



February 29, 2024
Project No. M0232.17.089

Heidi Bullock
Port of Portland
7200 NE Airport Way
Portland, Oregon 97219

Re: Taxiway A Pre-Construction Sampling Results
Portland International Airport
Portland, Oregon

Dear Heidi Bullock:

On the night of December 20, 2023, Maul Foster & Alongi, Inc. (MFA) conducted a pre-construction assessment in the vicinity of Taxiway A (the Site) at the Portland International Airport (PDX) (Figure 1). The results of the assessment will be used by Port of Portland Engineering to plan for excavation and dewatering activities.

Preparatory Activities

The following activities were conducted in preparation for the fieldwork:

- **Health and Safety Plan (HASP).** MFA prepared a HASP for its personnel involved with the project.
- **Underground Utility Location.** A private underground utility locate was conducted by Port personnel prior to the sampling activities in accordance with Standard Operating Procedure (SOP) 18 in Attachment A. The Port indicated that a public One-Call utility locate was not required since all utilities at the Site are privately owned.
- **Taxiway Access.** Anderson Environmental Contracting (AEC) provided taxiway closure support (i.e., installation and removal of lighted barricades) in accordance with Port Operations (OPS) requirements.

Subsurface Investigation

Two push-probe borings (TA-01 and TA-02; Figure 2) were completed by AEC (under subcontract to MFA) in accordance with SOP 7. The borings were completed to 15 feet below ground surface (bgs). Groundwater was encountered between approximately 6.5 and 9 feet bgs. Soil cores were obtained continuously from near the ground surface to the total depth of each exploration. Representative soil samples were collected in accordance with SOPs 4, 5, and 19 from just above the observed shallow groundwater depth. Each sample was field screened for volatile organic compounds (VOCs) in accordance with SOP 3, using a photoionization detector and for petroleum hydrocarbons using a sheen test. No field indications of petroleum hydrocarbon were observed. Grab groundwater samples were collected in accordance with SOP 9 using prepacked well screens to reduce turbidity. A photograph log is included in Attachment B.

Lithologic logging was conducted in accordance with SOP 2. The soils encountered during investigation activities generally consisted of layered sands and silts. Field exploration logs are included as Attachment C.

After sampling activities were completed, each exploration was abandoned in accordance with Oregon Water Resources Department regulations and procedures. The abandonment procedure consisted of filling the exploration with granular bentonite and hydrating the bentonite with water. The surface treatment was replaced consistent with surrounding material.

Analytical Results

Soil and groundwater samples collected from the above activities were submitted to ALS Environmental, in Kelso, Washington, for chemical analysis. Copies of the laboratory reports are included in Attachment D. The data are presented in Tables 1 and 2.

The samples were analyzed on a standard turnaround time for the following:

- Diesel and oil-range total petroleum hydrocarbons (TPH) by Northwest Method NWTPH-Dx (with silica gel cleanup)
- VOCs by U.S. Environmental Protection Agency Method 8260C
- Per- and Polyfluoroalkyl Substances (PFAS) by Draft EPA Method 1633
- The soil sample from boring TA-01 was also analyzed for RCRA 8 metals by EPA 6000/7000 series methods for use in disposal profiling (for the investigation-derived waste drum).

The laboratory analytical results are summarized below.

- **TPH.** Estimated (J-flagged) concentrations of TPH as diesel were detected above the method detection limit (MDL) in soil from borings TA-01 and TA-02 at concentrations of 3.6 and 3.3 milligrams per kilogram (mg/kg), respectively. TPH as oil was not detected in soil above the MDL.

Estimated concentrations of TPH as diesel were detected above the MDL in water from borings TA-01 and TA-02 at concentrations of 92 and 140 micrograms per liter (ug/L), respectively. Estimated (J-flagged) concentrations of TPH as oil were detected above the MDL in water from borings TA-01 and TA-02 at concentrations of 78 and 160 micrograms per liter (ug/L), respectively.

- **VOCs.** Estimated concentrations of acetone and benzene were detected above the MDL in soil from boring TA-01 at 4.4 and 0.4 micrograms/kilogram (ug/kg), respectively.

Estimated concentrations of acetone, carbon disulfide, naphthalene, and 1,2,3-trichlorobezene were detected above the MDL in water from boring TA-01 at 7.5, 0.07, 0.10 and 0.18 ug/L, respectively. Estimated concentrations of acetone and carbon disulfide were detected above the MDL in water from boring TA-02 at 3.8 and 0.07 ug/L, respectively.

- **PFAS.** Perfluorooctanoic acid (PFOA) was detected at an estimated concentration of 0.36 nanograms/gram (ng/g) in soil from boring TA-01. PFAS compounds were not detected above the MDL in soil from boring TA-02.

Perfluorooctane sulfonate (PFOS) and PFOA were detected above the method reporting limits (MRLs) at concentrations of 6.1 and 110 nanograms per liter (ng/L) in water from boring TA-01 and 5.9 and 11 ng/L in water from boring TA-02, respectively. Up to 12 other perfluorinated compounds were also detected at concentrations between 1.2 (estimated) and 9.7 ng/L in water from boring TA-01. Up to 8 other perfluorinated compounds were also detected at concentrations between 0.63 (estimated) and 12 ng/L in water from boring TA-02.

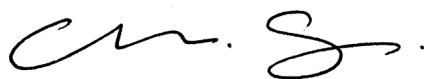
- **Metals.** Soils collected from TA-01 had detections for each of the eight metals analyzed, however, metals occur naturally in soil and were detected at typical background concentrations in soil from TA-01.¹

Summary and Conclusions

Soil and grab groundwater was collected from two borings. No field indications of petroleum were observed. Estimated concentrations of TPH and/or VOCs were detected in soil and water. PFOA was detected in soil from boring TA-01. PFAS, PFOA, and other perfluorinated compounds were detected in water from borings TA-01 and TA-02.

Sincerely,

Maul Foster & Alongi, Inc.



Chris Clough
Project Environmental Scientist



Michael Pickering, RG
Principal Geologist

Attachments

Limitations

Tables

Figures

A—Standard Operating Procedures

B—Photograph Log

C—Field Exploration Logs

D—Laboratory Analytical Data Reports

¹ DEQ. 2018. Background Levels of Metals in Soils for Cleanups. Oregon Department of Environmental Quality: Portland, OR. January 25.

Limitations

The services undertaken in completing this report were performed consistent with generally accepted professional consulting principles and practices. No other warranty, express or implied, is made. These services were performed consistent with our agreement with our client. This report is solely for the use and information of our client unless otherwise noted. Any reliance on this report by a third party is at such party's sole risk.

Opinions and recommendations contained in this report apply to conditions existing when services were performed and are intended only for the client, purposes, locations, time frames, and project parameters indicated. We are not responsible for the impacts of any changes in environmental standards, practices, or regulations subsequent to performance of services. We do not warrant the accuracy of information supplied by others, or the use of segregated portions of this report.

Tables

Table 1
Summary of Soil Analytical Results
PDX Taxiway A Pre-Construction Sampling
Port of Portland



Location:	TA-01	TA-02
Sample Name:	TA-01-S	TA-02-S
Collection Date:	12/20/2023	12/20/2023
Collection Depth (ft bgs):	8.0-8.5	8.5-9.0
TPH (mg/kg)		
Diesel-range hydrocarbons	3.6 J	3.3 J
Residual-range hydrocarbons	5.4 U	4.6 U
Metals (mg/kg)		
Arsenic	4.80	--
Barium	197	--
Cadmium	0.331	--
Chromium	26.8	--
Lead	10.1	--
Mercury	0.042	--
Selenium	0.5 J	--
Silver	0.111	--
PFAS (ng/g)		
11CI-PF3OUdS (F-53B Minor)	0.10 U	0.10 U
3:3 FTCA	0.60 U	0.60 U
4:2 FTSA	0.10 U	0.10 U
5:3 FTCA	0.60 U	0.60 U
6:2 FTSA	0.10 U	0.10 U
7:3 FTCA	0.60 U	0.60 U
8:2 FTSA	0.10 U	0.10 U
9CI-PF3ONS (F-53B Major)	0.10 U	0.10 U
ADONA	0.10 U	0.10 U
EtFOSA	0.10 U	0.10 U
EtFOSAA	0.10 U	0.10 U
EtFOSE	0.10 U	0.10 U
HFPO-DA (GenX)	0.10 U	0.10 U
MeFOSA	0.10 U	0.10 U
MeFOSAA	0.10 U	0.10 U
MeFOSE	0.10 U	0.10 U
NFDHA	0.10 U	0.10 U
PFBA	0.10 U	0.10 U
PFBS	0.10 U	0.10 U
PFDA	0.10 U	0.10 U
PFDaA	0.10 U	0.10 U
PFDoS	0.10 U	0.10 U
PFDS	0.10 U	0.10 U

Table 1
Summary of Soil Analytical Results
PDX Taxiway A Pre-Construction Sampling
Port of Portland



Location:	TA-01	TA-02
Sample Name:	TA-01-S	TA-02-S
Collection Date:	12/20/2023	12/20/2023
Collection Depth (ft bgs):	8.0-8.5	8.5-9.0
PFEESA	0.10 U	0.10 U
PFHpA	0.10 U	0.10 U
PFHpS	0.10 U	0.10 U
PFHxA	0.10 U	0.10 U
PFHxS	0.10 U	0.10 U
PFMBA	0.10 U	0.10 U
PFMPA	0.10 U	0.10 U
PFNA	0.10 U	0.10 U
PFNS	0.10 U	0.10 U
PFOA	0.36 J	0.10 U
PFOS	0.10 U	0.10 U
PFOSA	0.10 U	0.10 U
PFPeA	0.10 U	0.10 U
PFPeS	0.10 U	0.10 U
PFTeDA	0.10 U	0.10 U
PFTTrDA	0.10 U	0.10 U
PFUnA	0.10 U	0.10 U
VOCs (ug/kg)		
1,1,1,2-Tetrachloroethane	0.15 U	0.15 U
1,1,1-Trichloroethane	0.15 U	0.15 U
1,1,2,2-Tetrachloroethane	0.17 U	0.18 U
1,1,2-Trichloroethane	0.20 U	0.20 U
1,1-Dichloroethane	0.16 U	0.16 U
1,1-Dichloroethene	0.33 U	0.33 U
1,1-Dichloropropene	0.17 U	0.18 U
1,2,3-Trichlorobenzene	0.25 U	0.25 U
1,2,3-Trichloropropane	0.59 U	0.59 U
1,2,4-Trichlorobenzene	0.17 U	0.18 U
1,2,4-Trimethylbenzene	0.071 U	0.071 U
1,2-Dibromo-3-chloropropane	0.53 U	0.53 U
1,2-Dibromoethane	0.13 U	0.13 U
1,2-Dichlorobenzene	0.11 U	0.11 U
1,2-Dichloroethane	0.092 U	0.092 U
1,2-Dichloropropane	0.17 U	0.18 U
1,3,5-Trimethylbenzene	0.13 U	0.13 U
1,3-Dichlorobenzene	0.13 U	0.13 U

Table 1
Summary of Soil Analytical Results
PDX Taxiway A Pre-Construction Sampling
Port of Portland



Location:	TA-01	TA-02
Sample Name:	TA-01-S	TA-02-S
Collection Date:	12/20/2023	12/20/2023
Collection Depth (ft bgs):	8.0-8.5	8.5-9.0
1,3-Dichloropropane	0.16 U	0.16 U
1,4-Dichlorobenzene	0.12 U	0.12 U
2,2-Dichloropropane	0.13 U	0.13 U
2-Butanone	1.2 U	1.2 U
2-Chlorotoluene	0.16 U	0.16 U
2-Hexanone	1.3 U	1.3 U
4-Chlorotoluene	0.12 U	0.12 U
4-Isopropyltoluene	0.084 U	0.084 U
4-Methyl-2-pentanone	2.4 U	2.4 U
Acetone	4.4 J	3.9 U
Benzene	0.40 J	0.071 U
Bromobenzene	0.12 U	0.12 U
Bromodichloromethane	0.21 U	0.21 U
Bromoform	0.19 U	0.19 U
Bromomethane	0.27 U	0.27 U
Carbon disulfide	0.13 U	0.13 U
Carbon tetrachloride	0.13 U	0.13 U
Chlorobenzene	0.085 U	0.086 U
Chlorobromomethane	0.32 U	0.32 U
Chloroethane	0.97 U	0.97 U
Chloroform	0.15 U	0.15 U
Chloromethane	0.24 U	0.24 U
cis-1,2-Dichloroethene	0.16 U	0.16 U
cis-1,3-Dichloropropene	0.17 U	0.18 U
Dibromochloromethane	0.24 U	0.24 U
Dibromomethane	0.37 U	0.37 U
Dichlorodifluoromethane (Freon 12)	0.16 U	0.16 U
Ethylbenzene	0.13 U	0.13 U
Hexachlorobutadiene	0.53 U	0.53 U
Isopropylbenzene	0.11 U	0.11 U
m,p-Xylene	0.14 U	0.14 U
Methylene chloride	0.21 U	0.21 U
Naphthalene	0.17 U	0.18 U
n-Butylbenzene	0.091 U	0.091 U
n-Propylbenzene	0.17 U	0.18 U
o-Xylene	0.11 U	0.11 U

Table 1
Summary of Soil Analytical Results
PDX Taxiway A Pre-Construction Sampling
Port of Portland



Location:	TA-01	TA-02
Sample Name:	TA-01-S	TA-02-S
Collection Date:	12/20/2023	12/20/2023
Collection Depth (ft bgs):	8.0-8.5	8.5-9.0
sec-Butylbenzene	0.097 U	0.097 U
Styrene	0.19 U	0.19 U
tert-Butylbenzene	0.19 U	0.19 U
Tetrachloroethene	0.21 U	0.21 U
Toluene	0.20 U	0.20 U
trans-1,2-Dichloroethene	0.16 U	0.16 U
trans-1,3-Dichloropropene	0.15 U	0.15 U
Trichloroethene	0.20 U	0.20 U
Trichlorofluoromethane (Freon 11)	0.12 U	0.12 U
Vinyl chloride	0.24 U	0.24 U
Xylenes (total)	0.24 U	0.24 U
Notes Data are unvalidated. J and U qualifiers from the laboratory are shown; other flags from the laboratory are not included. bold = detected above the method detection limit. -- = not analyzed. ft bgs = feet below ground surface. J = result is estimated. mg/kg = milligrams per kilogram. ng/g = nanograms per gram. PFAS = per- and polyfluoroalkyl substances. TPH = total petroleum hydrocarbons. U = result is non-detect at the method detection limit. ug/kg = micrograms per kilogram. VOC = volatile organic compound.		

Table 2
Summary of Groundwater Analytical Results
PDX Taxiway A Pre-Construction Sampling
Port of Portland



Location:	TA-01	TA-02
Sample Name:	TA-01-W	TA-02-W
Collection Date:	12/20/2023	12/20/2023
Collection Depth (ft bgs):	8.5	10.5
Conventional Parameters (mg/L)		
Total suspended solids	4,360	330
TPH (ug/L)		
Diesel-range hydrocarbons	92 J	140 J
Residual-range hydrocarbons	78 J	160 J
PFAS (ng/L)		
11CI-PF3OUdS (F-53B Minor)	0.40 U	0.39 U
3:3 FTCA	6.9 U	6.8 U
4:2 FTSA	0.43 U	0.42 U
5:3 FTCA	4.3 U	4.2 U
6:2 FTSA	1.4 U	1.3 U
7:3 FTCA	6.1 U	6.0 U
8:2 FTSA	0.87 U	0.86 U
9CI-PF3ONS (F-53B Major)	0.46 U	0.45 U
ADONA	0.37 U	0.36 U
EtFOSA	0.86 U	0.85 U
EtFOSAA	0.97 U	0.95 U
EtFOSE	0.94 U	0.92 U
HFPO-DA (GenX)	0.42 U	0.41 U
MeFOSA	1.3 U	1.2 U
MeFOSAA	0.92 U	0.91 U
MeFOSE	0.83 U	0.82 U
NFDHA	0.59 U	0.58 U
PFBA	12	4.1 J
PFBS	1.2 J	0.63 J
PFDA	4.7 J	1.3 J
PFDoA	8.0	0.61 U
PFDoS	0.57 U	0.56 U
PFDS	0.68 U	0.67 U
PFEESA	0.44 U	0.43 U
PFHpA	5.2	3.2 J
PFHpS	0.70 U	0.69 U
PFHxA	7.8	5.7
PFHxS	5.8	1.6 J
PFMBA	0.55 U	0.54 U
PFMPA	0.42 U	0.41 U

Table 2
Summary of Groundwater Analytical Results
PDX Taxiway A Pre-Construction Sampling
Port of Portland



Location:	TA-01	TA-02
Sample Name:	TA-01-W	TA-02-W
Collection Date:	12/20/2023	12/20/2023
Collection Depth (ft bgs):	8.5	10.5
PFNA	3.8 J	2.5 J
PFNS	0.34 U	0.33 U
PFOA	110	11
PFOS	6.1	5.9
PFOSA	0.73 U	0.72 U
PFPeA	9.7	12
PFPeS	0.90 U	0.89 U
PFTeDA	2.5 J	1.3 U
PFTrDA	2.3 J	0.46 U
PFUnA	3.3 J	0.82 U
VOCs (ug/L)		
1,1,1,2-Tetrachloroethane	0.11 U	0.11 U
1,1,1-Trichloroethane	0.075 U	0.075 U
1,1,2,2-Tetrachloroethane	0.16 U	0.16 U
1,1,2-Trichloroethane	0.14 U	0.14 U
1,1-Dichloroethane	0.077 U	0.077 U
1,1-Dichloroethene	0.080 U	0.080 U
1,1-Dichloropropene	0.089 U	0.089 U
1,2,3-Trichlorobenzene	0.18 J	0.11 U
1,2,3-Trichloropropane	0.20 U	0.20 U
1,2,4-Trichlorobenzene	0.096 U	0.096 U
1,2,4-Trimethylbenzene	0.069 U	0.069 U
1,2-Dibromo-3-chloropropane	0.22 U	0.22 U
1,2-Dibromoethane	0.10 U	0.10 U
1,2-Dichlorobenzene	0.12 U	0.12 U
1,2-Dichloroethane	0.080 U	0.080 U
1,2-Dichloropropane	0.095 U	0.095 U
1,3,5-Trimethylbenzene	0.089 U	0.089 U
1,3-Dichlorobenzene	0.10 U	0.10 U
1,3-Dichloropropane	0.14 U	0.14 U
1,4-Dichlorobenzene	0.12 U	0.12 U
2,2-Dichloropropane	0.065 U	0.065 U
2-Butanone	1.9 U	1.9 U
2-Chlorotoluene	0.10 U	0.10 U
2-Hexanone	2.7 U	2.7 U
4-Chlorotoluene	0.13 U	0.13 U

Table 2
Summary of Groundwater Analytical Results
PDX Taxiway A Pre-Construction Sampling
Port of Portland



Location:	TA-01	TA-02
Sample Name:	TA-01-W	TA-02-W
Collection Date:	12/20/2023	12/20/2023
Collection Depth (ft bgs):	8.5	10.5
4-Isopropyltoluene	0.060 U	0.060 U
4-Methyl-2-pentanone	2.6 U	2.6 U
Acetone	7.5 J	3.8 J
Benzene	0.062 U	0.062 U
Bromobenzene	0.12 U	0.12 U
Bromodichloromethane	0.091 U	0.091 U
Bromoform	0.16 U	0.16 U
Bromomethane	0.16 U	0.16 U
Carbon disulfide	0.070 J	0.070 J
Carbon tetrachloride	0.096 U	0.096 U
Chlorobenzene	0.11 U	0.11 U
Chlorobromomethane	0.16 U	0.16 U
Chloroethane	0.16 U	0.16 U
Chloroform	0.072 U	0.072 U
Chloromethane	0.068 U	0.068 U
cis-1,2-Dichloroethene	0.067 U	0.067 U
cis-1,3-Dichloropropene	0.18 U	0.18 U
Dibromochloromethane	0.14 U	0.14 U
Dibromomethane	0.15 U	0.15 U
Dichlorodifluoromethane (Freon 12)	0.13 U	0.13 U
Ethylbenzene	0.050 U	0.050 U
Hexachlorobutadiene	0.11 U	0.11 U
Isopropylbenzene	0.051 U	0.051 U
m,p-Xylene	0.11 U	0.11 U
Methylene chloride	0.10 U	0.10 U
Naphthalene	0.10 J	0.088 U
n-Butylbenzene	0.054 U	0.054 U
n-Propylbenzene	0.054 U	0.054 U
o-Xylene	0.074 U	0.074 U
sec-Butylbenzene	0.062 U	0.062 U
Styrene	0.089 U	0.089 U
tert-Butylbenzene	0.059 U	0.059 U
Tetrachloroethene	0.099 U	0.099 U
Toluene	0.054 U	0.054 U
trans-1,2-Dichloroethene	0.072 U	0.072 U
trans-1,3-Dichloropropene	0.068 U	0.068 U

Table 2
Summary of Groundwater Analytical Results
PDX Taxiway A Pre-Construction Sampling
Port of Portland

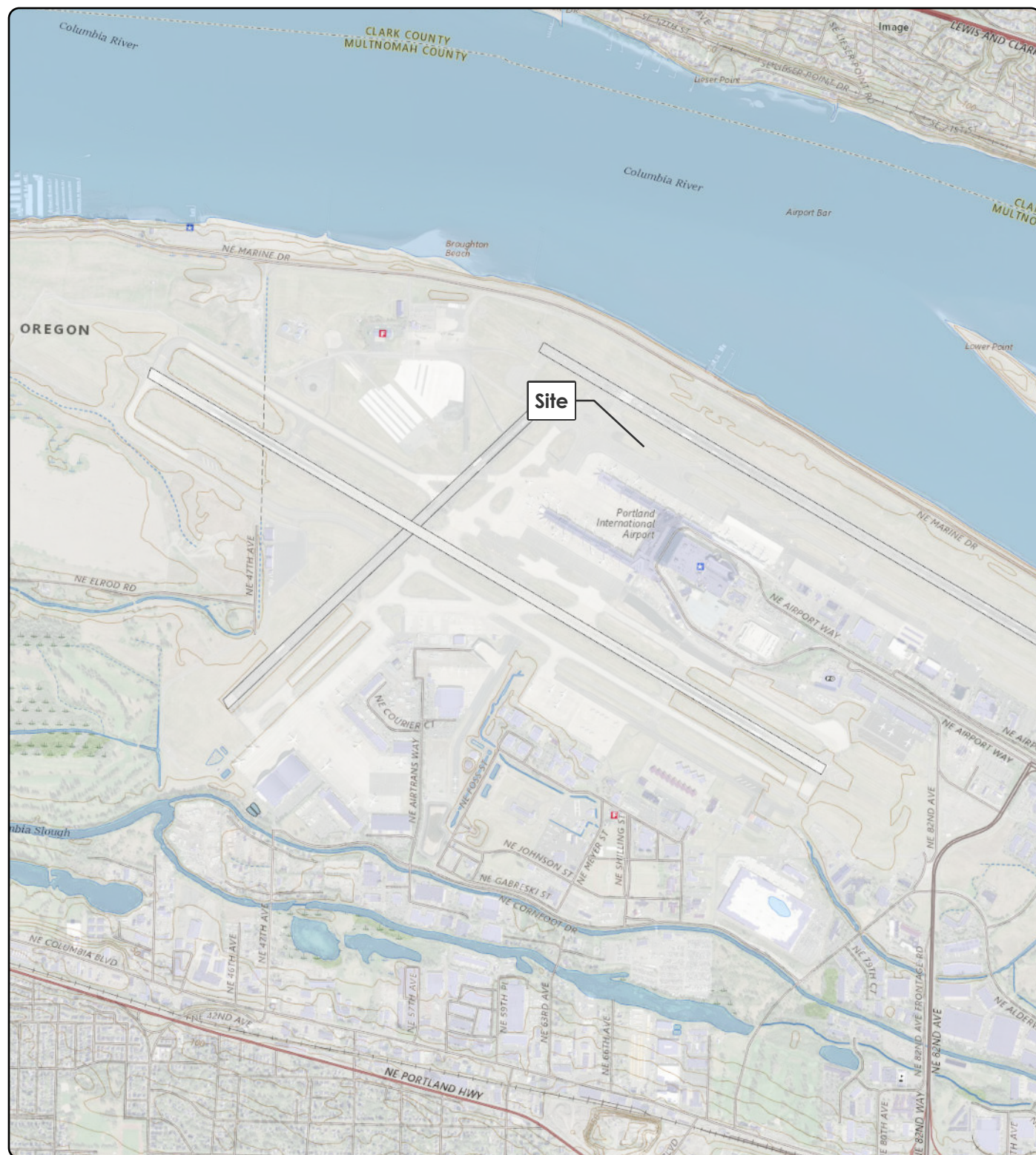


Location:	TA-01	TA-02
Sample Name:	TA-01-W	TA-02-W
Collection Date:	12/20/2023	12/20/2023
Collection Depth (ft bgs):	8.5	10.5
Trichloroethene	0.10 U	0.10 U
Trichlorofluoromethane (Freon 11)	0.12 U	0.12 U
Vinyl chloride	0.075 U	0.075 U
Notes Data are unvalidated. J and U qualifiers from the laboratory are shown; other flags from the laboratory are not included. bold = detected above the method detection limit. ft bgs = feet below ground surface. J = result is estimated. mg/L = milligrams per liter. ng/L = nanograms per liter. PFAS = per- and polyfluoroalkyl substances. TPH = total petroleum hydrocarbons. U = result is non-detect at the method detection limit. ug/L = micrograms per liter. VOC = volatile organic compound.		

Figures



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Notes

U.S. Geological Survey 7.5-minute topographic quadrangle (2020): Mount Tabor.
Township 1 north, range 2 east, section 8.



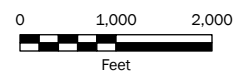
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Figure 1 Site Location

Taxiway A Sampling Event
Portland International Airport
Port of Portland
Portland, Oregon



Project: M0232.17.089 Produced By: jroberts Reviewed By: cslough Print Date: 1/30/2024 Path: X:\0232.17 Portland Airport\89 Proj\ M0232_17_089_001.aprx Fig 2 Sample Locations



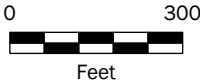
Figure 2 Sample Locations

Taxiway A Sampling Event
Portland International Airport
Port of Portland
Portland, OR

Legend

● Soil Boring

Note
Samples collected by MFA on December 20, 2023.



Data Sources
Aerial photograph obtained from the City of Portland (2022).



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Attachment A

Standard Operating Procedures



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Standard Operating Procedure

Lithologic Logging

SOP Number: 2

Date: 03/09/2021

Revision Number: 0.1

Scope and Application

This standard operating procedure (SOP) describes the methods for observing and documenting the physical characteristics of unconsolidated geologic materials (soil and sediment) encountered during field investigations. If a Maul Foster & Alongi, Inc. (MFA) project requires hard rock drilling and description of rock core or cuttings, procedures for describing rock should be specified in a project-specific sampling and analysis plan (SAP).

Equipment and Materials Required

The following materials are necessary for this procedure:

- Blank field forms (e.g., boring logs) for documenting observations
- Dry-erase board
- Camera
- Munsell soil color chart (where required)
- MFA field logging checklist

Methodology

When the project-specific SAP specifies additional or different requirements for lithologic logging, it takes precedence over this SOP. In the absence of a SAP, the procedures in this SOP shall be used. MFA uses a combination of the Unified Soil Classification System (USCS) and the ASTM International method D2487 for describing and classifying soil and sediment by visual and manual examination. Before beginning fieldwork, verify with the project manager the logging standard to be used.

Logging Process:

The objective of lithologic logging is to document the physical characteristics of soil and sediment encountered and the changes in characteristics with depth. Typically, changes with depth will define the strata encountered. Therefore, each stratum encountered should be identified and the following characteristics described in the order given:

- Depth interval of each stratum to the nearest tenth of a foot below ground surface
- USCS classification Group Name and Symbol
- Color, using the Munsell color chart
- Grain-size distribution, as percentages of fines (silt and clay combined), sand, and gravel
- Percentages of larger gravels (cobbles and boulders) if present.
- Consistency when the content of fines is 50 percent or greater

- Density when the combined percentage of sand and gravel is 50 percent or greater
- Sand and gravel grain shapes
- Chemical odors, if noticeable
- Structures, if present (e.g., laminae, pores)
- Presence of organic matter (e.g., roots, leaves, twigs, wood fragments)
- Moisture content as “dry,” “moist,” or “wet”
- If possible, a description of the origin of each stratum (e.g., fill, alluvium)



Standard Operating Procedure

Field Screening for VOCs in Soil

SOP Number: 3

Date: 03/09/2021

Revision Number: 0.1

Scope and Application

This standard operating procedure (SOP) describes the use of a photoionization detector (PID) to field screen soil for evidence of organic vapors. The PID measures the organic vapor concentration in parts per million, is not compound-specific.

Never rely on a stand-alone PID reading to identify organic chemical contamination in soil. Always collect multiple PID readings (e.g., at multiple depths along the length of a soil core), since it is the relative difference in concentration between multiple readings (e.g., a sudden increase in concentration at a certain depth interval) that is the typical indicator of contamination. Additionally, PID readings should always be accompanied by observation of the soil samples for other indicators of contamination, such as soil staining or chemical odors, so that these multiple lines of evidence can be used together to identify potential organic chemical contamination in the field.

Equipment and Materials Required

The following materials are necessary for this procedure:

- Personal protective equipment (as specified in the health and safety plan)
- PID with calibration gas
- Ziploc®-type bags
- Field forms or notebook for documenting PID readings

Methodology

When the project-specific sampling and analysis plan (SAP) specifies additional or different requirements for organic vapor field screening, it takes precedence over this SOP. In the absence of a SAP, the procedures in this SOP shall be used.

The electron volt (eV) rating for the PID lamp (e.g., 9.8, 10.6, 11.7) must be greater than the ionization potential (in eV) of a compound in order for the PID to detect the compound. A lamp of at least 9.8 eV should be used for petroleum hydrocarbons. A lamp of at least 10.6 eV should be used for typical chlorinated alkenes. If the project health and safety plan does not specify the lamp size, verify the compatibility of the lamp size with the anticipated compounds expected to be present in soil prior to the field activities, and confirm with the project manager.

General Sampling Procedure (Heading 3 No Number Style):

Calibration:

- The PID should be calibrated daily (or more frequently, as needed).
- Calibrate the PID according to the manufacturer's instructions.

- Document the calibration activities and results in the field notebook.

Measuring organic vapor content:

- Place a representative volume (generally, a “handful”) of freshly exposed soil into a Ziploc-type bag.
- Seal the bag and gently knead the bag to loosen the soil.
- Let the bag set for several minutes to allow organic vapors, if present, to volatilize from the soil into the headspace of the bag.
- Partially open the bag so that the tip of the PID intake tube can be inserted into the bag but is not in contact with the soil, then close the bag seal around the intake tube.
- Record the PID measurement and document results in the field notes or boring log.

Static Sheen Test Procedure and Observations:

Sheen Test Procedure:

- Following the PID screen discussed above, add enough water to cover the soil in the container.
- Observe the water for signs of discoloration/sheen and characterize per the table below.

When static sheen testing is required or when making observations of a water surface the following table presents descriptions to be used (consistent with Department of Ecology Guidance)¹.

No Sheen (NS)	No visible sheen on the water surface
Slight Sheen (SS)	Light, colorless, dull sheen; spread is irregular, not rapid. Natural organic oils or iron bacteria in the soil may produce a slight sheen.
Moderate Sheen (MS)	Pronounced sheen over limited area; probably has some color/iridescence; spread is irregular, may be rapid; sheen does not spread over entire water surface.
Heavy Sheen (HS)	Heavy sheen with pronounced color/iridescence; spread is rapid; the entire water surface is covered with sheen.
Biogenic Film (BF)	False positive results may be generated by the presence of decaying organic matter and iron bacteria, which can produce a rainbow-like sheen similar to an oil sheen. These sheens, unlike oil sheens, can typically be broken up creating platy or blocky fragments when agitated or disturbed. Biogenic films can also be foamy.

¹ Department of Ecology. 2016. Guidance for remediation of petroleum contaminated sites. June.



Standard Operating Procedure

Surface and Subsurface Soil Sampling Using Hand Tools

SOP Number: 4

Date: 09/13/2023

Revision Number: 0.2

Scope and Application

This standard operating procedure (SOP) describes the use of hand tools for obtaining surface and subsurface soil samples for physical and/or chemical analysis.

Equipment and Materials Required

The following materials are necessary for this procedure:

- Personal protective equipment (as specified in the Health and Safety Plan)
- Tools appropriate for the conditions that may be encountered (e.g., spoon, trowel, shovel, hand auger); tools constructed of stainless steel are preferred.
- Stainless steel bowls
- Tape measure with increments in feet and tenths of a foot.
- Laboratory-supplied sample containers
- Laboratory chain-of-custody form and cooler with ice.
- Equipment decontamination supplies if sampling equipment will be reused between sample locations (see SOP 1 for equipment decontamination procedures).
- Field forms or notebook for documenting the sampling procedures.

Methodology

When the project-specific sampling and analysis plan (SAP) specifies additional or other requirements for soil sampling, it takes precedence over this SOP. In the absence of a SAP, the procedures in this SOP shall be used.

General Sampling Procedure (Heading 3 No Number Style):

- Don gloves as specified in the Health and Safety Plan; replace gloves with new gloves after each sample is collected.
- Clear the ground surface of brush, root mat, grass, leaves, and other debris.
- Use the selected hand tool to remove soil to the targeted sample depth. Use a measuring tape to verify that the sample depth is correct and record the depth in the field notebook or boring log.
- Describe and document the soil lithology in accordance with SOP 2.
- Use the selected hand tool to collect soil and homogenize in a decontaminated stainless-steel bowl or a dedicated Ziploc® bag and then transfer the sample to the sample container using hand tools.

- Before sample collection, and to the extent possible, use the selected hand tool to remove organic debris, anthropogenic material (e.g., brick, metal, glass), and gravels larger than 4 millimeters, unless a project-specific SAP directs otherwise.
- When sampling for gasoline-range total petroleum hydrocarbons (gasoline) or volatile organic compounds (VOCs), a subsample will be obtained from a discrete portion of the collected sample. To minimize the potential loss of volatiles during sampling, the subsample shall not be composited or homogenized. The sample container for gasoline and/or VOC analysis will be filled first if additional containers are necessary for other analysis. Specific procedures for collecting samples for gasoline and/or VOC analysis using the U.S. Environmental Protection Agency Method 5035 are specified in SOP 5.
- The sampling device and field equipment will be decontaminated between sample locations in accordance with SOP 1. Alternatively, new, disposable equipment can be used to collect each sample to preclude the need for equipment decontamination.

Backfilling Sample Locations:

Backfill in accordance with federal and state regulations (e.g., Oregon bentonite requirements per OAR 690-240-0035). Otherwise, manual excavations can be backfilled with excess soil remaining after sample collection, unless the project-specific SAP requires a different backfill procedure.



Standard Operating Procedure

EPA Method 5035 Soil Sampling

SOP Number: 5

Date: 03/09/2021

Revision Number: 0.1

Scope and Application

This standard operating procedure (SOP) describes the methods for obtaining soil samples for chemical analysis for gasoline-range petroleum hydrocarbons (gasoline) and volatile organic compounds (VOCs) by U.S. Environmental Protection Agency Method 5035A.

Equipment and Materials Required

The following materials are necessary for this procedure:

- Sampling equipment (e.g., Terra Core Sampler™ or similar sampler capable of collecting a 5-gram soil sample).
- Laboratory-supplied sample containers:
 - Prew weighed and labeled 40-milliliter volatile organic analysis (VOA) vials, including preservative (typically methanol)
 - Two-ounce jar for percent total solids/moisture (if required, confirm with the laboratory)
- Laboratory chain-of-custody form and cooler with ice.
- Equipment decontamination supplies if sampling equipment will be reused between sample locations (see SOP 1 for equipment decontamination procedures).
- Field forms or notebook for documenting the sampling procedures.

Methodology

When the site-specific sampling and analysis plan (SAP) specifies additional or different requirements for soil sampling, it takes precedence over this SOP. In the absence of a SAP, the procedures in this SOP shall be used.

Laboratory Analytical Considerations:

- VOCs must be analyzed within 14 days of sample collection.
- Samples must be maintained at less than $4^{\circ} \pm 2^{\circ} \text{C}$.
- Discrete VOC samples may be composited at the laboratory.

General Procedure:

- When using the Terra Core Sampler, seat the plunger in the handle.
- Collect the sample by pushing the sampler into the soil until the soil has filled the sampler.
- Remove the sampler and confirm that the soil in it is flush with the mouth of the sampler.

- Wipe all debris from the outside of the sampler. Remove any excess collected soil that extends beyond the mouth of the sampler.
- Rotate the plunger handle 90 degrees until it is aligned with the slots in the body of the sampler. Place the mouth of the sampler into the sample container and extrude the sample into the sample container by pushing the plunger down. Hold the sample at an angle when extruding to minimize splashing of the preservative.
- Immediately remove any soil or debris from the threads of the vial and place the lid on the vial.
- Gently swirl the vial (do not shake) to allow the preservative to uniformly penetrate and wet the soil.
- Repeat process for each additional sample container.
- If required by the laboratory, fill a 2-ounce container to capacity for percent total solids determination.



Standard Operating Procedure

Push-Probe Drilling

SOP Number: 7

Date: 03/09/2021

Revision Number: 0.1

Scope and Application

This standard operating procedure (SOP) describes the use of a push probe (i.e., Geoprobe™) to observe subsurface conditions and collect samples of various environmental media (e.g., soil, sediment, groundwater, soil vapor) for laboratory analysis. Push-probe drilling is generally not suitable for soils with gravel/rock clast larger than about 4 inches in diameter. If gravelly/rocky soils are expected at the project site, consider use of the sonic drilling method described in SOP 8.

Push-probe drilling can be used for a variety of purposes, including:

- Retrieving cores to document subsurface soil or sediment conditions and to obtain samples for physical and/or chemical evaluation
- Sampling soil vapors, using temporary well points
- Collecting reconnaissance groundwater samples from temporary well screens
- Installing permanent monitoring wells

Equipment and Materials Required

The following equipment and materials are necessary for this procedure:

- Push-probe drill rig and operator provided by a subcontractor to MFA. Ensure that the subcontractor is licensed to perform the drilling work.
- Sampling equipment appropriate for the media to be sampled (e.g., water level meter, pumps, hand tools, and pump tubing).
- Laboratory-supplied sample containers.
- Traffic cones, measuring tape, buckets.
- Department of Transportation (DOT)-approved containers (e.g., 55-gallon drum) for storing excess soil and decontamination water; the drums are typically provided by the drilling subcontractor.
- Boring log form and notebook.
- Equipment decontamination supplies if sampling equipment will be reused between sample locations (see SOP 1 for equipment decontamination procedures).
- Personal protective equipment (as required by the project health and safety plan).

Methodology

When the project-specific sampling and analysis plan (SAP) provides additional or different requirements for push-probe drilling, it takes precedence over this SOP. In the absence of a SAP, the procedures in this SOP shall be used.

Utility Locate:

- Before beginning the fieldwork, assess the proposed drilling location(s) for the presence of overhead and underground utilities, and adjust the locations, as needed, to avoid identified utilities.
- See SOP 18 for the utility locating procedures.

Push-Probe Drilling Process:

- The push-probe drilling rig is equipped with a soil sampling device that retrieves a continuous soil core. A combination of static force and percussion is used to drive the soil sampler into unconsolidated geologic material. A plastic liner placed inside the sampler contains the soil core and permits its removal from the sampler for examination. The sampler is driven into the subsurface, typically in 4- or 5-foot intervals, depending on the length of the sampling device. When each interval depth is reached, the soil sampler is removed from the ground, and the liner is removed to facilitate soil observation and sampling.
- This process is repeated for each soil sample interval until the targeted boring depth is reached.
- Ensure that the drilling subcontractor decontaminates all subsurface equipment before and after each boring. Document the decontamination procedures in the field notebook. Store decontamination water in DOT-approved containers for later off-site disposal.

Logging and Soil Sampling Process:

- Remove the soil core from the sampler for field screening, description, and sampling.
- Describe the lithology in accordance with SOP 2.
- Confirm the required depth interval(s) for soil sample collection and field screening with the MFA project manager, or conduct the work in accordance with the SAP. The sample interval may require adjustment based on core recovery, soil stratigraphy and characteristics, and evidence of contamination. Confirm any adjustments to the sample intervals with the project manager.
- If the project requires field screening for organic vapor, conduct it in accordance with SOP 3.
- If the project requires laboratory analyses for gasoline-range petroleum hydrocarbons or volatile organic compounds, conduct the sampling in accordance with SOP 5.
- Contain all soil core remaining after sample collection in DOT-approved containers for later off-site disposal. See SOP 1 for drum storage, labeling, and documentation procedures.

Reconnaissance Groundwater Sampling Process:

- Typically, reconnaissance groundwater samples are collected at the first occurrence of groundwater in a boring. Confirm the required depth and procedures for groundwater sample collection with the MFA project manager, or conduct the work in accordance with the SAP. If the project requires use of the low-flow sampling method, refer to SOP 9 for the low-flow sampling procedures.
- Reconnaissance groundwater samples are collected using a decontaminated stainless steel or disposable, temporary polyvinyl chloride well screen placed in the boring. If the soils in the boring are fine-grained and may cause excessive turbidity in groundwater, consider using a filter pack

around the screen to reduce turbidity. Alternatively, purging the well screen of groundwater prior to sample collection may also reduce the turbidity. See SOP 9 for purging procedures.

- Purging and sampling will be conducted using a peristaltic pump unless otherwise specified in the SAP. New tubing will be used for each boring. Field parameters (e.g., temperature, conductivity, and pH) will be recorded in accordance with SOP 9 during purging and sampling.

Monitoring Well Installation:

- If the project requires installation of a monitoring well in the boring, refer to SOP 11 for the well installation procedures. Confirm the procedures with the MFA project manager.

Borehole Abandonment Process:

- Abandon each borehole in accordance with local and state regulations/procedures. The abandonment will be performed by the drilling subcontractor.
- The abandonment procedure typically consists of backfilling the boring with granular bentonite and hydrating the bentonite with potable water.
- If the boring was advanced through concrete or asphalt, backfill the boring to about 6 inches below grade to allow for placement of asphalt or concrete in the remaining 6 inches to match the surface conditions.



Standard Operating Procedure

Low-Flow Groundwater Sampling

SOP Number: 9

Date: 06/29/2023

Revision Number: 0.2

Scope and Application

This standard operating procedure (SOP) describes use of the low-flow sampling method for collection of reconnaissance groundwater samples from borings and groundwater samples from monitoring wells. The method uses low pumping rates during purging and sample collection to minimize water-level drawdown and hydraulic stress at the well-aquifer interface.

Equipment and Materials Required

The following materials are necessary for this procedure:

- Personal protective equipment (as specified in the health and safety plan)
- Water quality meter (e.g., Oakton, YSI Inc. multiparameter meter)
- Turbidity meter
- Water-level meter
- Peristaltic pump and tubing
- Laboratory-supplied sample containers
- Laboratory chain-of-custody form and cooler with ice
- Filter if dissolved analyses will be performed
- Well construction logs documenting the screen depth and interval for all wells to be sampled
- Equipment decontamination supplies if sampling equipment will be reused between sample locations (see SOP 1 for equipment decontamination procedures)
- 5-gallon buckets with lids
- Department of Transportation-approved storage containers (e.g., drums, totes)
- Groundwater field sampling datasheet and notebook

Methodology

When the project-specific sampling and analysis plan (SAP) provides additional or different requirements for low-flow groundwater sampling, it takes precedence over this SOP. In the absence of a SAP, the procedures in this SOP shall be used.

General Sampling Procedure (Heading 3 No Number Style):

Water Level Measurement

- Water-level measurement procedures are described in detail in SOP 13.

- Open the well cap to allow the water level to equilibrate (approximately ten minutes).
- Measure the water level in the well, using an electronic water-level meter to the nearest 0.01 foot to determine the depth to groundwater below the top of the well casing.
- If light nonaqueous-phase liquid (LNAPL) is present (typically indicated by a dark, oily sheen on the top of the water level meter), discuss with the MFA project manager how to proceed.

Purging

- If the water level is above the top of the well screen, place the end of the sample tubing in the middle of the well screen interval. If the water level is below the top of the screen, place the end of the sample tubing at the midpoint between the water level and the bottom of the well screen.
- Typical low-flow sampling pumping rates range from 0.1 to 0.5 liters per minute, depending on the hydrogeologic characteristics at the site. The objective of the rate selected is to minimize excessive drawdown (<0.3 feet) of the water level.
- Measure water quality parameters (dissolved oxygen, pH, electrical conductivity, turbidity, and temperature) using a flow-through cell connected to the discharge end of the peristaltic pump tubing. Purging will be considered complete when the water quality parameters stabilize per the following for three consecutive readings taken over 3-minute intervals (consistent with EPA guidance)¹:

Dissolved Oxygen (10% for values greater than 0.5 mg/L, if three Dissolved Oxygen values are less than 0.5 mg/L, consider the values as stabilized),

Specific Conductance (3%),

Temperature (3%),

pH (± 0.1 unit),

Oxidation/Reduction Potential (± 10 millivolts).

- Document the purge procedures, including pumping rates, water quality parameter measurements, and the water level during purging, on the groundwater field sampling datasheet.
- Place purge water in Department of Transportation-approved containers (e.g., 55-gallon drum) stored on site. See SOP 1 for drum storage, labeling, and documentation procedures.

Sample Collection

- Following the purging process, collect groundwater samples in laboratory-supplied containers.
- Confirm the laboratory analytical methods and sample container requirement with the MFA project manager or project chemist. If analysis for gasoline-range petroleum hydrocarbons or volatile organic compounds (VOCs) is proposed, fill the sample containers for gasoline and VOC analysis before filling sample containers for other analytical methods. Sample containers for gasoline and VOC analysis shall be filled to capacity without overfilling and capped so that no headspace or air bubbles remain in the container.

¹ EPA. 2017. Low stress (low flow) purging and sampling procedure for the collection of groundwater samples from monitoring wells. September 19.

Low Yield (Alternate Method)

- If drawdown of the water table cannot be avoided by reducing the pumping rate, and the well goes dry during purging, discontinue pumping and water quality parameter measurements.
- Collect the groundwater sample after the water level above the well bottom recovers to 90 percent of the prepurge water level. For example, if the water level was 10 feet above the well bottom before purging, begin sampling when the water level has recovered to 9 feet or more above the well bottom.
- If the water column volume is insufficient to meet the sample volume requirement, allow the water level to again recover to 90 percent before continuing sampling. Repeat this procedure until all sample containers are filled.



Standard Operating Procedure

Underground Utility Locates

SOP Number: 18

Date: 03/09/2021

Revision Number: 0.1

Scope and Application

This standard operating procedure (SOP) describes the practices for locating underground utilities. Refer to the MFA health and safety plan (HASP) for additional information regarding communication procedures to be followed when an inadvertent utility strike occurs, as well as regarding methods for mitigating hazards during a utility strike.

Equipment and Materials Required

The following materials are necessary for this procedure:

- Personal protective equipment (as specified in the HASP)
- Marking materials (e.g., marking paint, stakes, flags)
- Field documentation materials

Methodology

When the project-specific sampling and analysis plan (SAP) specifies additional or different requirements for underground utility locates, it takes precedence over this SOP. In the absence of a SAP, the procedures in this SOP shall be used.

Before Conducting Utility Locates:

- Ensure that the locate will be conducted reasonably soon before the excavation work begins, e.g., within 48 hours. There may be project-specific conditions, e.g., weather and/or ground features that could cause markings to fade, which would require scheduling of the excavation work sooner than 48 hours after the locate.
- Clearly define the boundary of the work and the locations of all proposed excavations. Prepare a map of the project area showing the excavation locations.
- Interview site managers/property owners and obtain plans or drawings, if available, showing on-site utilities.
- For project work that will not take place in the public right-of-way, ensure that the public rights-of-way nearest to the project are identified and communicated during the one-call notification.
- Identify the township and range of the project area. This information can be easily attained by a quick email to MFA's GIS Exchange.
- If feasible, conduct a site visit to identify site conditions that could cause fading or disruption of marking paint. Such conditions could include gravel or ground sensitive to erosion and high traffic.
- Check the weather forecast to assess the potential for snow or rain to make marking utilities difficult or cause the markings to fade.

One-Call Utility Notification:

- If possible, initiate the one-call utility notification at least one week before the proposed work begins.
- Include a map or GPS coordinates when submitting the notification.
- Before conducting any excavation activities, confirm with each public utility that the utility locate has been completed.
- On remote or complicated sites, consider meeting public locators on site.
- Document the one-call ticket number and results in the project files.
- Provide the one-call ticket number to subcontractors who will be doing the excavations.

Private Utility Locate:

- Conduct the private utility locate only after confirmation that the public utility locate has been completed and all public utilities have been marked and the results reviewed by MFA staff who will be overseeing the excavations.
- Meet the private locator on site and participate in the entire private utility locate. Be engaged in the process, ask questions, and take time to walk the site thoroughly with the locator.
- Bring a copy of the one-call utility ticket and results of the one-call utility locator to check against the utility markings on the ground.
- If possible, have a site/property representative knowledgeable of on-site utilities participate in the private utility locate.
- If paint alone may not suffice to ensure clear marking of utilities, add vertical markers such as stakes or flags.
- Visually assess the area of the proposed excavation(s) to identify features potentially indicative of buried utilities. Have the private utility locator examine each feature identified below to assess the presence of buried utilities.
 - Examine adjacent public rights-of-way where public utilities have been marked for evidence of utilities that may extend onto the project site.
 - Identify nearby light poles, telephone poles, electrical utility poles, or other overhead utility poles with wires or conductors that run from the overhead utility, down the pole, and into the ground.
 - Identify the location of gas meters, water meters, or other aboveground junction boxes for evidence of utilities extending from these features into the ground.
 - Examine asphalt and concrete ground surfaces for discontinuities in the surface indicative of utility installations. Discontinuities may include recent patches of asphalt or concrete inlaid within older concrete or asphalt surfaces.
 - Identify manholes and catch basins indicative of buried storm or sanitary sewer pipes. Open manholes to examine the orientation of associated pipes to assess whether the utilities may be present near proposed excavations.
 - Identify tank ports and vent pipes.

- Identify irrigation systems and associated features such as valve boxes and controllers.
- Identify any other signs indicating the presence of buried utilities.
- Be wary of utility marks that suddenly begin or dead end.

Preparing to Perform Subsurface Activities after a Locate:

- Ensure that the markings are still visible when the work begins.
- Adjust locations, as needed, to avoid identified utilities, or use alternative methods such as nonmechanical excavation means (i.e., manual excavation or air-knifing) to a minimum depth of 5 feet.

Table
APWA UNIFORM COLOR CODE

	WHITE—Proposed Excavation
	PINK—Temporary Survey Markings
	RED—Electric Power Lines, Cables, Conduit and Lighting Cables
	YELLOW—Gas, Oil, Steam, Petroleum or Gaseous Materials
	ORANGE—Communication, Alarm or Signal Lines, Cables or Conduit
	BLUE—Potable Water
	PURPLE—Reclaimed Water, Irrigation and Slurry Lines
	GREEN—Sewers and Drain Lines
Source: Uniform Color Codes, ANSI Standard Z535.1. American Public Works Association. Revised 1999.	



Standard Operating Procedure

Sample Collection for PFAS Analysis

SOP Number: 19

Date: 08/17/2023

Revision Number: 0.1

Scope and Application

This standard operating procedure (SOP) describes modifications to the methods used for obtaining soil, groundwater, stormwater, and sediment samples (SOPs 04, 09, 14, and 15, respectively) for chemical analysis of per- and polyfluoroalkyl substances (PFAS). The ubiquitous nature of PFAS and low screening/cleanup levels require special care to ensure that no cross-contamination from other sources occurs during sampling.

Equipment and Materials Required

Prior to conducting the sampling event, field equipment and supplies should be screened to identify any items that may pose a cross-contamination threat. Review safety data sheets, ingredients lists, or consult with the equipment manufacturer to ensure that the equipment and supplies do not contain PFAS.

Sampling equipment:

- Use high-density polyethylene (HDPE) and/or silicone tubing. Low-density polyethylene (LDPE) tubing should not be used. Tubing composed of or lined with polyvinylidene fluoride (PVDF), and polytetrafluoroethylene (PTFE or Teflon) should never be used.
- Ensure bladder pumps are PFAS-free. Many bladder pumps use PTFE bladders and valves that should be avoided.
- Ensure bailers and retrieval string are PFAS-free. Do not use bailers constructed from LDPE or fluorinated ethylene propylene (FEP). Undyed nylon is preferred for retrieval string.
- Ensure that submersible pumps are PFAS-free. The seals, pump body, and wire insulation may be composed of PTFE, PVDF, polychlorotrifluoroethylene (PCTFE), ethylene-tetrafluoroethylene (ETFE), or FEP.
- Ensure field notebooks, papers, clipboards, and writing utensils are PFAS-free. Waterproof paper, permanent markers, and plastic clipboards may contain PFAS. Regular/thick size markers (Sharpie or otherwise) should not be used. Fine and Ultra-Fine point Sharpie markers are acceptable so long as gloves are changed after their use.
- Work with subcontractors to ensure drilling equipment, core liners, well casings, and well screens are PFAS-free. Verify that the subcontractor decontaminates the drill casing prior to its initial use and following collection of each core using PFAS-free water in a location separate from the drilling location.
- Sample homogenization, if required, should be completed in a clean stainless-steel bowl. Resealable plastic bags should not be used in contact with the sample material.

Sample Containers and Reagents:

- Use PFAS-free sample bottles provided by the laboratory. Polypropylene or HDPE bottles with unlined caps are typically used. Do not use sample containers with Teflon lined lids.
- Use laboratory supplied, verified, deionized water when preparing field and equipment blanks.

Equipment Decontamination Supplies:

See SOP 01 for equipment decontamination procedures.

- Use laboratory supplied, PFAS-free deionized water for equipment decontamination.
- Ensure that the detergents or soaps used in decontamination do not contain fluoro-surfactants in the ingredients list. The commonly used detergents Alconox and Liquinox are acceptable for use¹ as they do not contain PFAS ingredients, nor are they exposed to PFAS during the manufacturing process.²
- Spray bottles used for equipment decontamination should be emptied before being stored, and new detergent and laboratory supplied, PFAS-free deionized water should be added at the start of the field event.
- Ensure that paper towels used during decontamination are PFAS-free.

Clothing and Personal Protective Equipment:

The safety of staff should never be compromised for the purpose of preventing PFAS cross-contamination. If PFAS-free alternatives to sun and biological protection or personal protective equipment (PPE) listed below are not available, use what is available and record the items used in the field notes.

- Use powderless nitrile gloves. Do not use latex gloves.
- Clothing should be well-laundered without the use of fabric softener. Do not wear new, unwashed clothing or clothing treated for water, stain, dirt, insect, or ultraviolet protection including coated Tyvek.
- Wear boots made from polyurethane or polyvinyl chloride (PVC). Avoid leather and treated fabrics.
- Rain gear, if worn, should be made with polyurethane, PVC, rubber, neoprene, or wax-coated fabric. Do not use Gore-Tex or Scotchgard rain gear.
- Review the ingredients lists for sunscreens, cosmetics, shampoo, insect repellents, and other personal care products to ensure that they do not contain PFAS. Do not apply sunscreens, insect repellents, or other personal care products near the sample collection area, or while wearing PPE that will be worn during sample collection.

¹ Michigan Department of Environmental Quality. 2018. *General PFAS Sampling Guidance*. October 16.

² Alconox Inc. 2019. "Are there any PFAS, PFOA, or PFOS in Alconox Inc. Critical Cleaners?" TechNotes Critical Cleaning Advice from Alconox Inc. White Plains, NY. November 4. Accessed September 6, 2023.
<https://technotes.alconox.com/industry/environmental/pfoa-pfos-pfas-alconox-cleaners/>.

Methodology

When the site-specific sampling and analysis plan (SAP) specifies additional or different requirements for soil or groundwater sampling, it takes precedence over this SOP. In the absence of a SAP, the procedures in this SOP shall be used.

Eating, staging, and sampling areas should be separated to help avoid PFAS cross-contamination. Due to the high risk of cross-contamination, visitors should not be allowed in the sampling area.

Laboratory Analytical Considerations:

- The sample must be submitted to the laboratory and be prepared within holding times described by the analytical method to be used.
- Samples must be maintained at less than $4^{\circ} \pm 2^{\circ}$ Celsius and protected from light until they are delivered to the laboratory.

General Sampling Procedure:

Sample collection should be conducted, if possible, in sequence from locations suspected to be least contaminated to locations suspected to be most contaminated. Staff will follow the sample collection procedures described for soil, groundwater, stormwater, and sediment sampling described in SOPs 04, 09, 14, and 15 with the following modifications. Low-flow methods are preferred for groundwater sample collection; however, other approaches may be used when measures are taken to minimize turbidity in the samples as specified in a project specific SAP.

- Wash hands and put on clean powderless nitrile gloves before commencing field activities.
- Decontaminate any dedicated equipment that may come in contact with the sample medium following the procedures in SOP 01 using laboratory supplied PFAS-free deionized water and fluoro-surfactant free detergent/soap.
- Change gloves for new clean gloves immediately prior to sample collection or handling sample equipment. Change gloves for new clean gloves whenever materials other than the PFAS sample container or sampling equipment are touched (including if sample containers for other analyses are touched).
- To avoid cross-contamination from the waterproof paper label, do not apply sample label to the sample container until after the container is filled and sealed.
- Keep sample containers sealed at all times and only open them during sample collection.
- Never place the sample container lid on any surface unless it is PFAS-free. The cap or lid must never be placed directly on the ground or upside down where it could collect airborne particulate matter.
- When collecting soil and sediment samples, fill the containers for volatile organic compounds (VOCs) analysis (see SOP 05) prior to collecting the material for PFAS analysis to avoid volatilization losses.³ Put on new clean gloves before collecting the PFAS sample to avoid cross-contamination from the PTFE lid on the volatile organic analysis (VOA) vials.

³ Washington State Department of Ecology, Toxics Cleanup Program. 2023. *Guidance for Investigating and Remediating PFAS Contamination in Washington State*. Publication No. 22-09-058. Olympia, WA. June.

- Fill the groundwater and surface water sample containers for PFAS analysis prior to the containers for other analyses to avoid cross-contamination from the PTFE lids on other sample containers.
- Once the sample container is filled and sealed, apply the sample label and fill it in with the relevant sample information. Then place the sample into a resealable plastic bag (e.g., Ziploc) and store it on water ice in a cooler. Chemical ice packs should not be used to cool PFAS samples.
- Avoid storing samples collected for PFAS with other sample containers that may have PFAS-containing lids such as VOA vials. Consider storing and shipping PFAS samples in a dedicated cooler separate from other sample containers.
- Follow method specific sample preservation, thermal storage, and holding times.

Attachment B

Photograph Log



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Photographs

Project Name: Taxiway A Pre-Construction Sampling Results
Project Number: M0232.17.089
Location: Portland, Oregon

Photo No. 1.

Description

Representative taxiway closure. Photograph obscured by foggy conditions.



Photo No. 2.

Description

Representative drilling location off the edge of pavement.



Attachment C

Field Exploration Logs



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MAUL FOSTER ALONGI

Geologic Borehole LogProject Number
M0232.17.089Boring Number
TA-01Sheet
1 of 1

Project Name **POP - Taxiway A**
 Project Location **Portland International Airport**
 Start/End Date **12/19/23 to 12/20/23**
 Driller/Equipment **AEC/Geoprobe**
 Geologist/Engineer **M. Pickering**
 Sample Method **Macrocore Liner**

Surface Elevation (feet)
 Northing
 Easting
 Total Depth of Borehole **15.0 feet**
 Outer Hole Diam **2.25 inch**

Depth (feet, bgs)	Water Levels	Percent Recovery	Sample Data Sample ID	Lithologic Column	Soil Description
1					0.0 to 1.0 feet: SILT WITH SAND (ML); brown; 80% fines; 20% sand; moist.
2					1.0 to 3.0 feet: SAND WITH SILT (SW-SM); brown; 10% fines; 90% sand, medium; no sheen; moist.
3		60			3.0 to 5.0 feet: No Recovery.
4					
5					5.0 to 7.5 feet: SAND WITH SILT (SW-SM); brown; 10% fines; 90% sand, medium; no sheen; moist.
6	▽				
7		74			7.5 to 8.7 feet: SILT WITH SAND (ML); brown; 85% fines; 15% sand; no sheen; moist.
8			TA-01-S		8.7 to 10.0 feet: No Recovery.
9					
10					10.0 to 11.0 feet: SAND WITH SILT (SW-SM); brown; 10% fines; 90% sand, coarse; no sheen; wet.
11					11.0 to 15.0 feet: SILT WITH SAND (ML); brown; 85% fines; 15% sand; no sheen; moist.
12		100			
13					
14					
15					

Total Depth = 15.0 feet bgs

NOTES:

1. bgs = below ground surface. 2. GP = Geoprobe macro-core sampler. 3. Depths are approximate and relative to feet bgs. 4. PID = photo ionization detector. 5. ppm = parts per million. 6. GW = groundwater sample TA-01-W at 1:05AM; pH = 6.53, Temperature = 11.3 degrees Celsius, Electrical Conductivity = 4.8 relative millivolts.

Borehole Completion Details

0.0 to 15.0 feet: Bentonite chips hydrated with potable water.

Reconnaissance Well Completion Details

Temporary prepacked well screen placed from 6.0 to 11.0 feet below ground surface.

▽ Water level measured in feet below ground surface.

MFA BOREHOLE WIRECON SCREEN W\GINT\GINTWP\PROJECTS\0232.17\TAXIWAY A.GPJ 12/21/23



MAUL FOSTER ALONGI

Geologic Borehole Log

Project Number
M0232.17.089Boring Number
TA-02Sheet
1 of 1

Project Name **POP - Taxiway A**
 Project Location **Portland International Airport**
 Start/End Date **12/20/23 to 12/20/23**
 Driller/Equipment **AEC/Geoprobe**
 Geologist/Engineer **M. Pickering**
 Sample Method **Macrocore Liner**

Surface Elevation (feet)
 Northing
 Easting
 Total Depth of Borehole **15.0 feet**
 Outer Hole Diam **2.25 inch**

Depth (feet, bgs)	Water Levels	Percent Recovery	Sample Data Sample ID	Lithologic Column	Soil Description
1					0.0 to 1.0 feet: SILTY SAND (SM); brown; 20% fines; 80% sand; no sheen; moist.
2					1.0 to 2.7 feet: SAND WITH SILT (SW-SM); brown; 10% fines; 90% sand, medium; no sheen; moist.
3		70			1.0 to 2.7 feet: SAND WITH SILT (SW-SM); brown; 10% fines; 90% sand, coarse; no sheen; moist.
4					3.5 to 5.0 feet: No Recovery.
5					5.0 to 9.4 feet: SAND WITH SILT (SW-SM); brown; 10% fines; 90% sand, coarse; no sheen; moist.
6					
7					
8		88			
9	▽		TA-02-S		
10					9.4 to 10.0 feet: No Recovery.
11					10.0 to 15.4 feet: SAND WITH SILT (SW-SM); brown; 10% fines; 90% sand, coarse; no sheen; wet.
12					
13		100			
14					
15					

Total Depth = 15.0 feet bgs

NOTES:

1. bgs = below ground surface. 2. GP = Geoprobe macro-core sampler. 3. Depths are approximate and relative to feet bgs. 4. PID = photo ionization detector. 5. ppm = parts per million. 6. GW = groundwater sample TA-02-W at 2:15AM; pH = 6.75, Temperature = 10.7 degrees Celsius, Electrical Conductivity = 6.8 relative millivolts.

Borehole Completion Details

0.0 to 15.0 feet: Bentonite chips hydrated with potable water.

Reconnaissance Well Completion Details

Temporary prepacked well screen placed from 8.0 to 13.0 feet below ground surface.

▽ Water level measured in feet below ground surface.

MFA BOREHOLE WIRECON SCREEN W\GINT\GINTWP\PROJECTS\0232.17\TAXIWAY A.GPJ 12/21/23

Attachment D

Laboratory Analytical Data Reports



MAUL
FOSTER
ALONGI



ALS Environmental
ALS Group USA, Corp
1317 South 13th Avenue
Kelso, WA 98626
T : +1 360 577 7222
F : +1 360 636 1068
www.alsglobal.com

February 07, 2024

Analytical Report for Service Request No: K2314281

Michael Pickering
Maul Foster & Alongi, Incorporated
6 Centerpointe Drive, Suite 360
Lake Oswego, OR 97035

RE: POP- PDX Taxiway A / M0232.17.089

Dear Michael,

Enclosed are the results of the sample(s) submitted to our laboratory December 20, 2023
For your reference, these analyses have been assigned our service request number **K2314281**.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3260. You may also contact me via email at Luke.Rahn@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Luke Rahn
Project Manager



ALS Environmental
ALS Group USA, Corp
1317 South 13th Avenue
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Raw Data

General Chemistry

Semi-Volatile Petroleum Products by Silica Gel Treated by GC/FID

Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS Compliant with Table B-24 of DOD QSM 5.4

Volatile Organic Compounds by GCMS

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Inorganic Data Qualifiers

- * The result is an outlier. See case narrative.
- # The control limit criteria is not applicable.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
- E The result is an estimate amount because the value exceeded the instrument calibration range.
- J The result is an estimated value.
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
DOD-QSM 4.2 definition : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- i The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
- X See case narrative.
- Q See case narrative. One or more quality control criteria was outside the limits.
- H The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

- # The control limit criteria is not applicable.
- J The result is an estimated value.
- E The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
- M The duplicate injection precision was not met.
- N The Matrix Spike sample recovery is not within control limits. See case narrative.
- S The reported value was determined by the Method of Standard Additions (MSA).
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
DOD-QSM 4.2 definition : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- W The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
- i The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
- X See case narrative.
- + The correlation coefficient for the MSA is less than 0.995.
- Q See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

- * The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- A A tentatively identified compound, a suspected aldol-condensation product.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
- C The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
- D The reported result is from a dilution.
- E The result is an estimated value.
- J The result is an estimated value.
- N The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
- P The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
DOD-QSM 4.2 definition : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- i The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
- X See case narrative.
- Q See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

- F The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
- L The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
- H The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
- O The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
- Y The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
- Z The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjllabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdwlabservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.

Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/analyte is offered by that state.



Case Narrative

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577- 7222 Fax (360)636-1 068
www.alsglobal.com

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A
Sample Matrix: Water

Service Request: K2314281
Date Received: 12/20/2023

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier level IV requested by the client.

Sample Receipt:

Two water samples were received for analysis at ALS Environmental on 12/20/2023. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Semivolatile GC:

Method NWTPH-Dx, 12/27/2023: The lower control criterion was exceeded for n-Triacontane in sample TA-02-W. The problem equates to a slight low bias. The data was flagged to indicate the problem.

Method NWTPH-Dx, 12/27/2023: The upper control criterion was exceeded for n-Triacontane in closing Continuing Calibration Verification (CCV) KQ2400312-02. The recovery for this surrogate was acceptable for the field and QC samples included in this sequence. The error associated with an elevated recovery equated to a high bias. The quality of the sample data was not significantly affected. No further corrective action was appropriate.

General Chemistry:

No significant anomalies were noted with this analysis.

Organic LC:

Method 1633, 01/22/2024: The upper control criterion was exceeded for one or more of the following native analytes in several Continuing Calibration Verifications (CCVs): N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA), Perfluoro-3-methoxypropanoic acid (PFMPA). The field samples analyzed in this sequence did not contain the analyte in question. Since the apparent problem indicated a potential high bias, the data quality was not affected. No further corrective action was required.

The control criteria were exceeded for one or more isotopes in several Continuing Calibration Verifications (CCVs). The recovery of the associated native analytes was within control criteria, which indicated the analysis was in control. No further corrective action was appropriate.

Method 1633, 01/22/2024: The upper control criterion was exceeded for N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA), 4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA), and/or Perfluoro-3-methoxypropanoic acid (PFMPA) in the replicate Laboratory Control Samples (LCS/DLCS) KQ2400483-01/-02 and Low Level Lab Control Sample (LCS_LL) KQ2400483-03. The analytes in question were not detected in the associated field samples. The error associated with elevated recovery indicated a high bias. The sample data was not significantly affected. No further corrective action was appropriate.

The reporting limits were slightly elevated for all analytes in sample TA-01-W due to slightly less than optimal sample volume received for analysis.

The lower control criterion was exceeded for 4,8-Dioxa-3H-perfluorononanoic acid (DONA) in Continuing Calibration Verification (CCV) KQ2401707-13. The analyte in question was not reported from the field samples analyzed in this sequence. The data quality was not affected. No further corrective action was required.

Volatiles by GC/MS:

Method 8260C, 12/22/2023: Several analytes were flagged as outside the control criterion for Continuing Calibration Verification (CCV). In accordance with the EPA Method, 80% or more of the CCV analytes must pass within 20% of the true value. The ALS SOP allows for 40% difference for the remaining analytes. The CCV met these criteria. The quality of the sample data was not significantly affected. No further corrective action was required.

Approved by



Date

02/07/2024



Chain of Custody

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577- 7222 Fax (360)636-1 068
www.alsglobal.com



MAUL FOSTER & ALONGI

CHAIN OF CUSTODY RECORD

Client Name: Maul Foster & Alongi
Address: 3140 NE Broadway
City/State/Zip: Portland, OR 97232

Telephone Number: 971-227-2566

Project Manager: Michael Pickering

Analytical Lab: ALS

Project Name: POP - PDX Taxiway A

Report To: mpickering@maulfoster.com

Project Number: M0232.17.089

Page: 1 of 1

Sampler Name: C. Clough

Sample ID / Description	Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Field Filtered	Preservative						Matrix						Analyze For:						RUSH TAT (Pre-Schedule)	Standard TAT	Fax Results	Send QC with report																																																		
							Ice	HNO ₃ (Red Label)	HCl (Blue Label)	NaOH (Orange Label)	H ₂ SO ₄ Plastic (Yellow Label)	H ₂ SO ₄ Glass (Yellow Label)	None (Black Label)	Groundwater	Wastewater	Drinking Water	Sludge	Soil	Other (specify):	1633/PFAS	VOCs by 8260C	TPH-Dx (SG)																																																								
TA-01-W	12/20/23	0105	7	X			X	X				X	X				X	X	X							X																																																				
TA-02-W	12/20/23	0215	7	X			X	X				X	X				X	X	X						X																																																					
Special Instructions:	Bill to MFA using Port rates EQuIS 4-file EDD required with final report.												Laboratory Comments:																																																																	
Method of Shipment: Courier <table border="1"> <tr> <td>Relinquished by: Name/Company</td> <td>Date</td> <td>Time</td> <td>Received by: Name/Company</td> <td>Date</td> <td>Time</td> </tr> <tr> <td>CHAZIS Clough/MFA</td> <td>12/20/23</td> <td>1015</td> <td>Don & ALS</td> <td>12/20/23</td> <td>1015</td> </tr> <tr> <td>Relinquished by: Name/Company</td> <td>Date</td> <td>Time</td> <td>Received by: Name/Company</td> <td>Date</td> <td>Time</td> </tr> <tr> <td>Don & ALS</td> <td>12/20/23</td> <td>1345</td> <td>Reders</td> <td>12/20/23</td> <td>1345</td> </tr> <tr> <td>Relinquished by: Name/Company</td> <td>Date</td> <td>Time</td> <td>Received by: Name/Company</td> <td>Date</td> <td>Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td>Relinquished by: Name/Company</td> <td>Date</td> <td>Time</td> <td>Received by: Name/Company</td> <td>Date</td> <td>Time</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>																									Relinquished by: Name/Company	Date	Time	Received by: Name/Company	Date	Time	CHAZIS Clough/MFA	12/20/23	1015	Don & ALS	12/20/23	1015	Relinquished by: Name/Company	Date	Time	Received by: Name/Company	Date	Time	Don & ALS	12/20/23	1345	Reders	12/20/23	1345	Relinquished by: Name/Company	Date	Time	Received by: Name/Company	Date	Time							Relinquished by: Name/Company	Date	Time	Received by: Name/Company	Date	Time							Temperature Upon Receipt: Sample Containers Intact? Y N VOCs Free of Headspace? Y N					
Relinquished by: Name/Company	Date	Time	Received by: Name/Company	Date	Time																																																																									
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Cooler Receipt and Preservation Form

Client Mark Foster Service Request K23 14281
 Received: 12/20/23 Opened: 12/20/23 By: AP Unloaded: 12/20/23 By: AP

- Samples were received via? USPS Fed Ex UPS DHL PDX Courier Hand Delivered
- Samples were received in: (circle) Cooler Box Envelope Other NA
- Were custody seals on coolers? NA Y N If yes, how many and where? _____
 If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / NA	Out of temp Indicate with "X"	PM Notified If out of temp	Tracking Number	NA	Filed
4.9		1201						

- Was a Temperature Blank present in cooler? NA Y N If yes, notate the temperature in the appropriate column above:

If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":

- Were samples received within the method specified temperature ranges? NA Y N
 If no, were they received on ice and same day as collected? If not, notate the cooler # above and notify the PM. NA Y N

If applicable, tissue samples were received: Frozen Partially Thawed Thawed

- Packing material: Inserts Baggies Bubble Wrap Gel Packs Wet Ice Dry Ice Sleeves
- Were custody papers properly filled out (ink, signed, etc.)? NA Y N
- Were samples received in good condition (unbroken) NA Y N
- Were all sample labels complete (ie, analysis, preservation, etc.)? NA Y N
- Did all sample labels and tags agree with custody papers? NA Y N
- Were appropriate bottles/containers and volumes received for the tests indicated? NA Y N
- Were the pH-preserved bottles (see SMO GEN SOP) received at the appropriate pH? Indicate in the table below NA Y N
- Were VOA vials received without headspace? Indicate in the table below. NA Y N
- Was C12/Res negative? NA Y N
- Were samples received within the method specified time limit? If not, notate the error below and notify the PM NA Y N
- Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? NA Y N Underfilled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Head- space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, Resolutions: _____



General Chemistry

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577- 7222 Fax (360)636-1 068
www.alsglobal.com

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Water
Analysis Method: SM 2540 D Modified
Prep Method: None

Service Request: K2314281
Date Collected: 12/20/23
Date Received: 12/20/23
Units: mg/L
Basis: NA

Solids, Total Suspended (TSS)

Sample Name	Lab Code	Result	MRL	MDL	Dil.	Date Analyzed	Q
TA-01-W	K2314281-001	4360	100	-	1	01/02/24 11:06	
TA-02-W	K2314281-002	330	100	-	1	01/02/24 11:06	
Method Blank	K2314281-MB	ND U	100	-	1	01/02/24 11:06	

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Water

Service Request: K2314281
Date Analyzed: 01/02/24
Date Extracted: NA

Lab Control Sample Summary
Solids, Total Suspended (TSS)

Analysis Method: SM 2540 D Modified
Prep Method: None

Units: mg/L
Basis: NA
Analysis Lot: 828575

Sample Name	Lab Code	Result	Spike Amount	% Rec	% Rec Limits
Lab Control Sample	K2314281-LCS	390	390	100	85-115



Semi-Volatile Petroleum Products by Silica Gel Treated by GC/FID

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Water

Service Request: K2314281
Date Collected: 12/20/23 01:05
Date Received: 12/20/23 13:45

Sample Name: TA-01-W
Lab Code: K2314281-001

Units: ug/L
Basis: NA

Semi-Volatile Petroleum Products, Silica Gel Treated by GC/FID

Analysis Method: NWTPH-Dx
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Diesel Range Organics (C12 - C25 DRO)	92 J	260	12	1	01/05/24 20:11	1/3/24	
Residual Range Organics (C25 - C36 RRO)	78 J	510	20	1	01/05/24 20:11	1/3/24	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
o-Terphenyl	65	50 - 150	01/05/24 20:11	
n-Triacontane	96	50 - 150	01/05/24 20:11	

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Analytical Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Water

Service Request: K2314281
Date Collected: 12/20/23 02:15
Date Received: 12/20/23 13:45

Sample Name: TA-02-W
Lab Code: K2314281-002

Units: ug/L
Basis: NA

Semi-Volatile Petroleum Products, Silica Gel Treated by GC/FID

Analysis Method: NWTPH-Dx
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Diesel Range Organics (C12 - C25 DRO)	140 J	250	11	1	12/27/23 20:05	12/21/23	
Residual Range Organics (C25 - C36 RRO)	160 J	500	19	1	12/27/23 20:05	12/21/23	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
o-Terphenyl	53	50 - 150	12/27/23 20:05	
n-Triacontane	49	50 - 150	12/27/23 20:05	*

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Analytical Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Water

Service Request: K2314281
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: KQ2322265-01

Units: ug/L
Basis: NA

Semi-Volatile Petroleum Products, Silica Gel Treated by GC/FID

Analysis Method: NWTPH-Dx
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Diesel Range Organics (C12 - C25 DRO)	65 J	250	11	1	12/27/23 18:39	12/21/23	
Residual Range Organics (C25 - C36 RRO)	26 J	500	19	1	12/27/23 18:39	12/21/23	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
o-Terphenyl	81	50 - 150	12/27/23 18:39	
n-Triacontane	92	50 - 150	12/27/23 18:39	

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Analytical Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Water

Service Request: K2314281
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: KQ2400071-01

Units: ug/L
Basis: NA

Semi-Volatile Petroleum Products, Silica Gel Treated by GC/FID

Analysis Method: NWTPH-Dx
Prep Method: EPA 3510C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Diesel Range Organics (C12 - C25 DRO)	48 J	250	11	1	01/05/24 19:06	1/3/24	
Residual Range Organics (C25 - C36 RRO)	51 J	500	19	1	01/05/24 19:06	1/3/24	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
o-Terphenyl	106	50 - 150	01/05/24 19:06	
n-Triacontane	120	50 - 150	01/05/24 19:06	

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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Water

Service Request: K2314281

SURROGATE RECOVERY SUMMARY
Semi-Volatile Petroleum Products, Silica Gel Treated by GC/FID

Analysis Method: NWTPH-Dx
Extraction Method: EPA 3510C

Sample Name	Lab Code	n-Triacontane	o-Terphenyl
		50 - 150	50 - 150
TA-01-W	K2314281-001	96	65
TA-02-W	K2314281-002	49 *	53
Method Blank	KQ2322265-01	92	81
Lab Control Sample	KQ2322265-02	102	95
Duplicate Lab Control Sample	KQ2322265-03	103	97
Method Blank	KQ2400071-01	120	106
Lab Control Sample	KQ2400071-02	116	102
Duplicate Lab Control Sample	KQ2400071-03	110	100

ALS Group USA, Corp.
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QA/QC Report

Client:
Project:
Sample Matrix:

Maul Foster & Alongi, Incorporated
POP- PDX Taxiway A/M0232.17.089
Water

Service Request:
Date Analyzed:
Date Extracted:

K2314281
12/27/23
12/21/23

Duplicate Lab Control Sample Summary
Semi-Volatile Petroleum Products, Silica Gel Treated by GC/FID

Analysis Method:
Prep Method:

NWTPH-Dx
EPA 3510C

Units:
Basis:
Analysis Lot:

ug/L
NA
828342

Lab Control Sample KQ2322265-02				Duplicate Lab Control Sample KQ2322265-03					
Analyte Name	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Diesel Range Organics (C12 - C25 DRO)	3100	3200	97	3140	3200	98	46-140	1	30
Residual Range Organics (C25 - C36 RRO)	1700	1600	106	1680	1600	105	45-159	1	30

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QA/QC Report

Client:

Project:

Sample Matrix:

Maul Foster & Alongi, Incorporated
POP- PDX Taxiway A/M0232.17.089
Water

Service Request:

Date Analyzed:

Date Extracted:

K2314281
01/05/24
01/03/24

Duplicate Lab Control Sample Summary
Semi-Volatile Petroleum Products, Silica Gel Treated by GC/FID

Analysis Method:

Prep Method:

NWTPH-Dx
EPA 3510C

Units:

Basis:

Analysis Lot:

ug/L
NA
829103

Lab Control Sample KQ2400071-02				Duplicate Lab Control Sample KQ2400071-03					
Analyte Name	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Diesel Range Organics (C12 - C25 DRO)	3580	3200	112	3600	3200	112	46-140	<1	30
Residual Range Organics (C25 - C36 RRO)	1960	1600	123	1880	1600	117	45-159	5	30

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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Water

Service Request: K2314281
Date Analyzed: 12/27/23 18:39
Date Extracted: 12/21/23

Method Blank Summary
Semi-Volatile Petroleum Products, Silica Gel Treated by GC/FID

Sample Name: Method Blank
Lab Code: KQ2322265-01
Analysis Method: NWTPH-Dx
Prep Method: EPA 3510C

Instrument ID: K-GC-21
File ID: J:\GC21\DATA\122723F\1227026.D\
Analysis Lot: 828342
Extraction Lot: 431731

This Method Blank applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Lab Control Sample	KQ2322265-02	J:\GC21\DATA\122723F\1227027.D\	12/27/23 19:01
Duplicate Lab Control Sample	KQ2322265-03	J:\GC21\DATA\122723F\1227028.D\	12/27/23 19:22
TA-02-W	K2314281-002	J:\GC21\DATA\122723F\1227030.D\	12/27/23 20:05

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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Water

Service Request: K2314281
Date Analyzed: 01/05/24 19:06
Date Extracted: 01/03/24

Method Blank Summary
Semi-Volatile Petroleum Products, Silica Gel Treated by GC/FID

Sample Name: Method Blank
Lab Code: KQ2400071-01
Analysis Method: NWTPH-Dx
Prep Method: EPA 3510C

Instrument ID: K-GC-35
File ID: J:\GC35\DATA\010524\0105F028.D\
Analysis Lot: 829103
Extraction Lot: 432147

This Method Blank applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Lab Control Sample	KQ2400071-02	J:\GC35\DATA\010524\0105F029.D\	01/05/24 19:28
Duplicate Lab Control Sample	KQ2400071-03	J:\GC35\DATA\010524\0105F030.D\	01/05/24 19:50
TA-01-W	K2314281-001	J:\GC35\DATA\010524\0105F031.D\	01/05/24 20:11

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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Water

Service Request: K2314281
Date Analyzed: 12/27/23 19:01
Date Extracted: 12/21/23

Lab Control Sample Summary
Semi-Volatile Petroleum Products, Silica Gel Treated by GC/FID

Sample Name: Lab Control Sample
Lab Code: KQ2322265-02
Analysis Method: NWTPH-Dx
Prep Method: EPA 3510C

Instrument ID: K-GC-21
File ID: J:\GC21\DATA\122723F\1227027.D\
Analysis Lot: 828342
Extraction Lot: 431731

This Lab Control Sample applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Method Blank	KQ2322265-01	J:\GC21\DATA\122723F\1227026.D\	12/27/23 18:39
Duplicate Lab Control Sample	KQ2322265-03	J:\GC21\DATA\122723F\1227028.D\	12/27/23 19:22
TA-02-W	K2314281-002	J:\GC21\DATA\122723F\1227030.D\	12/27/23 20:05

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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Water

Service Request: K2314281
Date Analyzed: 01/05/24 19:28
Date Extracted: 01/03/24

Lab Control Sample Summary
Semi-Volatile Petroleum Products, Silica Gel Treated by GC/FID

Sample Name: Lab Control Sample **Instrument ID:** K-GC-35
Lab Code: KQ2400071-02 **File ID:** J:\GC35\DATA\010524\0105F029.D\
Analysis Method: NWTPH-Dx **Analysis Lot:** 829103
Prep Method: EPA 3510C **Extraction Lot:** 432147

This Lab Control Sample applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Method Blank	KQ2400071-01	J:\GC35\DATA\010524\0105F028.D\	01/05/24 19:06
Duplicate Lab Control Sample	KQ2400071-03	J:\GC35\DATA\010524\0105F030.D\	01/05/24 19:50
TA-01-W	K2314281-001	J:\GC35\DATA\010524\0105F031.D\	01/05/24 20:11

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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A

Service Request: K2314281
Calibration Date: 9/5/2023

Initial Calibration Summary
Semi-Volatile Petroleum Products, Silica Gel Treated by GC/FID

Calibration ID: KC2300521
Instrument ID: K-GC-35

Signal ID: ZB-1

#	Lab Code	Sample Name	File Location	Acquisition Date
01	KC2300521-01	RRO SVF04-60K 50	J:\GC35\DATA\090523\0905F025.D	09/05/2023 17:22
02	KC2300521-02	RRO SVF04-60J 200	J:\GC35\DATA\090523\0905F026.D	09/05/2023 17:44
03	KC2300521-03	RRO SVF04-60I 500	J:\GC35\DATA\090523\0905F027.D	09/05/2023 18:05
04	KC2300521-04	RRO SVF04-60H 2000	J:\GC35\DATA\090523\0905F028.D	09/05/2023 18:27
05	KC2300521-05	RRO SVF04-60G 5000	J:\GC35\DATA\090523\0905F029.D	09/05/2023 18:49
07	KC2300521-07	AK103 SVF04-61D 50	J:\GC35\DATA\090523\0905F035.D	09/05/2023 20:59
08	KC2300521-08	AK103 SVF04-61C 200	J:\GC35\DATA\090523\0905F036.D	09/05/2023 21:20
09	KC2300521-09	AK103 SVF04-61B 500	J:\GC35\DATA\090523\0905F037.D	09/05/2023 21:41
10	KC2300521-10	AK103 SVF04-61A 2000	J:\GC35\DATA\090523\0905F038.D	09/05/2023 22:03
11	KC2300521-11	AK103 SVF04-60M 5000	J:\GC35\DATA\090523\0905F039.D	09/05/2023 22:25
13	KC2300521-13	DRO SVF04-62A 20/1.0	J:\GC35\DATA\090623\0906F006.D	09/06/2023 13:34
14	KC2300521-14	DRO SVF04-61L 50/2.5	J:\GC35\DATA\090623\0906F007.D	09/06/2023 13:55
15	KC2300521-15	DRO SVF04-61K 200/10	J:\GC35\DATA\090623\0906F008.D	09/06/2023 14:17
16	KC2300521-16	DRO SVF04-61J 500/25	J:\GC35\DATA\090623\0906F009.D	09/06/2023 14:38
17	KC2300521-17	DRO SVF04-61I 2000/100	J:\GC35\DATA\090623\0906F010.D	09/06/2023 15:00
18	KC2300521-18	DRO SVF04-61H 5000/250	J:\GC35\DATA\090623\0906F011.D	09/06/2023 15:22
19	KC2300521-19	DRO SVF04-61G 20K	J:\GC35\DATA\090623\0906F012.D	09/06/2023 15:43
20	KC2300521-20	DRO SVF04-61F 50K	J:\GC35\DATA\090623\0906F013.D	09/06/2023 16:05

Analyte

Diesel Range Organics (C12 - C25 DRO)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
13	20.000	1.132E3	14	50.000	1.099E3	15	200.000	1.085E3	16	500.000	1.133E3
17	2000.000	930.8	18	5000.000	1.104E3	19	20000.000	979.1	20	50000.000	964.2

Residual Range Organics (C25 - C36 RRO)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	50.000	1.004E3	02	200.000	839.5	03	500.000	818.1	04	2000.000	733.7
05	5000.000	719.6									

n-Triacontane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
13	1.000	1.32E3	14	2.500	1.265E3	15	10.000	1.251E3	16	25.000	1.233E3
17	100.000	989.3	18	250.000	1.164E3						

o-Terphenyl

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
13	1.000	1.604E3	14	2.500	1.542E3	15	10.000	1.55E3	16	25.000	1.52E3
17	100.000	1.205E3	18	250.000	1.459E3						

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A

Service Request: K2314281
Calibration Date: 9/5/2023

Initial Calibration Summary
Semi-Volatile Petroleum Products, Silica Gel Treated by GC/FID

Calibration ID: KC2300521
Instrument ID: K-GC-35

Signal ID: ZB-1

Analyte Name	Compound Type	Calibration Evaluation				Calibration Evaluation	
		Fit Type	Eval	Eval Result	Control Criteria	Average RRF	Minimum RRF
Diesel Range Organics (C12 - C25 DRO)	TRG	Average RF	% RSD	7.8	≤20	1.054E3	
Residual Range Organics (C25 - C36 RRO)	TRG	Average RF	% RSD	13.8	≤20	823	
n-Triacontane	SURR	Average RF	% RSD	9.7	≤20	1.204E3	
o-Terphenyl	SURR	Average RF	% RSD	9.6	≤20	1.48E3	

ALS Group USA, Corp.
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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A

Service Request: K2314281
Calibration Date: 9/1/2023

Initial Calibration Summary
Semi-Volatile Petroleum Products, Silica Gel Treated by GC/FID

Calibration ID: KC2300522
Instrument ID: K-GC-21

Signal ID: ZB-1

#	Lab Code	Sample Name	File Location	Acquisition Date
01	KC2300522-01	AK103 SVF04-58M 50	J:\GC21\DATA\090123\0901F032.D	09/01/2023 21:03
02	KC2300522-02	AK103 SVF04-58L 200	J:\GC21\DATA\090123\0901F033.D	09/01/2023 21:25
03	KC2300522-03	AK103 SVF04-58K 500	J:\GC21\DATA\090123\0901F034.D	09/01/2023 21:46
04	KC2300522-04	AK103 SVF04-58J 2000	J:\GC21\DATA\090123\0901F035.D	09/01/2023 22:08
05	KC2300522-05	AK103 SVF04-58I 5000	J:\GC21\DATA\090123\0901F036.D	09/01/2023 22:29
07	KC2300522-07	DRO SVF04-62A 20/1.0	J:\GC21\DATA\090623\0906F014.D	09/06/2023 13:22
08	KC2300522-08	DRO SVF04-61L 50/2.5	J:\GC21\DATA\090623\0906F015.D	09/06/2023 13:44
09	KC2300522-09	DRO SVF04-61K 200/10	J:\GC21\DATA\090623\0906F016.D	09/06/2023 14:05
10	KC2300522-10	DRO SVF04-61J 500/25	J:\GC21\DATA\090623\0906F017.D	09/06/2023 14:27
11	KC2300522-11	DRO SVF04-61I 2000/100	J:\GC21\DATA\090623\0906F018.D	09/06/2023 14:48
12	KC2300522-12	DRO SVF04-61H 5000/250	J:\GC21\DATA\090623\0906F019.D	09/06/2023 15:10
13	KC2300522-13	DRO SVF04-61G 20K	J:\GC21\DATA\090623\0906F020.D	09/06/2023 15:31
14	KC2300522-14	DRO SVF04-61F 50K	J:\GC21\DATA\090623\0906F021.D	09/06/2023 15:53
16	KC2300522-16	RRO SVF04-63A 50	J:\GC21\DATA\090723\0907F003.D	09/07/2023 11:19
17	KC2300522-17	RRO SVF04-62M 200	J:\GC21\DATA\090723\0907F004.D	09/07/2023 11:40
18	KC2300522-18	RRO SVF04-62L 500	J:\GC21\DATA\090723\0907F005.D	09/07/2023 12:02
19	KC2300522-19	RRO SVF04-62K 2000	J:\GC21\DATA\090723\0907F006.D	09/07/2023 12:23
20	KC2300522-20	RRO SVF04-62J 5000	J:\GC21\DATA\090723\0907F007.D	09/07/2023 12:45

Analyte

Diesel Range Organics (C12 - C25 DRO)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
07	20.000	927.2	08	50.000	812.8	09	200.000	760.1	10	500.000	766.6
11	2000.000	761.8	12	5000.000	883.2	13	20000.000	697.1	14	50000.000	736.7

Residual Range Organics (C25 - C36 RRO)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
16	50.000	529.5	17	200.000	532.5	18	500.000	630.3	19	2000.000	606.5
20	5000.000	537.9									

n-Triacontane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
07	1.000	1.054E3	08	2.500	939.6	09	10.000	939.7	10	25.000	913
11	100.000	907.7	12	250.000	1.016E3						

o-Terphenyl

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
07	1.000	1.277E3	08	2.500	1.097E3	09	10.000	1.083E3	10	25.000	1.062E3
11	100.000	1.049E3	12	250.000	1.183E3						

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A

Service Request: K2314281
Calibration Date: 9/1/2023

Initial Calibration Summary
Semi-Volatile Petroleum Products, Silica Gel Treated by GC/FID

Calibration ID: KC2300522
Instrument ID: K-GC-21

Signal ID: ZB-1

Analyte Name	Compound Type	Calibration Evaluation				Calibration Evaluation	
		Fit Type	Eval	Eval Result	Control Criteria	Average RRF	Minimum RRF
Diesel Range Organics (C12 - C25 DRO)	TRG	Average RF	% RSD	9.7	≤20	793.2	
Residual Range Organics (C25 - C36 RRO)	TRG	Average RF	% RSD	8.4	≤20	567.4	
n-Triacontane	SURR	Average RF	% RSD	6.2	≤20	961.7	
o-Terphenyl	SURR	Average RF	% RSD	7.8	≤20	1.125E3	

QA/QC Report

Service Request: K2314281
Calibration Date: 9/5/2023

Calibration ID: KC2300521
Instrument ID: K-GC-35

Signal ID: ZB-1

Analyte Name	Expected	Result	Average RF	SSV RF	% D	Criteria	Curve Fit
Diesel Range Organics (C12 - C25 DRO)	1000	1070	1.054E3	1.132E3	7.49	±15	Average RF
Residual Range Organics (C25 - C36 RRO)	1000	871	8.23E2	7.164E2	-12.943	±15	Average RF

QA/QC Report

Service Request: K2314281
Calibration Date: 9/1/2023

Calibration ID: KC2300522
Instrument ID: K-GC-21

Signal ID: ZB-1

Analyte Name	Expected	Result	Average RF	SSV RF	% D	Criteria	Curve Fit
Diesel Range Organics (C12 - C25 DRO)	1000	1080	7.932E2	8.538E2	7.64	±15	Average RF
Residual Range Organics (C25 - C36 RRO)	1000	895	5.674E2	5.078E2	-10.506	±15	Average RF

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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request: K2314281
Date Analyzed: 12/27/23 13:58

Continuing Calibration Verification (CCV) Summary
Semi-Volatile Petroleum Products, Silica Gel Treated by GC/FID

Analysis Method: NWTPH-Dx
File ID: J:\GC21\DATA\122723F\1227013.D\
Signal ID: ZB-1

Calibration Date: 9/1/2023
Calibration ID: KC2300522
Analysis Lot: 828342
Units: ppm

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
Diesel Range Organics (C12 - C25 DRO)	1000	1110	793.1796	882.431	11.3	NA	±15	Average RF
Residual Range Organics (C25 - C36 RRO)	1000	1010	567.3577	575.092	1.4	NA	±15	Average RF

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
o-Terphenyl	50.0	53.4	1.125E3	1.202E3	6.9	NA	±15	Average RF
n-Triacontane	50.0	56.7	961.6683	1.091E3	13.4	NA	±15	Average RF

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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request: K2314281
Date Analyzed: 12/27/23 22:15

Continuing Calibration Verification (CCV) Summary
Semi-Volatile Petroleum Products, Silica Gel Treated by GC/FID

Analysis Method: NWTPH-Dx
File ID: J:\GC21\DATA\122723F\1227036.D\
Signal ID: ZB-1

Calibration Date: 9/1/2023
Calibration ID: KC2300522
Analysis Lot: 828342
Units: ppm

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
Diesel Range Organics (C12 - C25 DRO)	1000	1020	793.1796	810.476	2.2	NA	±15	Average RF
Residual Range Organics (C25 - C36 RRO)	1000	1020	567.3577	579.827	2.2	NA	±15	Average RF

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
o-Terphenyl	50.0	48.2	1.125E3	1.084E3	-3.7	NA	±15	Average RF
n-Triacontane	50.0	52.2	961.6683	1.004E3	4.4	NA	±15	Average RF

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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request: K2314281
Date Analyzed: 01/05/24 16:35

Continuing Calibration Verification (CCV) Summary
Semi-Volatile Petroleum Products, Silica Gel Treated by GC/FID

Analysis Method: NWTPH-Dx
File ID: J:\GC35\DATA\010524\0105F021.D\
Signal ID: ZB-1

Calibration Date: 9/5/2023
Calibration ID: KC2300521
Analysis Lot: 829103
Units: ppm

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
Diesel Range Organics (C12 - C25 DRO)	1000	1110	1.054E3	1.167E3	10.7	NA	±15	Average RF
Residual Range Organics (C25 - C36 RRO)	1000	922	822.9505	758.436	-7.8	NA	±15	Average RF

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
o-Terphenyl	50.0	47.5	1.48E3	1.405E3	-5.1	NA	±15	Average RF
n-Triacontane	50.0	53.7	1.204E3	1.293E3	7.4	NA	±15	Average RF

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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request: K2314281
Date Analyzed: 01/05/24 23:47

Continuing Calibration Verification (CCV) Summary
Semi-Volatile Petroleum Products, Silica Gel Treated by GC/FID

Analysis Method: NWTPH-Dx
File ID: J:\GC35\DATA\010524\0105F041.D\
Signal ID: ZB-1

Calibration Date: 9/5/2023
Calibration ID: KC2300521
Analysis Lot: 829103
Units: ppm

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
Diesel Range Organics (C12 - C25 DRO)	1000	1010	1.054E3	1.065E3	1.1	NA	±15	Average RF
Residual Range Organics (C25 - C36 RRO)	1000	1110	822.9505	915.184	11.2	NA	±15	Average RF

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
o-Terphenyl	50.0	45.7	1.48E3	1.352E3	-8.6	NA	±15	Average RF
n-Triacontane	50.0	58.5	1.204E3	1.409E3	17.0*	NA	±15	Average RF

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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request:K2314281

Analysis Run Log
Semi-Volatile Petroleum Products, Silica Gel Treated by GC/FID

Analysis Method: NWTPH-Dx

Analysis Lot:828342
Instrument ID:K-GC-21

Raw Data File	Sample Name	Lab Code	Date Analyzed	Time Analyzed	Q
J:\GC21\DATA\122723F\1227013.D\	Continuing Calibration Verification	KQ2322584-01	12/27/2023	13:58:00	
J:\GC21\DATA\122723F\1227014.D\	Continuing Calibration Verification	KQ2322584-01	12/27/2023	14:20:00	
J:\GC21\DATA\122723F\1227016.D\	Continuing Calibration Blank	KQ2322584-03	12/27/2023	15:03:00	
J:\GC21\DATA\122723F\1227018.D\	ZZZZZZZZ	ZZZZZZZZ	12/27/2023	15:46:00	
J:\GC21\DATA\122723F\1227019.D\	ZZZZZZZZ	ZZZZZZZZ	12/27/2023	16:08:00	
J:\GC21\DATA\122723F\1227020.D\	ZZZZZZZZ	ZZZZZZZZ	12/27/2023	16:29:00	
J:\GC21\DATA\122723F\1227021.D\	ZZZZZZZZ	ZZZZZZZZ	12/27/2023	16:51:00	
J:\GC21\DATA\122723F\1227026.D\	Method Blank	KQ2322265-01	12/27/2023	18:39:00	
J:\GC21\DATA\122723F\1227027.D\	Lab Control Sample	KQ2322265-02	12/27/2023	19:01:00	
J:\GC21\DATA\122723F\1227028.D\	Duplicate Lab Control Sample	KQ2322265-03	12/27/2023	19:22:00	
J:\GC21\DATA\122723F\1227029.D\	ZZZZZZZZ	ZZZZZZZZ	12/27/2023	19:44:00	
J:\GC21\DATA\122723F\1227030.D\	TA-02-W	K2314281-002	12/27/2023	20:05:00	
J:\GC21\DATA\122723F\1227031.D\	ZZZZZZZZ	ZZZZZZZZ	12/27/2023	20:27:00	
J:\GC21\DATA\122723F\1227032.D\	ZZZZZZZZ	ZZZZZZZZ	12/27/2023	20:48:00	
J:\GC21\DATA\122723F\1227033.D\	ZZZZZZZZ	ZZZZZZZZ	12/27/2023	21:10:00	
J:\GC21\DATA\122723F\1227034.D\	ZZZZZZZZ	ZZZZZZZZ	12/27/2023	21:32:00	
J:\GC21\DATA\122723F\1227035.D\	ZZZZZZZZ	ZZZZZZZZ	12/27/2023	21:53:00	
J:\GC21\DATA\122723F\1227036.D\	Continuing Calibration Verification	KQ2322584-02	12/27/2023	22:15:00	
J:\GC21\DATA\122723F\1227037.D\	Continuing Calibration Verification	KQ2322584-02	12/27/2023	22:37:00	
J:\GC21\DATA\122723F\1227038.D\	Continuing Calibration Blank	KQ2322584-04	12/27/2023	22:58:00	

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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request:K2314281

Analysis Run Log
Semi-Volatile Petroleum Products, Silica Gel Treated by GC/FID

Analysis Method: NWTPH-Dx

Analysis Lot:829103
Instrument ID:K-GC-35

Raw Data File	Sample Name	Lab Code	Date Analyzed	Time Analyzed	Q
J:\GC35\DATA\010524\0105F021.D\	Continuing Calibration Verification	KQ2400312-01	1/5/2024	16:35:00	
J:\GC35\DATA\010524\0105F021.D\	ZZZZZZZZ	ZZZZZZZZ	1/5/2024	16:35:00	
J:\GC35\DATA\010524\0105F023.D\	Continuing Calibration Verification	KQ2400312-01	1/5/2024	17:18:00	
J:\GC35\DATA\010524\0105F023.D\	ZZZZZZZZ	ZZZZZZZZ	1/5/2024	17:18:00	
J:\GC35\DATA\010524\0105F024.D\	ZZZZZZZZ	ZZZZZZZZ	1/5/2024	17:40:00	
J:\GC35\DATA\010524\0105F024.D\	Continuing Calibration Blank	KQ2400312-03	1/5/2024	17:40:00	
J:\GC35\DATA\010524\0105F028.D\	Method Blank	KQ2400071-01	1/5/2024	19:06:00	
J:\GC35\DATA\010524\0105F029.D\	Lab Control Sample	KQ2400071-02	1/5/2024	19:28:00	
J:\GC35\DATA\010524\0105F030.D\	Duplicate Lab Control Sample	KQ2400071-03	1/5/2024	19:50:00	
J:\GC35\DATA\010524\0105F031.D\	TA-01-W	K2314281-001	1/5/2024	20:11:00	
J:\GC35\DATA\010524\0105F032.D\	ZZZZZZZZ	ZZZZZZZZ	1/5/2024	20:33:00	
J:\GC35\DATA\010524\0105F033.D\	ZZZZZZZZ	ZZZZZZZZ	1/5/2024	20:54:00	
J:\GC35\DATA\010524\0105F034.D\	ZZZZZZZZ	ZZZZZZZZ	1/5/2024	21:16:00	
J:\GC35\DATA\010524\0105F035.D\	ZZZZZZZZ	ZZZZZZZZ	1/5/2024	21:38:00	
J:\GC35\DATA\010524\0105F036.D\	ZZZZZZZZ	ZZZZZZZZ	1/5/2024	21:59:00	
J:\GC35\DATA\010524\0105F037.D\	ZZZZZZZZ	ZZZZZZZZ	1/5/2024	22:21:00	
J:\GC35\DATA\010524\0105F038.D\	ZZZZZZZZ	ZZZZZZZZ	1/5/2024	22:42:00	
J:\GC35\DATA\010524\0105F039.D\	ZZZZZZZZ	ZZZZZZZZ	1/5/2024	23:04:00	
J:\GC35\DATA\010524\0105F040.D\	ZZZZZZZZ	ZZZZZZZZ	1/5/2024	23:26:00	
J:\GC35\DATA\010524\0105F041.D\	Continuing Calibration Verification	KQ2400312-02	1/5/2024	23:47:00	
J:\GC35\DATA\010524\0105F041.D\	ZZZZZZZZ	ZZZZZZZZ	1/5/2024	23:47:00	
J:\GC35\DATA\010524\0105F042.D\	Continuing Calibration Verification	KQ2400312-02	1/6/2024	00:09:00	
J:\GC35\DATA\010524\0105F042.D\	ZZZZZZZZ	ZZZZZZZZ	1/6/2024	00:09:00	
J:\GC35\DATA\010524\0105F043.D\	ZZZZZZZZ	ZZZZZZZZ	1/6/2024	00:30:00	
J:\GC35\DATA\010524\0105F043.D\	Continuing Calibration Blank	KQ2400312-04	1/6/2024	00:30:00	

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Prep Summary Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Water

Service Request:K2314281

Semi-Volatile Petroleum Products, Silica Gel Treated by GC/FID

Prep Method: EPA 3510C
Analytical Method: NWTPH-Dx

Extraction Lot: 432147
Extraction Date: 01/03/24 17:43

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Amount	Percent Solids
TA-01-W	K2314281-001	12/20/23	12/20/23	490.0000 mL	1 mL	
Method Blank	KQ2400071-01MB	NA	NA	500 mL	1 mL	
Lab Control Sample	KQ2400071-02LCS	NA	NA	500 mL	1 mL	
Duplicate Lab Control Sample	KQ2400071-03DLCS	NA	NA	500 mL	1 mL	

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Prep Summary Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Water

Service Request:K2314281

Semi-Volatile Petroleum Products, Silica Gel Treated by GC/FID

Prep Method: EPA 3510C
Analytical Method: NWTPH-Dx

Extraction Lot: 431731
Extraction Date: 12/21/23 12:18

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Amount	Percent Solids
TA-02-W	K2314281-002	12/20/23	12/20/23	500 mL	1 mL	
Method Blank	KQ2322265-01MB	NA	NA	500 mL	1 mL	
Lab Control Sample	KQ2322265-02LCS	NA	NA	500 mL	1 mL	
Duplicate Lab Control Sample	KQ2322265-03DLCS	NA	NA	500 mL	1 mL	



Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

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Analytical Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Water

Service Request: K2314281
Date Collected: 12/20/23 01:05
Date Received: 12/20/23 13:45

Sample Name: TA-01-W
Lab Code: K2314281-001

Units: ng/L
Basis: NA

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Perfluoroalkyl Sulfonic Acids (PFASs)							
Perfluorobutane sulfonic acid (PFBS)	1.2 J	5.1	0.44	1	01/22/24 22:32	1/11/24	
Perfluoropentane sulfonic acid (PFPeS)	ND U	5.1	0.90	1	01/22/24 22:32	1/11/24	
Perfluorohexane sulfonic acid (PFHxS)	5.8	5.1	0.83	1	01/22/24 22:32	1/11/24	
Perfluoroheptane sulfonic acid (PFHpS)	ND U	5.1	0.70	1	01/22/24 22:32	1/11/24	
Perfluorooctane sulfonic acid (PFOS)	6.1	5.1	0.84	1	01/22/24 22:32	1/11/24	
Perfluorononane sulfonic acid (PFNS)	ND U	5.1	0.34	1	01/22/24 22:32	1/11/24	
Perfluorodecane sulfonic acid (PFDS)	ND U	5.1	0.68	1	01/22/24 22:32	1/11/24	
Perfluorododecane sulfonic acid (PFDoS)	ND U	5.1	0.57	1	01/22/24 22:32	1/11/24	
Perfluoroalkyl Carboxylic Acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	12	5.1	0.87	1	01/22/24 22:32	1/11/24	
Perfluoropentanoic acid (PFPeA)	9.7	5.1	0.65	1	02/01/24 23:09	1/11/24	
Perfluorohexanoic acid (PFHxA)	7.8	5.1	0.64	1	01/22/24 22:32	1/11/24	
Perfluoroheptanoic acid (PFHpA)	5.2	5.1	0.72	1	01/22/24 22:32	1/11/24	
Perfluorooctanoic acid (PFOA)	110	5.1	0.88	1	01/22/24 22:32	1/11/24	
Perfluorononanoic acid (PFNA)	3.8 J	5.1	0.76	1	01/22/24 22:32	1/11/24	
Perfluorodecanoic acid (PFDA)	4.7 J	5.1	0.61	1	01/22/24 22:32	1/11/24	
Perfluoroundecanoic acid (PFUnDA)	3.3 J	5.1	0.83	1	01/22/24 22:32	1/11/24	
Perfluorododecanoic acid (PFDOA)	8.0	5.1	0.62	1	01/22/24 22:32	1/11/24	
Perfluorotridecanoic acid (PFTTrDA)	2.3 J	5.1	0.47	1	01/22/24 22:32	1/11/24	
Perfluorotetradecanoic acid (PFTDA)	2.5 J	5.1	1.4	1	01/22/24 22:32	1/11/24	
Perfluoroalkyl Sulfonamido Substances							
Perfluorooctane sulfonamide (PFOSAm)	ND U	5.1	0.73	1	01/22/24 22:32	1/11/24	
N-Methylperfluorooctane sulfonamide (MeFOSA)	ND U	5.1	1.3	1	01/22/24 22:32	1/11/24	
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	ND U	5.1	0.86	1	01/22/24 22:32	1/11/24	
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	ND U	5.1	0.83	1	01/22/24 22:32	1/11/24	
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	ND U	5.1	0.94	1	01/22/24 22:32	1/11/24	
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	ND U	5.1	0.92	1	01/22/24 22:32	1/11/24	
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	ND U	5.1	0.97	1	01/22/24 22:32	1/11/24	*

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Analytical Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Water

Service Request: K2314281
Date Collected: 12/20/23 01:05
Date Received: 12/20/23 13:45

Sample Name: TA-01-W
Lab Code: K2314281-001

Units: ng/L
Basis: NA

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Fluorotelomer Sulfonic Acids (FTSAs)							
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	ND U	5.1	0.43	1	01/22/24 22:32	1/11/24	
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND U	5.1	1.4	1	01/22/24 22:32	1/11/24	
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND U	5.1	0.87	1	01/22/24 22:32	1/11/24	
Fluorotelomer Carboxylic Acids (FTCAs)							
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	ND U	200	6.9	1	02/01/24 23:09	1/11/24	*
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	ND U	200	4.3	1	01/22/24 22:32	1/11/24	
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	ND U	200	6.1	1	01/22/24 22:32	1/11/24	
Perfluoroalkyl Ether Sulfonic Acids (PFESAs)							
Perfluoro(2-ethoxyethane) sulfonic acid (PFEESA)	ND U	5.1	0.44	1	01/22/24 22:32	1/11/24	
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	ND U	5.1	0.46	1	01/22/24 22:32	1/11/24	
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	ND U	5.1	0.40	1	01/22/24 22:32	1/11/24	
Perfluoroalkyl Ether Carboxylic Acids (PFECAs)							
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND U	5.1	0.42	1	02/01/24 23:09	1/11/24	*
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND U	5.1	0.55	1	02/01/24 23:09	1/11/24	
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	ND U	5.1	0.42	1	01/22/24 22:32	1/11/24	
Nonafluoro-3,6-dioxahheptanoic acid (NFDHA)	ND U	5.1	0.59	1	01/22/24 22:32	1/11/24	
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	ND U	5.1	0.37	1	01/22/24 22:32	1/11/24	

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Analytical Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Water

Service Request: K2314281
Date Collected: 12/20/23 01:05
Date Received: 12/20/23 13:45

Sample Name: TA-01-W
Lab Code: K2314281-001

Units: ng/L
Basis: NA

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
Prep Method: Method

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
13C3-PFBS	85	40 - 135	01/22/24 22:32	
13C3-PFHxS	83	40 - 130	01/22/24 22:32	
13C8-PFOS	73	40 - 130	01/22/24 22:32	
13C4-PFBA	87	5 - 130	01/22/24 22:32	
13C5-PFPeA	104	40 - 130	02/01/24 23:09	
13C5-PFHxA	80	40 - 130	01/22/24 22:32	
13C4-PFHpA	91	40 - 130	01/22/24 22:32	
13C8-PFOA	92	40 - 130	01/22/24 22:32	
13C9-PFNA	98	40 - 130	01/22/24 22:32	
13C6-PFDA	99	40 - 130	01/22/24 22:32	
13C7-PFUnDA	78	30 - 130	01/22/24 22:32	
13C2-PFDoDA	55	10 - 130	01/22/24 22:32	
13C2-PFTeDA	14	10 - 130	01/22/24 22:32	
13C8-FOSA	77	40 - 130	01/22/24 22:32	
D3-MeFOSA	29	10 - 130	01/22/24 22:32	
D5-EtFOSA	25	10 - 130	01/22/24 22:32	
D7-MeFOSE	28	10 - 130	01/22/24 22:32	
D9-EtFOSE	25	10 - 130	01/22/24 22:32	
D3-MeFOSAA	102	40 - 170	01/22/24 22:32	
D5-EtFOSAA	75	25 - 135	01/22/24 22:32	
13C2-4:2 FTS	148	40 - 200	01/22/24 22:32	
13C2-6:2 FTS	135	40 - 200	01/22/24 22:32	
13C2-8:2 FTS	126	40 - 300	01/22/24 22:32	
13C3-HFPO-DA	98	40 - 130	01/22/24 22:32	

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Analytical Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Water

Service Request: K2314281
Date Collected: 12/20/23 02:15
Date Received: 12/20/23 13:45

Sample Name: TA-02-W
Lab Code: K2314281-002

Units: ng/L
Basis: NA

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Perfluoroalkyl Sulfonic Acids (PFSA)s							
Perfluorobutane sulfonic acid (PFBS)	0.63 J	4.9	0.43	1	01/22/24 22:56	1/11/24	
Perfluoropentane sulfonic acid (PFPeS)	ND U	4.9	0.89	1	01/22/24 22:56	1/11/24	
Perfluorohexane sulfonic acid (PFHxS)	1.6 J	4.9	0.82	1	01/22/24 22:56	1/11/24	
Perfluoroheptane sulfonic acid (PFHpS)	ND U	4.9	0.69	1	01/22/24 22:56	1/11/24	
Perfluorooctane sulfonic acid (PFOS)	5.9	4.9	0.83	1	01/22/24 22:56	1/11/24	
Perfluorononane sulfonic acid (PFNS)	ND U	4.9	0.33	1	01/22/24 22:56	1/11/24	
Perfluorodecane sulfonic acid (PFDS)	ND U	4.9	0.67	1	01/22/24 22:56	1/11/24	
Perfluorododecane sulfonic acid (PFDoS)	ND U	4.9	0.56	1	01/22/24 22:56	1/11/24	
Perfluoroalkyl Carboxylic Acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	4.1 J	4.9	0.86	1	01/22/24 22:56	1/11/24	
Perfluoropentanoic acid (PFPeA)	12	4.9	0.64	1	02/01/24 23:33	1/11/24	
Perfluorohexanoic acid (PFHxA)	5.7	4.9	0.63	1	01/22/24 22:56	1/11/24	
Perfluoroheptanoic acid (PFHpA)	3.2 J	4.9	0.71	1	01/22/24 22:56	1/11/24	
Perfluorooctanoic acid (PFOA)	11	4.9	0.87	1	01/22/24 22:56	1/11/24	
Perfluorononanoic acid (PFNA)	2.5 J	4.9	0.75	1	01/22/24 22:56	1/11/24	
Perfluorodecanoic acid (PFDA)	1.3 J	4.9	0.60	1	01/22/24 22:56	1/11/24	
Perfluoroundecanoic acid (PFUnDA)	ND U	4.9	0.82	1	01/22/24 22:56	1/11/24	
Perfluorododecanoic acid (PFDOA)	ND U	4.9	0.61	1	01/22/24 22:56	1/11/24	
Perfluorotridecanoic acid (PFTrDA)	ND U	4.9	0.46	1	01/22/24 22:56	1/11/24	
Perfluorotetradecanoic acid (PFTDA)	ND U	4.9	1.3	1	01/22/24 22:56	1/11/24	
Perfluoroalkyl Sulfonamido Substances							
Perfluorooctane sulfonamide (PFOSAm)	ND U	4.9	0.72	1	01/22/24 22:56	1/11/24	
N-Methylperfluorooctane sulfonamide (MeFOSA)	ND U	4.9	1.2	1	01/22/24 22:56	1/11/24	
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	ND U	4.9	0.85	1	01/22/24 22:56	1/11/24	
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	ND U	4.9	0.82	1	01/22/24 22:56	1/11/24	
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	ND U	4.9	0.92	1	01/22/24 22:56	1/11/24	
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	ND U	4.9	0.91	1	01/22/24 22:56	1/11/24	
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	ND U	4.9	0.95	1	01/22/24 22:56	1/11/24	*

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Analytical Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Water

Service Request: K2314281
Date Collected: 12/20/23 02:15
Date Received: 12/20/23 13:45

Sample Name: TA-02-W
Lab Code: K2314281-002

Units: ng/L
Basis: NA

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Fluorotelomer Sulfonic Acids (FTSAs)							
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	ND U	4.9	0.42	1	01/22/24 22:56	1/11/24	
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND U	4.9	1.3	1	01/22/24 22:56	1/11/24	
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND U	4.9	0.86	1	01/22/24 22:56	1/11/24	
Fluorotelomer Carboxylic Acids (FTCAs)							
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	ND U	200	6.8	1	02/01/24 23:33	1/11/24	*
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	ND U	200	4.2	1	01/22/24 22:56	1/11/24	
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	ND U	200	6.0	1	01/22/24 22:56	1/11/24	
Perfluoroalkyl Ether Sulfonic Acids (PFESAs)							
Perfluoro(2-ethoxyethane) sulfonic acid (PFEESA)	ND U	4.9	0.43	1	01/22/24 22:56	1/11/24	
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	ND U	4.9	0.45	1	01/22/24 22:56	1/11/24	
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	ND U	4.9	0.39	1	01/22/24 22:56	1/11/24	
Perfluoroalkyl Ether Carboxylic Acids (PFECAs)							
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND U	4.9	0.41	1	02/01/24 23:33	1/11/24	*
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND U	4.9	0.54	1	02/01/24 23:33	1/11/24	
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	ND U	4.9	0.41	1	01/22/24 22:56	1/11/24	
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND U	4.9	0.58	1	01/22/24 22:56	1/11/24	
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	ND U	4.9	0.36	1	01/22/24 22:56	1/11/24	

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Analytical Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Water

Service Request: K2314281
Date Collected: 12/20/23 02:15
Date Received: 12/20/23 13:45

Sample Name: TA-02-W
Lab Code: K2314281-002

Units: ng/L
Basis: NA

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
Prep Method: Method

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
13C3-PFBS	90	40 - 135	01/22/24 22:56	
13C3-PFHxS	85	40 - 130	01/22/24 22:56	
13C8-PFOS	82	40 - 130	01/22/24 22:56	
13C4-PFBA	100	5 - 130	01/22/24 22:56	
13C5-PFPeA	109	40 - 130	02/01/24 23:33	
13C5-PFHxA	92	40 - 130	01/22/24 22:56	
13C4-PFHpA	107	40 - 130	01/22/24 22:56	
13C8-PFOA	97	40 - 130	01/22/24 22:56	
13C9-PFNA	109	40 - 130	01/22/24 22:56	
13C6-PFDA	105	40 - 130	01/22/24 22:56	
13C7-PFUnDA	92	30 - 130	01/22/24 22:56	
13C2-PFDoDA	69	10 - 130	01/22/24 22:56	
13C2-PFTeDA	35	10 - 130	01/22/24 22:56	
13C8-FOSA	83	40 - 130	01/22/24 22:56	
D3-MeFOSA	51	10 - 130	01/22/24 22:56	
D5-EtFOSA	45	10 - 130	01/22/24 22:56	
D7-MeFOSE	59	10 - 130	01/22/24 22:56	
D9-EtFOSE	56	10 - 130	01/22/24 22:56	
D3-MeFOSAA	115	40 - 170	01/22/24 22:56	
D5-EtFOSAA	81	25 - 135	01/22/24 22:56	
13C2-4:2 FTS	152	40 - 200	01/22/24 22:56	
13C2-6:2 FTS	145	40 - 200	01/22/24 22:56	
13C2-8:2 FTS	133	40 - 300	01/22/24 22:56	
13C3-HFPO-DA	116	40 - 130	01/22/24 22:56	

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Analytical Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Water

Service Request: K2314281
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: KQ2400483-04

Units: ng/L
Basis: NA

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Perfluoroalkyl Sulfonic Acids (PFSA's)							
Perfluorobutane sulfonic acid (PFBS)	ND U	5.0	0.43	1	01/22/24 20:59	1/11/24	
Perfluoropentane sulfonic acid (PFPeS)	ND U	5.0	0.89	1	01/22/24 20:59	1/11/24	
Perfluorohexane sulfonic acid (PFHxS)	ND U	5.0	0.82	1	01/22/24 20:59	1/11/24	
Perfluoroheptane sulfonic acid (PFHpS)	ND U	5.0	0.69	1	01/22/24 20:59	1/11/24	
Perfluorooctane sulfonic acid (PFOS)	ND U	5.0	0.83	1	01/22/24 20:59	1/11/24	
Perfluorononane sulfonic acid (PFNS)	ND U	5.0	0.33	1	01/22/24 20:59	1/11/24	
Perfluorodecane sulfonic acid (PFDS)	ND U	5.0	0.67	1	01/22/24 20:59	1/11/24	
Perfluorododecane sulfonic acid (PFDoS)	ND U	5.0	0.56	1	01/22/24 20:59	1/11/24	
Perfluoroalkyl Carboxylic Acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	ND U	5.0	0.86	1	01/22/24 20:59	1/11/24	
Perfluoropentanoic acid (PFPeA)	ND U	5.0	0.64	1	01/22/24 20:59	1/11/24	
Perfluorohexanoic acid (PFHxA)	ND U	5.0	0.63	1	01/22/24 20:59	1/11/24	
Perfluoroheptanoic acid (PFHpA)	ND U	5.0	0.71	1	01/22/24 20:59	1/11/24	
Perfluorooctanoic acid (PFOA)	ND U	5.0	0.87	1	01/22/24 20:59	1/11/24	
Perfluorononanoic acid (PFNA)	ND U	5.0	0.75	1	01/22/24 20:59	1/11/24	
Perfluorodecanoic acid (PFDA)	ND U	5.0	0.60	1	01/22/24 20:59	1/11/24	
Perfluoroundecanoic acid (PFUnDA)	ND U	5.0	0.82	1	01/22/24 20:59	1/11/24	
Perfluorododecanoic acid (PFDOA)	ND U	5.0	0.61	1	01/22/24 20:59	1/11/24	
Perfluorotridecanoic acid (PFTrDA)	ND U	5.0	0.46	1	01/22/24 20:59	1/11/24	
Perfluorotetradecanoic acid (PFTDA)	ND U	5.0	1.3	1	01/22/24 20:59	1/11/24	
Perfluoroalkyl Sulfonamido Substances							
Perfluorooctane sulfonamide (PFOSAm)	ND U	5.0	0.72	1	01/22/24 20:59	1/11/24	
N-Methylperfluorooctane sulfonamide (MeFOSA)	ND U	5.0	1.2	1	01/22/24 20:59	1/11/24	
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	ND U	5.0	0.85	1	01/22/24 20:59	1/11/24	
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	ND U	5.0	0.82	1	01/22/24 20:59	1/11/24	
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	ND U	5.0	0.92	1	01/22/24 20:59	1/11/24	
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	ND U	5.0	0.91	1	01/22/24 20:59	1/11/24	
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	ND U	5.0	0.95	1	01/22/24 20:59	1/11/24	

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Analytical Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Water

Service Request: K2314281
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: KQ2400483-04

Units: ng/L
Basis: NA

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Fluorotelomer Sulfonic Acids (FTSAs)							
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	ND U	5.0	0.42	1	01/22/24 20:59	1/11/24	
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND U	5.0	1.3	1	01/22/24 20:59	1/11/24	
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND U	5.0	0.86	1	01/22/24 20:59	1/11/24	
Fluorotelomer Carboxylic Acids (FTCAs)							
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	ND U	200	6.8	1	01/22/24 20:59	1/11/24	
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	ND U	200	4.2	1	01/22/24 20:59	1/11/24	
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	ND U	200	6.0	1	01/22/24 20:59	1/11/24	
Perfluoroalkyl Ether Sulfonic Acids (PFESAs)							
Perfluoro(2-ethoxyethane) sulfonic acid (PFEESA)	ND U	5.0	0.43	1	01/22/24 20:59	1/11/24	
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	ND U	5.0	0.45	1	01/22/24 20:59	1/11/24	
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	ND U	5.0	0.39	1	01/22/24 20:59	1/11/24	
Perfluoroalkyl Ether Carboxylic Acids (PFECAs)							
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND U	5.0	0.41	1	01/22/24 20:59	1/11/24	
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND U	5.0	0.54	1	01/22/24 20:59	1/11/24	
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	ND U	5.0	0.41	1	01/22/24 20:59	1/11/24	
Nonafluoro-3,6-dioxahexanoic acid (NFDHA)	ND U	5.0	0.58	1	01/22/24 20:59	1/11/24	
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	ND U	5.0	0.36	1	01/22/24 20:59	1/11/24	

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Analytical Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Water

Service Request: K2314281
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: KQ2400483-04

Units: ng/L
Basis: NA

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
Prep Method: Method

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
13C3-PFBS	94	40 - 135	01/22/24 20:59	
13C3-PFHxS	87	40 - 130	01/22/24 20:59	
13C8-PFOS	79	40 - 130	01/22/24 20:59	
13C4-PFBA	103	5 - 130	01/22/24 20:59	
13C5-PFPeA	90	40 - 130	01/22/24 20:59	
13C5-PFHxA	95	40 - 130	01/22/24 20:59	
13C4-PFHpA	111	40 - 130	01/22/24 20:59	
13C8-PFOA	99	40 - 130	01/22/24 20:59	
13C9-PFNA	102	40 - 130	01/22/24 20:59	
13C6-PFDA	103	40 - 130	01/22/24 20:59	
13C7-PFUnDA	92	30 - 130	01/22/24 20:59	
13C2-PFDoDA	85	10 - 130	01/22/24 20:59	
13C2-PFTeDA	71	10 - 130	01/22/24 20:59	
13C8-FOSA	95	40 - 130	01/22/24 20:59	
D3-MeFOSA	76	10 - 130	01/22/24 20:59	
D5-EtFOSA	83	10 - 130	01/22/24 20:59	
D7-MeFOSE	100	10 - 130	01/22/24 20:59	
D9-EtFOSE	96	10 - 130	01/22/24 20:59	
D3-MeFOSAA	120	40 - 170	01/22/24 20:59	
D5-EtFOSAA	99	25 - 135	01/22/24 20:59	
13C2-4:2 FTS	147	40 - 200	01/22/24 20:59	
13C2-6:2 FTS	150	40 - 200	01/22/24 20:59	
13C2-8:2 FTS	142	40 - 300	01/22/24 20:59	
13C3-HFPO-DA	116	40 - 130	01/22/24 20:59	

ALS Group USA, Corp.
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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Water

Service Request: K2314281

SURROGATE RECOVERY SUMMARY

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633

Extraction Method: Method

Surrogate	Control Limits	TA-01-W K2314281-001	TA-02-W K2314281-002	Method Blank KQ2400483-04
13C3-PFBS	40-135	85	90	94
13C3-PFHxS	40-130	83	85	87
13C8-PFOS	40-130	73	82	79
13C4-PFBA	5-130	87	100	103
13C5-PFPeA	40-130	104	109	90
13C5-PFHxA	40-130	80	92	95
13C4-PFHpA	40-130	91	107	111
13C8-PFOA	40-130	92	97	99
13C9-PFNA	40-130	98	109	102
13C6-PFDA	40-130	99	105	103
13C7-PFUnDA	30-130	78	92	92
13C2-PFDoDA	10-130	55	69	85
13C2-PFTeDA	10-130	14	35	71
13C8-FOSA	40-130	77	83	95
D3-MeFOSA	10-130	29	51	76
D5-EtFOSA	10-130	25	45	83
D7-MeFOSE	10-130	28	59	100
D9-EtFOSE	10-130	25	56	96
D3-MeFOSAA	40-170	102	115	120
D5-EtFOSAA	25-135	75	81	99
13C2-4:2 FTS	40-200	148	152	147
13C2-6:2 FTS	40-200	135	145	150
13C2-8:2 FTS	40-300	126	133	142
13C3-HFPO-DA	40-130	98	116	116

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with an pound (#) indicate the control criteria is not acceptable.

ALS Group USA, Corp.
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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Water

Service Request: K2314281

SURROGATE RECOVERY SUMMARY

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633

Extraction Method: Method

Surrogate	Control Limits	Lab Control Sample	Duplicate Lab Control	Low Level Lab Control
		KQ2400483-01	Sample KQ2400483-02	Sample KQ2400483-03
13C3-PFBS	40-135	86	88	89
13C3-PFHxS	40-130	79	87	84
13C8-PFOS	40-130	78	73	72
13C4-PFBA	5-130	95	98	96
13C5-PFPeA	40-130	84	78	109
13C5-PFHxA	40-130	86	85	85
13C4-PFHpA	40-130	100	97	106
13C8-PFOA	40-130	92	89	91
13C9-PFNA	40-130	93	100	98
13C6-PFDA	40-130	98	104	100
13C7-PFUnDA	30-130	85	98	87
13C2-PFDoDA	10-130	85	86	84
13C2-PFTeDA	10-130	80	89	76
13C8-FOSA	40-130	86	86	90
D3-MeFOSA	10-130	70	75	68
D5-EtFOSA	10-130	80	81	71
D7-MeFOSE	10-130	94	93	95
D9-EtFOSE	10-130	98	97	96
D3-MeFOSAA	40-170	114	117	115
D5-EtFOSAA	25-135	96	91	96
13C2-4:2 FTS	40-200	143	148	152
13C2-6:2 FTS	40-200	143	139	139
13C2-8:2 FTS	40-300	133	133	133
13C3-HFPO-DA	40-130	108	104	113

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not acceptable.

ALS Group USA, Corp.
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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request:K2314281
Date Analyzed:01/22/24 12:04

Internal Standard Area and RT SUMMARY

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

File ID: J:\LCMS08\Data\240122_1633_B1\240122_007
Instrument ID: K-LCMS-08
Analysis Method: Draft EPA Method 1633

Lab Code:KQ2401073-11
Analysis Lot:830573
Signal ID:1

		18O2-PFHxS		13C4-PFOS		13C3-PFBA	
		Area	RT	Area	RT	Area	RT
	Result ==>	231,874	7.09	275,937	8.82	583,858	1.41
	Upper Limit ==>	463,748	7.49	551,874	9.22	1,167,716	1.81
	Lower Limit ==>	69,562	6.69	82,781	8.42	175,157	1.01
Associated Analyses							
Low Level Continuing Calibration Verification	KQ2401073-11	180064	7.071	217179	8.812	502244	1.391
Performance Evaluation	KQ2401073-13	190850	7.067	221403	8.808	514220	1.393
Continuing Calibration Blank	KQ2401073-14	0*	0	0*	0	0*	0

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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request:K2314281
Date Analyzed:01/22/24 12:04

Internal Standard Area and RT SUMMARY

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

File ID: J:\LCMS08\Data\240122_1633_B1\240122_007
Instrument ID: K-LCMS-08
Analysis Method: Draft EPA Method 1633

Lab Code:KQ2401073-11
Analysis Lot:830573
Signal ID:1

		13C2-PFHxA		13C4-PFOA		13C5-PFNA	
		Area	RT	Area	RT	Area	RT
	Result ==>	623,952	4.98	42,584	7.11	308,818	7.96
	Upper Limit ==>	1,247,904	5.38	85,168	7.51	617,636	8.36
	Lower Limit ==>	187,186	4.58	12,775	6.71	92,645	7.56
Associated Analyses							
Low Level Continuing Calibration Verification	KQ2401073-11	549058	4.954	37085	7.099	256514	7.950
Performance Evaluation	KQ2401073-13	555873	4.953	39140	7.094	252943	7.945
Continuing Calibration Blank	KQ2401073-14	0*	0	0*	0	0*	0

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request:K2314281
Date Analyzed:01/22/24 12:04

Internal Standard Area and RT SUMMARY

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

File ID: J:\LCMS08\Data\240122_1633_B1\240122_007
Instrument ID: K-LCMS-08
Analysis Method: Draft EPA Method 1633

Lab Code:KQ2401073-11
Analysis Lot:830573
Signal ID:1

	13C2-PFDA	
	Area	RT
Result ==>	226,796	8.72
Upper Limit ==>	453,592	9.12
Lower Limit ==>	68,039	8.32

Associated Analyses

Low Level Continuing Calibration Verification	KQ2401073-11	188279	8.717
Performance Evaluation	KQ2401073-13	175924	8.712
Continuing Calibration Blank	KQ2401073-14	0*	0

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request:K2314281
Date Analyzed:01/22/24 20:13

Internal Standard Area and RT SUMMARY

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

File ID: J:\LCMS08\Data\240122_1633_B1\240122_028
Instrument ID: K-LCMS-08
Analysis Method: Draft EPA Method 1633

Lab Code:KQ2401073-15
Analysis Lot:830573
Signal ID:1

		18O2-PFHxS		13C4-PFOS		13C3-PFBA	
		Area	RT	Area	RT	Area	RT
	Result ==>	231,874	7.09	275,937	8.82	583,858	1.41
	Upper Limit ==>	463,748	7.49	551,874	9.22	1,167,716	1.81
	Lower Limit ==>	69,562	6.69	82,781	8.42	175,157	1.01
Associated Analyses							
Continuing Calibration Verification	KQ2401073-15	201482	7.073	230431	8.815	538533	1.390
Continuing Calibration Blank	KQ2401073-16	181401	7.061	220958	8.801	506076	1.380
Method Blank	KQ2400483-04	137492	7.075	161457	8.815	384255	1.426
Lab Control Sample	KQ2400483-01	159550	7.074	193194	8.813	447125	1.412
Duplicate Lab Control Sample	KQ2400483-02	167668	7.069	200940	8.809	472211	1.405
Low Level Lab Control Sample	KQ2400483-03	176343	7.074	203603	8.813	472259	1.410
TA-01-W	K2314281-001	164711	7.087	187289	8.824	469239	1.435
TA-02-W	K2314281-002	171649	7.074	196297	8.811	488440	1.420

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request:K2314281
Date Analyzed:01/22/24 20:13

Internal Standard Area and RT SUMMARY

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

File ID: J:\LCMS08\Data\240122_1633_B1\240122_028
Instrument ID: K-LCMS-08
Analysis Method: Draft EPA Method 1633

Lab Code:KQ2401073-15
Analysis Lot:830573
Signal ID:1

		13C2-PFHxA		13C4-PFOA		13C5-PFNA	
		Area	RT	Area	RT	Area	RT
	Result ==>	623,952	4.98	42,584	7.11	308,818	7.96
	Upper Limit ==>	1,247,904	5.38	85,168	7.51	617,636	8.36
	Lower Limit ==>	187,186	4.58	12,775	6.71	92,645	7.56
Associated Analyses							
Continuing Calibration Verification	KQ2401073-15	656287	4.957	44253	7.101	284248	7.952
Continuing Calibration Blank	KQ2401073-16	552347	4.944	40019	7.090	252963	7.941
Method Blank	KQ2400483-04	399220	4.964	30935	7.102	189151	7.952
Lab Control Sample	KQ2400483-01	462594	4.963	34091	7.102	220903	7.952
Duplicate Lab Control Sample	KQ2400483-02	511730	4.955	34462	7.095	226261	7.948
Low Level Lab Control Sample	KQ2400483-03	502291	4.960	39325	7.102	238986	7.952
TA-01-W	K2314281-001	526961	4.979	34533	7.112	206808	7.963
TA-02-W	K2314281-002	489023	4.961	36800	7.101	222836	7.951

ALS Group USA, Corp.
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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request:K2314281
Date Analyzed:01/22/24 20:13

Internal Standard Area and RT SUMMARY

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

File ID: J:\LCMS08\Data\240122_1633_B1\240122_028
Instrument ID: K-LCMS-08
Analysis Method: Draft EPA Method 1633

Lab Code:KQ2401073-15
Analysis Lot:830573
Signal ID:1

13C2-PFDA		
	Area	RT
Result ==>	226,796	8.72
Upper Limit ==>	453,592	9.12
Lower Limit ==>	68,039	8.32

Associated Analyses

Continuing Calibration Verification	KQ2401073-15	212168	8.720
Continuing Calibration Blank	KQ2401073-16	193548	8.708
Method Blank	KQ2400483-04	143718	8.719
Lab Control Sample	KQ2400483-01	167130	8.719
Duplicate Lab Control Sample	KQ2400483-02	155643	8.714
Low Level Lab Control Sample	KQ2400483-03	176625	8.718
TA-01-W	K2314281-001	158733	8.729
TA-02-W	K2314281-002	164415	8.717

ALS Group USA, Corp.
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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request:K2314281
Date Analyzed:01/23/24 02:48

Internal Standard Area and RT SUMMARY

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

File ID: J:\LCMS08\Data\240122_1633_B1\240122_045
Instrument ID: K-LCMS-08
Analysis Method: Draft EPA Method 1633

Lab Code:KQ2401073-18
Analysis Lot:830573
Signal ID:1

		18O2-PFHxS		13C4-PFOS		13C3-PFBA	
		Area	RT	Area	RT	Area	RT
	Result ==>	231,874	7.09	275,937	8.82	583,858	1.41
	Upper Limit ==>	463,748	7.49	551,874	9.22	1,167,716	1.81
	Lower Limit ==>	69,562	6.69	82,781	8.42	175,157	1.01
Associated Analyses							
Continuing Calibration Verification	KQ2401073-18	198174	7.064	227026	8.804	546868	1.389
Continuing Calibration Blank	KQ2401073-17	184197	7.063	209387	8.802	501796	1.380
Continuing Calibration Blank	KQ2401073-19	179780	7.070	224299	8.809	499777	1.378

ALS Group USA, Corp.
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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request:K2314281
Date Analyzed:01/23/24 02:48

Internal Standard Area and RT SUMMARY

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

File ID: J:\LCMS08\Data\240122_1633_B1\240122_045
Instrument ID: K-LCMS-08
Analysis Method: Draft EPA Method 1633

Lab Code:KQ2401073-18
Analysis Lot:830573
Signal ID:1

		13C2-PFHxA		13C4-PFOA		13C5-PFNA	
		Area	RT	Area	RT	Area	RT
	Result ==>	623,952	4.98	42,584	7.11	308,818	7.96
	Upper Limit ==>	1,247,904	5.38	85,168	7.51	617,636	8.36
	Lower Limit ==>	187,186	4.58	12,775	6.71	92,645	7.56
Associated Analyses							
Continuing Calibration Verification	KQ2401073-18	558301	4.949	42340	7.091	265683	7.942
Continuing Calibration Blank	KQ2401073-17	519819	4.947	40756	7.092	246934	7.943
Continuing Calibration Blank	KQ2401073-19	538785	4.955	34581	7.099	243809	7.949

ALS Group USA, Corp.
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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request:K2314281
Date Analyzed:01/23/24 02:48

Internal Standard Area and RT SUMMARY

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

File ID: J:\LCMS08\Data\240122_1633_B1\240122_045
Instrument ID: K-LCMS-08
Analysis Method: Draft EPA Method 1633

Lab Code:KQ2401073-18
Analysis Lot:830573
Signal ID:1

13C2-PFDA		
	Area	RT
Result ==>	226,796	8.72
Upper Limit ==>	453,592	9.12
Lower Limit ==>	68,039	8.32

Associated Analyses

Continuing Calibration Verification	KQ2401073-18	193334	8.709
Continuing Calibration Blank	KQ2401073-17	187887	8.708
Continuing Calibration Blank	KQ2401073-19	156805	8.715

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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request:K2314281
Date Analyzed:02/01/24 12:18

Internal Standard Area and RT SUMMARY

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

File ID: J:\LCMS08\Data\240201_1633_RA\240201_006
Instrument ID: K-LCMS-08
Analysis Method: Draft EPA Method 1633

Lab Code:KQ2401707-02
Analysis Lot:831587
Signal ID:1

		18O2-PFHxS		13C4-PFOS		13C3-PFBA	
		Area	RT	Area	RT	Area	RT
	Result ==>	319,160	7.05	393,952	8.79	621,280	1.34
	Upper Limit ==>	638,320	7.45	787,904	9.19	1,242,560	1.74
	Lower Limit ==>	95,748	6.65	118,186	8.39	186,384	0.94
Associated Analyses							
Low Level Continuing Calibration Verification	KQ2401707-02	288696	7.069	371416	8.807	593925	1.360
Performance Evaluation	KQ2401707-04	263834	7.073	340389	8.810	519553	1.395
Performance Evaluation	KQ2401707-05	0*	0	0*	0	171*	1.391
Continuing Calibration Blank	KQ2401707-06	214971	7.076	302003	8.811	440343	1.404

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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request:K2314281
Date Analyzed:02/01/24 12:18

Internal Standard Area and RT SUMMARY

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

File ID: J:\LCMS08\Data\240201_1633_RA\240201_006
Instrument ID: K-LCMS-08
Analysis Method: Draft EPA Method 1633

Lab Code:KQ2401707-02
Analysis Lot:831587
Signal ID:1

		13C2-PFHxA		13C4-PFOA		13C5-PFNA	
		Area	RT	Area	RT	Area	RT
	Result ==>	710,660	4.93	62,385	7.08	446,476	7.93
	Upper Limit ==>	1,421,320	5.33	124,770	7.48	892,952	8.33
	Lower Limit ==>	213,198	4.53	18,716	6.68	133,943	7.53
Associated Analyses							
Low Level Continuing Calibration Verification	KQ2401707-02	655651	4.955	59269	7.098	409996	7.948
Performance Evaluation	KQ2401707-04	603446	4.963	47747	7.101	356733	7.950
Performance Evaluation	KQ2401707-05	44*	4.655	0*	0	60*	7.929
Continuing Calibration Blank	KQ2401707-06	517713	4.973	39287	7.104	294584	7.953

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request:K2314281
Date Analyzed:02/01/24 12:18

Internal Standard Area and RT SUMMARY

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

File ID: J:\LCMS08\Data\240201_1633_RA\240201_006
Instrument ID: K-LCMS-08
Analysis Method: Draft EPA Method 1633

Lab Code:KQ2401707-02
Analysis Lot:831587
Signal ID:1

	13C2-PFDA	
	Area	RT
Result ==>	287,859	8.7
Upper Limit ==>	575,718	9.10
Lower Limit ==>	86,358	8.30

Associated Analyses

Low Level Continuing Calibration Verification	KQ2401707-02	261376	8.712
Performance Evaluation	KQ2401707-04	212419	8.716
Performance Evaluation	KQ2401707-05	0*	0
Continuing Calibration Blank	KQ2401707-06	187260	8.718

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request:K2314281
Date Analyzed:02/01/24 22:00

Internal Standard Area and RT SUMMARY

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

File ID: J:\LCMS08\Data\240201_1633_RA\240201_031
Instrument ID: K-LCMS-08
Analysis Method: Draft EPA Method 1633

Lab Code:KQ2401707-13
Analysis Lot:831587
Signal ID:1

		18O2-PFHxS		13C4-PFOS		13C3-PFBA	
		Area	RT	Area	RT	Area	RT
	Result ==>	319,160	7.05	393,952	8.79	621,280	1.34
	Upper Limit ==>	638,320	7.45	787,904	9.19	1,242,560	1.74
	Lower Limit ==>	95,748	6.65	118,186	8.39	186,384	0.94

Associated Analyses

Continuing Calibration Verification	KQ2401707-13	308645	7.062	388948	8.799	557792	1.351
Continuing Calibration Blank	KQ2401707-14	240033	7.076	309271	8.811	457635	1.391
Low Level Lab Control Sample	KQ2400483-03	219518	7.080	284956	8.813	446550	1.411
TA-01-W	K2314281-001	201893	7.092	271669	8.824	445169	1.439
TA-02-W	K2314281-002	222765	7.096	286920	8.829	457896	1.425

ALS Group USA, Corp.
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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request:K2314281
Date Analyzed:02/01/24 22:00

Internal Standard Area and RT SUMMARY

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

File ID: J:\LCMS08\Data\240201_1633_RA\240201_031
Instrument ID: K-LCMS-08
Analysis Method: Draft EPA Method 1633

Lab Code:KQ2401707-13
Analysis Lot:831587
Signal ID:1

		13C2-PFHxA		13C4-PFOA		13C5-PFNA	
		Area	RT	Area	RT	Area	RT
	Result ==>	710,660	4.93	62,385	7.08	446,476	7.93
	Upper Limit ==>	1,421,320	5.33	124,770	7.48	892,952	8.33
	Lower Limit ==>	213,198	4.53	18,716	6.68	133,943	7.53
Associated Analyses							
Continuing Calibration Verification	KQ2401707-13	669414	4.947	50390	7.092	384748	7.942
Continuing Calibration Blank	KQ2401707-14	536476	4.969	39969	7.106	314302	7.953
Low Level Lab Control Sample	KQ2400483-03	541299	4.976	41164	7.109	302317	7.956
TA-01-W	K2314281-001	521077	4.989	34729	7.116	267030	7.965
TA-02-W	K2314281-002	554877	4.993	42487	7.121	276279	7.970

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request:K2314281
Date Analyzed:02/01/24 22:00

Internal Standard Area and RT SUMMARY

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

File ID: J:\LCMS08\Data\240201_1633_RA\240201_031
Instrument ID: K-LCMS-08
Analysis Method: Draft EPA Method 1633

Lab Code:KQ2401707-13
Analysis Lot:831587
Signal ID:1

13C2-PFDA		
	Area	RT
Result ==>	287,859	8.7
Upper Limit ==>	575,718	9.10
Lower Limit ==>	86,358	8.30

Associated Analyses

Continuing Calibration Verification	KQ2401707-13	252316	8.707
Continuing Calibration Blank	KQ2401707-14	198870	8.718
Low Level Lab Control Sample	KQ2400483-03	196750	8.720
TA-01-W	K2314281-001	173113	8.730
TA-02-W	K2314281-002	178869	8.734

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request:K2314281
Date Analyzed:02/02/24 03:49

Internal Standard Area and RT SUMMARY

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

File ID: J:\LCMS08\Data\240201_1633_RA\240201_046
Instrument ID: K-LCMS-08
Analysis Method: Draft EPA Method 1633

Lab Code:KQ2401707-08
Analysis Lot:831587
Signal ID:1

		18O2-PFHxS		13C4-PFOS		13C3-PFBA	
		Area	RT	Area	RT	Area	RT
	Result ==>	319,160	7.05	393,952	8.79	621,280	1.34
	Upper Limit ==>	638,320	7.45	787,904	9.19	1,242,560	1.74
	Lower Limit ==>	95,748	6.65	118,186	8.39	186,384	0.94
Associated Analyses							
Continuing Calibration Verification	KQ2401707-08	291132	7.063	374053	8.798	587026	1.354
Continuing Calibration Blank	KQ2401707-07	196762	7.081	252939	8.814	414290	1.403
Continuing Calibration Blank	KQ2401707-10	172151	7.088	243119	8.822	380591	1.411
Continuing Calibration Blank	KQ2401707-11	167965	7.101	253661	8.830	380501	1.414

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request:K2314281
Date Analyzed:02/02/24 03:49

Internal Standard Area and RT SUMMARY

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

File ID: J:\LCMS08\Data\240201_1633_RA\240201_046
Instrument ID: K-LCMS-08
Analysis Method: Draft EPA Method 1633

Lab Code:KQ2401707-08
Analysis Lot:831587
Signal ID:1

	13C2-PFHxA		13C4-PFOA		13C5-PFNA	
	Area	RT	Area	RT	Area	RT
Result ==>	710,660	4.93	62,385	7.08	446,476	7.93
Upper Limit ==>	1,421,320	5.33	124,770	7.48	892,952	8.33
Lower Limit ==>	213,198	4.53	18,716	6.68	133,943	7.53

Associated Analyses

Continuing Calibration Verification	KQ2401707-08	670095	4.951	50894	7.093	377080	7.944
Continuing Calibration Blank	KQ2401707-07	454347	4.977	35006	7.112	267388	7.956
Continuing Calibration Blank	KQ2401707-10	457166	4.986	30888	7.115	232126	7.964
Continuing Calibration Blank	KQ2401707-11	460432	5.000	33232	7.127	216623	7.974

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request:K2314281
Date Analyzed:02/02/24 03:49

Internal Standard Area and RT SUMMARY

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

File ID: J:\LCMS08\Data\240201_1633_RA\240201_046
Instrument ID: K-LCMS-08
Analysis Method: Draft EPA Method 1633

Lab Code:KQ2401707-08
Analysis Lot:831587
Signal ID:1

13C2-PFDA		
	Area	RT
Result ==>	287,859	8.7
Upper Limit ==>	575,718	9.10
Lower Limit ==>	86,358	8.30

Associated Analyses

Continuing Calibration Verification	KQ2401707-08	238365	8.707
Continuing Calibration Blank	KQ2401707-07	177579	8.721
Continuing Calibration Blank	KQ2401707-10	143159	8.728
Continuing Calibration Blank	KQ2401707-11	141296	8.735

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Water

Service Request: K2314281
Date Analyzed: 01/22/24
Date Extracted: 01/11/24

Lab Control Sample Summary

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
Prep Method: Method

Units: ng/L
Basis: NA
Analysis Lot: 830573

Low Level Lab Control Sample

KQ2400483-03

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	7.15	9.43	76	55-160
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	10.2	9.60	106	60-150
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	10.9	9.37	116	70-145
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	10.3	9.51	108	65-155
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	338	300	113	50-145
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	366	300	122	70-135
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	9.97	9.45	106	65-145
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	8.06	9.33	86	70-155
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	11.9	10.0	119	70-140
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	9.01	10.0	90	65-145
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	17.2	10.0	172 *	70-145
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	11.3	10.0	113	70-135
N-Methylperfluorooctane sulfonamide (MeFOSA)	9.81	10.0	98	60-150
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	11.5	10.0	115	50-140
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	11.1	10.0	111	70-145
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	14.9	10.0	149	50-150
Perfluoro(2-ethoxyethane) sulfonic acid (PFEEESA)	10.6	8.90	119	70-140
Perfluorobutane sulfonic acid (PFBS)	10.9	8.87	123	60-145
Perfluorobutanoic acid (PFBA)	11.9	10.0	119	70-140
Perfluorodecane sulfonic acid (PFDS)	12.8	9.65	133	60-145
Perfluorodecanoic acid (PFDA)	10.7	10.0	107	70-140
Perfluorododecane sulfonic acid (PFDoS)	9.04	9.70	93	50-145
Perfluorododecanoic acid (PFDOA)	11.0	10.0	110	70-140
Perfluoroheptane sulfonic acid (PFHpS)	13.6	9.53	143	70-150
Perfluoroheptanoic acid (PFHpA)	10.5	10.0	105	70-150
Perfluorohexane sulfonic acid (PFHxS)	11.9	9.14	130	65-145
Perfluorohexanoic acid (PFHxA)	11.7	10.0	117	70-145
Perfluorononane sulfonic acid (PFNS)	12.4	9.62	129	65-145
Perfluorononanoic acid (PFNA)	11.0	10.0	110	70-150
Perfluorooctane sulfonamide (PFOSAm)	12.1	10.0	121	70-145
Perfluorooctane sulfonic acid (PFOS)	12.4	9.28	133	55-150

ALS Group USA, Corp.
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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Water

Service Request: K2314281
Date Analyzed: 01/22/24
Date Extracted: 01/11/24

Lab Control Sample Summary

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
Prep Method: Method

Units: ng/L
Basis: NA
Analysis Lot: 830573

Low Level Lab Control Sample
KQ2400483-03

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
Perfluorooctanoic acid (PFOA)	10.9	10.0	109	70-150
Perfluoropentane sulfonic acid (PFPeS)	11.2	9.41	119	65-140
Perfluorotetradecanoic acid (PFTDA)	10.9	10.0	109	60-140
Perfluorotridecanoic acid (PFTrDA)	11.5	10.0	115	65-140
Perfluoroundecanoic acid (PFUnDA)	10.4	10.0	104	70-145

ALS Group USA, Corp.
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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Water

Service Request: K2314281
Date Analyzed: 02/01/24
Date Extracted: 01/11/24

Lab Control Sample Summary

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
Prep Method: Method

Units: ng/L
Basis: NA
Analysis Lot: 831587

Low Level Lab Control Sample

KQ2400483-03

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	272	300	91	65-130
Perfluoro-3-methoxypropanoic acid (PFMPA)	10.3	10.0	103	55-140
Perfluoro-4-methoxybutanoic acid (PFMBA)	12.5	10.0	125	60-150
Perfluoropentanoic acid (PFPeA)	12.0	10.0	120	65-135

ALS Group USA, Corp.
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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Water

Service Request: K2314281
Date Analyzed: 01/22/24
Date Extracted: 01/11/24

Duplicate Lab Control Sample Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
Prep Method: Method

Units: ng/L
Basis: NA
Analysis Lot: 830573

Analyte Name	Lab Control Sample KQ2400483-01			Duplicate Lab Control Sample KQ2400483-02					
	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	13.5	18.9	71	14.3	18.9	76	55-160	6	30
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	17.7	19.2	92	20.8	19.2	108	60-150	16	30
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	19.4	18.7	104	20.4	18.7	109	70-145	5	30
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	16.9	19.0	89	20.9	19.0	110	65-155	21	30
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	491	400	123	425	400	106	50-145	14	30
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	508	400	127	453	400	113	70-135	12	30
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	579	400	145 *	557	400	139 *	65-130	4	30
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	18.1	18.9	96	17.7	18.9	94	65-145	2	30
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	16.4	18.7	88	15.9	18.7	85	70-155	3	30
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	21.2	20.0	106	23.9	20.0	120	70-140	12	30
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	16.4	20.0	82	16.7	20.0	83	65-145	2	30
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	30.5	20.0	152 *	32.1	20.0	160 *	70-145	5	30
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	21.5	20.0	107	22.2	20.0	111	70-135	3	30
N-Methylperfluorooctane sulfonamide (MeFOSA)	18.9	20.0	94	18.8	20.0	94	60-150	<1	30
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	21.4	20.0	107	20.4	20.0	102	50-140	5	30
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	20.3	20.0	101	20.4	20.0	102	70-145	<1	30
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	25.0	20.0	125	25.3	20.0	127	50-150	1	30
Perfluoro(2-ethoxyethane) sulfonic acid (PFEEESA)	18.3	17.8	103	17.3	17.8	97	70-140	6	30
Perfluoro-3-methoxypropanoic acid (PFMPA)	27.0	20.0	135	29.6	20.0	148 *	55-140	9	30
Perfluoro-4-methoxybutanoic acid (PFMBA)	22.6	20.0	113	24.7	20.0	123	60-150	9	30
Perfluorobutane sulfonic acid (PFBS)	20.2	17.7	114	20.3	17.7	114	60-145	<1	30

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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Water

Service Request: K2314281
Date Analyzed: 01/22/24
Date Extracted: 01/11/24

Duplicate Lab Control Sample Summary

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
Prep Method: Method

Units: ng/L
Basis: NA
Analysis Lot: 830573

Analyte Name	Lab Control Sample KQ2400483-01			Duplicate Lab Control Sample KQ2400483-02					
	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Perfluorobutanoic acid (PFBA)	21.4	20.0	107	22.0	20.0	110	70-140	3	30
Perfluorodecane sulfonic acid (PFDS)	21.1	19.3	109	23.0	19.3	119	60-145	8	30
Perfluorodecanoic acid (PFDA)	19.5	20.0	97	20.9	20.0	105	70-140	7	30
Perfluorododecane sulfonic acid (PFDoS)	16.4	19.4	84	17.6	19.4	91	50-145	7	30
Perfluorododecanoic acid (PFDOA)	19.2	20.0	96	21.2	20.0	106	70-140	10	30
Perfluoroheptane sulfonic acid (PFHpS)	22.1	19.1	116	25.1	19.1	131	70-150	13	30
Perfluoroheptanoic acid (PFHpA)	20.2	20.0	101	19.8	20.0	99	70-150	2	30
Perfluorohexane sulfonic acid (PFHxS)	23.4	18.3	128	22.7	18.3	124	65-145	3	30
Perfluorohexanoic acid (PFHxA)	22.3	20.0	111	22.1	20.0	110	70-145	<1	30
Perfluorononane sulfonic acid (PFNS)	22.2	19.2	115	24.9	19.2	129	65-145	12	30
Perfluorononanoic acid (PFNA)	21.2	20.0	106	20.6	20.0	103	70-150	3	30
Perfluorooctane sulfonamide (PFOSAm)	21.7	20.0	108	22.6	20.0	113	70-145	4	30
Perfluorooctane sulfonic acid (PFOS)	21.9	18.6	118	24.0	18.6	129	55-150	9	30
Perfluorooctanoic acid (PFOA)	19.7	20.0	98	24.6	20.0	123	70-150	22	30
Perfluoropentane sulfonic acid (PFPeS)	21.2	18.8	113	19.9	18.8	106	65-140	7	30
Perfluoropentanoic acid (PFPeA)	24.5	20.0	123	26.7	20.0	134	65-135	9	30
Perfluorotetradecanoic acid (PFTDA)	20.2	20.0	101	21.3	20.0	107	60-140	5	30
Perfluorotridecanoic acid (PFTrDA)	18.9	20.0	94	19.3	20.0	96	65-140	2	30
Perfluoroundecanoic acid (PFUnDA)	18.8	20.0	94	19.8	20.0	99	70-145	5	30

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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Water

Service Request: K2314281
Date Analyzed: NA
Date Extracted:

Method Blank Summary

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Sample Name:
Lab Code:
Analysis Method: Draft EPA Method 1633
Prep Method: None

Instrument ID:
File ID:
Analysis Lot:830573

This Method Blank applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Performance Evaluation	KQ2401073-09	J:\LCMS08\Data\240122_1633_B1\240122_005	01/22/24 11:18
Performance Evaluation	KQ2401073-13	J:\LCMS08\Data\240122_1633_B1\240122_011	01/22/24 13:37
Performance Evaluation	KQ2401707-04	J:\LCMS08\Data\240201_1633_RA\240201_010	02/01/24 13:51
Performance Evaluation	KQ2401707-05	J:\LCMS08\Data\240201_1633_RA\240201_011	02/01/24 14:14

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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Water

Service Request: K2314281
Date Analyzed: 01/22/24 20:59
Date Extracted: 01/11/24

Method Blank Summary

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Sample Name: Method Blank **Instrument ID:** K-LCMS-08
Lab Code: KQ2400483-04 **File ID:** J:\LCMS08\Data\240122_1633_B1\240122_030
Analysis Method: Draft EPA Method 1633 **Analysis Lot:** 830573,831587
Prep Method: Method **Extraction Lot:** 432516

This Method Blank applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Lab Control Sample	KQ2400483-01	J:\LCMS08\Data\240122_1633_B1\240122_031	01/22/24 21:23
Duplicate Lab Control Sample	KQ2400483-02	J:\LCMS08\Data\240122_1633_B1\240122_032	01/22/24 21:46
Low Level Lab Control Sample	KQ2400483-03	J:\LCMS08\Data\240122_1633_B1\240122_033	01/22/24 22:09
TA-01-W	K2314281-001	J:\LCMS08\Data\240122_1633_B1\240122_034	01/22/24 22:32
TA-02-W	K2314281-002	J:\LCMS08\Data\240122_1633_B1\240122_035	01/22/24 22:56
Low Level Lab Control Sample	KQ2400483-03	J:\LCMS08\Data\240201_1633_RA\240201_033	02/01/24 22:46
TA-01-W	K2314281-001	J:\LCMS08\Data\240201_1633_RA\240201_034	02/01/24 23:09
TA-02-W	K2314281-002	J:\LCMS08\Data\240201_1633_RA\240201_035	02/01/24 23:33

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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Water

Service Request: K2314281
Date Analyzed: NA
Date Extracted:

Lab Control Sample Summary

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Sample Name:
Lab Code:
Analysis Method: Draft EPA Method 1633
Prep Method: None

Instrument ID:
File ID:
Analysis Lot:830573

This Lab Control Sample applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Performance Evaluation	KQ2401073-09	J:\LCMS08\Data\240122_1633_B1\240122_005	01/22/24 11:18
Performance Evaluation	KQ2401073-13	J:\LCMS08\Data\240122_1633_B1\240122_011	01/22/24 13:37
Performance Evaluation	KQ2401707-04	J:\LCMS08\Data\240201_1633_RA\240201_010	02/01/24 13:51
Performance Evaluation	KQ2401707-05	J:\LCMS08\Data\240201_1633_RA\240201_011	02/01/24 14:14

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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Water

Service Request: K2314281
Date Analyzed: 01/22/24 21:23
Date Extracted: 01/11/24

Lab Control Sample Summary

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Sample Name: Lab Control Sample **Instrument ID:** K-LCMS-08
Lab Code: KQ2400483-01 **File ID:** J:\LCMS08\Data\240122_1633_B1\240122_031
Analysis Method: Draft EPA Method 1633 **Analysis Lot:** 830573,831587
Prep Method: Method **Extraction Lot:** 432516

This Lab Control Sample applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Method Blank	KQ2400483-04	J:\LCMS08\Data\240122_1633_B1\240122_030	01/22/24 20:59
Duplicate Lab Control Sample	KQ2400483-02	J:\LCMS08\Data\240122_1633_B1\240122_032	01/22/24 21:46
Low Level Lab Control Sample	KQ2400483-03	J:\LCMS08\Data\240122_1633_B1\240122_033	01/22/24 22:09
TA-01-W	K2314281-001	J:\LCMS08\Data\240122_1633_B1\240122_034	01/22/24 22:32
TA-02-W	K2314281-002	J:\LCMS08\Data\240122_1633_B1\240122_035	01/22/24 22:56
Low Level Lab Control Sample	KQ2400483-03	J:\LCMS08\Data\240201_1633_RA\240201_033	02/01/24 22:46
TA-01-W	K2314281-001	J:\LCMS08\Data\240201_1633_RA\240201_034	02/01/24 23:09
TA-02-W	K2314281-002	J:\LCMS08\Data\240201_1633_RA\240201_035	02/01/24 23:33

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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A

Service Request: K2314281
Calibration Date: 1/18/2024

Initial Calibration Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Calibration ID: KC2400027
Instrument ID: K-LCMS-08

Signal ID: 1

#	Lab Code	Sample Name	File Location	Acquisition Date
01	KC2400027-01	1633 ICAL 0.05PPB	240118_006	01/18/2024 14:04
02	KC2400027-02	1633 ICAL 0.1PPB	240118_007	01/18/2024 14:27
03	KC2400027-03	1633 ICAL 0.25PPB	240118_008	01/18/2024 14:51
04	KC2400027-04	1633 ICAL 0.50PPB	240118_009	01/18/2024 15:14
05	KC2400027-05	1633 ICAL 1.0PPB	240118_010	01/18/2024 15:37
06	KC2400027-06	1633 ICAL 5.0PPB	240118_011	01/18/2024 16:00
07	KC2400027-07	1633 ICAL 10.0PPB	240118_012	01/18/2024 16:24
08	KC2400027-08	1633 ICAL 15.0PPB	240118_013	01/18/2024 16:47
09	KC2400027-09	1633 ICAL 20.0PPB	240118_014	01/18/2024 17:10

Analyte

11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0472	8.159	02	0.0940	5.935	03	0.2360	6.05	04	0.4720	5.441
05	0.9400	5.688	06	4.7200	5.661	07	9.4000	5.714	08	14.1000	5.604
09	18.9000	5.418									

13C2-4:2 FTS

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	5.0000	0.4093	02	5.0000	0.4132	03	5.0000	0.3727	04	5.0000	0.3378
05	5.0000	0.344	06	5.0000	0.3352	07	5.0000	0.3214	08	5.0000	0.274
09	5.0000	0.2886									

13C2-6:2 FTS

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	5.0000	0.35	02	5.0000	0.3648	03	5.0000	0.3532	04	5.0000	0.3579
05	5.0000	0.3215	06	5.0000	0.2981	07	5.0000	0.3028	08	5.0000	0.2913
09	5.0000	0.2889									

13C2-8:2 FTS

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	5.0000	0.3261	02	5.0000	0.3235	03	5.0000	0.2753	04	5.0000	0.261
05	5.0000	0.2421	06	5.0000	0.2535	07	5.0000	0.2524	08	5.0000	0.2247
09	5.0000	0.247									

13C2-PFDoDA

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.2500	1.476	02	1.2500	1.359	03	1.2500	1.333	04	1.2500	1.446
05	1.2500	1.352	06	1.2500	1.316	07	1.2500	1.3	08	1.2500	1.402
09	1.2500	1.419									

13C2-PFTeDA

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.2500	0.6351	02	1.2500	0.5806	03	1.2500	0.5694	04	1.2500	0.6471
05	1.2500	0.5758	06	1.2500	0.5474	07	1.2500	0.5611	08	1.2500	0.6105
09	1.2500	0.6284									

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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A

Service Request: K2314281
Calibration Date: 1/18/2024

Initial Calibration Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Calibration ID: KC2400027
Instrument ID: K-LCMS-08

Signal ID: 1

Analyte

13C3-HFPO-DA

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	10.0000	0.2408	02	10.0000	0.2273	03	10.0000	0.2277	04	10.0000	0.2494
05	10.0000	0.2412	06	10.0000	0.2497	07	10.0000	0.2476	08	10.0000	0.2521
09	10.0000	0.2666									

13C3-PFBS

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.5000	1.466	02	2.5000	1.487	03	2.5000	1.353	04	2.5000	1.421
05	2.5000	1.389	06	2.5000	1.428	07	2.5000	1.37	08	2.5000	1.383
09	2.5000	1.473									

13C3-PFHxS

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.5000	1.176	02	2.5000	1.049	03	2.5000	1.05	04	2.5000	1.085
05	2.5000	1.074	06	2.5000	1.022	07	2.5000	1.032	08	2.5000	1.075
09	2.5000	1.094									

13C4-PFBA

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	10.0000	1.093	02	10.0000	1.124	03	10.0000	1.113	04	10.0000	1.124
05	10.0000	1.136	06	10.0000	1.121	07	10.0000	1.112	08	10.0000	1.094
09	10.0000	1.14									

13C4-PFHpA

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.5000	0.9829	02	2.5000	0.8939	03	2.5000	0.935	04	2.5000	0.9545
05	2.5000	0.9493	06	2.5000	0.9889	07	2.5000	0.9572	08	2.5000	0.9323
09	2.5000	0.9902									

13C5-PFHxA

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.5000	1.096	02	2.5000	1.054	03	2.5000	1.009	04	2.5000	1.047
05	2.5000	1.045	06	2.5000	1.072	07	2.5000	1.057	08	2.5000	1.008
09	2.5000	1.094									

13C5-PFPeA

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	5.0000	0.1233	02	5.0000	0.1067	03	5.0000	0.1095	04	5.0000	0.1171
05	5.0000	0.1113	06	5.0000	0.1117	07	5.0000	0.1063	08	5.0000	0.1142
09	5.0000	0.1155									

13C6-PFDA

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.2500	1.051	02	1.2500	0.9903	03	1.2500	0.9543	04	1.2500	1.057
05	1.2500	1.018	06	1.2500	0.9832	07	1.2500	0.9726	08	1.2500	1.042
09	1.2500	0.9836									

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A

Service Request: K2314281
Calibration Date: 1/18/2024

Initial Calibration Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Calibration ID: KC2400027
Instrument ID: K-LCMS-08

Signal ID: 1

Analyte

13C7-PFUnDA

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.2500	1.298	02	1.2500	1.194	03	1.2500	1.189	04	1.2500	1.316
05	1.2500	1.137	06	1.2500	1.074	07	1.2500	1.097	08	1.2500	1.219
09	1.2500	1.272									

13C8-FOSA

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.5000	1.09	02	2.5000	1.077	03	2.5000	1.038	04	2.5000	1.119
05	2.5000	1.037	06	2.5000	0.9911	07	2.5000	1.028	08	2.5000	1.053
09	2.5000	1.118									

13C8-PFOA

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.5000	13.87	02	2.5000	13.24	03	2.5000	14.02	04	2.5000	14.75
05	2.5000	14.39	06	2.5000	13.2	07	2.5000	13.2	08	2.5000	13.95
09	2.5000	15.13									

13C8-PFOS

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.5000	0.4161	02	2.5000	0.4179	03	2.5000	0.4115	04	2.5000	0.4327
05	2.5000	0.4166	06	2.5000	0.3954	07	2.5000	0.4129	08	2.5000	0.4123
09	2.5000	0.4371									

13C9-PFNA

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.2500	0.9393	02	1.2500	0.9497	03	1.2500	0.9695	04	1.2500	0.9879
05	1.2500	1.001	06	1.2500	0.9931	07	1.2500	0.9953	08	1.2500	0.9603
09	1.2500	1.013									

1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0480	2.54	02	0.0960	1.65	03	0.2400	2.154	04	0.4800	2.055
05	0.9600	2.129	06	4.8000	2.256	07	9.6000	2.084	08	14.4000	2.302
09	19.2000	2.167									

1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0469	2.831	02	0.0940	2.384	03	0.2340	2.349	04	0.4690	2.463
05	0.9400	2.474	06	4.6900	2.404	07	9.4000	2.413	08	14.1000	2.489
09	18.7000	2.327									

1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	0.0950	2.604	03	0.2380	2.409	04	0.4760	1.834	05	0.9500	2.458
06	4.7600	2.337	07	9.5000	2.22	08	14.3000	2.287	09	19.0000	2.065

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Calibration ID: KC2400027
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Analyte

2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	5.0000	0.08112	03	10.0000	0.08179	04	15.0000	0.0808	05	20.0000	0.07912
06	50.0000	0.09713	07	80.0000	0.08443	08	100.0000	0.09652	09	150.0000	0.08971

2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.0000	0.07256	02	5.0000	0.0662	03	10.0000	0.06464	04	15.0000	0.06163
05	20.0000	0.06217	06	50.0000	0.0661	07	80.0000	0.0586	08	100.0000	0.06738
09	150.0000	0.06271									

4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.0000	0.1087	02	5.0000	0.1136	03	10.0000	0.1076	04	15.0000	0.103
05	20.0000	0.1066	06	50.0000	0.1219	07	80.0000	0.1097	08	100.0000	0.1142
09	150.0000	0.1126									

4,8-Dioxa-3H-perfluorononanoic acid (DONA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0473	9.878	02	0.0950	7.963	03	0.2360	8.164	04	0.4730	6.965
05	0.9500	7.41	06	4.7300	7.468	07	9.5000	7.309	08	14.2000	7.309
09	18.9000	7.289									

9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0467	10.11	02	0.0930	8.255	03	0.2340	8.495	04	0.4670	7.402
05	0.9300	8.204	06	4.6700	7.923	07	9.3000	7.92	08	14.0000	8.313
09	18.7000	7.579									

D3-MeFOSA

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.5000	0.213	02	2.5000	0.2211	03	2.5000	0.211	04	2.5000	0.2096
05	2.5000	0.228	06	2.5000	0.1997	07	2.5000	0.2021	08	2.5000	0.2129
09	2.5000	0.2262									

D3-MeFOSAA

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	5.0000	0.5007	02	5.0000	0.4569	03	5.0000	0.4449	04	5.0000	0.4459
05	5.0000	0.4209	06	5.0000	0.4019	07	5.0000	0.3982	08	5.0000	0.396
09	5.0000	0.4398									

D5-EtFOSA

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.5000	0.2807	02	2.5000	0.2848	03	2.5000	0.2861	04	2.5000	0.293
05	2.5000	0.269	06	2.5000	0.2635	07	2.5000	0.274	08	2.5000	0.2986
09	2.5000	0.3114									

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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
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Service Request: K2314281
Calibration Date: 1/18/2024

Initial Calibration Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Calibration ID: KC2400027
Instrument ID: K-LCMS-08

Signal ID: 1

Analyte

D5-EtFOSAA

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	5.0000	0.5569	02	5.0000	0.5672	03	5.0000	0.5493	04	5.0000	0.5385
05	5.0000	0.4957	06	5.0000	0.4756	07	5.0000	0.485	08	5.0000	0.4892
09	5.0000	0.5146									

D7-MeFOSE

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	25.0000	0.2613	02	25.0000	0.2549	03	25.0000	0.2571	04	25.0000	0.2719
05	25.0000	0.2466	06	25.0000	0.2402	07	25.0000	0.2587	08	25.0000	0.2694
09	25.0000	0.2948									

D9-EtFOSE

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	25.0000	0.265	02	25.0000	0.2651	03	25.0000	0.2623	04	25.0000	0.2793
05	25.0000	0.2597	06	25.0000	0.2497	07	25.0000	0.2533	08	25.0000	0.2669
09	25.0000	0.2904									

Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0500	1.224	02	0.1000	1.2	03	0.2500	1.147	04	0.5000	0.9938
05	1.0000	1.114	06	5.0000	1.064	07	10.0000	1.067	08	15.0000	1.08
09	20.0000	1.05									

N-Ethylperfluorooctane sulfonamide (EtFOSAm)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0500	1.77	02	0.1000	1.305	03	0.2500	1.37	04	0.5000	1.409
05	1.0000	1.415	06	5.0000	1.458	07	10.0000	1.471	08	15.0000	1.469
09	20.0000	1.432									

N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0500	0.8615	02	0.1000	0.5059	03	0.2500	0.67	04	0.5000	0.5919
05	1.0000	0.6858	06	5.0000	0.6483	07	10.0000	0.6483	08	15.0000	0.7286
09	20.0000	0.6696									

N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	0.1000	1.413	03	0.2500	1.439	04	0.5000	1.255	05	1.0000	1.219
06	5.0000	1.276	07	10.0000	1.323	08	15.0000	1.329	09	20.0000	1.269

N-Methylperfluorooctane sulfonamide (MeFOSA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0500	2.065	02	0.1000	1.667	03	0.2500	1.844	04	0.5000	1.811
05	1.0000	1.704	06	5.0000	1.793	07	10.0000	1.761	08	15.0000	1.8
09	20.0000	1.774									

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QA/QC Report

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Initial Calibration Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

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N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	0.1000	1.541	03	0.2500	1.245	04	0.5000	1.328	05	1.0000	1.359
06	5.0000	1.257	07	10.0000	1.337	08	15.0000	1.457	09	20.0000	1.328

N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	0.1000	1.173	03	0.2500	0.9782	04	0.5000	0.8163	05	1.0000	0.9017
06	5.0000	0.8644	07	10.0000	0.8531	08	15.0000	0.9135	09	20.0000	0.8446

Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0500	0.7167	02	0.1000	0.5219	03	0.2500	0.5649	04	0.5000	0.5333
05	1.0000	0.5269	06	5.0000	0.5333	07	10.0000	0.5302	08	15.0000	0.5622
09	20.0000	0.5027									

Perfluoro(2-ethoxyethane) sulfonic acid (PFEESA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0445	3.419	02	0.0890	2.655	03	0.2230	2.792	04	0.4450	2.604
05	0.8900	2.688	06	4.4500	2.678	07	8.9000	2.73	08	13.4000	2.912
09	17.8000	2.725									

Perfluoro-3-methoxypropanoic acid (PFMPA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0500	3.807	02	0.1000	3.337	03	0.2500	3.257	04	0.5000	2.966
05	1.0000	3.144	06	5.0000	3.161	07	10.0000	3.223	08	15.0000	3.087
09	20.0000	3.1									

Perfluoro-4-methoxybutanoic acid (PFMBA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0500	5.244	02	0.1000	4.709	03	0.2500	4.443	04	0.5000	4.262
05	1.0000	4.491	06	5.0000	4.412	07	10.0000	4.526	08	15.0000	4.526
09	20.0000	4.586									

Perfluorobutane sulfonic acid (PFBS)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0444	1.464	02	0.0890	1.252	03	0.2210	1.381	04	0.4440	1.148
05	0.8900	1.294	06	4.4400	1.239	07	8.9000	1.265	08	13.3000	1.287
09	17.7000	1.187									

Perfluorobutanoic acid (PFBA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	0.1000	0.915	03	0.2500	0.8907	04	0.5000	0.8273	05	1.0000	0.848
06	5.0000	0.8351	07	10.0000	0.8419	08	15.0000	0.8721	09	20.0000	0.8433

Perfluorodecane sulfonic acid (PFDS)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0483	2.225	02	0.0970	1.693	03	0.2410	1.65	04	0.4830	1.529
05	0.9700	1.606	06	4.8300	1.595	07	9.7000	1.589	08	14.5000	1.71

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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A

Service Request: K2314281
Calibration Date: 1/18/2024

Initial Calibration Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Calibration ID: KC2400027
Instrument ID: K-LCMS-08

Signal ID: 1

Analyte

Perfluorodecane sulfonic acid (PFDS)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
09	19.3000	1.66									

Perfluorodecanoic acid (PFDA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0500	1.928	02	0.1000	1.503	03	0.2500	1.274	04	0.5000	1.176
05	1.0000	1.202	06	5.0000	1.209	07	10.0000	1.176	08	15.0000	1.175
09	20.0000	1.216									

Perfluorododecane sulfonic acid (PFDoS)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0485	1.277	02	0.0970	1.045	03	0.2430	1.045	04	0.4850	0.8994
05	0.9700	0.9459	06	4.8500	0.931	07	9.7000	0.9379	08	14.6000	0.9927
09	19.4000	0.9492									

Perfluorododecanoic acid (PFDOA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0500	1.188	02	0.1000	0.799	03	0.2000	0.9867	04	0.5000	0.6951
05	1.0000	0.7279	06	5.0000	0.6971	07	10.0000	0.7067	08	15.0000	0.7158
09	20.0000	0.698									

Perfluoroheptane sulfonic acid (PFHpS)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0477	2.322	02	0.0950	1.898	03	0.2390	2.001	04	0.4770	1.863
05	0.9500	1.808	06	4.7700	1.899	07	9.5000	1.861	08	14.3000	1.976
09	19.1000	1.935									

Perfluoroheptanoic acid (PFHpA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0500	1.848	02	0.1000	1.409	03	0.2500	1.171	04	0.5000	1.028
05	1.0000	1.069	06	5.0000	1.031	07	10.0000	1.031	08	15.0000	1.061
09	20.0000	1.032									

Perfluorohexane sulfonic acid (PFHxS)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0457	1.752	02	0.0910	1.415	03	0.2290	1.272	04	0.4570	1.127
05	0.9100	1.234	06	4.5700	1.329	07	9.1000	1.278	08	13.7000	1.188
09	18.3000	1.146									

Perfluorohexanoic acid (PFHxA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0500	1.197	02	0.1000	0.8301	03	0.2500	0.8418	04	0.5000	0.7245
05	1.0000	0.8263	06	5.0000	0.8144	07	10.0000	0.8325	08	15.0000	0.871
09	20.0000	0.8124									

Perfluorononane sulfonic acid (PFNS)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0481	2.25	02	0.0960	1.982	03	0.2400	1.885	04	0.4810	1.792

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Analyte

Perfluorononane sulfonic acid (PFNS)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
05	0.9600	1.798	06	4.8100	1.812	07	9.6000	1.795	08	14.4000	1.937
09	19.2000	1.845									

Perfluorononanoic acid (PFNA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0500	1.157	02	0.1000	0.9651	03	0.2500	0.8215	04	0.5000	0.7306
05	1.0000	0.7031	06	5.0000	0.698	07	10.0000	0.7054	08	15.0000	0.7434
09	20.0000	0.6998									

Perfluorooctane sulfonamide (PFOSAm)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.1000	0.9782	02	0.2000	0.851	03	0.5000	0.8459	04	1.0000	0.7456
05	2.0000	0.7947	06	10.0000	0.7908	07	20.0000	0.783	08	30.0000	0.8152
09	40.0000	0.8118									

Perfluorooctane sulfonic acid (PFOS)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0464	3.278	02	0.0930	2.714	03	0.2330	2.904	04	0.4640	2.31
05	0.9300	2.352	06	4.6400	2.321	07	9.3000	2.377	08	13.9000	2.592
09	18.6000	2.555									

Perfluorooctanoic acid (PFOA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0500	1.058	02	0.1000	0.9445	03	0.2500	0.8119	04	0.5000	0.6195
05	1.0000	0.7174	06	5.0000	0.743	07	10.0000	0.738	08	15.0000	0.6692
09	20.0000	0.5616									

Perfluoropentane sulfonic acid (PFPeS)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0471	1.39	02	0.0940	1.366	03	0.2350	1.372	04	0.4710	1.202
05	0.9400	1.278	06	4.7100	1.348	07	9.4000	1.321	08	14.1000	1.288
09	18.8000	1.25									

Perfluoropentanoic acid (PFPeA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0500	8.294	02	0.1000	7.05	03	0.2500	6.206	04	0.5000	5.996
05	1.0000	5.995	06	5.0000	6.022	07	10.0000	6.167	08	15.0000	6.288
09	20.0000	6.268									

Perfluorotetradecanoic acid (PFTDA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0500	2.237	02	0.1000	1.643	03	0.2500	1.528	04	0.5000	1.291
05	1.0000	1.372	06	5.0000	1.37	07	10.0000	1.367	08	15.0000	1.341
09	20.0000	1.337									

Client: Maul Foster & Alongi, Incorporated
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Initial Calibration Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Calibration ID: KC2400027
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Analyte

Perfluorotridecanoic acid (PFTrDA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0500	2.927	02	0.1000	2.234	03	0.2500	2.018	04	0.5000	1.746
05	1.0000	1.873	06	5.0000	1.802	07	10.0000	1.778	08	15.0000	1.827
09	20.0000	1.71									

Perfluoroundecanoic acid (PFUnDA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0500	1.549	02	0.1000	1.099	03	0.2500	1.007	04	0.5000	0.8931
05	1.0000	0.9549	06	5.0000	0.9139	07	10.0000	0.927	08	15.0000	0.9252
09	20.0000	0.8829									

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Calibration ID: KC2400027
Instrument ID: K-LCMS-08

Signal ID: 1

Analyte Name	Compound Type	Calibration Evaluation				Calibration Evaluation	
		Fit Type	Eval	Eval Result	Control Criteria	Average RRF	Minimum RRF
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	TRG	Linear	R2	0.9995	≥	5.963	
13C2-4:2 FTS	SURR	Average RF	% RSD	14.0	≤20	0.344	
13C2-6:2 FTS	SURR	Average RF	% RSD	9.6	≤20	0.3254	
13C2-8:2 FTS	SURR	Average RF	% RSD	13.2	≤20	0.2673	
13C2-PFDoDA	SURR	Average RF	% RSD	4.4	≤20	1.378	
13C2-PFTeDA	SURR	Average RF	% RSD	6.0	≤20	0.595	
13C3-HFPO-DA	SURR	Average RF	% RSD	5.0	≤20	0.2447	
13C3-PFBS	SURR	Average RF	% RSD	3.4	≤20	1.419	
13C3-PFHxS	SURR	Average RF	% RSD	4.3	≤20	1.073	
13C4-PFBA	SURR	Average RF	% RSD	1.5	≤20	1.118	
13C4-PFHpA	SURR	Average RF	% RSD	3.3	≤20	0.9538	
13C5-PFHxA	SURR	Average RF	% RSD	3.0	≤20	1.054	
13C5-PFPeA	SURR	Average RF	% RSD	4.8	≤20	0.1128	
13C6-PFDA	SURR	Average RF	% RSD	3.7	≤20	1.006	
13C7-PFUnDA	SURR	Average RF	% RSD	7.2	≤20	1.2	
13C8-FOSA	SURR	Average RF	% RSD	4.0	≤20	1.061	
13C8-PFOA	SURR	Average RF	% RSD	5.0	≤20	13.97	
13C8-PFOS	SURR	Average RF	% RSD	2.9	≤20	0.4169	
13C9-PFNA	SURR	Average RF	% RSD	2.6	≤20	0.9787	
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	TRG	Average RF	% RSD	11.1	≤20	2.149	
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	TRG	Average RF	% RSD	6.1	≤20	2.459	
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	TRG	Average RF	% RSD	10.6	≤20	2.277	
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	TRG	Average RF	% RSD	8.4	≤20	0.08633	
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	TRG	Average RF	% RSD	6.2	≤20	0.06467	
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	TRG	Average RF	% RSD	4.9	≤20	0.1109	
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	TRG	Average RF	% RSD	11.3	≤20	7.751	
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	TRG	Average RF	% RSD	9.5	≤20	8.244	
D3-MeFOSA	SURR	Average RF	% RSD	4.6	≤20	0.2137	

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A

Service Request: K2314281
Calibration Date: 1/18/2024

Initial Calibration Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Calibration ID: KC2400027
Instrument ID: K-LCMS-08

Signal ID: 1

Analyte Name	Compound Type	Calibration Evaluation				Calibration Evaluation	
		Fit Type	Eval	Eval Result	Control Criteria	Average RRF	Minimum RRF
D3-MeFOSAA	SURR	Average RF	% RSD	7.8	≤20	0.4339	
D5-EtFOSA	SURR	Average RF	% RSD	5.3	≤20	0.2846	
D5-EtFOSAA	SURR	Average RF	% RSD	6.7	≤20	0.5191	
D7-MeFOSE	SURR	Average RF	% RSD	6.1	≤20	0.2617	
D9-EtFOSE	SURR	Average RF	% RSD	4.7	≤20	0.2658	
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	TRG	Average RF	% RSD	6.7	≤20	1.104	
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	TRG	Average RF	% RSD	8.9	≤20	1.455	
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	TRG	Average RF	% RSD	14.4	≤20	0.6678	
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	TRG	Average RF	% RSD	5.9	≤20	1.315	
N-Methylperfluorooctane sulfonamide (MeFOSA)	TRG	Average RF	% RSD	6.2	≤20	1.802	
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	TRG	Average RF	% RSD	7.3	≤20	1.357	
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	TRG	Average RF	% RSD	12.5	≤20	0.9181	
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	TRG	Average RF	% RSD	11.5	≤20	0.5547	
Perfluoro(2-ethoxyethane) sulfonic acid (PFEEESA)	TRG	Average RF	% RSD	8.9	≤20	2.8	
Perfluoro-3-methoxypropanoic acid (PFMPA)	TRG	Average RF	% RSD	7.5	≤20	3.231	
Perfluoro-4-methoxybutanoic acid (PFMBA)	TRG	Average RF	% RSD	6.1	≤20	4.578	
Perfluorobutane sulfonic acid (PFBS)	TRG	Average RF	% RSD	7.5	≤20	1.28	
Perfluorobutanoic acid (PFBA)	TRG	Average RF	% RSD	3.6	≤20	0.8592	
Perfluorodecane sulfonic acid (PFDS)	TRG	Linear	R2	0.9990	≥	1.695	
Perfluorodecanoic acid (PFDA)	TRG	Linear	R2	0.9996	≥	1.318	
Perfluorododecane sulfonic acid (PFDoS)	TRG	Average RF	% RSD	11.4	≤20	1.003	
Perfluorododecanoic acid (PFDOA)	TRG	Linear	R2	0.9995	≥	0.8016	
Perfluoroheptane sulfonic acid (PFHpS)	TRG	Average RF	% RSD	7.7	≤20	1.951	
Perfluoroheptanoic acid (PFHpA)	TRG	Linear	R2	0.9997	≥	1.187	
Perfluorohexane sulfonic acid (PFHxS)	TRG	Linear	R2	0.9971	≥	1.305	
Perfluorohexanoic acid (PFHxA)	TRG	Linear	R2	0.9988	≥	0.8611	

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A

Service Request: K2314281
Calibration Date: 1/18/2024

Initial Calibration Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Calibration ID: KC2400027
Instrument ID: K-LCMS-08

Signal ID: 1

Analyte Name	Compound Type	Calibration Evaluation				Calibration Evaluation	
		Fit Type	Eval	Eval Result	Control Criteria	Average RRF	Minimum RRF
Perfluorononane sulfonic acid (PFNS)	TRG	Average RF	% RSD	7.8	≤20	1.899	
Perfluorononanoic acid (PFNA)	TRG	Linear	R2	0.9992	≥	0.8026	
Perfluorooctane sulfonamide (PFOSAm)	TRG	Average RF	% RSD	8.0	≤20	0.824	
Perfluorooctane sulfonic acid (PFOS)	TRG	Average RF	% RSD	12.5	≤20	2.6	
Perfluorooctanoic acid (PFOA)	TRG	Linear	R2	0.9865	≥	0.7626	
Perfluoropentane sulfonic acid (PFPeS)	TRG	Average RF	% RSD	4.8	≤20	1.313	
Perfluoropentanoic acid (PFPeA)	TRG	Average RF	% RSD	11.6	≤20	6.476	
Perfluorotetradecanoic acid (PFTDA)	TRG	Linear	R2	0.9998	≥	1.498	
Perfluorotridecanoic acid (PFTrDA)	TRG	Linear	R2	0.9991	≥	1.99	
Perfluoroundecanoic acid (PFUnDA)	TRG	Linear	R2	0.9994	≥	1.017	

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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A

Service Request: K2314281
Calibration Date: 1/30/2024

Initial Calibration Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Calibration ID: KC2400048
Instrument ID: K-LCMS-08

Signal ID: 1

#	Lab Code	Sample Name	File Location	Acquisition Date
01	KC2400048-01	1633 ICAL 0.05PPB	240130_018	01/30/2024 21:18
02	KC2400048-02	1633 ICAL 0.1PPB	240130_019	01/30/2024 21:42
03	KC2400048-03	1633 ICAL 0.25PPB	240130_020	01/30/2024 22:05
04	KC2400048-04	1633 ICAL 0.5PPB	240130_021	01/30/2024 22:28
05	KC2400048-05	1633 ICAL 1.0PPB	240130_022	01/30/2024 22:51
06	KC2400048-06	1633 ICAL 5.0PPB	240130_023	01/30/2024 23:15
07	KC2400048-07	1633 ICAL 10.0PPB	240130_024	01/30/2024 23:38
08	KC2400048-08	1633 ICAL 15.0PPB	240130_025	01/31/2024 00:01
09	KC2400048-09	1633 ICAL 20.0PPB	240130_026	01/31/2024 00:24

Analyte

11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0472	7.901	02	0.0940	6.889	03	0.2360	6.921	04	0.4720	7.084
05	0.9400	6.654	06	4.7200	6.761	07	9.4000	6.895	08	14.1000	7.11
09	18.9000	6.78									

13C2-4:2 FTS

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	5.0000	0.4843	02	5.0000	0.4458	03	5.0000	0.4651	04	5.0000	0.4789
05	5.0000	0.5283	06	5.0000	0.4437	07	5.0000	0.4617	08	5.0000	0.4855
09	5.0000	0.4422									

13C2-6:2 FTS

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	5.0000	0.5233	02	5.0000	0.4252	03	5.0000	0.4486	04	5.0000	0.52
05	5.0000	0.5675	06	5.0000	0.444	07	5.0000	0.4764	08	5.0000	0.529
09	5.0000	0.4749									

13C2-8:2 FTS

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	5.0000	0.407	02	5.0000	0.3901	03	5.0000	0.3637	04	5.0000	0.3892
05	5.0000	0.4517	06	5.0000	0.4015	07	5.0000	0.431	08	5.0000	0.4562
09	5.0000	0.453									

13C2-PFDoDA

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.2500	1.478	02	1.2500	1.428	03	1.2500	1.423	04	1.2500	1.478
05	1.2500	1.53	06	1.2500	1.434	07	1.2500	1.419	08	1.2500	1.556
09	1.2500	1.627									

13C2-PFTeDA

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.2500	1.054	02	1.2500	0.9862	03	1.2500	1.038	04	1.2500	1.057
05	1.2500	1.098	06	1.2500	0.9567	07	1.2500	1.051	08	1.2500	1.131
09	1.2500	1.066									

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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A

Service Request: K2314281
Calibration Date: 1/30/2024

Initial Calibration Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Calibration ID: KC2400048
Instrument ID: K-LCMS-08

Signal ID: 1

Analyte

13C3-HFPO-DA

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	10.0000	0.221	02	10.0000	0.2072	03	10.0000	0.2167	04	10.0000	0.2194
05	10.0000	0.2304	06	10.0000	0.2189	07	10.0000	0.2298	08	10.0000	0.229
09	10.0000	0.2217									

13C3-PFBS

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.5000	0.9056	02	2.5000	0.8606	03	2.5000	0.8829	04	2.5000	0.9391
05	2.5000	0.9738	06	2.5000	0.9307	07	2.5000	0.9471	08	2.5000	0.9887
09	2.5000	0.9665									

13C3-PFHxS

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.5000	0.8699	02	2.5000	0.8772	03	2.5000	0.8816	04	2.5000	0.8296
05	2.5000	0.8589	06	2.5000	0.8887	07	2.5000	0.8601	08	2.5000	0.8965
09	2.5000	0.9235									

13C4-PFBA

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	10.0000	0.726	02	10.0000	0.7259	03	10.0000	0.7361	04	10.0000	0.7228
05	10.0000	0.742	06	10.0000	0.751	07	10.0000	0.7479	08	10.0000	0.7539
09	10.0000	0.7624									

13C4-PFHpA

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.5000	1.032	02	2.5000	0.9786	03	2.5000	1.023	04	2.5000	0.9798
05	2.5000	1.059	06	2.5000	0.9944	07	2.5000	1.041	08	2.5000	1.035
09	2.5000	0.9933									

13C5-PFHxA

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.5000	0.7882	02	2.5000	0.8139	03	2.5000	0.8346	04	2.5000	0.7703
05	2.5000	0.8128	06	2.5000	0.8428	07	2.5000	0.8204	08	2.5000	0.7956
09	2.5000	0.784									

13C5-PFPeA

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	5.0000	0.1847	02	5.0000	0.1766	03	5.0000	0.1783	04	5.0000	0.1706
05	5.0000	0.1788	06	5.0000	0.1865	07	5.0000	0.1839	08	5.0000	0.1815
09	5.0000	0.177									

13C6-PFDA

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.2500	1.061	02	1.2500	0.9575	03	1.2500	0.9451	04	1.2500	0.9983
05	1.2500	1.011	06	1.2500	1.005	07	1.2500	1.01	08	1.2500	1.045
09	1.2500	0.9826									

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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A

Service Request: K2314281
Calibration Date: 1/30/2024

Initial Calibration Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Calibration ID: KC2400048
Instrument ID: K-LCMS-08

Signal ID: 1

Analyte

13C7-PFUnDA

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.2500	1.294	02	1.2500	1.254	03	1.2500	1.197	04	1.2500	1.234
05	1.2500	1.265	06	1.2500	1.209	07	1.2500	1.18	08	1.2500	1.25
09	1.2500	1.319									

13C8-FOSA

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.5000	0.8127	02	2.5000	0.7528	03	2.5000	0.7873	04	2.5000	0.7755
05	2.5000	0.824	06	2.5000	0.7241	07	2.5000	0.825	08	2.5000	0.8333
09	2.5000	0.8127									

13C8-PFOA

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.5000	12.14	02	2.5000	11.65	03	2.5000	11.65	04	2.5000	11.51
05	2.5000	11.71	06	2.5000	12.34	07	2.5000	12.09	08	2.5000	12.39
09	2.5000	11.84									

13C8-PFOS

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.5000	0.3394	02	2.5000	0.3081	03	2.5000	0.3055	04	2.5000	0.2976
05	2.5000	0.3033	06	2.5000	0.3022	07	2.5000	0.3074	08	2.5000	0.333
09	2.5000	0.3352									

13C9-PFNA

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.2500	0.8986	02	1.2500	0.9116	03	1.2500	0.9456	04	1.2500	0.8913
05	1.2500	0.9268	06	1.2500	0.9406	07	1.2500	0.9204	08	1.2500	0.9371
09	1.2500	0.9557									

1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0480	1.897	02	0.0960	1.818	03	0.2400	2.085	04	0.4800	2.071
05	0.9600	1.778	06	4.8000	1.905	07	9.6000	1.749	08	14.4000	1.844
09	19.2000	2.006									

1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0469	2.893	02	0.0940	2.329	03	0.2340	2.28	04	0.4690	2.592
05	0.9400	2.309	06	4.6900	2.515	07	9.4000	2.386	08	14.1000	2.414
09	18.7000	2.589									

1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0476	1.862	02	0.0950	1.812	03	0.2380	2.099	04	0.4760	1.953
05	0.9500	1.713	06	4.7600	1.918	07	9.5000	1.86	08	14.3000	1.907
09	19.0000	2.037									

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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A

Service Request: K2314281
Calibration Date: 1/30/2024

Initial Calibration Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Calibration ID: KC2400048
Instrument ID: K-LCMS-08

Signal ID: 1

Analyte

2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.0000	0.1253	02	5.0000	0.1117	03	10.0000	0.1281	04	15.0000	0.137
05	20.0000	0.1205	06	50.0000	0.1398	07	80.0000	0.141	08	100.0000	0.1354
09	150.0000	0.1431									

2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.0000	0.07652	02	5.0000	0.0681	03	10.0000	0.07279	04	15.0000	0.07938
05	20.0000	0.0744	06	50.0000	0.07433	07	80.0000	0.07525	08	100.0000	0.07522
09	150.0000	0.07658									

4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.0000	0.0648	02	5.0000	0.06607	03	10.0000	0.07776	04	15.0000	0.07749
05	20.0000	0.07026	06	50.0000	0.07164	07	80.0000	0.07145	08	100.0000	0.07231
09	150.0000	0.0728									

4,8-Dioxa-3H-perfluorononanoic acid (DONA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0473	9.287	02	0.0950	8.311	03	0.2360	8.317	04	0.4730	8.939
05	0.9500	8.217	06	4.7300	8.018	07	9.5000	8.261	08	14.2000	8.542
09	18.9000	7.975									

9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0467	10.43	02	0.0930	9.8	03	0.2340	9.693	04	0.4670	9.884
05	0.9300	9.336	06	4.6700	9.66	07	9.3000	9.514	08	14.0000	10.03
09	18.7000	9.901									

D3-MeFOSA

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.5000	0.2055	02	2.5000	0.1999	03	2.5000	0.1937	04	2.5000	0.1994
05	2.5000	0.2017	06	2.5000	0.2273	07	2.5000	0.2075	08	2.5000	0.2212
09	2.5000	0.2098									

D3-MeFOSAA

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	5.0000	1.028	02	5.0000	0.9567	03	5.0000	0.9739	04	5.0000	1.034
05	5.0000	1.046	06	5.0000	1.028	07	5.0000	1.042	08	5.0000	1.058
09	5.0000	0.9943									

D5-EtFOSA

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.5000	0.2935	02	2.5000	0.2788	03	2.5000	0.2728	04	2.5000	0.2844
05	2.5000	0.285	06	2.5000	0.2852	07	2.5000	0.2941	08	2.5000	0.2972
09	2.5000	0.2889									

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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A

Service Request: K2314281
Calibration Date: 1/30/2024

Initial Calibration Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Calibration ID: KC2400048
Instrument ID: K-LCMS-08

Signal ID: 1

Analyte

D5-EtFOSAA

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	5.0000	0.8625	02	5.0000	0.807	03	5.0000	0.8076	04	5.0000	0.7668
05	5.0000	0.7763	06	5.0000	0.7934	07	5.0000	0.7891	08	5.0000	0.8214
09	5.0000	0.7956									

D7-MeFOSE

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	25.0000	0.2081	02	25.0000	0.1972	03	25.0000	0.1937	04	25.0000	0.1994
05	25.0000	0.2004	06	25.0000	0.2064	07	25.0000	0.2097	08	25.0000	0.2098
09	25.0000	0.2102									

D9-EtFOSE

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	25.0000	0.2608	02	25.0000	0.241	03	25.0000	0.2336	04	25.0000	0.2423
05	25.0000	0.2435	06	25.0000	0.2562	07	25.0000	0.266	08	25.0000	0.2526
09	25.0000	0.2492									

Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	0.1000	0.9561	03	0.2500	0.9738	04	0.5000	1.082	05	1.0000	0.9281
06	5.0000	0.9879	07	10.0000	0.9555	08	15.0000	0.9974	09	20.0000	0.9855

N-Ethylperfluorooctane sulfonamide (EtFOSAm)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0500	1.398	02	0.1000	1.343	03	0.2500	1.425	04	0.5000	1.362
05	1.0000	1.345	06	5.0000	1.338	07	10.0000	1.347	08	15.0000	1.389
09	20.0000	1.394									

N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0500	0.7816	02	0.1000	0.7542	03	0.2500	0.7644	04	0.5000	0.9038
05	1.0000	0.8317	06	5.0000	0.8154	07	10.0000	0.8528	08	15.0000	0.8606
09	20.0000	0.8252									

N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	0.1000	1.242	03	0.2500	1.209	04	0.5000	1.212	05	1.0000	1.192
06	5.0000	1.141	07	10.0000	1.146	08	15.0000	1.229	09	20.0000	1.22

N-Methylperfluorooctane sulfonamide (MeFOSA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0500	1.558	02	0.1000	1.419	03	0.2500	1.556	04	0.5000	1.472
05	1.0000	1.401	06	5.0000	1.27	07	10.0000	1.367	08	15.0000	1.374
09	20.0000	1.422									

N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0500	0.5727	02	0.1000	0.6873	03	0.2500	0.7062	04	0.5000	0.7492

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A

Service Request: K2314281
Calibration Date: 1/30/2024

Initial Calibration Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Calibration ID: KC2400048
Instrument ID: K-LCMS-08

Signal ID: 1

Analyte

N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
05	1.0000	0.7182	06	5.0000	0.68	07	10.0000	0.7104	08	15.0000	0.7611
09	20.0000	0.6694									

N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0500	1.78	02	0.1000	1.447	03	0.2500	1.252	04	0.5000	1.264
05	1.0000	1.173	06	5.0000	1.154	07	10.0000	1.163	08	15.0000	1.249
09	20.0000	1.223									

Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0500	0.5949	02	0.1000	0.4503	03	0.2500	0.5296	04	0.5000	0.5734
05	1.0000	0.4917	06	5.0000	0.4925	07	10.0000	0.5052	08	15.0000	0.5171
09	20.0000	0.5122									

Perfluoro(2-ethoxyethane) sulfonic acid (PFEEESA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0445	3.167	02	0.0890	2.836	03	0.2230	2.88	04	0.4450	3.293
05	0.8900	3.121	06	4.4500	2.868	07	8.9000	3.132	08	13.4000	3.378
09	17.8000	3.28									

Perfluoro-3-methoxypropanoic acid (PFMPA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0500	1.437	02	0.1000	1.319	03	0.2500	1.429	04	0.5000	1.559
05	1.0000	1.456	06	5.0000	1.356	07	10.0000	1.401	08	15.0000	1.454
09	20.0000	1.438									

Perfluoro-4-methoxybutanoic acid (PFMBA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0500	2.241	02	0.1000	1.989	03	0.2500	2.157	04	0.5000	2.446
05	1.0000	2.264	06	5.0000	2.048	07	10.0000	2.153	08	15.0000	2.235
09	20.0000	2.16									

Perfluorobutane sulfonic acid (PFBS)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0444	1.222	02	0.0890	1.271	03	0.2210	1.248	04	0.4440	1.292
05	0.8900	1.224	06	4.4400	1.184	07	8.9000	1.19	08	13.3000	1.262
09	17.7000	1.257									

Perfluorobutanoic acid (PFBA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0500	1.295	02	0.1000	0.9746	03	0.2500	0.905	04	0.5000	1.011
05	1.0000	0.9245	06	5.0000	0.9126	07	10.0000	0.9037	08	15.0000	0.9443
09	20.0000	0.9374									

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A

Service Request: K2314281
Calibration Date: 1/30/2024

Initial Calibration Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Calibration ID: KC2400048
Instrument ID: K-LCMS-08

Signal ID: 1

Analyte

Perfluorodecane sulfonic acid (PFDS)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0483	1.699	02	0.0970	1.856	03	0.2410	1.858	04	0.4830	2.04
05	0.9700	1.889	06	4.8300	1.888	07	9.7000	1.868	08	14.5000	1.857
09	19.3000	1.766									

Perfluorodecanoic acid (PFDA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	0.1000	1.18	03	0.2500	1.127	04	0.5000	1.168	05	1.0000	1.035
06	5.0000	0.9563	07	10.0000	0.95	08	15.0000	0.9939	09	20.0000	1.047

Perfluorododecane sulfonic acid (PFDoS)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0485	1.163	02	0.0970	1.161	03	0.2430	1.111	04	0.4850	1.253
05	0.9700	1.21	06	4.8500	1.145	07	9.7000	1.161	08	14.6000	1.109
09	19.4000	1.114									

Perfluorododecanoic acid (PFDOA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	0.1000	0.7475	03	0.2000	0.8164	04	0.5000	0.6859	05	1.0000	0.6142
06	5.0000	0.6185	07	10.0000	0.6011	08	15.0000	0.6269	09	20.0000	0.629

Perfluoroheptane sulfonic acid (PFHpS)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0477	2.071	02	0.0950	1.79	03	0.2390	2.048	04	0.4770	2.243
05	0.9500	2.187	06	4.7700	2.23	07	9.5000	2.211	08	14.3000	2.12
09	19.1000	2.018									

Perfluoroheptanoic acid (PFHpA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0500	1.18	02	0.1000	0.9914	03	0.2500	0.8741	04	0.5000	0.9462
05	1.0000	0.8149	06	5.0000	0.8426	07	10.0000	0.8237	08	15.0000	0.8523
09	20.0000	0.862									

Perfluorohexane sulfonic acid (PFHxS)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0457	1.319	02	0.0910	1.089	03	0.2290	1.036	04	0.4570	1.196
05	0.9100	1.078	06	4.5700	0.9292	07	9.1000	1.047	08	13.7000	1.117
09	18.3000	1.024									

Perfluorohexanoic acid (PFHxA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0500	1.091	02	0.1000	1.044	03	0.2500	0.8822	04	0.5000	0.9727
05	1.0000	0.8958	06	5.0000	0.9017	07	10.0000	0.9265	08	15.0000	0.9301
09	20.0000	0.9441									

Perfluorononane sulfonic acid (PFNS)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0481	1.982	02	0.0960	2.064	03	0.2400	1.959	04	0.4810	2.313

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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A

Service Request: K2314281
Calibration Date: 1/30/2024

Initial Calibration Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Calibration ID: KC2400048
Instrument ID: K-LCMS-08

Signal ID: 1

Analyte

Perfluorononane sulfonic acid (PFNS)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
05	0.9600	2.245	06	4.8100	2.143	07	9.6000	2.236	08	14.4000	2.1
09	19.2000	2.002									

Perfluorononanoic acid (PFNA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	0.1000	0.9913	03	0.2500	0.8645	04	0.5000	0.8903	05	1.0000	0.8094
06	5.0000	0.7683	07	10.0000	0.7965	08	15.0000	0.8296	09	20.0000	0.8176

Perfluorooctane sulfonamide (PFOSAm)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.1000	0.883	02	0.2000	0.9634	03	0.5000	0.7987	04	1.0000	0.9354
05	2.0000	0.8299	06	10.0000	0.9067	07	20.0000	0.8177	08	30.0000	0.8635
09	40.0000	0.8742									

Perfluorooctane sulfonic acid (PFOS)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0464	2.354	02	0.0930	2.093	03	0.2330	2.156	04	0.4640	2.219
05	0.9300	2.046	06	4.6400	2.044	07	9.3000	2.111	08	13.9000	2.13
09	18.6000	2.066									

Perfluorooctanoic acid (PFOA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	0.1000	1.04	03	0.2500	0.8876	04	0.5000	1.087	05	1.0000	0.9755
06	5.0000	0.8033	07	10.0000	0.8921	08	15.0000	0.9596	09	20.0000	0.9092

Perfluoropentane sulfonic acid (PFPeS)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0471	0.9256	02	0.0940	0.937	03	0.2350	0.8934	04	0.4710	1.08
05	0.9400	1.012	06	4.7100	0.964	07	9.4000	1.019	08	14.1000	1.059
09	18.8000	1.015									

Perfluoropentanoic acid (PFPeA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0500	3.651	02	0.1000	3.723	03	0.2500	3.429	04	0.5000	3.596
05	1.0000	3.42	06	5.0000	3.409	07	10.0000	3.325	08	15.0000	3.442
09	20.0000	3.515									

Perfluorotetradecanoic acid (PFTDA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	0.1000	1.089	03	0.2500	0.9335	04	0.5000	0.8906	05	1.0000	0.876
06	5.0000	0.8797	07	10.0000	0.8617	08	15.0000	0.8425	09	20.0000	0.8822

Perfluorotridecanoic acid (PFTrDA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	0.1000	1.505	03	0.2500	1.298	04	0.5000	1.331	05	1.0000	1.243
06	5.0000	1.318	07	10.0000	1.133	08	15.0000	1.203	09	20.0000	1.288

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A

Service Request: K2314281
Calibration Date: 1/30/2024

Initial Calibration Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Calibration ID: KC2400048
Instrument ID: K-LCMS-08

Signal ID: 1

Analyte

Perfluoroundecanoic acid (PFUnDA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	0.1000	1.01	03	0.2500	0.8825	04	0.5000	0.9545	05	1.0000	0.8731
06	5.0000	0.8371	07	10.0000	0.8666	08	15.0000	0.8772	09	20.0000	0.8268

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A

Service Request: K2314281
Calibration Date: 1/30/2024

Initial Calibration Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Calibration ID: KC2400048
Instrument ID: K-LCMS-08

Signal ID: 1

Analyte Name	Compound Type	Calibration Evaluation				Calibration Evaluation	
		Fit Type	Eval	Eval Result	Control Criteria	Average RRF	Minimum RRF
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	TRG	Average RF	% RSD	5.3	≤20	7	
13C2-4:2 FTS	SURR	Average RF	% RSD	5.8	≤20	0.4706	
13C2-6:2 FTS	SURR	Average RF	% RSD	9.7	≤20	0.4899	
13C2-8:2 FTS	SURR	Average RF	% RSD	8.0	≤20	0.4159	
13C2-PFDoDA	SURR	Average RF	% RSD	4.8	≤20	1.486	
13C2-PFTeDA	SURR	Average RF	% RSD	5.0	≤20	1.049	
13C3-HFPO-DA	SURR	Average RF	% RSD	3.4	≤20	0.2216	
13C3-PFBS	SURR	Average RF	% RSD	4.6	≤20	0.9328	
13C3-PFHxS	SURR	Average RF	% RSD	3.0	≤20	0.8762	
13C4-PFBA	SURR	Average RF	% RSD	1.9	≤20	0.7409	
13C4-PFHpA	SURR	Average RF	% RSD	2.9	≤20	1.015	
13C5-PFHxA	SURR	Average RF	% RSD	3.0	≤20	0.807	
13C5-PFPeA	SURR	Average RF	% RSD	2.7	≤20	0.1798	
13C6-PFDA	SURR	Average RF	% RSD	3.7	≤20	1.002	
13C7-PFUnDA	SURR	Average RF	% RSD	3.6	≤20	1.245	
13C8-FOSA	SURR	Average RF	% RSD	4.7	≤20	0.7942	
13C8-PFOA	SURR	Average RF	% RSD	2.7	≤20	11.92	
13C8-PFOS	SURR	Average RF	% RSD	5.2	≤20	0.3146	
13C9-PFNA	SURR	Average RF	% RSD	2.4	≤20	0.9253	
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	TRG	Average RF	% RSD	6.5	≤20	1.906	
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	TRG	Average RF	% RSD	7.8	≤20	2.478	
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	TRG	Average RF	% RSD	6.1	≤20	1.907	
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	TRG	Average RF	% RSD	8.1	≤20	0.1313	
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	TRG	Average RF	% RSD	4.1	≤20	0.07473	
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	TRG	Average RF	% RSD	6.1	≤20	0.07162	
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	TRG	Average RF	% RSD	5.1	≤20	8.43	
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	TRG	Average RF	% RSD	3.2	≤20	9.806	
D3-MeFOSA	SURR	Average RF	% RSD	5.2	≤20	0.2073	

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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A

Service Request: K2314281
Calibration Date: 1/30/2024

Initial Calibration Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Calibration ID: KC2400048
Instrument ID: K-LCMS-08

Signal ID: 1

Analyte Name	Compound Type	Calibration Evaluation				Calibration Evaluation	
		Fit Type	Eval	Eval Result	Control Criteria	Average RRF	Minimum RRF
D3-MeFOSAA	SURR	Average RF	% RSD	3.4	≤20	1.018	
D5-EtFOSA	SURR	Average RF	% RSD	2.7	≤20	0.2867	
D5-EtFOSAA	SURR	Average RF	% RSD	3.5	≤20	0.8022	
D7-MeFOSE	SURR	Average RF	% RSD	3.1	≤20	0.2039	
D9-EtFOSE	SURR	Average RF	% RSD	4.2	≤20	0.2495	
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	TRG	Average RF	% RSD	4.7	≤20	0.9833	
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	TRG	Average RF	% RSD	2.3	≤20	1.371	
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	TRG	Average RF	% RSD	5.9	≤20	0.8211	
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	TRG	Average RF	% RSD	3.1	≤20	1.199	
N-Methylperfluorooctane sulfonamide (MeFOSA)	TRG	Average RF	% RSD	6.4	≤20	1.427	
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	TRG	Average RF	% RSD	7.9	≤20	0.6949	
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	TRG	Linear	R2	0.9990	≥	1.3	
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	TRG	Average RF	% RSD	8.4	≤20	0.5186	
Perfluoro(2-ethoxyethane) sulfonic acid (PFEESA)	TRG	Average RF	% RSD	6.5	≤20	3.106	
Perfluoro-3-methoxypropanoic acid (PFMPA)	TRG	Average RF	% RSD	4.7	≤20	1.428	
Perfluoro-4-methoxybutanoic acid (PFMBA)	TRG	Average RF	% RSD	6.0	≤20	2.188	
Perfluorobutane sulfonic acid (PFBS)	TRG	Average RF	% RSD	3.0	≤20	1.239	
Perfluorobutanoic acid (PFBA)	TRG	Linear	R2	0.9996	≥	0.9787	
Perfluorodecane sulfonic acid (PFDS)	TRG	Average RF	% RSD	5.0	≤20	1.858	
Perfluorodecanoic acid (PFDA)	TRG	Average RF	% RSD	8.6	≤20	1.057	
Perfluorododecane sulfonic acid (PFDoS)	TRG	Average RF	% RSD	4.1	≤20	1.159	
Perfluorododecanoic acid (PFDOA)	TRG	Linear	R2	0.9995	≥	0.6675	
Perfluoroheptane sulfonic acid (PFHpS)	TRG	Average RF	% RSD	6.8	≤20	2.102	
Perfluoroheptanoic acid (PFHpA)	TRG	Linear	R2	0.9996	≥	0.9097	
Perfluorohexane sulfonic acid (PFHxS)	TRG	Average RF	% RSD	10.2	≤20	1.093	
Perfluorohexanoic acid (PFHxA)	TRG	Linear	R2	0.9997	≥	0.9543	

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A

Service Request: K2314281
Calibration Date: 1/30/2024

Initial Calibration Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Calibration ID: KC2400048
Instrument ID: K-LCMS-08

Signal ID: 1

Analyte Name	Compound Type	Calibration Evaluation				Calibration Evaluation	
		Fit Type	Eval	Eval Result	Control Criteria	Average RRF	Minimum RRF
Perfluorononane sulfonic acid (PFNS)	TRG	Average RF	% RSD	6.0	≤20	2.116	
Perfluorononanoic acid (PFNA)	TRG	Linear	R2	0.9994	≥	0.8459	
Perfluorooctane sulfonamide (PFOSAm)	TRG	Average RF	% RSD	6.2	≤20	0.8747	
Perfluorooctane sulfonic acid (PFOS)	TRG	Average RF	% RSD	4.6	≤20	2.135	
Perfluorooctanoic acid (PFOA)	TRG	Linear	R2	0.9971	≥	0.9443	
Perfluoropentane sulfonic acid (PFPeS)	TRG	Average RF	% RSD	6.4	≤20	0.9895	
Perfluoropentanoic acid (PFPeA)	TRG	Average RF	% RSD	3.7	≤20	3.501	
Perfluorotetradecanoic acid (PFTDA)	TRG	Linear	R2	0.9996	≥	0.9069	
Perfluorotridecanoic acid (PFTrDA)	TRG	Linear	R2	0.9971	≥	1.29	
Perfluoroundecanoic acid (PFUnDA)	TRG	Linear	R2	0.9992	≥	0.891	

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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A

Service Request: K2314281
Calibration Date: 1/18/2024

Initial Calibration Verification Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Calibration ID: KC2400027
Instrument ID: K-LCMS-08

Signal ID: 1

#	Lab Code	Sample Name	File Location	Acquisition Date
10	KC2400027-10	1633 ICV 1.0PPB	240118_016	01/18/2024 17:57
11	KC2400027-11	1633 FTCA ICV 1.0PPB	240118_017	01/18/2024 18:20

Analyte Name	Expected	Result	Average RF	SSV RF	% D	Criteria	Curve Fit
Perfluorobutane sulfonic acid (PFBS)	0.890	0.864	1.28E0	1.243E0	-2.883	±30	Average RF
Perfluoropentane sulfonic acid (PFPeS)	0.940	0.982	1.313E0	1.371E0	4.43	±30	Average RF
Perfluorohexane sulfonic acid (PFHxS)	0.910	0.924	1.305E0	1.244E0	1.56	±30	Linear
Perfluoroheptane sulfonic acid (PFHpS)	0.950	1.00	1.951E0	2.061E0	5.62	±30	Average RF
Perfluorooctane sulfonic acid (PFOS)	0.930	0.855	2.6E0	2.39E0	-8.068	±30	Average RF
Perfluorononane sulfonic acid (PFNS)	0.960	0.974	1.899E0	1.927E0	1.46	±30	Average RF
Perfluorodecane sulfonic acid (PFDS)	0.970	0.984	1.695E0	1.685E0	1.39	±30	Linear
Perfluorododecane sulfonic acid (PFDoS)	0.970	0.935	1.003E0	9.668E-1	-3.574	±30	Average RF
Perfluorobutanoic acid (PFBA)	1.00	0.990	8.592E-1	8.509E-1	-0.971	±30	Average RF
Perfluoropentanoic acid (PFPeA)	1.00	0.968	6.476E0	6.266E0	-3.247	±30	Average RF
Perfluorohexanoic acid (PFHxA)	1.00	0.994	8.611E-1	8.343E-1	-0.573	±30	Linear
Perfluoroheptanoic acid (PFHpA)	1.00	0.976	1.187E0	1.048E0	-2.365	±30	Linear
Perfluorooctanoic acid (PFOA)	1.00	0.969	7.626E-1	6.537E-1	-3.067	±30	Linear
Perfluorononanoic acid (PFNA)	1.00	0.952	8.026E-1	6.993E-1	-4.785	±30	Linear
Perfluorodecanoic acid (PFDA)	1.00	0.982	1.318E0	1.2E0	-1.825	±30	Linear
Perfluoroundecanoic acid (PFUnDA)	1.00	1.02	1.017E0	9.491E-1	1.90	±30	Linear
Perfluorododecanoic acid (PFDOA)	1.00	0.966	8.016E-1	7.022E-1	-3.407	±30	Linear
Perfluorotridecanoic acid (PFTrDA)	1.00	0.932	1.99E0	1.697E0	-6.843	±30	Linear
Perfluorotetradecanoic acid (PFTDA)	1.00	1.03	1.498E0	1.416E0	2.64	±30	Linear
Perfluorooctane sulfonamide (PFOSAm)	2.00	2.07	8.24E-1	8.516E-1	3.35	±30	Average RF
N-Methylperfluorooctane sulfonamide (MeFOSA)	1.00	0.957	1.802E0	1.724E0	-4.338	±30	Average RF
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	1.00	1.02	1.455E0	1.483E0	1.86	±30	Average RF
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	1.00	0.962	9.181E-1	8.831E-1	-3.816	±30	Average RF
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	1.00	0.994	1.315E0	1.308E0	-0.586	±30	Average RF
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	1.00	0.928	1.357E0	1.258E0	-7.240	±30	Average RF
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	1.00	1.01	6.678E-1	6.732E-1	0.817	±30	Average RF
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	0.940	0.904	2.459E0	2.364E0	-3.875	±30	Average RF
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	0.950	0.887	2.277E0	2.126E0	-6.638	±30	Average RF
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	0.960	0.989	2.149E0	2.215E0	3.07	±30	Average RF
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	20.0	21.8	1.109E-1	1.207E-1	8.89	±30	Average RF
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	20.0	19.4	6.467E-2	6.264E-2	-3.133	±30	Average RF
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	20.0	20.4	8.633E-2	8.815E-2	2.11	±30	Average RF

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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A

Service Request: K2314281
Calibration Date: 1/18/2024

Initial Calibration Verification Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Calibration ID: KC2400027
Instrument ID: K-LCMS-08

Signal ID: 1

Analyte Name	Expected	Result	Average RF	SSV RF	% D	Criteria	Curve Fit
Perfluoro(2-ethoxyethane) sulfonic acid (PFEEESA)	0.890	0.831	2.8E0	2.615E0	-6.611	±30	Average RF
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	0.930	0.806	8.244E0	7.146E0	-13.325	±30	Average RF
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	0.940	0.892	5.963E0	5.362E0	-5.139	±30	Linear
Perfluoro-3-methoxypropanoic acid (PFMPA)	1.00	1.00	3.231E0	3.235E0	0.105	±30	Average RF
Perfluoro-4-methoxybutanoic acid (PFMBA)	1.00	1.08	4.578E0	4.958E0	8.30	±30	Average RF
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	1.00	0.955	1.104E0	1.055E0	-4.505	±30	Average RF
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	1.00	0.954	5.547E-1	5.289E-1	-4.647	±30	Average RF
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	0.950	0.861	7.751E0	7.027E0	-9.339	±30	Average RF

Analyte Name	Expected	Result	Average RF	SSV RF	% D	Criteria	Curve Fit
13C3-PFBS	2.50	2.72	1.419E0	1.545E0	8.90	±30	Average RF
13C3-PFBS	2.50	2.59	1.419E0	1.471E0	3.66	±30	Average RF
13C3-PFHxS	2.50	2.59	1.073E0	1.112E0	3.67	±30	Average RF
13C3-PFHxS	2.50	2.67	1.073E0	1.146E0	6.75	±30	Average RF
13C8-PFOS	2.50	2.34	4.169E-1	3.897E-1	-6.527	±30	Average RF
13C8-PFOS	2.50	2.47	4.169E-1	4.113E-1	-1.357	±30	Average RF
13C4-PFBA	10.0	9.94	1.118E0	1.111E0	-0.606	±30	Average RF
13C4-PFBA	10.0	9.94	1.118E0	1.111E0	-0.557	±30	Average RF
13C5-PFPeA	5.00	5.14	1.128E-1	1.161E-1	2.85	±30	Average RF
13C5-PFPeA	5.00	4.63	1.128E-1	1.046E-1	-7.315	±30	Average RF
13C5-PFHxA	2.50	2.49	1.054E0	1.049E0	-0.429	±30	Average RF
13C5-PFHxA	2.50	2.51	1.054E0	1.057E0	0.343	±30	Average RF
13C4-PFHpA	2.50	2.42	9.538E-1	9.242E-1	-3.099	±30	Average RF
13C4-PFHpA	2.50	2.56	9.538E-1	9.766E-1	2.39	±30	Average RF
13C8-PFOA	2.50	2.37	1.397E1	1.322E1	-5.378	±30	Average RF
13C8-PFOA	2.50	2.53	1.397E1	1.415E1	1.28	±30	Average RF
13C9-PFNA	1.25	1.24	9.787E-1	9.717E-1	-0.716	±30	Average RF
13C9-PFNA	1.25	1.28	9.787E-1	1.0E0	2.21	±30	Average RF
13C6-PFDA	1.25	1.24	1.006E0	9.95E-1	-1.055	±30	Average RF
13C6-PFDA	1.25	1.35	1.006E0	1.083E0	7.73	±30	Average RF
13C7-PFUnDA	1.25	1.24	1.2E0	1.195E0	-0.414	±30	Average RF
13C7-PFUnDA	1.25	1.28	1.2E0	1.224E0	2.02	±30	Average RF
13C2-PFDoDA	1.25	1.24	1.378E0	1.364E0	-1.012	±30	Average RF

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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A

Service Request: K2314281
Calibration Date: 1/18/2024

Initial Calibration Verification Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Calibration ID: KC2400027
Instrument ID: K-LCMS-08

Signal ID: 1

Analyte Name	Expected	Result	Average RF	SSV RF	% D	Criteria	Curve Fit
13C2-PFDoDA	1.25	1.21	1.378E0	1.333E0	-3.255	±30	Average RF
13C2-PFTeDA	1.25	1.28	5.95E-1	6.075E-1	2.09	±30	Average RF
13C2-PFTeDA	1.25	1.18	5.95E-1	5.612E-1	-5.692	±30	Average RF
13C8-FOSA	2.50	2.29	1.061E0	9.73E-1	-8.316	±30	Average RF
13C8-FOSA	2.50	2.37	1.061E0	1.006E0	-5.183	±30	Average RF
D3-MeFOSA	2.50	2.44	2.137E-1	2.09E-1	-2.216	±30	Average RF
D3-MeFOSA	2.50	2.31	2.137E-1	1.974E-1	-7.653	±30	Average RF
D5-EtFOSA	2.50	2.33	2.846E-1	2.652E-1	-6.801	±30	Average RF
D5-EtFOSA	2.50	2.35	2.846E-1	2.677E-1	-5.915	±30	Average RF
D7-MeFOSE	25.0	24.1	2.617E-1	2.519E-1	-3.740	±30	Average RF
D7-MeFOSE	25.0	23.4	2.617E-1	2.449E-1	-6.389	±30	Average RF
D9-EtFOSE	25.0	23.6	2.658E-1	2.507E-1	-5.671	±30	Average RF
D9-EtFOSE	25.0	22.9	2.658E-1	2.429E-1	-8.589	±30	Average RF
D3-MeFOSAA	5.00	4.83	4.339E-1	4.19E-1	-3.438	±30	Average RF
D3-MeFOSAA	5.00	4.49	4.339E-1	3.896E-1	-10.216	±30	Average RF
D5-EtFOSAA	5.00	4.22	5.191E-1	4.382E-1	-15.594	±30	Average RF
D5-EtFOSAA	5.00	4.28	5.191E-1	4.445E-1	-14.367	±30	Average RF
13C2-4:2 FTS	5.00	5.13	3.44E-1	3.531E-1	2.65	±30	Average RF
13C2-4:2 FTS	5.00	4.53	3.44E-1	3.118E-1	-9.366	±30	Average RF
13C2-6:2 FTS	5.00	4.45	3.254E-1	2.894E-1	-11.051	±30	Average RF
13C2-6:2 FTS	5.00	4.73	3.254E-1	3.077E-1	-5.422	±30	Average RF
13C2-8:2 FTS	5.00	4.17	2.673E-1	2.229E-1	-16.593	±30	Average RF
13C2-8:2 FTS	5.00	5.54	2.673E-1	2.961E-1	10.77	±30	Average RF
13C3-HFPO-DA	10.0	10.0	2.447E-1	2.455E-1	0.304	±30	Average RF
13C3-HFPO-DA	10.0	10.6	2.447E-1	2.598E-1	6.15	±30	Average RF

ALS Group USA, Corp.
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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A

Service Request: K2314281
Calibration Date: 1/30/2024

Initial Calibration Verification Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Calibration ID: KC2400048
Instrument ID: K-LCMS-08

Signal ID: 1

#	Lab Code	Sample Name	File Location	Acquisition Date
10	KC2400048-10	1633 ICV 1.0PPB	240130_028	01/31/2024 01:11
11	KC2400048-11	1633 FTCA ICV 1.0PPB	240130_029	01/31/2024 01:34

Analyte Name	Expected	Result	Average RF	SSV RF	% D	Criteria	Curve Fit
Perfluorobutane sulfonic acid (PFBS)	0.890	0.917	1.239E0	1.277E0	3.04	±30	Average RF
Perfluoropentane sulfonic acid (PFPeS)	0.940	1.08	9.895E-1	1.134E0	14.62	±30	Average RF
Perfluorohexane sulfonic acid (PFHxS)	0.910	0.914	1.093E0	1.097E0	0.397	±30	Average RF
Perfluoroheptane sulfonic acid (PFHpS)	0.950	1.11	2.102E0	2.456E0	16.86	±30	Average RF
Perfluorooctane sulfonic acid (PFOS)	0.930	1.00	2.135E0	2.303E0	7.87	±30	Average RF
Perfluorononane sulfonic acid (PFNS)	0.960	1.04	2.116E0	2.284E0	7.94	±30	Average RF
Perfluorodecane sulfonic acid (PFDS)	0.970	1.03	1.858E0	1.972E0	6.15	±30	Average RF
Perfluorododecane sulfonic acid (PFDoS)	0.970	1.05	1.159E0	1.25E0	7.91	±30	Average RF
Perfluorobutanoic acid (PFBA)	1.00	1.09	9.787E-1	1.024E0	8.88	±30	Linear
Perfluoropentanoic acid (PFPeA)	1.00	1.05	3.501E0	3.688E0	5.34	±30	Average RF
Perfluorohexanoic acid (PFHxA)	1.00	1.05	9.543E-1	9.828E-1	4.96	±30	Linear
Perfluoroheptanoic acid (PFHpA)	1.00	1.07	9.097E-1	9.233E-1	7.15	±30	Linear
Perfluorooctanoic acid (PFOA)	1.00	0.977	9.443E-1	9.052E-1	-2.318	±30	Linear
Perfluorononanoic acid (PFNA)	1.00	1.07	8.459E-1	8.831E-1	6.92	±30	Linear
Perfluorodecanoic acid (PFDA)	1.00	1.00	1.057E0	1.061E0	0.399	±30	Average RF
Perfluoroundecanoic acid (PFUnDA)	1.00	1.01	8.91E-1	8.74E-1	0.621	±30	Linear
Perfluorododecanoic acid (PFDOA)	1.00	1.05	6.675E-1	6.736E-1	5.31	±30	Linear
Perfluorotridecanoic acid (PFTrDA)	1.00	1.10	1.29E0	1.384E0	10.20	±30	Linear
Perfluorotetradecanoic acid (PFTDA)	1.00	1.07	9.069E-1	9.452E-1	7.11	±30	Linear
Perfluorooctane sulfonamide (PFOSAm)	2.00	2.23	8.747E-1	9.773E-1	11.73	±30	Average RF
N-Methylperfluorooctane sulfonamide (MeFOSA)	1.00	1.14	1.427E0	1.622E0	13.69	±30	Average RF
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	1.00	1.06	1.371E0	1.453E0	5.97	±30	Average RF
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	1.00	1.08	1.3E0	1.322E0	7.57	±30	Linear
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	1.00	1.09	1.199E0	1.306E0	8.91	±30	Average RF
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	1.00	1.18	6.949E-1	8.232E-1	18.46	±30	Average RF
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	1.00	1.11	8.211E-1	9.101E-1	10.85	±30	Average RF
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	0.940	1.02	2.478E0	2.698E0	8.84	±30	Average RF
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	0.950	1.07	1.907E0	2.157E0	13.13	±30	Average RF
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	0.960	0.978	1.906E0	1.942E0	1.87	±30	Average RF
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	20.0	19.2	7.162E-2	6.878E-2	-3.969	±30	Average RF
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	20.0	19.2	7.473E-2	7.192E-2	-3.766	±30	Average RF
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	20.0	20.0	1.313E-1	1.311E-1	-0.158	±30	Average RF

ALS Group USA, Corp.
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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A

Service Request: K2314281
Calibration Date: 1/30/2024

Initial Calibration Verification Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Calibration ID: KC2400048
Instrument ID: K-LCMS-08

Signal ID: 1

Analyte Name	Expected	Result	Average RF	SSV RF	% D	Criteria	Curve Fit
Perfluoro(2-ethoxyethane) sulfonic acid (PFEEESA)	0.890	0.951	3.106E0	3.319E0	6.87	±30	Average RF
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	0.930	0.941	9.806E0	9.926E0	1.23	±30	Average RF
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	0.940	0.926	7.0E0	6.896E0	-1.487	±30	Average RF
Perfluoro-3-methoxypropanoic acid (PFMPA)	1.00	1.06	1.428E0	1.51E0	5.73	±30	Average RF
Perfluoro-4-methoxybutanoic acid (PFMBA)	1.00	1.04	2.188E0	2.281E0	4.24	±30	Average RF
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	1.00	1.06	9.833E-1	1.045E0	6.27	±30	Average RF
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	1.00	0.966	5.186E-1	5.008E-1	-3.423	±30	Average RF
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	0.950	0.942	8.43E0	8.363E0	-0.792	±30	Average RF

Analyte Name	Expected	Result	Average RF	SSV RF	% D	Criteria	Curve Fit
13C3-PFBS	2.50	2.93	9.328E-1	1.092E0	17.09	±30	Average RF
13C3-PFBS	2.50	3.00	9.328E-1	1.12E0	20.04	±30	Average RF
13C3-PFHxS	2.50	2.91	8.762E-1	1.019E0	16.28	±30	Average RF
13C3-PFHxS	2.50	2.93	8.762E-1	1.028E0	17.38	±30	Average RF
13C8-PFOS	2.50	2.91	3.146E-1	3.661E-1	16.35	±30	Average RF
13C8-PFOS	2.50	2.92	3.146E-1	3.669E-1	16.63	±30	Average RF
13C4-PFBA	10.0	11.5	7.409E-1	8.527E-1	15.09	±30	Average RF
13C4-PFBA	10.0	11.7	7.409E-1	8.642E-1	16.65	±30	Average RF
13C5-PFPeA	5.00	6.05	1.798E-1	2.174E-1	20.92	±30	Average RF
13C5-PFPeA	5.00	5.69	1.798E-1	2.046E-1	13.81	±30	Average RF
13C5-PFHxA	2.50	2.99	8.07E-1	9.661E-1	19.72	±30	Average RF
13C5-PFHxA	2.50	2.91	8.07E-1	9.385E-1	16.30	±30	Average RF
13C4-PFHpA	2.50	3.03	1.015E0	1.229E0	21.03	±30	Average RF
13C4-PFHpA	2.50	2.81	1.015E0	1.141E0	12.43	±30	Average RF
13C8-PFOA	2.50	3.06	1.192E1	1.462E1	22.60	±30	Average RF
13C8-PFOA	2.50	2.77	1.192E1	1.322E1	10.87	±30	Average RF
13C9-PFNA	1.25	1.47	9.253E-1	1.092E0	17.97	±30	Average RF
13C9-PFNA	1.25	1.40	9.253E-1	1.036E0	11.92	±30	Average RF
13C6-PFDA	1.25	1.35	1.002E0	1.08E0	7.81	±30	Average RF
13C6-PFDA	1.25	1.33	1.002E0	1.068E0	6.66	±30	Average RF
13C7-PFUnDA	1.25	1.33	1.245E0	1.32E0	6.03	±30	Average RF
13C7-PFUnDA	1.25	1.47	1.245E0	1.469E0	18.00	±30	Average RF
13C2-PFDoDA	1.25	1.47	1.486E0	1.751E0	17.88	±30	Average RF

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A

Service Request: K2314281
Calibration Date: 1/30/2024

Initial Calibration Verification Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Calibration ID: KC2400048
Instrument ID: K-LCMS-08

Signal ID: 1

Analyte Name	Expected	Result	Average RF	SSV RF	% D	Criteria	Curve Fit
13C2-PFDoDA	1.25	1.28	1.486E0	1.517E0	2.10	±30	Average RF
13C2-PFTeDA	1.25	1.41	1.049E0	1.182E0	12.72	±30	Average RF
13C2-PFTeDA	1.25	1.32	1.049E0	1.109E0	5.72	±30	Average RF
13C8-FOSA	2.50	2.67	7.942E-1	8.487E-1	6.86	±30	Average RF
13C8-FOSA	2.50	2.98	7.942E-1	9.456E-1	19.07	±30	Average RF
D3-MeFOSA	2.50	2.73	2.073E-1	2.261E-1	9.07	±30	Average RF
D3-MeFOSA	2.50	2.68	2.073E-1	2.224E-1	7.25	±30	Average RF
D5-EtFOSA	2.50	2.66	2.867E-1	3.054E-1	6.55	±30	Average RF
D5-EtFOSA	2.50	2.95	2.867E-1	3.388E-1	18.17	±30	Average RF
D7-MeFOSE	25.0	28.8	2.039E-1	2.349E-1	15.24	±30	Average RF
D7-MeFOSE	25.0	26.2	2.039E-1	2.14E-1	4.99	±30	Average RF
D9-EtFOSE	25.0	28.5	2.495E-1	2.847E-1	14.11	±30	Average RF
D9-EtFOSE	25.0	26.1	2.495E-1	2.604E-1	4.37	±30	Average RF
D3-MeFOSAA	5.00	5.81	1.018E0	1.184E0	16.28	±30	Average RF
D3-MeFOSAA	5.00	5.45	1.018E0	1.109E0	8.99	±30	Average RF
D5-EtFOSAA	5.00	5.88	8.022E-1	9.428E-1	17.53	±30	Average RF
D5-EtFOSAA	5.00	6.20	8.022E-1	9.942E-1	23.93	±30	Average RF
13C2-4:2 FTS	5.00	5.90	4.706E-1	5.552E-1	17.98	±30	Average RF
13C2-4:2 FTS	5.00	5.97	4.706E-1	5.623E-1	19.49	±30	Average RF
13C2-6:2 FTS	5.00	5.50	4.899E-1	5.388E-1	9.99	±30	Average RF
13C2-6:2 FTS	5.00	5.49	4.899E-1	5.379E-1	9.80	±30	Average RF
13C2-8:2 FTS	5.00	5.40	4.159E-1	4.491E-1	7.97	±30	Average RF
13C2-8:2 FTS	5.00	5.07	4.159E-1	4.217E-1	1.39	±30	Average RF
13C3-HFPO-DA	10.0	11.4	2.216E-1	2.522E-1	13.81	±30	Average RF
13C3-HFPO-DA	10.0	12.3	2.216E-1	2.728E-1	23.12	±30	Average RF

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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request: K2314281
Date Analyzed: 01/22/24 12:04

Continuing Calibration Verification (CCV) Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
File ID: J:\LCMS08\Data\240122_1633_B1\240122_007
Signal ID: 1

Calibration Date: 1/18/2024
Calibration ID: KC2400027
Analysis Lot: 830573
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	Rec.	% Drift	Criteria	Curve Fit
Perfluorobutane sulfonic acid (PFBS)	0.222	0.233	1.2797	1.3445	105	NA	±30	Average RF
Perfluoropentane sulfonic acid (PFPeS)	0.235	0.227	1.3129	1.2689	96.7	NA	±30	Average RF
Perfluorohexane sulfonic acid (PFHxS)	0.229	0.275	1.3045	1.5454	120	20.4	±30	Linear
Perfluoroheptane sulfonic acid (PFHpS)	0.238	0.272	1.9513	2.2246	114	NA	±30	Average RF
Perfluorooctane sulfonic acid (PFOS)	0.232	0.278	2.6003	3.1144	120	NA	±30	Average RF
Perfluorononane sulfonic acid (PFNS)	0.241	0.286	1.8995	2.2586	119	NA	±30	Average RF
Perfluorodecane sulfonic acid (PFDS)	0.241	0.255	1.6952	1.7902	106	5.9	±30	Linear
Perfluorododecane sulfonic acid (PFDoS)	0.243	0.248	1.0026	1.0259	102	NA	±30	Average RF
Perfluorobutanoic acid (PFBA)	0.250	0.256	0.8592	0.881	103	NA	±30	Average RF
Perfluoropentanoic acid (PFPeA)	0.250	0.270	6.4761	6.9888	108	NA	±30	Average RF
Perfluorohexanoic acid (PFHxA)	0.250	0.255	0.8611	0.8775	102	2.1	±30	Linear
Perfluoroheptanoic acid (PFHpA)	0.250	0.219	1.1866	1.0516	87.5	-12.5	±30	Linear
Perfluorooctanoic acid (PFOA)	0.250	0.225	0.7626	0.6926	89.8	-10.2	±30	Linear
Perfluorononanoic acid (PFNA)	0.250	0.234	0.8026	0.754	93.6	-6.4	±30	Linear
Perfluorodecanoic acid (PFDA)	0.250	0.232	1.3176	1.2246	92.6	-7.4	±30	Linear
Perfluoroundecanoic acid (PFUnDA)	0.250	0.212	1.0169	0.874	84.7	-15.3	±30	Linear
Perfluorododecanoic acid (PFDOA)	0.250	0.227	0.8016	0.7316	90.9	-9.1	±30	Linear
Perfluorotridecanoic acid (PFTrDA)	0.250	0.229	1.9905	1.8335	91.6	-8.4	±30	Linear
Perfluorotetradecanoic acid (PFTDA)	0.250	0.272	1.4984	1.6097	109	8.7	±30	Linear
Perfluorooctane sulfonamide (PFOSAm)	0.500	0.519	0.824	0.8548	104	NA	±30	Average RF
N-Methylperfluorooctane sulfonamide (MeFOSA)	0.250	0.238	1.8021	1.7181	95.3	NA	±30	Average RF
N-Ethylperfluorooctane sulfonamide (EtFOSA)	0.250	0.238	1.4555	1.3875	95.3	NA	±30	Average RF
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	0.250	0.271	0.9181	0.9952	108	NA	±30	Average RF
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	0.250	0.258	1.3154	1.3585	103	NA	±30	Average RF
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	0.250	0.227	1.3567	1.2307	90.7	NA	±30	Average RF
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	0.250	0.284	0.6678	0.7578	113	NA	±30	Average RF
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	0.234	0.252	2.4593	2.6448	108	NA	±30	Average RF
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	0.238	0.194	2.2768	1.8589	81.6	NA	±30	Average RF

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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request: K2314281
Date Analyzed: 01/22/24 12:04

Continuing Calibration Verification (CCV) Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
File ID: J:\LCMS08\Data\240122_1633_B1\240122_007
Signal ID: 1

Calibration Date: 1/18/2024
Calibration ID: KC2400027
Analysis Lot: 830573
Units: ng/mL

1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	0.240	0.228	2.1486	2.0406	95.0	NA	±30	Average RF
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	10.0	10.8	0.1109	0.1202	108	NA	±30	Average RF
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	10.0	9.53	0.0647	0.0616	95.3	NA	±30	Average RF
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	10.0	9.54	0.0863	0.0824	95.4	NA	±30	Average RF
Perfluoro(2-ethoxyethane) sulfonic acid (PFEESA)	0.223	0.197	2.8002	2.4744	88.4	NA	±30	Average RF
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	0.233	0.198	8.2443	6.9929	84.8	NA	±30	Average RF
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	0.236	0.188	5.9633	4.8123	79.5	-20.5	±30	Linear
Perfluoro-3-methoxypropanoic acid (PFMPA)	0.250	0.306	3.2313	3.9503	122	NA	±30	Average RF
Perfluoro-4-methoxybutanoic acid (PFMBA)	0.250	0.261	4.5778	4.7837	104	NA	±30	Average RF
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	0.250	0.254	1.1045	1.1207	101	NA	±30	Average RF
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	0.250	0.261	0.5547	0.5788	104	NA	±30	Average RF
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	0.236	0.221	7.7507	7.2401	93.4	NA	±30	Average RF

Analyte Name	Expected	Result	Average RF	CCV RF	Rec.	% Drift	Criteria	Curve Fit
13C3-PFBS	2.50	2.48	1.4187	1.4054	99.1	NA	±30	Average RF
13C3-PFHxS	2.50	2.39	1.0731	1.0256	95.6	NA	±30	Average RF
13C8-PFOS	2.50	2.18	0.4169	0.3641	87.3	NA	±30	Average RF
13C4-PFBA	10.0	10.1	1.1176	1.1285	101	NA	±30	Average RF
13C5-PFPeA	5.00	4.53	0.1128	0.1023	90.6	NA	±30	Average RF
13C5-PFHxA	2.50	2.40	1.0536	1.0129	96.1	NA	±30	Average RF
13C4-PFHpA	2.50	2.71	0.9538	1.0343	108	NA	±30	Average RF
13C8-PFOA	2.50	2.64	13.9732	14.7618	106	NA	±30	Average RF
13C9-PFNA	1.25	1.35	0.9787	1.0604	108	NA	±30	Average RF
13C6-PFDA	1.25	1.41	1.0057	1.1367	113	NA	±30	Average RF
13C7-PFUnDA	1.25	1.22	1.1996	1.1735	97.8	NA	±30	Average RF
13C2-PFDoDA	1.25	1.25	1.3782	1.3801	100	NA	±30	Average RF
13C2-PFTeDA	1.25	1.23	0.595	0.585	98.3	NA	±30	Average RF
13C8-FOSA	2.50	2.74	1.0613	1.1649	110	NA	±30	Average RF
D3-MeFOSA	2.50	2.33	0.2137	0.1992	93.2	NA	±30	Average RF

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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request: K2314281
Date Analyzed: 01/22/24 12:04

Continuing Calibration Verification (CCV) Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
File ID: J:\LCMS08\Data\240122_1633_B1\240122_007
Signal ID: 1

Calibration Date: 1/18/2024
Calibration ID: KC2400027
Analysis Lot: 830573
Units: ng/mL

D5-EtFOSA	2.50	2.82	0.2846	0.3205	113	NA	±30	Average RF
D7-MeFOSE	25.0	31.2	0.2617	0.3264	125	NA	±30	Average RF
D9-EtFOSE	25.0	31.6	0.2658	0.3357	126	NA	±30	Average RF
D3-MeFOSAA	5.00	6.62	0.4339	0.5744	132*	NA	±30	Average RF
D5-EtFOSAA	5.00	5.97	0.5191	0.6194	119	NA	±30	Average RF
13C2-4:2 FTS	5.00	7.53	0.344	0.5179	151*	NA	±30	Average RF
13C2-6:2 FTS	5.00	7.88	0.3254	0.5131	158*	NA	±30	Average RF
13C2-8:2 FTS	5.00	7.52	0.2673	0.4019	150*	NA	±30	Average RF
13C3-HFPO-DA	10.0	10.9	0.2447	0.2662	109	NA	±30	Average RF

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request: K2314281
Date Analyzed: 01/22/24 20:13

Continuing Calibration Verification (CCV) Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
File ID: J:\LCMS08\Data\240122_1633_B1\240122_028
Signal ID: 1

Calibration Date: 1/18/2024
Calibration ID: KC2400027
Analysis Lot: 830573
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	Rec.	% Drift	Criteria	Curve Fit
Perfluorobutane sulfonic acid (PFBS)	0.887	0.872	1.2797	1.258	98.3	NA	±30	Average RF
Perfluoropentane sulfonic acid (PFPeS)	0.941	0.938	1.3129	1.308	99.6	NA	±30	Average RF
Perfluorohexane sulfonic acid (PFHxS)	0.914	1.01	1.3045	1.3549	111	10.8	±30	Linear
Perfluoroheptane sulfonic acid (PFHpS)	0.953	1.21	1.9513	2.4838	127	NA	±30	Average RF
Perfluorooctane sulfonic acid (PFOS)	0.928	1.06	2.6003	2.9641	114	NA	±30	Average RF
Perfluorononane sulfonic acid (PFNS)	0.962	1.20	1.8995	2.3609	124	NA	±30	Average RF
Perfluorodecane sulfonic acid (PFDS)	0.965	1.11	1.6952	1.9164	115	15.4	±30	Linear
Perfluorododecane sulfonic acid (PFDoS)	0.970	0.942	1.0026	0.9739	97.1	NA	±30	Average RF
Perfluorobutanoic acid (PFBA)	1.00	0.953	0.8592	0.8185	95.3	NA	±30	Average RF
Perfluoropentanoic acid (PFPeA)	1.00	1.09	6.4761	7.0887	109	NA	±30	Average RF
Perfluorohexanoic acid (PFHxA)	1.00	0.994	0.8611	0.8337	99.4	-0.7	±30	Linear
Perfluoroheptanoic acid (PFHpA)	1.00	0.873	1.1866	0.9406	87.3	-12.8	±30	Linear
Perfluorooctanoic acid (PFOA)	1.00	0.879	0.7626	0.5955	87.9	-12.1	±30	Linear
Perfluorononanoic acid (PFNA)	1.00	0.927	0.8026	0.6816	92.7	-7.3	±30	Linear
Perfluorodecanoic acid (PFDA)	1.00	0.887	1.3176	1.0869	88.7	-11.3	±30	Linear
Perfluoroundecanoic acid (PFUnDA)	1.00	0.885	1.0169	0.8276	88.5	-11.5	±30	Linear
Perfluorododecanoic acid (PFDOA)	1.00	0.958	0.8016	0.6968	95.8	-4.2	±30	Linear
Perfluorotridecanoic acid (PFTrDA)	1.00	0.960	1.9905	1.7475	96.0	-4.0	±30	Linear
Perfluorotetradecanoic acid (PFTDA)	1.00	0.981	1.4984	1.3548	98.1	-1.9	±30	Linear
Perfluorooctane sulfonamide (PFOSAm)	2.00	1.98	0.824	0.8141	98.8	NA	±30	Average RF
N-Methylperfluorooctane sulfonamide (MeFOSA)	1.00	1.03	1.8021	1.8615	103	NA	±30	Average RF
N-Ethylperfluorooctane sulfonamide (EtFOSA)	1.00	0.874	1.4555	1.2725	87.4	NA	±30	Average RF
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	1.00	0.949	0.9181	0.8715	94.9	NA	±30	Average RF
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	1.00	1.02	1.3154	1.3357	102	NA	±30	Average RF
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	1.00	1.09	1.3567	1.4809	109	NA	±30	Average RF
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	1.00	1.36	0.6678	0.9078	136*	NA	±30	Average RF
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	0.937	0.868	2.4593	2.2768	92.6	NA	±30	Average RF
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	0.951	0.824	2.2768	1.9734	86.7	NA	±30	Average RF

ALS Group USA, Corp.
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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request: K2314281
Date Analyzed: 01/22/24 20:13

Continuing Calibration Verification (CCV) Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
File ID: J:\LCMS08\Data\240122_1633_B1\240122_028
Signal ID: 1

Calibration Date: 1/18/2024
Calibration ID: KC2400027
Analysis Lot: 830573
Units: ng/mL

1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	0.960	0.800	2.1486	1.7913	83.4	NA	±30	Average RF
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	20.0	21.7	0.1109	0.1204	109	NA	±30	Average RF
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	20.0	19.6	0.0647	0.0632	97.8	NA	±30	Average RF
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	20.0	18.6	0.0863	0.0803	93.0	NA	±30	Average RF
Perfluoro(2-ethoxyethane) sulfonic acid (PFEESA)	0.890	0.832	2.8002	2.6169	93.5	NA	±30	Average RF
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	0.933	0.727	8.2443	6.4251	77.9	NA	±30	Average RF
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	0.943	0.717	5.9633	4.3181	76.0	-24.0	±30	Linear
Perfluoro-3-methoxypropanoic acid (PFMPA)	1.00	1.19	3.2313	3.8461	119	NA	±30	Average RF
Perfluoro-4-methoxybutanoic acid (PFMBA)	1.00	1.02	4.5778	4.688	102	NA	±30	Average RF
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	1.00	0.930	1.1045	1.0276	93.0	NA	±30	Average RF
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	1.00	1.13	0.5547	0.629	113	NA	±30	Average RF
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	0.945	0.864	7.7507	7.0875	91.4	NA	±30	Average RF

Analyte Name	Expected	Result	Average RF	CCV RF	Rec.	% Drift	Criteria	Curve Fit
13C3-PFBS	2.50	2.45	1.4187	1.393	98.2	NA	±30	Average RF
13C3-PFHxS	2.50	2.43	1.0731	1.0429	97.2	NA	±30	Average RF
13C8-PFOS	2.50	2.08	0.4169	0.3475	83.3	NA	±30	Average RF
13C4-PFBA	10.0	10.3	1.1176	1.1517	103	NA	±30	Average RF
13C5-PFPeA	5.00	4.01	0.1128	0.0905	80.2	NA	±30	Average RF
13C5-PFHxA	2.50	2.20	1.0536	0.9288	88.2	NA	±30	Average RF
13C4-PFHpA	2.50	2.58	0.9538	0.9853	103	NA	±30	Average RF
13C8-PFOA	2.50	2.71	13.9732	15.1306	108	NA	±30	Average RF
13C9-PFNA	1.25	1.35	0.9787	1.055	108	NA	±30	Average RF
13C6-PFDA	1.25	1.29	1.0057	1.0363	103	NA	±30	Average RF
13C7-PFUnDA	1.25	1.18	1.1996	1.1335	94.5	NA	±30	Average RF
13C2-PFDoDA	1.25	1.19	1.3782	1.3092	95.0	NA	±30	Average RF
13C2-PFTeDA	1.25	1.14	0.595	0.545	91.6	NA	±30	Average RF
13C8-FOSA	2.50	2.77	1.0613	1.1738	111	NA	±30	Average RF
D3-MeFOSA	2.50	2.65	0.2137	0.2265	106	NA	±30	Average RF

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request: K2314281
Date Analyzed: 01/22/24 20:13

Continuing Calibration Verification (CCV) Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
File ID: J:\LCMS08\Data\240122_1633_B1\240122_028
Signal ID: 1

Calibration Date: 1/18/2024
Calibration ID: KC2400027
Analysis Lot: 830573
Units: ng/mL

D5-EtFOSA	2.50	2.84	0.2846	0.3232	114	NA	±30	Average RF
D7-MeFOSE	25.0	31.8	0.2617	0.3331	127	NA	±30	Average RF
D9-EtFOSE	25.0	31.3	0.2658	0.3323	125	NA	±30	Average RF
D3-MeFOSAA	5.00	6.88	0.4339	0.5971	138*	NA	±30	Average RF
D5-EtFOSAA	5.00	6.06	0.5191	0.6288	121	NA	±30	Average RF
13C2-4:2 FTS	5.00	8.14	0.344	0.5601	163*	NA	±30	Average RF
13C2-6:2 FTS	5.00	8.51	0.3254	0.5539	170*	NA	±30	Average RF
13C2-8:2 FTS	5.00	8.09	0.2673	0.4325	162*	NA	±30	Average RF
13C3-HFPO-DA	10.0	10.4	0.2447	0.2536	104	NA	±30	Average RF

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request: K2314281
Date Analyzed: 01/23/24 02:48

Continuing Calibration Verification (CCV) Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
File ID: J:\LCMS08\Data\240122_1633_B1\240122_045
Signal ID: 1

Calibration Date: 1/18/2024
Calibration ID: KC2400027
Analysis Lot: 830573
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	Rec.	% Drift	Criteria	Curve Fit
Perfluorobutane sulfonic acid (PFBS)	0.887	0.877	1.2797	1.2649	98.8	NA	±30	Average RF
Perfluoropentane sulfonic acid (PFPeS)	0.941	0.959	1.3129	1.3379	102	NA	±30	Average RF
Perfluorohexane sulfonic acid (PFHxS)	0.914	1.06	1.3045	1.4146	116	15.8	±30	Linear
Perfluoroheptane sulfonic acid (PFHpS)	0.953	1.14	1.9513	2.3394	120	NA	±30	Average RF
Perfluorooctane sulfonic acid (PFOS)	0.928	1.06	2.6003	2.9836	115	NA	±30	Average RF
Perfluorononane sulfonic acid (PFNS)	0.962	1.09	1.8995	2.1531	113	NA	±30	Average RF
Perfluorodecane sulfonic acid (PFDS)	0.965	1.07	1.6952	1.8496	111	11.4	±30	Linear
Perfluorododecane sulfonic acid (PFDoS)	0.970	0.838	1.0026	0.8658	86.4	NA	±30	Average RF
Perfluorobutanoic acid (PFBA)	1.00	0.954	0.8592	0.8194	95.4	NA	±30	Average RF
Perfluoropentanoic acid (PFPeA)	1.00	1.17	6.4761	7.586	117	NA	±30	Average RF
Perfluorohexanoic acid (PFHxA)	1.00	0.998	0.8611	0.8372	99.8	-0.2	±30	Linear
Perfluoroheptanoic acid (PFHpA)	1.00	0.863	1.1866	0.9312	86.3	-13.7	±30	Linear
Perfluorooctanoic acid (PFOA)	1.00	0.967	0.7626	0.6524	96.7	-3.3	±30	Linear
Perfluorononanoic acid (PFNA)	1.00	0.884	0.8026	0.6511	88.4	-11.6	±30	Linear
Perfluorodecanoic acid (PFDA)	1.00	0.861	1.3176	1.0562	86.1	-13.9	±30	Linear
Perfluoroundecanoic acid (PFUnDA)	1.00	0.798	1.0169	0.7493	79.8	-20.2	±30	Linear
Perfluorododecanoic acid (PFDOA)	1.00	0.907	0.8016	0.661	90.7	-9.3	±30	Linear
Perfluorotridecanoic acid (PFTrDA)	1.00	0.894	1.9905	1.6316	89.4	-10.6	±30	Linear
Perfluorotetradecanoic acid (PFTDA)	1.00	0.853	1.4984	1.1827	85.3	-14.7	±30	Linear
Perfluorooctane sulfonamide (PFOSAm)	2.00	1.99	0.824	0.82	99.5	NA	±30	Average RF
N-Methylperfluorooctane sulfonamide (MeFOSA)	1.00	1.02	1.8021	1.8427	102	NA	±30	Average RF
N-Ethylperfluorooctane sulfonamide (EtFOSA)	1.00	0.922	1.4555	1.3416	92.2	NA	±30	Average RF
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	1.00	1.02	0.9181	0.9355	102	NA	±30	Average RF
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	1.00	0.961	1.3154	1.2635	96.1	NA	±30	Average RF
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	1.00	0.975	1.3567	1.3226	97.5	NA	±30	Average RF
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	1.00	1.60	0.6678	1.0676	160*	NA	±30	Average RF
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	0.937	0.871	2.4593	2.2852	92.9	NA	±30	Average RF
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	0.951	0.929	2.2768	2.2248	97.7	NA	±30	Average RF

ALS Group USA, Corp.
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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request: K2314281
Date Analyzed: 01/23/24 02:48

Continuing Calibration Verification (CCV) Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
File ID: J:\LCMS08\Data\240122_1633_B1\240122_045
Signal ID: 1

Calibration Date: 1/18/2024
Calibration ID: KC2400027
Analysis Lot: 830573
Units: ng/mL

1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	0.960	0.857	2.1486	1.9181	89.3	NA	±30	Average RF
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	20.0	25.5	0.1109	0.1411	127	NA	±30	Average RF
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	20.0	20.7	0.0647	0.0669	104	NA	±30	Average RF
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	20.0	18.7	0.0863	0.0805	93.3	NA	±30	Average RF
Perfluoro(2-ethoxyethane) sulfonic acid (PFEESA)	0.890	0.836	2.8002	2.6299	93.9	NA	±30	Average RF
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	0.933	0.775	8.2443	6.8517	83.1	NA	±30	Average RF
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	0.943	0.712	5.9633	4.2851	75.5	-24.5	±30	Linear
Perfluoro-3-methoxypropanoic acid (PFMPA)	1.00	1.35	3.2313	4.3748	135*	NA	±30	Average RF
Perfluoro-4-methoxybutanoic acid (PFMBA)	1.00	1.16	4.5778	5.2898	116	NA	±30	Average RF
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	1.00	0.955	1.1045	1.0545	95.5	NA	±30	Average RF
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	1.00	1.16	0.5547	0.6448	116	NA	±30	Average RF
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	0.945	0.848	7.7507	6.9542	89.7	NA	±30	Average RF

Analyte Name	Expected	Result	Average RF	CCV RF	Rec.	% Drift	Criteria	Curve Fit
13C3-PFBS	2.50	2.49	1.4187	1.4116	99.5	NA	±30	Average RF
13C3-PFHxS	2.50	2.22	1.0731	0.9541	88.9	NA	±30	Average RF
13C8-PFOS	2.50	2.15	0.4169	0.3581	85.9	NA	±30	Average RF
13C4-PFBA	10.0	10.6	1.1176	1.1873	106	NA	±30	Average RF
13C5-PFPeA	5.00	4.11	0.1128	0.0927	82.1	NA	±30	Average RF
13C5-PFHxA	2.50	2.33	1.0536	0.9838	93.4	NA	±30	Average RF
13C4-PFHpA	2.50	2.95	0.9538	1.1252	118	NA	±30	Average RF
13C8-PFOA	2.50	2.60	13.9732	14.537	104	NA	±30	Average RF
13C9-PFNA	1.25	1.38	0.9787	1.0801	110	NA	±30	Average RF
13C6-PFDA	1.25	1.38	1.0057	1.1094	110	NA	±30	Average RF
13C7-PFUnDA	1.25	1.31	1.1996	1.2531	104	NA	±30	Average RF
13C2-PFDoDA	1.25	1.22	1.3782	1.3402	97.2	NA	±30	Average RF
13C2-PFTeDA	1.25	1.32	0.595	0.6287	106	NA	±30	Average RF
13C8-FOSA	2.50	2.61	1.0613	1.108	104	NA	±30	Average RF
D3-MeFOSA	2.50	2.53	0.2137	0.2163	101	NA	±30	Average RF

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QA/QC Report

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Service Request: K2314281
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Continuing Calibration Verification (CCV) Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
File ID: J:\LCMS08\Data\240122_1633_B1\240122_045
Signal ID: 1

Calibration Date: 1/18/2024
Calibration ID: KC2400027
Analysis Lot: 830573
Units: ng/mL

D5-EtFOSA	2.50	2.78	0.2846	0.3166	111	NA	±30	Average RF
D7-MeFOSE	25.0	30.4	0.2617	0.3179	122	NA	±30	Average RF
D9-EtFOSE	25.0	32.7	0.2658	0.3473	131*	NA	±30	Average RF
D3-MeFOSAA	5.00	7.09	0.4339	0.615	142*	NA	±30	Average RF
D5-EtFOSAA	5.00	5.42	0.5191	0.5632	108	NA	±30	Average RF
13C2-4:2 FTS	5.00	7.82	0.344	0.5382	156*	NA	±30	Average RF
13C2-6:2 FTS	5.00	6.82	0.3254	0.4435	136*	NA	±30	Average RF
13C2-8:2 FTS	5.00	7.12	0.2673	0.3807	142*	NA	±30	Average RF
13C3-HFPO-DA	10.0	11.8	0.2447	0.2898	118	NA	±30	Average RF

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request: K2314281
Date Analyzed: 02/01/24 12:18

Continuing Calibration Verification (CCV) Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
File ID: J:\LCMS08\Data\240201_1633_RA\240201_006
Signal ID: 1

Calibration Date: 1/30/2024
Calibration ID: KC2400048
Analysis Lot: 831587
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	Rec.	% Drift	Criteria	Curve Fit
Perfluorobutane sulfonic acid (PFBS)	0.222	0.217	1.2389	1.2103	97.7	NA	±30	Average RF
Perfluoropentane sulfonic acid (PFPeS)	0.235	0.244	0.9895	1.0279	104	NA	±30	Average RF
Perfluorohexane sulfonic acid (PFHxS)	0.229	0.239	1.0927	1.145	105	NA	±30	Average RF
Perfluoroheptane sulfonic acid (PFHpS)	0.238	0.235	2.1019	2.075	98.7	NA	±30	Average RF
Perfluorooctane sulfonic acid (PFOS)	0.232	0.221	2.1354	2.0305	95.1	NA	±30	Average RF
Perfluorononane sulfonic acid (PFNS)	0.241	0.251	2.1159	2.2114	105	NA	±30	Average RF
Perfluorodecane sulfonic acid (PFDS)	0.241	0.231	1.858	1.7768	95.6	NA	±30	Average RF
Perfluorododecane sulfonic acid (PFDoS)	0.243	0.229	1.1587	1.0932	94.4	NA	±30	Average RF
Perfluorobutanoic acid (PFBA)	0.250	0.243	0.9787	0.9523	97.4	-2.6	±30	Linear
Perfluoropentanoic acid (PFPeA)	0.250	0.240	3.501	3.3626	96.0	NA	±30	Average RF
Perfluorohexanoic acid (PFHxA)	0.250	0.227	0.9543	0.8676	90.8	-9.2	±30	Linear
Perfluoroheptanoic acid (PFHpA)	0.250	0.254	0.9097	0.9217	102	1.7	±30	Linear
Perfluorooctanoic acid (PFOA)	0.250	0.238	0.9443	0.9298	95.4	-4.6	±30	Linear
Perfluorononanoic acid (PFNA)	0.250	0.245	0.8459	0.8594	98.0	-2.0	±30	Linear
Perfluorodecanoic acid (PFDA)	0.250	0.253	1.0572	1.0682	101	NA	±30	Average RF
Perfluoroundecanoic acid (PFUnDA)	0.250	0.244	0.891	0.9045	97.5	-2.5	±30	Linear
Perfluorododecanoic acid (PFDOA)	0.250	0.232	0.6675	0.6566	92.6	-7.4	±30	Linear
Perfluorotridecanoic acid (PFTrDA)	0.250	0.248	1.29	1.3282	99.2	-0.8	±30	Linear
Perfluorotetradecanoic acid (PFTDA)	0.250	0.233	0.9069	0.8855	93.4	-6.6	±30	Linear
Perfluorooctane sulfonamide (PFOSAm)	0.500	0.454	0.8747	0.7941	90.8	NA	±30	Average RF
N-Methylperfluorooctane sulfonamide (MeFOSA)	0.250	0.239	1.4266	1.3642	95.6	NA	±30	Average RF
N-Ethylperfluorooctane sulfonamide (EtFOSA)	0.250	0.226	1.3714	1.2421	90.6	NA	±30	Average RF
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	0.250	0.263	1.3005	1.3591	105	5.1	±30	Linear
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	0.250	0.253	1.199	1.2153	101	NA	±30	Average RF
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	0.250	0.242	0.6949	0.6859	96.9	NA	±30	Average RF
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	0.250	0.241	0.8211	0.7923	96.5	NA	±30	Average RF
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	0.234	0.248	2.4785	2.6223	106	NA	±30	Average RF
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	0.238	0.279	1.9067	2.2353	117	NA	±30	Average RF

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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request: K2314281
Date Analyzed: 02/01/24 12:18

Continuing Calibration Verification (CCV) Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
File ID: J:\LCMS08\Data\240201_1633_RA\240201_006
Signal ID: 1

Calibration Date: 1/30/2024
Calibration ID: KC2400048
Analysis Lot: 831587
Units: ng/mL

1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	0.240	0.250	1.9059	1.9822	104	NA	±30	Average RF
4,4,5,5,6,6-Heptafluorohexanoic acid (3:3 FTCA)	10.0	9.48	0.0716	0.0679	94.8	NA	±30	Average RF
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	10.0	9.66	0.0747	0.0722	96.6	NA	±30	Average RF
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	10.0	9.42	0.1313	0.1237	94.2	NA	±30	Average RF
Perfluoro(2-ethoxyethane) sulfonic acid (PFEESA)	0.223	0.245	3.106	3.4207	110	NA	±30	Average RF
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	0.233	0.202	9.8058	8.4835	86.5	NA	±30	Average RF
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	0.236	0.190	6.9996	5.6539	80.8	NA	±30	Average RF
Perfluoro-3-methoxypropanoic acid (PFMPA)	0.250	0.227	1.4277	1.2947	90.7	NA	±30	Average RF
Perfluoro-4-methoxybutanoic acid (PFMBA)	0.250	0.239	2.1881	2.0893	95.5	NA	±30	Average RF
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	0.250	0.246	0.9833	0.9659	98.2	NA	±30	Average RF
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	0.250	0.268	0.5186	0.5564	107	NA	±30	Average RF
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	0.236	0.191	8.4297	6.8046	80.7	NA	±30	Average RF

Analyte Name	Expected	Result	Average RF	CCV RF	Rec.	% Drift	Criteria	Curve Fit
13C3-PFBS	2.50	2.70	0.9328	1.0089	108	NA	±30	Average RF
13C3-PFHxS	2.50	2.57	0.8762	0.9008	103	NA	±30	Average RF
13C8-PFOS	2.50	2.50	0.3146	0.3151	100	NA	±30	Average RF
13C4-PFBA	10.0	9.87	0.7409	0.7315	98.7	NA	±30	Average RF
13C5-PFPeA	5.00	5.21	0.1798	0.1875	104	NA	±30	Average RF
13C5-PFHxA	2.50	2.40	0.807	0.7743	95.9	NA	±30	Average RF
13C4-PFHpA	2.50	2.58	1.0152	1.0489	103	NA	±30	Average RF
13C8-PFOA	2.50	2.48	11.9228	11.8397	99.3	NA	±30	Average RF
13C9-PFNA	1.25	1.25	0.9253	0.9281	100	NA	±30	Average RF
13C6-PFDA	1.25	1.20	1.0017	0.9599	95.8	NA	±30	Average RF
13C7-PFUnDA	1.25	1.22	1.2447	1.2136	97.5	NA	±30	Average RF
13C2-PFDoDA	1.25	1.21	1.4859	1.4345	96.5	NA	±30	Average RF
13C2-PFTeDA	1.25	1.17	1.0487	0.9853	94.0	NA	±30	Average RF
13C8-FOSA	2.50	2.32	0.7942	0.738	92.9	NA	±30	Average RF
D3-MeFOSA	2.50	2.46	0.2073	0.2041	98.4	NA	±30	Average RF

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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request: K2314281
Date Analyzed: 02/01/24 12:18

Continuing Calibration Verification (CCV) Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
File ID: J:\LCMS08\Data\240201_1633_RA\240201_006
Signal ID: 1

Calibration Date: 1/30/2024
Calibration ID: KC2400048
Analysis Lot: 831587
Units: ng/mL

D5-EtFOSA	2.50	2.36	0.2867	0.2701	94.2	NA	±30	Average RF
D7-MeFOSE	25.0	22.7	0.2039	0.1851	90.8	NA	±30	Average RF
D9-EtFOSE	25.0	23.3	0.2495	0.2325	93.2	NA	±30	Average RF
D3-MeFOSAA	5.00	3.61	1.0179	0.7355	72.3	NA	±30	Average RF
D5-EtFOSAA	5.00	4.07	0.8022	0.6532	81.4	NA	±30	Average RF
13C2-4:2 FTS	5.00	3.92	0.4706	0.3687	78.4	NA	±30	Average RF
13C2-6:2 FTS	5.00	3.31	0.4899	0.324	66.1*	NA	±30	Average RF
13C2-8:2 FTS	5.00	3.61	0.4159	0.3	72.1	NA	±30	Average RF
13C3-HFPO-DA	10.0	12.4	0.2216	0.2753	124	NA	±30	Average RF

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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request: K2314281
Date Analyzed: 02/02/24 03:49

Continuing Calibration Verification (CCV) Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
File ID: J:\LCMS08\Data\240201_1633_RA\240201_046
Signal ID: 1

Calibration Date: 1/30/2024
Calibration ID: KC2400048
Analysis Lot: 831587
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	Rec.	% Drift	Criteria	Curve Fit
Perfluorobutane sulfonic acid (PFBS)	0.887	0.892	1.2389	1.2452	101	NA	±30	Average RF
Perfluoropentane sulfonic acid (PFPeS)	0.941	0.948	0.9895	0.9972	101	NA	±30	Average RF
Perfluorohexane sulfonic acid (PFHxS)	0.914	0.807	1.0927	0.9641	88.2	NA	±30	Average RF
Perfluoroheptane sulfonic acid (PFHpS)	0.953	0.963	2.1019	2.1231	101	NA	±30	Average RF
Perfluorooctane sulfonic acid (PFOS)	0.928	0.900	2.1354	2.0711	97.0	NA	±30	Average RF
Perfluorononane sulfonic acid (PFNS)	0.962	0.971	2.1159	2.1366	101	NA	±30	Average RF
Perfluorodecane sulfonic acid (PFDS)	0.965	0.919	1.858	1.7688	95.2	NA	±30	Average RF
Perfluorododecane sulfonic acid (PFDoS)	0.970	0.916	1.1587	1.0942	94.4	NA	±30	Average RF
Perfluorobutanoic acid (PFBA)	1.00	1.01	0.9787	0.9517	101	1.1	±30	Linear
Perfluoropentanoic acid (PFPeA)	1.00	0.922	3.501	3.2292	92.2	NA	±30	Average RF
Perfluorohexanoic acid (PFHxA)	1.00	0.953	0.9543	0.8931	95.3	-4.7	±30	Linear
Perfluoroheptanoic acid (PFHpA)	1.00	0.925	0.9097	0.7995	92.5	-7.5	±30	Linear
Perfluorooctanoic acid (PFOA)	1.00	0.956	0.9443	0.8861	95.6	-4.4	±30	Linear
Perfluorononanoic acid (PFNA)	1.00	0.894	0.8459	0.7407	89.4	-10.7	±30	Linear
Perfluorodecanoic acid (PFDA)	1.00	0.928	1.0572	0.981	92.8	NA	±30	Average RF
Perfluoroundecanoic acid (PFUnDA)	1.00	1.04	0.891	0.904	104	4.2	±30	Linear
Perfluorododecanoic acid (PFDOA)	1.00	0.913	0.6675	0.5869	91.3	-8.7	±30	Linear
Perfluorotridecanoic acid (PFTrDA)	1.00	0.918	1.29	1.1573	91.8	-8.2	±30	Linear
Perfluorotetradecanoic acid (PFTDA)	1.00	0.948	0.9069	0.839	94.8	-5.2	±30	Linear
Perfluorooctane sulfonamide (PFOSAm)	2.00	2.06	0.8747	0.9019	103	NA	±30	Average RF
N-Methylperfluorooctane sulfonamide (MeFOSA)	1.00	0.875	1.4266	1.2485	87.5	NA	±30	Average RF
N-Ethylperfluorooctane sulfonamide (EtFOSA)	1.00	0.840	1.3714	1.1519	84.0	NA	±30	Average RF
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	1.00	1.03	1.3005	1.2621	103	2.6	±30	Linear
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	1.00	0.890	1.199	1.0674	89.0	NA	±30	Average RF
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	1.00	1.08	0.6949	0.7638	108	NA	±30	Average RF
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	1.00	1.00	0.8211	0.8229	100	NA	±30	Average RF
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	0.937	0.984	2.4785	2.6039	105	NA	±30	Average RF
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	0.951	0.964	1.9067	1.9328	101	NA	±30	Average RF

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request: K2314281
Date Analyzed: 02/02/24 03:49

Continuing Calibration Verification (CCV) Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
File ID: J:\LCMS08\Data\240201_1633_RA\240201_046
Signal ID: 1

Calibration Date: 1/30/2024
Calibration ID: KC2400048
Analysis Lot: 831587
Units: ng/mL

1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	0.960	0.914	1.9059	1.8143	95.2	NA	±30	Average RF
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	20.0	16.8	0.0716	0.0602	84.0	NA	±30	Average RF
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	20.0	17.4	0.0747	0.065	86.9	NA	±30	Average RF
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	20.0	16.3	0.1313	0.1069	81.4	NA	±30	Average RF
Perfluoro(2-ethoxyethane) sulfonic acid (PFEESA)	0.890	1.05	3.106	3.6672	118	NA	±30	Average RF
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	0.933	0.770	9.8058	8.0892	82.5	NA	±30	Average RF
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	0.943	0.729	6.9996	5.4134	77.3	NA	±30	Average RF
Perfluoro-3-methoxypropanoic acid (PFMPA)	1.00	0.823	1.4277	1.1745	82.3	NA	±30	Average RF
Perfluoro-4-methoxybutanoic acid (PFMBA)	1.00	0.926	2.1881	2.0261	92.6	NA	±30	Average RF
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	1.00	1.04	0.9833	1.0238	104	NA	±30	Average RF
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	1.00	0.959	0.5186	0.4971	95.9	NA	±30	Average RF
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	0.945	0.670	8.4297	5.974	70.9	NA	±30	Average RF

Analyte Name	Expected	Result	Average RF	CCV RF	Rec.	% Drift	Criteria	Curve Fit
13C3-PFBS	2.50	2.69	0.9328	1.0028	108	NA	±30	Average RF
13C3-PFHxS	2.50	2.70	0.8762	0.9452	108	NA	±30	Average RF
13C8-PFOS	2.50	2.28	0.3146	0.2873	91.3	NA	±30	Average RF
13C4-PFBA	10.0	10.4	0.7409	0.7724	104	NA	±30	Average RF
13C5-PFPeA	5.00	5.07	0.1798	0.1821	101	NA	±30	Average RF
13C5-PFHxA	2.50	2.24	0.807	0.7215	89.4	NA	±30	Average RF
13C4-PFHpA	2.50	2.46	1.0152	1.0009	98.6	NA	±30	Average RF
13C8-PFOA	2.50	2.49	11.9228	11.8943	99.8	NA	±30	Average RF
13C9-PFNA	1.25	1.29	0.9253	0.957	103	NA	±30	Average RF
13C6-PFDA	1.25	1.32	1.0017	1.0542	105	NA	±30	Average RF
13C7-PFUnDA	1.25	1.23	1.2447	1.2272	98.6	NA	±30	Average RF
13C2-PFDoDA	1.25	1.23	1.4859	1.4569	98.0	NA	±30	Average RF
13C2-PFTeDA	1.25	1.23	1.0487	1.0346	98.7	NA	±30	Average RF
13C8-FOSA	2.50	1.94	0.7942	0.6158	77.5	NA	±30	Average RF
D3-MeFOSA	2.50	2.17	0.2073	0.1803	87.0	NA	±30	Average RF

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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request: K2314281
Date Analyzed: 02/02/24 03:49

Continuing Calibration Verification (CCV) Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
File ID: J:\LCMS08\Data\240201_1633_RA\240201_046
Signal ID: 1

Calibration Date: 1/30/2024
Calibration ID: KC2400048
Analysis Lot: 831587
Units: ng/mL

D5-EtFOSA	2.50	2.18	0.2867	0.2496	87.1	NA	±30	Average RF
D7-MeFOSE	25.0	20.6	0.2039	0.1683	82.5	NA	±30	Average RF
D9-EtFOSE	25.0	22.0	0.2495	0.2196	88.0	NA	±30	Average RF
D3-MeFOSAA	5.00	3.40	1.0179	0.6915	67.9*	NA	±30	Average RF
D5-EtFOSAA	5.00	3.45	0.8022	0.554	69.1*	NA	±30	Average RF
13C2-4:2 FTS	5.00	3.40	0.4706	0.3203	68.1*	NA	±30	Average RF
13C2-6:2 FTS	5.00	3.40	0.4899	0.3334	68.0*	NA	±30	Average RF
13C2-8:2 FTS	5.00	3.26	0.4159	0.271	65.1*	NA	±30	Average RF
13C3-HFPO-DA	10.0	12.1	0.2216	0.2681	121	NA	±30	Average RF

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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request: K2314281
Date Analyzed: 02/01/24 22:00

Continuing Calibration Verification (CCV) Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
File ID: J:\LCMS08\Data\240201_1633_RA\240201_031
Signal ID: 1

Calibration Date: 1/30/2024
Calibration ID: KC2400048
Analysis Lot: 831587
Units: ng/L

Analyte Name	Expected	Result	Average RF	CCV RF	Rec.	% Drift	Criteria	Curve Fit
Perfluorobutane sulfonic acid (PFBS)	0.887	0.835	1.2389	1.1666	94.2	NA	±30	Average RF
Perfluoropentane sulfonic acid (PFPeS)	0.941	0.983	0.9895	1.034	105	NA	±30	Average RF
Perfluorohexane sulfonic acid (PFHxS)	0.914	0.873	1.0927	1.0439	95.5	NA	±30	Average RF
Perfluoroheptane sulfonic acid (PFHpS)	0.953	0.925	2.1019	2.0403	97.1	NA	±30	Average RF
Perfluorooctane sulfonic acid (PFOS)	0.928	0.812	2.1354	1.868	87.5	NA	±30	Average RF
Perfluorononane sulfonic acid (PFNS)	0.962	0.921	2.1159	2.0249	95.7	NA	±30	Average RF
Perfluorodecane sulfonic acid (PFDS)	0.965	0.868	1.858	1.6716	90.0	NA	±30	Average RF
Perfluorododecane sulfonic acid (PFDoS)	0.970	0.851	1.1587	1.0167	87.7	NA	±30	Average RF
Perfluorobutanoic acid (PFBA)	1.00	0.961	0.9787	0.9044	96.1	-3.9	±30	Linear
Perfluoropentanoic acid (PFPeA)	1.00	0.920	3.501	3.2195	92.0	NA	±30	Average RF
Perfluorohexanoic acid (PFHxA)	1.00	0.925	0.9543	0.8672	92.5	-7.5	±30	Linear
Perfluoroheptanoic acid (PFHpA)	1.00	0.926	0.9097	0.7997	92.6	-7.4	±30	Linear
Perfluorooctanoic acid (PFOA)	1.00	1.00	0.9443	0.9293	100	0.3	±30	Linear
Perfluorononanoic acid (PFNA)	1.00	0.897	0.8459	0.7436	89.7	-10.3	±30	Linear
Perfluorodecanoic acid (PFDA)	1.00	0.862	1.0572	0.9116	86.2	NA	±30	Average RF
Perfluoroundecanoic acid (PFUnDA)	1.00	1.03	0.891	0.8982	103	3.5	±30	Linear
Perfluorododecanoic acid (PFDOA)	1.00	0.948	0.6675	0.6083	94.8	-5.2	±30	Linear
Perfluorotridecanoic acid (PFTrDA)	1.00	0.945	1.29	1.191	94.5	-5.5	±30	Linear
Perfluorotetradecanoic acid (PFTDA)	1.00	0.979	0.9069	0.8657	97.9	-2.1	±30	Linear
Perfluorooctane sulfonamide (PFOSAm)	2.00	2.12	0.8747	0.9277	106	NA	±30	Average RF
N-Methylperfluorooctane sulfonamide (MeFOSA)	1.00	0.892	1.4266	1.2718	89.2	NA	±30	Average RF
N-Ethylperfluorooctane sulfonamide (EtFOSA)	1.00	0.843	1.3714	1.1563	84.3	NA	±30	Average RF
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	1.00	1.00	1.3005	1.2354	100	0.4	±30	Linear
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	1.00	0.940	1.199	1.1266	94.0	NA	±30	Average RF
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	1.00	1.04	0.6949	0.7359	104	NA	±30	Average RF
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	1.00	0.984	0.8211	0.8081	98.4	NA	±30	Average RF
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	0.937	0.934	2.4785	2.4697	99.6	NA	±30	Average RF
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	0.951	0.917	1.9067	1.8375	96.4	NA	±30	Average RF

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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request: K2314281
Date Analyzed: 02/01/24 22:00

Continuing Calibration Verification (CCV) Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
File ID: J:\LCMS08\Data\240201_1633_RA\240201_031
Signal ID: 1

Calibration Date: 1/30/2024
Calibration ID: KC2400048
Analysis Lot: 831587
Units: ng/L

1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	0.960	0.846	1.9059	1.6796	88.1	NA	±30	Average RF
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	20.0	16.9	0.0716	0.0606	84.7	NA	±30	Average RF
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	20.0	17.1	0.0747	0.0638	85.3	NA	±30	Average RF
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	20.0	15.8	0.1313	0.104	79.2	NA	±30	Average RF
Perfluoro(2-ethoxyethane) sulfonic acid (PFEESA)	0.890	1.05	3.106	3.6717	118	NA	±30	Average RF
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	0.933	0.724	9.8058	7.6128	77.6	NA	±30	Average RF
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	0.943	0.674	6.9996	5.0011	71.5	NA	±30	Average RF
Perfluoro-3-methoxypropanoic acid (PFMPA)	1.00	0.786	1.4277	1.1225	78.6	NA	±30	Average RF
Perfluoro-4-methoxybutanoic acid (PFMBA)	1.00	0.907	2.1881	1.9839	90.7	NA	±30	Average RF
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	1.00	0.992	0.9833	0.9756	99.2	NA	±30	Average RF
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	1.00	0.968	0.5186	0.5021	96.8	NA	±30	Average RF
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	0.945	0.648	8.4297	5.7807	68.6*	NA	±30	Average RF

Analyte Name	Expected	Result	Average RF	CCV RF	Rec.	% Drift	Criteria	Curve Fit
13C3-PFBS	2.50	2.67	0.9328	0.9945	107	NA	±30	Average RF
13C3-PFHxS	2.50	2.50	0.8762	0.8752	100	NA	±30	Average RF
13C8-PFOS	2.50	2.43	0.3146	0.3062	97.3	NA	±30	Average RF
13C4-PFBA	10.0	10.6	0.7409	0.7855	106	NA	±30	Average RF
13C5-PFPeA	5.00	5.10	0.1798	0.1835	102	NA	±30	Average RF
13C5-PFHxA	2.50	2.27	0.807	0.7321	90.7	NA	±30	Average RF
13C4-PFHpA	2.50	2.65	1.0152	1.0755	106	NA	±30	Average RF
13C8-PFOA	2.50	2.62	11.9228	12.4971	105	NA	±30	Average RF
13C9-PFNA	1.25	1.32	0.9253	0.9744	105	NA	±30	Average RF
13C6-PFDA	1.25	1.27	1.0017	1.0157	101	NA	±30	Average RF
13C7-PFUnDA	1.25	1.18	1.2447	1.1724	94.2	NA	±30	Average RF
13C2-PFDoDA	1.25	1.17	1.4859	1.3962	94.0	NA	±30	Average RF
13C2-PFTeDA	1.25	1.18	1.0487	0.9877	94.2	NA	±30	Average RF
13C8-FOSA	2.50	1.89	0.7942	0.6013	75.7	NA	±30	Average RF
D3-MeFOSA	2.50	2.06	0.2073	0.1712	82.6	NA	±30	Average RF

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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request: K2314281
Date Analyzed: 02/01/24 22:00

Continuing Calibration Verification (CCV) Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
File ID: J:\LCMS08\Data\240201_1633_RA\240201_031
Signal ID: 1

Calibration Date: 1/30/2024
Calibration ID: KC2400048
Analysis Lot: 831587
Units: ng/L

D5-EtFOSA	2.50	2.15	0.2867	0.2466	86.0	NA	±30	Average RF
D7-MeFOSE	25.0	20.9	0.2039	0.1702	83.5	NA	±30	Average RF
D9-EtFOSE	25.0	21.8	0.2495	0.2171	87.0	NA	±30	Average RF
D3-MeFOSAA	5.00	3.29	1.0179	0.6688	65.7*	NA	±30	Average RF
D5-EtFOSAA	5.00	3.42	0.8022	0.5491	68.5*	NA	±30	Average RF
13C2-4:2 FTS	5.00	3.55	0.4706	0.3345	71.1	NA	±30	Average RF
13C2-6:2 FTS	5.00	3.67	0.4899	0.3597	73.4	NA	±30	Average RF
13C2-8:2 FTS	5.00	3.41	0.4159	0.2839	68.3*	NA	±30	Average RF
13C3-HFPO-DA	10.0	12.8	0.2216	0.2835	128	NA	±30	Average RF

ALS Group USA, Corp.
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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request:K2314281

Analysis Run Log
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633

Analysis Lot:830573
Instrument ID:K-LCMS-08

Raw Data File	Sample Name	Lab Code	Date Analyzed	Time Analyzed	Q
J:\LCMS08\Data\240122_1633_B1\240122_005	Performance Evaluation	KQ2401073-09	1/22/2024	11:18	
J:\LCMS08\Data\240122_1633_B1\240122_005	ZZZZZZZ	ZZZZZZZ	1/22/2024	11:18	
J:\LCMS08\Data\240122_1633_B1\240122_006	ZZZZZZZ	ZZZZZZZ	1/22/2024	11:41	
J:\LCMS08\Data\240122_1633_B1\240122_006	Continuing Calibration Blank	KQ2401073-10	1/22/2024	11:41	
J:\LCMS08\Data\240122_1633_B1\240122_007	Low Level Continuing Calibration Verification	KQ2401073-11	1/22/2024	12:04	
J:\LCMS08\Data\240122_1633_B1\240122_008	ZZZZZZZ	ZZZZZZZ	1/22/2024	12:27	
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J:\LCMS08\Data\240122_1633_B1\240122_010	ZZZZZZZ	ZZZZZZZ	1/22/2024	13:14	
J:\LCMS08\Data\240122_1633_B1\240122_011	ZZZZZZZ	ZZZZZZZ	1/22/2024	13:37	
J:\LCMS08\Data\240122_1633_B1\240122_011	Performance Evaluation	KQ2401073-13	1/22/2024	13:37	
J:\LCMS08\Data\240122_1633_B1\240122_012	Continuing Calibration Blank	KQ2401073-14	1/22/2024	14:00	
J:\LCMS08\Data\240122_1633_B1\240122_012	ZZZZZZZ	ZZZZZZZ	1/22/2024	14:00	
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J:\LCMS08\Data\240122_1633_B1\240122_017	ZZZZZZZ	ZZZZZZZ	1/22/2024	15:57	
J:\LCMS08\Data\240122_1633_B1\240122_018	ZZZZZZZ	ZZZZZZZ	1/22/2024	16:20	
J:\LCMS08\Data\240122_1633_B1\240122_020	ZZZZZZZ	ZZZZZZZ	1/22/2024	17:07	
J:\LCMS08\Data\240122_1633_B1\240122_021	ZZZZZZZ	ZZZZZZZ	1/22/2024	17:30	
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J:\LCMS08\Data\240122_1633_B1\240122_024	ZZZZZZZ	ZZZZZZZ	1/22/2024	18:40	
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J:\LCMS08\Data\240122_1633_B1\240122_026	ZZZZZZZ	ZZZZZZZ	1/22/2024	19:26	
J:\LCMS08\Data\240122_1633_B1\240122_027	ZZZZZZZ	ZZZZZZZ	1/22/2024	19:50	

ALS Group USA, Corp.
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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request:K2314281

Analysis Run Log
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633

Analysis Lot:830573
Instrument ID:K-LCMS-08

Raw Data File	Sample Name	Lab Code	Date Analyzed	Time Analyzed	Q
J:\LCMS08\Data\240122_1633_B1\240122_028	Continuing Calibration Verification	KQ2401073-15	1/22/2024	20:13	
J:\LCMS08\Data\240122_1633_B1\240122_029	Continuing Calibration Blank	KQ2401073-16	1/22/2024	20:36	
J:\LCMS08\Data\240122_1633_B1\240122_030	Method Blank	KQ2400483-04	1/22/2024	20:59	
J:\LCMS08\Data\240122_1633_B1\240122_031	Lab Control Sample	KQ2400483-01	1/22/2024	21:23	
J:\LCMS08\Data\240122_1633_B1\240122_032	Duplicate Lab Control Sample	KQ2400483-02	1/22/2024	21:46	
J:\LCMS08\Data\240122_1633_B1\240122_033	Low Level Lab Control Sample	KQ2400483-03	1/22/2024	22:09	
J:\LCMS08\Data\240122_1633_B1\240122_034	TA-01-W	K2314281-001	1/22/2024	22:32	
J:\LCMS08\Data\240122_1633_B1\240122_035	TA-02-W	K2314281-002	1/22/2024	22:56	
J:\LCMS08\Data\240122_1633_B1\240122_036	ZZZZZZZ	ZZZZZZZ	1/22/2024	23:19	
J:\LCMS08\Data\240122_1633_B1\240122_037	ZZZZZZZ	ZZZZZZZ	1/22/2024	23:42	
J:\LCMS08\Data\240122_1633_B1\240122_038	ZZZZZZZ	ZZZZZZZ	1/23/2024	00:05	
J:\LCMS08\Data\240122_1633_B1\240122_039	ZZZZZZZ	ZZZZZZZ	1/23/2024	00:29	
J:\LCMS08\Data\240122_1633_B1\240122_040	ZZZZZZZ	ZZZZZZZ	1/23/2024	00:52	
J:\LCMS08\Data\240122_1633_B1\240122_041	ZZZZZZZ	ZZZZZZZ	1/23/2024	01:15	
J:\LCMS08\Data\240122_1633_B1\240122_043	ZZZZZZZ	ZZZZZZZ	1/23/2024	02:02	
J:\LCMS08\Data\240122_1633_B1\240122_044	ZZZZZZZ	ZZZZZZZ	1/23/2024	02:25	
J:\LCMS08\Data\240122_1633_B1\240122_045	Continuing Calibration Verification	KQ2401073-18	1/23/2024	02:48	
J:\LCMS08\Data\240122_1633_B1\240122_046	Continuing Calibration Blank	KQ2401073-17	1/23/2024	03:12	
J:\LCMS08\Data\240122_1633_B1\240122_047	ZZZZZZZ	ZZZZZZZ	1/23/2024	03:35	
J:\LCMS08\Data\240122_1633_B1\240122_048	ZZZZZZZ	ZZZZZZZ	1/23/2024	03:58	
J:\LCMS08\Data\240122_1633_B1\240122_049	ZZZZZZZ	ZZZZZZZ	1/23/2024	04:21	
J:\LCMS08\Data\240122_1633_B1\240122_050	ZZZZZZZ	ZZZZZZZ	1/23/2024	04:45	
J:\LCMS08\Data\240122_1633_B1\240122_051	ZZZZZZZ	ZZZZZZZ	1/23/2024	05:08	

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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request:K2314281

Analysis Run Log

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633

Analysis Lot:830573

Instrument ID:K-LCMS-08

Raw Data File	Sample Name	Lab Code	Date Analyzed	Time Analyzed	Q
J:\LCMS08\Data\240122_1633_B1 \240122_052	ZZZZZZZ	ZZZZZZZ	1/23/2024	05:31	
J:\LCMS08\Data\240122_1633_B1 \240122_053	ZZZZZZZ	ZZZZZZZ	1/23/2024	05:54	
J:\LCMS08\Data\240122_1633_B1 \240122_054	ZZZZZZZ	ZZZZZZZ	1/23/2024	06:18	
J:\LCMS08\Data\240122_1633_B1 \240122_055	Continuing Calibration Blank	KQ2401073-19	1/23/2024	06:41	

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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request:K2314281

Analysis Run Log
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633

Analysis Lot:831587
Instrument ID:K-LCMS-08

Raw Data File	Sample Name	Lab Code	Date Analyzed	Time Analyzed	Q
J:\LCMS08	Continuing Calibration Blank	KQ2401707-01	2/1/2024	11:55	
\Data\240201_1633_RA\240201_005					
J:\LCMS08	Low Level Continuing Calibration	KQ2401707-02	2/1/2024	12:18	
\Data\240201_1633_RA\240201_006	Verification				
J:\LCMS08	ZZZZZZZ	ZZZZZZZ	2/1/2024	13:05	
\Data\240201_1633_RA\240201_008					
J:\LCMS08	Performance Evaluation	KQ2401707-04	2/1/2024	13:51	
\Data\240201_1633_RA\240201_010					
J:\LCMS08	Performance Evaluation	KQ2401707-05	2/1/2024	14:14	
\Data\240201_1633_RA\240201_011					
J:\LCMS08	Continuing Calibration Blank	KQ2401707-06	2/1/2024	14:38	
\Data\240201_1633_RA\240201_012					
J:\LCMS08	Continuing Calibration Verification	KQ2401707-13	2/1/2024	22:00	
\Data\240201_1633_RA\240201_031					
J:\LCMS08	Continuing Calibration Blank	KQ2401707-14	2/1/2024	22:23	
\Data\240201_1633_RA\240201_032					
J:\LCMS08	Low Level Lab Control Sample	KQ2400483-03	2/1/2024	22:46	
\Data\240201_1633_RA\240201_033					
J:\LCMS08	TA-01-W	K2314281-001	2/1/2024	23:09	
\Data\240201_1633_RA\240201_034					
J:\LCMS08	TA-02-W	K2314281-002	2/1/2024	23:33	
\Data\240201_1633_RA\240201_035					
J:\LCMS08	ZZZZZZZ	ZZZZZZZ	2/1/2024	23:56	
\Data\240201_1633_RA\240201_036					
J:\LCMS08	ZZZZZZZ	ZZZZZZZ	2/2/2024	00:19	
\Data\240201_1633_RA\240201_037					
J:\LCMS08	ZZZZZZZ	ZZZZZZZ	2/2/2024	00:42	
\Data\240201_1633_RA\240201_038					
J:\LCMS08	ZZZZZZZ	ZZZZZZZ	2/2/2024	01:06	
\Data\240201_1633_RA\240201_039					
J:\LCMS08	ZZZZZZZ	ZZZZZZZ	2/2/2024	01:29	
\Data\240201_1633_RA\240201_040					
J:\LCMS08	ZZZZZZZ	ZZZZZZZ	2/2/2024	01:52	
\Data\240201_1633_RA\240201_041					
J:\LCMS08	ZZZZZZZ	ZZZZZZZ	2/2/2024	02:16	
\Data\240201_1633_RA\240201_042					
J:\LCMS08	ZZZZZZZ	ZZZZZZZ	2/2/2024	02:39	
\Data\240201_1633_RA\240201_043					
J:\LCMS08	ZZZZZZZ	ZZZZZZZ	2/2/2024	03:02	
\Data\240201_1633_RA\240201_044					
J:\LCMS08	ZZZZZZZ	ZZZZZZZ	2/2/2024	03:25	
\Data\240201_1633_RA\240201_045					
J:\LCMS08	Continuing Calibration Verification	KQ2401707-08	2/2/2024	03:49	
\Data\240201_1633_RA\240201_046					
J:\LCMS08	Continuing Calibration Blank	KQ2401707-07	2/2/2024	04:12	
\Data\240201_1633_RA\240201_047					

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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request:K2314281

Analysis Run Log
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633

Analysis Lot:831587
Instrument ID:K-LCMS-08

Raw Data File	Sample Name	Lab Code	Date Analyzed	Time Analyzed	Q
J:\LCMS08	ZZZZZZZZ	ZZZZZZZZ	2/2/2024	04:35	
\Data\240201_1633_RA\240201_048					
J:\LCMS08	ZZZZZZZZ	ZZZZZZZZ	2/2/2024	04:58	
\Data\240201_1633_RA\240201_049					
J:\LCMS08	ZZZZZZZZ	ZZZZZZZZ	2/2/2024	05:22	
\Data\240201_1633_RA\240201_050					
J:\LCMS08	ZZZZZZZZ	ZZZZZZZZ	2/2/2024	06:08	
\Data\240201_1633_RA\240201_052					
J:\LCMS08	ZZZZZZZZ	ZZZZZZZZ	2/2/2024	06:31	
\Data\240201_1633_RA\240201_053					
J:\LCMS08	ZZZZZZZZ	ZZZZZZZZ	2/2/2024	06:55	
\Data\240201_1633_RA\240201_054					
J:\LCMS08	ZZZZZZZZ	ZZZZZZZZ	2/2/2024	07:18	
\Data\240201_1633_RA\240201_055					
J:\LCMS08	ZZZZZZZZ	ZZZZZZZZ	2/2/2024	07:41	
\Data\240201_1633_RA\240201_056					
J:\LCMS08	ZZZZZZZZ	ZZZZZZZZ	2/2/2024	08:04	
\Data\240201_1633_RA\240201_057					
J:\LCMS08	ZZZZZZZZ	ZZZZZZZZ	2/2/2024	08:28	
\Data\240201_1633_RA\240201_058					
J:\LCMS08	ZZZZZZZZ	ZZZZZZZZ	2/2/2024	08:51	
\Data\240201_1633_RA\240201_059					
J:\LCMS08	ZZZZZZZZ	ZZZZZZZZ	2/2/2024	09:14	
\Data\240201_1633_RA\240201_060					
J:\LCMS08	ZZZZZZZZ	ZZZZZZZZ	2/2/2024	09:37	
\Data\240201_1633_RA\240201_061					
J:\LCMS08	Continuing Calibration Blank	KQ2401707-10	2/2/2024	10:01	
\Data\240201_1633_RA\240201_062					
J:\LCMS08	ZZZZZZZZ	ZZZZZZZZ	2/2/2024	10:24	
\Data\240201_1633_RA\240201_063					
J:\LCMS08	ZZZZZZZZ	ZZZZZZZZ	2/2/2024	10:47	
\Data\240201_1633_RA\240201_064					
J:\LCMS08	ZZZZZZZZ	ZZZZZZZZ	2/2/2024	11:10	
\Data\240201_1633_RA\240201_065					
J:\LCMS08	ZZZZZZZZ	ZZZZZZZZ	2/2/2024	11:34	
\Data\240201_1633_RA\240201_066					
J:\LCMS08	ZZZZZZZZ	ZZZZZZZZ	2/2/2024	11:57	
\Data\240201_1633_RA\240201_067					
J:\LCMS08	ZZZZZZZZ	ZZZZZZZZ	2/2/2024	12:20	
\Data\240201_1633_RA\240201_068					
J:\LCMS08	Continuing Calibration Blank	KQ2401707-11	2/2/2024	12:43	
\Data\240201_1633_RA\240201_069					

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Prep Summary Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Water

Service Request:K2314281

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Prep Method: Method
Analytical Method: Draft EPA Method 1633
Extraction Lot: 432516
Extraction Date: 01/11/24 13:10

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Amount	Percent Solids
TA-01-W	K2314281-001	12/20/23	12/20/23	247.3000 mL	5 mL	
TA-02-W	K2314281-002	12/20/23	12/20/23	256.0300 mL	5 mL	
Lab Control Sample	KQ2400483-01LCS	NA	NA	250 mL	5 mL	
Duplicate Lab Control Sample	KQ2400483-02DLCS	NA	NA	250 mL	5 mL	
Low Level Lab Control Sample	KQ2400483-03LCS_LL	NA	NA	250 mL	5 mL	
Method Blank	KQ2400483-04MB	NA	NA	250 mL	5 mL	



Volatile Organic Compounds by GC/MS

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577- 7222 Fax (360)636-1 068
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Analytical Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Water

Service Request: K2314281
Date Collected: 12/20/23 01:05
Date Received: 12/20/23 13:45

Sample Name: TA-01-W
Lab Code: K2314281-001

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Acetone	7.5 J	20	3.3	1	12/22/23 15:04	
Benzene	ND U	0.50	0.062	1	12/22/23 15:04	
Bromobenzene	ND U	2.0	0.12	1	12/22/23 15:04	
Bromochloromethane	ND U	0.50	0.16	1	12/22/23 15:04	
Bromodichloromethane	ND U	0.50	0.091	1	12/22/23 15:04	
Bromoform	ND U	0.50	0.16	1	12/22/23 15:04	
Bromomethane	ND U	0.50	0.16	1	12/22/23 15:04	*
2-Butanone (MEK)	ND U	20	1.9	1	12/22/23 15:04	
n-Butylbenzene	ND U	4.0	0.054	1	12/22/23 15:04	
sec-Butylbenzene	ND U	2.0	0.062	1	12/22/23 15:04	
tert-Butylbenzene	ND U	2.0	0.059	1	12/22/23 15:04	
Carbon Disulfide	0.070 J	0.50	0.069	1	12/22/23 15:04	
Carbon Tetrachloride	ND U	0.50	0.096	1	12/22/23 15:04	*
Chlorobenzene	ND U	0.50	0.11	1	12/22/23 15:04	
Chloroethane	ND U	0.50	0.16	1	12/22/23 15:04	
Chloroform	ND U	0.50	0.072	1	12/22/23 15:04	
Chloromethane	ND U	0.50	0.068	1	12/22/23 15:04	*
2-Chlorotoluene	ND U	2.0	0.10	1	12/22/23 15:04	
4-Chlorotoluene	ND U	2.0	0.13	1	12/22/23 15:04	
1,2-Dibromo-3-chloropropane	ND U	2.0	0.22	1	12/22/23 15:04	
Dibromochloromethane	ND U	0.50	0.14	1	12/22/23 15:04	
1,2-Dibromoethane (EDB)	ND U	2.0	0.10	1	12/22/23 15:04	
Dibromomethane	ND U	0.50	0.15	1	12/22/23 15:04	
1,2-Dichlorobenzene	ND U	0.50	0.12	1	12/22/23 15:04	
1,3-Dichlorobenzene	ND U	0.50	0.10	1	12/22/23 15:04	
1,4-Dichlorobenzene	ND U	0.50	0.12	1	12/22/23 15:04	
Dichlorodifluoromethane	ND U	0.50	0.13	1	12/22/23 15:04	*
1,1-Dichloroethane	ND U	0.50	0.077	1	12/22/23 15:04	
1,2-Dichloroethane (EDC)	ND U	0.50	0.080	1	12/22/23 15:04	
1,1-Dichloroethene	ND U	0.50	0.080	1	12/22/23 15:04	
cis-1,2-Dichloroethene	ND U	0.50	0.067	1	12/22/23 15:04	
trans-1,2-Dichloroethene	ND U	0.50	0.072	1	12/22/23 15:04	
1,2-Dichloropropane	ND U	0.50	0.095	1	12/22/23 15:04	
1,3-Dichloropropane	ND U	0.50	0.14	1	12/22/23 15:04	
2,2-Dichloropropane	ND U	0.50	0.065	1	12/22/23 15:04	
1,1-Dichloropropene	ND U	0.50	0.089	1	12/22/23 15:04	
cis-1,3-Dichloropropene	ND U	0.50	0.18	1	12/22/23 15:04	
trans-1,3-Dichloropropene	ND U	0.50	0.068	1	12/22/23 15:04	*
Ethylbenzene	ND U	0.50	0.050	1	12/22/23 15:04	
Hexachlorobutadiene	ND U	2.0	0.11	1	12/22/23 15:04	
2-Hexanone	ND U	20	2.7	1	12/22/23 15:04	

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Analytical Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Water

Service Request: K2314281
Date Collected: 12/20/23 01:05
Date Received: 12/20/23 13:45

Sample Name: TA-01-W
Lab Code: K2314281-001

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Isopropylbenzene	ND U	2.0	0.051	1	12/22/23 15:04	
4-Isopropyltoluene	ND U	2.0	0.060	1	12/22/23 15:04	
4-Methyl-2-pentanone (MIBK)	ND U	20	2.6	1	12/22/23 15:04	
Methylene Chloride	ND U	2.0	0.10	1	12/22/23 15:04	
Naphthalene	0.10 J	2.0	0.088	1	12/22/23 15:04	
n-Propylbenzene	ND U	2.0	0.054	1	12/22/23 15:04	
Styrene	ND U	0.50	0.089	1	12/22/23 15:04	
1,1,1,2-Tetrachloroethane	ND U	0.50	0.11	1	12/22/23 15:04	
1,1,2,2-Tetrachloroethane	ND U	0.50	0.16	1	12/22/23 15:04	
Tetrachloroethene (PCE)	ND U	0.50	0.099	1	12/22/23 15:04	
Toluene	ND U	0.50	0.054	1	12/22/23 15:04	
1,2,3-Trichlorobenzene	0.18 J	2.0	0.11	1	12/22/23 15:04	
1,2,4-Trichlorobenzene	ND U	2.0	0.096	1	12/22/23 15:04	
1,1,2-Trichloroethane	ND U	0.50	0.14	1	12/22/23 15:04	
1,1,1-Trichloroethane (TCA)	ND U	0.50	0.075	1	12/22/23 15:04	
Trichloroethene (TCE)	ND U	0.50	0.10	1	12/22/23 15:04	
Trichlorofluoromethane (CFC 11)	ND U	0.50	0.12	1	12/22/23 15:04	
1,2,3-Trichloropropane	ND U	0.50	0.20	1	12/22/23 15:04	
1,2,4-Trimethylbenzene	ND U	2.0	0.069	1	12/22/23 15:04	
1,3,5-Trimethylbenzene	ND U	2.0	0.089	1	12/22/23 15:04	
Vinyl Chloride	ND U	0.50	0.075	1	12/22/23 15:04	
o-Xylene	ND U	0.50	0.074	1	12/22/23 15:04	
m,p-Xylenes	ND U	0.50	0.11	1	12/22/23 15:04	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	90	68 - 117	12/22/23 15:04	
Dibromofluoromethane	110	73 - 122	12/22/23 15:04	
Toluene-d8	98	65 - 144	12/22/23 15:04	

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Analytical Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Water

Service Request: K2314281
Date Collected: 12/20/23 02:15
Date Received: 12/20/23 13:45

Sample Name: TA-02-W
Lab Code: K2314281-002

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Acetone	3.8 J	20	3.3	1	12/22/23 15:28	
Benzene	ND U	0.50	0.062	1	12/22/23 15:28	
Bromobenzene	ND U	2.0	0.12	1	12/22/23 15:28	
Bromochloromethane	ND U	0.50	0.16	1	12/22/23 15:28	
Bromodichloromethane	ND U	0.50	0.091	1	12/22/23 15:28	
Bromoform	ND U	0.50	0.16	1	12/22/23 15:28	
Bromomethane	ND U	0.50	0.16	1	12/22/23 15:28	*
2-Butanone (MEK)	ND U	20	1.9	1	12/22/23 15:28	
n-Butylbenzene	ND U	4.0	0.054	1	12/22/23 15:28	
sec-Butylbenzene	ND U	2.0	0.062	1	12/22/23 15:28	
tert-Butylbenzene	ND U	2.0	0.059	1	12/22/23 15:28	
Carbon Disulfide	0.070 J	0.50	0.069	1	12/22/23 15:28	
Carbon Tetrachloride	ND U	0.50	0.096	1	12/22/23 15:28	*
Chlorobenzene	ND U	0.50	0.11	1	12/22/23 15:28	
Chloroethane	ND U	0.50	0.16	1	12/22/23 15:28	
Chloroform	ND U	0.50	0.072	1	12/22/23 15:28	
Chloromethane	ND U	0.50	0.068	1	12/22/23 15:28	*
2-Chlorotoluene	ND U	2.0	0.10	1	12/22/23 15:28	
4-Chlorotoluene	ND U	2.0	0.13	1	12/22/23 15:28	
1,2-Dibromo-3-chloropropane	ND U	2.0	0.22	1	12/22/23 15:28	
Dibromochloromethane	ND U	0.50	0.14	1	12/22/23 15:28	
1,2-Dibromoethane (EDB)	ND U	2.0	0.10	1	12/22/23 15:28	
Dibromomethane	ND U	0.50	0.15	1	12/22/23 15:28	
1,2-Dichlorobenzene	ND U	0.50	0.12	1	12/22/23 15:28	
1,3-Dichlorobenzene	ND U	0.50	0.10	1	12/22/23 15:28	
1,4-Dichlorobenzene	ND U	0.50	0.12	1	12/22/23 15:28	
Dichlorodifluoromethane	ND U	0.50	0.13	1	12/22/23 15:28	*
1,1-Dichloroethane	ND U	0.50	0.077	1	12/22/23 15:28	
1,2-Dichloroethane (EDC)	ND U	0.50	0.080	1	12/22/23 15:28	
1,1-Dichloroethene	ND U	0.50	0.080	1	12/22/23 15:28	
cis-1,2-Dichloroethene	ND U	0.50	0.067	1	12/22/23 15:28	
trans-1,2-Dichloroethene	ND U	0.50	0.072	1	12/22/23 15:28	
1,2-Dichloropropane	ND U	0.50	0.095	1	12/22/23 15:28	
1,3-Dichloropropane	ND U	0.50	0.14	1	12/22/23 15:28	
2,2-Dichloropropane	ND U	0.50	0.065	1	12/22/23 15:28	
1,1-Dichloropropene	ND U	0.50	0.089	1	12/22/23 15:28	
cis-1,3-Dichloropropene	ND U	0.50	0.18	1	12/22/23 15:28	
trans-1,3-Dichloropropene	ND U	0.50	0.068	1	12/22/23 15:28	*
Ethylbenzene	ND U	0.50	0.050	1	12/22/23 15:28	
Hexachlorobutadiene	ND U	2.0	0.11	1	12/22/23 15:28	
2-Hexanone	ND U	20	2.7	1	12/22/23 15:28	

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Analytical Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Water

Service Request: K2314281
Date Collected: 12/20/23 02:15
Date Received: 12/20/23 13:45

Sample Name: TA-02-W
Lab Code: K2314281-002

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Isopropylbenzene	ND U	2.0	0.051	1	12/22/23 15:28	
4-Isopropyltoluene	ND U	2.0	0.060	1	12/22/23 15:28	
4-Methyl-2-pentanone (MIBK)	ND U	20	2.6	1	12/22/23 15:28	
Methylene Chloride	ND U	2.0	0.10	1	12/22/23 15:28	
Naphthalene	ND U	2.0	0.088	1	12/22/23 15:28	
n-Propylbenzene	ND U	2.0	0.054	1	12/22/23 15:28	
Styrene	ND U	0.50	0.089	1	12/22/23 15:28	
1,1,1,2-Tetrachloroethane	ND U	0.50	0.11	1	12/22/23 15:28	
1,1,2,2-Tetrachloroethane	ND U	0.50	0.16	1	12/22/23 15:28	
Tetrachloroethene (PCE)	ND U	0.50	0.099	1	12/22/23 15:28	
Toluene	ND U	0.50	0.054	1	12/22/23 15:28	
1,2,3-Trichlorobenzene	ND U	2.0	0.11	1	12/22/23 15:28	
1,2,4-Trichlorobenzene	ND U	2.0	0.096	1	12/22/23 15:28	
1,1,2-Trichloroethane	ND U	0.50	0.14	1	12/22/23 15:28	
1,1,1-Trichloroethane (TCA)	ND U	0.50	0.075	1	12/22/23 15:28	
Trichloroethene (TCE)	ND U	0.50	0.10	1	12/22/23 15:28	
Trichlorofluoromethane (CFC 11)	ND U	0.50	0.12	1	12/22/23 15:28	
1,2,3-Trichloropropane	ND U	0.50	0.20	1	12/22/23 15:28	
1,2,4-Trimethylbenzene	ND U	2.0	0.069	1	12/22/23 15:28	
1,3,5-Trimethylbenzene	ND U	2.0	0.089	1	12/22/23 15:28	
Vinyl Chloride	ND U	0.50	0.075	1	12/22/23 15:28	
o-Xylene	ND U	0.50	0.074	1	12/22/23 15:28	
m,p-Xylenes	ND U	0.50	0.11	1	12/22/23 15:28	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	89	68 - 117	12/22/23 15:28	
Dibromofluoromethane	110	73 - 122	12/22/23 15:28	
Toluene-d8	99	65 - 144	12/22/23 15:28	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Water

Service Request: K2314281
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: KQ2322477-05

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Acetone	ND U	20	3.3	1	12/22/23 14:27	
Benzene	ND U	0.50	0.062	1	12/22/23 14:27	
Bromobenzene	ND U	2.0	0.12	1	12/22/23 14:27	
Bromochloromethane	ND U	0.50	0.16	1	12/22/23 14:27	
Bromodichloromethane	ND U	0.50	0.091	1	12/22/23 14:27	
Bromoform	ND U	0.50	0.16	1	12/22/23 14:27	
Bromomethane	ND U	0.50	0.16	1	12/22/23 14:27	
2-Butanone (MEK)	ND U	20	1.9	1	12/22/23 14:27	
n-Butylbenzene	ND U	4.0	0.054	1	12/22/23 14:27	
sec-Butylbenzene	ND U	2.0	0.062	1	12/22/23 14:27	
tert-Butylbenzene	ND U	2.0	0.059	1	12/22/23 14:27	
Carbon Disulfide	ND U	0.50	0.069	1	12/22/23 14:27	
Carbon Tetrachloride	ND U	0.50	0.096	1	12/22/23 14:27	
Chlorobenzene	ND U	0.50	0.11	1	12/22/23 14:27	
Chloroethane	ND U	0.50	0.16	1	12/22/23 14:27	
Chloroform	ND U	0.50	0.072	1	12/22/23 14:27	
Chloromethane	ND U	0.50	0.068	1	12/22/23 14:27	
2-Chlorotoluene	ND U	2.0	0.10	1	12/22/23 14:27	
4-Chlorotoluene	ND U	2.0	0.13	1	12/22/23 14:27	
1,2-Dibromo-3-chloropropane	ND U	2.0	0.22	1	12/22/23 14:27	
Dibromochloromethane	ND U	0.50	0.14	1	12/22/23 14:27	
1,2-Dibromoethane (EDB)	ND U	2.0	0.10	1	12/22/23 14:27	
Dibromomethane	ND U	0.50	0.15	1	12/22/23 14:27	
1,2-Dichlorobenzene	ND U	0.50	0.12	1	12/22/23 14:27	
1,3-Dichlorobenzene	ND U	0.50	0.10	1	12/22/23 14:27	
1,4-Dichlorobenzene	ND U	0.50	0.12	1	12/22/23 14:27	
Dichlorodifluoromethane	ND U	0.50	0.13	1	12/22/23 14:27	
1,1-Dichloroethane	ND U	0.50	0.077	1	12/22/23 14:27	
1,2-Dichloroethane (EDC)	ND U	0.50	0.080	1	12/22/23 14:27	
1,1-Dichloroethene	ND U	0.50	0.080	1	12/22/23 14:27	
cis-1,2-Dichloroethene	ND U	0.50	0.067	1	12/22/23 14:27	
trans-1,2-Dichloroethene	ND U	0.50	0.072	1	12/22/23 14:27	
1,2-Dichloropropane	ND U	0.50	0.095	1	12/22/23 14:27	
1,3-Dichloropropane	ND U	0.50	0.14	1	12/22/23 14:27	
2,2-Dichloropropane	ND U	0.50	0.065	1	12/22/23 14:27	
1,1-Dichloropropene	ND U	0.50	0.089	1	12/22/23 14:27	
cis-1,3-Dichloropropene	ND U	0.50	0.18	1	12/22/23 14:27	
trans-1,3-Dichloropropene	ND U	0.50	0.068	1	12/22/23 14:27	
Ethylbenzene	ND U	0.50	0.050	1	12/22/23 14:27	
Hexachlorobutadiene	0.12 J	2.0	0.11	1	12/22/23 14:27	
2-Hexanone	ND U	20	2.7	1	12/22/23 14:27	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Water

Service Request: K2314281
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: KQ2322477-05

Units: ug/L
Basis: NA

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Isopropylbenzene	ND U	2.0	0.051	1	12/22/23 14:27	
4-Isopropyltoluene	ND U	2.0	0.060	1	12/22/23 14:27	
4-Methyl-2-pentanone (MIBK)	ND U	20	2.6	1	12/22/23 14:27	
Methylene Chloride	0.23 J	2.0	0.10	1	12/22/23 14:27	
Naphthalene	0.20 J	2.0	0.088	1	12/22/23 14:27	
n-Propylbenzene	ND U	2.0	0.054	1	12/22/23 14:27	
Styrene	ND U	0.50	0.089	1	12/22/23 14:27	
1,1,1,2-Tetrachloroethane	ND U	0.50	0.11	1	12/22/23 14:27	
1,1,2,2-Tetrachloroethane	ND U	0.50	0.16	1	12/22/23 14:27	
Tetrachloroethene (PCE)	ND U	0.50	0.099	1	12/22/23 14:27	
Toluene	ND U	0.50	0.054	1	12/22/23 14:27	
1,2,3-Trichlorobenzene	0.27 J	2.0	0.11	1	12/22/23 14:27	
1,2,4-Trichlorobenzene	0.14 J	2.0	0.096	1	12/22/23 14:27	
1,1,2-Trichloroethane	ND U	0.50	0.14	1	12/22/23 14:27	
1,1,1-Trichloroethane (TCA)	ND U	0.50	0.075	1	12/22/23 14:27	
Trichloroethene (TCE)	ND U	0.50	0.10	1	12/22/23 14:27	
Trichlorofluoromethane (CFC 11)	ND U	0.50	0.12	1	12/22/23 14:27	
1,2,3-Trichloropropane	ND U	0.50	0.20	1	12/22/23 14:27	
1,2,4-Trimethylbenzene	ND U	2.0	0.069	1	12/22/23 14:27	
1,3,5-Trimethylbenzene	ND U	2.0	0.089	1	12/22/23 14:27	
Vinyl Chloride	ND U	0.50	0.075	1	12/22/23 14:27	
o-Xylene	ND U	0.50	0.074	1	12/22/23 14:27	
m,p-Xylenes	ND U	0.50	0.11	1	12/22/23 14:27	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	89	68 - 117	12/22/23 14:27	
Dibromofluoromethane	111	73 - 122	12/22/23 14:27	
Toluene-d8	98	65 - 144	12/22/23 14:27	

ALS Group USA, Corp.
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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Water

Service Request: K2314281

SURROGATE RECOVERY SUMMARY
Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Extraction Method: None

Sample Name	Lab Code	4-Bromofluorobenzene	Dibromofluoromethane	Toluene-d8
		68 - 117	73 - 122	65 - 144
TA-01-W	K2314281-001	90	110	98
TA-02-W	K2314281-002	89	110	99
Lab Control Sample	KQ2322477-03	102	109	105
Duplicate Lab Control Sample	KQ2322477-04	104	111	105
Method Blank	KQ2322477-05	89	111	98

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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request:K2314281
Date Analyzed:12/22/23 10:52

Internal Standard Area and RT SUMMARY
Volatile Organic Compounds by GC/MS

File ID: J:\MS23\DATA\122223\1222F004.D\
Instrument ID: K-MS-23
Analysis Method: 8260C

Lab Code:KQ2322477-02
Analysis Lot:828027
Signal ID:1

	Chlorobenzene-d5		1,4-Dichlorobenzene-d4		Fluorobenzene	
	Area	RT	Area	RT	Area	RT
Result ==>	472,295	9.17	381,585	11.59	1,229,264	5.72
Upper Limit ==>	944,590	9.67	763,170	12.09	2,458,528	6.22
Lower Limit ==>	236,148	8.67	190,793	11.09	614,632	5.22

Associated Analyses

Lab Control Sample	KQ2322477-03	485155	9.18	388080	11.59	1222155	5.71
Duplicate Lab Control Sample	KQ2322477-04	491353	9.17	396709	11.59	1247832	5.72
Method Blank	KQ2322477-05	428384	9.17	317385	11.59	1075786	5.72
TA-01-W	K2314281-001	446704	9.17	332161	11.59	1105307	5.71
TA-02-W	K2314281-002	421971	9.18	314687	11.59	1039989	5.71

ALS Group USA, Corp.
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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Water

Service Request: K2314281
Date Analyzed: 12/22/23
Date Extracted: NA

Duplicate Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Units: ug/L
Basis: NA
Analysis Lot: 828027

Lab Control Sample
KQ2322477-03

Duplicate Lab Control Sample
KQ2322477-04

Analyte Name	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	9.09	10.0	91	9.49	10.0	95	66-124	4	30
1,1,1-Trichloroethane (TCA)	10.5	10.0	105	10.9	10.0	109	59-136	4	30
1,1,2,2-Tetrachloroethane	8.86	10.0	89	9.15	10.0	92	70-127	3	30
1,1,2-Trichloroethane	8.77	10.0	88	9.18	10.0	92	74-118	5	30
1,1-Dichloroethane	9.40	10.0	94	9.85	10.0	99	68-132	5	30
1,1-Dichloroethene	8.73	10.0	87	9.42	10.0	94	66-129	8	30
1,1-Dichloropropene	9.76	10.0	98	10.3	10.0	103	59-134	6	30
1,2,3-Trichlorobenzene	10.7	10.0	107	11.5	10.0	115	68-120	7	30
1,2,3-Trichloropropane	9.06	10.0	91	9.62	10.0	96	69-123	6	30
1,2,4-Trichlorobenzene	9.29	10.0	93	9.75	10.0	98	58-126	5	30
1,2,4-Trimethylbenzene	9.04	10.0	90	9.41	10.0	94	63-122	4	30
1,2-Dibromo-3-chloropropane	7.53	10.0	75	7.59	10.0	76	55-132	<1	30
1,2-Dibromoethane (EDB)	9.28	10.0	93	9.69	10.0	97	74-118	4	30
1,2-Dichlorobenzene	8.67	10.0	87	9.01	10.0	90	72-115	4	30
1,2-Dichloroethane (EDC)	10.3	10.0	103	10.4	10.0	104	56-142	<1	30
1,2-Dichloropropane	8.61	10.0	86	8.84	10.0	88	67-126	3	30
1,3,5-Trimethylbenzene	9.12	10.0	91	9.51	10.0	95	62-126	4	30
1,3-Dichlorobenzene	8.63	10.0	86	9.07	10.0	91	70-116	5	30
1,3-Dichloropropane	8.74	10.0	87	9.14	10.0	91	75-116	4	30
1,4-Dichlorobenzene	8.58	10.0	86	8.74	10.0	87	73-115	2	30
2,2-Dichloropropane	8.71	10.0	87	9.08	10.0	91	37-145	4	30
2-Butanone (MEK)	51.7	50.0	103	54.0	50.0	108	71-149	4	30
2-Chlorotoluene	8.60	10.0	86	8.83	10.0	88	55-131	3	30
2-Hexanone	48.8	50.0	98	52.7	50.0	105	59-131	8	30
4-Chlorotoluene	8.96	10.0	90	9.19	10.0	92	66-121	3	30
4-Isopropyltoluene	9.40	10.0	94	9.82	10.0	98	61-128	4	30
4-Methyl-2-pentanone (MIBK)	47.5	50.0	95	50.5	50.0	101	64-134	6	30
Acetone	62.1	50.0	124	66.7	50.0	133	68-135	7	30
Benzene	9.17	10.0	92	9.49	10.0	95	69-124	3	30
Bromobenzene	8.62	10.0	86	9.00	10.0	90	72-116	4	30
Bromochloromethane	9.82	10.0	98	10.1	10.0	101	75-131	3	30
Bromodichloromethane	9.74	10.0	97	9.93	10.0	99	63-129	2	30
Bromoform	8.75	10.0	88	9.13	10.0	91	52-144	4	30
Bromomethane	7.24	10.0	72	7.62	10.0	76	35-113	5	30
Carbon Disulfide	15.8	20.0	79	16.3	20.0	82	46-144	4	30
Carbon Tetrachloride	10.7	10.0	107	11.3	10.0	113	55-140	6	30
Chlorobenzene	9.11	10.0	91	9.35	10.0	94	72-116	3	30
Chloroethane	8.41	10.0	84	8.76	10.0	88	58-134	4	30
Chloroform	10.5	10.0	105	10.6	10.0	106	70-129	1	30
Chloromethane	6.94	10.0	69	7.21	10.0	72	34-130	4	30
cis-1,2-Dichloroethene	9.17	10.0	92	9.46	10.0	95	71-118	3	30

ALS Group USA, Corp.
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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Water

Service Request: K2314281
Date Analyzed: 12/22/23
Date Extracted: NA

Duplicate Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Units: ug/L
Basis: NA
Analysis Lot: 828027

Lab Control Sample KQ2322477-03				Duplicate Lab Control Sample KQ2322477-04					
Analyte Name	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
cis-1,3-Dichloropropene	7.64	10.0	76	7.91	10.0	79	62-132	3	30
Dibromochloromethane	8.26	10.0	83	8.47	10.0	85	67-126	3	30
Dibromomethane	10.0	10.0	100	10.4	10.0	104	69-128	4	30
Dichlorodifluoromethane	8.17	10.0	82	8.51	10.0	85	32-124	4	30
Ethylbenzene	9.10	10.0	91	9.55	10.0	96	67-121	5	30
Hexachlorobutadiene	9.99	10.0	100	10.3	10.0	103	57-119	3	30
Isopropylbenzene	8.88	10.0	89	9.35	10.0	94	67-129	5	30
m,p-Xylenes	18.5	20.0	93	19.4	20.0	97	69-121	5	30
Methylene Chloride	8.57	10.0	86	8.84	10.0	88	71-122	3	30
Naphthalene	8.37	10.0	84	9.11	10.0	91	64-126	8	30
n-Butylbenzene	9.25	10.0	93	9.75	10.0	98	55-130	5	30
n-Propylbenzene	9.01	10.0	90	9.40	10.0	94	61-124	4	30
o-Xylene	8.85	10.0	89	9.30	10.0	93	71-119	5	30
sec-Butylbenzene	9.93	10.0	99	10.4	10.0	104	59-128	4	30
Styrene	8.97	10.0	90	9.36	10.0	94	74-121	4	30
tert-Butylbenzene	9.08	10.0	91	9.56	10.0	96	61-127	5	30
Tetrachloroethene (PCE)	9.12	10.0	91	9.78	10.0	98	62-126	7	30
Toluene	9.18	10.0	92	9.56	10.0	96	69-124	4	30
trans-1,2-Dichloroethene	9.25	10.0	93	9.77	10.0	98	67-125	5	30
trans-1,3-Dichloropropene	7.27	10.0	73	7.56	10.0	76	59-125	4	30
Trichloroethene (TCE)	9.46	10.0	95	9.82	10.0	98	67-128	4	30
Trichlorofluoromethane (CFC 11)	11.5	10.0	115	11.9	10.0	119	52-141	4	30
Vinyl Chloride	8.30	10.0	83	8.69	10.0	87	55-123	5	30

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Water

Service Request: K2314281
Date Analyzed: 12/22/23 14:27
Date Extracted:

Method Blank Summary
Volatile Organic Compounds by GC/MS

Sample Name: Method Blank
Lab Code: KQ2322477-05
Analysis Method: 8260C
Prep Method: None

Instrument ID: K-MS-23
File ID: J:\MS23\DATA\122223\1222F009.D\
Analysis Lot: 828027

This Method Blank applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Lab Control Sample	KQ2322477-03	J:\MS23\DATA\122223\1222F005.D\	12/22/23 11:16
Duplicate Lab Control Sample	KQ2322477-04	J:\MS23\DATA\122223\1222F006.D\	12/22/23 11:40
TA-01-W	K2314281-001	J:\MS23\DATA\122223\1222F010.D\	12/22/23 15:04
TA-02-W	K2314281-002	J:\MS23\DATA\122223\1222F011.D\	12/22/23 15:28

ALS Group USA, Corp.

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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Water

Service Request: K2314281
Date Analyzed: 12/22/23 11:16
Date Extracted:

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Sample Name: Lab Control Sample **Instrument ID:** K-MS-23
Lab Code: KQ2322477-03 **File ID:** J:\MS23\DATA\122223\1222F005.D\
Analysis Method: 8260C **Analysis Lot:** 828027
Prep Method: None

This Lab Control Sample applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Duplicate Lab Control Sample	KQ2322477-04	J:\MS23\DATA\122223\1222F006.D\	12/22/23 11:40
Method Blank	KQ2322477-05	J:\MS23\DATA\122223\1222F009.D\	12/22/23 14:27
TA-01-W	K2314281-001	J:\MS23\DATA\122223\1222F010.D\	12/22/23 15:04
TA-02-W	K2314281-002	J:\MS23\DATA\122223\1222F011.D\	12/22/23 15:28

ALS Group USA, Corp.
dba ALS Environmental

QC/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request:K2314281
Date Analyzed:12/22/23 10:01

Tune Summary
Volatile Organic Compounds by GC/MS

File ID: J:\MS23\DATA\122223\1222F002.D\
Instrument ID: K-MS-23

Analytical Method: 8260C
Analysis Lot: 828027

Target Mass	Relative to Mass	Lower Limit %	Upper Limit %	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	18.5	14586	Pass
75	95	30	60	49.4	38872	Pass
95	95	100	100	100.0	78746	Pass
96	95	5	9	6.4	5076	Pass
173	174	0	2	0.6	369	Pass
174	95	50	120	78.5	61821	Pass
175	174	5	9	7.3	4535	Pass
176	174	95	101	97.6	60322	Pass
177	176	5	9	7.0	4193	Pass

Sample Name	Lab Code	File ID:	Date Analyzed:	Q
Continuing Calibration Verification	KQ2322477-02	J:\MS23\DATA\122223\1222F004.D\	12/22/23 10:52	
Lab Control Sample	KQ2322477-03	J:\MS23\DATA\122223\1222F005.D\	12/22/23 11:16	
Duplicate Lab Control Sample	KQ2322477-04	J:\MS23\DATA\122223\1222F006.D\	12/22/23 11:40	
Method Blank	KQ2322477-05	J:\MS23\DATA\122223\1222F009.D\	12/22/23 14:27	
TA-01-W	K2314281-001	J:\MS23\DATA\122223\1222F010.D\	12/22/23 15:04	
TA-02-W	K2314281-002	J:\MS23\DATA\122223\1222F011.D\	12/22/23 15:28	

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A

Service Request: K2314281
Calibration Date: 9/11/2023

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

Calibration ID: KC2300542
Instrument ID: K-MS-23

Signal ID: 1

#	Lab Code	Sample Name	File Location	Acquisition Date
01	KC2300542-01	ICAL 0.1	I:\MS23\DATA\091123\0908F011.D	09/11/2023 15:25
02	KC2300542-02	ICAL 0.2	I:\MS23\DATA\091123\0908F012.D	09/11/2023 15:49
03	KC2300542-03	ICAL 0.5	I:\MS23\DATA\091123\0908F013.D	09/11/2023 16:14
04	KC2300542-04	ICAL 1	I:\MS23\DATA\091123\0908F014.D	09/11/2023 16:38
05	KC2300542-05	ICAL 2	I:\MS23\DATA\091123\0908F015.D	09/11/2023 17:02
06	KC2300542-06	ICAL 5	I:\MS23\DATA\091123\0908F016.D	09/11/2023 17:27
07	KC2300542-07	ICAL 10	I:\MS23\DATA\091123\0908F017.D	09/11/2023 17:51
08	KC2300542-08	ICAL 20	I:\MS23\DATA\091123\0908F018.D	09/11/2023 18:16
09	KC2300542-09	ICAL 40	I:\MS23\DATA\091123\0908F019.D	09/11/2023 18:40
10	KC2300542-10	ICAL 80	I:\MS23\DATA\091123\0908F020.D	09/11/2023 19:04
13	KC2300542-13	ICAL 120	J:\MS23\DATA\091123\0908F021.D	09/11/2023 19:28

Analyte

1,1,1,2-Tetrachloroethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	0.500	0.4121	04	1.000	0.4038	05	2.000	0.4801	06	5.000	0.5301
07	10.000	0.5855	08	20.000	0.6505	09	40.000	0.6749	10	80.000	0.6564
13	120.000	0.6687									

1,1,1-Trichloroethane (TCA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	0.200	0.2953	03	0.500	0.3336	04	1.000	0.3456	05	2.000	0.3555
06	5.000	0.3961	07	10.000	0.4154	08	20.000	0.4213	09	40.000	0.4256
10	80.000	0.4602	13	120.000	0.4735						

1,1,2,2-Tetrachloroethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	0.200	0.5919	03	0.500	0.6138	04	1.000	0.5533	05	2.000	0.6253
06	5.000	0.6347	07	10.000	0.6992	08	20.000	0.7361	09	40.000	0.7275
10	80.000	0.6857	13	120.000	0.7156						

1,1,2-Trichloroethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.100	0.4983	02	0.200	0.5275	03	0.500	0.4926	04	1.000	0.4702
05	2.000	0.515	06	5.000	0.5122	07	10.000	0.523	08	20.000	0.5423
09	40.000	0.5383	10	80.000	0.5018	13	120.000	0.5113			

1,1-Dichloroethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.100	0.5627	02	0.200	0.5455	03	0.500	0.5537	04	1.000	0.5321
05	2.000	0.5739	06	5.000	0.5677	07	10.000	0.5864	08	20.000	0.5777
09	40.000	0.5655	10	80.000	0.5652	13	120.000	0.569			

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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A

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Calibration ID: KC2300542
Instrument ID: K-MS-23

Signal ID: 1

Analyte

1,1-Dichloroethene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	0.200	0.2809	03	0.500	0.2854	04	1.000	0.2951	05	2.000	0.3012
06	5.000	0.3081	07	10.000	0.3132	08	20.000	0.297	09	40.000	0.2883
10	80.000	0.3105	13	120.000	0.311						

1,1-Dichloropropene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	0.200	0.3917	03	0.500	0.4062	04	1.000	0.4219	05	2.000	0.4204
06	5.000	0.4432	07	10.000	0.4431	08	20.000	0.438	09	40.000	0.432
10	80.000	0.463	13	120.000	0.4762						

1,2,3-Trichlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	0.500	0.2096	04	1.000	0.1934	05	2.000	0.1973	06	5.000	0.2001
07	10.000	0.2209	08	20.000	0.2481	09	40.000	0.2448	10	80.000	0.2226
13	120.000	0.2537									

1,2,3-Trichloropropane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	0.500	0.1995	04	1.000	0.2044	05	2.000	0.2106	06	5.000	0.2069
07	10.000	0.2247	08	20.000	0.2345	09	40.000	0.2303	10	80.000	0.216
13	120.000	0.2223									

1,2,4-Trichlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	0.200	0.3718	03	0.500	0.4306	04	1.000	0.3664	05	2.000	0.4057
06	5.000	0.3891	07	10.000	0.4337	08	20.000	0.491	09	40.000	0.4805
10	80.000	0.4473	13	120.000	0.4806						

1,2,4-Trimethylbenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	0.500	2.347	04	1.000	2.372	05	2.000	2.596	06	5.000	2.695
07	10.000	2.889	08	20.000	3.025	09	40.000	2.948	10	80.000	2.812
13	120.000	2.775									

1,2-Dibromo-3-chloropropane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
04	1.000	0.03349	05	2.000	0.03329	06	5.000	0.03845	07	10.000	0.04277
08	20.000	0.05017	09	40.000	0.0552	10	80.000	0.0574			

1,2-Dibromoethane (EDB)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.100	0.4606	02	0.200	0.4483	03	0.500	0.4697	04	1.000	0.4594
05	2.000	0.4965	06	5.000	0.5217	07	10.000	0.5552	08	20.000	0.5802
09	40.000	0.5785	10	80.000	0.5444	13	120.000	0.5551			

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Signal ID: 1

Analyte

1,2-Dichlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.100	1.409	02	0.200	1.359	03	0.500	1.352	04	1.000	1.294
05	2.000	1.319	06	5.000	1.297	07	10.000	1.366	08	20.000	1.447
09	40.000	1.401	10	80.000	1.311	13	120.000	1.36			

1,2-Dichloroethane (EDC)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	0.200	0.4079	03	0.500	0.4088	04	1.000	0.3575	05	2.000	0.385
06	5.000	0.3679	07	10.000	0.384	08	20.000	0.3923	09	40.000	0.3819
10	80.000	0.356	13	120.000	0.3694						

1,2-Dichloropropane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.100	0.3421	02	0.200	0.3392	03	0.500	0.3016	04	1.000	0.2964
05	2.000	0.3247	06	5.000	0.3257	07	10.000	0.3482	08	20.000	0.3576
09	40.000	0.3502	10	80.000	0.337	13	120.000	0.3467			

1,3,5-Trimethylbenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.100	2.155	02	0.200	2.066	03	0.500	2.348	04	1.000	2.396
05	2.000	2.586	06	5.000	2.695	07	10.000	2.818	08	20.000	2.953
09	40.000	2.902	10	80.000	2.811	13	120.000	2.775			

1,3-Dichlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.100	1.638	02	0.200	1.427	03	0.500	1.538	04	1.000	1.431
05	2.000	1.511	06	5.000	1.489	07	10.000	1.551	08	20.000	1.625
09	40.000	1.587	10	80.000	1.503	13	120.000	1.529			

1,3-Dichloropropane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.100	1.139	02	0.200	1.099	03	0.500	1.087	04	1.000	1.056
05	2.000	1.118	06	5.000	1.083	07	10.000	1.161	08	20.000	1.18
09	40.000	1.168	10	80.000	1.085	13	120.000	1.101			

1,4-Dichlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.100	1.736	02	0.200	1.728	03	0.500	1.673	04	1.000	1.577
05	2.000	1.602	06	5.000	1.521	07	10.000	1.593	08	20.000	1.688
09	40.000	1.631	10	80.000	1.533	13	120.000	1.571			

2,2-Dichloropropane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	0.500	0.296	04	1.000	0.2875	05	2.000	0.3123	06	5.000	0.3306
07	10.000	0.3612	08	20.000	0.3847	09	40.000	0.4042	10	80.000	0.4479

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QA/QC Report

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Analyte

2-Butanone (MEK)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.000	0.01524	02	4.000	0.01514	03	10.000	0.0172	04	20.000	0.01547
05	40.000	0.01713	06	100.000	0.01703	07	200.000	0.01857	08	400.000	0.01896
09	800.000	0.01994	10	1600.000	0.01851	13	2400.000	0.01919			

2-Chlorotoluene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.100	2.637	02	0.200	2.446	03	0.500	2.548	04	1.000	2.521
05	2.000	2.552	06	5.000	2.523	07	10.000	2.622	08	20.000	2.701
09	40.000	2.64	10	80.000	2.545	13	120.000	2.531			

2-Hexanone

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	4.000	0.04349	03	10.000	0.03908	04	20.000	0.03917	05	40.000	0.04654
06	100.000	0.04919	07	200.000	0.05403	08	400.000	0.05666	09	800.000	0.05777
10	1600.000	0.05234	13	2400.000	0.05166						

4-Bromofluorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
04	10.000	0.7989	05	10.000	0.8034	06	10.000	0.8258	07	10.000	0.8111
08	10.000	0.8113	09	10.000	0.8257	10	10.000	0.8114	13	10.000	0.8128

4-Chlorotoluene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.100	2.708	02	0.200	2.769	03	0.500	2.897	04	1.000	2.843
05	2.000	2.967	06	5.000	2.96	07	10.000	3.083	08	20.000	3.177
09	40.000	3.099	10	80.000	2.969	13	120.000	2.959			

4-Isopropyltoluene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	0.500	1.873	04	1.000	2.04	05	2.000	2.258	06	5.000	2.37
07	10.000	2.518	08	20.000	2.674	09	40.000	2.628	10	80.000	2.54
13	120.000	2.54									

4-Methyl-2-pentanone (MIBK)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	4.000	0.06801	03	10.000	0.05478	04	20.000	0.05164	05	40.000	0.05687
06	100.000	0.05754	07	200.000	0.0638	08	400.000	0.06573	09	800.000	0.06568
10	1600.000	0.0578	13	2400.000	0.05625						

Acetone

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	10.000	0.04068	04	20.000	0.03837	05	40.000	0.04068	06	100.000	0.03766
07	200.000	0.04033	08	400.000	0.04112	09	800.000	0.04064	10	1600.000	0.03713
13	2400.000	0.03835									

ALS Group USA, Corp.
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Analyte

Benzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.100	1.445	02	0.200	1.388	03	0.500	1.395	04	1.000	1.344
05	2.000	1.385	06	5.000	1.383	07	10.000	1.435	08	20.000	1.424
09	40.000	1.386	10	80.000	1.347	13	120.000	1.336			

Bromobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.100	0.9094	02	0.200	0.9118	03	0.500	0.9502	04	1.000	0.924
05	2.000	0.9552	06	5.000	0.9449	07	10.000	0.9831	08	20.000	1.047
09	40.000	1.023	10	80.000	0.9696	13	120.000	0.9859			

Bromochloromethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.100	0.1048	02	0.200	0.1296	03	0.500	0.1297	04	1.000	0.1316
05	2.000	0.1418	06	5.000	0.1432	07	10.000	0.151	08	20.000	0.1541
09	40.000	0.1487	10	80.000	0.1371	13	120.000	0.1356			

Bromodichloromethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	0.200	0.2448	03	0.500	0.2527	04	1.000	0.2494	05	2.000	0.2676
06	5.000	0.2961	07	10.000	0.3284	08	20.000	0.3663	09	40.000	0.3743
10	80.000	0.3689	13	120.000	0.3873						

Bromoform

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	0.200	0.1059	03	0.500	0.1491	04	1.000	0.1235	05	2.000	0.1391
06	5.000	0.1656	07	10.000	0.2003	08	20.000	0.2385	09	40.000	0.2677

Bromomethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	0.500	0.1455	04	1.000	0.1373	05	2.000	0.1391	06	5.000	0.1484
07	10.000	0.1435	08	20.000	0.1463	09	40.000	0.1455	10	80.000	0.1377
13	120.000	0.1358									

Carbon Disulfide

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	0.500	0.9019	04	1.000	0.776	05	2.000	0.7577	06	5.000	0.7619
07	10.000	0.7563	08	20.000	0.7514	09	40.000	0.7411	10	80.000	0.7848
13	120.000	0.7985									

Carbon Tetrachloride

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	0.500	0.233	04	1.000	0.2366	05	2.000	0.2592	06	5.000	0.2873
07	10.000	0.3032	08	20.000	0.3164	09	40.000	0.3262	10	80.000	0.3717

Chlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.100	2.275	02	0.200	2.21	03	0.500	2.165	04	1.000	2.129

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Chlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
05	2.000	2.16	06	5.000	2.129	07	10.000	2.173	08	20.000	2.196
09	40.000	2.147	10	80.000	2.032	13	120.000	1.996			

Chloroethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	0.200	0.2876	03	0.500	0.2383	04	1.000	0.2187	05	2.000	0.2405
06	5.000	0.2281	07	10.000	0.2254	08	20.000	0.2126	09	40.000	0.2024
10	80.000	0.1977	13	120.000	0.1872						

Chloroform

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.100	0.4543	02	0.200	0.4416	03	0.500	0.4872	04	1.000	0.489
05	2.000	0.5191	06	5.000	0.5115	07	10.000	0.5333	08	20.000	0.5369
09	40.000	0.5286	10	80.000	0.5151	13	120.000	0.5265			

Chloromethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	0.200	0.3657	03	0.500	0.3551	04	1.000	0.3373	05	2.000	0.3589
06	5.000	0.355	07	10.000	0.3455	08	20.000	0.337	09	40.000	0.3284
10	80.000	0.3339	13	120.000	0.3436						

Dibromochloromethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	0.500	0.3189	04	1.000	0.306	05	2.000	0.3665	06	5.000	0.4253
07	10.000	0.495	08	20.000	0.5709	09	40.000	0.6044	10	80.000	0.5952
13	120.000	0.6193									

Dibromofluoromethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
04	10.000	0.1961	05	10.000	0.1976	06	10.000	0.2025	07	10.000	0.2042
08	10.000	0.2073	09	10.000	0.2088	10	10.000	0.2052	13	10.000	0.2101

Dibromomethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.100	0.09336	02	0.200	0.1273	03	0.500	0.1355	04	1.000	0.1267
05	2.000	0.14	06	5.000	0.143	07	10.000	0.1525	08	20.000	0.1588
09	40.000	0.1567	10	80.000	0.1478	13	120.000	0.1549			

Dichlorodifluoromethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.100	0.3648	02	0.200	0.3451	03	0.500	0.3688	04	1.000	0.3543
05	2.000	0.3932	06	5.000	0.3941	07	10.000	0.3682	08	20.000	0.3448
09	40.000	0.3266	10	80.000	0.3591	13	120.000	0.3576			

Ethylbenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.100	0.9727	02	0.200	0.9814	03	0.500	1.051	04	1.000	1.036

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Analyte

Ethylbenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
05	2.000	1.079	06	5.000	1.12	07	10.000	1.125	08	20.000	1.131
09	40.000	1.115	10	80.000	1.106						

Hexachlorobutadiene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	0.500	0.2558	04	1.000	0.2338	05	2.000	0.2565	06	5.000	0.2318
07	10.000	0.261	08	20.000	0.2929	09	40.000	0.2917	10	80.000	0.2783
13	120.000	0.2914									

Isopropylbenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.100	2.215	02	0.200	2.147	03	0.500	2.4	04	1.000	2.574
05	2.000	2.688	06	5.000	2.777	07	10.000	2.862	08	20.000	2.87
09	40.000	2.842	10	80.000	2.773						

Methylene Chloride

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	0.500	0.5018	04	1.000	0.3916	05	2.000	0.388	06	5.000	0.3548
07	10.000	0.3517	08	20.000	0.3542	09	40.000	0.3406	10	80.000	0.3229
13	120.000	0.3319									

Naphthalene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
05	2.000	0.4736	06	5.000	0.5134	07	10.000	0.6058	08	20.000	0.7343
09	40.000	0.7635	10	80.000	0.7212						

Styrene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	0.500	0.7469	04	1.000	0.8393	05	2.000	0.8653	06	5.000	0.9784
07	10.000	1.029	08	20.000	1.084	09	40.000	1.075	10	80.000	1.005
13	120.000	1.037									

Tetrachloroethene (PCE)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.100	0.6478	02	0.200	0.5252	03	0.500	0.6223	04	1.000	0.5998
05	2.000	0.611	06	5.000	0.6155	07	10.000	0.5966	08	20.000	0.59
09	40.000	0.5881	10	80.000	0.6116	13	120.000	0.6167			

Toluene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.100	0.8776	02	0.200	0.8558	03	0.500	0.8367	04	1.000	0.8035
05	2.000	0.8305	06	5.000	0.8409	07	10.000	0.8596	08	20.000	0.8599
09	40.000	0.8361	10	80.000	0.8191	13	120.000	0.8205			

Toluene-d8

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
04	10.000	0.9289	05	10.000	0.9335	06	10.000	0.9582	07	10.000	0.9527

ALS Group USA, Corp.
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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A

Service Request: K2314281
Calibration Date: 9/11/2023

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

Calibration ID: KC2300542
Instrument ID: K-MS-23

Signal ID: 1

Analyte

Toluene-d8											
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
08	10.000	0.9636	09	10.000	0.9639	10	10.000	0.9627	13	10.000	0.9658
Trichloroethene (TCE)											
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.100	0.3433	02	0.200	0.3199	03	0.500	0.3038	04	1.000	0.2998
05	2.000	0.3069	06	5.000	0.3163	07	10.000	0.3206	08	20.000	0.327
09	40.000	0.3219	10	80.000	0.3302	13	120.000	0.3379			
Trichlorofluoromethane (CFC 11)											
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.100	0.4526	02	0.200	0.444	03	0.500	0.4576	04	1.000	0.4571
05	2.000	0.4679	06	5.000	0.474	07	10.000	0.4619	08	20.000	0.4404
09	40.000	0.4188	10	80.000	0.4445	13	120.000	0.4385			
Vinyl Chloride											
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.100	0.3202	02	0.200	0.3683	03	0.500	0.3682	04	1.000	0.347
05	2.000	0.3618	06	5.000	0.3733	07	10.000	0.3546	08	20.000	0.3432
09	40.000	0.3304	10	80.000	0.3547	13	120.000	0.3576			
cis-1,2-Dichloroethene											
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.100	0.3595	02	0.200	0.3477	03	0.500	0.3485	04	1.000	0.3348
05	2.000	0.3602	06	5.000	0.3507	07	10.000	0.3721	08	20.000	0.3744
09	40.000	0.3648	10	80.000	0.3612	13	120.000	0.3685			
cis-1,3-Dichloropropene											
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	0.500	0.2763	04	1.000	0.2713	05	2.000	0.3279	06	5.000	0.3806
07	10.000	0.455	08	20.000	0.5019	09	40.000	0.5173	10	80.000	0.4975
13	120.000	0.5157									
m,p-Xylenes											
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.200	1.244	02	0.400	1.206	03	1.000	1.272	04	2.000	1.287
05	4.000	1.339	06	10.000	1.34	07	20.000	1.361	08	40.000	1.355
09	80.000	1.329	10	160.000	1.272						
n-Butylbenzene											
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.100	1.33	02	0.200	1.4	03	0.500	1.457	04	1.000	1.501
05	2.000	1.724	06	5.000	1.792	07	10.000	1.961	08	20.000	2.169
09	40.000	2.138	10	80.000	2.081	13	120.000	2.127			
n-Propylbenzene											
#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.100	3.378	02	0.200	3.367	03	0.500	3.449	04	1.000	3.56

ALS Group USA, Corp.
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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A

Service Request: K2314281
Calibration Date: 9/11/2023

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

Calibration ID: KC2300542
Instrument ID: K-MS-23

Signal ID: 1

Analyte

n-Propylbenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
05	2.000	3.78	06	5.000	3.893	07	10.000	4.017	08	20.000	4.115
09	40.000	4.029	10	80.000	3.918						

o-Xylene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.100	1.126	02	0.200	1.142	03	0.500	1.228	04	1.000	1.18
05	2.000	1.228	06	5.000	1.275	07	10.000	1.309	08	20.000	1.342
09	40.000	1.329	10	80.000	1.28	13	120.000	1.271			

sec-Butylbenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.100	1.994	02	0.200	2.131	03	0.500	2.265	04	1.000	2.509
05	2.000	2.672	06	5.000	2.743	07	10.000	2.834	08	20.000	3.003
09	40.000	2.94	10	80.000	2.868	13	120.000	2.841			

tert-Butylbenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.100	1.754	02	0.200	1.771	03	0.500	1.896	04	1.000	2.077
05	2.000	2.13	06	5.000	2.168	07	10.000	2.242	08	20.000	2.342
09	40.000	2.318	10	80.000	2.275	13	120.000	2.272			

trans-1,2-Dichloroethene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.100	0.2995	02	0.200	0.3056	03	0.500	0.3149	04	1.000	0.3221
05	2.000	0.3275	06	5.000	0.3315	07	10.000	0.337	08	20.000	0.3282
09	40.000	0.3251	10	80.000	0.3323	13	120.000	0.3345			

trans-1,3-Dichloropropene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	0.500	0.5099	04	1.000	0.4953	05	2.000	0.5771	06	5.000	0.7029
07	10.000	0.8538	08	20.000	0.9744	09	40.000	1.048	10	80.000	1.022

ALS Group USA, Corp.
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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A

Service Request: K2314281
Calibration Date: 9/11/2023

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

Calibration ID: KC2300542
Instrument ID: K-MS-23

Signal ID: 1

Analyte Name	Compound Type	Calibration Evaluation				Calibration Evaluation	
		Fit Type	Eval	Eval Result	Control Criteria	Average RRF	Minimum RRF
1,1,1,2-Tetrachloroethane	TRG	Average RF	% RSD	19.5	≤20	0.5625	0.01
1,1,1-Trichloroethane (TCA)	TRG	Average RF	% RSD	14.7	≤20	0.3922	0.100
1,1,2,2-Tetrachloroethane	TRG	Average RF	% RSD	9.6	≤20	0.6583	0.300
1,1,2-Trichloroethane	TRG	Average RF	% RSD	4.1	≤20	0.5121	0.100
1,1-Dichloroethane	TRG	Average RF	% RSD	2.7	≤20	0.5636	0.200
1,1-Dichloroethene	TRG	Average RF	% RSD	3.9	≤20	0.2991	0.100
1,1-Dichloropropene	TRG	Average RF	% RSD	5.8	≤20	0.4336	0.01
1,2,3-Trichlorobenzene	TRG	Average RF	% RSD	10.4	≤20	0.2212	0.01
1,2,3-Trichloropropane	TRG	Average RF	% RSD	5.6	≤20	0.2166	0.01
1,2,4-Trichlorobenzene	TRG	Average RF	% RSD	10.7	≤20	0.4297	0.200
1,2,4-Trimethylbenzene	TRG	Average RF	% RSD	8.8	≤20	2.718	0.01
1,2-Dibromo-3-chloropropane	TRG	Linear	R2	0.9947	≥0.990	0.04439	0.025
1,2-Dibromoethane (EDB)	TRG	Average RF	% RSD	9.8	≤20	0.5154	0.100
1,2-Dichlorobenzene	TRG	Average RF	% RSD	3.6	≤20	1.356	0.400
1,2-Dichloroethane (EDC)	TRG	Average RF	% RSD	4.9	≤20	0.3811	0.100
1,2-Dichloropropane	TRG	Average RF	% RSD	5.9	≤20	0.3336	0.100
1,3,5-Trimethylbenzene	TRG	Average RF	% RSD	11.8	≤20	2.591	0.01
1,3-Dichlorobenzene	TRG	Average RF	% RSD	4.5	≤20	1.53	0.600
1,3-Dichloropropane	TRG	Average RF	% RSD	3.6	≤20	1.116	0.01
1,4-Dichlorobenzene	TRG	Average RF	% RSD	4.6	≤20	1.623	0.500
2,2-Dichloropropane	TRG	Average RF	% RSD	16.0	≤20	0.353	0.01
2-Butanone (MEK)	TRG	Average RF	% RSD	9.6	≤20	0.01749	0.010
2-Chlorotoluene	TRG	Average RF	% RSD	2.8	≤20	2.57	0.01
2-Hexanone	TRG	Average RF	% RSD	13.8	≤20	0.04899	0.015
4-Bromofluorobenzene	SURR	Average RF	% RSD	1.2	≤20	0.8126	0.01
4-Chlorotoluene	TRG	Average RF	% RSD	4.8	≤20	2.948	0.01
4-Isopropyltoluene	TRG	Average RF	% RSD	11.6	≤20	2.383	0.01
4-Methyl-2-pentanone (MIBK)	TRG	Average RF	% RSD	9.2	≤20	0.05981	0.010
Acetone	TRG	Average RF	% RSD	3.9	≤20	0.03944	0.010
Benzene	TRG	Average RF	% RSD	2.6	≤20	1.388	0.500
Bromobenzene	TRG	Average RF	% RSD	4.6	≤20	0.9641	0.01
Bromochloromethane	TRG	Average RF	% RSD	10.0	≤20	0.137	0.01
Bromodichloromethane	TRG	Average RF	% RSD	18.5	≤20	0.3136	0.200
Bromoform	TRG	Quadratic	COD	0.9986	≥0.990	0.1737	0.100

ALS Group USA, Corp.
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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A

Service Request: K2314281
Calibration Date: 9/11/2023

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

Calibration ID: KC2300542
Instrument ID: K-MS-23

Signal ID: 1

Analyte Name	Compound Type	Calibration Evaluation				Calibration Evaluation	
		Fit Type	Eval	Eval Result	Control Criteria	Average RRF	Minimum RRF
Bromomethane	TRG	Average RF	% RSD	3.3	≤20	0.1421	0.100
Carbon Disulfide	TRG	Average RF	% RSD	6.2	≤20	0.781	0.100
Carbon Tetrachloride	TRG	Average RF	% RSD	16.3	≤20	0.2917	0.100
Chlorobenzene	TRG	Average RF	% RSD	3.6	≤20	2.147	0.500
Chloroethane	TRG	Average RF	% RSD	12.6	≤20	0.2238	0.100
Chloroform	TRG	Average RF	% RSD	6.4	≤20	0.5039	0.200
Chloromethane	TRG	Average RF	% RSD	3.5	≤20	0.346	0.100
Dibromochloromethane	TRG	Quadratic	COD	0.9996	≥0.990	0.4779	0.100
Dibromofluoromethane	SURR	Average RF	% RSD	2.5	≤20	0.204	0.01
Dibromomethane	TRG	Average RF	% RSD	13.6	≤20	0.1397	0.01
Dichlorodifluoromethane	TRG	Average RF	% RSD	5.5	≤20	0.3615	0.100
Ethylbenzene	TRG	Average RF	% RSD	5.5	≤20	1.072	0.100
Hexachlorobutadiene	TRG	Average RF	% RSD	9.0	≤20	0.2659	0.01
Isopropylbenzene	TRG	Average RF	% RSD	10.4	≤20	2.615	0.100
Methylene Chloride	TRG	Average RF	% RSD	14.6	≤20	0.3708	0.100
Naphthalene	TRG	Average RF	% RSD	19.3	≤20	0.6353	0.01
Styrene	TRG	Average RF	% RSD	12.2	≤20	0.9622	0.300
Tetrachloroethene (PCE)	TRG	Average RF	% RSD	5.1	≤20	0.6022	0.200
Toluene	TRG	Average RF	% RSD	2.6	≤20	0.84	0.400
Toluene-d8	SURR	Average RF	% RSD	1.5	≤20	0.9536	0.01
Trichloroethene (TCE)	TRG	Average RF	% RSD	4.3	≤20	0.3207	0.200
Trichlorofluoromethane (CFC 11)	TRG	Average RF	% RSD	3.4	≤20	0.4507	0.100
Vinyl Chloride	TRG	Average RF	% RSD	4.7	≤20	0.3527	0.100
cis-1,2-Dichloroethene	TRG	Average RF	% RSD	3.3	≤20	0.3584	0.100
cis-1,3-Dichloropropene	TRG	Linear	R2	0.9985	≥0.990	0.4159	0.200
m,p-Xylenes	TRG	Average RF	% RSD	4.0	≤20	1.3	0.100
n-Butylbenzene	TRG	Average RF	% RSD	18.1	≤20	1.789	0.01
n-Propylbenzene	TRG	Average RF	% RSD	7.7	≤20	3.751	0.01
o-Xylene	TRG	Average RF	% RSD	5.8	≤20	1.246	0.300
sec-Butylbenzene	TRG	Average RF	% RSD	13.2	≤20	2.618	0.01
tert-Butylbenzene	TRG	Average RF	% RSD	10.1	≤20	2.113	0.01
trans-1,2-Dichloroethene	TRG	Average RF	% RSD	3.7	≤20	0.3235	0.100
trans-1,3-Dichloropropene	TRG	Quadratic	COD	0.9982	≥0.990	0.7729	0.100

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A

Service Request: K2314281
Calibration Date: 9/11/2023

Initial Calibration Verification Summary
Volatile Organic Compounds by GC/MS

Calibration ID: KC2300542
Instrument ID: K-MS-23

Signal ID: 1

#	Lab Code	Sample Name	File Location	Acquisition Date
11	KC2300542-11	ICV	J:\MS23\DATA\091123\0908F028.D	09/12/2023 11:43
12	KC2300542-12	ICV CLP	J:\MS23\DATA\091123\0908F029.D	09/12/2023 13:23

Analyte Name	Expected	Result	Average RF	SSV RF	% D	Criteria	Curve Fit
Acetone	50.0	51.3	3.944E-2	4.045E-2	2.57	±30	Average RF
Benzene	10.0	9.39	1.388E0	1.303E0	-6.138	±30	Average RF
Bromobenzene	10.0	9.70	9.641E-1	9.356E-1	-2.955	±30	Average RF
Bromochloromethane	10.0	9.88	1.37E-1	1.354E-1	-1.152	±30	Average RF
Bromodichloromethane	10.0	9.43	3.136E-1	2.958E-1	-5.655	±30	Average RF
Bromoform	10.0	8.87	1.737E-1	1.74E-1	-11.307	±30	Quadratic
Bromomethane	10.0	10.2	1.421E-1	1.449E-1	1.93	±30	Average RF
2-Butanone (MEK)	50.0	50.6	1.749E-2	1.771E-2	1.28	±30	Average RF
n-Butylbenzene	10.0	10.6	1.789E0	1.888E0	5.52	±30	Average RF
sec-Butylbenzene	10.0	10.9	2.618E0	2.86E0	9.25	±30	Average RF
tert-Butylbenzene	10.0	10.1	2.113E0	2.138E0	1.20	±30	Average RF
Carbon Disulfide	20.0	16.8	7.81E-1	6.558E-1	-16.037	±30	Average RF
Carbon Tetrachloride	10.0	9.32	2.917E-1	2.72E-1	-6.763	±30	Average RF
Chlorobenzene	10.0	9.48	2.147E0	2.035E0	-5.192	±30	Average RF
Chloroethane	10.0	8.76	2.238E-1	1.961E-1	-12.387	±30	Average RF
Chloroform	10.0	9.84	5.039E-1	4.959E-1	-1.599	±30	Average RF
Chloromethane	10.0	8.79	3.46E-1	3.042E-1	-12.079	±30	Average RF
2-Chlorotoluene	10.0	9.59	2.57E0	2.464E0	-4.125	±30	Average RF
4-Chlorotoluene	10.0	9.78	2.948E0	2.884E0	-2.176	±30	Average RF
1,2-Dibromo-3-chloropropane	10.0	7.21	4.439E-2	3.603E-2	-27.865	±30	Linear
Dibromochloromethane	10.0	8.24	4.779E-1	4.41E-1	-17.627	±30	Quadratic
1,2-Dibromoethane (EDB)	10.0	9.94	5.154E-1	5.121E-1	-0.645	±30	Average RF
Dibromomethane	10.0	9.98	1.397E-1	1.393E-1	-0.246	±30	Average RF
1,2-Dichlorobenzene	10.0	9.46	1.356E0	1.282E0	-5.429	±30	Average RF
1,3-Dichlorobenzene	10.0	9.47	1.53E0	1.449E0	-5.314	±30	Average RF
1,4-Dichlorobenzene	10.0	9.40	1.623E0	1.525E0	-6.031	±30	Average RF
Dichlorodifluoromethane	10.0	7.32	3.615E-1	2.646E-1	-26.805	±30	Average RF
1,1-Dichloroethane	10.0	9.38	5.636E-1	5.288E-1	-6.174	±30	Average RF
1,2-Dichloroethane (EDC)	10.0	9.38	3.811E-1	3.573E-1	-6.233	±30	Average RF
1,1-Dichloroethene	10.0	8.99	2.991E-1	2.689E-1	-10.088	±30	Average RF
cis-1,2-Dichloroethene	10.0	9.46	3.584E-1	3.39E-1	-5.410	±30	Average RF
trans-1,2-Dichloroethene	10.0	9.41	3.235E-1	3.044E-1	-5.891	±30	Average RF

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A

Service Request: K2314281
Calibration Date: 9/11/2023

Initial Calibration Verification Summary
Volatile Organic Compounds by GC/MS

Calibration ID: KC2300542
Instrument ID: K-MS-23

Signal ID: 1

Analyte Name	Expected	Result	Average RF	SSV RF	% D	Criteria	Curve Fit
1,2-Dichloropropane	10.0	9.38	3.336E-1	3.13E-1	-6.163	±30	Average RF
1,3-Dichloropropane	10.0	9.63	1.116E0	1.074E0	-3.748	±30	Average RF
2,2-Dichloropropane	10.0	9.99	3.53E-1	3.528E-1	-0.055	±30	Average RF
1,1-Dichloropropene	10.0	9.71	4.336E-1	4.208E-1	-2.940	±30	Average RF
cis-1,3-Dichloropropene	10.0	8.49	4.159E-1	4.107E-1	-15.145	±30	Linear
trans-1,3-Dichloropropene	10.0	8.76	7.729E-1	7.998E-1	-12.397	±30	Quadratic
Ethylbenzene	10.0	9.78	1.072E0	1.048E0	-2.215	±30	Average RF
Hexachlorobutadiene	10.0	9.36	2.659E-1	2.489E-1	-6.412	±30	Average RF
2-Hexanone	50.0	53.6	4.899E-2	5.255E-2	7.26	±30	Average RF
Isopropylbenzene	10.0	10.2	2.615E0	2.675E0	2.29	±30	Average RF
4-Isopropyltoluene	10.0	10.3	2.383E0	2.444E0	2.59	±30	Average RF
4-Methyl-2-pentanone (MIBK)	50.0	52.0	5.981E-2	6.214E-2	3.90	±30	Average RF
Methylene Chloride	10.0	8.69	3.708E-1	3.223E-1	-13.091	±30	Average RF
Naphthalene	10.0	8.19	6.353E-1	5.205E-1	-18.072	±30	Average RF
n-Propylbenzene	10.0	10.2	3.751E0	3.82E0	1.85	±30	Average RF
Styrene	10.0	10.1	9.622E-1	9.681E-1	0.619	±30	Average RF
1,1,1,2-Tetrachloroethane	10.0	9.53	5.625E-1	5.358E-1	-4.736	±30	Average RF
1,1,2,2-Tetrachloroethane	10.0	9.79	6.583E-1	6.448E-1	-2.056	±30	Average RF
Tetrachloroethene (PCE)	10.0	9.23	6.022E-1	5.558E-1	-7.718	±30	Average RF
Toluene	10.0	9.18	8.4E-1	7.714E-1	-8.169	±30	Average RF
1,2,3-Trichlorobenzene	10.0	8.61	2.212E-1	1.903E-1	-13.939	±30	Average RF
1,2,4-Trichlorobenzene	10.0	9.20	4.297E-1	3.952E-1	-8.015	±30	Average RF
1,1,2-Trichloroethane	10.0	9.42	5.121E-1	4.825E-1	-5.766	±30	Average RF
1,1,1-Trichloroethane (TCA)	10.0	9.74	3.922E-1	3.82E-1	-2.590	±30	Average RF
Trichloroethene (TCE)	10.0	9.27	3.207E-1	2.974E-1	-7.262	±30	Average RF
Trichlorofluoromethane (CFC 11)	10.0	9.65	4.507E-1	4.349E-1	-3.499	±30	Average RF
1,2,3-Trichloropropane	10.0	9.40	2.166E-1	2.035E-1	-6.031	±30	Average RF
1,2,4-Trimethylbenzene	10.0	9.87	2.718E0	2.684E0	-1.253	±30	Average RF
1,3,5-Trimethylbenzene	10.0	10.1	2.591E0	2.629E0	1.45	±30	Average RF
Vinyl Chloride	10.0	9.38	3.527E-1	3.307E-1	-6.225	±30	Average RF
o-Xylene	10.0	9.69	1.246E0	1.208E0	-3.066	±30	Average RF
m,p-Xylenes	20.0	19.4	1.3E0	1.259E0	-3.194	±30	Average RF

ALS Group USA, Corp.
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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A

Service Request: K2314281
Calibration Date: 9/11/2023

Initial Calibration Verification Summary
Volatile Organic Compounds by GC/MS

Calibration ID: KC2300542
Instrument ID: K-MS-23

Signal ID: 1

Analyte Name	Expected	Result	Average RF	SSV RF	% D	Criteria	Curve Fit
4-Bromofluorobenzene	10.0	10.0	8.126E-1	8.153E-1	0.340	±30	Average RF
Dibromofluoromethane	10.0	9.84	2.04E-1	2.008E-1	-1.564	±30	Average RF
Toluene-d8	10.0	9.90	9.536E-1	9.438E-1	-1.037	±30	Average RF

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request: K2314281
Date Analyzed: 12/22/23 10:52

Continuing Calibration Verification (CCV) Summary
Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
File ID: J:\MS23\DATA\122223\1222F004.D\
Signal ID: 1

Calibration Date: 9/11/2023
Calibration ID: KC2300542
Analysis Lot: 828027
Units: ppb

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
Acetone	100	101	0.0394	0.0397	0.6	NA	±20	Average RF
Benzene	10.0	9.82	1.3879	1.3625	-1.8	NA	±20	Average RF
Bromobenzene	10.0	9.22	0.9641	0.8893	-7.8	NA	±20	Average RF
Bromochloromethane	10.0	10.9	0.137	0.1487	8.5	NA	±20	Average RF
Bromodichloromethane	10.0	10.5	0.3136	0.3298	5.2	NA	±20	Average RF
Bromoform	10.0	9.89	0.1737	0.1966	NA	-1.1	±20	Quadratic
Bromomethane	10.0	6.81	0.1421	0.0968	-31.9*	NA	±20	Average RF
2-Butanone (MEK)	100	84.9	0.0175	0.0149	-15.1	NA	±20	Average RF
n-Butylbenzene	10.0	10.7	1.789	1.905	6.5	NA	±20	Average RF
sec-Butylbenzene	10.0	11.1	2.6181	2.8969	10.6	NA	±20	Average RF
tert-Butylbenzene	10.0	10.1	2.1132	2.1238	0.5	NA	±20	Average RF
Carbon Disulfide	10.0	10.3	0.781	0.8047	3.0	NA	±20	Average RF
Carbon Tetrachloride	10.0	12.4	0.2917	0.3611	23.8*	NA	±20	Average RF
Chlorobenzene	10.0	9.81	2.1466	2.1058	-1.9	NA	±20	Average RF
Chloroethane	10.0	8.73	0.2238	0.1955	-12.7	NA	±20	Average RF
Chloroform	10.0	11.1	0.5039	0.5595	11.0	NA	±20	Average RF
Chloromethane	10.0	6.71	0.346	0.2321	-32.9*	NA	±20	Average RF
2-Chlorotoluene	10.0	9.37	2.5697	2.4069	-6.3	NA	±20	Average RF
4-Chlorotoluene	10.0	9.76	2.9482	2.8764	-2.4	NA	±20	Average RF
1,2-Dibromo-3-chloropropane	10.0	7.96	0.0444	0.0402	NA	-20.4	±20	Linear
Dibromochloromethane	10.0	9.36	0.4779	0.5046	NA	-6.4	±20	Quadratic
1,2-Dibromoethane (EDB)	10.0	9.98	0.5154	0.5145	-0.2	NA	±20	Average RF
Dibromomethane	10.0	10.5	0.1397	0.1472	5.4	NA	±20	Average RF
1,2-Dichlorobenzene	10.0	9.27	1.3558	1.2564	-7.3	NA	±20	Average RF
1,3-Dichlorobenzene	10.0	9.31	1.53	1.4237	-6.9	NA	±20	Average RF
1,4-Dichlorobenzene	10.0	9.04	1.623	1.4668	-9.6	NA	±20	Average RF
Dichlorodifluoromethane	10.0	7.58	0.3615	0.2742	-24.2*	NA	±20	Average RF
1,1-Dichloroethane	10.0	10.2	0.5636	0.5718	1.5	NA	±20	Average RF
1,2-Dichloroethane (EDC)	10.0	10.7	0.3811	0.4078	7.0	NA	±20	Average RF
1,1-Dichloroethene	10.0	10.7	0.2991	0.3187	6.6	NA	±20	Average RF
cis-1,2-Dichloroethene	10.0	10.0	0.3584	0.3593	0.2	NA	±20	Average RF
trans-1,2-Dichloroethene	10.0	10.3	0.3235	0.3342	3.3	NA	±20	Average RF
1,2-Dichloropropane	10.0	9.36	0.3336	0.3124	-6.4	NA	±20	Average RF
1,3-Dichloropropane	10.0	9.59	1.116	1.0698	-4.1	NA	±20	Average RF
2,2-Dichloropropane	10.0	9.72	0.353	0.3432	-2.8	NA	±20	Average RF
1,1-Dichloropropene	10.0	10.9	0.4336	0.4721	8.9	NA	±20	Average RF
cis-1,3-Dichloropropene	10.0	8.18	0.4159	0.395	NA	-18.2	±20	Linear
trans-1,3-Dichloropropene	10.0	7.73	0.7729	0.6998	NA	-22.7*	±20	Quadratic
Ethylbenzene	10.0	10.3	1.0717	1.1012	2.7	NA	±20	Average RF

ALS Group USA, Corp.
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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request: K2314281
Date Analyzed: 12/22/23 10:52

Continuing Calibration Verification (CCV) Summary
Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
File ID: J:\MS23\DATA\122223\1222F004.D\
Signal ID: 1

Calibration Date: 9/11/2023
Calibration ID: KC2300542
Analysis Lot: 828027
Units: ppb

Hexachlorobutadiene	10.0	11.2	0.2659	0.2971	11.7	NA	±20	Average RF
2-Hexanone	100	89.5	0.049	0.0438	-10.5	NA	±20	Average RF
Isopropylbenzene	10.0	10.6	2.6149	2.7756	6.1	NA	±20	Average RF
4-Isopropyltoluene	10.0	10.2	2.3825	2.424	1.7	NA	±20	Average RF
4-Methyl-2-pentanone (MIBK)	100	84.9	0.0598	0.0508	-15.1	NA	±20	Average RF
Methylene Chloride	10.0	9.18	0.3708	0.3403	-8.2	NA	±20	Average RF
Naphthalene	10.0	8.45	0.6353	0.5365	-15.5	NA	±20	Average RF
n-Propylbenzene	10.0	10.1	3.7505	3.787	1.0	NA	±20	Average RF
Styrene	10.0	10.1	0.9622	0.9684	0.6	NA	±20	Average RF
1,1,1,2-Tetrachloroethane	10.0	10.3	0.5625	0.5804	3.2	NA	±20	Average RF
1,1,2,2-Tetrachloroethane	10.0	9.36	0.6583	0.6161	-6.4	NA	±20	Average RF
Tetrachloroethene (PCE)	10.0	10.5	0.6022	0.635	5.4	NA	±20	Average RF
Toluene	10.0	9.90	0.84	0.8313	-1.0	NA	±20	Average RF
1,2,3-Trichlorobenzene	10.0	10.9	0.2212	0.2418	9.3	NA	±20	Average RF
1,2,4-Trichlorobenzene	10.0	9.64	0.4297	0.4142	-3.6	NA	±20	Average RF
1,1,2-Trichloroethane	10.0	9.61	0.5121	0.4923	-3.9	NA	±20	Average RF
1,1,1-Trichloroethane (TCA)	10.0	11.6	0.3922	0.4561	16.3	NA	±20	Average RF
Trichloroethene (TCE)	10.0	10.3	0.3207	0.3294	2.7	NA	±20	Average RF
Trichlorofluoromethane (CFC 11)	10.0	11.9	0.4507	0.5348	18.7	NA	±20	Average RF
1,2,3-Trichloropropane	10.0	9.89	0.2166	0.2143	-1.1	NA	±20	Average RF
1,2,4-Trimethylbenzene	10.0	9.74	2.7178	2.6472	-2.6	NA	±20	Average RF
1,3,5-Trimethylbenzene	10.0	10.3	2.5913	2.6562	2.5	NA	±20	Average RF
Vinyl Chloride	10.0	8.06	0.3527	0.2843	-19.4	NA	±20	Average RF
o-Xylene	10.0	9.61	1.2465	1.1981	-3.9	NA	±20	Average RF
m,p-Xylenes	20.0	20.5	1.3005	1.3325	2.5	NA	±20	Average RF

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
4-Bromofluorobenzene	10.0	10.5	0.8126	0.8527	4.9	NA	±20	Average RF
Dibromofluoromethane	10.0	10.9	0.204	0.2226	9.1	NA	±20	Average RF
Toluene-d8	10.0	10.4	0.9536	0.989	3.7	NA	±20	Average RF

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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request:K2314281

Analysis Run Log
Volatile Organic Compounds by GC/MS

Analysis Method:**Analysis Lot:**828027**Instrument ID:**K-MS-23

Raw Data File	Sample Name	Lab Code	Date Analyzed	Time Analyzed	Q
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J:\MS23\DATA\122223\1222F006.D\	Duplicate Lab Control Sample	KQ2322477-04	12/22/2023	11:40:00	
J:\MS23\DATA\122223\1222F009.D\	Method Blank	KQ2322477-05	12/22/2023	14:27:00	
J:\MS23\DATA\122223\1222F010.D\	TA-01-W	K2314281-001	12/22/2023	15:04:00	
J:\MS23\DATA\122223\1222F011.D\	TA-02-W	K2314281-002	12/22/2023	15:28:00	
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J:\MS23\DATA\122223\1222F019.D\	ZZZZZZZ	ZZZZZZZ	12/22/2023	18:43:00	



Raw Data

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com



General Chemistry

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577- 7222 Fax (360)636-1 068
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Work Request # K2314281, 345, 515

Date Analyzed: 1/2/24

Analyst: AMY Run # 828575

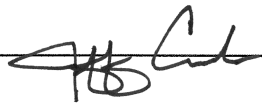
Analysis: TSS Screens 1633

**DATA QUALITY REPORT
INORGANICS**

Explain any "no" responses to questions below, and any corrective actions in the comments section below.

- | | | |
|-----|---|------------------|
| 1. | Is the method name and number correct and appropriate? | <u>yes/no/NA</u> |
| 2. | Holding times met for all analyses and for all samples? | <u>yes/no/NA</u> |
| 3. | Are calculations correct? | <u>yes/no/NA</u> |
| 4. | Is the reporting basis correct? (Dry Weight) | <u>yes/no/NA</u> |
| 5. | All quality control criteria met? | <u>yes/no</u> |
| 6. | Is the calibration curve correlation coefficient ≥ 0.995 ? | <u>yes/no/NA</u> |
| 7. | MBs, CCVs, CCBs, LCSs, Dups, and Spikes, analyzed at proper frequency? | <u>yes/no/NA</u> |
| 8. | Are ICVs, CCVs, and CCBs all within acceptance limits? | <u>yes/no/NA</u> |
| 9. | Are results for methods blanks all ND? | <u>yes/no/NA</u> |
| 10. | Are all QC samples within acceptance criteria?
(LCS % rec, MS/DMS % rec, DUP or MS/DMS RPDs, etc.) | <u>yes/no/NA</u> |
| 11. | Are all exceptions explained? | <u>yes/no/NA</u> |
| 12. | Have all applicable service requests been reviewed? | <u>yes/no/NA</u> |
| 13. | Are all samples labeled correctly? | <u>yes/no/NA</u> |
| 14. | Have all instructions on the service request been followed?
(e.g. Special MRLs, QC on a specific sample, Form V) | <u>yes/no/NA</u> |
| 15. | Are detection limits and units reported correctly? | <u>yes/no/NA</u> |
| 16. | Is the unused space on the benchsheet crossed out? | <u>yes/no/NA</u> |
| 17. | Was analysis turned in by the data due date? (If not record SR#) | <u>yes/no/NA</u> |

COMMENTS:

Secondary Approved by:  Date: 01/03/24

DQREPORT

Analytical Results Summary

Instrument Name: K-Balance-31

Analyst: AWILSON

Analysis Lot:

828575

Method/Testcode: SM 2540 D Modified/1633 TSS Scr

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
K2314281-001	Solids, Total Suspended (TSS)	N/A		Water	4360.00 mg/L	10 mL	4360 mg/L	1		100			1/2/24 11:06	N	IV
K2314281-002	Solids, Total Suspended (TSS)	N/A		Water	330.00 mg/L	10 mL	330 mg/L	1		100			1/2/24 11:06	N	IV
K2314345-001	Solids, Total Suspended (TSS)	N/A		Water	10.00 mg/L	10 mL	100 mg/L U	1		100			1/2/24 11:06	N	IV
K2314345-002	Solids, Total Suspended (TSS)	N/A		Water	20.00 mg/L	10 mL	100 mg/L U	1		100			1/2/24 11:06	N	IV
K2314345-003	Solids, Total Suspended (TSS)	N/A		Water	20.00 mg/L	10 mL	100 mg/L U	1		100			1/2/24 11:06	N	IV
K2314515-001	Solids, Total Suspended (TSS)	N/A		Water	-20.00 mg/L	10 mL	100 mg/L U	1		100			1/2/24 11:06	N	II
KQ2400011-01	Solids, Total Suspended (TSS)	DUP	K2314515-001	Water	0.00 mg/L	10 mL	100 mg/L U	1		100		NC	1/2/24 11:06	N	II
KQ2400011-02	Solids, Total Suspended (TSS)	MB		Water	0.00 mg/L	10 mL	100 mg/L U	1		100			1/2/24 11:06	N	IV
KQ2400011-03	Solids, Total Suspended (TSS)	LCS		Water	390.00 mg/L	10 mL	390 mg/L	1		100	100		1/2/24 11:06	N	IV

Any 1/3/24

indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Printed 1/3/24 12:14

Results Summary

Page 1 of 1

ALS ENVIRONMENTAL

Analysis:

1633 TSS Screen

Method: EPA SM 2540 D Modified

RUN:

RUN: 828575

Sample #	Row #	Pan Number	Comments	Sample Volume (ml)	Wt. Filter + Dry sample (1) (g)	Wt. Filter (g)	Wt. Dry Sample (g)	TSS (mg/L)	TSS (mg/L) reported
MB	1	T304275		10	0.1013	0.1013	0.0000	0.00	ND
LCS	2	T304274		10	0.1008	0.0969	0.0039	390.00	390
K2314281-001	3	T304273		10	0.1435	0.0999	0.0436	4360.00	4360
K2314281-002	4	T304272		10	0.0996	0.0963	0.0033	330.00	330
K2314345-001	5	T304271		10	0.0964	0.0963	0.0001	10.00	ND
K2314345-002	6	T304270		10	0.0972	0.0970	0.0002	20.00	ND
K2314345-003	7	T304269		10	0.0982	0.0980	0.0002	20.00	ND
K2314515-001	8	T304268		10	0.0980	0.0982	-0.0002	-20.00	ND
K2314515-001D	9	T304267		10	0.0970	0.0970	0.0000	0.00	ND
	10			10			#VALUE!	#VALUE!	#VALUE!
	11			10			#VALUE!	#VALUE!	#VALUE!
	12			10			#VALUE!	#VALUE!	#VALUE!
	13			10			#VALUE!	#VALUE!	#VALUE!
	14			10			#VALUE!	#VALUE!	#VALUE!
	15			10			#VALUE!	#VALUE!	#VALUE!
	16			10			#VALUE!	#VALUE!	#VALUE!
	17			10			#VALUE!	#VALUE!	#VALUE!
	18			10			#VALUE!	#VALUE!	#VALUE!
	19			10			#VALUE!	#VALUE!	#VALUE!
	20			10			#VALUE!	#VALUE!	#VALUE!
	21			10			#VALUE!	#VALUE!	#VALUE!
	22			10			#VALUE!	#VALUE!	#VALUE!
	23			10			#VALUE!	#VALUE!	#VALUE!
	24			10			#VALUE!	#VALUE!	#VALUE!
	25			10			#VALUE!	#VALUE!	#VALUE!

Calculation: Suspended Solids (mg/L) = Wt. Dry Sample (g) x 1000 x 1000 / K-Balance 31 105 oven: K - OVEN 15

ERA #:4033

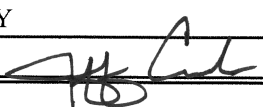
Lot#

070123m

ID# TSS/19-Gen-11-38-P

Filter Lot # 10700

Wt (1) Start	11:28	1/2/2024	TV = 390	Thermometer: Oven digital
Stop	10:00	1/3/2024		
Wt (1) Start	105	1/2/2024		
Temp Stop	105	1/3/2024		

		date	time
Analyzed By: AWY	Date Analyzed:	1/2/2024	11:06
Reviewed By: 	Date Reviewed:	01/03/24	

rev 12-04-18

ALS ENVIRONMENTAL

Analysis: Total Suspended Solids Method: EPA SM 2540 D

CCV Verification SN: 67095

1 st weigh	1.0000 g	≤(+/- 0.1%)	2 nd weigh	0.0100 g	≤(+/- 0.1%)	3 rd weigh	1.0000 g	≤(+/- 0.1%)	4 rd weigh	0.0100 g
CCV1	0.9998	99.98%	CCV2	0.0100	100.00%	CCV5		0.00%	CCV6	
Date/time	1/3/24	11:32	Date/time	1/3/24	11:32	Date/time			Date/time	
CCV3	0.9999	99.99%	CCV4	0.0101	101.00%	CCV7		0.00%	CCV8	
Date/time	1/3/24	11:43	Date/time	1/3/24	11:43	Date/time			Date/time	

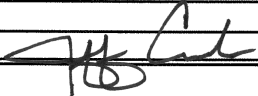
1 st weigh	1.0000 g	≤(+/- 0.1%)	2 nd weigh	0.0100 g	≤(+/- 0.1%)	3 rd weigh	1.0000 g	≤(+/- 0.1%)	4 rd weigh	0.0100 g
CCV9		0.00%	CCV10		0.00%	CCV13		0.00%	CCV14	
Date/time			Date/time			Date/time			Date/time	
CCV11		0.00%	CCV12		0.00%	CCV15		0.00%	CCV16	
Date/time			Date/time			Date/time			Date/time	

1 st weigh	1.0000 g	≤(+/- 0.1%)	2 nd weigh	0.0100 g	≤(+/- 0.1%)	3 rd weigh	1.0000 g	≤(+/- 0.1%)	4 rd weigh	0.0100 g
CCV		0.00%	CCV		0.00%	CCV		0.00%	CCV	
Date/time			Date/time			Date/time			Date/time	
CCV		0.00%	CCV		0.00%	CCV		0.00%	CCV	
Date/time			Date/time			Date/time			Date/time	

1 st weigh	1.0000 g	≤(+/- 0.1%)	2 nd weigh	0.0100 g	≤(+/- 0.1%)	3 rd weigh	1.0000 g	≤(+/- 0.1%)	4 rd weigh	0.0100 g
CCV		0.00%	CCV		0.00%	CCV		0.00%	CCV	
Date/time			Date/time			Date/time			Date/time	
CCV		0.00%	CCV		0.00%	CCV		0.00%	CCV	
Date/time			Date/time			Date/time			Date/time	

CCV Verification SN: 67095

1 st weigh	1.0000 g	≤(+/- 0.5%)	2 nd weigh	0.0100 g	≤(+/- 0.5%)	3 rd weigh	1.0000 g	≤(+/- 0.5%)	4 th weigh	0.0100 g
CCV1		0.00%	CCV2		0.00%	CCV5		0.00%	CCV6	
CCV3		0.00%	CCV4		0.00%	CCV7		0.00%	CCV8	

Analyzed By: AWY	Date Analyzed: 1/2/2024 11:06
Reviewed By: 	Date Reviewed: 01/03/24

ALS ENVIRONMENTAL

RUN: 828575

Sample #	Row #	Pan Number	Comments	Sample Volume (ml)
MB	1	T304275		10
LCS	2	T304274		10
K2314281-001	3	T304273		10
K2314281-002	4	T304272		10
K2314345-001	5	T304271		10
K2314345-002	6	T304270		10
K2314345-003	7	T304269		10
K2314515-001	8	T304268		10
K2314515-001D	9	T304267		10

Filtration started: 11:06

Into 105°C 11:28

Any 1-2-24



Semi-Volatile Petroleum Products by Silica Gel Treated by GC/FID

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Preparation Information Benchsheet

Prep Run#: 432147

Team: Semivova GC/KBYERS

Number of Copies to make: 1

Prep WorkFlow: TPHextAq(14)

Prep Method: EPA 3510C

Status: Prepped

Prep Date/Time: 1/3/24 17:43

#	Lab Code	Client ID	B#	Method /Test	pH	Matrix	Amt. Ext.	Final Vol	Sample Description
1	KQ2400071-01	MB		NWTPH-Dx/NW_TPH_SGT		Liquid	500mL	1.00mL	
2	KQ2400071-02	LCS		NWTPH-Dx/NW_TPH_SGT		Liquid	500mL	1.00mL	
3	KQ2400071-03	DLCS		NWTPH-Dx/NW_TPH_SGT		Liquid	500mL	1.00mL	
4	K2314281-001RE	TA-01-W	.02	NWTPH-Dx/NW_TPH_SGT		Water	490.0000mL	1.00mL	

Spiking Solutions

Name:	SVF-DRO/RRO SURR	Inventory ID	231888	Logbook Ref:	SVF04-69B	Expires On:	04/19/2024
K2314281-001	100.00µL	KQ2400071-01	100.00µL	KQ2400071-02	100.00µL	KQ2400071-03	100.00µL

Preparation Steps

Step:	Extraction	Step:	Final Volume
Started:	1/3/24 17:43	Started:	1/4/24 12:26
Finished:	1/3/24 19:36	Finished:	1/4/24 15:27
By:	NPATTERSON	By:	GTRICG
Comments		Comments	

Comments:

Reviewed By: JB Date: 1/4/24

Chain of Custody Spike Witness: ZPRIM

Reinquished By: JB Date: Extracts Examined
 Received By: Date: Yes No

Preparation Information Benchsheet

Prep Run#: 432147

Team: Semivoa GC/NPATTERSON

Number of Copies to make: 1

Prep Workflow: TPHexAq(14)

Prep Method: EPA 3510C

Status: Draft
Prep Date/Time: 1/3/24 17:43

#	Lab Code	Client ID	B#	✓	Method / Test	Matrix	Amt. Ext. mL	pH	Int. Vol	Final Vol mL	Surr Amt V1	Spike Amt V2
1	KQ2400071-01	MB		✓	NW/TPH-Dx / NW_TPH_SGT	Liquid	500	12	✓	1	100	100
2	KQ2400071-02	LCS		✓	NW/TPH-Dx / NW_TPH_SGT	Liquid	500	1	✓	1	100	100
3	KQ2400071-03	DLCS		✓	NW/TPH-Dx / NW_TPH_SGT	Liquid	500	1	✓	1	100	100
4	K2314281-001RE	TA-01-W	.02	✓	NW/TPH-Dx / NW_TPH_SGT	Water	490	1	✓	1	100	100

Comments:

Surrogate ID: SVF04-69B KP: 4/19/24 conc. 500ppm 100µL

Spike ID: SVF04-72F KP: 7/2/24 conc. 1600ppm 100µL

Witnessed By: SVF04-69B KP: 4/19/24 conc. 500ppm 100µL ✓

Analyst: Mark Patterson Assisted By: _____

ALS Environmental Extraction Analyst Notes

Service Request: K2314281

Prep Group: KQ2400071

Topic	Notes	Initials/Date
No Anomalies: ☐	—	—
Sample Anomalies: ☐	=	—
Organics Present (sticks, leafs, bugs): ☐	4281-1 has sediment present.	NRP 1/3/24
Fuel Odors: ☐	—	—
Sulfur Odors, Precipitate: ☐	—	—
General Notes:	4281-1 has heavy emulsion.	NRP 1/3/24

ALS Environmental
Appendix from EXT-3510
Extracting Fuel Hydrocarbons in Water

Service Request # K2314281 Work Group # KQ2400071

Syringe Volume(s) and ID: 100 μ L 33

pH Strips Lot (Narrow Range) #: 2238198V

DCM Lot #: 23D0662007 HCl Lot #: XH0603-75

pH adjustment to < 2 (Time/Date/Initial): 14:34 1/3/24 NRP

Extraction Start (time/date/initials): 17:43 1/3/24 NRP

Extraction Stop (time/date/initials): 19:36 1/3/24 NRP

Sulfate Lot # 202242895 Glass Wool Lot # 29022999

S-Evap (time/date/initial): 1020 1/4/24 KB S-Evap Temp (corrected): 75

S-Evap Thermometer ID: K-EXT-5003

N-Evap/Micro Snyder (time/date/initial): 1226 1/4/24 KB

N-Evap/Sonic Bath Temp (corrected): 20 N-Evap/Sonic Bath Thermometer ID: K-EXT-101

Sulfuric Acid Clean-up (3665) (time/date/initial): 1425 1/4/24 KB Acid Lot #: 2021060905

Silica Gel Clean-up (3630) (time/date/initial): 1450 1/4/24 KB Silica Gel Lot #: 15K230010

Pipette (5 mL) Lot # — Pipette (2 mL) Lot # — Pipette (1 mL) Lot # 30523645

Completed (Time/Date/Initial): 1527 1/4/24 KB

Amount Vialled: 1/2 mL clear

Vial Storage: 20N A7-A10

Archived Extract Storage: _____

Bench Sheet Review Check List	
☒	Hold times met; if no, reason: _____
☒	Prep date, time, method, department, product code correct
☒	Spike information and Q.C. correct (insufficient volume or mass recorded if no Q.C.)
☒	Weights/Volumes and units correct on raw and final bench sheets
☒	Sample IDs have been checked - bottle numbers appended if required
☒	Names present for: started by, completed by, relinquished by, and witnessed by
☒	Extract storage recorded
☒	Additional prep sheet completely filled out (NA or line out blanks)
☒	All clean-ups have been noted on additional prep sheet

Preparation Information Benchsheet

Prep Run#: 431731
Team: Semivoa GC/GTRIGG
Number of Copies to make: 1

Prep Workflow: TPHex(Aq)(14)
Prep Method: EPA 3510C

Status: Prepped
Prep Date/Time: 12/21/23 12:18

#	Lab Code	Client ID	B#	Method /Test	pH	Matrix	Amt. Ext.	Final Vol	Sample Description
1	KQ2322265-01	MB		NW/TPH-Dx/NW_TPH_SGT		Liquid	500mL	1.00mL	
2	KQ2322265-02	LCS		NW/TPH-Dx/NW_TPH_SGT		Liquid	500mL	1.00mL	
3	KQ2322265-03	DLCS		NW/TPH-Dx/NW_TPH_SGT		Liquid	500mL	1.00mL	
4	K2314281-001	TA-01-W	.02	NW/TPH-Dx/NW_TPH_SGT		Water	500mL	1.00mL	
5	K2314281-002	TA-02-W	.02	NW/TPH-Dx/NW_TPH_SGT		Water	500mL	1.00mL	

Spiking Solutions

Name:	SVF-DRO/RRO MS	Inventory ID	230901	Logbook Ref:	SVF04-50A	Expires On:	12/29/2023
KQ2322265-02		100.00µL	KQ2322265-03		100.00µL		
Name:	SVF-DRO/RRO SURR	Inventory ID	231888	Logbook Ref:	SVF04-69B	Expires On:	04/19/2024
K2314281-001		100.00µL	K2314281-002	100.00µL	KQ2322265-01	100.00µL	KQ2322265-03
					KQ2322265-02	100.00µL	KQ2322265-03
							100.00µL

Preparation Steps

Step: Extraction
Started: 12/21/23 12:18
Finished: 12/21/23 12:42
By: RAJONES

Step: Final Volume
Started: 12/22/23 14:33
Finished: 12/22/23 15:13
By: GTRIGG

Comments

Comments:

Reviewed By: KB Date: 12/22/23

Chain of Custody

Relinquished By:  Date: 12/22/23

Received By:  Date: 12/27/23

Extracts Examined
☒ Yes ☐ No

Preparation Information Benchsheet

Prep Run#: 431731

Team: Semivoa GC/RAJONES

Number of Copies to make: 1

Prep WorkFlow: TPHExtAq(14)

Prep Method:

Status: Draft

Prep Date/Time: 12/21/23 09:53 AM

#	Lab Code	Client ID	B#	✓	Method / Test	Matrix	Amt. Ext. mL	pH	Int. Vol	Final Vol mL	Surr Amt uL	Spike Amt uL
1	KQ2322265-01	MB		✓	NWTPH-Dx / NW_TPH_SGT	Liquid	500	4.9		1	100	-
2	KQ2322265-02	LCS		✓	NWTPH-Dx / NW_TPH_SGT	Liquid	500					100
3	KQ2322265-03	DICS		✓	NWTPH-Dx / NW_TPH_SGT	Liquid	500					100
4	K2314281-001	TA-01-W		✓	NWTPH-Dx / NW_TPH_SGT	Water	500					-
5	K2314281-002	TA-02-W		✓	NWTPH-Dx / NW_TPH_SGT	Water	500					-

Comments:

Surrogate ID: SVF04-698 xp: 4/19/24 500 ppm 100 uL

Spike ID: SVF04-50A xp: 12/24/23 16000/5000 ppm 100 uL

Witnessed By:

Analyst:

Rayna Jones

Assisted By:

ALS Environmental Extraction Analyst Notes

Service Request: _____ Prep Group: _____

Topic	Notes	Initials/Date
No Anomalies: ☐		
Sample Anomalies: ☐		
Organics Present (sticks, leafs, bugs): ☐		
Fuel Odors: ☐		
Sulfur Odors, Precipitate: ☐		
General Notes:	Heavy amount of sediment in both client samples	RJ 12/21/23

Validation Report

1st  01/08/24
2nd AA 01/08/24

Data File: J:\GC35\DATA\010524\0105F031.D\
Lab ID: K2314281-001
RunType: N/A
Matrix: Water

Date Acquired: 1/5/24 20:11:00
Batch ID: 829103
Analysis Method: NWTPH-Dx/NW_TPH_SG

Validations

Validation Categories	Pass	Fail
Preparation Hold Time	X	
Analytical Hold Time	X	
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery	X	
Continuing Calibration Recovery (Closing)		X
Lab Control Sample Recovery	X	
Duplicate Lab Control Sample Recovery	X	
Method Blank	X	
Method Blank Surrogates	X	
Surrogates	X	
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	
Analyte Coelutions	X	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Continuing Calibration Recovery (Closing)	n-Triacontane	17		15	surr+ND

Primary Review: _____

Secondary Review: _____

Quantitation Report

1st *AA* 01/08/24
2nd *AA* 01/08/24

Data File:	J:\GC35\DATA\010524\0105F031.D\	Instrument:	K-GC-35
Acqu Date:	1/5/24 20:11:00	Vial:	7
Run Type:	N/A	Dilution:	1
Lab ID:	K2314281-001	Raw Units:	ppm

Bottle ID:	K2314281-001.02	Tier:	IV	Matrix:	Water
Prod Code:	NW_TPH_SGT	Collect Date:	12/20/23	Receive Date:	12/20/23

Analysis Lot:	829103	Prep Lot:	432147	Report Group:	K2314281
Analysis	NWTPH-Dx	Prep Method:	EPA 3510C		
		Prep Date:	1/3/24		

Title:	Semi-Volatile Petroleum Products, Silica Gel Treated by GC/FID	Calibration ID:	KC2300521
		Report List ID:	22367

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
o-Terphenyl	5.61		47876	32.347	65	50 - 150	Y
n-Triacontane	7.78		57818	48.031	96	50 - 150	Y

Target Compounds

Final Conc.Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Diesel Range Organics (C12 - C25 DRO)	3.93		47735	45.311	92	J	Y
Residual Range Organics (C25 - C36 RRO)	6.79		31269	37.996	78	J	Y

Prep Amount: 490.0000 mL **Dilution:** 1
Prep Final Amount: 1.00 mL **Basis Factor:** 100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 1/8/24 13:35

\\alprews001\starlims\LIMSRpts\QuantValidation.rpt

Data File : J:\GC35\DATA\010524\0105F031.D Vial: 7
 Acq On : 05 Jan 2024 8:11 pm Operator: JLD
 Sample : K2314281-001 RE Inst : GC35
 Misc : Multiplr: 1.00
 IntFile : rteint.p
 Quant Time: Jan 08 09:47:46 2024 Quant Results File: 010524FSVF.RES

Quant Method : J:\GC35\METHODS\010524FSVF.M (RTE Integrator)
 Title : AK102/103 SVF MJ257 CAL 16220
 Last Update : Fri Jan 05 13:02:55 2024
 Response via : Initial Calibration
 DataAcq Meth : SVF2_F.M

Volume Inj. : 1 uL
 Signal Phase : ZB-1
 Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
1) S 4-Bromofluorobenzene	2.98	23108	34.214 ppm
Spiked Amount 50.000	Recovery	=	68.43%
2) S o-Terphenyl	5.61	47876	32.347 ppm
Spiked Amount 50.000	Recovery	=	64.69%
3) S n-Triacontane	7.78	57818	48.031 ppm
Spiked Amount 50.000	Recovery	=	96.06%
Target Compounds			
6) H C10-C25ex DRO [AK102]	3.30	300892	238.296 ppm
7) H C10-C28in DRO [8015]	3.40	357648	268.940 ppm
8) H C12-C25ex DRO [NWT PH]	3.93	47735	45.311 ppm
10) H C25-C36in RRO [NWT PH]	6.79	31269	37.996 ppm
11) H C25-C36in RRO [AK103]	6.89	175560	229.005 ppm

Data File : J:\GC35\DATA\010524\0105F031.D

Vial: 7

Acq On : 05 Jan 2024 8:11 pm

Operator: JLD

Sample : K2314281-001 RE

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Jan 8 11:40 2024 Quant Results File: 010524FSVF.RES

Quant Method : J:\GC35\METHODS\010524FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Fri Jan 05 13:02:55 2024

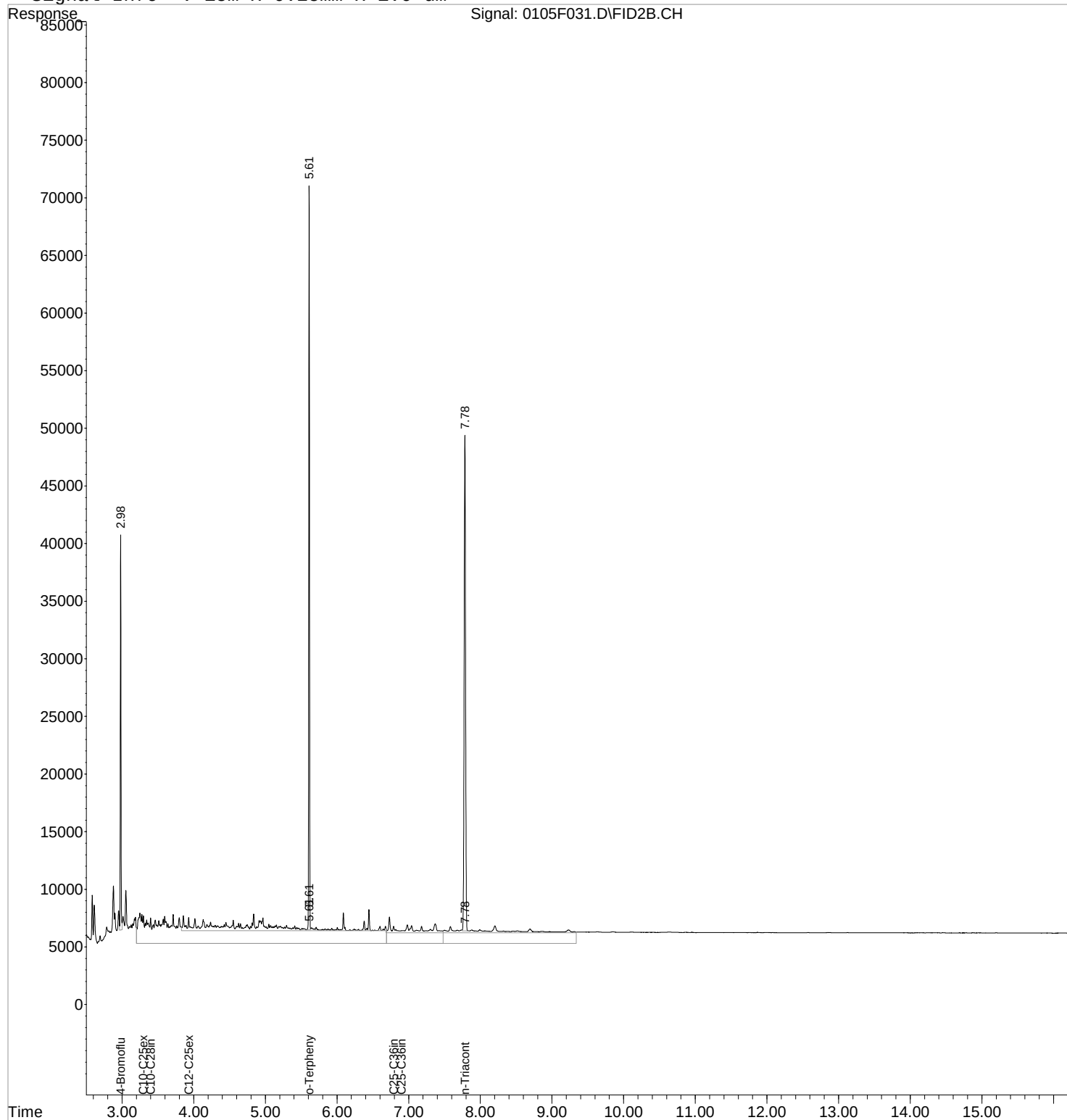
Response via : Single Level Calibration

DataAcq Meth : SVF2_F.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Data File : J:\GC35\DATA\010524\0105F031.D

Acq On : 05 Jan 2024 8:11 pm

Sample : K2314281-001 RE

Misc :

IntFile : rteint.p

Quant Time: Jan 8 9:49 2024 Quant Results File: 010524FSVF.RES

Vial: 7

Operator: JLD

Inst : GC35

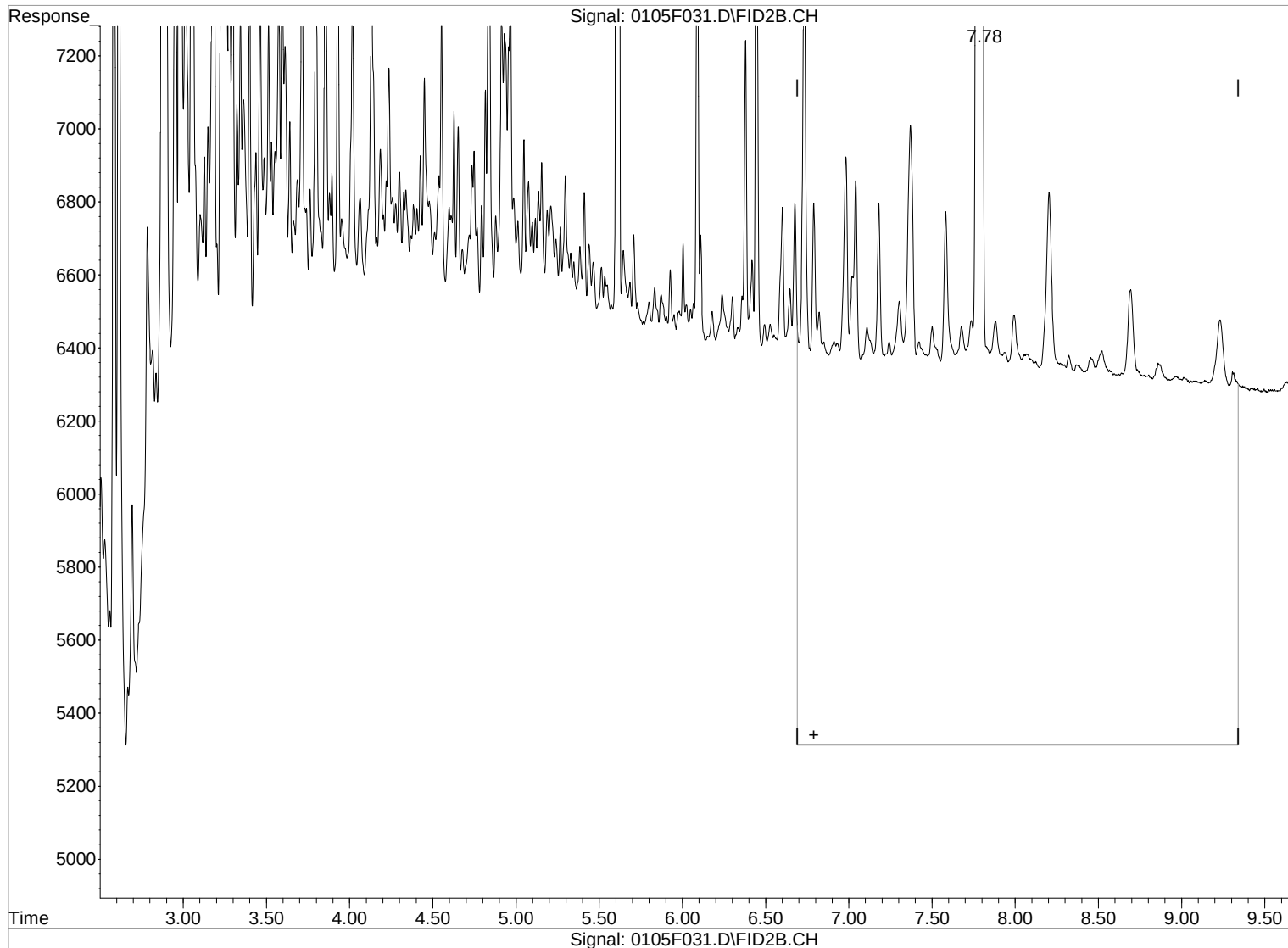
Multiplr: 1.00

Method : J:\GC35\METHODS\010524FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Fri Jan 05 13:02:55 2024

Response via : Multiple Level Calibration



(10) C25-C36in RRO [NWTPH] (H)

Manual Integration:

6.79min 213.330ppm

Before

response 175560

01/08/24

(+) = Expected Retention Time

0105F031.D 010524FSVF.M

Mon Jan 08 11:19:05 2024

184 of 3623

Data File : J:\GC35\DATA\010524\0105F031.D

Acq On : 05 Jan 2024 8:11 pm

Sample : K2314281-001 RE

Misc :

IntFile : rteint.p

Quant Time: Jan 8 9:49 2024 Quant Results File: 010524FSVF.RES

Vial: 7

Operator: JLD

Inst : GC35

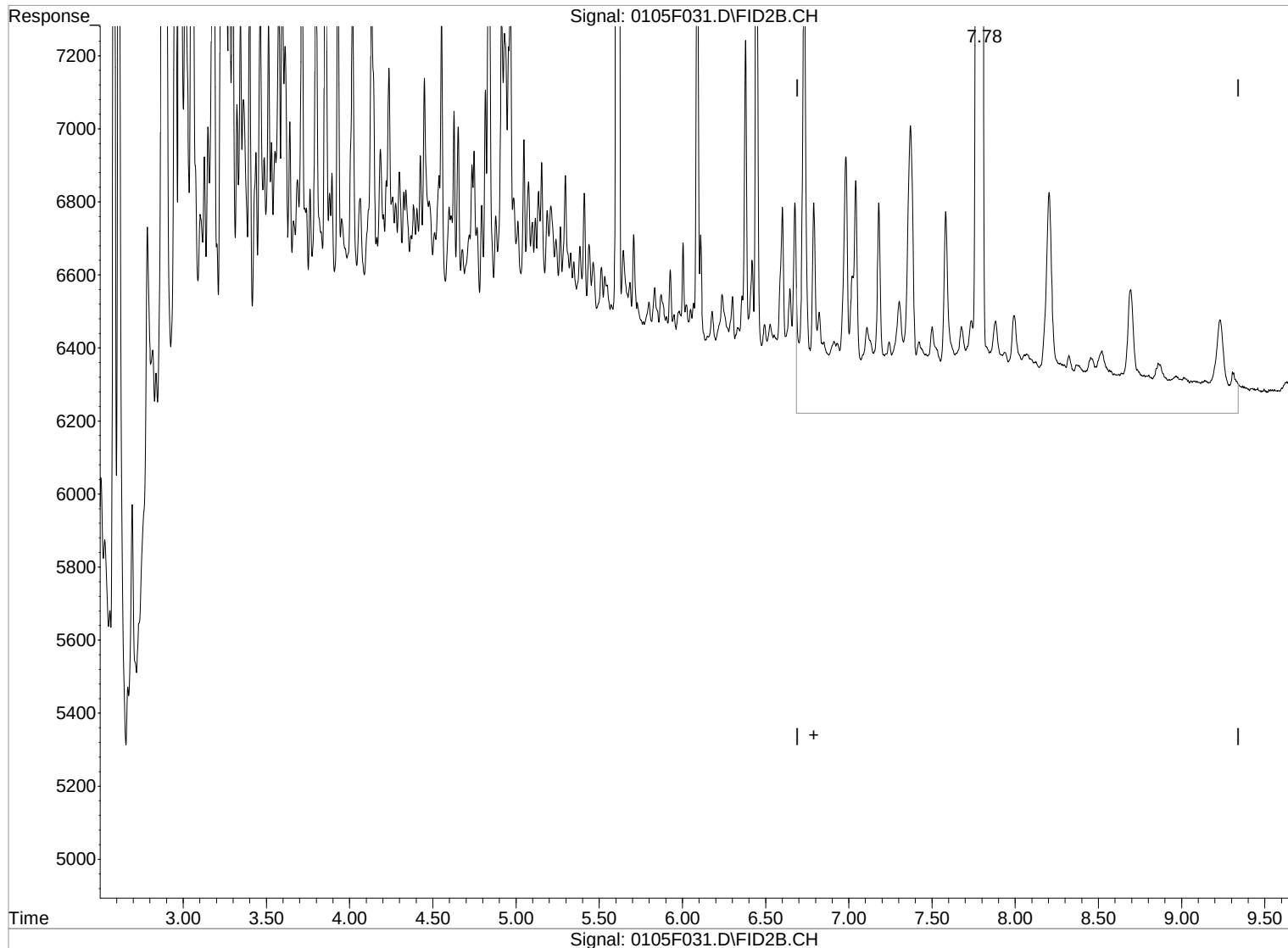
Multiplr: 1.00

Method : J:\GC35\METHODS\010524FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Fri Jan 05 13:02:55 2024

Response via : Multiple Level Calibration



(10) C25-C36in RRO [NWTPH] (H)

6.79min 37.996ppm

response 31269

Manual Integration:

After

Baseline/Shoulder

01/08/24

(+) = Expected Retention Time

0105F031.D 010524FSVF.M

Mon Jan 08 11:19:21 2024

Data File : J:\GC35\DATA\010524\0105F031.D

Vial: 7

Acq On : 05 Jan 2024 8:11 pm

Operator: JLD

Sample : K2314281-001 RE

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

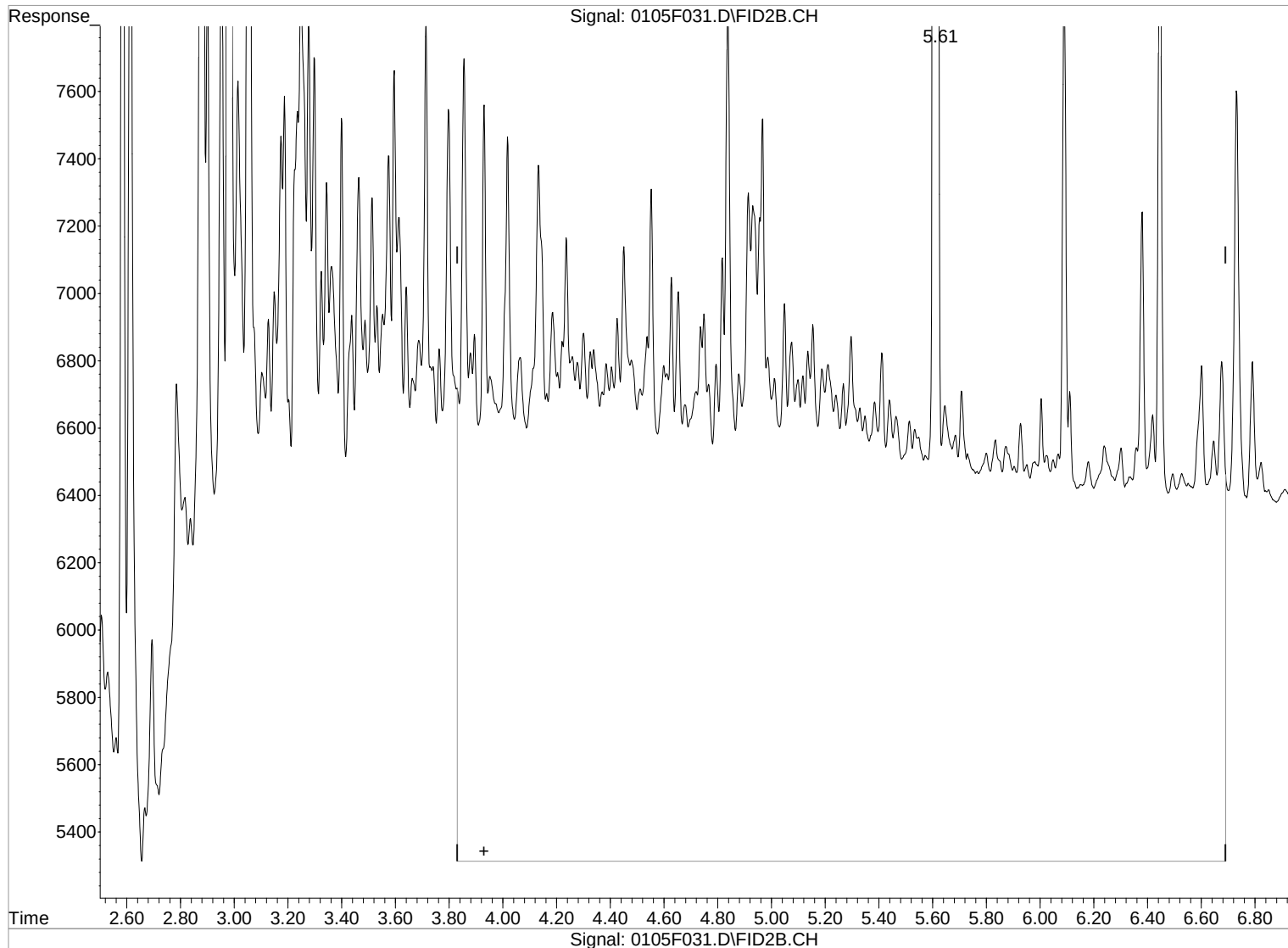
Quant Time: Jan 8 9:49 2024 Quant Results File: 010524FSVF.RES

Method : J:\GC35\METHODS\010524FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Fri Jan 05 13:02:55 2024

Response via : Multiple Level Calibration



(8) C12-C25ex DRO [NWTPH] (H)

Manual Integration:

3.93min 224.618ppm

Before

response 236637

01/08/24

(+) = Expected Retention Time

0105F031.D 010524FSVF.M

Mon Jan 08 11:18:41 2024

186 of 3623

Data File : J:\GC35\DATA\010524\0105F031.D

Vial: 7

Acq On : 05 Jan 2024 8:11 pm

Operator: JLD

Sample : K2314281-001 RE

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

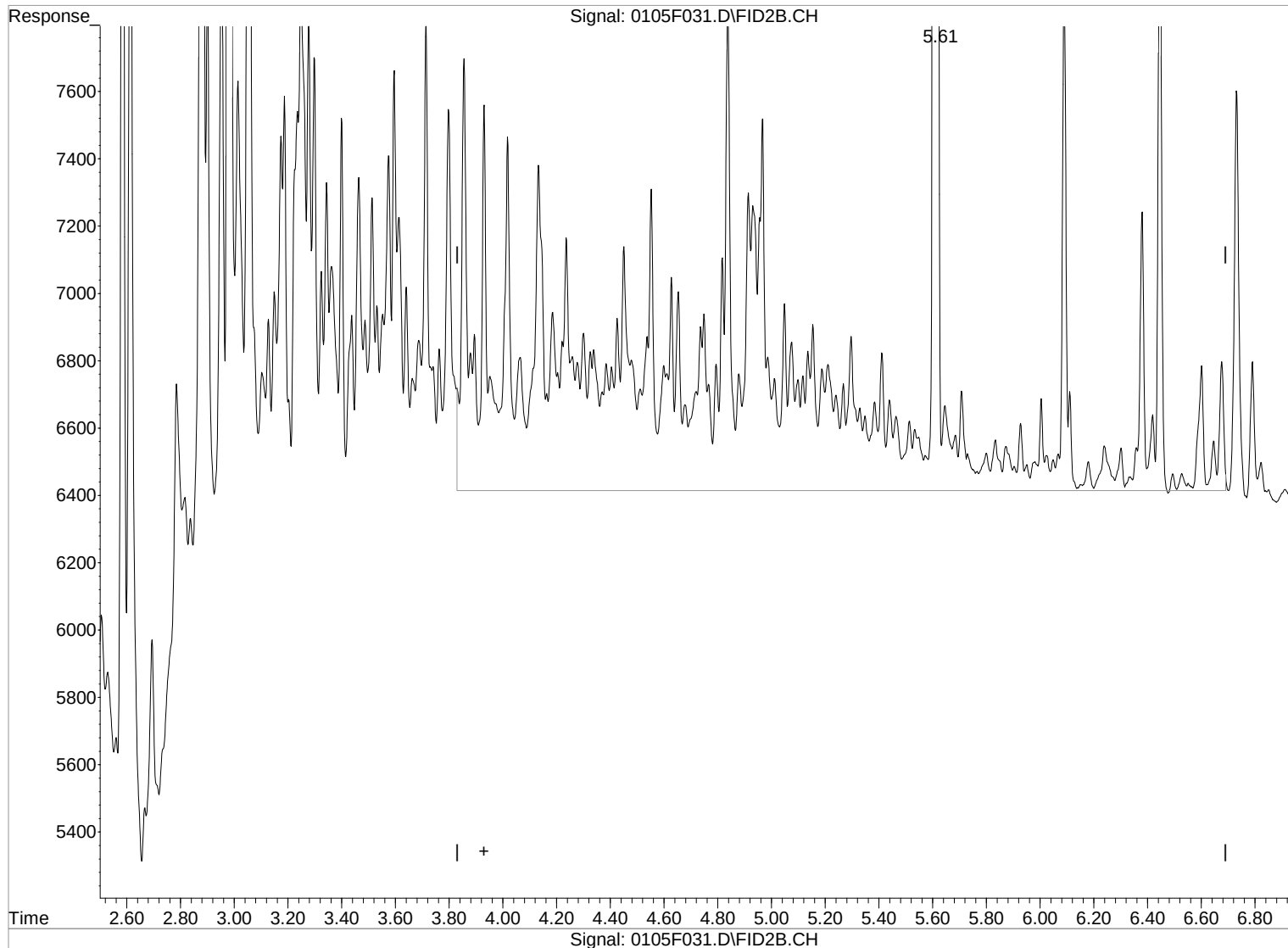
Quant Time: Jan 8 9:49 2024 Quant Results File: 010524FSVF.RES

Method : J:\GC35\METHODS\010524FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Fri Jan 05 13:02:55 2024

Response via : Multiple Level Calibration



(8) C12-C25ex DRO [NWTPH] (H)

Manual Integration:

3.93min 45.311ppm

After

response 47735

Baseline/Shoulder

01/08/24

(+) = Expected Retention Time

0105F031.D 010524FSVF.M

Mon Jan 08 11:18:53 2024

187 of 3623

Validation Report

1st  12/28/23
2nd  12/29/23

Data File: J:\GC21\DATA\122723F\1227030.D\
Lab ID: K2314281-002
RunType: N/A
Matrix: Water

Date Acquired: 12/27/23 20:05:00
Batch ID: 828342
Analysis Method: NWTPH-Dx/NW_TPH_SG

Validations

Validation Categories	Pass	Fail
Preparation Hold Time	X	
Analytical Hold Time	X	
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery	X	
Continuing Calibration Recovery (Closing)	X	
Lab Control Sample Recovery	X	
Duplicate Lab Control Sample Recovery	X	
Method Blank	X	
Method Blank Surrogates	X	
Surrogates		X
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	
Analyte Coelutions	X	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Surrogates	n-Triacontane	49	50	150	narr

Primary Review: _____

Secondary Review: _____

Quantitation Report

1st *SW* 12/28/23
2nd *SW* 12/29/23

Data File:	J:\GC21\DATA\122723F\1227030.D\	Instrument:	K-GC-21
Acqu Date:	12/27/23 20:05:00	Vial:	12
Run Type:	N/A	Dilution:	1
Lab ID:	K2314281-002	Raw Units:	ppm

Bottle ID:	K2314281-002.02	Tier:	IV	Matrix:	Water
Prod Code:	NW_TPH_SGT	Collect Date:	12/20/23	Receive Date:	12/20/23

Analysis Lot:	828342	Prep Lot:	431731	Report Group:	K2314281
Analysis	NWTPH-Dx	Prep Method:	EPA 3510C		
		Prep Date:	12/21/23		

Title:	Semi-Volatile Petroleum Products, Silica Gel Treated by GC/FID	Calibration ID:	KC2300522
		Report List ID:	22367

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
o-Terphenyl	5.43		29734	26.429	53	50 - 150	Y
n-Triacontane	7.56		23471	24.407	49 *	50 - 150	Y

Target Compounds

Final Conc.Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Diesel Range Organics (C12 - C25 DRO)	3.75		53909	67.966	140	J	Y
Residual Range Organics (C25 - C36 RRO)	6.61		44079	77.692	160	J	Y

Prep Amount: 500 mL **Dilution:** 1
Prep Final Amount: 1.00 mL **Basis Factor:** 100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 12/28/23 13:11

\\alprews001\starlims\LIMSReps\QuantValidation.rpt

Data File : J:\GC21\DATA\122723F\1227030.D Vial: 14
 Acq On : 27 Dec 23 08:05 pm Operator: AA
 Sample : K2314281-002 Inst : 6890
 Misc : Multiplr: 1.00
 IntFile : rteint.p
 Quant Time: Dec 28 10:26:47 2023 Quant Results File: 122723F.RES

Quant Method : J:\GC21\METHODS\122723F.M (RTE Integrator)
 Title : 8015/NWTPH/AK SVF MJ257 KC2000628
 Last Update : Fri Dec 22 13:00:01 2023
 Response via : Initial Calibration
 DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL
 Signal Phase : ZB-1
 Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
1) S 4-Bromofluorobenzene	2.75	12156	22.993 ppm
Spiked Amount 50.000	Recovery	=	45.99%
2) S o-Terphenyl	5.43	29734	26.429 ppm
Spiked Amount 50.000	Recovery	=	52.86%
3) S n-Triacontane	7.56	23471	24.407 ppm
Spiked Amount 50.000	Recovery	=	48.81%
Target Compounds			
6) H C10-C25ex DRO [AK102]	3.10	72169	74.456 ppm
7) H C10-C28in DRO [8015]	3.20	88328	87.097 ppm
8) H C12-C25ex DRO [NWTPH]	3.75	53909	67.966 ppm
10) H C25-C36in RRO [NWTPH]	6.61	44079	77.692 ppm
11) H C25-C36in RRO [AK103]	6.71	58186	95.581 ppm

Data File : J:\GC21\DATA\122723F\1227030.D

Vial: 14

Acq On : 27 Dec 23 08:05 pm

Operator: AA

Sample : K2314281-002

Inst : 6890

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Dec 28 11:35 2023 Quant Results File: 122723F.RES

Quant Method : J:\GC21\METHODS\122723F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Fri Dec 22 13:00:01 2023

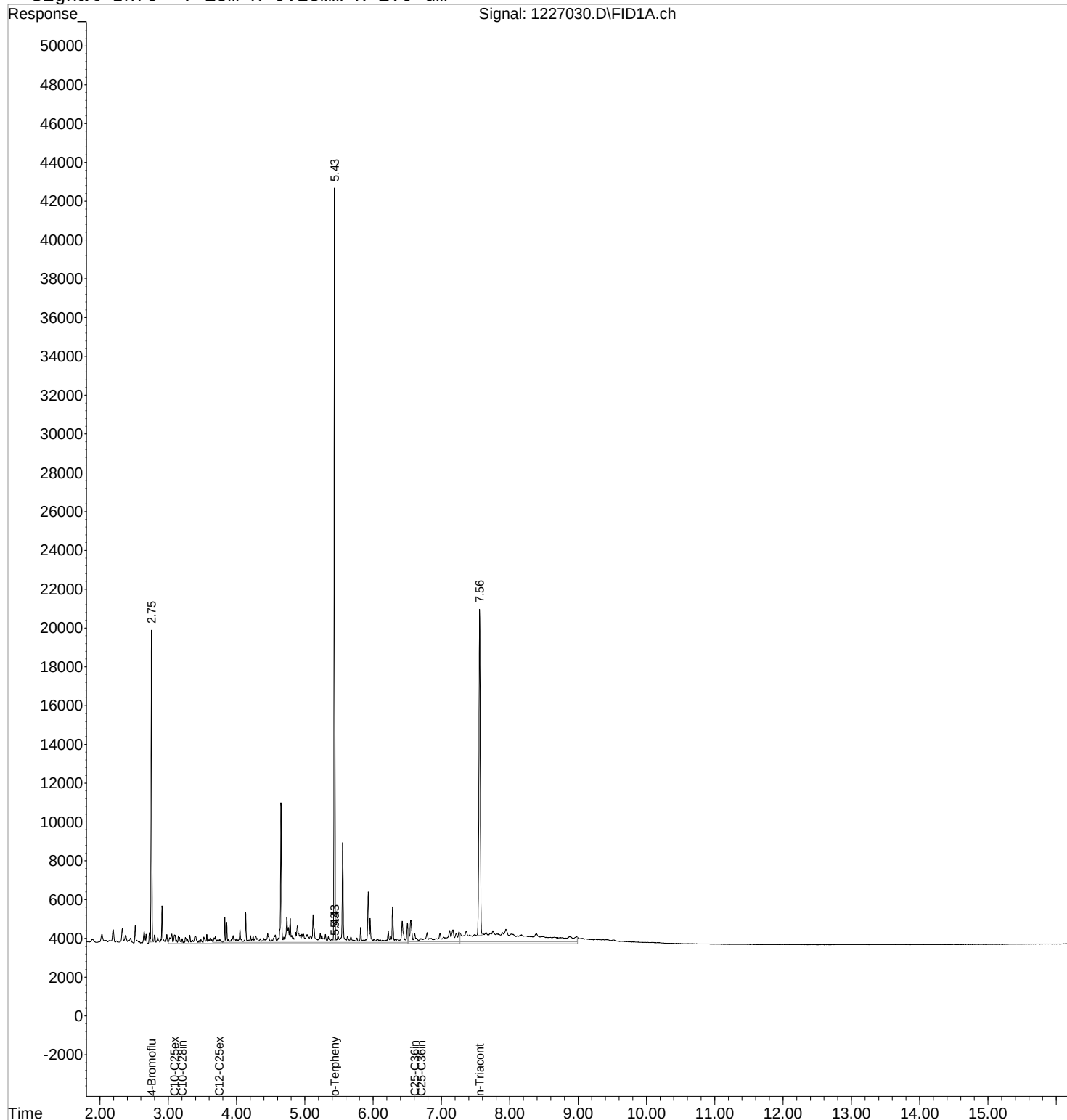
Response via : Single Level Calibration

DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Data File : J:\GC21\DATA\122723F\1227030.D

Vial: 14

Acq On : 27 Dec 23 08:05 pm

Operator: AA

Sample : K2314281-002

Inst : 6890

Misc :

Multiplr: 1.00

IntFile : rteint.p

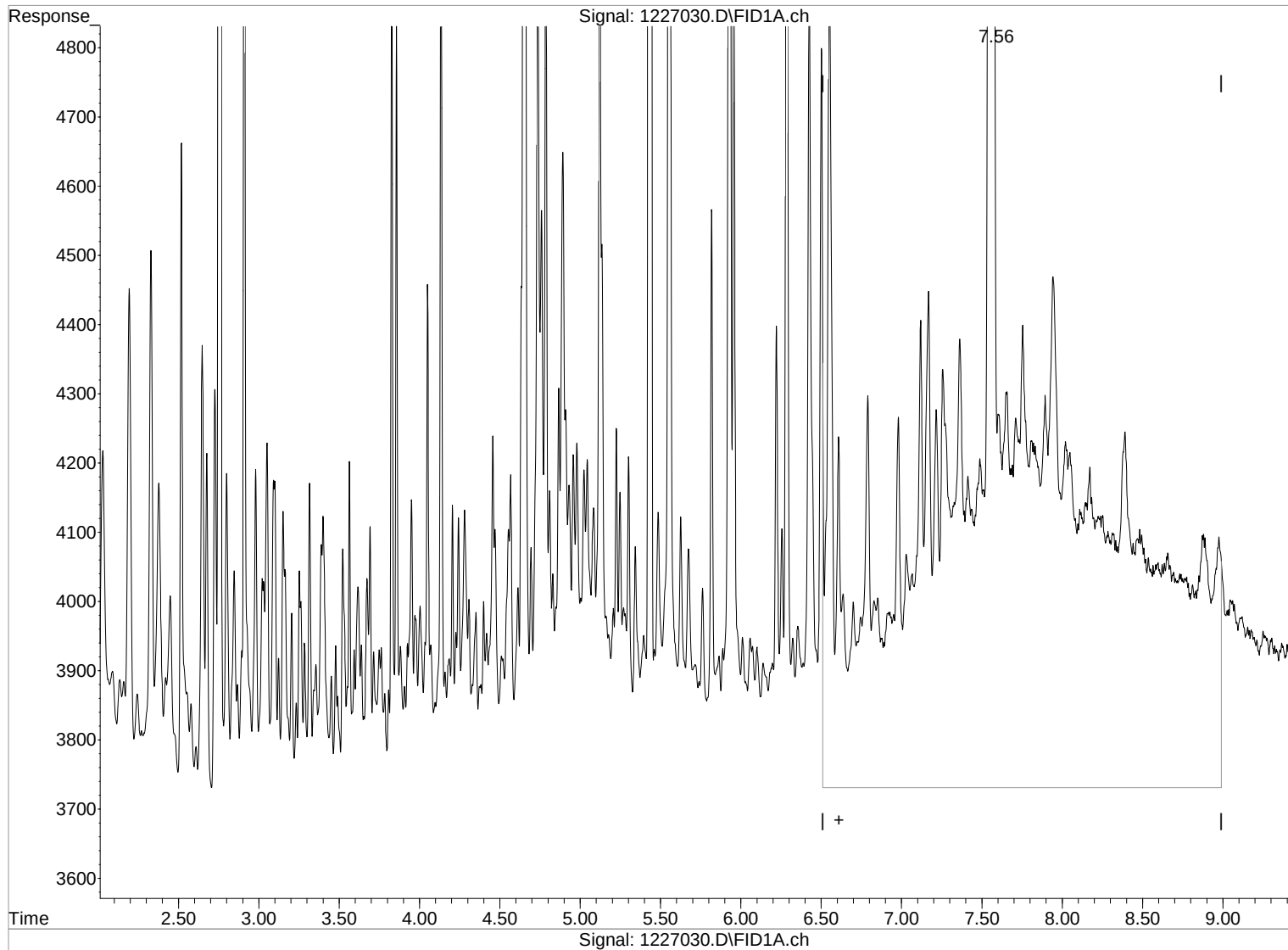
Quant Time: Dec 28 10:27 2023 Quant Results File: 122723F.RES

Method : J:\GC21\METHODS\122723F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Fri Dec 22 13:00:01 2023

Response via : Multiple Level Calibration



(10) C25-C36in RRO [NWTPH] (H)

Manual Integration:

6.61min 102.556ppm

Before

response 58186

12/28/23

(+) = Expected Retention Time

1227030.D 122723F.M Thu Dec 28 11:31:07 2023

192 of 3623

Data File : J:\GC21\DATA\122723F\1227030.D

Acq On : 27 Dec 23 08:05 pm

Sample : K2314281-002

Misc :

IntFile : rteint.p

Quant Time: Dec 28 10:27 2023 Quant Results File: 122723F.RES

Vial: 14

Operator: AA

Inst : 6890

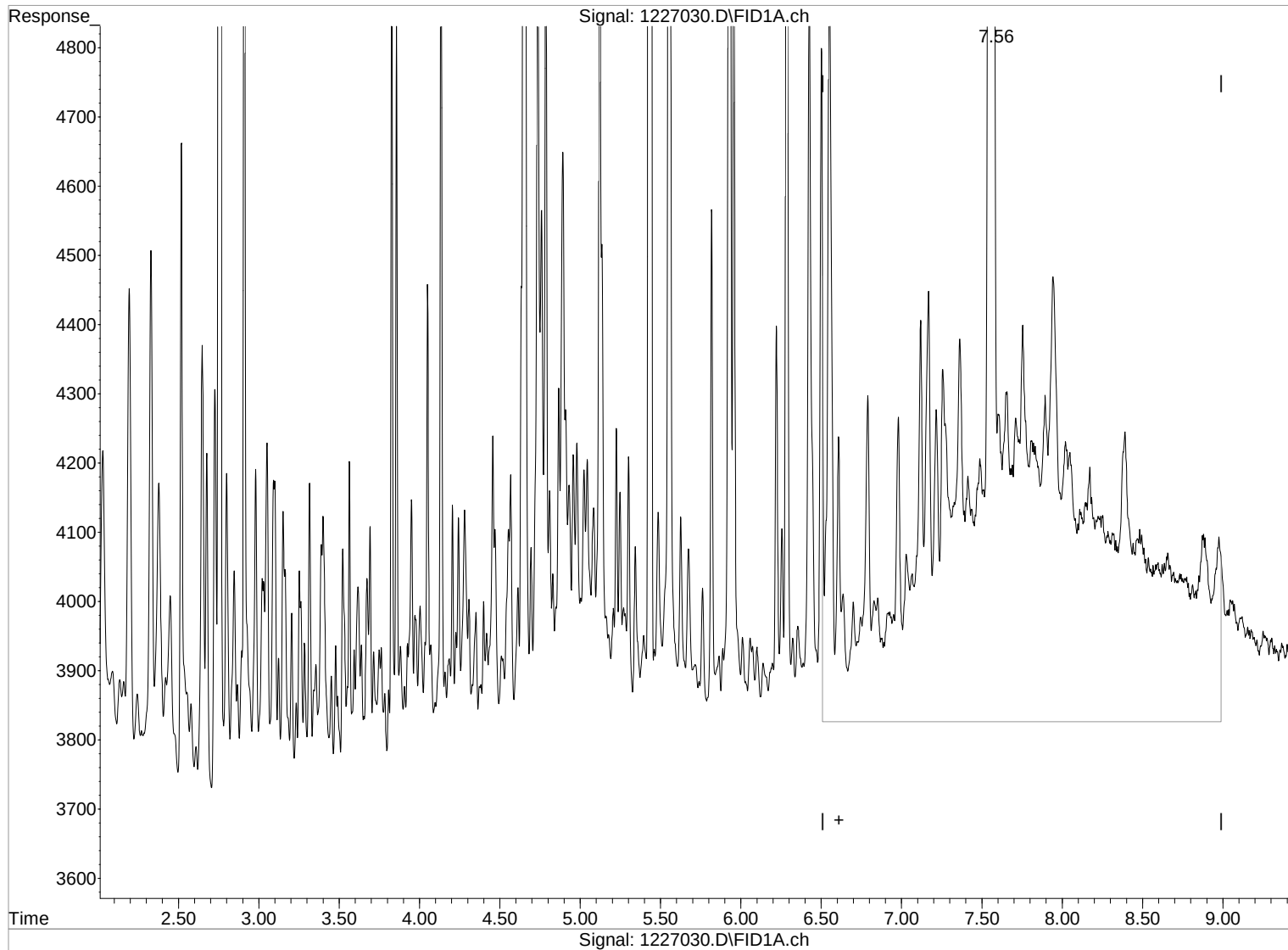
Multiplr: 1.00

Method : J:\GC21\METHODS\122723F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Fri Dec 22 13:00:01 2023

Response via : Multiple Level Calibration



(10) C25-C36in RRO [NWTPH] (H)

6.61min 77.692ppm

response 44079

Manual Integration:

After

Baseline/Shoulder

12/28/23

(+) = Expected Retention Time

1227030.D 122723F.M Thu Dec 28 11:31:16 2023

193 of 3623

Data File : J:\GC21\DATA\122723F\1227030.D

Acq On : 27 Dec 23 08:05 pm

Sample : K2314281-002

Misc :

IntFile : rteint.p

Quant Time: Dec 28 10:27 2023 Quant Results File: 122723F.RES

Vial: 14

Operator: AA

Inst : 6890

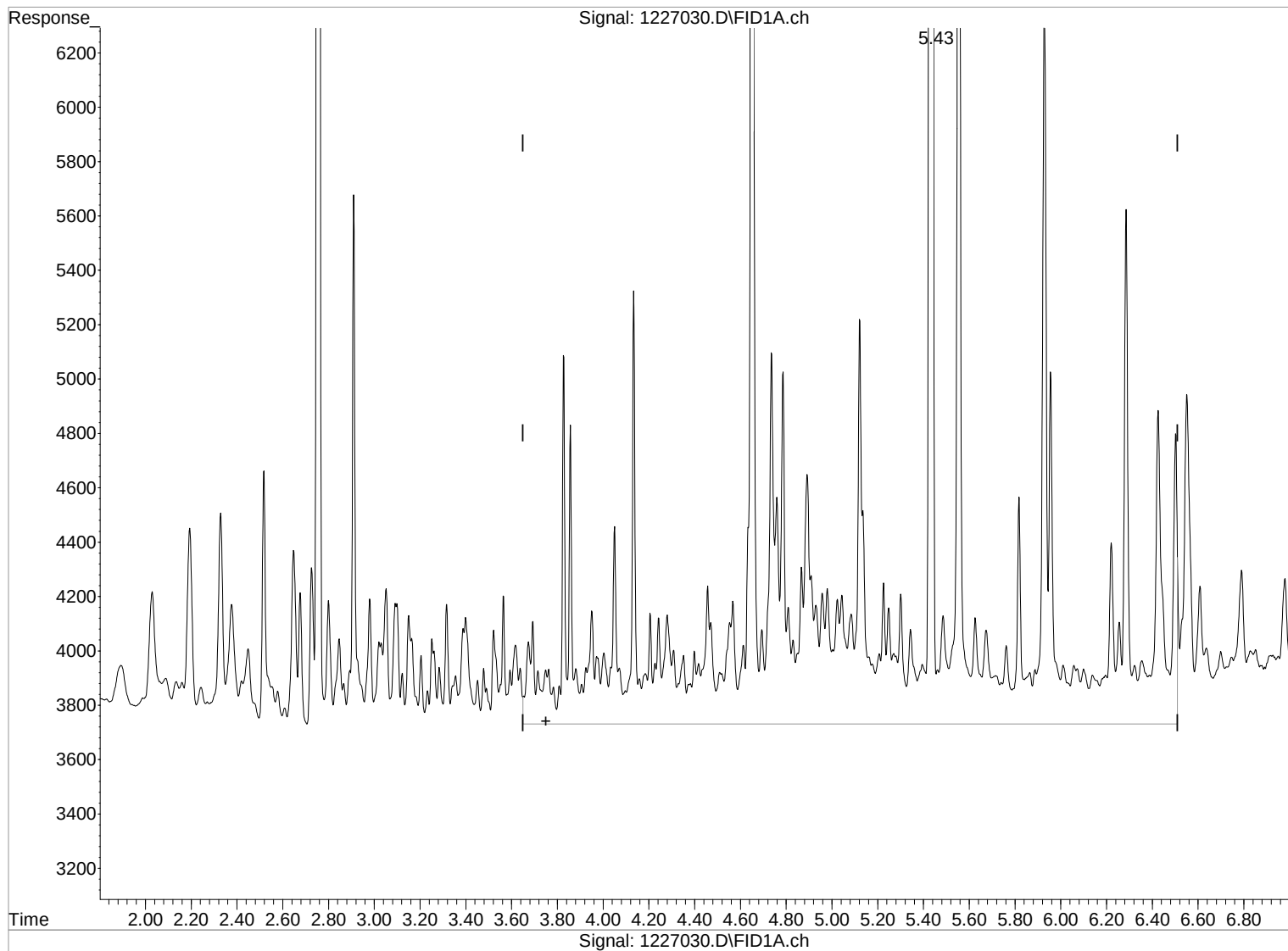
Multiplr: 1.00

Method : J:\GC21\METHODS\122723F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Fri Dec 22 13:00:01 2023

Response via : Multiple Level Calibration



(8) C12-C25ex DRO [NWTPH] (H)

Manual Integration:

3.75min 81.539ppm

Before

response 64675

12/28/23

(+) = Expected Retention Time

1227030.D 122723F.M Thu Dec 28 11:30:39 2023

194 of 3623

Data File : J:\GC21\DATA\122723F\1227030.D

Acq On : 27 Dec 23 08:05 pm

Sample : K2314281-002

Misc :

IntFile : rteint.p

Quant Time: Dec 28 10:27 2023 Quant Results File: 122723F.RES

Vial: 14

Operator: AA

Inst : 6890

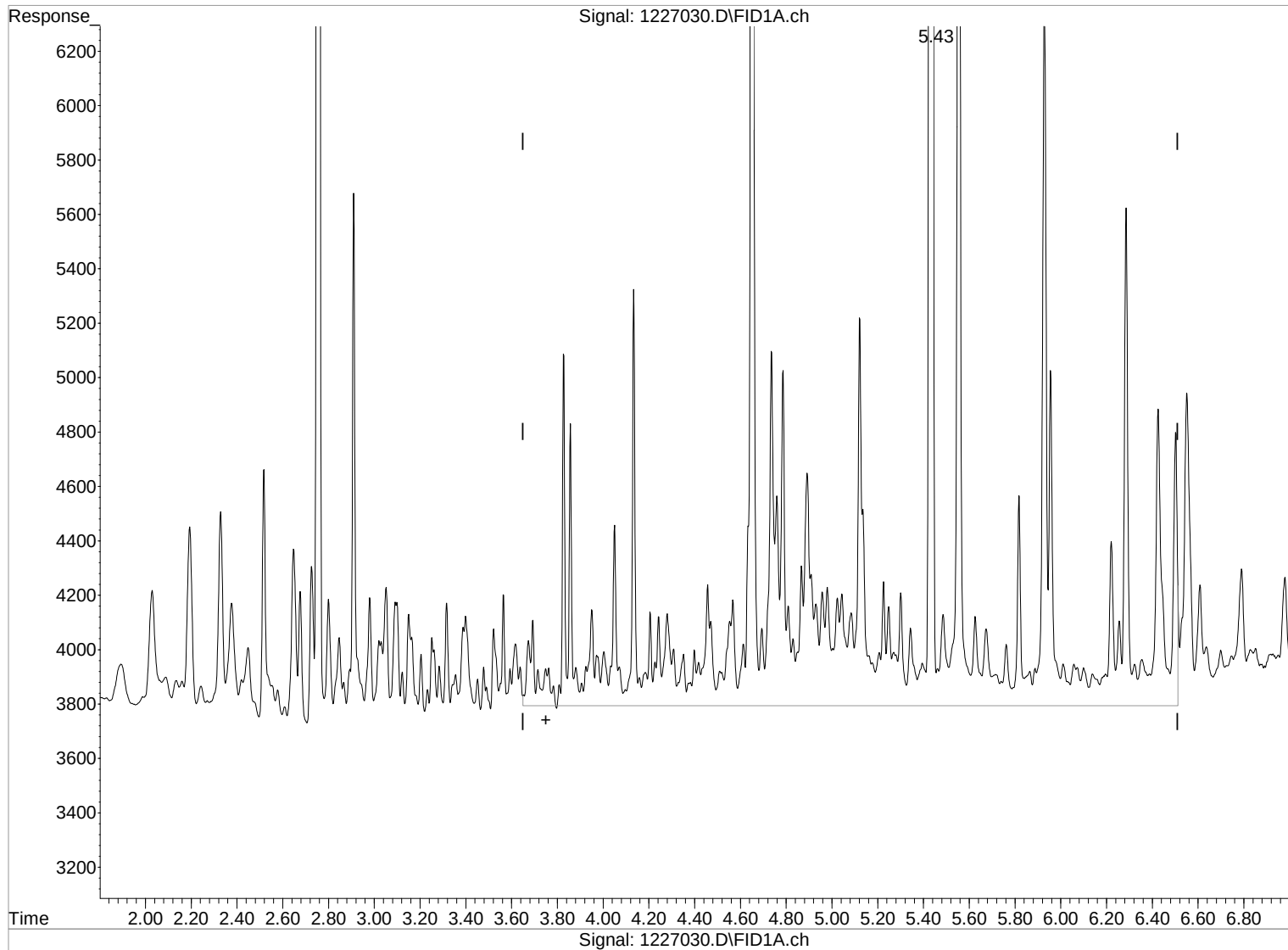
Multiplr: 1.00

Method : J:\GC21\METHODS\122723F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Fri Dec 22 13:00:01 2023

Response via : Multiple Level Calibration



(8) C12-C25ex DRO [NWTPH] (H)

3.75min 67.966ppm

response 53909

Manual Integration:

After

Baseline/Shoulder

12/28/23

(+) = Expected Retention Time

1227030.D 122723F.M Thu Dec 28 11:30:57 2023

195 of 3623

Validation Report

1st *JS* 12/28/23
2nd *SW* 12/29/23

Data File: J:\GC21\DATA\122723F\1227026.D\
Lab ID: KQ2322265-01
RunType: MB
Matrix: Water

Date Acquired: 12/27/23 18:39:00
Batch ID: 828342
Analysis Method: NWTPH-Dx/NW_TPH_SG

Validations

Validation Categories	Pass	Fail
Analytical Hold Time	X	
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery	X	
Continuing Calibration Recovery (Closing)	X	
Surrogates	X	
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	
Analyte Coelutions	X	

Primary Review: _____

Secondary Review: _____

Quantitation Report

1st *SW* 12/28/23
2nd *SW* 12/29/23

Data File:	J:\GC21\DATA\122723F\1227026.D\	Instrument:	K-GC-21
Acqu Date:	12/27/23 18:39:00	Vial:	8
Run Type:	MB	Dilution:	1
Lab ID:	KQ2322265-01	Raw Units:	ppm

Bottle ID:	NW_TPH_SGT	Tier:	IV	Matrix:	Water
Prod Code:		Collect Date:	12/20/23	Receive Date:	12/20/23

Analysis Lot:	828342	Prep Lot:	431731	Report Group:	KQ2322265
Analysis	NWTPH-Dx	Prep Method:	EPA 3510C		
		Prep Date:	12/21/23		

Title:	Semi-Volatile Petroleum Products, Silica Gel Treated by GC/FID	Calibration ID:	KC2300522
		Report List ID:	22367

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
o-Terphenyl	5.43		45808	40.717	81	50 - 150	Y
n-Triacontane	7.56		44277	46.042	92	50 - 150	Y

Target Compounds

Final Conc.Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Diesel Range Organics (C12 - C25 DRO)	3.75		25765	32.483	65	J	Y
Residual Range Organics (C25 - C36 RRO)	6.61		7258	12.793	26	J	Y

Prep Amount: 500 mL **Dilution:** 1
Prep Final Amount: 1.00 mL **Basis Factor:** 100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 12/28/23 13:11

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Data File : J:\GC21\DATA\122723F\1227026.D Vial: 10
 Acq On : 27 Dec 23 06:39 pm Operator: AA
 Sample : KQ2322265-01-MB Inst : 6890
 Misc : Multiplr: 1.00
 IntFile : rteint.p
 Quant Time: Dec 28 10:26:43 2023 Quant Results File: 122723F.RES

Quant Method : J:\GC21\METHODS\122723F.M (RTE Integrator)
 Title : 8015/NWTPH/AK SVF MJ257 KC2000628
 Last Update : Fri Dec 22 13:00:01 2023
 Response via : Initial Calibration
 DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL
 Signal Phase : ZB-1
 Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
1) S 4-Bromofluorobenzene	2.75	15943	30.156 ppm
Spiked Amount 50.000	Recovery	=	60.31%
2) S o-Terphenyl	5.43	45808	40.717 ppm
Spiked Amount 50.000	Recovery	=	81.43%
3) S n-Triacontane	7.56	44277	46.042 ppm
Spiked Amount 50.000	Recovery	=	92.08%
Target Compounds			
6) H C10-C25ex DRO [AK102]	3.10	51967	53.614 ppm
7) H C10-C28in DRO [8015]	3.20	55343	54.572 ppm
8) H C12-C25ex DRO [NWTPH]	3.75	25765	32.483 ppm
10) H C25-C36in RRO [NWTPH]	6.61	7258	12.793 ppm
11) H C25-C36in RRO [AK103]	6.71	7258	11.923 ppm

Data File : J:\GC21\DATA\122723F\1227026.D

Vial: 10

Acq On : 27 Dec 23 06:39 pm

Operator: AA

Sample : KQ2322265-01-MB

Inst : 6890

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Dec 28 10:27 2023 Quant Results File: 122723F.RES

Quant Method : J:\GC21\METHODS\122723F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Fri Dec 22 13:00:01 2023

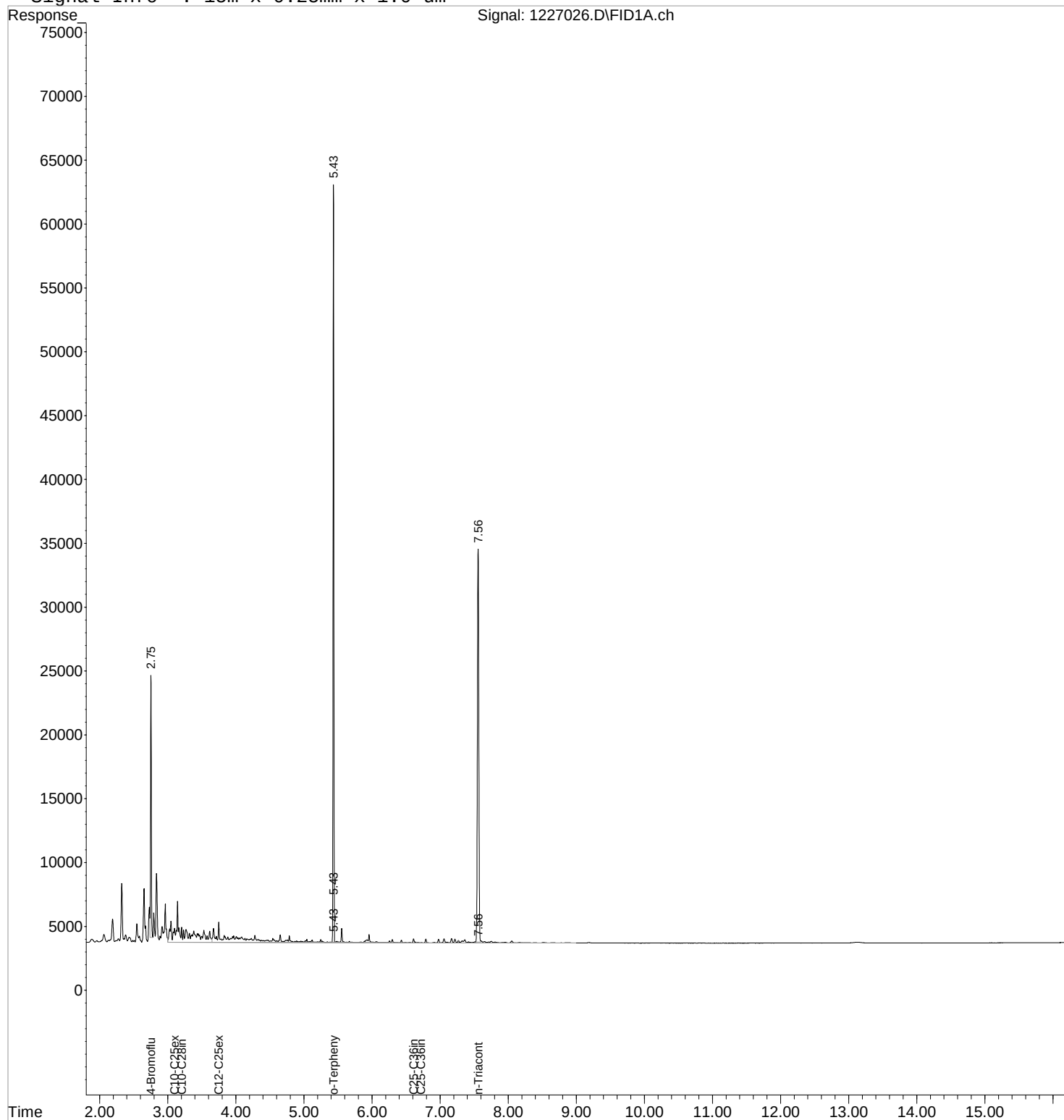
Response via : Single Level Calibration

DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Validation Report

1st  01/08/24
2nd AA 01/08/24

Data File: J:\GC35\DATA\010524\0105F028.D\
Lab ID: KQ2400071-01
RunType: MB
Matrix: Water

Date Acquired: 1/5/24 19:06:00
Batch ID: 829103
Analysis Method: NWTPH-Dx/NW_TPH_SG

Validations

Validation Categories	Pass	Fail
Analytical Hold Time	X	
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery	X	
Continuing Calibration Recovery (Closing)		X
Surrogates	X	
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	
Analyte Coelutions	X	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Continuing Calibration Recovery (Closing)	n-Triacontane	17		15	surr+ND

Primary Review: _____

Secondary Review: _____

Quantitation Report

1st *AA* 01/08/24
2nd *AA* 01/08/24

Data File:	J:\GC35\DATA\010524\0105F028.D\	Instrument:	K-GC-35
Acqu Date:	1/5/24 19:06:00	Vial:	4
Run Type:	MB	Dilution:	1
Lab ID:	KQ2400071-01	Raw Units:	ppm

Bottle ID:	NW_TPH_SGT	Tier:	IV	Matrix:	Water
Prod Code:		Collect Date:	12/20/23	Receive Date:	12/20/23

Analysis Lot:	829103	Prep Lot:	432147	Report Group:	KQ2400071
Analysis	NWTPH-Dx	Prep Method:	EPA 3510C		
		Prep Date:	1/3/24		

Title:	Semi-Volatile Petroleum Products, Silica Gel Treated by GC/FID	Calibration ID:	KC2300521
		Report List ID:	22367

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
o-Terphenyl	5.61		78376	52.953	106	50 - 150	Y
n-Triacontane	7.78		72340	60.095	120	50 - 150	Y

Target Compounds

Final Conc.Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Diesel Range Organics (C12 - C25 DRO)	3.93		25213	23.932	48	J	Y
Residual Range Organics (C25 - C36 RRO)	6.79		21181	25.738	51	J	Y

Prep Amount: 500 mL **Dilution:** 1
Prep Final Amount: 1.00 mL **Basis Factor:** 100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 1/8/24 13:35

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Data File : J:\GC35\DATA\010524\0105F028.D Vial: 4
 Acq On : 05 Jan 2024 7:06 pm Operator: JLD
 Sample : KQ2400071-01-MB Inst : GC35
 Misc : Multiplr: 1.00
 IntFile : rteint.p
 Quant Time: Jan 08 09:47:43 2024 Quant Results File: 010524FSVF.RES

Quant Method : J:\GC35\METHODS\010524FSVF.M (RTE Integrator)
 Title : AK102/103 SVF MJ257 CAL 16220
 Last Update : Fri Jan 05 13:02:55 2024
 Response via : Initial Calibration
 DataAcq Meth : SVF2_F.M

Volume Inj. : 1 uL
 Signal Phase : ZB-1
 Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
1) S 4-Bromofluorobenzene	2.98	29932	44.318 ppm
Spiked Amount 50.000	Recovery	=	88.64%
2) S o-Terphenyl	5.61	78376	52.953 ppm
Spiked Amount 50.000	Recovery	=	105.91%
3) S n-Triacontane	7.78	72340	60.095 ppm
Spiked Amount 50.000	Recovery	=	120.19%
Target Compounds			
6) H C10-C25ex DRO [AK102]	3.30	266336	210.929 ppm
7) H C10-C28in DRO [8015]	3.40	318160	239.246 ppm
8) H C12-C25ex DRO [NWT PH]	3.93	25213	23.932 ppm
10) H C25-C36in RRO [NWT PH]	6.79	21181	25.738 ppm
11) H C25-C36in RRO [AK103]	6.89	166825	217.611 ppm

Data File : J:\GC35\DATA\010524\0105F028.D

Vial: 4

Acq On : 05 Jan 2024 7:06 pm

Operator: JLD

Sample : KQ2400071-01-MB

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Jan 8 10:39 2024 Quant Results File: 010524FSVF.RES

Quant Method : J:\GC35\METHODS\010524FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Fri Jan 05 13:02:55 2024

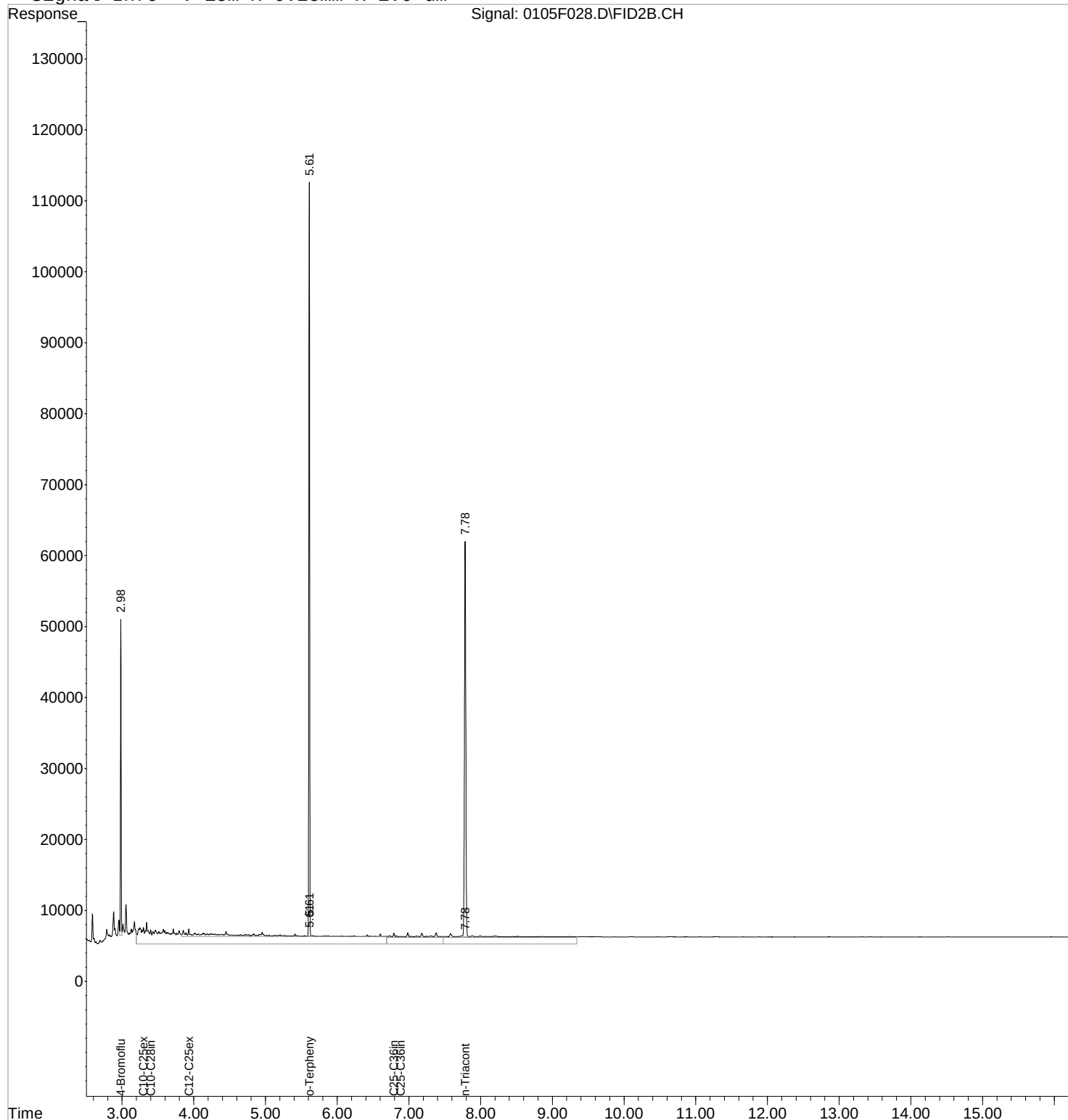
Response via : Single Level Calibration

DataAcq Meth : SVF2_F.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Quantitation Report (Qedit)

1st *AA* 01/08/242nd *AA* 01/08/24

Data File : J:\GC35\DATA\010524\0105F028.D

Acq On : 05 Jan 2024 7:06 pm

Sample : KQ2400071-01-MB

Misc :

IntFile : rteint.p

Quant Time: Jan 8 9:49 2024 Quant Results File: 010524FSVF.RES

Vial: 4

Operator: JLD

Inst : GC35

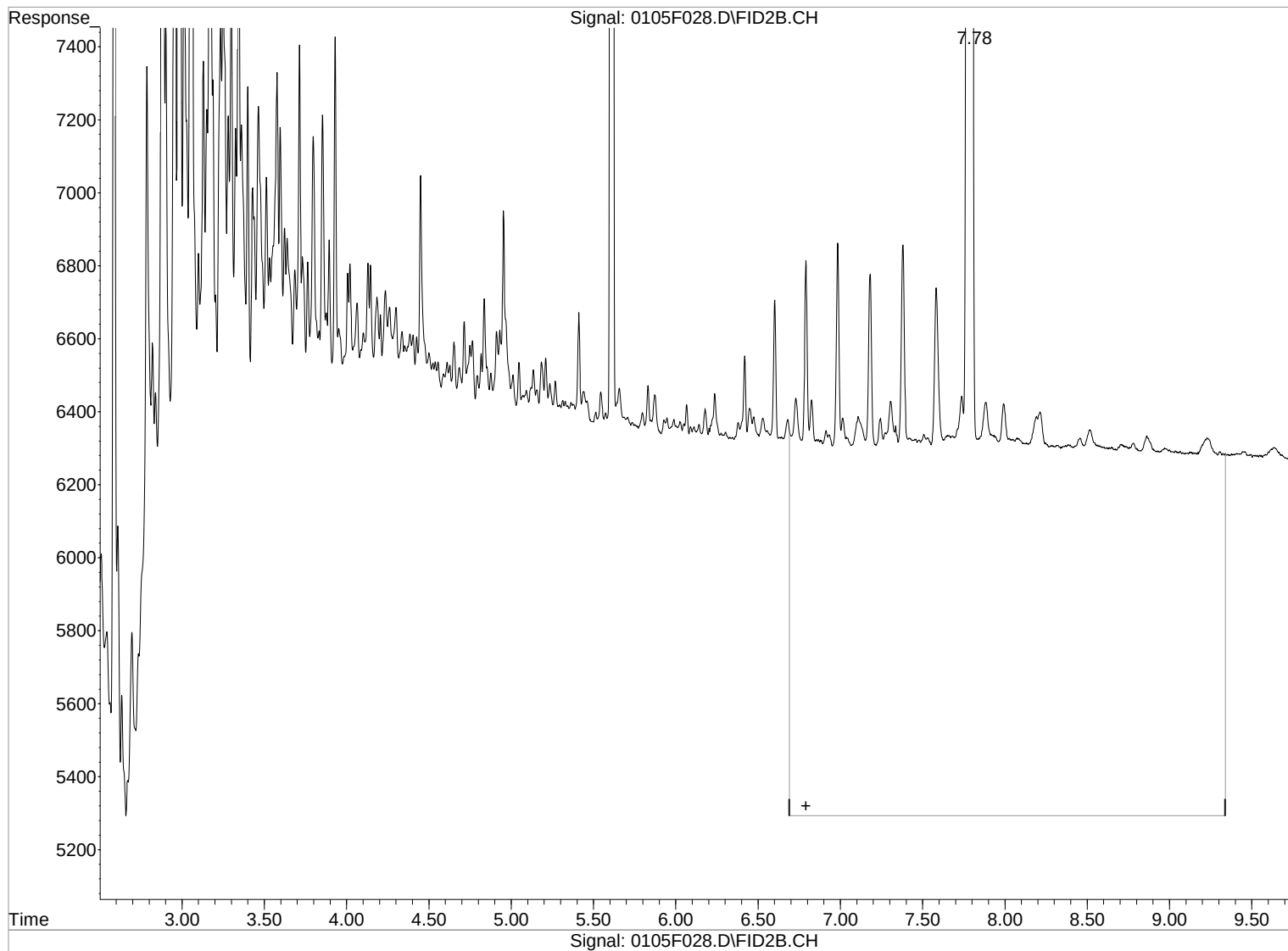
Multiplr: 1.00

Method : J:\GC35\METHODS\010524FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Fri Jan 05 13:02:55 2024

Response via : Multiple Level Calibration



(10) C25-C36in RRO [NWTPH] (H)

Manual Integration:

6.79min 202.716ppm

Before

response 166825

01/08/24

(+) = Expected Retention Time

0105F028.D 010524FSVF.M

Mon Jan 08 10:29:50 2024

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Quantitation Report (Qedit)

1st *Jan* 01/08/242nd *AA* 01/08/24

Data File : J:\GC35\DATA\010524\0105F028.D

Vial: 4

Acq On : 05 Jan 2024 7:06 pm

Operator: JLD

Sample : KQ2400071-01-MB

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

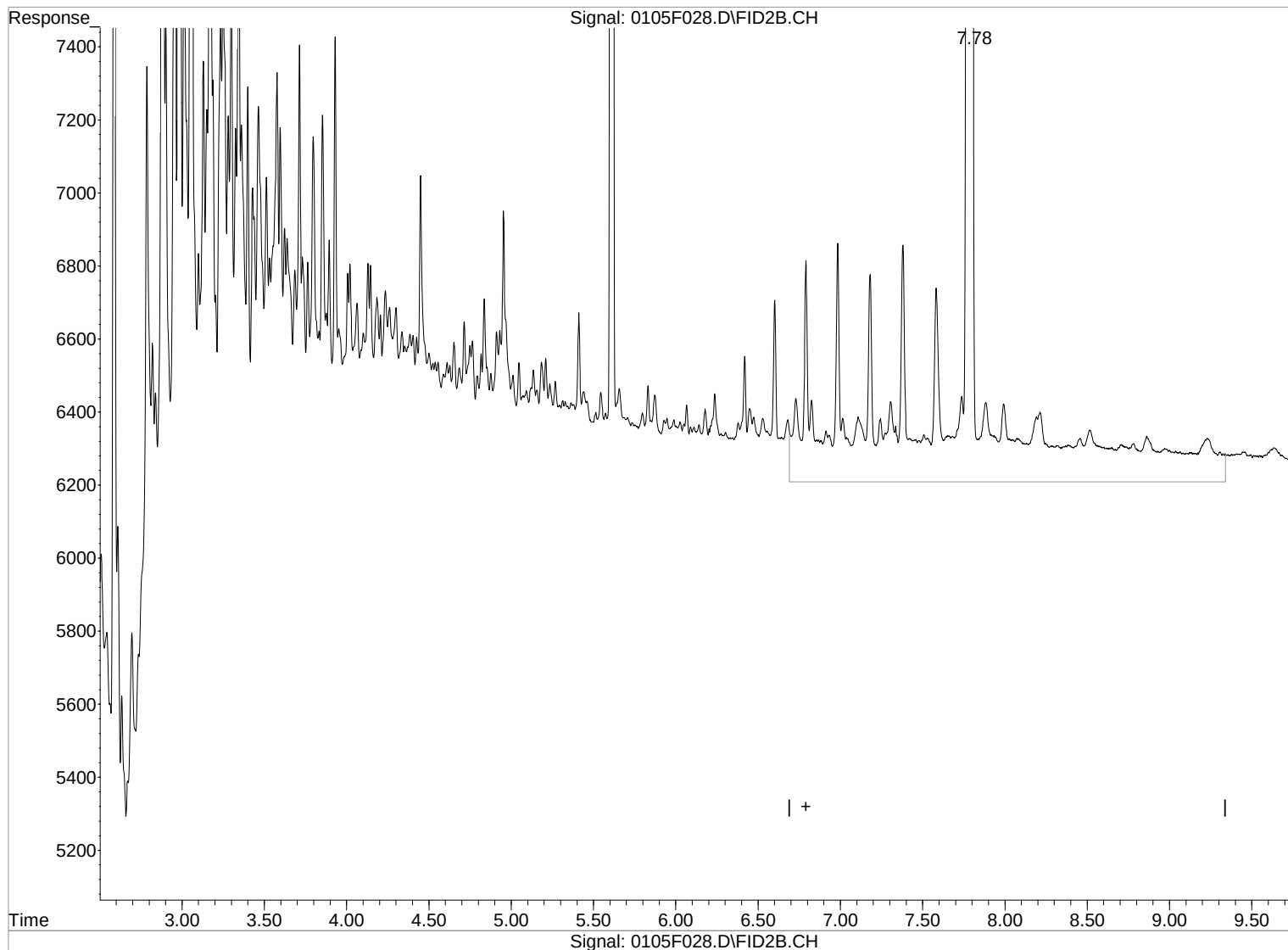
Quant Time: Jan 8 9:49 2024 Quant Results File: 010524FSVF.RES

Method : J:\GC35\METHODS\010524FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Fri Jan 05 13:02:55 2024

Response via : Multiple Level Calibration



(10) C25-C36in RRO [NWTPH] (H)

Manual Integration:

6.79min 25.738ppm

After

response 21181

Baseline/Shoulder

01/08/24

(+) = Expected Retention Time

0105F028.D 010524FSVF.M

Mon Jan 08 10:30:07 2024

205 of 3623

Quantitation Report (Qedit)

1st 01/08/24

2nd AA 01/08/24

Data File : J:\GC35\DATA\010524\0105F028.D

Acq On : 05 Jan 2024 7:06 pm

Sample : KQ2400071-01-MB

Misc :

IntFile : rteint.p

Quant Time: Jan 8 9:49 2024 Quant Results File: 010524FSVF.RES

Vial: 4

Operator: JLD

Inst : GC35

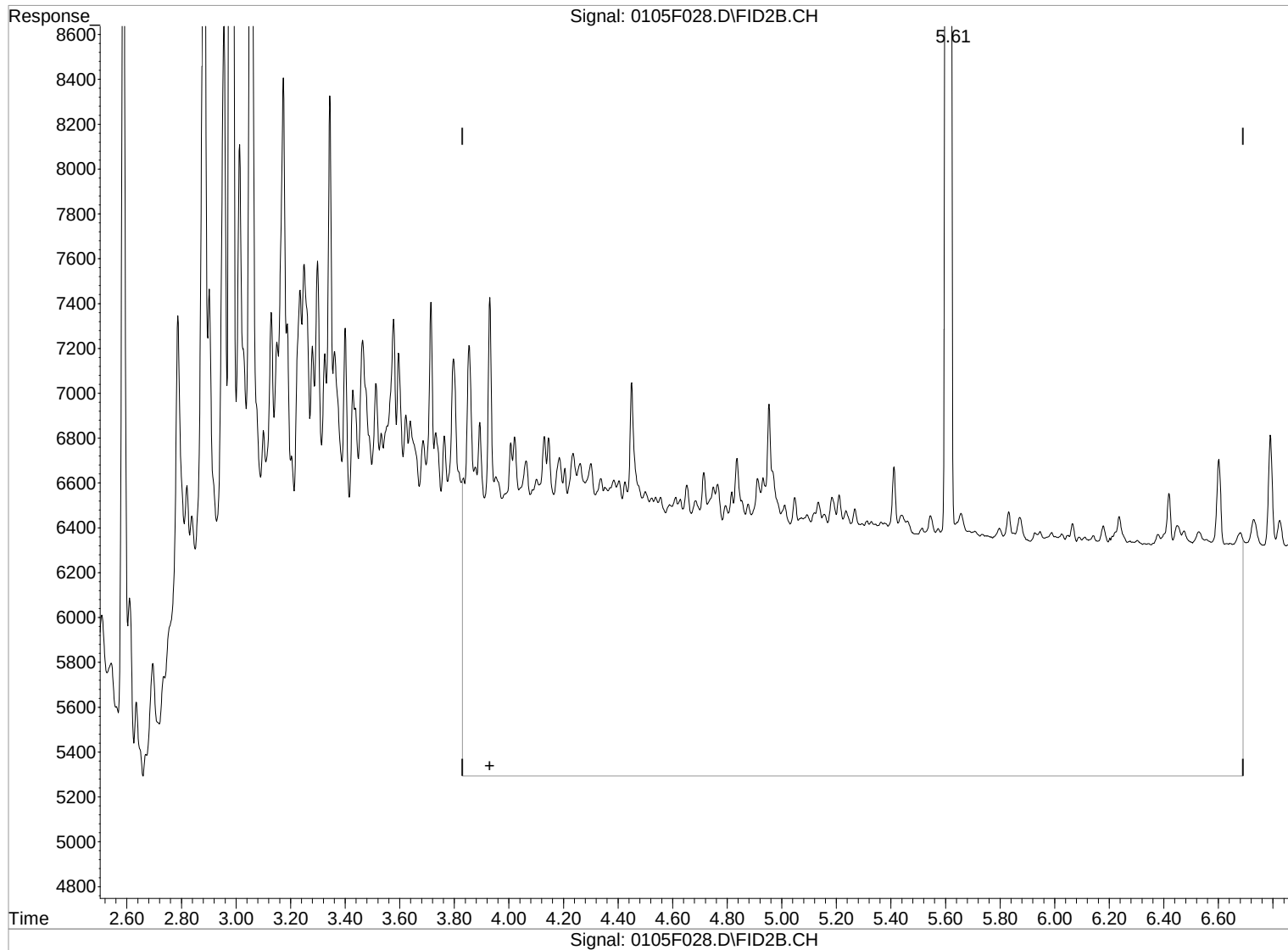
Multiplr: 1.00

Method : J:\GC35\METHODS\010524FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Fri Jan 05 13:02:55 2024

Response via : Multiple Level Calibration



(8) C12-C25ex DRO [NWTPH] (H)

Manual Integration:

3.93min 193.658ppm

Before

response 204020

01/08/24

(+) = Expected Retention Time

0105F028.D 010524FSVF.M

Mon Jan 08 10:29:13 2024

206 of 3623

Data File : J:\GC35\DATA\010524\0105F028.D

Acq On : 05 Jan 2024 7:06 pm

Sample : KQ2400071-01-MB

Misc :

IntFile : rteint.p

Quant Time: Jan 8 9:49 2024 Quant Results File: 010524FSVF.RES

Vial: 4

Operator: JLD

Inst : GC35

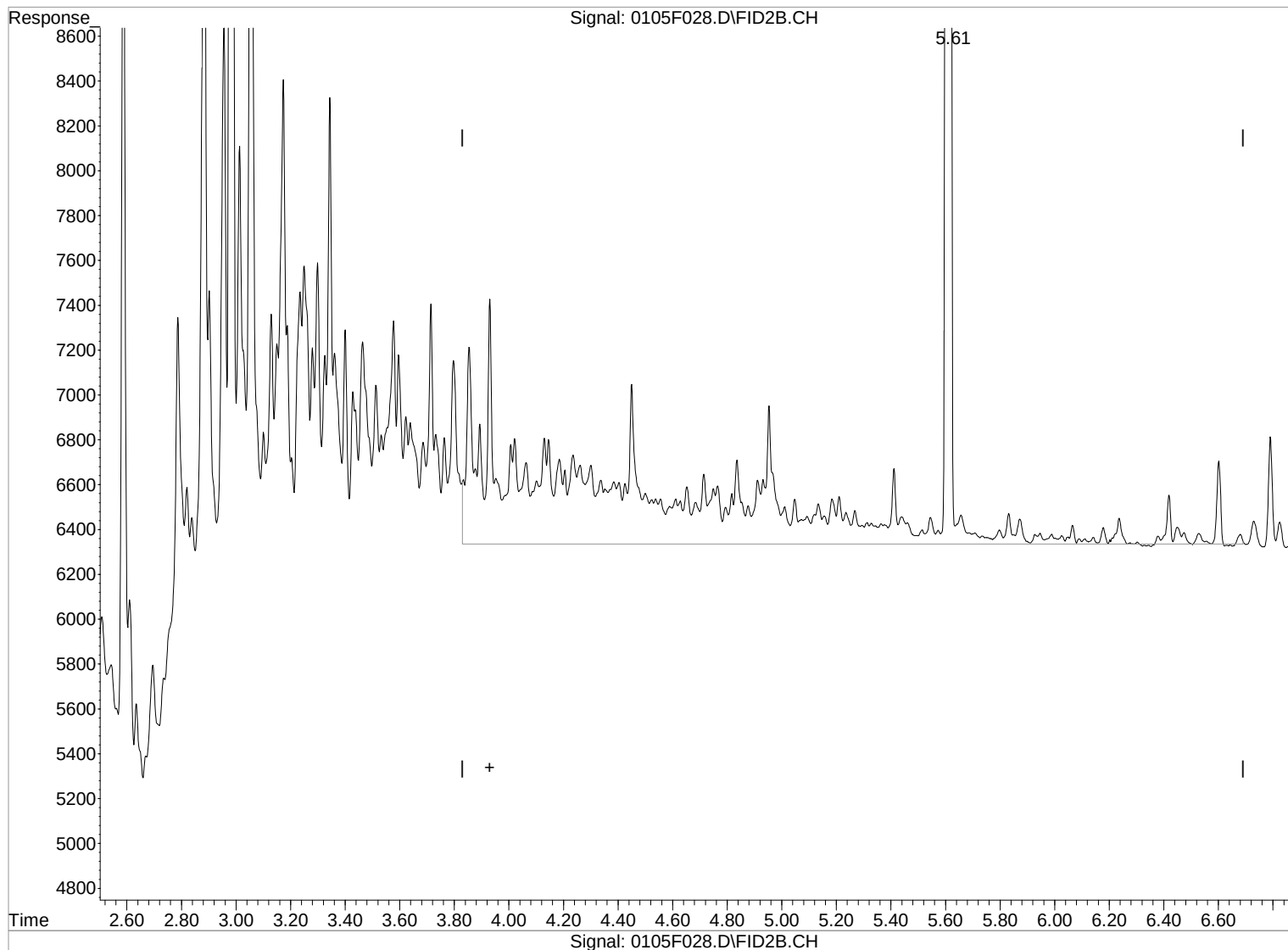
Multiplr: 1.00

Method : J:\GC35\METHODS\010524FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Fri Jan 05 13:02:55 2024

Response via : Multiple Level Calibration



(8) C12-C25ex DRO [NWTPH] (H)

3.93min 23.932ppm

response 25213

Manual Integration:

After

Baseline/Shoulder

01/08/24

(+) = Expected Retention Time

0105F028.D 010524FSVF.M

Mon Jan 08 10:29:40 2024

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Validation Report

1st *JS* 12/28/23
2nd *SW* 12/29/23

Data File: J:\GC21\DATA\122723F\1227027.D\
Lab ID: KQ2322265-02
RunType: LCS
Matrix: Water

Date Acquired: 12/27/23 19:01:00
Batch ID: 828342
Analysis Method: NWTPH-Dx/NW_TPH_SG

Validations

Validation Categories	Pass	Fail
Analytical Hold Time	X	
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery	X	
Continuing Calibration Recovery (Closing)	X	
Surrogates	X	
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	
Analyte Coelutions	X	

Primary Review: _____

Secondary Review: _____

Quantitation Report

1st *SW* 12/28/23
2nd *SW* 12/29/23

Data File:	J:\GC21\DATA\122723F\1227027.D\	Instrument:	K-GC-21
Acqu Date:	12/27/23 19:01:00	Vial:	9
Run Type:	LCS	Dilution:	1
Lab ID:	KQ2322265-02	Raw Units:	ppm

Bottle ID:	NW_TPH_SGT	Tier:	IV	Matrix:	Water
Prod Code:		Collect Date:	12/20/23	Receive Date:	12/20/23

Analysis Lot:	828342	Prep Lot:	431731	Report Group:	KQ2322265
Analysis	NWTPH-Dx	Prep Method:	EPA 3510C		
		Prep Date:	12/21/23		

Title:	Semi-Volatile Petroleum Products, Silica Gel Treated by GC/FID	Calibration ID:	KC2300522
		Report List ID:	22367

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
o-Terphenyl	5.43		53714	47.744	95	50 - 150	Y
n-Triacontane	7.56		49018	50.972	102	50 - 150	Y

Target Compounds

Final Conc.Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Diesel Range Organics (C12 - C25 DRO)	3.75		1230942	1551.908	3100		Y
Residual Range Organics (C25 - C36 RRO)	6.61		483154	851.586	1700		Y

Prep Amount: 500 mL **Dilution:** 1
Prep Final Amount: 1.00 mL **Basis Factor:** 100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 12/28/23 13:11

\\alprews001\starlims\LIMSReps\QuantValidation.rpt

Data File : J:\GC21\DATA\122723F\1227027.D Vial: 11
 Acq On : 27 Dec 23 07:01 pm Operator: AA
 Sample : KQ2322265-02-LCS Inst : 6890
 Misc : Multiplr: 1.00
 IntFile : rteint.p
 Quant Time: Dec 28 10:26:44 2023 Quant Results File: 122723F.RES

Quant Method : J:\GC21\METHODS\122723F.M (RTE Integrator)
 Title : 8015/NWTPH/AK SVF MJ257 KC2000628
 Last Update : Fri Dec 22 13:00:01 2023
 Response via : Initial Calibration
 DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL
 Signal Phase : ZB-1
 Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
----------	------	----------	------------

System Monitoring Compounds

1) S 4-Bromofluorobenzene	2.75	18052	34.146 ppm
Spiked Amount 50.000	Recovery	=	68.29%
2) S o-Terphenyl	5.43	53714	47.744 ppm
Spiked Amount 50.000	Recovery	=	95.49%
3) S n-Triacontane	7.56	49018	50.972 ppm
Spiked Amount 50.000	Recovery	=	101.94%

Target Compounds

6) H C10-C25ex DRO [AK102]	3.10	1422948	1468.034 ppm
7) H C10-C28in DRO [8015]	3.20	1585838	1563.736 ppm
8) H C12-C25ex DRO [NWTPH]	3.75	1230942	1551.908 ppm
10) H C25-C36in RRO [NWTPH]	6.61	483154	851.586 ppm
11) H C25-C36in RRO [AK103]	6.71	483154	793.665 ppm

Data File : J:\GC21\DATA\122723F\1227027.D

Vial: 11

Acq On : 27 Dec 23 07:01 pm

Operator: AA

Sample : KQ232265-02-LCS

Inst : 6890

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Dec 28 11:30 2023 Quant Results File: 122723F.RES

Quant Method : J:\GC21\METHODS\122723F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Fri Dec 22 13:00:01 2023

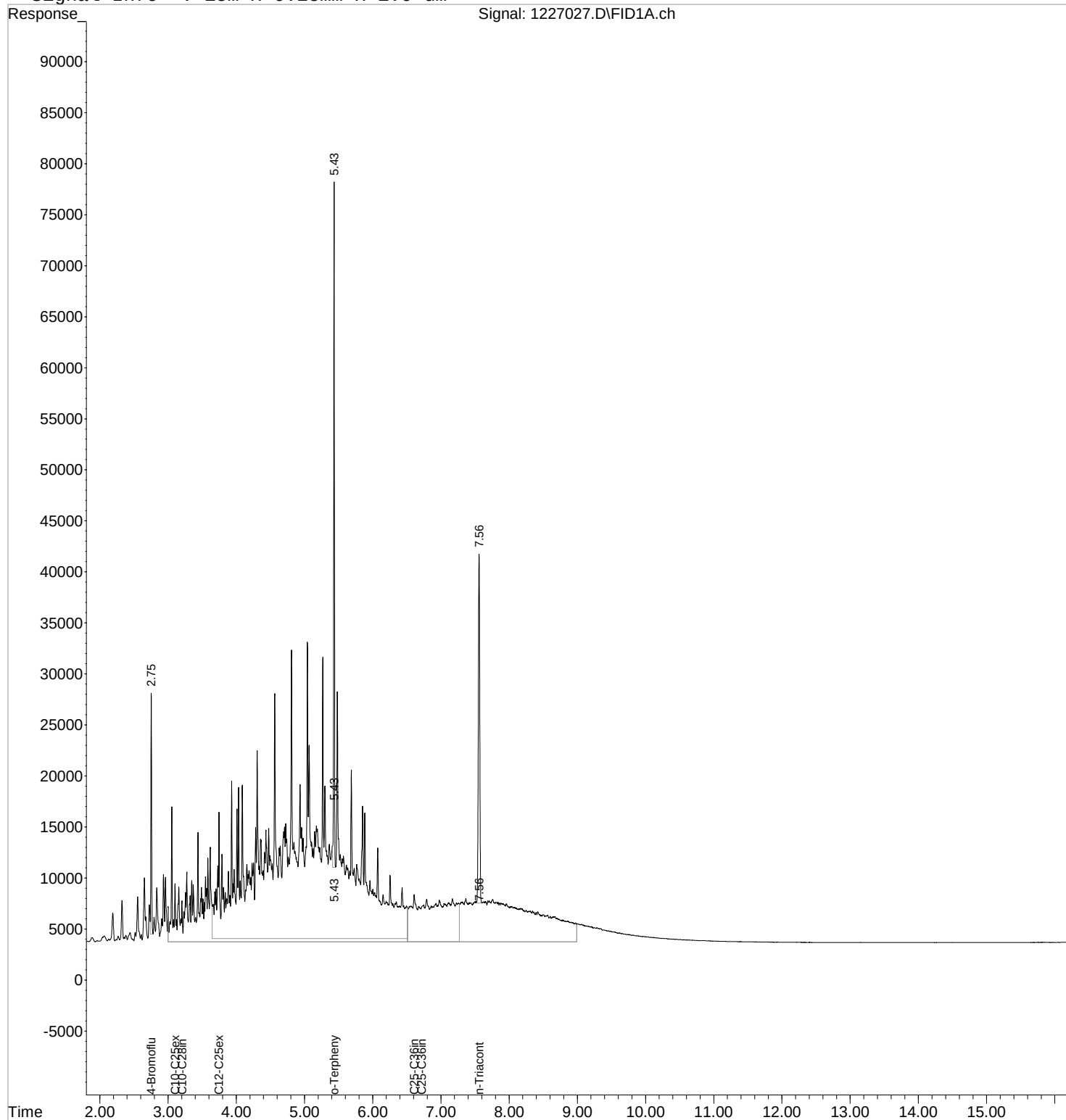
Response via : Single Level Calibration

DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Data File : J:\GC21\DATA\122723F\1227027.D

Vial: 11

Acq On : 27 Dec 23 07:01 pm

Operator: AA

Sample : KQ232265-02-LCS

Inst : 6890

Misc :

Multiplr: 1.00

IntFile : rteint.p

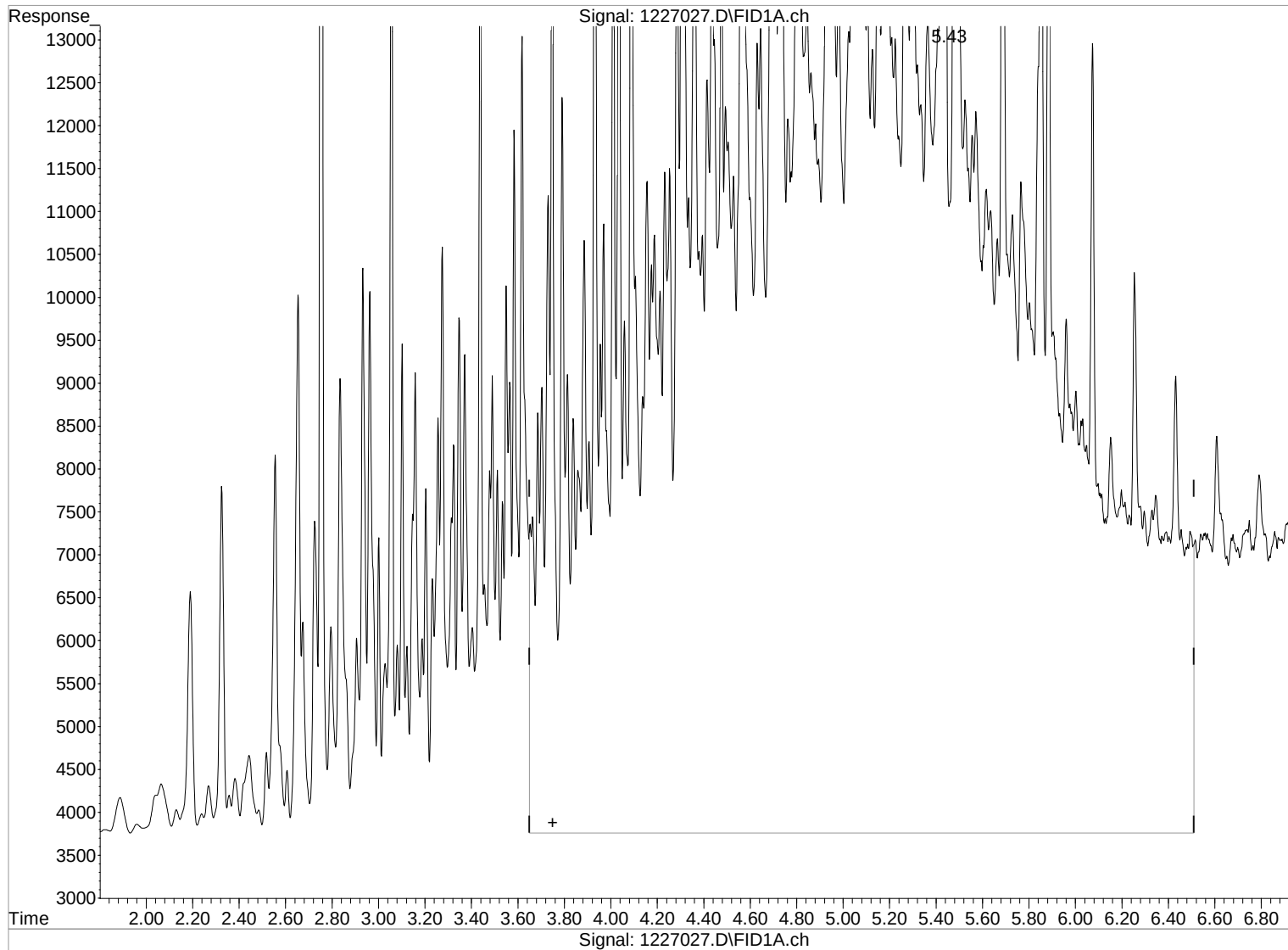
Quant Time: Dec 28 10:27 2023 Quant Results File: 122723F.RES

Method : J:\GC21\METHODS\122723F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Fri Dec 22 13:00:01 2023

Response via : Multiple Level Calibration



(8) C12-C25ex DRO [NWTPH] (H)

Manual Integration:

3.75min 1619.440ppm

Before

response 1284507

12/28/23

(+) = Expected Retention Time

1227027.D 122723F.M Thu Dec 28 11:27:55 2023

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Data File : J:\GC21\DATA\122723F\1227027.D

Vial: 11

Acq On : 27 Dec 23 07:01 pm

Operator: AA

Sample : KQ232265-02-LCS

Inst : 6890

Misc :

Multiplr: 1.00

IntFile : rteint.p

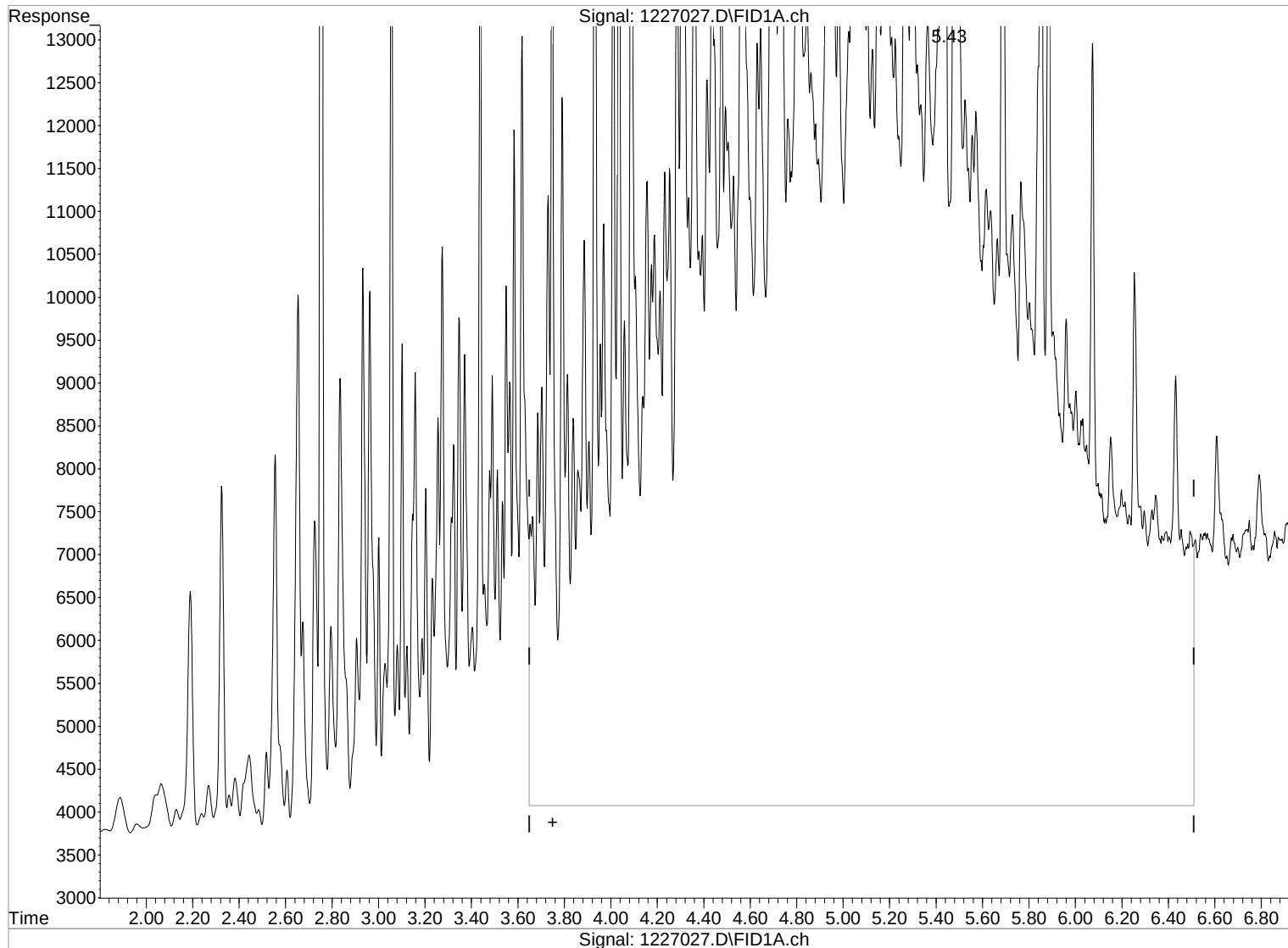
Quant Time: Dec 28 10:27 2023 Quant Results File: 122723F.RES

Method : J:\GC21\METHODS\122723F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Fri Dec 22 13:00:01 2023

Response via : Multiple Level Calibration



(8) C12-C25ex DRO [NWTPH] (H)

Manual Integration:

3.75min 1551.908ppm

After

response 1230942

Baseline/Shoulder

12/28/23

(+) = Expected Retention Time

1227027.D 122723F.M Thu Dec 28 11:28:11 2023

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Validation Report

1st  01/08/24
2nd **AA** 01/08/24

Data File: J:\GC35\DATA\010524\0105F029.D\
Lab ID: KQ2400071-02
RunType: LCS
Matrix: Water

Date Acquired: 1/5/24 19:28:00
Batch ID: 829103
Analysis Method: NWTPH-Dx/NW_TPH_SG

Validations

Validation Categories	Pass	Fail
Analytical Hold Time	X	
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery	X	
Continuing Calibration Recovery (Closing)		X
Surrogates	X	
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	
Analyte Coelutions	X	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Continuing Calibration Recovery (Closing)	n-Triacontane	17		15	surrt+ND

Primary Review: _____

Secondary Review: _____

Quantitation Report

1st *AA* 01/08/24
2nd *AA* 01/08/24

Data File:	J:\GC35\DATA\010524\0105F029.D\	Instrument:	K-GC-35
Acqu Date:	1/5/24 19:28:00	Vial:	5
Run Type:	LCS	Dilution:	1
Lab ID:	KQ2400071-02	Raw Units:	ppm

Bottle ID:		Tier:	IV	Matrix:	Water
Prod Code:	NW_TPH_SGT	Collect Date:	12/20/23	Receive Date:	12/20/23

Analysis Lot:	829103	Prep Lot:	432147	Report Group:	KQ2400071
Analysis	NWTPH-Dx	Prep Method:	EPA 3510C		
		Prep Date:	1/3/24		

Title:	Semi-Volatile Petroleum Products, Silica Gel Treated by GC/FID	Calibration ID:	KC2300521
		Report List ID:	22367

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
o-Terphenyl	5.61		75766	51.190	102	50 - 150	Y
n-Triacontane	7.79	+0.01	69675	57.881	116	50 - 150	Y

Target Compounds

Final Conc.Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Diesel Range Organics (C12 - C25 DRO)	3.93		1884309	1788.606	3580		Y
Residual Range Organics (C25 - C36 RRO)	6.79		807476	981.196	1960		Y

Prep Amount: 500 mL **Dilution:** 1
Prep Final Amount: 1.00 mL **Basis Factor:** 100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 1/8/24 13:35

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Data File : J:\GC35\DATA\010524\0105F029.D Vial: 5
 Acq On : 05 Jan 2024 7:28 pm Operator: JLD
 Sample : KQ2400071-02-LCS Inst : GC35
 Misc : Multiplr: 1.00
 IntFile : rteint.p
 Quant Time: Jan 08 09:47:44 2024 Quant Results File: 010524FSVF.RES

Quant Method : J:\GC35\METHODS\010524FSVF.M (RTE Integrator)
 Title : AK102/103 SVF MJ257 CAL 16220
 Last Update : Fri Jan 05 13:02:55 2024
 Response via : Initial Calibration
 DataAcq Meth : SVF2_F.M

Volume Inj. : 1 uL
 Signal Phase : ZB-1
 Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
1) S 4-Bromofluorobenzene	2.98	22769	33.712 ppm
Spiked Amount 50.000	Recovery	=	67.42%
2) S o-Terphenyl	5.61	75766	51.190 ppm
Spiked Amount 50.000	Recovery	=	102.38%
3) S n-Triacontane	7.79	69675	57.881 ppm
Spiked Amount 50.000	Recovery	=	115.76%
Target Compounds			
6) H C10-C25ex DRO [AK102]	3.30	2079515	1646.902 ppm
7) H C10-C28in DRO [8015]	3.40	2356552	1772.052 ppm
8) H C12-C25ex DRO [NWT PH]	3.93	1884309	1788.606 ppm
10) H C25-C36in RRO [NWT PH]	6.79	807476	981.196 ppm
11) H C25-C36in RRO [AK103]	6.89	807476	1053.295 ppm

Data File : J:\GC35\DATA\010524\0105F029.D

Vial: 5

Acq On : 05 Jan 2024 7:28 pm

Operator: JLD

Sample : KQ2400071-02-LCS

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Jan 8 9:49 2024 Quant Results File: 010524FSVF.RES

Quant Method : J:\GC35\METHODS\010524FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Fri Jan 05 13:02:55 2024

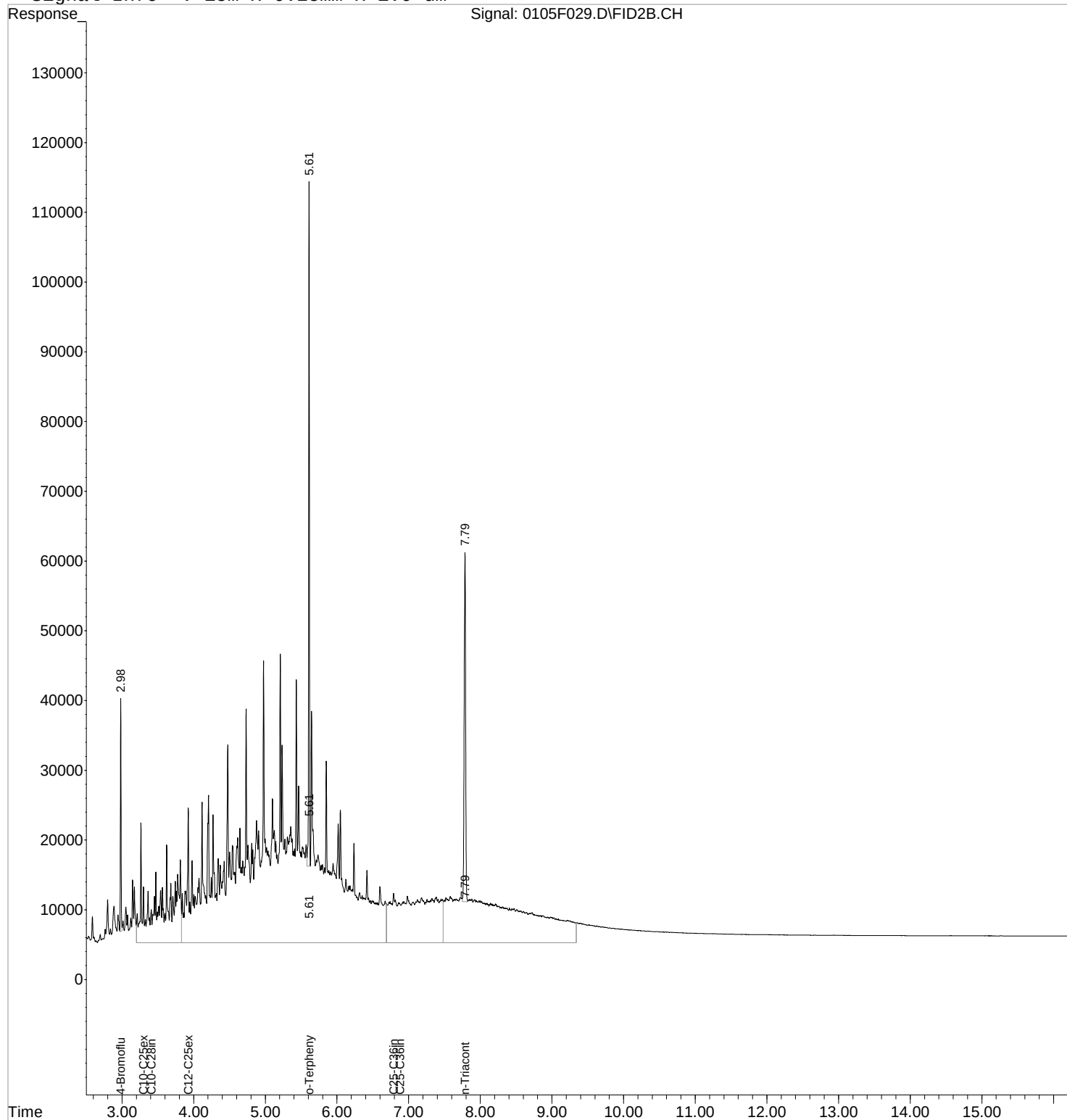
Response via : Single Level Calibration

DataAcq Meth : SVF2_F.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Validation Report

1st *JS* 12/28/23
2nd *SW* 12/29/23

Data File: J:\GC21\DATA\122723F\1227028.D\
Lab ID: KQ2322265-03
RunType: DLCS
Matrix: Water

Date Acquired: 12/27/23 19:22:00
Batch ID: 828342
Analysis Method: NWTPH-Dx/NW_TPH_SG

Validations

Validation Categories	Pass	Fail
Analytical Hold Time	X	
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery	X	
Continuing Calibration Recovery (Closing)	X	
Surrogates	X	
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	
Analyte Coelutions	X	

Primary Review: _____

Secondary Review: _____

Quantitation Report

1st *SW* 12/28/23
2nd *SW* 12/29/23

Data File:	J:\GC21\DATA\122723F\1227028.D\	Instrument:	K-GC-21
Acqu Date:	12/27/23 19:22:00	Vial:	10
Run Type:	DLCS	Dilution:	1
Lab ID:	KQ2322265-03	Raw Units:	ppm

Bottle ID:		Tier:	IV	Matrix:	Water
Prod Code:	NW_TPH_SGT	Collect Date:	12/20/23	Receive Date:	12/20/23

Analysis Lot:	828342	Prep Lot:	431731	Report Group:	KQ2322265
Analysis	NWTPH-Dx	Prep Method:	EPA 3510C		
		Prep Date:	12/21/23		

Title:	Semi-Volatile Petroleum Products, Silica Gel Treated by GC/FID	Calibration ID:	KC2300522
		Report List ID:	22367

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
o-Terphenyl	5.43		54798	48.708	97	50 - 150	Y
n-Triacontane	7.56		49630	51.608	103	50 - 150	Y

Target Compounds

Final Conc.Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Diesel Range Organics (C12 - C25 DRO)	3.75		1247167	1572.364	3140		Y
Residual Range Organics (C25 - C36 RRO)	6.61		476238	839.396	1680		Y

Prep Amount: 500 mL **Dilution:** 1
Prep Final Amount: 1.00 mL **Basis Factor:** 100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 12/28/23 13:11

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Data File : J:\GC21\DATA\122723F\1227028.D Vial: 12
 Acq On : 27 Dec 23 07:22 pm Operator: AA
 Sample : KQ2322265-03-DLCS Inst : 6890
 Misc : Multiplr: 1.00
 IntFile : rteint.p
 Quant Time: Dec 28 10:26:45 2023 Quant Results File: 122723F.RES

Quant Method : J:\GC21\METHODS\122723F.M (RTE Integrator)
 Title : 8015/NWTPH/AK SVF MJ257 KC2000628
 Last Update : Fri Dec 22 13:00:01 2023
 Response via : Initial Calibration
 DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL
 Signal Phase : ZB-1
 Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

1) S 4-Bromofluorobenzene	2.76	19425	36.743 ppm
Spiked Amount 50.000	Recovery	=	73.49%
2) S o-Terphenyl	5.43	54798	48.708 ppm
Spiked Amount 50.000	Recovery	=	97.42%
3) S n-Triacontane	7.56	49630	51.608 ppm
Spiked Amount 50.000	Recovery	=	103.22%

Target Compounds

6) H C10-C25ex DRO [AK102]	3.10	1446169	1491.991 ppm
7) H C10-C28in DRO [8015]	3.20	1606476	1584.087 ppm
8) H C12-C25ex DRO [NWTPH]	3.75	1247167	1572.364 ppm
10) H C25-C36in RRO [NWTPH]	6.61	476238	839.396 ppm
11) H C25-C36in RRO [AK103]	6.71	476238	782.304 ppm

Data File : J:\GC21\DATA\122723F\1227028.D

Vial: 12

Acq On : 27 Dec 23 07:22 pm

Operator: AA

Sample : KQ232265-03-DLCS

Inst : 6890

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Dec 28 11:31 2023 Quant Results File: 122723F.RES

Quant Method : J:\GC21\METHODS\122723F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Fri Dec 22 13:00:01 2023

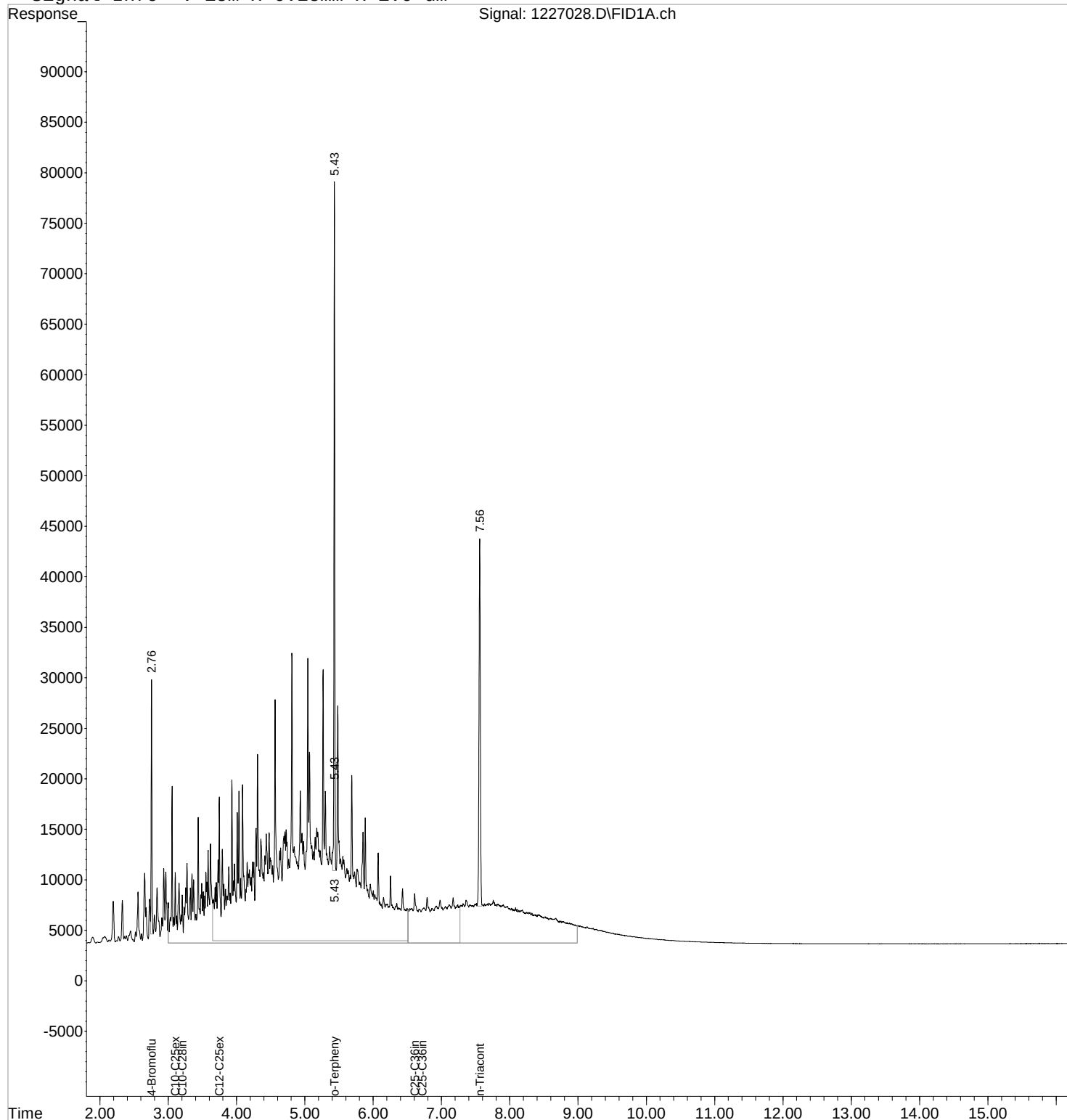
Response via : Single Level Calibration

DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Quantitation Report (Qedit)

1st *Jan* 12/28/232nd *SW* 12/29/23

Data File : J:\GC21\DATA\122723F\1227028.D

Vial: 12

Acq On : 27 Dec 23 07:22 pm

Operator: AA

Sample : KQ232265-03-DLCS

Inst : 6890

Misc :

Multiplr: 1.00

IntFile : rteint.p

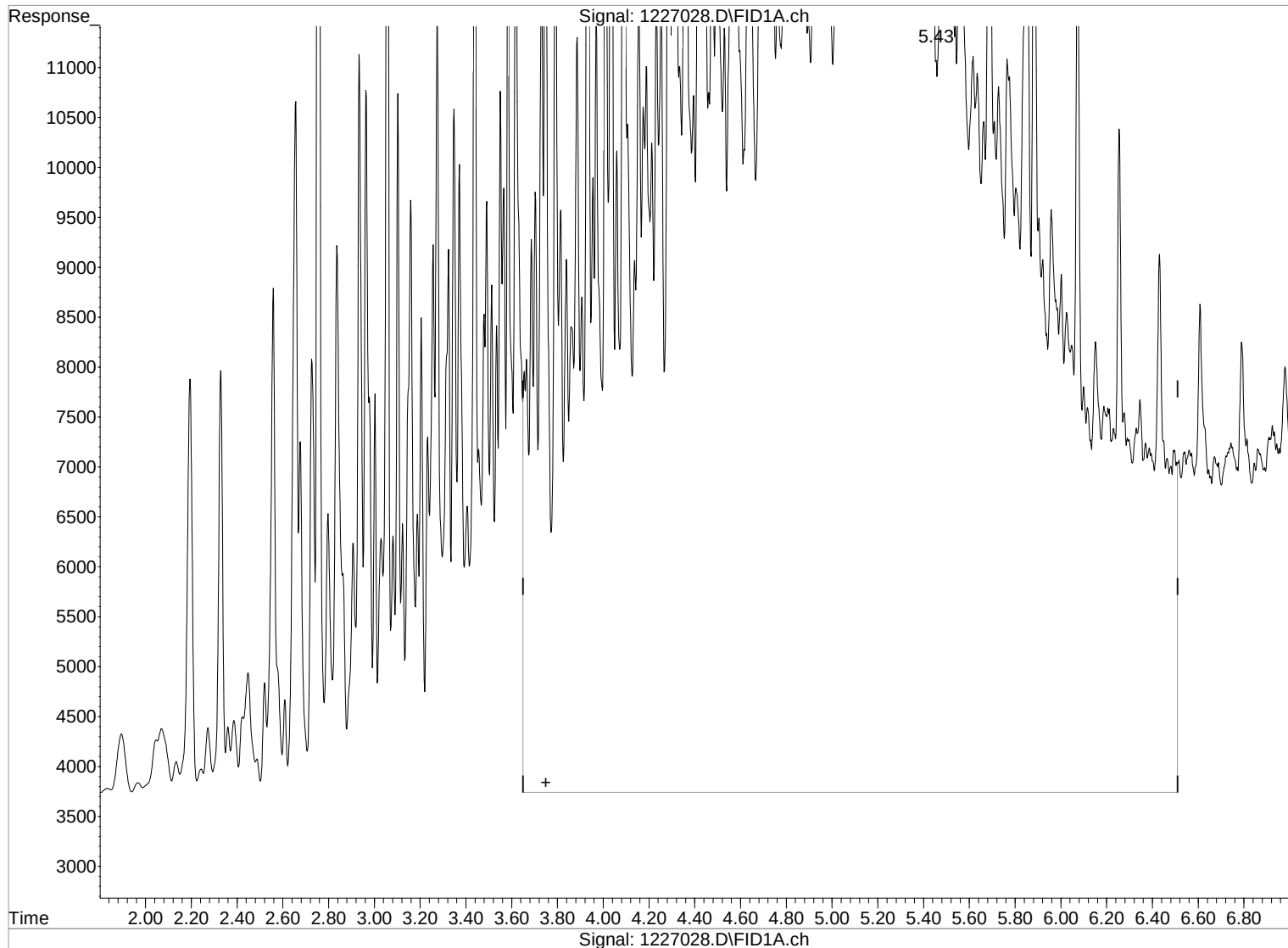
Quant Time: Dec 28 10:27 2023 Quant Results File: 122723F.RES

Method : J:\GC21\METHODS\122723F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Fri Dec 22 13:00:01 2023

Response via : Multiple Level Calibration



(8) C12-C25ex DRO [NWTPH] (H)

Manual Integration:

3.75min 1619.573ppm

Before

response 1284612

12/28/23

(+) = Expected Retention Time

1227028.D 122723F.M Thu Dec 28 11:28:46 2023

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Data File : J:\GC21\DATA\122723F\1227028.D

Vial: 12

Acq On : 27 Dec 23 07:22 pm

Operator: AA

Sample : KQ232265-03-DLCS

Inst : 6890

Misc :

Multiplr: 1.00

IntFile : rteint.p

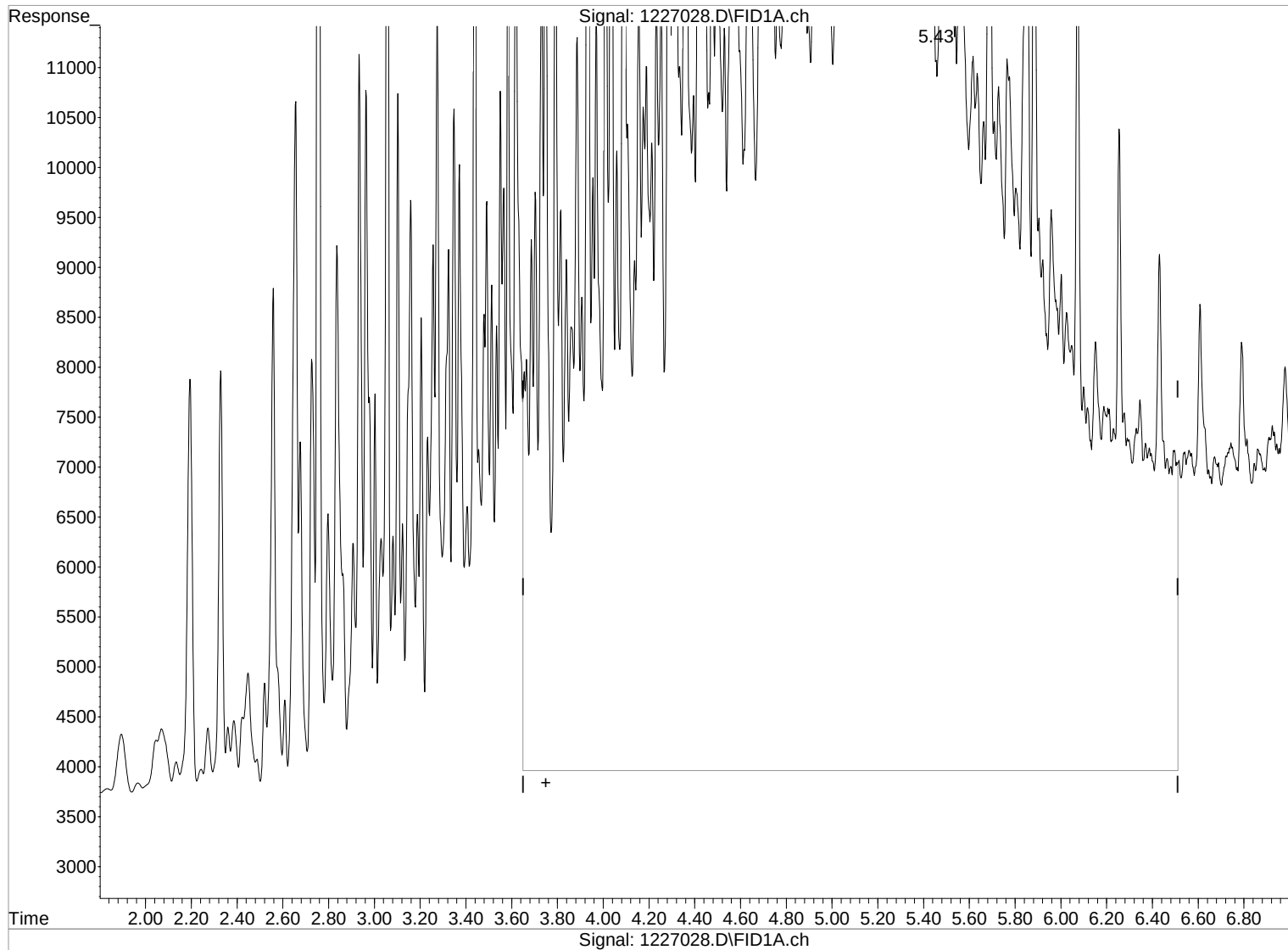
Quant Time: Dec 28 10:27 2023 Quant Results File: 122723F.RES

Method : J:\GC21\METHODS\122723F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Fri Dec 22 13:00:01 2023

Response via : Multiple Level Calibration



(8) C12-C25ex DRO [NWTPH] (H)

Manual Integration:

3.75min 1572.364ppm

After

response 1247167

Baseline/Shoulder

12/28/23

(+) = Expected Retention Time

1227028.D 122723F.M Thu Dec 28 11:28:55 2023

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Validation Report

1st  01/08/24
2nd **AA** 01/08/24

Data File: J:\GC35\DATA\010524\0105F030.D\
Lab ID: KQ2400071-03
RunType: DLCS
Matrix: Water

Date Acquired: 1/5/24 19:50:00
Batch ID: 829103
Analysis Method: NWTPH-Dx/NW_TPH_SG

Validations

Validation Categories	Pass	Fail
Analytical Hold Time	X	
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery	X	
Continuing Calibration Recovery (Closing)		X
Surrogates	X	
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	
Analyte Coelutions	X	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Continuing Calibration Recovery (Closing)	n-Triacontane	17		15	surr+ND

Primary Review: _____

Secondary Review: _____

Quantitation Report

1st *AA* 01/08/24
2nd *AA* 01/08/24

Data File:	J:\GC35\DATA\010524\0105F030.D\	Instrument:	K-GC-35
Acqu Date:	1/5/24 19:50:00	Vial:	6
Run Type:	DLCS	Dilution:	1
Lab ID:	KQ2400071-03	Raw Units:	ppm

Bottle ID:	NW_TPH_SGT	Tier:	IV	Matrix:	Water
Prod Code:		Collect Date:	12/20/23	Receive Date:	12/20/23

Analysis Lot:	829103	Prep Lot:	432147	Report Group:	KQ2400071
Analysis	NWTPH-Dx	Prep Method:	EPA 3510C		
		Prep Date:	1/3/24		

Title:	Semi-Volatile Petroleum Products, Silica Gel Treated by GC/FID	Calibration ID:	KC2300521
		Report List ID:	22367

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
o-Terphenyl	5.61		74033	50.019	100	50 - 150	Y
n-Triacontane	7.78		66102	54.913	110	50 - 150	Y

Target Compounds

Final Conc.Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Diesel Range Organics (C12 - C25 DRO)	3.93		1895906	1799.614	3600		Y
Residual Range Organics (C25 - C36 RRO)	6.79		771811	937.858	1880		Y

Prep Amount: 500 mL **Dilution:** 1
Prep Final Amount: 1.00 mL **Basis Factor:** 100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 1/8/24 13:35

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Data File : J:\GC35\DATA\010524\0105F030.D Vial: 6
 Acq On : 05 Jan 2024 7:50 pm Operator: JLD
 Sample : KQ2400071-03-DLCS Inst : GC35
 Misc : Multiplr: 1.00
 IntFile : rteint.p
 Quant Time: Jan 08 09:47:45 2024 Quant Results File: 010524FSVF.RES

Quant Method : J:\GC35\METHODS\010524FSVF.M (RTE Integrator)
 Title : AK102/103 SVF MJ257 CAL 16220
 Last Update : Fri Jan 05 13:02:55 2024
 Response via : Initial Calibration
 DataAcq Meth : SVF2_F.M

Volume Inj. : 1 uL
 Signal Phase : ZB-1
 Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

1) S 4-Bromofluorobenzene	2.98	26848	39.751 ppm
Spiked Amount 50.000	Recovery	=	79.50%
2) S o-Terphenyl	5.61	74033	50.019 ppm
Spiked Amount 50.000	Recovery	=	100.04%
3) S n-Triacontane	7.78	66102	54.913 ppm
Spiked Amount 50.000	Recovery	=	109.83%

Target Compounds

6) H C10-C25ex DRO [AK102]	3.30	2151926	1704.249 ppm
7) H C10-C28in DRO [8015]	3.40	2411892	1813.666 ppm
8) H C12-C25ex DRO [NWT PH]	3.93	1895906	1799.614 ppm
10) H C25-C36in RRO [NWT PH]	6.79	771811	937.858 ppm
11) H C25-C36in RRO [AK103]	6.89	771811	1006.772 ppm

Data File : J:\GC35\DATA\010524\0105F030.D

Vial: 6

Acq On : 05 Jan 2024 7:50 pm

Operator: JLD

Sample : KQ2400071-03-DLCS

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Jan 8 9:49 2024 Quant Results File: 010524FSVF.RES

Quant Method : J:\GC35\METHODS\010524FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Fri Jan 05 13:02:55 2024

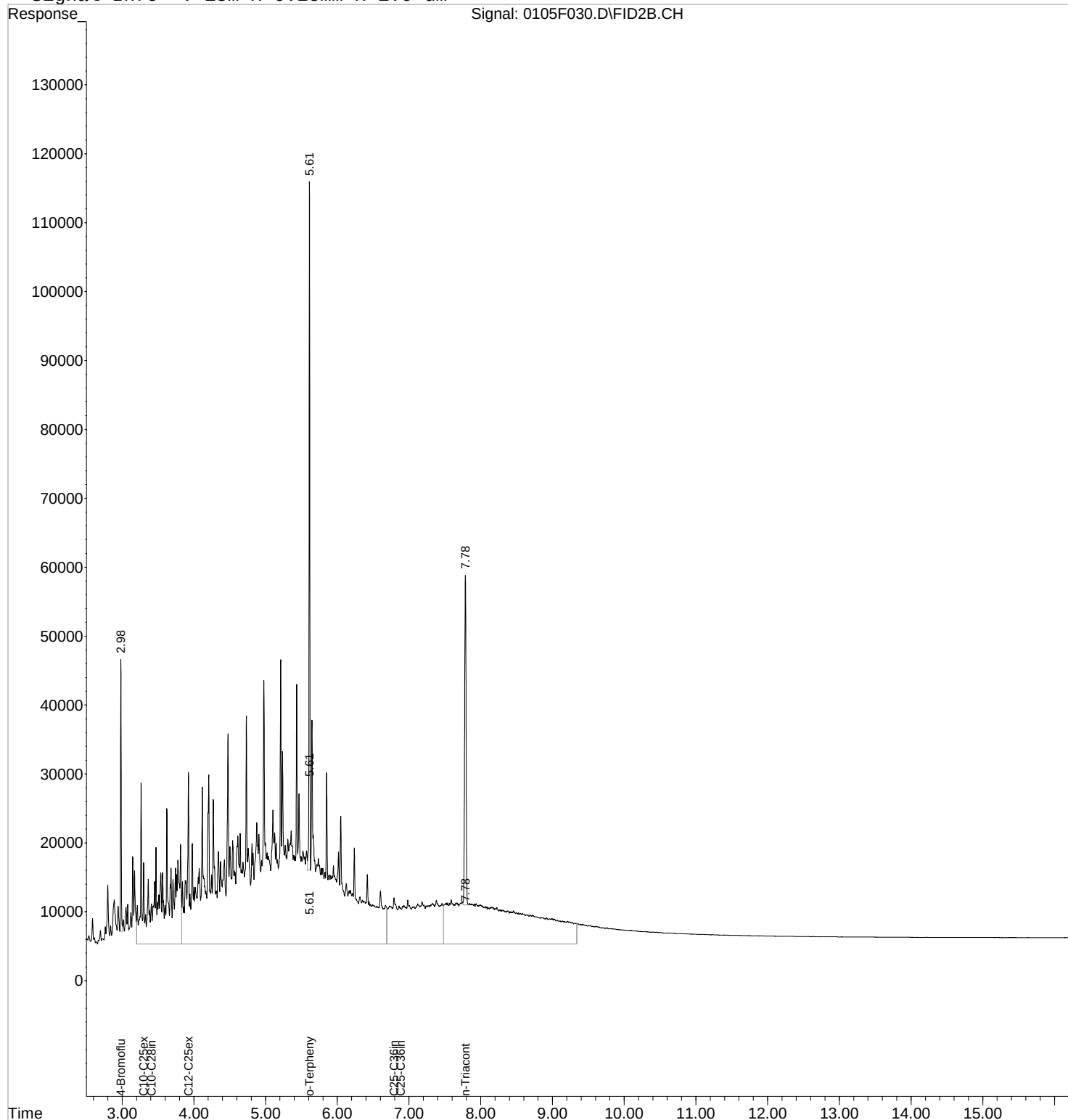
Response via : Single Level Calibration

DataAcq Meth : SVF2_F.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Validation Report

1st *JS* 12/28/23
2nd *SW* 12/29/23

Data File: J:\GC21\DATA\122723F\1227016.D\
Lab ID: KQ2322578-04
RunType: CCB
Matrix: Biosolids Solids

Date Acquired: 12/27/23 15:03:00
Batch ID: 828340
Analysis Method: NWTPH-Dx/NW_TPH

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery	X	
Continuing Calibration Recovery (Closing)	X	
Surrogates	X	
Above Highest ICAL Level	X	
Analyte Coelutions	X	

Primary Review: _____

Secondary Review: _____

Validation Report

1st *JS* 12/28/23
2nd *SW* 12/29/23

Data File: J:\GC21\DATA\122723F\1227016.D\
Lab ID: KQ2322584-03
RunType: CCB
Matrix: Misc. Liquid

Date Acquired: 12/27/23 15:03:00
Batch ID: 828342
Analysis Method: NWTPH-Dx/NW_TPH_SG

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery	X	
Continuing Calibration Recovery (Closing)	X	
Surrogates	X	
Above Highest ICAL Level	X	
Analyte Coelutions	X	

Primary Review: _____

Secondary Review: _____

Quantitation Report

1st *JS* 12/28/23
2nd *SW* 12/29/23

Data File:	J:\GC21\DATA\122723F\1227016.D\	Instrument:	K-GC-21
Acqu Date:	12/27/23 15:03:00	Vial:	3
Run Type:	CCB	Dilution:	1
Lab ID:	KQ2322578-04	Raw Units:	ppm

Bottle ID:		Tier:	II	Matrix:	Biosolids Solids
Prod Code:	NW_TPH	Collect Date:	12/19/23	Receive Date:	12/19/23

Analysis Lot:	828340	Prep Lot:		Report Group:	KQ2322578
Analysis	NWTPH-Dx	Prep Method:			
		Prep Date:			

Title:	Semi-Volatile Petroleum Products by GC/FID	Calibration ID:	KC2300522
		Report List ID:	22364

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
o-Terphenyl	0.00		0	0.000		50 - 150	Y
n-Triacontane	0.00		0	0.000		50 - 150	Y

Target Compounds

Final Conc.Units: mg/Kg

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Diesel Range Organics (C12 - C25 DRO)	3.75		5044	6.359	2.1	J	Y
Residual Range Organics (C25 - C36 RRO)	6.61		4545	8.011	2.7	U	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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Quantitation Report

1st *JS* 12/28/23
2nd *SW* 12/29/23

Data File:	J:\GC21\DATA\122723F\1227016.D\	Instrument:	K-GC-21
Acqu Date:	12/27/23 15:03:00	Vial:	3
Run Type:	CCB	Dilution:	1
Lab ID:	KQ2322584-03	Raw Units:	ppm

Bottle ID:		Tier:	II	Matrix:	Misc. Liquid
Prod Code:	NW_TPH_SGT	Collect Date:	12/10/23	Receive Date:	12/11/23

Analysis Lot:	828342	Prep Lot:		Report Group:	KQ2322584
Analysis	NWTPH-Dx	Prep Method:			
		Prep Date:			

Title:	Semi-Volatile Petroleum Products, Silica Gel Treated by GC/FID	Calibration ID:	KC2300522
		Report List ID:	22367

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
o-Terphenyl	0.00		0	0.000		50 - 150	Y
n-Triacontane	0.00		0	0.000		50 - 150	Y

Target Compounds

Final Conc.Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Diesel Range Organics (C12 - C25 DRO)	3.75		5044	6.359	13	J	Y
Residual Range Organics (C25 - C36 RRO)	6.61		4545	8.011	16	U	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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Data File : J:\GC21\DATA\122723F\1227016.D Vial: 100
Acq On : 27 Dec 23 03:03 pm Operator: AA
Sample : IB Inst : 6890
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Dec 27 17:08:07 2023 Quant Results File: 122723F.RES

Quant Method : J:\GC21\METHODS\122723F.M (RTE Integrator)
Title : 8015/NWTPH/AK SVF MJ257 KC2000628
Last Update : Fri Dec 22 13:00:01 2023
Response via : Initial Calibration
DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL
Signal Phase : ZB-1
Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
1) S 4-Bromofluorobenzene	2.81f	315	0.596 ppm
Spiked Amount 50.000	Recovery	=	1.19%
Target Compounds			
6) H C10-C25ex DRO [AK102]	3.10	6473	6.678 ppm
7) H C10-C28in DRO [8015]	3.20	8385	8.268 ppm
8) H C12-C25ex DRO [NWTPH]	3.75	5044	6.359 ppm
10) H C25-C36in RRO [NWTPH]	6.61	4545	8.011 ppm
11) H C25-C36in RRO [AK103]	6.71	4545	7.466 ppm

Data File : J:\GC21\DATA\122723F\1227016.D

Vial: 100

Acq On : 27 Dec 23 03:03 pm

Operator: AA

Sample : IB

Inst : 6890

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Dec 27 17:18 2023 Quant Results File: 122723F.RES

Quant Method : J:\GC21\METHODS\122723F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Fri Dec 22 13:00:01 2023

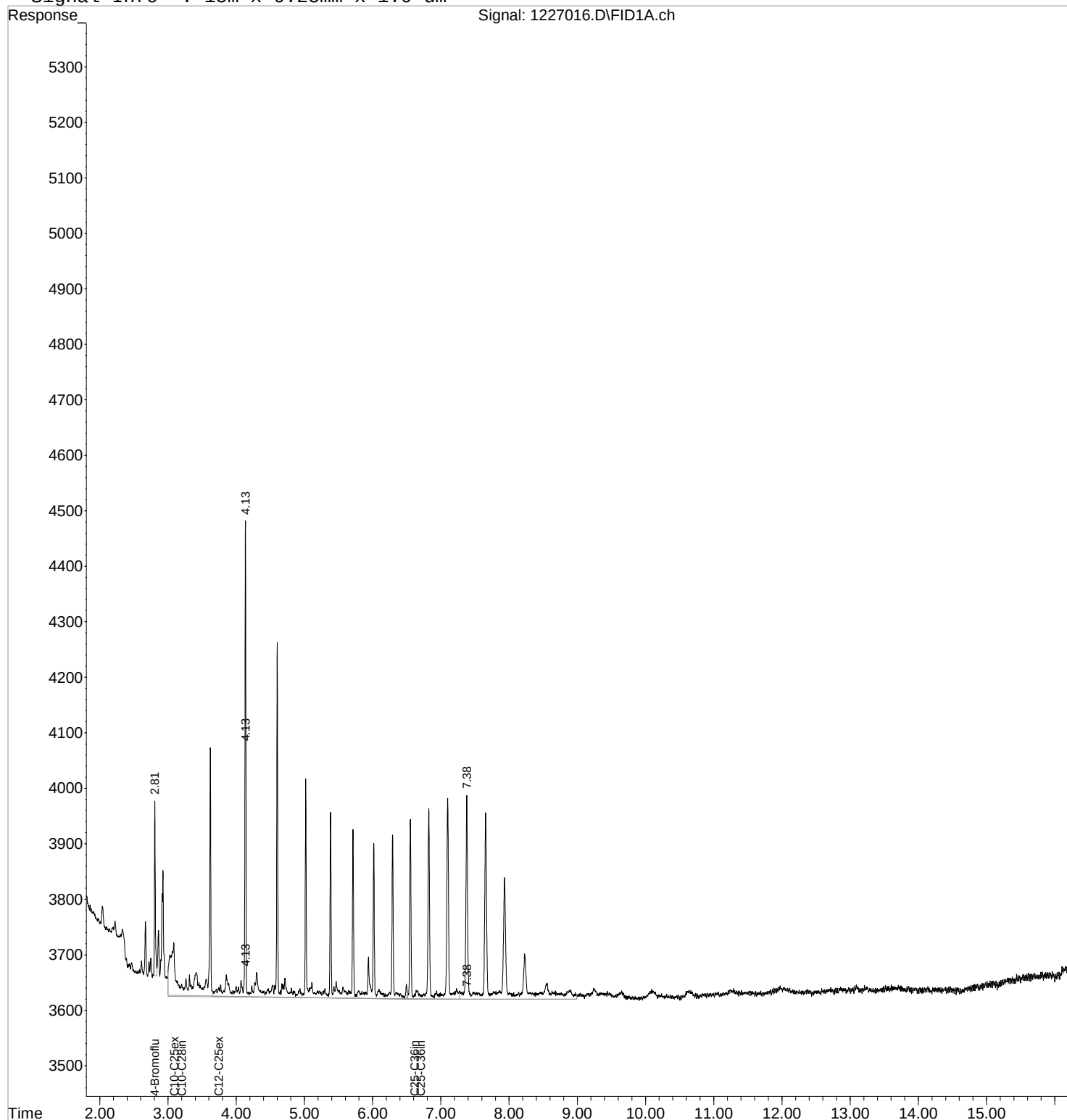
Response via : Single Level Calibration

DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Validation Report

1st *[Signature]* 12/28/23
2nd *[Signature]* 12/29/23

Data File: J:\GC21\DATA\122723F\1227038.D\
Lab ID: KQ2322578-05
RunType: CCB
Matrix: Biosolids Solids

Date Acquired: 12/27/23 22:58:00
Batch ID: 828340
Analysis Method: NWTPH-Dx/NW_TPH

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery	X	
Continuing Calibration Recovery (Closing)	X	
Surrogates	X	
Above Highest ICAL Level	X	
Analyte Coelutions	X	

Primary Review: _____

Secondary Review: _____

Validation Report

1st *[Signature]* 12/28/23
2nd *[Signature]* 12/29/23

Data File: J:\GC21\DATA\122723F\1227038.D\
Lab ID: KQ2322584-04
RunType: CCB
Matrix: Misc. Liquid

Date Acquired: 12/27/23 22:58:00
Batch ID: 828342
Analysis Method: NWTPH-Dx/NW_TPH_SG

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery	X	
Surrogates	X	
Above Highest ICAL Level	X	
Analyte Coelutions	X	

Primary Review: _____

Secondary Review: _____

Quantitation Report

1st *SW* 12/28/23
2nd *SW* 12/29/23

Data File:	J:\GC21\DATA\122723F\1227038.D\	Instrument:	K-GC-21
Acqu Date:	12/27/23 22:58:00	Vial:	11
Run Type:	CCB	Dilution:	1
Lab ID:	KQ2322578-05	Raw Units:	ppm

Bottle ID:		Tier:	II	Matrix:	Biosolids Solids
Prod Code:	NW_TPH	Collect Date:	12/19/23	Receive Date:	12/19/23

Analysis Lot:	828340	Prep Lot:		Report Group:	KQ2322578
Analysis	NWTPH-Dx	Prep Method:			
		Prep Date:			

Title:	Semi-Volatile Petroleum Products by GC/FID	Calibration ID:	KC2300522
		Report List ID:	22364

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
o-Terphenyl	0.00		0	0.000		50 - 150	Y
n-Triacontane	0.00		0	0.000		50 - 150	Y

Target Compounds

Final Conc.Units: mg/Kg

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Diesel Range Organics (C12 - C25 DRO)	3.75		5352	6.748	2.2	J	Y
Residual Range Organics (C25 - C36 RRO)	6.61		4700	8.284	2.8	U	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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Quantitation Report

1st *SW* 12/28/23
2nd *SW* 12/29/23

Data File:	J:\GC21\DATA\122723F\1227038.D\	Instrument:	K-GC-21
Acqu Date:	12/27/23 22:58:00	Vial:	20
Run Type:	CCB	Dilution:	1
Lab ID:	KQ2322584-04	Raw Units:	ppm

Bottle ID:		Tier:	II	Matrix:	Misc. Liquid
Prod Code:	NW_TPH_SGT	Collect Date:	12/10/23	Receive Date:	12/11/23

Analysis Lot:	828342	Prep Lot:		Report Group:	KQ2322584
Analysis	NWTPH-Dx	Prep Method:			
		Prep Date:			

Title:	Semi-Volatile Petroleum Products, Silica Gel Treated by GC/FID	Calibration ID:	KC2300522
		Report List ID:	22367

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
o-Terphenyl	0.00		0	0.000		50 - 150	Y
n-Triacontane	0.00		0	0.000		50 - 150	Y

Target Compounds

Final Conc.Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Diesel Range Organics (C12 - C25 DRO)	3.75		5352	6.748	13	J	Y
Residual Range Organics (C25 - C36 RRO)	6.61		4700	8.284	17	U	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 12/28/23 13:11

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Data File : J:\GC21\DATA\122723F\1227038.D Vial: 100
Acq On : 27 Dec 23 10:58 pm Operator: AA
Sample : IB Inst : 6890
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Dec 28 10:26:54 2023 Quant Results File: 122723F.RES

Quant Method : J:\GC21\METHODS\122723F.M (RTE Integrator)
Title : 8015/NWTPH/AK SVF MJ257 KC2000628
Last Update : Fri Dec 22 13:00:01 2023
Response via : Initial Calibration
DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL
Signal Phase : ZB-1
Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

Target Compounds

6)	H	C10-C25ex DRO [AK102]	3.10	7236	7.465 ppm
7)	H	C10-C28in DRO [8015]	3.20	9158	9.030 ppm
8)	H	C12-C25ex DRO [NWTPH]	3.75	5352	6.748 ppm
10)	H	C25-C36in RRO [NWTPH]	6.61	4700	8.284 ppm
11)	H	C25-C36in RRO [AK103]	6.71	4700	7.721 ppm

Data File : J:\GC21\DATA\122723F\1227038.D

Vial: 100

Acq On : 27 Dec 23 10:58 pm

Operator: AA

Sample : IB

Inst : 6890

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Dec 28 11:49 2023 Quant Results File: 122723F.RES

Quant Method : J:\GC21\METHODS\122723F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Fri Dec 22 13:00:01 2023

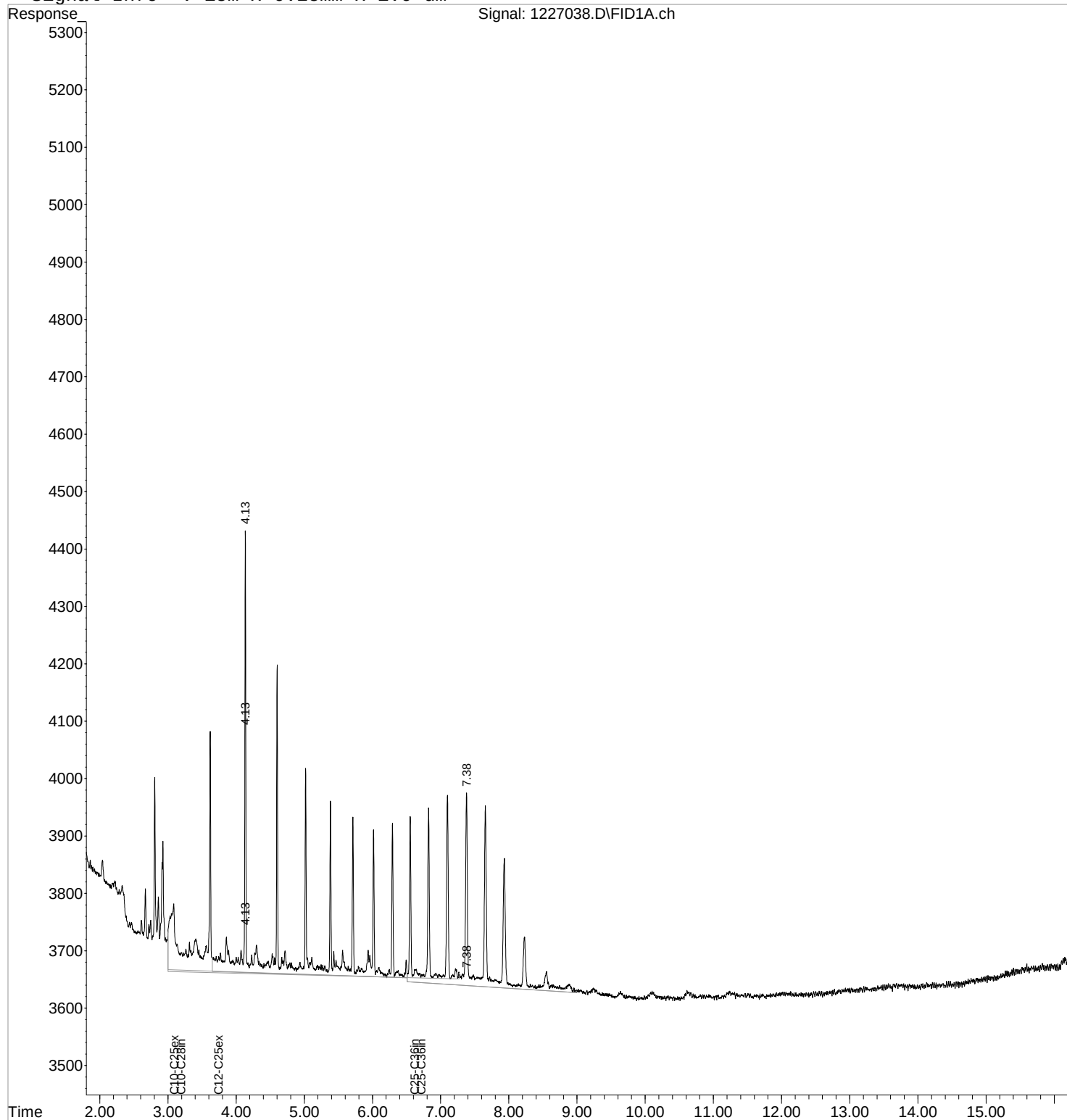
Response via : Single Level Calibration

DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Validation Report

1st  01/08/24
2nd  01/08/24

Data File: J:\GC35\DATA\010524\0105F024.D\
Lab ID: KQ2400312-07
RunType: CCB
Matrix: Water

Date Acquired: 1/5/24 17:40:00
Batch ID: 829103
Analysis Method: NWTPH-Dx/NW_TPH

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery	X	
Continuing Calibration Recovery (Closing)		X
Surrogates	X	
Above Highest ICAL Level	X	
Analyte Coelutions	X	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Continuing Calibration Recovery (Closing)	n-Triacontane	17		15	surr+ND

Primary Review: _____

Secondary Review: _____

Validation Report

1st  01/08/24
2nd  01/08/24

Data File: J:\GC35\DATA\010524\0105F024.D\
Lab ID: KQ2400312-03
RunType: CCB
Matrix: Water

Date Acquired: 1/5/24 17:40:00
Batch ID: 829103
Analysis Method: NWTPH-Dx/NW_TPH_SG

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery	X	
Continuing Calibration Recovery (Closing)		X
Surrogates	X	
Above Highest ICAL Level	X	
Analyte Coelutions	X	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Continuing Calibration Recovery (Closing)	n-Triacontane	17		15	surr+ND

Primary Review: _____

Secondary Review: _____

Quantitation Report

1st *AA* 01/08/24
2nd *AA* 01/08/24

Data File:	J:\GC35\DATA\010524\0105F024.D\	Instrument:	K-GC-35
Acqu Date:	1/5/24 17:40:00	Vial:	13
Run Type:	CCB	Dilution:	1
Lab ID:	KQ2400312-07	Raw Units:	ppm

Bottle ID:		Tier:	I	Matrix:	Water
Prod Code:	NW_TPH	Collect Date:	12/21/23	Receive Date:	12/21/23

Analysis Lot:	829103	Prep Lot:		Report Group:	KQ2400312
Analysis	NWTPH-Dx	Prep Method:			
		Prep Date:			

Title:	Semi-Volatile Petroleum Products by GC/FID	Calibration ID:	KC2300521
		Report List ID:	22364

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
o-Terphenyl	0.00		0	0.000		50 - 150	Y
n-Triacontane	0.00		0	0.000		50 - 150	Y

Target Compounds

Final Conc.Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Diesel Range Organics (C12 - C25 DRO)	3.93		7373	6.999	14	J	Y
Residual Range Organics (C25 - C36 RRO)	6.79		9540	11.592	23	J	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 1/8/24 13:35

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Quantitation Report

1st *AA* 01/08/24
2nd *AA* 01/08/24

Data File:	J:\GC35\DATA\010524\0105F024.D\	Instrument:	K-GC-35
Acqu Date:	1/5/24 17:40:00	Vial:	3
Run Type:	CCB	Dilution:	1
Lab ID:	KQ2400312-03	Raw Units:	ppm

Bottle ID:		Tier:	IV	Matrix:	Water
Prod Code:	NW_TPH_SGT	Collect Date:	12/20/23	Receive Date:	12/20/23

Analysis Lot:	829103	Prep Lot:		Report Group:	KQ2400312
Analysis	NWTPH-Dx	Prep Method:			
		Prep Date:			

Title:	Semi-Volatile Petroleum Products, Silica Gel Treated by GC/FID	Calibration ID:	KC2300521
		Report List ID:	22367

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
o-Terphenyl	0.00		0	0.000		50 - 150	Y
n-Triacontane	0.00		0	0.000		50 - 150	Y

Target Compounds

Final Conc.Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Diesel Range Organics (C12 - C25 DRO)	3.93		7373	6.999	14	J	Y
Residual Range Organics (C25 - C36 RRO)	6.79		9540	11.592	23	J	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 1/8/24 13:35

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Data File : J:\GC35\DATA\010524\0105F024.D Vial: 86
Acq On : 05 Jan 2024 5:40 pm Operator: JLD
Sample : IB Inst : GC35
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Jan 08 09:47:39 2024 Quant Results File: 010524FSVF.RES

Quant Method : J:\GC35\METHODS\010524FSVF.M (RTE Integrator)
Title : AK102/103 SVF MJ257 CAL 16220
Last Update : Fri Jan 05 13:02:55 2024
Response via : Initial Calibration
DataAcq Meth : SVF2_F.M

Volume Inj. : 1 uL
Signal Phase : ZB-1
Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

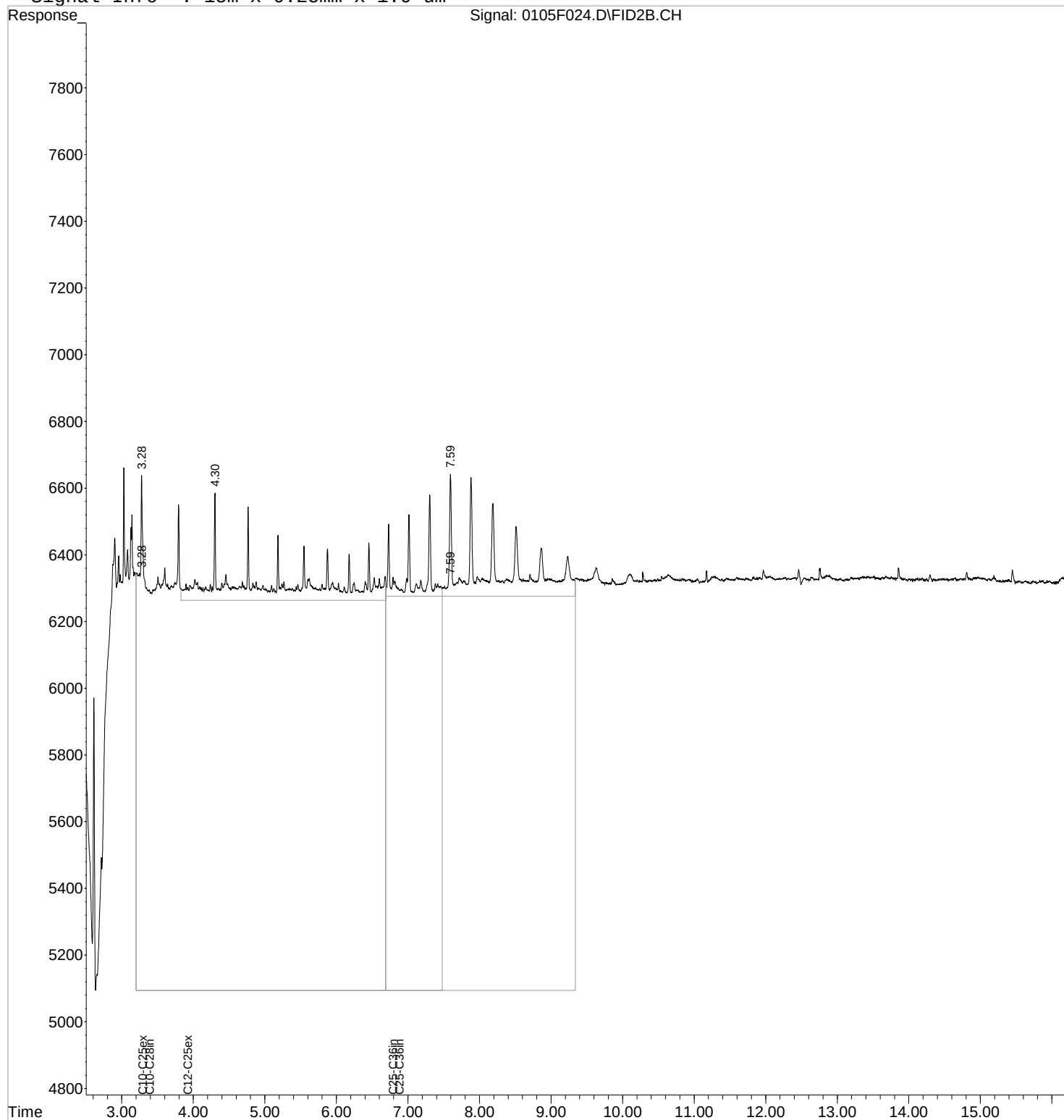
Target Compounds

6) H	C10-C25ex DRO [AK102]	3.30	254754	201.756 ppm
7) H	C10-C28in DRO [8015]	3.40	312938	235.319 ppm
8) H	C12-C25ex DRO [NWTPH]	3.93	7373	6.999 ppm
10) H	C25-C36in RRO [NWTPH]	6.79	9540	11.592 ppm
11) H	C25-C36in RRO [AK103]	6.89	197484	257.604 ppm

Data File : J:\GC35\DATA\010524\0105F024.D Vial: 86
Acq On : 05 Jan 2024 5:40 pm Operator: JLD
Sample : IB Inst : GC35
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Jan 8 9:59 2024 Quant Results File: 010524FSVF.RES

Quant Method : J:\GC35\METHODS\010524FSVF.M (RTE Integrator)
Title : AK102/103 SVF MJ257 CAL 16220
Last Update : Fri Jan 05 13:02:55 2024
Response via : Single Level Calibration
DataAcq Meth : SVF2_F.M

Volume Inj. : 1 uL
Signal Phase : ZB-1
Signal Info : 15m x 0.25mm x 1.0 um



Data File : J:\GC35\DATA\010524\0105F024.D

Vial: 86

Acq On : 05 Jan 2024 5:40 pm

Operator: JLD

Sample : IB

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

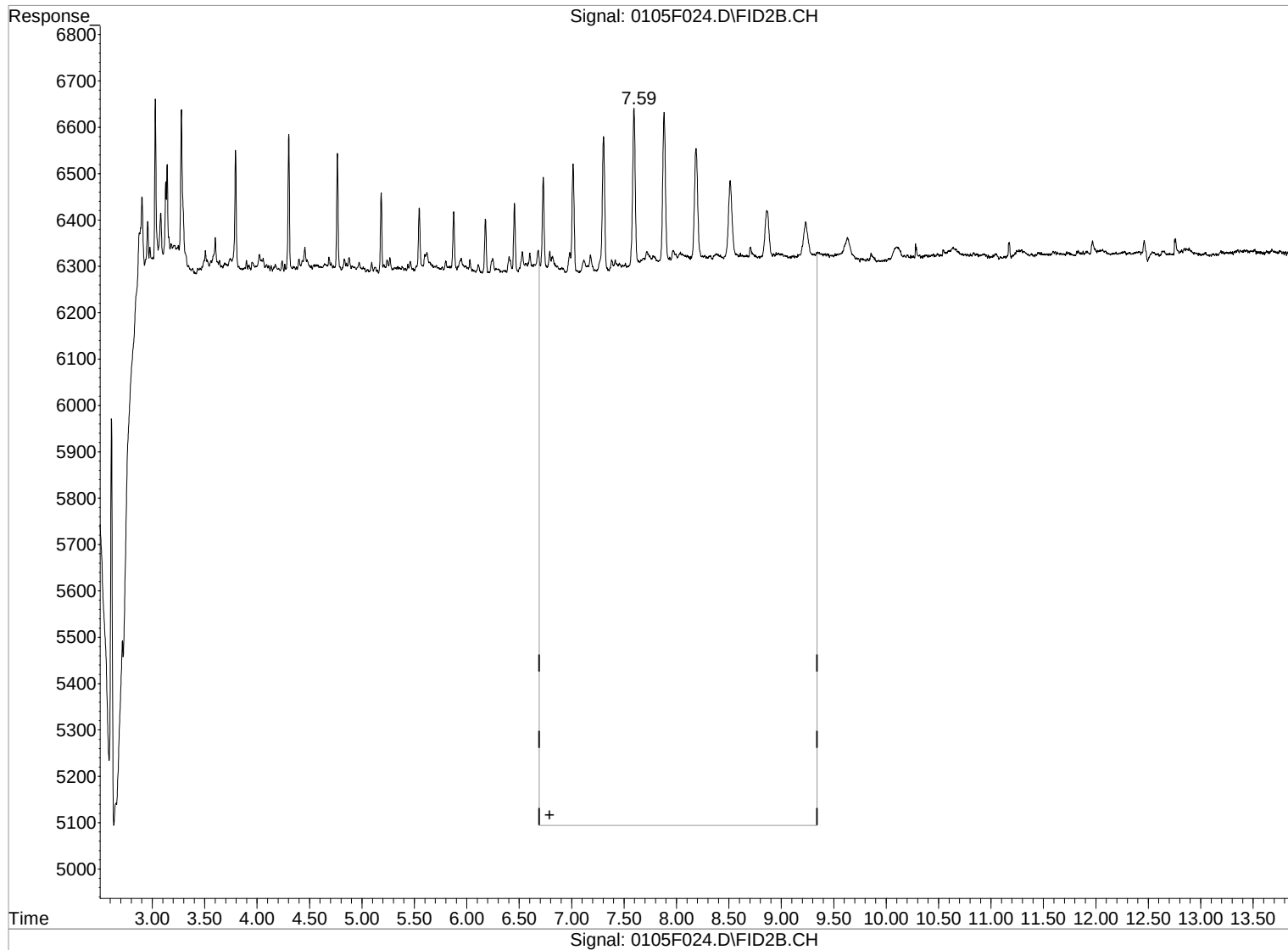
Quant Time: Jan 8 9:49 2024 Quant Results File: 010524FSVF.RES

Method : J:\GC35\METHODS\010524FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Fri Jan 05 13:02:55 2024

Response via : Multiple Level Calibration



(10) C25-C36in RRO [NWT PH] (H)

Manual Integration:

6.79min 239.971ppm

Before

response 197484

01/08/24

(+) = Expected Retention Time

0105F024.D 010524FSVF.M

Mon Jan 08 09:53:54 2024

246 of 3623

Data File : J:\GC35\DATA\010524\0105F024.D

Vial: 86

Acq On : 05 Jan 2024 5:40 pm

Operator: JLD

Sample : IB

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

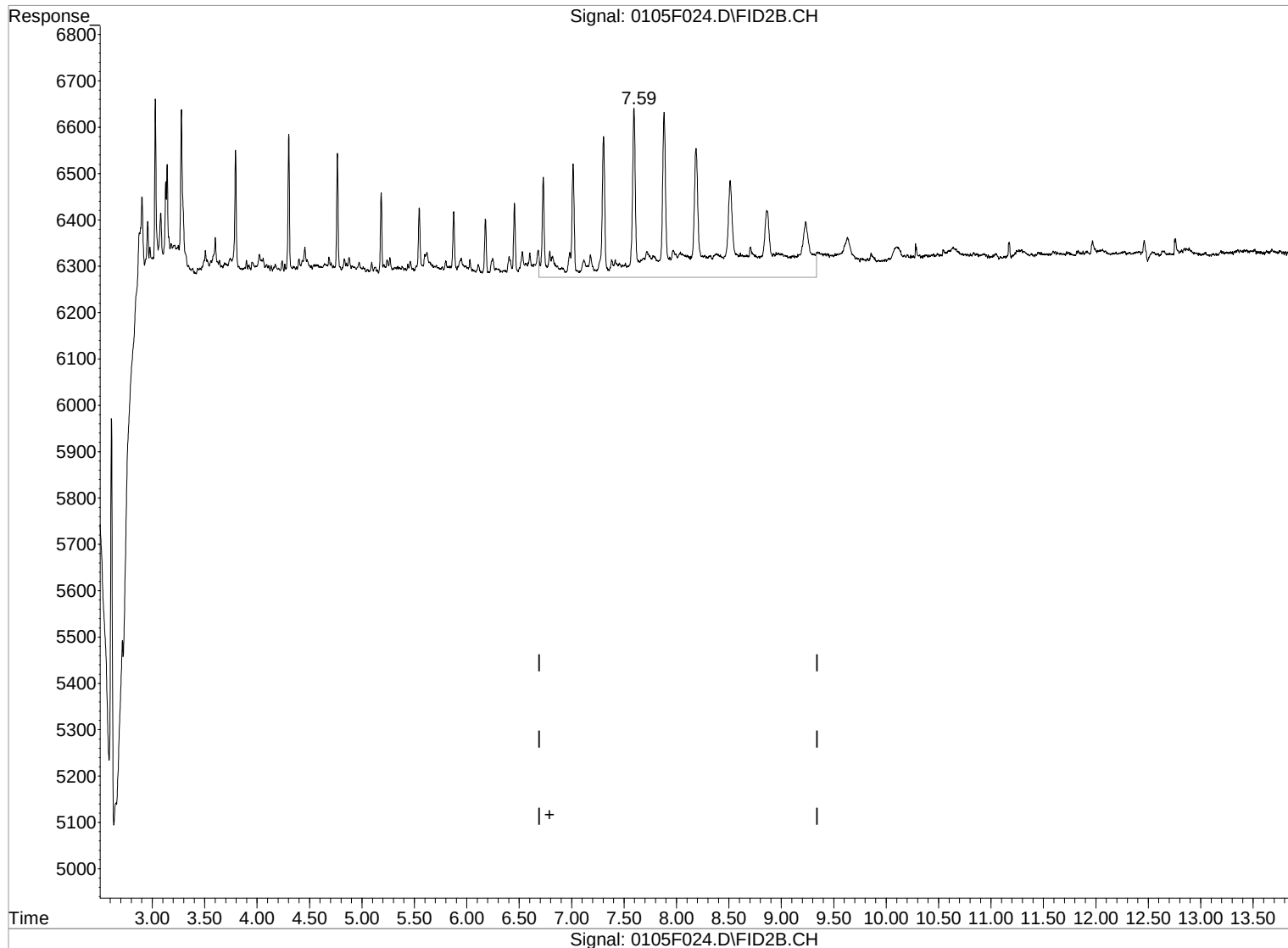
Quant Time: Jan 8 9:49 2024 Quant Results File: 010524FSVF.RES

Method : J:\GC35\METHODS\010524FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Fri Jan 05 13:02:55 2024

Response via : Multiple Level Calibration



(10) C25-C36in RRO [NWTPH] (H)

Manual Integration:

6.79min 11.592ppm

After

response 9540

Baseline/Shoulder

01/08/24

(+) = Expected Retention Time

0105F024.D 010524FSVF.M

Mon Jan 08 09:54:10 2024

Quantitation Report (Qedit)

1st *AA* 01/08/242nd *AA* 01/08/24

Data File : J:\GC35\DATA\010524\0105F024.D

Acq On : 05 Jan 2024 5:40 pm

Sample : IB

Misc :

IntFile : rteint.p

Quant Time: Jan 8 9:49 2024 Quant Results File: 010524FSVF.RES

Vial: 86

Operator: JLD

Inst : GC35

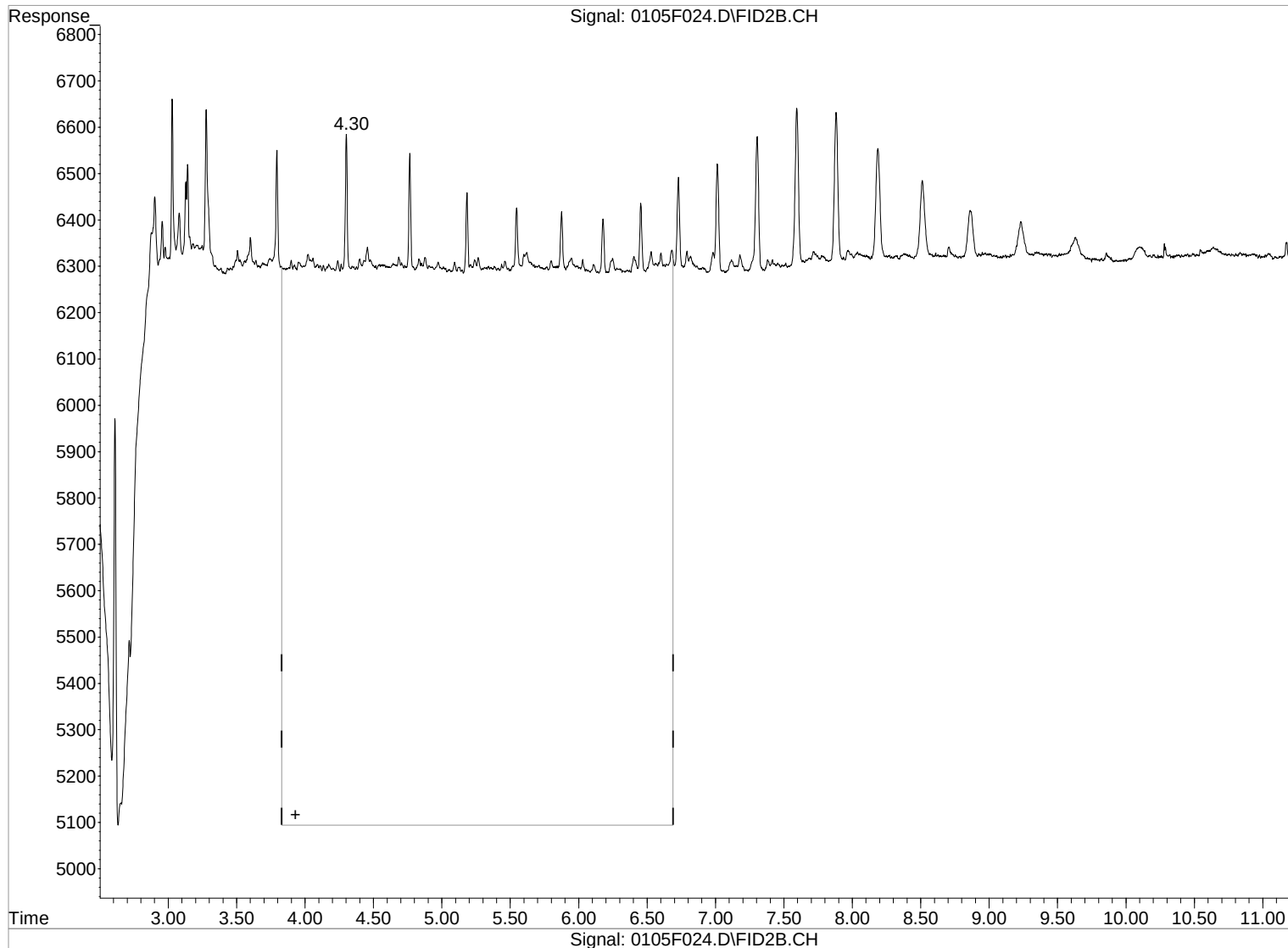
Multiplr: 1.00

Method : J:\GC35\METHODS\010524FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Fri Jan 05 13:02:55 2024

Response via : Multiple Level Calibration



(8) C12-C25ex DRO [NWTPH] (H)

Manual Integration:

3.93min 197.572ppm

Before

response 208143

01/08/24

(+) = Expected Retention Time

0105F024.D 010524FSVF.M

Mon Jan 08 09:53:33 2024

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Data File : J:\GC35\DATA\010524\0105F024.D

Vial: 86

Acq On : 05 Jan 2024 5:40 pm

Operator: JLD

Sample : IB

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

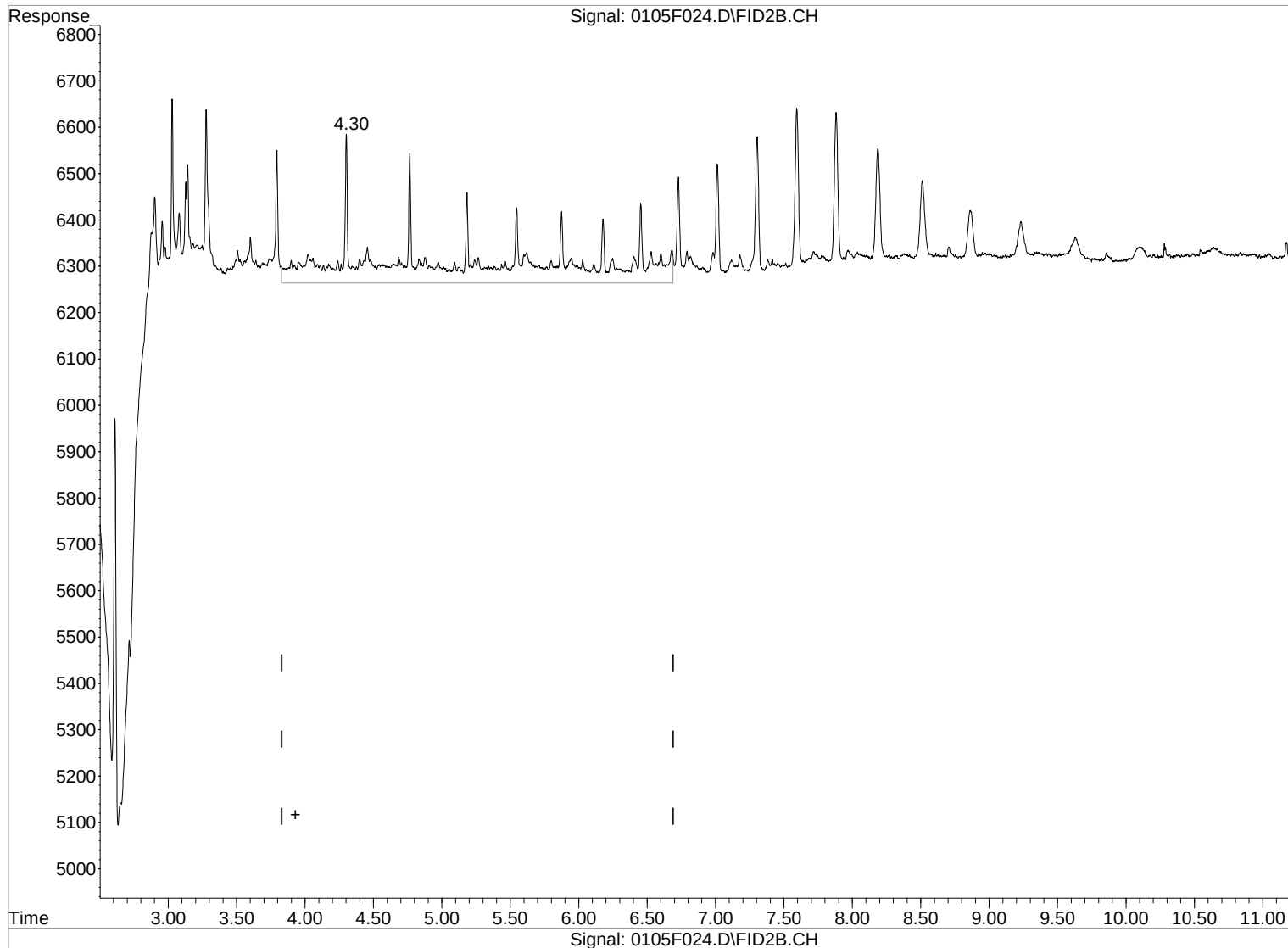
Quant Time: Jan 8 9:49 2024 Quant Results File: 010524FSVF.RES

Method : J:\GC35\METHODS\010524FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Fri Jan 05 13:02:55 2024

Response via : Multiple Level Calibration



(8) C12-C25ex DRO [NWT PH] (H)

Manual Integration:

3.93min 6.999ppm

After

response 7373

Baseline/Shoulder

01/08/24

(+) = Expected Retention Time

0105F024.D 010524FSVF.M

Mon Jan 08 09:53:48 2024

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Validation Report

1st  01/08/24
2nd  01/08/24

Data File: J:\GC35\DATA\010524\0105F043.D\
Lab ID: KQ2400312-08
RunType: CCB
Matrix: Water

Date Acquired: 1/6/24 00:30:00
Batch ID: 829103
Analysis Method: NWTPH-Dx/NW_TPH

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery		X
Surrogates	X	
Above Highest ICAL Level	X	
Analyte Coelutions	X	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Continuing Calibration Recovery	n-Triacontane	17		15	surr+ND

Primary Review: _____

Secondary Review: _____

Validation Report

1st  01/08/24
2nd  01/08/24

Data File: J:\GC35\DATA\010524\0105F043.D\
Lab ID: KQ2400312-04
RunType: CCB
Matrix: Water

Date Acquired: 1/6/24 00:30:00
Batch ID: 829103
Analysis Method: NWTPH-Dx/NW_TPH_SG

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery		X
Surrogates	X	
Above Highest ICAL Level	X	
Analyte Coelutions	X	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Continuing Calibration Recovery	n-Triacontane	17		15	

Primary Review: _____

Secondary Review: _____

Quantitation Report

1st *AA* 01/08/24
2nd *AA* 01/08/24

Data File:	J:\GC35\DATA\010524\0105F043.D\	Instrument:	K-GC-35
Acqu Date:	1/6/24 00:30:00	Vial:	25
Run Type:	CCB	Dilution:	1
Lab ID:	KQ2400312-08	Raw Units:	ppm

Bottle ID:		Tier:	III	Matrix:	Water
Prod Code:	NW_TPH	Collect Date:	12/20/23	Receive Date:	12/22/23

Analysis Lot:	829103	Prep Lot:		Report Group:	KQ2400312
Analysis	NWTPH-Dx	Prep Method:			
		Prep Date:			

Title:	Semi-Volatile Petroleum Products by GC/FID	Calibration ID:	KC2300521
		Report List ID:	22364

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
o-Terphenyl	0.00		0	0.000		50 - 150	Y
n-Triacontane	0.00		0	0.000		50 - 150	Y

Target Compounds

Final Conc.Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Diesel Range Organics (C12 - C25 DRO)	3.93		17363	16.481	33	J	Y
Residual Range Organics (C25 - C36 RRO)	6.79		33397	40.582	81	J	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 1/8/24 13:35

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Quantitation Report

1st *AA* 01/08/24
2nd *AA* 01/08/24

Data File:	J:\GC35\DATA\010524\0105F043.D\	Instrument:	K-GC-35
Acqu Date:	1/6/24 00:30:00	Vial:	10
Run Type:	CCB	Dilution:	1
Lab ID:	KQ2400312-04	Raw Units:	ppm

Bottle ID:		Tier:	IV	Matrix:	Water
Prod Code:	NW_TPH_SGT	Collect Date:	12/20/23	Receive Date:	12/20/23

Analysis Lot:	829103	Prep Lot:		Report Group:	KQ2400312
Analysis	NWTPH-Dx	Prep Method:			
		Prep Date:			

Title:	Semi-Volatile Petroleum Products, Silica Gel Treated by GC/FID	Calibration ID:	KC2300521
		Report List ID:	22367

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
o-Terphenyl	0.00		0	0.000		50 - 150	Y
n-Triacontane	0.00		0	0.000		50 - 150	Y

Target Compounds

Final Conc.Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Diesel Range Organics (C12 - C25 DRO)	3.93		17363	16.481	33	J	Y
Residual Range Organics (C25 - C36 RRO)	6.79		33397	40.582	81	J	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 1/8/24 13:35

\\alprews001\starlims\LIMSReps\QuantValidation.rpt

Data File : J:\GC35\DATA\010524\0105F043.D Vial: 86
Acq On : 06 Jan 2024 12:30 am Operator: JLD
Sample : IB Inst : GC35
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Jan 08 09:47:56 2024 Quant Results File: 010524FSVF.RES

Quant Method : J:\GC35\METHODS\010524FSVF.M (RTE Integrator)
Title : AK102/103 SVF MJ257 CAL 16220
Last Update : Fri Jan 05 13:02:55 2024
Response via : Initial Calibration
DataAcq Meth : SVF2_F.M

Volume Inj. : 1 uL
Signal Phase : ZB-1
Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
----------	------	----------	------------

System Monitoring Compounds

1) S 4-Bromofluorobenzene	3.03f	270	0.400 ppm
Spiked Amount 50.000	Recovery	=	0.80%

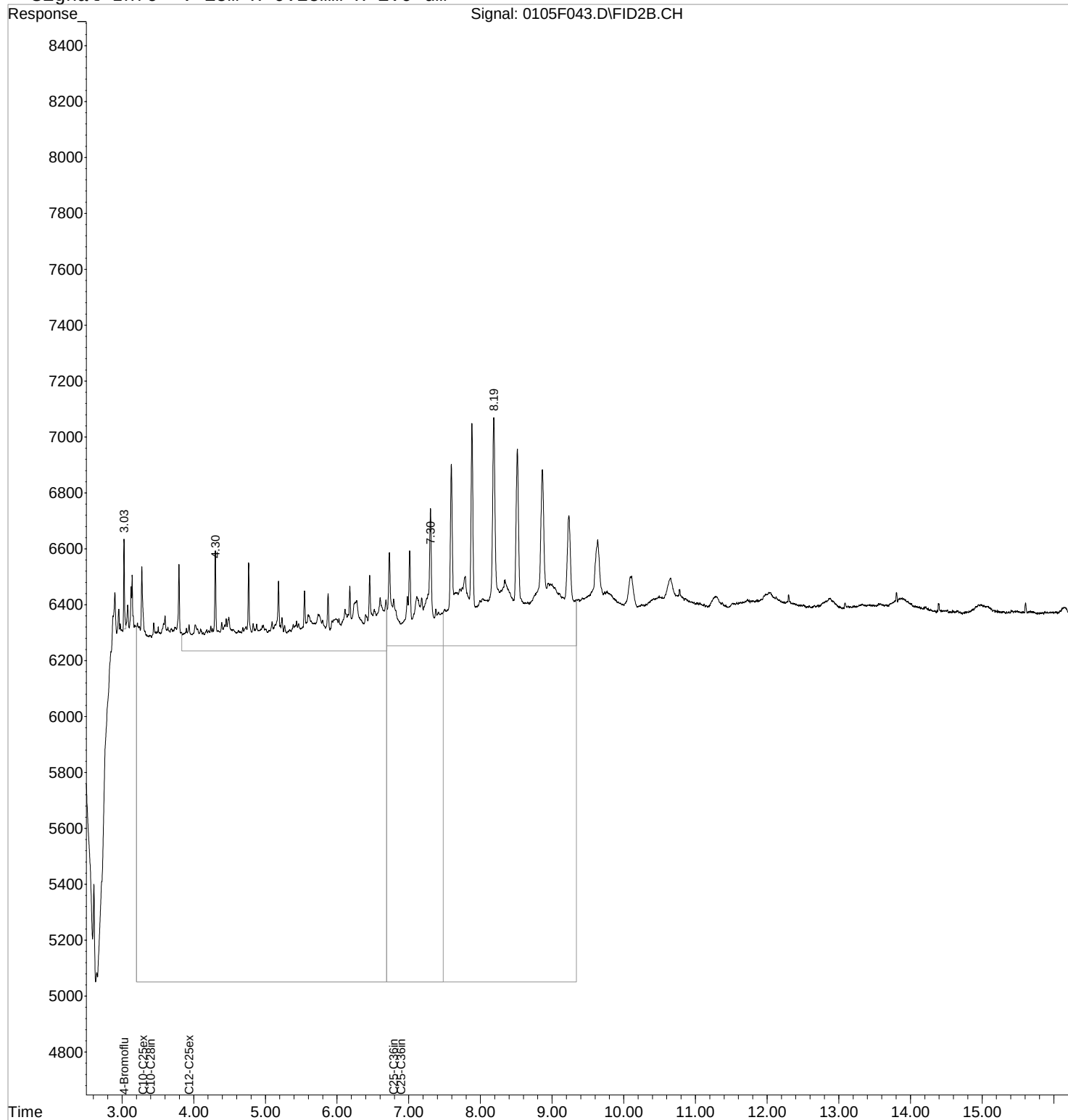
Target Compounds

6) H C10-C25ex DRO [AK102]	3.30	268513	212.653 ppm
7) H C10-C28in DRO [8015]	3.40	332619	250.119 ppm
8) H C12-C25ex DRO [NWTPH]	3.93	17363	16.481 ppm
10) H C25-C36in RRO [NWTPH]	6.79	33397	40.582 ppm
11) H C25-C36in RRO [AK103]	6.89	224543	292.900 ppm

Data File : J:\GC35\DATA\010524\0105F043.D Vial: 86
Acq On : 06 Jan 2024 12:30 am Operator: JLD
Sample : IB Inst : GC35
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Jan 8 12:12 2024 Quant Results File: 010524FSVF.RES

Quant Method : J:\GC35\METHODS\010524FSVF.M (RTE Integrator)
Title : AK102/103 SVF MJ257 CAL 16220
Last Update : Fri Jan 05 13:02:55 2024
Response via : Single Level Calibration
DataAcq Meth : SVF2_F.M

Volume Inj. : 1 uL
Signal Phase : ZB-1
Signal Info : 15m x 0.25mm x 1.0 um



Data File : J:\GC35\DATA\010524\0105F043.D

Acq On : 06 Jan 2024 12:30 am

Sample : IB

Misc :

IntFile : rteint.p

Quant Time: Jan 8 9:49 2024 Quant Results File: 010524FSVF.RES

Vial: 86

Operator: JLD

Inst : GC35

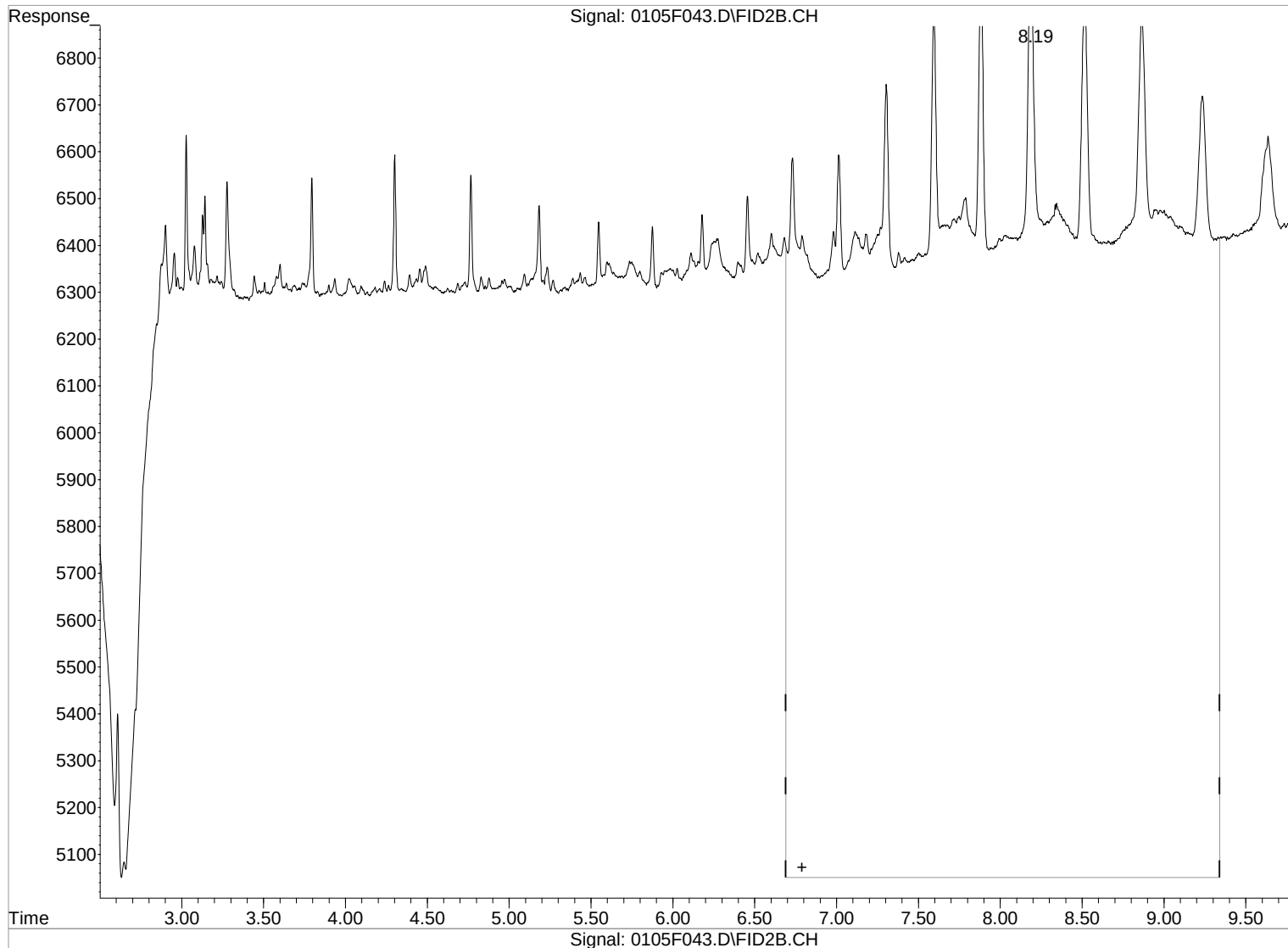
Multiplr: 1.00

Method : J:\GC35\METHODS\010524FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Fri Jan 05 13:02:55 2024

Response via : Multiple Level Calibration



(10) C25-C36in RRO [NWT PH] (H)

Manual Integration:

6.79min 272.851ppm

Before

response 224543

01/08/24

(+) = Expected Retention Time

0105F043.D 010524FSVF.M

Mon Jan 08 12:08:00 2024

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Data File : J:\GC35\DATA\010524\0105F043.D

Acq On : 06 Jan 2024 12:30 am

Sample : IB

Misc :

IntFile : rteint.p

Quant Time: Jan 8 9:49 2024 Quant Results File: 010524FSVF.RES

Vial: 86

Operator: JLD

Inst : GC35

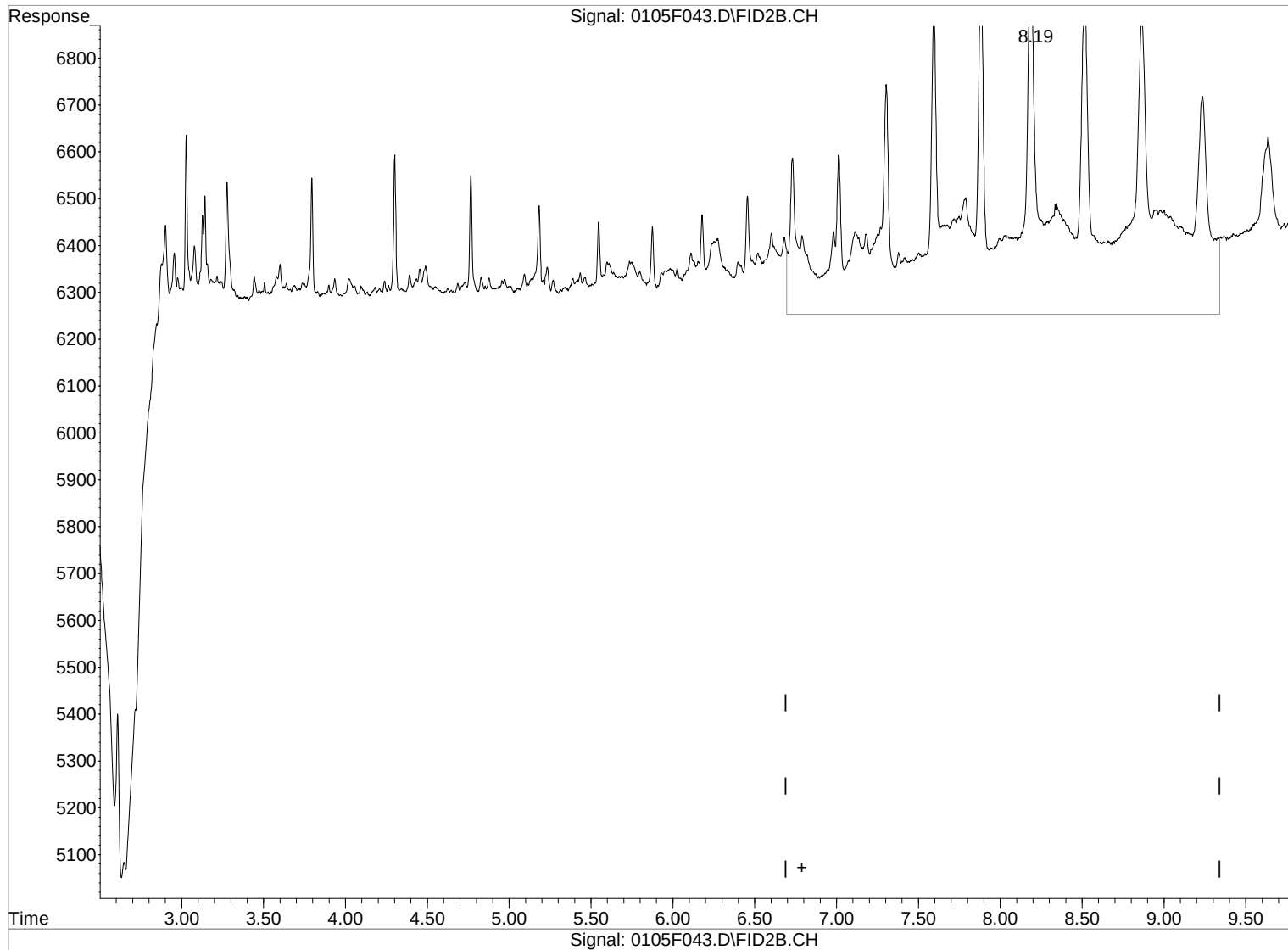
Multiplr: 1.00

Method : J:\GC35\METHODS\010524FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Fri Jan 05 13:02:55 2024

Response via : Multiple Level Calibration



(+) = Expected Retention Time

0105F043.D 010524FSVF.M

Mon Jan 08 12:08:07 2024

257 of 3623

Data File : J:\GC35\DATA\010524\0105F043.D

Vial: 86

Acq On : 06 Jan 2024 12:30 am

Operator: JLD

Sample : IB

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

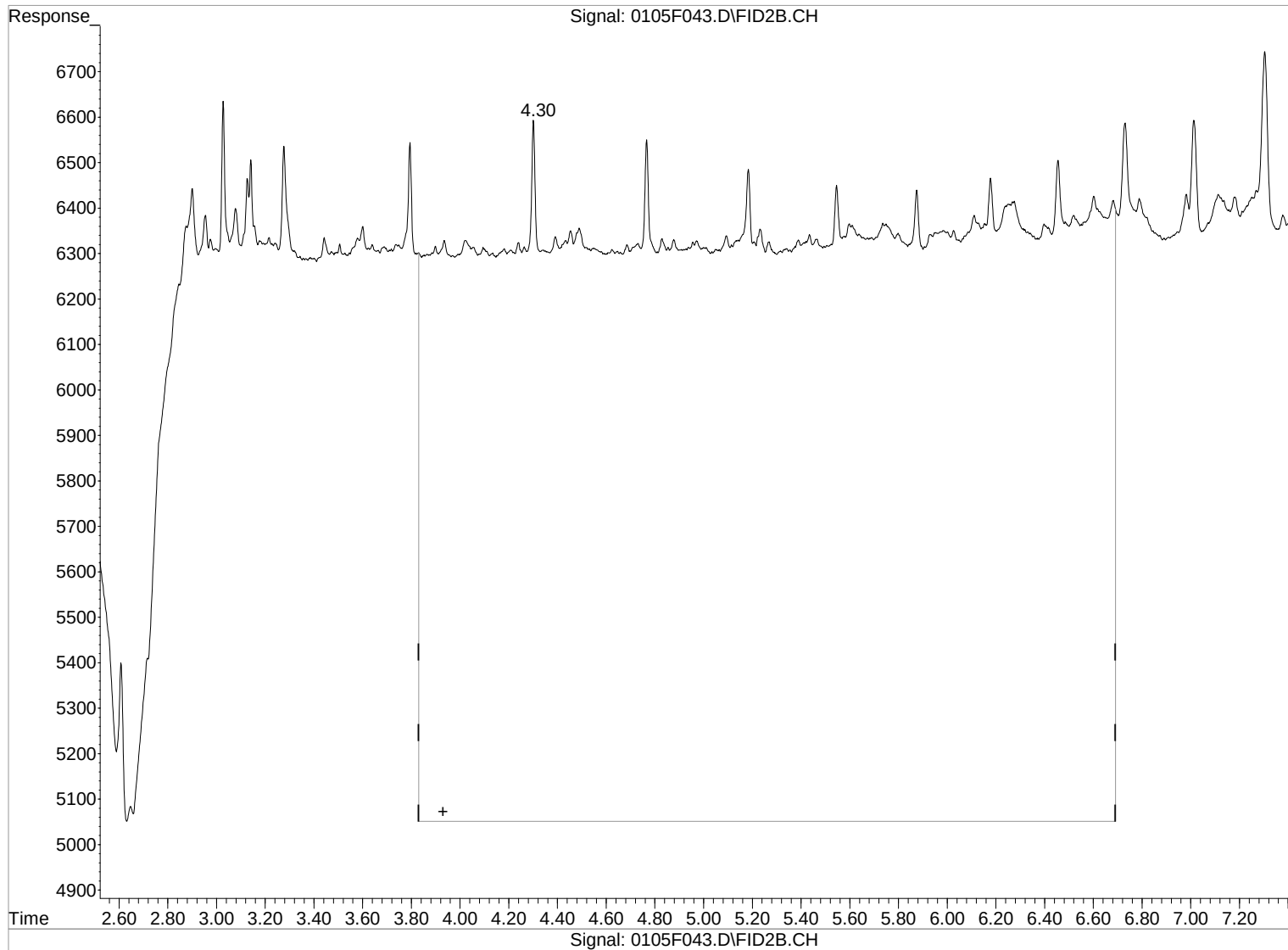
Quant Time: Jan 8 9:49 2024 Quant Results File: 010524FSVF.RES

Method : J:\GC35\METHODS\010524FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Fri Jan 05 13:02:55 2024

Response via : Multiple Level Calibration



(8) C12-C25ex DRO [NWTPH] (H)

Manual Integration:

3.93min 209.319ppm

Before

response 220519

01/08/24

(+) = Expected Retention Time

0105F043.D 010524FSVF.M

Mon Jan 08 12:07:43 2024

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Data File : J:\GC35\DATA\010524\0105F043.D

Acq On : 06 Jan 2024 12:30 am

Sample : IB

Misc :

IntFile : rteint.p

Quant Time: Jan 8 9:49 2024 Quant Results File: 010524FSVF.RES

Vial: 86

Operator: JLD

Inst : GC35

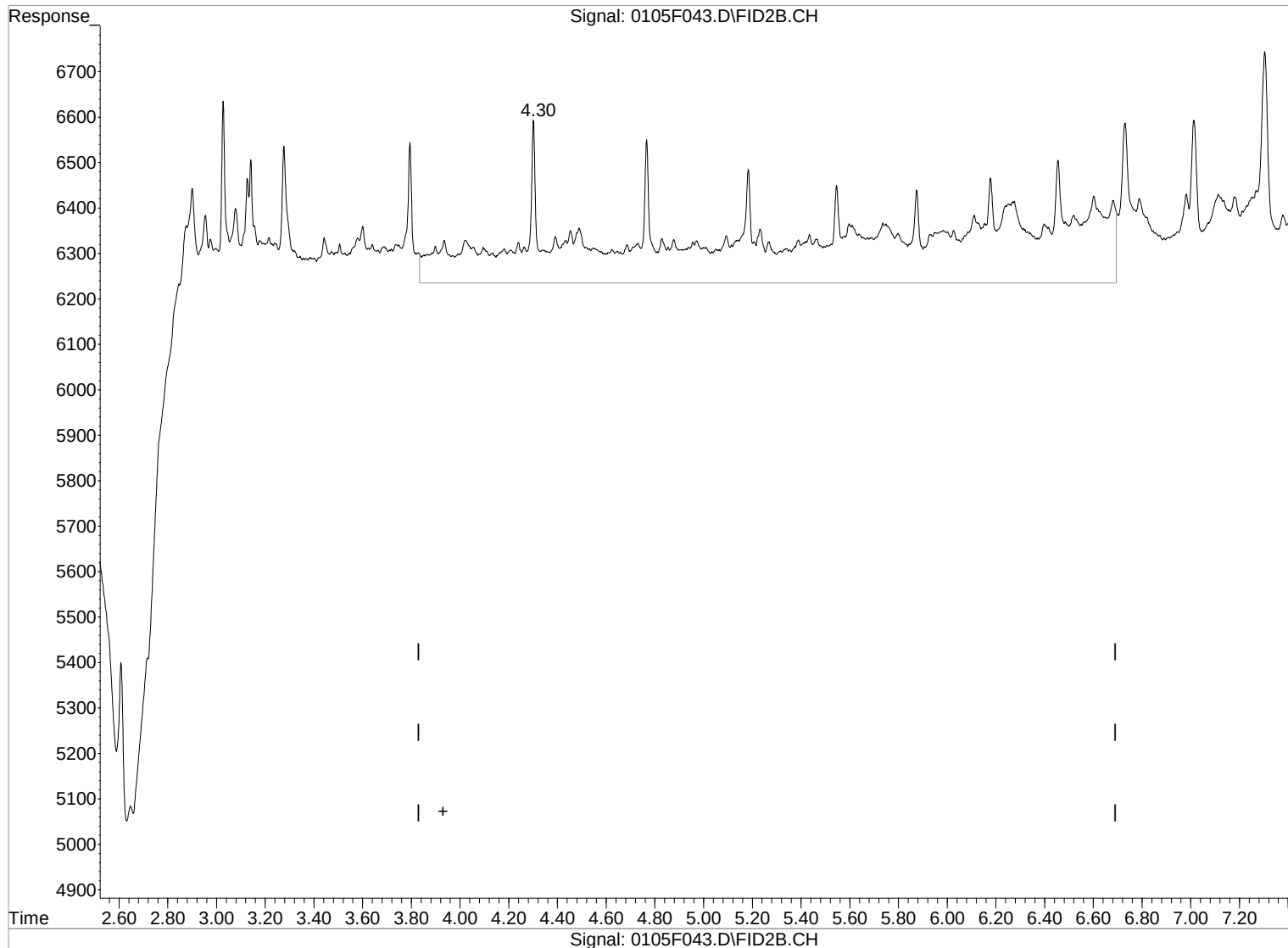
Multiplr: 1.00

Method : J:\GC35\METHODS\010524FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Fri Jan 05 13:02:55 2024

Response via : Multiple Level Calibration



(8) C12-C25ex DRO [NWT PH] (H)

3.93min 16.481ppm

response 17363

Manual Integration:

After

Baseline/Shoulder

01/08/24

(+) = Expected Retention Time

0105F043.D 010524FSVF.M

Mon Jan 08 12:07:52 2024

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Validation Report

1st  12/28/23
2nd  12/29/23

Data File: J:\GC21\DATA\122723F\1227013.D\
Lab ID: KQ2322578-01
RunType: CCV
Matrix: Biosolids Solids

Date Acquired: 12/27/23 13:58:00
Batch ID: 828340
Analysis Method: NWTPH-Dx/NW_TPH

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Analyte Coelutions	X	

Primary Review: _____

Secondary Review: _____

Validation Report

1st  12/28/23
2nd  12/29/23

Data File: J:\GC21\DATA\122723F\1227013.D\
Lab ID: KQ2322584-01
RunType: CCV
Matrix: Misc. Liquid

Date Acquired: 12/27/23 13:58:00
Batch ID: 828342
Analysis Method: NWTPH-Dx/NW_TPH_SG

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Analyte Coelutions	X	

Primary Review: _____

Secondary Review: _____

Quantitation Report

1st *JS* 12/28/23
2nd *SW* 12/29/23

Data File:	J:\GC21\DATA\122723F\1227013.D\	Instrument:	K-GC-21
Acqu Date:	12/27/23 13:58:00	Vial:	1
Run Type:	CCV	Dilution:	1
Lab ID:	KQ2322578-01	Raw Units:	ppm

Bottle ID:		Tier:	II	Matrix:	Biosolids Solids
Prod Code:	NW_TPH	Collect Date:	12/19/23	Receive Date:	12/19/23

Analysis Lot:	828340	Prep Lot:		Report Group:	KQ2322578
Analysis	NWTPH-Dx	Prep Method:			
		Prep Date:			

Title:	Semi-Volatile Petroleum Products by GC/FID	Calibration ID:	KC2300522
		Report List ID:	22364

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Rpt?
o-Terphenyl	5.43		60115	53.434	Y
n-Triacontane	7.56		54548	56.722	Y

Target Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Rpt?
Diesel Range Organics (C12 - C25 DRO)	3.75		882431	1112.524	Y
Residual Range Organics (C25 - C36 RRO)	6.61		12378	21.817	N

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 12/28/23 12:25

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Quantitation Report

1st *JS* 12/28/23
2nd *SW* 12/29/23

Data File:	J:\GC21\DATA\122723F\1227013.D\	Instrument:	K-GC-21
Acqu Date:	12/27/23 13:58:00	Vial:	1
Run Type:	CCV	Dilution:	1
Lab ID:	KQ2322584-01	Raw Units:	ppm

Bottle ID:		Tier:	II	Matrix:	Misc. Liquid
Prod Code:	NW_TPH_SGT	Collect Date:	12/10/23	Receive Date:	12/11/23

Analysis Lot:	828342	Prep Lot:		Report Group:	KQ2322584
Analysis	NWTPH-Dx	Prep Method:			
		Prep Date:			

Title:	Semi-Volatile Petroleum Products, Silica Gel Treated by GC/FID	Calibration ID:	KC2300522
		Report List ID:	22367

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Rpt?
o-Terphenyl	5.43		60115	53.434	Y
n-Triacontane	7.56		54548	56.722	Y

Target Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Rpt?
Diesel Range Organics (C12 - C25 DRO)	3.75		882431	1112.524	Y
Residual Range Organics (C25 - C36 RRO)	6.61		12378	21.817	N

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 12/28/23 13:11

\\alprews001\starlims\LIMSReps\QuantValidation.rpt

Data File : J:\GC21\DATA\122723F\1227013.D Vial: 96
 Acq On : 27 Dec 23 01:58 pm Operator: AA
 Sample : SVF04-71H DRO CCV 1000/50 Inst : 6890
 Misc : Multiplr: 1.00
 IntFile : rteint.p
 Quant Time: Dec 27 14:23:09 2023 Quant Results File: 122723F.RES

Quant Method : J:\GC21\METHODS\122723F.M (RTE Integrator)
 Title : 8015/NWTPH/AK SVF MJ257 KC2000628
 Last Update : Fri Dec 22 13:00:01 2023
 Response via : Initial Calibration
 DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL
 Signal Phase : ZB-1
 Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
1) S 4-Bromofluorobenzene	2.75	28505	53.918 ppm
Spiked Amount 50.000	Recovery	=	107.84%
2) S o-Terphenyl	5.43	60115	53.434 ppm
Spiked Amount 50.000	Recovery	=	106.87%
3) S n-Triacontane	7.56	54548	56.722 ppm
Spiked Amount 50.000	Recovery	=	113.44%
Target Compounds			
6) H C10-C25ex DRO [AK102]	3.10	1076690	1110.805 ppm
7) H C10-C28in DRO [8015]	3.20	1088189	1073.023 ppm
8) H C12-C25ex DRO [NWTPH]	3.75	882431	1112.524 ppm
10) H C25-C36in RRO [NWTPH]	6.61	12378	21.817 ppm
11) H C25-C36in RRO [AK103]	6.71	12378	20.333 ppm

Data File : J:\GC21\DATA\122723F\1227013.D

Vial: 96

Acq On : 27 Dec 23 01:58 pm

Operator: AA

Sample : SVF04-71H DRO CCV 1000/50

Inst : 6890

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Dec 27 14:33 2023 Quant Results File: 122723F.RES

Quant Method : J:\GC21\METHODS\122723F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Fri Dec 22 13:00:01 2023

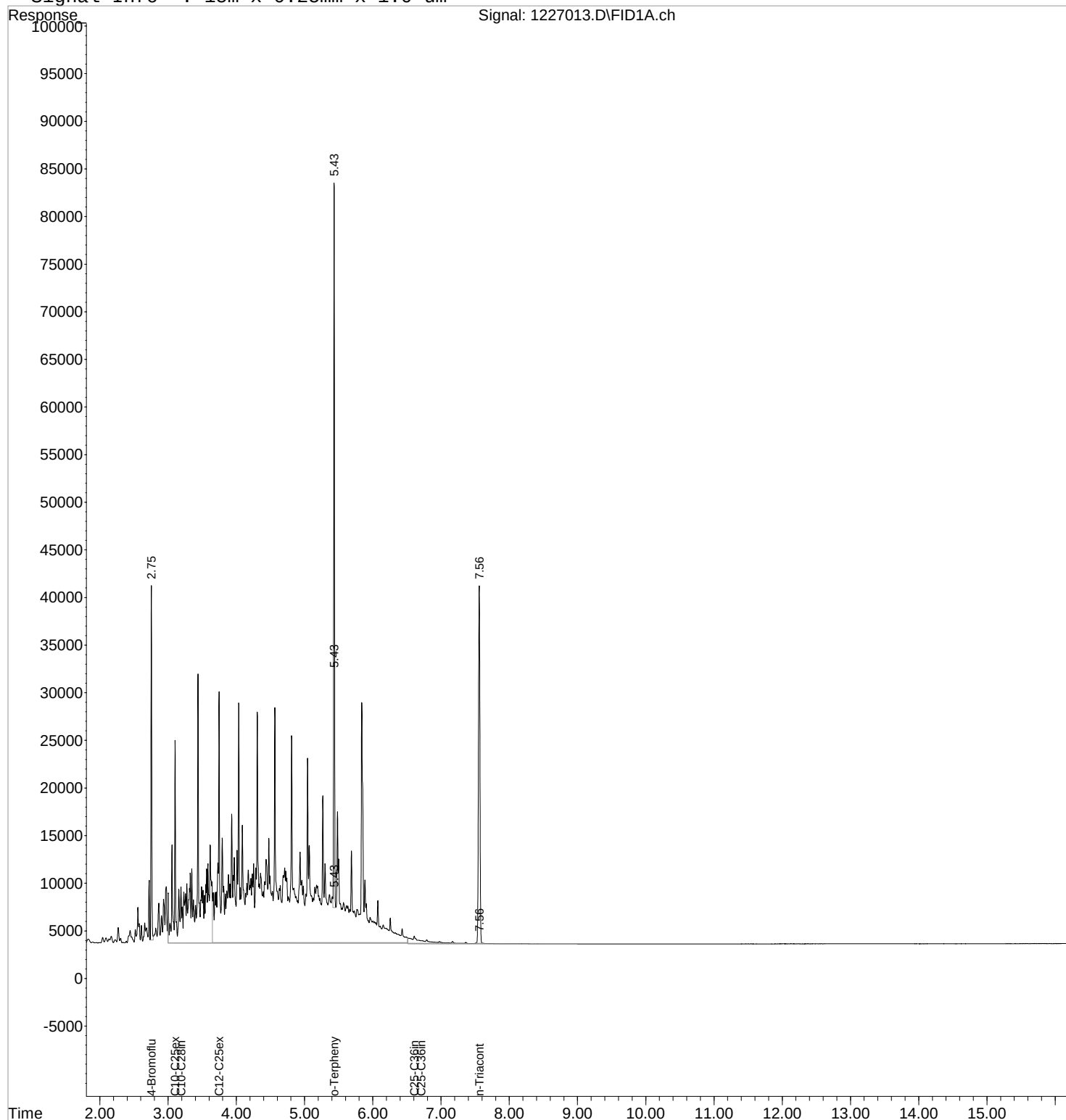
Response via : Single Level Calibration

DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Data File : J:\GC21\DATA\122723F\1227013.D

Vial: 96

Acq On : 27 Dec 23 01:58 pm

Operator: AA

Sample : SVF04-71H DRO CCV 1000/50

Inst : 6890

Misc :

Multiplr: 1.00

IntFile : rteint.p

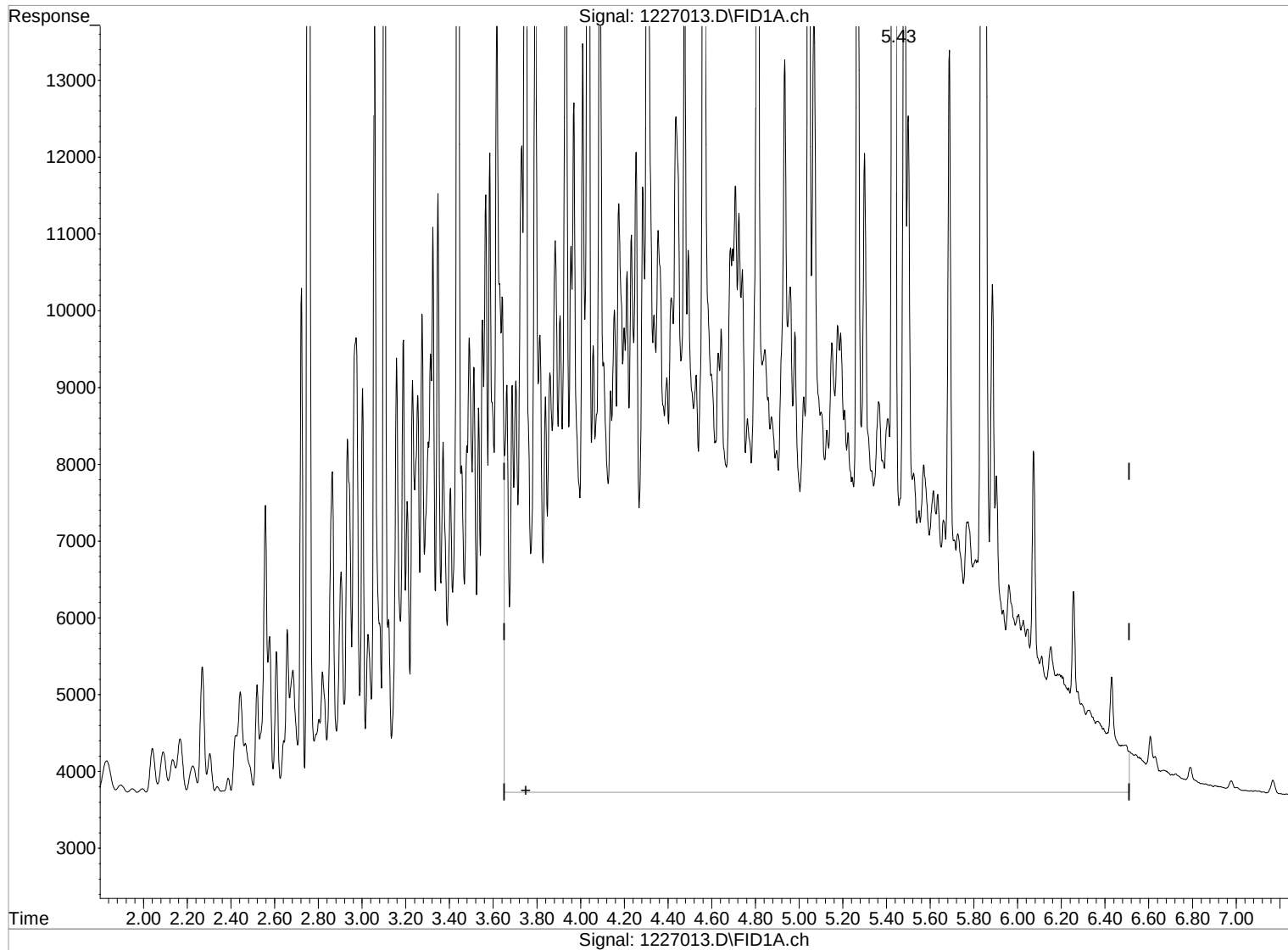
Quant Time: Dec 27 14:32 2023 Quant Results File: 122723F.RES

Method : J:\GC21\METHODS\122723F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Fri Dec 22 13:00:01 2023

Response via : Multiple Level Calibration



(8) C12-C25ex DRO [NWTPH] (H)

Manual Integration:

3.75min 1124.049ppm

Before

response 891573

12/27/23

(+) = Expected Retention Time

1227013.D 122723F.M Wed Dec 27 14:23:51 2023

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Data File : J:\GC21\DATA\122723F\1227013.D

Vial: 96

Acq On : 27 Dec 23 01:58 pm

Operator: AA

Sample : SVF04-71H DRO CCV 1000/50

Inst : 6890

Misc :

Multiplr: 1.00

IntFile : rteint.p

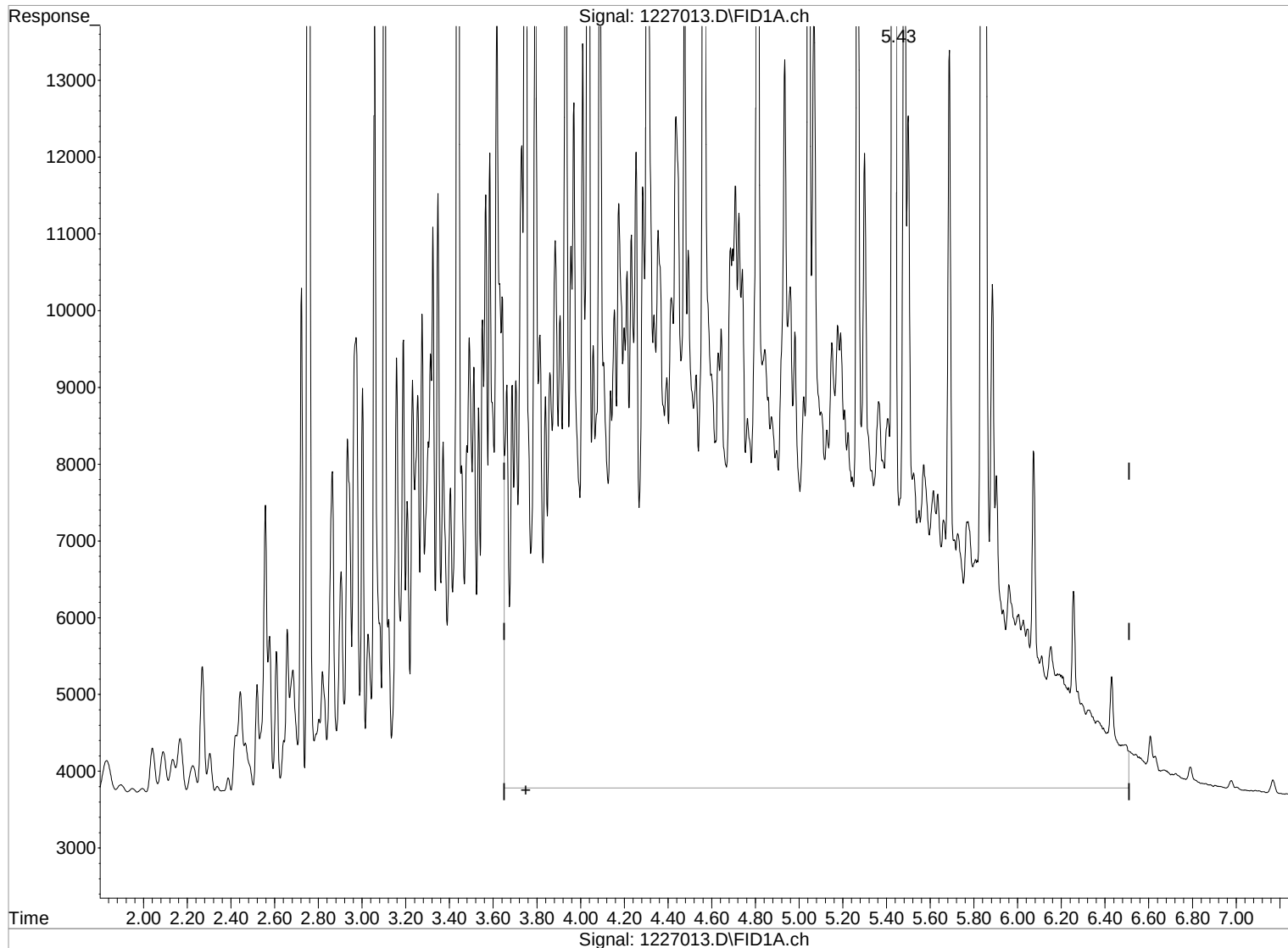
Quant Time: Dec 27 14:32 2023 Quant Results File: 122723F.RES

Method : J:\GC21\METHODS\122723F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Fri Dec 22 13:00:01 2023

Response via : Multiple Level Calibration



(8) C12-C25ex DRO [NWTPH] (H)

Manual Integration:

3.75min 1112.524ppm

After

response 882431

Baseline/Shoulder

12/27/23

(+) = Expected Retention Time

1227013.D 122723F.M Wed Dec 27 14:24:13 2023

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Validation Report

1st  12/28/23
2nd  12/29/23

Data File: J:\GC21\DATA\122723F\1227014.D\
Lab ID: KQ2322578-01.R01
RunType: CCV
Matrix: Biosolids Solids

Date Acquired: 12/27/23 14:20:00
Batch ID: 828340
Analysis Method: NWTPH-Dx/NW_TPH

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Analyte Coelutions	X	

Primary Review: _____

Secondary Review: _____

Validation Report

1st  12/28/23
2nd  12/29/23

Data File: J:\GC21\DATA\122723F\1227014.D\
Lab ID: KQ2322584-01.R01
RunType: CCV
Matrix: Misc. Liquid

Date Acquired: 12/27/23 14:20:00
Batch ID: 828342
Analysis Method: NWTPH-Dx/NW_TPH_SG

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Analyte Coelutions	X	

Primary Review: _____

Secondary Review: _____

Quantitation Report

1st *JS* 12/28/23
2nd *SW* 12/29/23

Data File:	J:\GC21\DATA\122723F\1227014.D\	Instrument:	K-GC-21
Acqu Date:	12/27/23 14:20:00	Vial:	2
Run Type:	CCV	Dilution:	1
Lab ID:	KQ2322578-01.R01	Raw Units:	ppm

Bottle ID:		Tier:	II	Matrix:	Biosolids Solids
Prod Code:	NW_TPH	Collect Date:	12/19/23	Receive Date:	12/19/23

Analysis Lot:	828340	Prep Lot:		Report Group:	KQ2322578
Analysis	NWTPH-Dx	Prep Method:			
		Prep Date:			

Title:	Semi-Volatile Petroleum Products by GC/FID	Calibration ID:	KC2300522
		Report List ID:	22364

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Rpt?
o-Terphenyl	0.00		0	0.000	N
n-Triacontane	0.00		0	0.000	N

Target Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Rpt?
Diesel Range Organics (C12 - C25 DRO)	3.75		57844	72.927	N
Residual Range Organics (C25 - C36 RRO)	6.61		575092	1013.632	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 12/28/23 12:25

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Quantitation Report

1st *JS* 12/28/23
2nd *SW* 12/29/23

Data File:	J:\GC21\DATA\122723F\1227014.D\	Instrument:	K-GC-21
Acqu Date:	12/27/23 14:20:00	Vial:	2
Run Type:	CCV	Dilution:	1
Lab ID:	KQ2322584-01.R01	Raw Units:	ppm

Bottle ID:		Tier:	II	Matrix:	Misc. Liquid
Prod Code:	NW_TPH_SGT	Collect Date:	12/10/23	Receive Date:	12/11/23

Analysis Lot:	828342	Prep Lot:		Report Group:	KQ2322584
Analysis	NWTPH-Dx	Prep Method:			
		Prep Date:			

Title:	Semi-Volatile Petroleum Products, Silica Gel Treated by GC/FID	Calibration ID:	KC2300522
		Report List ID:	22367

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Rpt?
o-Terphenyl	0.00		0	0.000	N
n-Triacontane	0.00		0	0.000	N

Target Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Rpt?
Diesel Range Organics (C12 - C25 DRO)	3.75		57844	72.927	N
Residual Range Organics (C25 - C36 RRO)	6.61		575092	1013.632	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 12/28/23 13:11

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Data File : J:\GC21\DATA\122723F\1227014.D Vial: 97
Acq On : 27 Dec 23 02:20 pm Operator: AA
Sample : SVF04-72E RRO CCV 1000 Inst : 6890
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Dec 27 14:37:55 2023 Quant Results File: 122723F.RES

Quant Method : J:\GC21\METHODS\122723F.M (RTE Integrator)
Title : 8015/NWTPH/AK SVF MJ257 KC2000628
Last Update : Fri Dec 22 13:00:01 2023
Response via : Initial Calibration
DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL
Signal Phase : ZB-1
Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
Target Compounds			
6) H C10-C25ex DRO [AK102]	3.10	58621	60.478 ppm
7) H C10-C28in DRO [8015]	3.20	231797	228.566 ppm
8) H C12-C25ex DRO [NWTPH]	3.75	57844	72.927 ppm
10) H C25-C36in RRO [NWTPH]	6.61	575092	1013.632 ppm
11) H C25-C36in RRO [AK103]	6.71	580393	953.396 ppm

Data File : J:\GC21\DATA\122723F\1227014.D

Vial: 97

Acq On : 27 Dec 23 02:20 pm

Operator: AA

Sample : SVF04-72E RRO CCV 1000

Inst : 6890

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Dec 27 14:39 2023 Quant Results File: 122723F.RES

Quant Method : J:\GC21\METHODS\122723F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Fri Dec 22 13:00:01 2023

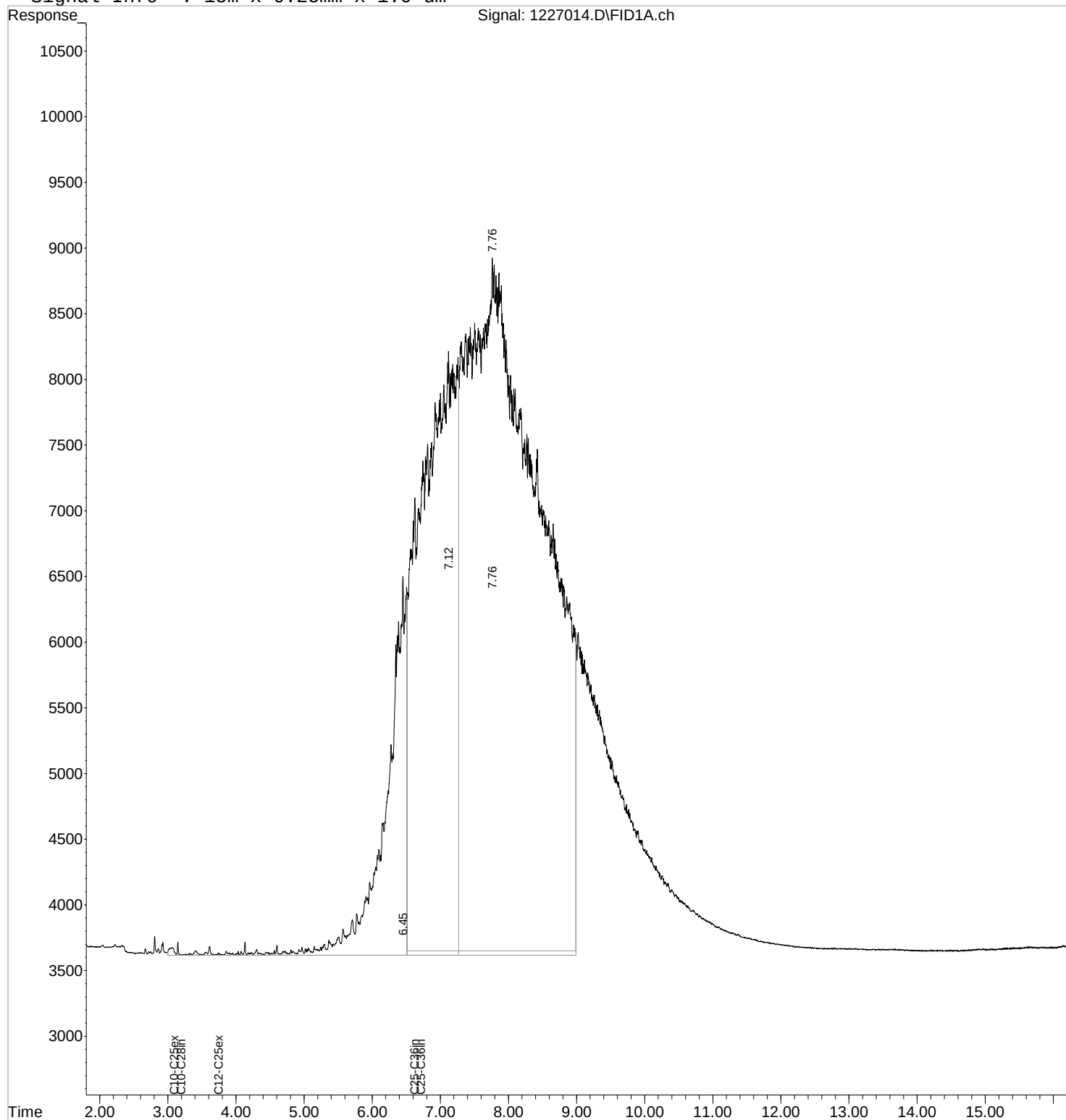
Response via : Single Level Calibration

DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Quantitation Report (Qedit)

1st *SW* 12/28/23
2nd *SW* 12/29/23

Data File : J:\GC21\DATA\122723F\1227014.D

Vial: 97

Acq On : 27 Dec 23 02:20 pm

Operator: AA

Sample : SVF04-72E RRO CCV 1000

Inst : 6890

Misc :

Multiplr: 1.00

IntFile : rteint.p

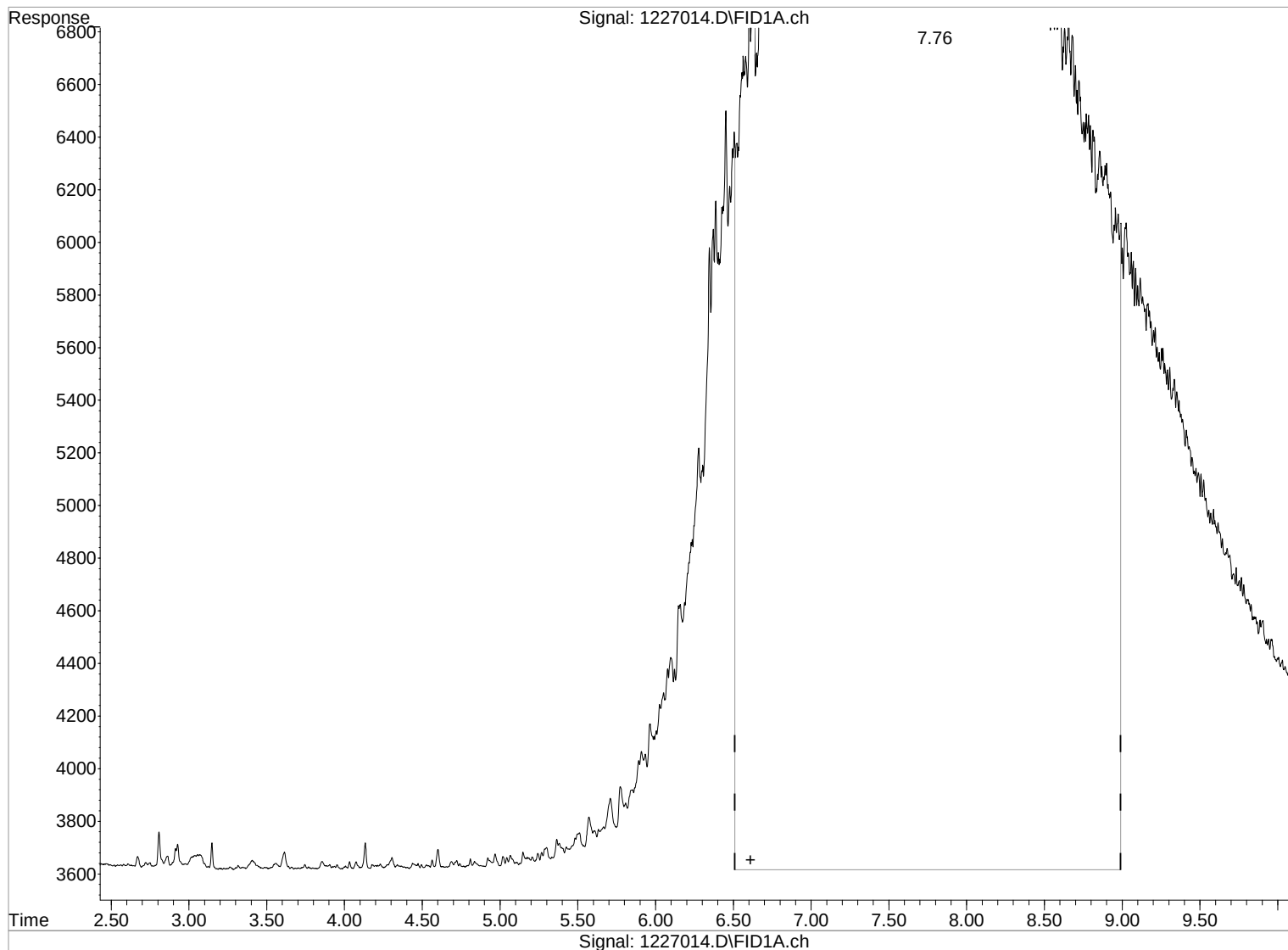
Quant Time: Dec 27 14:38 2023 Quant Results File: 122723F.RES

Method : J:\GC21\METHODS\122723F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Fri Dec 22 13:00:01 2023

Response via : Multiple Level Calibration



(10) C25-C36in RRO [NWTPH] (H)

Manual Integration:

6.61min 1022.976ppm

Before

response 580393

12/27/23

(+) = Expected Retention Time

1227014.D 122723F.M Wed Dec 27 14:38:27 2023

274013623

Quantitation Report (Qedit)

1st *SW* 12/28/23
2nd *SW* 12/29/23

Data File : J:\GC21\DATA\122723F\1227014.D

Vial: 97

Acq On : 27 Dec 23 02:20 pm

Operator: AA

Sample : SVF04-72E RRO CCV 1000

Inst : 6890

Misc :

Multiplr: 1.00

IntFile : rteint.p

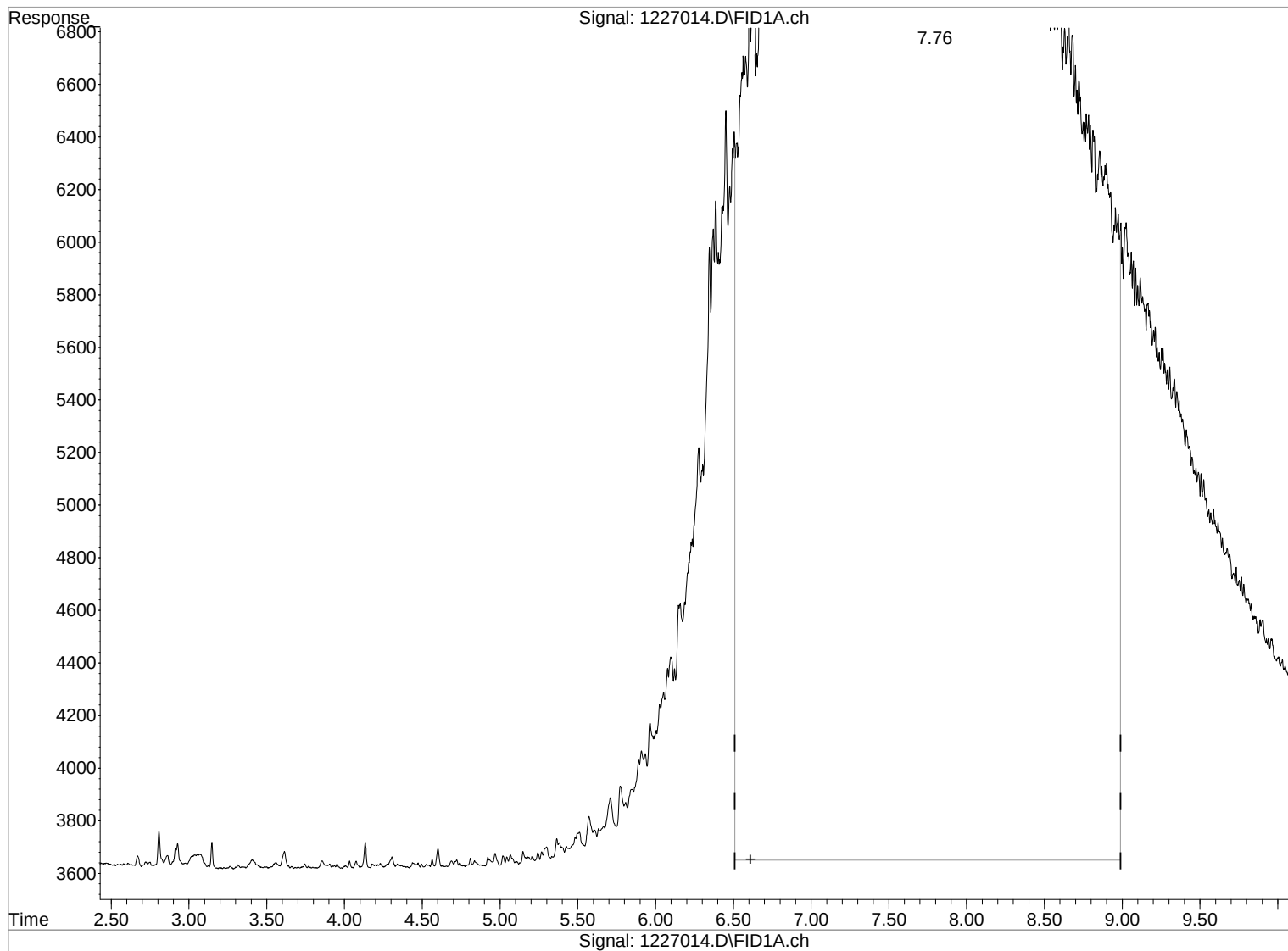
Quant Time: Dec 27 14:38 2023 Quant Results File: 122723F.RES

Method : J:\GC21\METHODS\122723F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Fri Dec 22 13:00:01 2023

Response via : Multiple Level Calibration



(10) C25-C36in RRO [NWTPH] (H)

Manual Integration:

6.61min 1013.632ppm

After

response 575092

Baseline/Shoulder

12/27/23

(+) = Expected Retention Time

1227014.D 122723F.M Wed Dec 27 14:38:46 2023

275 of 3623

Validation Report

1st  12/28/23
2nd  12/29/23

Data File: J:\GC21\DATA\122723F\1227036.D\
Lab ID: KQ2322578-02
RunType: CCV
Matrix: Biosolids Solids

Date Acquired: 12/27/23 22:15:00
Batch ID: 828340
Analysis Method: NWTPH-Dx/NW_TPH

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Analyte Coelutions	X	

Primary Review: _____

Secondary Review: _____

Validation Report

1st  12/28/23
2nd  12/29/23

Data File: J:\GC21\DATA\122723F\1227036.D\
Lab ID: KQ2322584-02
RunType: CCV
Matrix: Misc. Liquid

Date Acquired: 12/27/23 22:15:00
Batch ID: 828342
Analysis Method: NWTPH-Dx/NW_TPH_SG

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Analyte Coelutions	X	

Primary Review: _____

Secondary Review: _____

Validation Report

1st *FW* 12/29/23
2nd *FW* 12/29/23

Matrix printout

Data File: J:\GC21\DATA\122723F\1227036.D\
Lab ID: KQ2322578-07
RunType: CCV
Matrix: Water

Date Acquired: 12/27/23 22:15:00
Batch ID: 828340
Analysis Method: NWTPH-Dx/NW_TPH

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Analyte Coelutions	X	

Primary Review: _____

Secondary Review: _____

Quantitation Report

1st *JS* 12/28/23
2nd *SW* 12/29/23

Data File:	J:\GC21\DATA\122723F\1227036.D\	Instrument:	K-GC-21
Acqu Date:	12/27/23 22:15:00	Vial:	9
Run Type:	CCV	Dilution:	1
Lab ID:	KQ2322578-02	Raw Units:	ppm

Bottle ID:		Tier:	II	Matrix:	Biosolids Solids
Prod Code:	NW_TPH	Collect Date:	12/19/23	Receive Date:	12/19/23

Analysis Lot:	828340	Prep Lot:		Report Group:	KQ2322578
Analysis	NWTPH-Dx	Prep Method:			
		Prep Date:			

Title:	Semi-Volatile Petroleum Products by GC/FID	Calibration ID:	KC2300522
		Report List ID:	22364

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Rpt?
o-Terphenyl	5.43		54194	48.171	Y
n-Triacontane	7.56		50202	52.203	Y

Target Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Rpt?
Diesel Range Organics (C12 - C25 DRO)	3.75		810476	1021.806	Y
Residual Range Organics (C25 - C36 RRO)	6.61		12581	22.175	N

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 12/28/23 12:25

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Quantitation Report

1st *JS* 12/28/23
2nd *SW* 12/29/23

Data File:	J:\GC21\DATA\122723F\1227036.D\	Instrument:	K-GC-21
Acqu Date:	12/27/23 22:15:00	Vial:	18
Run Type:	CCV	Dilution:	1
Lab ID:	KQ2322584-02	Raw Units:	ppm

Bottle ID:		Tier:	II	Matrix:	Misc. Liquid
Prod Code:	NW_TPH_SGT	Collect Date:	12/10/23	Receive Date:	12/11/23

Analysis Lot:	828342	Prep Lot:		Report Group:	KQ2322584
Analysis	NWTPH-Dx	Prep Method:			
		Prep Date:			

Title:	Semi-Volatile Petroleum Products, Silica Gel Treated by GC/FID	Calibration ID:	KC2300522
		Report List ID:	22367

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Rpt?
o-Terphenyl	5.43		54194	48.171	Y
n-Triacontane	7.56		50202	52.203	Y

Target Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Rpt?
Diesel Range Organics (C12 - C25 DRO)	3.75		810476	1021.806	Y
Residual Range Organics (C25 - C36 RRO)	6.61		12581	22.175	N

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 12/28/23 13:11

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Quantitation Report

Matrix printout

1st *FW* 12/29/23
2nd *FW* 12/29/23

Data File:	J:\GC21\DATA\122723F\1227036.D\	Instrument:	K-GC-21
Acqu Date:	12/27/23 22:15:00	Vial:	11
Run Type:	CCV	Dilution:	1
Lab ID:	KQ2322578-07	Raw Units:	ppm

Bottle ID:		Tier:	III	Matrix:	Water
Prod Code:	NW_TPH	Collect Date:	12/8/23	Receive Date:	12/11/23

Analysis Lot:	828340	Prep Lot:		Report Group:	KQ2322578
Analysis	NWTPH-Dx	Prep Method:			
		Prep Date:			

Title:	Semi-Volatile Petroleum Products by GC/FID	Calibration ID:	KC2300522
		Report List ID:	22364

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Rpt?
o-Terphenyl	5.43		54194	48.171	Y
n-Triacontane	7.56		50202	52.203	Y

Target Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Rpt?
Diesel Range Organics (C12 - C25 DRO)	3.75		810476	1021.806	Y
Residual Range Organics (C25 - C36 RRO)	6.61		12581	22.175	N

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 12/29/23 11:17

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Data File : J:\GC21\DATA\122723F\1227036.D Vial: 96
 Acq On : 27 Dec 23 10:15 pm Operator: AA
 Sample : SVF04-71H DRO CCV 1000/50 Inst : 6890
 Misc : Multiplr: 1.00
 IntFile : rteint.p
 Quant Time: Dec 28 10:26:53 2023 Quant Results File: 122723F.RES

Quant Method : J:\GC21\METHODS\122723F.M (RTE Integrator)
 Title : 8015/NWTPH/AK SVF MJ257 KC2000628
 Last Update : Fri Dec 22 13:00:01 2023
 Response via : Initial Calibration
 DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL
 Signal Phase : ZB-1
 Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
1) S 4-Bromofluorobenzene	2.75	25988	49.157 ppm
Spiked Amount 50.000	Recovery	=	98.31%
2) S o-Terphenyl	5.43	54194	48.171 ppm
Spiked Amount 50.000	Recovery	=	96.34%
3) S n-Triacontane	7.56	50202	52.203 ppm
Spiked Amount 50.000	Recovery	=	104.41%
Target Compounds			
6) H C10-C25ex DRO [AK102]	3.10	979348	1010.379 ppm
7) H C10-C28in DRO [8015]	3.20	989467	975.677 ppm
8) H C12-C25ex DRO [NWTPH]	3.75	810476	1021.806 ppm
10) H C25-C36in RRO [NWTPH]	6.61	12581	22.175 ppm
11) H C25-C36in RRO [AK103]	6.71	12581	20.666 ppm

Data File : J:\GC21\DATA\122723F\1227036.D

Vial: 96

Acq On : 27 Dec 23 10:15 pm

Operator: AA

Sample : SVF04-71H DRO CCV 1000/50

Inst : 6890

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Dec 28 10:27 2023 Quant Results File: 122723F.RES

Quant Method : J:\GC21\METHODS\122723F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Fri Dec 22 13:00:01 2023

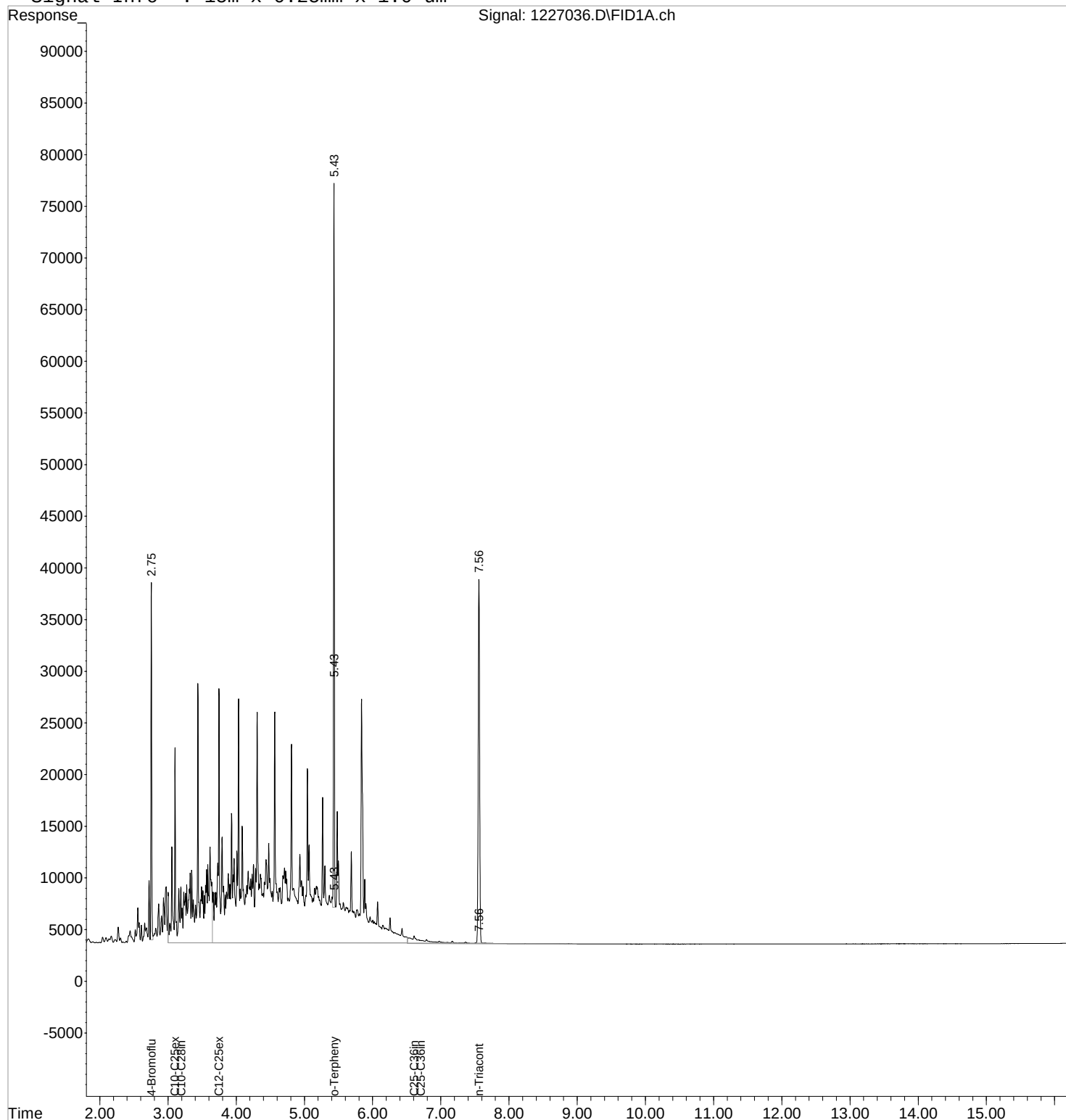
Response via : Single Level Calibration

DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Validation Report

1st  12/28/23
2nd  12/29/23

Data File: J:\GC21\DATA\122723F\1227037.D\
Lab ID: KQ2322578-02.R01
RunType: CCV
Matrix: Biosolids Solids

Date Acquired: 12/27/23 22:37:00
Batch ID: 828340
Analysis Method: NWTPH-Dx/NW_TPH

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Analyte Coelutions	X	

Primary Review: _____

Secondary Review: _____

Validation Report

1st  12/28/23
2nd  12/29/23

Data File: J:\GC21\DATA\122723F\1227037.D\
Lab ID: KQ2322584-02.R01
RunType: CCV
Matrix: Misc. Liquid

Date Acquired: 12/27/23 22:37:00
Batch ID: 828342
Analysis Method: NWTPH-Dx/NW_TPH_SG

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Analyte Coelutions	X	

Primary Review: _____

Secondary Review: _____

Validation Report

Matrix printout

1st *FW* 12/29/23
2nd *FW* 12/29/23

Data File: J:\GC21\DATA\122723F\1227037.D\
Lab ID: KQ2322578-07.R01
RunType: CCV
Matrix: Water

Date Acquired: 12/27/23 22:37:00
Batch ID: 828340
Analysis Method: NWTPH-Dx/NW_TPH

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Analyte Coelutions	X	

Primary Review: _____

Secondary Review: _____

Quantitation Report

1st *JS* 12/28/23
2nd *SW* 12/29/23

Data File:	J:\GC21\DATA\122723F\1227037.D\	Instrument:	K-GC-21
Acqu Date:	12/27/23 22:37:00	Vial:	10
Run Type:	CCV	Dilution:	1
Lab ID:	KQ2322578-02.R01	Raw Units:	ppm

Bottle ID:		Tier:	II	Matrix:	Biosolids Solids
Prod Code:	NW_TPH	Collect Date:	12/19/23	Receive Date:	12/19/23

Analysis Lot:	828340	Prep Lot:		Report Group:	KQ2322578
Analysis	NWTPH-Dx	Prep Method:			
		Prep Date:			

Title:	Semi-Volatile Petroleum Products by GC/FID	Calibration ID:	KC2300522
		Report List ID:	22364

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Rpt?
o-Terphenyl	0.00		0	0.000	N
n-Triacontane	0.00		0	0.000	N

Target Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Rpt?
Diesel Range Organics (C12 - C25 DRO)	3.75		58623	73.909	N
Residual Range Organics (C25 - C36 RRO)	6.61		579827	1021.978	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 12/28/23 12:25

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Quantitation Report

1st *JS* 12/28/23
2nd *SW* 12/29/23

Data File:	J:\GC21\DATA\122723F\1227037.D\	Instrument:	K-GC-21
Acqu Date:	12/27/23 22:37:00	Vial:	19
Run Type:	CCV	Dilution:	1
Lab ID:	KQ2322584-02.R01	Raw Units:	ppm

Bottle ID:		Tier:	II	Matrix:	Misc. Liquid
Prod Code:	NW_TPH_SGT	Collect Date:	12/10/23	Receive Date:	12/11/23

Analysis Lot:	828342	Prep Lot:		Report Group:	KQ2322584
Analysis	NWTPH-Dx	Prep Method:			
		Prep Date:			

Title:	Semi-Volatile Petroleum Products, Silica Gel Treated by GC/FID	Calibration ID:	KC2300522
		Report List ID:	22367

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Rpt?
o-Terphenyl	0.00		0	0.000	N
n-Triacontane	0.00		0	0.000	N

Target Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Rpt?
Diesel Range Organics (C12 - C25 DRO)	3.75		58623	73.909	N
Residual Range Organics (C25 - C36 RRO)	6.61		579827	1021.978	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 12/28/23 13:11

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Quantitation Report

Matrix printout

1st *FW* 12/29/23
2nd *FW* 12/29/23

Data File:	J:\GC21\DATA\122723F\1227037.D\	Instrument:	K-GC-21
Acqu Date:	12/27/23 22:37:00	Vial:	12
Run Type:	CCV	Dilution:	1
Lab ID:	KQ2322578-07.R01	Raw Units:	ppm

Bottle ID:		Tier:	III	Matrix:	Water
Prod Code:	NW_TPH	Collect Date:	12/8/23	Receive Date:	12/11/23

Analysis Lot:	828340	Prep Lot:		Report Group:	KQ2322578
Analysis	NWTPH-Dx	Prep Method:			
		Prep Date:			

Title:	Semi-Volatile Petroleum Products by GC/FID	Calibration ID:	KC2300522
		Report List ID:	22364

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Rpt?
o-Terphenyl	0.00		0	0.000	N
n-Triacontane	0.00		0	0.000	N

Target Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Rpt?
Diesel Range Organics (C12 - C25 DRO)	3.75		58623	73.909	N
Residual Range Organics (C25 - C36 RRO)	6.61		579827	1021.978	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 12/29/23 11:17

\\alprews001\starlims\LIMSReps\QuantValidation.rpt

Data File : J:\GC21\DATA\122723F\1227037.D Vial: 97
Acq On : 27 Dec 23 10:37 pm Operator: AA
Sample : SVF04-72E RRO CCV 1000 Inst : 6890
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Dec 28 10:26:54 2023 Quant Results File: 122723F.RES

Quant Method : J:\GC21\METHODS\122723F.M (RTE Integrator)
Title : 8015/NWTPH/AK SVF MJ257 KC2000628
Last Update : Fri Dec 22 13:00:01 2023
Response via : Initial Calibration
DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL
Signal Phase : ZB-1
Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

Target Compounds

6) H	C10-C25ex DRO [AK102]	3.10	59570	61.457 ppm
7) H	C10-C28in DRO [8015]	3.20	235650	232.366 ppm
8) H	C12-C25ex DRO [NWTPH]	3.75	58623	73.909 ppm
10) H	C25-C36in RRO [NWTPH]	6.61	579827	1021.978 ppm
11) H	C25-C36in RRO [AK103]	6.71	579827	952.467 ppm

Data File : J:\GC21\DATA\122723F\1227037.D

Vial: 97

Acq On : 27 Dec 23 10:37 pm

Operator: AA

Sample : SVF04-72E RRO CCV 1000

Inst : 6890

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Dec 28 10:27 2023 Quant Results File: 122723F.RES

Quant Method : J:\GC21\METHODS\122723F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Fri Dec 22 13:00:01 2023

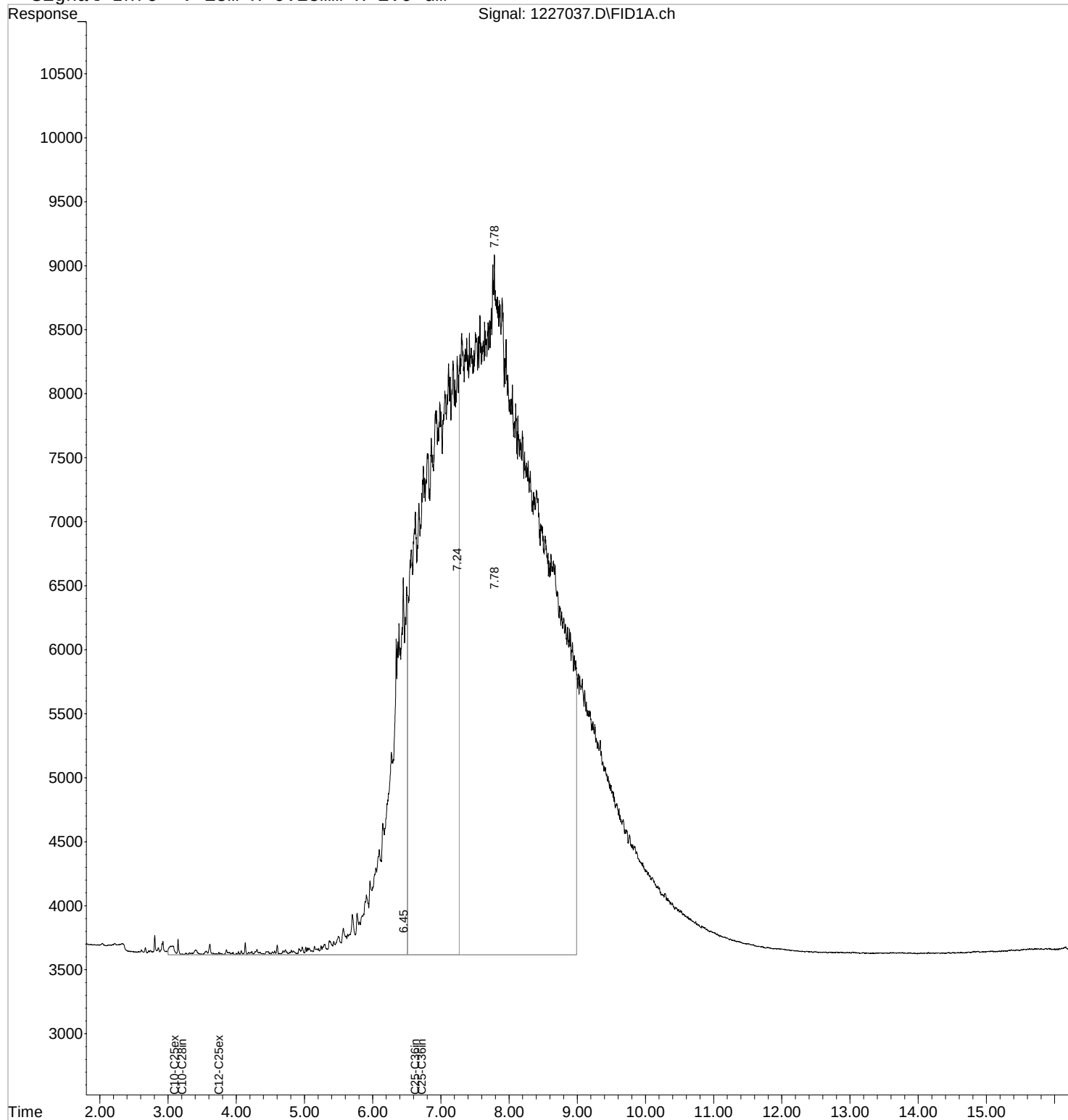
Response via : Single Level Calibration

DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Validation Report

1st  01/08/24
2nd  01/08/24

Data File: J:\GC35\DATA\010524\0105F021.D\
Lab ID: KQ2400312-05
RunType: CCV
Matrix: Water

Date Acquired: 1/5/24 16:35:00
Batch ID: 829103
Analysis Method: NWTTPH-Dx/NW_TPH

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Analyte Coelutions	X	

Primary Review: _____

Secondary Review: _____

Validation Report

1st  01/08/24
2nd  01/08/24

Data File: J:\GC35\DATA\010524\0105F021.D\
Lab ID: KQ2400312-01
RunType: CCV
Matrix: Water

Date Acquired: 1/5/24 16:35:00
Batch ID: 829103
Analysis Method: NWTPH-Dx/NW_TPH_SG

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Analyte Coelutions	X	

Primary Review: _____

Secondary Review: _____

Quantitation Report

1st *AA* 01/08/24
2nd *AA* 01/08/24

Data File:	J:\GC35\DATA\010524\0105F021.D\	Instrument:	K-GC-35
Acqu Date:	1/5/24 16:35:00	Vial:	11
Run Type:	CCV	Dilution:	1
Lab ID:	KQ2400312-05	Raw Units:	ppm

Bottle ID:		Tier:	I	Matrix:	Water
Prod Code:	NW_TPH	Collect Date:	12/21/23	Receive Date:	12/21/23

Analysis Lot:	829103	Prep Lot:		Report Group:	KQ2400312
Analysis	NWTPH-Dx	Prep Method:			
		Prep Date:			

Title:	Semi-Volatile Petroleum Products by GC/FID	Calibration ID:	KC2300521
		Report List ID:	22364

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Rpt?
o-Terphenyl	5.61		70247	47.461	Y
n-Triacontane	7.78		64658	53.713	Y

Target Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Rpt?
Diesel Range Organics (C12 - C25 DRO)	3.93		1166655	1107.401	Y
Residual Range Organics (C25 - C36 RRO)	6.79		191352	232.519	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 1/8/24 13:35

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Quantitation Report

1st *AA* 01/08/24
2nd *AA* 01/08/24

Data File:	J:\GC35\DATA\010524\0105F021.D\	Instrument:	K-GC-35
Acqu Date:	1/5/24 16:35:00	Vial:	1
Run Type:	CCV	Dilution:	1
Lab ID:	KQ2400312-01	Raw Units:	ppm

Bottle ID:		Tier:	IV	Matrix:	Water
Prod Code:	NW_TPH_SGT	Collect Date:	12/20/23	Receive Date:	12/20/23

Analysis Lot:	829103	Prep Lot:		Report Group:	KQ2400312
Analysis	NWTPH-Dx	Prep Method:			
		Prep Date:			

Title:	Semi-Volatile Petroleum Products, Silica Gel Treated by GC/FID	Calibration ID:	KC2300521
		Report List ID:	22367

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Rpt?
o-Terphenyl	5.61		70247	47.461	Y
n-Triacontane	7.78		64658	53.713	Y

Target Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Rpt?
Diesel Range Organics (C12 - C25 DRO)	3.93		1166655	1107.401	Y
Residual Range Organics (C25 - C36 RRO)	6.79		191352	232.519	N

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 1/8/24 13:35

\\alprews001\starlims\LIMSReps\QuantValidation.rpt

Data File : J:\GC35\DATA\010524\0105F021.D Vial: 96
 Acq On : 05 Jan 2024 4:35 pm Operator: JLD
 Sample : SVF04 72H DRO CCV 1000/50 Inst : GC35
 Misc : Multiplr: 1.00
 IntFile : rteint.p
 Quant Time: Jan 08 09:47:38 2024 Quant Results File: 010524FSVF.RES

Quant Method : J:\GC35\METHODS\010524FSVF.M (RTE Integrator)
 Title : AK102/103 SVF MJ257 CAL 16220
 Last Update : Fri Jan 05 13:02:55 2024
 Response via : Initial Calibration
 DataAcq Meth : SVF2_F.M

Volume Inj. : 1 uL
 Signal Phase : ZB-1
 Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
----------	------	----------	------------

System Monitoring Compounds

1) S 4-Bromofluorobenzene	2.98	34914	51.694 ppm
Spiked Amount 50.000	Recovery	=	103.39%
2) S o-Terphenyl	5.61	70247	47.461 ppm
Spiked Amount 50.000	Recovery	=	94.92%
3) S n-Triacontane	7.78	64658	53.713 ppm
Spiked Amount 50.000	Recovery	=	107.43%

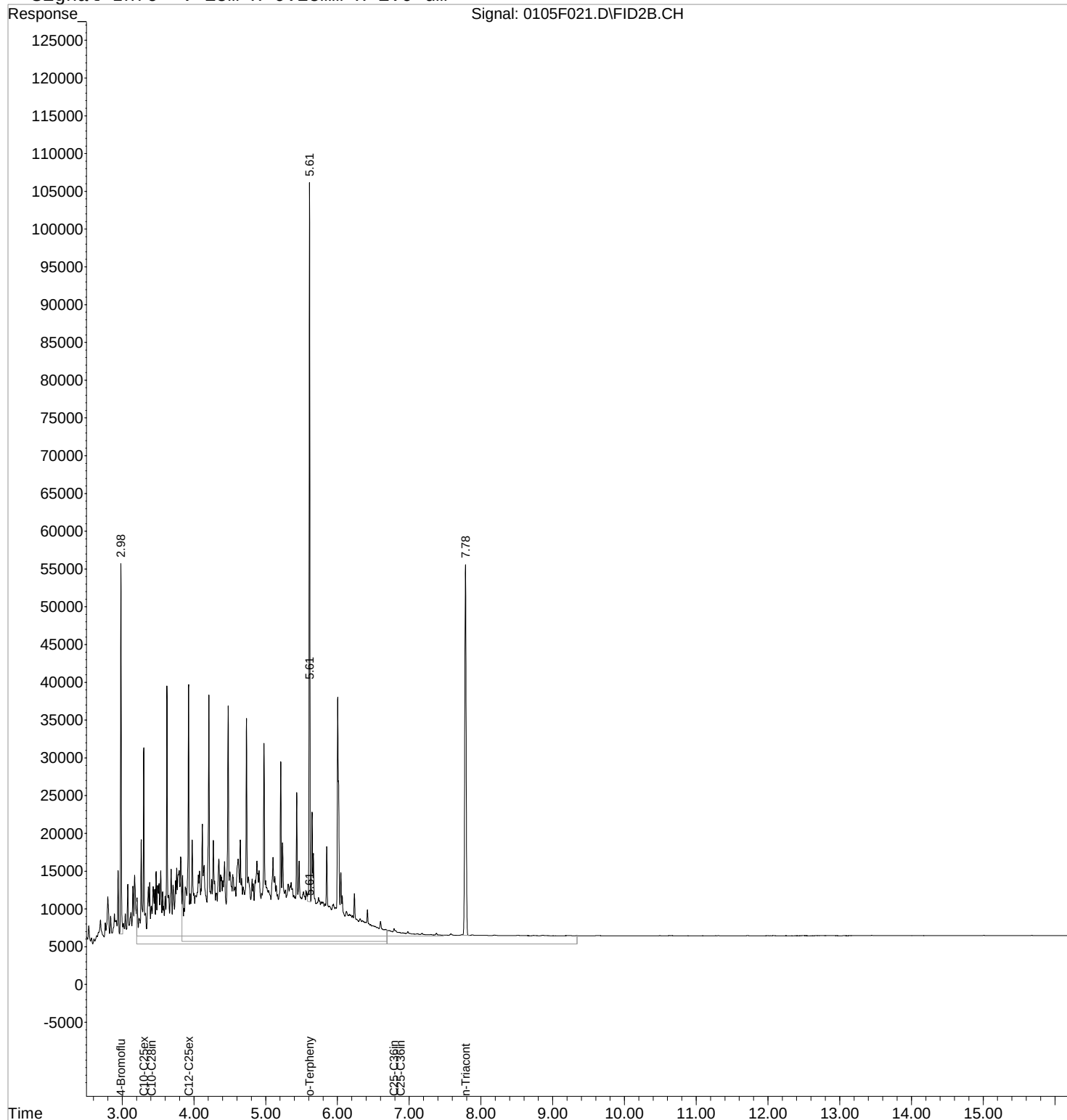
Target Compounds

6) H C10-C25ex DRO [AK102]	3.30	1483929	1175.219 ppm
7) H C10-C28in DRO [8015]	3.40	1281843	963.905 ppm
8) H C12-C25ex DRO [NWT PH]	3.93	1166655	1107.401 ppm
10) H C25-C36in RRO [NWT PH]	6.79	191352	232.519 ppm
11) H C25-C36in RRO [AK103]	6.89	191352	249.605 ppm

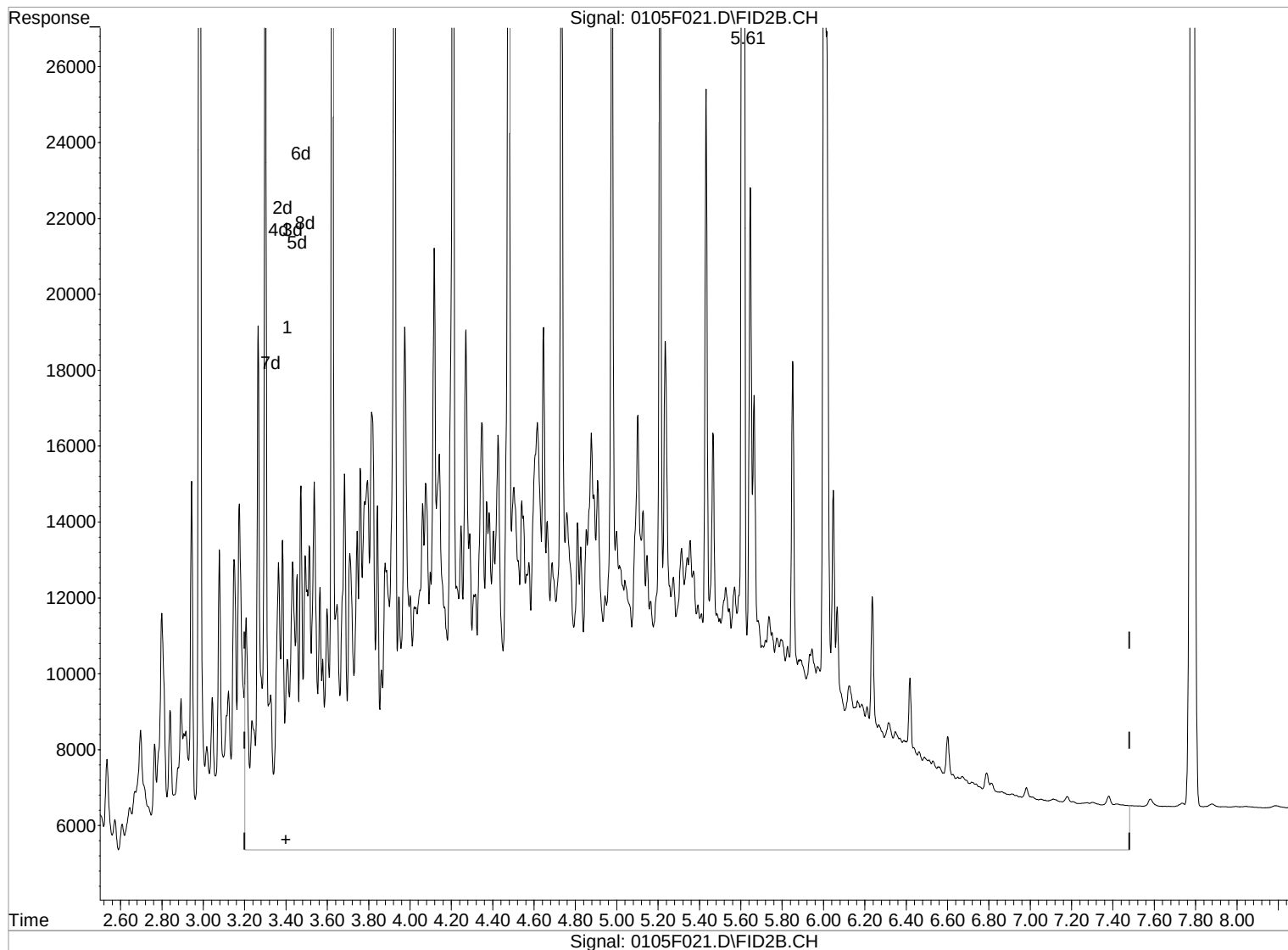
Data File : J:\GC35\DATA\010524\0105F021.D Vial: 96
Acq On : 05 Jan 2024 4:35 pm Operator: JLD
Sample : SVF04 72H DRO CCV 1000/50 Inst : GC35
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Jan 8 12:37 2024 Quant Results File: 010524FSVF.RES

Quant Method : J:\GC35\METHODS\010524FSVF.M (RTE Integrator)
Title : AK102/103 SVF MJ257 CAL 16220
Last Update : Fri Jan 05 13:02:55 2024
Response via : Single Level Calibration
DataAcq Meth : SVF2_F.M

Volume Inj. : 1 uL
Signal Phase : ZB-1
Signal Info : 15m x 0.25mm x 1.0 um



Method : J:\GC35\METHODS\010524FSVF.M (RTE Integrator)
Title : AK102/103 SVF MJ257 CAL 16220
Last Update : Fri Jan 05 13:02:55 2024
Response via : Multiple Level Calibration



Manual Integration:

Before

01/08/24

298 0 3623

Data File : J:\GC35\DATA\010524\0105F021.D

Vial: 96

Acq On : 05 Jan 2024 4:35 pm

Operator: JLD

Sample : SVF04 72H DRO CCV 1000/50

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

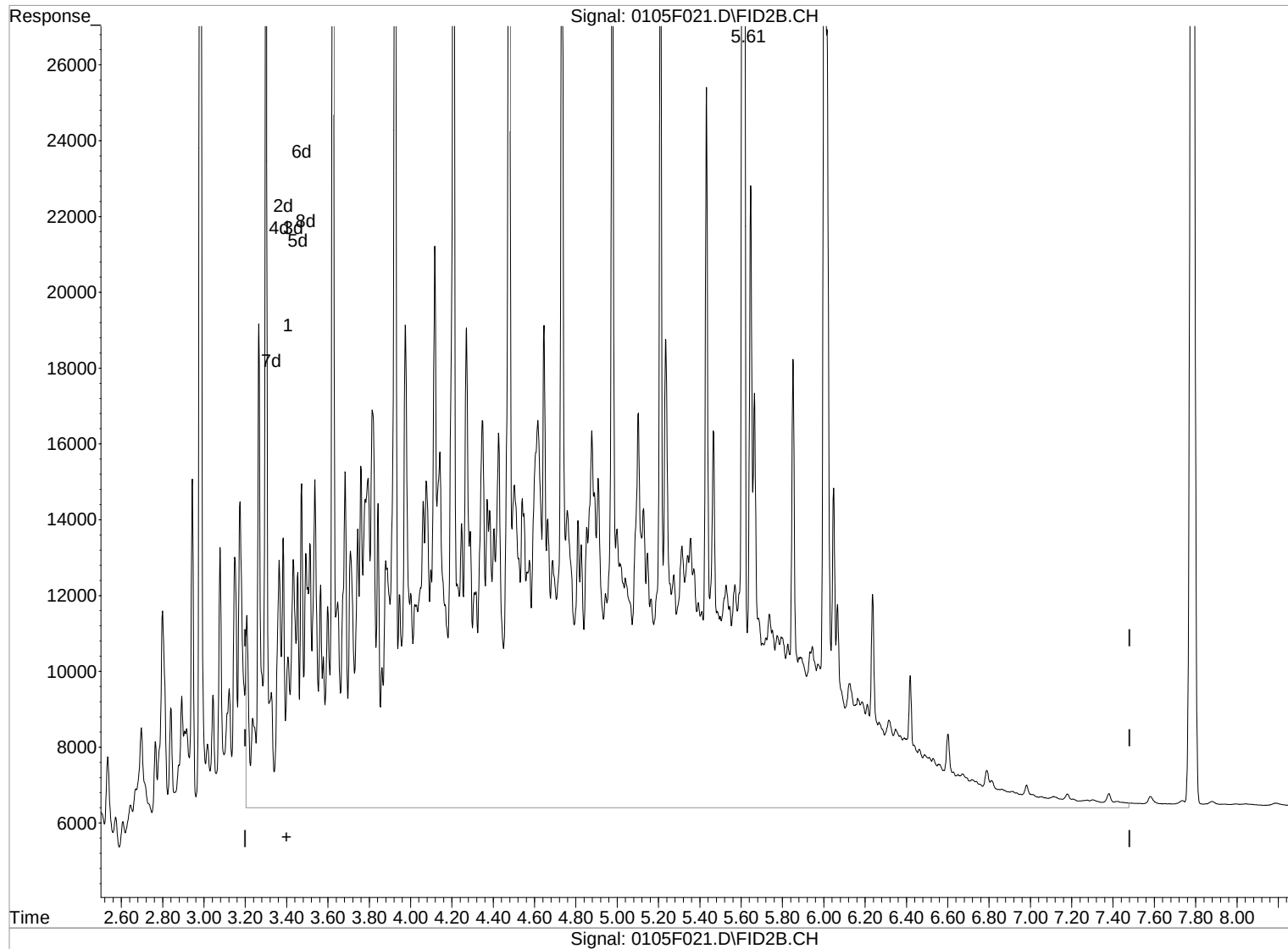
Quant Time: Jan 8 9:49 2024 Quant Results File: 010524FSVF.RES

Method : J:\GC35\METHODS\010524FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Fri Jan 05 13:02:55 2024

Response via : Multiple Level Calibration



(7) C10-C28in DRO [8015] (H)

Manual Integration:

3.40min 963.905ppm

After

response 1281843

Baseline/Shoulder

01/08/24

(+) = Expected Retention Time

0105F021.D 010524FSVF.M

Mon Jan 08 09:49:24 2024

299 of 3623

Data File : J:\GC35\DATA\010524\0105F021.D

Vial: 96

Acq On : 05 Jan 2024 4:35 pm

Operator: JLD

Sample : SVF04 72H DRO CCV 1000/50

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

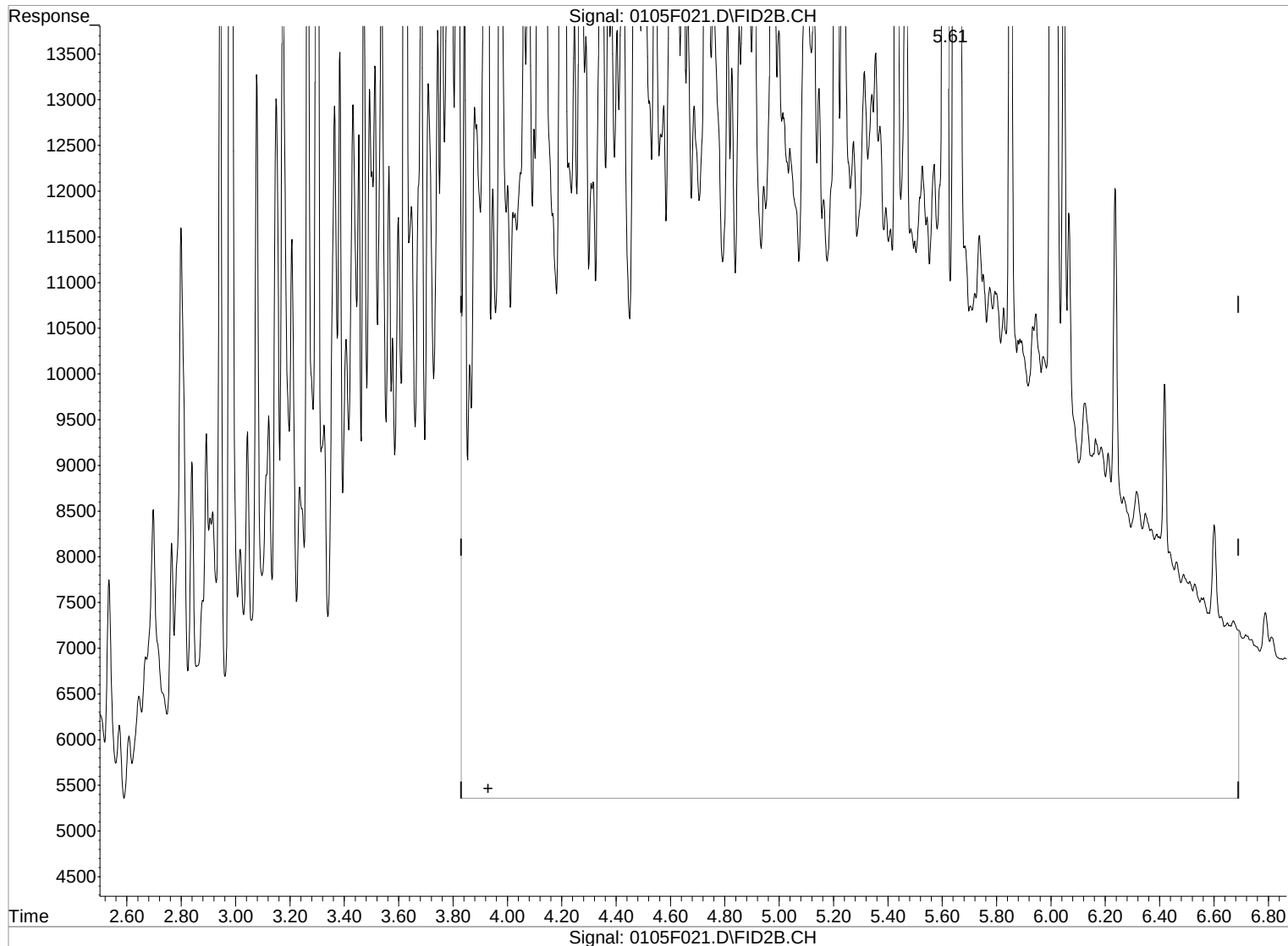
Quant Time: Jan 8 9:51 2024 Quant Results File: 010524FSVF.RES

Method : J:\GC35\METHODS\010524FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Fri Jan 05 13:02:55 2024

Response via : Multiple Level Calibration



(8) C12-C25ex DRO [NWTPH] (H)

Manual Integration:

3.93min 1164.900ppm

Before

response 1227230

01/08/24

(+) = Expected Retention Time

0105F021.D 010524FSVF.M

Mon Jan 08 12:33:32 2024

300 of 3623

Data File : J:\GC35\DATA\010524\0105F021.D

Vial: 96

Acq On : 05 Jan 2024 4:35 pm

Operator: JLD

Sample : SVF04 72H DRO CCV 1000/50

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

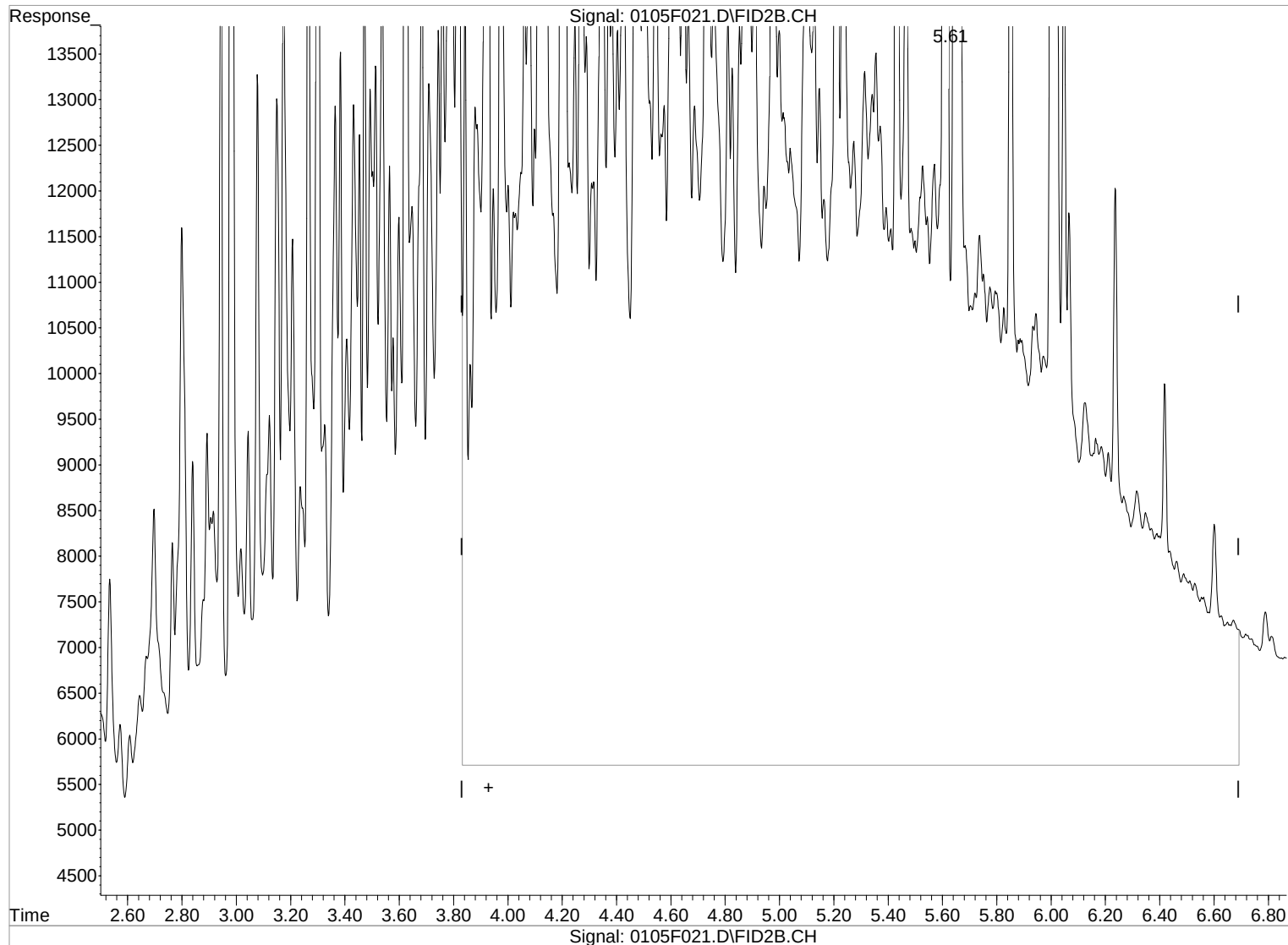
Quant Time: Jan 8 9:51 2024 Quant Results File: 010524FSVF.RES

Method : J:\GC35\METHODS\010524FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Fri Jan 05 13:02:55 2024

Response via : Multiple Level Calibration



(8) C12-C25ex DRO [NWTPH] (H)

Manual Integration:

3.93min 1107.401ppm

After

response 1166655

Baseline/Shoulder

01/08/24

(+) = Expected Retention Time

0105F021.D 010524FSVF.M

Mon Jan 08 12:33:47 2024

301 of 3623

Validation Report

1st  01/08/24
2nd  01/08/24

Data File: J:\GC35\DATA\010524\0105F023.D\
Lab ID: KQ2400312-05.R01
RunType: CCV
Matrix: Water

Date Acquired: 1/5/24 17:18:00
Batch ID: 829103
Analysis Method: NWTTPH-Dx/NW_TPH

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Analyte Coelutions	X	

Primary Review: _____

Secondary Review: _____

Validation Report

1st  01/08/24
2nd  01/08/24

Data File: J:\GC35\DATA\010524\0105F023.D\
Lab ID: KQ2400312-01.R01
RunType: CCV
Matrix: Water

Date Acquired: 1/5/24 17:18:00
Batch ID: 829103
Analysis Method: NWTPH-Dx/NW_TPH_SG

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Analyte Coelutions	X	

Primary Review: _____

Secondary Review: _____

Quantitation Report

1st *AA* 01/08/24
2nd *AA* 01/08/24

Data File:	J:\GC35\DATA\010524\0105F023.D\	Instrument:	K-GC-35
Acqu Date:	1/5/24 17:18:00	Vial:	12
Run Type:	CCV	Dilution:	1
Lab ID:	KQ2400312-05.R01	Raw Units:	ppm

Bottle ID:		Tier:	I	Matrix:	Water
Prod Code:	NW_TPH	Collect Date:	12/21/23	Receive Date:	12/21/23

Analysis Lot:	829103	Prep Lot:		Report Group:	KQ2400312
Analysis	NWTPH-Dx	Prep Method:			
		Prep Date:			

Title:	Semi-Volatile Petroleum Products by GC/FID	Calibration ID:	KC2300521
		Report List ID:	22364

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Rpt?
o-Terphenyl	0.00		0	0.000	N
n-Triacontane	0.00		0	0.000	N

Target Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Rpt?
Diesel Range Organics (C12 - C25 DRO)	3.93		294482	279.525	N
Residual Range Organics (C25 - C36 RRO)	6.79		758436	921.606	N

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 1/8/24 13:35

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Quantitation Report

1st *AA* 01/08/24
2nd *AA* 01/08/24

Data File:	J:\GC35\DATA\010524\0105F023.D\	Instrument:	K-GC-35
Acqu Date:	1/5/24 17:18:00	Vial:	2
Run Type:	CCV	Dilution:	1
Lab ID:	KQ2400312-01.R01	Raw Units:	ppm

Bottle ID:		Tier:	IV	Matrix:	Water
Prod Code:	NW_TPH_SGT	Collect Date:	12/20/23	Receive Date:	12/20/23

Analysis Lot:	829103	Prep Lot:		Report Group:	KQ2400312
Analysis	NWTPH-Dx	Prep Method:			
		Prep Date:			

Title:	Semi-Volatile Petroleum Products, Silica Gel Treated by GC/FID	Calibration ID:	KC2300521
		Report List ID:	22367

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Rpt?
o-Terphenyl	0.00		0	0.000	N
n-Triacontane	0.00		0	0.000	N

Target Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Rpt?
Diesel Range Organics (C12 - C25 DRO)	3.93		294482	279.525	N
Residual Range Organics (C25 - C36 RRO)	6.79		758436	921.606	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 1/8/24 13:35

\\alprews001\starlims\LIMSReps\QuantValidation.rpt

Data File : J:\GC35\DATA\010524\0105F023.D Vial: 97
Acq On : 05 Jan 2024 5:18 pm Operator: JLD
Sample : SVF04 72E RRO CCV 1000 PPM Inst : GC35
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Jan 08 09:47:38 2024 Quant Results File: 010524FSVF.RES

Quant Method : J:\GC35\METHODS\010524FSVF.M (RTE Integrator)
Title : AK102/103 SVF MJ257 CAL 16220
Last Update : Fri Jan 05 13:02:55 2024
Response via : Initial Calibration
DataAcq Meth : SVF2_F.M

Volume Inj. : 1 uL
Signal Phase : ZB-1
Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
Target Compounds			
6) H C10-C25ex DRO [AK102]	3.30	342646	271.363 ppm
7) H C10-C28in DRO [8015]	3.40	652090	490.351 ppm
8) H C12-C25ex DRO [NWTPH]	3.93	294482	279.525 ppm
10) H C25-C36in RRO [NWTPH]	6.79	758436	921.606 ppm
11) H C25-C36in RRO [AK103]	6.89	954818	1245.492 ppm

Data File : J:\GC35\DATA\010524\0105F023.D

Vial: 97

Acq On : 05 Jan 2024 5:18 pm

Operator: JLD

Sample : SVF04 72E RRO CCV 1000 PPM

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Jan 8 9:53 2024 Quant Results File: 010524FSVF.RES

Quant Method : J:\GC35\METHODS\010524FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Fri Jan 05 13:02:55 2024

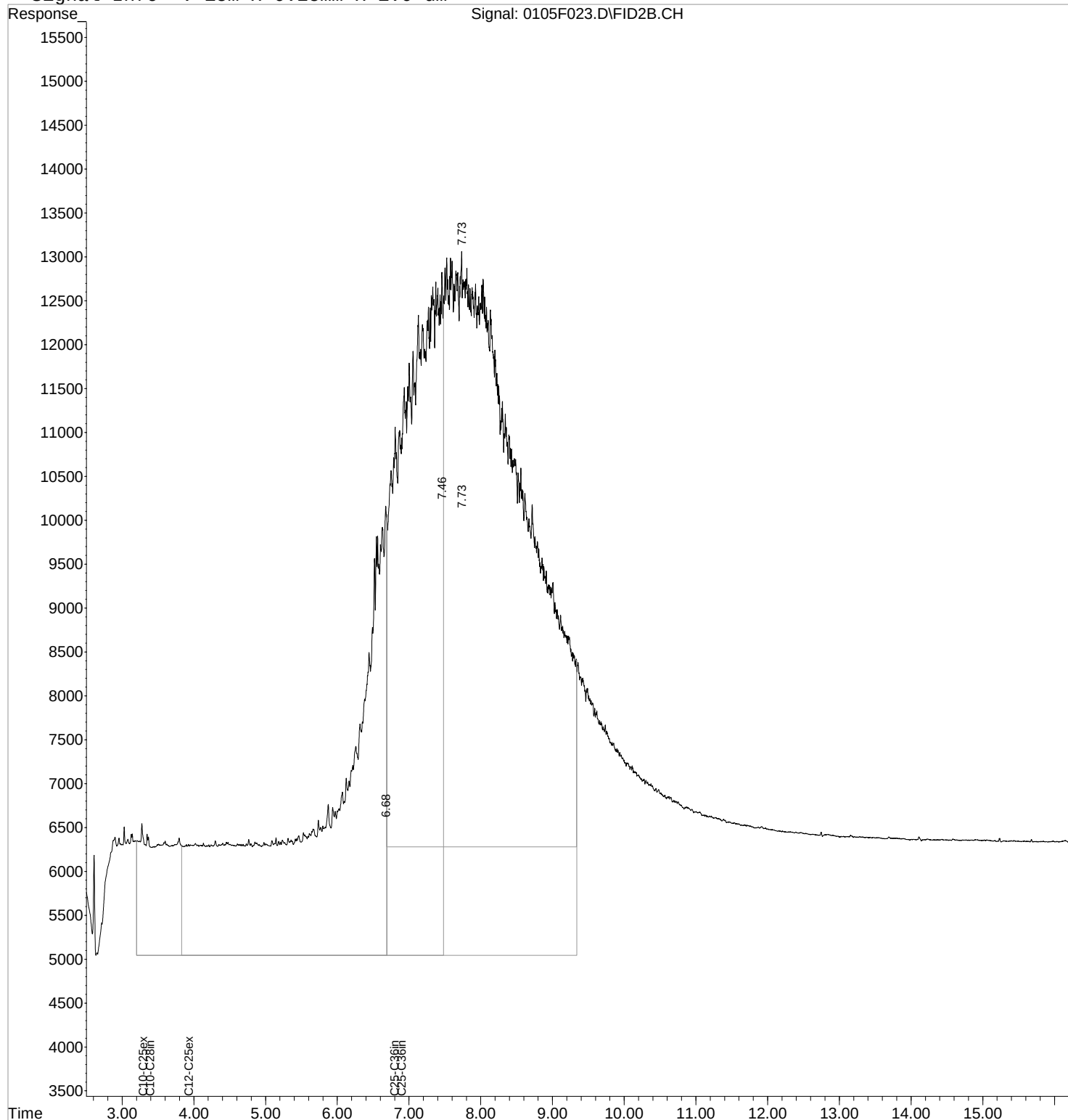
Response via : Single Level Calibration

DataAcq Meth : SVF2_F.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Data File : J:\GC35\DATA\010524\0105F023.D

Vial: 97

Acq On : 05 Jan 2024 5:18 pm

Operator: JLD

Sample : SVF04 72E RRO CCV 1000 PPM

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

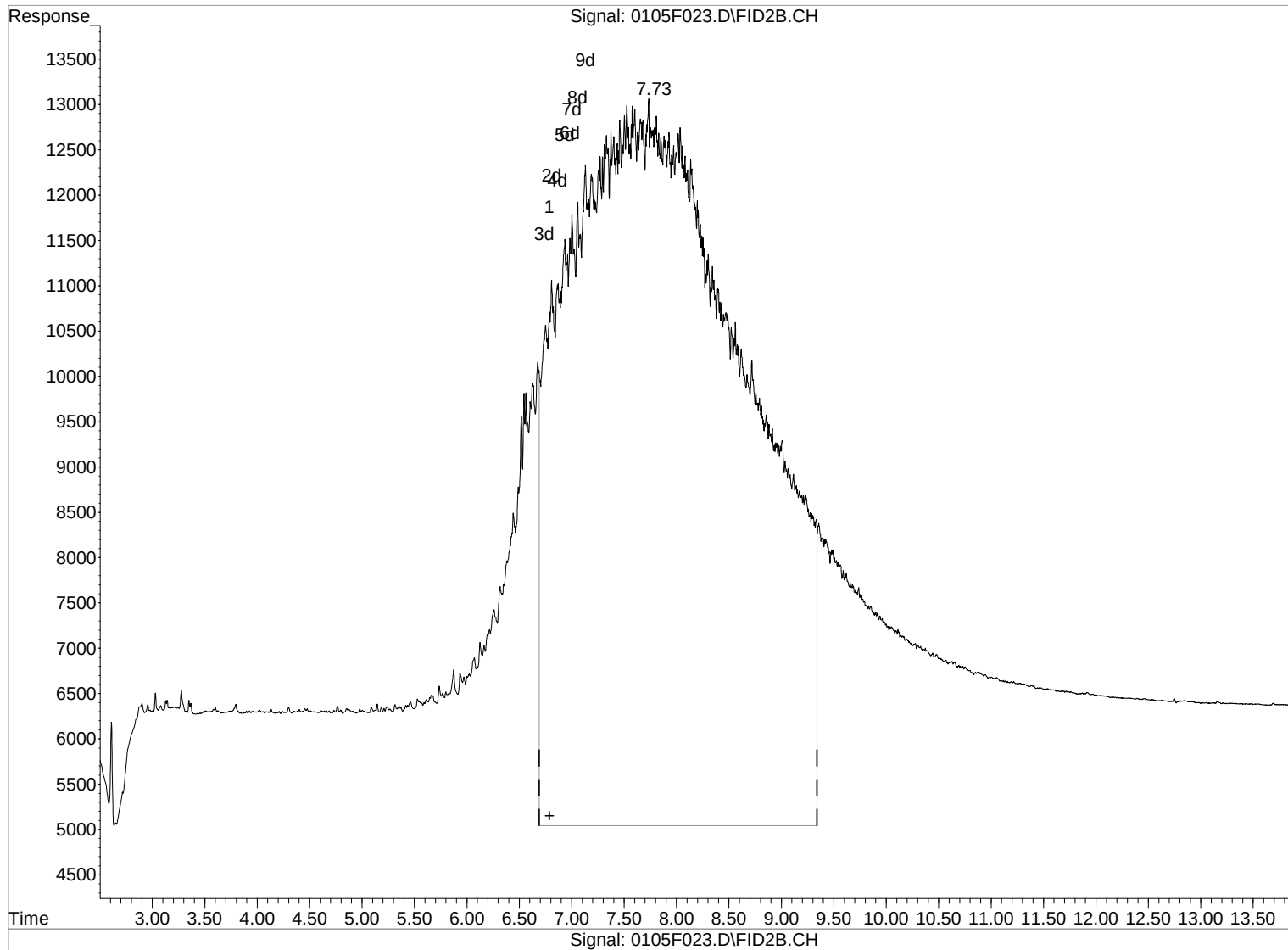
Quant Time: Jan 8 9:49 2024 Quant Results File: 010524FSVF.RES

Method : J:\GC35\METHODS\010524FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Fri Jan 05 13:02:55 2024

Response via : Multiple Level Calibration



(10) C25-C36in RRO [NWTPH] (H)

Manual Integration:

6.79min 1160.237ppm

Before

response 954818

01/08/24

(+) = Expected Retention Time

0105F023.D 010524FSVF.M

Mon Jan 08 09:49:56 2024

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Data File : J:\GC35\DATA\010524\0105F023.D

Vial: 97

Acq On : 05 Jan 2024 5:18 pm

Operator: JLD

Sample : SVF04 72E RRO CCV 1000 PPM

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

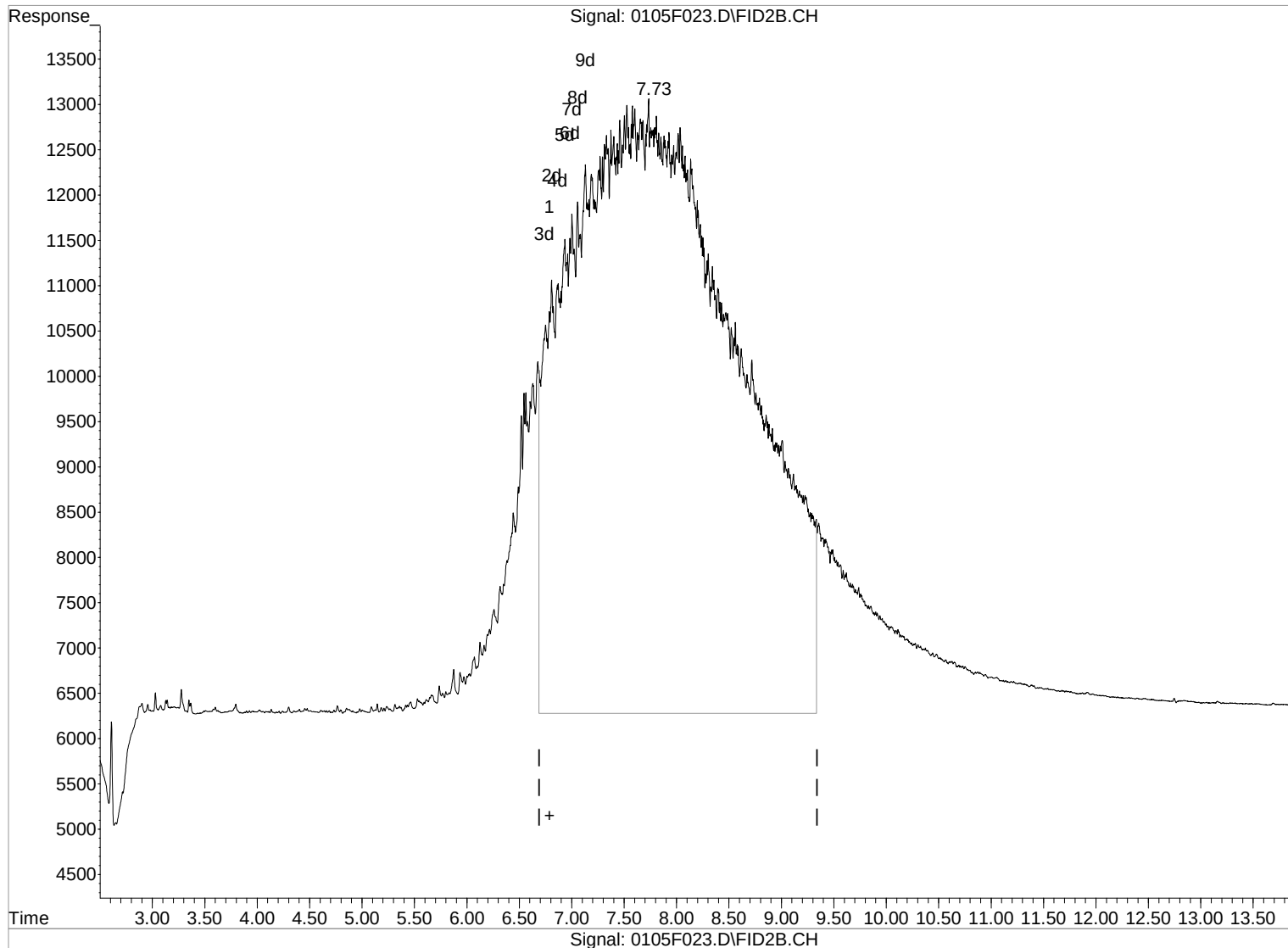
Quant Time: Jan 8 9:49 2024 Quant Results File: 010524FSVF.RES

Method : J:\GC35\METHODS\010524FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Fri Jan 05 13:02:55 2024

Response via : Multiple Level Calibration



(10) C25-C36in RRO [NWTPH] (H)

Manual Integration:

6.79min 921.606ppm

After

response 758436

Baseline/Shoulder

01/08/24

(+) = Expected Retention Time

0105F023.D 010524FSVF.M

Mon Jan 08 09:50:07 2024

309 of 3623

Validation Report

1st  01/08/24
2nd  01/08/24

Data File: J:\GC35\DATA\010524\0105F041.D\
Lab ID: KQ2400312-06
RunType: CCV
Matrix: Water

Date Acquired: 1/5/24 23:47:00
Batch ID: 829103
Analysis Method: NWTPH-Dx/NW_TPH

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Analyte Coelutions	X	

Primary Review: _____

Secondary Review: _____

Validation Report

1st  01/08/24
2nd  01/08/24

Data File: J:\GC35\DATA\010524\0105F041.D\
Lab ID: KQ2400312-02
RunType: CCV
Matrix: Water

Date Acquired: 1/5/24 23:47:00
Batch ID: 829103
Analysis Method: NWTTPH-Dx/NW_TPH_SG

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Analyte Coelutions	X	

Primary Review: _____

Secondary Review: _____

Quantitation Report

1st *AA* 01/08/24
2nd *AA* 01/08/24

Data File:	J:\GC35\DATA\010524\0105F041.D\	Instrument:	K-GC-35
Acqu Date:	1/5/24 23:47:00	Vial:	23
Run Type:	CCV	Dilution:	1
Lab ID:	KQ2400312-06	Raw Units:	ppm

Bottle ID:		Tier:	III	Matrix:	Water
Prod Code:	NW_TPH	Collect Date:	12/20/23	Receive Date:	12/22/23

Analysis Lot:	829103	Prep Lot:		Report Group:	KQ2400312
Analysis	NWTPH-Dx	Prep Method:			
		Prep Date:			

Title:	Semi-Volatile Petroleum Products by GC/FID	Calibration ID:	KC2300521
		Report List ID:	22364

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Rpt?
o-Terphenyl	5.61		67611	45.680	Y
n-Triacontane	7.79		70437	58.514	Y

Target Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Rpt?
Diesel Range Organics (C12 - C25 DRO)	3.93		1064883	1010.798	Y
Residual Range Organics (C25 - C36 RRO)	6.79		210950	256.334	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 1/8/24 13:35

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Quantitation Report

1st *AA* 01/08/24
2nd *AA* 01/08/24

Data File:	J:\GC35\DATA\010524\0105F041.D\	Instrument:	K-GC-35
Acqu Date:	1/5/24 23:47:00	Vial:	8
Run Type:	CCV	Dilution:	1
Lab ID:	KQ2400312-02	Raw Units:	ppm

Bottle ID:		Tier:	IV	Matrix:	Water
Prod Code:	NW_TPH_SGT	Collect Date:	12/20/23	Receive Date:	12/20/23

Analysis Lot:	829103	Prep Lot:		Report Group:	KQ2400312
Analysis	NWTPH-Dx	Prep Method:			
		Prep Date:			

Title:	Semi-Volatile Petroleum Products, Silica Gel Treated by GC/FID	Calibration ID:	KC2300521
		Report List ID:	22367

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Rpt?
o-Terphenyl	5.61		67611	45.680	Y
n-Triacontane	7.79		70437	58.514	Y

Target Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Rpt?
Diesel Range Organics (C12 - C25 DRO)	3.93		1064883	1010.798	Y
Residual Range Organics (C25 - C36 RRO)	6.79		210950	256.334	N

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 1/8/24 13:35

\\alprews001\starlims\LIMSReps\QuantValidation.rpt

Data File : J:\GC35\DATA\010524\0105F041.D Vial: 98
 Acq On : 05 Jan 2024 11:47 pm Operator: JLD
 Sample : SVF04 72H DRO CCV 1000/50 PPM Inst : GC35
 Misc : Multiplr: 1.00
 IntFile : rteint.p
 Quant Time: Jan 08 09:47:54 2024 Quant Results File: 010524FSVF.RES

Quant Method : J:\GC35\METHODS\010524FSVF.M (RTE Integrator)
 Title : AK102/103 SVF MJ257 CAL 16220
 Last Update : Fri Jan 05 13:02:55 2024
 Response via : Initial Calibration
 DataAcq Meth : SVF2_F.M

Volume Inj. : 1 uL
 Signal Phase : ZB-1
 Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
1) S 4-Bromofluorobenzene	2.98	34776	51.490 ppm
Spiked Amount 50.000	Recovery	=	102.98%
2) S o-Terphenyl	5.61	67611	45.680 ppm
Spiked Amount 50.000	Recovery	=	91.36%
3) S n-Triacontane	7.79	70437	58.514 ppm
Spiked Amount 50.000	Recovery	=	117.03%
Target Compounds			
6) H C10-C25ex DRO [AK102]	3.30	1474271	1167.570 ppm
7) H C10-C28in DRO [8015]	3.40	1545351	1162.055 ppm
8) H C12-C25ex DRO [NWT PH]	3.93	1064883	1010.798 ppm
10) H C25-C36in RRO [NWT PH]	6.79	210950	256.334 ppm
11) H C25-C36in RRO [AK103]	6.89	210950	275.169 ppm

Data File : J:\GC35\DATA\010524\0105F041.D

Vial: 98

Acq On : 05 Jan 2024 11:47 pm

Operator: JLD

Sample : SVF04 72H DRO CCV 1000/50 PPM

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Jan 8 9:54 2024 Quant Results File: 010524FSVF.RES

Quant Method : J:\GC35\METHODS\010524FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Fri Jan 05 13:02:55 2024

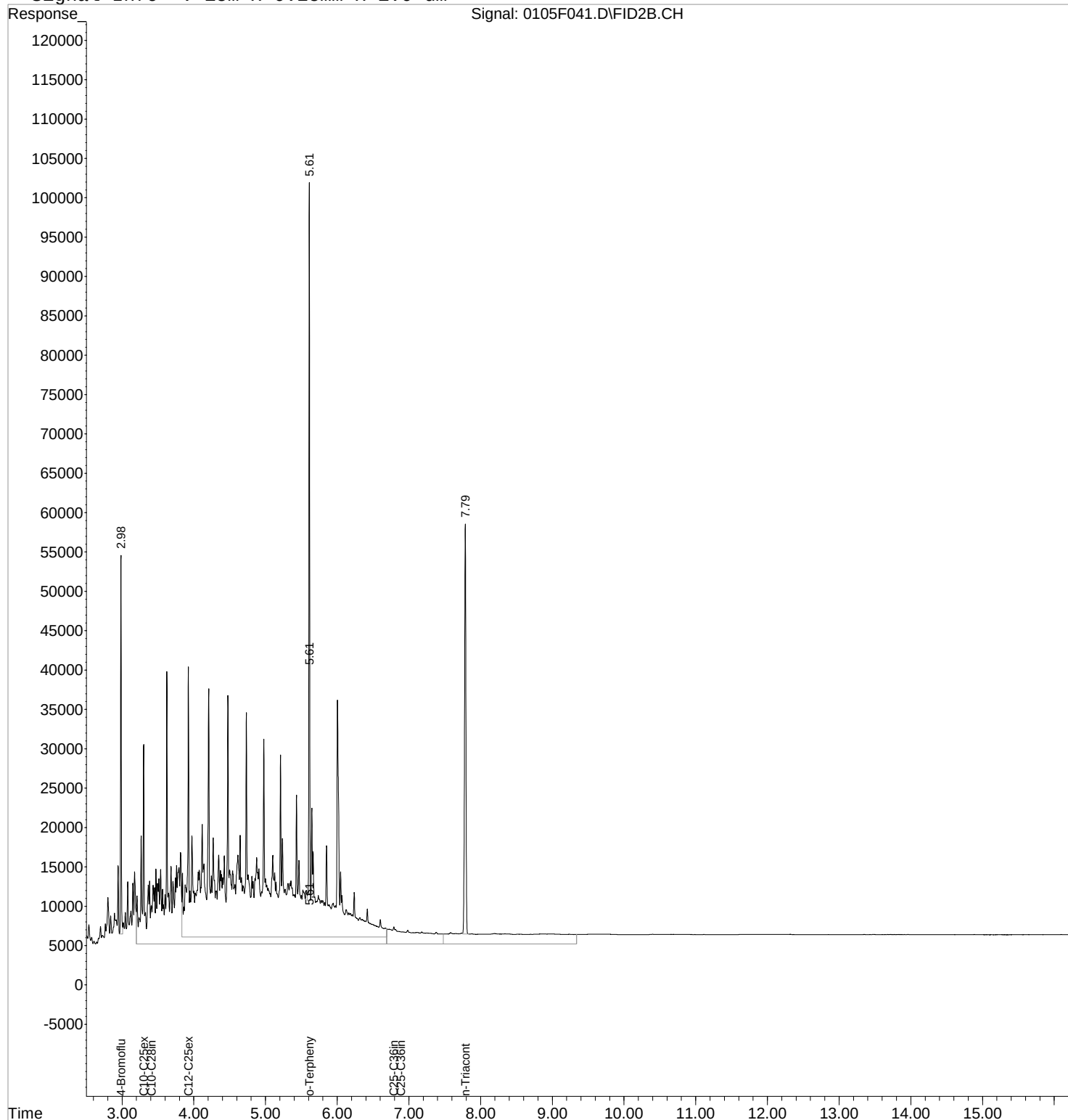
Response via : Single Level Calibration

DataAcq Meth : SVF2_F.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Data File : J:\GC35\DATA\010524\0105F041.D

Vial: 98

Acq On : 05 Jan 2024 11:47 pm

Operator: JLD

Sample : SVF04 72H DRO CCV 1000/50 PPM

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

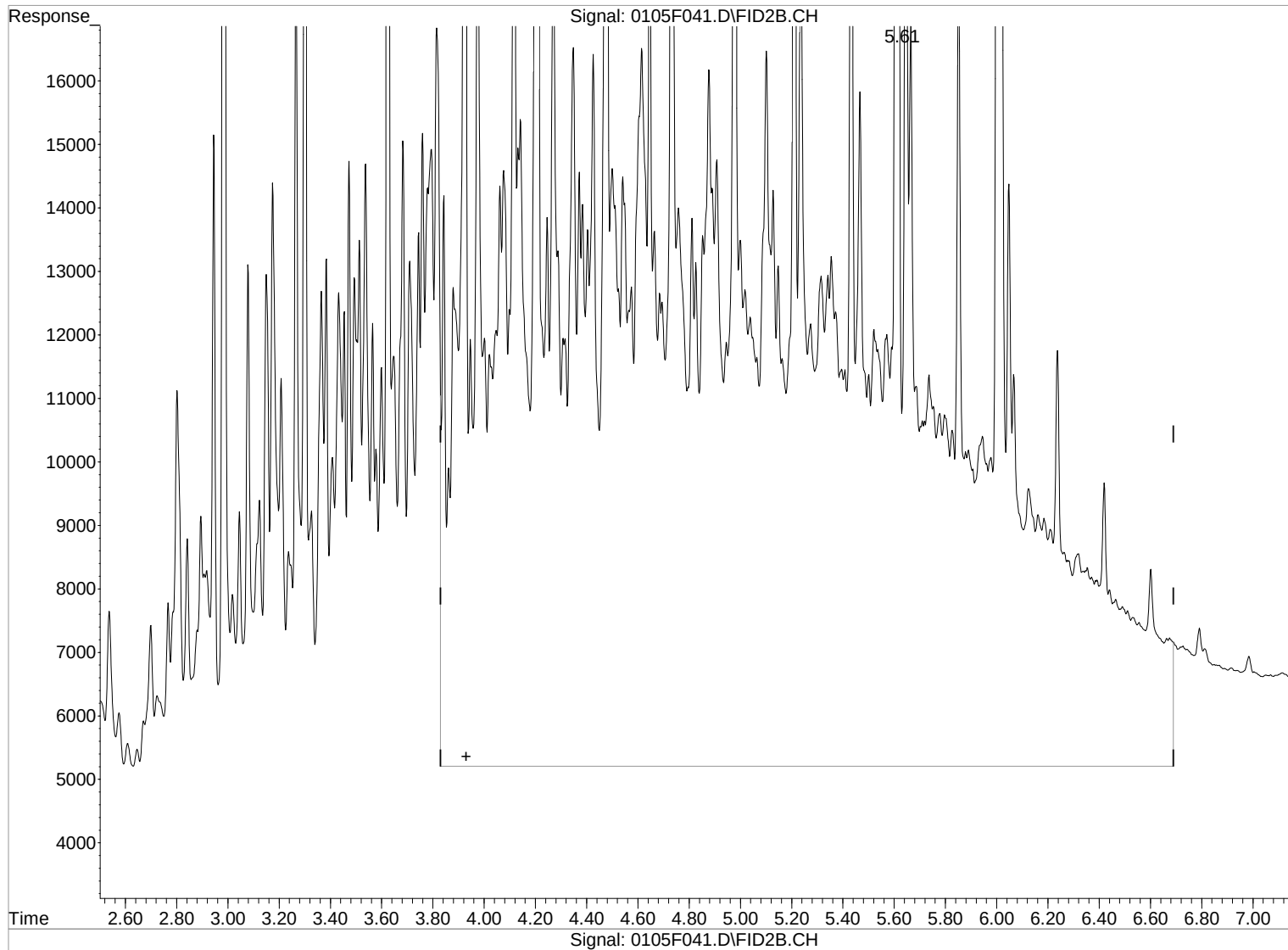
Quant Time: Jan 8 9:49 2024 Quant Results File: 010524FSVF.RES

Method : J:\GC35\METHODS\010524FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Fri Jan 05 13:02:55 2024

Response via : Multiple Level Calibration



(8) C12-C25ex DRO [NWTPH] (H)

Manual Integration:

3.93min 1157.162ppm

Before

response 1219078

01/08/24

(+) = Expected Retention Time

0105F041.D 010524FSVF.M

Mon Jan 08 09:50:39 2024

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Data File : J:\GC35\DATA\010524\0105F041.D

Vial: 98

Acq On : 05 Jan 2024 11:47 pm

Operator: JLD

Sample : SVF04 72H DRO CCV 1000/50 PPM

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

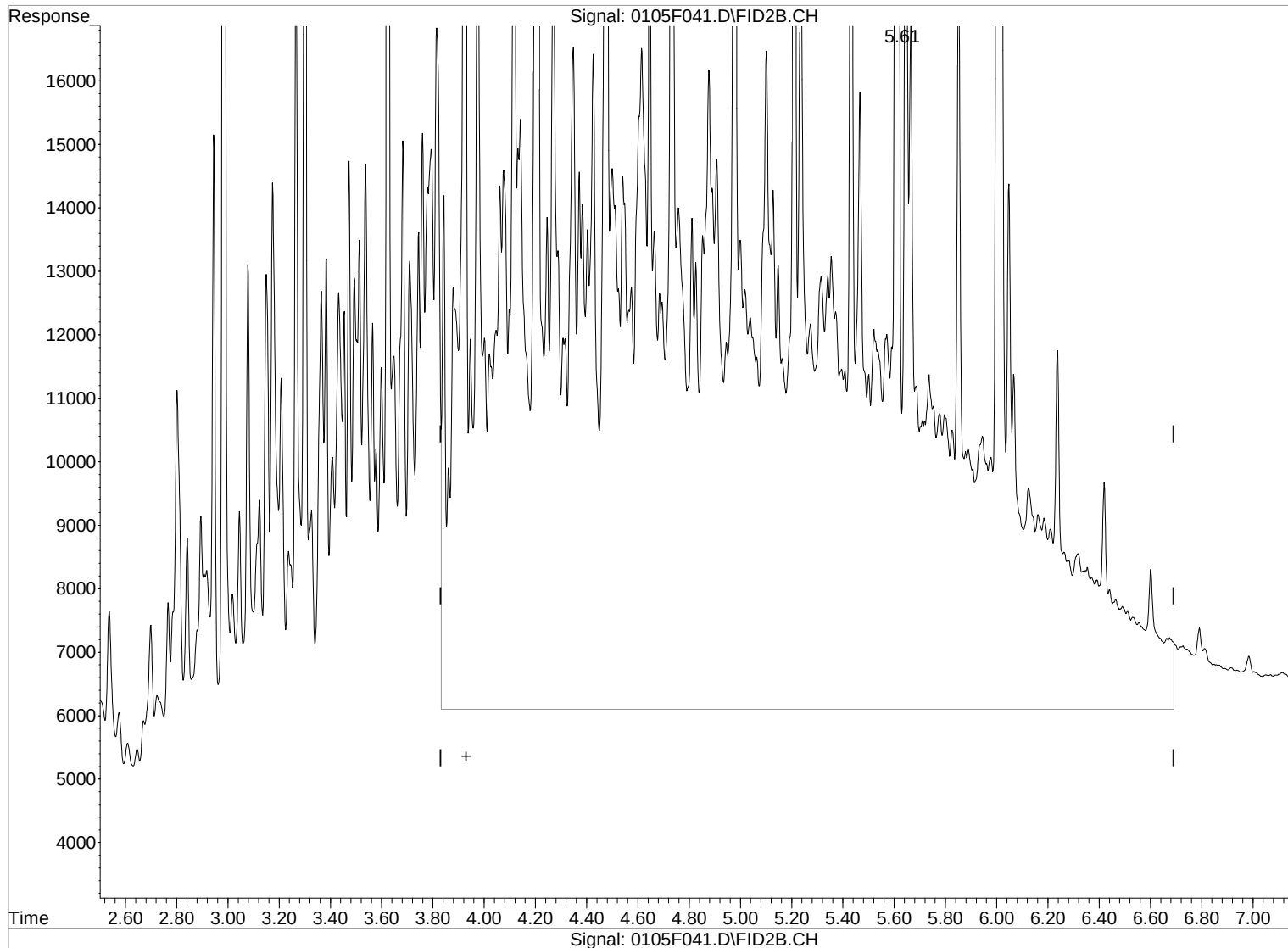
Quant Time: Jan 8 9:49 2024 Quant Results File: 010524FSVF.RES

Method : J:\GC35\METHODS\010524FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Fri Jan 05 13:02:55 2024

Response via : Multiple Level Calibration



(8) C12-C25ex DRO [NWTPH] (H)

Manual Integration:

3.93min 1010.798ppm

After

response 1064883

Baseline/Shoulder

01/08/24

(+) = Expected Retention Time

0105F041.D 010524FSVF.M

Mon Jan 08 09:51:00 2024

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Validation Report

1st  01/08/24
2nd  01/08/24

Data File: J:\GC35\DATA\010524\0105F042.D\
Lab ID: KQ2400312-06.R01
RunType: CCV
Matrix: Water

Date Acquired: 1/6/24 00:09:00
Batch ID: 829103
Analysis Method: NWTPH-Dx/NW_TPH

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Analyte Coelutions	X	

Primary Review: _____

Secondary Review: _____

Validation Report

1st  01/08/24
2nd AA 01/08/24

Data File: J:\GC35\DATA\010524\0105F042.D\
Lab ID: KQ2400312-02.R01
RunType: CCV
Matrix: Water

Date Acquired: 1/6/24 00:09:00
Batch ID: 829103
Analysis Method: NWTPH-Dx/NW_TPH_SG

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Analyte Coelutions	X	

Primary Review: _____

Secondary Review: _____

Quantitation Report

1st *AA* 01/08/24
2nd *AA* 01/08/24

Data File:	J:\GC35\DATA\010524\0105F042.D\	Instrument:	K-GC-35
Acqu Date:	1/6/24 00:09:00	Vial:	24
Run Type:	CCV	Dilution:	1
Lab ID:	KQ2400312-06.R01	Raw Units:	ppm

Bottle ID:		Tier:	III	Matrix:	Water
Prod Code:	NW_TPH	Collect Date:	12/20/23	Receive Date:	12/22/23

Analysis Lot:	829103	Prep Lot:		Report Group:	KQ2400312
Analysis	NWTPH-Dx	Prep Method:			
		Prep Date:			

Title:	Semi-Volatile Petroleum Products by GC/FID	Calibration ID:	KC2300521
		Report List ID:	22364

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Rpt?
o-Terphenyl	0.00		0	0.000	N
n-Triacontane	0.00		0	0.000	N

Target Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Rpt?
Diesel Range Organics (C12 - C25 DRO)	3.93		301303	286.000	N
Residual Range Organics (C25 - C36 RRO)	6.79		915184	1112.077	N

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 1/8/24 13:35

\\alprews001\starlims\LIMSReps\QuantValidation.rpt

Quantitation Report

1st *AA* 01/08/24
2nd *AA* 01/08/24

Data File:	J:\GC35\DATA\010524\0105F042.D\	Instrument:	K-GC-35
Acqu Date:	1/6/24 00:09:00	Vial:	9
Run Type:	CCV	Dilution:	1
Lab ID:	KQ2400312-02.R01	Raw Units:	ppm

Bottle ID:		Tier:	IV	Matrix:	Water
Prod Code:	NW_TPH_SGT	Collect Date:	12/20/23	Receive Date:	12/20/23

Analysis Lot:	829103	Prep Lot:		Report Group:	KQ2400312
Analysis	NWTPH-Dx	Prep Method:			
		Prep Date:			

Title:	Semi-Volatile Petroleum Products, Silica Gel Treated by GC/FID	Calibration ID:	KC2300521
		Report List ID:	22367

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Rpt?
o-Terphenyl	0.00		0	0.000	N
n-Triacontane	0.00		0	0.000	N

Target Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Rpt?
Diesel Range Organics (C12 - C25 DRO)	3.93		301303	286.000	N
Residual Range Organics (C25 - C36 RRO)	6.79		915184	1112.077	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 1/8/24 13:35

\\alprews001\starlims\LIMSReps\QuantValidation.rpt

Data File : J:\GC35\DATA\010524\0105F042.D Vial: 99
Acq On : 06 Jan 2024 12:09 am Operator: JLD
Sample : SVF04 72E RRO CCV 1000 PPM Inst : GC35
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Jan 08 09:47:55 2024 Quant Results File: 010524FSVF.RES

Quant Method : J:\GC35\METHODS\010524FSVF.M (RTE Integrator)
Title : AK102/103 SVF MJ257 CAL 16220
Last Update : Fri Jan 05 13:02:55 2024
Response via : Initial Calibration
DataAcq Meth : SVF2_F.M

Volume Inj. : 1 uL
Signal Phase : ZB-1
Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

Target Compounds

6) H	C10-C25ex DRO [AK102]	3.30	349774	277.009	ppm
7) H	C10-C28in DRO [8015]	3.40	663622	499.023	ppm
8) H	C12-C25ex DRO [NWTPH]	3.93	301303	286.000	ppm
10) H	C25-C36in RRO [NWTPH]	6.79	915184	1112.077	ppm
11) H	C25-C36in RRO [AK103]	6.89	1125560	1468.212	ppm

Data File : J:\GC35\DATA\010524\0105F042.D

Vial: 99

Acq On : 06 Jan 2024 12:09 am

Operator: JLD

Sample : SVF04 72E RRO CCV 1000 PPM

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Jan 8 9:56 2024 Quant Results File: 010524FSVF.RES

Quant Method : J:\GC35\METHODS\010524FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Fri Jan 05 13:02:55 2024

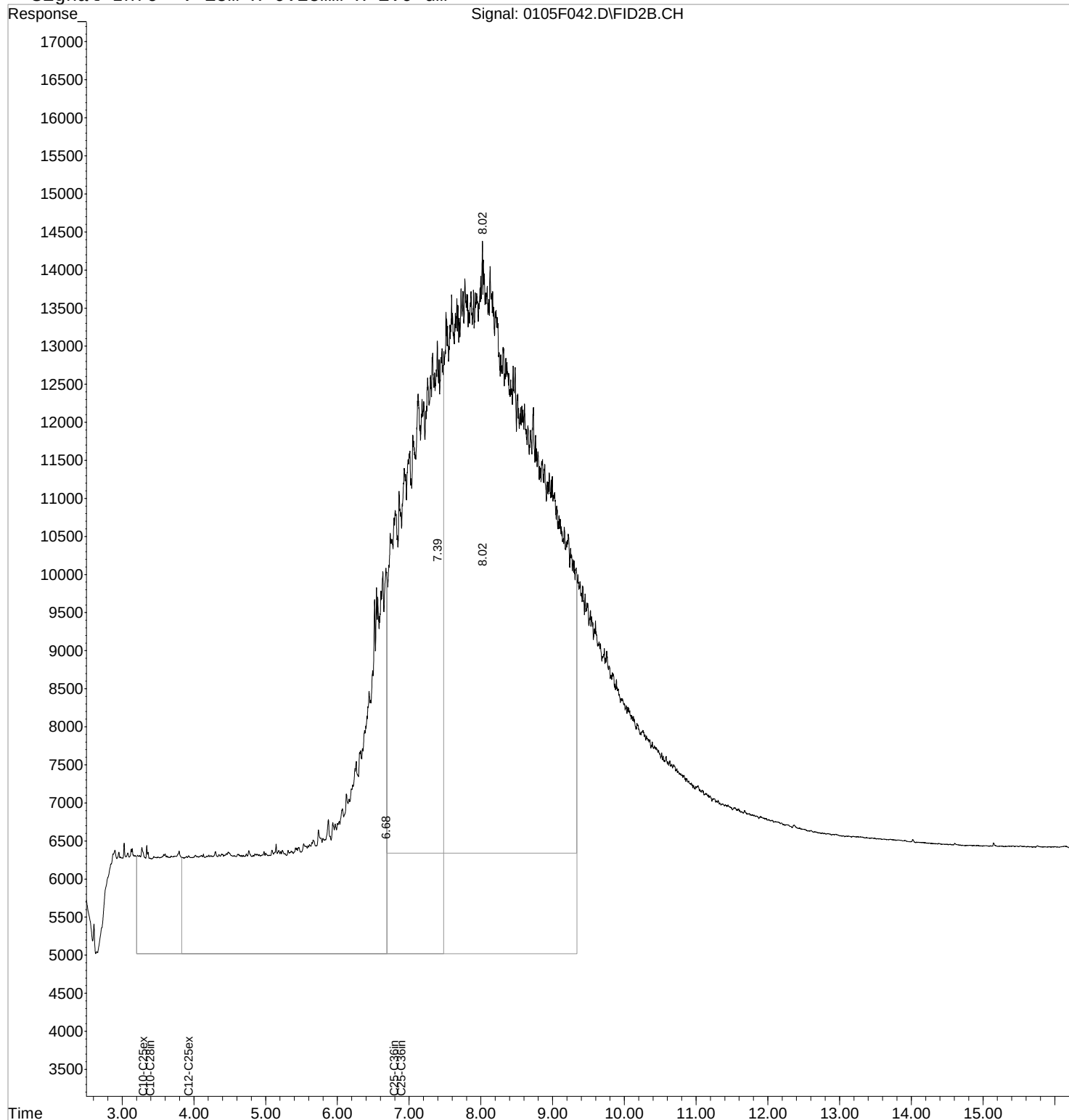
Response via : Single Level Calibration

DataAcq Meth : SVF2_F.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Data File : J:\GC35\DATA\010524\0105F042.D

Vial: 99

Acq On : 06 Jan 2024 12:09 am

Operator: JLD

Sample : SVF04 72E RRO CCV 1000 PPM

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

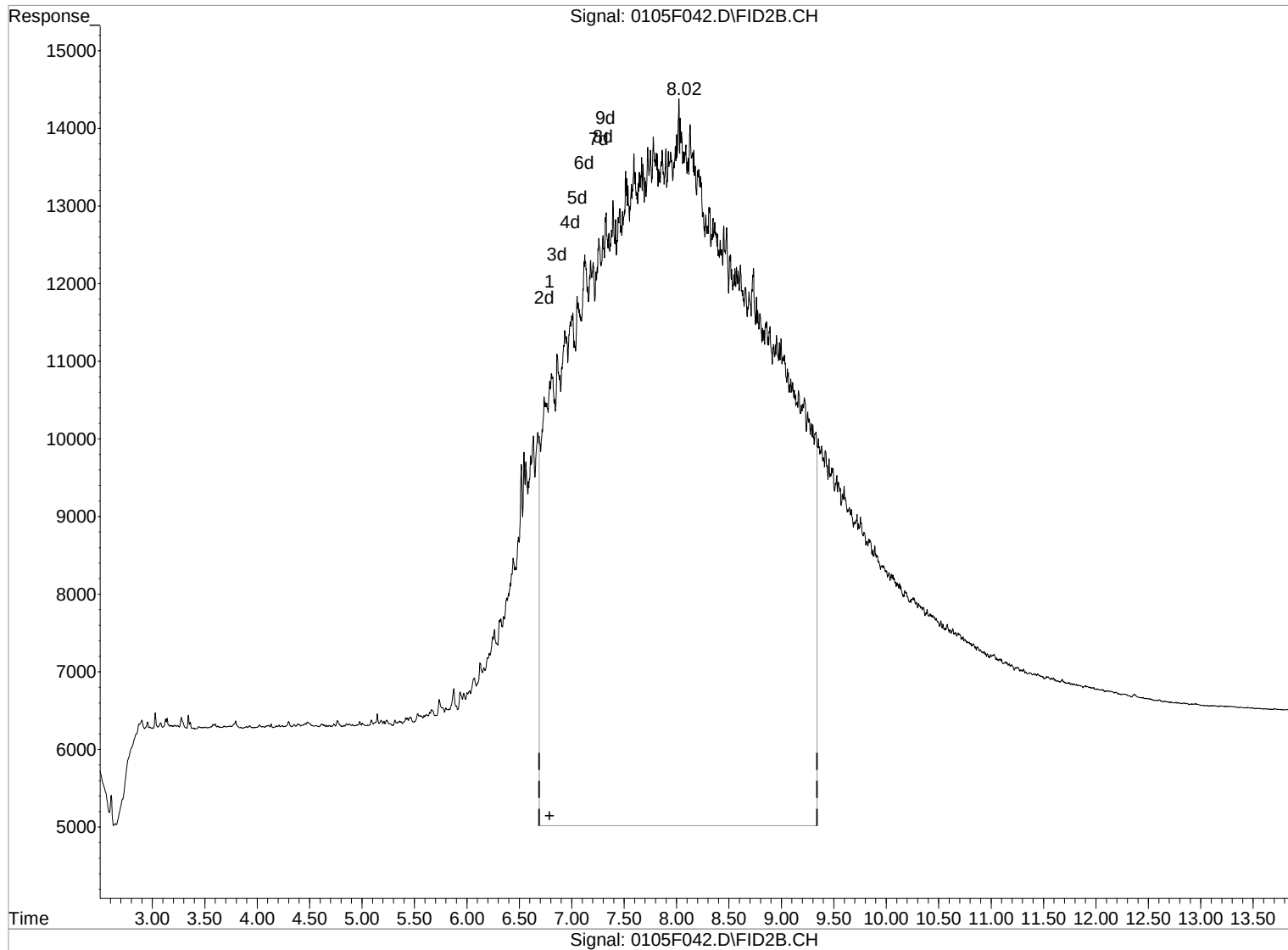
Quant Time: Jan 8 9:49 2024 Quant Results File: 010524FSVF.RES

Method : J:\GC35\METHODS\010524FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Fri Jan 05 13:02:55 2024

Response via : Multiple Level Calibration



(10) C25-C36in RRO [NWTPH] (H)

Manual Integration:

6.79min 1367.713ppm

Before

response 1125560

01/08/24

(+) = Expected Retention Time

0105F042.D 010524FSVF.M

Mon Jan 08 09:51:36 2024

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Quantitation Report (Qedit)

1st *AA* 01/08/242nd *AA* 01/08/24

Data File : J:\GC35\DATA\010524\0105F042.D

Vial: 99

Acq On : 06 Jan 2024 12:09 am

Operator: JLD

Sample : SVF04 72E RRO CCV 1000 PPM

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

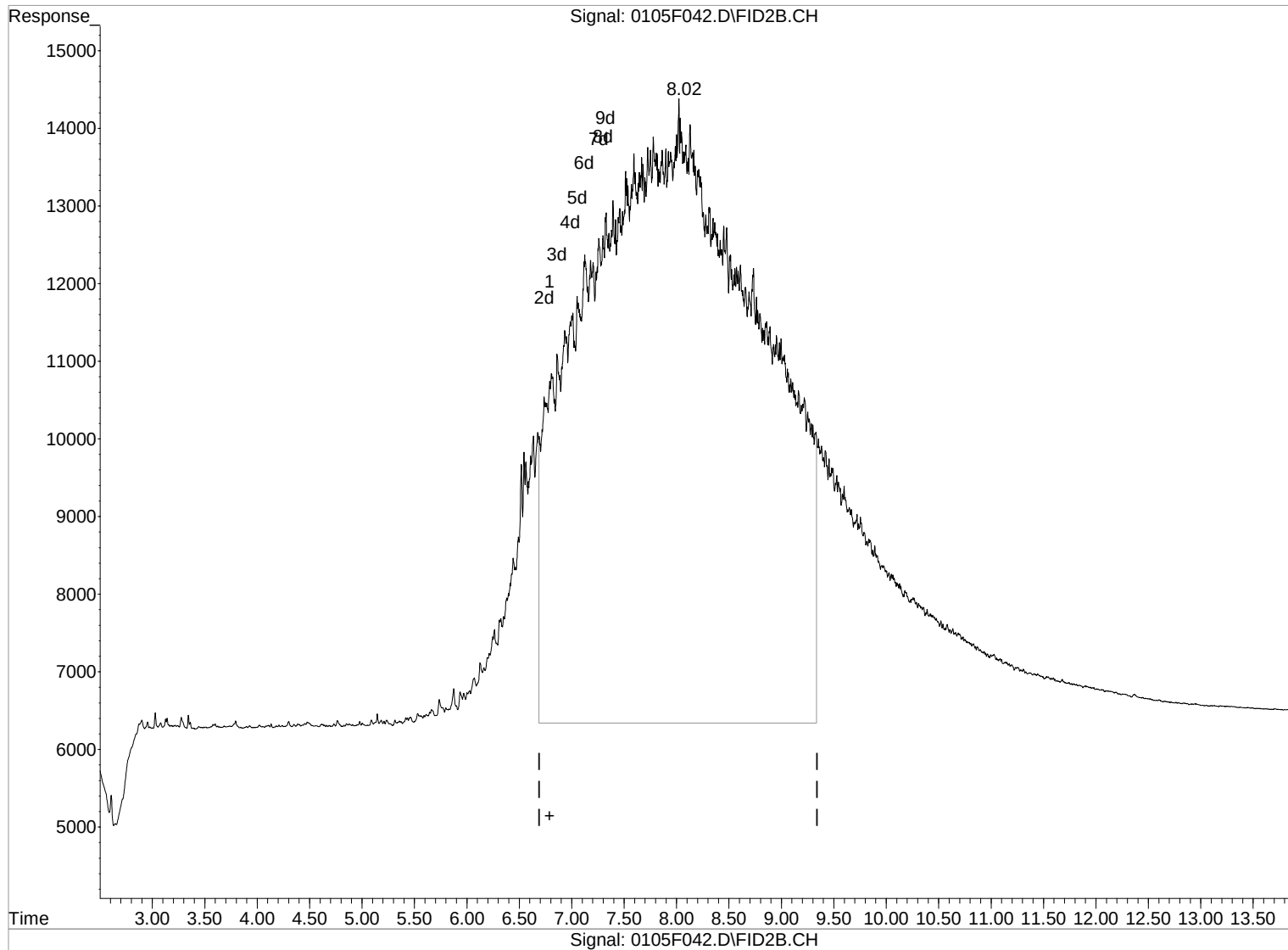
Quant Time: Jan 8 9:49 2024 Quant Results File: 010524FSVF.RES

Method : J:\GC35\METHODS\010524FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Fri Jan 05 13:02:55 2024

Response via : Multiple Level Calibration



(10) C25-C36in RRO [NWTPH] (H)

Manual Integration:

6.79min 1112.077ppm

After

response 915184

Baseline/Shoulder

01/08/24

(+) = Expected Retention Time

0105F042.D 010524FSVF.M

Mon Jan 08 09:52:06 2024

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Injection Log

Directory: J:\GC35\DATA\090523

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	100	0905f001.d	1.	IB		05 Sep 2023 08:00
2	100	0905f002.d	1.	IB		05 Sep 2023 08:22
3	100	0905f003.d	1.	IB		05 Sep 2023 08:43
4	100	0905f004.d	1.	IB		05 Sep 2023 09:05
5	100	0905f005.d	1.	IB		05 Sep 2023 09:27
6	100	0905f006.d	1.	IB		05 Sep 2023 09:48
7	100	0905f007.d	1.	IB		05 Sep 2023 10:10
8	91	0905f008.d	1.	ALIPHATICS		05 Sep 2023 11:15
9	1	0905f009.d	1.	IB		05 Sep 2023 11:37
10	2	0905f010.d	1.	DRO SVF04-60E 20/1.0		05 Sep 2023 11:58
11	3	0905f011.d	1.	DRO SVF04-60D 50/2.5		05 Sep 2023 12:20
12	4	0905f012.d	1.	DRO SVF04-60C 200/10		05 Sep 2023 12:42
13	5	0905f013.d	1.	DRO SVF04-60B 500/25		05 Sep 2023 13:03
14	6	0905f014.d	1.	DRO SVF04-60A 2000/100		05 Sep 2023 13:25
15	7	0905f015.d	1.	DRO SVF04-59L 5000/250		05 Sep 2023 13:46
16	8	0905f016.d	1.	DRO SVF04-59K 20K		05 Sep 2023 14:08
17	9	0905f017.d	1.	DRO SVF04-59J 50K		05 Sep 2023 14:29
18	1	0905f018.d	1.	IB		05 Sep 2023 14:51
19	1	0905f019.d	1.	IB		05 Sep 2023 15:13
20	1	0905f020.d	1.	IB		05 Sep 2023 15:34
21	10	0905f021.d	1.	DRO SVF04-60F ICV@1000		05 Sep 2023 15:56
22	1	0905f022.d	1.	IB		05 Sep 2023 16:17
23	1	0905f023.d	1.	IB		05 Sep 2023 16:39
24	1	0905f024.d	1.	IB		05 Sep 2023 17:00
25	11	0905f025.d	1.	RRO SVF04-60K 50		05 Sep 2023 17:22
26	12	0905f026.d	1.	RRO SVF04-60J 200		05 Sep 2023 17:44
27	13	0905f027.d	1.	RRO SVF04-60I 500		05 Sep 2023 18:05
28	14	0905f028.d	1.	RRO SVF04-60H 2000		05 Sep 2023 18:27
29	15	0905f029.d	1.	RRO SVF04-60G 5000		05 Sep 2023 18:49
30	1	0905f030.d	1.	IB		05 Sep 2023 19:11
31	1	0905f031.d	1.	IB		05 Sep 2023 19:32
32	16	0905f032.d	1.	RRO SVF04-60L ICV@1000		05 Sep 2023 19:54
33	1	0905f033.d	1.	IB		05 Sep 2023 20:16
34	1	0905f034.d	1.	IB		05 Sep 2023 20:37
35	17	0905f035.d	1.	AK103 SVF04-61D 50		05 Sep 2023 20:59
36	18	0905f036.d	1.	AK103 SVF04-61C 200		05 Sep 2023 21:20
37	19	0905f037.d	1.	AK103 SVF04-61B 500		05 Sep 2023 21:41
38	20	0905f038.d	1.	AK103 SVF04-61A 2000		05 Sep 2023 22:03
39	21	0905f039.d	1.	AK103 SVF04-60M 5000		05 Sep 2023 22:25
40	1	0905f040.d	1.	IB		05 Sep 2023 22:46
41	1	0905f041.d	1.	IB		05 Sep 2023 23:08
42	22	0905f042.d	1.	AK103 SVF04-61E ICV@1000		05 Sep 2023 23:30
43	1	0905f043.d	1.	IB		05 Sep 2023 23:51
44	1	0905f044.d	1.	IB		06 Sep 2023 00:13
45	100	0905f045.d	1.	IB		06 Sep 2023 00:35
46	100	0905f046.d	1.	IB		06 Sep 2023 00:56
47	100	0905f047.d	1.	IB		06 Sep 2023 01:18
48	100	0905f048.d	1.	IB		06 Sep 2023 01:40
49	100	0905f049.d	1.	IB		06 Sep 2023 02:01
50	100	0905f050.d	1.	IB		06 Sep 2023 02:23
51	100	0905f051.d	1.	IB		06 Sep 2023 02:45
52	100	0905f052.d	1.	IB		06 Sep 2023 03:06
53	100	0905f053.d	1.	IB		06 Sep 2023 03:28
54	100	0905f054.d	1.	IB		06 Sep 2023 03:50
55	100	0905f055.d	1.	IB		06 Sep 2023 04:11

14C23 00521

Injection Log

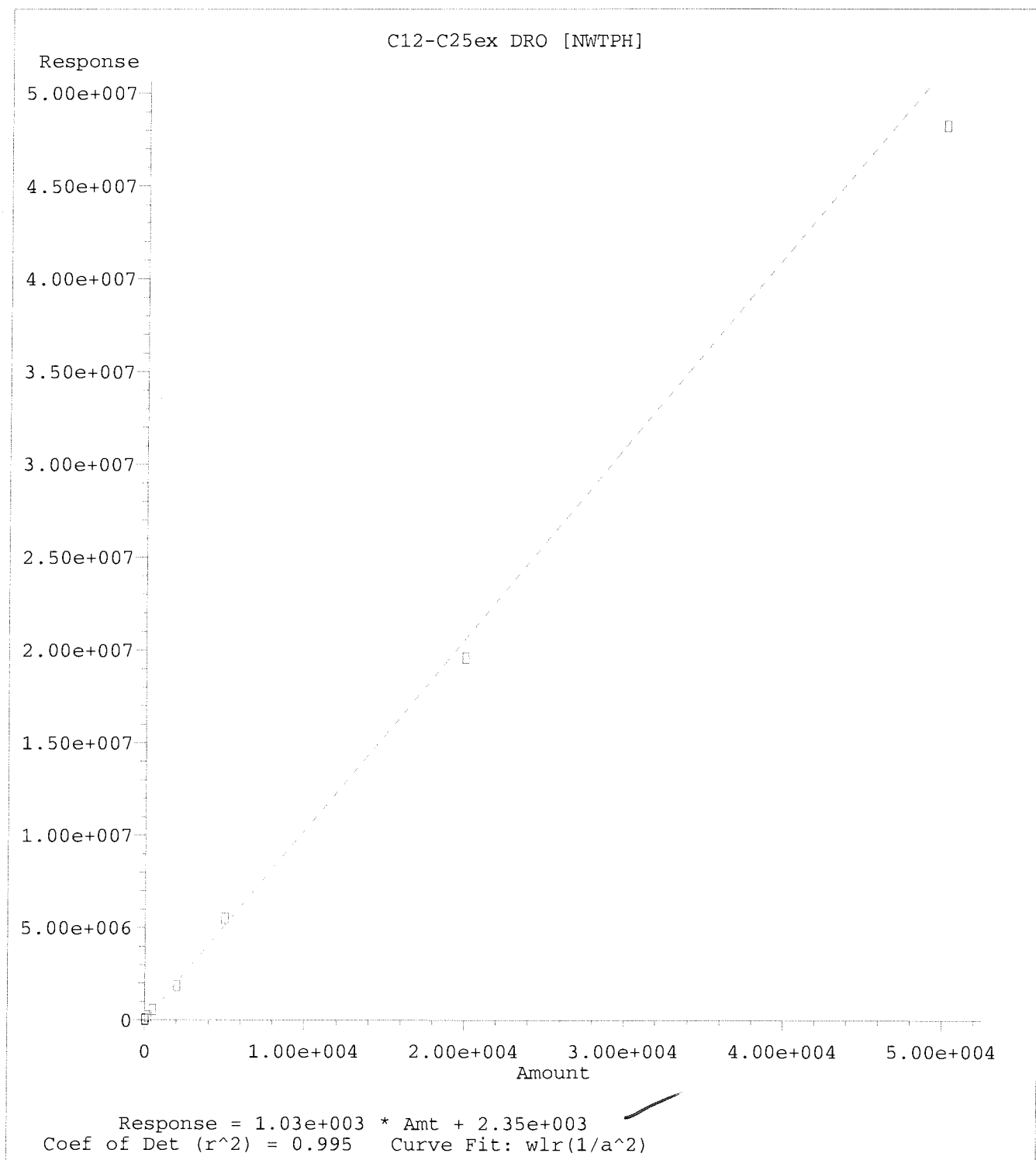
Directory: J:\GC35\DATA\090623

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	91	0906f001.d	1.	ALIPHATICS		06 Sep 2023 11:45
2	1	0906f002.d	1.	IB		06 Sep 2023 12:07
3	100	0906f003.d	1.	IB		06 Sep 2023 12:29
4	100	0906f004.d	1.	IB		06 Sep 2023 12:50
5	100	0906f005.d	1.	IB	K12300521	06 Sep 2023 13:12
6	2	0906f006.d	1.	DRO SVF04-62A 20/1.0		06 Sep 2023 13:34
7	3	0906f007.d	1.	DRO SVF04-61L 50/2.5		06 Sep 2023 13:55
8	4	0906f008.d	1.	DRO SVF04-61K 200/10		06 Sep 2023 14:17
9	5	0906f009.d	1.	DRO SVF04-61J 500/25		06 Sep 2023 14:38
10	6	0906f010.d	1.	DRO SVF04-61I 2000/100		06 Sep 2023 15:00
11	7	0906f011.d	1.	DRO SVF04-61H 5000/250		06 Sep 2023 15:22
12	8	0906f012.d	1.	DRO SVF04-61G 20K		06 Sep 2023 15:43
13	9	0906f013.d	1.	DRO SVF04-61F 50K		06 Sep 2023 16:05
14	1	0906f014.d	1.	IB		06 Sep 2023 16:27
15	1	0906f015.d	1.	IB		06 Sep 2023 16:48
16	1	0906f016.d	1.	IB		06 Sep 2023 17:10
17	10	0906f017.d	1.	DRO SVF04-62B ICV@1000		06 Sep 2023 17:32
18	1	0906f018.d	1.	IB		06 Sep 2023 17:53
19	1	0906f019.d	1.	IB		06 Sep 2023 18:15
20	1	0906f020.d	1.	IB		06 Sep 2023 18:37
21	100	0906f021.d	1.	IB		06 Sep 2023 18:58
22	100	0906f022.d	1.	IB		06 Sep 2023 19:20
23	100	0906f023.d	1.	IB		06 Sep 2023 19:41
24	100	0906f024.d	1.	IB		06 Sep 2023 20:03
25	100	0906f025.d	1.	IB		06 Sep 2023 20:25
26	100	0906f026.d	1.	IB		06 Sep 2023 20:47
27	100	0906f027.d	1.	IB		06 Sep 2023 21:08
28	100	0906f028.d	1.	IB		06 Sep 2023 21:30
29	100	0906f029.d	1.	IB		06 Sep 2023 21:51
30	100	0906f030.d	1.	IB		06 Sep 2023 22:13
31	100	0906f031.d	1.	IB		06 Sep 2023 22:34
32	100	0906f032.d	1.	IB		06 Sep 2023 22:56
33	100	0906f033.d	1.	IB		06 Sep 2023 23:17
34	100	0906f034.d	1.	IB		06 Sep 2023 23:39
35	100	0906f035.d	1.	IB		07 Sep 2023 00:00
36	100	0906f036.d	1.	IB		07 Sep 2023 00:22
37	100	0906f037.d	1.	IB		07 Sep 2023 00:44
38	100	0906f038.d	1.	IB		07 Sep 2023 01:05
39	100	0906f039.d	1.	IB		07 Sep 2023 01:27
40	100	0906f040.d	1.	IB		07 Sep 2023 01:49
41	100	0906f041.d	1.	IB		07 Sep 2023 02:11
42	100	0906f042.d	1.	IB		07 Sep 2023 02:32
43	100	0906f043.d	1.	IB		07 Sep 2023 02:54
44	100	0906f044.d	1.	IB		07 Sep 2023 03:15
45	100	0906f045.d	1.	IB		07 Sep 2023 03:37
46	100	0906f046.d	1.	IB		07 Sep 2023 03:58
47	100	0906f047.d	1.	IB		07 Sep 2023 04:20
48	100	0906f048.d	1.	IB		07 Sep 2023 04:41
49	100	0906f049.d	1.	IB		07 Sep 2023 05:03
50	100	0906f050.d	1.	IB		07 Sep 2023 05:25
51	100	0906f051.d	1.	IB		07 Sep 2023 05:46
52	100	0906f052.d	1.	IB		07 Sep 2023 06:08
53	100	0906f053.d	1.	IB		07 Sep 2023 06:30
54	100	0906f054.d	1.	IB		07 Sep 2023 06:52
55	100	0906f055.d	1.	IB		07 Sep 2023 07:13

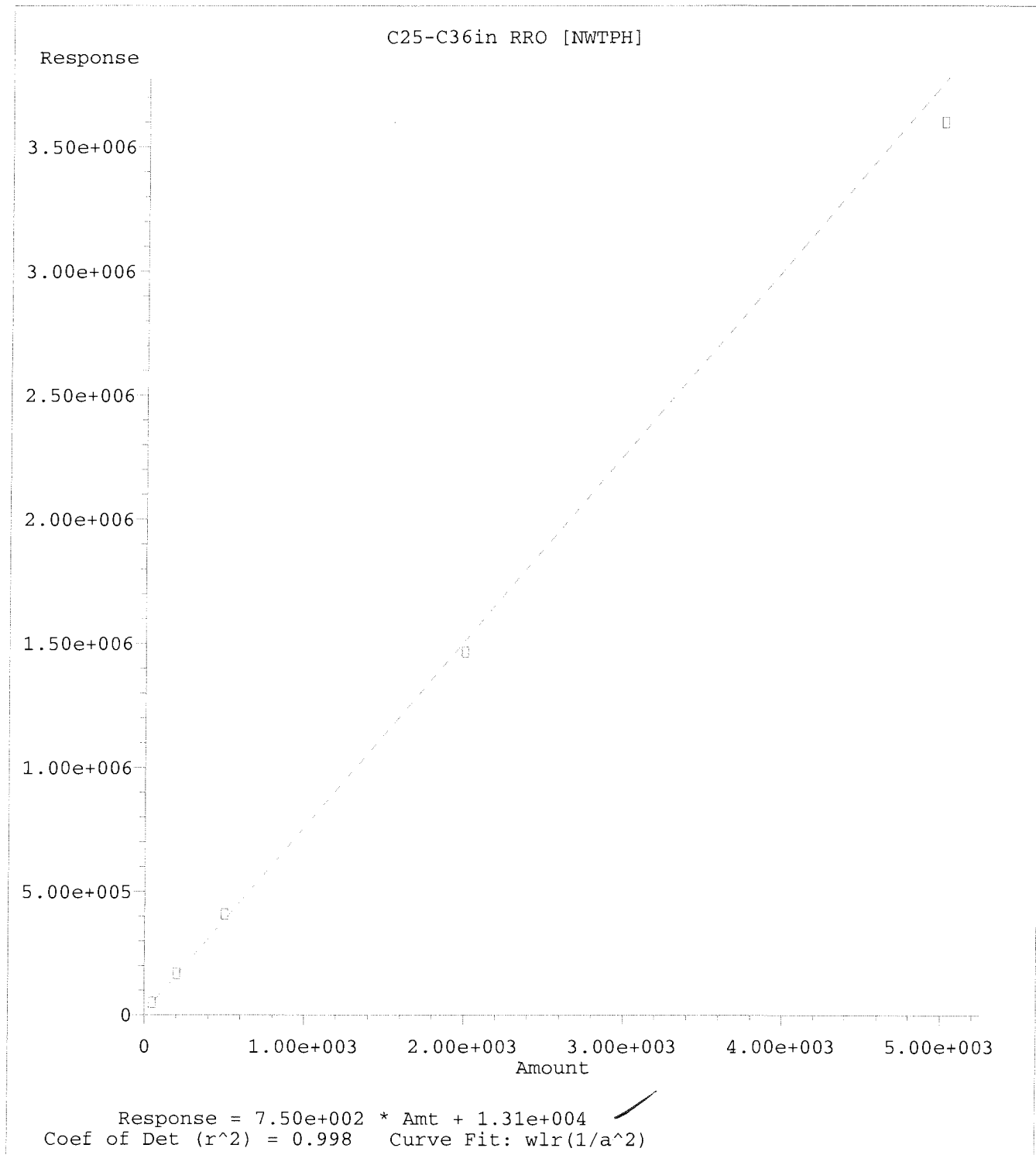
Injection Log

Directory: J:\GC35\DATA\090623

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
56	100	0906f056.d	1.	IB		07 Sep 2023 07:35
57	100	0906f057.d	1.	IB		07 Sep 2023 07:57
58	100	0906f058.d	1.	IB		07 Sep 2023 08:18
59	100	0906f059.d	1.	IB		07 Sep 2023 08:40
60	100	0906f060.d	1.	IB		07 Sep 2023 09:02
61	100	0906f061.d	1.	IB		07 Sep 2023 09:24
62	100	0906f062.d	1.	IB		07 Sep 2023 09:45
63	2	0906f063.d	1.	DRO SVF04-63C ICV@1000		07 Sep 2023 10:07
64	1	0906f064.d	1.	IB		07 Sep 2023 10:28
65	1	0906f065.d	1.	IB		07 Sep 2023 10:50
66	100	0906f066.d	1.	IB		07 Sep 2023 11:11
67	100	0906f067.d	1.	IB		07 Sep 2023 11:33
68	91	0906f068.d	1.	ALIPHATICS		07 Sep 2023 11:55
69	1	0906f069.d	1.	IB		07 Sep 2023 12:16
70	2	0906f070.d	1.	DRO SVF04-63E ICV@1000		07 Sep 2023 12:38



Method Name: J:\GC35\METHODS\090623FSVF.M
Calibration Table Last Updated: Thu Sep 07 12:24:13 2023



Method Name: J:\GC35\METHODS\090623FSVF.M
Calibration Table Last Updated: Thu Sep 07 13:16:26 2023

Data File : J:\GC35\DATA\090523\0905F024.D Vial: 1
Acq On : 05 Sep 2023 5:00 pm Operator: AA
Sample : IB Inst : GC35
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Sep 07 13:04:20 2023 Quant Results File: 090523FSVF.RES

Quant Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)
Title : AK102/103 SVF MJ257 CAL 16220
Last Update : Thu Sep 07 07:40:53 2023
Response via : Initial Calibration
DataAcq Meth : SVF2_F.M

Volume Inj. : 1 uL
Signal Phase : ZB-1
Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
----------	------	----------	------------

System Monitoring Compounds

Target Compounds

6) H	C10-C25ex DRO [AK102]	3.30	180690	143.100 ppm
7) H	C10-C28in DRO [8015]	3.40	220455	165.775 ppm
8) H	C12-C25ex DRO [NWTPH]	3.93	147745	140.241 ppm
10) H	C25-C36in RRO [NWTPH]	6.79	8076	9.813 ppm
11) H	C25-C36in RRO [AK103]	6.89	133181	173.725 ppm

Data File : J:\GC35\DATA\090523\0905F024.D

Vial: 1

Acq On : 05 Sep 2023 5:00 pm

Operator: AA

Sample : IB

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Sep 7 13:07 2023 Quant Results File: 090523FSVF.RES

Quant Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Thu Sep 07 07:40:53 2023

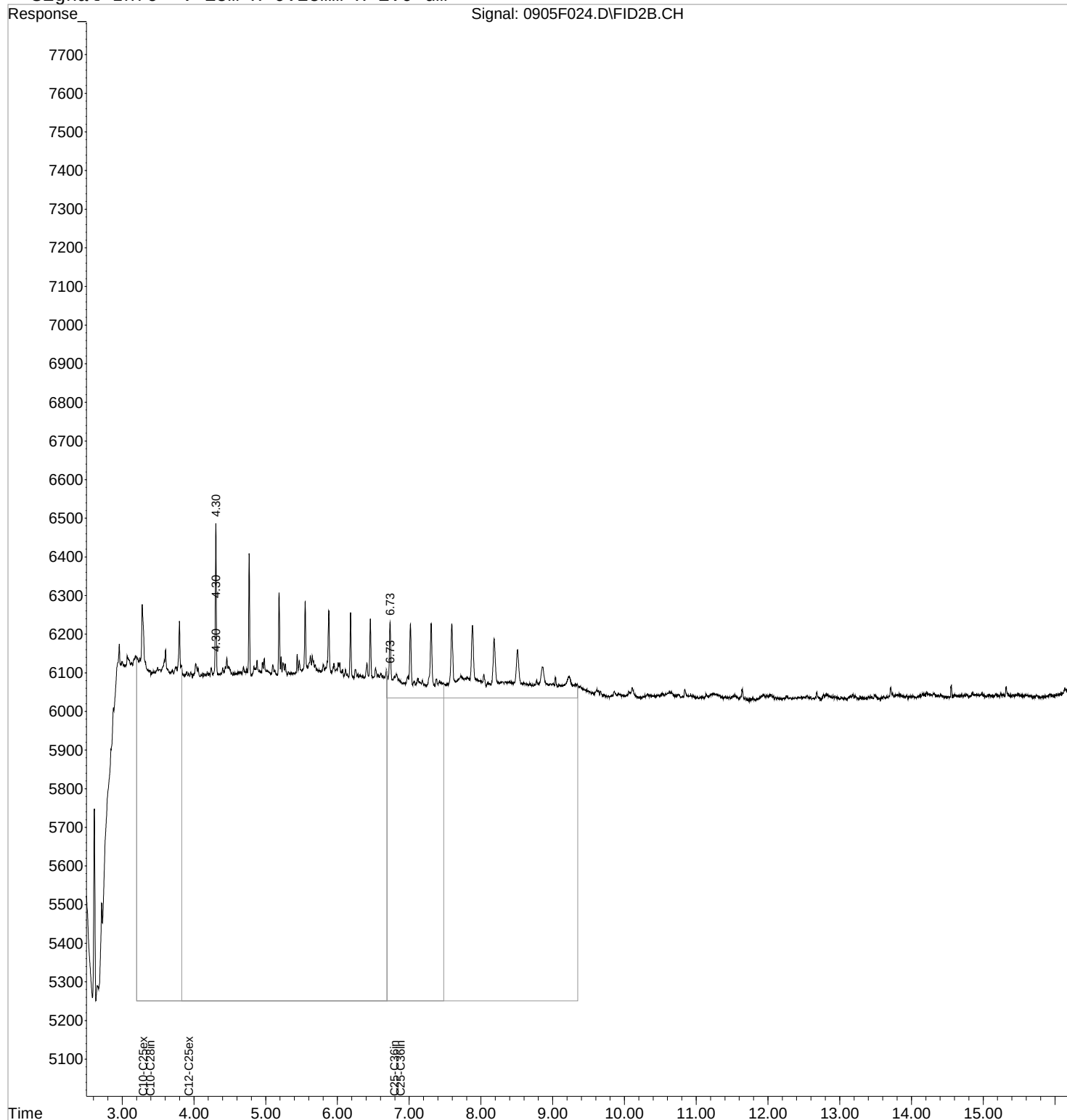
Response via : Single Level Calibration

DataAcq Meth : SVF2_F.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Data File : J:\GC35\DATA\090523\0905F024.D

Acq On : 05 Sep 2023 5:00 pm

Sample : IB

Misc :

IntFile : rteint.p

Quant Time: Sep 7 13:04 2023 Quant Results File: 090523FSVF.RES

Vial: 1

Operator: AA

Inst : GC35

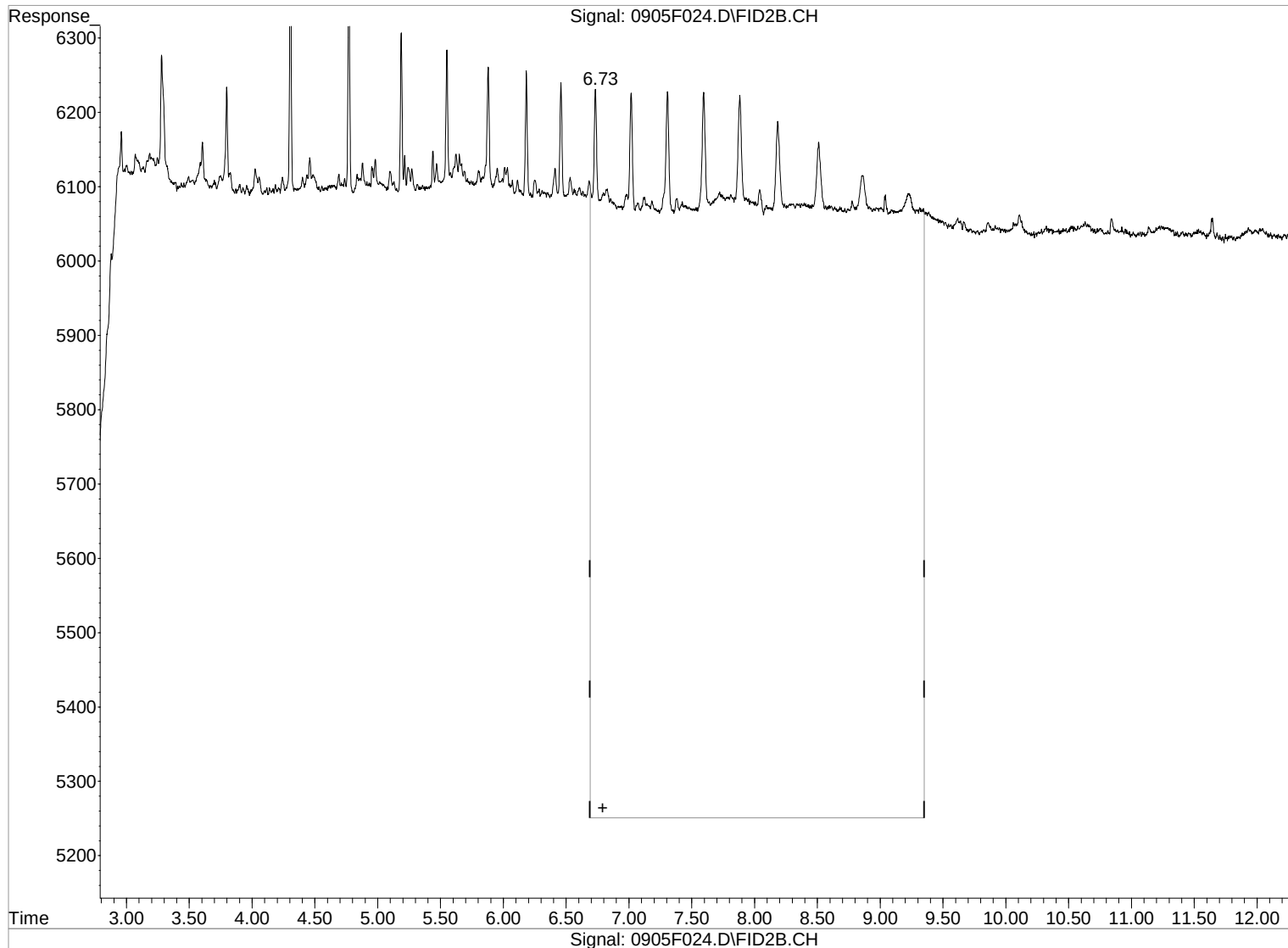
Multiplr: 1.00

Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Thu Sep 07 07:40:53 2023

Response via : Multiple Level Calibration



(10) C25-C36in RRO [NWTPH] (H)

Manual Integration:

6.79min 161.834ppm

Before

response 133181

09/07/23

(+) = Expected Retention Time

0905F024.D 090523FSVF.M

Thu Sep 07 13:07:11 2023

333 of 3623

Data File : J:\GC35\DATA\090523\0905F024.D

Acq On : 05 Sep 2023 5:00 pm

Sample : IB

Misc :

IntFile : rteint.p

Quant Time: Sep 7 13:04 2023 Quant Results File: 090523FSVF.RES

Vial: 1

Operator: AA

Inst : GC35

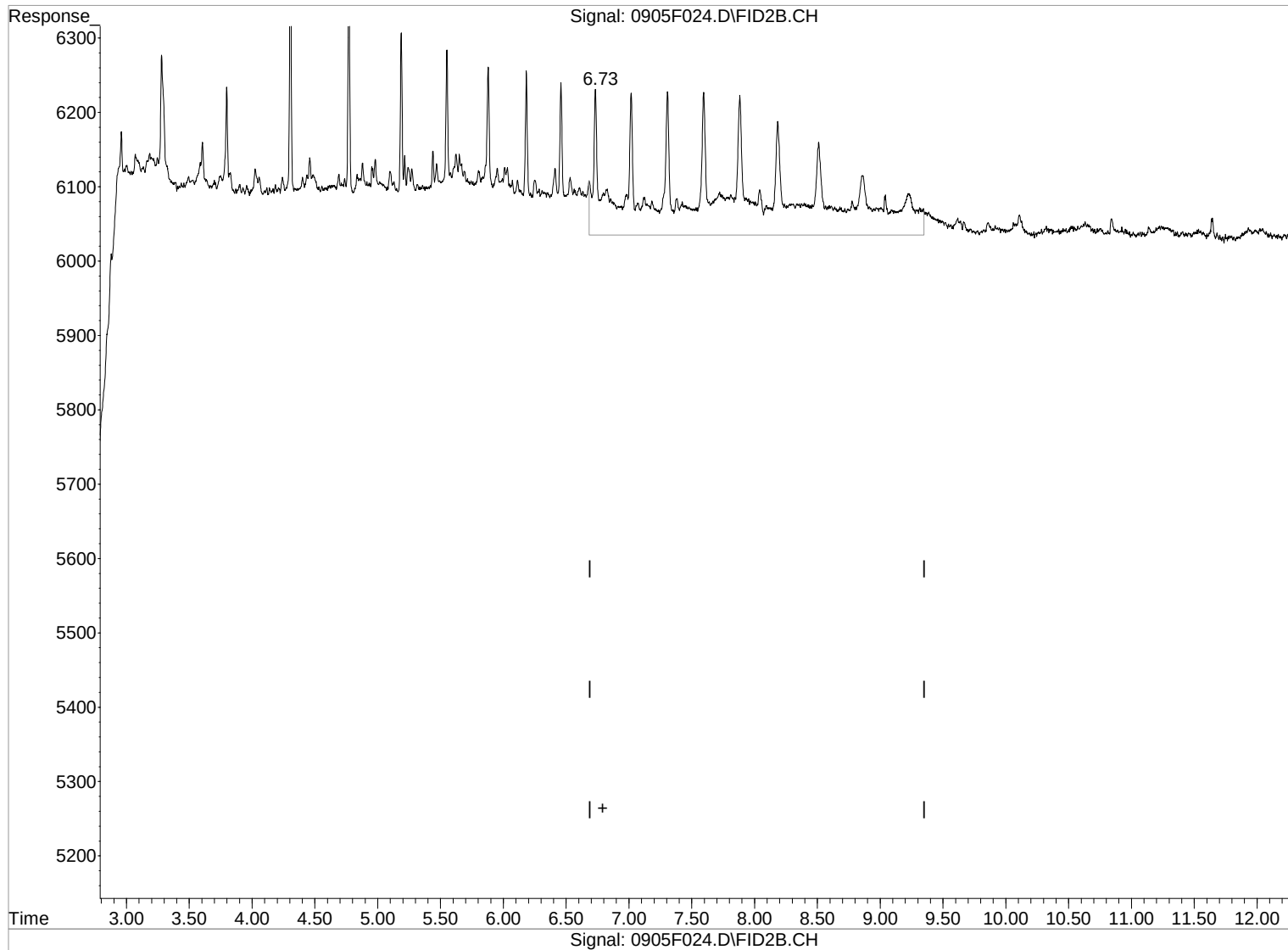
Multiplr: 1.00

Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Thu Sep 07 07:40:53 2023

Response via : Multiple Level Calibration



(10) C25-C36in RRO [NWTPH] (H)

6.79min 9.813ppm

response 8076

Manual Integration:

After

Baseline/Shoulder

09/07/23

(+) = Expected Retention Time

0905F024.D 090523FSVF.M

Thu Sep 07 13:07:18 2023

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Data File : J:\GC35\DATA\090523\0905F025.D Vial: 11
Acq On : 05 Sep 2023 5:22 pm Operator: AA
Sample : RRO SVF04-60K 50 Inst : GC35
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Sep 06 06:48:52 2023 Quant Results File: 090523FSVF.RES

Quant Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)
Title : AK102/103 SVF MJ257 CAL 16220
Last Update : Tue Sep 05 16:03:26 2023
Response via : Initial Calibration
DataAcq Meth : SVF2_F.M

Volume Inj. : 1 uL
Signal Phase : ZB-1
Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

Target Compounds

10) H C25-C36in RRO [NWTPH]	6.79	50189	70.309 ppm
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Data File : J:\GC35\DATA\090523\0905F025.D

Vial: 11

Acq On : 05 Sep 2023 5:22 pm

Operator: AA

Sample : RRO SVF04-60K 50

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Sep 6 6:50 2023 Quant Results File: 090523FSVF.RES

Quant Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Tue Sep 05 16:03:26 2023

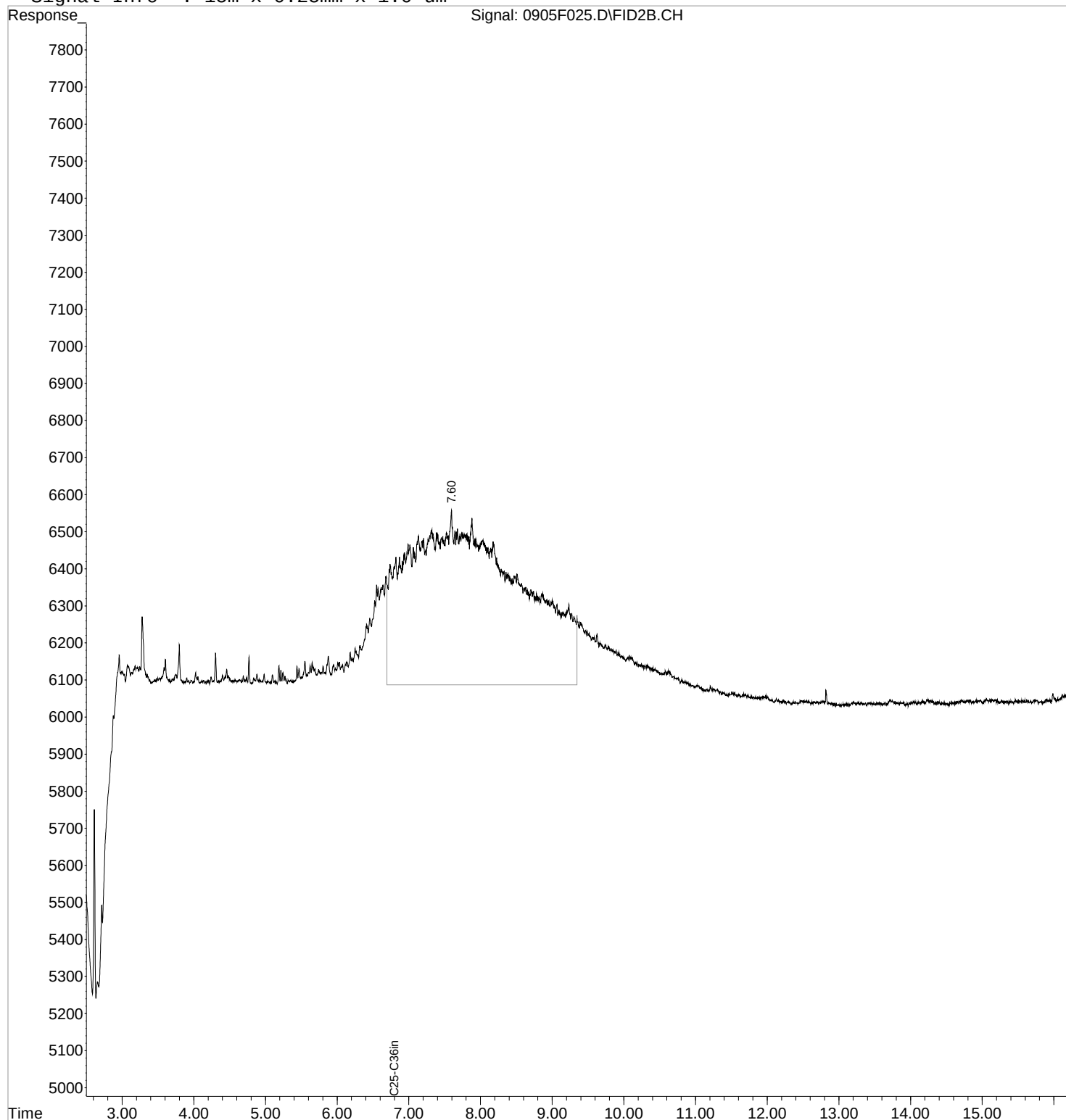
Response via : Single Level Calibration

DataAcq Meth : SVF2_F.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Data File : J:\GC35\DATA\090523\0905F025.D

Vial: 11

Acq On : 05 Sep 2023 5:22 pm

Operator: AA

Sample : RRO SVF04-60K 50

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

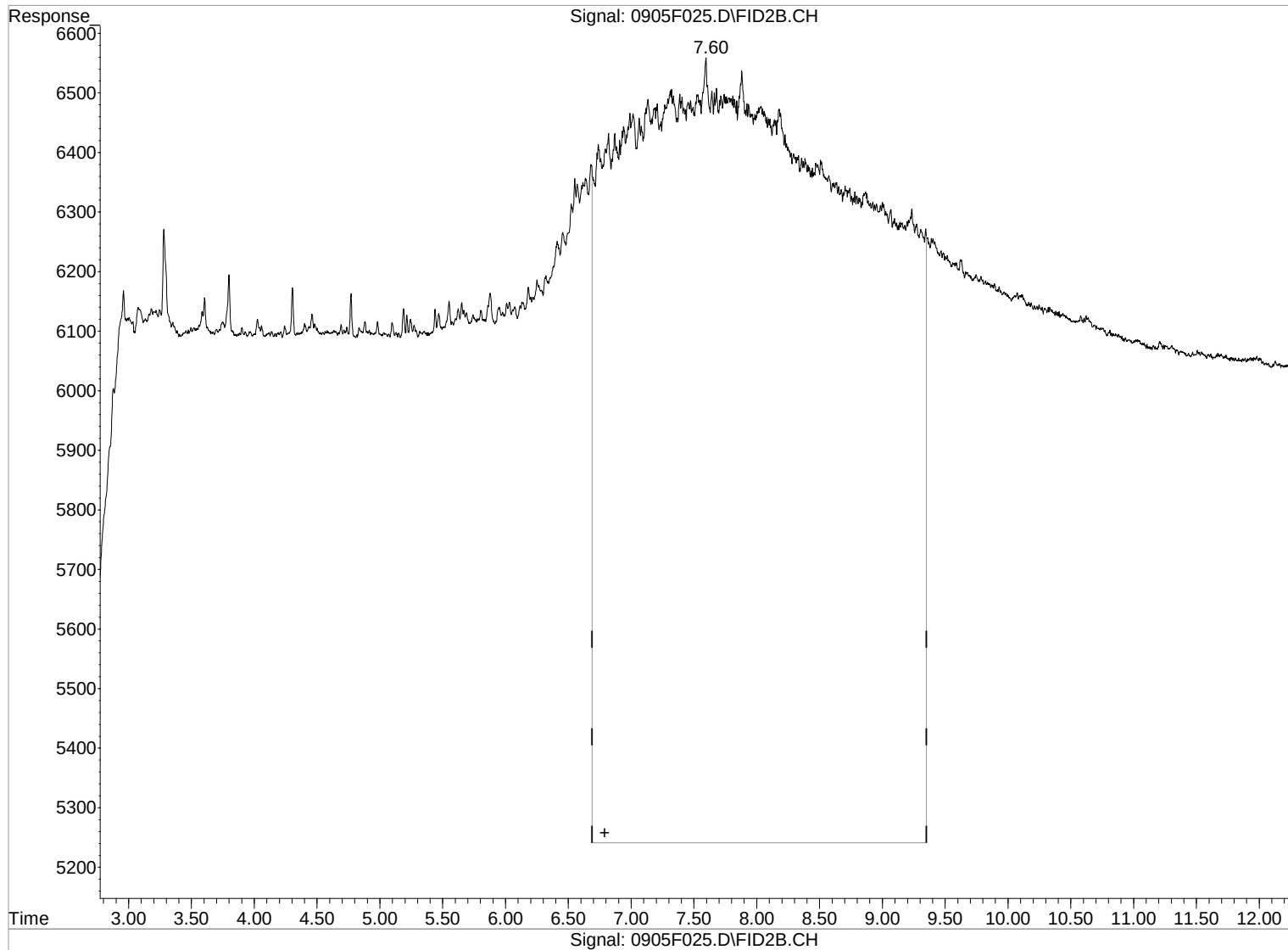
Quant Time: Sep 6 6:48 2023 Quant Results File: 090523FSVF.RES

Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Tue Sep 05 16:03:26 2023

Response via : Multiple Level Calibration



(10) C25-C36in RRO [NWTPH] (H)

Manual Integration:

6.79min 259.648ppm

Before

response 185345

09/06/23

(+) = Expected Retention Time

0905F025.D 090523FSVF.M Wed Sep 06 06:50:12 2023

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Data File : J:\GC35\DATA\090523\0905F025.D

Vial: 11

Acq On : 05 Sep 2023 5:22 pm

Operator: AA

Sample : RRO SVF04-60K 50

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

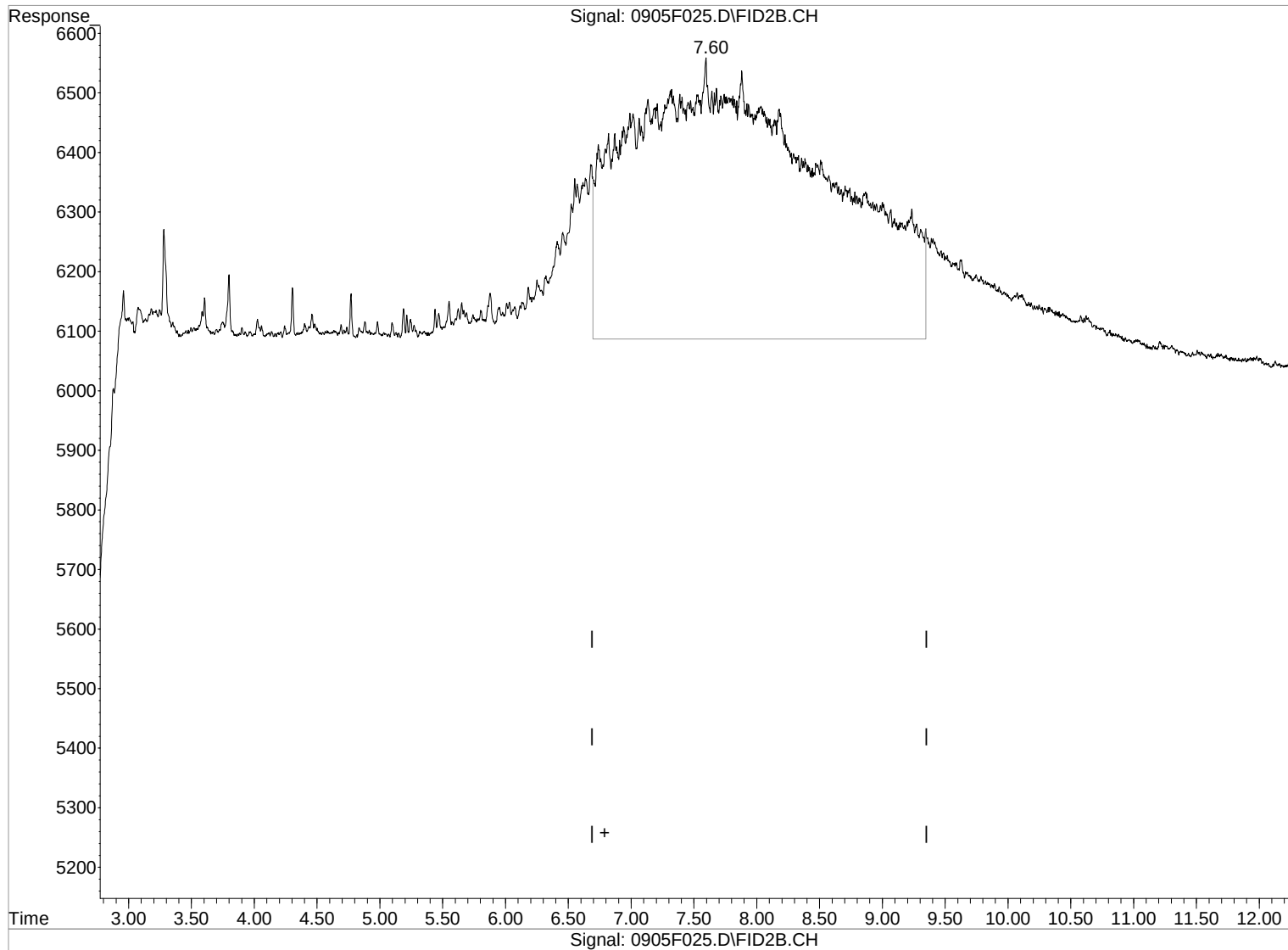
Quant Time: Sep 6 6:48 2023 Quant Results File: 090523FSVF.RES

Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Tue Sep 05 16:03:26 2023

Response via : Multiple Level Calibration



(10) C25-C36in RRO [NWTPH] (H)

Manual Integration:

6.79min 70.309ppm

After

response 50189

Baseline/Shoulder

09/06/23

(+) = Expected Retention Time

0905F025.D 090523FSVF.M

Wed Sep 06 06:50:29 2023

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Data File : J:\GC35\DATA\090523\0905F026.D Vial: 12
Acq On : 05 Sep 2023 5:44 pm Operator: AA
Sample : RRO SVF04-60J 200 Inst : GC35
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Sep 06 06:48:54 2023 Quant Results File: 090523FSVF.RES

Quant Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)
Title : AK102/103 SVF MJ257 CAL 16220
Last Update : Tue Sep 05 16:03:26 2023
Response via : Initial Calibration
DataAcq Meth : SVF2_F.M

Volume Inj. : 1 uL
Signal Phase : ZB-1
Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

Target Compounds

10) H C25-C36in RRO [NWTPH]	6.79	167909	235.222 ppm
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Data File : J:\GC35\DATA\090523\0905F026.D

Vial: 12

Acq On : 05 Sep 2023 5:44 pm

Operator: AA

Sample : RRO SVF04-60J 200

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Sep 6 6:52 2023 Quant Results File: 090523FSVF.RES

Quant Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Tue Sep 05 16:03:26 2023

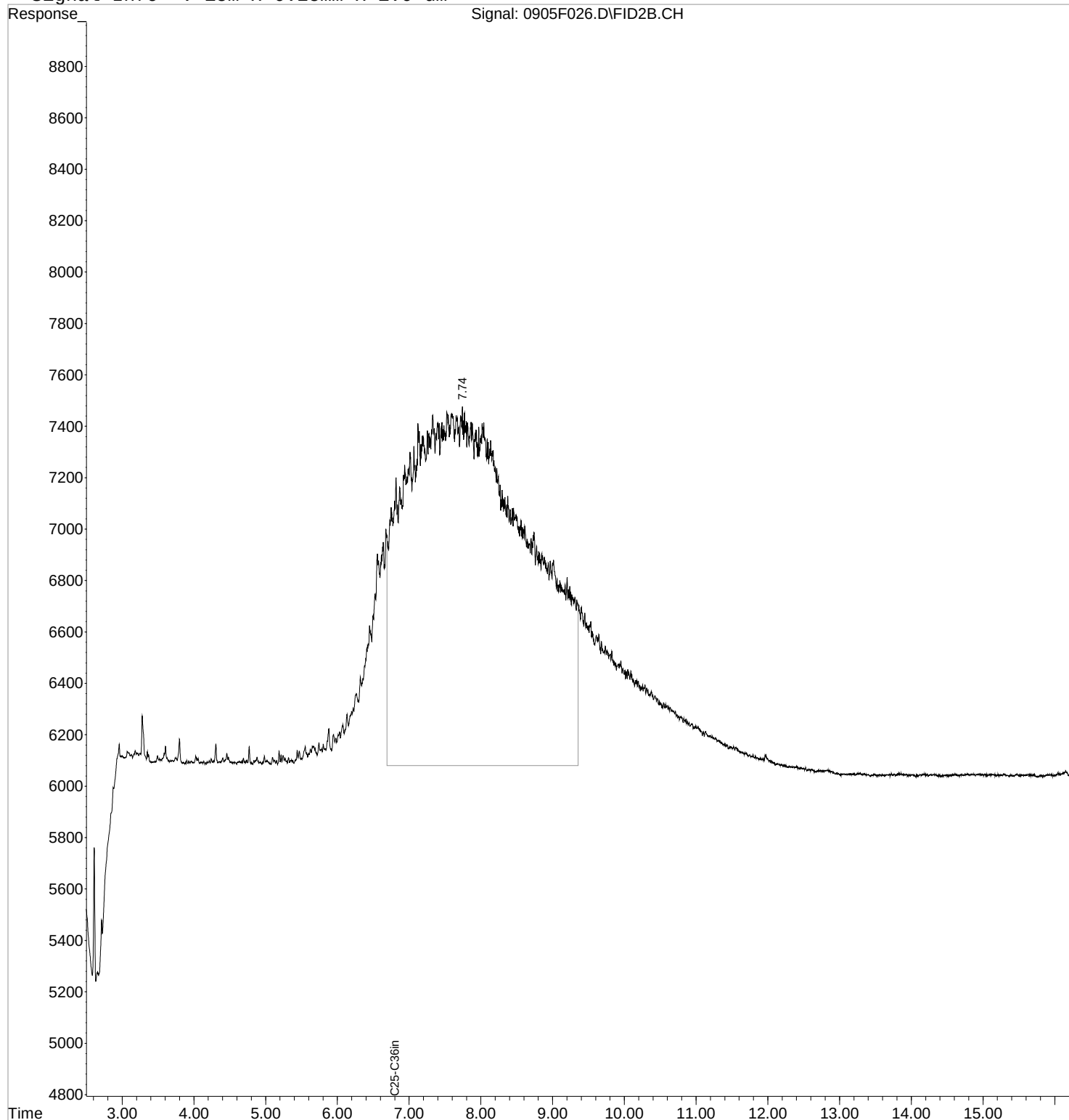
Response via : Single Level Calibration

DataAcq Meth : SVF2_F.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Data File : J:\GC35\DATA\090523\0905F026.D

Vial: 12

Acq On : 05 Sep 2023 5:44 pm

Operator: AA

Sample : RRO SVF04-60J 200

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

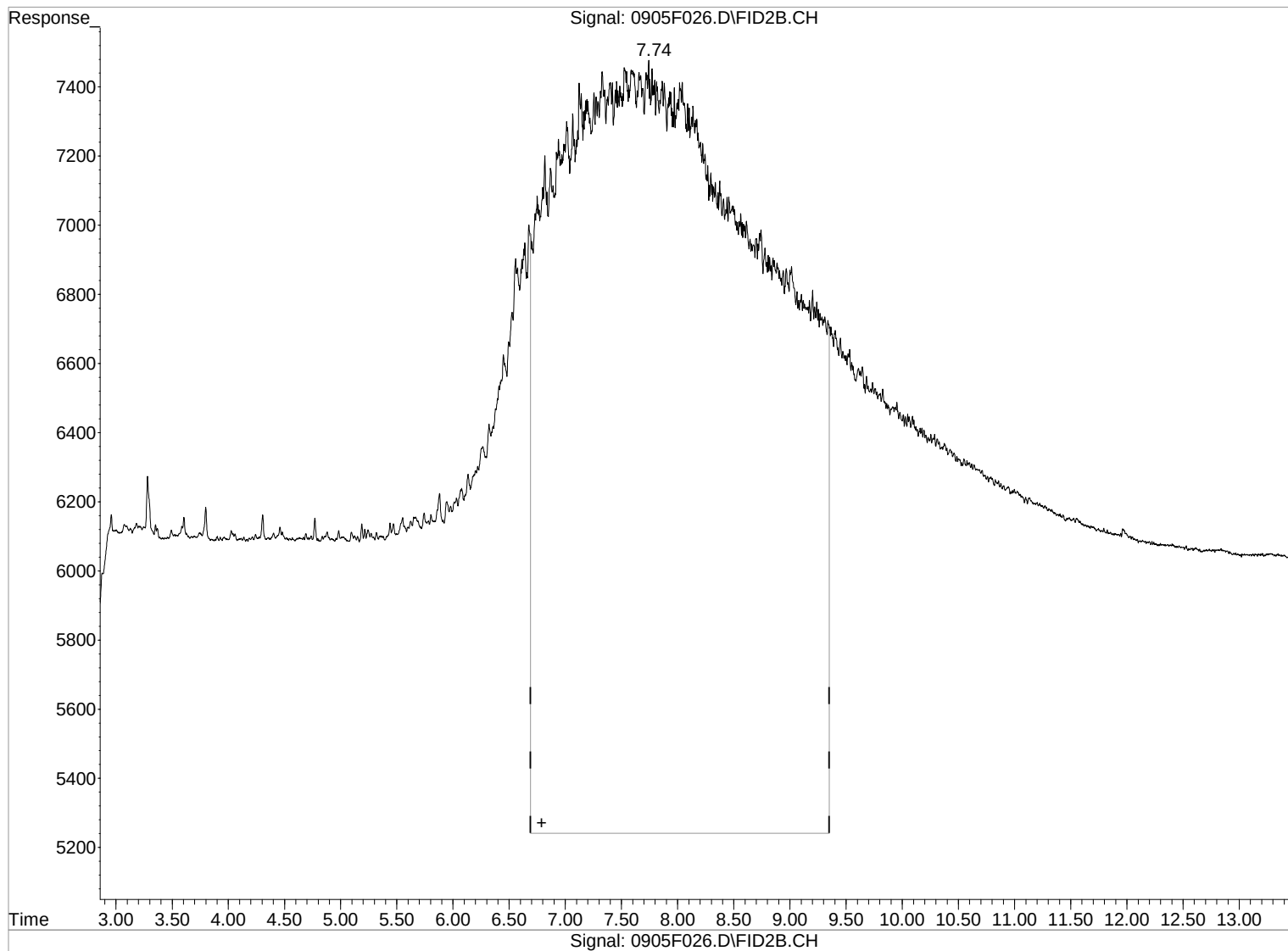
Quant Time: Sep 6 6:48 2023 Quant Results File: 090523FSVF.RES

Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Wed Sep 06 06:50:38 2023

Response via : Multiple Level Calibration



(10) C25-C36in RRO [NWTPH] (H)

Manual Integration:

6.79min 422.757ppm

Before

response 301777

09/06/23

(+) = Expected Retention Time

0905F026.D 090523FSVF.M Wed Sep 06 06:52:03 2023

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Data File : J:\GC35\DATA\090523\0905F026.D

Vial: 12

Acq On : 05 Sep 2023 5:44 pm

Operator: AA

Sample : RRO SVF04-60J 200

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

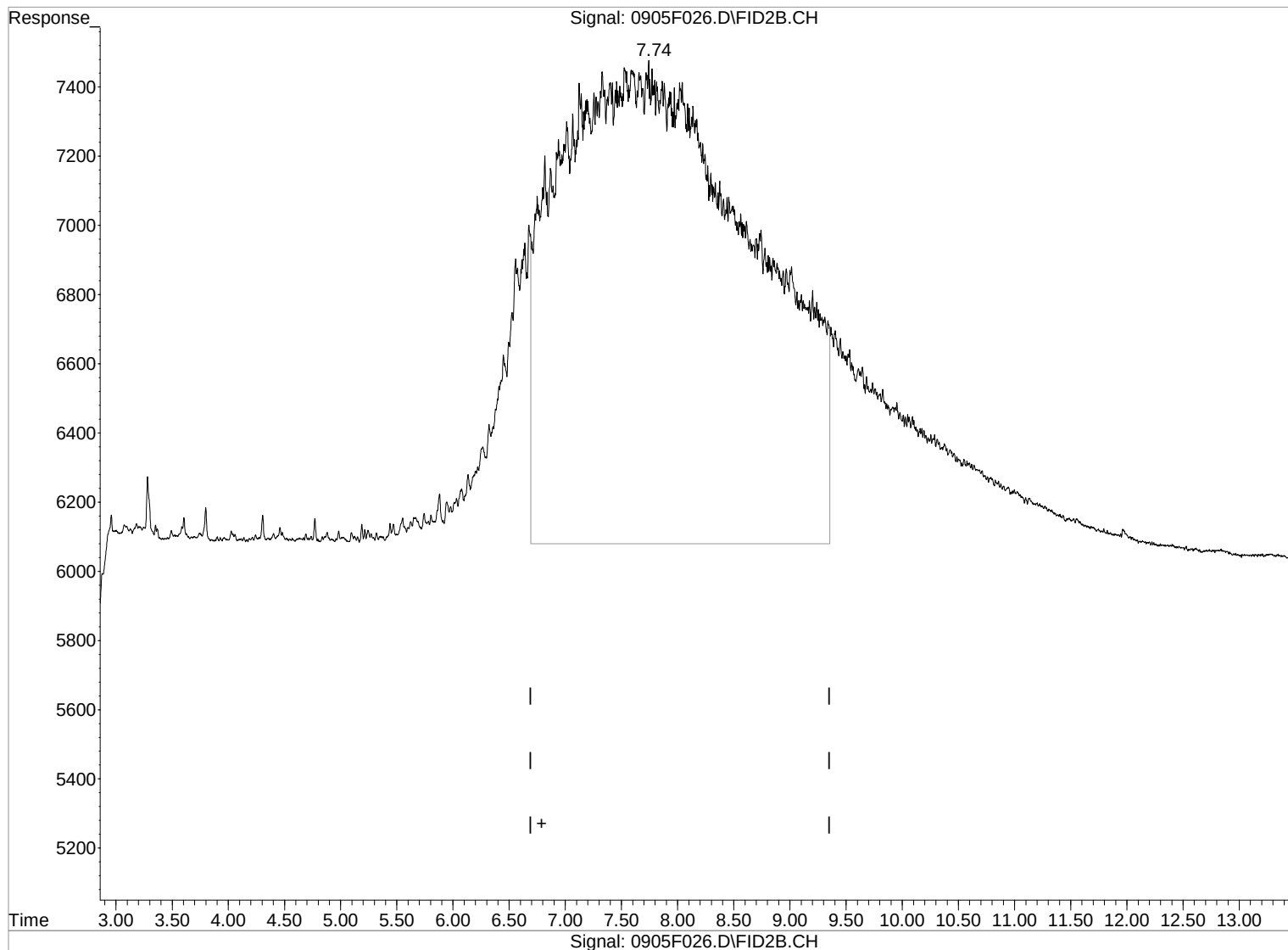
Quant Time: Sep 6 6:48 2023 Quant Results File: 090523FSVF.RES

Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Wed Sep 06 06:50:38 2023

Response via : Multiple Level Calibration



(10) C25-C36in RRO [NWTPH] (H)

Manual Integration:

6.79min 235.222ppm

After

response 167909

Baseline/Shoulder

09/06/23

(+) = Expected Retention Time

0905F026.D 090523FSVF.M Wed Sep 06 06:52:23 2023

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Data File : J:\GC35\DATA\090523\0905F027.D Vial: 13
Acq On : 05 Sep 2023 6:05 pm Operator: AA
Sample : RRO SVF04-60I 500 Inst : GC35
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Sep 06 06:48:55 2023 Quant Results File: 090523FSVF.RES

Quant Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)
Title : AK102/103 SVF MJ257 CAL 16220
Last Update : Tue Sep 05 16:03:26 2023
Response via : Initial Calibration
DataAcq Meth : SVF2_F.M

Volume Inj. : 1 uL
Signal Phase : ZB-1
Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

Target Compounds

10) H C25-C36in RRO [NWTPH]	6.79	409049	573.033 ppm
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Data File : J:\GC35\DATA\090523\0905F027.D

Vial: 13

Acq On : 05 Sep 2023 6:05 pm

Operator: AA

Sample : RRO SVF04-60I 500

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Sep 6 6:53 2023 Quant Results File: 090523FSVF.RES

Quant Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Tue Sep 05 16:03:26 2023

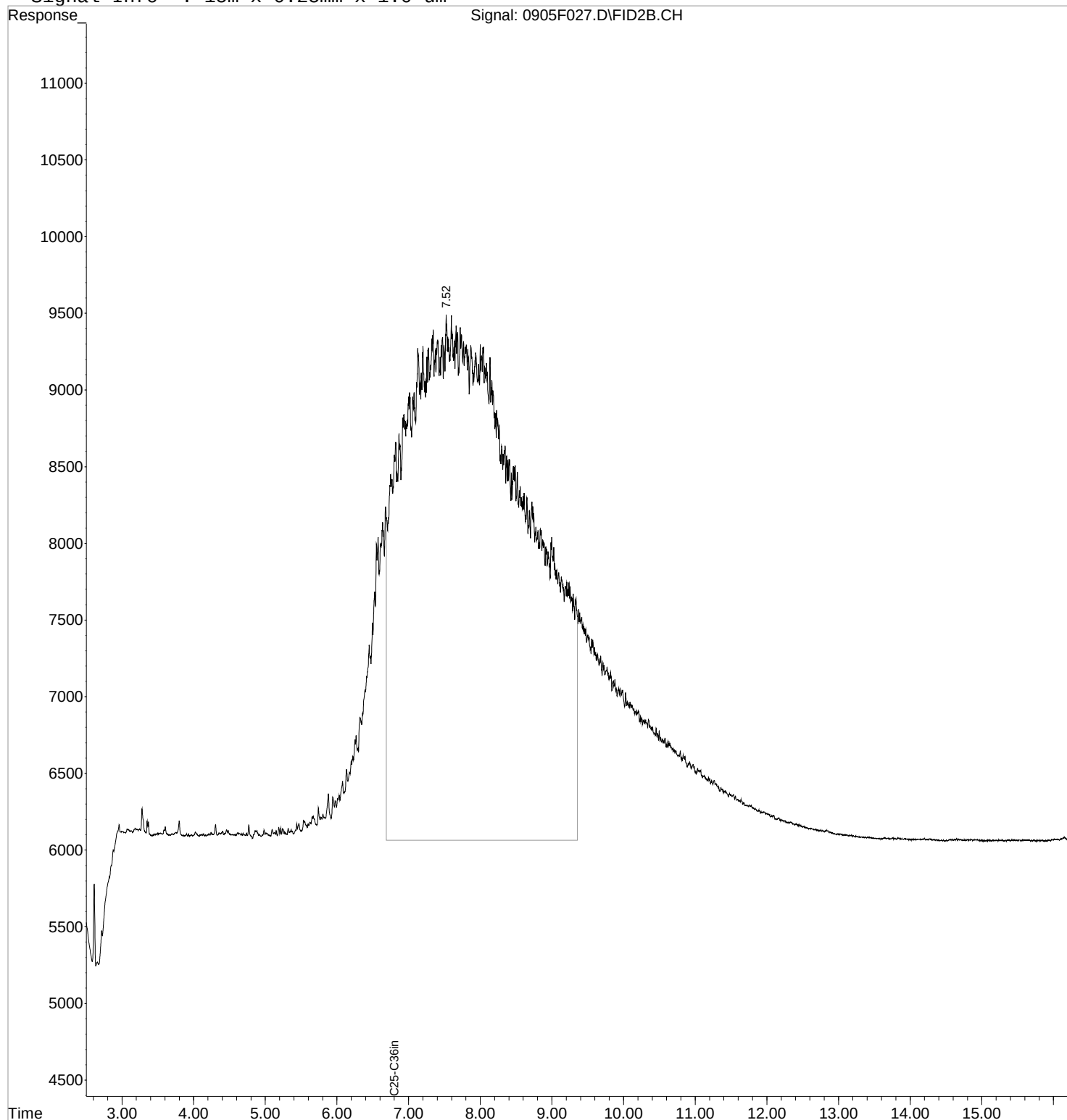
Response via : Single Level Calibration

DataAcq Meth : SVF2_F.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Data File : J:\GC35\DATA\090523\0905F027.D

Vial: 13

Acq On : 05 Sep 2023 6:05 pm

Operator: AA

Sample : RRO SVF04-60I 500

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

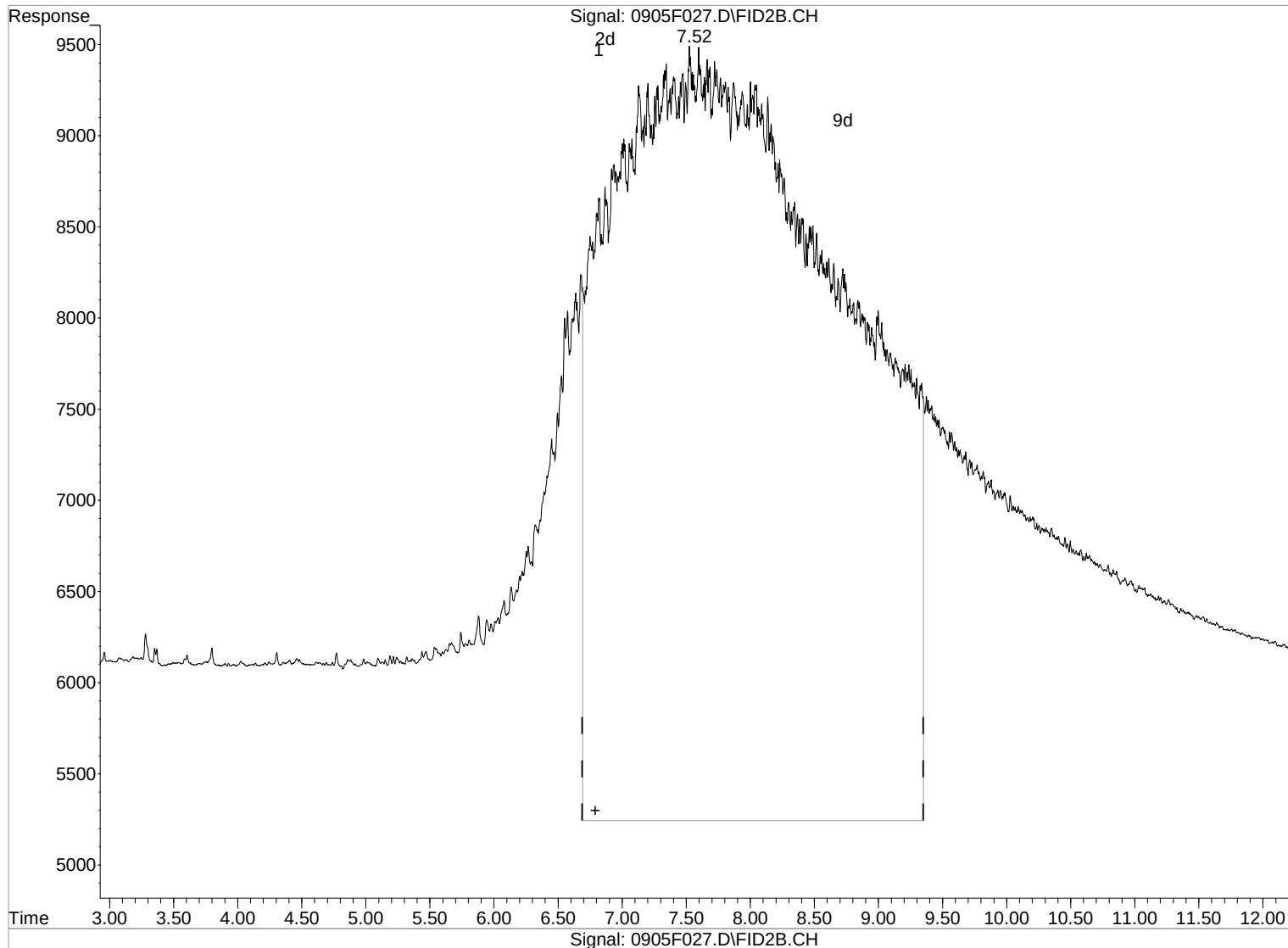
Quant Time: Sep 6 6:48 2023 Quant Results File: 090523FSVF.RES

Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Wed Sep 06 06:52:30 2023

Response via : Multiple Level Calibration



(10) C25-C36in RRO [NWTPH] (H)

Manual Integration:

6.79min 755.666ppm

Before

response 539418

09/06/23

(+) = Expected Retention Time

0905F027.D 090523FSVF.M

Wed Sep 06 06:52:54 2023

345 of 3623

Data File : J:\GC35\DATA\090523\0905F027.D

Vial: 13

Acq On : 05 Sep 2023 6:05 pm

Operator: AA

Sample : RRO SVF04-60I 500

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

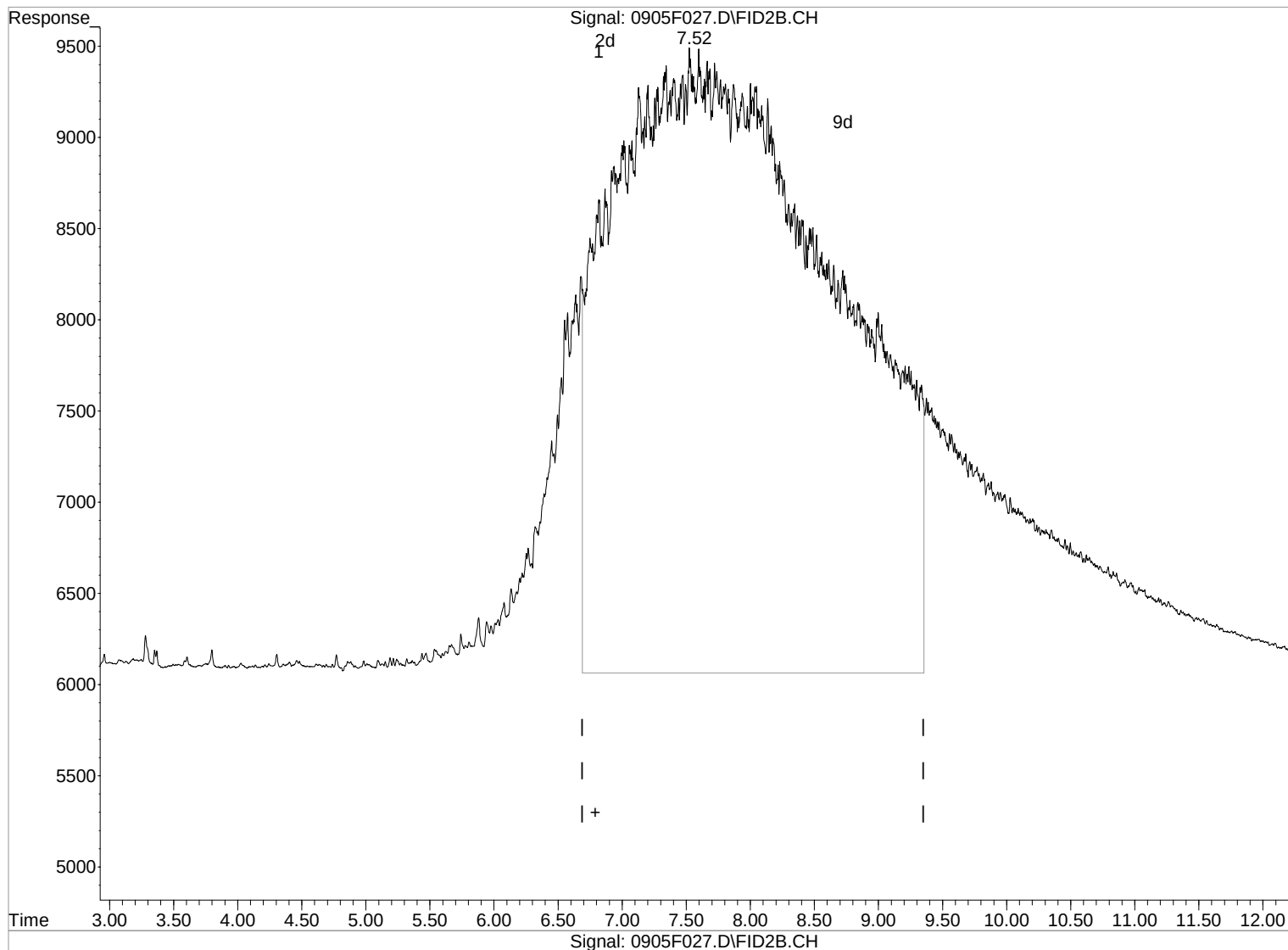
Quant Time: Sep 6 6:48 2023 Quant Results File: 090523FSVF.RES

Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Wed Sep 06 06:52:30 2023

Response via : Multiple Level Calibration



(10) C25-C36in RRO [NWTPH] (H)

Manual Integration:

6.79min 573.033ppm

After

response 409049

Baseline/Shoulder

09/06/23

(+) = Expected Retention Time

0905F027.D 090523FSVF.M

Wed Sep 06 06:52:07 2023

346 of 3623

Data File : J:\GC35\DATA\090523\0905F028.D Vial: 14
Acq On : 05 Sep 2023 6:27 pm Operator: AA
Sample : RRO SVF04-60H 2000 Inst : GC35
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Sep 06 06:48:57 2023 Quant Results File: 090523FSVF.RES

Quant Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)
Title : AK102/103 SVF MJ257 CAL 16220
Last Update : Tue Sep 05 16:03:26 2023
Response via : Initial Calibration
DataAcq Meth : SVF2_F.M

Volume Inj. : 1 uL
Signal Phase : ZB-1
Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

Target Compounds

10) H C25-C36in RRO [NWTPH]	6.79	1467460	2055.752 ppm
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Data File : J:\GC35\DATA\090523\0905F028.D

Vial: 14

Acq On : 05 Sep 2023 6:27 pm

Operator: AA

Sample : RRO SVF04-60H 2000

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Sep 6 6:53 2023 Quant Results File: 090523FSVF.RES

Quant Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Tue Sep 05 16:03:26 2023

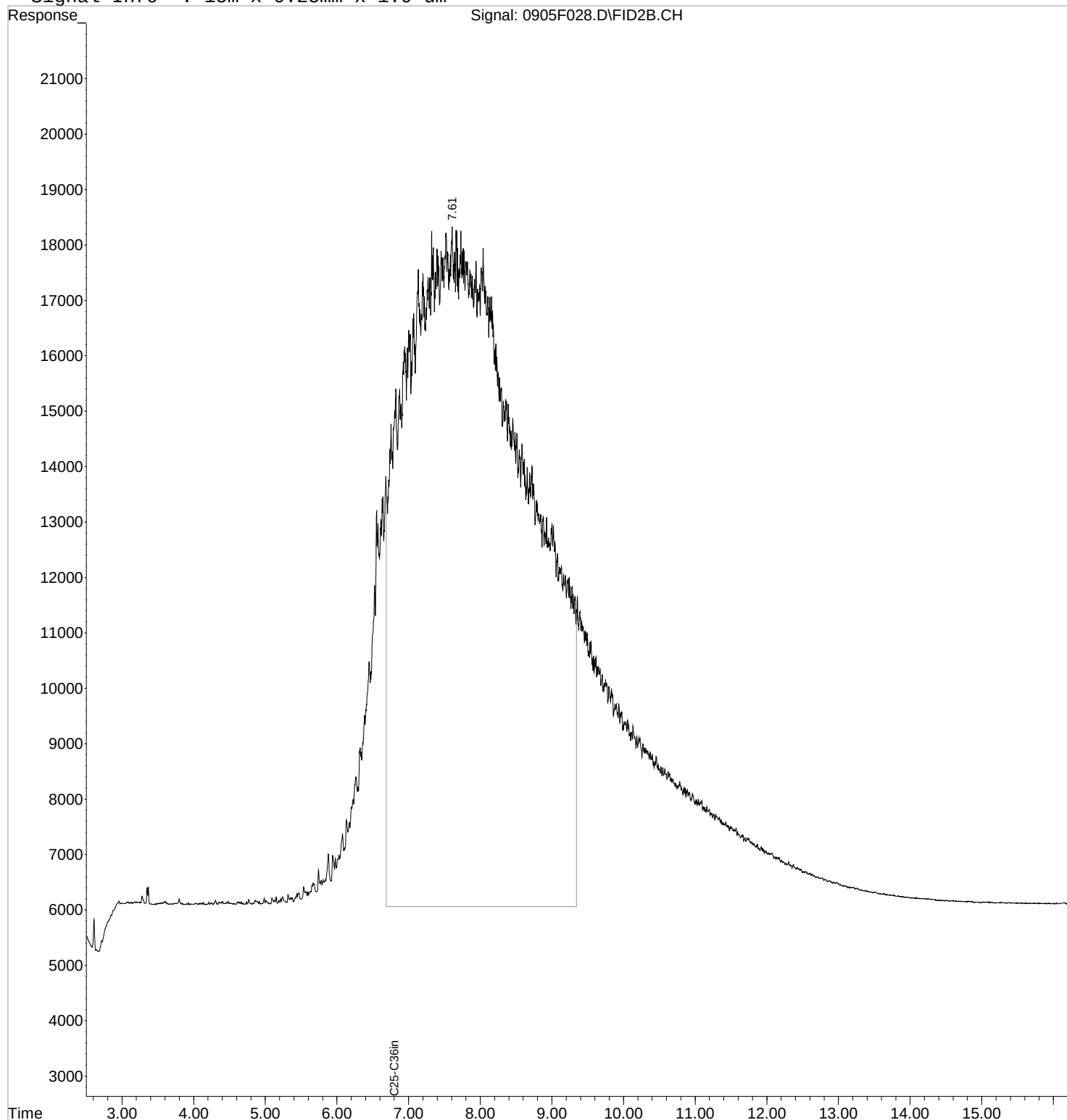
Response via : Single Level Calibration

DataAcq Meth : SVF2_F.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Data File : J:\GC35\DATA\090523\0905F028.D

Vial: 14

Acq On : 05 Sep 2023 6:27 pm

Operator: AA

Sample : RRO SVF04-60H 2000

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

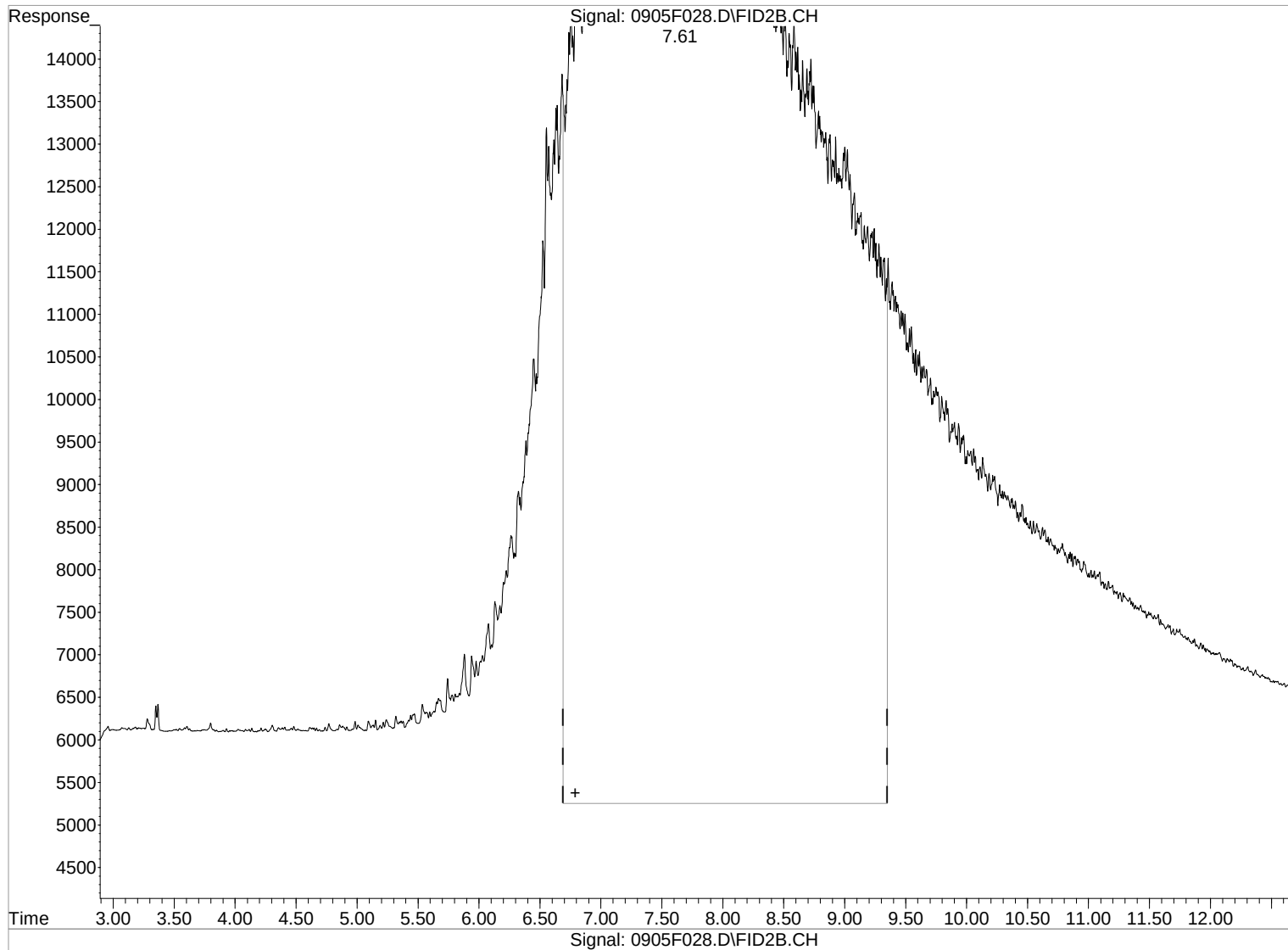
Quant Time: Sep 6 6:48 2023 Quant Results File: 090523FSVF.RES

Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Wed Sep 06 06:53:14 2023

Response via : Multiple Level Calibration



(10) C25-C36in RRO [NWTPH] (H)

Manual Integration:

6.79min 2237.443ppm

Before

response 1597157

09/06/23

(+) = Expected Retention Time

0905F028.D 090523FSVF.M Wed Sep 06 06:53:46 2023

Quantitation Report (Qedit)

1st *AA* 09/07/232nd *SW* 09/08/23

Data File : J:\GC35\DATA\090523\0905F028.D

Vial: 14

Acq On : 05 Sep 2023 6:27 pm

Operator: AA

Sample : RRO SVF04-60H 2000

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

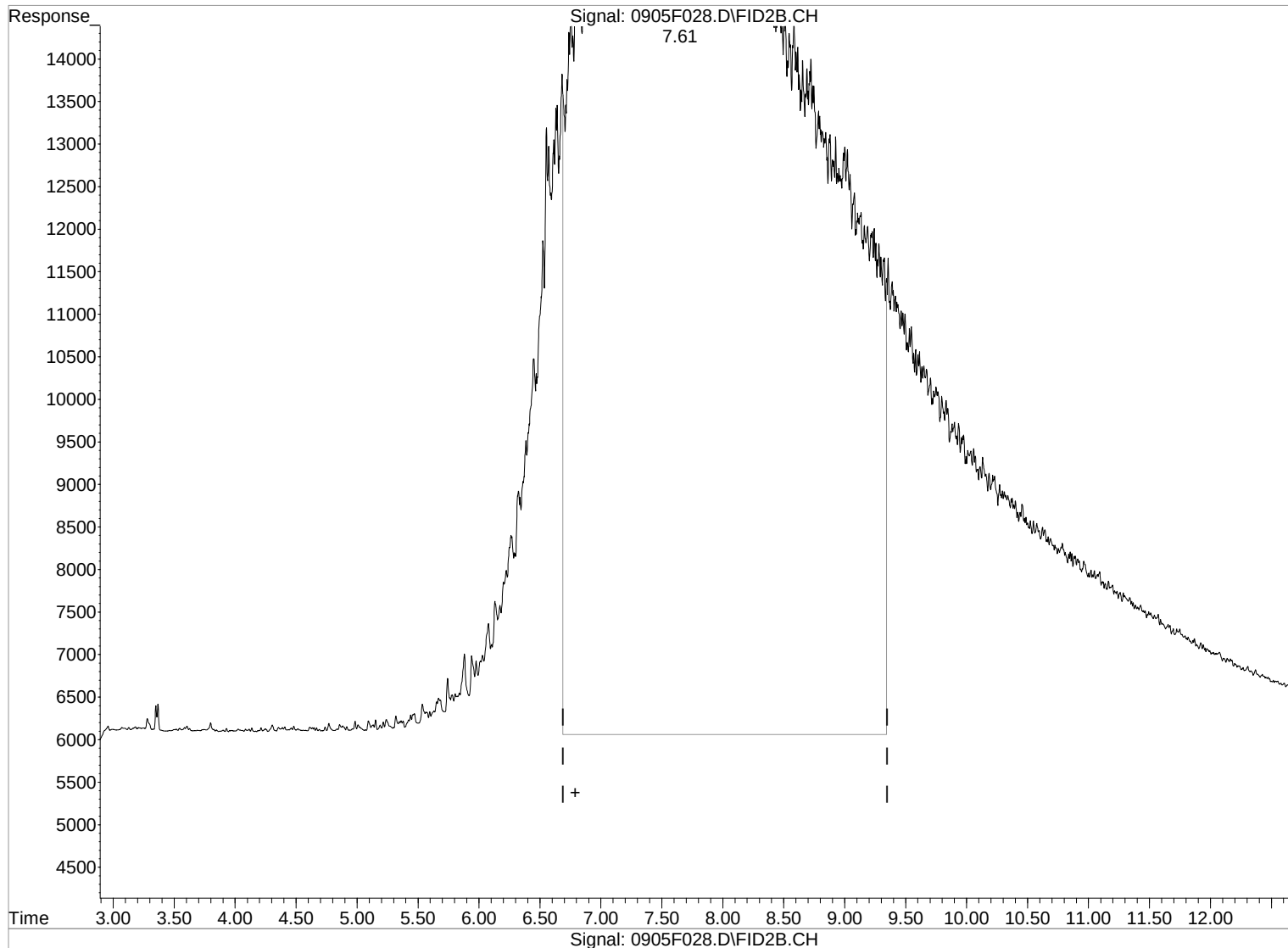
Quant Time: Sep 6 6:48 2023 Quant Results File: 090523FSVF.RES

Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Wed Sep 06 06:53:14 2023

Response via : Multiple Level Calibration



(10) C25-C36in RRO [NWTPH] (H)

Manual Integration:

6.79min 2055.752ppm

After

response 1467460

Baseline/Shoulder

09/06/23

(+) = Expected Retention Time

0905F028.D 090523FSVF.M Wed Sep 06 06:54:01 2023

350 of 3623

Data File : J:\GC35\DATA\090523\0905F029.D Vial: 15
Acq On : 05 Sep 2023 6:49 pm Operator: AA
Sample : RRO SVF04-60G 5000 Inst : GC35
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Sep 06 06:48:58 2023 Quant Results File: 090523FSVF.RES

Quant Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)
Title : AK102/103 SVF MJ257 CAL 16220
Last Update : Tue Sep 05 16:03:26 2023
Response via : Initial Calibration
DataAcq Meth : SVF2_F.M

Volume Inj. : 1 uL
Signal Phase : ZB-1
Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

Target Compounds

10) H C25-C36in RRO [NWTPH]	6.79	3597997	5040.403 ppm
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Data File : J:\GC35\DATA\090523\0905F029.D

Vial: 15

Acq On : 05 Sep 2023 6:49 pm

Operator: AA

Sample : RRO SVF04-60G 5000

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Sep 6 6:54 2023 Quant Results File: 090523FSVF.RES

Quant Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Tue Sep 05 16:03:26 2023

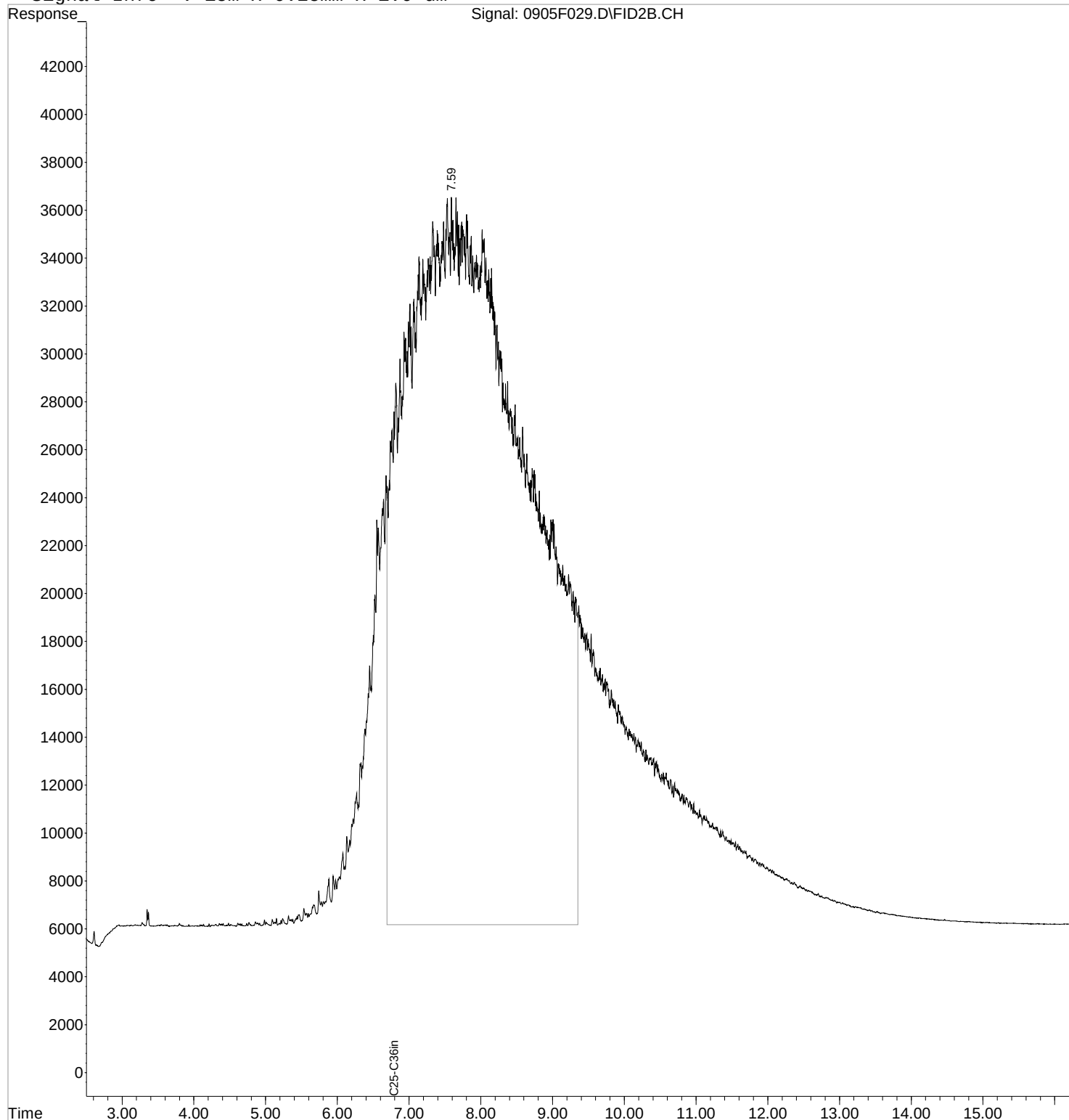
Response via : Single Level Calibration

DataAcq Meth : SVF2_F.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Data File : J:\GC35\DATA\090523\0905F029.D

Vial: 15

Acq On : 05 Sep 2023 6:49 pm

Operator: AA

Sample : RRO SVF04-60G 5000

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

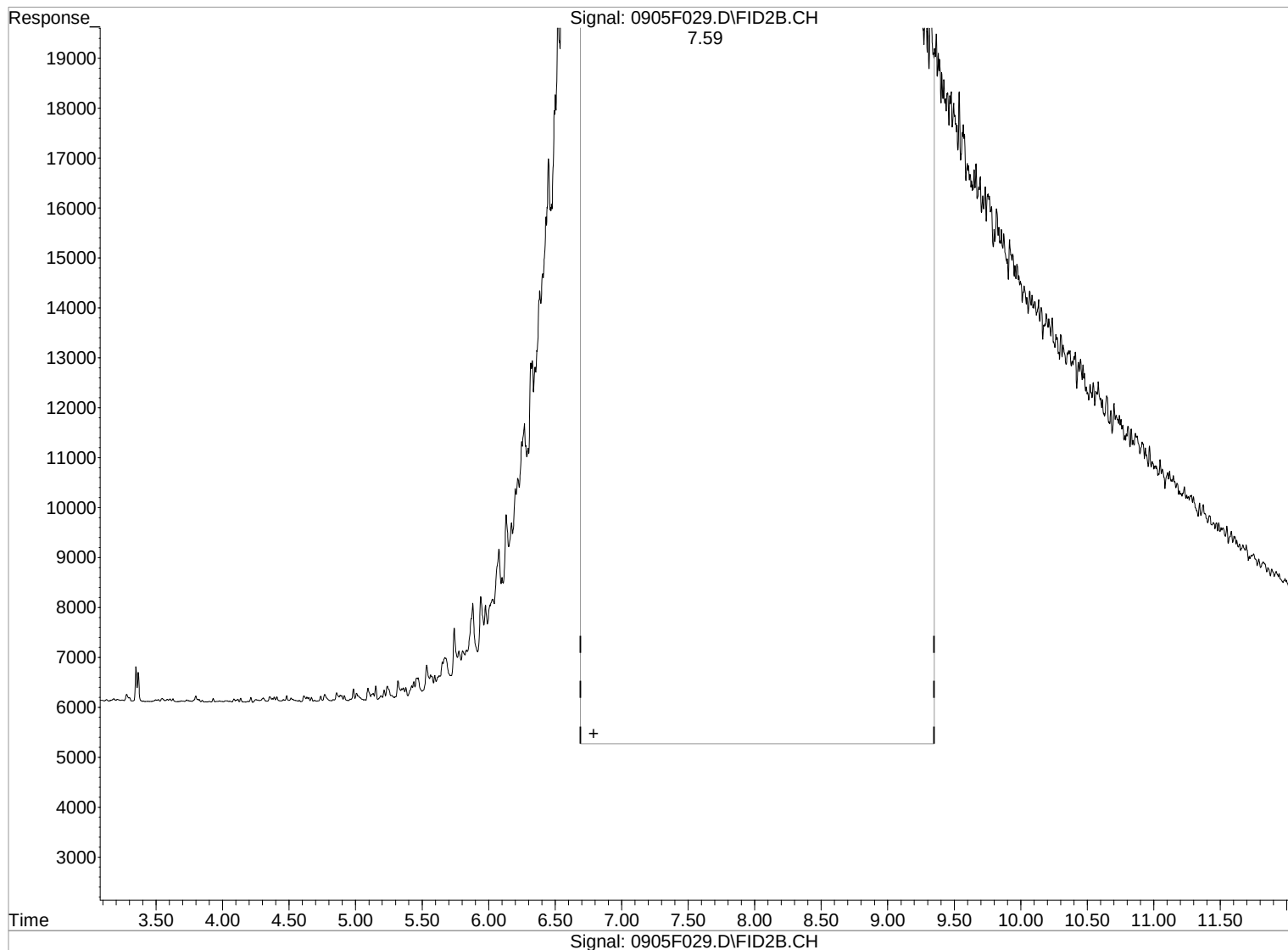
Quant Time: Sep 6 6:49 2023 Quant Results File: 090523FSVF.RES

Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Wed Sep 06 06:54:09 2023

Response via : Multiple Level Calibration



(10) C25-C36in RRO [NWT PH] (H)

Manual Integration:

6.79min 5241.592ppm

Before

response 3741612

09/06/23

(+) = Expected Retention Time

0905F029.D 090523FSVF.M Wed Sep 06 06:54:37 2023

353 of 3623

Data File : J:\GC35\DATA\090523\0905F029.D

Vial: 15

Acq On : 05 Sep 2023 6:49 pm

Operator: AA

Sample : RRO SVF04-60G 5000

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

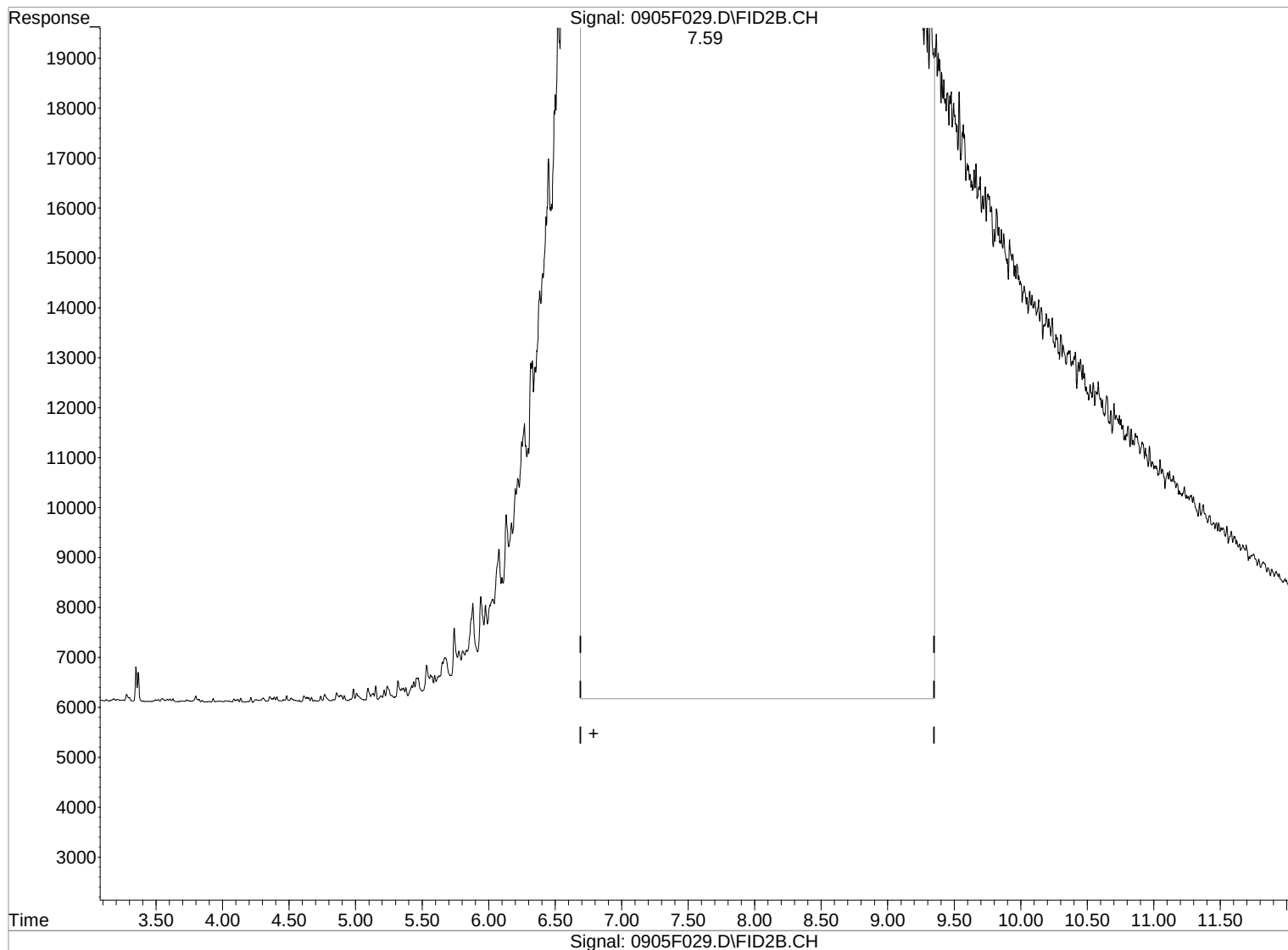
Quant Time: Sep 6 6:49 2023 Quant Results File: 090523FSVF.RES

Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Wed Sep 06 06:54:09 2023

Response via : Multiple Level Calibration



(10) C25-C36in RRO [NWTPH] (H)

Manual Integration:

6.79min 5040.403ppm

After

response 3597997

Baseline/Shoulder

09/06/23

(+) = Expected Retention Time

0905F029.D 090523FSVF.M Wed Sep 06 06:54:52 2023

354 of 3623

Data File : J:\GC35\DATA\090523\0905F031.D Vial: 1
Acq On : 05 Sep 2023 7:32 pm Operator: AA
Sample : IB Inst : GC35
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Sep 07 13:04:22 2023 Quant Results File: 090523FSVF.RES

Quant Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)
Title : AK102/103 SVF MJ257 CAL 16220
Last Update : Thu Sep 07 07:40:53 2023
Response via : Initial Calibration
DataAcq Meth : SVF2_F.M

Volume Inj. : 1 uL
Signal Phase : ZB-1
Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

Target Compounds

6) H	C10-C25ex DRO [AK102]	3.30	183002	144.931 ppm
7) H	C10-C28in DRO [8015]	3.40	223778	168.274 ppm
8) H	C12-C25ex DRO [NWTPH]	3.93	149572	141.975 ppm
10) H	C25-C36in RRO [NWTPH]	6.79	6847	8.320 ppm
11) H	C25-C36in RRO [AK103]	6.89	137556	179.432 ppm

Data File : J:\GC35\DATA\090523\0905F031.D

Vial: 1

Acq On : 05 Sep 2023 7:32 pm

Operator: AA

Sample : IB

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Sep 7 13:06 2023 Quant Results File: 090523FSVF.RES

Quant Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Thu Sep 07 07:40:53 2023

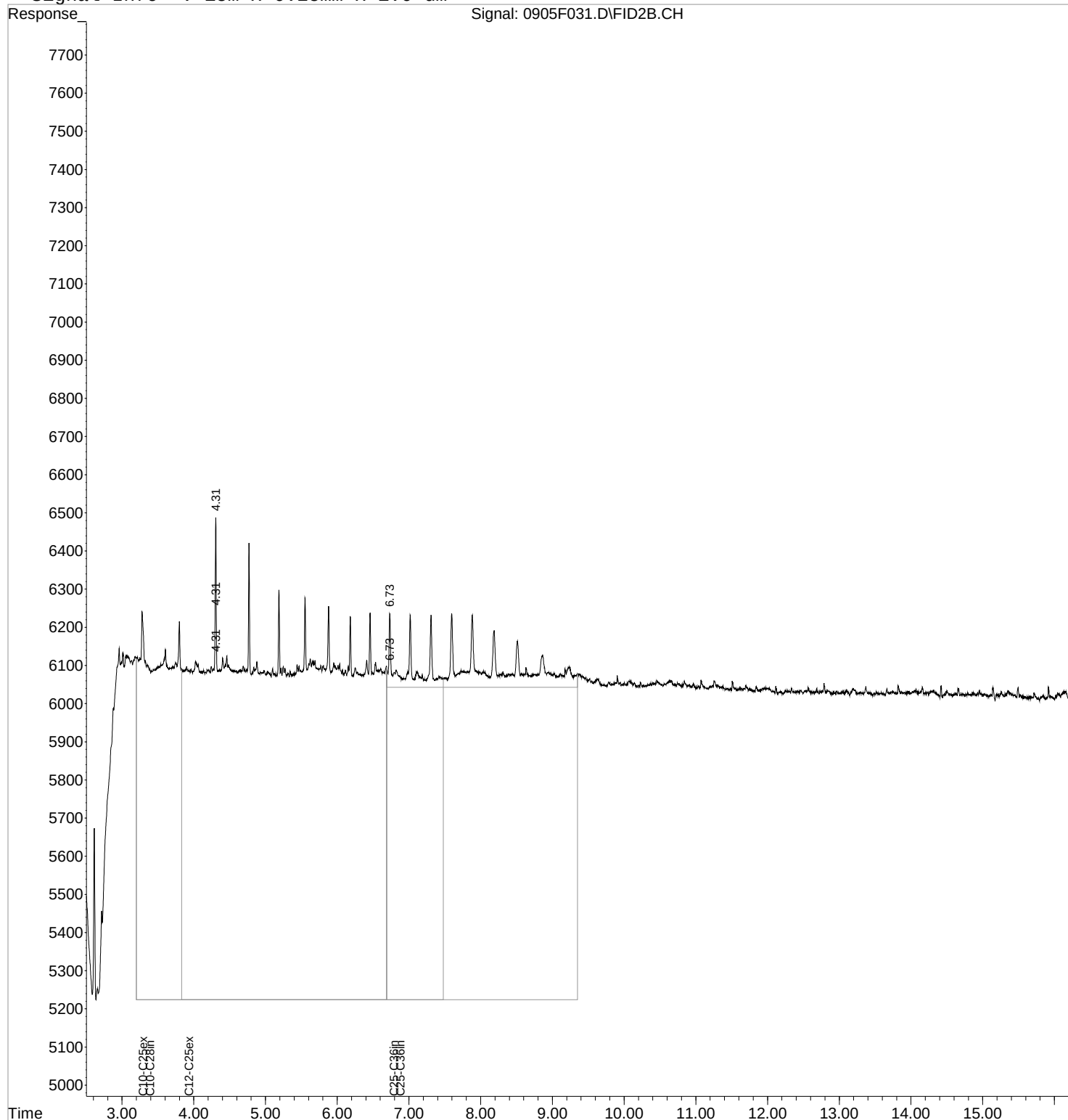
Response via : Single Level Calibration

DataAcq Meth : SVF2_F.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Data File : J:\GC35\DATA\090523\0905F031.D

Acq On : 05 Sep 2023 7:32 pm

Sample : IB

Misc :

IntFile : rteint.p

Quant Time: Sep 7 13:04 2023 Quant Results File: 090523FSVF.RES

Vial: 1

Operator: AA

Inst : GC35

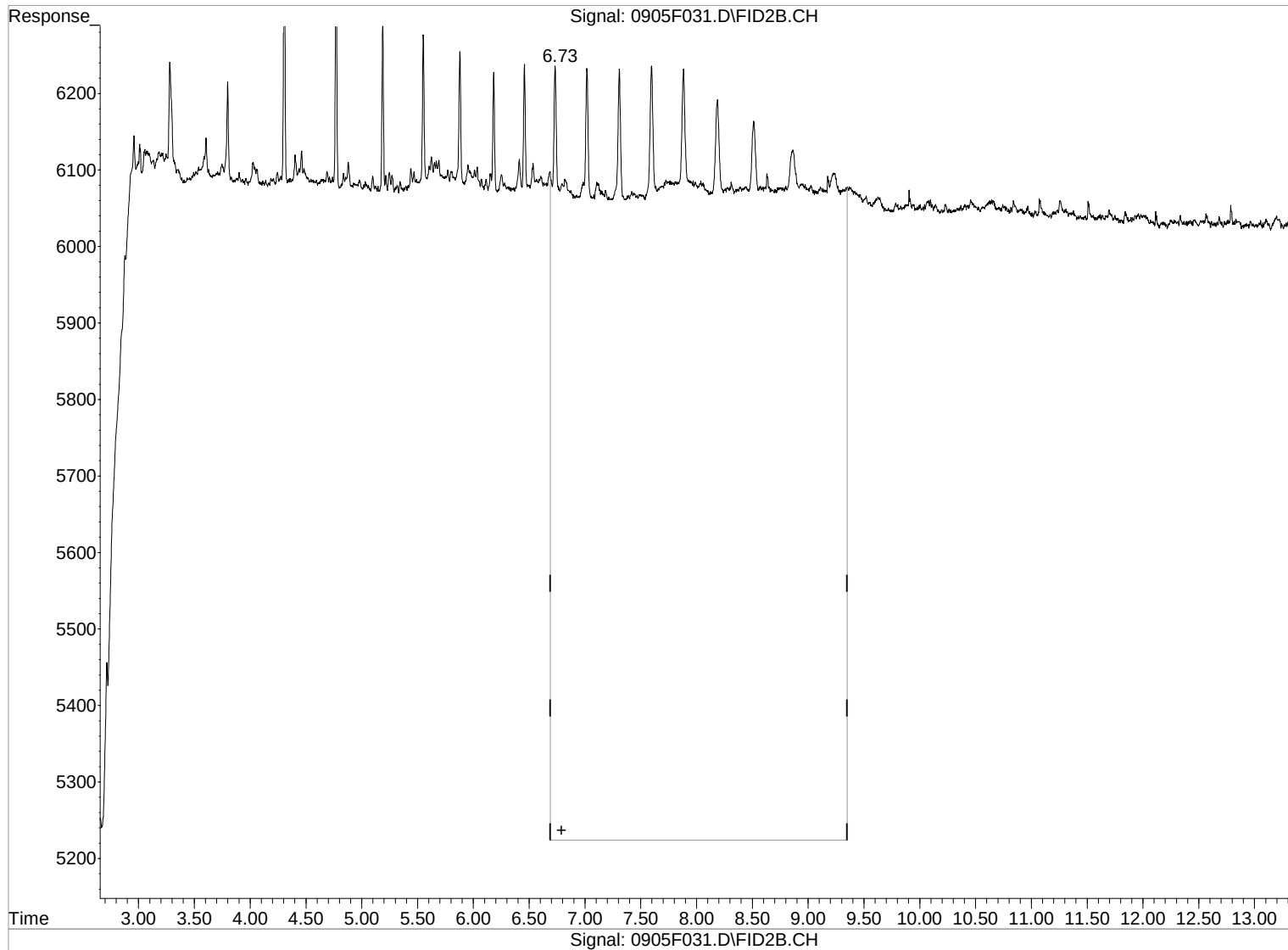
Multiplr: 1.00

Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Thu Sep 07 07:40:53 2023

Response via : Multiple Level Calibration



(10) C25-C36in RRO [NWTPH] (H)

Manual Integration:

6.79min 167.150ppm

Before

response 137556

09/07/23

(+) = Expected Retention Time

0905F031.D 090523FSVF.M

Thu Sep 07 13:06:28 2023

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Data File : J:\GC35\DATA\090523\0905F031.D

Acq On : 05 Sep 2023 7:32 pm

Sample : IB

Misc :

IntFile : rteint.p

Quant Time: Sep 7 13:04 2023 Quant Results File: 090523FSVF.RES

Vial: 1

Operator: AA

Inst : GC35

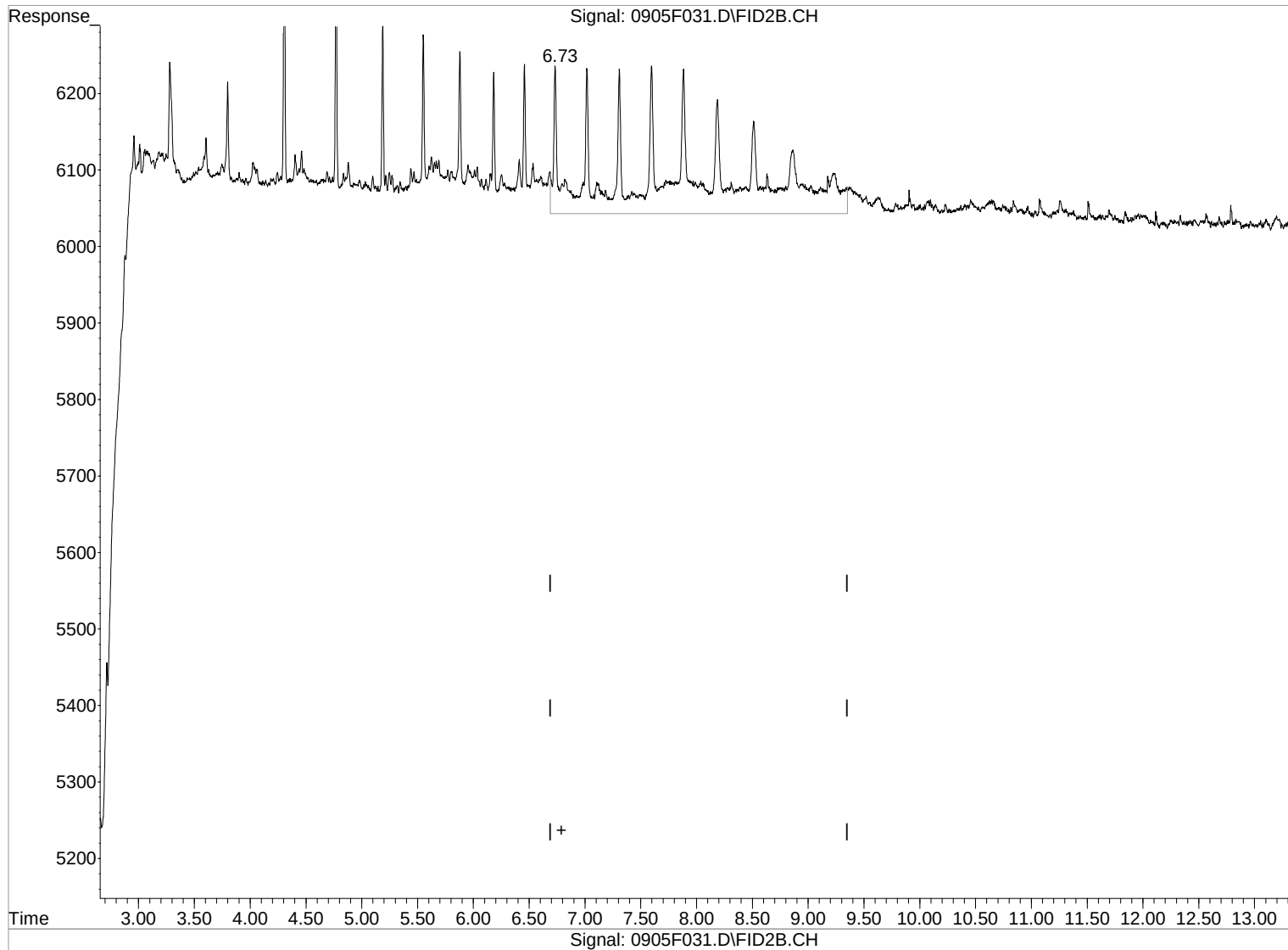
Multiplr: 1.00

Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Thu Sep 07 07:40:53 2023

Response via : Multiple Level Calibration



(10) C25-C36in RRO [NWTPH] (H)

6.79min 8.320ppm

response 6847

Manual Integration:

After

Baseline/Shoulder

09/07/23

(+) = Expected Retention Time

0905F031.D 090523FSVF.M

Thu Sep 07 13:06:41 2023

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Data File : J:\GC35\DATA\090523\0905F032.D Vial: 16
Acq On : 05 Sep 2023 7:54 pm Operator: AA
Sample : RRO SVF04-60L ICV@1000 Inst : GC35
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Sep 06 06:55:24 2023 Quant Results File: 090523FSVF.RES

Quant Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)
Title : AK102/103 SVF MJ257 CAL 16220
Last Update : Wed Sep 06 06:55:11 2023
Response via : Initial Calibration
DataAcq Meth : SVF2_F.M

Volume Inj. : 1 uL
Signal Phase : ZB-1
Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

Target Compounds

10) H C25-C36in RRO [NWTPH]	6.79	716433	870.566 ppm
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Data File : J:\GC35\DATA\090523\0905F032.D

Vial: 16

Acq On : 05 Sep 2023 7:54 pm

Operator: AA

Sample : RRO SVF04-60L ICV@1000

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Sep 6 6:56 2023 Quant Results File: 090523FSVF.RES

Quant Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Wed Sep 06 06:55:11 2023

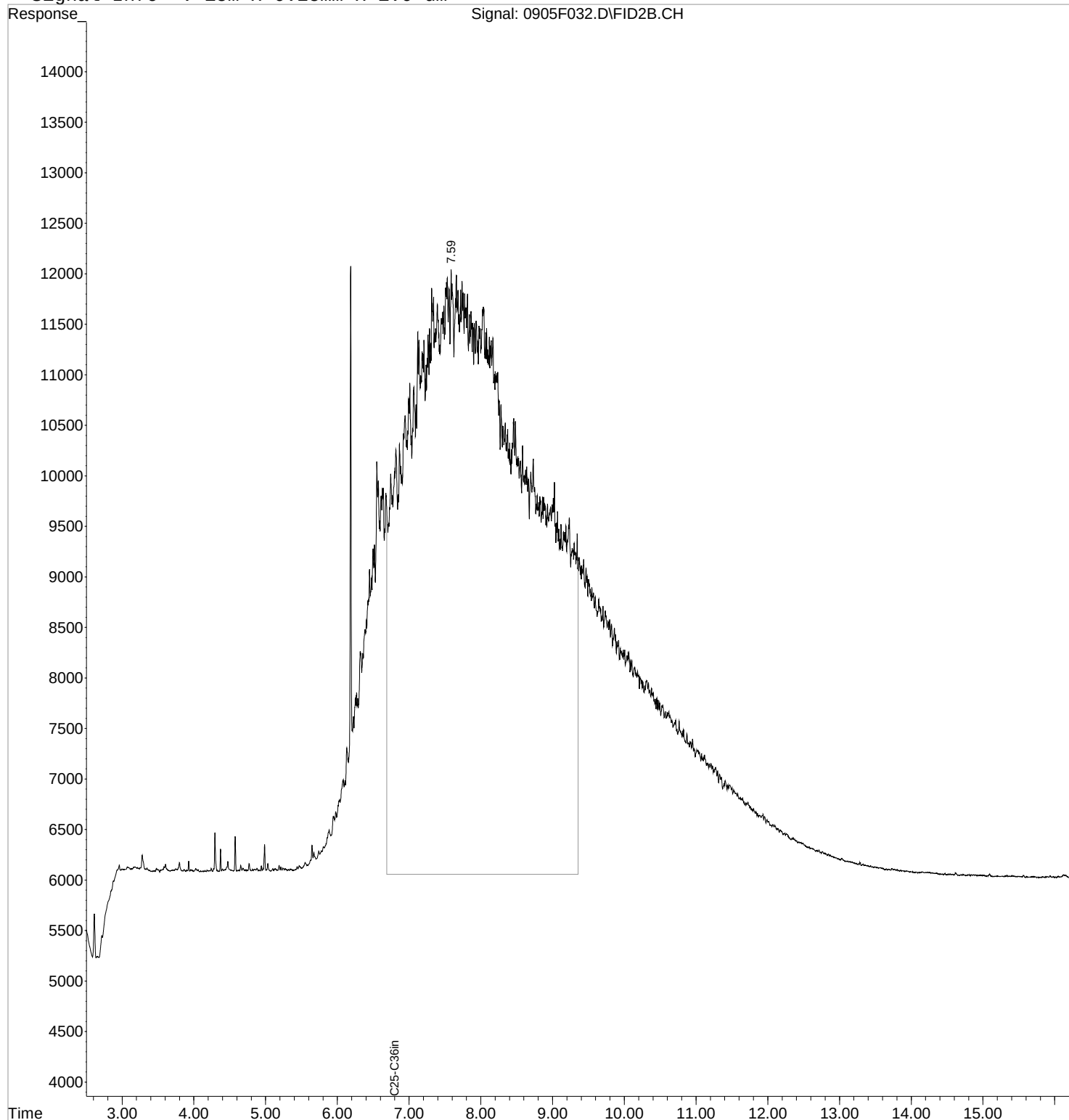
Response via : Single Level Calibration

DataAcq Meth : SVF2_F.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Data File : J:\GC35\DATA\090523\0905F032.D

Vial: 16

Acq On : 05 Sep 2023 7:54 pm

Operator: AA

Sample : RRO SVF04-60L ICV@1000

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

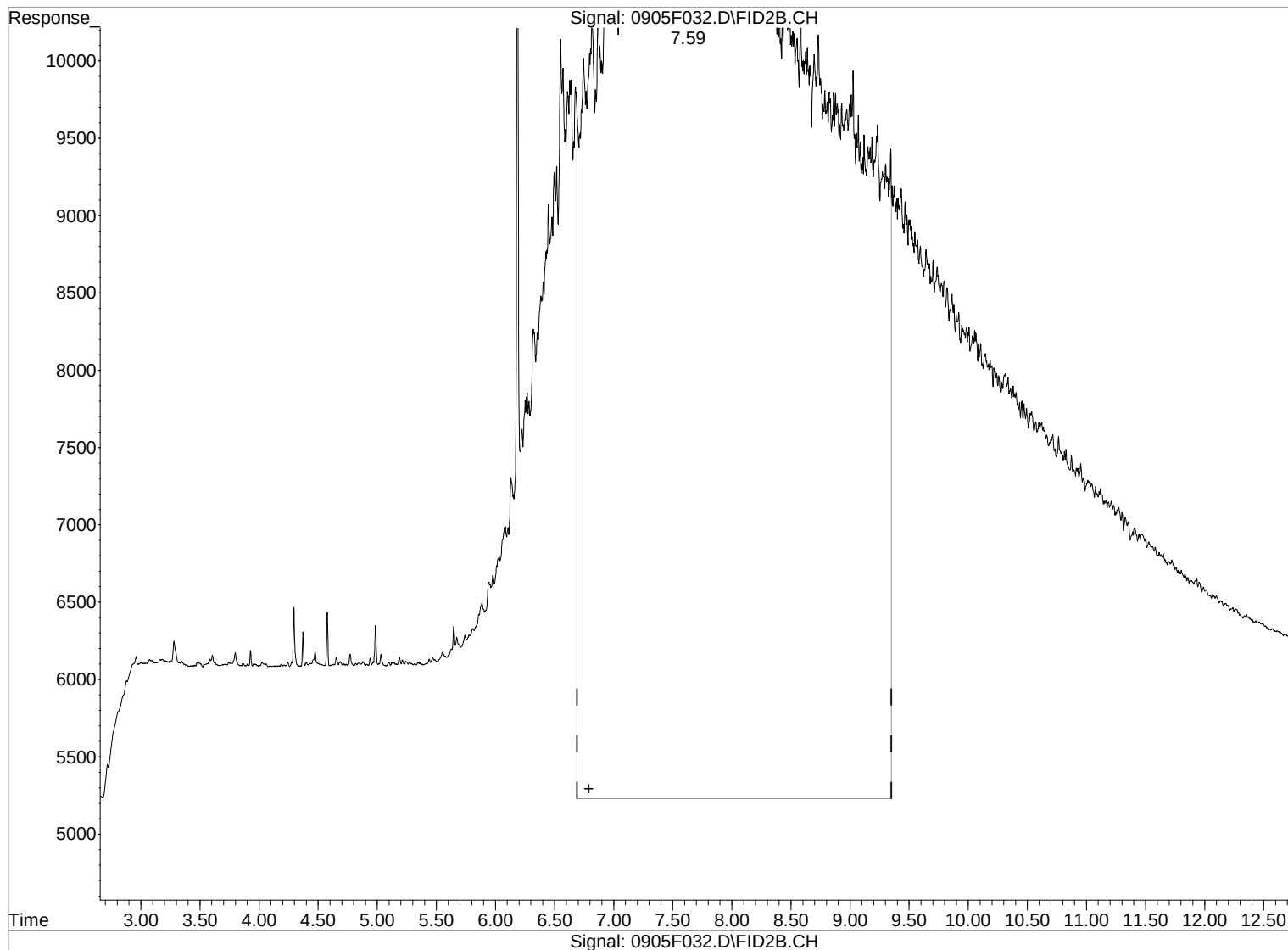
Quant Time: Sep 6 6:55 2023 Quant Results File: 090523FSVF.RES

Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Wed Sep 06 06:55:11 2023

Response via : Multiple Level Calibration



(10) C25-C36in RRO [NWTPH] (H)

Manual Integration:

6.79min 1030.032ppm

Before

response 847665

09/06/23

(+) = Expected Retention Time

0905F032.D 090523FSVF.M Wed Sep 06 06:55:55 2023

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Data File : J:\GC35\DATA\090523\0905F032.D

Vial: 16

Acq On : 05 Sep 2023 7:54 pm

Operator: AA

Sample : RRO SVF04-60L ICV@1000

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

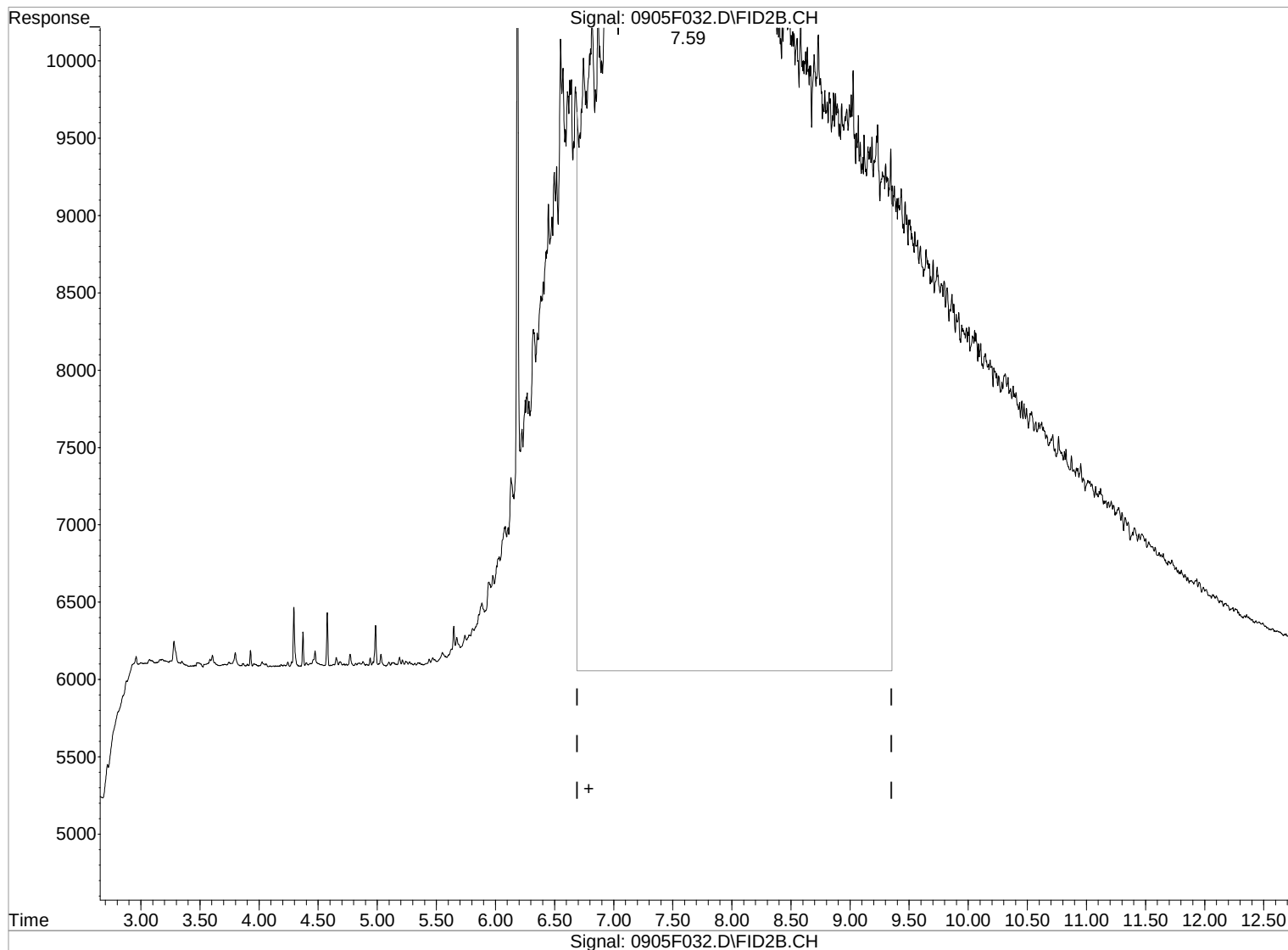
Quant Time: Sep 6 6:55 2023 Quant Results File: 090523FSVF.RES

Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Wed Sep 06 06:55:11 2023

Response via : Multiple Level Calibration



(10) C25-C36in RRO [NWTPH] (H)

Manual Integration:

6.79min 870.566ppm

After

response 716433

Baseline/Shoulder

09/06/23

(+) = Expected Retention Time

0905F032.D 090523FSVF.M Wed Sep 06 06:56:04 2023

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Data File : J:\GC35\DATA\090523\0905F034.D Vial: 1
Acq On : 05 Sep 2023 8:37 pm Operator: AA
Sample : IB Inst : GC35
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Sep 07 13:04:24 2023 Quant Results File: 090523FSVF.RES

Quant Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)
Title : AK102/103 SVF MJ257 CAL 16220
Last Update : Thu Sep 07 07:40:53 2023
Response via : Initial Calibration
DataAcq Meth : SVF2_F.M

Volume Inj. : 1 uL
Signal Phase : ZB-1
Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

Target Compounds

6) H	C10-C25ex DRO [AK102]	3.30	182528	144.556 ppm
7) H	C10-C28in DRO [8015]	3.40	222583	167.375 ppm
8) H	C12-C25ex DRO [NWTPH]	3.93	149026	141.457 ppm
10) H	C25-C36in RRO [NWTPH]	6.79	133011	161.627 ppm
11) H	C25-C36in RRO [AK103]	6.89	9640	12.575 ppm

Data File : J:\GC35\DATA\090523\0905F034.D

Vial: 1

Acq On : 05 Sep 2023 8:37 pm

Operator: AA

Sample : IB

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Sep 7 13:06 2023 Quant Results File: 090523FSVF.RES

Quant Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Thu Sep 07 07:40:53 2023

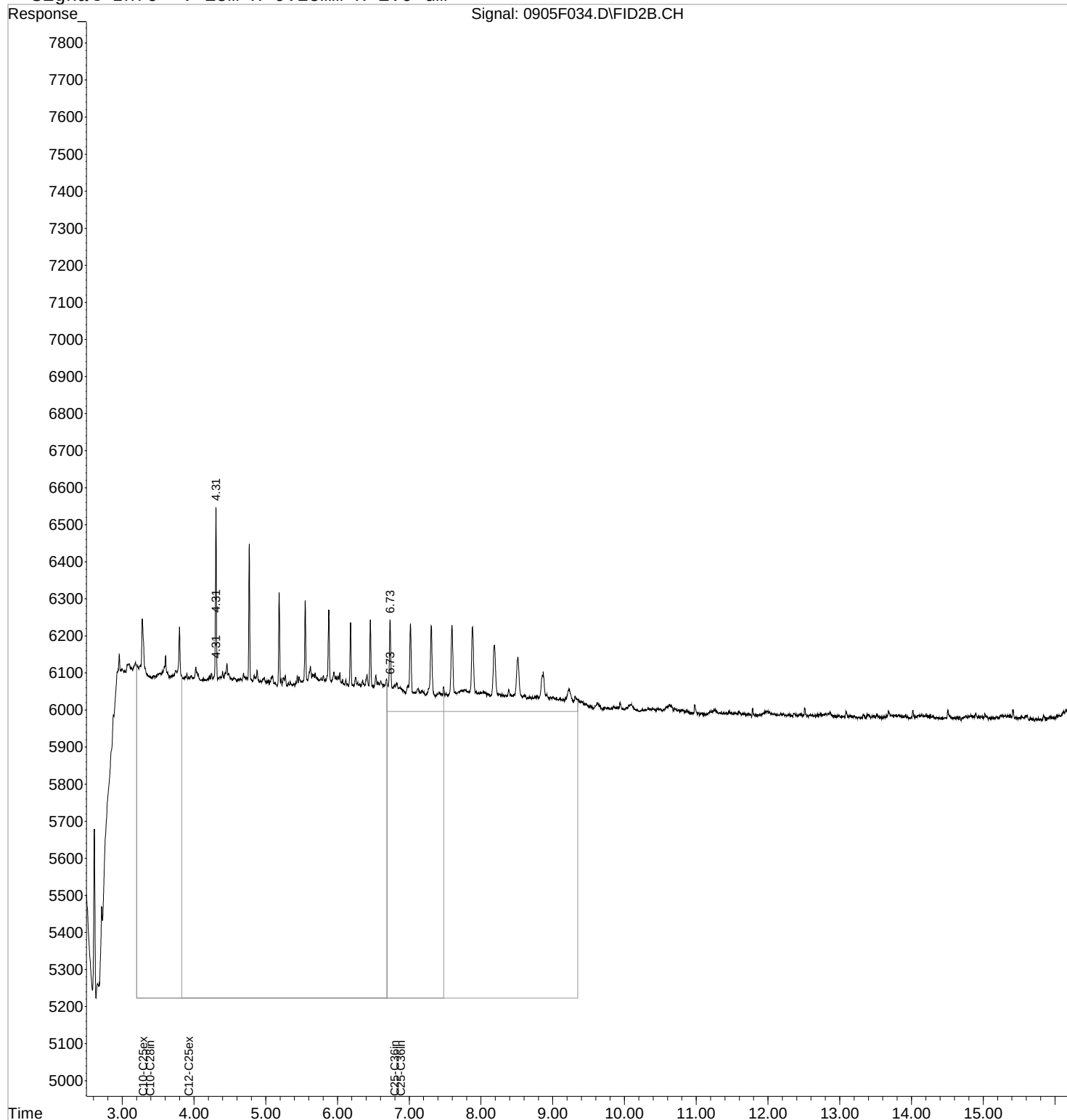
Response via : Single Level Calibration

DataAcq Meth : SVF2_F.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Data File : J:\GC35\DATA\090523\0905F034.D

Acq On : 05 Sep 2023 8:37 pm

Sample : IB

Misc :

IntFile : rteint.p

Quant Time: Sep 7 13:04 2023 Quant Results File: 090523FSVF.RES

Vial: 1

Operator: AA

Inst : GC35

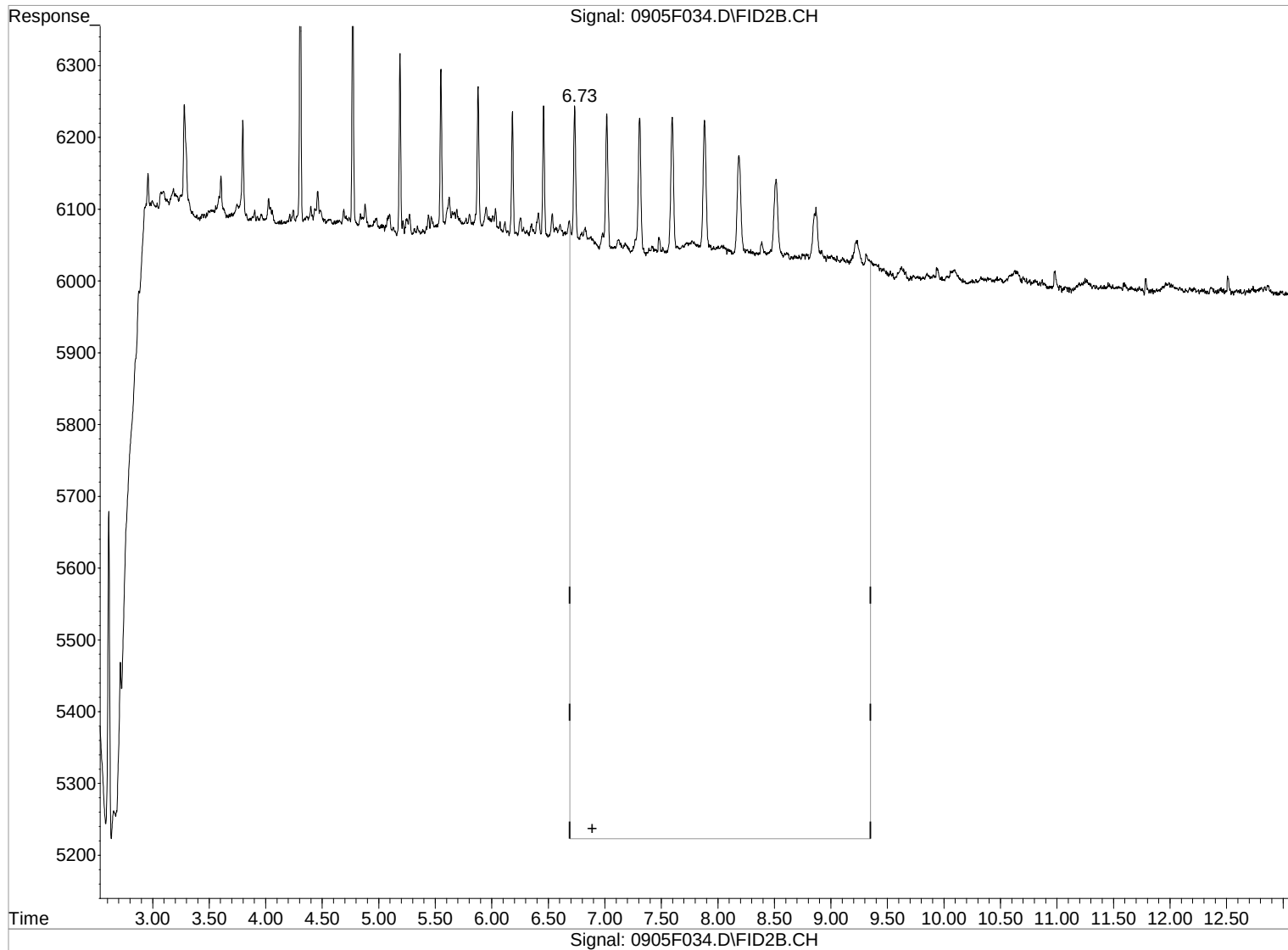
Multiplr: 1.00

Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Thu Sep 07 07:40:53 2023

Response via : Multiple Level Calibration



(11) C25-C36in RRO [AK103] (H)

Manual Integration:

6.89min 173.503ppm

Before

response 133011

09/07/23

(+) = Expected Retention Time

0905F034.D 090523FSVF.M

Thu Sep 07 13:05:51 2023

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Data File : J:\GC35\DATA\090523\0905F034.D

Acq On : 05 Sep 2023 8:37 pm

Sample : IB

Misc :

IntFile : rteint.p

Quant Time: Sep 7 13:04 2023 Quant Results File: 090523FSVF.RES

Vial: 1

Operator: AA

Inst : GC35

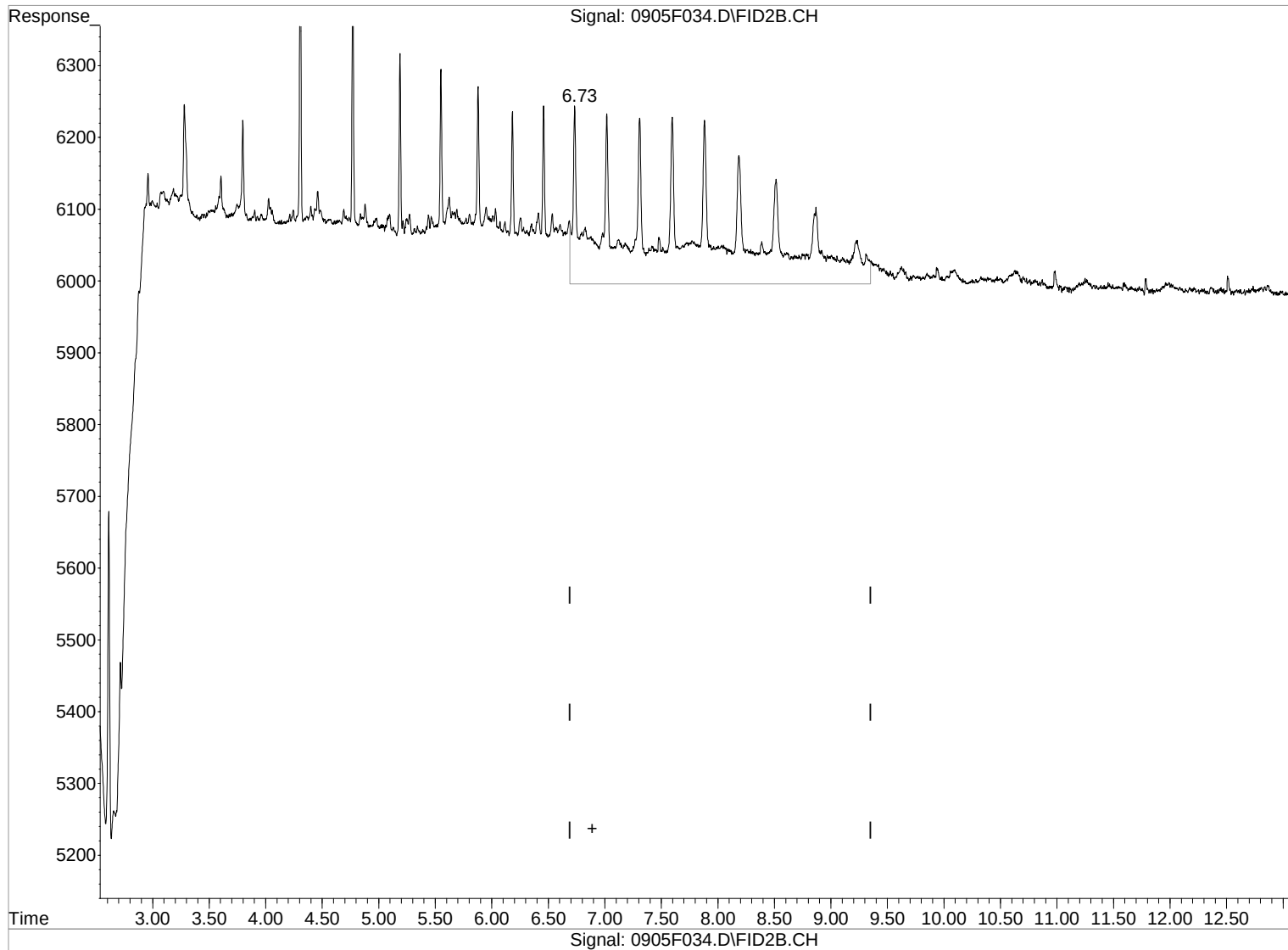
Multiplr: 1.00

Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Thu Sep 07 07:40:53 2023

Response via : Multiple Level Calibration



(11) C25-C36in RRO [AK103] (H)

6.89min 12.575ppm

response 9640

Manual Integration:

After

Baseline/Shoulder

09/07/23

(+) = Expected Retention Time

0905F034.D 090523FSVF.M

Thu Sep 07 13:06:04 2023

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Data File : J:\GC35\DATA\090523\0905F035.D Vial: 17
Acq On : 05 Sep 2023 8:59 pm Operator: AA
Sample : AK103 SVF04-61D 50 Inst : GC35
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Sep 06 06:49:00 2023 Quant Results File: 090523FSVF.RES

Quant Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)
Title : AK102/103 SVF MJ257 CAL 16220
Last Update : Tue Sep 05 16:03:26 2023
Response via : Initial Calibration
DataAcq Meth : SVF2_F.M

Volume Inj. : 1 uL
Signal Phase : ZB-1
Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

Target Compounds

11) H C25-C36in RRO [AK103]	6.89	44764	58.992 ppm
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Data File : J:\GC35\DATA\090523\0905F035.D

Vial: 17

Acq On : 05 Sep 2023 8:59 pm

Operator: AA

Sample : AK103 SVF04-61D 50

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Sep 6 6:56 2023 Quant Results File: 090523FSVF.RES

Quant Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Tue Sep 05 16:03:26 2023

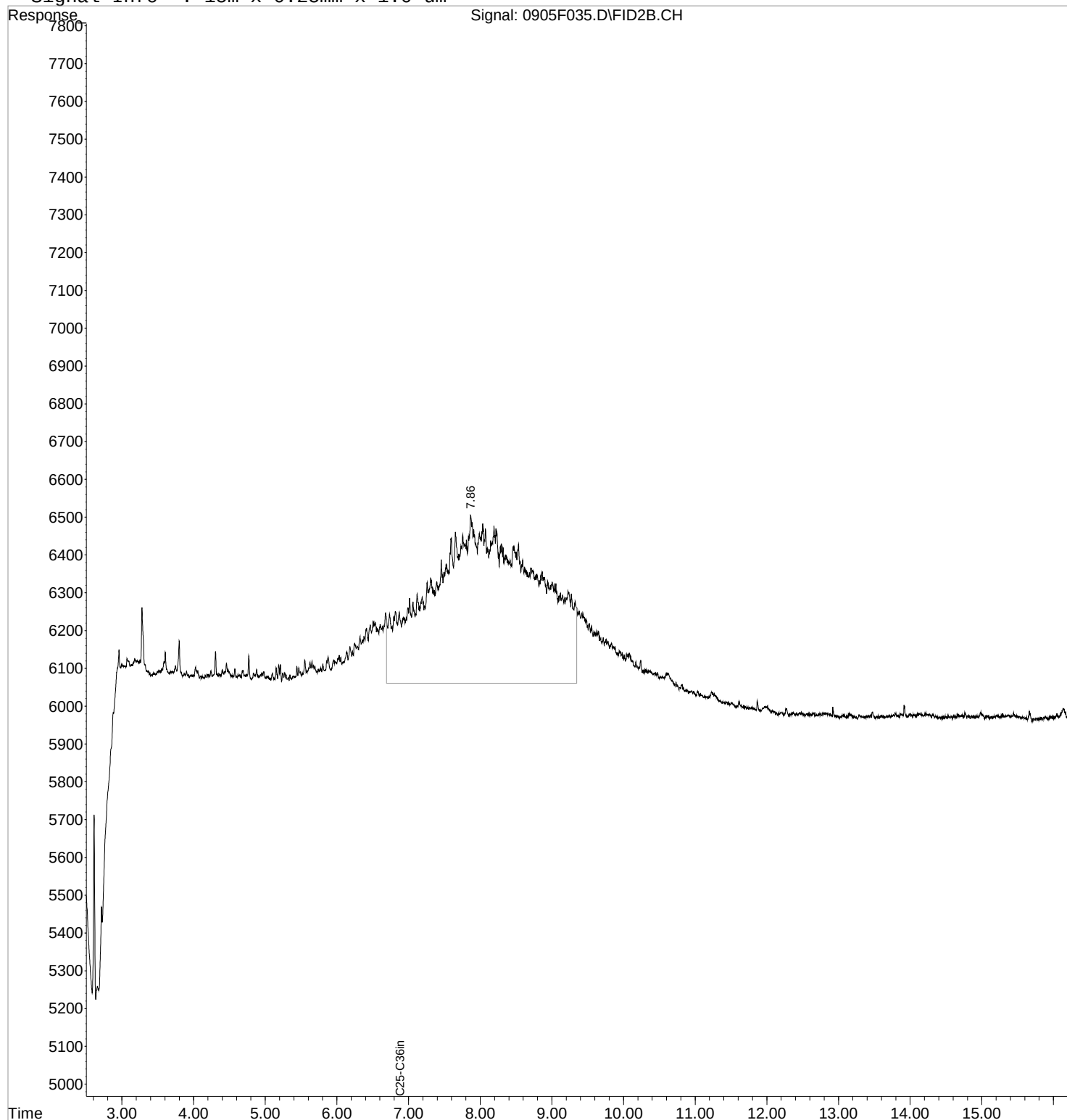
Response via : Single Level Calibration

DataAcq Meth : SVF2_F.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Data File : J:\GC35\DATA\090523\0905F035.D

Vial: 17

Acq On : 05 Sep 2023 8:59 pm

Operator: AA

Sample : AK103 SVF04-61D 50

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

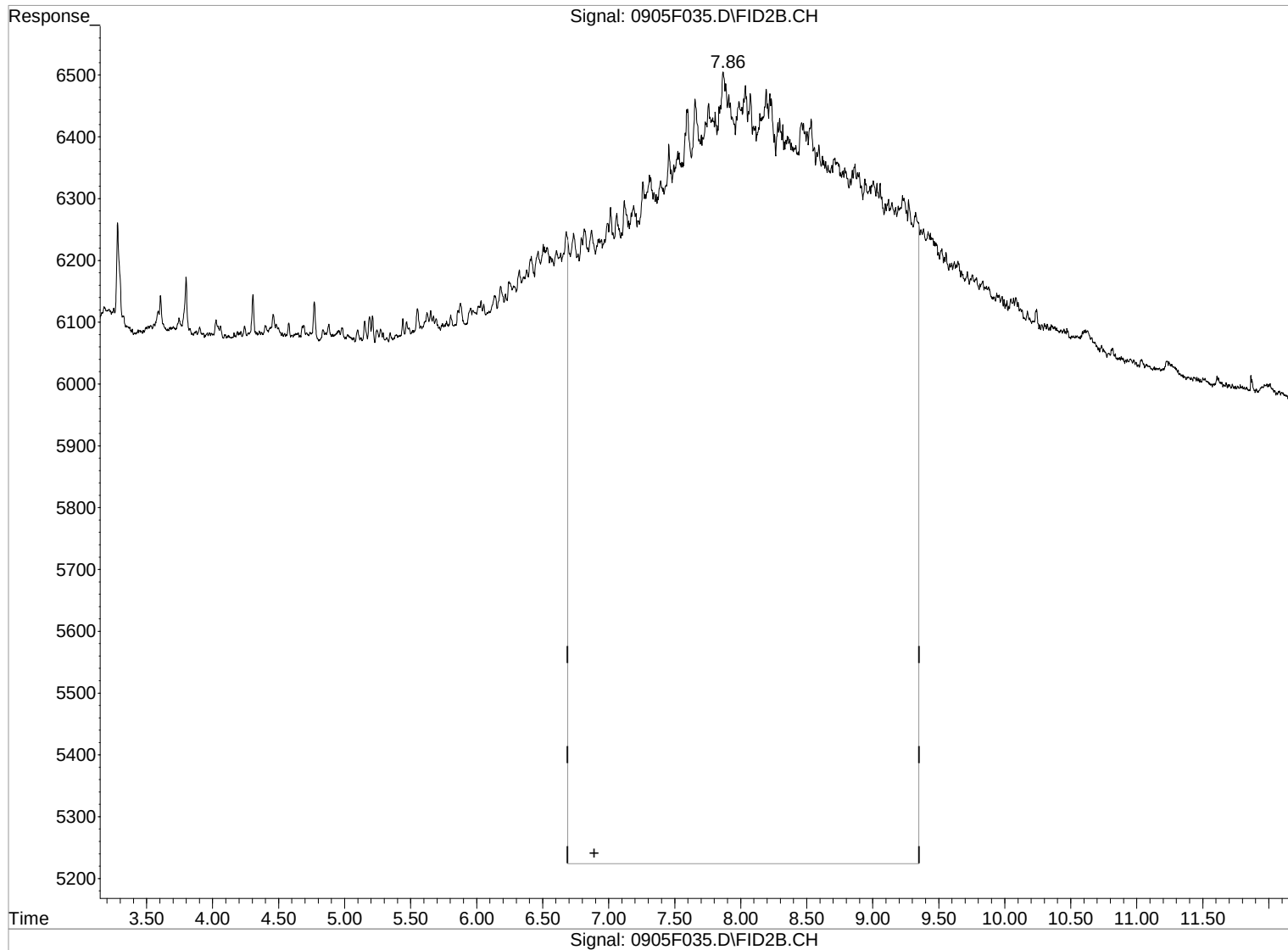
Quant Time: Sep 6 6:49 2023 Quant Results File: 090523FSVF.RES

Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Wed Sep 06 06:55:11 2023

Response via : Multiple Level Calibration



(11) C25-C36in RRO [AK103] (H)

Manual Integration:

6.89min 235.085ppm

Before

response 178386

09/06/23

(+) = Expected Retention Time

0905F035.D 090523FSVF.M Wed Sep 06 06:56:32 2023

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Data File : J:\GC35\DATA\090523\0905F035.D

Vial: 17

Acq On : 05 Sep 2023 8:59 pm

Operator: AA

Sample : AK103 SVF04-61D 50

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

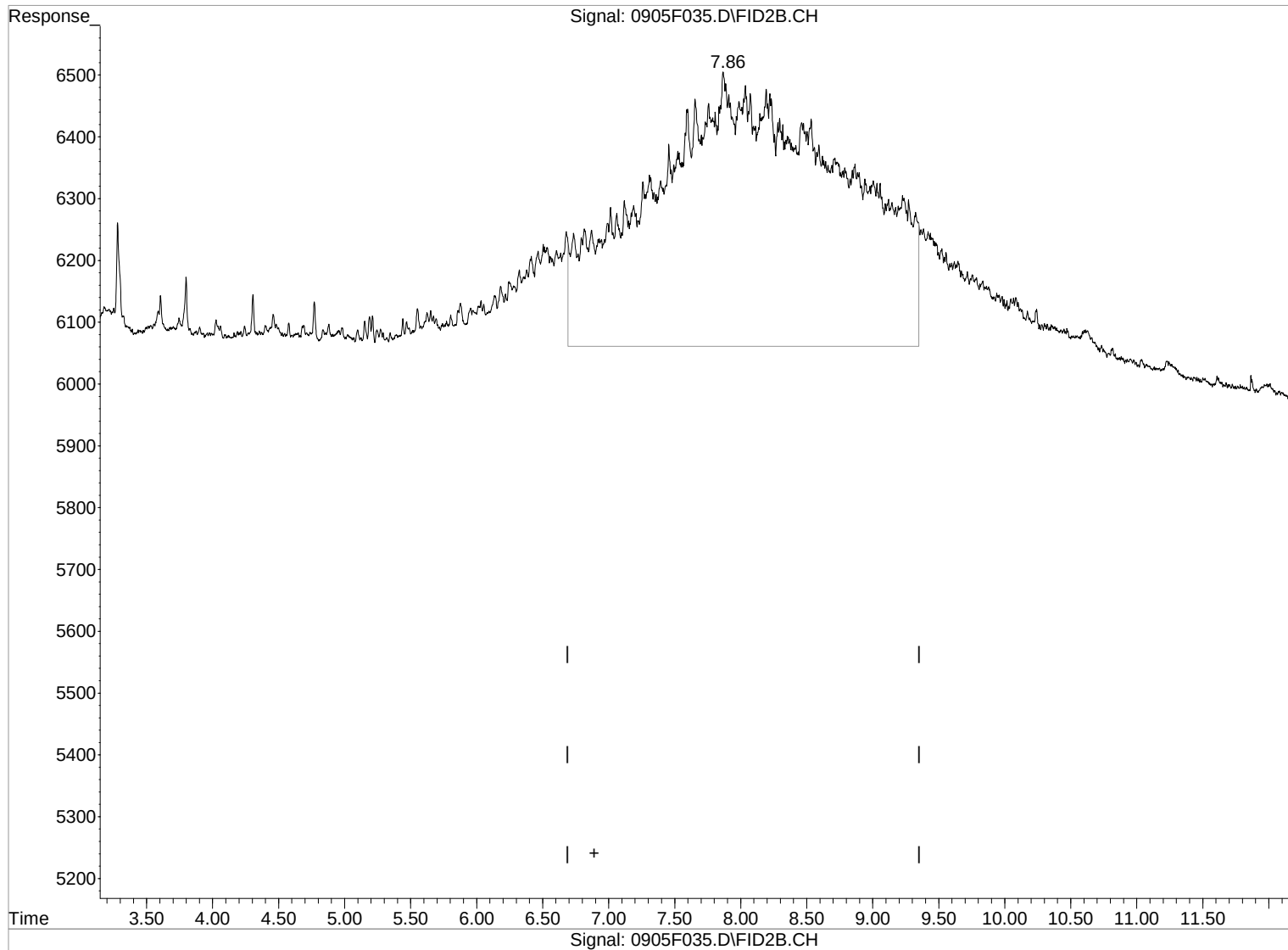
Quant Time: Sep 6 6:49 2023 Quant Results File: 090523FSVF.RES

Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Wed Sep 06 06:55:11 2023

Response via : Multiple Level Calibration



(11) C25-C36in RRO [AK103] (H)

Manual Integration:

6.89min 58.992ppm

After

response 44764

Baseline/Shoulder

09/06/23

(+) = Expected Retention Time

0905F035.D 090523FSVF.M Wed Sep 06 06:49 2023

370 of 3623

Data File : J:\GC35\DATA\090523\0905F036.D Vial: 18
Acq On : 05 Sep 2023 9:20 pm Operator: AA
Sample : AK103 SVF04-61C 200 Inst : GC35
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Sep 06 06:49:01 2023 Quant Results File: 090523FSVF.RES

Quant Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)
Title : AK102/103 SVF MJ257 CAL 16220
Last Update : Tue Sep 05 16:03:26 2023
Response via : Initial Calibration
DataAcq Meth : SVF2_F.M

Volume Inj. : 1 uL
Signal Phase : ZB-1
Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

Target Compounds

11) H C25-C36in RRO [AK103]	6.89	156127	205.751 ppm
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Data File : J:\GC35\DATA\090523\0905F036.D

Vial: 18

Acq On : 05 Sep 2023 9:20 pm

Operator: AA

Sample : AK103 SVF04-61C 200

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Sep 6 6:58 2023 Quant Results File: 090523FSVF.RES

Quant Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Tue Sep 05 16:03:26 2023

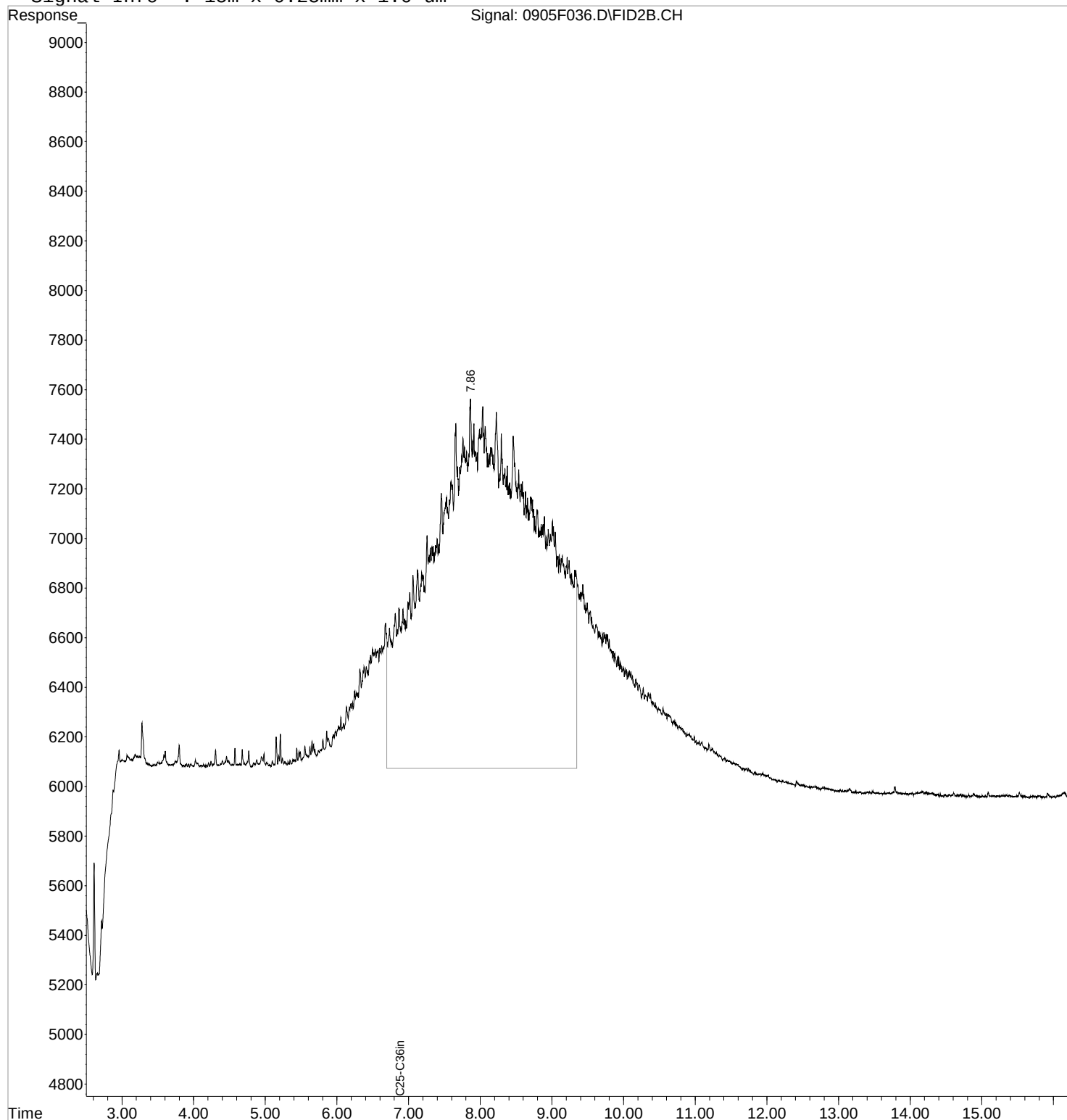
Response via : Single Level Calibration

DataAcq Meth : SVF2_F.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Data File : J:\GC35\DATA\090523\0905F036.D

Vial: 18

Acq On : 05 Sep 2023 9:20 pm

Operator: AA

Sample : AK103 SVF04-61C 200

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

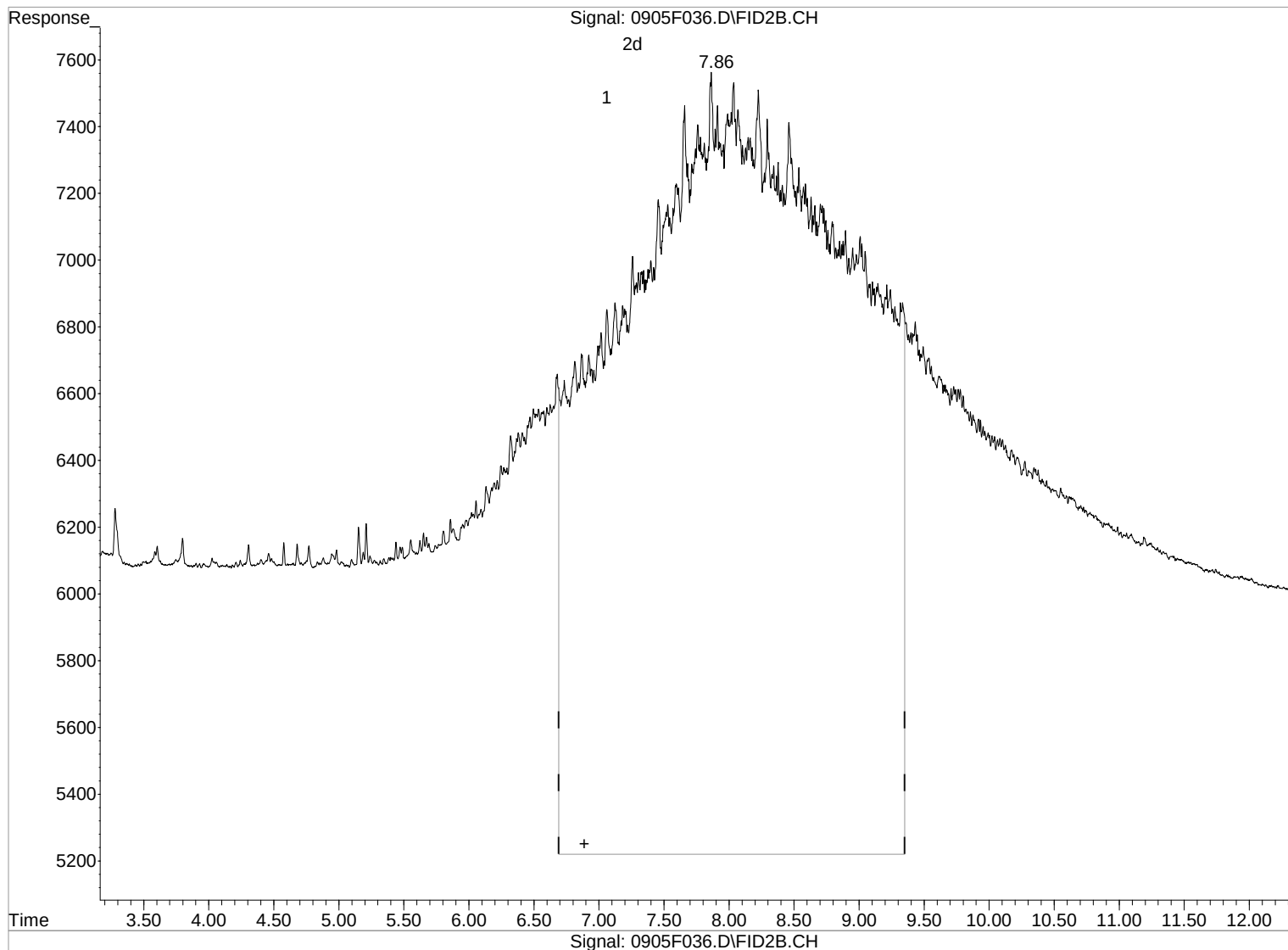
Quant Time: Sep 6 6:49 2023 Quant Results File: 090523FSVF.RES

Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Wed Sep 06 06:55:11 2023

Response via : Multiple Level Calibration



(11) C25-C36in RRO [AK103] (H)

Manual Integration:

6.89min 385.471ppm

Before

response 292501

09/06/23

(+) = Expected Retention Time

0905F036.D 090523FSVF.M

Wed Sep 06 06:58:10 2023

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Data File : J:\GC35\DATA\090523\0905F036.D

Vial: 18

Acq On : 05 Sep 2023 9:20 pm

Operator: AA

Sample : AK103 SVF04-61C 200

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

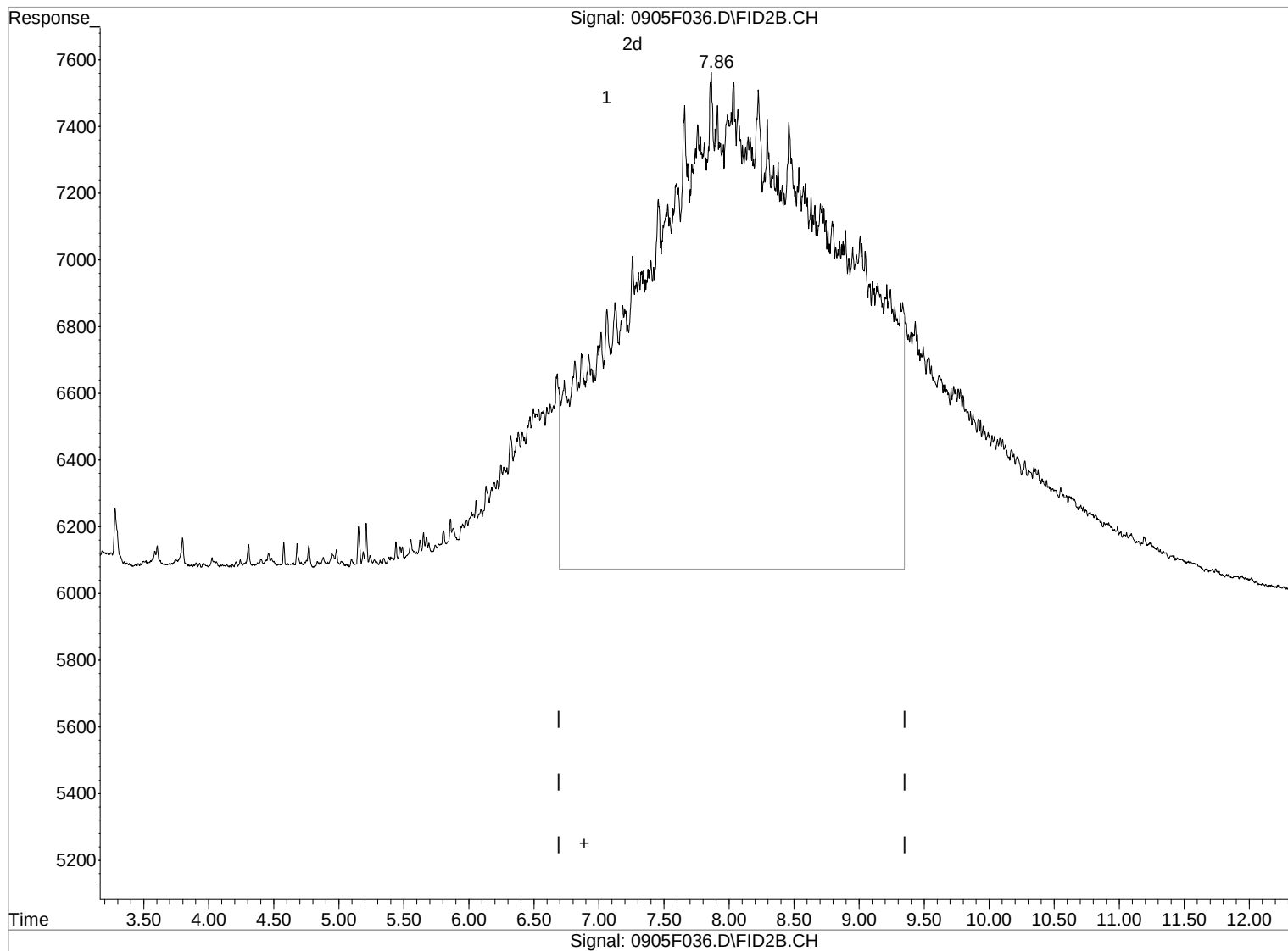
Quant Time: Sep 6 6:49 2023 Quant Results File: 090523FSVF.RES

Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Wed Sep 06 06:55:11 2023

Response via : Multiple Level Calibration



(11) C25-C36in RRO [AK103] (H)

Manual Integration:

6.89min 205.751ppm

After

response 156127

Baseline/Shoulder

09/06/23

(+) = Expected Retention Time

0905F036.D 090523FSVF.M Wed Sep 06 06:58:20 2023

374 of 3623

Data File : J:\GC35\DATA\090523\0905F037.D Vial: 19
Acq On : 05 Sep 2023 9:41 pm Operator: AA
Sample : AK103 SVF04-61B 500 Inst : GC35
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Sep 06 06:49:03 2023 Quant Results File: 090523FSVF.RES

Quant Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)
Title : AK102/103 SVF MJ257 CAL 16220
Last Update : Tue Sep 05 16:03:26 2023
Response via : Initial Calibration
DataAcq Meth : SVF2_F.M

Volume Inj. : 1 uL
Signal Phase : ZB-1
Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

Target Compounds

11) H C25-C36in RRO [AK103]	6.89	380985	502.080 ppm
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Data File : J:\GC35\DATA\090523\0905F037.D

Vial: 19

Acq On : 05 Sep 2023 9:41 pm

Operator: AA

Sample : AK103 SVF04-61B 500

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Sep 6 6:59 2023 Quant Results File: 090523FSVF.RES

Quant Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Tue Sep 05 16:03:26 2023

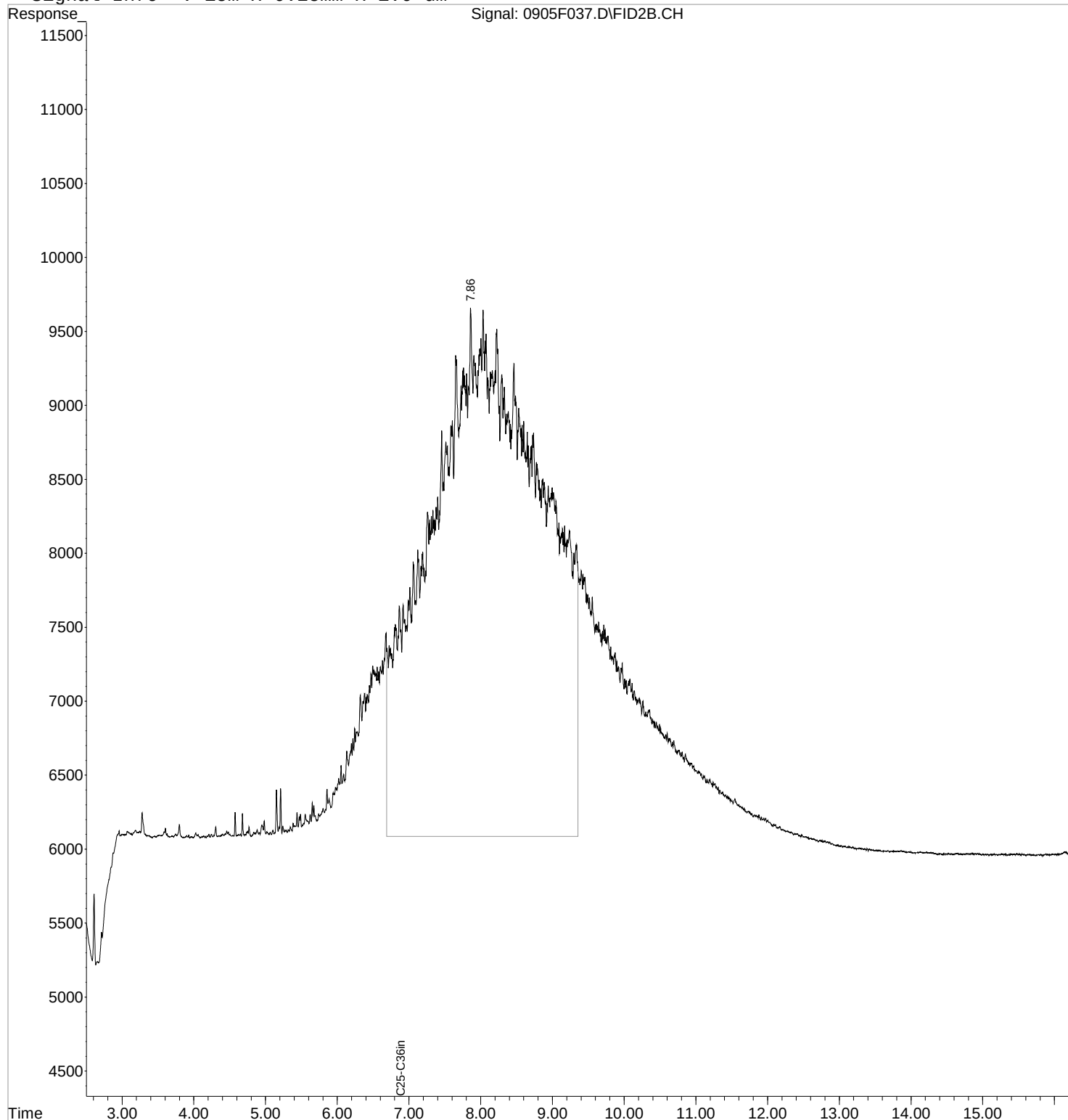
Response via : Single Level Calibration

DataAcq Meth : SVF2_F.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Data File : J:\GC35\DATA\090523\0905F037.D

Vial: 19

Acq On : 05 Sep 2023 9:41 pm

Operator: AA

Sample : AK103 SVF04-61B 500

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

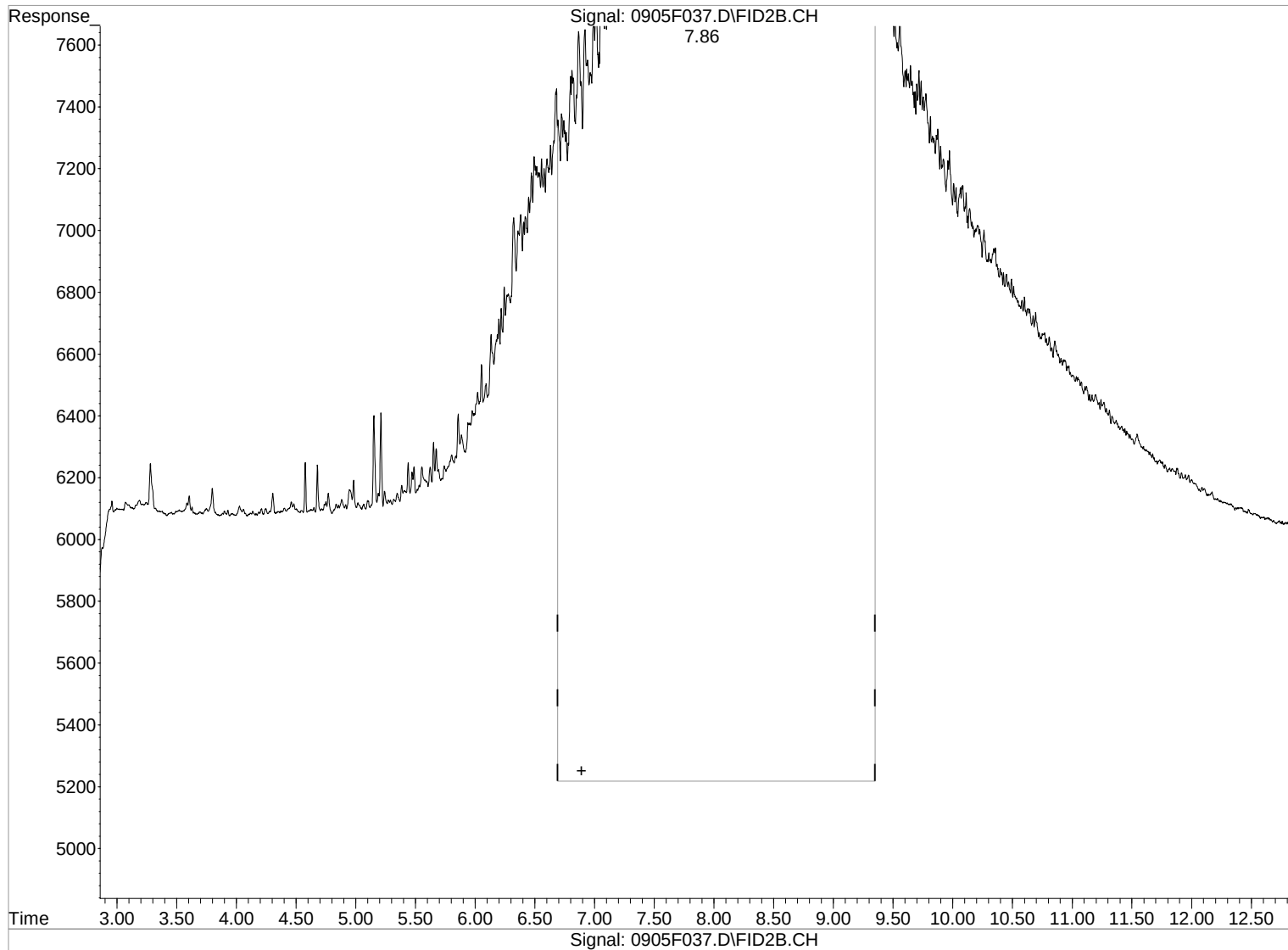
Quant Time: Sep 6 6:49 2023 Quant Results File: 090523FSVF.RES

Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Wed Sep 06 06:58:45 2023

Response via : Multiple Level Calibration



(11) C25-C36in RRO [AK103] (H)

Manual Integration:

6.89min 683.519ppm

Before

response 518664

09/06/23

(+) = Expected Retention Time

0905F037.D 090523FSVF.M Wed Sep 06 06:59:09 2023

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Data File : J:\GC35\DATA\090523\0905F037.D

Vial: 19

Acq On : 05 Sep 2023 9:41 pm

Operator: AA

Sample : AK103 SVF04-61B 500

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

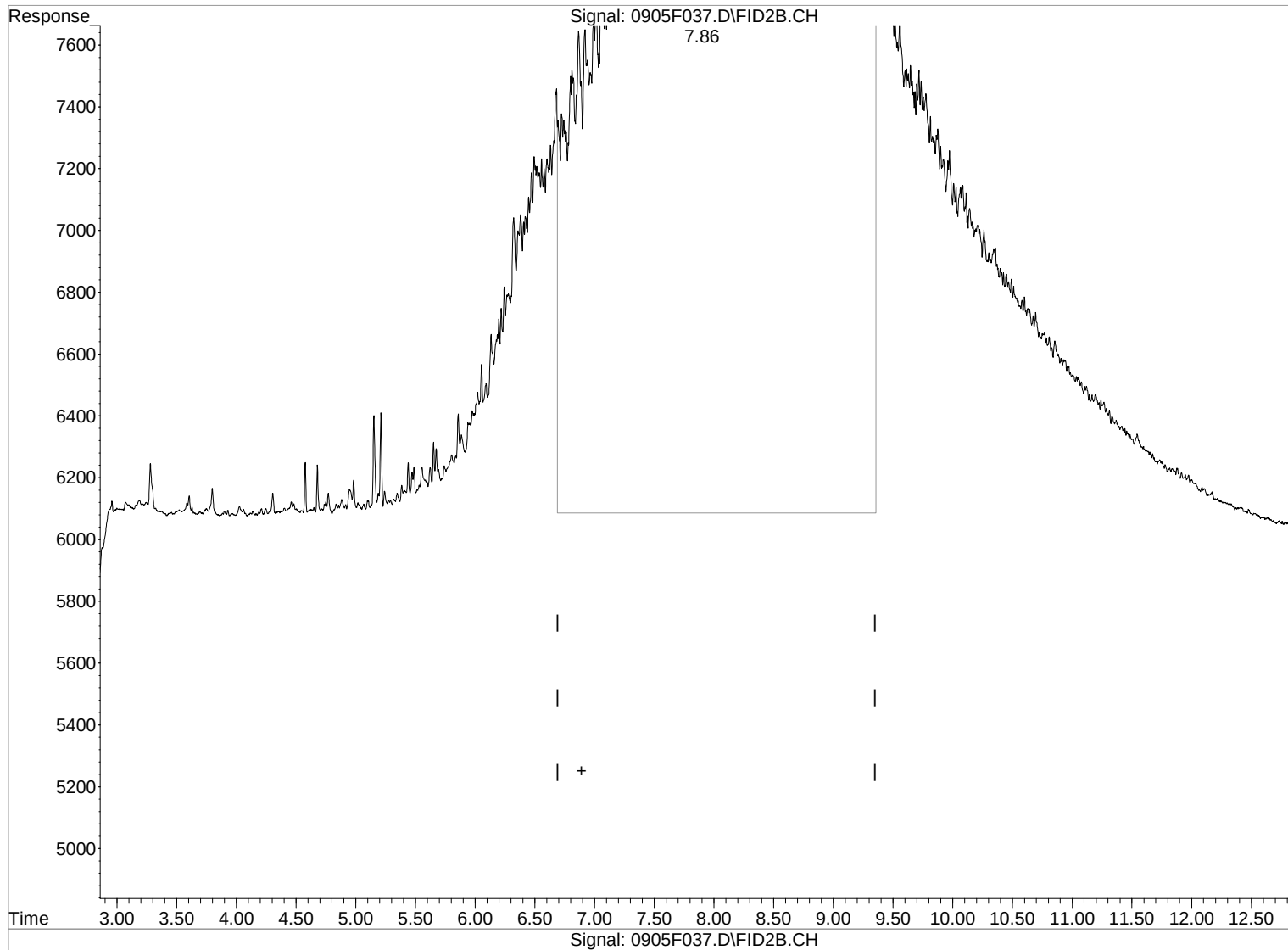
Quant Time: Sep 6 6:49 2023 Quant Results File: 090523FSVF.RES

Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Wed Sep 06 06:58:45 2023

Response via : Multiple Level Calibration



(11) C25-C36in RRO [AK103] (H)

Manual Integration:

6.89min 502.080ppm

After

response 380985

Baseline/Shoulder

09/06/23

(+) = Expected Retention Time

0905F037.D 090523FSVF.M Wed Sep 06 06:59:16 2023

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Data File : J:\GC35\DATA\090523\0905F038.D Vial: 20
Acq On : 05 Sep 2023 10:03 pm Operator: AA
Sample : AK103 SVF04-61A 2000 Inst : GC35
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Sep 06 06:49:05 2023 Quant Results File: 090523FSVF.RES

Quant Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)
Title : AK102/103 SVF MJ257 CAL 16220
Last Update : Tue Sep 05 16:03:26 2023
Response via : Initial Calibration
DataAcq Meth : SVF2_F.M

Volume Inj. : 1 uL
Signal Phase : ZB-1
Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

Target Compounds

11) H C25-C36in RRO [AK103]	6.89	1405286	1851.950 ppm
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Data File : J:\GC35\DATA\090523\0905F038.D

Vial: 20

Acq On : 05 Sep 2023 10:03 pm

Operator: AA

Sample : AK103 SVF04-61A 2000

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Sep 6 7:00 2023 Quant Results File: 090523FSVF.RES

Quant Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Tue Sep 05 16:03:26 2023

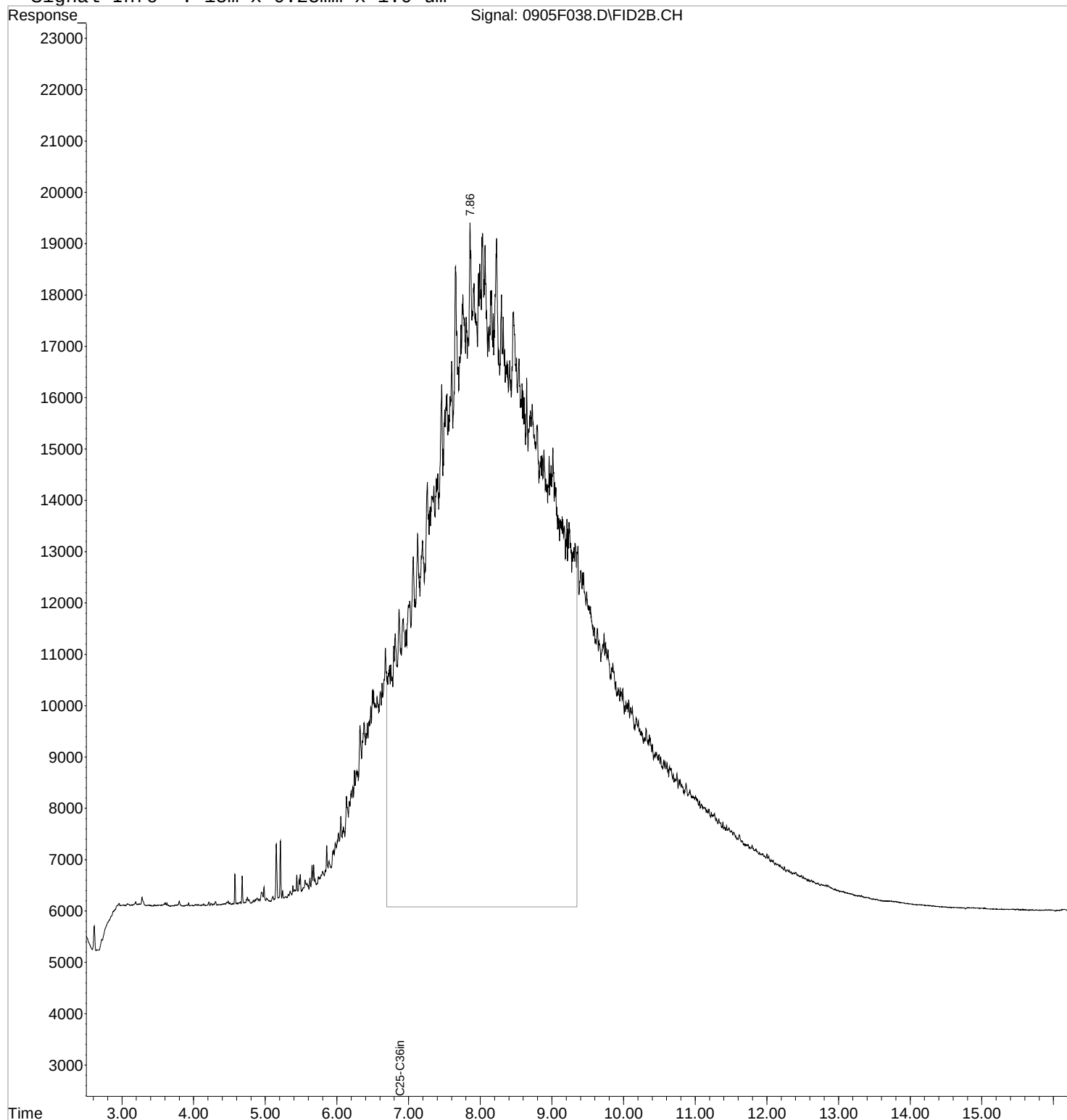
Response via : Single Level Calibration

DataAcq Meth : SVF2_F.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Data File : J:\GC35\DATA\090523\0905F038.D

Vial: 20

Acq On : 05 Sep 2023 10:03 pm

Operator: AA

Sample : AK103 SVF04-61A 2000

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

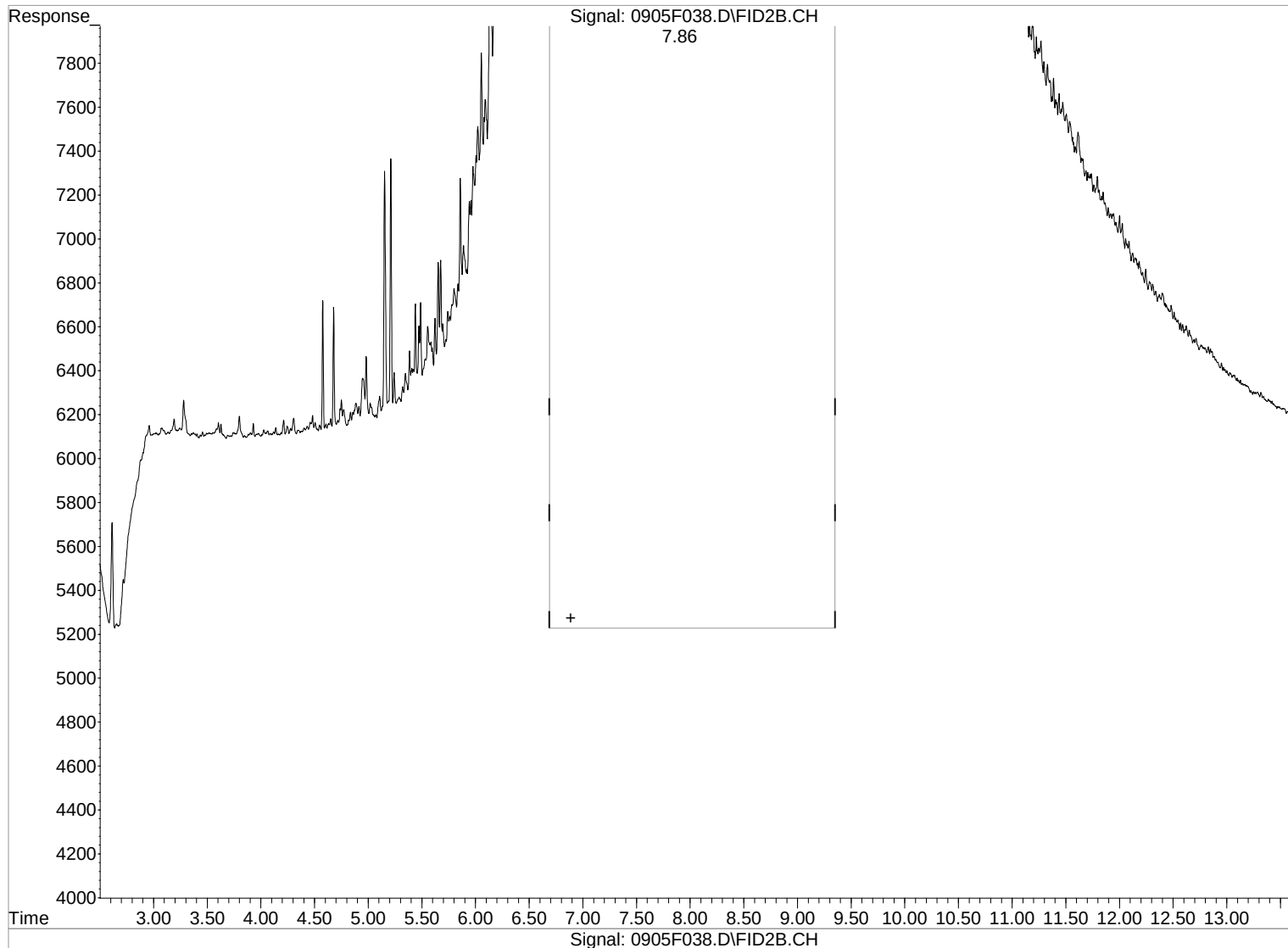
Quant Time: Sep 6 6:49 2023 Quant Results File: 090523FSVF.RES

Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Wed Sep 06 06:59:24 2023

Response via : Multiple Level Calibration



(11) C25-C36in RRO [AK103] (H)

Manual Integration:

6.89min 2033.917ppm

Before

response 1543365

09/06/23

(+) = Expected Retention Time

0905F038.D 090523FSVF.M Wed Sep 06 06:59:50 2023

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Data File : J:\GC35\DATA\090523\0905F038.D

Vial: 20

Acq On : 05 Sep 2023 10:03 pm

Operator: AA

Sample : AK103 SVF04-61A 2000

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

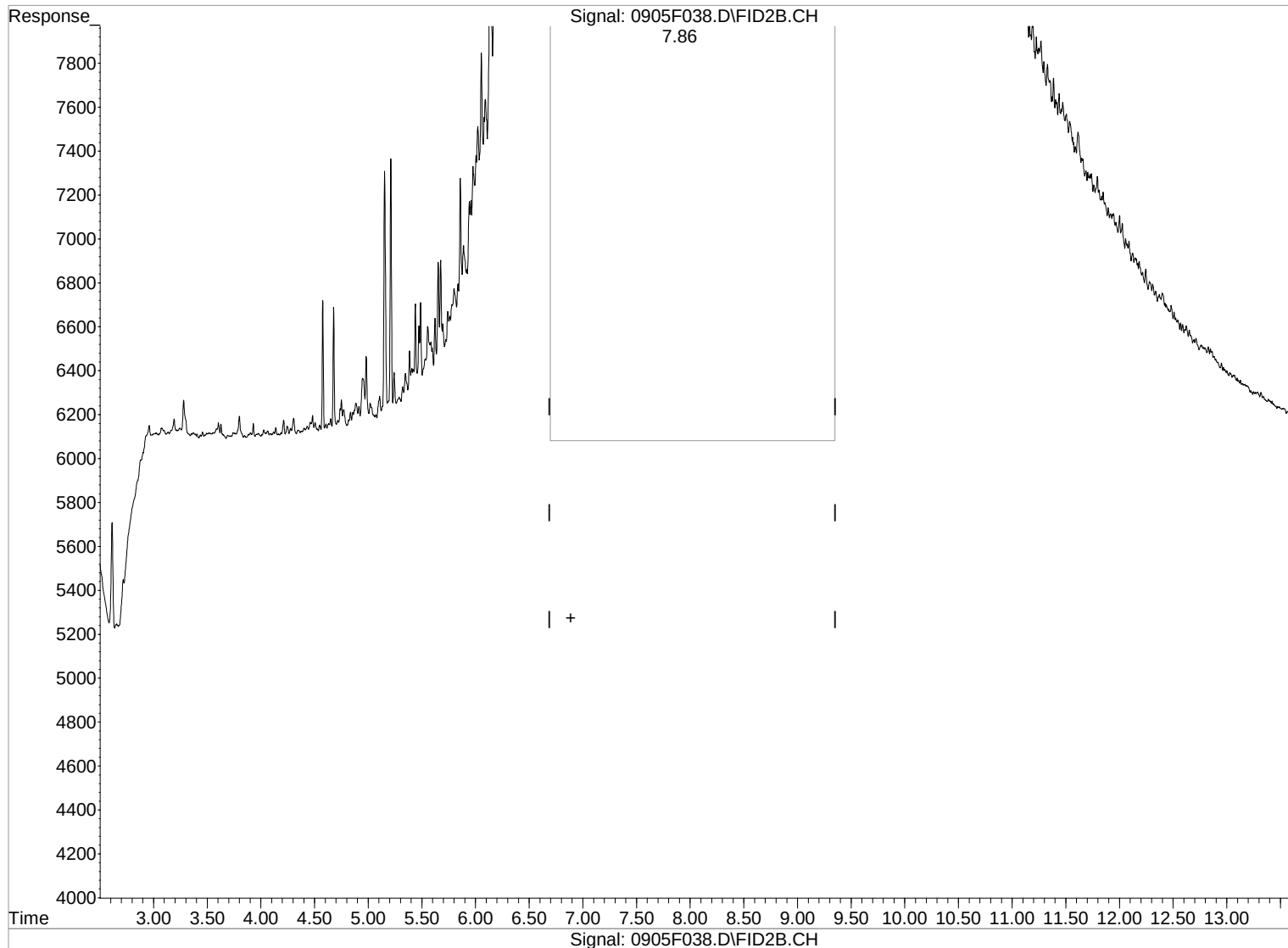
Quant Time: Sep 6 6:49 2023 Quant Results File: 090523FSVF.RES

Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Wed Sep 06 06:59:24 2023

Response via : Multiple Level Calibration



(11) C25-C36in RRO [AK103] (H)

Manual Integration:

6.89min 1851.950ppm

After

response 1405286

Baseline/Shoulder

09/06/23

(+) = Expected Retention Time

0905F038.D 090523FSVF.M Wed Sep 06 07:00:09 2023

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Data File : J:\GC35\DATA\090523\0905F039.D Vial: 21
Acq On : 05 Sep 2023 10:25 pm Operator: AA
Sample : AK103 SVF04-60M 5000 Inst : GC35
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Sep 06 06:49:07 2023 Quant Results File: 090523FSVF.RES

Quant Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)
Title : AK102/103 SVF MJ257 CAL 16220
Last Update : Tue Sep 05 16:03:26 2023
Response via : Initial Calibration
DataAcq Meth : SVF2_F.M

Volume Inj. : 1 uL
Signal Phase : ZB-1
Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

Target Compounds

11) H C25-C36in RRO [AK103]	6.89	3462843	4563.493 ppm
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Data File : J:\GC35\DATA\090523\0905F039.D

Vial: 21

Acq On : 05 Sep 2023 10:25 pm

Operator: AA

Sample : AK103 SVF04-60M 5000

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Sep 6 7:02 2023 Quant Results File: 090523FSVF.RES

Quant Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Tue Sep 05 16:03:26 2023

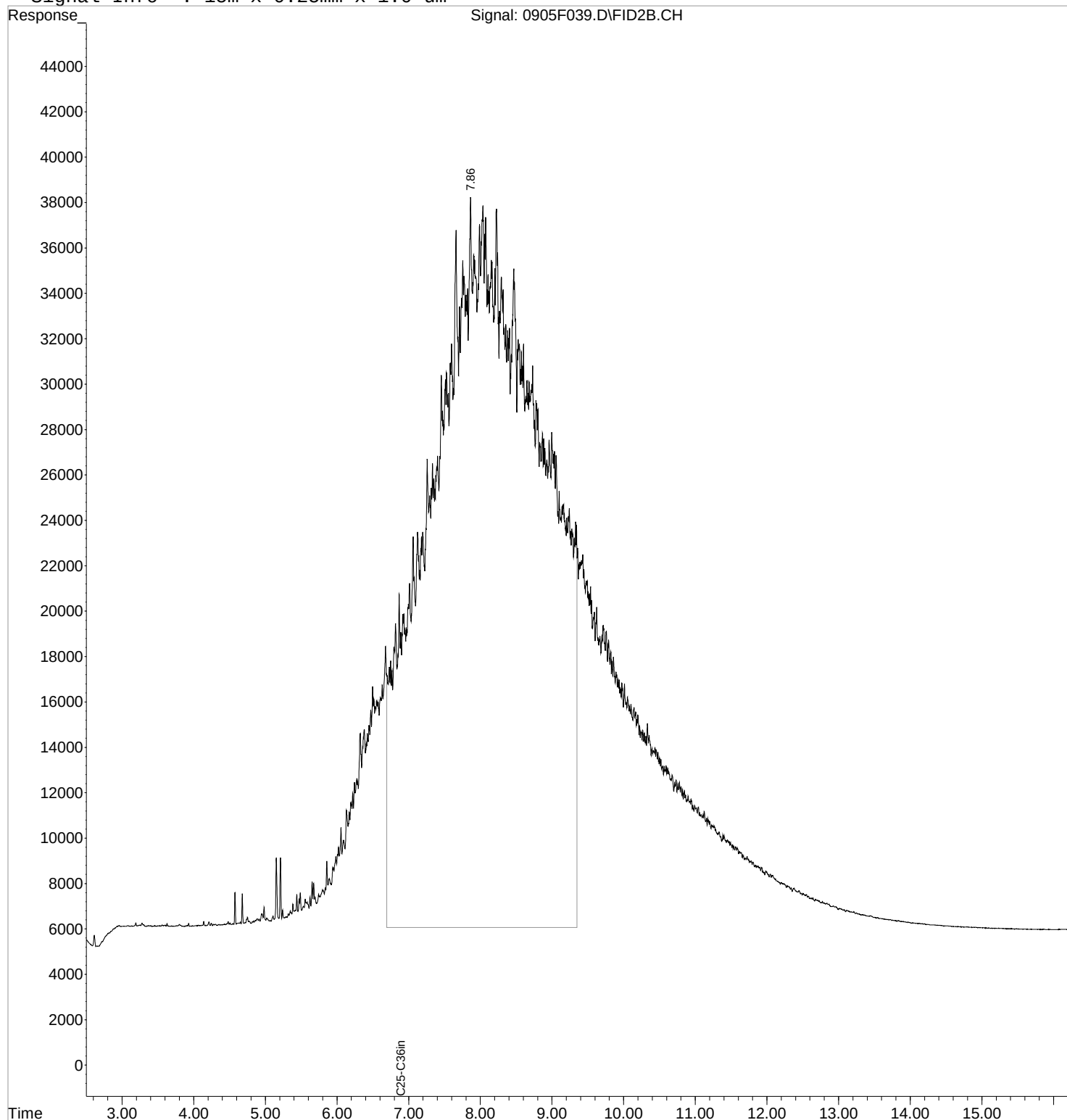
Response via : Single Level Calibration

DataAcq Meth : SVF2_F.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Data File : J:\GC35\DATA\090523\0905F039.D

Vial: 21

Acq On : 05 Sep 2023 10:25 pm

Operator: AA

Sample : AK103 SVF04-60M 5000

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

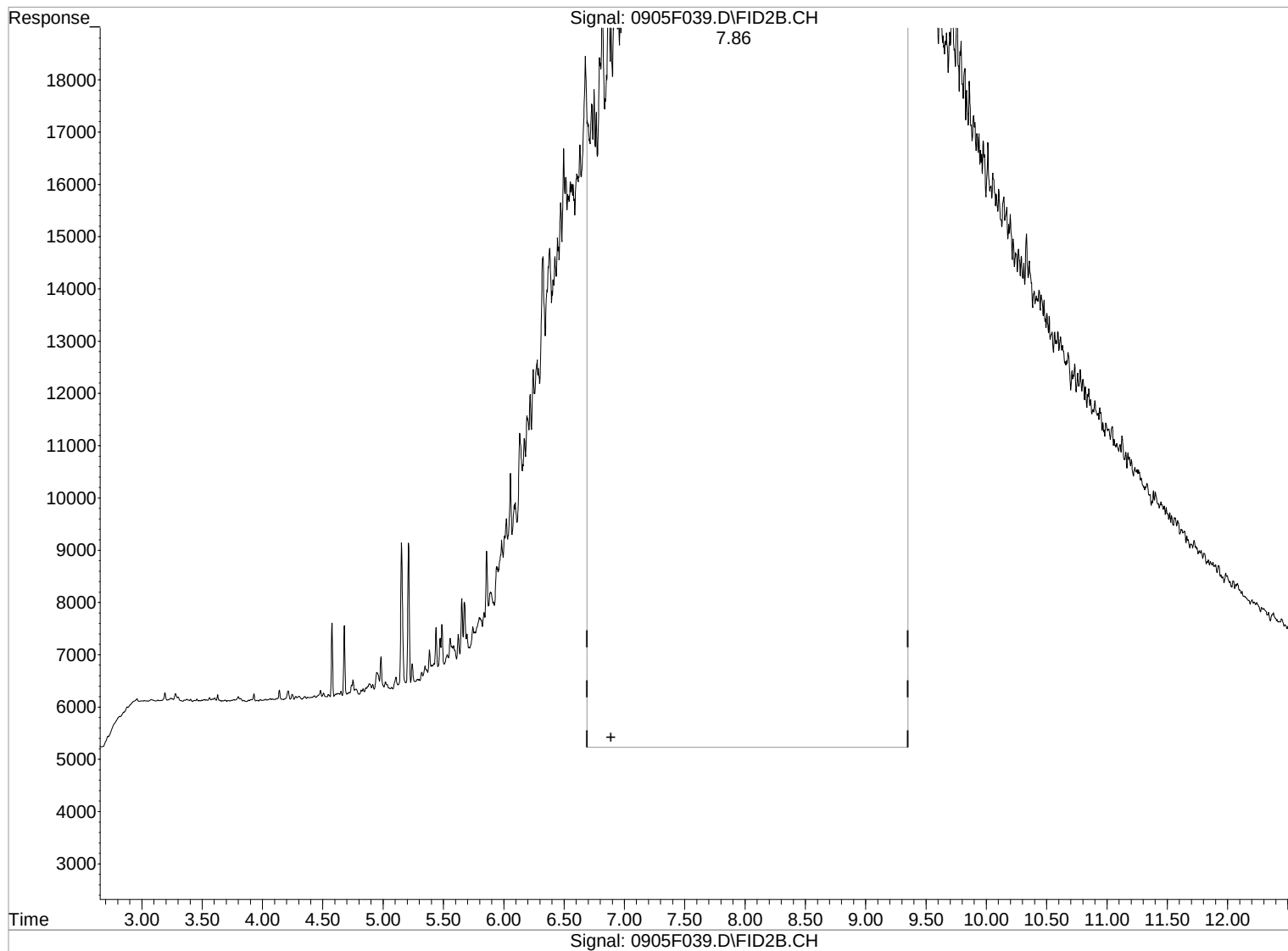
Quant Time: Sep 6 6:49 2023 Quant Results File: 090523FSVF.RES

Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Wed Sep 06 07:01:32 2023

Response via : Multiple Level Calibration



(11) C25-C36in RRO [AK103] (H)

Manual Integration:

6.89min 4743.928ppm

Before

response 3599759

09/06/23

(+) = Expected Retention Time

0905F039.D 090523FSVF.M Wed Sep 06 07:02:03 2023

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Data File : J:\GC35\DATA\090523\0905F039.D

Vial: 21

Acq On : 05 Sep 2023 10:25 pm

Operator: AA

Sample : AK103 SVF04-60M 5000

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

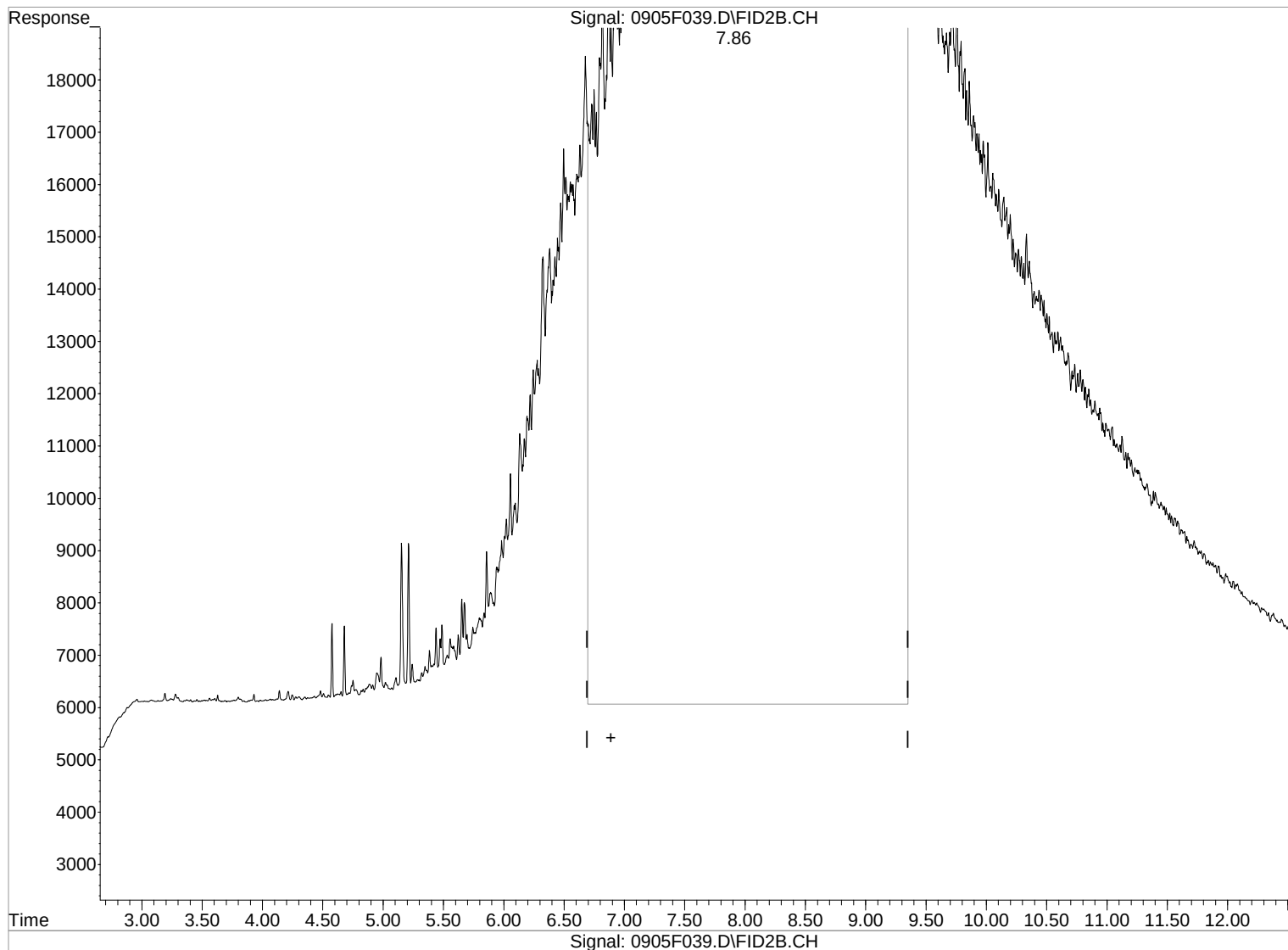
Quant Time: Sep 6 6:49 2023 Quant Results File: 090523FSVF.RES

Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Wed Sep 06 07:01:32 2023

Response via : Multiple Level Calibration



(11) C25-C36in RRO [AK103] (H)

Manual Integration:

6.89min 4563.493ppm

After

response 3462843

Baseline/Shoulder

09/06/23

(+) = Expected Retention Time

0905F039.D 090523FSVF.M Wed Sep 06 07:02:15 2023

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Data File : J:\GC35\DATA\090523\0905F041.D Vial: 1
Acq On : 05 Sep 2023 11:08 pm Operator: AA
Sample : IB Inst : GC35
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Sep 07 13:04:26 2023 Quant Results File: 090523FSVF.RES

Quant Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)
Title : AK102/103 SVF MJ257 CAL 16220
Last Update : Thu Sep 07 07:40:53 2023
Response via : Initial Calibration
DataAcq Meth : SVF2_F.M

Volume Inj. : 1 uL
Signal Phase : ZB-1
Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
----------	------	----------	------------

System Monitoring Compounds

Target Compounds

6) H	C10-C25ex DRO [AK102]	3.30	180798	143.186 ppm
7) H	C10-C28in DRO [8015]	3.40	219224	164.849 ppm
8) H	C12-C25ex DRO [NWTPH]	3.93	147723	140.220 ppm
10) H	C25-C36in RRO [NWTPH]	6.79	120416	146.322 ppm
11) H	C25-C36in RRO [AK103]	6.89	19190	25.032 ppm

Data File : J:\GC35\DATA\090523\0905F041.D

Vial: 1

Acq On : 05 Sep 2023 11:08 pm

Operator: AA

Sample : IB

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Sep 7 13:05 2023 Quant Results File: 090523FSVF.RES

Quant Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Thu Sep 07 07:40:53 2023

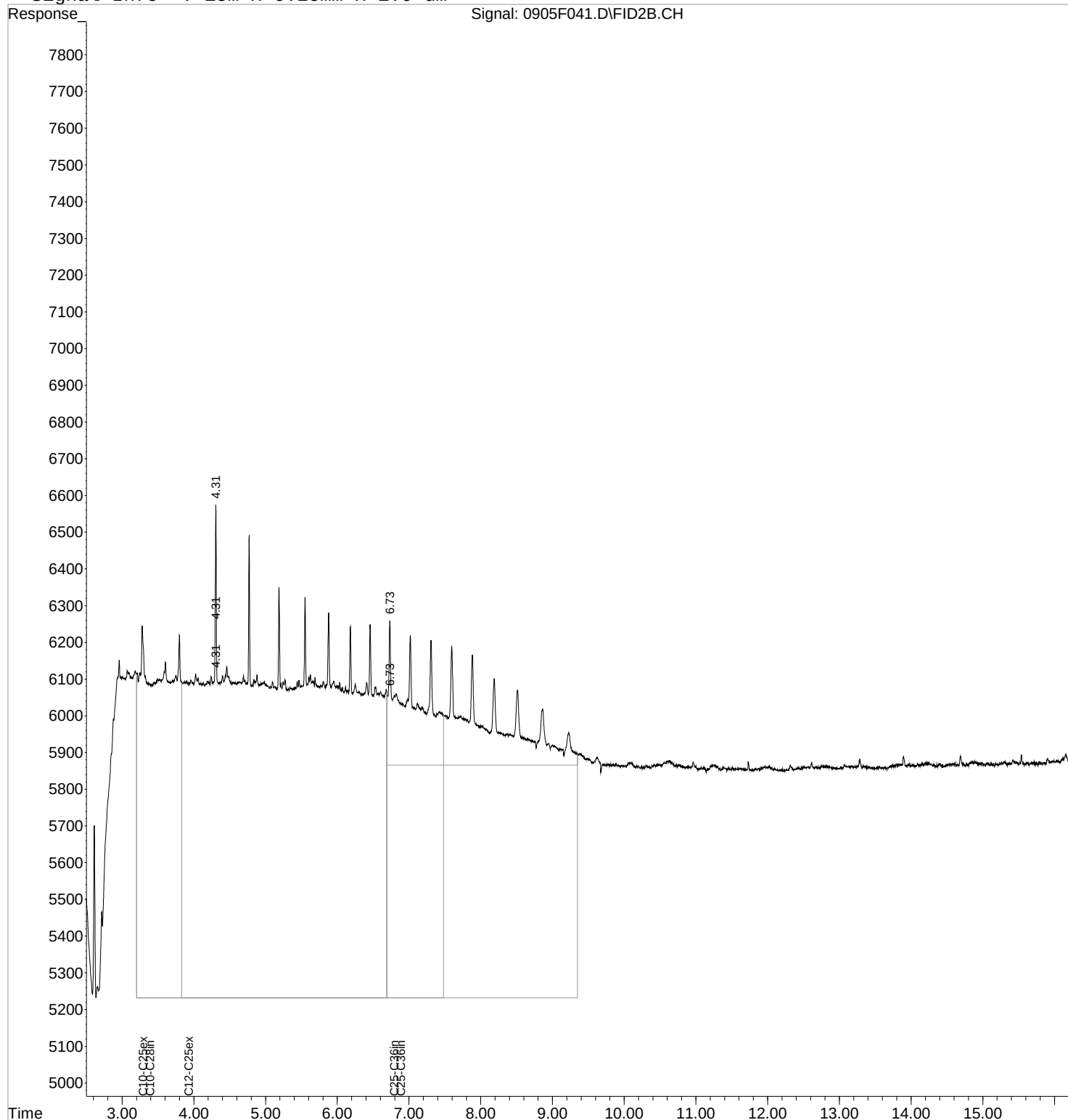
Response via : Single Level Calibration

DataAcq Meth : SVF2_F.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Data File : J:\GC35\DATA\090523\0905F041.D

Acq On : 05 Sep 2023 11:08 pm

Sample : IB

Misc :

IntFile : rteint.p

Quant Time: Sep 7 13:04 2023 Quant Results File: 090523FSVF.RES

Vial: 1

Operator: AA

Inst : GC35

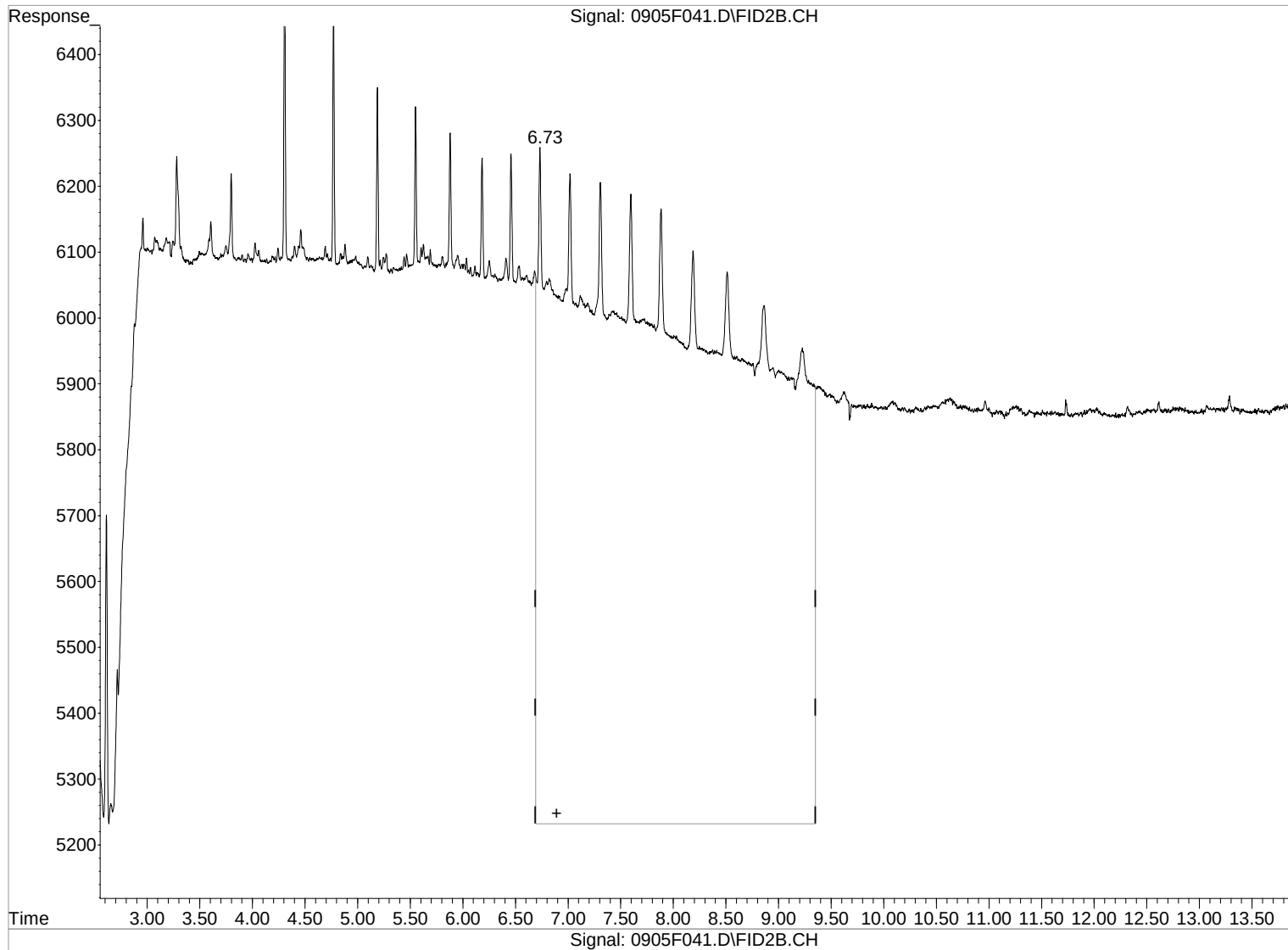
Multiplr: 1.00

Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Thu Sep 07 07:40:53 2023

Response via : Multiple Level Calibration



(11) C25-C36in RRO [AK103] (H)

Manual Integration:

6.89min 157.074ppm

Before

response 120416

09/07/23

(+) = Expected Retention Time

0905F041.D 090523FSVF.M

Thu Sep 07 13:05:19 2023

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Data File : J:\GC35\DATA\090523\0905F041.D

Acq On : 05 Sep 2023 11:08 pm

Sample : IB

Misc :

IntFile : rteint.p

Quant Time: Sep 7 13:04 2023 Quant Results File: 090523FSVF.RES

Vial: 1

Operator: AA

Inst : GC35

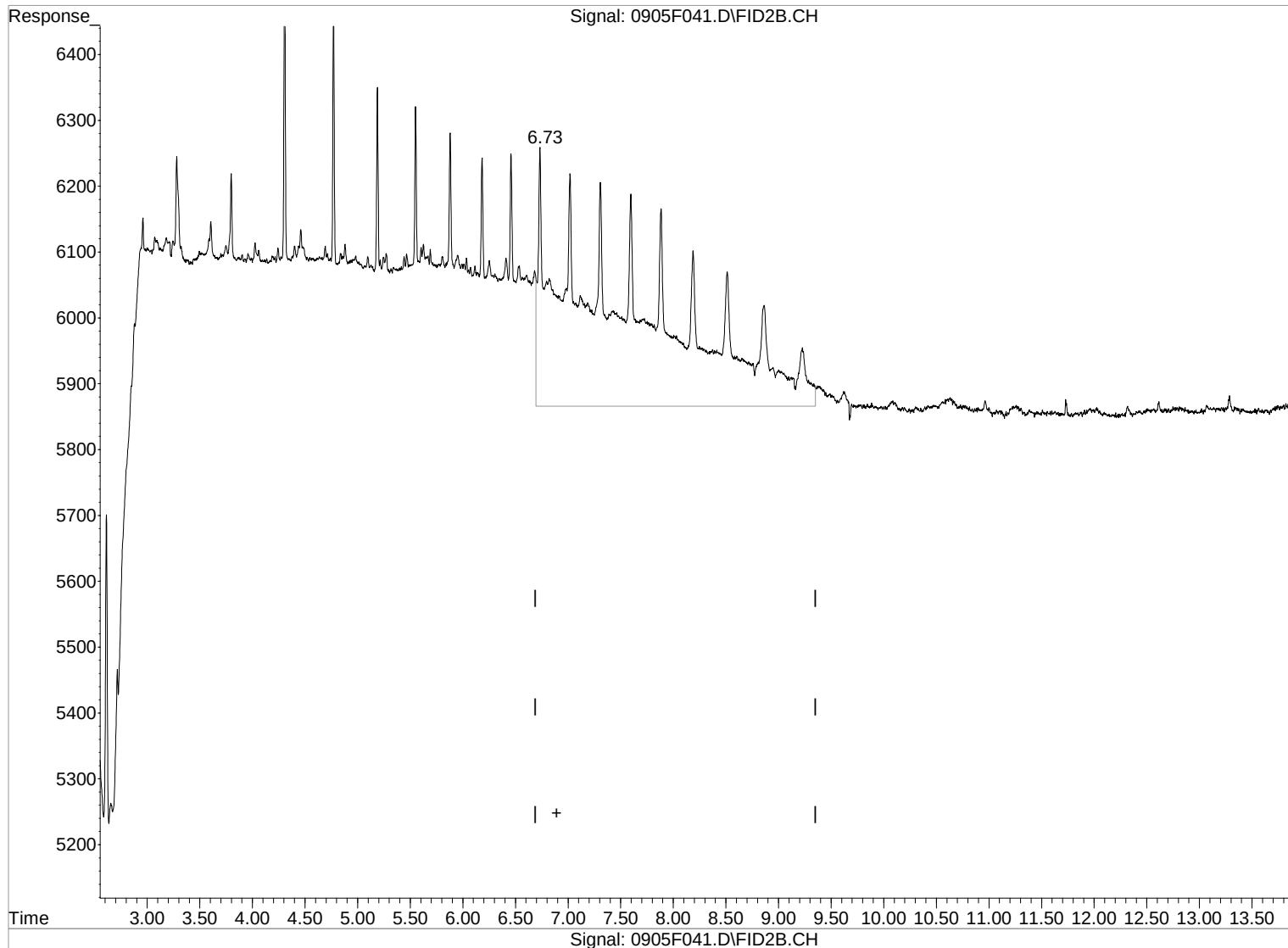
Multiplr: 1.00

Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Thu Sep 07 07:40:53 2023

Response via : Multiple Level Calibration



(11) C25-C36in RRO [AK103] (H)

6.89min 25.032ppm

response 19190

Manual Integration:

After

Baseline/Shoulder

09/07/23

(+) = Expected Retention Time

0905F041.D 090523FSVF.M

Thu Sep 07 13:05:27 2023

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Data File : J:\GC35\DATA\090523\0905F042.D Vial: 22
Acq On : 05 Sep 2023 11:30 pm Operator: AA
Sample : AK103 SVF04-61E ICV@1000 Inst : GC35
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Sep 06 07:02:45 2023 Quant Results File: 090523FSVF.RES

Quant Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)
Title : AK102/103 SVF MJ257 CAL 16220
Last Update : Wed Sep 06 07:02:25 2023
Response via : Initial Calibration
DataAcq Meth : SVF2_F.M

Volume Inj. : 1 uL
Signal Phase : ZB-1
Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

Target Compounds

11) H C25-C36in RRO [AK103]	6.89	662755	864.516 ppm
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Data File : J:\GC35\DATA\090523\0905F042.D

Vial: 22

Acq On : 05 Sep 2023 11:30 pm

Operator: AA

Sample : AK103 SVF04-61E ICV@1000

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Sep 6 7:03 2023 Quant Results File: 090523FSVF.RES

Quant Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Wed Sep 06 07:02:25 2023

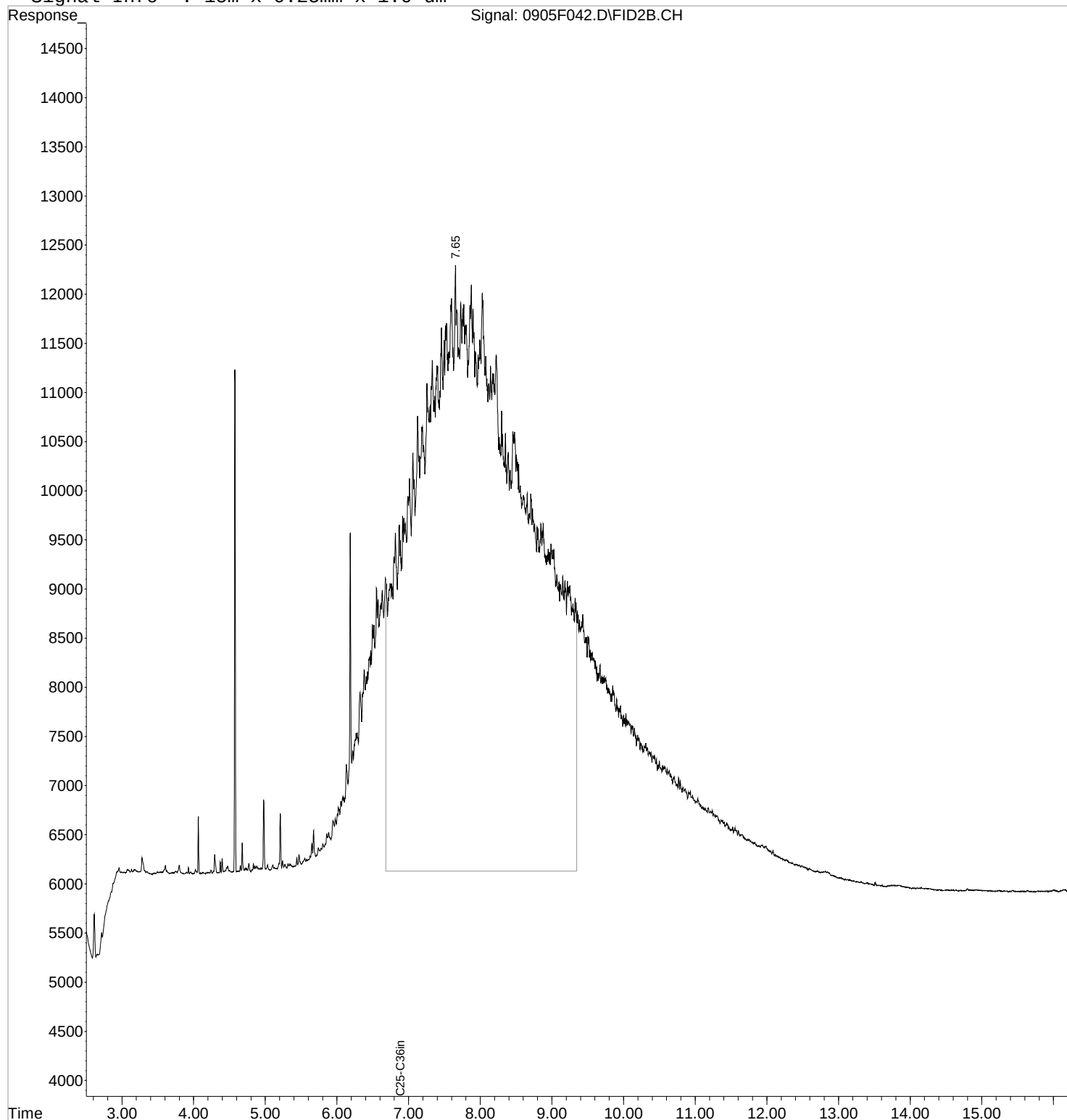
Response via : Single Level Calibration

DataAcq Meth : SVF2_F.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Data File : J:\GC35\DATA\090523\0905F042.D

Vial: 22

Acq On : 05 Sep 2023 11:30 pm

Operator: AA

Sample : AK103 SVF04-61E ICV@1000

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

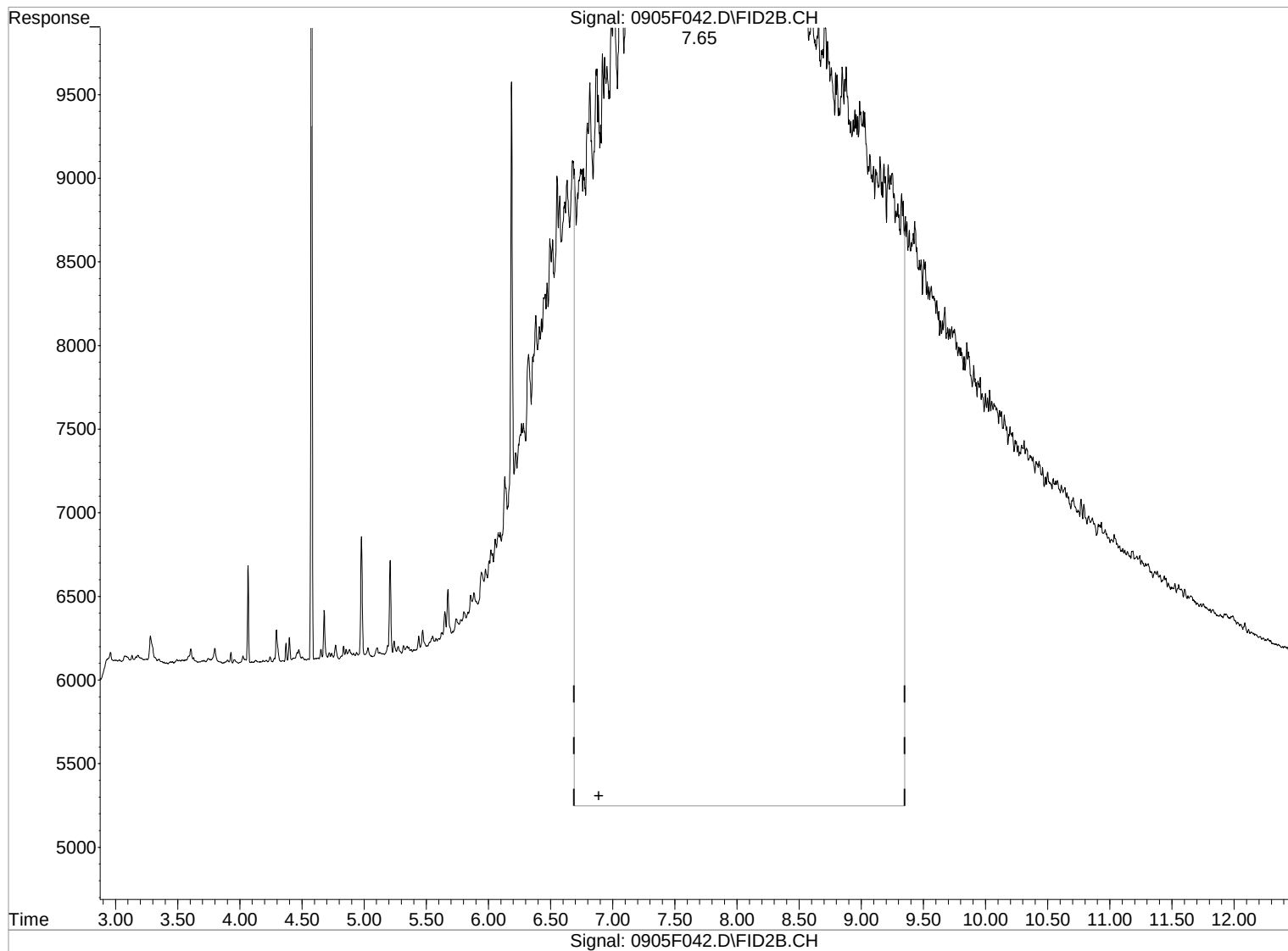
Quant Time: Sep 6 7:02 2023 Quant Results File: 090523FSVF.RES

Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Wed Sep 06 07:02:25 2023

Response via : Multiple Level Calibration



(11) C25-C36in RRO [AK103] (H)

Manual Integration:

6.89min 1047.076ppm

Before

response 802709

09/06/23

(+) = Expected Retention Time

0905F042.D 090523FSVF.M Wed Sep 06 07:03:16 2023

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Data File : J:\GC35\DATA\090523\0905F042.D

Vial: 22

Acq On : 05 Sep 2023 11:30 pm

Operator: AA

Sample : AK103 SVF04-61E ICV@1000

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

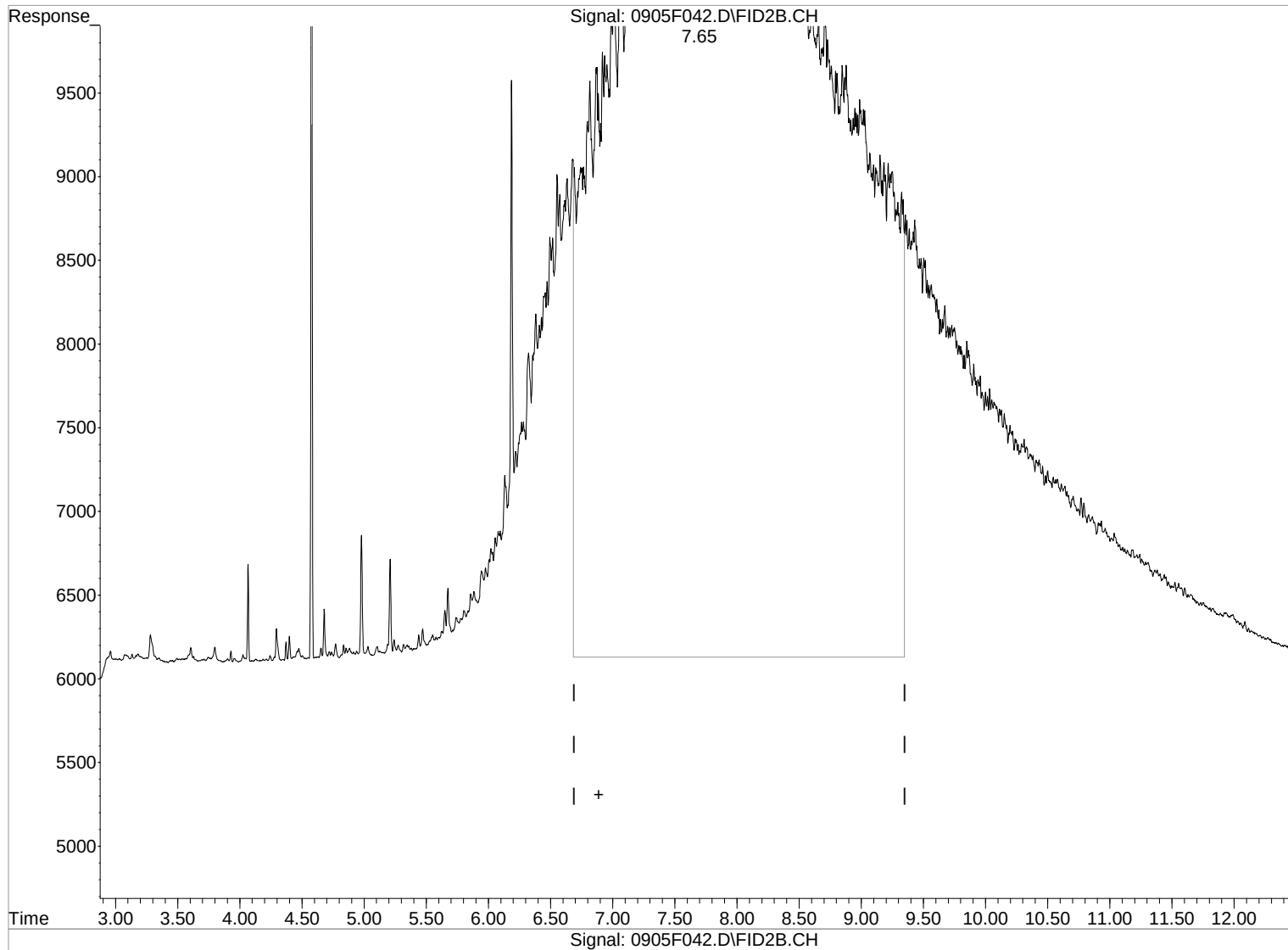
Quant Time: Sep 6 7:02 2023 Quant Results File: 090523FSVF.RES

Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Wed Sep 06 07:02:25 2023

Response via : Multiple Level Calibration



(11) C25-C36in RRO [AK103] (H)

Manual Integration:

6.89min 864.516ppm

After

response 662755

Baseline/Shoulder

09/06/23

(+) = Expected Retention Time

0905F042.D 090523FSVF.M

Wed Sep 06 07:03:34 2023

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Data File : J:\GC35\DATA\090623\0906F005.D Vial: 100
Acq On : 06 Sep 2023 1:12 pm Operator: AA
Sample : IB Inst : GC35
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Sep 07 13:09:36 2023 Quant Results File: 090523FSVF.RES

Quant Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)
Title : AK102/103 SVF MJ257 CAL 16220
Last Update : Thu Sep 07 07:40:53 2023
Response via : Initial Calibration
DataAcq Meth : SVF2_F.M

Volume Inj. : 1 uL
Signal Phase : ZB-1
Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

Target Compounds

6) H	C10-C25ex DRO [AK102]	3.30	8197	6.492 ppm
7) H	C10-C28in DRO [8015]	3.40	11641	8.754 ppm
8) H	C12-C25ex DRO [NWTPH]	3.93	8443	8.014 ppm
10) H	C25-C36in RRO [NWTPH]	6.79	169747	206.266 ppm
11) H	C25-C36in RRO [AK103]	6.89	169747	221.423 ppm

Data File : J:\GC35\DATA\090623\0906F005.D

Vial: 100

Acq On : 06 Sep 2023 1:12 pm

Operator: AA

Sample : IB

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Sep 7 13:10 2023 Quant Results File: 090523FSVF.RES

Quant Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Thu Sep 07 07:40:53 2023

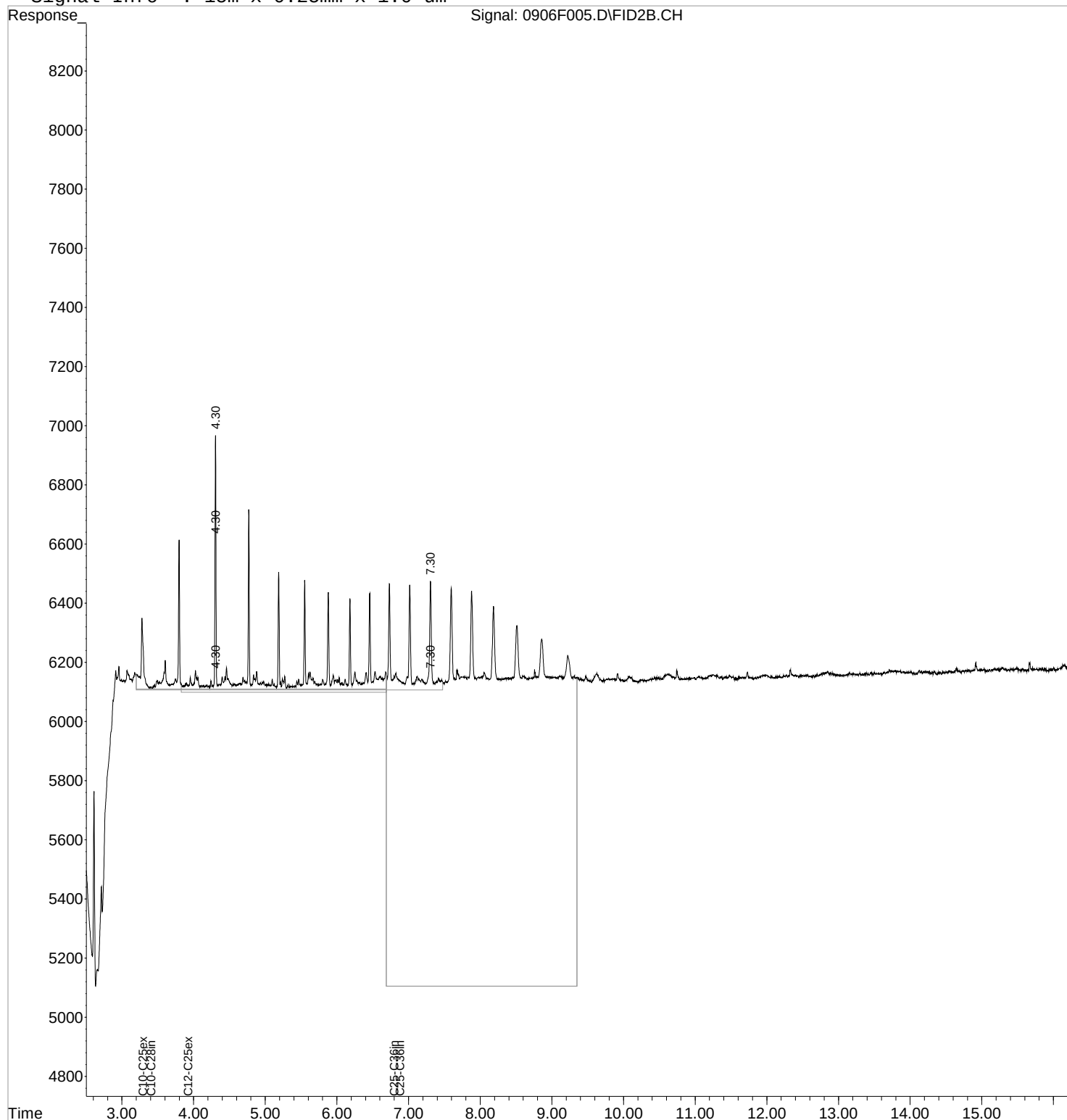
Response via : Single Level Calibration

DataAcq Meth : SVF2_F.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Data File : J:\GC35\DATA\090623\0906F005.D

Vial: 100

Acq On : 06 Sep 2023 1:12 pm

Operator: AA

Sample : IB

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

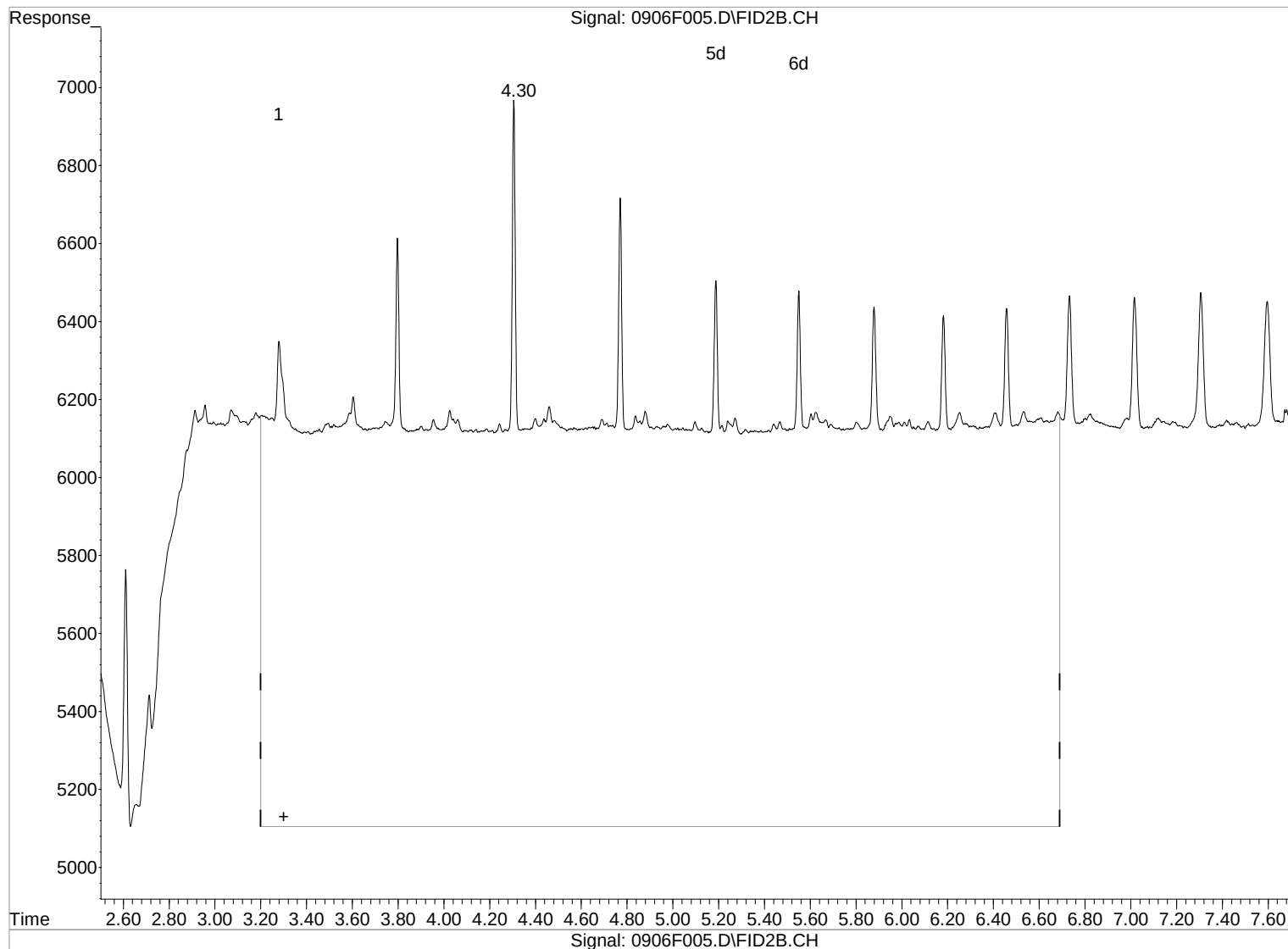
Quant Time: Sep 7 13:09 2023 Quant Results File: 090523FSVF.RES

Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Thu Sep 07 07:40:53 2023

Response via : Multiple Level Calibration



(6) C10-C25ex DRO [AK102] (H)

Manual Integration:

3.30min 173.162ppm

Before

response 218649

09/07/23

(+) = Expected Retention Time

0906F005.D 090523FSVF.M Thu Sep 07 13:09:49 2023

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Data File : J:\GC35\DATA\090623\0906F005.D

Vial: 100

Acq On : 06 Sep 2023 1:12 pm

Operator: AA

Sample : IB

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

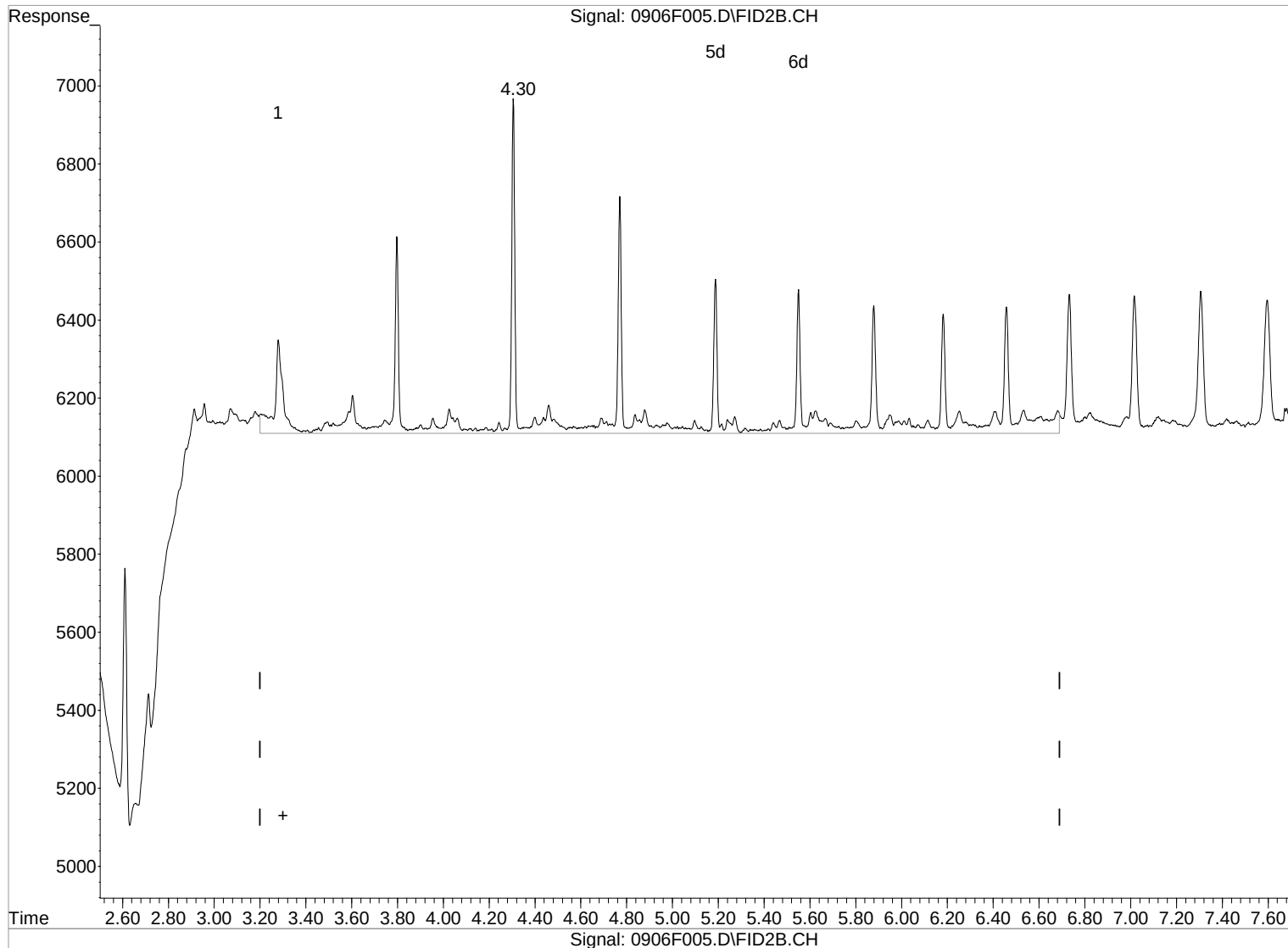
Quant Time: Sep 7 13:09 2023 Quant Results File: 090523FSVF.RES

Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Thu Sep 07 07:40:53 2023

Response via : Multiple Level Calibration



(6) C10-C25ex DRO [AK102] (H)

3.30min 6.492ppm

response 8197

Manual Integration:

After

Baseline/Shoulder

09/07/23

(+) = Expected Retention Time

0906F005.D 090523FSVF.M

Thu Sep 07 13:10:03 2023

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Data File : J:\GC35\DATA\090623\0906F005.D

Vial: 100

Acq On : 06 Sep 2023 1:12 pm

Operator: AA

Sample : IB

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

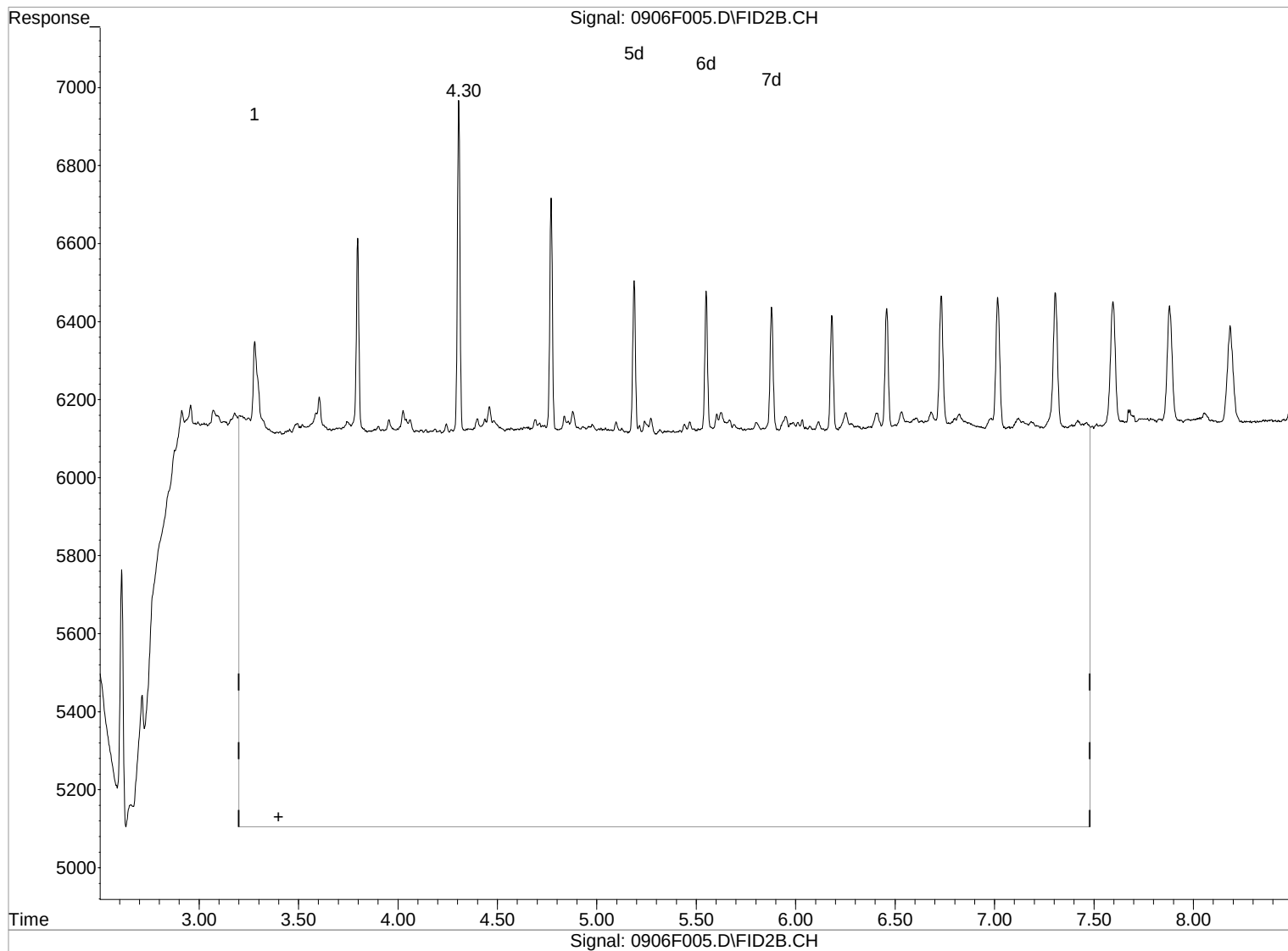
Quant Time: Sep 7 13:09 2023 Quant Results File: 090523FSVF.RES

Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Thu Sep 07 07:40:53 2023

Response via : Multiple Level Calibration



(7) C10-C28in DRO [8015] (H)

Manual Integration:

3.40min 202.249ppm

Before

response 268959

09/07/23

(+) = Expected Retention Time

0906F005.D 090523FSVF.M

Thu Sep 07 13:10:05 2023

Data File : J:\GC35\DATA\090623\0906F005.D

Vial: 100

Acq On : 06 Sep 2023 1:12 pm

Operator: AA

Sample : IB

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

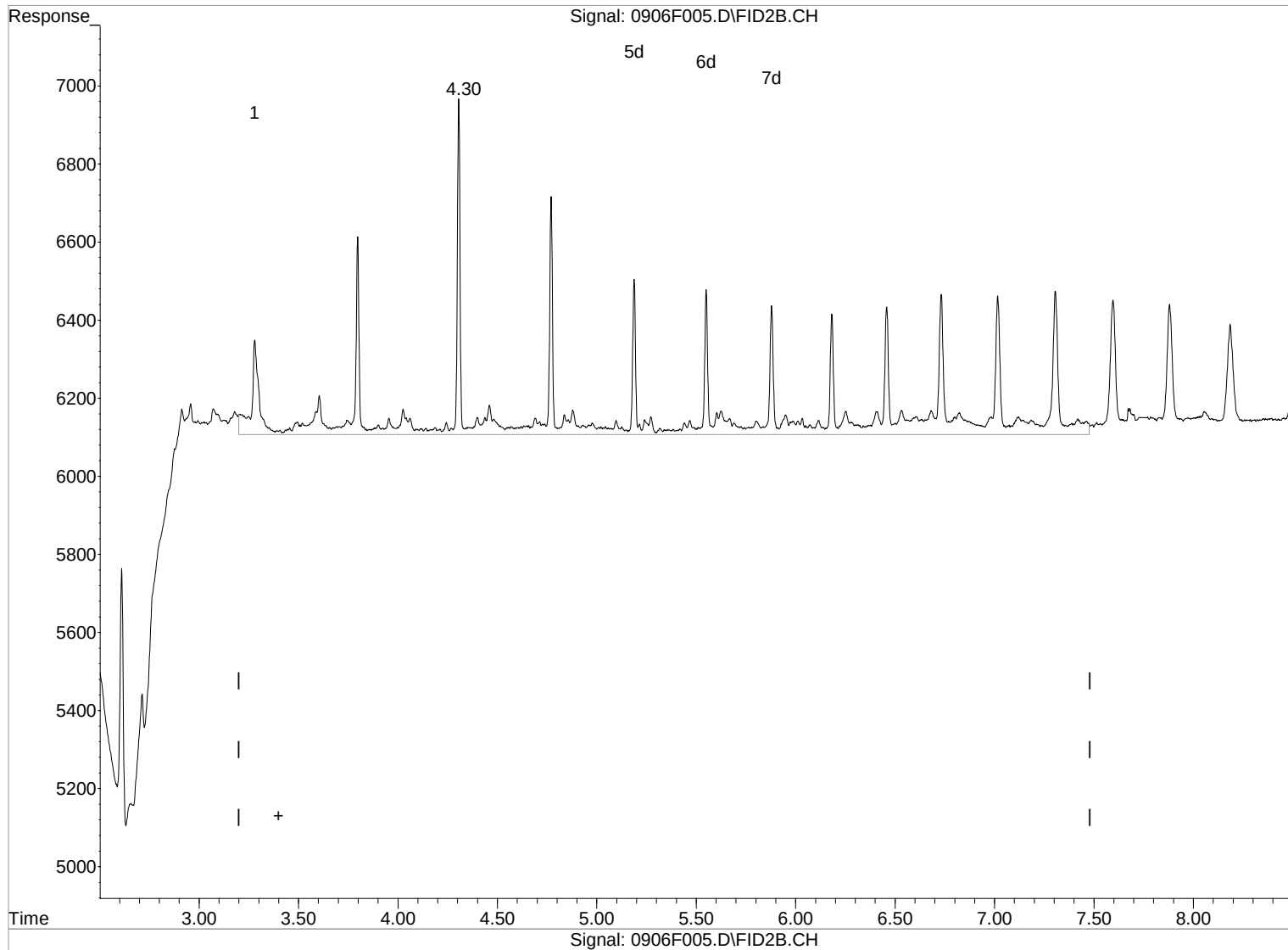
Quant Time: Sep 7 13:09 2023 Quant Results File: 090523FSVF.RES

Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Thu Sep 07 07:40:53 2023

Response via : Multiple Level Calibration



(7) C10-C28in DRO [8015] (H)

3.40min 8.754ppm

response 11641

Manual Integration:

After

Baseline/Shoulder

09/07/23

(+) = Expected Retention Time

0906F005.D 090523FSVF.M Thu Sep 07 13:10:25 2023

400 of 3623

Data File : J:\GC35\DATA\090623\0906F005.D

Vial: 100

Acq On : 06 Sep 2023 1:12 pm

Operator: AA

Sample : IB

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

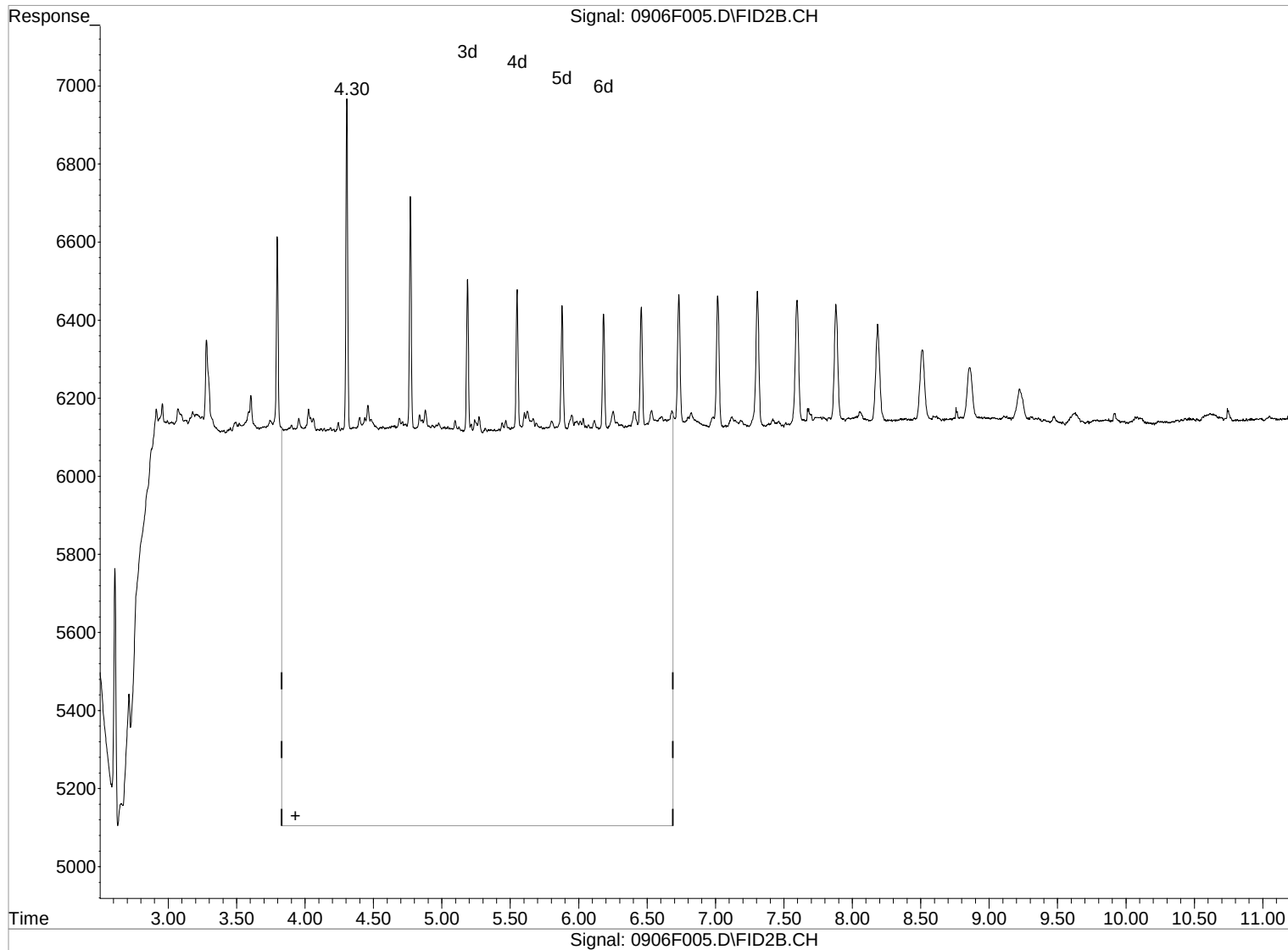
Quant Time: Sep 7 13:09 2023 Quant Results File: 090523FSVF.RES

Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Thu Sep 07 07:40:53 2023

Response via : Multiple Level Calibration



(8) C12-C25ex DRO [NWTPH] (H)

Manual Integration:

3.93min 169.919ppm

Before

response 179011

09/07/23

(+) = Expected Retention Time

0906F005.D 090523FSVF.M

Thu Sep 07 13:10:38 2023

401 of 3623

Data File : J:\GC35\DATA\090623\0906F005.D

Vial: 100

Acq On : 06 Sep 2023 1:12 pm

Operator: AA

Sample : IB

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

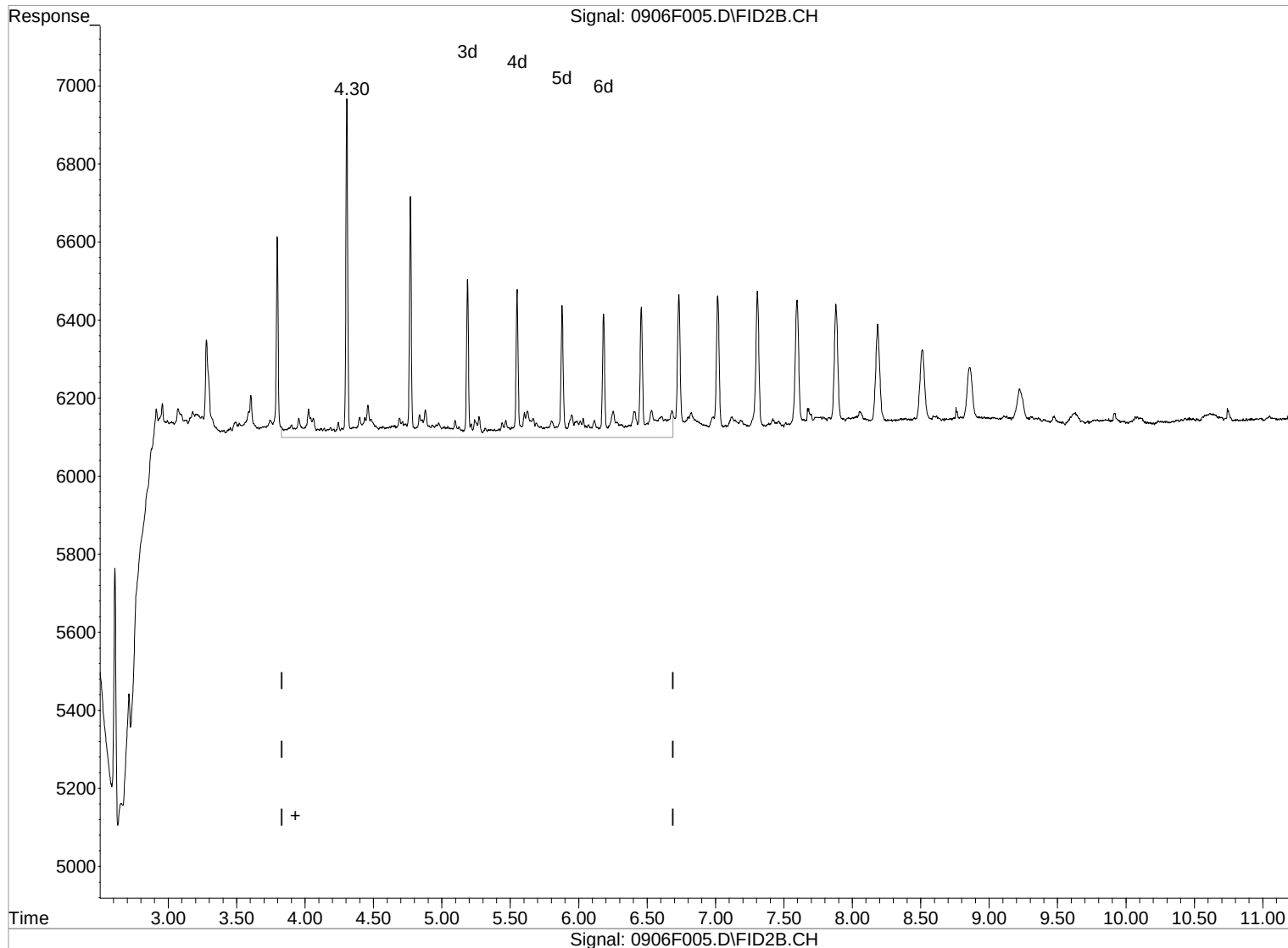
Quant Time: Sep 7 13:09 2023 Quant Results File: 090523FSVF.RES

Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Thu Sep 07 07:40:53 2023

Response via : Multiple Level Calibration



(+) = Expected Retention Time

0906F005.D 090523FSVF.M

Thu Sep 07 13:10:47 2023

402 of 3623

Data File : J:\GC35\DATA\090623\0906F006.D Vial: 2
Acq On : 06 Sep 2023 1:34 pm Operator: AA
Sample : DRO SVF04-62A 20/1.0 Inst : GC35
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Sep 07 07:28:14 2023 Quant Results File: 090523FSVF.RES

Quant Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)
Title : AK102/103 SVF MJ257 CAL 16220
Last Update : Wed Sep 06 07:02:25 2023
Response via : Initial Calibration
DataAcq Meth : SVF2_F.M

Volume Inj. : 1 uL
Signal Phase : ZB-1
Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

1) S 4-Bromofluorobenzene	2.99	705	0.972 ppm
Spiked Amount 50.000	Recovery	=	1.94%
2) S o-Terphenyl	5.62	1604	1.025 ppm
Spiked Amount 50.000	Recovery	=	2.05%
3) S n-Triacontane	7.79	1320	1.015 ppm
Spiked Amount 50.000	Recovery	=	2.03%

Target Compounds

6) H C10-C25ex DRO [AK102]	3.30	25156	18.675 ppm
7) H C10-C28in DRO [8015]	3.40	32870	22.889 ppm
8) H C12-C25ex DRO [NWTPH]	3.93	22639	20.232 ppm

Data File : J:\GC35\DATA\090623\0906F006.D

Vial: 2

Acq On : 06 Sep 2023 1:34 pm

Operator: AA

Sample : DRO SVF04-62A 20/1.0

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Sep 7 7:30 2023 Quant Results File: 090523FSVF.RES

Quant Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Wed Sep 06 07:02:25 2023

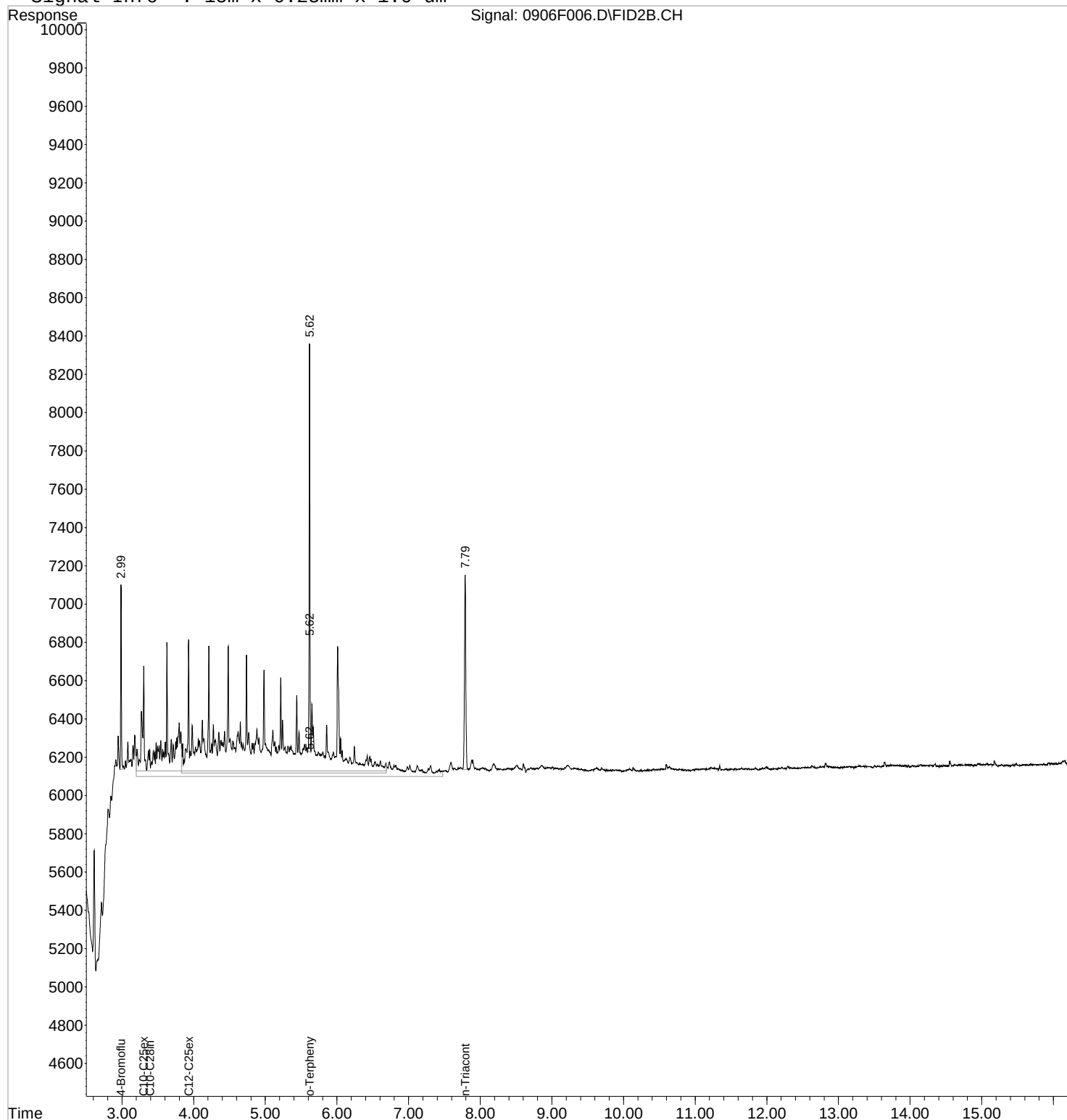
Response via : Single Level Calibration

DataAcq Meth : SVF2_F.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Data File : J:\GC35\DATA\090623\0906F006.D

Vial: 2

Acq On : 06 Sep 2023 1:34 pm

Operator: AA

Sample : DRO SVF04-62A 20/1.0

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

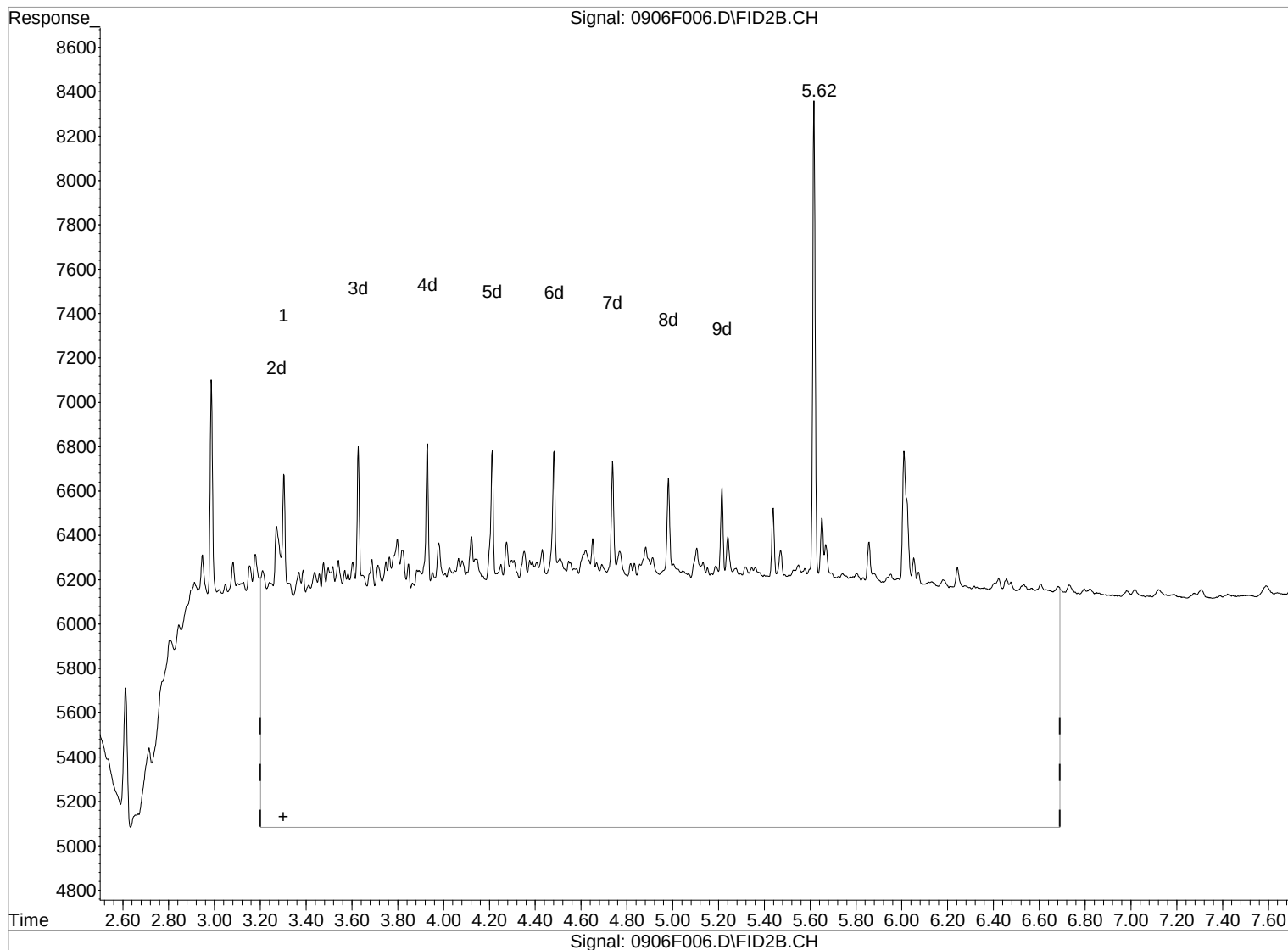
Quant Time: Sep 7 7:28 2023 Quant Results File: 090523FSVF.RES

Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Wed Sep 06 07:02:25 2023

Response via : Multiple Level Calibration



(6) C10-C25ex DRO [AK102] (H)

Manual Integration:

3.30min 181.123ppm

Before

response 243978

09/07/23

(+) = Expected Retention Time

0906F006.D 090523FSVF.M

Thu Sep 07 07:29:32 2023

405 of 3623

Data File : J:\GC35\DATA\090623\0906F006.D

Vial: 2

Acq On : 06 Sep 2023 1:34 pm

Operator: AA

Sample : DRO SVF04-62A 20/1.0

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

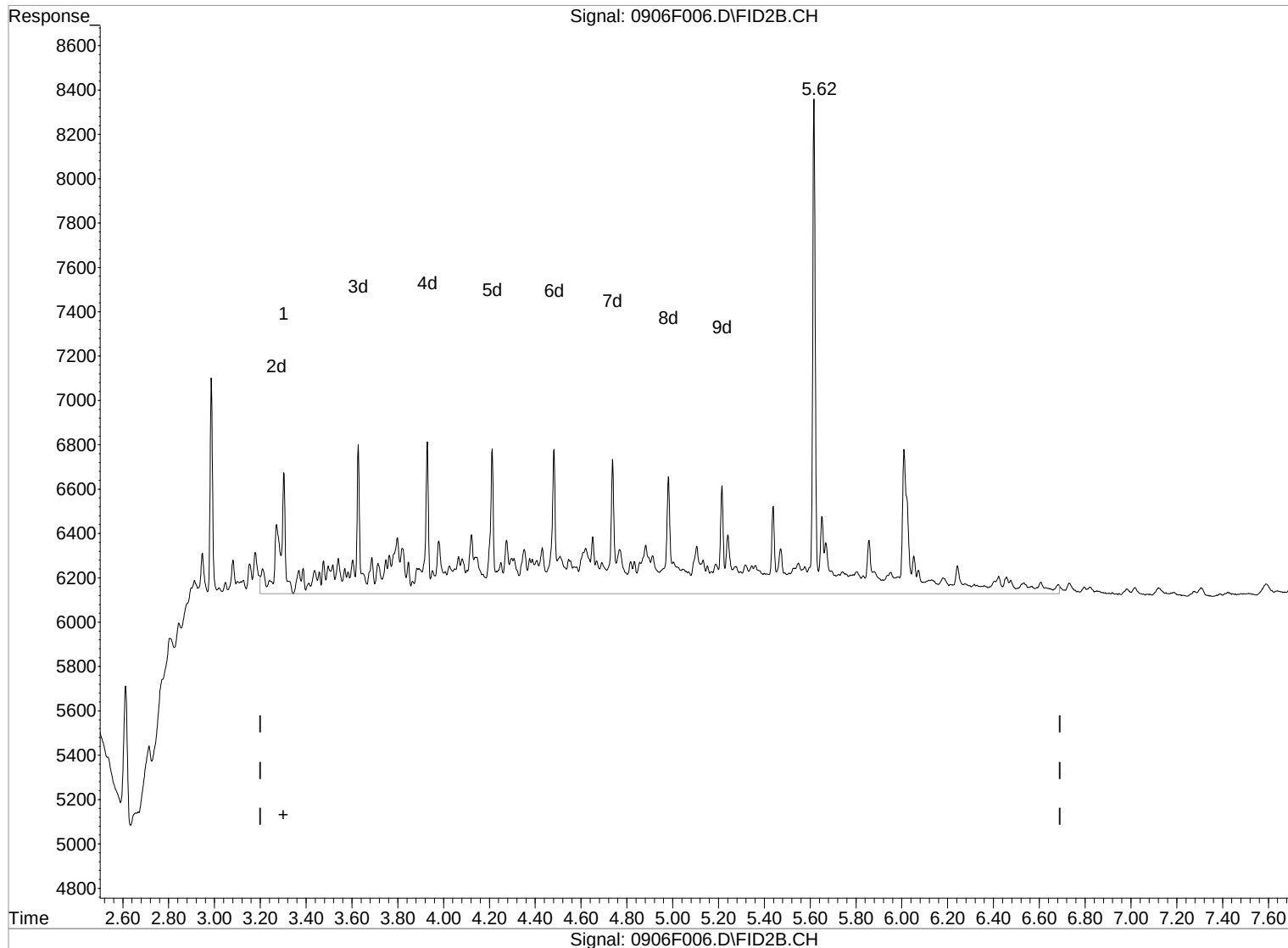
Quant Time: Sep 7 7:28 2023 Quant Results File: 090523FSVF.RES

Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Wed Sep 06 07:02:25 2023

Response via : Multiple Level Calibration



Manual Integration:

After

Baseline/Shoulder

09/07/23

Data File : J:\GC35\DATA\090623\0906F006.D

Vial: 2

Acq On : 06 Sep 2023 1:34 pm

Operator: AA

Sample : DRO SVF04-62A 20/1.0

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

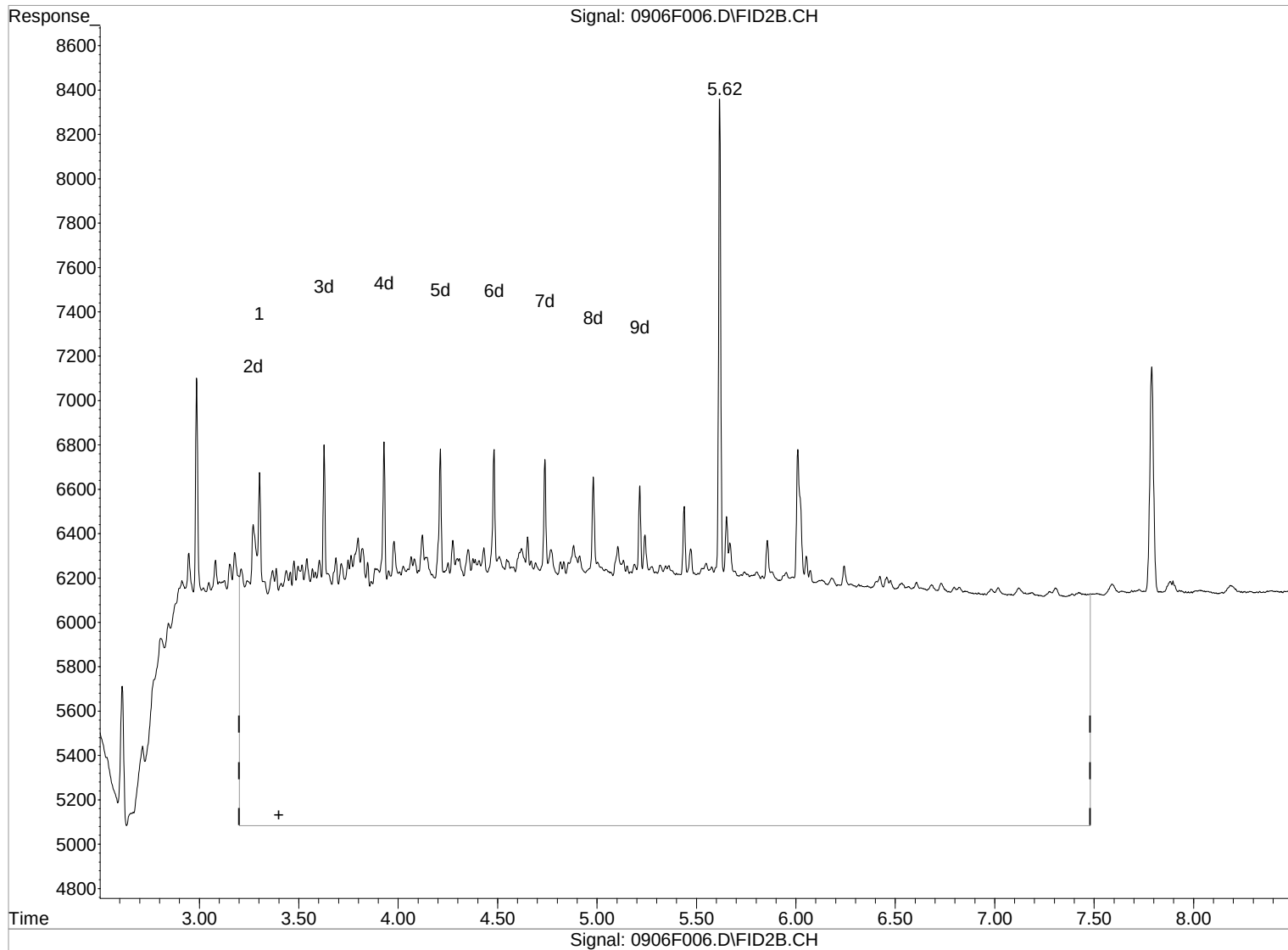
Quant Time: Sep 7 7:28 2023 Quant Results File: 090523FSVF.RES

Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Wed Sep 06 07:02:25 2023

Response via : Multiple Level Calibration



(7) C10-C28in DRO [8015] (H)

Manual Integration:

3.40min 204.573ppm

Before

response 293777

09/07/23

(+) = Expected Retention Time

0906F006.D 090523FSVF.M

Thu Sep 07 07:29:49 2023

407 of 3623

Data File : J:\GC35\DATA\090623\0906F006.D

Vial: 2

Acq On : 06 Sep 2023 1:34 pm

Operator: AA

Sample : DRO SVF04-62A 20/1.0

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

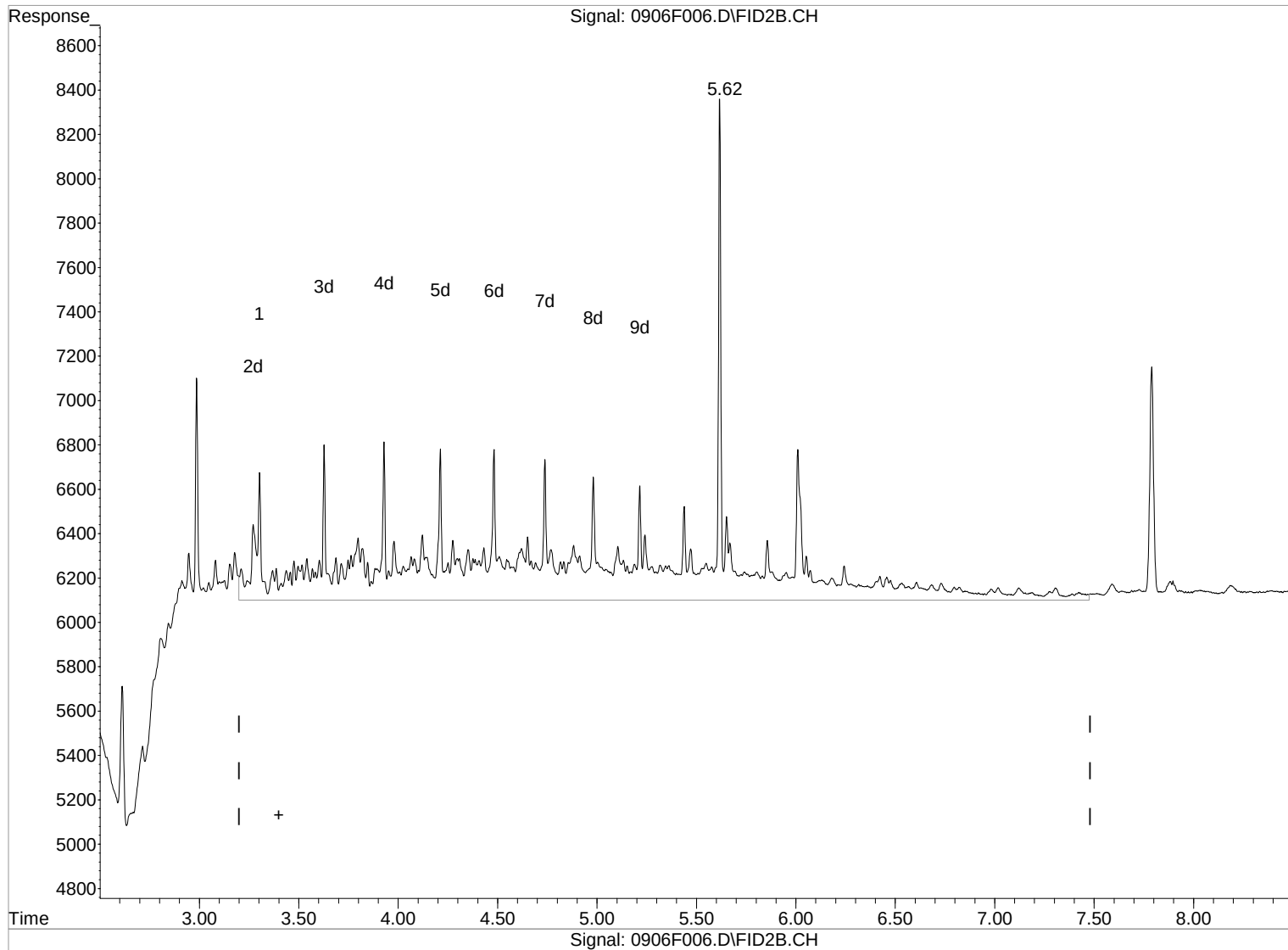
Quant Time: Sep 7 7:28 2023 Quant Results File: 090523FSVF.RES

Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Wed Sep 06 07:02:25 2023

Response via : Multiple Level Calibration



(7) C10-C28in DRO [8015] (H)

Manual Integration:

3.40min 22.889ppm

After

response 32870

Baseline/Shoulder

09/07/23

(+) = Expected Retention Time

0906F006.D 090523FSVF.M

Thu Sep 07 07:28:59 2023

408 of 3623

Data File : J:\GC35\DATA\090623\0906F006.D

Vial: 2

Acq On : 06 Sep 2023 1:34 pm

Operator: AA

Sample : DRO SVF04-62A 20/1.0

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

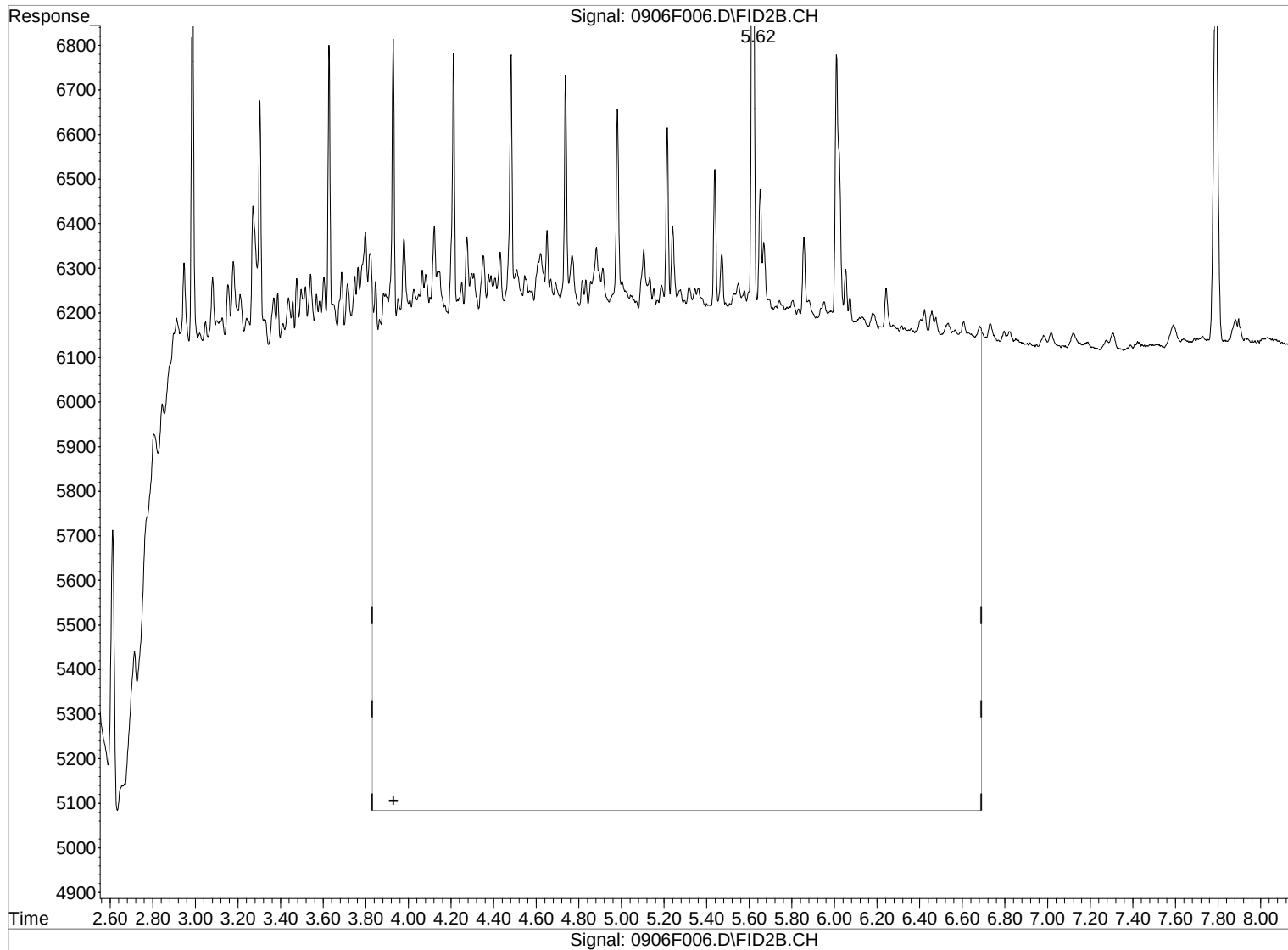
Quant Time: Sep 7 7:28 2023 Quant Results File: 090523FSVF.RES

Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Wed Sep 06 07:02:25 2023

Response via : Multiple Level Calibration



(8) C12-C25ex DRO [NWTPH] (H)

Manual Integration:

3.93min 178.808ppm

Before

response 200082

09/07/23

(+) = Expected Retention Time

0906F006.D 090523FSVF.M

Thu Sep 07 07:28:12 2023

409 of 3623

Data File : J:\GC35\DATA\090623\0906F006.D

Vial: 2

Acq On : 06 Sep 2023 1:34 pm

Operator: AA

Sample : DRO SVF04-62A 20/1.0

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

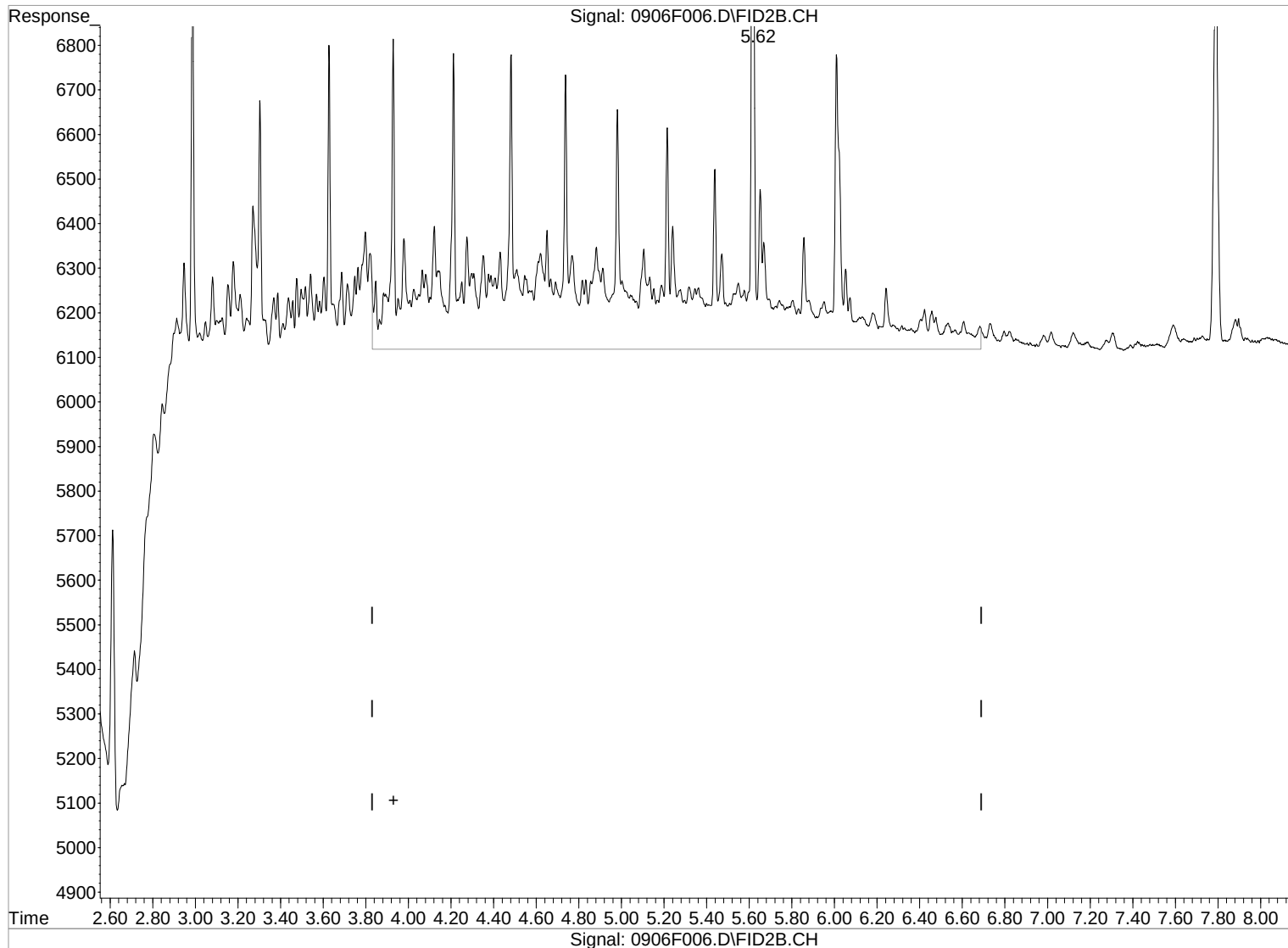
Quant Time: Sep 7 7:28 2023 Quant Results File: 090523FSVF.RES

Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Wed Sep 06 07:02:25 2023

Response via : Multiple Level Calibration



(8) C12-C25ex DRO [NWT PH] (H)

Manual Integration:

3.93min 20.232ppm

After

response 22639

Missed Peak

09/07/23

(+) = Expected Retention Time

0906F006.D 090523FSVF.M

Thu Sep 07 07:33:33 2023

410 of 3623

Data File : J:\GC35\DATA\090623\0906F006.D

Vial: 2

Acq On : 06 Sep 2023 1:34 pm

Operator: AA

Sample : DRO SVF04-62A 20/1.0

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

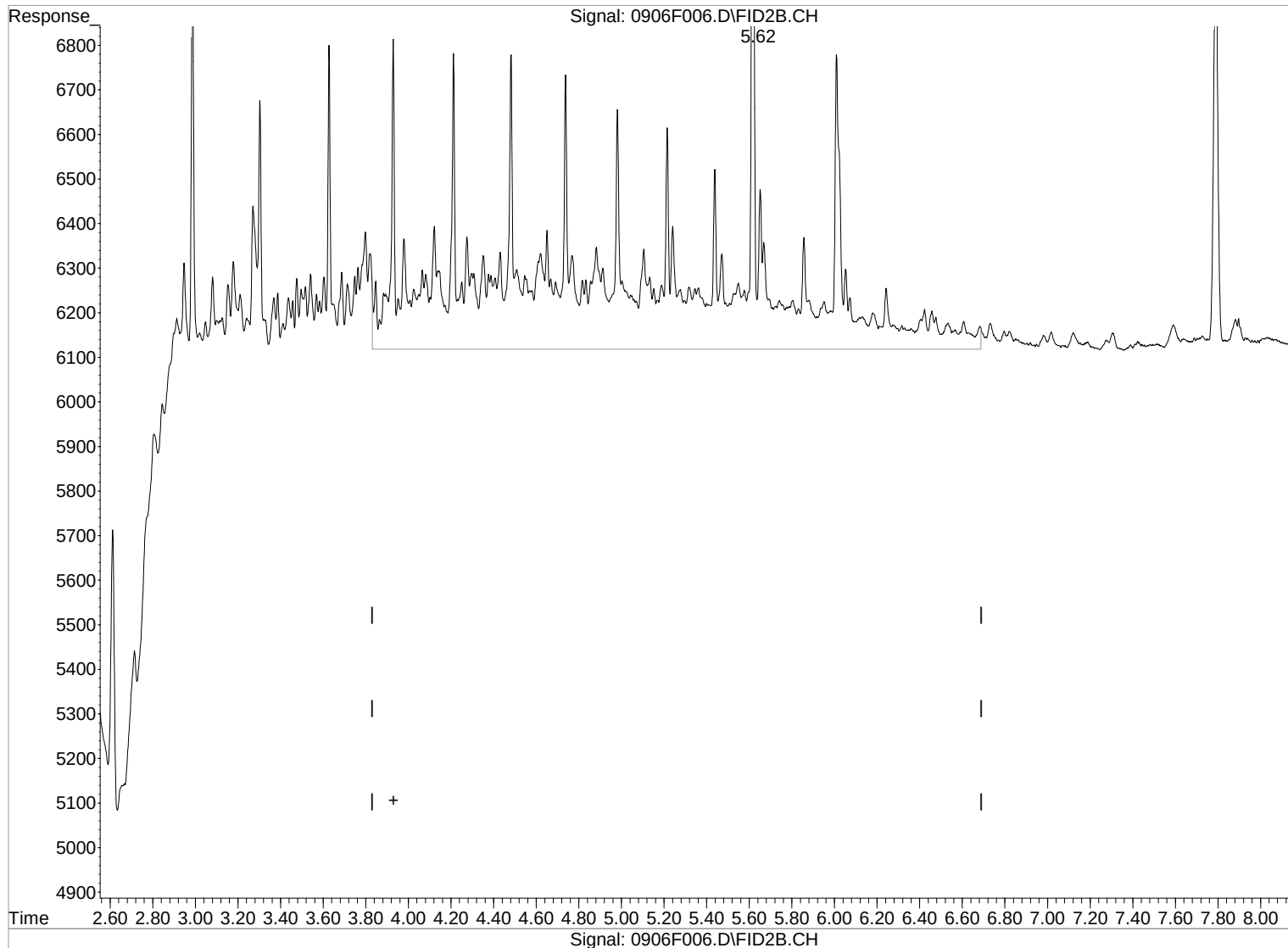
Quant Time: Sep 7 7:28 2023 Quant Results File: 090523FSVF.RES

Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Wed Sep 06 07:02:25 2023

Response via : Multiple Level Calibration



(8) C12-C25ex DRO [NWTPH] (H)

Manual Integration:

3.93min 20.232ppm

After

response 22639

Baseline/Shoulder

09/07/23

(+) = Expected Retention Time

0906F006.D 090523FSVF.M

Thu Sep 07 07:35 2023

411 of 3623

Data File : J:\GC35\DATA\090623\0906F007.D Vial: 3
 Acq On : 06 Sep 2023 1:55 pm Operator: AA
 Sample : DRO SVF04-61L 50/2.5 Inst : GC35
 Misc : Multiplr: 1.00
 IntFile : rteint.p
 Quant Time: Sep 07 07:28:15 2023 Quant Results File: 090523FSVF.RES

Quant Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)
 Title : AK102/103 SVF MJ257 CAL 16220
 Last Update : Wed Sep 06 07:02:25 2023
 Response via : Initial Calibration
 DataAcq Meth : SVF2_F.M

Volume Inj. : 1 uL
 Signal Phase : ZB-1
 Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
1) S 4-Bromofluorobenzene	2.98	1755	2.418 ppm
Spiked Amount 50.000	Recovery	=	4.84%
2) S o-Terphenyl	5.62	3856	2.464 ppm
Spiked Amount 50.000	Recovery	=	4.93%
3) S n-Triacontane	7.79	3163	2.432 ppm
Spiked Amount 50.000	Recovery	=	4.86%
Target Compounds			
6) H C10-C25ex DRO [AK102]	3.30	67625	50.203 ppm
7) H C10-C28in DRO [8015]	3.40	71365	49.695 ppm
8) H C12-C25ex DRO [NWTPH]	3.93	54969	49.124 ppm

Data File : J:\GC35\DATA\090623\0906F007.D

Vial: 3

Acq On : 06 Sep 2023 1:55 pm

Operator: AA

Sample : DR0 SVF04-61L 50/2.5

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Sep 7 7:31 2023 Quant Results File: 090523FSVF.RES

Quant Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Wed Sep 06 07:02:25 2023

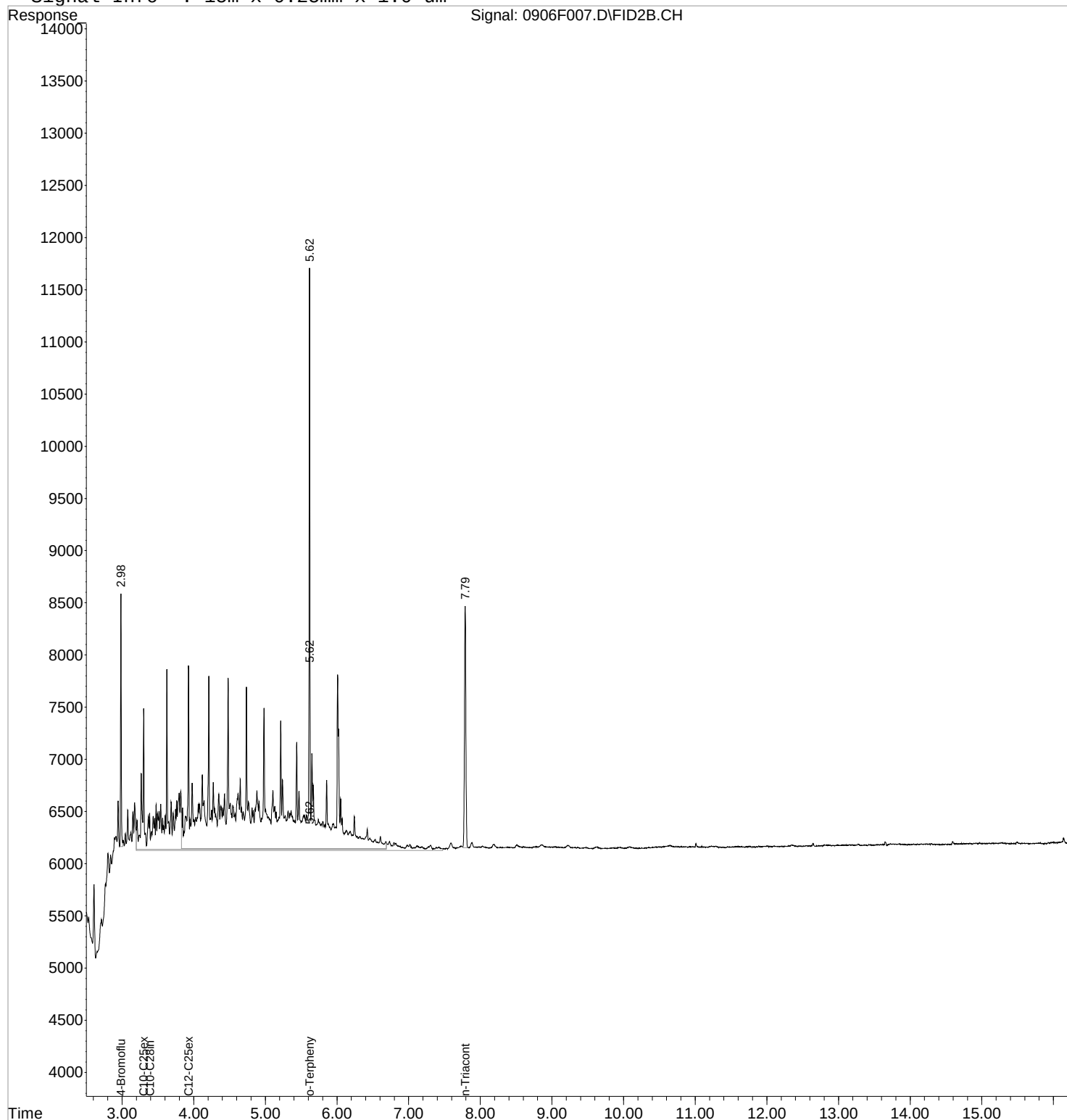
Response via : Single Level Calibration

DataAcq Meth : SVF2_F.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Data File : J:\GC35\DATA\090623\0906F007.D

Vial: 3

Acq On : 06 Sep 2023 1:55 pm

Operator: AA

Sample : DRO SVF04-61L 50/2.5

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

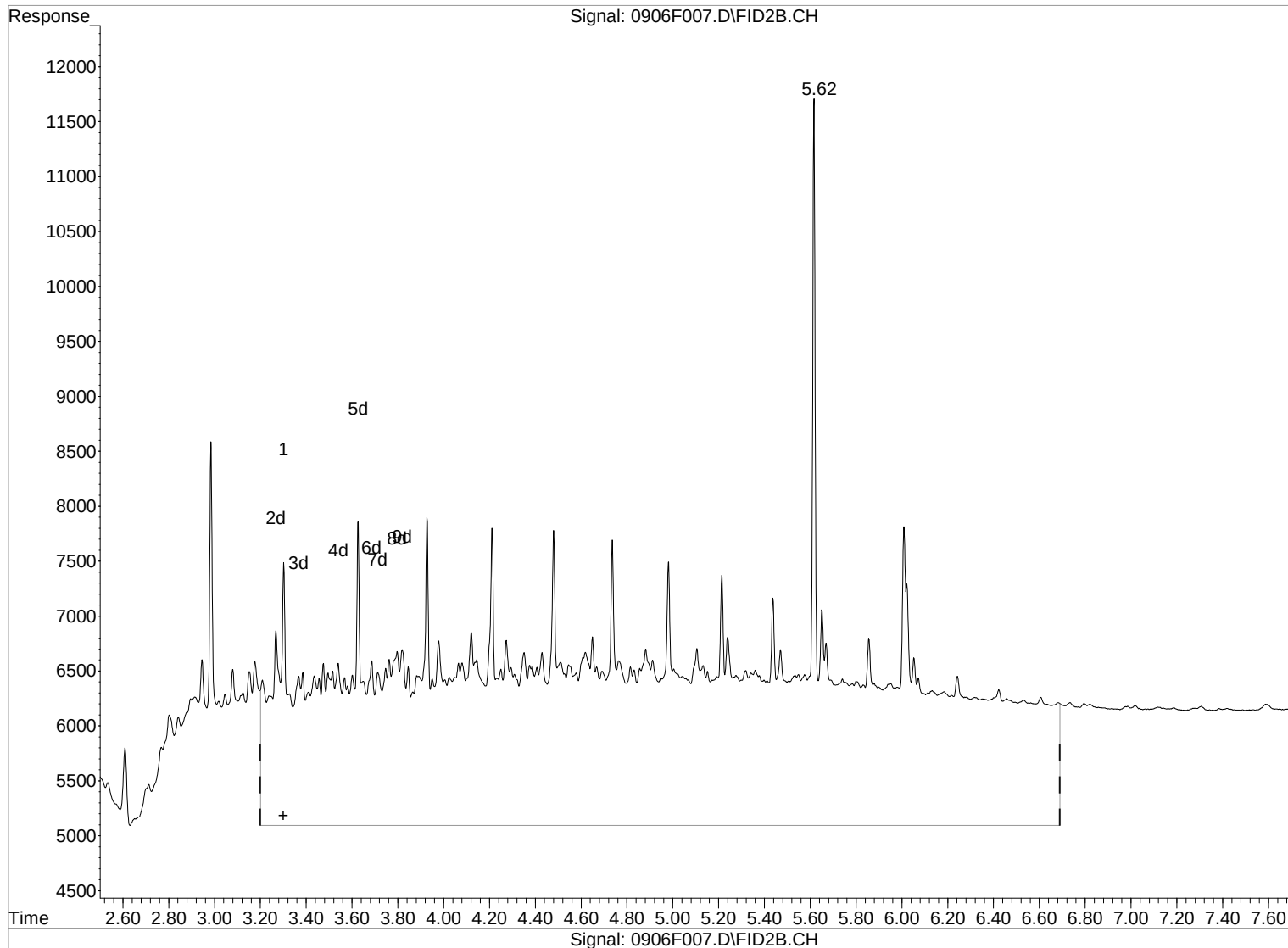
Quant Time: Sep 7 7:28 2023 Quant Results File: 090523FSVF.RES

Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Thu Sep 07 07:30:44 2023

Response via : Multiple Level Calibration



(6) C10-C25ex DRO [AK102] (H)

Manual Integration:

3.30min 212.337ppm

Before

response 286024

09/07/23

(+) = Expected Retention Time

0906F007.D 090523FSVF.M

Thu Sep 07 07:31:02 2023

414 of 3623

Data File : J:\GC35\DATA\090623\0906F007.D

Vial: 3

Acq On : 06 Sep 2023 1:55 pm

Operator: AA

Sample : DRO SVF04-61L 50/2.5

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

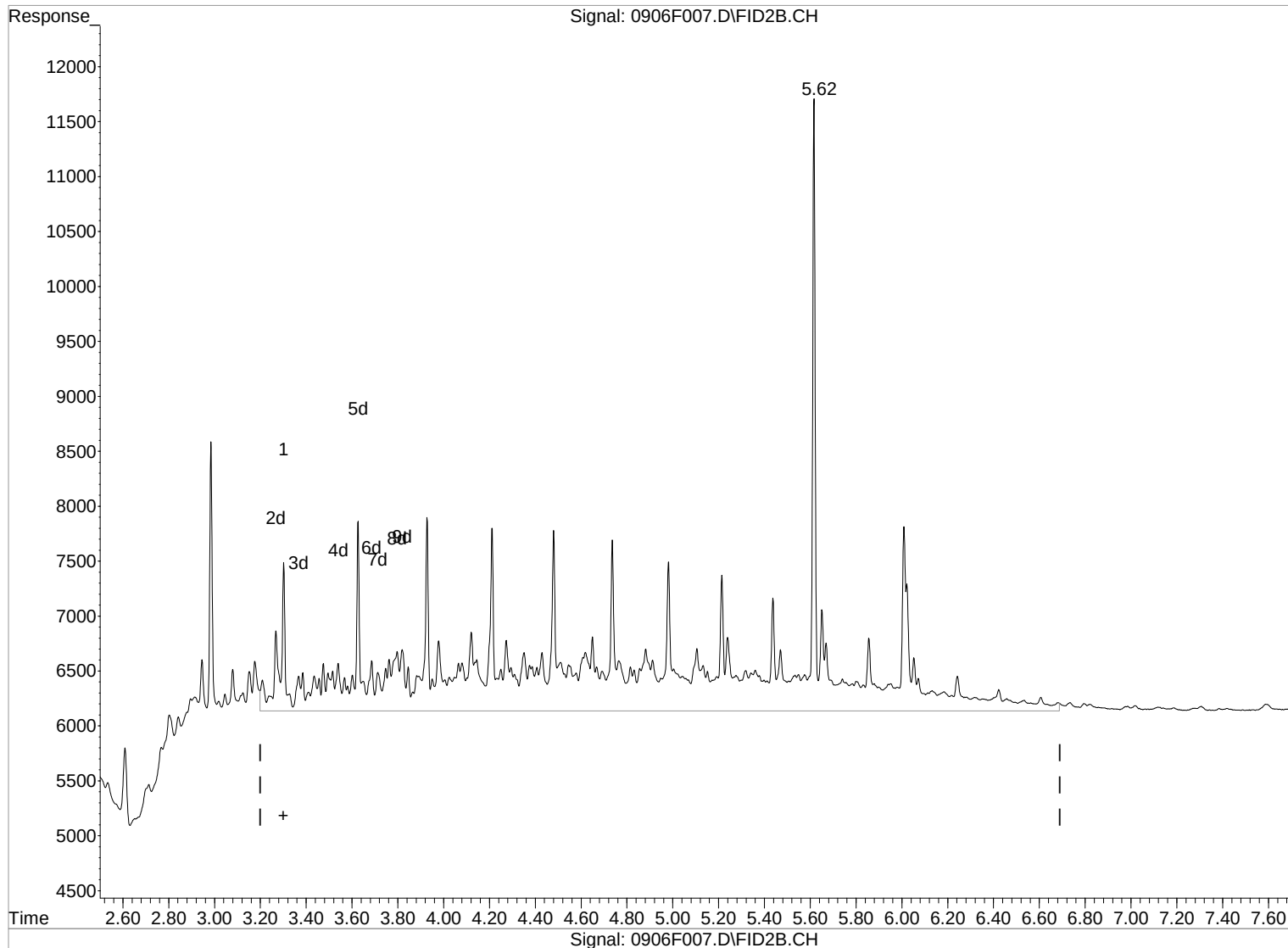
Quant Time: Sep 7 7:28 2023 Quant Results File: 090523FSVF.RES

Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Thu Sep 07 07:30:44 2023

Response via : Multiple Level Calibration



(6) C10-C25ex DRO [AK102] (H)

Manual Integration:

3.30min 50.203ppm

After

response 67625

Baseline/Shoulder

09/07/23

(+) = Expected Retention Time

0906F007.D 090523FSVF.M

Thu Sep 07 07:31:16 2023

415 of 3623

Data File : J:\GC35\DATA\090623\0906F007.D

Vial: 3

Acq On : 06 Sep 2023 1:55 pm

Operator: AA

Sample : DRO SVF04-61L 50/2.5

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

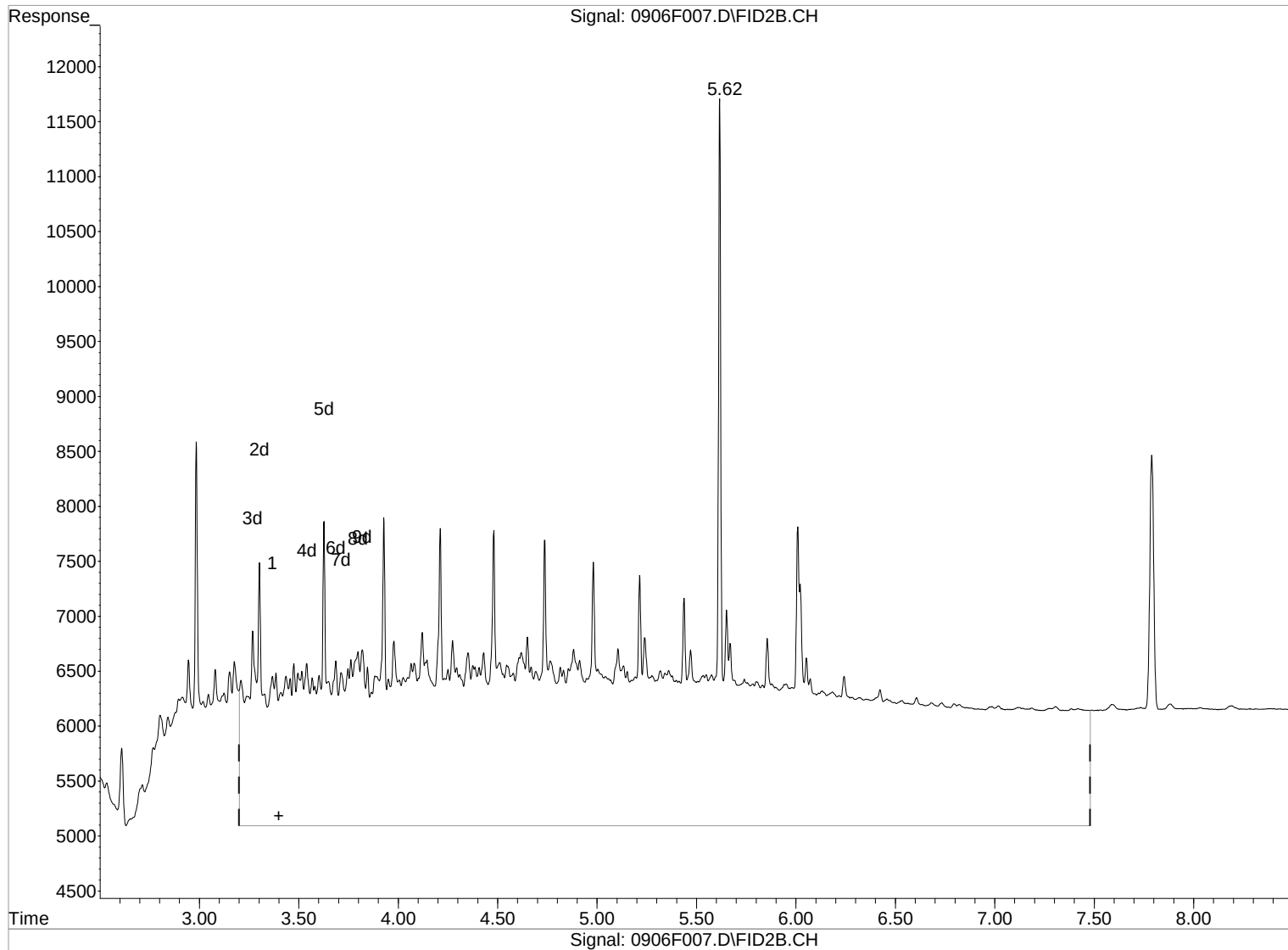
Quant Time: Sep 7 7:28 2023 Quant Results File: 090523FSVF.RES

Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Thu Sep 07 07:30:44 2023

Response via : Multiple Level Calibration



(7) C10-C28in DRO [8015] (H)

Manual Integration:

3.40min 234.410ppm

Before

response 336624

09/07/23

(+) = Expected Retention Time

0906F007.D 090523FSVF.M

Thu Sep 07 07:31:20 2023

416 of 3623

Data File : J:\GC35\DATA\090623\0906F007.D

Vial: 3

Acq On : 06 Sep 2023 1:55 pm

Operator: AA

Sample : DRO SVF04-61L 50/2.5

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

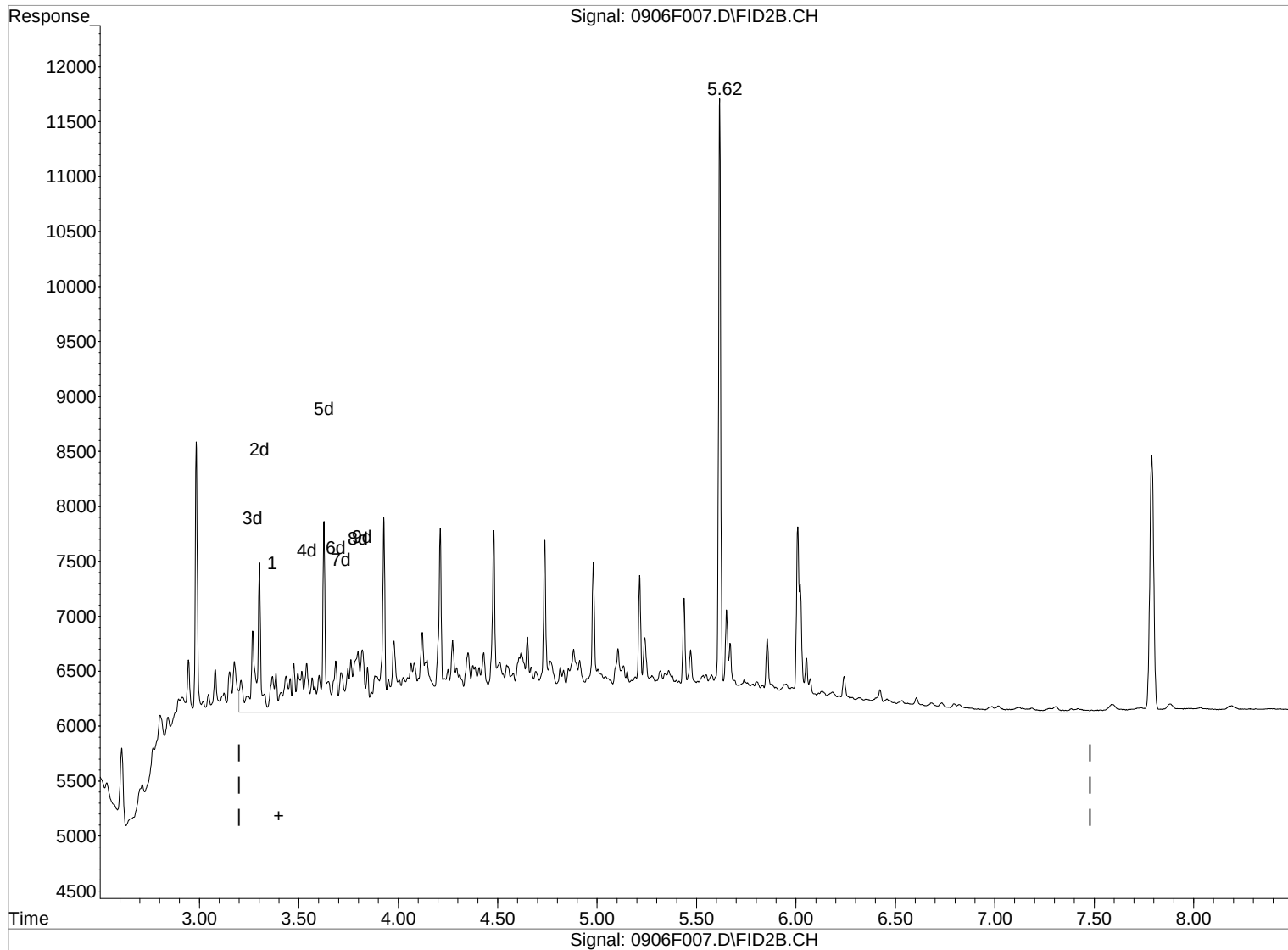
Quant Time: Sep 7 7:28 2023 Quant Results File: 090523FSVF.RES

Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Thu Sep 07 07:30:44 2023

Response via : Multiple Level Calibration



(7) C10-C28in DRO [8015] (H)

Manual Integration:

3.40min 49.695ppm

After

response 71365

Baseline/Shoulder

09/07/23

(+) = Expected Retention Time

0906F007.D 090523FSVF.M

Thu Sep 07 07:31:36 2023

417 of 3623

Data File : J:\GC35\DATA\090623\0906F007.D

Vial: 3

Acq On : 06 Sep 2023 1:55 pm

Operator: AA

Sample : DRO SVF04-61L 50/2.5

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

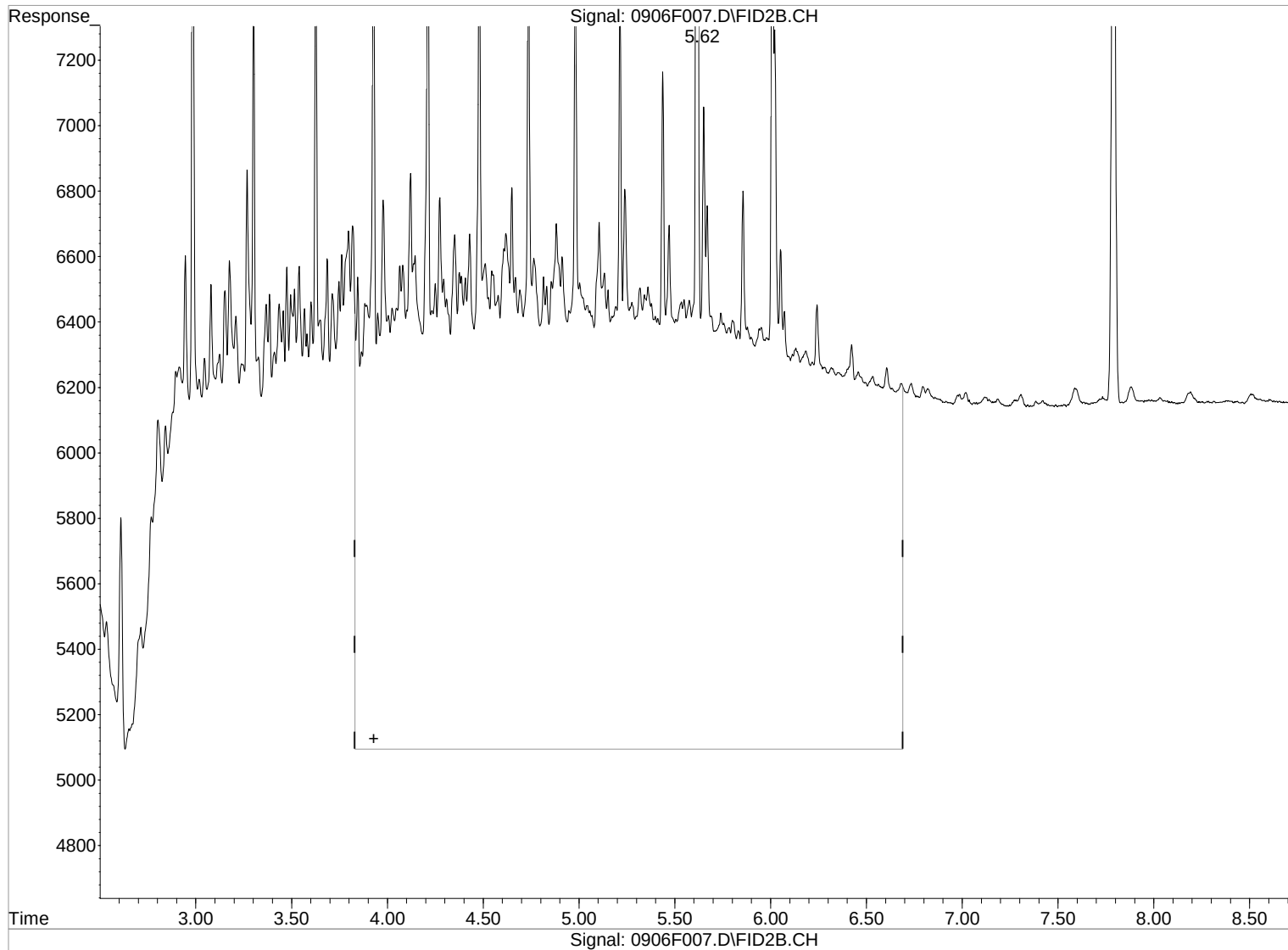
Quant Time: Sep 7 7:28 2023 Quant Results File: 090523FSVF.RES

Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Thu Sep 07 07:30:44 2023

Response via : Multiple Level Calibration



(8) C12-C25ex DRO [NWTPH] (H)

Manual Integration:

3.93min 210.126ppm

Before

response 235127

09/07/23

(+) = Expected Retention Time

0906F007.D 090523FSVF.M

Thu Sep 07 07:31:49 2023

418 of 3623

Data File : J:\GC35\DATA\090623\0906F007.D

Vial: 3

Acq On : 06 Sep 2023 1:55 pm

Operator: AA

Sample : DRO SVF04-61L 50/2.5

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

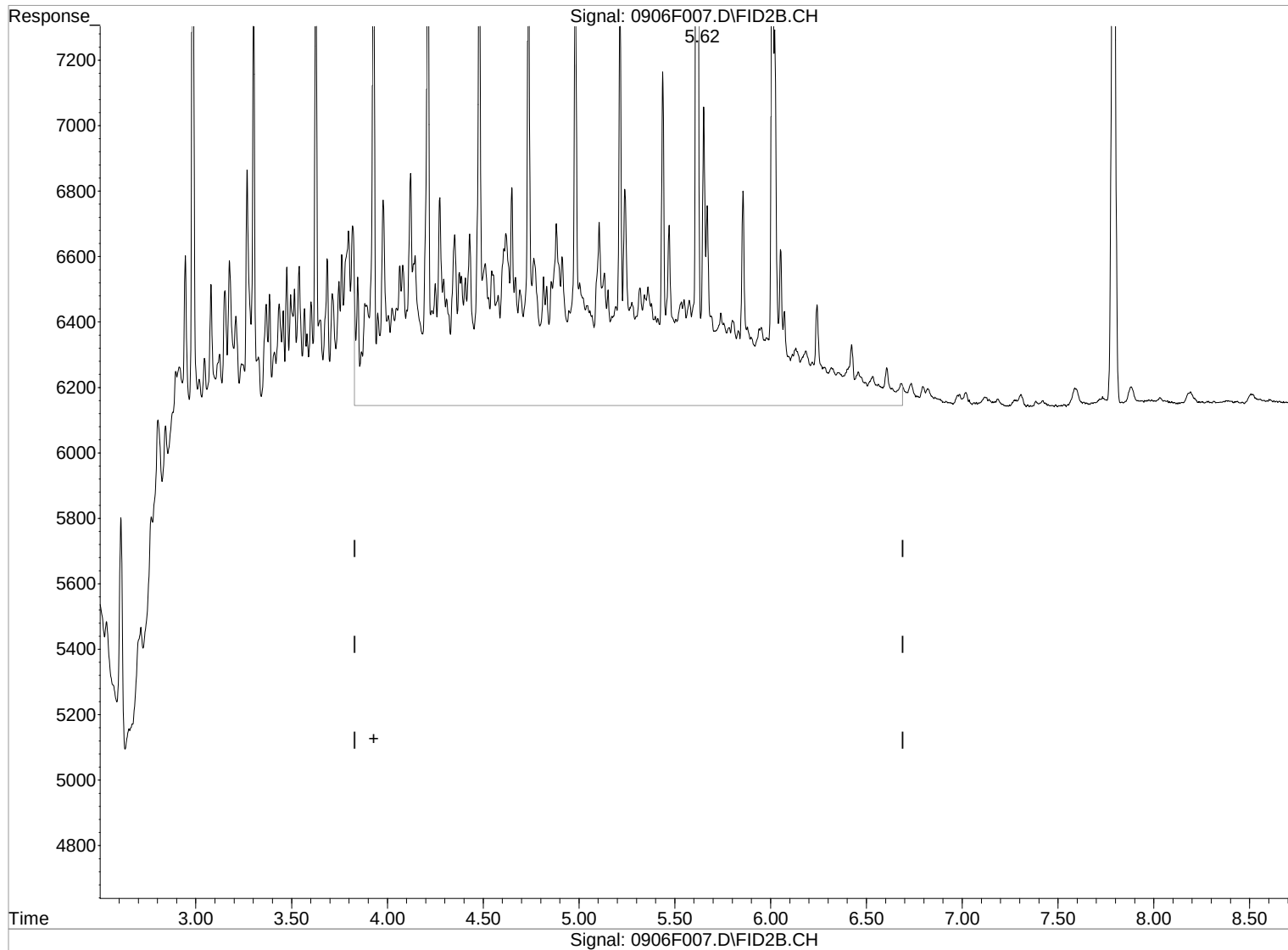
Quant Time: Sep 7 7:28 2023 Quant Results File: 090523FSVF.RES

Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Thu Sep 07 07:30:44 2023

Response via : Multiple Level Calibration



(8) C12-C25ex DRO [NWT PH] (H)

Manual Integration:

3.93min 49.124ppm

After

response 54969

Baseline/Shoulder

09/07/23

(+) = Expected Retention Time

0906F007.D 090523FSVF.M

Thu Sep 07 07:31:58 2023

419 of 3623

Data File : J:\GC35\DATA\090623\0906F008.D Vial: 4
 Acq On : 06 Sep 2023 2:17 pm Operator: AA
 Sample : DRO SVF04-61K 200/10 Inst : GC35
 Misc : Multiplr: 1.00
 IntFile : rteint.p
 Quant Time: Sep 07 07:28:17 2023 Quant Results File: 090523FSVF.RES

Quant Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)
 Title : AK102/103 SVF MJ257 CAL 16220
 Last Update : Wed Sep 06 07:02:25 2023
 Response via : Initial Calibration
 DataAcq Meth : SVF2_F.M

Volume Inj. : 1 uL
 Signal Phase : ZB-1
 Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
1) S 4-Bromofluorobenzene	2.99	7122	9.814 ppm
Spiked Amount 50.000	Recovery	=	19.63%
2) S o-Terphenyl	5.62	15500	9.905 ppm
Spiked Amount 50.000	Recovery	=	19.81%
3) S n-Triacontane	7.79	12510	9.620 ppm
Spiked Amount 50.000	Recovery	=	19.24%
Target Compounds			
6) H C10-C25ex DRO [AK102]	3.30	274552	203.820 ppm
7) H C10-C28in DRO [8015]	3.40	268857	187.220 ppm
8) H C12-C25ex DRO [NWTPH]	3.93	217061	193.981 ppm

Data File : J:\GC35\DATA\090623\0906F008.D

Vial: 4

Acq On : 06 Sep 2023 2:17 pm

Operator: AA

Sample : DRO SVF04-61K 200/10

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Sep 7 7:33 2023 Quant Results File: 090523FSVF.RES

Quant Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Wed Sep 06 07:02:25 2023

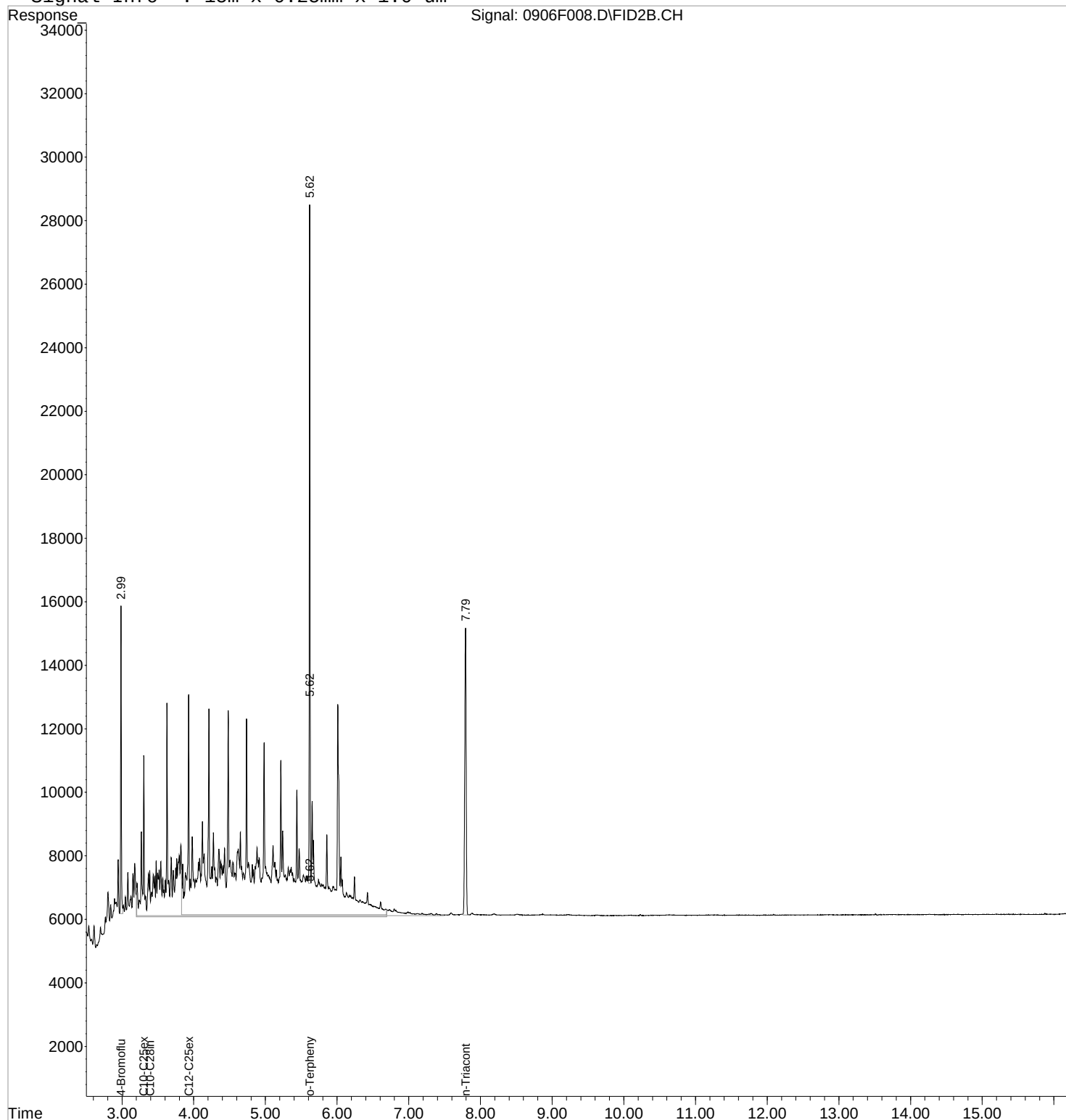
Response via : Single Level Calibration

DataAcq Meth : SVF2_F.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Data File : J:\GC35\DATA\090623\0906F008.D

Vial: 4

Acq On : 06 Sep 2023 2:17 pm

Operator: AA

Sample : DRO SVF04-61K 200/10

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

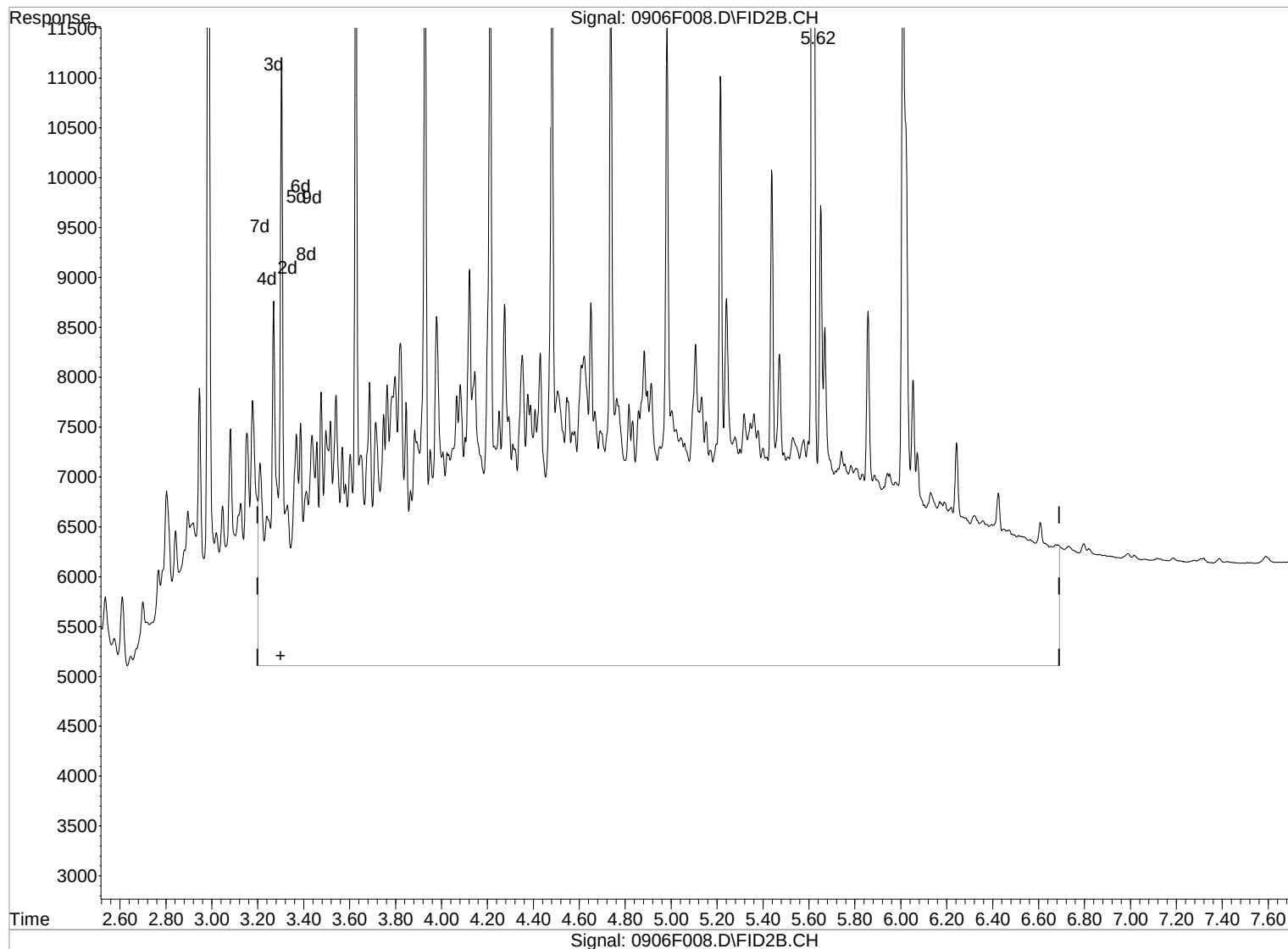
Quant Time: Sep 7 7:28 2023 Quant Results File: 090523FSVF.RES

Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Thu Sep 07 07:32:06 2023

Response via : Multiple Level Calibration



(6) C10-C25ex DRO [AK102] (H)

Manual Integration:

3.30min 354.508ppm

Before

response 477534

09/07/23

(+) = Expected Retention Time

0906F008.D 090523FSVF.M

Thu Sep 07 07:32:29 2023

422 of 3623

Data File : J:\GC35\DATA\090623\0906F008.D

Vial: 4

Acq On : 06 Sep 2023 2:17 pm

Operator: AA

Sample : DRO SVF04-61K 200/10

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

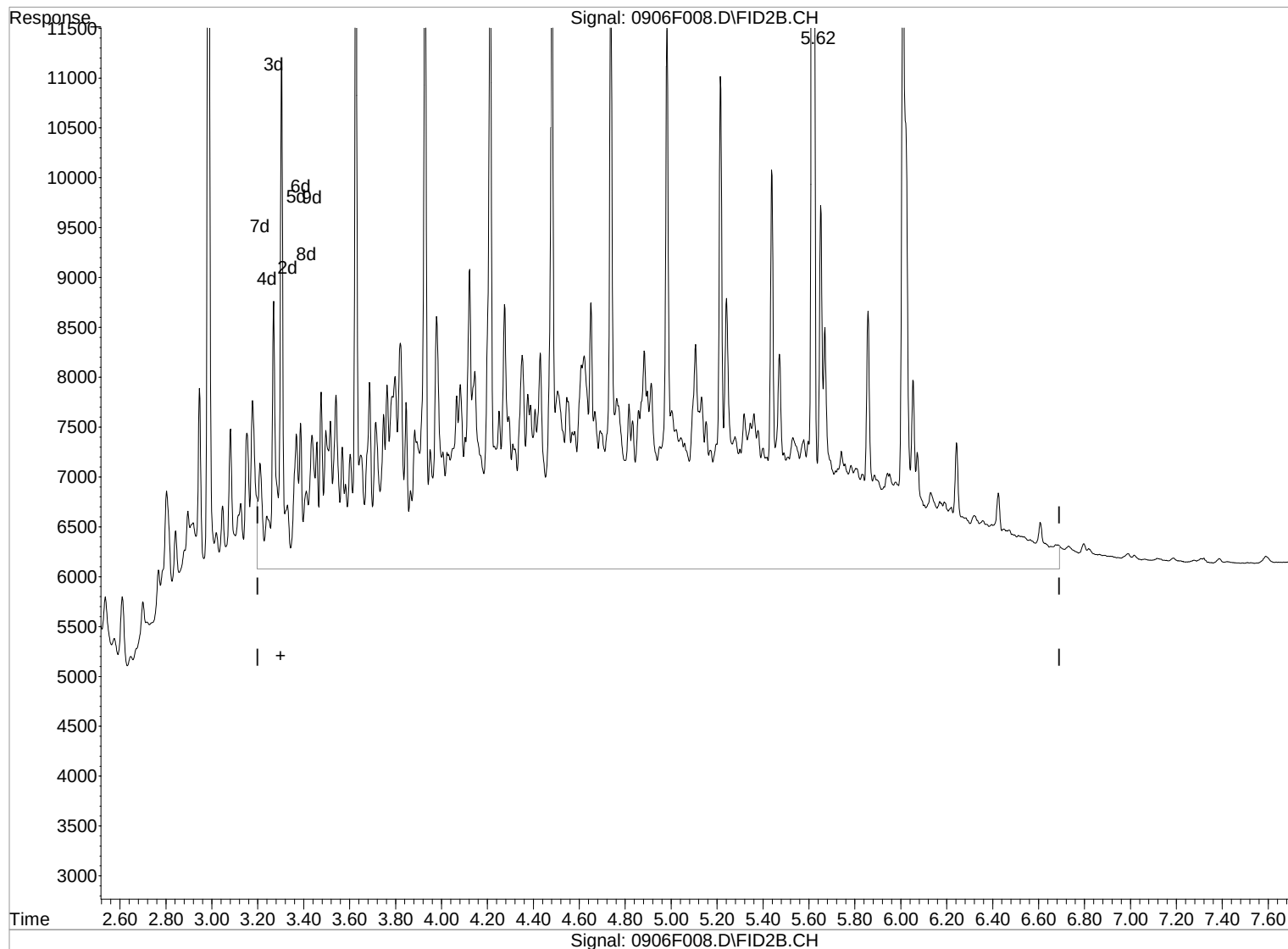
Quant Time: Sep 7 7:28 2023 Quant Results File: 090523FSVF.RES

Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Thu Sep 07 07:32:06 2023

Response via : Multiple Level Calibration



Signal: 0906F008.D\FID2B.CH

(6) C10-C25ex DRO [AK102] (H)

Manual Integration:

3.30min 203.820ppm

After

response 274552

Baseline/Shoulder

09/07/23

(+) = Expected Retention Time

0906F008.D 090523FSVF.M

Thu Sep 07 07:32:47 2023

423 of 3623

Data File : J:\GC35\DATA\090623\0906F008.D

Vial: 4

Acq On : 06 Sep 2023 2:17 pm

Operator: AA

Sample : DRO SVF04-61K 200/10

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

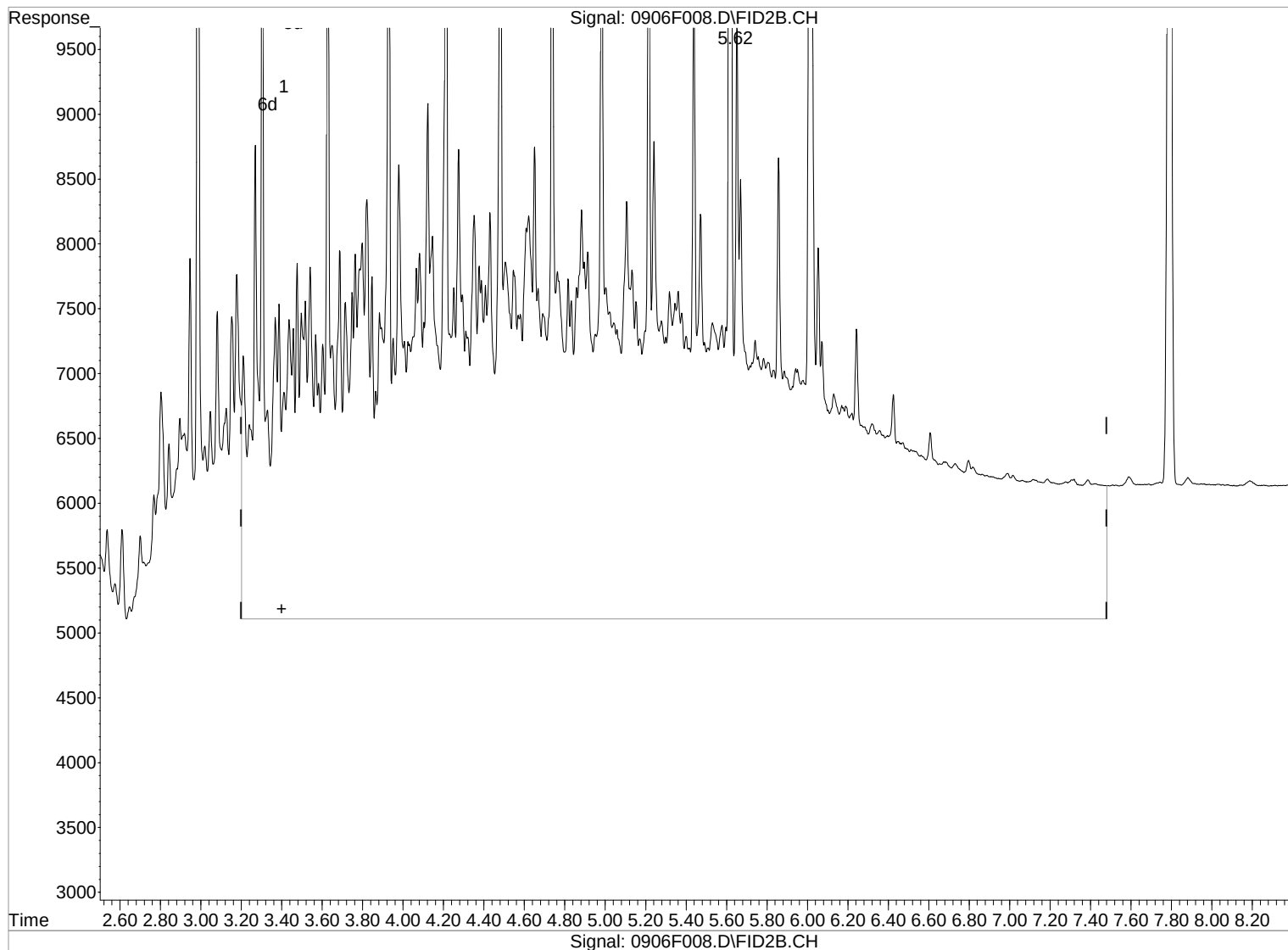
Quant Time: Sep 7 7:28 2023 Quant Results File: 090523FSVF.RES

Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Thu Sep 07 07:32:06 2023

Response via : Multiple Level Calibration



(7) C10-C28in DRO [8015] (H)

Manual Integration:

3.40min 368.349ppm

Before

response 528967

09/07/23

(+) = Expected Retention Time

0906F008.D 090523FSVF.M

Thu Sep 07 07:32:53 2023

424 of 3623

Data File : J:\GC35\DATA\090623\0906F008.D

Vial: 4

Acq On : 06 Sep 2023 2:17 pm

Operator: AA

Sample : DRO SVF04-61K 200/10

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

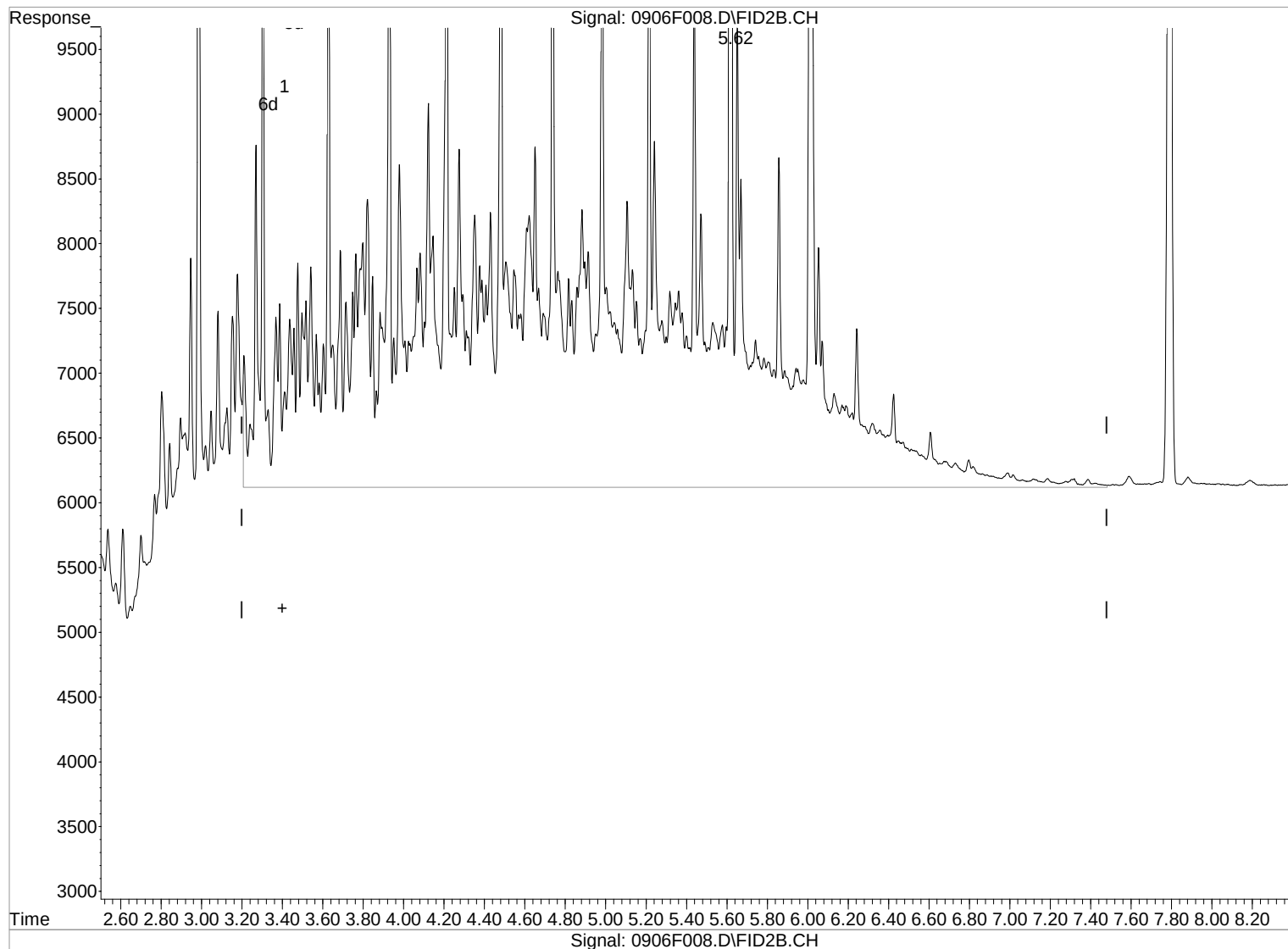
Quant Time: Sep 7 7:28 2023 Quant Results File: 090523FSVF.RES

Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Thu Sep 07 07:32:06 2023

Response via : Multiple Level Calibration



(7) C10-C28in DRO [8015] (H)

Manual Integration:

3.40min 187.220ppm

After

response 268857

Baseline/Shoulder

09/07/23

(+) = Expected Retention Time

0906F008.D 090523FSVF.M

Thu Sep 07 07:23:17 2023

425 of 3623

Data File : J:\GC35\DATA\090623\0906F008.D

Vial: 4

Acq On : 06 Sep 2023 2:17 pm

Operator: AA

Sample : DRO SVF04-61K 200/10

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

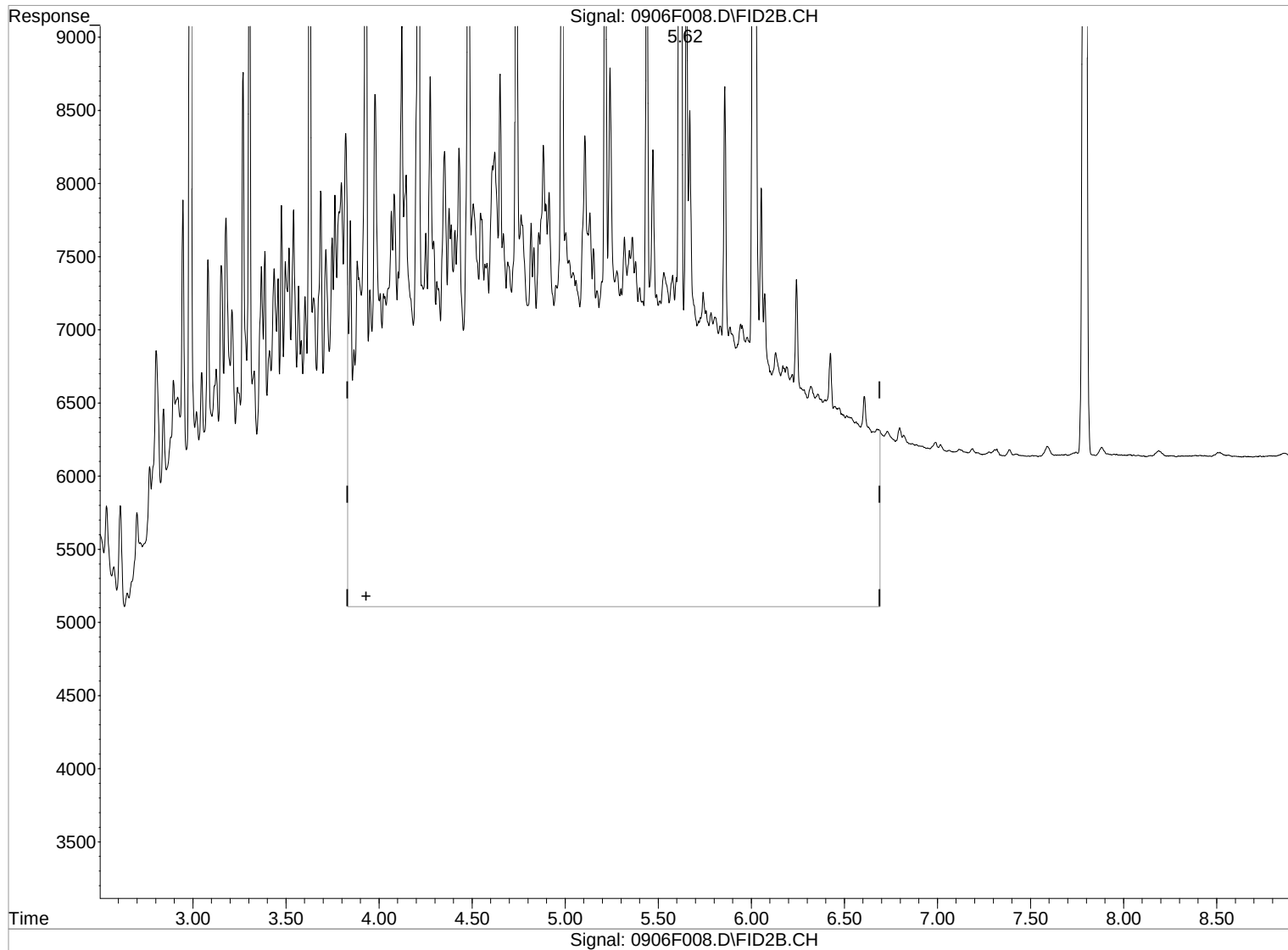
Quant Time: Sep 7 7:28 2023 Quant Results File: 090523FSVF.RES

Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Thu Sep 07 07:32:06 2023

Response via : Multiple Level Calibration



(8) C12-C25ex DRO [NWTPH] (H)

Manual Integration:

3.93min 353.089ppm

Before

response 395099

09/07/23

(+) = Expected Retention Time

0906F008.D 090523FSVF.M

Thu Sep 07 07:23:28 2023

426 of 3623

Data File : J:\GC35\DATA\090623\0906F008.D

Vial: 4

Acq On : 06 Sep 2023 2:17 pm

Operator: AA

Sample : DRO SVF04-61K 200/10

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

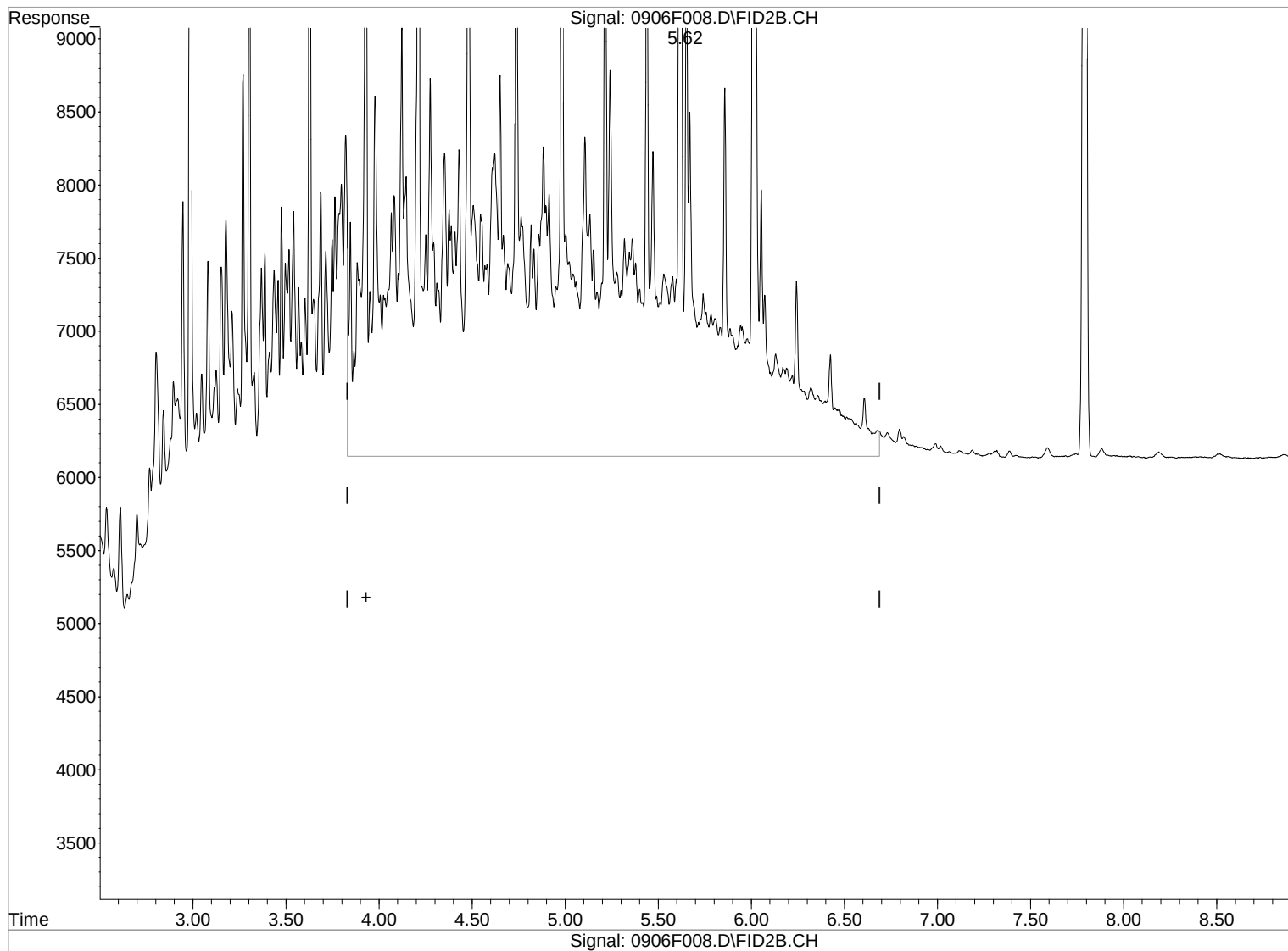
Quant Time: Sep 7 7:28 2023 Quant Results File: 090523FSVF.RES

Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Thu Sep 07 07:32:06 2023

Response via : Multiple Level Calibration



(8) C12-C25ex DRO [NWTPH] (H)

Manual Integration:

3.93min 193.981ppm

After

response 217061

Baseline/Shoulder

09/07/23

(+) = Expected Retention Time

0906F008.D 090523FSVF.M

Thu Sep 07 07:33:41 2023

427 of 3623

Data File : J:\GC35\DATA\090623\0906F009.D Vial: 5
 Acq On : 06 Sep 2023 2:38 pm Operator: AA
 Sample : DRO SVF04-61J 500/25 Inst : GC35
 Misc : Multiplr: 1.00
 IntFile : rteint.p
 Quant Time: Sep 07 07:28:18 2023 Quant Results File: 090523FSVF.RES

Quant Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)
 Title : AK102/103 SVF MJ257 CAL 16220
 Last Update : Wed Sep 06 07:02:25 2023
 Response via : Initial Calibration
 DataAcq Meth : SVF2_F.M

Volume Inj. : 1 uL
 Signal Phase : ZB-1
 Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
1) S 4-Bromofluorobenzene	2.99	17619	24.279 ppm
Spiked Amount 50.000	Recovery	=	48.56%
2) S o-Terphenyl	5.62	38006	24.287 ppm
Spiked Amount 50.000	Recovery	=	48.57%
3) S n-Triacontane	7.79	30830	23.707 ppm
Spiked Amount 50.000	Recovery	=	47.41%
Target Compounds			
6) H C10-C25ex DRO [AK102]	3.30	673137	499.719 ppm
7) H C10-C28in DRO [8015]	3.40	686441	478.007 ppm
8) H C12-C25ex DRO [NWTPH]	3.93	566505	506.270 ppm

Data File : J:\GC35\DATA\090623\0906F009.D

Vial: 5

Acq On : 06 Sep 2023 2:38 pm

Operator: AA

Sample : DR0 SVF04-61J 500/25

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Sep 7 7:38 2023 Quant Results File: 090523FSVF.RES

Quant Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Wed Sep 06 07:02:25 2023

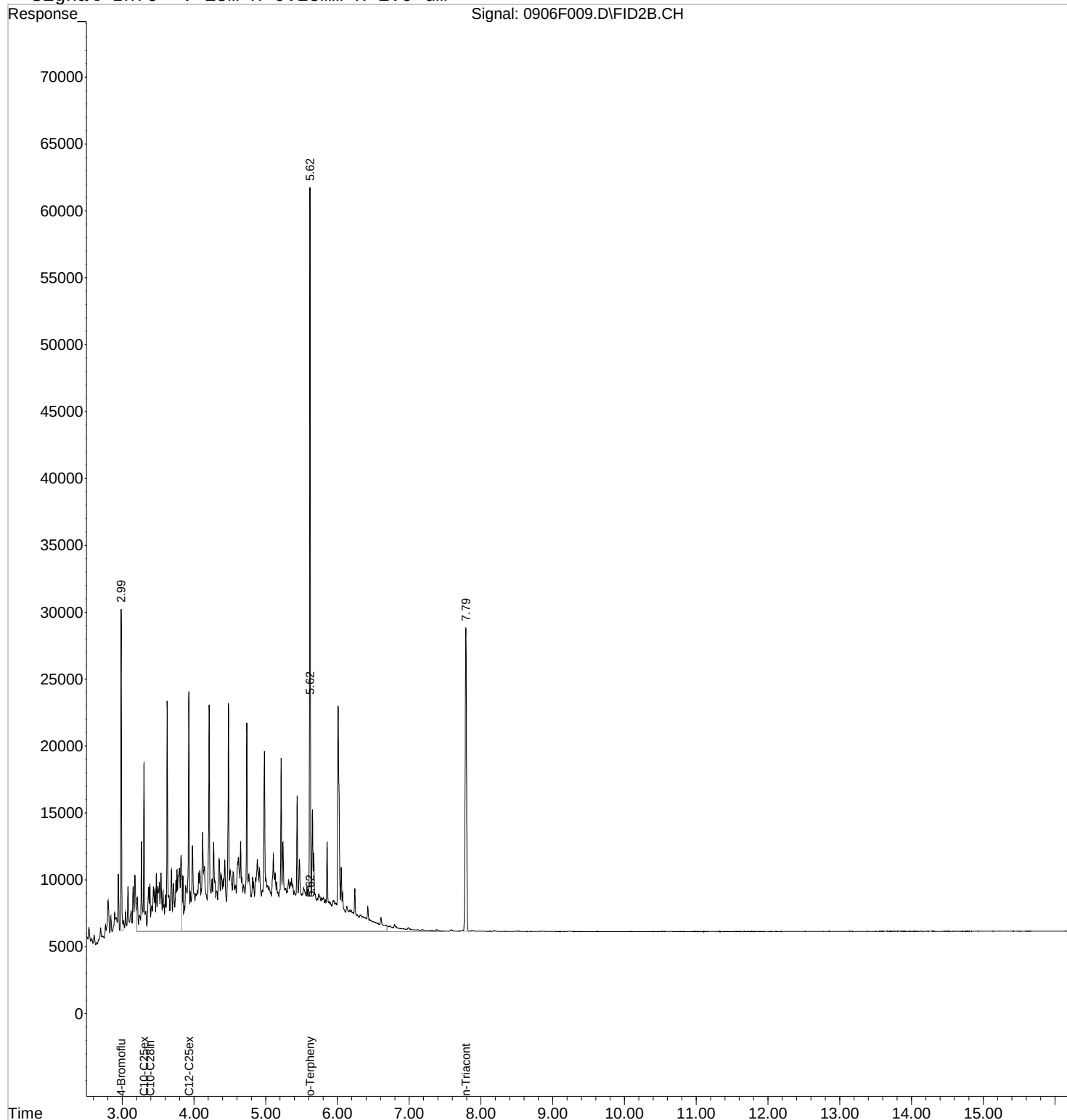
Response via : Single Level Calibration

DataAcq Meth : SVF2_F.M

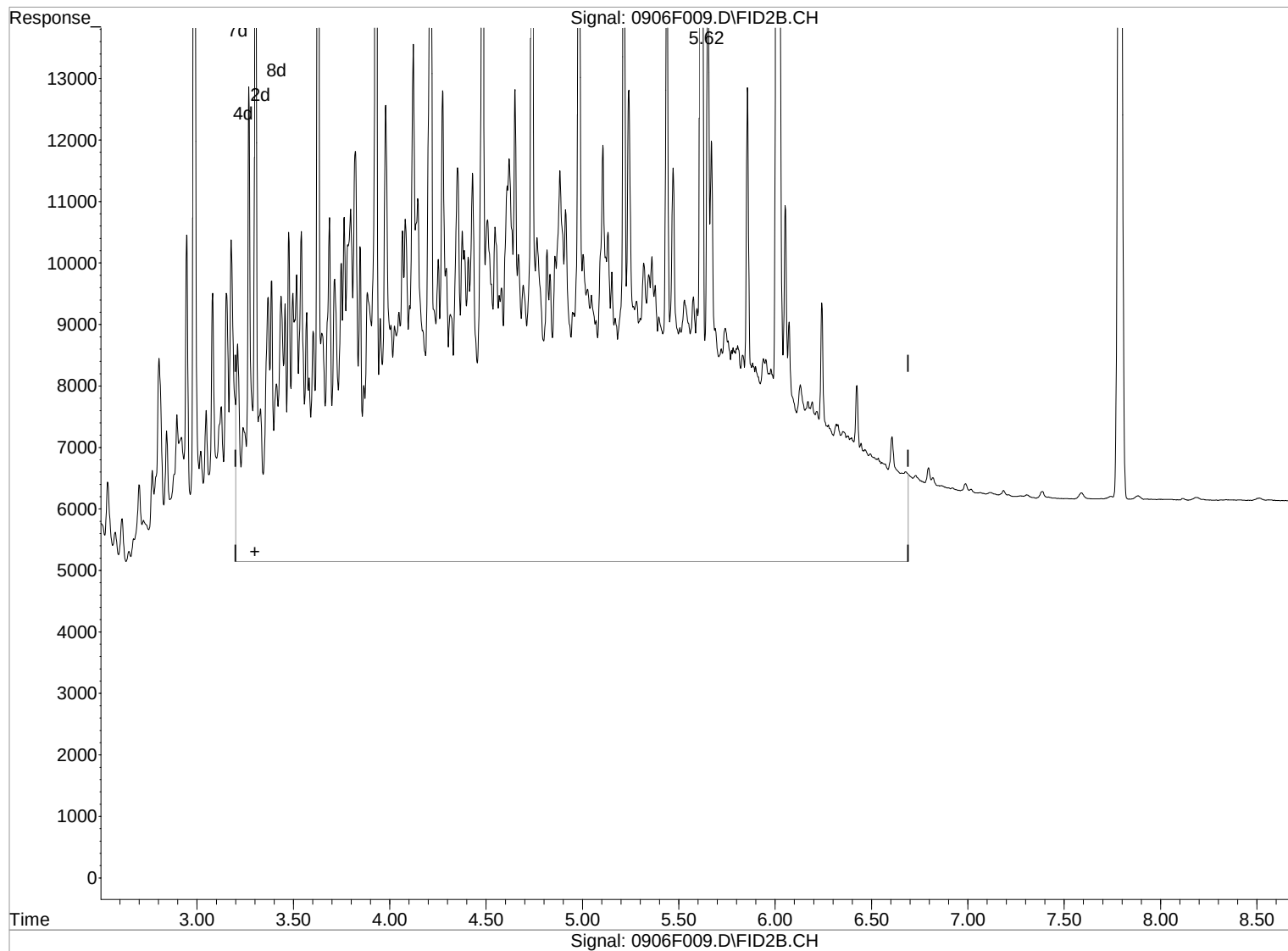
Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um




```
Method      : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)
Title       : AK102/103 SVF MJ257 CAL 16220
Last Update  : Thu Sep 07 07:33:52 2023
Response via : Multiple Level Calibration
```



Manual Integration:

Before

09/07/23

0906F009.D 090523FSVF.M Thu Sep 07 07:36:53 2023 430 of 3623

Data File : J:\GC35\DATA\090623\0906F009.D

Vial: 5

Acq On : 06 Sep 2023 2:38 pm

Operator: AA

Sample : DRO SVF04-61J 500/25

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

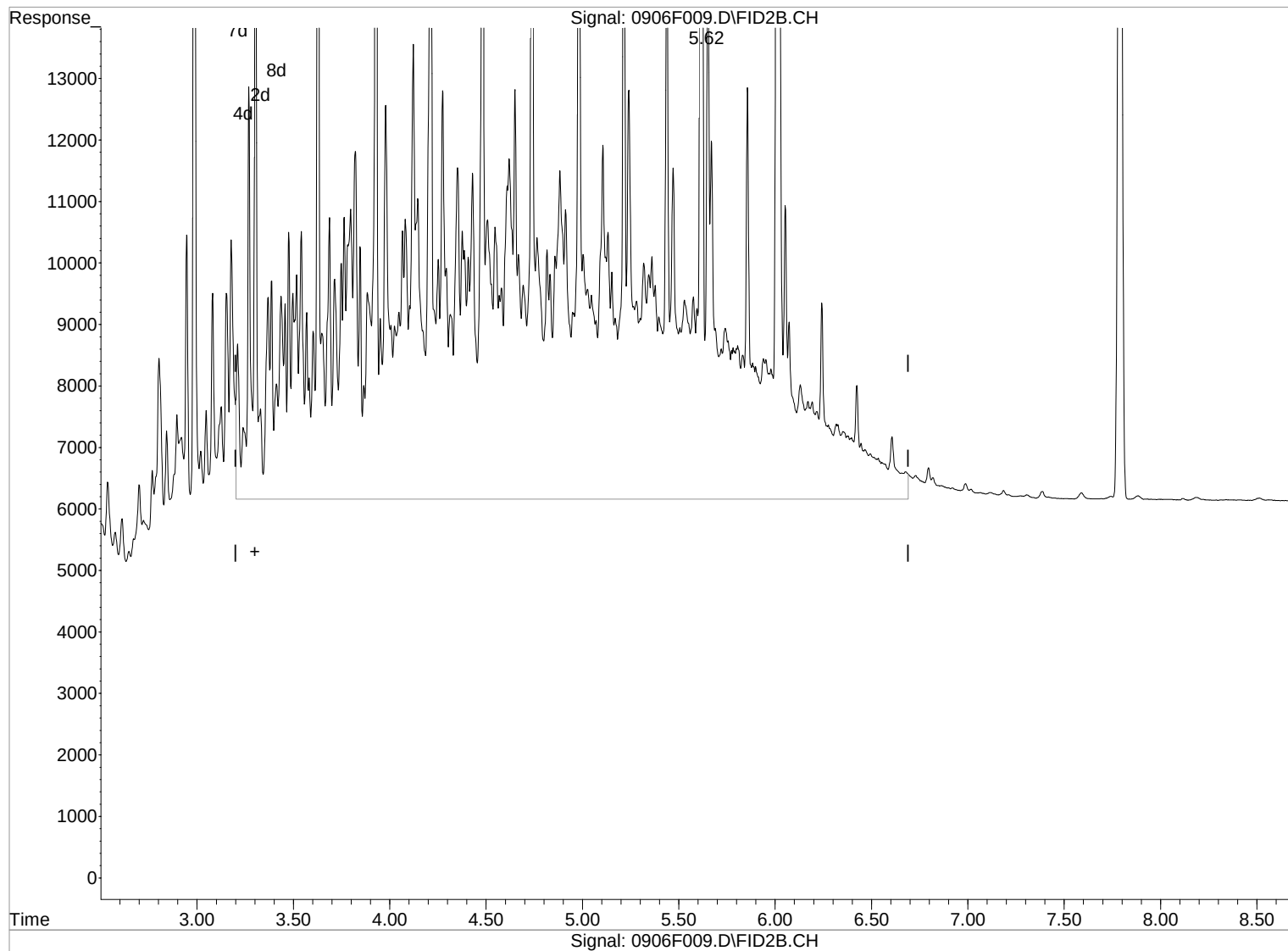
Quant Time: Sep 7 7:28 2023 Quant Results File: 090523FSVF.RES

Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Thu Sep 07 07:33:52 2023

Response via : Multiple Level Calibration



(6) C10-C25ex DRO [AK102] (H)

Manual Integration:

3.30min 499.719ppm

After

response 673137

Baseline/Shoulder

09/07/23

(+) = Expected Retention Time

0906F009.D 090523FSVF.M

Thu Sep 07 07:27:07 2023

431 of 3623

Data File : J:\GC35\DATA\090623\0906F009.D

Vial: 5

Acq On : 06 Sep 2023 2:38 pm

Operator: AA

Sample : DRO SVF04-61J 500/25

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

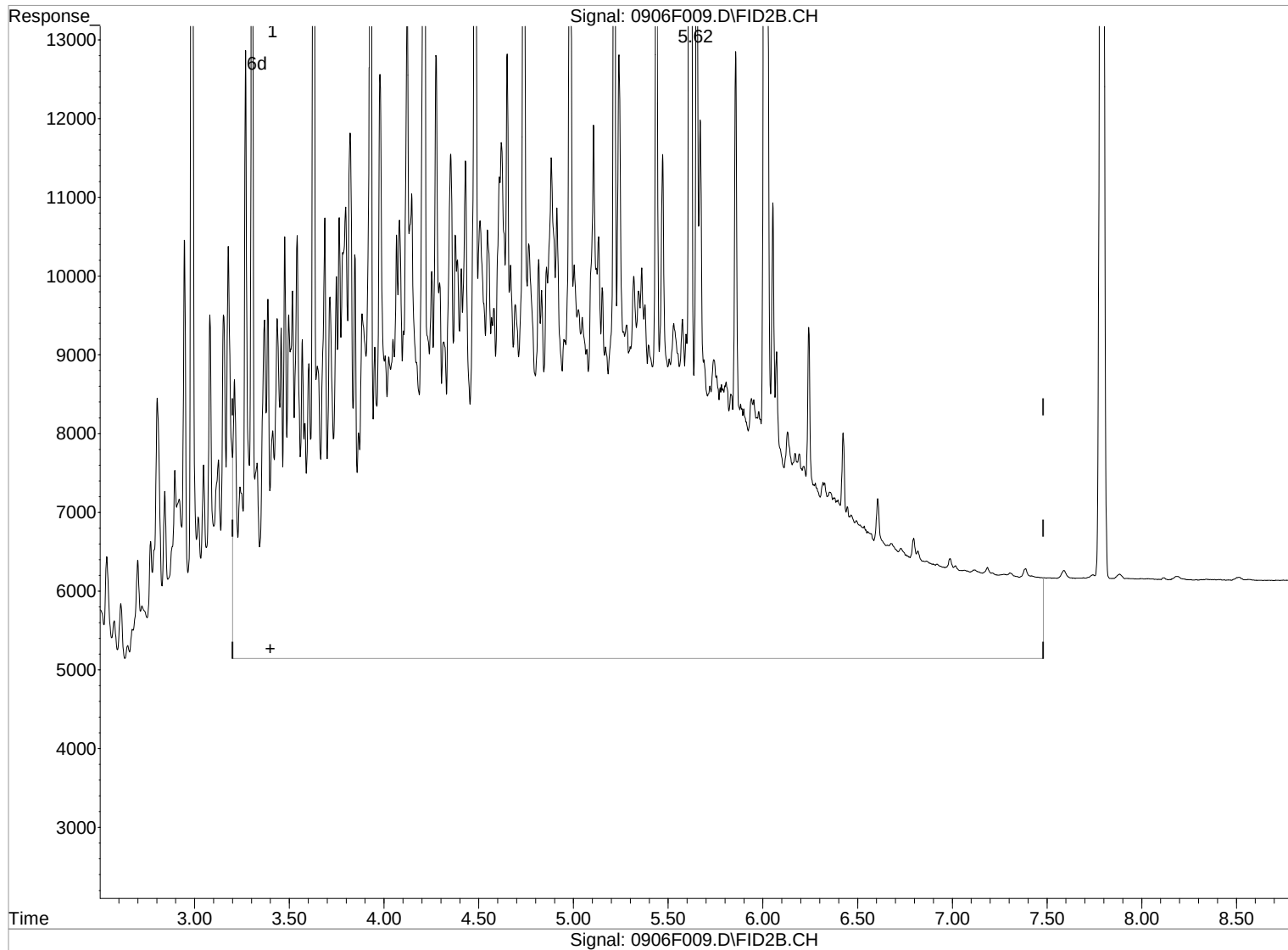
Quant Time: Sep 7 7:28 2023 Quant Results File: 090523FSVF.RES

Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Thu Sep 07 07:33:52 2023

Response via : Multiple Level Calibration



(7) C10-C28in DRO [8015] (H)

Manual Integration:

3.40min 655.067ppm

Before

response 940709

09/07/23

(+) = Expected Retention Time

0906F009.D 090523FSVF.M

Thu Sep 07 07:27:23 2023

432 of 3623

Data File : J:\GC35\DATA\090623\0906F009.D

Vial: 5

Acq On : 06 Sep 2023 2:38 pm

Operator: AA

Sample : DRO SVF04-61J 500/25

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

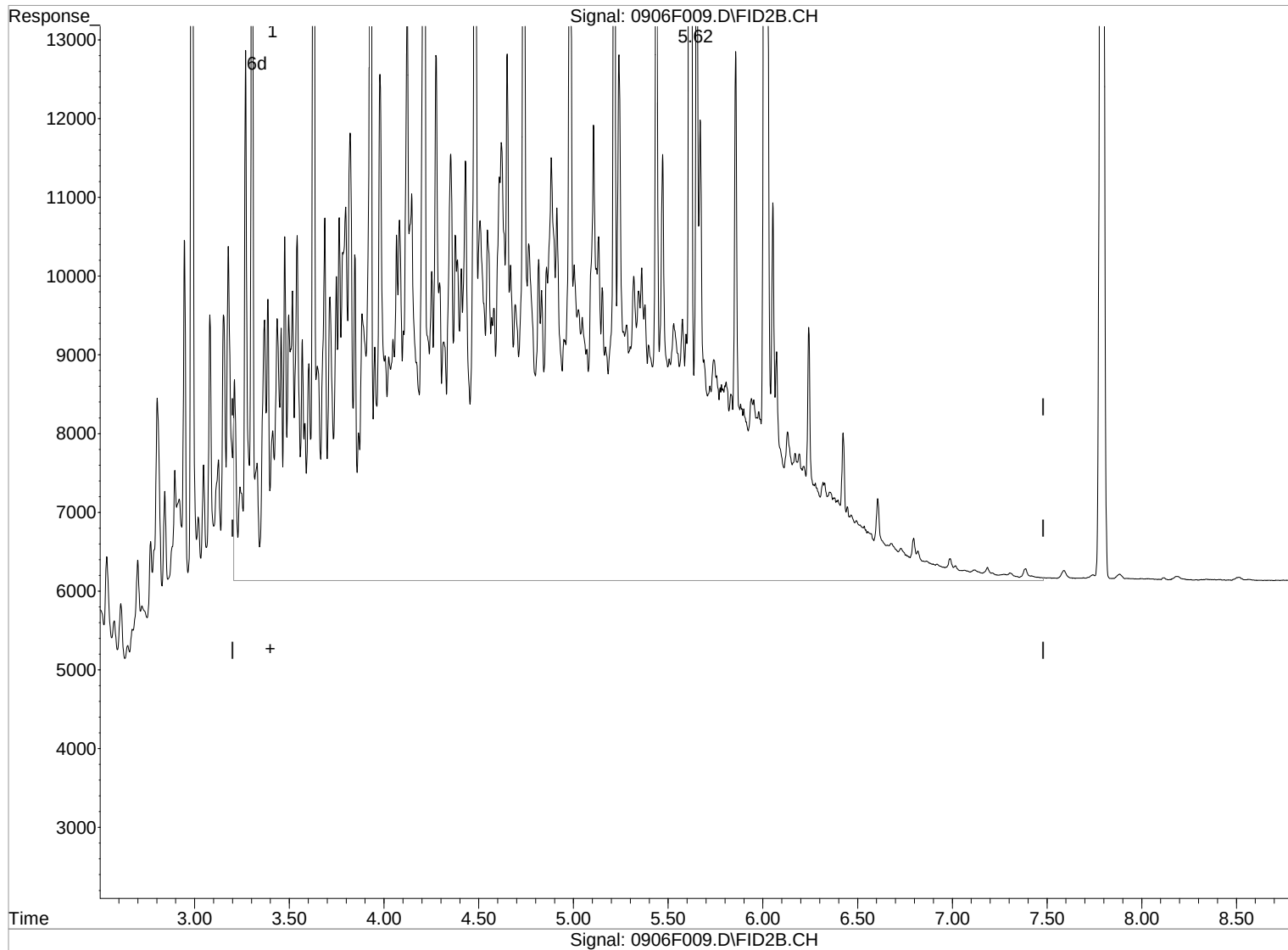
Quant Time: Sep 7 7:28 2023 Quant Results File: 090523FSVF.RES

Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Thu Sep 07 07:33:52 2023

Response via : Multiple Level Calibration



(7) C10-C28in DRO [8015] (H)

Manual Integration:

3.40min 478.007ppm

After

response 686441

Baseline/Shoulder

09/07/23

(+) = Expected Retention Time

0906F009.D 090523FSVF.M

Thu Sep 07 07:27:35 2023

433 of 3623

Data File : J:\GC35\DATA\090623\0906F009.D

Vial: 5

Acq On : 06 Sep 2023 2:38 pm

Operator: AA

Sample : DRO SVF04-61J 500/25

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

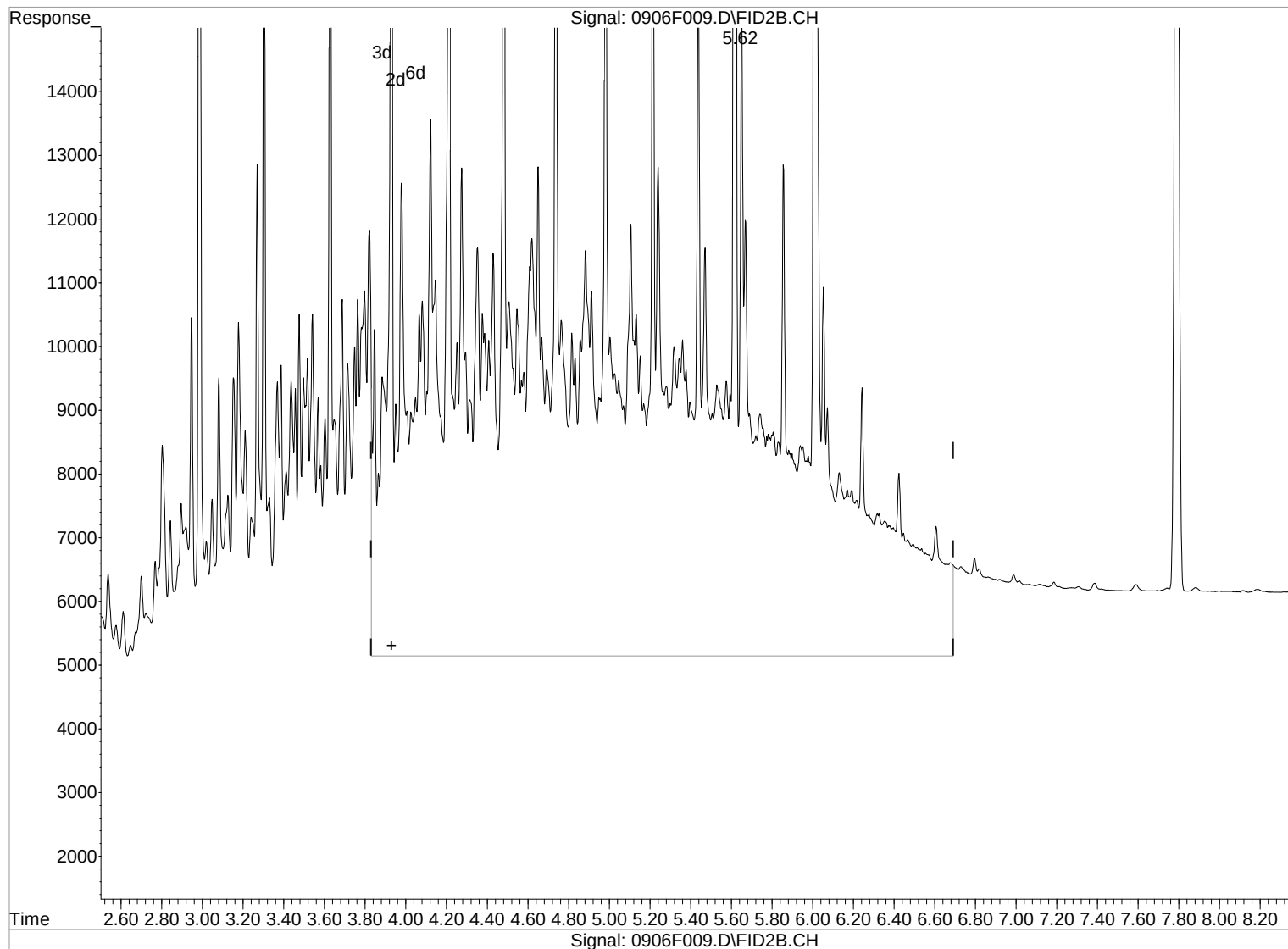
Quant Time: Sep 7 7:28 2023 Quant Results File: 090523FSVF.RES

Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Thu Sep 07 07:33:52 2023

Response via : Multiple Level Calibration



(8) C12-C25ex DRO [NWTPH] (H)

Manual Integration:

3.93min 658.494ppm

Before

response 736841

09/07/23

(+) = Expected Retention Time

0906F009.D 090523FSVF.M

Thu Sep 07 07:27:43 2023

434 of 3623

1st **AA** 09/07/23
2nd **FW** 09/08/23

Data File : J:\GC35\DATA\090623\0906F009.D

Acq On : 06 Sep 2023 2:38 pm

Sample : DRO SVF04-61J 500/25

Misc :

```
IntFile      : rteint.p
```

Quant Time: Sep 7 7:28 2023 Quant Results File: 090523FSVF.RES

Vial: 5

Operator: AA

Inst : GC35

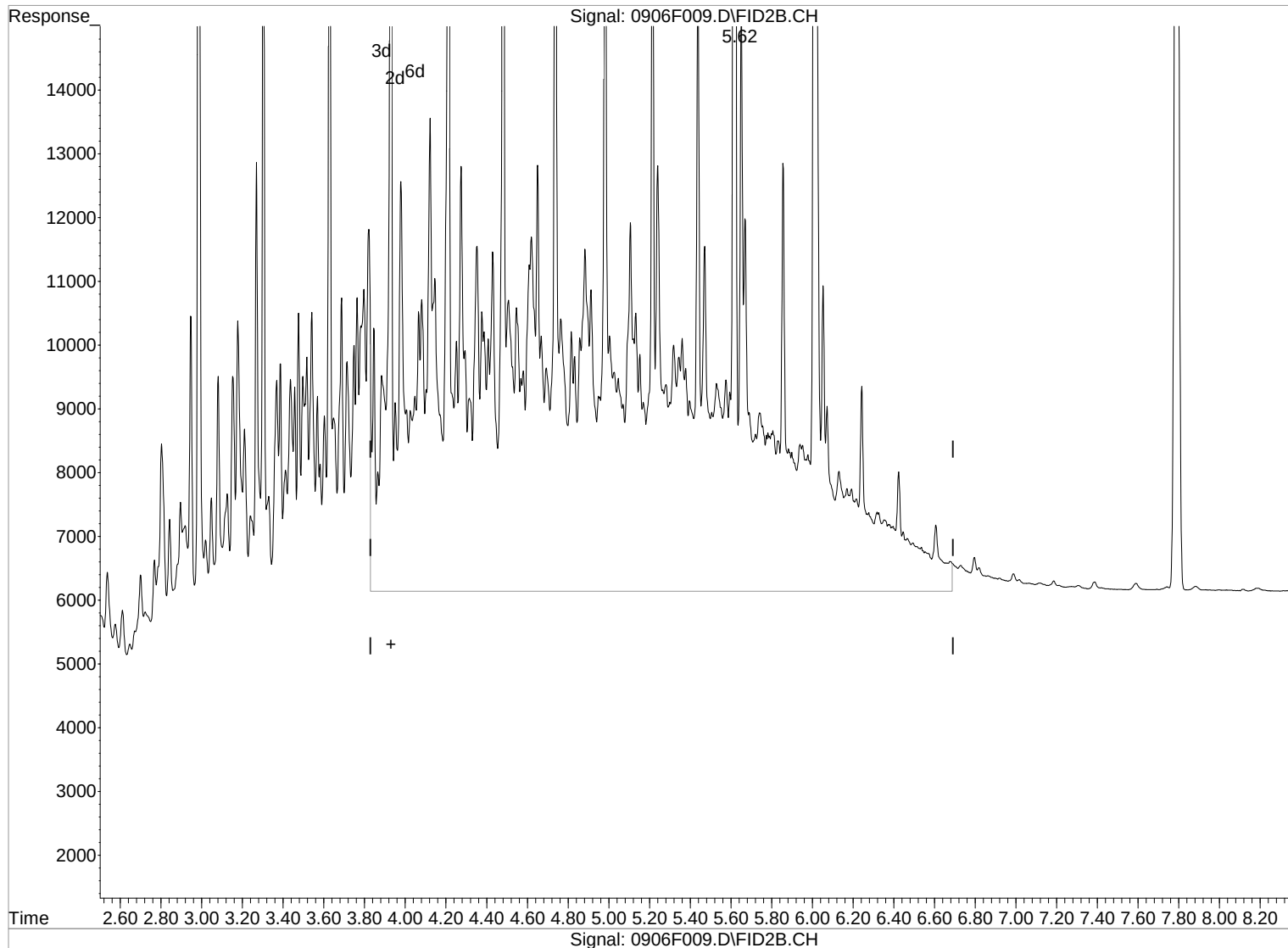
Multiplr: 1.00

Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Thu Sep 07 07:33:52 2023

Response via : Multiple Level Calibration



(8) C12-C25ex DRO [NWTPH] (H)

3.93min 506.270ppm

response 566505

Manual Integration:

After

Baseline/Shoulder

09/07/23

(+) = Expected Retention Time

0906F009.D 090523FSVF.M

Thu Sep 07 07:38:03 2023

435 of 3623

Data File : J:\GC35\DATA\090623\0906F010.D Vial: 6
 Acq On : 06 Sep 2023 3:00 pm Operator: AA
 Sample : DRO SVF04-61I 2000/100 Inst : GC35
 Misc : Multiplr: 1.00
 IntFile : rteint.p
 Quant Time: Sep 07 07:28:20 2023 Quant Results File: 090523FSVF.RES

Quant Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)
 Title : AK102/103 SVF MJ257 CAL 16220
 Last Update : Wed Sep 06 07:02:25 2023
 Response via : Initial Calibration
 DataAcq Meth : SVF2_F.M

Volume Inj. : 1 uL
 Signal Phase : ZB-1
 Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
1) S 4-Bromofluorobenzene	2.98	55818	76.918 ppm
Spiked Amount 50.000	Recovery	=	153.84%
2) S o-Terphenyl	5.62	120529	77.023 ppm
Spiked Amount 50.000	Recovery	=	154.05%
3) S n-Triacontane	7.79	98925	76.068 ppm
Spiked Amount 50.000	Recovery	=	152.14%
Target Compounds			
6) H C10-C25ex DRO [AK102]	3.30	2233473	1658.070 ppm
7) H C10-C28in DRO [8015]	3.40	2300777	1602.158 ppm
8) H C12-C25ex DRO [NWTPH]	3.93	1861632	1663.688 ppm

Data File : J:\GC35\DATA\090623\0906F010.D

Vial: 6

Acq On : 06 Sep 2023 3:00 pm

Operator: AA

Sample : DRO SVF04-61I 2000/100

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Sep 7 7:38 2023 Quant Results File: 090523FSVF.RES

Quant Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Wed Sep 06 07:02:25 2023

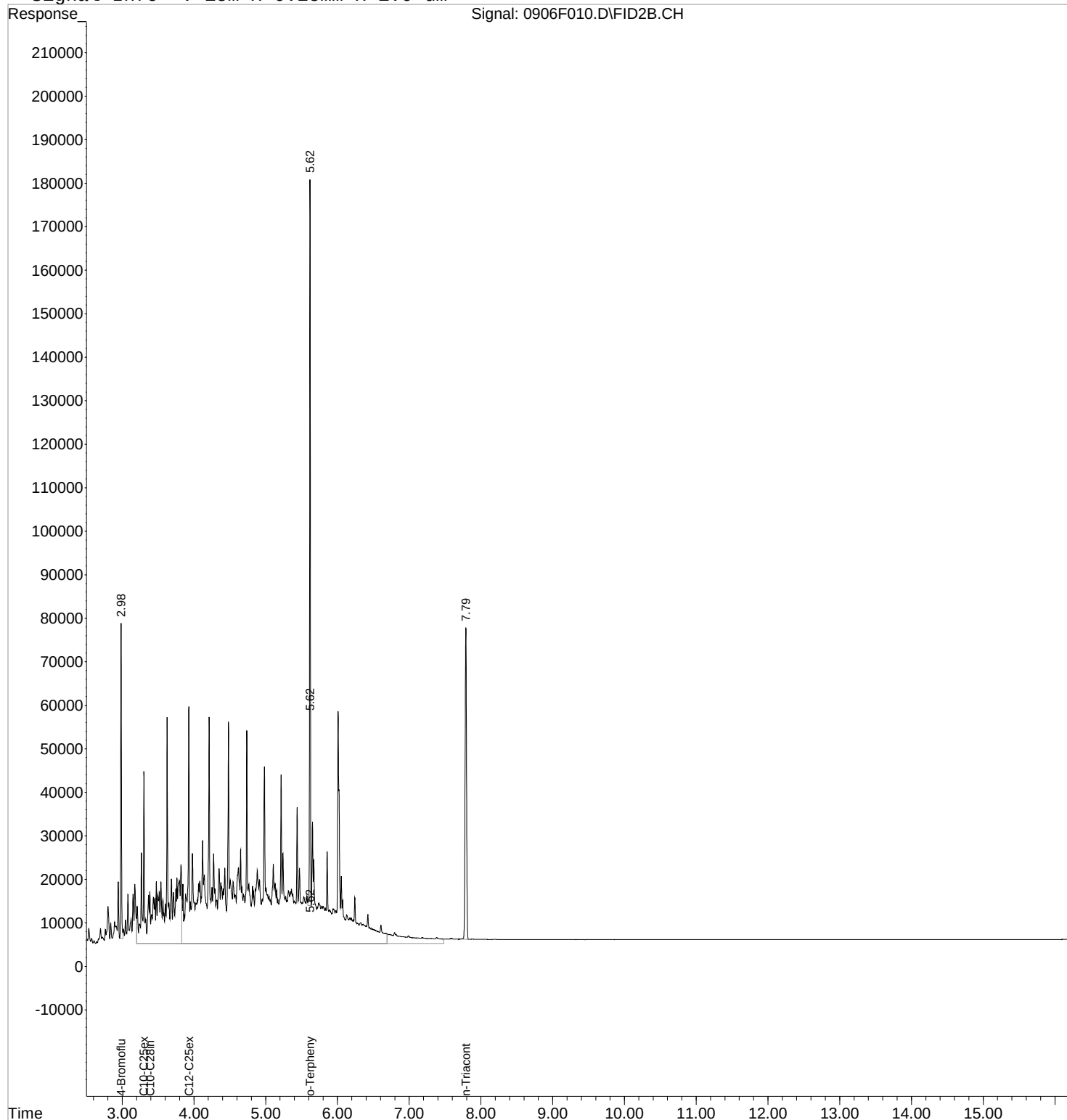
Response via : Single Level Calibration

DataAcq Meth : SVF2_F.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Data File : J:\GC35\DATA\090623\0906F011.D Vial: 7
 Acq On : 06 Sep 2023 3:22 pm Operator: AA
 Sample : DRO SVF04-61H 5000/250 Inst : GC35
 Misc : Multiplr: 1.00
 IntFile : rteint.p
 Quant Time: Sep 07 07:28:21 2023 Quant Results File: 090523FSVF.RES

Quant Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)
 Title : AK102/103 SVF MJ257 CAL 16220
 Last Update : Wed Sep 06 07:02:25 2023
 Response via : Initial Calibration
 DataAcq Meth : SVF2_F.M

Volume Inj. : 1 uL
 Signal Phase : ZB-1
 Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
1) S 4-Bromofluorobenzene	2.99	167559	230.899 ppm
Spiked Amount 50.000	Recovery	=	461.80%
2) S o-Terphenyl	5.62	364660	233.033 ppm
Spiked Amount 50.000	Recovery	=	466.07%
3) S n-Triacontane	7.79	290990	223.756 ppm
Spiked Amount 50.000	Recovery	=	447.51%
Target Compounds			
6) H C10-C25ex DRO [AK102]	3.30	6603619	4902.350 ppm
7) H C10-C28in DRO [8015]	3.40	6705596	4669.476 ppm
8) H C12-C25ex DRO [NWTPH]	3.93	5521469	4934.382 ppm

Data File : J:\GC35\DATA\090623\0906F011.D

Vial: 7

Acq On : 06 Sep 2023 3:22 pm

Operator: AA

Sample : DR0 SVF04-61H 5000/250

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Sep 7 7:39 2023 Quant Results File: 090523FSVF.RES

Quant Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Wed Sep 06 07:02:25 2023

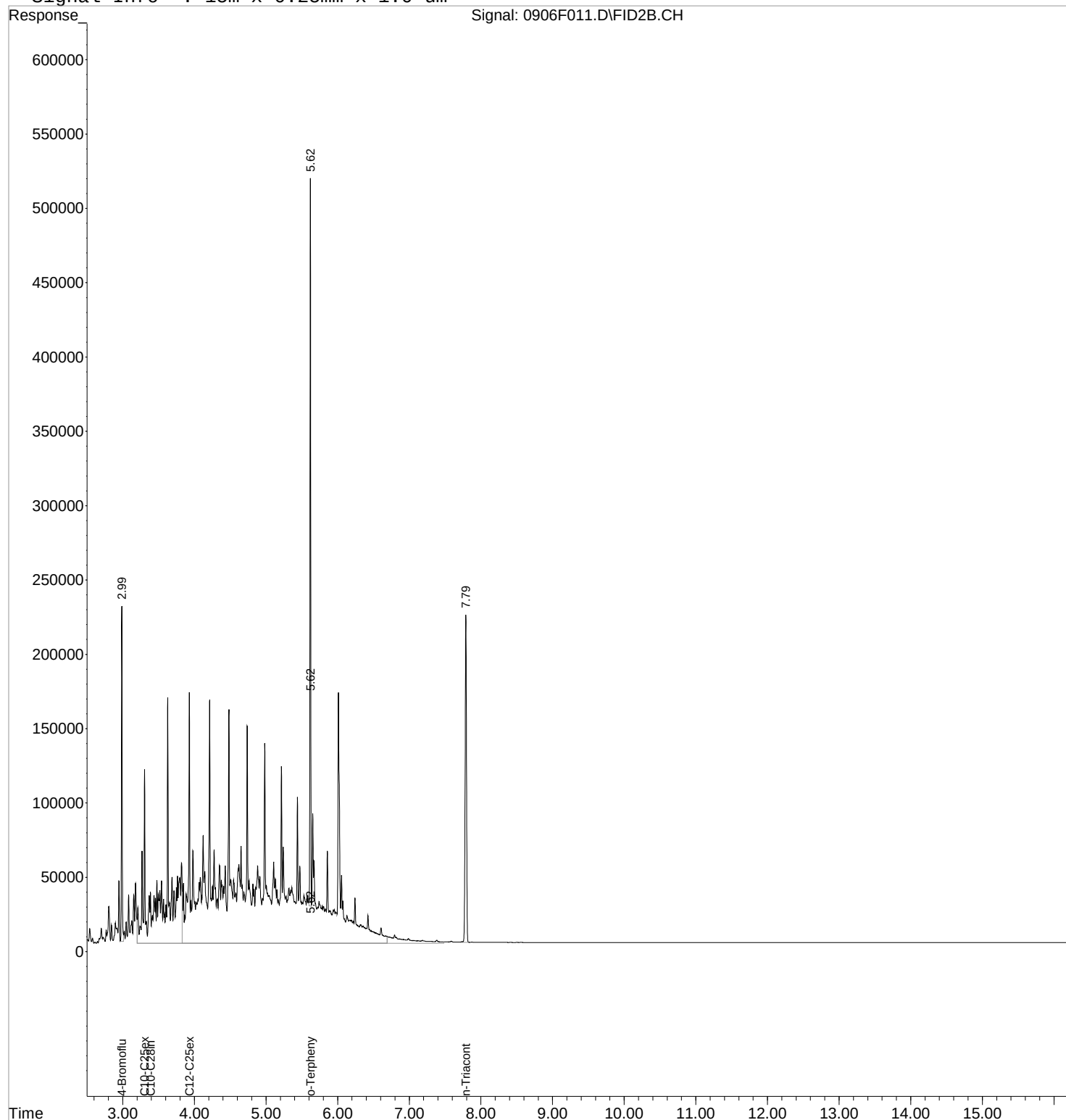
Response via : Single Level Calibration

DataAcq Meth : SVF2_F.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Data File : J:\GC35\DATA\090623\0906F012.D Vial: 8
Acq On : 06 Sep 2023 3:43 pm Operator: AA
Sample : DR0 SVF04-61G 20K Inst : GC35
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Sep 07 07:28:23 2023 Quant Results File: 090523FSVF.RES

Quant Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)
Title : AK102/103 SVF MJ257 CAL 16220
Last Update : Wed Sep 06 07:02:25 2023
Response via : Initial Calibration
DataAcq Meth : SVF2_F.M

Volume Inj. : 1 uL
Signal Phase : ZB-1
Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

Target Compounds

6) H	C10-C25ex DR0 [AK102]	3.30	23478574	17429.864	ppm
7) H	C10-C28in DR0 [8015]	3.40	23733887	16527.212	ppm
8) H	C12-C25ex DR0 [NWTPH]	3.93	19582855	17500.648	ppm

Volume Inj. : 1 uL
Signal Phase : ZB-1
Signal Info : 15m x 0.25mm x 1.0 um



Data File : J:\GC35\DATA\090623\0906F013.D Vial: 9
Acq On : 06 Sep 2023 4:05 pm Operator: AA
Sample : DR0 SVF04-61F 50K Inst : GC35
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Sep 07 07:28:24 2023 Quant Results File: 090523FSVF.RES

Quant Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)
Title : AK102/103 SVF MJ257 CAL 16220
Last Update : Wed Sep 06 07:02:25 2023
Response via : Initial Calibration
DataAcq Meth : SVF2_F.M

Volume Inj. : 1 uL
Signal Phase : ZB-1
Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

Target Compounds

6) H	C10-C25ex DR0 [AK102]	3.30	58037005	43085.117	ppm
7) H	C10-C28in DR0 [8015]	3.40	58628966	40826.576	ppm
8) H	C12-C25ex DR0 [NWTPH]	3.93	48207991	43082.128	ppm

Data File : J:\GC35\DATA\090623\0906F013.D

Vial: 9

Acq On : 06 Sep 2023 4:05 pm

Operator: AA

Sample : DR0 SVF04-61F 50K

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Sep 7 7:39 2023 Quant Results File: 090523FSVF.RES

Quant Method : J:\GC35\METHODS\090523FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Wed Sep 06 07:02:25 2023

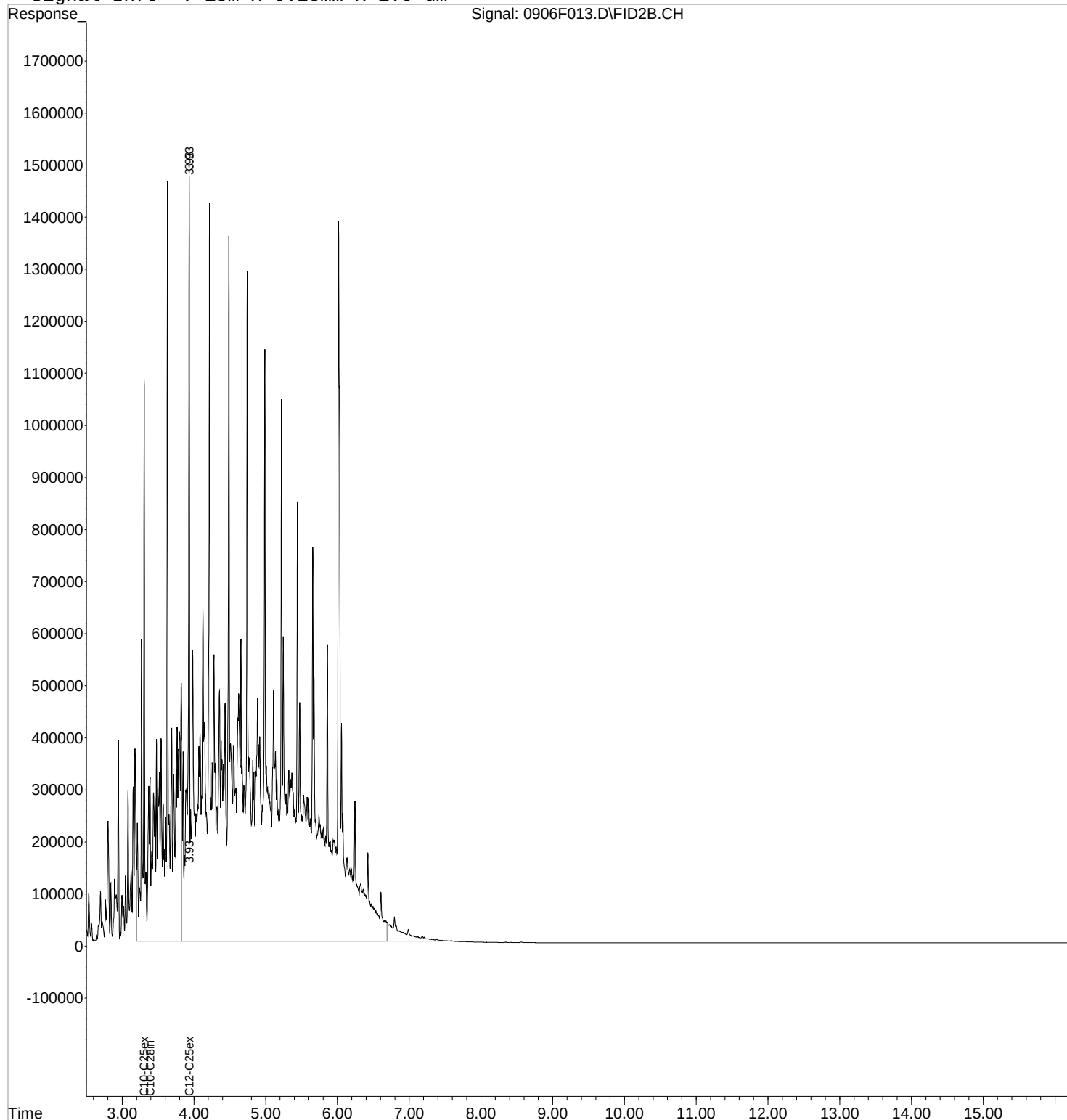
Response via : Single Level Calibration

DataAcq Meth : SVF2_F.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Data File : J:\GC35\DATA\090623\0906F069.D Vial: 1
Acq On : 07 Sep 2023 12:16 pm Operator: AA
Sample : IB Inst : GC35
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Sep 07 13:11:58 2023 Quant Results File: 090623FSVF.RES

Quant Method : J:\GC35\METHODS\090623FSVF.M (RTE Integrator)
Title : AK102/103 SVF MJ257 CAL 16220
Last Update : Thu Sep 07 12:24:13 2023
Response via : Initial Calibration
DataAcq Meth : SVF2_F.M

Volume Inj. : 1 uL
Signal Phase : ZB-1
Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

Target Compounds

6)	H	C10-C25ex DRO [AK102]	3.30	7464	5.911 ppm
7)	H	C10-C28in DRO [8015]	3.40	9763	7.341 ppm
8)	H	C12-C25ex DRO [NWTPH]	3.93	7144	6.781 ppm
10)	H	C25-C36in RRO [NWTPH]	6.79	170100	206.695 ppm
11)	H	C25-C36in RRO [AK103]	6.89	170100	221.883 ppm

Data File : J:\GC35\DATA\090623\0906F069.D

Vial: 1

Acq On : 07 Sep 2023 12:16 pm

Operator: AA

Sample : IB

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Sep 7 13:13 2023 Quant Results File: 090623FSVF.RES

Quant Method : J:\GC35\METHODS\090623FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Thu Sep 07 12:24:13 2023

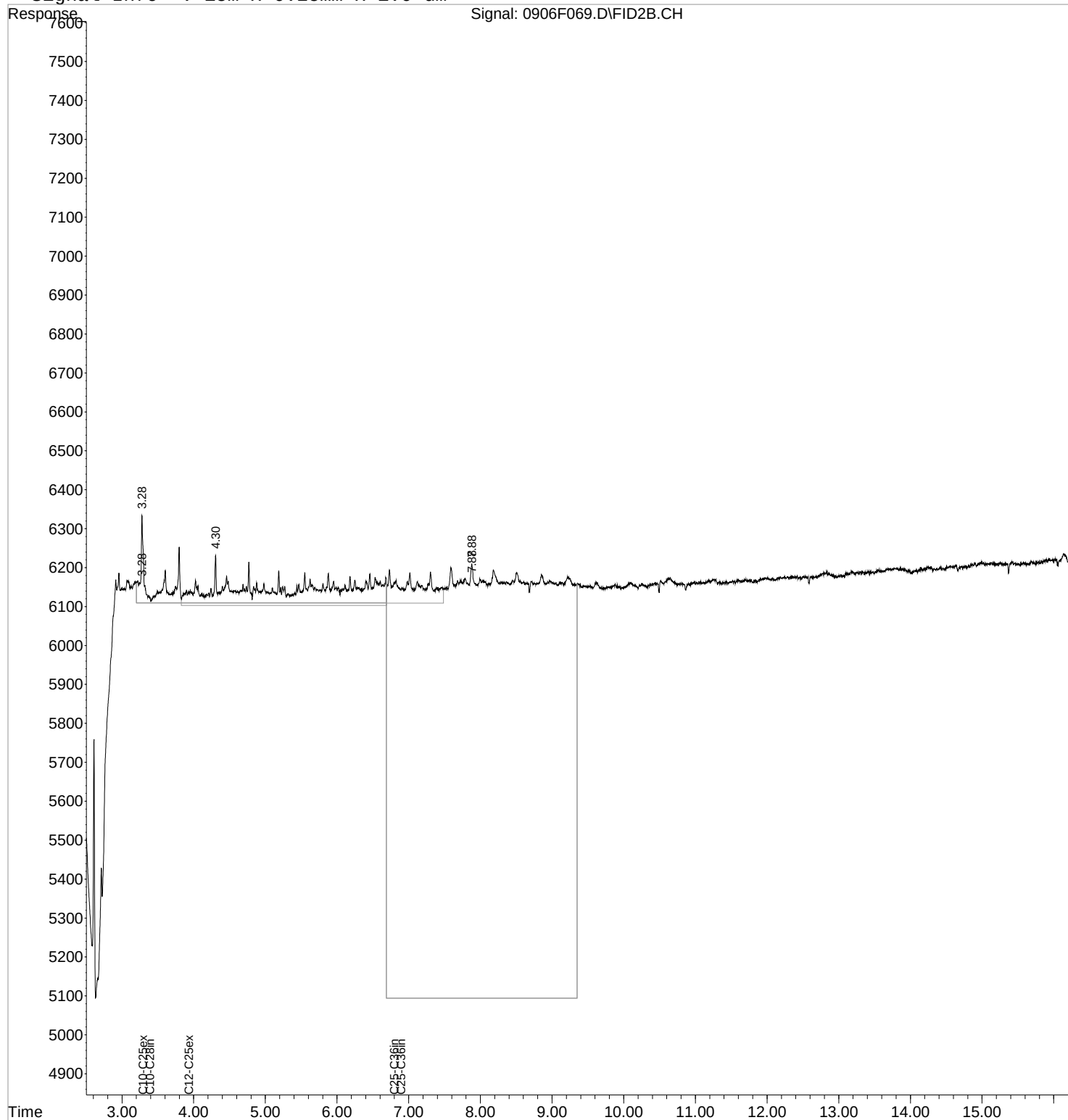
Response via : Single Level Calibration

DataAcq Meth : SVF2_F.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Data File : J:\GC35\DATA\090623\0906F069.D

Acq On : 07 Sep 2023 12:16 pm

Sample : IB

Misc :

IntFile : rteint.p

Quant Time: Sep 7 13:11 2023 Quant Results File: 090623FSVF.RES

Vial: 1

Operator: AA

Inst : GC35

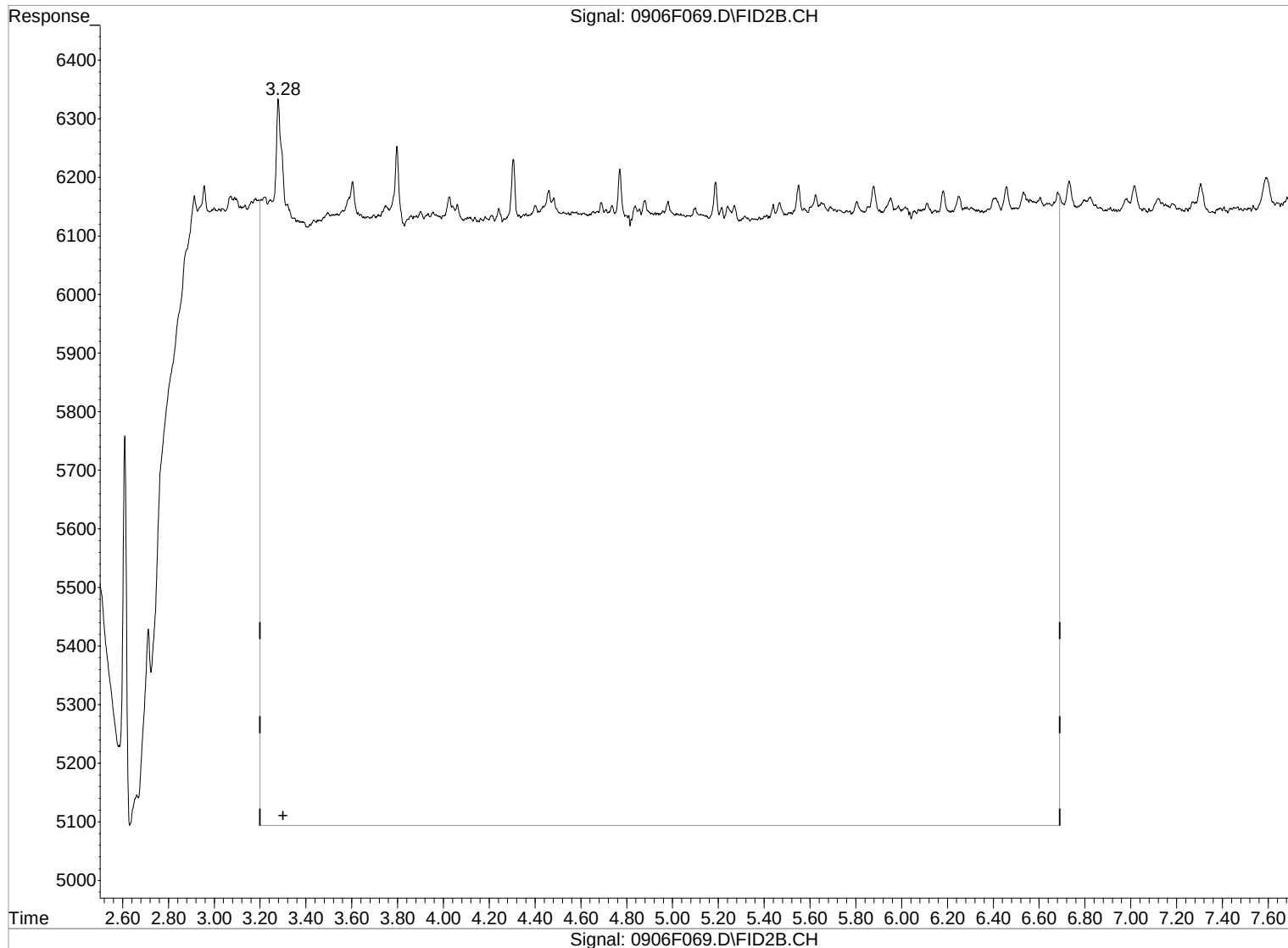
Multiplr: 1.00

Method : J:\GC35\METHODS\090623FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Thu Sep 07 12:24:13 2023

Response via : Multiple Level Calibration



(6) C10-C25ex DRO [AK102] (H)

3.30min 174.406ppm

response 220220

Manual Integration:

Before

09/07/23

(+) = Expected Retention Time

0906F069.D 090623FSVF.M

Thu Sep 07 13:12:27 2023

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Data File : J:\GC35\DATA\090623\0906F069.D

Acq On : 07 Sep 2023 12:16 pm

Sample : IB

Misc :

IntFile : rteint.p

Quant Time: Sep 7 13:11 2023 Quant Results File: 090623FSVF.RES

Vial: 1

Operator: AA

Inst : GC35

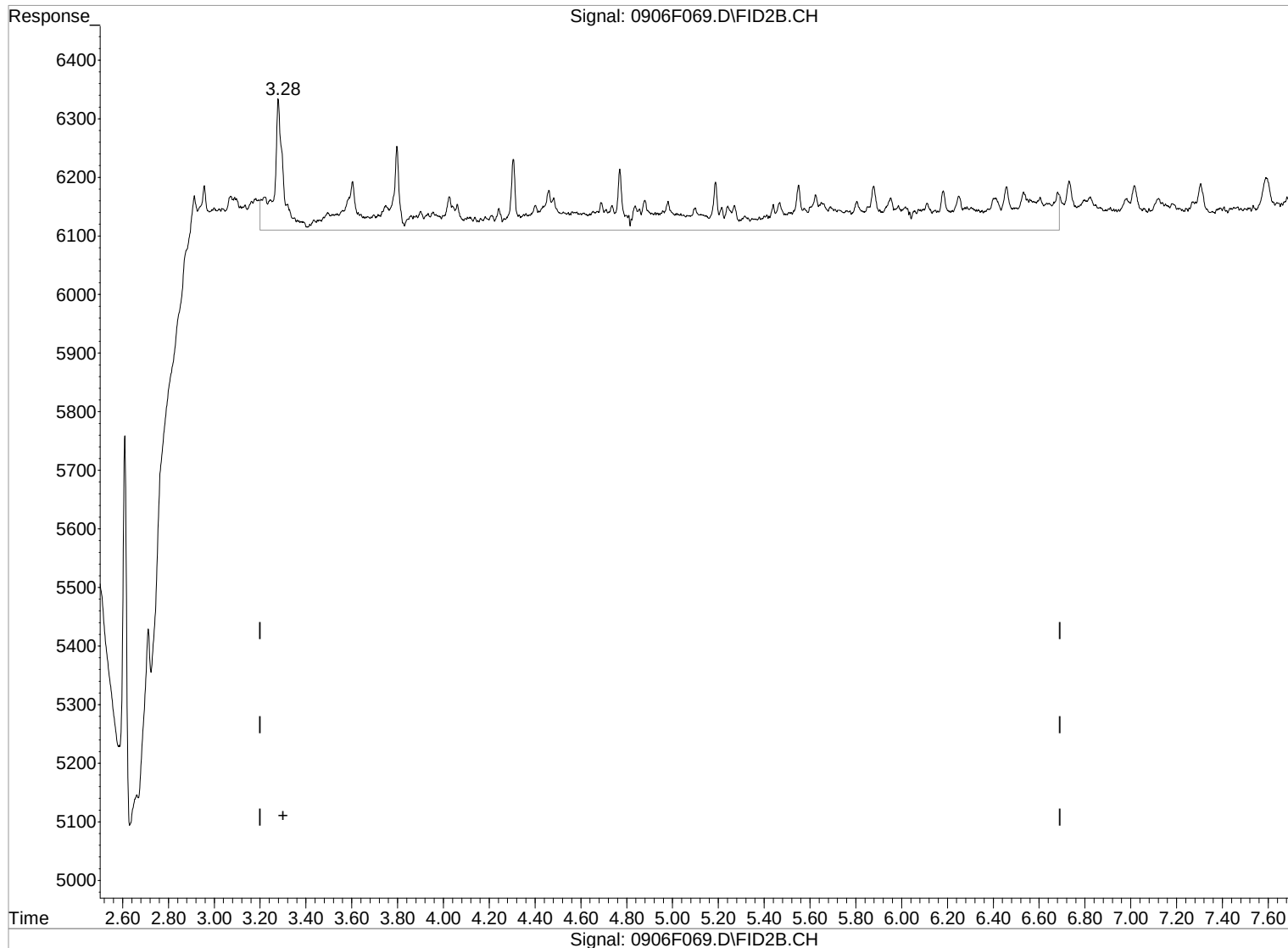
Multiplr: 1.00

Method : J:\GC35\METHODS\090623FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Thu Sep 07 12:24:13 2023

Response via : Multiple Level Calibration



(6) C10-C25ex DRO [AK102] (H)

3.30min 5.911ppm

response 7464

Manual Integration:

After

Baseline/Shoulder

09/07/23

(+) = Expected Retention Time

0906F069.D 090623FSVF.M

Thu Sep 07 13:12:38 2023

447 of 3623

Data File : J:\GC35\DATA\090623\0906F069.D

Acq On : 07 Sep 2023 12:16 pm

Sample : IB

Misc :

IntFile : rteint.p

Quant Time: Sep 7 13:11 2023 Quant Results File: 090623FSVF.RES

Vial: 1

Operator: AA

Inst : GC35

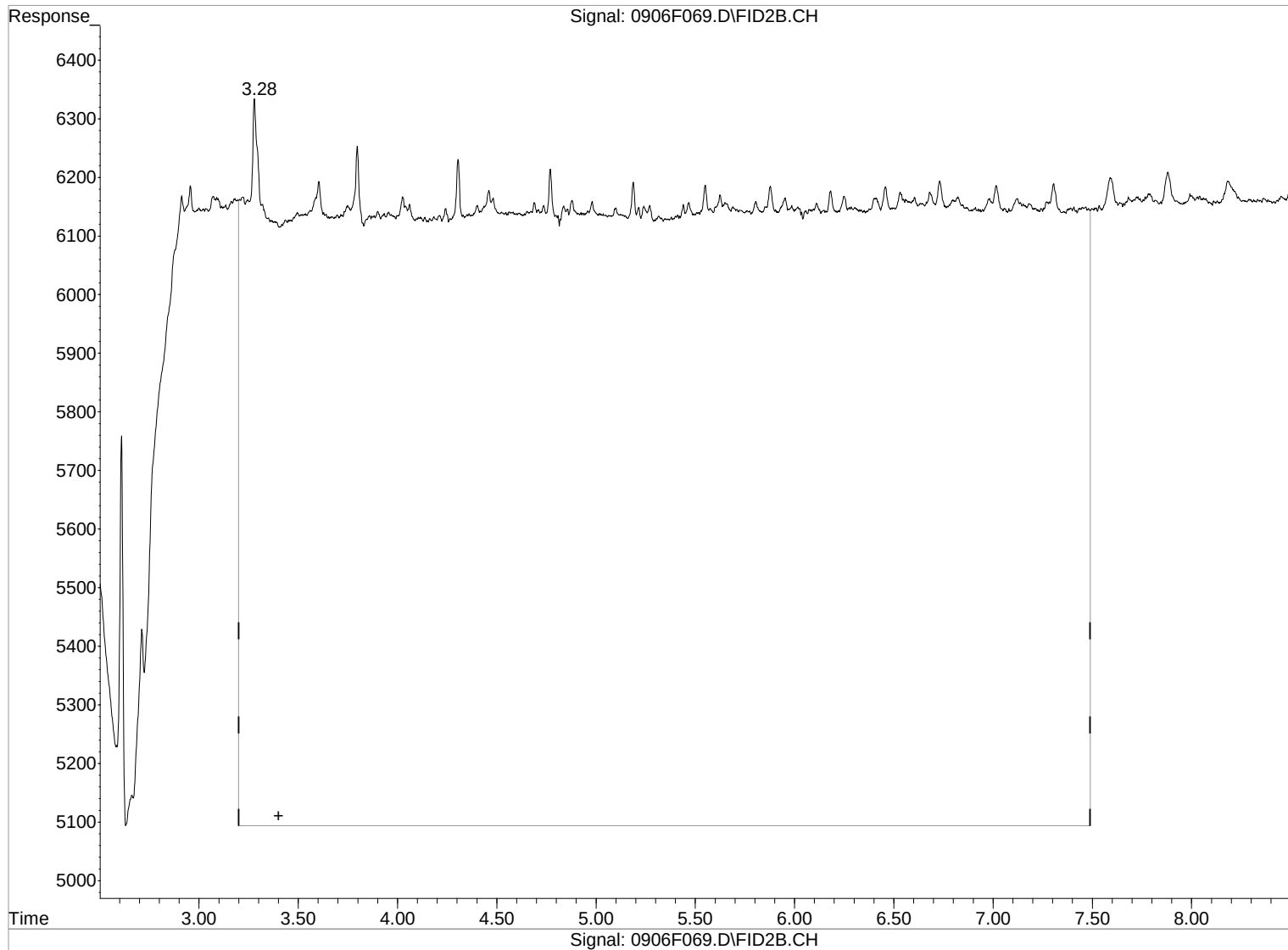
Multiplr: 1.00

Method : J:\GC35\METHODS\090623FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Thu Sep 07 12:24:13 2023

Response via : Multiple Level Calibration



(7) C10-C28in DRO [8015] (H)

Manual Integration:

3.40min 203.810ppm

Before

response 271036

09/07/23

(+) = Expected Retention Time

0906F069.D 090623FSVF.M

Thu Sep 07 13:12:41 2023

448 of 3623

Data File : J:\GC35\DATA\090623\0906F069.D

Acq On : 07 Sep 2023 12:16 pm

Sample : IB

Misc :

IntFile : rteint.p

Quant Time: Sep 7 13:11 2023 Quant Results File: 090623FSVF.RES

Vial: 1

Operator: AA

Inst : GC35

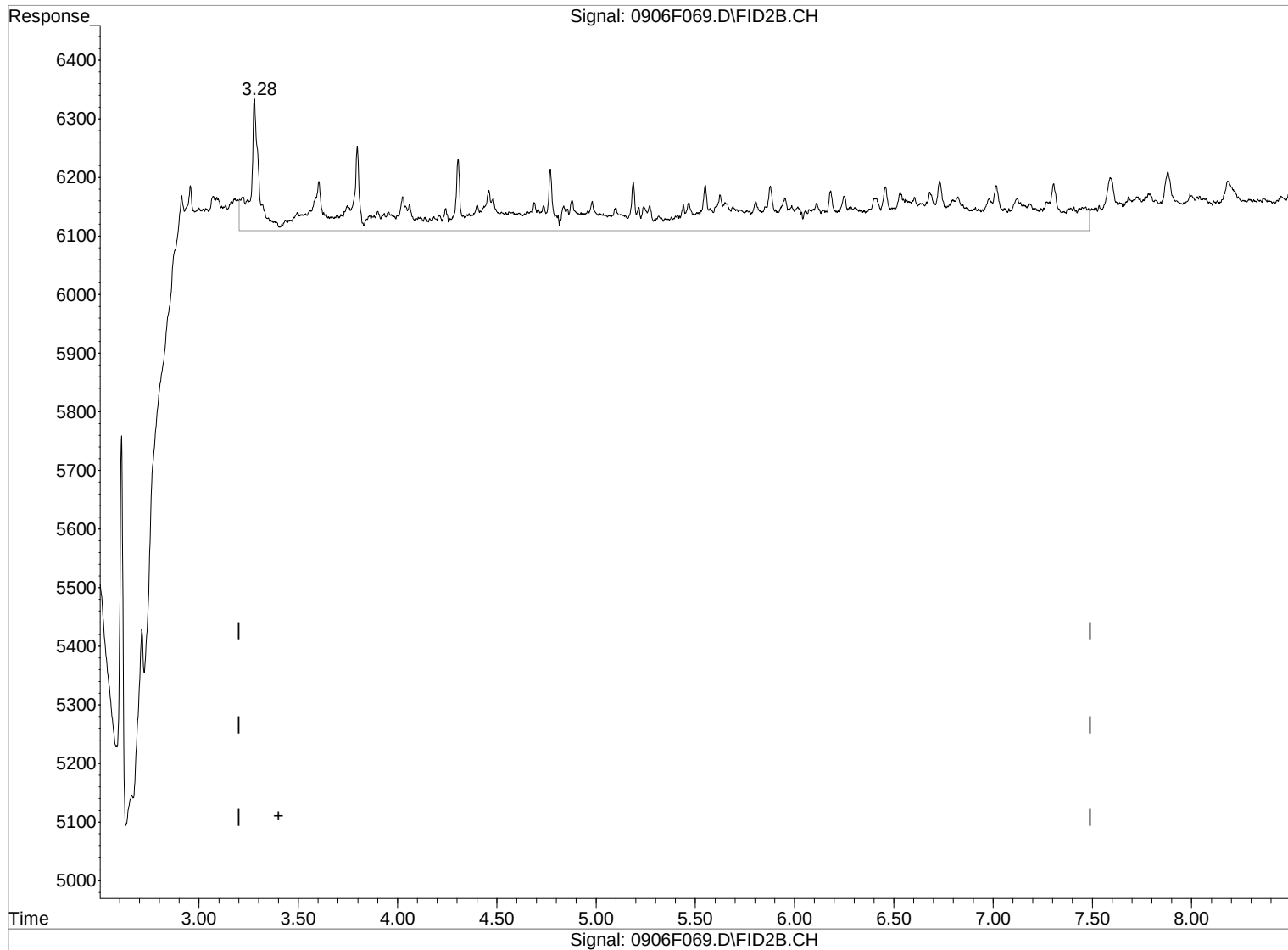
Multiplr: 1.00

Method : J:\GC35\METHODS\090623FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Thu Sep 07 12:24:13 2023

Response via : Multiple Level Calibration



(7) C10-C28in DRO [8015] (H)

3.40min 7.341ppm

response 9763

Manual Integration:

After

Baseline/Shoulder

09/07/23

(+) = Expected Retention Time

0906F069.D 090623FSVF.M

Thu Sep 07 13:12:58 2023

449 of 3623

Data File : J:\GC35\DATA\090623\0906F069.D

Vial: 1

Acq On : 07 Sep 2023 12:16 pm

Operator: AA

Sample : IB

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

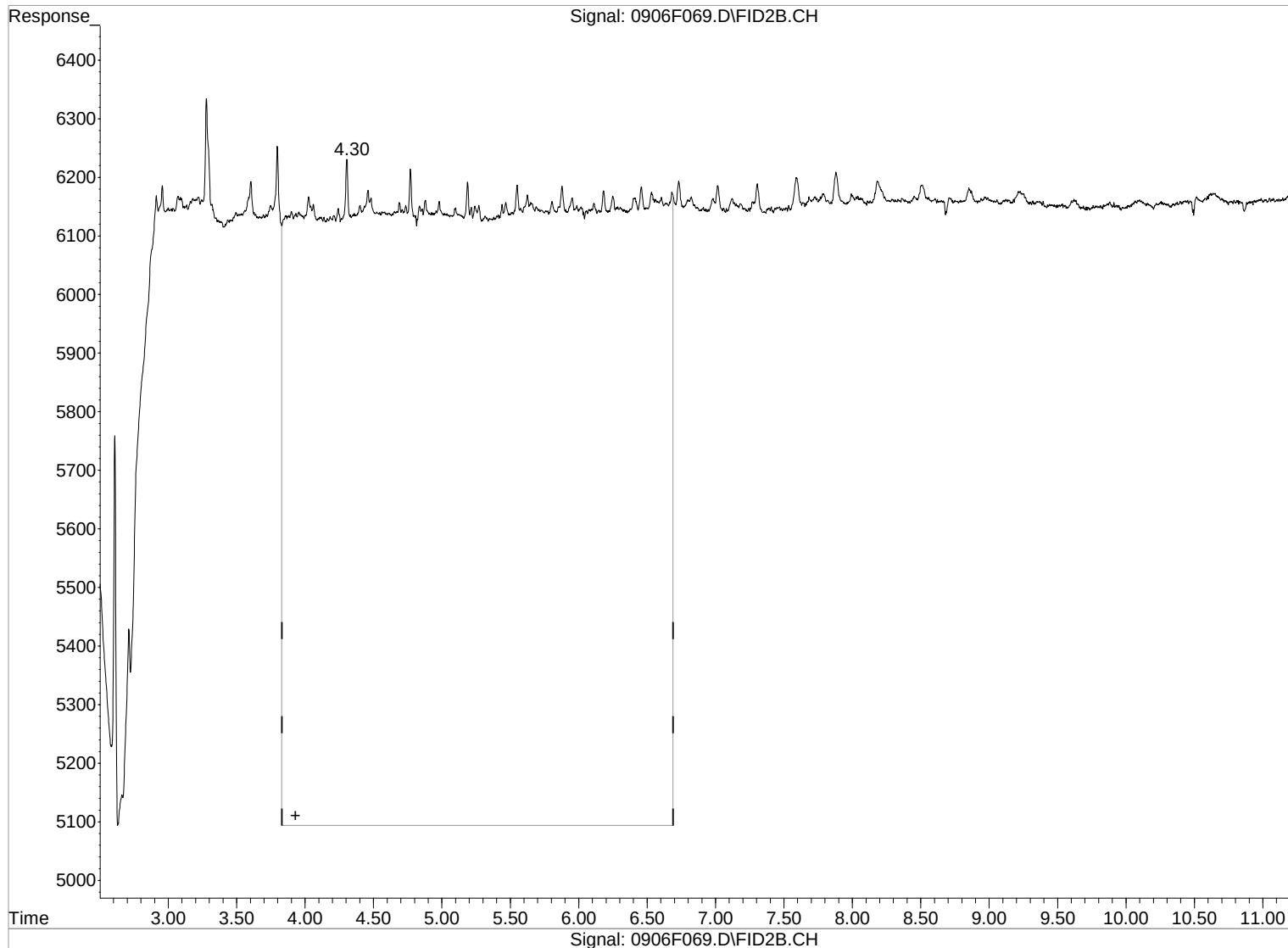
Quant Time: Sep 7 13:11 2023 Quant Results File: 090623FSVF.RES

Method : J:\GC35\METHODS\090623FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Thu Sep 07 12:24:13 2023

Response via : Multiple Level Calibration



(8) C12-C25ex DRO [NWTPH] (H)

Manual Integration:

3.93min 171.130ppm

Before

response 180287

09/07/23

(+) = Expected Retention Time

0906F069.D 090623FSVF.M

Thu Sep 07 13:13:08 2023

450 of 3623

Data File : J:\GC35\DATA\090623\0906F069.D

Vial: 1

Acq On : 07 Sep 2023 12:16 pm

Operator: AA

Sample : IB

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

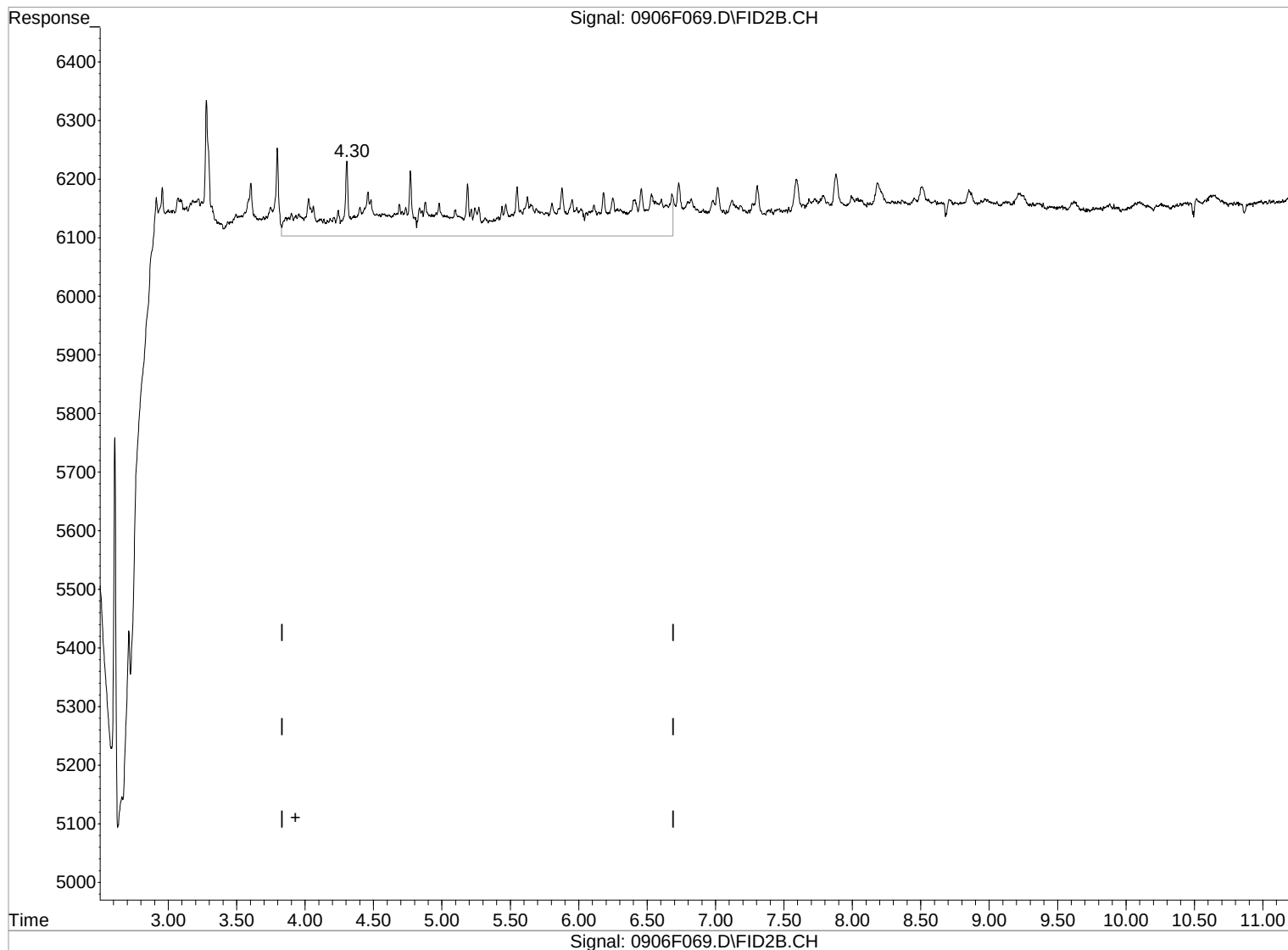
Quant Time: Sep 7 13:11 2023 Quant Results File: 090623FSVF.RES

Method : J:\GC35\METHODS\090623FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Thu Sep 07 12:24:13 2023

Response via : Multiple Level Calibration



(8) C12-C25ex DRO [NWTPH] (H)

Manual Integration:

3.93min 6.781ppm

After

response 7144

Baseline/Shoulder

09/07/23

(+) = Expected Retention Time

0906F069.D 090623FSVF.M

Thu Sep 07 13:13:21 2023

451 of 3623

Data File : J:\GC35\DATA\090623\0906F070.D Vial: 2
Acq On : 07 Sep 2023 12:38 pm Operator: AA
Sample : DR0 SVF04-63E ICV@1000 Inst : GC35
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Sep 07 12:56:11 2023 Quant Results File: 090623FSVF.RES

Quant Method : J:\GC35\METHODS\090623FSVF.M (RTE Integrator)
Title : AK102/103 SVF MJ257 CAL 16220
Last Update : Thu Sep 07 12:24:13 2023
Response via : Initial Calibration
DataAcq Meth : SVF2_F.M

Volume Inj. : 1 uL
Signal Phase : ZB-1
Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

Target Compounds

6) H	C10-C25ex DR0 [AK102]	3.30	1347613	1067.262	ppm
7) H	C10-C28in DR0 [8015]	3.40	1392640	1047.221	ppm
8) H	C12-C25ex DR0 [NWTPH]	3.93	1132434	1074.918	ppm

Data File : J:\GC35\DATA\090623\0906F070.D

Vial: 2

Acq On : 07 Sep 2023 12:38 pm

Operator: AA

Sample : DR0 SVF04-63E ICV@1000

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Sep 7 12:57 2023 Quant Results File: 090623FSVF.RES

Quant Method : J:\GC35\METHODS\090623FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Thu Sep 07 12:24:13 2023

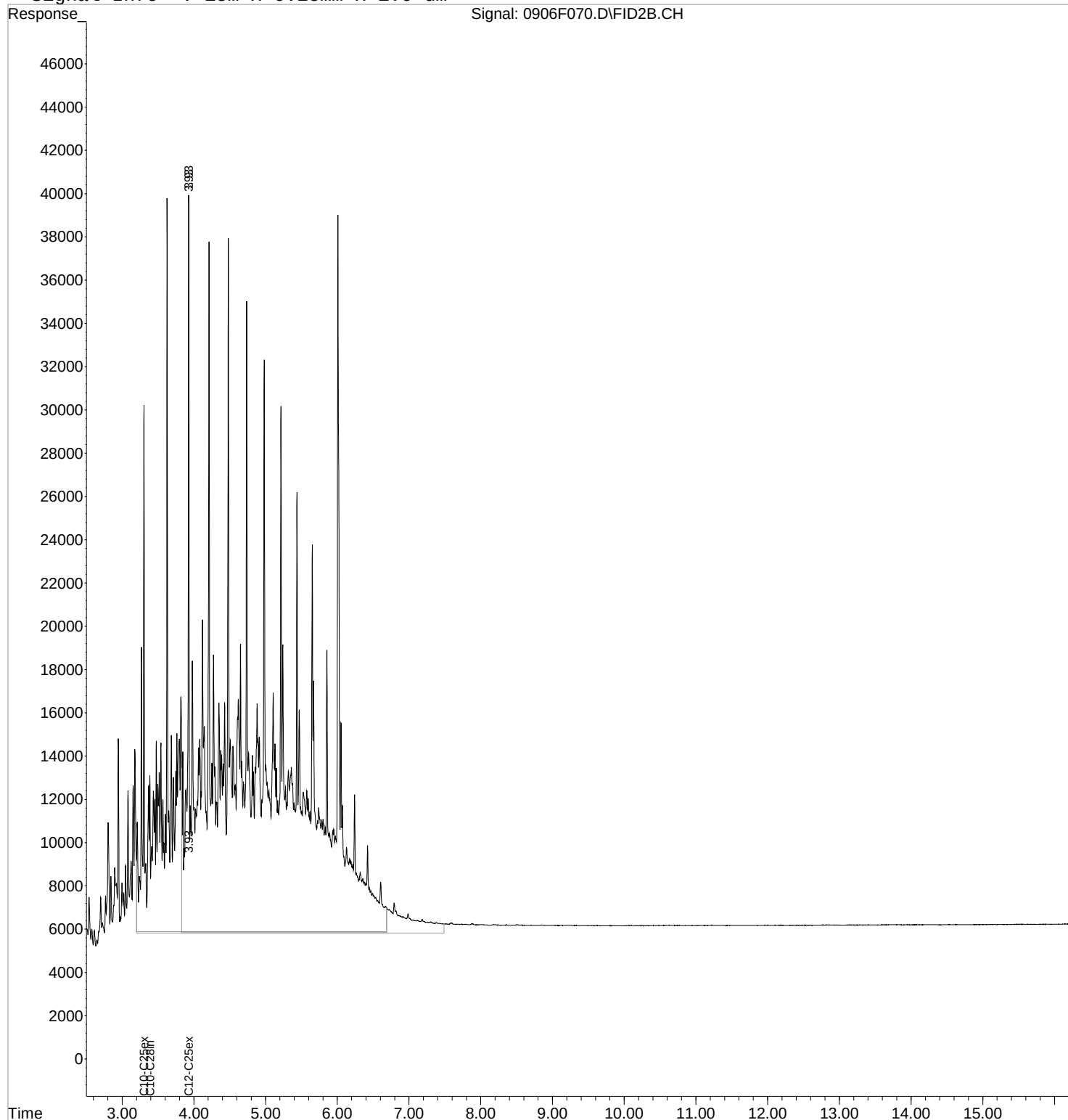
Response via : Single Level Calibration

DataAcq Meth : SVF2_F.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Data File : J:\GC35\DATA\090623\0906F070.D

Vial: 2

Acq On : 07 Sep 2023 12:38 pm

Operator: AA

Sample : DRO SVF04-63E ICV@1000

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

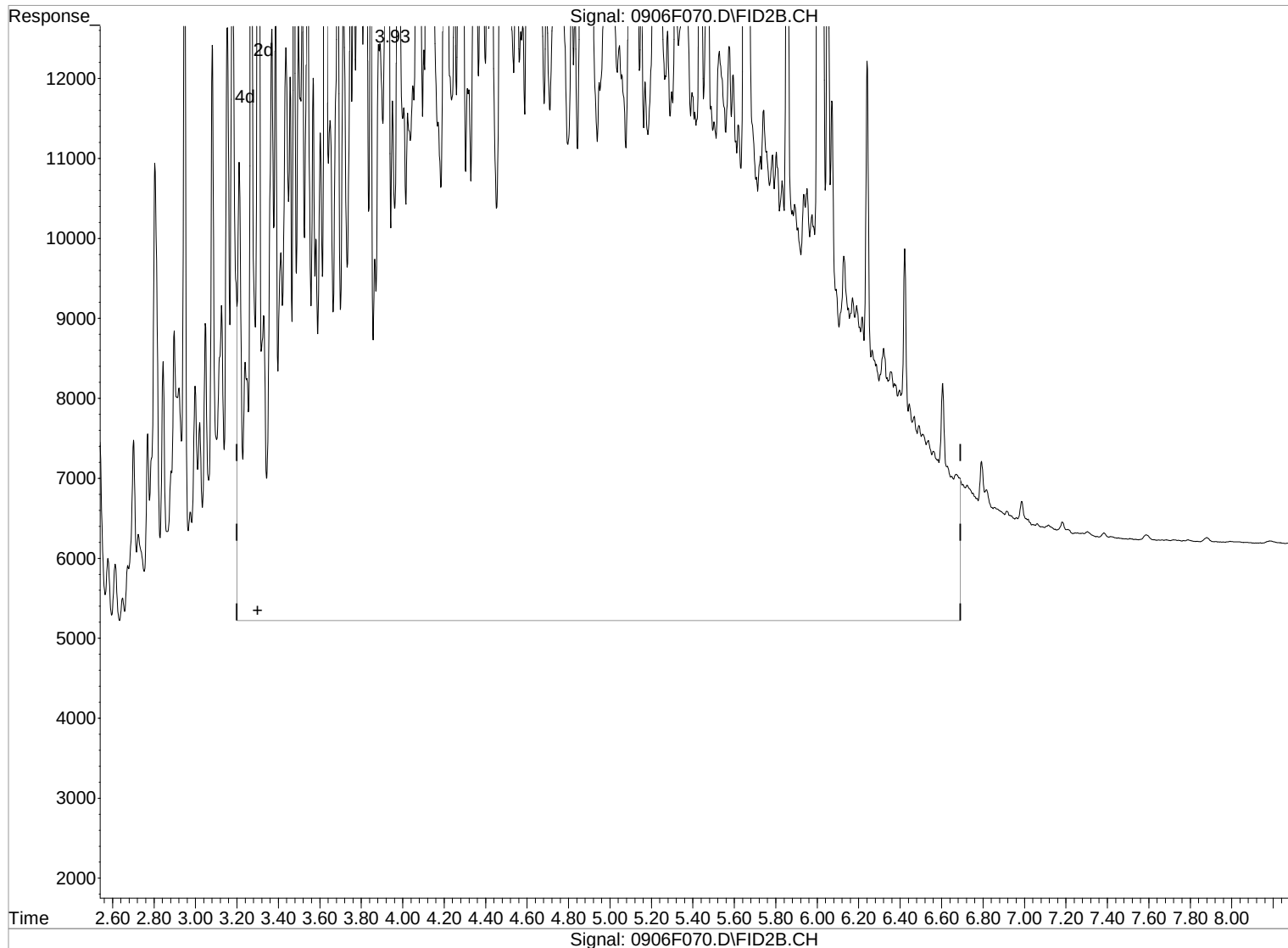
Quant Time: Sep 7 12:56 2023 Quant Results File: 090623FSVF.RES

Method : J:\GC35\METHODS\090623FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Thu Sep 07 12:24:13 2023

Response via : Multiple Level Calibration



(6) C10-C25ex DRO [AK102] (H)

Manual Integration:

3.30min 1177.056ppm

Before

response 1486248

09/07/23

(+) = Expected Retention Time

0906F070.D 090623FSVF.M

Thu Sep 07 12:56:41 2023

454 of 3623

Data File : J:\GC35\DATA\090623\0906F070.D

Vial: 2

Acq On : 07 Sep 2023 12:38 pm

Operator: AA

Sample : DRO SVF04-63E ICV@1000

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

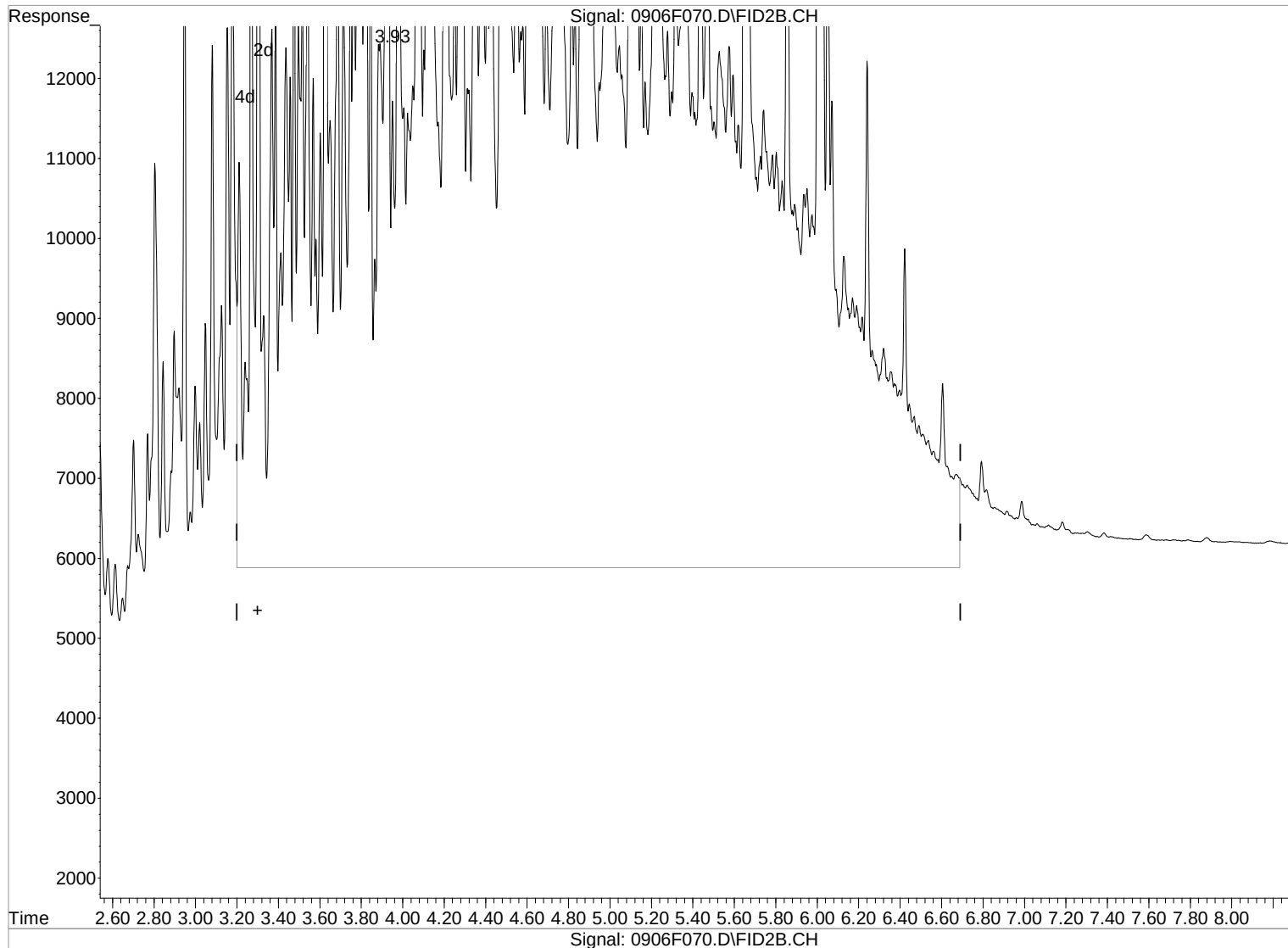
Quant Time: Sep 7 12:56 2023 Quant Results File: 090623FSVF.RES

Method : J:\GC35\METHODS\090623FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Thu Sep 07 12:24:13 2023

Response via : Multiple Level Calibration



(6) C10-C25ex DRO [AK102] (H)

Manual Integration:

3.30min 1067.262ppm

After

response 1347613

Baseline/Shoulder

09/07/23

(+) = Expected Retention Time

0906F070.D 090623FSVF.M

Thu Sep 07 12:56:59 2023

455 of 3623

Data File : J:\GC35\DATA\090623\0906F070.D

Vial: 2

Acq On : 07 Sep 2023 12:38 pm

Operator: AA

Sample : DRO SVF04-63E ICV@1000

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

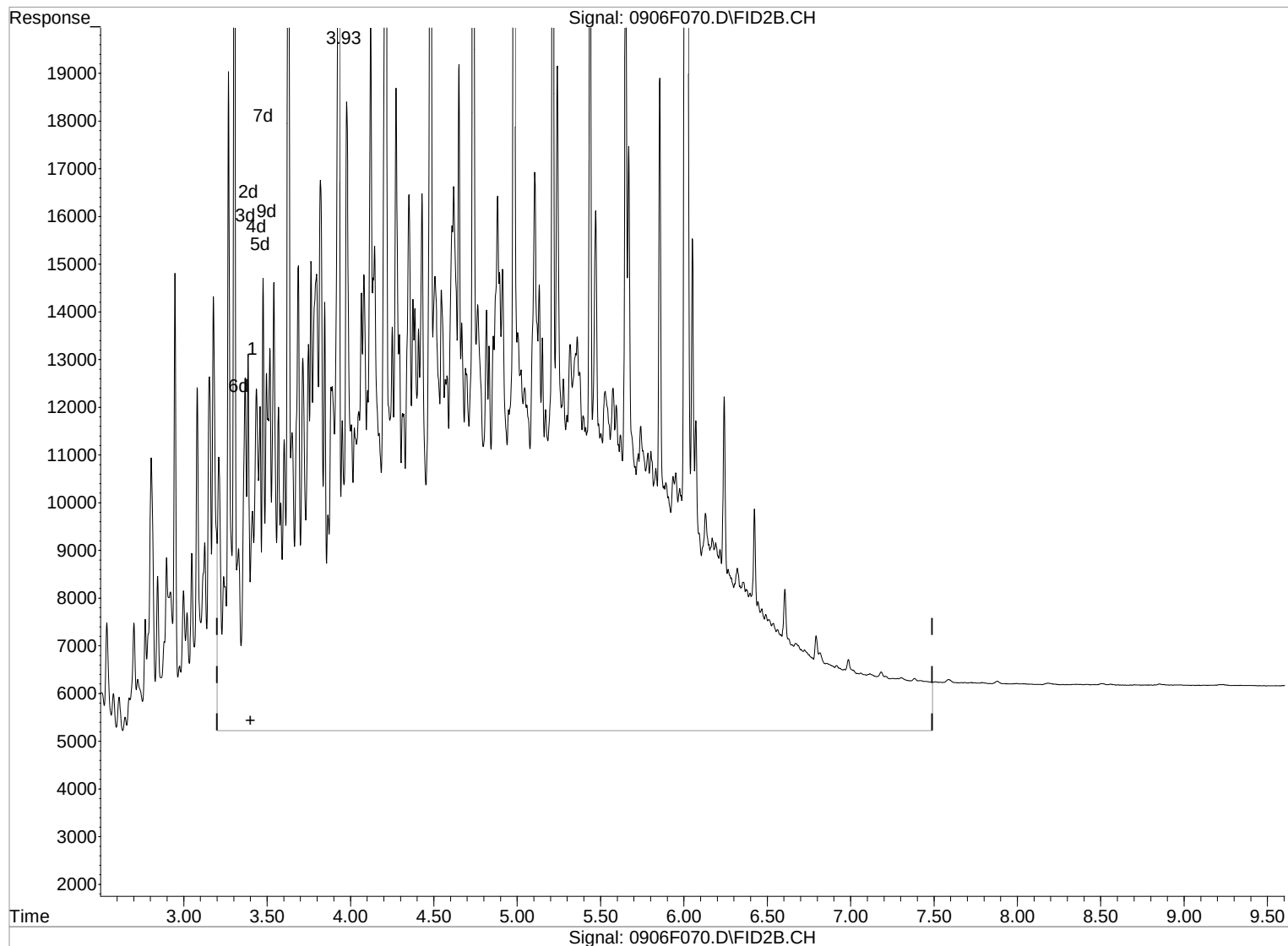
Quant Time: Sep 7 12:56 2023 Quant Results File: 090623FSVF.RES

Method : J:\GC35\METHODS\090623FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Thu Sep 07 12:24:13 2023

Response via : Multiple Level Calibration



(7) C10-C28in DRO [8015] (H)

Manual Integration:

3.40min 1163.094ppm

Before

response 1546733

09/07/23

(+) = Expected Retention Time

0906F070.D 090623FSVF.M

Thu Sep 07 12:57:07 2023

436 of 3623

Data File : J:\GC35\DATA\090623\0906F070.D

Vial: 2

Acq On : 07 Sep 2023 12:38 pm

Operator: AA

Sample : DRO SVF04-63E ICV@1000

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

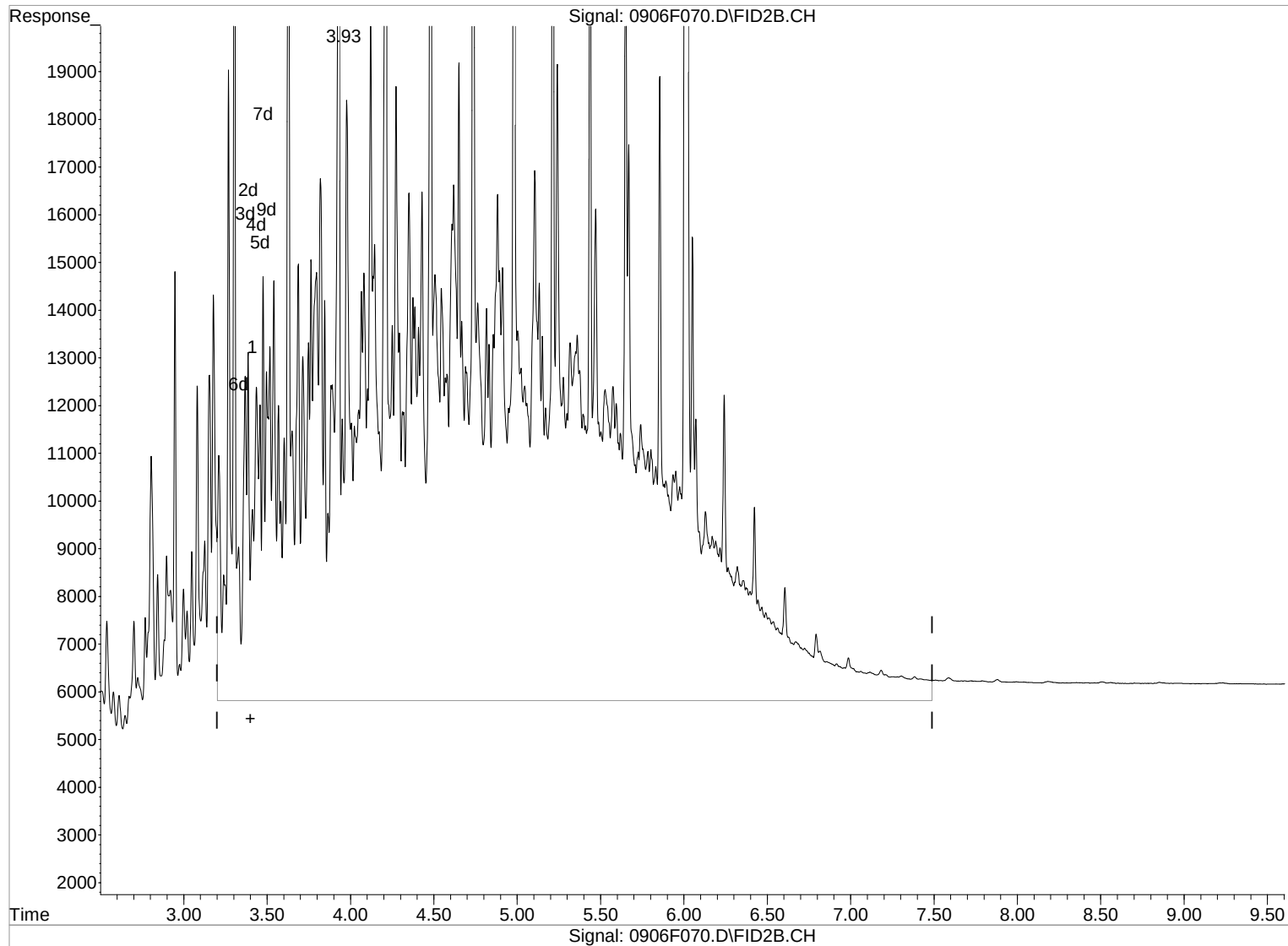
Quant Time: Sep 7 12:56 2023 Quant Results File: 090623FSVF.RES

Method : J:\GC35\METHODS\090623FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Thu Sep 07 12:24:13 2023

Response via : Multiple Level Calibration



(7) C10-C28in DRO [8015] (H)

Manual Integration:

3.40min 1047.221ppm

After

response 1392640

Baseline/Shoulder

09/07/23

(+) = Expected Retention Time

0906F070.D 090623FSVF.M

Thu Sep 07 12:57:20 2023

437 of 3623

Data File : J:\GC35\DATA\090623\0906F070.D

Vial: 2

Acq On : 07 Sep 2023 12:38 pm

Operator: AA

Sample : DRO SVF04-63E ICV@1000

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

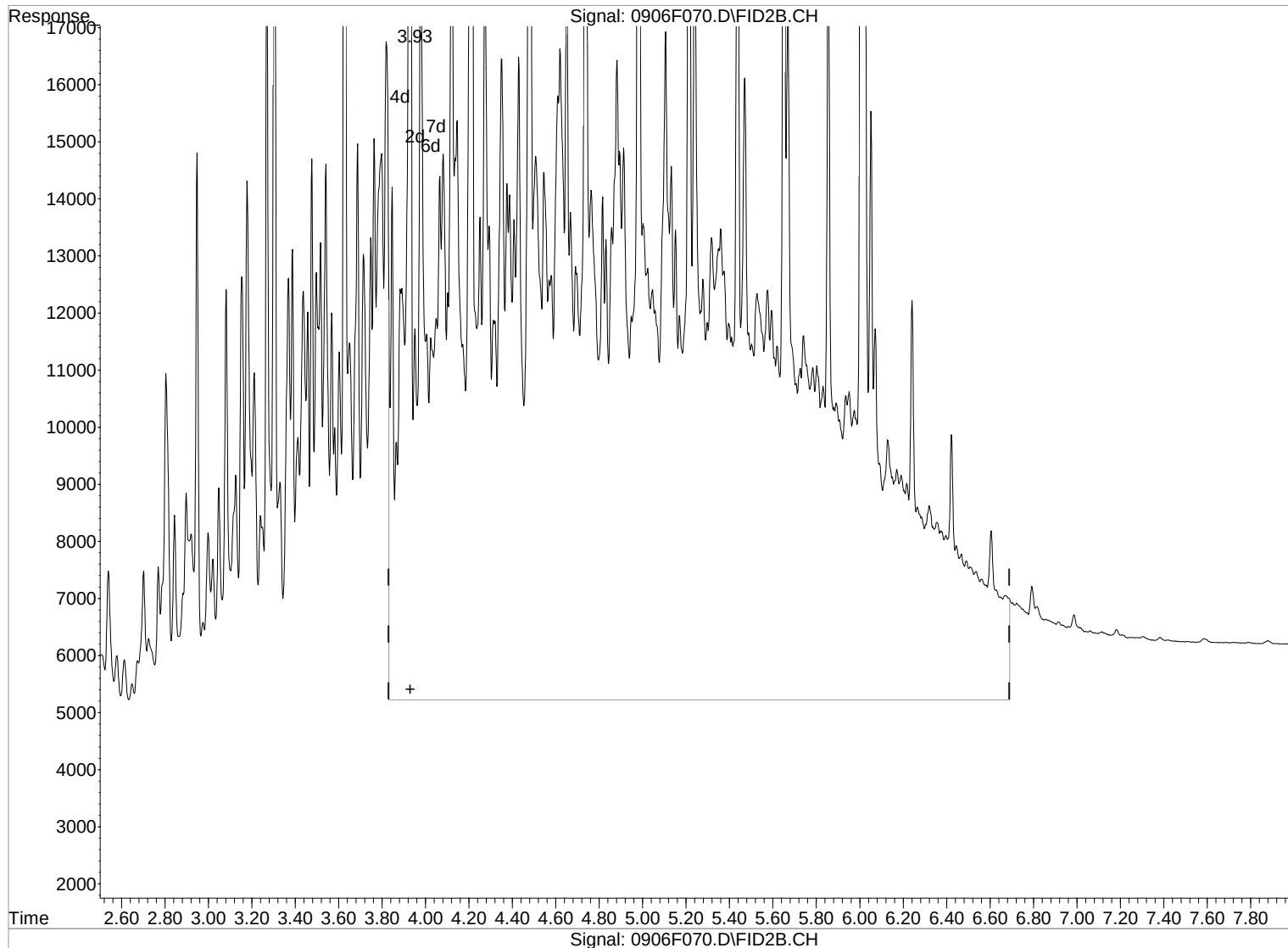
Quant Time: Sep 7 12:56 2023 Quant Results File: 090623FSVF.RES

Method : J:\GC35\METHODS\090623FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Thu Sep 07 12:24:13 2023

Response via : Multiple Level Calibration



(8) C12-C25ex DRO [NWTPH] (H)

Manual Integration:

3.93min 1175.409ppm

Before

response 1238302

09/07/23

(+) = Expected Retention Time

0906F070.D 090623FSVF.M

Thu Sep 07 12:57:30 2023

438 of 3623

Data File : J:\GC35\DATA\090623\0906F070.D

Vial: 2

Acq On : 07 Sep 2023 12:38 pm

Operator: AA

Sample : DRO SVF04-63E ICV@1000

Inst : GC35

Misc :

Multiplr: 1.00

IntFile : rteint.p

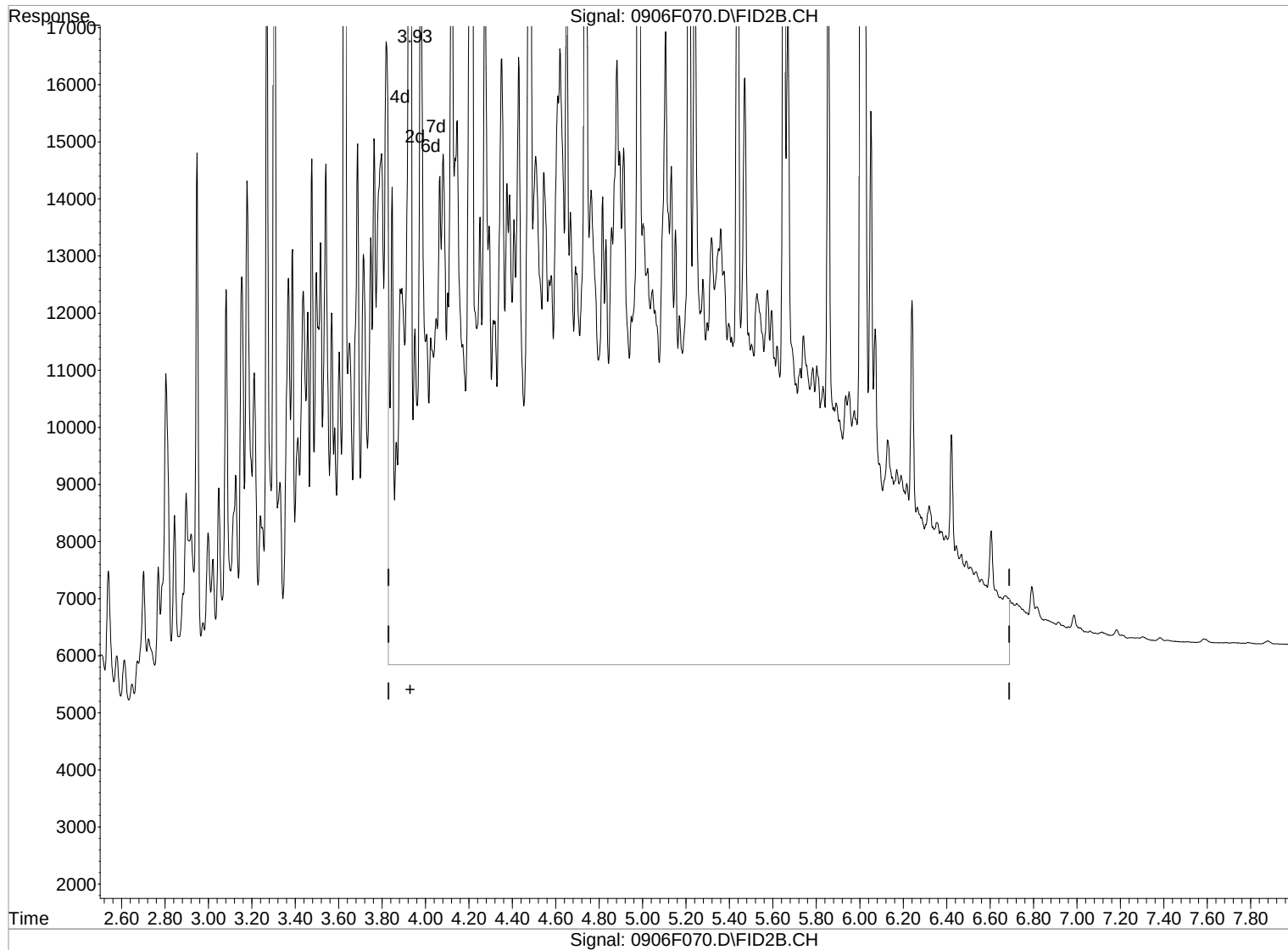
Quant Time: Sep 7 12:56 2023 Quant Results File: 090623FSVF.RES

Method : J:\GC35\METHODS\090623FSVF.M (RTE Integrator)

Title : AK102/103 SVF MJ257 CAL 16220

Last Update : Thu Sep 07 12:24:13 2023

Response via : Multiple Level Calibration



(8) C12-C25ex DRO [NWTPH] (H)

Manual Integration:

3.93min 1074.918ppm

After

response 1132434

Baseline/Shoulder

09/07/23

(+) = Expected Retention Time

0906F070.D 090623FSVF.M

Thu Sep 07 12:57:44 2023

439 of 3623

Injection Log

Directory: J:\GC21\DATA\090123

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	91	0901f001.d	1.	ALIPHATICS		01 Sep 2023 09:56
2	96	0901f002.d	1.	DRO@1000/50 SVF04-57C		01 Sep 2023 10:17
3	97	0901f003.d	1.	RRO@1000 SVF04-57D		01 Sep 2023 10:39
4	98	0901f004.d	1.	AK103@1000 SVF04-47J		01 Sep 2023 11:00
5	86	0901f005.d	1.	IB		01 Sep 2023 11:22
6	100	0901f006.d	1.	IB		01 Sep 2023 11:43
7	100	0901f007.d	1.	IB		01 Sep 2023 12:05
8	1	0901f008.d	1.	IB		01 Sep 2023 12:26
9	2	0901f009.d	1.	DRO SVF04-58A 20/1.0		01 Sep 2023 12:48
10	3	0901f010.d	1.	DRO SVF04-57K 50/2.5		01 Sep 2023 13:09
11	4	0901f011.d	1.	DRO SVF04-57J 200/10		01 Sep 2023 13:31
12	5	0901f012.d	1.	DRO SVF04-57I 500/25		01 Sep 2023 13:53
13	6	0901f013.d	1.	DRO SVF04-57H 2000/100		01 Sep 2023 14:14
14	7	0901f014.d	1.	DRO SVF04-57G 5000/250		01 Sep 2023 14:36
15	8	0901f015.d	1.	DRO SVF04-57F 20K		01 Sep 2023 14:57
16	9	0901f016.d	1.	DRO SVF04-57E 50K		01 Sep 2023 15:19
17	1	0901f017.d	1.	IB		01 Sep 2023 15:40
18	1	0901f018.d	1.	IB		01 Sep 2023 16:02
19	10	0901f019.d	1.	DRO SVF04-58B ICV@1000		01 Sep 2023 16:23
20	1	0901f020.d	1.	IB		01 Sep 2023 16:45
21	1	0901f021.d	1.	IB		01 Sep 2023 17:06
22	11	0901f022.d	1.	RRO SVF04-58G 50		01 Sep 2023 17:28
23	12	0901f023.d	1.	RRO SVF04-58F 200		01 Sep 2023 17:49
24	13	0901f024.d	1.	RRO SVF04-58E 500		01 Sep 2023 18:11
25	14	0901f025.d	1.	RRO SVF04-58D 2000		01 Sep 2023 18:32
26	15	0901f026.d	1.	RRO SVF04-58C 5000		01 Sep 2023 18:54
27	1	0901f027.d	1.	IB		01 Sep 2023 19:16
28	1	0901f028.d	1.	IB		01 Sep 2023 19:37
29	16	0901f029.d	1.	RRO SVF04-58H ICV@1000		01 Sep 2023 19:59
30	1	0901f030.d	1.	IB		01 Sep 2023 20:20
31	1	0901f031.d	1.	IB		01 Sep 2023 20:42
32	17	0901f032.d	1.	AK103 SVF04-58M 50		01 Sep 2023 21:03
33	18	0901f033.d	1.	AK103 SVF04-58L 200		01 Sep 2023 21:25
34	19	0901f034.d	1.	AK103 SVF04-58K 500		01 Sep 2023 21:46
35	20	0901f035.d	1.	AK103 SVF04-58J 2000		01 Sep 2023 22:08
36	21	0901f036.d	1.	AK103 SVF04-58I 5000		01 Sep 2023 22:29
37	1	0901f037.d	1.	IB		01 Sep 2023 22:51
38	1	0901f038.d	1.	IB		01 Sep 2023 23:12
39	22	0901f039.d	1.	AK103 SVF04-58N ICV@1000		01 Sep 2023 23:34
40	1	0901f040.d	1.	IB		01 Sep 2023 23:55
41	1	0901f041.d	1.	IB		02 Sep 2023 00:17
42	100	0901f042.d	1.	IB		02 Sep 2023 00:38
43	100	0901f043.d	1.	IB		02 Sep 2023 01:00
44	100	0901f044.d	1.	IB		02 Sep 2023 01:21

KC2300522

Injection Log

Directory: J:\GC21\DATA\090623

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	100	0906f001.d	1.	IB		06 Sep 2023 08:02
2	100	0906f002.d	1.	IB		06 Sep 2023 08:23
3	100	0906f003.d	1.	IB		06 Sep 2023 08:45
4	100	0906f004.d	1.	IB		06 Sep 2023 09:06
5	100	0906f005.d	1.	IB		06 Sep 2023 09:28
6	100	0906f006.d	1.	IB		06 Sep 2023 09:49
7	100	0906f007.d	1.	IB		06 Sep 2023 10:11
8	100	0906f008.d	1.	IB		06 Sep 2023 10:32
9	91	0906f009.d	1.	ALIPHATICS		06 Sep 2023 11:35
10	1	0906f010.d	1.	IB		06 Sep 2023 11:56
11	2	0906f011.d	1.	RRO SVF04-62C ICV@1000		06 Sep 2023 12:18
12	1	0906f012.d	1.	IB		06 Sep 2023 12:39
13	1	0906f013.d	1.	IB		06 Sep 2023 13:01
14	3	0906f014.d	1.	DRO SVF04-62A 20/1.0		06 Sep 2023 13:22
15	4	0906f015.d	1.	DRO SVF04-61L 50/2.5		06 Sep 2023 13:44
16	5	0906f016.d	1.	DRO SVF04-61K 200/10		06 Sep 2023 14:05
17	6	0906f017.d	1.	DRO SVF04-61J 500/25		06 Sep 2023 14:27
18	7	0906f018.d	1.	DRO SVF04-61I 2000/100		06 Sep 2023 14:48
19	8	0906f019.d	1.	DRO SVF04-61H 5000/250		06 Sep 2023 15:10
20	9	0906f020.d	1.	DRO SVF04-61G 20K		06 Sep 2023 15:31
21	10	0906f021.d	1.	DRO SVF04-61F 50K		06 Sep 2023 15:53
22	1	0906f022.d	1.	IB		06 Sep 2023 16:14
23	1	0906f023.d	1.	IB		06 Sep 2023 16:36
24	1	0906f024.d	1.	IB		06 Sep 2023 16:57
25	11	0906f025.d	1.	DRO SVF04-62B ICV@1000		06 Sep 2023 17:19
26	1	0906f026.d	1.	IB		06 Sep 2023 17:40
27	1	0906f027.d	1.	IB		06 Sep 2023 18:02
28	1	0906f028.d	1.	IB		06 Sep 2023 18:23
29	12	0906f029.d	1.	RRO SVF04-62G ICV@1000		06 Sep 2023 18:45
30	1	0906f030.d	1.	IB		06 Sep 2023 19:06
31	1	0906f031.d	1.	IB		06 Sep 2023 19:28
32	100	0906f032.d	1.	IB		06 Sep 2023 19:49
33	100	0906f033.d	1.	IB		06 Sep 2023 20:11
34	100	0906f034.d	1.	IB		06 Sep 2023 20:33
35	100	0906f035.d	1.	IB		06 Sep 2023 20:54
36	100	0906f036.d	1.	IB		06 Sep 2023 21:16
37	100	0906f037.d	1.	IB		06 Sep 2023 21:37
38	100	0906f038.d	1.	IB		06 Sep 2023 21:59
39	100	0906f039.d	1.	IB		06 Sep 2023 22:20
40	100	0906f040.d	1.	IB		06 Sep 2023 22:42
41	100	0906f041.d	1.	IB		06 Sep 2023 23:03
42	100	0906f042.d	1.	IB		06 Sep 2023 23:25
43	100	0906f043.d	1.	IB		06 Sep 2023 23:46
44	100	0906f044.d	1.	IB		07 Sep 2023 00:08
45	100	0906f045.d	1.	IB		07 Sep 2023 00:30
46	100	0906f046.d	1.	IB		07 Sep 2023 00:51
47	100	0906f047.d	1.	IB		07 Sep 2023 01:13
48	100	0906f048.d	1.	IB		07 Sep 2023 01:34
49	100	0906f049.d	1.	IB		07 Sep 2023 01:56
50	100	0906f050.d	1.	IB		07 Sep 2023 02:17
51	100	0906f051.d	1.	IB		07 Sep 2023 02:39
52	100	0906f052.d	1.	IB		07 Sep 2023 03:00
53	100	0906f053.d	1.	IB		07 Sep 2023 03:22
54	100	0906f054.d	1.	IB		07 Sep 2023 03:43
55	100	0906f055.d	1.	IB		07 Sep 2023 04:05

MC2300522

Injection Log

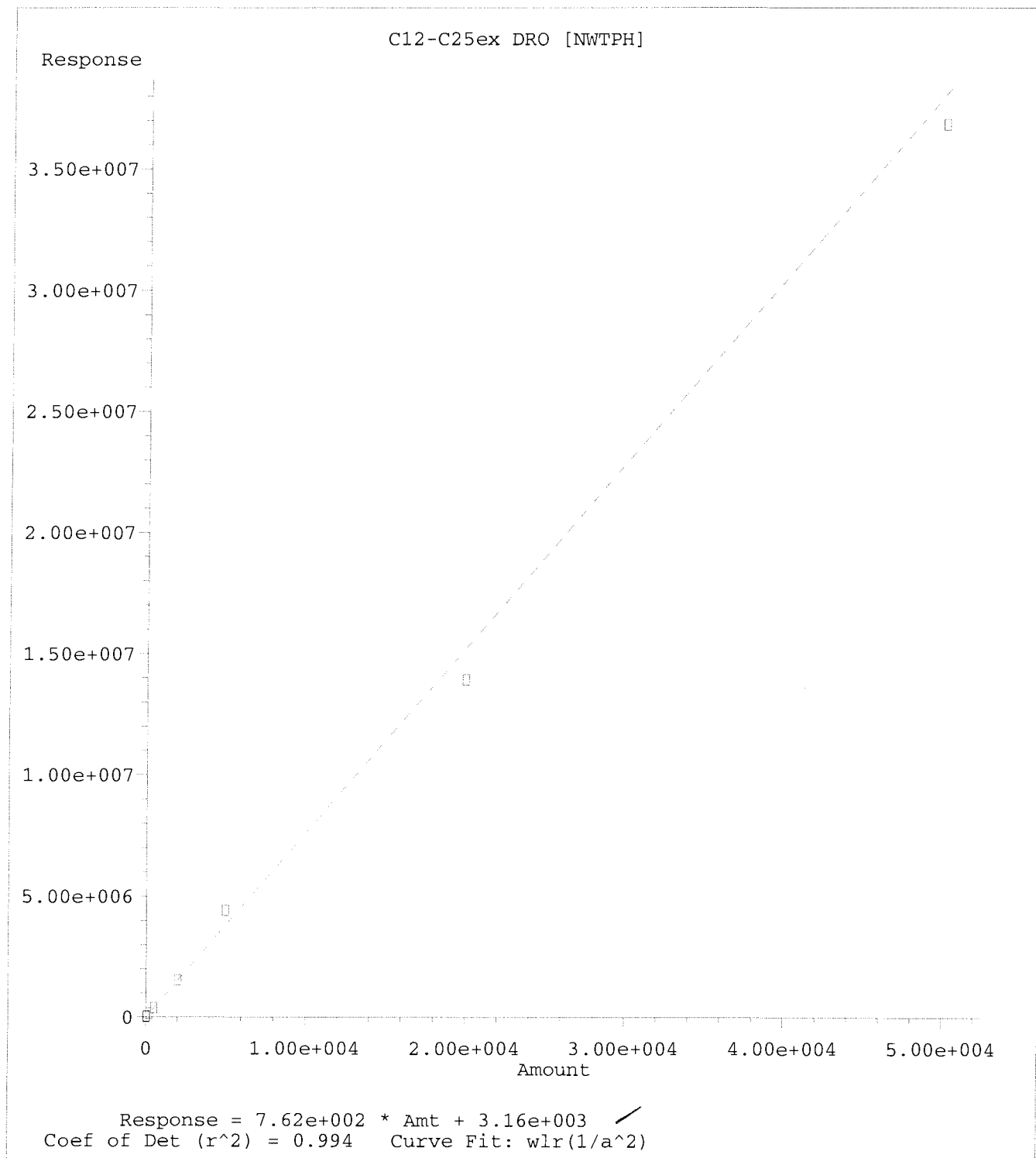
Directory: J:\GC21\DATA\090623

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
56	100	0906f056.d	1.	IB		07 Sep 2023 04:27
57	100	0906f057.d	1.	IB		07 Sep 2023 04:48
58	100	0906f058.d	1.	IB		07 Sep 2023 05:10
59	100	0906f059.d	1.	IB		07 Sep 2023 05:31
60	100	0906f060.d	1.	IB		07 Sep 2023 05:53
61	100	0906f061.d	1.	IB		07 Sep 2023 06:14
62	100	0906f062.d	1.	IB		07 Sep 2023 06:36
63	100	0906f063.d	1.	IB		07 Sep 2023 06:57
64	100	0906f064.d	1.	IB		07 Sep 2023 07:19
65	100	0906f065.d	1.	IB		07 Sep 2023 07:40
66	100	0906f066.d	1.	IB		07 Sep 2023 08:02
67	100	0906f067.d	1.	IB		07 Sep 2023 08:24
68	100	0906f068.d	1.	IB		07 Sep 2023 08:45
69	100	0906f069.d	1.	IB		07 Sep 2023 09:07
70	100	0906f070.d	1.	IB		07 Sep 2023 09:28

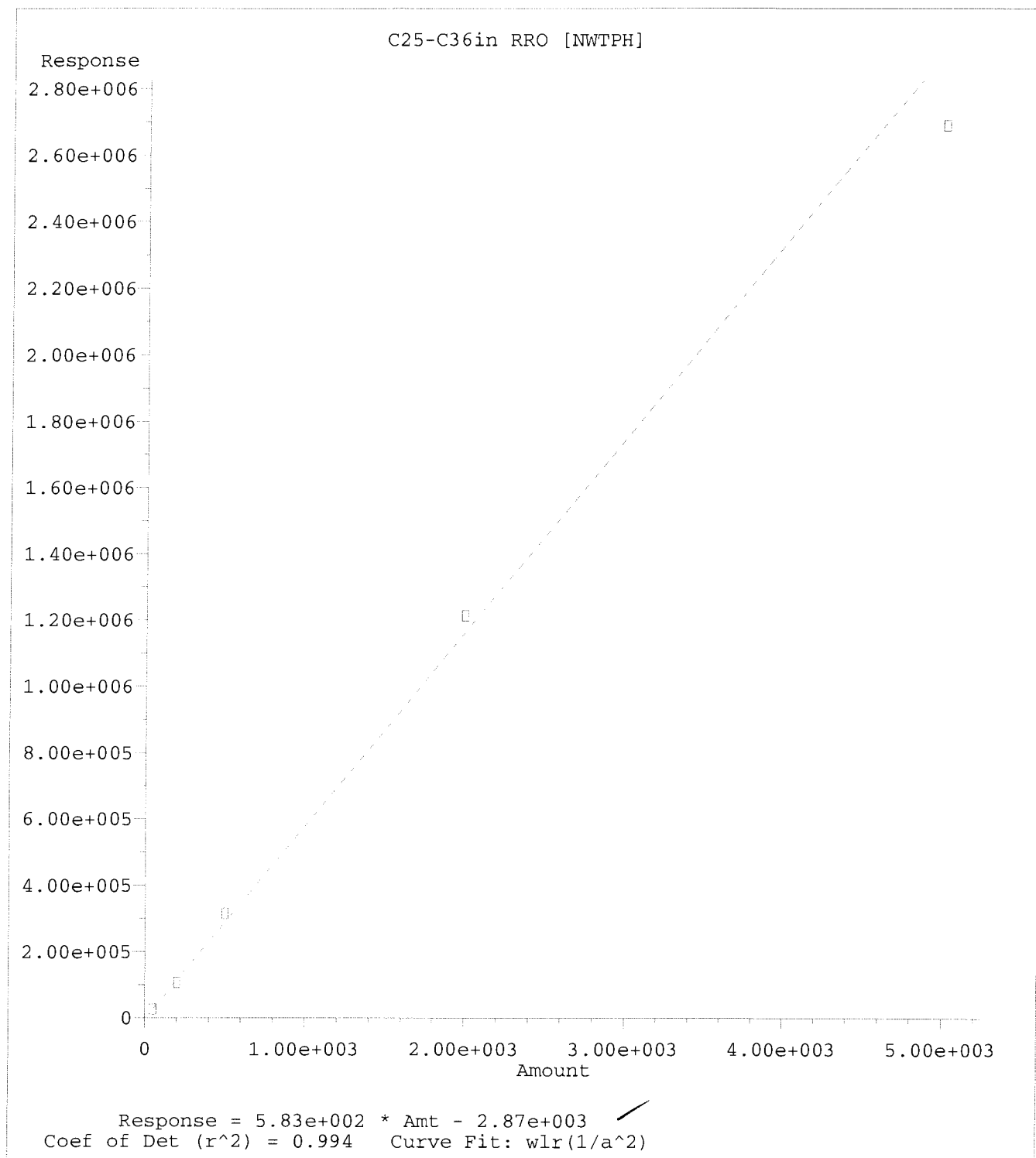
Injection Log

Directory: J:\GC21\DATA\090723

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	91	0907f001.d	1.	ALIPHATICS		07 Sep 2023 10:36
2	1	0907f002.d	1.	IB		07 Sep 2023 10:57
3	2	0907f003.d	1.	RRO SVF04-63A 50	162300522	07 Sep 2023 11:19
4	3	0907f004.d	1.	RRO SVF04-62M 200		07 Sep 2023 11:40
5	4	0907f005.d	1.	RRO SVF04-62L 500		07 Sep 2023 12:02
6	5	0907f006.d	1.	RRO SVF04-62K 2000		07 Sep 2023 12:23
7	6	0907f007.d	1.	RRO SVF04-62J 5000		07 Sep 2023 12:45
8	1	0907f008.d	1.	IB		07 Sep 2023 13:07
9	1	0907f009.d	1.	IB		07 Sep 2023 13:28
10	7	0907f010.d	1.	RRO SVF04-63B ICV@1000		07 Sep 2023 13:50



Method Name: J:\GC21\METHODS\090723F.M
Calibration Table Last Updated: Thu Sep 07 13:35:15 2023



Method Name: J:\GC21\METHODS\090723F.M
Calibration Table Last Updated: Thu Sep 07 13:35:15 2023

Data File : J:\GC21\DATA\090123\0901F031.D Vial: 1
Acq On : 01 Sep 2023 8:42 pm Operator: AA
Sample : IB Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Sep 05 06:55:55 2023 Quant Results File: 090123F.RES

Quant Method : J:\GC21\METHODS\090123F.M (RTE Integrator)
Title : 8015/NWTPH/AK SVF MJ257 KC2000628
Last Update : Fri Sep 01 10:57:30 2023
Response via : Initial Calibration
DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL
Signal Phase : ZB-1
Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

Target Compounds

6)	H	C10-C25ex DRO [AK102]	3.11	11908	12.154 ppm
7)	H	C10-C28in DRO [8015]	3.21	13288	13.047 ppm
8)	H	C12-C25ex DRO [NWTPH]	3.75	9740	12.086 ppm
10)	H	C25-C36in RRO [NWTPH]	6.62	4606	8.440 ppm
11)	H	C25-C36in RRO [AK103]	6.72	4606	9.856 ppm

Data File : J:\GC21\DATA\090123\0901F031.D

Vial: 1

Acq On : 01 Sep 2023 8:42 pm

Operator: AA

Sample : IB

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Sep 5 6:55 2023 Quant Results File: 090123F.RES

Quant Method : J:\GC21\METHODS\090123F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Fri Sep 01 10:57:30 2023

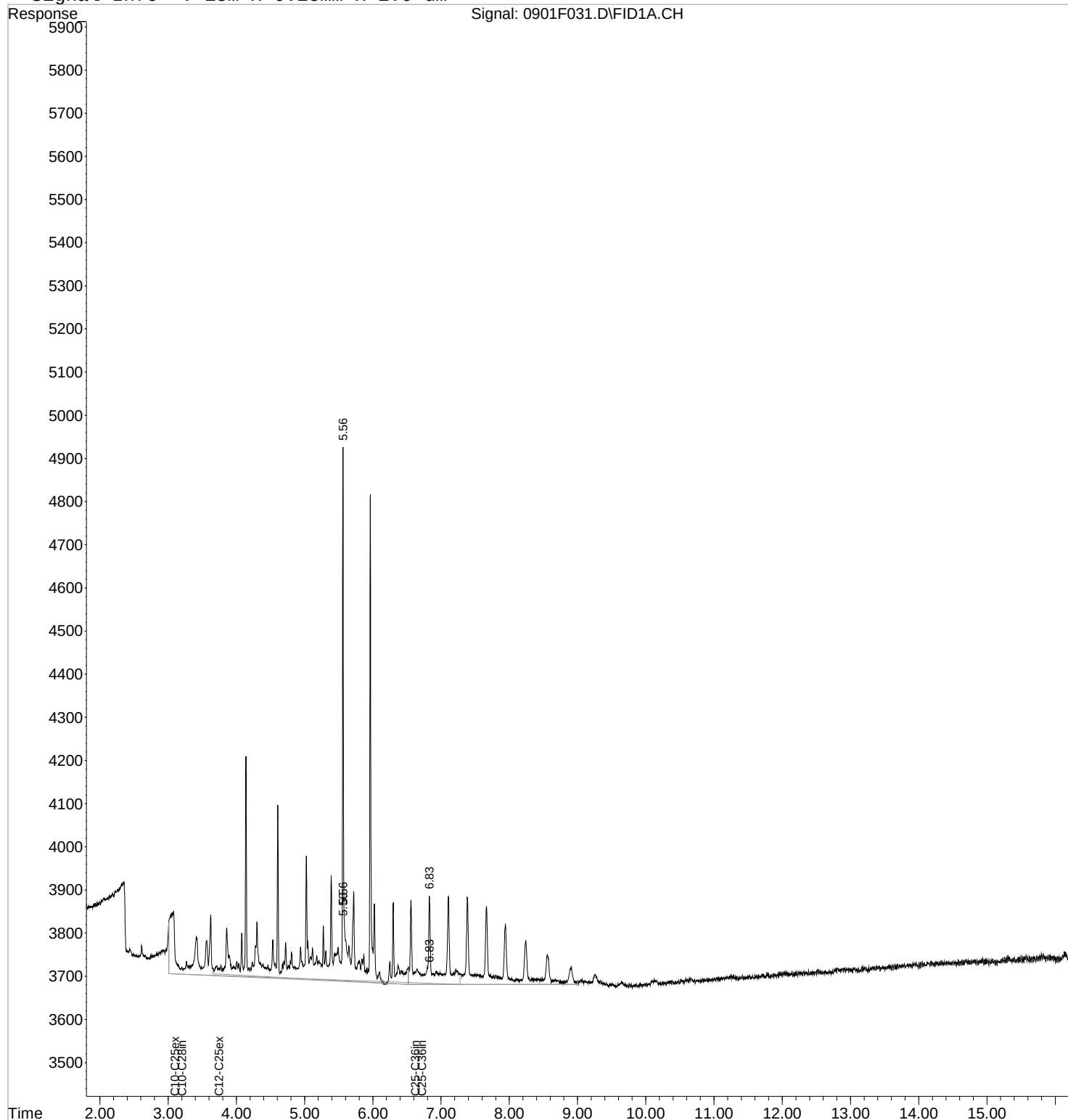
Response via : Single Level Calibration

DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Data File : J:\GC21\DATA\090123\0901F032.D Vial: 17
Acq On : 01 Sep 2023 9:03 pm Operator: AA
Sample : AK103 SVF04-58M 50 Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Sep 05 06:55:56 2023 Quant Results File: 090123F.RES

Quant Method : J:\GC21\METHODS\090123F.M (RTE Integrator)
Title : 8015/NWTPH/AK SVF MJ257 KC2000628
Last Update : Fri Sep 01 10:57:30 2023
Response via : Initial Calibration
DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL
Signal Phase : ZB-1
Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

Target Compounds

11) H C25-C36in RRO [AK103]	6.72	35028	74.952 ppm
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Data File : J:\GC21\DATA\090123\0901F032.D

Vial: 17

Acq On : 01 Sep 2023 9:03 pm

Operator: AA

Sample : AK103 SVF04-58M 50

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Sep 5 7:02 2023 Quant Results File: 090123F.RES

Quant Method : J:\GC21\METHODS\090123F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Fri Sep 01 10:57:30 2023

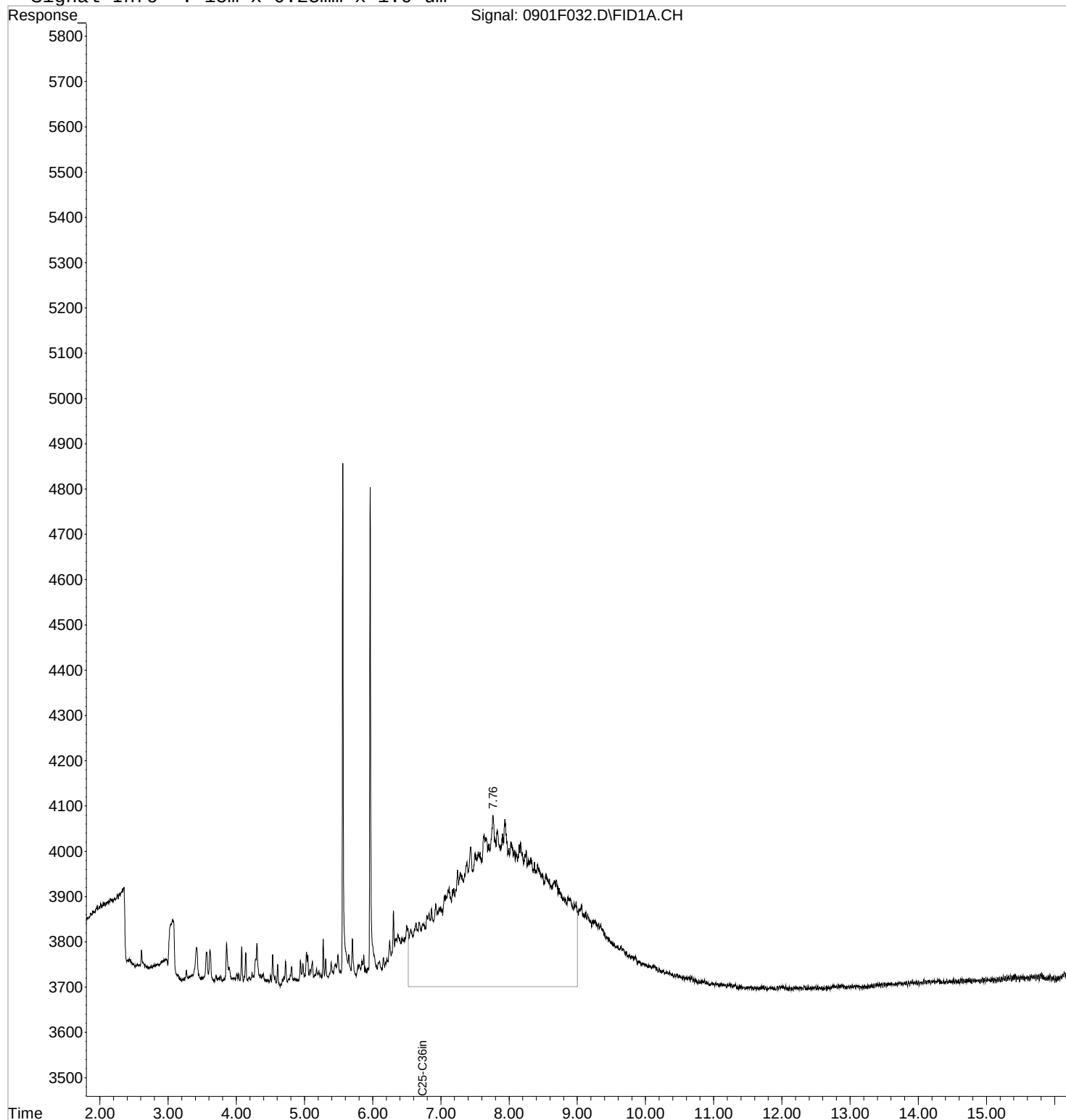
Response via : Single Level Calibration

DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Data File : J:\GC21\DATA\090123\0901F033.D Vial: 18
Acq On : 01 Sep 2023 9:25 pm Operator: AA
Sample : AK103 SVF04-58L 200 Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Sep 05 06:55:57 2023 Quant Results File: 090123F.RES

Quant Method : J:\GC21\METHODS\090123F.M (RTE Integrator)
Title : 8015/NWTPH/AK SVF MJ257 KC2000628
Last Update : Fri Sep 01 10:57:30 2023
Response via : Initial Calibration
DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL
Signal Phase : ZB-1
Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
----------	------	----------	------------

System Monitoring Compounds

Target Compounds

11) H C25-C36in RRO [AK103]	6.72	120072	256.927 ppm
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Data File : J:\GC21\DATA\090123\0901F033.D

Vial: 18

Acq On : 01 Sep 2023 9:25 pm

Operator: AA

Sample : AK103 SVF04-58L 200

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Sep 5 7:02 2023 Quant Results File: 090123F.RES

Quant Method : J:\GC21\METHODS\090123F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Fri Sep 01 10:57:30 2023

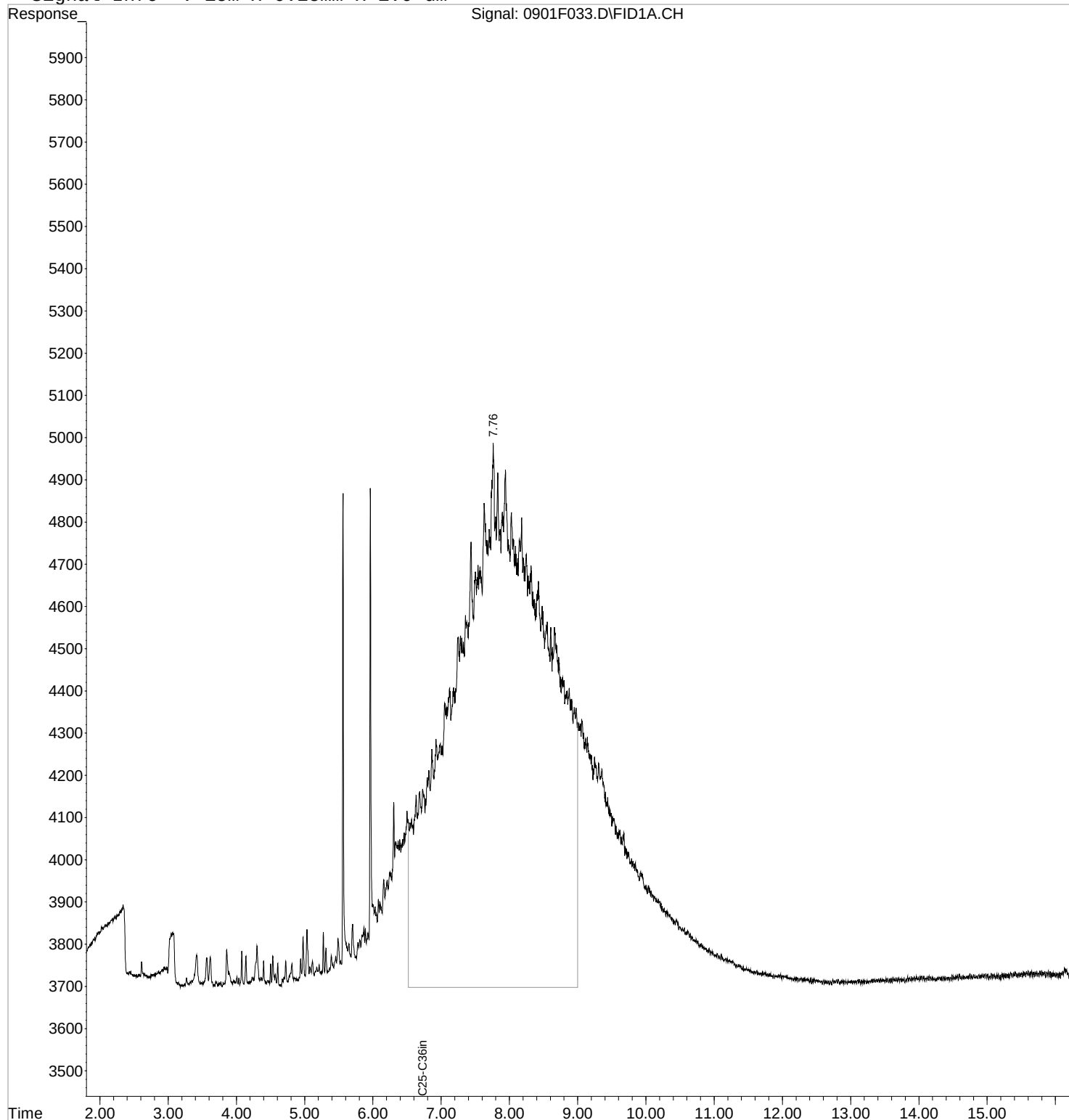
Response via : Single Level Calibration

DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Data File : J:\GC21\DATA\090123\0901F034.D Vial: 19
Acq On : 01 Sep 2023 9:46 pm Operator: AA
Sample : AK103 SVF04-58K 500 Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Sep 05 06:55:59 2023 Quant Results File: 090123F.RES

Quant Method : J:\GC21\METHODS\090123F.M (RTE Integrator)
Title : 8015/NWTPH/AK SVF MJ257 KC2000628
Last Update : Fri Sep 01 10:57:30 2023
Response via : Initial Calibration
DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL
Signal Phase : ZB-1
Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

Target Compounds

11) H C25-C36in RRO [AK103]	6.72	327663	701.126 ppm
-----------------------------	------	--------	-------------

Data File : J:\GC21\DATA\090123\0901F034.D

Vial: 19

Acq On : 01 Sep 2023 9:46 pm

Operator: AA

Sample : AK103 SVF04-58K 500

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Sep 5 7:03 2023 Quant Results File: 090123F.RES

Quant Method : J:\GC21\METHODS\090123F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Fri Sep 01 10:57:30 2023

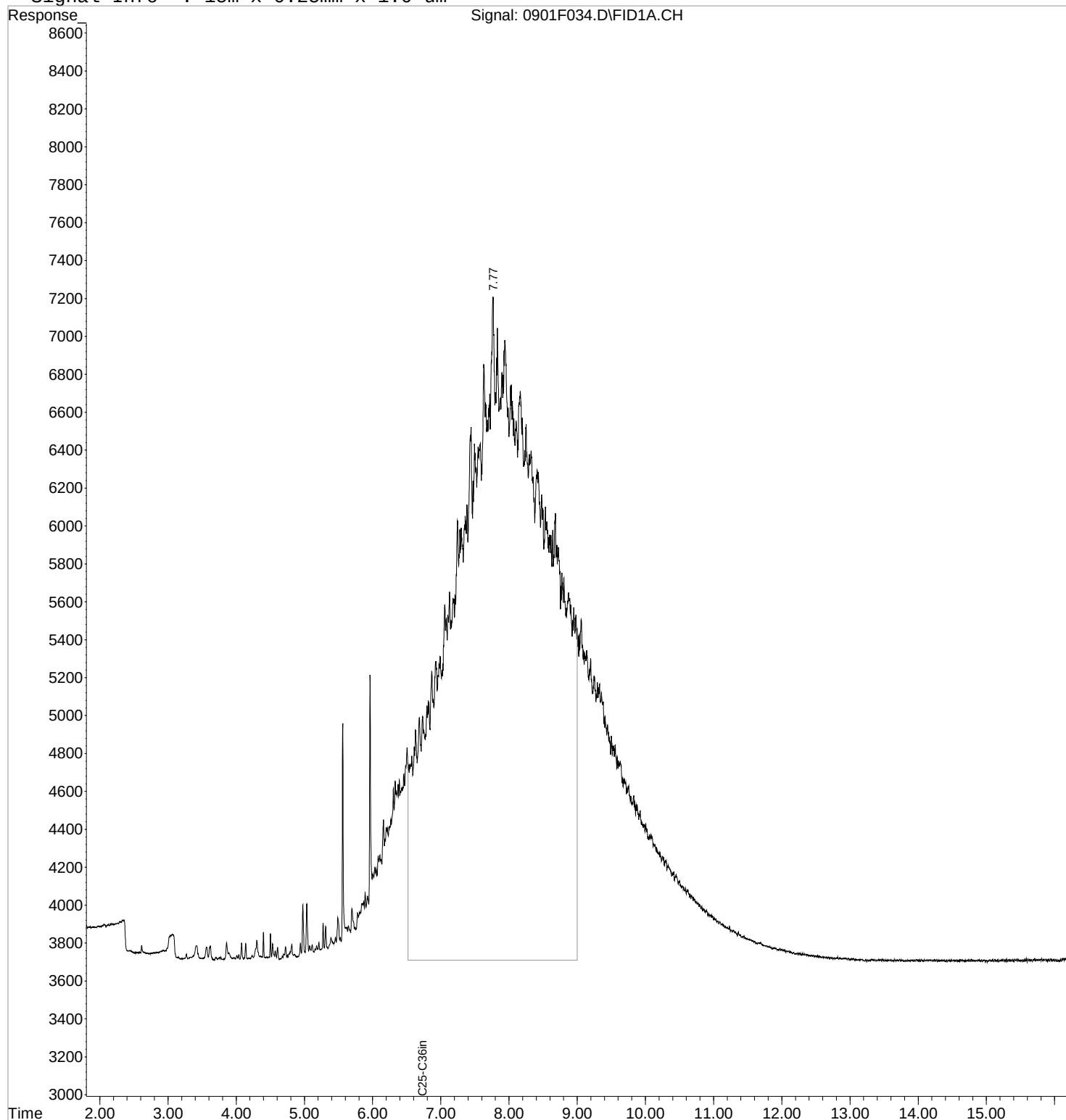
Response via : Single Level Calibration

DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Data File : J:\GC21\DATA\090123\0901F035.D Vial: 20
Acq On : 01 Sep 2023 10:08 pm Operator: AA
Sample : AK103 SVF04-58J 2000 Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Sep 05 06:56:01 2023 Quant Results File: 090123F.RES

Quant Method : J:\GC21\METHODS\090123F.M (RTE Integrator)
Title : 8015/NWTPH/AK SVF MJ257 KC2000628
Last Update : Fri Sep 01 10:57:30 2023
Response via : Initial Calibration
DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL
Signal Phase : ZB-1
Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

Target Compounds

11) H C25-C36in RRO [AK103]	6.72	1080464	2311.954 ppm
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Data File : J:\GC21\DATA\090123\0901F035.D

Vial: 20

Acq On : 01 Sep 2023 10:08 pm

Operator: AA

Sample : AK103 SVF04-58J 2000

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Sep 5 7:03 2023 Quant Results File: 090123F.RES

Quant Method : J:\GC21\METHODS\090123F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Fri Sep 01 10:57:30 2023

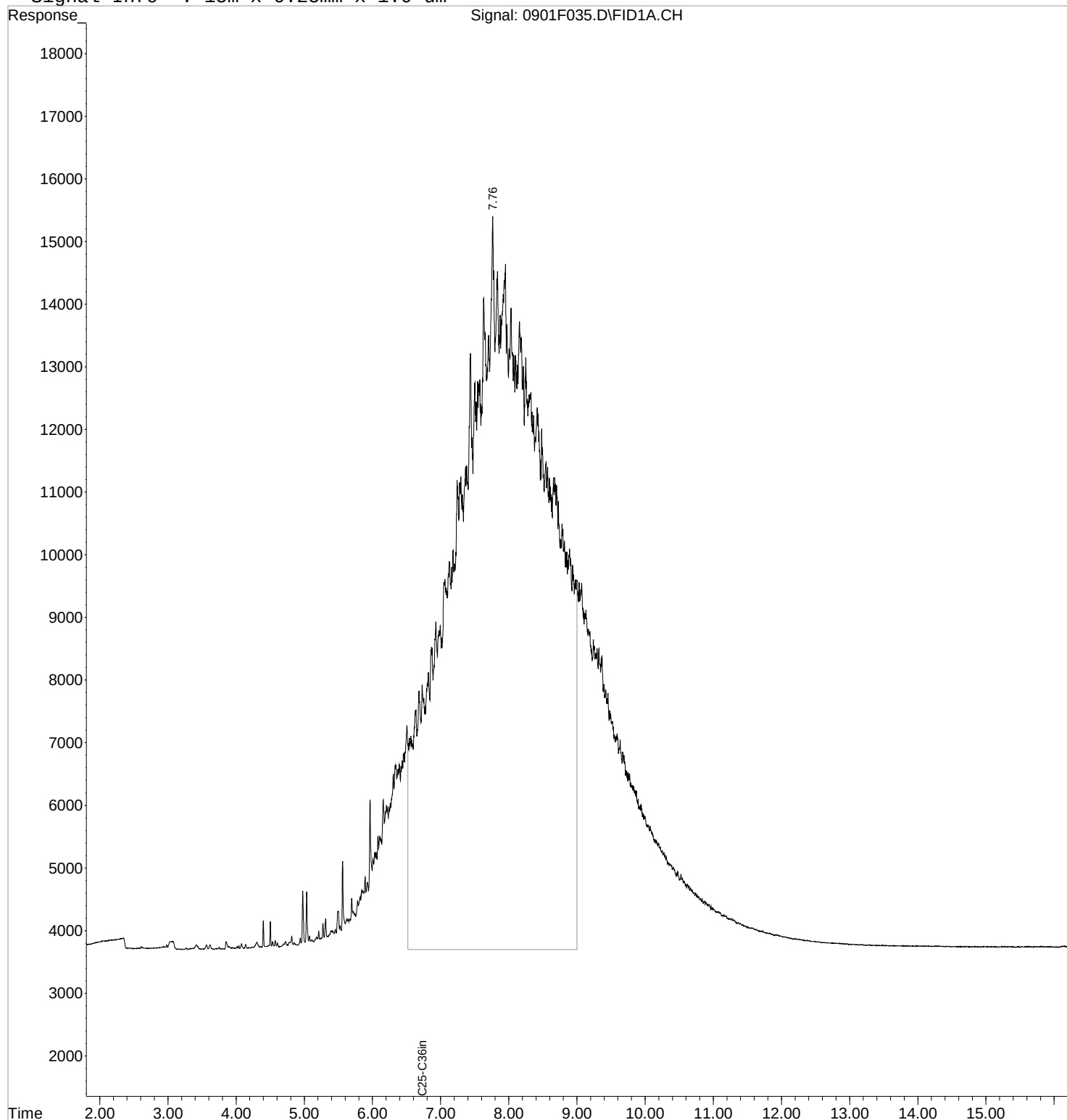
Response via : Single Level Calibration

DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Data File : J:\GC21\DATA\090123\0901F036.D Vial: 21
Acq On : 01 Sep 2023 10:29 pm Operator: AA
Sample : AK103 SVF04-58I 5000 Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Sep 05 06:56:02 2023 Quant Results File: 090123F.RES

Quant Method : J:\GC21\METHODS\090123F.M (RTE Integrator)
Title : 8015/NWTPH/AK SVF MJ257 KC2000628
Last Update : Fri Sep 01 10:57:30 2023
Response via : Initial Calibration
DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL
Signal Phase : ZB-1
Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

Target Compounds

11) H C25-C36in RRO [AK103]	6.72	2736698	5855.928 ppm
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Data File : J:\GC21\DATA\090123\0901F036.D

Vial: 21

Acq On : 01 Sep 2023 10:29 pm

Operator: AA

Sample : AK103 SVF04-58I 5000

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Sep 5 7:03 2023 Quant Results File: 090123F.RES

Quant Method : J:\GC21\METHODS\090123F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Fri Sep 01 10:57:30 2023

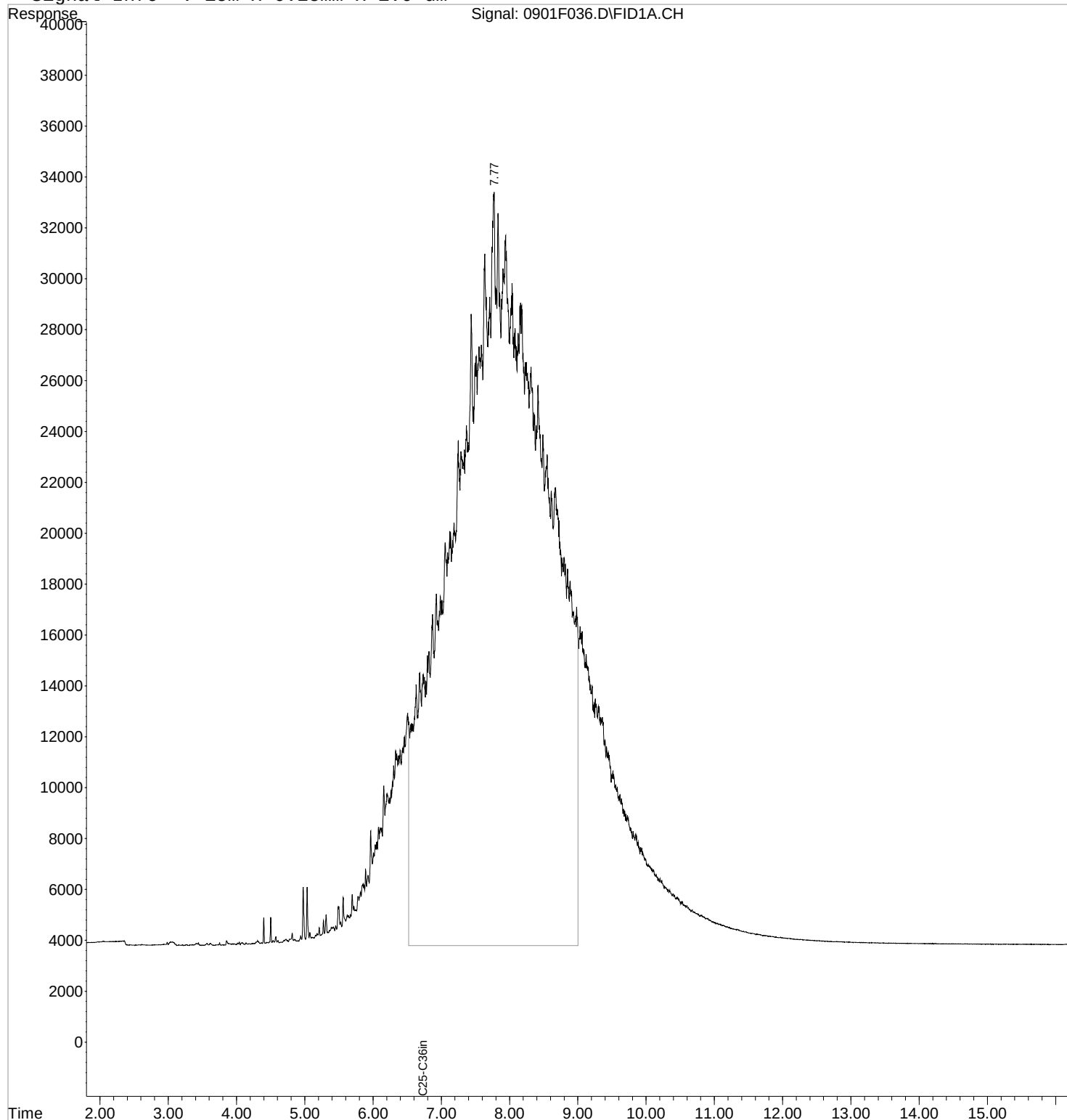
Response via : Single Level Calibration

DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Data File : J:\GC21\DATA\090123\0901F038.D Vial: 1
Acq On : 01 Sep 2023 11:12 pm Operator: AA
Sample : IB Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Sep 05 06:56:04 2023 Quant Results File: 090123F.RES

Quant Method : J:\GC21\METHODS\090123F.M (RTE Integrator)
Title : 8015/NWTPH/AK SVF MJ257 KC2000628
Last Update : Fri Sep 01 10:57:30 2023
Response via : Initial Calibration
DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL
Signal Phase : ZB-1
Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

Target Compounds

6)	H	C10-C25ex DRO [AK102]	3.11	10624	10.843 ppm
7)	H	C10-C28in DRO [8015]	3.21	12739	12.508 ppm
8)	H	C12-C25ex DRO [NWTPH]	3.75	8554	10.614 ppm
10)	H	C25-C36in RRO [NWTPH]	6.62	8260	15.136 ppm
11)	H	C25-C36in RRO [AK103]	6.72	8260	17.675 ppm

Data File : J:\GC21\DATA\090123\0901F038.D

Vial: 1

Acq On : 01 Sep 2023 11:12 pm

Operator: AA

Sample : IB

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Sep 5 6:56 2023 Quant Results File: 090123F.RES

Quant Method : J:\GC21\METHODS\090123F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Fri Sep 01 10:57:30 2023

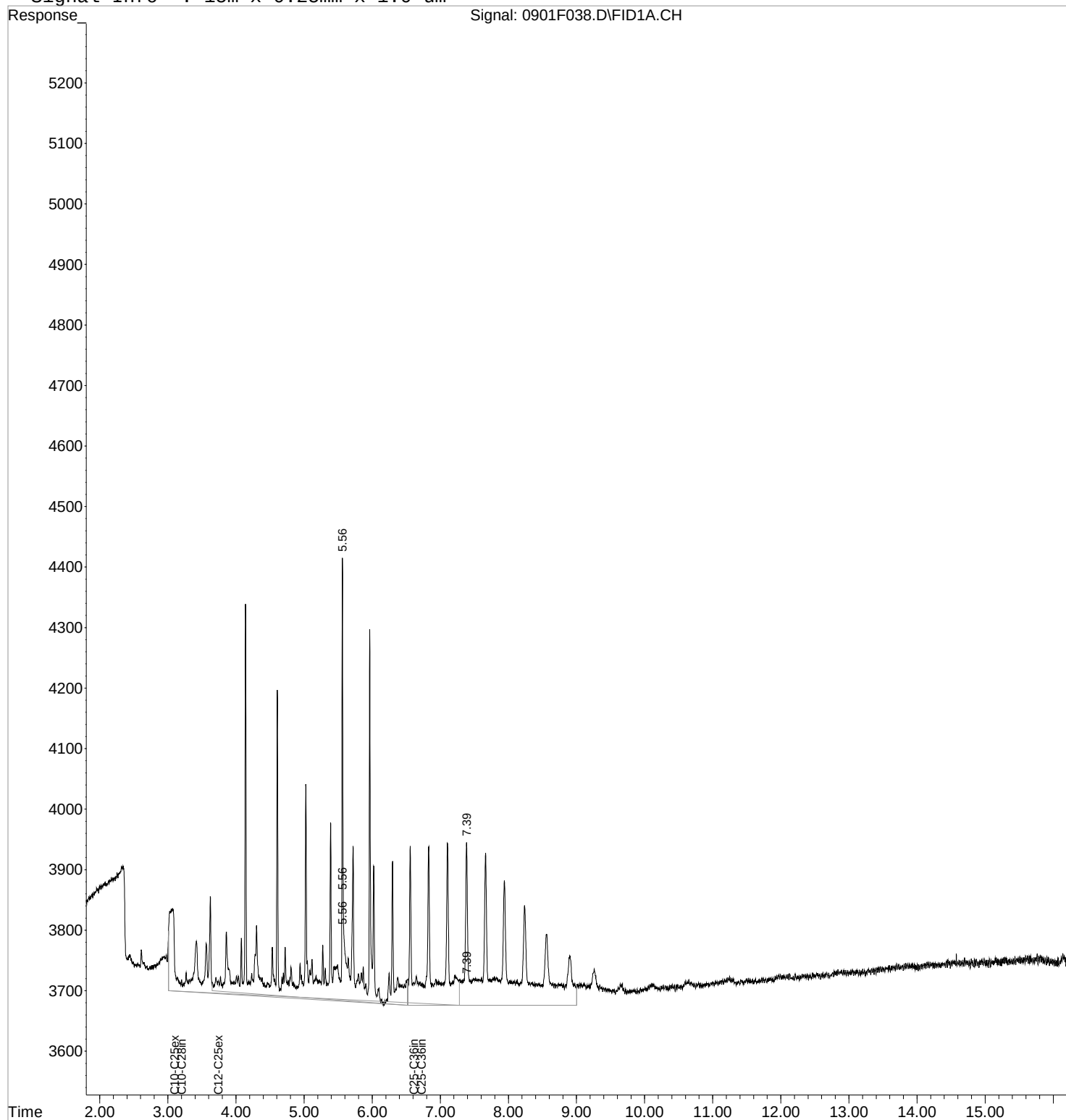
Response via : Single Level Calibration

DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Data File : J:\GC21\DATA\090123\0901F039.D Vial: 22
Acq On : 01 Sep 2023 11:34 pm Operator: AA
Sample : AK103 SVF04-58N ICV@1000 Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Sep 05 07:44:14 2023 Quant Results File: 090123F.RES

Quant Method : J:\GC21\METHODS\090123F.M (RTE Integrator)
Title : 8015/NWTPH/AK SVF MJ257 KC2000628
Last Update : Tue Sep 05 07:11:11 2023
Response via : Initial Calibration
DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL
Signal Phase : ZB-1
Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

Target Compounds

11) H C25-C36in RRO [AK103]	6.72	511899	840.883 ppm
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Data File : J:\GC21\DATA\090123\0901F039.D

Vial: 22

Acq On : 01 Sep 2023 11:34 pm

Operator: AA

Sample : AK103 SVF04-58N ICV@1000

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Sep 5 7:44 2023 Quant Results File: 090123F.RES

Quant Method : J:\GC21\METHODS\090123F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Tue Sep 05 07:11:11 2023

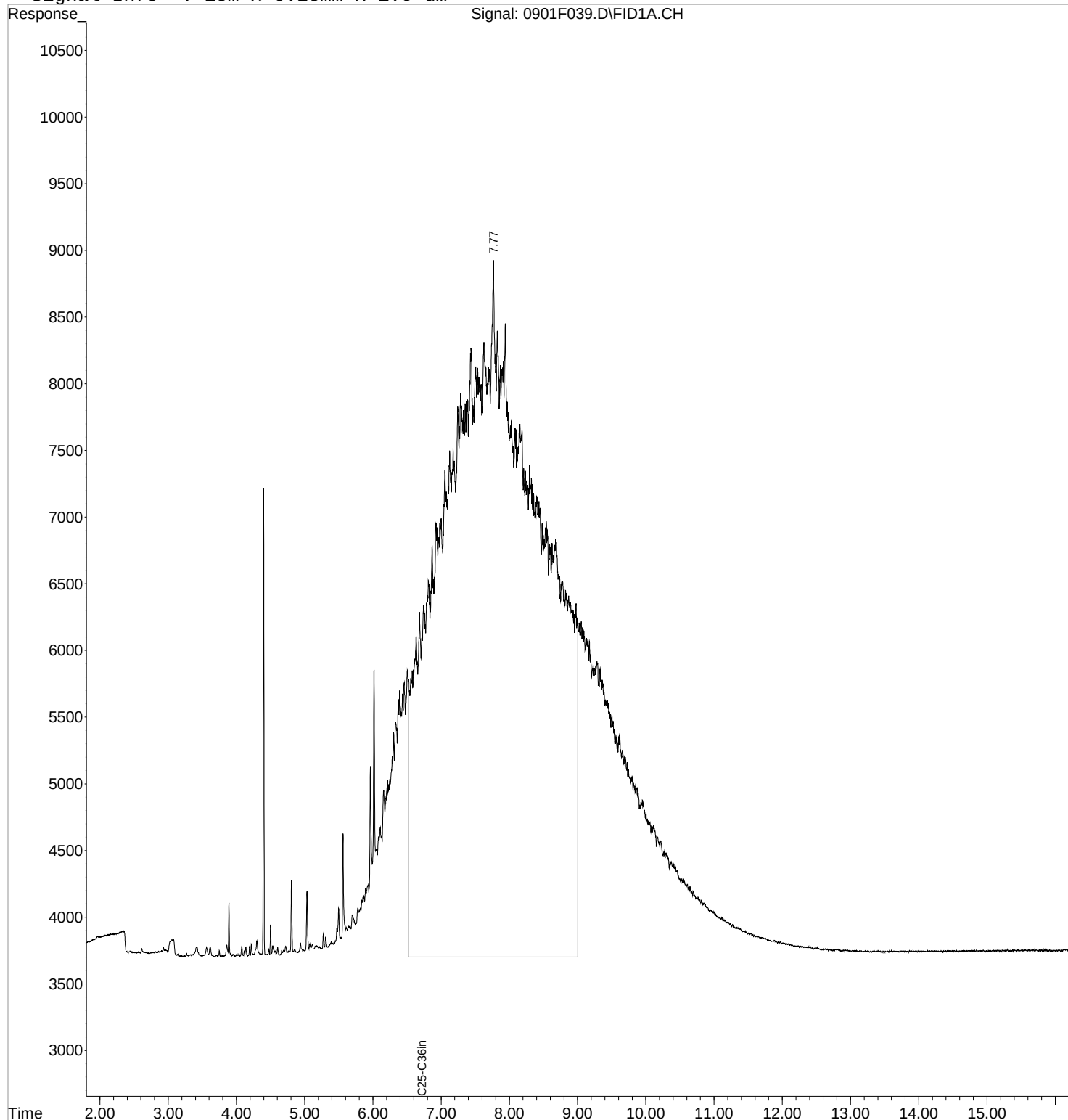
Response via : Single Level Calibration

DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Data File : J:\GC21\DATA\090623\0906F013.D Vial: 1
Acq On : 06 Sep 2023 1:01 pm Operator: AA
Sample : IB Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Sep 07 14:30:18 2023 Quant Results File: 090623F.RES

Quant Method : J:\GC21\METHODS\090623F.M (RTE Integrator)
Title : 8015/NWTPH/AK SVF MJ257 KC2000628
Last Update : Thu Sep 07 07:26:08 2023
Response via : Initial Calibration
DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL
Signal Phase : ZB-1
Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

Target Compounds

6)	H	C10-C25ex DRO [AK102]	3.11	8681	8.956 ppm
7)	H	C10-C28in DRO [8015]	3.21	10455	10.309 ppm
8)	H	C12-C25ex DRO [NWTPH]	3.75	6325	7.974 ppm
10)	H	C25-C36in RRO [NWTPH]	6.62	4778	7.190 ppm
11)	H	C25-C36in RRO [AK103]	6.72	4778	7.849 ppm

Data File : J:\GC21\DATA\090623\0906F013.D

Vial: 1

Acq On : 06 Sep 2023 1:01 pm

Operator: AA

Sample : IB

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Sep 7 14:31 2023 Quant Results File: 090623F.RES

Quant Method : J:\GC21\METHODS\090623F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Thu Sep 07 07:26:08 2023

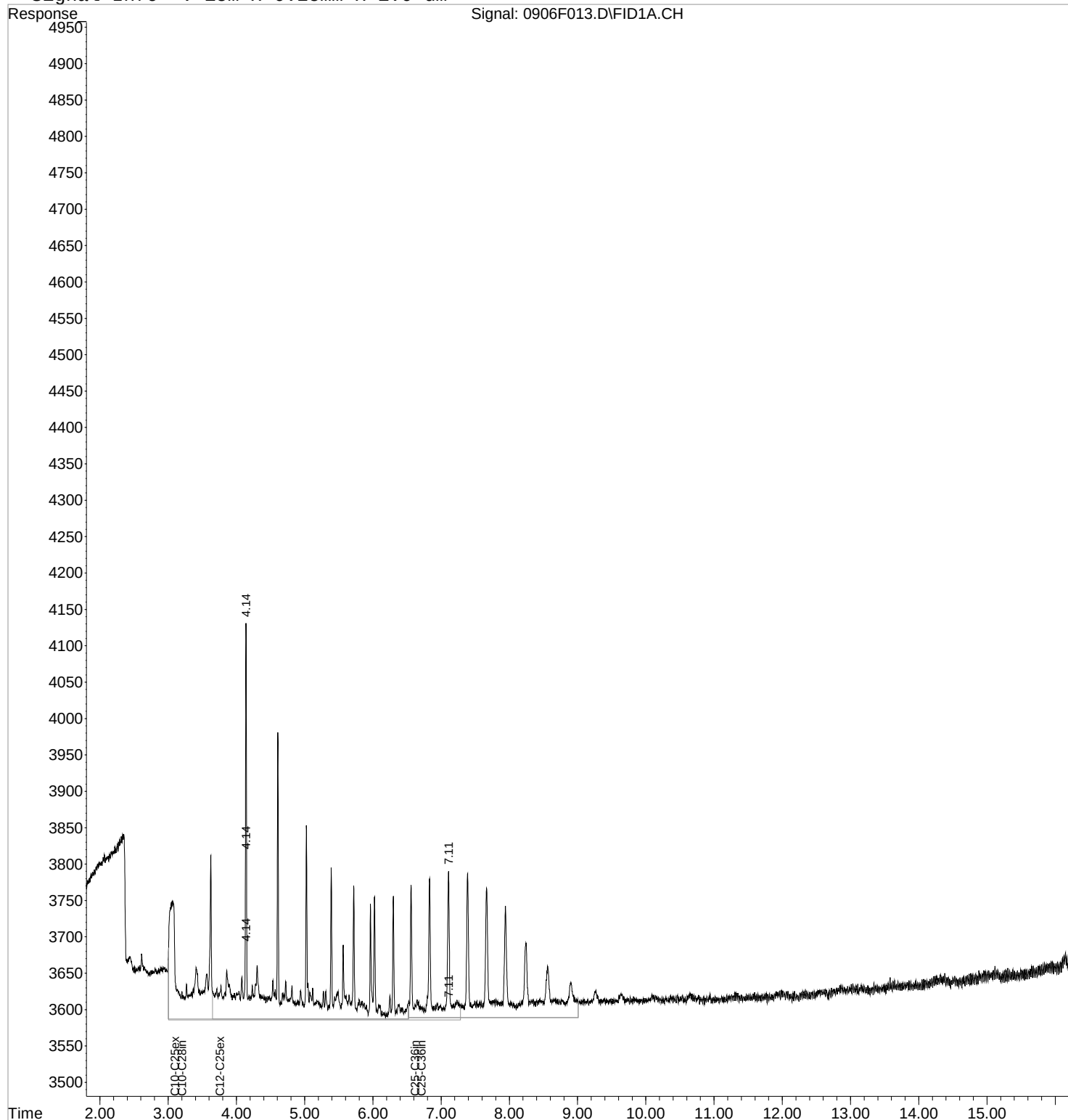
Response via : Single Level Calibration

DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Data File : J:\GC21\DATA\090623\0906F013.D

Acq On : 06 Sep 2023 1:01 pm

Sample : IB

Misc :

IntFile : rteint.p

Quant Time: Sep 7 14:30 2023 Quant Results File: 090623F.RES

Vial: 1

Operator: AA

Inst : GC21

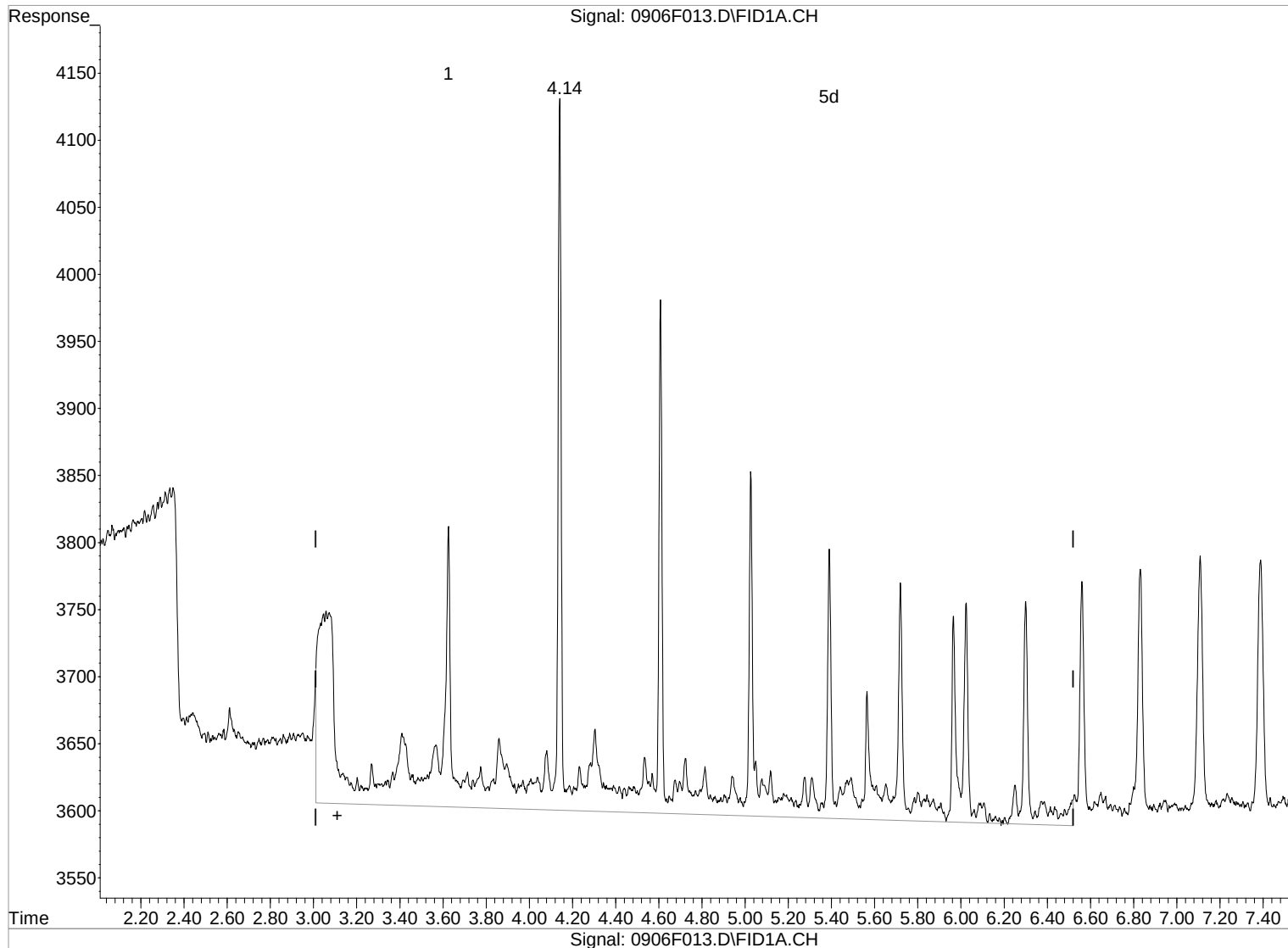
Multiplr: 1.00

Method : J:\GC21\METHODS\090623F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Thu Sep 07 07:26:08 2023

Response via : Multiple Level Calibration



(6) C10-C25ex DRO [AK102] (H)

3.11min 6.720ppm

response 6514

Manual Integration:

Before

09/07/23

(+) = Expected Retention Time

0906F013.D 090623F.M Thu Sep 07 14:30:44 2023

484 of 3023

Data File : J:\GC21\DATA\090623\0906F013.D

Acq On : 06 Sep 2023 1:01 pm

Sample : IB

Misc :

IntFile : rteint.p

Quant Time: Sep 7 14:30 2023 Quant Results File: 090623F.RES

Vial: 1

Operator: AA

Inst : GC21

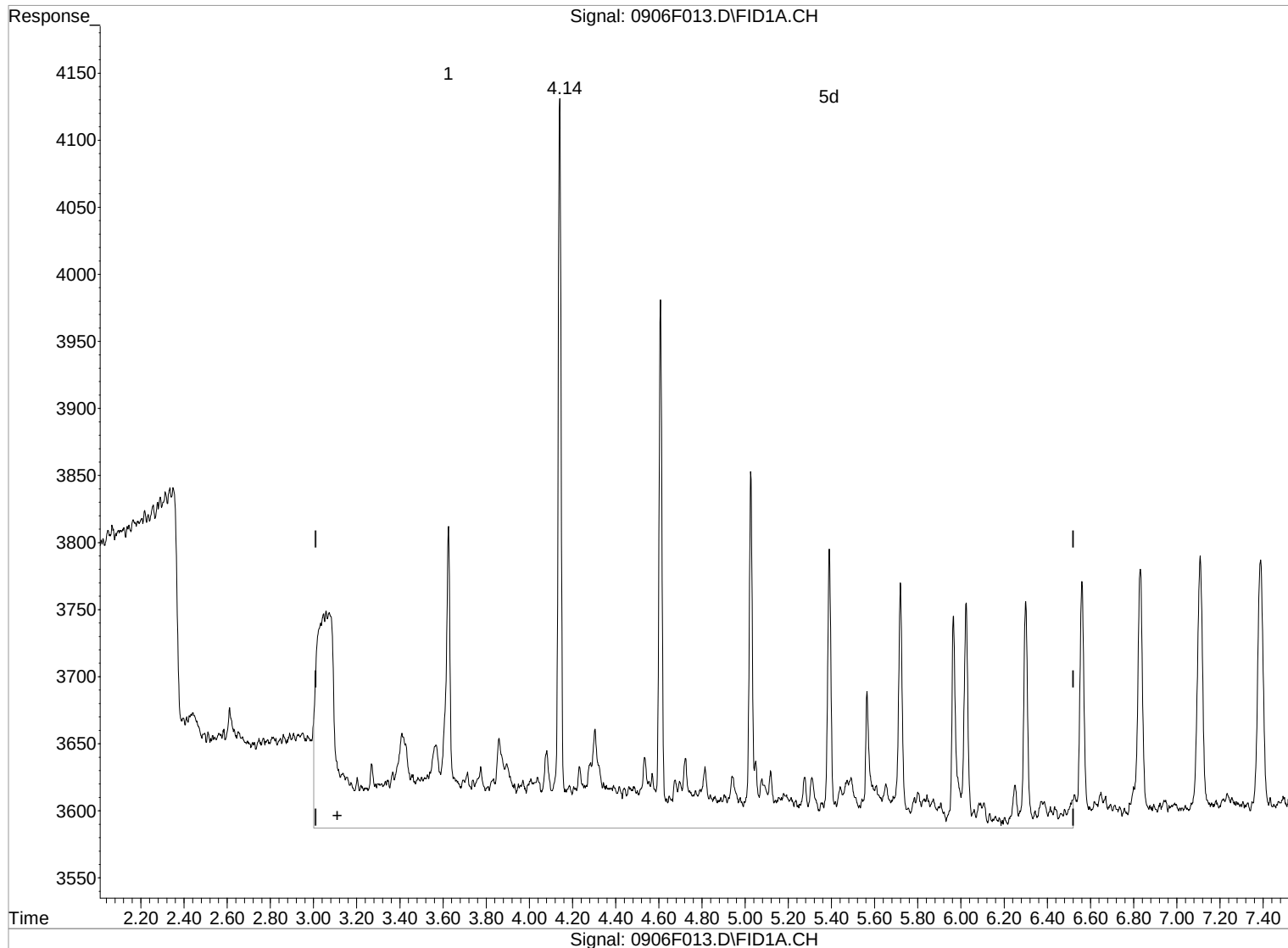
Multiplr: 1.00

Method : J:\GC21\METHODS\090623F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Thu Sep 07 07:26:08 2023

Response via : Multiple Level Calibration



(6) C10-C25ex DRO [AK102] (H)

3.11min 8.956ppm

response 8681

Manual Integration:

After

Baseline/Shoulder

09/07/23

(+) = Expected Retention Time

0906F013.D 090623F.M Thu Sep 07 14:31:02 2023

485 of 3023

Data File : J:\GC21\DATA\090623\0906F013.D

Acq On : 06 Sep 2023 1:01 pm

Sample : IB

Misc :

IntFile : rteint.p

Quant Time: Sep 7 14:30 2023 Quant Results File: 090623F.RES

Vial: 1

Operator: AA

Inst : GC21

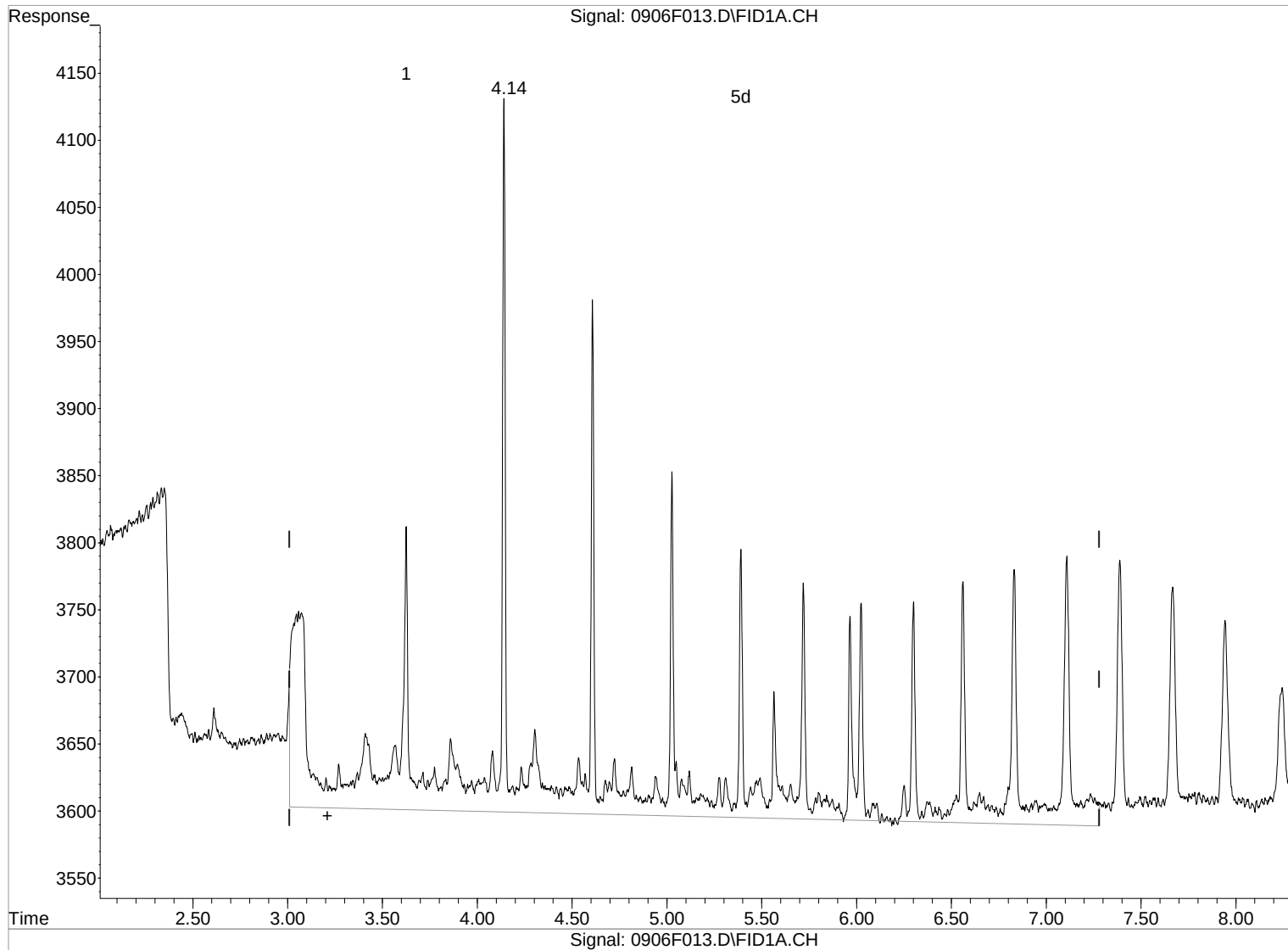
Multiplr: 1.00

Method : J:\GC21\METHODS\090623F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Thu Sep 07 07:26:08 2023

Response via : Multiple Level Calibration



(7) C10-C28in DRO [8015] (H)

Manual Integration:

3.21min 7.746ppm

Before

response 7855

09/07/23

(+) = Expected Retention Time

0906F013.D 090623F.M Thu Sep 07 14:31:06 2023

486 of 3023

Data File : J:\GC21\DATA\090623\0906F013.D

Acq On : 06 Sep 2023 1:01 pm

Sample : IB

Misc :

IntFile : rteint.p

Quant Time: Sep 7 14:30 2023 Quant Results File: 090623F.RES

Vial: 1

Operator: AA

Inst : GC21

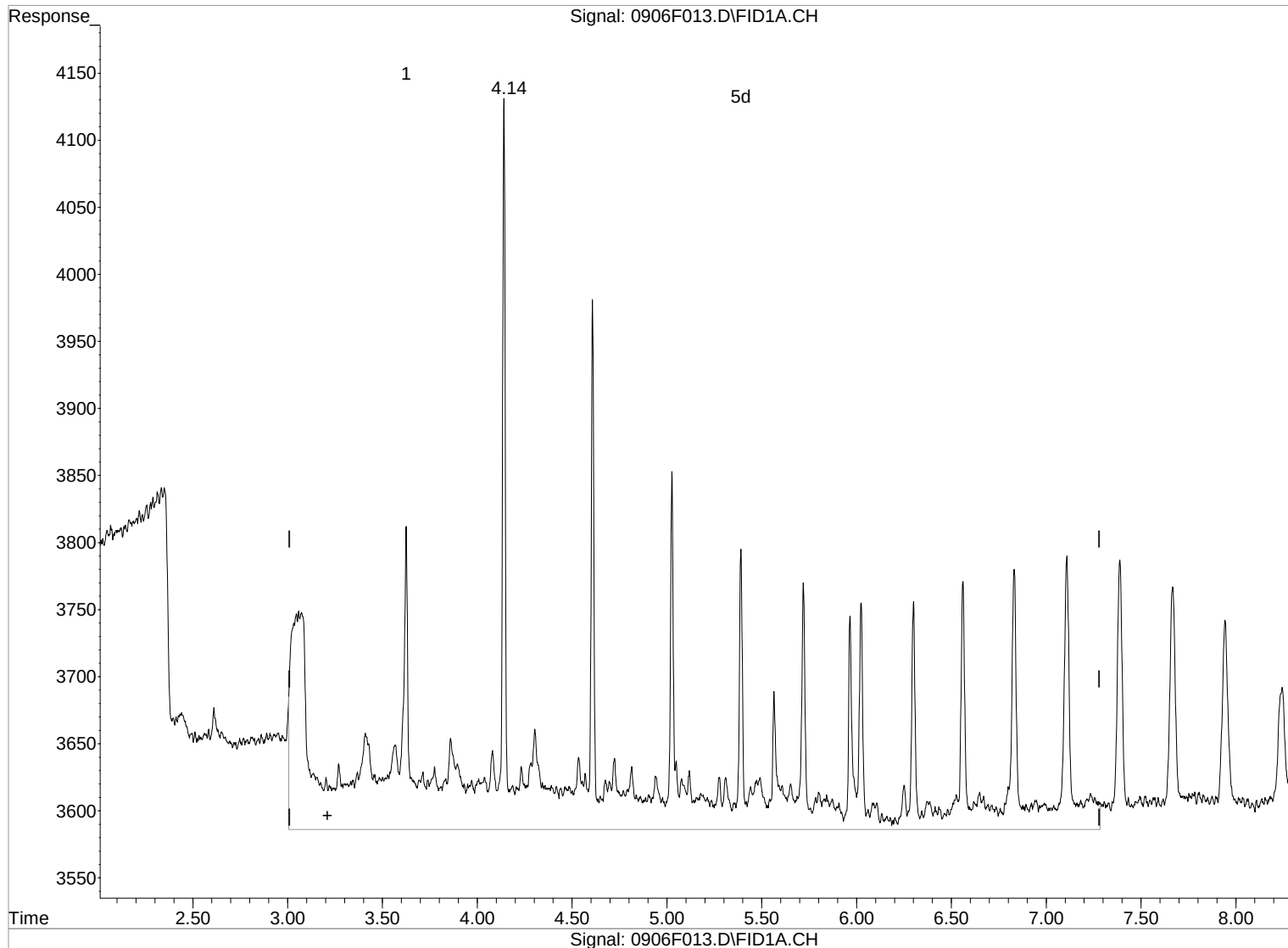
Multiplr: 1.00

Method : J:\GC21\METHODS\090623F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Thu Sep 07 07:26:08 2023

Response via : Multiple Level Calibration



(7) C10-C28in DRO [8015] (H)

3.21min 10.309ppm

response 10455

Manual Integration:

After

Baseline/Shoulder

09/07/23

(+) = Expected Retention Time

0906F013.D 090623F.M Thu Sep 07 14:31:24 2023

487 of 3023

Data File : J:\GC21\DATA\090623\0906F013.D

Acq On : 06 Sep 2023 1:01 pm

Sample : IB

Misc :

IntFile : rteint.p

Quant Time: Sep 7 14:30 2023 Quant Results File: 090623F.RES

Vial: 1

Operator: AA

Inst : GC21

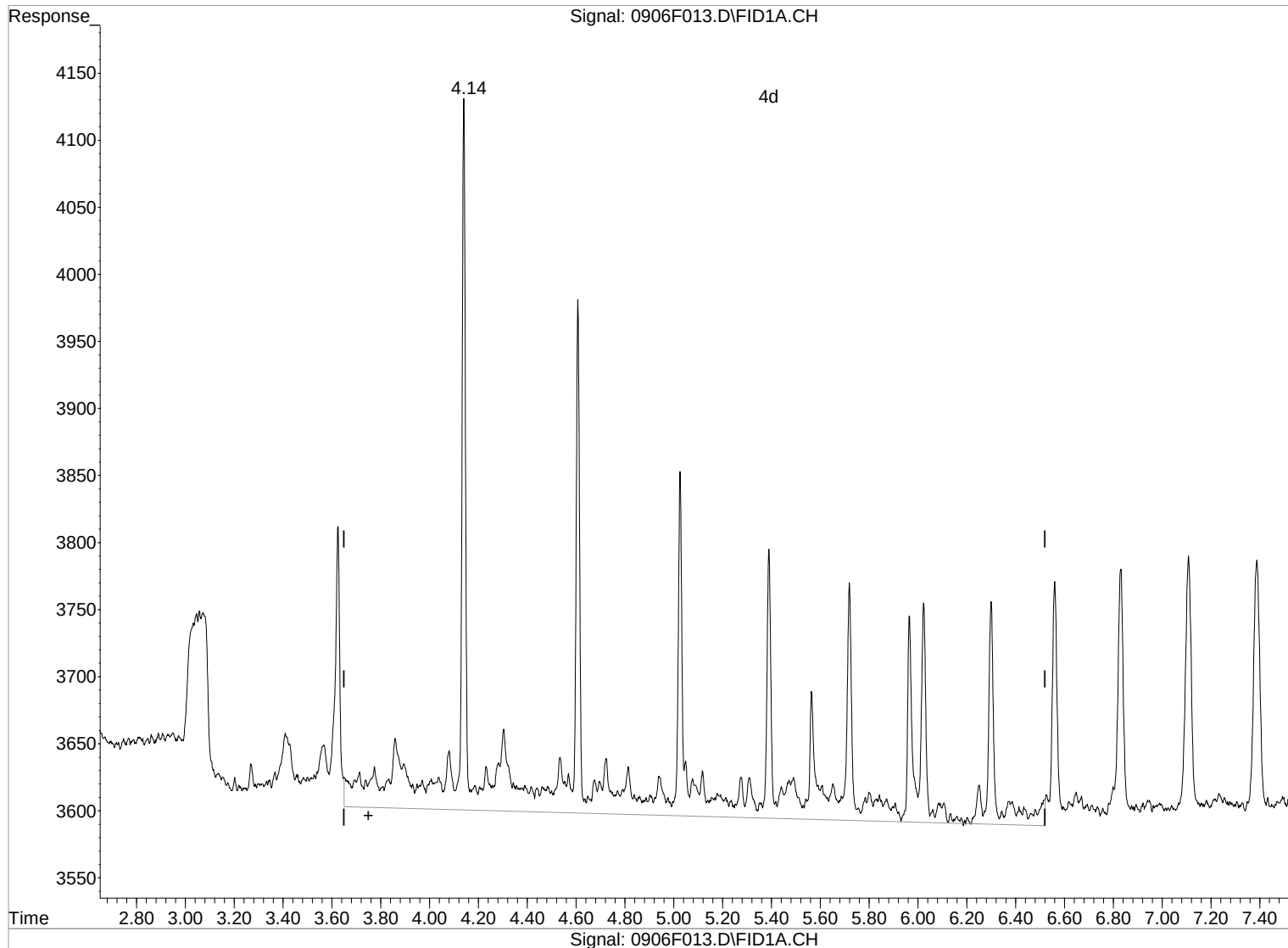
Multiplr: 1.00

Method : J:\GC21\METHODS\090623F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Thu Sep 07 07:26:08 2023

Response via : Multiple Level Calibration



(8) C12-C25ex DRO [NWTPH] (H)

Manual Integration:

3.75min 6.015ppm

Before

response 4771

09/07/23

(+) = Expected Retention Time

0906F013.D 090623F.M Thu Sep 07 14:31:27 2023

488 of 3023

Data File : J:\GC21\DATA\090623\0906F013.D

Acq On : 06 Sep 2023 1:01 pm

Sample : IB

Misc :

IntFile : rteint.p

Quant Time: Sep 7 14:30 2023 Quant Results File: 090623F.RES

Vial: 1

Operator: AA

Inst : GC21

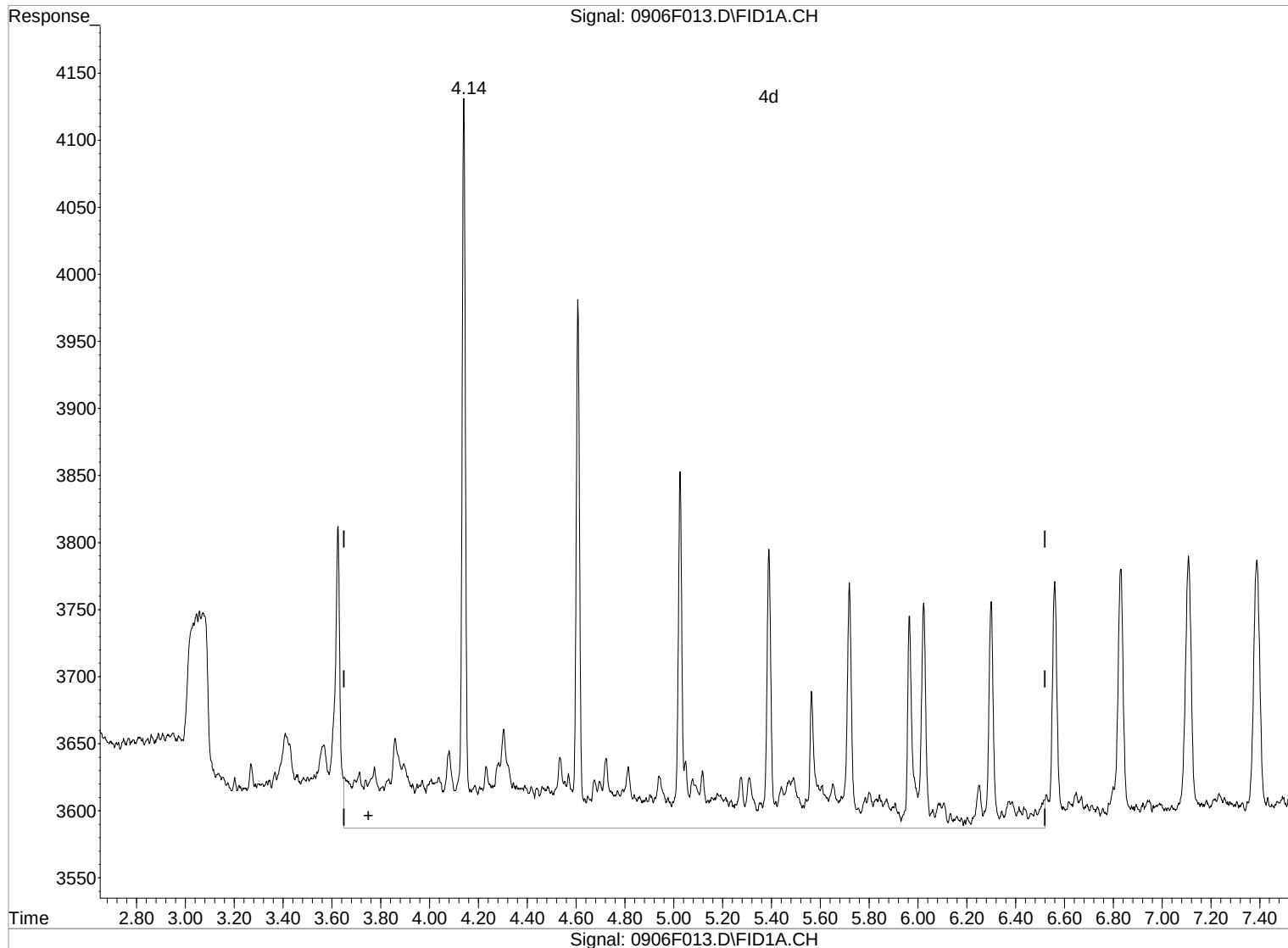
Multiplr: 1.00

Method : J:\GC21\METHODS\090623F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Thu Sep 07 07:26:08 2023

Response via : Multiple Level Calibration



(8) C12-C25ex DRO [NWTPH] (H)

3.75min 7.974ppm

response 6325

Manual Integration:

After

Baseline/Shoulder

09/07/23

(+) = Expected Retention Time

0906F013.D 090623F.M Thu Sep 07 14:31:26 2023

489 of 3023

Data File : J:\GC21\DATA\090623\0906F014.D Vial: 3
 Acq On : 06 Sep 2023 1:22 pm Operator: AA
 Sample : DRO SVF04-62A 20/1.0 Inst : GC21
 Misc : Multiplr: 1.00
 IntFile : rteint.p
 Quant Time: Sep 07 07:15:37 2023 Quant Results File: 090623F.RES

Quant Method : J:\GC21\METHODS\090623F.M (RTE Integrator)
 Title : 8015/NWTPH/AK SVF MJ257 KC2000628
 Last Update : Wed Sep 06 06:47:48 2023
 Response via : Initial Calibration
 DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL
 Signal Phase : ZB-1
 Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
1) S 4-Bromofluorobenzene	2.76	614	1.065 ppm
Spiked Amount 50.000	Recovery	=	2.13%
2) S o-Terphenyl	5.44	1277	1.043 ppm
Spiked Amount 50.000	Recovery	=	2.09%
3) S n-Triacontane	7.57	1054	1.001 ppm
Spiked Amount 50.000	Recovery	=	2.00%
Target Compounds			
6) H C10-C25ex DRO [AK102]	3.11	23717	22.212 ppm
7) H C10-C28in DRO [8015]	3.21	25775	23.077 ppm
8) H C12-C25ex DRO [NWTPH]	3.75	18544	20.980 ppm

Data File : J:\GC21\DATA\090623\0906F014.D

Vial: 3

Acq On : 06 Sep 2023 1:22 pm

Operator: AA

Sample : DRO SVF04-62A 20/1.0

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Sep 7 7:20 2023 Quant Results File: 090623F.RES

Quant Method : J:\GC21\METHODS\090623F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Wed Sep 06 06:47:48 2023

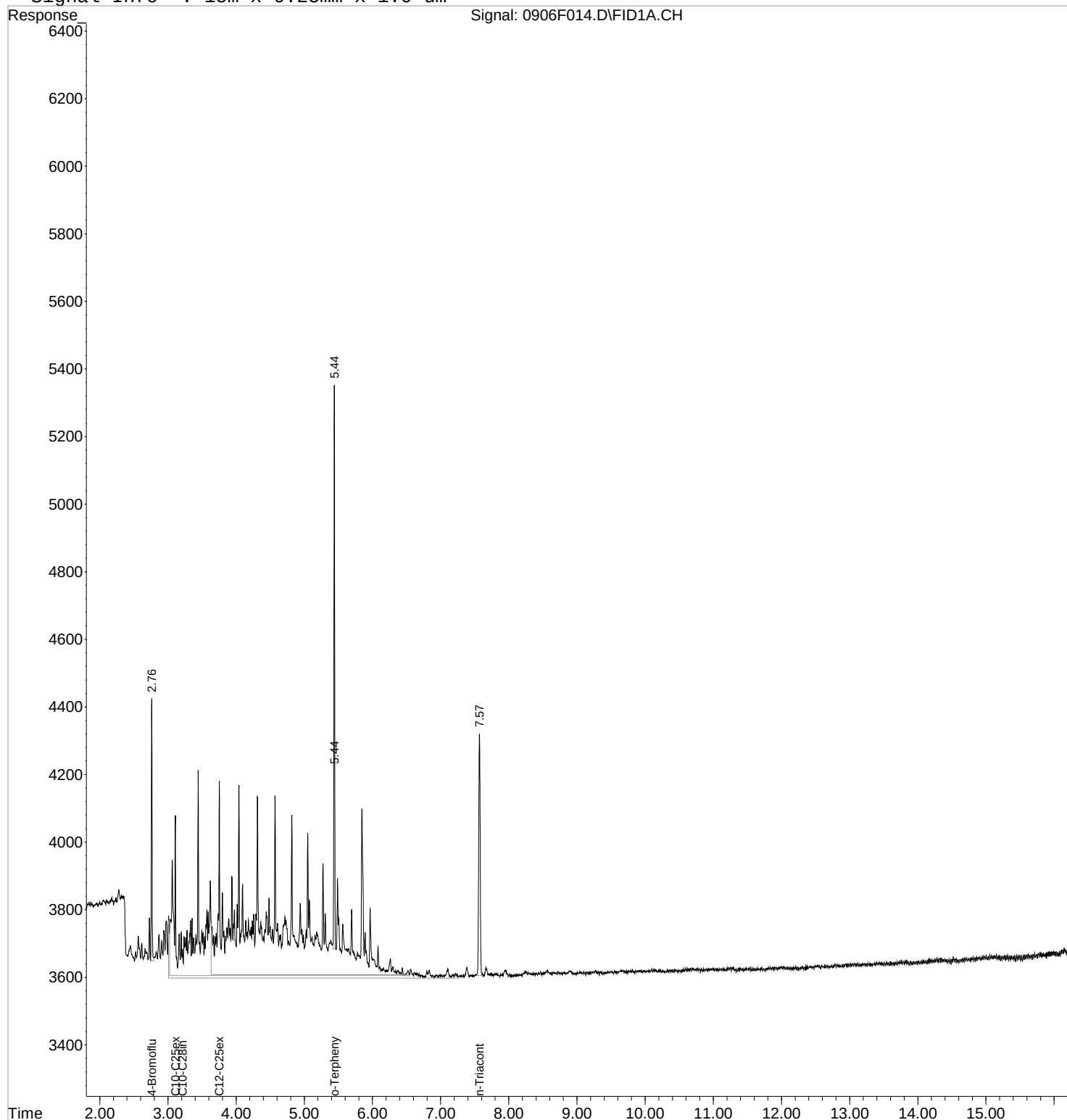
Response via : Single Level Calibration

DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Quantitation Report (Qedit)

1st *AA* 09/08/232nd *SW* 09/08/23

Data File : J:\GC21\DATA\090623\0906F014.D

Vial: 3

Acq On : 06 Sep 2023 1:22 pm

Operator: AA

Sample : DRO SVF04-62A 20/1.0

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

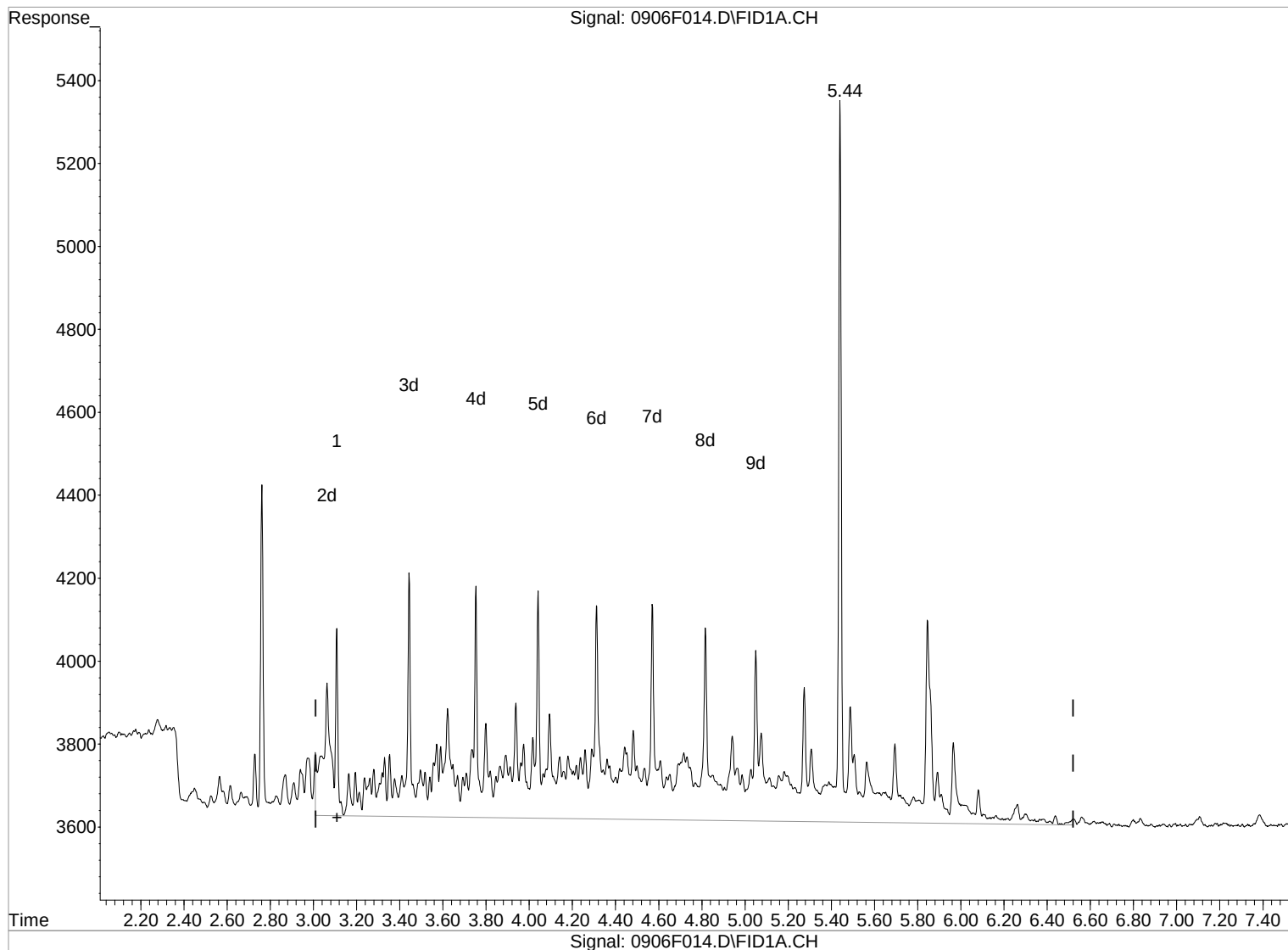
Quant Time: Sep 7 7:15 2023 Quant Results File: 090623F.RES

Method : J:\GC21\METHODS\090623F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Wed Sep 06 06:47:48 2023

Response via : Multiple Level Calibration



(6) C10-C25ex DRO [AK102] (H)

Manual Integration:

3.11min 20.164ppm

Before

response 21530

09/07/23

(+) = Expected Retention Time

0906F014.D 090623F.M Thu Sep 07 07:19:17 2023

492 of 3023

Data File : J:\GC21\DATA\090623\0906F014.D

Vial: 3

Acq On : 06 Sep 2023 1:22 pm

Operator: AA

Sample : DRO SVF04-62A 20/1.0

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

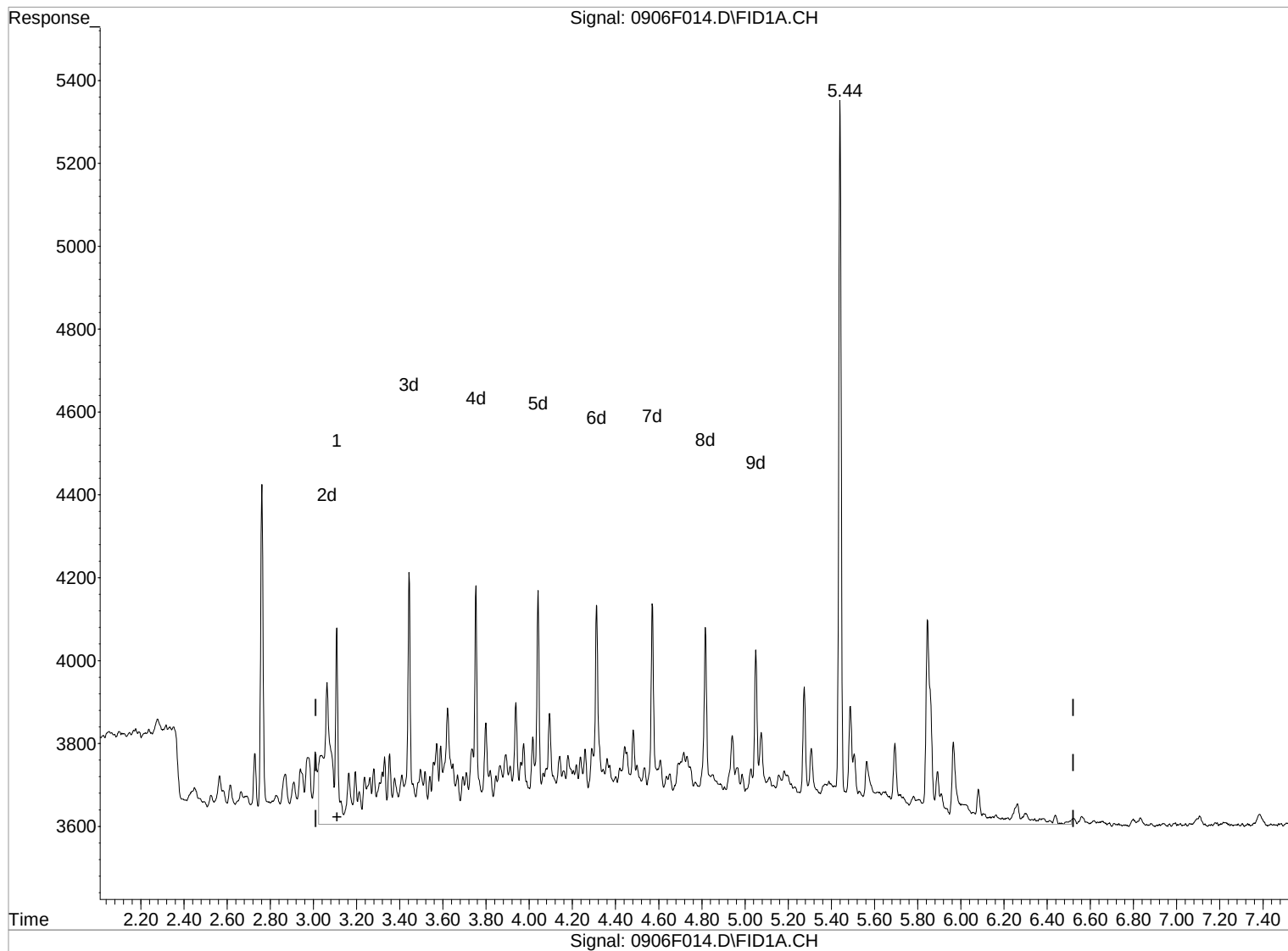
Quant Time: Sep 7 7:15 2023 Quant Results File: 090623F.RES

Method : J:\GC21\METHODS\090623F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Wed Sep 06 06:47:48 2023

Response via : Multiple Level Calibration



(6) C10-C25ex DRO [AK102] (H)

Manual Integration:

3.11min 22.212ppm

After

response 23717

Baseline/Shoulder

09/07/23

(+) = Expected Retention Time

0906F014.D 090623F.M Thu Sep 07 07:19:49 2023

493 of 3023

Quantitation Report (Qedit)

1st AA 09/08/23

2nd *SW* 09/08/23

Data File : J:\GC21\DATA\090623\0906F014.D

Vial: 3

Acq On : 06 Sep 2023 1:22 pm

Operator: AA

Sample : DRO SVF04-62A 20/1.0

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

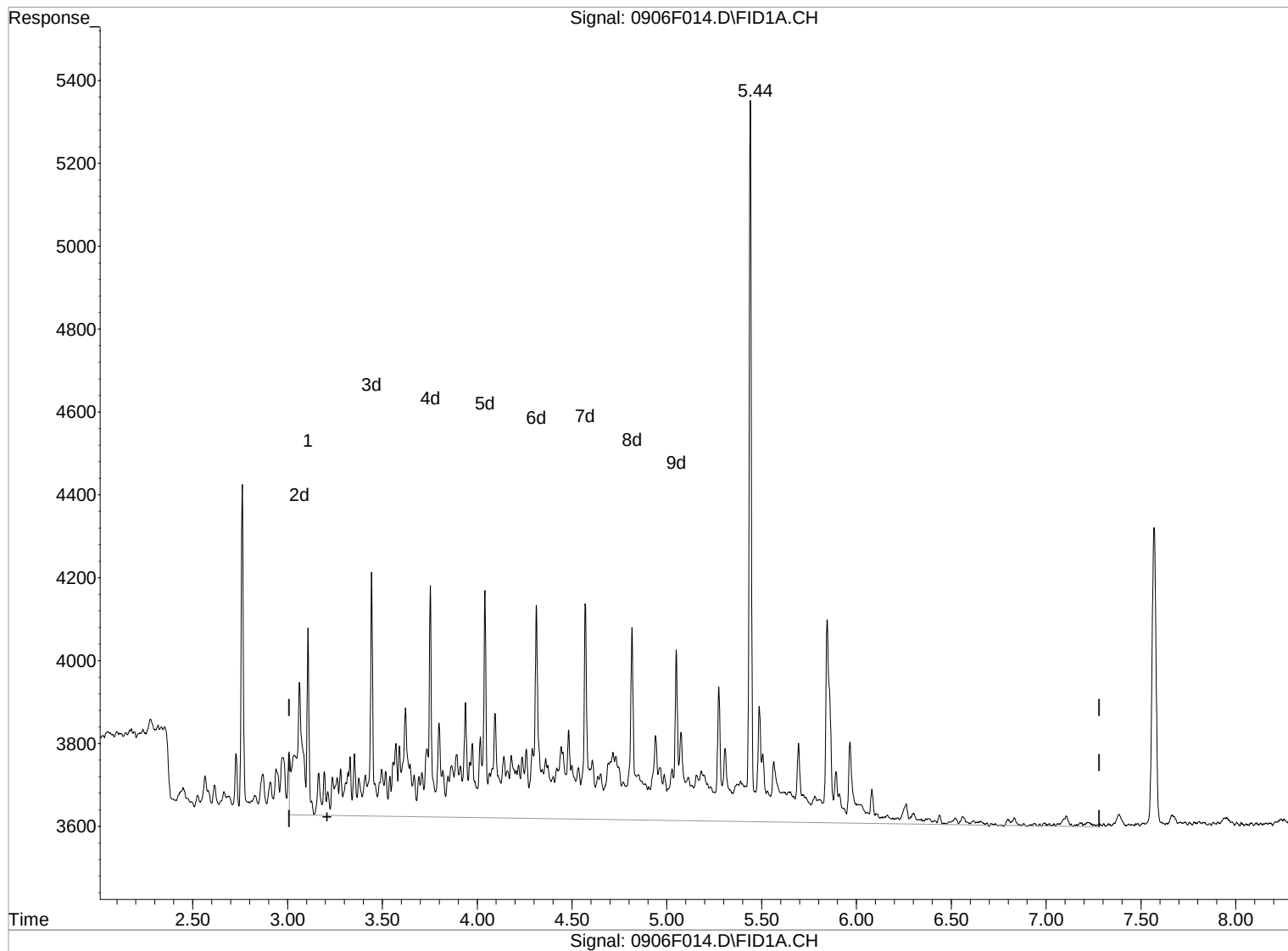
Quant Time: Sep 7 7:15 2023 Quant Results File: 090623F.RES

Method : J:\GC21\METHODS\090623F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Wed Sep 06 06:47:48 2023

Response via : Multiple Level Calibration



(7) C10-C28in DRO [8015] (H)

Manual Integration:

3.21min 19.608ppm

Before

response 21900

09/07/23

(+) = Expected Retention Time

0906F014.D 090623F.M Thu Sep 07 07:19:04 2023

494 of 3023

Quantitation Report (Qedit)

1st *AA* 09/08/23
2nd *SW* 09/08/23

Data File : J:\GC21\DATA\090623\0906F014.D

Acq On : 06 Sep 2023 1:22 pm

Sample : DRO SVF04-62A 20/1.0

Misc :

IntFile : rteint.p

Quant Time: Sep 7 7:15 2023 Quant Results File: 090623F.RES

Vial: 3

Operator: AA

Inst : GC21

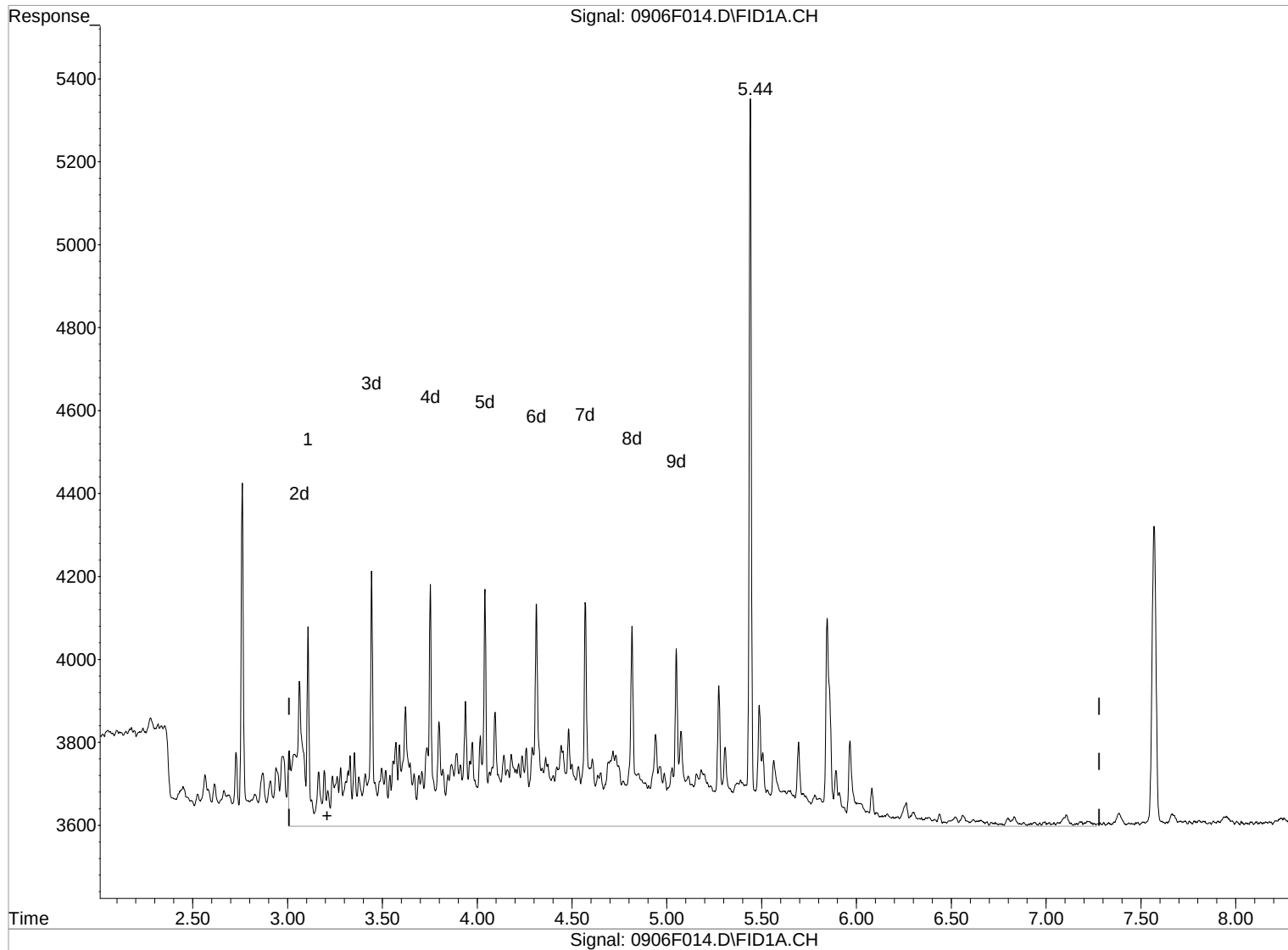
Multiplr: 1.00

Method : J:\GC21\METHODS\090623F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Wed Sep 06 06:47:48 2023

Response via : Multiple Level Calibration



(7) C10-C28in DRO [8015] (H)

3.21min 23.077ppm

response 25775

Manual Integration:

After

Baseline/Shoulder

09/07/23

(+) = Expected Retention Time

0906F014.D 090623F.M

Thu Sep 07 07:19:14 2023

495 of 3023

Data File : J:\GC21\DATA\090623\0906F014.D

Vial: 3

Acq On : 06 Sep 2023 1:22 pm

Operator: AA

Sample : DRO SVF04-62A 20/1.0

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

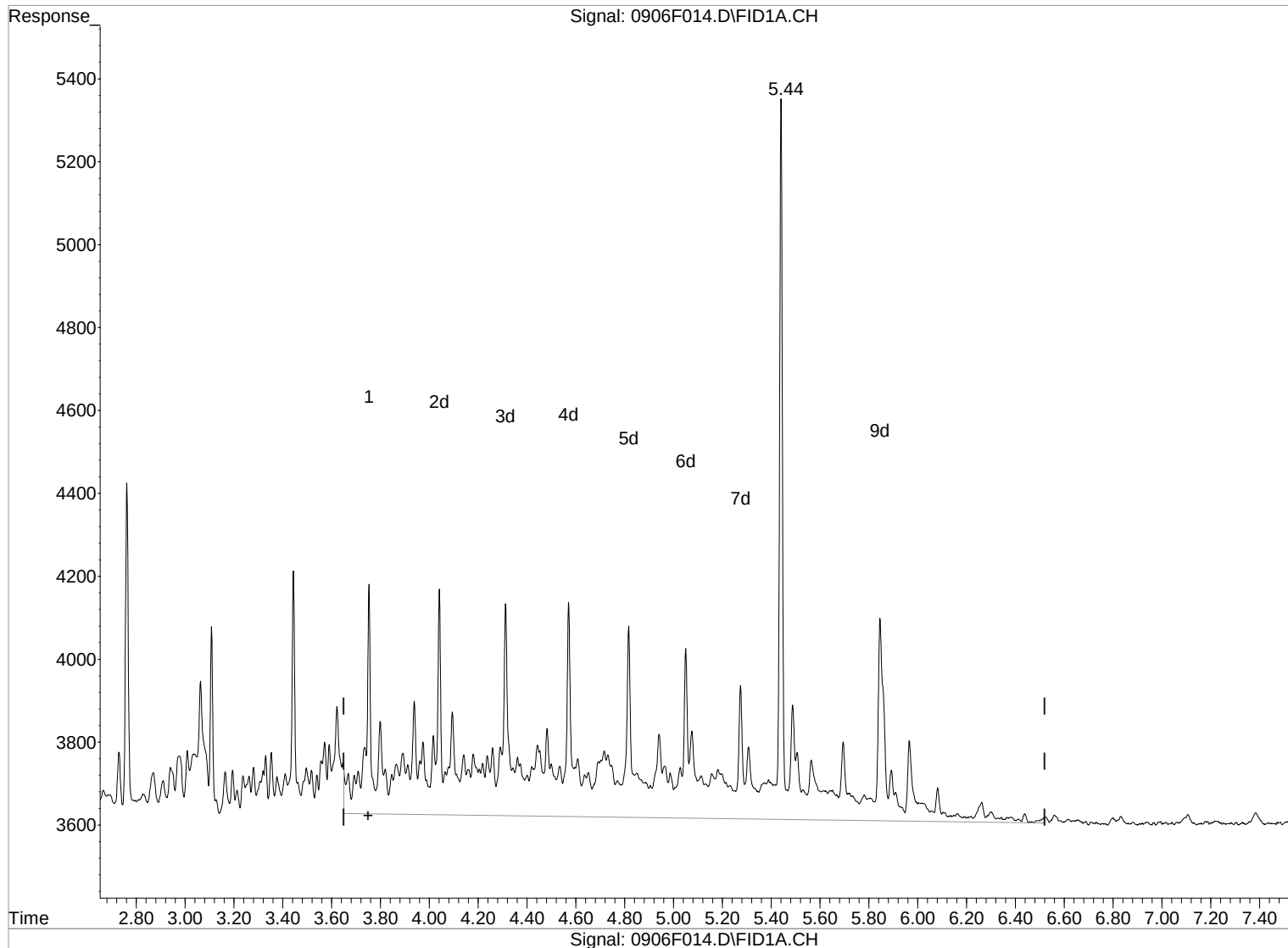
Quant Time: Sep 7 7:15 2023 Quant Results File: 090623F.RES

Method : J:\GC21\METHODS\090623F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Wed Sep 06 06:47:48 2023

Response via : Multiple Level Calibration



(8) C12-C25ex DRO [NWTPH] (H)

Manual Integration:

3.75min 19.290ppm

Before

response 17050

09/07/23

(+) = Expected Retention Time

0906F014.D 090623F.M Thu Sep 07 07:18:17 2023

496 of 3023

Quantitation Report (Qedit)

1st *AA* 09/08/23
2nd *SW* 09/08/23

Data File : J:\GC21\DATA\090623\0906F014.D

Vial: 3

Acq On : 06 Sep 2023 1:22 pm

Operator: AA

Sample : DRO SVF04-62A 20/1.0

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

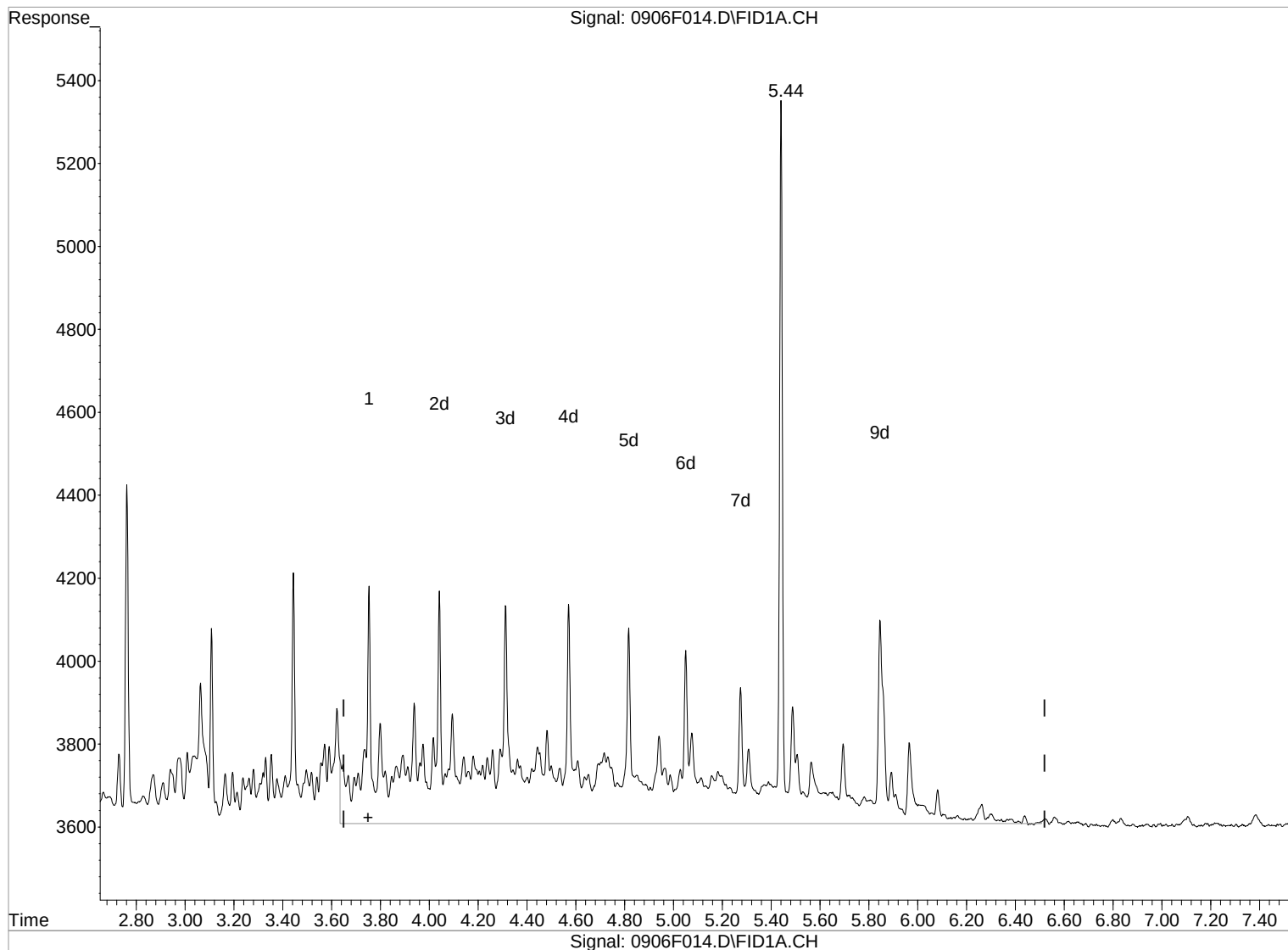
Quant Time: Sep 7 7:15 2023 Quant Results File: 090623F.RES

Method : J:\GC21\METHODS\090623F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Wed Sep 06 06:47:48 2023

Response via : Multiple Level Calibration



(8) C12-C25ex DRO [NWTPH] (H)

Manual Integration:

3.75min 20.980ppm

After

response 18544

Baseline/Shoulder

09/07/23

(+) = Expected Retention Time

0906F014.D 090623F.M Thu Sep 07 07:19:00 2023

497 of 3023

Data File : J:\GC21\DATA\090623\0906F015.D Vial: 4
 Acq On : 06 Sep 2023 1:44 pm Operator: AA
 Sample : DRO SVF04-61L 50/2.5 Inst : GC21
 Misc : Multiplr: 1.00
 IntFile : rteint.p
 Quant Time: Sep 07 07:15:39 2023 Quant Results File: 090623F.RES

Quant Method : J:\GC21\METHODS\090623F.M (RTE Integrator)
 Title : 8015/NWTPH/AK SVF MJ257 KC2000628
 Last Update : Wed Sep 06 06:47:48 2023
 Response via : Initial Calibration
 DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL
 Signal Phase : ZB-1
 Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
1) S 4-Bromofluorobenzene	2.76	1271	2.204 ppm
Spiked Amount 50.000	Recovery	=	4.41%
2) S o-Terphenyl	5.44	2742	2.239 ppm
Spiked Amount 50.000	Recovery	=	4.48%
3) S n-Triacontane	7.57	2349	2.230 ppm
Spiked Amount 50.000	Recovery	=	4.46%
Target Compounds			
6) H C10-C25ex DRO [AK102]	3.11	50767	47.546 ppm
7) H C10-C28in DRO [8015]	3.21	57855	51.799 ppm
8) H C12-C25ex DRO [NWTPH]	3.75	40640	45.980 ppm

Data File : J:\GC21\DATA\090623\0906F015.D

Vial: 4

Acq On : 06 Sep 2023 1:44 pm

Operator: AA

Sample : DR0 SVF04-61L 50/2.5

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Sep 7 7:21 2023 Quant Results File: 090623F.RES

Quant Method : J:\GC21\METHODS\090623F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Wed Sep 06 06:47:48 2023

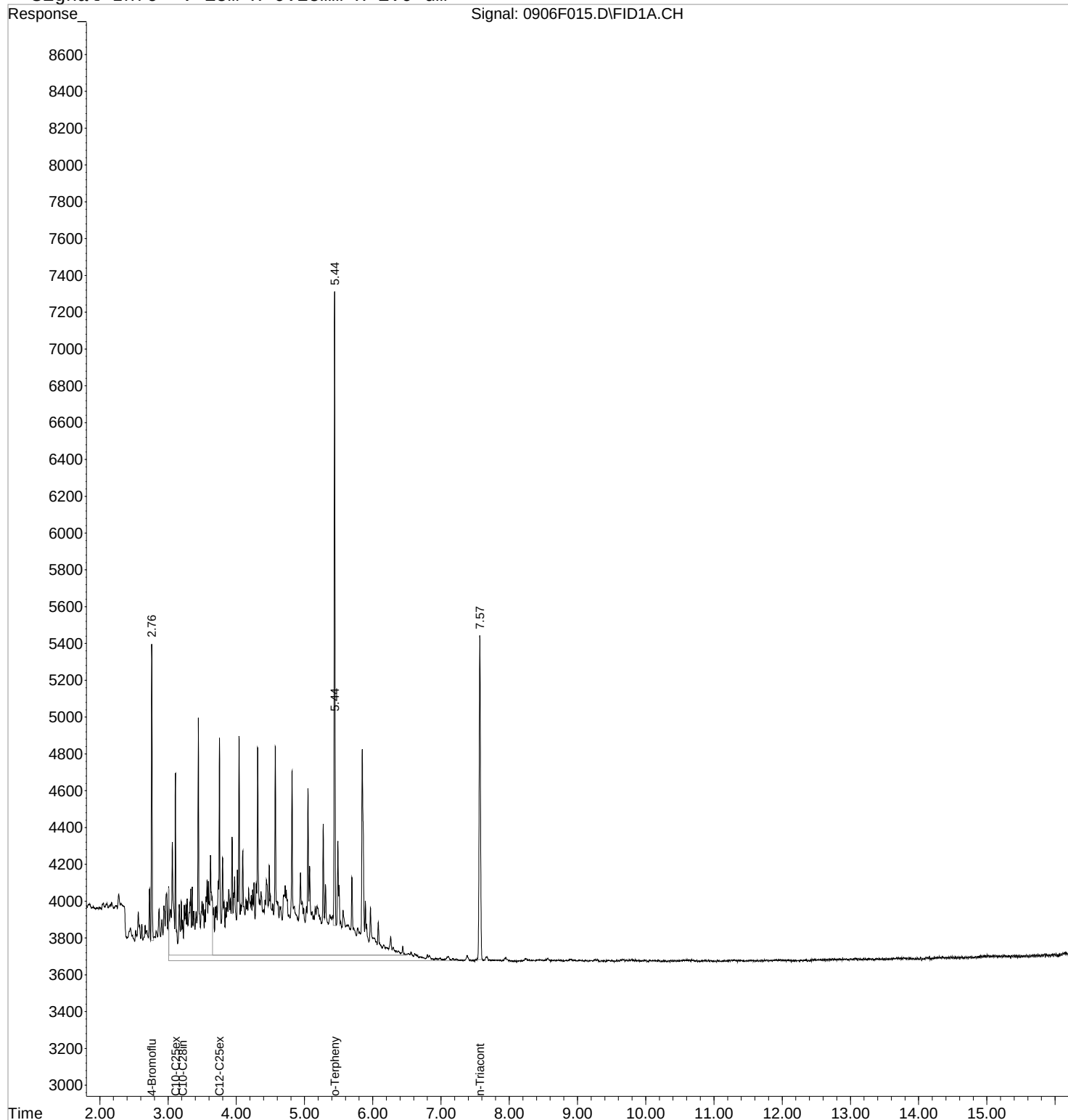
Response via : Single Level Calibration

DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Data File : J:\GC21\DATA\090623\0906F015.D

Vial: 4

Acq On : 06 Sep 2023 1:44 pm

Operator: AA

Sample : DRO SVF04-61L 50/2.5

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

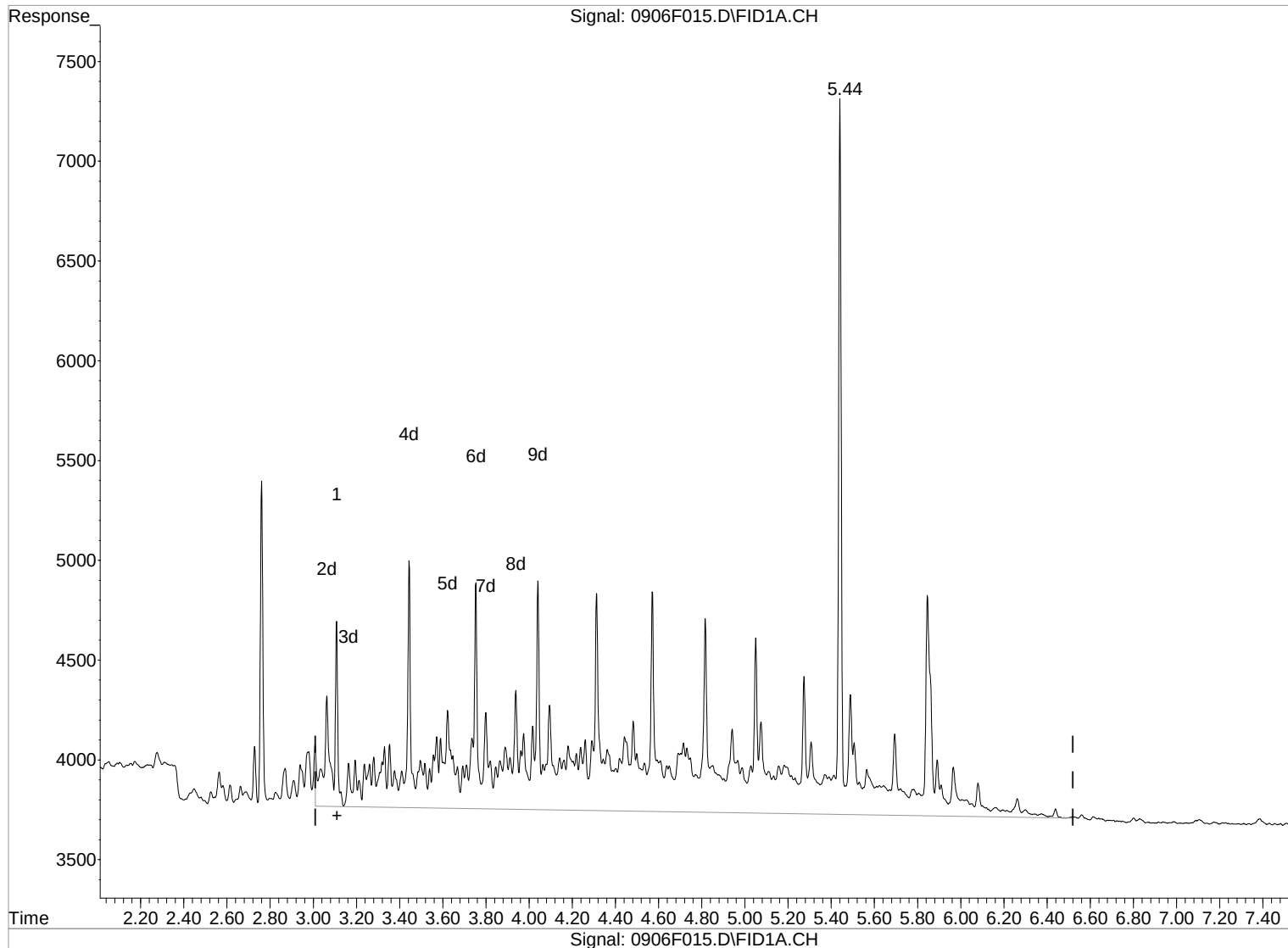
Quant Time: Sep 7 7:15 2023 Quant Results File: 090623F.RES

Method : J:\GC21\METHODS\090623F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Thu Sep 07 07:20:12 2023

Response via : Multiple Level Calibration



(6) C10-C25ex DRO [AK102] (H)

Manual Integration:

3.11min 41.441ppm

Before

response 44248

09/07/23

(+) = Expected Retention Time

0906F015.D 090623F.M Thu Sep 07 07:20:20 2023

500 of 3823

Data File : J:\GC21\DATA\090623\0906F015.D

Acq On : 06 Sep 2023 1:44 pm

Sample : DRO SVF04-61L 50/2.5

Misc :

IntFile : rteint.p

Quant Time: Sep 7 7:15 2023 Quant Results File: 090623F.RES

Vial: 4

Operator: AA

Inst : GC21

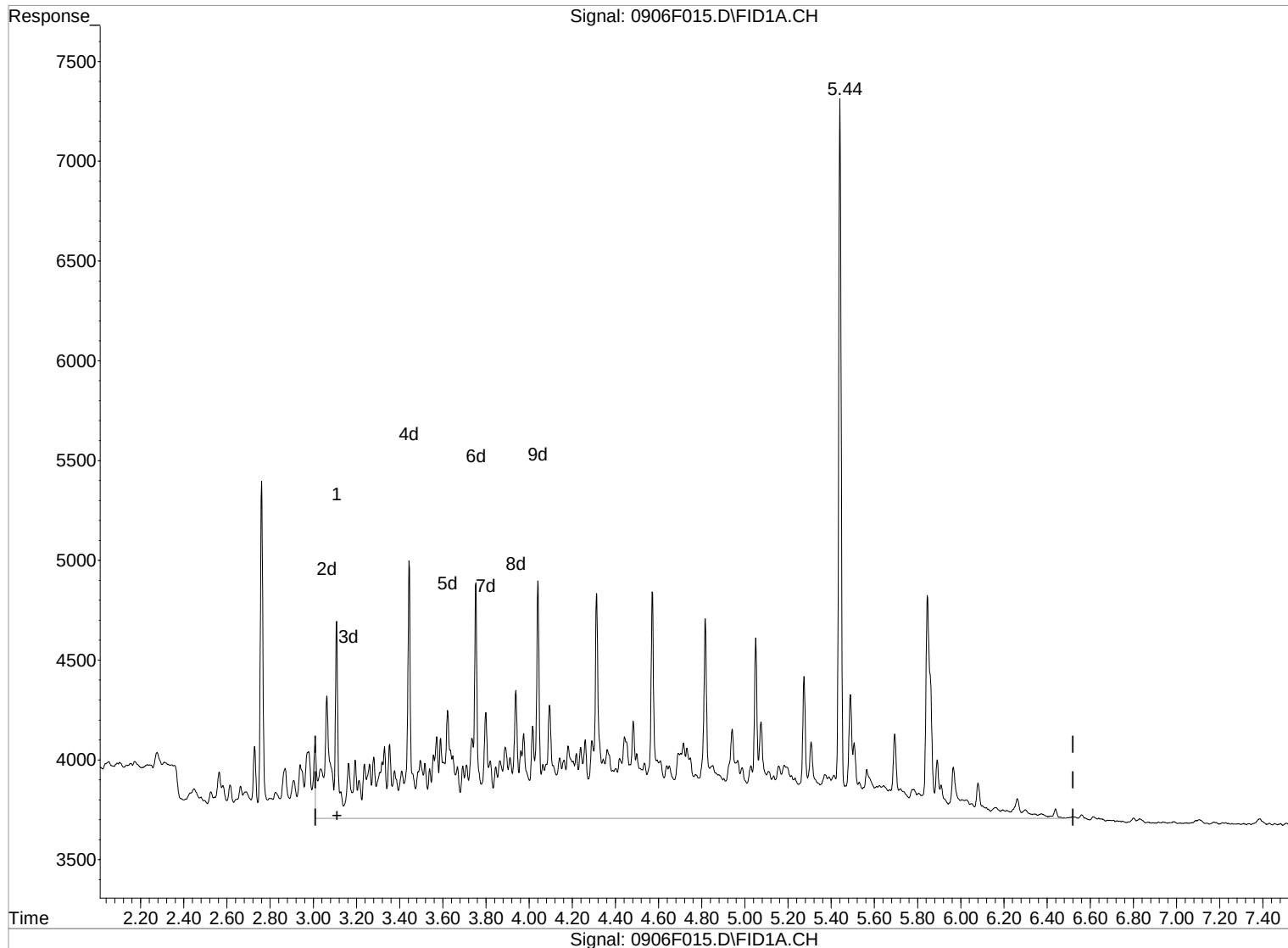
Multiplr: 1.00

Method : J:\GC21\METHODS\090623F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Thu Sep 07 07:20:12 2023

Response via : Multiple Level Calibration



(6) C10-C25ex DRO [AK102] (H)

3.11min 47.546ppm

response 50767

Manual Integration:

After

Baseline/Shoulder

09/07/23

(+) = Expected Retention Time

0906F015.D 090623F.M Thu Sep 07 07:20:50 2023

501 of 3023

Data File : J:\GC21\DATA\090623\0906F015.D

Vial: 4

Acq On : 06 Sep 2023 1:44 pm

Operator: AA

Sample : DRO SVF04-61L 50/2.5

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

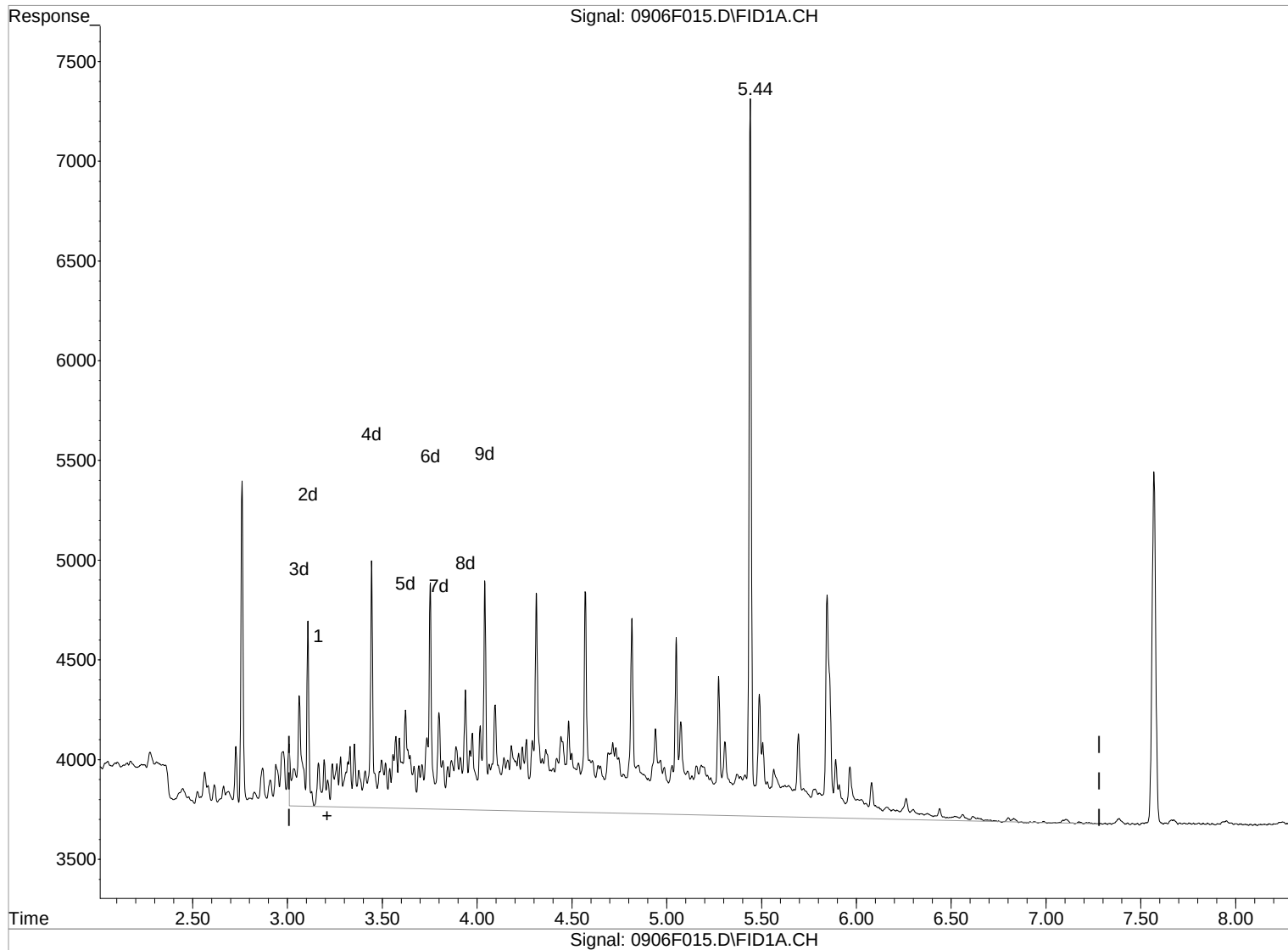
Quant Time: Sep 7 7:15 2023 Quant Results File: 090623F.RES

Method : J:\GC21\METHODS\090623F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Thu Sep 07 07:20:12 2023

Response via : Multiple Level Calibration



(7) C10-C28in DRO [8015] (H)

Manual Integration:

3.21min 41.180ppm

Before

response 45995

09/07/23

(+) = Expected Retention Time

0906F015.D 090623F.M Thu Sep 07 07:21:03 2023

502 of 3023

Data File : J:\GC21\DATA\090623\0906F015.D

Vial: 4

Acq On : 06 Sep 2023 1:44 pm

Operator: AA

Sample : DRO SVF04-61L 50/2.5

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

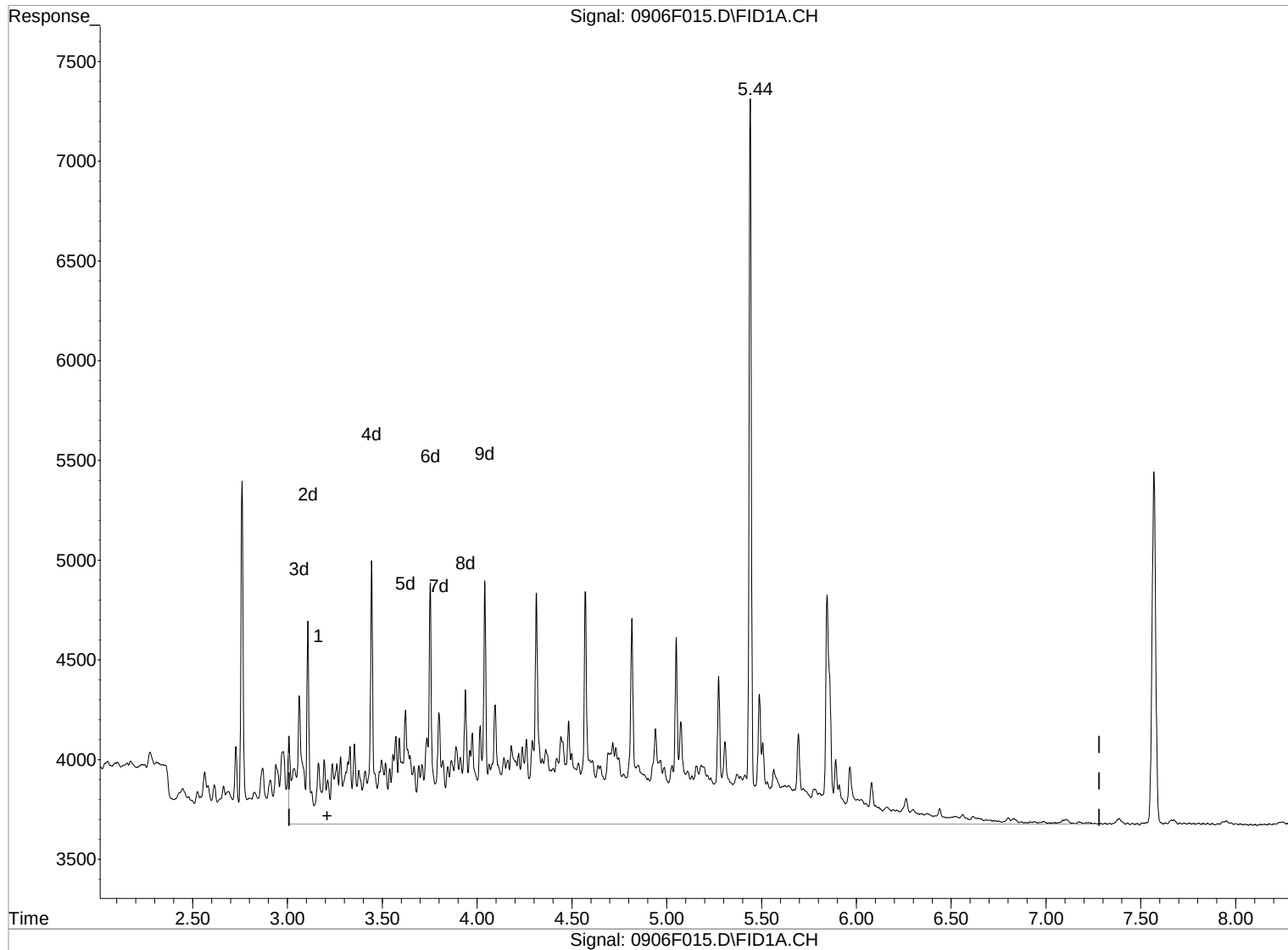
Quant Time: Sep 7 7:15 2023 Quant Results File: 090623F.RES

Method : J:\GC21\METHODS\090623F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Thu Sep 07 07:20:12 2023

Response via : Multiple Level Calibration



(7) C10-C28in DRO [8015] (H)

Manual Integration:

3.21min 51.799ppm

After

response 57855

Baseline/Shoulder

09/07/23

(+) = Expected Retention Time

0906F015.D 090623F.M Thu Sep 07 07:21:23 2023

503 of 3023

Quantitation Report (Qedit)

1st *AA* 09/08/232nd *SW* 09/08/23

Data File : J:\GC21\DATA\090623\0906F015.D

Vial: 4

Acq On : 06 Sep 2023 1:44 pm

Operator: AA

Sample : DRO SVF04-61L 50/2.5

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

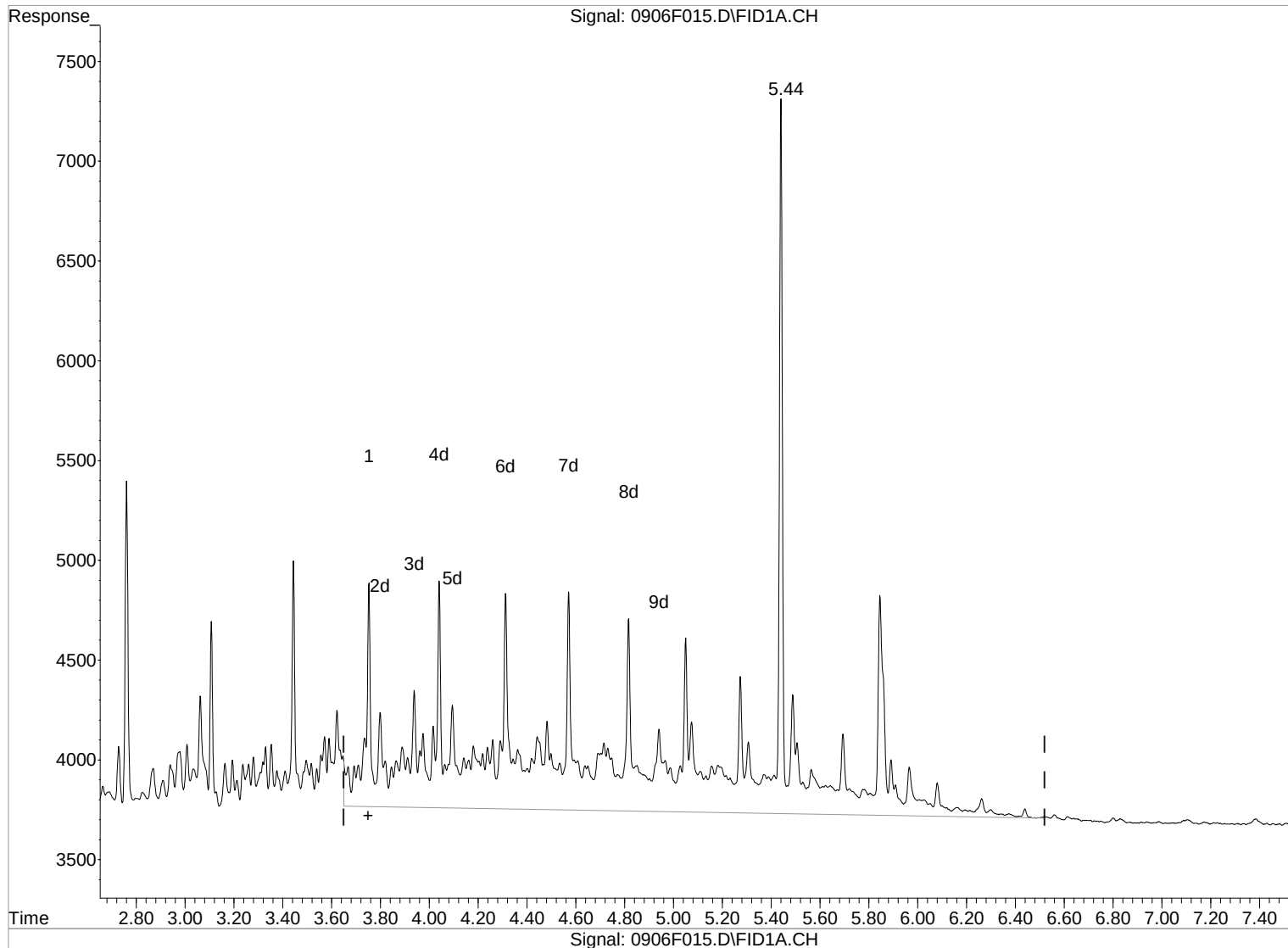
Quant Time: Sep 7 7:15 2023 Quant Results File: 090623F.RES

Method : J:\GC21\METHODS\090623F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Thu Sep 07 07:20:12 2023

Response via : Multiple Level Calibration



(8) C12-C25ex DRO [NWTPH] (H)

Manual Integration:

3.75min 39.946ppm

Before

response 35307

09/07/23

(+) = Expected Retention Time

0906F015.D 090623F.M

Thu Sep 07 07:21:26 2023

504 of 3023

Data File : J:\GC21\DATA\090623\0906F015.D

Vial: 4

Acq On : 06 Sep 2023 1:44 pm

Operator: AA

Sample : DRO SVF04-61L 50/2.5

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

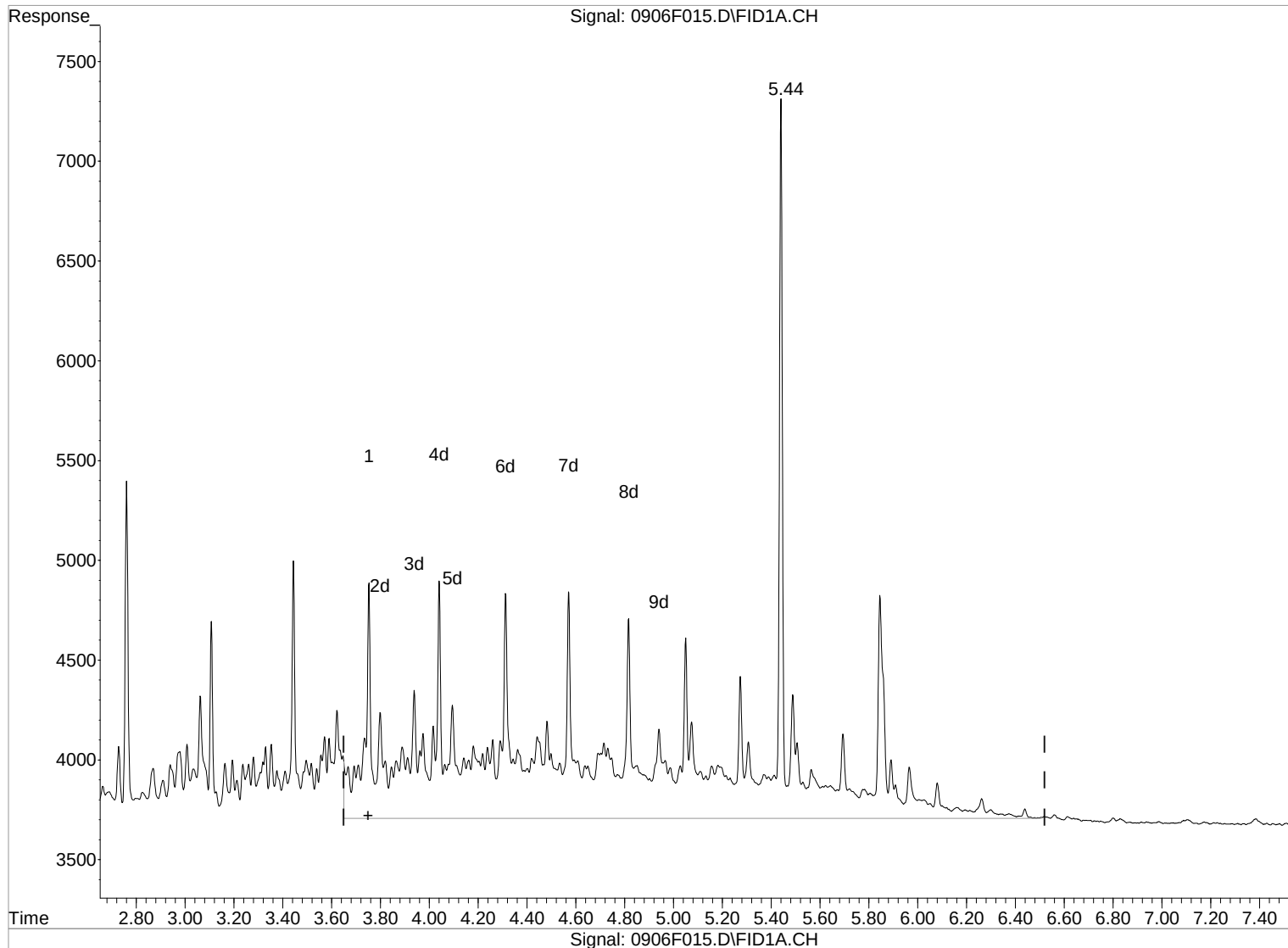
Quant Time: Sep 7 7:15 2023 Quant Results File: 090623F.RES

Method : J:\GC21\METHODS\090623F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Thu Sep 07 07:20:12 2023

Response via : Multiple Level Calibration



(8) C12-C25ex DRO [NWTPH] (H)

Manual Integration:

3.75min 45.980ppm

After

response 40640

Baseline/Shoulder

09/07/23

(+) = Expected Retention Time

0906F015.D 090623F.M Thu Sep 07 07:21:41 2023

505 of 3023

Data File : J:\GC21\DATA\090623\0906F016.D Vial: 5
 Acq On : 06 Sep 2023 2:05 pm Operator: AA
 Sample : DRO SVF04-61K 200/10 Inst : GC21
 Misc : Multiplr: 1.00
 IntFile : rteint.p
 Quant Time: Sep 07 07:15:40 2023 Quant Results File: 090623F.RES

Quant Method : J:\GC21\METHODS\090623F.M (RTE Integrator)
 Title : 8015/NWTPH/AK SVF MJ257 KC2000628
 Last Update : Wed Sep 06 06:47:48 2023
 Response via : Initial Calibration
 DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL
 Signal Phase : ZB-1
 Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
1) S 4-Bromofluorobenzene	2.76	5096	8.835 ppm
Spiked Amount 50.000	Recovery	=	17.67%
2) S o-Terphenyl	5.44	10825	8.840 ppm
Spiked Amount 50.000	Recovery	=	17.68%
3) S n-Triacontane	7.57	9397	8.922 ppm
Spiked Amount 50.000	Recovery	=	17.84%
Target Compounds			
6) H C10-C25ex DRO [AK102]	3.11	183675	172.022 ppm
7) H C10-C28in DRO [8015]	3.21	192293	172.165 ppm
8) H C12-C25ex DRO [NWTPH]	3.75	152020	171.993 ppm

Data File : J:\GC21\DATA\090623\0906F016.D

Vial: 5

Acq On : 06 Sep 2023 2:05 pm

Operator: AA

Sample : DRO SVF04-61K 200/10

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Sep 7 7:22 2023 Quant Results File: 090623F.RES

Quant Method : J:\GC21\METHODS\090623F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Wed Sep 06 06:47:48 2023

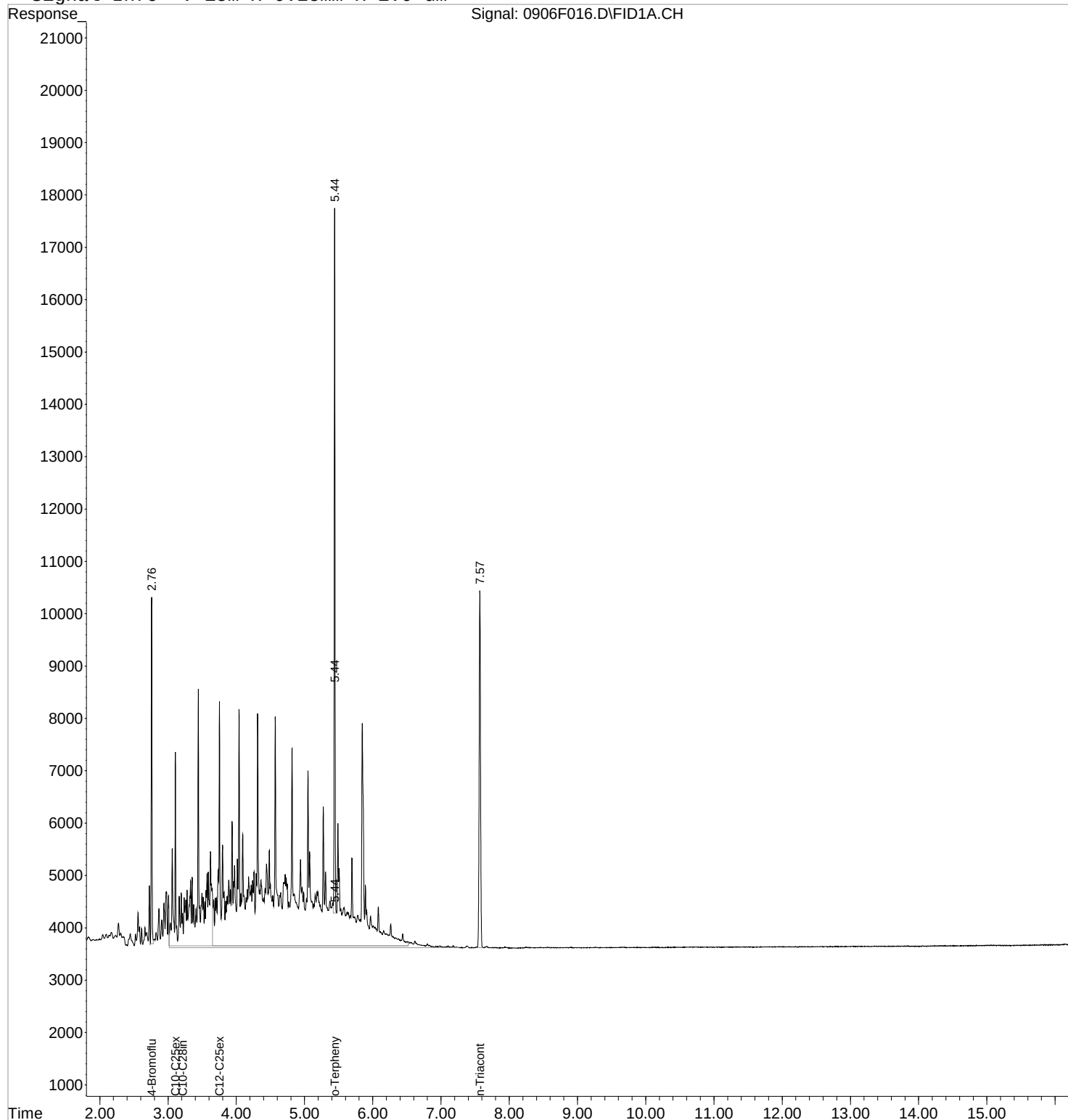
Response via : Single Level Calibration

DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Data File : J:\GC21\DATA\090623\0906F016.D

Vial: 5

Acq On : 06 Sep 2023 2:05 pm

Operator: AA

Sample : DRO SVF04-61K 200/10

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

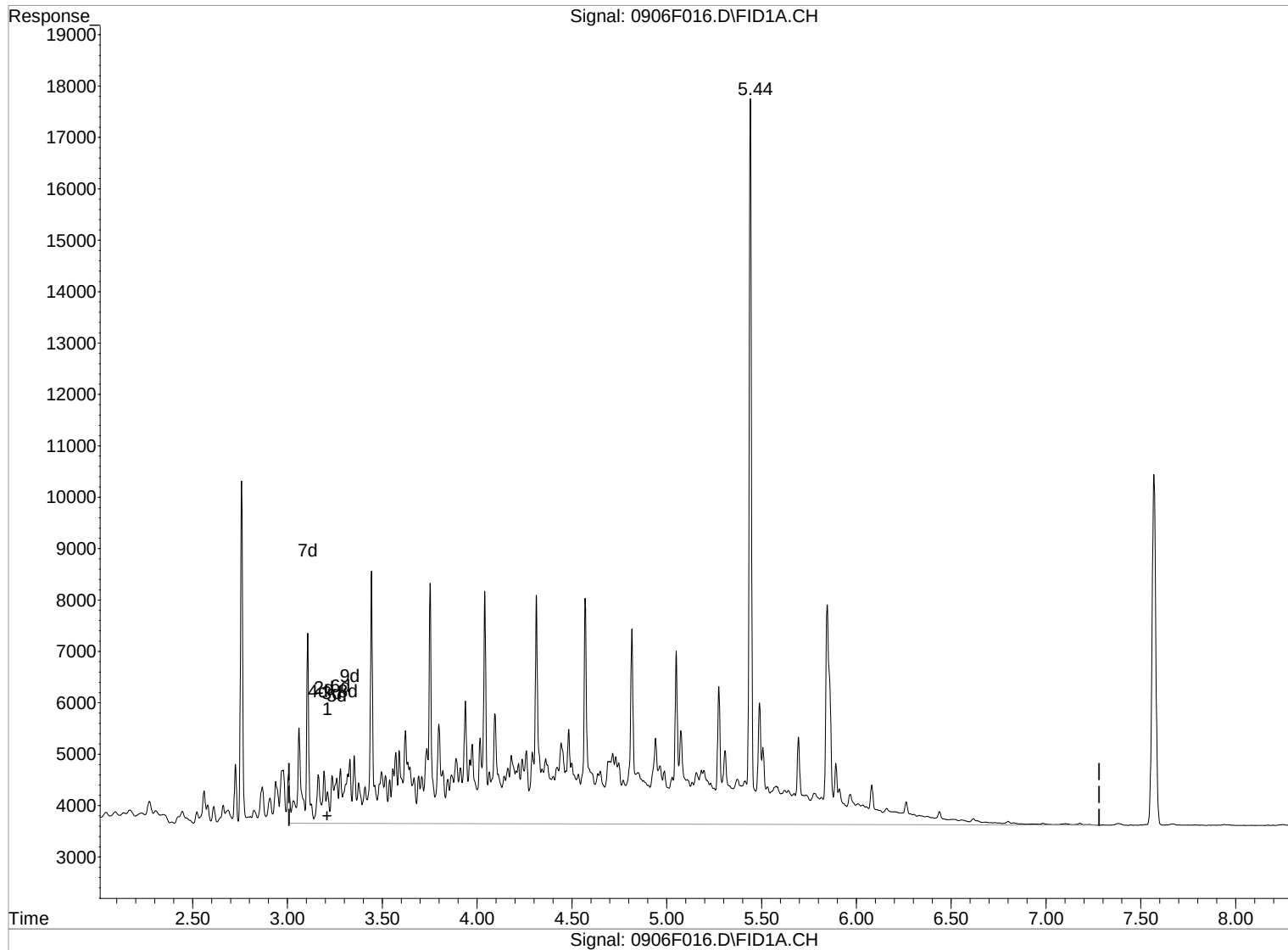
Quant Time: Sep 7 7:15 2023 Quant Results File: 090623F.RES

Method : J:\GC21\METHODS\090623F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Thu Sep 07 07:21:50 2023

Response via : Multiple Level Calibration



(7) C10-C28in DRO [8015] (H)

Manual Integration:

3.21min 168.642ppm

Before

response 188359

09/07/23

(+) = Expected Retention Time

0906F016.D 090623F.M Thu Sep 07 07:22:00 2023

508 of 3023

Quantitation Report (Qedit)

1st *AA* 09/08/23
2nd *SW* 09/08/23

Data File : J:\GC21\DATA\090623\0906F016.D

Vial: 5

Acq On : 06 Sep 2023 2:05 pm

Operator: AA

Sample : DRO SVF04-61K 200/10

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

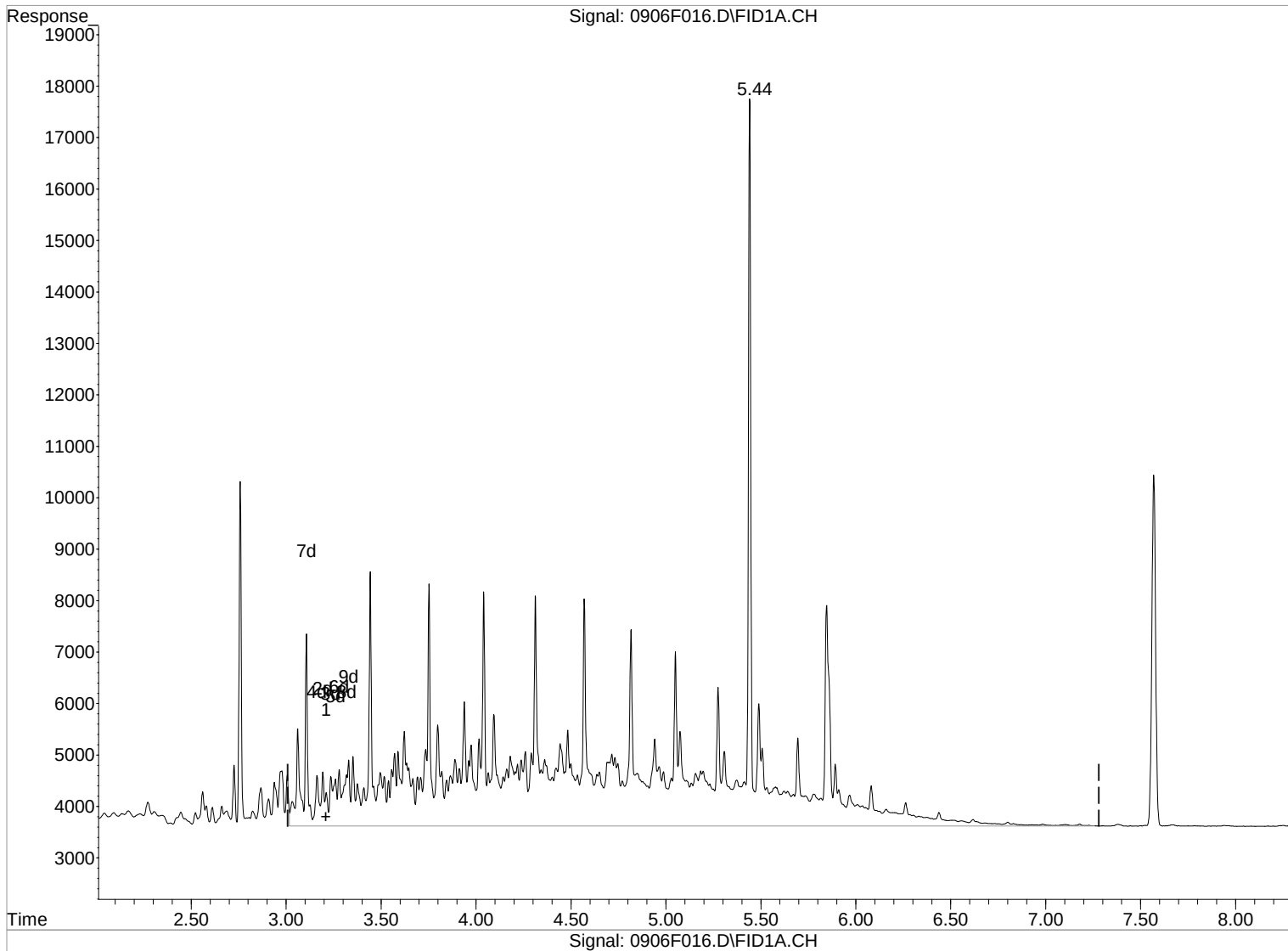
Quant Time: Sep 7 7:15 2023 Quant Results File: 090623F.RES

Method : J:\GC21\METHODS\090623F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Thu Sep 07 07:21:50 2023

Response via : Multiple Level Calibration



(7) C10-C28in DRO [8015] (H)

Manual Integration:

3.21min 172.165ppm

After

response 192293

Baseline/Shoulder

09/07/23

(+) = Expected Retention Time

0906F016.D 090623F.M

Thu Sep 07 07:22:27 2023

509 of 3023

Data File : J:\GC21\DATA\090623\0906F017.D Vial: 6
 Acq On : 06 Sep 2023 2:27 pm Operator: AA
 Sample : DRO SVF04-61J 500/25 Inst : GC21
 Misc : Multiplr: 1.00
 IntFile : rteint.p
 Quant Time: Sep 07 07:15:42 2023 Quant Results File: 090623F.RES

Quant Method : J:\GC21\METHODS\090623F.M (RTE Integrator)
 Title : 8015/NWTPH/AK SVF MJ257 KC2000628
 Last Update : Wed Sep 06 06:47:48 2023
 Response via : Initial Calibration
 DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL
 Signal Phase : ZB-1
 Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
1) S 4-Bromofluorobenzene	2.76	12321	21.362 ppm
Spiked Amount 50.000	Recovery	=	42.72%
2) S o-Terphenyl	5.44	26558	21.689 ppm
Spiked Amount 50.000	Recovery	=	43.38%
3) S n-Triacontane	7.57	22825	21.672 ppm
Spiked Amount 50.000	Recovery	=	43.34%
Target Compounds			
6) H C10-C25ex DRO [AK102]	3.11	461856	432.553 ppm
7) H C10-C28in DRO [8015]	3.21	479838	429.611 ppm
8) H C12-C25ex DRO [NWTPH]	3.75	383288	433.647 ppm

Data File : J:\GC21\DATA\090623\0906F017.D

Vial: 6

Acq On : 06 Sep 2023 2:27 pm

Operator: AA

Sample : DR0 SVF04-61J 500/25

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Sep 7 7:23 2023 Quant Results File: 090623F.RES

Quant Method : J:\GC21\METHODS\090623F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Wed Sep 06 06:47:48 2023

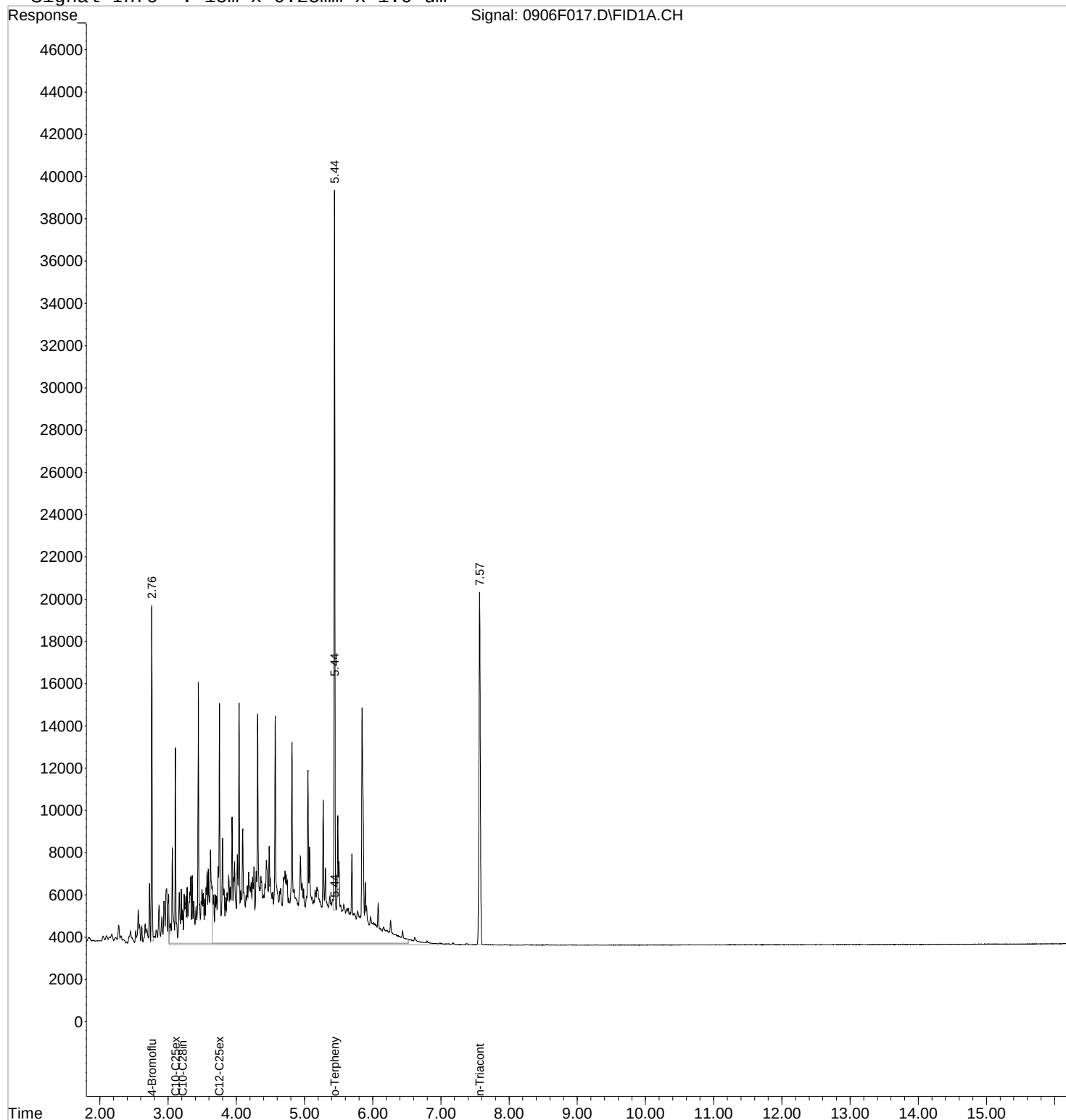
Response via : Single Level Calibration

DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Data File : J:\GC21\DATA\090623\0906F017.D

Vial: 6

Acq On : 06 Sep 2023 2:27 pm

Operator: AA

Sample : DRO SVF04-61J 500/25

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

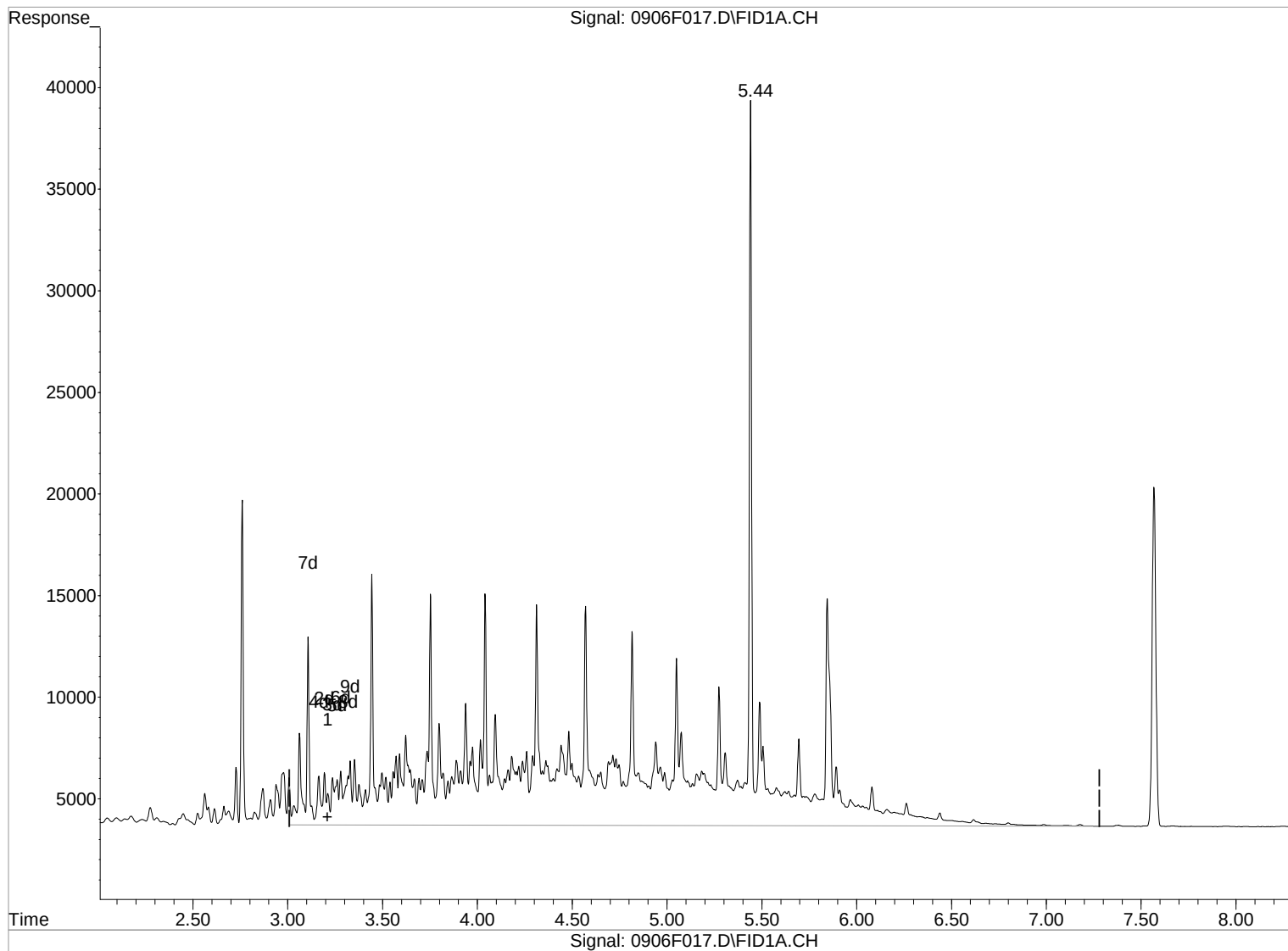
Quant Time: Sep 7 7:15 2023 Quant Results File: 090623F.RES

Method : J:\GC21\METHODS\090623F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Thu Sep 07 07:22:38 2023

Response via : Multiple Level Calibration



(7) C10-C28in DRO [8015] (H)

Manual Integration:

3.21min 422.126ppm

Before

response 471478

09/07/23

(+) = Expected Retention Time

0906F017.D 090623F.M Thu Sep 07 07:22:38 2023

512 of 3023

Quantitation Report (Qedit)

1st *AA* 09/08/232nd *SW* 09/08/23

Data File : J:\GC21\DATA\090623\0906F017.D

Vial: 6

Acq On : 06 Sep 2023 2:27 pm

Operator: AA

Sample : DRO SVF04-61J 500/25

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

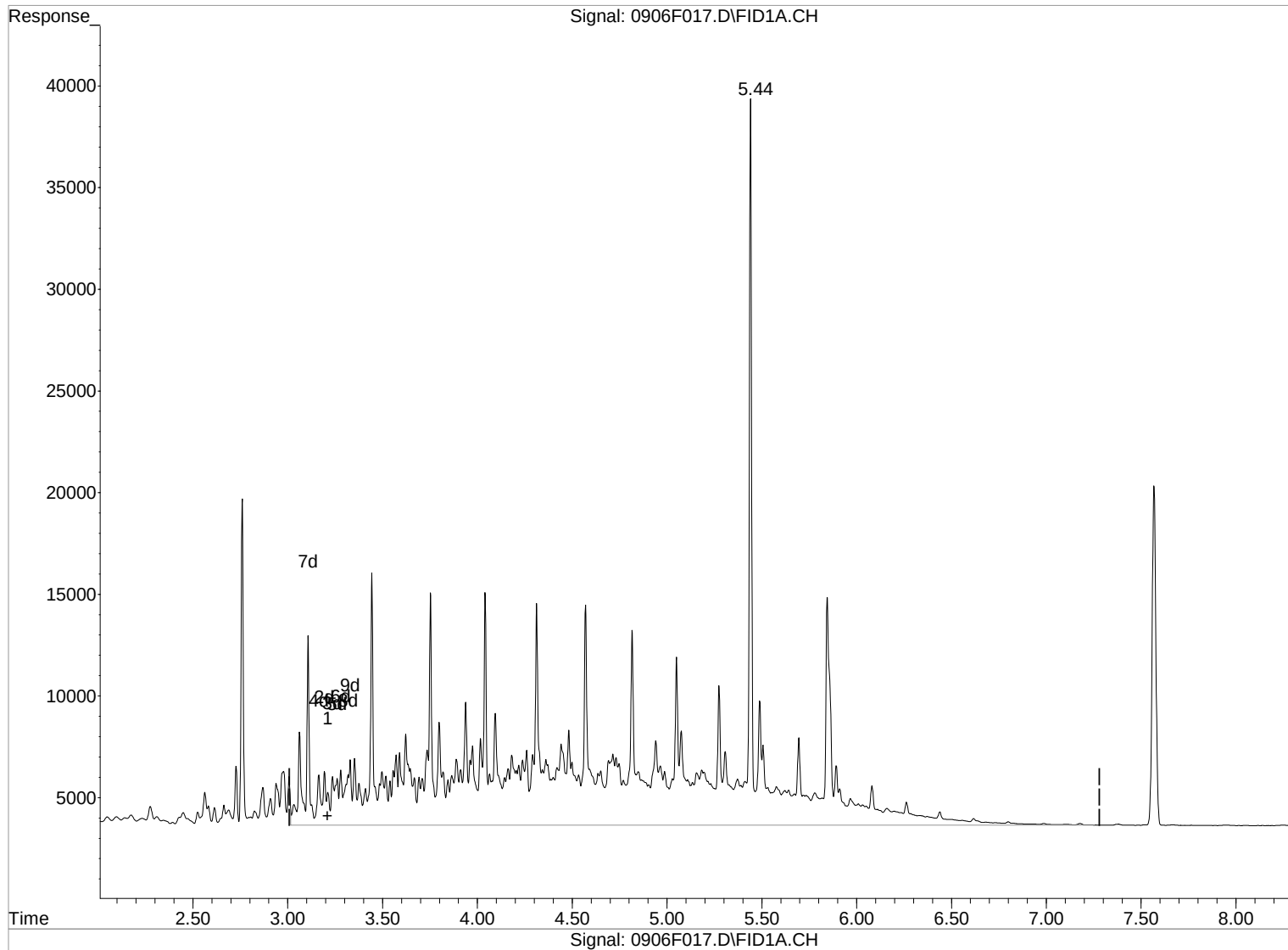
Quant Time: Sep 7 7:15 2023 Quant Results File: 090623F.RES

Method : J:\GC21\METHODS\090623F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Thu Sep 07 07:22:38 2023

Response via : Multiple Level Calibration



(7) C10-C28in DRO [8015] (H)

Manual Integration:

3.21min 429.611ppm

After

response 479838

Baseline/Shoulder

09/07/23

(+) = Expected Retention Time

0906F017.D 090623F.M Thu Sep 07 07:23:14 2023

513 of 3023

Data File : J:\GC21\DATA\090623\0906F018.D Vial: 7
 Acq On : 06 Sep 2023 2:48 pm Operator: AA
 Sample : DRO SVF04-61I 2000/100 Inst : GC21
 Misc : Multiplr: 1.00
 IntFile : rteint.p
 Quant Time: Sep 07 07:15:43 2023 Quant Results File: 090623F.RES

Quant Method : J:\GC21\METHODS\090623F.M (RTE Integrator)
 Title : 8015/NWTPH/AK SVF MJ257 KC2000628
 Last Update : Wed Sep 06 06:47:48 2023
 Response via : Initial Calibration
 DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL
 Signal Phase : ZB-1
 Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
----------	------	----------	------------

System Monitoring Compounds

1) S 4-Bromofluorobenzene	2.76	48731	84.489 ppm
Spiked Amount 50.000	Recovery	=	168.98%
2) S o-Terphenyl	5.44	104864	85.639 ppm
Spiked Amount 50.000	Recovery	=	171.28%
3) S n-Triacontane	7.57	90767	86.180 ppm
Spiked Amount 50.000	Recovery	=	172.36%

Target Compounds

6) H C10-C25ex DRO [AK102]	3.11	1834311	1717.931 ppm
7) H C10-C28in DRO [8015]	3.21	1851606	1657.788 ppm
8) H C12-C25ex DRO [NWTPH]	3.75	1523643	1723.829 ppm

Data File : J:\GC21\DATA\090623\0906F018.D

Vial: 7

Acq On : 06 Sep 2023 2:48 pm

Operator: AA

Sample : DR0 SVF04-61I 2000/100

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Sep 7 7:23 2023 Quant Results File: 090623F.RES

Quant Method : J:\GC21\METHODS\090623F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Wed Sep 06 06:47:48 2023

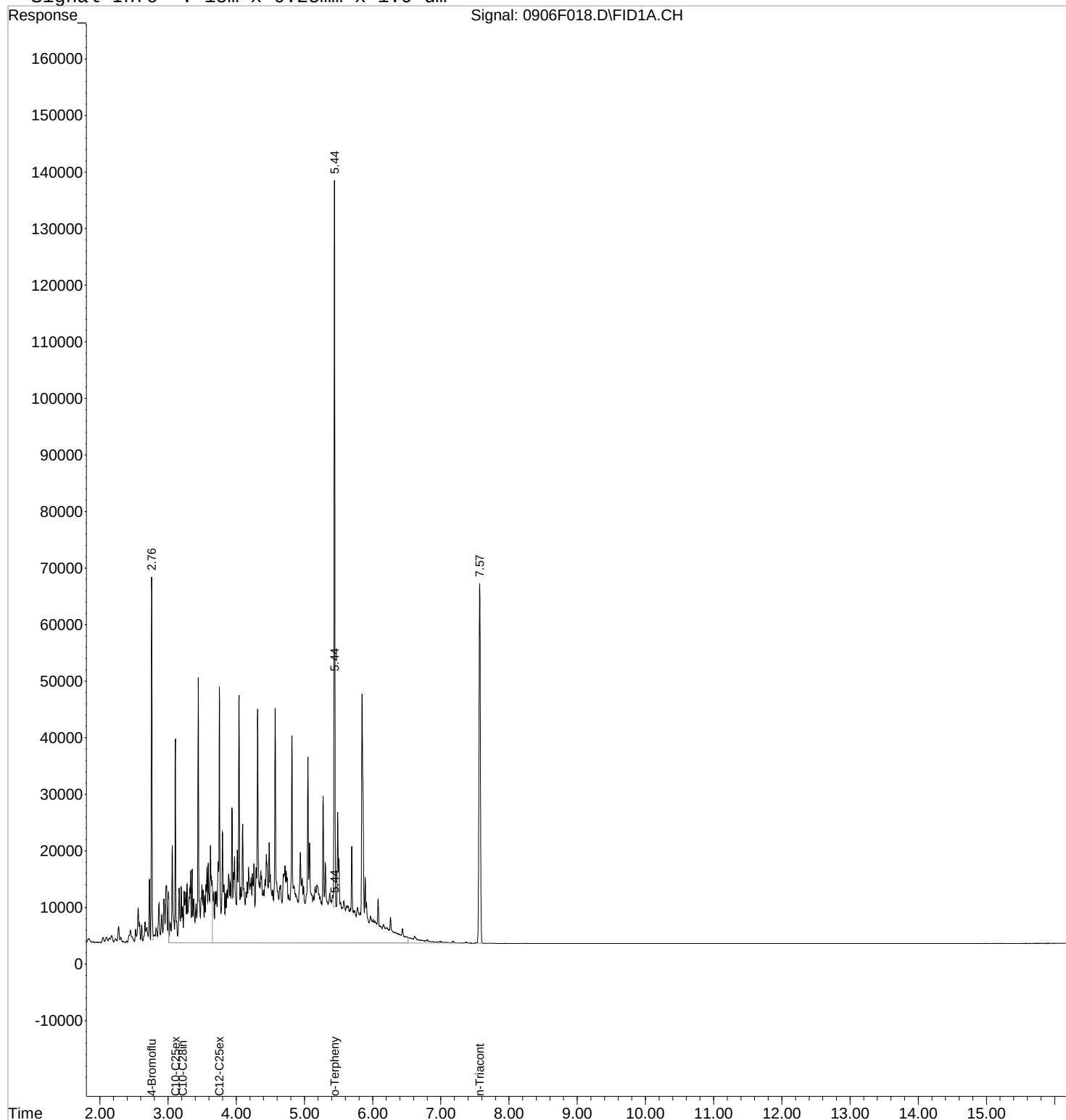
Response via : Single Level Calibration

DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Data File : J:\GC21\DATA\090623\0906F019.D Vial: 8
 Acq On : 06 Sep 2023 3:10 pm Operator: AA
 Sample : DRO SVF04-61H 5000/250 Inst : GC21
 Misc : Multiplr: 1.00
 IntFile : rteint.p
 Quant Time: Sep 07 07:15:45 2023 Quant Results File: 090623F.RES

Quant Method : J:\GC21\METHODS\090623F.M (RTE Integrator)
 Title : 8015/NWTPH/AK SVF MJ257 KC2000628
 Last Update : Wed Sep 06 06:47:48 2023
 Response via : Initial Calibration
 DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL
 Signal Phase : ZB-1
 Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

1) S 4-Bromofluorobenzene	2.76	139976	242.688 ppm
Spiked Amount 50.000	Recovery	=	485.38%
2) S o-Terphenyl	5.44	295735	241.516 ppm
Spiked Amount 50.000	Recovery	=	483.03%
3) S n-Triacontane	7.57	254010	241.174 ppm
Spiked Amount 50.000	Recovery	=	482.35%

Target Compounds

6) H C10-C25ex DRO [AK102]	3.11	5334395	4995.948 ppm
7) H C10-C28in DRO [8015]	3.21	5381521	4818.208 ppm
8) H C12-C25ex DRO [NWTPH]	3.75	4415868	4996.054 ppm

Data File : J:\GC21\DATA\090623\0906F019.D

Vial: 8

Acq On : 06 Sep 2023 3:10 pm

Operator: AA

Sample : DR0 SVF04-61H 5000/250

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Sep 7 7:24 2023 Quant Results File: 090623F.RES

Quant Method : J:\GC21\METHODS\090623F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Wed Sep 06 06:47:48 2023

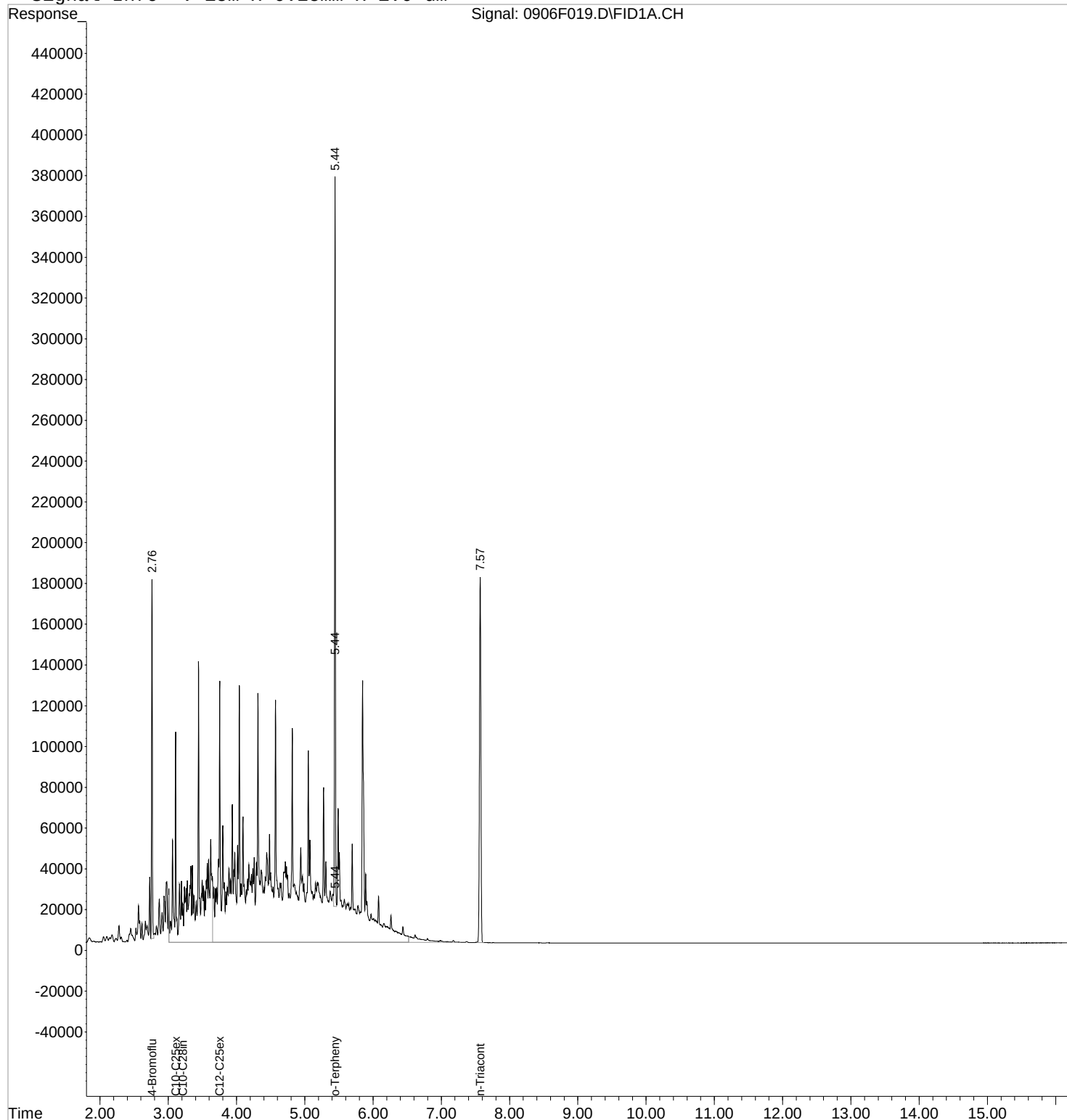
Response via : Single Level Calibration

DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Data File : J:\GC21\DATA\090623\0906F020.D Vial: 9
Acq On : 06 Sep 2023 3:31 pm Operator: AA
Sample : DRO SVF04-61G 20K Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Sep 07 07:15:47 2023 Quant Results File: 090623F.RES

Quant Method : J:\GC21\METHODS\090623F.M (RTE Integrator)
Title : 8015/NWTPH/AK SVF MJ257 KC2000628
Last Update : Wed Sep 06 06:47:48 2023
Response via : Initial Calibration
DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL
Signal Phase : ZB-1
Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

Target Compounds

6) H	C10-C25ex DRO [AK102]	3.11	16823339	15755.961	ppm
7) H	C10-C28in DRO [8015]	3.21	16975671	15198.736	ppm
8) H	C12-C25ex DRO [NWTPH]	3.75	13941544	15773.277	ppm

Data File : J:\GC21\DATA\090623\0906F020.D

Vial: 9

Acq On : 06 Sep 2023 3:31 pm

Operator: AA

Sample : DR0 SVF04-61G 20K

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Sep 7 7:24 2023 Quant Results File: 090623F.RES

Quant Method : J:\GC21\METHODS\090623F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Wed Sep 06 06:47:48 2023

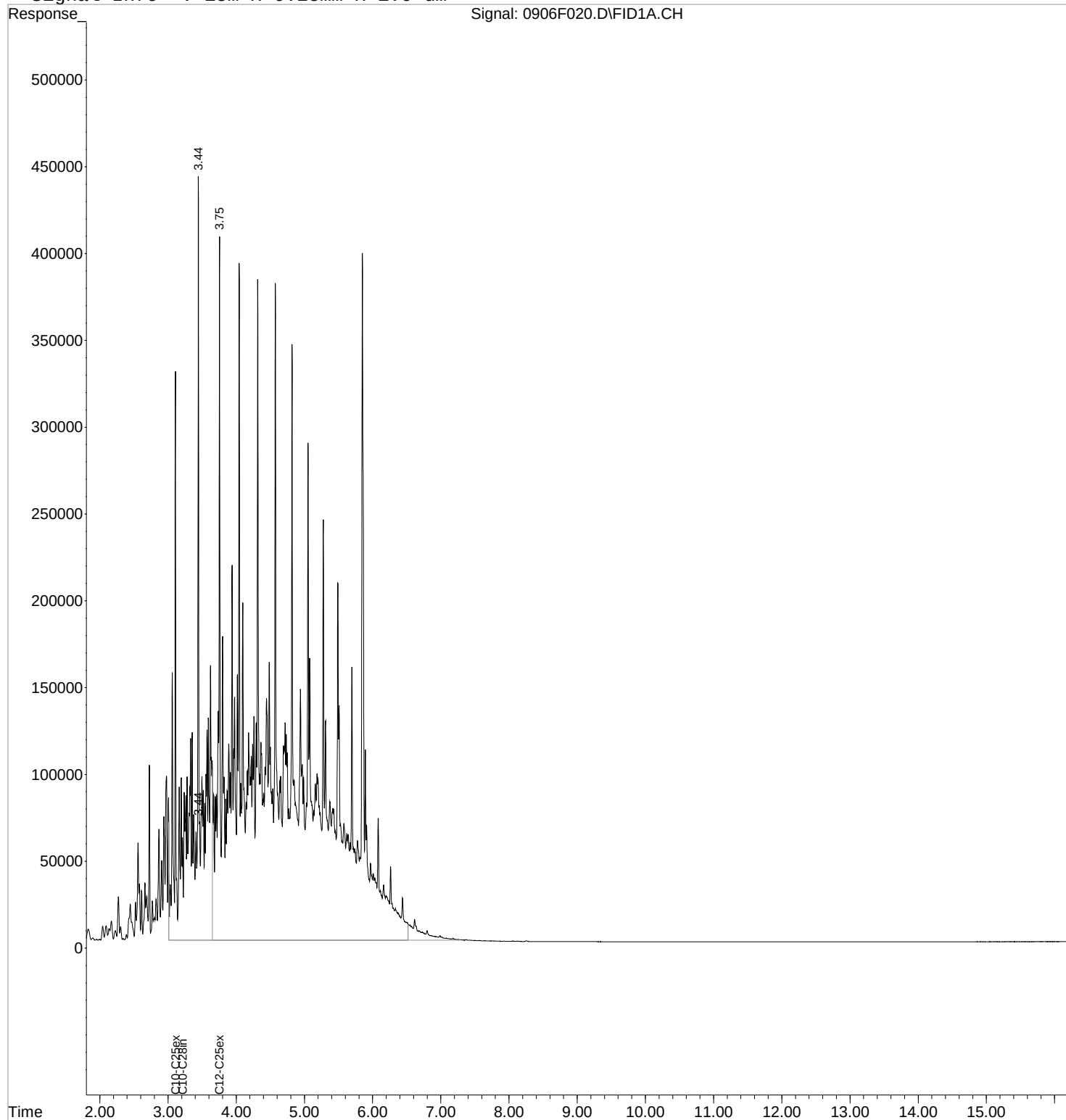
Response via : Single Level Calibration

DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Data File : J:\GC21\DATA\090623\0906F021.D Vial: 10
Acq On : 06 Sep 2023 3:53 pm Operator: AA
Sample : DR0 SVF04-61F 50K Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Sep 07 07:15:49 2023 Quant Results File: 090623F.RES

Quant Method : J:\GC21\METHODS\090623F.M (RTE Integrator)
Title : 8015/NWTPH/AK SVF MJ257 KC2000628
Last Update : Wed Sep 06 06:47:48 2023
Response via : Initial Calibration
DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL
Signal Phase : ZB-1
Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc	Units
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System Monitoring Compounds

Target Compounds

6) H	C10-C25ex DR0 [AK102]	3.11	44291332	41481.212	ppm
7) H	C10-C28in DR0 [8015]	3.21	44759448	40074.235	ppm
8) H	C12-C25ex DR0 [NWTPH]	3.75	36834436	41673.989	ppm

Data File : J:\GC21\DATA\090623\0906F021.D

Vial: 10

Acq On : 06 Sep 2023 3:53 pm

Operator: AA

Sample : DR0 SVF04-61F 50K

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Sep 7 7:24 2023 Quant Results File: 090623F.RES

Quant Method : J:\GC21\METHODS\090623F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Wed Sep 06 06:47:48 2023

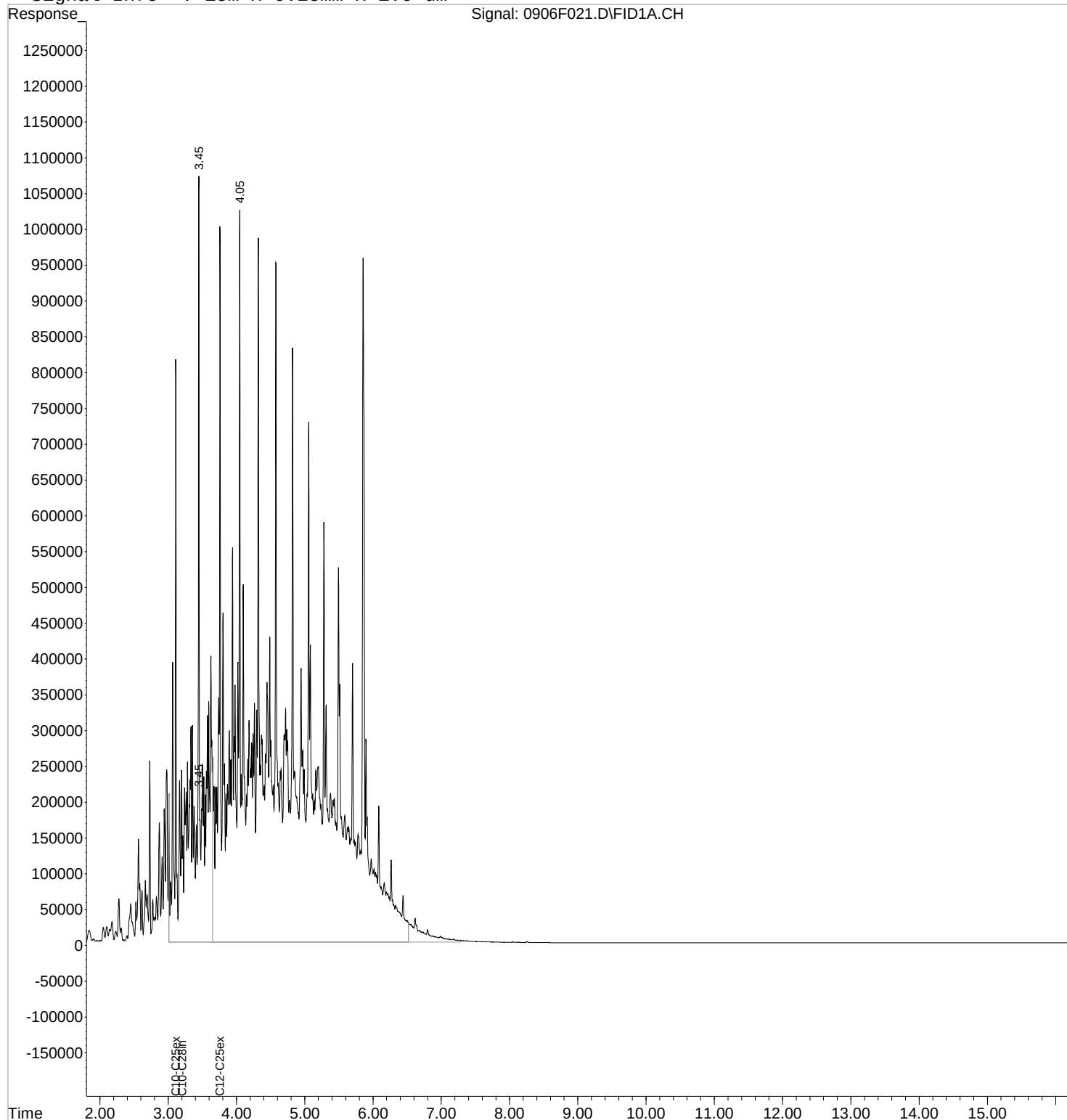
Response via : Single Level Calibration

DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Data File : J:\GC21\DATA\090623\0906F024.D Vial: 1
Acq On : 06 Sep 2023 4:57 pm Operator: AA
Sample : IB Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Sep 07 14:30:19 2023 Quant Results File: 090623F.RES

Quant Method : J:\GC21\METHODS\090623F.M (RTE Integrator)
Title : 8015/NWTPH/AK SVF MJ257 KC2000628
Last Update : Thu Sep 07 07:26:08 2023
Response via : Initial Calibration
DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL
Signal Phase : ZB-1
Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

Target Compounds

6) H	C10-C25ex DRO [AK102]	3.11	8290	8.553 ppm
7) H	C10-C28in DRO [8015]	3.21	9820	9.683 ppm
8) H	C12-C25ex DRO [NWTPH]	3.75	6851	8.637 ppm
10) H	C25-C36in RRO [NWTPH]	6.62	4870	7.329 ppm
11) H	C25-C36in RRO [AK103]	6.72	4870	8.000 ppm

Data File : J:\GC21\DATA\090623\0906F024.D

Vial: 1

Acq On : 06 Sep 2023 4:57 pm

Operator: AA

Sample : IB

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Sep 7 14:30 2023 Quant Results File: 090623F.RES

Quant Method : J:\GC21\METHODS\090623F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Thu Sep 07 07:26:08 2023

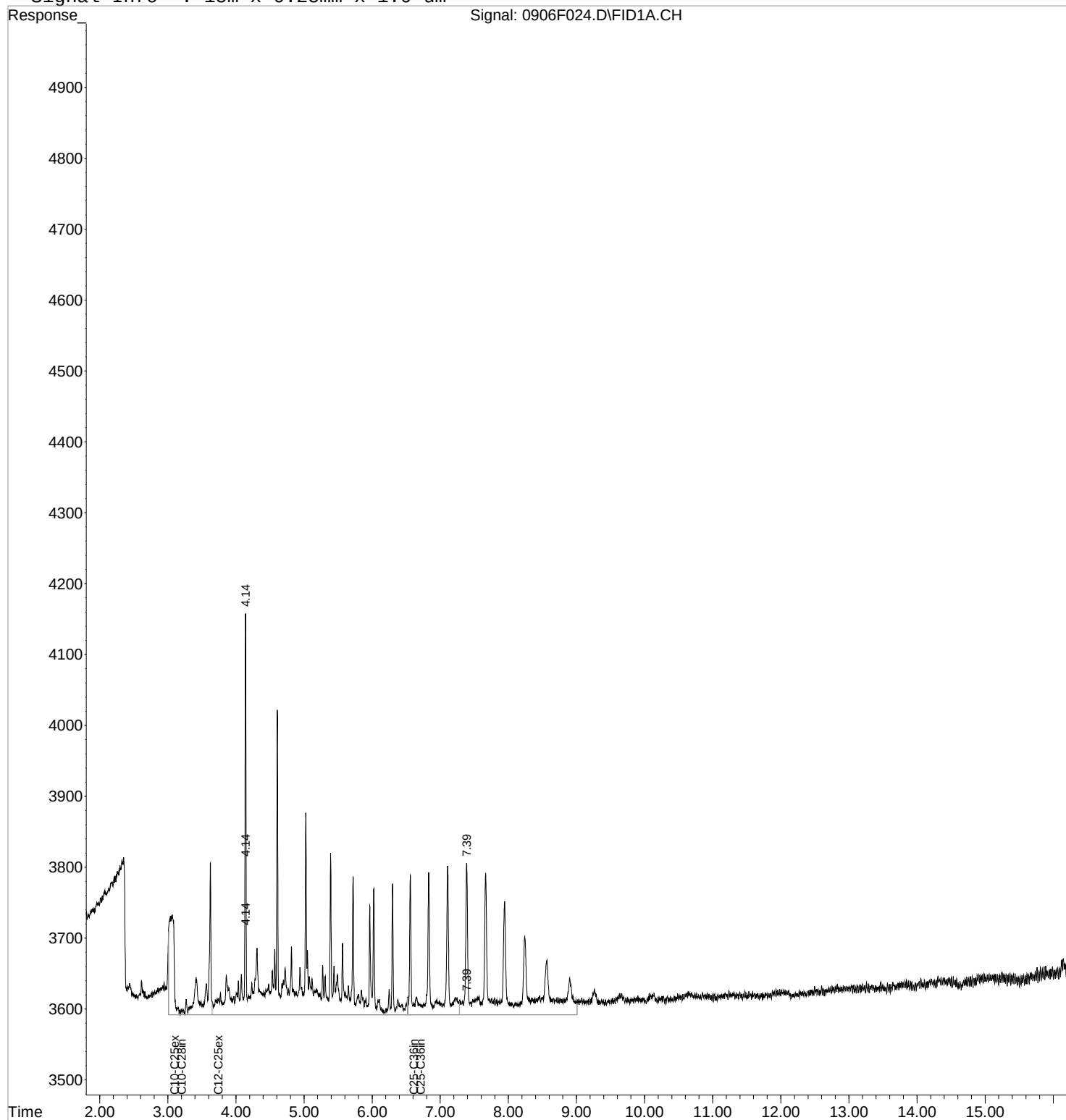
Response via : Single Level Calibration

DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Data File : J:\GC21\DATA\090623\0906F025.D Vial: 11
Acq On : 06 Sep 2023 5:19 pm Operator: AA
Sample : DR0 SVF04-62B ICV@1000 Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Sep 07 07:26:42 2023 Quant Results File: 090623F.RES

Quant Method : J:\GC21\METHODS\090623F.M (RTE Integrator)
Title : 8015/NWTPH/AK SVF MJ257 KC2000628
Last Update : Thu Sep 07 07:26:08 2023
Response via : Initial Calibration
DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL
Signal Phase : ZB-1
Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

Target Compounds

6) H	C10-C25ex DR0 [AK102]	3.11	958243	988.605 ppm
7) H	C10-C28in DR0 [8015]	3.21	969443	955.932 ppm
8) H	C12-C25ex DR0 [NWTPH]	3.75	853798	1076.425 ppm

Data File : J:\GC21\DATA\090623\0906F025.D

Vial: 11

Acq On : 06 Sep 2023 5:19 pm

Operator: AA

Sample : DR0 SVF04-62B ICV@1000

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Sep 7 7:27 2023 Quant Results File: 090623F.RES

Quant Method : J:\GC21\METHODS\090623F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Thu Sep 07 07:26:08 2023

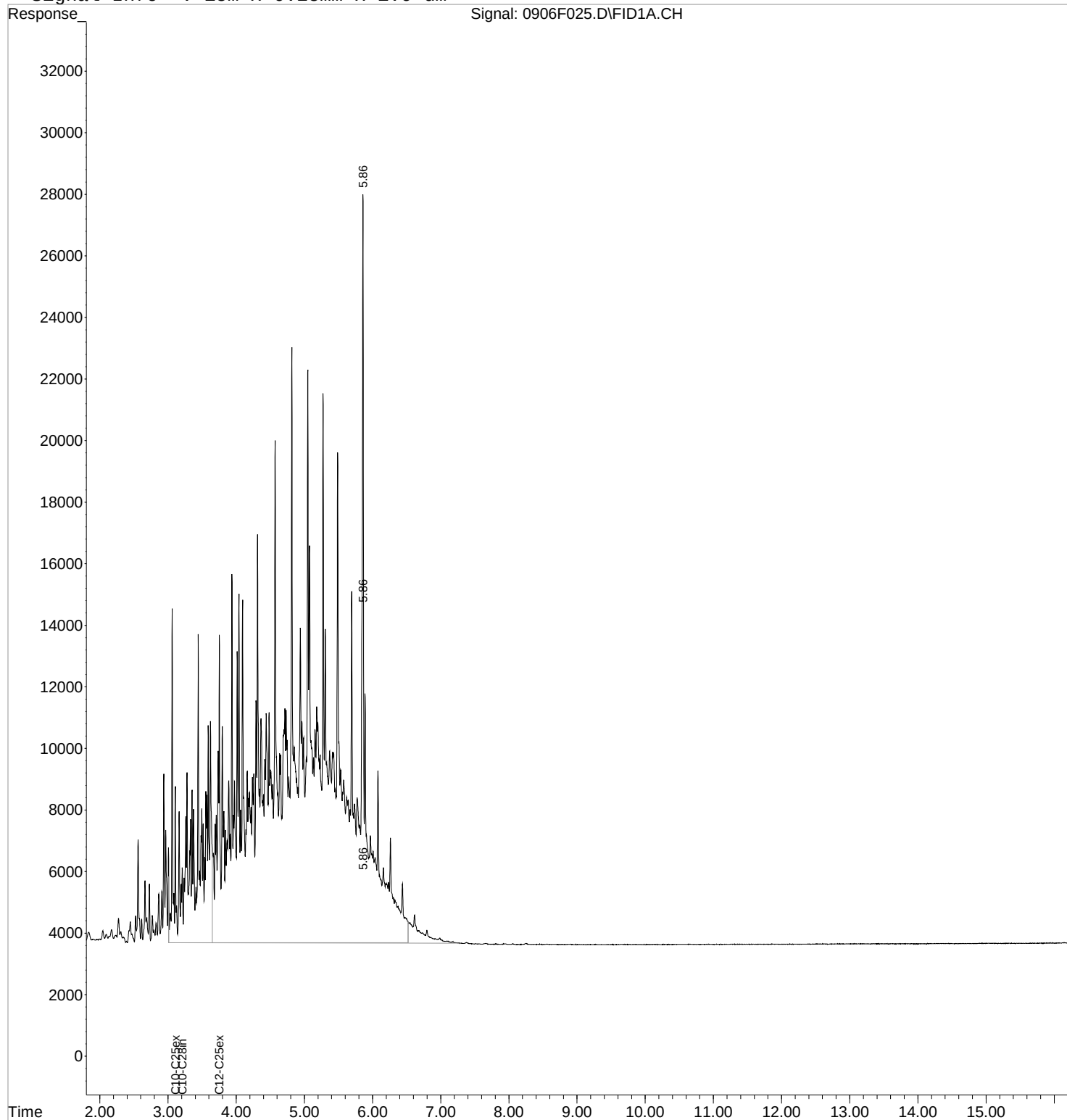
Response via : Single Level Calibration

DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Data File : J:\GC21\DATA\090723\0907F002.D Vial: 1
Acq On : 07 Sep 2023 10:57 am Operator: AA
Sample : IB Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Sep 07 14:21:38 2023 Quant Results File: 090723F.RES

Quant Method : J:\GC21\METHODS\090723F.M (RTE Integrator)
Title : 8015/NWTPH/AK SVF MJ257 KC2000628
Last Update : Thu Sep 07 13:35:15 2023
Response via : Initial Calibration
DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL
Signal Phase : ZB-1
Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

Target Compounds

6)	H	C10-C25ex DRO [AK102]	3.11	22075	22.774 ppm
7)	H	C10-C28in DRO [8015]	3.21	28154	27.762 ppm
8)	H	C12-C25ex DRO [NWTPH]	3.75	18271	23.035 ppm
10)	H	C25-C36in RRO [NWTPH]	6.61	5346	9.423 ppm
11)	H	C25-C36in RRO [AK103]	6.71	21369	35.102 ppm

Data File : J:\GC21\DATA\090723\0907F002.D

Vial: 1

Acq On : 07 Sep 2023 10:57 am

Operator: AA

Sample : IB

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Sep 7 14:22 2023 Quant Results File: 090723F.RES

Quant Method : J:\GC21\METHODS\090723F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Thu Sep 07 13:35:15 2023

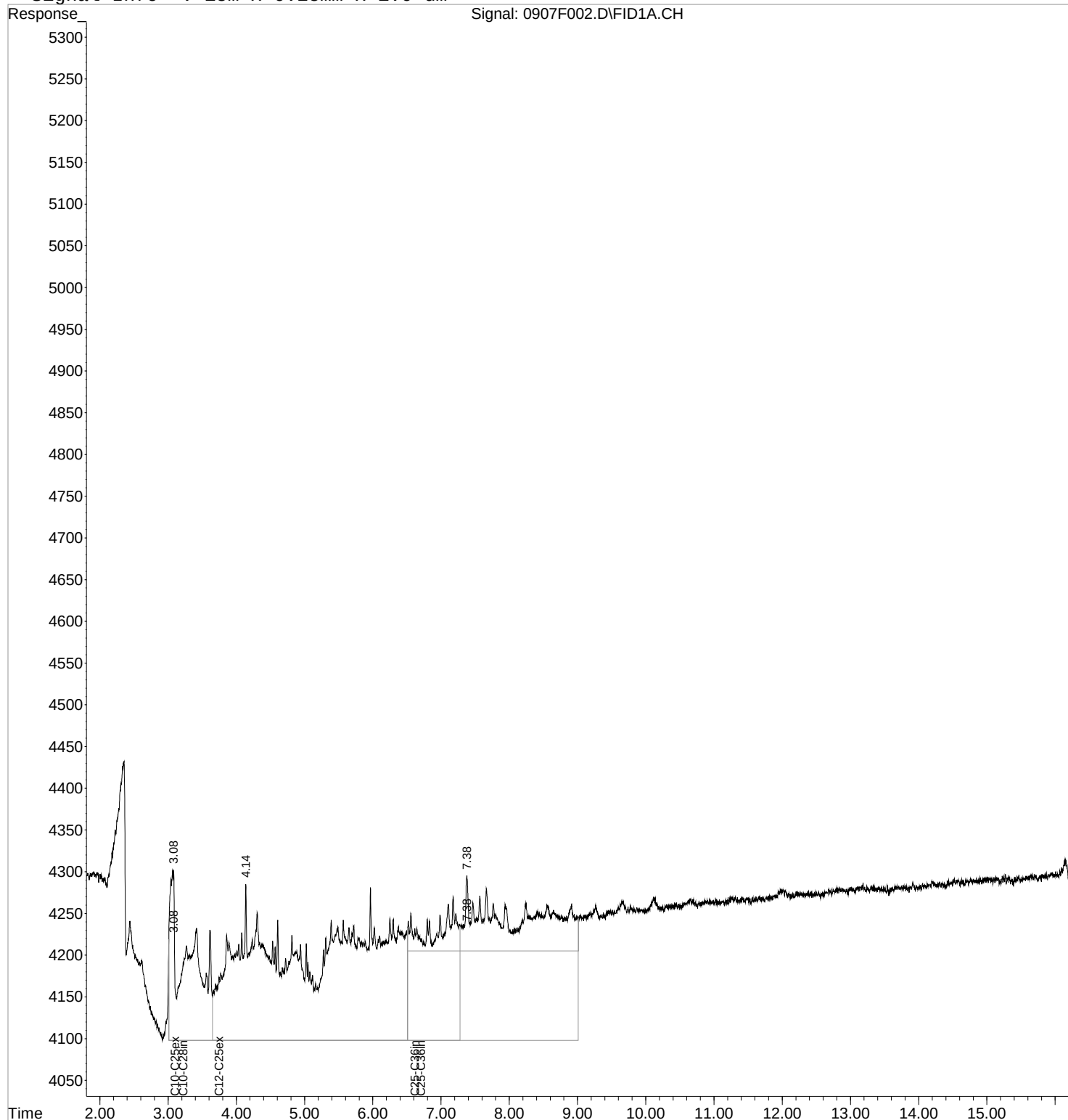
Response via : Single Level Calibration

DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Quantitation Report (Qedit)

1st *AA* 09/08/232nd *SW* 09/08/23

Data File : J:\GC21\DATA\090723\0907F002.D

Acq On : 07 Sep 2023 10:57 am

Sample : IB

Misc :

IntFile : rteint.p

Quant Time: Sep 7 14:21 2023 Quant Results File: 090723F.RES

Vial: 1

Operator: AA

Inst : GC21

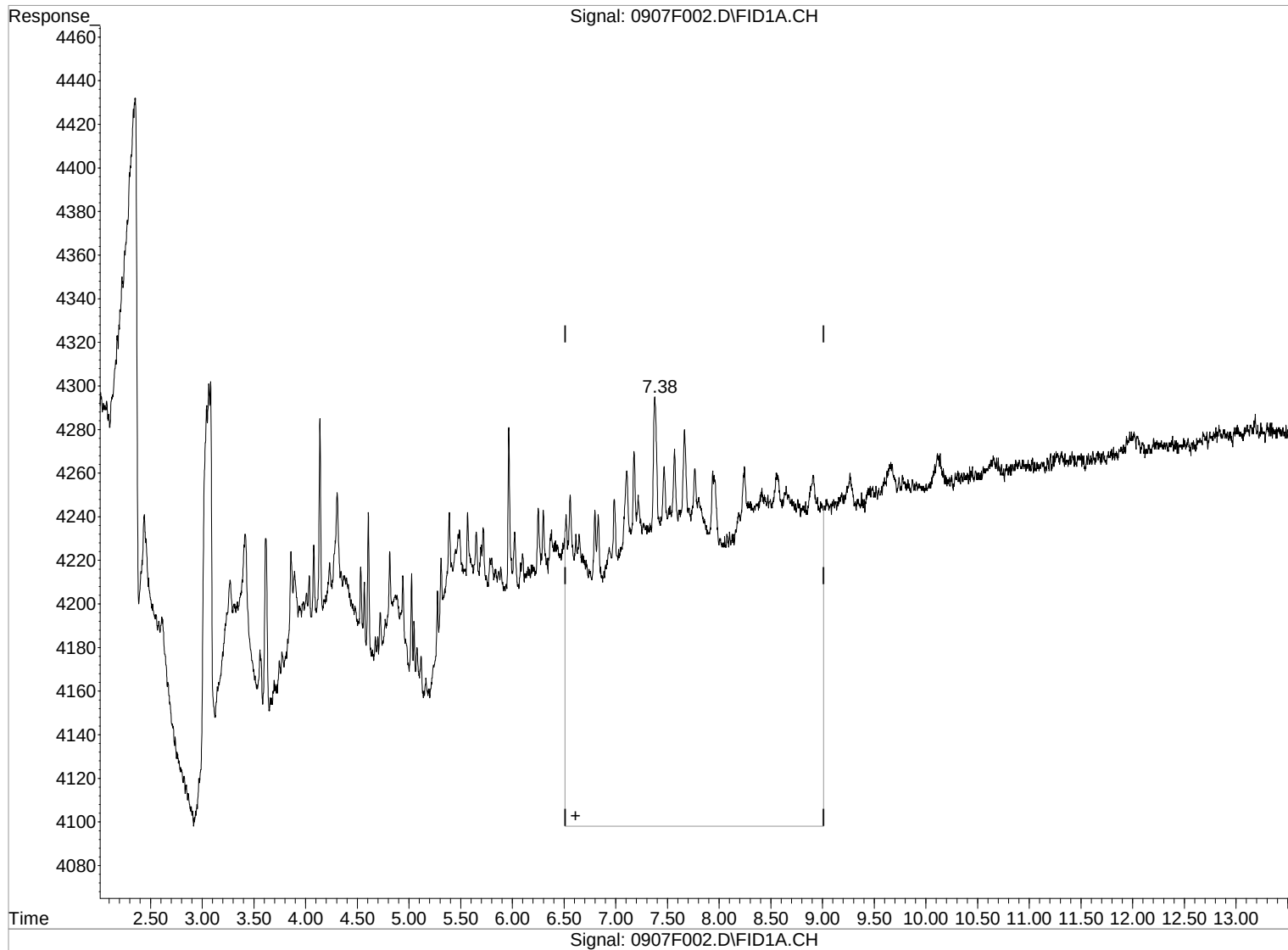
Multiplr: 1.00

Method : J:\GC21\METHODS\090723F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Thu Sep 07 13:35:15 2023

Response via : Multiple Level Calibration



(10) C25-C36in RRO [NWTPH] (H)

Manual Integration:

6.61min 37.664ppm

Before

response 21369

09/07/23

(+) = Expected Retention Time

0907F002.D 090723F.M Thu Sep 07 14:22:35 2023

528 of 3023

Data File : J:\GC21\DATA\090723\0907F002.D

Acq On : 07 Sep 2023 10:57 am

Sample : IB

Misc :

IntFile : rteint.p

Quant Time: Sep 7 14:21 2023 Quant Results File: 090723F.RES

Vial: 1

Operator: AA

Inst : GC21

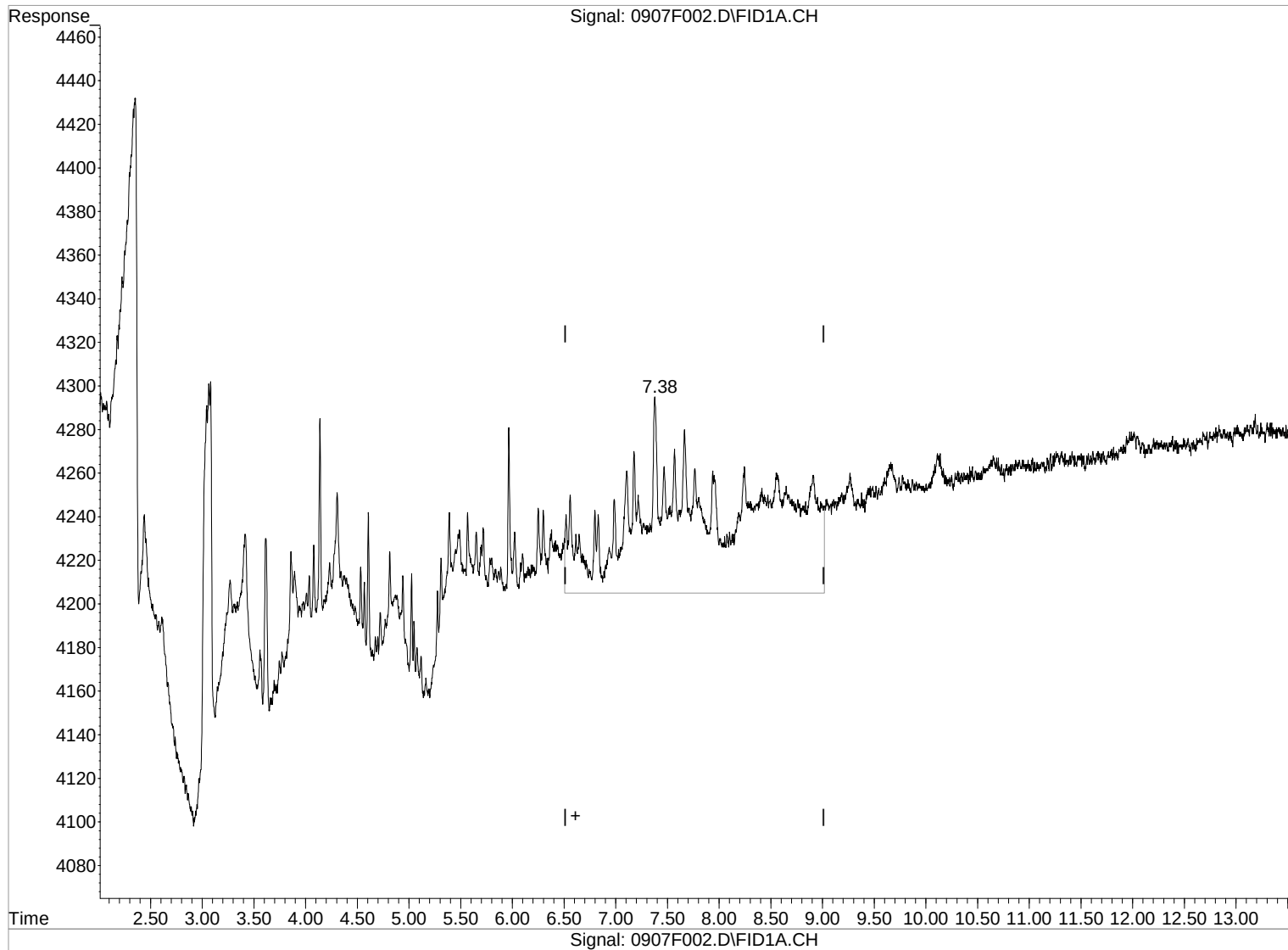
Multiplr: 1.00

Method : J:\GC21\METHODS\090723F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Thu Sep 07 13:35:15 2023

Response via : Multiple Level Calibration



(10) C25-C36in RRO [NWTPH] (H)

6.61min 9.423ppm

response 5346

Manual Integration:

After

Baseline/Shoulder

09/07/23

(+) = Expected Retention Time

0907F002.D 090723F.M Thu Sep 07 14:22:42 2023

529 of 3023

Data File : J:\GC21\DATA\090723\0907F003.D Vial: 2
Acq On : 07 Sep 2023 11:19 am Operator: AA
Sample : RRO SVF04-63A 50 Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Sep 07 13:31:46 2023 Quant Results File: 090723F.RES

Quant Method : J:\GC21\METHODS\090723F.M (RTE Integrator)
Title : 8015/NWTPH/AK SVF MJ257 KC2000628
Last Update : Thu Sep 07 13:31:21 2023
Response via : Initial Calibration
DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL
Signal Phase : ZB-1
Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

Target Compounds

10) H C25-C36in RRO [NWTPH]	6.61	26477	39.845 ppm
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Data File : J:\GC21\DATA\090723\0907F003.D

Vial: 2

Acq On : 07 Sep 2023 11:19 am

Operator: AA

Sample : RR0 SVF04-63A 50

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Sep 7 13:32 2023 Quant Results File: 090723F.RES

Quant Method : J:\GC21\METHODS\090723F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Thu Sep 07 13:31:21 2023

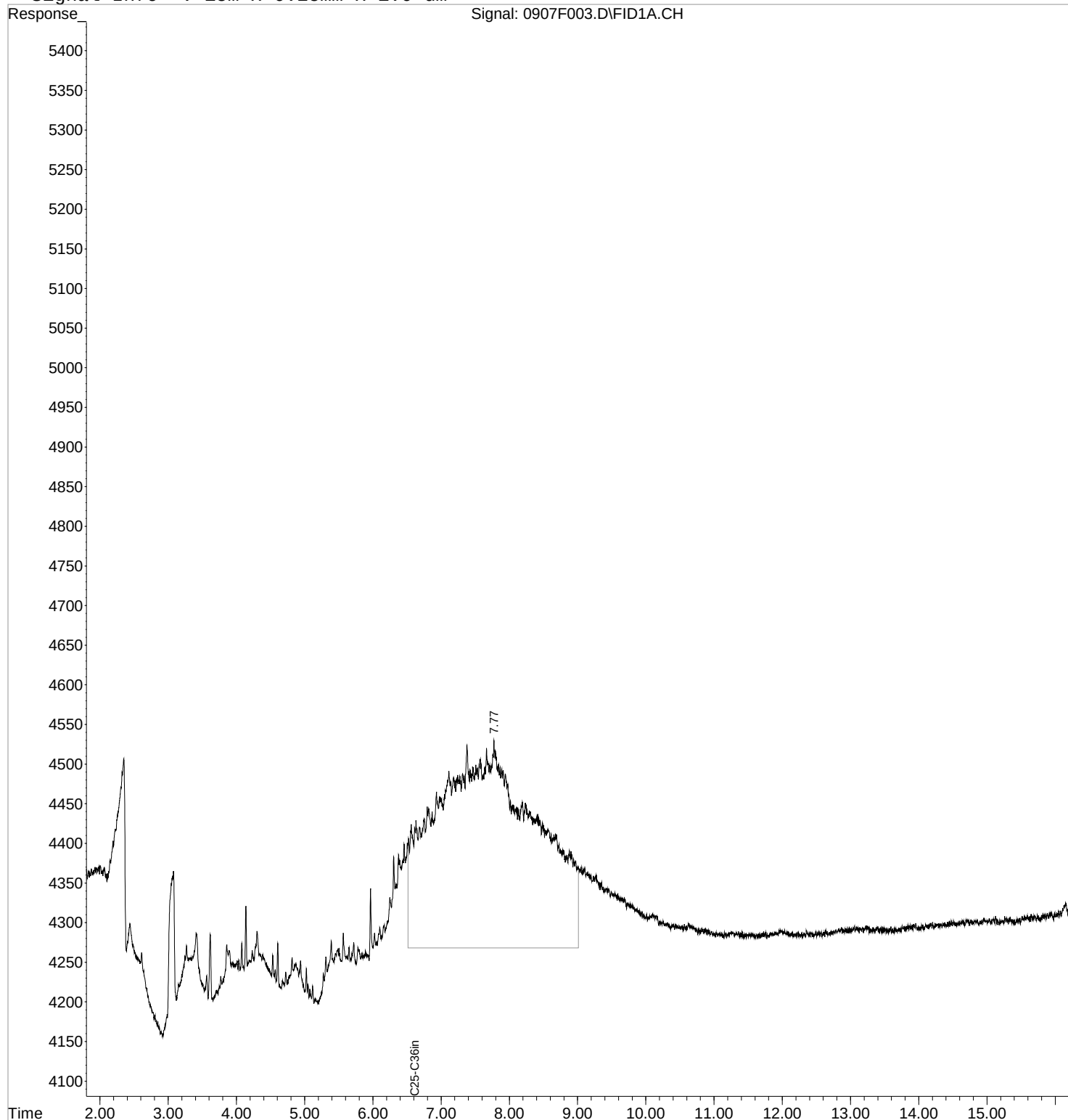
Response via : Single Level Calibration

DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Quantitation Report (Qedit)

1st *AA* 09/08/232nd *SW* 09/08/23

Data File : J:\GC21\DATA\090723\0907F003.D

Acq On : 07 Sep 2023 11:19 am

Sample : RRO SVF04-63A 50

Misc :

IntFile : rteint.p

Quant Time: Sep 7 13:31 2023 Quant Results File: 090723F.RES

Vial: 2

Operator: AA

Inst : GC21

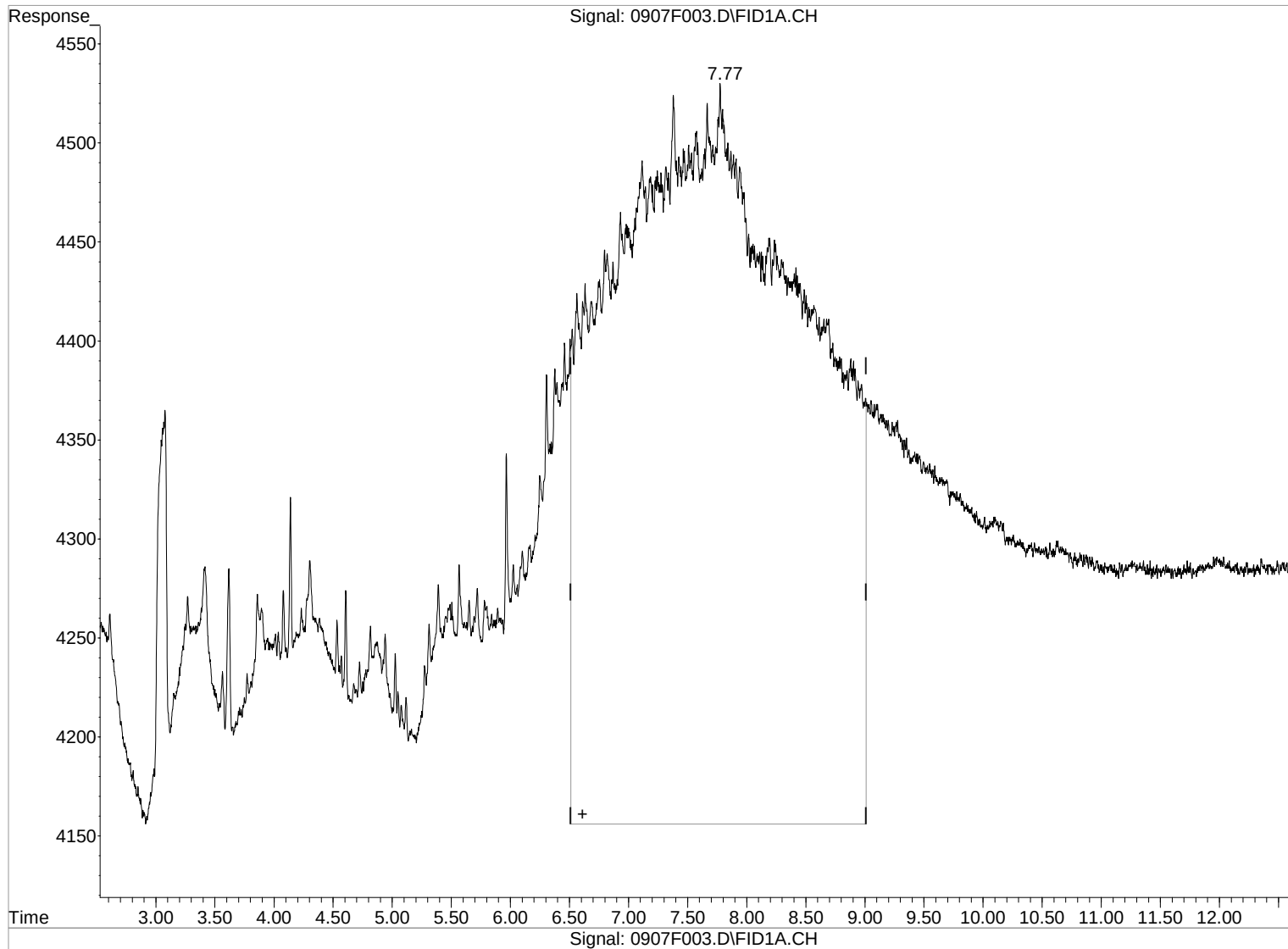
Multiplr: 1.00

Method : J:\GC21\METHODS\090723F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Thu Sep 07 13:31:21 2023

Response via : Multiple Level Calibration



(10) C25-C36in RRO [NWTPH] (H)

Manual Integration:

6.61min 65.150ppm

Before

response 43292

09/07/23

(+) = Expected Retention Time

0907F003.D 090723F.M Thu Sep 07 13:32:23 2023

532 of 3023

Quantitation Report (Qedit)

1st *AA* 09/08/232nd *SW* 09/08/23

Data File : J:\GC21\DATA\090723\0907F003.D

Acq On : 07 Sep 2023 11:19 am

Sample : RRO SVF04-63A 50

Misc :

IntFile : rteint.p

Quant Time: Sep 7 13:31 2023 Quant Results File: 090723F.RES

Vial: 2

Operator: AA

Inst : GC21

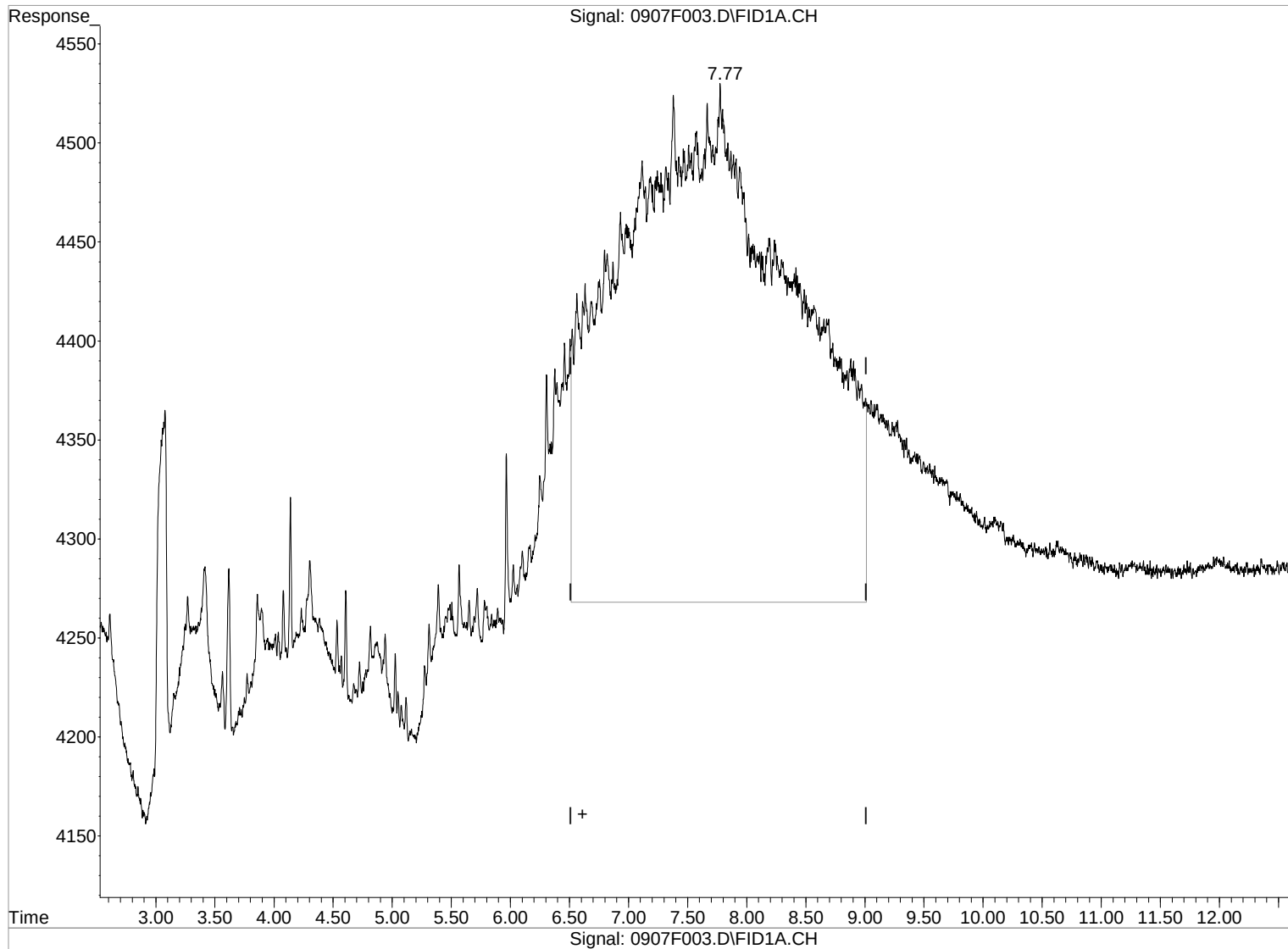
Multiplr: 1.00

Method : J:\GC21\METHODS\090723F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Thu Sep 07 13:31:21 2023

Response via : Multiple Level Calibration



(10) C25-C36in RRO [NWTPH] (H)

6.61min 39.845ppm

response 26477

Manual Integration:

After

Baseline/Shoulder

09/07/23

(+) = Expected Retention Time

0907F003.D 090723F.M Thu Sep 07 13:32:29 2023

533 of 3023

Data File : J:\GC21\DATA\090723\0907F004.D Vial: 3
Acq On : 07 Sep 2023 11:40 am Operator: AA
Sample : RRO SVF04-62M 200 Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Sep 07 13:31:47 2023 Quant Results File: 090723F.RES

Quant Method : J:\GC21\METHODS\090723F.M (RTE Integrator)
Title : 8015/NWTPH/AK SVF MJ257 KC2000628
Last Update : Thu Sep 07 13:31:21 2023
Response via : Initial Calibration
DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL
Signal Phase : ZB-1
Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
----------	------	----------	------------

System Monitoring Compounds

Target Compounds

10) H C25-C36in RRO [NWTPH]	6.61	106505	160.279 ppm
-----------------------------	------	--------	-------------

Data File : J:\GC21\DATA\090723\0907F004.D

Vial: 3

Acq On : 07 Sep 2023 11:40 am

Operator: AA

Sample : RRO SVF04-62M 200

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Sep 7 13:33 2023 Quant Results File: 090723F.RES

Quant Method : J:\GC21\METHODS\090723F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Thu Sep 07 13:31:21 2023

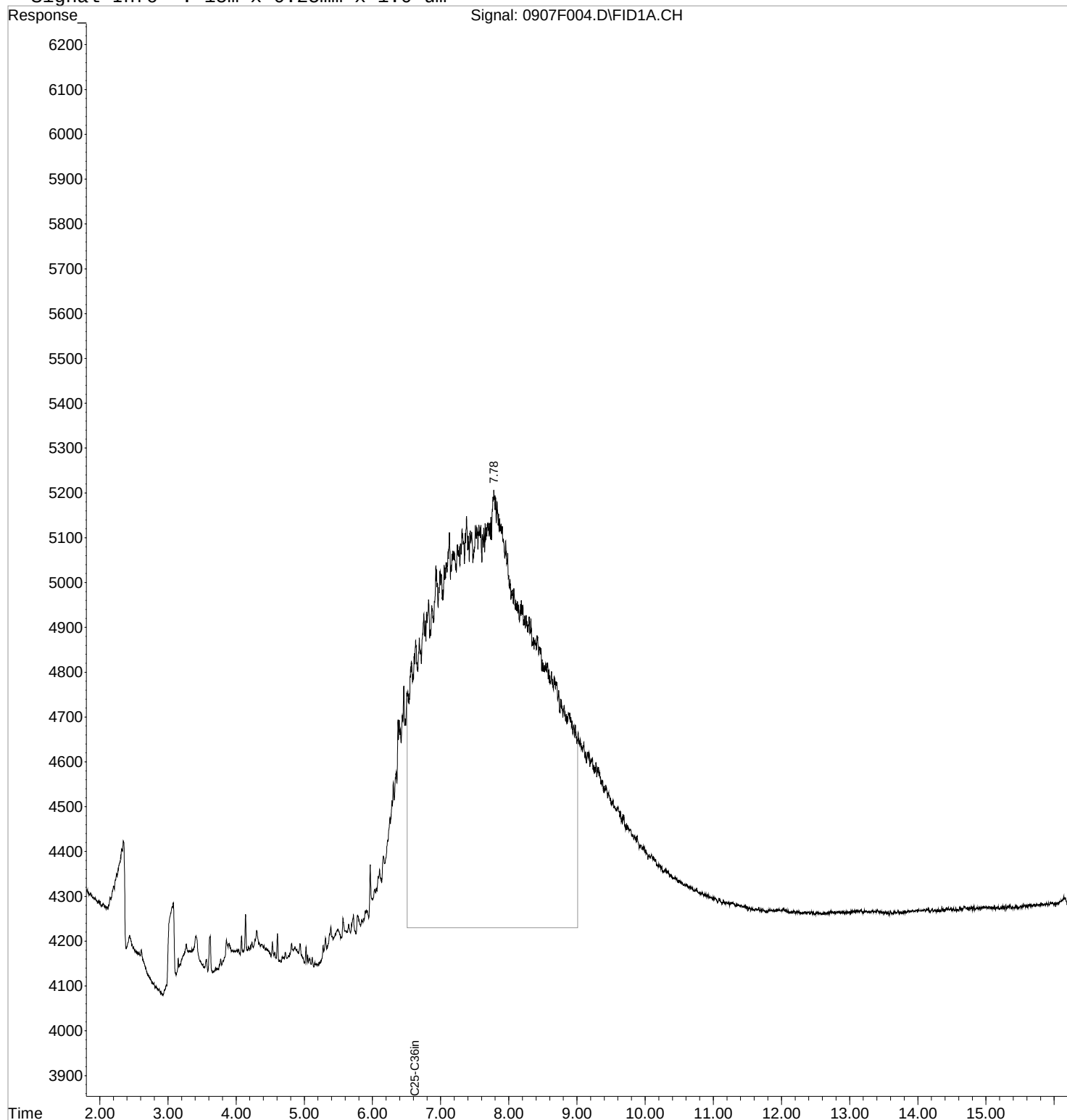
Response via : Single Level Calibration

DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Data File : J:\GC21\DATA\090723\0907F004.D

Vial: 3

Acq On : 07 Sep 2023 11:40 am

Operator: AA

Sample : RRO SVF04-62M 200

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

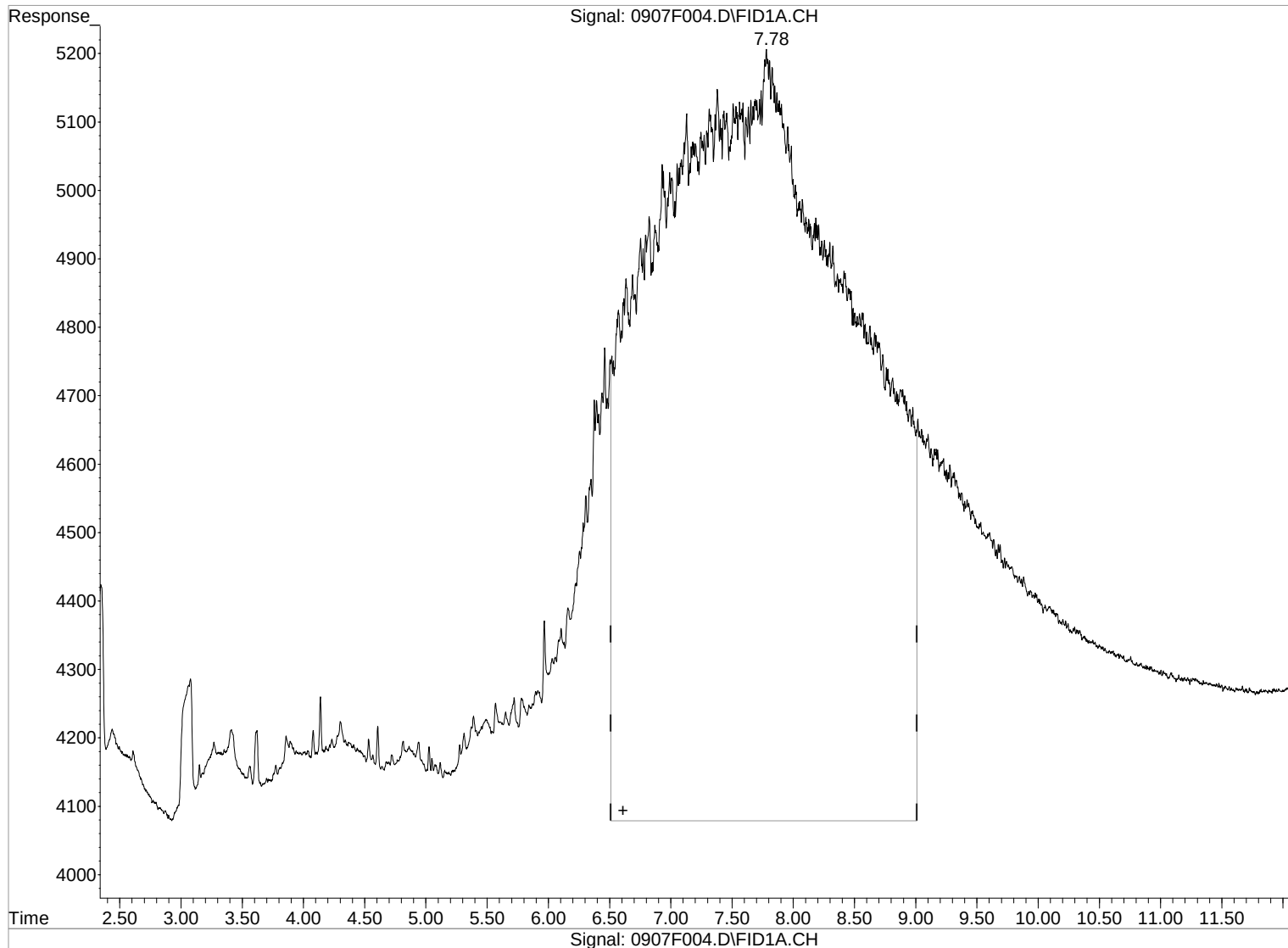
Quant Time: Sep 7 13:31 2023 Quant Results File: 090723F.RES

Method : J:\GC21\METHODS\090723F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Thu Sep 07 13:32:48 2023

Response via : Multiple Level Calibration



(10) C25-C36in RRO [NWTPH] (H)

Manual Integration:

6.61min 194.365ppm

Before

response 129155

09/07/23

(+) = Expected Retention Time

0907F004.D 090723F.M Thu Sep 07 13:33:10 2023

536 of 3023

Data File : J:\GC21\DATA\090723\0907F004.D

Vial: 3

Acq On : 07 Sep 2023 11:40 am

Operator: AA

Sample : RRO SVF04-62M 200

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

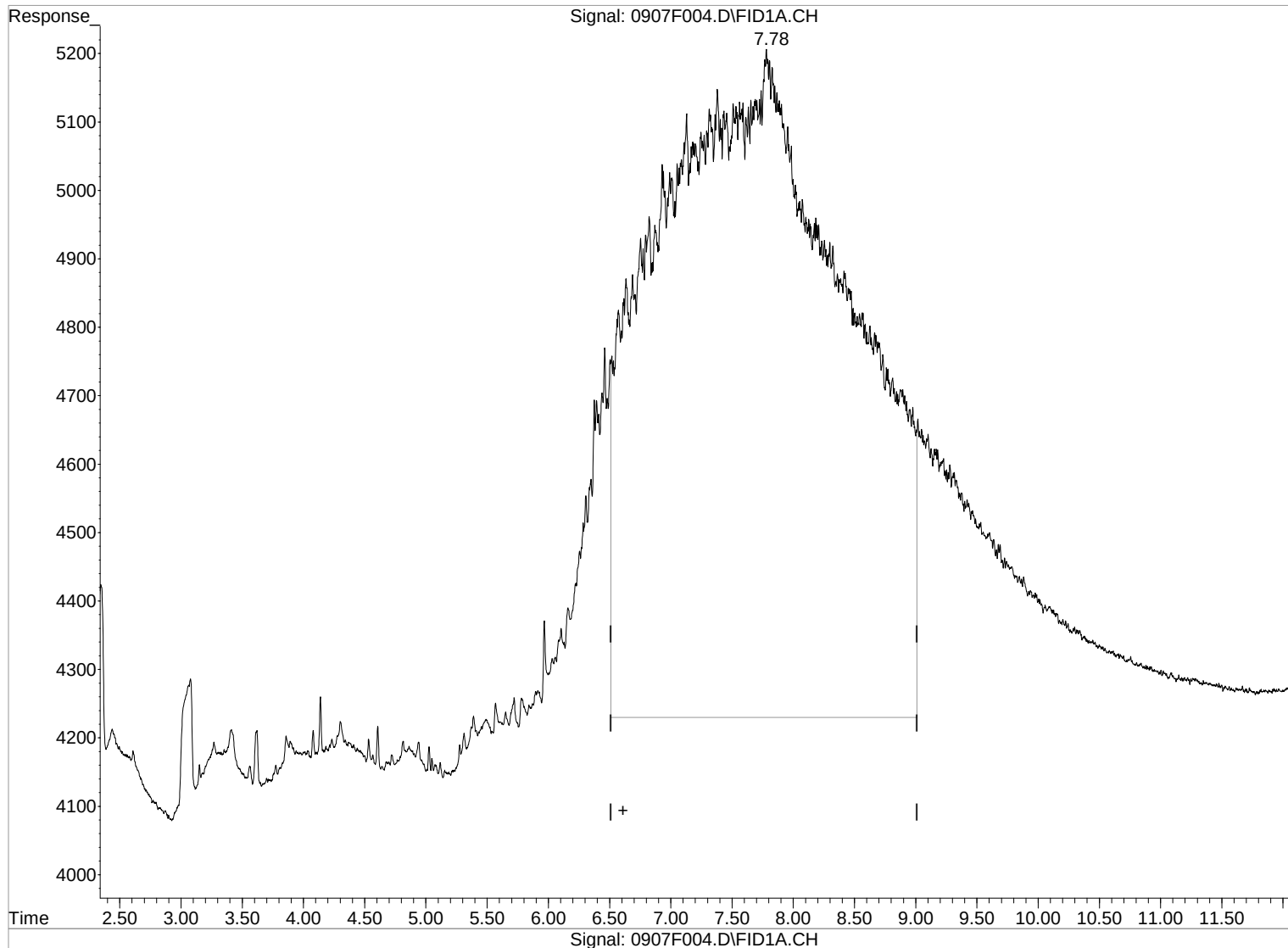
Quant Time: Sep 7 13:31 2023 Quant Results File: 090723F.RES

Method : J:\GC21\METHODS\090723F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Thu Sep 07 13:32:48 2023

Response via : Multiple Level Calibration



(10) C25-C36in RRO [NWTPH] (H)

Manual Integration:

6.61min 160.279ppm

After

response 106505

Baseline/Shoulder

09/07/23

(+) = Expected Retention Time

0907F004.D 090723F.M Thu Sep 07 13:33:24 2023

537 of 3023

Data File : J:\GC21\DATA\090723\0907F005.D Vial: 4
Acq On : 07 Sep 2023 12:02 pm Operator: AA
Sample : RRO SVF04-62L 500 Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Sep 07 13:31:49 2023 Quant Results File: 090723F.RES

Quant Method : J:\GC21\METHODS\090723F.M (RTE Integrator)
Title : 8015/NWTPH/AK SVF MJ257 KC2000628
Last Update : Thu Sep 07 13:31:21 2023
Response via : Initial Calibration
DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL
Signal Phase : ZB-1
Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
----------	------	----------	------------

System Monitoring Compounds

Target Compounds

10) H C25-C36in RRO [NWTPH]	6.61	315132	474.240 ppm
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Data File : J:\GC21\DATA\090723\0907F005.D

Vial: 4

Acq On : 07 Sep 2023 12:02 pm

Operator: AA

Sample : RR0 SVF04-62L 500

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Sep 7 13:34 2023 Quant Results File: 090723F.RES

Quant Method : J:\GC21\METHODS\090723F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Thu Sep 07 13:31:21 2023

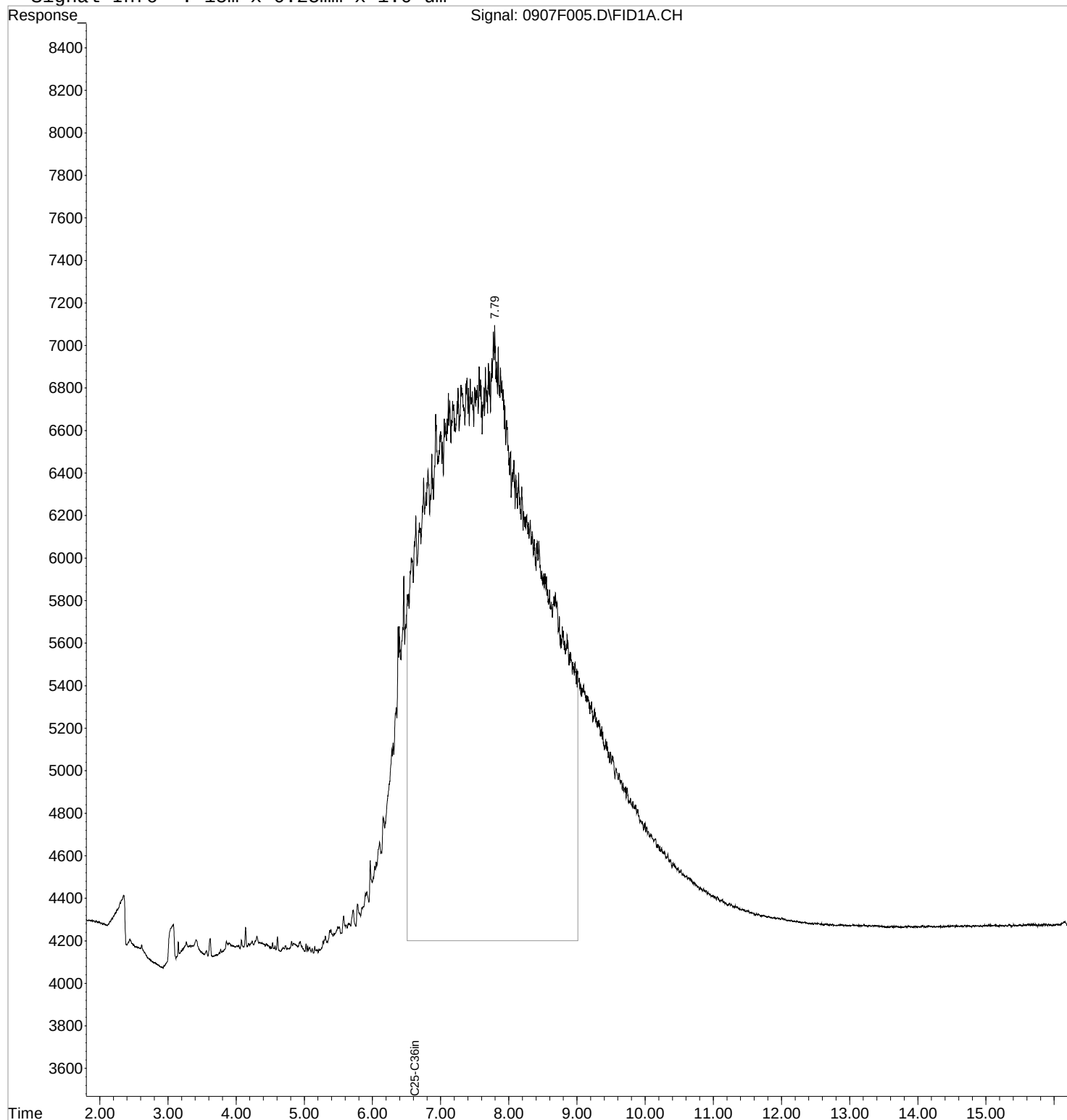
Response via : Single Level Calibration

DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Data File : J:\GC21\DATA\090723\0907F005.D

Vial: 4

Acq On : 07 Sep 2023 12:02 pm

Operator: AA

Sample : RRO SVF04-62L 500

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

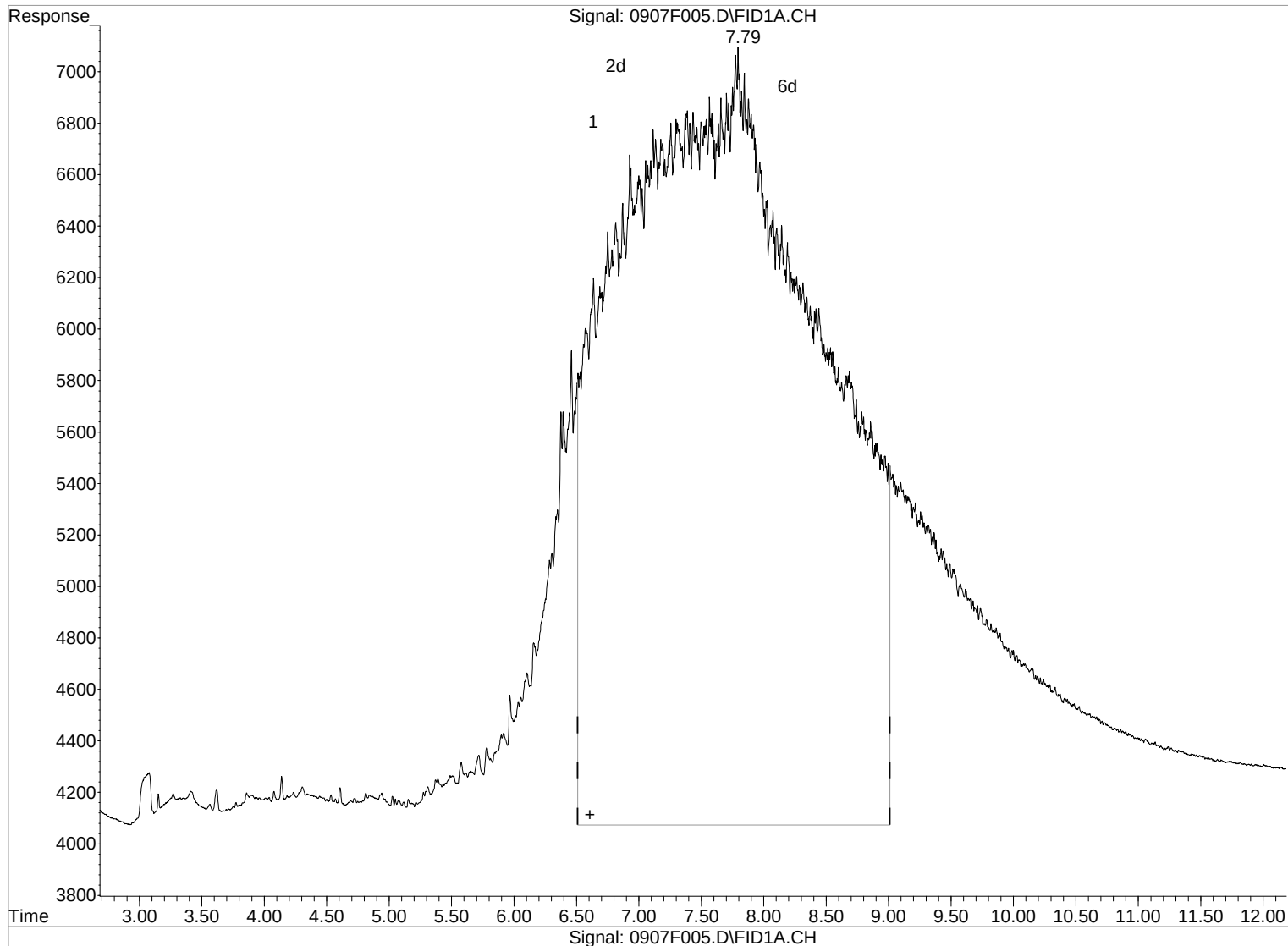
Quant Time: Sep 7 13:31 2023 Quant Results File: 090723F.RES

Method : J:\GC21\METHODS\090723F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Thu Sep 07 13:33:30 2023

Response via : Multiple Level Calibration



(10) C25-C36in RRO [NWTPH] (H)

Manual Integration:

6.61min 502.755ppm

Before

response 334080

09/07/23

(+) = Expected Retention Time

0907F005.D 090723F.M Thu Sep 07 13:33:52 2023

540 of 3023

Data File : J:\GC21\DATA\090723\0907F005.D

Vial: 4

Acq On : 07 Sep 2023 12:02 pm

Operator: AA

Sample : RRO SVF04-62L 500

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

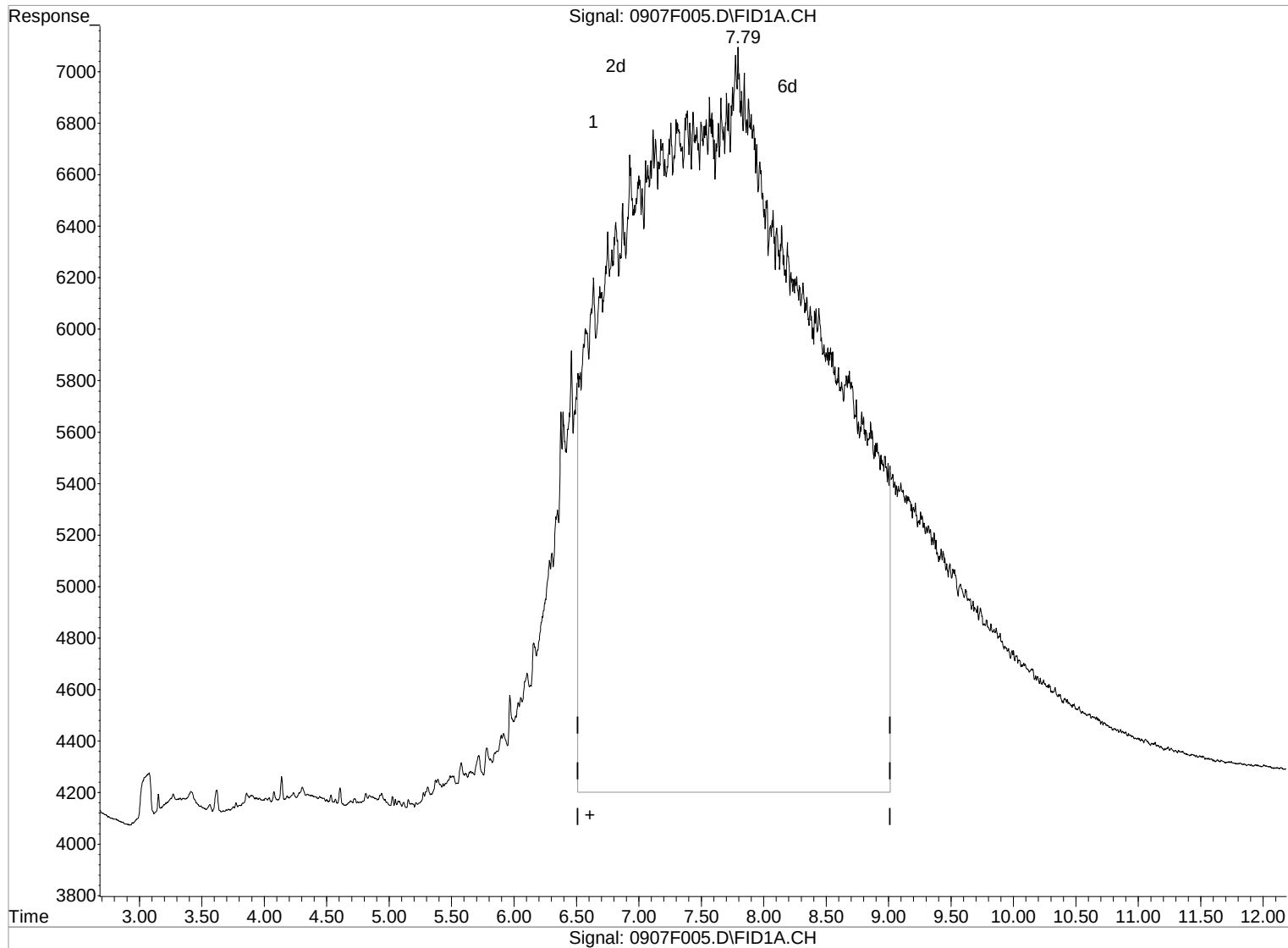
Quant Time: Sep 7 13:31 2023 Quant Results File: 090723F.RES

Method : J:\GC21\METHODS\090723F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Thu Sep 07 13:33:30 2023

Response via : Multiple Level Calibration



(10) C25-C36in RRO [NWTPH] (H)

Manual Integration:

6.61min 474.240ppm

After

response 315132

Baseline/Shoulder

09/07/23

(+) = Expected Retention Time

0907F005.D 090723F.M Thu Sep 07 13:34:03 2023

541 of 3023

Data File : J:\GC21\DATA\090723\0907F006.D Vial: 5
Acq On : 07 Sep 2023 12:23 pm Operator: AA
Sample : RRO SVF04-62K 2000 Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Sep 07 13:31:50 2023 Quant Results File: 090723F.RES

Quant Method : J:\GC21\METHODS\090723F.M (RTE Integrator)
Title : 8015/NWTPH/AK SVF MJ257 KC2000628
Last Update : Thu Sep 07 13:31:21 2023
Response via : Initial Calibration
DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL
Signal Phase : ZB-1
Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

Target Compounds

10) H C25-C36in RRO [NWTPH]	6.61	1213069	1825.541 ppm
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Data File : J:\GC21\DATA\090723\0907F006.D

Vial: 5

Acq On : 07 Sep 2023 12:23 pm

Operator: AA

Sample : RRO SVF04-62K 2000

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Sep 7 13:34 2023 Quant Results File: 090723F.RES

Quant Method : J:\GC21\METHODS\090723F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Thu Sep 07 13:31:21 2023

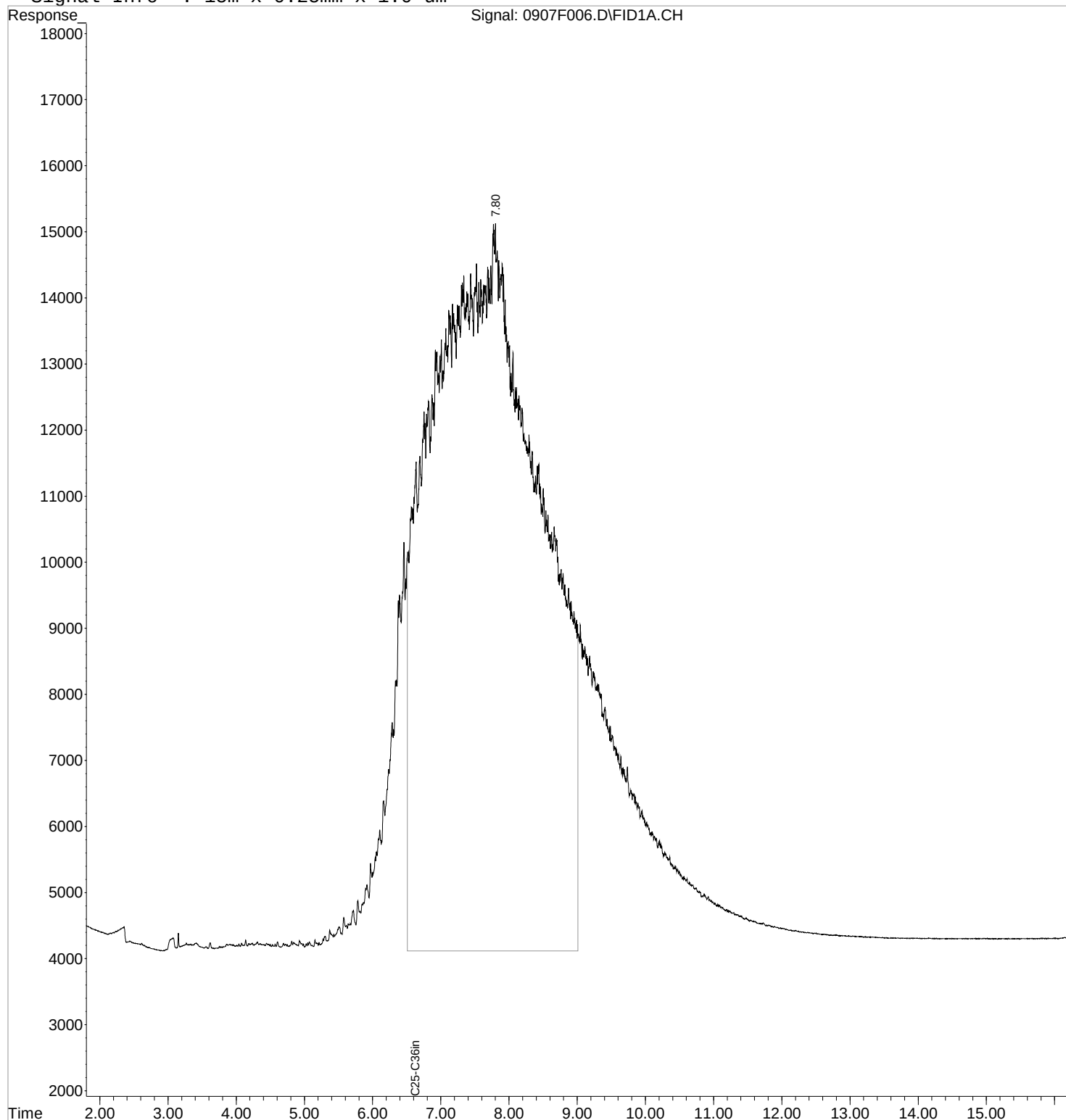
Response via : Single Level Calibration

DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Data File : J:\GC21\DATA\090723\0907F007.D Vial: 6
Acq On : 07 Sep 2023 12:45 pm Operator: AA
Sample : RRO SVF04-62J 5000 Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Sep 07 13:31:52 2023 Quant Results File: 090723F.RES

Quant Method : J:\GC21\METHODS\090723F.M (RTE Integrator)
Title : 8015/NWTPH/AK SVF MJ257 KC2000628
Last Update : Thu Sep 07 13:31:21 2023
Response via : Initial Calibration
DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL
Signal Phase : ZB-1
Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

Target Compounds

10) H C25-C36in RRO [NWTPH]	6.61	2689624	4047.600 ppm
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Data File : J:\GC21\DATA\090723\0907F007.D

Vial: 6

Acq On : 07 Sep 2023 12:45 pm

Operator: AA

Sample : RRO SVF04-62J 5000

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Sep 7 13:35 2023 Quant Results File: 090723F.RES

Quant Method : J:\GC21\METHODS\090723F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Thu Sep 07 13:31:21 2023

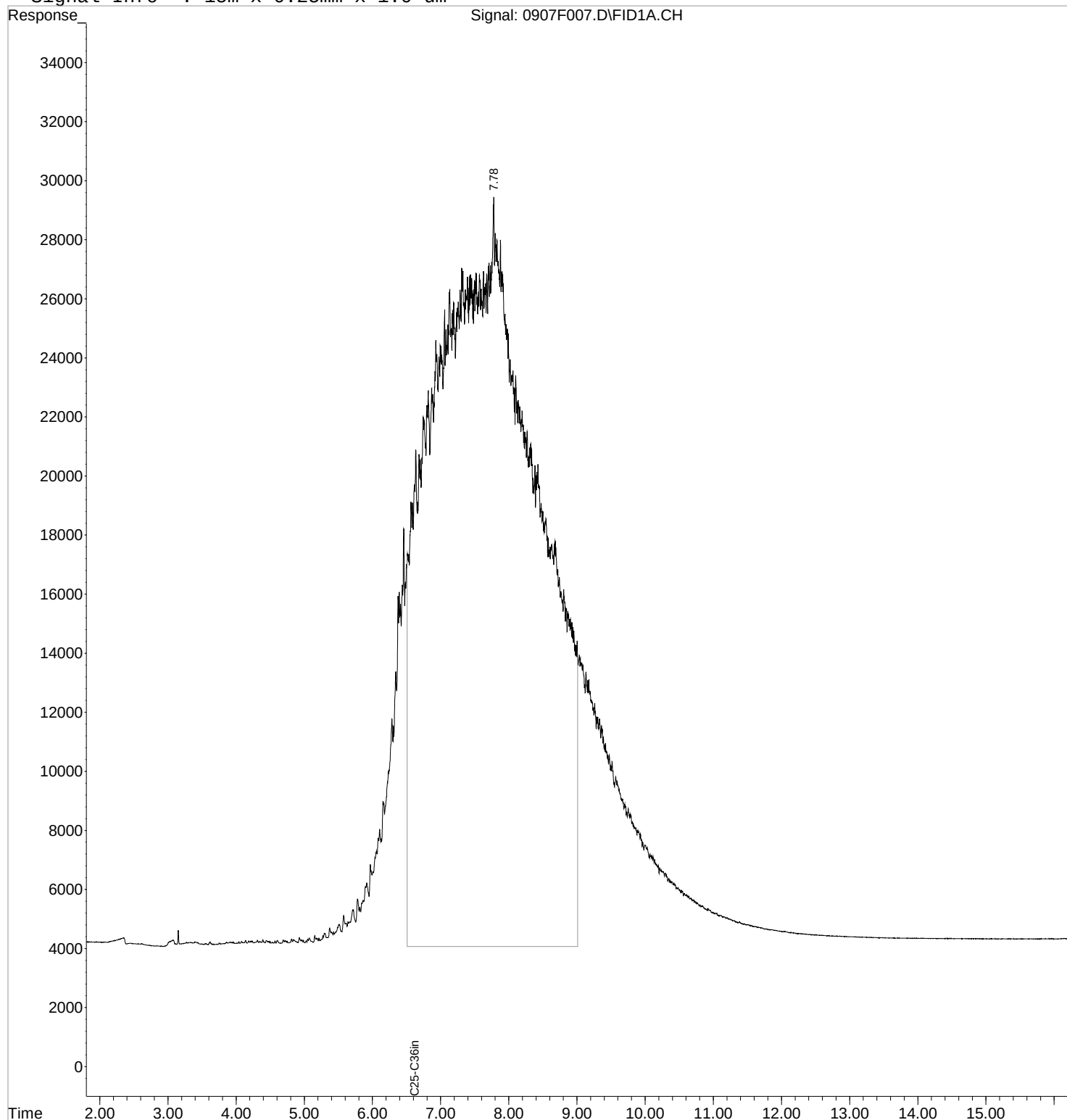
Response via : Single Level Calibration

DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Data File : J:\GC21\DATA\090723\0907F009.D Vial: 1
Acq On : 07 Sep 2023 1:28 pm Operator: AA
Sample : IB Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Sep 07 14:21:39 2023 Quant Results File: 090723F.RES

Quant Method : J:\GC21\METHODS\090723F.M (RTE Integrator)
Title : 8015/NWTPH/AK SVF MJ257 KC2000628
Last Update : Thu Sep 07 13:35:15 2023
Response via : Initial Calibration
DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL
Signal Phase : ZB-1
Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
Target Compounds			
6) H C10-C25ex DRO [AK102]	3.11	22322	23.029 ppm
7) H C10-C28in DRO [8015]	3.21	28514	28.117 ppm
8) H C12-C25ex DRO [NWTPH]	3.75	18399	23.197 ppm
10) H C25-C36in RRO [NWTPH]	6.61	6737	11.874 ppm
11) H C25-C36in RRO [AK103]	6.71	22300	36.632 ppm

Data File : J:\GC21\DATA\090723\0907F009.D

Vial: 1

Acq On : 07 Sep 2023 1:28 pm

Operator: AA

Sample : IB

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Sep 7 14:22 2023 Quant Results File: 090723F.RES

Quant Method : J:\GC21\METHODS\090723F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Thu Sep 07 13:35:15 2023

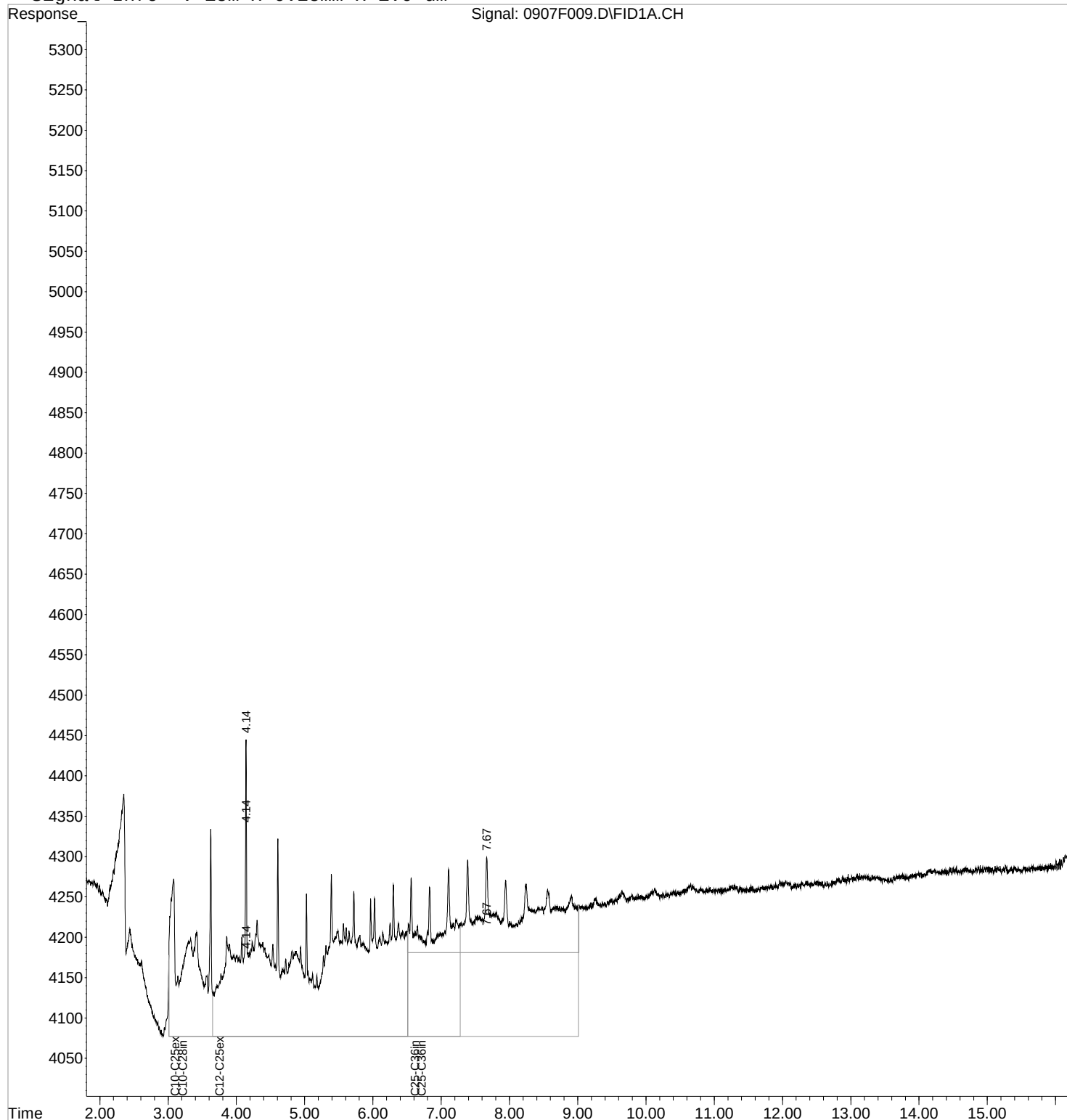
Response via : Single Level Calibration

DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Data File : J:\GC21\DATA\090723\0907F009.D

Acq On : 07 Sep 2023 1:28 pm

Sample : IB

Misc :

IntFile : rteint.p

Quant Time: Sep 7 14:21 2023 Quant Results File: 090723F.RES

Vial: 1

Operator: AA

Inst : GC21

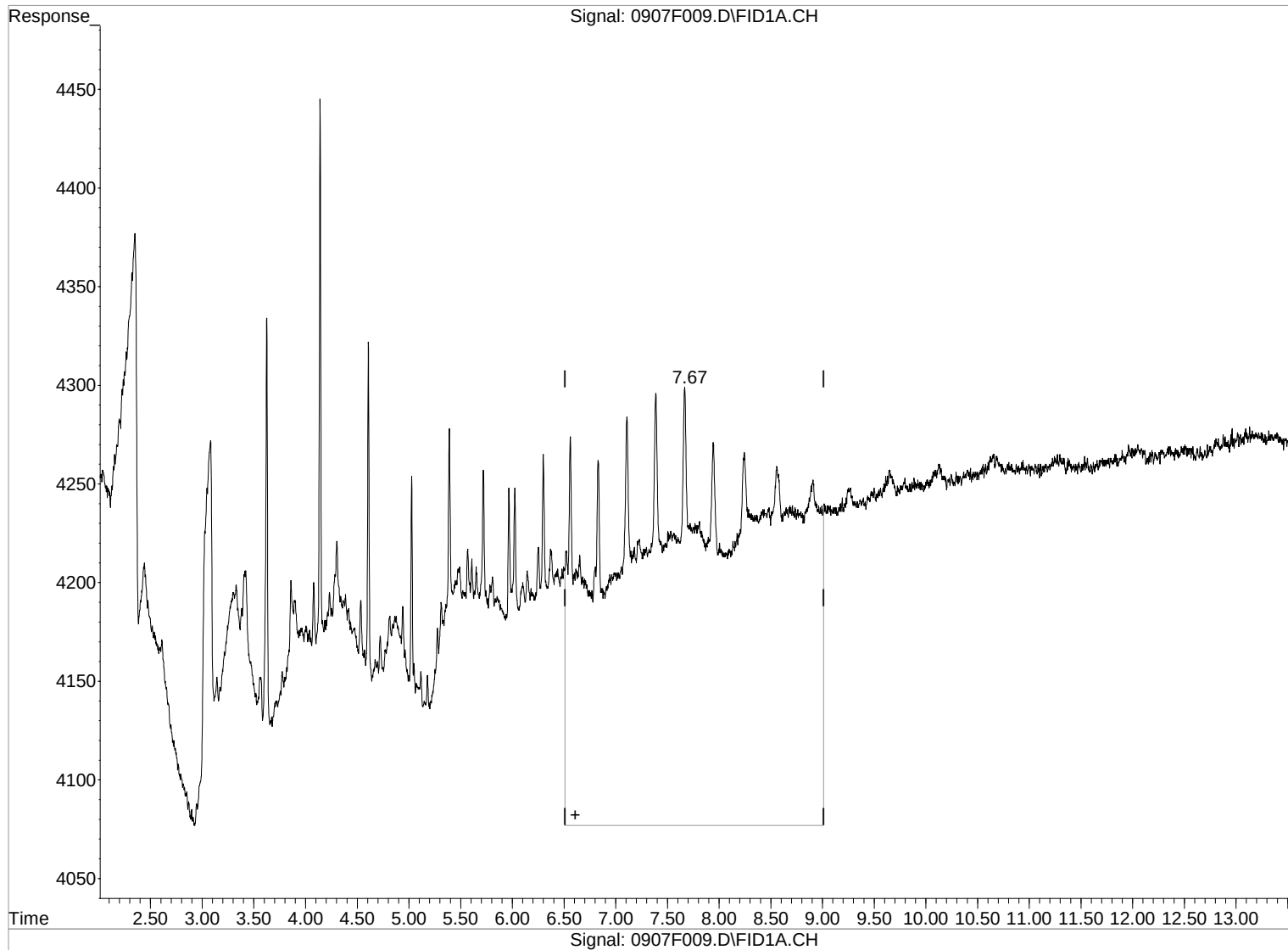
Multiplr: 1.00

Method : J:\GC21\METHODS\090723F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Thu Sep 07 13:35:15 2023

Response via : Multiple Level Calibration



(10) C25-C36in RRO [NWTPH] (H)

Manual Integration:

6.61min 39.305ppm

Before

response 22300

09/07/23

(+) = Expected Retention Time

0907F009.D 090723F.M Thu Sep 07 14:22:12 2023

548 of 3023

Data File : J:\GC21\DATA\090723\0907F009.D

Acq On : 07 Sep 2023 1:28 pm

Sample : IB

Misc :

IntFile : rteint.p

Quant Time: Sep 7 14:21 2023 Quant Results File: 090723F.RES

Vial: 1

Operator: AA

Inst : GC21

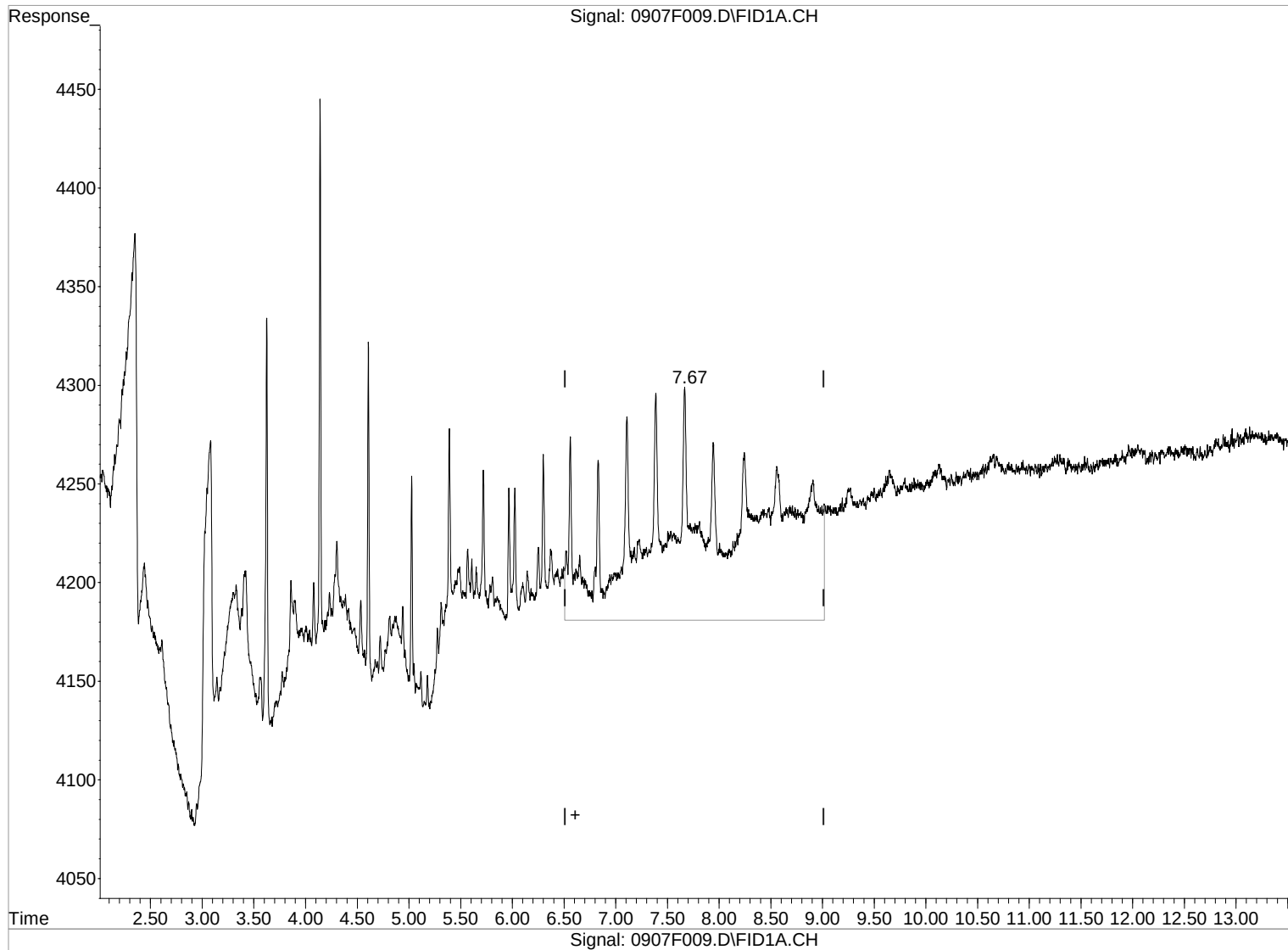
Multiplr: 1.00

Method : J:\GC21\METHODS\090723F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Thu Sep 07 13:35:15 2023

Response via : Multiple Level Calibration



(10) C25-C36in RRO [NWTPH] (H)

6.61min 11.874ppm

response 6737

Manual Integration:

After

Baseline/Shoulder

09/07/23

(+) = Expected Retention Time

0907F009.D 090723F.M Thu Sep 07 14:22:20 2023

549 of 3023

Data File : J:\GC21\DATA\090723\0907F010.D Vial: 7
Acq On : 07 Sep 2023 1:50 pm Operator: AA
Sample : RRO SVF04-63B ICV@1000 Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Sep 07 14:19:36 2023 Quant Results File: 090723F.RES

Quant Method : J:\GC21\METHODS\090723F.M (RTE Integrator)
Title : 8015/NWTPH/AK SVF MJ257 KC2000628
Last Update : Thu Sep 07 13:35:15 2023
Response via : Initial Calibration
DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL
Signal Phase : ZB-1
Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

Target Compounds

10) H C25-C36in RRO [NWTPH]	6.61	507751	894.940 ppm
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Data File : J:\GC21\DATA\090723\0907F010.D

Vial: 7

Acq On : 07 Sep 2023 1:50 pm

Operator: AA

Sample : RR0 SVF04-63B ICV@1000

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Sep 7 14:20 2023 Quant Results File: 090723F.RES

Quant Method : J:\GC21\METHODS\090723F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Thu Sep 07 13:35:15 2023

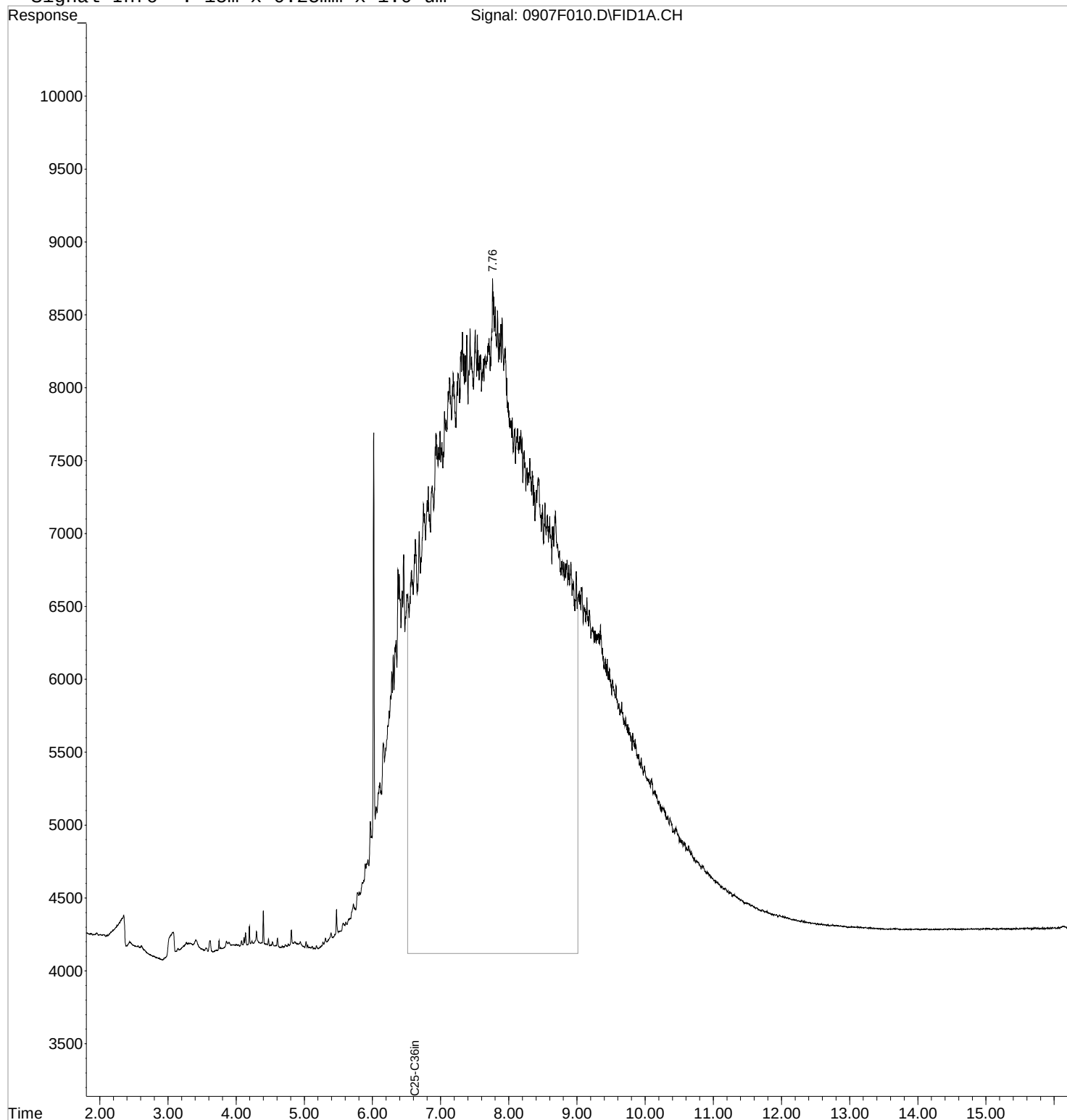
Response via : Single Level Calibration

DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Data File : J:\GC21\DATA\090723\0907F010.D

Vial: 7

Acq On : 07 Sep 2023 1:50 pm

Operator: AA

Sample : RRO SVF04-63B ICV@1000

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

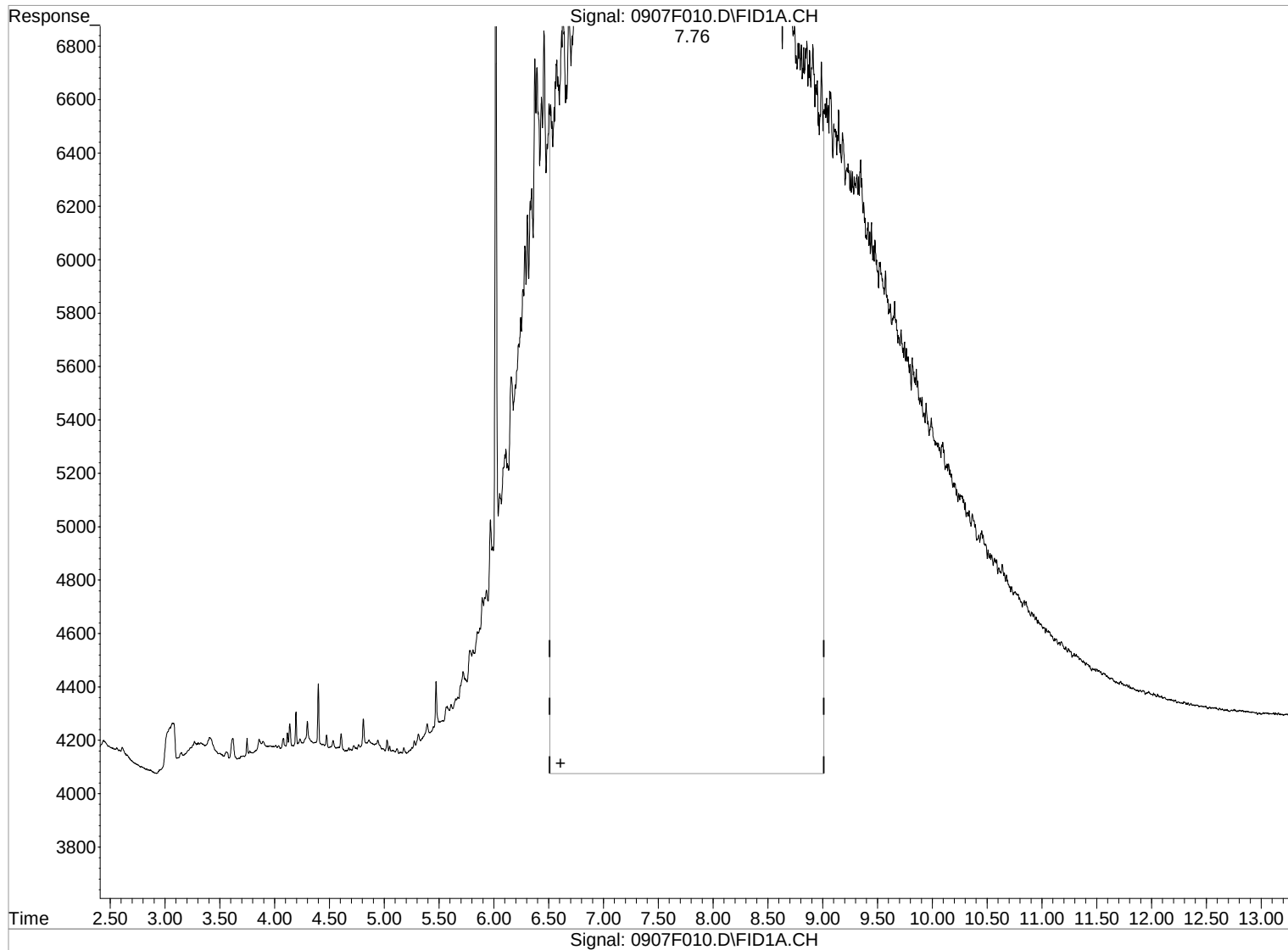
Quant Time: Sep 7 14:19 2023 Quant Results File: 090723F.RES

Method : J:\GC21\METHODS\090723F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Thu Sep 07 13:35:15 2023

Response via : Multiple Level Calibration



(10) C25-C36in RRO [NWTPH] (H)

Manual Integration:

6.61min 906.832ppm

Before

response 514498

09/07/23

(+) = Expected Retention Time

0907F010.D 090723F.M Thu Sep 07 14:20:06 2023

552 of 3023

Data File : J:\GC21\DATA\090723\0907F010.D

Vial: 7

Acq On : 07 Sep 2023 1:50 pm

Operator: AA

Sample : RRO SVF04-63B ICV@1000

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

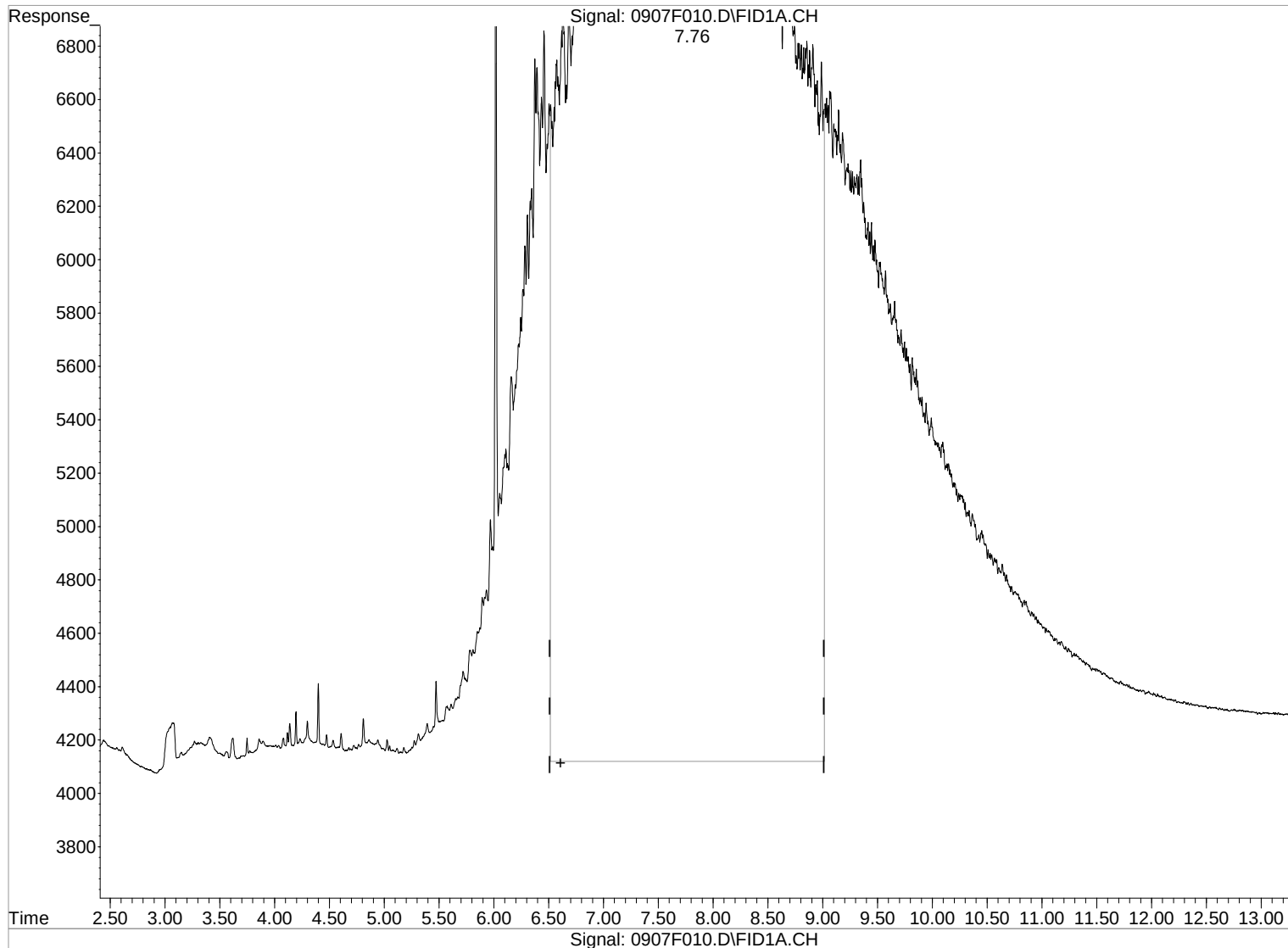
Quant Time: Sep 7 14:19 2023 Quant Results File: 090723F.RES

Method : J:\GC21\METHODS\090723F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Thu Sep 07 13:35:15 2023

Response via : Multiple Level Calibration



(10) C25-C36in RRO [NWTPH] (H)

Manual Integration:

6.61min 894.940ppm

After

response 507751

Baseline/Shoulder

09/07/23

(+) = Expected Retention Time

0907F010.D 090723F.M Thu Sep 07 14:20:15 2023

553 of 3023

Run ID (NWTPH): 828340

Run ID (NWTPH-SGT): 828342

Cal ID (Both): 1K2300522

Starting sequence Wed Dec 27 13:35:17 2023

Instrument Name: GC21

Sequence File: C:\GC21\SEQUENCE\122723F.sequence.xml

Comment:

Operator: AA

Data Path: C:\GC21\DATA\122723F\

Line	Type	Vials	DataFile	Sample Name
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Acquisition Method Path: C:\GC21\METHODS\

Acquisition Method File: SVF_FX32.M

12)	Sample	91	1227012	ALIPHATIC MARKER
13)	Sample	96	1227013	SVF04-71H DRO CCV 1000/50 ok
14)	Sample	97	1227014	SVF04-72E RRO CCV 1000 ok
15)	Sample	100	1227015	IB
16)	Sample	100	1227016	IB ok
17)	Sample	1	1227017	K2313947-002-RR H10
18)	Sample	2	1227018	Report 020 only — K2313878-001-10X Y10 10x dilution
19)	Sample	3	1227019	K2313878-002-10X Y10 10x dilution
20)	Sample	4	1227020	K2313878-003 Y10
21)	Sample	5	1227021	K2313878-004-10X Y10 10x dilution
22)	Sample	6	1227022	KQ2322342-01-MB
23)	Sample	7	1227023	KQ2322342-02-LCS
24)	Sample	8	1227024	KQ2322342-03-DLCS
25)	Sample	9	1227025	K2314229-001 Y10
26)	Sample	10	1227026	KQ2322265-01-MB
27)	Sample	11	1227027	KQ2322265-02-LCS
28)	Sample	12	1227028	KQ2322265-03-DLCS
29)	Sample	13	1227029	K2314281-001 Y1L -swartail ReX
30)	Sample	14	1227030	K2314281-002 H10
31)	Sample	15	1227031	KQ2322297-02-MB
32)	Sample	16	1227032	KQ2322297-03-LCS ← swartail ReX
33)	Sample	17	1227033	K2314283-001 H10
34)	Sample	18	1227034	K2314283-001-DUP
35)	Sample	19	1227035	K2314283-002 Y1L
36)	Sample	96	1227036	SVF04-71H DRO CCV 1000/50 ok
37)	Sample	97	1227037	SVF04-72E RRO CCV 1000 ok
38)	Sample	100	1227038	IB ok
39)	Sample	20	1227039	KQ2322360-01-MB
40)	Sample	21	1227040	KQ2322360-02-LCS
41)	Sample	22	1227041	KQ2322360-03-DLCS
42)	Sample	23	1227042	K2313894-002 RE Y1L
43)	Sample	24	1227043	K2313894-003 RE Y1L
44)	Sample	25	1227044	K2313894-004 RE H10
45)	Sample	26	1227045	K2313894-006 RE H10
46)	Sample	27	1227046	K2313939-002 RE Y1L
47)	Sample	28	1227047	K2313939-002 DUP
48)	Sample	29	1227048	K2313939-003 RE Y1L
49)	Sample	96	1227049	SVF04-71H DRO CCV 1000/50 ok

50) Sample 97 1227050
51) Sample 100 1227051

SVF04-72E RRO CCV 1000 OK
IB OK

Sequence completed Thu Dec 28 03:55:46 2023

C:\GC21\DATA\122723F\2023 Dec 27 1335 Sequence Log .LOG

Injection Log

Directory: J:\GC35\DATA\010524

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	91	0105f010.d	1.	ALIPHATIC MARKER		05 Jan 2024 12:38
2	96	0105f011.d	1.	SVF04 72A DRO CCV 1000/50		05 Jan 2024 13:00
3	97	0105f012.d	1.	SVF04 72G DRO CCV 1000/50		05 Jan 2024 13:21
4	98	0105f013.d	1.	SVF04 72E RRO CCV 1000		05 Jan 2024 13:43
5	86	0105f014.d	1.	IB		05 Jan 2024 14:05
6	96	0105f015.d	1.	SVF04 72G DRO CCV 1000/50 PPM		05 Jan 2024 14:26
7	97	0105f016.d	1.	SVF04 72H DRO CCV 1000/50 PPM		05 Jan 2024 14:48
8	98	0105f017.d	1.	SVF04 72E RRO CCV 1000PPM		05 Jan 2024 15:09
9	86	0105f018.d	1.	IB		05 Jan 2024 15:31
10	86	0105f019.d	1.	IB		05 Jan 2024 15:52
11	86	0105f020.d	1.	IB		05 Jan 2024 16:14
12	96	0105f021.d	1.	SVF04 72H DRO CCV 1000/50		05 Jan 2024 16:35
13	86	0105f022.d	1.	IB		05 Jan 2024 16:57
14	97	0105f023.d	1.	SVF04 72E RRO CCV 1000 PPM		05 Jan 2024 17:18
15	86	0105f024.d	1.	IB		05 Jan 2024 17:40
16	1	0105f025.d	1.	KQ2400123-01-MB		05 Jan 2024 18:02
17	2	0105f026.d	1.	K2400102-006 GC35 NWSGT LODv		05 Jan 2024 18:23
18	3	0105f027.d	1.	K2400104-006 GC35 NWSGT LOQv		05 Jan 2024 18:45
19	4	0105f028.d	1.	KQ2400071-01-MB		05 Jan 2024 19:06
20	5	0105f029.d	1.	KQ2400071-02-LCS		05 Jan 2024 19:28
21	6	0105f030.d	1.	KQ2400071-03-DLCS		05 Jan 2024 19:50
22	7	0105f031.d	1.	K2314281-001 RE		05 Jan 2024 20:11
23	8	0105f032.d	1.	KQ2400070-01-MB		05 Jan 2024 20:33
24	9	0105f033.d	1.	KQ2400070-02-LCS		05 Jan 2024 20:54
25	10	0105f034.d	1.	KQ2400070-03-DLCS		05 Jan 2024 21:16
26	11	0105f035.d	1.	K2314354-001 RE		05 Jan 2024 21:38
27	12	0105f036.d	1.	K2314355-001 RE	- low surr, accurate +	05 Jan 2024 21:59
28	13	0105f037.d	1.	K2314419-001 RE		05 Jan 2024 22:21
29	14	0105f038.d	1.	K2314362-001 RE 10X	- y/o	05 Jan 2024 22:42
30	15	0105f039.d	1.	K2314362-002 RE 10X		05 Jan 2024 23:04
31	16	0105f040.d	1.	K2314362-003 RE 10X		05 Jan 2024 23:26
32	98	0105f041.d	1.	SVF04 72H DRO CCV 1000/50 PPM	- high n-tetracarbene	05 Jan 2024 23:47
33	99	0105f042.d	1.	SVF04 72E RRO CCV 1000 PPM	high surr bias	06 Jan 2024 00:09
34	86	0105f043.d	1.	IB		06 Jan 2024 00:30

Run ID: 829103

Cal ID: 162300521

* See GC-21 file 1229016.D for reference.



Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Preparation Information Benchsheet

Prep Run#: 432516
Team: Organic LC/ADAVISON
Number of Copies to make: 8

Prep Workflow: OLCPFAS_SPEI1633
Prep Method: Method

Status: Prepped
Prep Date/Time: 1/11/24 13:10

#	Lab Code	Client ID	B#	Method /Test	pH	Matrix	Amt. Ext.	Final Vol	Sample Description
1	K2314281-001	TA-01-W	.03	1633/PFAS_DOD5.4	6.5	Water	247.3600mL	5.00mL	
2	K2314281-002	TA-02-W	.04	1633/PFAS_DOD5.4	6.5	Water	256.0300mL	5.00mL	
3	K2314515-001	HW-AF-03-01-2648-122123	.01	1633/PFAS_DOD5.4	6.5	Water	2.0000uL	5.00mL	
4	K2400112-008	LCMS05-1633	.03	1633/PFAS_DOD5.4	6.5	Water	250mL	5.00mL	
5	K2400112-009	LCMS08-1633	.03	1633/PFAS_DOD5.4	6.5	Water	250mL	5.00mL	
6	K2400112-010	LCMS09-1633	.03	1633/PFAS_DOD5.4	6.5	Water	250mL	5.00mL	
7	K2400114-008	LCMS05-1633	.03	1633/PFAS_DOD5.4	6.5	Water	250mL	5.00mL	
8	K2400114-009	LCMS08-1633	.03	1633/PFAS_DOD5.4	6.5	Water	250mL	5.00mL	
9	K2400114-010	LCMS09-1633	.03	1633/PFAS_DOD5.4	6.5	Water	250mL	5.00mL	
10	KQ2400483-05	MRLV		1633/PFAS_DOD5.4	6.5	Liquid	250mL	5.00mL	
11	R2312025-001	WTP-Influent-122723	.02	1633/PFAS_DOD5.4	6.5	Water	278.8300mL	5.00mL	
12	R2312025-002	WTP-Effluent-122723	.03	1633/PFAS_DOD5.4	6.5	Water	289.0100mL	5.00mL	
13	R2312025-003	FieldBlank-122723	.02	1633/PFAS_DOD5.4	6.5	Water	268.1900mL	5.00mL	
14	R2309948-001RE	MW-122-20231026	.13	1633/PFAS_DOD5.4	6.5	Water	50.0000mL	5.00mL	
15	K2312629-007RE	CHPZ046207-O1023	.04	1633/PFAS_DOD5.4	6.5	Water	267.9100mL	5.00mL	
16	K2313452-001RE	CHPZ046201-O1123	.04	1633/PFAS_DOD5.4	6.5	Water	269.0500mL	5.00mL	
17	K2313452-002RE	CHPZ04620H-O1123	.04	1633/PFAS_DOD5.4	6.5	Water	264.8800mL	5.00mL	
18	K2313452-003RE	CHPZ04620G-O1123	.04	1633/PFAS_DOD5.4	6.5	Water	274.4000mL	5.00mL	
19	K2313452-004RE	CHPZ04620F-O1123	.04	1633/PFAS_DOD5.4	6.5	Water	267.2500mL	5.00mL	
20	KQ2400483-01	LCS		1633/PFAS_DOD5.4	6.5	Liquid	250mL	5.00mL	
21	KQ2400483-02	DLCS		1633/PFAS_DOD5.4	6.5	Liquid	250mL	5.00mL	
22	KQ2400483-03	LCS_LL		1633/PFAS_DOD5.4	6.5	Liquid	250mL	5.00mL	
23	KQ2400483-04	MB		1633/PFAS_DOD5.4	6.5	Liquid	250mL	5.00mL	

Spiking Solutions

Name: 1633 No FTCA spike 200ng/mL	Inventory ID 231930	Logbook Ref: 23-OLC-04-02A	Expires On: 06/28/2024
KQ2400483-01 25.00uL	KQ2400483-02 25.00uL	KQ2400483-03 12.50uL	
Name: 1633 No FTCA spike 10ng/mL	Inventory ID 232285	Logbook Ref: 23-OLC-03-65B	Expires On: 04/19/2024
K2400112-008 50.00uL	K2400112-009 50.00uL	K2400114-008 75.00uL	K2400114-009 75.00uL
KQ2400483-05 25.00uL			K2400114-010 75.00uL
Name: 1633 FTCA only spike 500ng/mL	Inventory ID 232286	Logbook Ref: 23-OLC-03-65C	Expires On: 04/03/2024

Preparation Information Benchsheet

Prep Run#: 432516

Team: Organic LC/ADAVISON

K2400112-008 10.00µL K2400112-009 10.00µL

K2400112-010 10.00µL

K2400114-008 50.00µL

K2400114-009 50.00µL

K2400114-010 50.00µL

Prep Workflow: OLCPEAS_SPE1633

Prep Method: Method

Status: Prepped

Prep Date/Time: 1/11/24 13:10

Name: 1633 FTCA only spike 5000ng/mL

Inventory ID 232518

Logbook Ref: 23-OLC-03-76B

Expires On: 05/21/2024

KQ2400483-01 20.00µL

KQ2400483-02 20.00µL

KQ2400483-03 15.00µL

Name: 1633 EIS (working standard)

Inventory ID 233090

Logbook Ref: 23-OLC-03-99A

Expires On: 06/22/2024

K2312629-007 50.00µL

K2313452-001 50.00µL

K2313452-002 50.00µL

K2313452-003 50.00µL

K2313452-004 50.00µL

K2314281-001 50.00µL

K2314281-002 50.00µL

K2314515-001 50.00µL

K2400112-008 50.00µL

K2400112-009 50.00µL

K2400112-010 50.00µL

K2400114-008 50.00µL

K2400114-009 50.00µL

K2400114-010 50.00µL

KQ2400483-01 50.00µL

KQ2400483-02 50.00µL

KQ2400483-03 50.00µL

KQ2400483-04 50.00µL

KQ2400483-05 50.00µL

R2309948-001 50.00µL

R2312025-001 50.00µL

R2312025-002 50.00µL

R2312025-003 50.00µL

Name: 1633 NIS (working solution)

Inventory ID 233091

Logbook Ref: 23-OLC-04-05A

Expires On: 07/02/2024

K2312629-007 50.00µL

K2313452-001 50.00µL

K2313452-002 50.00µL

K2313452-003 50.00µL

K2313452-004 50.00µL

K2314281-001 50.00µL

K2314281-002 50.00µL

K2314515-001 50.00µL

K2400112-008 50.00µL

K2400112-009 50.00µL

K2400112-010 50.00µL

K2400114-008 50.00µL

K2400114-009 50.00µL

K2400114-010 50.00µL

KQ2400483-01 50.00µL

KQ2400483-02 50.00µL

KQ2400483-03 50.00µL

KQ2400483-04 50.00µL

KQ2400483-05 50.00µL

R2309948-001 50.00µL

R2312025-001 50.00µL

R2312025-002 50.00µL

R2312025-003 50.00µL

Preparation Steps

Step:	Extraction Start	Step:	Extraction	Step:	Carbon Clean	Step:	Final Volume
Started:	1/11/24 13:10	Started:	1/11/24 14:21	Started:	1/12/24 11:14	Started:	1/12/24 12:57
Finished:	1/11/24 13:37	Finished:	1/11/24 17:54	Finished:	1/12/24 11:47	Finished:	1/12/24 13:14
By:	ADAVISON	By:	ADAVISON	By:	ADAVISON	By:	ADAVISON
Comments		Comments		Comments		Comments	

Comments:

Reviewed By: AS Date: 1/25/24

Chain of Custody

Relinquished By: Annette Davisson Date: 1/12/24
Received By: AS Date: 1/22/24
Extracts Examined ☒ Yes ☐ No

Preparation Information Benchsheet

Prep Run#: 432516

Team: Organic LC/ADAVISON

Prep Workflow: OLCPEAS_SPEI633
Prep Method: Method

Status: Draft

Prep Date/Time: 1/11/24 12:45 PM

Number of Copies to make: 8

#	Lab Code	Client ID	B#	Method / Test	Matrix	Amt. Ext. mL	pH	Int. Vol	Final Vol mL	Surr Amt mL	Spike Amt mL
1	K2314281-001	TA-01-W	(4)	1633 / PEAS_DOD5.4	Water	247.30	6.5	7	50	50	7
2	K2314281-002	TA-02-W	(4)	1633 / PEAS_DOD5.4	Water	256.030		7			
3	K2314515-001	HW-AF-03-01-2648-122123	(3)	1633 / PEAS_DOD5.4	Water	2 mL					
4	K2400112-008	LCMS05-1633		1633 / PEAS_DOD5.4	Water	250					
5	K2400112-009	LCMS08-1633		1633 / PEAS_DOD5.4	Water						
6	K2400112-010	LCMS09-1633		1633 / PEAS_DOD5.4	Water						
7	K2400114-008	LCMS05-1633		1633 / PEAS_DOD5.4	Water						
8	K2400114-009	LCMS08-1633		1633 / PEAS_DOD5.4	Water						
9	K2400114-010	LCMS09-1633		1633 / PEAS_DOD5.4	Water						
10	R2312025-001	WTF-Influent-122723	(5)	1633 / PEAS_DOD5.4	Water	278.830					
11	R2312025-002	WTF-Effluent-122723	(5)	1633 / PEAS_DOD5.4	Water	289.010					
12	R2312025-003	FieldBlank-122723		1633 / PEAS_DOD5.4	Water	268.190					
13	R2309948-001RE	MMW-122-20231026	(1)	1633 / PEAS_DOD5.4	Water	50					
14	K2312629-007RE	CHPZ04807F-01023		1633 / PEAS_DOD5.4	Water	267.910					
15	K2313452-001RE	CHPZ04620F-01123		1633 / PEAS_DOD5.4	Water	269.050					
16	K2313452-002RE	CHPZ04620H-01123		1633 / PEAS_DOD5.4	Water	264.880					
17	K2313452-003RE	CHPZ04620G-01123		1633 / PEAS_DOD5.4	Water	274.400					
18	K2313452-004RE	CHPZ04620F-01123		1633 / PEAS_DOD5.4	Water	267.250					
19	KQ2400483-01	LCS		1633 / PEAS_DOD5.4	Liquid	250					
20	KQ2400483-02	DLCS		1633 / PEAS_DOD5.4	Liquid						
21	KQ2400483-03	LCS_IL		1633 / PEAS_DOD5.4	Liquid						
22	KQ2400483-04	MB		1633 / PEAS_DOD5.4	Liquid						

1. 5x0 dilution up front per 1633 TSS screen tracker
2. 125,000 dilution up front per 1633 TSS screen tracker
3. See other prep report regarding spike amount, was not entered till end of peer work
4. per PC wire Rahn samples were spiked with E15, centrifuged at 1800 for 5 min. then decanted into clean bottles
5. 10x back end dilution per 1633 TSS screen tracker

Comments: (A) 1633 NO FTCA @ 200ppb 23-OLC-04-02A 240.128124

(B) 1633 FTCA only @ 500ppb 23-OLC-03-74B 240.512124

Surrogate ID: 1633E15 23-OLC-03-99A 240.122124 240.122124

Spike ID: (C) 1633 NO FTCA @ 100ppb 23-OLC-03-45B 240.416124

Witnessed By: (D) 1633 FTCA only @ 500ppb 23-OLC-03-45C 240.415124

Analyst: Annette Davison Assisted By: [Signature]

Preparation Information Benchsheet

Prep Run#: 432516
 Team: Organic LC/ADAVISON
 Number of Copies to make: 8
 Prep Workflow: OLCPEAS_SPE1633
 Prep Method: Method
 Status: Draft
 Prep Date/Time: 1/11/24 12:45 PM

#	Lab Code	Client ID	B#	Method / Test	Matrix	Amt. Ext. mL	pH	Int. Vol	Final Vol mL	Surr Amt mL	Spike Amt mL
1	K2314281-001	TA-01-W		1633 / PEAS_DOD5.4	Water	7	7	7	7	7	7
2	K2314281-002	TA-02-W		1633 / PEAS_DOD5.4	Water	7	7	7	7	7	7
3	K2314515-001	HW-AF-03-01-2648-122123	.01	1633 / PEAS_DOD5.4	Water	7	7	7	7	7	7
4	K2400112-008	LCMS05-1633	.03	1633 / PEAS_DOD5.4	Water	7	7	7	7	7	7
5	K2400112-009	LCMS08-1633	.03	1633 / PEAS_DOD5.4	Water	7	7	7	7	7	7
6	K2400112-010	LCMS09-1633	.03	1633 / PEAS_DOD5.4	Water	7	7	7	7	7	7
7	K2400114-008	LCMS05-1633	.03	1633 / PEAS_DOD5.4	Water	7	7	7	7	7	7
8	K2400114-009	LCMS08-1633	.03	1633 / PEAS_DOD5.4	Water	7	7	7	7	7	7
9	K2400114-010	LCMS09-1633	.03	1633 / PEAS_DOD5.4	Water	7	7	7	7	7	7
10	KQ2400483-05	MRLV		1633 / PEAS_DOD5.4	Liquid	250	65	7	5	50	25
11	R2312025-001	WTP-Influent-122723		1633 / PEAS_DOD5.4	Water	7		7	7	7	7
12	R2312025-002	WTP-Effluent-122723		1633 / PEAS_DOD5.4	Water	7		7	7	7	7
13	R2312025-003	FieldBlank-122723		1633 / PEAS_DOD5.4	Water	7		7	7	7	7
14	R2309948-001RE	MW-122-20231026	.13	1633 / PEAS_DOD5.4	Water	7		7	7	7	7
15	K2312629-007RE	CHPZ04807F-01023	.04	1633 / PEAS_DOD5.4	Water	7		7	7	7	7
16	K2313452-001RE	CHPZ04620F-01123	.04	1633 / PEAS_DOD5.4	Water	7		7	7	7	7
17	K2313452-002RE	CHPZ04620H-01123	.04	1633 / PEAS_DOD5.4	Water	7		7	7	7	7
18	K2313452-003RE	CHPZ04620G-01123	.04	1633 / PEAS_DOD5.4	Water	7		7	7	7	7
19	K2313452-004RE	CHPZ04620F-01123	.04	1633 / PEAS_DOD5.4	Water	7		7	7	7	7
20	KQ2400483-01	LCS		1633 / PEAS_DOD5.4	Liquid	7		7	7	7	7
21	KQ2400483-02	DLCS		1633 / PEAS_DOD5.4	Liquid	7		7	7	7	7
22	KQ2400483-03	LCS_LL		1633 / PEAS_DOD5.4	Liquid	7		7	7	7	7
23	KQ2400483-04	MB		1633 / PEAS_DOD5.4	Liquid	7		7	7	7	7

③ See other raw prep report

Comments:

Surrogate ID:

Spike ID:

Witnessed By:

Analyst:

Assisted By:

1633 Waters Total Solid Worksheet

Sample-ID	Estimated volume (mL)	TSS (mg/L)	% suspended solids	Estimated solid load in sample (mg)	Extract less than (mL)	To target 25mg solids
R2309948-001	250	80	0.01	20	625	313
K2313452-001	250	20	0.00	5	2500	1250
K2313452-002	250	30	0.00	7.5	1667	833
K2313452-003	250	-10	0.00	-2.5	-5000	-2500
K2313452-004	250	-10	0.00	-2.5	-5000	-2500

1633 Waters Total Solid Worksheet

Sample ID	Estimated volume (mL)	TSS (mg/L)	% suspended solids	Estimated solid load in sample (mg)	Extract less than (mL)	To target 25mg solids
K2314281-001	250	4360	0.44	1090	11	6
K2314281-002	250	330	0.03	82.5	152	76
K2314515-001	250	20	0.00	-5	-2500	-1250
R2312025-001	250	40	0.00	10	1250	625
R2312025-002	250	-20	0.00	-5	-2500	-1250
R2312025-003	250	30	0.00	7.5	1667	833

1633 Weigh Sheet				Prep Run# 432516	
Sample #	Weight 1	Weight 2	Amount Extracted (1-2)	Scales Used	
K2314281-001	280.210	32.780	247.430	Weight 1: Balance #:	
K2314281-002	290.490	34.460	256.030	K-Balance-57	
R2312025-001	313.440	34.610	278.830	Verified Y/N:	
R2312025-002	323.150	34.140	289.010	Yes	
R2312025-003	302.270	34.080	268.190	Date/time 1:	
K2312629-007	299.190	31.280	267.910		1/11/2024 11:39
K2313452-001	299.560	30.510	269.050	Initials:	
K2313452-002	294.580	29.700	264.880	AD	
K2313452-003	304.880	30.480	274.400	Weight 2: Balance #:	
K2313452-004	298.410	31.160	267.250	K-Balance-57	
			0.000	Verified Y/N:	
			0.000	Yes	
			0.000	Date/time 2:	
			0.000		1/12/2024 12:45
			0.000	Initials:	
			0.000	CIM	

Additional prep information for Perfluorinated Compounds

by HPLC/MS/MS – SOP: LCP-1633 (Rev. 1.0)

Waters

Prep Run # 432516
Service Request R2314281, 4515, 0112, 0114, 2629, 3452 11/01/24 AD
R2312025, 9948 Workgroup LQ2400483-01

6cc 200mg Strata XL-AW Cartridge Sorbent Lot # S322-0047

10mL Eccentric Tip Syringe Lot#: 0135854

Silanized Glass Wool Lot# 110022999 5mL Pipette Lot#: BF12G

1% NH₄OH in MeOH Lot# 23-OLC-04-10D 10mL Pipette Lot#: 0110812023

0.3M Acetic Acid Lot# 23-OLC-04-08E 200uL Pipette Tip Lot#: 501555728

Reagent Water Lot# 63153 1mL Pipette Tip Lot#: 03110121

25% NH₄OH Lot# N/A

1:1 0.1M Acetic Acid/MeOH lot# 23-OLC-04-09J

Acetic Acid (LCMS Grade) Lot# MKCS1513

Extraction (Manifold) Start (Time/Date/Initial): 2:21pm 11/1/24 AD

Extraction (Manifold) Stop (Time/Date/Initial): 5:54pm 11/1/24 AD

Falcon Tube Lot#: 33422055 Envi-Carb Lot # 161954

Centrifuge Used? (K-Centrifuge-01): Yes ☒ No ☐

NIS solution Lot #: 23-OLC-04-05A xp 7/2/24

Nylon Filter Lot#: 220744103 5mL LL Syringe Lot#: 20220509

Poly Vial Lot#: 436021271V2 Poly Screw Cap Lot#: 5826532540

Extract Storage: Johnny Utah

Completed (Time/Date/Initial): 1:14pm 11/2/24 AD

Comments/Observations:

1% NH₄OH in MeOH 23-OLC-04-11B used for final rinse
" " " " 23-OLC-04-10D used for conditioning
1633 F.V. Sol. 23-OLC-04-04A xp 2/2/24

Validation Report

1st *PS* 01/25/24
2nd *MS* 01/25/24

Data File: J:\LCMS08\Data\240122_1633_B1\240122_034
Lab ID: K2314281-001
RunType: N/A
Matrix: Water

Date Acquired: 1/22/24 22:32
Batch ID: 830573
Analysis Method: 1633/PFAS_DOD5.4

Validations

Validation Categories	Pass	Fail
Preparation Hold Time	X	
Analytical Hold Time	X	
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery		X
Continuing Calibration Recovery (Closing)		X
Lab Control Sample Recovery		X
Duplicate Lab Control Sample Recovery		X
Method Blank	X	
Method Blank Surrogates	X	
Internal Standards	X	
Surrogates	X	
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Continuing Calibration Recovery	N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	136	70	130	high bias, native <MRL
	D3-MeFOSAA	138	70	130	native in control
	13C2-4:2 FTS	163	70	130	
	13C2-6:2 FTS	170	70	130	
	13C2-8:2 FTS	162	70	130	
Continuing Calibration Recovery (Closing)	N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	160	70	130	high bias, native <MRL
	Perfluoro-3-methoxypropanoic acid (PFMPA)	135	70	130	
	D9-EtFOSE	131	70	130	native in control
	D3-MeFOSAA	142	70	130	
	13C2-4:2 FTS	156	70	130	
	13C2-6:2 FTS	136	70	130	
	13C2-8:2 FTS	142	70	130	
Lab Control Sample Recovery	N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	152	70	145	high bias, native <MRL
	4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	145	65	130	
Duplicate Lab Control Sample Recovery	N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	160	70	145	
	4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	139	65	130	

Primary Review: _____

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Secondary Review: _____

Analyte Exceptions

1st PS 01/25/24

2nd MS 01/25/24

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
	Perfluoro-3-methoxypropanoic acid (PFMPA)	148	55	140	high bias, native <MRL

Primary Review: _____

Secondary Review: _____

Quantitation Report

1st *PS* 01/25/24
2nd *MS* 01/25/24

Data File:	J:\LCMS08\Data\240122_1633_B1\240122_034	Instrument:	K-LCMS-08
Acqu Date:	1/22/24 22:32	Vial:	26
Run Type:	N/A	Dilution:	1
Lab ID:	K2314281-001	Raw Units:	ng/mL

Bottle ID:	K2314281-001.03	Tier:	IV	Matrix:	Water
Prod Code:	PFAS_DOD5.4	Collect Date:	12/20/23	Receive Date:	12/20/23

Analysis Lot:	830573	Prep Lot:	432516	Report Group:	K2314281
Analysis	1633	Prep Method:	Method		
		Prep Date:	1/11/24		

Title:	Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM	Calibration ID:	KC2400027
		Report List ID:	24615

Internal Standard Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Area Criteria
18O2-PFHxS	7.087	+0.01	164711	2.5000	OK
13C4-PFOS	8.824	+0.01	187289	2.5000	OK
13C3-PFBA	1.435	+0.05	469239	5.0000	OK
13C2-PFHxA	4.979	+0.02	526961	2.5000	OK
13C4-PFOA	7.112	+0.01	34533	2.5000	OK
13C5-PFNA	7.963	+0.01	206808	1.2500	OK
13C2-PFDA	8.729	+0.01	158733	1.2500	OK

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
13C3-PFBS	4.644	+0.03	198399	2.1225	85	40 - 135	Y
13C3-PFHxS	7.087	+0.01	145905	2.0638	83	40 - 130	Y
13C8-PFOS	8.824	+0.01	56727	1.8161	73	40 - 130	Y
13C4-PFBA	1.434	+0.05	915541	8.7291	87	5 - 130	Y
13C5-PFPeA	3.498	+0.03	88890	3.7370	75	40 - 130	Y
13C5-PFHxA	4.978	+0.02	446029	2.0083	80	40 - 130	Y
13C4-PFHpA	6.156	+0.02	459693	2.2865	91	40 - 130	Y
13C8-PFOA	7.112	+0.01	443324	2.2969	92	40 - 130	Y
13C9-PFNA	7.963	+0.01	198321	1.2248	98	40 - 130	Y
13C6-PFDA	8.728	+0.01	158452	1.2408	99	40 - 130	Y
13C7-PFUnDA	9.452	+0.01	148980	0.9780	78	30 - 130	Y
13C2-PFDoDA	10.140	+0.01	119232	0.6813	55	10 - 130	Y
13C2-PFTeDA	11.431	+0.01	13452	0.1780	14	10 - 130	Y
13C8-FOSA	11.168	0.00	152591	1.9192	77	40 - 130	Y
D3-MeFOSA	13.710	-0.01	11450	0.7151	29	10 - 130	Y
D5-EtFOSA	14.386	-0.01	13293	0.6236	25	10 - 130	Y
D7-MeFOSE	13.403	-0.01	137067	6.9924	28	10 - 130	Y
D9-EtFOSE	14.031	-0.01	124569	6.2568	25	10 - 130	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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			1st	PS	01/25/24
Data File:	J:\LCMS08\Data\240122_1633_B1\240122_034	Instrument:	K-LCMS08	MS	01/25/24
Acqu Date:	1/22/24 22:32	Vial:	26		
Run Type:	N/A	Dilution:	1		
Lab ID:	K2314281-001	Raw Units:	ng/mL		

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
D3-MeFOSAA	8.864	+0.01	165441	5.0896	102	40 - 170	Y
D5-EtFOSAA	9.196	+0.00	146529	3.7679	75	25 - 135	Y
13C2-4:2 FTS	4.661	+0.02	167956	7.4099	148	40 - 200	Y
13C2-6:2 FTS	6.797	+0.01	145142	6.7703	135	40 - 200	Y
13C2-8:2 FTS	8.417	+0.01	110915	6.2984	126	40 - 300	Y
13C3-HFPO-DA	5.453	+0.02	506667	9.8220	98	40 - 130	Y

Target Compounds

Final Conc.Units: ng/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Perfluorobutane sulfonic acid (PFBS)	4.645	+0.03	5910	0.0582	1.2	J	Y
Perfluoropentane sulfonic acid (PFPeS)	6.015	+0.02	1150	0.0150	0.30	U	Y
Perfluorohexane sulfonic acid (PFHxS)	7.085	+0.01	21295	0.2849	5.8		Y
Perfluoroheptane sulfonic acid (PFHpS)	8.020	+0.03	662	0.0149	0.30	U	Y
Perfluorooctane sulfonic acid (PFOS)	8.824	+0.01	17758	0.3010	6.1		Y
Perfluorononane sulfonic acid (PFNS)	0		0	0	0	U	Y
Perfluorodecane sulfonic acid (PFDS)	10.300	+0.01	350	0.0031	0.063	U	Y
Perfluorododecane sulfonic acid (PFDoS)	0		0	0	0	U	Y
Perfluorobutanoic acid (PFBA)	1.435	+0.04	46227	0.5877	12		Y
Perfluoropentanoic acid (PFPeA)	3.501	+0.03	63725	0.5535	11		Y
Perfluorohexanoic acid (PFHxA)	4.980	+0.02	58691	0.3869	7.8		Y
Perfluoroheptanoic acid (PFHpA)	6.157	+0.01	55636	0.2571	5.2		Y
Perfluorooctanoic acid (PFOA)	7.114	+0.01	642519	5.5719	110		Y
Perfluorononanoic acid (PFNA)	7.963	+0.01	24887	0.1896	3.8	J	Y
Perfluorodecanoic acid (PFDA)	8.729	+0.01	38687	0.2307	4.7	J	Y
Perfluoroundecanoic acid (PFUnDA)	9.452	+0.01	20921	0.1642	3.3	J	Y
Perfluorododecanoic acid (PFDOA)	10.141	+0.01	28607	0.3937	8.0		Y
Perfluorotridecanoic acid (PFTrDA)	10.798	+0.01	2775	0.1153	2.3	J	Y
Perfluorotetradecanoic acid (PFTDA)	11.430	+0.01	2184	0.1233	2.5	J	Y
Perfluorooctane sulfonamide (PFOSAm)	11.171	+0.00	493	0.0098	0.20	U	Y
N-Methylperfluorooctane sulfonamide (MeFOSA)	0		0	0	0	U	Y
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	0		0	0	0	U	Y
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	0		0	0	0	U	Y
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	0		0	0	0	U	Y
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	0		0	0	0	U	Y

U: Undetected at or above MDL

J: Analyte detected above MDL, but below MRL

B: Hit above MRL also found in Method Blank

E: Analyte concentration above high point of ICAL

N: Presumptive evidence of compound

D: Result from dilution

m: Manual integration performed

d: Compound manually deleted

NR: Analyte not reported from this analysis

*: Result fails acceptance criteria

#: Acceptance criteria not applicable

?: Insufficient information to determine acceptance

e: Result >= MRL, but MRL less than low point of ICAL

c: check for co-elution

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			1st	01/25/24
Data File:	J:\LCMS08\Data\240122_1633_B1\240122_034	Instrument:	K-LCMS08	01/25/24
Acqu Date:	1/22/24 22:32	Vial:	26	
Run Type:	N/A	Dilution:	1	
Lab ID:	K2314281-001	Raw Units:	ng/mL	

Target Compounds			Final Conc.Units: ng/L				
Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	0		0	0	0	U	Y
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	0		0	0	0	U	Y
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	6.794	+0.01	577	0.0087	0.18	U	Y
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	8.430	+0.02	198	0.0042	0.085	U	Y
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	0		0	0	0	U	Y
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	0		0	0	0	U	Y
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	7.961	+0.02	662	0.0430	0.87	U	Y
Perfluoro(2-ethoxyethane) sulfonic acid (PFEESA)	0		0	0	0	U	Y
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	9.391	+0.01	132	0.0003	0.0061	U	Y
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	0		0	0	0	U	Y
Perfluoro-3-methoxypropanoic acid (PFMPA)	2.442	+0.04	966	0.0168	0.34	U	Y
Perfluoro-4-methoxybutanoic acid (PFMBA)	4.028	+0.03	200	0.0025	0.051	U	Y
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	5.458	+0.02	203	0.0036	0.073	U	Y
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	4.829	+0.02	810	0.0082	0.17	U	Y
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	6.524	+0.01	116	0.0003	0.0061	U	Y

Prep Amount:	247.3000 mL	Dilution:	1
Prep Final Amount:	5.00 mL	Basis Factor:	100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution



240122_034

Sample ID: K2314281-001
Date Acquired: 1/22/2024 10:32:56 PM
Acquired by: System Administrator
Data File: 240122_034
Vial: 14 | Inj. Volume: 10.0000uL | Tray: 2

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	915541	----	----	----	----	----	----	
13C4-PFBA_IS	216.80>171.90	----	915541	----	----	----	----	----	----	
13C3-PFBA_IS	216.00>172.00	----	469239	----	----	----	----	----	----	
PFBA	212.80>169.05	----	46227	----	----	----	----	----	----	
PFMPA	229.00>84.90	----	966	----	----	----	----	----	----	
3_3 FTCA	241.00>177.10	241.00>117.00	----	0	0.00	141.17	0	0.00	135.52	
13C5-PFPeA	268.30>223.00	----	88890	----	----	----	----	----	----	
13C5-PFPeA_IS	268.30>223.00	----	88890	----	----	----	----	----	----	
PFPeA	263.00>219.00	----	63725	----	----	----	----	----	----	
PFMBA	279.00>84.95	----	200	----	----	----	----	----	----	
13C2-4_2 FTS	329.10>80.90	----	167956	----	----	----	----	----	----	
13C2-4_2 FTS_IS	329.10>80.90	----	167956	----	----	----	----	----	----	
4_2 FTS	327.10>307.00	327.10>80.90	----	0	0.00	29.06	0	0.00	35.34	
13C3-PFBS_IS	302.10>79.90	----	198399	----	----	----	----	----	----	
PFBS	298.70>79.90	298.70>98.80	5910	2413	40.84	46.72	2413	40.84	49.78	
13C3-PFBS	302.10>79.90	----	198399	----	----	----	----	----	----	
NFDHA	295.00>201.00	295.00>84.90	810	394	48.61	40.25	394	48.61	37.18	
13C5-PFHxA	318.00>273.00	----	446029	----	----	----	----	----	----	
13C5-PFHxA_IS	318.00>273.00	----	446029	----	----	----	----	----	----	
13C2-PFHxA_IS	315.10>270.00	----	526961	----	----	----	----	----	----	
PFHxA	313.00>269.00	----	58691	----	----	----	----	----	----	
PFEESA	314.80>135.00	314.80>82.90	----	0	0.00	6.11	0	0.00	5.72	
13C3-HFPO-DA	286.90>168.90	----	506667	----	----	----	----	----	----	
13C3-HFPO-DA_IS	286.90>168.90	----	506667	----	----	----	----	----	----	
HFPO-DA	284.90>168.90	284.90>184.90	203	1840	907.64	65.61	1840	907.64	60.94	IRr
5_3 FTCA	341.00>237.05	341.00>217.00	----	0	0.00	158.86	0	0.00	155.83	
PFPeS	349.10>79.90	349.10>98.80	1150	908	79.01	55.80	893	77.69	56.73	
13C4-PFHpA	367.10>322.00	----	459693	----	----	----	----	----	----	
13C4-PFHpA_IS	367.10>322.00	----	459693	----	----	----	----	----	----	
PFHpA	363.10>319.00	363.10>169.00	55636	13164	23.66	21.50	13164	23.66	21.92	
DONA	376.90>250.90	376.90>84.80	116	30	25.98	29.66	30	25.98	30.77	
13C2-6_2 FTS_IS	429.10>80.90	----	145142	----	----	----	----	----	----	
13C2-6_2 FTS	429.10>80.90	----	145142	----	----	----	----	----	----	
6_2 FTS	427.10>407.00	427.10>80.90	577	552	95.65	41.15	552	95.65	40.98	IRr
13C4-PFOA_IS	417.10>172.00	----	34533	----	----	----	----	----	----	
13C8-PFOA_IS	421.10>376.00	----	443324	----	----	----	----	----	----	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240122_034 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	443324	----	----	----	----	----	----	----
PFOA	413.00>369.00	413.00>169.00	642519	212303	33.04	31.89	212303	33.04	32.23	
13C3-PFHxS	402.10>79.90	----	145905	----	----	----	----	----	----	----
13C3-PFHxS_IS	402.10>79.90	----	145905	----	----	----	----	----	----	----
PFHxS	398.70>79.90	398.70>98.90	21295	12457	58.50	56.62	12457	58.50	60.26	
18O2-PFHxS_IS	403.00>83.90	----	164711	----	----	----	----	----	----	----
13C9-PFNA_IS	472.10>427.00	----	198321	----	----	----	----	----	----	----
13C9-PFNA	472.10>427.00	----	198321	----	----	----	----	----	----	----
13C5-PFNA_IS	468.00>423.00	----	206808	----	----	----	----	----	----	----
PFNA	463.00>419.00	463.00>219.00	24887	6153	24.72	23.17	6153	24.72	23.63	
PFHpS	449.00>79.90	449.00>98.80	662	82	12.37	56.96	82	12.37	59.06	IRr
7_3 FTCA	441.00>317.00	441.00>336.90	662	378	57.07	117.47	378	57.07	125.53	IRr
13C2-8_2-FTS	529.10>80.90	----	110915	----	----	----	----	----	----	----
13C2-8_2-FTS_IS	529.10>80.90	----	110915	----	----	----	----	----	----	----
8_2 FTS	527.10>506.95	527.10>80.80	198	71	36.03	49.59	71	36.03	44.81	
13C6-PFDA_IS	519.10>474.10	----	158452	----	----	----	----	----	----	----
13C6-PFDA	519.10>474.10	----	158452	----	----	----	----	----	----	----
13C2-PFDA_IS	515.10>470.10	----	158733	----	----	----	----	----	----	----
PFDA	512.90>469.00	512.90>219.00	38687	8988	23.23	19.00	8988	23.23	19.15	
D3-NMeFOSAA_IS	573.20>419.00	----	165441	----	----	----	----	----	----	----
D3-NMeFOSAA	573.20>419.00	----	165441	----	----	----	----	----	----	----
13C8-PFOS_IS	507.10>98.90	----	56727	----	----	----	----	----	----	----
13C8-PFOS	507.10>98.90	----	56727	----	----	----	----	----	----	----
13C4-PFOS_IS	502.80>79.90	----	187289	----	----	----	----	----	----	----
PFOS	498.90>79.90	498.90>98.80	17758	9719	54.73	52.47	9719	54.73	53.10	
NMeFOSAA	570.10>419.00	570.10>483.00	----	0	0.00	55.15	0	0.00	60.69	
D5-NEtFOSAA_IS	589.20>419.00	----	146529	----	----	----	----	----	----	----
D5-NEtFOSAA	589.20>419.00	----	146529	----	----	----	----	----	----	----
NEtFOSAA	584.20>419.10	584.20>526.00	----	0	0.00	81.95	0	0.00	73.27	
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	132	1499	1137.34	32.76	1497	1135.88	32.59	IRr
PFUnDA	563.10>519.00	563.10>269.10	20921	2922	13.97	13.12	2922	13.97	14.36	
13C7-PFUnDA_IS	570.00>525.10	----	148980	----	----	----	----	----	----	----
13C7-PFUnDA	570.00>525.10	----	148980	----	----	----	----	----	----	----
PFNS	548.80>79.90	548.80>98.80	----	0	0.00	65.22	0	0.00	65.31	
10_2 FTS	626.80>607.05	626.80>81.00	----	0	0.00	37.13	0	0.00	38.76	
13C2-PFDOA_IS	615.10>570.00	----	119232	----	----	----	----	----	----	----
13C2-PFDOA	615.10>570.00	----	119232	----	----	----	----	----	----	----
PFDOA	613.10>569.00	613.10>319.00	28607	2741	9.58	11.29	2741	9.58	11.19	
PFDS	599.00>79.90	599.00>98.80	350	158	45.14	60.18	158	45.14	65.65	
PFTrDA	663.00>619.00	663.00>168.90	2775	544	19.61	17.64	544	19.61	19.81	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240122_034 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	----	0	0.00	36.44	0	0.00	35.86	
PFOSAm	498.10>77.90	----	493	----	----	----	----	----	----	
13C8-PFOSAm	506.10>77.80	----	152591	----	----	----	----	----	----	
13C8-PFOSAm_IS	506.10>77.80	----	152591	----	----	----	----	----	----	
PFTDA	713.10>669.00	713.10>168.90	2184	591	27.06	22.96	591	27.06	25.01	
13C2-PFTDA	715.20>670.00	----	13452	----	----	----	----	----	----	
13C2-PFTDA_IS	715.20>670.00	----	13452	----	----	----	----	----	----	
PFDoS	699.10>79.90	699.10>98.80	----	0	0.00	67.40	0	0.00	73.46	
D7-MeFOSE_IS	623.20>58.90	----	137067	----	----	----	----	----	----	
D7-MeFOSE	623.20>58.90	----	137067	----	----	----	----	----	----	
MeFOSE	616.10>59.00	----	----	----	----	----	----	----	----	
13C2-PFHxDA_IS	815.00>770.05	----	16890	----	----	----	----	----	----	
13C2-PFHxDA	815.00>770.05	----	16890	----	----	----	----	----	----	
PFHxDA	813.00>768.95	813.00>218.95	2893	485	16.76	13.90	485	16.76	15.85	
D3-MeFOSA	515.00>219.00	----	11450	----	----	----	----	----	----	
D3-MeFOSA_IS	515.00>219.00	----	11450	----	----	----	----	----	----	
MeFOSA	511.90>219.00	511.90>169.00	----	0	0.00	140.79	0	0.00	150.13	
D9-EtFOSE_IS	639.20>58.90	----	124569	----	----	----	----	----	----	
D9-EtFOSE	639.20>58.90	----	124569	----	----	----	----	----	----	
EtFOSE	630.00>59.00	----	----	----	----	----	----	----	----	
D5-EtFOSAm	531.10>219.00	----	13293	----	----	----	----	----	----	
D5-EtFOSAm_IS	531.10>219.00	----	13293	----	----	----	----	----	----	
EtFOSAm	526.00>219.00	526.00>169.00	----	0	0.00	163.90	0	0.00	152.08	
PFODA	913.00>868.65	913.00>169.00	1162	412	35.41	27.03	412	35.41	26.29	

Flag ID key: IRr: Ion Ratio (Relative)



240122_034

Sample ID: K2314281-001
Date Acquired: 1/22/2024 10:32:56 PM
Acquired by: System Administrator
Data File: 240122_034
Vial: 14 | Inj. Volume: 10.0000uL | Tray: 2

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.434	0.043	-0.001	915541	469239	13C3-PFBA_IS	8.7291	ng/mL	
13C4-PFBA_IS	Auto	1.434	0.043	----	915541	915541	----	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.435	0.044	----	469239	469239	----	5.0000	ng/mL	
PFBA	Auto	1.435	0.040	0.001	46227	915541	13C4-PFBA_IS	0.5877	ng/mL	
PFMPA	M	2.442	0.036	-1.056	966	88890	13C5-PFPeA_IS	0.0168	ng/mL	
3_3 FTCA	ND(W/B)	----	----	----	----	88890	13C5-PFPeA_IS	----	ng/mL	
13C5-PFPeA	Auto	3.498	0.033	-1.481	88890	526961	13C2-PFHxA_IS	3.7370	ng/mL	
13C5-PFPeA_IS	Auto	3.498	0.033	----	88890	88890	----	5.0000	ng/mL	
PFPeA	Auto	3.501	0.034	0.003	63725	88890	13C5-PFPeA_IS	0.5535	ng/mL	
PFMBA	M	4.028	0.037	0.530	200	88890	13C5-PFPeA_IS	0.0025	ng/mL	
13C2-4_2 FTS	Auto	4.661	0.025	-2.426	167956	164711	18O2-PFHxS_IS	7.4099	ng/mL	
13C2-4_2 FTS_IS	Auto	4.661	0.025	----	167956	167956	----	5.0000	ng/mL	
4_2 FTS	ND(W/B)	----	----	----	----	167956	13C2-4_2 FTS_IS	----	ng/mL	
13C3-PFBS_IS	Auto	4.644	0.032	----	198399	198399	----	2.5000	ng/mL	
PFBS	M	4.645	0.032	0.001	5910	198399	13C3-PFBS_IS	0.0582	ng/mL	
13C3-PFBS	Auto	4.644	0.032	-2.443	198399	164711	18O2-PFHxS_IS	2.1225	ng/mL	
NFDHA	M	4.829	0.019	-0.149	810	446029	13C5-PFHxA_IS	0.0082	ng/mL	
13C5-PFHxA	Auto	4.978	0.026	-0.001	446029	526961	13C2-PFHxA_IS	2.0083	ng/mL	
13C5-PFHxA_IS	Auto	4.978	0.026	----	446029	446029	----	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	4.979	0.026	----	526961	526961	----	2.5000	ng/mL	
PFHxA	Auto	4.980	0.026	0.002	58691	446029	13C5-PFHxA_IS	0.3869	ng/mL	
PFEESA	ND(W/B)	----	----	----	----	446029	13C5-PFHxA_IS	----	ng/mL	
13C3-HFPO-DA	Auto	5.453	0.023	0.474	506667	526961	13C2-PFHxA_IS	9.8220	ng/mL	
13C3-HFPO-DA_IS	Auto	5.453	0.023	----	506667	506667	----	10.0000	ng/mL	
HFPO-DA	M	5.458	0.027	0.005	203	506667	13C3-HFPO-DA_IS	0.0036	ng/mL	IRr
5_3 FTCA	ND(W/B)	----	----	----	----	446029	13C5-PFHxA_IS	----	ng/mL	
PFPeS	M	6.015	0.021	-1.072	1150	145905	13C3-PFHxS_IS	0.0150	ng/mL	
13C4-PFHpA	Auto	6.156	0.019	1.177	459693	526961	13C2-PFHxA_IS	2.2865	ng/mL	
13C4-PFHpA_IS	Auto	6.156	0.019	----	459693	459693	----	2.5000	ng/mL	
PFHpA	M	6.157	0.018	0.001	55636	459693	13C4-PFHpA_IS	0.2571	ng/mL	
DONA	M	6.524	0.020	1.071	116	506667	13C3-HFPO-DA_IS	0.0003	ng/mL	
13C2-6_2 FTS_IS	Auto	6.797	0.016	----	145142	145142	----	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.797	0.016	-0.290	145142	164711	18O2-PFHxS_IS	6.7703	ng/mL	
6_2 FTS	M	6.794	0.013	-0.003	577	145142	13C2-6_2 FTS_IS	0.0087	ng/mL	IRr
13C4-PFOA_IS	Auto	7.112	0.015	----	34533	34533	----	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.112	0.016	----	443324	443324	----	2.5000	ng/mL	
13C8-PFOA	Auto	7.112	0.016	0.000	443324	34533	13C4-PFOA_IS	2.2969	ng/mL	
PFOA	M	7.114	0.016	0.002	642519	443324	13C8-PFOA_IS	5.5719	ng/mL	
13C3-PFHxS	Auto	7.087	0.019	0.000	145905	164711	18O2-PFHxS_IS	2.0638	ng/mL	
13C3-PFHxS_IS	Auto	7.087	0.019	----	145905	145905	----	2.5000	ng/mL	
PFHxS	M	7.085	0.016	-0.002	21295	145905	13C3-PFHxS_IS	0.2849	ng/mL	
18O2-PFHxS_IS	Auto	7.087	0.018	----	164711	164711	----	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.963	0.016	----	198321	198321	----	1.2500	ng/mL	
13C9-PFNA	Auto	7.963	0.016	0.000	198321	206808	13C5-PFNA_IS	1.2248	ng/mL	
13C5-PFNA_IS	Auto	7.963	0.015	----	206808	206808	----	1.2500	ng/mL	
PFNA	Auto	7.963	0.015	0.000	24887	198321	13C9-PFNA_IS	0.1896	ng/mL	
PFHpS	M	8.020	0.028	-0.804	662	56727	13C8-PFOS_IS	0.0149	ng/mL	IRr
7_3 FTCA	M	7.961	0.025	2.983	662	446029	13C5-PFHxA_IS	0.0430	ng/mL	IRr
13C2-8_2-FTS	Auto	8.417	0.014	1.330	110915	164711	18O2-PFHxS_IS	6.2984	ng/mL	
13C2-8_2-FTS_IS	Auto	8.417	0.014	----	110915	110915	----	5.0000	ng/mL	
8_2 FTS	M	8.430	0.026	0.013	198	110915	13C2-8_2-FTS_IS	0.0042	ng/mL	
13C6-PFDA_IS	Auto	8.728	0.015	----	158452	158452	----	1.2500	ng/mL	
13C6-PFDA	Auto	8.728	0.015	-0.001	158452	158733	13C2-PFDA_IS	1.2408	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_034 (continued)

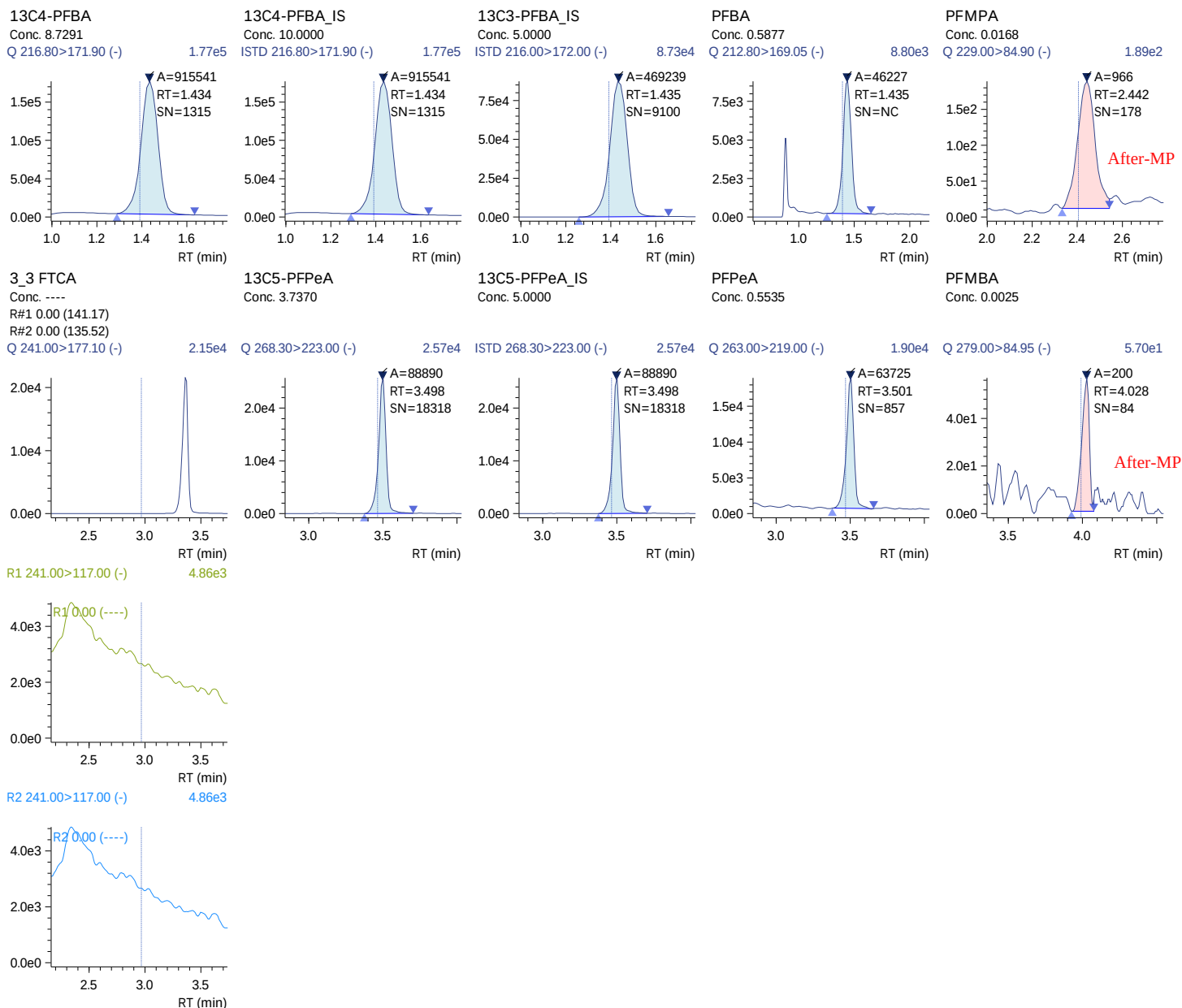
(Table continued from previous page)

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C2-PFDA_IS	Auto	8.729	0.016	----	158733	158733	----	1.2500	ng/mL	
PFDA	Auto	8.729	0.014	0.001	38687	158452	13C6-PFDA_IS	0.2307	ng/mL	
D3-NMeFOSAA_IS	Auto	8.864	0.013	----	165441	165441	----	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.864	0.013	0.040	165441	187289	13C4-PFOS_IS	5.0896	ng/mL	
13C8-PFOS_IS	Auto	8.824	0.016	----	56727	56727	----	2.5000	ng/mL	
13C8-PFOS	Auto	8.824	0.016	0.000	56727	187289	13C4-PFOS_IS	1.8161	ng/mL	
13C4-PFOS_IS	Auto	8.824	0.015	----	187289	187289	----	2.5000	ng/mL	
PFOS	M	8.824	0.015	0.000	17758	56727	13C8-PFOS_IS	0.3010	ng/mL	
NMeFOSAA	ND(W/B)	----	----	----	----	165441	D3-NMeFOSAA_IS	----	ng/mL	
D5-NetFOSAA_IS	Auto	9.196	0.013	----	146529	146529	----	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.196	0.013	0.372	146529	187289	13C4-PFOS_IS	3.7679	ng/mL	
NetFOSAA	ND(W/B)	----	----	----	----	146529	D5-NetFOSAA_IS	----	ng/mL	
9-CI-PF3ONS	M	9.391	0.016	3.938	132	506667	13C3-HFPO-DA_IS	0.0003	ng/mL	IRr
PFUnDA	M	9.452	0.012	0.000	20921	148980	13C7-PFUnDA_IS	0.1642	ng/mL	
13C7-PFUnDA_IS	Auto	9.452	0.014	----	148980	148980	----	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.452	0.014	0.723	148980	158733	13C2-PFDA_IS	0.9780	ng/mL	
PFNS	ND(W/B)	----	----	----	----	56727	13C8-PFOS_IS	----	ng/mL	
10_2_FTS	ND(W/B)	----	----	----	----	110915	13C2-8_2-FTS_IS	----	ng/mL	
13C2-PFDOA_IS	Auto	10.140	0.012	----	119232	119232	----	1.2500	ng/mL	
13C2-PFDOA	Auto	10.140	0.012	1.411	119232	158733	13C2-PFDA_IS	0.6813	ng/mL	
PFDOA	Auto	10.141	0.012	0.001	28607	119232	13C2-PFDOA_IS	0.3937	ng/mL	
PFDS	M	10.300	0.012	1.476	350	56727	13C8-PFOS_IS	0.0031	ng/mL	
PFTDA	Auto	10.798	0.010	-0.633	2775	13452	13C2-PFTDA_IS	0.1153	ng/mL	
11-CI-PF3OUdS	ND(W/B)	----	----	----	----	506667	13C3-HFPO-DA_IS	----	ng/mL	
PFOSAm	M	11.171	0.009	0.003	493	152591	13C8-PFOSAm_IS	0.0098	ng/mL	
13C8-PFOSAm	Auto	11.168	0.004	2.344	152591	187289	13C4-PFOS_IS	1.9192	ng/mL	
13C8-PFOSAm_IS	Auto	11.168	0.004	----	152591	152591	----	2.5000	ng/mL	
PFTDA	M	11.430	0.009	-0.001	2184	13452	13C2-PFTDA_IS	0.1233	ng/mL	
13C2-PFTDA	Auto	11.431	0.012	2.702	13452	158733	13C2-PFDA_IS	0.1780	ng/mL	
13C2-PFTDA_IS	Auto	11.431	0.012	----	13452	13452	----	1.2500	ng/mL	
PFDoS	ND(W/B)	----	----	----	----	56727	13C8-PFOS_IS	----	ng/mL	
D7-MeFOSE_IS	Auto	13.403	0.001	----	137067	137067	----	25.0000	ng/mL	
D7-MeFOSE	Auto	13.403	0.001	4.579	137067	187289	13C4-PFOS_IS	6.9924	ng/mL	
MeFOSE	ND(W/B)	----	----	----	----	137067	D7-MeFOSE_IS	----	ng/mL	
13C2-PFHXDA_IS	Auto	12.647	0.011	----	16890	16890	----	2.5000	ng/mL	
13C2-PFHXDA	Auto	12.647	0.011	3.918	16890	158733	13C2-PFDA_IS	0.1146	ng/mL	
PFHXDA	M	12.649	0.012	0.002	2893	16890	13C2-PFHXDA_IS	0.3898	ng/mL	
D3-MeFOSA	Auto	13.710	-0.001	4.886	11450	187289	13C4-PFOS_IS	0.7151	ng/mL	
D3-MeFOSA_IS	Auto	13.710	-0.001	----	11450	11450	----	2.5000	ng/mL	
MeFOSA	ND(W/B)	----	----	----	----	11450	D3-MeFOSA_IS	----	ng/mL	
D9-EtFOSE_IS	Auto	14.031	-0.001	----	124569	124569	----	25.0000	ng/mL	
D9-EtFOSE	Auto	14.031	-0.001	5.207	124569	187289	13C4-PFOS_IS	6.2568	ng/mL	
EtFOSE	ND(W/B)	----	----	----	----	124569	D9-EtFOSE_IS	----	ng/mL	
D5-EtFOSAm	Auto	14.386	-0.001	5.562	13293	187289	13C4-PFOS_IS	0.6236	ng/mL	
D5-EtFOSAm_IS	Auto	14.386	-0.001	----	13293	13293	----	2.5000	ng/mL	
EtFOSAm	ND(W/B)	----	----	----	----	13293	D5-EtFOSAm_IS	----	ng/mL	
PFODA	M	13.778	0.004	1.131	1162	16890	13C2-PFHXDA_IS	0.3043	ng/mL	

Flag ID key: IRr: Ion Ratio (Relative)



240122_034 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_034 (continued)

13C2-4_2 FTS
Conc. 7.4099

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. ----
R#1 0.00 (29.06)
R#2 0.00 (35.34)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 0.0582
R#1 40.84 (46.72)
R#2 40.84 (49.78)

Q 329.10>80.90 (-)

5.17e4

ISTD 329.10>80.90 (-)

5.17e4

Q 327.10>307.00 (-)

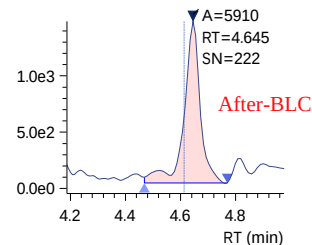
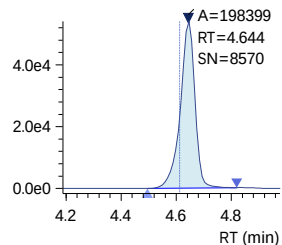
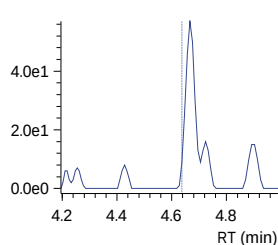
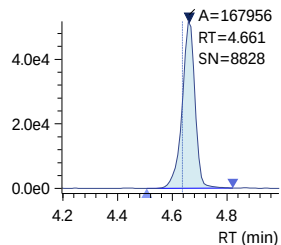
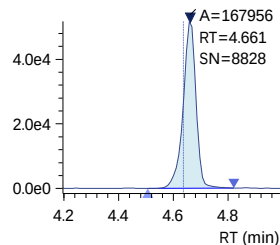
5.70e1

ISTD 302.10>79.90 (-)

5.41e4

Q 298.70>79.90 (-)

1.48e3

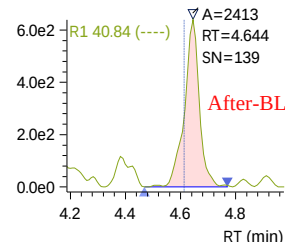
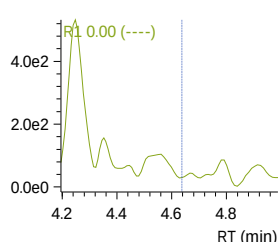


R1 327.10>80.90 (-)

5.32e2

R1 298.70>98.80 (-)

6.39e2

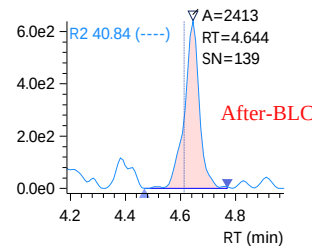
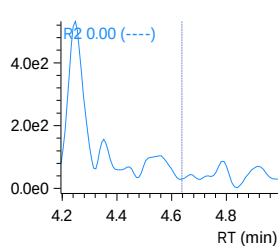


R2 327.10>80.90 (-)

5.32e2

R2 298.70>98.80 (-)

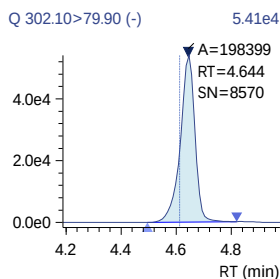
6.39e2



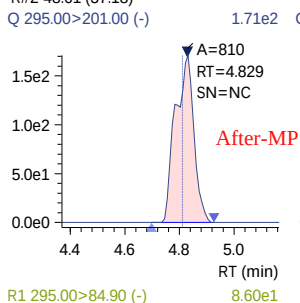


240122_034 (continued)

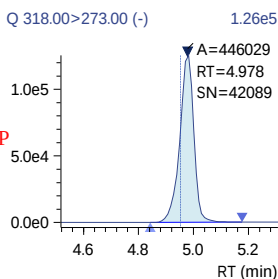
13C3-PFBS
Conc. 2.1225



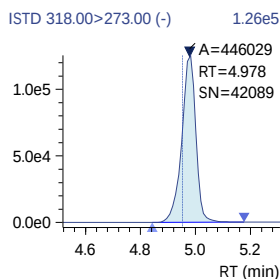
NFDHA
Conc. 0.0082
R#1 48.61 (40.25)
R#2 48.61 (37.18)



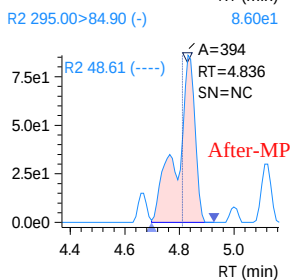
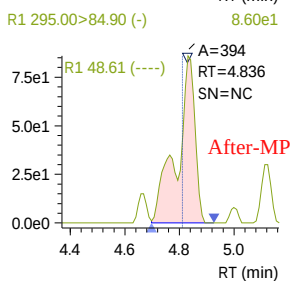
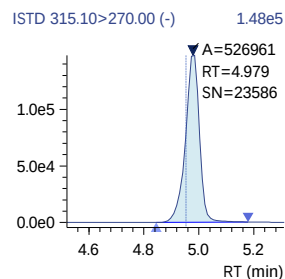
13C5-PFHxA
Conc. 2.0083



13C5-PFHxA_IS
Conc. 2.5000

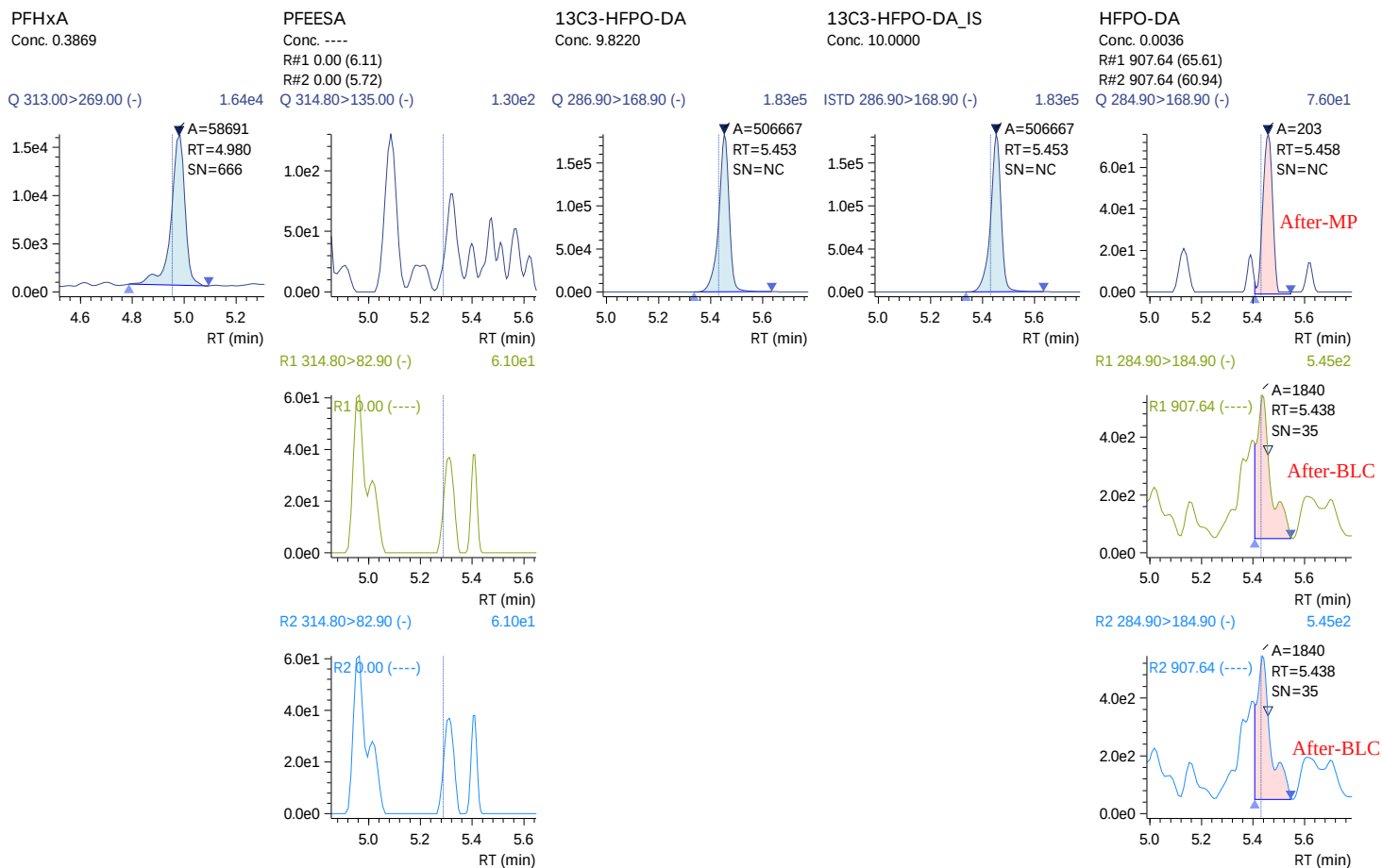


13C2-PFHxA_IS
Conc. 2.5000



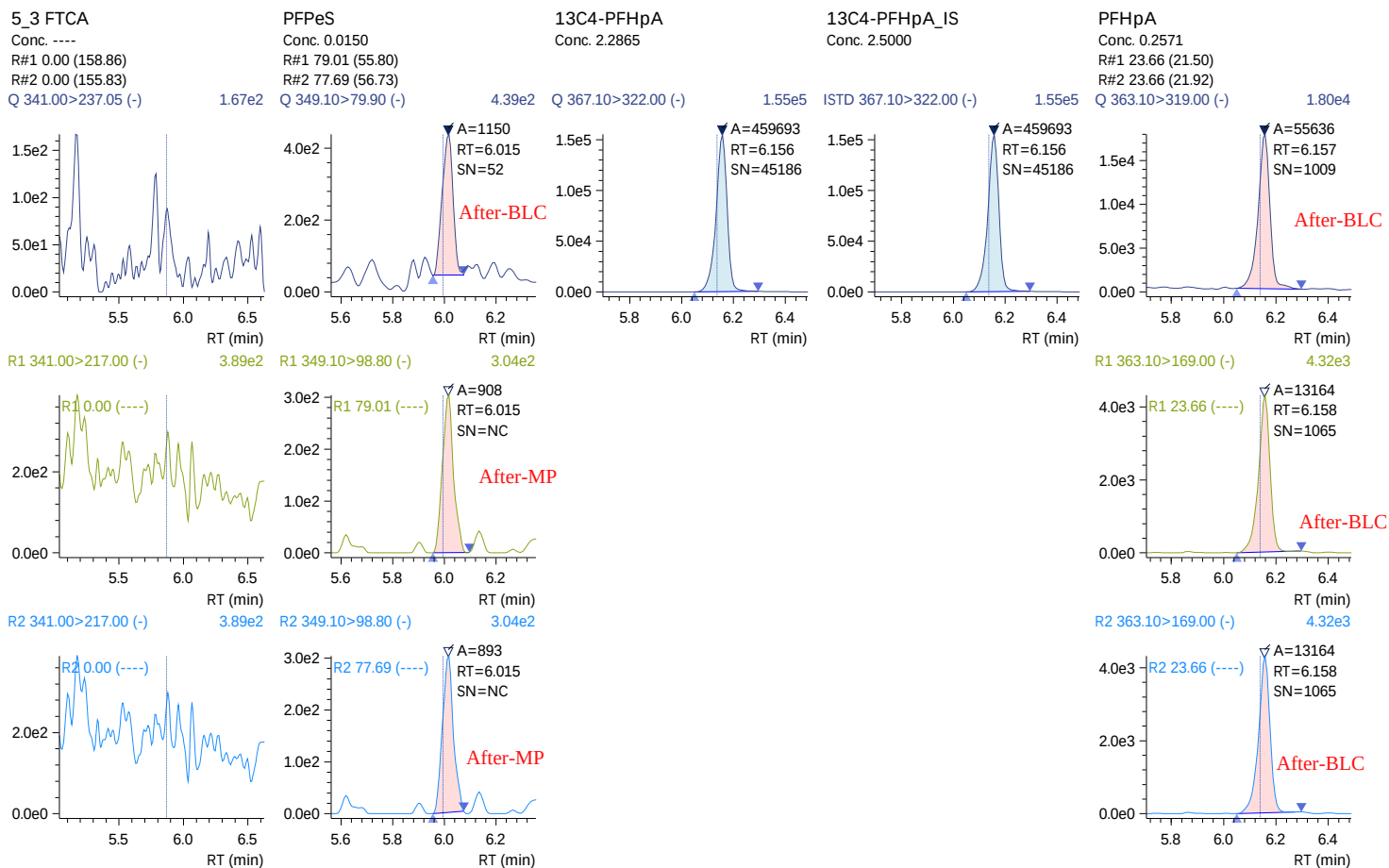


240122_034 (continued)





240122_034 (continued)

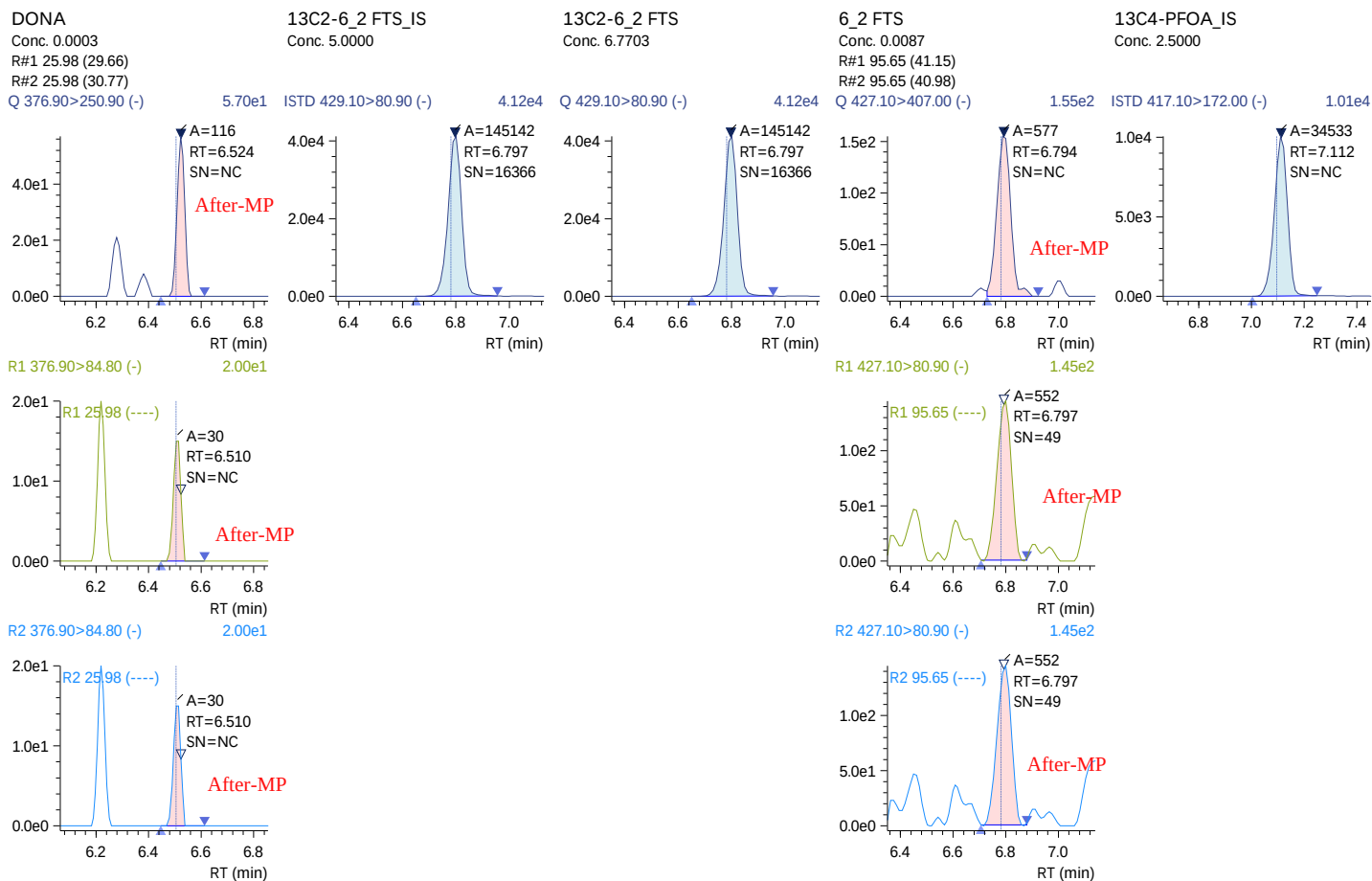


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_034 (continued)





240122_034 (continued)

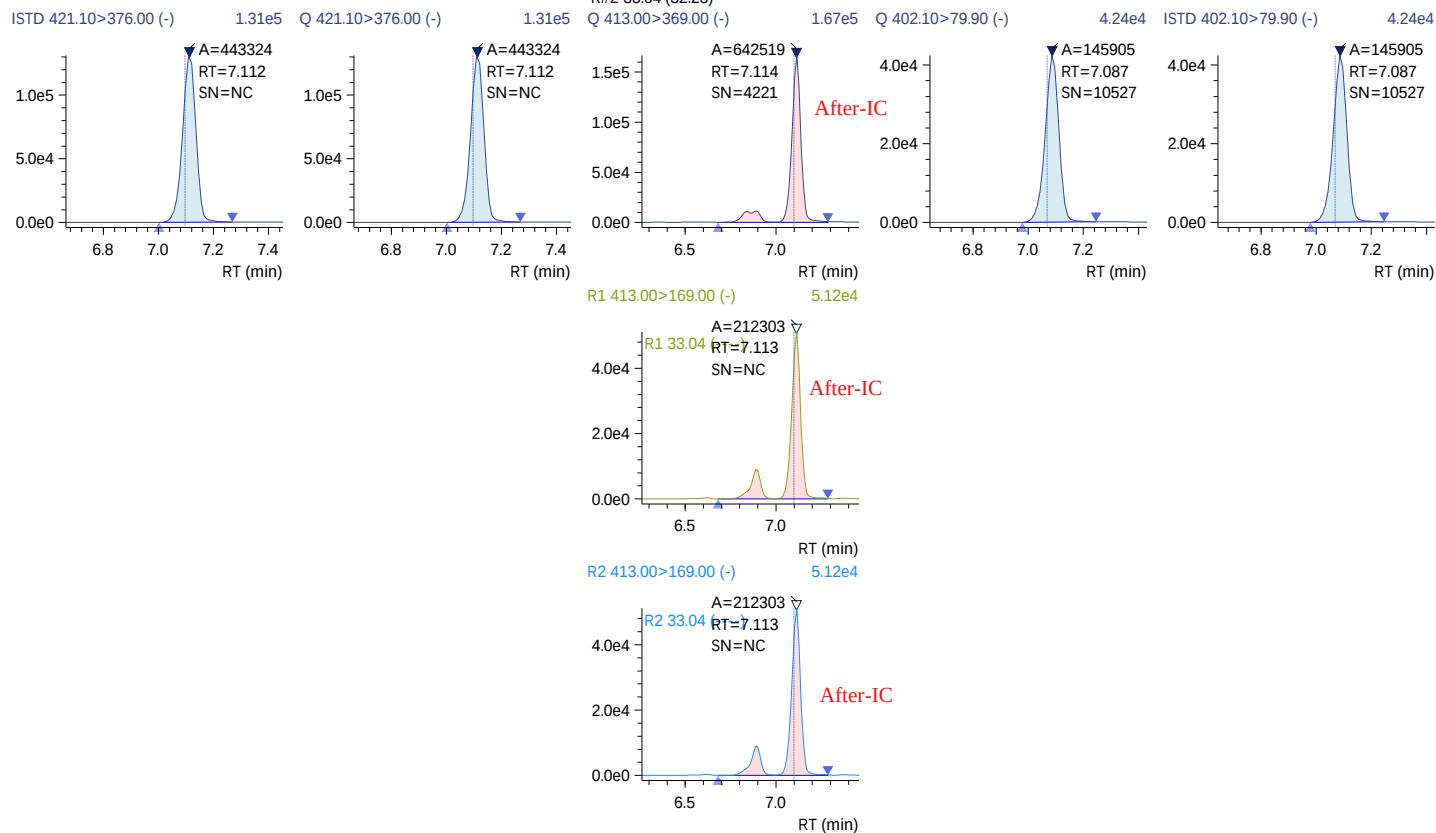
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.2969

PFOA
Conc. 5.5719
R#1 33.04 (31.89)
R#2 33.04 (32.23)

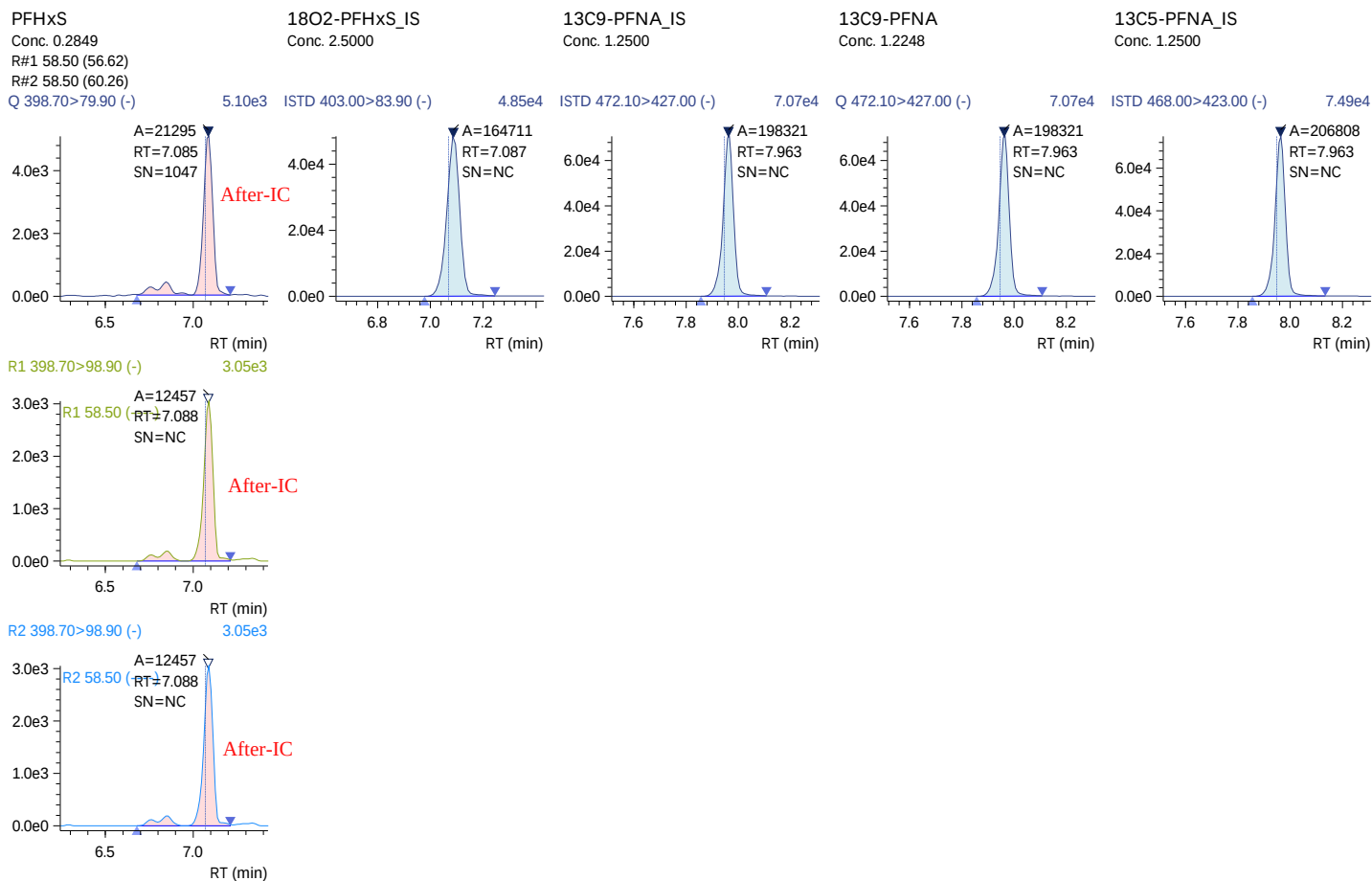
13C3-PFHxS
Conc. 2.0638

13C3-PFHxS_IS
Conc. 2.5000



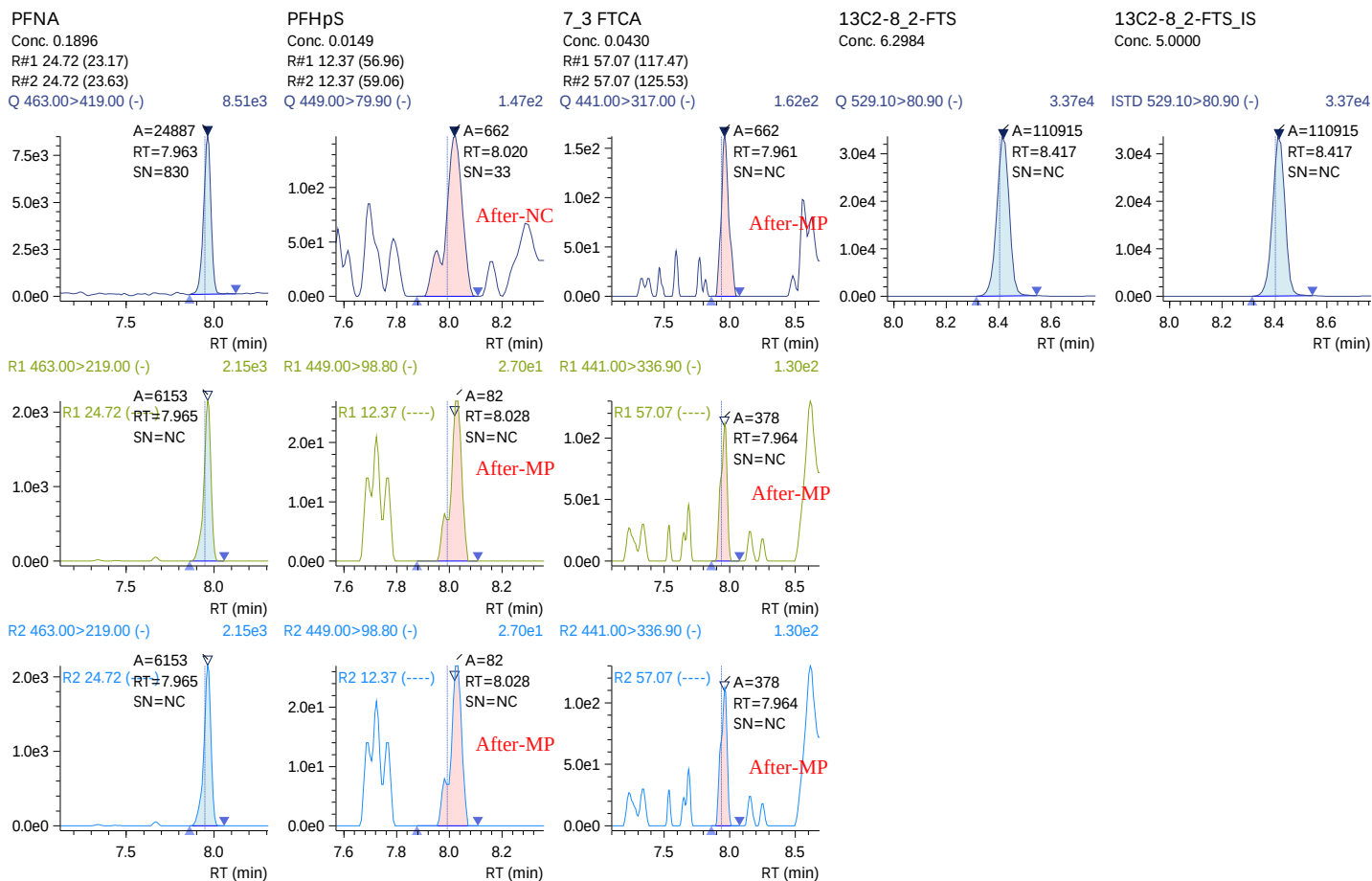


240122_034 (continued)





240122_034 (continued)

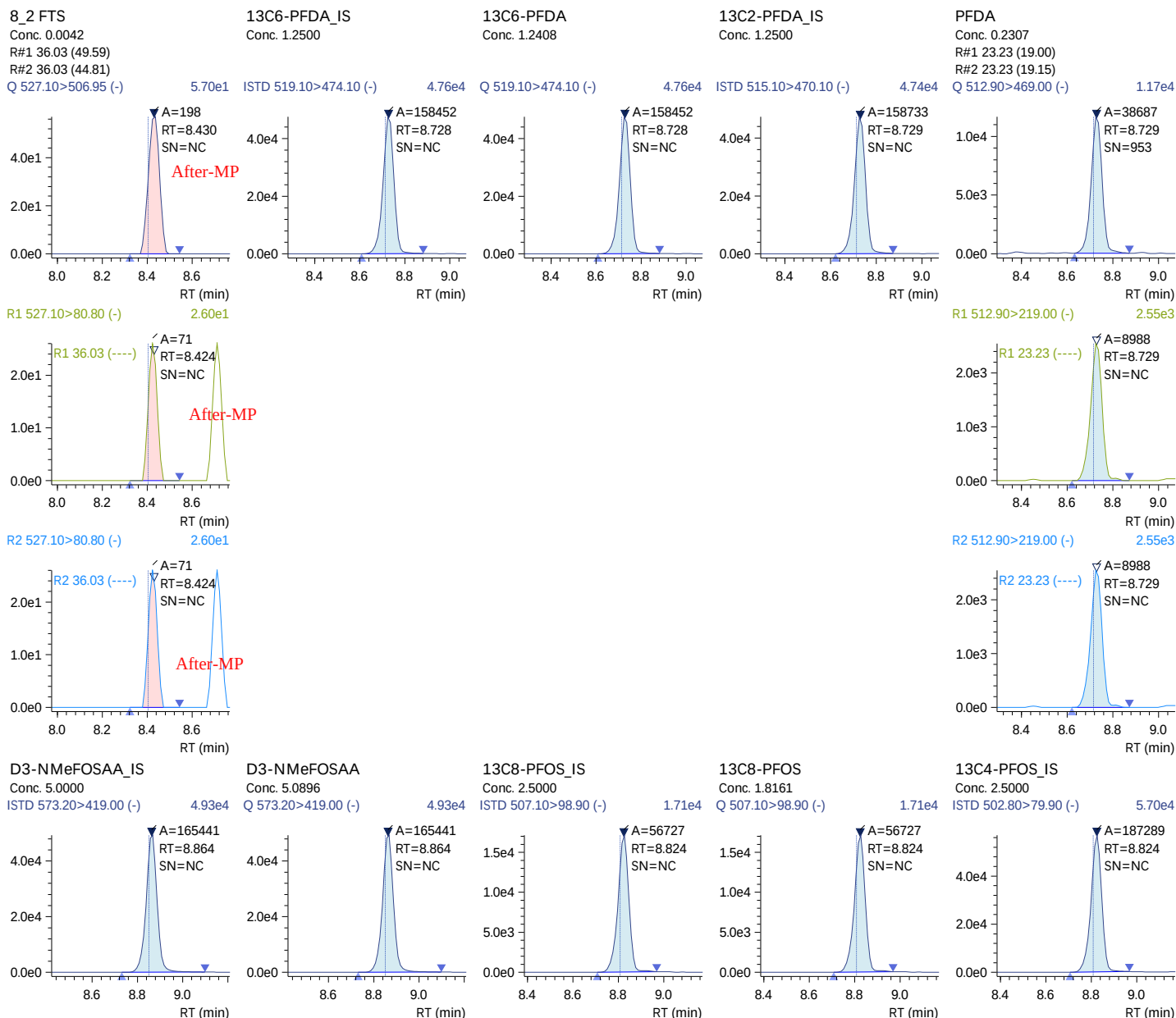


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_034 (continued)

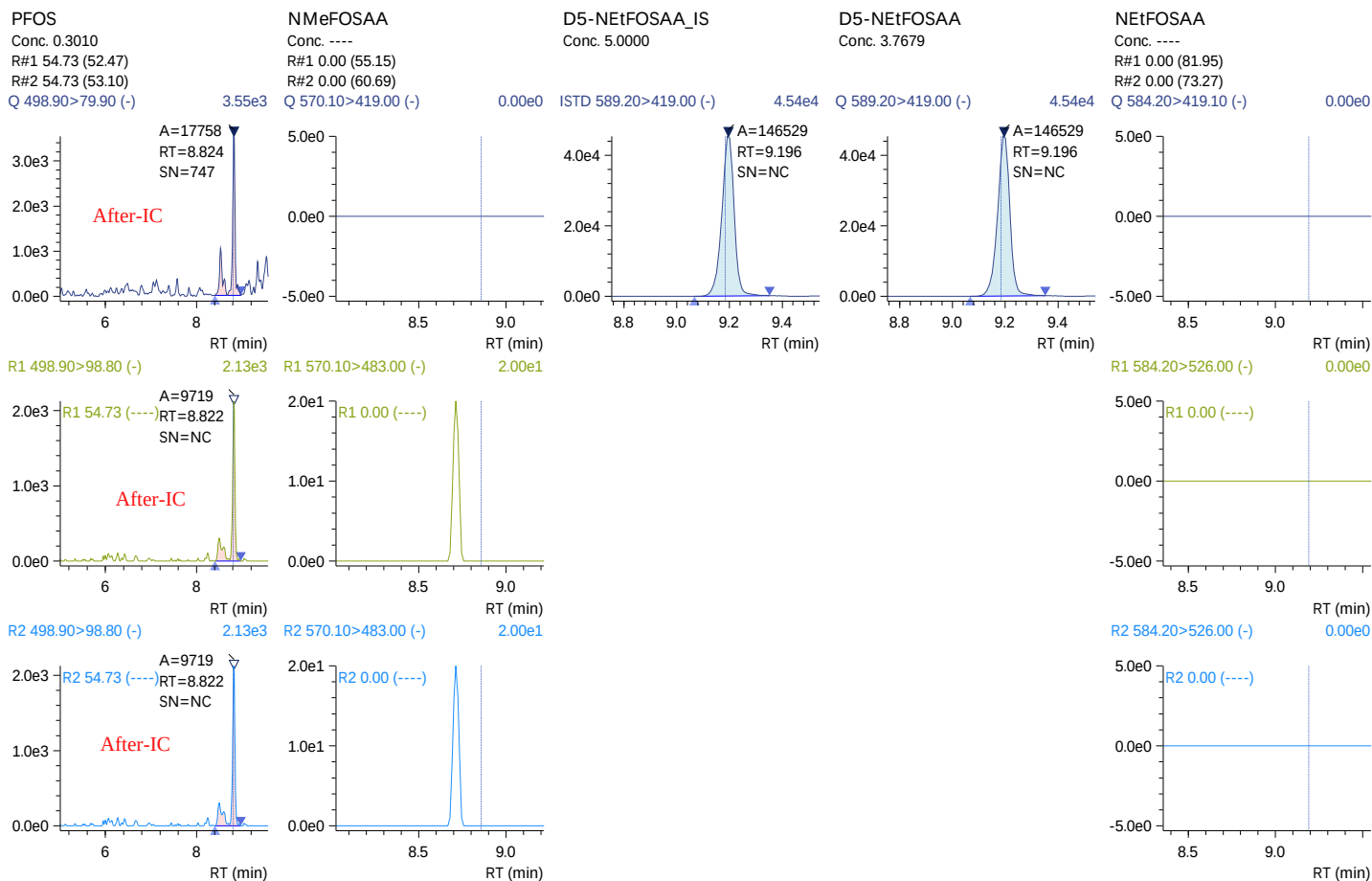


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_034 (continued)



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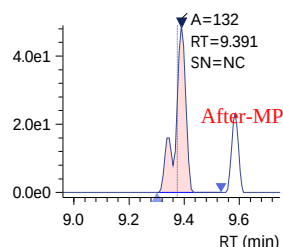
SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



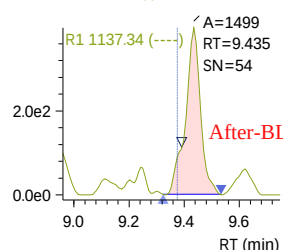
240122_034 (continued)

9-Cl-PF3ONS

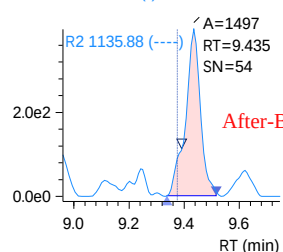
Conc. 0.0003
R#1 1137.34 (32.76)
R#2 1135.88 (32.59)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-) 3.98e2

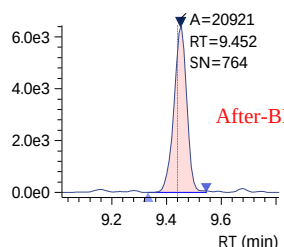


R2 532.80>353.00 (-) 3.98e2

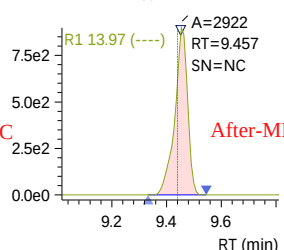


PFUnDA

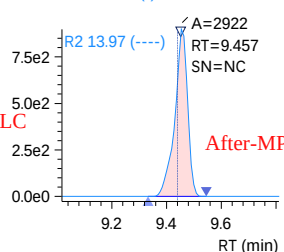
Conc. 0.1642
R#1 13.97 (13.12)
R#2 13.97 (14.36)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-) 8.98e2

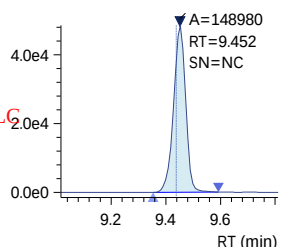


R2 563.10>269.10 (-) 8.98e2



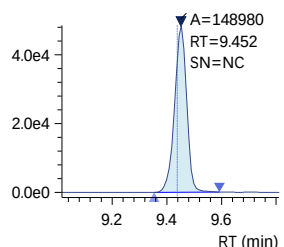
13C7-PFUnDA_IS

Conc. 1.2500
ISTD 570.00>525.10 (-)



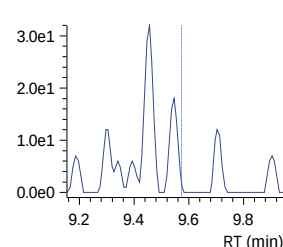
13C7-PFUnDA

Conc. 0.9780
Q 570.00>525.10 (-)

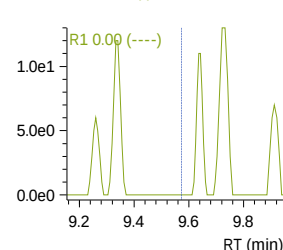


PFNS

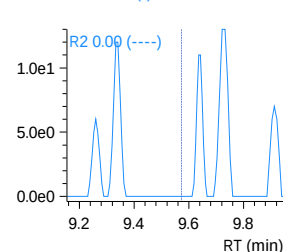
Conc. ----
R#1 0.00 (65.22)
R#2 0.00 (65.31)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-) 1.30e1

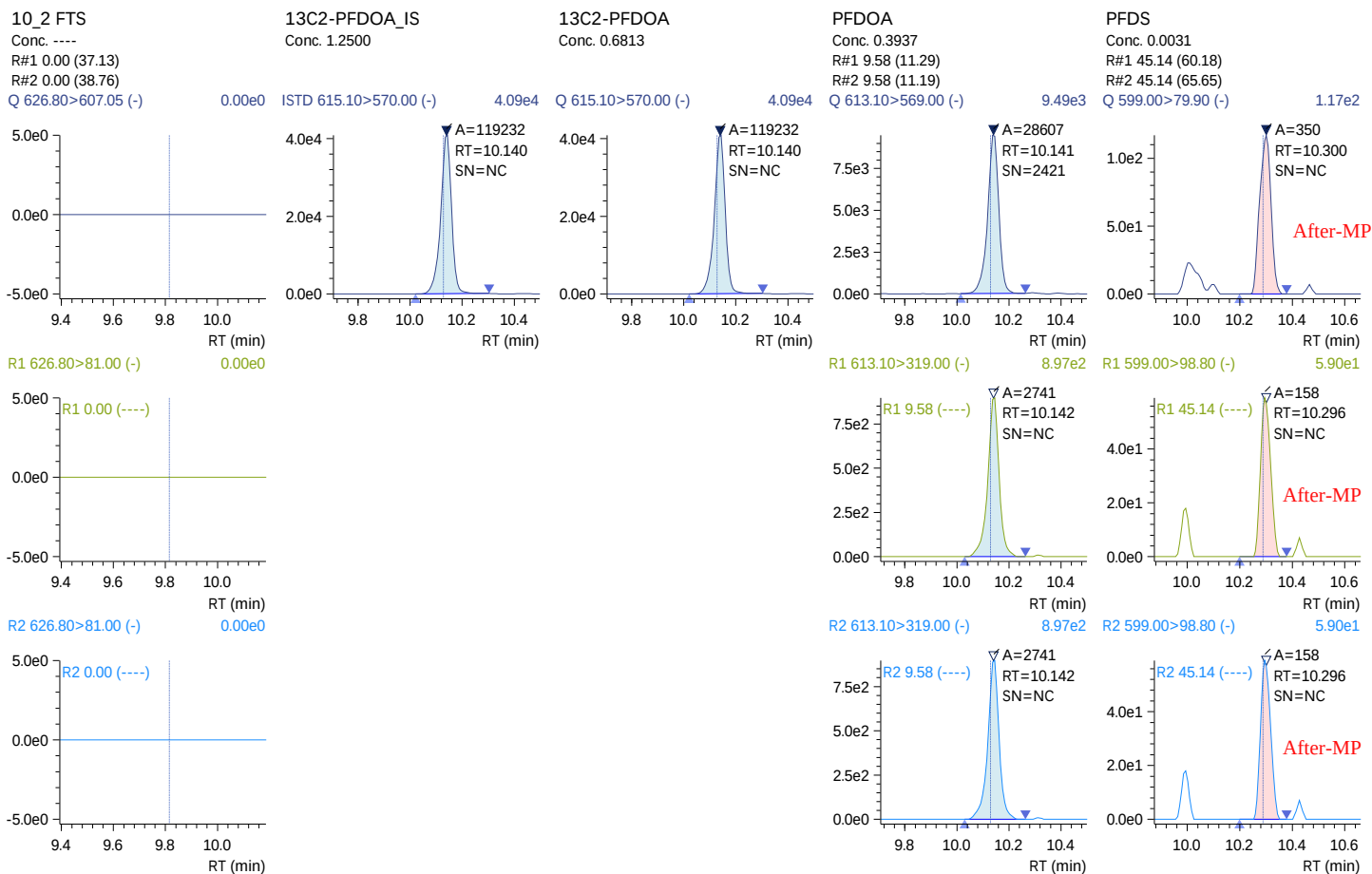


R2 548.80>98.80 (-) 1.30e1





240122_034 (continued)

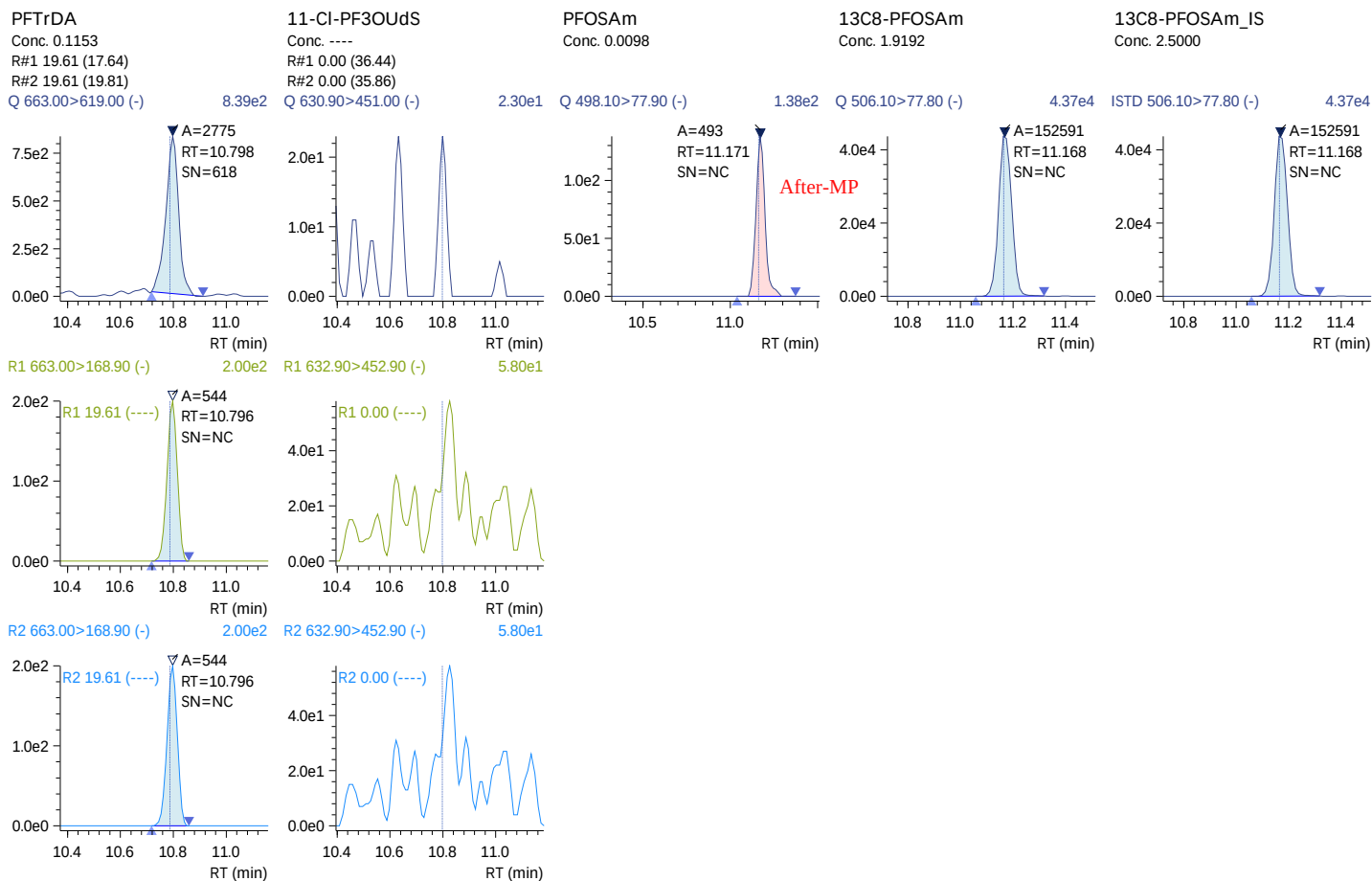


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_034 (continued)

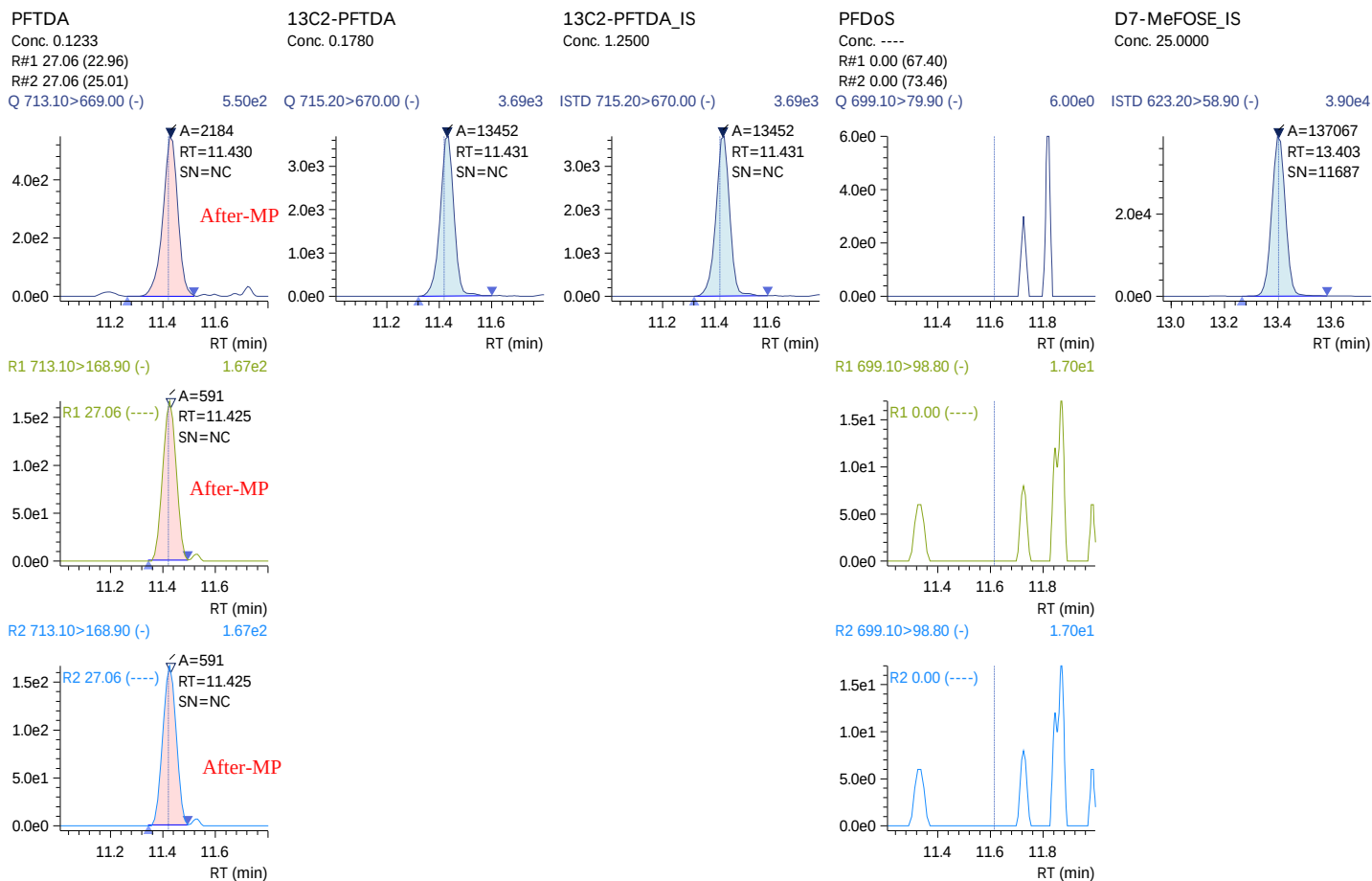


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_034 (continued)





240122_034 (continued)

D7-MeFOSE
Conc. 6.9924

MeFOSE
Conc. ----

13C2-PFHxDA_IS
Conc. 2.5000

13C2-PFHxDA
Conc. 0.1146

PFHxDA
Conc. 0.3898

Q 623.20>58.90 (-)

3.90e4

Q 616.10>59.00 (-)

3.90e1

ISTD 815.00>770.05 (-)

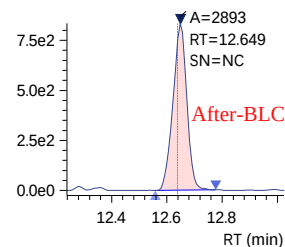
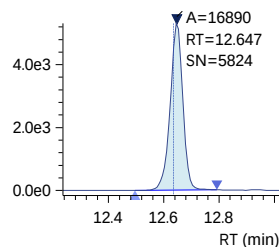
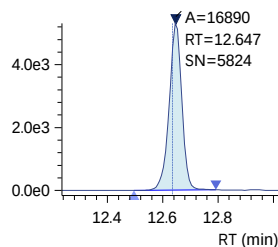
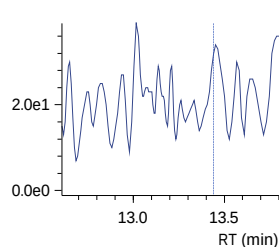
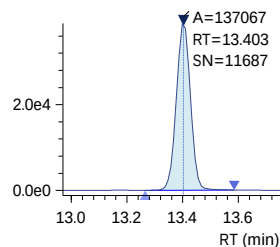
5.31e3

Q 815.00>770.05 (-)

5.31e3

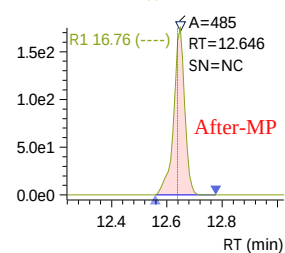
Q 813.00>768.95 (-)

8.35e2



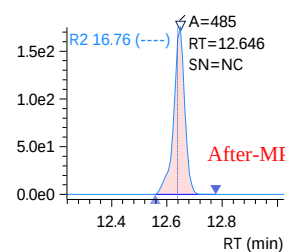
R1 813.00>218.95 (-)

1.75e2



R2 813.00>218.95 (-)

1.75e2





240122_034 (continued)

D3-MeFOSA
Conc. 0.7151

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. ----
R#1 0.00 (140.79)
R#2 0.00 (150.13)

D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 6.2568

Q 515.00>219.00 (-)

3.10e3

ISTD 515.00>219.00 (-)

3.10e3

Q 511.90>219.00 (-)

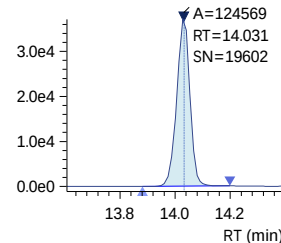
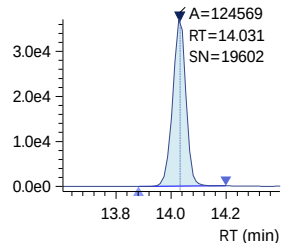
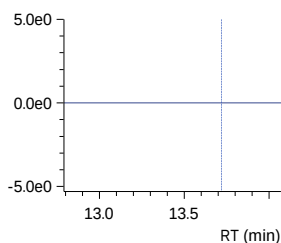
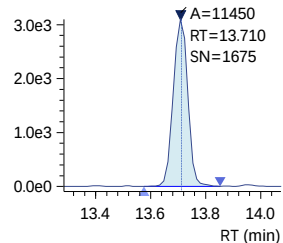
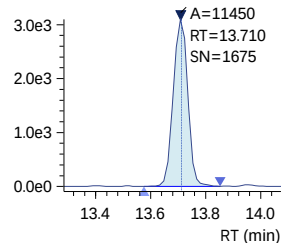
0.00e0

ISTD 639.20>58.90 (-)

3.71e4

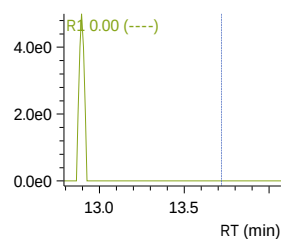
Q 639.20>58.90 (-)

3.71e4



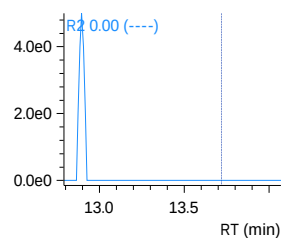
R1 511.90>169.00 (-)

5.00e0



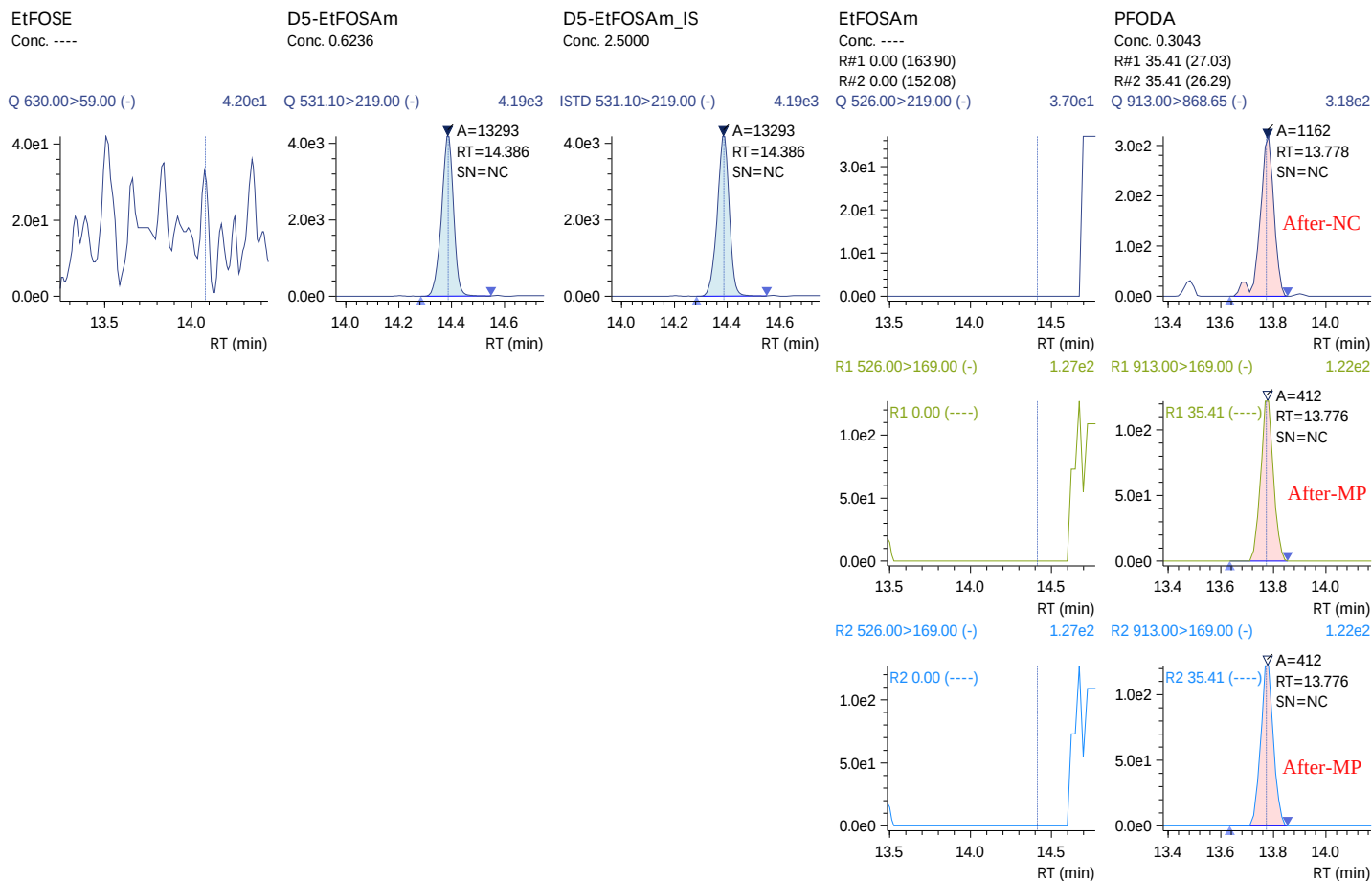
R2 511.90>169.00 (-)

5.00e0





240122_034 (continued)



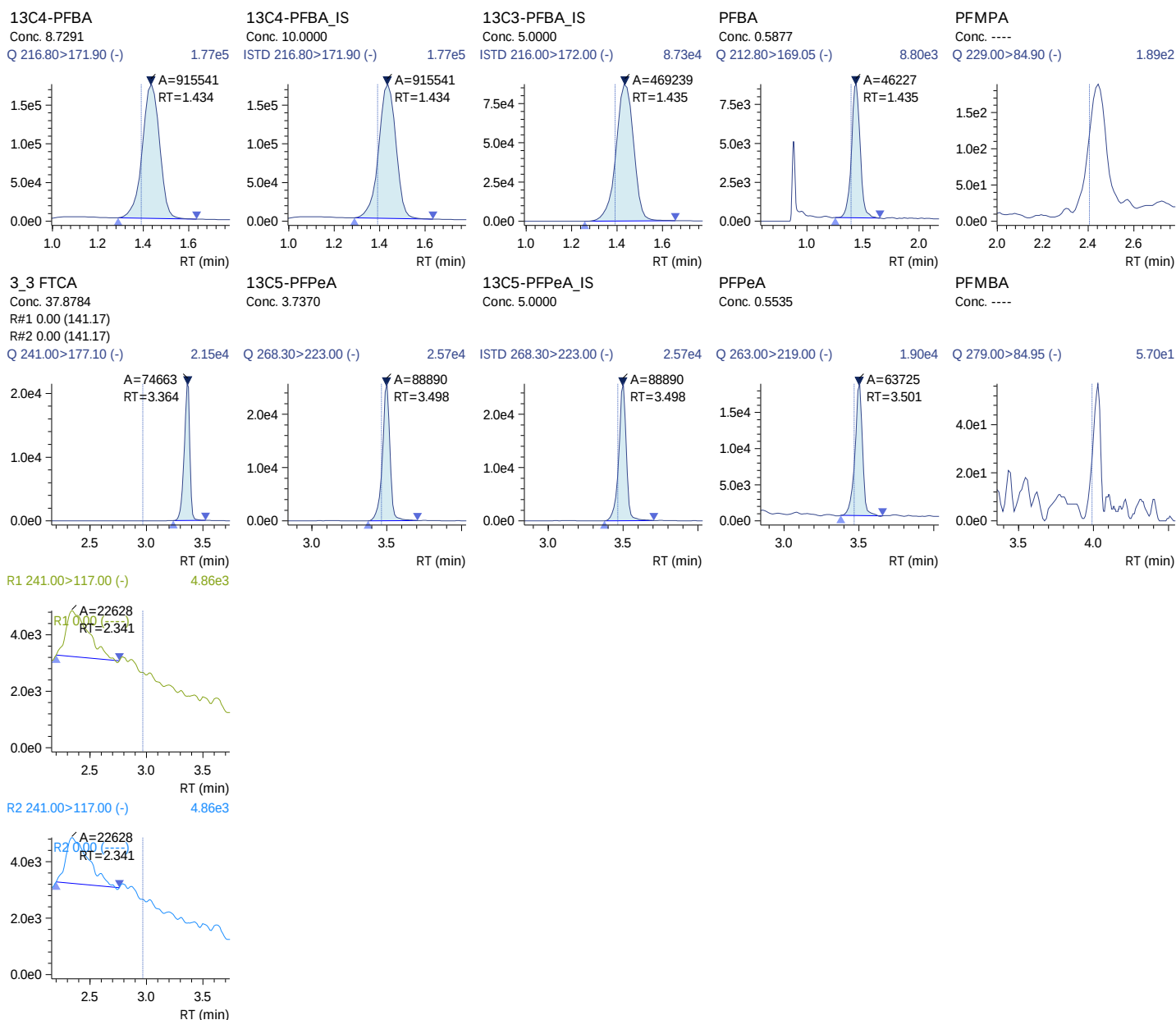
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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_034

Sample ID: K2314281-001
Date Acquired: 1/22/2024 10:32:56 PM
Acquired by: System Administrator
Data File: 240122_034
Vial: 14 | Inj. Volume: 10.0000uL | Tray: 2





240122_034 (continued)

13C2-4_2 FTS
Conc. 7.4099

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. ----
R#1 0.00 (29.06)
R#2 0.00 (29.06)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 0.0534
R#1 43.41 (46.72)
R#2 43.41 (46.72)

Q 329.10>80.90 (-)

5.17e4

ISTD 329.10>80.90 (-)

5.17e4

Q 327.10>307.00 (-)

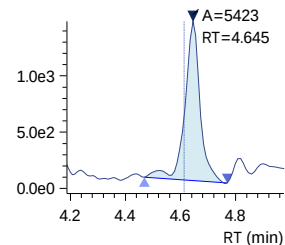
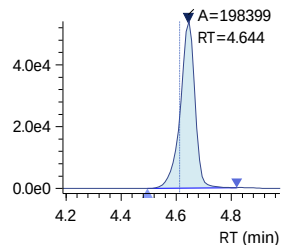
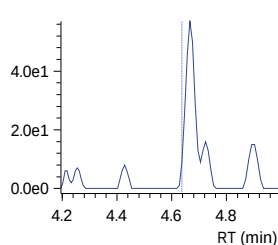
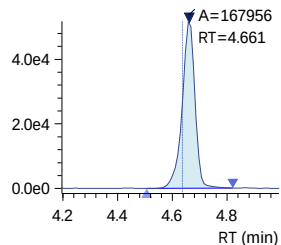
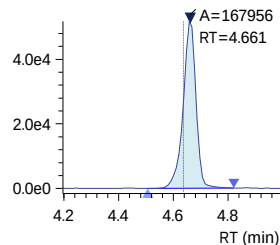
5.70e1

ISTD 302.10>79.90 (-)

5.41e4

Q 298.70>79.90 (-)

1.48e3

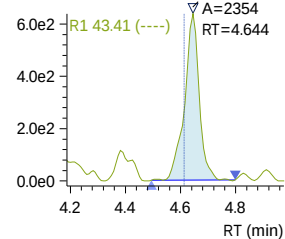
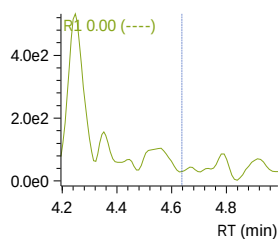


R1 327.10>80.90 (-)

5.32e2

R1 298.70>98.80 (-)

6.39e2

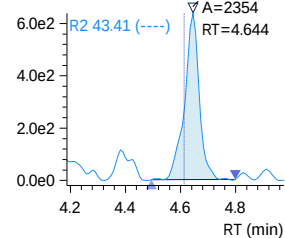
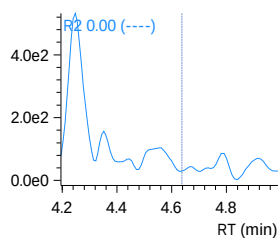


R2 327.10>80.90 (-)

5.32e2

R2 298.70>98.80 (-)

6.39e2





240122_034 (continued)

13C3-PFBS
 Conc. 2.1225

NFDHA
 Conc. ----
 R#1 0.00 (40.25)
 R#2 0.00 (40.25)

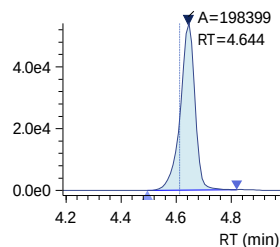
13C5-PFHxA
 Conc. 2.0083

13C5-PFHxA_IS
 Conc. 2.5000

13C2-PFHxA_IS
 Conc. 2.5000

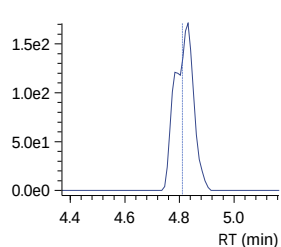
Q 302.10>79.90 (-)

5.41e4



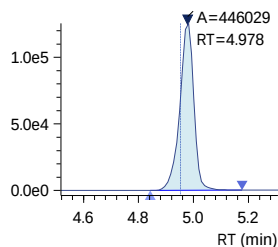
Q 295.00>201.00 (-)

1.71e2



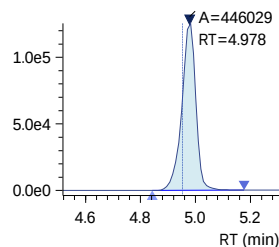
Q 318.00>273.00 (-)

1.26e5



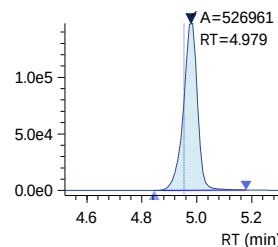
ISTD 318.00>273.00 (-)

1.26e5



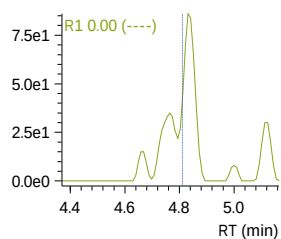
ISTD 315.10>270.00 (-)

1.48e5



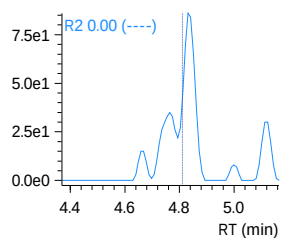
R1 295.00>84.90 (-)

8.60e1



R2 295.00>84.90 (-)

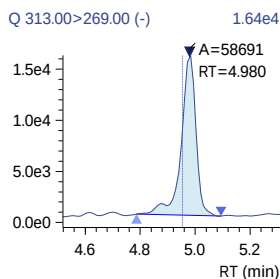
8.60e1





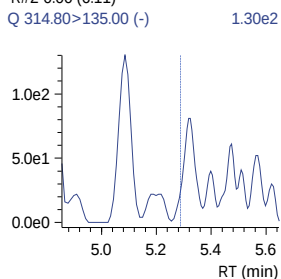
240122_034 (continued)

PFHxA
Conc. 0.3869

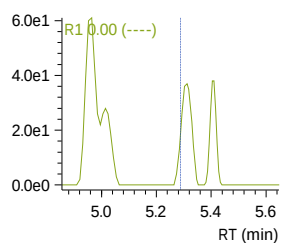


PFEESA
Conc. ----

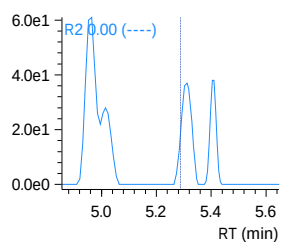
R#1 0.00 (6.11)
R#2 0.00 (6.11)



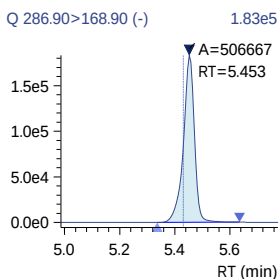
R1 314.80>82.90 (-) 6.10e1



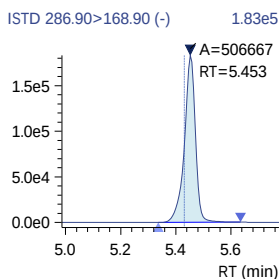
R2 314.80>82.90 (-) 6.10e1



13C3-HFPO-DA
Conc. 9.8220

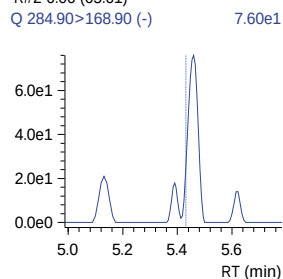


13C3-HFPO-DA_IS
Conc. 10.0000

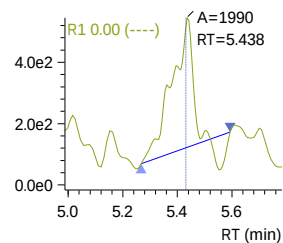


HFPO-DA
Conc. ----

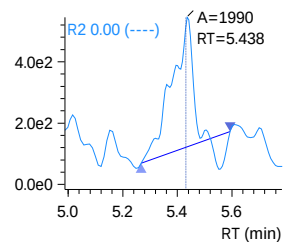
R#1 0.00 (65.61)
R#2 0.00 (65.61)



R1 284.90>184.90 (-) 5.45e2



R2 284.90>184.90 (-) 5.45e2





240122_034 (continued)

5_3 FTCA

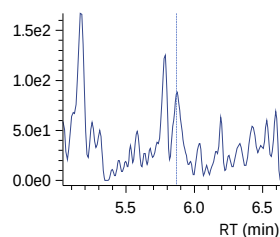
Conc. ----

R#1 0.00 (158.86)

R#2 0.00 (158.86)

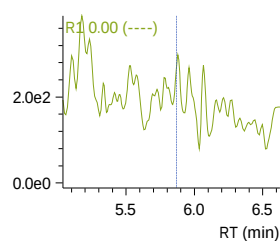
Q 341.00>237.05 (-)

1.67e2



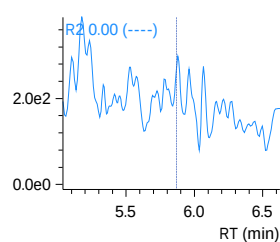
R1 341.00>217.00 (-)

3.89e2



R2 341.00>217.00 (-)

3.89e2



PFPeS

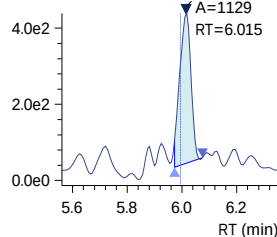
Conc. 0.0147

R#1 0.00 (55.80)

R#2 0.00 (55.80)

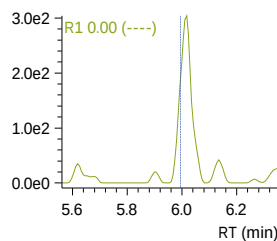
Q 349.10>79.90 (-)

4.39e2



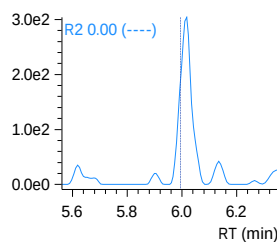
R1 349.10>98.80 (-)

3.04e2



R2 349.10>98.80 (-)

3.04e2

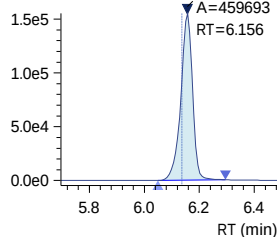


13C4-PFHpA

Conc. 2.2865

Q 367.10>322.00 (-)

1.55e5

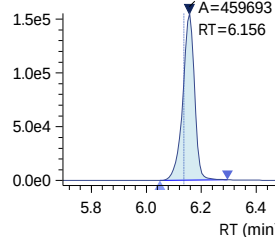


13C4-PFHpA_IS

Conc. 2.5000

ISTD 367.10>322.00 (-)

1.55e5



PFHpA

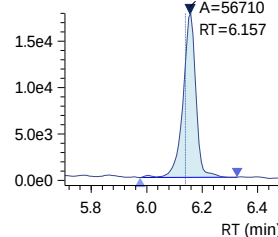
Conc. 0.2627

R#1 23.98 (21.50)

R#2 23.98 (21.50)

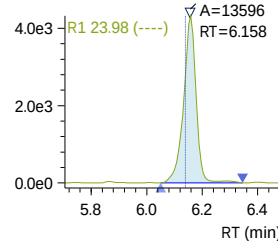
Q 363.10>319.00 (-)

1.80e4



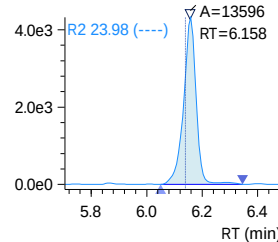
R1 363.10>169.00 (-)

4.32e3



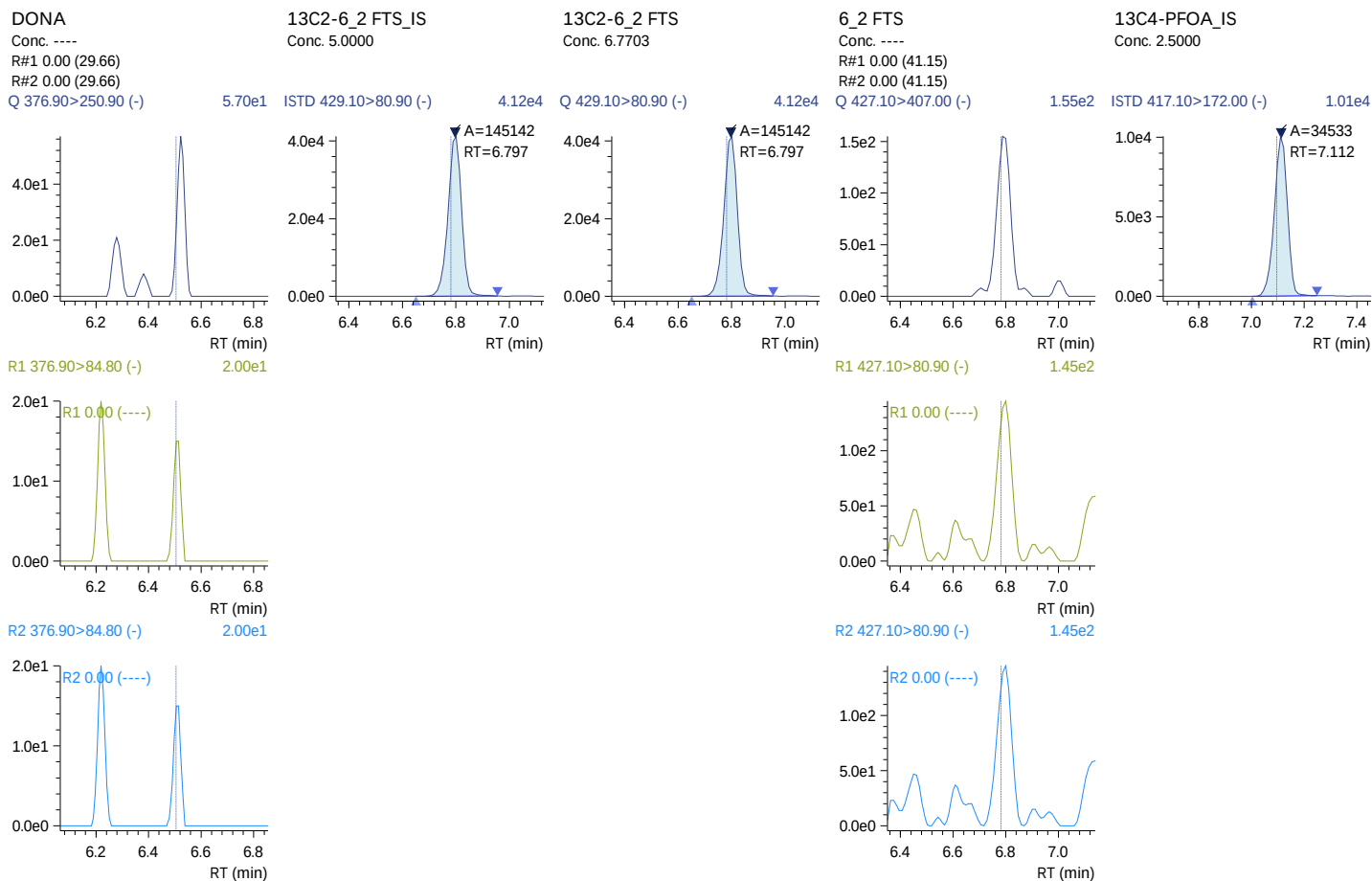
R2 363.10>169.00 (-)

4.32e3





240122_034 (continued)





240122_034 (continued)

13C8-PFOA_IS
 Conc. 2.5000

13C8-PFOA
 Conc. 2.2969

PFOA
 Conc. 4.8464
 R#1 30.73 (31.89)
 R#2 30.73 (31.89)

13C3-PFHxS
 Conc. 2.0638

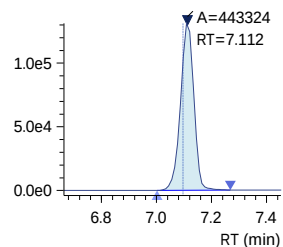
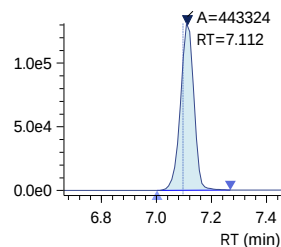
13C3-PFHxS_IS
 Conc. 2.5000

ISTD 421.10>376.00 (-)

1.31e5

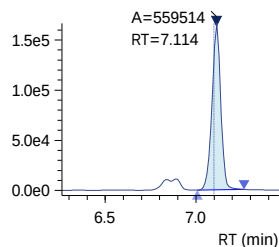
Q 421.10>376.00 (-)

1.31e5



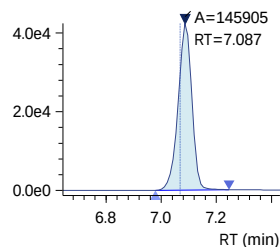
Q 413.00>369.00 (-)

1.67e5



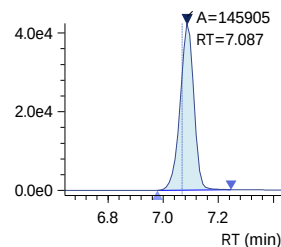
Q 402.10>79.90 (-)

4.24e4



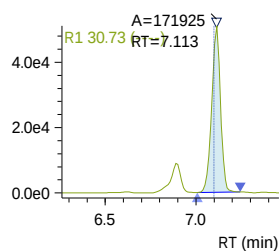
ISTD 402.10>79.90 (-)

4.24e4



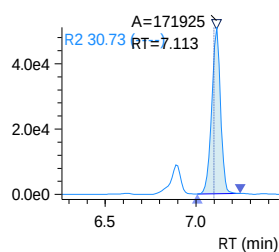
R1 413.00>169.00 (-)

5.12e4



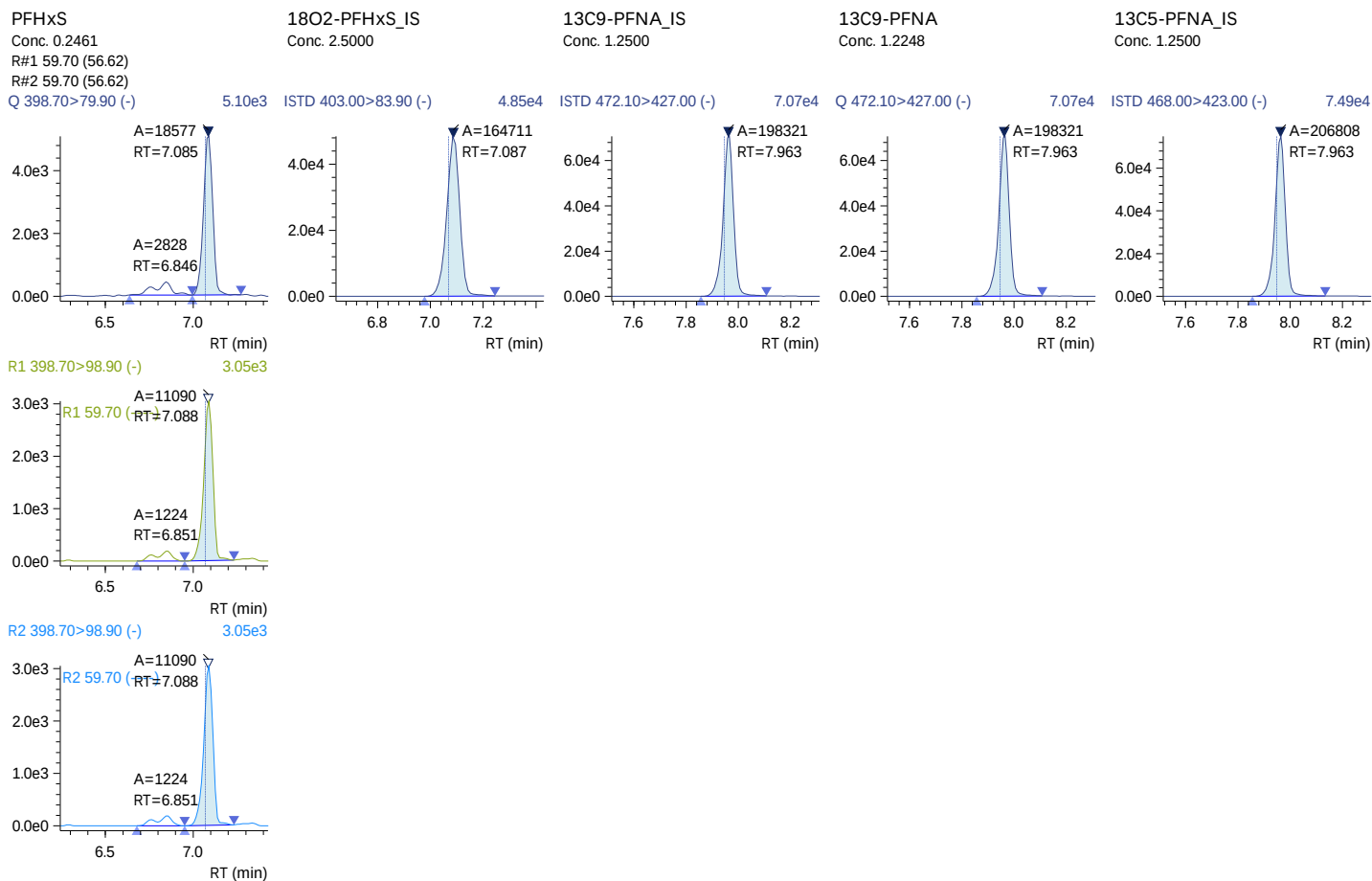
R2 413.00>169.00 (-)

5.12e4



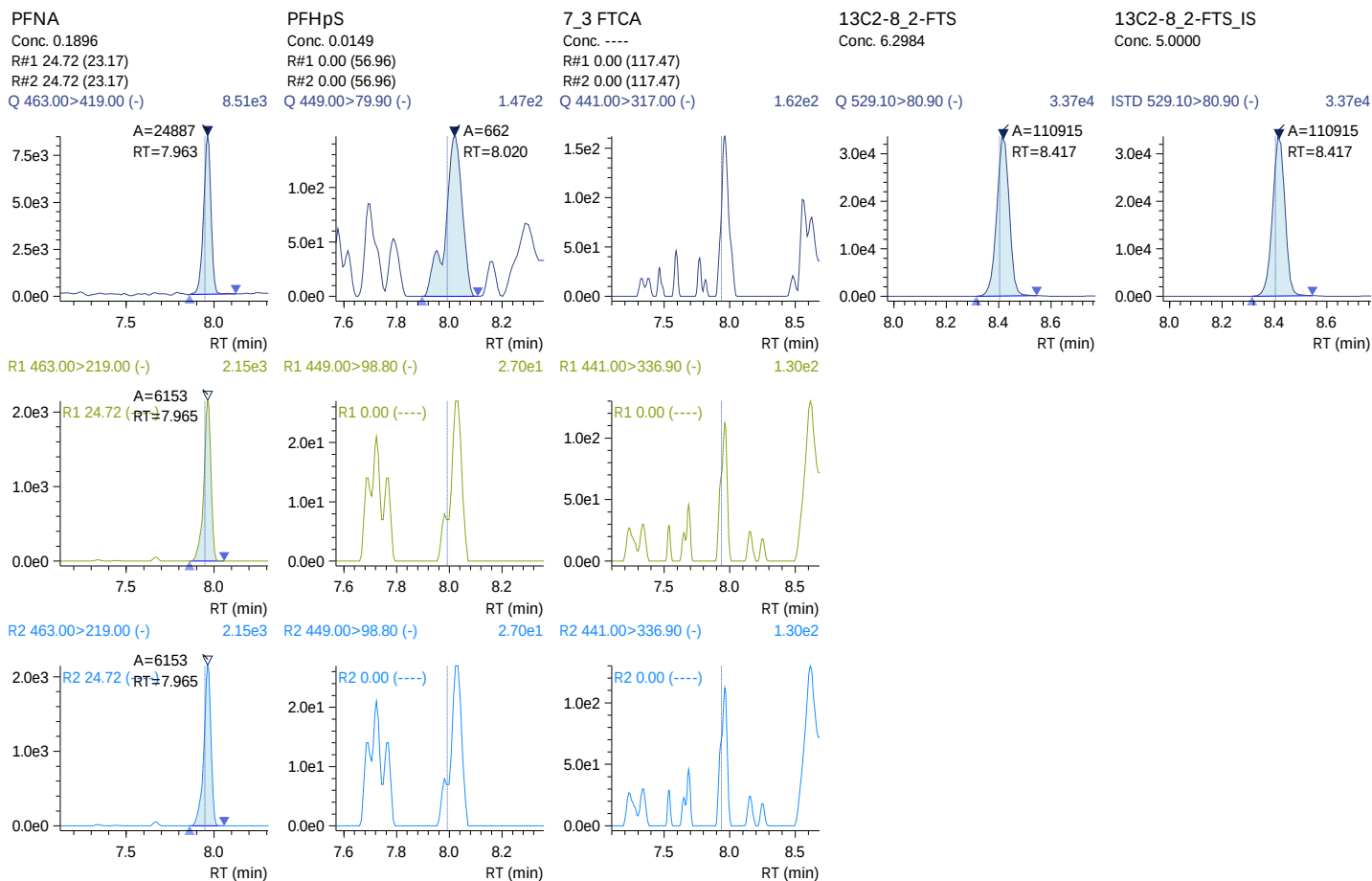


240122_034 (continued)



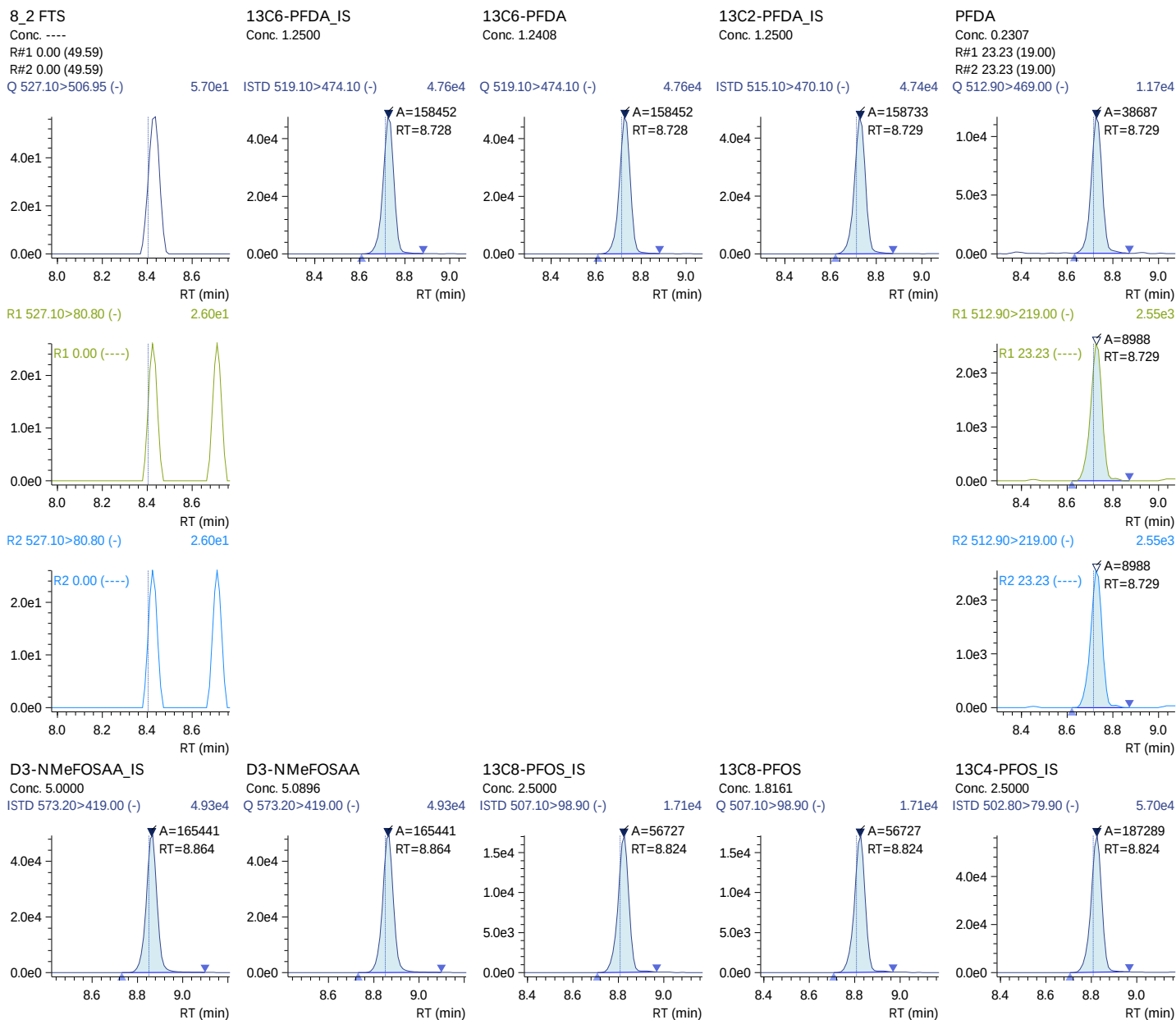


240122_034 (continued)



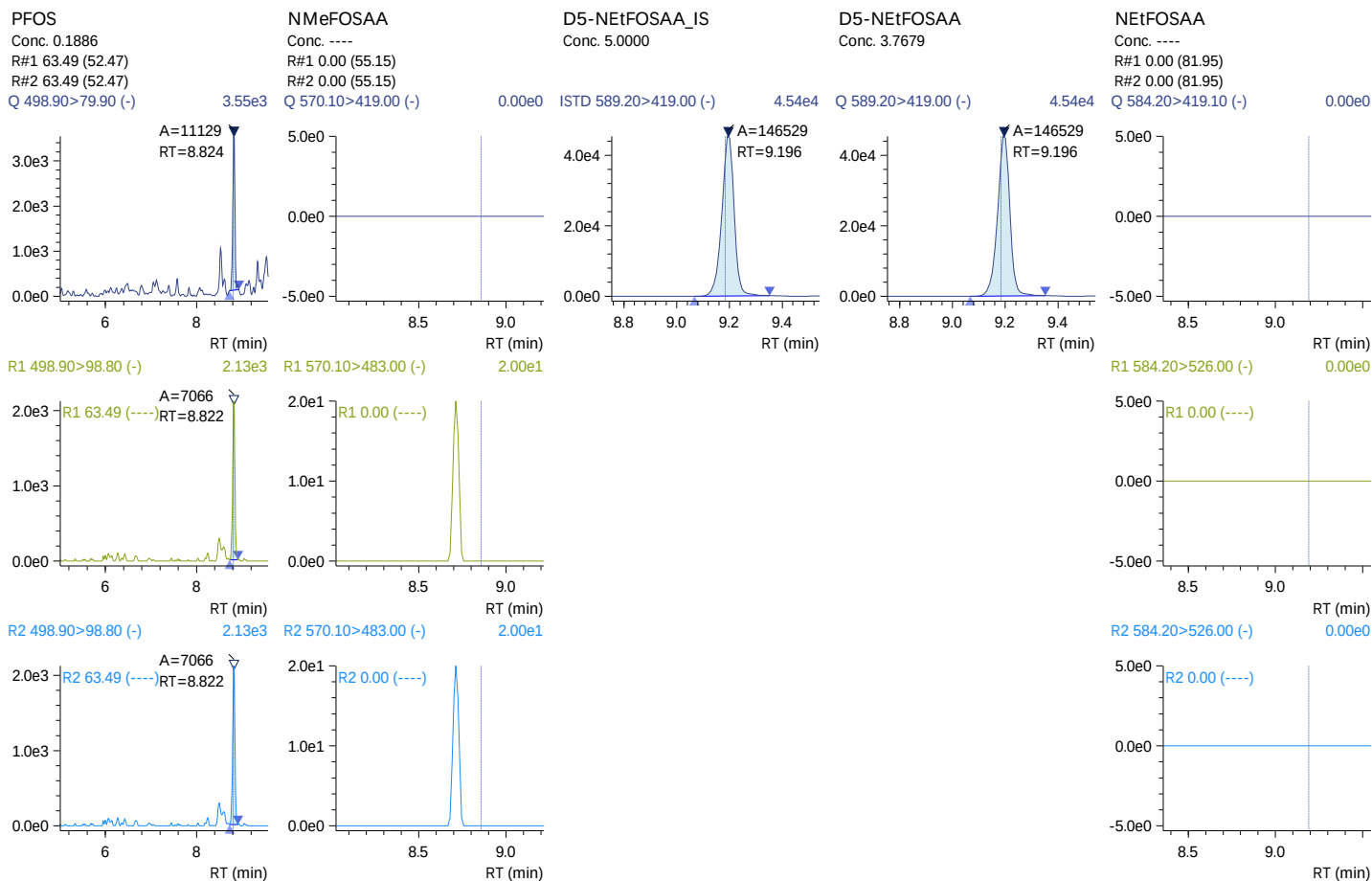


240122_034 (continued)





240122_034 (continued)





240122_034 (continued)

9-Cl-PF3ONS

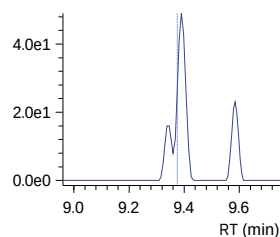
Conc. ----

R#1 0.00 (32.76)

R#2 0.00 (32.76)

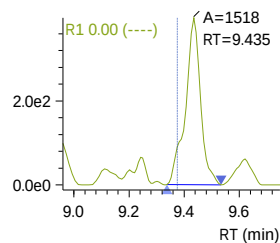
Q 530.80>351.00 (-)

4.90e1



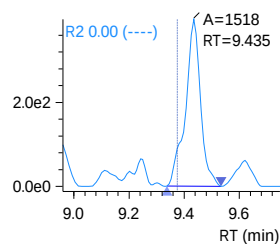
R1 532.80>353.00 (-)

3.98e2



R2 532.80>353.00 (-)

3.98e2



PFUnDA

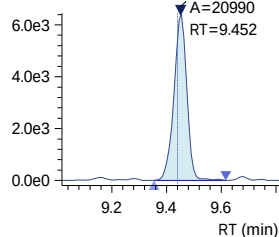
Conc. 0.1649

R#1 0.00 (13.12)

R#2 0.00 (13.12)

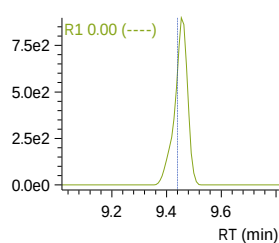
Q 563.10>519.00 (-)

6.45e3



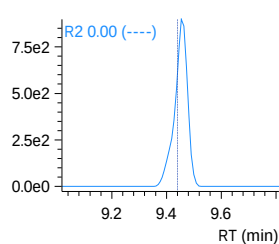
R1 563.10>269.10 (-)

8.98e2



R2 563.10>269.10 (-)

8.98e2

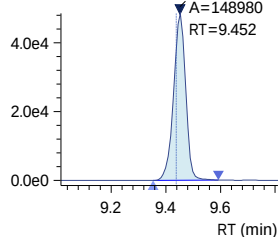


13C7-PFUnDA_IS

Conc. 1.2500

ISTD 570.00>525.10 (-)

4.85e4

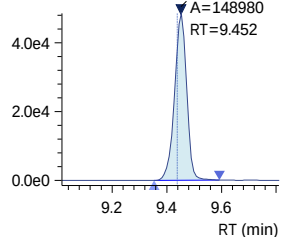


13C7-PFUnDA

Conc. 0.9780

Q 570.00>525.10 (-)

4.85e4



PFNS

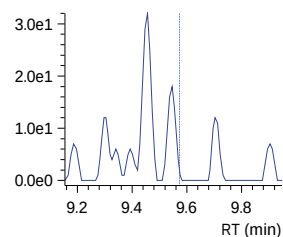
Conc. ----

R#1 0.00 (65.22)

R#2 0.00 (65.22)

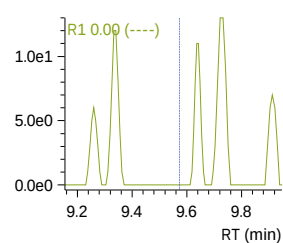
Q 548.80>79.90 (-)

3.20e1



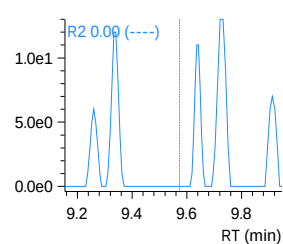
R1 548.80>98.80 (-)

1.30e1



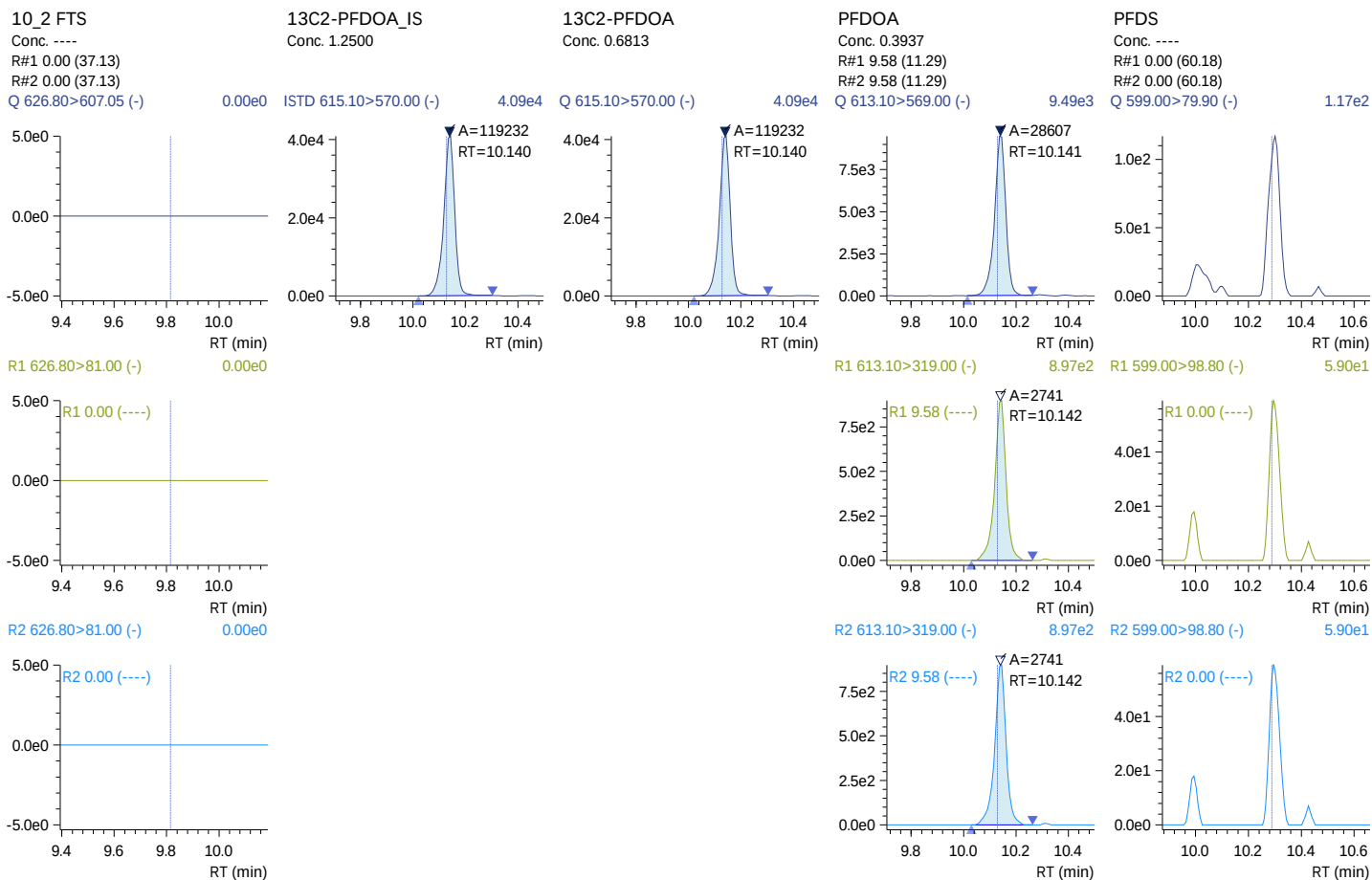
R2 548.80>98.80 (-)

1.30e1





240122_034 (continued)



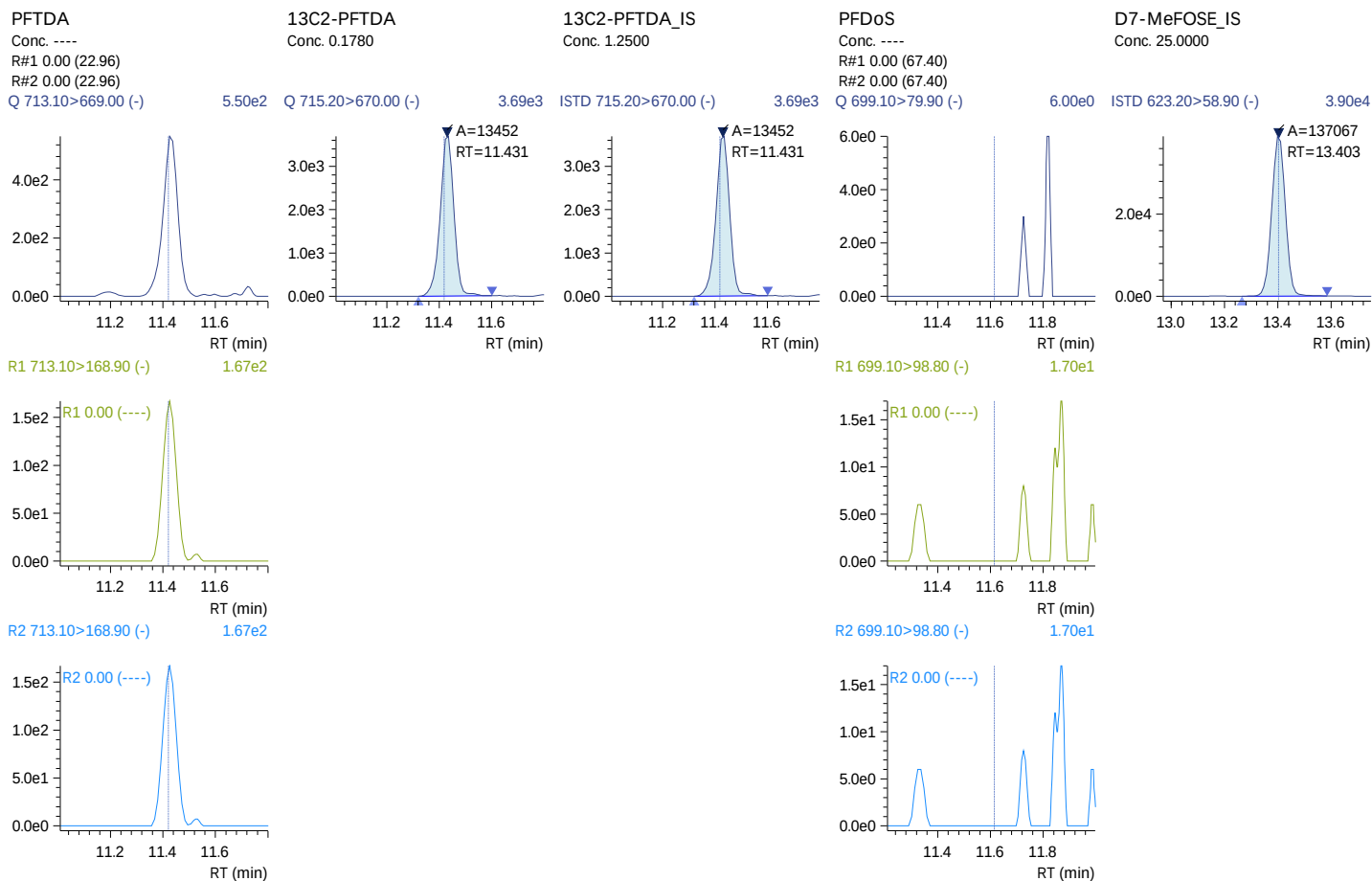


240122_034 (continued)





240122_034 (continued)





240122_034 (continued)

D7-MeFOSE
 Conc. 6.9924

MeFOSE
 Conc. ----

¹³C2-PFHxDA_IS
 Conc. 2.5000

¹³C2-PFHxDA
 Conc. 0.1146

PFHXDA
 Conc. 0.3909
 R#1 0.00 (13.90)
 R#2 0.00 (13.90)

Q 623.20>58.90 (-)

3.90e4

Q 616.10>59.00 (-)

3.90e1

ISTD 815.00>770.05 (-)

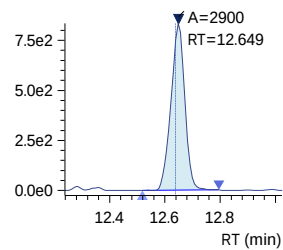
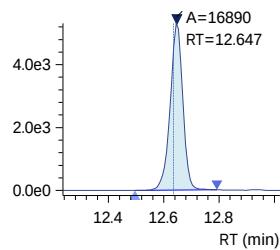
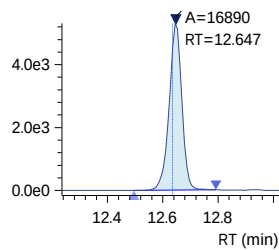
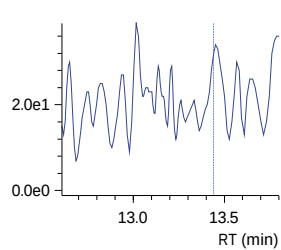
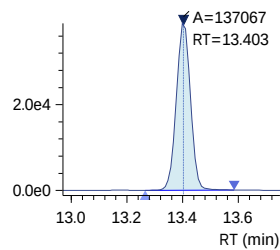
5.31e3

Q 815.00>770.05 (-)

5.31e3

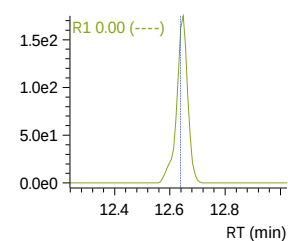
Q 813.00>768.95 (-)

8.35e2



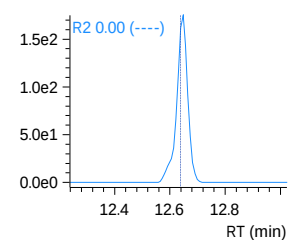
R1 813.00>218.95 (-)

1.75e2



R2 813.00>218.95 (-)

1.75e2





240122_034 (continued)

D3-MeFOSA
 Conc. 0.7151

D3-MeFOSA_IS
 Conc. 2.5000

MeFOSA
 Conc. ----
 R#1 0.00 (140.79)
 R#2 0.00 (140.79)

D9-EtFOSE_IS
 Conc. 25.0000

D9-EtFOSE
 Conc. 6.2568

Q 515.00>219.00 (-)

3.10e3

ISTD 515.00>219.00 (-)

3.10e3

Q 511.90>219.00 (-)

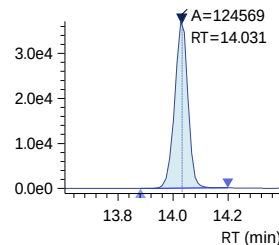
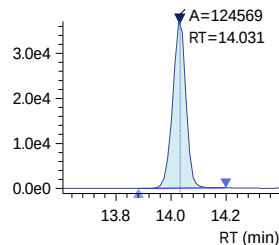
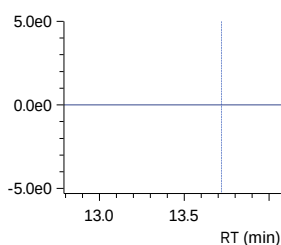
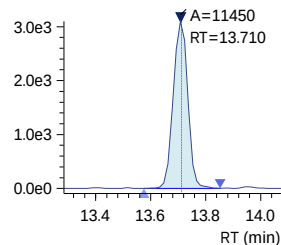
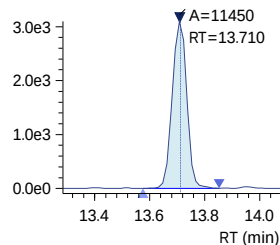
0.00e0

ISTD 639.20>58.90 (-)

3.71e4

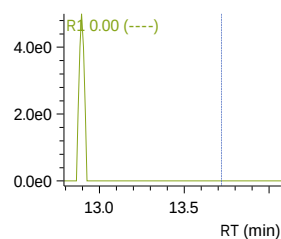
Q 639.20>58.90 (-)

3.71e4



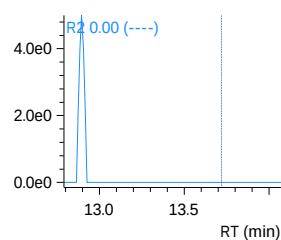
R1 511.90>169.00 (-)

5.00e0



R2 511.90>169.00 (-)

5.00e0





240122_034 (continued)

EtFOSE
Conc. ----

D5-EtFOSAm
Conc. 0.6236

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. ----

PFODA
Conc. 0.3043

Q 630.00>59.00 (-)

4.20e1

Q 531.10>219.00 (-)

4.19e3

ISTD 531.10>219.00 (-)

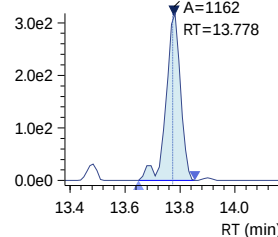
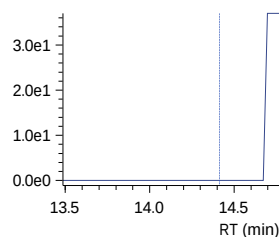
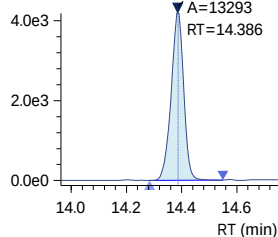
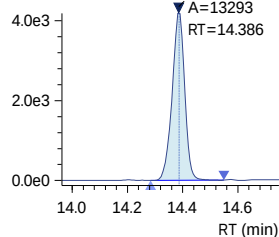
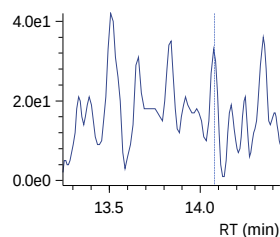
4.19e3

Q 526.00>219.00 (-)

3.70e1

Q 913.00>868.65 (-)

3.18e2

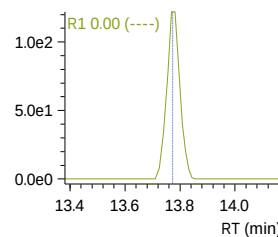
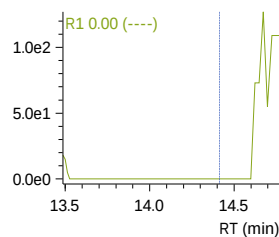


R1 526.00>169.00 (-)

1.27e2

R1 913.00>169.00 (-)

1.22e2

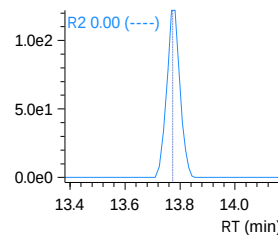
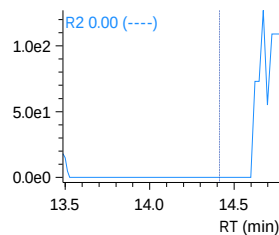


R2 526.00>169.00 (-)

1.27e2

R2 913.00>169.00 (-)

1.22e2



Validation Report

1st *PS* 02/06/24
2nd *MS* 02/06/24

Data File: J:\LCMS08\Data\240201_1633_RA\240201_034
Lab ID: K2314281-001
RunType: N/A
Matrix: Water

Date Acquired: 2/1/24 23:09
Batch ID: 831587
Analysis Method: 1633/PFAS_DOD5.4

Validations

Validation Categories	Pass	Fail
Preparation Hold Time	X	
Analytical Hold Time	X	
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery	X	
Continuing Calibration Recovery (Closing)		X
Lab Control Sample Recovery		X
Duplicate Lab Control Sample Recovery		X
Method Blank	X	
Method Blank Surrogates	X	
Internal Standards	X	
Surrogates	X	
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	

Analyte Exceptions

Only reanalyzed for PFPeA surrogate and assoiated natives

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Continuing Calibration Recovery (Closing)	13C2-6:2 FTS	68	70	130	NR in sample
	D3-MeFOSAA	68	70	130	
	D5-EtFOSAA	69	70	130	
	13C2-4:2 FTS	68	70	130	
	13C2-8:2 FTS	65	70	130	
Lab Control Sample Recovery	N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	152	70	145	
	4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	145	65	130	high bias, sample <MRL
Duplicate Lab Control Sample Recovery	N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	160	70	145	NR in sample
	4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	139	65	130	high bias, sample <MRL
	Perfluoro-3-methoxypropanoic acid (PFMPA)	148	55	140	

Primary Review: _____

Secondary Review: _____

Printed: 2/6/24 11:52

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Quantitation Report

1st *PS* 02/06/24
2nd *MS* 02/06/24

Data File:	J:\LCMS08\Data\240201_1633_RA\240201_034	Instrument:	K-LCMS-08
Acqu Date:	2/1/24 23:09	Vial:	15
Run Type:	N/A	Dilution:	1
Lab ID:	K2314281-001	Raw Units:	ng/mL

Bottle ID:	K2314281-001.03	Tier:	IV	Matrix:	Water
Prod Code:	PFAS_DOD5.4	Collect Date:	12/20/23	Receive Date:	12/20/23

Analysis Lot:	831587	Prep Lot:	432516	Report Group:	K2314281
Analysis	1633	Prep Method:	Method		
		Prep Date:	1/11/24		

Title:	Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM	Calibration ID:	KC2400048
		Report List ID:	24615

Internal Standard Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Area Criteria
18O2-PFHxS	7.092	+0.03	201893	2.5000	OK
13C4-PFOS	8.824	+0.03	271669	2.5000	OK
13C3-PFBA	1.439	+0.09	445169	5.0000	OK
13C2-PFHxA	4.989	+0.04	521077	2.5000	OK
13C4-PFOA	7.116	+0.02	34729	2.5000	OK
13C5-PFNA	7.965	+0.02	267030	1.2500	OK
13C2-PFDA	8.730	+0.02	173113	1.2500	OK

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
13C3-PFBS	4.656	+0.05	246435	3.2714	131	40 - 135	N
13C3-PFHxS	7.091	+0.03	191575	2.7073	108	40 - 130	N
13C8-PFOS	8.824	+0.03	79579	2.3276	93	40 - 130	N
13C4-PFBA	1.439	+0.09	677703	10.2738	103	5 - 130	N
13C5-PFPeA	3.511	+0.06	195730	5.2240	104	40 - 130	Y
13C5-PFHxA	4.988	+0.04	408686	2.4298	97	40 - 130	N
13C4-PFHpA	6.164	+0.03	531542	2.5120	100	40 - 130	N
13C8-PFOA	7.116	+0.02	436489	2.6354	105	40 - 130	N
13C9-PFNA	7.965	+0.02	267070	1.3511	108	40 - 130	N
13C6-PFDA	8.729	+0.02	173451	1.2503	100	40 - 130	N
13C7-PFUnDA	9.451	+0.02	187399	1.0871	87	30 - 130	N
13C2-PFDoDA	10.138	+0.02	164518	0.7995	64	10 - 130	N
13C2-PFTeDA	11.427	+0.02	25765	0.1774	14	10 - 130	N
13C8-FOSA	11.145	-0.01	135984	1.5757	63	40 - 130	N
D3-MeFOSA	13.680	-0.01	16125	0.7157	29	10 - 130	N
D5-EtFOSA	14.356	-0.01	18267	0.5864	23	10 - 130	N
D7-MeFOSE	13.373	-0.01	119520	5.3950	22	10 - 130	N
D9-EtFOSE	14.002	-0.01	125537	4.6306	19	10 - 130	N

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 2/6/24 11:52

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			1st	PS	02/06/24
			2nd	MS	02/06/24
Data File:	J:\LCMS08\Data\240201_1633_RA\240201_034		Instrument:	K-LCMS08	
Acqu Date:	2/1/24 23:09		Vial:	15	
Run Type:	N/A		Dilution:	1	
Lab ID:	K2314281-001		Raw Units:	ng/mL	

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
D3-MeFOSAA	8.864	+0.02	321885	2.9101	58	40 - 170	N
D5-EtFOSAA	9.195	+0.02	225568	2.5876	52	25 - 135	N
13C2-4:2 FTS	4.671	+0.04	149867	3.9435	79	40 - 200	N
13C2-6:2 FTS	6.802	+0.02	154423	3.9033	78	40 - 200	N
13C2-8:2 FTS	8.417	+0.02	117759	3.5059	70	40 - 300	N
13C3-HFPO-DA	5.462	+0.04	595447	12.8944	129	40 - 130	N

Target Compounds

Final Conc.Units: ng/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Perfluorobutane sulfonic acid (PFBS)	4.656	+0.05	7046	0.0577	1.2	J	N
Perfluoropentane sulfonic acid (PFPeS)	6.025	+0.04	2175	0.0287	0.58	U	N
Perfluorohexane sulfonic acid (PFHxS)	7.092	+0.03	30100	0.3595	7.3		N
Perfluoroheptane sulfonic acid (PFHpS)	0		0	0	0	U	N
Perfluorooctane sulfonic acid (PFOS)	8.827	+0.03	20974	0.3086	6.2		N
Perfluorononane sulfonic acid (PFNS)	0		0	0	0	U	N
Perfluorodecane sulfonic acid (PFDS)	10.298	+0.02	362	0.0061	0.12	U	N
Perfluorododecane sulfonic acid (PFDoS)	0		0	0	0	U	N
Perfluorobutanoic acid (PFBA)	1.440	+0.09	39171	0.6092	12		N
Perfluoropentanoic acid (PFPeA)	3.514	+0.05	65609	0.4787	9.7		Y
Perfluorohexanoic acid (PFHxA)	4.990	+0.04	58272	0.3769	7.6		N
Perfluoroheptanoic acid (PFHpA)	6.165	+0.03	61256	0.3223	6.5		N
Perfluorooctanoic acid (PFOA)	7.117	+0.02	1150886	7.2186	150		N
Perfluorononanoic acid (PFNA)	7.965	+0.02	42257	0.2240	4.5	J	N
Perfluorodecanoic acid (PFDA)	8.731	+0.02	42742	0.2914	5.9		N
Perfluoroundecanoic acid (PFUnDA)	9.452	+0.02	32895	0.2360	4.8	J	N
Perfluorododecanoic acid (PFDOA)	10.139	+0.02	39853	0.4551	9.2		N
Perfluorotridecanoic acid (PFTTrDA)	10.792	+0.02	5390	0.1907	3.9	J	N
Perfluorotetradecanoic acid (PFTDA)	11.425	+0.02	3678	0.1837	3.7	J	N
Perfluorooctane sulfonamide (PFOSAm)	11.142	-0.01	254	0.0053	0.11	U	N
N-Methylperfluorooctane sulfonamide (MeFOSA)	0		0	0	0	U	N
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	0		0	0	0	U	N
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	0		0	0	0	U	N
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	0		0	0	0	U	N
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	0		0	0	0	U	N

U: Undetected at or above MDL

J: Analyte detected above MDL, but below MRL

B: Hit above MRL also found in Method Blank

E: Analyte concentration above high point of ICAL

N: Presumptive evidence of compound

D: Result from dilution

m: Manual integration performed

d: Compound manually deleted

NR: Analyte not reported from this analysis

*: Result fails acceptance criteria

#: Acceptance criteria not applicable

?: Insufficient information to determine acceptance

e: Result >= MRL, but MRL less than low point of ICAL

c: check for co-elution

Printed: 2/6/24 11:52

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Data File:	J:\LCMS08\Data\240201_1633_RA\240201_034	Instrument:	K-LCMS08
Acqu Date:	2/1/24 23:09	Vial:	15
Run Type:	N/A	Dilution:	1
Lab ID:	K2314281-001	Raw Units:	ng/mL

Target Compounds

Target Compounds			Final Conc.Units: ng/L				
Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	0		0	0	0	U	N
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	0		0	0	0	U	N
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	6.803	+0.03	435	0.0074	0.15	U	N
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	8.404	+0.01	519	0.0116	0.23	U	N
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	0		0	0	0	U	Y
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	0		0	0	0	U	N
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	7.944	+0.01	844	0.0393	0.79	U	N
Perfluoro(2-ethoxyethane) sulfonic acid (PFEESA)	0		0	0	0	U	N
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	9.373	+0.01	210	0.0004	0.0081	U	N
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	0		0	0	0	U	N
Perfluoro-3-methoxypropanoic acid (PFMPA)	2.460	+0.08	124	0.0022	0.044	U	Y
Perfluoro-4-methoxybutanoic acid (PFMBA)	4.048	+0.06	118	0.0014	0.028	U	Y
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	5.455	+0.03	295	0.0050	0.10	U	N
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	0		0	0	0	U	N
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	0		0	0	0	U	N

Prep Amount:	247.3000 mL	Dilution:	1
Prep Final Amount:	5.00 mL	Basis Factor:	100.00



240201_034

Sample ID: K2314281-001
Date Acquired: 2/1/2024 11:09:57 PM
Acquired by: System Administrator
Data File: 240201_034
Vial: 12 | Inj. Volume: 10.0000uL | Tray: 2

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	677703	----	----	----	----	----	----	
13C4-PFBA_IS	216.80>171.90	----	677703	----	----	----	----	----	----	
13C3-PFBA_IS	216.00>172.00	----	445169	----	----	----	----	----	----	
PFBA	212.80>169.05	----	39171	----	----	----	----	----	----	
PFMPA	229.00>84.90	----	124	----	----	----	----	----	----	
3_3 FTCA	241.00>177.10	241.00>117.00	----	0	0.00	139.21	----	----	----	
13C5-PFPeA	268.30>223.00	----	195730	----	----	----	----	----	----	
13C5-PFPeA_IS	268.30>223.00	----	195730	----	----	----	----	----	----	
PFPeA	263.00>219.00	----	65609	----	----	----	----	----	----	
PFMBA	279.00>84.95	----	118	----	----	----	----	----	----	
13C2-4_2 FTS	329.10>80.90	----	149867	----	----	----	----	----	----	
13C2-4_2 FTS_IS	329.10>80.90	----	149867	----	----	----	----	----	----	
4_2 FTS	327.10>307.00	327.10>80.90	----	0	0.00	32.10	0	0.00	32.79	
13C3-PFBS_IS	302.10>79.90	----	246435	----	----	----	----	----	----	
PFBS	298.70>79.90	298.70>98.80	7046	3072	43.60	44.81	3072	43.60	46.72	
13C3-PFBS	302.10>79.90	----	246435	----	----	----	----	----	----	
NFDHA	295.00>201.00	295.00>84.90	----	0	0.00	35.54	0	0.00	37.91	
13C5-PFHxA	318.00>273.00	----	408686	----	----	----	----	----	----	
13C5-PFHxA_IS	318.00>273.00	----	408686	----	----	----	----	----	----	
13C2-PFHxA_IS	315.10>270.00	----	521077	----	----	----	----	----	----	
PFHxA	313.00>269.00	----	58272	----	----	----	----	----	----	
PFEESA	314.80>135.00	314.80>82.90	----	0	0.00	5.22	0	0.00	5.35	
13C3-HFPO-DA	286.90>168.90	----	595447	----	----	----	----	----	----	
13C3-HFPO-DA_IS	286.90>168.90	----	595447	----	----	----	----	----	----	
HFPO-DA	284.90>168.90	284.90>184.90	295	1268	430.28	59.79	1268	430.28	58.32	IRr NR
5_3 FTCA	341.00>237.05	341.00>217.00	----	0	0.00	157.08	0	0.00	155.87	
PFPeS	349.10>79.90	349.10>98.80	2175	947	43.55	55.12	947	43.55	54.87	
13C4-PFHpA	367.10>322.00	----	531542	----	----	----	----	----	----	
13C4-PFHpA_IS	367.10>322.00	----	531542	----	----	----	----	----	----	
PFHpA	363.10>319.00	363.10>169.00	61256	14162	23.12	23.02	14162	23.12	20.91	
DONA	376.90>250.90	376.90>84.80	----	0	0.00	27.50	0	0.00	27.00	
13C2-6_2 FTS_IS	429.10>80.90	----	154423	----	----	----	----	----	----	
13C2-6_2 FTS	429.10>80.90	----	154423	----	----	----	----	----	----	
6_2 FTS	427.10>407.00	427.10>80.90	435	286	65.87	50.47	286	65.87	46.83	
13C4-PFOA_IS	417.10>172.00	----	34729	----	----	----	----	----	----	
13C8-PFOA_IS	421.10>376.00	----	436489	----	----	----	----	----	----	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240201_034 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	436489	----	----	----	----	----	----	----
PFOA	413.00>369.00	413.00>169.00	1150886	307424	26.71	28.77	307424	26.71	28.12	
13C3-PFHxS	402.10>79.90	----	191575	----	----	----	----	----	----	----
13C3-PFHxS_IS	402.10>79.90	----	191575	----	----	----	----	----	----	----
PFHxS	398.70>79.90	398.70>98.90	30100	16085	53.44	60.90	16085	53.44	61.53	
18O2-PFHxS_IS	403.00>83.90	----	201893	----	----	----	----	----	----	----
13C9-PFNA_IS	472.10>427.00	----	267070	----	----	----	----	----	----	----
13C9-PFNA	472.10>427.00	----	267070	----	----	----	----	----	----	----
13C5-PFNA_IS	468.00>423.00	----	267030	----	----	----	----	----	----	----
PFNA	463.00>419.00	463.00>219.00	42257	9084	21.50	19.31	9084	21.50	20.30	
PFHpS	449.00>79.90	449.00>98.80	----	0	0.00	52.44	0	0.00	52.33	
7_3 FTCA	441.00>317.00	441.00>336.90	844	814	96.52	129.46	814	96.52	129.73	
13C2-8_2-FTS	529.10>80.90	----	117759	----	----	----	----	----	----	----
13C2-8_2-FTS_IS	529.10>80.90	----	117759	----	----	----	----	----	----	----
8_2 FTS	527.10>506.95	527.10>80.80	519	97	18.76	45.98	97	18.76	43.25	IRr NR
13C6-PFDA_IS	519.10>474.10	----	173451	----	----	----	----	----	----	----
13C6-PFDA	519.10>474.10	----	173451	----	----	----	----	----	----	----
13C2-PFDA_IS	515.10>470.10	----	173113	----	----	----	----	----	----	----
PFDA	512.90>469.00	512.90>219.00	42742	6849	16.02	17.88	6849	16.02	18.89	
D3-NMeFOSAA_IS	573.20>419.00	----	321885	----	----	----	----	----	----	----
D3-NMeFOSAA	573.20>419.00	----	321885	----	----	----	----	----	----	----
13C8-PFOS_IS	507.10>98.90	----	79579	----	----	----	----	----	----	----
13C8-PFOS	507.10>98.90	----	79579	----	----	----	----	----	----	----
13C4-PFOS_IS	502.80>79.90	----	271669	----	----	----	----	----	----	----
PFOS	498.90>79.90	498.90>98.80	20974	10358	49.39	53.60	10358	49.39	52.29	
NMeFOSAA	570.10>419.00	570.10>483.00	----	0	0.00	64.89	0	0.00	60.97	
D5-NEtFOSAA_IS	589.20>419.00	----	225568	----	----	----	----	----	----	----
D5-NEtFOSAA	589.20>419.00	----	225568	----	----	----	----	----	----	----
NEtFOSAA	584.20>419.10	584.20>526.00	----	0	0.00	96.07	0	0.00	94.54	
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	210	3032	1441.30	30.95	3031	1440.67	30.61	IRr NR
PFUnDA	563.10>519.00	563.10>269.10	32895	3392	10.31	11.01	3392	10.31	12.02	
13C7-PFUnDA_IS	570.00>525.10	----	187399	----	----	----	----	----	----	----
13C7-PFUnDA	570.00>525.10	----	187399	----	----	----	----	----	----	----
PFNS	548.80>79.90	548.80>98.80	----	0	0.00	60.44	0	0.00	58.51	
10_2 FTS	626.80>607.05	626.80>81.00	----	0	0.00	36.14	0	0.00	33.04	
13C2-PFDOA_IS	615.10>570.00	----	164518	----	----	----	----	----	----	----
13C2-PFDOA	615.10>570.00	----	164518	----	----	----	----	----	----	----
PFDOA	613.10>569.00	613.10>319.00	39853	3744	9.40	10.16	3744	9.40	10.60	
PFDS	599.00>79.90	599.00>98.80	362	281	77.74	58.26	281	77.74	61.78	
PFTrDA	663.00>619.00	663.00>168.90	5390	830	15.40	16.18	830	15.40	14.85	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240201_034 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	----	0	0.00	34.99	0	0.00	34.39	
PFOSAm	498.10>77.90	----	254	----	----	----	----	----	----	
13C8-PFOSAm	506.10>77.80	----	135984	----	----	----	----	----	----	
13C8-PFOSAm_IS	506.10>77.80	----	135984	----	----	----	----	----	----	
PFTDA	713.10>669.00	713.10>168.90	3678	794	21.59	18.05	794	21.59	17.39	
13C2-PFTDA	715.20>670.00	----	25765	----	----	----	----	----	----	
13C2-PFTDA_IS	715.20>670.00	----	25765	----	----	----	----	----	----	
PFDoS	699.10>79.90	699.10>98.80	----	0	0.00	61.13	0	0.00	62.47	
D7-MeFOSE_IS	623.20>58.90	----	119520	----	----	----	----	----	----	
D7-MeFOSE	623.20>58.90	----	119520	----	----	----	----	----	----	
MeFOSE	616.10>59.00	----	----	----	----	----	----	----	----	
13C2-PFHxDA_IS	815.00>770.05	----	22647	----	----	----	----	----	----	
13C2-PFHxDA	815.00>770.05	----	22647	----	----	----	----	----	----	
PFHxDA	813.00>768.95	813.00>218.95	5784	683	11.82	11.66	683	11.82	10.99	
D3-MeFOSA	515.00>219.00	----	16125	----	----	----	----	----	----	
D3-MeFOSA_IS	515.00>219.00	----	16125	----	----	----	----	----	----	
MeFOSA	511.90>219.00	511.90>169.00	----	0	0.00	160.44	0	0.00	161.92	
D9-EtFOSE_IS	639.20>58.90	----	127411	----	----	----	----	----	----	
D9-EtFOSE	639.20>58.90	----	125537	----	----	----	----	----	----	
EtFOSE	630.00>59.00	----	----	----	----	----	----	----	----	
D5-EtFOSAm	531.10>219.00	----	18267	----	----	----	----	----	----	
D5-EtFOSAm_IS	531.10>219.00	----	18267	----	----	----	----	----	----	
EtFOSAm	526.00>219.00	526.00>169.00	----	0	0.00	159.63	0	0.00	172.60	
PFODA	913.00>868.65	913.00>169.00	1936	932	48.13	36.03	932	48.13	35.02	

Flag ID key: IRr: Ion Ratio (Relative)



240201_034

Sample ID: K2314281-001
Date Acquired: 2/1/2024 11:09:57 PM
Acquired by: System Administrator
Data File: 240201_034
Vial: 12 | Inj. Volume: 10.0000uL | Tray: 2

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.439	0.086	0.000	677703	445169	13C3-PFBA_IS	10.2738	ng/mL	
13C4-PFBA_IS	Auto	1.439	0.086	----	677703	677703	----	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.439	0.084	----	445169	445169	----	5.0000	ng/mL	
PFBA	Auto	1.440	0.084	0.001	39171	677703	13C4-PFBA_IS	0.6092	ng/mL	
PFMPA	M	2.460	0.079	-1.051	124	195730	13C5-PFPeA_IS	0.0022	ng/mL	
3_3 FTCA	ND(W/B)	----	----	----	----	195730	13C5-PFPeA_IS	----	ng/mL	
13C5-PFPeA	Auto	3.511	0.056	-1.478	195730	521077	13C2-PFHxA_IS	5.2240	ng/mL	
13C5-PFPeA_IS	Auto	3.511	0.056	----	195730	195730	----	5.0000	ng/mL	
PFPeA	Auto	3.514	0.056	0.003	65609	195730	13C5-PFPeA_IS	0.4787	ng/mL	
PFMBA	M	4.048	0.064	0.537	118	195730	13C5-PFPeA_IS	0.0014	ng/mL	
13C2-4_2 FTS	Auto	4.671	0.038	-2.421	149867	201893	18O2-PFHxS_IS	3.9435	ng/mL	
13C2-4_2 FTS_IS	Auto	4.671	0.038	----	149867	149867	----	5.0000	ng/mL	
4_2 FTS	ND(W/B)	----	----	----	----	149867	13C2-4_2 FTS_IS	----	ng/mL	
13C3-PFBS_IS	Auto	4.656	0.053	----	246435	246435	----	2.5000	ng/mL	
PFBS	M	4.656	0.051	0.000	7046	246435	13C3-PFBS_IS	0.0577	ng/mL	
13C3-PFBS	Auto	4.656	0.053	-2.436	246435	201893	18O2-PFHxS_IS	3.2714	ng/mL	
NFDHA	ND(W/B)	----	----	----	----	408686	13C5-PFHxA_IS	----	ng/mL	
13C5-PFHxA	Auto	4.988	0.041	-0.001	408686	521077	13C2-PFHxA_IS	2.4298	ng/mL	
13C5-PFHxA_IS	Auto	4.988	0.041	----	408686	408686	----	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	4.989	0.042	----	521077	521077	----	2.5000	ng/mL	
PFHxA	Auto	4.990	0.041	0.002	58272	408686	13C5-PFHxA_IS	0.3769	ng/mL	
PFEESA	ND(W/B)	----	----	----	----	408686	13C5-PFHxA_IS	----	ng/mL	
13C3-HFPO-DA	Auto	5.462	0.037	0.473	595447	521077	13C2-PFHxA_IS	12.8944	ng/mL	
13C3-HFPO-DA_IS	Auto	5.462	0.037	----	595447	595447	----	10.0000	ng/mL	
HFPO-DA	M	5.455	0.028	-0.007	295	595447	13C3-HFPO-DA_IS	0.0050	ng/mL	IRr
5_3 FTCA	ND(W/B)	----	----	----	----	408686	13C5-PFHxA_IS	----	ng/mL	
PFPeS	M	6.025	0.037	-1.066	2175	191575	13C3-PFHxS_IS	0.0287	ng/mL	
13C4-PFHpA	Auto	6.164	0.032	1.175	531542	521077	13C2-PFHxA_IS	2.5120	ng/mL	
13C4-PFHpA_IS	Auto	6.164	0.032	----	531542	531542	----	2.5000	ng/mL	
PFHpA	Auto	6.165	0.031	0.001	61256	531542	13C4-PFHpA_IS	0.3223	ng/mL	
DONA	ND(W/B)	----	----	----	----	595447	13C3-HFPO-DA_IS	----	ng/mL	
13C2-6_2 FTS_IS	Auto	6.802	0.024	----	154423	154423	----	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.802	0.024	-0.290	154423	201893	18O2-PFHxS_IS	3.9033	ng/mL	
6_2 FTS	M	6.803	0.026	0.001	435	154423	13C2-6_2 FTS_IS	0.0074	ng/mL	
13C4-PFOA_IS	Auto	7.116	0.025	----	34729	34729	----	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.116	0.025	----	436489	436489	----	2.5000	ng/mL	
13C8-PFOA	Auto	7.116	0.025	0.000	436489	34729	13C4-PFOA_IS	2.6354	ng/mL	
PFOA	M	7.117	0.024	0.001	1150886	436489	13C8-PFOA_IS	7.2186	ng/mL	
13C3-PFHxS	Auto	7.091	0.029	-0.001	191575	201893	18O2-PFHxS_IS	2.7073	ng/mL	
13C3-PFHxS_IS	Auto	7.091	0.029	----	191575	191575	----	2.5000	ng/mL	
PFHxS	M	7.092	0.030	0.001	30100	191575	13C3-PFHxS_IS	0.3595	ng/mL	
18O2-PFHxS_IS	Auto	7.092	0.030	----	201893	201893	----	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.965	0.023	----	267070	267070	----	1.2500	ng/mL	
13C9-PFNA	Auto	7.965	0.023	-0.001	267070	267030	13C5-PFNA_IS	1.3511	ng/mL	
13C5-PFNA_IS	Auto	7.965	0.023	----	267030	267030	----	1.2500	ng/mL	
PFNA	Auto	7.965	0.022	0.001	42257	267070	13C9-PFNA_IS	0.2240	ng/mL	
PFHpS	ND(W/B)	----	----	----	----	79579	13C8-PFOS_IS	----	ng/mL	
7_3 FTCA	M	7.944	0.016	2.956	844	408686	13C5-PFHxA_IS	0.0393	ng/mL	
13C2-8_2-FTS	Auto	8.417	0.018	1.325	117759	201893	18O2-PFHxS_IS	3.5059	ng/mL	
13C2-8_2-FTS_IS	Auto	8.417	0.018	----	117759	117759	----	5.0000	ng/mL	
8_2 FTS	M	8.404	0.006	-0.013	519	117759	13C2-8_2-FTS_IS	0.0116	ng/mL	IRr
13C6-PFDA_IS	Auto	8.729	0.022	----	173451	173451	----	1.2500	ng/mL	
13C6-PFDA	Auto	8.729	0.022	-0.001	173451	173113	13C2-PFDA_IS	1.2503	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_034 (continued)

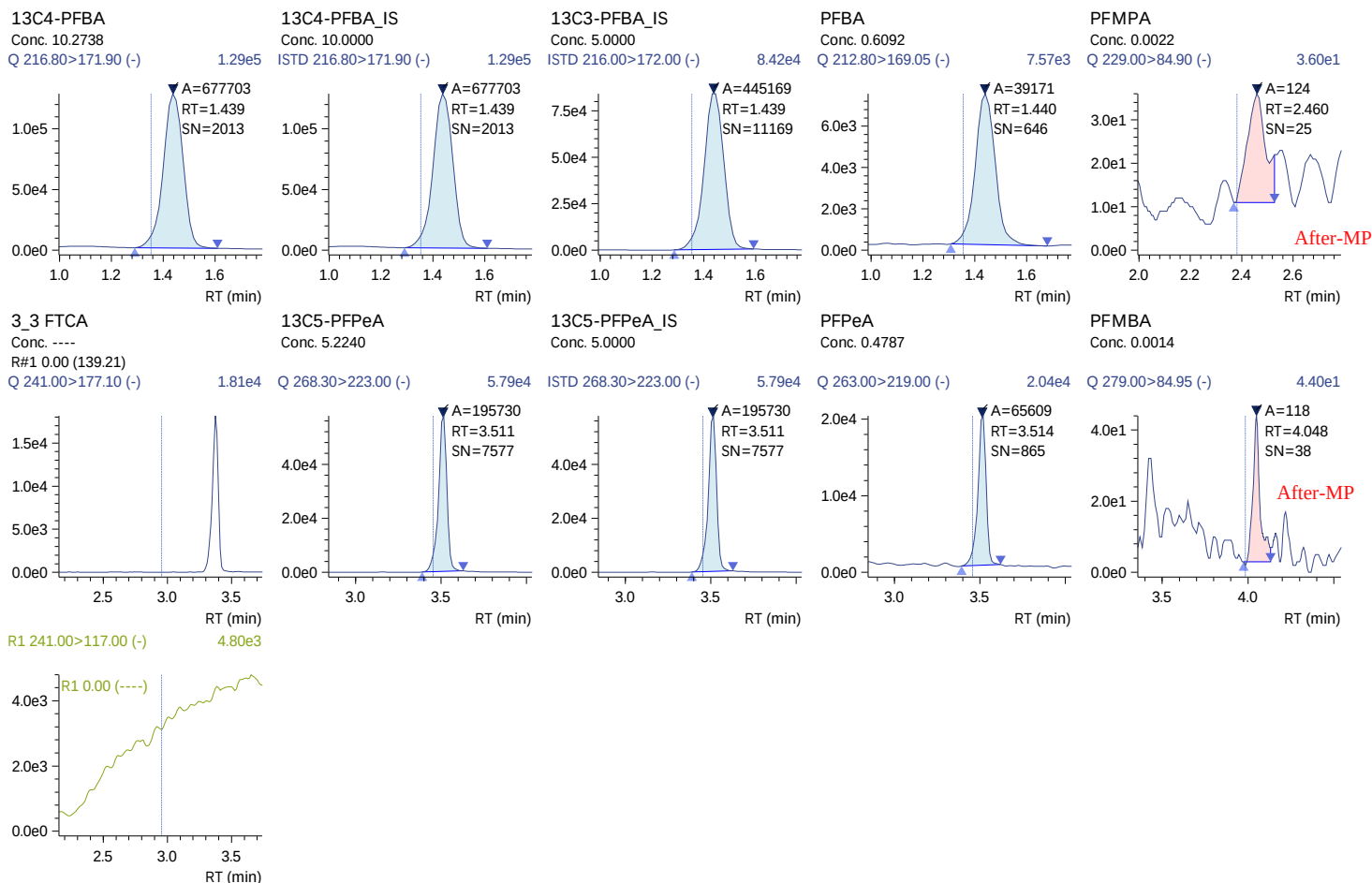
(Table continued from previous page)

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C2-PFDA_IS	Auto	8.730	0.022	----	173113	173113	----	1.2500	ng/mL	
PFDA	Auto	8.731	0.022	0.002	42742	173451	13C6-PFDA_IS	0.2914	ng/mL	
D3-NMeFOSAA_IS	Auto	8.864	0.021	----	321885	321885	----	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.864	0.021	0.040	321885	271669	13C4-PFOS_IS	2.9101	ng/mL	
13C8-PFOS_IS	Auto	8.824	0.024	----	79579	79579	----	2.5000	ng/mL	
13C8-PFOS	Auto	8.824	0.024	0.000	79579	271669	13C4-PFOS_IS	2.3276	ng/mL	
13C4-PFOS_IS	Auto	8.824	0.024	----	271669	271669	----	2.5000	ng/mL	
PFOS	M	8.827	0.026	0.003	20974	79579	13C8-PFOS_IS	0.3086	ng/mL	
NMeFOSAA	ND(W/B)	----	----	----	----	321885	D3-NMeFOSAA_IS	----	ng/mL	
D5-NetFOSAA_IS	Auto	9.195	0.023	----	225568	225568	----	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.195	0.023	0.371	225568	271669	13C4-PFOS_IS	2.5876	ng/mL	
NetFOSAA	ND(W/B)	----	----	----	----	225568	D5-NetFOSAA_IS	----	ng/mL	
9-CI-PF3ONS	M	9.373	0.008	3.911	210	595447	13C3-HFPO-DA_IS	0.0004	ng/mL	IRr
PFUnDA	Auto	9.452	0.019	0.001	32895	187399	13C7-PFUnDA_IS	0.2360	ng/mL	
13C7-PFUnDA_IS	Auto	9.451	0.021	----	187399	187399	----	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.451	0.021	0.721	187399	173113	13C2-PFDA_IS	1.0871	ng/mL	
PFNS	ND(W/B)	----	----	----	----	79579	13C8-PFOS_IS	----	ng/mL	
10_2_FTS	ND(W/B)	----	----	----	----	117759	13C2-8_2-FTS_IS	----	ng/mL	
13C2-PFDOA_IS	Auto	10.138	0.020	----	164518	164518	----	1.2500	ng/mL	
13C2-PFDOA	Auto	10.138	0.020	1.408	164518	173113	13C2-PFDA_IS	0.7995	ng/mL	
PFDOA	Auto	10.139	0.020	0.001	39853	164518	13C2-PFDOA_IS	0.4551	ng/mL	
PFDS	MI R1 R2	10.298	0.022	1.474	362	79579	13C8-PFOS_IS	0.0061	ng/mL	
PFTDA	M	10.792	0.017	-0.635	5390	25765	13C2-PFTDA_IS	0.1907	ng/mL	
11-CI-PF3OUdS	ND(W/B)	----	----	----	----	595447	13C3-HFPO-DA_IS	----	ng/mL	
PFOSAm	M	11.142	0.000	-0.003	254	135984	13C8-PFOSAm_IS	0.0053	ng/mL	
13C8-PFOSAm	Auto	11.145	0.003	2.321	135984	271669	13C4-PFOS_IS	1.5757	ng/mL	
13C8-PFOSAm_IS	Auto	11.145	0.003	----	135984	135984	----	2.5000	ng/mL	
PFTDA	Auto	11.425	0.017	-0.002	3678	25765	13C2-PFTDA_IS	0.1837	ng/mL	
13C2-PFTDA	Auto	11.427	0.021	2.697	25765	173113	13C2-PFDA_IS	0.1774	ng/mL	
13C2-PFTDA_IS	Auto	11.427	0.021	----	25765	25765	----	1.2500	ng/mL	
PFDoS	ND(W/B)	----	----	----	----	79579	13C8-PFOS_IS	----	ng/mL	
D7-MeFOSE_IS	Auto	13.373	-0.007	----	119520	119520	----	25.0000	ng/mL	
D7-MeFOSE	Auto	13.373	-0.007	4.549	119520	271669	13C4-PFOS_IS	5.3950	ng/mL	
MeFOSE	ND(W/B)	----	----	----	----	119520	D7-MeFOSE_IS	----	ng/mL	
13C2-PFHxDA_IS	Auto	12.637	0.017	----	22647	22647	----	2.5000	ng/mL	
13C2-PFHxDA	Auto	12.637	0.017	3.907	22647	173113	13C2-PFDA_IS	0.1165	ng/mL	
PFHxDA	Auto	12.637	0.016	0.000	5784	22647	13C2-PFHxDA_IS	0.4726	ng/mL	
D3-MeFOSA	Auto	13.680	-0.005	4.856	16125	271669	13C4-PFOS_IS	0.7157	ng/mL	
D3-MeFOSA_IS	Auto	13.680	-0.005	----	16125	16125	----	2.5000	ng/mL	
MeFOSA	ND(W/B)	----	----	----	----	16125	D3-MeFOSA_IS	----	ng/mL	
D9-EtFOSE_IS	Auto	14.002	-0.006	----	127411	127411	----	25.0000	ng/mL	
D9-EtFOSE	Auto	14.002	-0.006	5.178	125537	271669	13C4-PFOS_IS	4.6306	ng/mL	
EtFOSE	ND(W/B)	----	----	----	----	127411	D9-EtFOSE_IS	----	ng/mL	
D5-EtFOSAm	Auto	14.356	-0.005	5.532	18267	271669	13C4-PFOS_IS	0.5864	ng/mL	
D5-EtFOSAm_IS	Auto	14.356	-0.005	----	18267	18267	----	2.5000	ng/mL	
EtFOSAm	ND(W/B)	----	----	----	----	18267	D5-EtFOSAm_IS	----	ng/mL	
PFODA	Auto	13.764	0.008	1.127	1936	22647	13C2-PFHxDA_IS	0.4234	ng/mL	

Flag ID key: IRr: Ion Ratio (Relative)



240201_034 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_034 (continued)

13C2-4_2 FTS
Conc. 3.9435

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. ----
R#1 0.00 (32.10)
R#2 0.00 (32.79)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 0.0577
R#1 43.60 (44.81)
R#2 43.60 (46.72)

Q 329.10>80.90 (-)

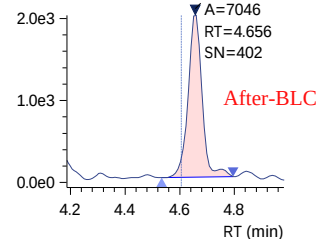
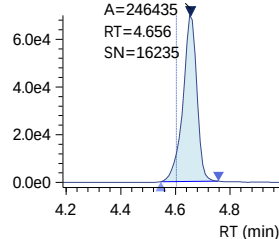
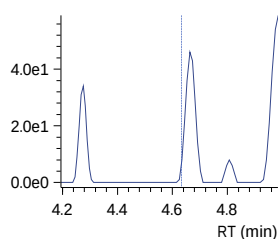
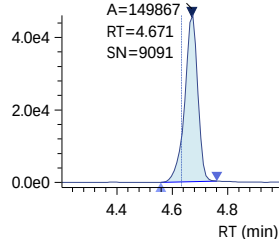
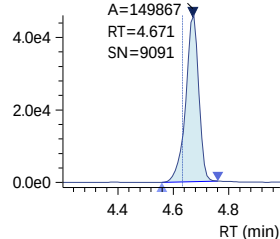
4.61e4 ISTD 329.10>80.90 (-)

4.61e4 Q 327.10>307.00 (-)

5.90e1 ISTD 302.10>79.90 (-)

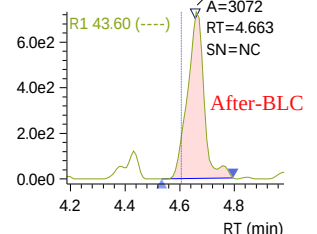
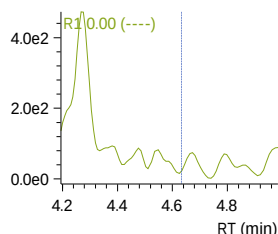
7.00e4 Q 298.70>79.90 (-)

2.04e3



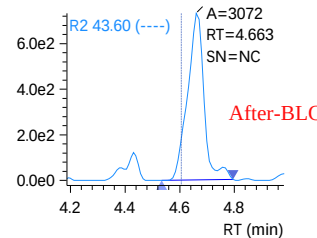
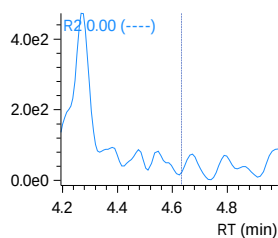
R1 327.10>80.90 (-)

R1 298.70>98.80 (-)



R2 327.10>80.90 (-)

R2 298.70>98.80 (-)





240201_034 (continued)

13C3-PFBS
Conc. 3.2714

NFDHA
Conc. ----
R#1 0.00 (35.54)
R#2 0.00 (37.91)

13C5-PFHxA
Conc. 2.4298

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

Q 302.10>79.90 (-)

7.00e4

Q 295.00>201.00 (-)

1.54e2

Q 318.00>273.00 (-)

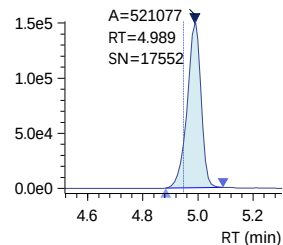
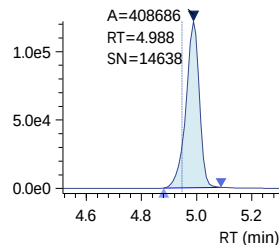
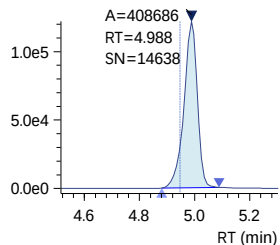
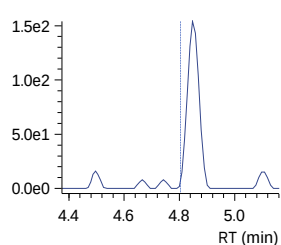
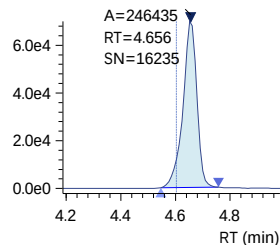
1.22e5

ISTD 318.00>273.00 (-)

1.22e5

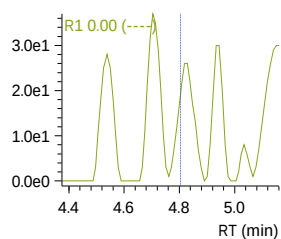
ISTD 315.10>270.00 (-)

1.52e5



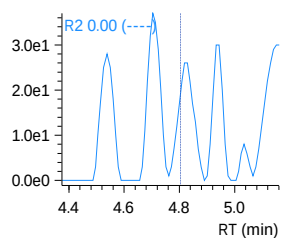
R1 295.00>84.90 (-)

3.70e1



R2 295.00>84.90 (-)

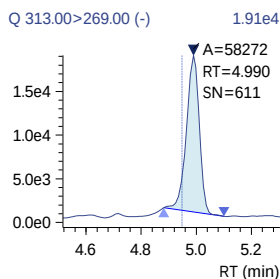
3.70e1



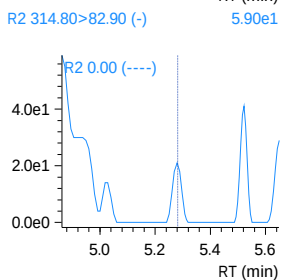
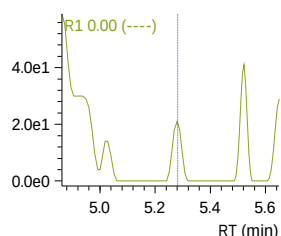
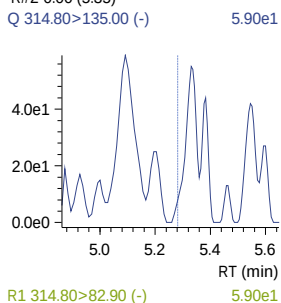


240201_034 (continued)

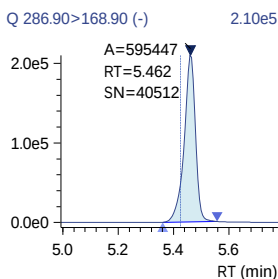
PFHxA
Conc. 0.3769



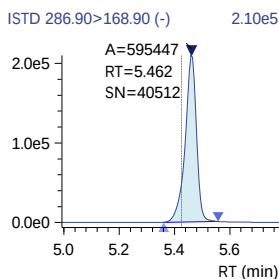
PFEESA
Conc. ----
R#1 0.00 (5.22)
R#2 0.00 (5.35)



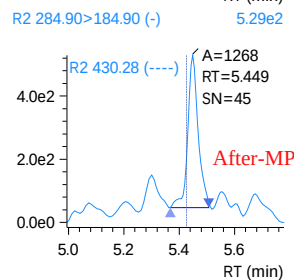
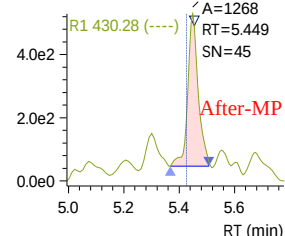
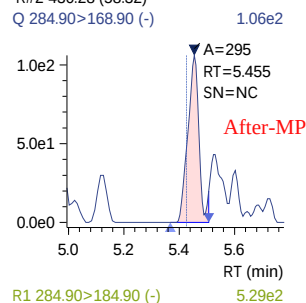
13C3-HFPO-DA
Conc. 12.8944



13C3-HFPO-DA_IS
Conc. 10.0000

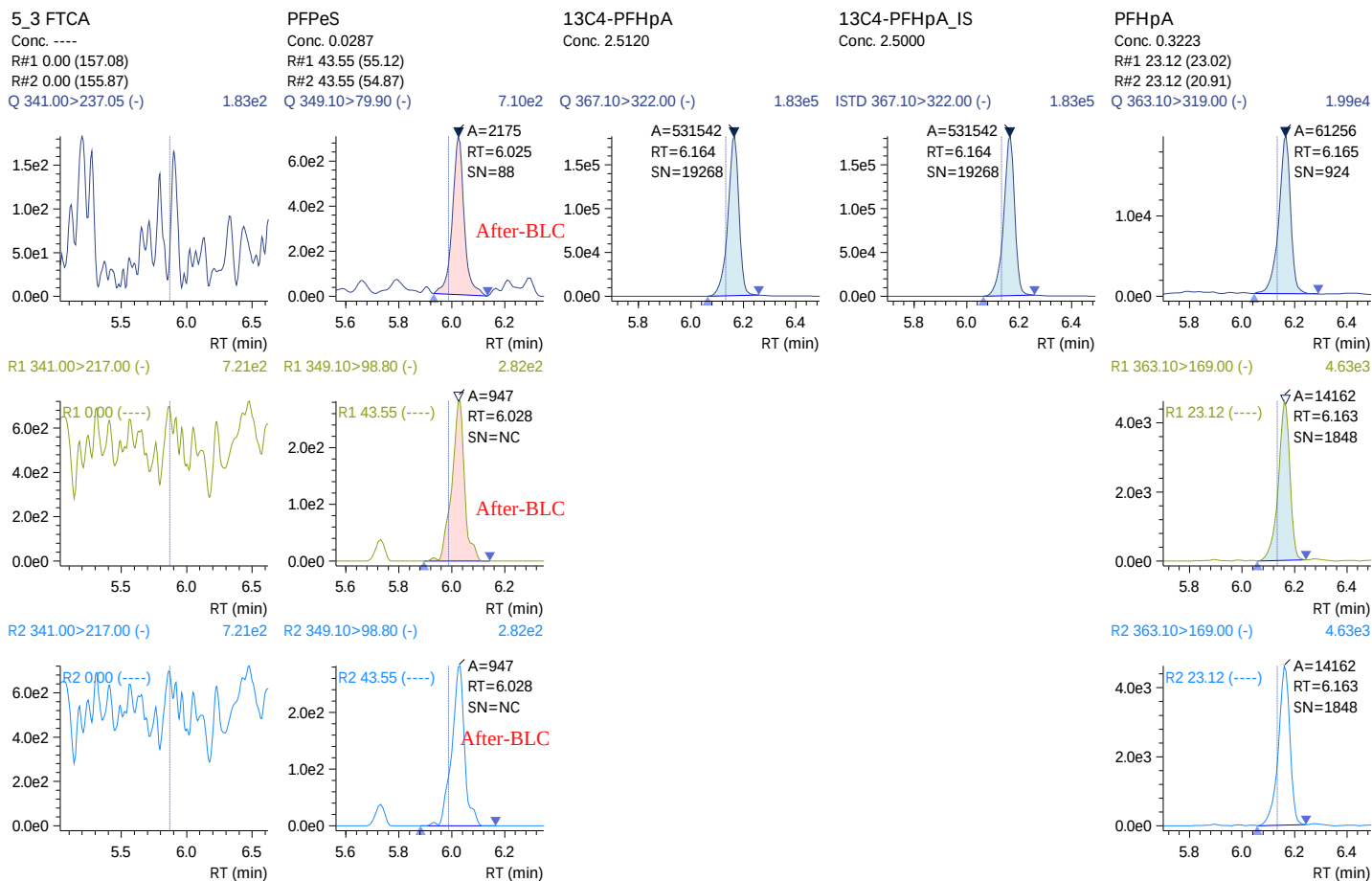


HFPO-DA
Conc. 0.0050
R#1 430.28 (59.79)
R#2 430.28 (58.32)





240201_034 (continued)

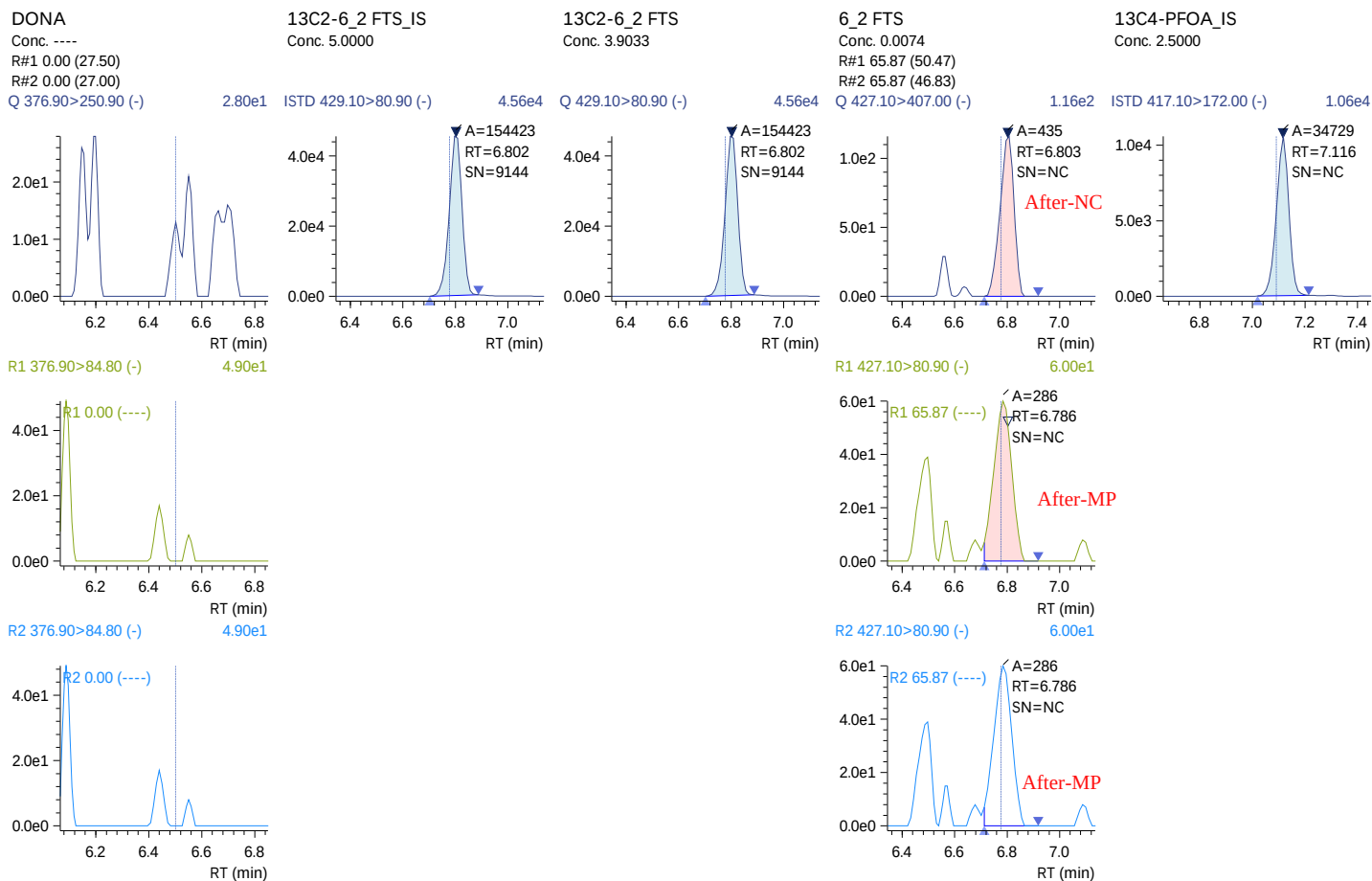


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_034 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_034 (continued)

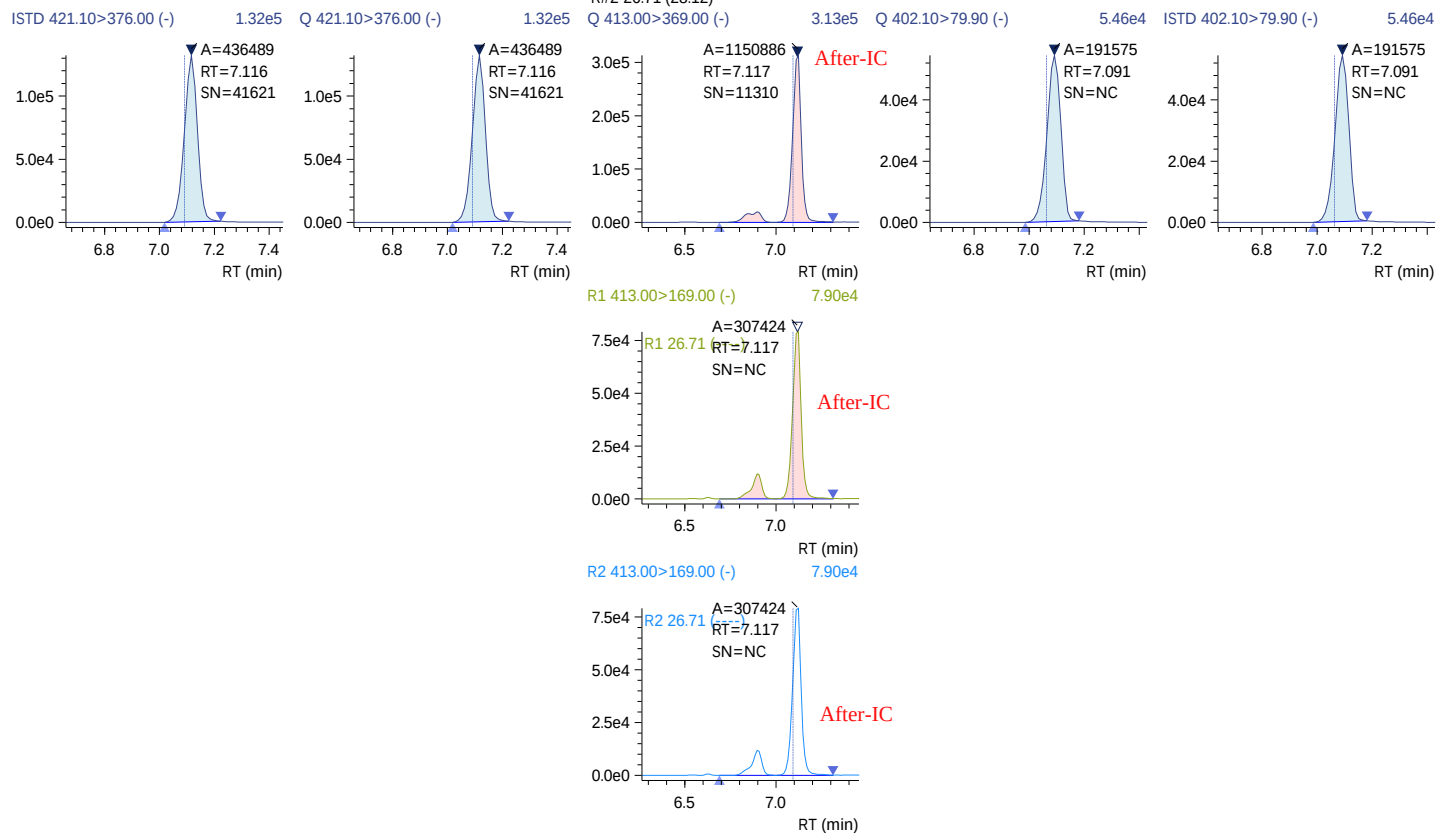
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.6354

PFOA
Conc. 7.2186
R#1 26.71 (28.77)
R#2 26.71 (28.12)

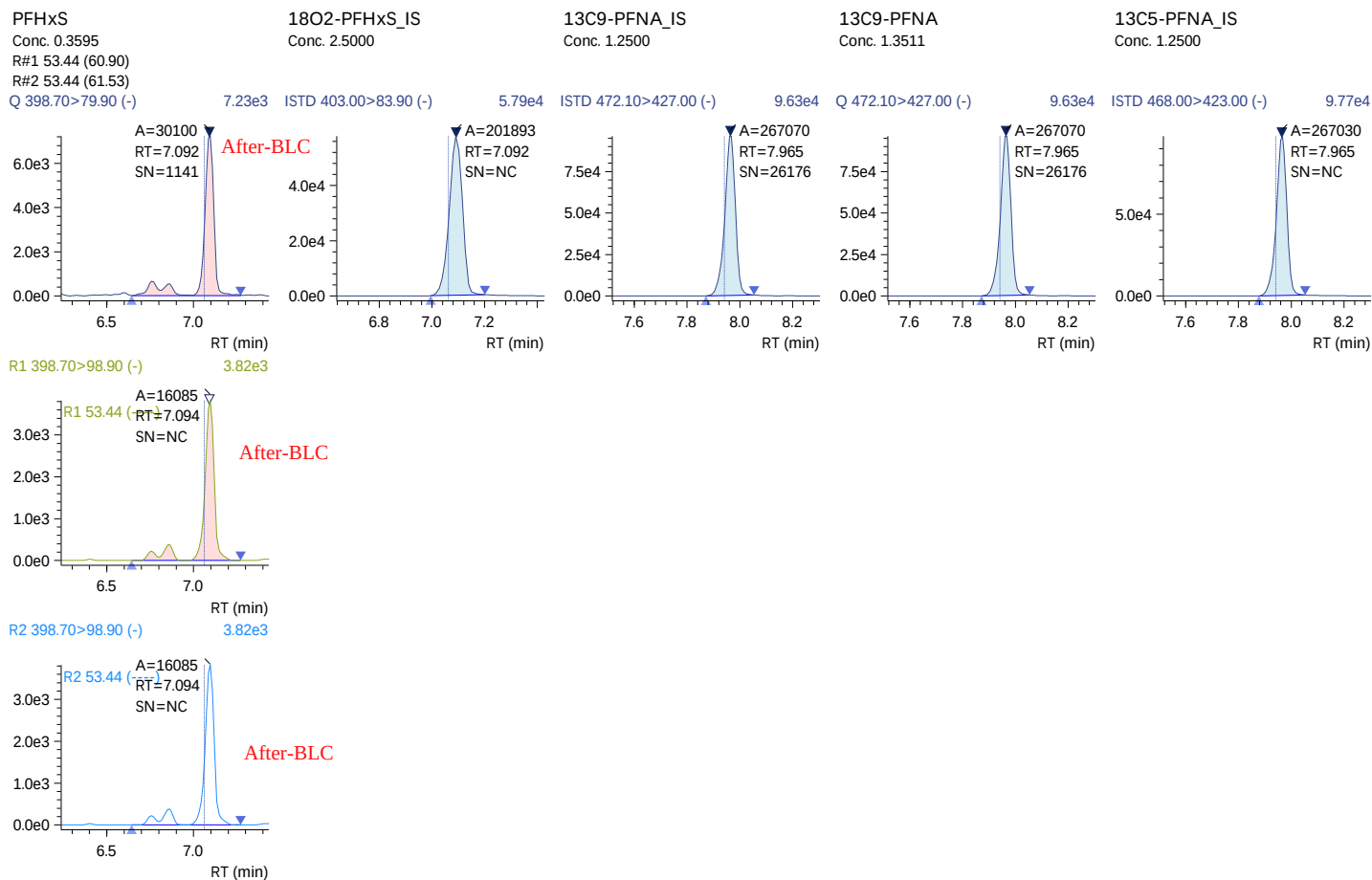
13C3-PFHxS
Conc. 2.7073

13C3-PFHxS_IS
Conc. 2.5000





240201_034 (continued)

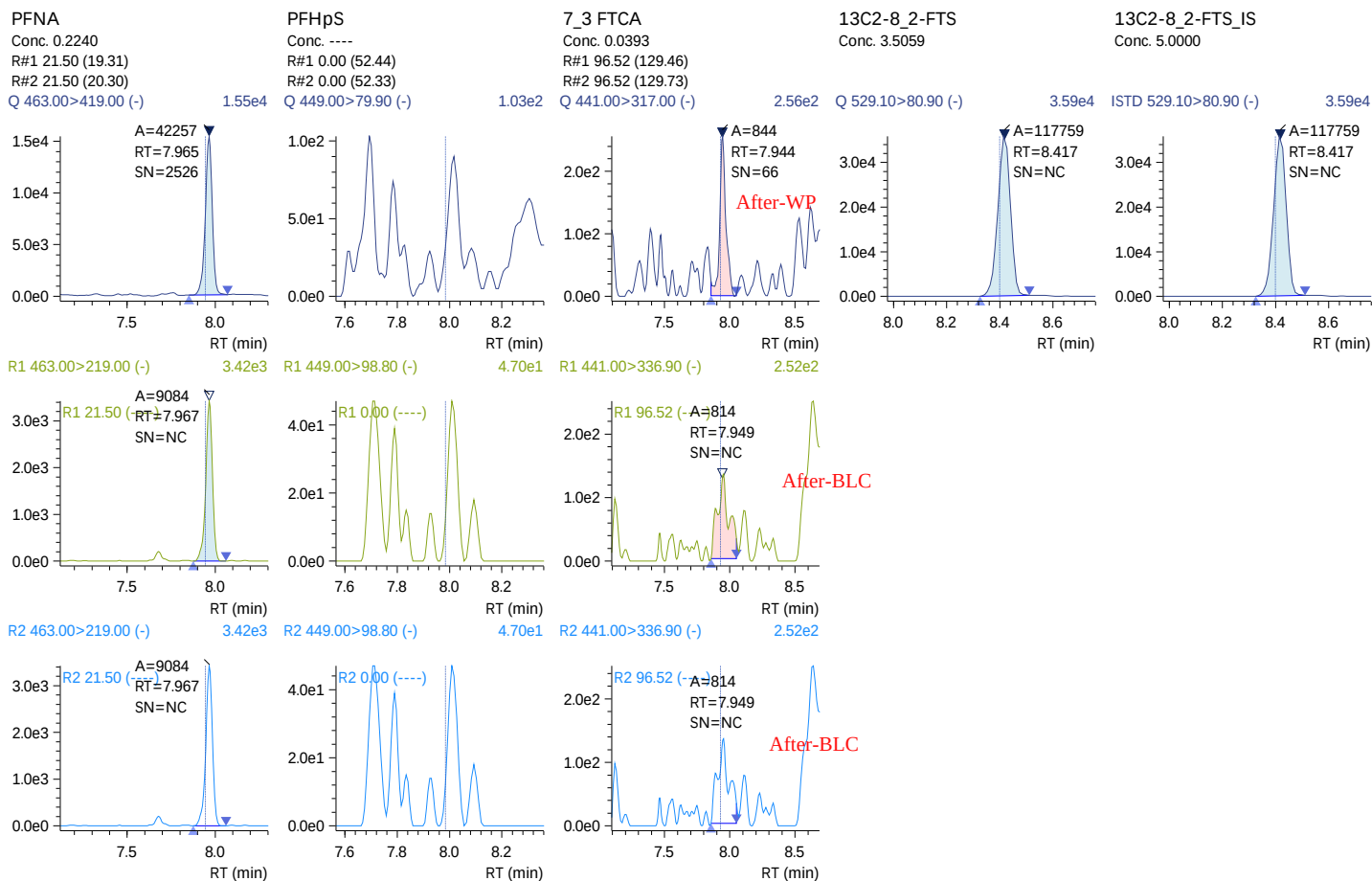


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_034 (continued)

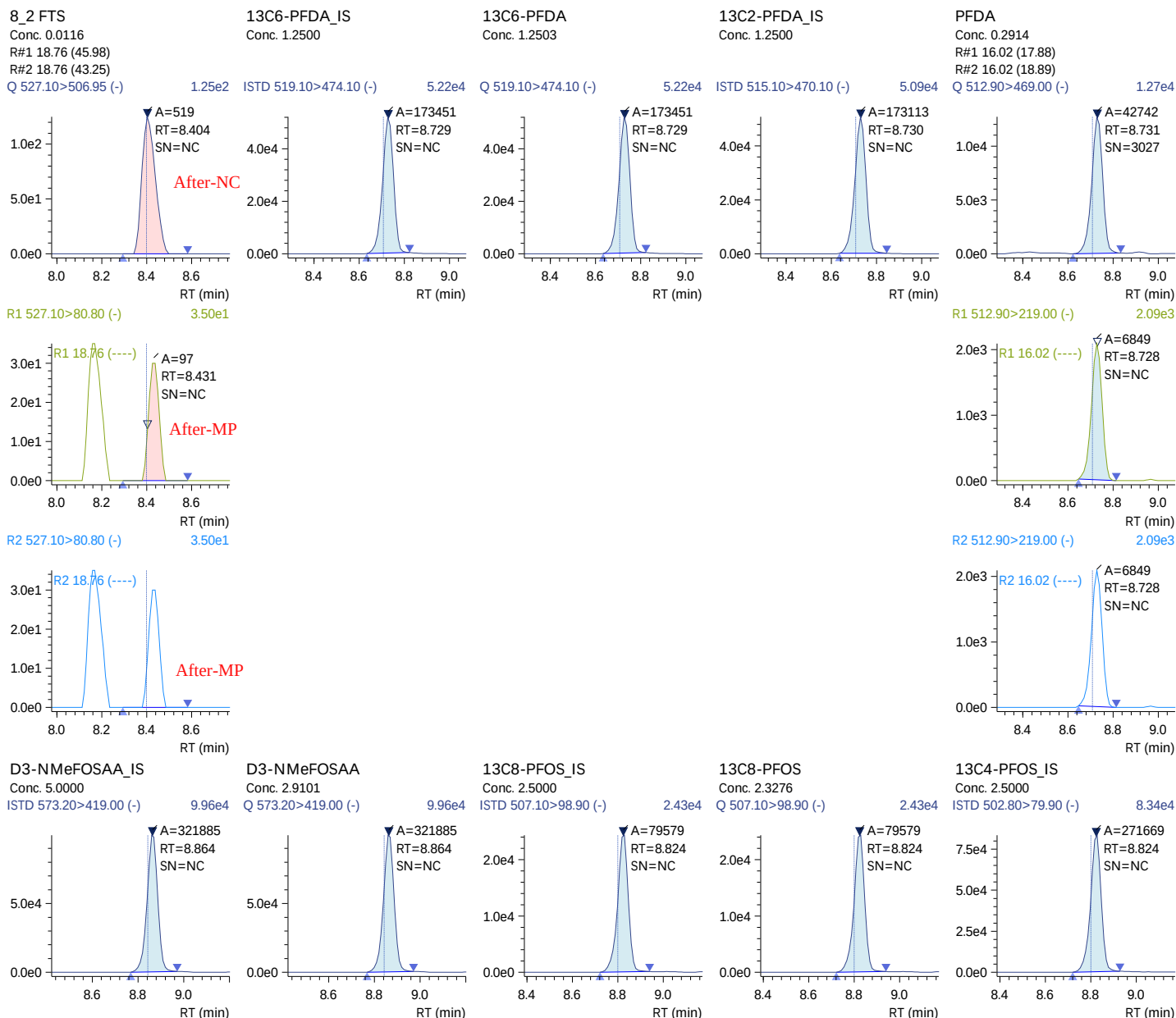


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_034 (continued)

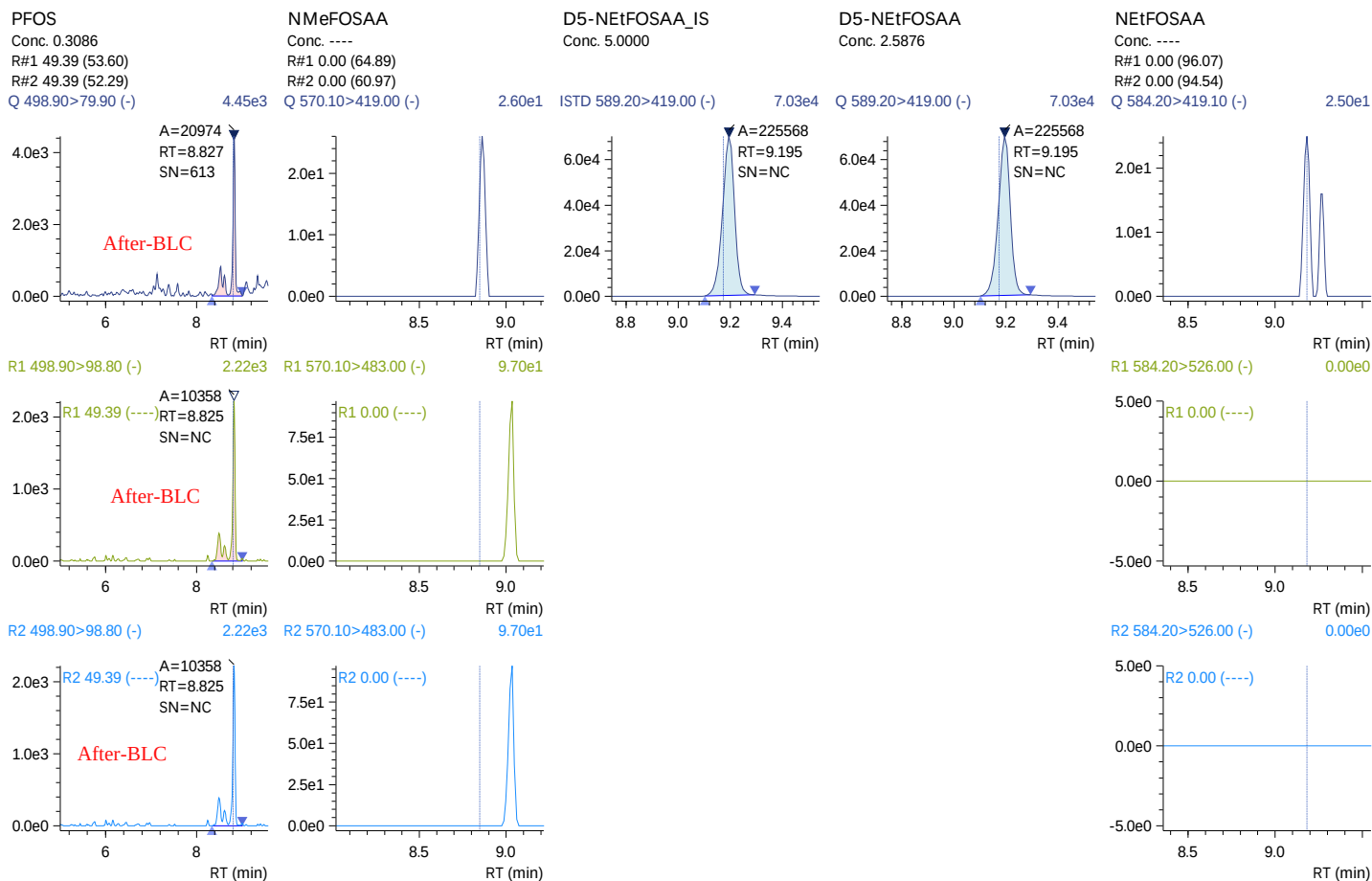


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_034 (continued)



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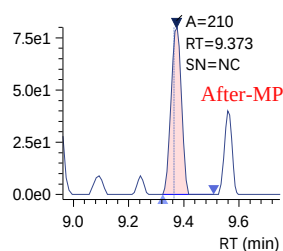
SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



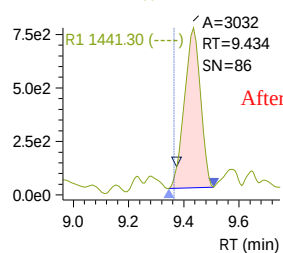
240201_034 (continued)

9-CI-PF3ONS

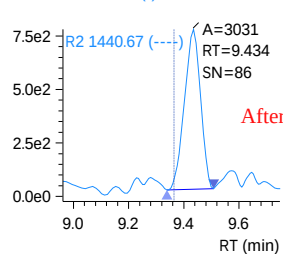
Conc. 0.0004
R#1 1441.30 (30.95)
R#2 1440.67 (30.61)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-)

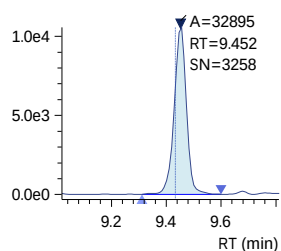


R2 532.80>353.00 (-)

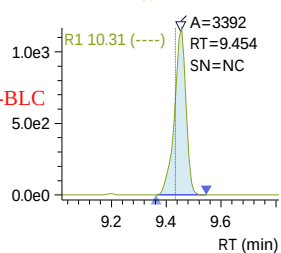


PFUnDA

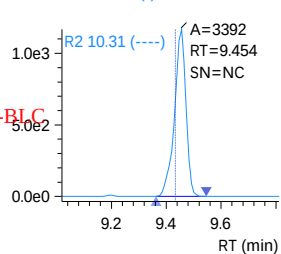
Conc. 0.2360
R#1 10.31 (11.01)
R#2 10.31 (12.02)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-)



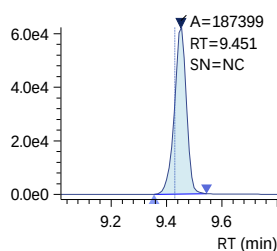
R2 563.10>269.10 (-)



13C7-PFUnDA_IS

Conc. 1.2500

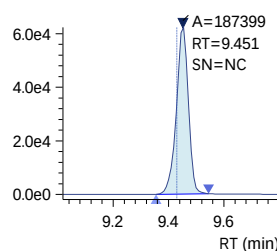
ISTD 570.00>525.10 (-)



13C7-PFUnDA

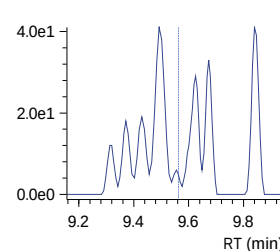
Conc. 1.0871

Q 570.00>525.10 (-)

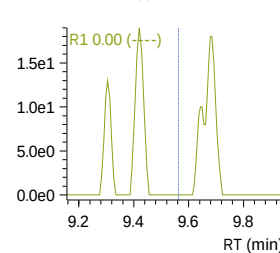


PFNS

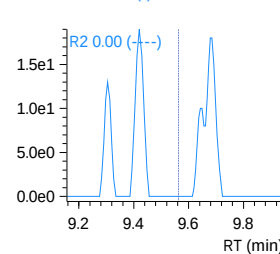
Conc. ----
R#1 0.00 (60.44)
R#2 0.00 (58.51)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-)

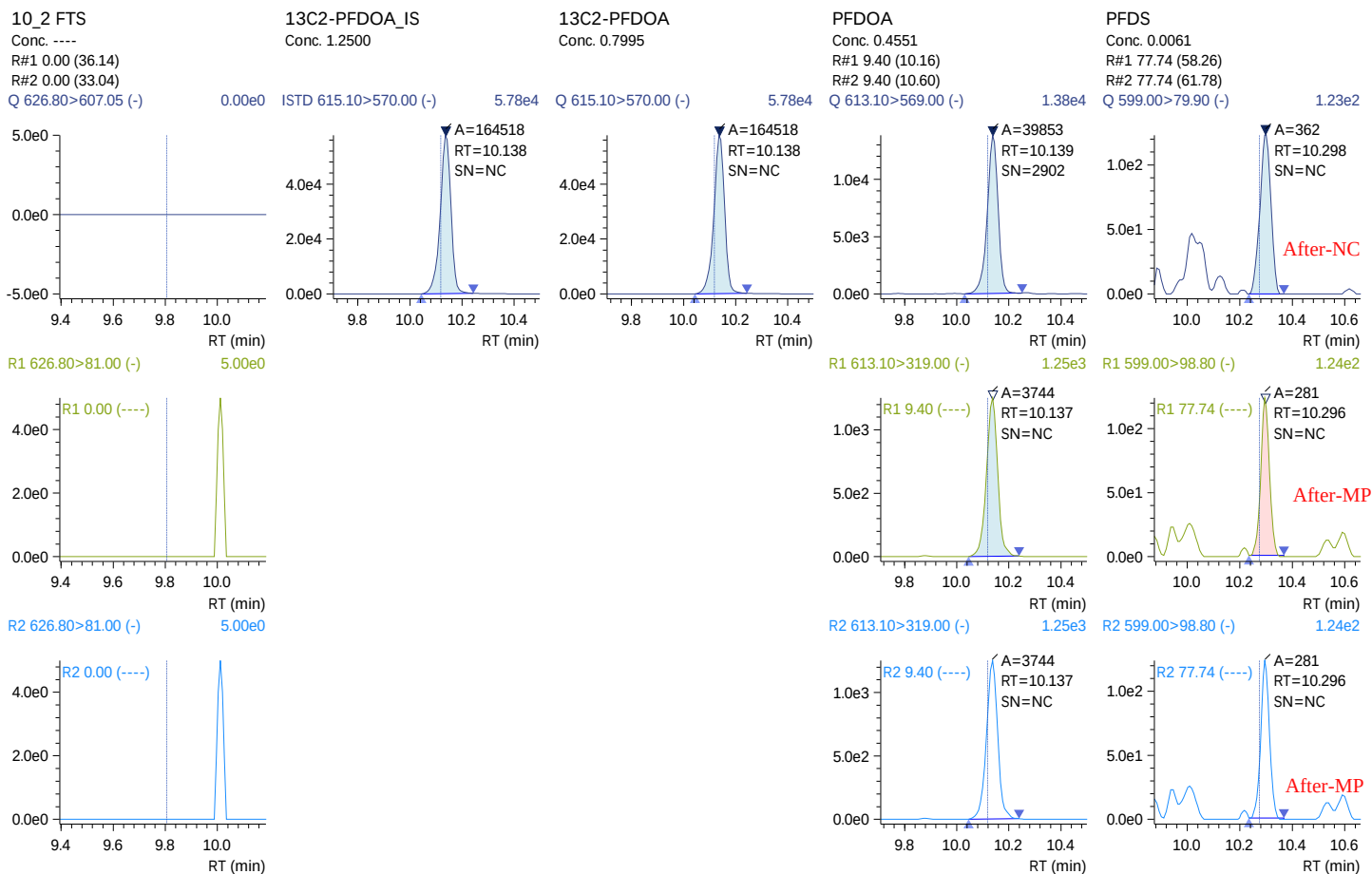


R2 548.80>98.80 (-)





240201_034 (continued)

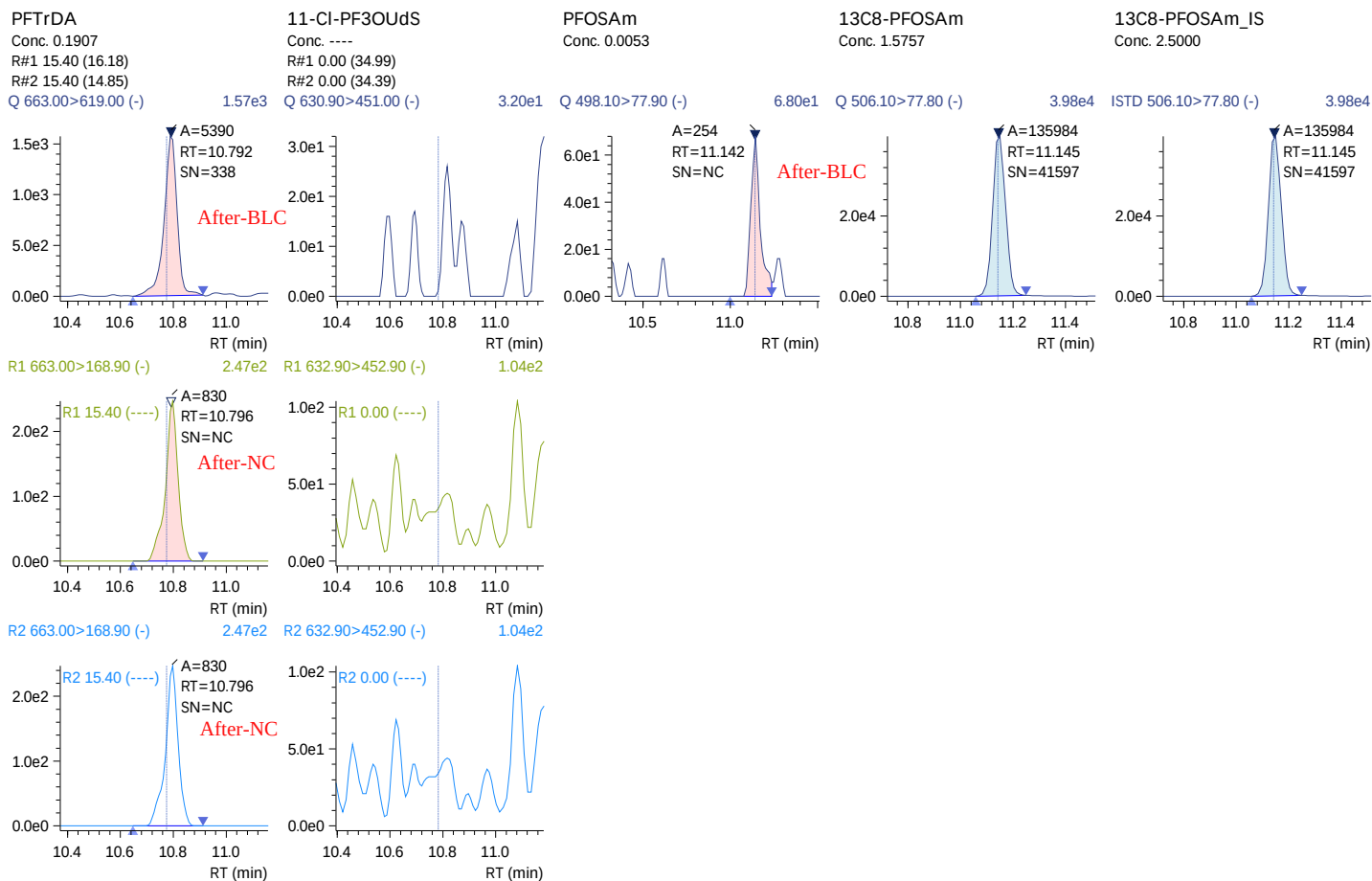


J:\LCMS08\Data\240201_1633_RA\240201_1633_RA.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_034 (continued)

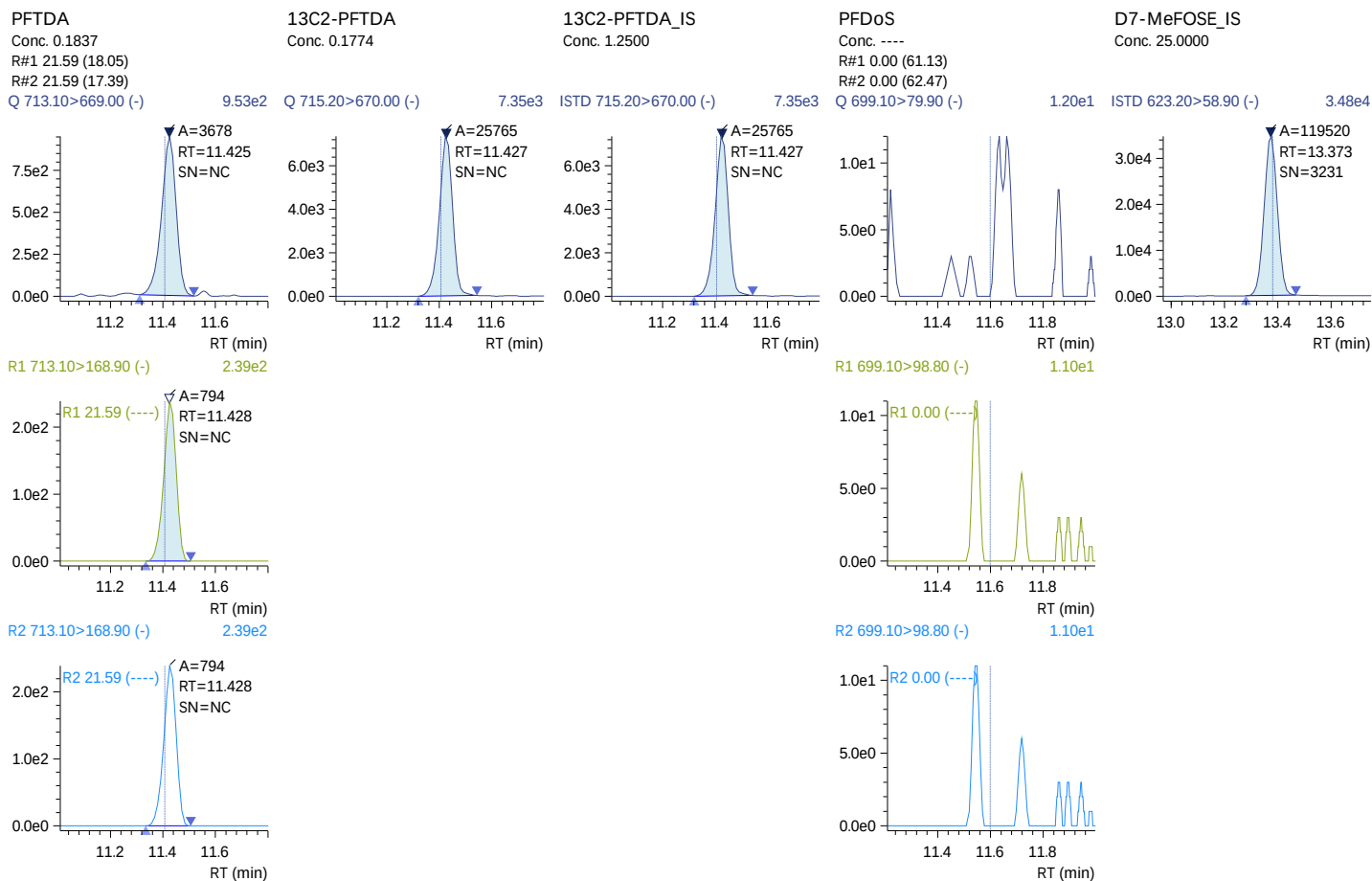


J:\LCMS08\Data\240201_1633_RA\240201_1633_RA.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_034 (continued)





240201_034 (continued)

D7-MeFOSE
Conc. 5.3950

MeFOSE
Conc. ----

13C2-PFHDA-IS
Conc. 2.5000

13C2-PFHDA
Conc. 0.1165

PFHXDA

Conc. 0.4726
R#1 11.82 (11.66)
R#2 11.82 (10.99)

Q 623.20>58.90 (-)

3.48e4

Q 616.10>59.00 (-)

7.40e1

ISTD 815.00>770.05 (-)

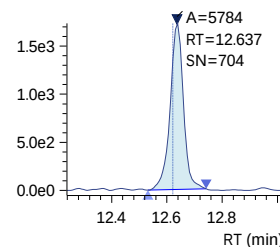
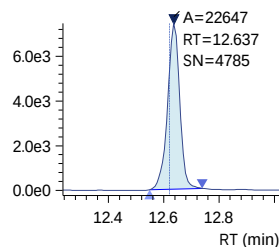
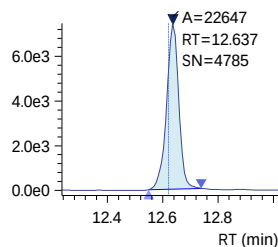
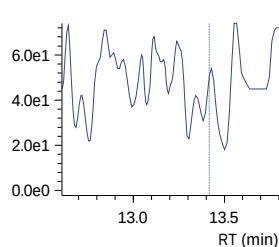
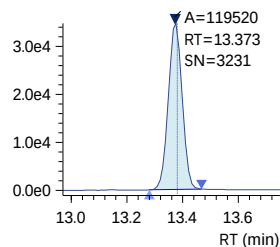
7.47e3

Q 815.00>770.05 (-)

7.47e3

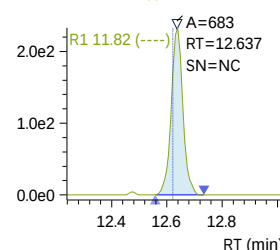
Q 813.00>768.95 (-)

1.74e3



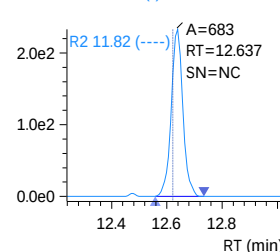
R1 813.00>218.95 (-)

2.33e2



R2 813.00>218.95 (-)

2.33e2





240201_034 (continued)

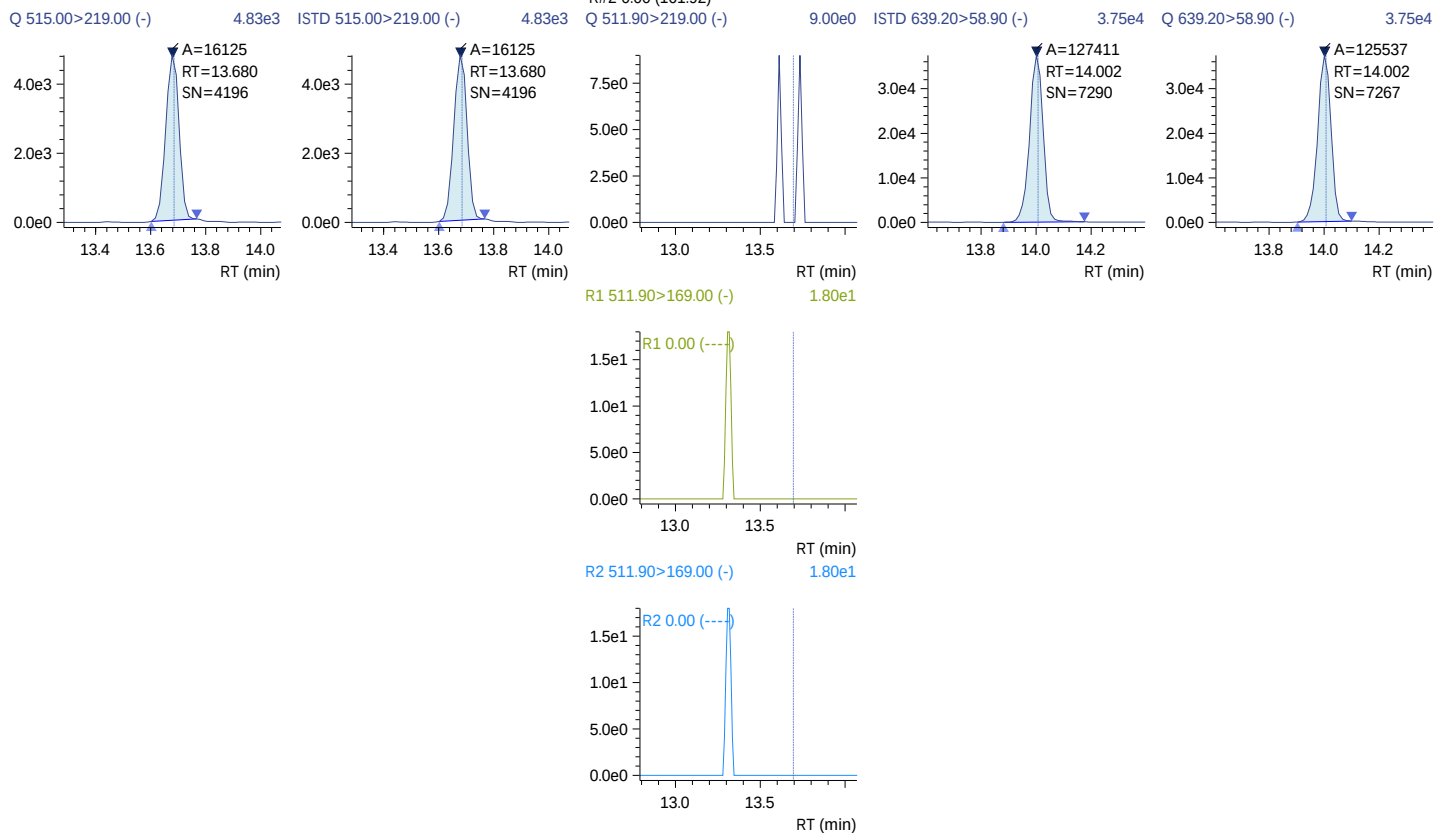
D3-MeFOSA
Conc. 0.7157

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. ----
R#1 0.00 (160.44)
R#2 0.00 (161.92)

D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 4.6306





240201_034 (continued)

EtFOSE
Conc. ----

D5-EtFOSAm
Conc. 0.5864

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. ----

PFODA
Conc. 0.4234

Q 630.00>59.00 (-)

6.30e1

Q 531.10>219.00 (-)

5.91e3

ISTD 531.10>219.00 (-)

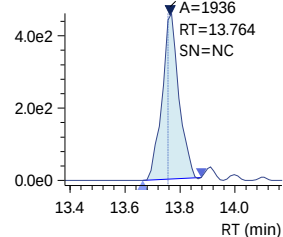
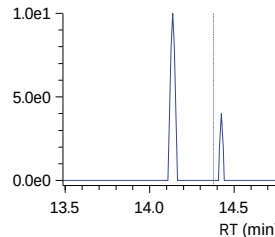
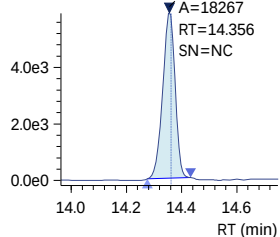
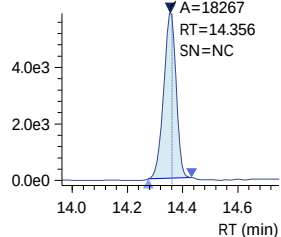
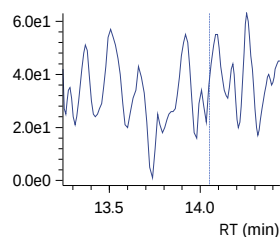
5.91e3

Q 526.00>219.00 (-)

1.00e1

Q 913.00>868.65 (-)

4.62e2

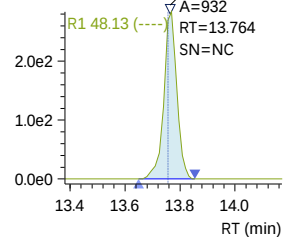
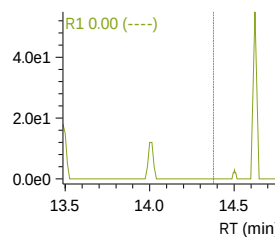


R1 526.00>169.00 (-)

5.50e1

R1 913.00>169.00 (-)

2.84e2

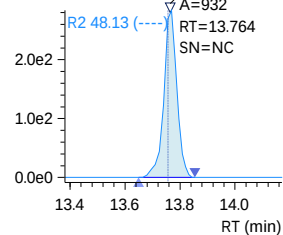
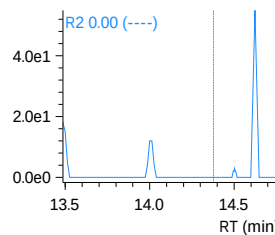


R2 526.00>169.00 (-)

5.50e1

R2 913.00>169.00 (-)

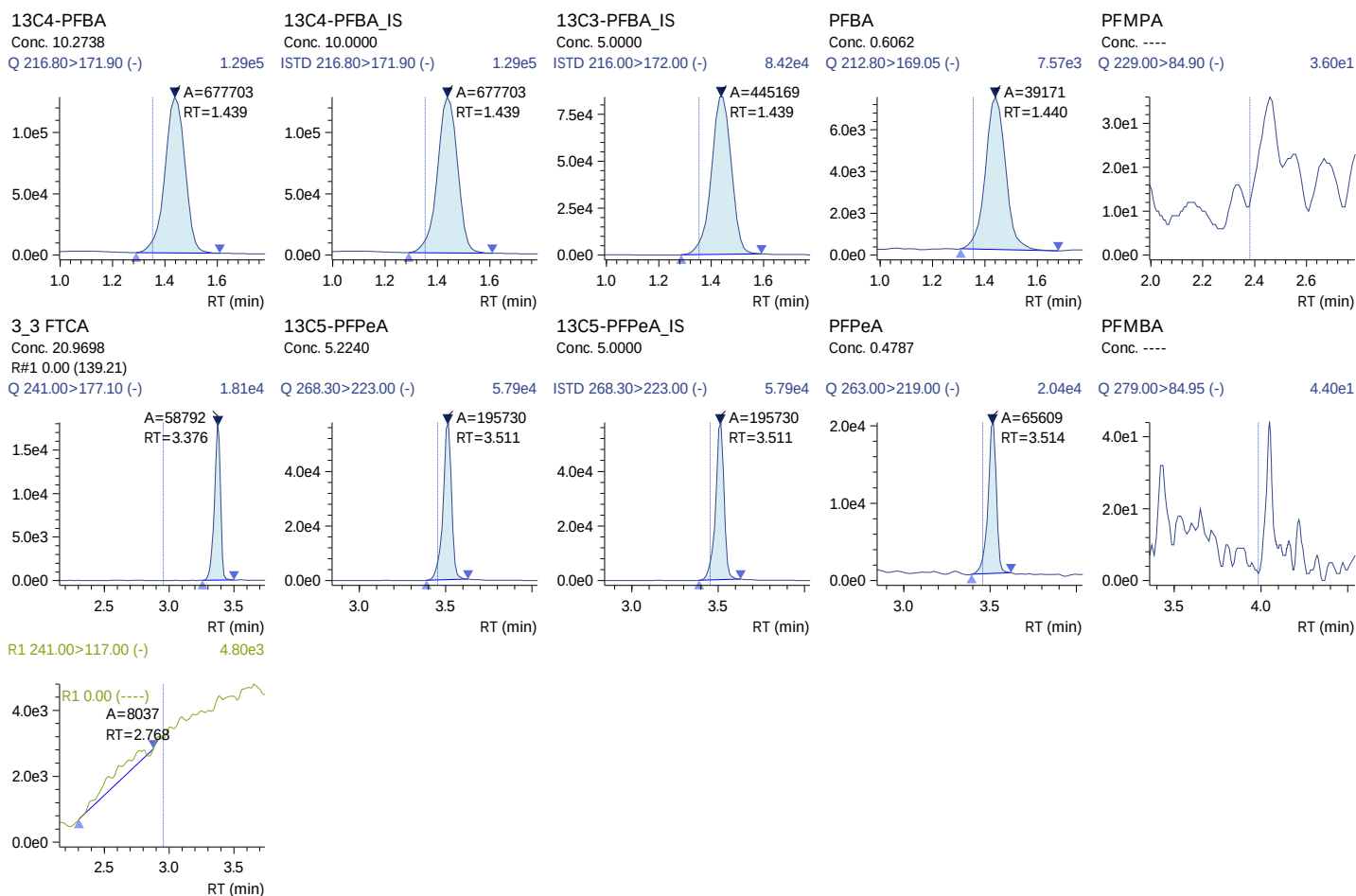
2.84e2





240201_034

Sample ID: K2314281-001
Date Acquired: 2/1/2024 11:09:57 PM
Acquired by: System Administrator
Data File: 240201_034
Vial: 12 | Inj. Volume: 10.0000uL | Tray: 2





240201_034 (continued)

13C2-4_2 FTS
 Conc. 3.9435

13C2-4_2 FTS_IS
 Conc. 5.0000

4_2 FTS
 Conc. ----
 R#1 0.00 (32.10)
 R#2 0.00 (32.79)

13C3-PFBS_IS
 Conc. 2.5000

PFBS
 Conc. 0.0551
 R#1 42.14 (44.81)
 R#2 42.14 (46.72)

Q 329.10>80.90 (-)

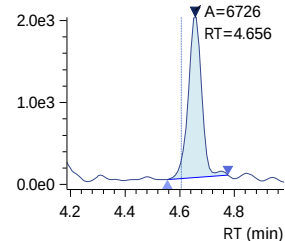
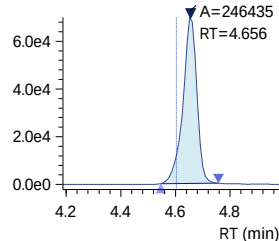
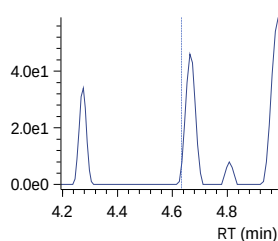
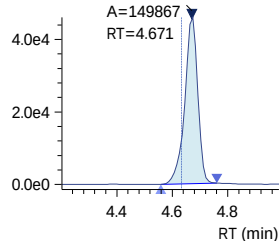
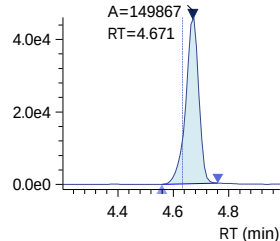
4.61e4 ISTD 329.10>80.90 (-)

4.61e4 Q 327.10>307.00 (-)

5.90e1 ISTD 302.10>79.90 (-)

7.00e4 Q 298.70>79.90 (-)

2.04e3

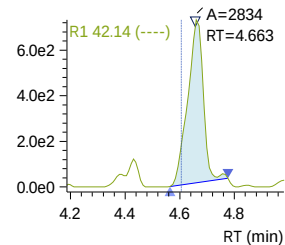
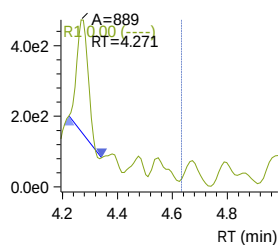


R1 327.10>80.90 (-)

4.73e2

R1 298.70>98.80 (-)

7.33e2

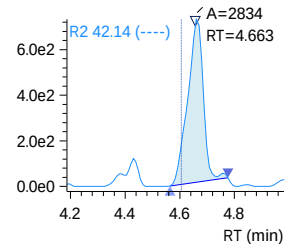
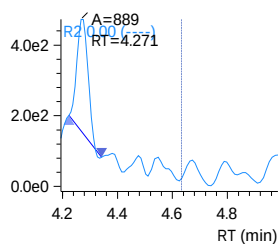


R2 327.10>80.90 (-)

4.73e2

R2 298.70>98.80 (-)

7.33e2





240201_034 (continued)

13C3-PFBS
 Conc. 3.2714

NFDHA
 Conc. 0.0054
 R#1 0.00 (35.54)
 R#2 0.00 (37.91)

13C5-PFHxA
 Conc. 2.4298

13C5-PFHxA_IS
 Conc. 2.5000

13C2-PFHxA_IS
 Conc. 2.5000

Q 302.10>79.90 (-)

7.00e4

Q 295.00>201.00 (-)

1.54e2

Q 318.00>273.00 (-)

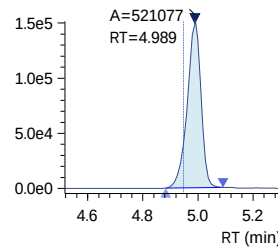
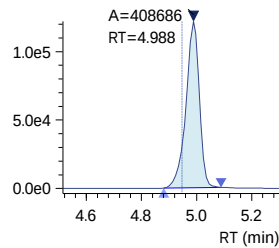
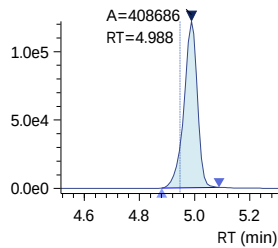
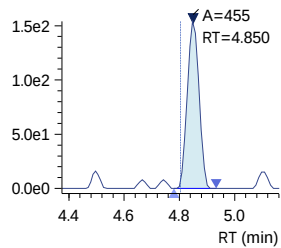
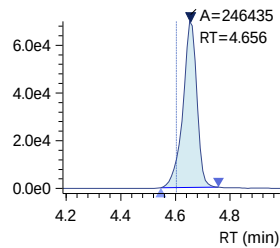
1.22e5

ISTD 318.00>273.00 (-)

1.22e5

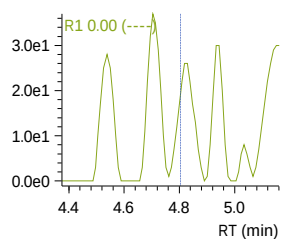
ISTD 315.10>270.00 (-)

1.52e5



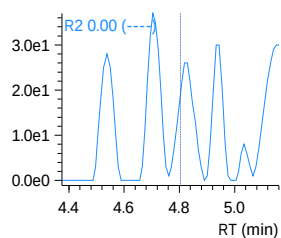
R1 295.00>84.90 (-)

3.70e1



R2 295.00>84.90 (-)

3.70e1





240201_034 (continued)

PFHxA
 Conc. 0.3844

PFEESA
 Conc. ----
 R#1 0.00 (5.22)
 R#2 0.00 (5.35)

13C3-HFPO-DA
 Conc. 12.8944

13C3-HFPO-DA_IS
 Conc. 10.0000

HFPO-DA
 Conc. ----

R#1 0.00 (59.79)
 R#2 0.00 (58.32)

Q 313.00>269.00 (-)

1.91e4

Q 314.80>135.00 (-)

5.90e1

Q 286.90>168.90 (-)

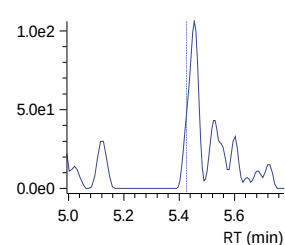
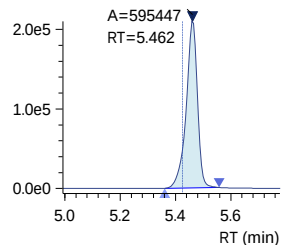
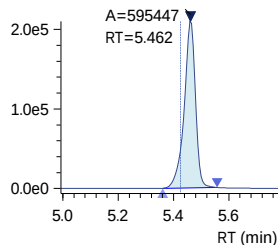
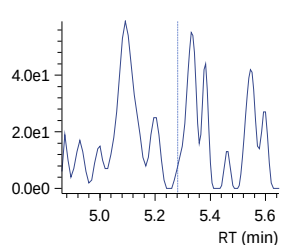
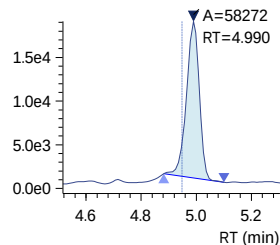
2.10e5

ISTD 286.90>168.90 (-)

2.10e5

Q 284.90>168.90 (-)

1.06e2

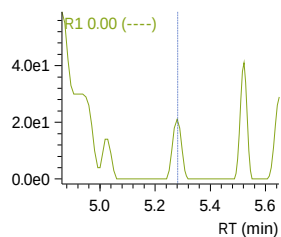


R1 314.80>82.90 (-)

5.90e1

R1 284.90>184.90 (-)

5.29e2

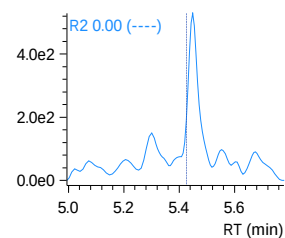
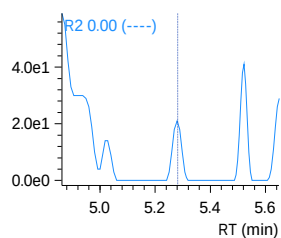


R2 314.80>82.90 (-)

5.90e1

R2 284.90>184.90 (-)

5.29e2

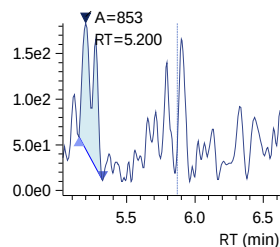




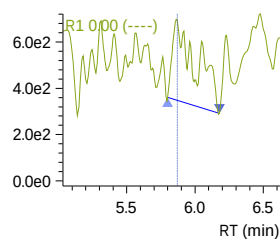
240201_034 (continued)

5_3 FTCA

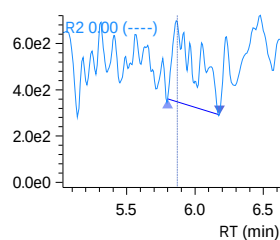
Conc. 0.0698
R#1 0.00 (157.08)
R#2 0.00 (155.87)
Q 341.00>237.05 (-)



R1 341.00>217.00 (-) 7.21e2

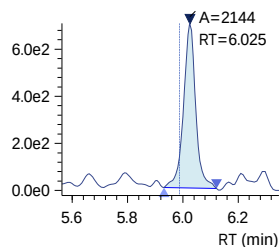


R2 341.00>217.00 (-) 7.21e2

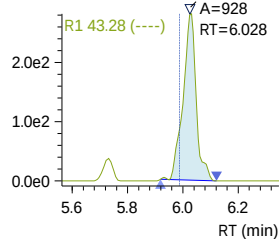


PFPeS

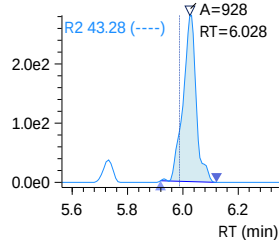
Conc. 0.0283
R#1 43.28 (55.12)
R#2 43.28 (54.87)
Q 349.10>79.90 (-)



R1 349.10>98.80 (-) 2.82e2

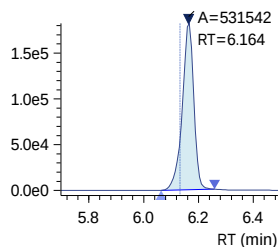


R2 349.10>98.80 (-) 2.82e2



13C4-PFHpa

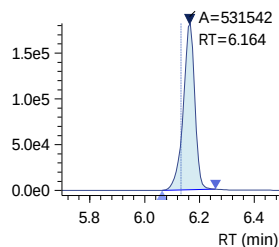
Conc. 2.5120
Q 367.10>322.00 (-)



Q 367.10>322.00 (-) 1.83e5

13C4-PFHpa_IS

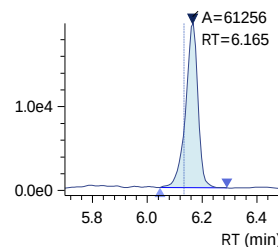
Conc. 2.5000
ISTD 367.10>322.00 (-)



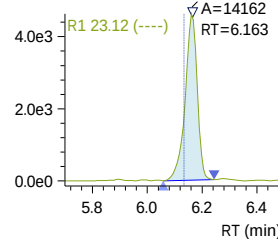
ISTD 367.10>322.00 (-) 1.83e5

PFHpA

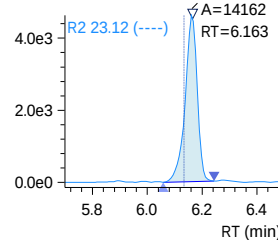
Conc. 0.3223
R#1 23.12 (23.02)
R#2 23.12 (20.91)
Q 363.10>319.00 (-)



R1 363.10>169.00 (-) 4.63e3

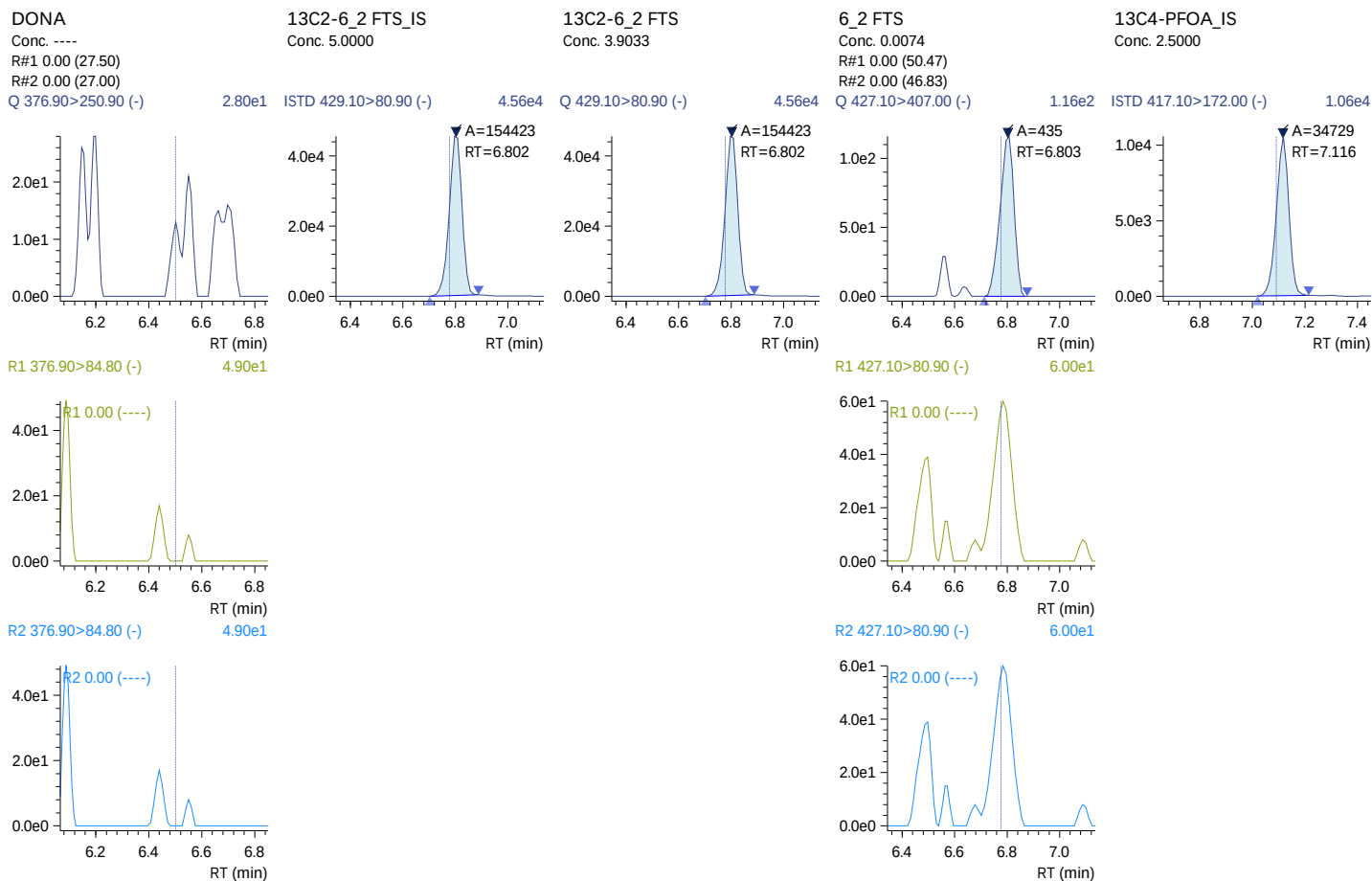


R2 363.10>169.00 (-) 4.63e3





240201_034 (continued)





240201_034 (continued)

13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.6354

PFOA
Conc. 6.3462
R#1 25.22 (28.77)
R#2 25.22 (28.12)

13C3-PFHxS
Conc. 2.7073

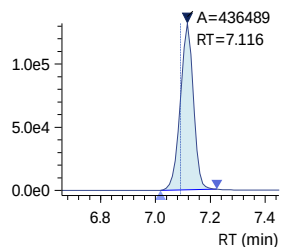
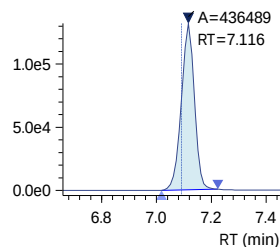
13C3-PFHxS_IS
Conc. 2.5000

ISTD 421.10>376.00 (-)

1.32e5

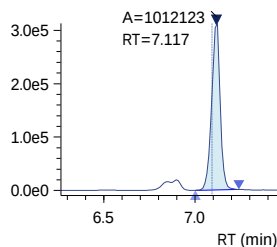
Q 421.10>376.00 (-)

1.32e5



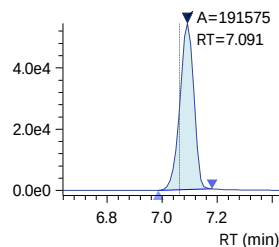
Q 413.00>369.00 (-)

3.13e5



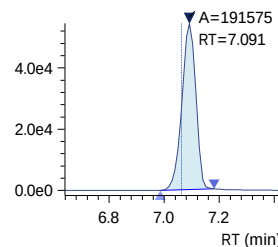
Q 402.10>79.90 (-)

5.46e4



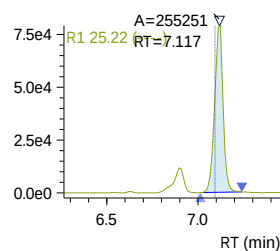
ISTD 402.10>79.90 (-)

5.46e4



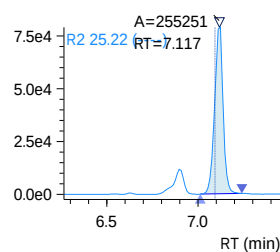
R1 413.00>169.00 (-)

7.90e4



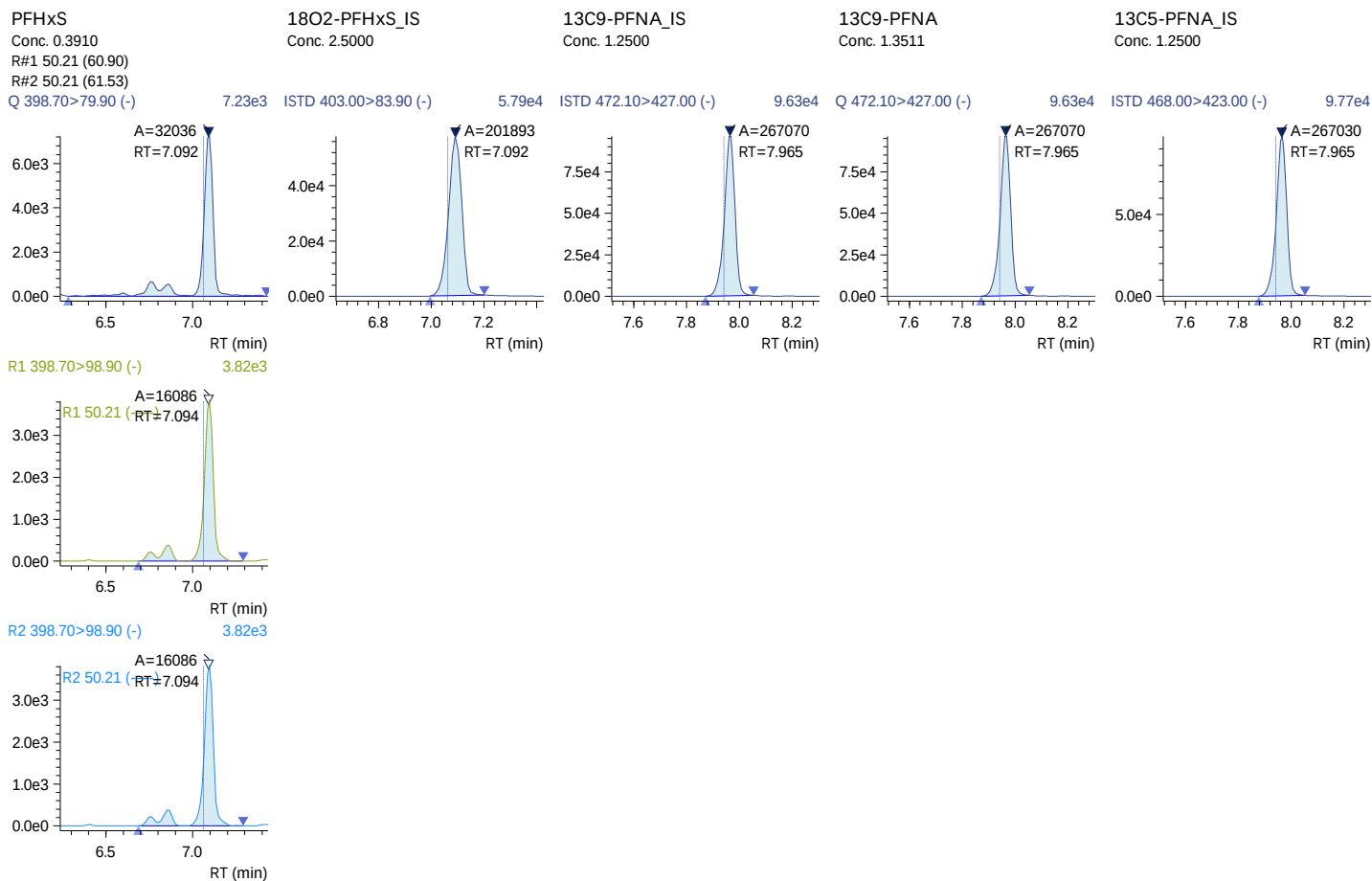
R2 413.00>169.00 (-)

7.90e4



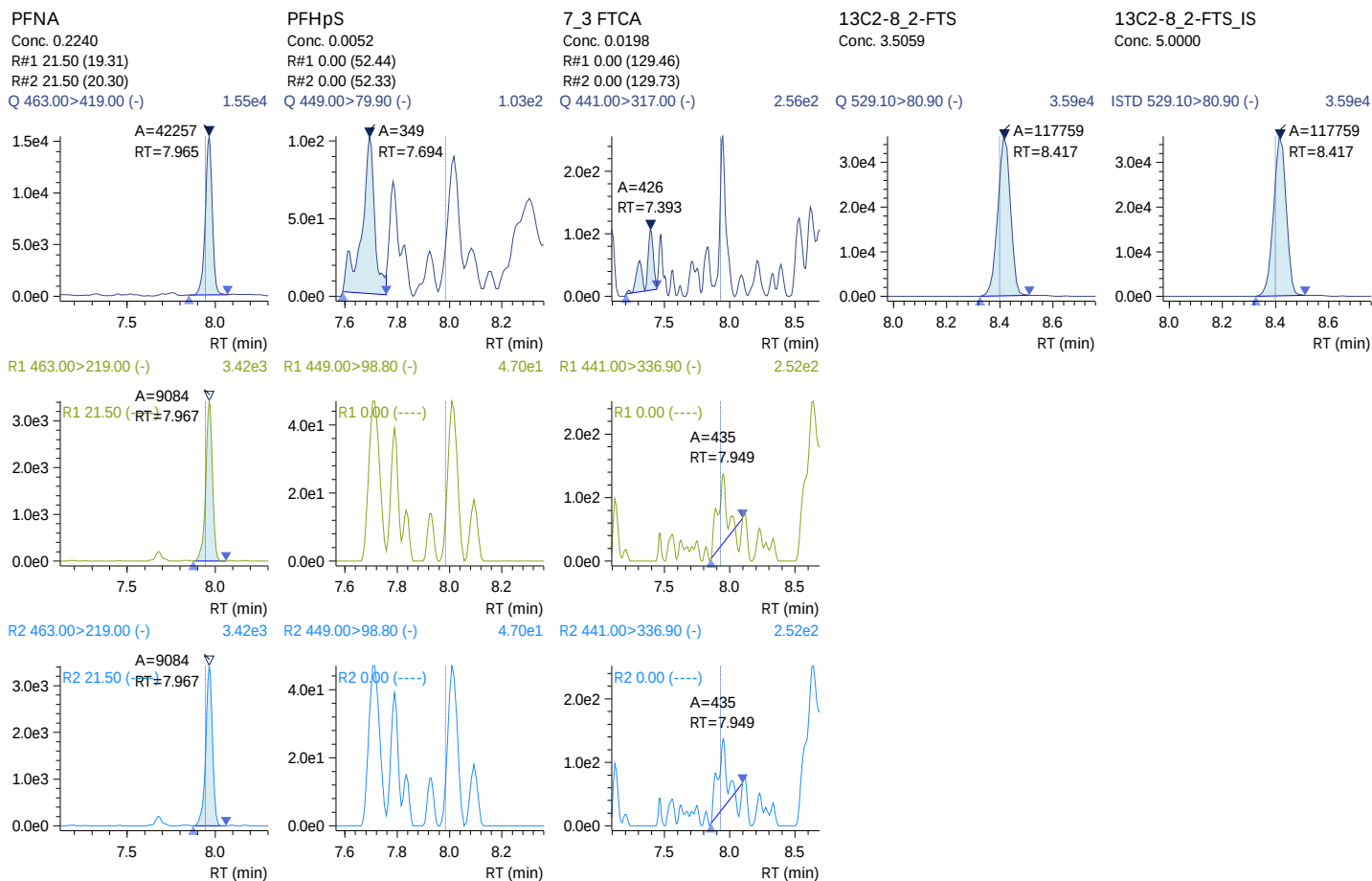


240201_034 (continued)



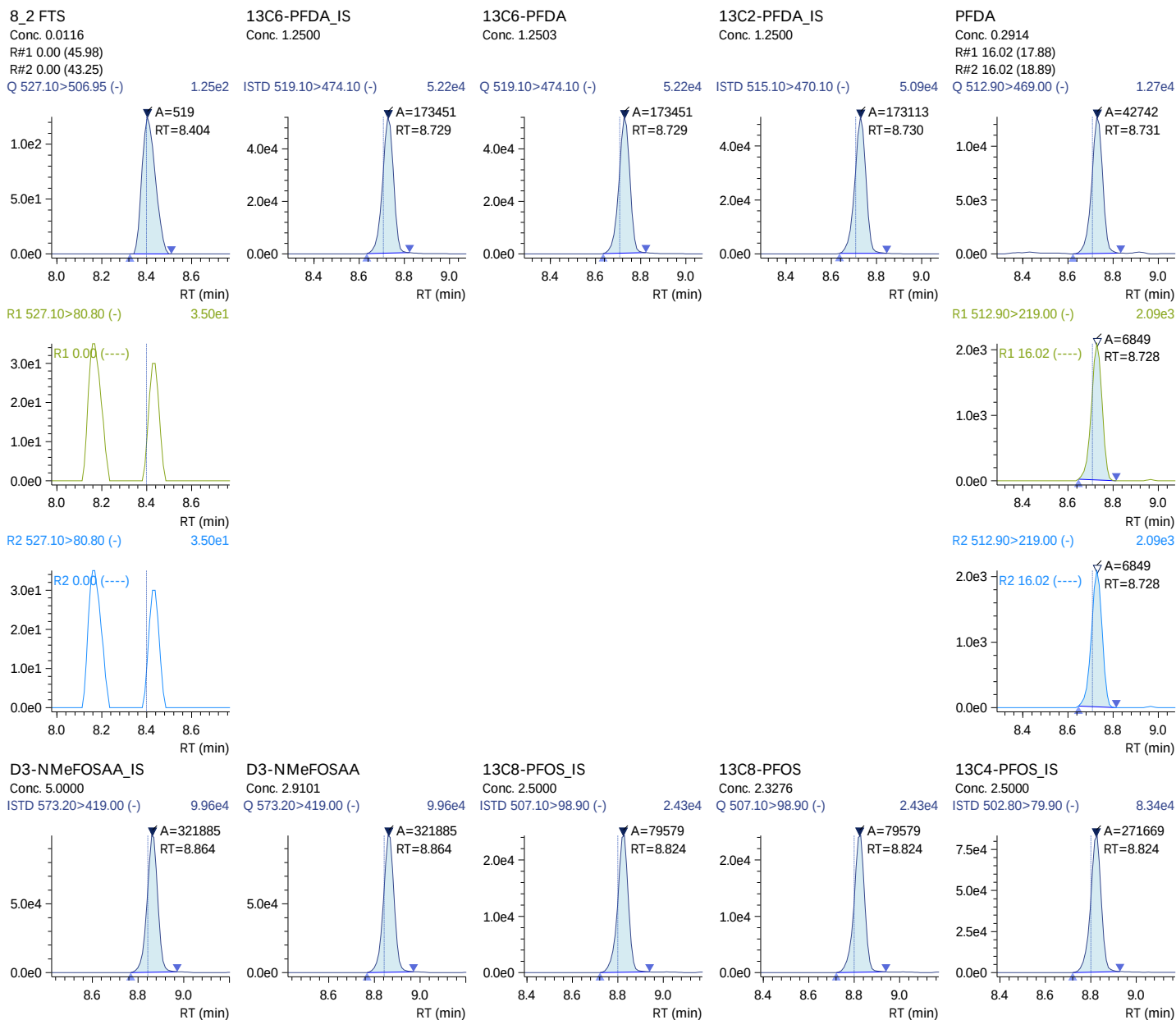


240201_034 (continued)



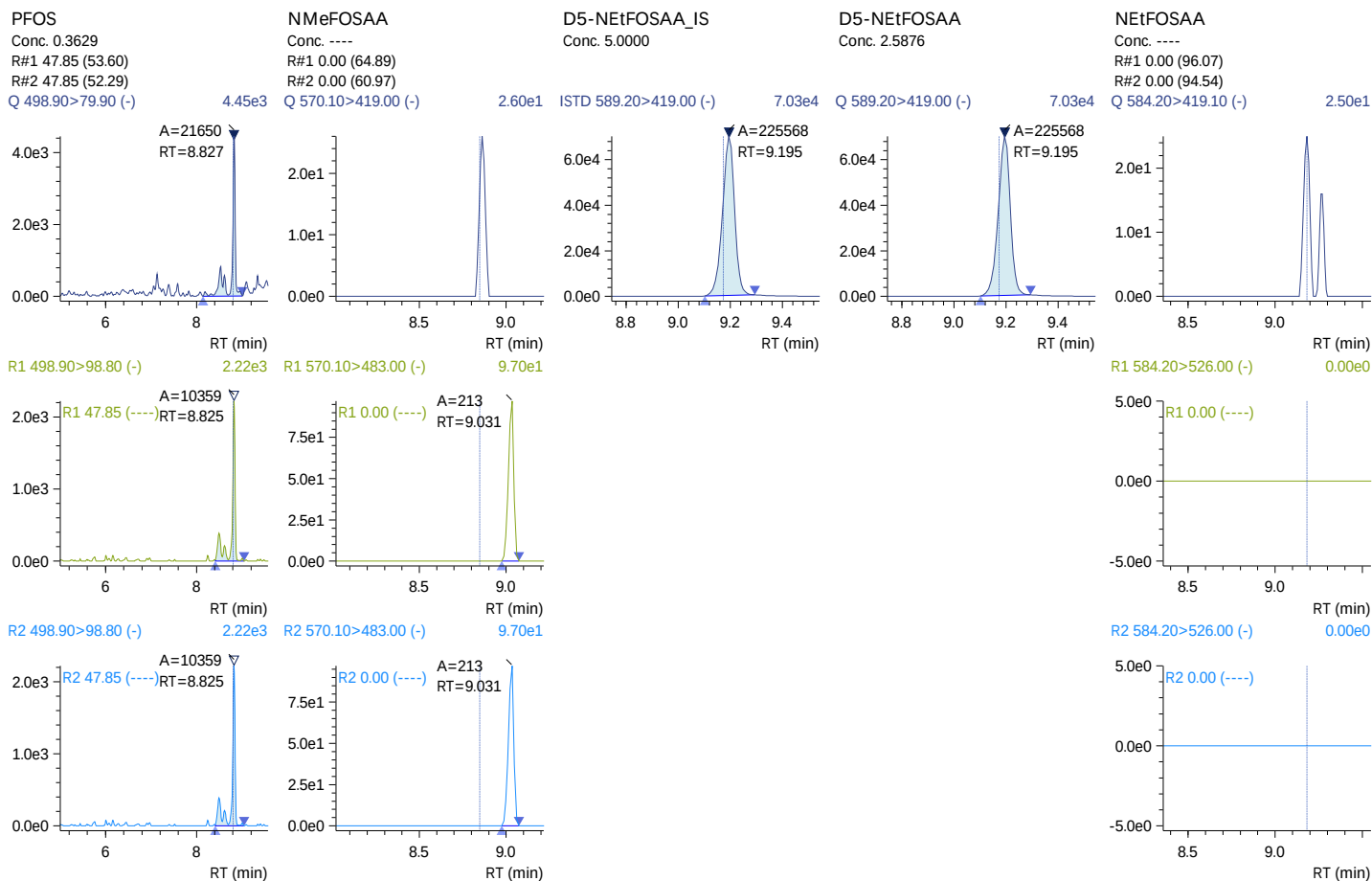


240201_034 (continued)





240201_034 (continued)





240201_034 (continued)

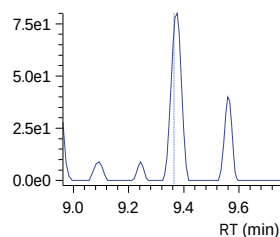
9-Cl-PF3ONS

Conc. ----

R#1 0.00 (30.95)

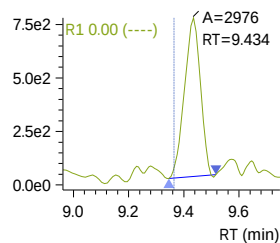
R#2 0.00 (30.61)

Q 530.80>351.00 (-)



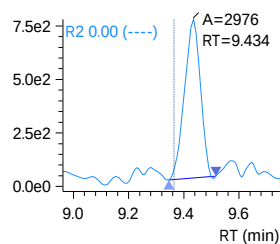
R1 532.80>353.00 (-)

7.81e2



R2 532.80>353.00 (-)

7.81e2



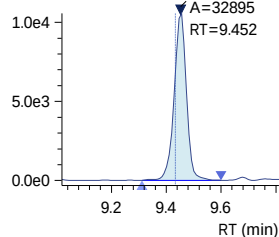
PFUnDA

Conc. 0.2360

R#1 10.31 (11.01)

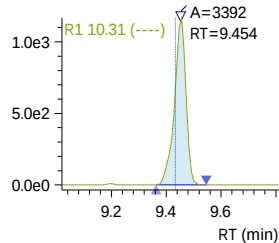
R#2 10.31 (12.02)

Q 563.10>519.00 (-)



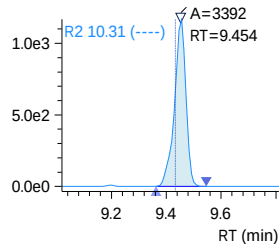
R1 563.10>269.10 (-)

1.17e3



R2 563.10>269.10 (-)

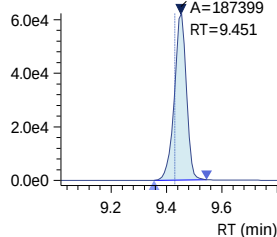
1.17e3



13C7-PFUnDA_IS

Conc. 1.2500

ISTD 570.00>525.10 (-)



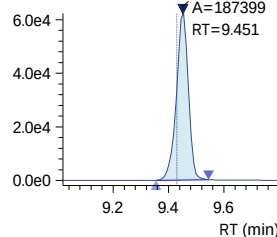
6.24e4



13C7-PFUnDA

Conc. 1.0871

Q 570.00>525.10 (-)



6.24e4



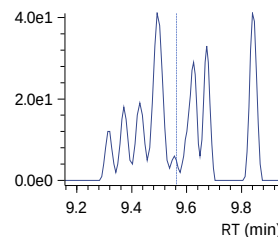
PFNS

Conc. ----

R#1 0.00 (60.44)

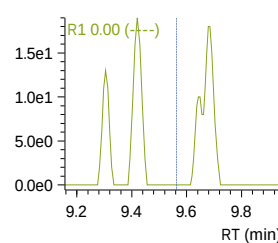
R#2 0.00 (58.51)

Q 548.80>79.90 (-)



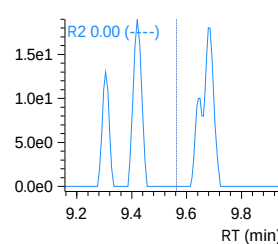
R1 548.80>98.80 (-)

1.90e1



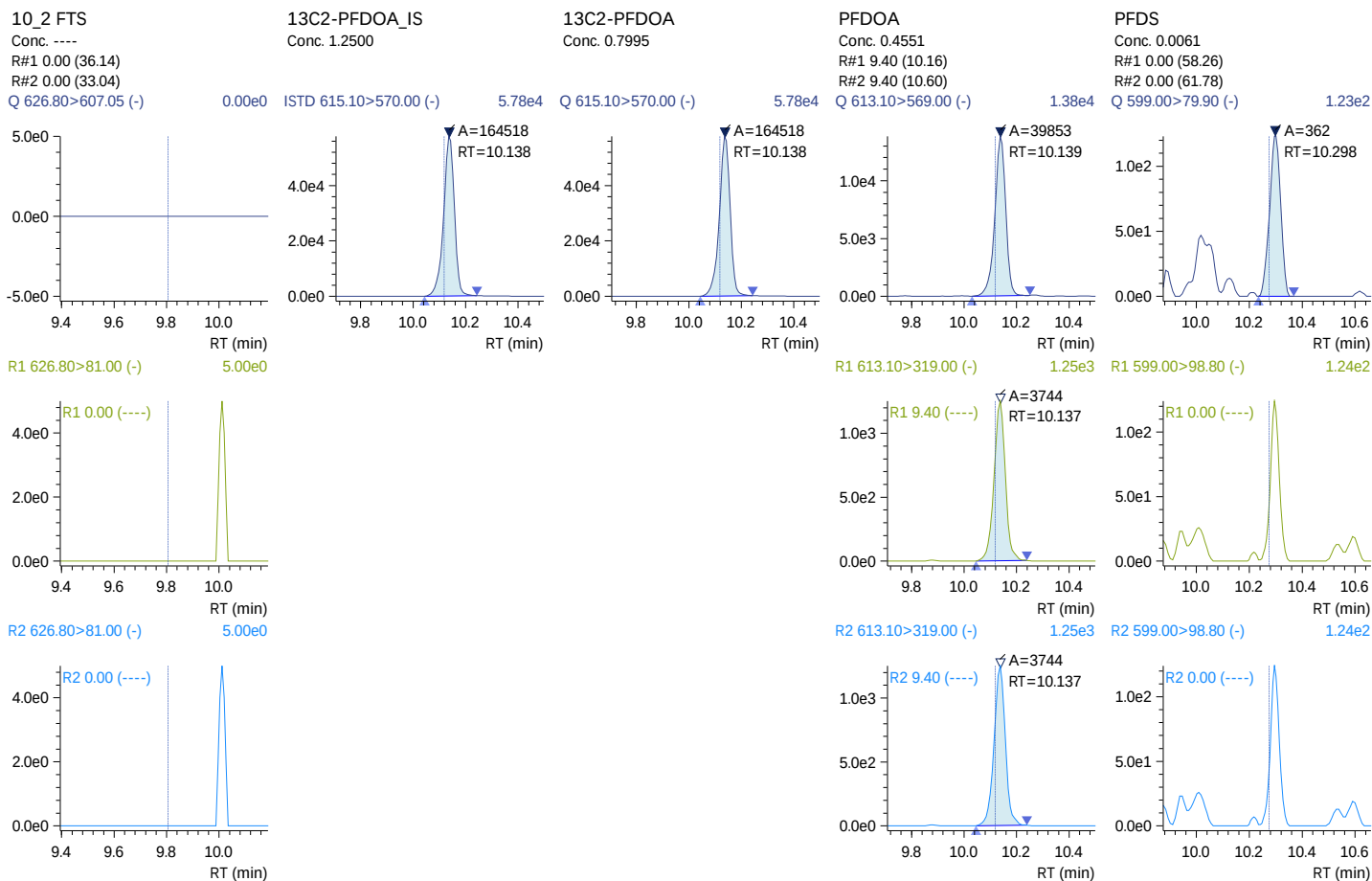
R2 548.80>98.80 (-)

1.90e1



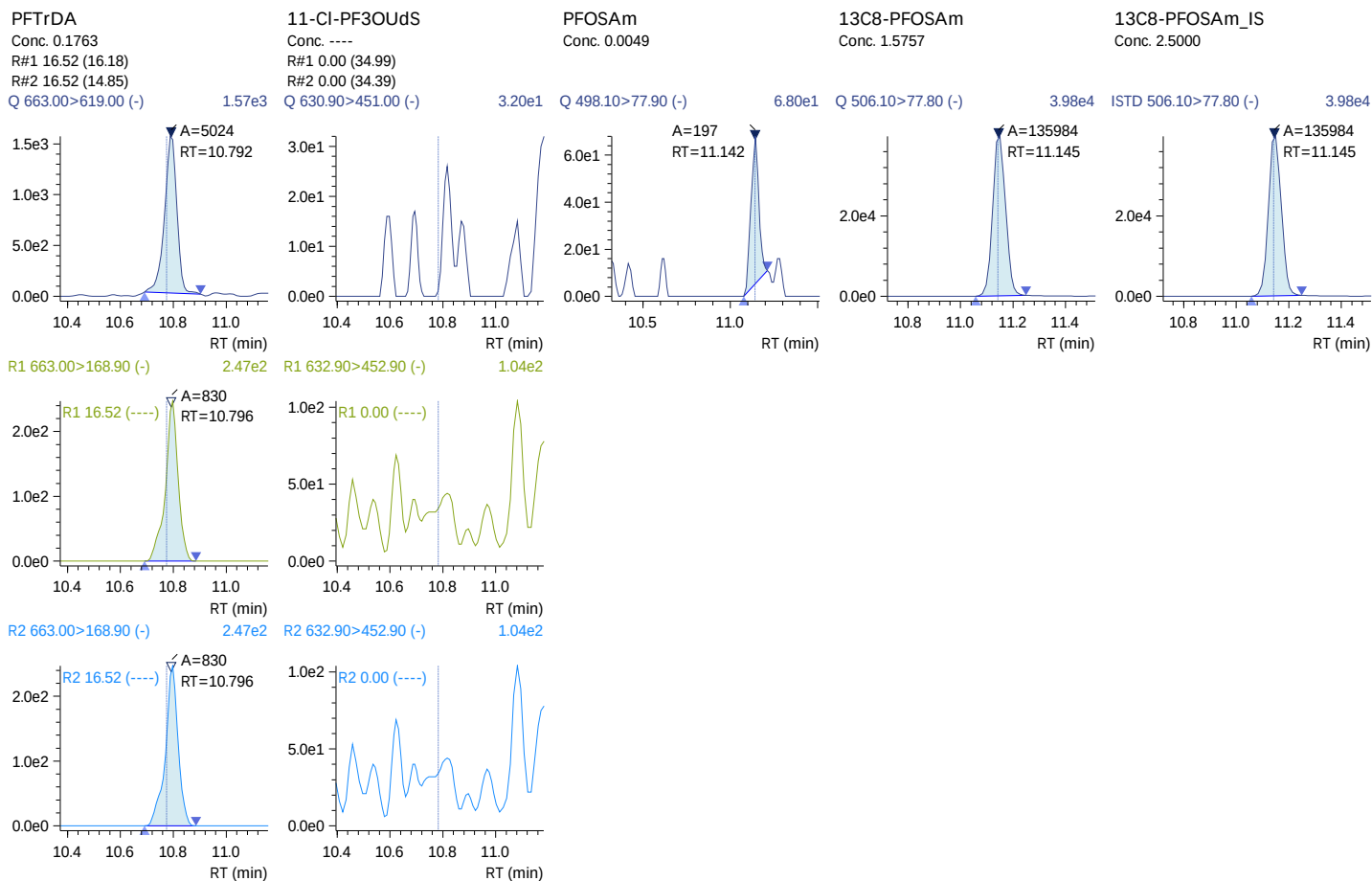


240201_034 (continued)



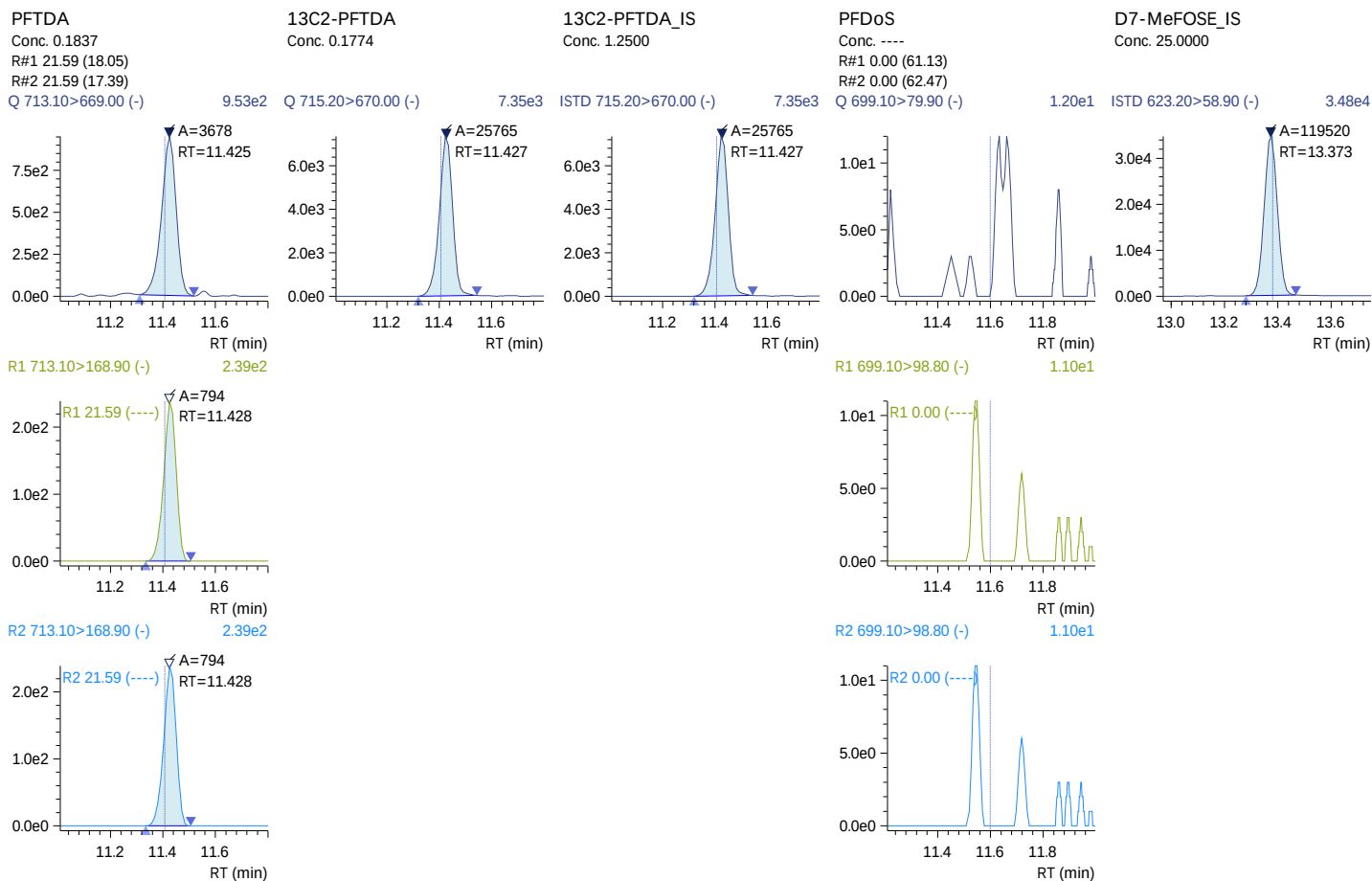


240201_034 (continued)





240201_034 (continued)





240201_034 (continued)

D7-MeFOSE
 Conc. 5.3950

MeFOSE
 Conc. ----

¹³C2-PFHDA-IS
 Conc. 2.5000

¹³C2-PFHDA
 Conc. 0.1165

PFHXDA
 Conc. 0.4726
 R#1 11.82 (11.66)
 R#2 11.82 (10.99)

Q 623.20>58.90 (-)

3.48e4

Q 616.10>59.00 (-)

7.40e1

ISTD 815.00>770.05 (-)

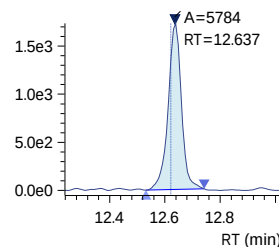
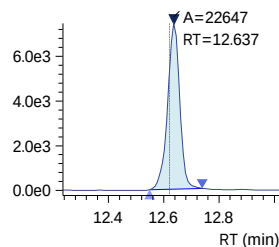
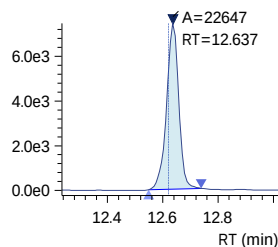
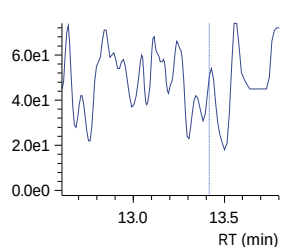
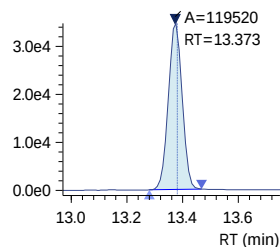
7.47e3

Q 815.00>770.05 (-)

7.47e3

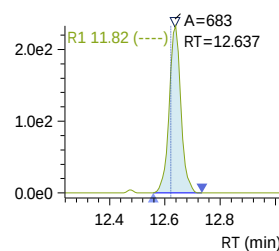
Q 813.00>768.95 (-)

1.74e3



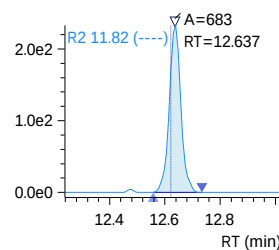
R1 813.00>218.95 (-)

2.33e2



R2 813.00>218.95 (-)

2.33e2





240201_034 (continued)

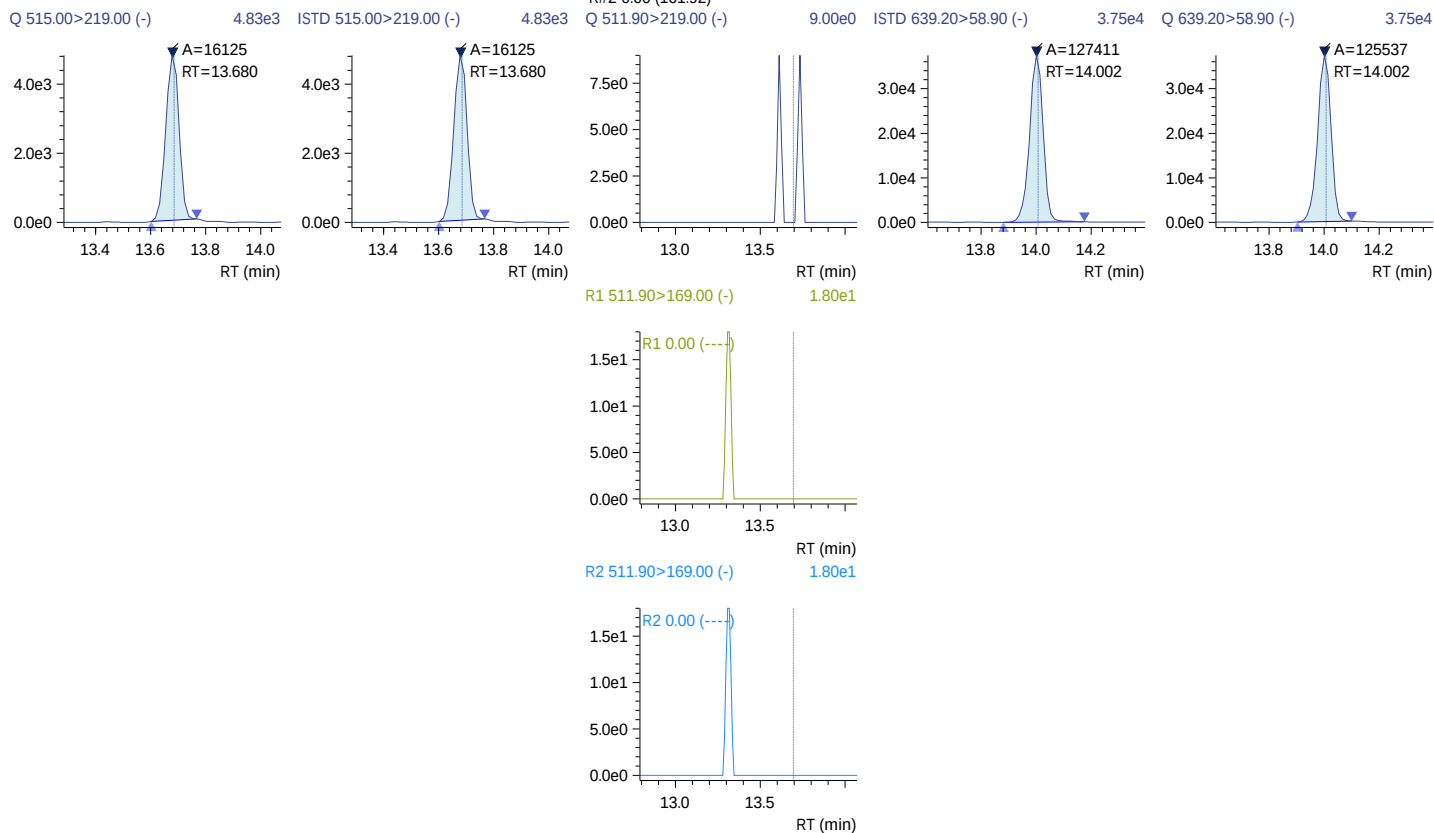
D3-MeFOSA
 Conc. 0.7157

D3-MeFOSA_IS
 Conc. 2.5000

MeFOSA
 Conc. ----
 R#1 0.00 (160.44)
 R#2 0.00 (161.92)

D9-EtFOSE_IS
 Conc. 25.0000

D9-EtFOSE
 Conc. 4.6306





240201_034 (continued)

EtFOSE
 Conc. ----

D5-EtFOSAm
 Conc. 0.5864

D5-EtFOSAm_IS
 Conc. 2.5000

EtFOSAm
 Conc. ----

PFODA
 Conc. 0.4234

Q 630.00>59.00 (-)

6.30e1

Q 531.10>219.00 (-)

5.91e3

ISTD 531.10>219.00 (-)

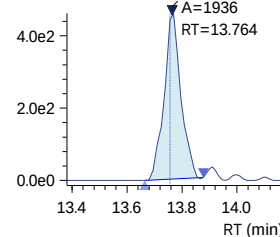
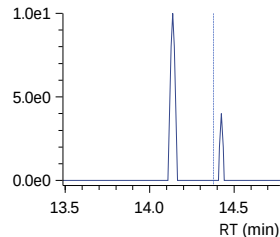
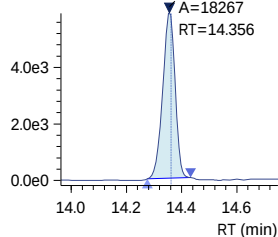
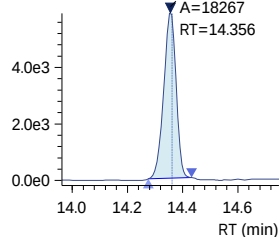
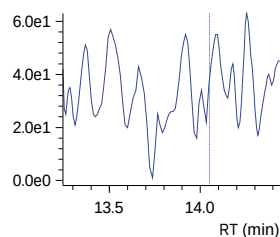
5.91e3

Q 526.00>219.00 (-)

1.00e1

Q 913.00>868.65 (-)

4.62e2

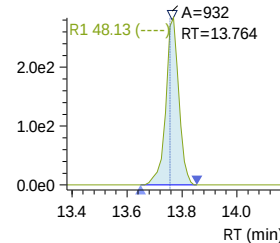
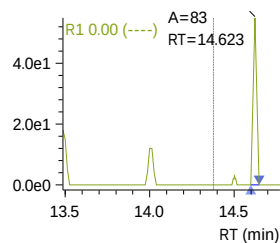


R1 526.00>169.00 (-)

5.50e1

R1 913.00>169.00 (-)

2.84e2

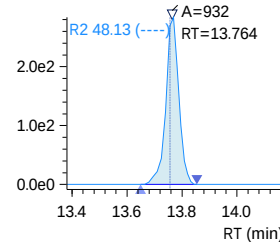
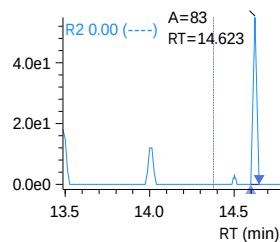


R2 526.00>169.00 (-)

5.50e1

R2 913.00>169.00 (-)

2.84e2



Validation Report

1st *PS* 01/25/24
2nd *MS* 01/25/24

Data File: J:\LCMS08\Data\240122_1633_B1\240122_035
Lab ID: K2314281-002
RunType: N/A
Matrix: Water

Date Acquired: 1/22/24 22:56
Batch ID: 830573
Analysis Method: 1633/PFAS_DOD5.4

Validations

Validation Categories	Pass	Fail
Preparation Hold Time	X	
Analytical Hold Time	X	
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery		X
Continuing Calibration Recovery (Closing)		X
Lab Control Sample Recovery		X
Duplicate Lab Control Sample Recovery		X
Method Blank	X	
Method Blank Surrogates	X	
Internal Standards	X	
Surrogates	X	
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Continuing Calibration Recovery	N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	136	70	130	high bias, native <MRL
	D3-MeFOSAA	138	70	130	native in control
	13C2-4:2 FTS	163	70	130	
	13C2-6:2 FTS	170	70	130	
	13C2-8:2 FTS	162	70	130	
Continuing Calibration Recovery (Closing)	N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	160	70	130	high bias, native <MRL
	Perfluoro-3-methoxypropanoic acid (PFMPA)	135	70	130	
	D9-EtFOSE	131	70	130	native in control
	D3-MeFOSAA	142	70	130	
	13C2-4:2 FTS	156	70	130	
	13C2-6:2 FTS	136	70	130	
	13C2-8:2 FTS	142	70	130	
Lab Control Sample Recovery	N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	152	70	145	high bias, native <MRL
	4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	145	65	130	
Duplicate Lab Control Sample Recovery	N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	160	70	145	
	4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	139	65	130	

Primary Review: _____

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Secondary Review: _____

Analyte Exceptions

1st PS 01/25/24

2nd MS 01/25/24

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
	Perfluoro-3-methoxypropanoic acid (PFMPA)	148	55	140	high bias, native <MRL

Quantitation Report

1st *PS* 01/25/24
2nd *MS* 01/25/24

Data File:	J:\LCMS08\Data\240122_1633_B1\240122_035	Instrument:	K-LCMS-08
Acqu Date:	1/22/24 22:56	Vial:	27
Run Type:	N/A	Dilution:	1
Lab ID:	K2314281-002	Raw Units:	ng/mL

Bottle ID:	K2314281-002.04	Tier:	IV	Matrix:	Water
Prod Code:	PFAS_DOD5.4	Collect Date:	12/20/23	Receive Date:	12/20/23

Analysis Lot:	830573	Prep Lot:	432516	Report Group:	K2314281
Analysis	1633	Prep Method:	Method		
		Prep Date:	1/11/24		

Title:	Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM	Calibration ID:	KC2400027
		Report List ID:	24615

Internal Standard Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Area Criteria
18O2-PFHxS	7.074	+0.00	171649	2.5000	OK
13C4-PFOS	8.811	0.00	196297	2.5000	OK
13C3-PFBA	1.420	+0.03	488440	5.0000	OK
13C2-PFHxA	4.961	+0.00	489023	2.5000	OK
13C4-PFOA	7.101		36800	2.5000	OK
13C5-PFNA	7.951	0.00	222836	1.2500	OK
13C2-PFDA	8.717	0.00	164415	1.2500	OK

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
13C3-PFBS	4.626	+0.01	218955	2.2478	90	40 - 135	Y
13C3-PFHxS	7.073		156855	2.1290	85	40 - 130	Y
13C8-PFOS	8.811	0.00	67207	2.0529	82	40 - 130	Y
13C4-PFBA	1.419	+0.03	1088110	9.9666	100	5 - 130	Y
13C5-PFPeA	3.481	+0.01	100634	4.5590	91	40 - 130	Y
13C5-PFHxA	4.961	+0.00	471470	2.2876	92	40 - 130	Y
13C4-PFHpA	6.142	+0.00	497962	2.6690	107	40 - 130	Y
13C8-PFOA	7.100	0.00	497842	2.4204	97	40 - 130	Y
13C9-PFNA	7.950	0.00	236813	1.3573	109	40 - 130	Y
13C6-PFDA	8.717	0.00	174062	1.3159	105	40 - 130	Y
13C7-PFUnDA	9.440	0.00	180682	1.1451	92	30 - 130	Y
13C2-PFDoDA	10.130	0.00	155365	0.8571	69	10 - 130	Y
13C2-PFTeDA	11.418	-0.01	34211	0.4371	35	10 - 130	Y
13C8-FOSA	11.159	-0.01	173900	2.0869	83	40 - 130	Y
D3-MeFOSA	13.700	-0.02	21272	1.2676	51	10 - 130	Y
D5-EtFOSA	14.378	-0.02	24976	1.1178	45	10 - 130	Y
D7-MeFOSE	13.395	-0.01	301592	14.6795	59	10 - 130	Y
D9-EtFOSE	14.023	-0.02	290335	13.9138	56	10 - 130	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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			1st	PS	01/25/24
Data File:	J:\LCMS08\Data\240122_1633_B1\240122_035	Instrument:	K-LCMS08	MS	01/25/24
Acqu Date:	1/22/24 22:56	Vial:	27		
Run Type:	N/A	Dilution:	1		
Lab ID:	K2314281-002	Raw Units:	ng/mL		

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
D3-MeFOSAA	8.852	-0.01	196197	5.7588	115	40 - 170	Y
D5-EtFOSAA	9.184	-0.01	165390	4.0577	81	25 - 135	Y
13C2-4:2 FTS	4.644	+0.00	179688	7.6071	152	40 - 200	Y
13C2-6:2 FTS	6.784	0.00	161536	7.2305	145	40 - 200	Y
13C2-8:2 FTS	8.404	0.00	122273	6.6627	133	40 - 300	Y
13C3-HFPO-DA	5.438	+0.00	553440	11.5610	116	40 - 130	Y

Target Compounds

Final Conc.Units: ng/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Perfluorobutane sulfonic acid (PFBS)	4.627	+0.01	3622	0.0323	0.63	J	Y
Perfluoropentane sulfonic acid (PFPeS)	6.006	+0.01	685	0.0083	0.16	U	Y
Perfluorohexane sulfonic acid (PFHxS)	7.075	+0.00	7460	0.0799	1.6	J	Y
Perfluoroheptane sulfonic acid (PFHpS)	0		0	0	0	U	Y
Perfluorooctane sulfonic acid (PFOS)	8.813	0.00	21240	0.3039	5.9		Y
Perfluorononane sulfonic acid (PFNS)	0		0	0	0	U	Y
Perfluorodecane sulfonic acid (PFDS)	0		0	0	0	U	Y
Perfluorododecane sulfonic acid (PFDoS)	0		0	0	0	U	Y
Perfluorobutanoic acid (PFBA)	1.420	+0.03	19826	0.2121	4.1	J	Y
Perfluoropentanoic acid (PFPeA)	3.484	+0.01	87081	0.6681	13		Y
Perfluorohexanoic acid (PFHxA)	4.963	+0.01	47087	0.2917	5.7		Y
Perfluoroheptanoic acid (PFHpA)	6.141	0.00	40668	0.1622	3.2	J	Y
Perfluorooctanoic acid (PFOA)	7.102	0.00	75020	0.5401	11		Y
Perfluorononanoic acid (PFNA)	7.952	0.00	21564	0.1292	2.5	J	Y
Perfluorodecanoic acid (PFDA)	8.718	0.00	14965	0.0647	1.3	J	Y
Perfluoroundecanoic acid (PFUnDA)	9.441	-0.01	3099	-0.0060	0	U	Y
Perfluorododecanoic acid (PFDOA)	10.127	-0.01	3901	0.0118	0.23	U	Y
Perfluorotridecanoic acid (PFTrDA)	10.786	-0.01	2425	0.0193	0.38	U	Y
Perfluorotetradecanoic acid (PFTDA)	11.418	-0.01	2172	0.0313	0.61	U	Y
Perfluorooctane sulfonamide (PFOSAm)	11.157	-0.01	386	0.0067	0.13	U	Y
N-Methylperfluorooctane sulfonamide (MeFOSA)	0		0	0	0	U	Y
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	0		0	0	0	U	Y
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	0		0	0	0	U	Y
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	0		0	0	0	U	Y
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	0		0	0	0	U	Y

U: Undetected at or above MDL

J: Analyte detected above MDL, but below MRL

B: Hit above MRL also found in Method Blank

E: Analyte concentration above high point of ICAL

N: Presumptive evidence of compound

D: Result from dilution

m: Manual integration performed

d: Compound manually deleted

NR: Analyte not reported from this analysis

*: Result fails acceptance criteria

#: Acceptance criteria not applicable

?: Insufficient information to determine acceptance

e: Result >= MRL, but MRL less than low point of ICAL

c: check for co-elution

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			1st	PS	01/25/24
Data File:	J:\LCMS08\Data\240122_1633_B1\240122_035	Instrument:	K-LCMS08	MS	01/25/24
Acqu Date:	1/22/24 22:56	Vial:	27		
Run Type:	N/A	Dilution:	1		
Lab ID:	K2314281-002	Raw Units:	ng/mL		

<i>Target Compounds</i>			Final Conc.Units: ng/L				
Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	0		0	0	0	U	Y
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	0		0	0	0	U	Y
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	6.778	-0.01	1517	0.0206	0.40	U	Y
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	0		0	0	0	U	Y
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	0		0	0	0	U	Y
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	0		0	0	0	U	Y
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	0		0	0	0	U	Y
Perfluoro(2-ethoxyethane) sulfonic acid (PFEEESA)	0		0	0	0	U	Y
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	9.372	-0.01	31	0.0001	0.0020	U	Y
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	0		0	0	0	U	Y
Perfluoro-3-methoxypropanoic acid (PFMPA)	2.418	+0.01	198	0.0030	0.059	U	Y
Perfluoro-4-methoxybutanoic acid (PFMBA)	4.000	+0.01	147	0.0016	0.031	U	Y
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	5.445	+0.01	243	0.0040	0.078	U	Y
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	4.819	+0.01	736	0.0070	0.14	U	Y
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	6.506	0.00	152	0.0004	0.0078	U	Y

Prep Amount:	256.0300 mL	Dilution:	1
Prep Final Amount:	5.00 mL	Basis Factor:	100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution



240122_035

Sample ID: K2314281-002
Date Acquired: 1/22/2024 10:56:11 PM
Acquired by: System Administrator
Data File: 240122_035
Vial: 15 | Inj. Volume: 10.0000uL | Tray: 2

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	1088110	----	----	----	----	----	----	
13C4-PFBA_IS	216.80>171.90	----	1088110	----	----	----	----	----	----	
13C3-PFBA_IS	216.00>172.00	----	488440	----	----	----	----	----	----	
PFBA	212.80>169.05	----	19826	----	----	----	----	----	----	
PFMPA	229.00>84.90	----	198	----	----	----	----	----	----	
3_3 FTCA	241.00>177.10	241.00>117.00	----	0	0.00	141.17	0	0.00	135.52	
13C5-PFPeA	268.30>223.00	----	100634	----	----	----	----	----	----	
13C5-PFPeA_IS	268.30>223.00	----	100634	----	----	----	----	----	----	
PFPeA	263.00>219.00	----	87081	----	----	----	----	----	----	
PFMBA	279.00>84.95	----	147	----	----	----	----	----	----	
13C2-4_2 FTS	329.10>80.90	----	179688	----	----	----	----	----	----	
13C2-4_2 FTS_IS	329.10>80.90	----	179688	----	----	----	----	----	----	
4_2 FTS	327.10>307.00	327.10>80.90	----	0	0.00	29.06	0	0.00	35.34	
13C3-PFBS_IS	302.10>79.90	----	218955	----	----	----	----	----	----	
PFBS	298.70>79.90	298.70>98.80	3622	2054	56.70	46.72	2054	56.70	49.78	
13C3-PFBS	302.10>79.90	----	218955	----	----	----	----	----	----	
NFDHA	295.00>201.00	295.00>84.90	736	269	36.59	40.25	269	36.59	37.18	
13C5-PFHxA	318.00>273.00	----	471470	----	----	----	----	----	----	
13C5-PFHxA_IS	318.00>273.00	----	471470	----	----	----	----	----	----	
13C2-PFHxA_IS	315.10>270.00	----	489023	----	----	----	----	----	----	
PFHxA	313.00>269.00	----	47087	----	----	----	----	----	----	
PFEESA	314.80>135.00	314.80>82.90	----	0	0.00	6.11	0	0.00	5.72	
13C3-HFPO-DA	286.90>168.90	----	553440	----	----	----	----	----	----	
13C3-HFPO-DA_IS	286.90>168.90	----	553440	----	----	----	----	----	----	
HFPO-DA	284.90>168.90	284.90>184.90	243	879	362.03	65.61	879	362.03	60.94	IRr
5_3 FTCA	341.00>237.05	341.00>217.00	----	0	0.00	158.86	0	0.00	155.83	
PFPeS	349.10>79.90	349.10>98.80	685	302	44.14	55.80	302	44.14	56.73	
13C4-PFHpA	367.10>322.00	----	497962	----	----	----	----	----	----	
13C4-PFHpA_IS	367.10>322.00	----	497962	----	----	----	----	----	----	
PFHpA	363.10>319.00	363.10>169.00	40668	9335	22.96	21.50	9335	22.96	21.92	
DONA	376.90>250.90	376.90>84.80	152	59	39.05	29.66	59	39.05	30.77	
13C2-6_2 FTS_IS	429.10>80.90	----	161536	----	----	----	----	----	----	
13C2-6_2 FTS	429.10>80.90	----	161536	----	----	----	----	----	----	
6_2 FTS	427.10>407.00	427.10>80.90	1517	1061	69.95	41.15	1061	69.95	40.98	IRr
13C4-PFOA_IS	417.10>172.00	----	36800	----	----	----	----	----	----	
13C8-PFOA_IS	421.10>376.00	----	497842	----	----	----	----	----	----	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240122_035 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	497842	----	----	----	----	----	----	----
PFOA	413.00>369.00	413.00>169.00	75020	22738	30.31	31.89	22738	30.31	32.23	
13C3-PFHxS	402.10>79.90	----	156855	----	----	----	----	----	----	----
13C3-PFHxS_IS	402.10>79.90	----	156855	----	----	----	----	----	----	----
PFHxS	398.70>79.90	398.70>98.90	7460	6304	84.50	56.62	6304	84.50	60.26	
18O2-PFHxS_IS	403.00>83.90	----	171649	----	----	----	----	----	----	----
13C9-PFNA_IS	472.10>427.00	----	236813	----	----	----	----	----	----	----
13C9-PFNA	472.10>427.00	----	236813	----	----	----	----	----	----	----
13C5-PFNA_IS	468.00>423.00	----	222836	----	----	----	----	----	----	----
PFNA	463.00>419.00	463.00>219.00	21564	4731	21.94	23.17	4731	21.94	23.63	
PFHpS	449.00>79.90	449.00>98.80	----	0	0.00	56.96	0	0.00	59.06	
7_3 FTCA	441.00>317.00	441.00>336.90	----	0	0.00	117.47	0	0.00	125.53	
13C2-8_2-FTS	529.10>80.90	----	122273	----	----	----	----	----	----	----
13C2-8_2-FTS_IS	529.10>80.90	----	122273	----	----	----	----	----	----	----
8_2 FTS	527.10>506.95	527.10>80.80	----	0	0.00	49.59	0	0.00	44.81	
13C6-PFDA_IS	519.10>474.10	----	174062	----	----	----	----	----	----	----
13C6-PFDA	519.10>474.10	----	174062	----	----	----	----	----	----	----
13C2-PFDA_IS	515.10>470.10	----	164415	----	----	----	----	----	----	----
PFDA	512.90>469.00	512.90>219.00	14965	2724	18.20	19.00	2724	18.20	19.15	
D3-NMeFOSAA_IS	573.20>419.00	----	196197	----	----	----	----	----	----	----
D3-NMeFOSAA	573.20>419.00	----	196197	----	----	----	----	----	----	----
13C8-PFOS_IS	507.10>98.90	----	67207	----	----	----	----	----	----	----
13C8-PFOS	507.10>98.90	----	67207	----	----	----	----	----	----	----
13C4-PFOS_IS	502.80>79.90	----	196297	----	----	----	----	----	----	----
PFOS	498.90>79.90	498.90>98.80	21240	12328	58.04	52.47	12328	58.04	53.10	
NMeFOSAA	570.10>419.00	570.10>483.00	----	0	0.00	55.15	0	0.00	60.69	
D5-NEtFOSAA_IS	589.20>419.00	----	165390	----	----	----	----	----	----	----
D5-NEtFOSAA	589.20>419.00	----	165390	----	----	----	----	----	----	----
NEtFOSAA	584.20>419.10	584.20>526.00	----	0	0.00	81.95	0	0.00	73.27	
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	31	4639	15014.03	32.76	4639	15014.03	32.59	IRr
PFUnDA	563.10>519.00	563.10>269.10	3099	654	21.10	13.12	654	21.10	14.36	IRr
13C7-PFUnDA_IS	570.00>525.10	----	180682	----	----	----	----	----	----	----
13C7-PFUnDA	570.00>525.10	----	180682	----	----	----	----	----	----	----
PFNS	548.80>79.90	548.80>98.80	----	0	0.00	65.22	0	0.00	65.31	
10_2 FTS	626.80>607.05	626.80>81.00	----	0	0.00	37.13	0	0.00	38.76	
13C2-PFDOA_IS	615.10>570.00	----	155365	----	----	----	----	----	----	----
13C2-PFDOA	615.10>570.00	----	155365	----	----	----	----	----	----	----
PFDOA	613.10>569.00	613.10>319.00	3901	314	8.05	11.29	314	8.05	11.19	
PFDS	599.00>79.90	599.00>98.80	----	0	0.00	60.18	0	0.00	65.65	
PFTrDA	663.00>619.00	663.00>168.90	2425	676	27.87	17.64	676	27.87	19.81	IRr

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240122_035 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	----	0	0.00	36.44	0	0.00	35.86	
PFOSAm	498.10>77.90	----	386	----	----	----	----	----	----	
13C8-PFOSAm	506.10>77.80	----	173900	----	----	----	----	----	----	
13C8-PFOSAm_IS	506.10>77.80	----	173900	----	----	----	----	----	----	
PFTDA	713.10>669.00	713.10>168.90	2172	344	15.82	22.96	344	15.82	25.01	
13C2-PFTDA	715.20>670.00	----	34211	----	----	----	----	----	----	
13C2-PFTDA_IS	715.20>670.00	----	34211	----	----	----	----	----	----	
PFDoS	699.10>79.90	699.10>98.80	----	0	0.00	67.40	0	0.00	73.46	
D7-MeFOSE_IS	623.20>58.90	----	301592	----	----	----	----	----	----	
D7-MeFOSE	623.20>58.90	----	301592	----	----	----	----	----	----	
MeFOSE	616.10>59.00	----	----	----	----	----	----	----	----	
13C2-PFHxDA_IS	815.00>770.05	----	65868	----	----	----	----	----	----	
13C2-PFHxDA	815.00>770.05	----	65868	----	----	----	----	----	----	
PFHxDA	813.00>768.95	813.00>218.95	2922	330	11.29	13.90	330	11.29	15.85	
D3-MeFOSA	515.00>219.00	----	21272	----	----	----	----	----	----	
D3-MeFOSA_IS	515.00>219.00	----	21272	----	----	----	----	----	----	
MeFOSA	511.90>219.00	511.90>169.00	----	0	0.00	140.79	0	0.00	150.13	
D9-EtFOSE_IS	639.20>58.90	----	290335	----	----	----	----	----	----	
D9-EtFOSE	639.20>58.90	----	290335	----	----	----	----	----	----	
EtFOSE	630.00>59.00	----	----	----	----	----	----	----	----	
D5-EtFOSAm	531.10>219.00	----	24976	----	----	----	----	----	----	
D5-EtFOSAm_IS	531.10>219.00	----	24976	----	----	----	----	----	----	
EtFOSAm	526.00>219.00	526.00>169.00	----	0	0.00	163.90	0	0.00	152.08	
PFODA	913.00>868.65	913.00>169.00	1316	219	16.65	27.03	219	16.65	26.29	

Flag ID key: IRr: Ion Ratio (Relative)



240122_035

Sample ID: K2314281-002
Date Acquired: 1/22/2024 10:56:11 PM
Acquired by: System Administrator
Data File: 240122_035
Vial: 15 | Inj. Volume: 10.0000uL | Tray: 2

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.419	0.028	-0.001	1088110	488440	13C3-PFBA_IS	9.9666	ng/mL	
13C4-PFBA_IS	Auto	1.419	0.028	----	1088110	1088110	----	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.420	0.029	----	488440	488440	----	5.0000	ng/mL	
PFBA	Auto	1.420	0.025	0.001	19826	1088110	13C4-PFBA_IS	0.2121	ng/mL	
PFMPA	M	2.418	0.012	-1.063	198	100634	13C5-PFPeA_IS	0.0030	ng/mL	
3_3 FTCA	ND(W/B)	----	----	----	----	100634	13C5-PFPeA_IS	----	ng/mL	
13C5-PFPeA	Auto	3.481	0.016	-1.480	100634	489023	13C2-PFHxA_IS	4.5590	ng/mL	
13C5-PFPeA_IS	Auto	3.481	0.016	----	100634	100634	----	5.0000	ng/mL	
PFPeA	Auto	3.484	0.017	0.003	87081	100634	13C5-PFPeA_IS	0.6681	ng/mL	
PFMBA	M	4.000	0.009	0.519	147	100634	13C5-PFPeA_IS	0.0016	ng/mL	
13C2-4_2 FTS	Auto	4.644	0.008	-2.430	179688	171649	18O2-PFHxS_IS	7.6071	ng/mL	
13C2-4_2 FTS_IS	Auto	4.644	0.008	----	179688	179688	----	5.0000	ng/mL	
4_2 FTS	ND(W/B)	----	----	----	----	179688	13C2-4_2 FTS_IS	----	ng/mL	
13C3-PFBS_IS	Auto	4.626	0.014	----	218955	218955	----	2.5000	ng/mL	
PFBS	M	4.627	0.014	0.001	3622	218955	13C3-PFBS_IS	0.0323	ng/mL	
13C3-PFBS	Auto	4.626	0.014	-2.448	218955	171649	18O2-PFHxS_IS	2.2478	ng/mL	
NFDHA	M	4.819	0.009	-0.142	736	471470	13C5-PFHxA_IS	0.0070	ng/mL	
13C5-PFHxA	Auto	4.961	0.009	0.000	471470	489023	13C2-PFHxA_IS	2.2876	ng/mL	
13C5-PFHxA_IS	Auto	4.961	0.009	----	471470	471470	----	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	4.961	0.008	----	489023	489023	----	2.5000	ng/mL	
PFHxA	Auto	4.963	0.009	0.002	47087	471470	13C5-PFHxA_IS	0.2917	ng/mL	
PFEESA	ND(W/B)	----	----	----	----	471470	13C5-PFHxA_IS	----	ng/mL	
13C3-HFPO-DA	Auto	5.438	0.008	0.477	553440	489023	13C2-PFHxA_IS	11.5610	ng/mL	
13C3-HFPO-DA_IS	Auto	5.438	0.008	----	553440	553440	----	10.0000	ng/mL	
HFPO-DA	M	5.445	0.014	0.007	243	553440	13C3-HFPO-DA_IS	0.0040	ng/mL	IRr
5_3 FTCA	ND(W/B)	----	----	----	----	471470	13C5-PFHxA_IS	----	ng/mL	
PFPeS	M	6.006	0.012	-1.067	685	156855	13C3-PFHxS_IS	0.0083	ng/mL	
13C4-PFHpA	Auto	6.142	0.005	1.181	497962	489023	13C2-PFHxA_IS	2.6690	ng/mL	
13C4-PFHpA_IS	Auto	6.142	0.005	----	497962	497962	----	2.5000	ng/mL	
PFHpA	M	6.141	0.002	-0.001	40668	497962	13C4-PFHpA_IS	0.1622	ng/mL	
DONA	M	6.506	0.002	1.068	152	553440	13C3-HFPO-DA_IS	0.0004	ng/mL	
13C2-6_2 FTS_IS	Auto	6.784	0.003	----	161536	161536	----	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.784	0.003	-0.290	161536	171649	18O2-PFHxS_IS	7.2305	ng/mL	
6_2 FTS	M	6.778	-0.003	-0.006	1517	161536	13C2-6_2 FTS_IS	0.0206	ng/mL	IRr
13C4-PFOA_IS	Auto	7.101	0.004	----	36800	36800	----	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.100	0.004	----	497842	497842	----	2.5000	ng/mL	
13C8-PFOA	Auto	7.100	0.004	-0.001	497842	36800	13C4-PFOA_IS	2.4204	ng/mL	
PFOA	M	7.102	0.004	0.002	75020	497842	13C8-PFOA_IS	0.5401	ng/mL	
13C3-PFHxS	Auto	7.073	0.005	-0.001	156855	171649	18O2-PFHxS_IS	2.1290	ng/mL	
13C3-PFHxS_IS	Auto	7.073	0.005	----	156855	156855	----	2.5000	ng/mL	
PFHxS	M	7.075	0.006	0.002	7460	156855	13C3-PFHxS_IS	0.0799	ng/mL	
18O2-PFHxS_IS	Auto	7.074	0.005	----	171649	171649	----	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.950	0.003	----	236813	236813	----	1.2500	ng/mL	
13C9-PFNA	Auto	7.950	0.003	-0.001	236813	222836	13C5-PFNA_IS	1.3573	ng/mL	
13C5-PFNA_IS	Auto	7.951	0.003	----	222836	222836	----	1.2500	ng/mL	
PFNA	Auto	7.952	0.004	0.002	21564	236813	13C9-PFNA_IS	0.1292	ng/mL	
PFHpS	ND(W/B)	----	----	----	----	67207	13C8-PFOS_IS	----	ng/mL	
7_3 FTCA	ND(W/B)	----	----	----	----	471470	13C5-PFHxA_IS	----	ng/mL	
13C2-8_2-FTS	Auto	8.404	0.001	1.330	122273	171649	18O2-PFHxS_IS	6.6627	ng/mL	
13C2-8_2-FTS_IS	Auto	8.404	0.001	----	122273	122273	----	5.0000	ng/mL	
8_2 FTS	ND(W/B)	----	----	----	----	122273	13C2-8_2-FTS_IS	----	ng/mL	
13C6-PFDA_IS	Auto	8.717	0.004	----	174062	174062	----	1.2500	ng/mL	
13C6-PFDA	Auto	8.717	0.004	0.000	174062	164415	13C2-PFDA_IS	1.3159	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_035 (continued)

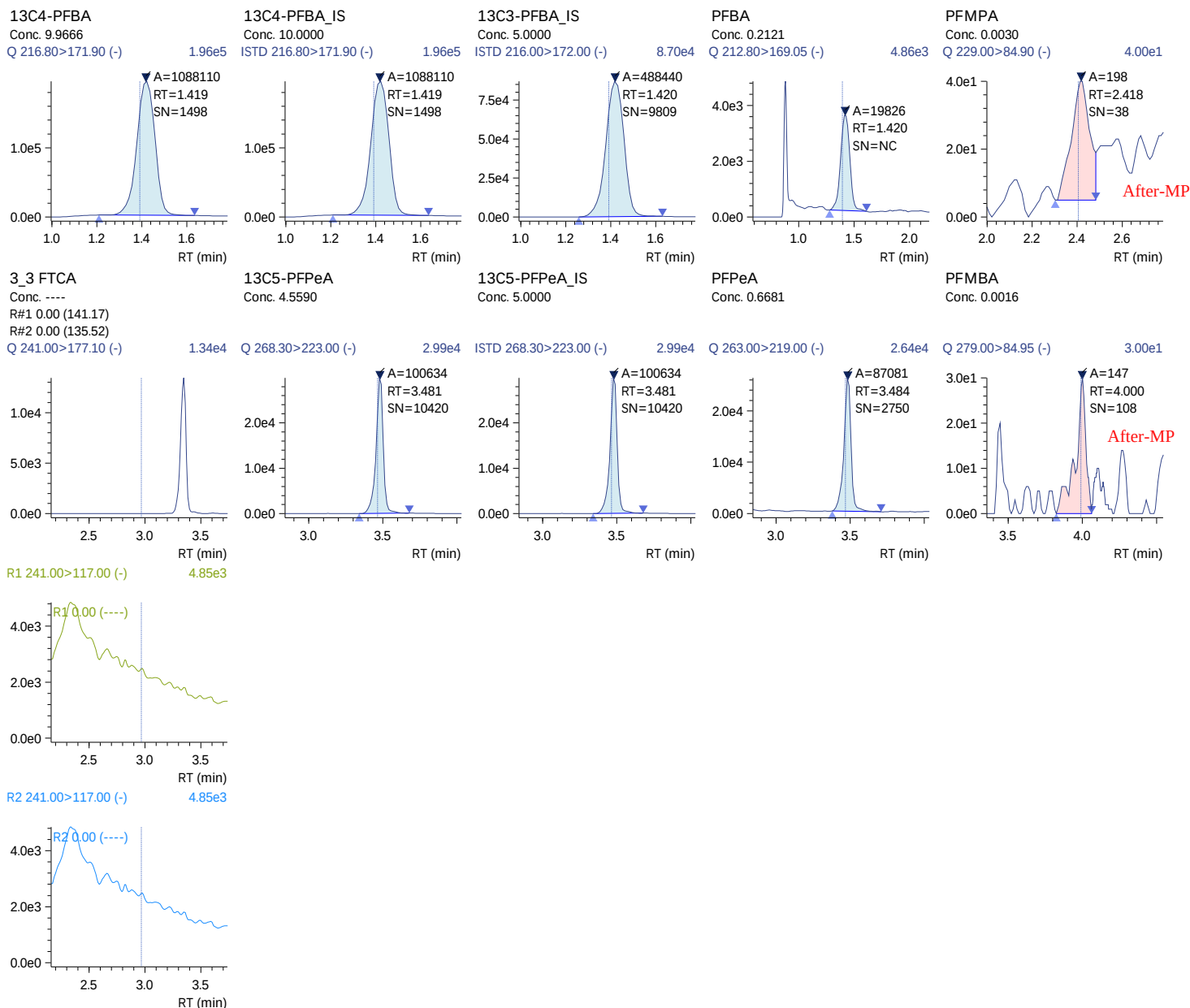
(Table continued from previous page)

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C2-PFDA_IS	Auto	8.717	0.004	----	164415	164415	----	1.2500	ng/mL	
PFDA	Auto	8.718	0.003	0.001	14965	174062	13C6-PFDA_IS	0.0647	ng/mL	
D3-NMeFOSAA_IS	Auto	8.852	0.001	----	196197	196197	----	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.852	0.001	0.041	196197	196297	13C4-PFOS_IS	5.7588	ng/mL	
13C8-PFOS_IS	Auto	8.811	0.003	----	67207	67207	----	2.5000	ng/mL	
13C8-PFOS	Auto	8.811	0.003	0.000	67207	196297	13C4-PFOS_IS	2.0529	ng/mL	
13C4-PFOS_IS	Auto	8.811	0.002	----	196297	196297	----	2.5000	ng/mL	
PFOS	M	8.813	0.004	0.002	21240	67207	13C8-PFOS_IS	0.3039	ng/mL	
NMeFOSAA	ND(W/B)	----	----	----	----	196197	D3-NMeFOSAA_IS	----	ng/mL	
D5-NetFOSAA_IS	Auto	9.184	0.001	----	165390	165390	----	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.184	0.001	0.373	165390	196297	13C4-PFOS_IS	4.0577	ng/mL	
NetFOSAA	ND(W/B)	----	----	----	----	165390	D5-NetFOSAA_IS	----	ng/mL	
9-CI-PF3ONS	M	9.372	-0.003	3.934	31	553440	13C3-HFPO-DA_IS	0.0001	ng/mL	IRr
PFUnDA	M	9.441	0.001	0.001	3099	180682	13C7-PFUnDA_IS	-0.0060	ng/mL	IRr
13C7-PFUnDA_IS	Auto	9.440	0.002	----	180682	180682	----	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.440	0.002	0.723	180682	164415	13C2-PFDA_IS	1.1451	ng/mL	
PFNS	ND(W/B)	----	----	----	----	67207	13C8-PFOS_IS	----	ng/mL	
10_2_FTS	ND(W/B)	----	----	----	----	122273	13C2-8_2-FTS_IS	----	ng/mL	
13C2-PFDOA_IS	Auto	10.130	0.002	----	155365	155365	----	1.2500	ng/mL	
13C2-PFDOA	Auto	10.130	0.002	1.413	155365	164415	13C2-PFDA_IS	0.8571	ng/mL	
PFDOA	M	10.127	-0.002	-0.003	3901	155365	13C2-PFDOA_IS	0.0118	ng/mL	
PFDS	ND(W/B)	----	----	----	----	67207	13C8-PFOS_IS	----	ng/mL	
PFTDA	Auto	10.786	-0.002	-0.632	2425	34211	13C2-PFTDA_IS	0.0193	ng/mL	IRr
11-CI-PF3OUdS	ND(W/B)	----	----	----	----	553440	13C3-HFPO-DA_IS	----	ng/mL	
PFOSAm	M	11.157	-0.006	-0.003	386	173900	13C8-PFOSAm_IS	0.0067	ng/mL	
13C8-PFOSAm	Auto	11.159	-0.005	2.348	173900	196297	13C4-PFOS_IS	2.0869	ng/mL	
13C8-PFOSAm_IS	Auto	11.159	-0.005	----	173900	173900	----	2.5000	ng/mL	
PFTDA	M	11.418	-0.003	0.000	2172	34211	13C2-PFTDA_IS	0.0313	ng/mL	
13C2-PFTDA	Auto	11.418	-0.001	2.701	34211	164415	13C2-PFDA_IS	0.4371	ng/mL	
13C2-PFTDA_IS	Auto	11.418	-0.001	----	34211	34211	----	1.2500	ng/mL	
PFDoS	ND(W/B)	----	----	----	----	67207	13C8-PFOS_IS	----	ng/mL	
D7-MeFOSE_IS	Auto	13.395	-0.007	----	301592	301592	----	25.0000	ng/mL	
D7-MeFOSE	Auto	13.395	-0.007	4.584	301592	196297	13C4-PFOS_IS	14.6795	ng/mL	
MeFOSE	ND(W/B)	----	----	----	----	301592	D7-MeFOSE_IS	----	ng/mL	
13C2-PFHxDA_IS	Auto	12.637	0.001	----	65868	65868	----	2.5000	ng/mL	
13C2-PFHxDA	Auto	12.637	0.001	3.920	65868	164415	13C2-PFDA_IS	0.4313	ng/mL	
PFHxDA	M	12.637	0.000	0.000	2922	65868	13C2-PFHxDA_IS	0.0803	ng/mL	
D3-MeFOSA	Auto	13.700	-0.011	4.889	21272	196297	13C4-PFOS_IS	1.2676	ng/mL	
D3-MeFOSA_IS	Auto	13.700	-0.011	----	21272	21272	----	2.5000	ng/mL	
MeFOSA	ND(W/B)	----	----	----	----	21272	D3-MeFOSA_IS	----	ng/mL	
D9-EtFOSE_IS	Auto	14.023	-0.009	----	290335	290335	----	25.0000	ng/mL	
D9-EtFOSE	Auto	14.023	-0.009	5.212	290335	196297	13C4-PFOS_IS	13.9138	ng/mL	
EtFOSE	ND(W/B)	----	----	----	----	290335	D9-EtFOSE_IS	----	ng/mL	
D5-EtFOSAm	Auto	14.378	-0.009	5.567	24976	196297	13C4-PFOS_IS	1.1178	ng/mL	
D5-EtFOSAm_IS	Auto	14.378	-0.009	----	24976	24976	----	2.5000	ng/mL	
EtFOSAm	ND(W/B)	----	----	----	----	24976	D5-EtFOSAm_IS	----	ng/mL	
PFODA	M	13.771	-0.003	1.134	1316	65868	13C2-PFHxDA_IS	0.0884	ng/mL	

Flag ID key: IRr: Ion Ratio (Relative)



240122_035 (continued)





240122_035 (continued)

13C2-4_2_FTS
Conc. 7.6071

13C2-4_2_FTS_IS
Conc. 5.0000

4_2_FTS
Conc. ----
R#1 0.00 (29.06)
R#2 0.00 (35.34)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 0.0323
R#1 56.70 (46.72)
R#2 56.70 (49.78)

Q 329.10>80.90 (-)

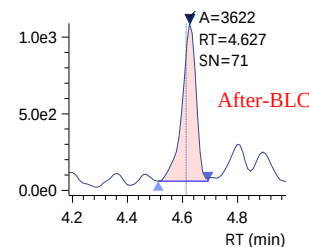
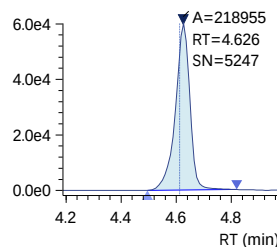
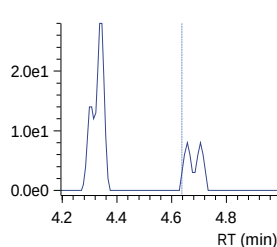
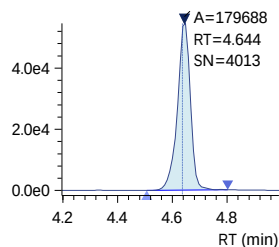
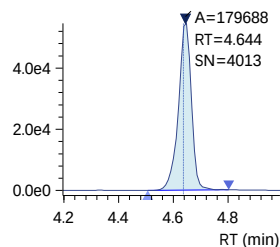
5.46e4 ISTD 329.10>80.90 (-)

5.46e4 Q 327.10>307.00 (-)

2.80e1 ISTD 302.10>79.90 (-)

6.02e4 Q 298.70>79.90 (-)

1.09e3

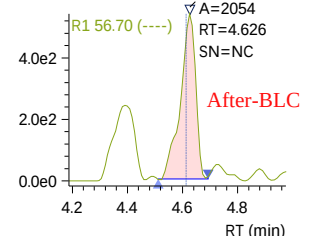
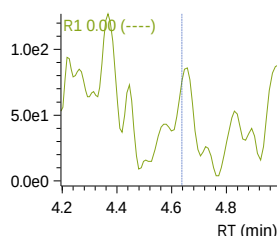


R1 327.10>80.90 (-)

1.27e2

R1 298.70>98.80 (-)

5.43e2

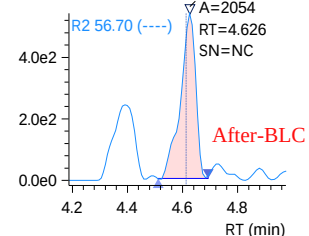
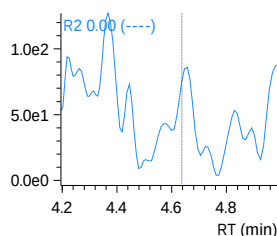


R2 327.10>80.90 (-)

1.27e2

R2 298.70>98.80 (-)

5.43e2





240122_035 (continued)

13C3-PFBS
Conc. 2.2478

NFDHA
Conc. 0.0070
R#1 36.59 (40.25)
R#2 36.59 (37.18)

13C5-PFHxA
Conc. 2.2876

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

Q 302.10>79.90 (-)

6.02e4

Q 295.00>201.00 (-)

2.37e2

Q 318.00>273.00 (-)

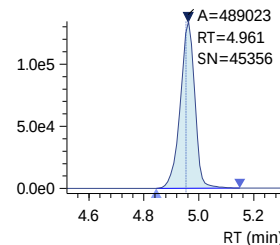
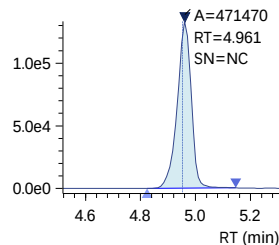
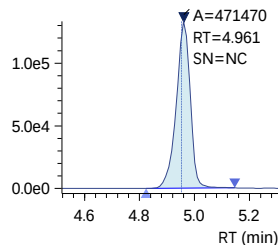
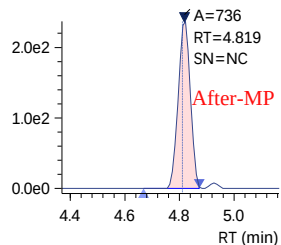
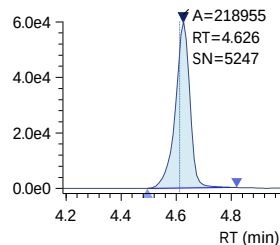
1.33e5

ISTD 318.00>273.00 (-)

1.33e5

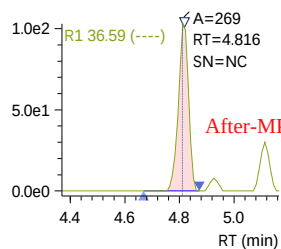
ISTD 315.10>270.00 (-)

1.34e5



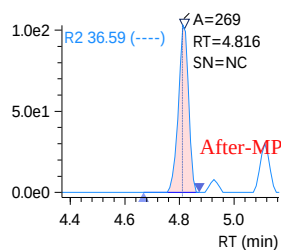
R1 295.00>84.90 (-)

1.03e2



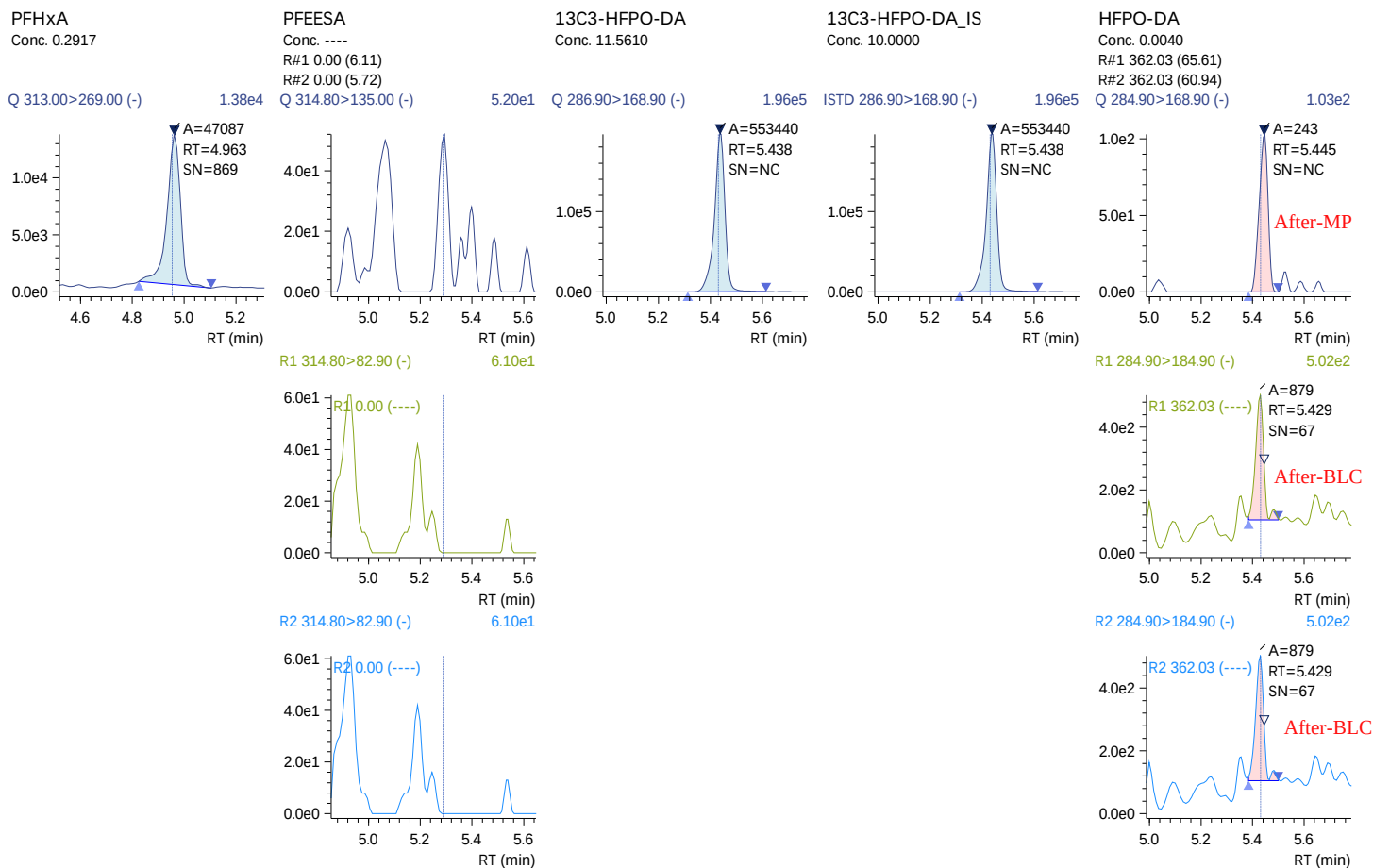
R2 295.00>84.90 (-)

1.03e2



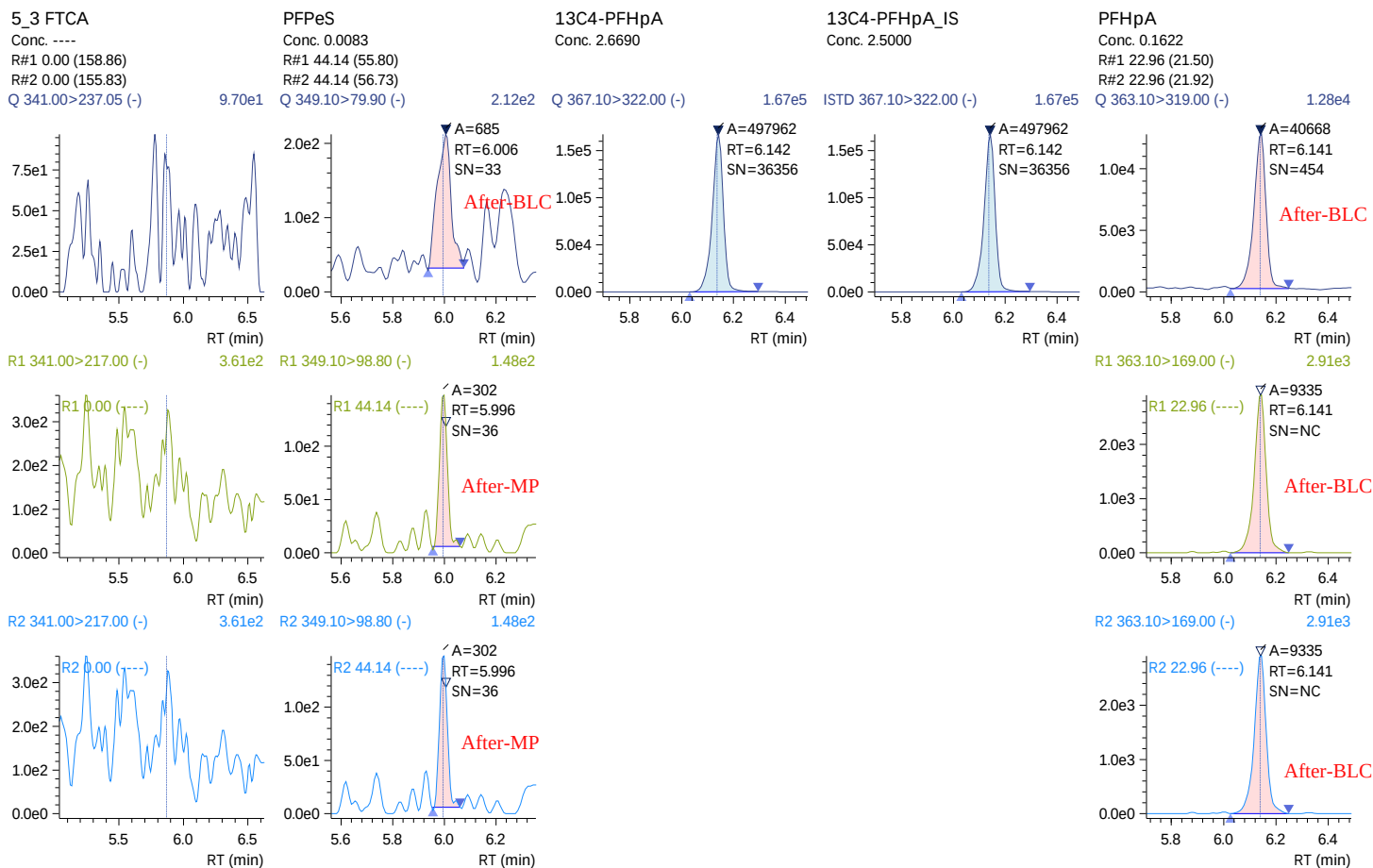


240122_035 (continued)





240122_035 (continued)

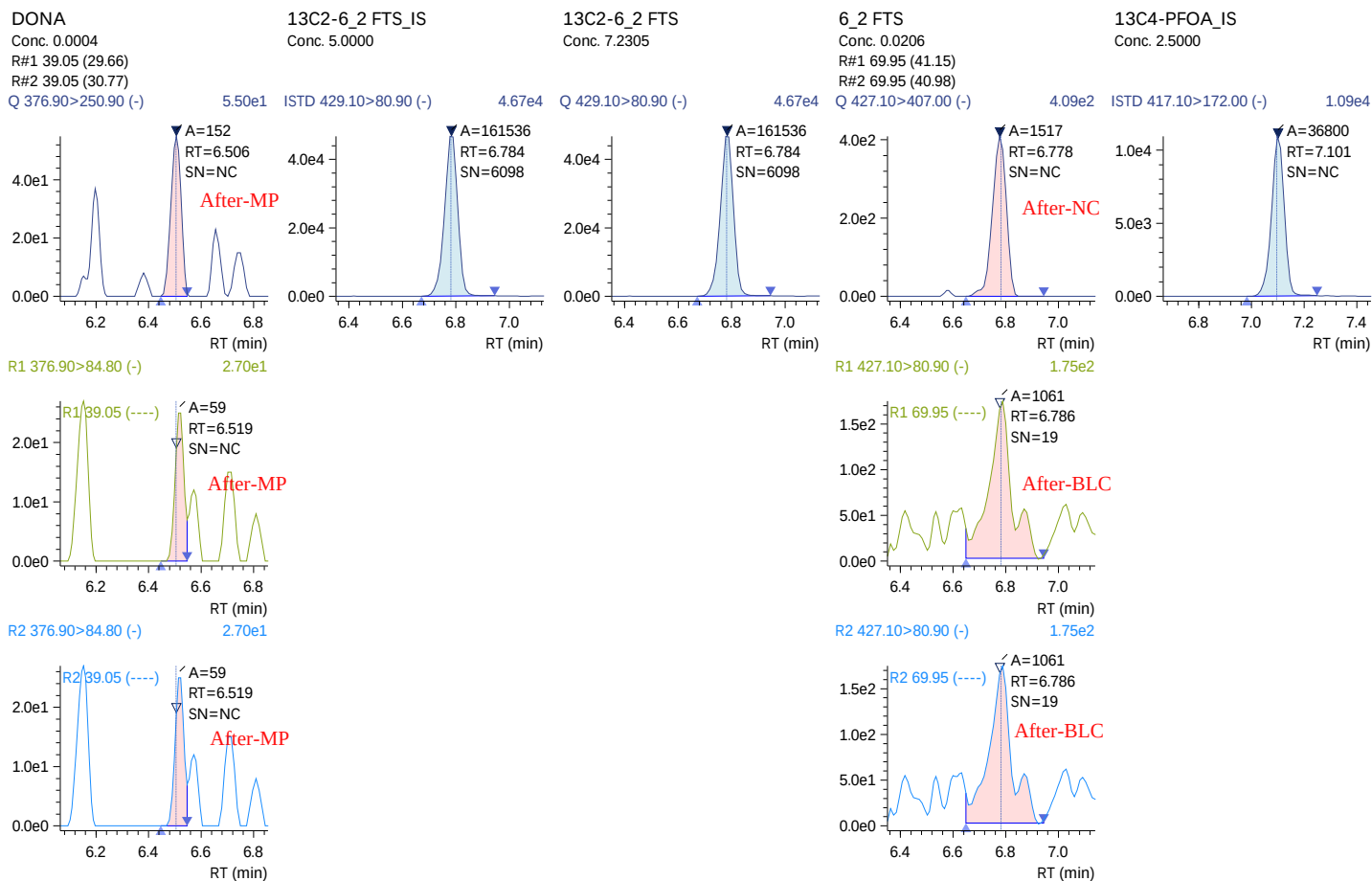


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_035 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_035 (continued)

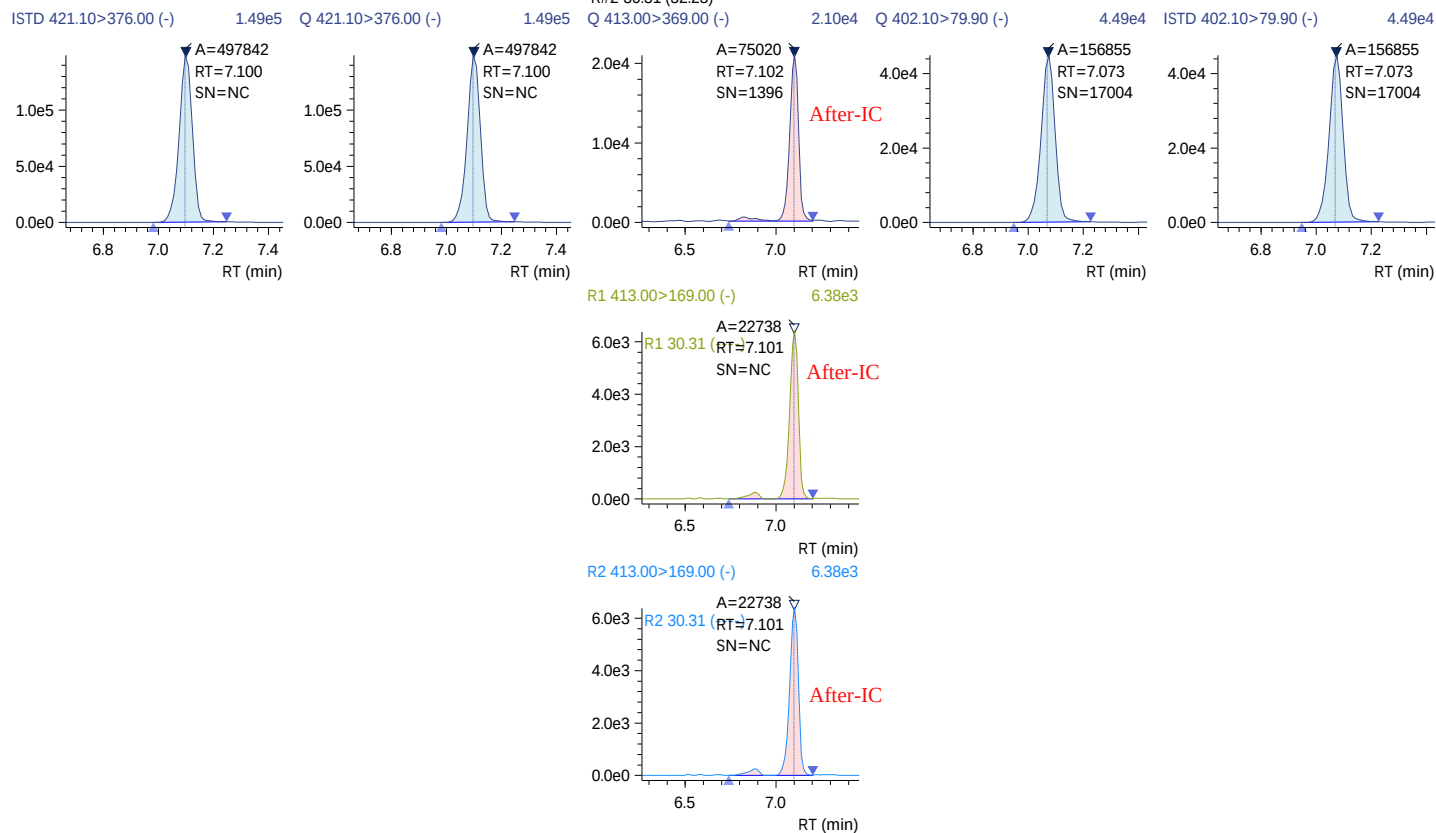
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.4204

PFOA
Conc. 0.5401
R#1 30.31 (31.89)
R#2 30.31 (32.23)

13C3-PFHxS
Conc. 2.1290

13C3-PFHxS_IS
Conc. 2.5000

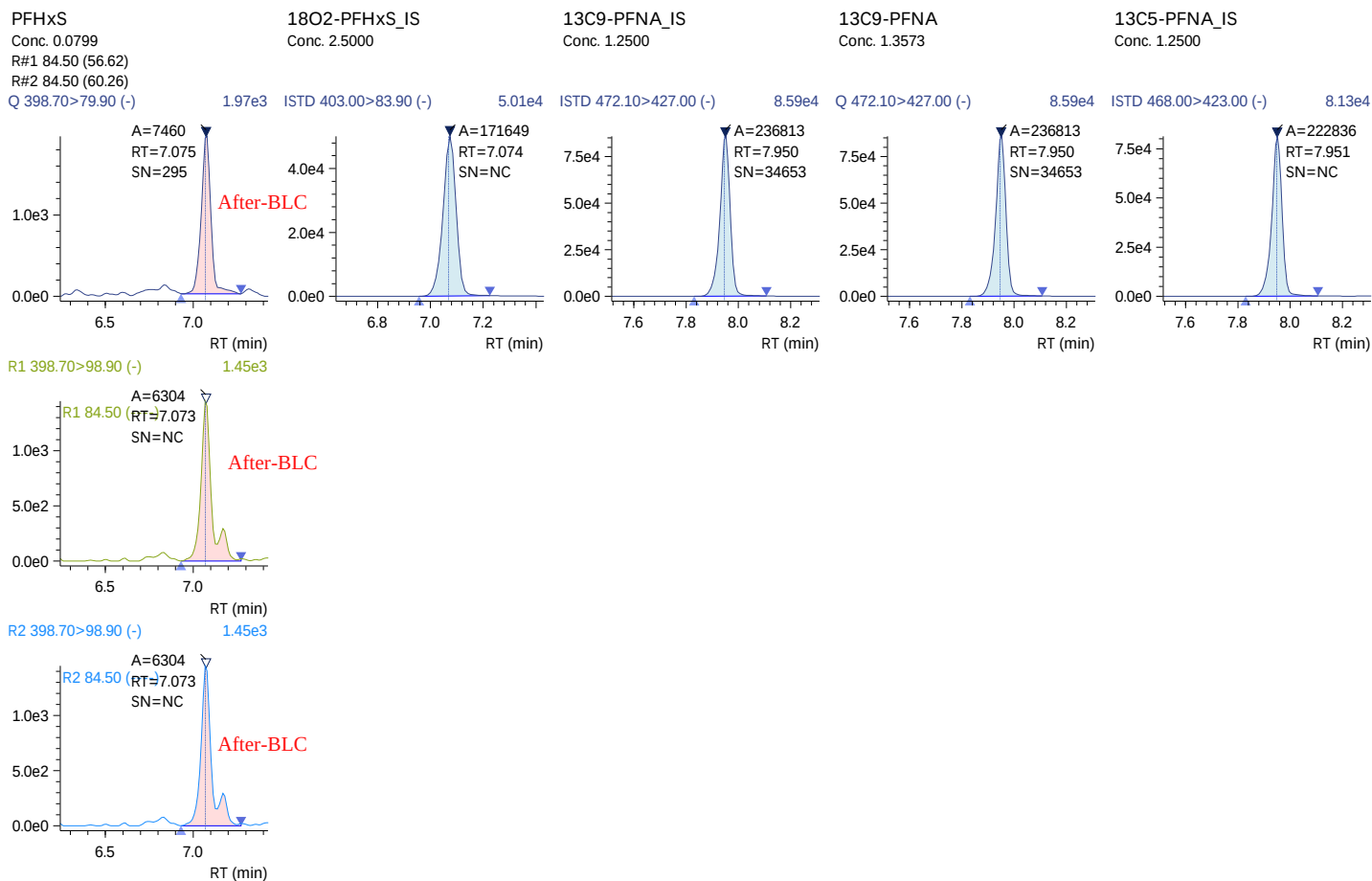


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_035 (continued)

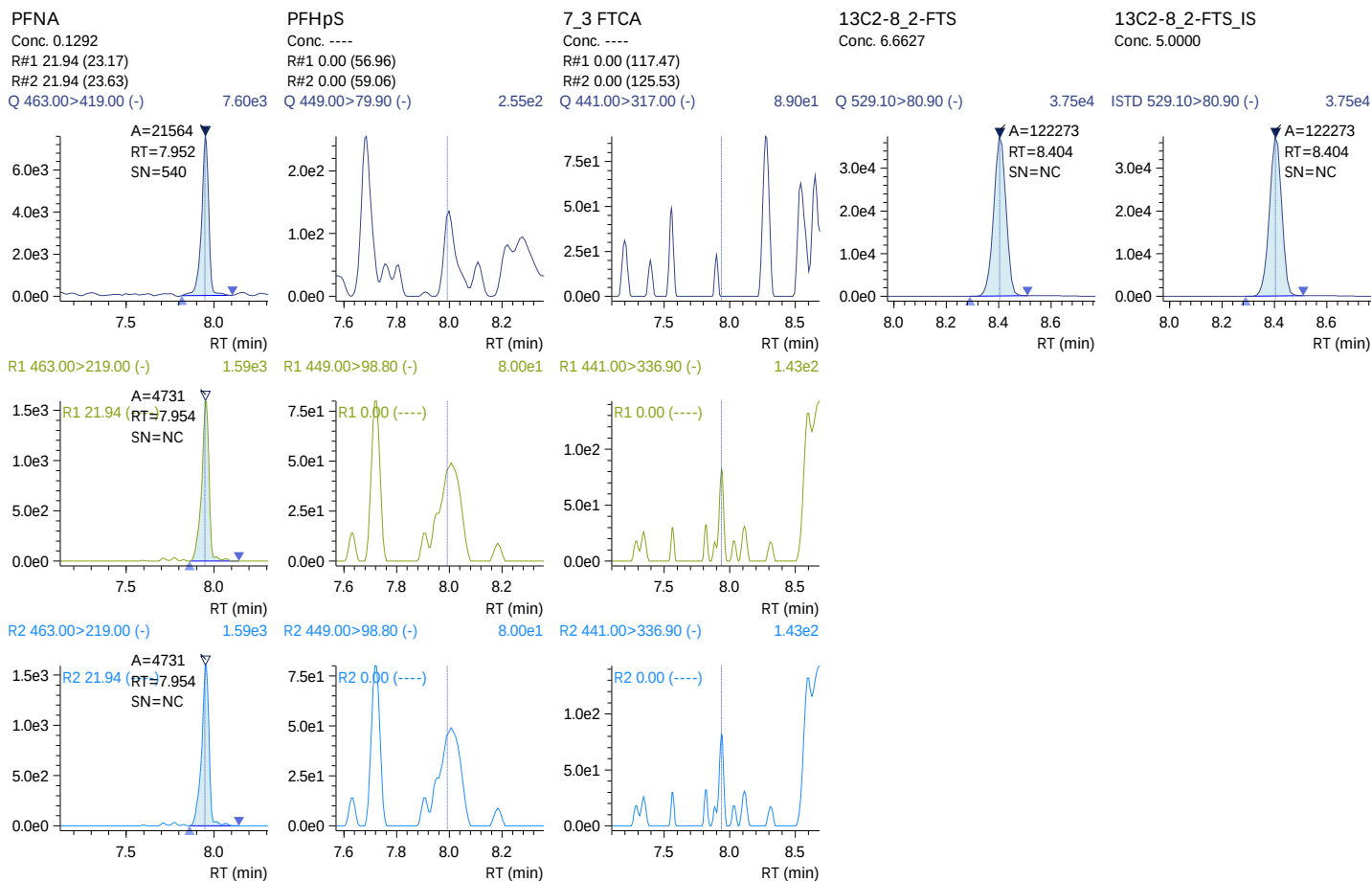


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.

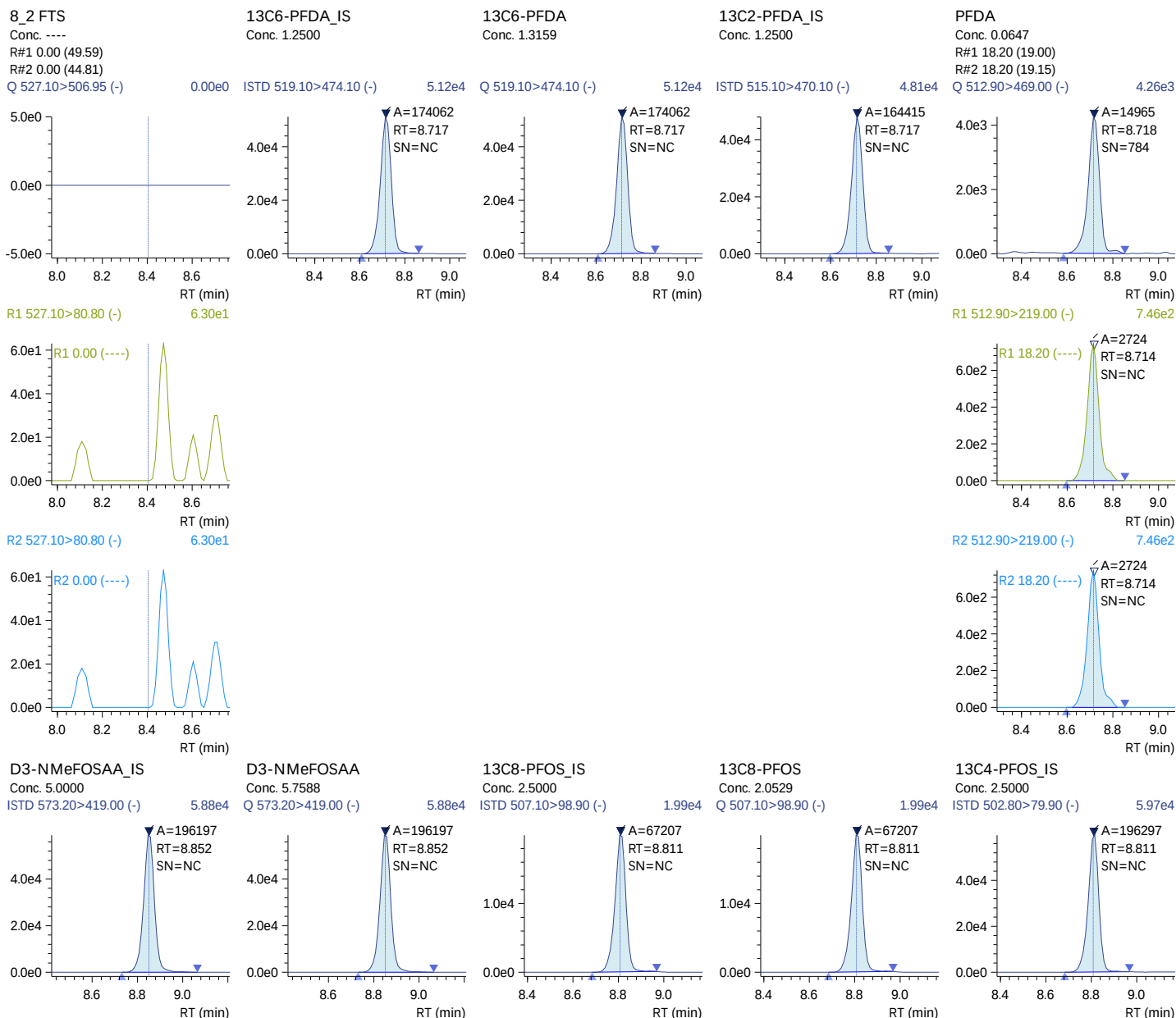


240122_035 (continued)





240122_035 (continued)

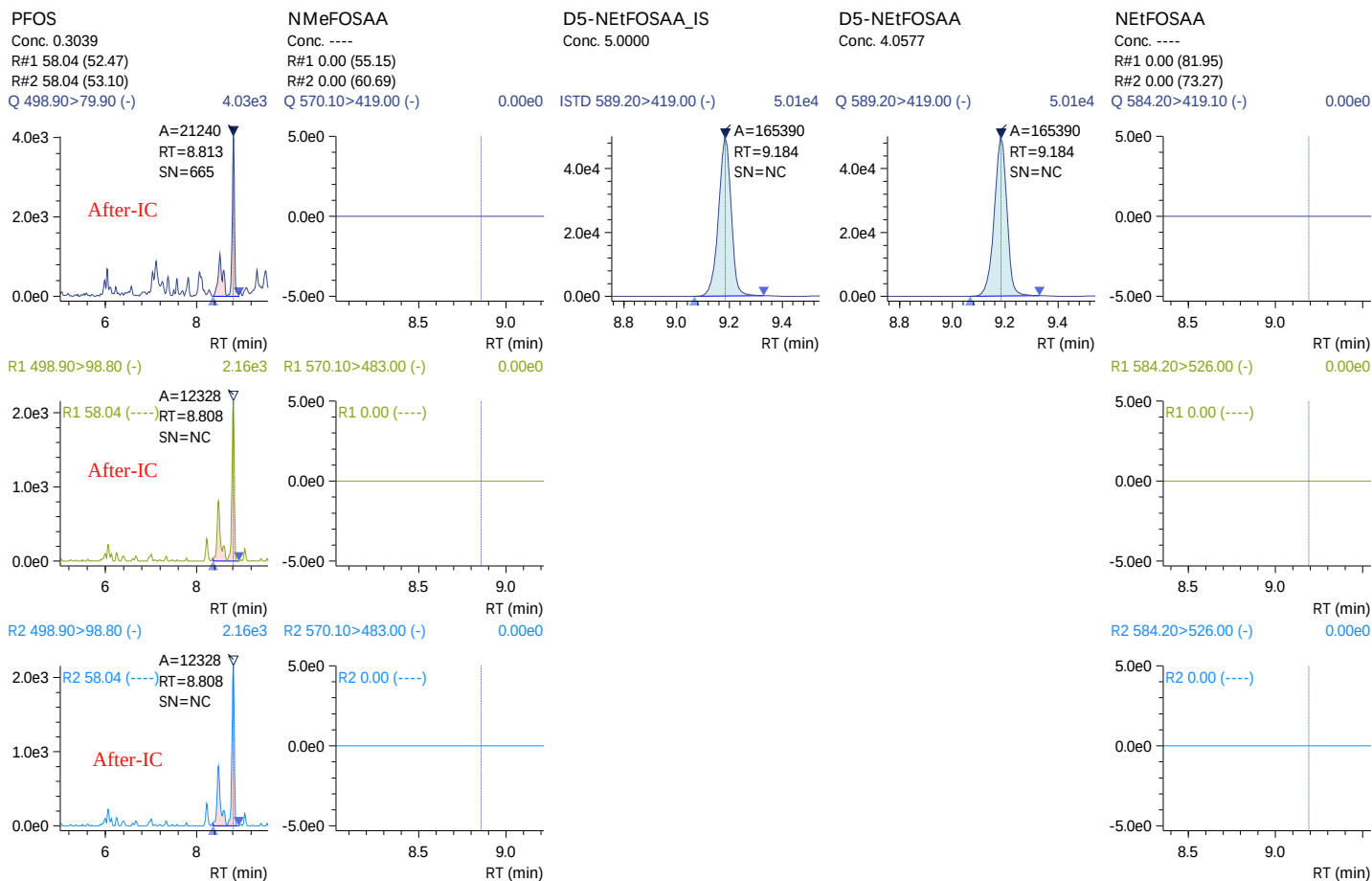


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_035 (continued)



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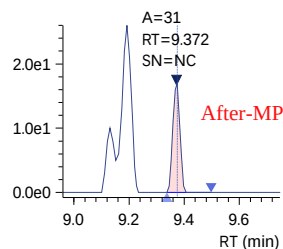
SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



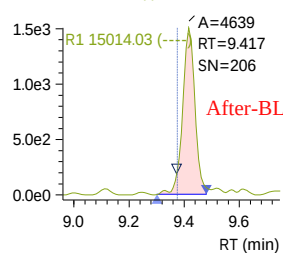
240122_035 (continued)

9-CI-PF3ONS

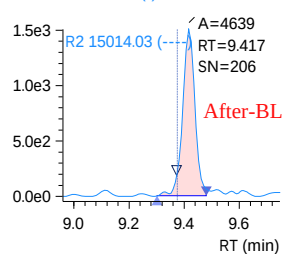
Conc. 0.0001
R#1 15014.03 (32.76)
R#2 15014.03 (32.59)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-)

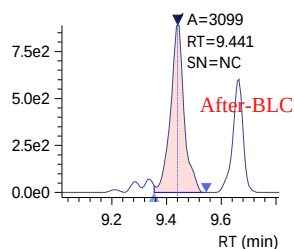


R2 532.80>353.00 (-)

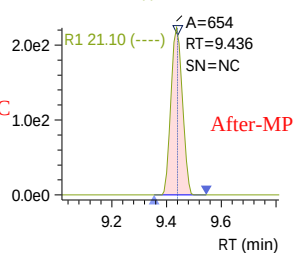


PFUnDA

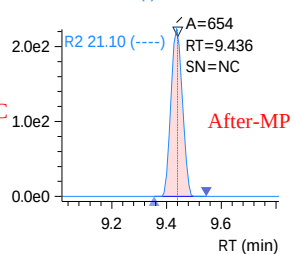
Conc. -0.0060
R#1 21.10 (13.12)
R#2 21.10 (14.36)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-)



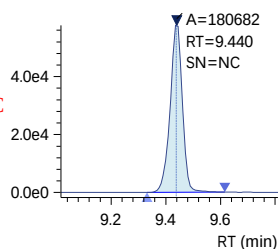
R2 563.10>269.10 (-)



13C7-PFUnDA_IS

Conc. 1.2500

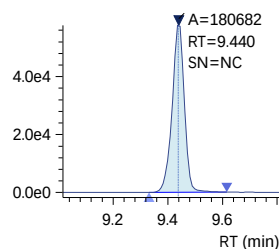
ISTD 570.00>525.10 (-)



13C7-PFUnDA

Conc. 1.1451

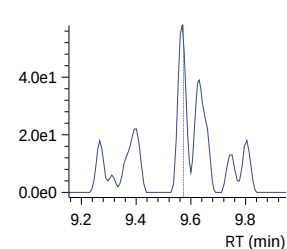
Q 570.00>525.10 (-)



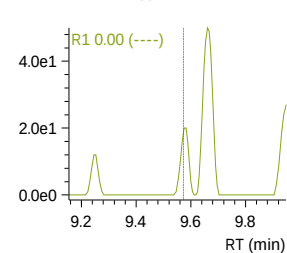
PFNS

Conc. ----

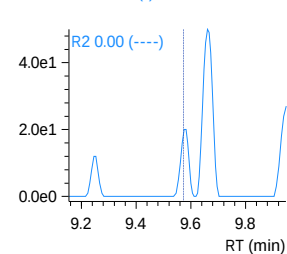
R#1 0.00 (65.22)
R#2 0.00 (65.31)
Q 548.80>79.90 (-)



R1 548.80>79.90 (-)

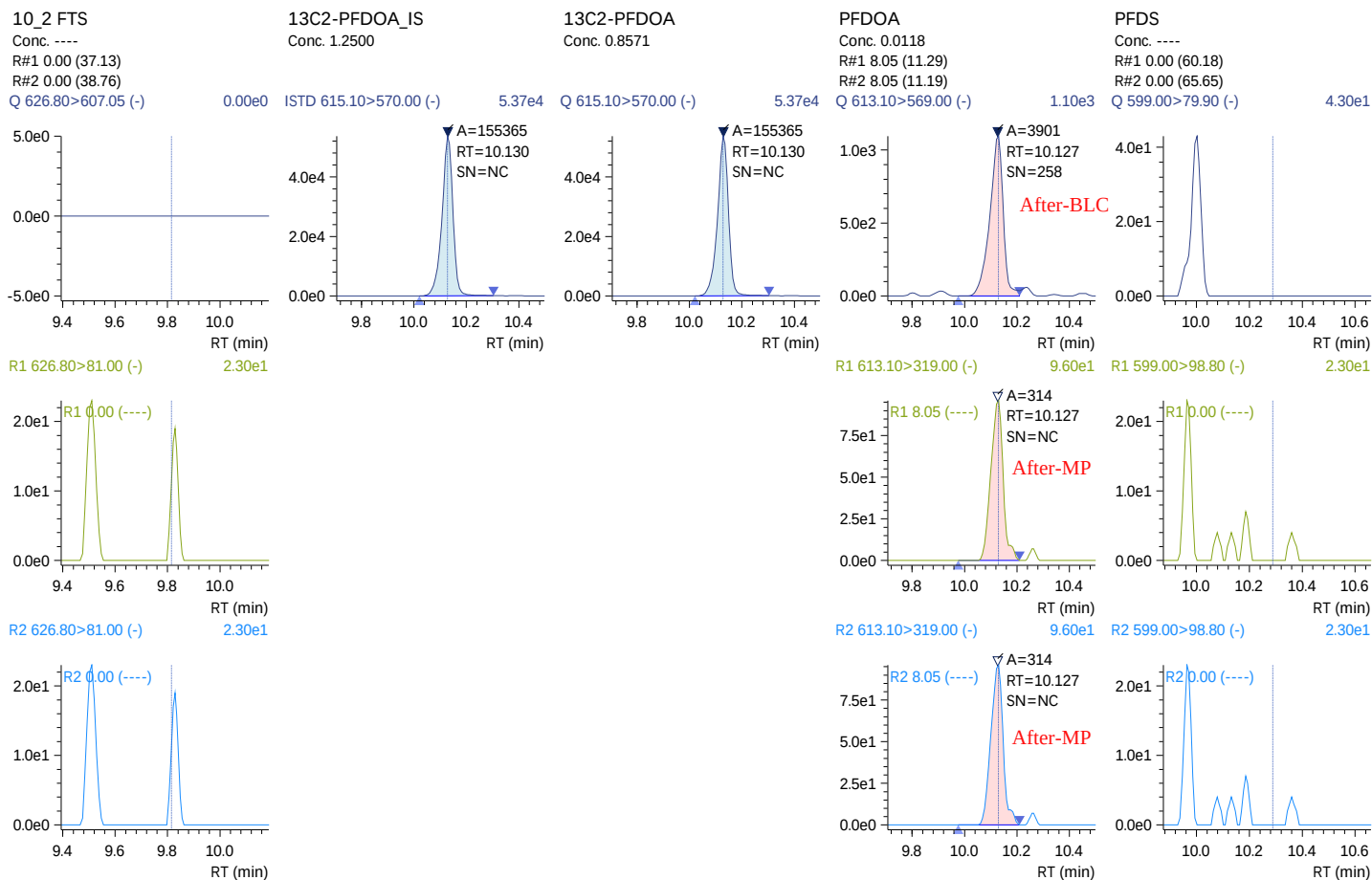


R2 548.80>79.90 (-)





240122_035 (continued)

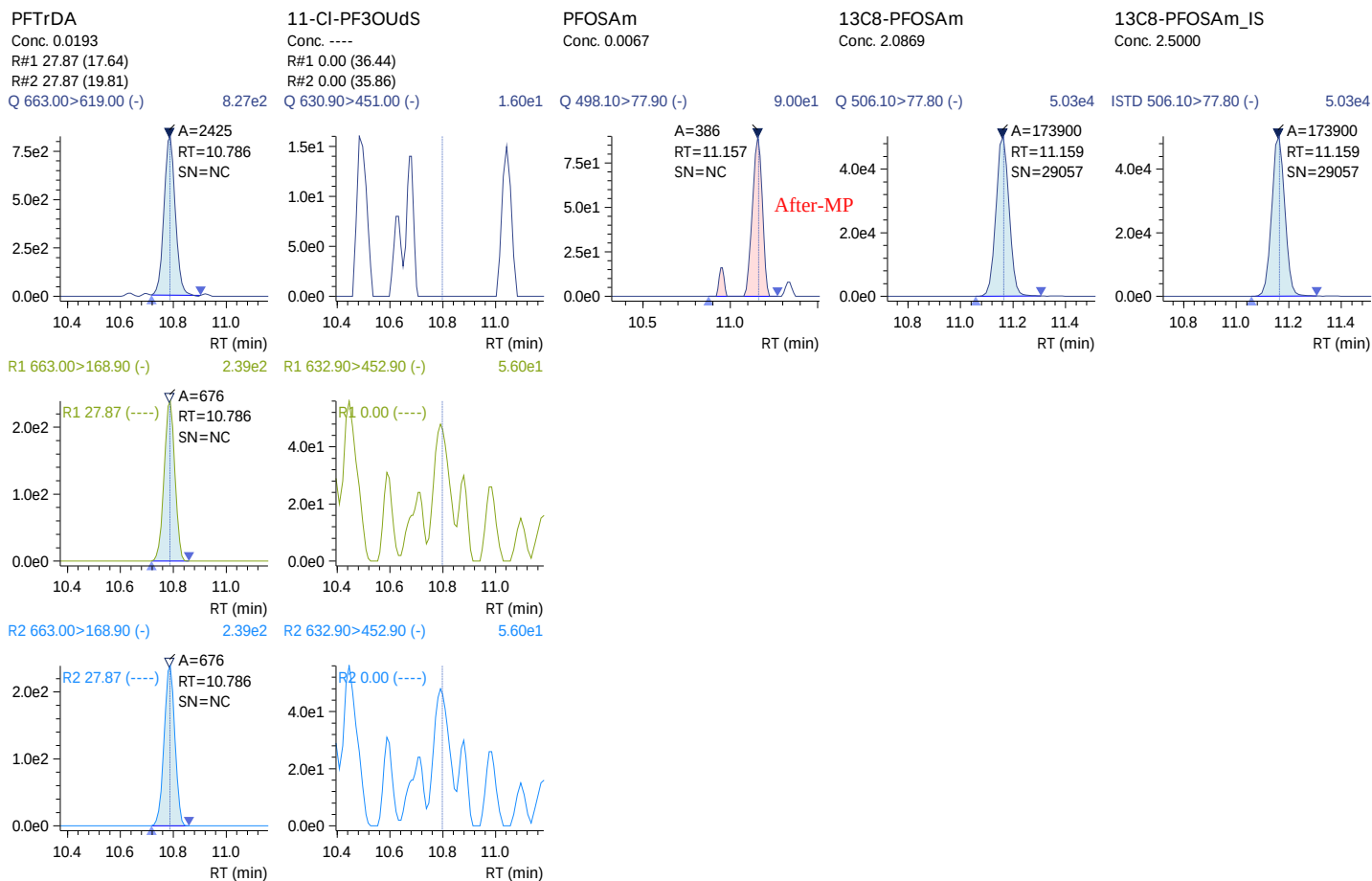


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_035 (continued)

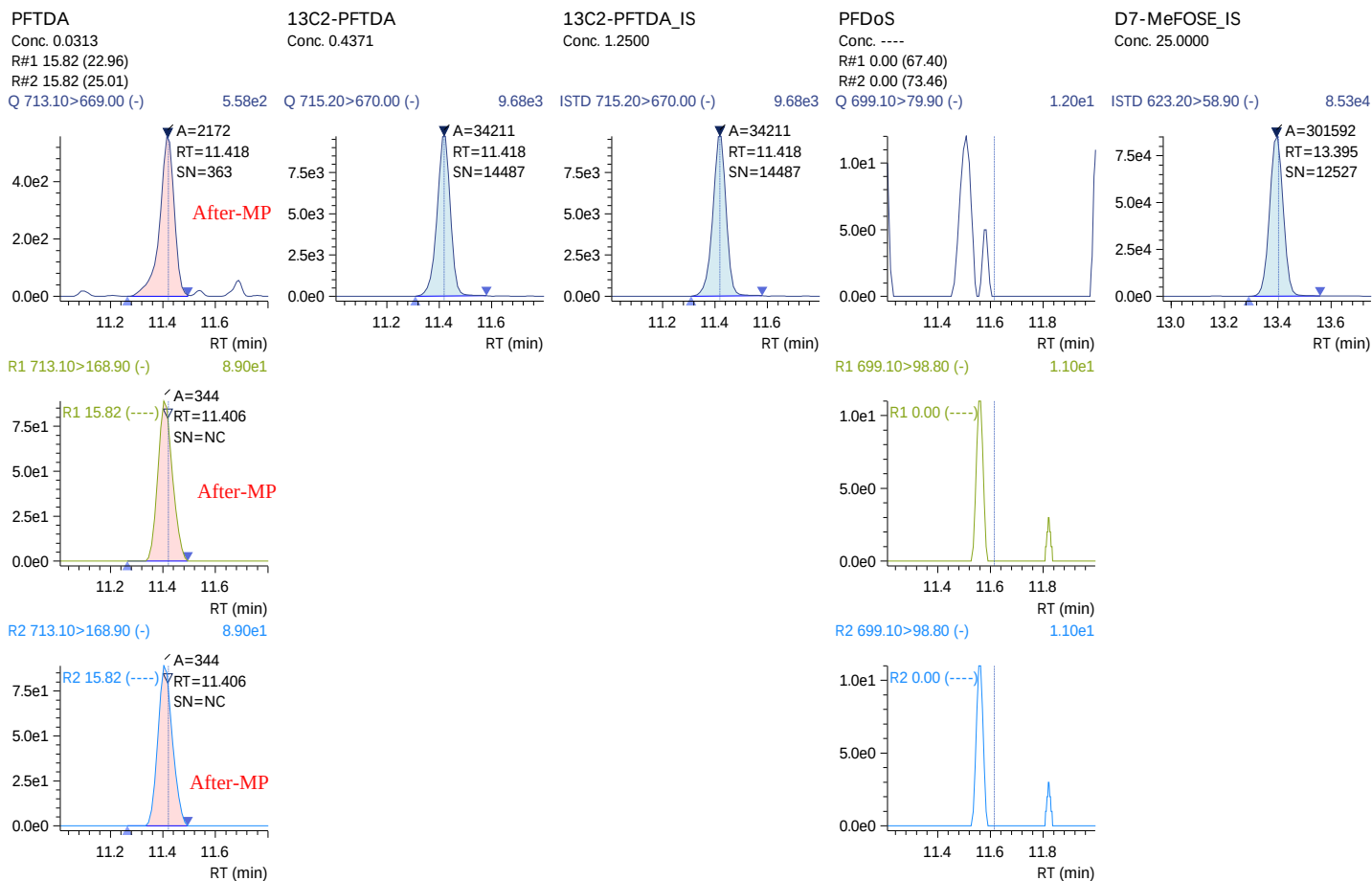


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_035 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_035 (continued)

D7-MeFOSE
Conc. 14.6795

MeFOSE
Conc. ----

13C2-PFHXA_IS
Conc. 2.5000

13C2-PFHXA
Conc. 0.4313

PFHXA
Conc. 0.0803

R#1 11.29 (13.90)
R#2 11.29 (15.85)

Q 623.20>58.90 (-)

8.53e4

Q 616.10>59.00 (-)

4.00e1

ISTD 815.00>770.05 (-)

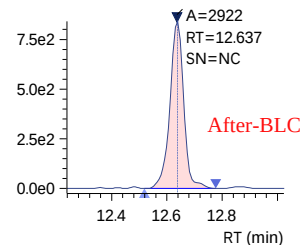
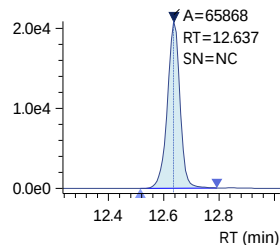
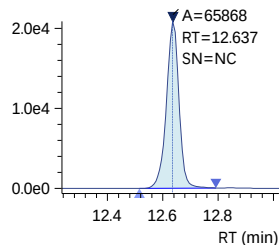
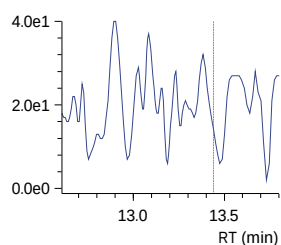
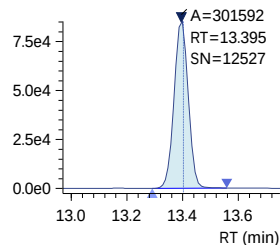
2.09e4

Q 815.00>770.05 (-)

2.09e4

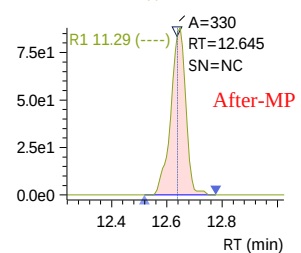
Q 813.00>768.95 (-)

8.41e2



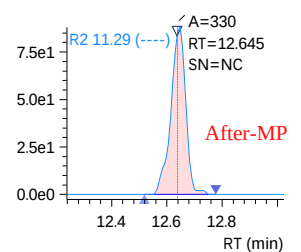
R1 813.00>218.95 (-)

8.80e1



R2 813.00>218.95 (-)

8.80e1





240122_035 (continued)

D3-MeFOSA
Conc. 1.2676

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. ----
R#1 0.00 (140.79)
R#2 0.00 (150.13)

D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 13.9138

Q 515.00>219.00 (-)

6.10e3

ISTD 515.00>219.00 (-)

6.10e3

Q 511.90>219.00 (-)

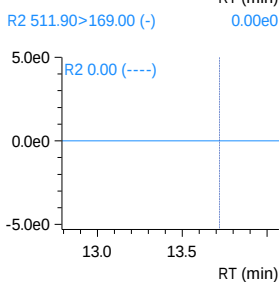
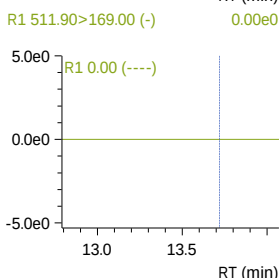
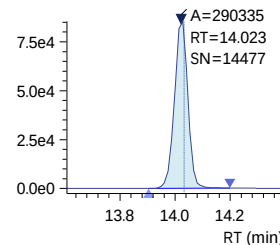
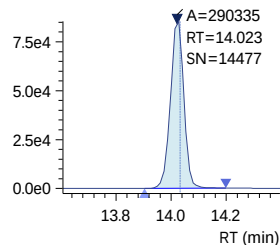
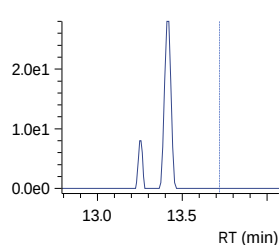
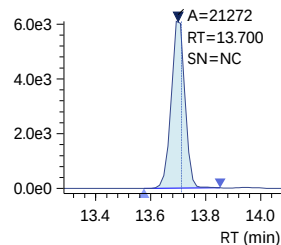
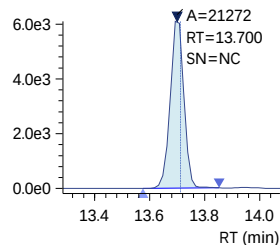
2.80e1

ISTD 639.20>58.90 (-)

8.55e4

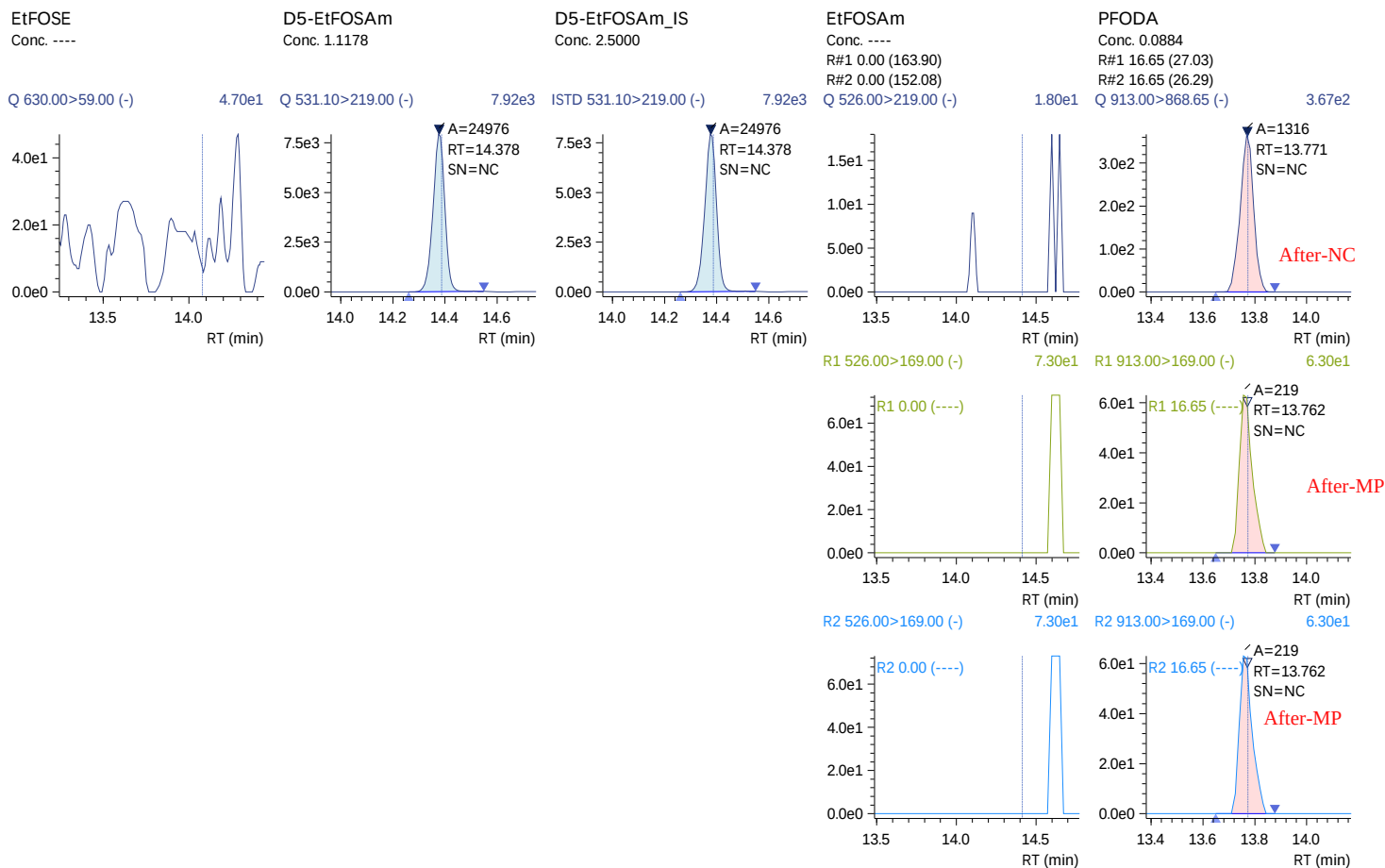
Q 639.20>58.90 (-)

8.55e4





240122_035 (continued)



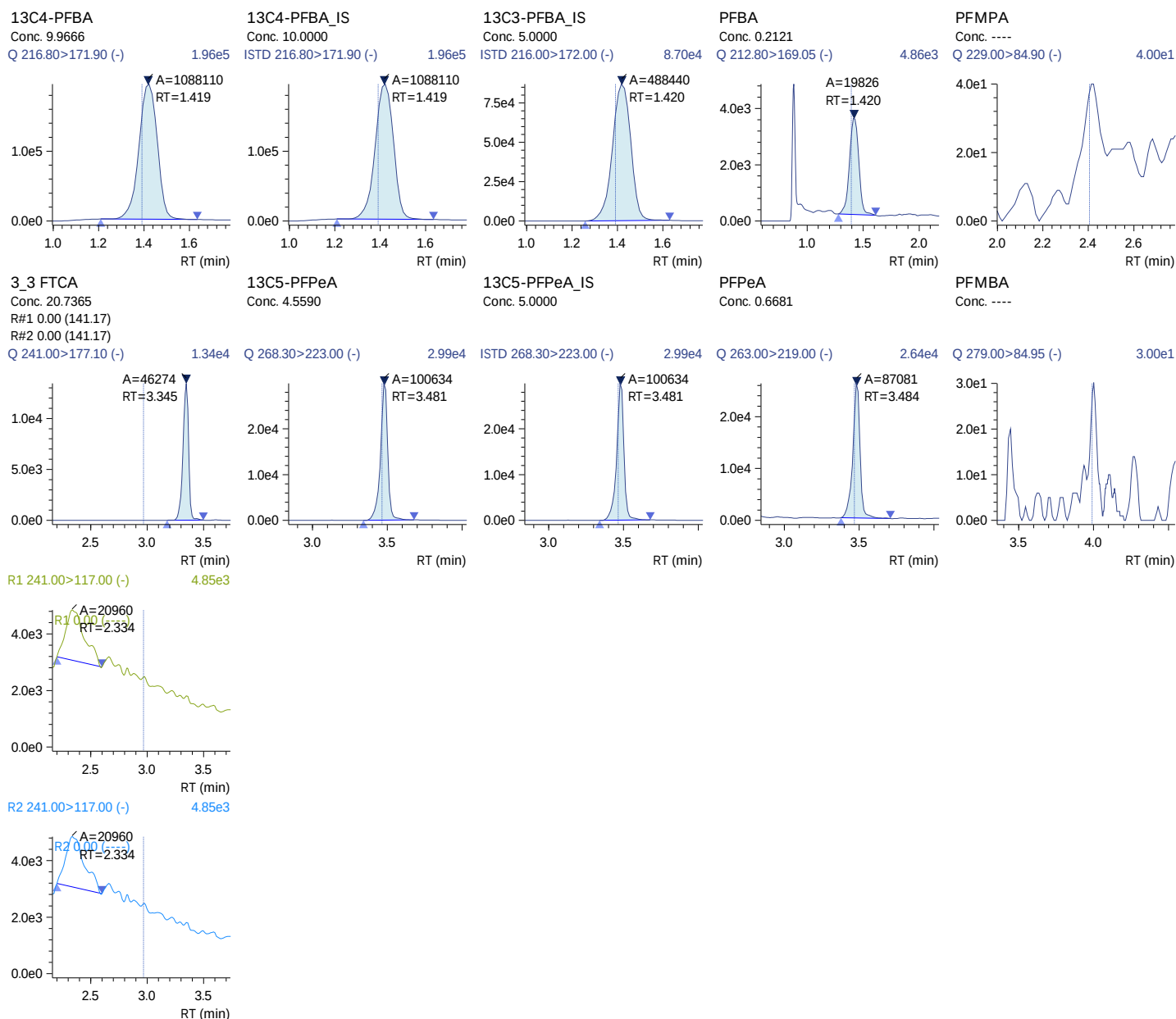
J:\LCMS08\Data\240122_1633_B1\240122_1633_B1.dampl

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_035

Sample ID: K2314281-002
Date Acquired: 1/22/2024 10:56:11 PM
Acquired by: System Administrator
Data File: 240122_035
Vial: 15 | Inj. Volume: 10.0000uL | Tray: 2





240122_035 (continued)

13C2-4_2_FTS
 Conc. 7.6071

13C2-4_2_FTS_IS
 Conc. 5.0000

4_2_FTS
 Conc. ----
 R#1 0.00 (29.06)
 R#2 0.00 (29.06)

13C3-PFBS_IS
 Conc. 2.5000

PFBS
 Conc. 0.0354
 R#1 50.33 (46.72)
 R#2 50.33 (46.72)

Q 329.10>80.90 (-)

5.46e4

ISTD 329.10>80.90 (-)

5.46e4

Q 327.10>307.00 (-)

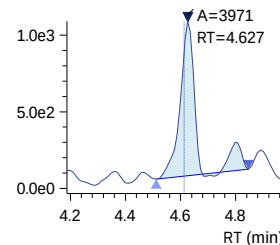
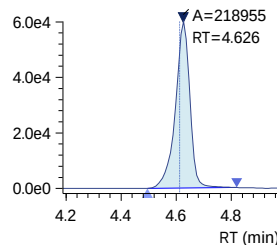
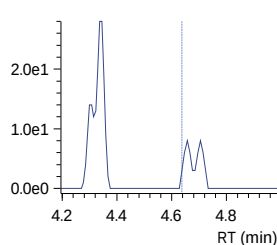
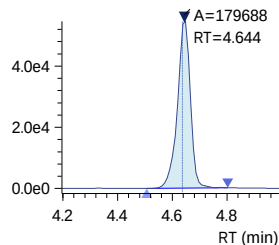
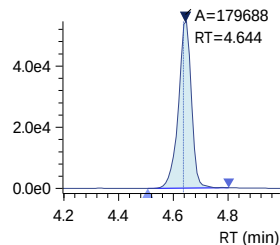
2.80e1

ISTD 302.10>79.90 (-)

6.02e4

Q 298.70>79.90 (-)

1.09e3

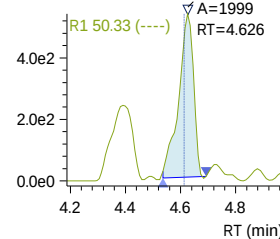
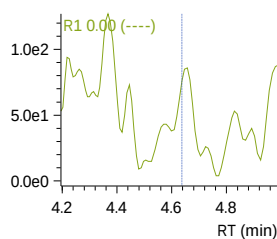


R1 327.10>80.90 (-)

1.27e2

R1 298.70>98.80 (-)

5.43e2

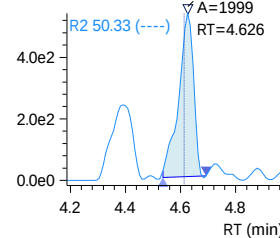
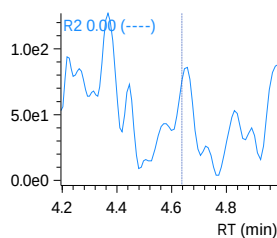


R2 327.10>80.90 (-)

1.27e2

R2 298.70>98.80 (-)

5.43e2





240122_035 (continued)

13C3-PFBS
Conc. 2.2478

NFDHA
Conc. ----
R#1 0.00 (40.25)
R#2 0.00 (40.25)

13C5-PFHxA
Conc. 2.2876

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

Q 302.10>79.90 (-)

6.02e4

Q 295.00>201.00 (-)

2.37e2

Q 318.00>273.00 (-)

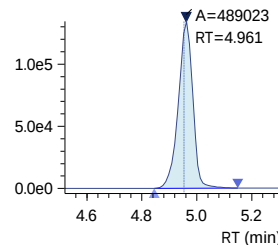
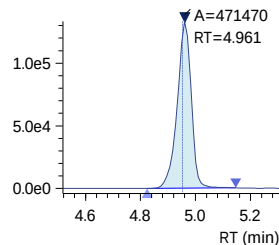
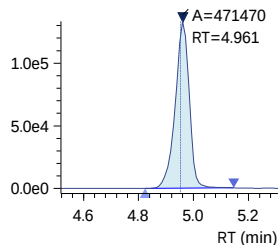
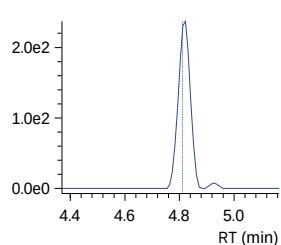
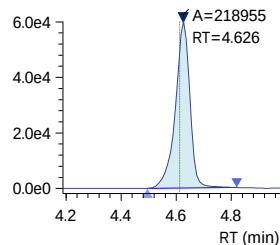
1.33e5

ISTD 318.00>273.00 (-)

1.33e5

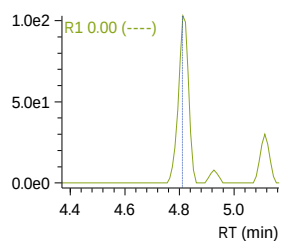
ISTD 315.10>270.00 (-)

1.34e5



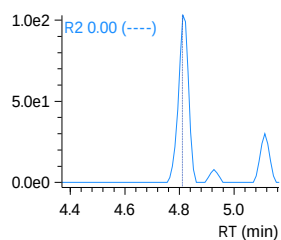
R1 295.00>84.90 (-)

1.03e2



R2 295.00>84.90 (-)

1.03e2

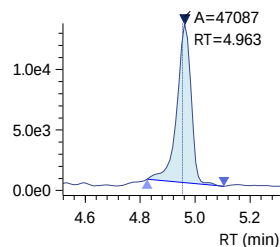




240122_035 (continued)

PFHxA
Conc. 0.2917

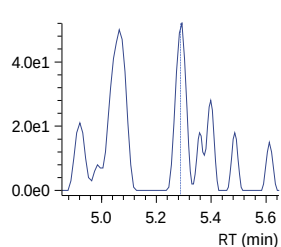
Q 313.00>269.00 (-)



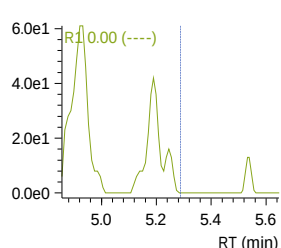
PFEESA
Conc. ----

R#1 0.00 (6.11)
R#2 0.00 (6.11)

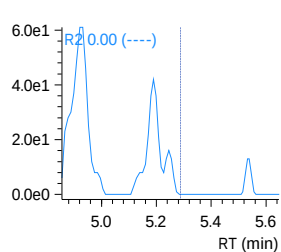
Q 314.80>135.00 (-)



R1 314.80>82.90 (-)

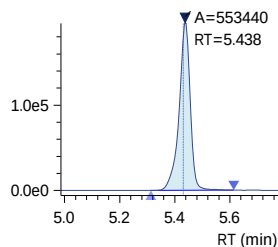


R2 314.80>82.90 (-)



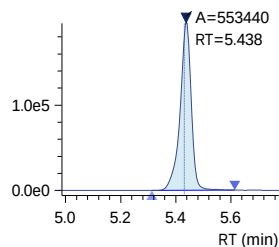
13C3-HFPO-DA
Conc. 11.5610

Q 286.90>168.90 (-)



13C3-HFPO-DA_IS
Conc. 10.0000

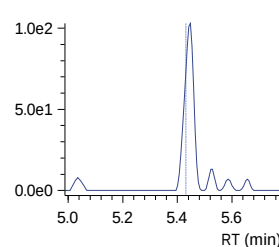
ISTD 286.90>168.90 (-)



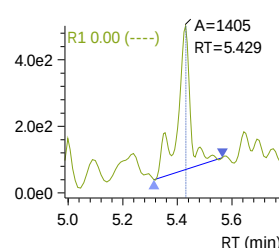
HFPO-DA
Conc. ----

R#1 0.00 (65.61)
R#2 0.00 (65.61)

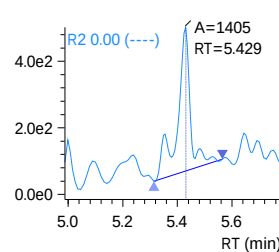
Q 284.90>168.90 (-)



R1 284.90>184.90 (-)



R2 284.90>184.90 (-)





240122_035 (continued)

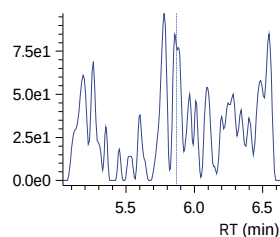
5_3 FTCA

Conc. ----

R#1 0.00 (158.86)

R#2 0.00 (158.86)

Q 341.00>237.05 (-)



R1 341.00>217.00 (-)

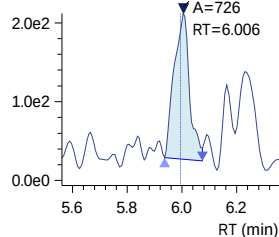
PFPeS

Conc. 0.0088

R#1 0.00 (55.80)

R#2 0.00 (55.80)

Q 349.10>79.90 (-)

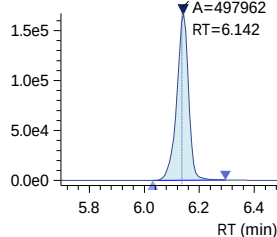


R1 349.10>98.80 (-)

13C4-PFHpa

Conc. 2.6690

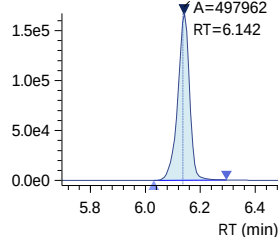
Q 367.10>322.00 (-)



13C4-PFHpa_IS

Conc. 2.5000

ISTD 367.10>322.00 (-)



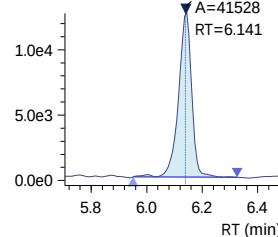
PFHpA

Conc. 0.1663

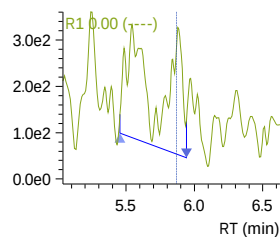
R#1 22.47 (21.50)

R#2 22.47 (21.50)

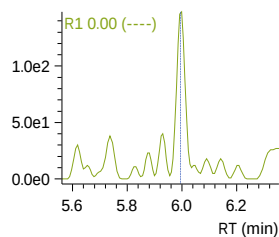
Q 363.10>319.00 (-)



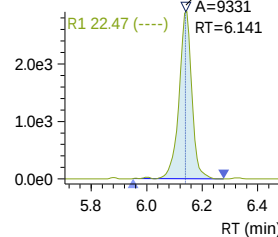
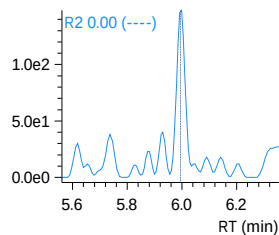
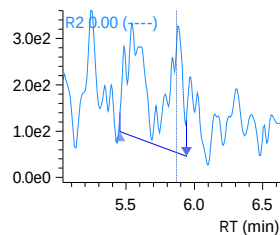
R1 363.10>169.00 (-)



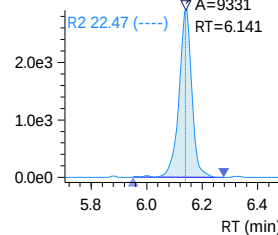
R2 341.00>217.00 (-)



R2 349.10>98.80 (-)

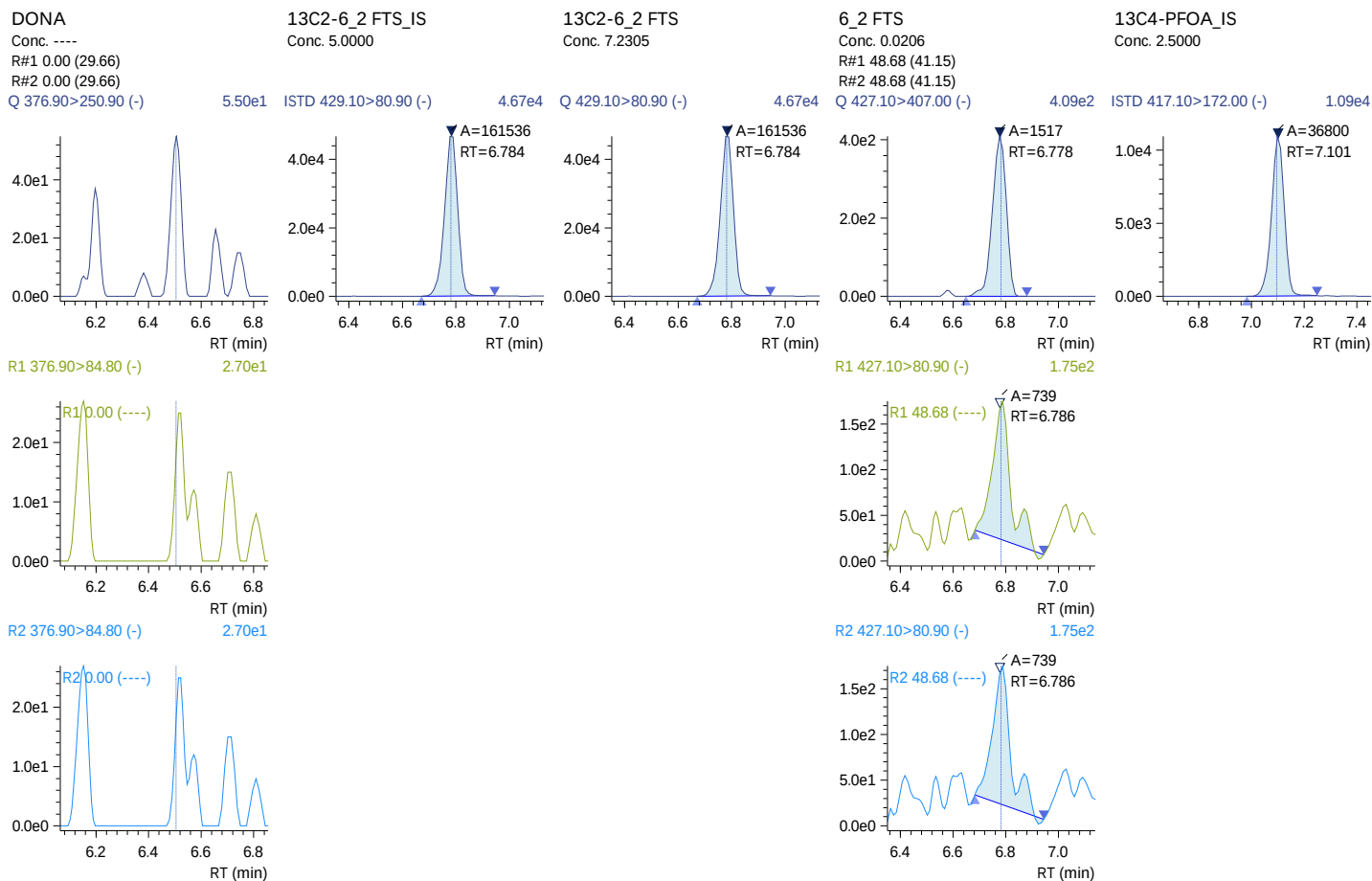


R2 363.10>169.00 (-)





240122_035 (continued)





240122_035 (continued)

13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.4204

PFOA
Conc. 0.5102
R#1 30.40 (31.89)
R#2 30.40 (31.89)

13C3-PFHxS
Conc. 2.1290

13C3-PFHxS_IS
Conc. 2.5000

ISTD 421.10>376.00 (-)

1.49e5

Q 421.10>376.00 (-)

1.49e5

Q 413.00>369.00 (-)

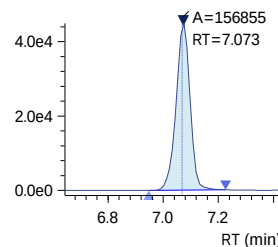
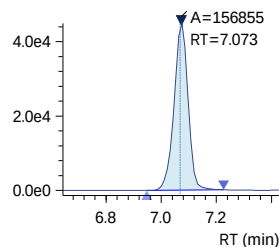
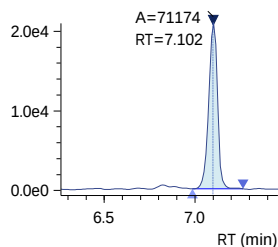
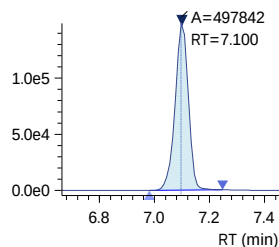
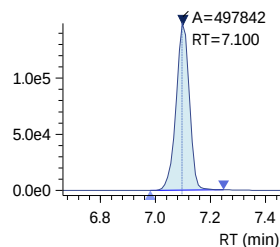
2.10e4

Q 402.10>79.90 (-)

4.49e4

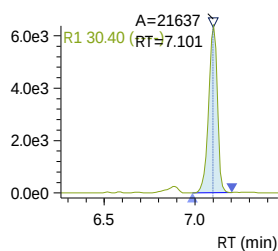
ISTD 402.10>79.90 (-)

4.49e4



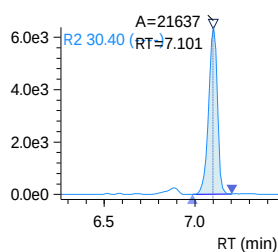
R1 413.00>169.00 (-)

6.38e3



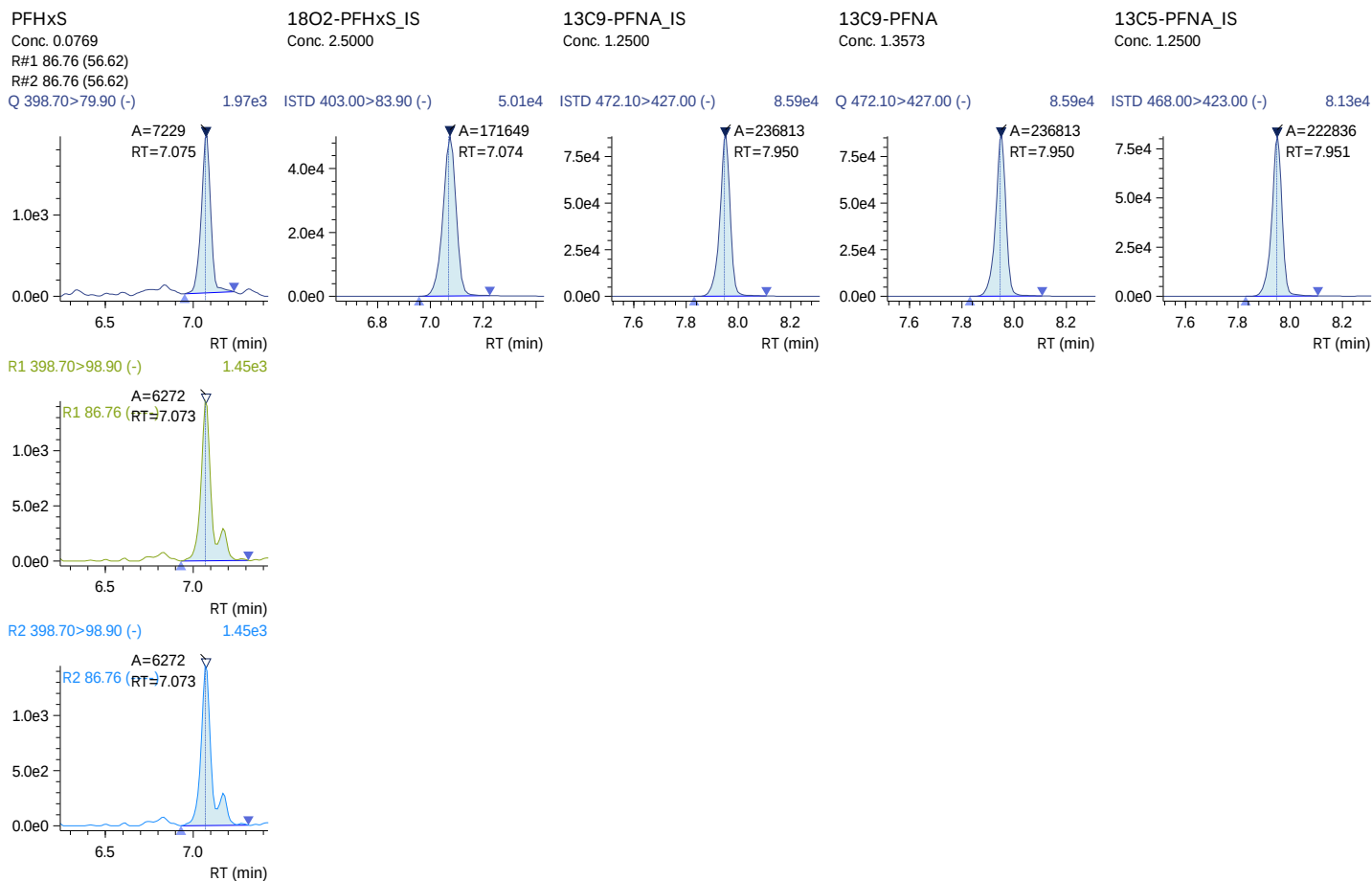
R2 413.00>169.00 (-)

6.38e3



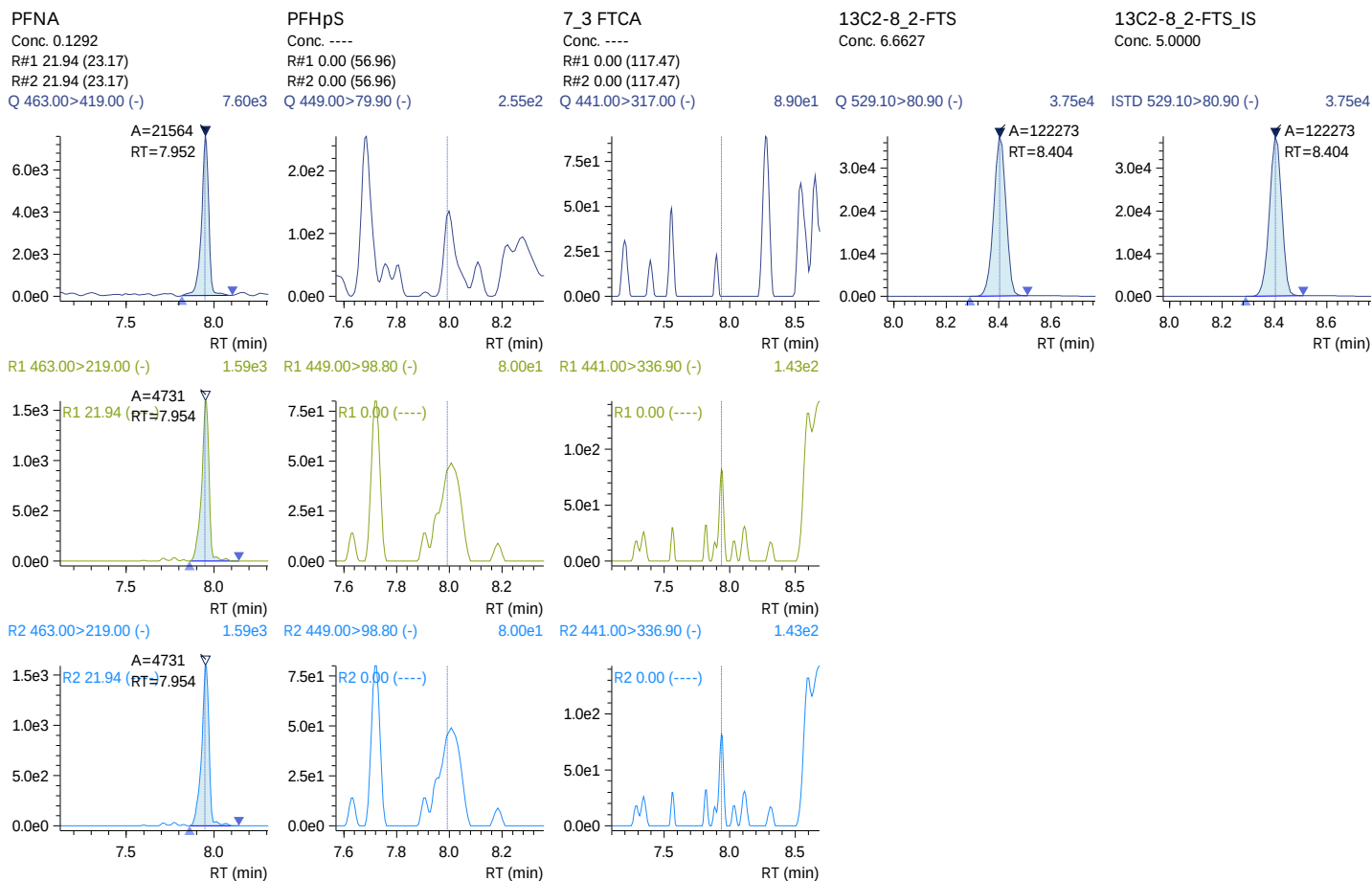


240122_035 (continued)



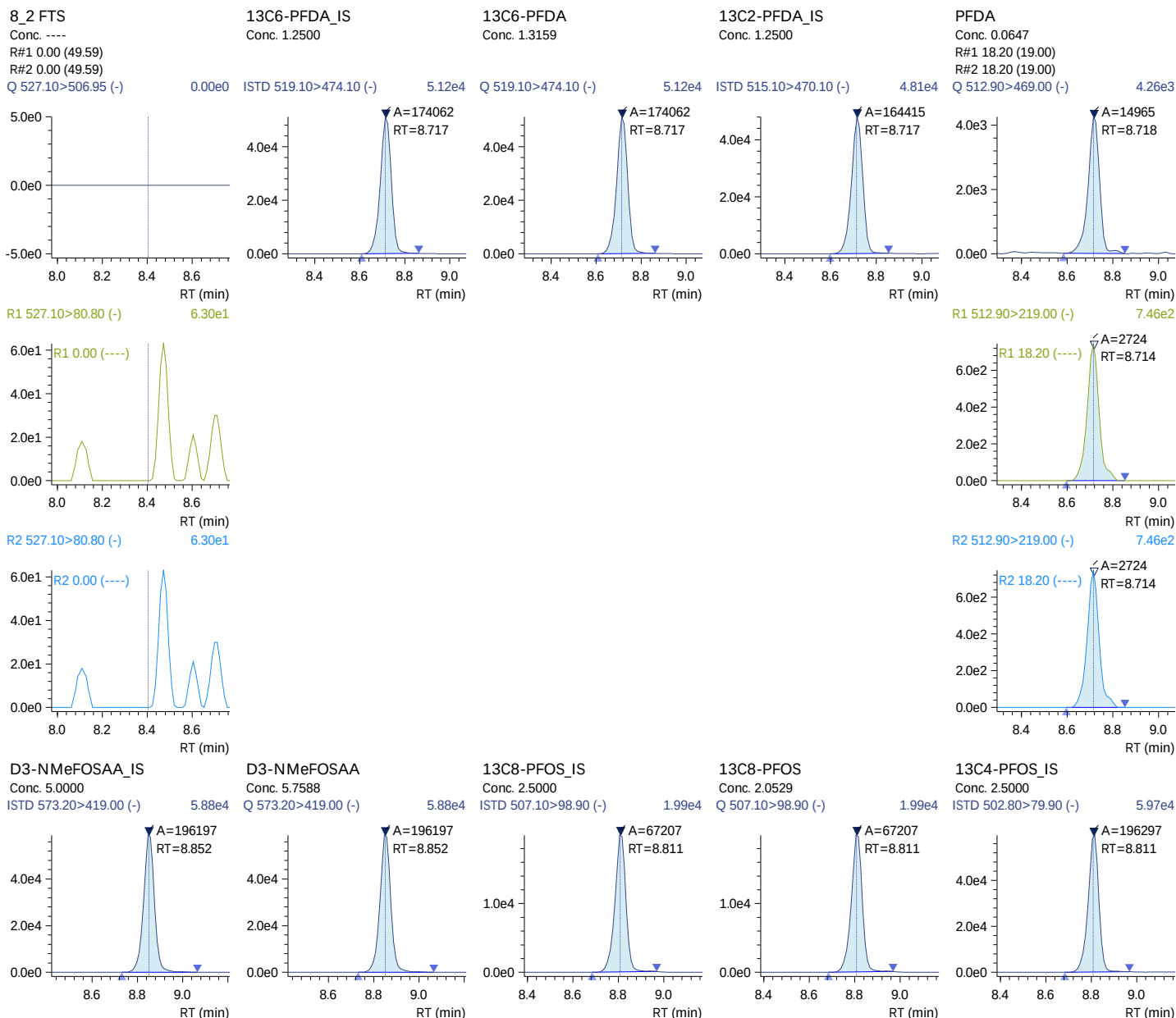


240122_035 (continued)



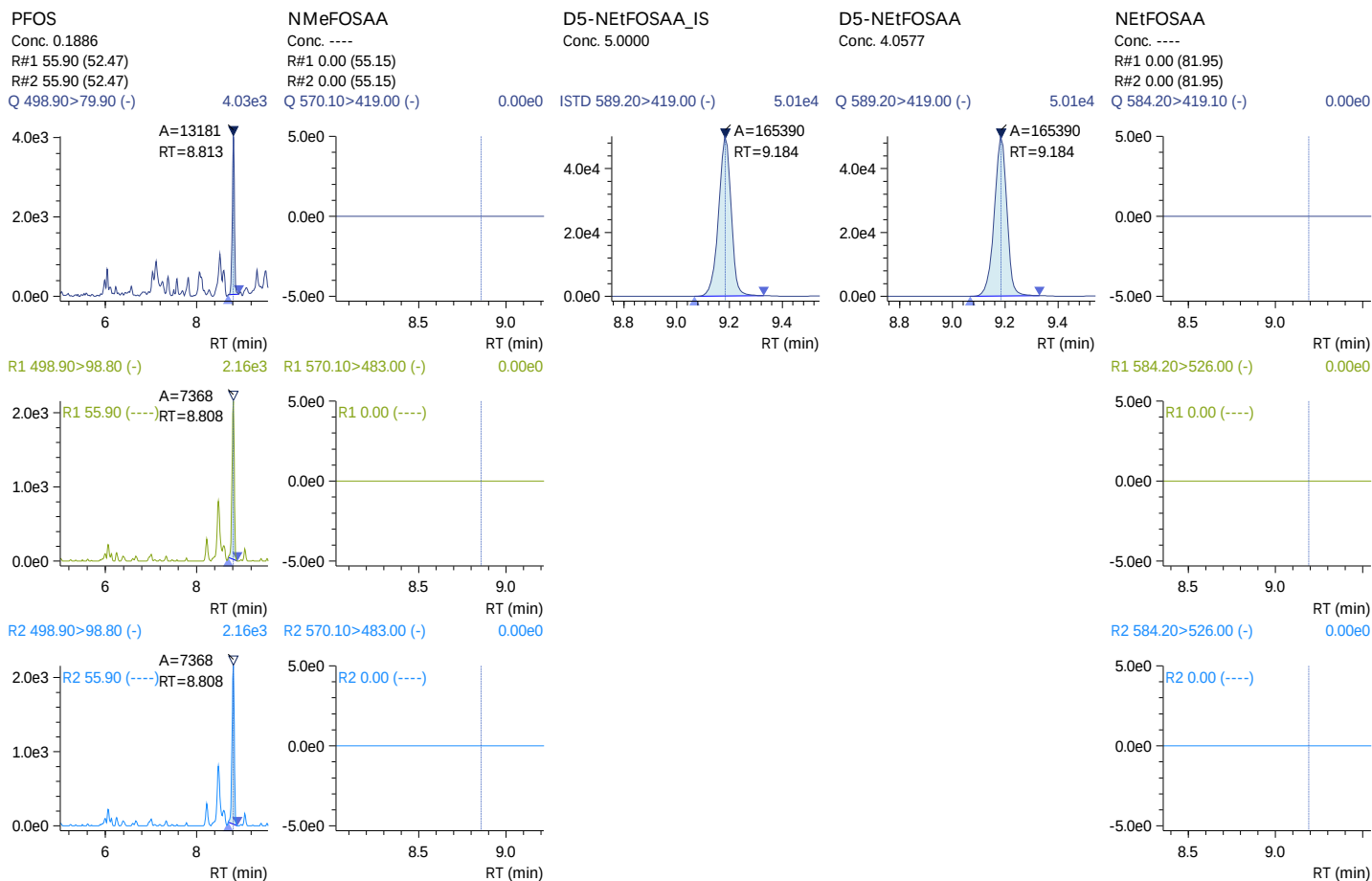


240122_035 (continued)





240122_035 (continued)





240122_035 (continued)

9-Cl-PF3ONS

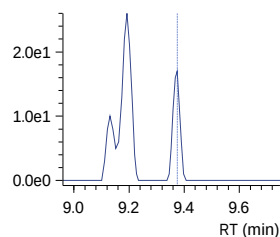
Conc. ----

R#1 0.00 (32.76)

R#2 0.00 (32.76)

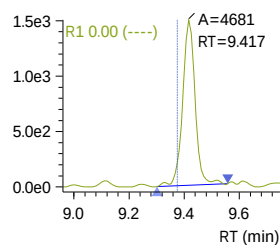
Q 530.80>351.00 (-)

2.60e1



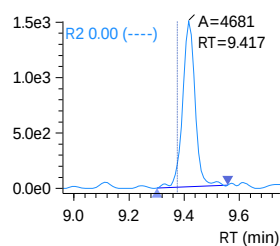
R1 532.80>353.00 (-)

1.51e3



R2 532.80>353.00 (-)

1.51e3



PFUnDA

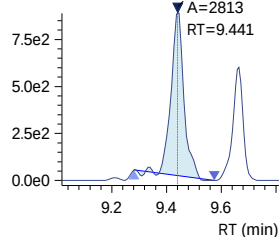
Conc. -0.0082

R#1 0.00 (13.12)

R#2 0.00 (13.12)

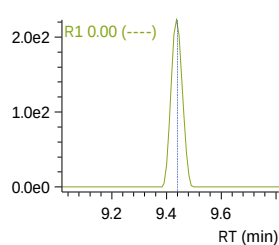
Q 563.10>519.00 (-)

8.89e2



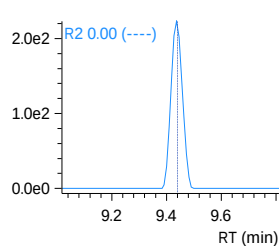
R1 563.10>269.10 (-)

2.23e2



R2 563.10>269.10 (-)

2.23e2

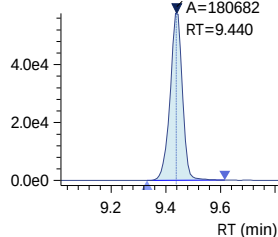


13C7-PFUnDA_IS

Conc. 1.2500

ISTD 570.00>525.10 (-)

5.77e4

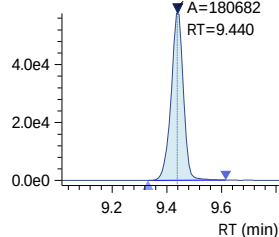


13C7-PFUnDA

Conc. 1.1451

Q 570.00>525.10 (-)

5.77e4



PFNS

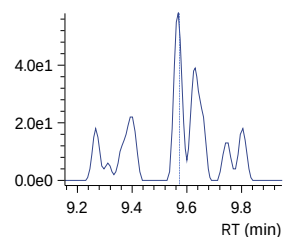
Conc. ----

R#1 0.00 (65.22)

R#2 0.00 (65.22)

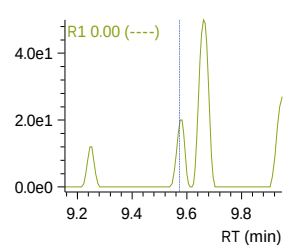
Q 548.80>79.90 (-)

5.80e1



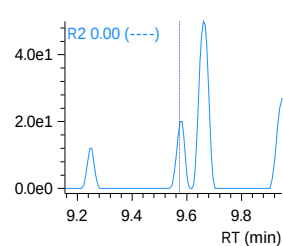
R1 548.80>98.80 (-)

5.00e1



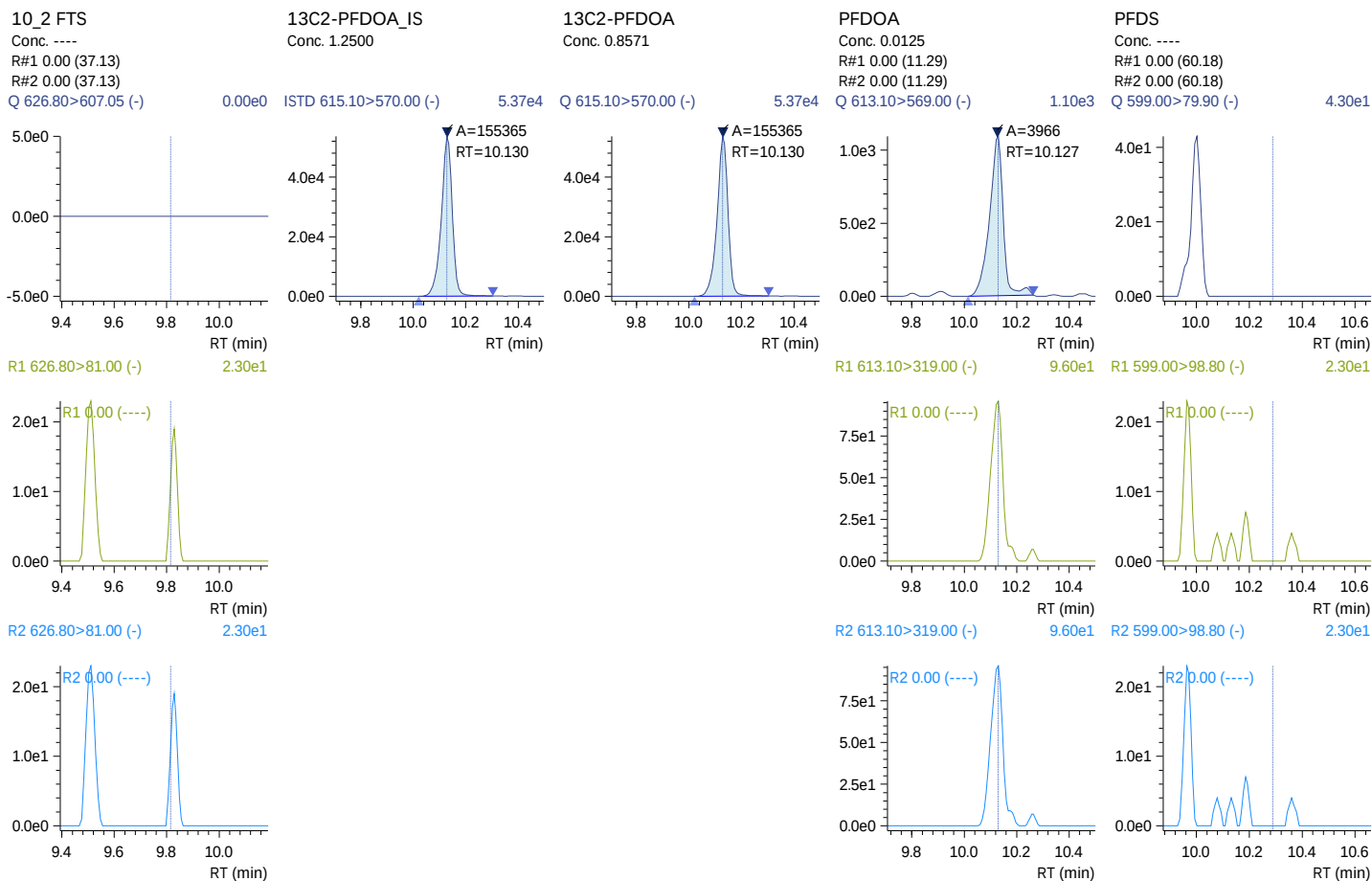
R2 548.80>98.80 (-)

5.00e1



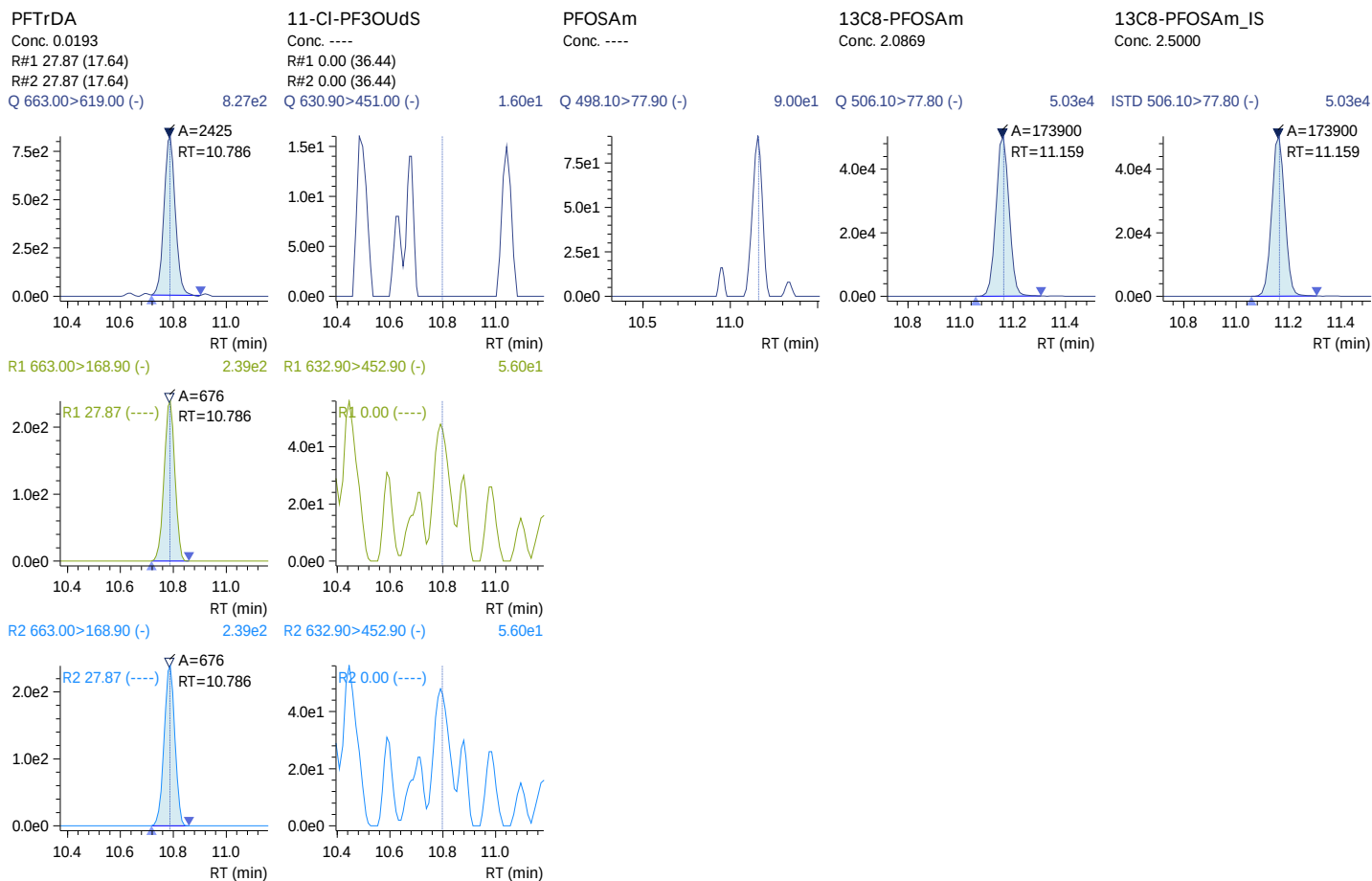


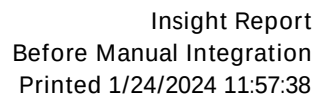
240122_035 (continued)



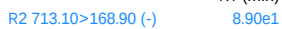
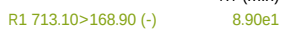


240122_035 (continued)





PFTDA	13C2-PFTDA	13C2-PFTDA_IS	PFDoS	D7-MeFOSE_IS			
Conc. ----	Conc. 0.4371	Conc. 1.2500	Conc. ----	Conc. 25.0000			
R#1 0.00 (22.96)			R#1 0.00 (67.40)				
R#2 0.00 (22.96)			R#2 0.00 (67.40)				
Q 713.10>669.00 (-)	5.58e2	Q 715.20>670.00 (-)	9.68e3	Q 699.10>79.90 (-)	1.20e1	ISTD 623.20>58.90 (-)	8.53e4





240122_035 (continued)

D7-MeFOSE
 Conc. 14.6795

MeFOSE
 Conc. ----

13C2-PFHXA_IS
 Conc. 2.5000

13C2-PFHXA
 Conc. 0.4313

PFHXA

Conc. 0.0800
 R#1 0.00 (13.90)
 R#2 0.00 (13.90)

Q 623.20>58.90 (-)

8.53e4

Q 616.10>59.00 (-)

4.00e1

ISTD 815.00>770.05 (-)

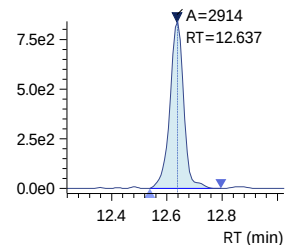
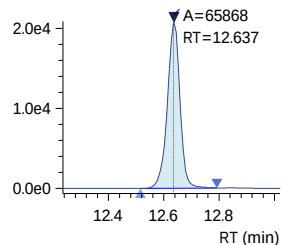
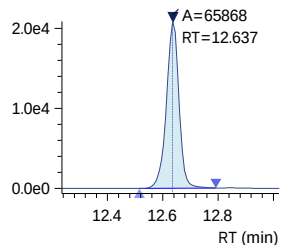
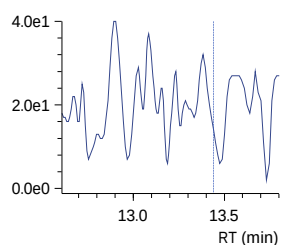
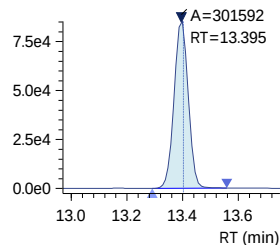
2.09e4

Q 815.00>770.05 (-)

2.09e4

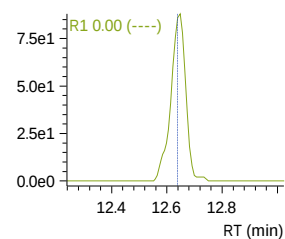
Q 813.00>768.95 (-)

8.41e2



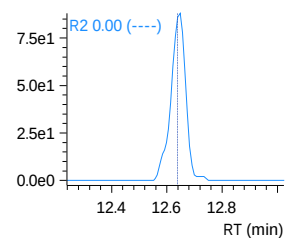
R1 813.00>218.95 (-)

8.80e1



R2 813.00>218.95 (-)

8.80e1





240122_035 (continued)

D3-MeFOSA
 Conc. 1.2676

D3-MeFOSA_IS
 Conc. 2.5000

MeFOSA
 Conc. ----
 R#1 0.00 (140.79)
 R#2 0.00 (140.79)

D9-EtFOSE_IS
 Conc. 25.0000

D9-EtFOSE
 Conc. 13.9138

Q 515.00>219.00 (-)

6.10e3

ISTD 515.00>219.00 (-)

6.10e3

Q 511.90>219.00 (-)

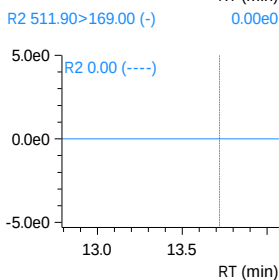
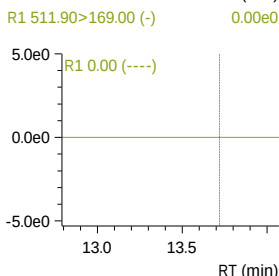
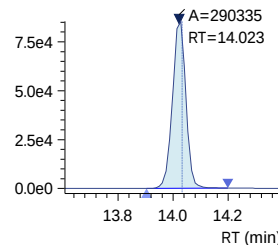
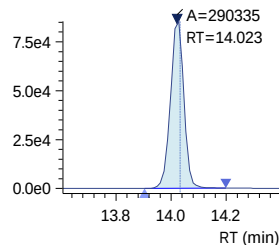
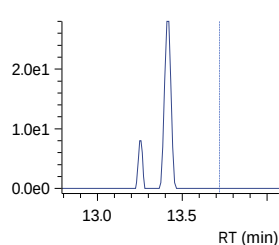
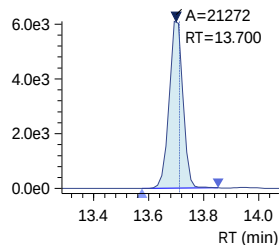
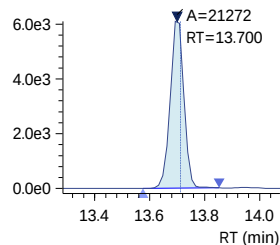
2.80e1

ISTD 639.20>58.90 (-)

8.55e4

Q 639.20>58.90 (-)

8.55e4





240122_035 (continued)

EtFOSE
 Conc. ----

D5-EtFOSAm
 Conc. 1.1178

D5-EtFOSAm_IS
 Conc. 2.5000

EtFOSAm
 Conc. ----

PFODA
 Conc. 0.0884

Q 630.00>59.00 (-)

4.70e1

Q 531.10>219.00 (-)

7.92e3

ISTD 531.10>219.00 (-)

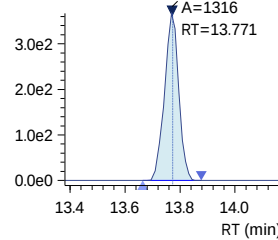
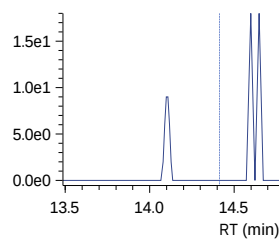
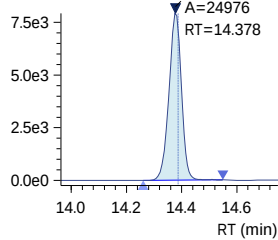
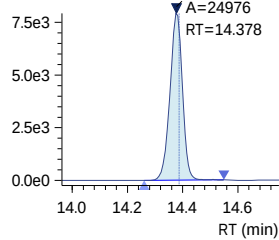
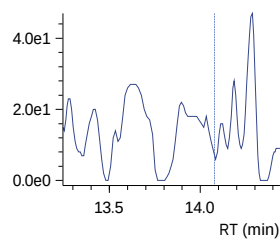
7.92e3

Q 526.00>219.00 (-)

1.80e1

Q 913.00>868.65 (-)

3.67e2

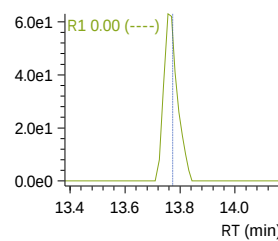
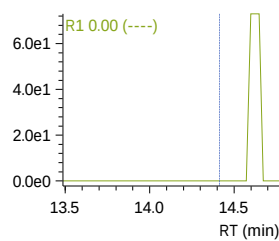


R1 526.00>169.00 (-)

7.30e1

R1 913.00>169.00 (-)

6.30e1

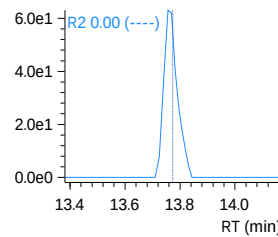
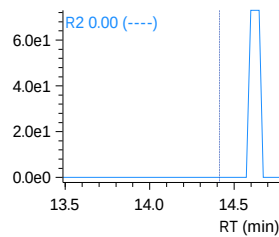


R2 526.00>169.00 (-)

7.30e1

R2 913.00>169.00 (-)

6.30e1



Validation Report

1st *PS* 02/06/24
2nd *MS* 02/06/24

Data File: J:\LCMS08\Data\240201_1633_RA\240201_035
Lab ID: K2314281-002
RunType: N/A
Matrix: Water

Date Acquired: 2/1/24 23:33
Batch ID: 831587
Analysis Method: 1633/PFAS_DOD5.4

Validations

Validation Categories	Pass	Fail
Preparation Hold Time	X	
Analytical Hold Time	X	
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery	X	
Continuing Calibration Recovery (Closing)		X
Lab Control Sample Recovery		X
Duplicate Lab Control Sample Recovery		X
Method Blank	X	
Method Blank Surrogates	X	
Internal Standards	X	
Surrogates		X
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	

Analyte Exceptions

Only reanalyzed for PFPeA surrogate and associated natives

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Continuing Calibration Recovery (Closing)	13C2-8:2 FTS	65	70	130	NR in sample
	13C2-4:2 FTS	68	70	130	
	D5-EtFOSAA	69	70	130	
	D3-MeFOSAA	68	70	130	
	13C2-6:2 FTS	68	70	130	
Lab Control Sample Recovery	N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	152	70	145	
	4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	145	65	130	high bias, sample <MRL
Duplicate Lab Control Sample Recovery	N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	160	70	145	NR in sample
	4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	139	65	130	high bias, sample <MRL
	Perfluoro-3-methoxypropanoic acid (PFMPA)	148	55	140	
Surrogates	13C3-HFPO-DA	136	40	130	NR in sample

Primary Review: _____

Secondary Review: _____

Printed: 2/6/24 11:52

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Quantitation Report

1st *PS* 02/06/24
2nd *MS* 02/06/24

Data File:	J:\LCMS08\Data\240201_1633_RA\240201_035	Instrument:	K-LCMS-08
Acqu Date:	2/1/24 23:33	Vial:	16
Run Type:	N/A	Dilution:	1
Lab ID:	K2314281-002	Raw Units:	ng/mL

Bottle ID:	K2314281-002.04	Tier:	IV	Matrix:	Water
Prod Code:	PFAS_DOD5.4	Collect Date:	12/20/23	Receive Date:	12/20/23

Analysis Lot:	831587	Prep Lot:	432516	Report Group:	K2314281
Analysis	1633	Prep Method:	Method		
		Prep Date:	1/11/24		

Title:	Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM	Calibration ID:	KC2400048
		Report List ID:	24615

Internal Standard Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Area Criteria
18O2-PFHxS	7.096	+0.03	222765	2.5000	OK
13C4-PFOS	8.829	+0.03	286920	2.5000	OK
13C3-PFBA	1.425	+0.07	457896	5.0000	OK
13C2-PFHxA	4.993	+0.05	554877	2.5000	OK
13C4-PFOA	7.121	+0.03	42487	2.5000	OK
13C5-PFNA	7.970	+0.03	276279	1.2500	OK
13C2-PFDA	8.734	+0.03	178869	1.2500	OK

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
13C3-PFBS	4.658	+0.06	260993	3.1401	126	40 - 135	N
13C3-PFHxS	7.096	+0.04	232461	2.9773	119	40 - 130	N
13C8-PFOS	8.829	+0.03	92779	2.5694	103	40 - 130	N
13C4-PFBA	1.424	+0.07	796892	11.7449	117	5 - 130	N
13C5-PFPeA	3.512	+0.06	216915	5.4367	109	40 - 130	Y
13C5-PFHxA	4.993	+0.05	448410	2.5036	100	40 - 130	N
13C4-PFHpA	6.169	+0.04	616081	2.7342	109	40 - 130	N
13C8-PFOA	7.120	+0.03	589411	2.9088	116	40 - 130	N
13C9-PFNA	7.970	+0.03	300809	1.4708	118	40 - 130	N
13C6-PFDA	8.733	+0.03	182915	1.2761	102	40 - 130	N
13C7-PFUnDA	9.457	+0.03	222040	1.2466	100	30 - 130	N
13C2-PFDODA	10.144	+0.02	215875	1.0153	81	10 - 130	N
13C2-PFTeDA	11.431	+0.02	70671	0.4709	38	10 - 130	N
13C8-FOSA	11.156	+0.01	187364	2.0557	82	40 - 130	N
D3-MeFOSA	13.686		27764	1.1668	47	10 - 130	N
D5-EtFOSA	14.363	+0.00	35704	1.0852	43	10 - 130	N
D7-MeFOSE	13.382		287824	12.3014	49	10 - 130	N
D9-EtFOSE	14.009		317293	11.0817	44	10 - 130	N

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 2/6/24 11:52

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			1st	PS	02/06/24
Data File:	J:\LCMS08\Data\240201_1633_RA\240201_035	Instrument:	K-LCMS08	MS	02/06/24
Acqu Date:	2/1/24 23:33	Vial:	16		
Run Type:	N/A	Dilution:	1		
Lab ID:	K2314281-002	Raw Units:	ng/mL		

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
D3-MeFOSAA	8.870	+0.02	350345	2.9990	60	40 - 170	N
D5-EtFOSAA	9.201	+0.02	268754	2.9192	58	25 - 135	N
13C2-4:2 FTS	4.677	+0.04	173111	4.1283	83	40 - 200	N
13C2-6:2 FTS	6.810	+0.03	156274	3.5800	72	40 - 200	N
13C2-8:2 FTS	8.423	+0.03	120602	3.2541	65	40 - 300	N
13C3-HFPO-DA	5.466	+0.04	668514	13.5949	136 *	40 - 130	N

Target Compounds

Final Conc.Units: ng/L							
Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Perfluorobutane sulfonic acid (PFBS)	4.658	+0.05	5004	0.0387	0.76	J	N
Perfluoropentane sulfonic acid (PFPeS)	6.025	+0.04	693	0.0075	0.15	U	N
Perfluorohexane sulfonic acid (PFHxS)	7.095	+0.03	11855	0.1167	2.3	J	N
Perfluoroheptane sulfonic acid (PFHpS)	0		0	0	0	U	N
Perfluorooctane sulfonic acid (PFOS)	8.830	+0.03	23533	0.2969	5.8		N
Perfluorononane sulfonic acid (PFNS)	0		0	0	0	U	N
Perfluorodecane sulfonic acid (PFDS)	0		0	0	0	U	N
Perfluorododecane sulfonic acid (PFDoS)	0		0	0	0	U	N
Perfluorobutanoic acid (PFBA)	1.424	+0.07	15813	0.2007	3.9	J	N
Perfluoropentanoic acid (PFPeA)	3.515	+0.06	92311	0.6078	12		Y
Perfluorohexanoic acid (PFHxA)	4.996	+0.05	51030	0.2996	5.9		N
Perfluoroheptanoic acid (PFHpA)	6.169	+0.03	44261	0.1943	3.8	J	N
Perfluorooctanoic acid (PFOA)	7.123	+0.03	118273	0.5339	10		N
Perfluorononanoic acid (PFNA)	7.972	+0.03	31395	0.1410	2.8	J	N
Perfluorodecanoic acid (PFDA)	8.737	+0.03	11348	0.0734	1.4	J	N
Perfluoroundecanoic acid (PFUnDA)	9.456	+0.02	5738	0.0158	0.31	U	N
Perfluorododecanoic acid (PFDOA)	10.143	+0.02	4210	0.0061	0.12	U	N
Perfluorotridecanoic acid (PFTTrDA)	10.799	+0.02	4834	0.0479	0.94	J	N
Perfluorotetradecanoic acid (PFTDA)	11.432	+0.02	3631	0.0515	1.0	U	N
Perfluorooctane sulfonamide (PFOSAm)	11.149	+0.00	291	0.0044	0.086	U	N
N-Methylperfluorooctane sulfonamide (MeFOSA)	0		0	0	0	U	N
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	0		0	0	0	U	N
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	0		0	0	0	U	N
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	0		0	0	0	U	N
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	8.878	+0.03	85	0.0017	0.033	U	N

U: Undetected at or above MDL

J: Analyte detected above MDL, but below MRL

B: Hit above MRL also found in Method Blank

E: Analyte concentration above high point of ICAL

N: Presumptive evidence of compound

D: Result from dilution

m: Manual integration performed

d: Compound manually deleted

NR: Analyte not reported from this analysis

*: Result fails acceptance criteria

#: Acceptance criteria not applicable

?: Insufficient information to determine acceptance

e: Result >= MRL, but MRL less than low point of ICAL

c: check for co-elution

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			1st	PS	02/06/24
			2nd	MS	02/06/24
Data File:	J:\LCMS08\Data\240201_1633_RA\240201_035	Instrument:	K-LCMS08		
Acqu Date:	2/1/24 23:33	Vial:	16		
Run Type:	N/A	Dilution:	1		
Lab ID:	K2314281-002	Raw Units:	ng/mL		

Target Compounds			Final Conc.Units: ng/L				
Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	0		0	0	0	U	N
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	0		0	0	0	U	N
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	6.808	+0.03	1079	0.0181	0.35	U	N
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	8.450	+0.05	51	0.0011	0.021	U	N
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	0		0	0	0	U	Y
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	0		0	0	0	U	N
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	0		0	0	0	U	N
Perfluoro(2-ethoxyethane) sulfonic acid (PFEEESA)	0		0	0	0	U	N
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	9.390	+0.02	323	0.0005	0.0098	U	N
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	0		0	0	0	U	N
Perfluoro-3-methoxypropanoic acid (PFMPA)	2.470	+0.09	194	0.0031	0.061	U	Y
Perfluoro-4-methoxybutanoic acid (PFMBA)	4.035	+0.05	112	0.0012	0.023	U	Y
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	5.468	+0.04	238	0.0036	0.070	U	N
Nonafluoro-3,6-dioxahexanoic acid (NFDHA)	4.854	+0.05	549	0.0059	0.12	U	N
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	6.527	+0.03	342	0.0006	0.012	U	N

Prep Amount:	256.0300 mL	Dilution:	1
Prep Final Amount:	5.00 mL	Basis Factor:	100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution



240201_035

Sample ID: K2314281-002
Date Acquired: 2/1/2024 11:33:13 PM
Acquired by: System Administrator
Data File: 240201_035
Vial: 13 | Inj. Volume: 10.0000uL | Tray: 2

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	796892	----	----	----	----	----	----	
13C4-PFBA_IS	216.80>171.90	----	796892	----	----	----	----	----	----	
13C3-PFBA_IS	216.00>172.00	----	457896	----	----	----	----	----	----	
PFBA	212.80>169.05	----	15813	----	----	----	----	----	----	
PFMPA	229.00>84.90	----	194	----	----	----	----	----	----	
3_3 FTCA	241.00>177.10	241.00>117.00	----	0	0.00	139.21	----	----	----	
13C5-PFPeA	268.30>223.00	----	216915	----	----	----	----	----	----	
13C5-PFPeA_IS	268.30>223.00	----	216915	----	----	----	----	----	----	
PFPeA	263.00>219.00	----	92311	----	----	----	----	----	----	
PFMBA	279.00>84.95	----	112	----	----	----	----	----	----	
13C2-4_2 FTS	329.10>80.90	----	173111	----	----	----	----	----	----	
13C2-4_2 FTS_IS	329.10>80.90	----	173111	----	----	----	----	----	----	
4_2 FTS	327.10>307.00	327.10>80.90	----	0	0.00	32.10	0	0.00	32.79	
13C3-PFBS_IS	302.10>79.90	----	260993	----	----	----	----	----	----	
PFBS	298.70>79.90	298.70>98.80	5004	1441	28.80	44.81	1441	28.80	46.72	
13C3-PFBS	302.10>79.90	----	260993	----	----	----	----	----	----	
NFDHA	295.00>201.00	295.00>84.90	549	121	22.04	35.54	121	22.04	37.91	
13C5-PFHxA	318.00>273.00	----	448410	----	----	----	----	----	----	
13C5-PFHxA_IS	318.00>273.00	----	448410	----	----	----	----	----	----	
13C2-PFHxA_IS	315.10>270.00	----	554877	----	----	----	----	----	----	
PFHxA	313.00>269.00	----	51030	----	----	----	----	----	----	
PFEESA	314.80>135.00	314.80>82.90	----	0	0.00	5.22	0	0.00	5.35	
13C3-HFPO-DA	286.90>168.90	----	668514	----	----	----	----	----	----	
13C3-HFPO-DA_IS	286.90>168.90	----	668514	----	----	----	----	----	----	
HFPO-DA	284.90>168.90	284.90>184.90	238	636	267.42	59.79	636	267.42	58.32	IRr 'NR
5_3 FTCA	341.00>237.05	341.00>217.00	----	0	0.00	157.08	0	0.00	155.87	
PFPeS	349.10>79.90	349.10>98.80	693	313	45.21	55.12	313	45.21	54.87	
13C4-PFHpA	367.10>322.00	----	616081	----	----	----	----	----	----	
13C4-PFHpA_IS	367.10>322.00	----	616081	----	----	----	----	----	----	
PFHpA	363.10>319.00	363.10>169.00	44261	10732	24.25	23.02	10732	24.25	20.91	
DONA	376.90>250.90	376.90>84.80	342	59	17.14	27.50	59	17.14	27.00	
13C2-6_2 FTS_IS	429.10>80.90	----	156274	----	----	----	----	----	----	
13C2-6_2 FTS	429.10>80.90	----	156274	----	----	----	----	----	----	
6_2 FTS	427.10>407.00	427.10>80.90	1079	483	44.78	50.47	483	44.78	46.83	
13C4-PFOA_IS	417.10>172.00	----	42487	----	----	----	----	----	----	
13C8-PFOA_IS	421.10>376.00	----	589411	----	----	----	----	----	----	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240201_035 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	589411	----	----	----	----	----	----	----
PFOA	413.00>369.00	413.00>169.00	118273	31138	26.33	28.77	31138	26.33	28.12	
13C3-PFHxS	402.10>79.90	----	232461	----	----	----	----	----	----	----
13C3-PFHxS_IS	402.10>79.90	----	232461	----	----	----	----	----	----	----
PFHxS	398.70>79.90	398.70>98.90	11855	5788	48.83	60.90	5788	48.83	61.53	
18O2-PFHxS_IS	403.00>83.90	----	222765	----	----	----	----	----	----	----
13C9-PFNA_IS	472.10>427.00	----	300809	----	----	----	----	----	----	----
13C9-PFNA	472.10>427.00	----	300809	----	----	----	----	----	----	----
13C5-PFNA_IS	468.00>423.00	----	276279	----	----	----	----	----	----	----
PFNA	463.00>419.00	463.00>219.00	31395	6812	21.70	19.31	6812	21.70	20.30	
PFHpS	449.00>79.90	449.00>98.80	----	0	0.00	52.44	0	0.00	52.33	
7_3 FTCA	441.00>317.00	441.00>336.90	----	0	0.00	129.46	0	0.00	129.73	
13C2-8_2-FTS	529.10>80.90	----	120602	----	----	----	----	----	----	----
13C2-8_2-FTS_IS	529.10>80.90	----	120602	----	----	----	----	----	----	----
8_2 FTS	527.10>506.95	527.10>80.80	51	204	403.23	45.98	204	403.23	43.25	IRr NR
13C6-PFDA_IS	519.10>474.10	----	182915	----	----	----	----	----	----	----
13C6-PFDA	519.10>474.10	----	182915	----	----	----	----	----	----	----
13C2-PFDA_IS	515.10>470.10	----	178869	----	----	----	----	----	----	----
PFDA	512.90>469.00	512.90>219.00	11348	2164	19.07	17.88	2164	19.07	18.89	
D3-NMeFOSAA_IS	573.20>419.00	----	350345	----	----	----	----	----	----	----
D3-NMeFOSAA	573.20>419.00	----	350345	----	----	----	----	----	----	----
13C8-PFOS_IS	507.10>98.90	----	92779	----	----	----	----	----	----	----
13C8-PFOS	507.10>98.90	----	92779	----	----	----	----	----	----	----
13C4-PFOS_IS	502.80>79.90	----	286920	----	----	----	----	----	----	----
PFOS	498.90>79.90	498.90>98.80	23533	12907	54.85	53.60	12907	54.85	52.29	
NMeFOSAA	570.10>419.00	570.10>483.00	85	83	98.57	64.89	83	98.57	60.97	IRr NR
D5-NEtFOSAA_IS	589.20>419.00	----	268754	----	----	----	----	----	----	----
D5-NEtFOSAA	589.20>419.00	----	268754	----	----	----	----	----	----	----
NEtFOSAA	584.20>419.10	584.20>526.00	----	0	0.00	96.07	0	0.00	94.54	
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	323	7859	2433.82	30.95	7859	2433.82	30.61	IRr NR
PFUnDA	563.10>519.00	563.10>269.10	5738	519	9.04	11.01	519	9.04	12.02	
13C7-PFUnDA_IS	570.00>525.10	----	222040	----	----	----	----	----	----	----
13C7-PFUnDA	570.00>525.10	----	222040	----	----	----	----	----	----	----
PFNS	548.80>79.90	548.80>98.80	----	0	0.00	60.44	0	0.00	58.51	
10_2 FTS	626.80>607.05	626.80>81.00	----	0	0.00	36.14	0	0.00	33.04	
13C2-PFDOA_IS	615.10>570.00	----	215875	----	----	----	----	----	----	----
13C2-PFDOA	615.10>570.00	----	215875	----	----	----	----	----	----	----
PFDOA	613.10>569.00	613.10>319.00	4210	457	10.85	10.16	457	10.85	10.60	
PFDS	599.00>79.90	599.00>98.80	----	0	0.00	58.26	0	0.00	61.78	
PFTrDA	663.00>619.00	663.00>168.90	4834	661	13.67	16.18	661	13.67	14.85	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240201_035 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	----	0	0.00	34.99	0	0.00	34.39	
PFOSAm	498.10>77.90	----	291	----	----	----	----	----	----	
13C8-PFOSAm	506.10>77.80	----	187364	----	----	----	----	----	----	
13C8-PFOSAm_IS	506.10>77.80	----	187364	----	----	----	----	----	----	
PFTDA	713.10>669.00	713.10>168.90	3631	504	13.87	18.05	504	13.87	17.39	
13C2-PFTDA	715.20>670.00	----	70671	----	----	----	----	----	----	
13C2-PFTDA_IS	715.20>670.00	----	70671	----	----	----	----	----	----	
PFDoS	699.10>79.90	699.10>98.80	----	0	0.00	61.13	0	0.00	62.47	
D7-MeFOSE_IS	623.20>58.90	----	287824	----	----	----	----	----	----	
D7-MeFOSE	623.20>58.90	----	287824	----	----	----	----	----	----	
MeFOSE	616.10>59.00	----	----	----	----	----	----	----	----	
13C2-PFHxDA_IS	815.00>770.05	----	94088	----	----	----	----	----	----	
13C2-PFHxDA	815.00>770.05	----	94088	----	----	----	----	----	----	
PFHxDA	813.00>768.95	813.00>218.95	5396	587	10.88	11.66	587	10.88	10.99	
D3-MeFOSA	515.00>219.00	----	27764	----	----	----	----	----	----	
D3-MeFOSA_IS	515.00>219.00	----	27764	----	----	----	----	----	----	
MeFOSA	511.90>219.00	511.90>169.00	----	0	0.00	160.44	0	0.00	161.92	
D9-EtFOSE_IS	639.20>58.90	----	320663	----	----	----	----	----	----	
D9-EtFOSE	639.20>58.90	----	317293	----	----	----	----	----	----	
EtFOSE	630.00>59.00	----	----	----	----	----	----	----	----	
D5-EtFOSAm	531.10>219.00	----	35704	----	----	----	----	----	----	
D5-EtFOSAm_IS	531.10>219.00	----	35704	----	----	----	----	----	----	
EtFOSAm	526.00>219.00	526.00>169.00	----	0	0.00	159.63	0	0.00	172.60	
PFODA	913.00>868.65	913.00>169.00	2114	562	26.58	36.03	562	26.58	35.02	

Flag ID key: IRr: Ion Ratio (Relative)



240201_035

Sample ID: K2314281-002
Date Acquired: 2/1/2024 11:33:13 PM
Acquired by: System Administrator
Data File: 240201_035
Vial: 13 | Inj. Volume: 10.0000uL | Tray: 2

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.424	0.071	-0.001	796892	457896	13C3-PFBA_IS	11.7449	ng/mL	
13C4-PFBA_IS	Auto	1.424	0.071	----	796892	796892	----	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.425	0.070	----	457896	457896	----	5.0000	ng/mL	
PFBA	Auto	1.424	0.068	0.000	15813	796892	13C4-PFBA_IS	0.2007	ng/mL	
PFMPA	M	2.470	0.089	-1.042	194	216915	13C5-PFPeA_IS	0.0031	ng/mL	
3_3 FTCA	ND(W/B)	----	----	----	----	216915	13C5-PFPeA_IS	----	ng/mL	
13C5-PFPeA	Auto	3.512	0.057	-1.481	216915	554877	13C2-PFHxA_IS	5.4367	ng/mL	
13C5-PFPeA_IS	Auto	3.512	0.057	----	216915	216915	----	5.0000	ng/mL	
PFPeA	Auto	3.515	0.057	0.003	92311	216915	13C5-PFPeA_IS	0.6078	ng/mL	
PFMBA	M	4.035	0.050	0.522	112	216915	13C5-PFPeA_IS	0.0012	ng/mL	
13C2-4_2 FTS	Auto	4.677	0.044	-2.419	173111	222765	18O2-PFHxS_IS	4.1283	ng/mL	
13C2-4_2 FTS_IS	Auto	4.677	0.044	----	173111	173111	----	5.0000	ng/mL	
4_2 FTS	ND(W/B)	----	----	----	----	173111	13C2-4_2 FTS_IS	----	ng/mL	
13C3-PFBS_IS	Auto	4.658	0.055	----	260993	260993	----	2.5000	ng/mL	
PFBS	Auto	4.658	0.053	0.000	5004	260993	13C3-PFBS_IS	0.0387	ng/mL	
13C3-PFBS	Auto	4.658	0.055	-2.438	260993	222765	18O2-PFHxS_IS	3.1401	ng/mL	
NFDHA	M	4.854	0.049	-0.139	549	448410	13C5-PFHxA_IS	0.0059	ng/mL	
13C5-PFHxA	Auto	4.993	0.046	0.000	448410	554877	13C2-PFHxA_IS	2.5036	ng/mL	
13C5-PFHxA_IS	Auto	4.993	0.046	----	448410	448410	----	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	4.993	0.046	----	554877	554877	----	2.5000	ng/mL	
PFHxA	Auto	4.996	0.047	0.003	51030	448410	13C5-PFHxA_IS	0.2996	ng/mL	
PFEESA	ND(W/B)	----	----	----	----	448410	13C5-PFHxA_IS	----	ng/mL	
13C3-HFPO-DA	Auto	5.466	0.041	0.473	668514	554877	13C2-PFHxA_IS	13.5949	ng/mL	
13C3-HFPO-DA_IS	Auto	5.466	0.041	----	668514	668514	----	10.0000	ng/mL	
HFPO-DA	M	5.468	0.041	0.002	238	668514	13C3-HFPO-DA_IS	0.0036	ng/mL	IRr
5_3 FTCA	ND(W/B)	----	----	----	----	448410	13C5-PFHxA_IS	----	ng/mL	
PFPeS	Auto	6.025	0.037	-1.071	693	232461	13C3-PFHxS_IS	0.0075	ng/mL	
13C4-PFHpA	Auto	6.169	0.037	1.176	616081	554877	13C2-PFHxA_IS	2.7342	ng/mL	
13C4-PFHpA_IS	Auto	6.169	0.037	----	616081	616081	----	2.5000	ng/mL	
PFHpA	Auto	6.169	0.035	0.000	44261	616081	13C4-PFHpA_IS	0.1943	ng/mL	
DONA	M	6.527	0.026	1.061	342	668514	13C3-HFPO-DA_IS	0.0006	ng/mL	
13C2-6_2 FTS_IS	Auto	6.810	0.032	----	156274	156274	----	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.810	0.032	-0.286	156274	222765	18O2-PFHxS_IS	3.5800	ng/mL	
6_2 FTS	Auto	6.808	0.031	-0.002	1079	156274	13C2-6_2 FTS_IS	0.0181	ng/mL	
13C4-PFOA_IS	Auto	7.121	0.030	----	42487	42487	----	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.120	0.029	----	589411	589411	----	2.5000	ng/mL	
13C8-PFOA	Auto	7.120	0.029	-0.001	589411	42487	13C4-PFOA_IS	2.9088	ng/mL	
PFOA	M	7.123	0.030	0.003	118273	589411	13C8-PFOA_IS	0.5339	ng/mL	
13C3-PFHxS	Auto	7.096	0.034	0.000	232461	222765	18O2-PFHxS_IS	2.9773	ng/mL	
13C3-PFHxS_IS	Auto	7.096	0.034	----	232461	232461	----	2.5000	ng/mL	
PFHxS	M	7.095	0.033	-0.001	11855	232461	13C3-PFHxS_IS	0.1167	ng/mL	
18O2-PFHxS_IS	Auto	7.096	0.034	----	222765	222765	----	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.970	0.029	----	300809	300809	----	1.2500	ng/mL	
13C9-PFNA	Auto	7.970	0.029	0.000	300809	276279	13C5-PFNA_IS	1.4708	ng/mL	
13C5-PFNA_IS	Auto	7.970	0.028	----	276279	276279	----	1.2500	ng/mL	
PFNA	Auto	7.972	0.029	0.002	31395	300809	13C9-PFNA_IS	0.1410	ng/mL	
PFHpS	ND(W/B)	----	----	----	----	92779	13C8-PFOS_IS	----	ng/mL	
7_3 FTCA	ND(W/B)	----	----	----	----	448410	13C5-PFHxA_IS	----	ng/mL	
13C2-8_2-FTS	Auto	8.423	0.024	1.327	120602	222765	18O2-PFHxS_IS	3.2541	ng/mL	
13C2-8_2-FTS_IS	Auto	8.423	0.024	----	120602	120602	----	5.0000	ng/mL	
8_2 FTS	M	8.450	0.052	0.027	51	120602	13C2-8_2-FTS_IS	0.0011	ng/mL	IRr
13C6-PFDA_IS	Auto	8.733	0.026	----	182915	182915	----	1.2500	ng/mL	
13C6-PFDA	Auto	8.733	0.026	-0.001	182915	178869	13C2-PFDA_IS	1.2761	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_035 (continued)

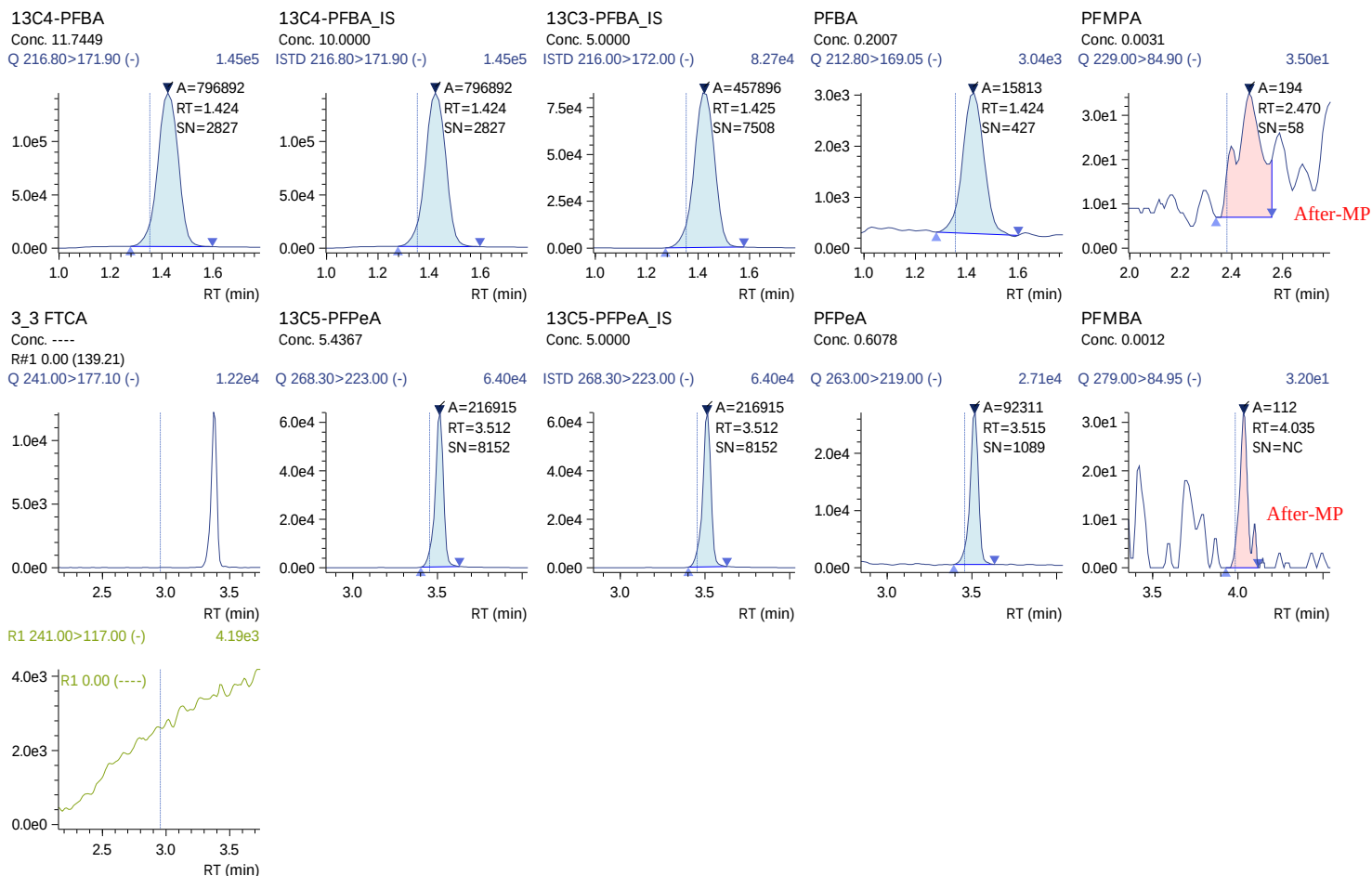
(Table continued from previous page)

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C2-PFDA_IS	Auto	8.734	0.026	----	178869	178869	----	1.2500	ng/mL	
PFDA	Auto	8.737	0.028	0.004	11348	182915	13C6-PFDA_IS	0.0734	ng/mL	
D3-NMeFOSAA_IS	Auto	8.870	0.027	----	350345	350345	----	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.870	0.027	0.041	350345	286920	13C4-PFOS_IS	2.9990	ng/mL	
13C8-PFOS_IS	Auto	8.829	0.029	----	92779	92779	----	2.5000	ng/mL	
13C8-PFOS	Auto	8.829	0.029	0.000	92779	286920	13C4-PFOS_IS	2.5694	ng/mL	
13C4-PFOS_IS	Auto	8.829	0.029	----	286920	286920	----	2.5000	ng/mL	
PFOS	M	8.830	0.029	0.001	23533	92779	13C8-PFOS_IS	0.2969	ng/mL	
NMeFOSAA	M	8.878	0.030	0.008	85	350345	D3-NMeFOSAA_IS	0.0017	ng/mL	IRr
D5-NetFOSAA_IS	Auto	9.201	0.029	----	268754	268754	----	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.201	0.029	0.372	268754	286920	13C4-PFOS_IS	2.9192	ng/mL	
NetFOSAA	ND(W/B)	----	----	----	----	268754	D5-NetFOSAA_IS	----	ng/mL	
9-CI-PF3ONS	M	9.390	0.025	3.924	323	668514	13C3-HFPO-DA_IS	0.0005	ng/mL	IRr
PFUnDA	Auto	9.456	0.023	-0.001	5738	222040	13C7-PFUnDA_IS	0.0158	ng/mL	
13C7-PFUnDA_IS	Auto	9.457	0.027	----	222040	222040	----	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.457	0.027	0.723	222040	178869	13C2-PFDA_IS	1.2466	ng/mL	
PFNS	ND(W/B)	----	----	----	----	92779	13C8-PFOS_IS	----	ng/mL	
10_2_FTS	ND(W/B)	----	----	----	----	120602	13C2-8_2-FTS_IS	----	ng/mL	
13C2-PFDOA_IS	Auto	10.144	0.026	----	215875	215875	----	1.2500	ng/mL	
13C2-PFDOA	Auto	10.144	0.026	1.410	215875	178869	13C2-PFDA_IS	1.0153	ng/mL	
PFDOA	Auto	10.143	0.024	-0.001	4210	215875	13C2-PFDOA_IS	0.0061	ng/mL	
PFDS	ND(W/B)	----	----	----	----	92779	13C8-PFOS_IS	----	ng/mL	
PFTDA	Auto	10.799	0.024	-0.632	4834	70671	13C2-PFTDA_IS	0.0479	ng/mL	
11-CI-PF3OUdS	ND(W/B)	----	----	----	----	668514	13C3-HFPO-DA_IS	----	ng/mL	
PFOSAm	M	11.149	0.007	-0.007	291	187364	13C8-PFOSAm_IS	0.0044	ng/mL	
13C8-PFOSAm	Auto	11.156	0.014	2.327	187364	286920	13C4-PFOS_IS	2.0557	ng/mL	
13C8-PFOSAm_IS	Auto	11.156	0.014	----	187364	187364	----	2.5000	ng/mL	
PFTDA	Auto	11.432	0.024	0.001	3631	70671	13C2-PFTDA_IS	0.0515	ng/mL	
13C2-PFTDA	Auto	11.431	0.025	2.697	70671	178869	13C2-PFDA_IS	0.4709	ng/mL	
13C2-PFTDA_IS	Auto	11.431	0.025	----	70671	70671	----	1.2500	ng/mL	
PFDoS	ND(W/B)	----	----	----	----	92779	13C8-PFOS_IS	----	ng/mL	
D7-MeFOSE_IS	Auto	13.382	0.002	----	287824	287824	----	25.0000	ng/mL	
D7-MeFOSE	Auto	13.382	0.002	4.553	287824	286920	13C4-PFOS_IS	12.3014	ng/mL	
MeFOSE	ND(W/B)	----	----	----	----	287824	D7-MeFOSE_IS	----	ng/mL	
13C2-PFHxDA_IS	Auto	12.641	0.021	----	94088	94088	----	2.5000	ng/mL	
13C2-PFHxDA	Auto	12.641	0.021	3.907	94088	178869	13C2-PFDA_IS	0.4685	ng/mL	
PFHxDA	Auto	12.641	0.020	0.000	5396	94088	13C2-PFHxDA_IS	0.1061	ng/mL	
D3-MeFOSA	Auto	13.686	0.001	4.857	27764	286920	13C4-PFOS_IS	1.1668	ng/mL	
D3-MeFOSA_IS	Auto	13.686	0.001	----	27764	27764	----	2.5000	ng/mL	
MeFOSA	ND(W/B)	----	----	----	----	27764	D3-MeFOSA_IS	----	ng/mL	
D9-EtFOSE_IS	Auto	14.009	0.001	----	320663	320663	----	25.0000	ng/mL	
D9-EtFOSE	Auto	14.009	0.001	5.180	317293	286920	13C4-PFOS_IS	11.0817	ng/mL	
EtFOSE	ND(W/B)	----	----	----	----	320663	D9-EtFOSE_IS	----	ng/mL	
D5-EtFOSAm	Auto	14.363	0.002	5.534	35704	286920	13C4-PFOS_IS	1.0852	ng/mL	
D5-EtFOSAm_IS	Auto	14.363	0.002	----	35704	35704	----	2.5000	ng/mL	
EtFOSAm	ND(W/B)	----	----	----	----	35704	D5-EtFOSAm_IS	----	ng/mL	
PFODA	Auto	13.774	0.018	1.133	2114	94088	13C2-PFHxDA_IS	0.1294	ng/mL	

Flag ID key: IRr: Ion Ratio (Relative)



240201_035 (continued)





240201_035 (continued)

13C2-4_2_FTS
Conc. 4.1283

13C2-4_2_FTS_IS
Conc. 5.0000

4_2_FTS
Conc. ----
R#1 0.00 (32.10)
R#2 0.00 (32.79)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 0.0387
R#1 28.80 (44.81)
R#2 28.80 (46.72)

Q 329.10>80.90 (-)

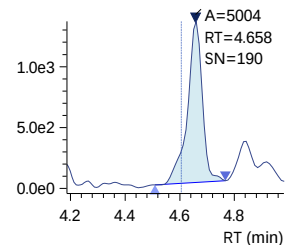
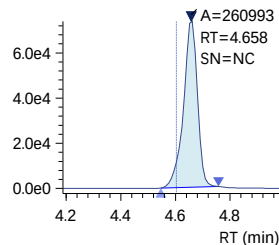
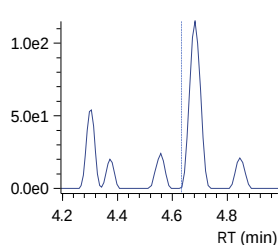
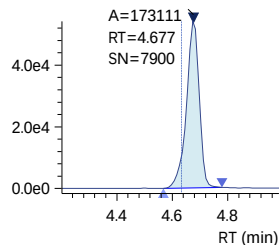
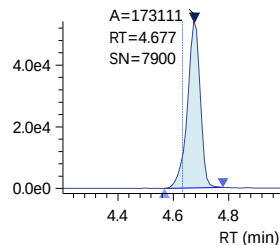
5.42e4 ISTD 329.10>80.90 (-)

5.42e4 Q 327.10>307.00 (-)

1.15e2 ISTD 302.10>79.90 (-)

7.40e4 Q 298.70>79.90 (-)

1.37e3

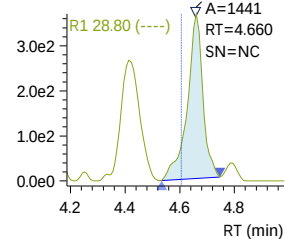
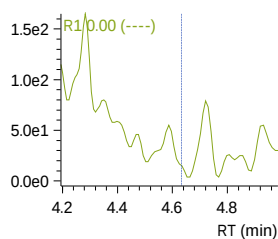


R1 327.10>80.90 (-)

1.65e2

R1 298.70>98.80 (-)

3.71e2

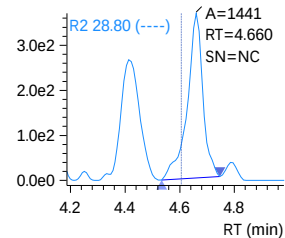
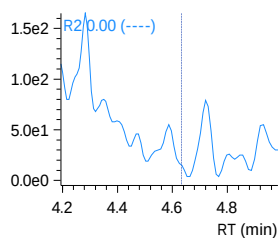


R2 327.10>80.90 (-)

1.65e2

R2 298.70>98.80 (-)

3.71e2

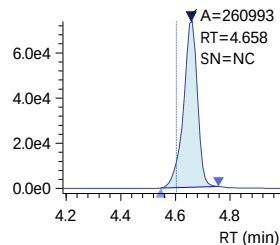




240201_035 (continued)

13C3-PFBS
Conc. 3.1401

Q 302.10>79.90 (-)

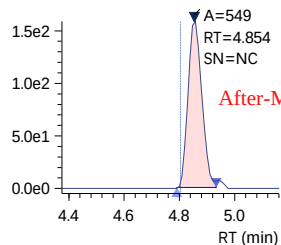


NFDHA
Conc. 0.0059

R#1 22.04 (35.54)

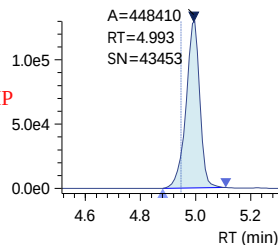
R#2 22.04 (37.91)

Q 295.00>201.00 (-)



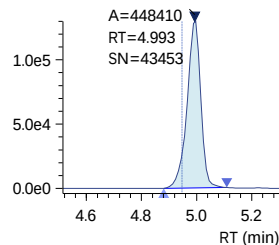
13C5-PFHxA
Conc. 2.5036

Q 318.00>273.00 (-)



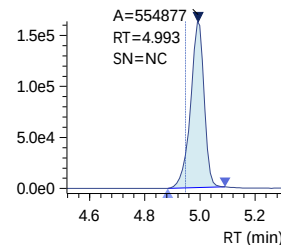
13C5-PFHxA_IS
Conc. 2.5000

ISTD 318.00>273.00 (-)

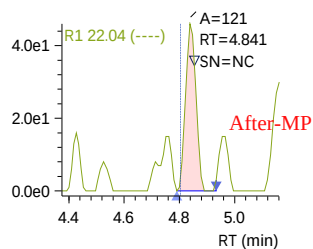


13C2-PFHxA_IS
Conc. 2.5000

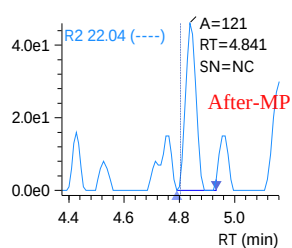
ISTD 315.10>270.00 (-)



R1 295.00>84.90 (-)



R2 295.00>84.90 (-)





240201_035 (continued)

PFHxA
Conc. 0.2996

PFEESA
Conc. ----

13C3-HFPO-DA
Conc. 13.5949

13C3-HFPO-DA_IS
Conc. 10.0000

HFPO-DA
Conc. 0.0036

Q 313.00>269.00 (-)

1.57e4

Q 314.80>135.00 (-)

7.40e1

Q 286.90>168.90 (-)

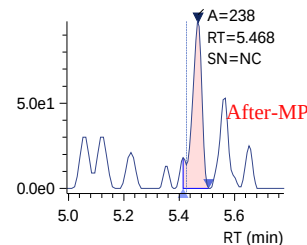
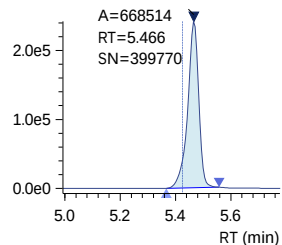
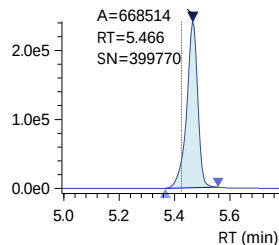
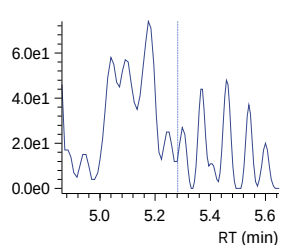
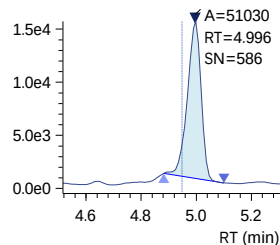
2.42e5

ISTD 286.90>168.90 (-)

2.42e5

Q 284.90>168.90 (-)

9.80e1

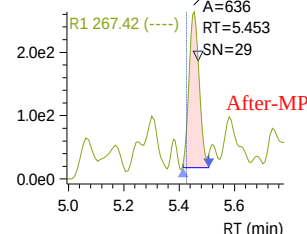
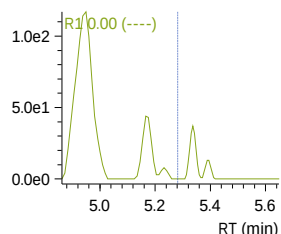


R1 314.80>82.90 (-)

1.17e2

R1 284.90>184.90 (-)

2.64e2

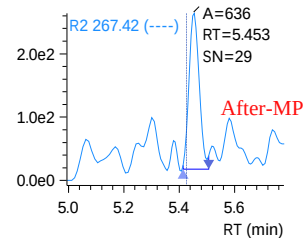
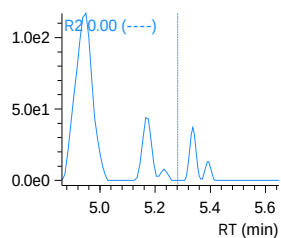


R2 314.80>82.90 (-)

1.17e2

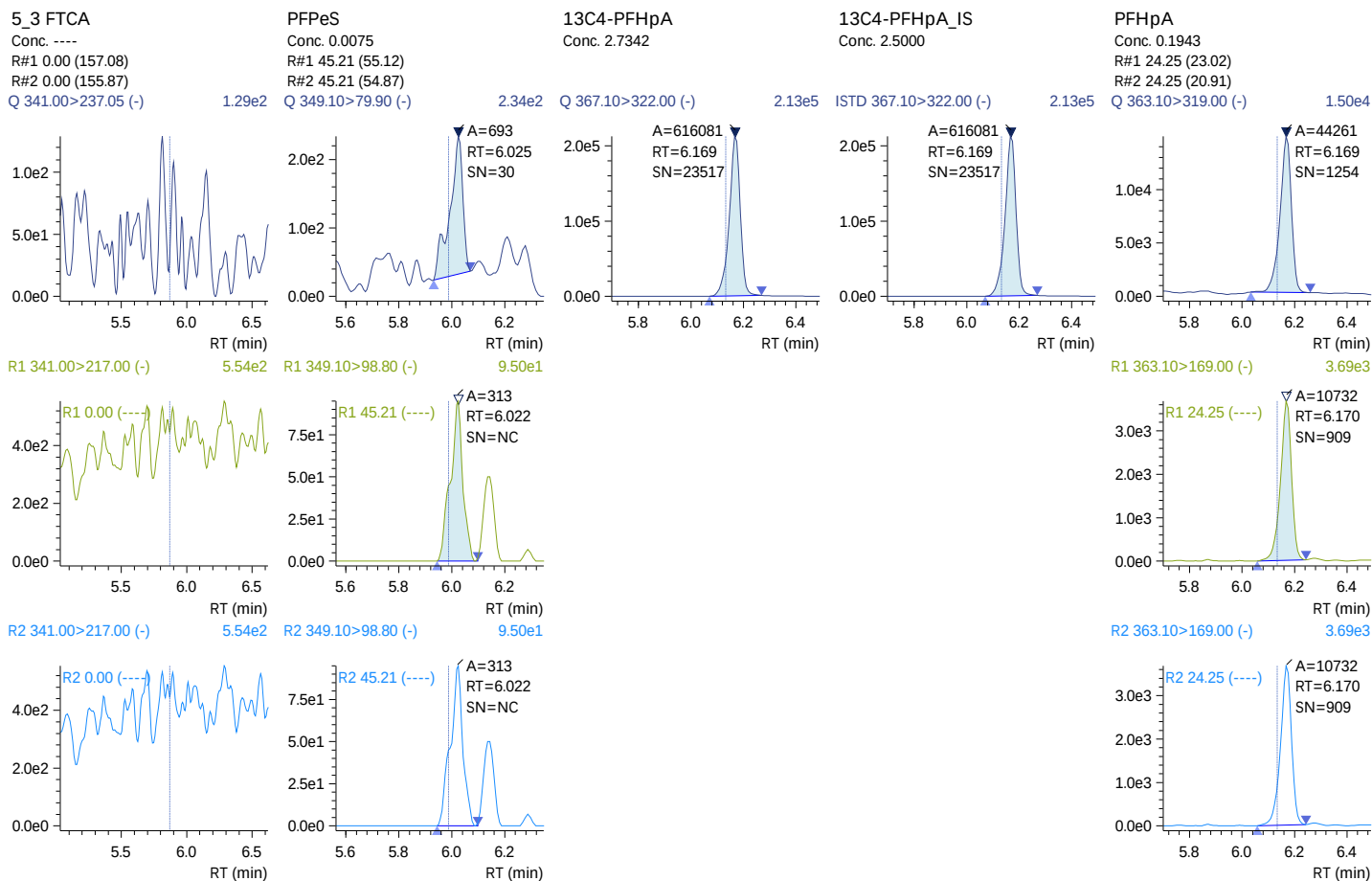
R2 284.90>184.90 (-)

2.64e2





240201_035 (continued)

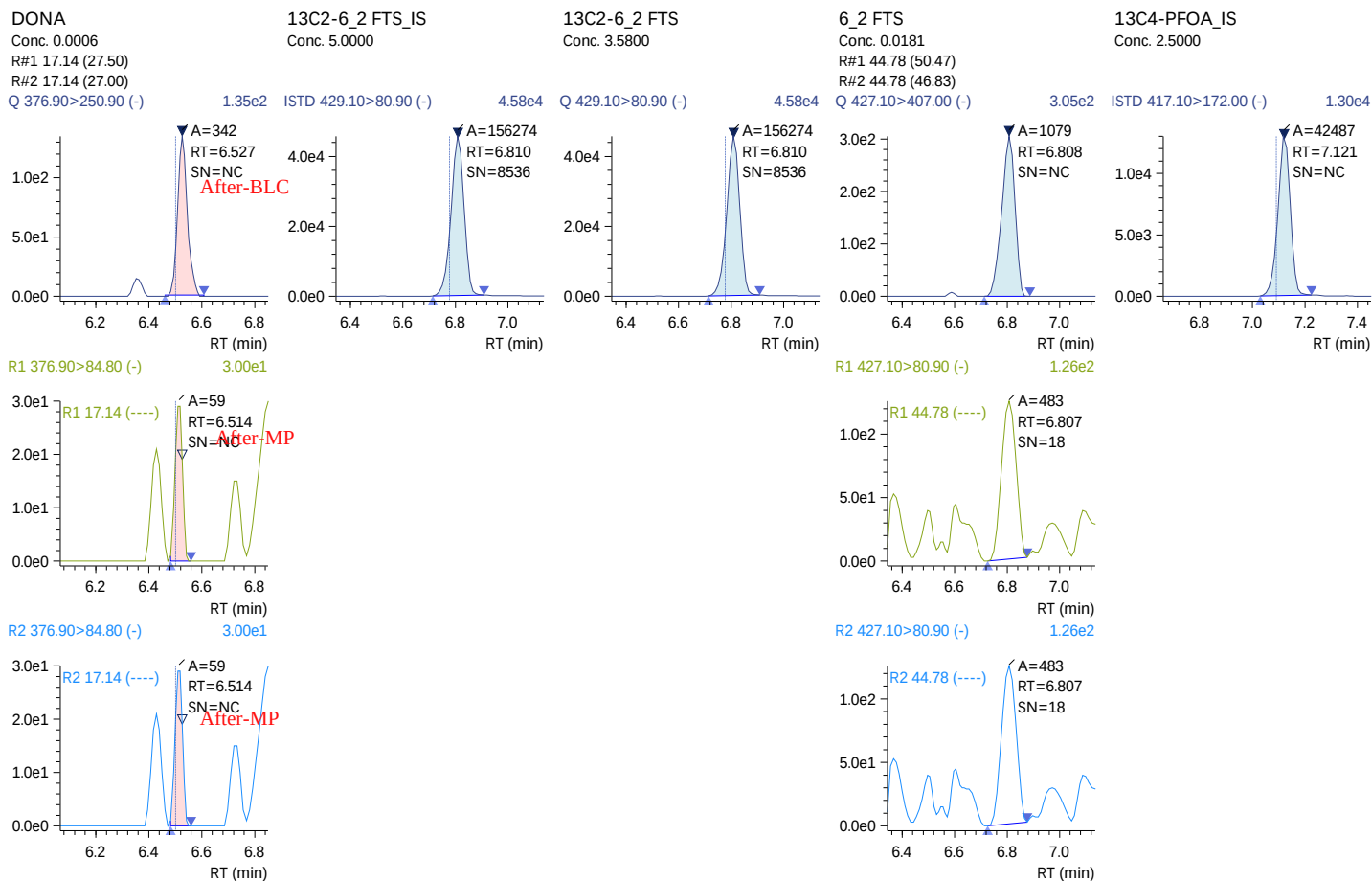


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_035 (continued)





240201_035 (continued)

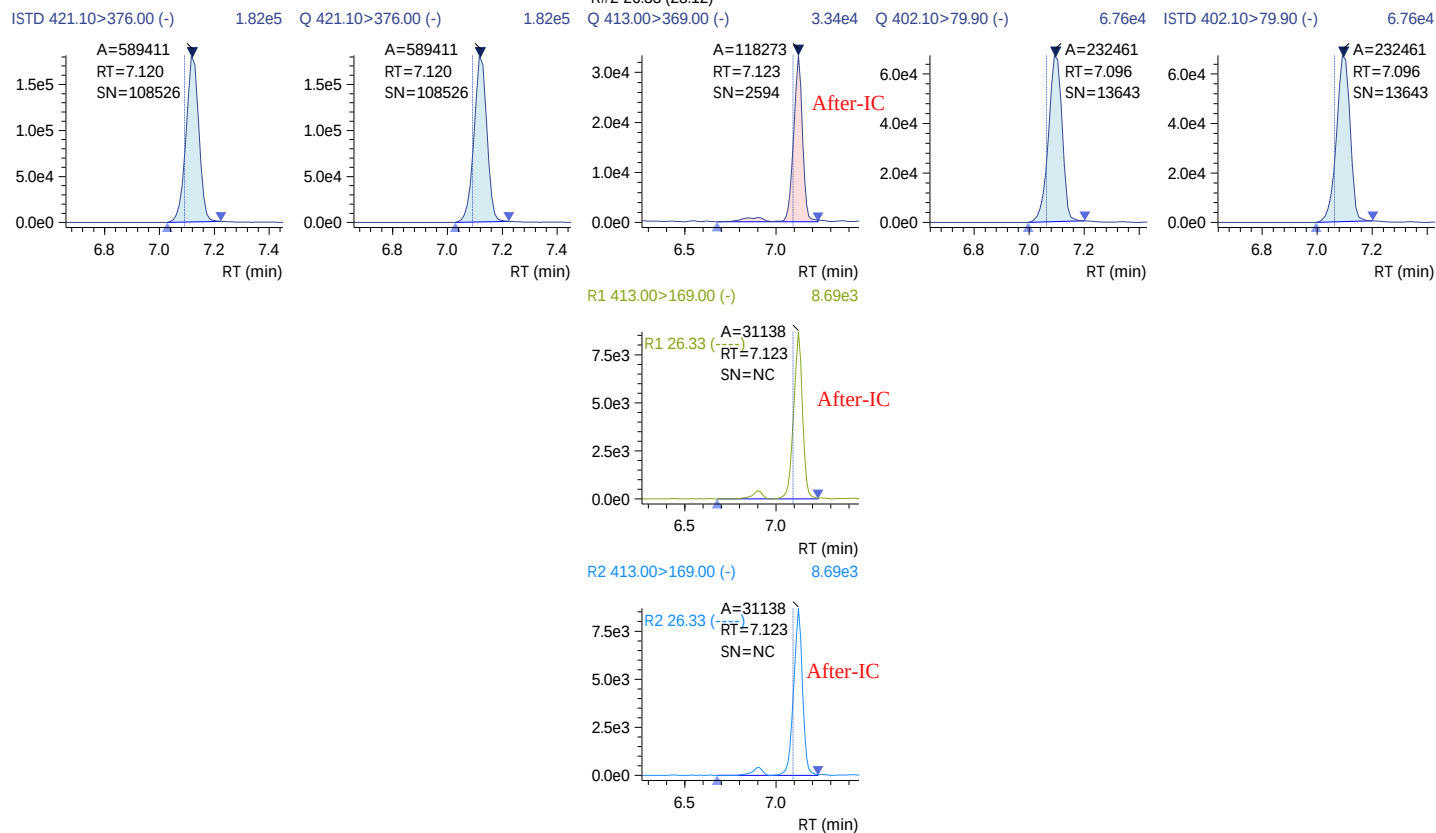
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.9088

PFOA
Conc. 0.5339
R#1 26.33 (28.77)
R#2 26.33 (28.12)

13C3-PFHxS
Conc. 2.9773

13C3-PFHxS_IS
Conc. 2.5000

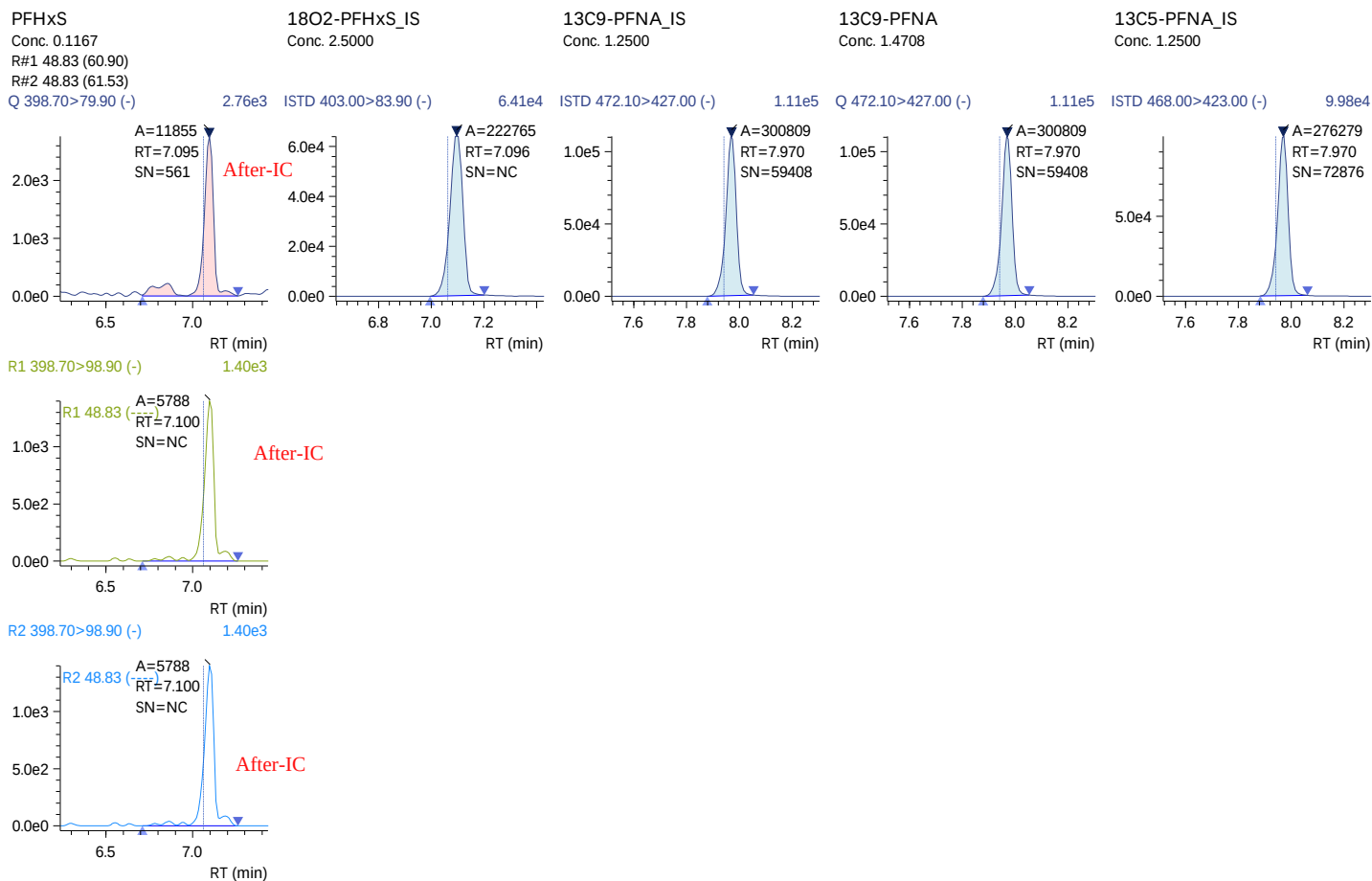


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_035 (continued)

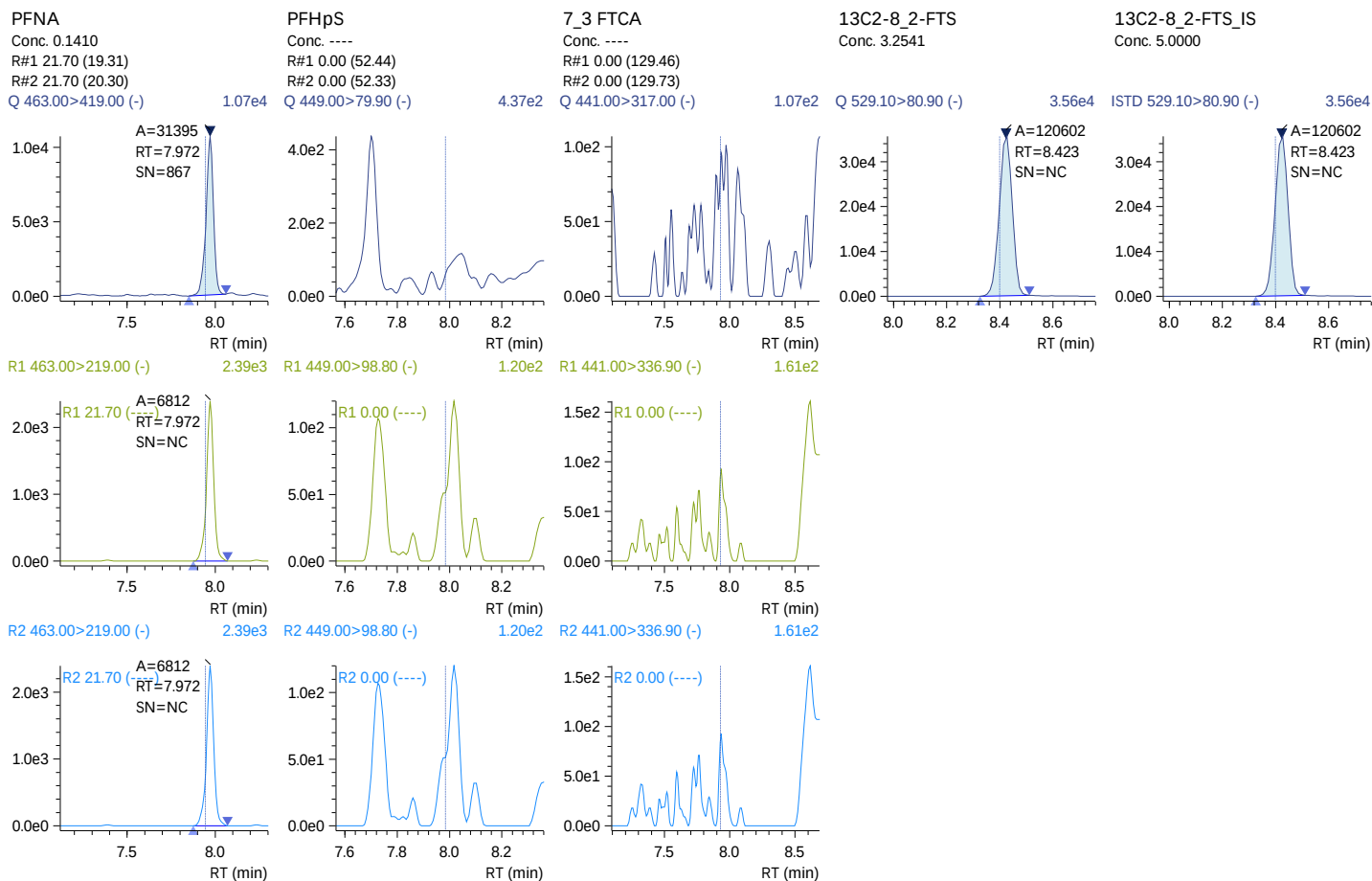


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_035 (continued)

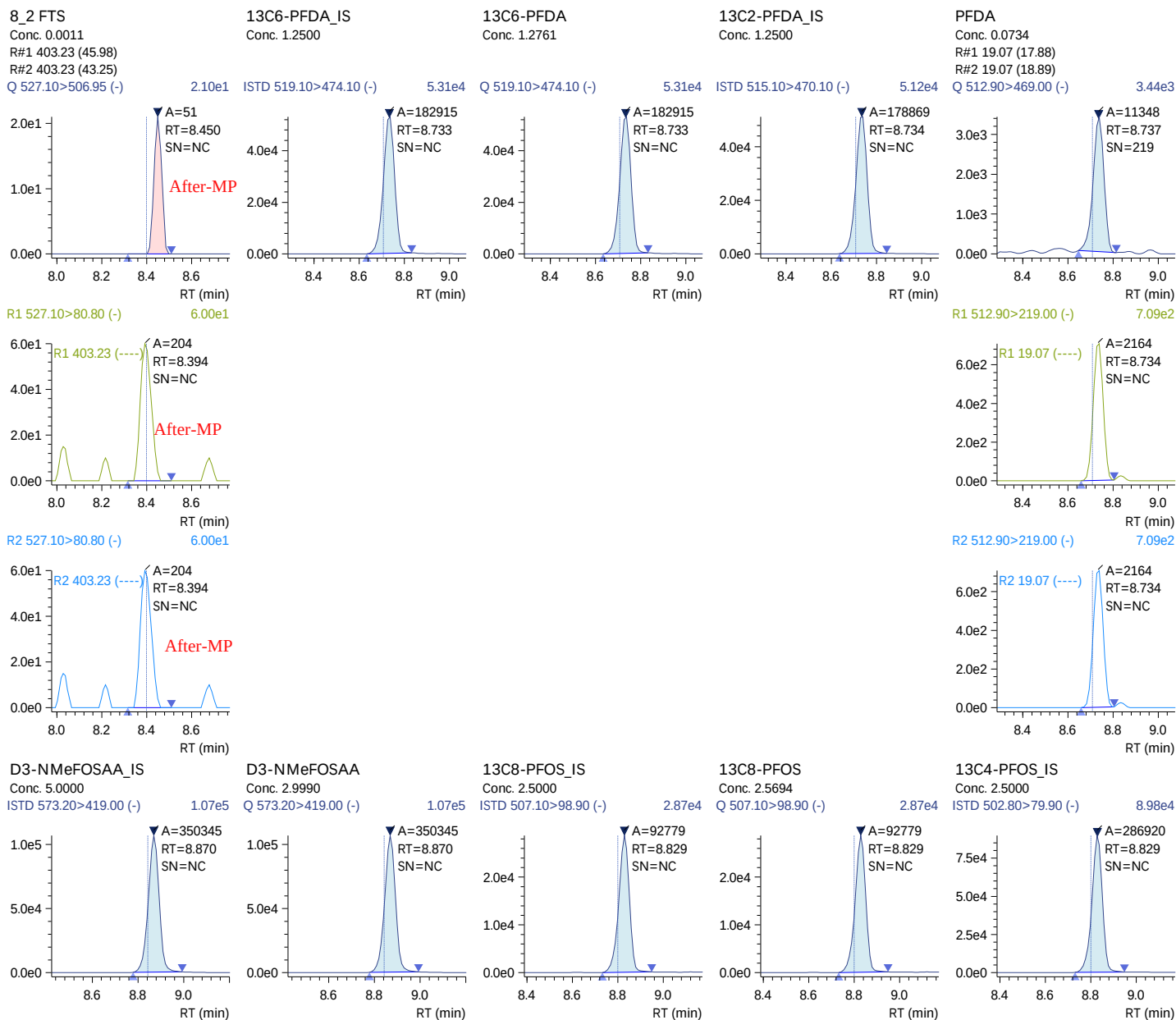


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_035 (continued)

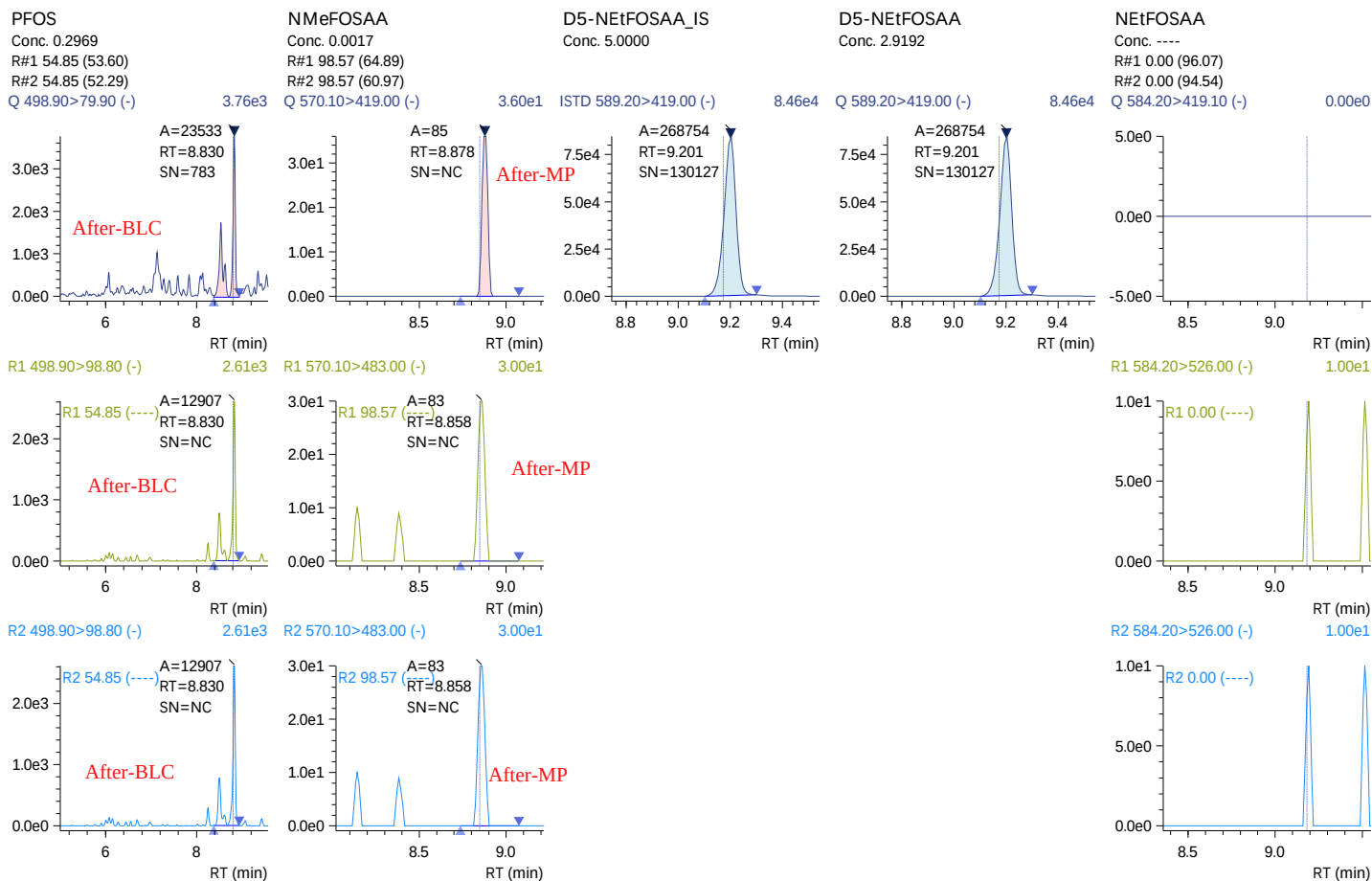


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_035 (continued)

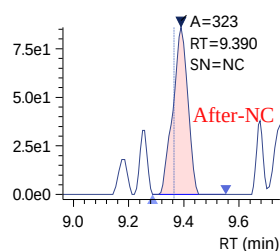




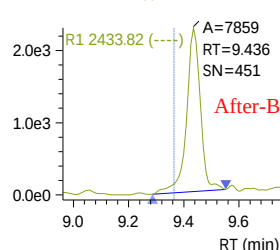
240201_035 (continued)

9-Cl-PF3ONS

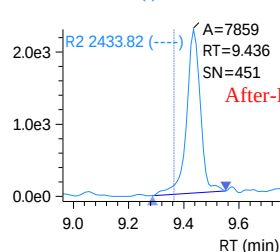
Conc. 0.0005
R#1 2433.82 (30.95)
R#2 2433.82 (30.61)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-) 2.31e3

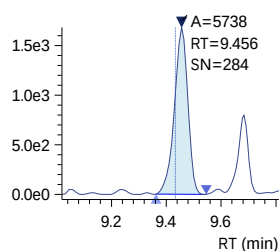


R2 532.80>353.00 (-) 2.31e3

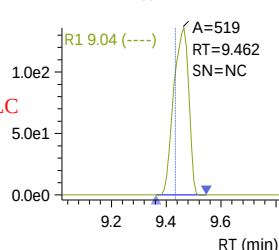


PFUnDA

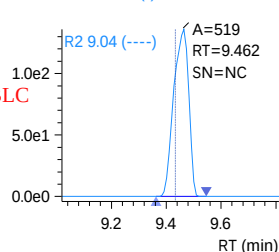
Conc. 0.0158
R#1 9.04 (11.01)
R#2 9.04 (12.02)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-) 1.36e2

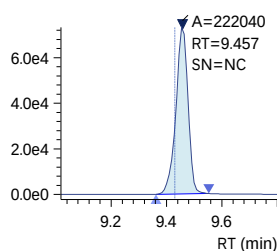


R2 563.10>269.10 (-) 1.36e2



13C7-PFUnDA_IS

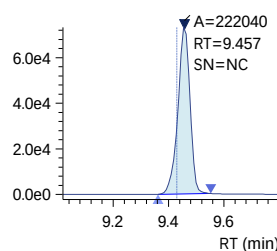
Conc. 1.2500
ISTD 570.00>525.10 (-)



7.33e4

13C7-PFUnDA

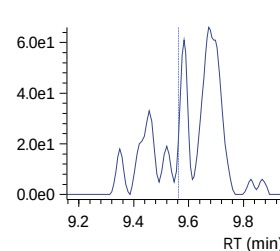
Conc. 1.2466
Q 570.00>525.10 (-)



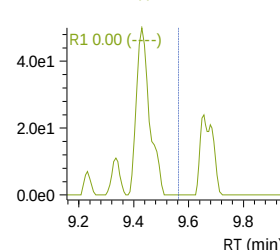
7.33e4

PFNS

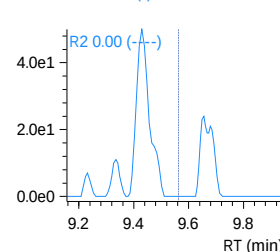
Conc. ----
R#1 0.00 (60.44)
R#2 0.00 (58.51)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-) 5.00e1

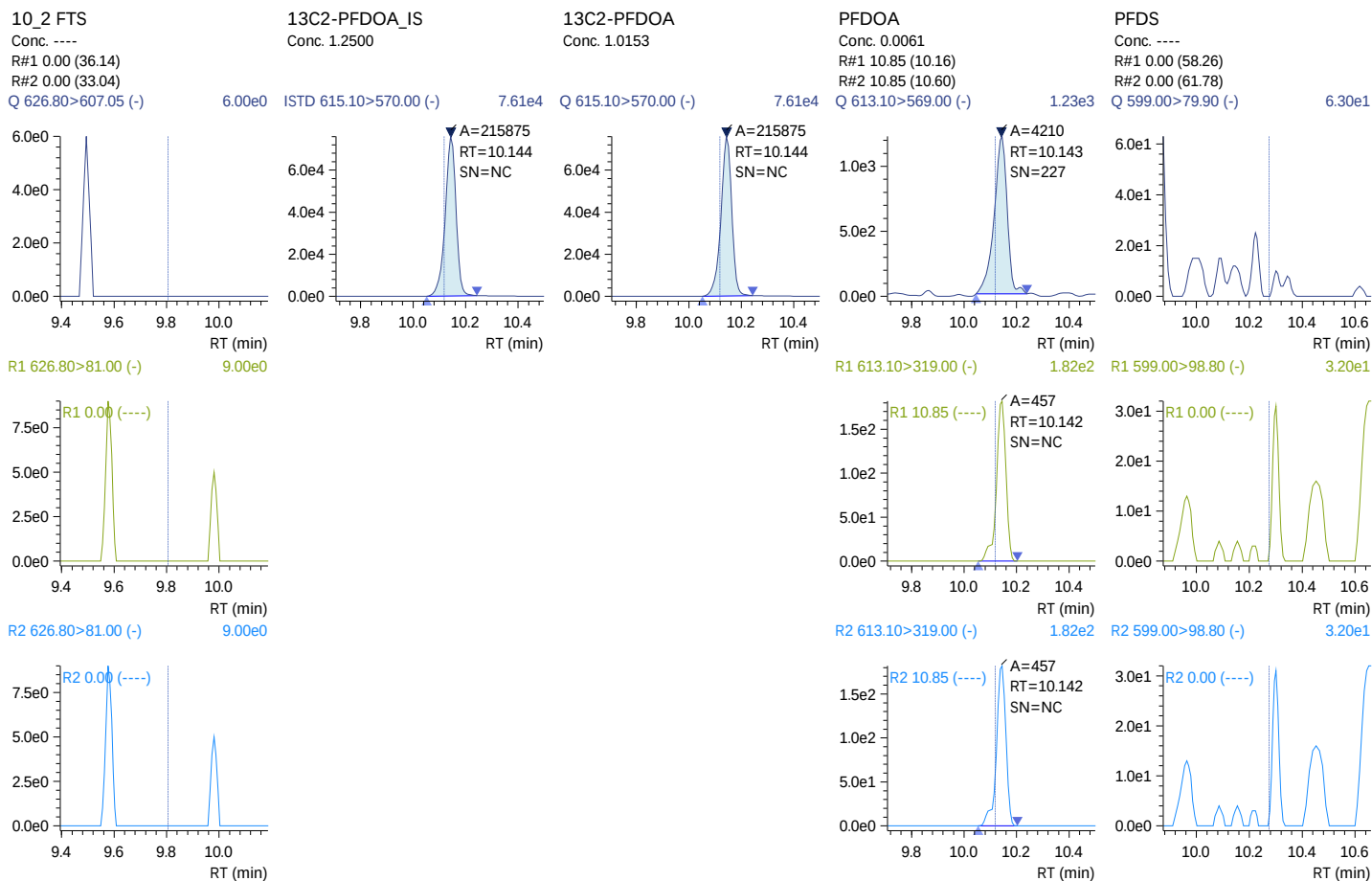


R2 548.80>98.80 (-) 5.00e1





240201_035 (continued)

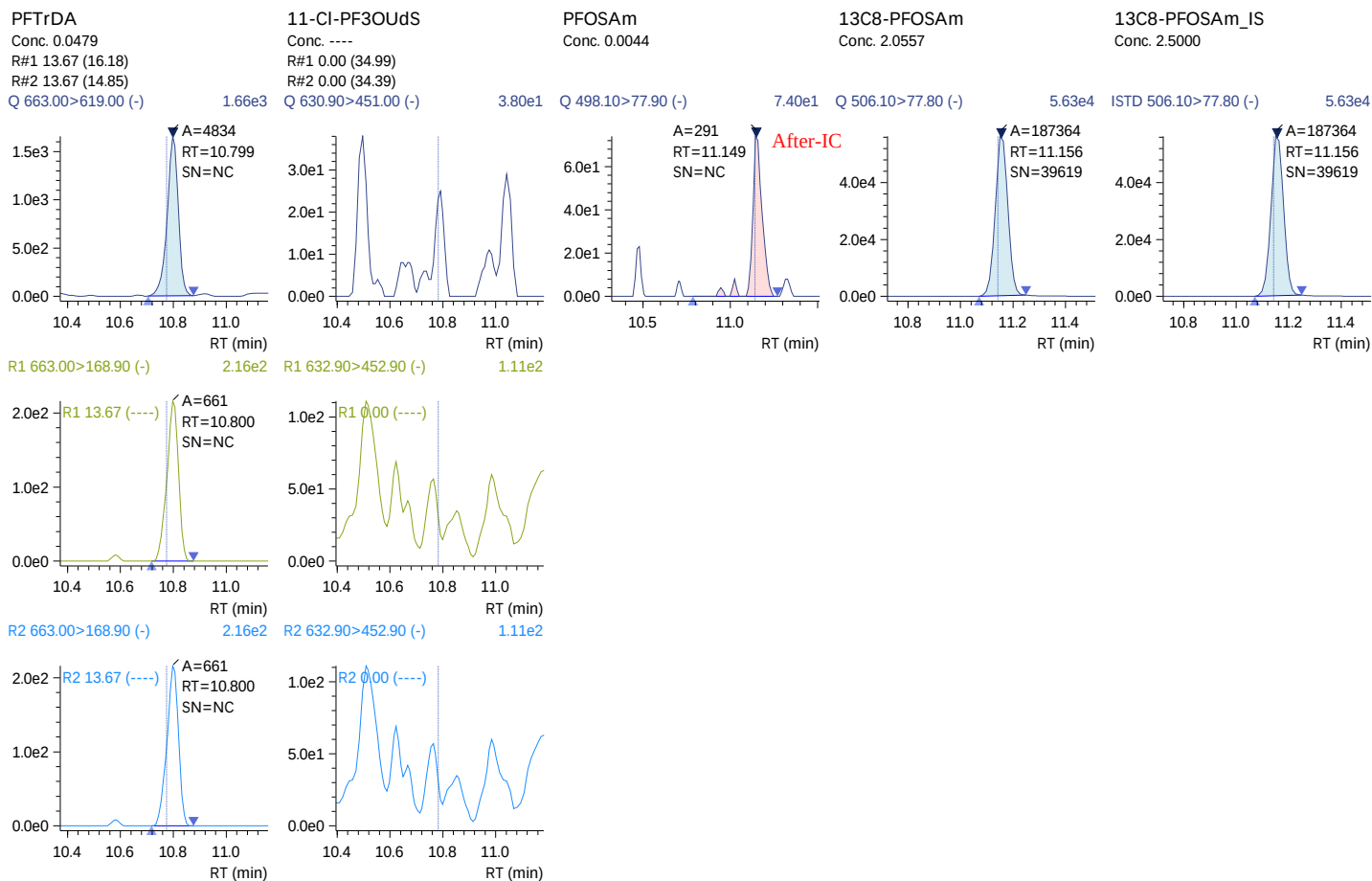


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.

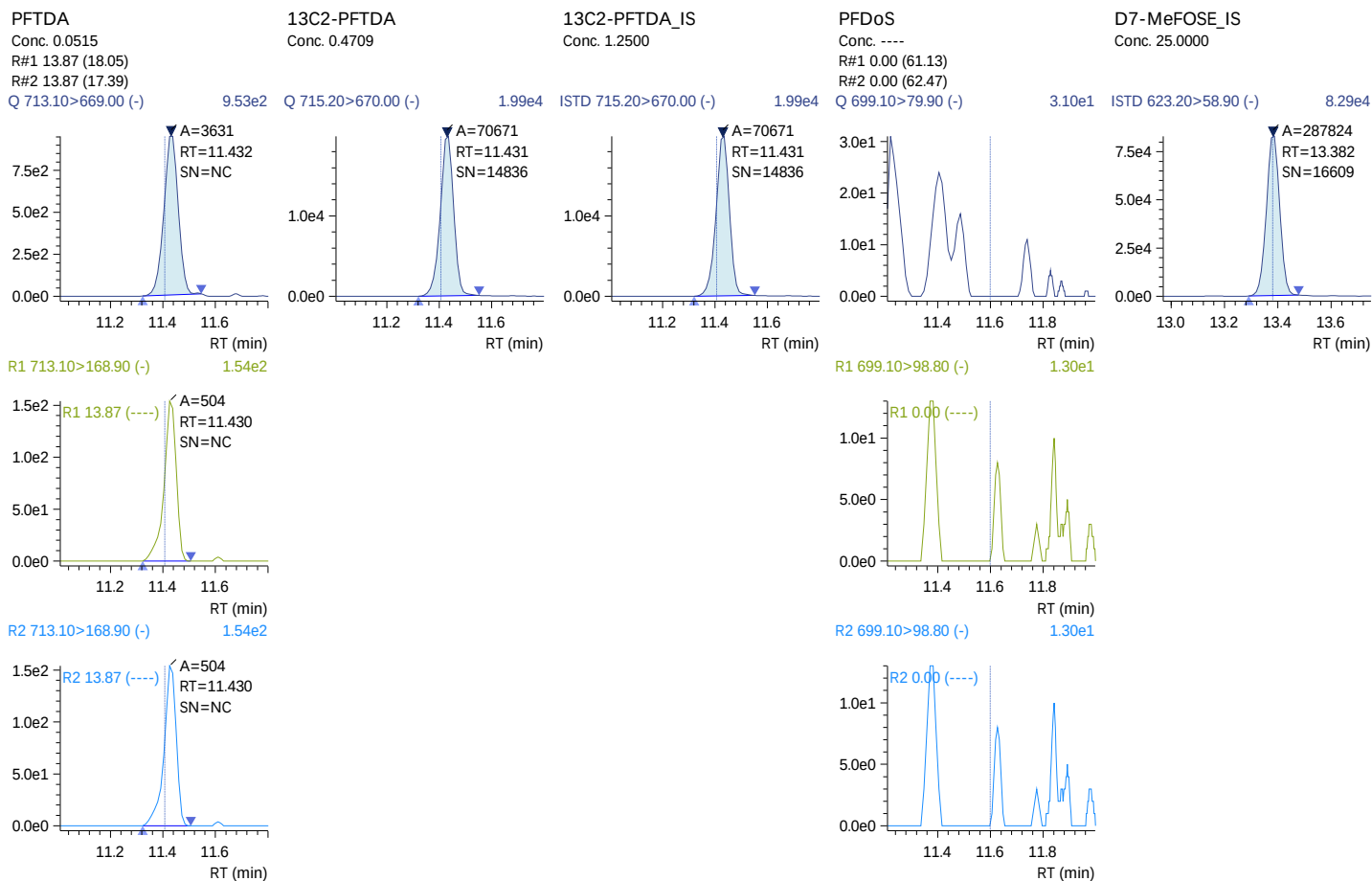


240201_035 (continued)





240201_035 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_035 (continued)

D7-MeFOSE
Conc. 12.3014

MeFOSE
Conc. ----

13C2-PFHxDA_IS
Conc. 2.5000

13C2-PFHxDA
Conc. 0.4685

PFHxDA
Conc. 0.1061
R#1 10.88 (11.66)
R#2 10.88 (10.99)

Q 623.20>58.90 (-)

8.29e4

Q 616.10>59.00 (-)

7.30e1

ISTD 815.00>770.05 (-)

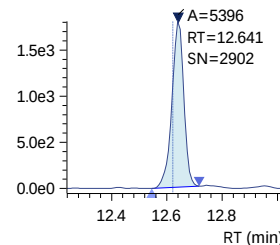
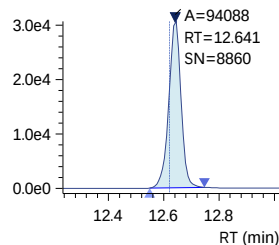
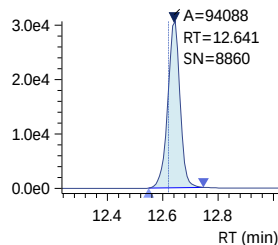
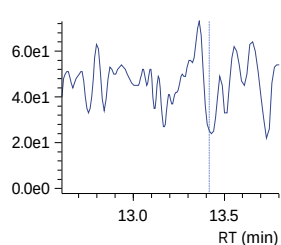
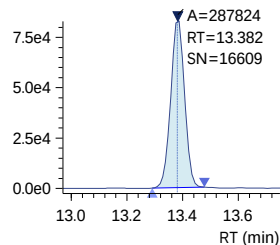
3.07e4

Q 815.00>770.05 (-)

3.07e4

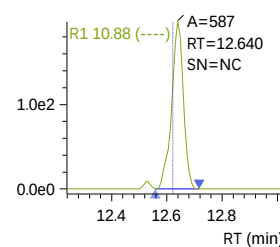
Q 813.00>768.95 (-)

1.81e3



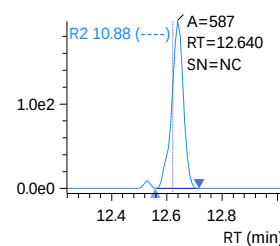
R1 813.00>218.95 (-)

1.98e2



R2 813.00>218.95 (-)

1.98e2





240201_035 (continued)

D3-MeFOSA
Conc. 1.1668

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. ----
R#1 0.00 (160.44)
R#2 0.00 (161.92)

D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 11.0817

Q 515.00>219.00 (-)

7.89e3

ISTD 515.00>219.00 (-)

7.89e3

Q 511.90>219.00 (-)

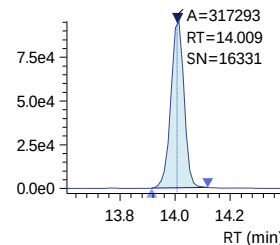
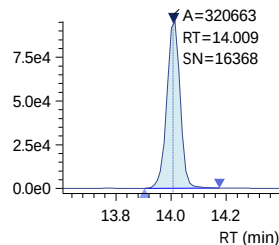
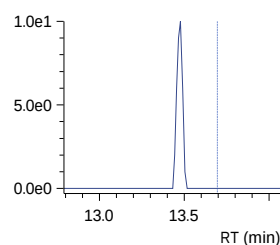
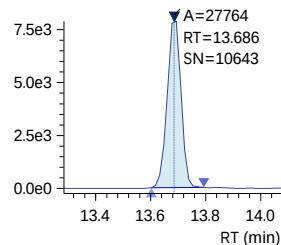
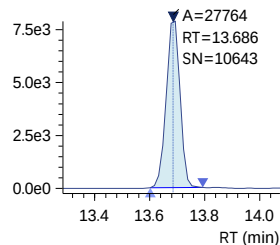
1.00e1

ISTD 639.20>58.90 (-)

9.56e4

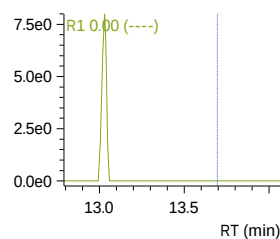
Q 639.20>58.90 (-)

9.56e4



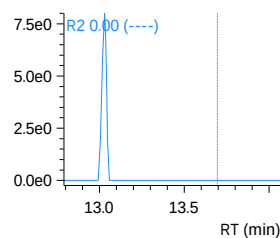
R1 511.90>169.00 (-)

8.00e0



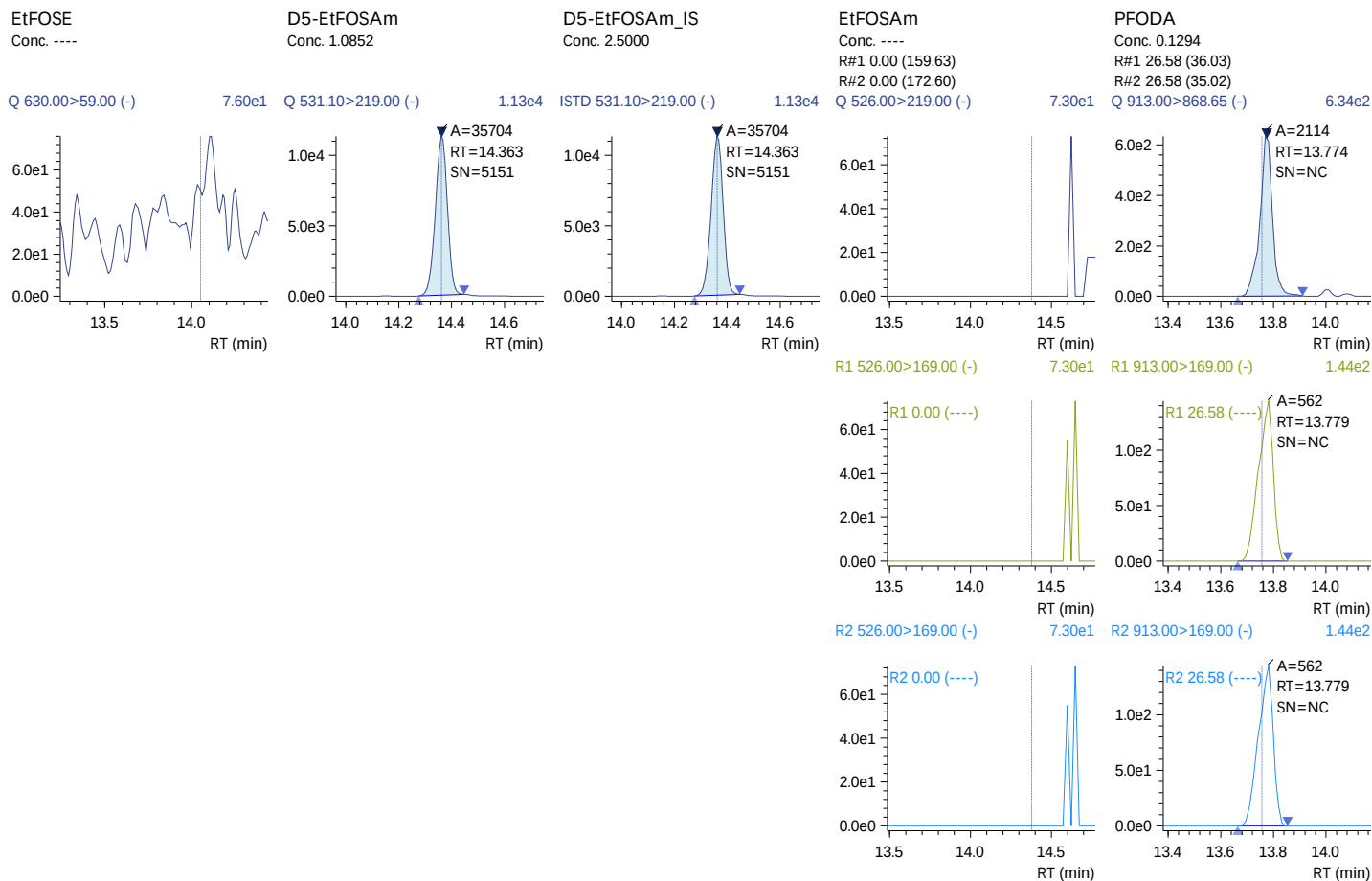
R2 511.90>169.00 (-)

8.00e0





240201_035 (continued)



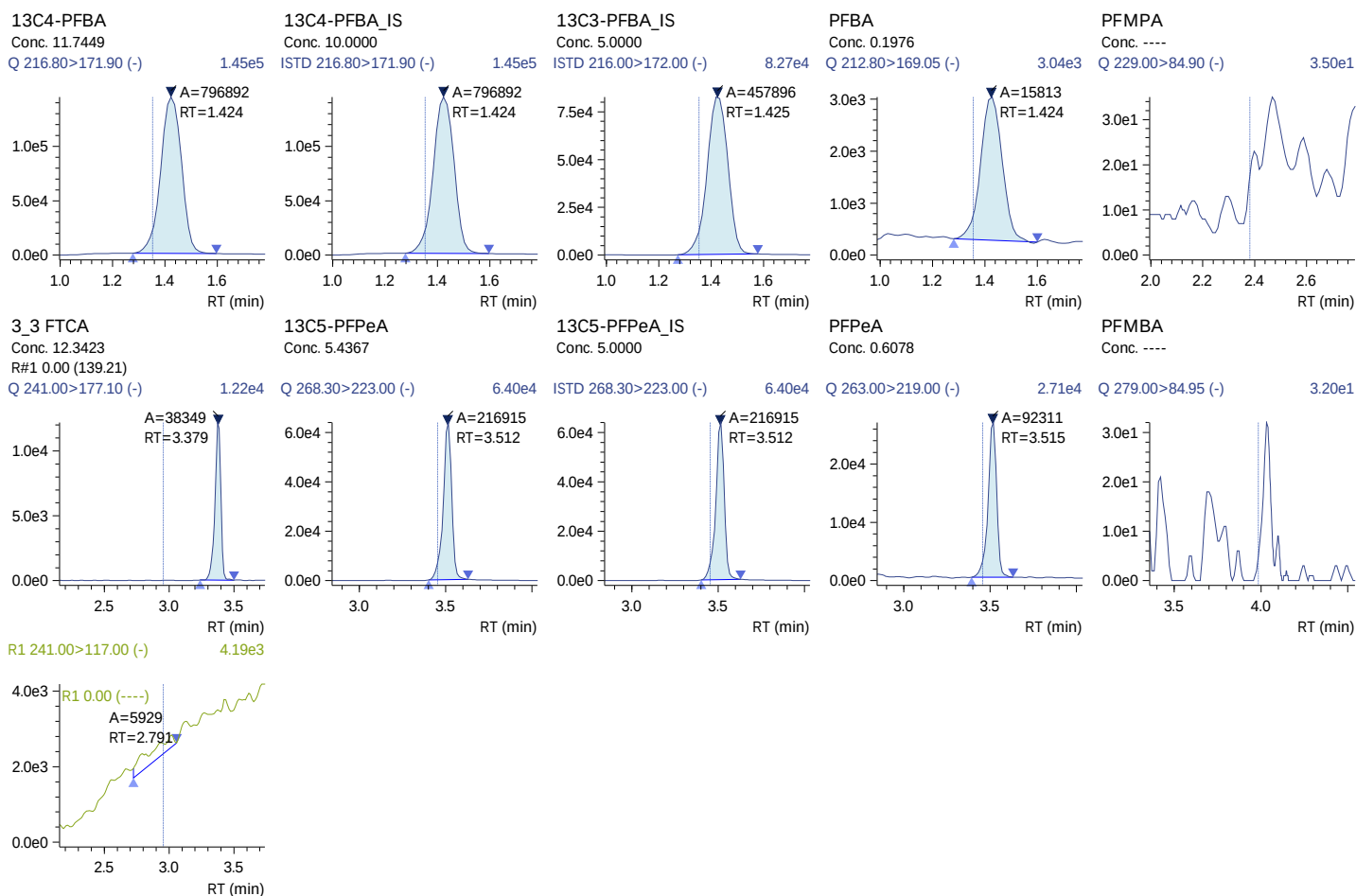
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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_035

Sample ID: K2314281-002
Date Acquired: 2/1/2024 11:33:13 PM
Acquired by: System Administrator
Data File: 240201_035
Vial: 13 | Inj. Volume: 10.0000uL | Tray: 2





240201_035 (continued)

13C2-4_2 FTS
Conc. 4.1283

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. 0.0037
R#1 0.00 (32.10)
R#2 0.00 (32.79)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 0.0387
R#1 28.80 (44.81)
R#2 28.80 (46.72)

Q 329.10>80.90 (-)

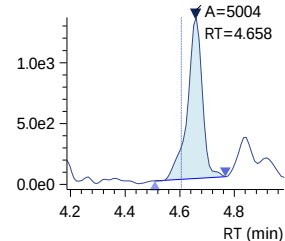
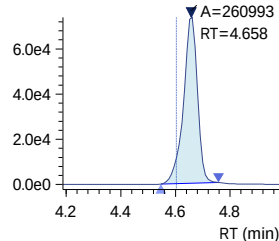
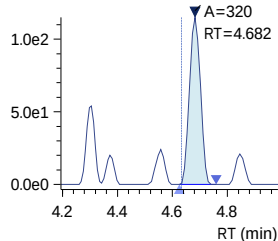
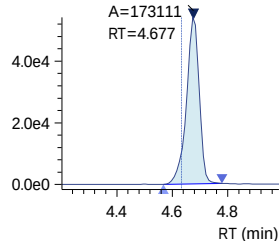
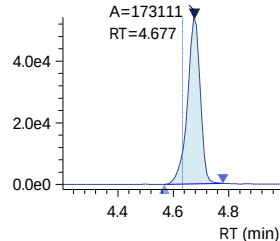
5.42e4 ISTD 329.10>80.90 (-)

5.42e4 Q 327.10>307.00 (-)

1.15e2 ISTD 302.10>79.90 (-)

7.40e4 Q 298.70>79.90 (-)

1.37e3

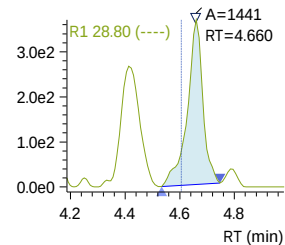
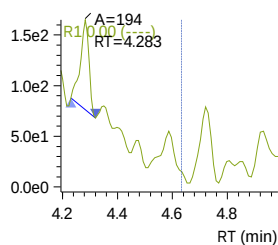


R1 327.10>80.90 (-)

1.65e2

R1 298.70>98.80 (-)

3.71e2

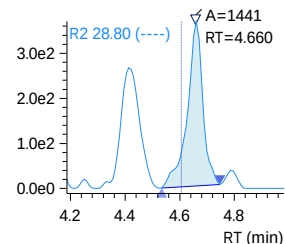
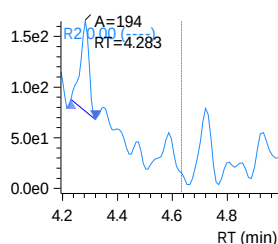


R2 327.10>80.90 (-)

1.65e2

R2 298.70>98.80 (-)

3.71e2





240201_035 (continued)

13C3-PFBS
 Conc. 3.1401

NFDHA
 Conc. ----
 R#1 0.00 (35.54)
 R#2 0.00 (37.91)

13C5-PFHxA
 Conc. 2.5036

13C5-PFHxA_IS
 Conc. 2.5000

13C2-PFHxA_IS
 Conc. 2.5000

Q 302.10>79.90 (-)

7.40e4

Q 295.00>201.00 (-)

1.59e2

Q 318.00>273.00 (-)

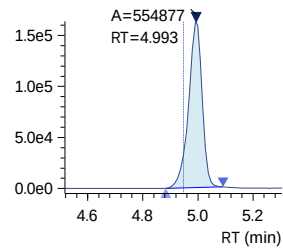
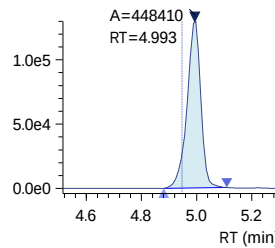
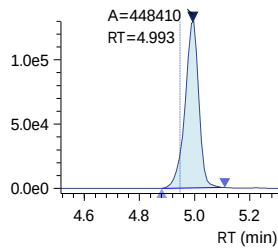
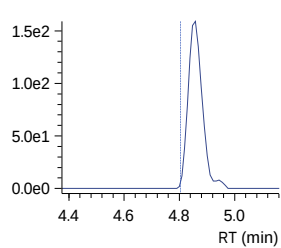
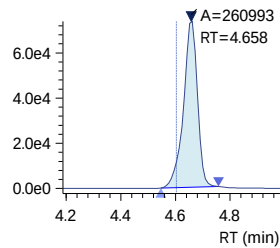
1.30e5

ISTD 318.00>273.00 (-)

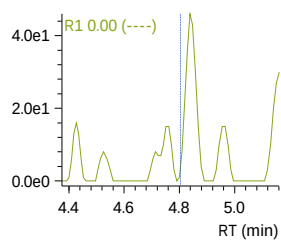
1.30e5

ISTD 315.10>270.00 (-)

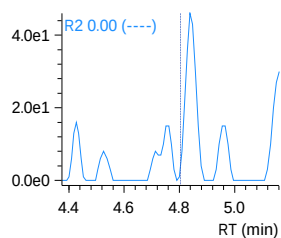
1.64e5



R1 295.00>84.90 (-)



R2 295.00>84.90 (-)





240201_035 (continued)

PFHxA
 Conc. 0.3071

PFEESA
 Conc. ----

13C3-HFPO-DA
 Conc. 13.5949

13C3-HFPO-DA_IS
 Conc. 10.0000

HFPO-DA
 Conc. ----

Q 313.00>269.00 (-)

1.57e4

Q 314.80>135.00 (-)

7.40e1

Q 286.90>168.90 (-)

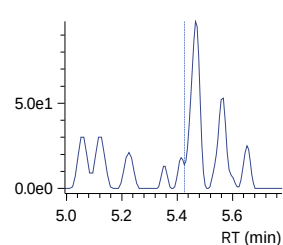
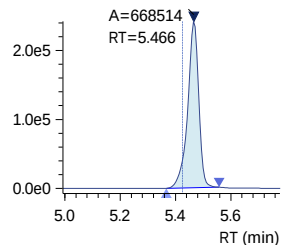
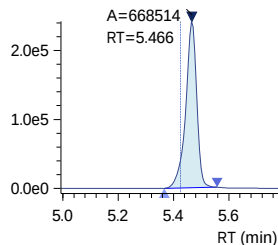
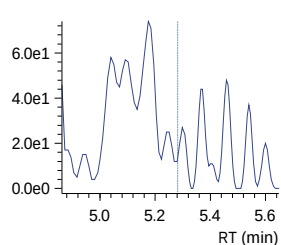
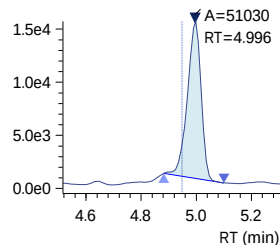
2.42e5

ISTD 286.90>168.90 (-)

2.42e5

Q 284.90>168.90 (-)

9.80e1

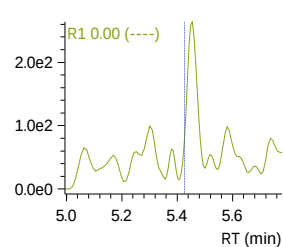
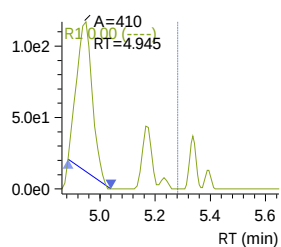


R1 314.80>82.90 (-)

1.17e2

R1 284.90>184.90 (-)

2.64e2

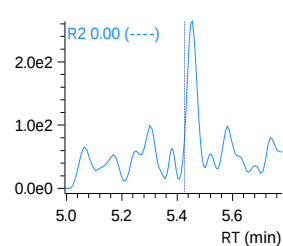
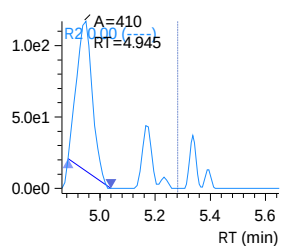


R2 314.80>82.90 (-)

1.17e2

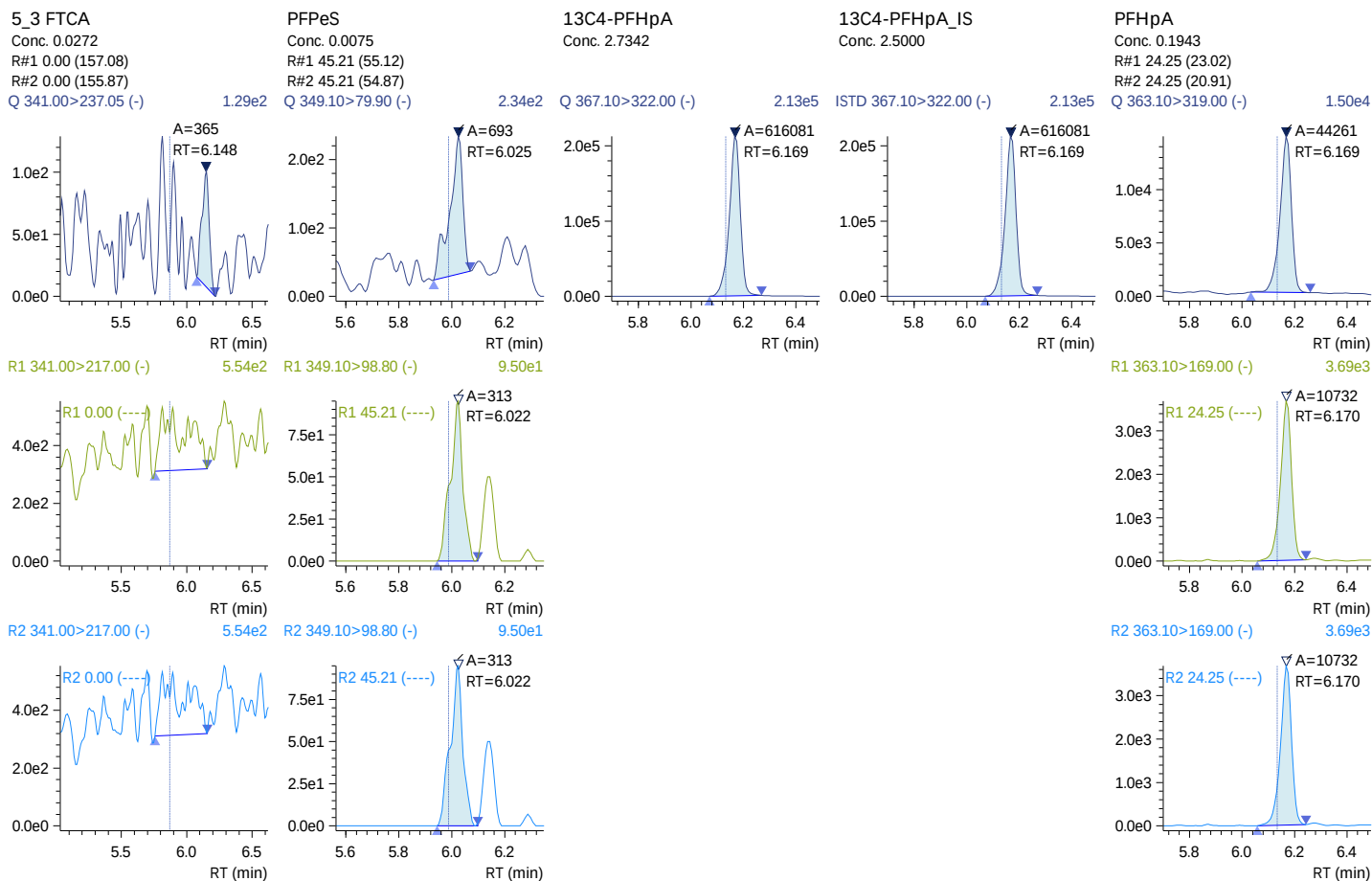
R2 284.90>184.90 (-)

2.64e2



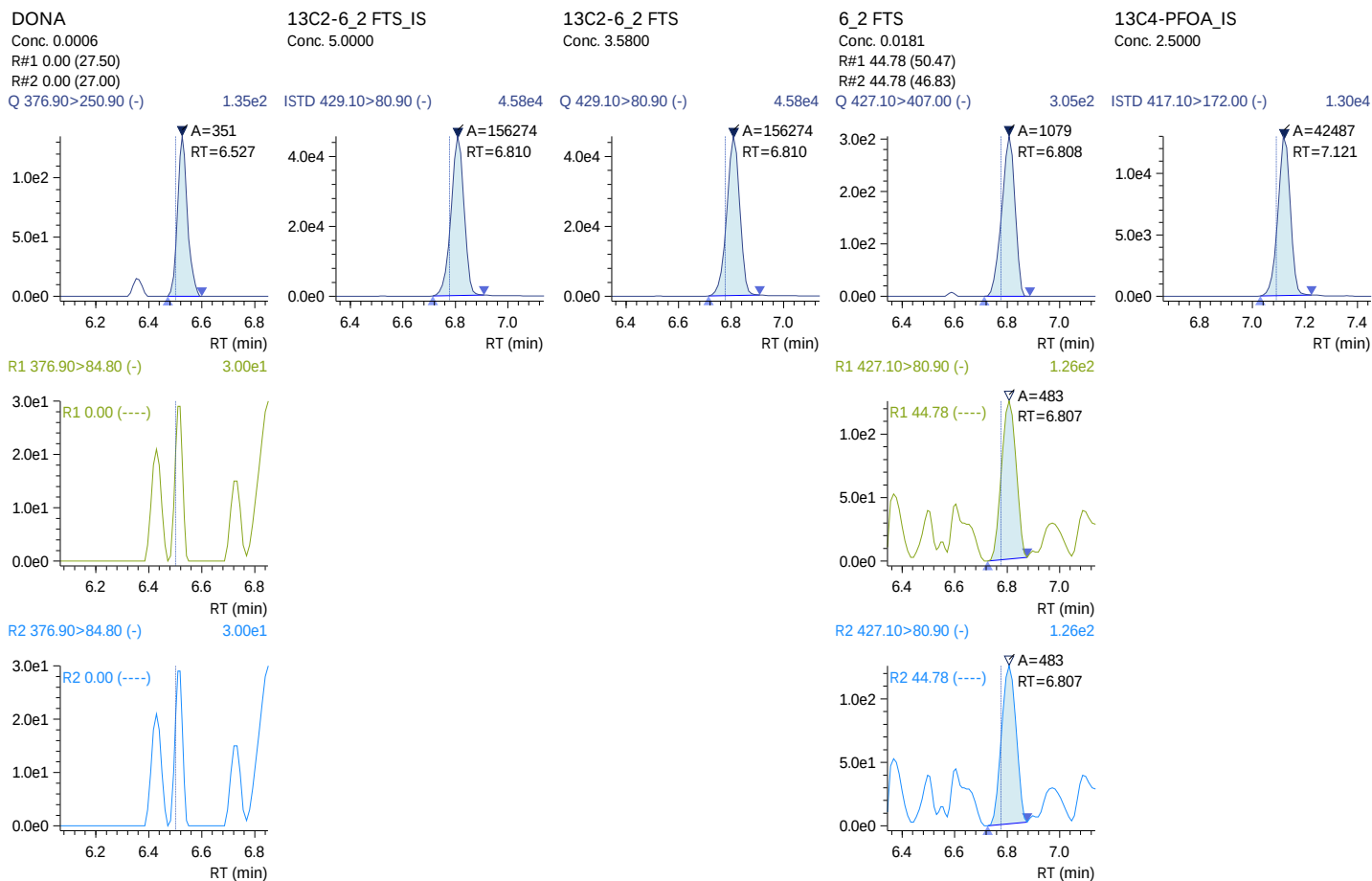


240201_035 (continued)





240201_035 (continued)





240201_035 (continued)

13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.9088

PFOA
Conc. 0.4912
R#1 26.46 (28.77)
R#2 26.46 (28.12)

13C3-PFHxS
Conc. 2.9773

13C3-PFHxS_IS
Conc. 2.5000

ISTD 421.10>376.00 (-)

1.82e5

Q 421.10>376.00 (-)

1.82e5

Q 413.00>369.00 (-)

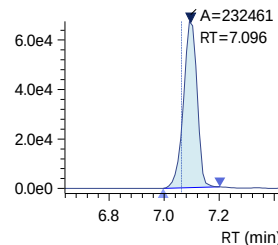
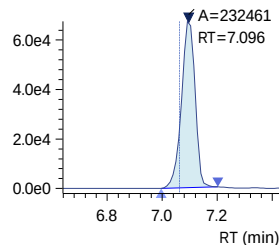
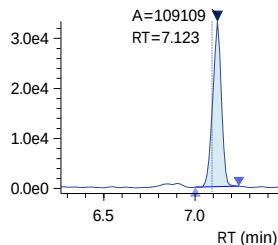
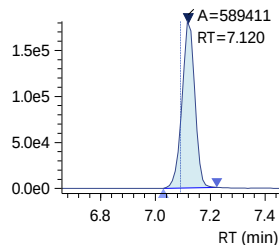
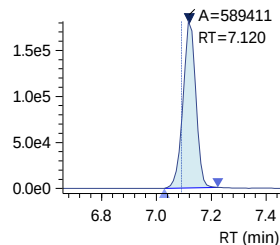
3.34e4

Q 402.10>79.90 (-)

6.76e4

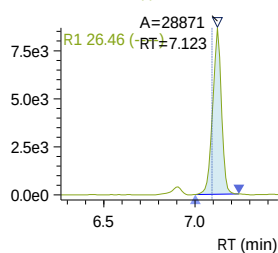
ISTD 402.10>79.90 (-)

6.76e4



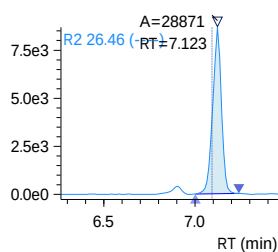
R1 413.00>169.00 (-)

8.69e3



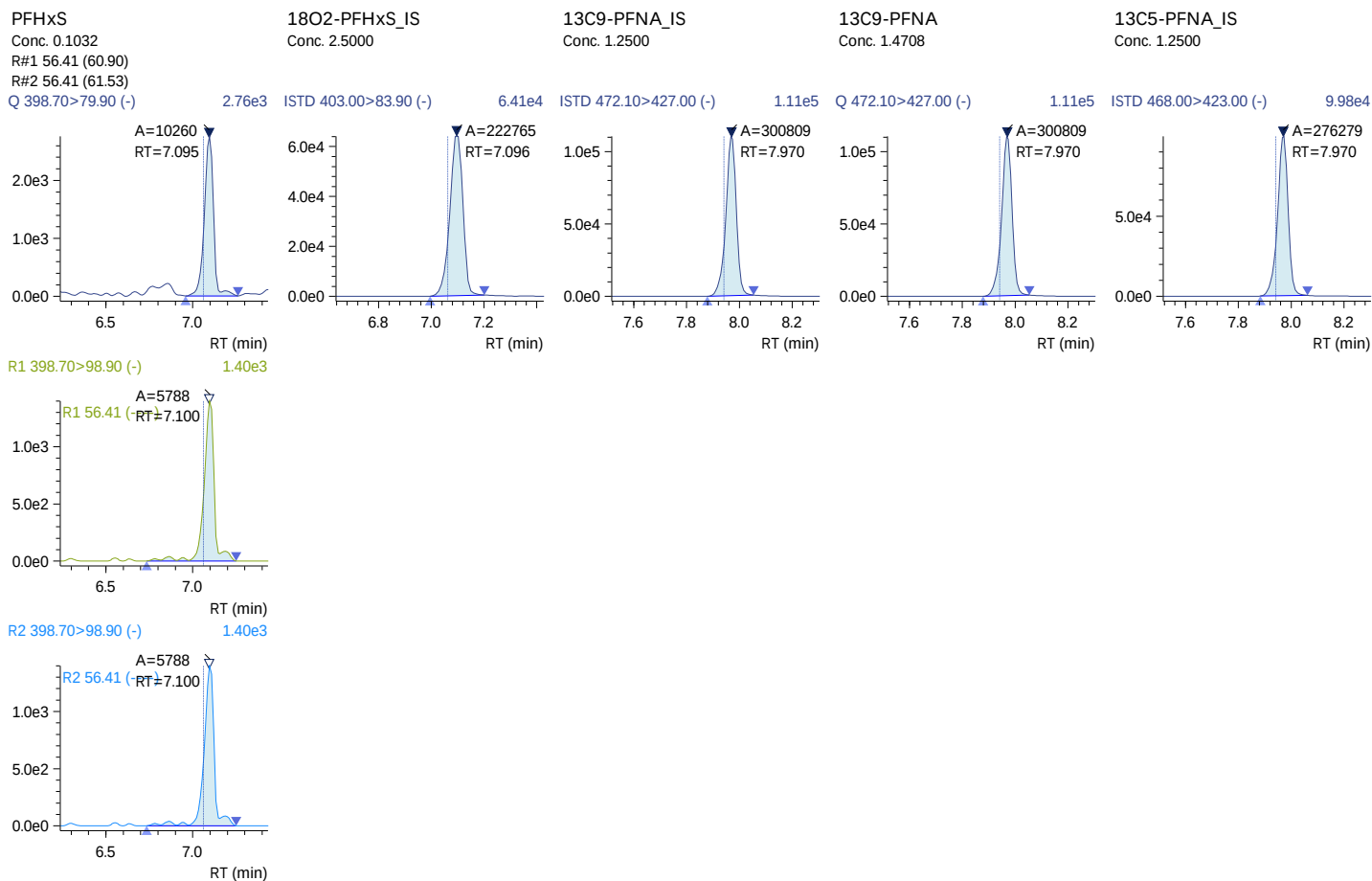
R2 413.00>169.00 (-)

8.69e3



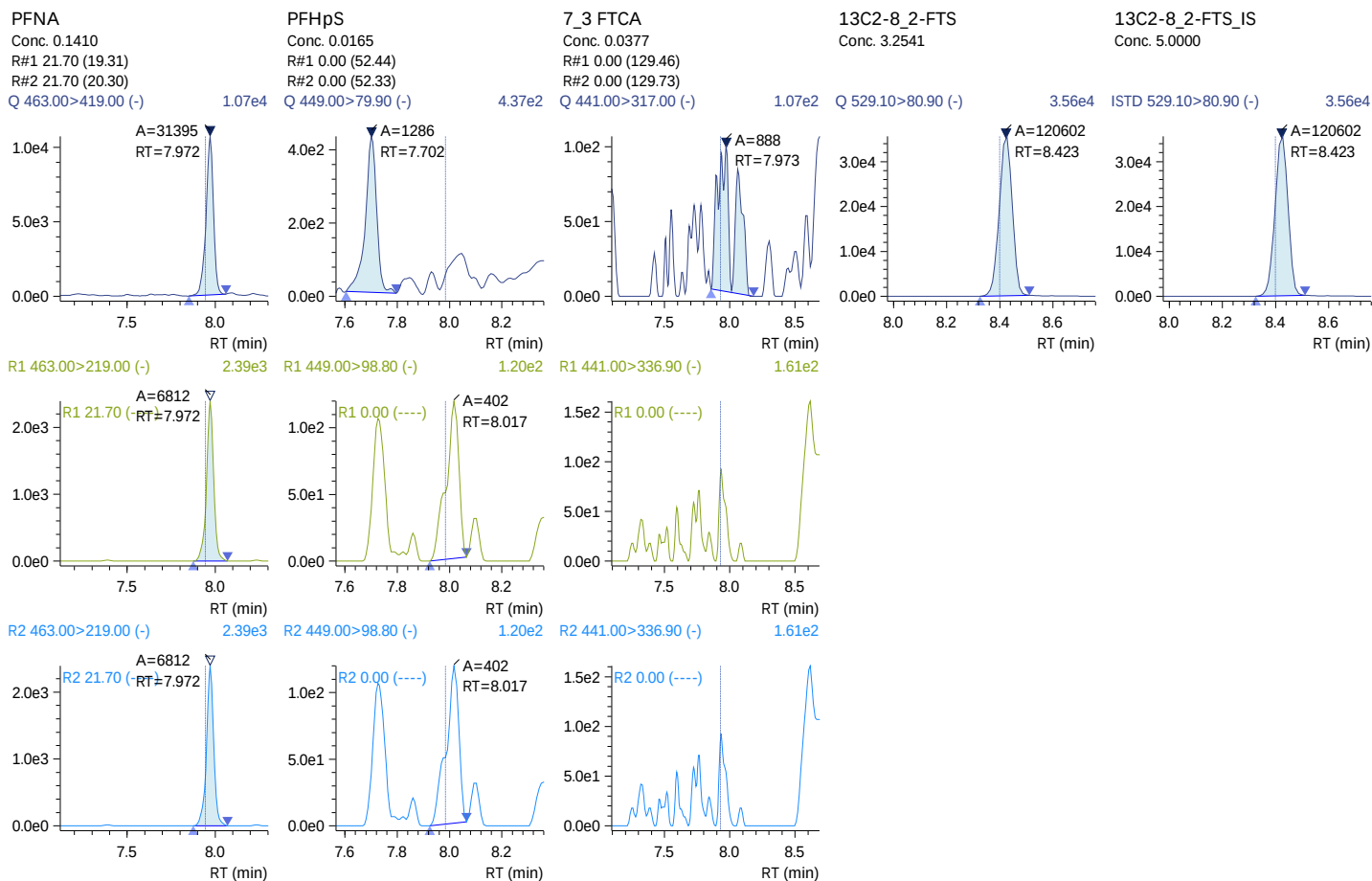


240201_035 (continued)



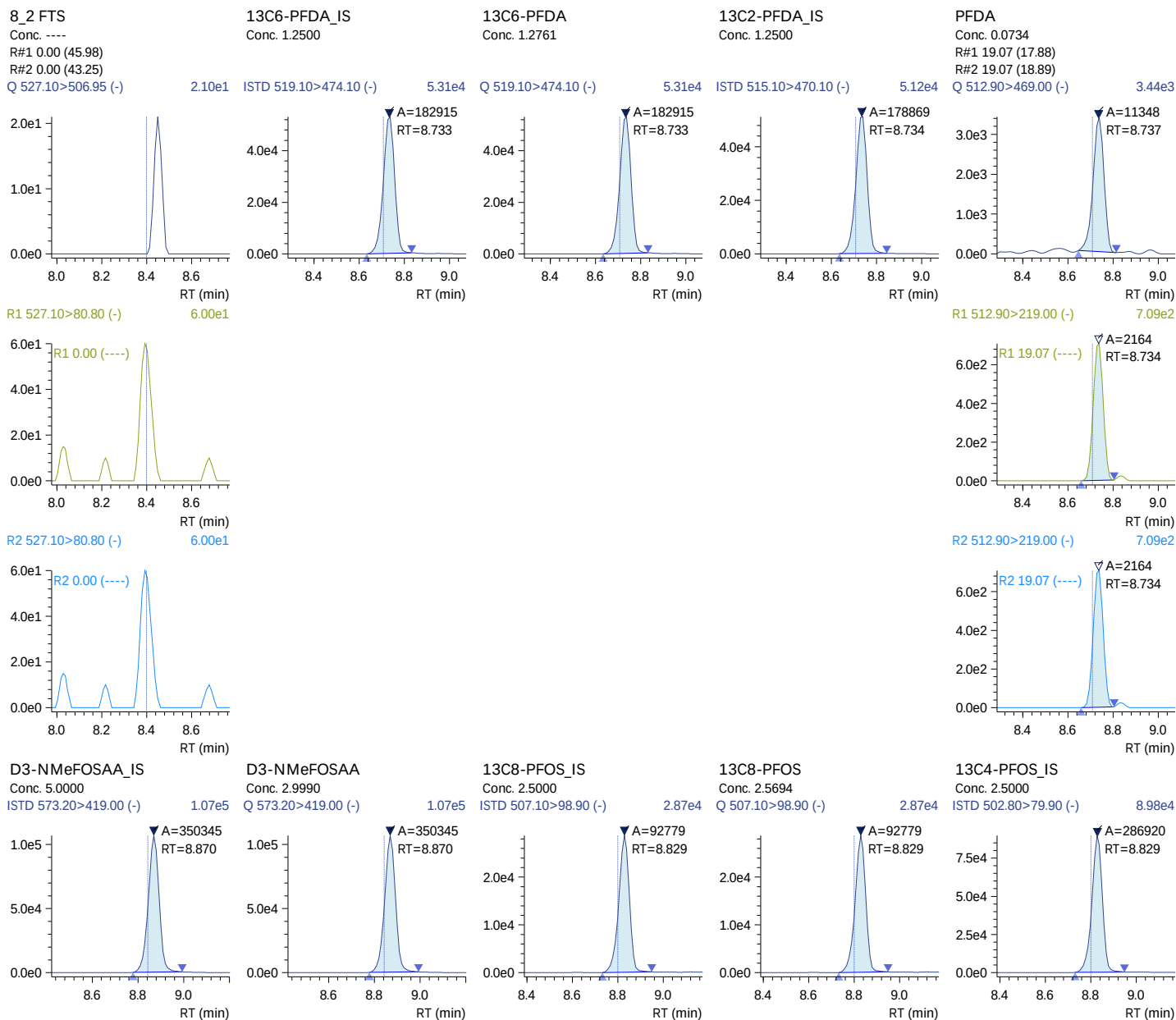


240201_035 (continued)



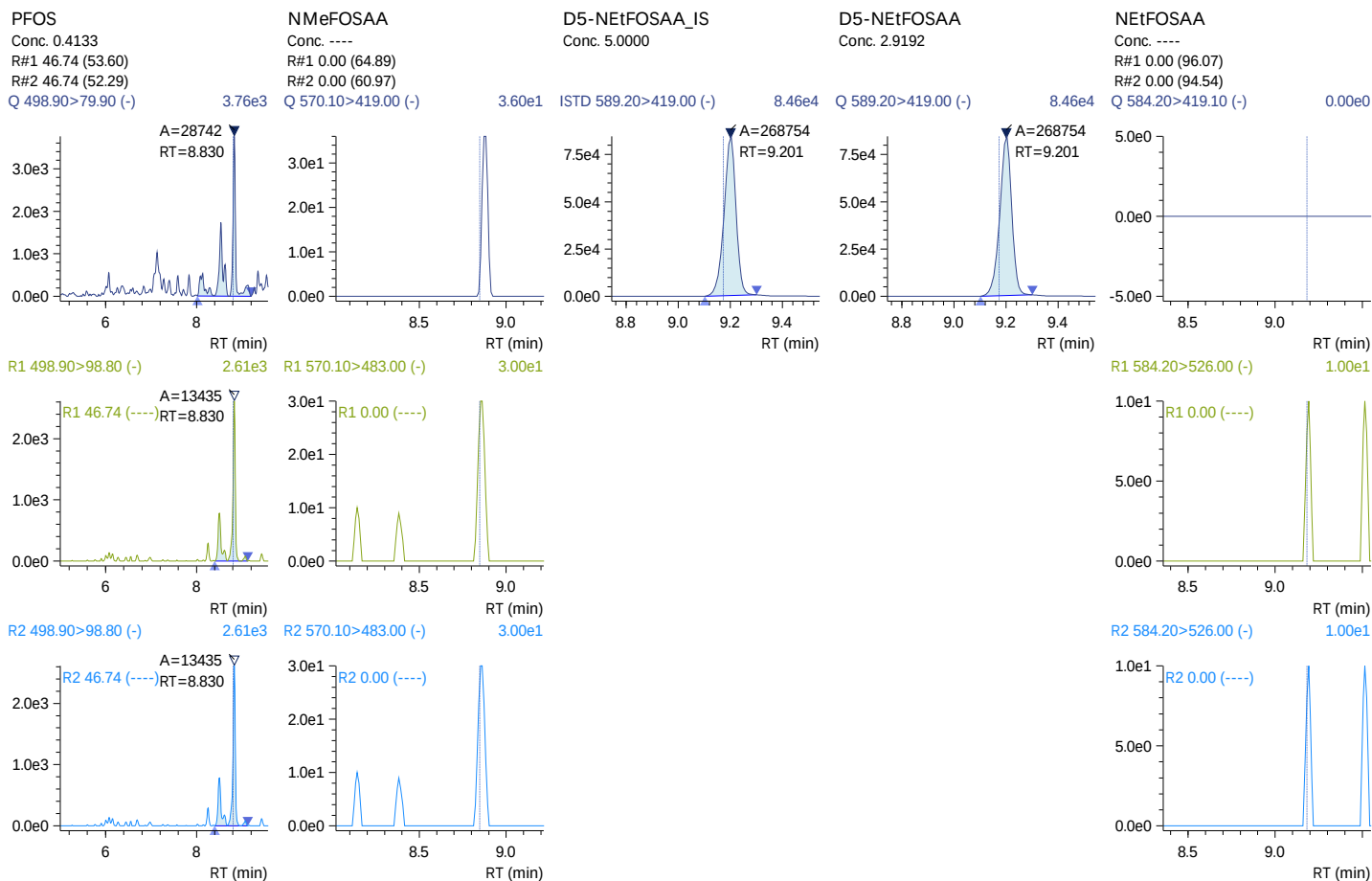


240201_035 (continued)





240201_035 (continued)

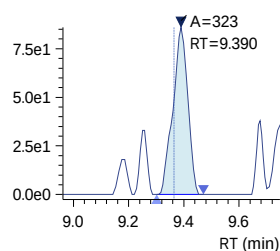




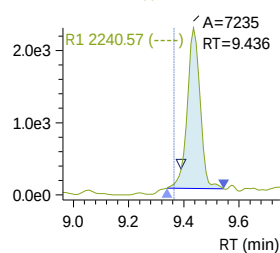
240201_035 (continued)

9-Cl-PF3ONS

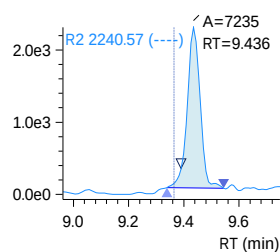
Conc. 0.0005
R#1 2240.57 (30.95)
R#2 2240.57 (30.61)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-) 2.31e3

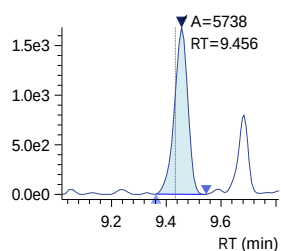


R2 532.80>353.00 (-) 2.31e3

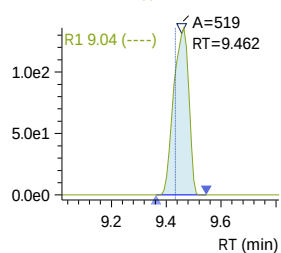


PFUnDA

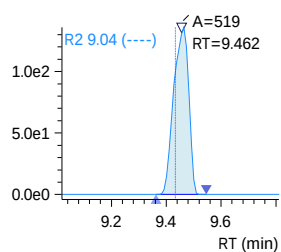
Conc. 0.0158
R#1 9.04 (11.01)
R#2 9.04 (12.02)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-) 1.36e2

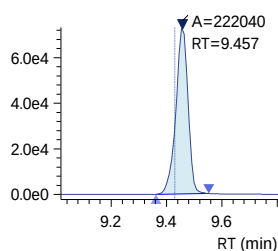


R2 563.10>269.10 (-) 1.36e2



13C7-PFUnDA_IS

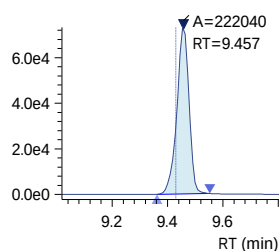
Conc. 1.2500
ISTD 570.00>525.10 (-)



7.33e4

13C7-PFUnDA

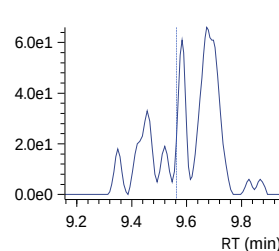
Conc. 1.2466
Q 570.00>525.10 (-)



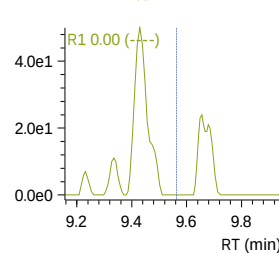
7.33e4

PFNS

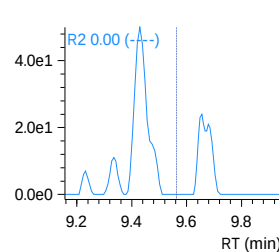
Conc. ----
R#1 0.00 (60.44)
R#2 0.00 (58.51)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-) 5.00e1



R2 548.80>98.80 (-) 5.00e1





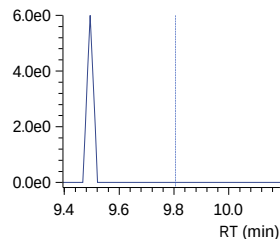
240201_035 (continued)

10_2 FTS
Conc. ----

R#1 0.00 (36.14)

R#2 0.00 (33.04)

Q 626.80>607.05 (-)

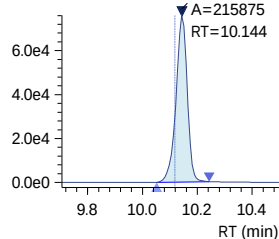


R1 626.80>81.00 (-)

6.00e0

13C2-PFDOA_IS
Conc. 1.2500

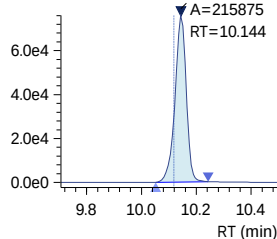
ISTD 615.10>570.00 (-)



7.61e4

13C2-PFDOA
Conc. 1.0153

Q 615.10>570.00 (-)



7.61e4

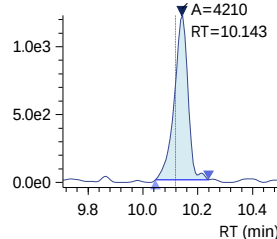
PFDOA

Conc. 0.0061

R#1 10.85 (10.16)

R#2 10.85 (10.60)

Q 613.10>569.00 (-)



1.23e3

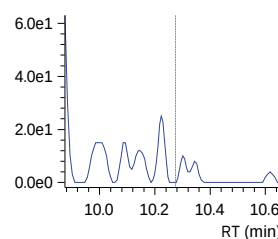
PFDS

Conc. ----

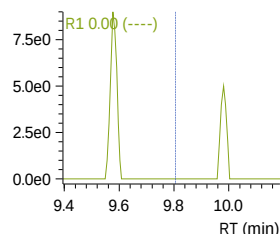
R#1 0.00 (58.26)

R#2 0.00 (61.78)

Q 599.00>79.90 (-)

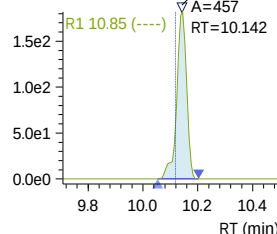


6.30e1

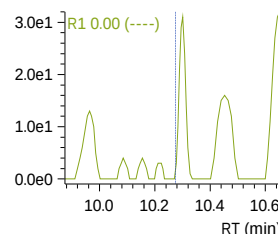


R2 626.80>81.00 (-)

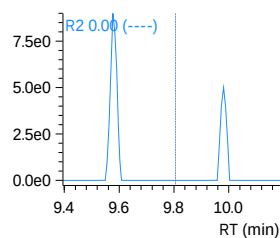
9.00e0



1.82e2

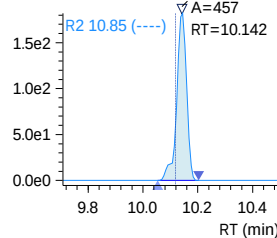


3.20e1

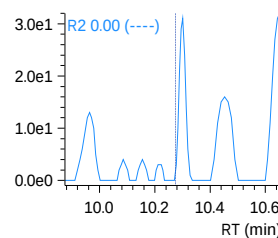


R2 626.80>81.00 (-)

9.00e0



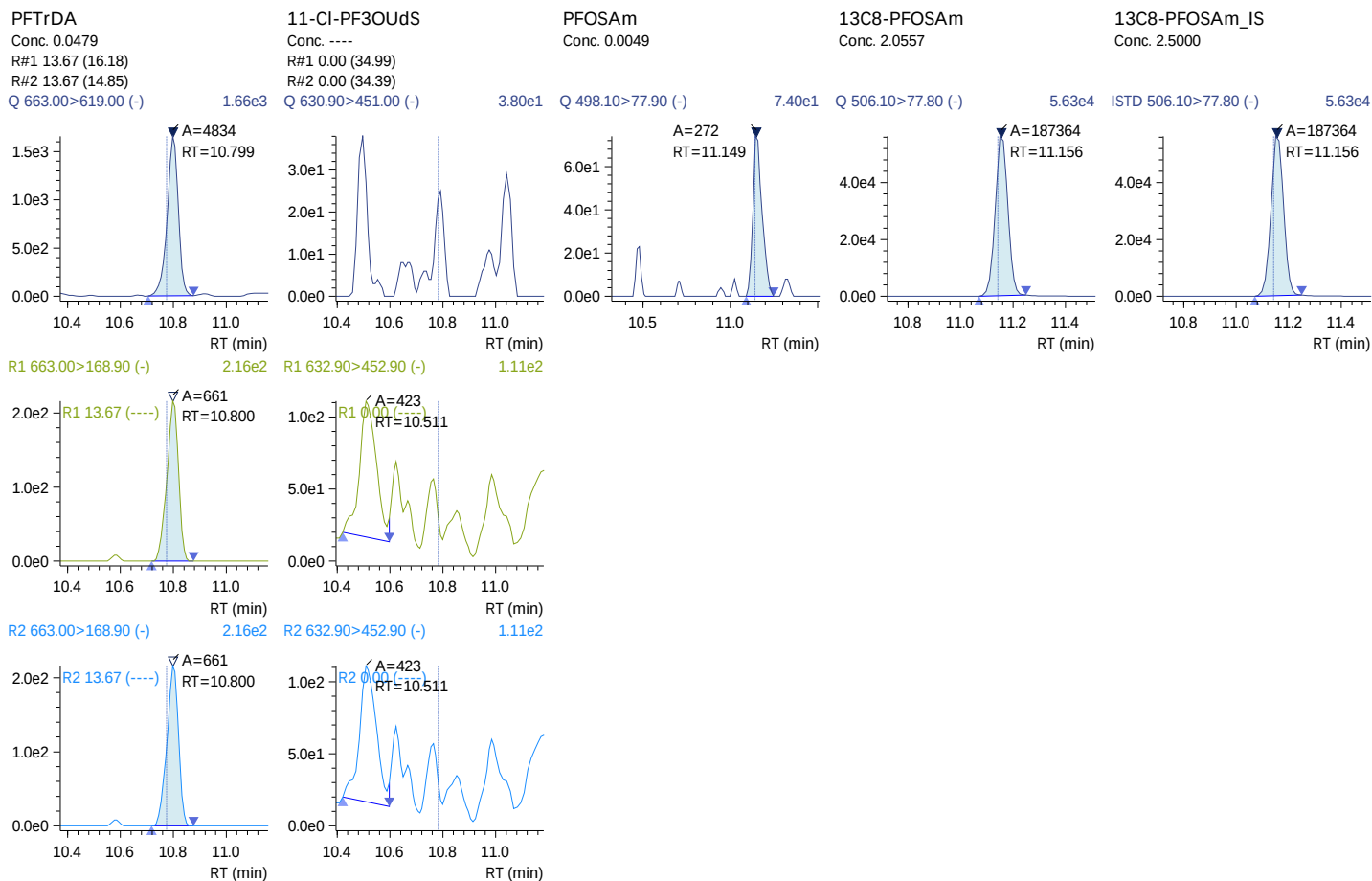
1.82e2



3.20e1

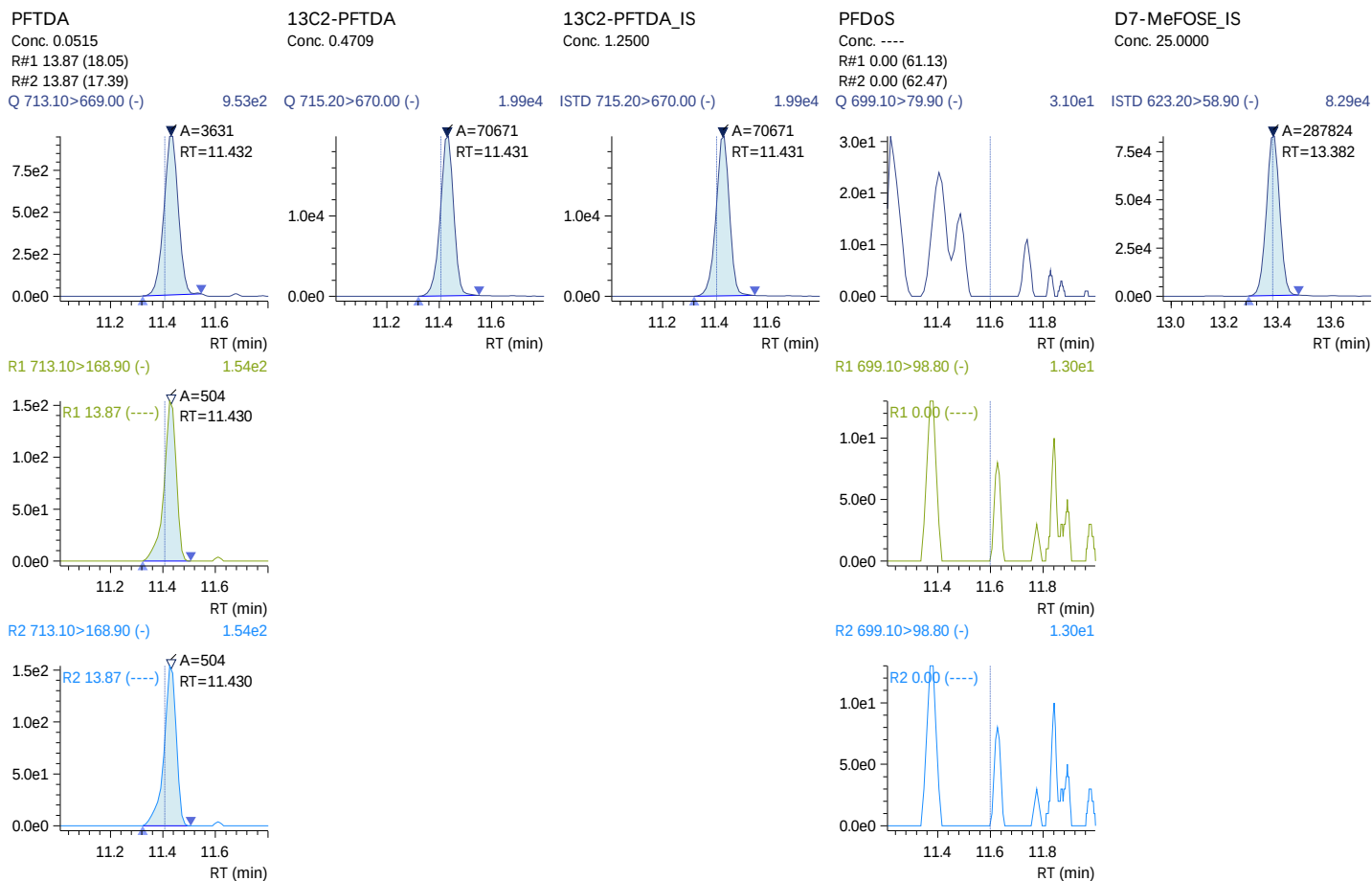


240201_035 (continued)





240201_035 (continued)





240201_035 (continued)

D7-MeFOSE
 Conc. 12.3014

MeFOSE
 Conc. ----

¹³C2-PFHxDA_IS
 Conc. 2.5000

¹³C2-PFHxDA
 Conc. 0.4685

PFHxDA
 Conc. 0.1061
 R#1 10.88 (11.66)
 R#2 10.88 (10.99)

Q 623.20>58.90 (-)

8.29e4

Q 616.10>59.00 (-)

7.30e1

ISTD 815.00>770.05 (-)

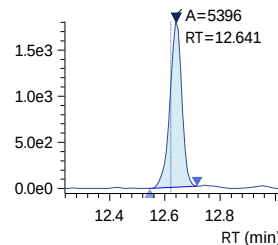
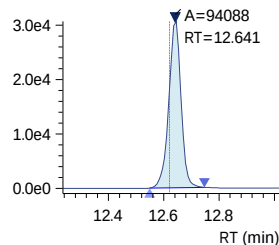
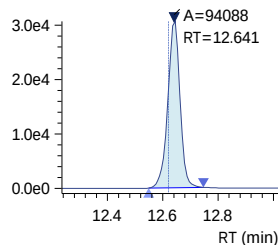
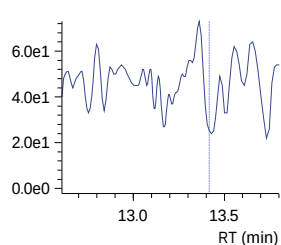
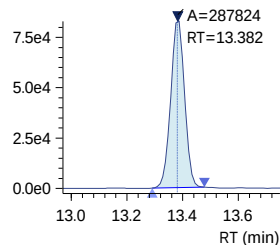
3.07e4

Q 815.00>770.05 (-)

3.07e4

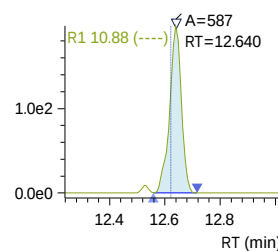
Q 813.00>768.95 (-)

1.81e3



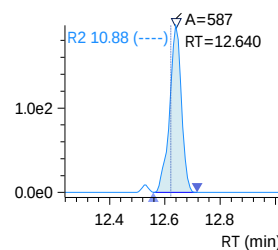
R1 813.00>218.95 (-)

1.98e2



R2 813.00>218.95 (-)

1.98e2





240201_035 (continued)

D3-MeFOSA
 Conc. 1.1668

D3-MeFOSA_IS
 Conc. 2.5000

MeFOSA
 Conc. ----
 R#1 0.00 (160.44)
 R#2 0.00 (161.92)

D9-EtFOSE_IS
 Conc. 25.0000

D9-EtFOSE
 Conc. 11.0817

Q 515.00>219.00 (-)

7.89e3

ISTD 515.00>219.00 (-)

7.89e3

Q 511.90>219.00 (-)

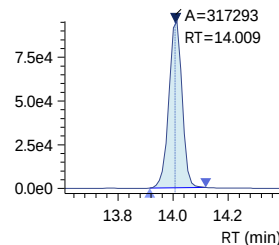
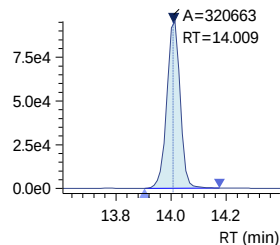
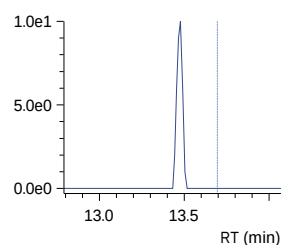
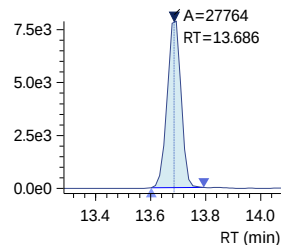
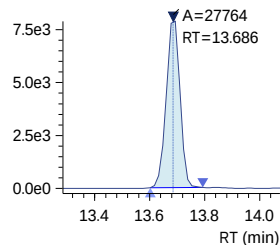
1.00e1

ISTD 639.20>58.90 (-)

9.56e4

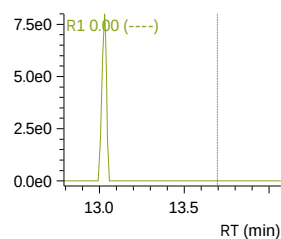
Q 639.20>58.90 (-)

9.56e4



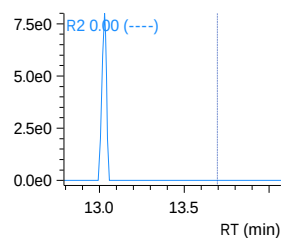
R1 511.90>169.00 (-)

8.00e0



R2 511.90>169.00 (-)

8.00e0





240201_035 (continued)

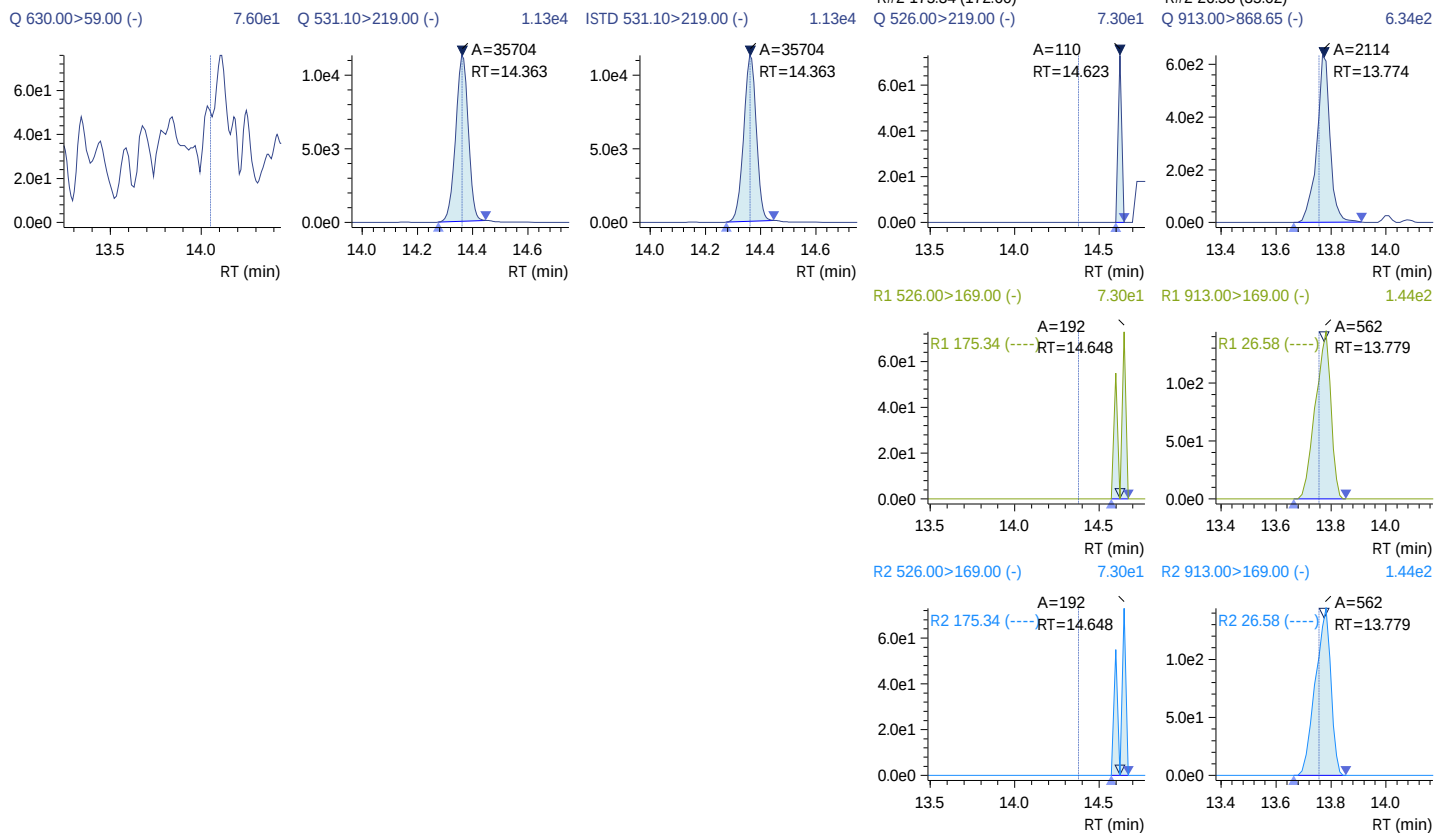
EtFOSE
 Conc. ----

D5-EtFOSAm
 Conc. 1.0852

D5-EtFOSAm_IS
 Conc. 2.5000

EtFOSAm
 Conc. 0.0106
 R#1 175.34 (159.63)
 R#2 175.34 (172.60)

PFODA
 Conc. 0.1294
 R#1 26.58 (36.03)
 R#2 26.58 (35.02)



Validation Report

1st *PS* 01/25/24
2nd *MS* 01/25/24

Data File: J:\LCMS08\Data\240122_1633_B1\240122_030
Lab ID: KQ2400483-04
RunType: MB
Matrix: Water

Date Acquired: 1/22/24 20:59
Batch ID: 830573
Analysis Method: 1633/PFAS_DOD5.4

Validations

Validation Categories	Pass	Fail
Analytical Hold Time	X	
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery		X
Continuing Calibration Recovery (Closing)		X
Internal Standards	X	
Surrogates	X	
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Continuing Calibration Recovery	N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	136	70	130	high bias, native <MRL
	D3-MeFOSAA	138	70	130	native in control
	13C2-4:2 FTS	163	70	130	
	13C2-6:2 FTS	170	70	130	
	13C2-8:2 FTS	162	70	130	
Continuing Calibration Recovery (Closing)	N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	160	70	130	high bias, native <MRL
	Perfluoro-3-methoxypropanoic acid (PFMPA)	135	70	130	
	D9-EtFOSE	131	70	130	native in control
	D3-MeFOSAA	142	70	130	
	13C2-4:2 FTS	156	70	130	
	13C2-6:2 FTS	136	70	130	
	13C2-8:2 FTS	142	70	130	

Primary Review: _____

Secondary Review: _____

Quantitation Report

1st *PS* 01/25/24
2nd *MS* 01/25/24

Data File:	J:\LCMS08\Data\240122_1633_B1\240122_030	Instrument:	K-LCMS-08
Acqu Date:	1/22/24 20:59	Vial:	50
Run Type:	MB	Dilution:	1
Lab ID:	KQ2400483-04	Raw Units:	ng/mL

Bottle ID:		Tier:	IV	Matrix:	Water
Prod Code:	PFAS_DOD5.4	Collect Date:	12/27/23	Receive Date:	12/28/23

Analysis Lot:	830573	Prep Lot:	432516	Report Group:	KQ2400483
Analysis	1633	Prep Method:	Method		
		Prep Date:	1/11/24		

Title:	Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM	Calibration ID:	KC2400027
		Report List ID:	24615

Internal Standard Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Area Criteria
18O2-PFHxS	7.075	+0.00	137492	2.5000	OK
13C4-PFOS	8.815		161457	2.5000	OK
13C3-PFBA	1.426	+0.04	384255	5.0000	OK
13C2-PFHxA	4.964	+0.01	399220	2.5000	OK
13C4-PFOA	7.102	+0.00	30935	2.5000	OK
13C5-PFNA	7.952		189151	1.2500	OK
13C2-PFDA	8.719	0.00	143718	1.2500	OK

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
13C3-PFBS	4.629	+0.01	182758	2.3423	94	40 - 135	Y
13C3-PFHxS	7.075	+0.00	128905	2.1843	87	40 - 130	Y
13C8-PFOS	8.815	+0.00	53262	1.9780	79	40 - 130	Y
13C4-PFBA	1.426	+0.04	886550	10.3222	103	5 - 130	Y
13C5-PFPeA	3.483	+0.02	81495	4.5224	90	40 - 130	Y
13C5-PFHxA	4.963	+0.01	401526	2.3865	95	40 - 130	Y
13C4-PFHpA	6.144	+0.00	422929	2.7768	111	40 - 130	Y
13C8-PFOA	7.102	+0.00	428238	2.4767	99	40 - 130	Y
13C9-PFNA	7.952		188437	1.2723	102	40 - 130	Y
13C6-PFDA	8.718	0.00	148540	1.2847	103	40 - 130	Y
13C7-PFUnDA	9.444		159367	1.1555	92	30 - 130	Y
13C2-PFDoDA	10.131	0.00	168695	1.0646	85	10 - 130	Y
13C2-PFTeDA	11.422	0.00	60659	0.8866	71	10 - 130	Y
13C8-FOSA	11.163	-0.01	162268	2.3674	95	40 - 130	Y
D3-MeFOSA	13.706	-0.01	26328	1.9074	76	10 - 130	Y
D5-EtFOSA	14.382	-0.01	38246	2.0812	83	10 - 130	Y
D7-MeFOSE	13.400	-0.01	422996	25.0313	100	10 - 130	Y
D9-EtFOSE	14.028	-0.01	413028	24.0648	96	10 - 130	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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			1st	PS	01/25/24
Data File:	J:\LCMS08\Data\240122_1633_B1\240122_030	Instrument:	K-LCMS08	MS	01/25/24
Acqu Date:	1/22/24 20:59	Vial:	50		
Run Type:	MB	Dilution:	1		
Lab ID:	KQ2400483-04	Raw Units:	ng/mL		

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
D3-MeFOSAA	8.857	0.00	167542	5.9789	120	40 - 170	Y
D5-EtFOSAA	9.189	0.00	166377	4.9628	99	25 - 135	Y
13C2-4:2 FTS	4.646	+0.00	139364	7.3657	147	40 - 200	Y
13C2-6:2 FTS	6.785		134157	7.4968	150	40 - 200	Y
13C2-8:2 FTS	8.407	0.00	104683	7.1213	142	40 - 300	Y
13C3-HFPO-DA	5.440	+0.01	455192	11.6476	116	40 - 130	Y

Target Compounds

Final Conc.Units: ng/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Perfluorobutane sulfonic acid (PFBS)	0		0	0	0	U	Y
Perfluoropentane sulfonic acid (PFPeS)	0		0	0	0	U	Y
Perfluorohexane sulfonic acid (PFHxS)	7.084	+0.01	749	-0.0070	0	U	Y
Perfluoroheptane sulfonic acid (PFHpS)	0		0	0	0	U	Y
Perfluorooctane sulfonic acid (PFOS)	0		0	0	0	U	Y
Perfluorononane sulfonic acid (PFNS)	0		0	0	0	U	Y
Perfluorodecane sulfonic acid (PFDS)	0		0	0	0	U	Y
Perfluorododecane sulfonic acid (PFDoS)	0		0	0	0	U	Y
Perfluorobutanoic acid (PFBA)	1.447	+0.06	1364	0.0179	0.36	U	Y
Perfluoropentanoic acid (PFPeA)	3.485	+0.01	2198	0.0208	0.42	U	Y
Perfluorohexanoic acid (PFHxA)	4.964	+0.01	1576	0.0034	0.068	U	Y
Perfluoroheptanoic acid (PFHpA)	6.124	-0.02	5875	-0.0013	0	U	Y
Perfluorooctanoic acid (PFOA)	7.101	0.00	5797	0.0087	0.17	U	Y
Perfluorononanoic acid (PFNA)	7.949	0.00	3958	0.0061	0.12	U	Y
Perfluorodecanoic acid (PFDA)	8.716	-0.01	3576	-0.0002	0	U	Y
Perfluoroundecanoic acid (PFUnDA)	9.447	+0.00	3190	-0.0021	0	U	Y
Perfluorododecanoic acid (PFDOA)	10.134	+0.00	2417	-0.0074	0	U	Y
Perfluorotridecanoic acid (PFTTrDA)	10.793	+0.00	3390	0.0086	0.17	U	Y
Perfluorotetradecanoic acid (PFTDA)	11.422	0.00	2651	0.0129	0.26	U	Y
Perfluorooctane sulfonamide (PFOSAm)	11.172	+0.00	40	0.0008	0.016	U	Y
N-Methylperfluorooctane sulfonamide (MeFOSA)	0		0	0	0	U	Y
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	0		0	0	0	U	Y
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	0		0	0	0	U	Y
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	0		0	0	0	U	Y
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	8.850	-0.01	21	0.0005	0.010	U	Y

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D: Result from dilution

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d: Compound manually deleted

NR: Analyte not reported from this analysis

*: Result fails acceptance criteria

#: Acceptance criteria not applicable

?: Insufficient information to determine acceptance

e: Result >= MRL, but MRL less than low point of ICAL

c: check for co-elution

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			1st	PS	01/25/24
Data File:	J:\LCMS08\Data\240122_1633_B1\240122_030	Instrument:	K-LCMS08	MS	01/25/24
Acqu Date:	1/22/24 20:59	Vial:	50		
Run Type:	MB	Dilution:	1		
Lab ID:	KQ2400483-04	Raw Units:	ng/mL		

Target Compounds			Final Conc.Units: ng/L				
Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	0		0	0	0	U	Y
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	4.642	+0.00	150	0.0022	0.044	U	Y
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	6.793	+0.01	420	0.0069	0.14	U	Y
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	0		0	0	0	U	Y
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	0		0	0	0	U	Y
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	0		0	0	0	U	Y
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	0		0	0	0	U	Y
Perfluoro(2-ethoxyethane) sulfonic acid (PFEESA)	0		0	0	0	U	Y
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	0		0	0	0	U	Y
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	0		0	0	0	U	Y
Perfluoro-3-methoxypropanoic acid (PFMPA)	2.433	+0.03	204	0.0039	0.078	U	Y
Perfluoro-4-methoxybutanoic acid (PFMBA)	4.009	+0.01	47	0.0006	0.012	U	Y
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	0		0	0	0	U	Y
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	4.830	+0.02	674	0.0076	0.15	U	Y
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	0		0	0	0	U	Y

Prep Amount:	250 mL	Dilution:	1
Prep Final Amount:	5.00 mL	Basis Factor:	100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution



240122_030

Sample ID: KQ2400483-04
Date Acquired: 1/22/2024 8:59:54 PM
Acquired by: System Administrator
Data File: 240122_030
Vial: 10 | Inj. Volume: 10.0000uL | Tray: 2

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	886550	----	----	----	----	----	----	----
13C4-PFBA_IS	216.80>171.90	----	886550	----	----	----	----	----	----	----
13C3-PFBA_IS	216.00>172.00	----	384255	----	----	----	----	----	----	----
PFBA	212.80>169.05	----	1364	----	----	----	----	----	----	----
PFMPA	229.00>84.90	----	204	----	----	----	----	----	----	----
3_3 FTCA	241.00>177.10	241.00>117.00	----	0	0.00	141.17	0	0.00	135.52	
13C5-PFPeA	268.30>223.00	----	81495	----	----	----	----	----	----	----
13C5-PFPeA_IS	268.30>223.00	----	81495	----	----	----	----	----	----	----
PFPeA	263.00>219.00	----	2198	----	----	----	----	----	----	----
PFMBA	279.00>84.95	----	47	----	----	----	----	----	----	----
13C2-4_2 FTS	329.10>80.90	----	139364	----	----	----	----	----	----	----
13C2-4_2 FTS_IS	329.10>80.90	----	139364	----	----	----	----	----	----	----
4_2 FTS	327.10>307.00	327.10>80.90	150	48	31.92	29.06	48	31.92	35.34	
13C3-PFBS_IS	302.10>79.90	----	182758	----	----	----	----	----	----	----
PFBS	298.70>79.90	298.70>98.80	----	0	0.00	46.72	0	0.00	49.78	
13C3-PFBS	302.10>79.90	----	182758	----	----	----	----	----	----	----
NFDHA	295.00>201.00	295.00>84.90	674	201	29.79	40.25	201	29.79	37.18	
13C5-PFHxA	318.00>273.00	----	401526	----	----	----	----	----	----	----
13C5-PFHxA_IS	318.00>273.00	----	401526	----	----	----	----	----	----	----
13C2-PFHxA_IS	315.10>270.00	----	399220	----	----	----	----	----	----	----
PFHxA	313.00>269.00	----	1576	----	----	----	----	----	----	----
PFEESA	314.80>135.00	314.80>82.90	----	0	0.00	6.11	0	0.00	5.72	
13C3-HFPO-DA	286.90>168.90	----	455192	----	----	----	----	----	----	----
13C3-HFPO-DA_IS	286.90>168.90	----	455192	----	----	----	----	----	----	----
HFPO-DA	284.90>168.90	284.90>184.90	----	0	0.00	65.61	0	0.00	60.94	
5_3 FTCA	341.00>237.05	341.00>217.00	----	0	0.00	158.86	0	0.00	155.83	
PFPeS	349.10>79.90	349.10>98.80	----	0	0.00	55.80	0	0.00	56.73	
13C4-PFHpA	367.10>322.00	----	422929	----	----	----	----	----	----	----
13C4-PFHpA_IS	367.10>322.00	----	422929	----	----	----	----	----	----	----
PFHpA	363.10>319.00	363.10>169.00	5875	1425	24.25	21.50	1425	24.25	21.92	
DONA	376.90>250.90	376.90>84.80	----	0	0.00	29.66	0	0.00	30.77	
13C2-6_2 FTS_IS	429.10>80.90	----	134157	----	----	----	----	----	----	----
13C2-6_2 FTS	429.10>80.90	----	134157	----	----	----	----	----	----	----
6_2 FTS	427.10>407.00	427.10>80.90	420	246	58.64	41.15	246	58.64	40.98	
13C4-PFOA_IS	417.10>172.00	----	30935	----	----	----	----	----	----	----
13C8-PFOA_IS	421.10>376.00	----	428238	----	----	----	----	----	----	----

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240122_030 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	428238	----	----	----	----	----	----	----
PFOA	413.00>369.00	413.00>169.00	5797	1322	22.80	31.89	1322	22.80	32.23	
13C3-PFHxS	402.10>79.90	----	128905	----	----	----	----	----	----	----
13C3-PFHxS_IS	402.10>79.90	----	128905	----	----	----	----	----	----	----
PFHxS	398.70>79.90	398.70>98.90	749	230	30.66	56.62	230	30.66	60.26	
18O2-PFHxS_IS	403.00>83.90	----	137492	----	----	----	----	----	----	----
13C9-PFNA_IS	472.10>427.00	----	188437	----	----	----	----	----	----	----
13C9-PFNA	472.10>427.00	----	188437	----	----	----	----	----	----	----
13C5-PFNA_IS	468.00>423.00	----	189151	----	----	----	----	----	----	----
PFNA	463.00>419.00	463.00>219.00	3958	619	15.65	23.17	619	15.65	23.63	
PFHpS	449.00>79.90	449.00>98.80	----	0	0.00	56.96	0	0.00	59.06	
7_3 FTCA	441.00>317.00	441.00>336.90	----	0	0.00	117.47	0	0.00	125.53	
13C2-8_2-FTS	529.10>80.90	----	104683	----	----	----	----	----	----	----
13C2-8_2-FTS_IS	529.10>80.90	----	104683	----	----	----	----	----	----	----
8_2 FTS	527.10>506.95	527.10>80.80	----	0	0.00	49.59	0	0.00	44.81	
13C6-PFDA_IS	519.10>474.10	----	148540	----	----	----	----	----	----	----
13C6-PFDA	519.10>474.10	----	148540	----	----	----	----	----	----	----
13C2-PFDA_IS	515.10>470.10	----	143718	----	----	----	----	----	----	----
PFDA	512.90>469.00	512.90>219.00	3576	659	18.44	19.00	659	18.44	19.15	
D3-NMeFOSAA_IS	573.20>419.00	----	167542	----	----	----	----	----	----	----
D3-NMeFOSAA	573.20>419.00	----	167542	----	----	----	----	----	----	----
13C8-PFOS_IS	507.10>98.90	----	53262	----	----	----	----	----	----	----
13C8-PFOS	507.10>98.90	----	53262	----	----	----	----	----	----	----
13C4-PFOS_IS	502.80>79.90	----	161457	----	----	----	----	----	----	----
PFOS	498.90>79.90	498.90>98.80	----	0	0.00	52.47	0	0.00	53.10	
NMeFOSAA	570.10>419.00	570.10>483.00	21	107	521.17	55.15	107	521.17	60.69	IRr
D5-NEtFOSAA_IS	589.20>419.00	----	166377	----	----	----	----	----	----	----
D5-NEtFOSAA	589.20>419.00	----	166377	----	----	----	----	----	----	----
NEtFOSAA	584.20>419.10	584.20>526.00	----	0	0.00	81.95	0	0.00	73.27	
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	----	0	0.00	32.76	0	0.00	32.59	
PFUnDA	563.10>519.00	563.10>269.10	3190	500	15.68	13.12	500	15.68	14.36	
13C7-PFUnDA_IS	570.00>525.10	----	159367	----	----	----	----	----	----	----
13C7-PFUnDA	570.00>525.10	----	159367	----	----	----	----	----	----	----
PFNS	548.80>79.90	548.80>98.80	----	0	0.00	65.22	0	0.00	65.31	
10_2 FTS	626.80>607.05	626.80>81.00	----	0	0.00	37.13	0	0.00	38.76	
13C2-PFDOA_IS	615.10>570.00	----	168695	----	----	----	----	----	----	----
13C2-PFDOA	615.10>570.00	----	168695	----	----	----	----	----	----	----
PFDOA	613.10>569.00	613.10>319.00	2417	165	6.81	11.29	165	6.81	11.19	
PFDS	599.00>79.90	599.00>98.80	----	0	0.00	60.18	0	0.00	65.65	
PFTrDA	663.00>619.00	663.00>168.90	3390	703	20.75	17.64	703	20.75	19.81	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240122_030 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	----	0	0.00	36.44	0	0.00	35.86	
PFOSAm	498.10>77.90	----	40	----	----	----	----	----	----	
13C8-PFOSAm	506.10>77.80	----	162268	----	----	----	----	----	----	
13C8-PFOSAm_IS	506.10>77.80	----	162268	----	----	----	----	----	----	
PFTDA	713.10>669.00	713.10>168.90	2651	676	25.50	22.96	676	25.50	25.01	
13C2-PFTDA	715.20>670.00	----	60659	----	----	----	----	----	----	
13C2-PFTDA_IS	715.20>670.00	----	60659	----	----	----	----	----	----	
PFDoS	699.10>79.90	699.10>98.80	----	0	0.00	67.40	0	0.00	73.46	
D7-MeFOSE_IS	623.20>58.90	----	422996	----	----	----	----	----	----	
D7-MeFOSE	623.20>58.90	----	422996	----	----	----	----	----	----	
MeFOSE	616.10>59.00	----	----	----	----	----	----	----	----	
13C2-PFHxDA_IS	815.00>770.05	----	194017	----	----	----	----	----	----	
13C2-PFHxDA	815.00>770.05	----	194017	----	----	----	----	----	----	
PFHxDA	813.00>768.95	813.00>218.95	2661	459	17.26	13.90	459	17.26	15.85	
D3-MeFOSA	515.00>219.00	----	26328	----	----	----	----	----	----	
D3-MeFOSA_IS	515.00>219.00	----	26328	----	----	----	----	----	----	
MeFOSA	511.90>219.00	511.90>169.00	----	0	0.00	140.79	0	0.00	153.61	
D9-EtFOSE_IS	639.20>58.90	----	413028	----	----	----	----	----	----	
D9-EtFOSE	639.20>58.90	----	413028	----	----	----	----	----	----	
EtFOSE	630.00>59.00	----	----	----	----	----	----	----	----	
D5-EtFOSAm	531.10>219.00	----	38246	----	----	----	----	----	----	
D5-EtFOSAm_IS	531.10>219.00	----	38246	----	----	----	----	----	----	
EtFOSAm	526.00>219.00	526.00>169.00	----	0	0.00	163.90	0	0.00	152.08	
PFODA	913.00>868.65	913.00>169.00	1627	234	14.40	27.03	234	14.40	26.29	

Flag ID key: IRr: Ion Ratio (Relative)



240122_030

Sample ID: KQ2400483-04
Date Acquired: 1/22/2024 8:59:54 PM
Acquired by: System Administrator
Data File: 240122_030
Vial: 10 | Inj. Volume: 10.0000uL | Tray: 2

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.426	0.035	0.000	886550	384255	13C3-PFBA_IS	10.3222	ng/mL	
13C4-PFBA_IS	Auto	1.426	0.035	----	886550	886550	----	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.426	0.035	----	384255	384255	----	5.0000	ng/mL	
PFBA	M	1.447	0.052	0.021	1364	886550	13C4-PFBA_IS	0.0179	ng/mL	
PFMPA	M	2.433	0.027	-1.050	204	81495	13C5-PFPeA_IS	0.0039	ng/mL	
3_3 FTCA	ND(W/B)	----	----	----	----	81495	13C5-PFPeA_IS	----	ng/mL	
13C5-PFPeA	Auto	3.483	0.018	-1.481	81495	399220	13C2-PFHxA_IS	4.5224	ng/mL	
13C5-PFPeA_IS	Auto	3.483	0.018	----	81495	81495	----	5.0000	ng/mL	
PFPeA	M	3.485	0.018	0.002	2198	81495	13C5-PFPeA_IS	0.0208	ng/mL	
PFMBA	M	4.009	0.018	0.526	47	81495	13C5-PFPeA_IS	0.0006	ng/mL	
13C2-4_2 FTS	Auto	4.646	0.010	-2.429	139364	137492	18O2-PFHxS_IS	7.3657	ng/mL	
13C2-4_2 FTS_IS	Auto	4.646	0.010	----	139364	139364	----	5.0000	ng/mL	
4_2 FTS	M	4.642	0.005	-0.004	150	139364	13C2-4_2 FTS_IS	0.0022	ng/mL	
13C3-PFBS_IS	Auto	4.629	0.017	----	182758	182758	----	2.5000	ng/mL	
PFBS	ND(W/B)	----	----	----	----	182758	13C3-PFBS_IS	----	ng/mL	
13C3-PFBS	Auto	4.629	0.017	-2.446	182758	137492	18O2-PFHxS_IS	2.3423	ng/mL	
NFDHA	M	4.830	0.020	-0.133	674	401526	13C5-PFHxA_IS	0.0076	ng/mL	
13C5-PFHxA	Auto	4.963	0.011	-0.001	401526	399220	13C2-PFHxA_IS	2.3865	ng/mL	
13C5-PFHxA_IS	Auto	4.963	0.011	----	401526	401526	----	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	4.964	0.011	----	399220	399220	----	2.5000	ng/mL	
PFHxA	M	4.964	0.010	0.001	1576	401526	13C5-PFHxA_IS	0.0034	ng/mL	
PFEESA	ND(W/B)	----	----	----	----	401526	13C5-PFHxA_IS	----	ng/mL	
13C3-HFPO-DA	Auto	5.440	0.010	0.476	455192	399220	13C2-PFHxA_IS	11.6476	ng/mL	
13C3-HFPO-DA_IS	Auto	5.440	0.010	----	455192	455192	----	10.0000	ng/mL	
HFPO-DA	ND(W/B)	----	----	----	----	455192	13C3-HFPO-DA_IS	----	ng/mL	
5_3 FTCA	ND(W/B)	----	----	----	----	401526	13C5-PFHxA_IS	----	ng/mL	
PFPeS	ND(W/B)	----	----	----	----	128905	13C3-PFHxS_IS	----	ng/mL	
13C4-PFHpA	Auto	6.144	0.007	1.180	422929	399220	13C2-PFHxA_IS	2.7768	ng/mL	
13C4-PFHpA_IS	Auto	6.144	0.007	----	422929	422929	----	2.5000	ng/mL	
PFHpA	M	6.124	-0.015	-0.020	5875	422929	13C4-PFHpA_IS	-0.0013	ng/mL	
DONA	ND(W/B)	----	----	----	----	455192	13C3-HFPO-DA_IS	----	ng/mL	
13C2-6_2 FTS_IS	Auto	6.785	0.004	----	134157	134157	----	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.785	0.004	-0.290	134157	137492	18O2-PFHxS_IS	7.4968	ng/mL	
6_2 FTS	M	6.793	0.011	0.007	420	134157	13C2-6_2 FTS_IS	0.0069	ng/mL	
13C4-PFOA_IS	Auto	7.102	0.005	----	30935	30935	----	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.102	0.006	----	428238	428238	----	2.5000	ng/mL	
13C8-PFOA	Auto	7.102	0.006	0.000	428238	30935	13C4-PFOA_IS	2.4767	ng/mL	
PFOA	Auto	7.101	0.003	-0.001	5797	428238	13C8-PFOA_IS	0.0087	ng/mL	
13C3-PFHxS	Auto	7.075	0.007	0.000	128905	137492	18O2-PFHxS_IS	2.1843	ng/mL	
13C3-PFHxS_IS	Auto	7.075	0.007	----	128905	128905	----	2.5000	ng/mL	
PFHxS	M	7.084	0.015	0.009	749	128905	13C3-PFHxS_IS	-0.0070	ng/mL	
18O2-PFHxS_IS	Auto	7.075	0.006	----	137492	137492	----	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.952	0.005	----	188437	188437	----	1.2500	ng/mL	
13C9-PFNA	Auto	7.952	0.005	0.000	188437	189151	13C5-PFNA_IS	1.2723	ng/mL	
13C5-PFNA_IS	Auto	7.952	0.004	----	189151	189151	----	1.2500	ng/mL	
PFNA	M	7.949	0.001	-0.003	3958	188437	13C9-PFNA_IS	0.0061	ng/mL	
PFHpS	ND(W/B)	----	----	----	----	53262	13C8-PFOS_IS	----	ng/mL	
7_3 FTCA	ND(W/B)	----	----	----	----	401526	13C5-PFHxA_IS	----	ng/mL	
13C2-8_2-FTS	Auto	8.407	0.004	1.332	104683	137492	18O2-PFHxS_IS	7.1213	ng/mL	
13C2-8_2-FTS_IS	Auto	8.407	0.004	----	104683	104683	----	5.0000	ng/mL	
8_2 FTS	ND(W/B)	----	----	----	----	104683	13C2-8_2-FTS_IS	----	ng/mL	
13C6-PFDA_IS	Auto	8.718	0.005	----	148540	148540	----	1.2500	ng/mL	
13C6-PFDA	Auto	8.718	0.005	-0.001	148540	143718	13C2-PFDA_IS	1.2847	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_030 (continued)

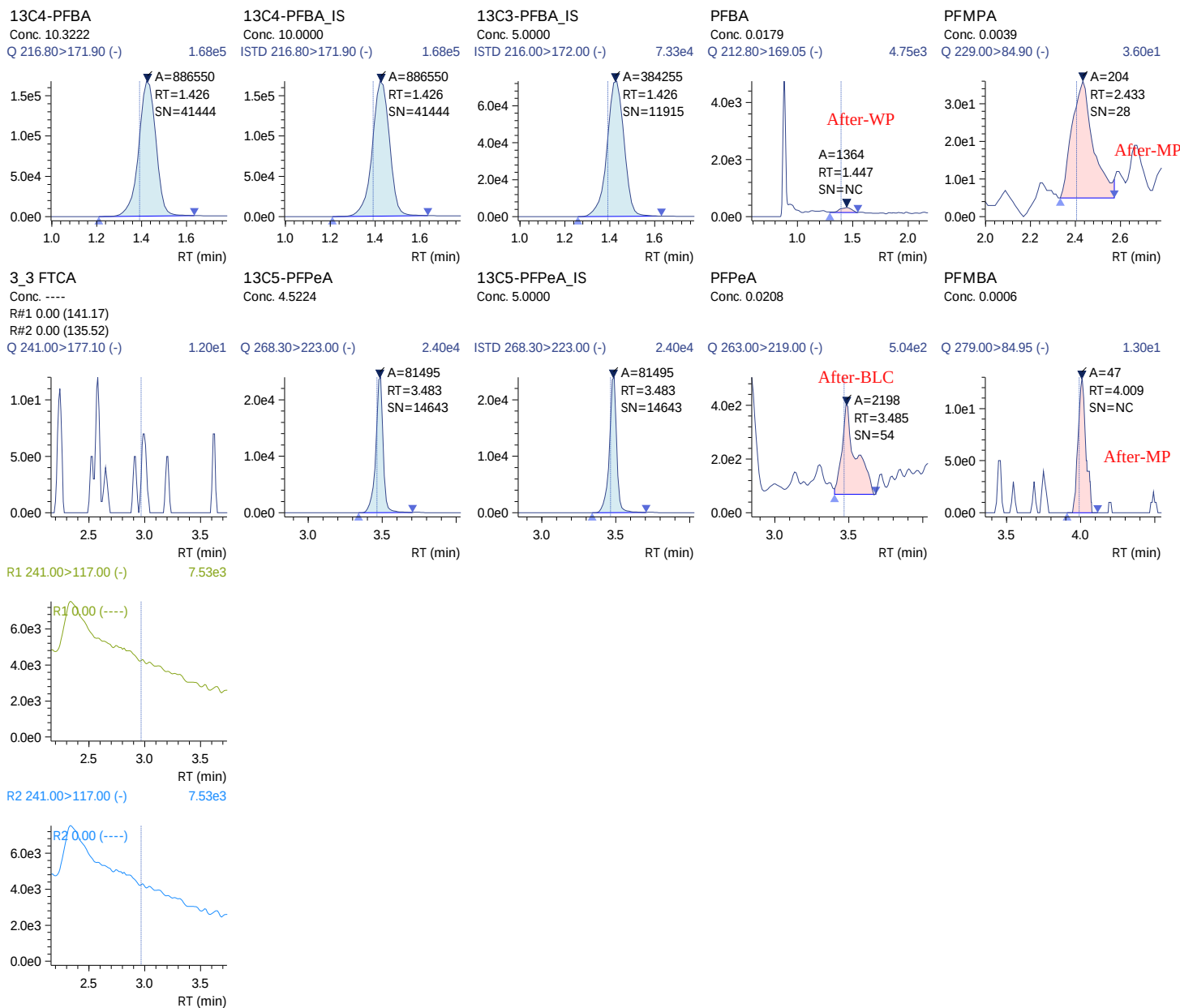
(Table continued from previous page)

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C2-PFDA_IS	Auto	8.719	0.006	----	143718	143718	----	1.2500	ng/mL	
PFDA	Auto	8.716	0.001	-0.002	3576	148540	13C6-PFDA_IS	-0.0002	ng/mL	
D3-NMeFOSAA_IS	Auto	8.857	0.006	----	167542	167542	----	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.857	0.006	0.042	167542	161457	13C4-PFOS_IS	5.9789	ng/mL	
13C8-PFOS_IS	Auto	8.815	0.007	----	53262	53262	----	2.5000	ng/mL	
13C8-PFOS	Auto	8.815	0.007	0.000	53262	161457	13C4-PFOS_IS	1.9780	ng/mL	
13C4-PFOS_IS	Auto	8.815	0.006	----	161457	161457	----	2.5000	ng/mL	
PFOS	ND(W/B)	----	----	----	----	53262	13C8-PFOS_IS	----	ng/mL	
NMeFOSAA	M	8.850	-0.007	-0.007	21	167542	D3-NMeFOSAA_IS	0.0005	ng/mL	IRr
D5-NetFOSAA_IS	Auto	9.189	0.006	----	166377	166377	----	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.189	0.006	0.374	166377	161457	13C4-PFOS_IS	4.9628	ng/mL	
NetFOSAA	ND(W/B)	----	----	----	----	166377	D5-NetFOSAA_IS	----	ng/mL	
9-CI-PF3ONS	ND(W/B)	----	----	----	----	455192	13C3-HFPO-DA_IS	----	ng/mL	
PFUnDA	M	9.447	0.007	0.003	3190	159367	13C7-PFUnDA_IS	-0.0021	ng/mL	
13C7-PFUnDA_IS	Auto	9.444	0.006	----	159367	159367	----	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.444	0.006	0.725	159367	143718	13C2-PFDA_IS	1.1555	ng/mL	
PFNS	ND(W/B)	----	----	----	----	53262	13C8-PFOS_IS	----	ng/mL	
10_2_FTS	ND(W/B)	----	----	----	----	104683	13C2-8_2-FTS_IS	----	ng/mL	
13C2-PFDOA_IS	Auto	10.131	0.003	----	168695	168695	----	1.2500	ng/mL	
13C2-PFDOA	Auto	10.131	0.003	1.412	168695	143718	13C2-PFDA_IS	1.0646	ng/mL	
PFDOA	M	10.134	0.005	0.003	2417	168695	13C2-PFDOA_IS	-0.0074	ng/mL	
PFDS	ND(W/B)	----	----	----	----	53262	13C8-PFOS_IS	----	ng/mL	
PFTDA	Auto	10.793	0.005	-0.629	3390	60659	13C2-PFDA_IS	0.0086	ng/mL	
11-CI-PF3OUdS	ND(W/B)	----	----	----	----	455192	13C3-HFPO-DA_IS	----	ng/mL	
PFOSAm	M	11.172	0.010	0.009	40	162268	13C8-PFOSAm_IS	0.0008	ng/mL	
13C8-PFOSAm	Auto	11.163	-0.001	2.348	162268	161457	13C4-PFOS_IS	2.3674	ng/mL	
13C8-PFOSAm_IS	Auto	11.163	-0.001	----	162268	162268	----	2.5000	ng/mL	
PFTDA	M	11.422	0.001	0.000	2651	60659	13C2-PFTDA_IS	0.0129	ng/mL	
13C2-PFTDA	Auto	11.422	0.003	2.703	60659	143718	13C2-PFDA_IS	0.8866	ng/mL	
13C2-PFTDA_IS	Auto	11.422	0.003	----	60659	60659	----	1.2500	ng/mL	
PFDoS	ND(W/B)	----	----	----	----	53262	13C8-PFOS_IS	----	ng/mL	
D7-MeFOSE_IS	Auto	13.400	-0.002	----	422996	422996	----	25.0000	ng/mL	
D7-MeFOSE	Auto	13.400	-0.002	4.585	422996	161457	13C4-PFOS_IS	25.0313	ng/mL	
MeFOSE	ND(W/B)	----	----	----	----	422996	D7-MeFOSE_IS	----	ng/mL	
13C2-PFHxDA_IS	Auto	12.639	0.003	----	194017	194017	----	2.5000	ng/mL	
13C2-PFHxDA	Auto	12.639	0.003	3.920	194017	143718	13C2-PFDA_IS	1.4533	ng/mL	
PFHxDA	M	12.639	0.002	0.000	2661	194017	13C2-PFHxDA_IS	0.0056	ng/mL	
D3-MeFOSA	Auto	13.706	-0.005	4.891	26328	161457	13C4-PFOS_IS	1.9074	ng/mL	
D3-MeFOSA_IS	Auto	13.706	-0.005	----	26328	26328	----	2.5000	ng/mL	
MeFOSA	ND(W/B)	----	----	----	----	26328	D3-MeFOSA_IS	----	ng/mL	
D9-EtFOSE_IS	Auto	14.028	-0.004	----	413028	413028	----	25.0000	ng/mL	
D9-EtFOSE	Auto	14.028	-0.004	5.213	413028	161457	13C4-PFOS_IS	24.0648	ng/mL	
EtFOSE	ND(W/B)	----	----	----	----	413028	D9-EtFOSE_IS	----	ng/mL	
D5-EtFOSAm	Auto	14.382	-0.005	5.567	38246	161457	13C4-PFOS_IS	2.0812	ng/mL	
D5-EtFOSAm_IS	Auto	14.382	-0.005	----	38246	38246	----	2.5000	ng/mL	
EtFOSAm	ND(W/B)	----	----	----	----	38246	D5-EtFOSAm_IS	----	ng/mL	
PFODA	M	13.772	-0.002	1.133	1627	194017	13C2-PFHxDA_IS	0.0371	ng/mL	

Flag ID key: IRr: Ion Ratio (Relative)



240122_030 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_030 (continued)

13C2-4_2 FTS
Conc. 7.3657

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. 0.0022
R#1 31.92 (29.06)
R#2 31.92 (35.34)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. ----
R#1 0.00 (46.72)
R#2 0.00 (49.78)

Q 329.10>80.90 (-)

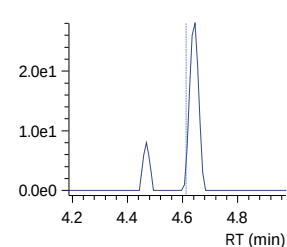
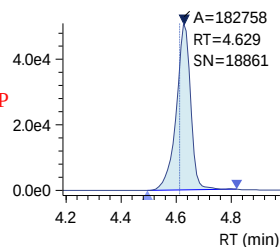
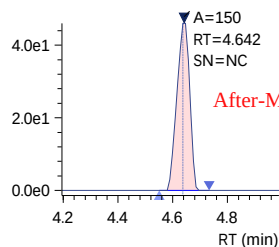
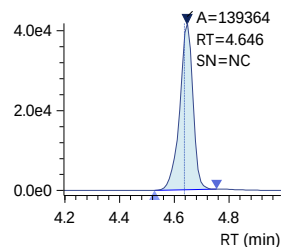
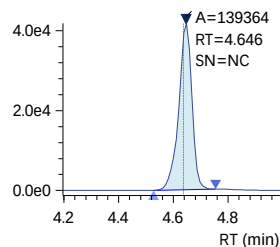
4.19e4 ISTD 329.10>80.90 (-)

4.19e4 Q 327.10>307.00 (-)

4.60e1 ISTD 302.10>79.90 (-)

5.10e4 Q 298.70>79.90 (-)

2.80e1

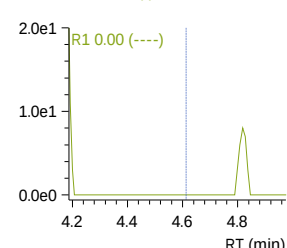
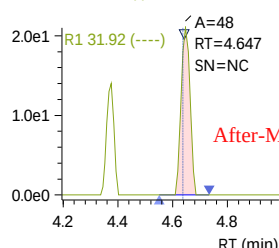


R1 327.10>80.90 (-)

2.10e1

R1 298.70>98.80 (-)

2.00e1

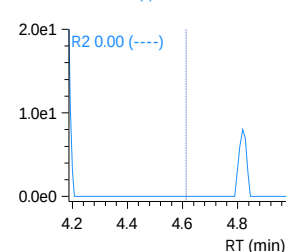
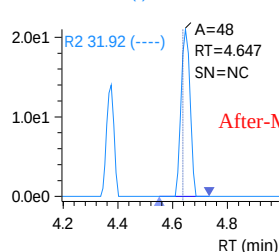


R2 327.10>80.90 (-)

2.10e1

R2 298.70>98.80 (-)

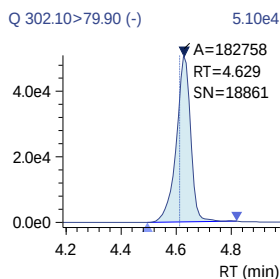
2.00e1



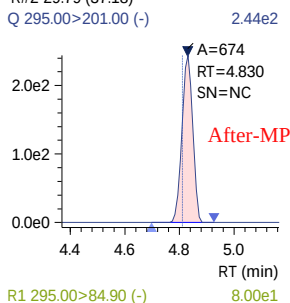


240122_030 (continued)

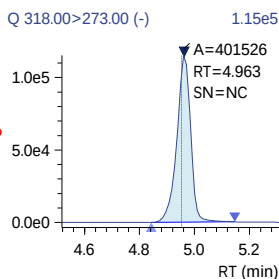
13C3-PFBS
Conc. 2.3423



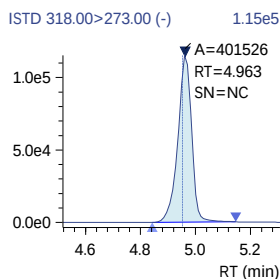
NFDHA
Conc. 0.0076
R#1 29.79 (40.25)
R#2 29.79 (37.18)



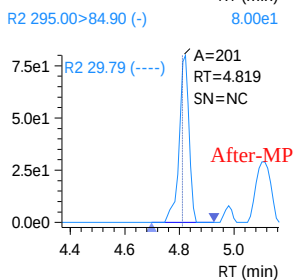
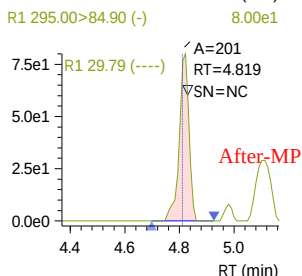
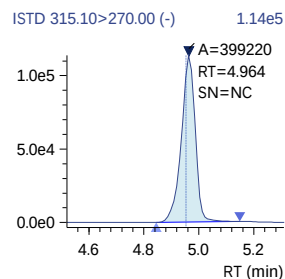
13C5-PFHxA
Conc. 2.3865



13C5-PFHxA_IS
Conc. 2.5000



13C2-PFHxA_IS
Conc. 2.5000





240122_030 (continued)

PFHxA
Conc. 0.0034

PFEESA
Conc. ----
R#1 0.00 (6.11)
R#2 0.00 (5.72)

13C3-HFPO-DA
Conc. 11.6476

13C3-HFPO-DA_IS
Conc. 10.0000

HFPO-DA
Conc. ----
R#1 0.00 (65.61)
R#2 0.00 (60.94)

Q 313.00>269.00 (-)

1.00e3

Q 314.80>135.00 (-)

7.90e1

Q 286.90>168.90 (-)

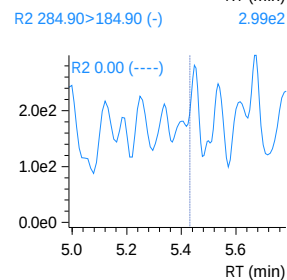
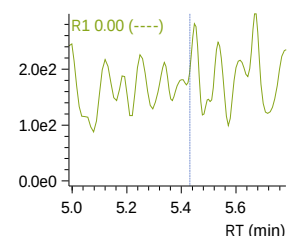
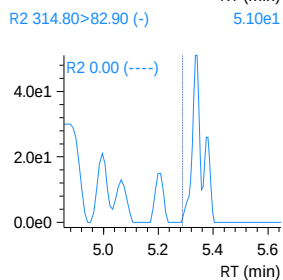
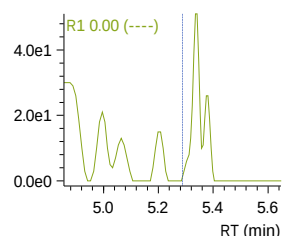
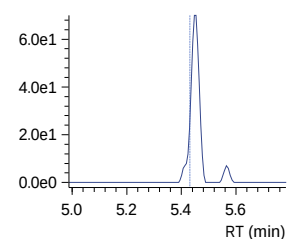
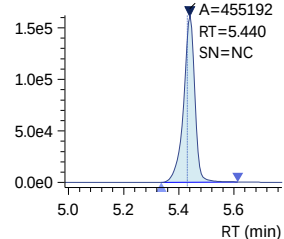
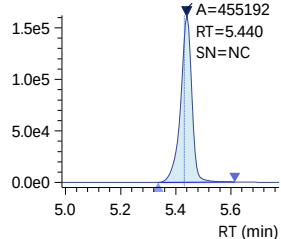
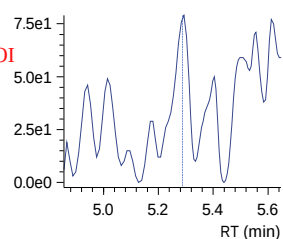
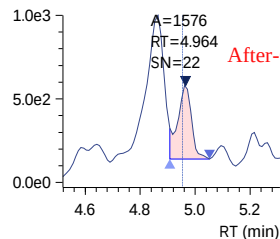
1.62e5

ISTD 286.90>168.90 (-)

1.62e5

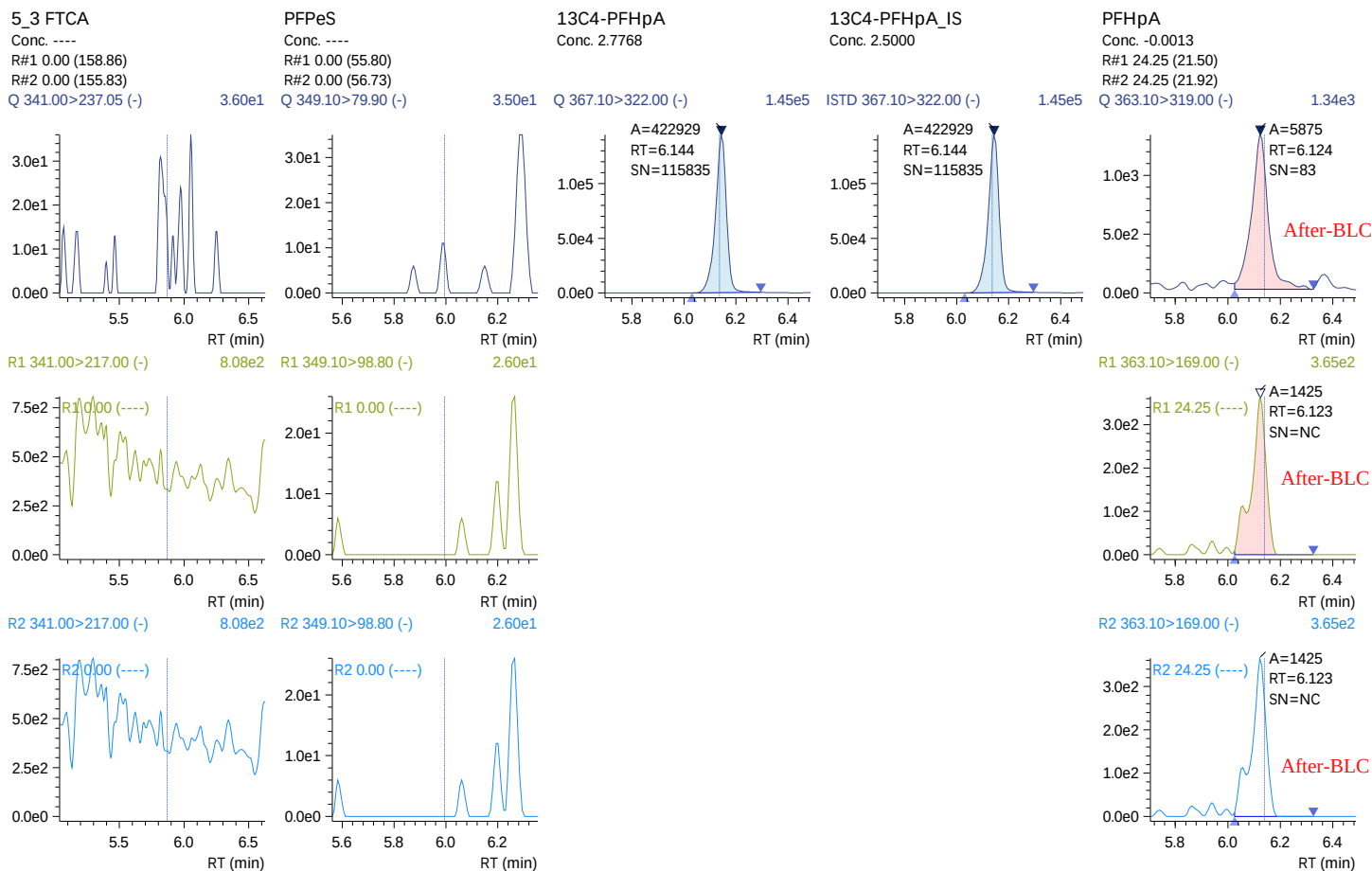
Q 284.90>168.90 (-)

7.00e1





240122_030 (continued)

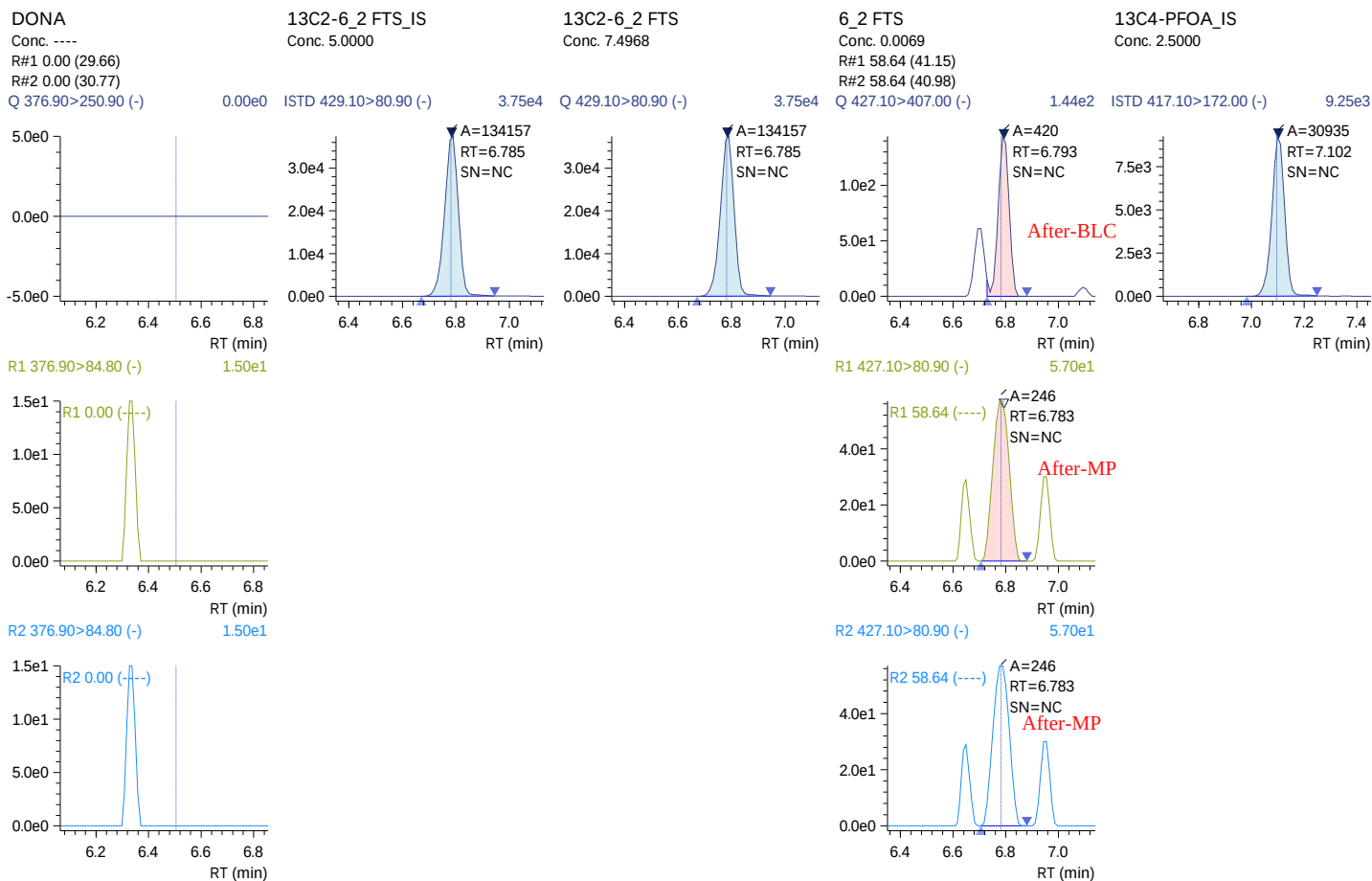


J:\LCMS08\Data\240122_1633_B1\240122_1633_B1.dampl

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_030 (continued)





240122_030 (continued)

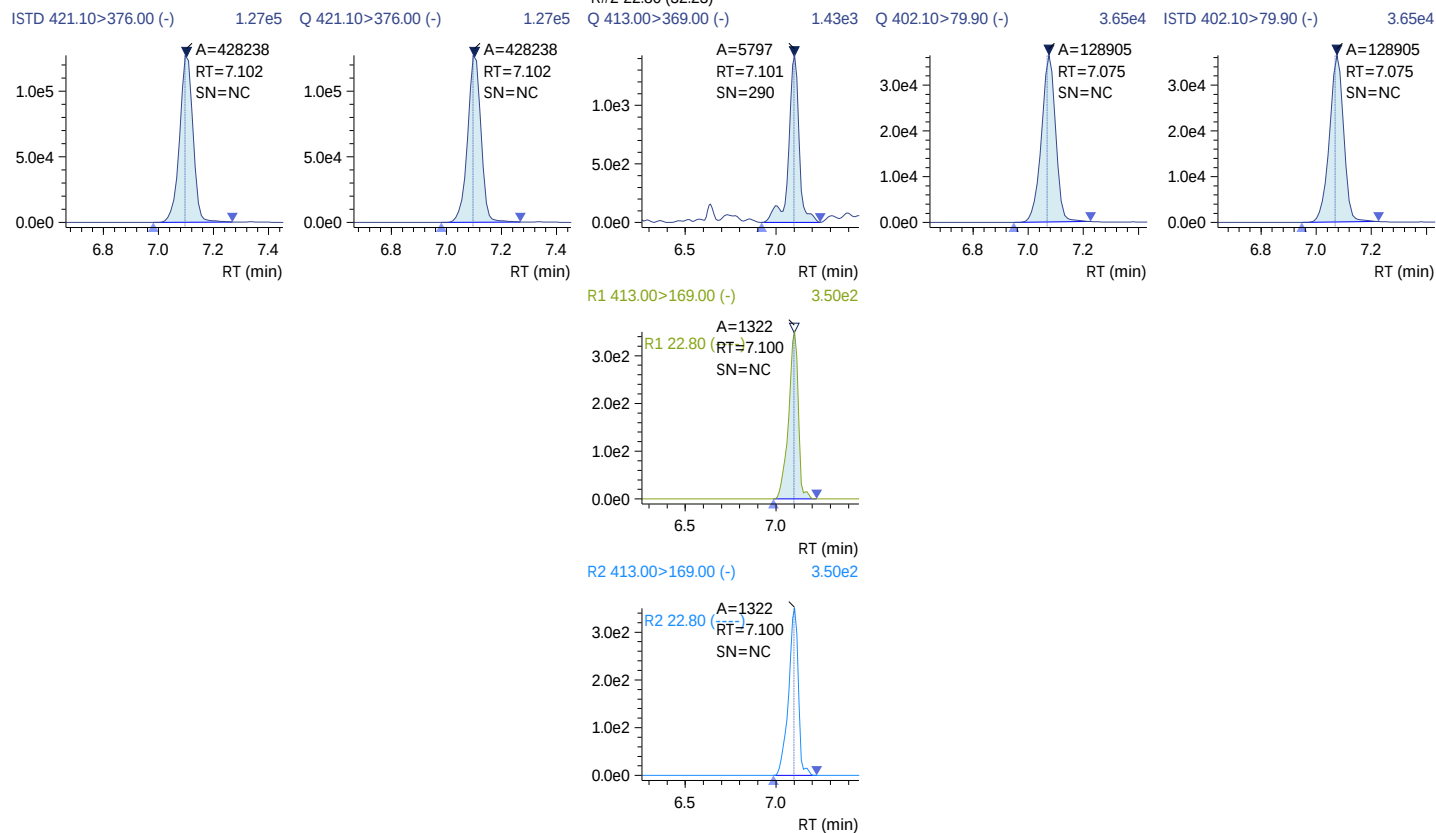
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.4767

PFOA
Conc. 0.0087
R#1 22.80 (31.89)
R#2 22.80 (32.23)

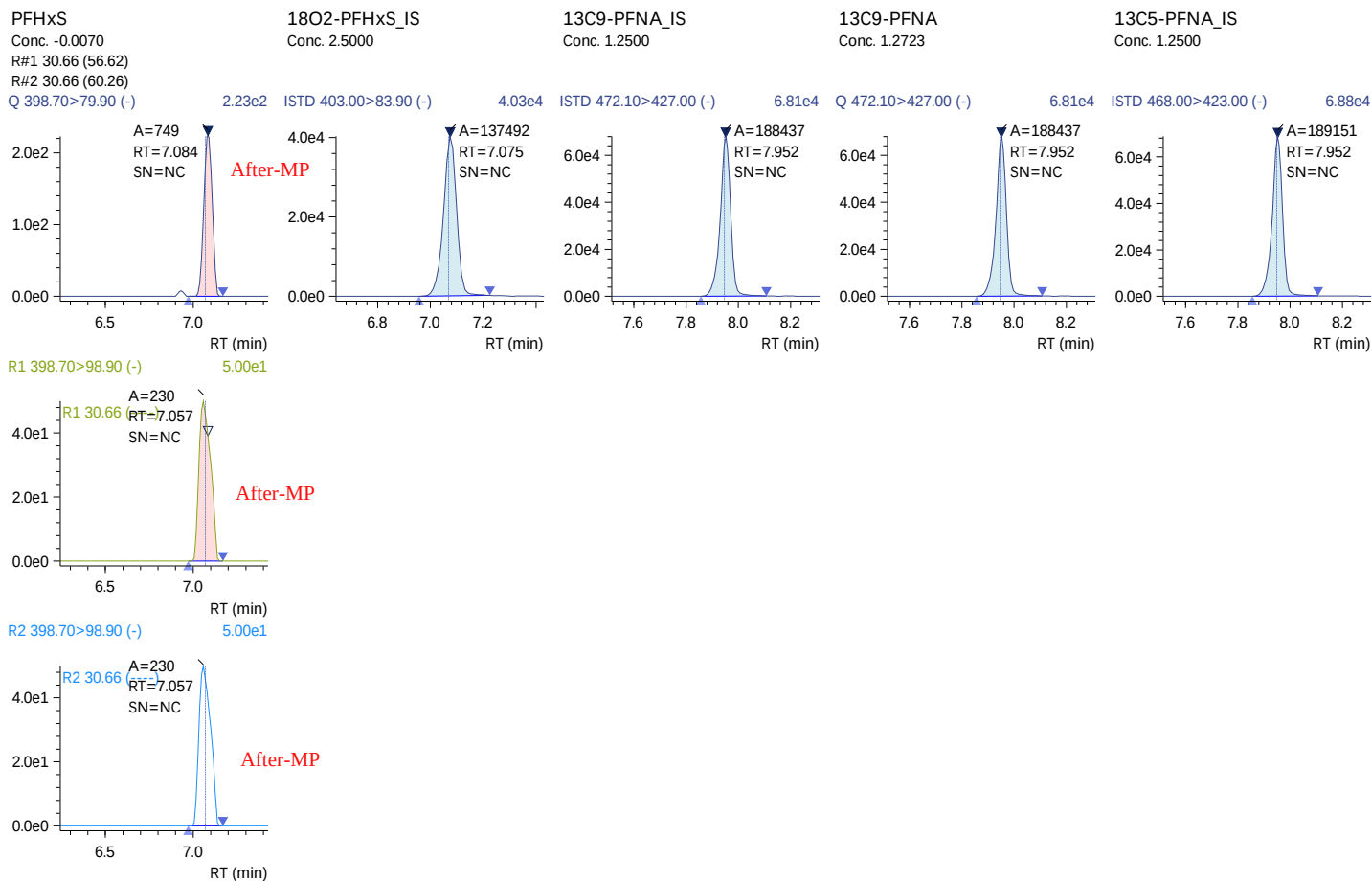
13C3-PFHxS
Conc. 2.1843

13C3-PFHxS_IS
Conc. 2.5000





240122_030 (continued)

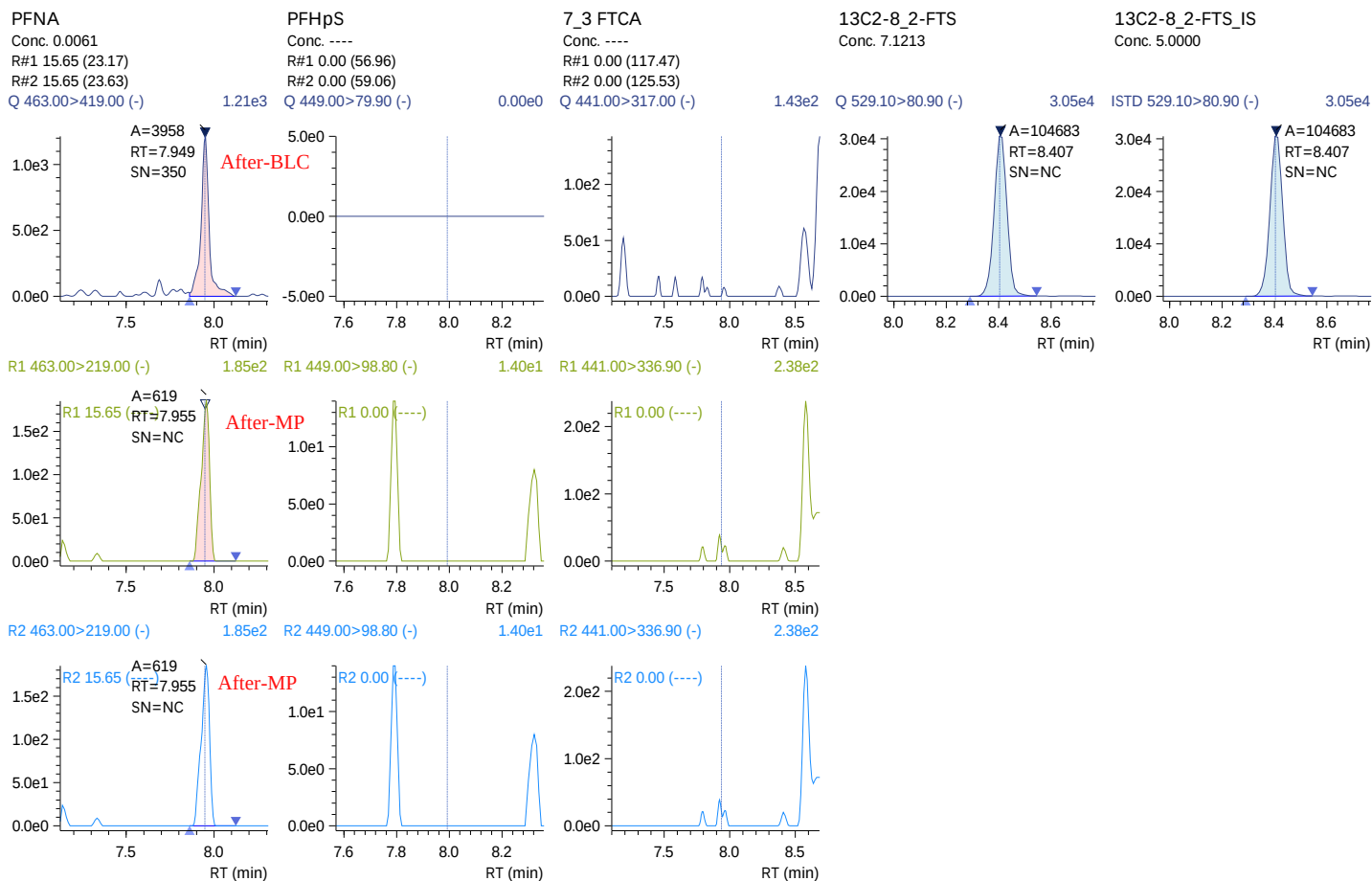


J:\LCMS08\Data\240122_1633_B1\240122_1633_B1.dampl

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_030 (continued)

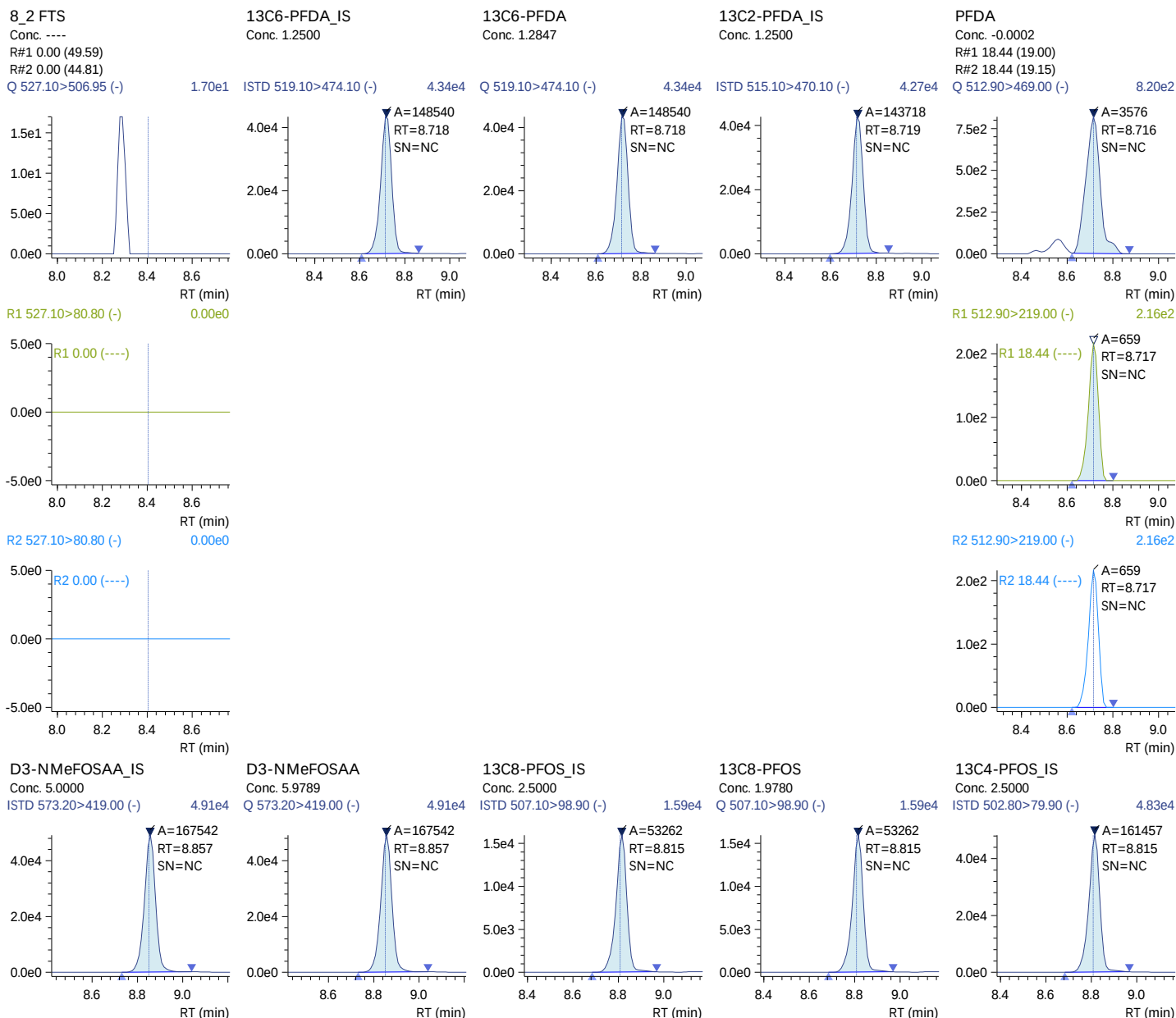


J:\LCMS08\Data\240122_1633_B1\240122_1633_B1.dampl

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_030 (continued)

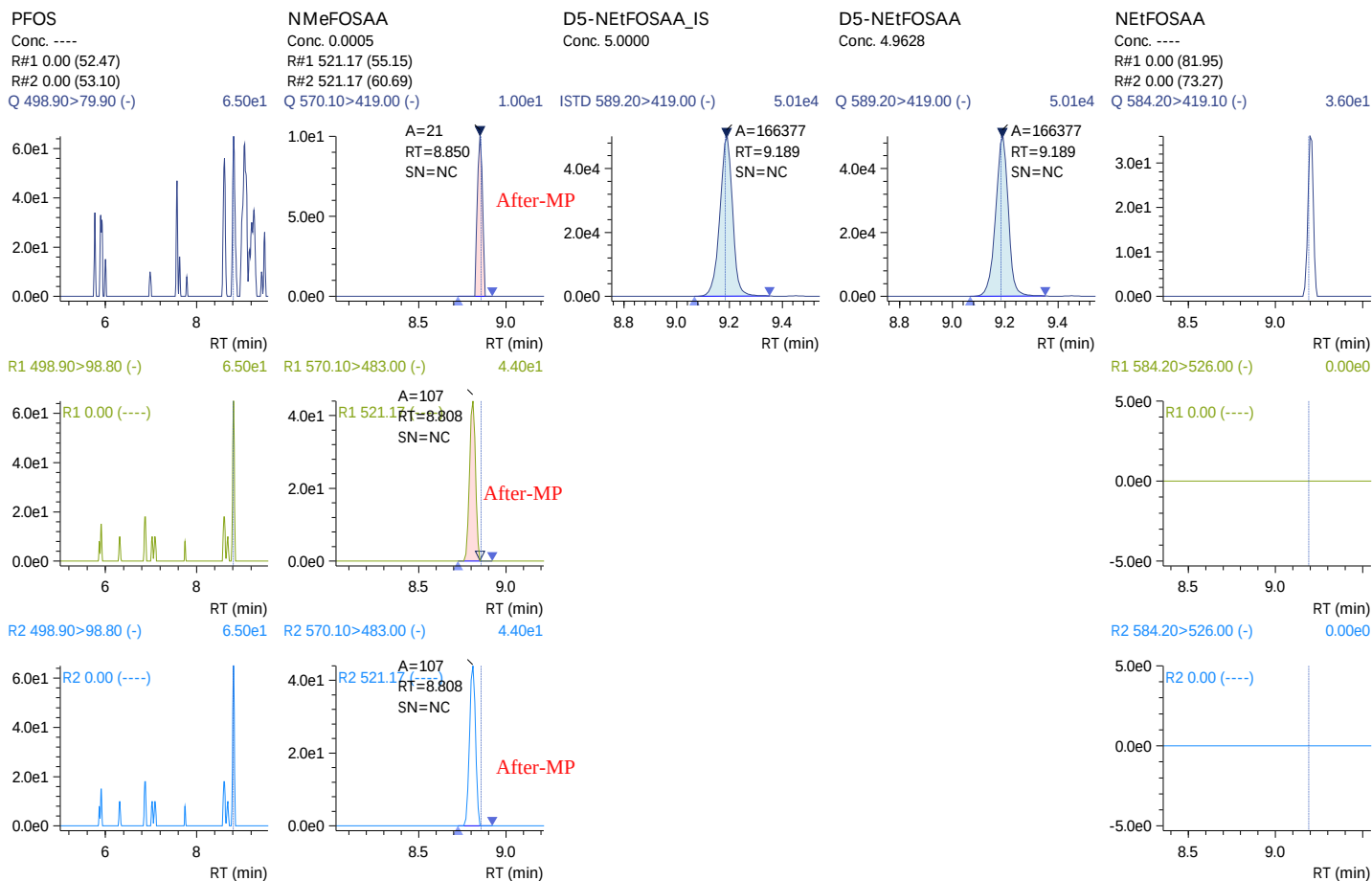


J:\LCMS08\Data\240122_1633_B1\240122_1633_B1.dampl

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_030 (continued)





240122_030 (continued)

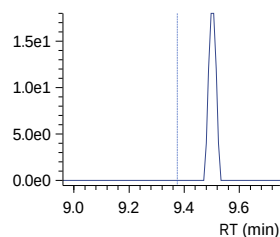
9-Cl-PF3ONS

Conc. ----

R#1 0.00 (32.76)

R#2 0.00 (32.59)

Q 530.80>351.00 (-)



R1 532.80>353.00 (-)

1.80e1

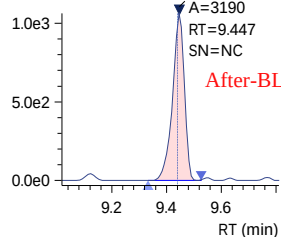
PFUnDA

Conc. -0.0021

R#1 15.68 (13.12)

R#2 15.68 (14.36)

Q 563.10>519.00 (-)



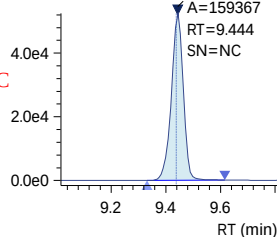
R1 563.10>269.10 (-)

1.06e3

13C7-PFUnDA_IS

Conc. 1.2500

ISTD 570.00>525.10 (-)

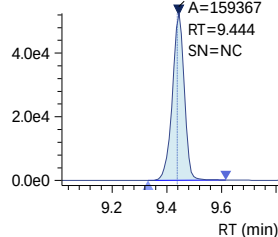


5.25e4

13C7-PFUnDA

Conc. 1.1555

Q 570.00>525.10 (-)



5.25e4

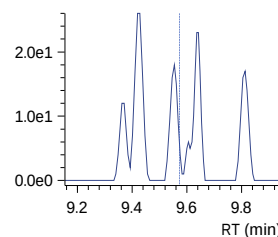
PFNS

Conc. ----

R#1 0.00 (65.22)

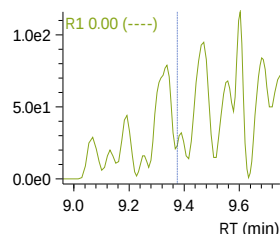
R#2 0.00 (65.31)

Q 548.80>79.90 (-)



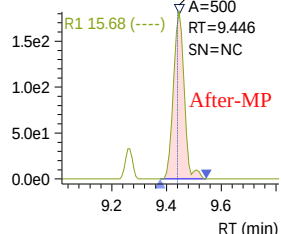
R1 548.80>98.80 (-)

2.60e1



R2 532.80>353.00 (-)

1.16e2



R2 563.10>269.10 (-)

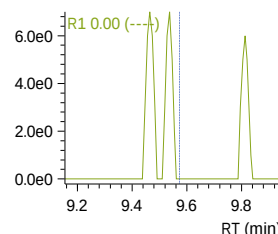
1.82e2



5.25e4

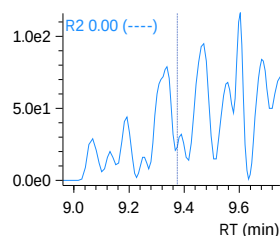


5.25e4



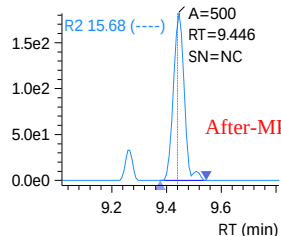
R2 548.80>98.80 (-)

7.00e0



R2 532.80>353.00 (-)

1.16e2



R2 563.10>269.10 (-)

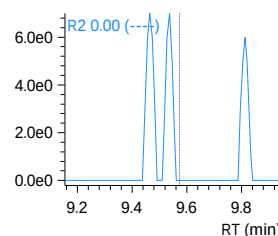
1.82e2



5.25e4



5.25e4

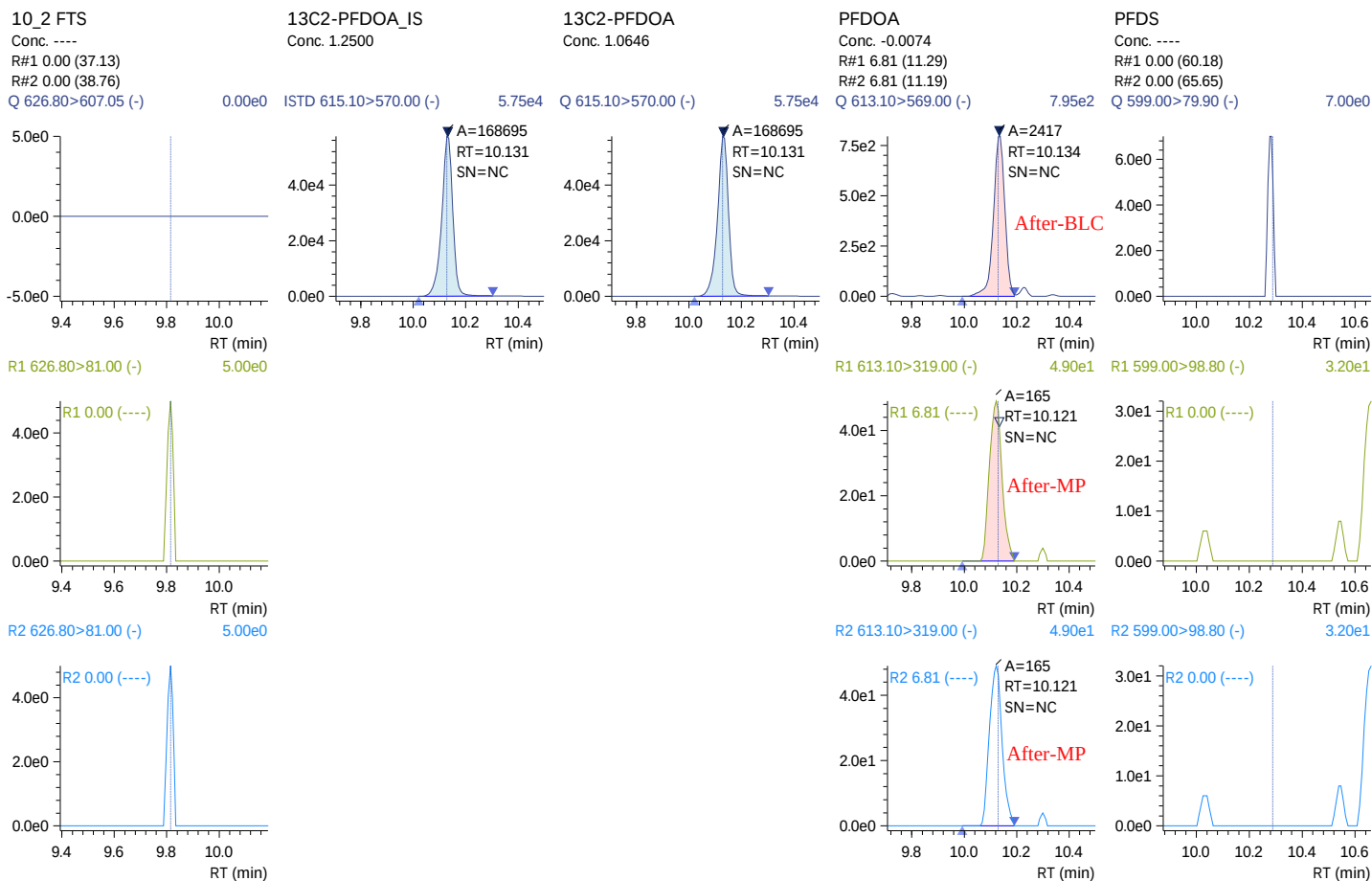


R2 548.80>98.80 (-)

7.00e0



240122_030 (continued)

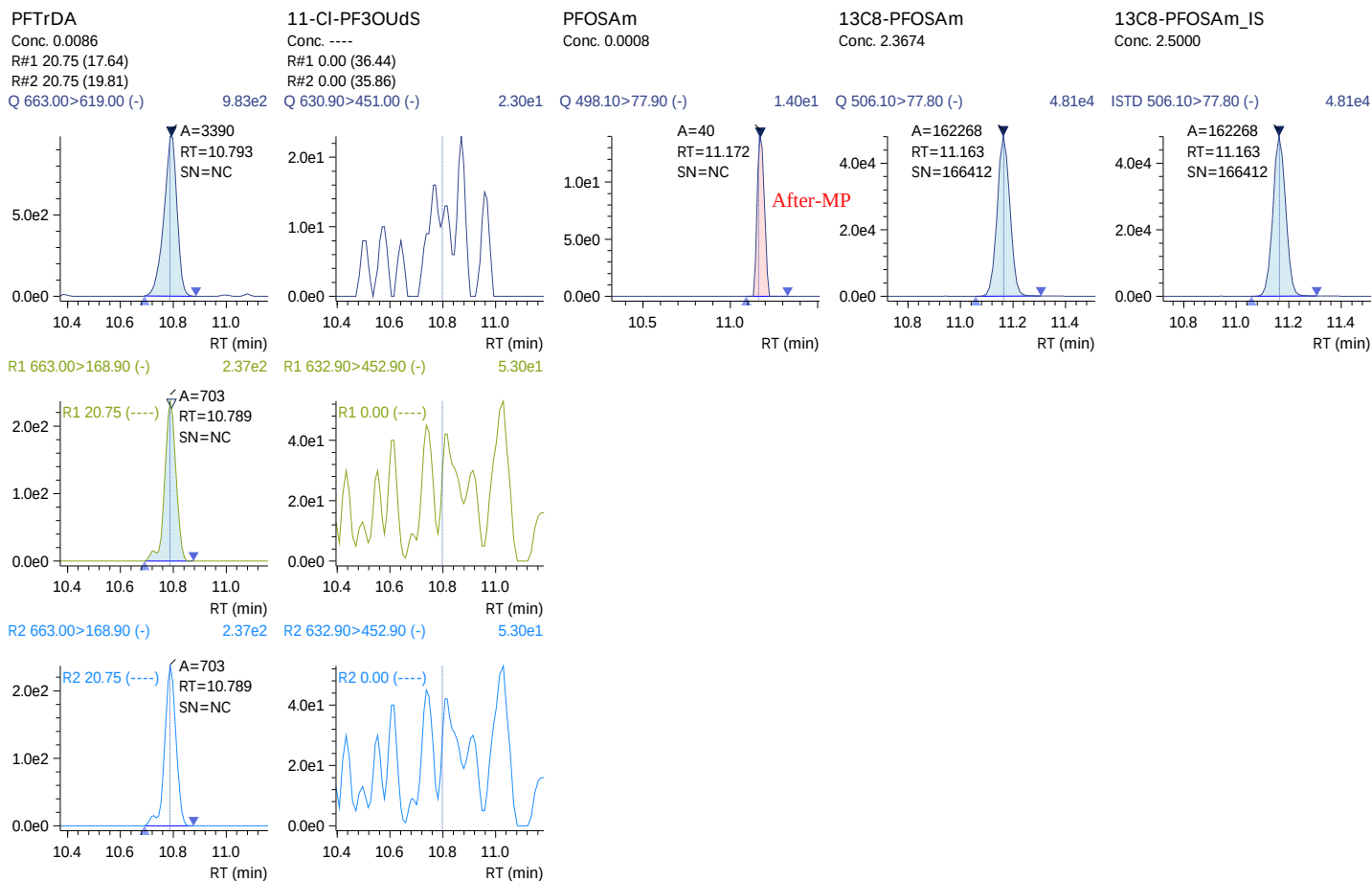


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_030 (continued)

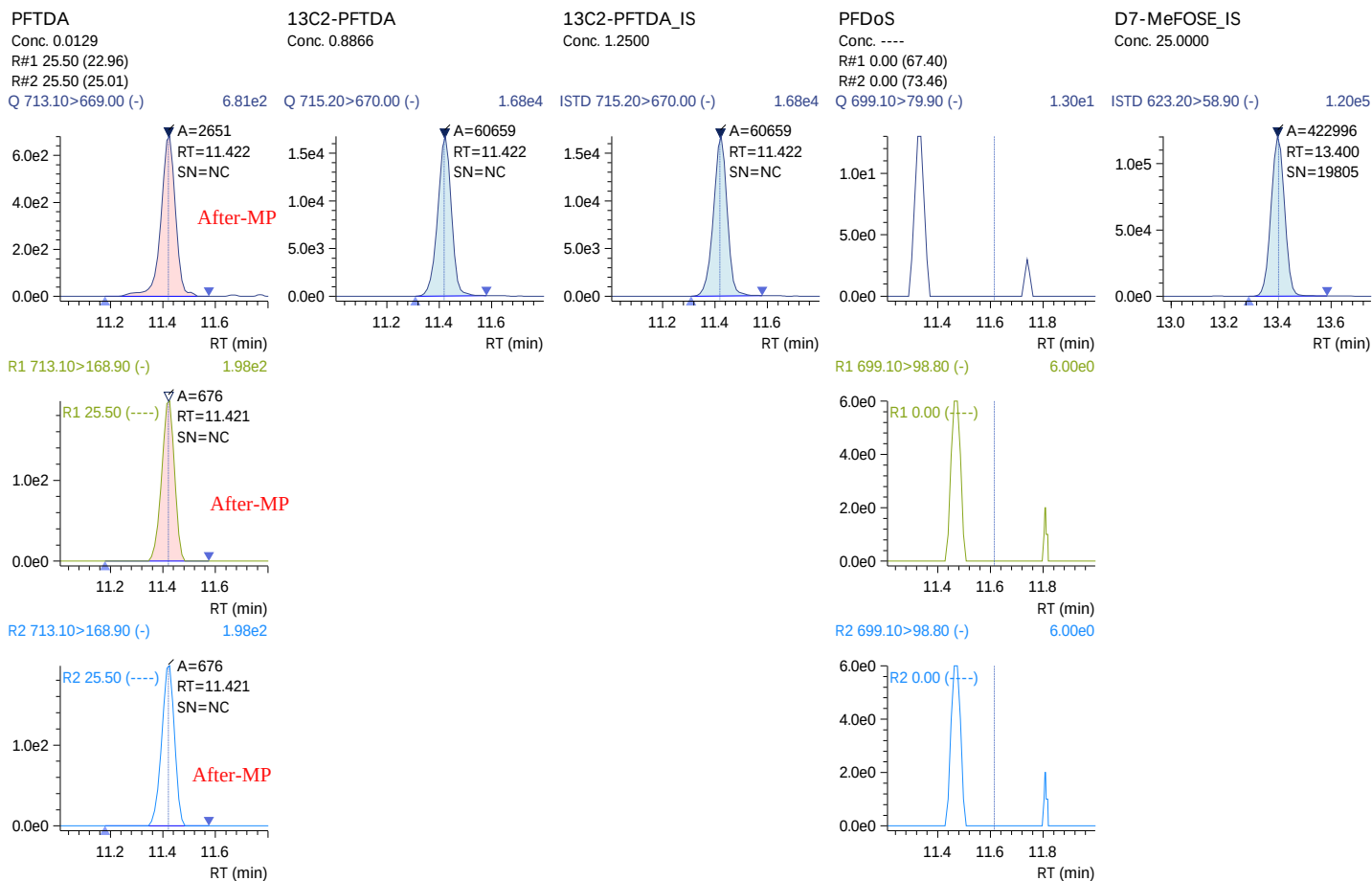


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_030 (continued)





240122_030 (continued)

D7-MeFOSE
Conc. 25.0313

MeFOSE
Conc. ----

13C2-PFHXA_IS
Conc. 2.5000

13C2-PFHXA
Conc. 1.4533

PFHXA
Conc. 0.0056

Q 623.20>58.90 (-)

1.20e5

Q 616.10>59.00 (-)

4.50e1

ISTD 815.00>770.05 (-)

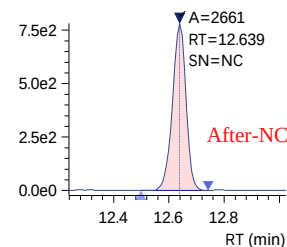
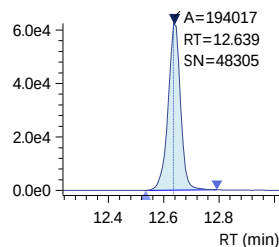
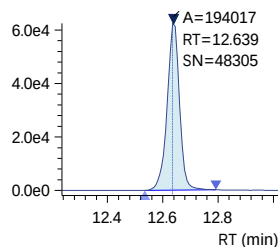
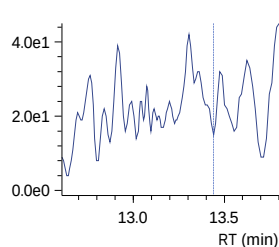
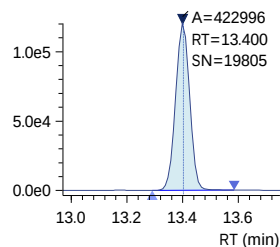
6.25e4

Q 815.00>770.05 (-)

6.25e4

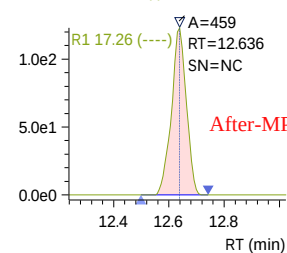
Q 813.00>768.95 (-)

7.82e2



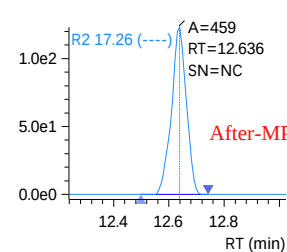
R1 813.00>218.95 (-)

1.23e2



R2 813.00>218.95 (-)

1.23e2





240122_030 (continued)

D3-MeFOSA
Conc. 1.9074

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. ----
R#1 0.00 (140.79)
R#2 0.00 (153.61)

D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 24.0648

Q 515.00>219.00 (-)

7.49e3

ISTD 515.00>219.00 (-)

7.49e3

Q 511.90>219.00 (-)

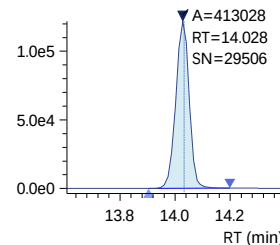
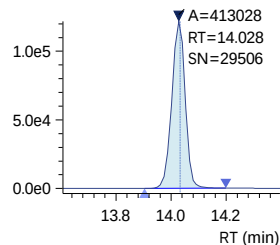
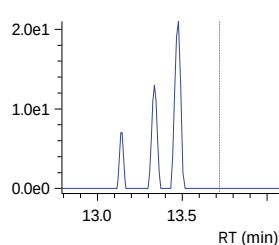
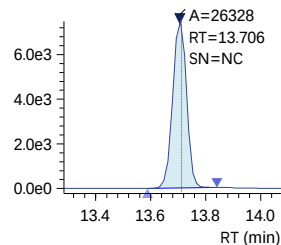
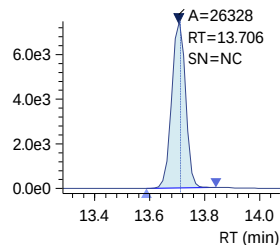
2.10e1

ISTD 639.20>58.90 (-)

1.22e5

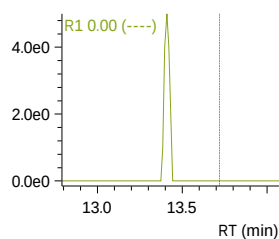
Q 639.20>58.90 (-)

1.22e5



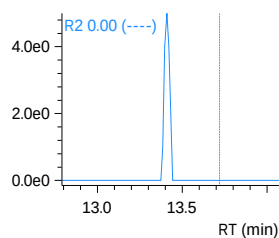
R1 511.90>169.00 (-)

5.00e0



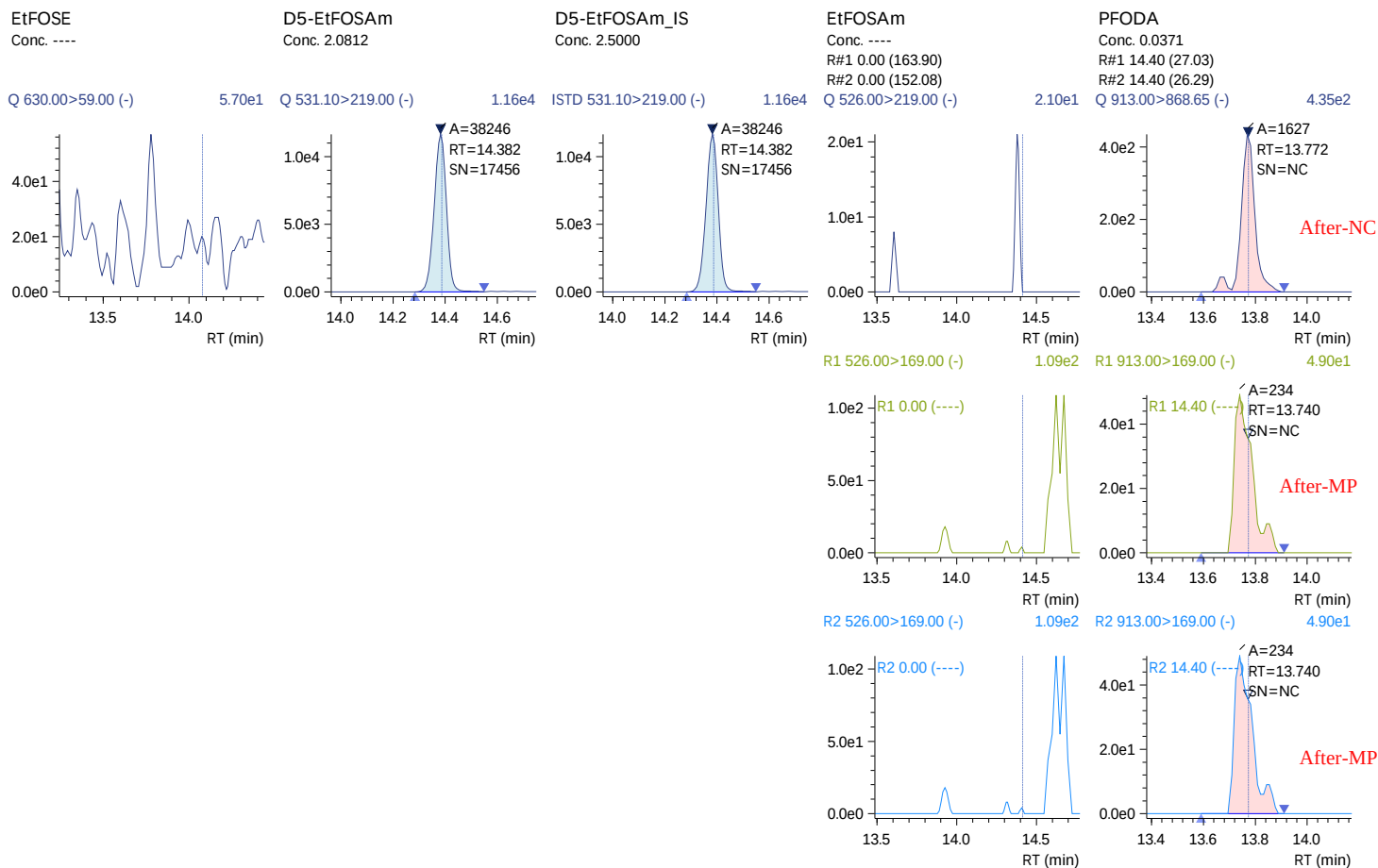
R2 511.90>169.00 (-)

5.00e0





240122_030 (continued)



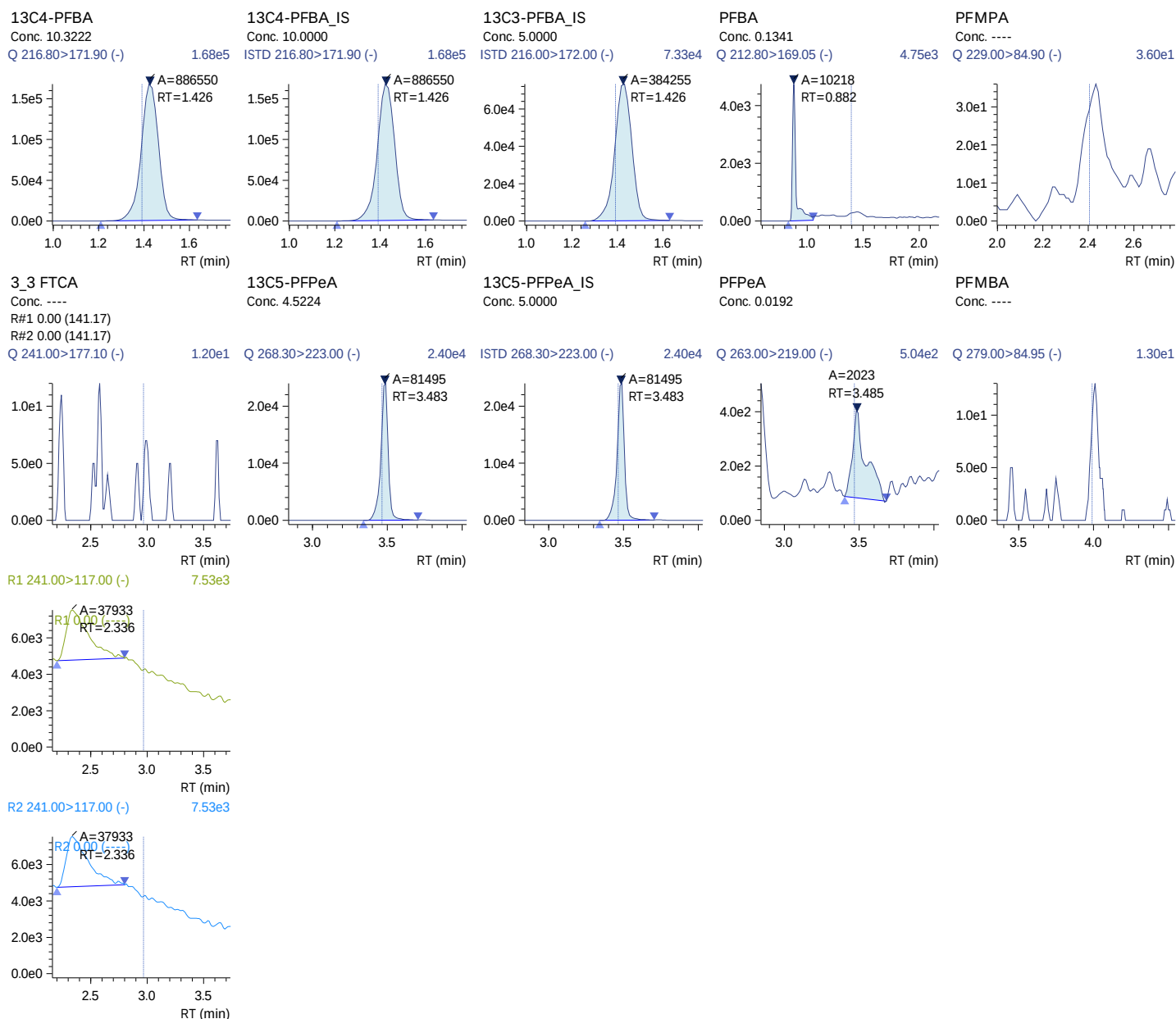
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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_030

Sample ID: KQ2400483-04
Date Acquired: 1/22/2024 8:59:54 PM
Acquired by: System Administrator
Data File: 240122_030
Vial: 10 | Inj. Volume: 10.0000uL | Tray: 2





240122_030 (continued)

13C2-4_2 FTS
 Conc. 7.3657

13C2-4_2 FTS_IS
 Conc. 5.0000

4_2 FTS
 Conc. ----
 R#1 0.00 (29.06)
 R#2 0.00 (29.06)

13C3-PFBS_IS
 Conc. 2.5000

PFBS
 Conc. ----
 R#1 0.00 (46.72)
 R#2 0.00 (46.72)

Q 329.10>80.90 (-)

4.19e4

ISTD 329.10>80.90 (-)

4.19e4

Q 327.10>307.00 (-)

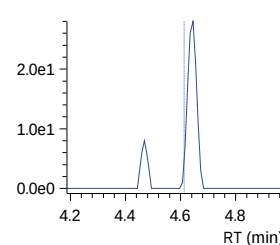
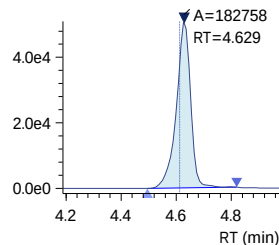
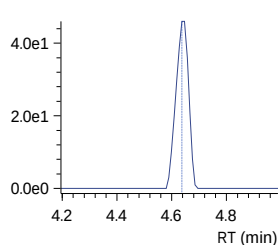
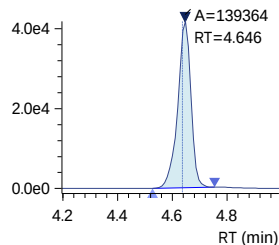
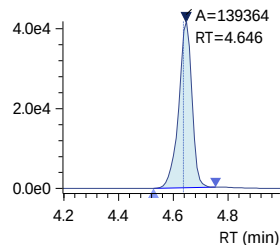
4.60e1

ISTD 302.10>79.90 (-)

5.10e4

Q 298.70>79.90 (-)

2.80e1

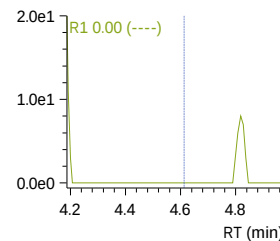
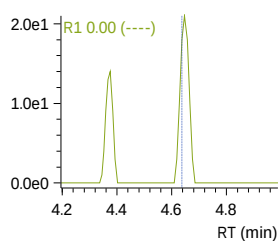


R1 327.10>80.90 (-)

2.10e1

R1 298.70>98.80 (-)

2.00e1

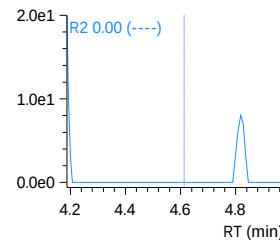
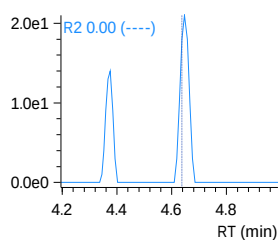


R2 327.10>80.90 (-)

2.10e1

R2 298.70>98.80 (-)

2.00e1





240122_030 (continued)

13C3-PFBS
 Conc. 2.3423

NFDHA
 Conc. ----
 R#1 0.00 (40.25)
 R#2 0.00 (40.25)

13C5-PFHxA
 Conc. 2.3865

13C5-PFHxA_IS
 Conc. 2.5000

13C2-PFHxA_IS
 Conc. 2.5000

Q 302.10>79.90 (-)

5.10e4

Q 295.00>201.00 (-)

2.44e2

Q 318.00>273.00 (-)

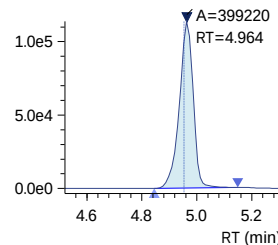
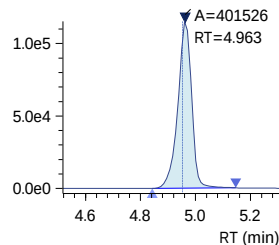
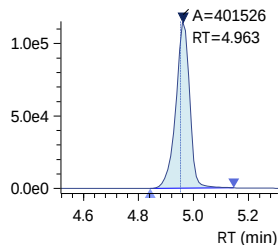
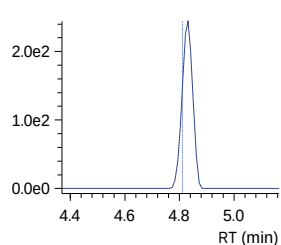
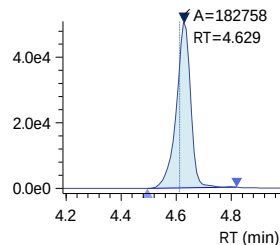
1.15e5

ISTD 318.00>273.00 (-)

1.15e5

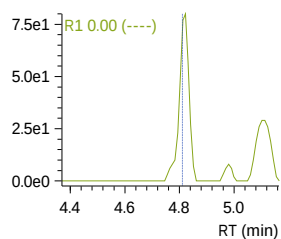
ISTD 315.10>270.00 (-)

1.14e5



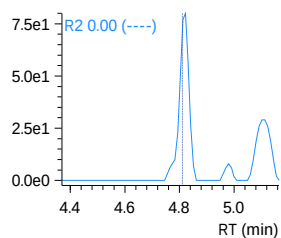
R1 295.00>84.90 (-)

8.00e1



R2 295.00>84.90 (-)

8.00e1





240122_030 (continued)

PFHxA
 Conc. 0.0335

PFEESA
 Conc. ----

13C3-HFPO-DA
 Conc. 11.6476

13C3-HFPO-DA_IS
 Conc. 10.0000

HFPO-DA
 Conc. ----

Q 313.00>269.00 (-)

1.00e3

Q 314.80>135.00 (-)

7.90e1

Q 286.90>168.90 (-)

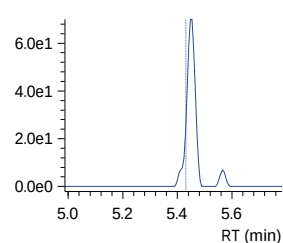
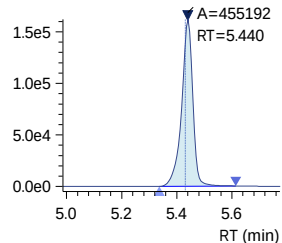
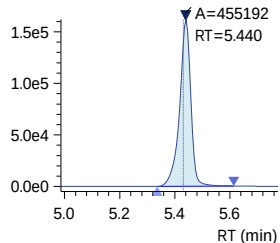
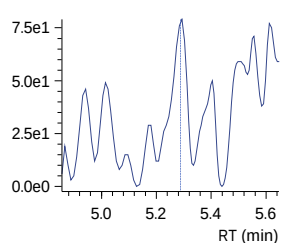
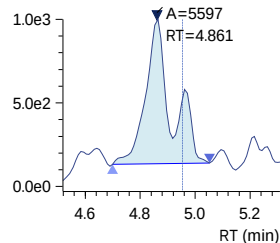
1.62e5

ISTD 286.90>168.90 (-)

1.62e5

Q 284.90>168.90 (-)

7.00e1

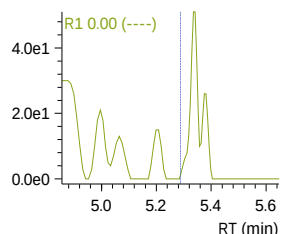


R1 314.80>82.90 (-)

5.10e1

R1 284.90>184.90 (-)

2.99e2

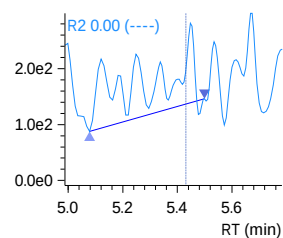
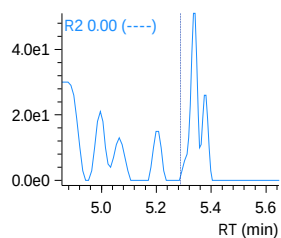


R2 314.80>82.90 (-)

5.10e1

R2 284.90>184.90 (-)

2.99e2





240122_030 (continued)

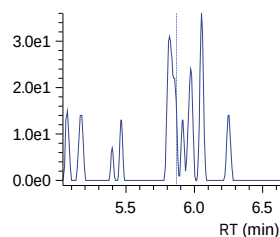
5_3 FTCA

Conc. ----

R#1 0.00 (158.86)

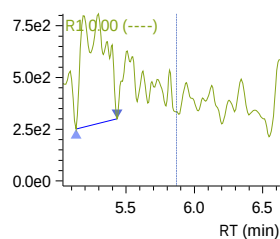
R#2 0.00 (158.86)

Q 341.00>237.05 (-)



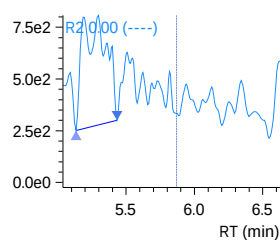
R1 341.00>217.00 (-)

8.08e2



R2 341.00>217.00 (-)

8.08e2



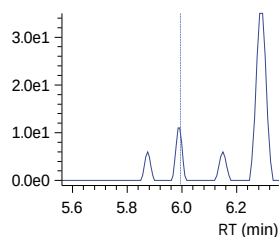
PFPeS

Conc. ----

R#1 0.00 (55.80)

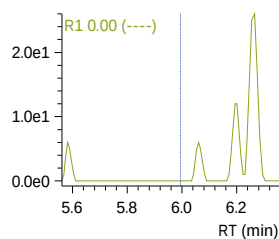
R#2 0.00 (55.80)

Q 349.10>79.90 (-)



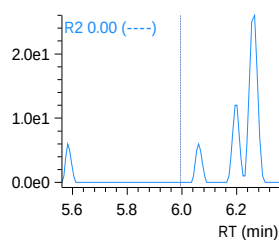
R1 349.10>98.80 (-)

2.60e1



R2 349.10>98.80 (-)

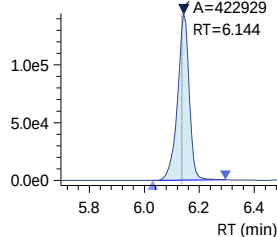
2.60e1



13C4-PFHpa

Conc. 2.7768

Q 367.10>322.00 (-)

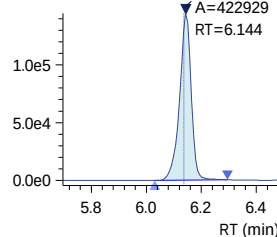


1.45e5

13C4-PFHpa_IS

Conc. 2.5000

ISTD 367.10>322.00 (-)



1.45e5

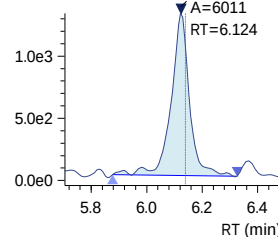
PFHpA

Conc. -0.0005

R#1 23.56 (21.50)

R#2 23.56 (21.50)

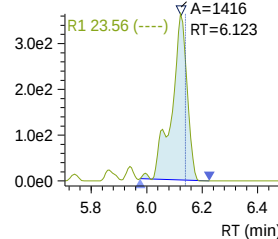
Q 363.10>319.00 (-)



1.34e3

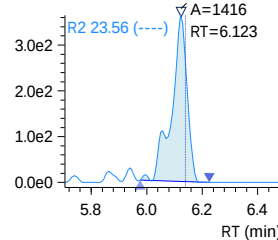
R1 363.10>169.00 (-)

3.65e2



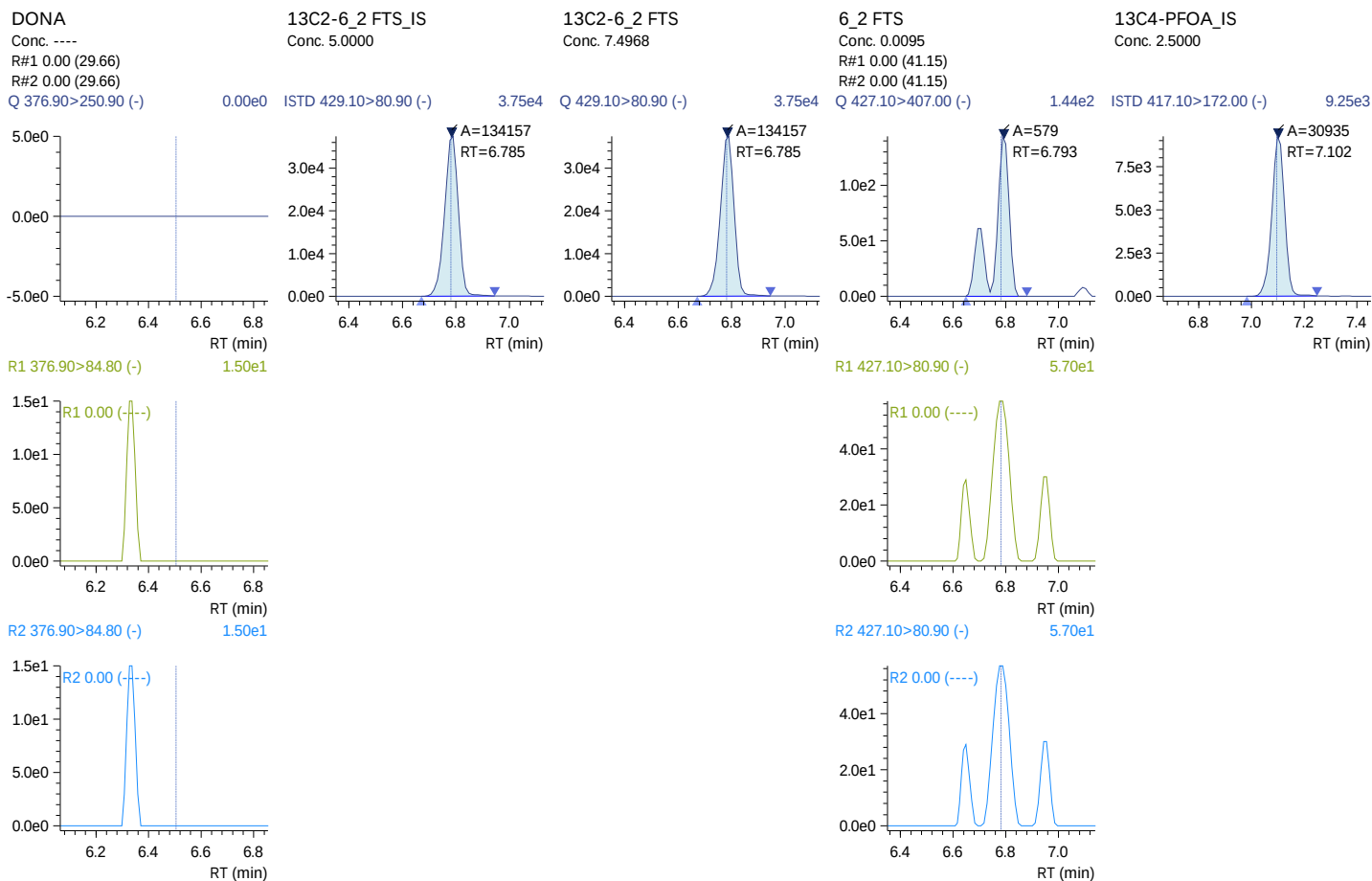
R2 363.10>169.00 (-)

3.65e2





240122_030 (continued)





240122_030 (continued)

13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.4767

PFOA
Conc. 0.0087
R#1 22.80 (31.89)
R#2 22.80 (31.89)

13C3-PFHxS
Conc. 2.1843

13C3-PFHxS_IS
Conc. 2.5000

ISTD 421.10>376.00 (-)

1.27e5

Q 421.10>376.00 (-)

1.27e5

Q 413.00>369.00 (-)

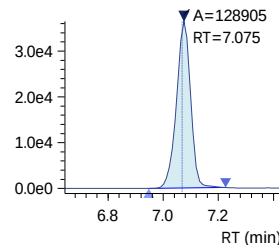
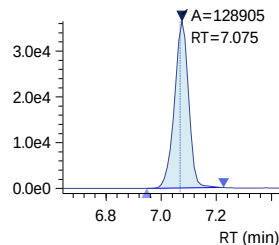
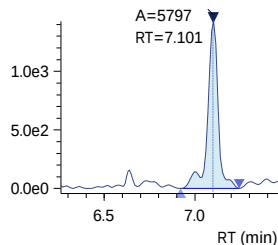
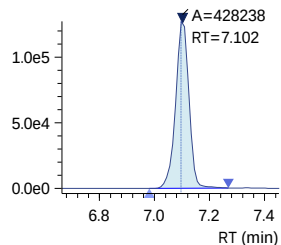
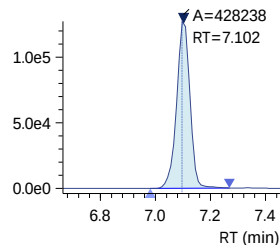
1.43e3

Q 402.10>79.90 (-)

3.65e4

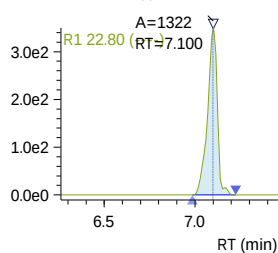
ISTD 402.10>79.90 (-)

3.65e4



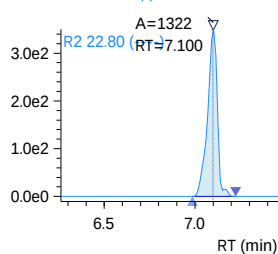
R1 413.00>169.00 (-)

3.50e2



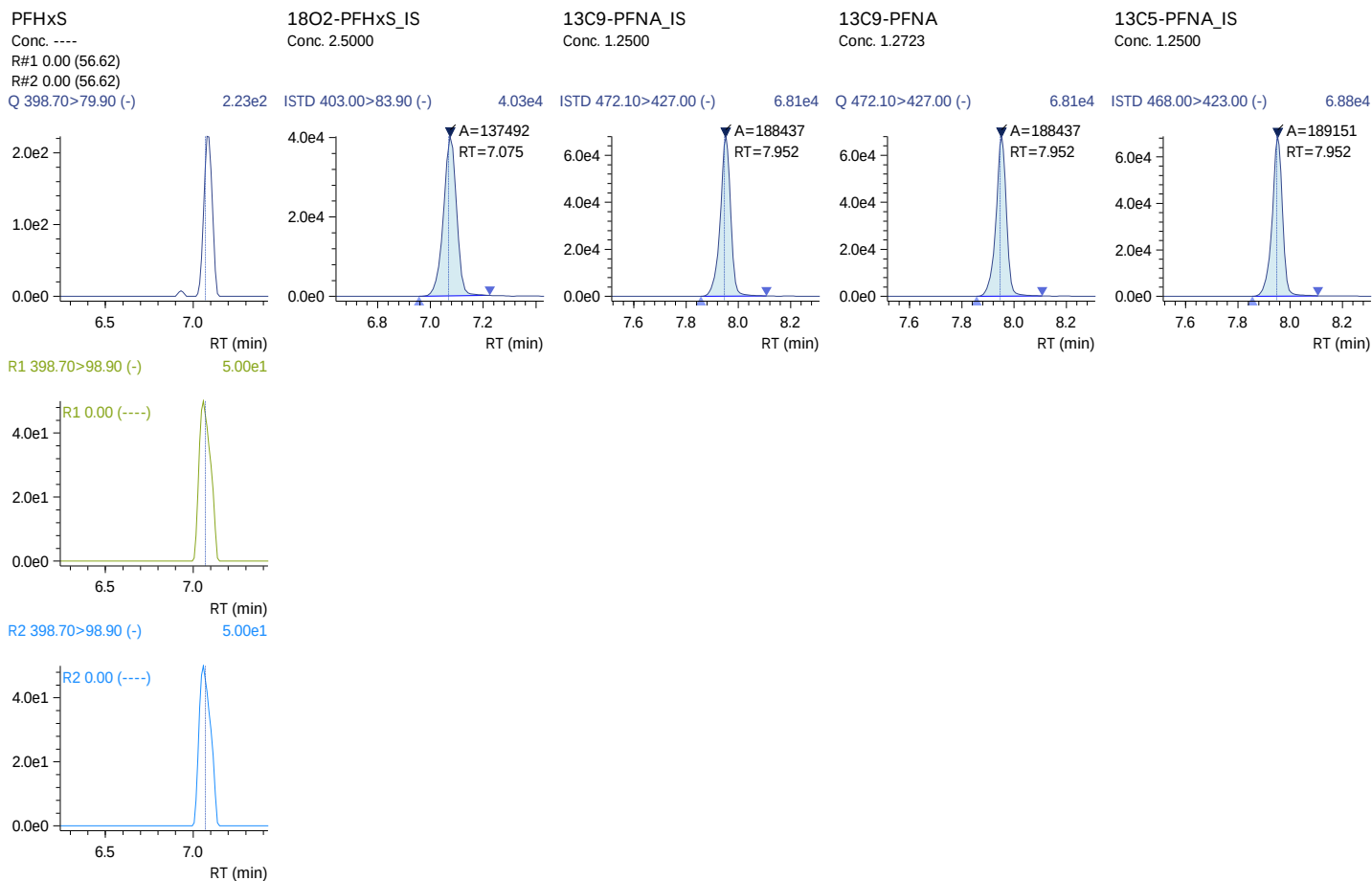
R2 413.00>169.00 (-)

3.50e2



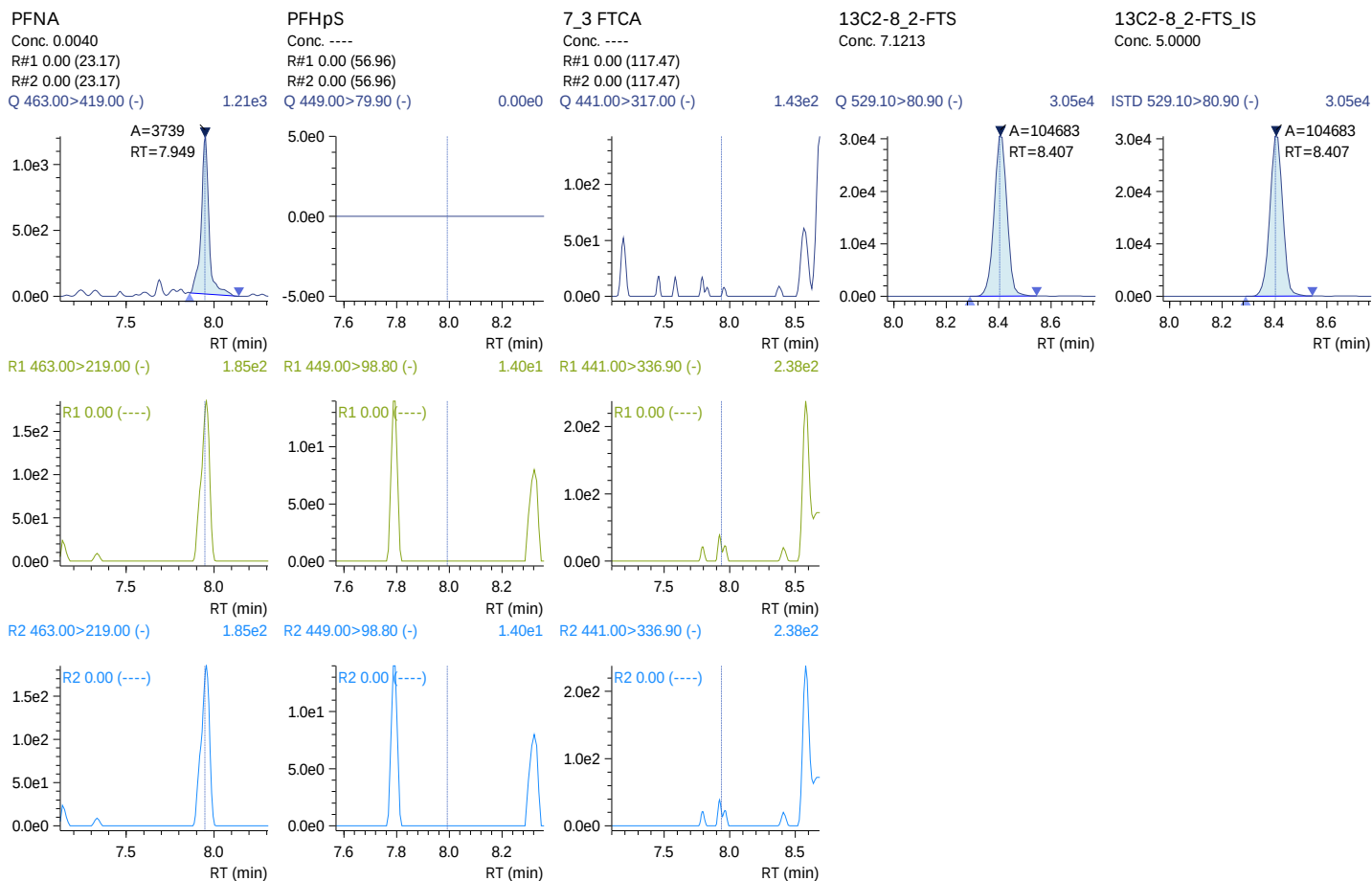


240122_030 (continued)



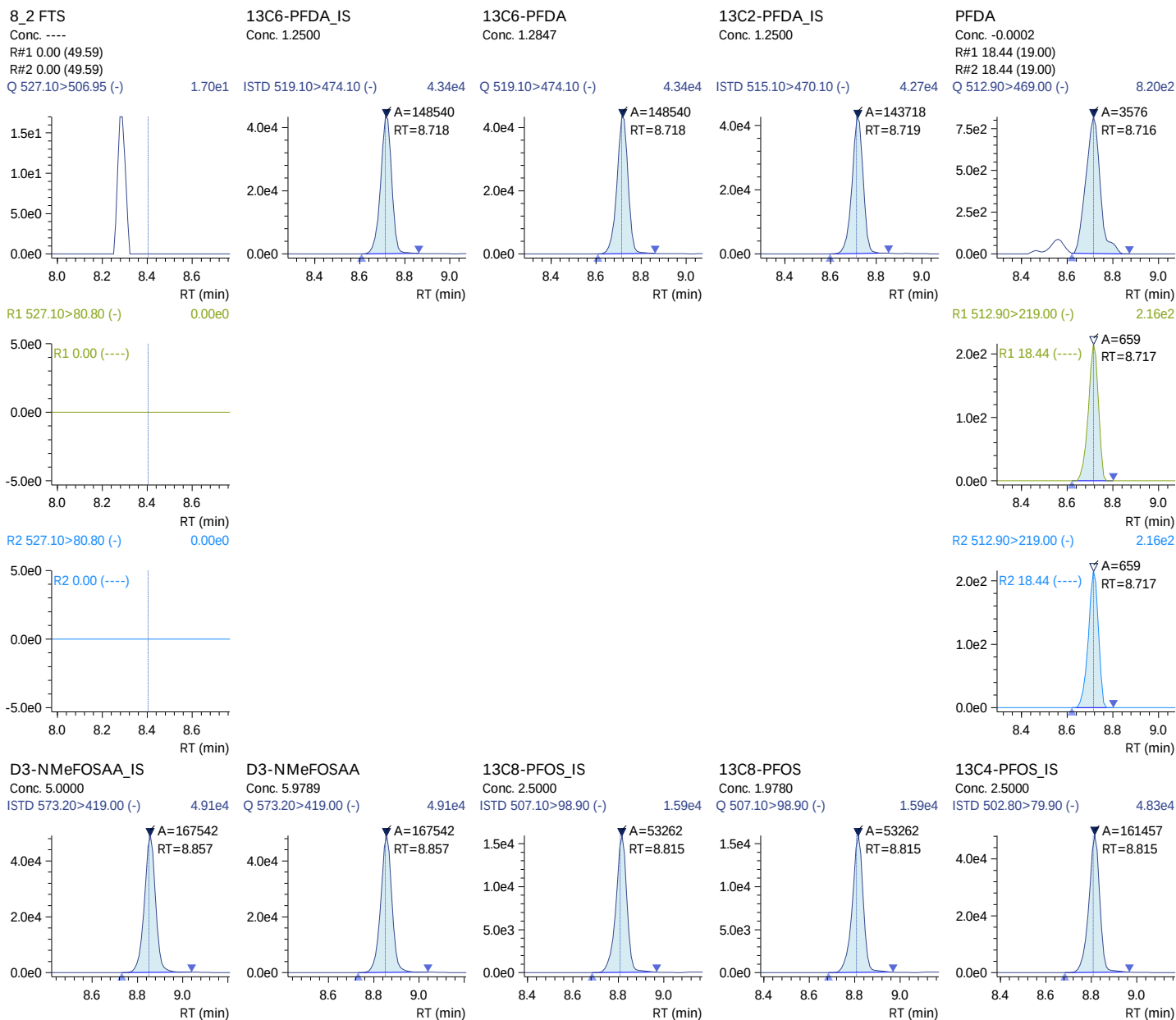


240122_030 (continued)



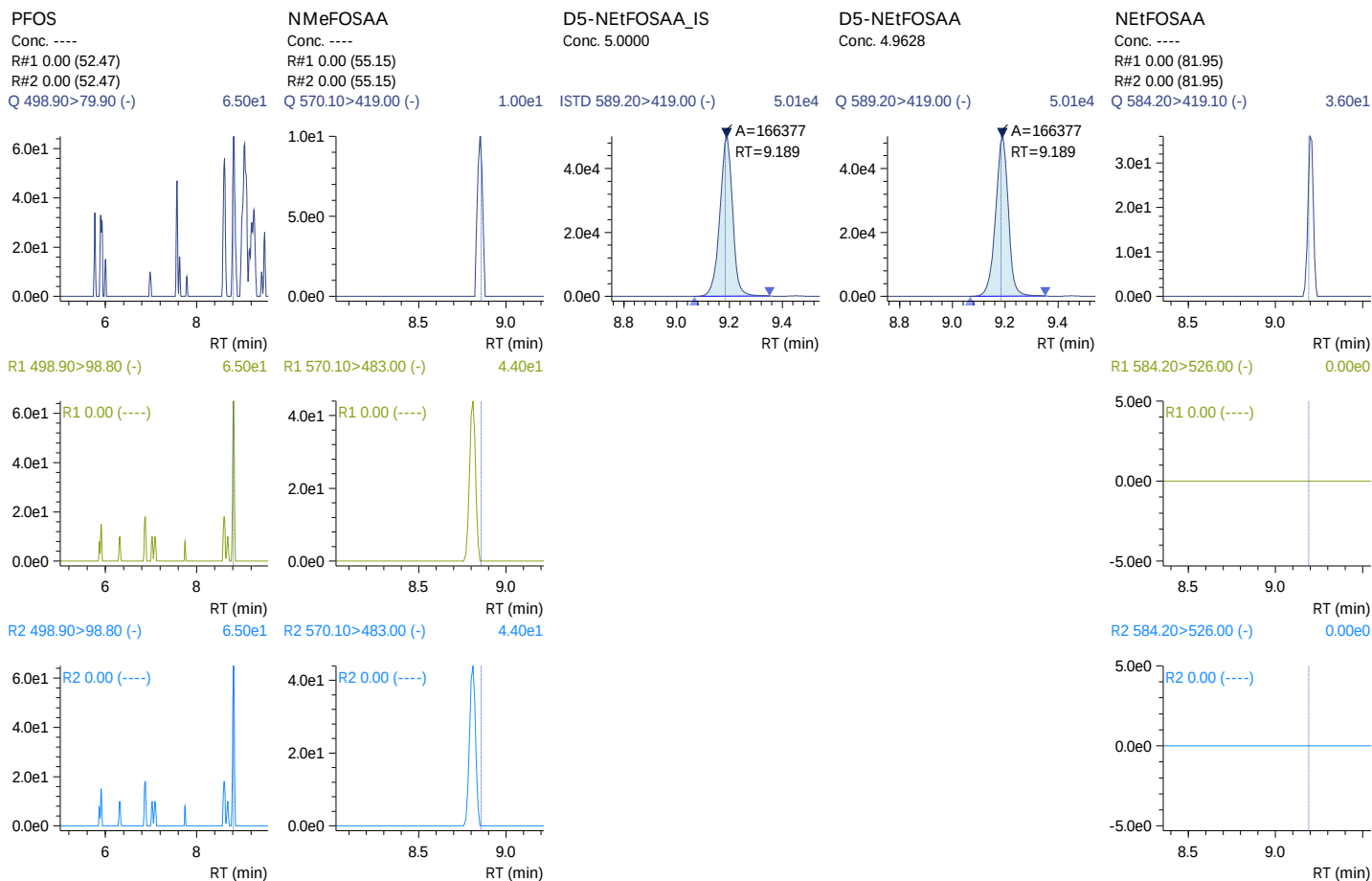


240122_030 (continued)





240122_030 (continued)





240122_030 (continued)

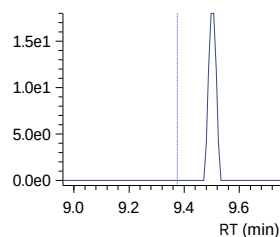
9-Cl-PF3ONS

Conc. ----

R#1 0.00 (32.76)

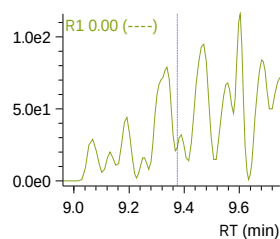
R#2 0.00 (32.76)

Q 530.80>351.00 (-)



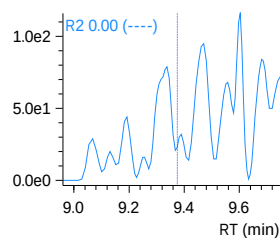
R1 532.80>353.00 (-)

1.16e2



R2 532.80>353.00 (-)

1.16e2



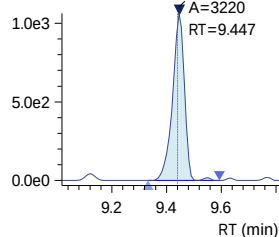
PFUnDA

Conc. -0.0018

R#1 0.00 (13.12)

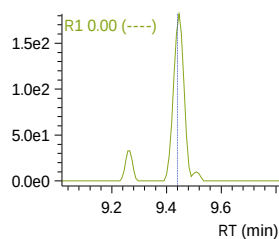
R#2 0.00 (13.12)

Q 563.10>519.00 (-)



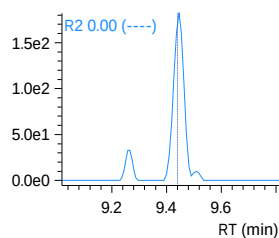
R1 563.10>269.10 (-)

1.82e2



R2 563.10>269.10 (-)

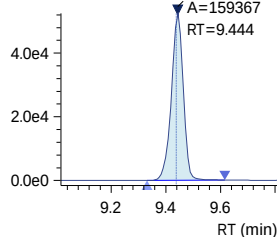
1.82e2



13C7-PFUnDA_IS

Conc. 1.2500

ISTD 570.00>525.10 (-)



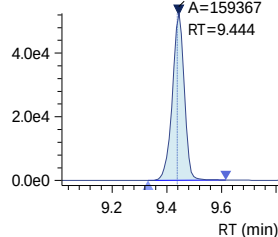
5.25e4



13C7-PFUnDA

Conc. 1.1555

Q 570.00>525.10 (-)



5.25e4



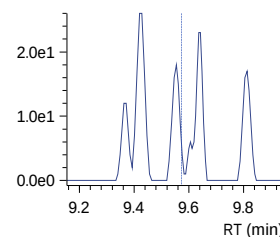
PFNS

Conc. ----

R#1 0.00 (65.22)

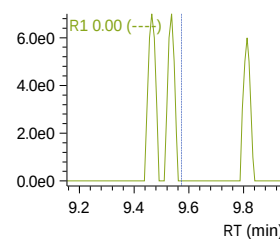
R#2 0.00 (65.22)

Q 548.80>79.90 (-)



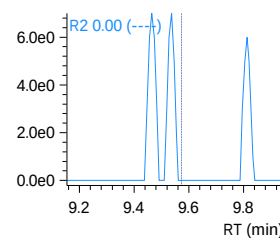
R1 548.80>98.80 (-)

7.00e0



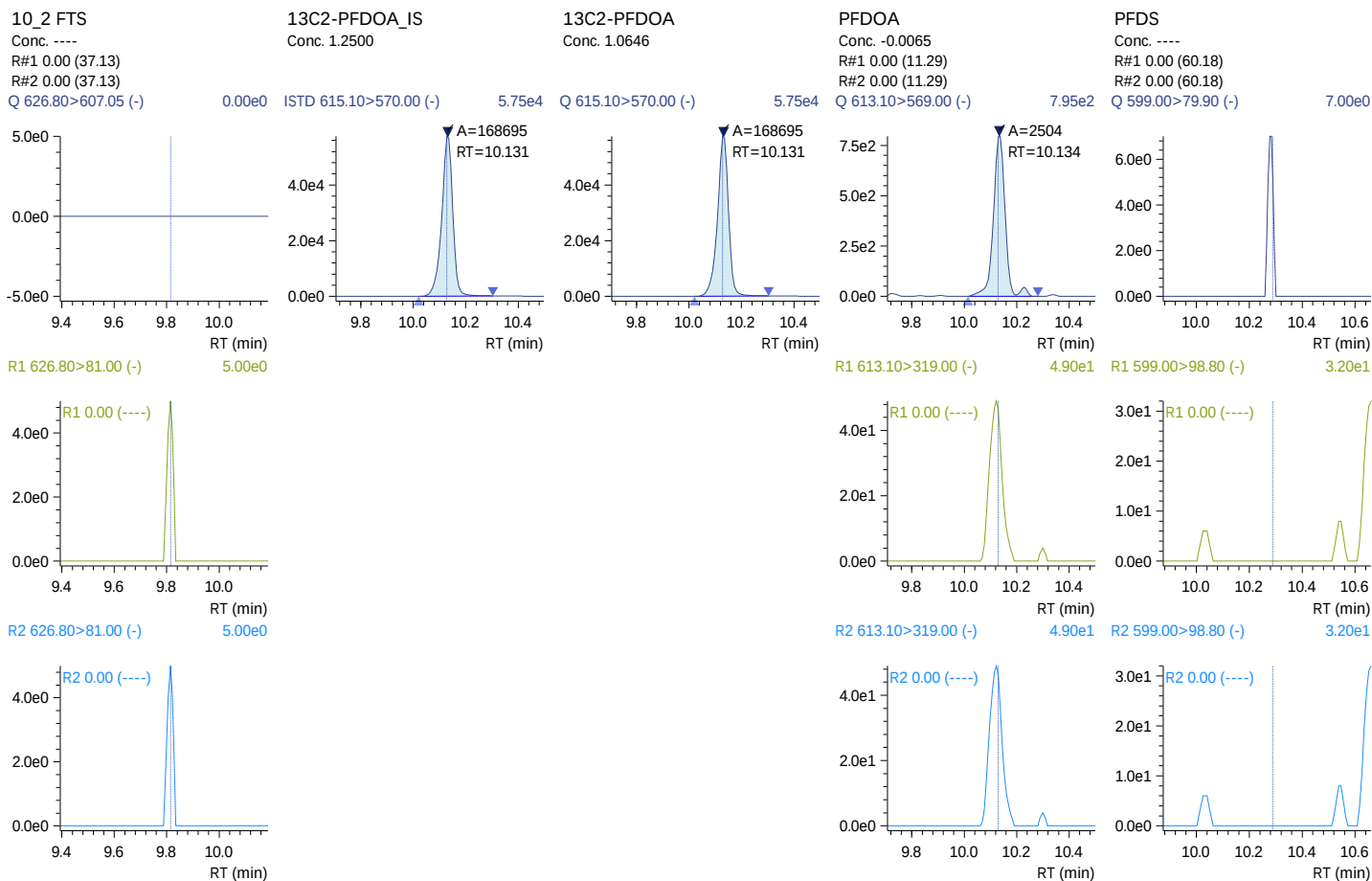
R2 548.80>98.80 (-)

7.00e0



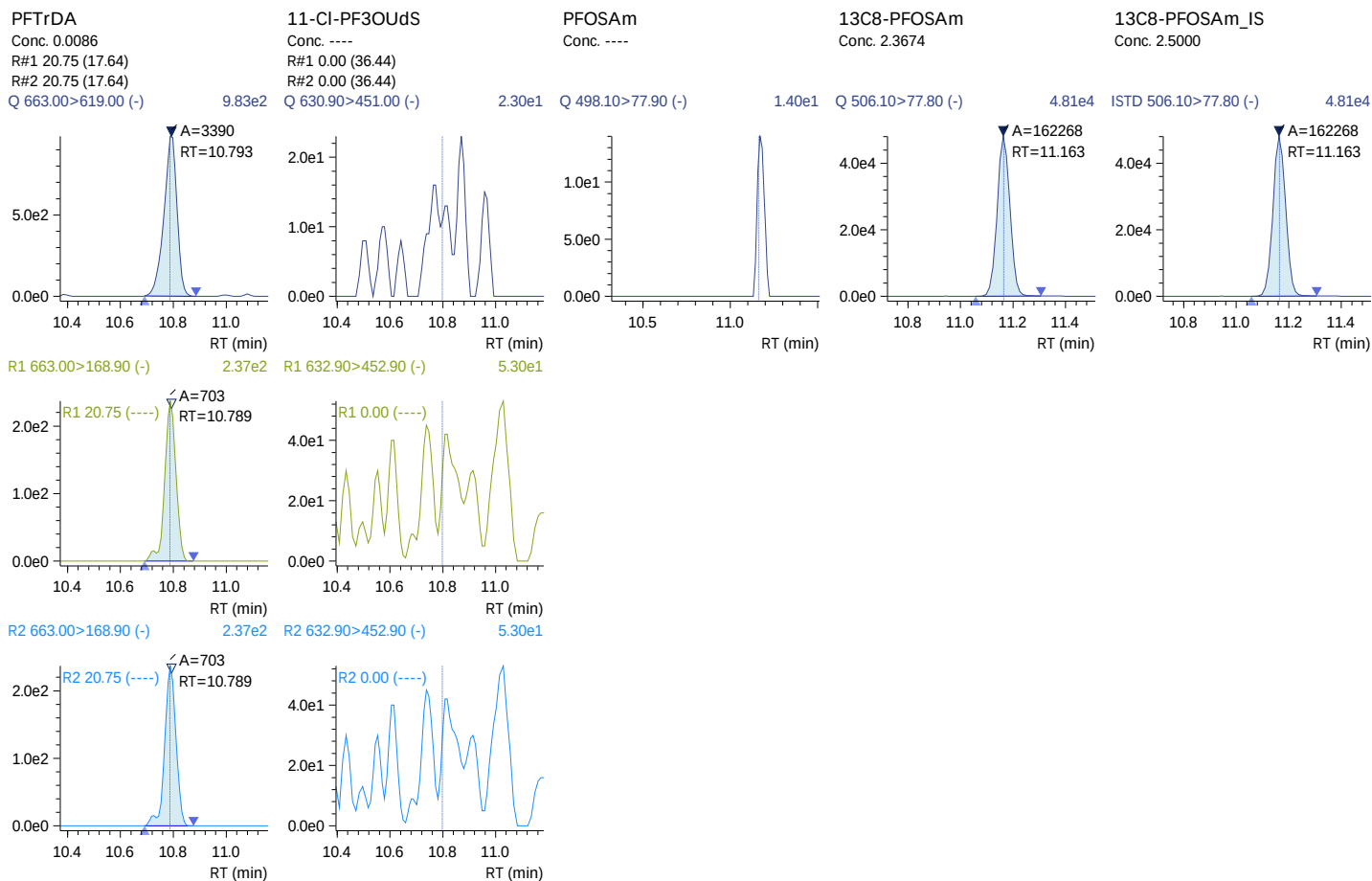


240122_030 (continued)



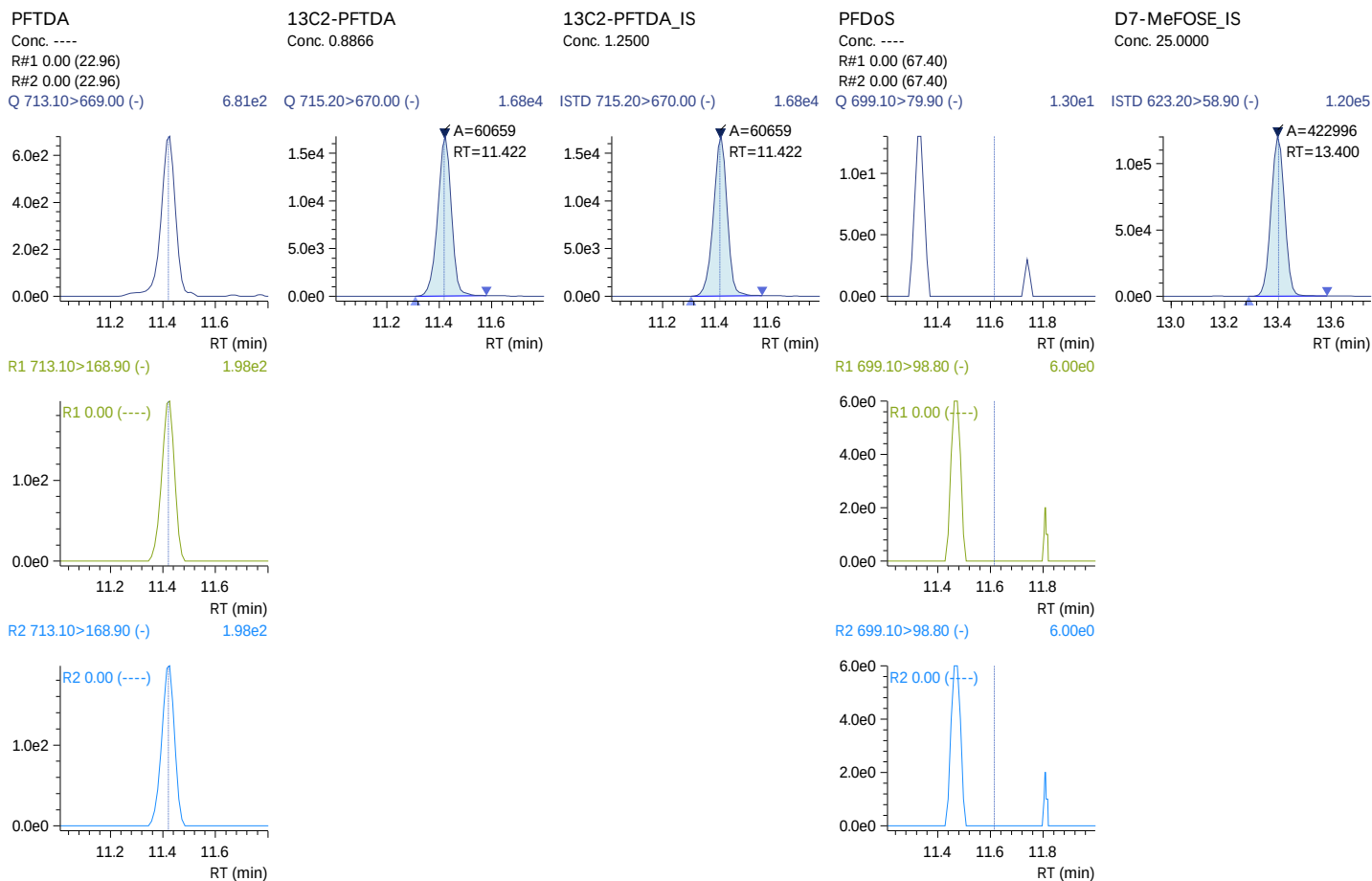


240122_030 (continued)





240122_030 (continued)





240122_030 (continued)

D7-MeFOSE
 Conc. 25.0313

MeFOSE
 Conc. ----

13C2-PFHxDA_IS
 Conc. 2.5000

13C2-PFHxDA
 Conc. 1.4533

PFHxDA

Conc. 0.0056
 R#1 0.00 (13.90)
 R#2 0.00 (13.90)

Q 623.20>58.90 (-)

1.20e5

Q 616.10>59.00 (-)

4.50e1

ISTD 815.00>770.05 (-)

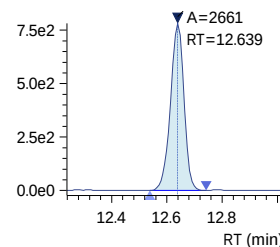
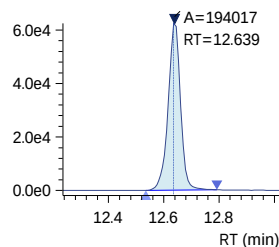
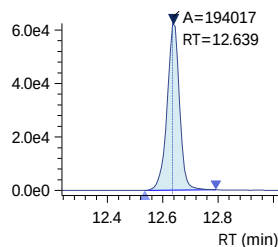
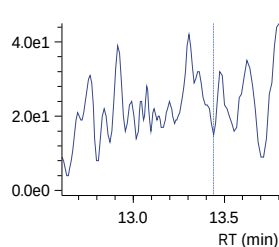
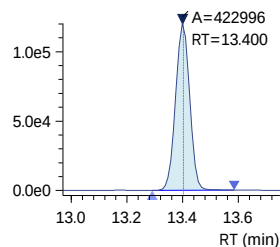
6.25e4

Q 815.00>770.05 (-)

6.25e4

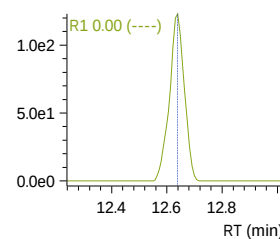
Q 813.00>768.95 (-)

7.82e2



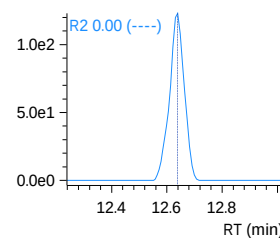
R1 813.00>218.95 (-)

1.23e2



R2 813.00>218.95 (-)

1.23e2





240122_030 (continued)

D3-MeFOSA
 Conc. 1.9074

D3-MeFOSA_IS
 Conc. 2.5000

MeFOSA
 Conc. ----
 R#1 0.00 (140.79)
 R#2 0.00 (140.79)

D9-EtFOSE_IS
 Conc. 25.0000

D9-EtFOSE
 Conc. 24.0648

Q 515.00>219.00 (-)

7.49e3

ISTD 515.00>219.00 (-)

7.49e3

Q 511.90>219.00 (-)

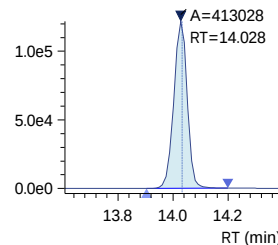
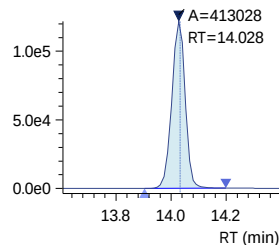
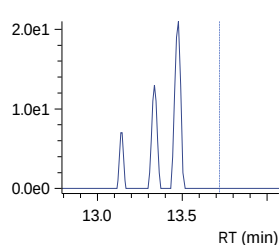
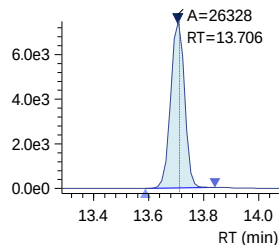
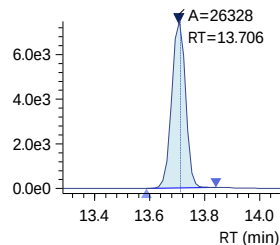
2.10e1

ISTD 639.20>58.90 (-)

1.22e5

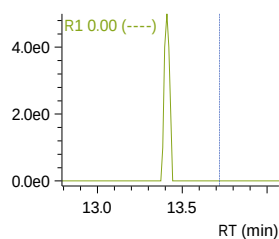
Q 639.20>58.90 (-)

1.22e5



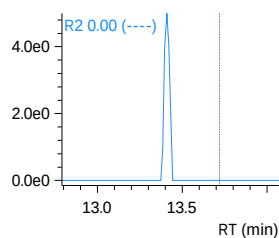
R1 511.90>169.00 (-)

5.00e0



R2 511.90>169.00 (-)

5.00e0





240122_030 (continued)

EtFOSE
 Conc. ----

D5-EtFOSAm
 Conc. 2.0812

D5-EtFOSAm_IS
 Conc. 2.5000

EtFOSAm
 Conc. ----

PFODA
 Conc. 0.0371

Q 630.00>59.00 (-)

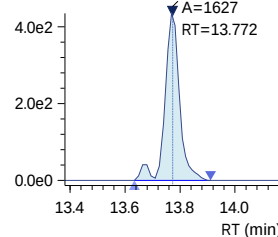
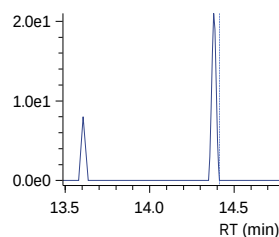
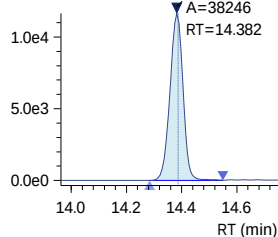
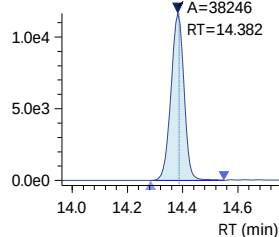
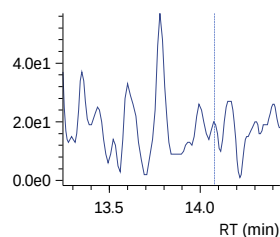
5.70e1 Q 531.10>219.00 (-)

1.16e4 ISTD 531.10>219.00 (-)

1.16e4 Q 526.00>219.00 (-)

2.10e1 Q 913.00>868.65 (-)

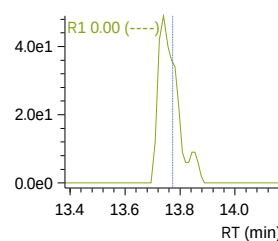
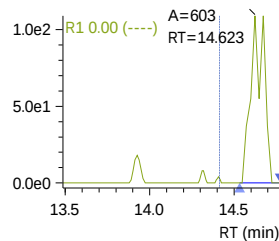
4.35e2



R1 526.00>169.00 (-)

1.09e2 R1 913.00>169.00 (-)

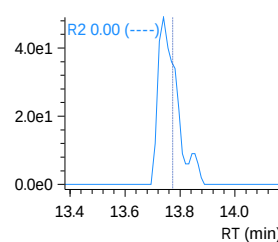
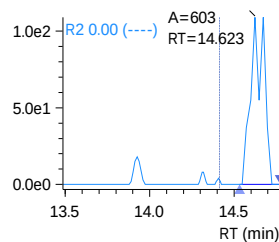
4.90e1



R2 526.00>169.00 (-)

1.09e2 R2 913.00>169.00 (-)

4.90e1



Validation Report

1st *PS* 01/25/24
2nd *MS* 01/25/24

Data File: J:\LCMS08\Data\240122_1633_B1\240122_031
Lab ID: KQ2400483-01
RunType: LCS
Matrix: Water

Date Acquired: 1/22/24 21:23
Batch ID: 830573
Analysis Method: 1633/PFAS_DOD5.4

Validations

Validation Categories	Pass	Fail
Analytical Hold Time	X	
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery		X
Continuing Calibration Recovery (Closing)		X
Internal Standards	X	
Surrogates	X	
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Continuing Calibration Recovery	N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	136	70	130	rerun with any samples with hits
	D3-MeFOSAA	138	70	130	native in control
	13C2-4:2 FTS	163	70	130	
	13C2-6:2 FTS	170	70	130	
	13C2-8:2 FTS	162	70	130	
Continuing Calibration Recovery (Closing)	N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	160	70	130	rerun with any samples with hits
	Perfluoro-3-methoxypropanoic acid (PFMPA)	135	70	130	
	D9-EtFOSE	131	70	130	native in control
	D3-MeFOSAA	142	70	130	
	13C2-4:2 FTS	156	70	130	
	13C2-6:2 FTS	136	70	130	
	13C2-8:2 FTS	142	70	130	

Primary Review: _____

Secondary Review: _____

Quantitation Report

1st *PS* 01/25/24
2nd *MS* 01/25/24

Data File:	J:\LCMS08\Data\240122_1633_B1\240122_031	Instrument:	K-LCMS-08
Acqu Date:	1/22/24 21:23	Vial:	47
Run Type:	LCS	Dilution:	1
Lab ID:	KQ2400483-01	Raw Units:	ng/mL

Bottle ID:		Tier:	IV	Matrix:	Water
Prod Code:	PFAS_DOD5.4	Collect Date:	12/27/23	Receive Date:	12/28/23

Analysis Lot:	830573	Prep Lot:	432516	Report Group:	KQ2400483
Analysis	1633	Prep Method:	Method		
		Prep Date:	1/11/24		

Title:	Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM	Calibration ID:	KC2400027
		Report List ID:	24615

Internal Standard Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Area Criteria
18O2-PFHxS	7.074	+0.00	159550	2.5000	OK
13C4-PFOS	8.813	0.00	193194	2.5000	OK
13C3-PFBA	1.412	+0.02	447125	5.0000	OK
13C2-PFHxA	4.963	+0.01	462594	2.5000	OK
13C4-PFOA	7.102	+0.00	34091	2.5000	OK
13C5-PFNA	7.952		220903	1.2500	OK
13C2-PFDA	8.719	0.00	167130	1.2500	OK

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
13C3-PFBS	4.627	+0.01	194169	2.1445	86	40 - 135	Y
13C3-PFHxS	7.073		134816	1.9686	79	40 - 130	Y
13C8-PFOS	8.813	0.00	62522	1.9405	78	40 - 130	Y
13C4-PFBA	1.413	+0.02	951121	9.5169	95	5 - 130	Y
13C5-PFPeA	3.482	+0.01	87515	4.1912	84	40 - 130	Y
13C5-PFHxA	4.962	+0.01	420152	2.1551	86	40 - 130	Y
13C4-PFHpA	6.143	+0.00	441388	2.5009	100	40 - 130	Y
13C8-PFOA	7.101		436669	2.2917	92	40 - 130	Y
13C9-PFNA	7.951	0.00	201362	1.1642	93	40 - 130	Y
13C6-PFDA	8.718	0.00	165410	1.2302	98	40 - 130	Y
13C7-PFUnDA	9.441	0.00	170396	1.0624	85	30 - 130	Y
13C2-PFDoDA	10.130	0.00	196584	1.0669	85	10 - 130	Y
13C2-PFTeDA	11.421	0.00	79837	1.0035	80	10 - 130	Y
13C8-FOSA	11.163	-0.01	176444	2.1514	86	40 - 130	Y
D3-MeFOSA	13.709	-0.01	28713	1.7385	70	10 - 130	Y
D5-EtFOSA	14.384	-0.01	43832	1.9933	80	10 - 130	Y
D7-MeFOSE	13.400	-0.01	473891	23.4363	94	10 - 130	Y
D9-EtFOSE	14.029	-0.01	501903	24.4391	98	10 - 130	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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			1st	PS	01/25/24
Data File:	J:\LCMS08\Data\240122_1633_B1\240122_031	Instrument:	K-LCMS08	MS	01/25/24
Acqu Date:	1/22/24 21:23	Vial:	47		
Run Type:	LCS	Dilution:	1		
Lab ID:	KQ2400483-01	Raw Units:	ng/mL		

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
D3-MeFOSAA	8.855	0.00	191818	5.7207	114	40 - 170	Y
D5-EtFOSAA	9.187	-0.01	192004	4.7864	96	25 - 135	Y
13C2-4:2 FTS	4.646	+0.00	156890	7.1456	143	40 - 200	Y
13C2-6:2 FTS	6.784	0.00	148476	7.1499	143	40 - 200	Y
13C2-8:2 FTS	8.406	0.00	113391	6.6473	133	40 - 300	Y
13C3-HFPO-DA	5.439	+0.00	489898	10.8184	108	40 - 130	Y

Target Compounds

Final Conc.Units: ng/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Perfluorobutane sulfonic acid (PFBS)	4.627	+0.01	100620	1.0124	20.2		Y
Perfluoropentane sulfonic acid (PFPeS)	6.002	+0.00	75188	1.0620	21.2		Y
Perfluorohexane sulfonic acid (PFHxS)	7.073		77098	1.1723	23.4		Y
Perfluoroheptane sulfonic acid (PFHpS)	7.996	+0.00	53824	1.1030	22.1		Y
Perfluorooctane sulfonic acid (PFOS)	8.814	0.00	71043	1.0925	21.9		Y
Perfluorononane sulfonic acid (PFNS)	9.577	0.00	52644	1.1082	22.2		Y
Perfluorodecane sulfonic acid (PFDS)	10.290	0.00	43824	1.0552	21.1		Y
Perfluorododecane sulfonic acid (PFDoS)	11.617		20509	0.8179	16.4		Y
Perfluorobutanoic acid (PFBA)	1.415	+0.02	87474	1.0704	21.4		Y
Perfluoropentanoic acid (PFPeA)	3.484	+0.01	139082	1.2270	24.5		Y
Perfluorohexanoic acid (PFHxA)	4.964	+0.01	156848	1.1132	22.3		Y
Perfluoroheptanoic acid (PFHpA)	6.145	+0.00	190815	1.0076	20.2		Y
Perfluorooctanoic acid (PFOA)	7.103	0.00	115696	0.9829	19.7		Y
Perfluorononanoic acid (PFNA)	7.953		124852	1.0586	21.2		Y
Perfluorodecanoic acid (PFDA)	8.719	0.00	157346	0.9725	19.5		Y
Perfluoroundecanoic acid (PFUnDA)	9.443	0.00	119856	0.9417	18.8		Y
Perfluorododecanoic acid (PFDOA)	10.131	0.00	110029	0.9623	19.2		Y
Perfluorotridecanoic acid (PFTTrDA)	10.788	0.00	109682	0.9429	18.9		Y
Perfluorotetradecanoic acid (PFTDA)	11.422	0.00	89201	1.0120	20.2		Y
Perfluorooctane sulfonamide (PFOSAm)	11.161	-0.01	63048	1.0841	21.7		Y
N-Methylperfluorooctane sulfonamide (MeFOSA)	13.714	-0.01	19527	0.9434	18.9		Y
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	14.402	-0.01	20928	0.8201	16.4		Y
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	13.438	-0.01	17628	1.0129	20.3		Y
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	14.073	-0.01	28362	1.0740	21.5		Y
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	8.861	0.00	55804	1.0722	21.4		Y

U: Undetected at or above MDL

J: Analyte detected above MDL, but below MRL

B: Hit above MRL also found in Method Blank

E: Analyte concentration above high point of ICAI

N: Presumptive evidence of compound

D: Result from dilution

m: Manual integration performed

d: Compound manually deleted

NR: Analyte not reported from this analysis

*: Result fails acceptance criteria

#: Acceptance criteria not applicable

?: Insufficient information to determine acceptance

e: Result >= MRL, but MRL less than low point of ICAI

c: check for co-elution

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			1st	PS	01/25/24
Data File:	J:\LCMS08\Data\240122_1633_B1\240122_031	Instrument:	K-LCMS08	MS	01/25/24
Acqu Date:	1/22/24 21:23	Vial:	47		
Run Type:	LCS	Dilution:	1		
Lab ID:	KQ2400483-01	Raw Units:	ng/mL		

<i>Target Compounds</i>		Final Conc.Units: ng/L				
Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q Rpt?
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	9.196	-0.01	39084	1.5242	30.5	Y
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	4.647	+0.01	74931	0.9710	19.4	Y
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	6.784	0.00	57119	0.8448	16.9	Y
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	8.405	0.00	43089	0.8843	17.7	Y
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	2.989	+0.02	56212	28.9658	579	Y
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	5.879		276232	25.4177	508	Y
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	7.941	-0.01	356290	24.5579	491	Y
Perfluoro(2-ethoxyethane) sulfonic acid (PFEEESA)	5.302	+0.01	431330	0.9166	18.3	Y
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	9.378	0.00	331279	0.8202	16.4	Y
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	10.798	0.00	187622	0.6735	13.5	Y
Perfluoro-3-methoxypropanoic acid (PFMPA)	2.430	+0.02	76438	1.3515	27.0	Y
Perfluoro-4-methoxybutanoic acid (PFMBA)	4.006	+0.01	90714	1.1321	22.6	Y
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	5.440	+0.00	57354	1.0600	21.2	Y
Nonafluoro-3,6-dioxahexanoic acid (NFDHA)	4.819	+0.01	116482	1.2496	25.0	Y
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	6.509		342721	0.9026	18.1	Y

Prep Amount:	250 mL	Dilution:	1
Prep Final Amount:	5.00 mL	Basis Factor:	100.00



240122_031

Sample ID: KQ2400483-01
Date Acquired: 1/22/2024 9:23:09 PM
Acquired by: System Administrator
Data File: 240122_031
Vial: 11 | Inj. Volume: 10.0000uL | Tray: 2

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	951121	----	----	----	----	----	----	
13C4-PFBA_IS	216.80>171.90	----	951121	----	----	----	----	----	----	
13C3-PFBA_IS	216.00>172.00	----	447125	----	----	----	----	----	----	
PFBA	212.80>169.05	----	87474	----	----	----	----	----	----	
PFMPA	229.00>84.90	----	76438	----	----	----	----	----	----	
3_3 FTCA	241.00>177.10	241.00>117.00	56212	79898	142.14	141.17	79898	142.14	135.52	AC
13C5-PFPeA	268.30>223.00	----	87515	----	----	----	----	----	----	
13C5-PFPeA_IS	268.30>223.00	----	87515	----	----	----	----	----	----	
PFPeA	263.00>219.00	----	139082	----	----	----	----	----	----	
PFMBA	279.00>84.95	----	90714	----	----	----	----	----	----	
13C2-4_2 FTS	329.10>80.90	----	156890	----	----	----	----	----	----	
13C2-4_2 FTS_IS	329.10>80.90	----	156890	----	----	----	----	----	----	
4_2 FTS	327.10>307.00	327.10>80.90	74931	25174	33.60	29.06	25174	33.60	35.34	
13C3-PFBS_IS	302.10>79.90	----	194169	----	----	----	----	----	----	
PFBS	298.70>79.90	298.70>98.80	100620	44922	44.65	46.72	44922	44.65	49.78	
13C3-PFBS	302.10>79.90	----	194169	----	----	----	----	----	----	
NFDHA	295.00>201.00	295.00>84.90	116482	43071	36.98	40.25	43071	36.98	37.18	
13C5-PFHxA	318.00>273.00	----	420152	----	----	----	----	----	----	
13C5-PFHxA_IS	318.00>273.00	----	420152	----	----	----	----	----	----	
13C2-PFHxA_IS	315.10>270.00	----	462594	----	----	----	----	----	----	
PFHxA	313.00>269.00	----	156848	----	----	----	----	----	----	
PFEESA	314.80>135.00	314.80>82.90	431330	25494	5.91	6.11	25494	5.91	5.72	
13C3-HFPO-DA	286.90>168.90	----	489898	----	----	----	----	----	----	
13C3-HFPO-DA_IS	286.90>168.90	----	489898	----	----	----	----	----	----	
HFPO-DA	284.90>168.90	284.90>184.90	57354	36136	63.01	65.61	36136	63.01	60.94	
5_3 FTCA	341.00>237.05	341.00>217.00	276232	441103	159.69	158.86	441103	159.69	155.83	
PFPeS	349.10>79.90	349.10>98.80	75188	41142	54.72	55.80	41142	54.72	56.73	
13C4-PFHpA	367.10>322.00	----	441388	----	----	----	----	----	----	
13C4-PFHpA_IS	367.10>322.00	----	441388	----	----	----	----	----	----	
PFHpA	363.10>319.00	363.10>169.00	190815	47073	24.67	21.50	47073	24.67	21.92	
DONA	376.90>250.90	376.90>84.80	342721	94443	27.56	29.66	94443	27.56	30.77	
13C2-6_2 FTS_IS	429.10>80.90	----	148476	----	----	----	----	----	----	
13C2-6_2 FTS	429.10>80.90	----	148476	----	----	----	----	----	----	
6_2 FTS	427.10>407.00	427.10>80.90	57119	25715	45.02	41.15	25715	45.02	40.98	
13C4-PFOA_IS	417.10>172.00	----	34091	----	----	----	----	----	----	
13C8-PFOA_IS	421.10>376.00	----	436669	----	----	----	----	----	----	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240122_031 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	436669	----	----	----	----	----	----	----
PFOA	413.00>369.00	413.00>169.00	115696	34145	29.51	31.89	34145	29.51	32.23	
13C3-PFHxS	402.10>79.90	----	134816	----	----	----	----	----	----	----
13C3-PFHxS_IS	402.10>79.90	----	134816	----	----	----	----	----	----	----
PFHxS	398.70>79.90	398.70>98.90	77098	45097	58.49	56.62	45097	58.49	60.26	
18O2-PFHxS_IS	403.00>83.90	----	159550	----	----	----	----	----	----	----
13C9-PFNA_IS	472.10>427.00	----	201362	----	----	----	----	----	----	----
13C9-PFNA	472.10>427.00	----	201362	----	----	----	----	----	----	----
13C5-PFNA_IS	468.00>423.00	----	220903	----	----	----	----	----	----	----
PFNA	463.00>419.00	463.00>219.00	124852	29431	23.57	23.17	29431	23.57	23.63	
PFHpS	449.00>79.90	449.00>98.80	53824	32078	59.60	56.96	32078	59.60	59.06	
7_3 FTCA	441.00>317.00	441.00>336.90	356290	466514	130.94	117.47	466514	130.94	125.53	
13C2-8_2-FTS	529.10>80.90	----	113391	----	----	----	----	----	----	----
13C2-8_2-FTS_IS	529.10>80.90	----	113391	----	----	----	----	----	----	----
8_2 FTS	527.10>506.95	527.10>80.80	43089	22112	51.32	49.59	22112	51.32	44.81	
13C6-PFDA_IS	519.10>474.10	----	165410	----	----	----	----	----	----	----
13C6-PFDA	519.10>474.10	----	165410	----	----	----	----	----	----	----
13C2-PFDA_IS	515.10>470.10	----	167130	----	----	----	----	----	----	----
PFDA	512.90>469.00	512.90>219.00	157346	30762	19.55	19.00	30762	19.55	19.15	
D3-NMeFOSAA_IS	573.20>419.00	----	191818	----	----	----	----	----	----	----
D3-NMeFOSAA	573.20>419.00	----	191818	----	----	----	----	----	----	----
13C8-PFOS_IS	507.10>98.90	----	62522	----	----	----	----	----	----	----
13C8-PFOS	507.10>98.90	----	62522	----	----	----	----	----	----	----
13C4-PFOS_IS	502.80>79.90	----	193194	----	----	----	----	----	----	----
PFOS	498.90>79.90	498.90>98.80	71043	35189	49.53	52.47	35189	49.53	53.10	
NMeFOSAA	570.10>419.00	570.10>483.00	55804	28587	51.23	55.15	28587	51.23	60.69	
D5-NEtFOSAA_IS	589.20>419.00	----	192004	----	----	----	----	----	----	----
D5-NEtFOSAA	589.20>419.00	----	192004	----	----	----	----	----	----	----
NEtFOSAA	584.20>419.10	584.20>526.00	39084	25450	65.12	81.95	25450	65.12	73.27	AC
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	331279	103121	31.13	32.76	103121	31.13	32.59	
PFUnDA	563.10>519.00	563.10>269.10	119856	16796	14.01	13.12	16796	14.01	14.36	
13C7-PFUnDA_IS	570.00>525.10	----	170396	----	----	----	----	----	----	----
13C7-PFUnDA	570.00>525.10	----	170396	----	----	----	----	----	----	----
PFNS	548.80>79.90	548.80>98.80	52644	33844	64.29	65.22	33844	64.29	65.31	
10_2 FTS	626.80>607.05	626.80>81.00	52562	18862	35.89	37.13	18862	35.89	38.76	
13C2-PFDOA_IS	615.10>570.00	----	196584	----	----	----	----	----	----	----
13C2-PFDOA	615.10>570.00	----	196584	----	----	----	----	----	----	----
PFDOA	613.10>569.00	613.10>319.00	110029	11911	10.83	11.29	11911	10.83	11.19	
PFDS	599.00>79.90	599.00>98.80	43824	25514	58.22	60.18	25514	58.22	65.65	
PFTrDA	663.00>619.00	663.00>168.90	109682	20428	18.63	17.64	20428	18.63	19.81	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240122_031 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	187622	67250	35.84	36.44	67250	35.84	35.86	
PFOSAm	498.10>77.90	----	63048	----	----	----	----	----	----	AC
13C8-PFOSAm	506.10>77.80	----	176444	----	----	----	----	----	----	
13C8-PFOSAm_IS	506.10>77.80	----	176444	----	----	----	----	----	----	
PFTDA	713.10>669.00	713.10>168.90	89201	19730	22.12	22.96	19730	22.12	25.01	
13C2-PFTDA	715.20>670.00	----	79837	----	----	----	----	----	----	
13C2-PFTDA_IS	715.20>670.00	----	79837	----	----	----	----	----	----	
PFDoS	699.10>79.90	699.10>98.80	20509	14456	70.49	67.40	14456	70.49	73.46	
D7-MeFOSE_IS	623.20>58.90	----	473891	----	----	----	----	----	----	
D7-MeFOSE	623.20>58.90	----	473891	----	----	----	----	----	----	
MeFOSE	616.10>59.00	----	17628	----	----	----	----	----	----	
13C2-PFHxDA_IS	815.00>770.05	----	256338	----	----	----	----	----	----	
13C2-PFHxDA	815.00>770.05	----	256338	----	----	----	----	----	----	
PFHxDA	813.00>768.95	813.00>218.95	108531	16581	15.28	13.90	16581	15.28	15.85	
D3-MeFOSA	515.00>219.00	----	28713	----	----	----	----	----	----	
D3-MeFOSA_IS	515.00>219.00	----	28713	----	----	----	----	----	----	
MeFOSA	511.90>219.00	511.90>169.00	19527	22479	115.12	140.79	22479	115.12	150.13	
D9-EtFOSE_IS	639.20>58.90	----	501903	----	----	----	----	----	----	
D9-EtFOSE	639.20>58.90	----	501903	----	----	----	----	----	----	
EtFOSE	630.00>59.00	----	28362	----	----	----	----	----	----	
D5-EtFOSAm	531.10>219.00	----	43832	----	----	----	----	----	----	
D5-EtFOSAm_IS	531.10>219.00	----	43832	----	----	----	----	----	----	
EtFOSAm	526.00>219.00	526.00>169.00	20928	27219	130.06	163.90	27219	130.06	152.08	
PFODA	913.00>868.65	913.00>169.00	48332	14307	29.60	27.03	14307	29.60	26.29	

Flag ID key: AC: Accuracy%



240122_031

Sample ID: KQ2400483-01
Date Acquired: 1/22/2024 9:23:09 PM
Acquired by: System Administrator
Data File: 240122_031
Vial: 11 | Inj. Volume: 10.0000uL | Tray: 2

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.413	0.022	0.001	951121	447125	13C3-PFBA_IS	9.5169	ng/mL	
13C4-PFBA_IS	Auto	1.413	0.022	----	951121	951121	----	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.412	0.021	----	447125	447125	----	5.0000	ng/mL	
PFBA	Auto	1.415	0.020	0.002	87474	951121	13C4-PFBA_IS	1.0704	ng/mL	
PFMPA	Auto	2.430	0.024	-1.052	76438	87515	13C5-PFPeA_IS	1.3515	ng/mL	
3_3 FTCA	Auto	2.989	0.021	-0.493	56212	87515	13C5-PFPeA_IS	28.9658	ng/mL	AC
13C5-PFPeA	Auto	3.482	0.017	-1.481	87515	462594	13C2-PFHxA_IS	4.1912	ng/mL	
13C5-PFPeA_IS	Auto	3.482	0.017	----	87515	87515	----	5.0000	ng/mL	
PFPeA	Auto	3.484	0.017	0.002	139082	87515	13C5-PFPeA_IS	1.2270	ng/mL	
PFMBA	Auto	4.006	0.015	0.524	90714	87515	13C5-PFPeA_IS	1.1321	ng/mL	
13C2-4_2 FTS	Auto	4.646	0.010	-2.428	156890	159550	18O2-PFHxS_IS	7.1456	ng/mL	
13C2-4_2 FTS_IS	Auto	4.646	0.010	----	156890	156890	----	5.0000	ng/mL	
4_2 FTS	Auto	4.647	0.010	0.001	74931	156890	13C2-4_2 FTS_IS	0.9710	ng/mL	
13C3-PFBS_IS	Auto	4.627	0.015	----	194169	194169	----	2.5000	ng/mL	
PFBS	Auto	4.627	0.014	0.000	100620	194169	13C3-PFBS_IS	1.0124	ng/mL	
13C3-PFBS	Auto	4.627	0.015	-2.447	194169	159550	18O2-PFHxS_IS	2.1445	ng/mL	
NFDHA	Auto	4.819	0.009	-0.143	116482	420152	13C5-PFHxA_IS	1.2496	ng/mL	
13C5-PFHxA	Auto	4.962	0.010	-0.001	420152	462594	13C2-PFHxA_IS	2.1551	ng/mL	
13C5-PFHxA_IS	Auto	4.962	0.010	----	420152	420152	----	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	4.963	0.010	----	462594	462594	----	2.5000	ng/mL	
PFHxA	Auto	4.964	0.010	0.002	156848	420152	13C5-PFHxA_IS	1.1132	ng/mL	
PFEESA	Auto	5.302	0.013	0.340	431330	420152	13C5-PFHxA_IS	0.9166	ng/mL	
13C3-HFPO-DA	Auto	5.439	0.009	0.476	489898	462594	13C2-PFHxA_IS	10.8184	ng/mL	
13C3-HFPO-DA_IS	Auto	5.439	0.009	----	489898	489898	----	10.0000	ng/mL	
HFPO-DA	Auto	5.440	0.009	0.001	57354	489898	13C3-HFPO-DA_IS	1.0600	ng/mL	
5_3 FTCA	Auto	5.879	0.009	0.917	276232	420152	13C5-PFHxA_IS	25.4177	ng/mL	
PFPeS	Auto	6.002	0.008	-1.071	75188	134816	13C3-PFHxS_IS	1.0620	ng/mL	
13C4-PFHpA	Auto	6.143	0.006	1.180	441388	462594	13C2-PFHxA_IS	2.5009	ng/mL	
13C4-PFHpA_IS	Auto	6.143	0.006	----	441388	441388	----	2.5000	ng/mL	
PFHpA	Auto	6.145	0.006	0.002	190815	441388	13C4-PFHpA_IS	1.0076	ng/mL	
DONA	Auto	6.509	0.005	1.070	342721	489898	13C3-HFPO-DA_IS	0.9026	ng/mL	
13C2-6_2 FTS_IS	Auto	6.784	0.003	----	148476	148476	----	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.784	0.003	-0.290	148476	159550	18O2-PFHxS_IS	7.1499	ng/mL	
6_2 FTS	Auto	6.784	0.003	0.000	57119	148476	13C2-6_2 FTS_IS	0.8448	ng/mL	
13C4-PFOA_IS	Auto	7.102	0.005	----	34091	34091	----	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.101	0.005	----	436669	436669	----	2.5000	ng/mL	
13C8-PFOA	Auto	7.101	0.005	-0.001	436669	34091	13C4-PFOA_IS	2.2917	ng/mL	
PFOA	Auto	7.103	0.005	0.002	115696	436669	13C8-PFOA_IS	0.9829	ng/mL	
13C3-PFHxS	Auto	7.073	0.005	-0.001	134816	159550	18O2-PFHxS_IS	1.9686	ng/mL	
13C3-PFHxS_IS	Auto	7.073	0.005	----	134816	134816	----	2.5000	ng/mL	
PFHxS	M	7.073	0.004	0.000	77098	134816	13C3-PFHxS_IS	1.1723	ng/mL	
18O2-PFHxS_IS	Auto	7.074	0.005	----	159550	159550	----	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.951	0.004	----	201362	201362	----	1.2500	ng/mL	
13C9-PFNA	Auto	7.951	0.004	-0.001	201362	220903	13C5-PFNA_IS	1.1642	ng/mL	
13C5-PFNA_IS	Auto	7.952	0.004	----	220903	220903	----	1.2500	ng/mL	
PFNA	Auto	7.953	0.005	0.002	124852	201362	13C9-PFNA_IS	1.0586	ng/mL	
PFHpS	Auto	7.996	0.004	-0.817	53824	62522	13C8-PFOS_IS	1.1030	ng/mL	
7_3 FTCA	Auto	7.941	0.005	2.979	356290	420152	13C5-PFHxA_IS	24.5579	ng/mL	
13C2-8_2-FTS	Auto	8.406	0.003	1.332	113391	159550	18O2-PFHxS_IS	6.6473	ng/mL	
13C2-8_2-FTS_IS	Auto	8.406	0.003	----	113391	113391	----	5.0000	ng/mL	
8_2 FTS	Auto	8.405	0.001	-0.001	43089	113391	13C2-8_2-FTS_IS	0.8843	ng/mL	
13C6-PFDA_IS	Auto	8.718	0.005	----	165410	165410	----	1.2500	ng/mL	
13C6-PFDA	Auto	8.718	0.005	-0.001	165410	167130	13C2-PFDA_IS	1.2302	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_031 (continued)

(Table continued from previous page)

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C2-PFDA_IS	Auto	8.719	0.006	----	167130	167130	----	1.2500	ng/mL	
PFDA	Auto	8.719	0.004	0.001	157346	165410	13C6-PFDA_IS	0.9725	ng/mL	
D3-NMeFOSAA_IS	Auto	8.855	0.004	----	191818	191818	----	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.855	0.004	0.042	191818	193194	13C4-PFOS_IS	5.7207	ng/mL	
13C8-PFOS_IS	Auto	8.813	0.005	----	62522	62522	----	2.5000	ng/mL	
13C8-PFOS	Auto	8.813	0.005	0.000	62522	193194	13C4-PFOS_IS	1.9405	ng/mL	
13C4-PFOS_IS	Auto	8.813	0.004	----	193194	193194	----	2.5000	ng/mL	
PFOS	M	8.814	0.005	0.001	71043	62522	13C8-PFOS_IS	1.0925	ng/mL	
NMeFOSAA	M	8.861	0.004	0.006	55804	191818	D3-NMeFOSAA_IS	1.0722	ng/mL	
D5-NetFOSAA_IS	Auto	9.187	0.004	----	192004	192004	----	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.187	0.004	0.374	192004	193194	13C4-PFOS_IS	4.7864	ng/mL	
NetFOSAA	M	9.196	0.004	0.009	39084	192004	D5-NetFOSAA_IS	1.5242	ng/mL	AC
9-CI-PF3ONS	Auto	9.378	0.003	3.939	331279	489898	13C3-HFPO-DA_IS	0.8202	ng/mL	
PFUnDA	Auto	9.443	0.003	0.002	119856	170396	13C7-PFUnDA_IS	0.9417	ng/mL	
13C7-PFUnDA_IS	Auto	9.441	0.003	----	170396	170396	----	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.441	0.003	0.722	170396	167130	13C2-PFDA_IS	1.0624	ng/mL	
PFNS	Auto	9.577	0.004	0.764	52644	62522	13C8-PFOS_IS	1.1082	ng/mL	
10_2_FTS	Auto	9.816	0.001	1.410	52562	113391	13C2-8_2-FTS_IS	0.8866	ng/mL	
13C2-PFDOA_IS	Auto	10.130	0.002	----	196584	196584	----	1.2500	ng/mL	
13C2-PFDOA	Auto	10.130	0.002	1.411	196584	167130	13C2-PFDA_IS	1.0669	ng/mL	
PFDOA	Auto	10.131	0.002	0.001	110029	196584	13C2-PFDOA_IS	0.9623	ng/mL	
PFDS	Auto	10.290	0.002	1.477	43824	62522	13C8-PFOS_IS	1.0552	ng/mL	
PFTDA	Auto	10.788	0.000	-0.633	109682	79837	13C2-PFTDA_IS	0.9429	ng/mL	
11-CI-PF3OUdS	Auto	10.798	0.000	5.359	187622	489898	13C3-HFPO-DA_IS	0.6735	ng/mL	
PFOSAm	Auto	11.161	-0.001	-0.002	63048	176444	13C8-PFOSAm_IS	1.0841	ng/mL	AC
13C8-PFOSAm	Auto	11.163	-0.001	2.350	176444	193194	13C4-PFOS_IS	2.1514	ng/mL	
13C8-PFOSAm_IS	Auto	11.163	-0.001	----	176444	176444	----	2.5000	ng/mL	
PFTDA	Auto	11.422	0.001	0.001	89201	79837	13C2-PFTDA_IS	1.0120	ng/mL	
13C2-PFTDA	Auto	11.421	0.002	2.702	79837	167130	13C2-PFDA_IS	1.0035	ng/mL	
13C2-PFTDA_IS	Auto	11.421	0.002	----	79837	79837	----	1.2500	ng/mL	
PFDoS	Auto	11.617	0.002	2.804	20509	62522	13C8-PFOS_IS	0.8179	ng/mL	
D7-MeFOSE_IS	Auto	13.400	-0.002	----	473891	473891	----	25.0000	ng/mL	
D7-MeFOSE	Auto	13.400	-0.002	4.587	473891	193194	13C4-PFOS_IS	23.4363	ng/mL	
MeFOSE	Auto	13.438	-0.003	0.038	17628	473891	D7-MeFOSE_IS	1.0129	ng/mL	
13C2-PFHxDA_IS	Auto	12.638	0.002	----	256338	256338	----	2.5000	ng/mL	
13C2-PFHxDA	Auto	12.638	0.002	3.919	256338	167130	13C2-PFDA_IS	1.6512	ng/mL	
PFHxDA	Auto	12.639	0.002	0.001	108531	256338	13C2-PFHxDA_IS	1.0047	ng/mL	
D3-MeFOSA	Auto	13.709	-0.002	4.896	28713	193194	13C4-PFOS_IS	1.7385	ng/mL	
D3-MeFOSA_IS	Auto	13.709	-0.002	----	28713	28713	----	2.5000	ng/mL	
MeFOSA	Auto	13.714	-0.004	0.005	19527	28713	D3-MeFOSA_IS	0.9434	ng/mL	
D9-EtFOSE_IS	Auto	14.029	-0.003	----	501903	501903	----	25.0000	ng/mL	
D9-EtFOSE	Auto	14.029	-0.003	5.216	501903	193194	13C4-PFOS_IS	24.4391	ng/mL	
EtFOSE	Auto	14.073	-0.003	0.044	28362	501903	D9-EtFOSE_IS	1.0740	ng/mL	
D5-EtFOSAm	Auto	14.384	-0.003	5.571	43832	193194	13C4-PFOS_IS	1.9933	ng/mL	
D5-EtFOSAm_IS	Auto	14.384	-0.003	----	43832	43832	----	2.5000	ng/mL	
EtFOSAm	Auto	14.402	-0.011	0.018	20928	43832	D5-EtFOSAm_IS	0.8201	ng/mL	
PFODA	Auto	13.773	-0.001	1.135	48332	256338	13C2-PFHxDA_IS	0.8338	ng/mL	

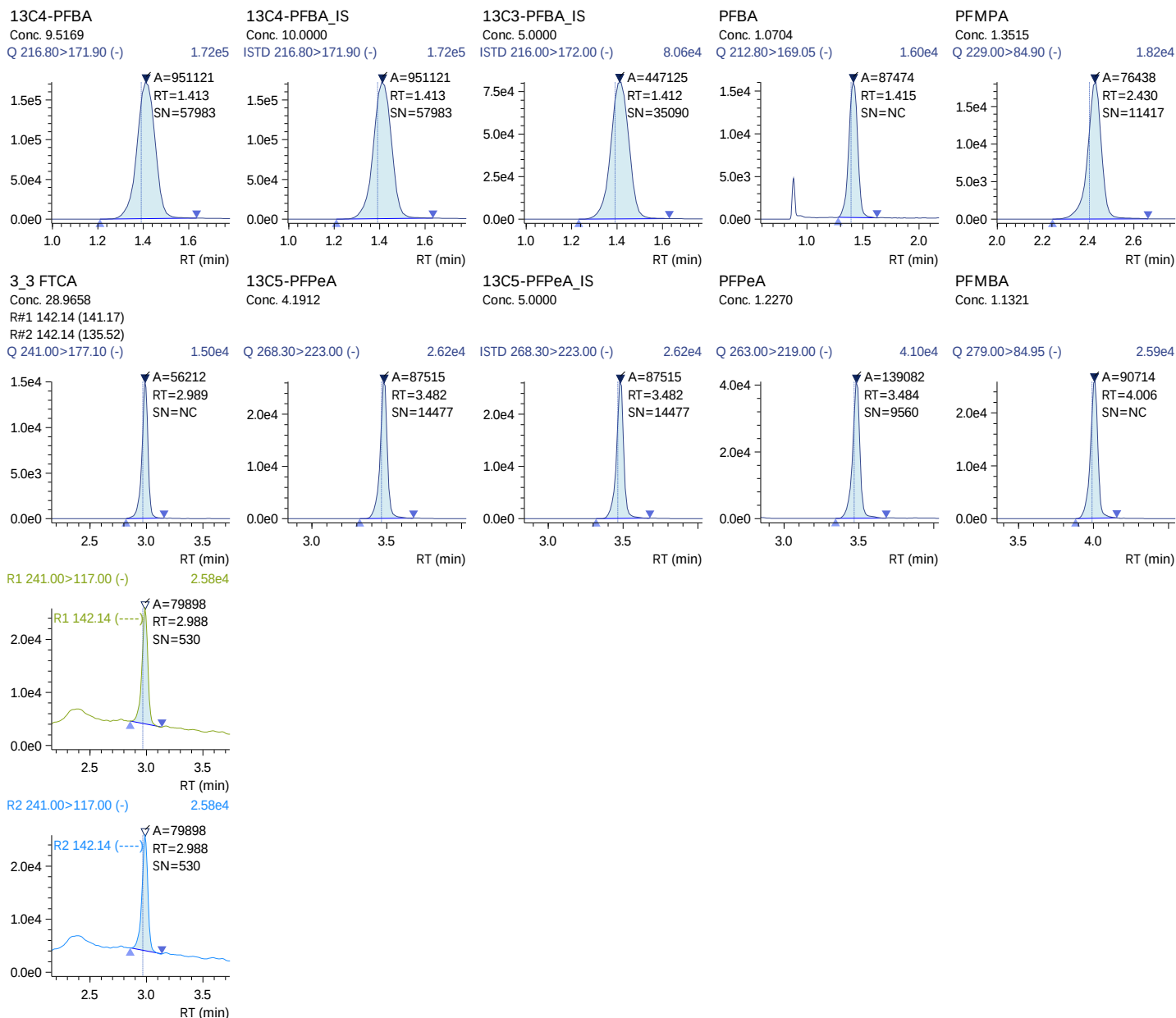
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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_031 (continued)





240122_031 (continued)

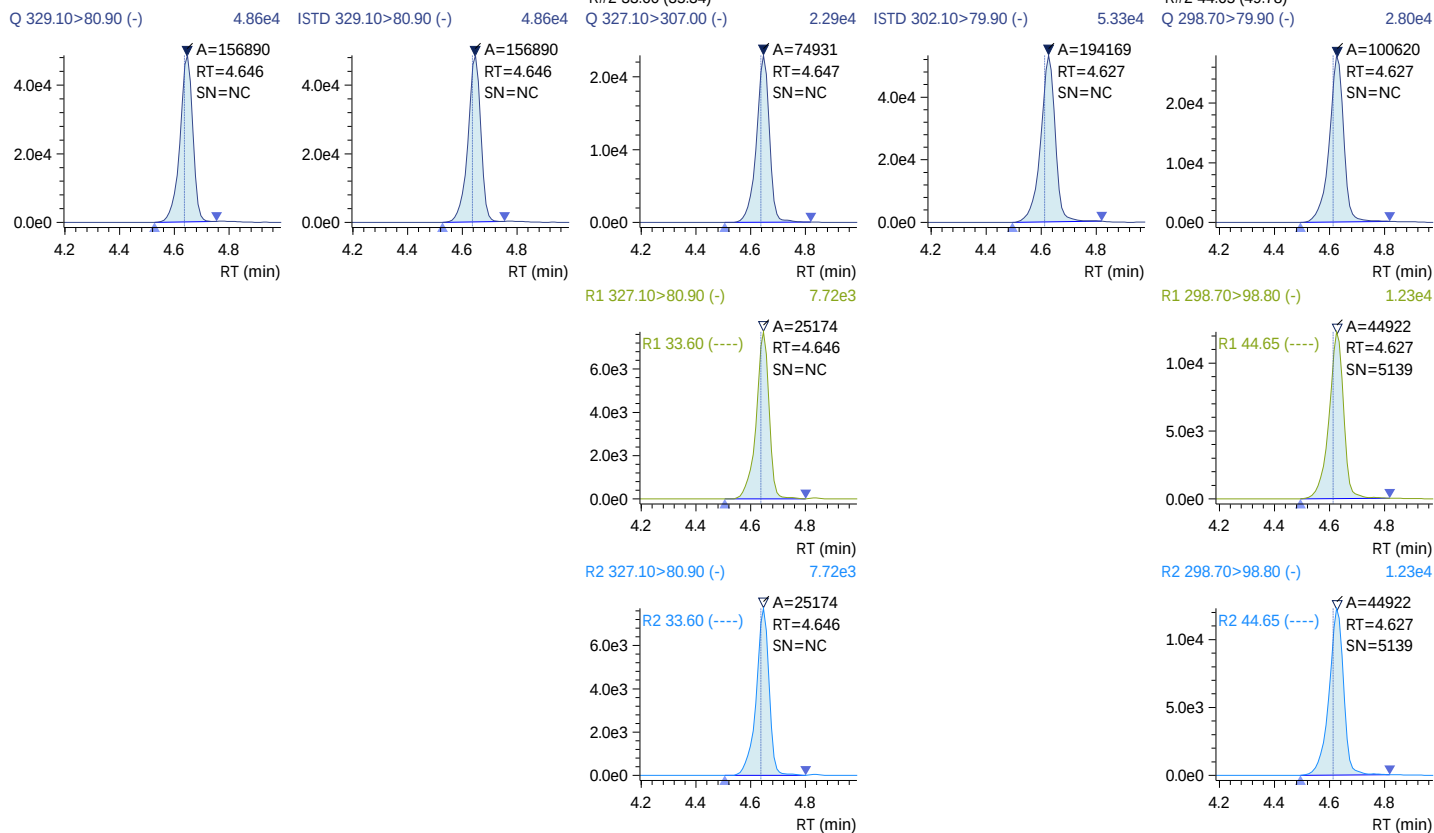
13C2-4_2_FTS
Conc. 7.1456

13C2-4_2_FTS_IS
Conc. 5.0000

4_2_FTS
Conc. 0.9710
R#1 33.60 (29.06)
R#2 33.60 (35.34)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 1.0124
R#1 44.65 (46.72)
R#2 44.65 (49.78)





240122_031 (continued)

13C3-PFBS
Conc. 2.1445

NFDHA
Conc. 1.2496
R#1 36.98 (40.25)
R#2 36.98 (37.18)

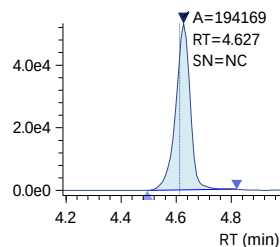
13C5-PFHxA
Conc. 2.1551

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

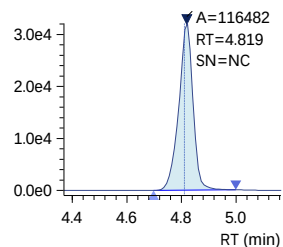
Q 302.10>79.90 (-)

5.33e4



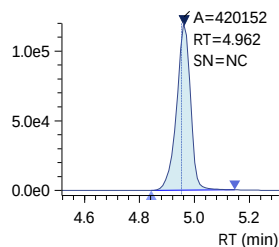
Q 295.00>201.00 (-)

3.22e4



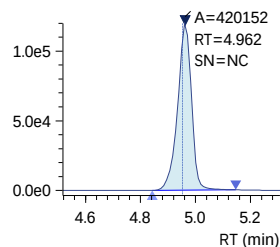
Q 318.00>273.00 (-)

1.20e5



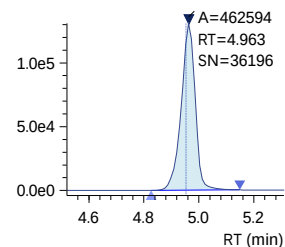
ISTD 318.00>273.00 (-)

1.20e5



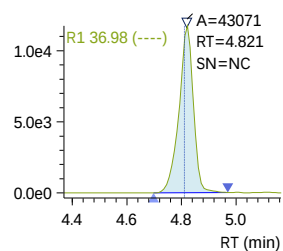
ISTD 315.10>270.00 (-)

1.31e5



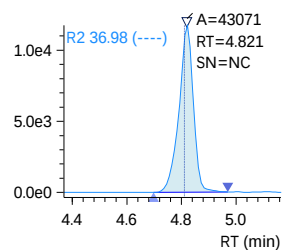
R1 295.00>84.90 (-)

1.17e4



R2 295.00>84.90 (-)

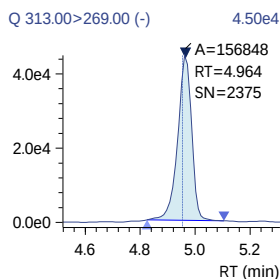
1.17e4



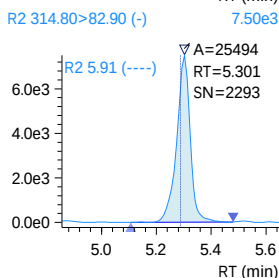
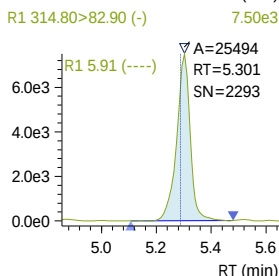
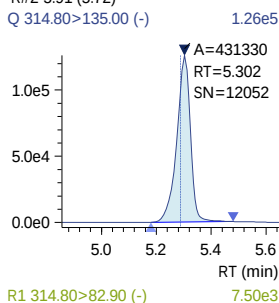


240122_031 (continued)

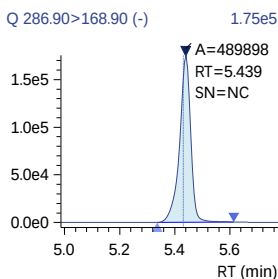
PFHxA
Conc. 1.1132



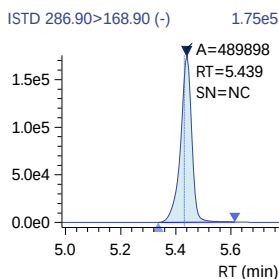
PFEESA
Conc. 0.9166
R#1 5.91 (6.11)
R#2 5.91 (5.72)



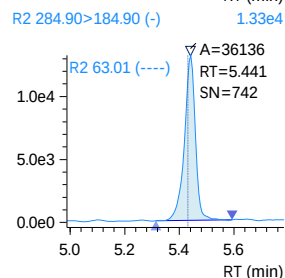
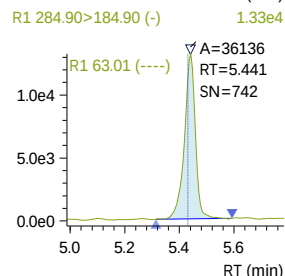
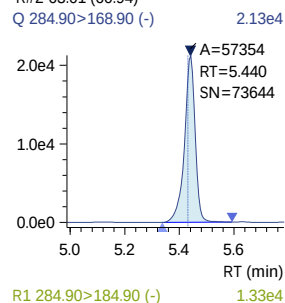
13C3-HFPO-DA
Conc. 10.8184



13C3-HFPO-DA_IS
Conc. 10.0000

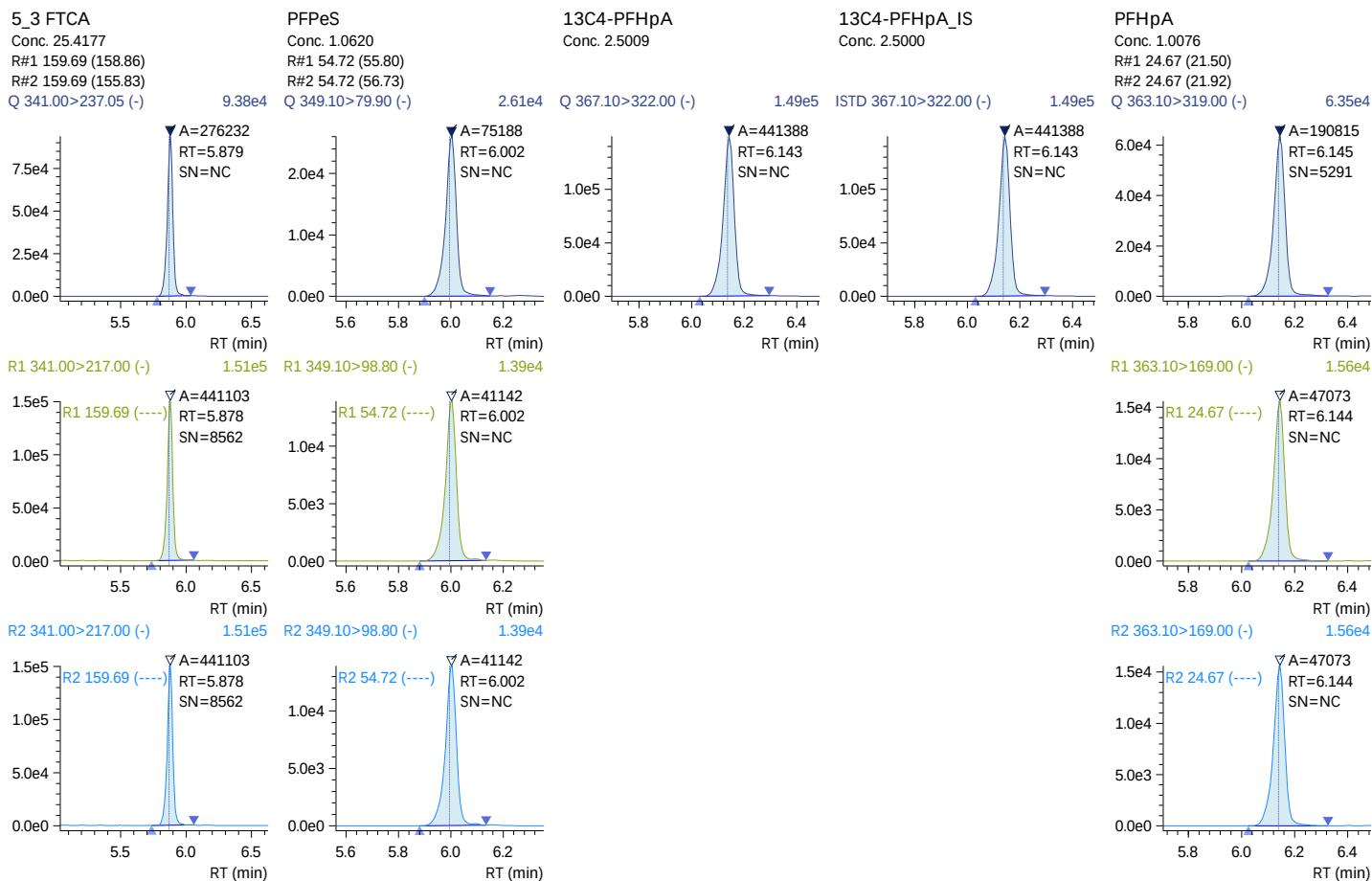


HFPO-DA
Conc. 1.0600
R#1 63.01 (65.61)
R#2 63.01 (60.94)





240122_031 (continued)

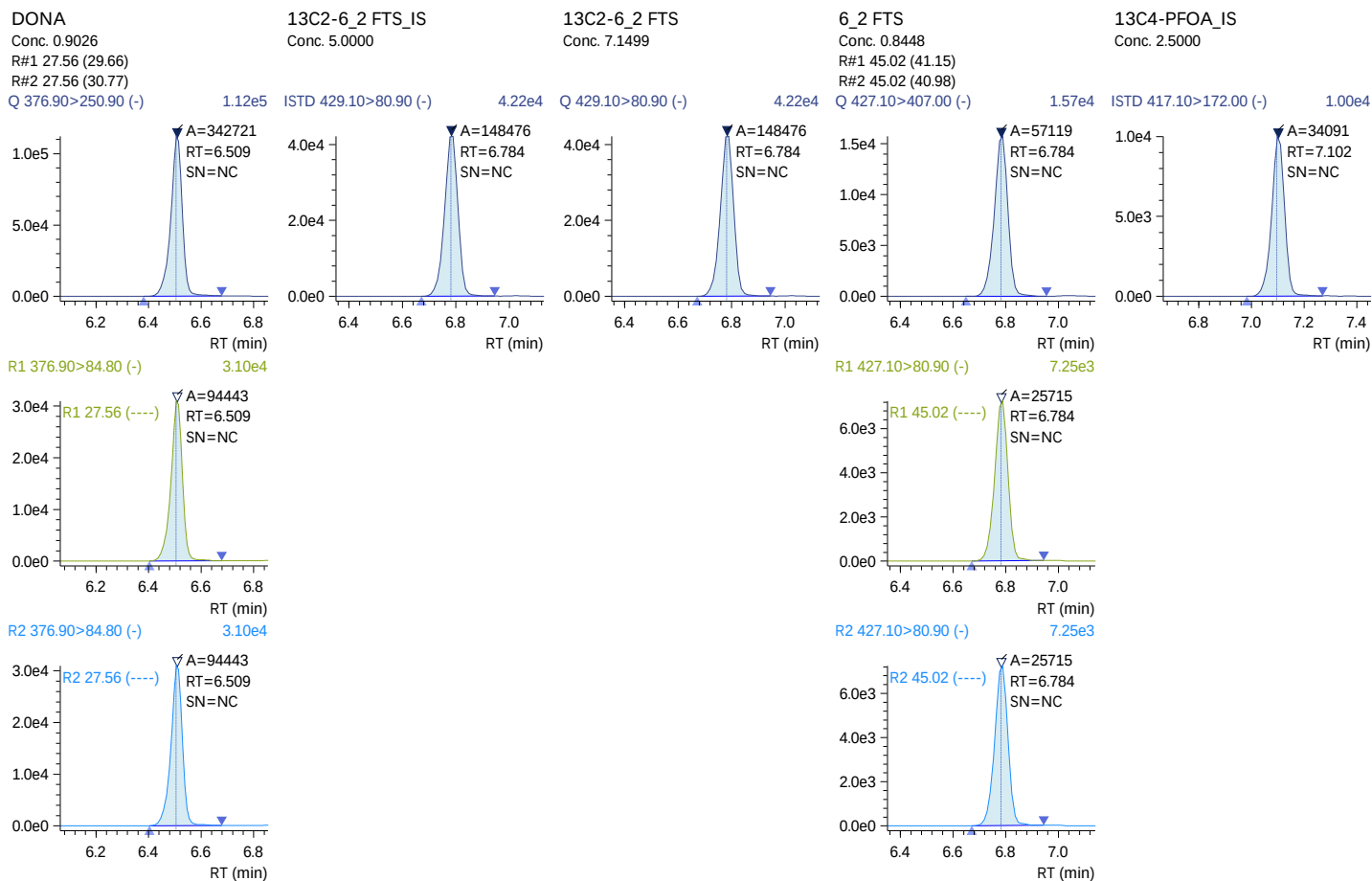


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_031 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_031 (continued)

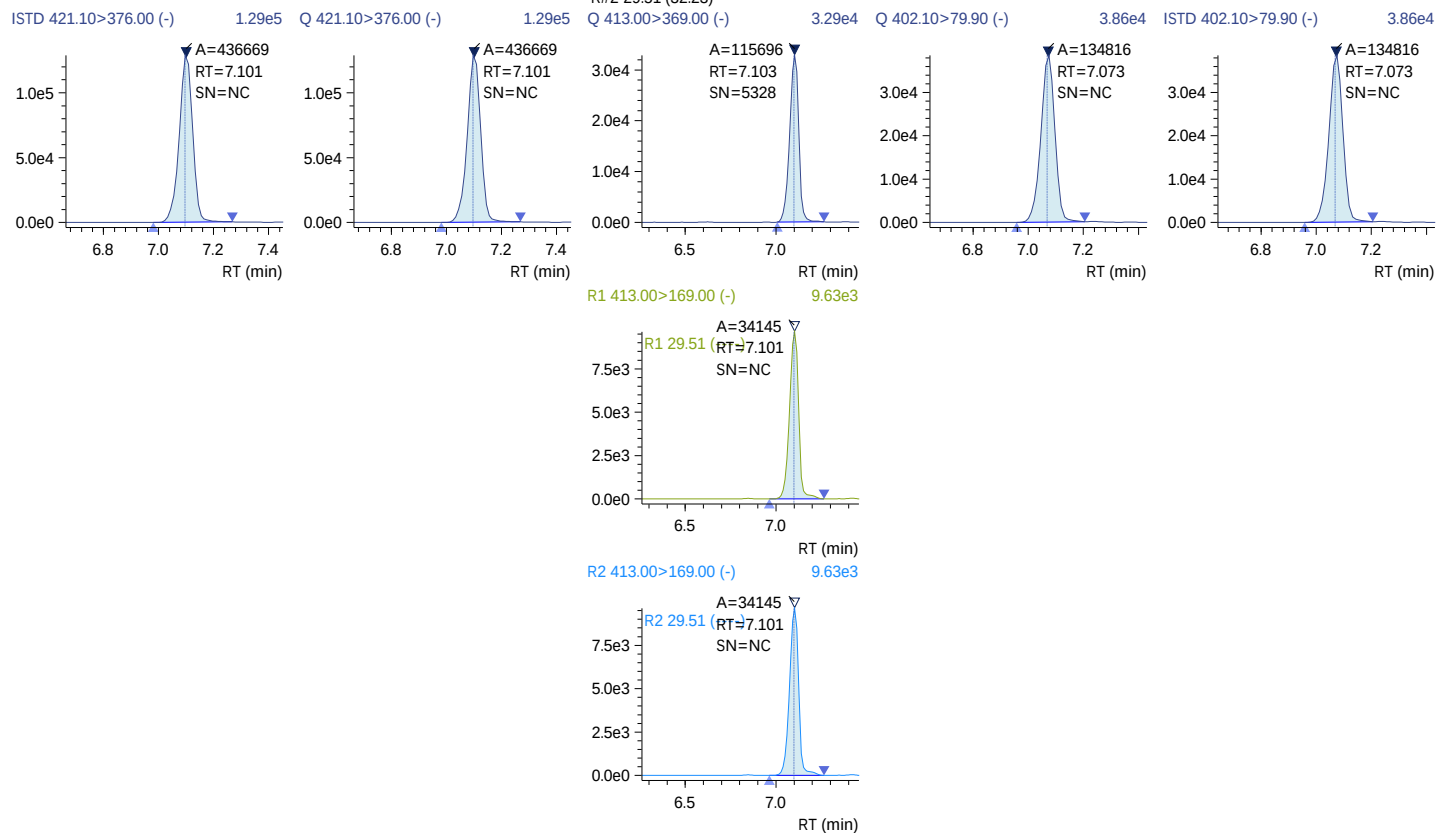
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.2917

PFOA
Conc. 0.9829
R#1 29.51 (31.89)
R#2 29.51 (32.23)

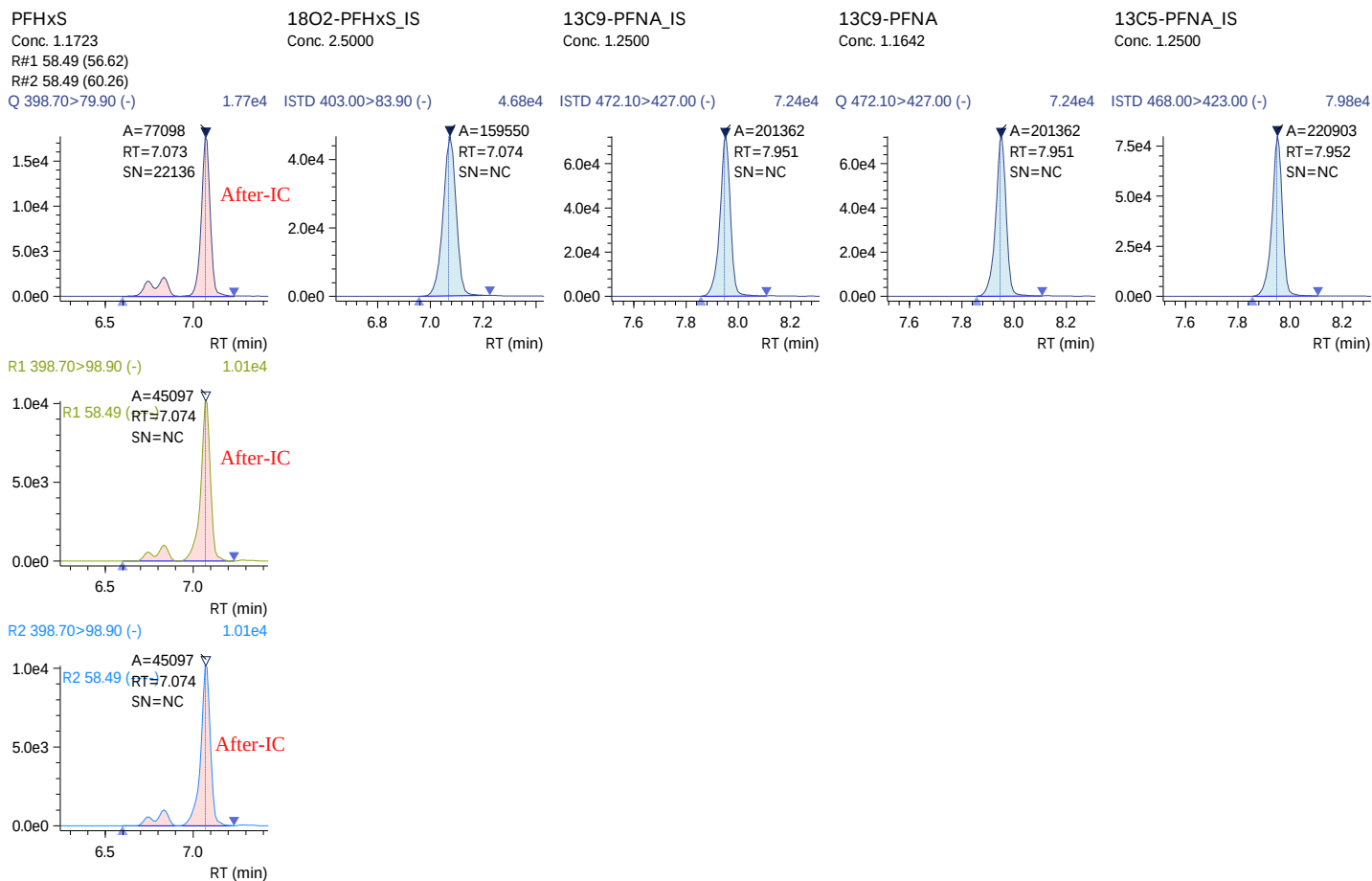
13C3-PFHxS
Conc. 1.9686

13C3-PFHxS_IS
Conc. 2.5000



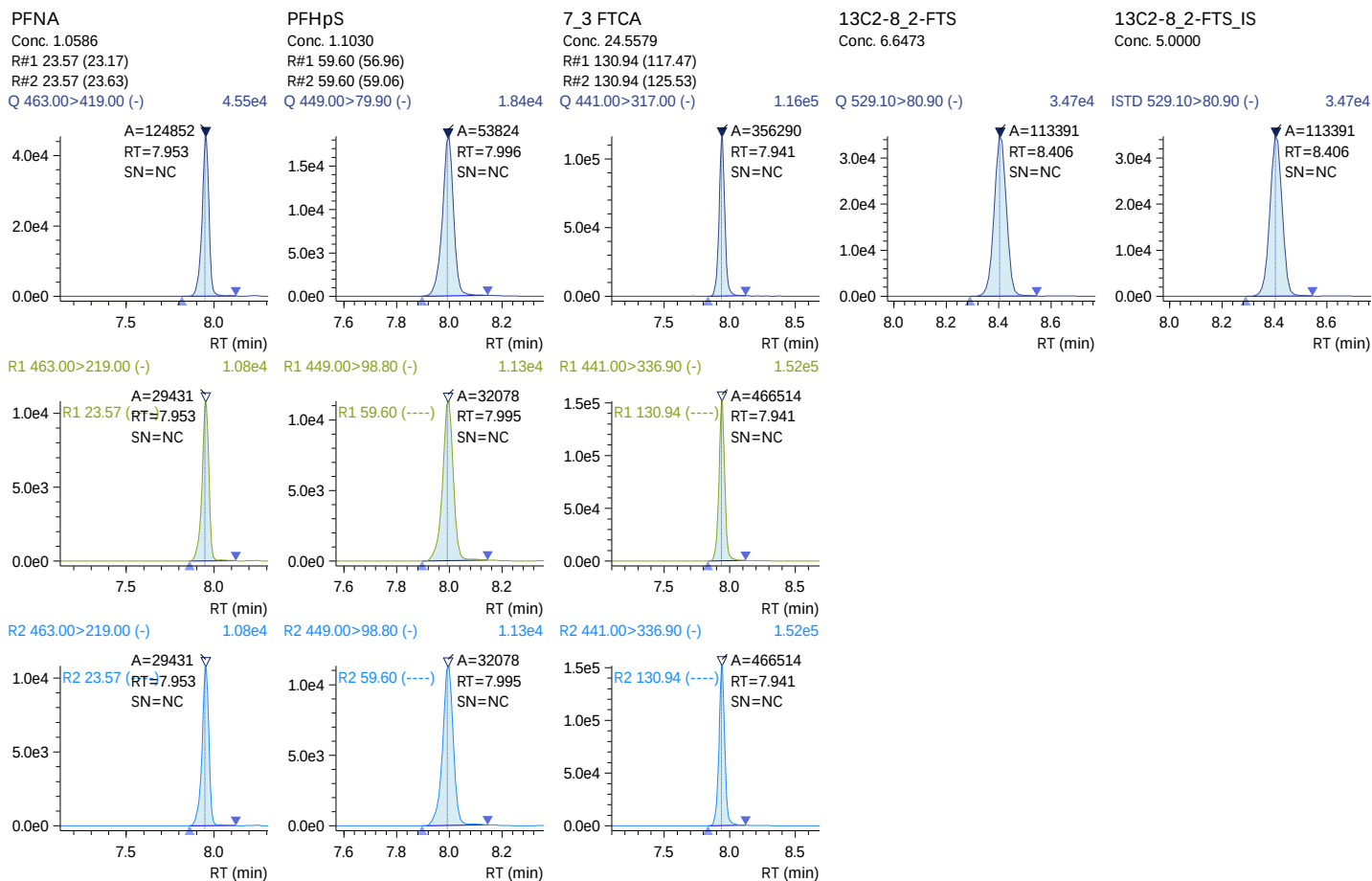


240122_031 (continued)





240122_031 (continued)

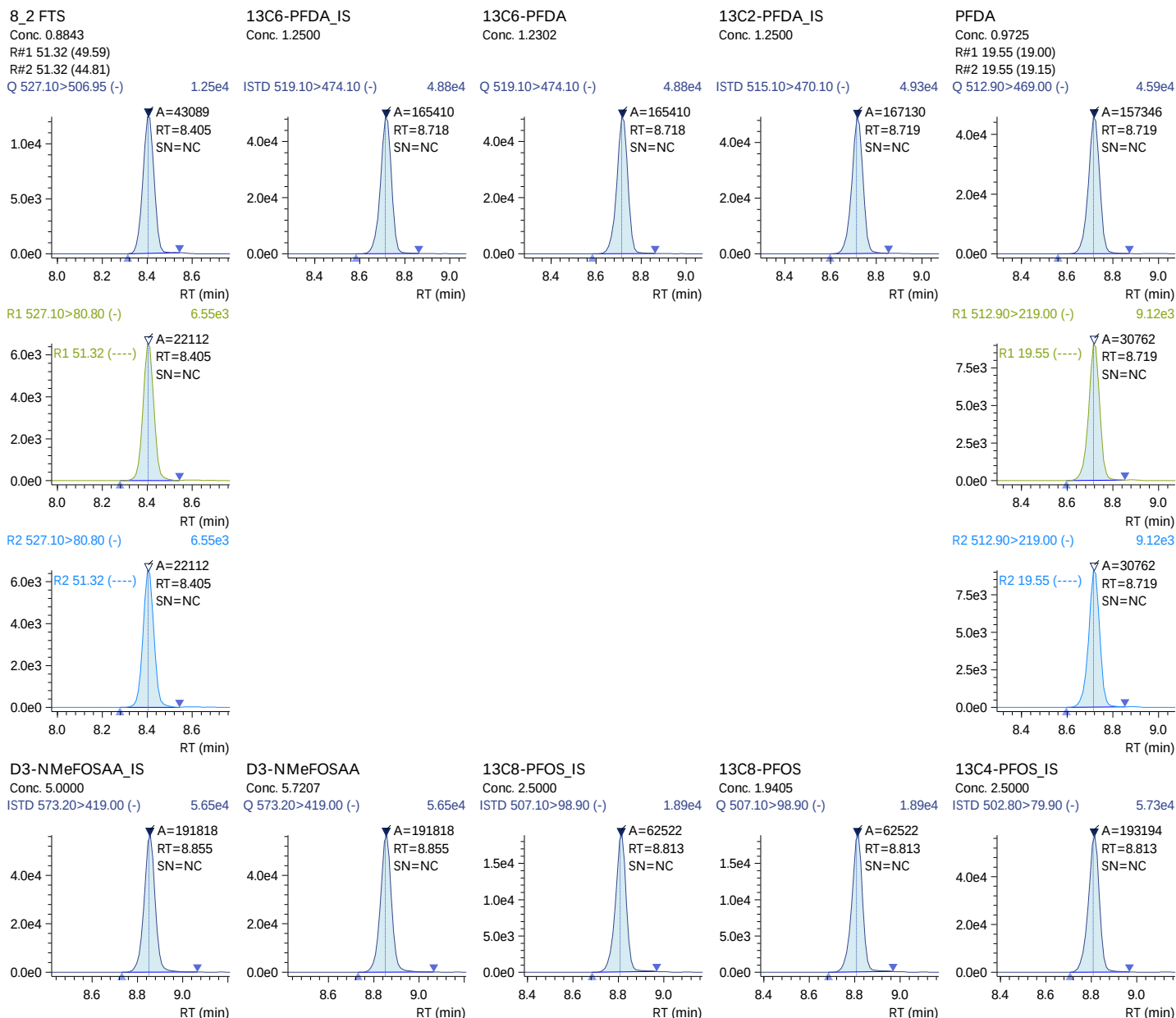


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.

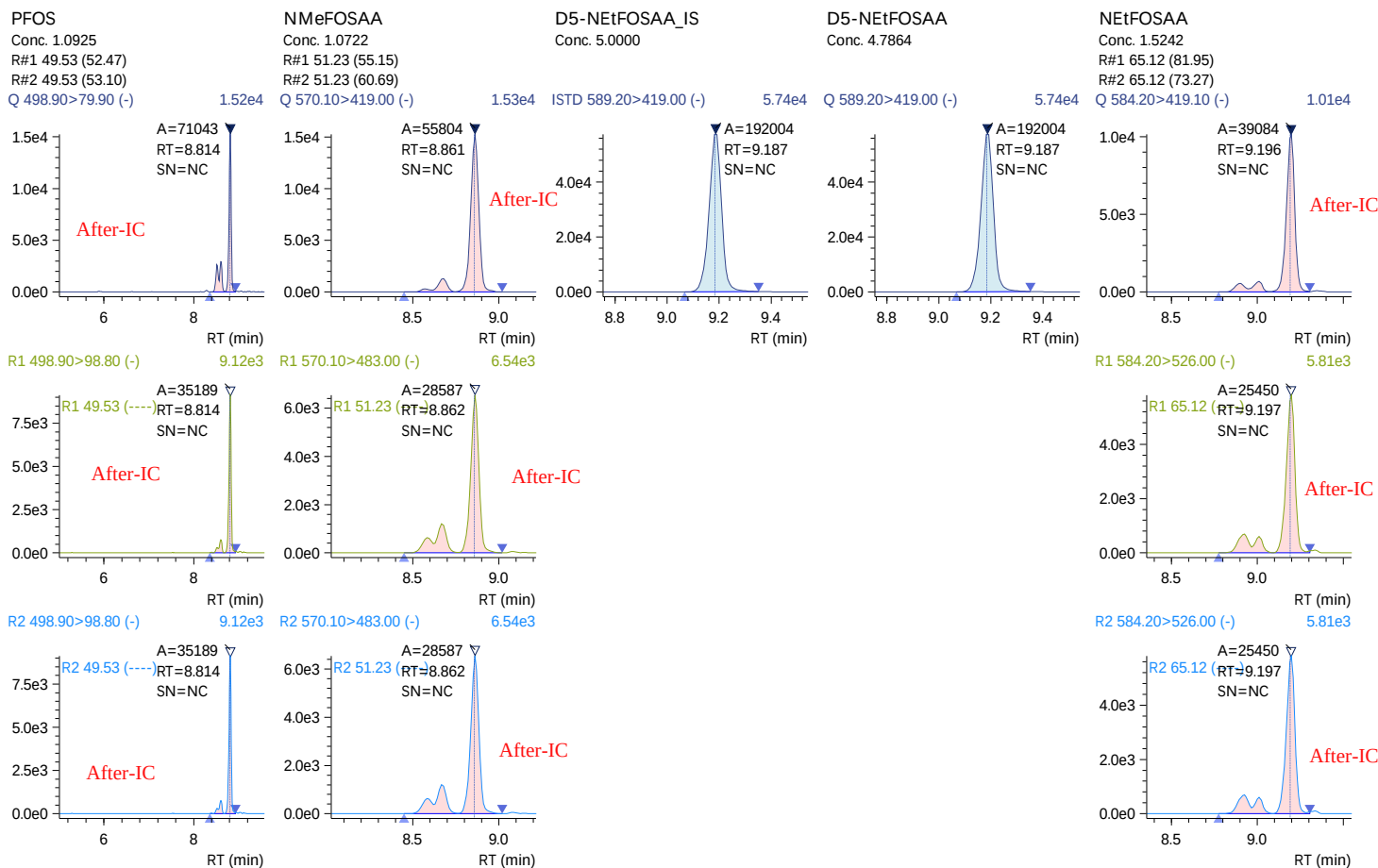


240122_031 (continued)





240122_031 (continued)

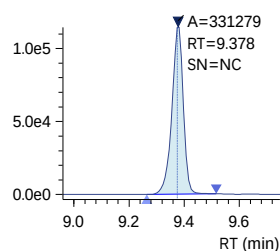




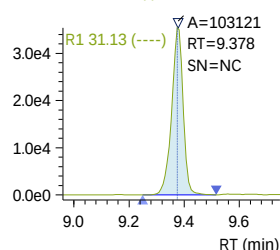
240122_031 (continued)

9-Cl-PF3ONS

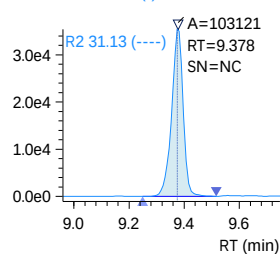
Conc. 0.8202
R#1 31.13 (32.76)
R#2 31.13 (32.59)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-)

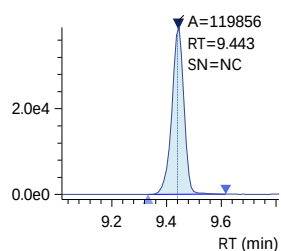


R2 532.80>353.00 (-)

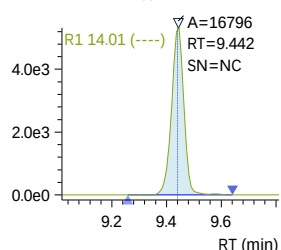


PFUnDA

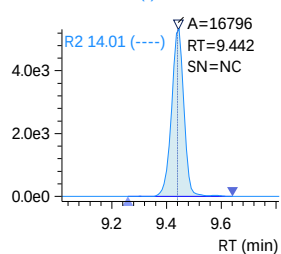
Conc. 0.9417
R#1 14.01 (13.12)
R#2 14.01 (14.36)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-)

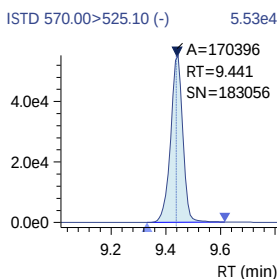


R2 563.10>269.10 (-)



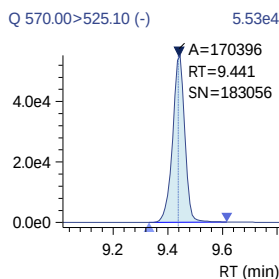
13C7-PFUnDA_IS

Conc. 1.2500



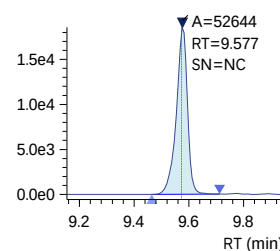
13C7-PFUnDA

Conc. 1.0624

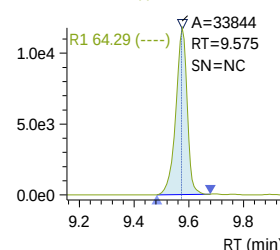


PFNS

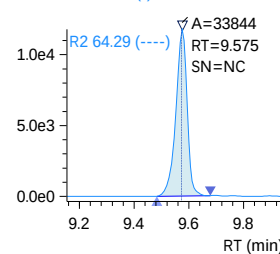
Conc. 1.1082
R#1 64.29 (65.22)
R#2 64.29 (65.31)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-)

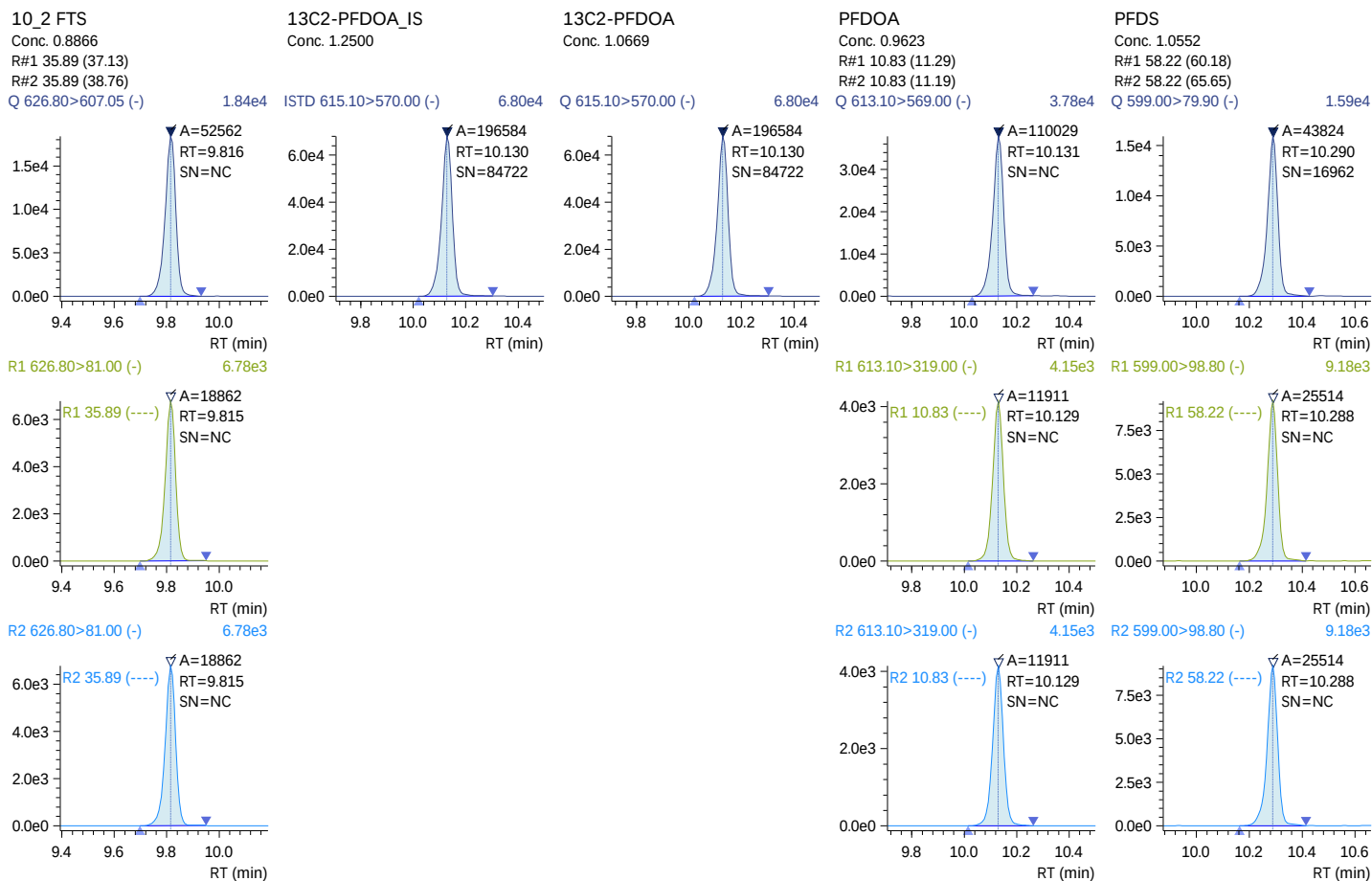


R2 548.80>98.80 (-)





240122_031 (continued)

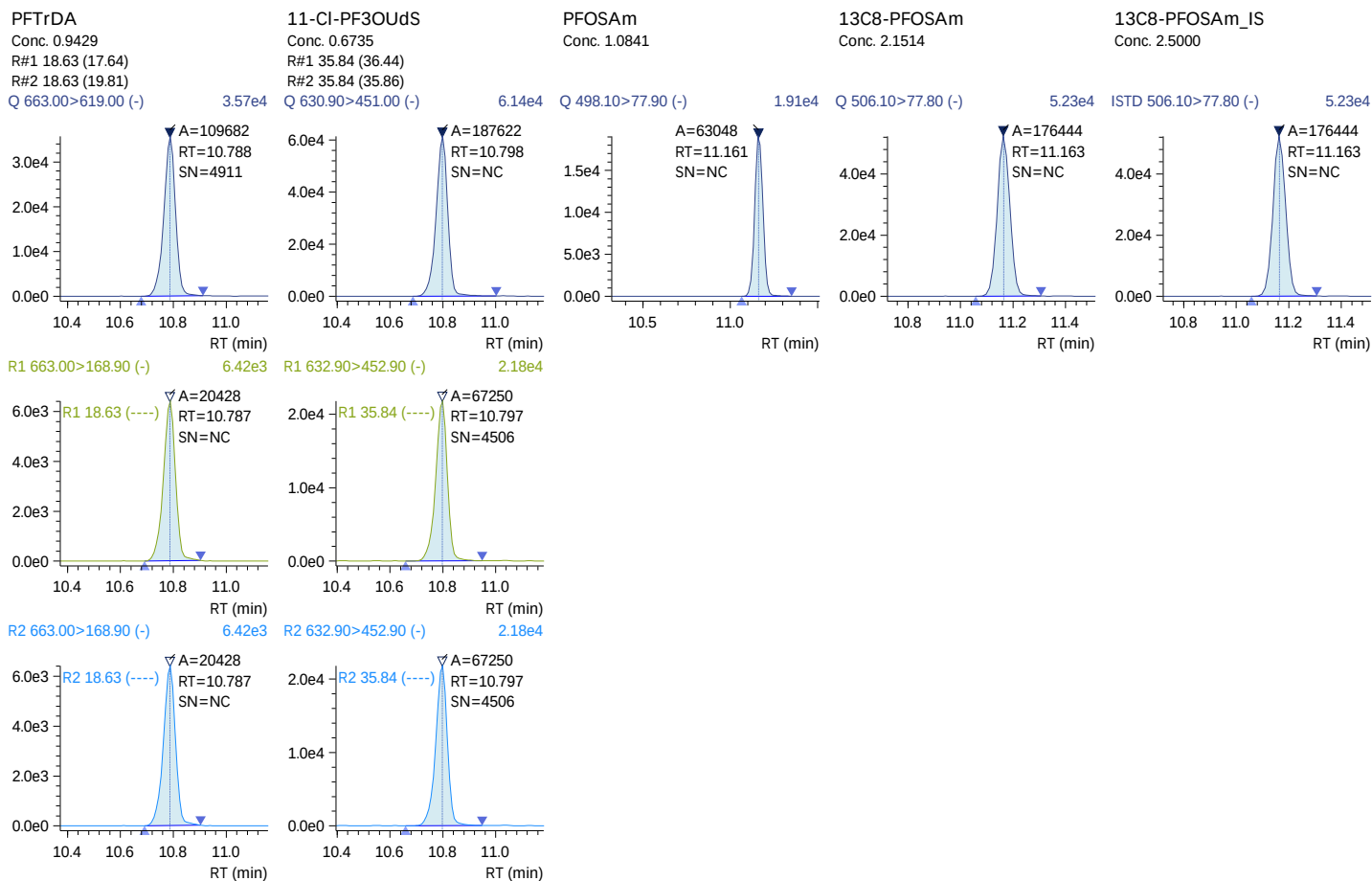


J:\LCMS08\Data\240122_1633_B1\240122_1633_B1.dampl

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.

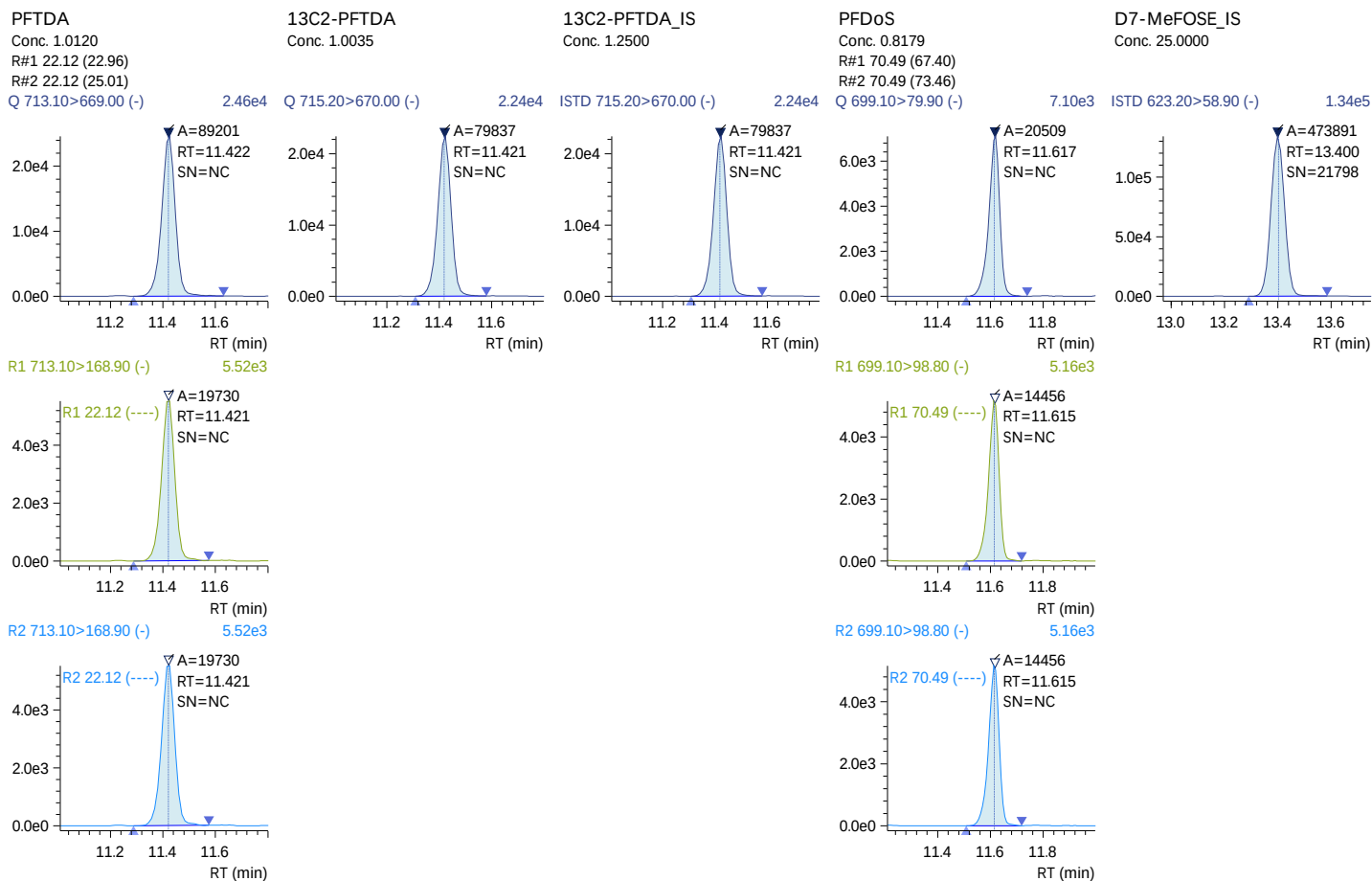


240122_031 (continued)





240122_031 (continued)





240122_031 (continued)

D7-MeFOSE
Conc. 23.4363

MeFOSE
Conc. 1.0129

13C2-PFHXA_IS
Conc. 2.5000

13C2-PFHXA
Conc. 1.6512

PFHXA

Conc. 1.0047
R#1 15.28 (13.90)
R#2 15.28 (15.85)

Q 623.20>58.90 (-)

1.34e5

Q 616.10>59.00 (-)

4.81e3

ISTD 815.00>770.05 (-)

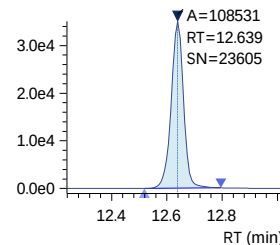
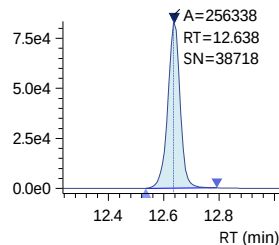
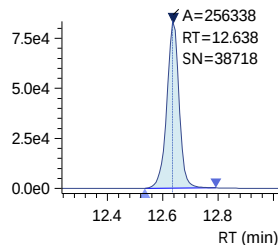
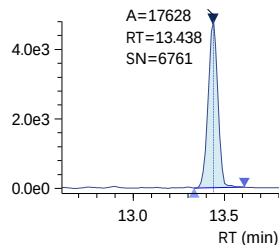
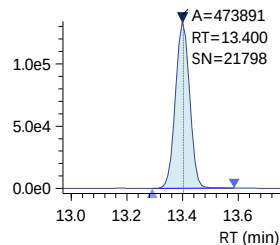
8.35e4

Q 815.00>770.05 (-)

8.35e4

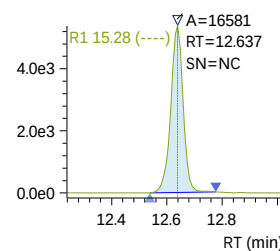
Q 813.00>768.95 (-)

3.51e4

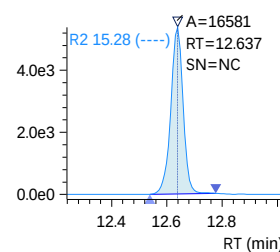


R1 813.00>218.95 (-)

5.38e3



R2 813.00>218.95 (-)





240122_031 (continued)

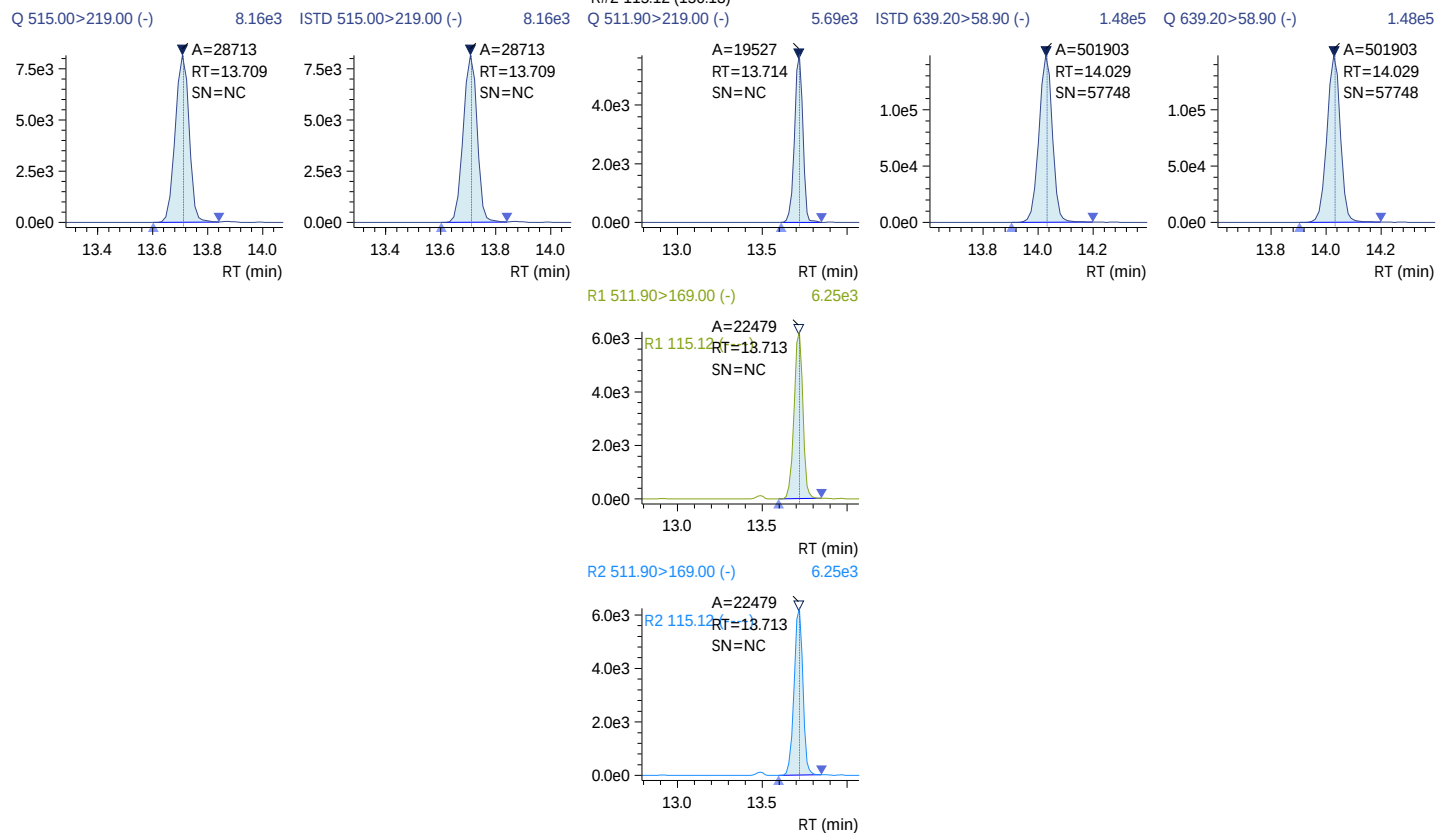
D3-MeFOSA
Conc. 1.7385

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. 0.9434
R#1 115.12 (140.79)
R#2 115.12 (150.13)

D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 24.4391





240122_031 (continued)

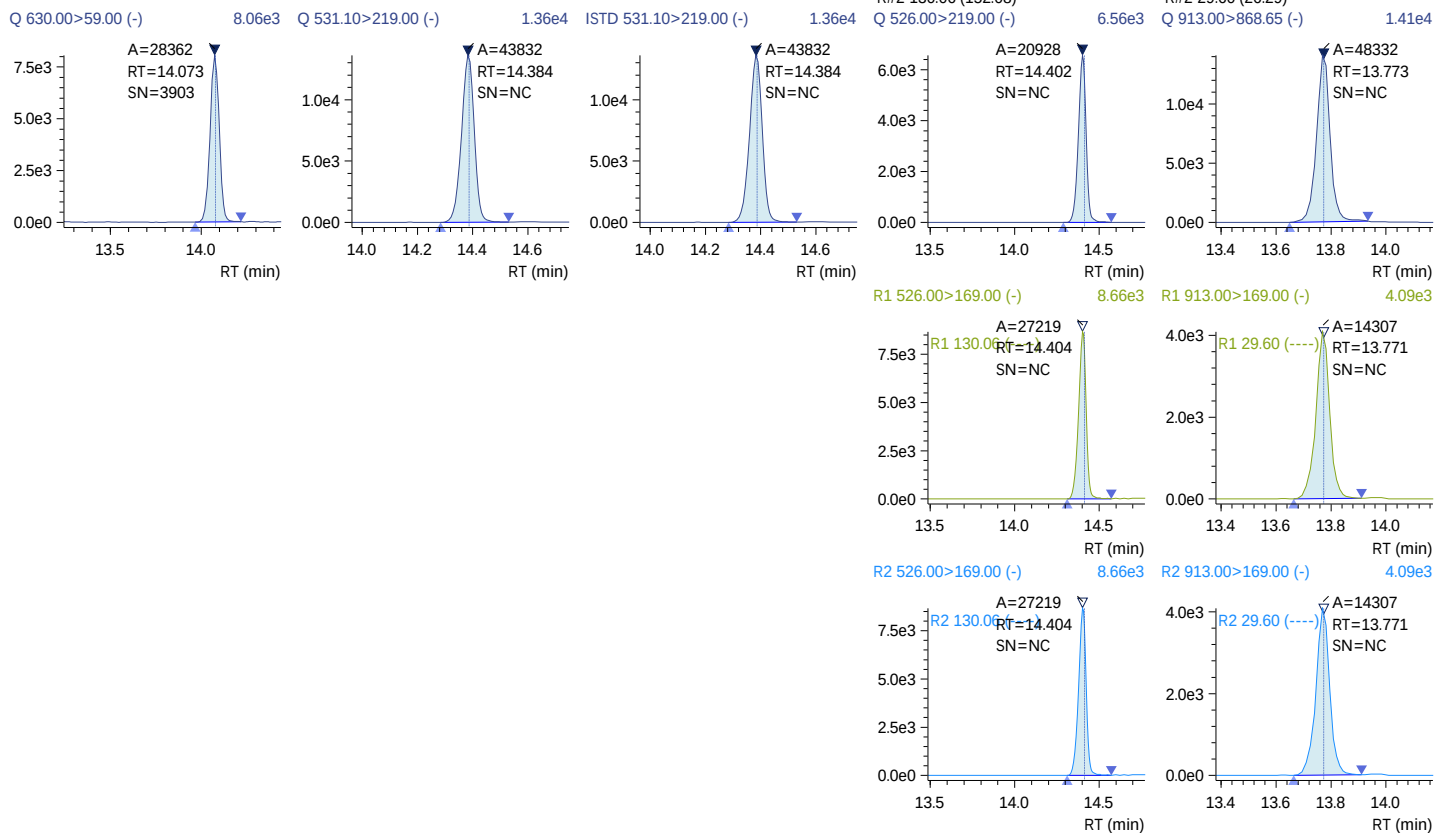
EtFOSE
Conc. 1.0740

D5-EtFOSAm
Conc. 1.9933

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. 0.8201
R#1 130.06 (163.90)
R#2 130.06 (152.08)

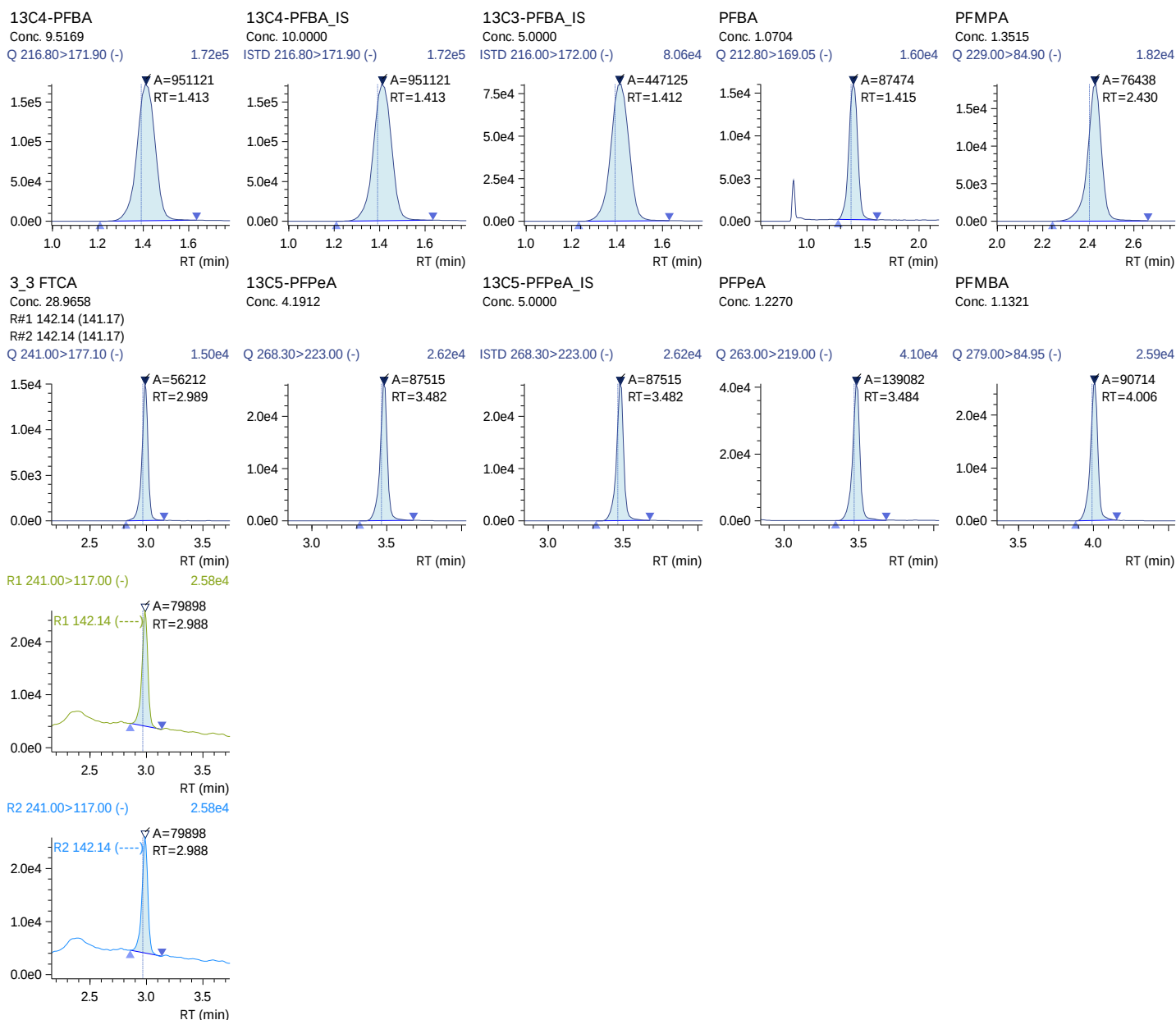
PFODA
Conc. 0.8338
R#1 29.60 (27.03)
R#2 29.60 (26.29)





240122_031

Sample ID: KQ2400483-01
Date Acquired: 1/22/2024 9:23:09 PM
Acquired by: System Administrator
Data File: 240122_031
Vial: 11 | Inj. Volume: 10.0000uL | Tray: 2





240122_031 (continued)

13C2-4_2 FTS
Conc. 7.1456

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. 0.9710
R#1 33.60 (29.06)
R#2 33.60 (29.06)

13C3-PFBS_IS
Conc. 2.5000

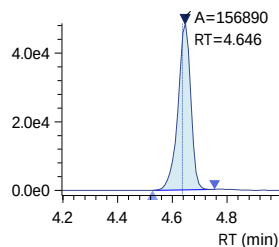
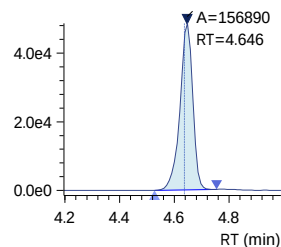
PFBS
Conc. 1.0124
R#1 44.65 (46.72)
R#2 44.65 (46.72)

Q 329.10>80.90 (-)

4.86e4

ISTD 329.10>80.90 (-)

4.86e4

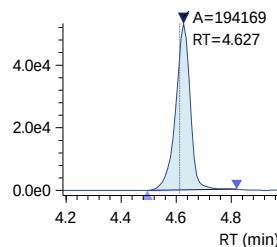
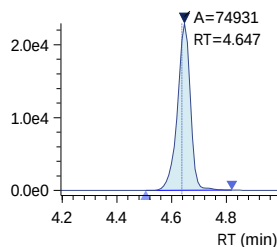


Q 327.10>307.00 (-)

2.29e4

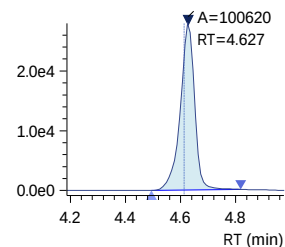
ISTD 302.10>79.90 (-)

5.33e4



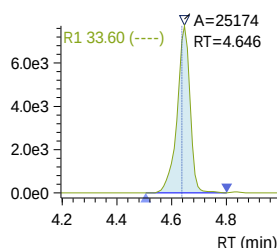
Q 298.70>79.90 (-)

2.80e4



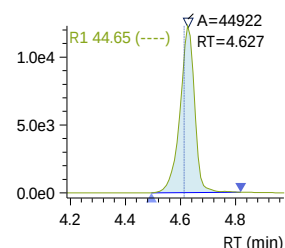
R1 327.10>80.90 (-)

7.72e3



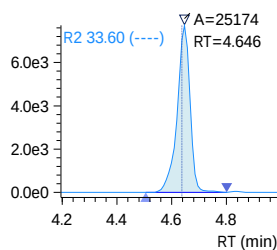
R1 298.70>98.80 (-)

1.23e4



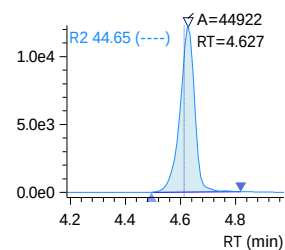
R2 327.10>80.90 (-)

7.72e3



R2 298.70>98.80 (-)

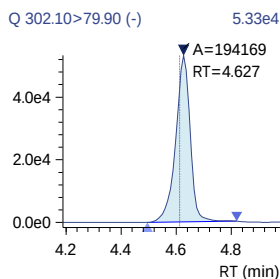
1.23e4



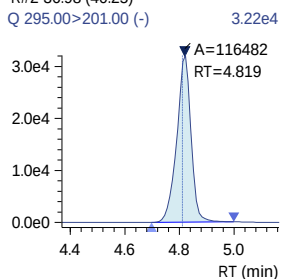


240122_031 (continued)

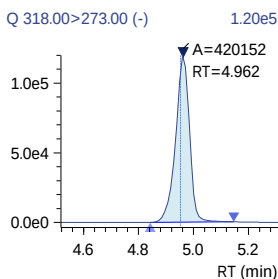
13C3-PFBS
Conc. 2.1445



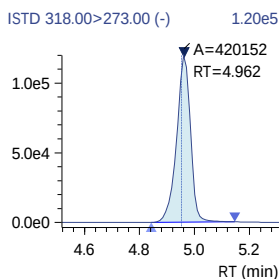
NFDHA
Conc. 1.2496
R#1 36.98 (40.25)
R#2 36.98 (40.25)



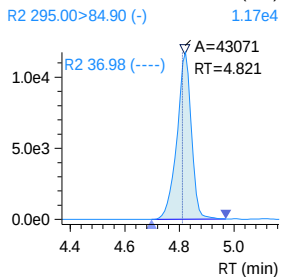
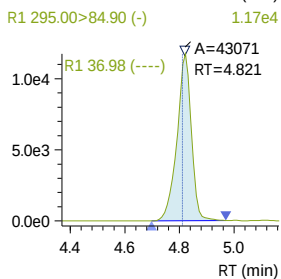
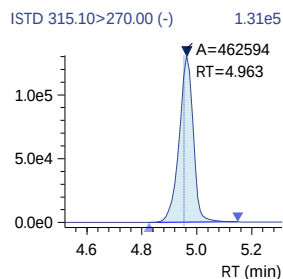
13C5-PFHxA
Conc. 2.1551



13C5-PFHxA_IS
Conc. 2.5000



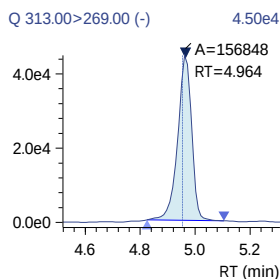
13C2-PFHxA_IS
Conc. 2.5000



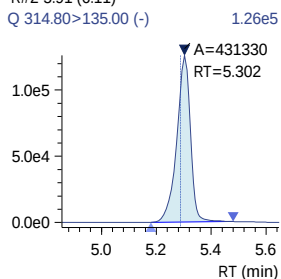


240122_031 (continued)

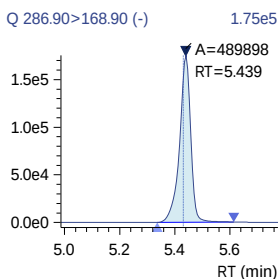
PFHxA
 Conc. 1.1132



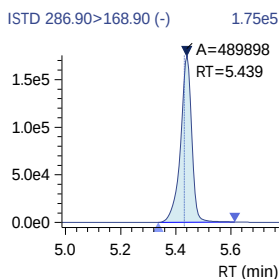
PFEESA
 Conc. 0.9166
 R#1 5.91 (6.11)
 R#2 5.91 (6.11)



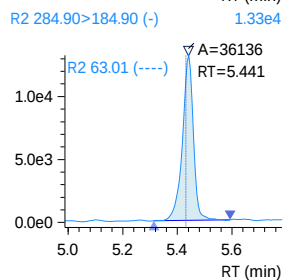
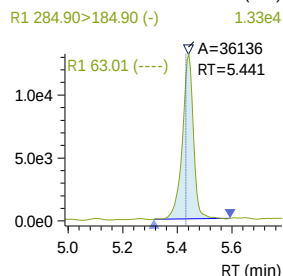
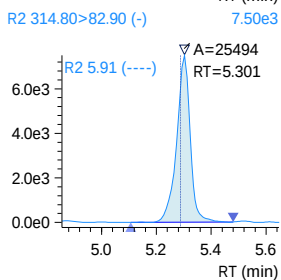
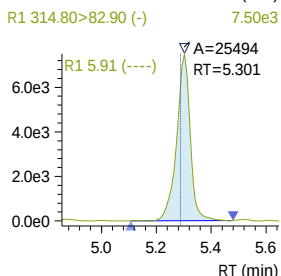
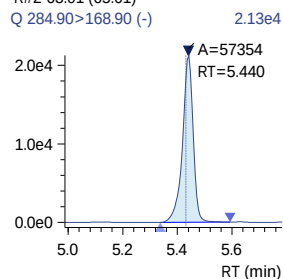
13C3-HFPO-DA
 Conc. 10.8184



13C3-HFPO-DA_IS
 Conc. 10.0000



HFPO-DA
 Conc. 1.0600
 R#1 63.01 (65.61)
 R#2 63.01 (65.61)

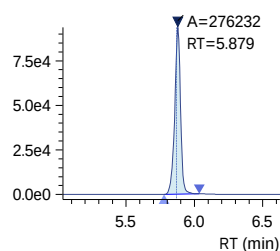




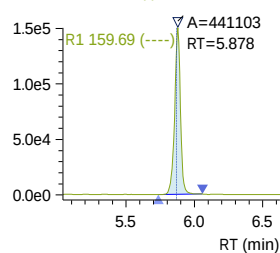
240122_031 (continued)

5_3 FTCA

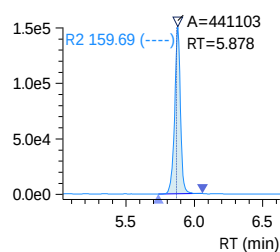
Conc. 25.4177
R#1 159.69 (158.86)
R#2 159.69 (158.86)
Q 341.00>237.05 (-)



R1 341.00>217.00 (-) 1.51e5

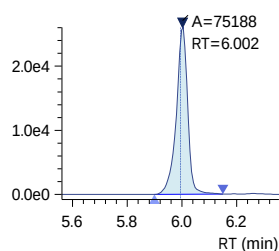


R2 341.00>217.00 (-) 1.51e5

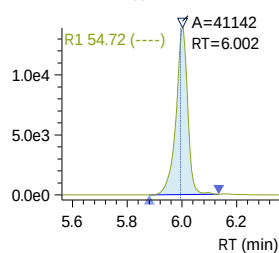


PFPeS

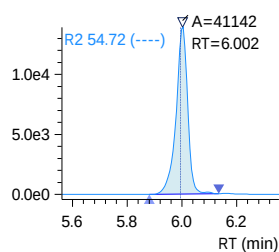
Conc. 1.0620
R#1 54.72 (55.80)
R#2 54.72 (55.80)
Q 349.10>79.90 (-)



R1 349.10>98.80 (-) 1.39e4

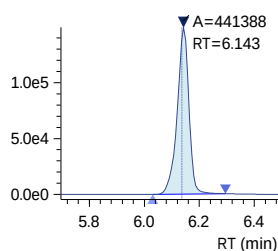


R2 349.10>98.80 (-) 1.39e4



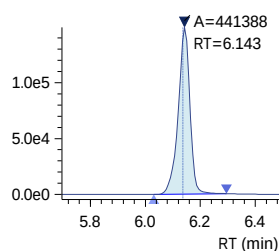
13C4-PFHpA

Conc. 2.5009
Q 367.10>322.00 (-)



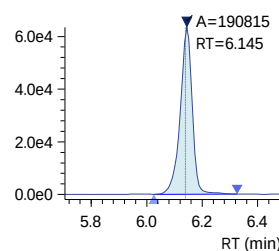
13C4-PFHpA_IS

Conc. 2.5000
ISTD 367.10>322.00 (-)

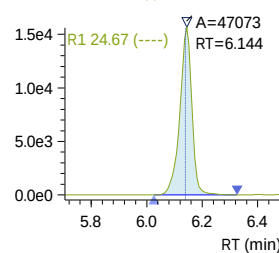


PFHpA

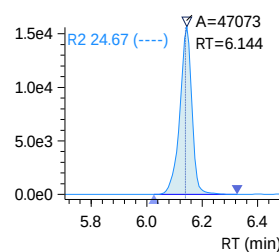
Conc. 1.0076
R#1 24.67 (21.50)
R#2 24.67 (21.50)
Q 363.10>319.00 (-)



R1 363.10>169.00 (-) 1.56e4

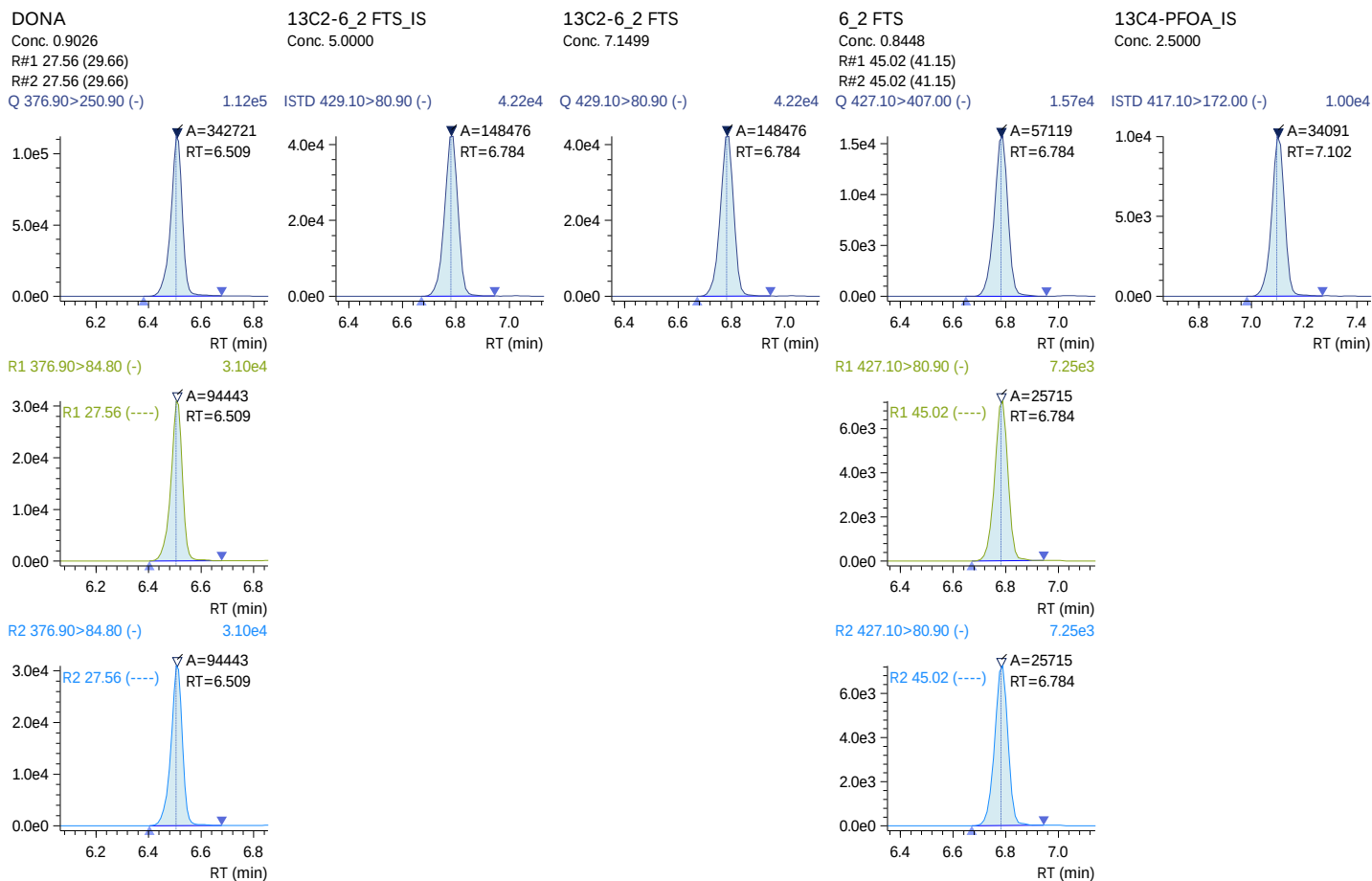


R2 363.10>169.00 (-) 1.56e4





240122_031 (continued)





240122_031 (continued)

13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.2917

PFOA
Conc. 0.9829
R#1 29.51 (31.89)
R#2 29.51 (31.89)

13C3-PFHxS
Conc. 1.9686

13C3-PFHxS_IS
Conc. 2.5000

ISTD 421.10>376.00 (-)

1.29e5

Q 421.10>376.00 (-)

1.29e5

Q 413.00>369.00 (-)

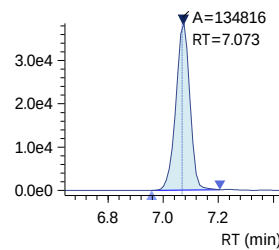
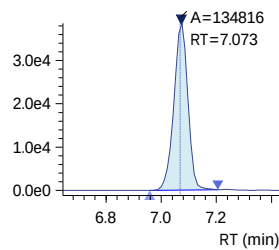
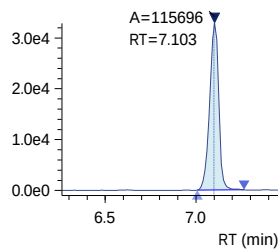
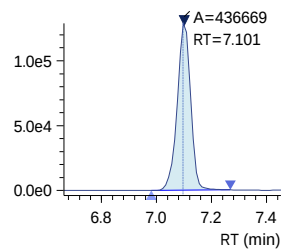
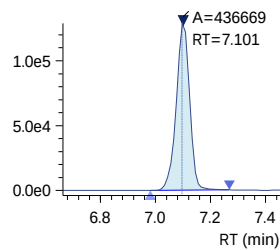
3.29e4

Q 402.10>79.90 (-)

3.86e4

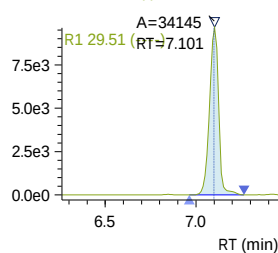
ISTD 402.10>79.90 (-)

3.86e4



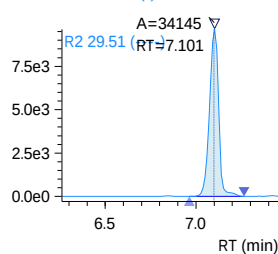
R1 413.00>169.00 (-)

9.63e3



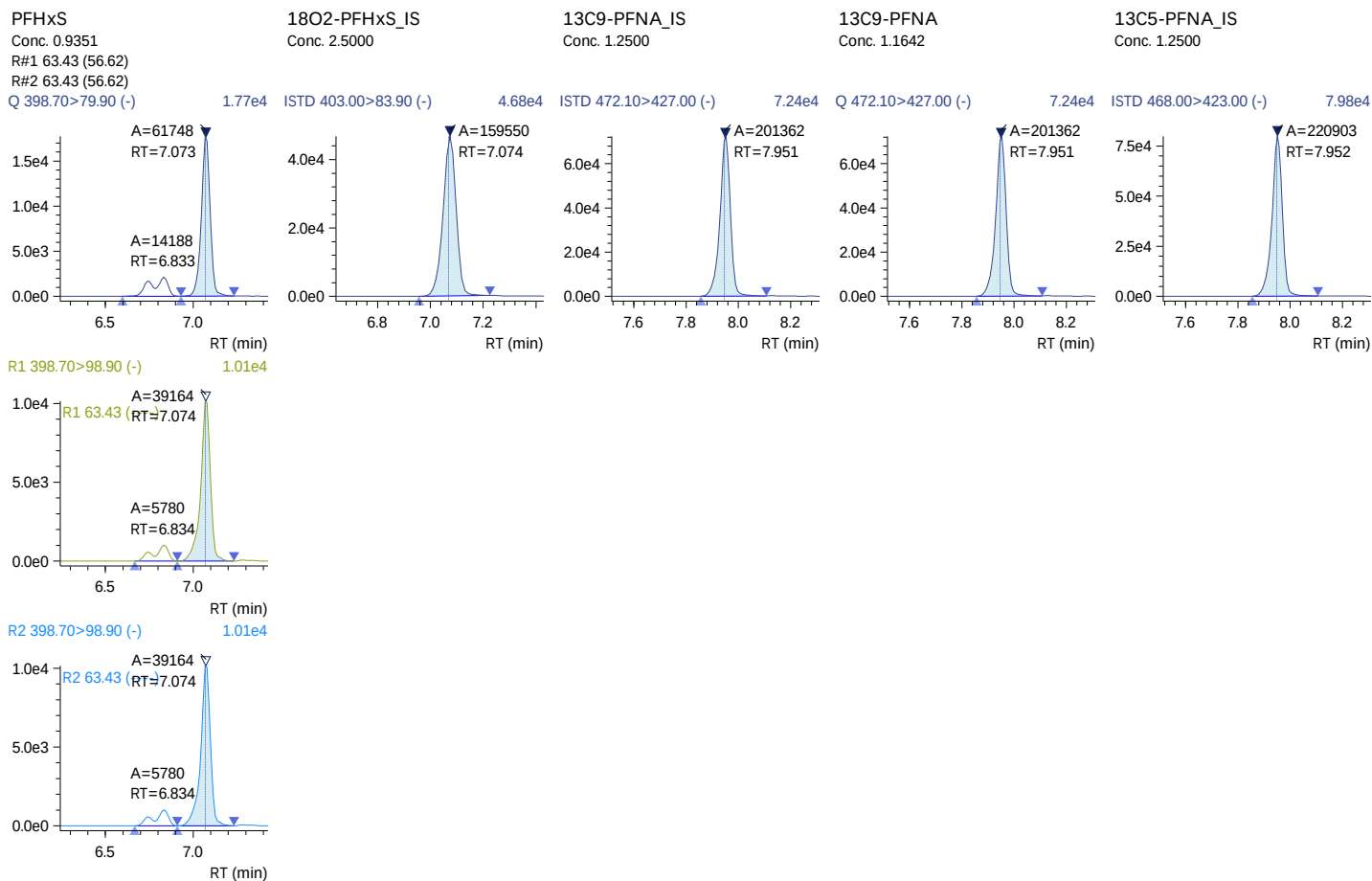
R2 413.00>169.00 (-)

9.63e3



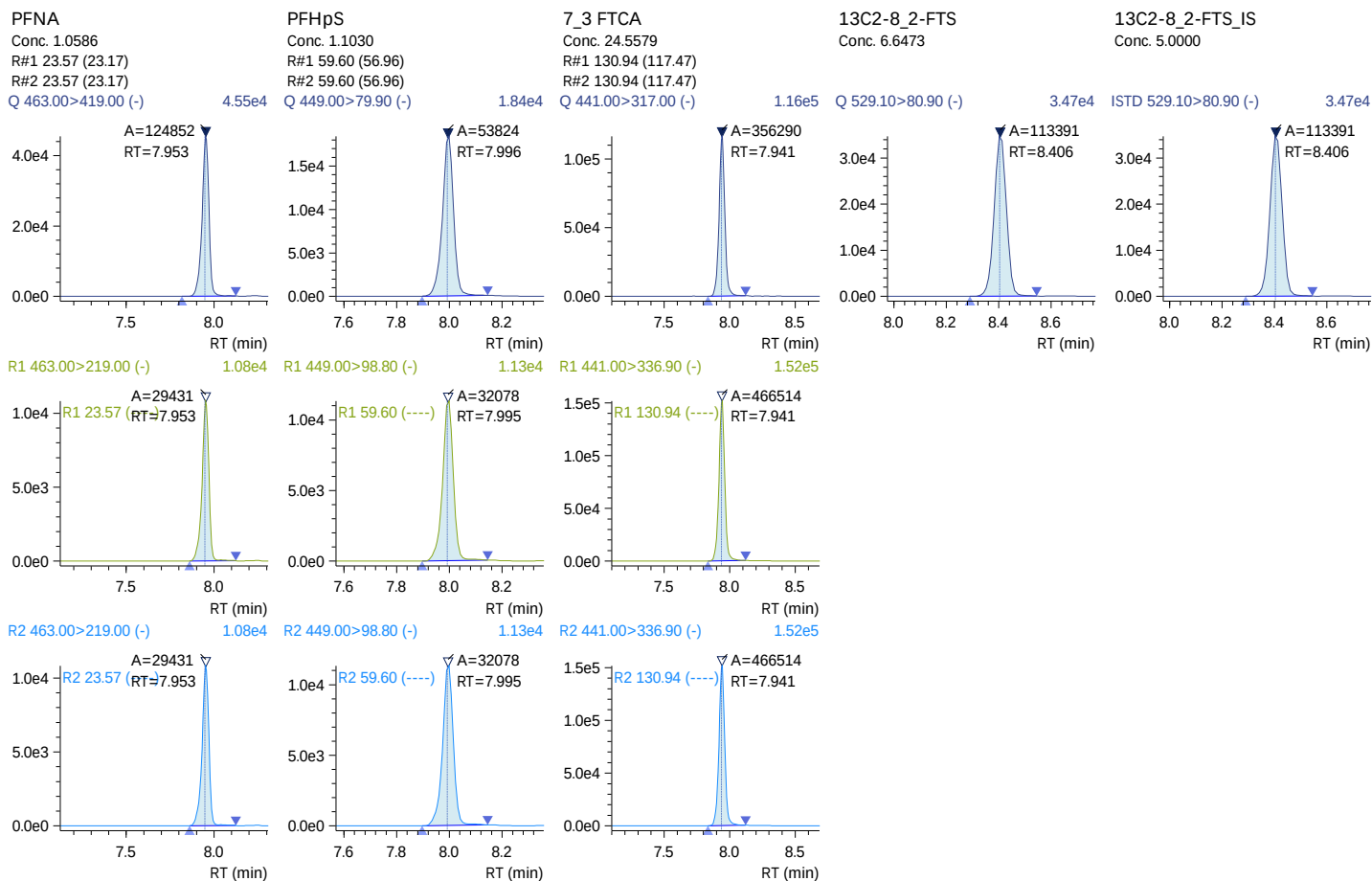


240122_031 (continued)



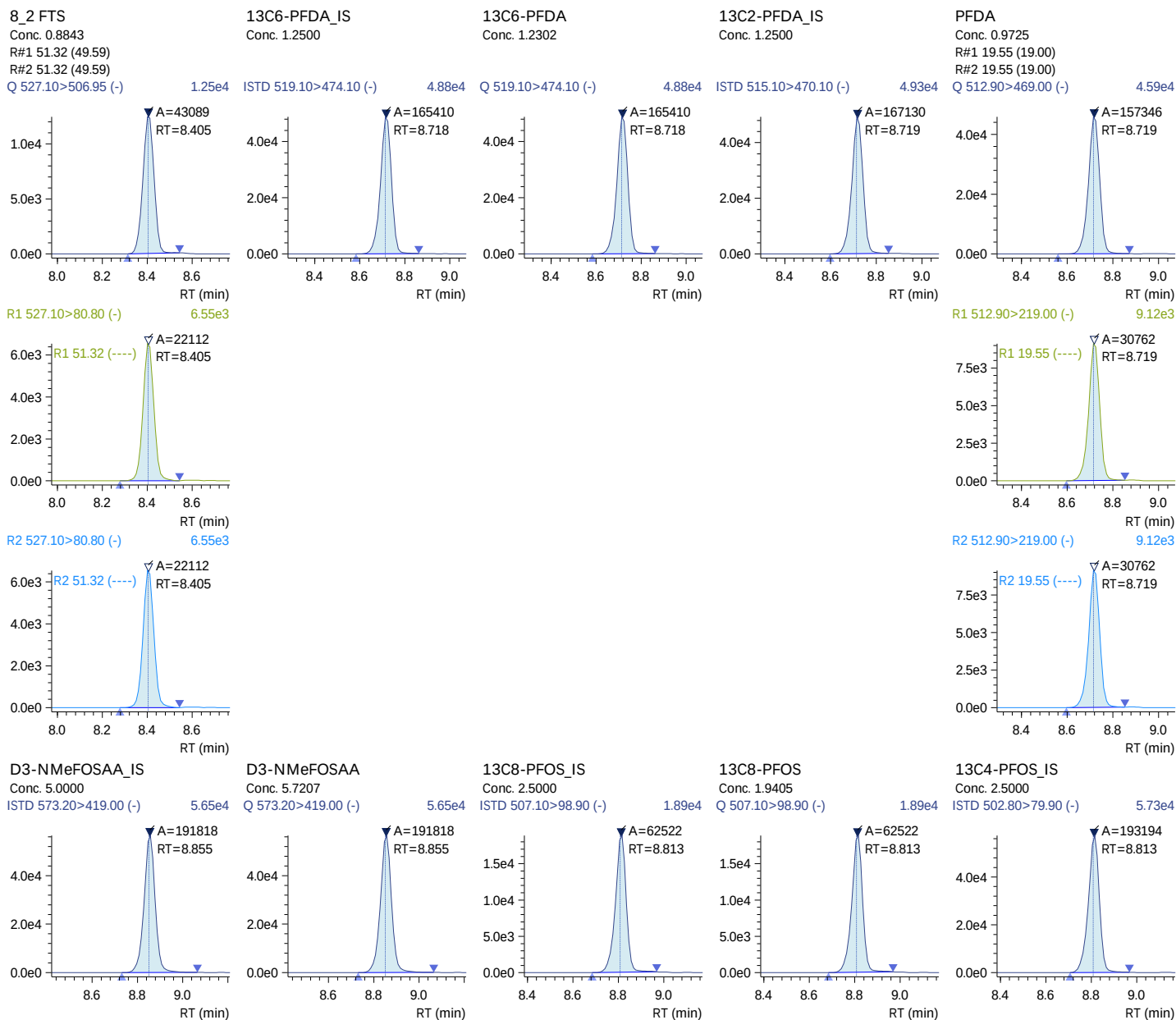


240122_031 (continued)



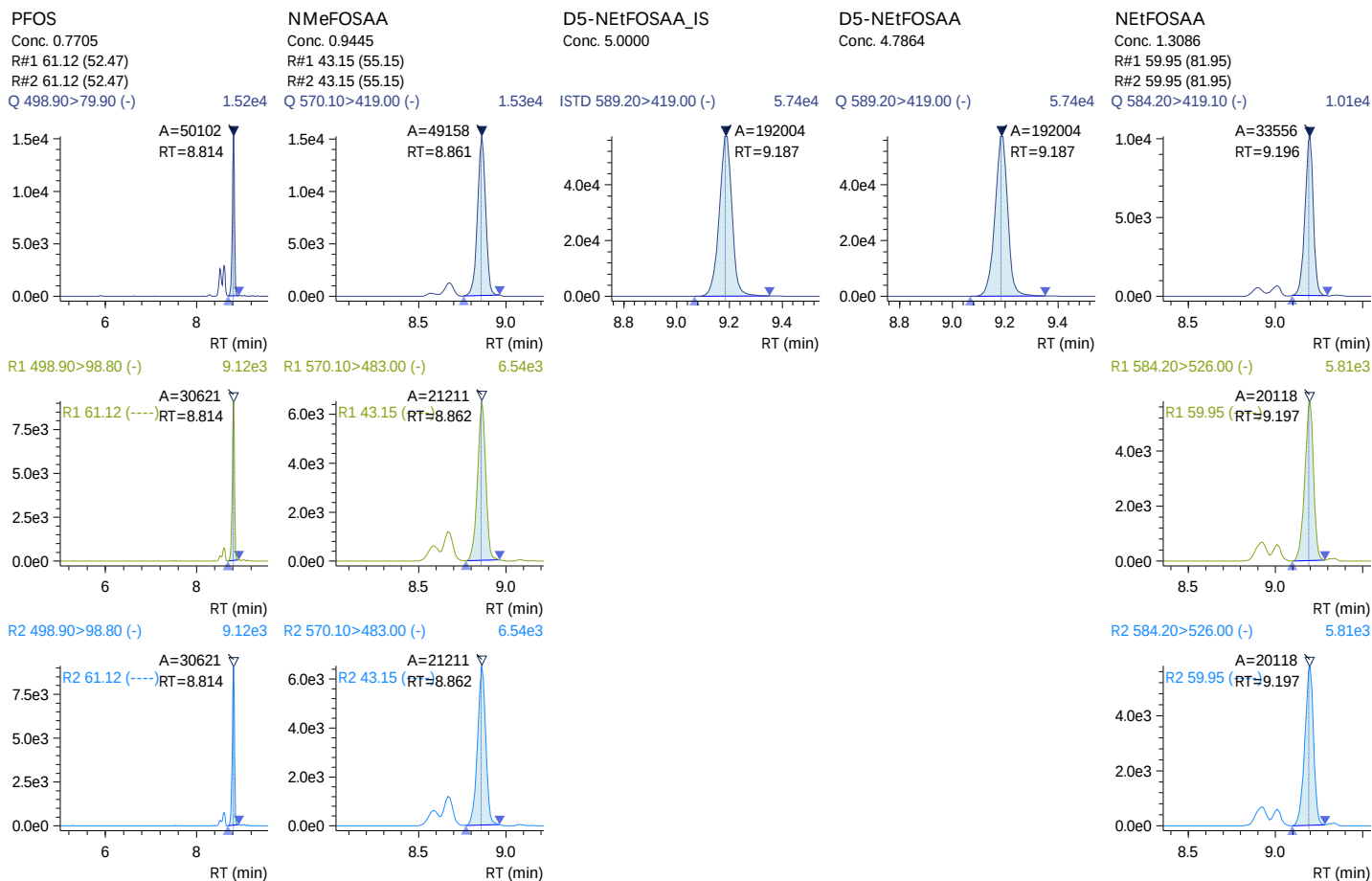


240122_031 (continued)





240122_031 (continued)

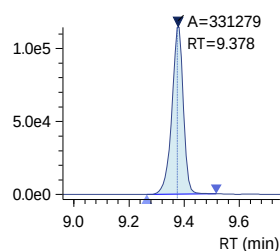




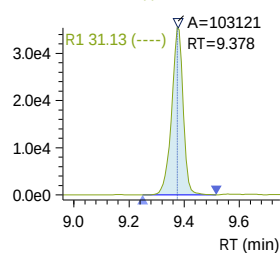
240122_031 (continued)

9-Cl-PF3ONS

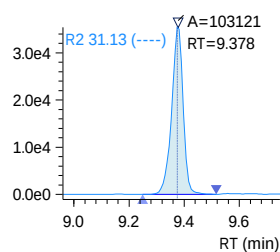
Conc. 0.8202
R#1 31.13 (32.76)
R#2 31.13 (32.76)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-)

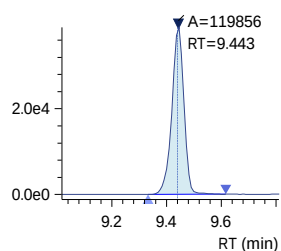


R2 532.80>353.00 (-)

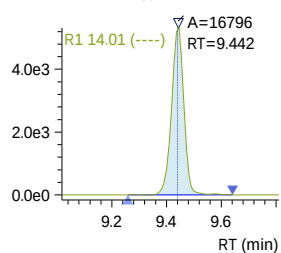


PFUnDA

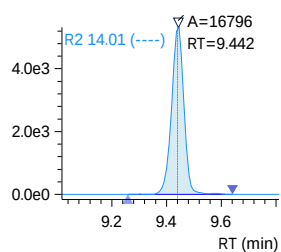
Conc. 0.9417
R#1 14.01 (13.12)
R#2 14.01 (13.12)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-)

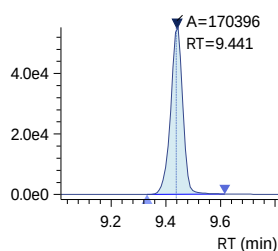


R2 563.10>269.10 (-)



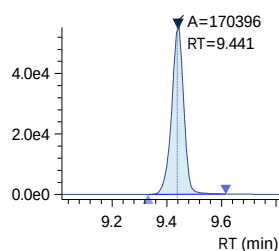
13C7-PFUnDA_IS

Conc. 1.2500
ISTD 570.00>525.10 (-)



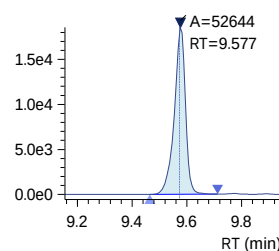
13C7-PFUnDA

Conc. 1.0624
Q 570.00>525.10 (-)

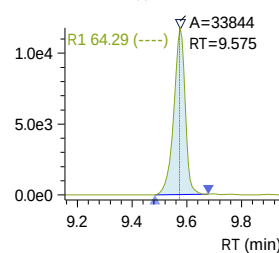


PFNS

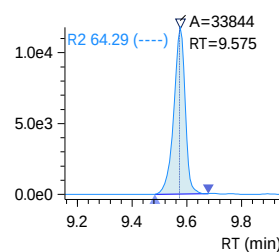
Conc. 1.1082
R#1 64.29 (65.22)
R#2 64.29 (65.22)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-)



R2 548.80>98.80 (-)





240122_031 (continued)

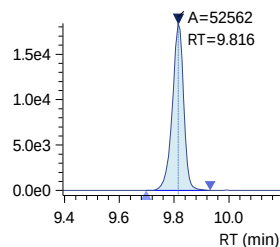
10_2_FTS

Conc. 0.8866

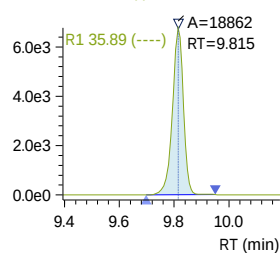
R#1 35.89 (37.13)

R#2 35.89 (37.13)

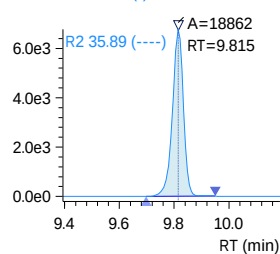
Q 626.80>607.05 (-)



R1 626.80>81.00 (-) 6.78e3



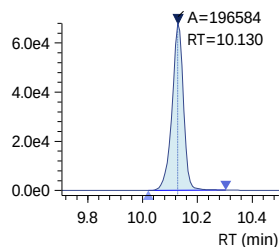
R2 626.80>81.00 (-) 6.78e3



13C2-PFDOA_IS

Conc. 1.2500

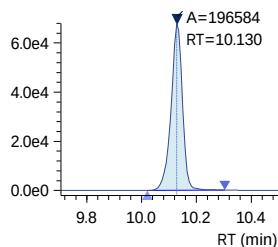
ISTD 615.10>570.00 (-)



13C2-PFDOA

Conc. 1.0669

Q 615.10>570.00 (-)



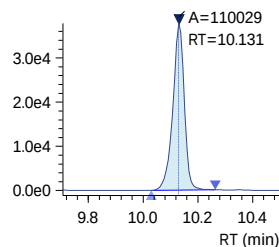
PFDOA

Conc. 0.9623

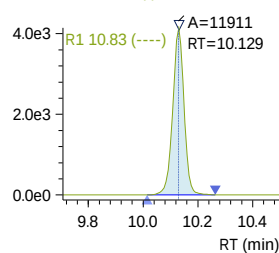
R#1 10.83 (11.29)

R#2 10.83 (11.29)

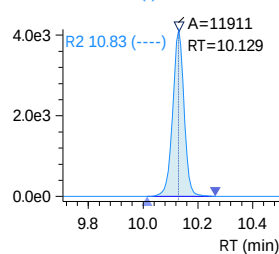
Q 613.10>569.00 (-)



R1 613.10>319.00 (-) 4.15e3



R2 613.10>319.00 (-) 4.15e3



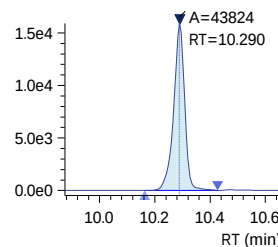
PFDS

Conc. 1.0552

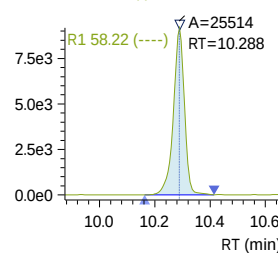
R#1 58.22 (60.18)

R#2 58.22 (60.18)

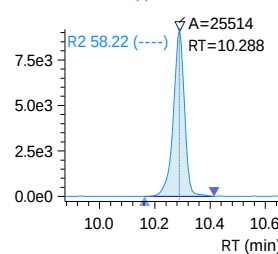
Q 599.00>79.90 (-)



R1 599.00>98.80 (-) 9.18e3



R2 599.00>98.80 (-) 9.18e3





240122_031 (continued)

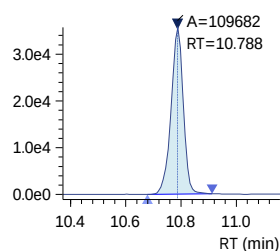
PFTTrDA

Conc. 0.9429

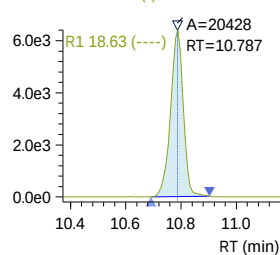
R#1 18.63 (17.64)

R#2 18.63 (17.64)

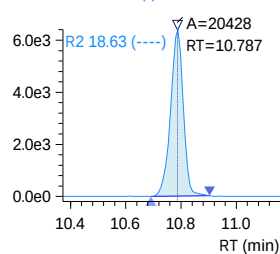
Q 663.00>619.00 (-)



R1 663.00>168.90 (-)



R2 663.00>168.90 (-)



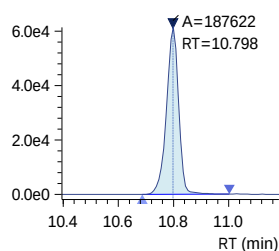
11-CI-PF3OUdS

Conc. 0.6735

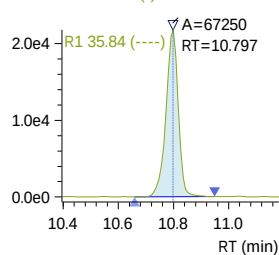
R#1 35.84 (36.44)

R#2 35.84 (36.44)

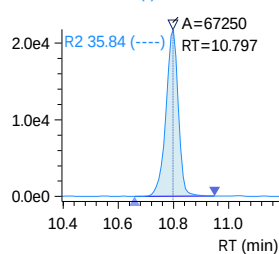
Q 630.90>451.00 (-)



R1 632.90>452.90 (-)



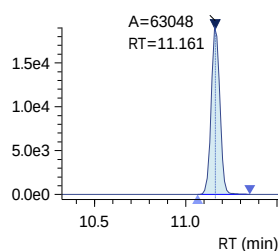
R2 632.90>452.90 (-)



PFOSAm

Conc. 1.0841

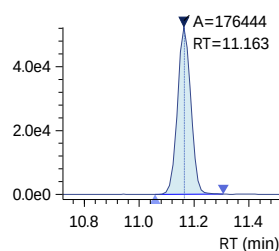
Q 498.10>77.90 (-)



13C8-PFOSAm

Conc. 2.1514

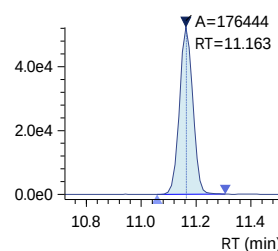
Q 506.10>77.80 (-)



13C8-PFOSAm_IS

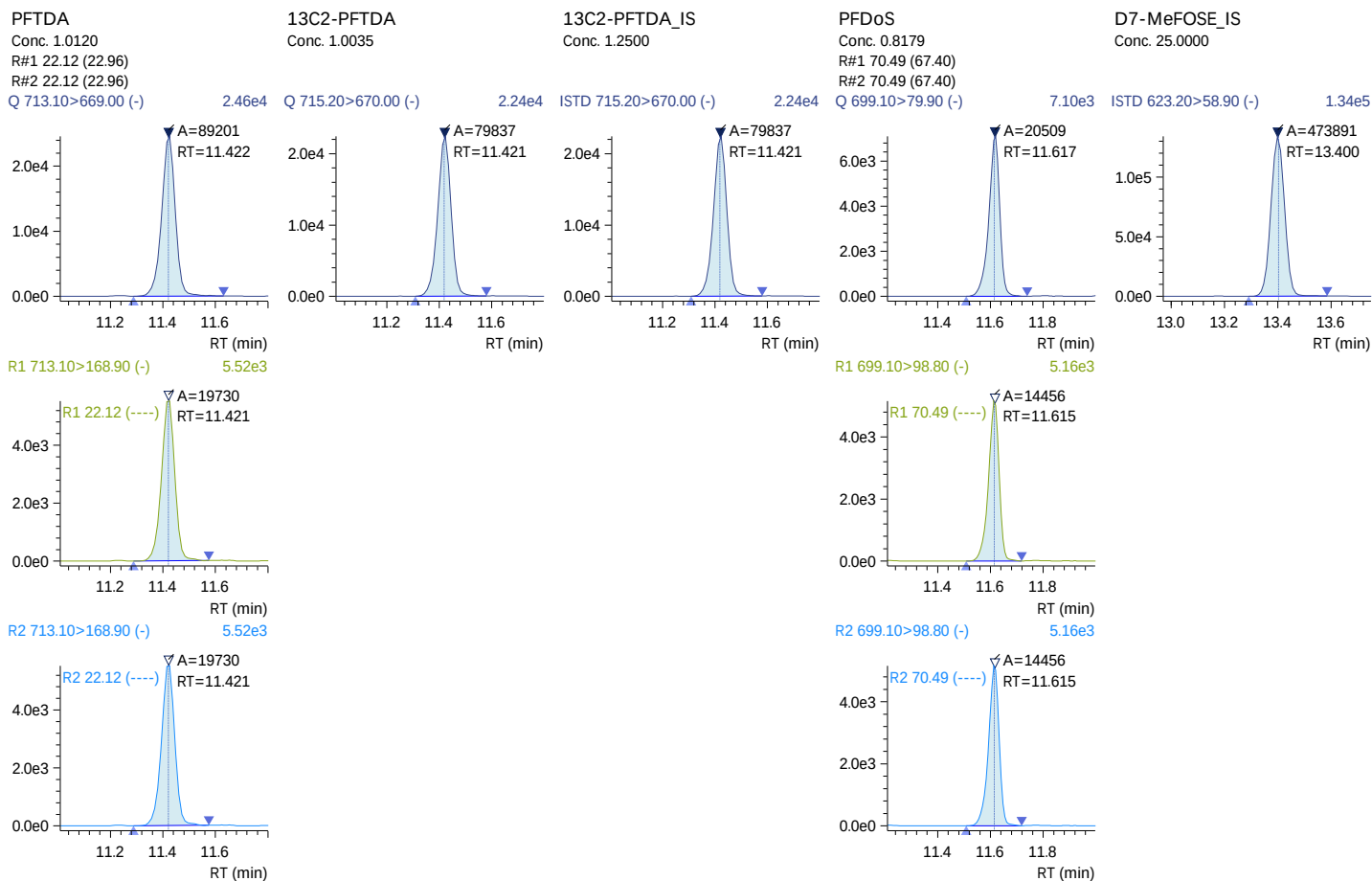
Conc. 2.5000

ISTD 506.10>77.80 (-)





240122_031 (continued)





240122_031 (continued)

D7-MeFOSE
 Conc. 23.4363

MeFOSE
 Conc. 1.0129

¹³C2-PFHxDA_IS
 Conc. 2.5000

¹³C2-PFHxDA
 Conc. 1.6512

PFHxDA

Conc. 1.0047
 R#1 15.28 (13.90)
 R#2 15.28 (13.90)

Q 623.20>58.90 (-)

1.34e5

Q 616.10>59.00 (-)

4.81e3

ISTD 815.00>770.05 (-)

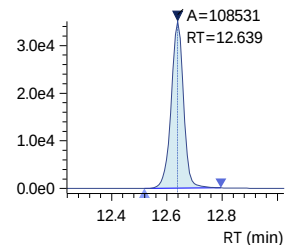
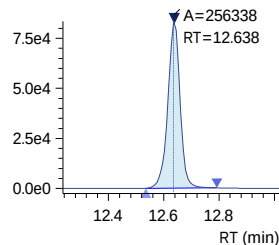
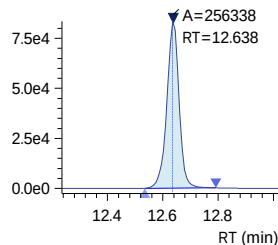
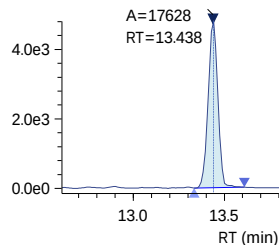
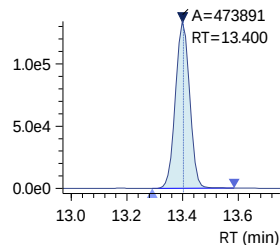
8.35e4

Q 815.00>770.05 (-)

8.35e4

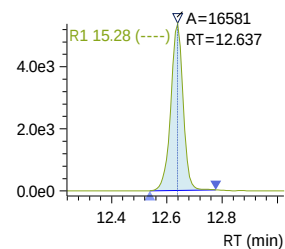
Q 813.00>768.95 (-)

3.51e4



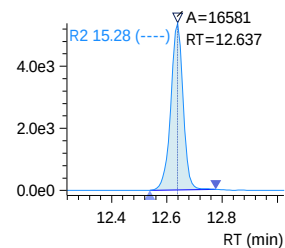
R1 813.00>218.95 (-)

5.38e3



R2 813.00>218.95 (-)

5.38e3





240122_031 (continued)

D3-MeFOSA
Conc. 1.7385

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. 0.9434
R#1 115.12 (140.79)
R#2 115.12 (140.79)

D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 24.4391

Q 515.00>219.00 (-)

8.16e3

ISTD 515.00>219.00 (-)

8.16e3

Q 511.90>219.00 (-)

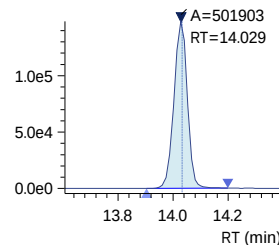
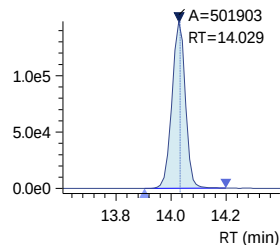
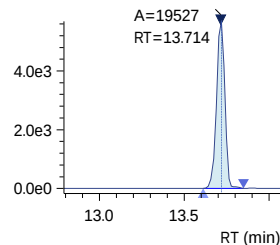
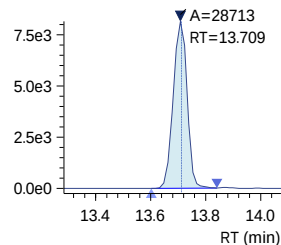
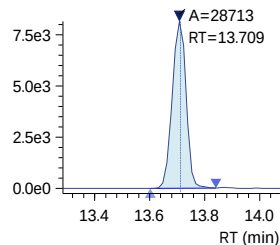
5.69e3

ISTD 639.20>58.90 (-)

1.48e5

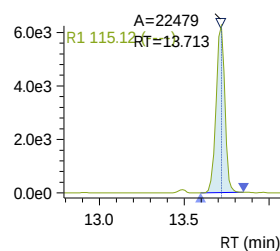
Q 639.20>58.90 (-)

1.48e5



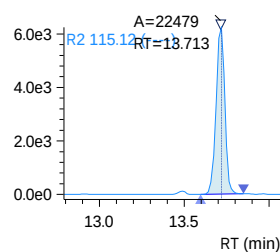
R1 511.90>169.00 (-)

6.25e3



R2 511.90>169.00 (-)

6.25e3





240122_031 (continued)

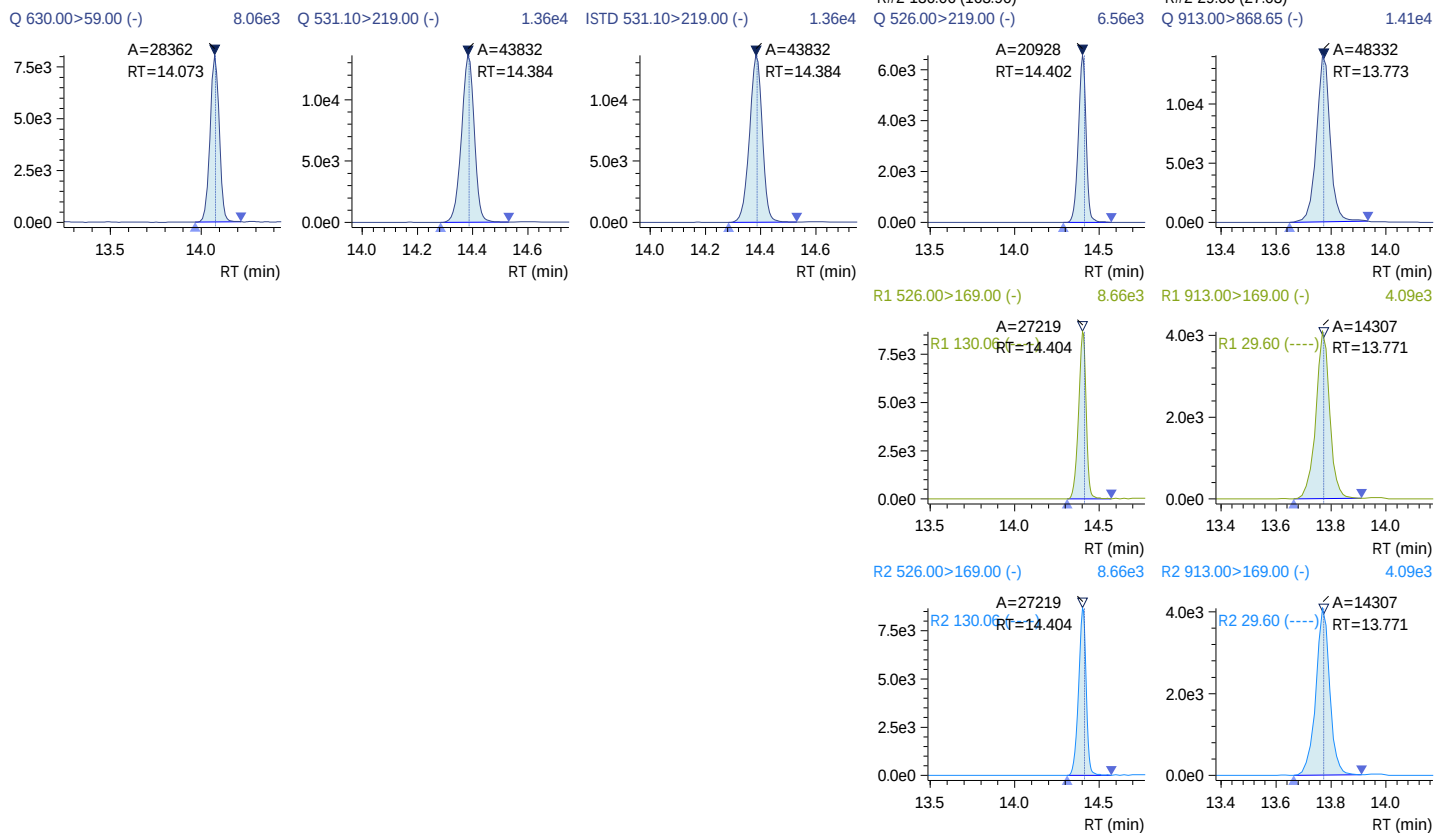
EtFOSE
Conc. 1.0740

D5-EtFOSAm
Conc. 1.9933

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. 0.8201
R#1 130.06 (163.90)
R#2 130.06 (163.90)

PFODA
Conc. 0.8338
R#1 29.60 (27.03)
R#2 29.60 (27.03)



Validation Report

1st *PS* 01/25/24
2nd *MS* 01/25/24

Data File: J:\LCMS08\Data\240122_1633_B1\240122_032
Lab ID: KQ2400483-02
RunType: DLCS
Matrix: Water

Date Acquired: 1/22/24 21:46
Batch ID: 830573
Analysis Method: 1633/PFAS_DOD5.4

Validations

Validation Categories	Pass	Fail
Analytical Hold Time	X	
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery		X
Continuing Calibration Recovery (Closing)		X
Internal Standards	X	
Surrogates	X	
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Continuing Calibration Recovery	N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	136	70	130	rerun with any samples with hits
	D3-MeFOSAA	138	70	130	native in control
	13C2-4:2 FTS	163	70	130	
	13C2-6:2 FTS	170	70	130	
	13C2-8:2 FTS	162	70	130	
Continuing Calibration Recovery (Closing)	N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	160	70	130	rerun with any samples with hits
	Perfluoro-3-methoxypropanoic acid (PFMPA)	135	70	130	
	D9-EtFOSE	131	70	130	native in control
	D3-MeFOSAA	142	70	130	
	13C2-4:2 FTS	156	70	130	
	13C2-6:2 FTS	136	70	130	
	13C2-8:2 FTS	142	70	130	

Primary Review: _____

Secondary Review: _____

Quantitation Report

1st *PS* 01/25/24
2nd *MS* 01/25/24

Data File:	J:\LCMS08\Data\240122_1633_B1\240122_032	Instrument:	K-LCMS-08
Acqu Date:	1/22/24 21:46	Vial:	48
Run Type:	DLCS	Dilution:	1
Lab ID:	KQ2400483-02	Raw Units:	ng/mL

Bottle ID:		Tier:	IV	Matrix:	Water
Prod Code:	PFAS_DOD5.4	Collect Date:	12/27/23	Receive Date:	12/28/23

Analysis Lot:	830573	Prep Lot:	432516	Report Group:	KQ2400483
Analysis	1633	Prep Method:	Method		
		Prep Date:	1/11/24		

Title:	Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM	Calibration ID:	KC2400027
		Report List ID:	24615

Internal Standard Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Area Criteria
18O2-PFHxS	7.069	0.00	167668	2.5000	OK
13C4-PFOS	8.809	-0.01	200940	2.5000	OK
13C3-PFBA	1.405	+0.02	472211	5.0000	OK
13C2-PFHxA	4.955	0.00	511730	2.5000	OK
13C4-PFOA	7.095	-0.01	34462	2.5000	OK
13C5-PFNA	7.948	0.00	226261	1.2500	OK
13C2-PFDA	8.714	-0.01	155643	1.2500	OK

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
13C3-PFBS	4.617		208619	2.1925	88	40 - 135	Y
13C3-PFHxS	7.068	-0.01	157397	2.1871	87	40 - 130	Y
13C8-PFOS	8.809	-0.01	61045	1.8216	73	40 - 130	Y
13C4-PFBA	1.404	+0.01	1032041	9.7780	98	5 - 130	Y
13C5-PFPeA	3.470	+0.00	90163	3.9034	78	40 - 130	Y
13C5-PFHxA	4.954	0.00	457693	2.1222	85	40 - 130	Y
13C4-PFHpA	6.136	-0.01	473899	2.4273	97	40 - 130	Y
13C8-PFOA	7.095	-0.01	430615	2.2356	89	40 - 130	Y
13C9-PFNA	7.948	0.00	220446	1.2443	100	40 - 130	Y
13C6-PFDA	8.715	0.00	162996	1.3017	104	40 - 130	Y
13C7-PFUnDA	9.439	-0.01	183746	1.2302	98	30 - 130	Y
13C2-PFDoDA	10.127	0.00	183837	1.0713	86	10 - 130	Y
13C2-PFTeDA	11.418	-0.01	82665	1.1157	89	10 - 130	Y
13C8-FOSA	11.162	-0.01	182710	2.1419	86	40 - 130	Y
D3-MeFOSA	13.705	-0.01	32154	1.8718	75	10 - 130	Y
D5-EtFOSA	14.383	-0.01	46255	2.0224	81	10 - 130	Y
D7-MeFOSE	13.400	-0.01	487245	23.1679	93	10 - 130	Y
D9-EtFOSE	14.028	-0.01	516333	24.1726	97	10 - 130	Y

			1st	PS	01/25/24
Data File:	J:\LCMS08\Data\240122_1633_B1\240122_032	Instrument:	K-LCMS08	MS	01/25/24
Acqu Date:	1/22/24 21:46	Vial:	48		
Run Type:	DLCS	Dilution:	1		
Lab ID:	KQ2400483-02	Raw Units:	ng/mL		

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
D3-MeFOSAA	8.852	-0.01	204791	5.8722	117	40 - 170	Y
D5-EtFOSAA	9.184	-0.01	189178	4.5341	91	25 - 135	Y
13C2-4:2 FTS	4.637	0.00	170967	7.4097	148	40 - 200	Y
13C2-6:2 FTS	6.781	0.00	151995	6.9650	139	40 - 200	Y
13C2-8:2 FTS	8.404	0.00	119440	6.6628	133	40 - 300	Y
13C3-HFPO-DA	5.432	0.00	521358	10.4076	104	40 - 130	Y

Target Compounds

Final Conc.Units: ng/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Perfluorobutane sulfonic acid (PFBS)	4.618		108212	1.0134	20.3		Y
Perfluoropentane sulfonic acid (PFPeS)	5.995	0.00	82239	0.9950	19.9		Y
Perfluorohexane sulfonic acid (PFHxS)	7.069	0.00	87022	1.1327	22.7		Y
Perfluoroheptane sulfonic acid (PFHpS)	7.993	0.00	59681	1.2525	25.1		Y
Perfluorooctane sulfonic acid (PFOS)	8.811	0.00	76114	1.1988	24.0		Y
Perfluorononane sulfonic acid (PFNS)	9.575	0.00	57728	1.2446	24.9		Y
Perfluorodecane sulfonic acid (PFDS)	10.287	-0.01	46538	1.1482	23.0		Y
Perfluorododecane sulfonic acid (PFDoS)	11.614	0.00	21579	0.8814	17.6		Y
Perfluorobutanoic acid (PFBA)	1.407	+0.02	97551	1.1001	22.0		Y
Perfluoropentanoic acid (PFPeA)	3.473	+0.00	156161	1.3372	26.7		Y
Perfluorohexanoic acid (PFHxA)	4.956	0.00	169304	1.1030	22.1		Y
Perfluoroheptanoic acid (PFHpA)	6.138	-0.01	201182	0.9889	19.8		Y
Perfluorooctanoic acid (PFOA)	7.097	-0.01	141721	1.2315	24.6		Y
Perfluorononanoic acid (PFNA)	7.949	0.00	133072	1.0298	20.6		Y
Perfluorodecanoic acid (PFDA)	8.716	-0.01	166463	1.0460	20.9		Y
Perfluoroundecanoic acid (PFUnDA)	9.441	-0.01	135931	0.9920	19.8		Y
Perfluorododecanoic acid (PFDOA)	10.128	-0.01	112873	1.0588	21.2		Y
Perfluorotridecanoic acid (PFTTrDA)	10.785	-0.01	116094	0.9645	19.3		Y
Perfluorotetradecanoic acid (PFTDA)	11.420	-0.01	97165	1.0661	21.3		Y
Perfluorooctane sulfonamide (PFOSAm)	11.161	-0.01	68163	1.1319	22.6		Y
N-Methylperfluorooctane sulfonamide (MeFOSA)	13.713	-0.01	21810	0.9409	18.8		Y
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	14.401	-0.01	22430	0.8330	16.7		Y
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	13.436	-0.01	18270	1.0210	20.4		Y
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	14.073	-0.01	30117	1.1086	22.2		Y
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	8.857	-0.01	56580	1.0182	20.4		Y

			1st	PS	01/25/24
Data File:	J:\LCMS08\Data\240122_1633_B1\240122_032	Instrument:	K-LCMS08	MS	01/25/24
Acqu Date:	1/22/24 21:46	Vial:	48		
Run Type:	DLCS	Dilution:	1		
Lab ID:	KQ2400483-02	Raw Units:	ng/mL		

<i>Target Compounds</i>		Final Conc.Units: ng/L				
Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q Rpt?
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	9.195	-0.01	40489	1.6025	32.1	Y
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	4.639	0.00	85791	1.0202	20.4	Y
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	6.780	-0.01	72368	1.0456	20.9	Y
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	8.404	0.00	53431	1.0410	20.8	Y
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	2.979	+0.01	55715	27.8665	557	Y
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	5.872	-0.01	267871	22.6267	453	Y
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	7.938	-0.01	335724	21.2424	425	Y
Perfluoro(2-ethoxyethane) sulfonic acid (PFEEESA)	5.292	0.00	442450	0.8631	17.3	Y
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	9.376	0.00	340737	0.7927	15.9	Y
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	10.796	-0.01	211458	0.7142	14.3	Y
Perfluoro-3-methoxypropanoic acid (PFMPA)	2.419	+0.01	86338	1.4817	29.6	Y
Perfluoro-4-methoxybutanoic acid (PFMBA)	3.996	+0.00	101870	1.2340	24.7	Y
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	5.433	0.00	68852	1.1958	23.9	Y
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	4.812	0.00	128639	1.2668	25.3	Y
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	6.504	-0.01	358579	0.8874	17.7	Y

Prep Amount:	250 mL	Dilution:	1
Prep Final Amount:	5.00 mL	Basis Factor:	100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution



240122_032

Sample ID: KQ2400483-02
Date Acquired: 1/22/2024 9:46:25 PM
Acquired by: System Administrator
Data File: 240122_032
Vial: 12 | Inj. Volume: 10.0000uL | Tray: 2

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	1032041	----	----	----	----	----	----	
13C4-PFBA_IS	216.80>171.90	----	1032041	----	----	----	----	----	----	
13C3-PFBA_IS	216.00>172.00	----	472211	----	----	----	----	----	----	
PFBA	212.80>169.05	----	97551	----	----	----	----	----	----	
PFMPA	229.00>84.90	----	86338	----	----	----	----	----	----	AC
3_3 FTCA	241.00>177.10	241.00>117.00	55715	77331	138.80	141.17	77331	138.80	135.52	AC
13C5-PFPeA	268.30>223.00	----	90163	----	----	----	----	----	----	
13C5-PFPeA_IS	268.30>223.00	----	90163	----	----	----	----	----	----	
PFPeA	263.00>219.00	----	156161	----	----	----	----	----	----	
PFMBA	279.00>84.95	----	101870	----	----	----	----	----	----	
13C2-4_2 FTS	329.10>80.90	----	170967	----	----	----	----	----	----	
13C2-4_2 FTS_IS	329.10>80.90	----	170967	----	----	----	----	----	----	
4_2 FTS	327.10>307.00	327.10>80.90	85791	28606	33.34	29.06	28606	33.34	35.34	
13C3-PFBS_IS	302.10>79.90	----	208619	----	----	----	----	----	----	
PFBS	298.70>79.90	298.70>98.80	108212	49537	45.78	46.72	49537	45.78	49.78	
13C3-PFBS	302.10>79.90	----	208619	----	----	----	----	----	----	
NFDHA	295.00>201.00	295.00>84.90	128639	49060	38.14	40.25	49060	38.14	37.18	
13C5-PFHxA	318.00>273.00	----	457693	----	----	----	----	----	----	
13C5-PFHxA_IS	318.00>273.00	----	457693	----	----	----	----	----	----	
13C2-PFHxA_IS	315.10>270.00	----	511730	----	----	----	----	----	----	
PFHxA	313.00>269.00	----	169304	----	----	----	----	----	----	
PFEESA	314.80>135.00	314.80>82.90	442450	26361	5.96	6.11	26361	5.96	5.72	
13C3-HFPO-DA	286.90>168.90	----	521358	----	----	----	----	----	----	
13C3-HFPO-DA_IS	286.90>168.90	----	521358	----	----	----	----	----	----	
HFPO-DA	284.90>168.90	284.90>184.90	68852	40230	58.43	65.61	40230	58.43	60.94	
5_3 FTCA	341.00>237.05	341.00>217.00	267871	419045	156.44	158.86	419045	156.44	155.83	
PFPeS	349.10>79.90	349.10>98.80	82239	44761	54.43	55.80	44761	54.43	56.73	
13C4-PFHpA	367.10>322.00	----	473899	----	----	----	----	----	----	
13C4-PFHpA_IS	367.10>322.00	----	473899	----	----	----	----	----	----	
PFHpA	363.10>319.00	363.10>169.00	201182	49612	24.66	21.50	49612	24.66	21.92	
DONA	376.90>250.90	376.90>84.80	358579	108020	30.12	29.66	108020	30.12	30.77	
13C2-6_2 FTS_IS	429.10>80.90	----	151995	----	----	----	----	----	----	
13C2-6_2 FTS	429.10>80.90	----	151995	----	----	----	----	----	----	
6_2 FTS	427.10>407.00	427.10>80.90	72368	31981	44.19	41.15	31981	44.19	40.98	
13C4-PFOA_IS	417.10>172.00	----	34462	----	----	----	----	----	----	
13C8-PFOA_IS	421.10>376.00	----	430615	----	----	----	----	----	----	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240122_032 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	430615	----	----	----	----	----	----	----
PFOA	413.00>369.00	413.00>169.00	141721	43991	31.04	31.89	43991	31.04	32.23	
13C3-PFHxS	402.10>79.90	----	157397	----	----	----	----	----	----	----
13C3-PFHxS_IS	402.10>79.90	----	157397	----	----	----	----	----	----	----
PFHxS	398.70>79.90	398.70>98.90	87022	45908	52.75	56.62	45908	52.75	60.26	
18O2-PFHxS_IS	403.00>83.90	----	167668	----	----	----	----	----	----	----
13C9-PFNA_IS	472.10>427.00	----	220446	----	----	----	----	----	----	----
13C9-PFNA	472.10>427.00	----	220446	----	----	----	----	----	----	----
13C5-PFNA_IS	468.00>423.00	----	226261	----	----	----	----	----	----	----
PFNA	463.00>419.00	463.00>219.00	133072	32518	24.44	23.17	32518	24.44	23.63	
PFHpS	449.00>79.90	449.00>98.80	59681	33376	55.92	56.96	33376	55.92	59.06	
7_3 FTCA	441.00>317.00	441.00>336.90	335724	439245	130.84	117.47	439245	130.84	125.53	
13C2-8_2-FTS	529.10>80.90	----	119440	----	----	----	----	----	----	----
13C2-8_2-FTS_IS	529.10>80.90	----	119440	----	----	----	----	----	----	----
8_2 FTS	527.10>506.95	527.10>80.80	53431	25274	47.30	49.59	25274	47.30	44.81	
13C6-PFDA_IS	519.10>474.10	----	162996	----	----	----	----	----	----	----
13C6-PFDA	519.10>474.10	----	162996	----	----	----	----	----	----	----
13C2-PFDA_IS	515.10>470.10	----	155643	----	----	----	----	----	----	----
PFDA	512.90>469.00	512.90>219.00	166463	34386	20.66	19.00	34386	20.66	19.15	
D3-NMeFOSAA_IS	573.20>419.00	----	204791	----	----	----	----	----	----	----
D3-NMeFOSAA	573.20>419.00	----	204791	----	----	----	----	----	----	----
13C8-PFOS_IS	507.10>98.90	----	61045	----	----	----	----	----	----	----
13C8-PFOS	507.10>98.90	----	61045	----	----	----	----	----	----	----
13C4-PFOS_IS	502.80>79.90	----	200940	----	----	----	----	----	----	----
PFOS	498.90>79.90	498.90>98.80	76114	36305	47.70	52.47	36305	47.70	53.10	
NMeFOSAA	570.10>419.00	570.10>483.00	56580	33485	59.18	55.15	33485	59.18	60.69	
D5-NEtFOSAA_IS	589.20>419.00	----	189178	----	----	----	----	----	----	----
D5-NEtFOSAA	589.20>419.00	----	189178	----	----	----	----	----	----	----
NEtFOSAA	584.20>419.10	584.20>526.00	40489	30144	74.45	81.95	30144	74.45	73.27	AC
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	340737	108936	31.97	32.76	108936	31.97	32.59	
PFUnDA	563.10>519.00	563.10>269.10	135931	18095	13.31	13.12	18095	13.31	14.36	
13C7-PFUnDA_IS	570.00>525.10	----	183746	----	----	----	----	----	----	----
13C7-PFUnDA	570.00>525.10	----	183746	----	----	----	----	----	----	----
PFNS	548.80>79.90	548.80>98.80	57728	35811	62.04	65.22	35811	62.04	65.31	
10_2 FTS	626.80>607.05	626.80>81.00	53654	18410	34.31	37.13	18410	34.31	38.76	
13C2-PFDOA_IS	615.10>570.00	----	183837	----	----	----	----	----	----	----
13C2-PFDOA	615.10>570.00	----	183837	----	----	----	----	----	----	----
PFDOA	613.10>569.00	613.10>319.00	112873	12640	11.20	11.29	12640	11.20	11.19	
PFDS	599.00>79.90	599.00>98.80	46538	27811	59.76	60.18	27811	59.76	65.65	
PFTTrDA	663.00>619.00	663.00>168.90	116094	23019	19.83	17.64	23019	19.83	19.81	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240122_032 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	211458	73951	34.97	36.44	73951	34.97	35.86	
PFOSAm	498.10>77.90	----	68163	----	----	----	----	----	----	AC
13C8-PFOSAm	506.10>77.80	----	182710	----	----	----	----	----	----	
13C8-PFOSAm_IS	506.10>77.80	----	182710	----	----	----	----	----	----	
PFTDA	713.10>669.00	713.10>168.90	97165	22806	23.47	22.96	22806	23.47	25.01	
13C2-PFTDA	715.20>670.00	----	82665	----	----	----	----	----	----	
13C2-PFTDA_IS	715.20>670.00	----	82665	----	----	----	----	----	----	
PFDoS	699.10>79.90	699.10>98.80	21579	15382	71.28	67.40	15382	71.28	73.46	
D7-MeFOSE_IS	623.20>58.90	----	487245	----	----	----	----	----	----	
D7-MeFOSE	623.20>58.90	----	487245	----	----	----	----	----	----	
MeFOSE	616.10>59.00	----	18270	----	----	----	----	----	----	
13C2-PFHxDA_IS	815.00>770.05	----	248703	----	----	----	----	----	----	
13C2-PFHxDA	815.00>770.05	----	248703	----	----	----	----	----	----	
PFHxDA	813.00>768.95	813.00>218.95	114376	17107	14.96	13.90	17107	14.96	15.85	
D3-MeFOSA	515.00>219.00	----	32154	----	----	----	----	----	----	
D3-MeFOSA_IS	515.00>219.00	----	32154	----	----	----	----	----	----	
MeFOSA	511.90>219.00	511.90>169.00	21810	28559	130.95	140.79	28559	130.95	150.13	
D9-EtFOSE_IS	639.20>58.90	----	516333	----	----	----	----	----	----	
D9-EtFOSE	639.20>58.90	----	516333	----	----	----	----	----	----	
EtFOSE	630.00>59.00	----	30117	----	----	----	----	----	----	
D5-EtFOSAm	531.10>219.00	----	46255	----	----	----	----	----	----	
D5-EtFOSAm_IS	531.10>219.00	----	46255	----	----	----	----	----	----	
EtFOSAm	526.00>219.00	526.00>169.00	22430	30034	133.90	163.90	30034	133.90	152.08	
PFODA	913.00>868.65	913.00>169.00	54958	13790	25.09	27.03	13790	25.09	26.29	

Flag ID key: AC: Accuracy%



240122_032

Sample ID: KQ2400483-02
Date Acquired: 1/22/2024 9:46:25 PM
Acquired by: System Administrator
Data File: 240122_032
Vial: 12 | Inj. Volume: 10.0000uL | Tray: 2

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.404	0.013	-0.001	1032041	472211	13C3-PFBA_IS	9.7780	ng/mL	
13C4-PFBA_IS	Auto	1.404	0.013	----	1032041	1032041	----	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.405	0.014	----	472211	472211	----	5.0000	ng/mL	
PFBA	Auto	1.407	0.012	0.003	97551	1032041	13C4-PFBA_IS	1.1001	ng/mL	
PFMPA	Auto	2.419	0.013	-1.051	86338	90163	13C5-PFPeA_IS	1.4817	ng/mL	AC
3_3 FTCA	Auto	2.979	0.011	-0.491	55715	90163	13C5-PFPeA_IS	27.8665	ng/mL	AC
13C5-PFPeA	Auto	3.470	0.005	-1.485	90163	511730	13C2-PFHxA_IS	3.9034	ng/mL	
13C5-PFPeA_IS	Auto	3.470	0.005	----	90163	90163	----	5.0000	ng/mL	
PFPeA	Auto	3.473	0.006	0.003	156161	90163	13C5-PFPeA_IS	1.3372	ng/mL	
PFMBA	Auto	3.996	0.005	0.526	101870	90163	13C5-PFPeA_IS	1.2340	ng/mL	
13C2-4_2 FTS	Auto	4.637	0.001	-2.432	170967	167668	18O2-PFHxS_IS	7.4097	ng/mL	
13C2-4_2 FTS_IS	Auto	4.637	0.001	----	170967	170967	----	5.0000	ng/mL	
4_2 FTS	Auto	4.639	0.002	0.002	85791	170967	13C2-4_2 FTS_IS	1.0202	ng/mL	
13C3-PFBS_IS	Auto	4.617	0.005	----	208619	208619	----	2.5000	ng/mL	
PFBS	Auto	4.618	0.005	0.001	108212	208619	13C3-PFBS_IS	1.0134	ng/mL	
13C3-PFBS	Auto	4.617	0.005	-2.452	208619	167668	18O2-PFHxS_IS	2.1925	ng/mL	
NFDHA	Auto	4.812	0.002	-0.142	128639	457693	13C5-PFHxA_IS	1.2668	ng/mL	
13C5-PFHxA	Auto	4.954	0.002	-0.001	457693	511730	13C2-PFHxA_IS	2.1222	ng/mL	
13C5-PFHxA_IS	Auto	4.954	0.002	----	457693	457693	----	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	4.955	0.002	----	511730	511730	----	2.5000	ng/mL	
PFHxA	Auto	4.956	0.002	0.002	169304	457693	13C5-PFHxA_IS	1.1030	ng/mL	
PFEESA	Auto	5.292	0.003	0.338	442450	457693	13C5-PFHxA_IS	0.8631	ng/mL	
13C3-HFPO-DA	Auto	5.432	0.002	0.477	521358	511730	13C2-PFHxA_IS	10.4076	ng/mL	
13C3-HFPO-DA_IS	Auto	5.432	0.002	----	521358	521358	----	10.0000	ng/mL	
HFPO-DA	Auto	5.433	0.002	0.001	68852	521358	13C3-HFPO-DA_IS	1.1958	ng/mL	
5_3 FTCA	Auto	5.872	0.002	0.918	267871	457693	13C5-PFHxA_IS	22.6267	ng/mL	
PFPeS	Auto	5.995	0.001	-1.073	82239	157397	13C3-PFHxS_IS	0.9950	ng/mL	
13C4-PFHpA	Auto	6.136	-0.001	1.181	473899	511730	13C2-PFHxA_IS	2.4273	ng/mL	
13C4-PFHpA_IS	Auto	6.136	-0.001	----	473899	473899	----	2.5000	ng/mL	
PFHpA	Auto	6.138	-0.001	0.002	201182	473899	13C4-PFHpA_IS	0.9889	ng/mL	
DONA	Auto	6.504	0.000	1.072	358579	521358	13C3-HFPO-DA_IS	0.8874	ng/mL	
13C2-6_2 FTS_IS	Auto	6.781	0.000	----	151995	151995	----	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.781	0.000	-0.288	151995	167668	18O2-PFHxS_IS	6.9650	ng/mL	
6_2 FTS	Auto	6.780	-0.001	-0.001	72368	151995	13C2-6_2 FTS_IS	1.0456	ng/mL	
13C4-PFOA_IS	Auto	7.095	-0.002	----	34462	34462	----	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.095	-0.001	----	430615	430615	----	2.5000	ng/mL	
13C8-PFOA	Auto	7.095	-0.001	0.000	430615	34462	13C4-PFOA_IS	2.2356	ng/mL	
PFOA	Auto	7.097	-0.001	0.002	141721	430615	13C8-PFOA_IS	1.2315	ng/mL	
13C3-PFHxS	Auto	7.068	0.000	-0.001	157397	167668	18O2-PFHxS_IS	2.1871	ng/mL	
13C3-PFHxS_IS	Auto	7.068	0.000	----	157397	157397	----	2.5000	ng/mL	
PFHxS	M	7.069	0.000	0.001	87022	157397	13C3-PFHxS_IS	1.1327	ng/mL	
18O2-PFHxS_IS	Auto	7.069	0.000	----	167668	167668	----	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.948	0.001	----	220446	220446	----	1.2500	ng/mL	
13C9-PFNA	Auto	7.948	0.001	0.000	220446	226261	13C5-PFNA_IS	1.2443	ng/mL	
13C5-PFNA_IS	Auto	7.948	0.000	----	226261	226261	----	1.2500	ng/mL	
PFNA	Auto	7.949	0.001	0.001	133072	220446	13C9-PFNA_IS	1.0298	ng/mL	
PFHpS	Auto	7.993	0.001	-0.816	59681	61045	13C8-PFOS_IS	1.2525	ng/mL	
7_3 FTCA	Auto	7.938	0.002	2.984	335724	457693	13C5-PFHxA_IS	21.2424	ng/mL	
13C2-8_2-FTS	Auto	8.404	0.001	1.335	119440	167668	18O2-PFHxS_IS	6.6628	ng/mL	
13C2-8_2-FTS_IS	Auto	8.404	0.001	----	119440	119440	----	5.0000	ng/mL	
8_2 FTS	Auto	8.404	0.000	0.000	53431	119440	13C2-8_2-FTS_IS	1.0410	ng/mL	
13C6-PFDA_IS	Auto	8.715	0.002	----	162996	162996	----	1.2500	ng/mL	
13C6-PFDA	Auto	8.715	0.002	0.001	162996	155643	13C2-PFDA_IS	1.3017	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_032 (continued)

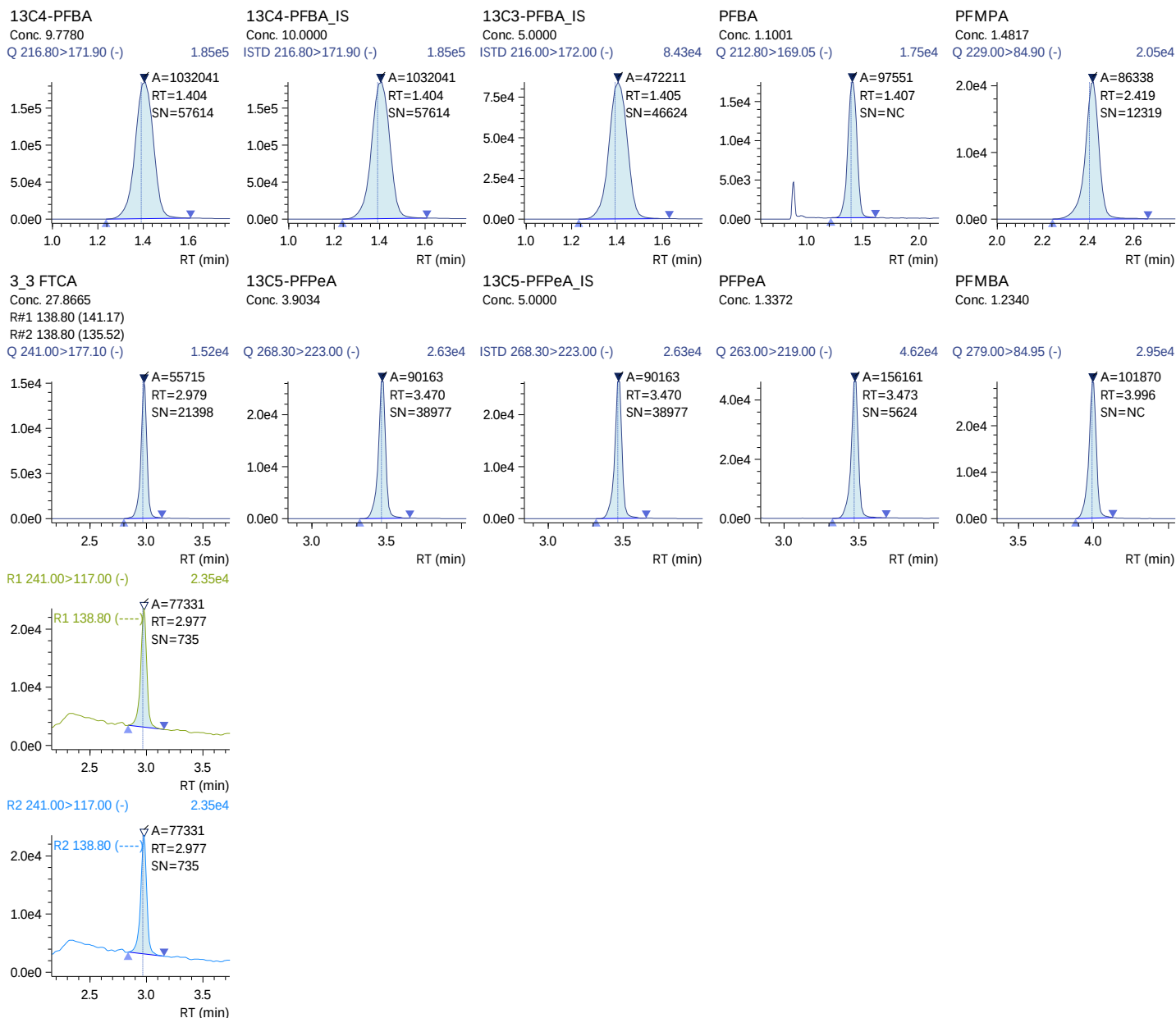
(Table continued from previous page)

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C2-PFDA_IS	Auto	8.714	0.001	----	155643	155643	----	1.2500	ng/mL	
PFDA	Auto	8.716	0.001	0.001	166463	162996	13C6-PFDA_IS	1.0460	ng/mL	
D3-NMeFOSAA_IS	Auto	8.852	0.001	----	204791	204791	----	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.852	0.001	0.043	204791	200940	13C4-PFOS_IS	5.8722	ng/mL	
13C8-PFOS_IS	Auto	8.809	0.001	----	61045	61045	----	2.5000	ng/mL	
13C8-PFOS	Auto	8.809	0.001	0.000	61045	200940	13C4-PFOS_IS	1.8216	ng/mL	
13C4-PFOS_IS	Auto	8.809	0.000	----	200940	200940	----	2.5000	ng/mL	
PFOS	M	8.811	0.002	0.002	76114	61045	13C8-PFOS_IS	1.1988	ng/mL	
NMeFOSAA	M	8.857	0.000	0.005	56580	204791	D3-NMeFOSAA_IS	1.0182	ng/mL	
D5-NetFOSAA_IS	Auto	9.184	0.001	----	189178	189178	----	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.184	0.001	0.375	189178	200940	13C4-PFOS_IS	4.5341	ng/mL	
NetFOSAA	M	9.195	0.003	0.011	40489	189178	D5-NetFOSAA_IS	1.6025	ng/mL	AC
9-CI-PF3ONS	Auto	9.376	0.001	3.944	340737	521358	13C3-HFPO-DA_IS	0.7927	ng/mL	
PFUnDA	Auto	9.441	0.001	0.002	135931	183746	13C7-PFUnDA_IS	0.9920	ng/mL	
13C7-PFUnDA_IS	Auto	9.439	0.001	----	183746	183746	----	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.439	0.001	0.725	183746	155643	13C2-PFDA_IS	1.2302	ng/mL	
PFNS	Auto	9.575	0.002	0.766	57728	61045	13C8-PFOS_IS	1.2446	ng/mL	
10_2_FTS	Auto	9.814	-0.001	1.410	53654	119440	13C2-8_2-FTS_IS	0.8592	ng/mL	
13C2-PFDOA_IS	Auto	10.127	-0.001	----	183837	183837	----	1.2500	ng/mL	
13C2-PFDOA	Auto	10.127	-0.001	1.413	183837	155643	13C2-PFDA_IS	1.0713	ng/mL	
PFDOA	Auto	10.128	-0.001	0.001	112873	183837	13C2-PFDOA_IS	1.0588	ng/mL	
PFDS	Auto	10.287	-0.001	1.478	46538	61045	13C8-PFOS_IS	1.1482	ng/mL	
PFTDA	Auto	10.785	-0.003	-0.633	116094	82665	13C2-PFTDA_IS	0.9645	ng/mL	
11-CI-PF3OUdS	Auto	10.796	-0.002	5.364	211458	521358	13C3-HFPO-DA_IS	0.7142	ng/mL	
PFOSAm	Auto	11.161	-0.001	-0.001	68163	182710	13C8-PFOSAm_IS	1.1319	ng/mL	AC
13C8-PFOSAm	Auto	11.162	-0.002	2.353	182710	200940	13C4-PFOS_IS	2.1419	ng/mL	
13C8-PFOSAm_IS	Auto	11.162	-0.002	----	182710	182710	----	2.5000	ng/mL	
PFTDA	Auto	11.420	-0.001	0.002	97165	82665	13C2-PFTDA_IS	1.0661	ng/mL	
13C2-PFTDA	Auto	11.418	-0.001	2.704	82665	155643	13C2-PFDA_IS	1.1157	ng/mL	
13C2-PFTDA_IS	Auto	11.418	-0.001	----	82665	82665	----	1.2500	ng/mL	
PFDoS	Auto	11.614	-0.001	2.805	21579	61045	13C8-PFOS_IS	0.8814	ng/mL	
D7-MeFOSE_IS	Auto	13.400	-0.002	----	487245	487245	----	25.0000	ng/mL	
D7-MeFOSE	Auto	13.400	-0.002	4.591	487245	200940	13C4-PFOS_IS	23.1679	ng/mL	
MeFOSE	Auto	13.436	-0.005	0.036	18270	487245	D7-MeFOSE_IS	1.0210	ng/mL	
13C2-PFHxDA_IS	Auto	12.634	-0.002	----	248703	248703	----	2.5000	ng/mL	
13C2-PFHxDA	Auto	12.634	-0.002	3.920	248703	155643	13C2-PFDA_IS	1.7202	ng/mL	
PFHXDA	Auto	12.636	-0.001	0.002	114376	248703	13C2-PFHxDA_IS	1.0938	ng/mL	
D3-MeFOSA	Auto	13.705	-0.006	4.896	32154	200940	13C4-PFOS_IS	1.8718	ng/mL	
D3-MeFOSA_IS	Auto	13.705	-0.006	----	32154	32154	----	2.5000	ng/mL	
MeFOSA	Auto	13.713	-0.005	0.008	21810	32154	D3-MeFOSA_IS	0.9409	ng/mL	
D9-EtFOSE_IS	Auto	14.028	-0.004	----	516333	516333	----	25.0000	ng/mL	
D9-EtFOSE	Auto	14.028	-0.004	5.219	516333	200940	13C4-PFOS_IS	24.1726	ng/mL	
EtFOSE	Auto	14.073	-0.003	0.045	30117	516333	D9-EtFOSE_IS	1.1086	ng/mL	
D5-EtFOSAm	Auto	14.383	-0.004	5.574	46255	200940	13C4-PFOS_IS	2.0224	ng/mL	
D5-EtFOSAm_IS	Auto	14.383	-0.004	----	46255	46255	----	2.5000	ng/mL	
EtFOSAm	Auto	14.401	-0.012	0.018	22430	46255	D5-EtFOSAm_IS	0.8330	ng/mL	
PFODA	Auto	13.770	-0.004	1.136	54958	248703	13C2-PFHxDA_IS	0.9772	ng/mL	

Flag ID key: AC: Accuracy%



240122_032 (continued)





240122_032 (continued)

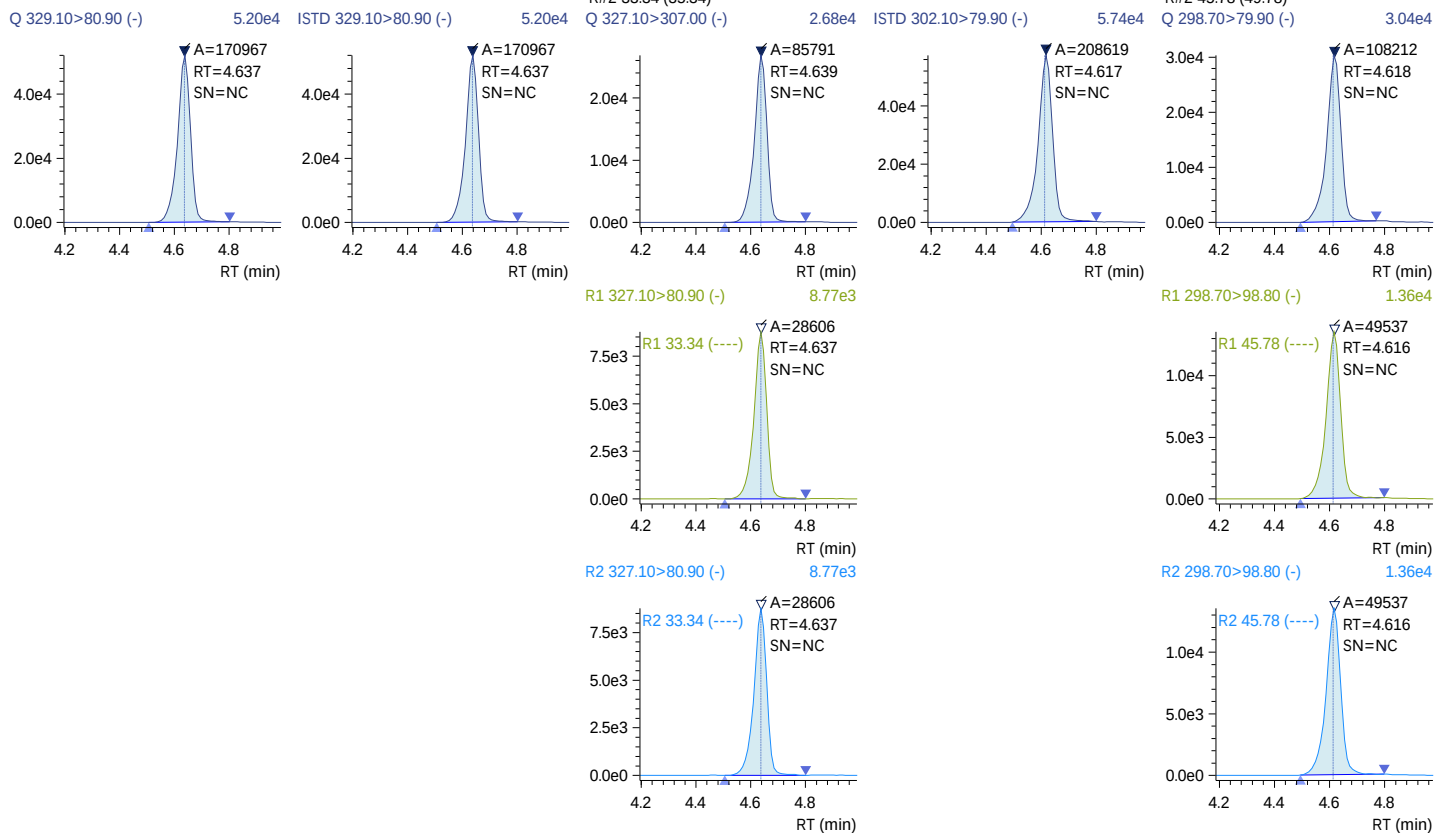
13C2-4_2 FTS
Conc. 7.4097

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. 1.0202
R#1 33.34 (29.06)
R#2 33.34 (35.34)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 1.0134
R#1 45.78 (46.72)
R#2 45.78 (49.78)





240122_032 (continued)

13C3-PFBS
Conc. 2.1925

NFDHA
Conc. 1.2668
R#1 38.14 (40.25)
R#2 38.14 (37.18)

13C5-PFHxA
Conc. 2.1222

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

Q 302.10>79.90 (-)

5.74e4

Q 295.00>201.00 (-)

3.69e4

Q 318.00>273.00 (-)

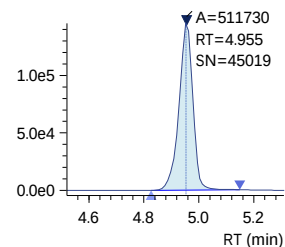
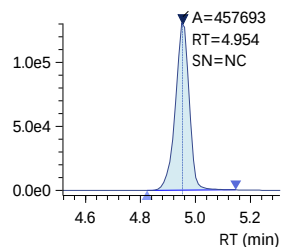
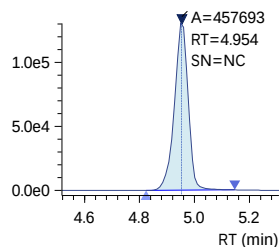
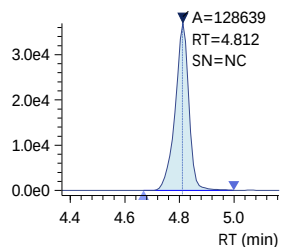
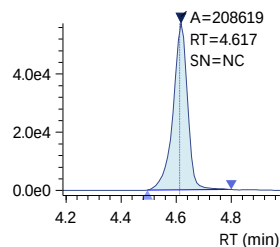
1.30e5

ISTD 318.00>273.00 (-)

1.30e5

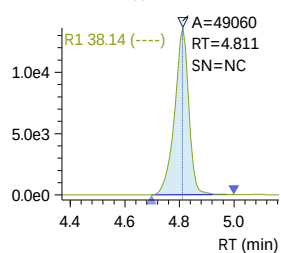
ISTD 315.10>270.00 (-)

1.45e5



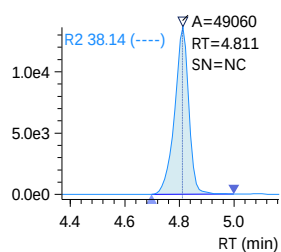
R1 295.00>84.90 (-)

1.36e4



R2 295.00>84.90 (-)

1.36e4





240122_032 (continued)

PFHxA
Conc. 1.1030

PFEESA
Conc. 0.8631
R#1 5.96 (6.11)
R#2 5.96 (5.72)

13C3-HFPO-DA
Conc. 10.4076

13C3-HFPO-DA_IS
Conc. 10.0000

HFPO-DA
Conc. 1.1958
R#1 58.43 (65.61)
R#2 58.43 (60.94)

Q 313.00>269.00 (-)

4.77e4

Q 314.80>135.00 (-)

1.26e5

Q 286.90>168.90 (-)

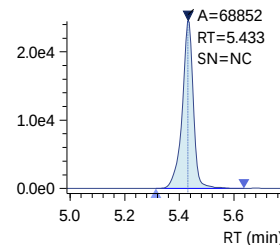
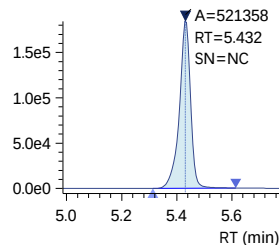
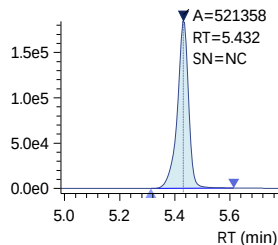
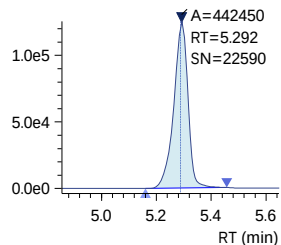
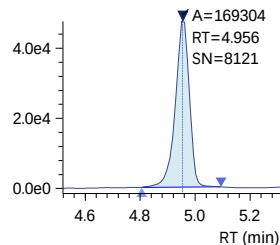
1.84e5

ISTD 286.90>168.90 (-)

1.84e5

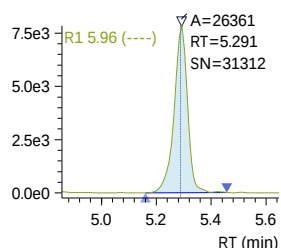
Q 284.90>168.90 (-)

2.45e4



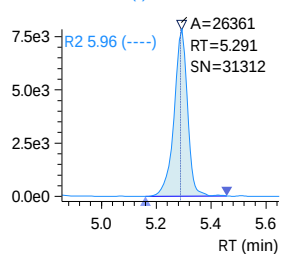
R1 314.80>82.90 (-)

7.84e3



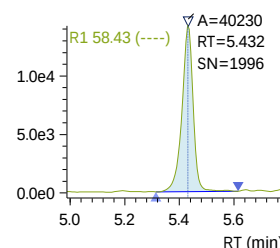
R2 314.80>82.90 (-)

7.84e3



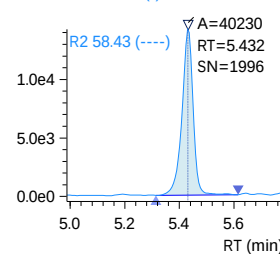
R1 284.90>184.90 (-)

1.43e4



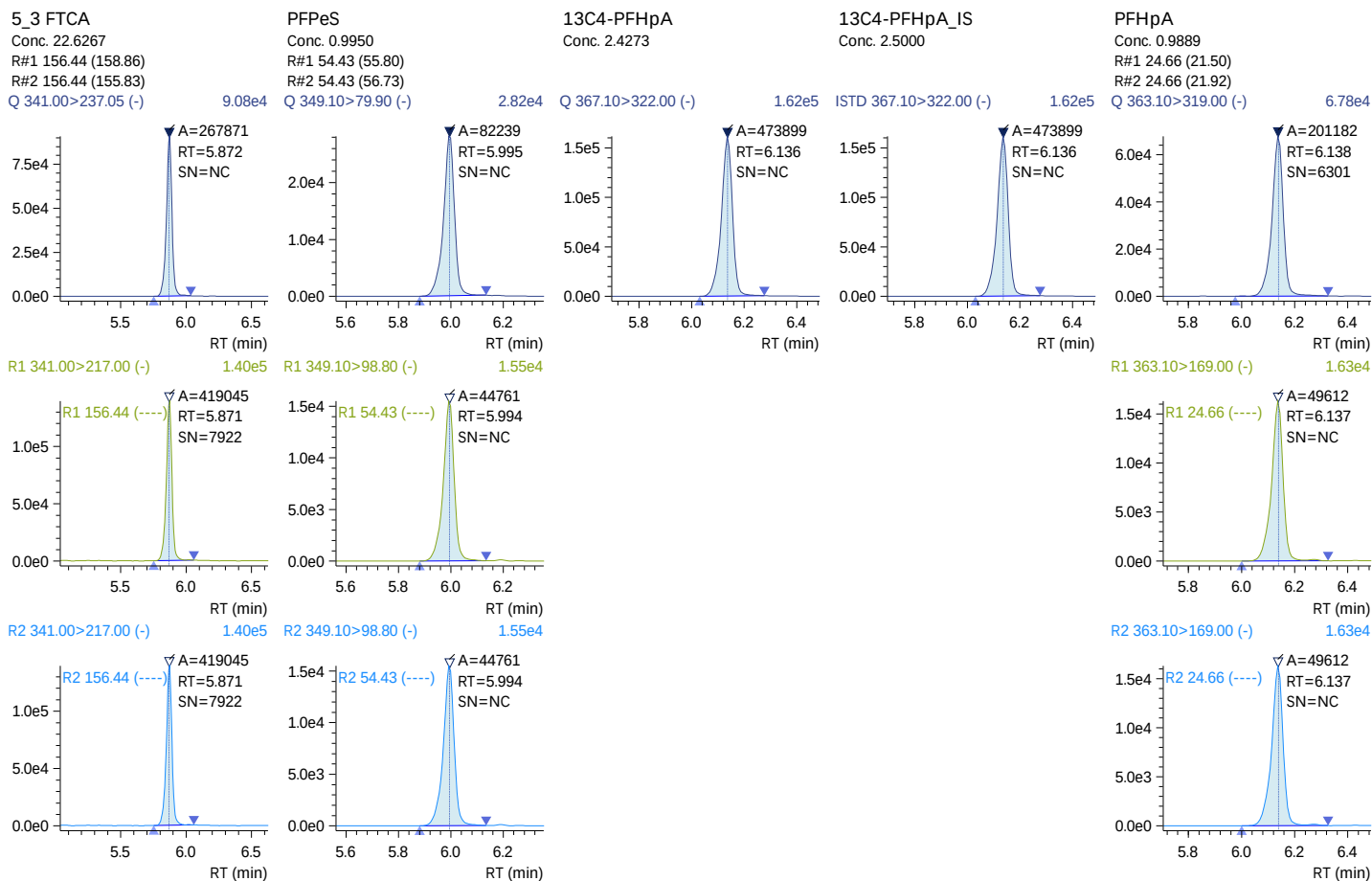
R2 284.90>184.90 (-)

1.43e4





240122_032 (continued)

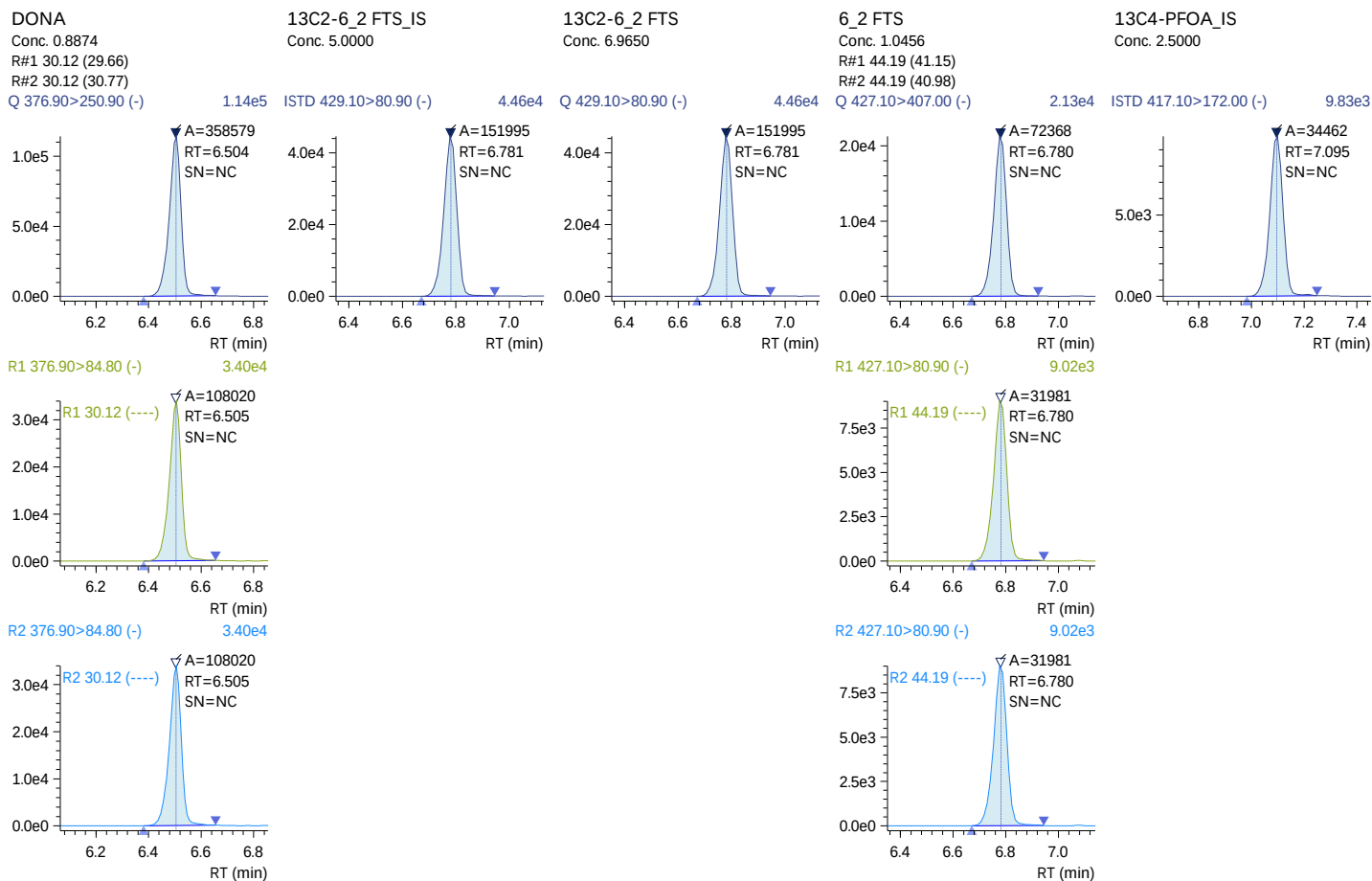


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_032 (continued)





240122_032 (continued)

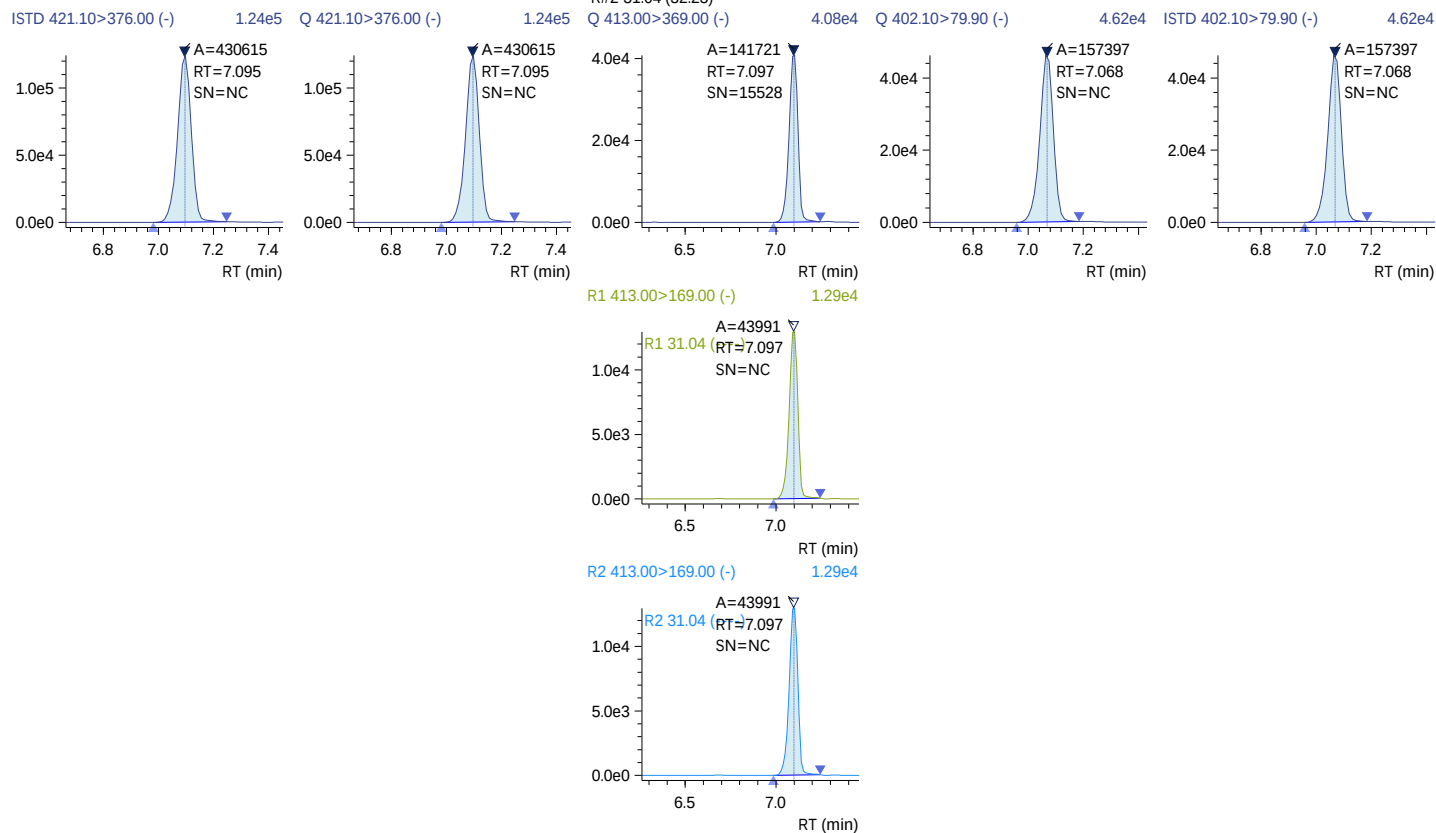
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.2356

PFOA
Conc. 1.2315
R#1 31.04 (31.89)
R#2 31.04 (32.23)

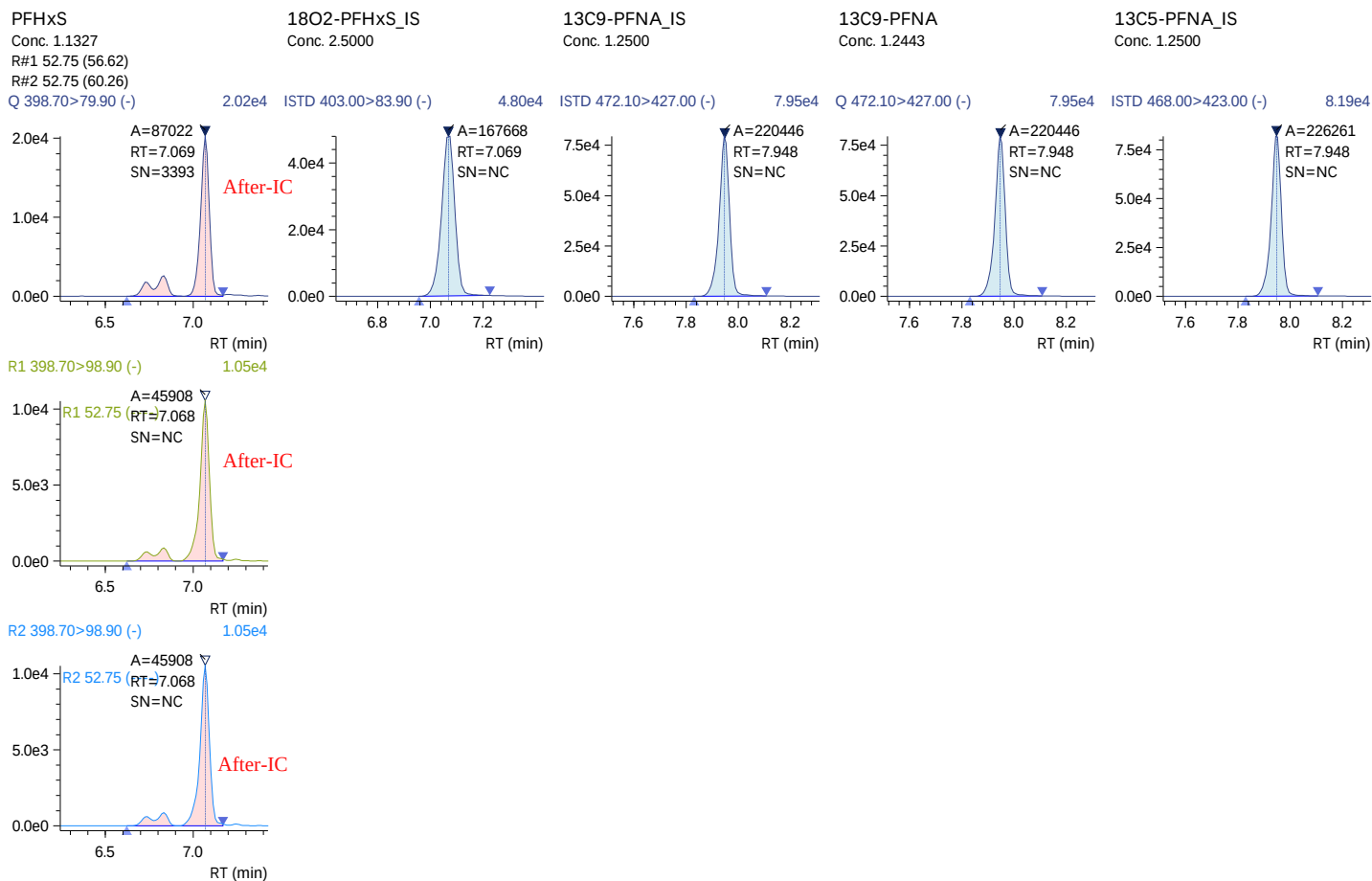
13C3-PFHxS
Conc. 2.1871

13C3-PFHxS_IS
Conc. 2.5000





240122_032 (continued)

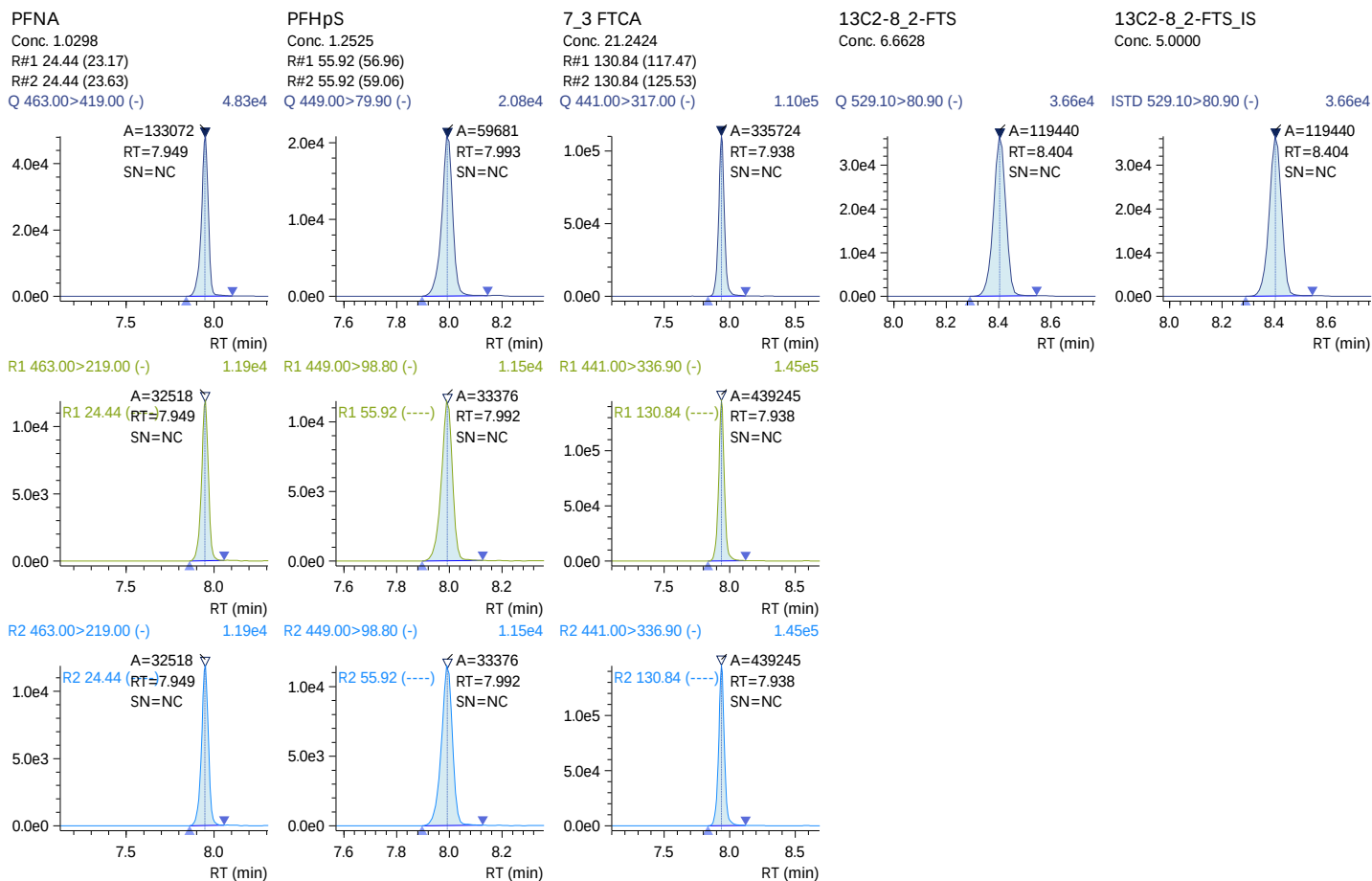


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.

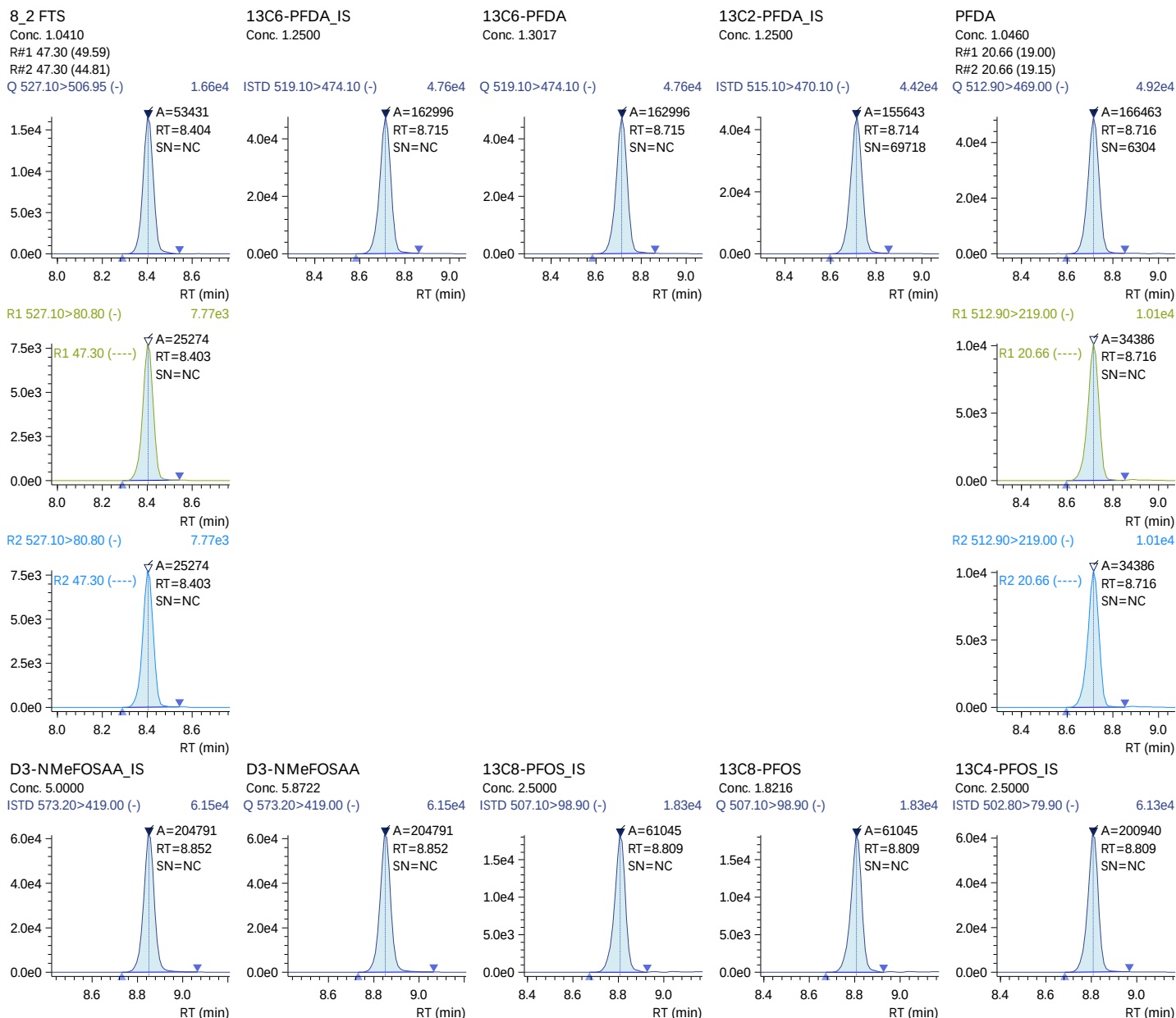


240122_032 (continued)





240122_032 (continued)

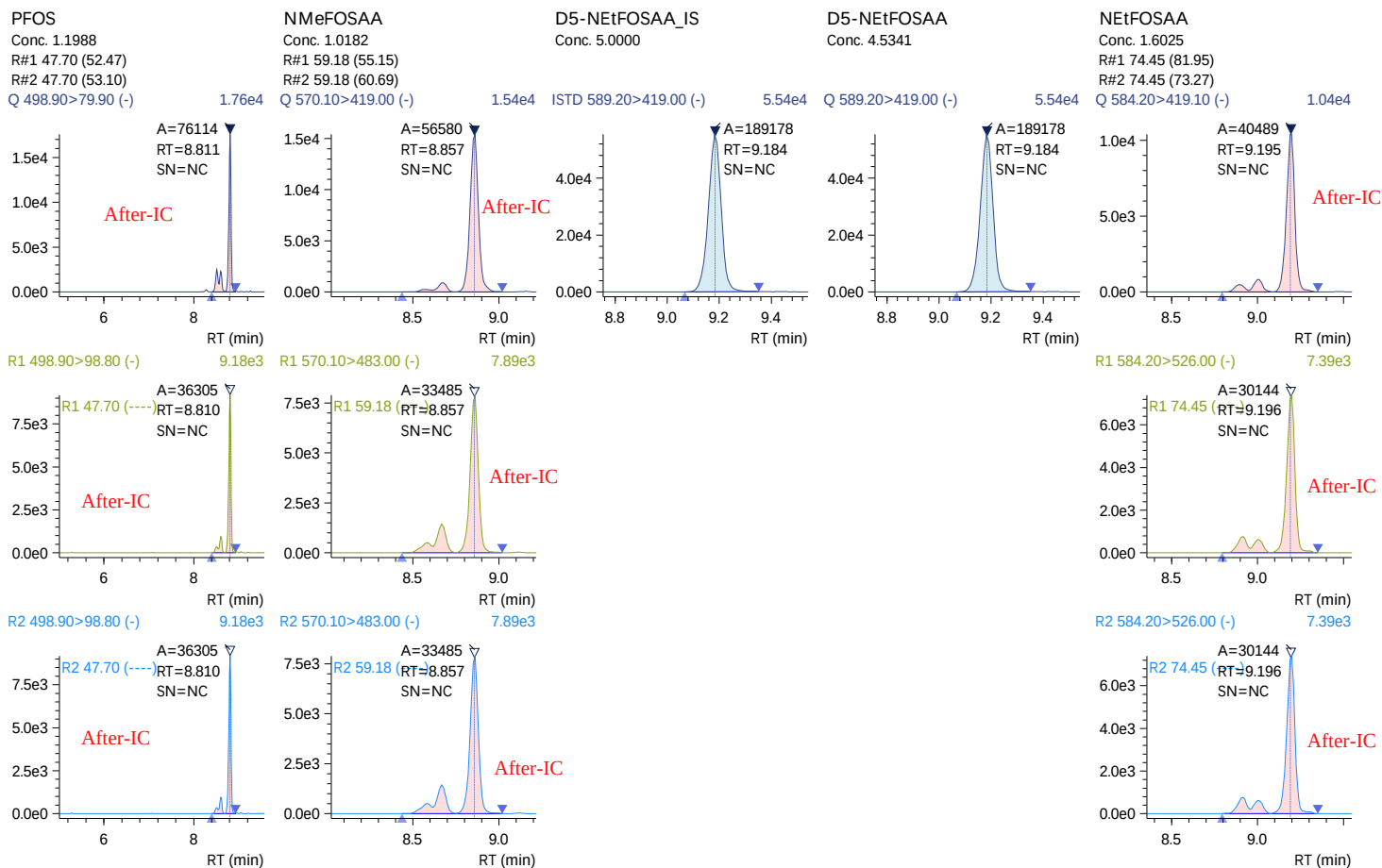


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_032 (continued)

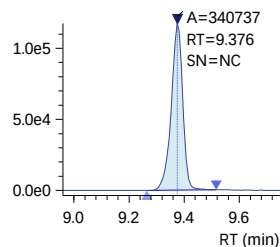




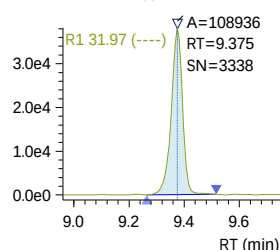
240122_032 (continued)

9-Cl-PF3ONS

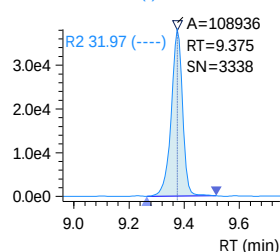
Conc. 0.7927
R#1 31.97 (32.76)
R#2 31.97 (32.59)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-) 3.82e4

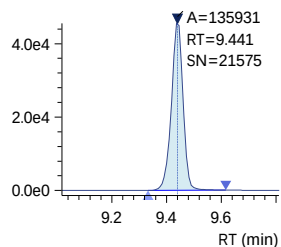


R2 532.80>353.00 (-) 3.82e4

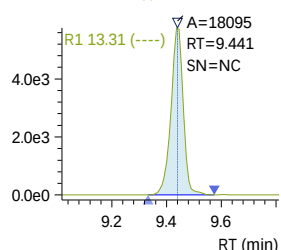


PFUnDA

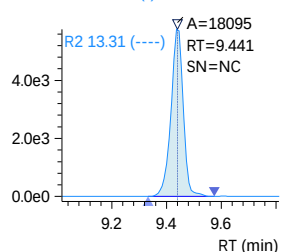
Conc. 0.9920
R#1 13.31 (13.12)
R#2 13.31 (14.36)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-) 5.76e3

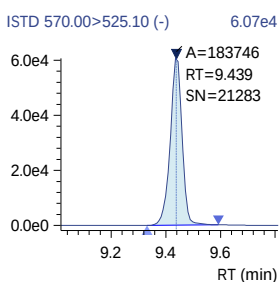


R2 563.10>269.10 (-) 5.76e3



13C7-PFUnDA_IS

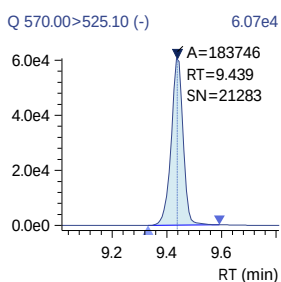
Conc. 1.2500



ISTD 570.00>525.10 (-) 6.07e4

13C7-PFUnDA

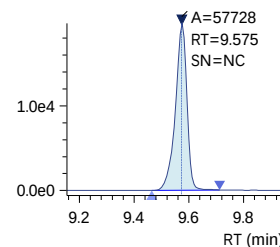
Conc. 1.2302



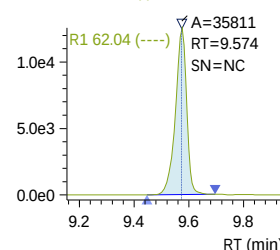
Q 570.00>525.10 (-) 6.07e4

PFNS

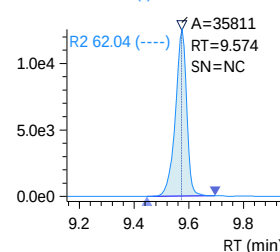
Conc. 1.2446
R#1 62.04 (65.22)
R#2 62.04 (65.31)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-) 1.26e4

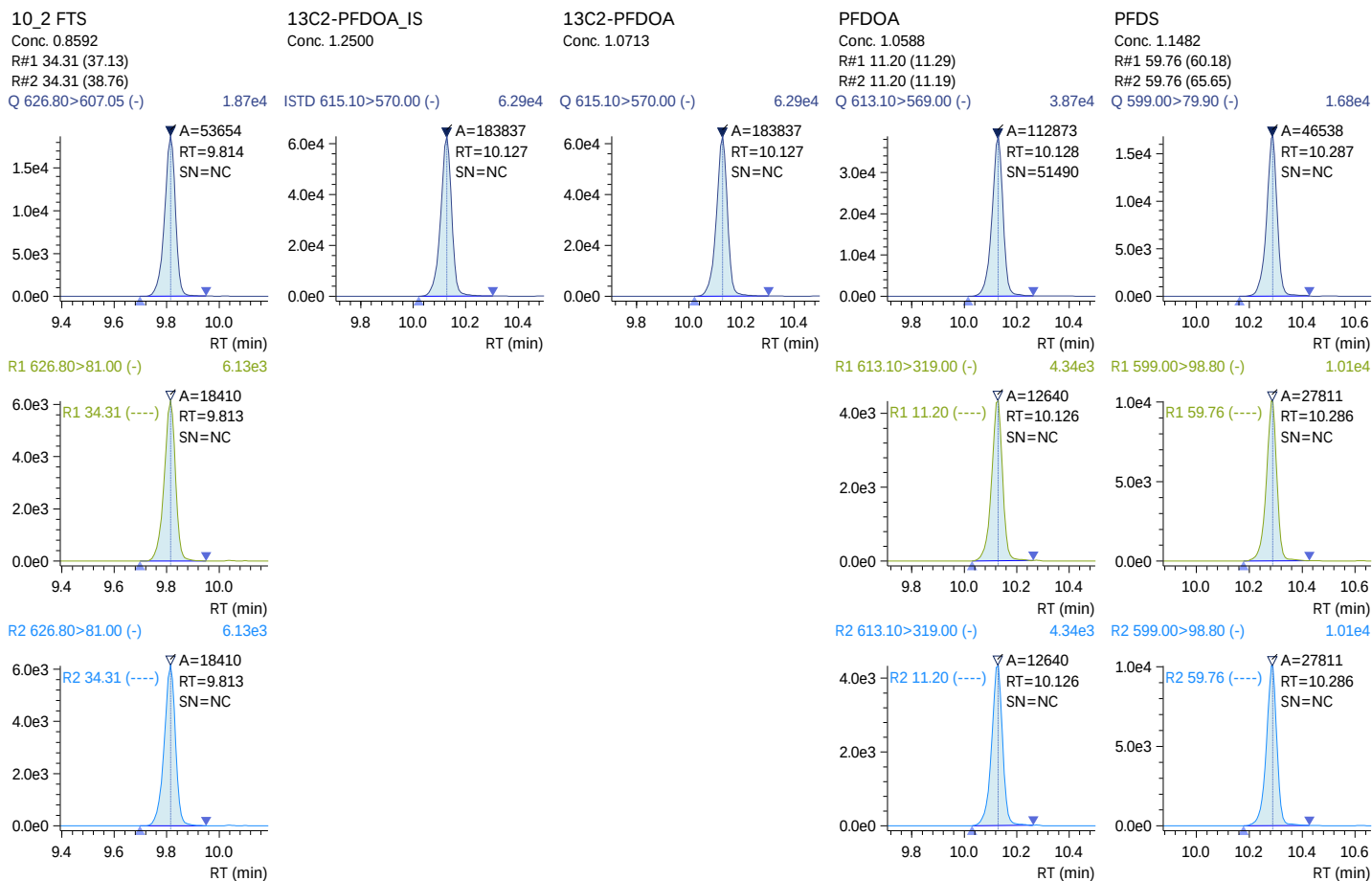


R2 548.80>98.80 (-) 1.26e4





240122_032 (continued)

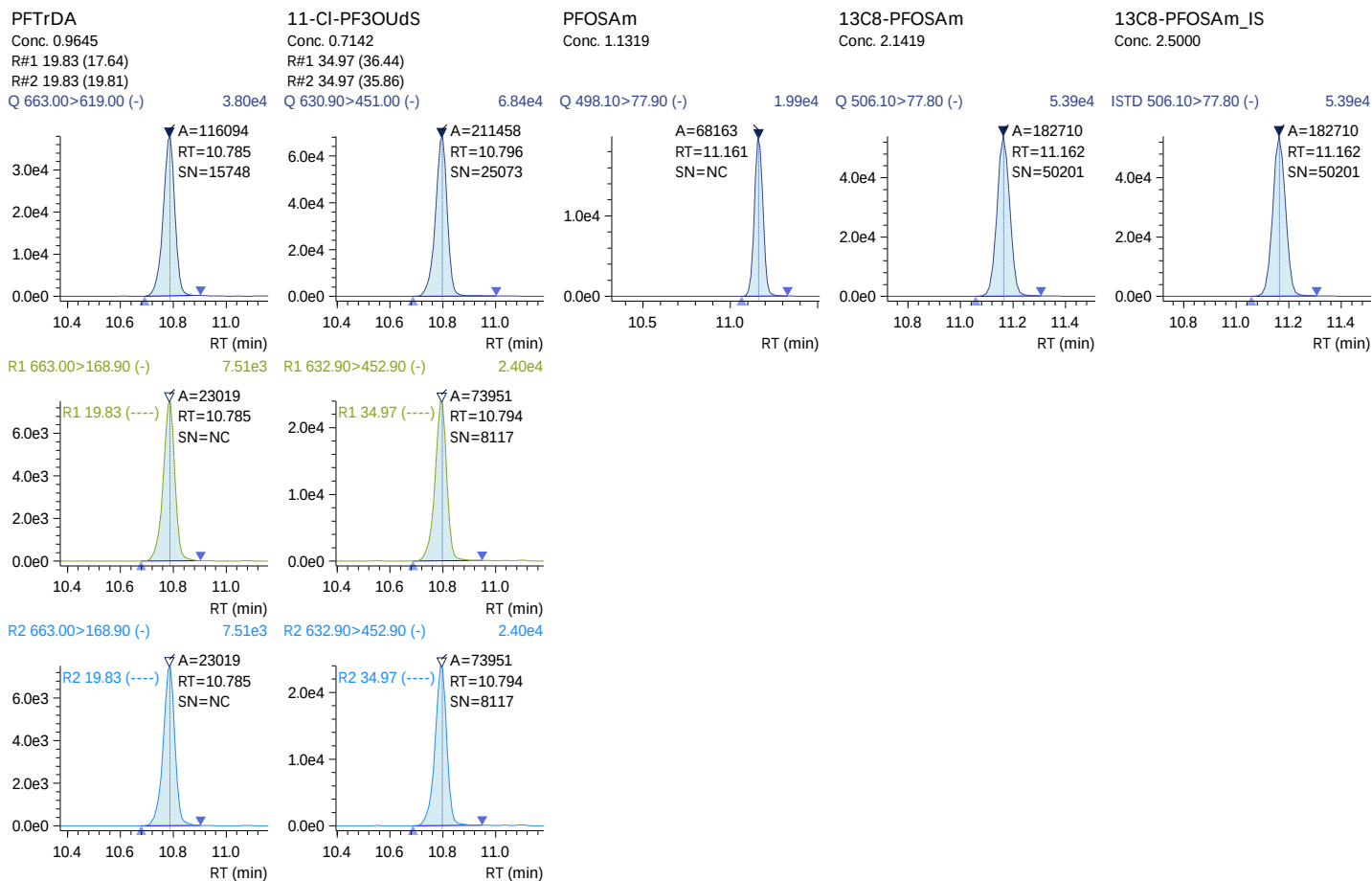


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.

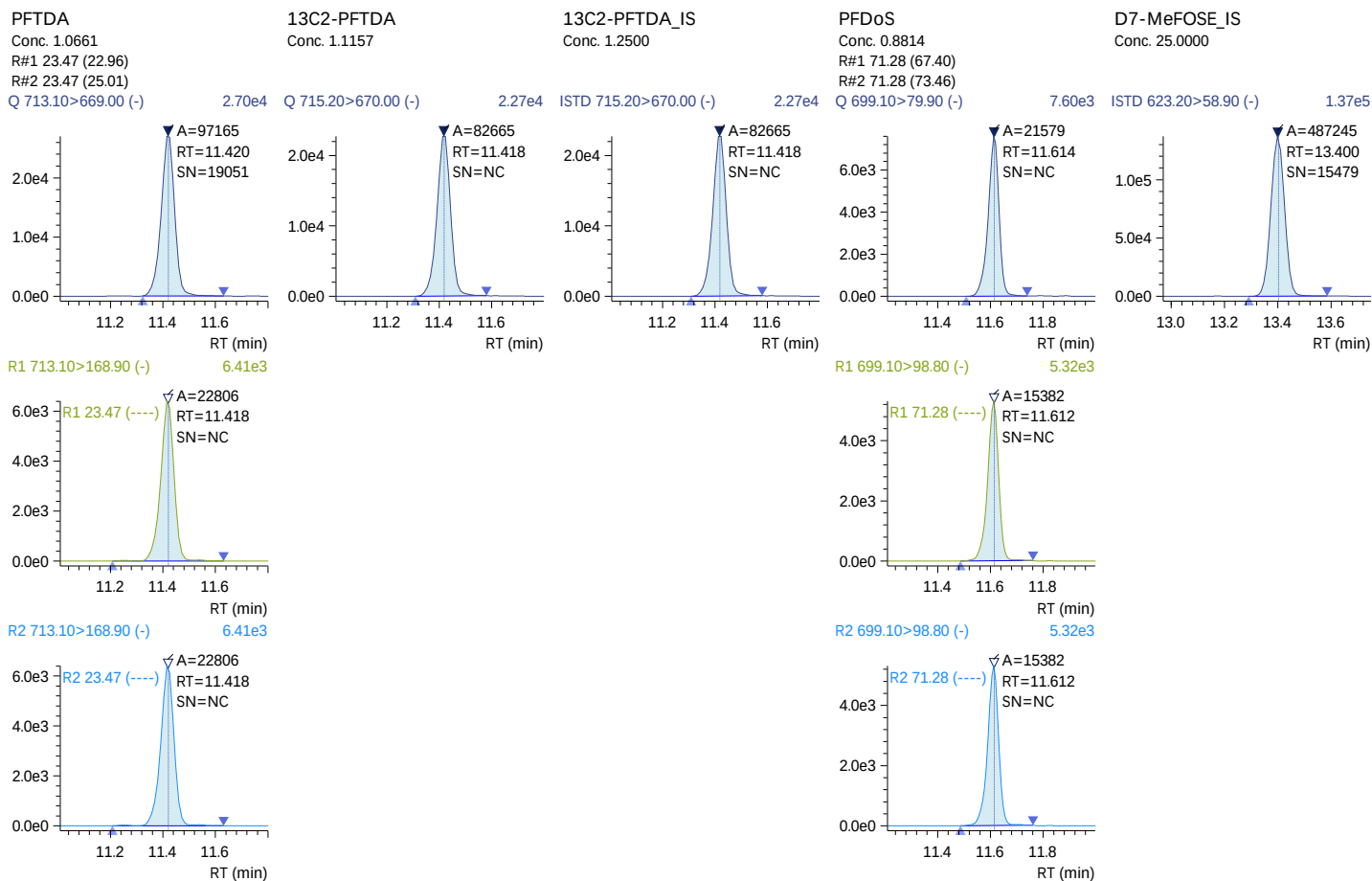


240122_032 (continued)





240122_032 (continued)





240122_032 (continued)

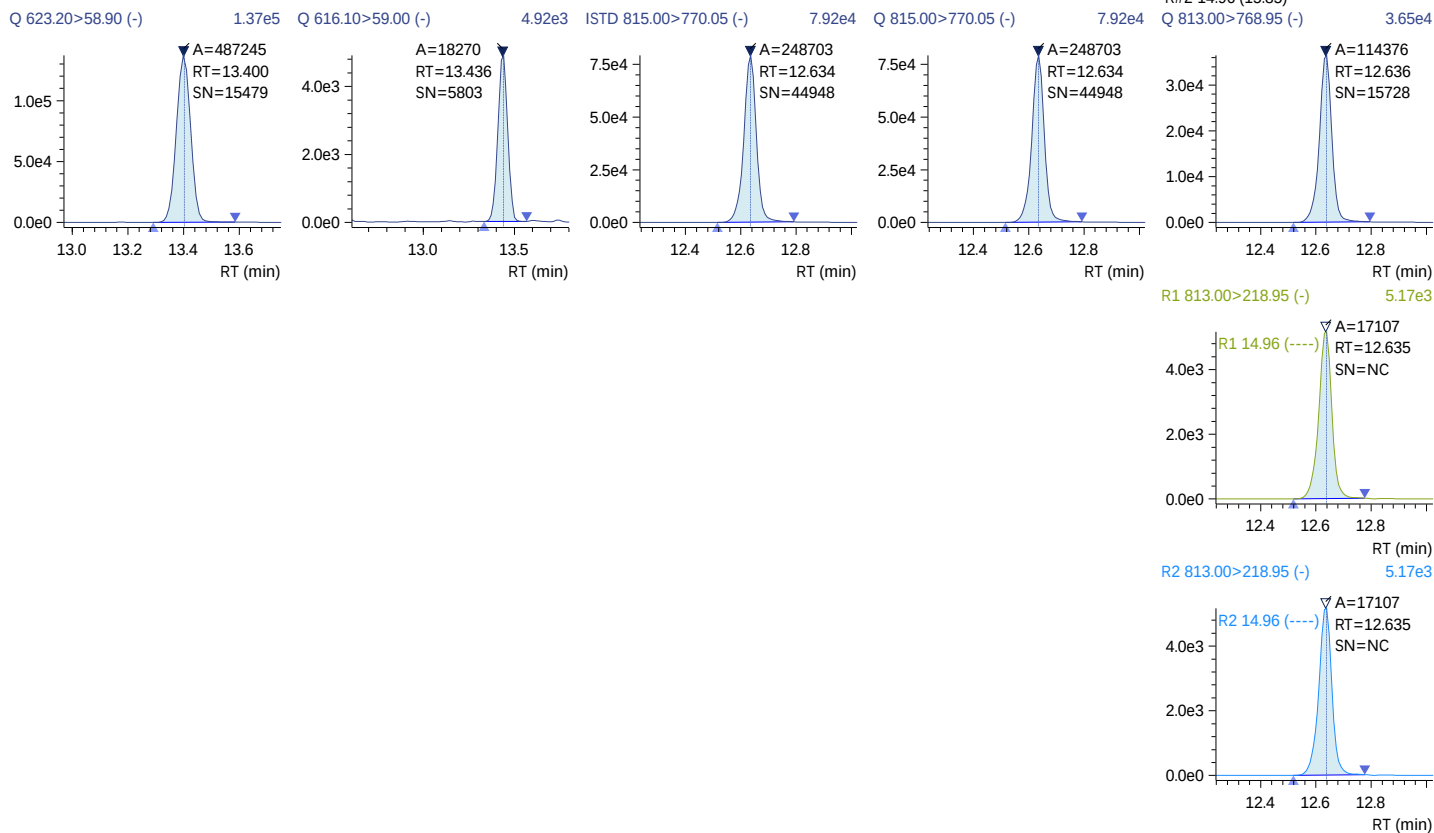
D7-MeFOSE
Conc. 23.1679

MeFOSE
Conc. 1.0210

13C2-PFHXA_IS
Conc. 2.5000

13C2-PFHXA
Conc. 1.7202

PFHXA
Conc. 1.0938
R#1 14.96 (13.90)
R#2 14.96 (15.85)





240122_032 (continued)

D3-MeFOSA
Conc. 1.8718

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. 0.9409
R#1 130.95 (140.79)
R#2 130.95 (150.13)

D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 24.1726

Q 515.00>219.00 (-)

9.20e3

ISTD 515.00>219.00 (-)

9.20e3

Q 511.90>219.00 (-)

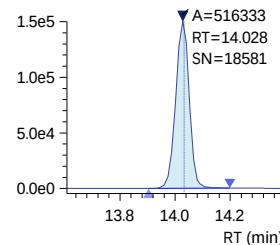
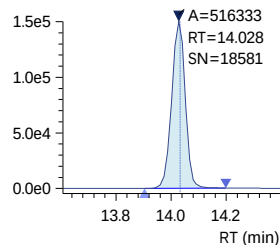
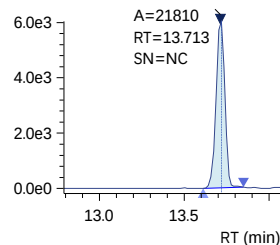
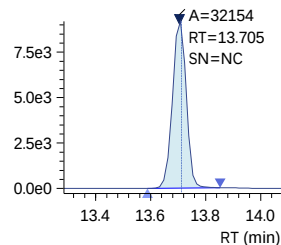
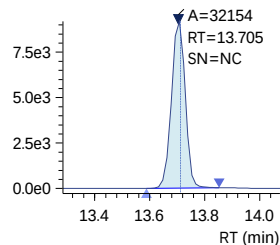
6.04e3

ISTD 639.20>58.90 (-)

1.50e5

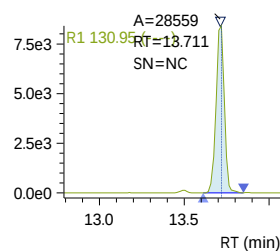
Q 639.20>58.90 (-)

1.50e5



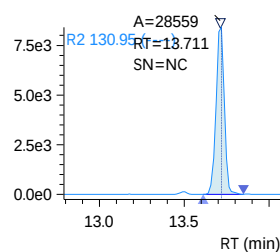
R1 511.90>169.00 (-)

8.41e3



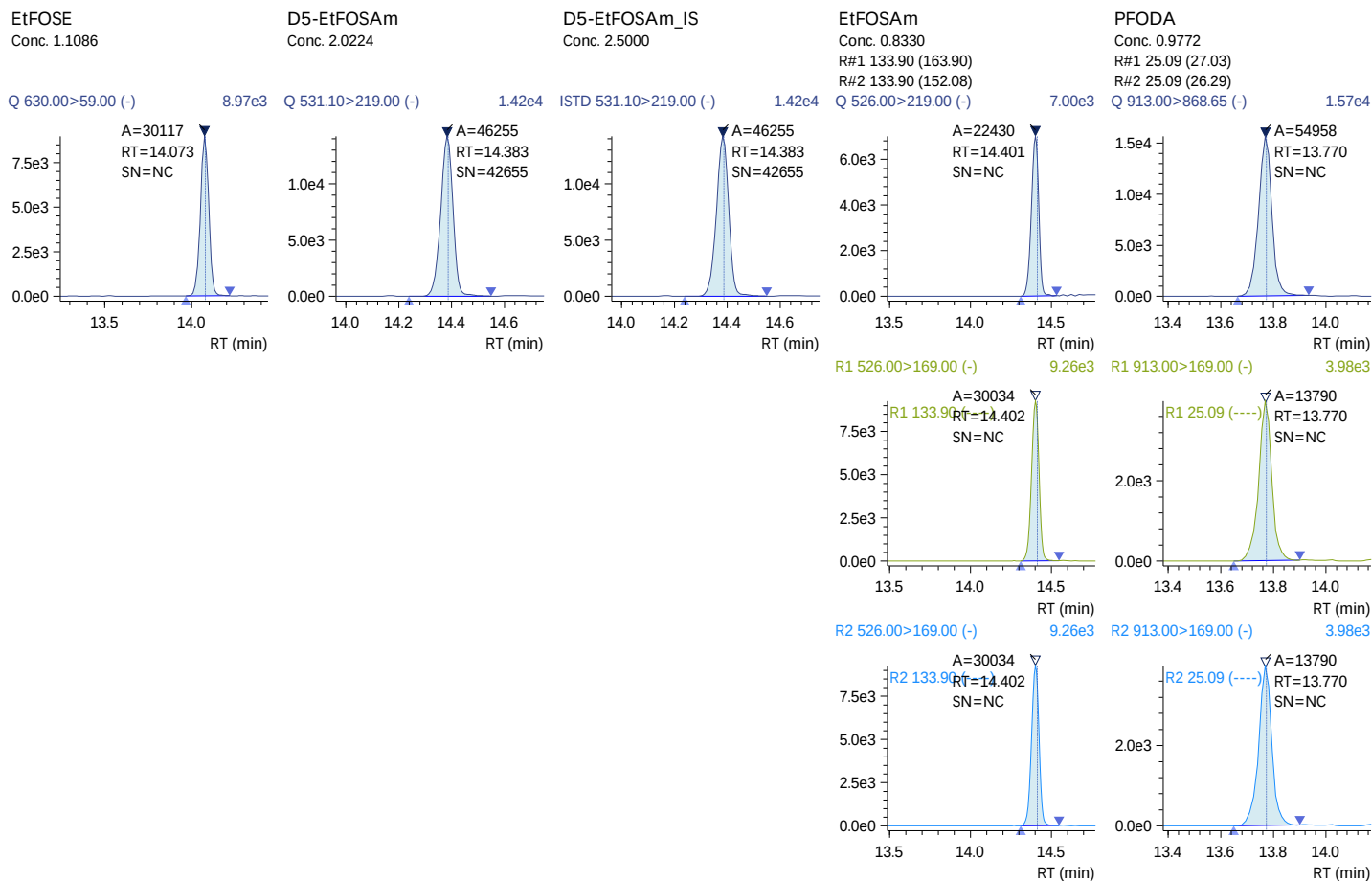
R2 511.90>169.00 (-)

8.41e3





240122_032 (continued)



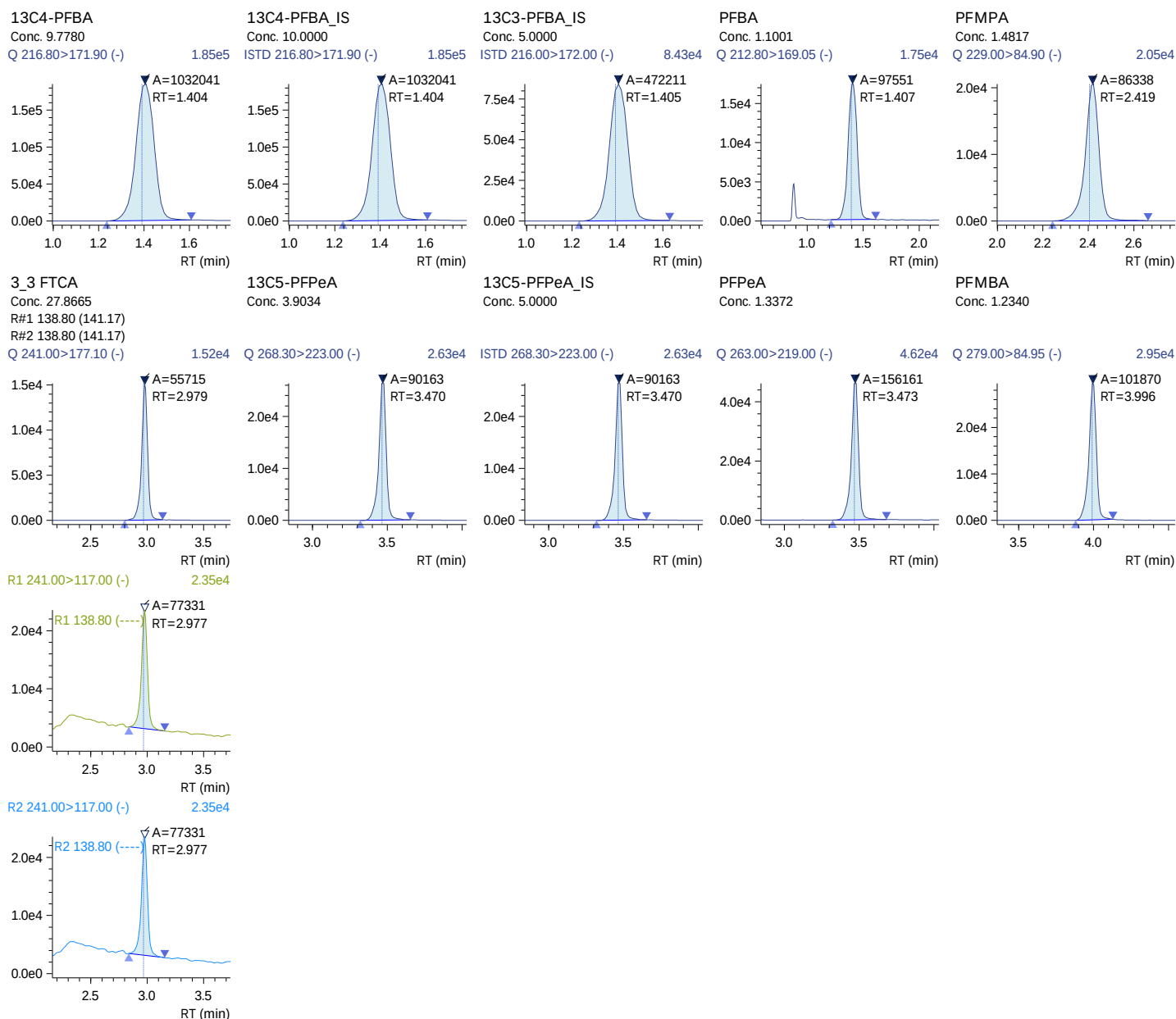
J:\LCMS08\Data\240122_1633_B1\240122_1633_B1.dampl

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_032

Sample ID: KQ2400483-02
Date Acquired: 1/22/2024 9:46:25 PM
Acquired by: System Administrator
Data File: 240122_032
Vial: 12 | Inj. Volume: 10.0000uL | Tray: 2





240122_032 (continued)

13C2-4_2 FTS
Conc. 7.4097

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. 1.0202
R#1 33.34 (29.06)
R#2 33.34 (29.06)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 1.0134
R#1 45.78 (46.72)
R#2 45.78 (46.72)

Q 329.10>80.90 (-)

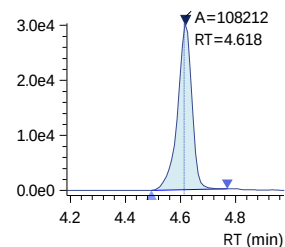
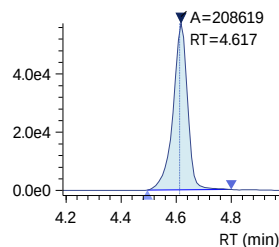
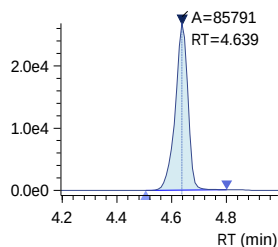
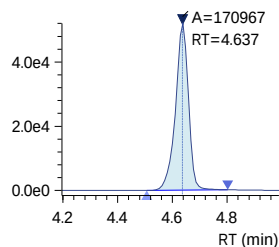
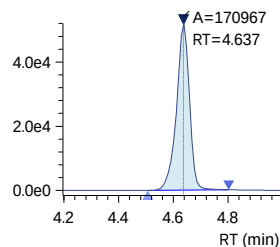
5.20e4 ISTD 329.10>80.90 (-)

5.20e4 Q 327.10>307.00 (-)

2.68e4 ISTD 302.10>79.90 (-)

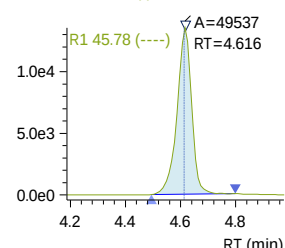
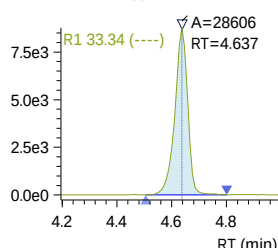
5.74e4 Q 298.70>79.90 (-)

3.04e4



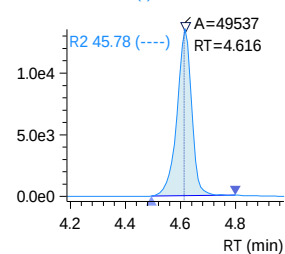
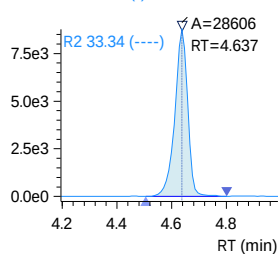
R1 327.10>80.90 (-) 8.77e3

R1 298.70>98.80 (-) 1.36e4



R2 327.10>80.90 (-) 8.77e3

R2 298.70>98.80 (-) 1.36e4





240122_032 (continued)

13C3-PFBS
Conc. 2.1925

NFDHA
Conc. 1.2668
R#1 38.14 (40.25)
R#2 38.14 (40.25)

13C5-PFHxA
Conc. 2.1222

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

Q 302.10>79.90 (-)

5.74e4

Q 295.00>201.00 (-)

3.69e4

Q 318.00>273.00 (-)

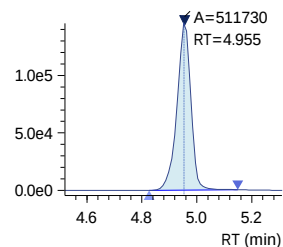
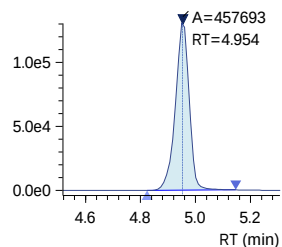
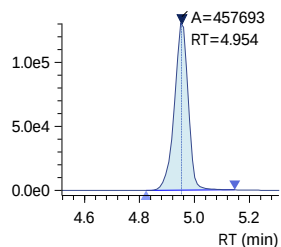
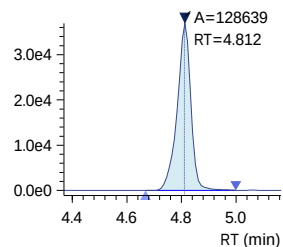
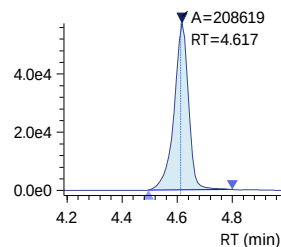
1.30e5

ISTD 318.00>273.00 (-)

1.30e5

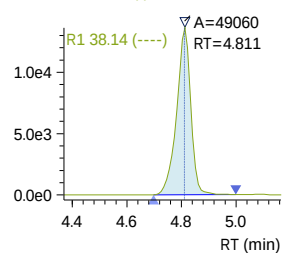
ISTD 315.10>270.00 (-)

1.45e5



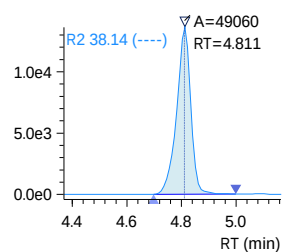
R1 295.00>84.90 (-)

1.36e4



R2 295.00>84.90 (-)

1.36e4

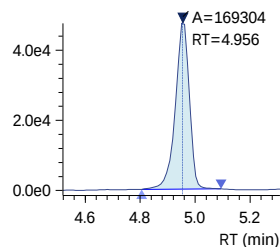




240122_032 (continued)

PFHxA
Conc. 1.1030

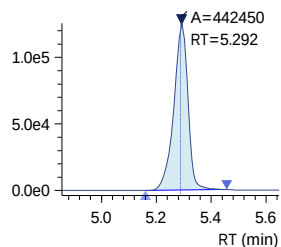
Q 313.00>269.00 (-)



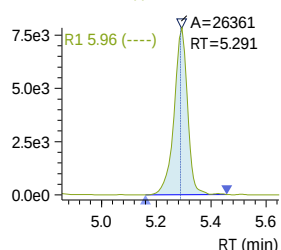
PFEESA
Conc. 0.8631

R#1 5.96 (6.11)
R#2 5.96 (6.11)

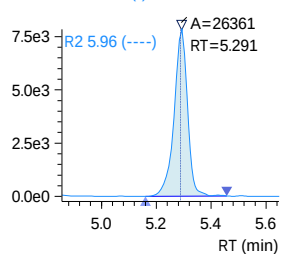
Q 314.80>135.00 (-)



R1 314.80>82.90 (-)

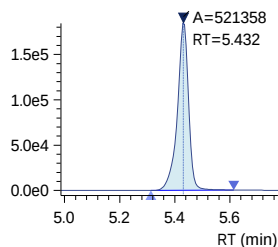


R2 314.80>82.90 (-)



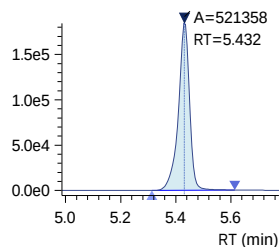
13C3-HFPO-DA
Conc. 10.4076

Q 286.90>168.90 (-)



13C3-HFPO-DA_IS
Conc. 10.0000

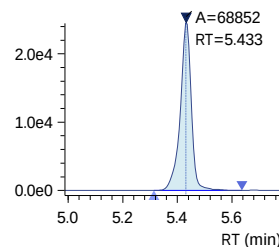
ISTD 286.90>168.90 (-)



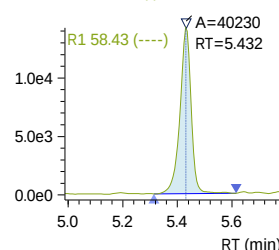
HFPO-DA
Conc. 1.1958

R#1 58.43 (65.61)
R#2 58.43 (65.61)

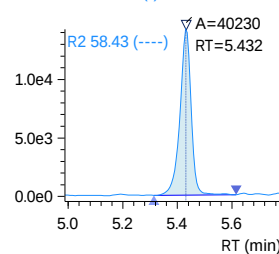
Q 284.90>168.90 (-)



R1 284.90>184.90 (-)



R2 284.90>184.90 (-)





240122_032 (continued)

5_3 FTCA

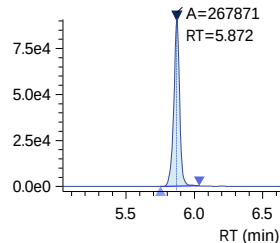
Conc. 22.6267

R#1 156.44 (158.86)

R#2 156.44 (158.86)

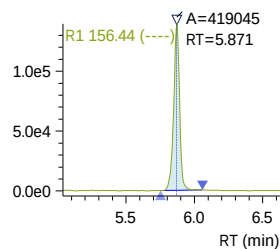
Q 341.00>237.05 (-)

9.08e4



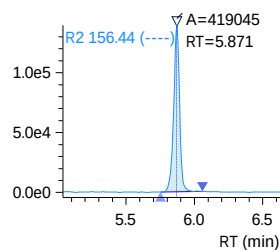
R1 341.00>217.00 (-)

1.40e5



R2 341.00>217.00 (-)

1.40e5



PFPeS

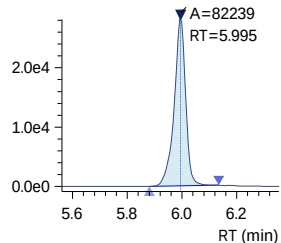
Conc. 0.9950

R#1 54.43 (55.80)

R#2 54.43 (55.80)

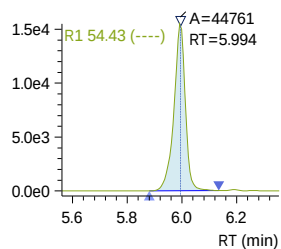
Q 349.10>79.90 (-)

2.82e4



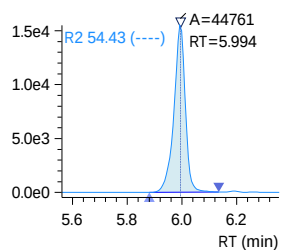
R1 349.10>98.80 (-)

1.55e4



R2 349.10>98.80 (-)

1.55e4

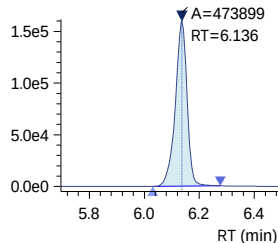


13C4-PFHpa

Conc. 2.4273

Q 367.10>322.00 (-)

1.62e5

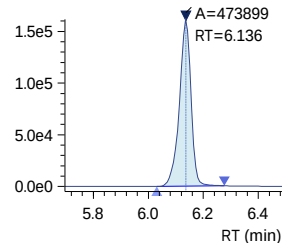


13C4-PFHpa_IS

Conc. 2.5000

ISTD 367.10>322.00 (-)

1.62e5



PFHpA

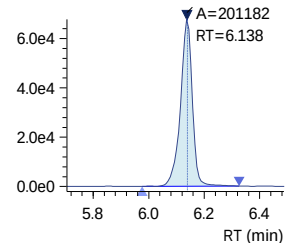
Conc. 0.9889

R#1 24.66 (21.50)

R#2 24.66 (21.50)

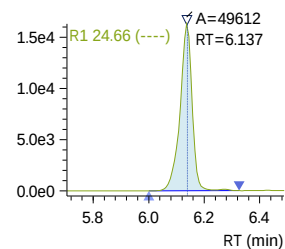
Q 363.10>319.00 (-)

6.78e4



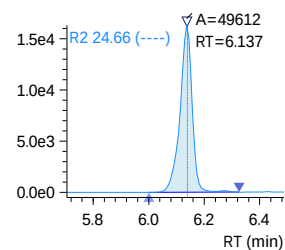
R1 363.10>169.00 (-)

1.63e4



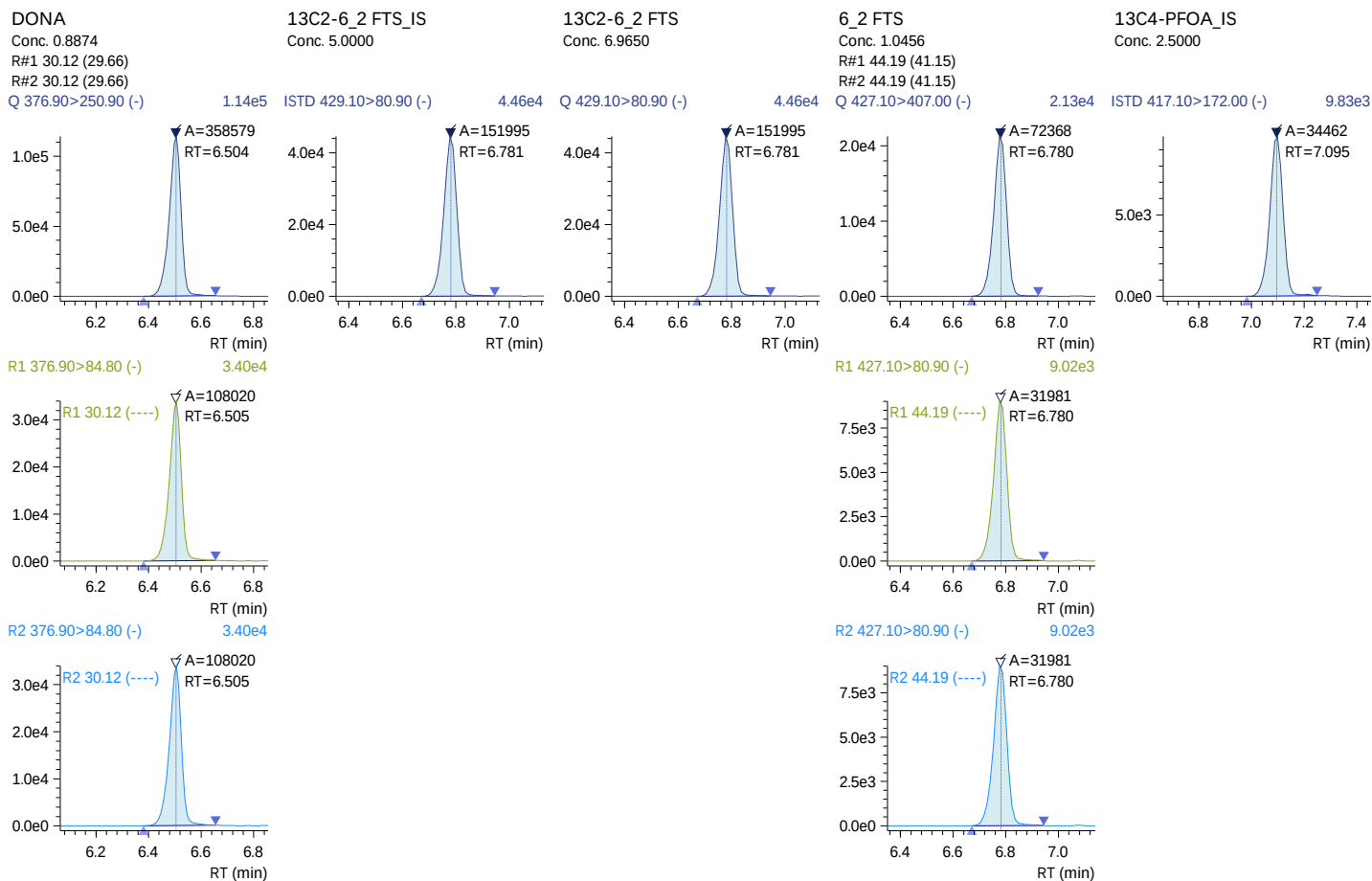
R2 363.10>169.00 (-)

1.63e4





240122_032 (continued)





240122_032 (continued)

13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.2356

PFOA
Conc. 1.2315
R#1 31.04 (31.89)
R#2 31.04 (31.89)

13C3-PFHxS
Conc. 2.1871

13C3-PFHxS_IS
Conc. 2.5000

ISTD 421.10>376.00 (-)

1.24e5

Q 421.10>376.00 (-)

1.24e5

Q 413.00>369.00 (-)

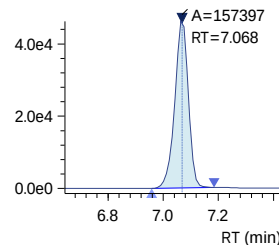
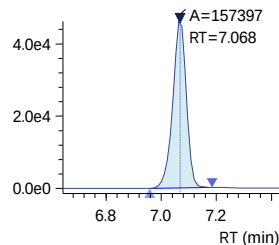
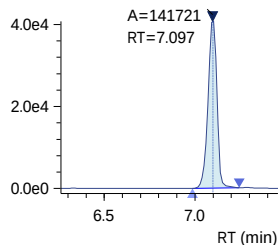
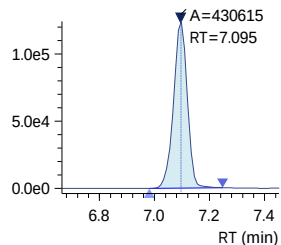
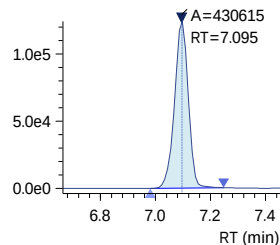
4.08e4

Q 402.10>79.90 (-)

4.62e4

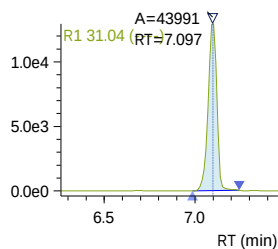
ISTD 402.10>79.90 (-)

4.62e4



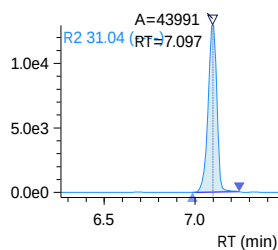
R1 413.00>169.00 (-)

1.29e4



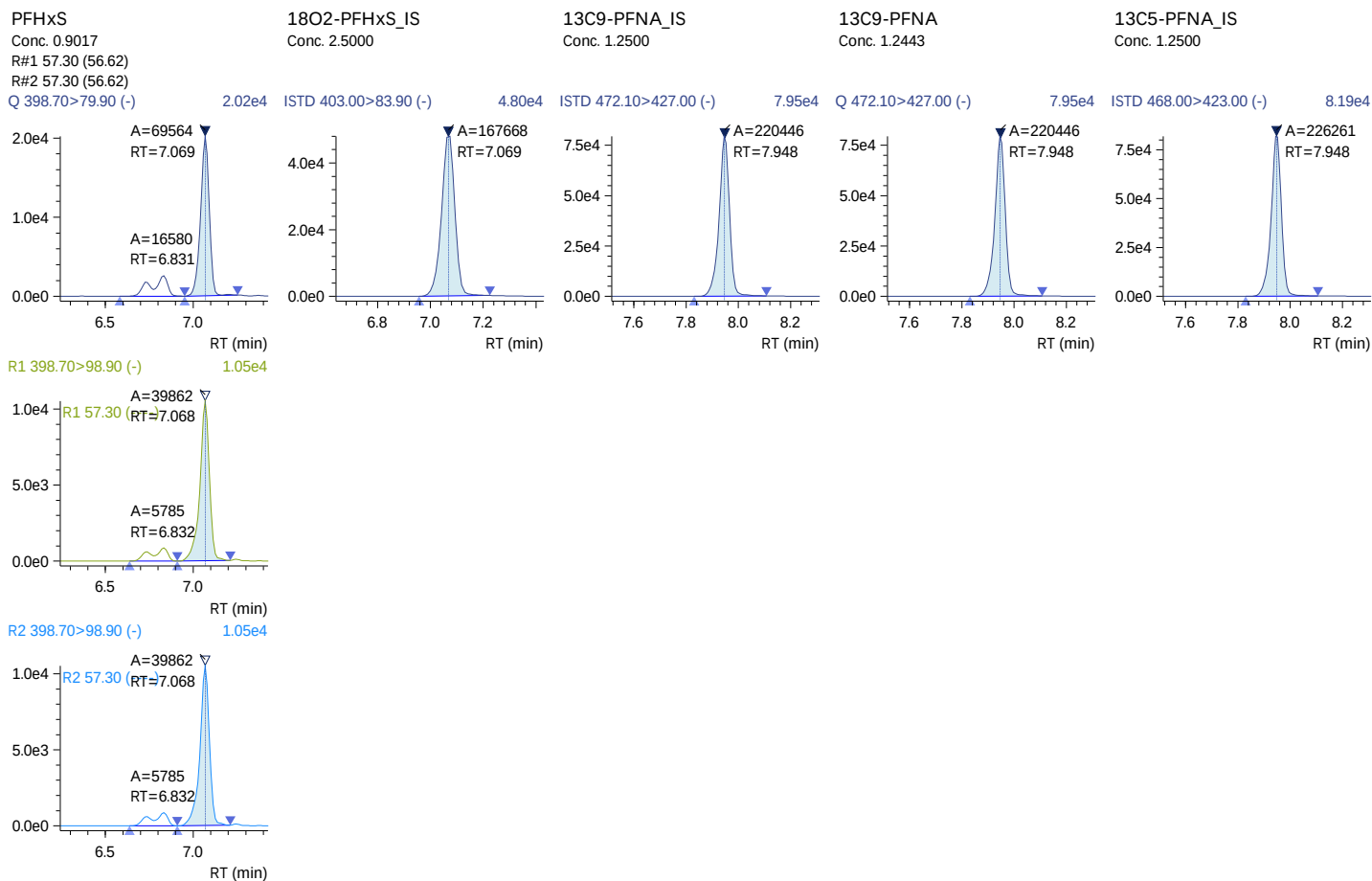
R2 413.00>169.00 (-)

1.29e4



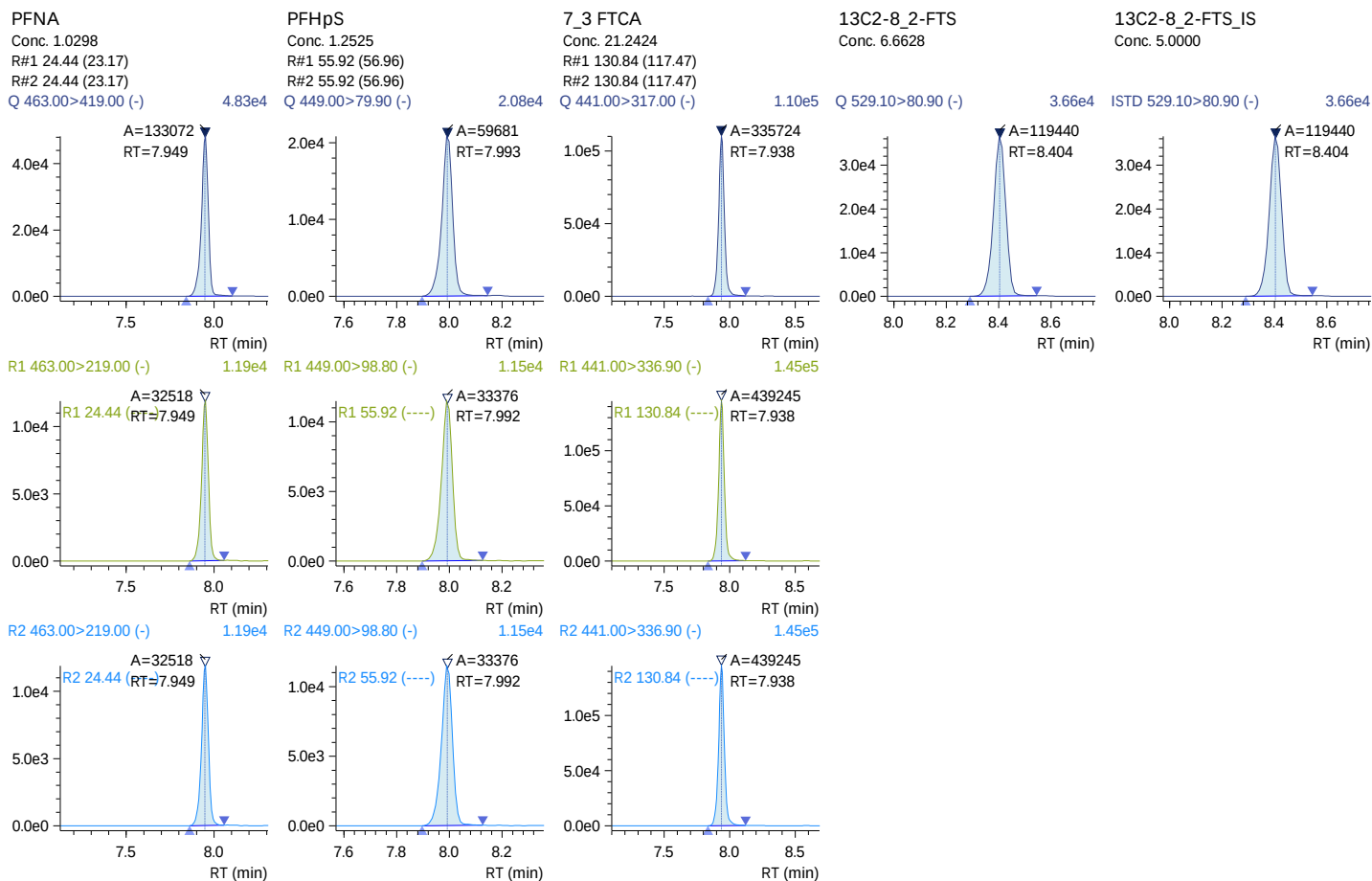


240122_032 (continued)



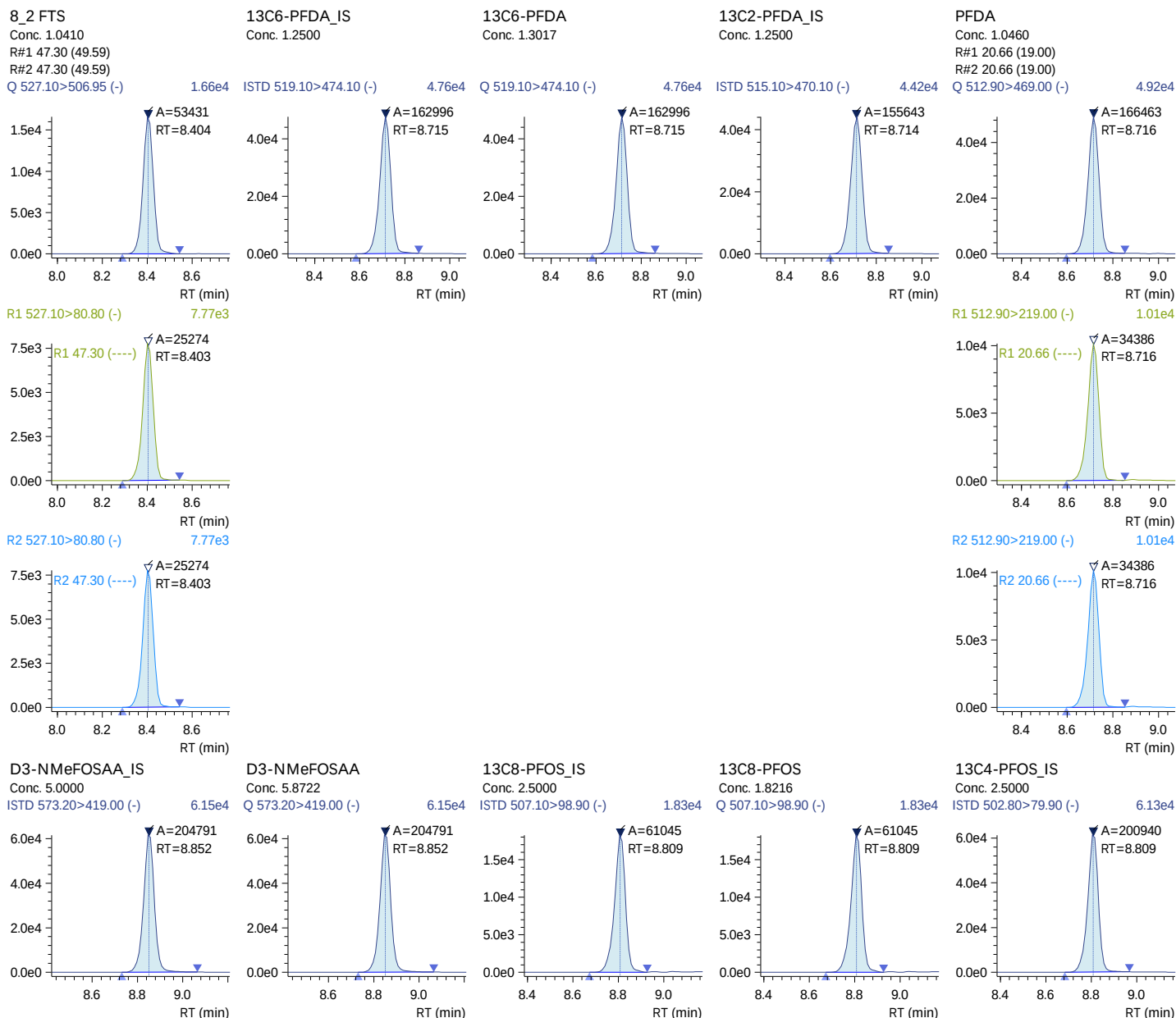


240122_032 (continued)



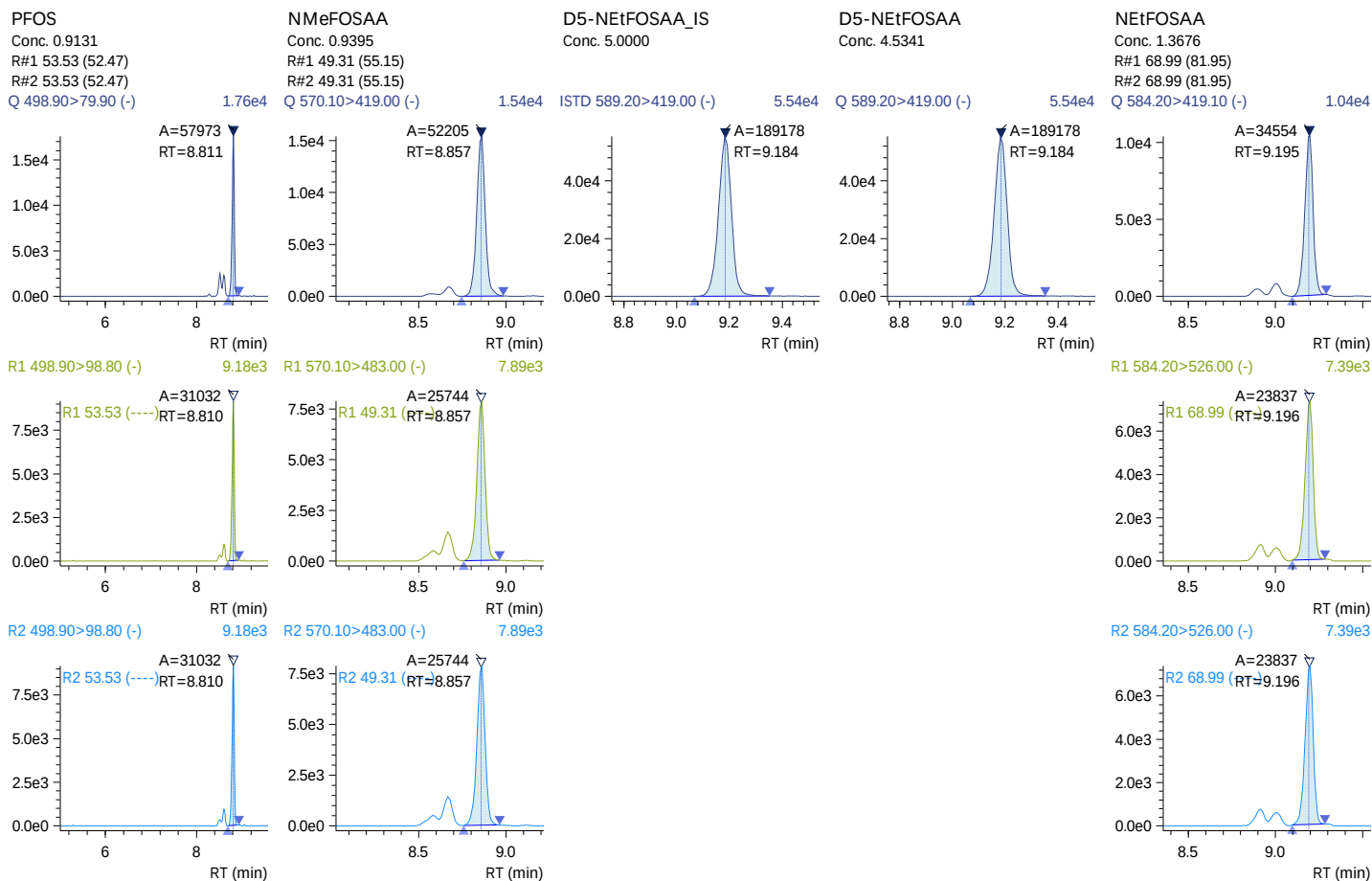


240122_032 (continued)





240122_032 (continued)

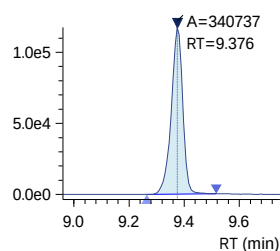




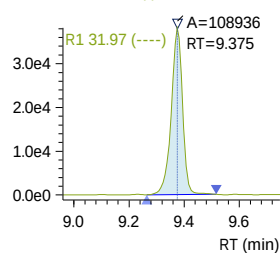
240122_032 (continued)

9-Cl-PF3ONS

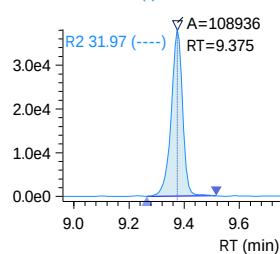
Conc. 0.7927
R#1 31.97 (32.76)
R#2 31.97 (32.76)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-)

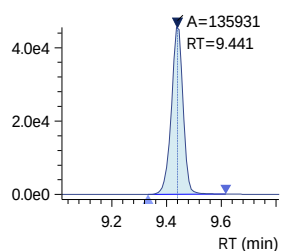


R2 532.80>353.00 (-)

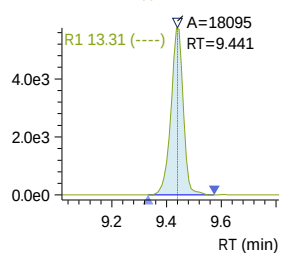


PFUnDA

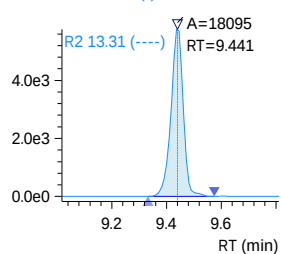
Conc. 0.9920
R#1 13.31 (13.12)
R#2 13.31 (13.12)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-)

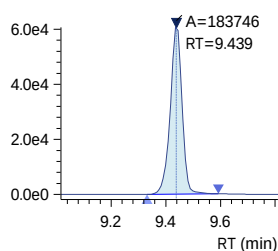


R2 563.10>269.10 (-)



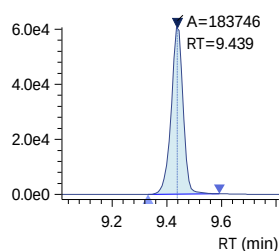
13C7-PFUnDA_IS

Conc. 1.2500
ISTD 570.00>525.10 (-)



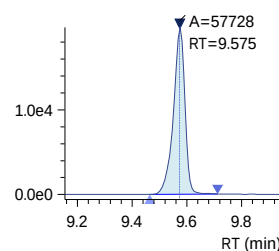
13C7-PFUnDA

Conc. 1.2302
Q 570.00>525.10 (-)

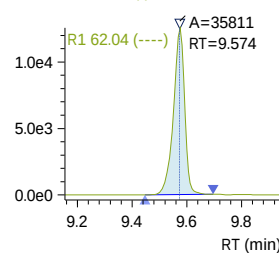


PFNS

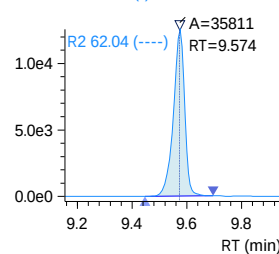
Conc. 1.2446
R#1 62.04 (65.22)
R#2 62.04 (65.22)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-)

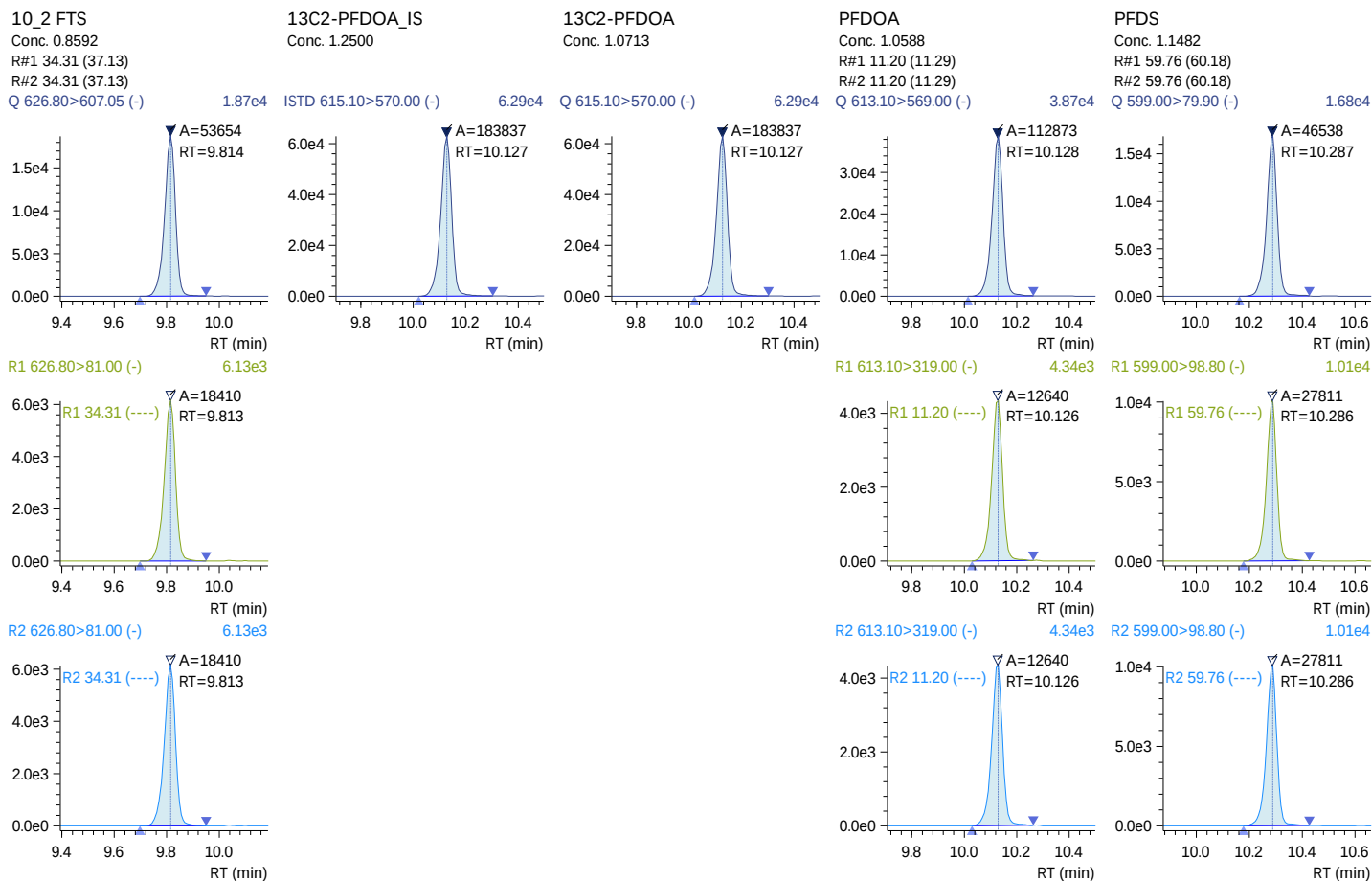


R2 548.80>98.80 (-)





240122_032 (continued)

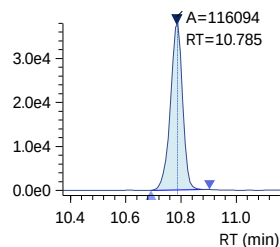




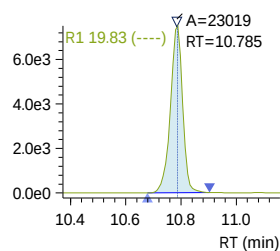
240122_032 (continued)

PFTTrDA

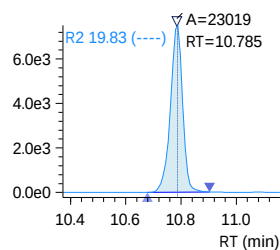
Conc. 0.9645
R#1 19.83 (17.64)
R#2 19.83 (17.64)
Q 663.00>619.00 (-)



R1 663.00>168.90 (-) 7.51e3

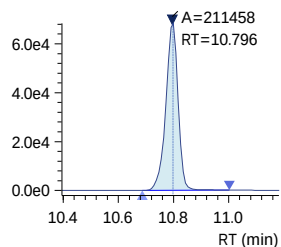


R2 663.00>168.90 (-) 7.51e3

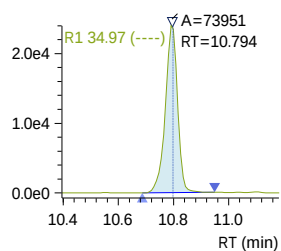


11-Cl-PF3OUdS

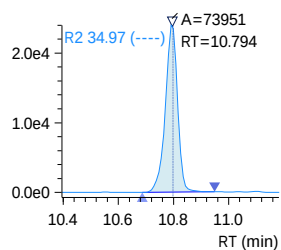
Conc. 0.7142
R#1 34.97 (36.44)
R#2 34.97 (36.44)
Q 630.90>451.00 (-)



R1 632.90>452.90 (-) 2.40e4

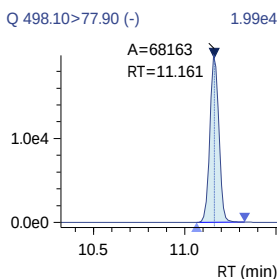


R2 632.90>452.90 (-) 2.40e4



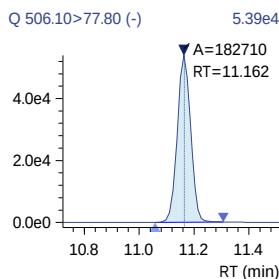
PFOSAm

Conc. 1.1319



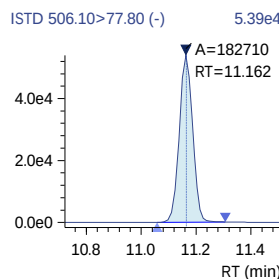
13C8-PFOSAm

Conc. 2.1419



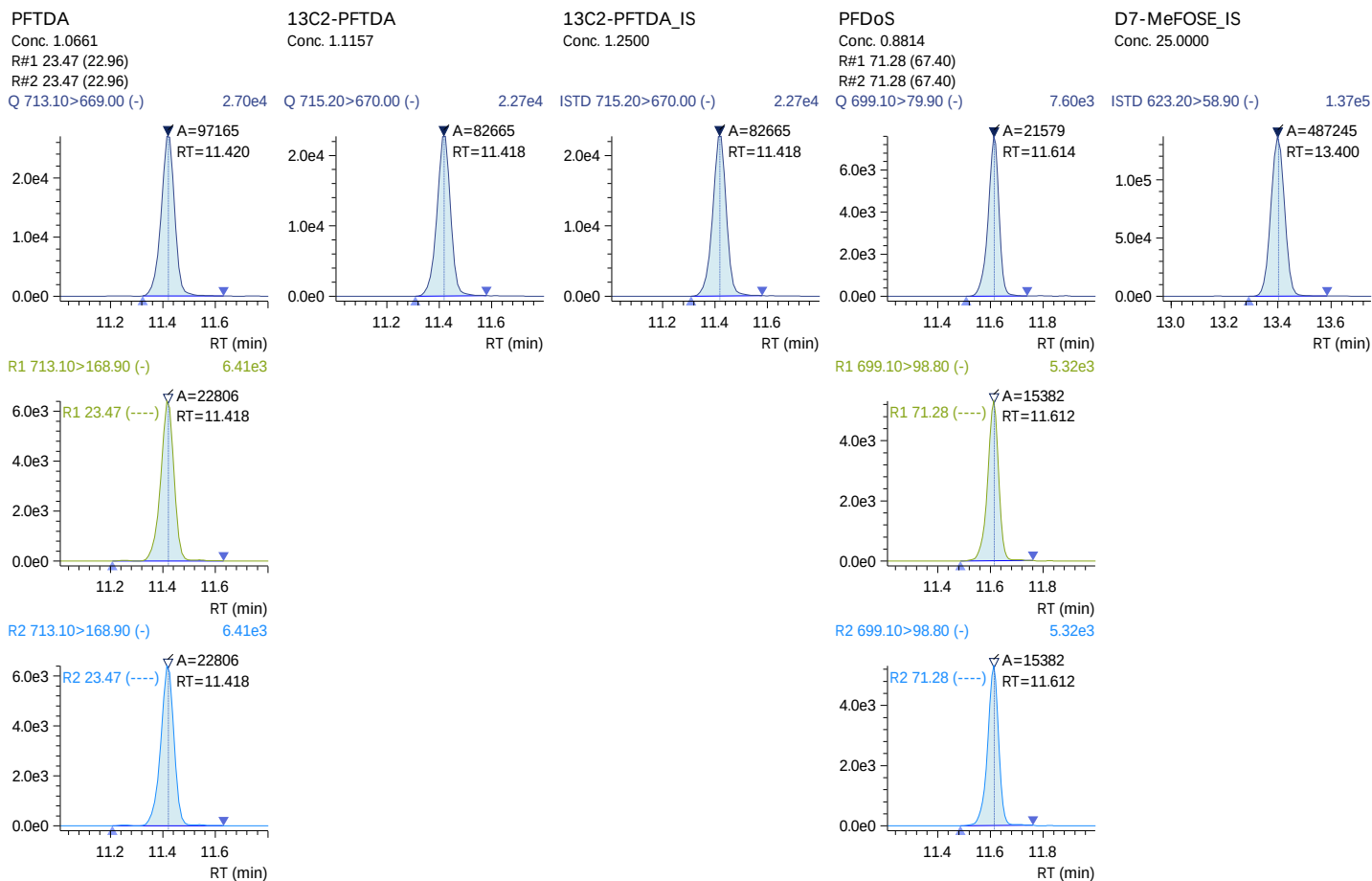
13C8-PFOSAm_IS

Conc. 2.5000





240122_032 (continued)





240122_032 (continued)

D7-MeFOSE
Conc. 23.1679

MeFOSE
Conc. 1.0210

¹³C2-PFHDA_IS
Conc. 2.5000

¹³C2-PFHDA
Conc. 1.7202

PFHXDA
Conc. 1.0938
R#1 14.96 (13.90)
R#2 14.96 (13.90)

Q 623.20>58.90 (-)

1.37e5

Q 616.10>59.00 (-)

4.92e3

ISTD 815.00>770.05 (-)

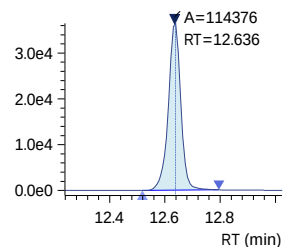
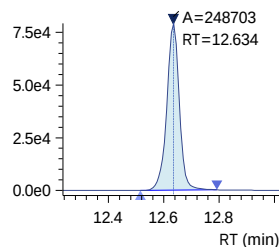
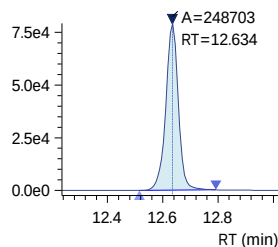
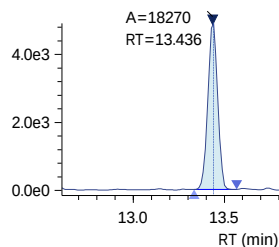
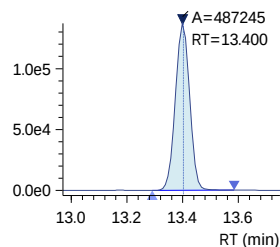
7.92e4

Q 815.00>770.05 (-)

7.92e4

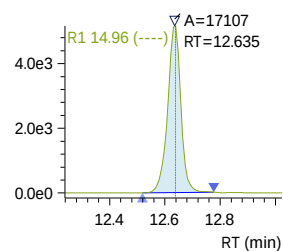
Q 813.00>768.95 (-)

3.65e4



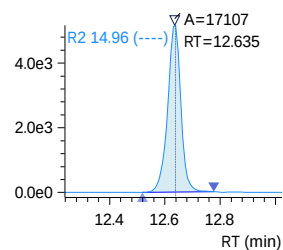
R1 813.00>218.95 (-)

5.17e3



R2 813.00>218.95 (-)

5.17e3





240122_032 (continued)

D3-MeFOSA
Conc. 1.8718

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. 0.9409
R#1 130.95 (140.79)
R#2 130.95 (140.79)

D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 24.1726

Q 515.00>219.00 (-)

9.20e3

ISTD 515.00>219.00 (-)

9.20e3

Q 511.90>219.00 (-)

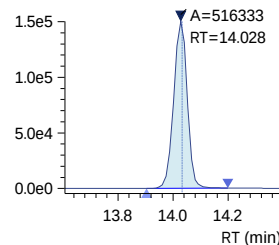
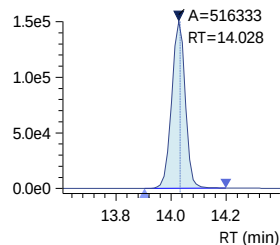
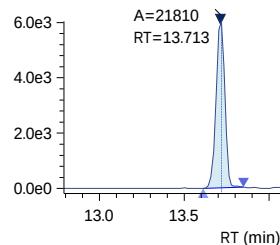
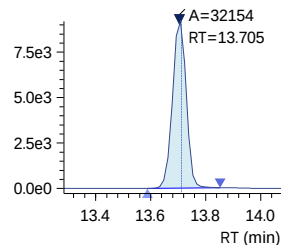
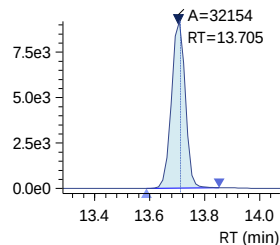
6.04e3

ISTD 639.20>58.90 (-)

1.50e5

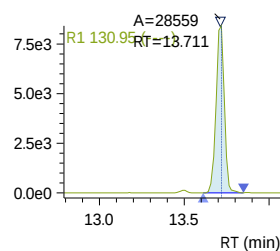
Q 639.20>58.90 (-)

1.50e5



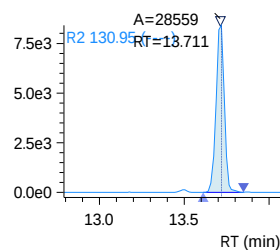
R1 511.90>169.00 (-)

8.41e3



R2 511.90>169.00 (-)

8.41e3





240122_032 (continued)

EtFOSE
 Conc. 1.1086

D5-EtFOSAm
 Conc. 2.0224

D5-EtFOSAm_IS
 Conc. 2.5000

EtFOSAm
 Conc. 0.8330

PFODA
 Conc. 0.9772

Q 630.00>59.00 (-)

8.97e3

Q 531.10>219.00 (-)

1.42e4

ISTD 531.10>219.00 (-)

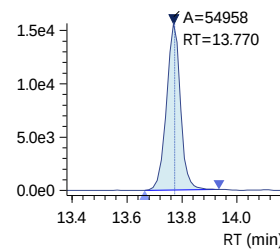
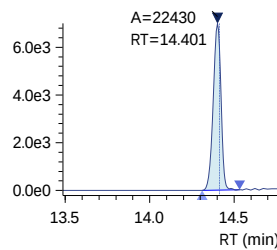
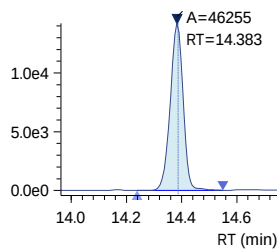
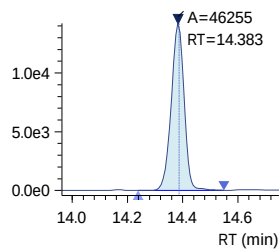
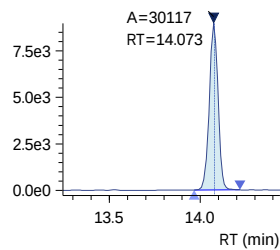
1.42e4

Q 526.00>219.00 (-)

7.00e3

Q 913.00>868.65 (-)

1.57e4

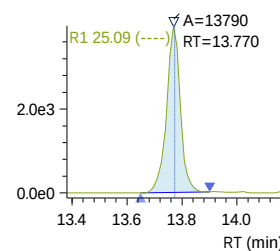
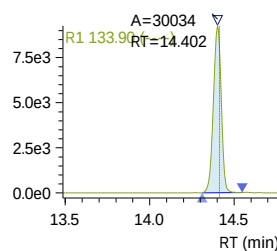


R1 526.00>169.00 (-)

9.26e3

R1 913.00>169.00 (-)

3.98e3

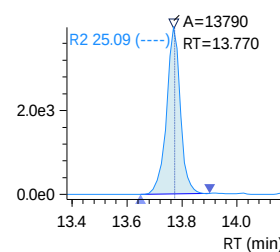
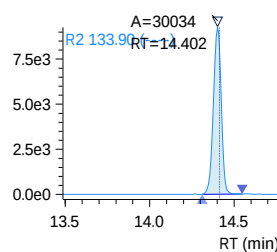


R2 526.00>169.00 (-)

9.26e3

R2 913.00>169.00 (-)

3.98e3



Validation Report

1st *PS* 01/25/24
2nd *MS* 01/25/24

Data File: J:\LCMS08\Data\240122_1633_B1\240122_006
Lab ID: KQ2401073-02
RunType: CCB
Matrix: Soil

Date Acquired: 1/22/24 11:41
Batch ID: 830573
Analysis Method: 1633/PFAS_DOD5.4

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery (Closing)		X
Internal Standards	X	
Surrogates		X
Above Highest ICAL Level	X	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action	
Continuing Calibration Recovery (Closing)	D7-MeFOSE	132	70	130	native in control	
	D9-EtFOSE	137	70	130		
	D3-MeFOSAA	138	70	130		
	13C2-4:2 FTS	168	70	130		
	13C2-6:2 FTS	165	70	130		
	13C2-8:2 FTS	164	70	130		
Surrogates	13C2-6:2 FTS	151	20	150	high bias, native <MRL	

Primary Review: _____

Secondary Review: _____

Validation Report

1st *PS* 01/25/24
2nd *MS* 01/25/24

Data File: J:\LCMS08\Data\240122_1633_B1\240122_006
Lab ID: KQ2401073-10
RunType: CCB
Matrix: Water

Date Acquired: 1/22/24 11:41
Batch ID: 830573
Analysis Method: 1633/PFAS_DOD5.4

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery (Closing)		X
Internal Standards	X	
Surrogates	X	
Above Highest ICAL Level	X	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action	
Continuing Calibration Recovery (Closing)	D3-MeFOSAA	132	70	130	native in control	
	13C2-4:2 FTS	151	70	130		
	13C2-6:2 FTS	158	70	130		
	13C2-8:2 FTS	150	70	130		

Primary Review: _____

Secondary Review: _____

Quantitation Report

1st *PS* 01/25/24
2nd *MS* 01/25/24

Data File:	J:\LCMS08\Data\240122_1633_B1\240122_006	Instrument:	K-LCMS-08
Acqu Date:	1/22/24 11:41	Vial:	2
Run Type:	CCB	Dilution:	1
Lab ID:	KQ2401073-02	Raw Units:	ng/mL

Bottle ID:		Tier:	IV	Matrix:	Soil
Prod Code:	PFAS_DOD5.4	Collect Date:	12/6/23	Receive Date:	12/13/23

Analysis Lot:	830573	Prep Lot:		Report Group:	KQ2401073
Analysis	1633	Prep Method:			
		Prep Date:			

Title:	Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM	Calibration ID:	KC2400027
		Report List ID:	24615

Internal Standard Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Area Criteria
18O2-PFHxS	7.068		193210	2.5000	OK
13C4-PFOS	8.809		229543	2.5000	OK
13C3-PFBA	1.385		511248	5.0000	OK
13C2-PFHxA	4.950		529810	2.5000	OK
13C4-PFOA	7.095		40379	2.5000	OK
13C5-PFNA	7.947		271166	1.2500	OK
13C2-PFDA	8.714		190942	1.2500	OK

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
13C3-PFBS	4.611		267379	2.4386	98	20 - 150	Y
13C3-PFHxS	7.067		202911	2.4467	98	20 - 150	Y
13C8-PFOS	8.809		97866	2.5565	102	20 - 150	Y
13C4-PFBA	1.386		1146219	10.0305	100	20 - 150	Y
13C5-PFPeA	3.462		113259	4.7359	95	20 - 150	Y
13C5-PFHxA	4.950		549132	2.4593	98	20 - 150	Y
13C4-PFHpA	6.135		574440	2.8419	114	20 - 150	Y
13C8-PFOA	7.095		539199	2.3891	96	20 - 150	Y
13C9-PFNA	7.947		281782	1.3272	106	20 - 150	Y
13C6-PFDA	8.714		208879	1.3597	109	20 - 150	Y
13C7-PFUnDA	9.440		242280	1.3222	106	20 - 150	Y
13C2-PFDoDA	10.128		260863	1.2392	99	20 - 150	Y
13C2-PFTeDA	11.424		113164	1.2450	100	20 - 150	Y
13C8-FOSA	11.161		256366	2.6309	105	20 - 150	Y
D3-MeFOSA	13.707		46528	2.3710	95	20 - 150	Y
D5-EtFOSA	14.387		71488	2.7362	109	20 - 150	Y
D7-MeFOSE	13.401		736810	30.6687	123	20 - 150	Y
D9-EtFOSE	14.032		763369	31.2845	125	20 - 150	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 1/25/24 15:28

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			1st	PS	01/25/24
Data File:	J:\LCMS08\Data\240122_1633_B1\240122_006	Instrument:	K-LCMS08	MS	01/25/24
Acqu Date:	1/22/24 11:41	Vial:	2		
Run Type:	CCB	Dilution:	1		
Lab ID:	KQ2401073-02	Raw Units:	ng/mL		

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
D3-MeFOSAA	8.850		278805	6.9983	140	20 - 150	Y
D5-EtFOSAA	9.183		283627	5.9508	119	20 - 150	Y
13C2-4:2 FTS	4.635		190903	7.1800	144	20 - 150	Y
13C2-6:2 FTS	6.781		189781	7.5468	151 *	20 - 150	Y
13C2-8:2 FTS	8.404		155168	7.5116	150	20 - 150	Y
13C3-HFPO-DA	5.429		605759	11.6798	117	20 - 150	Y

Target Compounds

Final Conc.Units: ng/g

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Perfluorobutane sulfonic acid (PFBS)	4.606		256	0.0019	0.0019	U	Y
Perfluoropentane sulfonic acid (PFPeS)	0		0	0	0	U	Y
Perfluorohexane sulfonic acid (PFHxS)	7.056		1097	-0.0079	0	U	Y
Perfluoroheptane sulfonic acid (PFHpS)	7.983		67	0.0009	0.00090	U	Y
Perfluorooctane sulfonic acid (PFOS)	8.611		451	0.0044	0.0044	U	Y
Perfluorononane sulfonic acid (PFNS)	0		0	0	0	U	Y
Perfluorodecane sulfonic acid (PFDS)	0		0	0	0	U	Y
Perfluorododecane sulfonic acid (PFDoS)	0		0	0	0	U	Y
Perfluorobutanoic acid (PFBA)	1.407		904	0.0092	0.0092	U	Y
Perfluoropentanoic acid (PFPeA)	3.461		2033	0.0139	0.014	U	Y
Perfluorohexanoic acid (PFHxA)	4.949		1881	0.0019	0.0019	U	Y
Perfluoroheptanoic acid (PFHpA)	6.115		5388	-0.0121	0	U	Y
Perfluorooctanoic acid (PFOA)	7.092		4466	-0.0117	0	U	Y
Perfluorononanoic acid (PFNA)	7.949		3187	-0.0110	0	U	Y
Perfluorodecanoic acid (PFDA)	8.713		4178	-0.0045	0	U	Y
Perfluoroundecanoic acid (PFUnDA)	9.438		3910	-0.0074	0	U	Y
Perfluorododecanoic acid (PFDOA)	10.128		2770	-0.0140	0	U	Y
Perfluorotridecanoic acid (PFTTrDA)	10.787		3040	-0.0119	0	U	Y
Perfluorotetradecanoic acid (PFTDA)	11.423		2646	-0.0060	0	U	Y
Perfluorooctane sulfonamide (PFOSAm)	11.158		279	0.0033	0.0033	U	Y
N-Methylperfluorooctane sulfonamide (MeFOSA)	0		0	0	0	U	Y
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	0		0	0	0	U	Y
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	0		0	0	0	U	Y
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	0		0	0	0	U	Y
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	0		0	0	0	U	Y

U: Undetected at or above MDL

J: Analyte detected above MDL, but below MRL

B: Hit above MRL also found in Method Blank

E: Analyte concentration above high point of ICAL

N: Presumptive evidence of compound

D: Result from dilution

m: Manual integration performed

d: Compound manually deleted

NR: Analyte not reported from this analysis

*: Result fails acceptance criteria

#: Acceptance criteria not applicable

?: Insufficient information to determine acceptance

e: Result >= MRL, but MRL less than low point of ICAL

c: check for co-elution

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			1st	PS	01/25/24
Data File:	J:\LCMS08\Data\240122_1633_B1\240122_006	Instrument:	K-LCMS08	MS	01/25/24
Acqu Date:	1/22/24 11:41	Vial:	2		
Run Type:	CCB	Dilution:	1		
Lab ID:	KQ2401073-02	Raw Units:	ng/mL		

<i>Target Compounds</i>			Final Conc.Units: ng/g				
Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	0		0	0	0	U	Y
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	4.633		167	0.0018	0.0018	U	Y
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	6.773		681	0.0079	0.0079	U	Y
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	0		0	0	0	U	Y
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	0		0	0	0	U	Y
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	5.873		303	0.0213	0.021	U	Y
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	7.936		707	0.0373	0.037	U	Y
Perfluoro(2-ethoxyethane) sulfonic acid (PFEEESA)	0		0	0	0	U	Y
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	9.387		215	0.0004	0.00040	U	Y
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	0		0	0	0	U	Y
Perfluoro-3-methoxypropanoic acid (PFMPA)	2.388		172	0.0024	0.0024	U	Y
Perfluoro-4-methoxybutanoic acid (PFMBA)	4.006		53	0.0005	0.00050	U	Y
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	0		0	0	0	U	Y
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	4.810		948	0.0078	0.0078	U	Y
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	0		0	0	0	U	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report

1st *PS* 01/25/24
2nd *MS* 01/25/24

Data File:	J:\LCMS08\Data\240122_1633_B1\240122_006	Instrument:	K-LCMS-08
Acqu Date:	1/22/24 11:41	Vial:	19
Run Type:	CCB	Dilution:	1
Lab ID:	KQ2401073-10	Raw Units:	ng/mL

Bottle ID:		Tier:	IV	Matrix:	Water
Prod Code:	PFAS_DOD5.4	Collect Date:	12/20/23	Receive Date:	12/20/23

Analysis Lot:	830573	Prep Lot:		Report Group:	KQ2401073
Analysis	1633	Prep Method:			
		Prep Date:			

Title:	Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM	Calibration ID:	KC2400027
		Report List ID:	24615

Internal Standard Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Area Criteria
18O2-PFHxS	7.068		193210	2.5000	OK
13C4-PFOS	8.809		229543	2.5000	OK
13C3-PFBA	1.385		511248	5.0000	OK
13C2-PFHxA	4.950		529810	2.5000	OK
13C4-PFOA	7.095		40379	2.5000	OK
13C5-PFNA	7.947		271166	1.2500	OK
13C2-PFDA	8.714		190942	1.2500	OK

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
13C3-PFBS	4.611		267379	2.4386	98	40 - 135	Y
13C3-PFHxS	7.067		202911	2.4467	98	40 - 130	Y
13C8-PFOS	8.809		97866	2.5565	102	40 - 130	Y
13C4-PFBA	1.386		1146219	10.0305	100	5 - 130	Y
13C5-PFPeA	3.462		113259	4.7359	95	40 - 130	Y
13C5-PFHxA	4.950		549132	2.4593	98	40 - 130	Y
13C4-PFHpA	6.135		574440	2.8419	114	40 - 130	Y
13C8-PFOA	7.095		539199	2.3891	96	40 - 130	Y
13C9-PFNA	7.947		281782	1.3272	106	40 - 130	Y
13C6-PFDA	8.714		208879	1.3597	109	40 - 130	Y
13C7-PFUnDA	9.440		242280	1.3222	106	30 - 130	Y
13C2-PFDoDA	10.128		260863	1.2392	99	10 - 130	Y
13C2-PFTeDA	11.424		113164	1.2450	100	10 - 130	Y
13C8-FOSA	11.161		256366	2.6309	105	40 - 130	Y
D3-MeFOSA	13.707		46528	2.3710	95	10 - 130	Y
D5-EtFOSA	14.387		71488	2.7362	109	10 - 130	Y
D7-MeFOSE	13.401		736810	30.6687	123	10 - 130	Y
D9-EtFOSE	14.032		763369	31.2845	125	10 - 130	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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			1st	PS	01/25/24
Data File:	J:\LCMS08\Data\240122_1633_B1\240122_006	Instrument:	K-LCMS08	MS	01/25/24
Acqu Date:	1/22/24 11:41	Vial:	19		
Run Type:	CCB	Dilution:	1		
Lab ID:	KQ2401073-10	Raw Units:	ng/mL		

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
D3-MeFOSAA	8.850		278805	6.9983	140	40 - 170	Y
D5-EtFOSAA	9.183		283627	5.9508	119	25 - 135	Y
13C2-4:2 FTS	4.635		190903	7.1800	144	40 - 200	Y
13C2-6:2 FTS	6.781		189781	7.5468	151	40 - 200	Y
13C2-8:2 FTS	8.404		155168	7.5116	150	40 - 300	Y
13C3-HFPO-DA	5.429		605759	11.6798	117	40 - 130	Y

Target Compounds

Final Conc.Units: ng/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Perfluorobutane sulfonic acid (PFBS)	4.606		256	0.0019	0.038	U	Y
Perfluoropentane sulfonic acid (PFPeS)	0		0	0	0	U	Y
Perfluorohexane sulfonic acid (PFHxS)	7.056		1097	-0.0079	0	U	Y
Perfluoroheptane sulfonic acid (PFHpS)	7.983		67	0.0009	0.018	U	Y
Perfluorooctane sulfonic acid (PFOS)	8.611		451	0.0044	0.088	U	Y
Perfluorononane sulfonic acid (PFNS)	0		0	0	0	U	Y
Perfluorodecane sulfonic acid (PFDS)	0		0	0	0	U	Y
Perfluorododecane sulfonic acid (PFDoS)	0		0	0	0	U	Y
Perfluorobutanoic acid (PFBA)	1.407		904	0.0092	0.18	U	Y
Perfluoropentanoic acid (PFPeA)	3.461		2033	0.0139	0.28	U	Y
Perfluorohexanoic acid (PFHxA)	4.949		1881	0.0019	0.038	U	Y
Perfluoroheptanoic acid (PFHpA)	6.115		5388	-0.0121	0	U	Y
Perfluorooctanoic acid (PFOA)	7.092		4466	-0.0117	0	U	Y
Perfluorononanoic acid (PFNA)	7.949		3187	-0.0110	0	U	Y
Perfluorodecanoic acid (PFDA)	8.713		4178	-0.0045	0	U	Y
Perfluoroundecanoic acid (PFUnDA)	9.438		3910	-0.0074	0	U	Y
Perfluorododecanoic acid (PFDOA)	10.128		2770	-0.0140	0	U	Y
Perfluorotridecanoic acid (PFTTrDA)	10.787		3040	-0.0119	0	U	Y
Perfluorotetradecanoic acid (PFTDA)	11.423		2646	-0.0060	0	U	Y
Perfluorooctane sulfonamide (PFOSAm)	11.158		279	0.0033	0.066	U	Y
N-Methylperfluorooctane sulfonamide (MeFOSA)	0		0	0	0	U	Y
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	0		0	0	0	U	Y
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	0		0	0	0	U	Y
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	0		0	0	0	U	Y
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	0		0	0	0	U	Y

U: Undetected at or above MDL

J: Analyte detected above MDL, but below MRL

B: Hit above MRL also found in Method Blank

E: Analyte concentration above high point of ICAL

N: Presumptive evidence of compound

D: Result from dilution

m: Manual integration performed

d: Compound manually deleted

NR: Analyte not reported from this analysis

*: Result fails acceptance criteria

#: Acceptance criteria not applicable

?: Insufficient information to determine acceptance

e: Result >= MRL, but MRL less than low point of ICAL

c: check for co-elution

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			1st	PS	01/25/24
			2nd	MS	01/25/24
Data File:	J:\LCMS08\Data\240122_1633_B1\240122_006	Instrument:	K-LCMS08		
Acqu Date:	1/22/24 11:41	Vial:	19		
Run Type:	CCB	Dilution:	1		
Lab ID:	KQ2401073-10	Raw Units:	ng/mL		

Target Compounds			Final Conc.Units: ng/L				
Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	0		0	0	0	U	Y
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	4.633		167	0.0018	0.036	U	Y
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	6.773		681	0.0079	0.16	U	Y
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	0		0	0	0	U	Y
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	0		0	0	0	U	Y
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	5.873		303	0.0213	0.43	U	Y
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	7.936		707	0.0373	0.75	U	Y
Perfluoro(2-ethoxyethane) sulfonic acid (PFEEESA)	0		0	0	0	U	Y
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	9.387		215	0.0004	0.0080	U	Y
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	0		0	0	0	U	Y
Perfluoro-3-methoxypropanoic acid (PFMPA)	2.388		172	0.0024	0.048	U	Y
Perfluoro-4-methoxybutanoic acid (PFMBA)	4.006		53	0.0005	0.010	U	Y
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	0		0	0	0	U	Y
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	4.810		948	0.0078	0.16	U	Y
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	0		0	0	0	U	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
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E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution



240122_006

Sample ID: 1633 CCB
Date Acquired: 1/22/2024 11:41:22 AM
Acquired by: System Administrator
Data File: 240122_006
Vial: 54 | Inj. Volume: 10.0000uL | Tray: 1

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	1146219	----	----	----	----	----	----	
13C4-PFBA_IS	216.80>171.90	----	1146219	----	----	----	----	----	----	
13C3-PFBA_IS	216.00>172.00	----	511248	----	----	----	----	----	----	
PFBA	212.80>169.05	----	904	----	----	----	----	----	----	
PFMPA	229.00>84.90	----	172	----	----	----	----	----	----	
3_3 FTCA	241.00>177.10	241.00>117.00	----	0	0.00	141.17	0	0.00	135.52	
13C5-PFPeA	268.30>223.00	----	113259	----	----	----	----	----	----	
13C5-PFPeA_IS	268.30>223.00	----	113259	----	----	----	----	----	----	
PFPeA	263.00>219.00	----	2033	----	----	----	----	----	----	
PFMBA	279.00>84.95	----	53	----	----	----	----	----	----	
13C2-4_2 FTS	329.10>80.90	----	190903	----	----	----	----	----	----	
13C2-4_2 FTS_IS	329.10>80.90	----	190903	----	----	----	----	----	----	
4_2 FTS	327.10>307.00	327.10>80.90	167	48	28.62	29.06	48	28.62	35.34	
13C3-PFBS_IS	302.10>79.90	----	267379	----	----	----	----	----	----	
PFBS	298.70>79.90	298.70>98.80	256	32	12.58	46.72	32	12.58	49.78	IRr
13C3-PFBS	302.10>79.90	----	267379	----	----	----	----	----	----	
NFDHA	295.00>201.00	295.00>84.90	948	337	35.49	40.25	337	35.49	37.18	
13C5-PFHxA	318.00>273.00	----	549132	----	----	----	----	----	----	
13C5-PFHxA_IS	318.00>273.00	----	549132	----	----	----	----	----	----	
13C2-PFHxA_IS	315.10>270.00	----	529810	----	----	----	----	----	----	
PFHxA	313.00>269.00	----	1881	----	----	----	----	----	----	
PFEESA	314.80>135.00	314.80>82.90	----	0	0.00	6.11	0	0.00	5.72	
13C3-HFPO-DA	286.90>168.90	----	605759	----	----	----	----	----	----	
13C3-HFPO-DA_IS	286.90>168.90	----	605759	----	----	----	----	----	----	
HFPO-DA	284.90>168.90	284.90>184.90	----	0	0.00	65.61	0	0.00	60.94	
5_3 FTCA	341.00>237.05	341.00>217.00	303	871	287.39	158.86	871	287.39	155.83	IRr
PFPeS	349.10>79.90	349.10>98.80	----	0	0.00	55.80	0	0.00	56.73	
13C4-PFHpA	367.10>322.00	----	574440	----	----	----	----	----	----	
13C4-PFHpA_IS	367.10>322.00	----	574440	----	----	----	----	----	----	
PFHpA	363.10>319.00	363.10>169.00	5388	985	18.29	21.50	985	18.29	21.92	
DONA	376.90>250.90	376.90>84.80	----	0	0.00	29.66	0	0.00	30.77	
13C2-6_2 FTS_IS	429.10>80.90	----	189781	----	----	----	----	----	----	
13C2-6_2 FTS	429.10>80.90	----	189781	----	----	----	----	----	----	
6_2 FTS	427.10>407.00	427.10>80.90	681	123	18.09	41.15	123	18.09	40.98	IRr
13C4-PFOA_IS	417.10>172.00	----	40379	----	----	----	----	----	----	
13C8-PFOA_IS	421.10>376.00	----	539199	----	----	----	----	----	----	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240122_006 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	539199	----	----	----	----	----	----	----
PFOA	413.00>369.00	413.00>169.00	4466	750	16.79	31.89	750	16.79	32.23	
13C3-PFHxS	402.10>79.90	----	202911	----	----	----	----	----	----	----
13C3-PFHxS_IS	402.10>79.90	----	202911	----	----	----	----	----	----	----
PFHxS	398.70>79.90	398.70>98.90	1097	671	61.17	56.62	671	61.17	60.26	
18O2-PFHxS_IS	403.00>83.90	----	193210	----	----	----	----	----	----	----
13C9-PFNA_IS	472.10>427.00	----	281782	----	----	----	----	----	----	----
13C9-PFNA	472.10>427.00	----	281782	----	----	----	----	----	----	----
13C5-PFNA_IS	468.00>423.00	----	271166	----	----	----	----	----	----	----
PFNA	463.00>419.00	463.00>219.00	3187	912	28.63	23.17	912	28.63	23.63	
PFHpS	449.00>79.90	449.00>98.80	67	13	19.81	56.96	13	19.81	59.06	IRr
7_3 FTCA	441.00>317.00	441.00>336.90	707	856	121.06	117.47	856	121.06	125.53	
13C2-8_2-FTS	529.10>80.90	----	155168	----	----	----	----	----	----	----
13C2-8_2-FTS_IS	529.10>80.90	----	155168	----	----	----	----	----	----	----
8_2 FTS	527.10>506.95	527.10>80.80	----	0	0.00	49.59	0	0.00	44.81	
13C6-PFDA_IS	519.10>474.10	----	208879	----	----	----	----	----	----	----
13C6-PFDA	519.10>474.10	----	208879	----	----	----	----	----	----	----
13C2-PFDA_IS	515.10>470.10	----	190942	----	----	----	----	----	----	----
PFDA	512.90>469.00	512.90>219.00	4178	1264	30.26	19.00	1264	30.26	19.15	IRr
D3-NMeFOSAA_IS	573.20>419.00	----	278805	----	----	----	----	----	----	----
D3-NMeFOSAA	573.20>419.00	----	278805	----	----	----	----	----	----	----
13C8-PFOS_IS	507.10>98.90	----	97866	----	----	----	----	----	----	----
13C8-PFOS	507.10>98.90	----	97866	----	----	----	----	----	----	----
13C4-PFOS_IS	502.80>79.90	----	229543	----	----	----	----	----	----	----
PFOS	498.90>79.90	498.90>98.80	451	216	47.85	52.47	216	47.85	53.10	RTi
NMeFOSAA	570.10>419.00	570.10>483.00	----	0	0.00	55.15	0	0.00	60.69	
D5-NEtFOSAA_IS	589.20>419.00	----	283627	----	----	----	----	----	----	----
D5-NEtFOSAA	589.20>419.00	----	283627	----	----	----	----	----	----	----
NEtFOSAA	584.20>419.10	584.20>526.00	----	0	0.00	81.95	0	0.00	73.27	
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	215	623	290.20	32.76	623	290.20	32.59	IRr
PFUnDA	563.10>519.00	563.10>269.10	3910	208	5.32	13.12	208	5.32	14.36	IRr
13C7-PFUnDA_IS	570.00>525.10	----	242280	----	----	----	----	----	----	----
13C7-PFUnDA	570.00>525.10	----	242280	----	----	----	----	----	----	----
PFNS	548.80>79.90	548.80>98.80	----	0	0.00	65.22	0	0.00	65.31	
10_2 FTS	626.80>607.05	626.80>81.00	----	0	0.00	37.13	0	0.00	38.76	
13C2-PFDOA_IS	615.10>570.00	----	260863	----	----	----	----	----	----	----
13C2-PFDOA	615.10>570.00	----	260863	----	----	----	----	----	----	----
PFDOA	613.10>569.00	613.10>319.00	2770	190	6.87	11.29	190	6.87	11.19	
PFDS	599.00>79.90	599.00>98.80	----	0	0.00	60.18	0	0.00	65.65	
PFTrDA	663.00>619.00	663.00>168.90	3040	404	13.28	17.64	404	13.28	19.81	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240122_006 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	----	0	0.00	36.44	0	0.00	35.86	
PFOSAm	498.10>77.90	----	279	----	----	----	----	----	----	
13C8-PFOSAm	506.10>77.80	----	256366	----	----	----	----	----	----	
13C8-PFOSAm_IS	506.10>77.80	----	256366	----	----	----	----	----	----	
PFTDA	713.10>669.00	713.10>168.90	2646	537	20.29	22.96	537	20.29	25.01	
13C2-PFTDA	715.20>670.00	----	113164	----	----	----	----	----	----	
13C2-PFTDA_IS	715.20>670.00	----	113164	----	----	----	----	----	----	
PFDoS	699.10>79.90	699.10>98.80	----	0	0.00	67.40	0	0.00	73.46	
D7-MeFOSE_IS	623.20>58.90	----	736810	----	----	----	----	----	----	
D7-MeFOSE	623.20>58.90	----	736810	----	----	----	----	----	----	
MeFOSE	616.10>59.00	----	----	----	----	----	----	----	----	
13C2-PFHxDA_IS	815.00>770.05	----	442550	----	----	----	----	----	----	
13C2-PFHxDA	815.00>770.05	----	442550	----	----	----	----	----	----	
PFHxDA	813.00>768.95	813.00>218.95	3175	453	14.26	13.90	453	14.26	15.85	
D3-MeFOSA	515.00>219.00	----	46528	----	----	----	----	----	----	
D3-MeFOSA_IS	515.00>219.00	----	46528	----	----	----	----	----	----	
MeFOSA	511.90>219.00	511.90>169.00	----	0	0.00	140.79	0	0.00	150.13	
D9-EtFOSE_IS	639.20>58.90	----	763369	----	----	----	----	----	----	
D9-EtFOSE	639.20>58.90	----	763369	----	----	----	----	----	----	
EtFOSE	630.00>59.00	----	----	----	----	----	----	----	----	
D5-EtFOSAm	531.10>219.00	----	71488	----	----	----	----	----	----	
D5-EtFOSAm_IS	531.10>219.00	----	71488	----	----	----	----	----	----	
EtFOSAm	526.00>219.00	526.00>169.00	----	0	0.00	163.90	0	0.00	152.08	
PFODA	913.00>868.65	913.00>169.00	1277	534	41.77	27.03	534	41.77	26.29	IRr

Flag ID key: IRr: Ion Ratio (Relative), RTI: RT Diff (Absolute ISTD)



240122_006

Sample ID: 1633 CCB
Date Acquired: 1/22/2024 11:41:22 AM
Acquired by: System Administrator
Data File: 240122_006
Vial: 54 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.386	-0.005	0.001	1146219	511248	13C3-PFBA_IS	10.0305	ng/mL	
13C4-PFBA_IS	Auto	1.386	-0.005	----	1146219	1146219	----	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.385	-0.006	----	511248	511248	----	5.0000	ng/mL	
PFBA	M	1.407	0.012	0.021	904	1146219	13C4-PFBA_IS	0.0092	ng/mL	
PFMPA	M	2.388	-0.018	-1.074	172	113259	13C5-PFPeA_IS	0.0024	ng/mL	
3_3 FTCA	ND(W/B)	----	----	----	----	113259	13C5-PFPeA_IS	----	ng/mL	
13C5-PFPeA	Auto	3.462	-0.003	-1.488	113259	529810	13C2-PFHxA_IS	4.7359	ng/mL	
13C5-PFPeA_IS	Auto	3.462	-0.003	----	113259	113259	----	5.0000	ng/mL	
PFPeA	M	3.461	-0.006	-0.001	2033	113259	13C5-PFPeA_IS	0.0139	ng/mL	
PFMBA	M	4.006	0.015	0.544	53	113259	13C5-PFPeA_IS	0.0005	ng/mL	
13C2-4_2 FTS	Auto	4.635	-0.001	-2.433	190903	193210	18O2-PFHxS_IS	7.1800	ng/mL	
13C2-4_2 FTS_IS	Auto	4.635	-0.001	----	190903	190903	----	5.0000	ng/mL	
4_2 FTS	M	4.633	-0.004	-0.002	167	190903	13C2-4_2 FTS_IS	0.0018	ng/mL	
13C3-PFBS_IS	Auto	4.611	-0.001	----	267379	267379	----	2.5000	ng/mL	
PFBS	M	4.606	-0.007	-0.005	256	267379	13C3-PFBS_IS	0.0019	ng/mL	IRr
13C3-PFBS	Auto	4.611	-0.001	-2.457	267379	193210	18O2-PFHxS_IS	2.4386	ng/mL	
NFDHA	M	4.810	0.000	-0.140	948	549132	13C5-PFHxA_IS	0.0078	ng/mL	
13C5-PFHxA	Auto	4.950	-0.002	0.000	549132	529810	13C2-PFHxA_IS	2.4593	ng/mL	
13C5-PFHxA_IS	Auto	4.950	-0.002	----	549132	549132	----	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	4.950	-0.003	----	529810	529810	----	2.5000	ng/mL	
PFHxA	M	4.949	-0.005	-0.001	1881	549132	13C5-PFHxA_IS	0.0019	ng/mL	
PFEESA	ND(W/B)	----	----	----	----	549132	13C5-PFHxA_IS	----	ng/mL	
13C3-HFPO-DA	Auto	5.429	-0.001	0.479	605759	529810	13C2-PFHxA_IS	11.6798	ng/mL	
13C3-HFPO-DA_IS	Auto	5.429	-0.001	----	605759	605759	----	10.0000	ng/mL	
HFPO-DA	ND(W/B)	----	----	----	----	605759	13C3-HFPO-DA_IS	----	ng/mL	
5_3 FTCA	M	5.873	0.003	0.923	303	549132	13C5-PFHxA_IS	0.0213	ng/mL	IRr
PFPeS	ND(W/B)	----	----	----	----	202911	13C3-PFHxS_IS	----	ng/mL	
13C4-PFHpA	Auto	6.135	-0.002	1.185	574440	529810	13C2-PFHxA_IS	2.8419	ng/mL	
13C4-PFHpA_IS	Auto	6.135	-0.002	----	574440	574440	----	2.5000	ng/mL	
PFHpA	M	6.115	-0.024	-0.020	5388	574440	13C4-PFHpA_IS	-0.0121	ng/mL	
DONA	ND(W/B)	----	----	----	----	605759	13C3-HFPO-DA_IS	----	ng/mL	
13C2-6_2 FTS_IS	Auto	6.781	0.000	----	189781	189781	----	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.781	0.000	-0.287	189781	193210	18O2-PFHxS_IS	7.5468	ng/mL	
6_2 FTS	M	6.773	-0.008	-0.008	681	189781	13C2-6_2 FTS_IS	0.0079	ng/mL	IRr
13C4-PFOA_IS	Auto	7.095	-0.003	----	40379	40379	----	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.095	-0.001	----	539199	539199	----	2.5000	ng/mL	
13C8-PFOA	Auto	7.095	-0.001	0.001	539199	40379	13C4-PFOA_IS	2.3891	ng/mL	
PFOA	M	7.092	-0.006	-0.003	4466	539199	13C8-PFOA_IS	-0.0117	ng/mL	
13C3-PFHxS	Auto	7.067	-0.001	-0.001	202911	193210	18O2-PFHxS_IS	2.4467	ng/mL	
13C3-PFHxS_IS	Auto	7.067	-0.001	----	202911	202911	----	2.5000	ng/mL	
PFHxS	M	7.056	-0.013	-0.011	1097	202911	13C3-PFHxS_IS	-0.0079	ng/mL	
18O2-PFHxS_IS	Auto	7.068	-0.001	----	193210	193210	----	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.947	0.000	----	281782	281782	----	1.2500	ng/mL	
13C9-PFNA	Auto	7.947	0.000	0.000	281782	271166	13C5-PFNA_IS	1.3272	ng/mL	
13C5-PFNA_IS	Auto	7.947	-0.001	----	271166	271166	----	1.2500	ng/mL	
PFNA	M	7.949	0.001	0.002	3187	281782	13C9-PFNA_IS	-0.0110	ng/mL	
PFHpS	M	7.983	-0.009	-0.826	67	97866	13C8-PFOS_IS	0.0009	ng/mL	IRr
7_3 FTCA	M	7.936	0.000	2.986	707	549132	13C5-PFHxA_IS	0.0373	ng/mL	
13C2-8_2-FTS	Auto	8.404	0.001	1.336	155168	193210	18O2-PFHxS_IS	7.5116	ng/mL	
13C2-8_2-FTS_IS	Auto	8.404	0.001	----	155168	155168	----	5.0000	ng/mL	
8_2 FTS	ND(W/B)	----	----	----	----	155168	13C2-8_2-FTS_IS	----	ng/mL	
13C6-PFDA_IS	Auto	8.714	0.001	----	208879	208879	----	1.2500	ng/mL	
13C6-PFDA	Auto	8.714	0.001	0.000	208879	190942	13C2-PFDA_IS	1.3597	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_006 (continued)

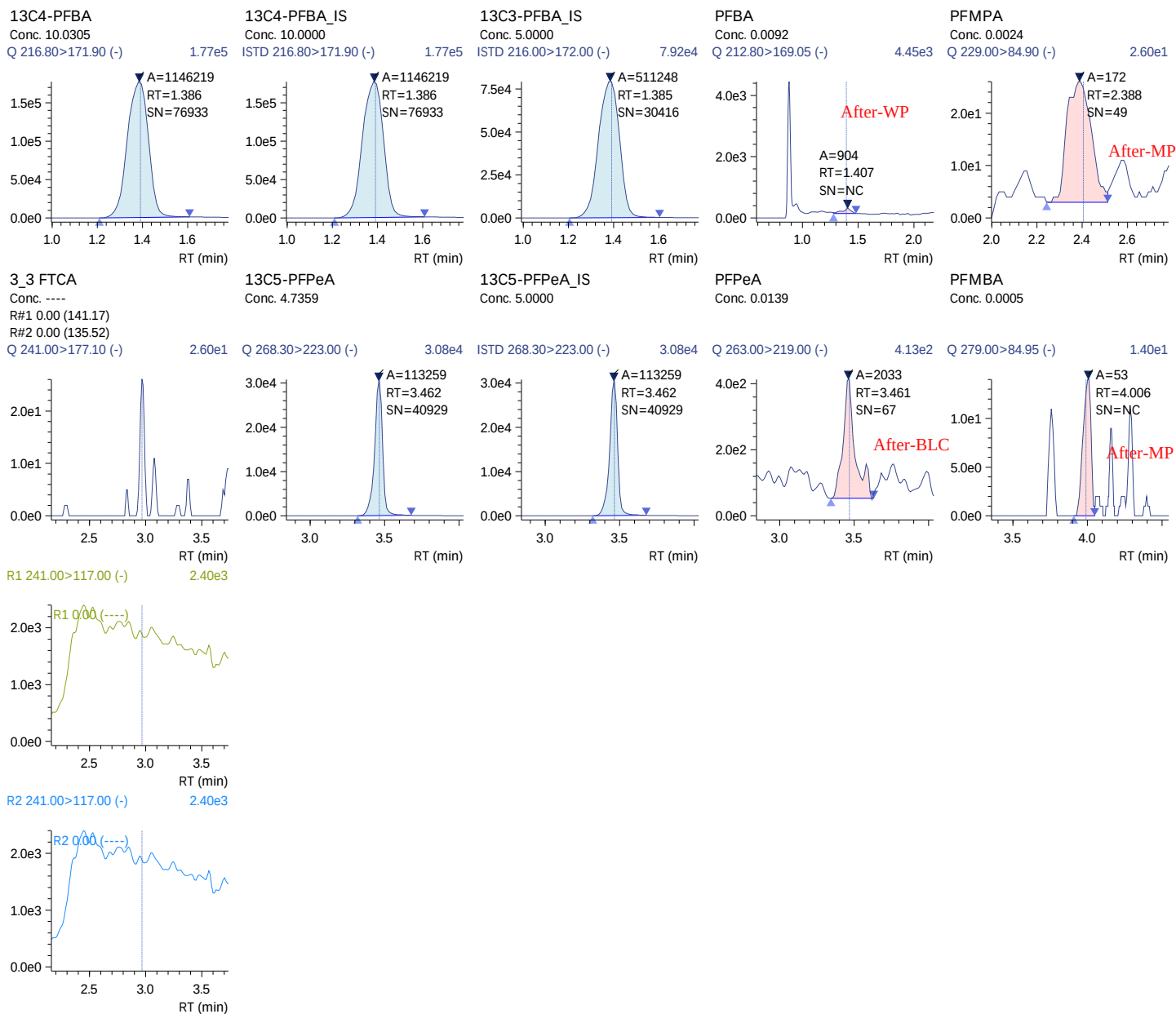
(Table continued from previous page)

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C2-PFDA_IS	Auto	8.714	0.001	----	190942	190942	----	1.2500	ng/mL	
PFDA	Auto	8.713	-0.002	-0.001	4178	208879	13C6-PFDA_IS	-0.0045	ng/mL	IRr
D3-NMeFOSAA_IS	Auto	8.850	-0.001	----	278805	278805	----	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.850	-0.001	0.041	278805	229543	13C4-PFOS_IS	6.9983	ng/mL	
13C8-PFOS_IS	Auto	8.809	0.001	----	97866	97866	----	2.5000	ng/mL	
13C8-PFOS	Auto	8.809	0.001	0.000	97866	229543	13C4-PFOS_IS	2.5565	ng/mL	
13C4-PFOS_IS	Auto	8.809	0.000	----	229543	229543	----	2.5000	ng/mL	
PFOS	M	8.611	-0.198	-0.198	451	97866	13C8-PFOS_IS	0.0044	ng/mL	RTi
NMeFOSAA	ND(W/B)	----	----	----	----	278805	D3-NMeFOSAA_IS	----	ng/mL	
D5-NetFOSAA_IS	Auto	9.183	0.000	----	283627	283627	----	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.183	0.000	0.374	283627	229543	13C4-PFOS_IS	5.9508	ng/mL	
NetFOSAA	ND(W/B)	----	----	----	----	283627	D5-NetFOSAA_IS	----	ng/mL	
9-CI-PF3ONS	M	9.387	0.011	3.957	215	605759	13C3-HFPO-DA_IS	0.0004	ng/mL	IRr
PFUnDA	M	9.438	-0.002	-0.002	3910	242280	13C7-PFUnDA_IS	-0.0074	ng/mL	IRr
13C7-PFUnDA_IS	Auto	9.440	0.002	----	242280	242280	----	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.440	0.002	0.726	242280	190942	13C2-PFDA_IS	1.3222	ng/mL	
PFNS	ND(W/B)	----	----	----	----	97866	13C8-PFOS_IS	----	ng/mL	
10_2_FTS	ND(W/B)	----	----	----	----	155168	13C2-8_2-FTS_IS	----	ng/mL	
13C2-PFDOA_IS	Auto	10.128	0.000	----	260863	260863	----	1.2500	ng/mL	
13C2-PFDOA	Auto	10.128	0.000	1.414	260863	190942	13C2-PFDA_IS	1.2392	ng/mL	
PFDOA	M	10.128	-0.001	0.000	2770	260863	13C2-PFDOA_IS	-0.0140	ng/mL	
PFDS	ND(W/B)	----	----	----	----	97866	13C8-PFOS_IS	----	ng/mL	
PFTDA	Auto	10.787	-0.001	-0.637	3040	113164	13C2-PFDA_IS	-0.0119	ng/mL	
11-CI-PF3OUdS	ND(W/B)	----	----	----	----	605759	13C3-HFPO-DA_IS	----	ng/mL	
PFOSAm	M	11.158	-0.004	-0.003	279	256366	13C8-PFOSAm_IS	0.0033	ng/mL	
13C8-PFOSAm	Auto	11.161	-0.003	2.352	256366	229543	13C4-PFOS_IS	2.6309	ng/mL	
13C8-PFOSAm_IS	Auto	11.161	-0.003	----	256366	256366	----	2.5000	ng/mL	
PFTDA	M	11.423	0.002	-0.001	2646	113164	13C2-PFTDA_IS	-0.0060	ng/mL	
13C2-PFTDA	Auto	11.424	0.005	2.710	113164	190942	13C2-PFDA_IS	1.2450	ng/mL	
13C2-PFTDA_IS	Auto	11.424	0.005	----	113164	113164	----	1.2500	ng/mL	
PFDoS	ND(W/B)	----	----	----	----	97866	13C8-PFOS_IS	----	ng/mL	
D7-MeFOSE_IS	Auto	13.401	-0.001	----	736810	736810	----	25.0000	ng/mL	
D7-MeFOSE	Auto	13.401	-0.001	4.592	736810	229543	13C4-PFOS_IS	30.6687	ng/mL	
MeFOSE	ND(W/B)	----	----	----	----	736810	D7-MeFOSE_IS	----	ng/mL	
13C2-PFHxDA_IS	Auto	12.640	0.004	----	442550	442550	----	2.5000	ng/mL	
13C2-PFHxDA	Auto	12.640	0.004	3.926	442550	190942	13C2-PFDA_IS	2.4952	ng/mL	
PFHxDA	M	12.642	0.005	0.002	3175	442550	13C2-PFHxDA_IS	-0.0104	ng/mL	
D3-MeFOSA	Auto	13.707	-0.004	4.898	46528	229543	13C4-PFOS_IS	2.3710	ng/mL	
D3-MeFOSA_IS	Auto	13.707	-0.004	----	46528	46528	----	2.5000	ng/mL	
MeFOSA	ND(W/B)	----	----	----	----	46528	D3-MeFOSA_IS	----	ng/mL	
D9-EtFOSE_IS	Auto	14.032	0.000	----	763369	763369	----	25.0000	ng/mL	
D9-EtFOSE	Auto	14.032	0.000	5.223	763369	229543	13C4-PFOS_IS	31.2845	ng/mL	
EtFOSE	ND(W/B)	----	----	----	----	763369	D9-EtFOSE_IS	----	ng/mL	
D5-EtFOSAm	Auto	14.387	0.000	5.578	71488	229543	13C4-PFOS_IS	2.7362	ng/mL	
D5-EtFOSAm_IS	Auto	14.387	0.000	----	71488	71488	----	2.5000	ng/mL	
EtFOSAm	ND(W/B)	----	----	----	----	71488	D5-EtFOSAm_IS	----	ng/mL	
PFODA	Auto	13.776	0.002	1.136	1277	442550	13C2-PFHxDA_IS	0.0128	ng/mL	IRr

Flag ID key: IRr: Ion Ratio (Relative), RTi: RT Diff (Absolute ISTD)



240122_006 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_006 (continued)

13C2-4_2 FTS
Conc. 7.1800

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. 0.0018
R#1 28.62 (29.06)
R#2 28.62 (35.34)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 0.0019
R#1 12.58 (46.72)
R#2 12.58 (49.78)

Q 329.10>80.90 (-)

5.77e4

ISTD 329.10>80.90 (-)

5.77e4

Q 327.10>307.00 (-)

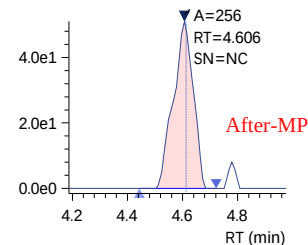
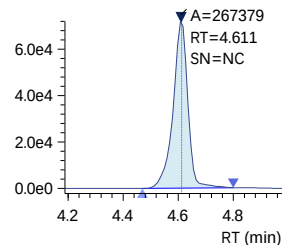
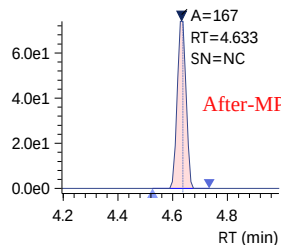
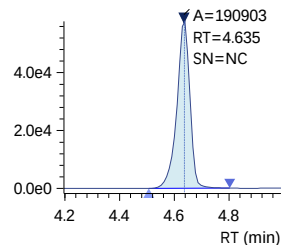
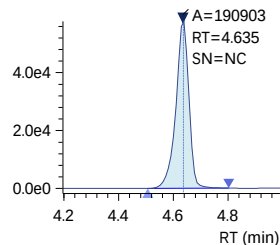
7.40e1

ISTD 302.10>79.90 (-)

7.20e4

Q 298.70>79.90 (-)

5.10e1

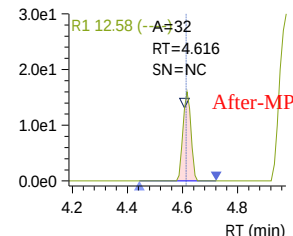
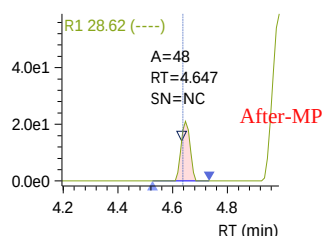


R1 327.10>80.90 (-)

5.90e1

R1 298.70>98.80 (-)

3.00e1

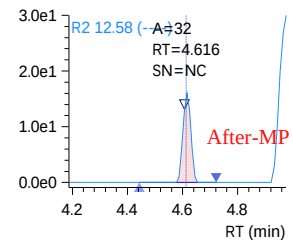
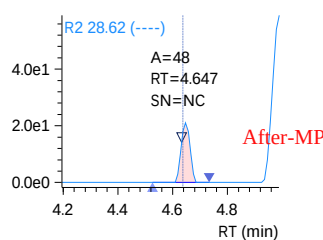


R2 327.10>80.90 (-)

5.90e1

R2 298.70>98.80 (-)

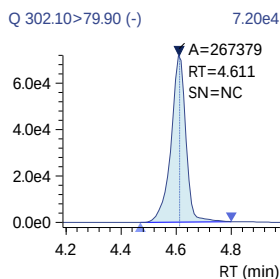
3.00e1





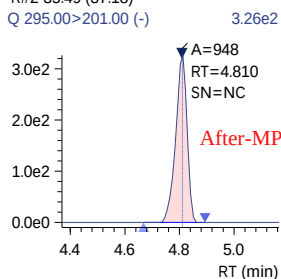
240122_006 (continued)

13C3-PFBS
Conc. 2.4386

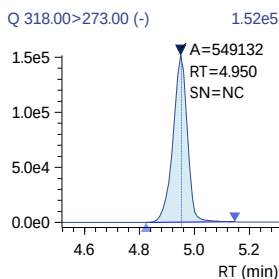


NFDHA
Conc. 0.0078

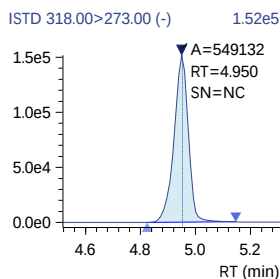
R#1 35.49 (40.25)
R#2 35.49 (37.18)



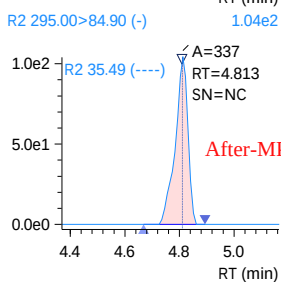
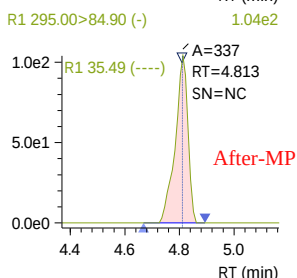
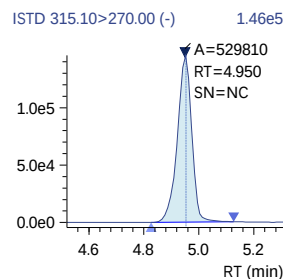
13C5-PFHxA
Conc. 2.4593



13C5-PFHxA_IS
Conc. 2.5000

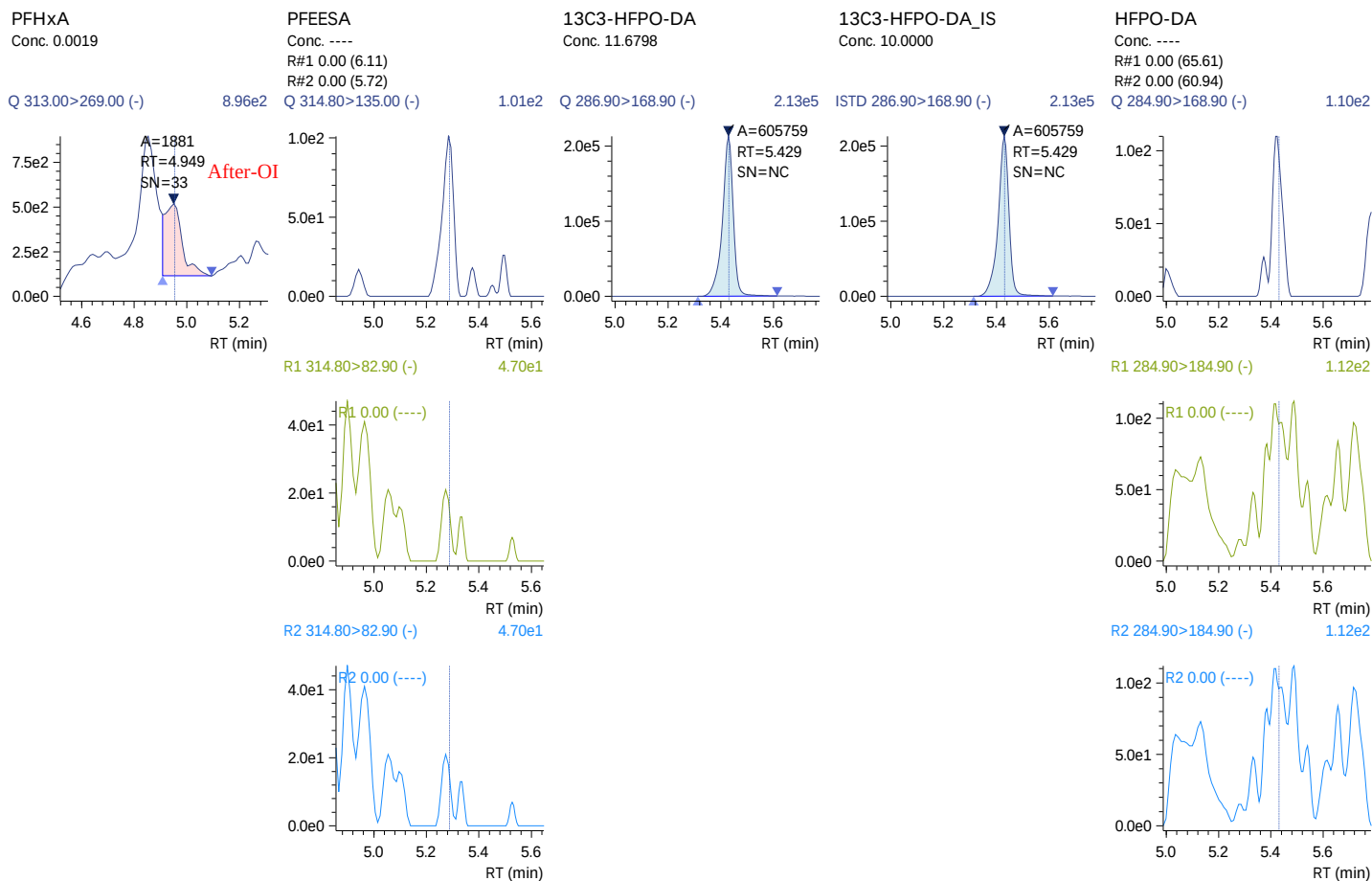


13C2-PFHxA_IS
Conc. 2.5000





240122_006 (continued)

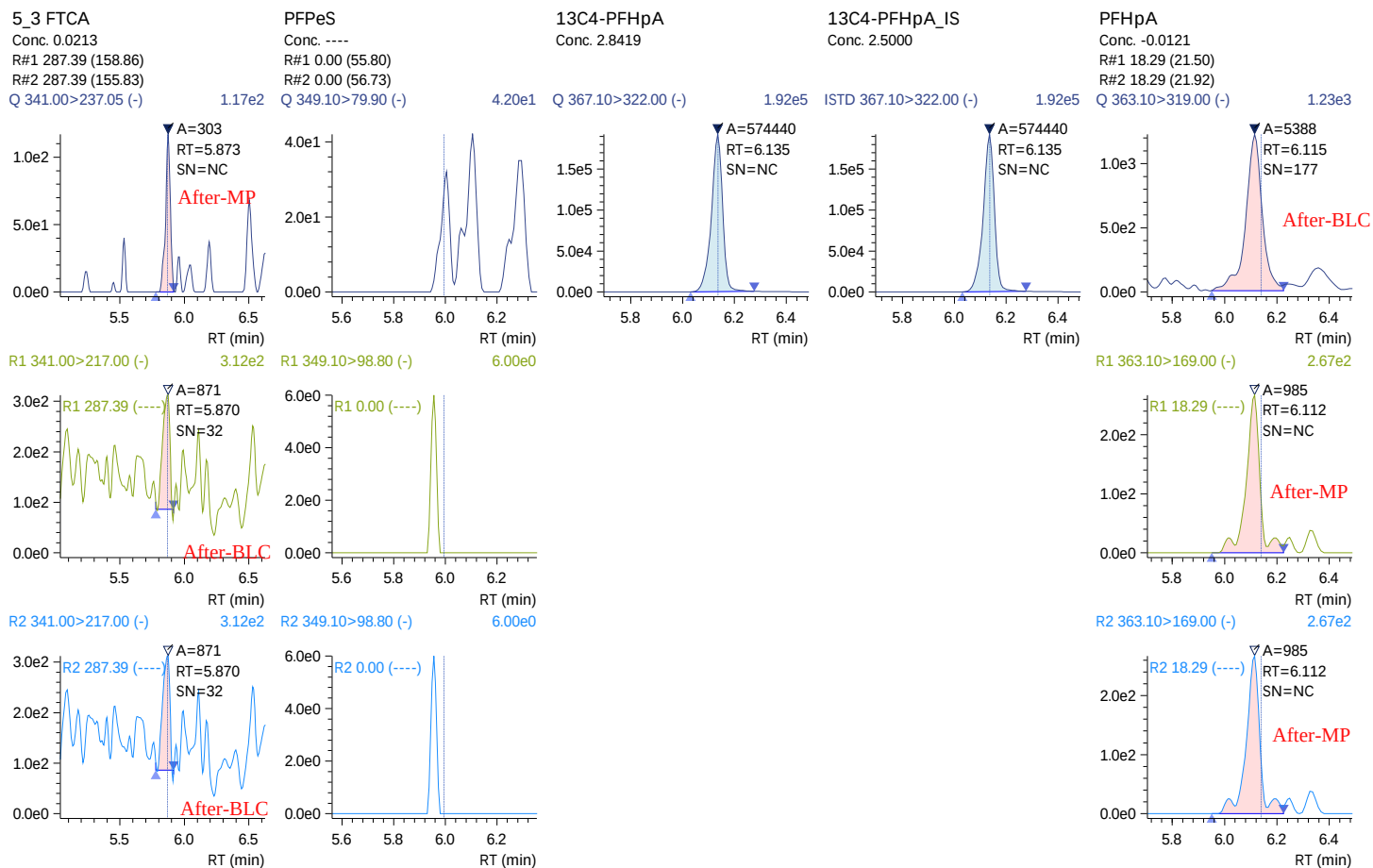


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_006 (continued)

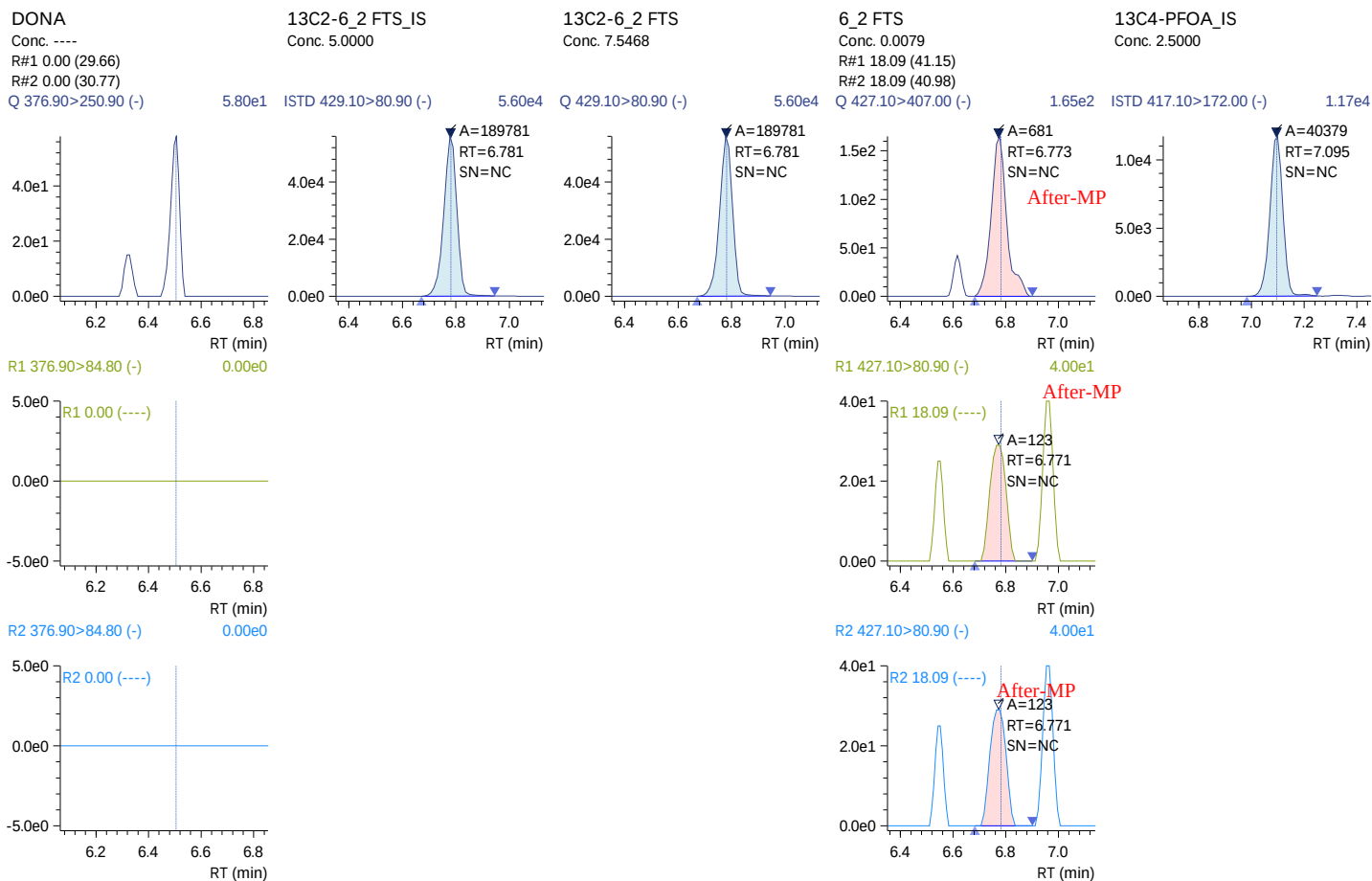


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_006 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_006 (continued)

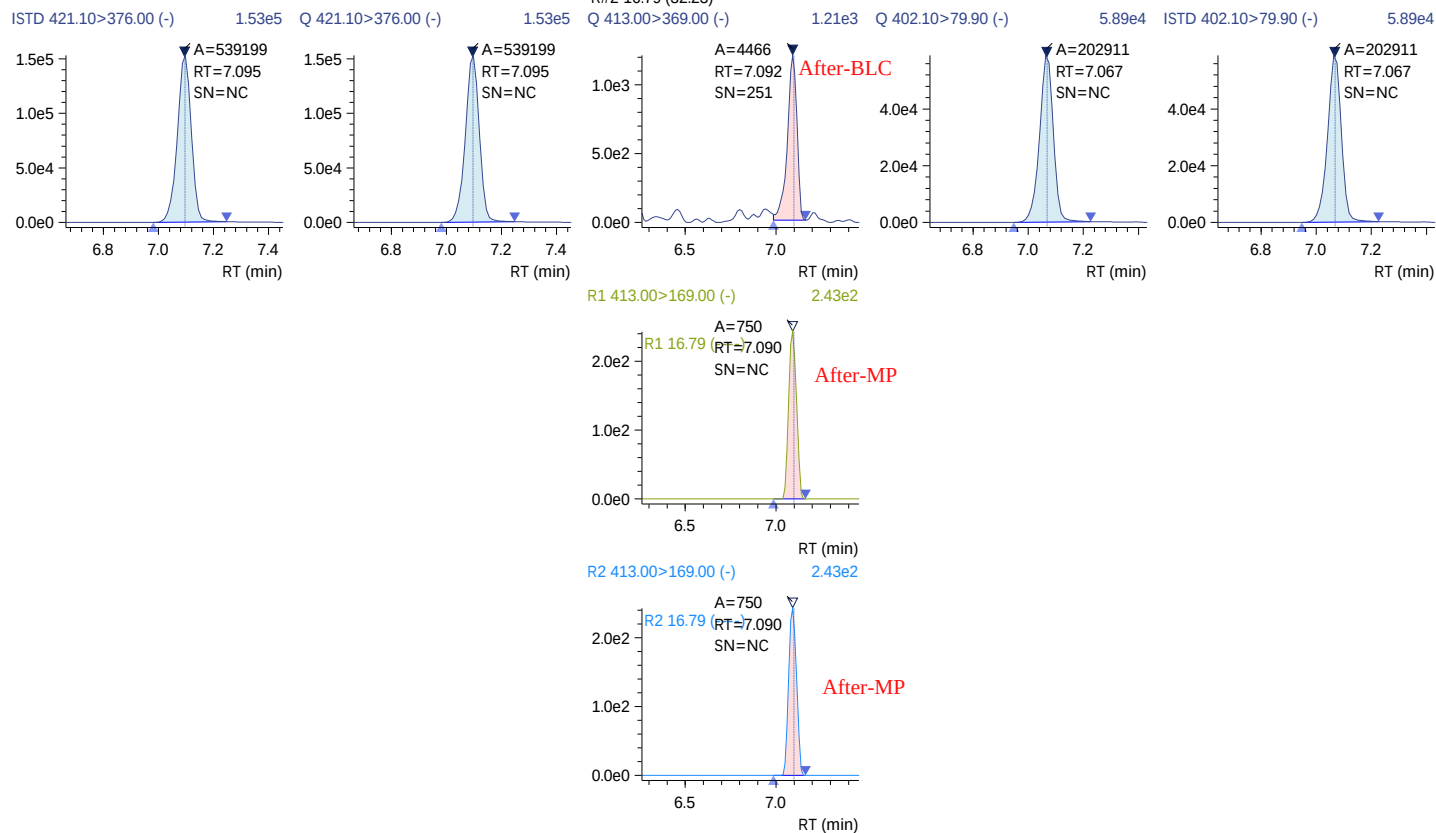
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.3891

PFOA
Conc. -0.0117
R#1 16.79 (31.89)
R#2 16.79 (32.23)

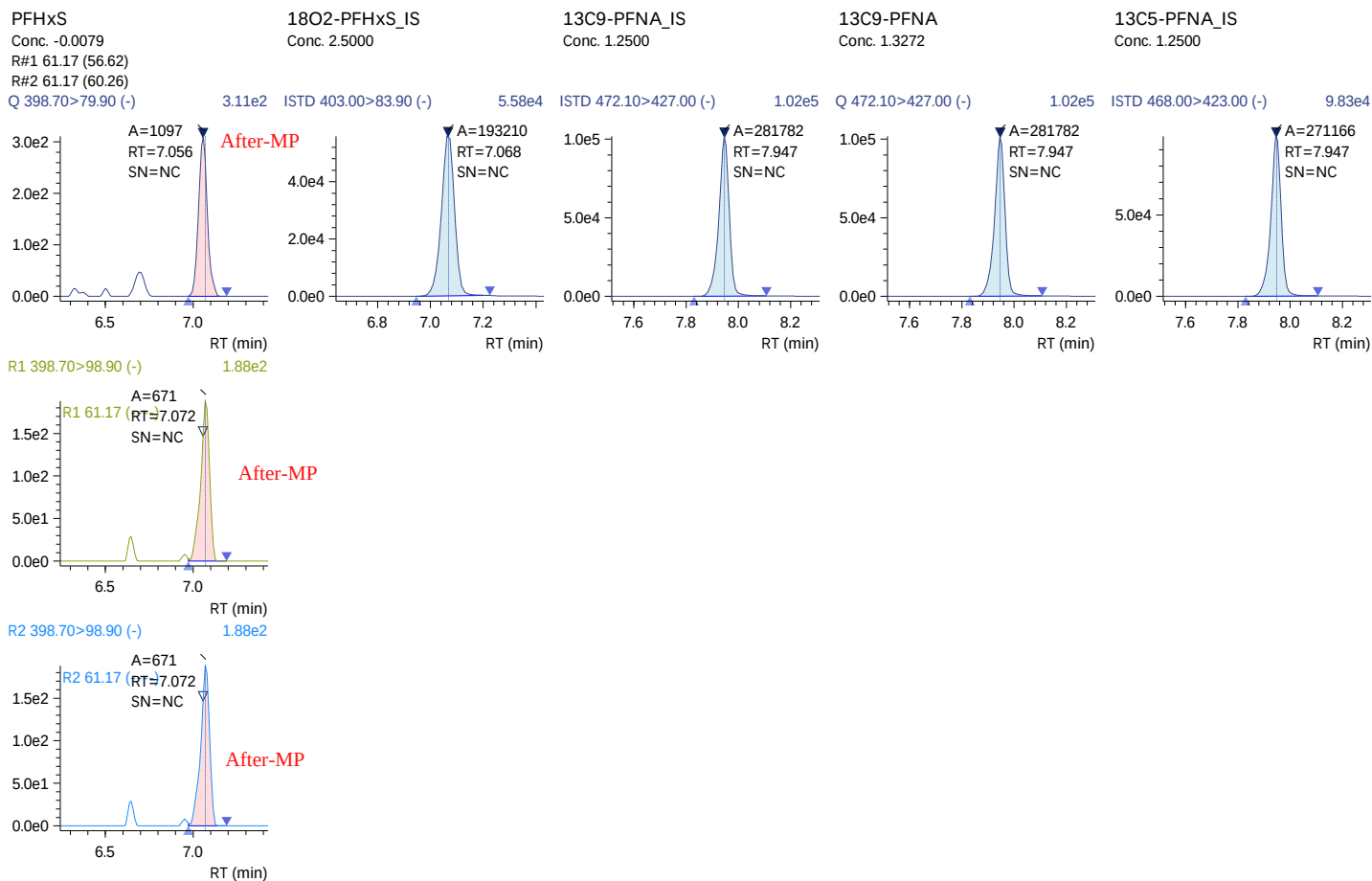
13C3-PFHxS
Conc. 2.4467

13C3-PFHxS_IS
Conc. 2.5000





240122_006 (continued)

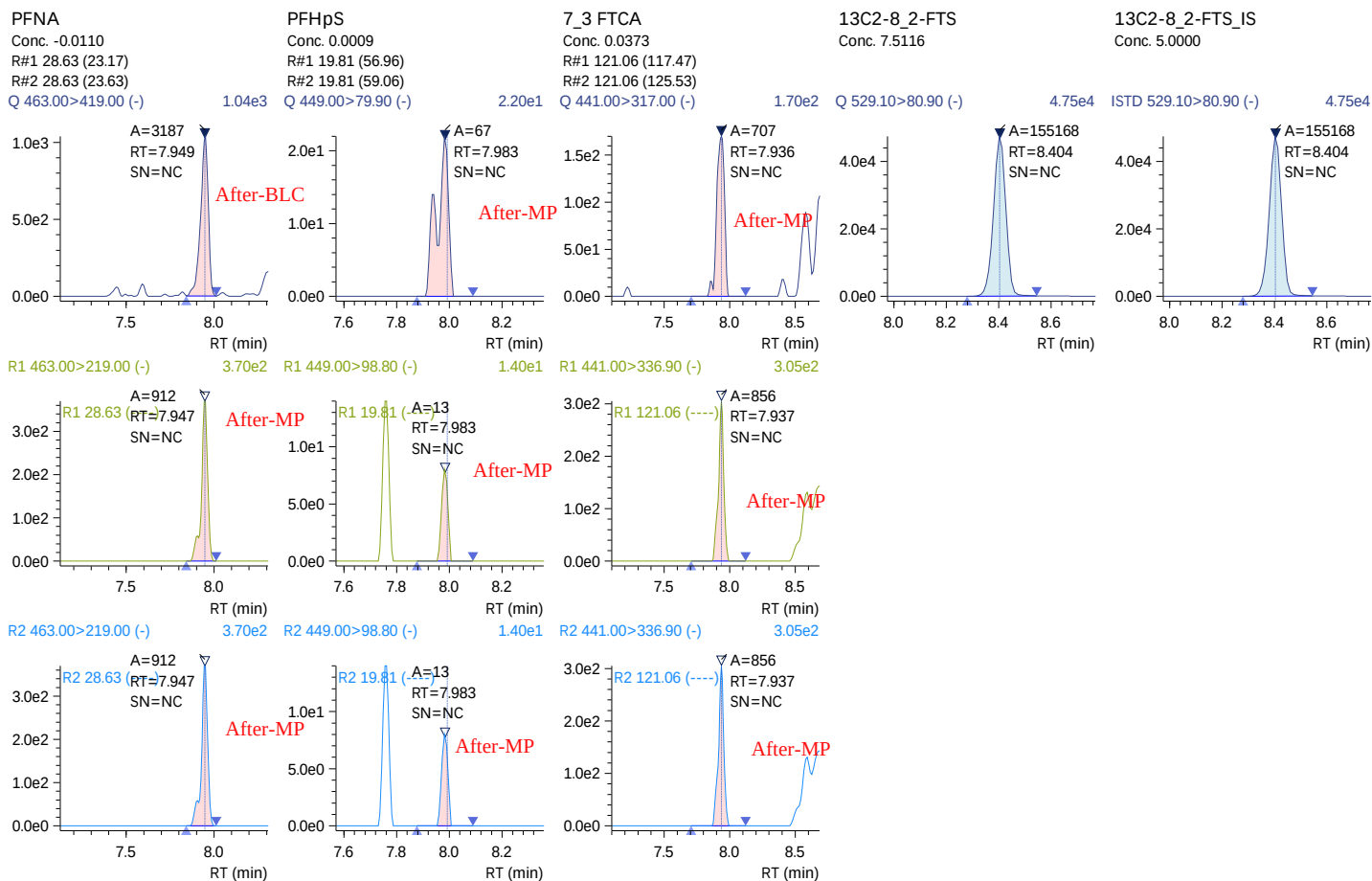


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_006 (continued)

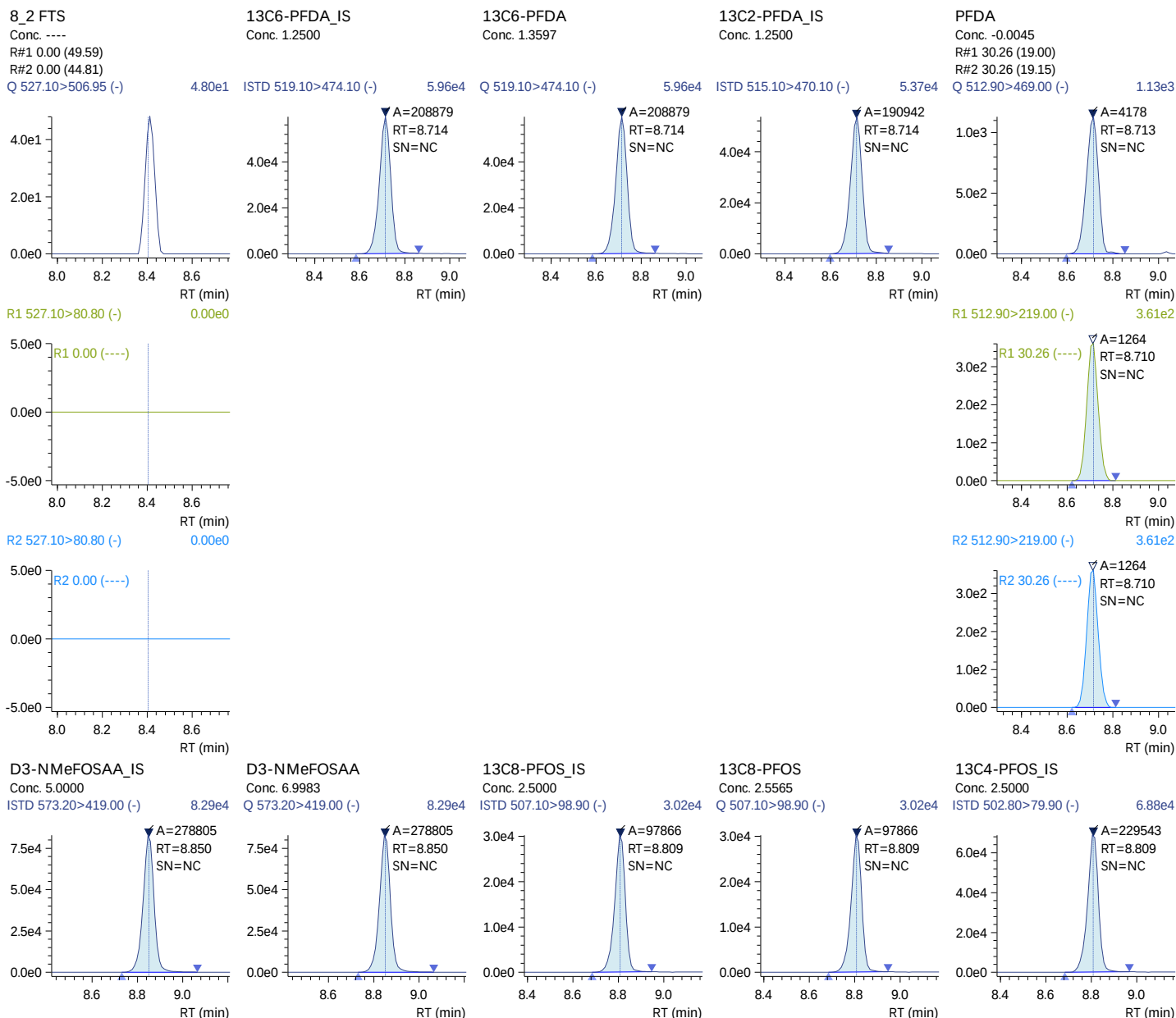


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_006 (continued)

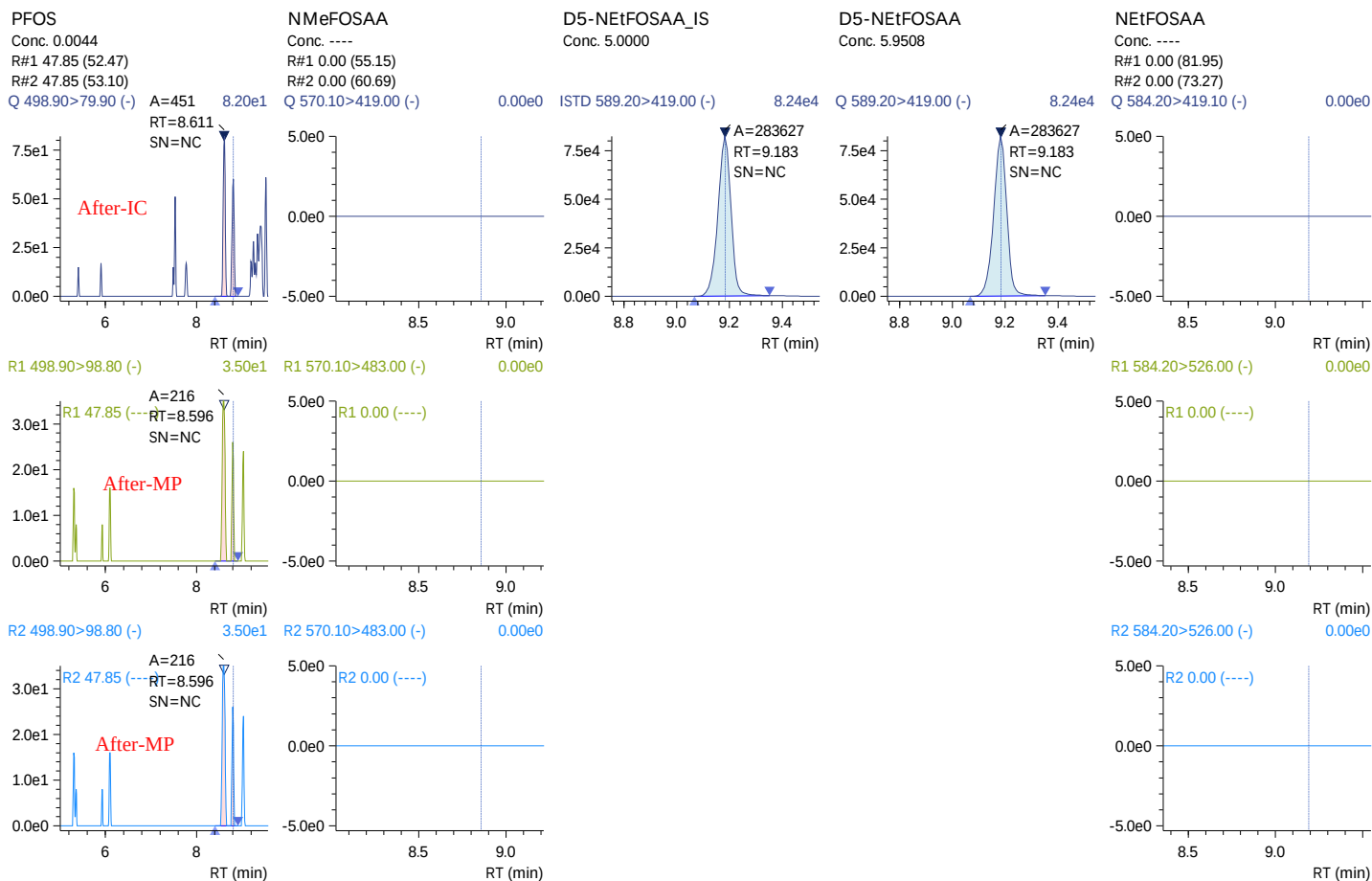


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_006 (continued)



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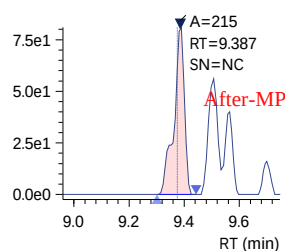
SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



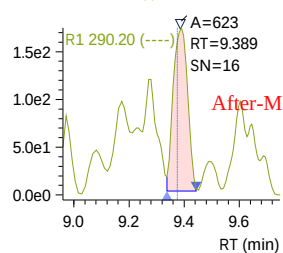
240122_006 (continued)

9-CI-PF3ONS

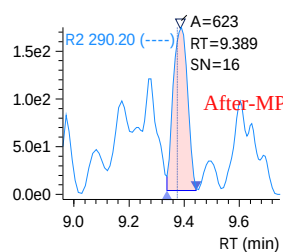
Conc. 0.0004
R#1 290.20 (32.76)
R#2 290.20 (32.59)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-)

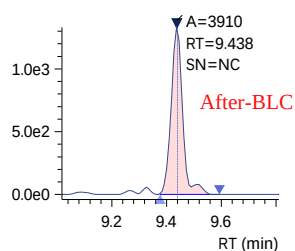


R2 532.80>353.00 (-)

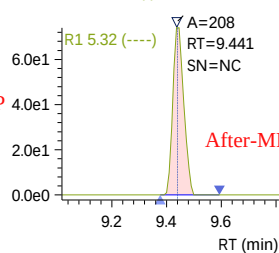


PFUnDA

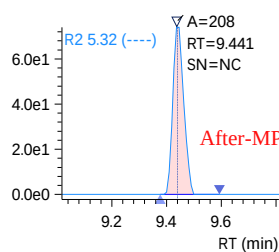
Conc. -0.0074
R#1 5.32 (13.12)
R#2 5.32 (14.36)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-)

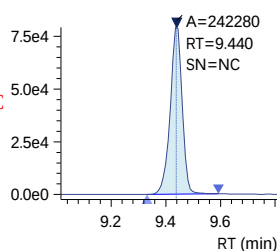


R2 563.10>269.10 (-)



13C7-PFUnDA_IS

Conc. 1.2500
ISTD 570.00>525.10 (-)



R1 570.00>525.10 (-)

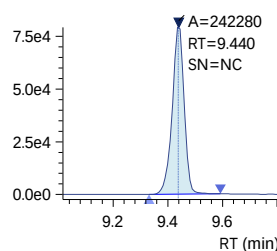


R2 570.00>525.10 (-)



13C7-PFUnDA

Conc. 1.3222
Q 570.00>525.10 (-)



R1 570.00>525.10 (-)

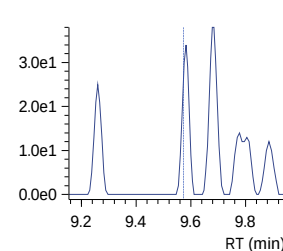


R2 570.00>525.10 (-)

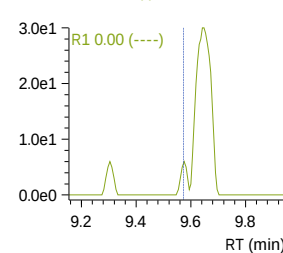


PFNS

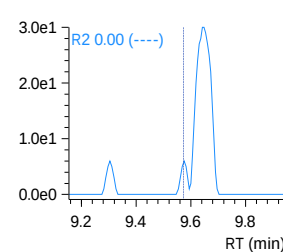
Conc. ----
R#1 0.00 (65.22)
R#2 0.00 (65.31)
Q 548.80>79.90 (-)



R1 548.80>79.90 (-)

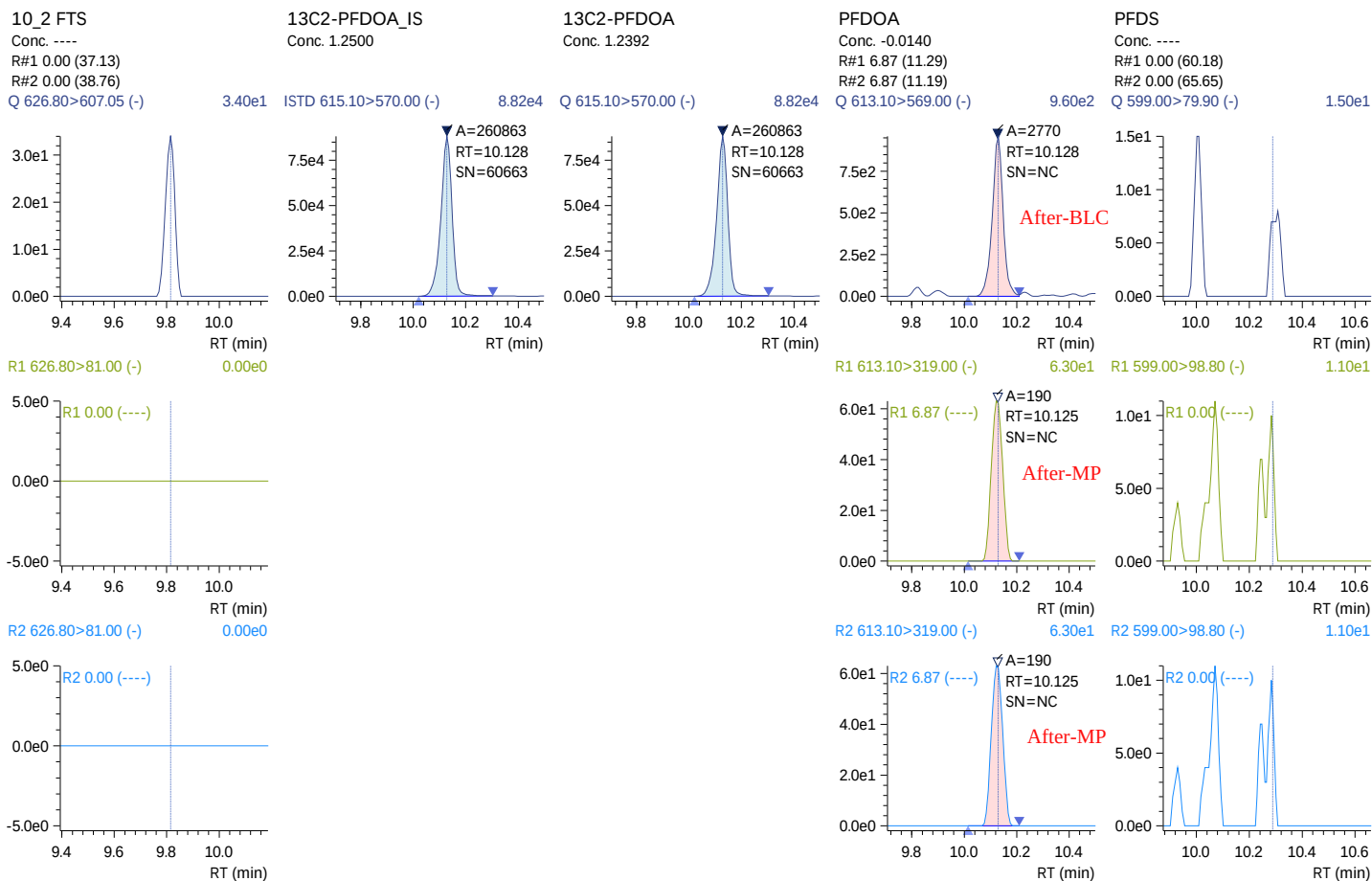


R2 548.80>79.90 (-)





240122_006 (continued)

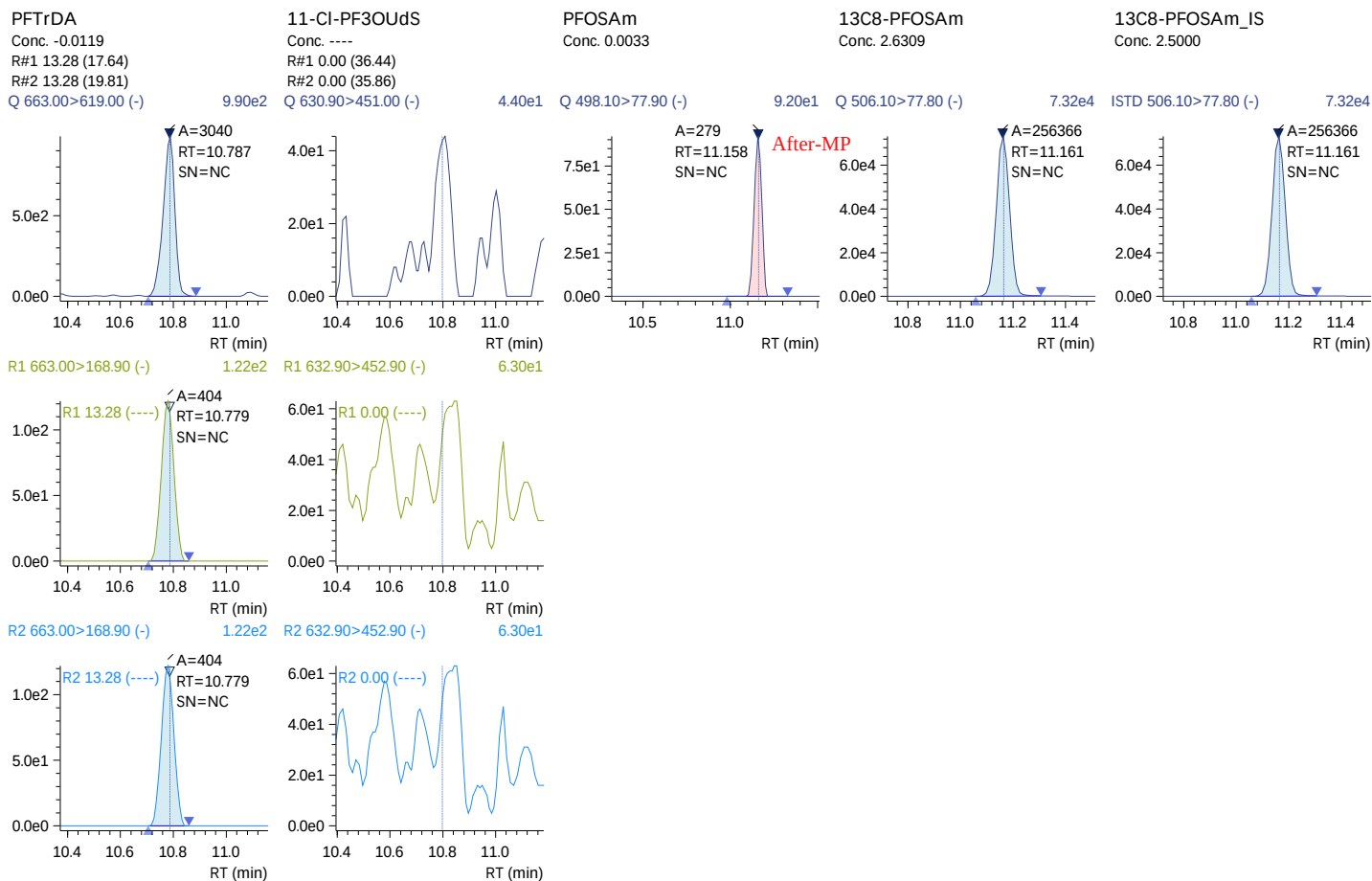


J:\LCMS08\Data\240122_1633_B1\240122_1633_B1.damip

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_006 (continued)

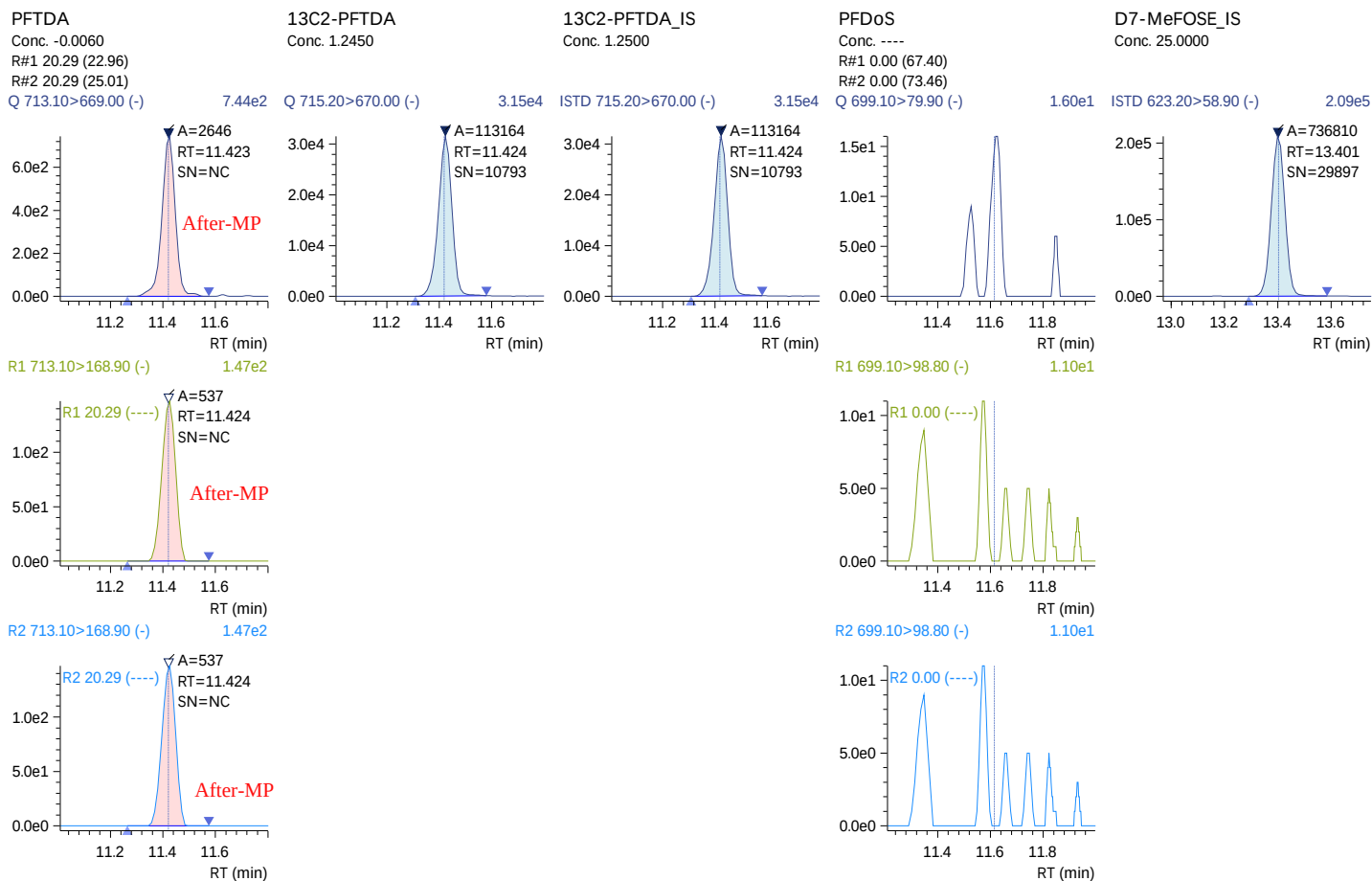


J:\LCMS08\Data\240122_1633_B1\240122_1633_B1.dampl

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_006 (continued)





240122_006 (continued)

D7-MeFOSE
Conc. 30.6687

MeFOSE
Conc. ----

13C2-PFHxDA_IS
Conc. 2.5000

13C2-PFHxDA
Conc. 2.4952

PFHxDA

Conc. -0.0104
R#1 14.26 (13.90)
R#2 14.26 (15.85)

Q 623.20>58.90 (-)

2.09e5

Q 616.10>59.00 (-)

6.20e1

ISTD 815.00>770.05 (-)

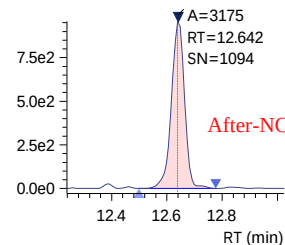
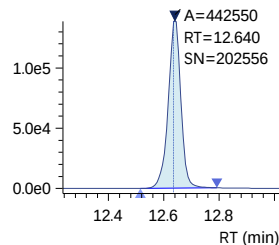
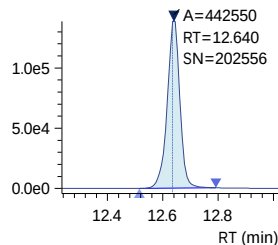
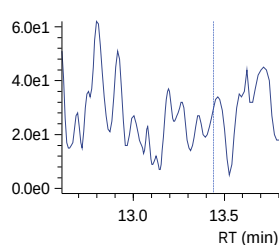
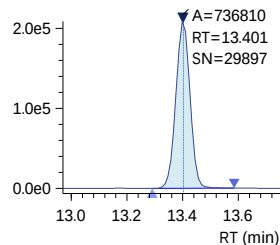
1.39e5

Q 815.00>770.05 (-)

1.39e5

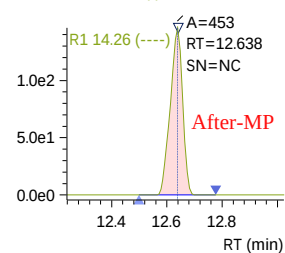
Q 813.00>768.95 (-)

9.58e2



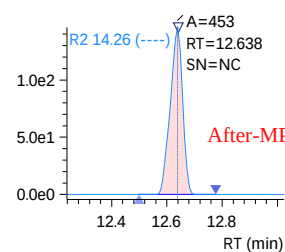
R1 813.00>218.95 (-)

1.46e2



R2 813.00>218.95 (-)

1.46e2





240122_006 (continued)

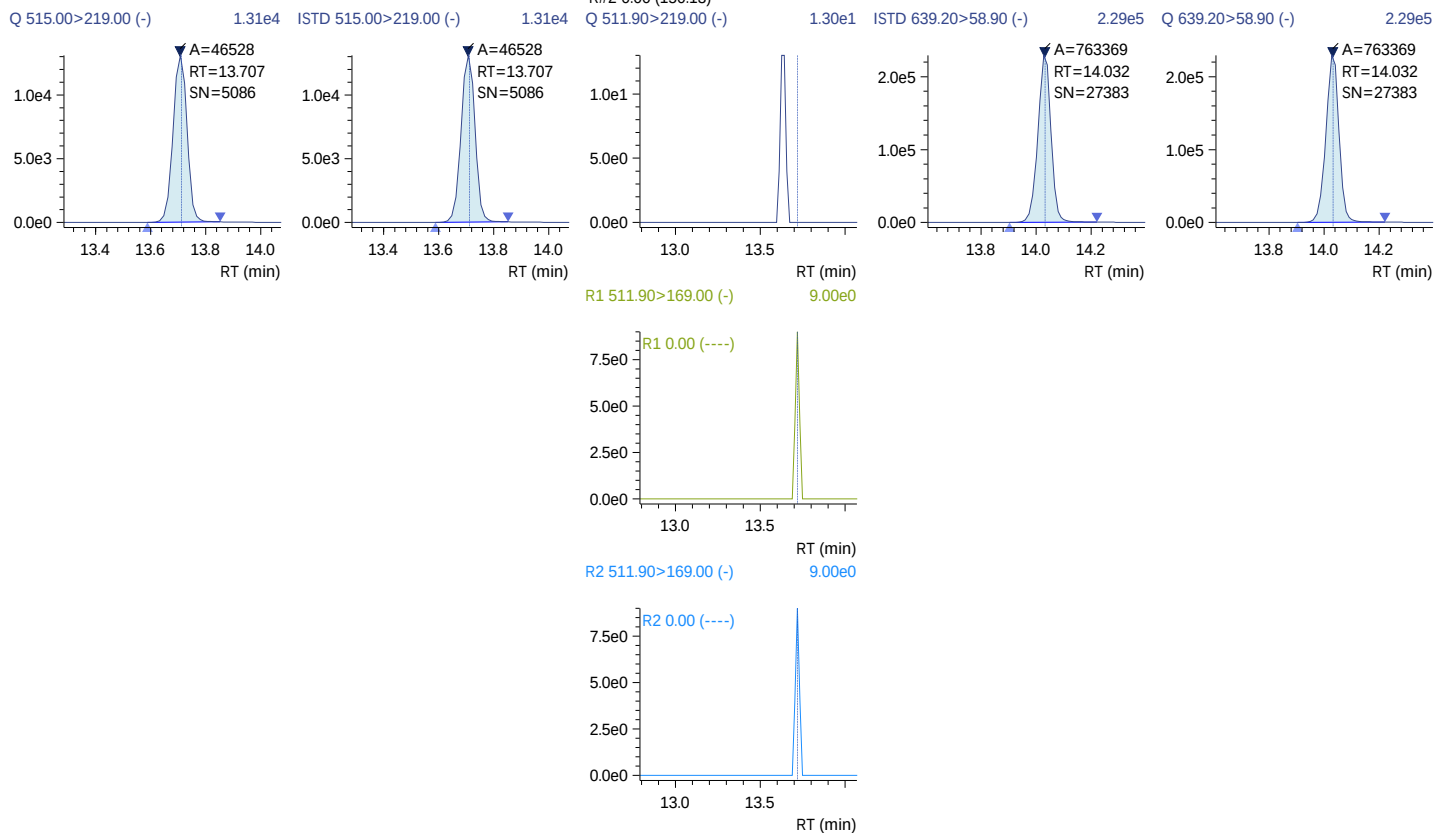
D3-MeFOSA
Conc. 2.3710

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. ----
R#1 0.00 (140.79)
R#2 0.00 (150.13)

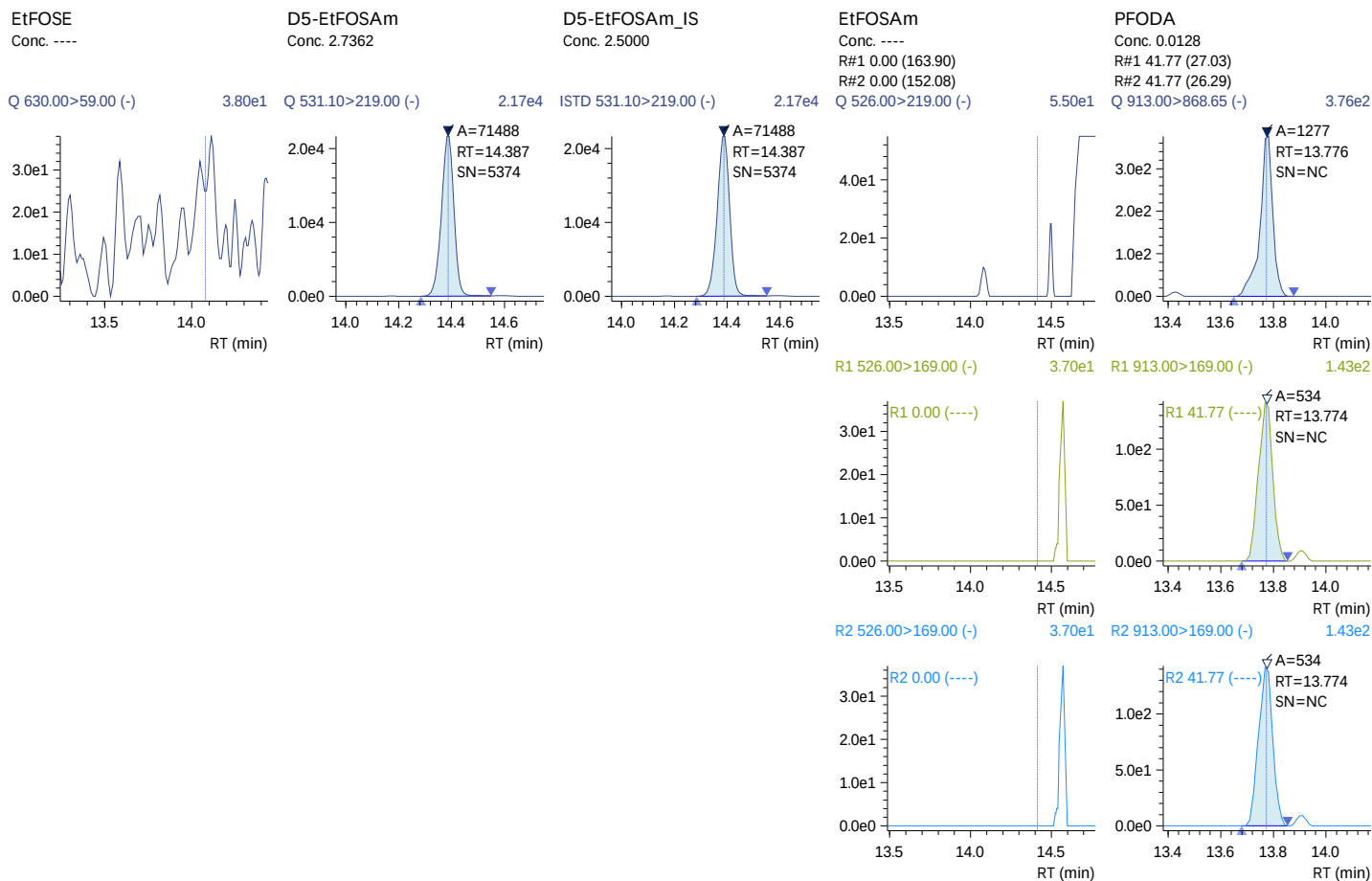
D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 31.2845





240122_006 (continued)



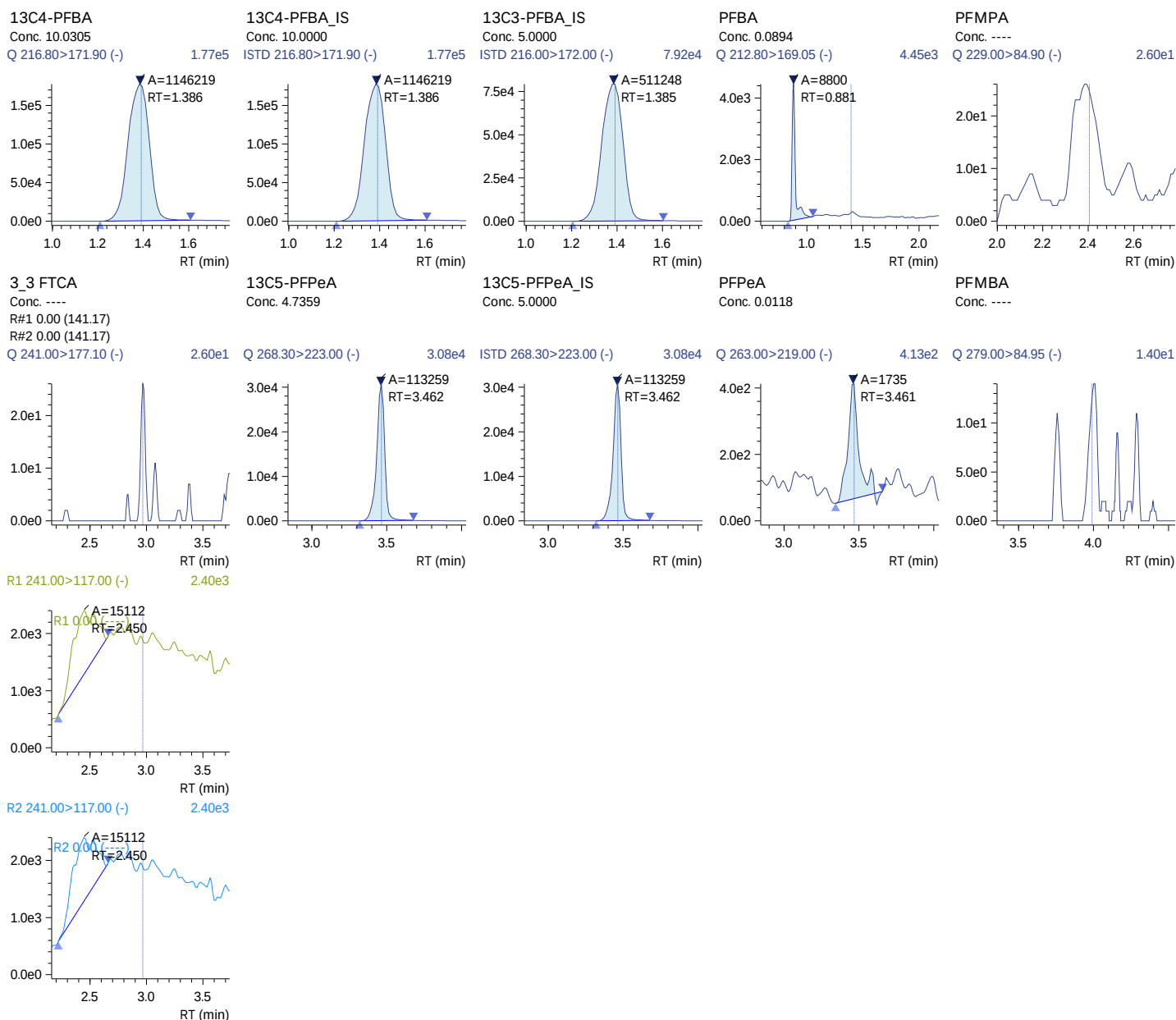
J:\LCMS08\Data\240122_1633_B1\240122_1633_B1.dampl

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_006

Sample ID: 1633 CCB
Date Acquired: 1/22/2024 11:41:22 AM
Acquired by: System Administrator
Data File: 240122_006
Vial: 54 | Inj. Volume: 10.0000uL | Tray: 1





240122_006 (continued)

13C2-4_2 FTS
Conc. 7.1800

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. ----
R#1 0.00 (29.06)
R#2 0.00 (29.06)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. ----
R#1 0.00 (46.72)
R#2 0.00 (46.72)

Q 329.10>80.90 (-)

5.77e4

ISTD 329.10>80.90 (-)

5.77e4

Q 327.10>307.00 (-)

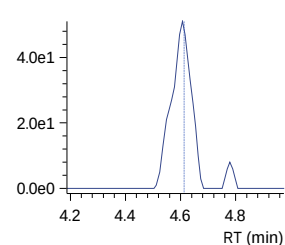
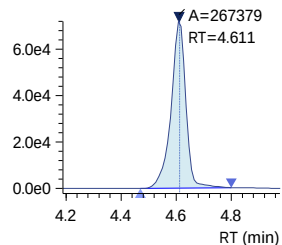
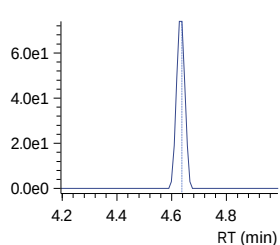
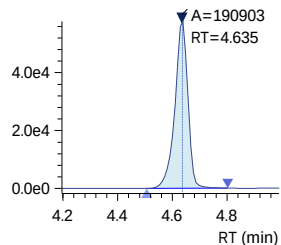
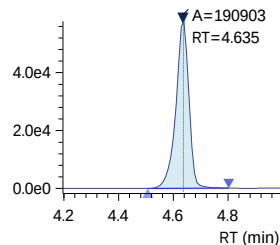
7.40e1

ISTD 302.10>79.90 (-)

7.20e4

Q 298.70>79.90 (-)

5.10e1

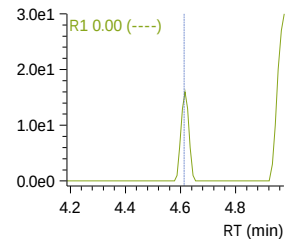
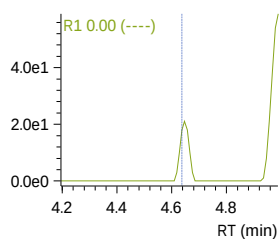


R1 327.10>80.90 (-)

5.90e1

R1 298.70>98.80 (-)

3.00e1

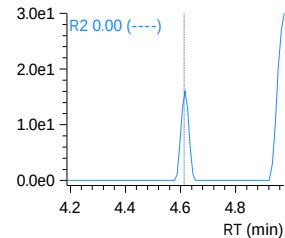
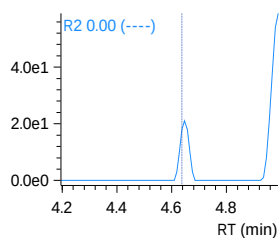


R2 327.10>80.90 (-)

5.90e1

R2 298.70>98.80 (-)

3.00e1





240122_006 (continued)

13C3-PFBS
 Conc. 2.4386

NFDHA
 Conc. ----
 R#1 0.00 (40.25)
 R#2 0.00 (40.25)

13C5-PFHxA
 Conc. 2.4593

13C5-PFHxA_IS
 Conc. 2.5000

13C2-PFHxA_IS
 Conc. 2.5000

Q 302.10>79.90 (-)

7.20e4

Q 295.00>201.00 (-)

3.26e2

Q 318.00>273.00 (-)

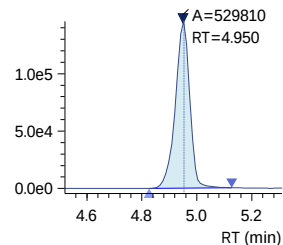
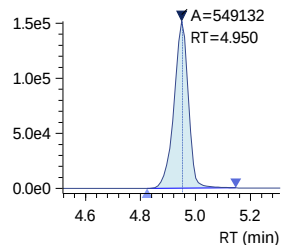
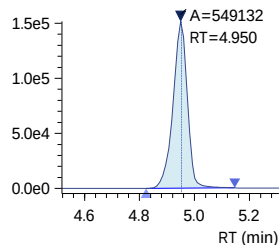
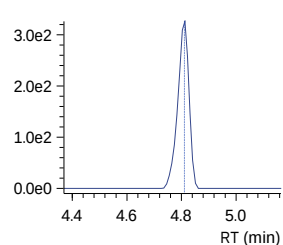
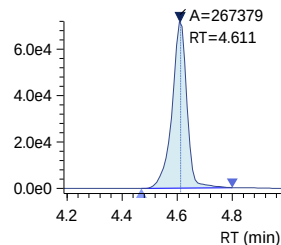
1.52e5

ISTD 318.00>273.00 (-)

1.52e5

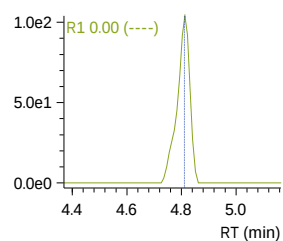
ISTD 315.10>270.00 (-)

1.46e5



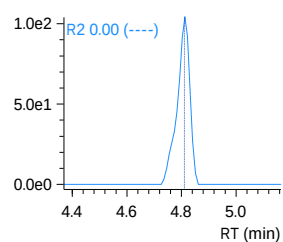
R1 295.00>84.90 (-)

1.04e2



R2 295.00>84.90 (-)

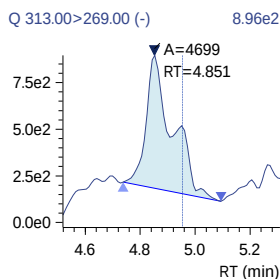
1.04e2



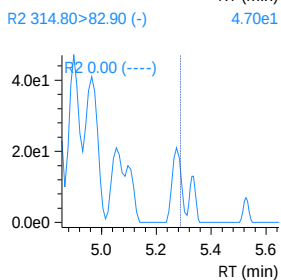
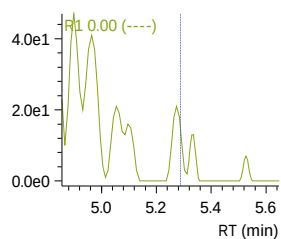
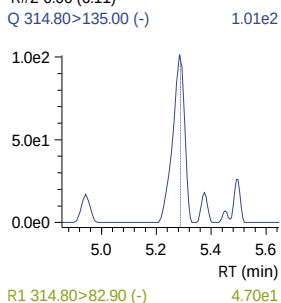


240122_006 (continued)

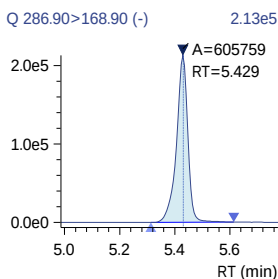
PFHxA
Conc. 0.0173



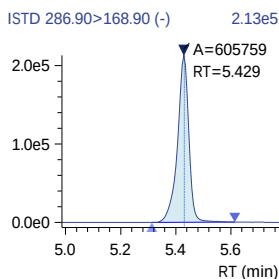
PFEESA
Conc. ----
R#1 0.00 (6.11)
R#2 0.00 (6.11)



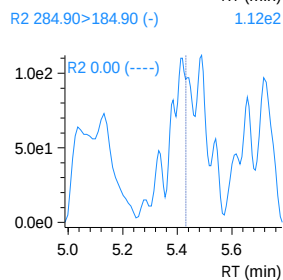
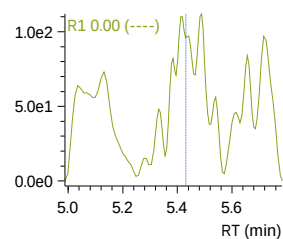
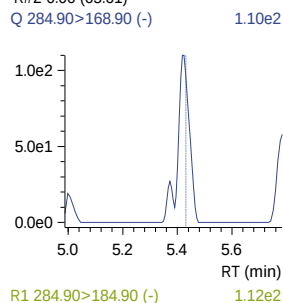
13C3-HFPO-DA
Conc. 11.6798



13C3-HFPO-DA_IS
Conc. 10.0000



HFPO-DA
Conc. ----
R#1 0.00 (65.61)
R#2 0.00 (65.61)





240122_006 (continued)

5_3 FTCA

Conc. ----

R#1 0.00 (158.86)

R#2 0.00 (158.86)

Q 341.00>237.05 (-)

1.17e2

PFPeS

Conc. ----

R#1 0.00 (55.80)

R#2 0.00 (55.80)

Q 349.10>79.90 (-)

4.20e1

13C4-PFHpa

Conc. 2.8419

Q 367.10>322.00 (-)

1.92e5

13C4-PFHpa_IS

Conc. 2.5000

ISTD 367.10>322.00 (-)

1.92e5

PFHpA

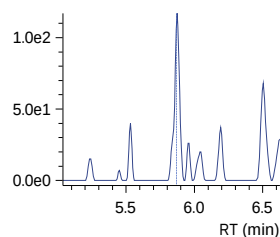
Conc. -0.0129

R#1 0.00 (21.50)

R#2 0.00 (21.50)

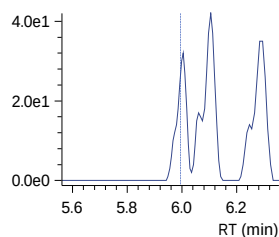
Q 363.10>319.00 (-)

1.23e3



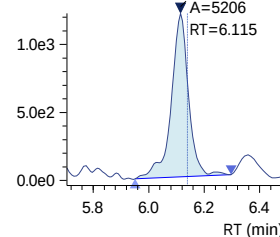
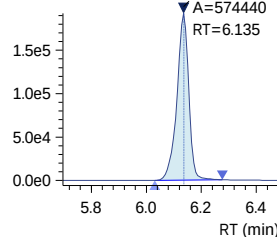
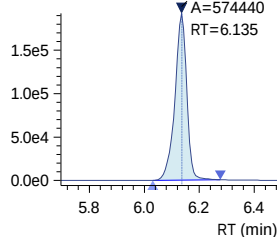
R1 341.00>217.00 (-)

3.12e2



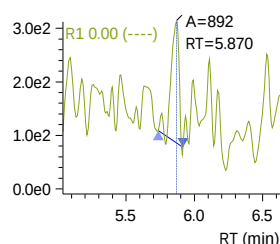
R1 349.10>98.80 (-)

6.00e0



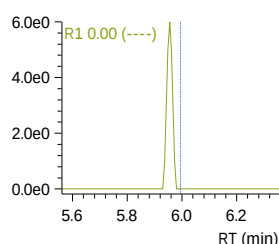
R1 363.10>169.00 (-)

2.67e2



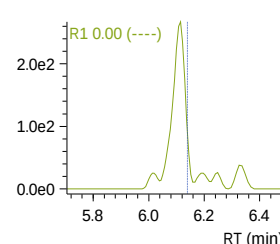
R2 341.00>217.00 (-)

3.12e2



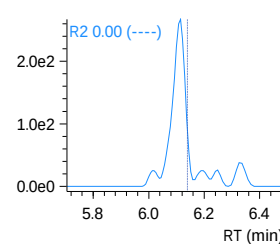
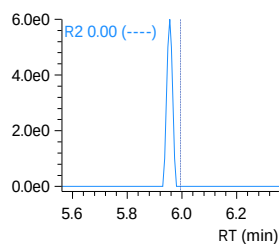
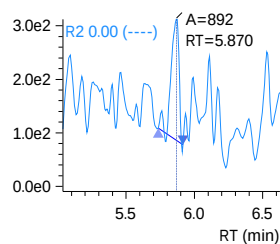
R2 349.10>98.80 (-)

6.00e0



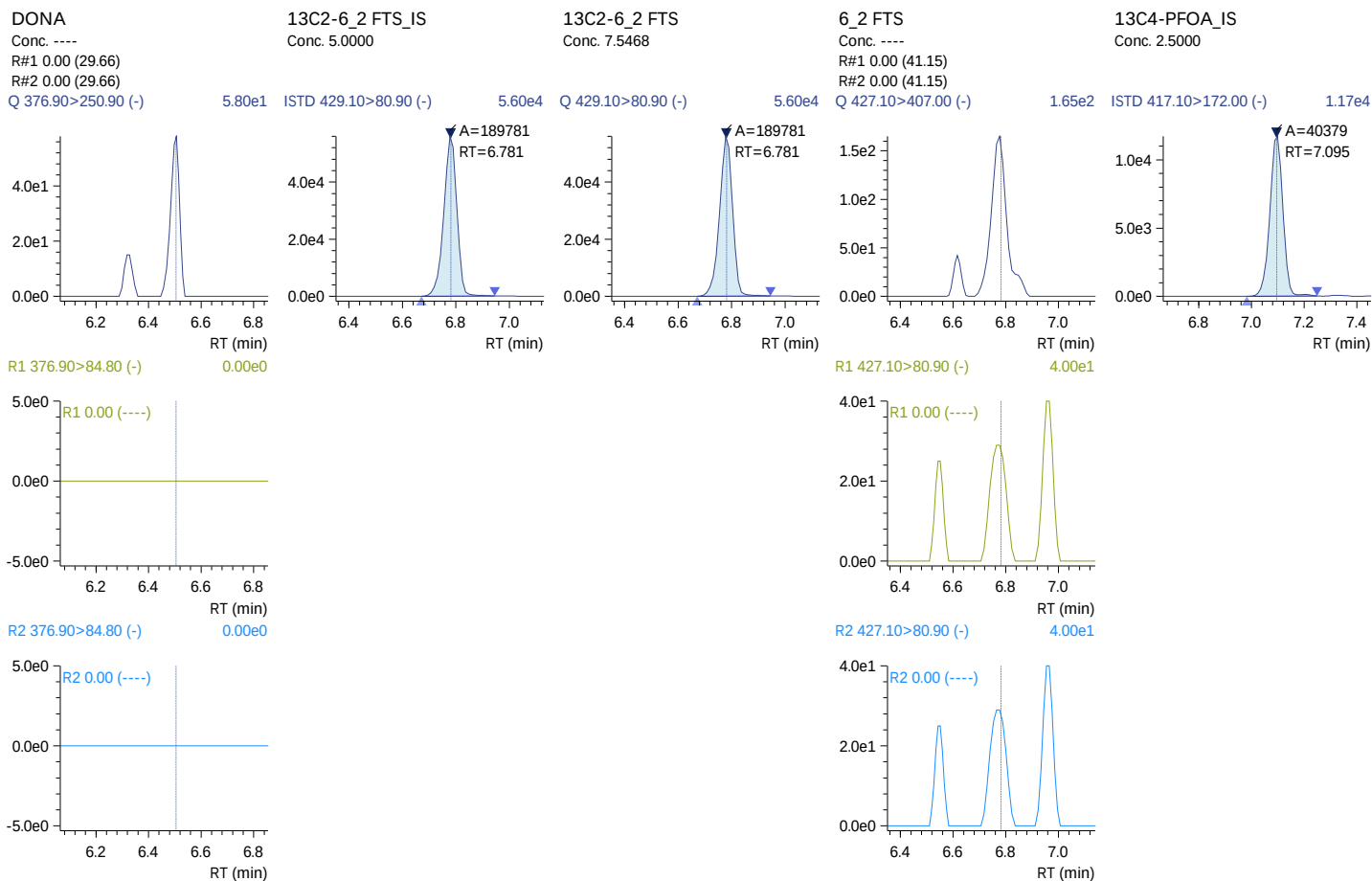
R2 363.10>169.00 (-)

2.67e2





240122_006 (continued)





240122_006 (continued)

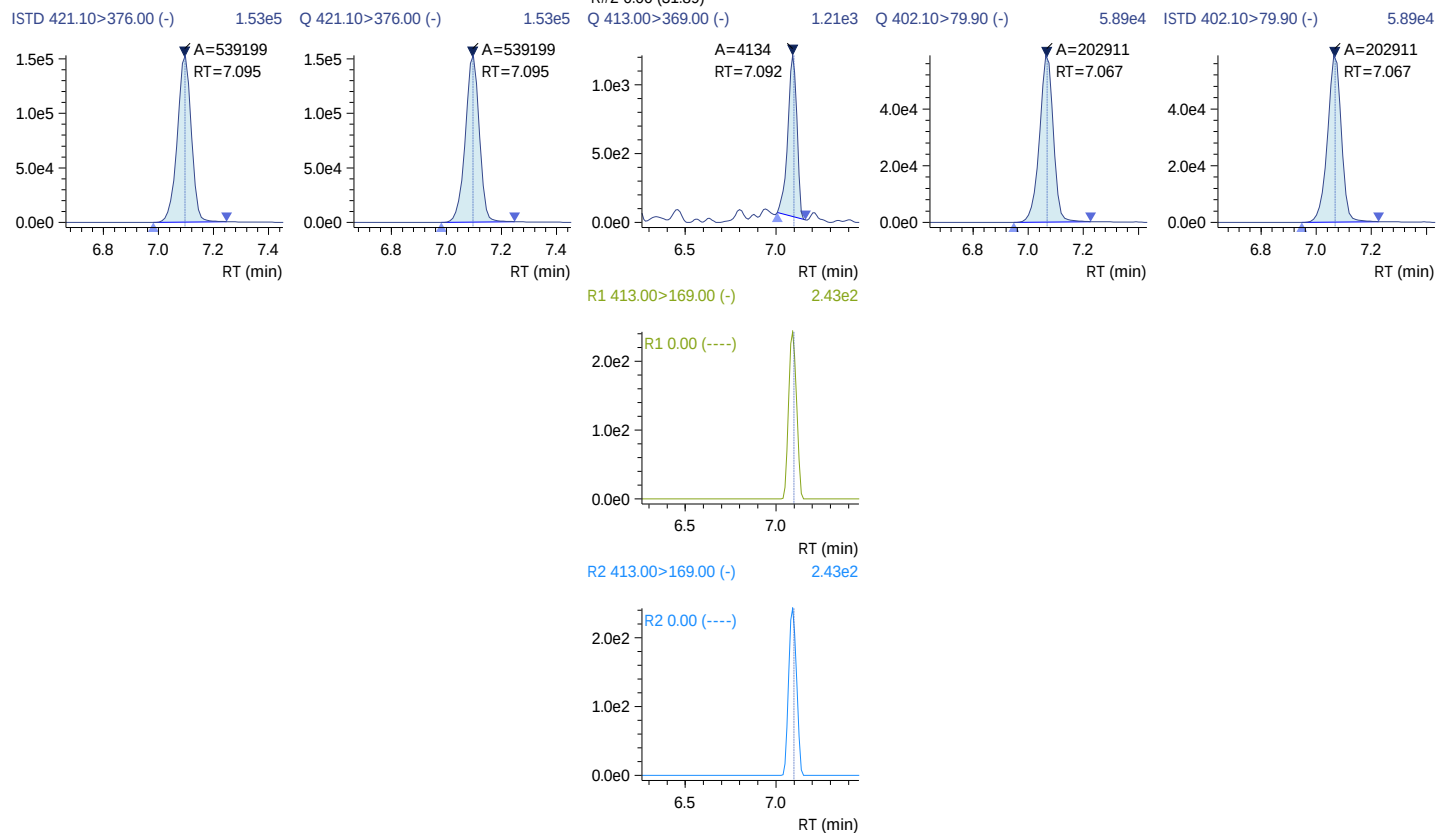
13C8-PFOA_IS
 Conc. 2.5000

13C8-PFOA
 Conc. 2.3891

PFOA
 Conc. -0.0140
 R#1 0.00 (31.89)
 R#2 0.00 (31.89)

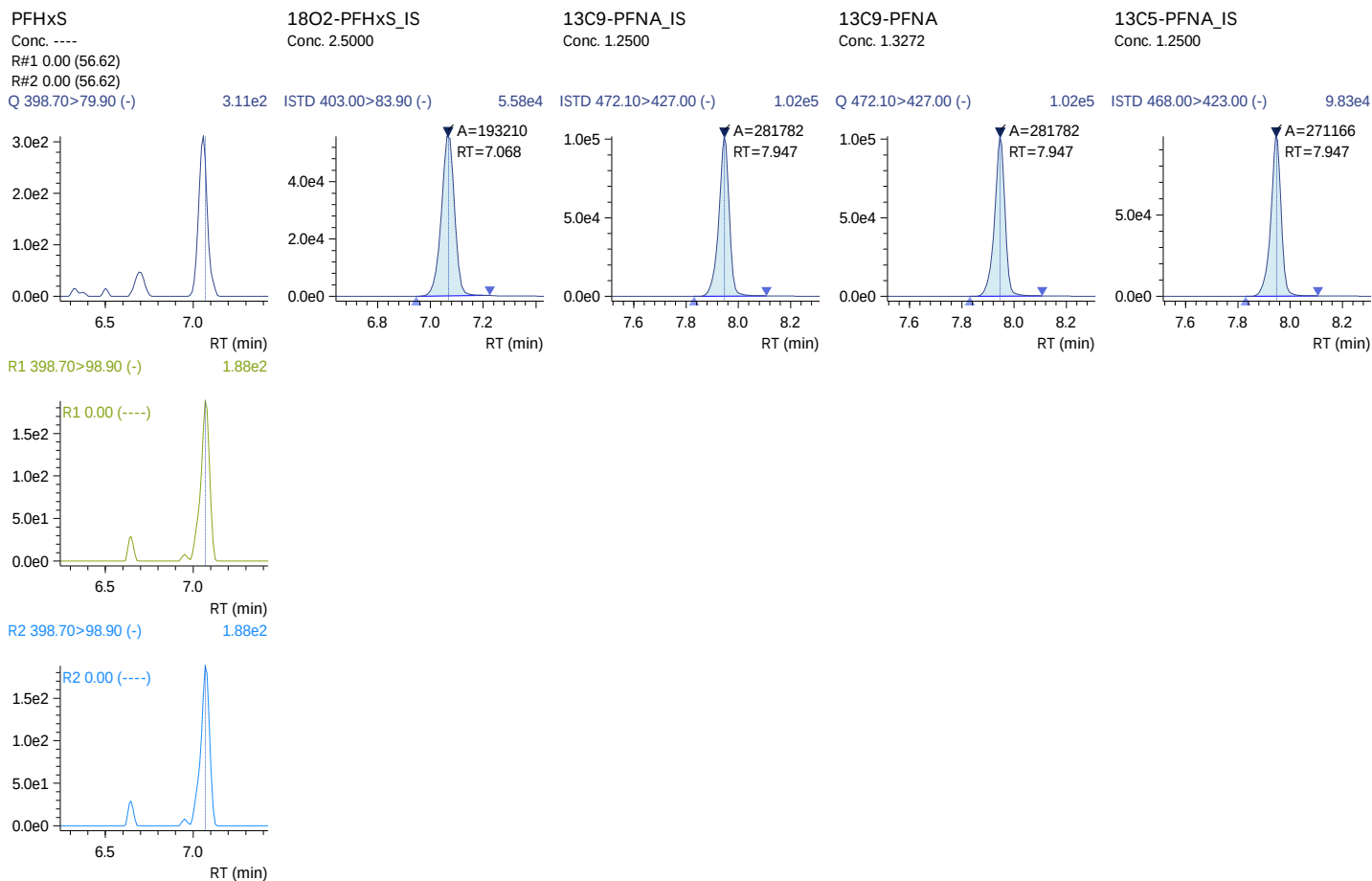
13C3-PFHxS
 Conc. 2.4467

13C3-PFHxS_IS
 Conc. 2.5000



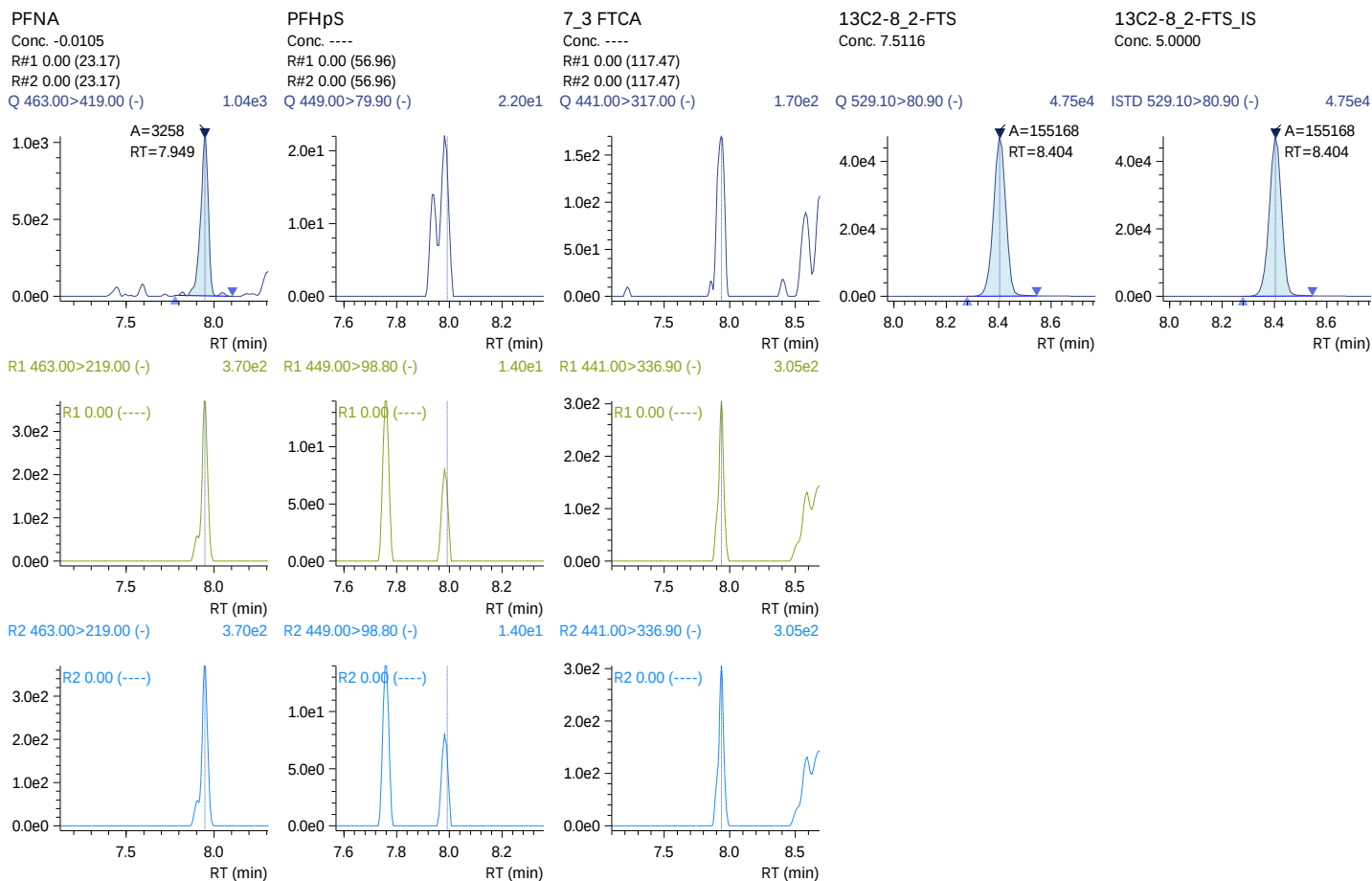


240122_006 (continued)



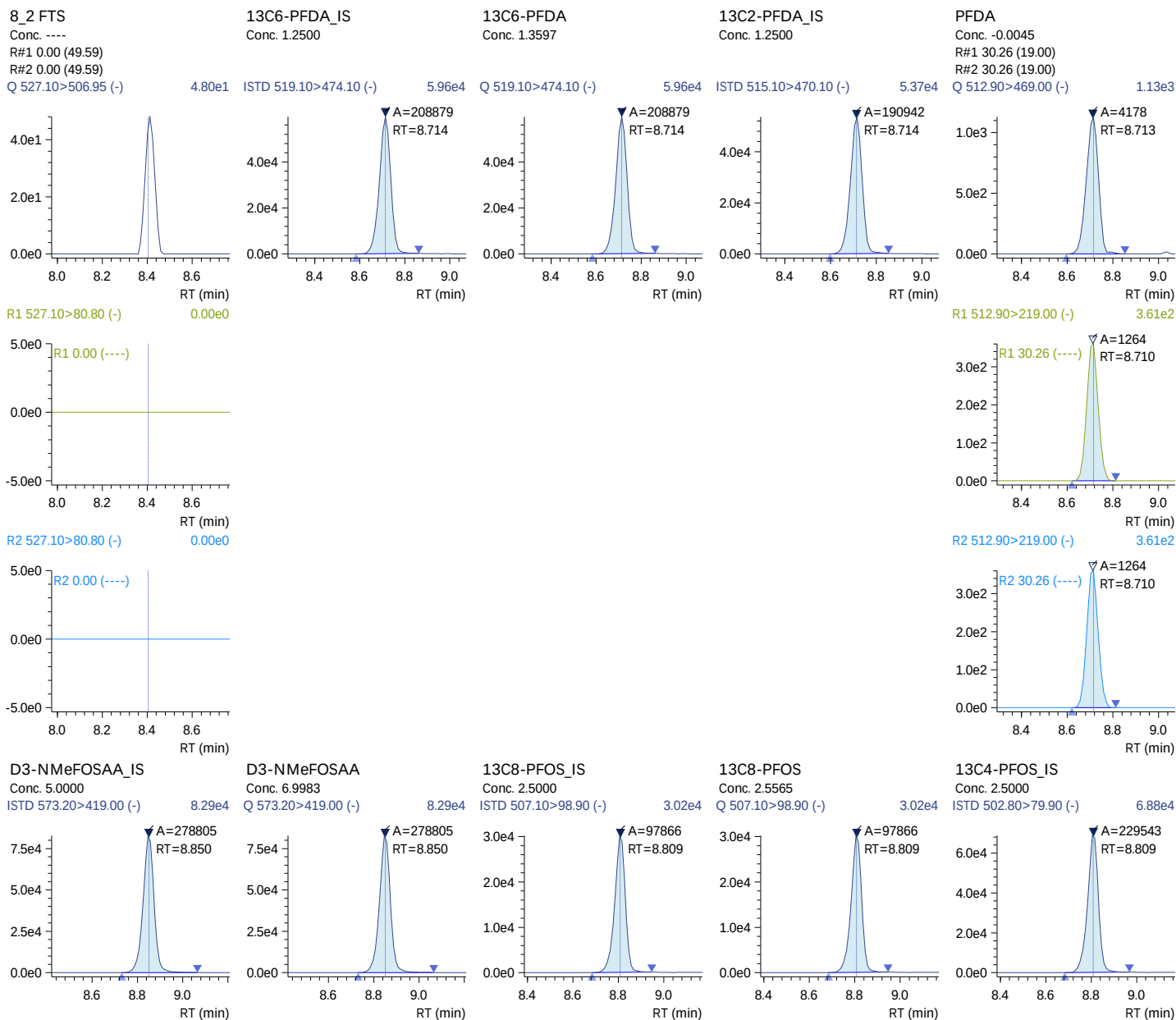


240122_006 (continued)



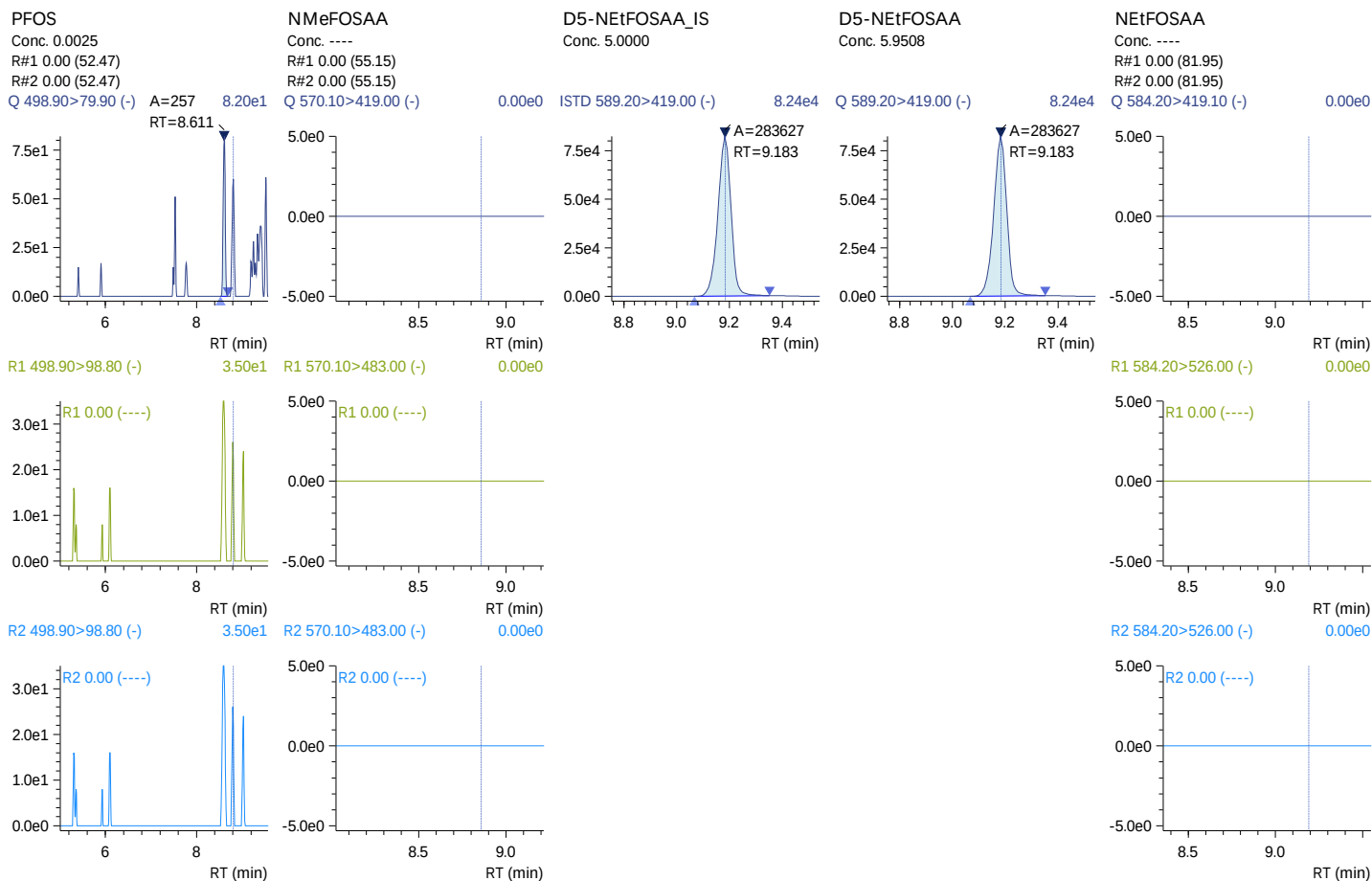


240122_006 (continued)





240122_006 (continued)





240122_006 (continued)

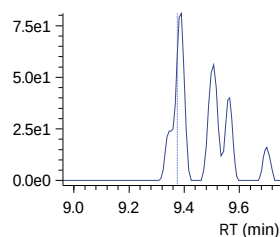
9-Cl-PF3ONS

Conc. ----

R#1 0.00 (32.76)

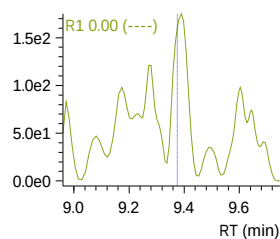
R#2 0.00 (32.76)

Q 530.80>351.00 (-)



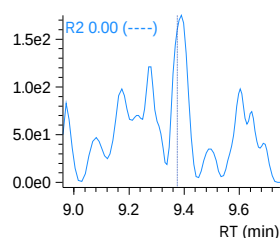
R1 532.80>353.00 (-)

1.75e2



R2 532.80>353.00 (-)

1.75e2



RT (min)

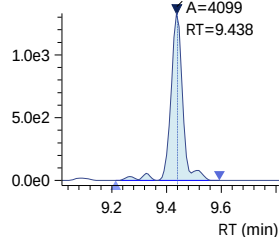
PFUnDA

Conc. -0.0063

R#1 0.00 (13.12)

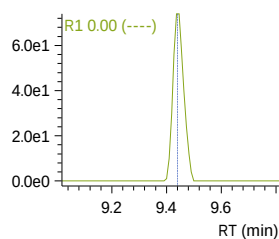
R#2 0.00 (13.12)

Q 563.10>519.00 (-)



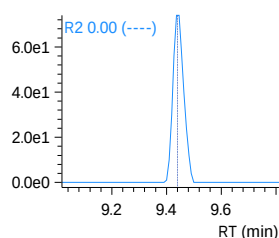
R1 563.10>269.10 (-)

7.40e1



R2 563.10>269.10 (-)

7.40e1

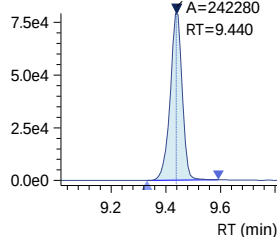


RT (min)

13C7-PFUnDA_IS

Conc. 1.2500

ISTD 570.00>525.10 (-)



A=4099
RT=9.438

7.93e4



A=242280
RT=9.440

7.93e4

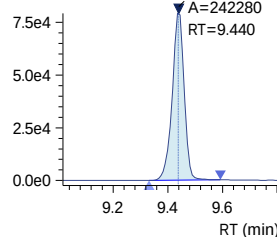


RT (min)

13C7-PFUnDA

Conc. 1.3222

Q 570.00>525.10 (-)



A=242280
RT=9.440

7.93e4



A=242280
RT=9.440

7.93e4



RT (min)

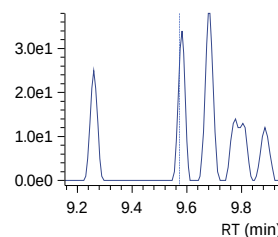
PFNS

Conc. ----

R#1 0.00 (65.22)

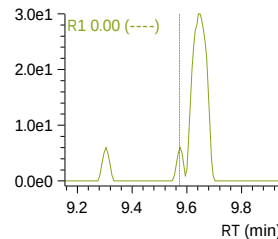
R#2 0.00 (65.22)

Q 548.80>79.90 (-)



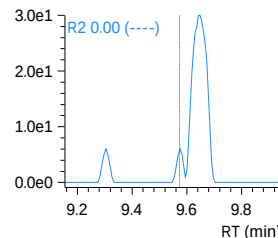
R1 548.80>98.80 (-)

3.00e1



R2 548.80>98.80 (-)

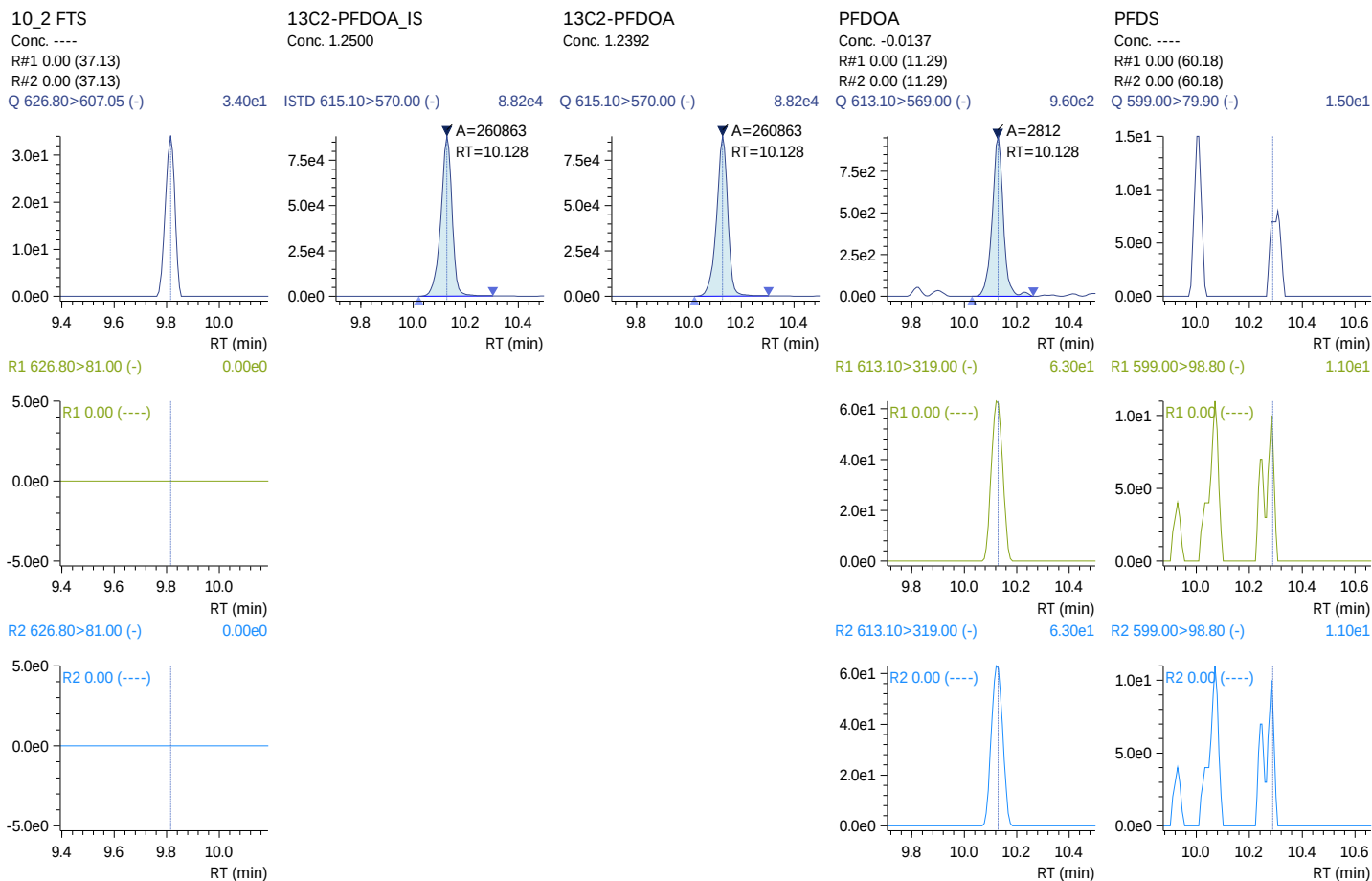
3.00e1



RT (min)

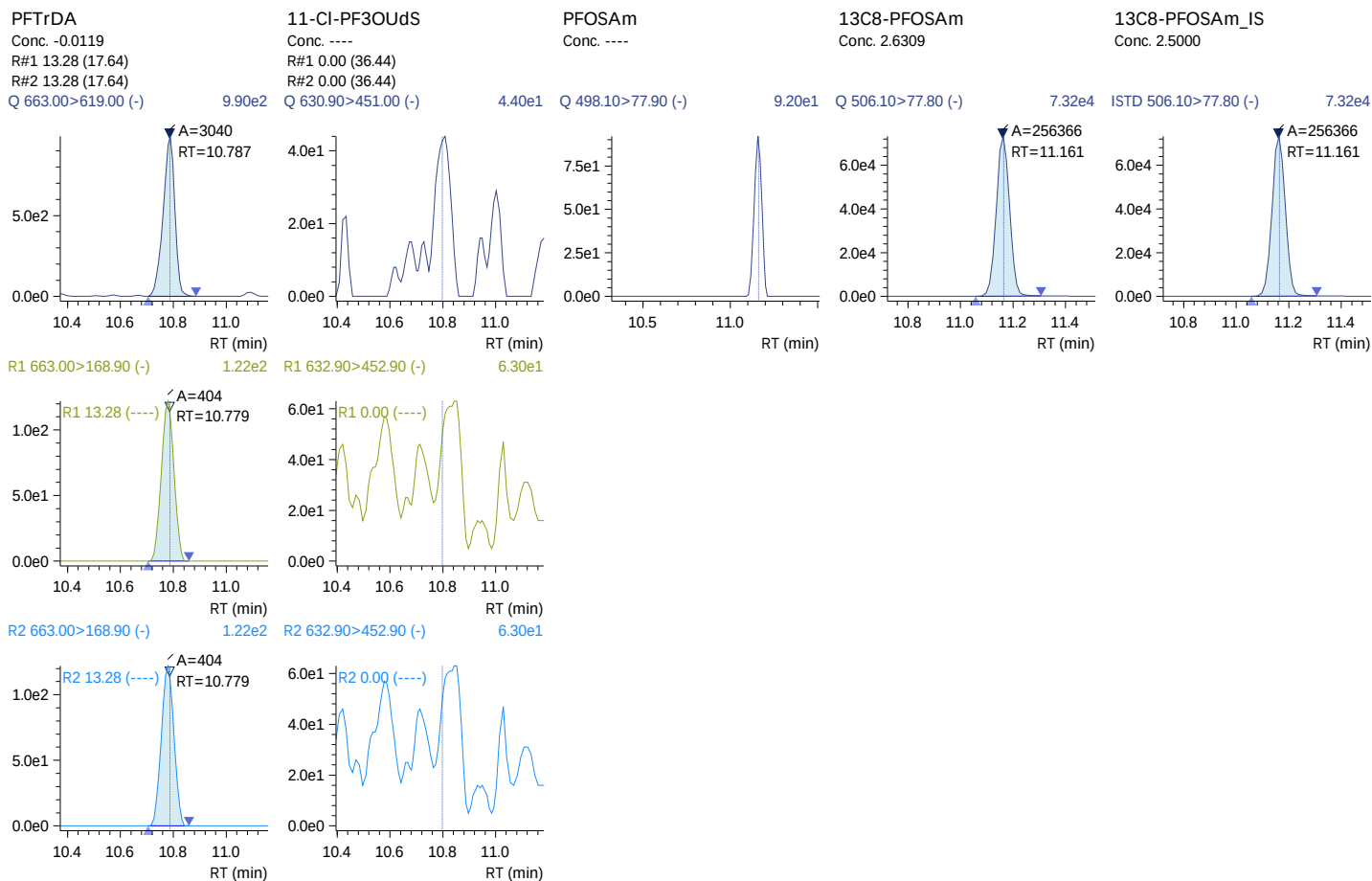


240122_006 (continued)



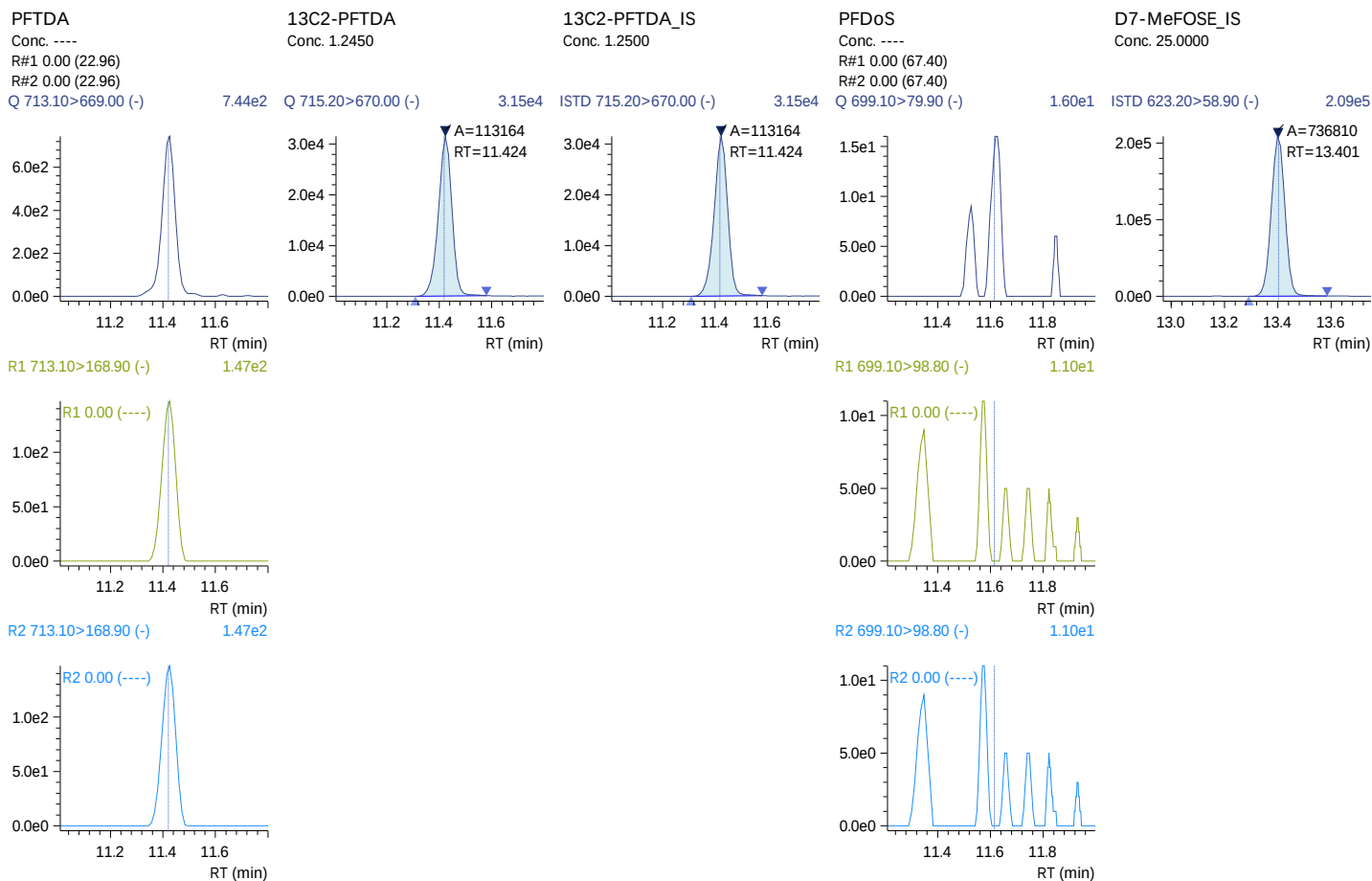


240122_006 (continued)





240122_006 (continued)





240122_006 (continued)

D7-MeFOSE
Conc. 30.6687

MeFOSE
Conc. ----

13C2-PFHxDA_IS
Conc. 2.5000

13C2-PFHxDA
Conc. 2.4952

PFHxDA
Conc. -0.0104

R#1 0.00 (13.90)

R#2 0.00 (13.90)

Q 623.20>58.90 (-)

2.09e5

Q 616.10>59.00 (-)

6.20e1

ISTD 815.00>770.05 (-)

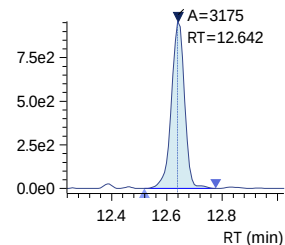
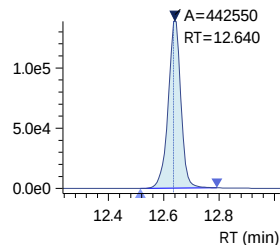
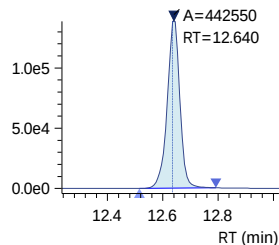
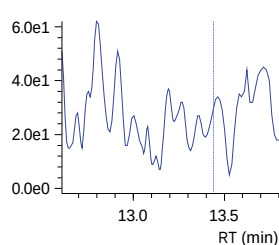
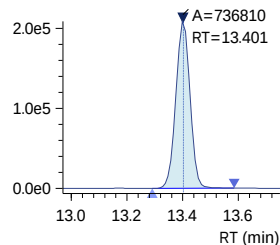
1.39e5

Q 815.00>770.05 (-)

1.39e5

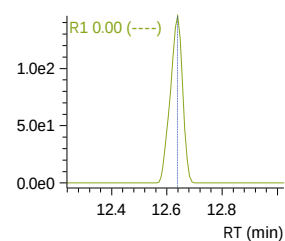
Q 813.00>768.95 (-)

9.58e2



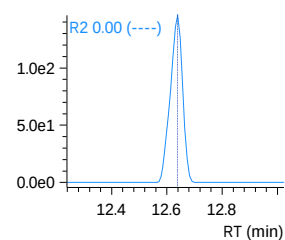
R1 813.00>218.95 (-)

1.46e2



R2 813.00>218.95 (-)

1.46e2





240122_006 (continued)

D3-MeFOSA
 Conc. 2.3710

D3-MeFOSA_IS
 Conc. 2.5000

MeFOSA
 Conc. ----
 R#1 0.00 (140.79)
 R#2 0.00 (140.79)

D9-EtFOSE_IS
 Conc. 25.0000

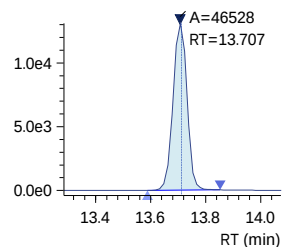
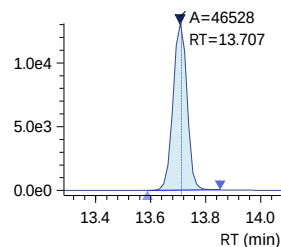
D9-EtFOSE
 Conc. 31.2845

Q 515.00>219.00 (-)

1.31e4

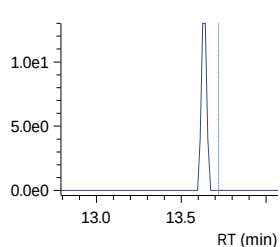
ISTD 515.00>219.00 (-)

1.31e4



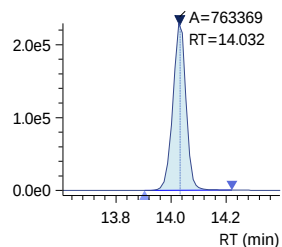
Q 511.90>219.00 (-)

1.30e1



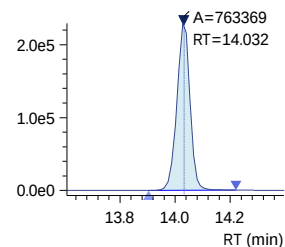
ISTD 639.20>58.90 (-)

2.29e5



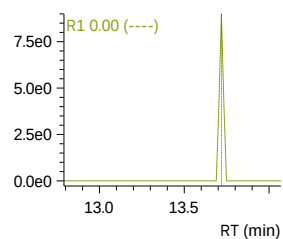
Q 639.20>58.90 (-)

2.29e5



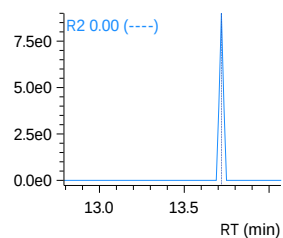
R1 511.90>169.00 (-)

9.00e0



R2 511.90>169.00 (-)

9.00e0





240122_006 (continued)

EtFOSE
Conc. ----

D5-EtFOSAm
Conc. 2.7362

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. ----

PFODA

Conc. 0.0128

R#1 41.77 (27.03)

R#2 41.77 (27.03)

Q 630.00>59.00 (-)

3.80e1

Q 531.10>219.00 (-)

2.17e4

ISTD 531.10>219.00 (-)

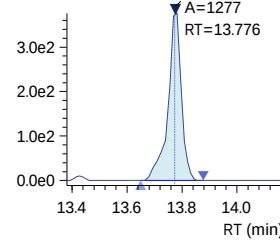
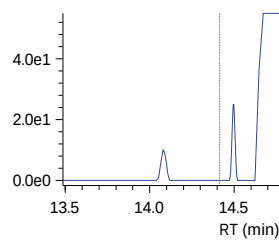
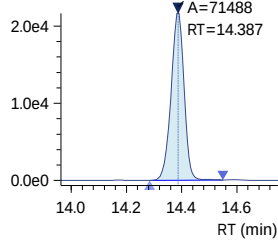
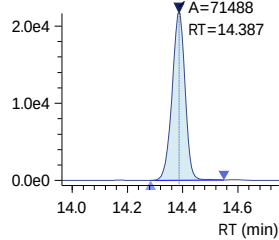
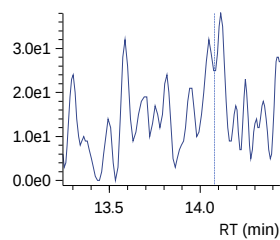
2.17e4

Q 526.00>219.00 (-)

5.50e1

Q 913.00>868.65 (-)

3.76e2

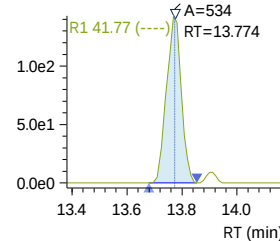
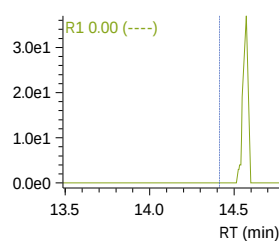


R1 526.00>169.00 (-)

3.70e1

R1 913.00>169.00 (-)

1.43e2

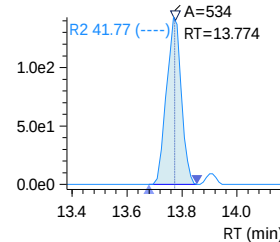
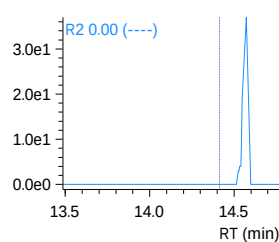


R2 526.00>169.00 (-)

3.70e1

R2 913.00>169.00 (-)

1.43e2



Validation Report

1st *PS* 01/25/24
2nd *MS* 01/25/24

Data File: J:\LCMS08\Data\240122_1633_B1\240122_012
Lab ID: KQ2401073-06
RunType: CCB
Matrix: Soil

Date Acquired: 1/22/24 14:00
Batch ID: 830573
Analysis Method: 1633/PFAS_DOD5.4

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery		X
Continuing Calibration Recovery (Closing)		X
Internal Standards		X
Surrogates	X	
Above Highest ICAL Level	X	

Primer served as CCB, all native area counts < 1/2 MRL

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Continuing Calibration Recovery	4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	137	70	130	high bias, native <MRL
	D3-MeFOSAA	134	70	130	native in control
	13C2-4:2 FTS	142	70	130	
	13C2-6:2 FTS	138	70	130	
	13C2-8:2 FTS	139	70	130	
Continuing Calibration Recovery (Closing)	4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	131	70	130	high bias, native <MRL
	D3-MeFOSAA	136	70	130	native in control
	13C2-4:2 FTS	158	70	130	
	13C2-6:2 FTS	148	70	130	
	13C2-8:2 FTS	135	70	130	
Internal Standards	18O2-PFHxS	0	69562	463748	see above
	13C4-PFOS	0	82781	551874	
	13C3-PFBA	0	175157	1167716	
	13C2-PFHxA	0	187186	1247904	
	13C4-PFOA	0	12775	85168	
	13C5-PFNA	0	92645	617636	
	13C2-PFDA	0	68039	453592	

Primary Review: _____

Secondary Review: _____

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Validation Report

1st *PS* 01/25/24
2nd *MS* 01/25/24

Data File: J:\LCMS08\Data\240122_1633_B1\240122_012
Lab ID: KQ2401073-14
RunType: CCB
Matrix: Water

Date Acquired: 1/22/24 14:00
Batch ID: 830573
Analysis Method: 1633/PFAS_DOD5.4

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery		X
Continuing Calibration Recovery (Closing)		X
Internal Standards		X
Surrogates	X	
Above Highest ICAL Level	X	

Primer served as CCB, all native area counts < 1/2 MRL

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Continuing Calibration Recovery	N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	133	70	130	see above
	13C2-4:2 FTS	149	70	130	
	13C2-6:2 FTS	158	70	130	
	13C2-8:2 FTS	142	70	130	
Continuing Calibration Recovery (Closing)	N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	136	70	130	
	D3-MeFOSAA	138	70	130	
	13C2-4:2 FTS	163	70	130	
	13C2-6:2 FTS	170	70	130	
	13C2-8:2 FTS	162	70	130	
Internal Standards	18O2-PFHxS	0	69562	463748	
	13C4-PFOS	0	82781	551874	
	13C3-PFBA	0	175157	1167716	
	13C2-PFHxA	0	187186	1247904	
	13C4-PFOA	0	12775	85168	
	13C5-PFNA	0	92645	617636	
	13C2-PFDA	0	68039	453592	

Primary Review: _____

Secondary Review: _____

Quantitation Report

Data File:	J:\LCMS08\Data\240122_1633_B1\240122_012	Instrument:	K-LCMS-08
Acqu Date:	1/22/24 14:00	Vial:	6
Run Type:	CCB	Dilution:	1
Lab ID:	KQ2401073-06	Raw Units:	ng/mL

Bottle ID:		Tier:	IV	Matrix:	Soil
Prod Code:	PFAS_DOD5.4	Collect Date:	12/6/23	Receive Date:	12/13/23

Analysis Lot:	830573	Prep Lot:		Report Group:	KQ2401073
Analysis	1633	Prep Method:			
		Prep Date:			

Title:	Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM	Calibration ID:	KC2400027
		Report List ID:	24615

Internal Standard Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Area Criteria
18O2-PFHxS	0		0	0	* LOW
13C4-PFOS	0		0	0	* LOW
13C3-PFBA	0		0	0	* LOW
13C2-PFHxA	0		0	0	* LOW
13C4-PFOA	0		0	0	* LOW
13C5-PFNA	0		0	0	* LOW
13C2-PFDA	0		0	0	* LOW

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
13C3-PFBS	0		0	ISTD Error		20 - 150	Y
13C3-PFHxS	0		0	ISTD Error		20 - 150	Y
13C8-PFOS	0		0	ISTD Error		20 - 150	Y
13C4-PFBA	0		0	ISTD Error		20 - 150	Y
13C5-PFPeA	0		0	ISTD Error		20 - 150	Y
13C5-PFHxA	0		0	ISTD Error		20 - 150	Y
13C4-PFHpA	0		0	ISTD Error		20 - 150	Y
13C8-PFOA	0		0	ISTD Error		20 - 150	Y
13C9-PFNA	0		0	ISTD Error		20 - 150	Y
13C6-PFDA	0		0	ISTD Error		20 - 150	Y
13C7-PFUnDA	0		0	ISTD Error		20 - 150	Y
13C2-PFDoDA	0		0	ISTD Error		20 - 150	Y
13C2-PFTeDA	0		0	ISTD Error		20 - 150	Y
13C8-FOSA	0		0	ISTD Error		20 - 150	Y
D3-MeFOSA	0		0	ISTD Error		20 - 150	Y
D5-EtFOSA	0		0	ISTD Error		20 - 150	Y
D7-MeFOSE	0		0	ISTD Error		20 - 150	Y
D9-EtFOSE	0		0	ISTD Error		20 - 150	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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			1st	01/25/24
Data File:	J:\LCMS08\Data\240122_1633_B1\240122_012	Instrument:	K-LCMS08	01/25/24
Acqu Date:	1/22/24 14:00	Vial:	6	
Run Type:	CCB	Dilution:	1	
Lab ID:	KQ2401073-06	Raw Units:	ng/mL	

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
D3-MeFOSAA	0		0	ISTD Error		20 - 150	Y
D5-EtFOSAA	0		0	ISTD Error		20 - 150	Y
13C2-4:2 FTS	0		0	ISTD Error		20 - 150	Y
13C2-6:2 FTS	0		0	ISTD Error		20 - 150	Y
13C2-8:2 FTS	0		0	ISTD Error		20 - 150	Y
13C3-HFPO-DA	0		0	ISTD Error		20 - 150	Y

Target Compounds

Final Conc.Units: ng/g

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Perfluorobutane sulfonic acid (PFBS)	0		0	ISTD Error	0	U	Y
Perfluoropentane sulfonic acid (PFPeS)	0		0	ISTD Error	0	U	Y
Perfluorohexane sulfonic acid (PFHxS)	0		0	ISTD Error	0	U	Y
Perfluoroheptane sulfonic acid (PFHpS)	0		0	ISTD Error	0	U	Y
Perfluorooctane sulfonic acid (PFOS)	0		0	ISTD Error	0	U	Y
Perfluorononane sulfonic acid (PFNS)	0		0	ISTD Error	0	U	Y
Perfluorodecane sulfonic acid (PFDS)	0		0	ISTD Error	0	U	Y
Perfluorododecane sulfonic acid (PFDoS)	0		0	ISTD Error	0	U	Y
Perfluorobutanoic acid (PFBA)	0		0	ISTD Error	0	U	Y
Perfluoropentanoic acid (PFPeA)	0		0	ISTD Error	0	U	Y
Perfluorohexanoic acid (PFHxA)	5.068	+0.12	1635	ISTD Error	0	U	Y
Perfluoroheptanoic acid (PFHpA)	6.203	+0.07	5129	ISTD Error	0	U	Y
Perfluorooctanoic acid (PFOA)	7.159	+0.07	3027	ISTD Error	0	U	Y
Perfluorononanoic acid (PFNA)	8.002	+0.06	3030	ISTD Error	0	U	Y
Perfluorodecanoic acid (PFDA)	8.766	+0.06	3720	ISTD Error	0	U	Y
Perfluoroundecanoic acid (PFUnDA)	9.492	+0.06	2665	ISTD Error	0	U	Y
Perfluorododecanoic acid (PFDOA)	10.179	+0.06	2801	ISTD Error	0	U	Y
Perfluorotridecanoic acid (PFTTrDA)	10.834	+0.05	2667	ISTD Error	0	U	Y
Perfluorotetradecanoic acid (PFTDA)	11.465	+0.05	2599	ISTD Error	0	U	Y
Perfluorooctane sulfonamide (PFOSAm)	11.117	-0.04	59	ISTD Error	0	U	Y
N-Methylperfluorooctane sulfonamide (MeFOSA)	0		0	ISTD Error	0	U	Y
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	0		0	ISTD Error	0	U	Y
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	0		0	ISTD Error	0	U	Y
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	14.052	-0.02	197	ISTD Error	0	U	Y
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	0		0	ISTD Error	0	U	Y

U: Undetected at or above MDL

J: Analyte detected above MDL, but below MRL

B: Hit above MRL also found in Method Blank

E: Analyte concentration above high point of ICAL

N: Presumptive evidence of compound

D: Result from dilution

m: Manual integration performed

d: Compound manually deleted

NR: Analyte not reported from this analysis

*: Result fails acceptance criteria

#: Acceptance criteria not applicable

?: Insufficient information to determine acceptance

e: Result >= MRL, but MRL less than low point of ICAL

c: check for co-elution

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			1st	01/25/24
Data File:	J:\LCMS08\Data\240122_1633_B1\240122_012	Instrument:	K-LCMS08	01/25/24
Acqu Date:	1/22/24 14:00	Vial:	6	
Run Type:	CCB	Dilution:	1	
Lab ID:	KQ2401073-06	Raw Units:	ng/mL	

Target Compounds		Final Conc.Units: ng/g				
Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q Rpt?
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	0		0	ISTD Error	0	U Y
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	0		0	ISTD Error	0	U Y
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	6.840	+0.06	849	ISTD Error	0	U Y
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	0		0	ISTD Error	0	U Y
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	0		0	ISTD Error	0	U Y
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	0		0	ISTD Error	0	U Y
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	0		0	ISTD Error	0	U Y
Perfluoro(2-ethoxyethane) sulfonic acid (PFEEESA)	0		0	ISTD Error	0	U Y
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	0		0	ISTD Error	0	U Y
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	0		0	ISTD Error	0	U Y
Perfluoro-3-methoxypropanoic acid (PFMPA)	0		0	ISTD Error	0	U Y
Perfluoro-4-methoxybutanoic acid (PFMBA)	3.997	+0.01	178	ISTD Error	0	U Y
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	0		0	ISTD Error	0	U Y
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	0		0	ISTD Error	0	U Y
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	0		0	ISTD Error	0	U Y

Data File:	J:\LCMS08\Data\240122_1633_B1\240122_012	Instrument:	K-LCMS-08
Acqu Date:	1/22/24 14:00	Vial:	23
Run Type:	CCB	Dilution:	1
Lab ID:	KQ2401073-14	Raw Units:	ng/mL
Bottle ID:		Tier:	IV
Prod Code:	PFAS_DOD5.4	Collect Date:	12/20/23
		Matrix:	Water
		Receive Date:	12/20/23
Analysis Lot:	830573	Prep Lot:	
Analysis	1633	Prep Method:	
		Prep Date:	
Report Group:	KQ2401073		
Title:	Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM	Calibration ID:	KC2400027
		Report List ID:	24615

Internal Standard Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Area Criteria
18O2-PFHxS	0		0	0	* LOW
13C4-PFOS	0		0	0	* LOW
13C3-PFBA	0		0	0	* LOW
13C2-PFHxA	0		0	0	* LOW
13C4-PFOA	0		0	0	* LOW
13C5-PFNA	0		0	0	* LOW
13C2-PFDA	0		0	0	* LOW

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
13C3-PFBS	0		0	ISTD Error		40 - 135	Y
13C3-PFHxS	0		0	ISTD Error		40 - 130	Y
13C8-PFOS	0		0	ISTD Error		40 - 130	Y
13C4-PFBA	0		0	ISTD Error		5 - 130	Y
13C5-PFPeA	0		0	ISTD Error		40 - 130	Y
13C5-PFHxA	0		0	ISTD Error		40 - 130	Y
13C4-PFHpA	0		0	ISTD Error		40 - 130	Y
13C8-PFOA	0		0	ISTD Error		40 - 130	Y
13C9-PFNA	0		0	ISTD Error		40 - 130	Y
13C6-PFDA	0		0	ISTD Error		40 - 130	Y
13C7-PFUnDA	0		0	ISTD Error		30 - 130	Y
13C2-PFDoDA	0		0	ISTD Error		10 - 130	Y
13C2-PFTeDA	0		0	ISTD Error		10 - 130	Y
13C8-FOSA	0		0	ISTD Error		40 - 130	Y
D3-MeFOSA	0		0	ISTD Error		10 - 130	Y
D5-EtFOSA	0		0	ISTD Error		10 - 130	Y
D7-MeFOSE	0		0	ISTD Error		10 - 130	Y
D9-EtFOSE	0		0	ISTD Error		10 - 130	Y

U: Undetected at or above MDL

J: Analyte detected above MDL, but below MRL

B: Hit above MRL also found in Method Blank

E: Analyte concentration above high point of ICAL

N: Presumptive evidence of compound

D: Result from dilution

m: Manual integration performed

d: Compound manually deleted

NR: Analyte not reported from this analysis

*: Result fails acceptance criteria

#: Acceptance criteria not applicable

?: Insufficient information to determine acceptance

e: Result >= MRL, but MRL less than low point of ICAL

c: check for co-elution

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\\alprews001\starlims\LIMSReps\QuantValidation.rpt

			1st	01/25/24
Data File:	J:\LCMS08\Data\240122_1633_B1\240122_012	Instrument:	K-LCMS08	01/25/24
Acqu Date:	1/22/24 14:00	Vial:	23	
Run Type:	CCB	Dilution:	1	
Lab ID:	KQ2401073-14	Raw Units:	ng/mL	

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
D3-MeFOSAA	0		0	ISTD Error		40 - 170	Y
D5-EtFOSAA	0		0	ISTD Error		25 - 135	Y
13C2-4:2 FTS	0		0	ISTD Error		40 - 200	Y
13C2-6:2 FTS	0		0	ISTD Error		40 - 200	Y
13C2-8:2 FTS	0		0	ISTD Error		40 - 300	Y
13C3-HFPO-DA	0		0	ISTD Error		40 - 130	Y

Target Compounds

Final Conc.Units: ng/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Perfluorobutane sulfonic acid (PFBS)	0		0	ISTD Error	0	U	Y
Perfluoropentane sulfonic acid (PFPeS)	0		0	ISTD Error	0	U	Y
Perfluorohexane sulfonic acid (PFHxS)	0		0	ISTD Error	0	U	Y
Perfluoroheptane sulfonic acid (PFHpS)	0		0	ISTD Error	0	U	Y
Perfluorooctane sulfonic acid (PFOS)	0		0	ISTD Error	0	U	Y
Perfluorononane sulfonic acid (PFNS)	0		0	ISTD Error	0	U	Y
Perfluorodecane sulfonic acid (PFDS)	0		0	ISTD Error	0	U	Y
Perfluorododecane sulfonic acid (PFDoS)	0		0	ISTD Error	0	U	Y
Perfluorobutanoic acid (PFBA)	0		0	ISTD Error	0	U	Y
Perfluoropentanoic acid (PFPeA)	0		0	ISTD Error	0	U	Y
Perfluorohexanoic acid (PFHxA)	5.068	+0.11	1635	ISTD Error	0	U	Y
Perfluoroheptanoic acid (PFHpA)	6.203	+0.06	5129	ISTD Error	0	U	Y
Perfluorooctanoic acid (PFOA)	7.159	+0.06	3027	ISTD Error	0	U	Y
Perfluorononanoic acid (PFNA)	8.002	+0.05	3030	ISTD Error	0	U	Y
Perfluorodecanoic acid (PFDA)	8.766	+0.05	3720	ISTD Error	0	U	Y
Perfluoroundecanoic acid (PFUnDA)	9.492	+0.05	2665	ISTD Error	0	U	Y
Perfluorododecanoic acid (PFDOA)	10.179	+0.05	2801	ISTD Error	0	U	Y
Perfluorotridecanoic acid (PFTTrDA)	10.834	+0.05	2667	ISTD Error	0	U	Y
Perfluorotetradecanoic acid (PFTDA)	11.465	+0.04	2599	ISTD Error	0	U	Y
Perfluorooctane sulfonamide (PFOSAm)	11.117	-0.05	59	ISTD Error	0	U	Y
N-Methylperfluorooctane sulfonamide (MeFOSA)	0		0	ISTD Error	0	U	Y
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	0		0	ISTD Error	0	U	Y
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	0		0	ISTD Error	0	U	Y
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	14.052	-0.02	197	ISTD Error	0	U	Y
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	0		0	ISTD Error	0	U	Y

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E: Analyte concentration above high point of ICAL

N: Presumptive evidence of compound

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d: Compound manually deleted

NR: Analyte not reported from this analysis

*: Result fails acceptance criteria

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?: Insufficient information to determine acceptance

e: Result >= MRL, but MRL less than low point of ICAL

c: check for co-elution

Printed: 1/25/24 15:28

\\alprews001\starlims\LIMSReps\QuantValidation.rpt

		1st	PS	01/25/24
Data File:	J:\LCMS08\Data\240122_1633_B1\240122_012	Instrument:	K-LCMS08	MS 01/25/24
Acqu Date:	1/22/24 14:00	Vial:	23	
Run Type:	CCB	Dilution:	1	
Lab ID:	KQ2401073-14	Raw Units:	ng/mL	

Target Compounds

Final Conc.Units: ng/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	0		0	ISTD Error	0	U	Y
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	0		0	ISTD Error	0	U	Y
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	6.840	+0.06	849	ISTD Error	0	U	Y
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	0		0	ISTD Error	0	U	Y
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	0		0	ISTD Error	0	U	Y
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	0		0	ISTD Error	0	U	Y
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	0		0	ISTD Error	0	U	Y
Perfluoro(2-ethoxyethane) sulfonic acid (PFEEESA)	0		0	ISTD Error	0	U	Y
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	0		0	ISTD Error	0	U	Y
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	0		0	ISTD Error	0	U	Y
Perfluoro-3-methoxypropanoic acid (PFMPA)	0		0	ISTD Error	0	U	Y
Perfluoro-4-methoxybutanoic acid (PFMBA)	3.997	+0.01	178	ISTD Error	0	U	Y
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	0		0	ISTD Error	0	U	Y
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	0		0	ISTD Error	0	U	Y
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	0		0	ISTD Error	0	U	Y

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N: Presumptive evidence of compound

D: Result from dilution

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*: Result fails acceptance criteria

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?: Insufficient information to determine acceptance

e: Result >= MRL, but MRL less than low point of ICAL

c: check for co-elution

Printed: 1/25/24 15:28

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240122_012

Sample ID: PRIMER
Date Acquired: 1/22/2024 2:00:54 PM
Acquired by: System Administrator
Data File: 240122_012
Vial: 46 | Inj. Volume: 10.0000uL | Tray: 1

Serves as blank before batch, all area counts < 1/2 MRL

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C4-PFBA	ND(W/B)	----	----	----	----	----	13C3-PFBA_IS	ISTD Error	ng/mL	
13C4-PFBA_IS	ND(W/B)	----	----	----	----	----		----	ng/mL	
13C3-PFBA_IS	ND(W/B)	----	----	----	----	----		----	ng/mL	
PFBA	ND(W/B)	----	----	----	----	----	13C4-PFBA_IS	ISTD Error	ng/mL	
PFMPA	ND(W/B)	----	----	----	----	----	13C5-PFPeA_IS	ISTD Error	ng/mL	
3_3 FTCA	ND(W/B)	----	----	----	----	----	13C5-PFPeA_IS	ISTD Error	ng/mL	
13C5-PFPeA	ND(W/B)	----	----	----	----	----	13C2-PFHxA_IS	ISTD Error	ng/mL	
13C5-PFPeA_IS	ND(W/B)	----	----	----	----	----		----	ng/mL	
PFPeA	ND(W/B)	----	----	----	----	----	13C5-PFPeA_IS	ISTD Error	ng/mL	
PFMBA	M	3.997	0.006	----	178	----	13C5-PFPeA_IS	ISTD Error	ng/mL	
13C2-4_2 FTS	ND(W/B)	----	----	----	----	----	18O2-PFHxS_IS	ISTD Error	ng/mL	
13C2-4_2 FTS_IS	ND(W/B)	----	----	----	----	----		----	ng/mL	
4_2 FTS	ND(W/B)	----	----	----	----	----	13C2-4_2 FTS_IS	ISTD Error	ng/mL	
13C3-PFBS_IS	ND(W/B)	----	----	----	----	----		----	ng/mL	
PFBS	ND(W/B)	----	----	----	----	----	13C3-PFBS_IS	ISTD Error	ng/mL	
13C3-PFBS	ND(W/B)	----	----	----	----	----	18O2-PFHxS_IS	ISTD Error	ng/mL	
NFDHA	ND(W/B)	----	----	----	----	----	13C5-PFHxA_IS	ISTD Error	ng/mL	
13C5-PFHxA	ND(W/B)	----	----	----	----	----	13C2-PFHxA_IS	ISTD Error	ng/mL	
13C5-PFHxA_IS	ND(W/B)	----	----	----	----	----		----	ng/mL	
13C2-PFHxA_IS	ND(W/B)	----	----	----	----	----		----	ng/mL	
PFHxA	M	5.068	0.114	----	1635	----	13C5-PFHxA_IS	ISTD Error	ng/mL	
PFEESA	ND(W/B)	----	----	----	----	----	13C5-PFHxA_IS	ISTD Error	ng/mL	
13C3-HFPO-DA	ND(W/B)	----	----	----	----	----	13C2-PFHxA_IS	ISTD Error	ng/mL	
13C3-HFPO-DA_IS	ND(W/B)	----	----	----	----	----		----	ng/mL	
HFPO-DA	ND(W/B)	----	----	----	----	----	13C3-HFPO-DA_IS	ISTD Error	ng/mL	
5_3 FTCA	ND(W/B)	----	----	----	----	----	13C5-PFHxA_IS	ISTD Error	ng/mL	
PFPeS	ND(W/B)	----	----	----	----	----	13C3-PFHxS_IS	ISTD Error	ng/mL	
13C4-PFHpA	ND(W/B)	----	----	----	----	----	13C2-PFHxA_IS	ISTD Error	ng/mL	
13C4-PFHpA_IS	ND(W/B)	----	----	----	----	----		----	ng/mL	
PFHpA	M	6.203	0.064	----	5129	----	13C4-PFHpA_IS	ISTD Error	ng/mL	
DONA	ND(W/B)	----	----	----	----	----	13C3-HFPO-DA_IS	ISTD Error	ng/mL	
13C2-6_2 FTS_IS	ND(W/B)	----	----	----	----	----		----	ng/mL	
13C2-6_2 FTS	ND(W/B)	----	----	----	----	----	18O2-PFHxS_IS	ISTD Error	ng/mL	
6_2 FTS	M	6.840	0.059	----	849	----	13C2-6_2 FTS_IS	ISTD Error	ng/mL	
13C4-PFOA_IS	ND(W/B)	----	----	----	----	----		----	ng/mL	
13C8-PFOA_IS	ND(W/B)	----	----	----	----	----		----	ng/mL	
13C8-PFOA	ND(W/B)	----	----	----	----	----	13C4-PFOA_IS	ISTD Error	ng/mL	
PFOA	M	7.159	0.061	----	3027	----	13C8-PFOA_IS	ISTD Error	ng/mL	
13C3-PFHxS	ND(W/B)	----	----	----	----	----	18O2-PFHxS_IS	ISTD Error	ng/mL	
13C3-PFHxS_IS	ND(W/B)	----	----	----	----	----		----	ng/mL	
PFHxS	ND(W/B)	----	----	----	----	----	13C3-PFHxS_IS	ISTD Error	ng/mL	
18O2-PFHxS_IS	ND(W/B)	----	----	----	----	----		----	ng/mL	
13C9-PFNA_IS	ND(W/B)	----	----	----	----	----		----	ng/mL	
13C9-PFNA	ND(W/B)	----	----	----	----	----	13C5-PFNA_IS	ISTD Error	ng/mL	
13C5-PFNA_IS	ND(W/B)	----	----	----	----	----		----	ng/mL	
PFNA	M	8.002	0.054	----	3030	----	13C9-PFNA_IS	ISTD Error	ng/mL	
PFHpS	ND(W/B)	----	----	----	----	----	13C8-PFOS_IS	ISTD Error	ng/mL	
7_3 FTCA	ND(W/B)	----	----	----	----	----	13C5-PFHxA_IS	ISTD Error	ng/mL	
13C2-8_2-FTS	ND(W/B)	----	----	----	----	----	18O2-PFHxS_IS	ISTD Error	ng/mL	
13C2-8_2-FTS_IS	ND(W/B)	----	----	----	----	----		----	ng/mL	
8_2 FTS	ND(W/B)	----	----	----	----	----	13C2-8_2-FTS_IS	ISTD Error	ng/mL	
13C6-PFDA_IS	ND(W/B)	----	----	----	----	----		----	ng/mL	
13C6-PFDA	ND(W/B)	----	----	----	----	----	13C2-PFDA_IS	ISTD Error	ng/mL	

J:\LCMS08\Data\240122_1633_B1\240122_1633_B1.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_012 (continued)

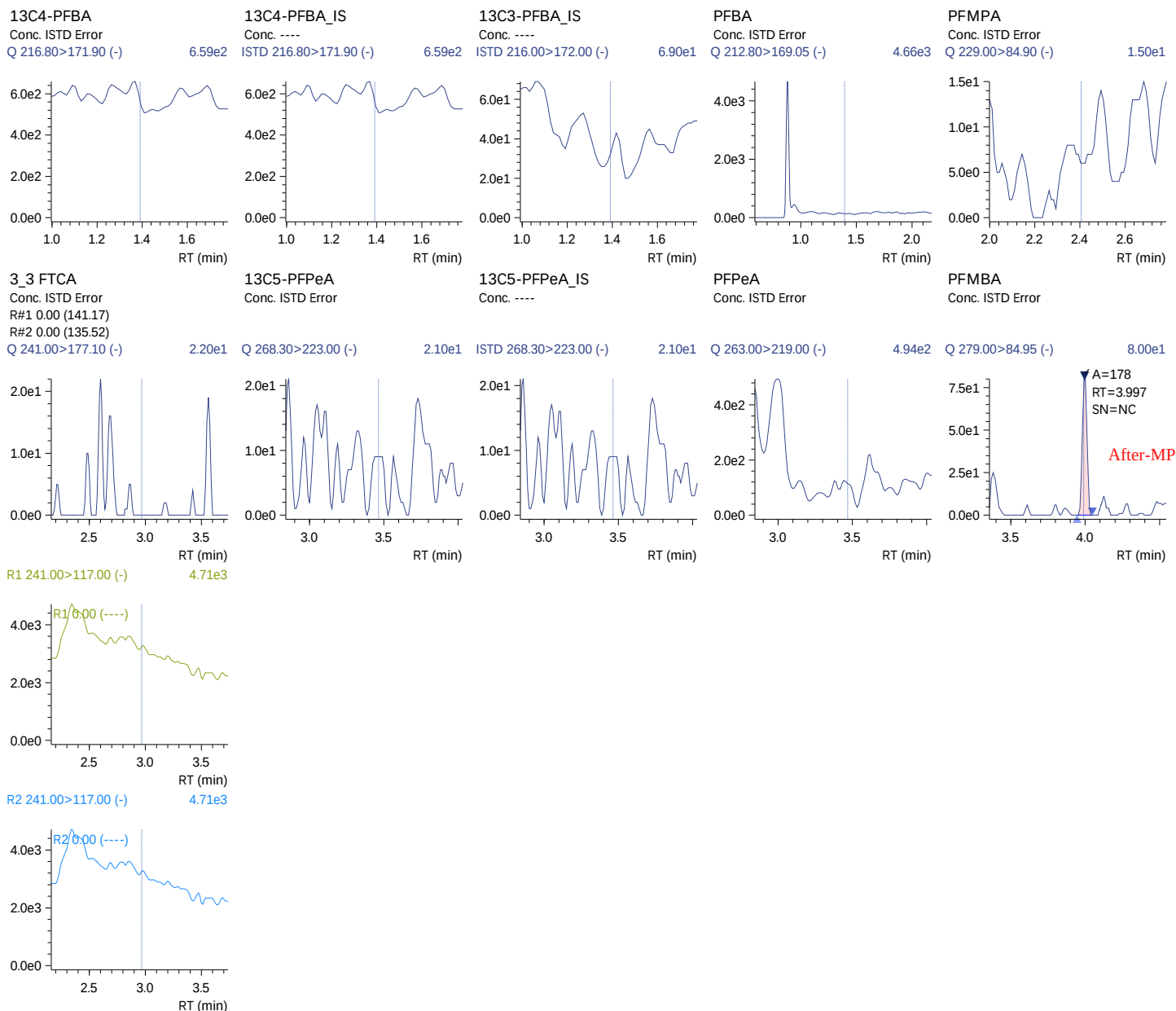
(Table continued from previous page)

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C2-PFDA_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
PFDA	Auto	8.766	0.051	----	3720	----	13C6-PFDA_IS	ISTD Error	ng/mL	
D3-NMeFOSAA_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
D3-NMeFOSAA	ND(W/B)	----	----	----	----	----	13C4-PFOS_IS	ISTD Error	ng/mL	
13C8-PFOS_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
13C8-PFOS	ND(W/B)	----	----	----	----	----	13C4-PFOS_IS	ISTD Error	ng/mL	
13C4-PFOS_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
PFOS	ND(W/B)	----	----	----	----	----	13C8-PFOS_IS	ISTD Error	ng/mL	
NMeFOSAA	ND(W/B)	----	----	----	----	----	D3-NMeFOSAA_IS	ISTD Error	ng/mL	
D5-NetFOSAA_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
D5-NetFOSAA	ND(W/B)	----	----	----	----	----	13C4-PFOS_IS	ISTD Error	ng/mL	
NetFOSAA	ND(W/B)	----	----	----	----	----	D5-NetFOSAA_IS	ISTD Error	ng/mL	
9-CI-PF3ONS	ND(W/B)	----	----	----	----	----	13C3-HFPO-DA_IS	ISTD Error	ng/mL	
PFUnDA	M	9.492	0.052	----	2665	----	13C7-PFUnDA_IS	ISTD Error	ng/mL	IRr
13C7-PFUnDA_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
13C7-PFUnDA	ND(W/B)	----	----	----	----	----	13C2-PFDA_IS	ISTD Error	ng/mL	
PFNS	ND(W/B)	----	----	----	----	----	13C8-PFOS_IS	ISTD Error	ng/mL	
10_2_FTS	ND(W/B)	----	----	----	----	----	13C2-8_2-FTS_IS	ISTD Error	ng/mL	
13C2-PFDOA_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
13C2-PFDOA	ND(W/B)	----	----	----	----	----	13C2-PFDA_IS	ISTD Error	ng/mL	
PFDOA	M	10.179	0.050	----	2801	----	13C2-PFDOA_IS	ISTD Error	ng/mL	
PFDS	ND(W/B)	----	----	----	----	----	13C8-PFOS_IS	ISTD Error	ng/mL	
PFTDA	Auto	10.834	0.046	----	2667	----	13C2-PFTDA_IS	ISTD Error	ng/mL	
11-CI-PF3OUdS	ND(W/B)	----	----	----	----	----	13C3-HFPO-DA_IS	ISTD Error	ng/mL	
PFOSAm	M	11.117	-0.045	----	59	----	13C8-PFOSAm_IS	ISTD Error	ng/mL	
13C8-PFOSAm	ND(W/B)	----	----	----	----	----	13C4-PFOS_IS	ISTD Error	ng/mL	
13C8-PFOSAm_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
PFTDA	M	11.465	0.044	----	2599	----	13C2-PFTDA_IS	ISTD Error	ng/mL	
13C2-PFTDA	ND(W/B)	----	----	----	----	----	13C2-PFDA_IS	ISTD Error	ng/mL	
13C2-PFTDA_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
PFDoS	ND(W/B)	----	----	----	----	----	13C8-PFOS_IS	ISTD Error	ng/mL	
D7-MeFOSE_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
D7-MeFOSE	ND(W/B)	----	----	----	----	----	13C4-PFOS_IS	ISTD Error	ng/mL	
MeFOSE	ND(W/B)	----	----	----	----	----	D7-MeFOSE_IS	ISTD Error	ng/mL	
13C2-PFHXA_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
13C2-PFHXA	ND(W/B)	----	----	----	----	----	13C2-PFDA_IS	ISTD Error	ng/mL	
PFHXDA	M	12.675	0.038	----	2257	----	13C2-PFHXA_IS	ISTD Error	ng/mL	
D3-MeFOSA	ND(W/B)	----	----	----	----	----	13C4-PFOS_IS	ISTD Error	ng/mL	
D3-MeFOSA_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
MeFOSA	ND(W/B)	----	----	----	----	----	D3-MeFOSA_IS	ISTD Error	ng/mL	
D9-EtFOSE_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
D9-EtFOSE	ND(W/B)	----	----	----	----	----	13C4-PFOS_IS	ISTD Error	ng/mL	
EtFOSE	M	14.052	-0.024	----	197	----	D9-EtFOSE_IS	ISTD Error	ng/mL	
D5-EtFOSAm	ND(W/B)	----	----	----	----	----	13C4-PFOS_IS	ISTD Error	ng/mL	
D5-EtFOSAm_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
EtFOSAm	ND(W/B)	----	----	----	----	----	D5-EtFOSAm_IS	ISTD Error	ng/mL	
PFODA	Auto	13.803	0.029	----	1572	----	13C2-PFHXA_IS	ISTD Error	ng/mL	

Flag ID key: IRr: Ion Ratio (Relative)



240122_012 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_012 (continued)

13C2-4_2 FTS
Conc. ISTD Error

13C2-4_2 FTS_IS
Conc. ----

4_2 FTS
Conc. ISTD Error
R#1 0.00 (29.06)
R#2 0.00 (35.34)

13C3-PFBS_IS
Conc. ----

PFBS
Conc. ISTD Error
R#1 0.00 (46.72)
R#2 0.00 (49.78)

Q 329.10>80.90 (-)

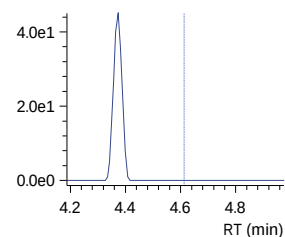
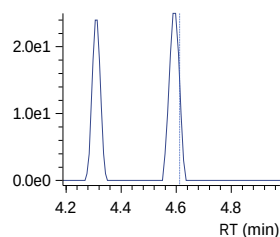
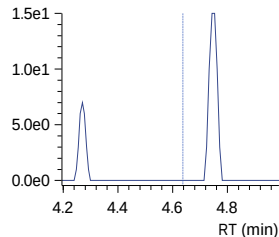
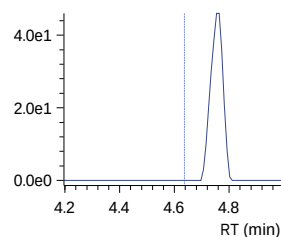
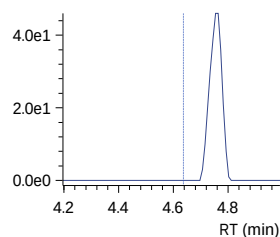
4.60e1 ISTD 329.10>80.90 (-)

4.60e1 Q 327.10>307.00 (-)

1.50e1 ISTD 302.10>79.90 (-)

2.50e1 Q 298.70>79.90 (-)

4.50e1

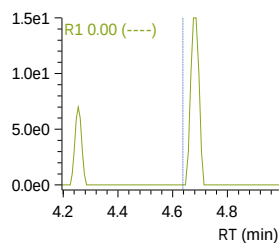


R1 327.10>80.90 (-)

1.50e1

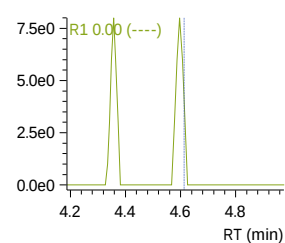
R1 298.70>98.80 (-)

8.00e0



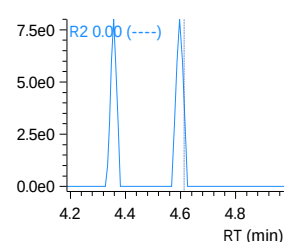
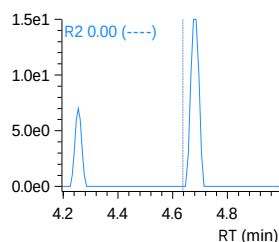
R2 327.10>80.90 (-)

1.50e1



R2 298.70>98.80 (-)

8.00e0

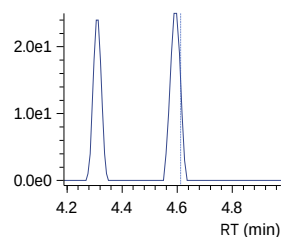




240122_012 (continued)

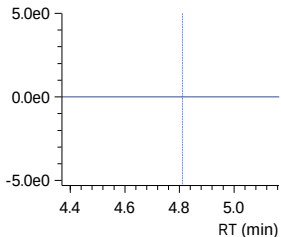
13C3-PFBS
 Conc. ISTD Error

Q 302.10>79.90 (-)



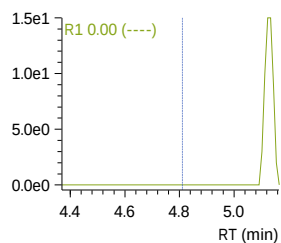
NFDHA
 Conc. ISTD Error
 R#1 0.00 (40.25)
 R#2 0.00 (37.18)

Q 295.00>201.00 (-)



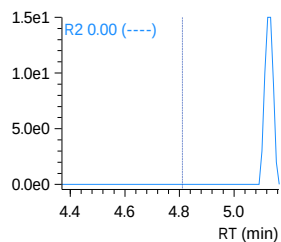
R1 295.00>84.90 (-)

1.50e1



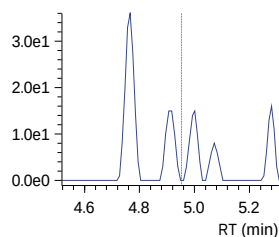
R2 295.00>84.90 (-)

1.50e1



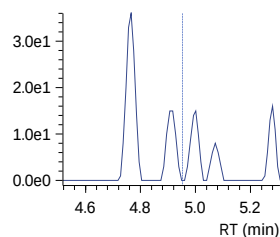
13C5-PFHxA
 Conc. ISTD Error

Q 318.00>273.00 (-)



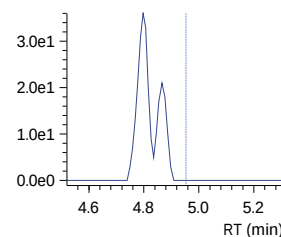
13C5-PFHxA_IS
 Conc. ----

ISTD 318.00>273.00 (-)



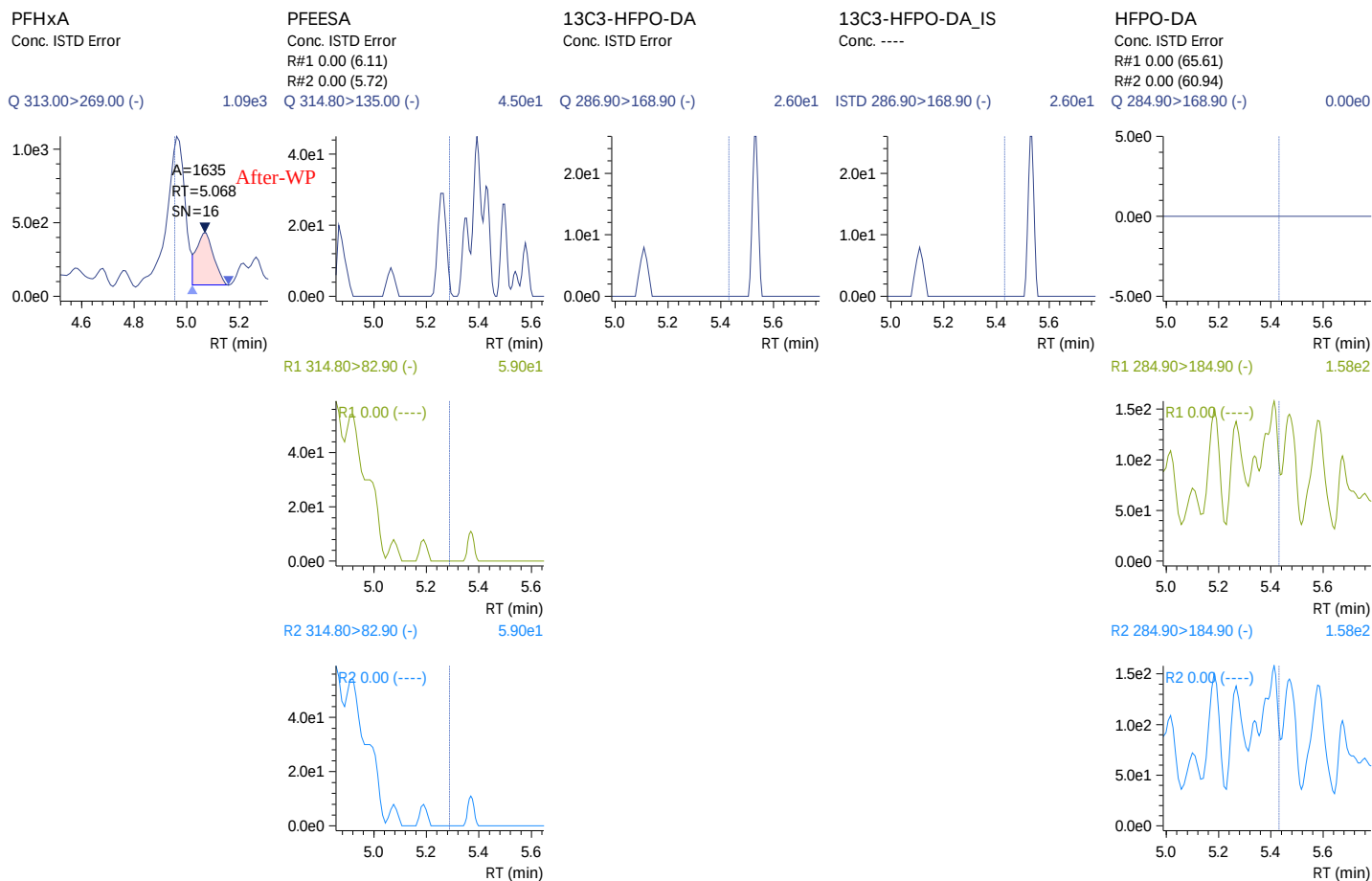
13C2-PFHxA_IS
 Conc. ----

ISTD 315.10>270.00 (-)





240122_012 (continued)



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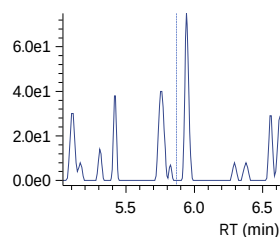
SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



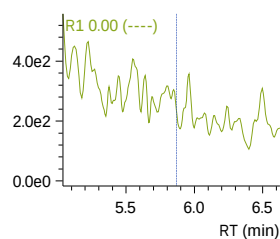
240122_012 (continued)

5_3 FTCA

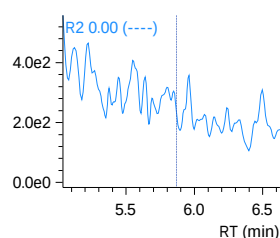
Conc. ISTD Error
R#1 0.00 (158.86)
R#2 0.00 (155.83)
Q 341.00>237.05 (-)



R1 341.00>217.00 (-)

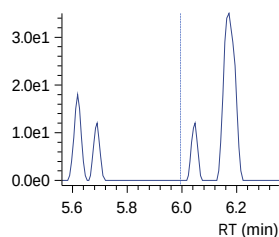


R2 341.00>217.00 (-)

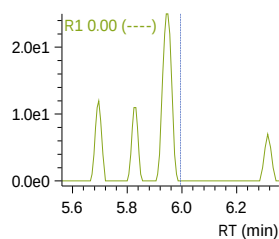


PFPeS

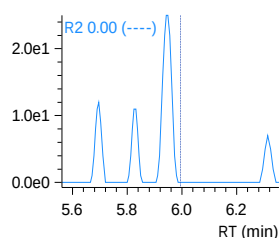
Conc. ISTD Error
R#1 0.00 (55.80)
R#2 0.00 (56.73)
Q 349.10>79.90 (-)



R1 349.10>98.80 (-)

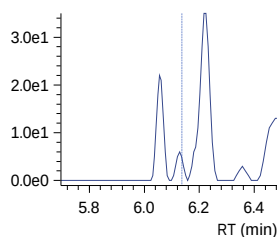


R2 349.10>98.80 (-)



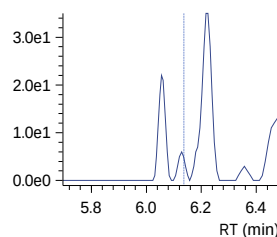
13C4-PFHpA

Conc. ISTD Error
Q 367.10>322.00 (-)



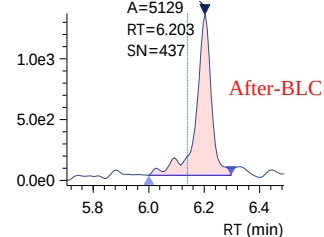
13C4-PFHpA_IS

Conc. ----
ISTD 367.10>322.00 (-)

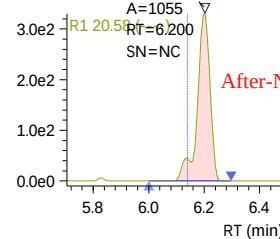


PFHpA

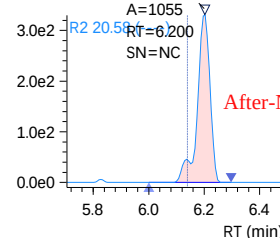
Conc. ISTD Error
R#1 20.58 (21.50)
R#2 20.58 (21.92)
Q 363.10>319.00 (-)



R1 363.10>169.00 (-)

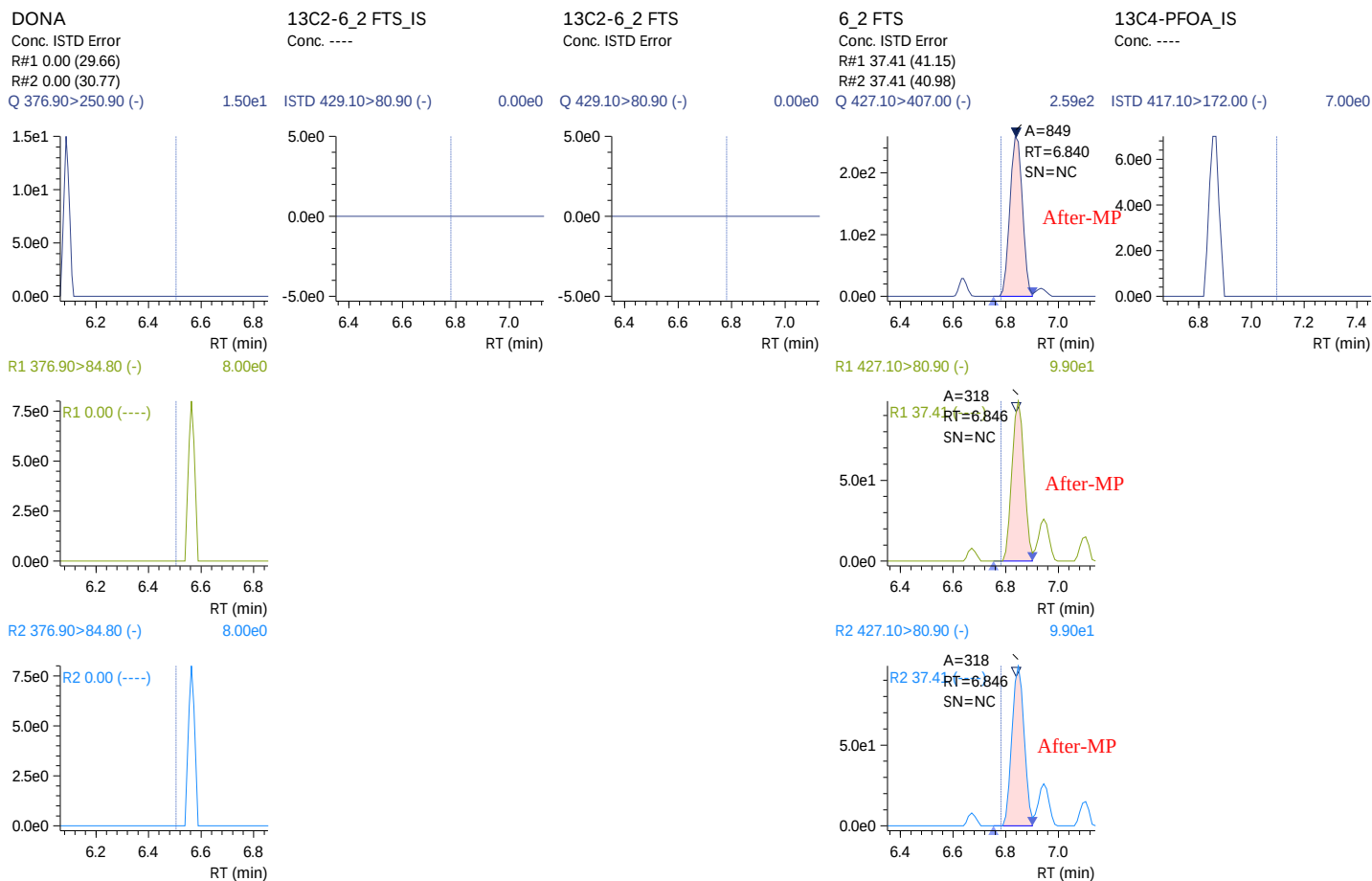


R2 363.10>169.00 (-)





240122_012 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_012 (continued)

13C8-PFOA_IS
Conc. ----

13C8-PFOA
Conc. ISTD Error

PFOA
Conc. ISTD Error
R#1 17.89 (31.89)
R#2 17.89 (32.23)

13C3-PFHxS
Conc. ISTD Error

13C3-PFHxS_IS
Conc. ----

ISTD 421.10>376.00 (-)

5.90e1

Q 421.10>376.00 (-)

5.90e1

Q 413.00>369.00 (-)

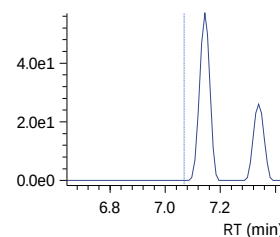
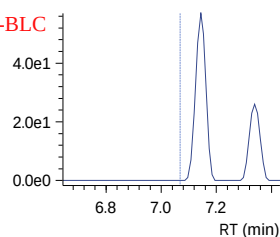
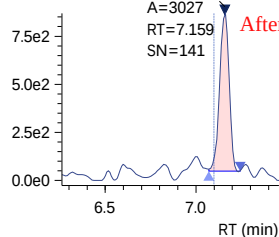
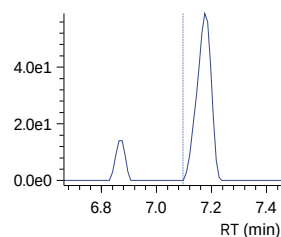
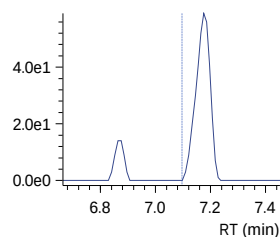
8.69e2

Q 402.10>79.90 (-)

5.70e1

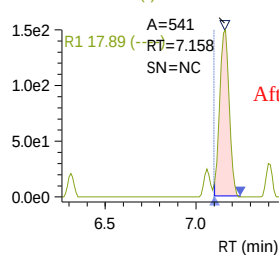
ISTD 402.10>79.90 (-)

5.70e1



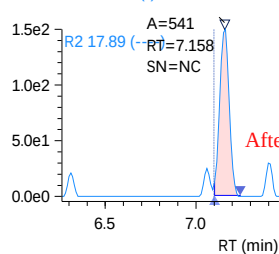
R1 413.00>169.00 (-)

1.50e2



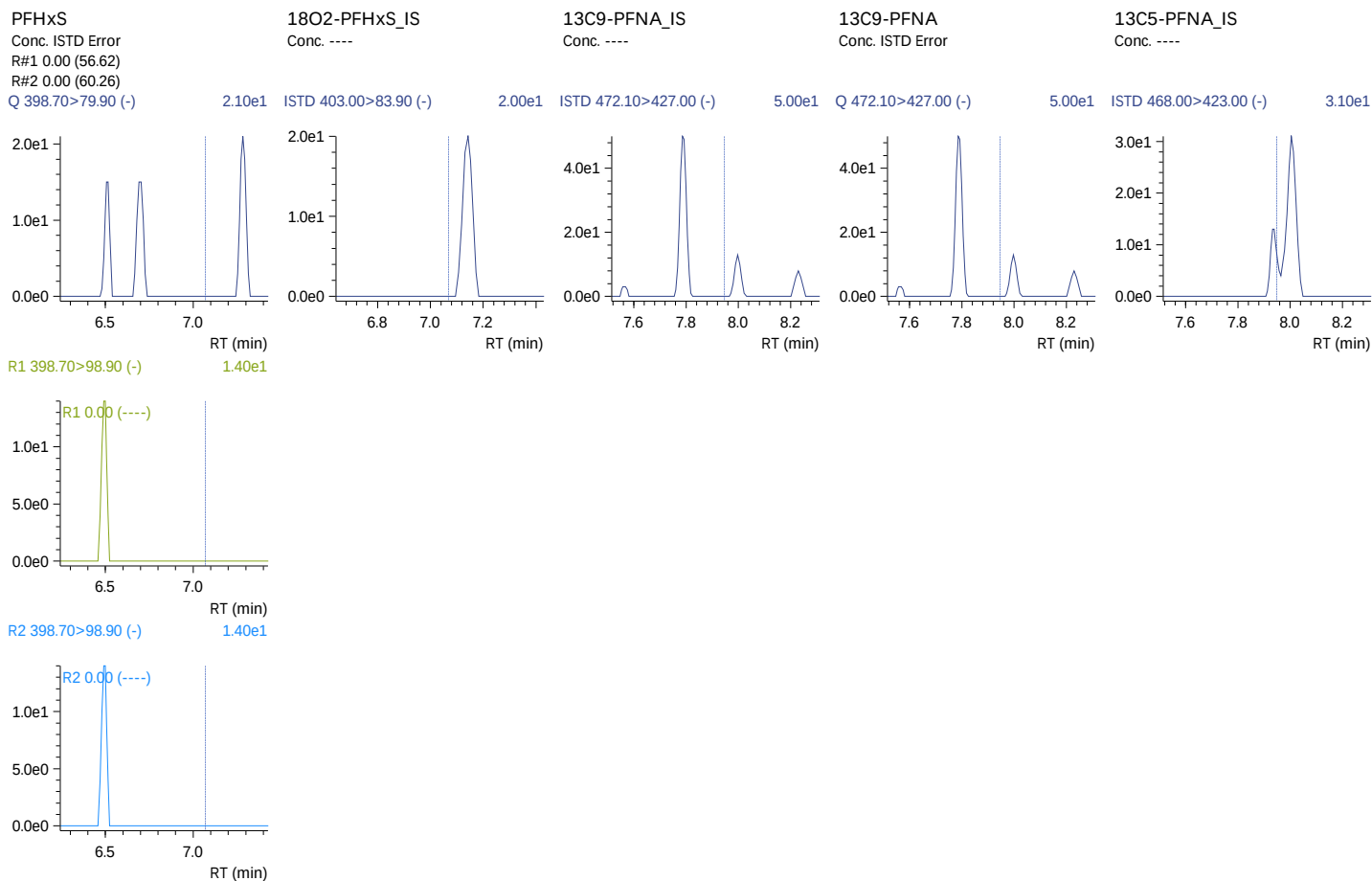
R2 413.00>169.00 (-)

1.50e2



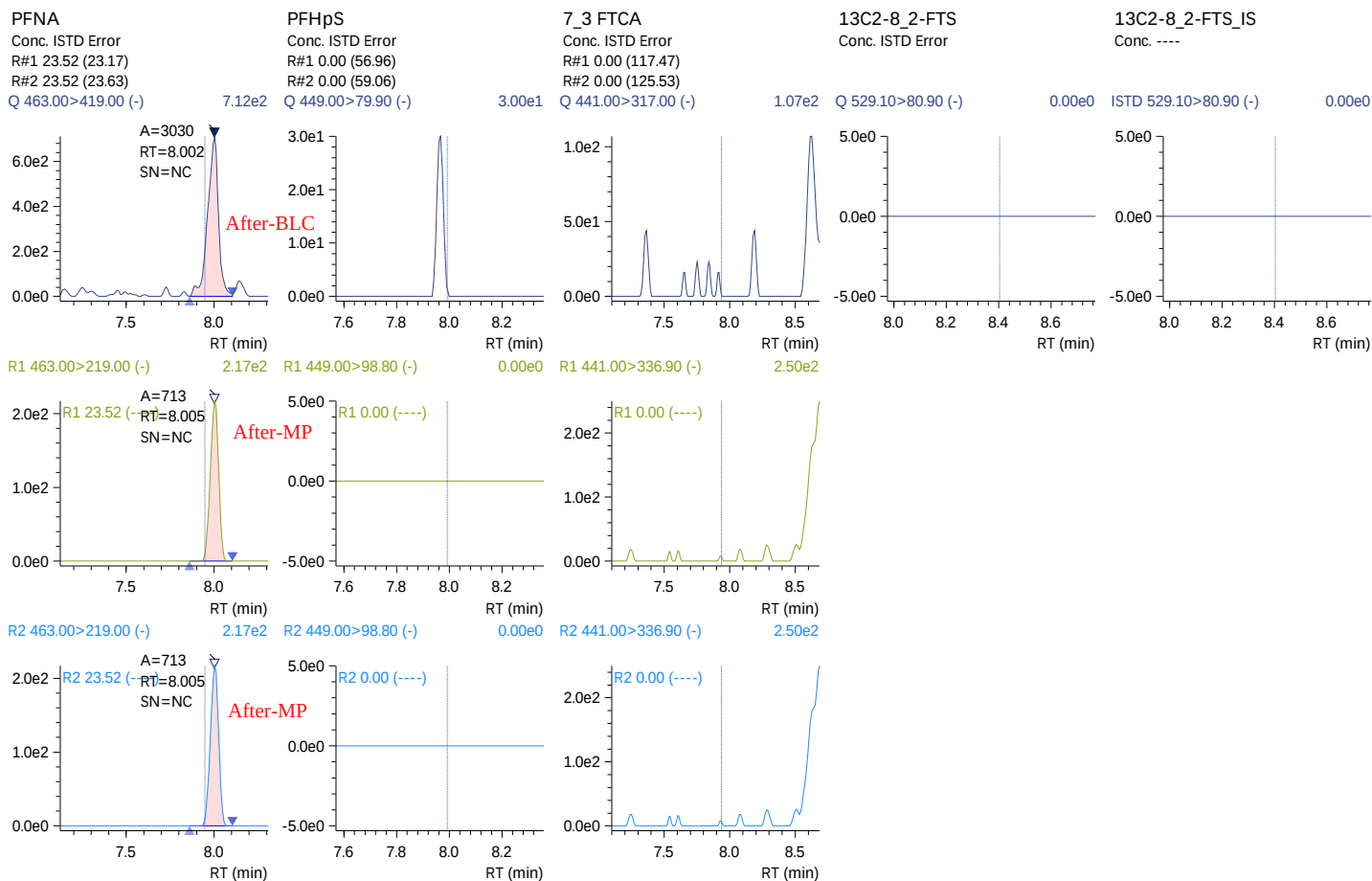


240122_012 (continued)





240122_012 (continued)

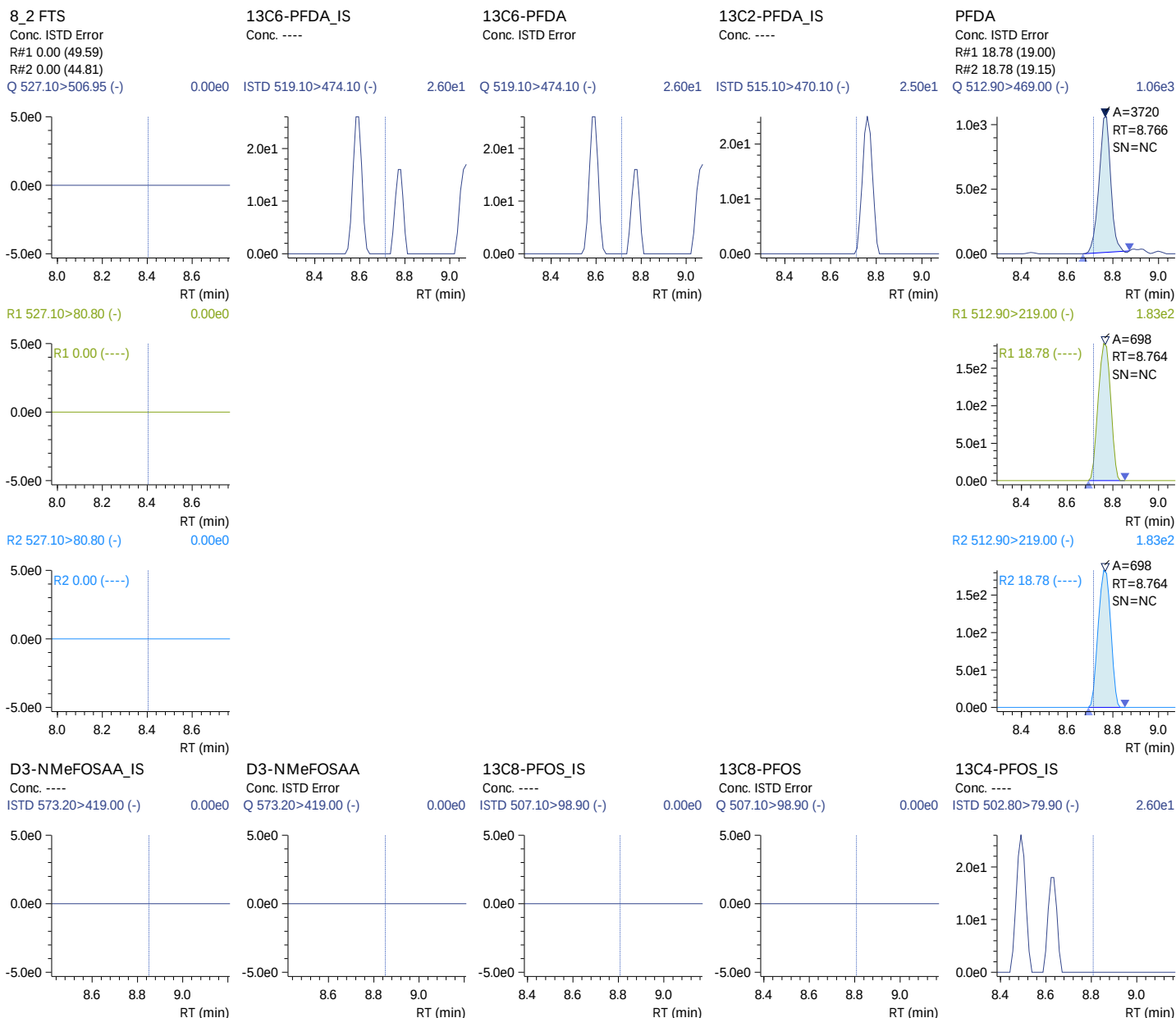


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_012 (continued)

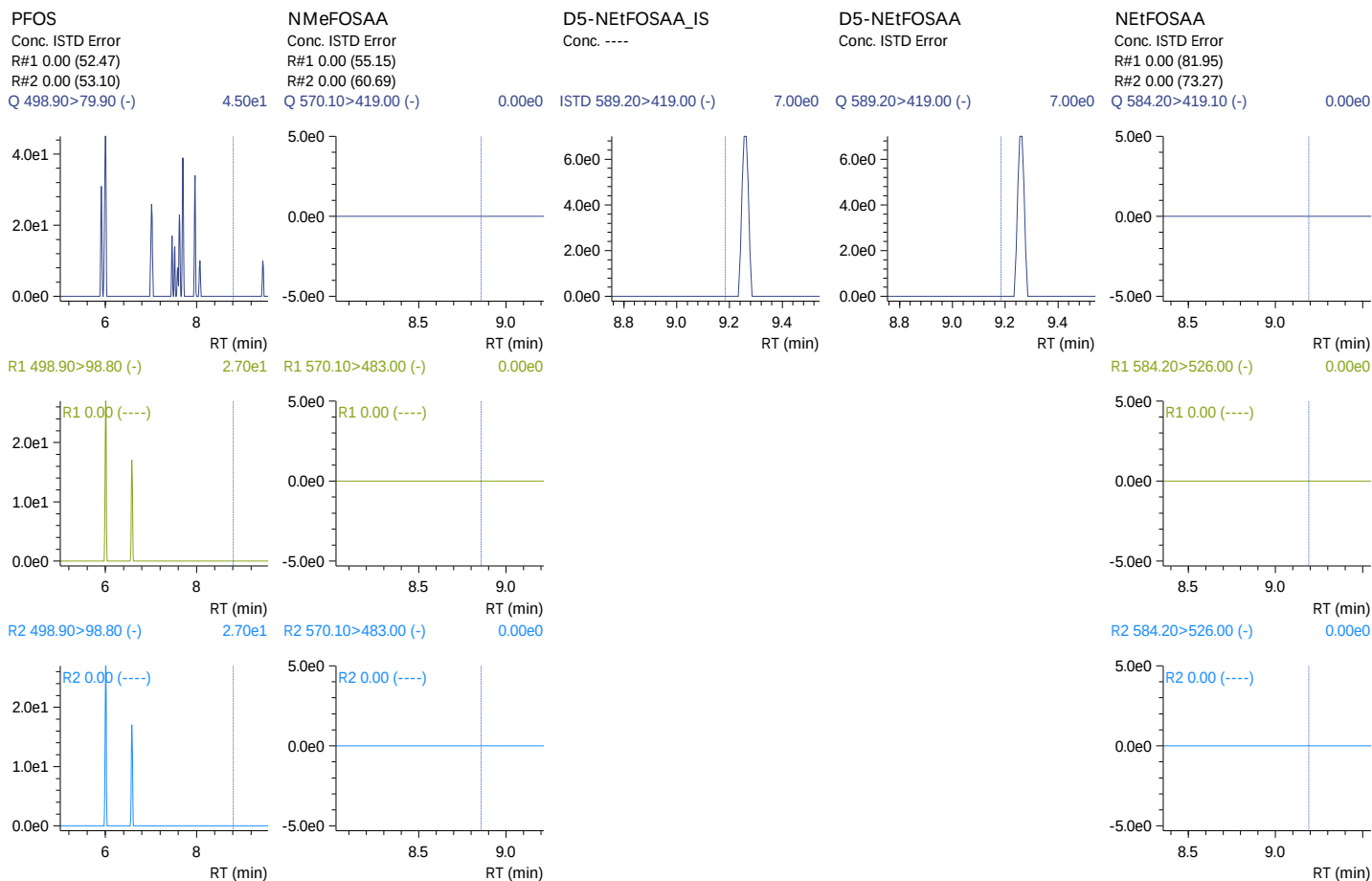


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_012 (continued)



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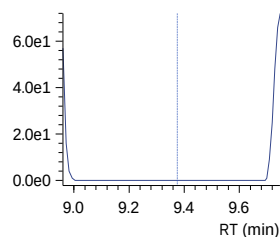
SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_012 (continued)

9-Cl-PF3ONS

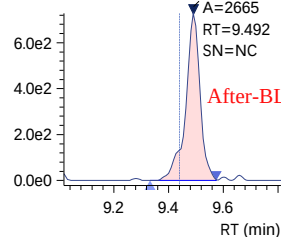
Conc. ISTD Error
R#1 0.00 (32.76)
R#2 0.00 (32.59)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-)

PFUnDA

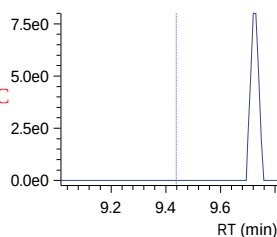
Conc. ISTD Error
R#1 6.37 (13.12)
R#2 6.37 (14.36)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-)

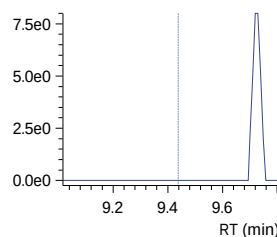
13C7-PFUnDA_IS

Conc. ----



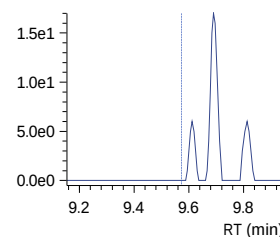
13C7-PFUnDA

Conc. ISTD Error

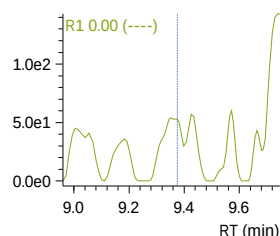


PFNS

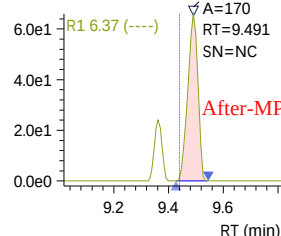
Conc. ISTD Error
R#1 0.00 (65.22)
R#2 0.00 (65.31)
Q 548.80>79.90 (-)



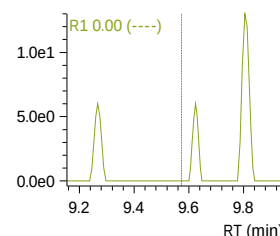
R1 548.80>98.80 (-)



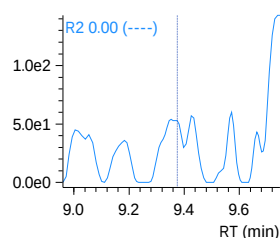
R2 532.80>353.00 (-)



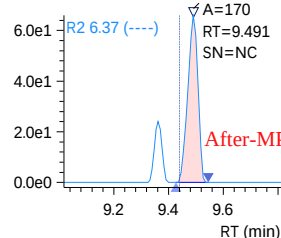
R2 563.10>269.10 (-)



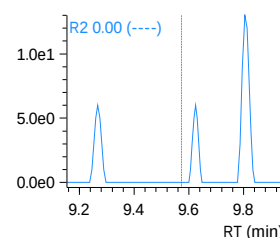
R2 548.80>98.80 (-)



R2 532.80>353.00 (-)



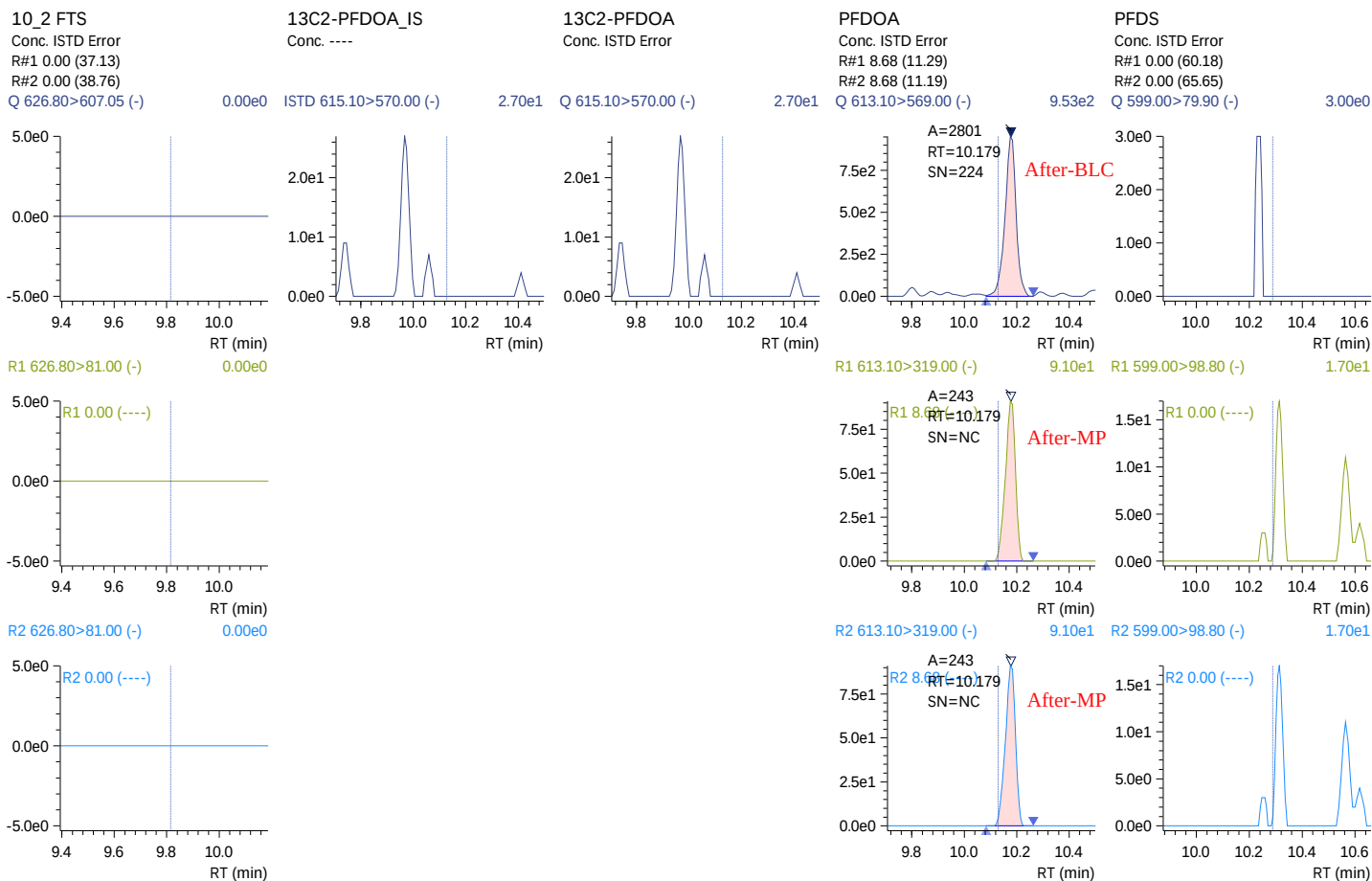
R2 563.10>269.10 (-)



R2 548.80>98.80 (-)



240122_012 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_012 (continued)

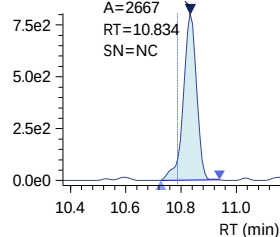
PFTTrDA

Conc. ISTD Error

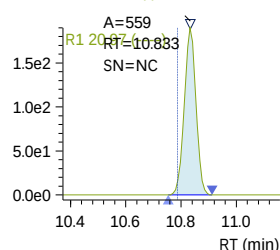
R#1 20.97 (17.64)

R#2 20.97 (19.81)

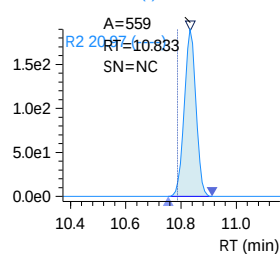
Q 663.00>619.00 (-)



R1 663.00>168.90 (-)



R2 663.00>168.90 (-)



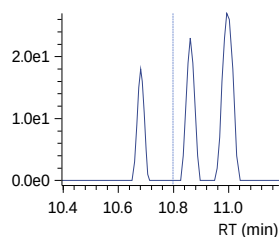
11-CI-PF3OUdS

Conc. ISTD Error

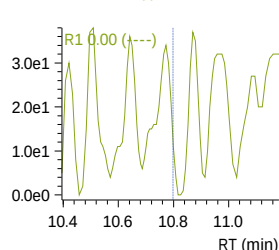
R#1 0.00 (36.44)

R#2 0.00 (35.86)

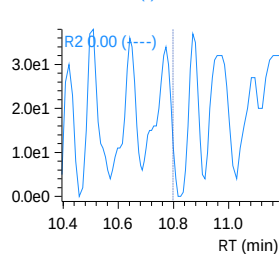
Q 630.90>451.00 (-)



R1 632.90>452.90 (-)



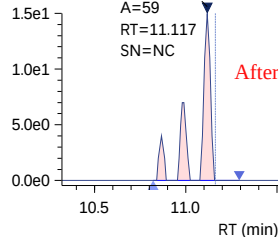
R2 632.90>452.90 (-)



PFOSAm

Conc. ISTD Error

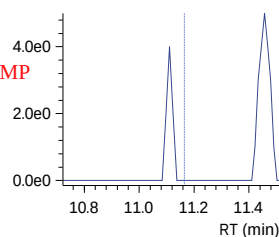
Q 498.10>77.90 (-)



13C8-PFOSAm

Conc. ISTD Error

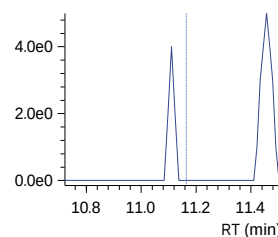
Q 506.10>77.80 (-)



13C8-PFOSAm_IS

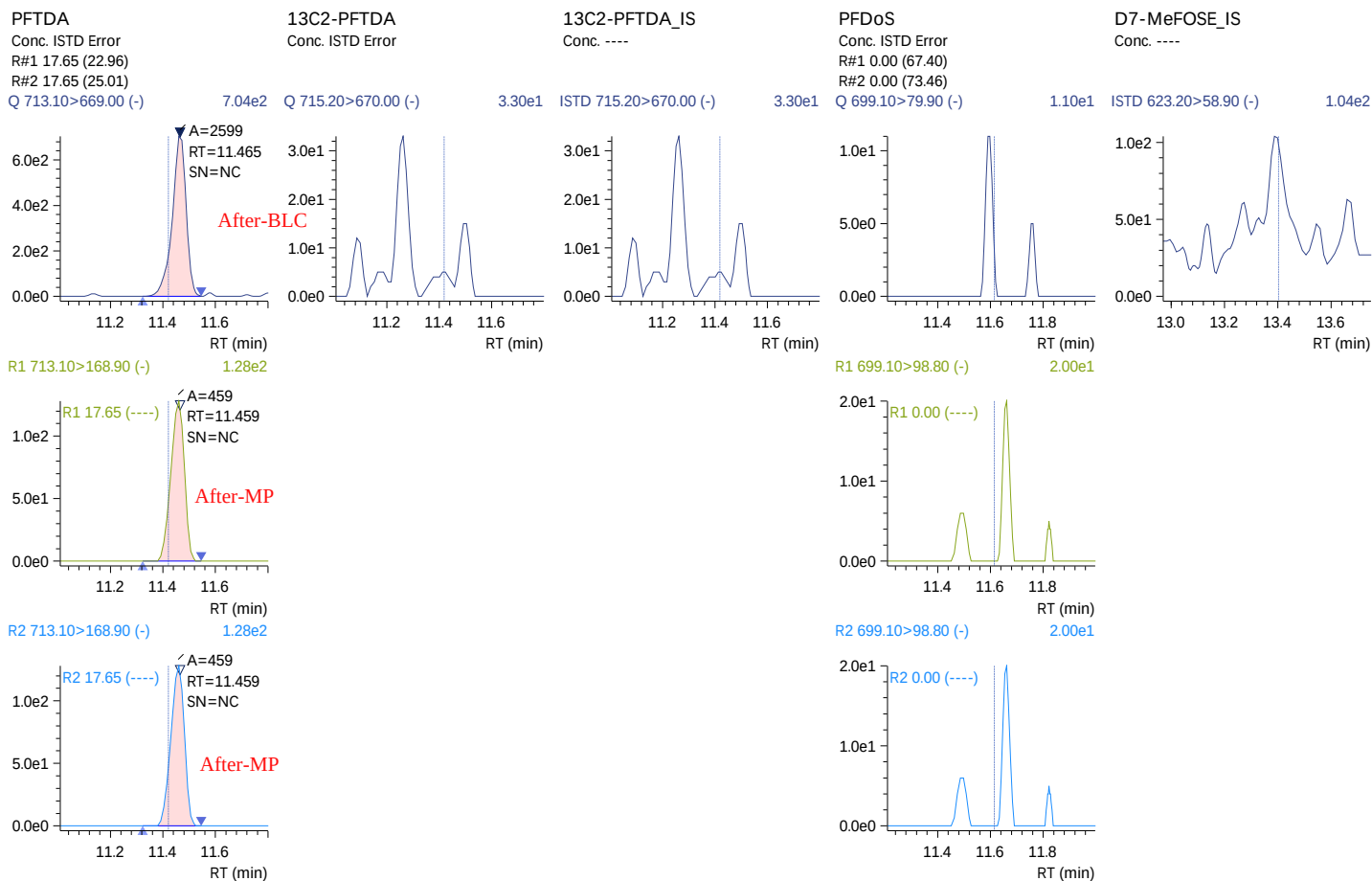
Conc. ----

ISTD 506.10>77.80 (-)





240122_012 (continued)



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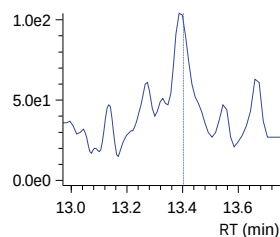
SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_012 (continued)

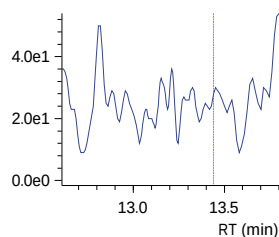
D7-MeFOSE
Conc. ISTD Error

Q 623.20>58.90 (-)



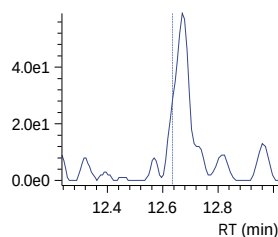
MeFOSE
Conc. ISTD Error

Q 616.10>59.00 (-)



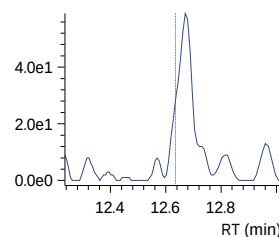
13C2-PFHXA_IS
Conc. ----

ISTD 815.00>770.05 (-)



13C2-PFHXA
Conc. ISTD Error

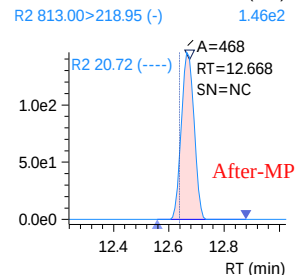
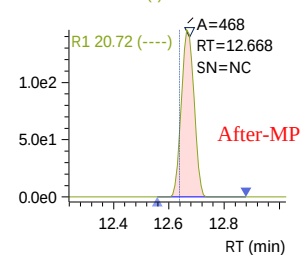
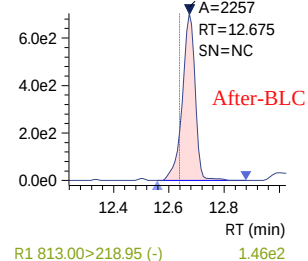
Q 815.00>770.05 (-)



PFHXA

Conc. ISTD Error
R#1 20.72 (13.90)
R#2 20.72 (15.85)

Q 813.00>768.95 (-)





240122_012 (continued)

D3-MeFOSA
Conc. ISTD Error

D3-MeFOSA_IS
Conc. ----

MeFOSA
Conc. ISTD Error
R#1 0.00 (140.79)
R#2 0.00 (150.13)

D9-EtFOSE_IS
Conc. ----

D9-EtFOSE
Conc. ISTD Error

Q 515.00>219.00 (-)

1.80e1

ISTD 515.00>219.00 (-)

1.80e1

Q 511.90>219.00 (-)

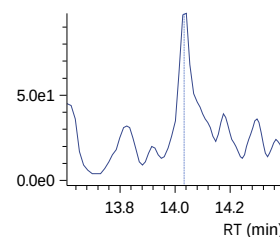
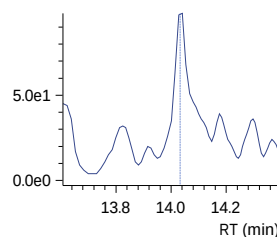
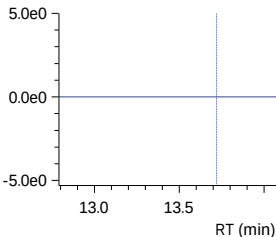
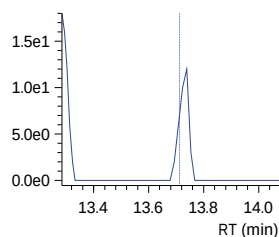
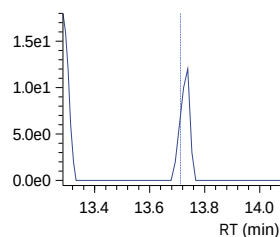
0.00e0

ISTD 639.20>58.90 (-)

9.80e1

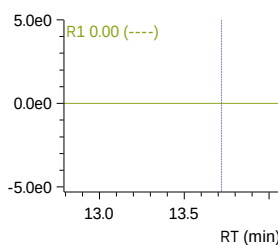
Q 639.20>58.90 (-)

9.80e1



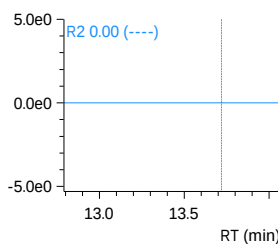
R1 511.90>169.00 (-)

0.00e0



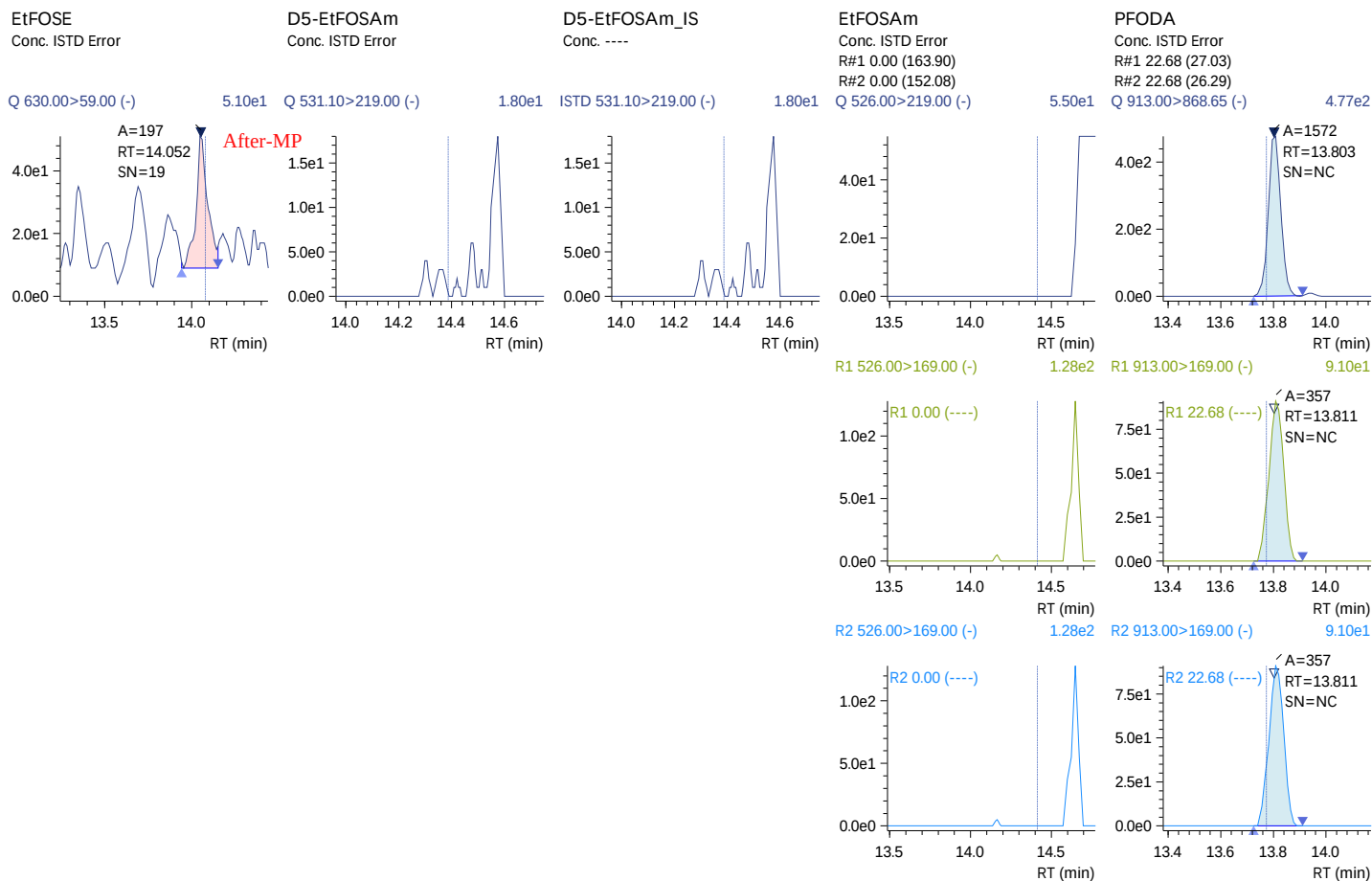
R2 511.90>169.00 (-)

0.00e0





240122_012 (continued)



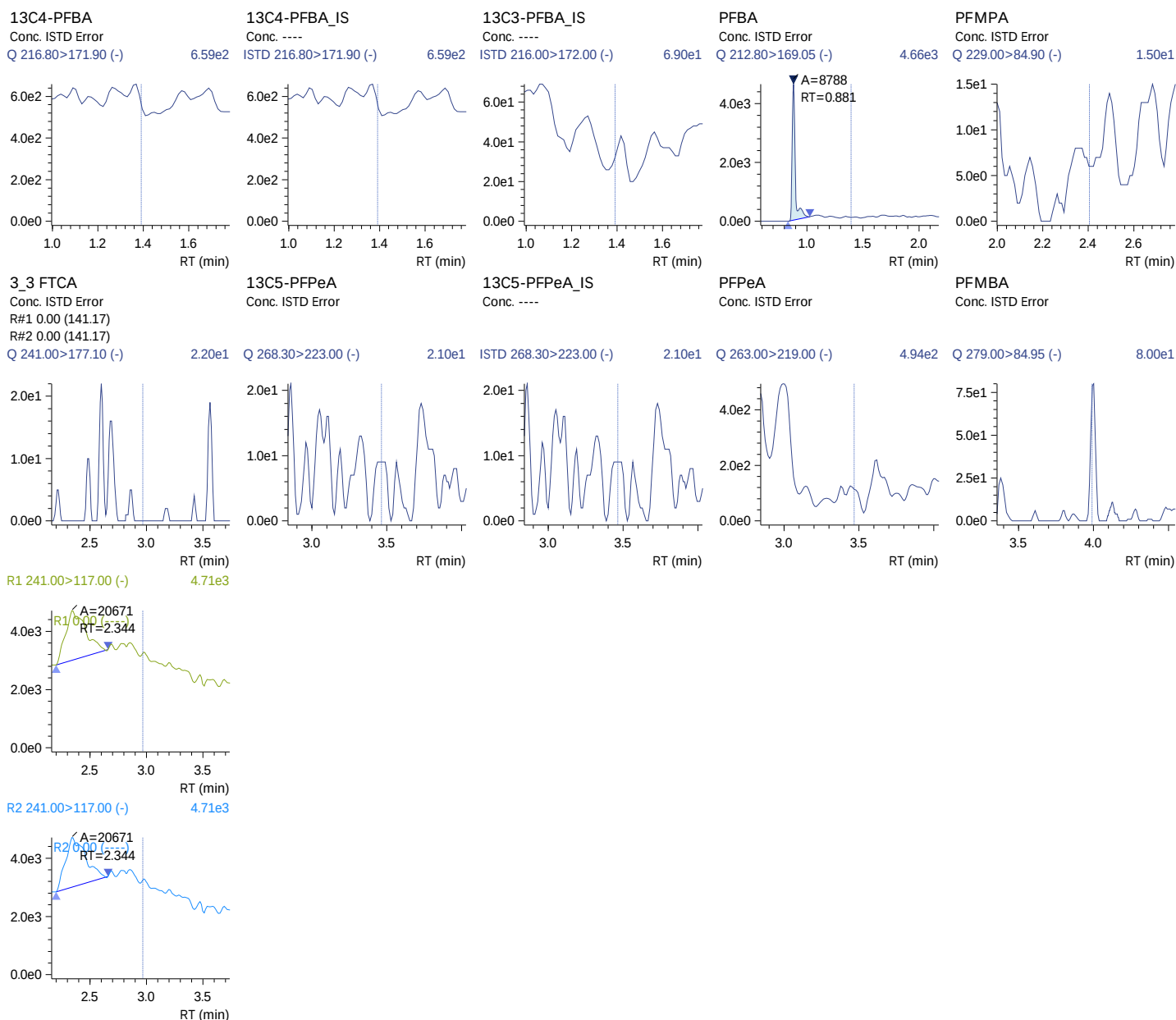
J:\LCMS08\Data\240122_1633_B1\240122_1633_B1.damlp

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_012

Sample ID: PRIMER
Date Acquired: 1/22/2024 2:00:54 PM
Acquired by: System Administrator
Data File: 240122_012
Vial: 46 | Inj. Volume: 10.0000uL | Tray: 1





240122_012 (continued)

13C2-4_2 FTS
 Conc. ISTD Error

13C2-4_2 FTS_IS
 Conc. ----

4_2 FTS
 Conc. ISTD Error
 R#1 0.00 (29.06)
 R#2 0.00 (29.06)

13C3-PFBS_IS
 Conc. ----

PFBS
 Conc. ISTD Error
 R#1 0.00 (46.72)
 R#2 0.00 (46.72)

Q 329.10>80.90 (-)

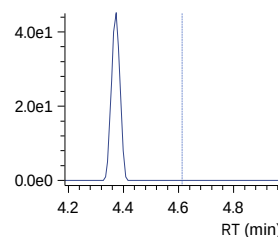
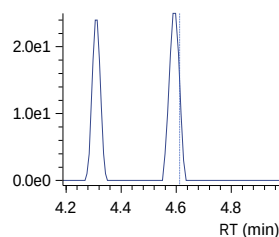
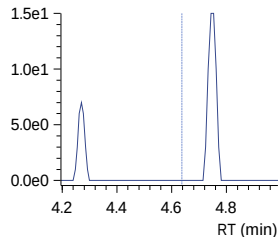
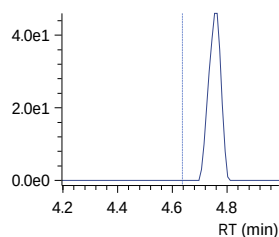
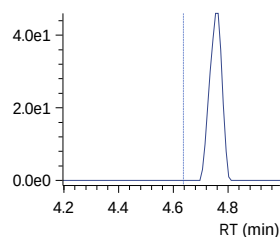
4.60e1 ISTD 329.10>80.90 (-)

4.60e1 Q 327.10>307.00 (-)

1.50e1 ISTD 302.10>79.90 (-)

2.50e1 Q 298.70>79.90 (-)

4.50e1

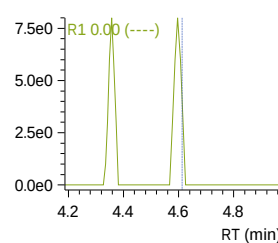
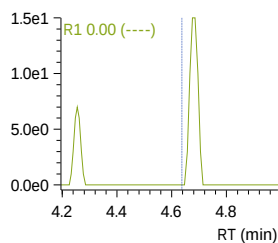


R1 327.10>80.90 (-)

1.50e1

R1 298.70>98.80 (-)

8.00e0

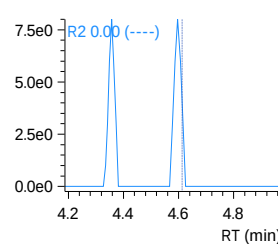
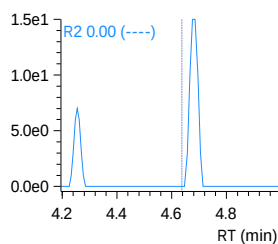


R2 327.10>80.90 (-)

1.50e1

R2 298.70>98.80 (-)

8.00e0

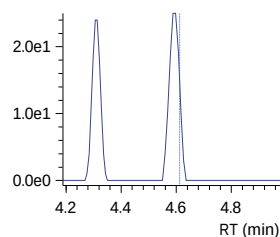




240122_012 (continued)

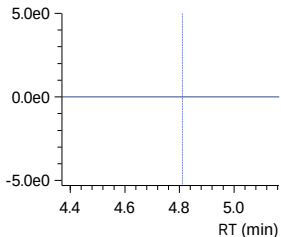
13C3-PFBS
 Conc. ISTD Error

Q 302.10>79.90 (-)

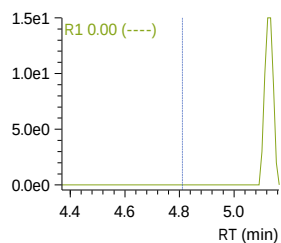


NFDHA
 Conc. ISTD Error
 R#1 0.00 (40.25)
 R#2 0.00 (40.25)

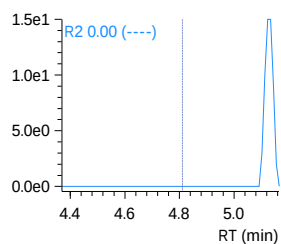
Q 295.00>201.00 (-)



R1 295.00>84.90 (-) 1.50e1

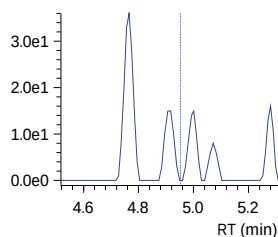


R2 295.00>84.90 (-) 1.50e1



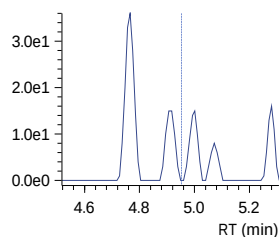
13C5-PFHxA
 Conc. ISTD Error

Q 318.00>273.00 (-)



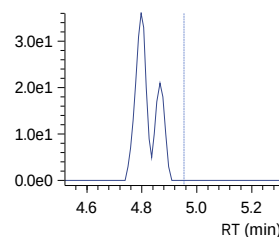
13C5-PFHxA_IS
 Conc. ----

ISTD 318.00>273.00 (-)



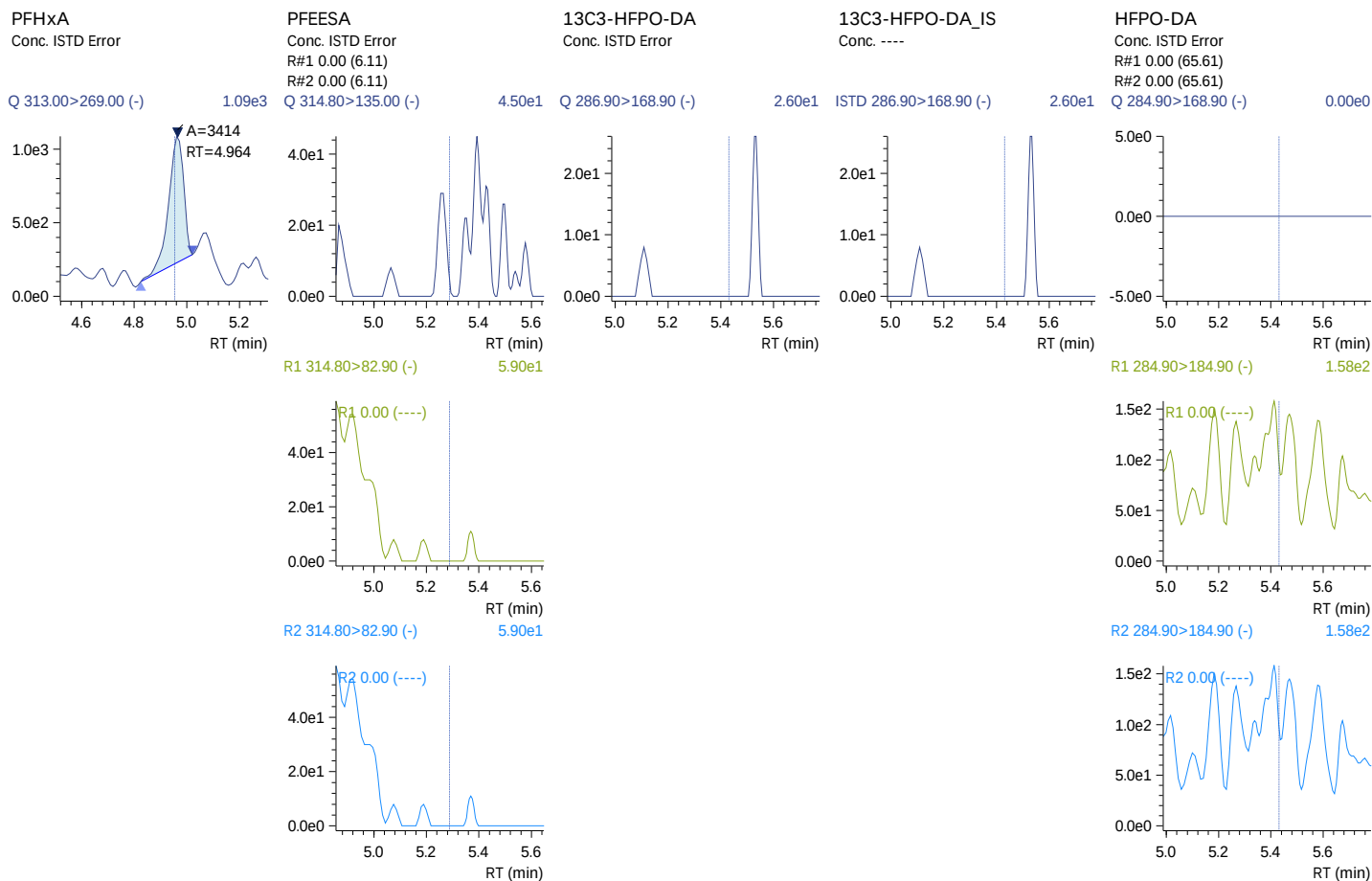
13C2-PFHxA_IS
 Conc. ----

ISTD 315.10>270.00 (-)





240122_012 (continued)



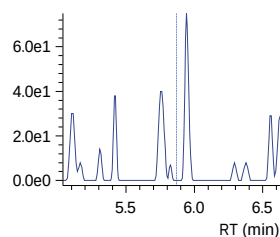


240122_012 (continued)

5_3 FTCA

Conc. ISTD Error
R#1 0.00 (158.86)
R#2 0.00 (158.86)

Q 341.00>237.05 (-)

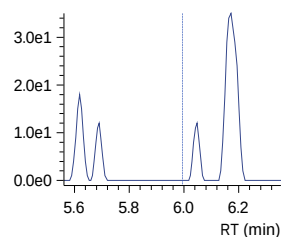


R1 341.00>217.00 (-)

PFPeS

Conc. ISTD Error
R#1 0.00 (55.80)
R#2 0.00 (55.80)

Q 349.10>79.90 (-)

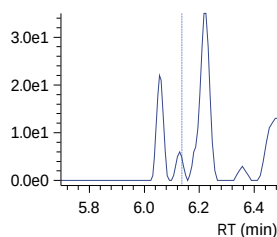


R1 349.10>98.80 (-)

13C4-PFHpA

Conc. ISTD Error

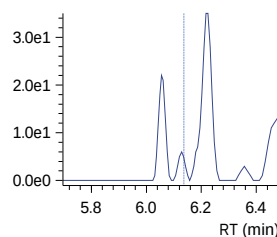
Q 367.10>322.00 (-)



13C4-PFHpA_IS

Conc. ----

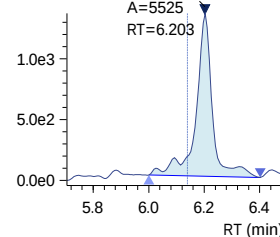
ISTD 367.10>322.00 (-)



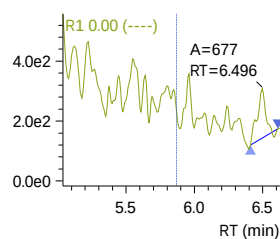
PFHpA

Conc. ISTD Error
R#1 19.10 (21.50)
R#2 19.10 (21.50)

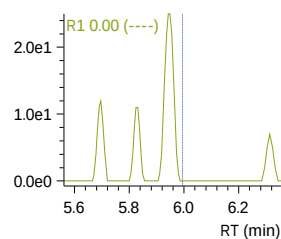
Q 363.10>319.00 (-)



R1 363.10>169.00 (-)



R2 341.00>217.00 (-)



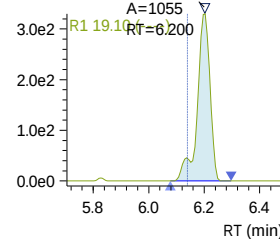
R2 349.10>98.80 (-)



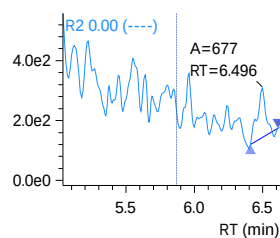
R2 367.10>322.00 (-)



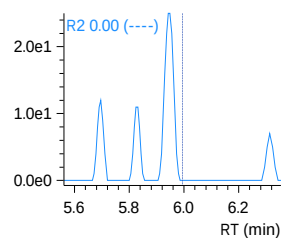
R2 367.10>322.00 (-)



R2 363.10>169.00 (-)



R2 341.00>217.00 (-)



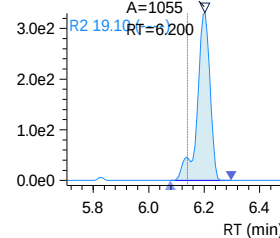
R2 349.10>98.80 (-)



R2 367.10>322.00 (-)



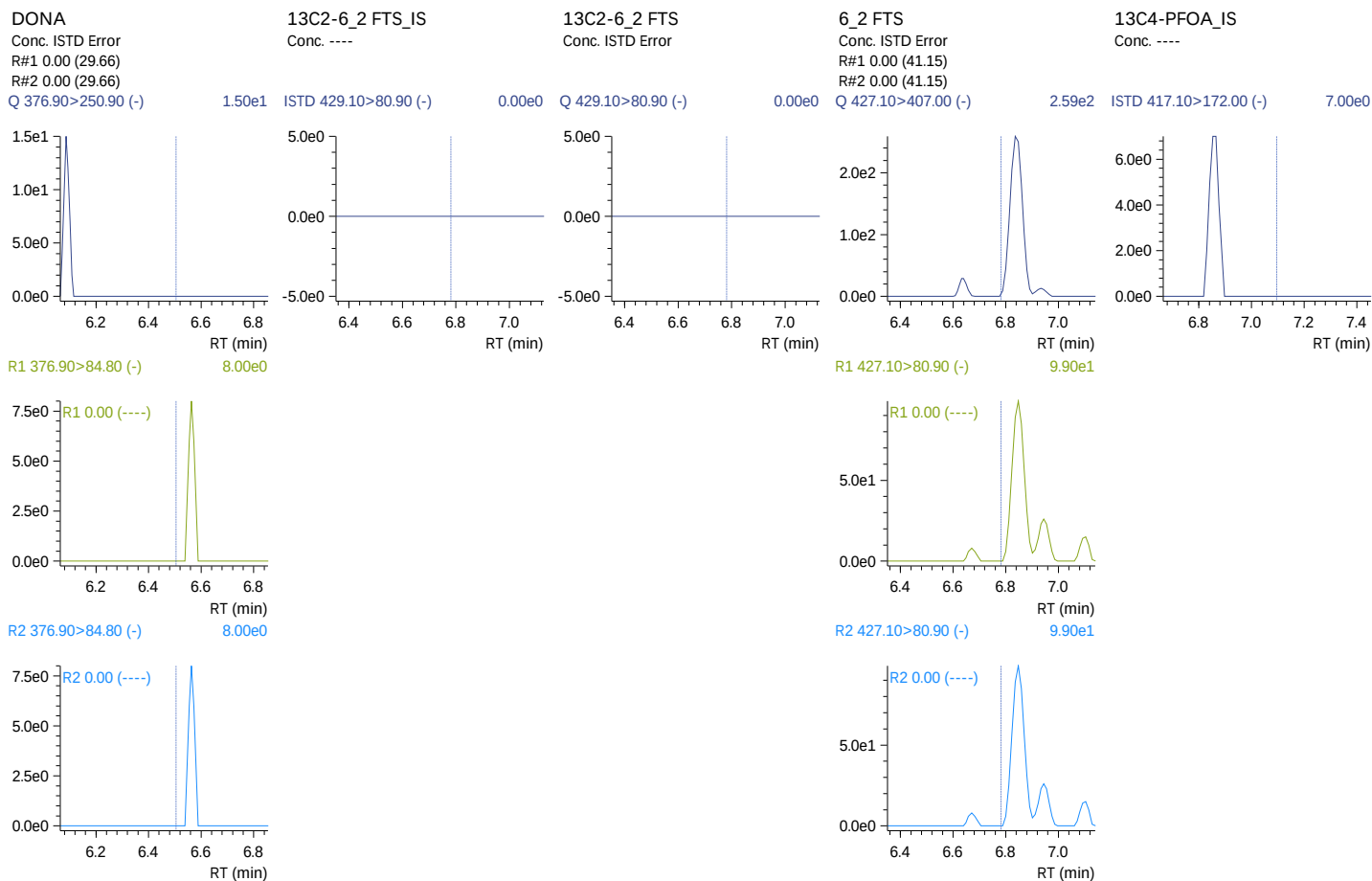
R2 367.10>322.00 (-)



R2 363.10>169.00 (-)



240122_012 (continued)





240122_012 (continued)

13C8-PFOA_IS
 Conc. ----

13C8-PFOA
 Conc. ISTD Error

PFOA
 Conc. ISTD Error
 R#1 0.00 (31.89)
 R#2 0.00 (31.89)

13C3-PFHxS
 Conc. ISTD Error

13C3-PFHxS_IS
 Conc. ----

ISTD 421.10>376.00 (-)

5.90e1

Q 421.10>376.00 (-)

5.90e1

Q 413.00>369.00 (-)

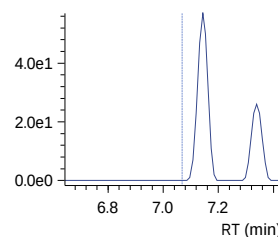
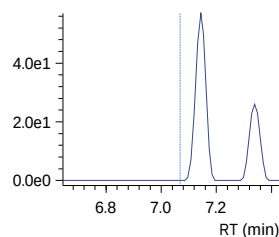
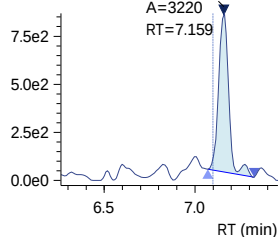
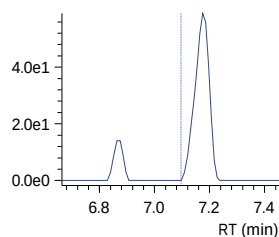
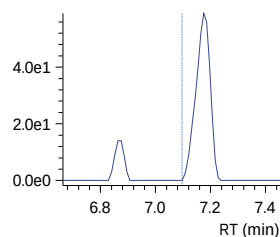
8.69e2

Q 402.10>79.90 (-)

5.70e1

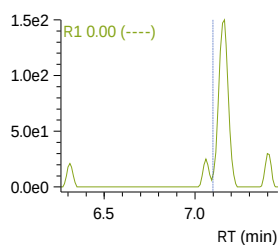
ISTD 402.10>79.90 (-)

5.70e1



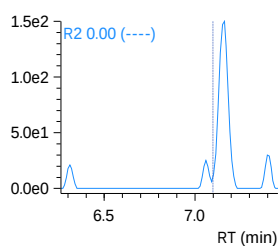
R1 413.00>169.00 (-)

1.50e2



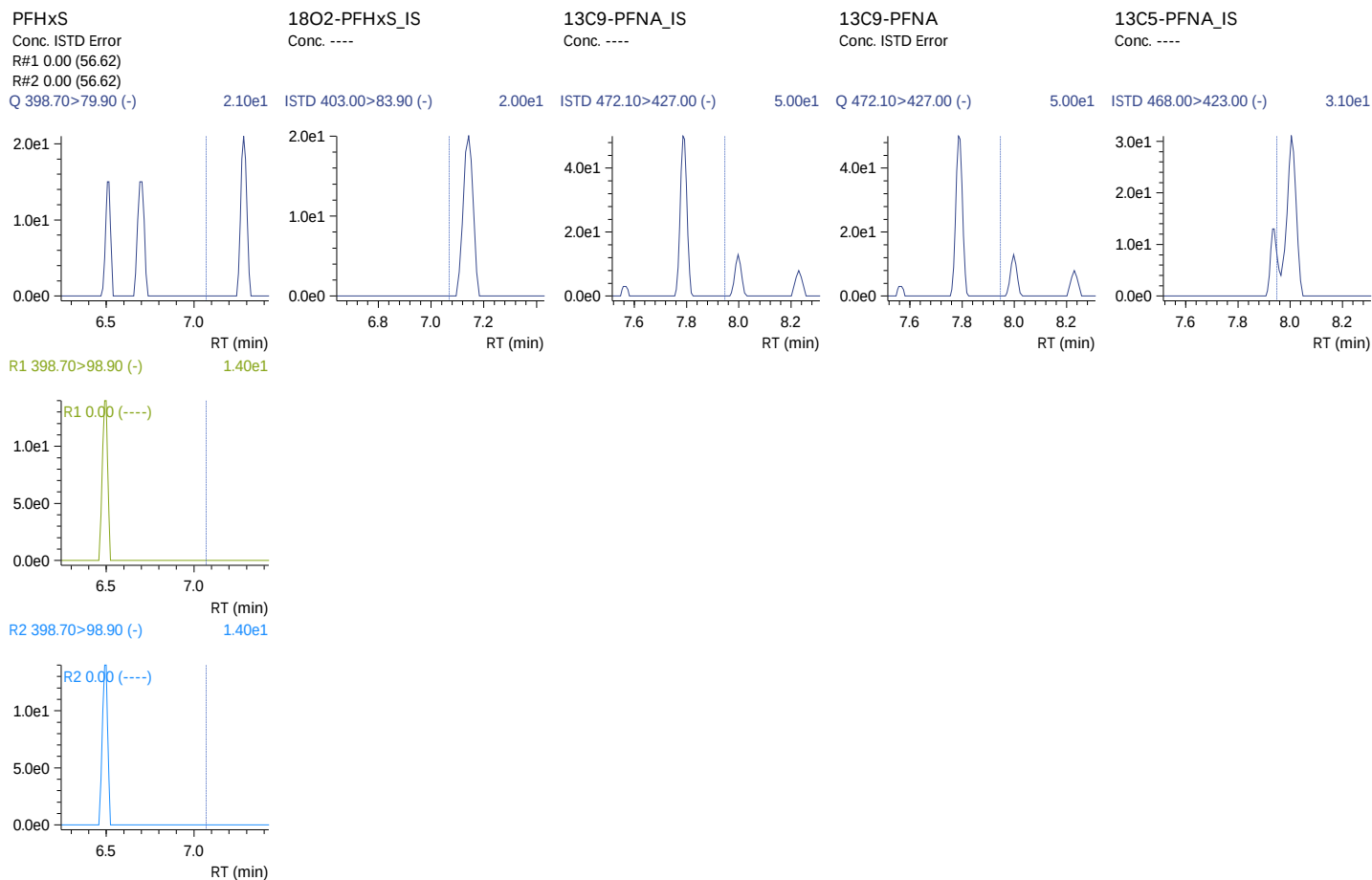
R2 413.00>169.00 (-)

1.50e2



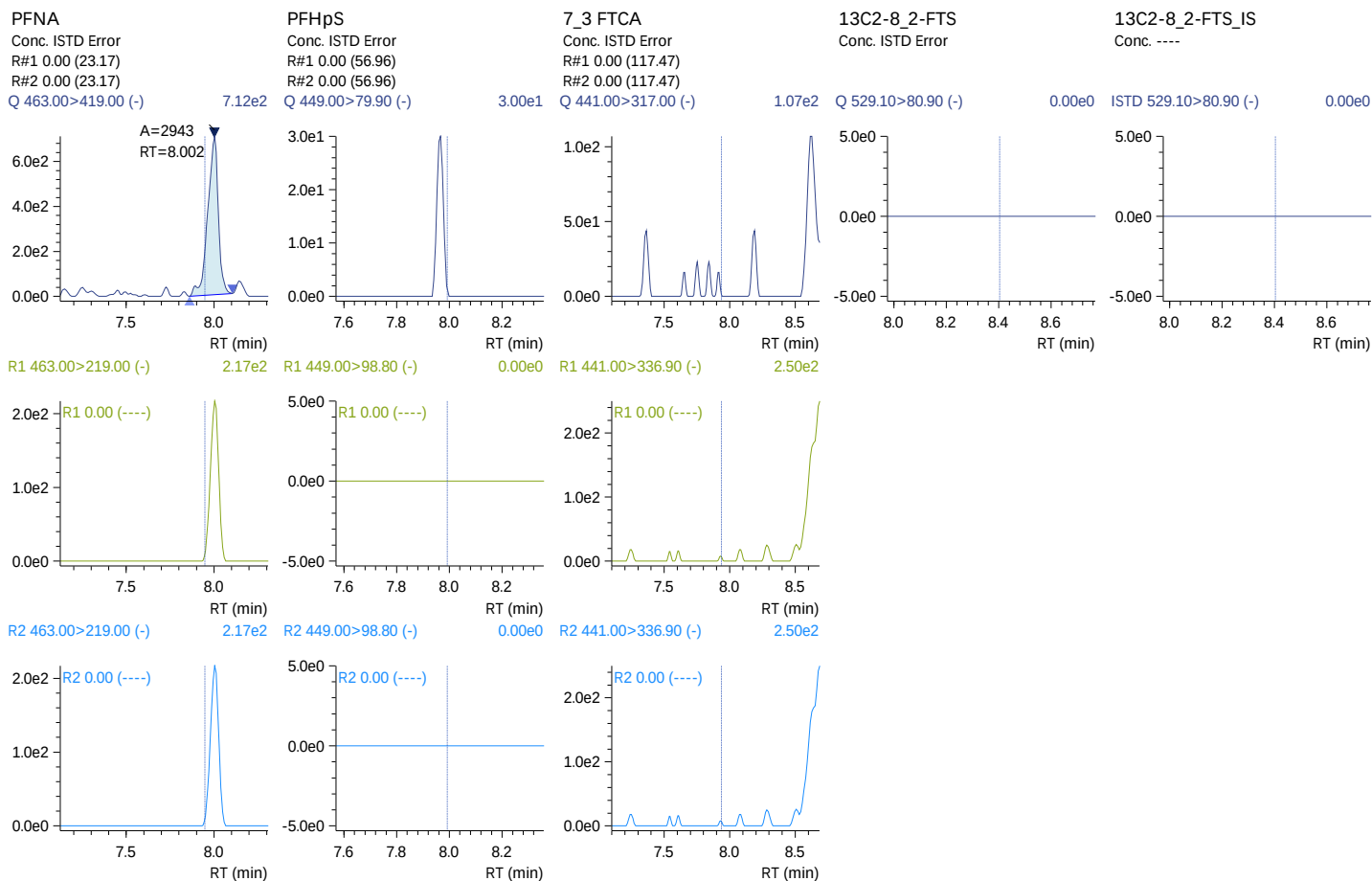


240122_012 (continued)



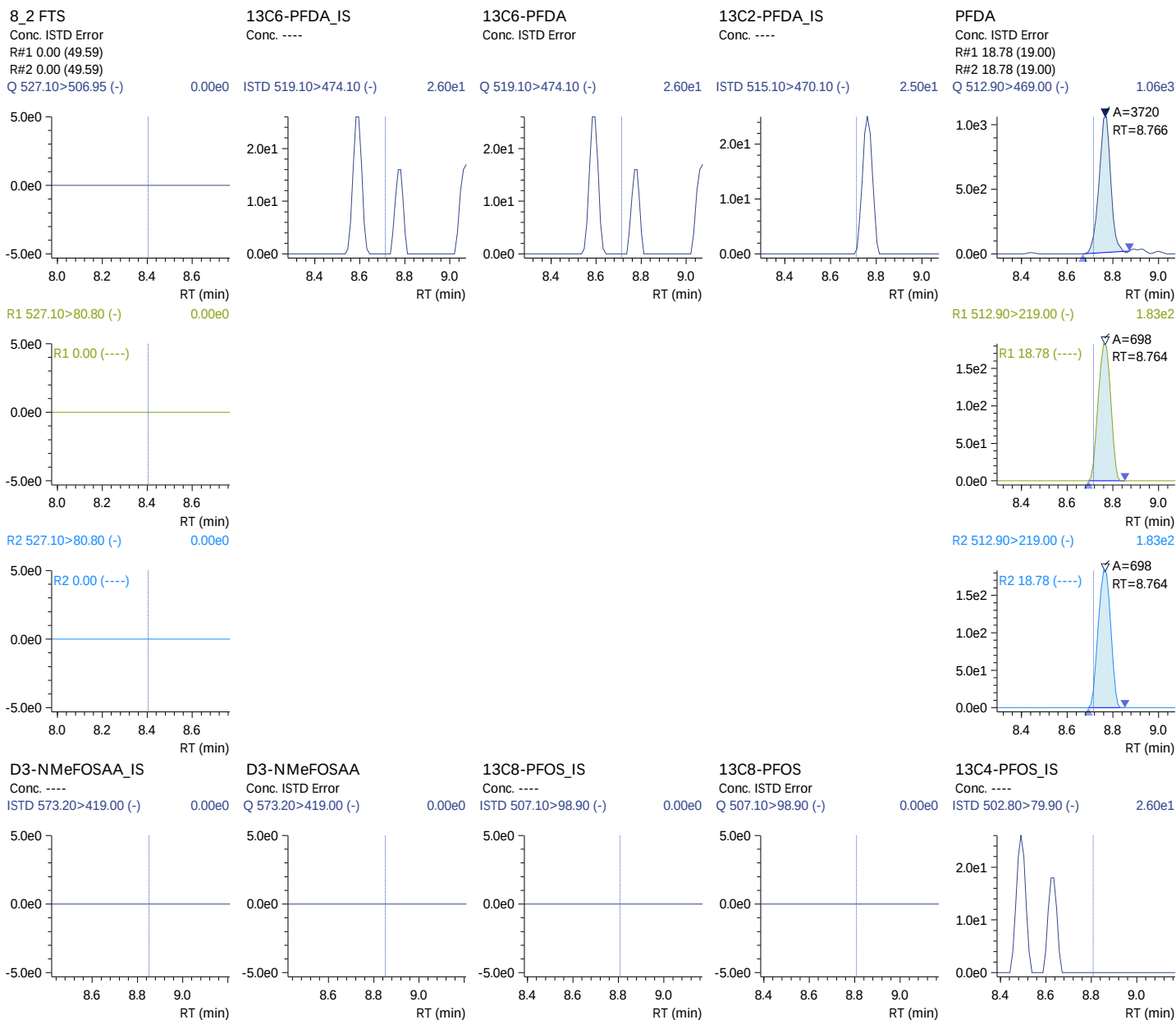


240122_012 (continued)



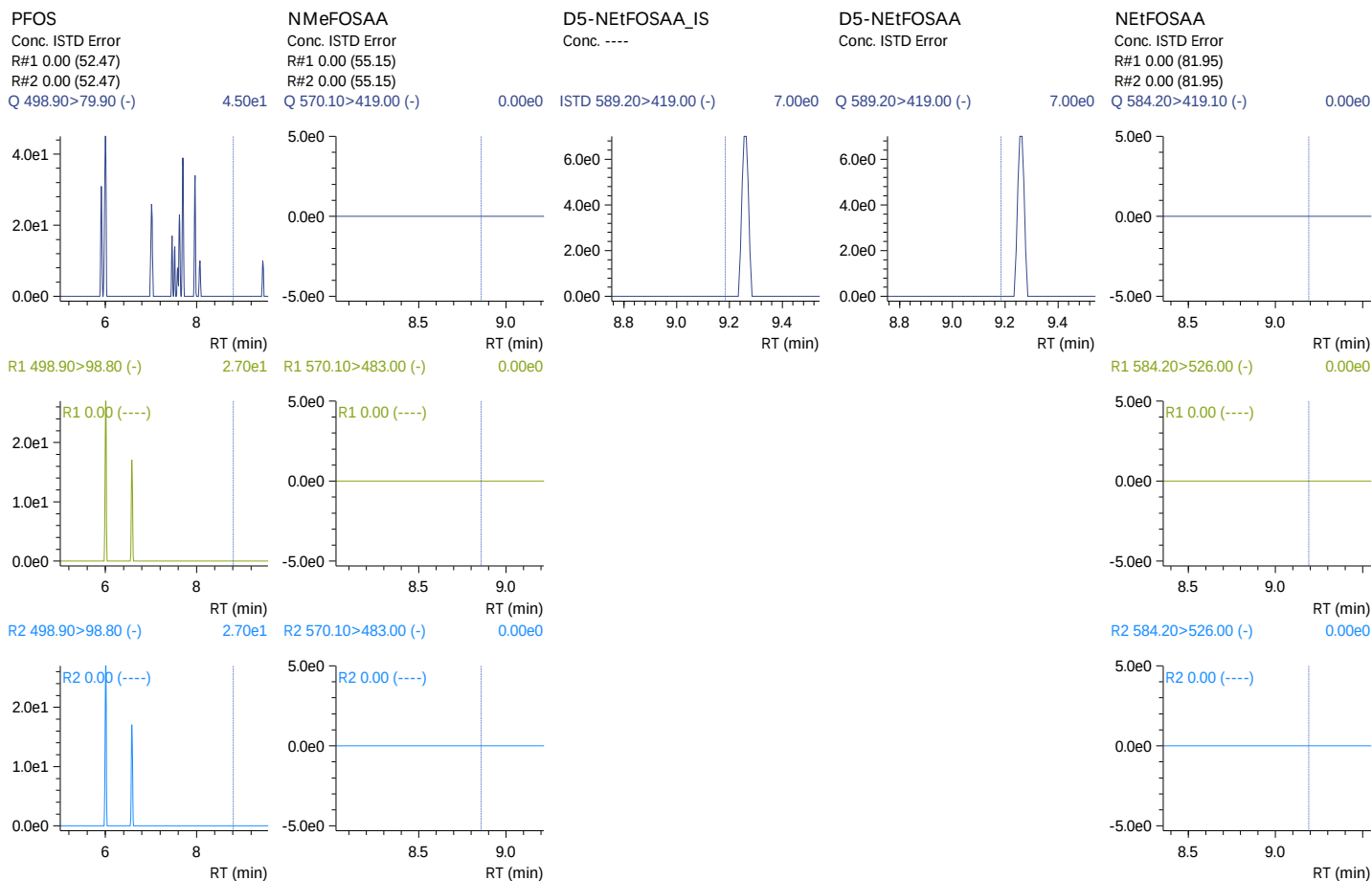


240122_012 (continued)





240122_012 (continued)

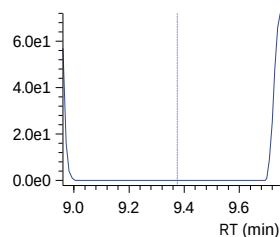




240122_012 (continued)

9-Cl-PF3ONS

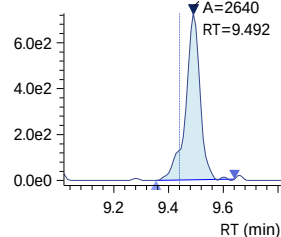
Conc. ISTD Error
R#1 0.00 (32.76)
R#2 0.00 (32.76)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-)

PFUnDA

Conc. ISTD Error
R#1 0.00 (13.12)
R#2 0.00 (13.12)
Q 563.10>519.00 (-)

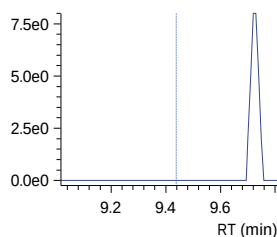


R1 563.10>269.10 (-)

13C7-PFUnDA_IS

Conc. ----

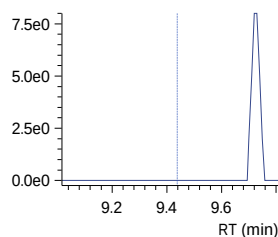
ISTD 570.00>525.10 (-)



13C7-PFUnDA

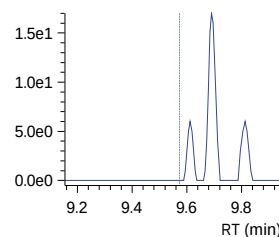
Conc. ISTD Error

Q 570.00>525.10 (-)

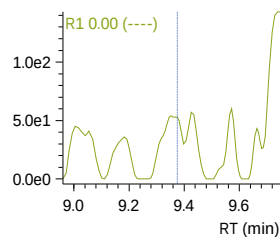


PFNS

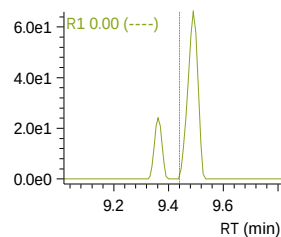
Conc. ISTD Error
R#1 0.00 (65.22)
R#2 0.00 (65.22)
Q 548.80>79.90 (-)



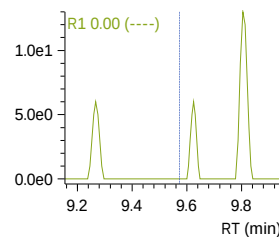
R1 548.80>98.80 (-)



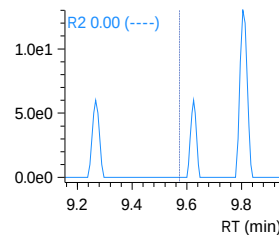
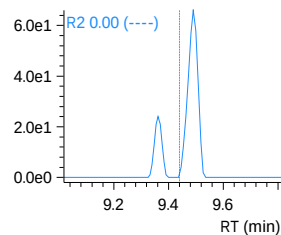
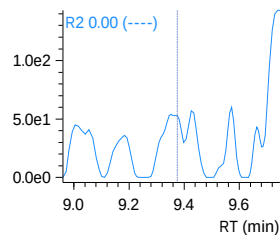
R2 532.80>353.00 (-)



R2 563.10>269.10 (-)

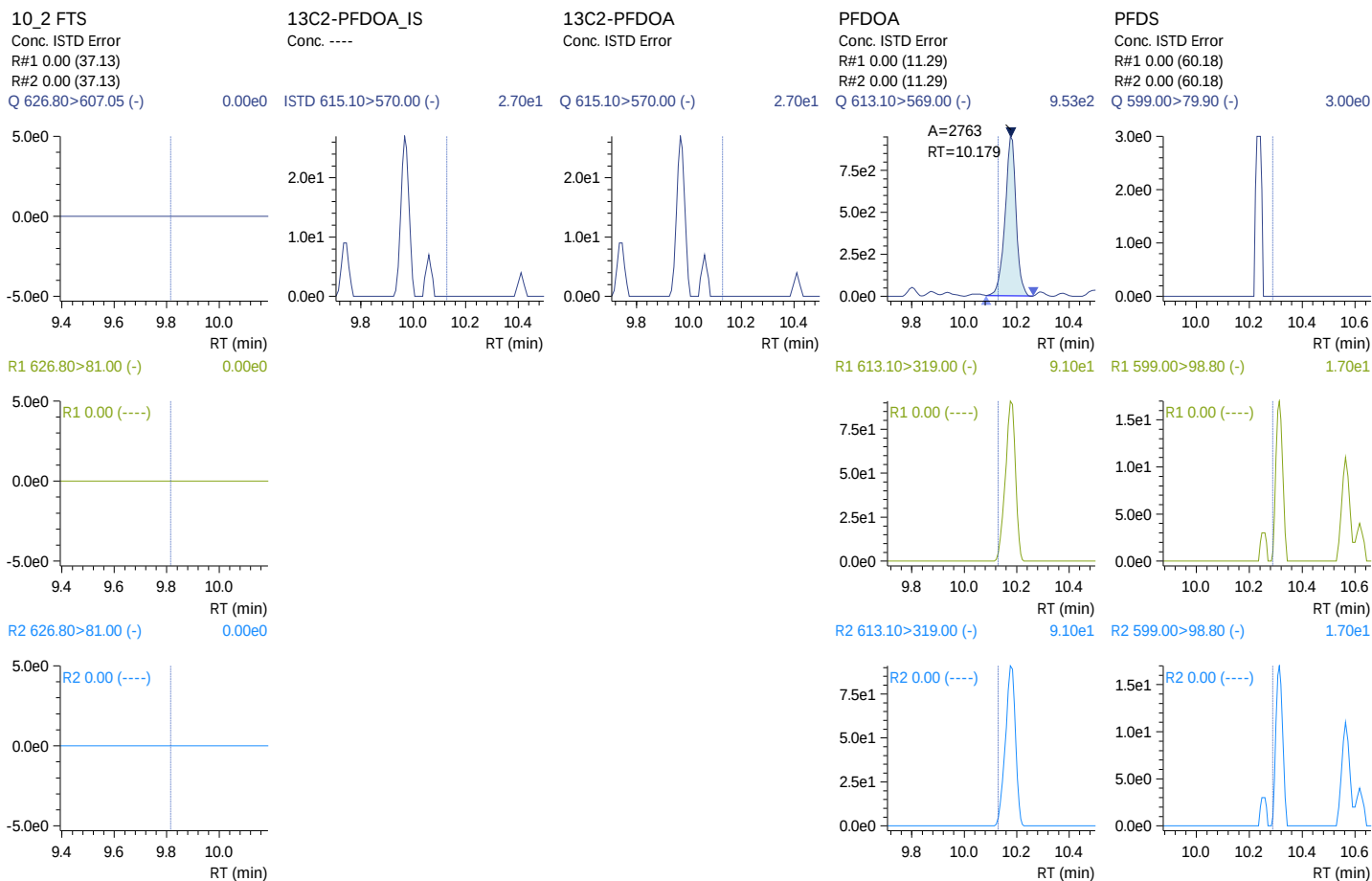


R2 548.80>98.80 (-)





240122_012 (continued)



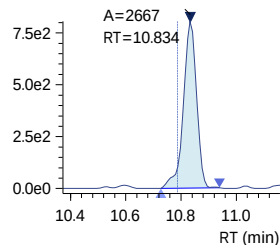


240122_012 (continued)

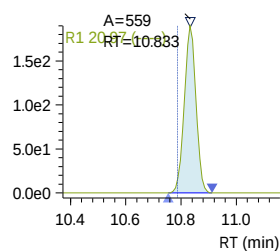
PFTrDA

Conc. ISTD Error
 R#1 20.97 (17.64)
 R#2 20.97 (17.64)

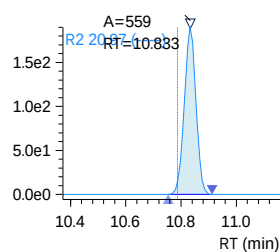
Q 663.00>619.00 (-)



R1 663.00>168.90 (-)



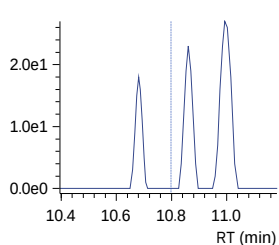
R2 663.00>168.90 (-)



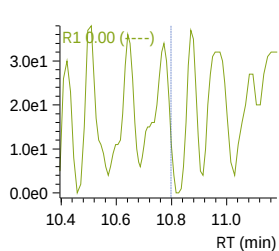
11-Cl-PF3OUdS

Conc. ISTD Error
 R#1 0.00 (36.44)
 R#2 0.00 (36.44)

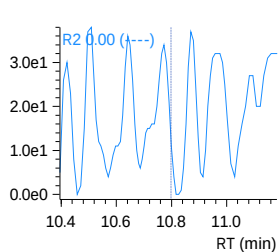
Q 630.90>451.00 (-)



R1 632.90>452.90 (-)



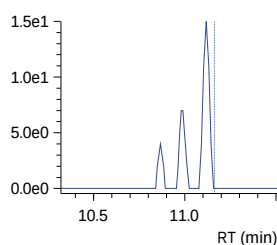
R2 632.90>452.90 (-)



PFOSAm

Conc. ISTD Error

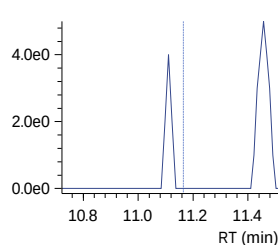
Q 498.10>77.90 (-)



13C8-PFOSAm

Conc. ISTD Error

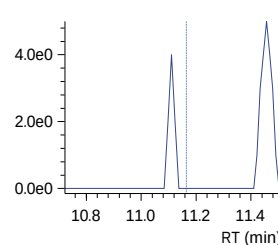
Q 506.10>77.80 (-)



13C8-PFOSAm_IS

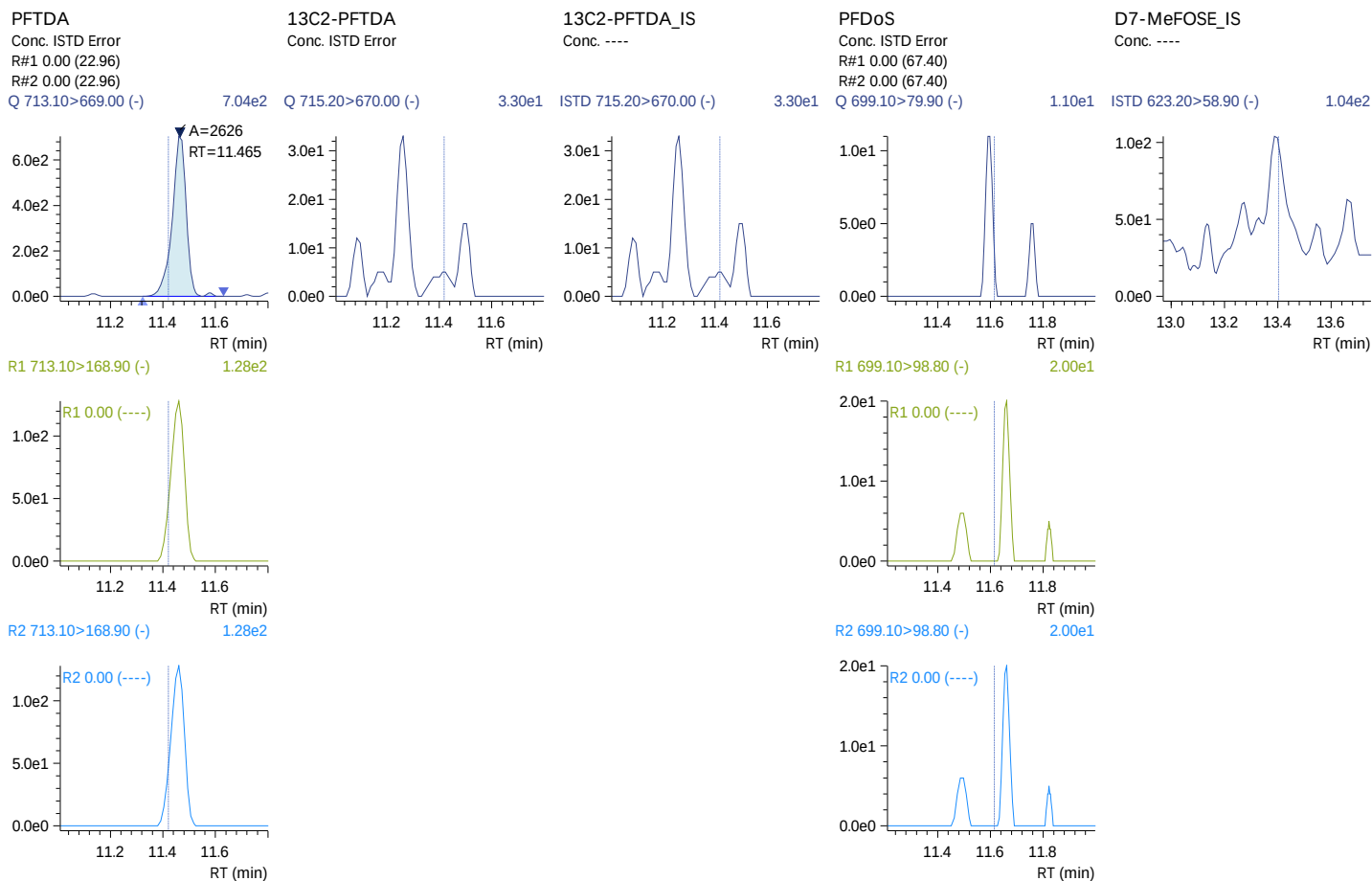
Conc. ----

ISTD 506.10>77.80 (-)





240122_012 (continued)

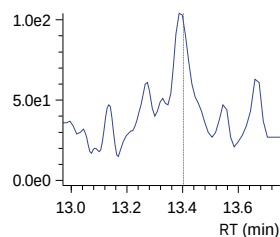




240122_012 (continued)

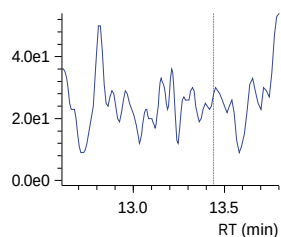
D7-MeFOSE
Conc. ISTD Error

Q 623.20>58.90 (-)



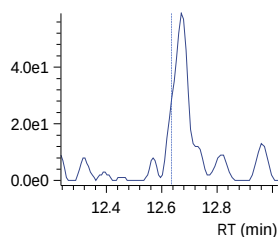
MeFOSE
Conc. ISTD Error

Q 616.10>59.00 (-)



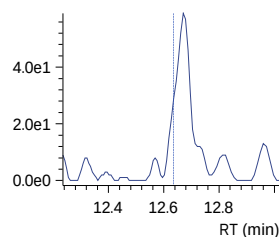
13C2-PFHDA_IS
Conc. ----

ISTD 815.00>770.05 (-)



13C2-PFHDA
Conc. ISTD Error

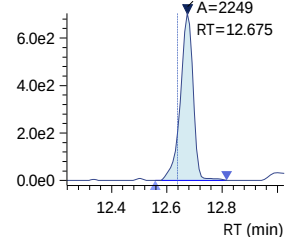
Q 815.00>770.05 (-)



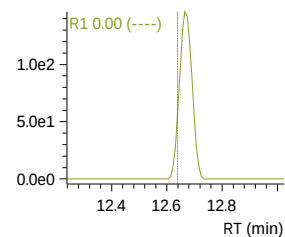
PFHXDA

Conc. ISTD Error
R#1 0.00 (13.90)
R#2 0.00 (13.90)

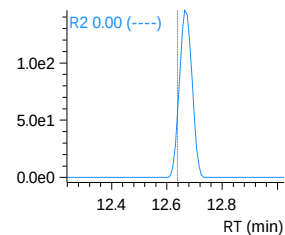
Q 813.00>768.95 (-)



R1 813.00>218.95 (-)



R2 813.00>218.95 (-)





240122_012 (continued)

D3-MeFOSA
 Conc. ISTD Error

D3-MeFOSA_IS
 Conc. ----

MeFOSA
 Conc. ISTD Error
 R#1 0.00 (140.79)
 R#2 0.00 (140.79)

D9-EtFOSE_IS
 Conc. ----

D9-EtFOSE
 Conc. ISTD Error

Q 515.00>219.00 (-)

1.80e1

ISTD 515.00>219.00 (-)

1.80e1

Q 511.90>219.00 (-)

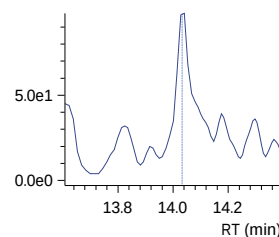
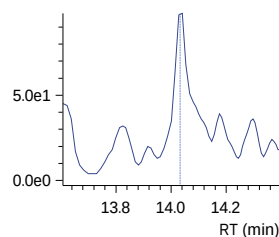
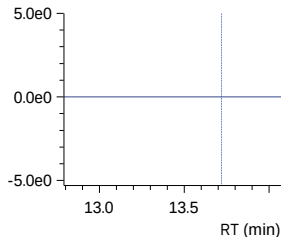
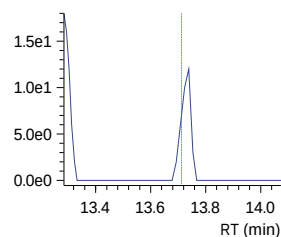
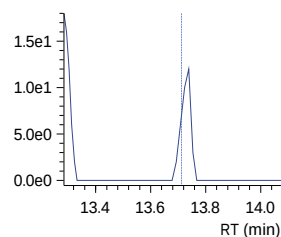
0.00e0

ISTD 639.20>58.90 (-)

9.80e1

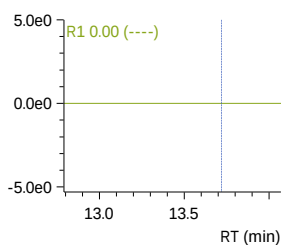
Q 639.20>58.90 (-)

9.80e1



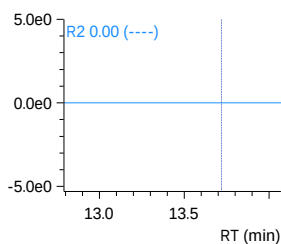
R1 511.90>169.00 (-)

0.00e0



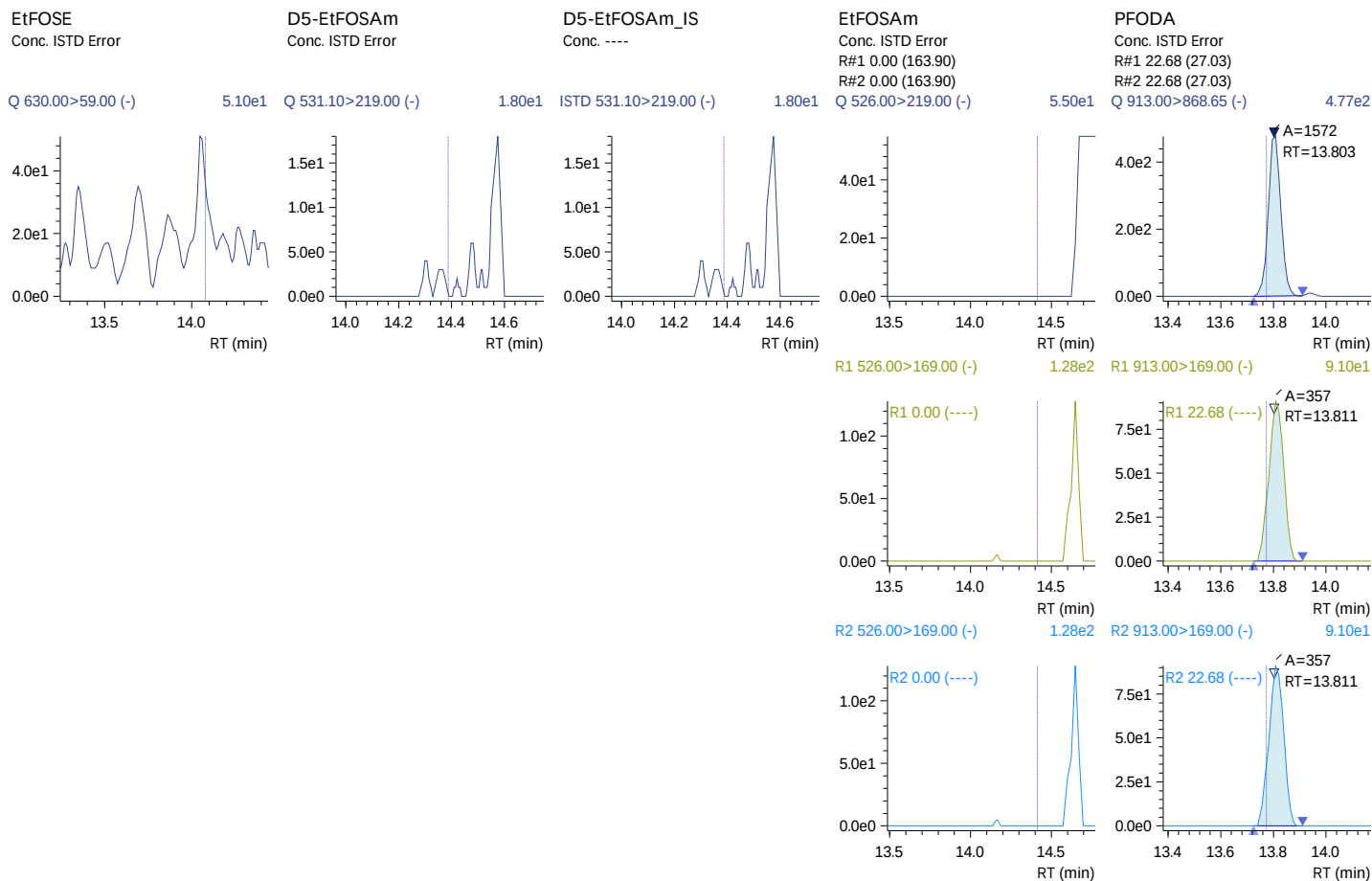
R2 511.90>169.00 (-)

0.00e0





240122_012 (continued)



Validation Report

1st *PS* 01/25/24
2nd *MS* 01/25/24

Data File: J:\LCMS08\Data\240122_1633_B1\240122_029
Lab ID: KQ2401073-16
RunType: CCB
Matrix: Water

Date Acquired: 1/22/24 20:36
Batch ID: 830573
Analysis Method: 1633/PFAS_DOD5.4

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery		X
Continuing Calibration Recovery (Closing)		X
Internal Standards	X	
Surrogates	X	
Above Highest ICAL Level	X	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Continuing Calibration Recovery	N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	136	70	130	high bias, native <MRL
	D3-MeFOSAA	138	70	130	native in control
	13C2-4:2 FTS	163	70	130	
	13C2-6:2 FTS	170	70	130	
	13C2-8:2 FTS	162	70	130	
Continuing Calibration Recovery (Closing)	N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	160	70	130	high bias, native <MRL
	Perfluoro-3-methoxypropanoic acid (PFMPA)	135	70	130	native in control
	D9-EtFOSE	131	70	130	
	D3-MeFOSAA	142	70	130	
	13C2-4:2 FTS	156	70	130	
	13C2-6:2 FTS	136	70	130	
	13C2-8:2 FTS	142	70	130	

Primary Review: _____

Secondary Review: _____

Quantitation Report

1st *PS* 01/25/24
2nd *MS* 01/25/24

Data File:	J:\LCMS08\Data\240122_1633_B1\240122_029	Instrument:	K-LCMS-08
Acqu Date:	1/22/24 20:36	Vial:	25
Run Type:	CCB	Dilution:	1
Lab ID:	KQ2401073-16	Raw Units:	ng/mL

Bottle ID:		Tier:	IV	Matrix:	Water
Prod Code:	PFAS_DOD5.4	Collect Date:	12/20/23	Receive Date:	12/20/23

Analysis Lot:	830573	Prep Lot:		Report Group:	KQ2401073
Analysis	1633	Prep Method:			
		Prep Date:			

Title:	Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM	Calibration ID:	KC2400027
		Report List ID:	24615

Internal Standard Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Area Criteria
18O2-PFHxS	7.061	-0.01	181401	2.5000	OK
13C4-PFOS	8.801	-0.01	220958	2.5000	OK
13C3-PFBA	1.380	-0.01	506076	5.0000	OK
13C2-PFHxA	4.944	-0.01	552347	2.5000	OK
13C4-PFOA	7.090	-0.01	40019	2.5000	OK
13C5-PFNA	7.941	-0.01	252963	1.2500	OK
13C2-PFDA	8.708	-0.01	193548	1.2500	OK

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
13C3-PFBS	4.603	-0.01	270281	2.6255	105	40 - 135	Y
13C3-PFHxS	7.060	-0.01	185145	2.3778	95	40 - 130	Y
13C8-PFOS	8.801	-0.01	81730	2.2179	89	40 - 130	Y
13C4-PFBA	1.379	-0.01	1165836	10.3065	103	5 - 130	Y
13C5-PFPeA	3.456	-0.01	112187	4.4997	90	40 - 130	Y
13C5-PFHxA	4.944	-0.01	543430	2.3344	93	40 - 130	Y
13C4-PFHpA	6.129	-0.01	600318	2.8487	114	40 - 130	Y
13C8-PFOA	7.089	-0.01	609557	2.7251	109	40 - 130	Y
13C9-PFNA	7.941	-0.01	276331	1.3951	112	40 - 130	Y
13C6-PFDA	8.707	-0.01	209355	1.3445	108	40 - 130	Y
13C7-PFUnDA	9.431	-0.01	234332	1.2616	101	30 - 130	Y
13C2-PFDoDA	10.120	-0.01	245354	1.1498	92	10 - 130	Y
13C2-PFTeDA	11.413	-0.01	111688	1.2122	97	10 - 130	Y
13C8-FOSA	11.163	-0.01	240253	2.5613	102	40 - 130	Y
D3-MeFOSA	13.707	-0.01	42057	2.2264	89	10 - 130	Y
D5-EtFOSA	14.387	-0.01	66689	2.6517	106	10 - 130	Y
D7-MeFOSE	13.401	-0.01	704061	30.4442	122	10 - 130	Y
D9-EtFOSE	14.031	-0.01	721937	30.7361	123	10 - 130	Y

			1st	PS	01/25/24
Data File:	J:\LCMS08\Data\240122_1633_B1\240122_029	Instrument:	K-LCMS08	MS	01/25/24
Acqu Date:	1/22/24 20:36	Vial:	25		
Run Type:	CCB	Dilution:	1		
Lab ID:	KQ2401073-16	Raw Units:	ng/mL		

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
D3-MeFOSAA	8.846	-0.01	250609	6.5349	131	40 - 170	Y
D5-EtFOSAA	9.178	-0.01	268497	5.8522	117	25 - 135	Y
13C2-4:2 FTS	4.629	-0.01	217365	8.7074	174	40 - 200	Y
13C2-6:2 FTS	6.773	-0.01	204513	8.6621	173	40 - 200	Y
13C2-8:2 FTS	8.397	-0.01	145182	7.4857	150	40 - 300	Y
13C3-HFPO-DA	5.422	-0.01	598061	11.0609	111	40 - 130	Y

Target Compounds

Final Conc.Units: ng/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Perfluorobutane sulfonic acid (PFBS)	0		0	0	0	U	Y
Perfluoropentane sulfonic acid (PFPeS)	0		0	0	0	U	Y
Perfluorohexane sulfonic acid (PFHxS)	7.056	-0.02	764	-0.0105	0	U	Y
Perfluoroheptane sulfonic acid (PFHpS)	0		0	0	0	U	Y
Perfluorooctane sulfonic acid (PFOS)	8.809	-0.01	619	0.0073	0.15	U	Y
Perfluorononane sulfonic acid (PFNS)	0		0	0	0	U	Y
Perfluorodecane sulfonic acid (PFDS)	0		0	0	0	U	Y
Perfluorododecane sulfonic acid (PFDoS)	11.592	-0.03	47	0.0014	0.028	U	Y
Perfluorobutanoic acid (PFBA)	1.404	+0.01	729	0.0073	0.15	U	Y
Perfluoropentanoic acid (PFPeA)	3.454	-0.02	1369	0.0094	0.19	U	Y
Perfluorohexanoic acid (PFHxA)	4.946	-0.01	1373	-0.0008	0	U	Y
Perfluoroheptanoic acid (PFHpA)	6.111	-0.03	5760	-0.0116	0	U	Y
Perfluorooctanoic acid (PFOA)	7.080	-0.03	5175	-0.0108	0	U	Y
Perfluorononanoic acid (PFNA)	7.936	-0.02	3406	-0.0092	0	U	Y
Perfluorodecanoic acid (PFDA)	8.707	-0.01	3574	-0.0076	0	U	Y
Perfluoroundecanoic acid (PFUnDA)	9.430	-0.02	3648	-0.0082	0	U	Y
Perfluorododecanoic acid (PFDOA)	10.116	-0.02	2523	-0.0146	0	U	Y
Perfluorotridecanoic acid (PFTTrDA)	10.778	-0.01	3275	-0.0102	0	U	Y
Perfluorotetradecanoic acid (PFTDA)	11.414	-0.01	2586	-0.0063	0	U	Y
Perfluorooctane sulfonamide (PFOSAm)	11.160	-0.01	223	0.0028	0.056	U	Y
N-Methylperfluorooctane sulfonamide (MeFOSA)	0		0	0	0	U	Y
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	0		0	0	0	U	Y
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	0		0	0	0	U	Y
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	0		0	0	0	U	Y
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	0		0	0	0	U	Y

			1st	PS	01/25/24
Data File:	J:\LCMS08\Data\240122_1633_B1\240122_029	Instrument:	K-LCMS08	MS	01/25/24
Acqu Date:	1/22/24 20:36	Vial:	25		
Run Type:	CCB	Dilution:	1		
Lab ID:	KQ2401073-16	Raw Units:	ng/mL		

Target Compounds

Final Conc.Units: ng/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	0		0	0	0	U	Y
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	4.625	-0.02	200	0.0019	0.038	U	Y
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	6.773	-0.01	1053	0.0113	0.23	U	Y
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	0		0	0	0	U	Y
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	0		0	0	0	U	Y
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	0		0	0	0	U	Y
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	7.932	-0.01	671	0.0358	0.72	U	Y
Perfluoro(2-ethoxyethane) sulfonic acid (PFEEESA)	0		0	0	0	U	Y
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	0		0	0	0	U	Y
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	10.790	-0.01	144	-0.0166	0	U	Y
Perfluoro-3-methoxypropanoic acid (PFMPA)	2.412	+0.01	151	0.0021	0.042	U	Y
Perfluoro-4-methoxybutanoic acid (PFMBA)	3.980	-0.02	101	0.0010	0.020	U	Y
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	0		0	0	0	U	Y
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	4.804	-0.01	779	0.0065	0.13	U	Y
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	6.488	-0.02	371	0.0008	0.016	U	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 1/25/24 15:28

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240122_029

Sample ID: 1633 CCB
Date Acquired: 1/22/2024 8:36:38 PM
Acquired by: System Administrator
Data File: 240122_029
Vial: 54 | Inj. Volume: 10.0000uL | Tray: 1

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	1165836	----	----	----	----	----	----	
13C4-PFBA_IS	216.80>171.90	----	1165836	----	----	----	----	----	----	
13C3-PFBA_IS	216.00>172.00	----	506076	----	----	----	----	----	----	
PFBA	212.80>169.05	----	729	----	----	----	----	----	----	
PFMPA	229.00>84.90	----	151	----	----	----	----	----	----	
3_3 FTCA	241.00>177.10	241.00>117.00	----	0	0.00	141.17	0	0.00	135.52	
13C5-PFPeA	268.30>223.00	----	112187	----	----	----	----	----	----	
13C5-PFPeA_IS	268.30>223.00	----	112187	----	----	----	----	----	----	
PFPeA	263.00>219.00	----	1369	----	----	----	----	----	----	
PFMBA	279.00>84.95	----	101	----	----	----	----	----	----	
13C2-4_2 FTS	329.10>80.90	----	217365	----	----	----	----	----	----	
13C2-4_2 FTS_IS	329.10>80.90	----	217365	----	----	----	----	----	----	
4_2 FTS	327.10>307.00	327.10>80.90	200	32	16.09	29.06	32	16.09	35.34	IRr
13C3-PFBS_IS	302.10>79.90	----	270281	----	----	----	----	----	----	
PFBS	298.70>79.90	298.70>98.80	----	0	0.00	46.72	0	0.00	49.78	
13C3-PFBS	302.10>79.90	----	270281	----	----	----	----	----	----	
NFDHA	295.00>201.00	295.00>84.90	779	117	15.01	40.25	117	15.01	37.18	IRr
13C5-PFHxA	318.00>273.00	----	543430	----	----	----	----	----	----	
13C5-PFHxA_IS	318.00>273.00	----	543430	----	----	----	----	----	----	
13C2-PFHxA_IS	315.10>270.00	----	552347	----	----	----	----	----	----	
PFHxA	313.00>269.00	----	1373	----	----	----	----	----	----	
PFEESA	314.80>135.00	314.80>82.90	----	0	0.00	6.11	0	0.00	5.72	
13C3-HFPO-DA	286.90>168.90	----	598061	----	----	----	----	----	----	
13C3-HFPO-DA_IS	286.90>168.90	----	598061	----	----	----	----	----	----	
HFPO-DA	284.90>168.90	284.90>184.90	----	0	0.00	65.61	0	0.00	60.94	
5_3 FTCA	341.00>237.05	341.00>217.00	----	0	0.00	158.86	0	0.00	155.83	
PFPeS	349.10>79.90	349.10>98.80	----	0	0.00	55.80	0	0.00	56.73	
13C4-PFHpA	367.10>322.00	----	600318	----	----	----	----	----	----	
13C4-PFHpA_IS	367.10>322.00	----	600318	----	----	----	----	----	----	
PFHpA	363.10>319.00	363.10>169.00	5760	1392	24.17	21.50	1392	24.17	21.92	
DONA	376.90>250.90	376.90>84.80	371	47	12.61	29.66	47	12.61	30.77	IRr
13C2-6_2 FTS_IS	429.10>80.90	----	204513	----	----	----	----	----	----	
13C2-6_2 FTS	429.10>80.90	----	204513	----	----	----	----	----	----	
6_2 FTS	427.10>407.00	427.10>80.90	1053	392	37.20	41.15	392	37.20	40.98	
13C4-PFOA_IS	417.10>172.00	----	40019	----	----	----	----	----	----	
13C8-PFOA_IS	421.10>376.00	----	609557	----	----	----	----	----	----	

J:\LCMS08\Data\240122_1633_B1\240122_1633_B1.damp

Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240122_029 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	609557	----	----	----	----	----	----	----
PFOA	413.00>369.00	413.00>169.00	5175	1172	22.65	31.89	1172	22.65	32.23	
13C3-PFHxS	402.10>79.90	----	185145	----	----	----	----	----	----	----
13C3-PFHxS_IS	402.10>79.90	----	185145	----	----	----	----	----	----	----
PFHxS	398.70>79.90	398.70>98.90	764	735	96.15	56.62	735	96.15	60.26	IRr
18O2-PFHxS_IS	403.00>83.90	----	181401	----	----	----	----	----	----	----
13C9-PFNA_IS	472.10>427.00	----	276331	----	----	----	----	----	----	----
13C9-PFNA	472.10>427.00	----	276331	----	----	----	----	----	----	----
13C5-PFNA_IS	468.00>423.00	----	252963	----	----	----	----	----	----	----
PFNA	463.00>419.00	463.00>219.00	3406	780	22.91	23.17	780	22.91	23.63	
PFHpS	449.00>79.90	449.00>98.80	----	0	0.00	56.96	0	0.00	59.06	
7_3 FTCA	441.00>317.00	441.00>336.90	671	1212	180.50	117.47	1212	180.50	125.53	IRr
13C2-8_2-FTS	529.10>80.90	----	145182	----	----	----	----	----	----	----
13C2-8_2-FTS_IS	529.10>80.90	----	145182	----	----	----	----	----	----	----
8_2 FTS	527.10>506.95	527.10>80.80	----	0	0.00	49.59	0	0.00	44.81	
13C6-PFDA_IS	519.10>474.10	----	209355	----	----	----	----	----	----	----
13C6-PFDA	519.10>474.10	----	209355	----	----	----	----	----	----	----
13C2-PFDA_IS	515.10>470.10	----	193548	----	----	----	----	----	----	----
PFDA	512.90>469.00	512.90>219.00	3574	1002	28.03	19.00	1002	28.03	19.15	
D3-NMeFOSAA_IS	573.20>419.00	----	250609	----	----	----	----	----	----	----
D3-NMeFOSAA	573.20>419.00	----	250609	----	----	----	----	----	----	----
13C8-PFOS_IS	507.10>98.90	----	81730	----	----	----	----	----	----	----
13C8-PFOS	507.10>98.90	----	81730	----	----	----	----	----	----	----
13C4-PFOS_IS	502.80>79.90	----	220958	----	----	----	----	----	----	----
PFOS	498.90>79.90	498.90>98.80	619	447	72.17	52.47	447	72.17	53.10	
NMeFOSAA	570.10>419.00	570.10>483.00	----	0	0.00	55.15	0	0.00	60.69	
D5-NEtFOSAA_IS	589.20>419.00	----	268497	----	----	----	----	----	----	----
D5-NEtFOSAA	589.20>419.00	----	268497	----	----	----	----	----	----	----
NEtFOSAA	584.20>419.10	584.20>526.00	----	0	0.00	81.95	0	0.00	73.27	
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	----	0	0.00	32.76	0	0.00	32.59	
PFUnDA	563.10>519.00	563.10>269.10	3648	191	5.25	13.12	191	5.25	14.36	IRr
13C7-PFUnDA_IS	570.00>525.10	----	234332	----	----	----	----	----	----	----
13C7-PFUnDA	570.00>525.10	----	234332	----	----	----	----	----	----	----
PFNS	548.80>79.90	548.80>98.80	----	0	0.00	65.22	0	0.00	65.31	
10_2 FTS	626.80>607.05	626.80>81.00	----	0	0.00	37.13	0	0.00	38.76	
13C2-PFDOA_IS	615.10>570.00	----	245354	----	----	----	----	----	----	----
13C2-PFDOA	615.10>570.00	----	245354	----	----	----	----	----	----	----
PFDOA	613.10>569.00	613.10>319.00	2523	256	10.16	11.29	256	10.16	11.19	
PFDS	599.00>79.90	599.00>98.80	----	0	0.00	60.18	0	0.00	65.65	
PFTrDA	663.00>619.00	663.00>168.90	3275	502	15.34	17.64	502	15.34	19.81	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240122_029 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	144	157	108.43	36.44	157	108.43	35.86	IRr
PFOSAm	498.10>77.90	----	223	----	----	----	----	----	----	----
13C8-PFOSAm	506.10>77.80	----	240253	----	----	----	----	----	----	----
13C8-PFOSAm_IS	506.10>77.80	----	240253	----	----	----	----	----	----	----
PFTDA	713.10>669.00	713.10>168.90	2586	722	27.94	22.96	722	27.94	25.01	----
13C2-PFTDA	715.20>670.00	----	111688	----	----	----	----	----	----	----
13C2-PFTDA_IS	715.20>670.00	----	111688	----	----	----	----	----	----	----
PFDoS	699.10>79.90	699.10>98.80	47	29	62.73	67.40	29	62.73	73.46	----
D7-MeFOSE_IS	623.20>58.90	----	704061	----	----	----	----	----	----	----
D7-MeFOSE	623.20>58.90	----	704061	----	----	----	----	----	----	----
MeFOSE	616.10>59.00	----	----	----	----	----	----	----	----	----
13C2-PFHxDA_IS	815.00>770.05	----	409957	----	----	----	----	----	----	----
13C2-PFHxDA	815.00>770.05	----	409957	----	----	----	----	----	----	----
PFHxDA	813.00>768.95	813.00>218.95	2634	457	17.35	13.90	457	17.35	15.85	----
D3-MeFOSA	515.00>219.00	----	42057	----	----	----	----	----	----	----
D3-MeFOSA_IS	515.00>219.00	----	42057	----	----	----	----	----	----	----
MeFOSA	511.90>219.00	511.90>169.00	----	0	0.00	140.79	0	0.00	150.13	----
D9-EtFOSE_IS	639.20>58.90	----	721937	----	----	----	----	----	----	----
D9-EtFOSE	639.20>58.90	----	721937	----	----	----	----	----	----	----
EtFOSE	630.00>59.00	----	----	----	----	----	----	----	----	----
D5-EtFOSAm	531.10>219.00	----	66689	----	----	----	----	----	----	----
D5-EtFOSAm_IS	531.10>219.00	----	66689	----	----	----	----	----	----	----
EtFOSAm	526.00>219.00	526.00>169.00	----	0	0.00	163.90	0	0.00	152.08	----
PFODA	913.00>868.65	913.00>169.00	1578	318	20.17	27.03	318	20.17	26.29	----

Flag ID key: IRr: Ion Ratio (Relative)



240122_029

Sample ID: 1633 CCB
Date Acquired: 1/22/2024 8:36:38 PM
Acquired by: System Administrator
Data File: 240122_029
Vial: 54 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.379	-0.012	-0.001	1165836	506076	13C3-PFBA_IS	10.3065	ng/mL	
13C4-PFBA_IS	Auto	1.379	-0.012	----	1165836	1165836	----	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.380	-0.011	----	506076	506076	----	5.0000	ng/mL	
PFBA	M	1.404	0.009	0.025	729	1165836	13C4-PFBA_IS	0.0073	ng/mL	
PFMPA	M	2.412	0.006	-1.044	151	112187	13C5-PFPeA_IS	0.0021	ng/mL	
3_3 FTCA	ND(W/B)	----	----	----	----	112187	13C5-PFPeA_IS	----	ng/mL	
13C5-PFPeA	Auto	3.456	-0.009	-1.488	112187	552347	13C2-PFHxA_IS	4.4997	ng/mL	
13C5-PFPeA_IS	Auto	3.456	-0.009	----	112187	112187	----	5.0000	ng/mL	
PFPeA	M	3.454	-0.013	-0.002	1369	112187	13C5-PFPeA_IS	0.0094	ng/mL	
PFMBA	M	3.980	-0.011	0.524	101	112187	13C5-PFPeA_IS	0.0010	ng/mL	
13C2-4_2 FTS	Auto	4.629	-0.007	-2.432	217365	181401	18O2-PFHxS_IS	8.7074	ng/mL	
13C2-4_2 FTS_IS	Auto	4.629	-0.007	----	217365	217365	----	5.0000	ng/mL	
4_2 FTS	M	4.625	-0.012	-0.004	200	217365	13C2-4_2 FTS_IS	0.0019	ng/mL	IRr
13C3-PFBS_IS	Auto	4.603	-0.009	----	270281	270281	----	2.5000	ng/mL	
PFBS	ND(W/B)	----	----	----	----	270281	13C3-PFBS_IS	----	ng/mL	
13C3-PFBS	Auto	4.603	-0.009	-2.458	270281	181401	18O2-PFHxS_IS	2.6255	ng/mL	
NFDHA	M	4.804	-0.006	-0.140	779	543430	13C5-PFHxA_IS	0.0065	ng/mL	IRr
13C5-PFHxA	Auto	4.944	-0.008	0.000	543430	552347	13C2-PFHxA_IS	2.3344	ng/mL	
13C5-PFHxA_IS	Auto	4.944	-0.008	----	543430	543430	----	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	4.944	-0.009	----	552347	552347	----	2.5000	ng/mL	
PFHxA	M	4.946	-0.008	0.002	1373	543430	13C5-PFHxA_IS	-0.0008	ng/mL	
PFEESA	ND(W/B)	----	----	----	----	543430	13C5-PFHxA_IS	----	ng/mL	
13C3-HFPO-DA	Auto	5.422	-0.008	0.478	598061	552347	13C2-PFHxA_IS	11.0609	ng/mL	
13C3-HFPO-DA_IS	Auto	5.422	-0.008	----	598061	598061	----	10.0000	ng/mL	
HFPO-DA	ND(W/B)	----	----	----	----	598061	13C3-HFPO-DA_IS	----	ng/mL	
5_3 FTCA	ND(W/B)	----	----	----	----	543430	13C5-PFHxA_IS	----	ng/mL	
PFPeS	ND(W/B)	----	----	----	----	185145	13C3-PFHxS_IS	----	ng/mL	
13C4-PFHpA	Auto	6.129	-0.008	1.185	600318	552347	13C2-PFHxA_IS	2.8487	ng/mL	
13C4-PFHpA_IS	Auto	6.129	-0.008	----	600318	600318	----	2.5000	ng/mL	
PFHpA	M	6.111	-0.028	-0.018	5760	600318	13C4-PFHpA_IS	-0.0116	ng/mL	
DONA	M	6.488	-0.016	1.066	371	598061	13C3-HFPO-DA_IS	0.0008	ng/mL	IRr
13C2-6_2 FTS_IS	Auto	6.773	-0.008	----	204513	204513	----	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.773	-0.008	-0.288	204513	181401	18O2-PFHxS_IS	8.6621	ng/mL	
6_2 FTS	MI R1 R2	6.773	-0.008	0.000	1053	204513	13C2-6_2 FTS_IS	0.0113	ng/mL	
13C4-PFOA_IS	Auto	7.090	-0.007	----	40019	40019	----	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.089	-0.007	----	609557	609557	----	2.5000	ng/mL	
13C8-PFOA	Auto	7.089	-0.007	-0.001	609557	40019	13C4-PFOA_IS	2.7251	ng/mL	
PFOA	Auto	7.080	-0.018	-0.009	5175	609557	13C8-PFOA_IS	-0.0108	ng/mL	
13C3-PFHxS	Auto	7.060	-0.008	-0.001	185145	181401	18O2-PFHxS_IS	2.3778	ng/mL	
13C3-PFHxS_IS	Auto	7.060	-0.008	----	185145	185145	----	2.5000	ng/mL	
PFHxS	M	7.056	-0.013	-0.004	764	185145	13C3-PFHxS_IS	-0.0105	ng/mL	IRr
18O2-PFHxS_IS	Auto	7.061	-0.008	----	181401	181401	----	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.941	-0.006	----	276331	276331	----	1.2500	ng/mL	
13C9-PFNA	Auto	7.941	-0.006	0.000	276331	252963	13C5-PFNA_IS	1.3951	ng/mL	
13C5-PFNA_IS	Auto	7.941	-0.007	----	252963	252963	----	1.2500	ng/mL	
PFNA	M	7.936	-0.012	-0.005	3406	276331	13C9-PFNA_IS	-0.0092	ng/mL	
PFHpS	ND(W/B)	----	----	----	----	81730	13C8-PFOS_IS	----	ng/mL	
7_3 FTCA	M	7.932	-0.004	2.988	671	543430	13C5-PFHxA_IS	0.0358	ng/mL	IRr
13C2-8_2-FTS	Auto	8.397	-0.006	1.336	145182	181401	18O2-PFHxS_IS	7.4857	ng/mL	
13C2-8_2-FTS_IS	Auto	8.397	-0.006	----	145182	145182	----	5.0000	ng/mL	
8_2 FTS	ND(W/B)	----	----	----	----	145182	13C2-8_2-FTS_IS	----	ng/mL	
13C6-PFDA_IS	Auto	8.707	-0.006	----	209355	209355	----	1.2500	ng/mL	
13C6-PFDA	Auto	8.707	-0.006	-0.001	209355	193548	13C2-PFDA_IS	1.3445	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_029 (continued)

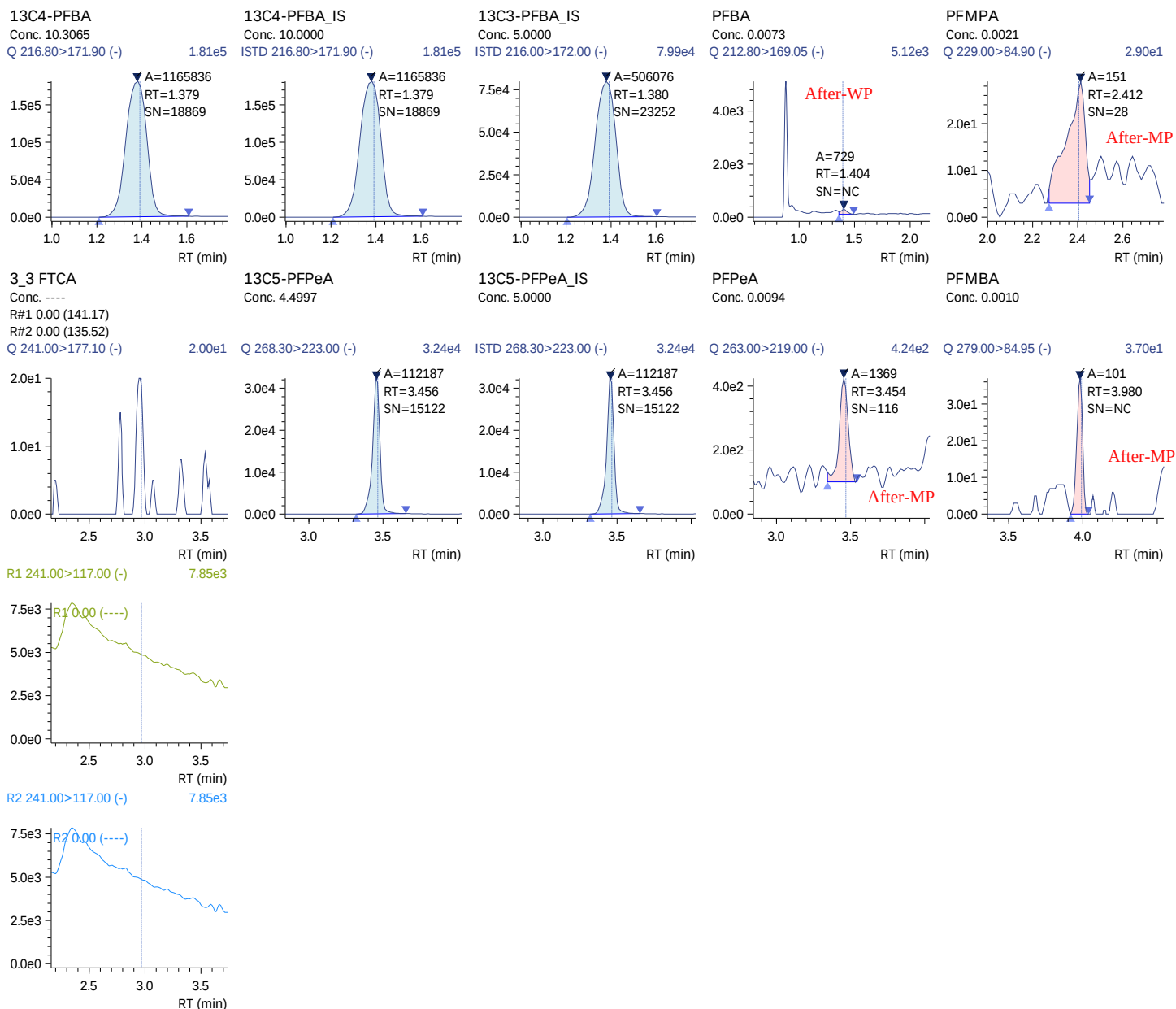
(Table continued from previous page)

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C2-PFDA_IS	Auto	8.708	-0.005	----	193548	193548	----	1.2500	ng/mL	
PFDA	Auto	8.707	-0.008	0.000	3574	209355	13C6-PFDA_IS	-0.0076	ng/mL	
D3-NMeFOSAA_IS	Auto	8.846	-0.005	----	250609	250609	----	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.846	-0.005	0.045	250609	220958	13C4-PFOS_IS	6.5349	ng/mL	
13C8-PFOS_IS	Auto	8.801	-0.007	----	81730	81730	----	2.5000	ng/mL	
13C8-PFOS	Auto	8.801	-0.007	0.000	81730	220958	13C4-PFOS_IS	2.2179	ng/mL	
13C4-PFOS_IS	Auto	8.801	-0.008	----	220958	220958	----	2.5000	ng/mL	
PFOS	M	8.809	0.000	0.008	619	81730	13C8-PFOS_IS	0.0073	ng/mL	
NMeFOSAA	ND(W/B)	----	----	----	----	250609	D3-NMeFOSAA_IS	----	ng/mL	
D5-NetFOSAA_IS	Auto	9.178	-0.005	----	268497	268497	----	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.178	-0.005	0.377	268497	220958	13C4-PFOS_IS	5.8522	ng/mL	
NetFOSAA	ND(W/B)	----	----	----	----	268497	D5-NetFOSAA_IS	----	ng/mL	
9-CI-PF3ONS	ND(W/B)	----	----	----	----	598061	13C3-HFPO-DA_IS	----	ng/mL	
PFUnDA	M	9.430	-0.010	-0.001	3648	234332	13C7-PFUnDA_IS	-0.0082	ng/mL	IRr
13C7-PFUnDA_IS	Auto	9.431	-0.007	----	234332	234332	----	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.431	-0.007	0.723	234332	193548	13C2-PFDA_IS	1.2616	ng/mL	
PFNS	ND(W/B)	----	----	----	----	81730	13C8-PFOS_IS	----	ng/mL	
10_2_FTS	ND(W/B)	----	----	----	----	145182	13C2-8_2-FTS_IS	----	ng/mL	
13C2-PFDOA_IS	Auto	10.120	-0.008	----	245354	245354	----	1.2500	ng/mL	
13C2-PFDOA	Auto	10.120	-0.008	1.412	245354	193548	13C2-PFDA_IS	1.1498	ng/mL	
PFDOA	M	10.116	-0.013	-0.004	2523	245354	13C2-PFDOA_IS	-0.0146	ng/mL	
PFDS	ND(W/B)	----	----	----	----	81730	13C8-PFOS_IS	----	ng/mL	
PFTDA	Auto	10.778	-0.010	-0.635	3275	111688	13C2-PFTDA_IS	-0.0102	ng/mL	
11-CI-PF3OUdS	M	10.790	-0.008	5.368	144	598061	13C3-HFPO-DA_IS	-0.0166	ng/mL	IRr
PFOSAm	M	11.160	-0.002	-0.003	223	240253	13C8-PFOSAm_IS	0.0028	ng/mL	
13C8-PFOSAm	Auto	11.163	-0.001	2.362	240253	220958	13C4-PFOS_IS	2.5613	ng/mL	
13C8-PFOSAm_IS	Auto	11.163	-0.001	----	240253	240253	----	2.5000	ng/mL	
PFTDA	M	11.414	-0.007	0.001	2586	111688	13C2-PFTDA_IS	-0.0063	ng/mL	
13C2-PFTDA	Auto	11.413	-0.006	2.705	111688	193548	13C2-PFDA_IS	1.2122	ng/mL	
13C2-PFTDA_IS	Auto	11.413	-0.006	----	111688	111688	----	1.2500	ng/mL	
PFDoS	M	11.592	-0.023	2.791	47	81730	13C8-PFOS_IS	0.0014	ng/mL	
D7-MeFOSE_IS	Auto	13.401	-0.001	----	704061	704061	----	25.0000	ng/mL	
D7-MeFOSE	Auto	13.401	-0.001	4.600	704061	220958	13C4-PFOS_IS	30.4442	ng/mL	
MeFOSE	ND(W/B)	----	----	----	----	704061	D7-MeFOSE_IS	----	ng/mL	
13C2-PFHxDA_IS	Auto	12.629	-0.007	----	409957	409957	----	2.5000	ng/mL	
13C2-PFHxDA	Auto	12.629	-0.007	3.921	409957	193548	13C2-PFDA_IS	2.2803	ng/mL	
PFHxDA	M	12.628	-0.009	-0.001	2634	409957	13C2-PFHxDA_IS	-0.0122	ng/mL	
D3-MeFOSA	Auto	13.707	-0.004	4.906	42057	220958	13C4-PFOS_IS	2.2264	ng/mL	
D3-MeFOSA_IS	Auto	13.707	-0.004	----	42057	42057	----	2.5000	ng/mL	
MeFOSA	ND(W/B)	----	----	----	----	42057	D3-MeFOSA_IS	----	ng/mL	
D9-EtFOSE_IS	Auto	14.031	-0.001	----	721937	721937	----	25.0000	ng/mL	
D9-EtFOSE	Auto	14.031	-0.001	5.230	721937	220958	13C4-PFOS_IS	30.7361	ng/mL	
EtFOSE	ND(W/B)	----	----	----	----	721937	D9-EtFOSE_IS	----	ng/mL	
D5-EtFOSAm	Auto	14.387	0.000	5.586	66689	220958	13C4-PFOS_IS	2.6517	ng/mL	
D5-EtFOSAm_IS	Auto	14.387	0.000	----	66689	66689	----	2.5000	ng/mL	
EtFOSAm	ND(W/B)	----	----	----	----	66689	D5-EtFOSAm_IS	----	ng/mL	
PFODA	M	13.767	-0.007	1.138	1578	409957	13C2-PFHxDA_IS	0.0170	ng/mL	

Flag ID key: IRr: Ion Ratio (Relative)



240122_029 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_029 (continued)

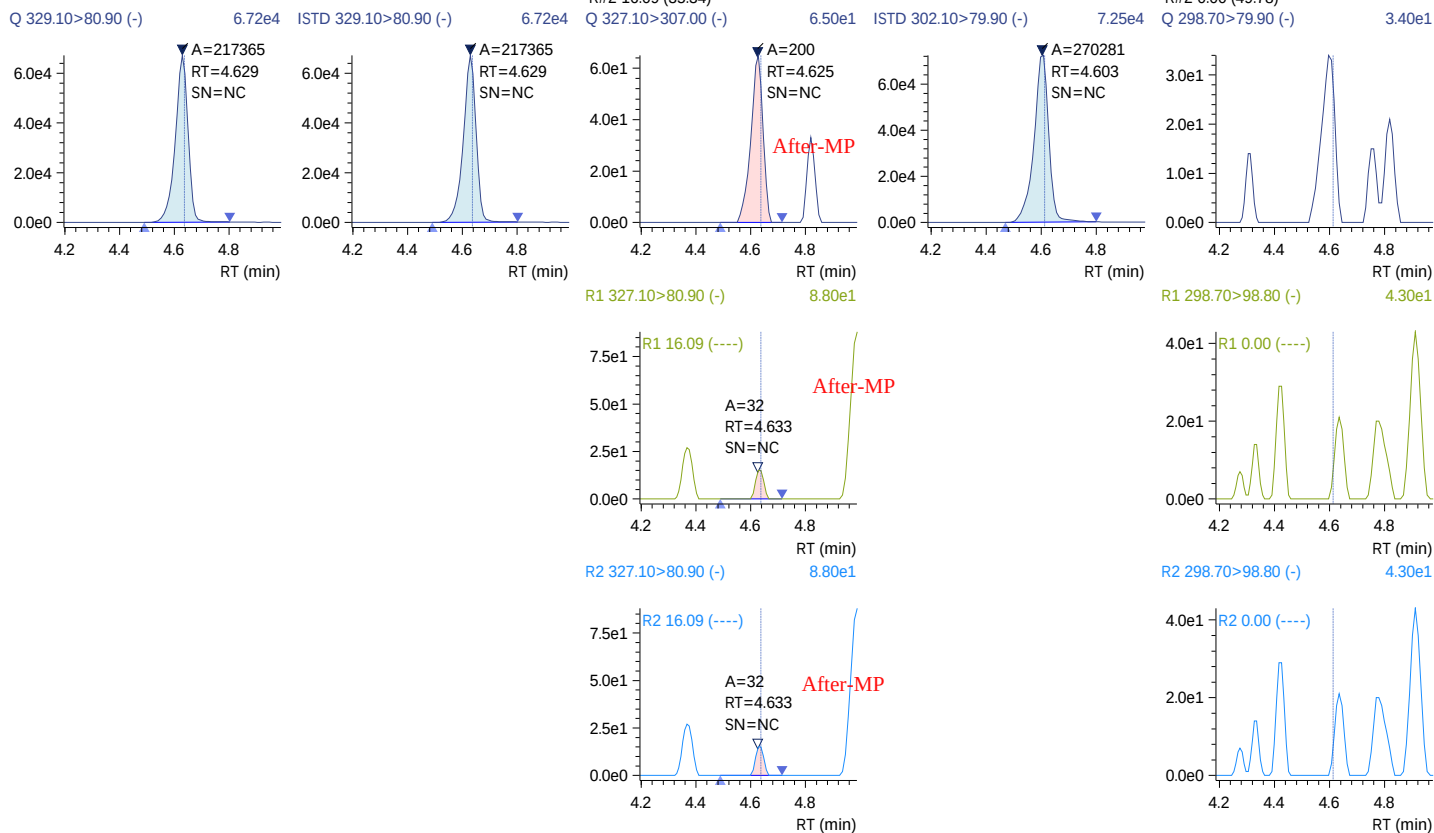
13C2-4_2 FTS
Conc. 8.7074

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. 0.0019
R#1 16.09 (29.06)
R#2 16.09 (35.34)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. ----
R#1 0.00 (46.72)
R#2 0.00 (49.78)





240122_029 (continued)

13C3-PFBS
Conc. 2.6255

NFDHA
Conc. 0.0065
R#1 15.01 (40.25)
R#2 15.01 (37.18)

13C5-PFHxA
Conc. 2.3344

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

Q 302.10>79.90 (-)

7.25e4

Q 295.00>201.00 (-)

2.22e2

Q 318.00>273.00 (-)

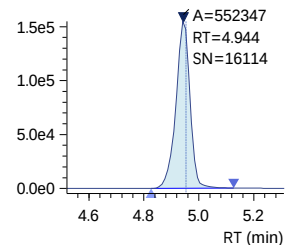
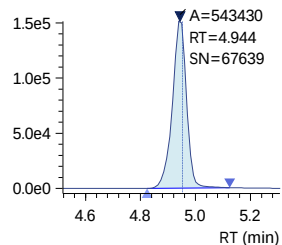
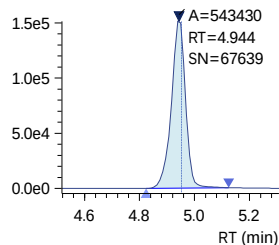
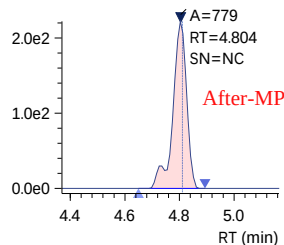
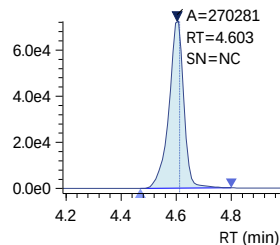
1.51e5

ISTD 318.00>273.00 (-)

1.51e5

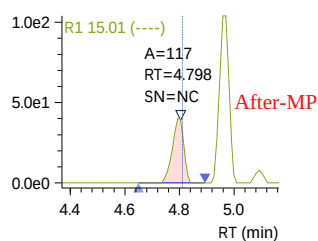
ISTD 315.10>270.00 (-)

1.55e5



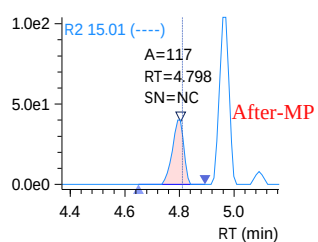
R1 295.00>84.90 (-)

1.04e2



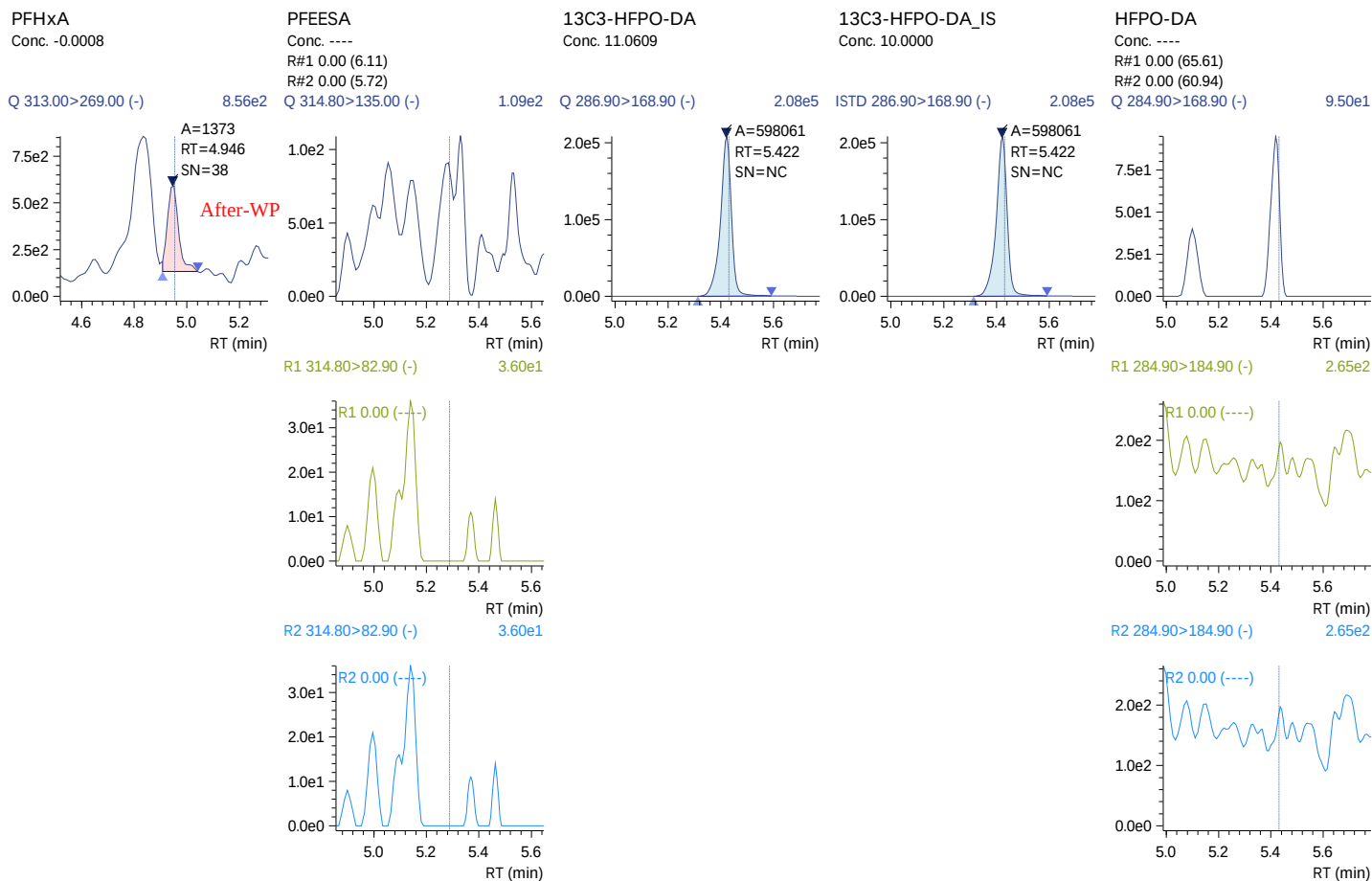
R2 295.00>84.90 (-)

1.04e2



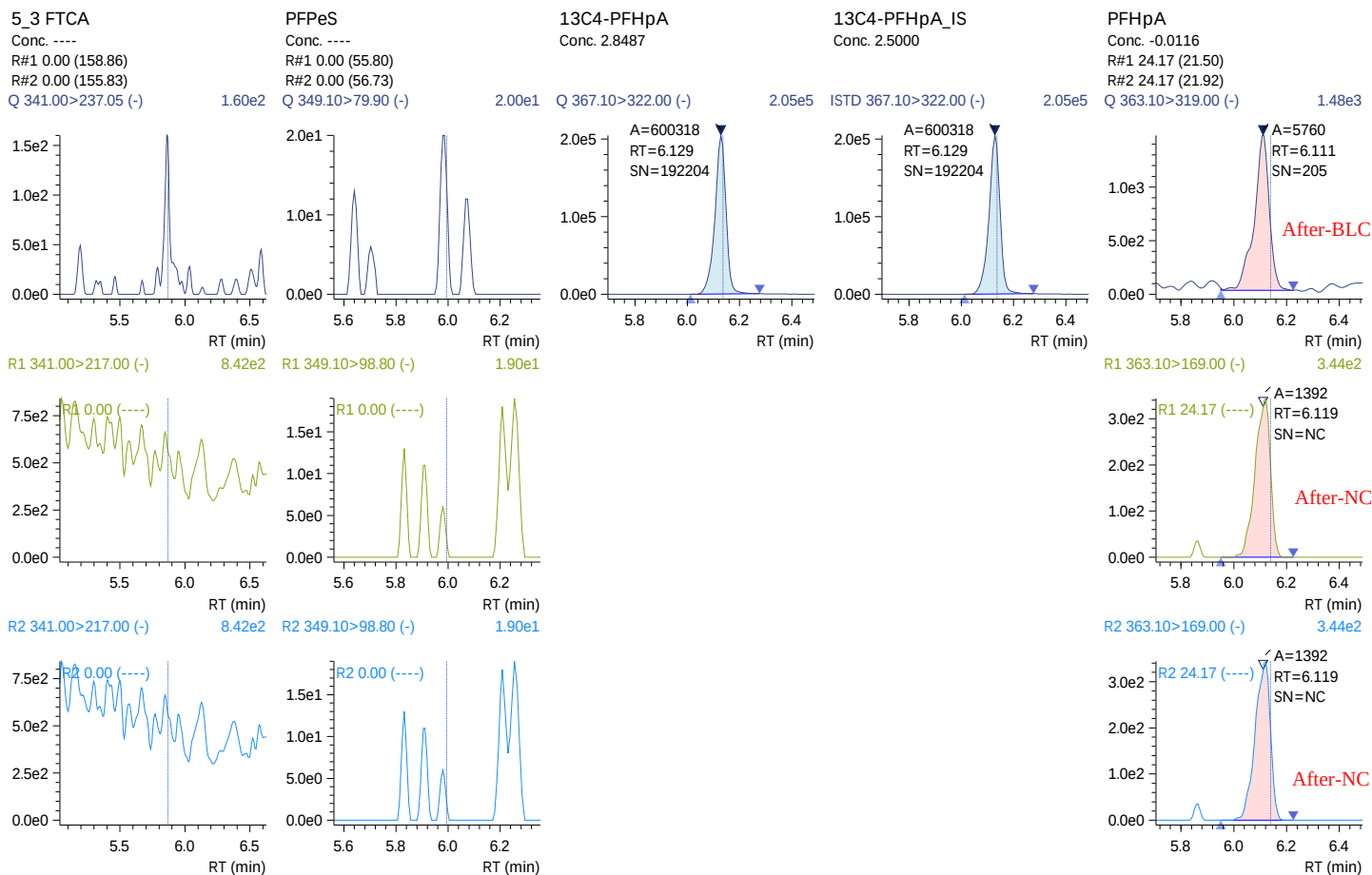


240122_029 (continued)





240122_029 (continued)

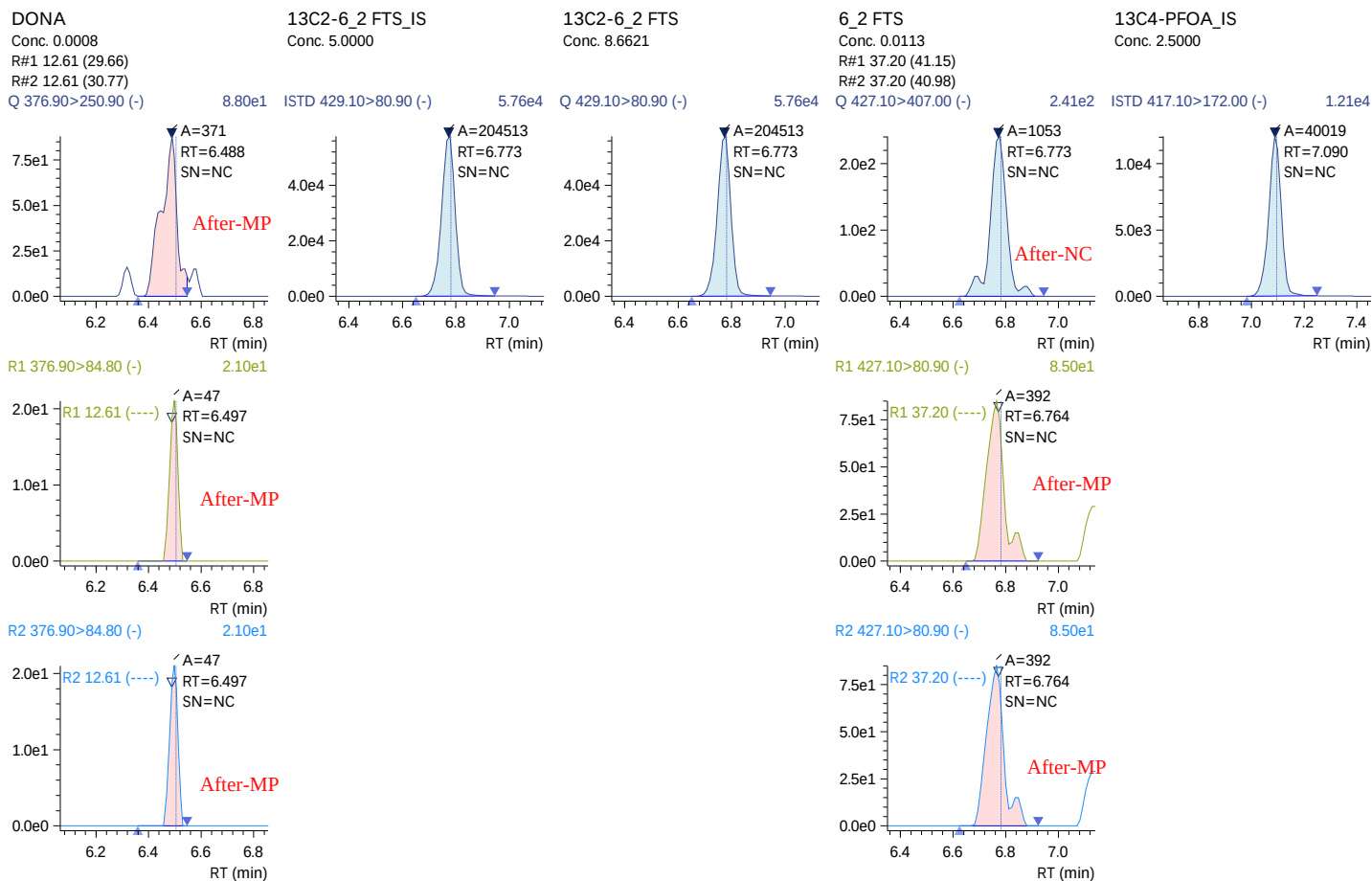


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_029 (continued)





240122_029 (continued)

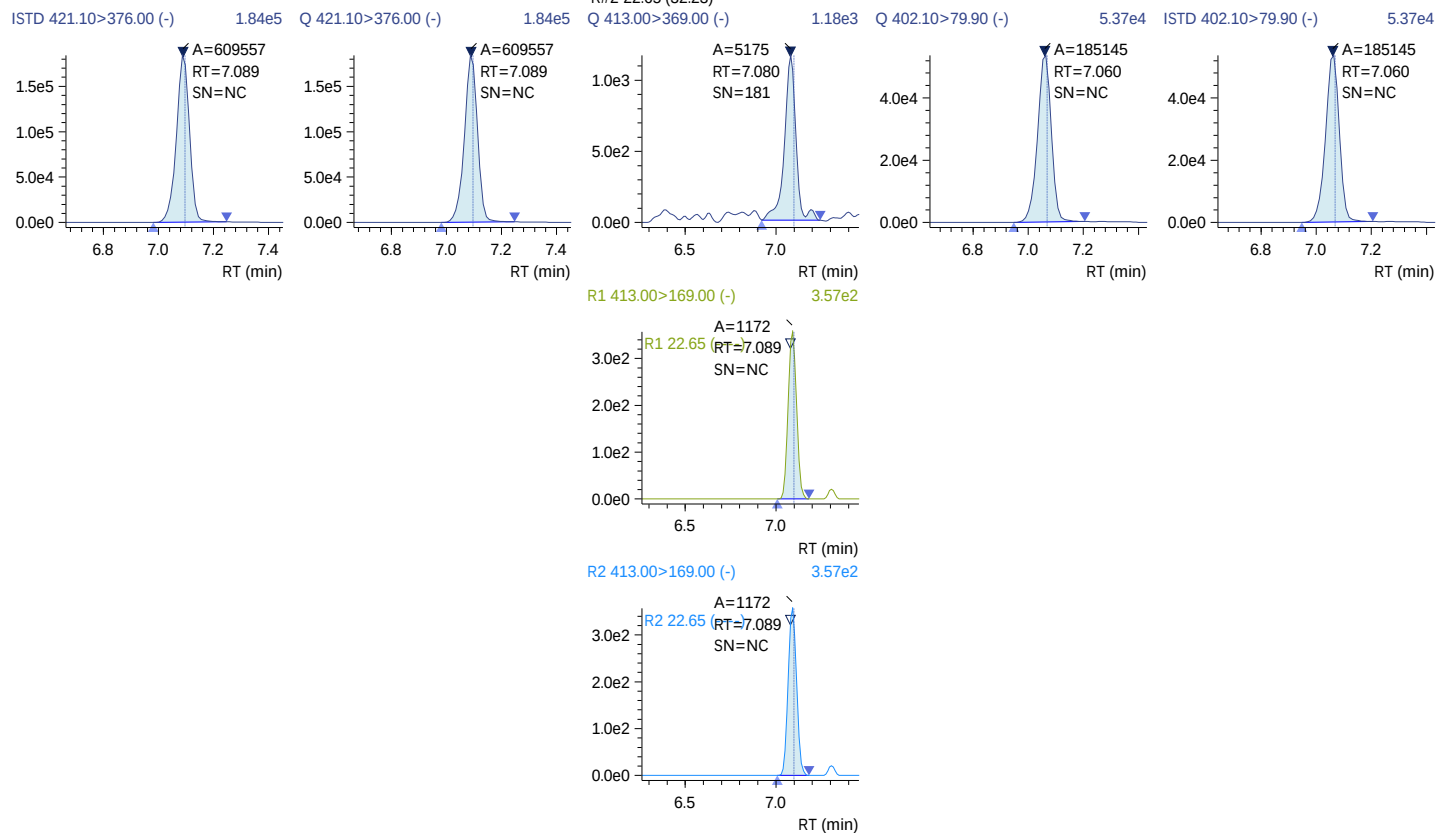
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.7251

PFOA
Conc. -0.0108
R#1 22.65 (31.89)
R#2 22.65 (32.23)

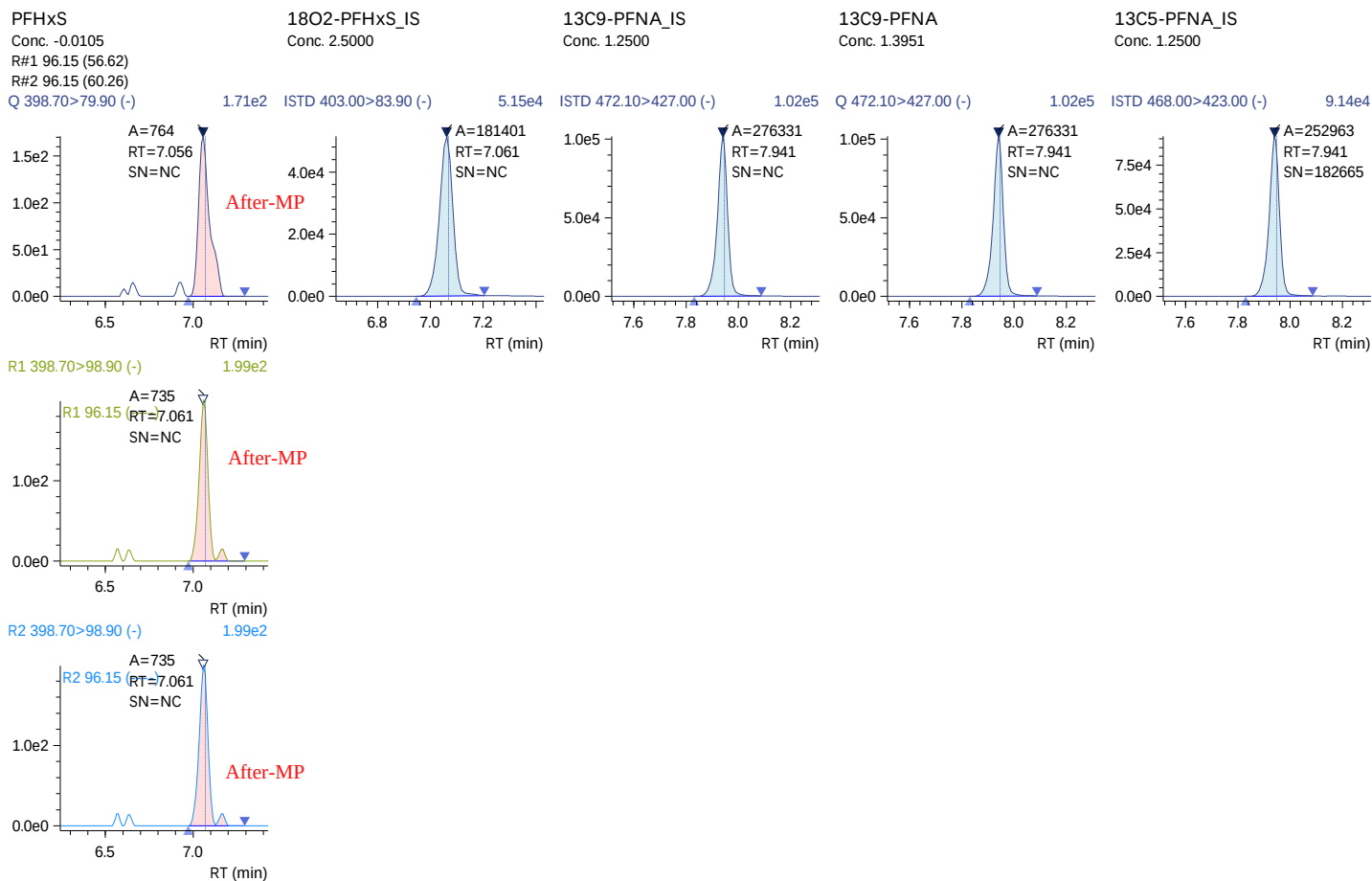
13C3-PFHxS
Conc. 2.3778

13C3-PFHxS_IS
Conc. 2.5000



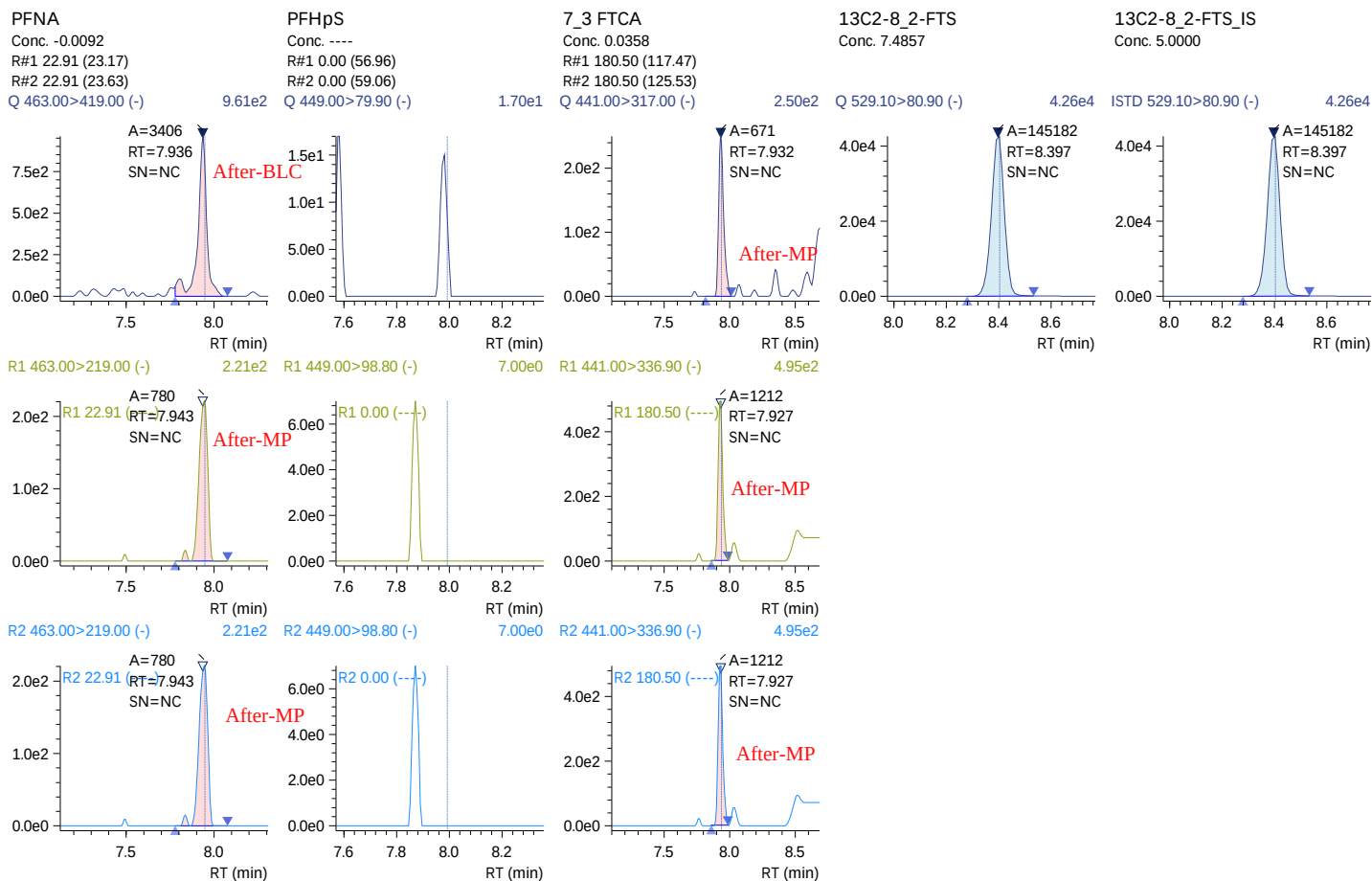


240122_029 (continued)





240122_029 (continued)

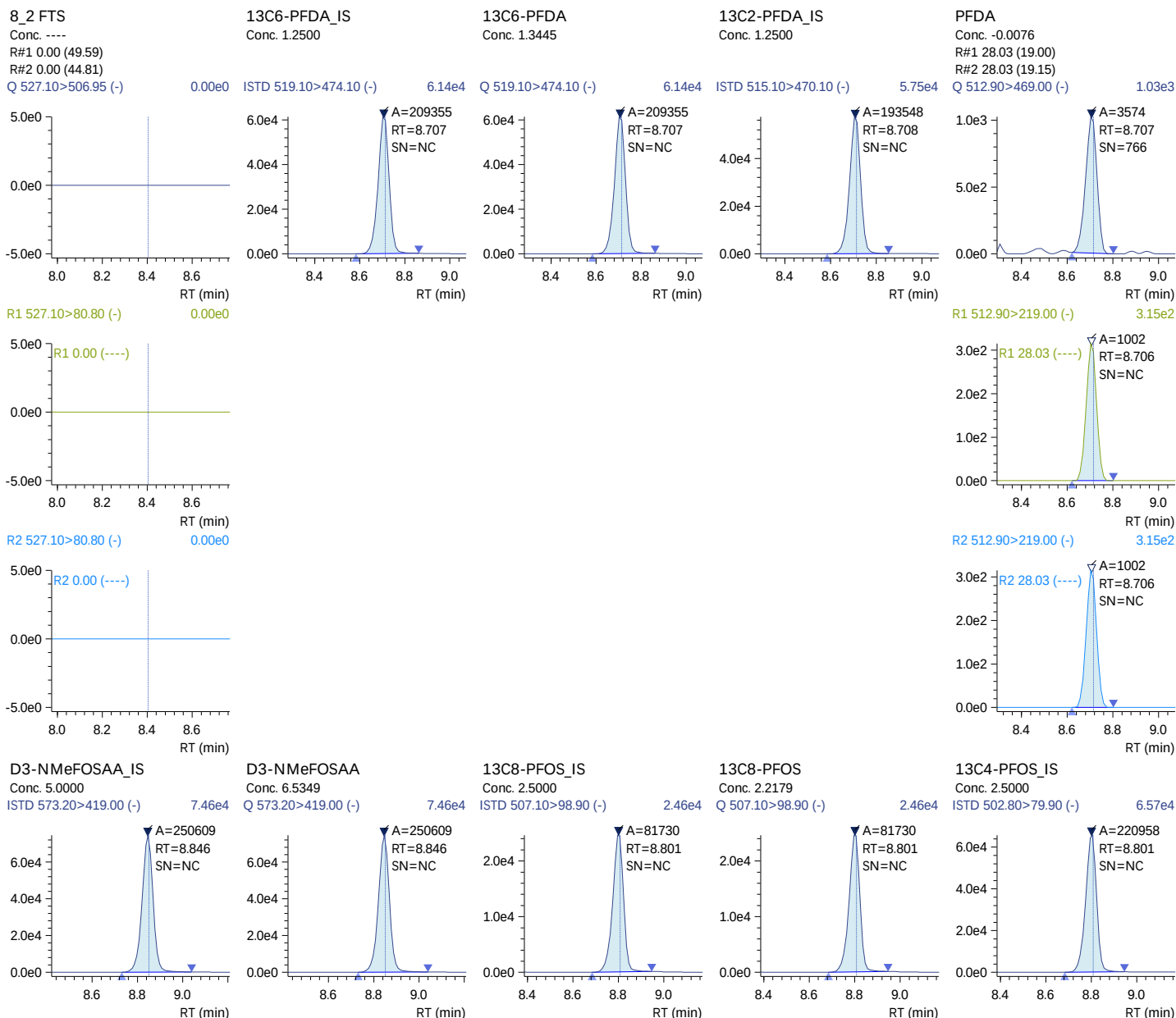


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_029 (continued)

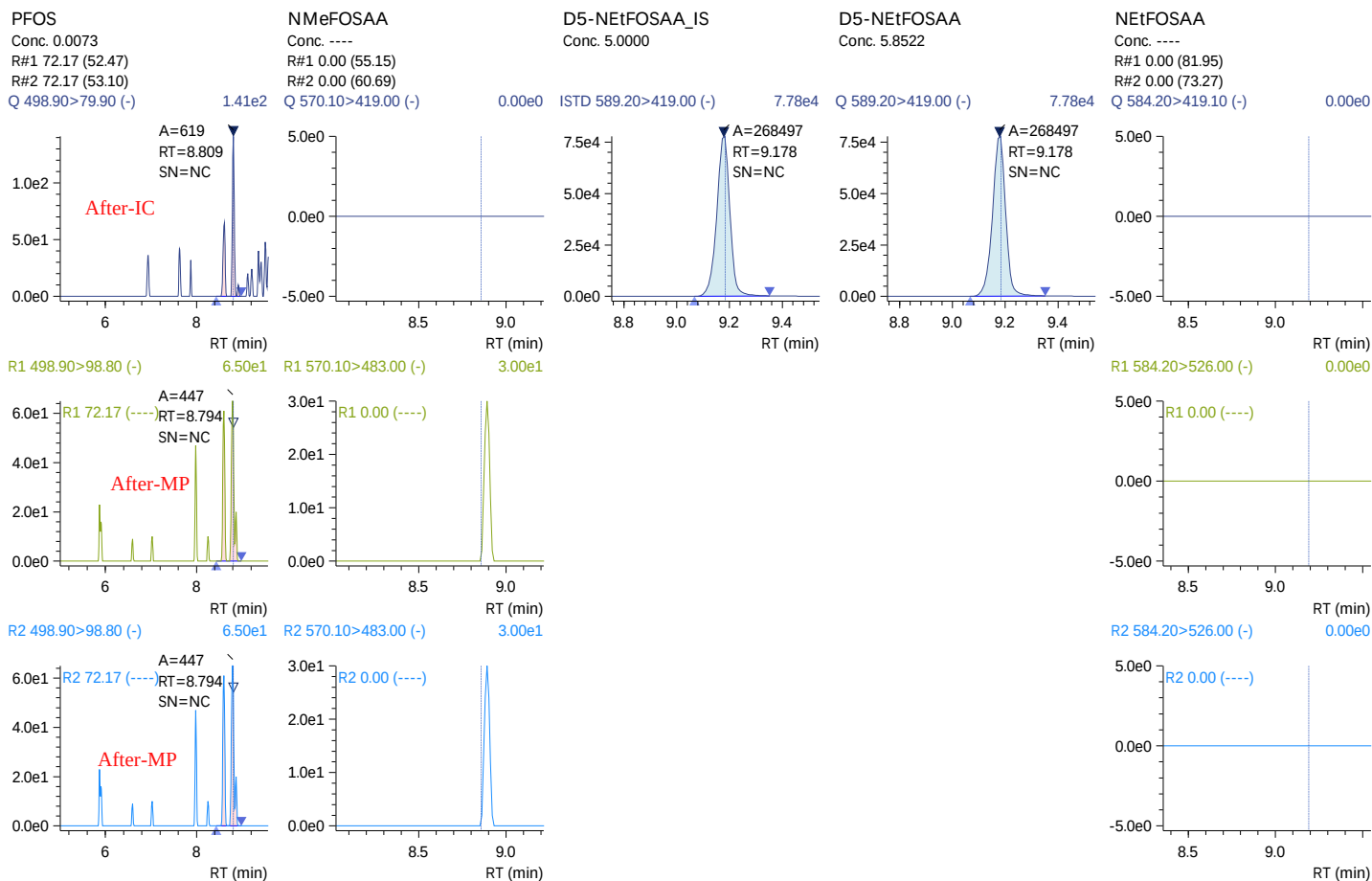


J:\LCMS08\Data\240122_1633_B1\240122_1633_B1.dampl

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_029 (continued)



J:\LCMS08\Data\240122_1633_B1\240122_1633_B1.dampl

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_029 (continued)

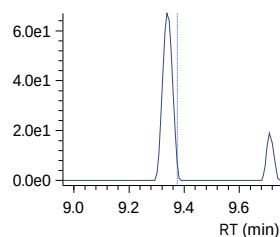
9-Cl-PF3ONS

Conc. ----

R#1 0.00 (32.76)

R#2 0.00 (32.59)

Q 530.80>351.00 (-)



R1 532.80>353.00 (-)

1.23e2

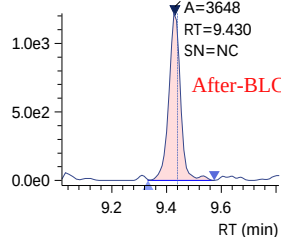
PFUnDA

Conc. -0.0082

R#1 5.25 (13.12)

R#2 5.25 (14.36)

Q 563.10>519.00 (-)



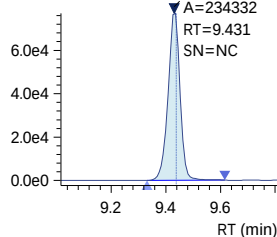
R1 563.10>269.10 (-)

6.90e1

13C7-PFUnDA_IS

Conc. 1.2500

ISTD 570.00>525.10 (-)

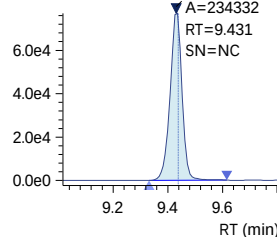


7.71e4

13C7-PFUnDA

Conc. 1.2616

Q 570.00>525.10 (-)



7.71e4

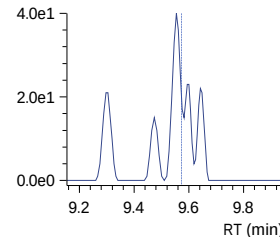
PFNS

Conc. ----

R#1 0.00 (65.22)

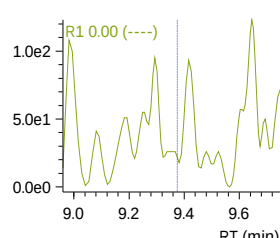
R#2 0.00 (65.31)

Q 548.80>79.90 (-)



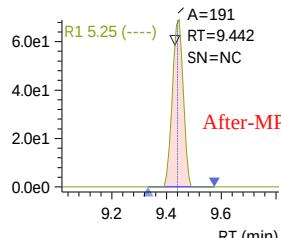
R1 548.80>98.80 (-)

5.30e1



R2 532.80>353.00 (-)

1.23e2



R2 563.10>269.10 (-)

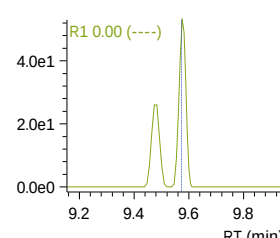
6.90e1



7.71e4

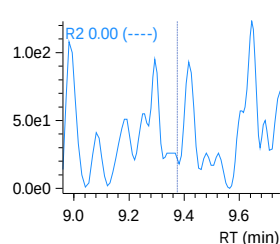


7.71e4



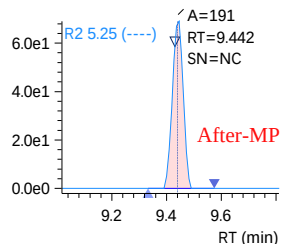
R2 548.80>98.80 (-)

5.30e1



R2 532.80>353.00 (-)

1.23e2



R2 563.10>269.10 (-)

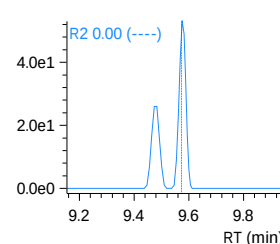
6.90e1



7.71e4



7.71e4

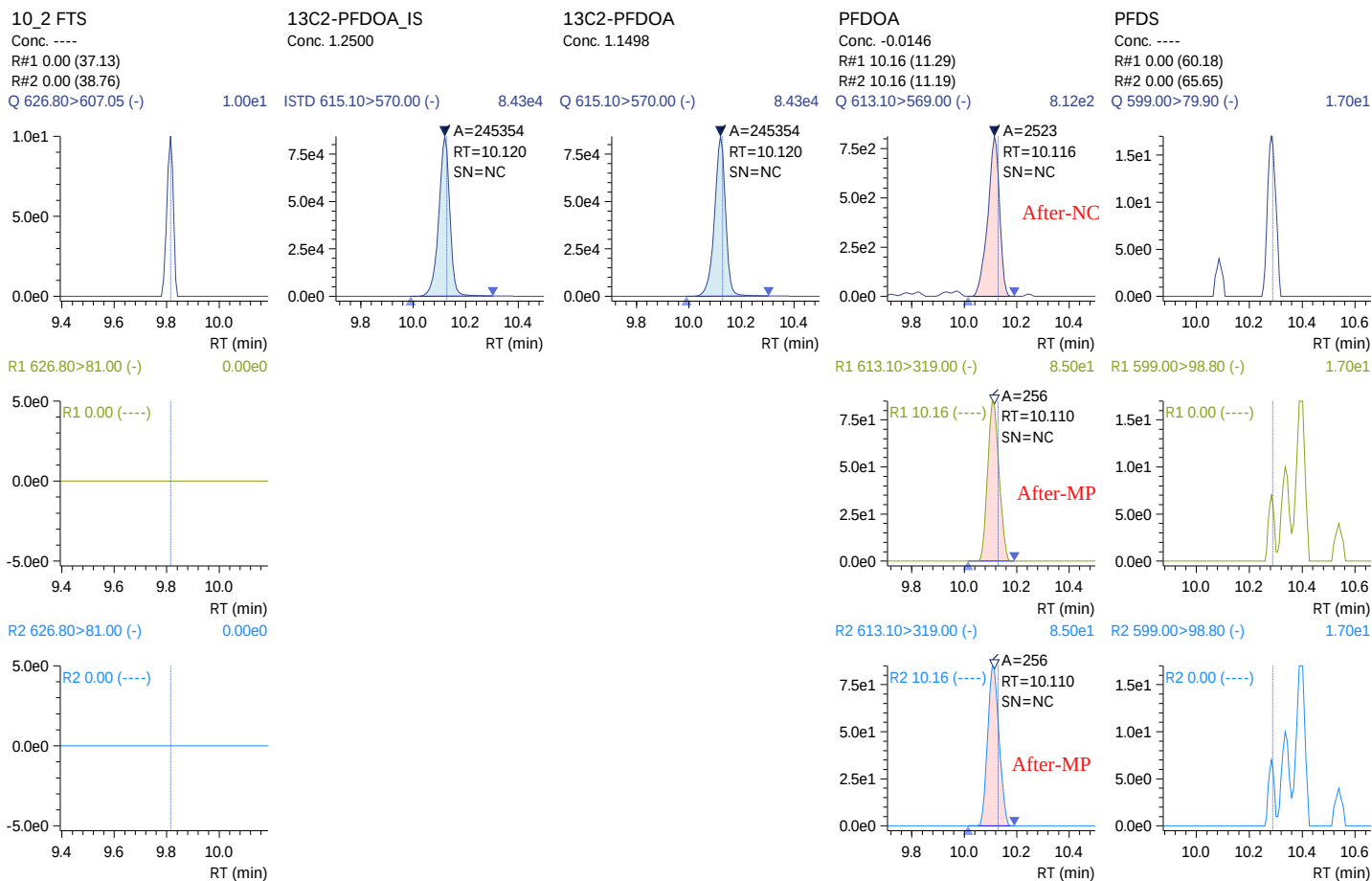


R2 548.80>98.80 (-)

5.30e1



240122_029 (continued)

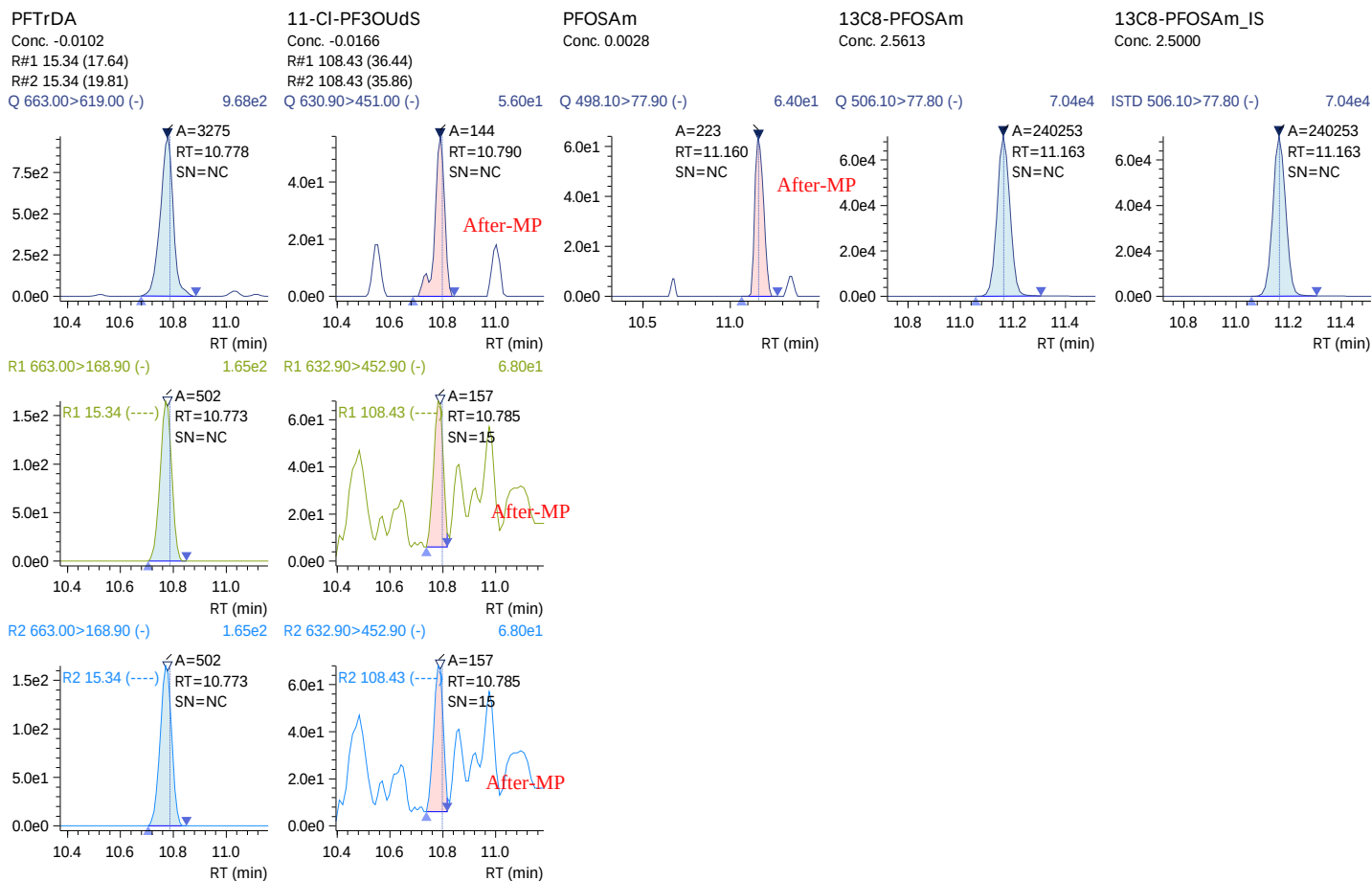


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.

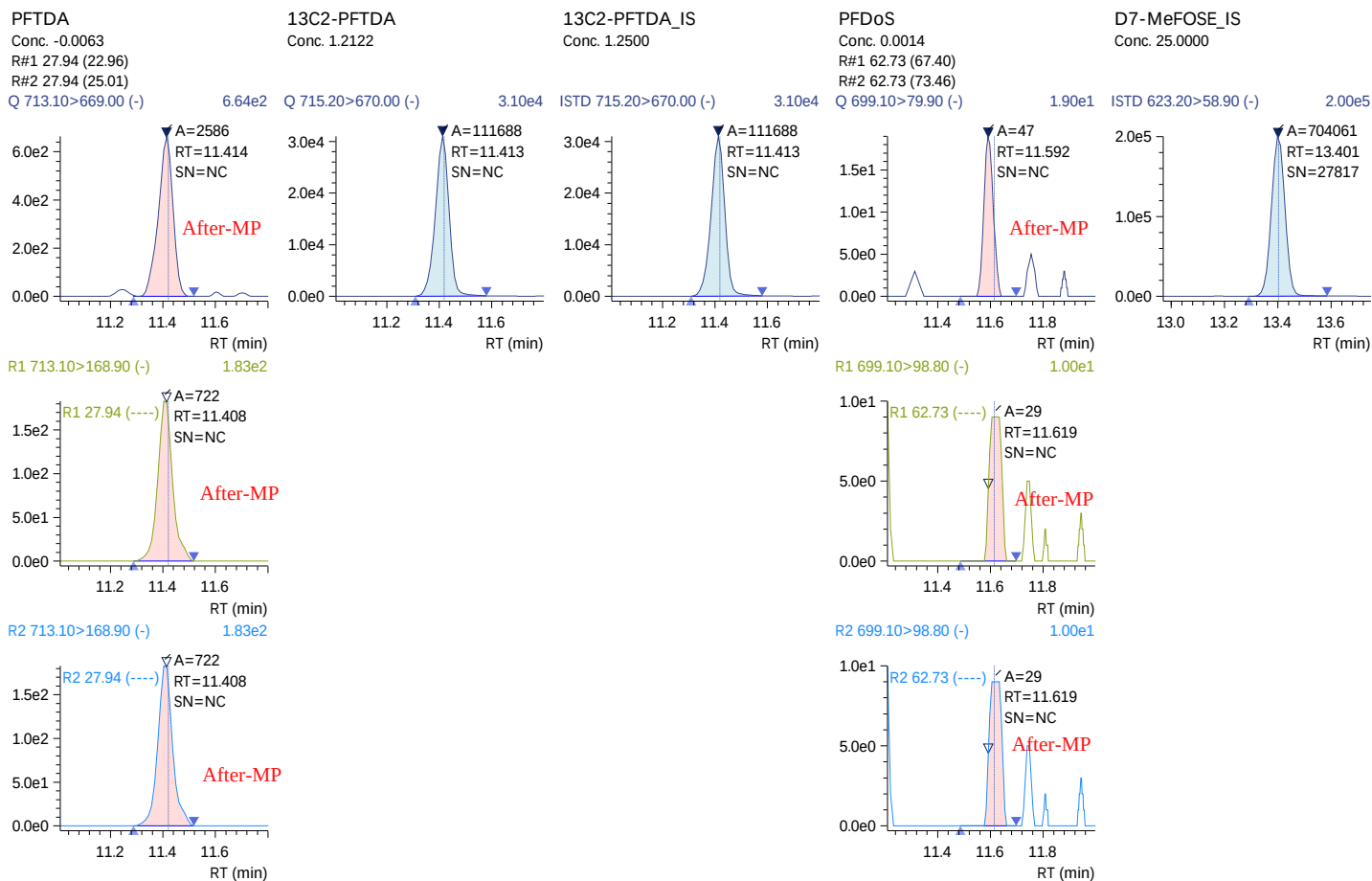


240122_029 (continued)





240122_029 (continued)





240122_029 (continued)

D7-MeFOSE
Conc. 30.4442

MeFOSE
Conc. ----

13C2-PFHXA_IS
Conc. 2.5000

13C2-PFHXA
Conc. 2.2803

PFHXA

Conc. -0.0122
R#1 17.35 (13.90)
R#2 17.35 (15.85)

Q 623.20>58.90 (-)

2.00e5

Q 616.10>59.00 (-)

5.40e1

ISTD 815.00>770.05 (-)

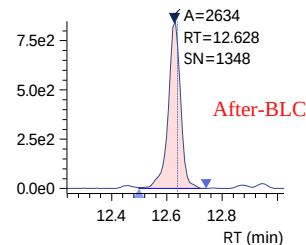
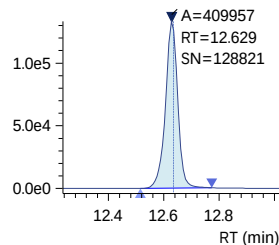
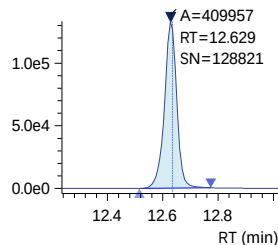
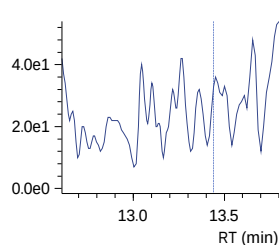
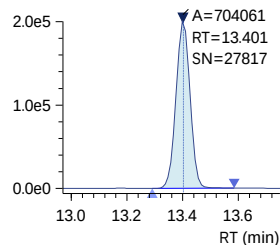
1.33e5

Q 815.00>770.05 (-)

1.33e5

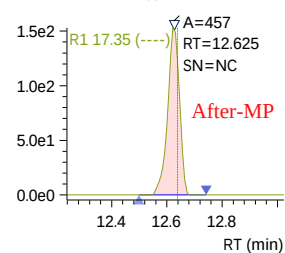
Q 813.00>768.95 (-)

8.48e2



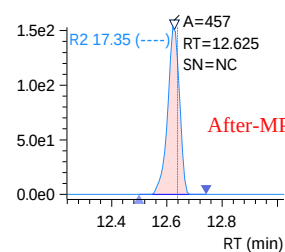
R1 813.00>218.95 (-)

1.53e2



R2 813.00>218.95 (-)

1.53e2





240122_029 (continued)

D3-MeFOSA
Conc. 2.2264

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. ----
R#1 0.00 (140.79)
R#2 0.00 (150.13)

D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 30.7361

Q 515.00>219.00 (-)

1.17e4

ISTD 515.00>219.00 (-)

1.17e4

Q 511.90>219.00 (-)

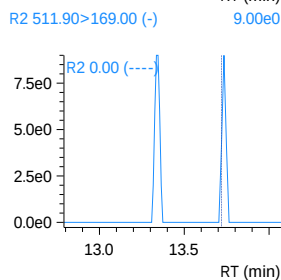
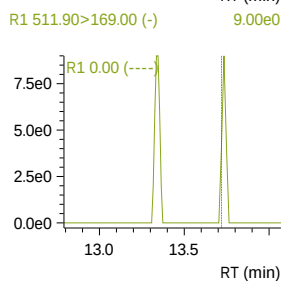
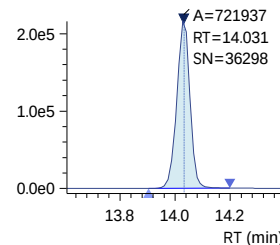
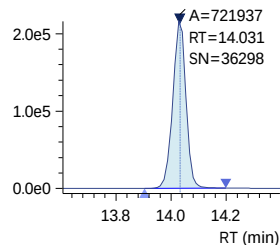
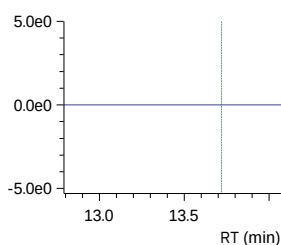
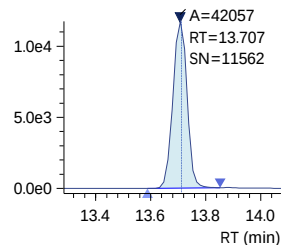
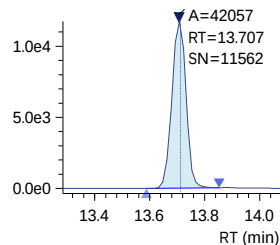
0.00e0

ISTD 639.20>58.90 (-)

2.16e5

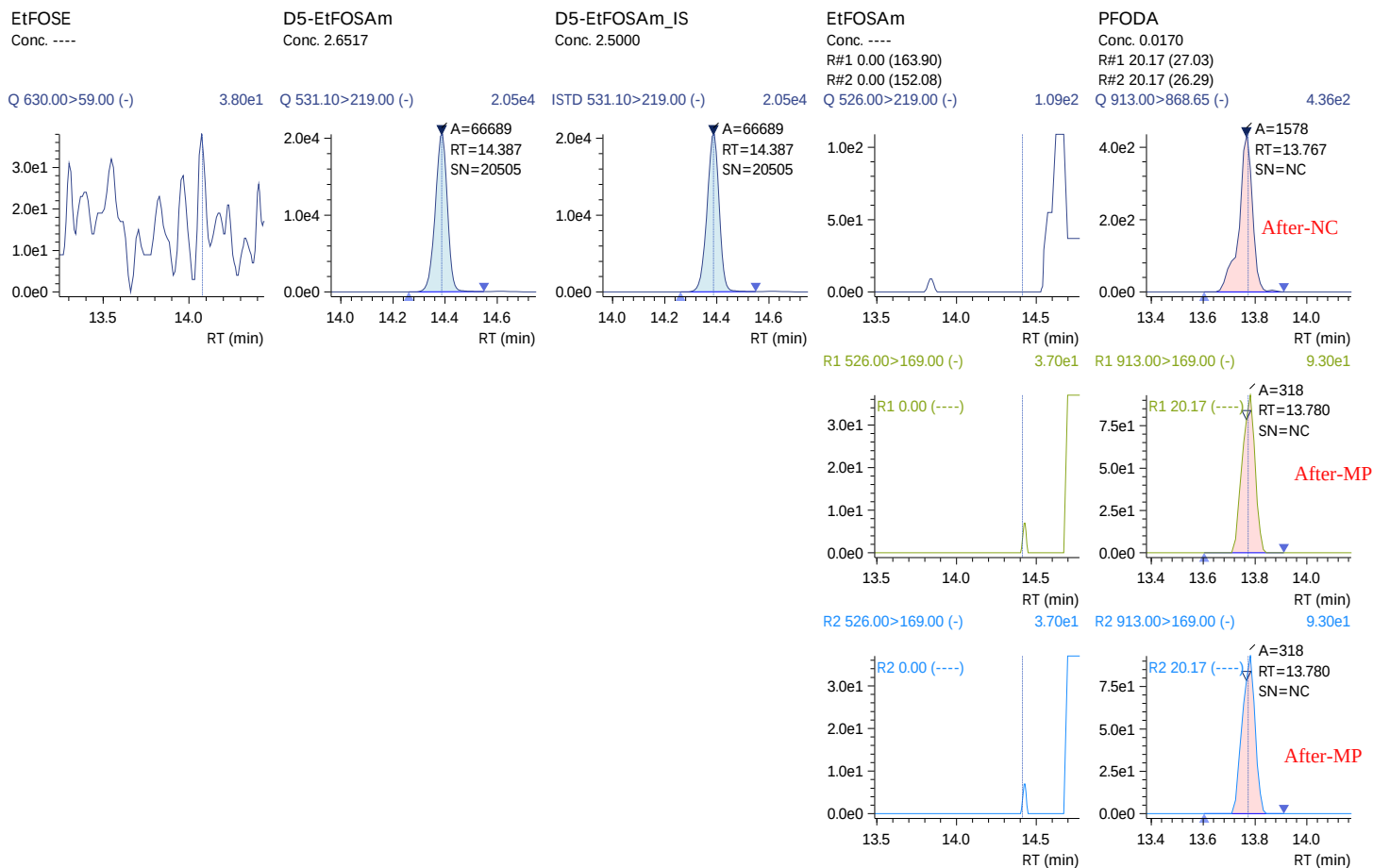
Q 639.20>58.90 (-)

2.16e5





240122_029 (continued)



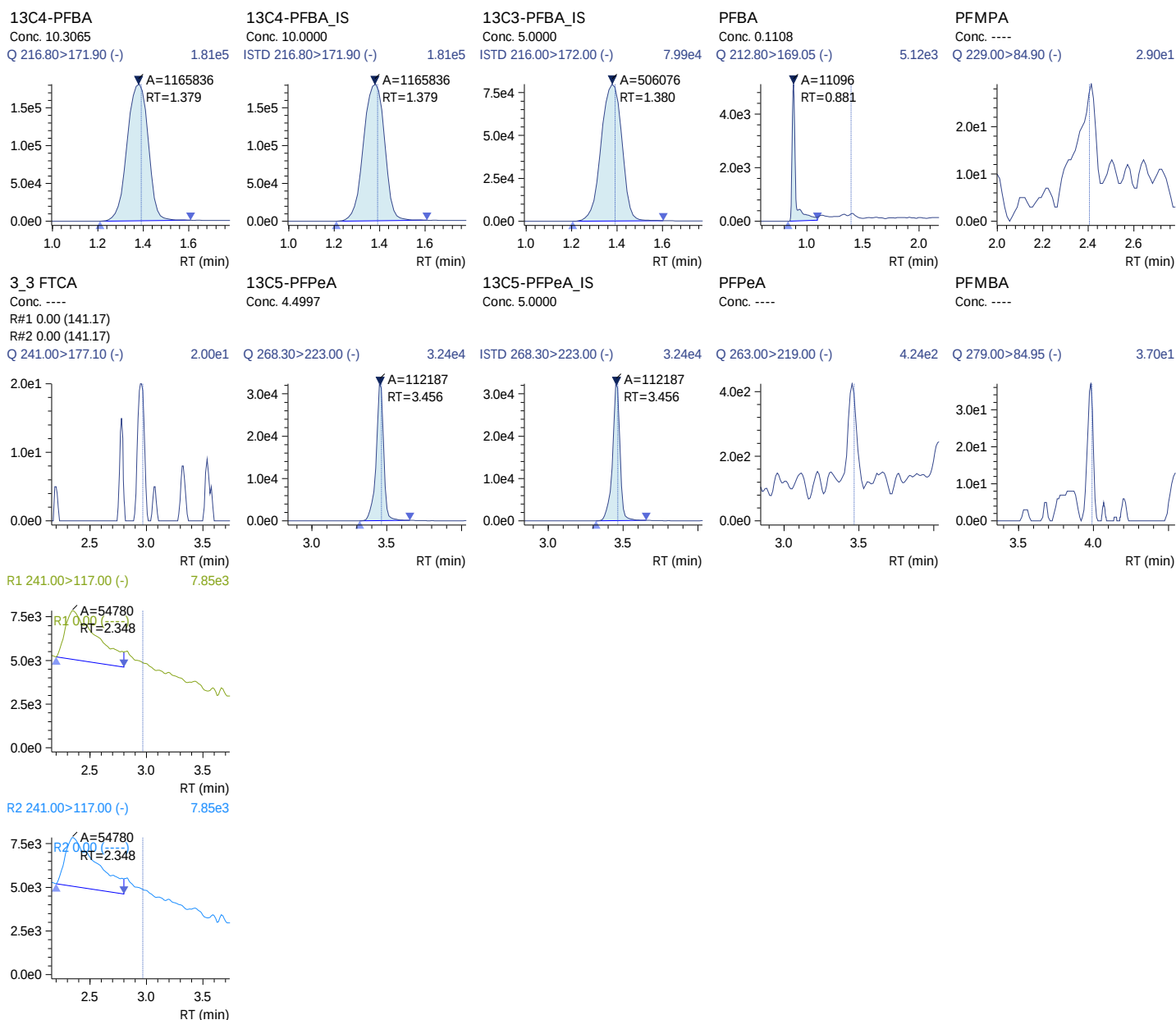
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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_029

Sample ID: 1633 CCB
Date Acquired: 1/22/2024 8:36:38 PM
Acquired by: System Administrator
Data File: 240122_029
Vial: 54 | Inj. Volume: 10.0000uL | Tray: 1





240122_029 (continued)

13C2-4_2 FTS
Conc. 8.7074

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. ----
R#1 0.00 (29.06)
R#2 0.00 (29.06)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. ----
R#1 0.00 (46.72)
R#2 0.00 (46.72)

Q 329.10>80.90 (-)

6.72e4

ISTD 329.10>80.90 (-)

6.72e4

Q 327.10>307.00 (-)

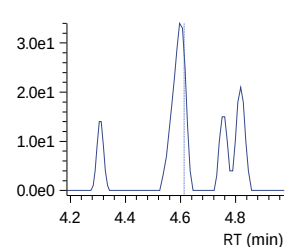
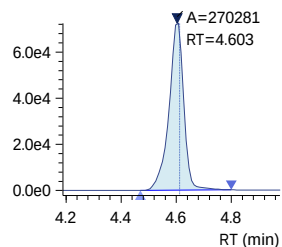
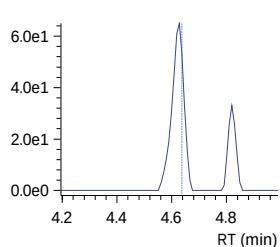
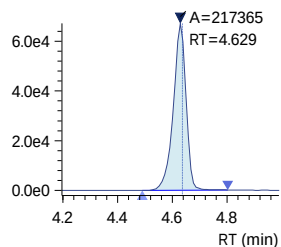
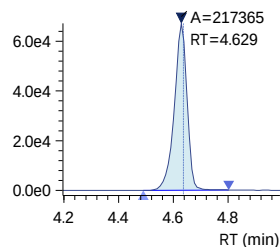
6.50e1

ISTD 302.10>79.90 (-)

7.25e4

Q 298.70>79.90 (-)

3.40e1

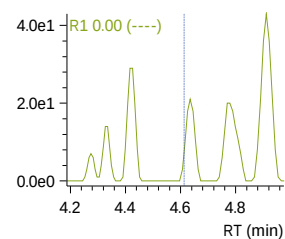
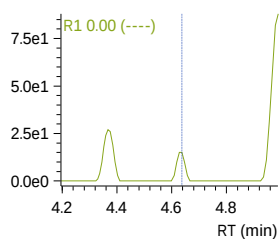


R1 327.10>80.90 (-)

8.80e1

R1 298.70>98.80 (-)

4.30e1

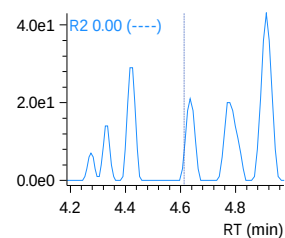
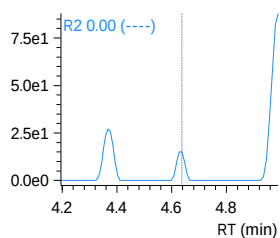


R2 327.10>80.90 (-)

8.80e1

R2 298.70>98.80 (-)

4.30e1





240122_029 (continued)

13C3-PFBS
 Conc. 2.6255

NFDHA
 Conc. ----
 R#1 0.00 (40.25)
 R#2 0.00 (40.25)

13C5-PFHxA
 Conc. 2.3344

13C5-PFHxA_IS
 Conc. 2.5000

13C2-PFHxA_IS
 Conc. 2.5000

Q 302.10>79.90 (-)

7.25e4

Q 295.00>201.00 (-)

2.22e2

Q 318.00>273.00 (-)

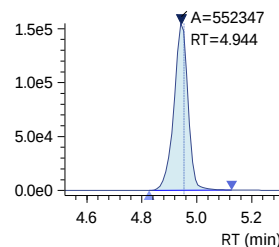
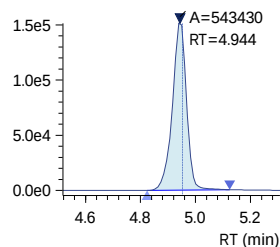
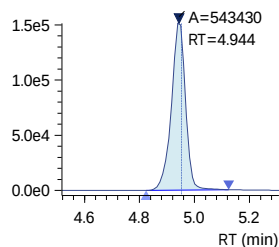
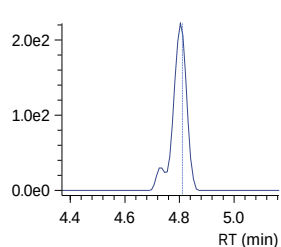
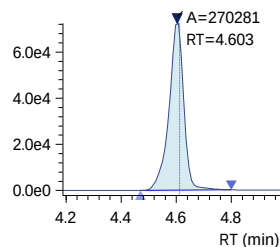
1.51e5

ISTD 318.00>273.00 (-)

1.51e5

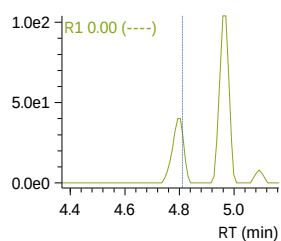
ISTD 315.10>270.00 (-)

1.55e5



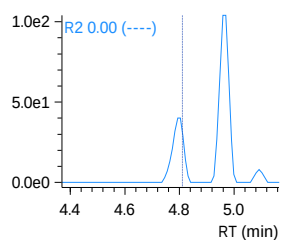
R1 295.00>84.90 (-)

1.04e2



R2 295.00>84.90 (-)

1.04e2





240122_029 (continued)

PFHxA
Conc. 0.0110

PFEESA
Conc. ----

13C3-HFPO-DA
Conc. 11.0609

13C3-HFPO-DA_IS
Conc. 10.0000

HFPO-DA
Conc. ----

Q 313.00>269.00 (-)

8.56e2

Q 314.80>135.00 (-)

1.09e2

Q 286.90>168.90 (-)

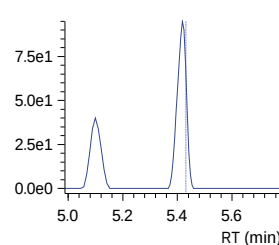
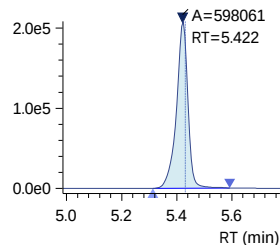
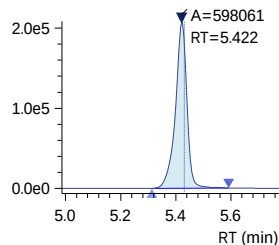
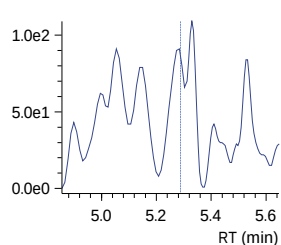
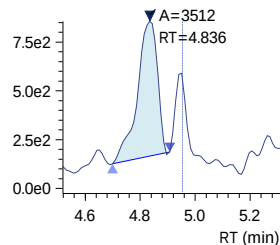
2.08e5

ISTD 286.90>168.90 (-)

2.08e5

Q 284.90>168.90 (-)

9.50e1

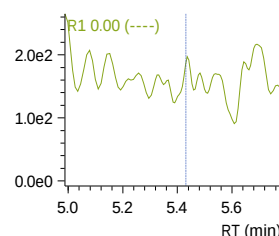
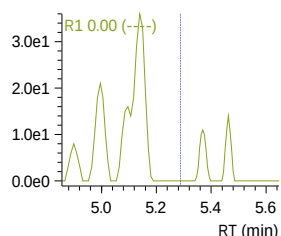


R1 314.80>82.90 (-)

3.60e1

R1 284.90>184.90 (-)

2.65e2

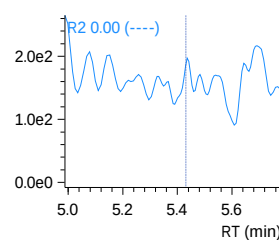
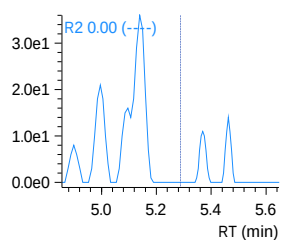


R2 314.80>82.90 (-)

3.60e1

R2 284.90>184.90 (-)

2.65e2





240122_029 (continued)

5_3 FTCA

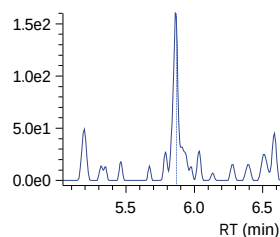
Conc. ----

R#1 0.00 (158.86)

R#2 0.00 (158.86)

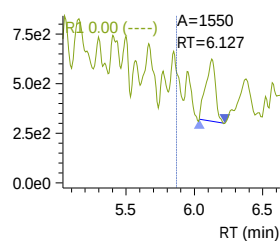
Q 341.00>237.05 (-)

1.60e2



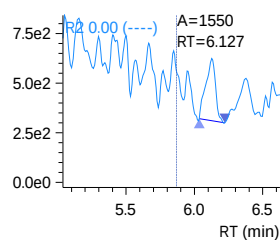
R1 341.00>217.00 (-)

8.42e2



R2 341.00>217.00 (-)

8.42e2



PFPeS

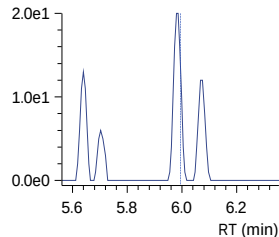
Conc. ----

R#1 0.00 (55.80)

R#2 0.00 (55.80)

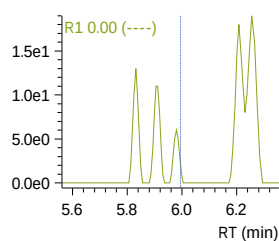
Q 349.10>79.90 (-)

2.00e1



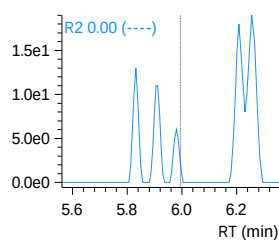
R1 349.10>98.80 (-)

1.90e1



R2 349.10>98.80 (-)

1.90e1

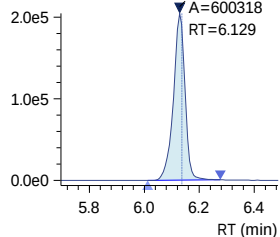


13C4-PFHpA

Conc. 2.8487

Q 367.10>322.00 (-)

2.05e5

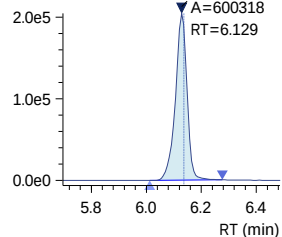


13C4-PFHpA_IS

Conc. 2.5000

ISTD 367.10>322.00 (-)

2.05e5



PFHpA

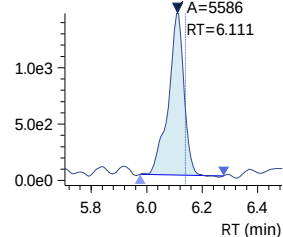
Conc. -0.0123

R#1 24.92 (21.50)

R#2 24.92 (21.50)

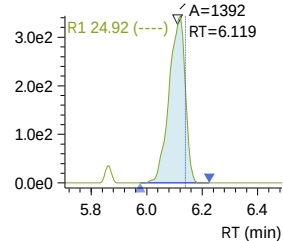
Q 363.10>319.00 (-)

1.48e3



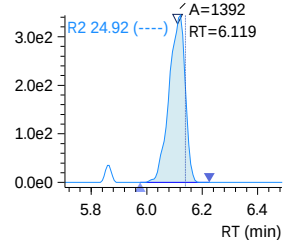
R1 363.10>169.00 (-)

3.44e2



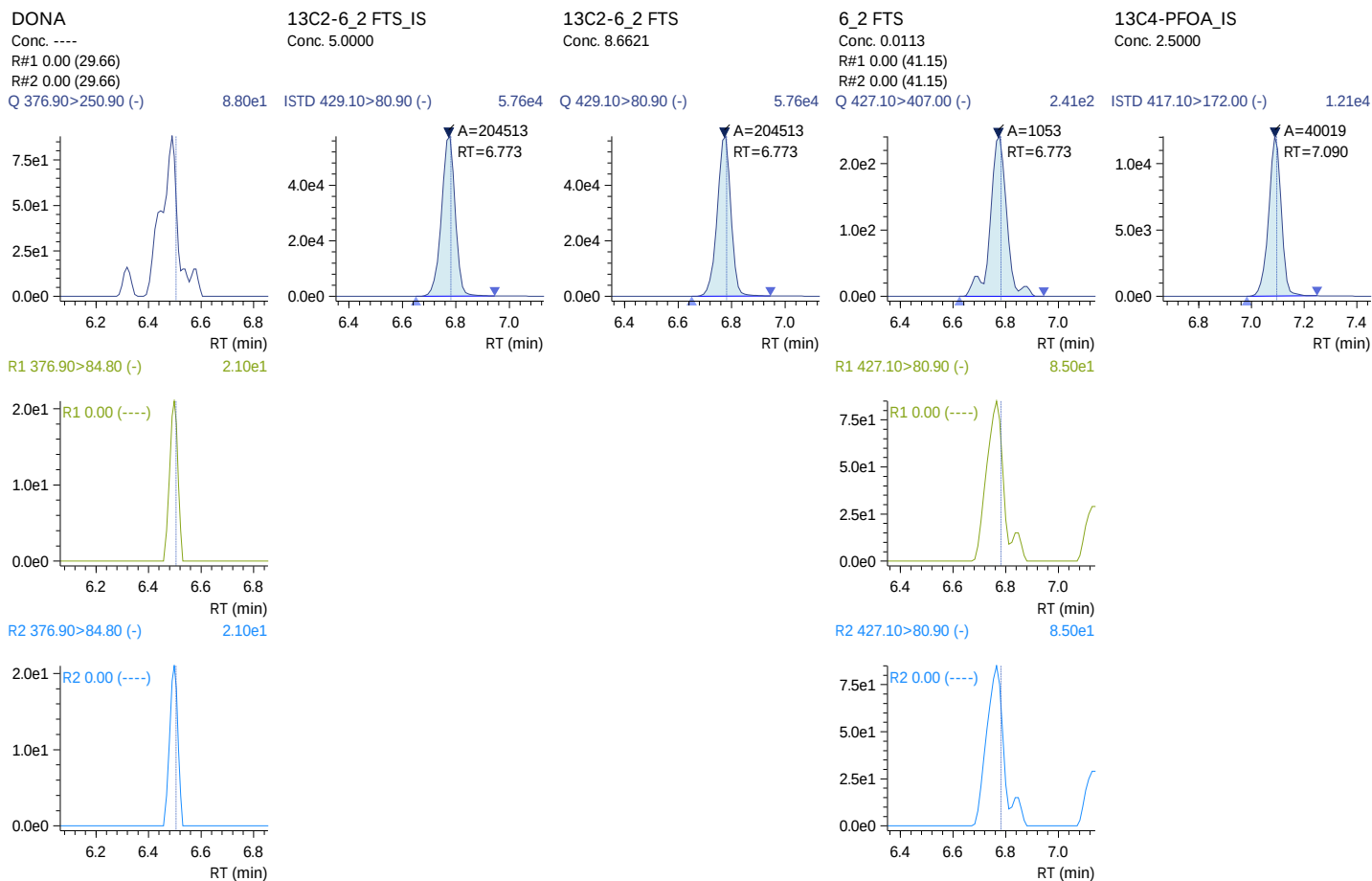
R2 363.10>169.00 (-)

3.44e2





240122_029 (continued)





240122_029 (continued)

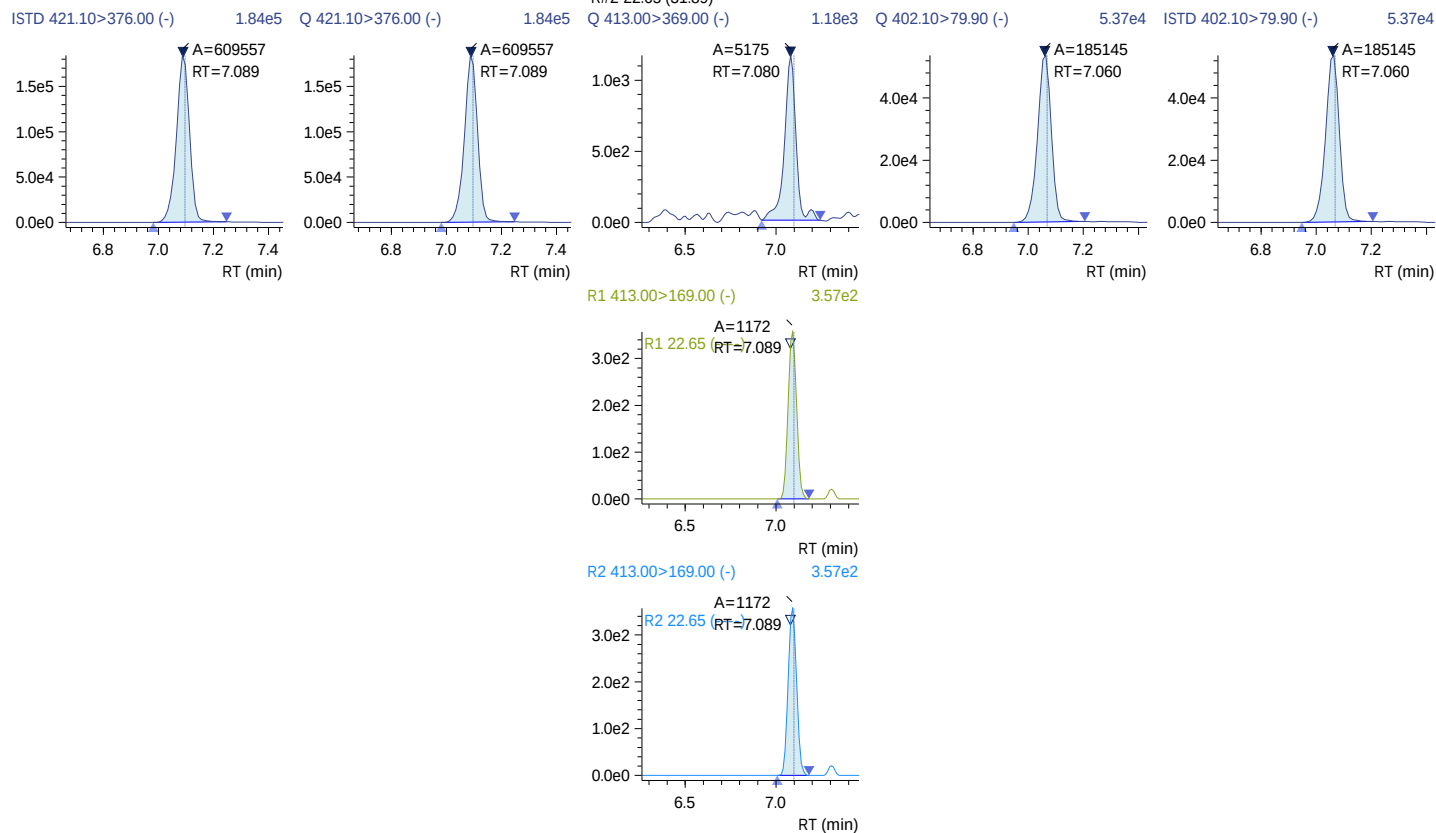
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.7251

PFOA
Conc. -0.0108
R#1 22.65 (31.89)
R#2 22.65 (31.89)

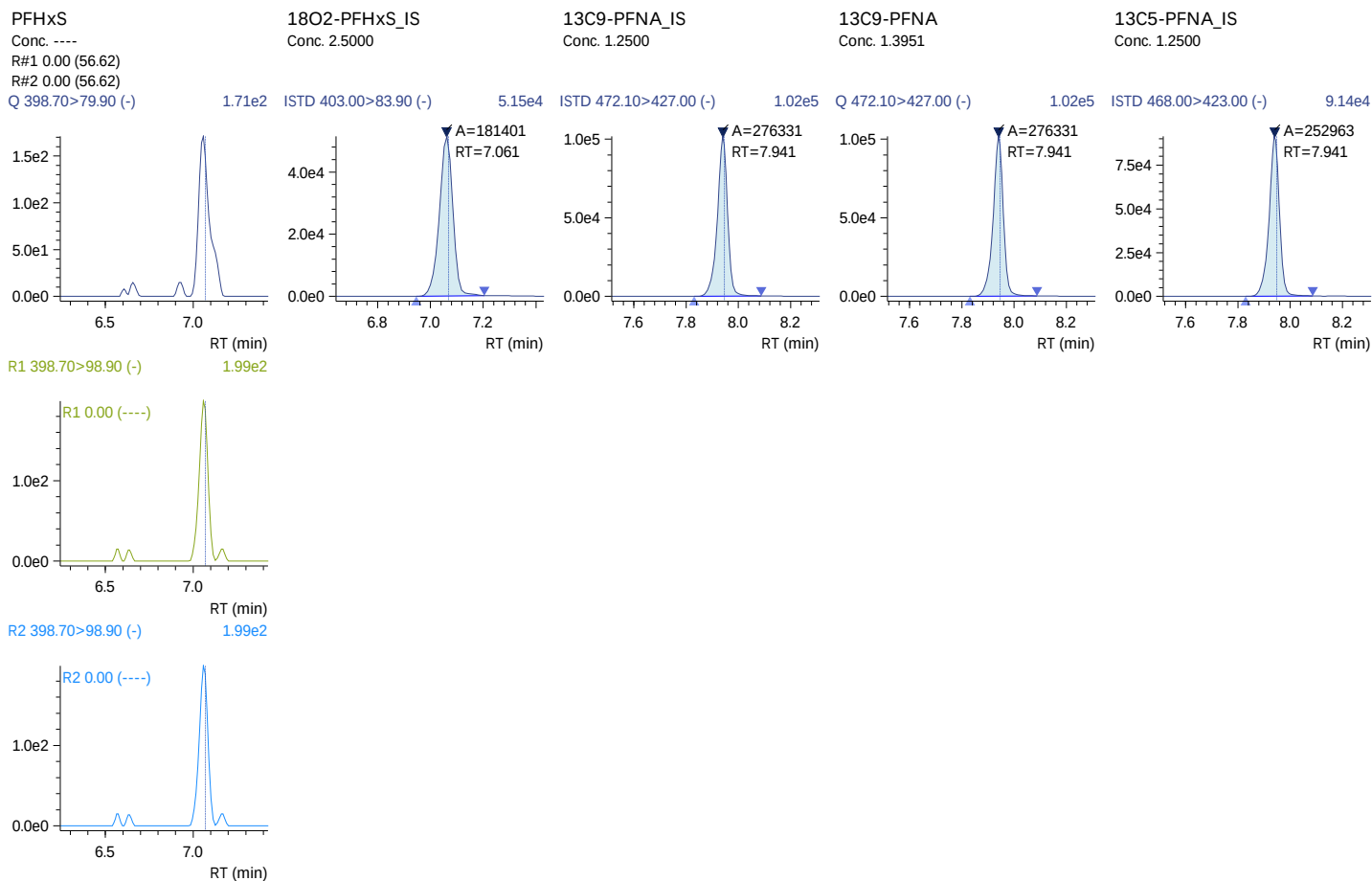
13C3-PFHxS
Conc. 2.3778

13C3-PFHxS_IS
Conc. 2.5000



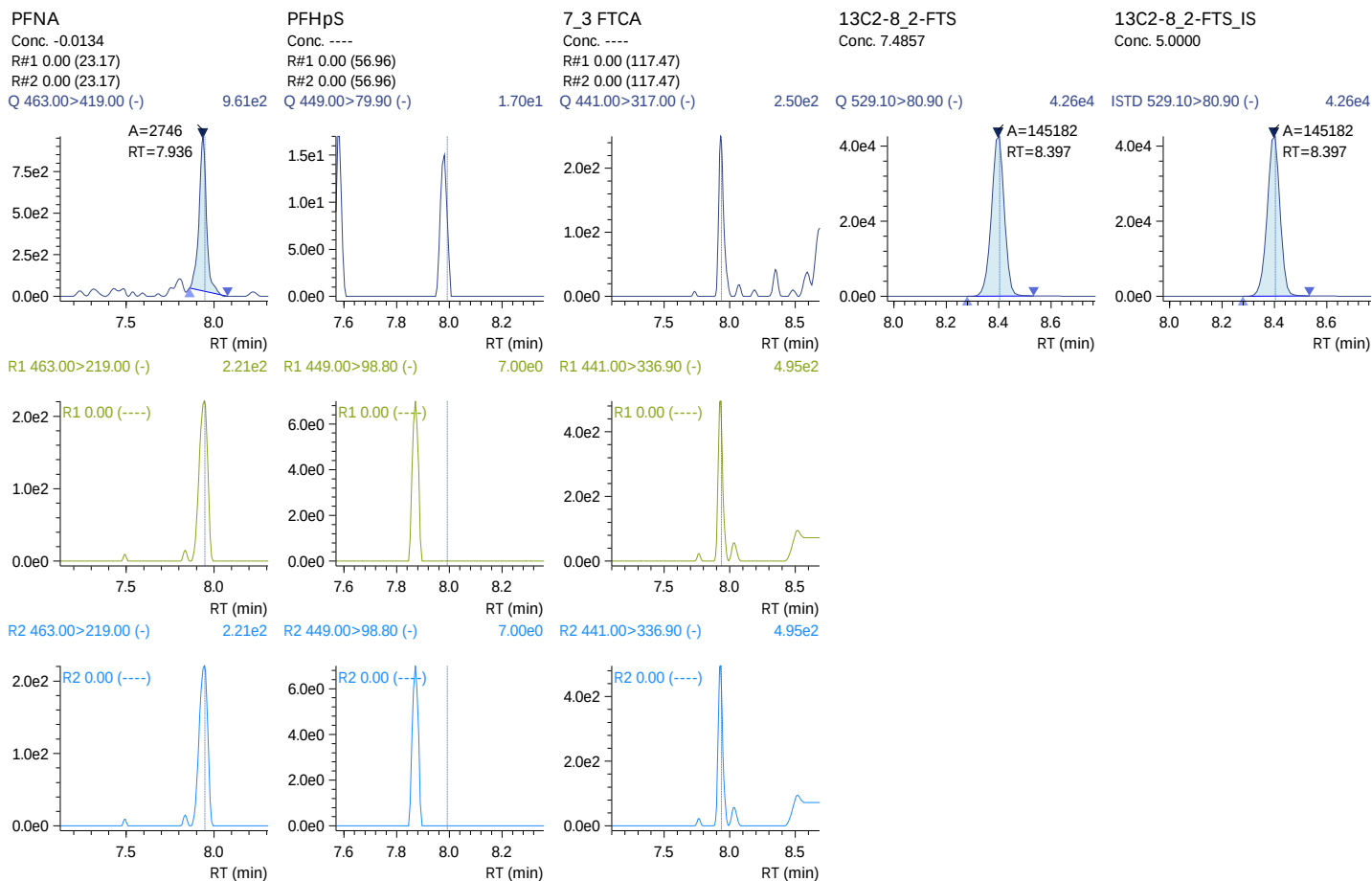


240122_029 (continued)



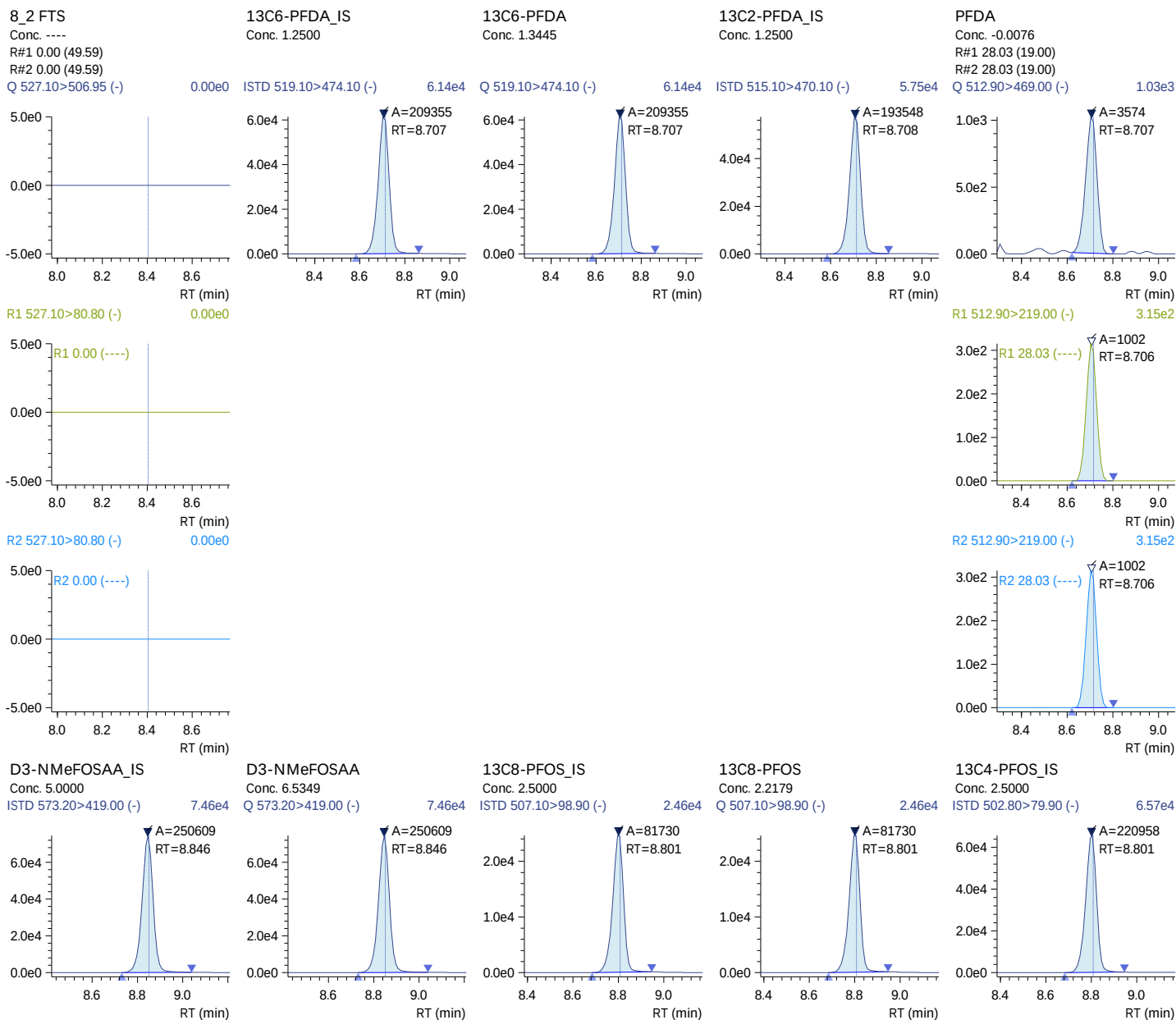


240122_029 (continued)



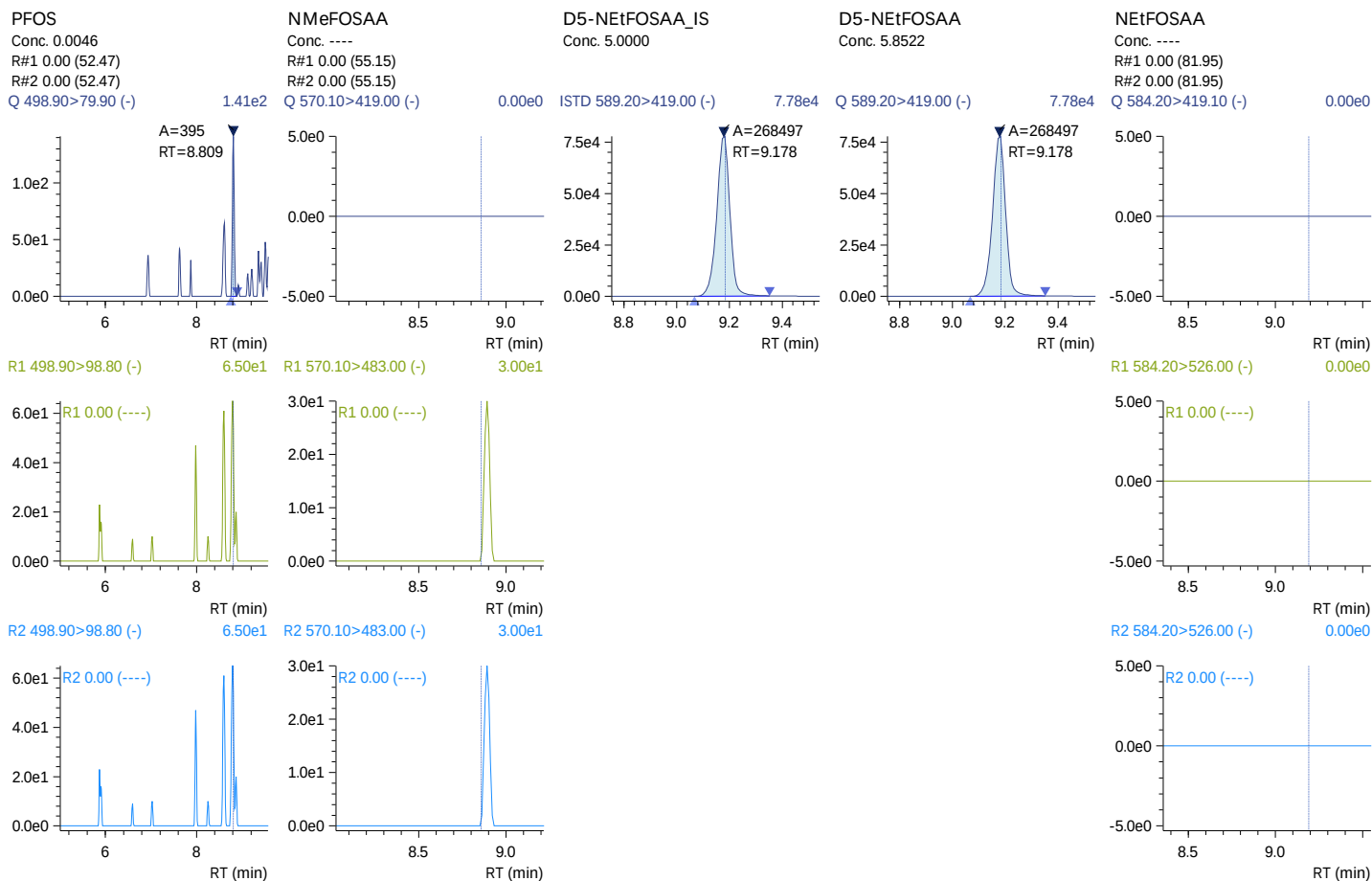


240122_029 (continued)





240122_029 (continued)





240122_029 (continued)

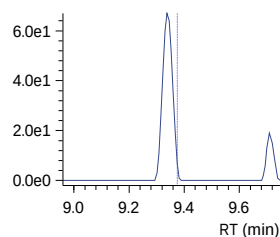
9-Cl-PF3ONS

Conc. ----

R#1 0.00 (32.76)

R#2 0.00 (32.76)

Q 530.80>351.00 (-)



R1 532.80>353.00 (-)

1.23e2

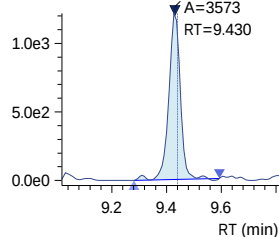
PFUnDA

Conc. -0.0086

R#1 0.00 (13.12)

R#2 0.00 (13.12)

Q 563.10>519.00 (-)



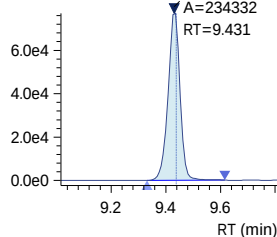
R1 563.10>269.10 (-)

6.90e1

13C7-PFUnDA_IS

Conc. 1.2500

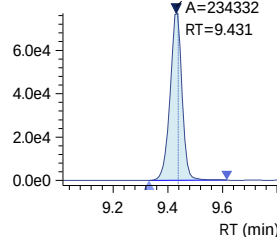
ISTD 570.00>525.10 (-)



13C7-PFUnDA

Conc. 1.2616

Q 570.00>525.10 (-)



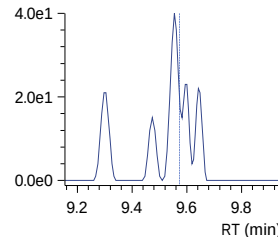
PFNS

Conc. ----

R#1 0.00 (65.22)

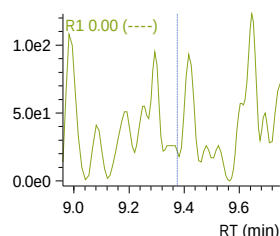
R#2 0.00 (65.22)

Q 548.80>79.90 (-)



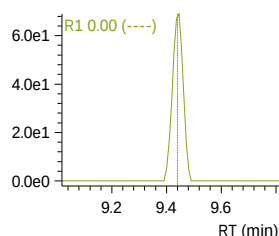
R1 548.80>98.80 (-)

5.30e1



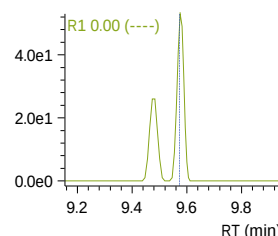
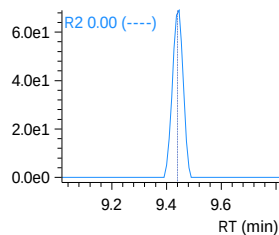
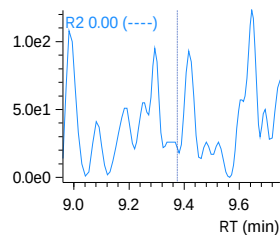
R2 532.80>353.00 (-)

1.23e2



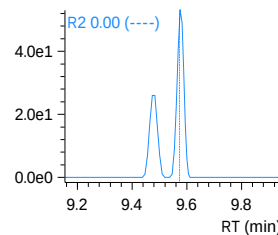
R2 563.10>269.10 (-)

6.90e1



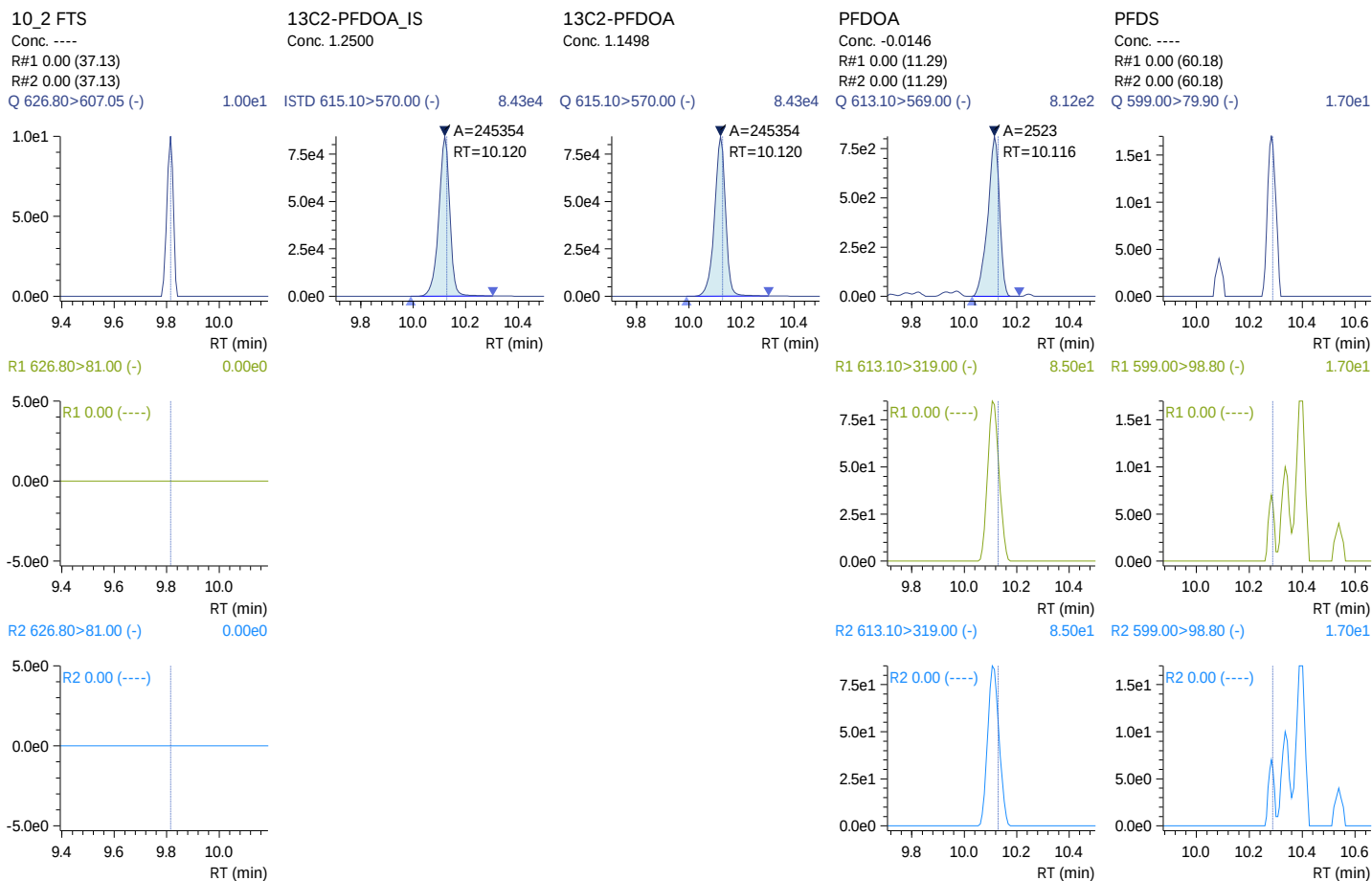
R2 548.80>98.80 (-)

5.30e1



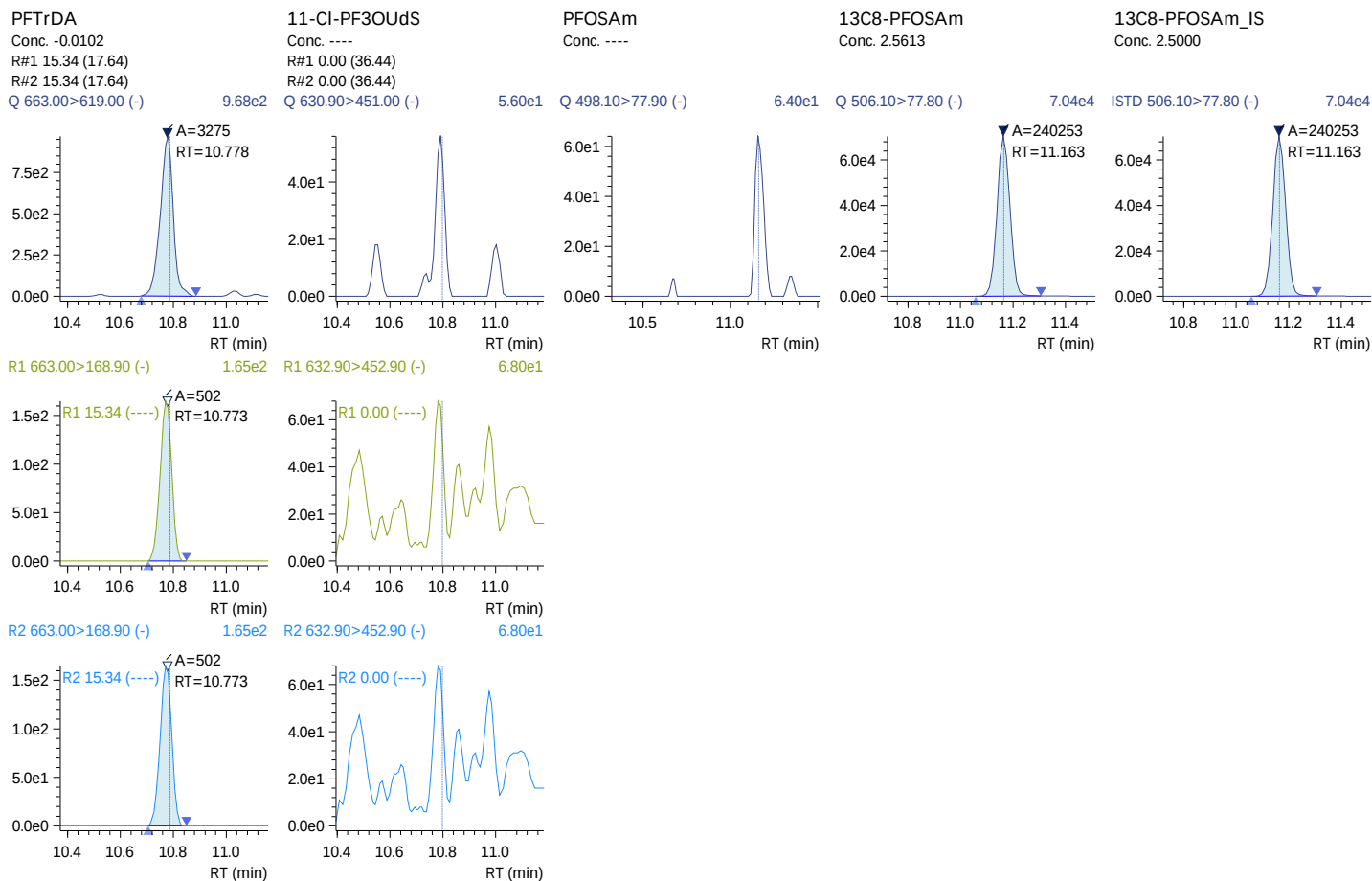


240122_029 (continued)



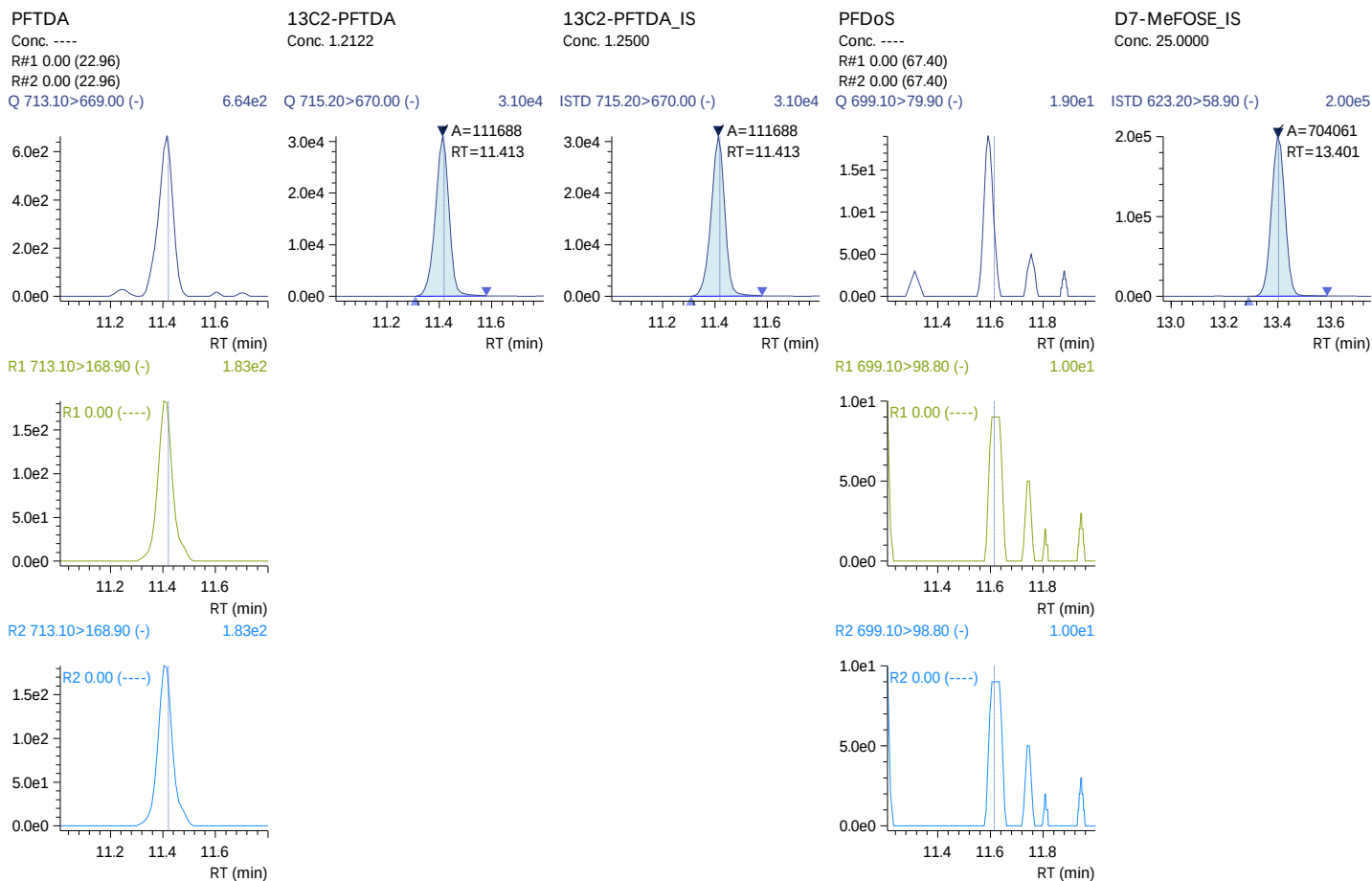


240122_029 (continued)





240122_029 (continued)





240122_029 (continued)

D7-MeFOSE
 Conc. 30.4442

MeFOSE
 Conc. ----

¹³C2-PFHxDA_IS
 Conc. 2.5000

¹³C2-PFHxDA
 Conc. 2.2803

PFHxDA

Conc. -0.0125
 R#1 0.00 (13.90)
 R#2 0.00 (13.90)

Q 623.20>58.90 (-)

2.00e5

Q 616.10>59.00 (-)

5.40e1

ISTD 815.00>770.05 (-)

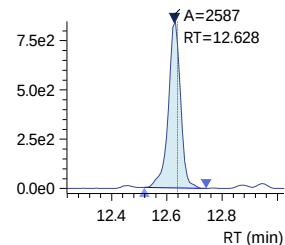
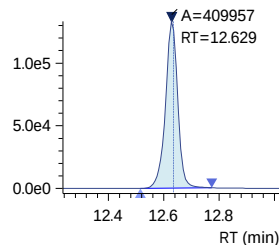
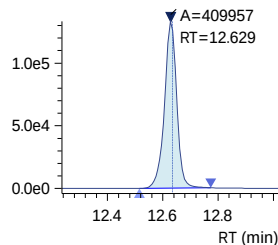
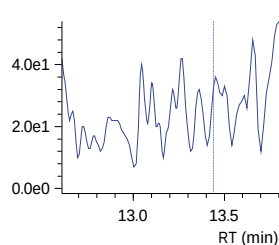
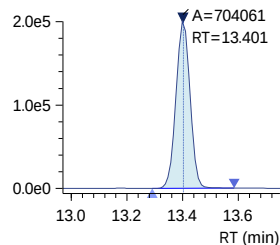
1.33e5

Q 815.00>770.05 (-)

1.33e5

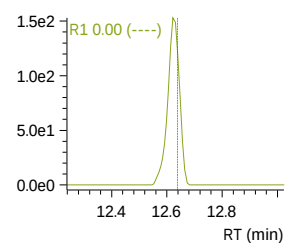
Q 813.00>768.95 (-)

8.48e2



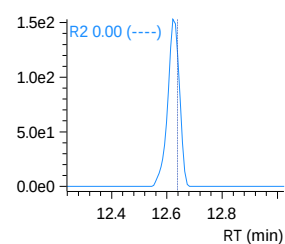
R1 813.00>218.95 (-)

1.53e2



R2 813.00>218.95 (-)

1.53e2





240122_029 (continued)

D3-MeFOSA
 Conc. 2.2264

D3-MeFOSA_IS
 Conc. 2.5000

MeFOSA
 Conc. ----
 R#1 0.00 (140.79)
 R#2 0.00 (140.79)

D9-EtFOSE_IS
 Conc. 25.0000

D9-EtFOSE
 Conc. 30.7361

Q 515.00>219.00 (-)

1.17e4

ISTD 515.00>219.00 (-)

1.17e4

Q 511.90>219.00 (-)

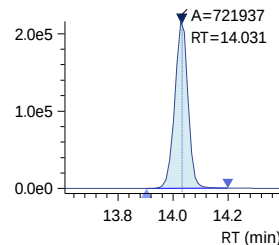
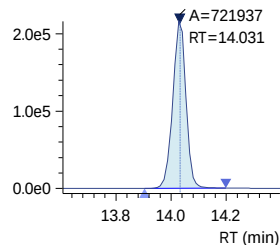
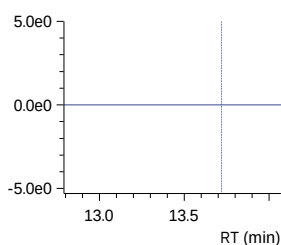
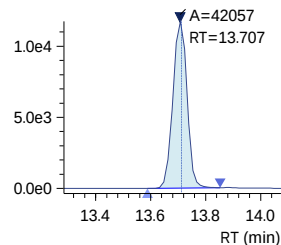
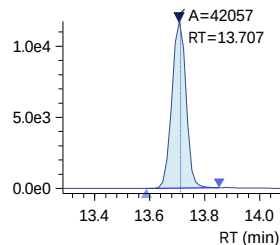
0.00e0

ISTD 639.20>58.90 (-)

2.16e5

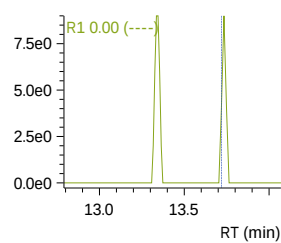
Q 639.20>58.90 (-)

2.16e5



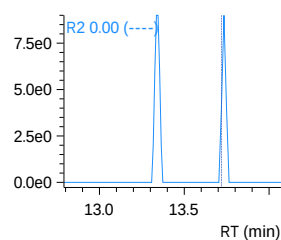
R1 511.90>169.00 (-)

9.00e0



R2 511.90>169.00 (-)

9.00e0





240122_029 (continued)

EtFOSE
 Conc. ----

D5-EtFOSAm
 Conc. 2.6517

D5-EtFOSAm_IS
 Conc. 2.5000

EtFOSAm
 Conc. ----

PFODA
 Conc. 0.0170

Q 630.00>59.00 (-)

3.80e1

Q 531.10>219.00 (-)

2.05e4

ISTD 531.10>219.00 (-)

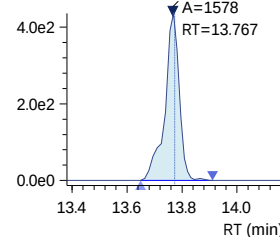
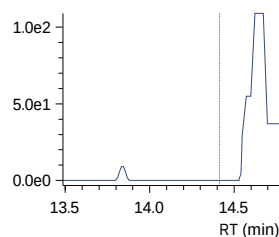
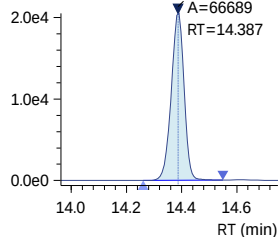
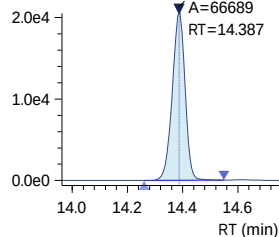
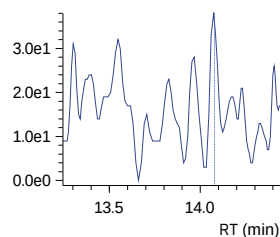
2.05e4

Q 526.00>219.00 (-)

1.09e2

Q 913.00>868.65 (-)

4.36e2

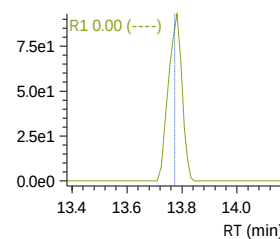
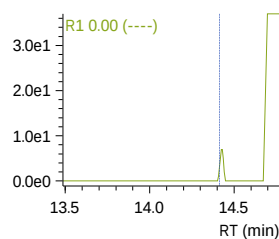


R1 526.00>169.00 (-)

3.70e1

R1 913.00>169.00 (-)

9.30e1

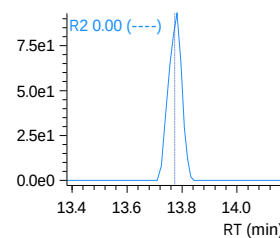
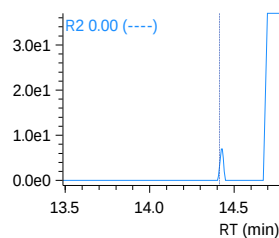


R2 526.00>169.00 (-)

3.70e1

R2 913.00>169.00 (-)

9.30e1



Validation Report

1st *PS* 01/25/24
2nd *MS* 01/25/24

Data File: J:\LCMS08\Data\240122_1633_B1\240122_046
Lab ID: KQ2401073-17
RunType: CCB
Matrix: Water

Date Acquired: 1/23/24 03:12
Batch ID: 830573
Analysis Method: 1633/PFAS_DOD5.4

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery		X
Continuing Calibration Recovery (Closing)		X
Internal Standards	X	
Surrogates	X	
Above Highest ICAL Level	X	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Continuing Calibration Recovery	N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	160	70	130	high bias, native <MRL
	Perfluoro-3-methoxypropanoic acid (PFMPA)	135	70	130	
	D9-EtFOSE	131	70	130	native in control
	D3-MeFOSAA	142	70	130	
	13C2-4:2 FTS	156	70	130	
	13C2-6:2 FTS	136	70	130	
	13C2-8:2 FTS	142	70	130	
Continuing Calibration Recovery (Closing)	N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	151	70	130	high bias, native <MRL
	D3-MeFOSAA	135	70	130	native in control
	13C2-4:2 FTS	162	70	130	
	13C2-6:2 FTS	146	70	130	
	13C2-8:2 FTS	150	70	130	

Primary Review: _____

Secondary Review: _____

Quantitation Report

1st *PS* 01/25/24
2nd *MS* 01/25/24

Data File:	J:\LCMS08\Data\240122_1633_B1\240122_046	Instrument:	K-LCMS-08
Acqu Date:	1/23/24 03:12	Vial:	37
Run Type:	CCB	Dilution:	1
Lab ID:	KQ2401073-17	Raw Units:	ng/mL

Bottle ID:		Tier:	IV	Matrix:	Water
Prod Code:	PFAS_DOD5.4	Collect Date:	12/27/23	Receive Date:	12/28/23

Analysis Lot:	830573	Prep Lot:		Report Group:	KQ2401073
Analysis	1633	Prep Method:			
		Prep Date:			

Title:	Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM	Calibration ID:	KC2400027
		Report List ID:	24615

Internal Standard Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Area Criteria
18O2-PFHxS	7.063	0.00	184197	2.5000	OK
13C4-PFOS	8.802	0.00	209387	2.5000	OK
13C3-PFBA	1.380	-0.01	501796	5.0000	OK
13C2-PFHxA	4.947	0.00	519819	2.5000	OK
13C4-PFOA	7.092	+0.00	40756	2.5000	OK
13C5-PFNA	7.943	+0.00	246934	1.2500	OK
13C2-PFDA	8.708	0.00	187887	1.2500	OK

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
13C3-PFBS	4.605	-0.01	255762	2.4468	98	40 - 135	Y
13C3-PFHxS	7.062	0.00	176605	2.2337	89	40 - 130	Y
13C8-PFOS	8.801	0.00	79595	2.2793	91	40 - 130	Y
13C4-PFBA	1.379	-0.01	1202578	10.7219	107	5 - 130	Y
13C5-PFPeA	3.456	-0.01	103915	4.4287	89	40 - 130	Y
13C5-PFHxA	4.947	0.00	503298	2.2973	92	40 - 130	Y
13C4-PFHpA	6.132	0.00	589146	2.9707	119	40 - 130	Y
13C8-PFOA	7.091		569920	2.5019	100	40 - 130	Y
13C9-PFNA	7.943	+0.00	277259	1.4340	115	40 - 130	Y
13C6-PFDA	8.707	0.00	201569	1.3335	107	40 - 130	Y
13C7-PFUnDA	9.431	0.00	220686	1.2239	98	30 - 130	Y
13C2-PFDoDA	10.118	0.00	246954	1.1922	95	10 - 130	Y
13C2-PFTeDA	11.410	0.00	117667	1.3156	105	10 - 130	Y
13C8-FOSA	11.163	+0.00	238755	2.6860	107	40 - 130	Y
D3-MeFOSA	13.703	0.00	43035	2.4041	96	10 - 130	Y
D5-EtFOSA	14.380	0.00	66822	2.8038	112	10 - 130	Y
D7-MeFOSE	13.397		643901	29.3815	118	10 - 130	Y
D9-EtFOSE	14.025	0.00	711287	31.9561	128	10 - 130	Y

			1st	PS	01/25/24
Data File:	J:\LCMS08\Data\240122_1633_B1\240122_046	Instrument:	K-LCMS08	MS	01/25/24
Acqu Date:	1/23/24 03:12	Vial:	37		
Run Type:	CCB	Dilution:	1		
Lab ID:	KQ2401073-17	Raw Units:	ng/mL		

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
D3-MeFOSAA	8.846	0.00	261606	7.1987	144	40 - 170	Y
D5-EtFOSAA	9.178	0.00	246969	5.6805	114	25 - 135	Y
13C2-4:2 FTS	4.631	0.00	210184	8.2920	166	40 - 200	Y
13C2-6:2 FTS	6.776	+0.00	165622	6.9084	138	40 - 200	Y
13C2-8:2 FTS	8.399	+0.00	136033	6.9075	138	40 - 300	Y
13C3-HFPO-DA	5.425	0.00	589891	11.5925	116	40 - 130	Y

Target Compounds

Final Conc.Units: ng/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Perfluorobutane sulfonic acid (PFBS)	4.590	-0.02	84	0.0006	0.012	U	Y
Perfluoropentane sulfonic acid (PFPeS)	5.977	-0.01	165	0.0018	0.036	U	Y
Perfluorohexane sulfonic acid (PFHxS)	7.062	0.00	1062	-0.0066	0	U	Y
Perfluoroheptane sulfonic acid (PFHpS)	0		0	0	0	U	Y
Perfluorooctane sulfonic acid (PFOS)	8.802	0.00	497	0.0060	0.12	U	Y
Perfluorononane sulfonic acid (PFNS)	9.555	-0.01	71	0.0012	0.024	U	Y
Perfluorodecane sulfonic acid (PFDS)	0		0	0	0	U	Y
Perfluorododecane sulfonic acid (PFDoS)	11.602	0.00	31	0.0010	0.020	U	Y
Perfluorobutanoic acid (PFBA)	1.411	+0.02	1322	0.0128	0.26	U	Y
Perfluoropentanoic acid (PFPeA)	3.456	-0.01	1738	0.0129	0.26	U	Y
Perfluorohexanoic acid (PFHxA)	4.948	0.00	1698	0.0017	0.034	U	Y
Perfluoroheptanoic acid (PFHpA)	6.115	-0.02	5175	-0.0136	0	U	Y
Perfluorooctanoic acid (PFOA)	7.092	0.00	4688	-0.0119	0	U	Y
Perfluorononanoic acid (PFNA)	7.941	0.00	4351	-0.0033	0	U	Y
Perfluorodecanoic acid (PFDA)	8.705	-0.01	4736	-0.0008	0	U	Y
Perfluoroundecanoic acid (PFUnDA)	9.430	0.00	3180	-0.0098	0	U	Y
Perfluorododecanoic acid (PFDOA)	10.121		2906	-0.0119	0	U	Y
Perfluorotridecanoic acid (PFTTrDA)	10.778	0.00	2815	-0.0140	0	U	Y
Perfluorotetradecanoic acid (PFTDA)	11.413	+0.00	2590	-0.0073	0	U	Y
Perfluorooctane sulfonamide (PFOSAm)	11.157	0.00	259	0.0033	0.066	U	Y
N-Methylperfluorooctane sulfonamide (MeFOSA)	0		0	0	0	U	Y
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	0		0	0	0	U	Y
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	0		0	0	0	U	Y
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	0		0	0	0	U	Y
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	0		0	0	0	U	Y

		1st	PS	01/25/24
Data File:	J:\LCMS08\Data\240122_1633_B1\240122_046	Instrument:	K-LCMS08	MS
Acqu Date:	1/23/24 03:12	Vial:	37	01/25/24
Run Type:	CCB	Dilution:	1	
Lab ID:	KQ2401073-17	Raw Units:	ng/mL	

Target Compounds

Final Conc.Units: ng/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	0		0	0	0	U	Y
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	4.621	-0.01	267	0.0026	0.052	U	Y
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	6.767	-0.01	1166	0.0155	0.31	U	Y
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	0		0	0	0	U	Y
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	0		0	0	0	U	Y
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	0		0	0	0	U	Y
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	7.934	0.00	453	0.0261	0.52	U	Y
Perfluoro(2-ethoxyethane) sulfonic acid (PFEEESA)	0		0	0	0	U	Y
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	0		0	0	0	U	Y
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	0		0	0	0	U	Y
Perfluoro-3-methoxypropanoic acid (PFMPA)	2.398	-0.01	155	0.0023	0.046	U	Y
Perfluoro-4-methoxybutanoic acid (PFMBA)	3.975	-0.02	83	0.0009	0.018	U	Y
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	0		0	0	0	U	Y
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	4.805	0.00	694	0.0062	0.12	U	Y
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	6.500		239	0.0005	0.010	U	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 1/25/24 15:28

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240122_046

Sample ID: 1633 CCB
Date Acquired: 1/23/2024 3:12:03 AM
Acquired by: System Administrator
Data File: 240122_046
Vial: 54 | Inj. Volume: 10.0000uL | Tray: 1

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	1202578	----	----	----	----	----	----	
13C4-PFBA_IS	216.80>171.90	----	1202578	----	----	----	----	----	----	
13C3-PFBA_IS	216.00>172.00	----	501796	----	----	----	----	----	----	
PFBA	212.80>169.05	----	1322	----	----	----	----	----	----	
PFMPA	229.00>84.90	----	155	----	----	----	----	----	----	
3_3 FTCA	241.00>177.10	241.00>117.00	----	0	0.00	141.17	0	0.00	135.52	
13C5-PFPeA	268.30>223.00	----	103915	----	----	----	----	----	----	
13C5-PFPeA_IS	268.30>223.00	----	103915	----	----	----	----	----	----	
PFPeA	263.00>219.00	----	1738	----	----	----	----	----	----	
PFMBA	279.00>84.95	----	83	----	----	----	----	----	----	
13C2-4_2 FTS	329.10>80.90	----	210184	----	----	----	----	----	----	
13C2-4_2 FTS_IS	329.10>80.90	----	210184	----	----	----	----	----	----	
4_2 FTS	327.10>307.00	327.10>80.90	267	102	38.05	29.06	102	38.05	35.34	
13C3-PFBS_IS	302.10>79.90	----	255762	----	----	----	----	----	----	
PFBS	298.70>79.90	298.70>98.80	84	83	98.76	46.72	83	98.76	49.78	IRr
13C3-PFBS	302.10>79.90	----	255762	----	----	----	----	----	----	
NFDHA	295.00>201.00	295.00>84.90	694	322	46.35	40.25	322	46.35	37.18	
13C5-PFHxA	318.00>273.00	----	503298	----	----	----	----	----	----	
13C5-PFHxA_IS	318.00>273.00	----	503298	----	----	----	----	----	----	
13C2-PFHxA_IS	315.10>270.00	----	519819	----	----	----	----	----	----	
PFHxA	313.00>269.00	----	1698	----	----	----	----	----	----	
PFEESA	314.80>135.00	314.80>82.90	----	0	0.00	6.11	0	0.00	5.72	
13C3-HFPO-DA	286.90>168.90	----	589891	----	----	----	----	----	----	
13C3-HFPO-DA_IS	286.90>168.90	----	589891	----	----	----	----	----	----	
HFPO-DA	284.90>168.90	284.90>184.90	----	0	0.00	65.61	0	0.00	60.94	
5_3 FTCA	341.00>237.05	341.00>217.00	----	0	0.00	158.86	0	0.00	155.83	
PFPeS	349.10>79.90	349.10>98.80	165	87	52.70	55.80	87	52.70	56.73	
13C4-PFHpA	367.10>322.00	----	589146	----	----	----	----	----	----	
13C4-PFHpA_IS	367.10>322.00	----	589146	----	----	----	----	----	----	
PFHpA	363.10>319.00	363.10>169.00	5175	1329	25.67	21.50	1329	25.67	21.92	
DONA	376.90>250.90	376.90>84.80	239	30	12.67	29.66	30	12.67	30.77	IRr
13C2-6_2 FTS_IS	429.10>80.90	----	165622	----	----	----	----	----	----	
13C2-6_2 FTS	429.10>80.90	----	165622	----	----	----	----	----	----	
6_2 FTS	427.10>407.00	427.10>80.90	1166	291	24.92	41.15	291	24.92	40.98	
13C4-PFOA_IS	417.10>172.00	----	40756	----	----	----	----	----	----	
13C8-PFOA_IS	421.10>376.00	----	569920	----	----	----	----	----	----	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240122_046 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	569920	----	----	----	----	----	----	----
PFOA	413.00>369.00	413.00>169.00	4688	1661	35.43	31.89	1661	35.43	32.23	
13C3-PFHxS	402.10>79.90	----	176605	----	----	----	----	----	----	----
13C3-PFHxS_IS	402.10>79.90	----	176605	----	----	----	----	----	----	----
PFHxS	398.70>79.90	398.70>98.90	1062	376	35.42	56.62	376	35.42	60.26	
18O2-PFHxS_IS	403.00>83.90	----	184197	----	----	----	----	----	----	----
13C9-PFNA_IS	472.10>427.00	----	277259	----	----	----	----	----	----	----
13C9-PFNA	472.10>427.00	----	277259	----	----	----	----	----	----	----
13C5-PFNA_IS	468.00>423.00	----	246934	----	----	----	----	----	----	----
PFNA	463.00>419.00	463.00>219.00	4351	703	16.17	23.17	703	16.17	23.63	
PFHpS	449.00>79.90	449.00>98.80	----	0	0.00	56.96	0	0.00	59.06	
7_3 FTCA	441.00>317.00	441.00>336.90	453	326	72.04	117.47	326	72.04	125.53	
13C2-8_2-FTS	529.10>80.90	----	136033	----	----	----	----	----	----	----
13C2-8_2-FTS_IS	529.10>80.90	----	136033	----	----	----	----	----	----	----
8_2 FTS	527.10>506.95	527.10>80.80	----	0	0.00	49.59	0	0.00	44.81	
13C6-PFDA_IS	519.10>474.10	----	201569	----	----	----	----	----	----	----
13C6-PFDA	519.10>474.10	----	201569	----	----	----	----	----	----	----
13C2-PFDA_IS	515.10>470.10	----	187887	----	----	----	----	----	----	----
PFDA	512.90>469.00	512.90>219.00	4736	390	8.22	19.00	390	8.22	19.15	IRr
D3-NMeFOSAA_IS	573.20>419.00	----	261606	----	----	----	----	----	----	----
D3-NMeFOSAA	573.20>419.00	----	261606	----	----	----	----	----	----	----
13C8-PFOS_IS	507.10>98.90	----	79595	----	----	----	----	----	----	----
13C8-PFOS	507.10>98.90	----	79595	----	----	----	----	----	----	----
13C4-PFOS_IS	502.80>79.90	----	209387	----	----	----	----	----	----	----
PFOS	498.90>79.90	498.90>98.80	497	241	48.49	52.47	241	48.49	53.10	
NMeFOSAA	570.10>419.00	570.10>483.00	----	0	0.00	55.15	0	0.00	60.69	
D5-NEtFOSAA_IS	589.20>419.00	----	246969	----	----	----	----	----	----	----
D5-NEtFOSAA	589.20>419.00	----	246969	----	----	----	----	----	----	----
NEtFOSAA	584.20>419.10	584.20>526.00	----	0	0.00	81.95	0	0.00	73.27	
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	----	0	0.00	32.76	0	0.00	32.59	
PFUnDA	563.10>519.00	563.10>269.10	3180	643	20.23	13.12	643	20.23	14.36	IRr
13C7-PFUnDA_IS	570.00>525.10	----	220686	----	----	----	----	----	----	----
13C7-PFUnDA	570.00>525.10	----	220686	----	----	----	----	----	----	----
PFNS	548.80>79.90	548.80>98.80	71	103	144.51	65.22	103	144.51	65.31	IRr
10_2 FTS	626.80>607.05	626.80>81.00	83	61	73.98	37.13	61	73.98	38.76	IRr
13C2-PFDOA_IS	615.10>570.00	----	246954	----	----	----	----	----	----	----
13C2-PFDOA	615.10>570.00	----	246954	----	----	----	----	----	----	----
PFDOA	613.10>569.00	613.10>319.00	2906	199	6.86	11.29	199	6.86	11.19	
PFDS	599.00>79.90	599.00>98.80	----	0	0.00	60.18	0	0.00	65.65	
PFTrDA	663.00>619.00	663.00>168.90	2815	385	13.69	17.64	385	13.69	19.81	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240122_046 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	----	0	0.00	36.44	0	0.00	35.86	
PFOSAm	498.10>77.90	----	259	----	----	----	----	----	----	
13C8-PFOSAm	506.10>77.80	----	238755	----	----	----	----	----	----	
13C8-PFOSAm_IS	506.10>77.80	----	238755	----	----	----	----	----	----	
PFTDA	713.10>669.00	713.10>168.90	2590	407	15.72	22.96	407	15.72	25.01	
13C2-PFTDA	715.20>670.00	----	117667	----	----	----	----	----	----	
13C2-PFTDA_IS	715.20>670.00	----	117667	----	----	----	----	----	----	
PFDoS	699.10>79.90	699.10>98.80	31	13	39.87	67.40	13	39.87	73.46	
D7-MeFOSE_IS	623.20>58.90	----	643901	----	----	----	----	----	----	
D7-MeFOSE	623.20>58.90	----	643901	----	----	----	----	----	----	
MeFOSE	616.10>59.00	----	----	----	----	----	----	----	----	
13C2-PFHxDA_IS	815.00>770.05	----	381413	----	----	----	----	----	----	
13C2-PFHxDA	815.00>770.05	----	381413	----	----	----	----	----	----	
PFHxDA	813.00>768.95	813.00>218.95	3366	430	12.78	13.90	430	12.78	15.85	
D3-MeFOSA	515.00>219.00	----	43035	----	----	----	----	----	----	
D3-MeFOSA_IS	515.00>219.00	----	43035	----	----	----	----	----	----	
MeFOSA	511.90>219.00	511.90>169.00	----	0	0.00	140.79	0	0.00	153.61	
D9-EtFOSE_IS	639.20>58.90	----	711287	----	----	----	----	----	----	
D9-EtFOSE	639.20>58.90	----	711287	----	----	----	----	----	----	
EtFOSE	630.00>59.00	----	----	----	----	----	----	----	----	
D5-EtFOSAm	531.10>219.00	----	66822	----	----	----	----	----	----	
D5-EtFOSAm_IS	531.10>219.00	----	66822	----	----	----	----	----	----	
EtFOSAm	526.00>219.00	526.00>169.00	----	0	0.00	163.90	0	0.00	152.08	
PFODA	913.00>868.65	913.00>169.00	1481	626	42.30	27.03	626	42.30	26.29	IRr

Flag ID key: IRr: Ion Ratio (Relative)



240122_046

Sample ID: 1633 CCB
Date Acquired: 1/23/2024 3:12:03 AM
Acquired by: System Administrator
Data File: 240122_046
Vial: 54 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.379	-0.012	-0.001	1202578	501796	13C3-PFBA_IS	10.7219	ng/mL	
13C4-PFBA_IS	Auto	1.379	-0.012	----	1202578	1202578	----	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.380	-0.011	----	501796	501796	----	5.0000	ng/mL	
PFBA	M	1.411	0.016	0.032	1322	1202578	13C4-PFBA_IS	0.0128	ng/mL	
PFMPA	M	2.398	-0.008	-1.058	155	103915	13C5-PFPeA_IS	0.0023	ng/mL	
3_3 FTCA	ND(W/B)	----	----	----	----	103915	13C5-PFPeA_IS	----	ng/mL	
13C5-PFPeA	Auto	3.456	-0.009	-1.491	103915	519819	13C2-PFHxA_IS	4.4287	ng/mL	
13C5-PFPeA_IS	Auto	3.456	-0.009	----	103915	103915	----	5.0000	ng/mL	
PFPeA	M	3.456	-0.011	0.000	1738	103915	13C5-PFPeA_IS	0.0129	ng/mL	
PFMBA	M	3.975	-0.016	0.519	83	103915	13C5-PFPeA_IS	0.0009	ng/mL	
13C2-4_2 FTS	Auto	4.631	-0.005	-2.432	210184	184197	18O2-PFHxS_IS	8.2920	ng/mL	
13C2-4_2 FTS_IS	Auto	4.631	-0.005	----	210184	210184	----	5.0000	ng/mL	
4_2 FTS	M	4.621	-0.016	-0.010	267	210184	13C2-4_2 FTS_IS	0.0026	ng/mL	
13C3-PFBS_IS	Auto	4.605	-0.007	----	255762	255762	----	2.5000	ng/mL	
PFBS	M	4.590	-0.023	-0.015	84	255762	13C3-PFBS_IS	0.0006	ng/mL	IRr
13C3-PFBS	Auto	4.605	-0.007	-2.458	255762	184197	18O2-PFHxS_IS	2.4468	ng/mL	
NFDHA	M	4.805	-0.005	-0.142	694	503298	13C5-PFHxA_IS	0.0062	ng/mL	
13C5-PFHxA	Auto	4.947	-0.005	0.000	503298	519819	13C2-PFHxA_IS	2.2973	ng/mL	
13C5-PFHxA_IS	Auto	4.947	-0.005	----	503298	503298	----	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	4.947	-0.006	----	519819	519819	----	2.5000	ng/mL	
PFHxA	M	4.948	-0.006	0.001	1698	503298	13C5-PFHxA_IS	0.0017	ng/mL	
PFEESA	ND(W/B)	----	----	----	----	503298	13C5-PFHxA_IS	----	ng/mL	
13C3-HFPO-DA	Auto	5.425	-0.005	0.478	589891	519819	13C2-PFHxA_IS	11.5925	ng/mL	
13C3-HFPO-DA_IS	Auto	5.425	-0.005	----	589891	589891	----	10.0000	ng/mL	
HFPO-DA	ND(W/B)	----	----	----	----	589891	13C3-HFPO-DA_IS	----	ng/mL	
5_3 FTCA	ND(W/B)	----	----	----	----	503298	13C5-PFHxA_IS	----	ng/mL	
PFPeS	M	5.977	-0.018	-1.086	165	176605	13C3-PFHxS_IS	0.0018	ng/mL	
13C4-PFHpA	Auto	6.132	-0.005	1.185	589146	519819	13C2-PFHxA_IS	2.9707	ng/mL	
13C4-PFHpA_IS	Auto	6.132	-0.005	----	589146	589146	----	2.5000	ng/mL	
PFHpA	M	6.115	-0.025	-0.018	5175	589146	13C4-PFHpA_IS	-0.0136	ng/mL	
DONA	M	6.500	-0.004	1.075	239	589891	13C3-HFPO-DA_IS	0.0005	ng/mL	IRr
13C2-6_2 FTS_IS	Auto	6.776	-0.005	----	165622	165622	----	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.776	-0.005	-0.287	165622	184197	18O2-PFHxS_IS	6.9084	ng/mL	
6_2 FTS	M	6.767	-0.014	-0.009	1166	165622	13C2-6_2 FTS_IS	0.0155	ng/mL	
13C4-PFOA_IS	Auto	7.092	-0.005	----	40756	40756	----	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.091	-0.005	----	569920	569920	----	2.5000	ng/mL	
13C8-PFOA	Auto	7.091	-0.005	-0.001	569920	40756	13C4-PFOA_IS	2.5019	ng/mL	
PFOA	Auto	7.092	-0.006	0.001	4688	569920	13C8-PFOA_IS	-0.0119	ng/mL	
13C3-PFHxS	Auto	7.062	-0.006	-0.001	176605	184197	18O2-PFHxS_IS	2.2337	ng/mL	
13C3-PFHxS_IS	Auto	7.062	-0.006	----	176605	176605	----	2.5000	ng/mL	
PFHxS	M	7.062	-0.007	0.000	1062	176605	13C3-PFHxS_IS	-0.0066	ng/mL	
18O2-PFHxS_IS	Auto	7.063	-0.006	----	184197	184197	----	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.943	-0.005	----	277259	277259	----	1.2500	ng/mL	
13C9-PFNA	Auto	7.943	-0.005	-0.001	277259	246934	13C5-PFNA_IS	1.4340	ng/mL	
13C5-PFNA_IS	Auto	7.943	-0.005	----	246934	246934	----	1.2500	ng/mL	
PFNA	M	7.941	-0.007	-0.001	4351	277259	13C9-PFNA_IS	-0.0033	ng/mL	
PFHpS	ND(W/B)	----	----	----	----	79595	13C8-PFOS_IS	----	ng/mL	
7_3 FTCA	M	7.934	-0.002	2.987	453	503298	13C5-PFHxA_IS	0.0261	ng/mL	
13C2-8_2-FTS	Auto	8.399	-0.004	1.336	136033	184197	18O2-PFHxS_IS	6.9075	ng/mL	
13C2-8_2-FTS_IS	Auto	8.399	-0.004	----	136033	136033	----	5.0000	ng/mL	
8_2 FTS	ND(W/B)	----	----	----	----	136033	13C2-8_2-FTS_IS	----	ng/mL	
13C6-PFDA_IS	Auto	8.707	-0.006	----	201569	201569	----	1.2500	ng/mL	
13C6-PFDA	Auto	8.707	-0.006	-0.001	201569	187887	13C2-PFDA_IS	1.3335	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_046 (continued)

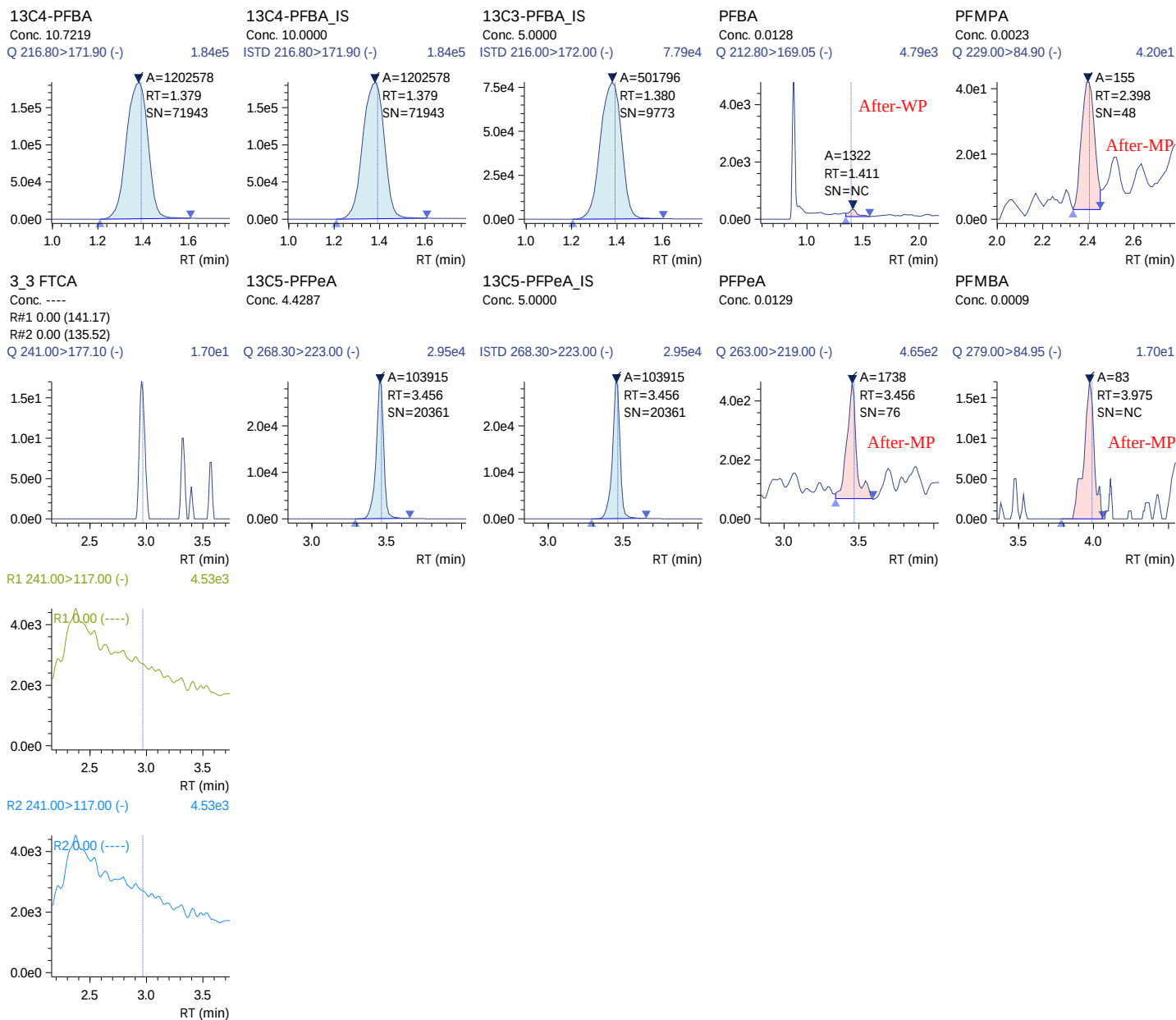
(Table continued from previous page)

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C2-PFDA_IS	Auto	8.708	-0.005	----	187887	187887	----	1.2500	ng/mL	
PFDA	M	8.705	-0.010	-0.002	4736	201569	13C6-PFDA_IS	-0.0008	ng/mL	IRr
D3-NMeFOSAA_IS	Auto	8.846	-0.005	----	261606	261606	----	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.846	-0.005	0.044	261606	209387	13C4-PFOS_IS	7.1987	ng/mL	
13C8-PFOS_IS	Auto	8.801	-0.007	----	79595	79595	----	2.5000	ng/mL	
13C8-PFOS	Auto	8.801	-0.007	-0.001	79595	209387	13C4-PFOS_IS	2.2793	ng/mL	
13C4-PFOS_IS	Auto	8.802	-0.007	----	209387	209387	----	2.5000	ng/mL	
PFOS	M	8.802	-0.007	0.001	497	79595	13C8-PFOS_IS	0.0060	ng/mL	
NMeFOSAA	ND(W/B)	----	----	----	----	261606	D3-NMeFOSAA_IS	----	ng/mL	
D5-NetFOSAA_IS	Auto	9.178	-0.005	----	246969	246969	----	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.178	-0.005	0.376	246969	209387	13C4-PFOS_IS	5.6805	ng/mL	
NetFOSAA	ND(W/B)	----	----	----	----	246969	D5-NetFOSAA_IS	----	ng/mL	
9-CI-PF3ONS	ND(W/B)	----	----	----	----	589891	13C3-HFPO-DA_IS	----	ng/mL	
PFUnDA	M	9.430	-0.010	-0.001	3180	220686	13C7-PFUnDA_IS	-0.0098	ng/mL	IRr
13C7-PFUnDA_IS	Auto	9.431	-0.007	----	220686	220686	----	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.431	-0.007	0.723	220686	187887	13C2-PFDA_IS	1.2239	ng/mL	
PFNS	M	9.555	-0.018	0.754	71	79595	13C8-PFOS_IS	0.0012	ng/mL	IRr
10_2_FTS	M	9.815	0.000	1.416	83	136033	13C2-8_2-FTS_IS	0.0012	ng/mL	IRr
13C2-PFDOA_IS	Auto	10.118	-0.010	----	246954	246954	----	1.2500	ng/mL	
13C2-PFDOA	Auto	10.118	-0.010	1.410	246954	187887	13C2-PFDA_IS	1.1922	ng/mL	
PFDOA	M	10.121	-0.008	0.003	2906	246954	13C2-PFDOA_IS	-0.0119	ng/mL	
PFDS	ND(W/B)	----	----	----	----	79595	13C8-PFOS_IS	----	ng/mL	
PFTDA	Auto	10.778	-0.010	-0.632	2815	117667	13C2-PFTDA_IS	-0.0140	ng/mL	
11-CI-PF3OUdS	ND(W/B)	----	----	----	----	589891	13C3-HFPO-DA_IS	----	ng/mL	
PFOSAm	M	11.157	-0.005	-0.006	259	238755	13C8-PFOSAm_IS	0.0033	ng/mL	
13C8-PFOSAm	Auto	11.163	-0.001	2.361	238755	209387	13C4-PFOS_IS	2.6860	ng/mL	
13C8-PFOSAm_IS	Auto	11.163	-0.001	----	238755	238755	----	2.5000	ng/mL	
PFTDA	M	11.413	-0.008	0.003	2590	117667	13C2-PFTDA_IS	-0.0073	ng/mL	
13C2-PFTDA	Auto	11.410	-0.009	2.702	117667	187887	13C2-PFDA_IS	1.3156	ng/mL	
13C2-PFTDA_IS	Auto	11.410	-0.009	----	117667	117667	----	1.2500	ng/mL	
PFDoS	M	11.602	-0.013	2.801	31	79595	13C8-PFOS_IS	0.0010	ng/mL	
D7-MeFOSE_IS	Auto	13.397	-0.005	----	643901	643901	----	25.0000	ng/mL	
D7-MeFOSE	Auto	13.397	-0.005	4.595	643901	209387	13C4-PFOS_IS	29.3815	ng/mL	
MeFOSE	ND(W/B)	----	----	----	----	643901	D7-MeFOSE_IS	----	ng/mL	
13C2-PFHxDA_IS	Auto	12.627	-0.009	----	381413	381413	----	2.5000	ng/mL	
13C2-PFHxDA	Auto	12.627	-0.009	3.919	381413	187887	13C2-PFDA_IS	2.1854	ng/mL	
PFHxDA	M	12.624	-0.013	-0.003	3366	381413	13C2-PFHxDA_IS	-0.0064	ng/mL	
D3-MeFOSA	Auto	13.703	-0.008	4.901	43035	209387	13C4-PFOS_IS	2.4041	ng/mL	
D3-MeFOSA_IS	Auto	13.703	-0.008	----	43035	43035	----	2.5000	ng/mL	
MeFOSA	ND(W/B)	----	----	----	----	43035	D3-MeFOSA_IS	----	ng/mL	
D9-EtFOSE_IS	Auto	14.025	-0.007	----	711287	711287	----	25.0000	ng/mL	
D9-EtFOSE	Auto	14.025	-0.007	5.223	711287	209387	13C4-PFOS_IS	31.9561	ng/mL	
EtFOSE	ND(W/B)	----	----	----	----	711287	D9-EtFOSE_IS	----	ng/mL	
D5-EtFOSAm	Auto	14.380	-0.007	5.578	66822	209387	13C4-PFOS_IS	2.8038	ng/mL	
D5-EtFOSAm_IS	Auto	14.380	-0.007	----	66822	66822	----	2.5000	ng/mL	
EtFOSAm	ND(W/B)	----	----	----	----	66822	D5-EtFOSAm_IS	----	ng/mL	
PFODA	Auto	13.761	-0.013	1.134	1481	381413	13C2-PFHxDA_IS	0.0172	ng/mL	IRr

Flag ID key: IRr: Ion Ratio (Relative)



240122_046 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_046 (continued)

13C2-4_2 FTS
Conc. 8.2920

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. 0.0026
R#1 38.05 (29.06)
R#2 38.05 (35.34)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 0.0006
R#1 98.76 (46.72)
R#2 98.76 (49.78)

Q 329.10>80.90 (-)

6.54e4

ISTD 329.10>80.90 (-)

6.54e4

Q 327.10>307.00 (-)

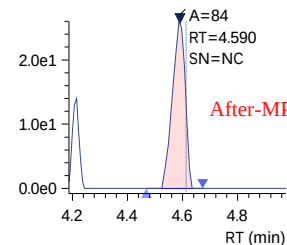
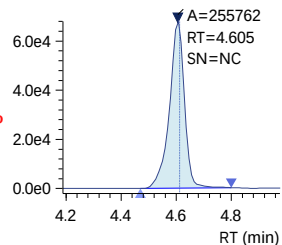
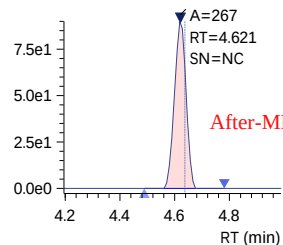
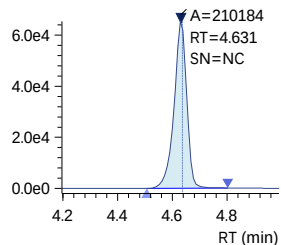
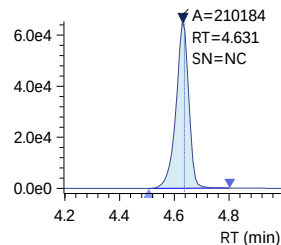
9.00e1

ISTD 302.10>79.90 (-)

6.80e4

Q 298.70>79.90 (-)

2.60e1

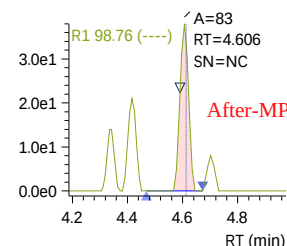
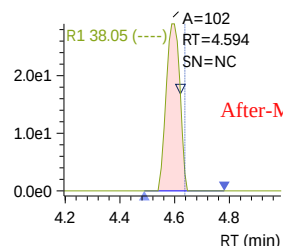


R1 327.10>80.90 (-)

2.90e1

R1 298.70>98.80 (-)

3.80e1

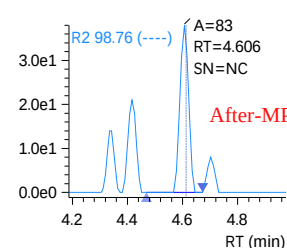
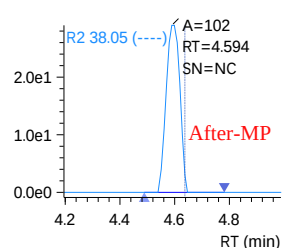


R2 327.10>80.90 (-)

2.90e1

R2 298.70>98.80 (-)

3.80e1





240122_046 (continued)

13C3-PFBS
Conc. 2.4468

NFDHA
Conc. 0.0062
R#1 46.35 (40.25)
R#2 46.35 (37.18)

13C5-PFHxA
Conc. 2.2973

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

Q 302.10>79.90 (-)

6.80e4

Q 295.00>201.00 (-)

2.57e2

Q 318.00>273.00 (-)

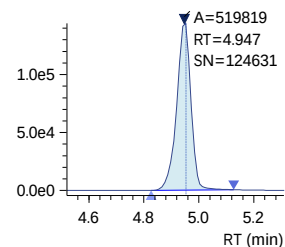
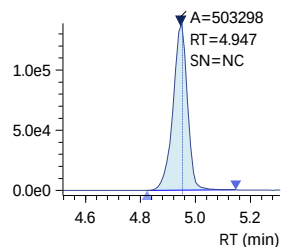
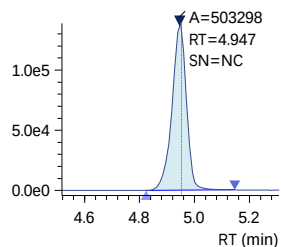
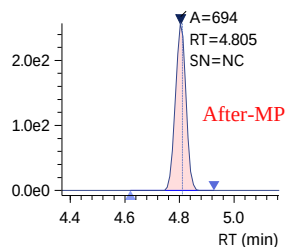
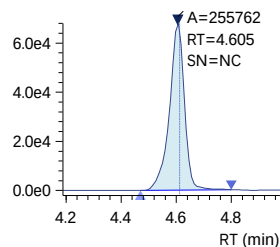
1.39e5

ISTD 318.00>273.00 (-)

1.39e5

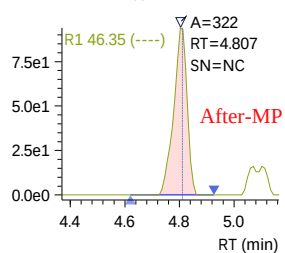
ISTD 315.10>270.00 (-)

1.44e5



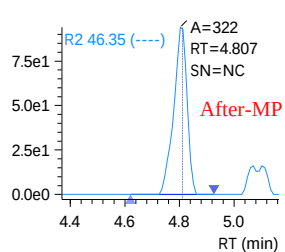
R1 295.00>84.90 (-)

9.40e1



R2 295.00>84.90 (-)

9.40e1





240122_046 (continued)

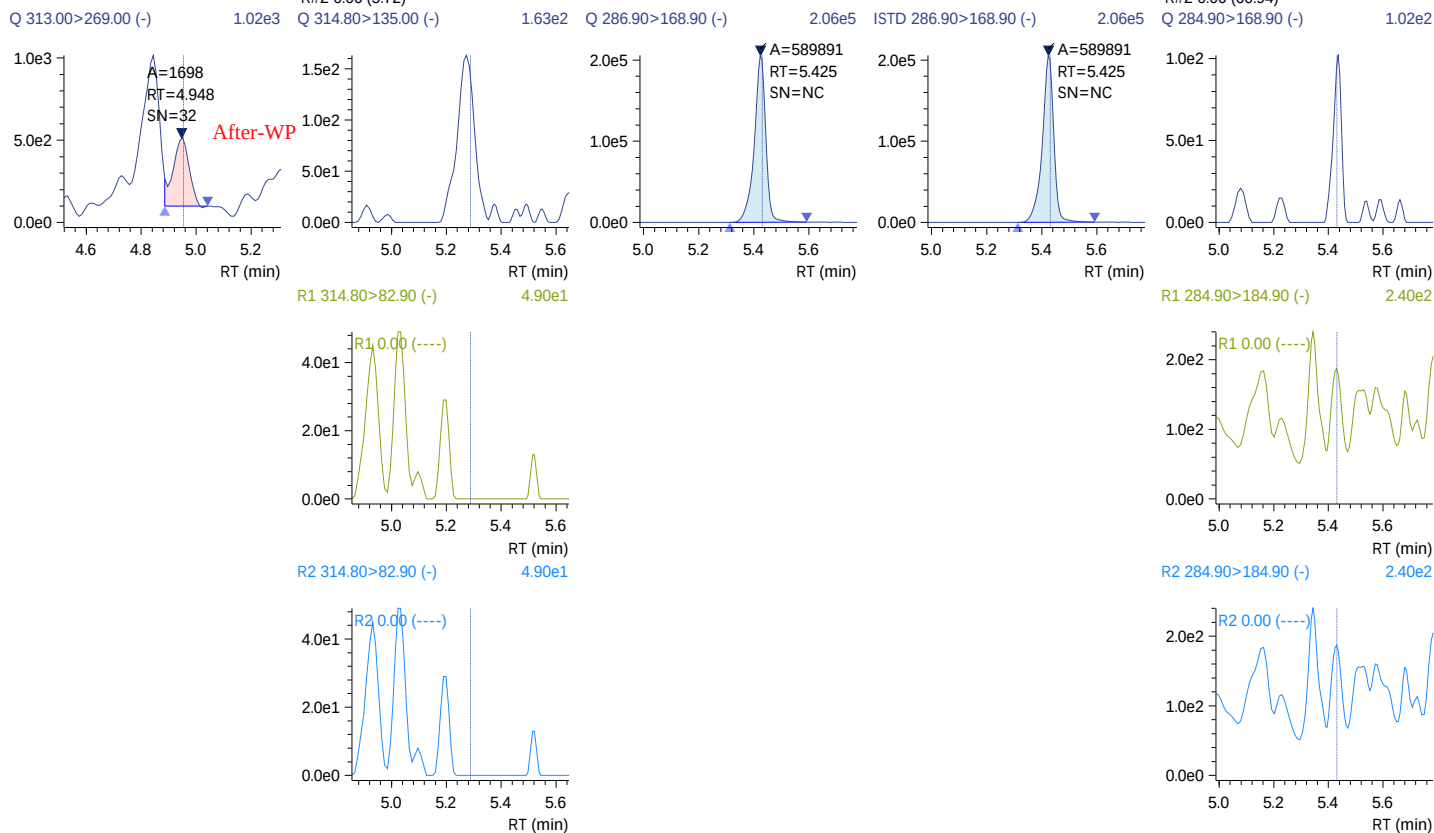
PFHxA
Conc. 0.0017

PFEESA
Conc. ----
R#1 0.00 (6.11)
R#2 0.00 (5.72)

13C3-HFPO-DA
Conc. 11.5925

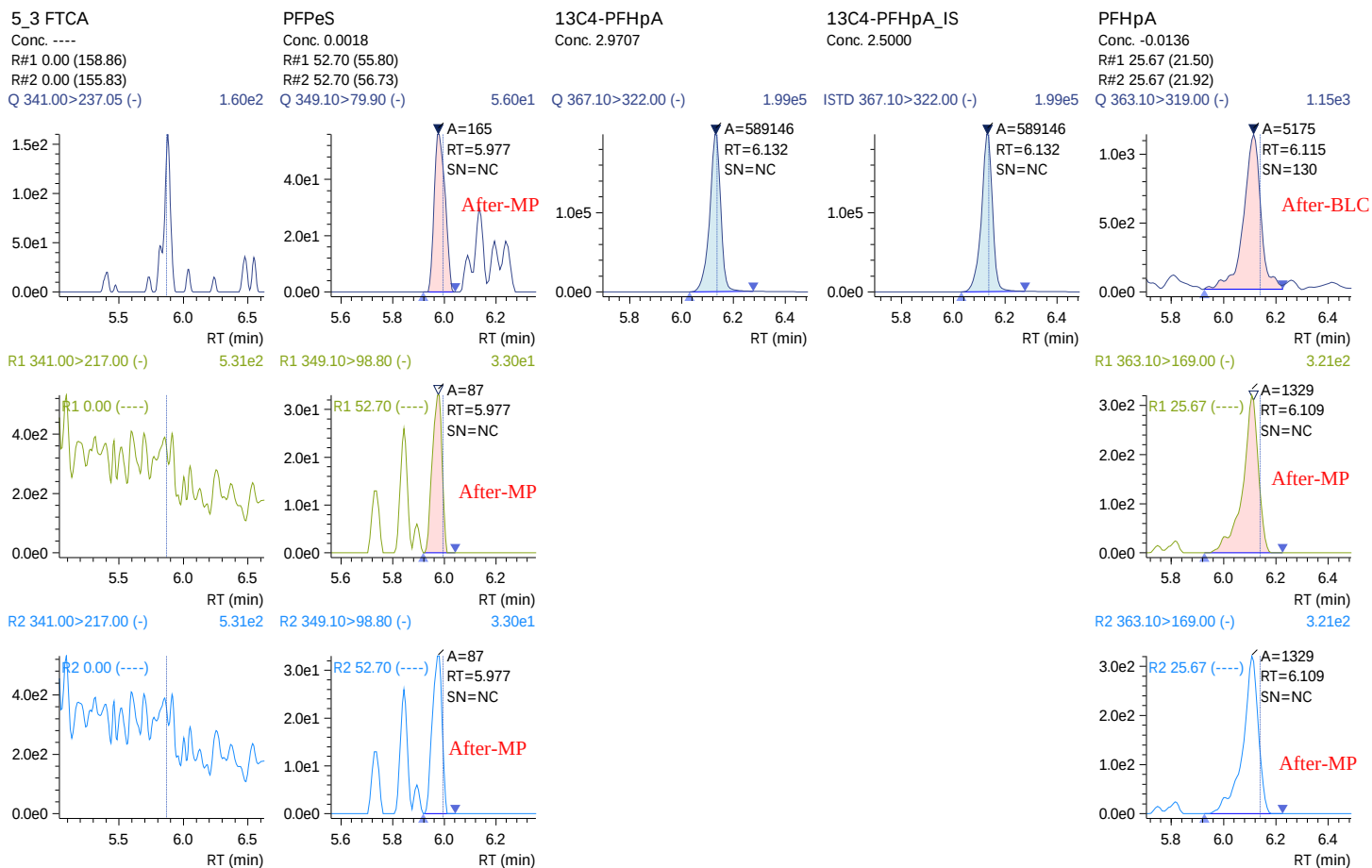
13C3-HFPO-DA_IS
Conc. 10.0000

HFPO-DA
Conc. ----
R#1 0.00 (65.61)
R#2 0.00 (60.94)





240122_046 (continued)

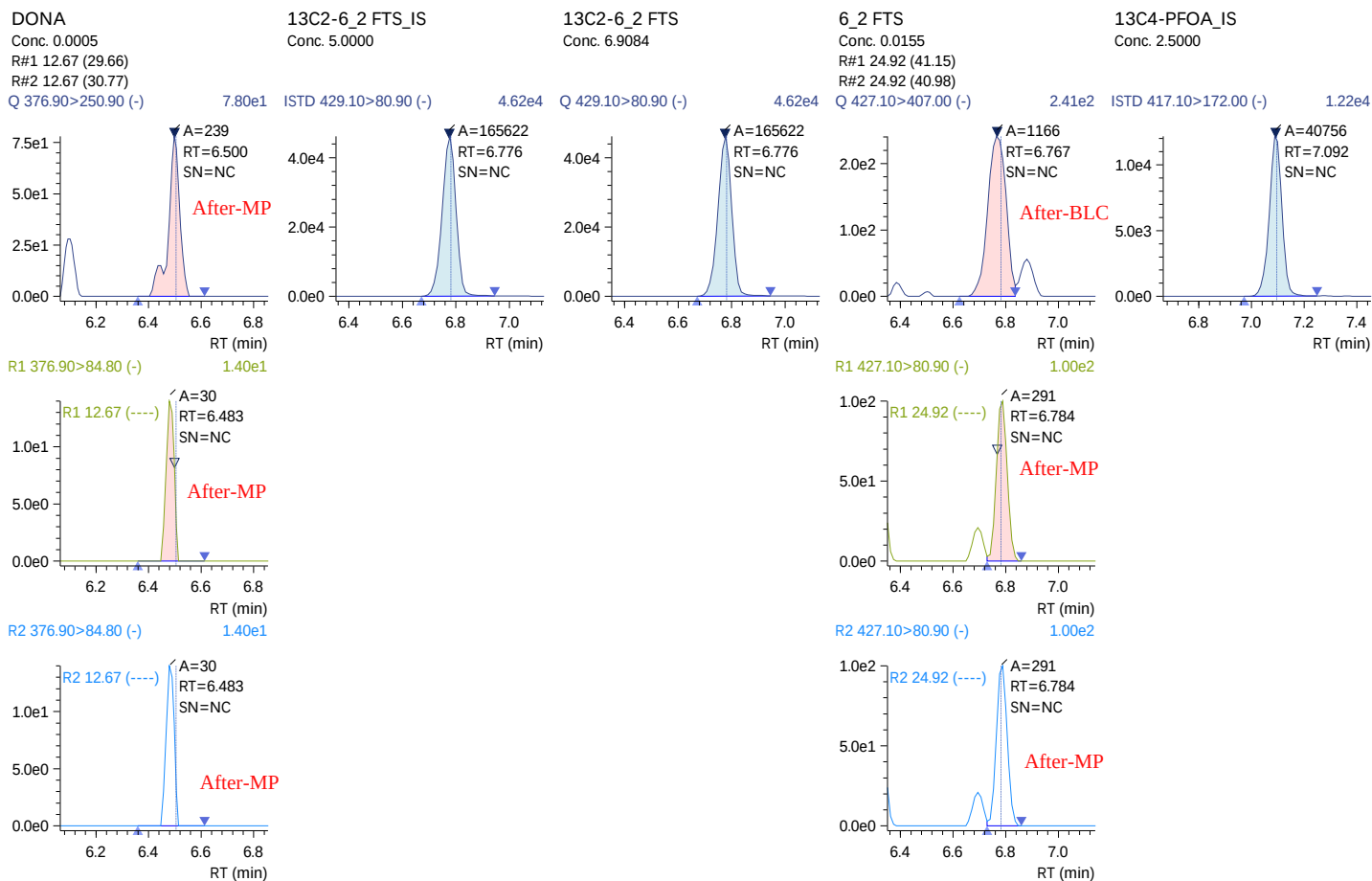


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_046 (continued)





240122_046 (continued)

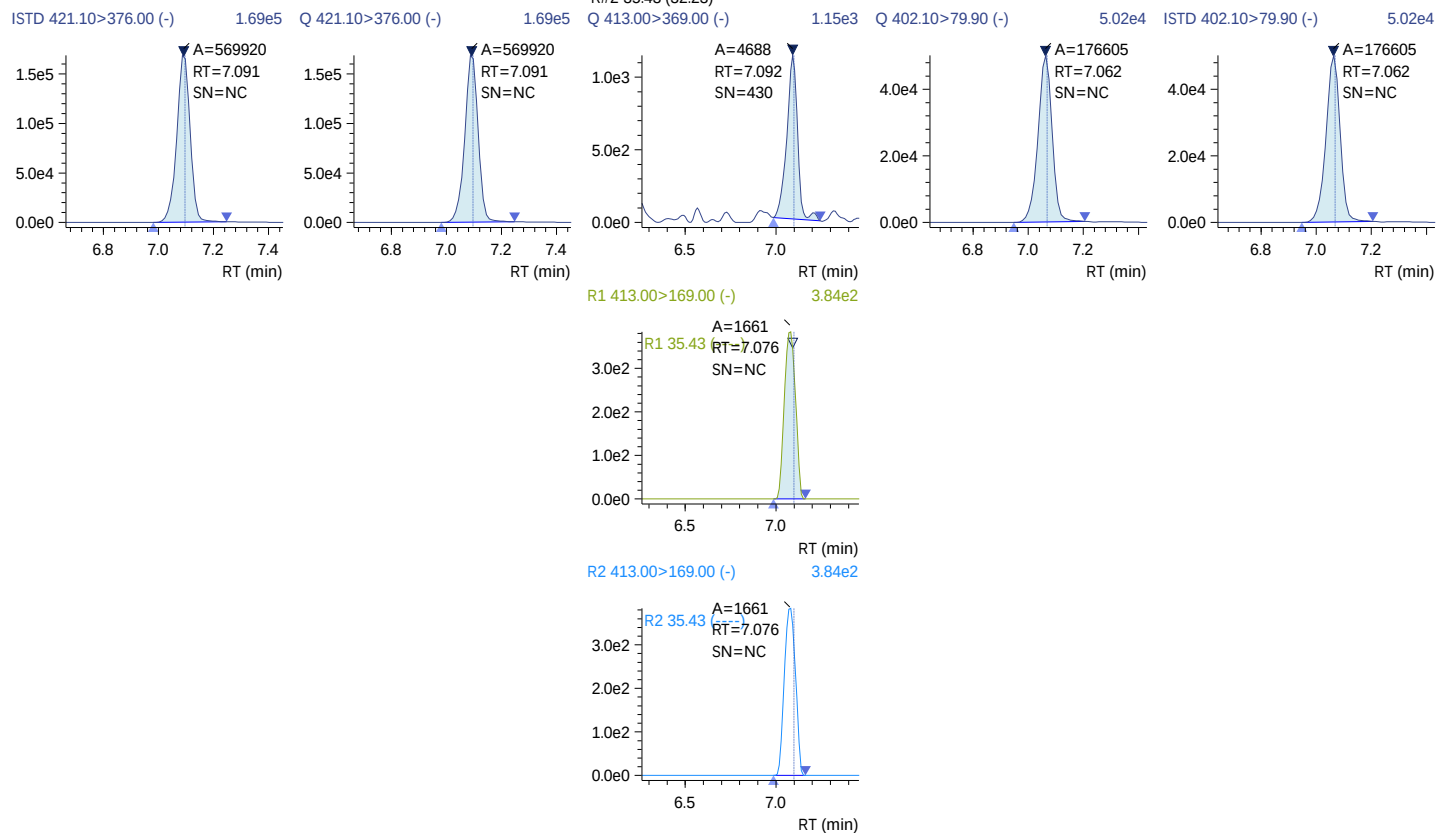
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.5019

PFOA
Conc. -0.0119
R#1 35.43 (31.89)
R#2 35.43 (32.23)

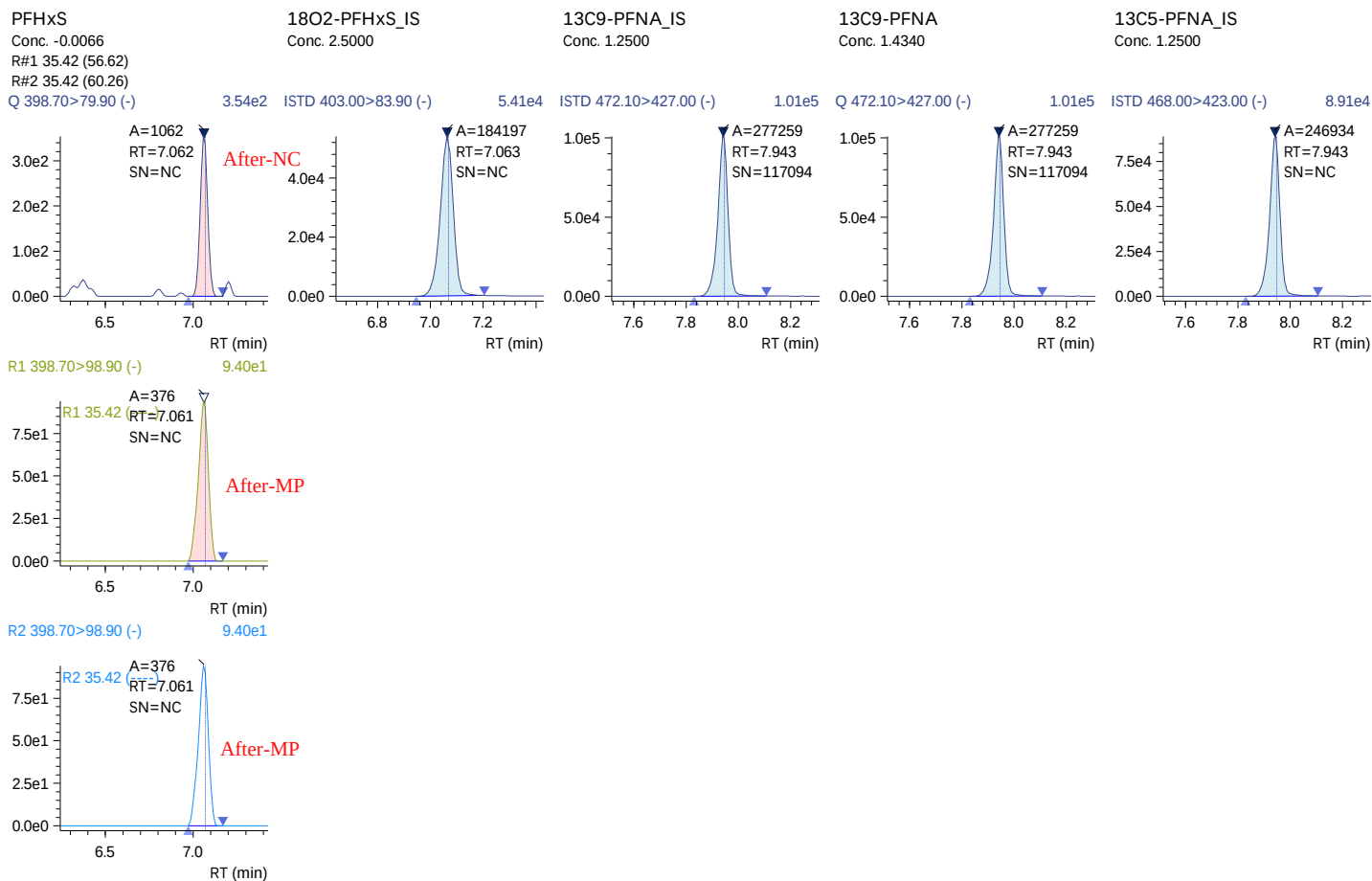
13C3-PFHxS
Conc. 2.2337

13C3-PFHxS_IS
Conc. 2.5000





240122_046 (continued)

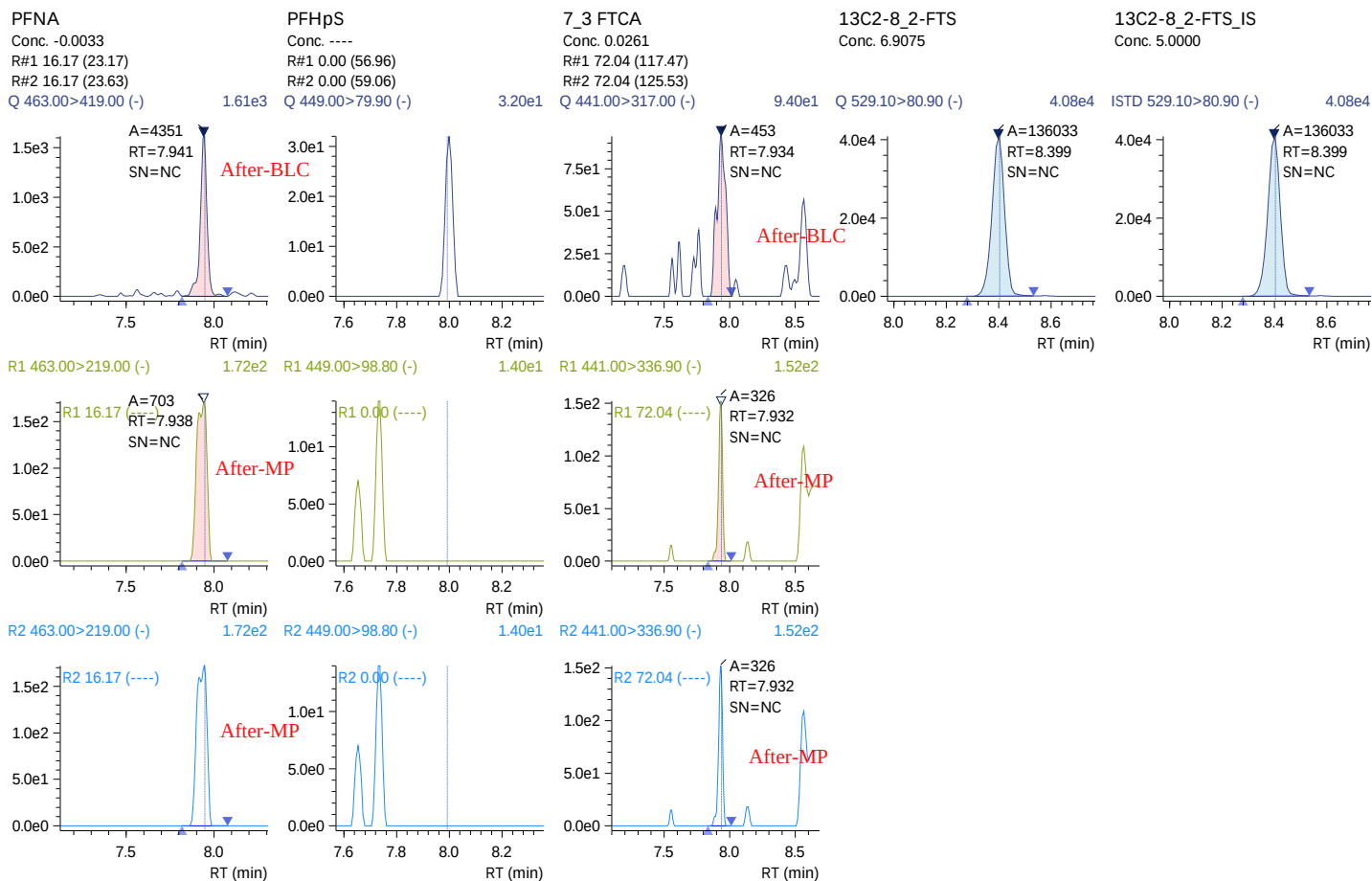


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_046 (continued)

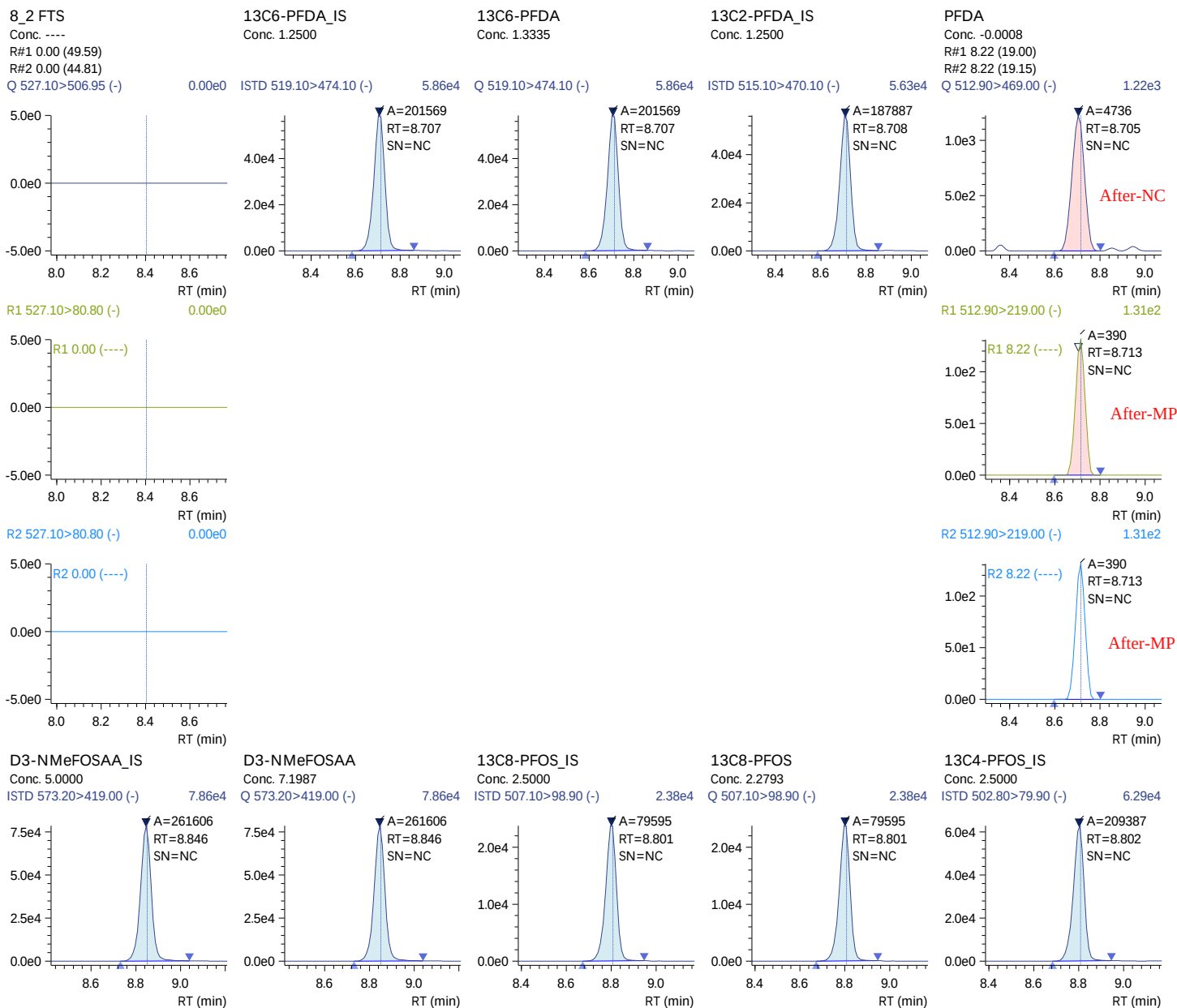


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_046 (continued)

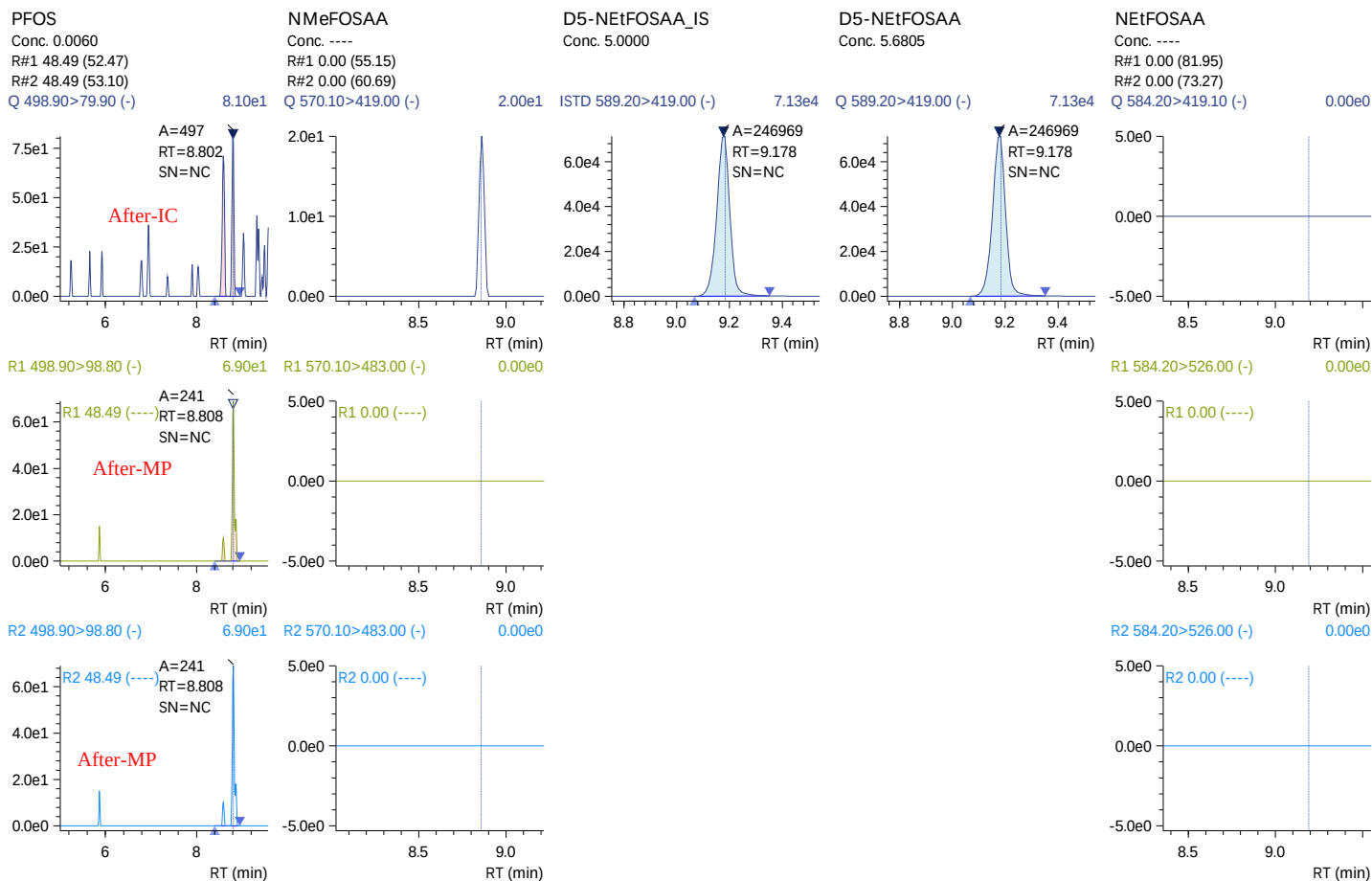


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_046 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_046 (continued)

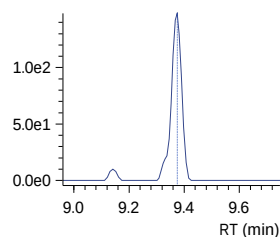
9-Cl-PF3ONS

Conc. ----

R#1 0.00 (32.76)

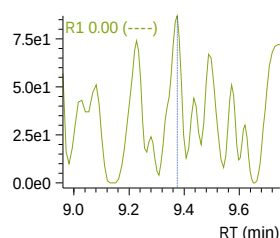
R#2 0.00 (32.59)

Q 530.80>351.00 (-)



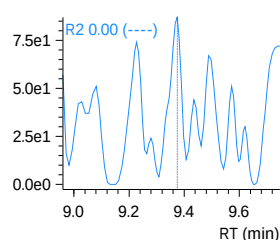
R1 532.80>353.00 (-)

8.70e1



R2 532.80>353.00 (-)

8.70e1



RT (min)

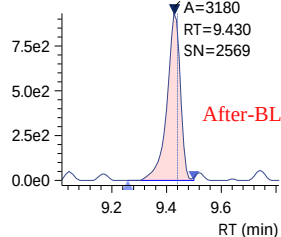
PFUnDA

Conc. -0.0098

R#1 20.23 (13.12)

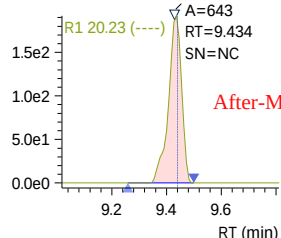
R#2 20.23 (14.36)

Q 563.10>519.00 (-)



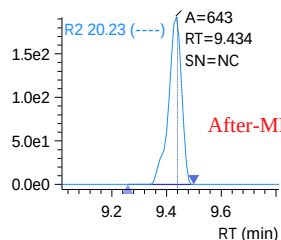
R1 563.10>269.10 (-)

1.92e2



R2 563.10>269.10 (-)

1.92e2

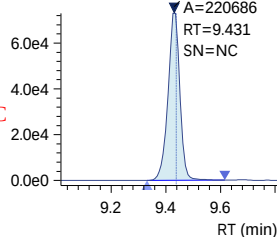


RT (min)

13C7-PFUnDA_IS

Conc. 1.2500

ISTD 570.00>525.10 (-)

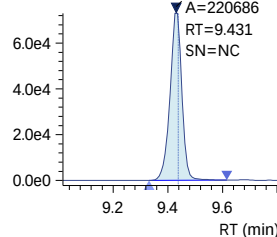


RT (min)

13C7-PFUnDA

Conc. 1.2239

Q 570.00>525.10 (-)



RT (min)

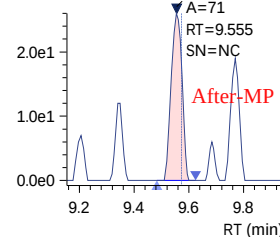
PFNS

Conc. 0.0012

R#1 144.51 (65.22)

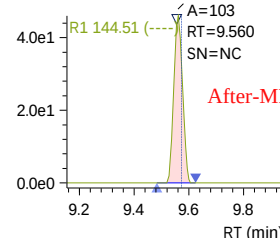
R#2 144.51 (65.31)

Q 548.80>79.90 (-)



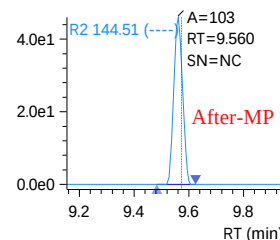
R1 548.80>98.80 (-)

4.60e1



R2 548.80>98.80 (-)

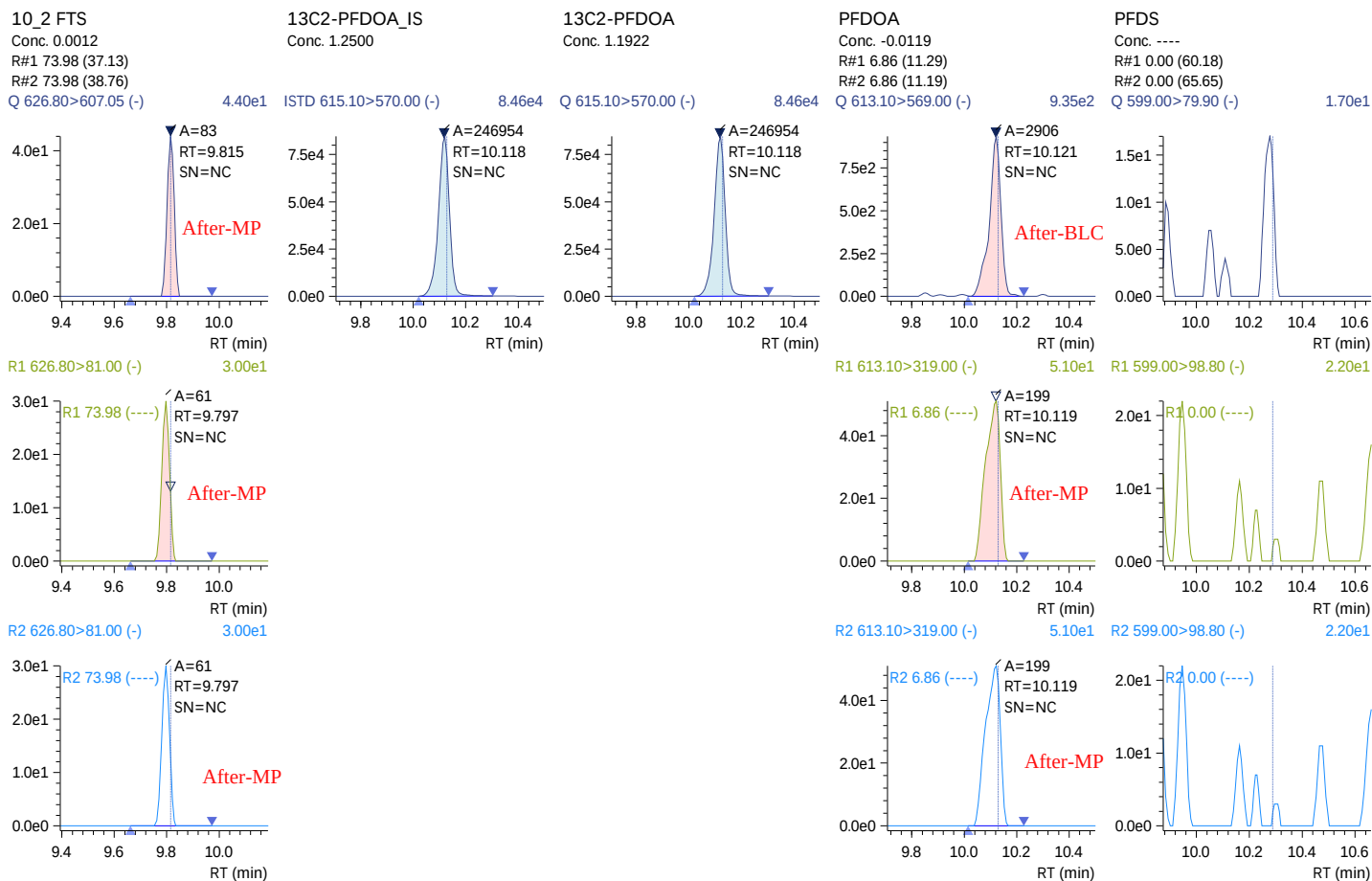
4.60e1



RT (min)



240122_046 (continued)

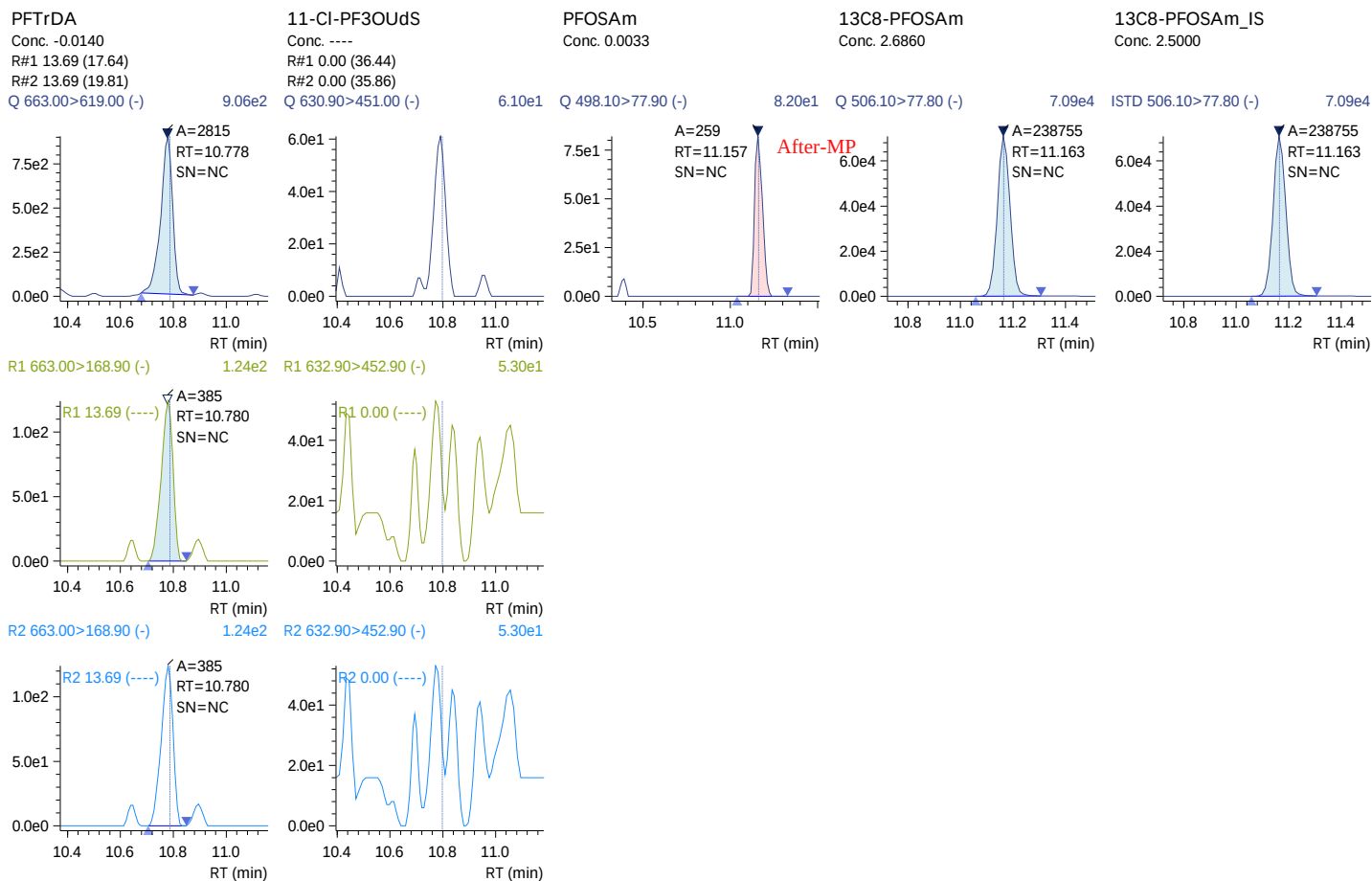


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_046 (continued)

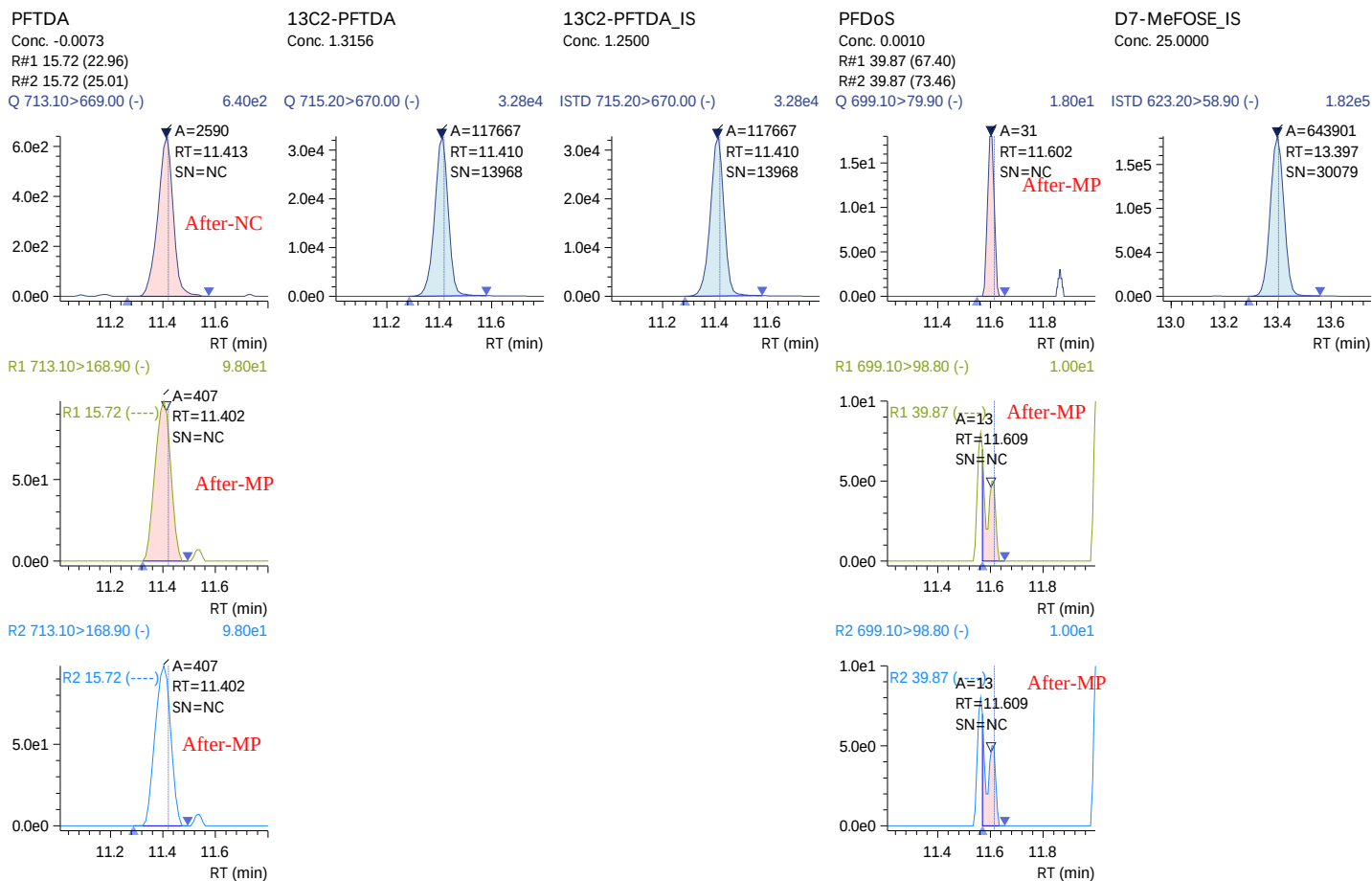


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_046 (continued)





240122_046 (continued)

D7-MeFOSE
Conc. 29.3815

MeFOSE
Conc. ----

13C2-PFHXA_IS
Conc. 2.5000

13C2-PFHXA
Conc. 2.1854

PFHXA

Conc. -0.0064
R#1 12.78 (13.90)
R#2 12.78 (15.85)

Q 623.20>58.90 (-)

1.82e5

Q 616.10>59.00 (-)

4.80e1

ISTD 815.00>770.05 (-)

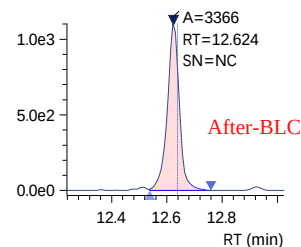
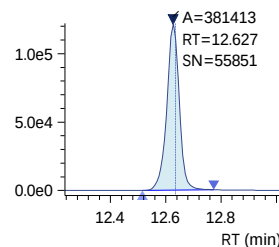
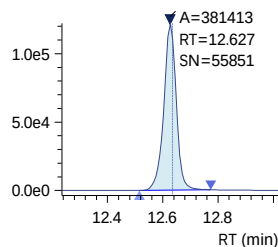
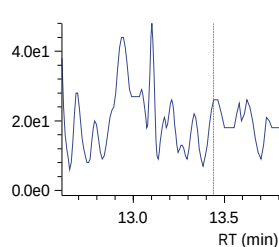
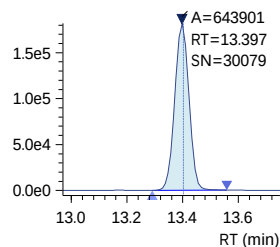
1.22e5

Q 815.00>770.05 (-)

1.22e5

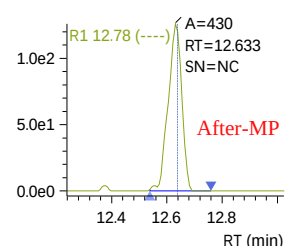
Q 813.00>768.95 (-)

1.11e3



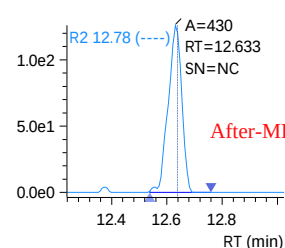
R1 813.00>218.95 (-)

1.26e2



R2 813.00>218.95 (-)

1.26e2





240122_046 (continued)

D3-MeFOSA
Conc. 2.4041

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. ----
R#1 0.00 (140.79)
R#2 0.00 (153.61)

D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 31.9561

Q 515.00>219.00 (-)

1.22e4

ISTD 515.00>219.00 (-)

1.22e4

Q 511.90>219.00 (-)

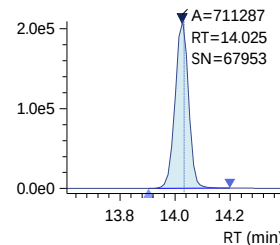
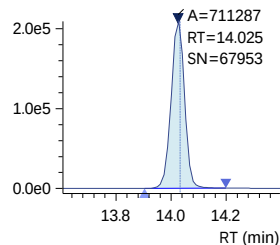
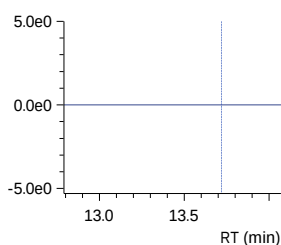
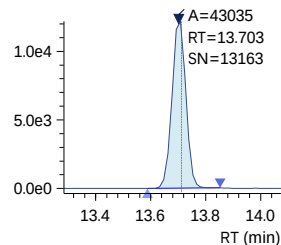
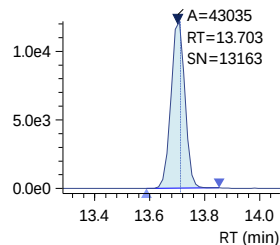
0.00e0

ISTD 639.20>58.90 (-)

2.09e5

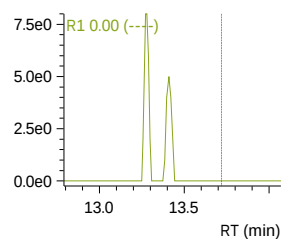
Q 639.20>58.90 (-)

2.09e5



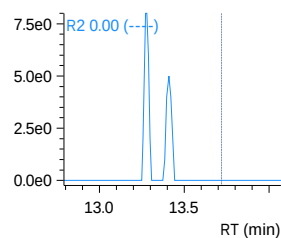
R1 511.90>169.00 (-)

8.00e0



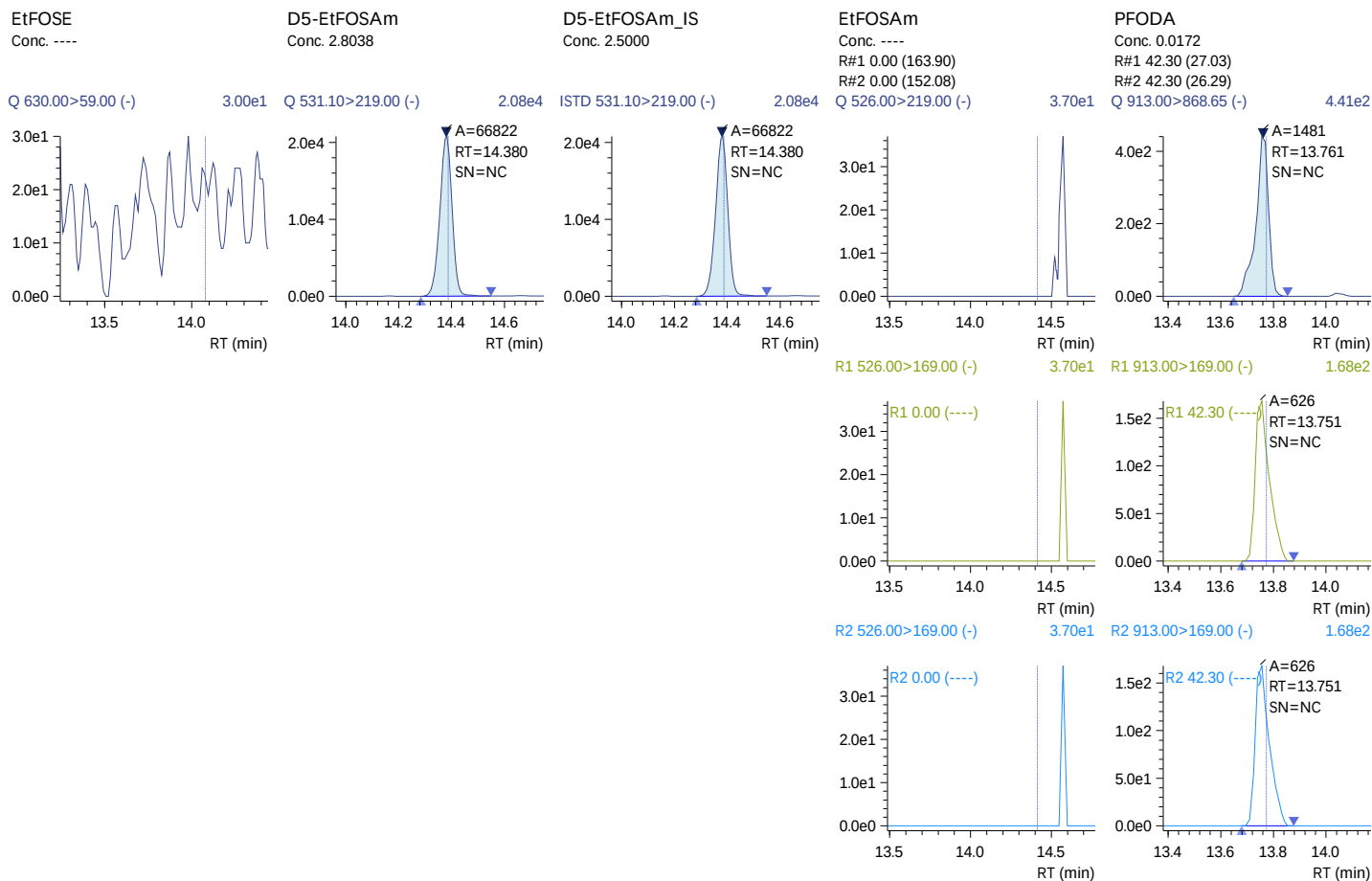
R2 511.90>169.00 (-)

8.00e0





240122_046 (continued)



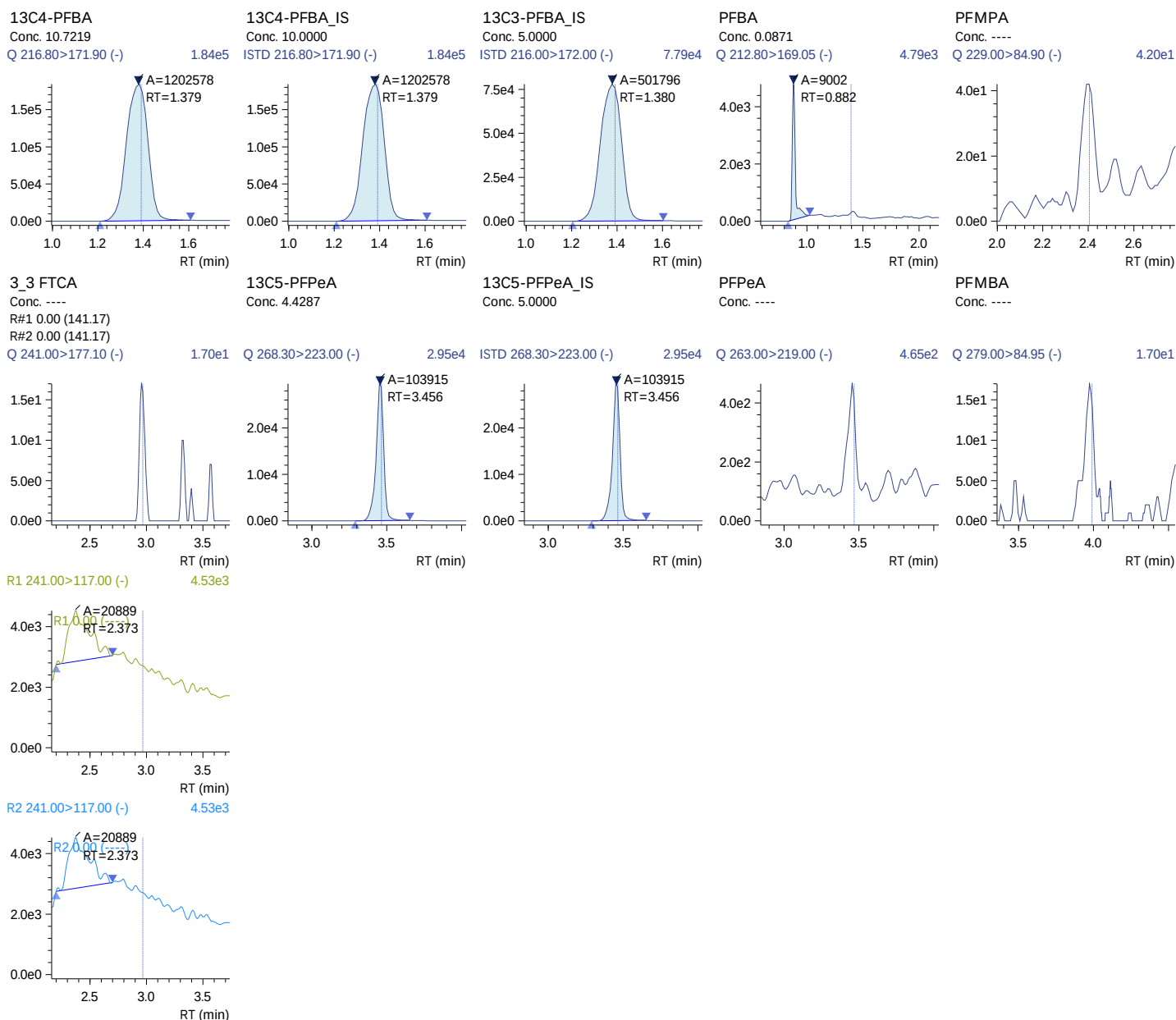
J:\LCMS08\Data\240122_1633_B1\240122_1633_B1.dampl

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_046

Sample ID: 1633 CCB
Date Acquired: 1/23/2024 3:12:03 AM
Acquired by: System Administrator
Data File: 240122_046
Vial: 54 | Inj. Volume: 10.0000uL | Tray: 1





240122_046 (continued)

13C2-4_2 FTS
Conc. 8.2920

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. ----
R#1 0.00 (29.06)
R#2 0.00 (29.06)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. ----
R#1 0.00 (46.72)
R#2 0.00 (46.72)

Q 329.10>80.90 (-)

6.54e4

ISTD 329.10>80.90 (-)

6.54e4

Q 327.10>307.00 (-)

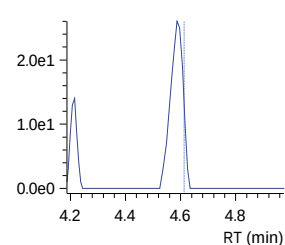
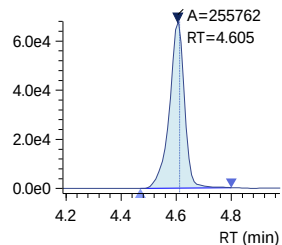
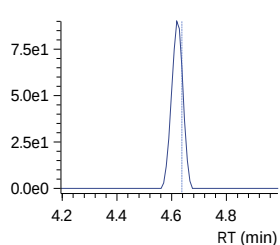
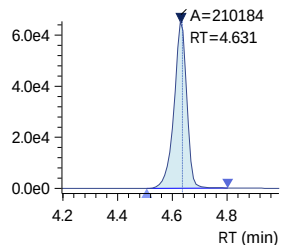
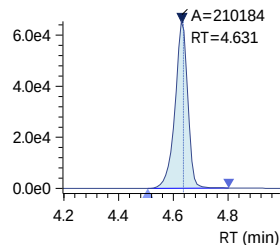
9.00e1

ISTD 302.10>79.90 (-)

6.80e4

Q 298.70>79.90 (-)

2.60e1

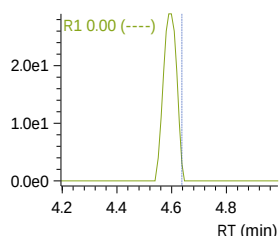


R1 327.10>80.90 (-)

2.90e1

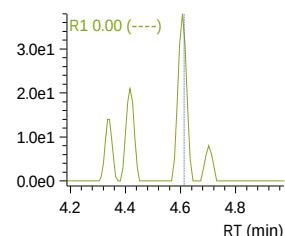
R1 298.70>98.80 (-)

3.80e1



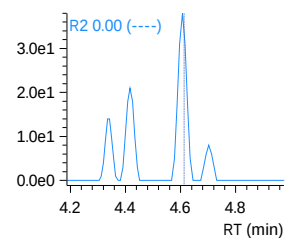
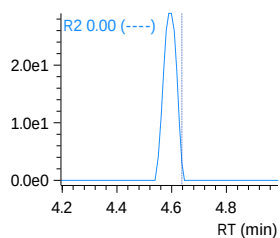
R2 327.10>80.90 (-)

2.90e1



R2 298.70>98.80 (-)

3.80e1





240122_046 (continued)

13C3-PFBS
 Conc. 2.4468

NFDHA
 Conc. ----
 R#1 0.00 (40.25)
 R#2 0.00 (40.25)

13C5-PFHxA
 Conc. 2.2973

13C5-PFHxA_IS
 Conc. 2.5000

13C2-PFHxA_IS
 Conc. 2.5000

Q 302.10>79.90 (-)

6.80e4

Q 295.00>201.00 (-)

2.57e2

Q 318.00>273.00 (-)

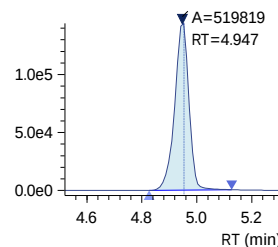
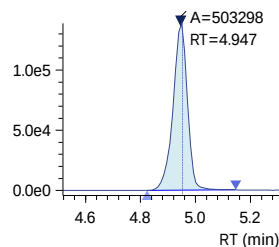
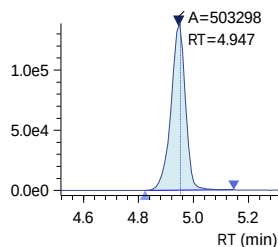
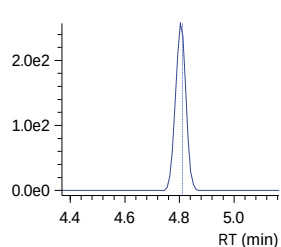
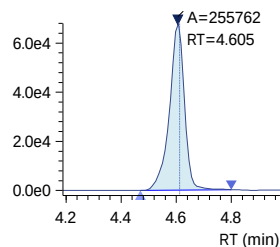
1.39e5

ISTD 318.00>273.00 (-)

1.39e5

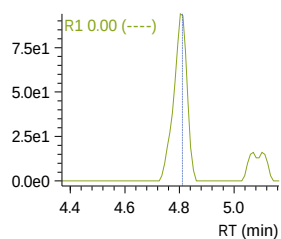
ISTD 315.10>270.00 (-)

1.44e5



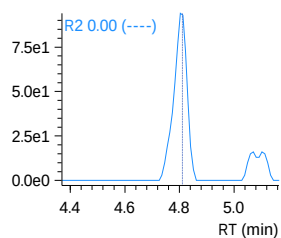
R1 295.00>84.90 (-)

9.40e1



R2 295.00>84.90 (-)

9.40e1





240122_046 (continued)

PFHxA
Conc. 0.0153

PFEESA
Conc. ----

13C3-HFPO-DA
Conc. 11.5925

13C3-HFPO-DA_IS
Conc. 10.0000

HFPO-DA
Conc. ----

Q 313.00>269.00 (-)

1.02e3

Q 314.80>135.00 (-)

1.63e2

Q 286.90>168.90 (-)

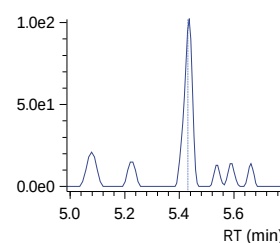
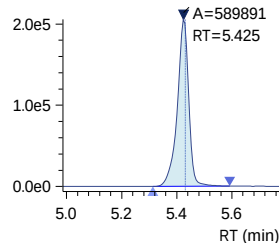
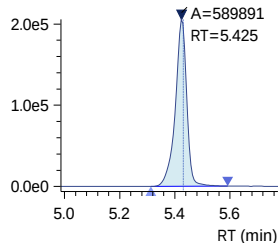
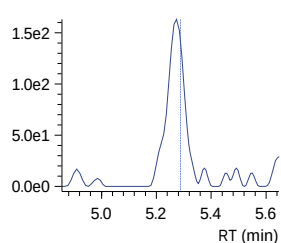
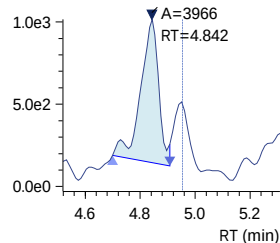
2.06e5

ISTD 286.90>168.90 (-)

2.06e5

Q 284.90>168.90 (-)

1.02e2

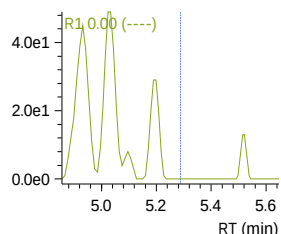


R1 314.80>82.90 (-)

4.90e1

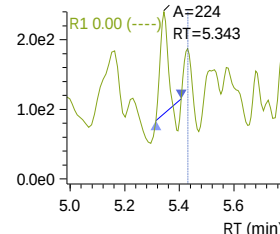
R1 284.90>184.90 (-)

2.40e2



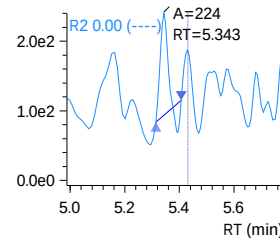
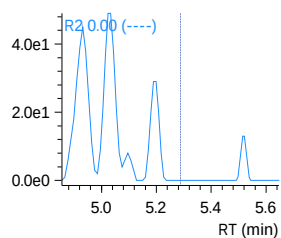
R2 314.80>82.90 (-)

4.90e1



R2 284.90>184.90 (-)

2.40e2





240122_046 (continued)

5_3 FTCA

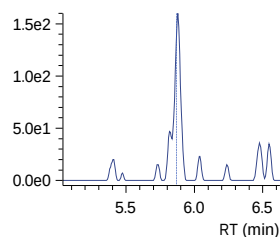
Conc. ----

R#1 0.00 (158.86)

R#2 0.00 (158.86)

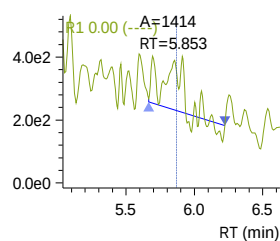
Q 341.00>237.05 (-)

1.60e2



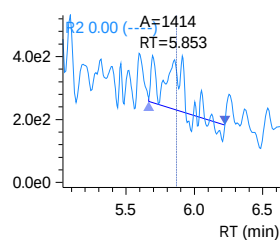
R1 341.00>217.00 (-)

5.31e2



R2 341.00>217.00 (-)

5.31e2



PFPeS

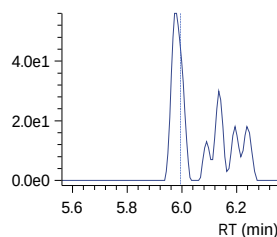
Conc. ----

R#1 0.00 (55.80)

R#2 0.00 (55.80)

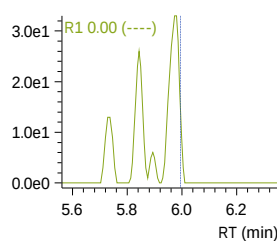
Q 349.10>79.90 (-)

5.60e1



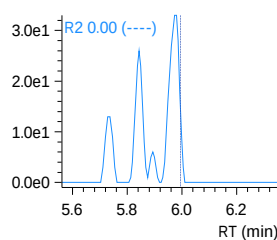
R1 349.10>98.80 (-)

3.30e1



R2 349.10>98.80 (-)

3.30e1

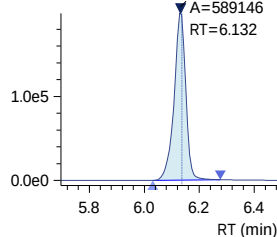


13C4-PFHpa

Conc. 2.9707

Q 367.10>322.00 (-)

1.99e5

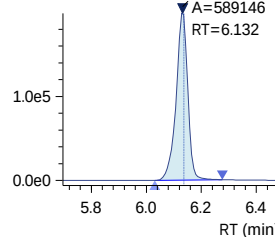


13C4-PFHpa_IS

Conc. 2.5000

ISTD 367.10>322.00 (-)

1.99e5



PFHpA

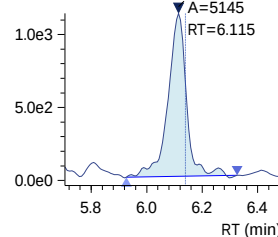
Conc. -0.0137

R#1 0.00 (21.50)

R#2 0.00 (21.50)

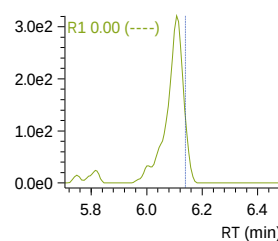
Q 363.10>319.00 (-)

1.15e3



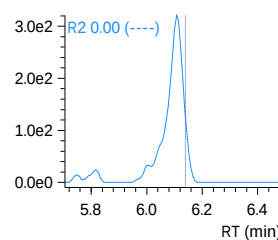
R1 363.10>169.00 (-)

3.21e2



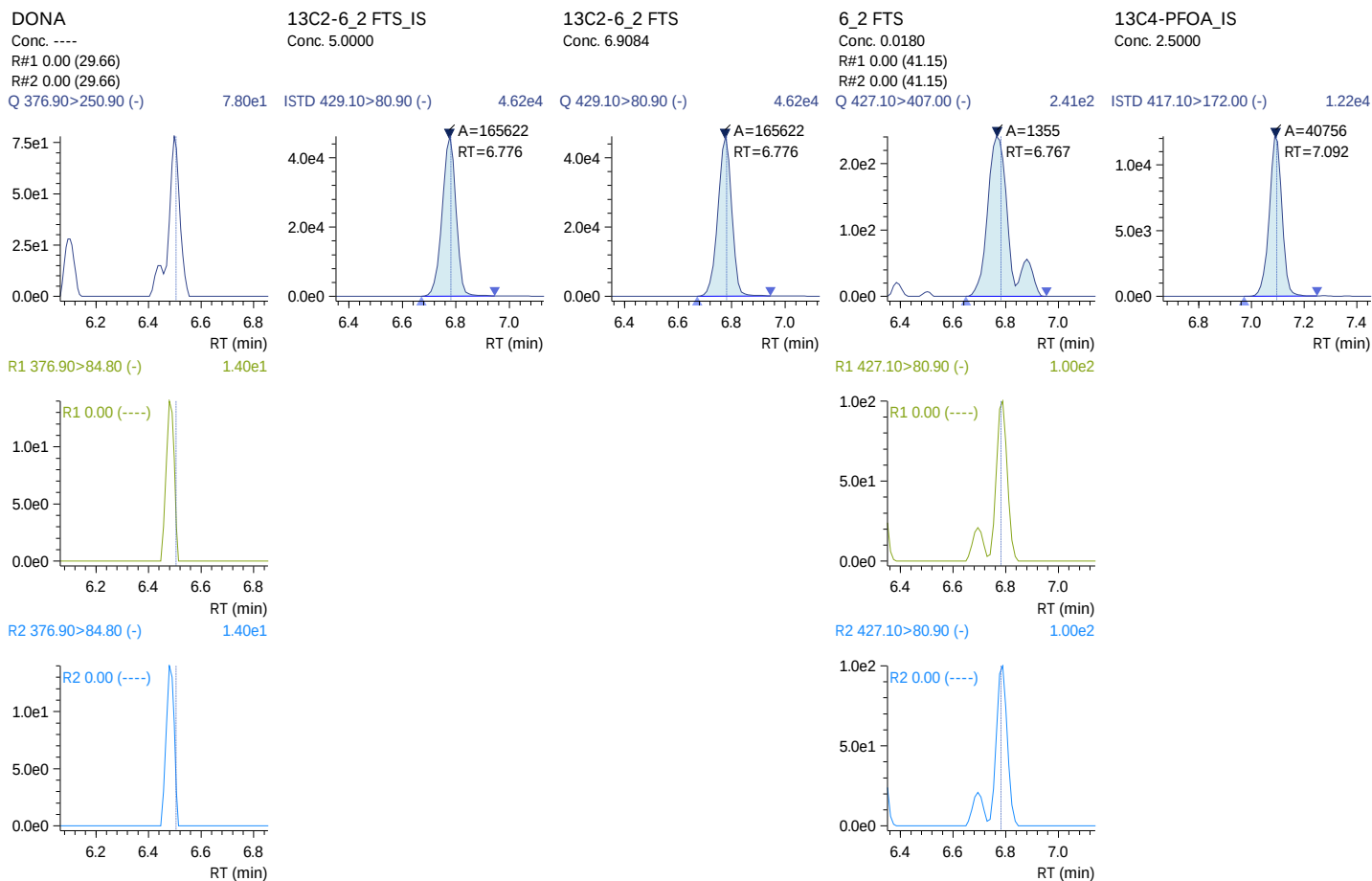
R2 363.10>169.00 (-)

3.21e2





240122_046 (continued)





240122_046 (continued)

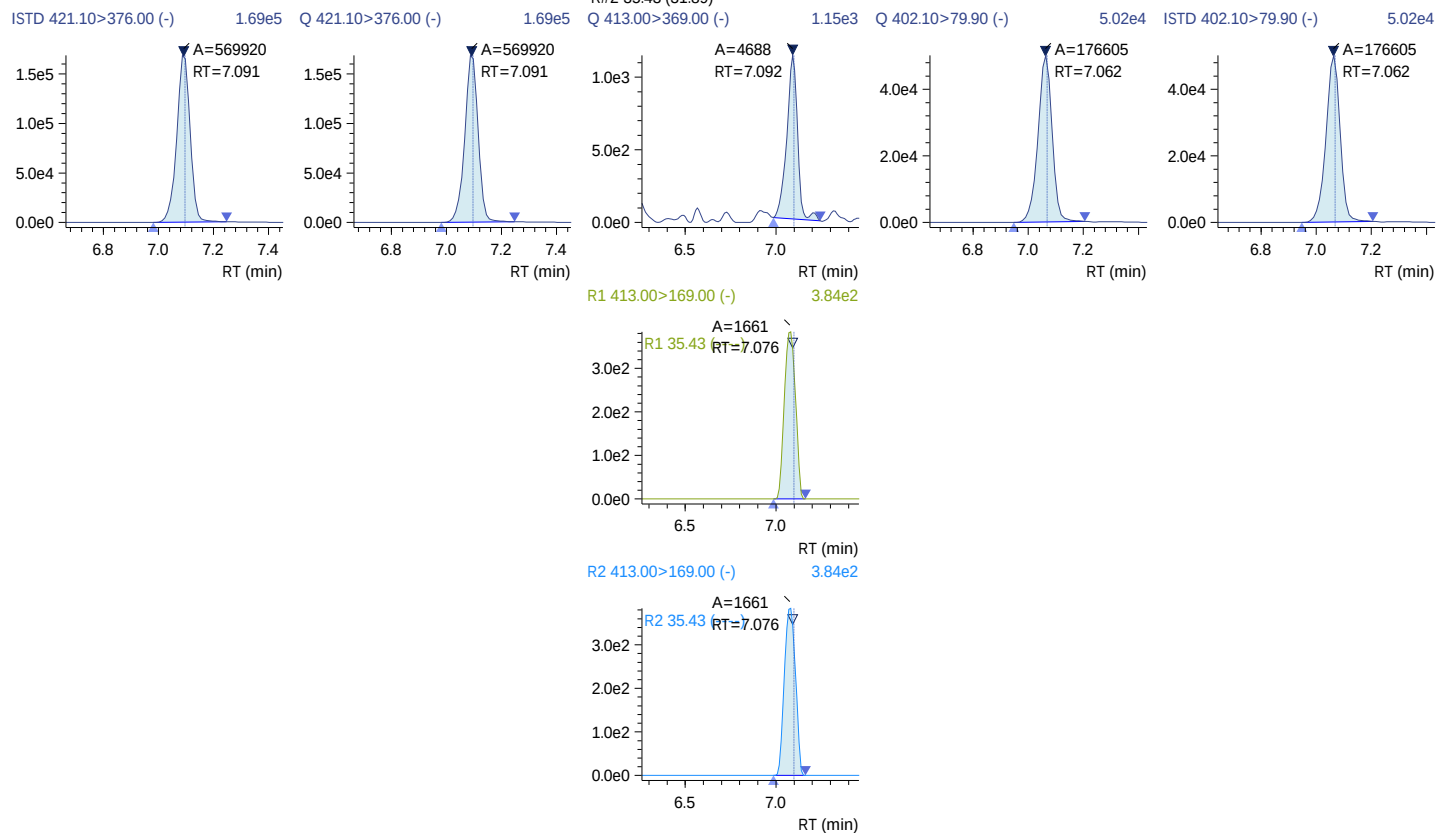
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.5019

PFOA
Conc. -0.0119
R#1 35.43 (31.89)
R#2 35.43 (31.89)

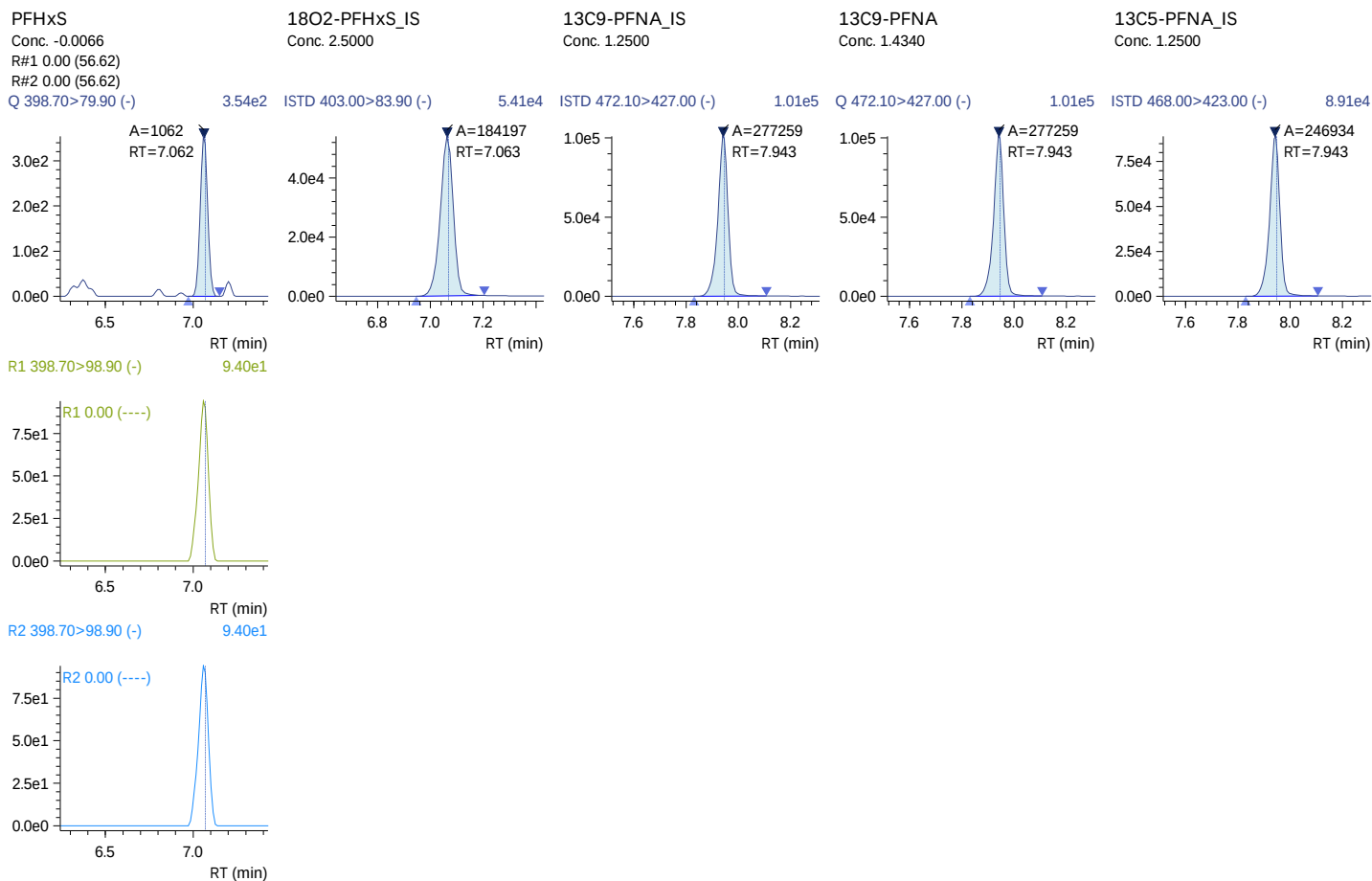
13C3-PFHxS
Conc. 2.2337

13C3-PFHxS_IS
Conc. 2.5000



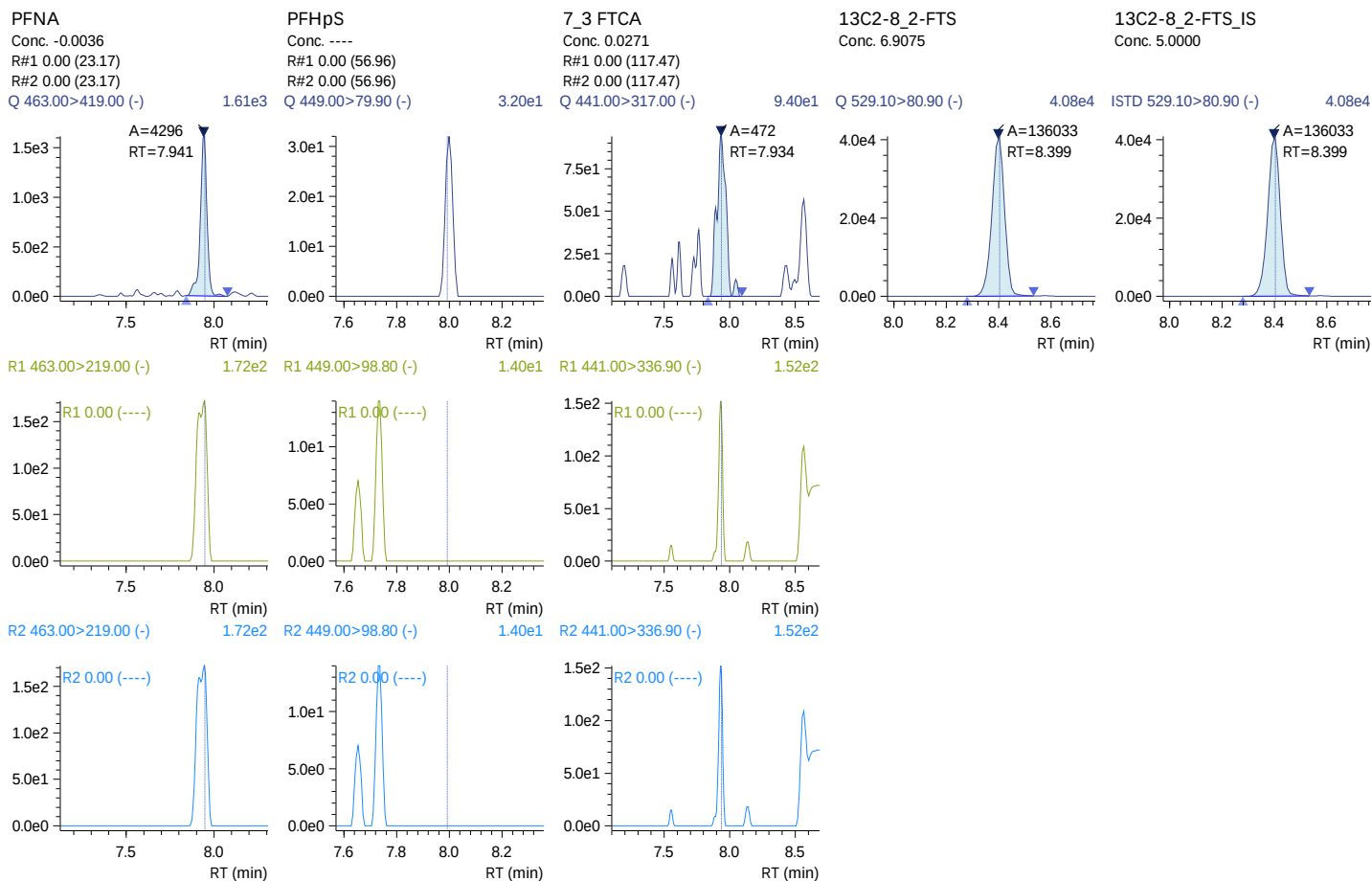


240122_046 (continued)



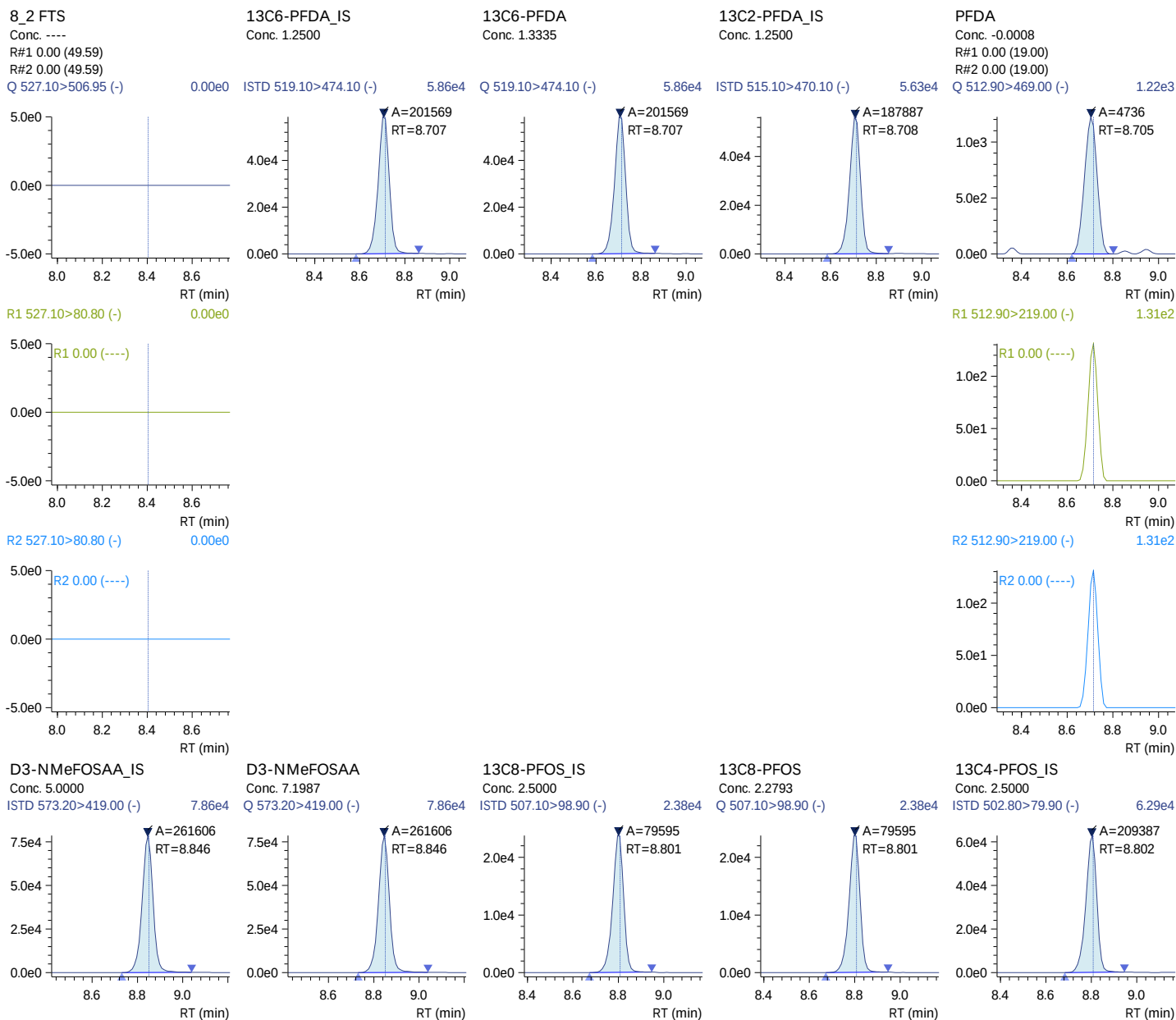


240122_046 (continued)



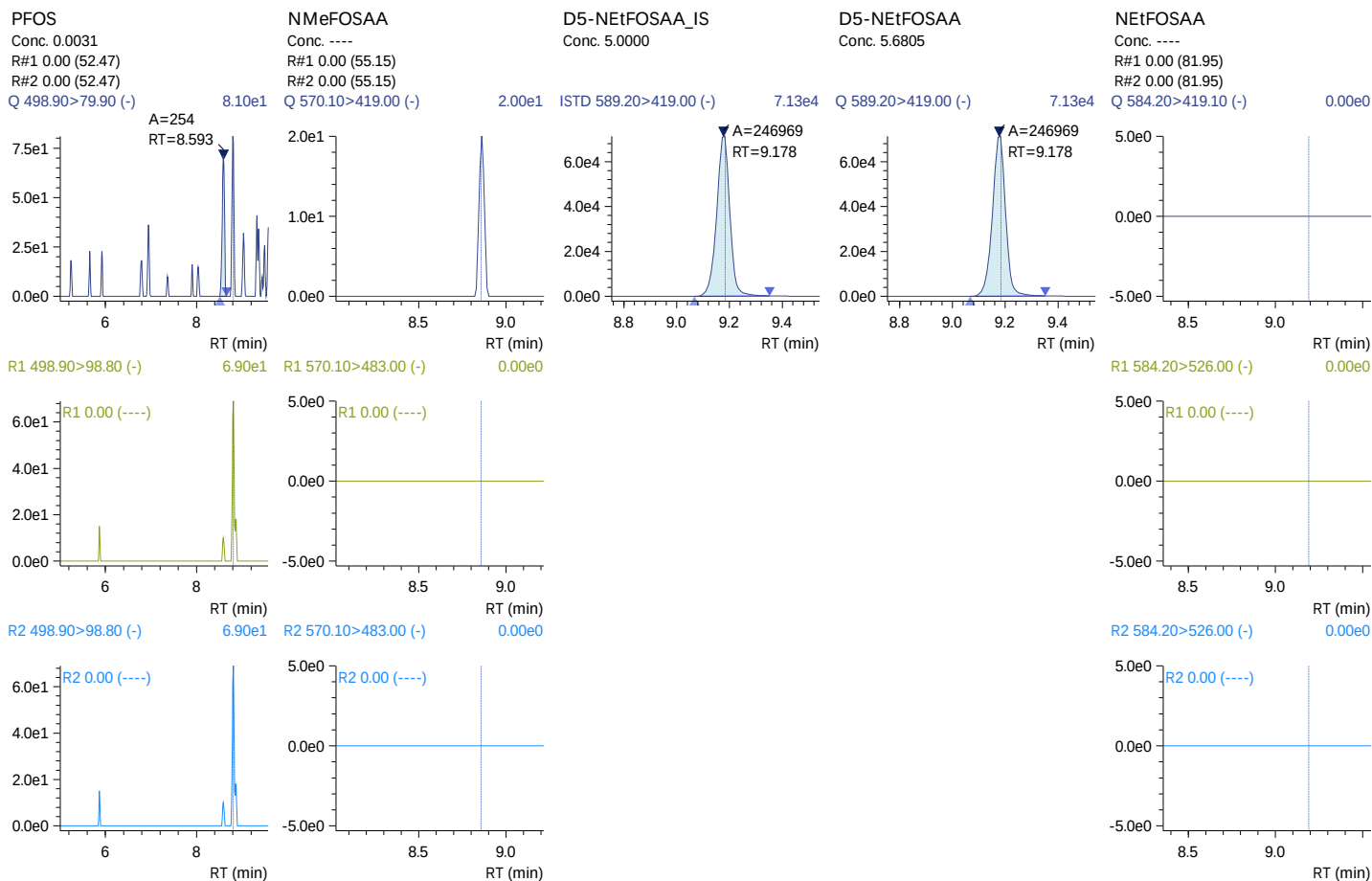


240122_046 (continued)





240122_046 (continued)





240122_046 (continued)

9-Cl-PF3ONS

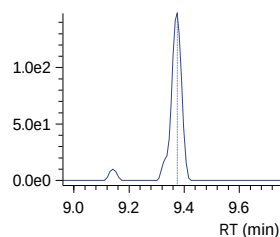
Conc. ----

R#1 0.00 (32.76)

R#2 0.00 (32.76)

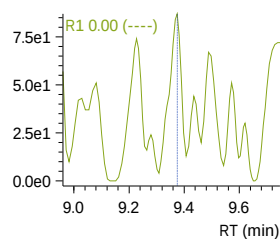
Q 530.80>351.00 (-)

1.48e2



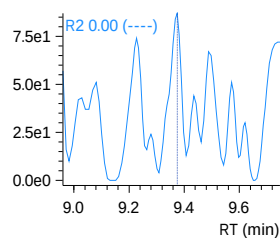
R1 532.80>353.00 (-)

8.70e1



R2 532.80>353.00 (-)

8.70e1



PFUnDA

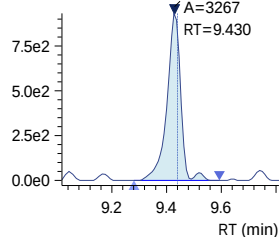
Conc. -0.0093

R#1 0.00 (13.12)

R#2 0.00 (13.12)

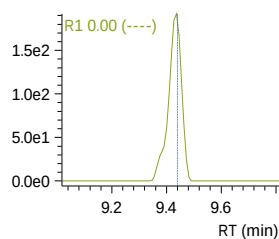
Q 563.10>519.00 (-)

9.33e2



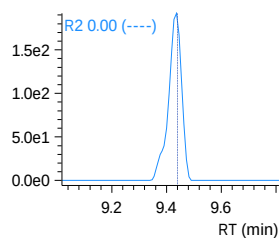
R1 563.10>269.10 (-)

1.92e2



R2 563.10>269.10 (-)

1.92e2

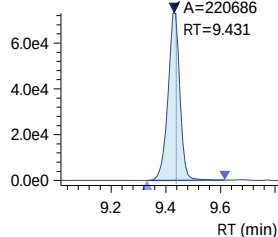


13C7-PFUnDA_IS

Conc. 1.2500

ISTD 570.00>525.10 (-)

7.30e4

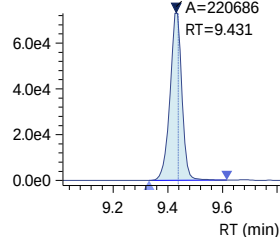


13C7-PFUnDA

Conc. 1.2239

Q 570.00>525.10 (-)

7.30e4



PFNS

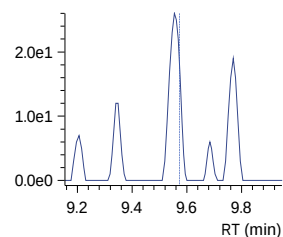
Conc. ----

R#1 0.00 (65.22)

R#2 0.00 (65.22)

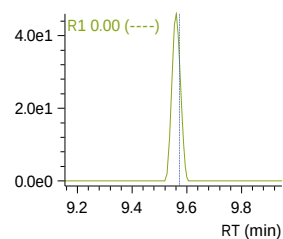
Q 548.80>79.90 (-)

2.60e1



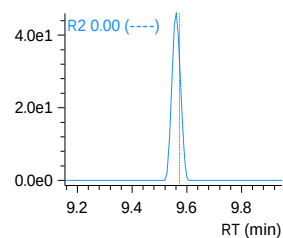
R1 548.80>98.80 (-)

4.60e1



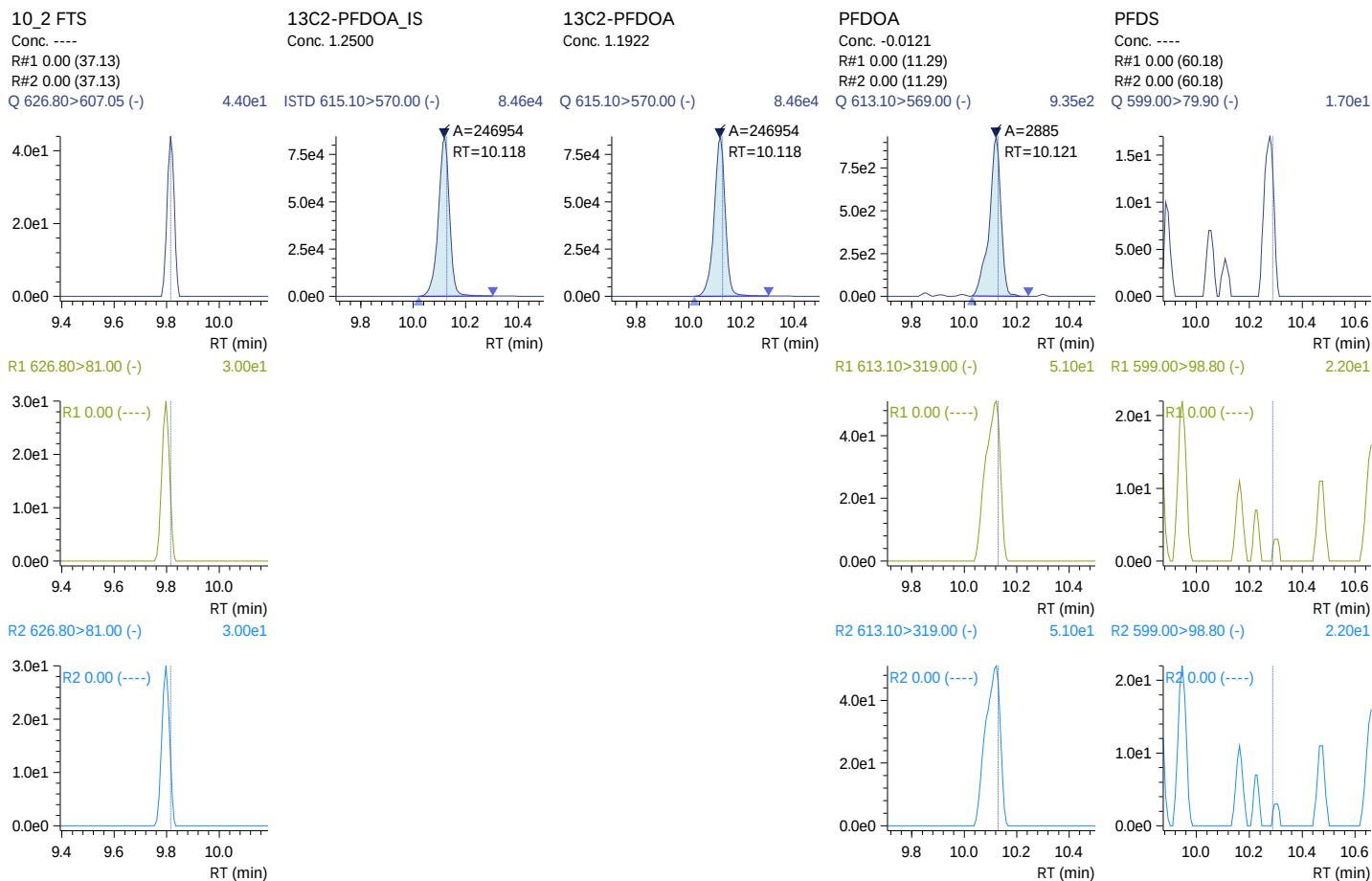
R2 548.80>98.80 (-)

4.60e1



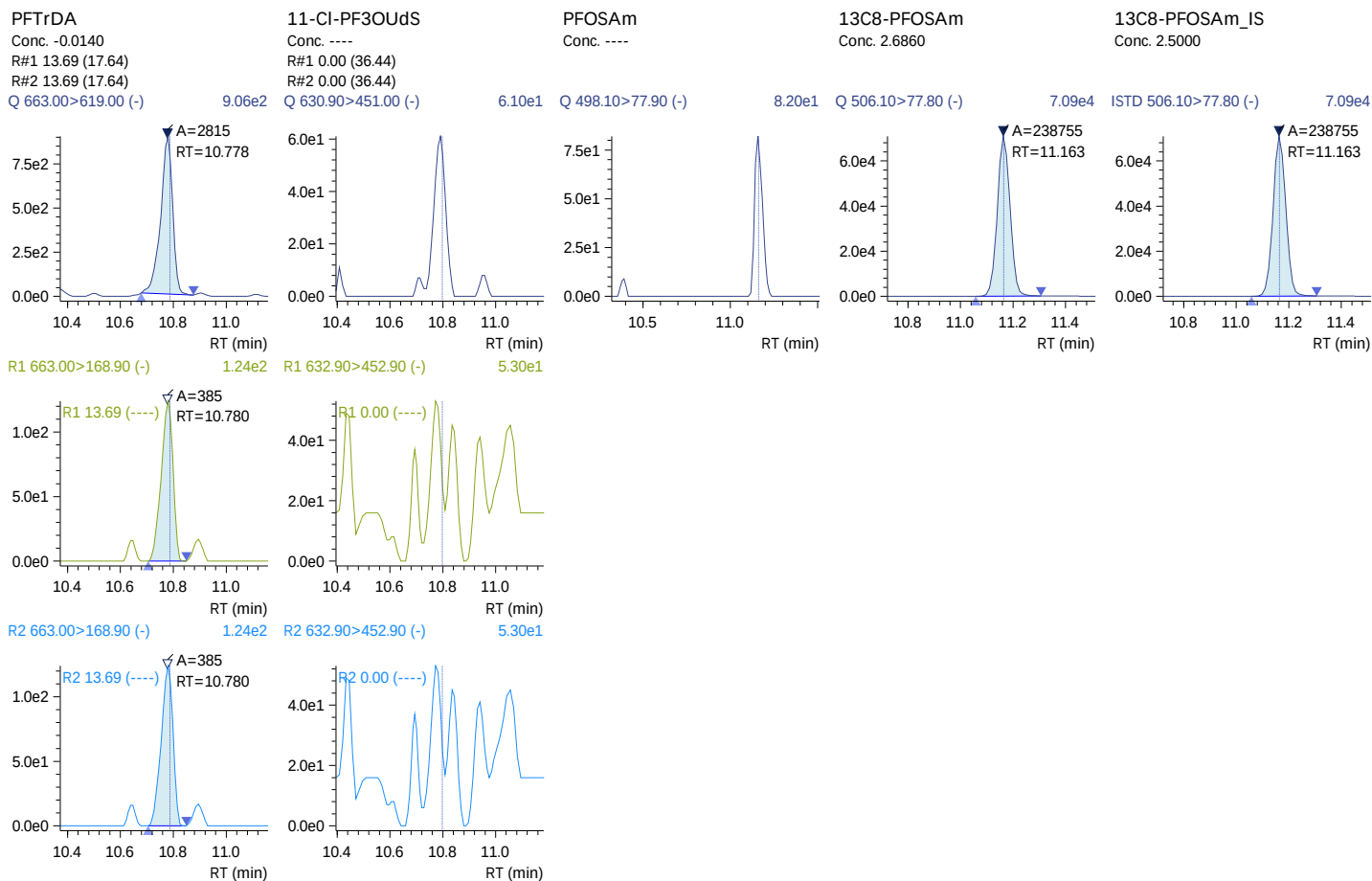


240122_046 (continued)



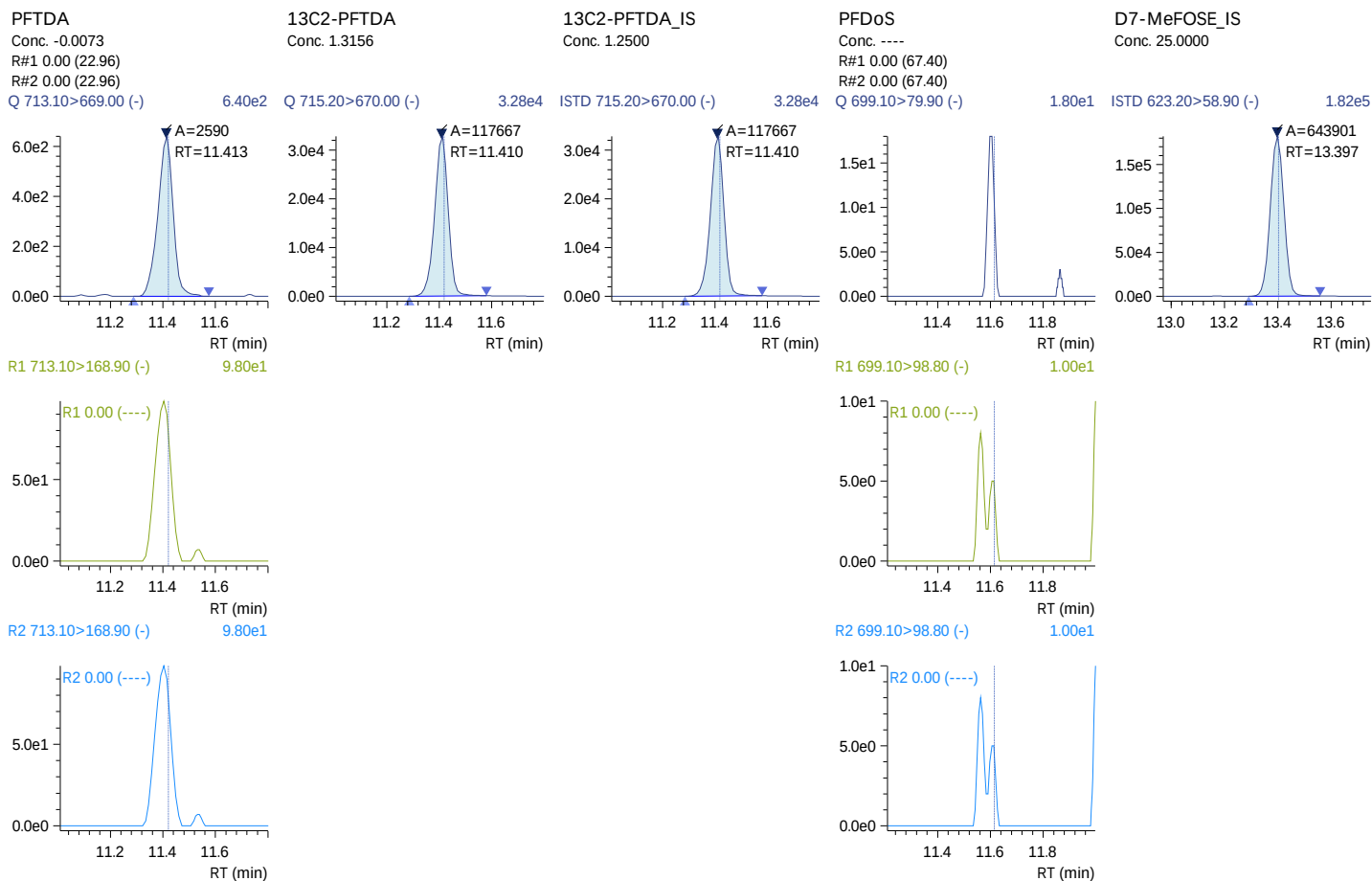


240122_046 (continued)





240122_046 (continued)





240122_046 (continued)

D7-MeFOSE
Conc. 29.3815

MeFOSE
Conc. ----

13C2-PFHDA_IS
Conc. 2.5000

13C2-PFHDA
Conc. 2.1854

PFHXDA
Conc. -0.0066
R#1 0.00 (13.90)
R#2 0.00 (13.90)

Q 623.20>58.90 (-)

1.82e5

Q 616.10>59.00 (-)

4.80e1

ISTD 815.00>770.05 (-)

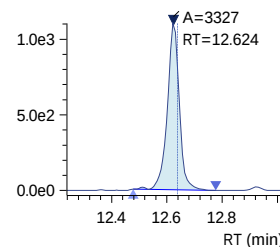
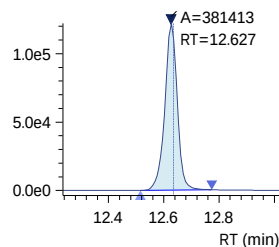
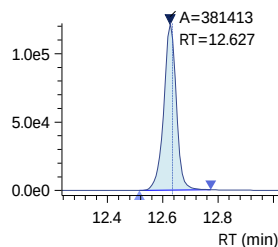
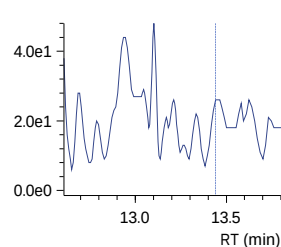
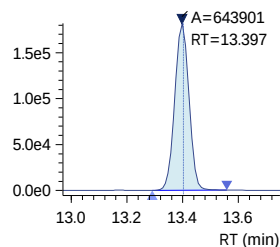
1.22e5

Q 815.00>770.05 (-)

1.22e5

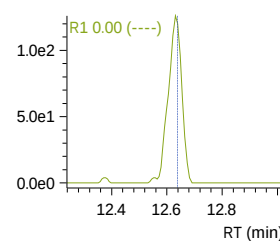
Q 813.00>768.95 (-)

1.11e3



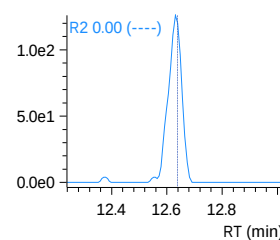
R1 813.00>218.95 (-)

1.26e2



R2 813.00>218.95 (-)

1.26e2





240122_046 (continued)

D3-MeFOSA
 Conc. 2.4041

D3-MeFOSA_IS
 Conc. 2.5000

MeFOSA
 Conc. ----
 R#1 0.00 (140.79)
 R#2 0.00 (140.79)

D9-EtFOSE_IS
 Conc. 25.0000

D9-EtFOSE
 Conc. 31.9561

Q 515.00>219.00 (-)

1.22e4

ISTD 515.00>219.00 (-)

1.22e4

Q 511.90>219.00 (-)

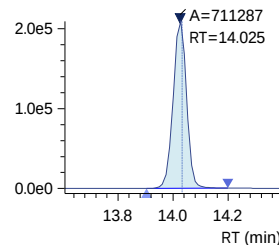
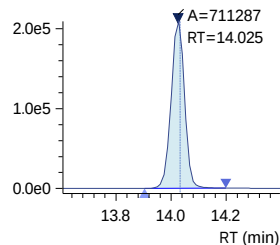
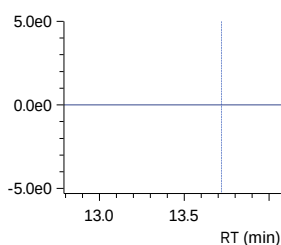
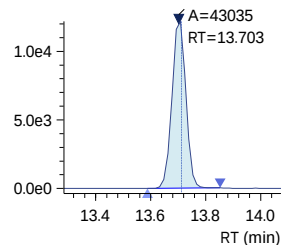
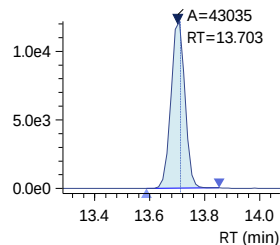
0.00e0

ISTD 639.20>58.90 (-)

2.09e5

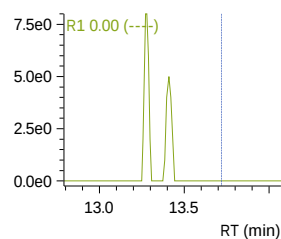
Q 639.20>58.90 (-)

2.09e5



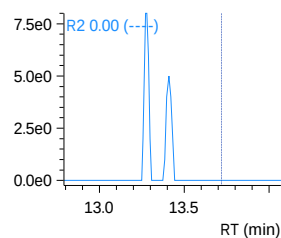
R1 511.90>169.00 (-)

8.00e0



R2 511.90>169.00 (-)

8.00e0





240122_046 (continued)

EtFOSE
Conc. ----

D5-EtFOSAm
Conc. 2.8038

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. ----

PFODA

Conc. 0.0172

R#1 42.30 (27.03)

R#2 42.30 (27.03)

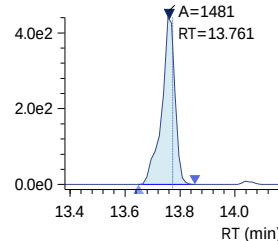
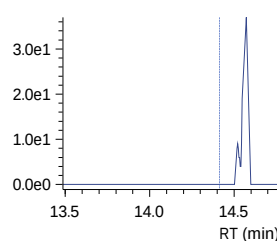
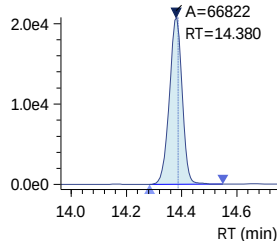
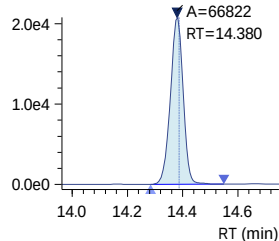
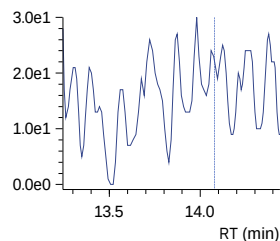
Q 630.00>59.00 (-)

Q 531.10>219.00 (-)

ISTD 531.10>219.00 (-)

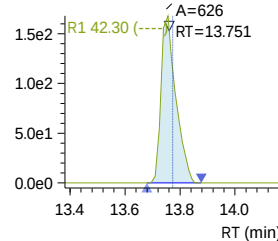
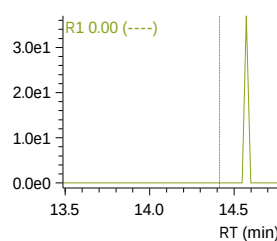
Q 526.00>219.00 (-)

Q 913.00>868.65 (-)



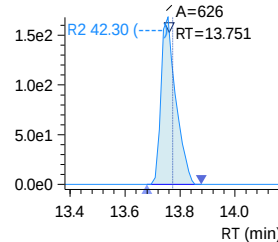
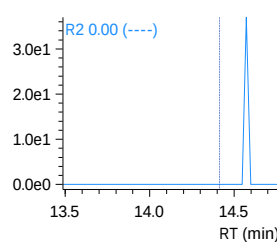
R1 526.00>169.00 (-)

R1 913.00>169.00 (-)



R2 526.00>169.00 (-)

R2 913.00>169.00 (-)



Validation Report

1st *PS* 01/25/24
2nd *MS* 01/25/24

Data File: J:\LCMS08\Data\240122_1633_B1\240122_055
Lab ID: KQ2401073-19
RunType: CCB
Matrix: Water

Date Acquired: 1/23/24 06:41
Batch ID: 830573
Analysis Method: 1633/PFAS_DOD5.4

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery		X
Internal Standards	X	
Surrogates	X	
Above Highest ICAL Level	X	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Continuing Calibration Recovery	N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	151	70	130	high bias, native <MRL
	D3-MeFOSAA	135	70	130	native in control
	13C2-4:2 FTS	162	70	130	
	13C2-6:2 FTS	146	70	130	
	13C2-8:2 FTS	150	70	130	

Primary Review: _____

Secondary Review: _____

Quantitation Report

1st *PS* 01/25/24
2nd *MS* 01/25/24

Data File:	J:\LCMS08\Data\240122_1633_B1\240122_055	Instrument:	K-LCMS-08
Acqu Date:	1/23/24 06:41	Vial:	46
Run Type:	CCB	Dilution:	1
Lab ID:	KQ2401073-19	Raw Units:	ng/mL

Bottle ID:		Tier:	IV	Matrix:	Water
Prod Code:	PFAS_DOD5.4	Collect Date:	11/27/23	Receive Date:	11/30/23

Analysis Lot:	830573	Prep Lot:		Report Group:	KQ2401073
Analysis	1633	Prep Method:			
		Prep Date:			

Title:	Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM	Calibration ID:	KC2400027
		Report List ID:	24615

Internal Standard Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Area Criteria
18O2-PFHxS	7.070	0.00	179780	2.5000	OK
13C4-PFOS	8.809	0.00	224299	2.5000	OK
13C3-PFBA	1.378	-0.01	499777	5.0000	OK
13C2-PFHxA	4.955	0.00	538785	2.5000	OK
13C4-PFOA	7.099	0.00	34581	2.5000	OK
13C5-PFNA	7.949	0.00	243809	1.2500	OK
13C2-PFDA	8.715	0.00	156805	1.2500	OK

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
13C3-PFBS	4.613	-0.01	252636	2.4762	99	40 - 135	Y
13C3-PFHxS	7.069	0.00	184693	2.3934	96	40 - 130	Y
13C8-PFOS	8.808	0.00	76938	2.0568	82	40 - 130	Y
13C4-PFBA	1.379	-0.01	1195725	10.7039	107	5 - 130	Y
13C5-PFPeA	3.462	-0.01	96135	3.9529	79	40 - 130	Y
13C5-PFHxA	4.954	-0.01	517795	2.2803	91	40 - 130	Y
13C4-PFHpA	6.138	-0.01	588693	2.8639	115	40 - 130	Y
13C8-PFOA	7.098	0.00	524900	2.7157	109	40 - 130	Y
13C9-PFNA	7.948	0.00	266394	1.3955	112	40 - 130	Y
13C6-PFDA	8.714	0.00	188214	1.4919	119	40 - 130	Y
13C7-PFUnDA	9.439	0.00	224271	1.4903	119	30 - 130	Y
13C2-PFDoDA	10.126	0.00	243395	1.4079	113	10 - 130	Y
13C2-PFTeDA	11.415	0.00	109869	1.4719	118	10 - 130	Y
13C8-FOSA	11.169	0.00	229229	2.4074	96	40 - 130	Y
D3-MeFOSA	13.713	+0.00	44306	2.3106	92	10 - 130	Y
D5-EtFOSA	14.387	+0.00	66810	2.6169	105	10 - 130	Y
D7-MeFOSE	13.403	+0.00	668705	28.4847	114	10 - 130	Y
D9-EtFOSE	14.033	+0.00	745278	31.2572	125	10 - 130	Y

			1st	PS	01/25/24
Data File:	J:\LCMS08\Data\240122_1633_B1\240122_055	Instrument:	K-LCMS08	MS	01/25/24
Acqu Date:	1/23/24 06:41	Vial:	46		
Run Type:	CCB	Dilution:	1		
Lab ID:	KQ2401073-19	Raw Units:	ng/mL		

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
D3-MeFOSAA	8.852	0.00	260991	6.7043	134	40 - 170	Y
D5-EtFOSAA	9.185	0.00	254714	5.4691	109	25 - 135	Y
13C2-4:2 FTS	4.639	0.00	205202	8.2943	166	40 - 200	Y
13C2-6:2 FTS	6.782	0.00	179411	7.6674	153	40 - 200	Y
13C2-8:2 FTS	8.404	0.00	141129	7.3424	147	40 - 300	Y
13C3-HFPO-DA	5.432	-0.01	593808	11.2587	113	40 - 130	Y

Target Compounds

Final Conc.Units: ng/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Perfluorobutane sulfonic acid (PFBS)	4.618	0.00	285	0.0022	0.044	U	Y
Perfluoropentane sulfonic acid (PFPeS)	0		0	0	0	U	Y
Perfluorohexane sulfonic acid (PFHxS)	7.075	+0.00	909	-0.0089	0	U	Y
Perfluoroheptane sulfonic acid (PFHpS)	0		0	0	0	U	Y
Perfluorooctane sulfonic acid (PFOS)	8.815	+0.00	393	0.0049	0.098	U	Y
Perfluorononane sulfonic acid (PFNS)	0		0	0	0	U	Y
Perfluorodecane sulfonic acid (PFDS)	0		0	0	0	U	Y
Perfluorododecane sulfonic acid (PFDoS)	0		0	0	0	U	Y
Perfluorobutanoic acid (PFBA)	1.387	0.00	1361	0.0132	0.26	U	Y
Perfluoropentanoic acid (PFPeA)	3.466	-0.01	1202	0.0097	0.19	U	Y
Perfluorohexanoic acid (PFHxA)	4.960		2674	0.0071	0.14	U	Y
Perfluoroheptanoic acid (PFHpA)	6.121	-0.02	6015	-0.0101	0	U	Y
Perfluorooctanoic acid (PFOA)	7.094	-0.01	5582	-0.0025	0	U	Y
Perfluorononanoic acid (PFNA)	7.946	-0.01	4014	-0.0044	0	U	Y
Perfluorodecanoic acid (PFDA)	8.710	-0.01	4396	-0.0010	0	U	Y
Perfluoroundecanoic acid (PFUnDA)	9.440	0.00	2708	-0.0130	0	U	Y
Perfluorododecanoic acid (PFDOA)	10.125	0.00	2914	-0.0116	0	U	Y
Perfluorotridecanoic acid (PFTTrDA)	10.782	-0.01	2374	-0.0157	0	U	Y
Perfluorotetradecanoic acid (PFTDA)	11.414	-0.01	1922	-0.0115	0	U	Y
Perfluorooctane sulfonamide (PFOSAm)	11.140	-0.03	196	0.0026	0.052	U	Y
N-Methylperfluorooctane sulfonamide (MeFOSA)	0		0	0	0	U	Y
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	0		0	0	0	U	Y
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	0		0	0	0	U	Y
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	0		0	0	0	U	Y
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	0		0	0	0	U	Y

		1st	PS	01/25/24
Data File:	J:\LCMS08\Data\240122_1633_B1\240122_055	Instrument:	K-LCMS08	MS 01/25/24
Acqu Date:	1/23/24 06:41	Vial:	46	
Run Type:	CCB	Dilution:	1	
Lab ID:	KQ2401073-19	Raw Units:	ng/mL	

Target Compounds

Final Conc.Units: ng/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	0		0	0	0	U	Y
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	4.641	0.00	251	0.0025	0.050	U	Y
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	6.773	-0.01	685	0.0084	0.17	U	Y
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	0		0	0	0	U	Y
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	0		0	0	0	U	Y
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	0		0	0	0	U	Y
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	7.948	+0.00	497	0.0278	0.56	U	Y
Perfluoro(2-ethoxyethane) sulfonic acid (PFEEESA)	0		0	0	0	U	Y
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	0		0	0	0	U	Y
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	10.789	-0.01	212	-0.0164	0	U	Y
Perfluoro-3-methoxypropanoic acid (PFMPA)	2.408	+0.00	163	0.0026	0.052	U	Y
Perfluoro-4-methoxybutanoic acid (PFMBA)	3.989	-0.01	110	0.0013	0.026	U	Y
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	0		0	0	0	U	Y
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	4.809	-0.01	733	0.0064	0.13	U	Y
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	6.519	+0.01	145	0.0003	0.0060	U	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 1/25/24 15:28

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240122_055

Sample ID: 1633 CCB
Date Acquired: 1/23/2024 6:41:21 AM
Acquired by: System Administrator
Data File: 240122_055
Vial: 54 | Inj. Volume: 10.0000uL | Tray: 1

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	1195725	----	----	----	----	----	----	
13C4-PFBA_IS	216.80>171.90	----	1195725	----	----	----	----	----	----	
13C3-PFBA_IS	216.00>172.00	----	499777	----	----	----	----	----	----	
PFBA	212.80>169.05	----	1361	----	----	----	----	----	----	
PFMPA	229.00>84.90	----	163	----	----	----	----	----	----	
3_3 FTCA	241.00>177.10	241.00>117.00	----	0	0.00	141.17	0	0.00	135.52	
13C5-PFPeA	268.30>223.00	----	96135	----	----	----	----	----	----	
13C5-PFPeA_IS	268.30>223.00	----	96135	----	----	----	----	----	----	
PFPeA	263.00>219.00	----	1202	----	----	----	----	----	----	
PFMBA	279.00>84.95	----	110	----	----	----	----	----	----	
13C2-4_2 FTS	329.10>80.90	----	205202	----	----	----	----	----	----	
13C2-4_2 FTS_IS	329.10>80.90	----	205202	----	----	----	----	----	----	
4_2 FTS	327.10>307.00	327.10>80.90	251	15	5.98	29.06	15	5.98	35.34	IRr
13C3-PFBS_IS	302.10>79.90	----	252636	----	----	----	----	----	----	
PFBS	298.70>79.90	298.70>98.80	285	49	17.09	46.72	49	17.09	49.78	IRr
13C3-PFBS	302.10>79.90	----	252636	----	----	----	----	----	----	
NFDHA	295.00>201.00	295.00>84.90	733	290	39.55	40.25	290	39.55	37.18	
13C5-PFHxA	318.00>273.00	----	517795	----	----	----	----	----	----	
13C5-PFHxA_IS	318.00>273.00	----	517795	----	----	----	----	----	----	
13C2-PFHxA_IS	315.10>270.00	----	538785	----	----	----	----	----	----	
PFHxA	313.00>269.00	----	2674	----	----	----	----	----	----	
PFEESA	314.80>135.00	314.80>82.90	----	0	0.00	6.11	0	0.00	5.72	
13C3-HFPO-DA	286.90>168.90	----	593808	----	----	----	----	----	----	
13C3-HFPO-DA_IS	286.90>168.90	----	593808	----	----	----	----	----	----	
HFPO-DA	284.90>168.90	284.90>184.90	----	0	0.00	65.61	0	0.00	60.94	
5_3 FTCA	341.00>237.05	341.00>217.00	----	0	0.00	158.86	0	0.00	155.83	
PFPeS	349.10>79.90	349.10>98.80	----	0	0.00	55.80	0	0.00	56.73	
13C4-PFHpA	367.10>322.00	----	588693	----	----	----	----	----	----	
13C4-PFHpA_IS	367.10>322.00	----	588693	----	----	----	----	----	----	
PFHpA	363.10>319.00	363.10>169.00	6015	959	15.94	21.50	959	15.94	21.92	
DONA	376.90>250.90	376.90>84.80	145	14	9.53	29.66	14	9.53	30.77	IRr
13C2-6_2 FTS_IS	429.10>80.90	----	179411	----	----	----	----	----	----	
13C2-6_2 FTS	429.10>80.90	----	179411	----	----	----	----	----	----	
6_2 FTS	427.10>407.00	427.10>80.90	685	412	60.10	41.15	412	60.10	40.98	
13C4-PFOA_IS	417.10>172.00	----	34581	----	----	----	----	----	----	
13C8-PFOA_IS	421.10>376.00	----	524900	----	----	----	----	----	----	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240122_055 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	524900	----	----	----	----	----	----	----
PFOA	413.00>369.00	413.00>169.00	5582	1106	19.82	31.89	1106	19.82	32.23	
13C3-PFHxS	402.10>79.90	----	184693	----	----	----	----	----	----	----
13C3-PFHxS_IS	402.10>79.90	----	184693	----	----	----	----	----	----	----
PFHxS	398.70>79.90	398.70>98.90	909	616	67.73	56.62	616	67.73	60.26	
18O2-PFHxS_IS	403.00>83.90	----	179780	----	----	----	----	----	----	----
13C9-PFNA_IS	472.10>427.00	----	266394	----	----	----	----	----	----	----
13C9-PFNA	472.10>427.00	----	266394	----	----	----	----	----	----	----
13C5-PFNA_IS	468.00>423.00	----	243809	----	----	----	----	----	----	----
PFNA	463.00>419.00	463.00>219.00	4014	581	14.46	23.17	581	14.46	23.63	
PFHpS	449.00>79.90	449.00>98.80	----	0	0.00	56.96	0	0.00	59.06	
7_3 FTCA	441.00>317.00	441.00>336.90	497	753	151.39	117.47	753	151.39	125.53	
13C2-8_2-FTS	529.10>80.90	----	141129	----	----	----	----	----	----	----
13C2-8_2-FTS_IS	529.10>80.90	----	141129	----	----	----	----	----	----	----
8_2 FTS	527.10>506.95	527.10>80.80	----	0	0.00	49.59	0	0.00	44.81	
13C6-PFDA_IS	519.10>474.10	----	188214	----	----	----	----	----	----	----
13C6-PFDA	519.10>474.10	----	188214	----	----	----	----	----	----	----
13C2-PFDA_IS	515.10>470.10	----	156805	----	----	----	----	----	----	----
PFDA	512.90>469.00	512.90>219.00	4396	1030	23.43	19.00	1030	23.43	19.15	
D3-NMeFOSAA_IS	573.20>419.00	----	260991	----	----	----	----	----	----	----
D3-NMeFOSAA	573.20>419.00	----	260991	----	----	----	----	----	----	----
13C8-PFOS_IS	507.10>98.90	----	76938	----	----	----	----	----	----	----
13C8-PFOS	507.10>98.90	----	76938	----	----	----	----	----	----	----
13C4-PFOS_IS	502.80>79.90	----	224299	----	----	----	----	----	----	----
PFOS	498.90>79.90	498.90>98.80	393	0	0.00	52.47	0	0.00	53.10	IRr
NMeFOSAA	570.10>419.00	570.10>483.00	----	0	0.00	55.15	0	0.00	60.69	
D5-NEtFOSAA_IS	589.20>419.00	----	254714	----	----	----	----	----	----	----
D5-NEtFOSAA	589.20>419.00	----	254714	----	----	----	----	----	----	----
NEtFOSAA	584.20>419.10	584.20>526.00	----	0	0.00	81.95	0	0.00	73.27	
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	----	0	0.00	32.76	0	0.00	32.59	
PFUnDA	563.10>519.00	563.10>269.10	2708	267	9.86	13.12	267	9.86	14.36	
13C7-PFUnDA_IS	570.00>525.10	----	224271	----	----	----	----	----	----	----
13C7-PFUnDA	570.00>525.10	----	224271	----	----	----	----	----	----	----
PFNS	548.80>79.90	548.80>98.80	----	0	0.00	65.22	0	0.00	65.31	
10_2 FTS	626.80>607.05	626.80>81.00	----	0	0.00	37.13	0	0.00	38.76	
13C2-PFDOA_IS	615.10>570.00	----	243395	----	----	----	----	----	----	----
13C2-PFDOA	615.10>570.00	----	243395	----	----	----	----	----	----	----
PFDOA	613.10>569.00	613.10>319.00	2914	230	7.91	11.29	230	7.91	11.19	
PFDS	599.00>79.90	599.00>98.80	----	0	0.00	60.18	0	0.00	65.65	
PFTrDA	663.00>619.00	663.00>168.90	2374	357	15.04	17.64	357	15.04	19.81	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240122_055 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	212	184	87.07	36.44	184	87.07	35.86	IRr
PFOSAm	498.10>77.90	----	196	----	----	----	----	----	----	
13C8-PFOSAm	506.10>77.80	----	229229	----	----	----	----	----	----	
13C8-PFOSAm_IS	506.10>77.80	----	229229	----	----	----	----	----	----	
PFTDA	713.10>669.00	713.10>168.90	1922	621	32.30	22.96	621	32.30	25.01	
13C2-PFTDA	715.20>670.00	----	109869	----	----	----	----	----	----	
13C2-PFTDA_IS	715.20>670.00	----	109869	----	----	----	----	----	----	
PFDoS	699.10>79.90	699.10>98.80	----	0	0.00	67.40	0	0.00	73.46	
D7-MeFOSE_IS	623.20>58.90	----	668705	----	----	----	----	----	----	
D7-MeFOSE	623.20>58.90	----	668705	----	----	----	----	----	----	
MeFOSE	616.10>59.00	----	----	----	----	----	----	----	----	
13C2-PFHxDA_IS	815.00>770.05	----	395722	----	----	----	----	----	----	
13C2-PFHxDA	815.00>770.05	----	395722	----	----	----	----	----	----	
PFHxDA	813.00>768.95	813.00>218.95	3118	342	10.97	13.90	342	10.97	15.85	
D3-MeFOSA	515.00>219.00	----	44306	----	----	----	----	----	----	
D3-MeFOSA_IS	515.00>219.00	----	44306	----	----	----	----	----	----	
MeFOSA	511.90>219.00	511.90>169.00	----	0	0.00	140.79	0	0.00	150.13	
D9-EtFOSE_IS	639.20>58.90	----	745278	----	----	----	----	----	----	
D9-EtFOSE	639.20>58.90	----	745278	----	----	----	----	----	----	
EtFOSE	630.00>59.00	----	----	----	----	----	----	----	----	
D5-EtFOSAm	531.10>219.00	----	66810	----	----	----	----	----	----	
D5-EtFOSAm_IS	531.10>219.00	----	66810	----	----	----	----	----	----	
EtFOSAm	526.00>219.00	526.00>169.00	----	0	0.00	163.90	0	0.00	152.08	
PFODA	913.00>868.65	913.00>169.00	1735	420	24.22	27.03	420	24.22	26.29	

Flag ID key: IRr: Ion Ratio (Relative)



240122_055

Sample ID: 1633 CCB
Date Acquired: 1/23/2024 6:41:21 AM
Acquired by: System Administrator
Data File: 240122_055
Vial: 54 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.379	-0.012	0.001	1195725	499777	13C3-PFBA_IS	10.7039	ng/mL	
13C4-PFBA_IS	Auto	1.379	-0.012	----	1195725	1195725	----	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.378	-0.013	----	499777	499777	----	5.0000	ng/mL	
PFBA	M	1.387	-0.008	0.008	1361	1195725	13C4-PFBA_IS	0.0132	ng/mL	
PFMPA	M	2.408	0.002	-1.054	163	96135	13C5-PFPeA_IS	0.0026	ng/mL	
3_3 FTCA	ND(W/B)	----	----	----	----	96135	13C5-PFPeA_IS	----	ng/mL	
13C5-PFPeA	Auto	3.462	-0.003	-1.493	96135	538785	13C2-PFHxA_IS	3.9529	ng/mL	
13C5-PFPeA_IS	Auto	3.462	-0.003	----	96135	96135	----	5.0000	ng/mL	
PFPeA	M	3.466	-0.001	0.004	1202	96135	13C5-PFPeA_IS	0.0097	ng/mL	
PFMBA	M	3.989	-0.002	0.527	110	96135	13C5-PFPeA_IS	0.0013	ng/mL	
13C2-4_2 FTS	Auto	4.639	0.003	-2.431	205202	179780	18O2-PFHxS_IS	8.2943	ng/mL	
13C2-4_2 FTS_IS	Auto	4.639	0.003	----	205202	205202	----	5.0000	ng/mL	
4_2 FTS	M	4.641	0.004	0.002	251	205202	13C2-4_2 FTS_IS	0.0025	ng/mL	IRr
13C3-PFBS_IS	Auto	4.613	0.001	----	252636	252636	----	2.5000	ng/mL	
PFBS	M	4.618	0.005	0.005	285	252636	13C3-PFBS_IS	0.0022	ng/mL	IRr
13C3-PFBS	Auto	4.613	0.001	-2.457	252636	179780	18O2-PFHxS_IS	2.4762	ng/mL	
NFDHA	M	4.809	-0.001	-0.145	733	517795	13C5-PFHxA_IS	0.0064	ng/mL	
13C5-PFHxA	Auto	4.954	0.002	-0.001	517795	538785	13C2-PFHxA_IS	2.2803	ng/mL	
13C5-PFHxA_IS	Auto	4.954	0.002	----	517795	517795	----	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	4.955	0.002	----	538785	538785	----	2.5000	ng/mL	
PFHxA	M	4.960	0.006	0.006	2674	517795	13C5-PFHxA_IS	0.0071	ng/mL	
PFEESA	ND(W/B)	----	----	----	----	517795	13C5-PFHxA_IS	----	ng/mL	
13C3-HFPO-DA	Auto	5.432	0.002	0.477	593808	538785	13C2-PFHxA_IS	11.2587	ng/mL	
13C3-HFPO-DA_IS	Auto	5.432	0.002	----	593808	593808	----	10.0000	ng/mL	
HFPO-DA	ND(W/B)	----	----	----	----	593808	13C3-HFPO-DA_IS	----	ng/mL	
5_3 FTCA	ND(W/B)	----	----	----	----	517795	13C5-PFHxA_IS	----	ng/mL	
PFPeS	ND(W/B)	----	----	----	----	184693	13C3-PFHxS_IS	----	ng/mL	
13C4-PFHpA	Auto	6.138	0.001	1.183	588693	538785	13C2-PFHxA_IS	2.8639	ng/mL	
13C4-PFHpA_IS	Auto	6.138	0.001	----	588693	588693	----	2.5000	ng/mL	
PFHpA	M	6.121	-0.018	-0.017	6015	588693	13C4-PFHpA_IS	-0.0101	ng/mL	
DONA	M	6.519	0.015	1.087	145	593808	13C3-HFPO-DA_IS	0.0003	ng/mL	IRr
13C2-6_2 FTS_IS	Auto	6.782	0.001	----	179411	179411	----	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.782	0.001	-0.288	179411	179780	18O2-PFHxS_IS	7.6674	ng/mL	
6_2 FTS	M	6.773	-0.008	-0.009	685	179411	13C2-6_2 FTS_IS	0.0084	ng/mL	
13C4-PFOA_IS	Auto	7.099	0.002	----	34581	34581	----	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.098	0.002	----	524900	524900	----	2.5000	ng/mL	
13C8-PFOA	Auto	7.098	0.002	-0.001	524900	34581	13C4-PFOA_IS	2.7157	ng/mL	
PFOA	M	7.094	-0.004	-0.004	5582	524900	13C8-PFOA_IS	-0.0025	ng/mL	
13C3-PFHxS	Auto	7.069	0.001	-0.001	184693	179780	18O2-PFHxS_IS	2.3934	ng/mL	
13C3-PFHxS_IS	Auto	7.069	0.001	----	184693	184693	----	2.5000	ng/mL	
PFHxS	M	7.075	0.006	0.006	909	184693	13C3-PFHxS_IS	-0.0089	ng/mL	
18O2-PFHxS_IS	Auto	7.070	0.001	----	179780	179780	----	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.948	0.001	----	266394	266394	----	1.2500	ng/mL	
13C9-PFNA	Auto	7.948	0.001	0.000	266394	243809	13C5-PFNA_IS	1.3955	ng/mL	
13C5-PFNA_IS	Auto	7.949	0.000	----	243809	243809	----	1.2500	ng/mL	
PFNA	M	7.946	-0.002	-0.002	4014	266394	13C9-PFNA_IS	-0.0044	ng/mL	
PFHpS	ND(W/B)	----	----	----	----	76938	13C8-PFOS_IS	----	ng/mL	
7_3 FTCA	M	7.948	0.012	2.994	497	517795	13C5-PFHxA_IS	0.0278	ng/mL	
13C2-8_2-FTS	Auto	8.404	0.001	1.334	141129	179780	18O2-PFHxS_IS	7.3424	ng/mL	
13C2-8_2-FTS_IS	Auto	8.404	0.001	----	141129	141129	----	5.0000	ng/mL	
8_2 FTS	ND(W/B)	----	----	----	----	141129	13C2-8_2-FTS_IS	----	ng/mL	
13C6-PFDA_IS	Auto	8.714	0.001	----	188214	188214	----	1.2500	ng/mL	
13C6-PFDA	Auto	8.714	0.001	-0.001	188214	156805	13C2-PFDA_IS	1.4919	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_055 (continued)

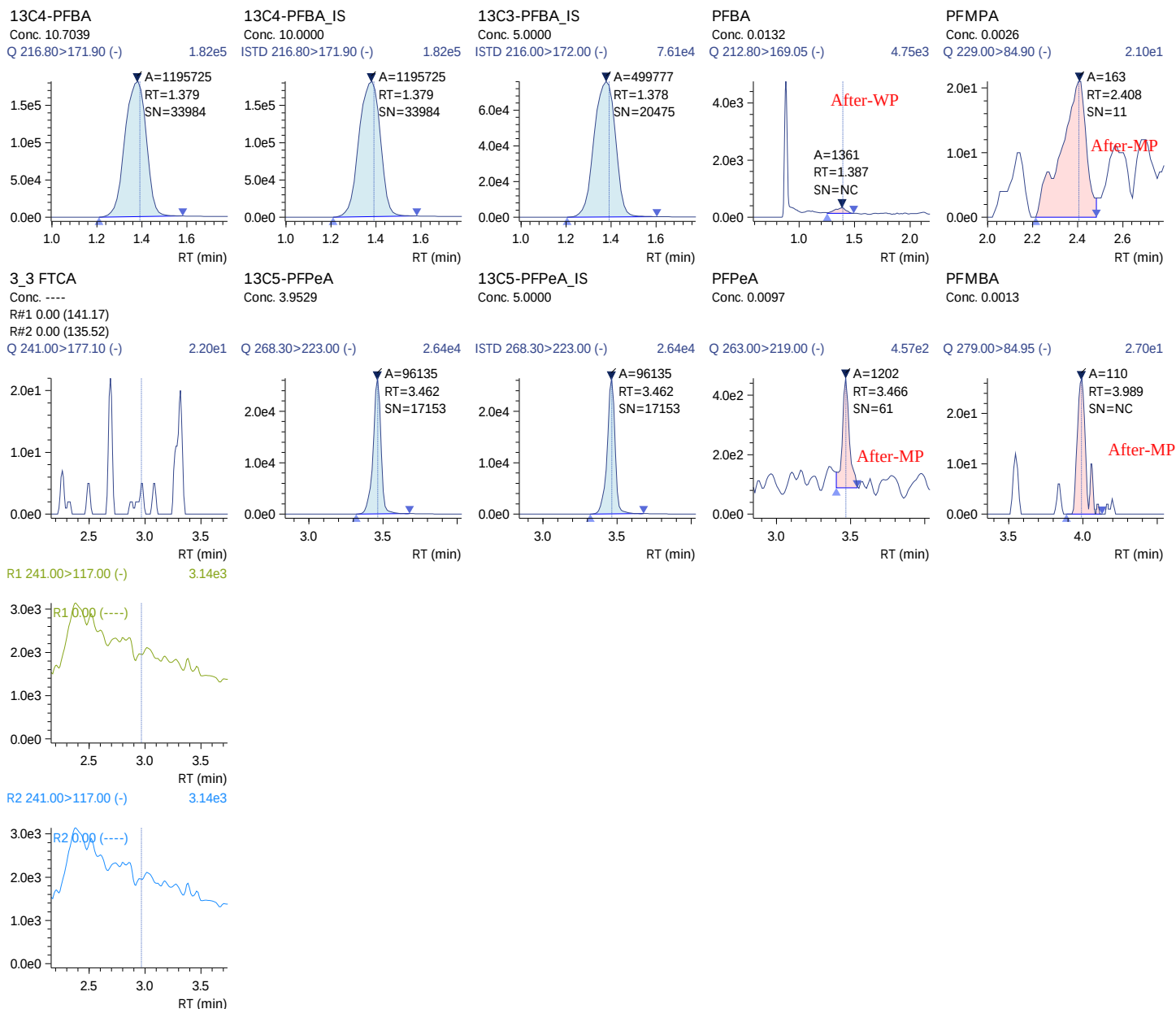
(Table continued from previous page)

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C2-PFDA_IS	Auto	8.715	0.002	----	156805	156805	----	1.2500	ng/mL	
PFDA	M	8.710	-0.005	-0.004	4396	188214	13C6-PFDA_IS	-0.0010	ng/mL	
D3-NMeFOSAA_IS	Auto	8.852	0.001	----	260991	260991	----	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.852	0.001	0.043	260991	224299	13C4-PFOS_IS	6.7043	ng/mL	
13C8-PFOS_IS	Auto	8.808	0.000	----	76938	76938	----	2.5000	ng/mL	
13C8-PFOS	Auto	8.808	0.000	-0.001	76938	224299	13C4-PFOS_IS	2.0568	ng/mL	
13C4-PFOS_IS	Auto	8.809	0.000	----	224299	224299	----	2.5000	ng/mL	
PFOS	M	8.815	0.006	0.007	393	76938	13C8-PFOS_IS	0.0049	ng/mL	IRr
NMeFOSAA	ND(W/B)	----	----	----	----	260991	D3-NMeFOSAA_IS	----	ng/mL	
D5-NetFOSAA_IS	Auto	9.185	0.002	----	254714	254714	----	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.185	0.002	0.376	254714	224299	13C4-PFOS_IS	5.4691	ng/mL	
NetFOSAA	ND(W/B)	----	----	----	----	254714	D5-NetFOSAA_IS	----	ng/mL	
9-CI-PF3ONS	ND(W/B)	----	----	----	----	593808	13C3-HFPO-DA_IS	----	ng/mL	
PFUnDA	M	9.440	0.000	0.001	2708	224271	13C7-PFUnDA_IS	-0.0130	ng/mL	
13C7-PFUnDA_IS	Auto	9.439	0.001	----	224271	224271	----	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.439	0.001	0.724	224271	156805	13C2-PFDA_IS	1.4903	ng/mL	
PFNS	ND(W/B)	----	----	----	----	76938	13C8-PFOS_IS	----	ng/mL	
10_2_FTS	ND(W/B)	----	----	----	----	141129	13C2-8_2-FTS_IS	----	ng/mL	
13C2-PFDOA_IS	Auto	10.126	-0.002	----	243395	243395	----	1.2500	ng/mL	
13C2-PFDOA	Auto	10.126	-0.002	1.411	243395	156805	13C2-PFDA_IS	1.4079	ng/mL	
PFDOA	M	10.125	-0.004	-0.001	2914	243395	13C2-PFDOA_IS	-0.0116	ng/mL	
PFDS	ND(W/B)	----	----	----	----	76938	13C8-PFOS_IS	----	ng/mL	
PFTDA	Auto	10.782	-0.006	-0.633	2374	109869	13C2-PFTDA_IS	-0.0157	ng/mL	
11-CI-PF3OUdS	M	10.789	-0.009	5.357	212	593808	13C3-HFPO-DA_IS	-0.0164	ng/mL	IRr
PFOSAm	M	11.140	-0.022	-0.029	196	229229	13C8-PFOSAm_IS	0.0026	ng/mL	
13C8-PFOSAm	Auto	11.169	0.005	2.360	229229	224299	13C4-PFOS_IS	2.4074	ng/mL	
13C8-PFOSAm_IS	Auto	11.169	0.005	----	229229	229229	----	2.5000	ng/mL	
PFTDA	M	11.414	-0.007	-0.001	1922	109869	13C2-PFTDA_IS	-0.0115	ng/mL	
13C2-PFTDA	Auto	11.415	-0.004	2.700	109869	156805	13C2-PFDA_IS	1.4719	ng/mL	
13C2-PFTDA_IS	Auto	11.415	-0.004	----	109869	109869	----	1.2500	ng/mL	
PFDoS	ND(W/B)	----	----	----	----	76938	13C8-PFOS_IS	----	ng/mL	
D7-MeFOSE_IS	Auto	13.403	0.001	----	668705	668705	----	25.0000	ng/mL	
D7-MeFOSE	Auto	13.403	0.001	4.594	668705	224299	13C4-PFOS_IS	28.4847	ng/mL	
MeFOSE	ND(W/B)	----	----	----	----	668705	D7-MeFOSE_IS	----	ng/mL	
13C2-PFHxDA_IS	Auto	12.631	-0.005	----	395722	395722	----	2.5000	ng/mL	
13C2-PFHxDA	Auto	12.631	-0.005	3.916	395722	156805	13C2-PFDA_IS	2.7169	ng/mL	
PFHxDA	M	12.630	-0.007	-0.001	3118	395722	13C2-PFHxDA_IS	-0.0087	ng/mL	
D3-MeFOSA	Auto	13.713	0.002	4.904	44306	224299	13C4-PFOS_IS	2.3106	ng/mL	
D3-MeFOSA_IS	Auto	13.713	0.002	----	44306	44306	----	2.5000	ng/mL	
MeFOSA	ND(W/B)	----	----	----	----	44306	D3-MeFOSA_IS	----	ng/mL	
D9-EtFOSE_IS	Auto	14.033	0.001	----	745278	745278	----	25.0000	ng/mL	
D9-EtFOSE	Auto	14.033	0.001	5.224	745278	224299	13C4-PFOS_IS	31.2572	ng/mL	
EtFOSE	ND(W/B)	----	----	----	----	745278	D9-EtFOSE_IS	----	ng/mL	
D5-EtFOSAm	Auto	14.387	0.000	5.578	66810	224299	13C4-PFOS_IS	2.6169	ng/mL	
D5-EtFOSAm_IS	Auto	14.387	0.000	----	66810	66810	----	2.5000	ng/mL	
EtFOSAm	ND(W/B)	----	----	----	----	66810	D5-EtFOSAm_IS	----	ng/mL	
PFODA	M	13.766	-0.008	1.135	1735	395722	13C2-PFHxDA_IS	0.0194	ng/mL	

Flag ID key: IRr: Ion Ratio (Relative)



240122_055 (continued)





240122_055 (continued)

13C2-4_2 FTS
Conc. 8.2943

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. 0.0025
R#1 5.98 (29.06)
R#2 5.98 (35.34)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 0.0022
R#1 17.09 (46.72)
R#2 17.09 (49.78)

Q 329.10>80.90 (-)

6.24e4

ISTD 329.10>80.90 (-)

6.24e4

Q 327.10>307.00 (-)

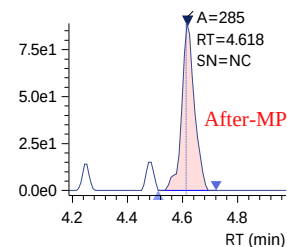
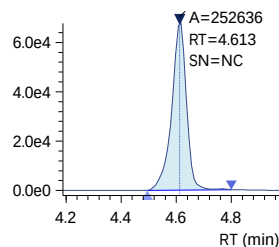
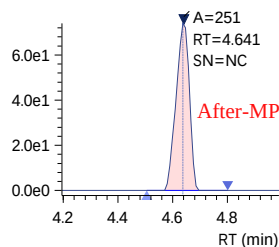
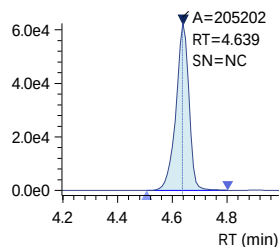
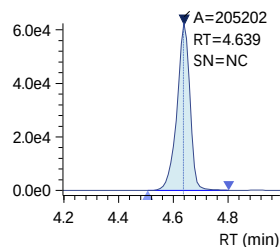
7.40e1

ISTD 302.10>79.90 (-)

6.77e4

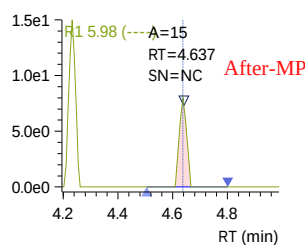
Q 298.70>79.90 (-)

8.90e1



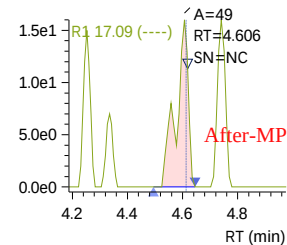
R1 327.10>80.90 (-)

1.50e1



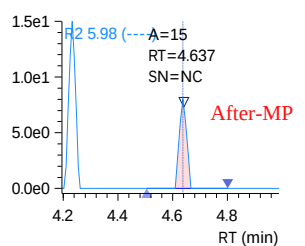
R1 298.70>98.80 (-)

1.60e1



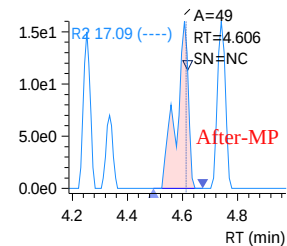
R2 327.10>80.90 (-)

1.50e1



R2 298.70>98.80 (-)

1.60e1

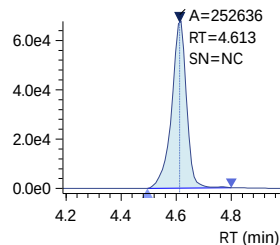




240122_055 (continued)

13C3-PFBS
Conc. 2.4762

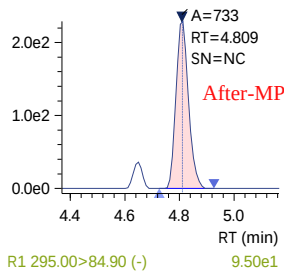
Q 302.10>79.90 (-)



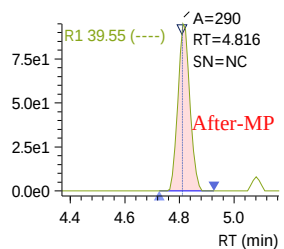
NFDHA
Conc. 0.0064

R#1 39.55 (40.25)
R#2 39.55 (37.18)

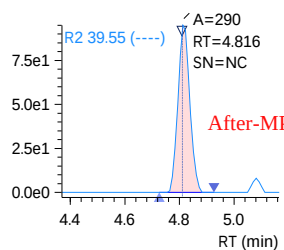
Q 295.00>201.00 (-)



R1 295.00>84.90 (-)

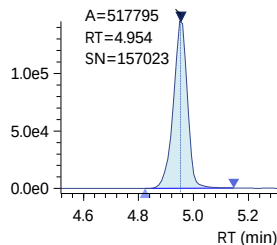


R2 295.00>84.90 (-)



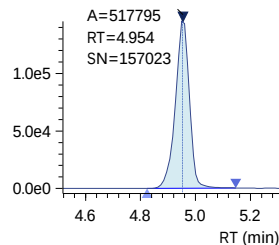
13C5-PFHxA
Conc. 2.2803

Q 318.00>273.00 (-)



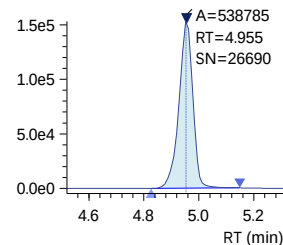
13C5-PFHxA_IS
Conc. 2.5000

ISTD 318.00>273.00 (-)



13C2-PFHxA_IS
Conc. 2.5000

ISTD 315.10>270.00 (-)





240122_055 (continued)

PFHxA
Conc. 0.0071

PFEESA
Conc. ----
R#1 0.00 (6.11)
R#2 0.00 (5.72)

13C3-HFPO-DA
Conc. 11.2587

13C3-HFPO-DA_IS
Conc. 10.0000

HFPO-DA
Conc. ----
R#1 0.00 (65.61)
R#2 0.00 (60.94)

Q 313.00>269.00 (-)

1.14e3

Q 314.80>135.00 (-)

1.27e2

Q 286.90>168.90 (-)

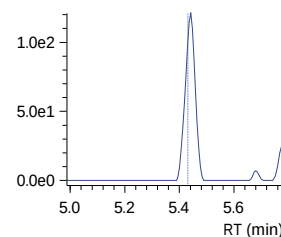
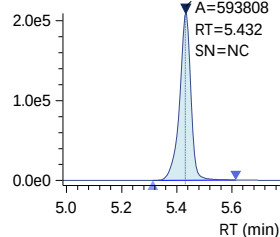
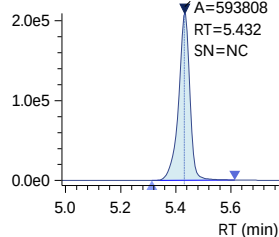
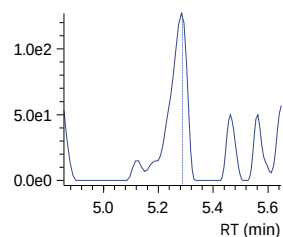
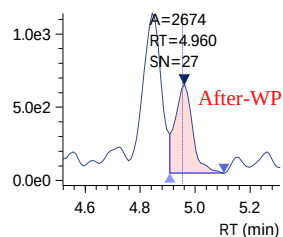
2.09e5

ISTD 286.90>168.90 (-)

2.09e5

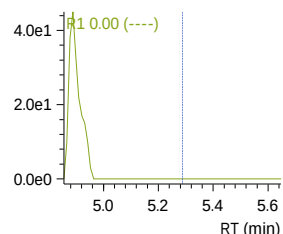
Q 284.90>168.90 (-)

1.21e2



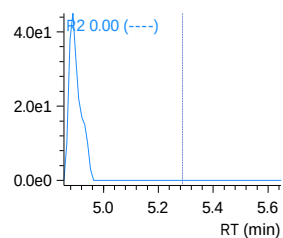
R1 314.80>82.90 (-)

4.50e1



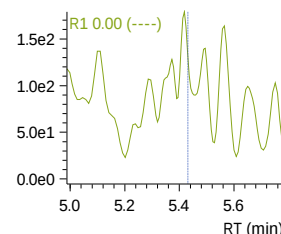
R2 314.80>82.90 (-)

4.50e1



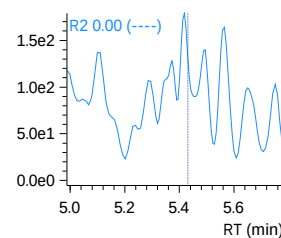
R1 284.90>184.90 (-)

1.79e2



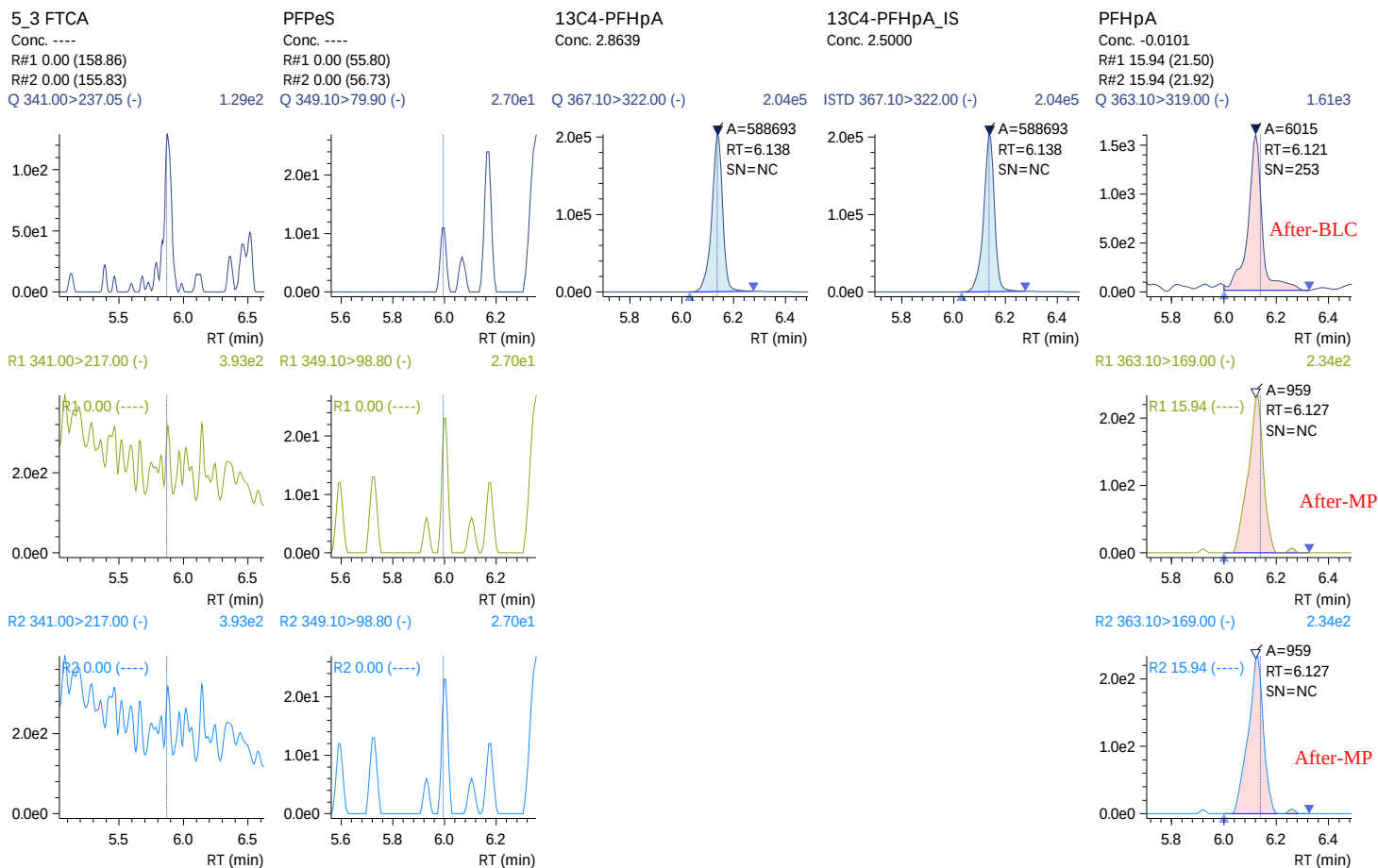
R2 284.90>184.90 (-)

1.79e2



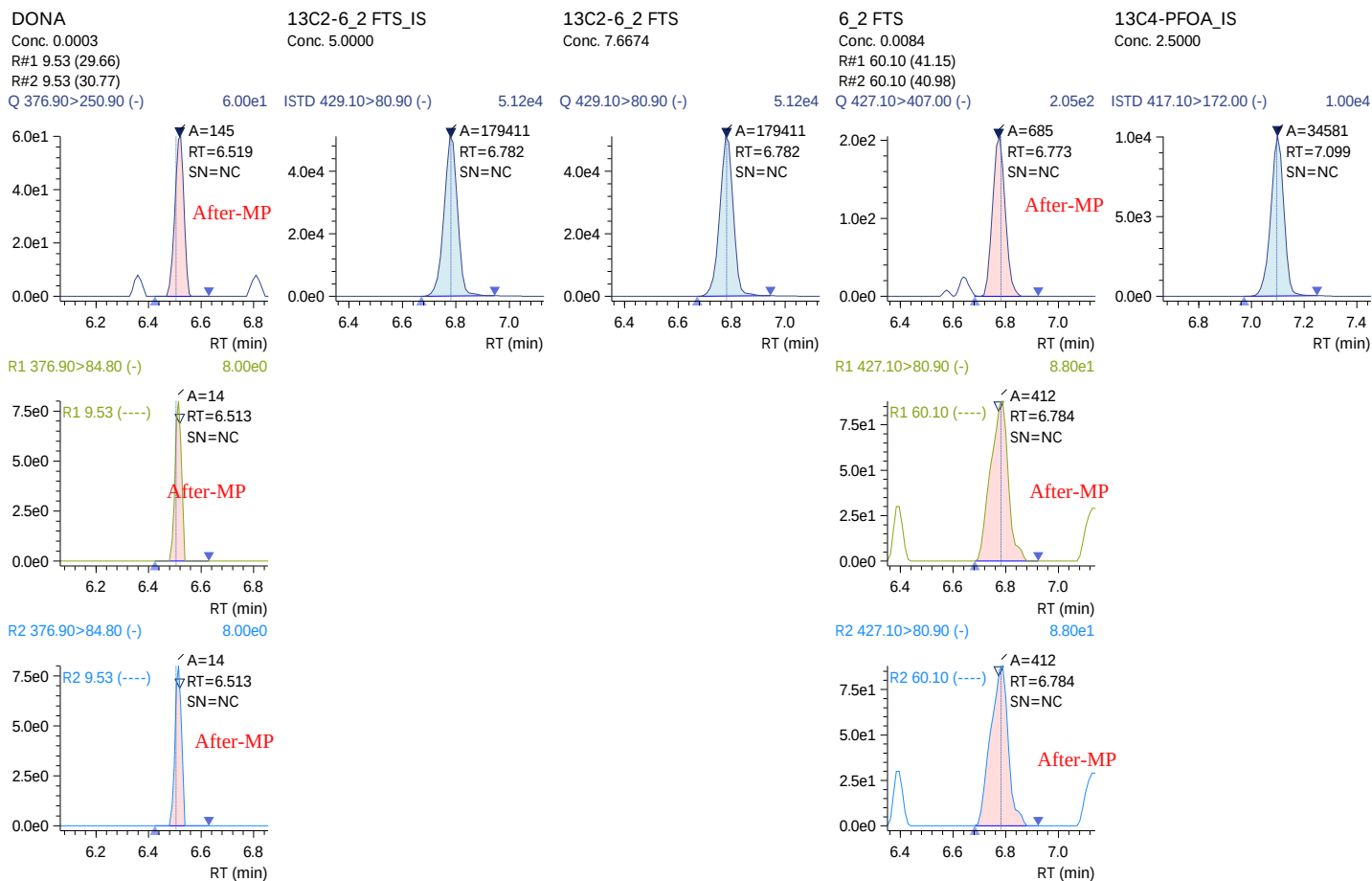


240122_055 (continued)





240122_055 (continued)





240122_055 (continued)

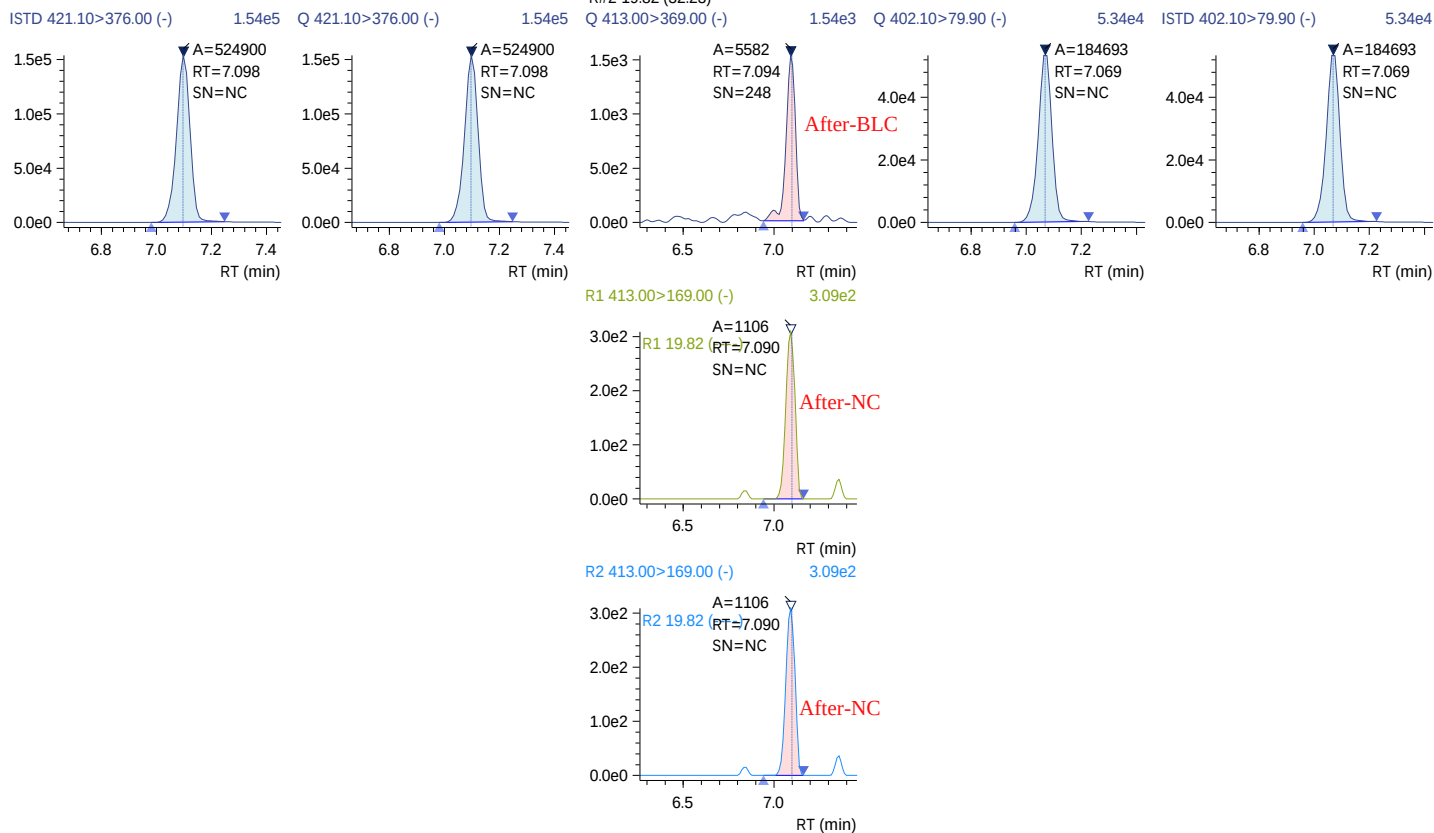
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.7157

PFOA
Conc. -0.0025
R#1 19.82 (31.89)
R#2 19.82 (32.23)

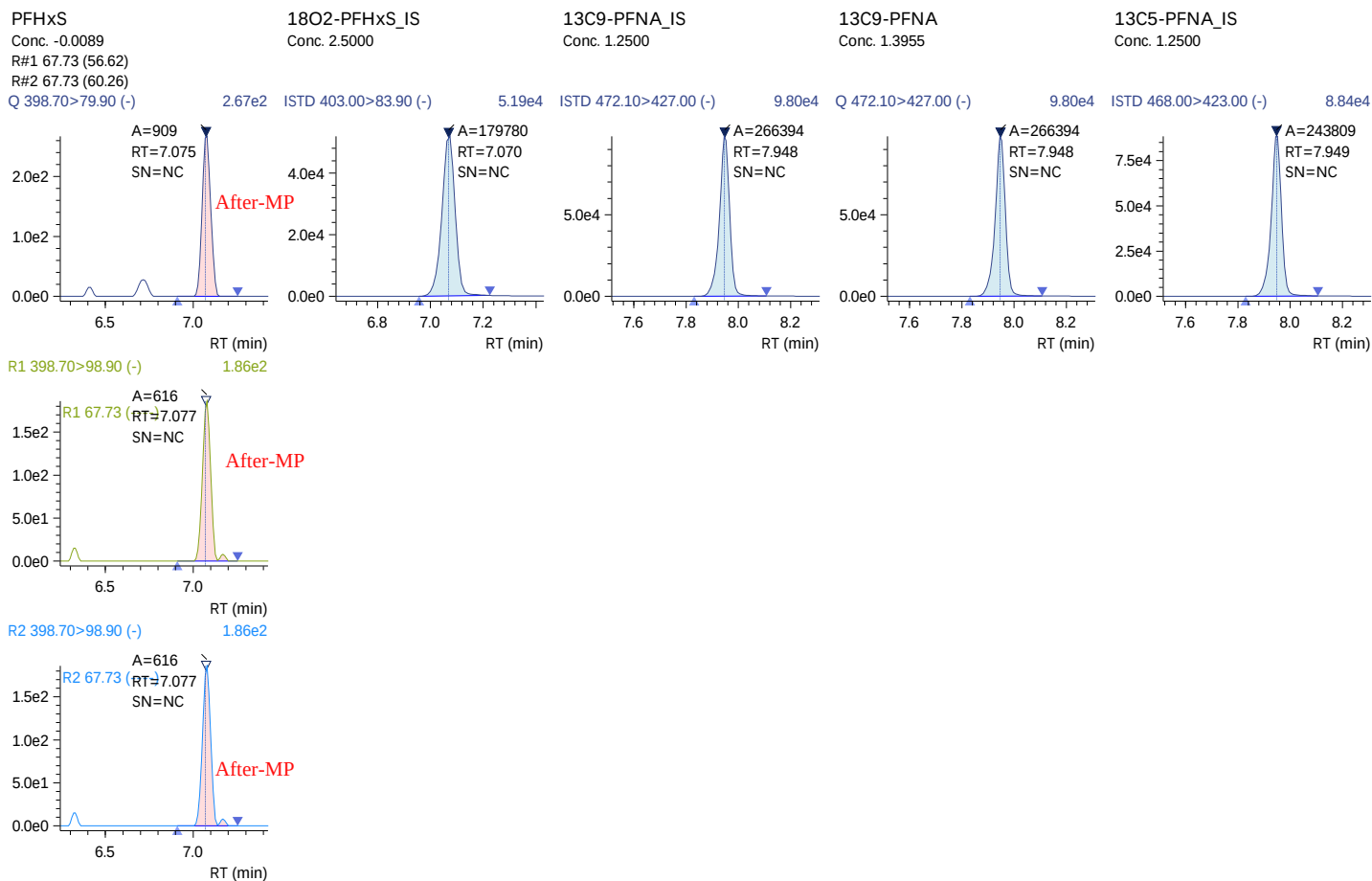
13C3-PFHxS
Conc. 2.3934

13C3-PFHxS_IS
Conc. 2.5000





240122_055 (continued)

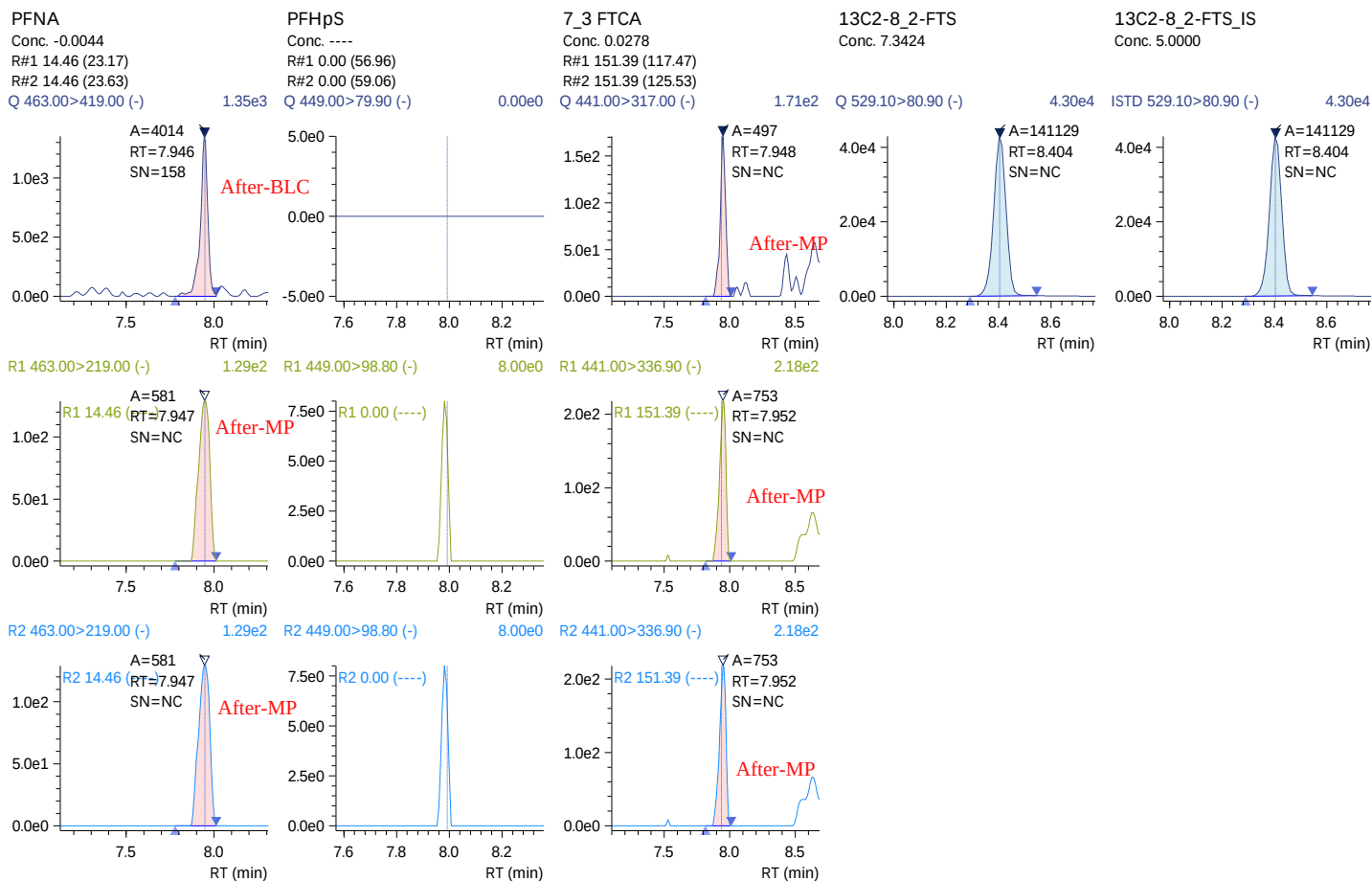


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_055 (continued)

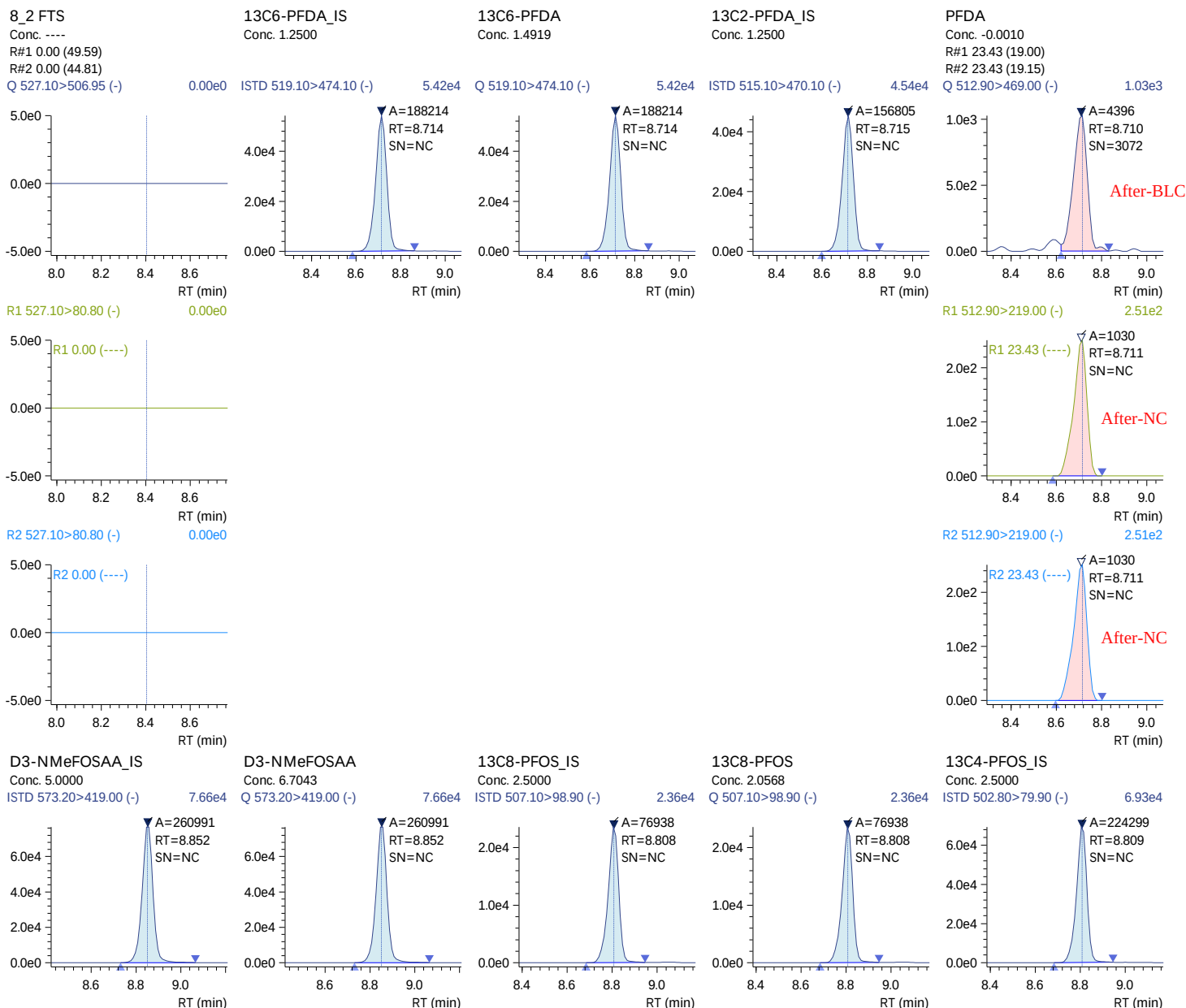


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_055 (continued)

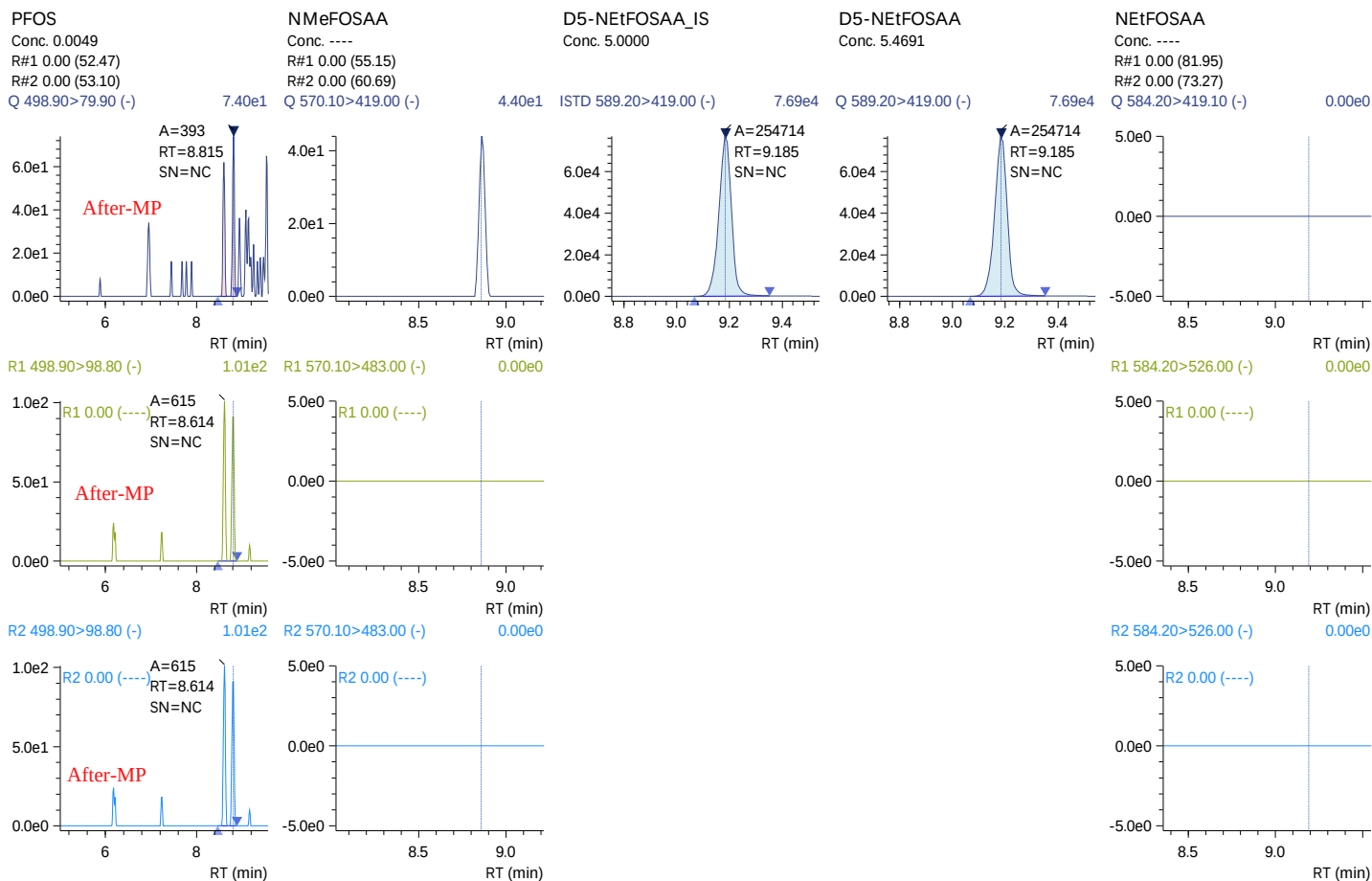


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_055 (continued)





240122_055 (continued)

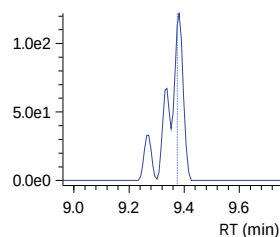
9-Cl-PF3ONS

Conc. ----

R#1 0.00 (32.76)

R#2 0.00 (32.59)

Q 530.80>351.00 (-)



R1 532.80>353.00 (-)

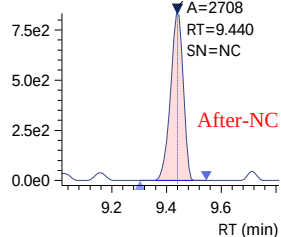
PFUnDA

Conc. -0.0130

R#1 9.86 (13.12)

R#2 9.86 (14.36)

Q 563.10>519.00 (-)

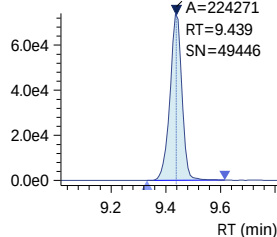


R1 563.10>269.10 (-)

13C7-PFUnDA_IS

Conc. 1.2500

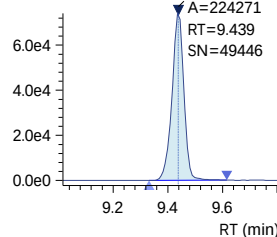
ISTD 570.00>525.10 (-)



13C7-PFUnDA

Conc. 1.4903

Q 570.00>525.10 (-)



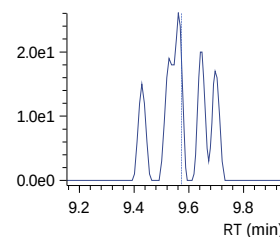
PFNS

Conc. ----

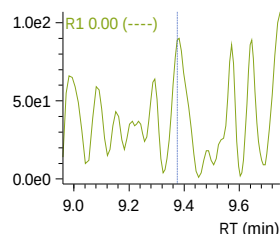
R#1 0.00 (65.22)

R#2 0.00 (65.31)

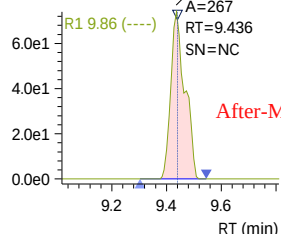
Q 548.80>79.90 (-)



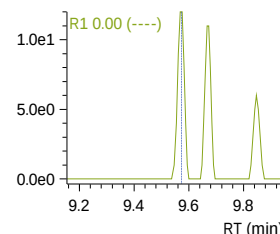
R1 548.80>98.80 (-)



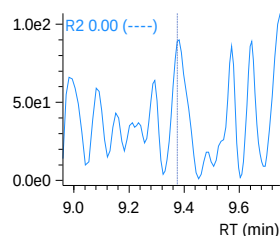
R2 532.80>353.00 (-)



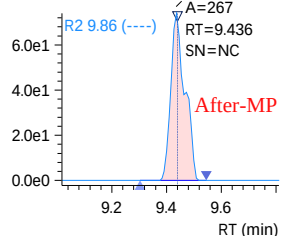
R2 563.10>269.10 (-)



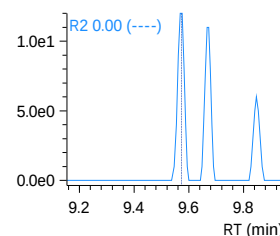
R2 548.80>98.80 (-)



R2 532.80>353.00 (-)



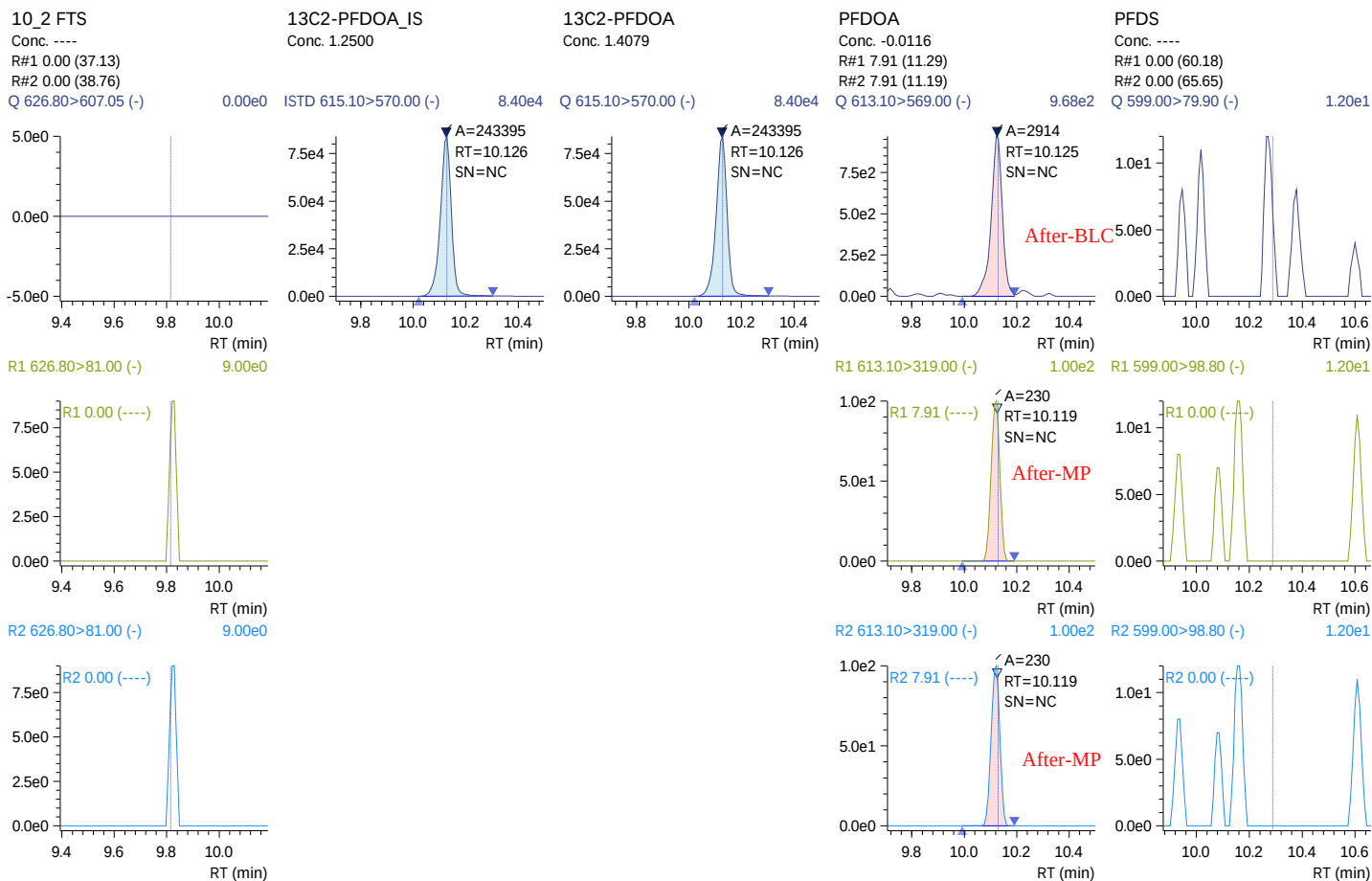
R2 563.10>269.10 (-)



R2 548.80>98.80 (-)



240122_055 (continued)

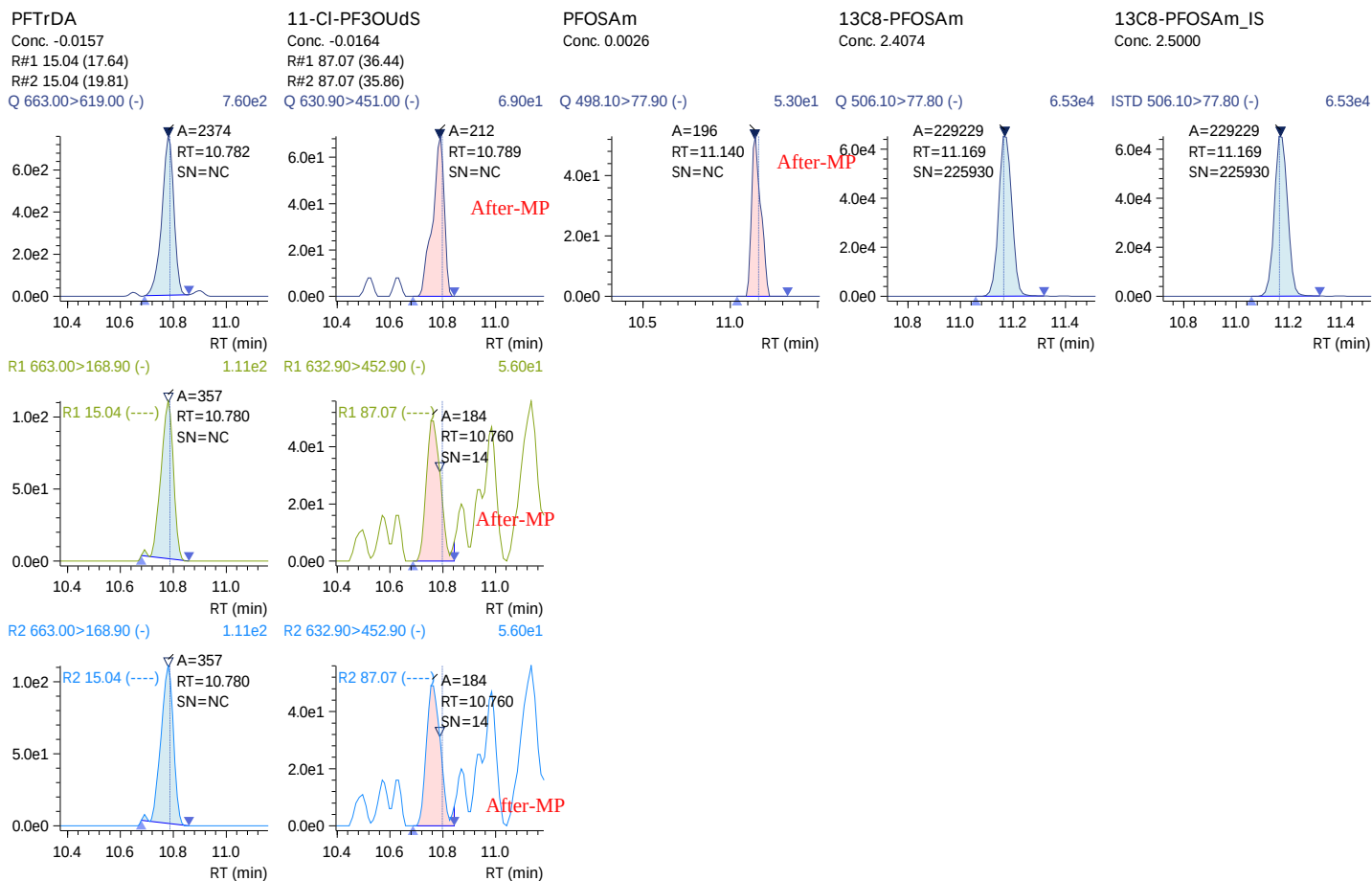


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_055 (continued)

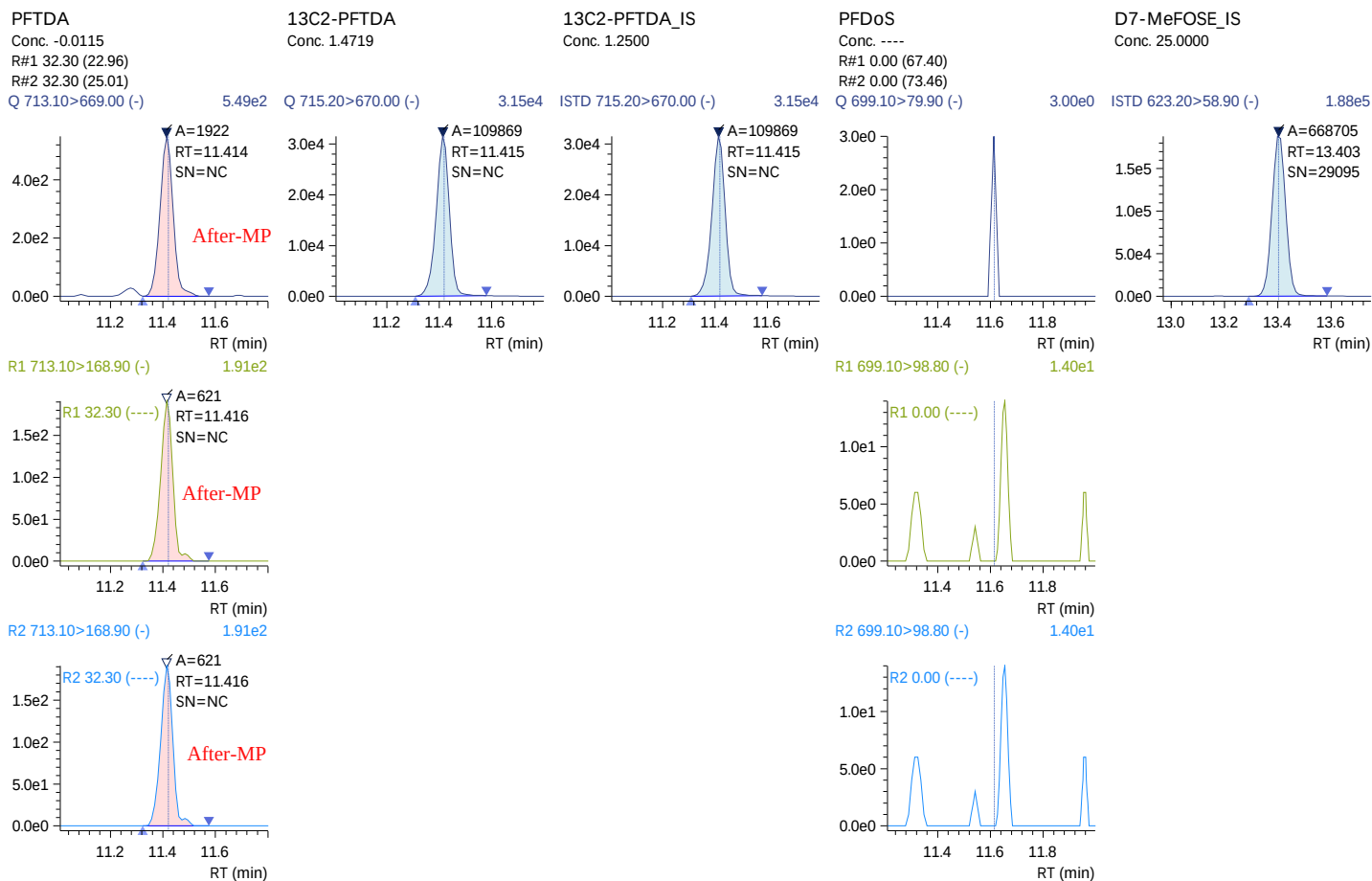


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_055 (continued)





240122_055 (continued)

D7-MeFOSE
Conc. 28.4847

MeFOSE
Conc. ----

13C2-PFHxDA_IS
Conc. 2.5000

13C2-PFHxDA
Conc. 2.7169

PFHxDA

Conc. -0.0087
R#1 10.97 (13.90)
R#2 10.97 (15.85)

Q 623.20>58.90 (-)

1.88e5

Q 616.10>59.00 (-)

5.90e1

ISTD 815.00>770.05 (-)

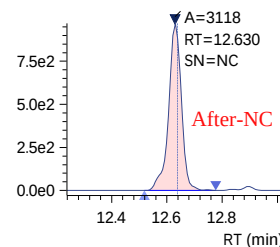
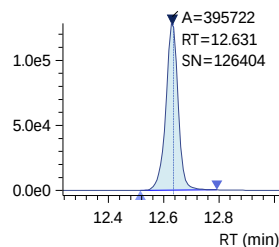
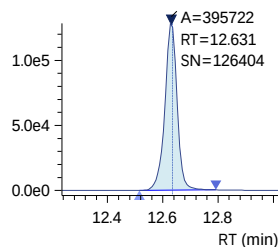
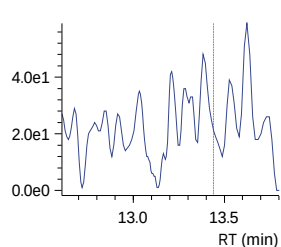
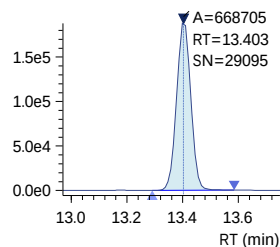
1.28e5

Q 815.00>770.05 (-)

1.28e5

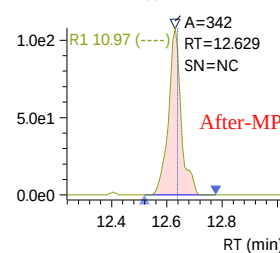
Q 813.00>768.95 (-)

9.70e2



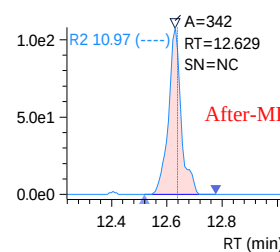
R1 813.00>218.95 (-)

1.08e2



R2 813.00>218.95 (-)

1.08e2





240122_055 (continued)

D3-MeFOSA
Conc. 2.3106

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. ----
R#1 0.00 (140.79)
R#2 0.00 (150.13)

D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 31.2572

Q 515.00>219.00 (-)

1.31e4

ISTD 515.00>219.00 (-)

1.31e4

Q 511.90>219.00 (-)

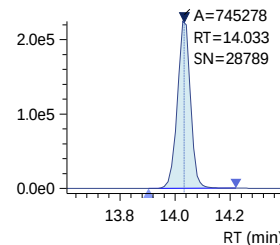
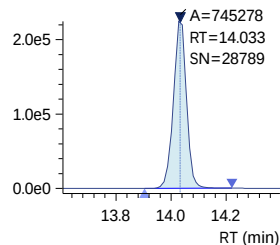
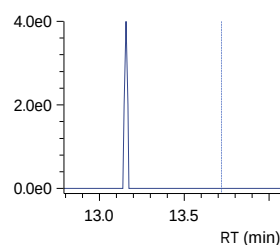
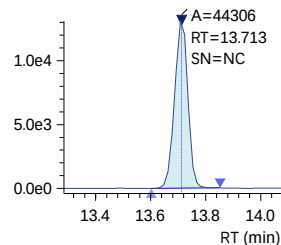
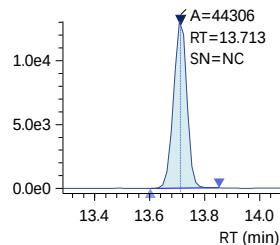
4.00e0

ISTD 639.20>58.90 (-)

2.25e5

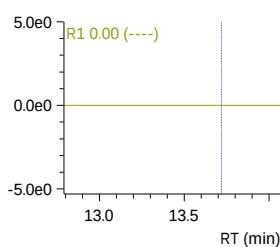
Q 639.20>58.90 (-)

2.25e5



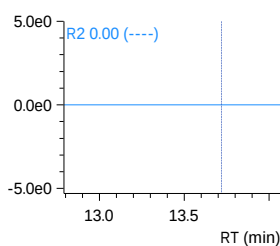
R1 511.90>169.00 (-)

0.00e0



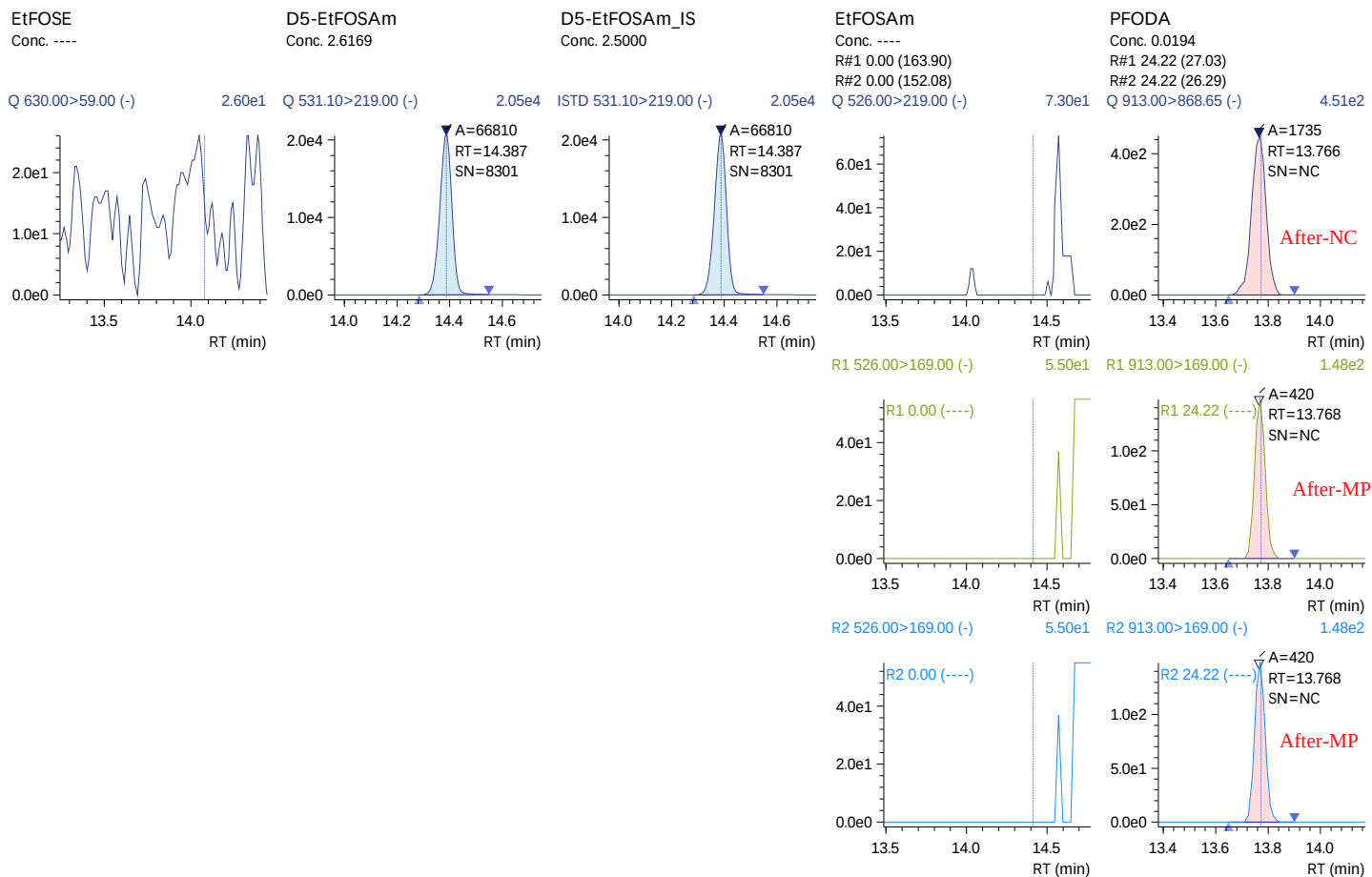
R2 511.90>169.00 (-)

0.00e0





240122_055 (continued)



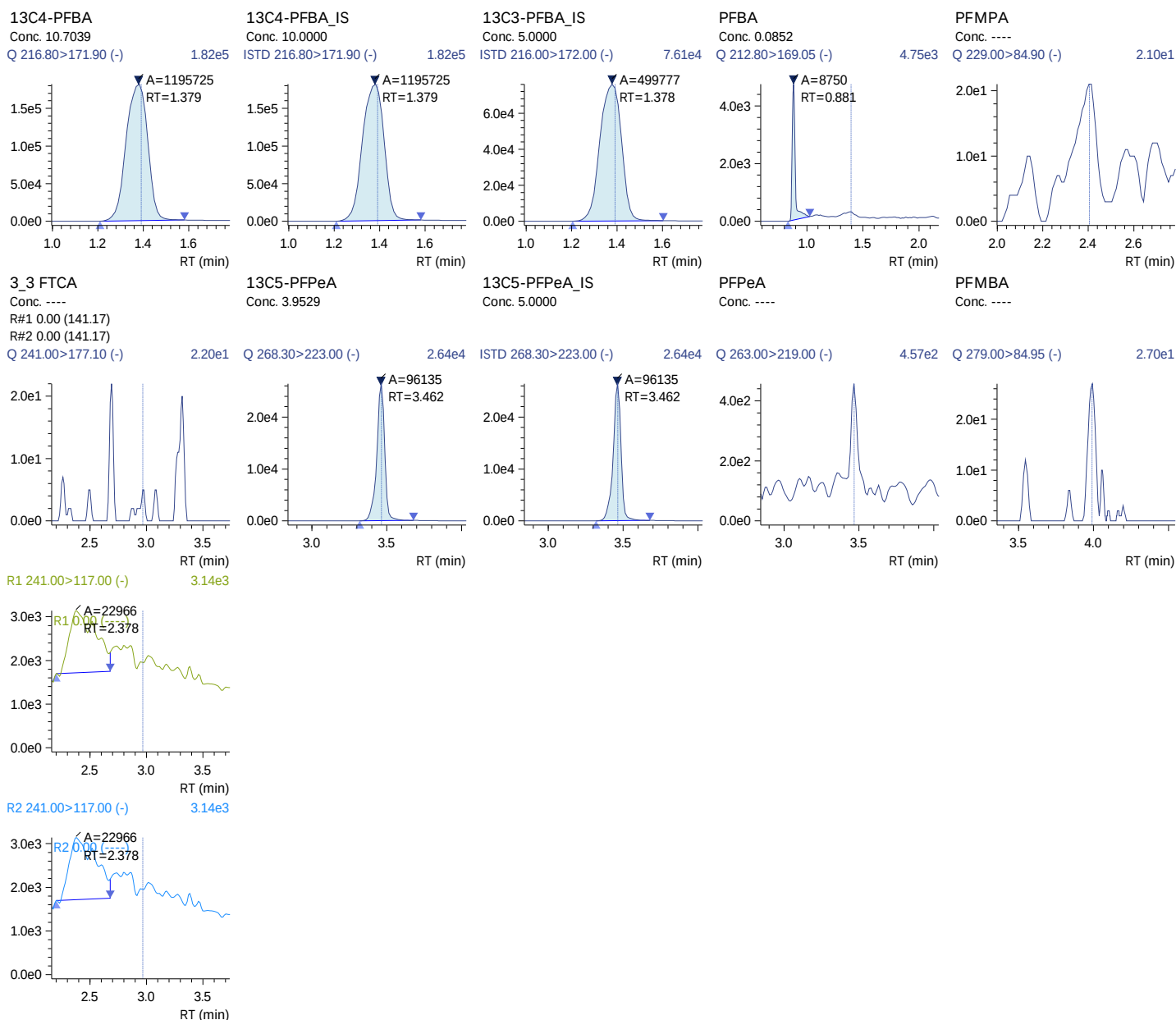
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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_055

Sample ID: 1633 CCB
Date Acquired: 1/23/2024 6:41:21 AM
Acquired by: System Administrator
Data File: 240122_055
Vial: 54 | Inj. Volume: 10.0000uL | Tray: 1





240122_055 (continued)

13C2-4_2 FTS
 Conc. 8.2943

13C2-4_2 FTS_IS
 Conc. 5.0000

4_2 FTS
 Conc. ----
 R#1 0.00 (29.06)
 R#2 0.00 (29.06)

13C3-PFBS_IS
 Conc. 2.5000

PFBS
 Conc. ----
 R#1 0.00 (46.72)
 R#2 0.00 (46.72)

Q 329.10>80.90 (-)

6.24e4

ISTD 329.10>80.90 (-)

6.24e4

Q 327.10>307.00 (-)

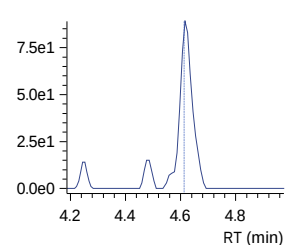
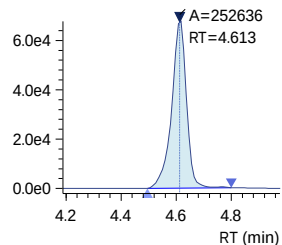
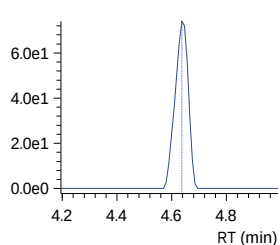
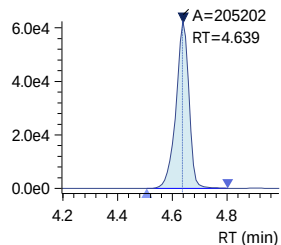
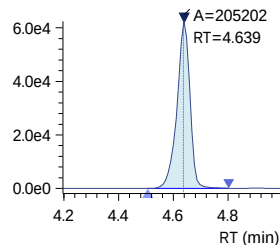
7.40e1

ISTD 302.10>79.90 (-)

6.77e4

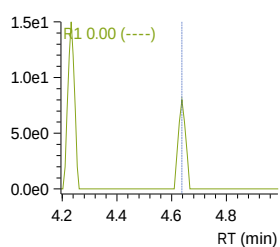
Q 298.70>79.90 (-)

8.90e1



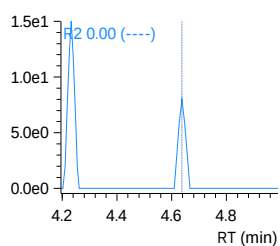
R1 327.10>80.90 (-)

1.50e1



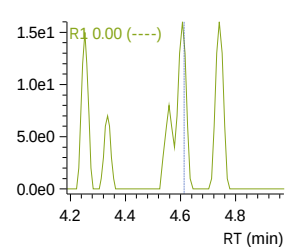
R2 327.10>80.90 (-)

1.50e1



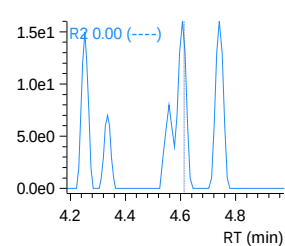
R1 298.70>98.80 (-)

1.60e1



R2 298.70>98.80 (-)

1.60e1





240122_055 (continued)

13C3-PFBS
 Conc. 2.4762

NFDHA
 Conc. ----
 R#1 0.00 (40.25)
 R#2 0.00 (40.25)

13C5-PFHxA
 Conc. 2.2803

13C5-PFHxA_IS
 Conc. 2.5000

13C2-PFHxA_IS
 Conc. 2.5000

Q 302.10>79.90 (-)

6.77e4

Q 295.00>201.00 (-)

2.29e2

Q 318.00>273.00 (-)

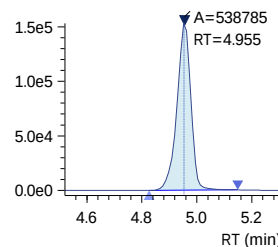
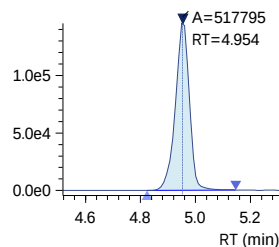
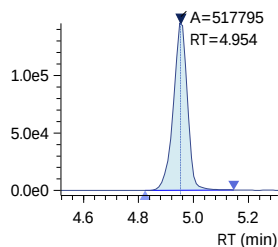
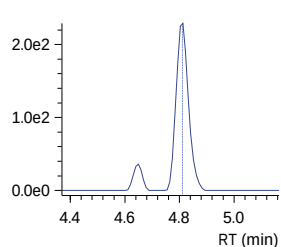
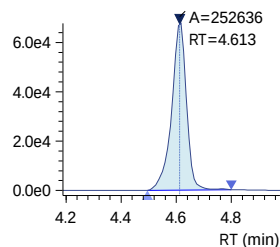
1.45e5

ISTD 318.00>273.00 (-)

1.45e5

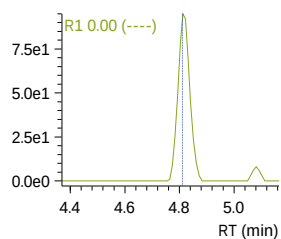
ISTD 315.10>270.00 (-)

1.53e5



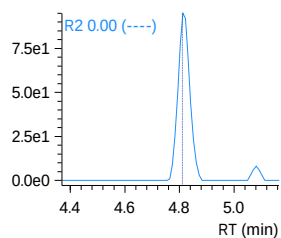
R1 295.00>84.90 (-)

9.50e1



R2 295.00>84.90 (-)

9.50e1





240122_055 (continued)

PFHxA
 Conc. 0.0178

PFEESA
 Conc. ----

13C3-HFPO-DA
 Conc. 11.2587

13C3-HFPO-DA_IS
 Conc. 10.0000

HFPO-DA
 Conc. ----

Q 313.00>269.00 (-)

1.14e3

Q 314.80>135.00 (-)

1.27e2

Q 286.90>168.90 (-)

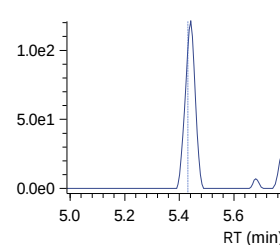
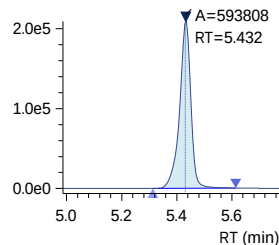
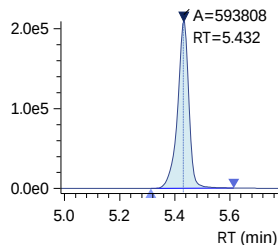
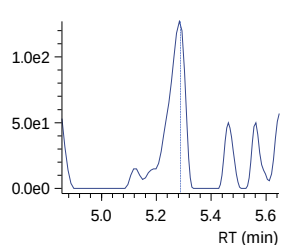
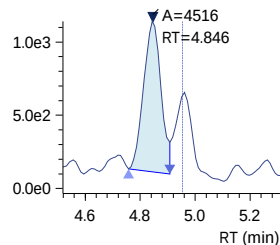
2.09e5

ISTD 286.90>168.90 (-)

2.09e5

Q 284.90>168.90 (-)

1.21e2

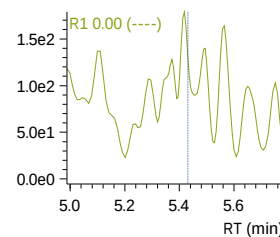
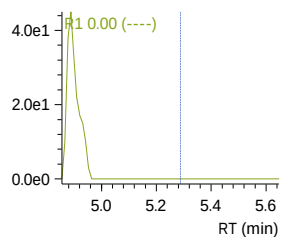


R1 314.80>82.90 (-)

4.50e1

R1 284.90>184.90 (-)

1.79e2

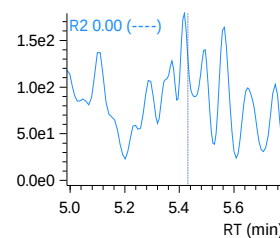
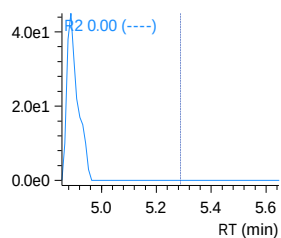


R2 314.80>82.90 (-)

4.50e1

R2 284.90>184.90 (-)

1.79e2





240122_055 (continued)

5_3 FTCA

Conc. ----

R#1 0.00 (158.86)

R#2 0.00 (158.86)

Q 341.00>237.05 (-)

1.29e2

PFPeS

Conc. ----

R#1 0.00 (55.80)

R#2 0.00 (55.80)

Q 349.10>79.90 (-)

2.70e1

13C4-PFHpA

Conc. 2.8639

Q 367.10>322.00 (-)

2.04e5

13C4-PFHpA_IS

Conc. 2.5000

ISTD 367.10>322.00 (-)

2.04e5

PFHpA

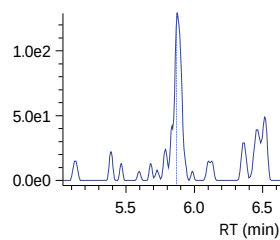
Conc. -0.0112

R#1 0.00 (21.50)

R#2 0.00 (21.50)

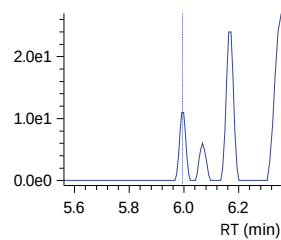
Q 363.10>319.00 (-)

1.61e3



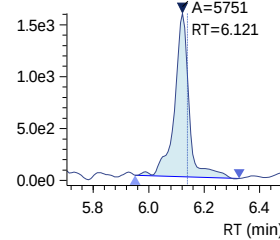
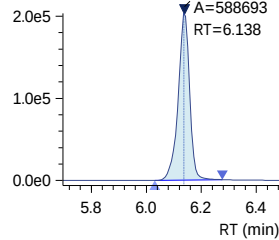
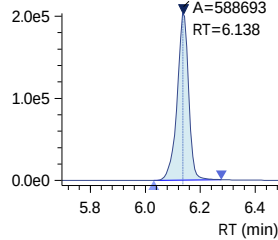
R1 341.00>217.00 (-)

3.93e2



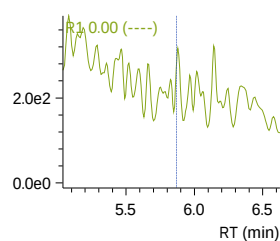
R1 349.10>98.80 (-)

2.70e1



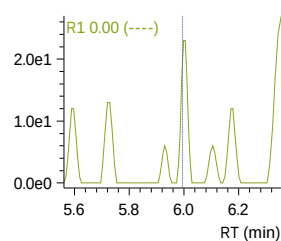
R1 363.10>169.00 (-)

2.34e2



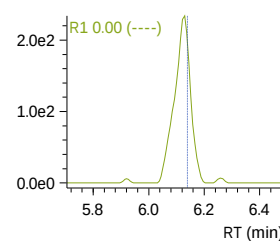
R2 341.00>217.00 (-)

3.93e2



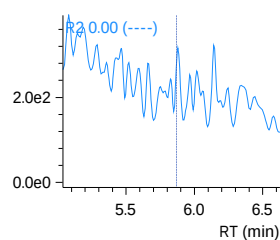
R2 349.10>98.80 (-)

2.70e1



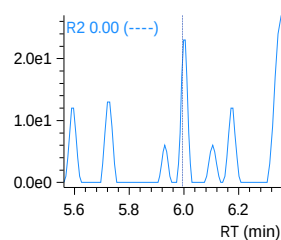
R2 363.10>169.00 (-)

2.34e2



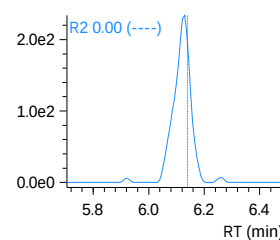
R2 341.00>217.00 (-)

3.93e2



R2 349.10>98.80 (-)

2.70e1

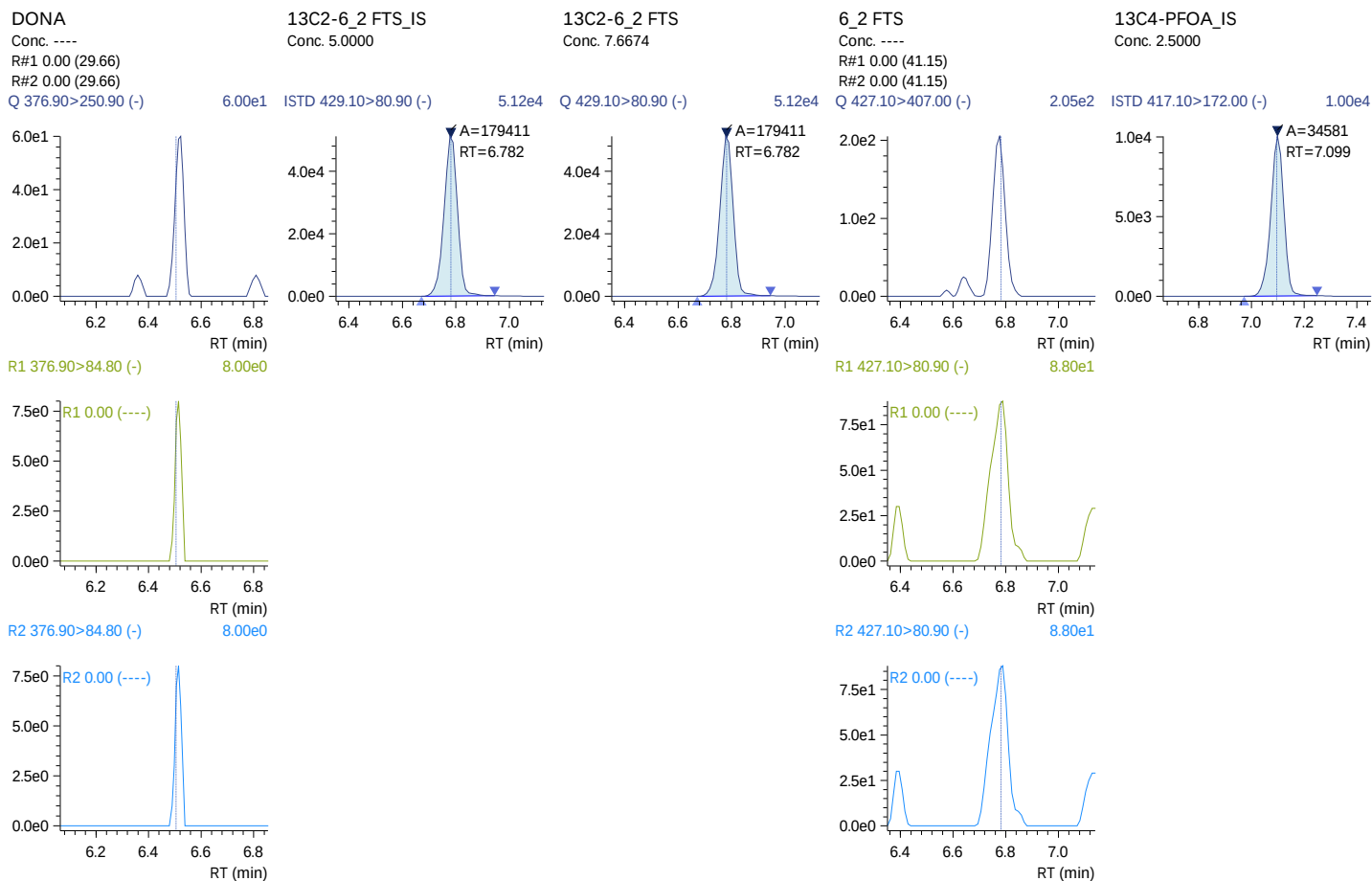


R2 363.10>169.00 (-)

2.34e2



240122_055 (continued)





240122_055 (continued)

13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.7157

PFOA
Conc. -0.0011
R#1 19.16 (31.89)
R#2 19.16 (31.89)

13C3-PFHxS
Conc. 2.3934

13C3-PFHxS_IS
Conc. 2.5000

ISTD 421.10>376.00 (-)

1.54e5

Q 421.10>376.00 (-)

1.54e5

Q 413.00>369.00 (-)

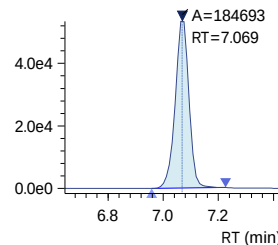
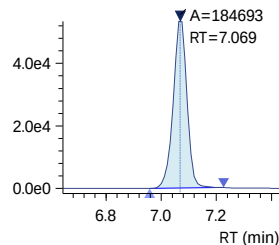
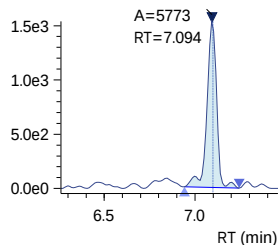
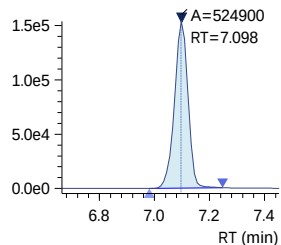
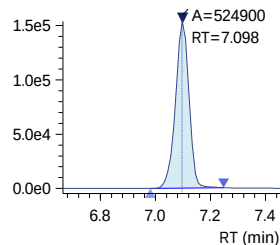
1.54e3

Q 402.10>79.90 (-)

5.34e4

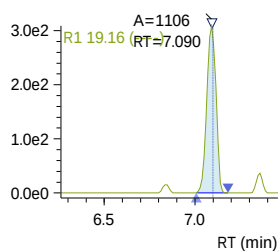
ISTD 402.10>79.90 (-)

5.34e4



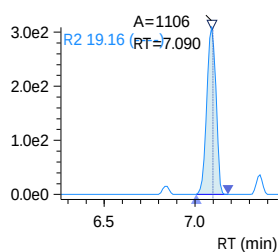
R1 413.00>169.00 (-)

3.09e2



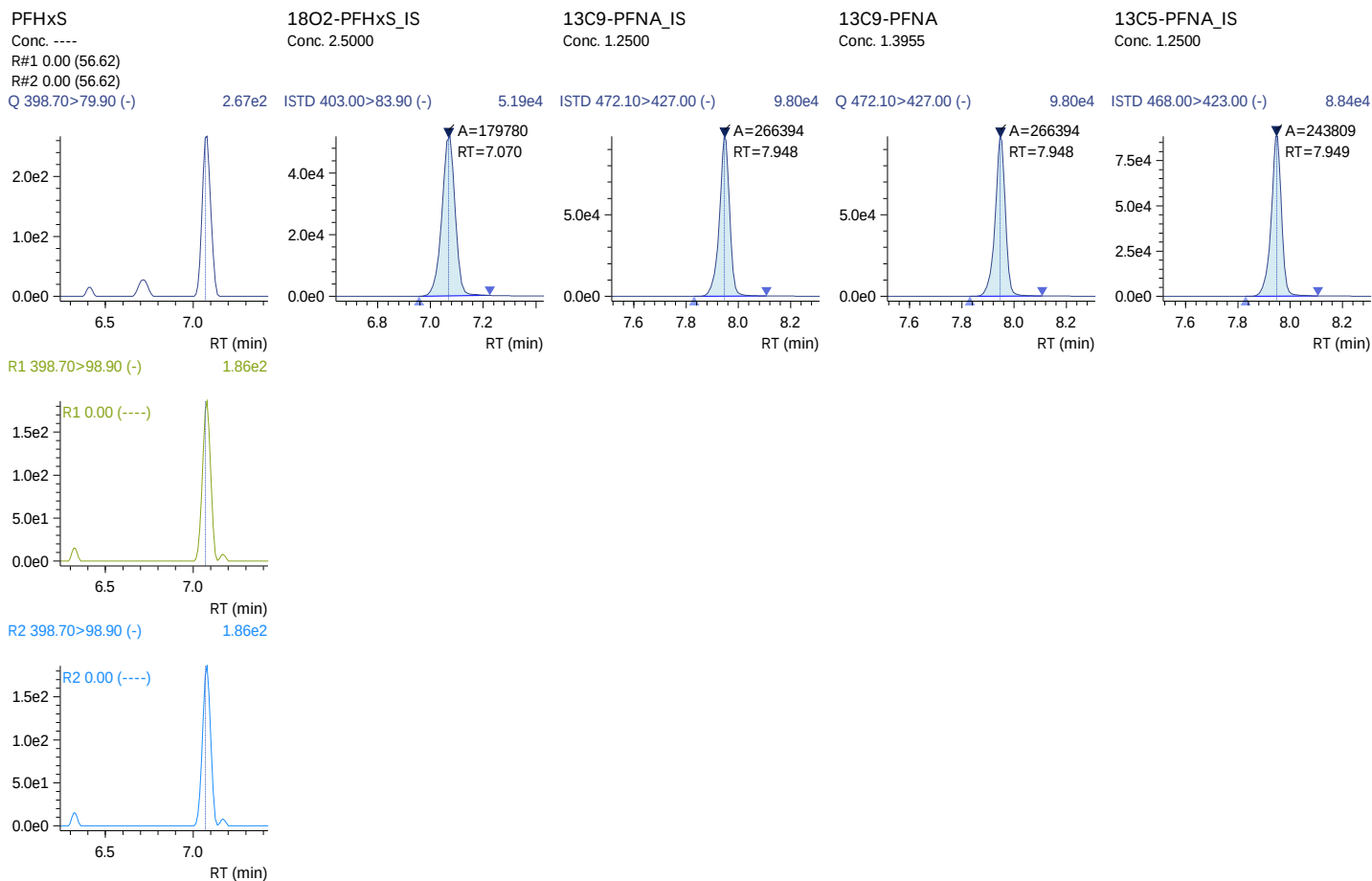
R2 413.00>169.00 (-)

3.09e2



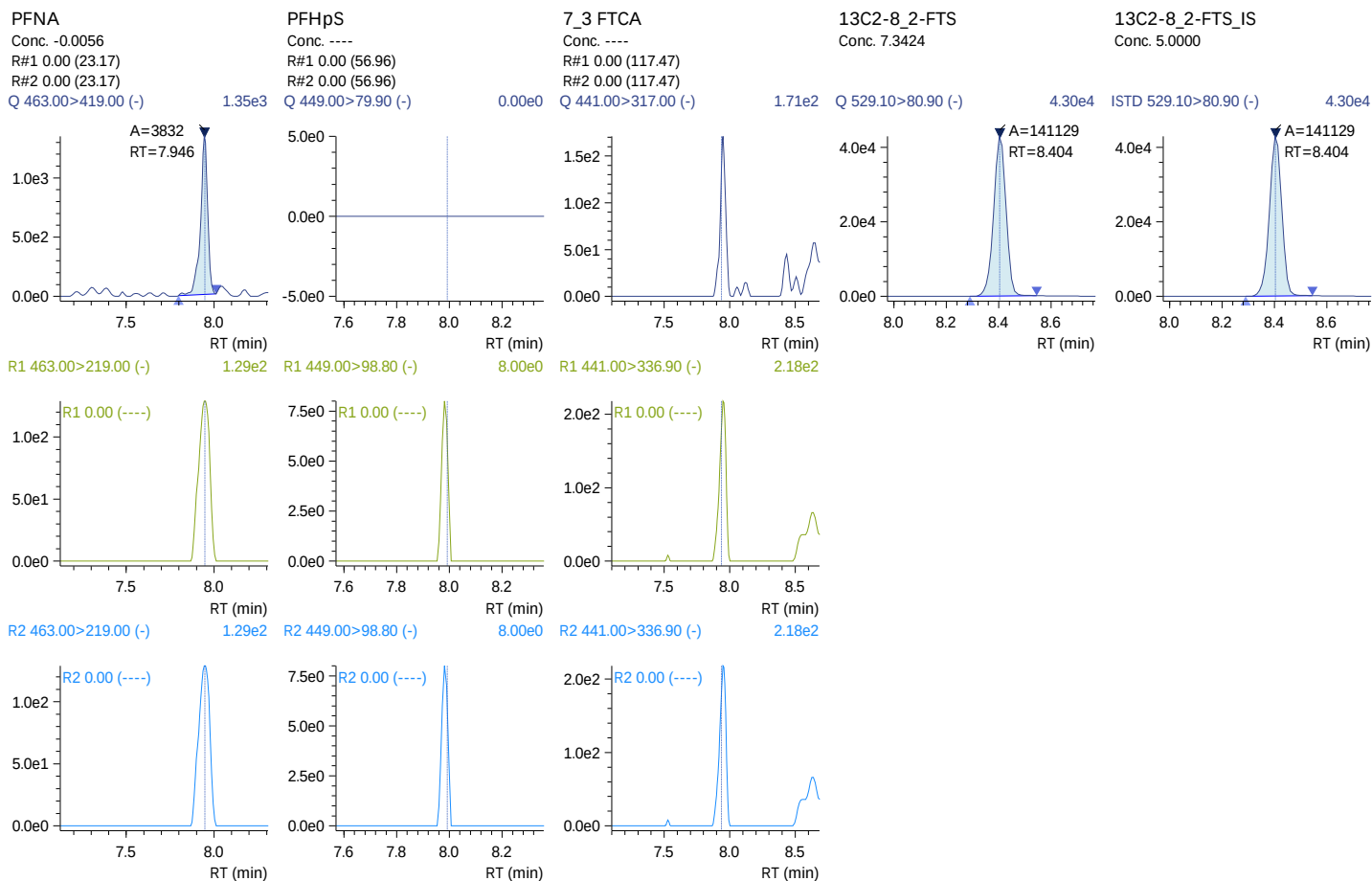


240122_055 (continued)



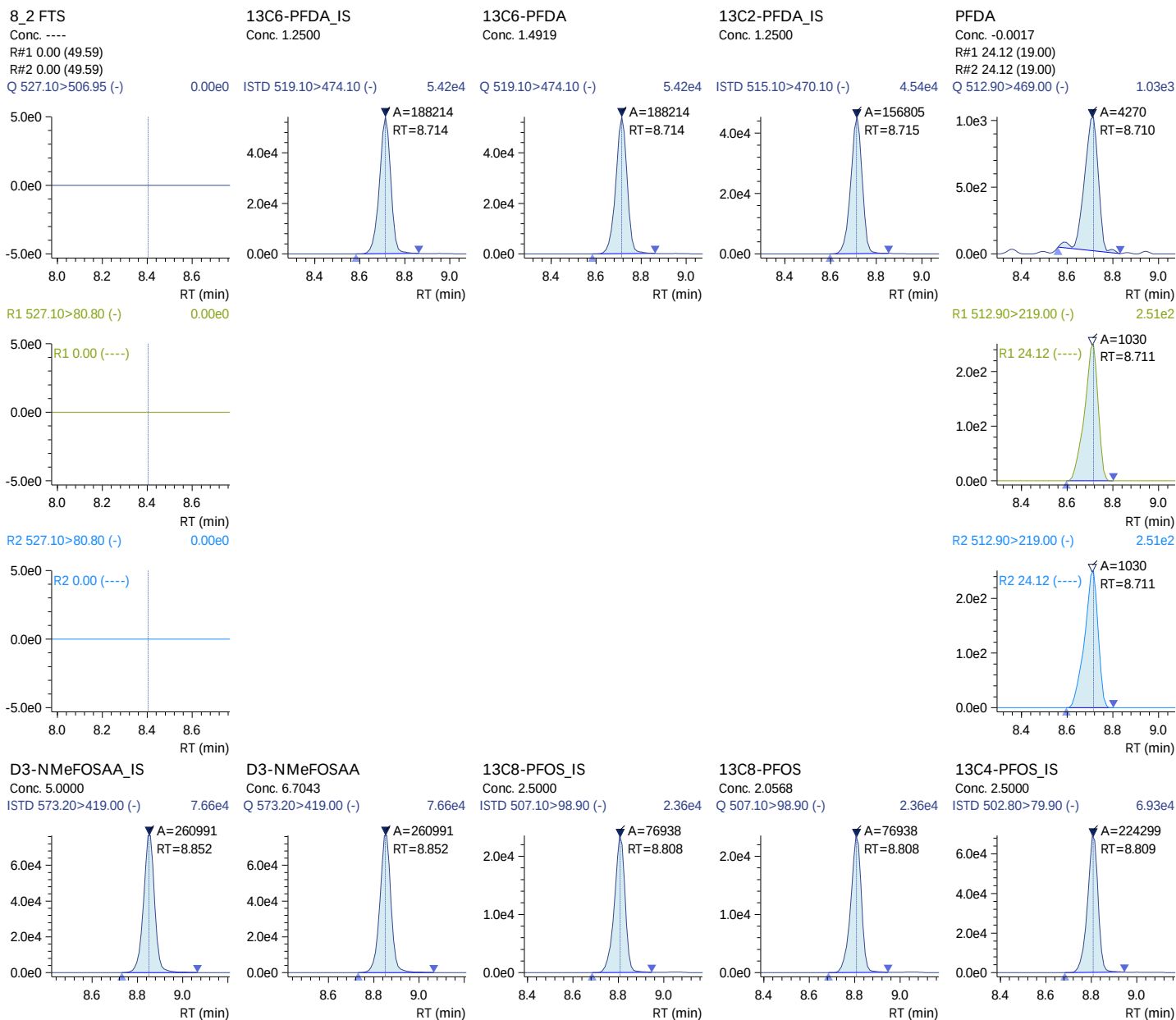


240122_055 (continued)



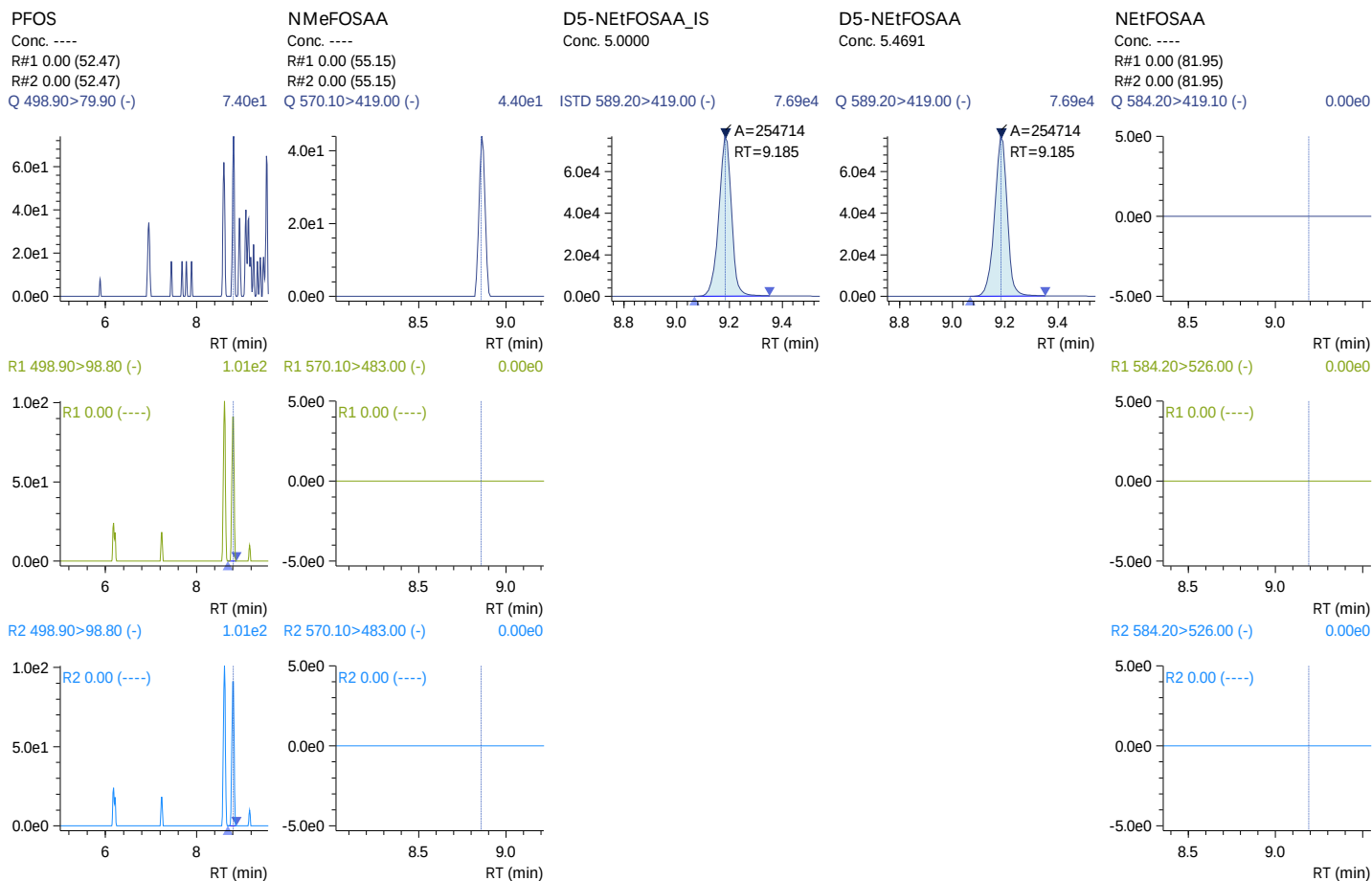


240122_055 (continued)





240122_055 (continued)





240122_055 (continued)

9-Cl-PF3ONS

Conc. ----

R#1 0.00 (32.76)

R#2 0.00 (32.76)

Q 530.80>351.00 (-)

1.22e2

PFUnDA

Conc. -0.0130

R#1 0.00 (13.12)

R#2 0.00 (13.12)

Q 563.10>519.00 (-)

8.33e2

13C7-PFUnDA_IS

Conc. 1.2500

ISTD 570.00>525.10 (-)

7.41e4

13C7-PFUnDA

Conc. 1.4903

Q 570.00>525.10 (-)

7.41e4

PFNS

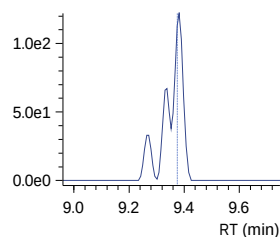
Conc. ----

R#1 0.00 (65.22)

R#2 0.00 (65.22)

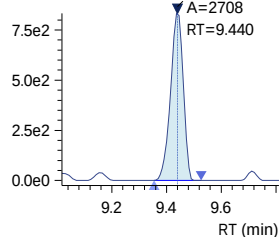
Q 548.80>79.90 (-)

2.60e1



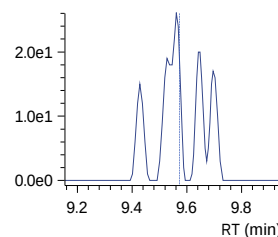
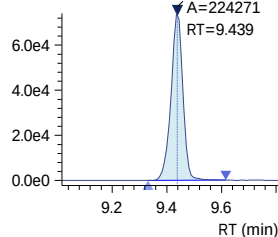
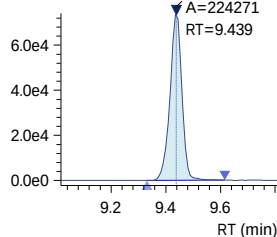
R1 532.80>353.00 (-)

1.07e2



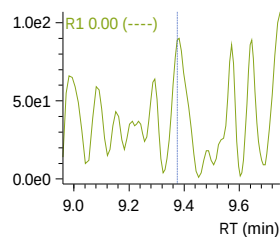
R1 563.10>269.10 (-)

7.40e1



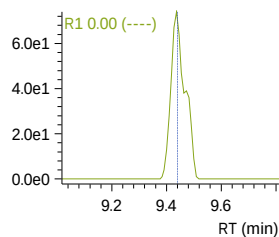
R1 548.80>98.80 (-)

1.20e1



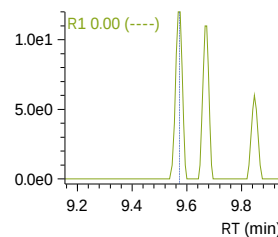
R2 532.80>353.00 (-)

1.07e2



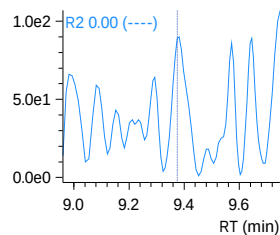
R2 563.10>269.10 (-)

7.40e1



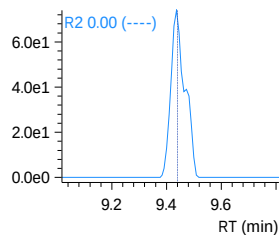
R2 548.80>98.80 (-)

1.20e1



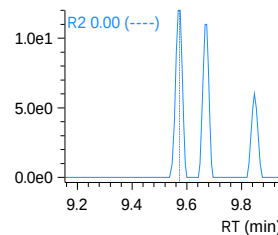
R2 532.80>353.00 (-)

1.07e2



R2 563.10>269.10 (-)

7.40e1

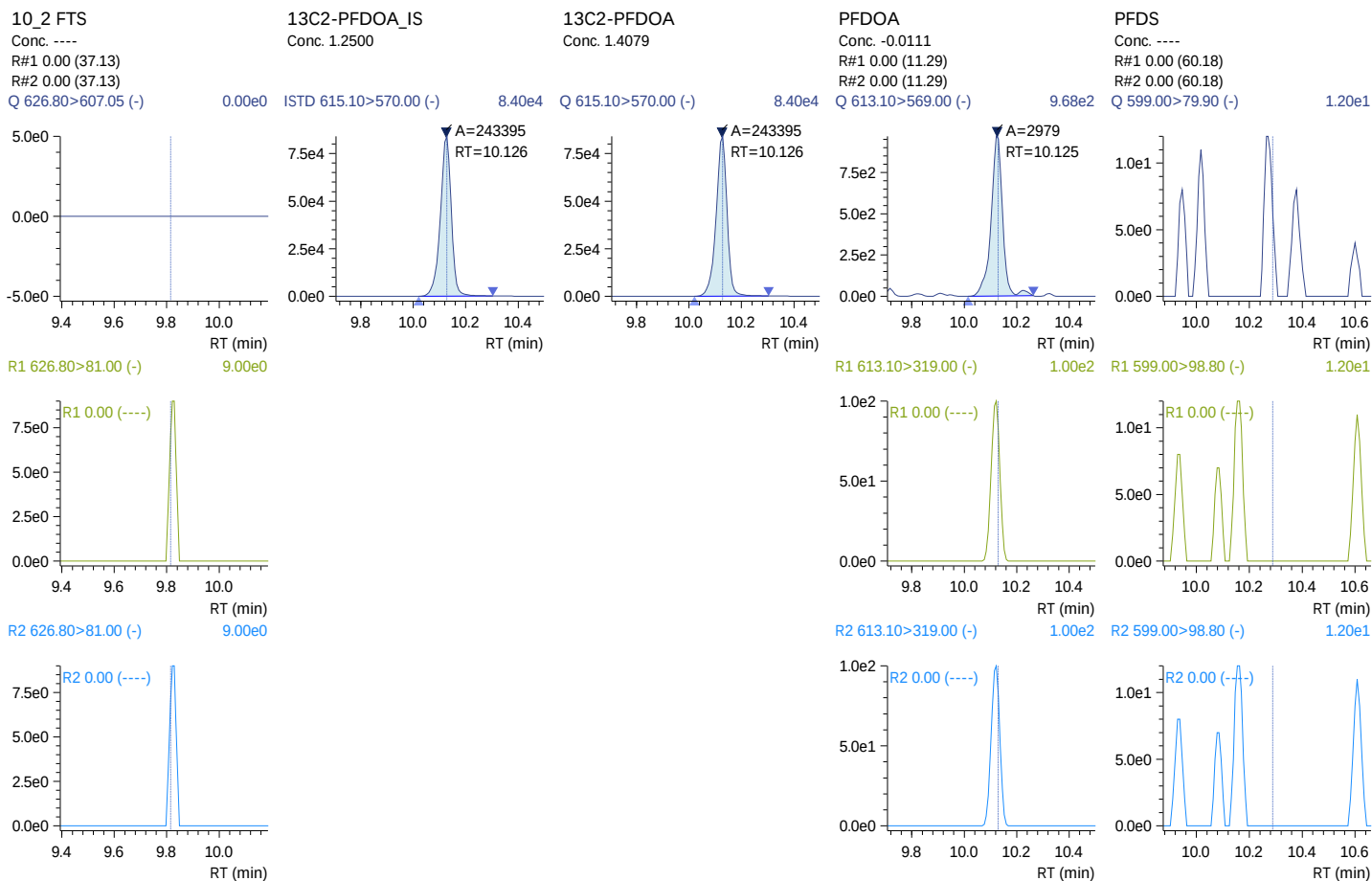


R2 548.80>98.80 (-)

1.20e1

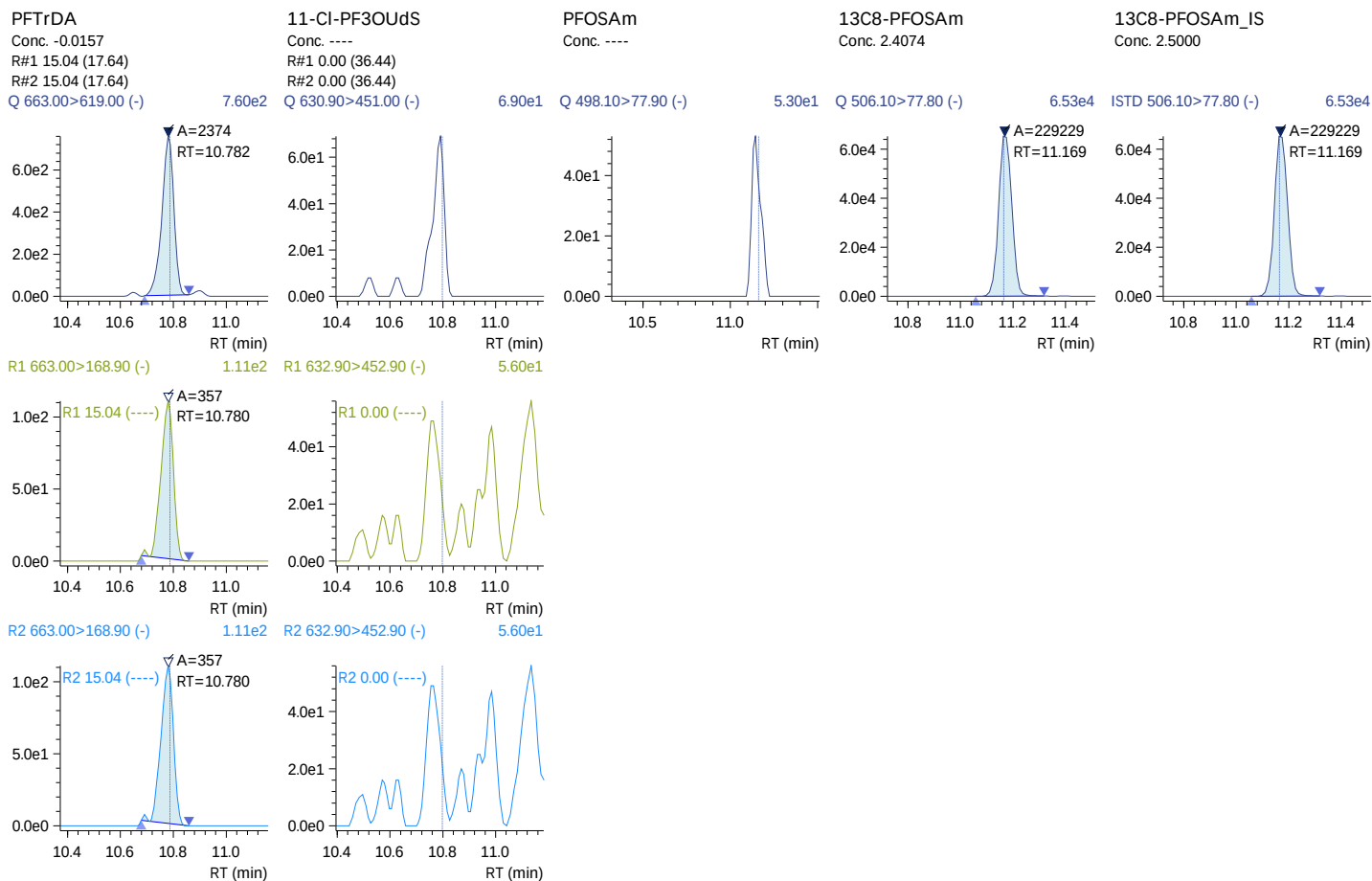


240122_055 (continued)



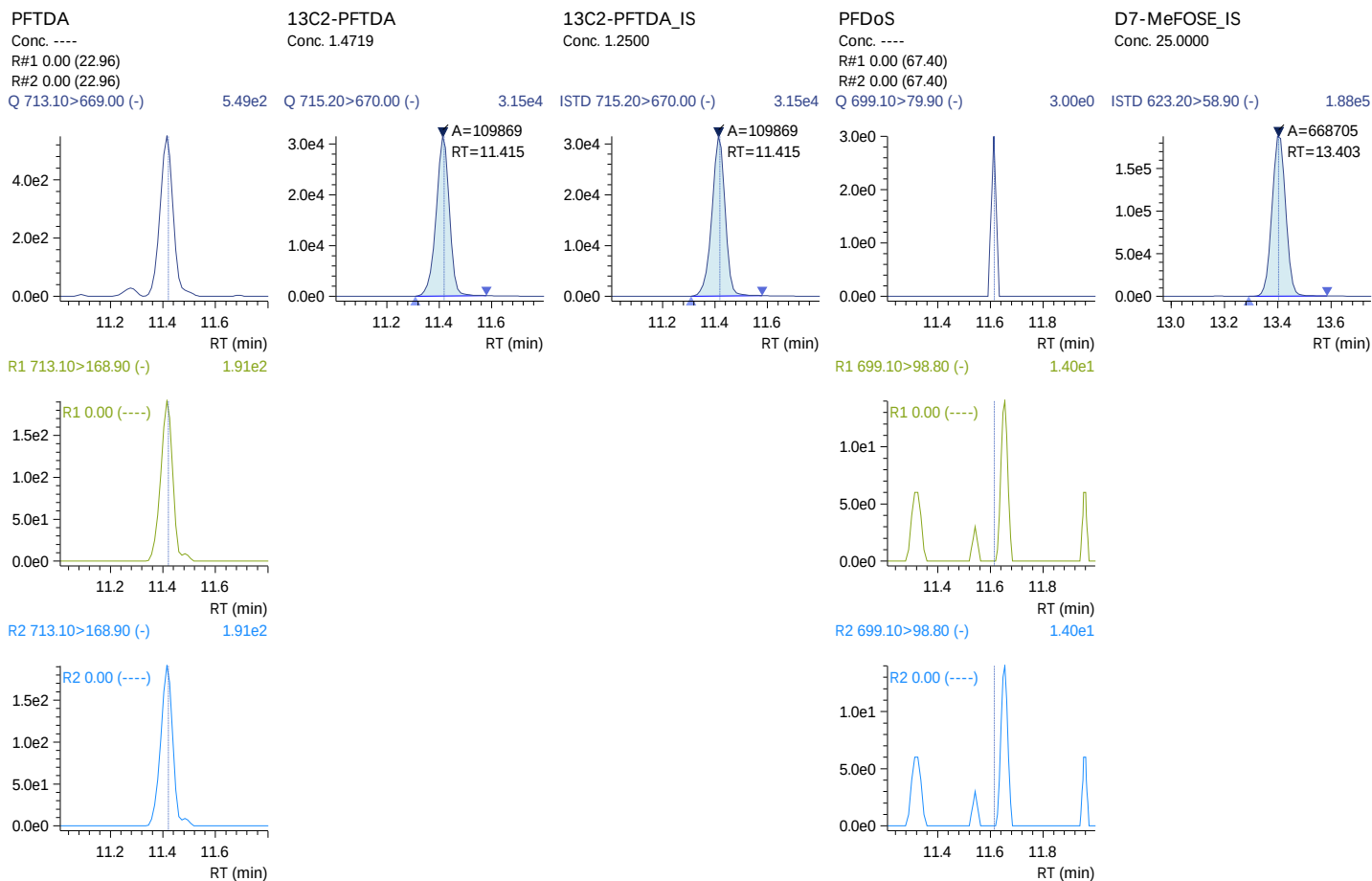


240122_055 (continued)





240122_055 (continued)





240122_055 (continued)

D7-MeFOSE
Conc. 28.4847

MeFOSE
Conc. ----

13C2-PFHxDA_IS
Conc. 2.5000

13C2-PFHxDA
Conc. 2.7169

PFHxDA

Conc. -0.0087
R#1 0.00 (13.90)
R#2 0.00 (13.90)

Q 623.20>58.90 (-)

1.88e5

Q 616.10>59.00 (-)

5.90e1

ISTD 815.00>770.05 (-)

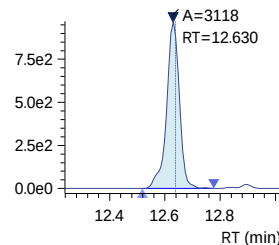
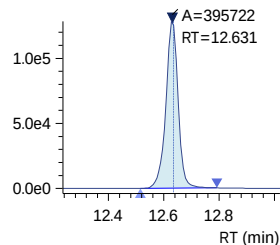
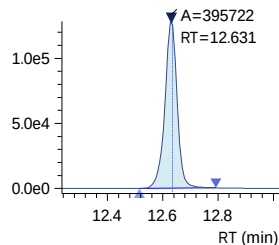
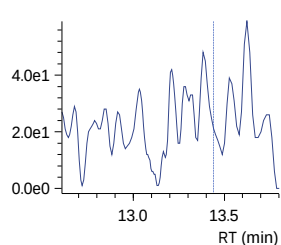
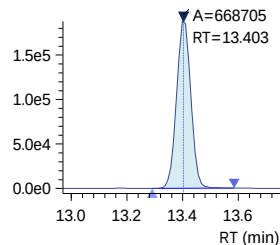
1.28e5

Q 815.00>770.05 (-)

1.28e5

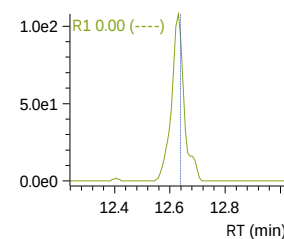
Q 813.00>768.95 (-)

9.70e2



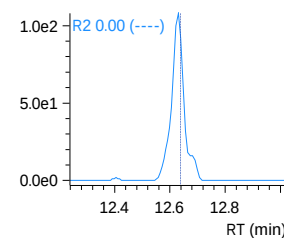
R1 813.00>218.95 (-)

1.08e2



R2 813.00>218.95 (-)

1.08e2





240122_055 (continued)

D3-MeFOSA
 Conc. 2.3106

D3-MeFOSA_IS
 Conc. 2.5000

MeFOSA
 Conc. ----
 R#1 0.00 (140.79)
 R#2 0.00 (140.79)

D9-EtFOSE_IS
 Conc. 25.0000

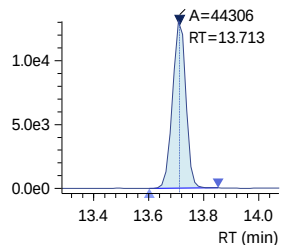
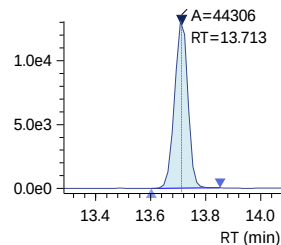
D9-EtFOSE
 Conc. 31.2572

Q 515.00>219.00 (-)

1.31e4

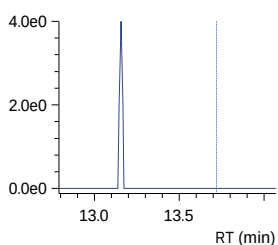
ISTD 515.00>219.00 (-)

1.31e4



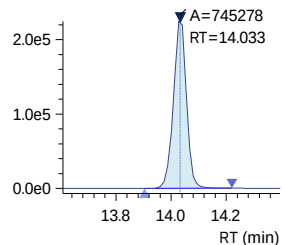
Q 511.90>219.00 (-)

4.00e0



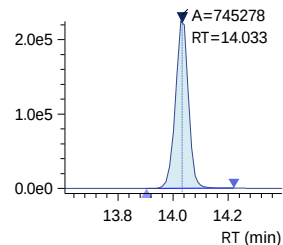
ISTD 639.20>58.90 (-)

2.25e5



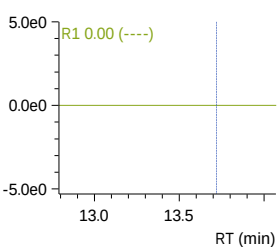
Q 639.20>58.90 (-)

2.25e5



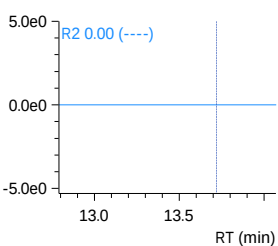
R1 511.90>169.00 (-)

0.00e0



R2 511.90>169.00 (-)

0.00e0





240122_055 (continued)

EtFOSE
 Conc. ----

D5-EtFOSAm
 Conc. 2.6169

D5-EtFOSAm_IS
 Conc. 2.5000

EtFOSAm
 Conc. ----

PFODA
 Conc. 0.0194

Q 630.00>59.00 (-)

2.60e1

Q 531.10>219.00 (-)

2.05e4

ISTD 531.10>219.00 (-)

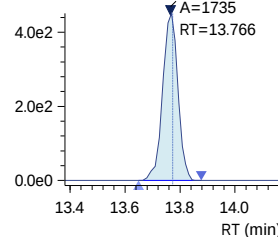
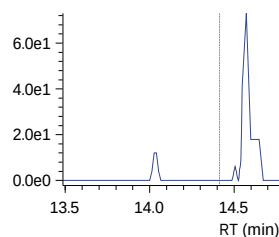
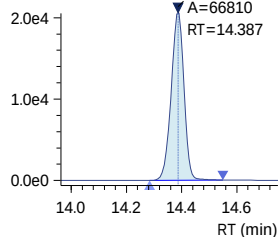
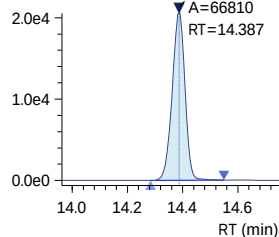
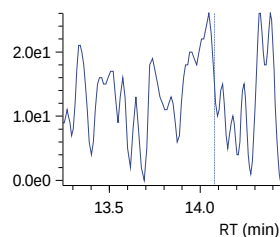
2.05e4

Q 526.00>219.00 (-)

7.30e1

Q 913.00>868.65 (-)

4.51e2

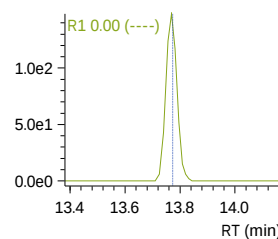
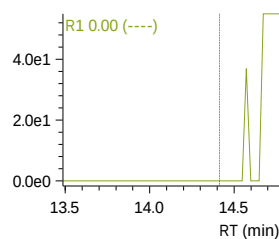


R1 526.00>169.00 (-)

5.50e1

R1 913.00>169.00 (-)

1.48e2

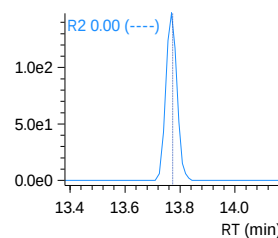
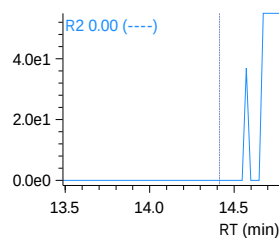


R2 526.00>169.00 (-)

5.50e1

R2 913.00>169.00 (-)

1.48e2



Validation Report

1st PS 02/06/24
2nd MS 02/06/24

Data File: J:\LCMS08\Data\240201_1633_RA\240201_005
Lab ID: KQ2401707-01
RunType: CCB
Matrix: Water

Date Acquired: 2/1/24 11:55
Batch ID: 831587
Analysis Method: 1633/PFAS_DOD5.4

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery (Closing)		X
Internal Standards	X	
Surrogates		X
Above Highest ICAL Level	X	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Continuing Calibration Recovery (Closing)	13C2-6:2 FTS	66	70	130	NR in all samples
Surrogates	13C3-HFPO-DA	136	40	130	high bias, ND

Primary Review: _____

Secondary Review: _____

Quantitation Report

1st *PS* 02/06/24
2nd *MS* 02/06/24

Data File:	J:\LCMS08\Data\240201_1633_RA\240201_005	Instrument:	K-LCMS-08
Acqu Date:	2/1/24 11:55	Vial:	1
Run Type:	CCB	Dilution:	1
Lab ID:	KQ2401707-01	Raw Units:	ng/mL

Bottle ID:		Tier:	IV	Matrix:	Water
Prod Code:	PFAS_DOD5.4	Collect Date:	10/31/23	Receive Date:	11/7/23

Analysis Lot:	831587	Prep Lot:		Report Group:	KQ2401707
Analysis	1633	Prep Method:			
		Prep Date:			

Title:	Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM	Calibration ID:	KC2400048
		Report List ID:	24615

Internal Standard Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Area Criteria
18O2-PFHxS	7.109		133208	2.5000	OK
13C4-PFOS	8.842		178209	2.5000	OK
13C3-PFBA	1.449		265743	5.0000	OK
13C2-PFHxA	5.001		325634	2.5000	OK
13C4-PFOA	7.135		29437	2.5000	OK
13C5-PFNA	7.980		168998	1.2500	OK
13C2-PFDA	8.745		117454	1.2500	OK

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
13C3-PFBS	4.667		149721	3.0124	120	40 - 135	Y
13C3-PFHxS	7.109		142195	3.0456	122	40 - 130	Y
13C8-PFOS	8.841		63411	2.8274	113	40 - 130	Y
13C4-PFBA	1.447		456162	11.5844	116	5 - 130	Y
13C5-PFPeA	3.521		136697	5.8382	117	40 - 130	Y
13C5-PFHxA	5.000		302743	2.8802	115	40 - 130	Y
13C4-PFHpA	6.177		365801	2.7663	111	40 - 130	Y
13C8-PFOA	7.134		386547	2.7534	110	40 - 130	Y
13C9-PFNA	7.979		190090	1.5195	122	40 - 130	Y
13C6-PFDA	8.744		138808	1.4747	118	40 - 130	Y
13C7-PFUnDA	9.467		177250	1.5155	121	30 - 130	Y
13C2-PFDoDA	10.155		201222	1.4413	115	10 - 130	Y
13C2-PFTeDA	11.446		131129	1.3307	106	10 - 130	Y
13C8-FOSA	11.150		138632	2.4489	98	40 - 130	Y
D3-MeFOSA	13.687		37596	2.5438	102	10 - 130	Y
D5-EtFOSA	14.363		52736	2.5807	103	10 - 130	Y
D7-MeFOSE	13.382		356021	24.4982	98	10 - 130	Y
D9-EtFOSE	14.009		440363	24.7622	99	10 - 130	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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			1st	PS	02/06/24
Data File:	J:\LCMS08\Data\240201_1633_RA\240201_005	Instrument:	K-LCMS08	MS	02/06/24
Acqu Date:	2/1/24 11:55	Vial:	1		
Run Type:	CCB	Dilution:	1		
Lab ID:	KQ2401707-01	Raw Units:	ng/mL		

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
D3-MeFOSAA	8.877		291366	4.0156	80	40 - 170	Y
D5-EtFOSAA	9.207		256373	4.4834	90	25 - 135	Y
13C2-4:2 FTS	4.682		107540	4.2888	86	40 - 200	Y
13C2-6:2 FTS	6.816		115181	4.4126	88	40 - 200	Y
13C2-8:2 FTS	8.434		98135	4.4281	89	40 - 300	Y
13C3-HFPO-DA	5.474		392698	13.6079	136 *	40 - 130	Y

Target Compounds

Final Conc.Units: ng/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Perfluorobutane sulfonic acid (PFBS)	0		0	0	0	U	Y
Perfluoropentane sulfonic acid (PFPeS)	0		0	0	0	U	Y
Perfluorohexane sulfonic acid (PFHxS)	7.107		754	0.0121	0.24	U	Y
Perfluoroheptane sulfonic acid (PFHpS)	0		0	0	0	U	Y
Perfluorooctane sulfonic acid (PFOS)	0		0	0	0	U	Y
Perfluorononane sulfonic acid (PFNS)	0		0	0	0	U	Y
Perfluorodecane sulfonic acid (PFDS)	0		0	0	0	U	Y
Perfluorododecane sulfonic acid (PFDoS)	0		0	0	0	U	Y
Perfluorobutanoic acid (PFBA)	1.427		1079	0.0126	0.25	U	Y
Perfluoropentanoic acid (PFPeA)	3.520		1773	0.0185	0.37	U	Y
Perfluorohexanoic acid (PFHxA)	5.001		1048	0.0033	0.066	U	Y
Perfluoroheptanoic acid (PFHpA)	6.158		5758	0.0289	0.58	U	Y
Perfluorooctanoic acid (PFOA)	7.132		6447	0.0290	0.58	U	Y
Perfluorononanoic acid (PFNA)	7.978		5945	0.0283	0.57	U	Y
Perfluorodecanoic acid (PFDA)	8.743		3822	0.0326	0.65	J	Y
Perfluoroundecanoic acid (PFUnDA)	9.469		5056	0.0197	0.39	U	Y
Perfluorododecanoic acid (PFDOA)	10.156		3873	0.0056	0.11	U	Y
Perfluorotridecanoic acid (PFTrDA)	10.815		5254	0.0191	0.38	U	Y
Perfluorotetradecanoic acid (PFTDA)	11.444		3686	0.0179	0.36	U	Y
Perfluorooctane sulfonamide (PFOSAm)	11.147		189	0.0039	0.078	U	Y
N-Methylperfluorooctane sulfonamide (MeFOSA)	0		0	0	0	U	Y
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	0		0	0	0	U	Y
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	0		0	0	0	U	Y
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	0		0	0	0	U	Y
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	0		0	0	0	U	Y

U: Undetected at or above MDL

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B: Hit above MRL also found in Method Blank

E: Analyte concentration above high point of ICAL

N: Presumptive evidence of compound

D: Result from dilution

m: Manual integration performed

d: Compound manually deleted

NR: Analyte not reported from this analysis

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#: Acceptance criteria not applicable

?: Insufficient information to determine acceptance

e: Result >= MRL, but MRL less than low point of ICAL

c: check for co-elution

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Data File:	J:\LCMS08\Data\240201_1633_RA\240201_005	Instrument:	K-LCMS08	1st 02/06/24
Acqu Date:	2/1/24 11:55	Vial:	1	02/06/24
Run Type:	CCB	Dilution:	1	
Lab ID:	KQ2401707-01	Raw Units:	ng/mL	

Target Compounds			Final Conc.Units: ng/L				
Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	0		0	0	0	U	Y
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	0		0	0	0	U	Y
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	6.815		413	0.0094	0.19	U	Y
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	0		0	0	0	U	Y
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	0		0	0	0	U	Y
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	5.906		405	0.0448	0.90	U	Y
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	7.932		359	0.0226	0.45	U	Y
Perfluoro(2-ethoxyethane) sulfonic acid (PFEEESA)	0		0	0	0	U	Y
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	0		0	0	0	U	Y
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	0		0	0	0	U	Y
Perfluoro-3-methoxypropanoic acid (PFMPA)	2.470		117	0.0030	0.060	U	Y
Perfluoro-4-methoxybutanoic acid (PFMBA)	4.036		75	0.0013	0.026	U	Y
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	0		0	0	0	U	Y
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	4.851		370	0.0059	0.12	U	Y
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	0		0	0	0	U	Y

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E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
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?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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240201_005

Sample ID: 1633 CCB
Date Acquired: 2/1/2024 11:55:26 AM
Acquired by: System Administrator
Data File: 240201_005
Vial: 54 | Inj. Volume: 10.0000uL | Tray: 1

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	456162	----	----	----	----	----	----	----
13C4-PFBA_IS	216.80>171.90	----	456162	----	----	----	----	----	----	----
13C3-PFBA_IS	216.00>172.00	----	265743	----	----	----	----	----	----	----
PFBA	212.80>169.05	----	1079	----	----	----	----	----	----	----
PFMPA	229.00>84.90	----	117	----	----	----	----	----	----	----
3_3 FTCA	241.00>177.10	241.00>117.00	----	0	0.00	139.21	----	----	----	----
13C5-PFPeA	268.30>223.00	----	136697	----	----	----	----	----	----	----
13C5-PFPeA_IS	268.30>223.00	----	136697	----	----	----	----	----	----	----
PFPeA	263.00>219.00	----	1773	----	----	----	----	----	----	----
PFMBA	279.00>84.95	----	75	----	----	----	----	----	----	----
13C2-4_2 FTS	329.10>80.90	----	107540	----	----	----	----	----	----	----
13C2-4_2 FTS_IS	329.10>80.90	----	107540	----	----	----	----	----	----	----
4_2 FTS	327.10>307.00	327.10>80.90	----	0	0.00	32.10	0	0.00	32.79	----
13C3-PFBS_IS	302.10>79.90	----	149721	----	----	----	----	----	----	----
PFBS	298.70>79.90	298.70>98.80	----	0	0.00	44.81	0	0.00	46.72	----
13C3-PFBS	302.10>79.90	----	149721	----	----	----	----	----	----	----
NFDHA	295.00>201.00	295.00>84.90	370	159	43.12	35.54	159	43.12	37.91	----
13C5-PFHxA	318.00>273.00	----	302743	----	----	----	----	----	----	----
13C5-PFHxA_IS	318.00>273.00	----	302743	----	----	----	----	----	----	----
13C2-PFHxA_IS	315.10>270.00	----	325634	----	----	----	----	----	----	----
PFHxA	313.00>269.00	----	1048	----	----	----	----	----	----	----
PFEESA	314.80>135.00	314.80>82.90	----	0	0.00	5.22	0	0.00	5.35	----
13C3-HFPO-DA	286.90>168.90	----	392698	----	----	----	----	----	----	----
13C3-HFPO-DA_IS	286.90>168.90	----	392698	----	----	----	----	----	----	----
HFPO-DA	284.90>168.90	284.90>184.90	----	0	0.00	59.79	0	0.00	58.32	----
5_3 FTCA	341.00>237.05	341.00>217.00	405	606	149.56	157.08	607	149.75	155.87	----
PFPeS	349.10>79.90	349.10>98.80	----	0	0.00	55.12	0	0.00	54.87	----
13C4-PFHpA	367.10>322.00	----	365801	----	----	----	----	----	----	----
13C4-PFHpA_IS	367.10>322.00	----	365801	----	----	----	----	----	----	----
PFHpA	363.10>319.00	363.10>169.00	5758	1450	25.18	23.02	1450	25.18	20.91	----
DONA	376.90>250.90	376.90>84.80	----	0	0.00	27.50	0	0.00	27.00	----
13C2-6_2 FTS_IS	429.10>80.90	----	115181	----	----	----	----	----	----	----
13C2-6_2 FTS	429.10>80.90	----	115181	----	----	----	----	----	----	----
6_2 FTS	427.10>407.00	427.10>80.90	413	122	29.48	50.47	122	29.48	46.83	----
13C4-PFOA_IS	417.10>172.00	----	29437	----	----	----	----	----	----	----
13C8-PFOA_IS	421.10>376.00	----	386547	----	----	----	----	----	----	----

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240201_005 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	386547	----	----	----	----	----	----	----
PFOA	413.00>369.00	413.00>169.00	6447	1474	22.87	28.77	1474	22.87	28.12	
13C3-PFHxS	402.10>79.90	----	142195	----	----	----	----	----	----	----
13C3-PFHxS_IS	402.10>79.90	----	142195	----	----	----	----	----	----	----
PFHxS	398.70>79.90	398.70>98.90	754	243	32.21	60.90	243	32.21	61.53	
18O2-PFHxS_IS	403.00>83.90	----	133208	----	----	----	----	----	----	----
13C9-PFNA_IS	472.10>427.00	----	190090	----	----	----	----	----	----	----
13C9-PFNA	472.10>427.00	----	190090	----	----	----	----	----	----	----
13C5-PFNA_IS	468.00>423.00	----	168998	----	----	----	----	----	----	----
PFNA	463.00>419.00	463.00>219.00	5945	1198	20.16	19.31	1198	20.16	20.30	
PFHpS	449.00>79.90	449.00>98.80	----	0	0.00	52.44	0	0.00	52.33	
7_3 FTCA	441.00>317.00	441.00>336.90	359	627	174.73	129.46	627	174.73	129.73	
13C2-8_2-FTS	529.10>80.90	----	98135	----	----	----	----	----	----	----
13C2-8_2-FTS_IS	529.10>80.90	----	98135	----	----	----	----	----	----	----
8_2 FTS	527.10>506.95	527.10>80.80	----	0	0.00	45.98	0	0.00	43.25	
13C6-PFDA_IS	519.10>474.10	----	138808	----	----	----	----	----	----	----
13C6-PFDA	519.10>474.10	----	138808	----	----	----	----	----	----	----
13C2-PFDA_IS	515.10>470.10	----	117454	----	----	----	----	----	----	----
PFDA	512.90>469.00	512.90>219.00	3822	453	11.84	17.88	453	11.84	18.89	
D3-NMeFOSAA_IS	573.20>419.00	----	291366	----	----	----	----	----	----	----
D3-NMeFOSAA	573.20>419.00	----	291366	----	----	----	----	----	----	----
13C8-PFOS_IS	507.10>98.90	----	63411	----	----	----	----	----	----	----
13C8-PFOS	507.10>98.90	----	63411	----	----	----	----	----	----	----
13C4-PFOS_IS	502.80>79.90	----	178209	----	----	----	----	----	----	----
PFOS	498.90>79.90	498.90>98.80	----	0	0.00	53.60	0	0.00	52.29	
NMeFOSAA	570.10>419.00	570.10>483.00	----	0	0.00	64.89	0	0.00	60.97	
D5-NEtFOSAA_IS	589.20>419.00	----	256373	----	----	----	----	----	----	----
D5-NEtFOSAA	589.20>419.00	----	256373	----	----	----	----	----	----	----
NEtFOSAA	584.20>419.10	584.20>526.00	----	0	0.00	96.07	0	0.00	94.54	
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	----	0	0.00	30.95	0	0.00	30.61	
PFUnDA	563.10>519.00	563.10>269.10	5056	691	13.68	11.01	691	13.68	12.02	
13C7-PFUnDA_IS	570.00>525.10	----	177250	----	----	----	----	----	----	----
13C7-PFUnDA	570.00>525.10	----	177250	----	----	----	----	----	----	----
PFNS	548.80>79.90	548.80>98.80	----	0	0.00	60.44	0	0.00	58.51	
10_2 FTS	626.80>607.05	626.80>81.00	----	0	0.00	36.14	0	0.00	33.04	
13C2-PFDOA_IS	615.10>570.00	----	201222	----	----	----	----	----	----	----
13C2-PFDOA	615.10>570.00	----	201222	----	----	----	----	----	----	----
PFDOA	613.10>569.00	613.10>319.00	3873	413	10.66	10.16	413	10.66	10.60	
PFDS	599.00>79.90	599.00>98.80	----	0	0.00	58.26	0	0.00	61.78	
PFTrDA	663.00>619.00	663.00>168.90	5254	964	18.35	16.18	964	18.35	14.85	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240201_005 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	----	0	0.00	34.99	0	0.00	34.39	
PFOSAm	498.10>77.90	----	189	----	----	----	----	----	----	
13C8-PFOSAm	506.10>77.80	----	138632	----	----	----	----	----	----	
13C8-PFOSAm_IS	506.10>77.80	----	138632	----	----	----	----	----	----	
PFTDA	713.10>669.00	713.10>168.90	3686	874	23.70	18.05	874	23.70	17.39	
13C2-PFTDA	715.20>670.00	----	131129	----	----	----	----	----	----	
13C2-PFTDA_IS	715.20>670.00	----	131129	----	----	----	----	----	----	
PFDoS	699.10>79.90	699.10>98.80	----	0	0.00	61.13	0	0.00	62.47	
D7-MeFOSE_IS	623.20>58.90	----	356021	----	----	----	----	----	----	
D7-MeFOSE	623.20>58.90	----	356021	----	----	----	----	----	----	
MeFOSE	616.10>59.00	----	----	----	----	----	----	----	----	
13C2-PFHxDA_IS	815.00>770.05	----	335288	----	----	----	----	----	----	
13C2-PFHxDA	815.00>770.05	----	335288	----	----	----	----	----	----	
PFHxDA	813.00>768.95	813.00>218.95	6365	719	11.29	11.66	719	11.29	10.99	
D3-MeFOSA	515.00>219.00	----	37596	----	----	----	----	----	----	
D3-MeFOSA_IS	515.00>219.00	----	37596	----	----	----	----	----	----	
MeFOSA	511.90>219.00	511.90>169.00	----	0	0.00	160.44	0	0.00	161.92	
D9-EtFOSE_IS	639.20>58.90	----	446256	----	----	----	----	----	----	
D9-EtFOSE	639.20>58.90	----	440363	----	----	----	----	----	----	
EtFOSE	630.00>59.00	----	----	----	----	----	----	----	----	
D5-EtFOSAm	531.10>219.00	----	52736	----	----	----	----	----	----	
D5-EtFOSAm_IS	531.10>219.00	----	52736	----	----	----	----	----	----	
EtFOSAm	526.00>219.00	526.00>169.00	----	0	0.00	159.63	0	0.00	172.60	
PFODA	913.00>868.65	913.00>169.00	1809	703	38.89	36.03	703	38.89	35.02	



240201_005

Sample ID: 1633 CCB
Date Acquired: 2/1/2024 11:55:26 AM
Acquired by: System Administrator
Data File: 240201_005
Vial: 54 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.447	0.094	-0.002	456162	265743	13C3-PFBA_IS	11.5844	ng/mL	
13C4-PFBA_IS	Auto	1.447	0.094	----	456162	456162	----	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.449	0.094	----	265743	265743	----	5.0000	ng/mL	
PFBA	M	1.427	0.071	-0.020	1079	456162	13C4-PFBA_IS	0.0126	ng/mL	
PFMPA	M	2.470	0.089	-1.051	117	136697	13C5-PFPeA_IS	0.0030	ng/mL	
3_3 FTCA	ND(W/B)	----	----	----	----	136697	13C5-PFPeA_IS	----	ng/mL	
13C5-PFPeA	Auto	3.521	0.066	-1.480	136697	325634	13C2-PFHxA_IS	5.8382	ng/mL	
13C5-PFPeA_IS	Auto	3.521	0.066	----	136697	136697	----	5.0000	ng/mL	
PFPeA	Auto	3.520	0.062	-0.001	1773	136697	13C5-PFPeA_IS	0.0185	ng/mL	
PFMBA	M	4.036	0.052	0.515	75	136697	13C5-PFPeA_IS	0.0013	ng/mL	
13C2-4_2 FTS	Auto	4.682	0.049	-2.427	107540	133208	18O2-PFHxS_IS	4.2888	ng/mL	
13C2-4_2 FTS_IS	Auto	4.682	0.049	----	107540	107540	----	5.0000	ng/mL	
4_2 FTS	ND(W/B)	----	----	----	----	107540	13C2-4_2 FTS_IS	----	ng/mL	
13C3-PFBS_IS	Auto	4.667	0.064	----	149721	149721	----	2.5000	ng/mL	
PFBS	ND(W/B)	----	----	----	----	149721	13C3-PFBS_IS	----	ng/mL	
13C3-PFBS	Auto	4.667	0.064	-2.442	149721	133208	18O2-PFHxS_IS	3.0124	ng/mL	
NFDHA	M	4.851	0.046	-0.149	370	302743	13C5-PFHxA_IS	0.0059	ng/mL	
13C5-PFHxA	Auto	5.000	0.053	-0.001	302743	325634	13C2-PFHxA_IS	2.8802	ng/mL	
13C5-PFHxA_IS	Auto	5.000	0.053	----	302743	302743	----	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	5.001	0.054	----	325634	325634	----	2.5000	ng/mL	
PFHxA	M	5.001	0.052	0.001	1048	302743	13C5-PFHxA_IS	0.0033	ng/mL	
PFEESA	ND(W/B)	----	----	----	----	302743	13C5-PFHxA_IS	----	ng/mL	
13C3-HFPO-DA	Auto	5.474	0.049	0.473	392698	325634	13C2-PFHxA_IS	13.6079	ng/mL	
13C3-HFPO-DA_IS	Auto	5.474	0.049	----	392698	392698	----	10.0000	ng/mL	
HFPO-DA	ND(W/B)	----	----	----	----	392698	13C3-HFPO-DA_IS	----	ng/mL	
5_3 FTCA	M	5.906	0.038	0.906	405	302743	13C5-PFHxA_IS	0.0448	ng/mL	
PFPeS	ND(W/B)	----	----	----	----	142195	13C3-PFHxS_IS	----	ng/mL	
13C4-PFHpA	Auto	6.177	0.045	1.176	365801	325634	13C2-PFHxA_IS	2.7663	ng/mL	
13C4-PFHpA_IS	Auto	6.177	0.045	----	365801	365801	----	2.5000	ng/mL	
PFHpA	Auto	6.158	0.024	-0.019	5758	365801	13C4-PFHpA_IS	0.0289	ng/mL	
DONA	ND(W/B)	----	----	----	----	392698	13C3-HFPO-DA_IS	----	ng/mL	
13C2-6_2 FTS_IS	Auto	6.816	0.038	----	115181	115181	----	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.816	0.038	-0.293	115181	133208	18O2-PFHxS_IS	4.4126	ng/mL	
6_2 FTS	M	6.815	0.038	-0.001	413	115181	13C2-6_2 FTS_IS	0.0094	ng/mL	
13C4-PFOA_IS	Auto	7.135	0.044	----	29437	29437	----	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.134	0.043	----	386547	386547	----	2.5000	ng/mL	
13C8-PFOA	Auto	7.134	0.043	-0.001	386547	29437	13C4-PFOA_IS	2.7534	ng/mL	
PFOA	M	7.132	0.039	-0.002	6447	386547	13C8-PFOA_IS	0.0290	ng/mL	
13C3-PFHxS	Auto	7.109	0.047	0.000	142195	133208	18O2-PFHxS_IS	3.0456	ng/mL	
13C3-PFHxS_IS	Auto	7.109	0.047	----	142195	142195	----	2.5000	ng/mL	
PFHxS	M	7.107	0.045	-0.002	754	142195	13C3-PFHxS_IS	0.0121	ng/mL	
18O2-PFHxS_IS	Auto	7.109	0.047	----	133208	133208	----	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.979	0.038	----	190090	190090	----	1.2500	ng/mL	
13C9-PFNA	Auto	7.979	0.038	-0.001	190090	168998	13C5-PFNA_IS	1.5195	ng/mL	
13C5-PFNA_IS	Auto	7.980	0.038	----	168998	168998	----	1.2500	ng/mL	
PFNA	M	7.978	0.035	-0.001	5945	190090	13C9-PFNA_IS	0.0283	ng/mL	
PFHpS	ND(W/B)	----	----	----	----	63411	13C8-PFOS_IS	----	ng/mL	
7_3 FTCA	M	7.932	0.004	2.932	359	302743	13C5-PFHxA_IS	0.0226	ng/mL	
13C2-8_2-FTS	Auto	8.434	0.035	1.325	98135	133208	18O2-PFHxS_IS	4.4281	ng/mL	
13C2-8_2-FTS_IS	Auto	8.434	0.035	----	98135	98135	----	5.0000	ng/mL	
8_2 FTS	ND(W/B)	----	----	----	----	98135	13C2-8_2-FTS_IS	----	ng/mL	
13C6-PFDA_IS	Auto	8.744	0.037	----	138808	138808	----	1.2500	ng/mL	
13C6-PFDA	Auto	8.744	0.037	-0.001	138808	117454	13C2-PFDA_IS	1.4747	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_005 (continued)

(Table continued from previous page)

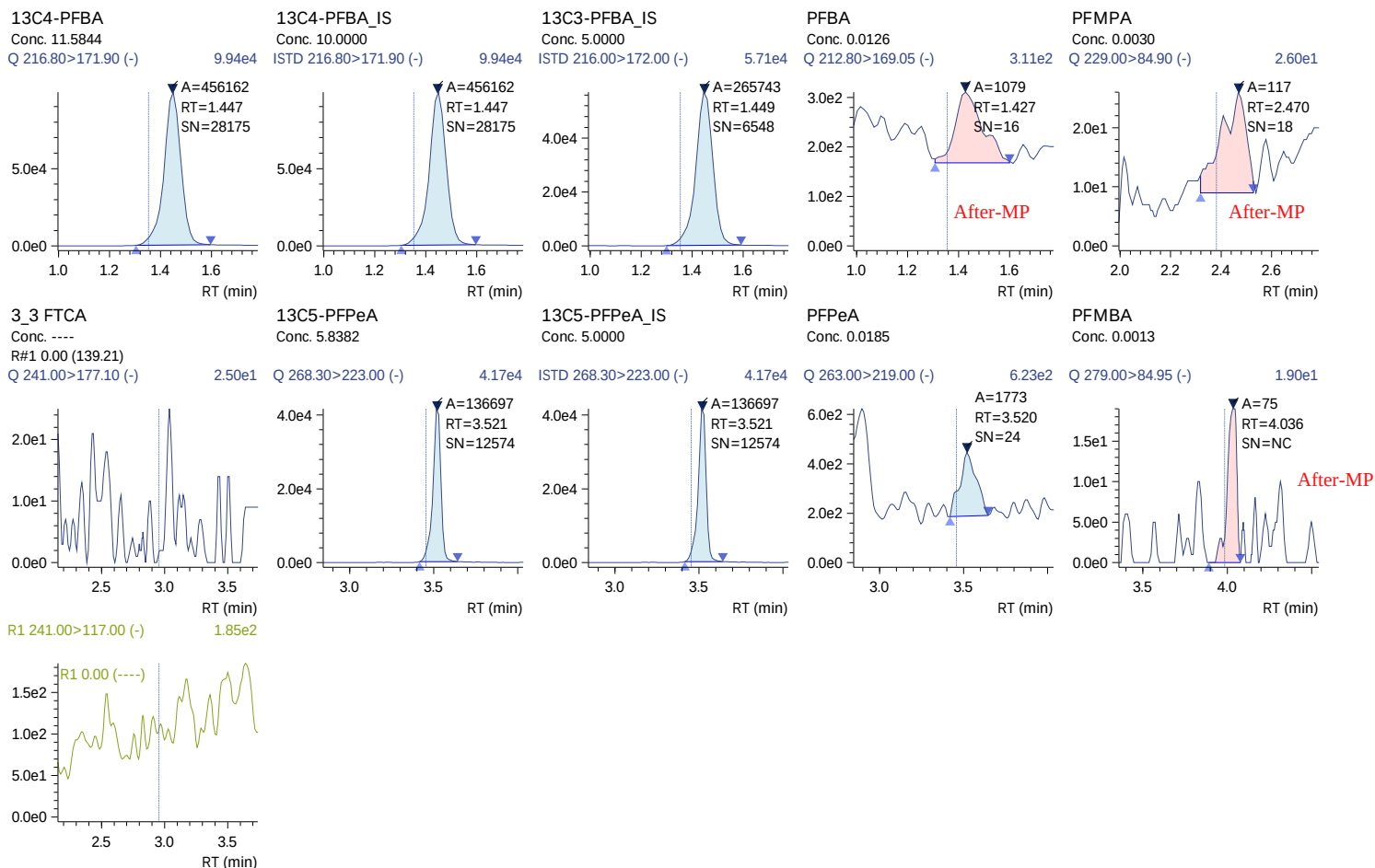
Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C2-PFDA_IS	Auto	8.745	0.037	----	117454	117454	----	1.2500	ng/mL	
PFDA	M	8.743	0.034	-0.001	3822	138808	13C6-PFDA_IS	0.0326	ng/mL	
D3-NMeFOSAA_IS	Auto	8.877	0.034	----	291366	291366	----	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.877	0.034	0.035	291366	178209	13C4-PFOS_IS	4.0156	ng/mL	
13C8-PFOS_IS	Auto	8.841	0.041	----	63411	63411	----	2.5000	ng/mL	
13C8-PFOS	Auto	8.841	0.041	-0.001	63411	178209	13C4-PFOS_IS	2.8274	ng/mL	
13C4-PFOS_IS	Auto	8.842	0.042	----	178209	178209	----	2.5000	ng/mL	
PFOS	ND(W/B)	----	----	----	----	63411	13C8-PFOS_IS	----	ng/mL	
NMeFOSAA	ND(W/B)	----	----	----	----	291366	D3-NMeFOSAA_IS	----	ng/mL	
D5-NetFOSAA_IS	Auto	9.207	0.035	----	256373	256373	----	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.207	0.035	0.365	256373	178209	13C4-PFOS_IS	4.4834	ng/mL	
NetFOSAA	ND(W/B)	----	----	----	----	256373	D5-NetFOSAA_IS	----	ng/mL	
9-CI-PF3ONS	ND(W/B)	----	----	----	----	392698	13C3-HFPO-DA_IS	----	ng/mL	
PFUnDA	Auto	9.469	0.036	0.002	5056	177250	13C7-PFUnDA_IS	0.0197	ng/mL	
13C7-PFUnDA_IS	Auto	9.467	0.037	----	177250	177250	----	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.467	0.037	0.722	177250	117454	13C2-PFDA_IS	1.5155	ng/mL	
PFNS	ND(W/B)	----	----	----	----	63411	13C8-PFOS_IS	----	ng/mL	
10_2_FTS	ND(W/B)	----	----	----	----	98135	13C2-8_2-FTS_IS	----	ng/mL	
13C2-PFDOA_IS	Auto	10.155	0.037	----	201222	201222	----	1.2500	ng/mL	
13C2-PFDOA	Auto	10.155	0.037	1.410	201222	117454	13C2-PFDA_IS	1.4413	ng/mL	
PFDOA	Auto	10.156	0.037	0.001	3873	201222	13C2-PFDOA_IS	0.0056	ng/mL	
PFDS	ND(W/B)	----	----	----	----	63411	13C8-PFOS_IS	----	ng/mL	
PFTDA	Auto	10.815	0.040	-0.631	5254	131129	13C2-PFTDA_IS	0.0191	ng/mL	
11-CI-PF3OUdS	ND(W/B)	----	----	----	----	392698	13C3-HFPO-DA_IS	----	ng/mL	
PFOSAm	M	11.147	0.005	-0.003	189	138632	13C8-PFOSAm_IS	0.0039	ng/mL	
13C8-PFOSAm	Auto	11.150	0.008	2.308	138632	178209	13C4-PFOS_IS	2.4489	ng/mL	
13C8-PFOSAm_IS	Auto	11.150	0.008	----	138632	138632	----	2.5000	ng/mL	
PFTDA	Auto	11.444	0.036	-0.002	3686	131129	13C2-PFTDA_IS	0.0179	ng/mL	
13C2-PFTDA	Auto	11.446	0.040	2.701	131129	117454	13C2-PFDA_IS	1.3307	ng/mL	
13C2-PFTDA_IS	Auto	11.446	0.040	----	131129	131129	----	1.2500	ng/mL	
PFDoS	ND(W/B)	----	----	----	----	63411	13C8-PFOS_IS	----	ng/mL	
D7-MeFOSE_IS	Auto	13.382	0.002	----	356021	356021	----	25.0000	ng/mL	
D7-MeFOSE	Auto	13.382	0.002	4.540	356021	178209	13C4-PFOS_IS	24.4982	ng/mL	
MeFOSE	ND(W/B)	----	----	----	----	356021	D7-MeFOSE_IS	----	ng/mL	
13C2-PFHxDA_IS	Auto	12.659	0.039	----	335288	335288	----	2.5000	ng/mL	
13C2-PFHxDA	Auto	12.659	0.039	3.914	335288	117454	13C2-PFDA_IS	2.5425	ng/mL	
PFHxDA	Auto	12.662	0.041	0.003	6365	335288	13C2-PFHxDA_IS	0.0351	ng/mL	
D3-MeFOSA	Auto	13.687	0.002	4.845	37596	178209	13C4-PFOS_IS	2.5438	ng/mL	
D3-MeFOSA_IS	Auto	13.687	0.002	----	37596	37596	----	2.5000	ng/mL	
MeFOSA	ND(W/B)	----	----	----	----	37596	D3-MeFOSA_IS	----	ng/mL	
D9-EtFOSE_IS	Auto	14.009	0.001	----	446256	446256	----	25.0000	ng/mL	
D9-EtFOSE	Auto	14.009	0.001	5.167	440363	178209	13C4-PFOS_IS	24.7622	ng/mL	
EtFOSE	ND(W/B)	----	----	----	----	446256	D9-EtFOSE_IS	----	ng/mL	
D5-EtFOSAm	Auto	14.363	0.002	5.521	52736	178209	13C4-PFOS_IS	2.5807	ng/mL	
D5-EtFOSAm_IS	Auto	14.363	0.002	----	52736	52736	----	2.5000	ng/mL	
EtFOSAm	ND(W/B)	----	----	----	----	52736	D5-EtFOSAm_IS	----	ng/mL	
PFODA	M	13.795	0.039	1.136	1809	335288	13C2-PFHxDA_IS	0.0497	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_005 (continued)





240201_005 (continued)

13C2-4_2_FTS
 Conc. 4.2888

13C2-4_2_FTS_IS
 Conc. 5.0000

4_2_FTS
 Conc. ----
 R#1 0.00 (32.10)
 R#2 0.00 (32.79)

13C3-PFBS_IS
 Conc. 2.5000

PFBS
 Conc. ----
 R#1 0.00 (44.81)
 R#2 0.00 (46.72)

Q 329.10>80.90 (-)

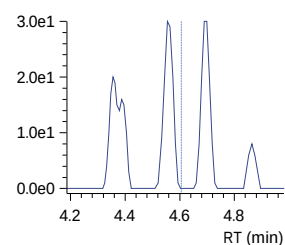
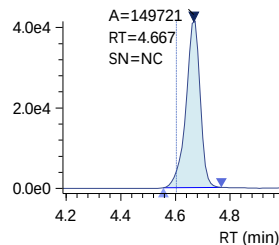
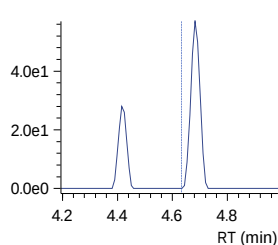
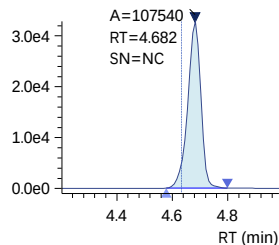
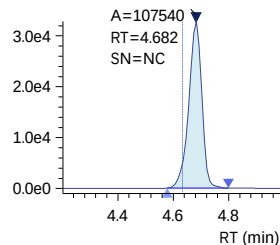
3.29e4 ISTD 329.10>80.90 (-)

3.29e4 Q 327.10>307.00 (-)

5.70e1 ISTD 302.10>79.90 (-)

4.15e4 Q 298.70>79.90 (-)

3.00e1

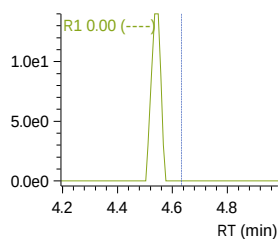


R1 327.10>80.90 (-)

1.40e1

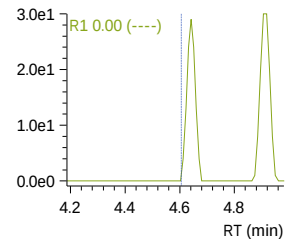
R1 298.70>98.80 (-)

3.00e1



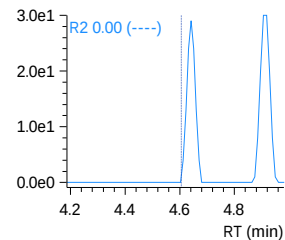
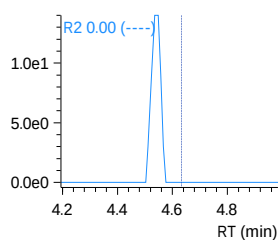
R2 327.10>80.90 (-)

1.40e1



R2 298.70>98.80 (-)

3.00e1





240201_005 (continued)

13C3-PFBS
Conc. 3.0124

NFDHA
Conc. 0.0059
R#1 43.12 (35.54)
R#2 43.12 (37.91)

13C5-PFHxA
Conc. 2.8802

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

Q 302.10>79.90 (-)

4.15e4

Q 295.00>201.00 (-)

1.03e2

Q 318.00>273.00 (-)

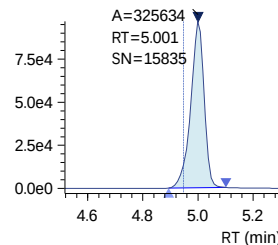
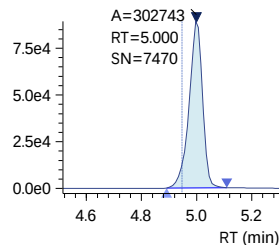
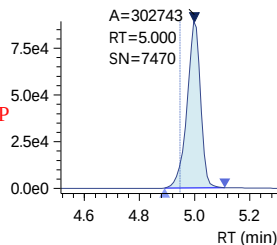
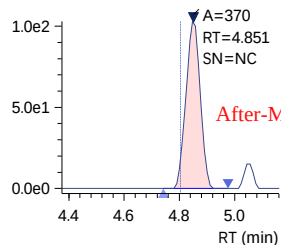
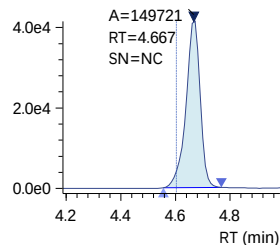
8.94e4

ISTD 318.00>273.00 (-)

8.94e4

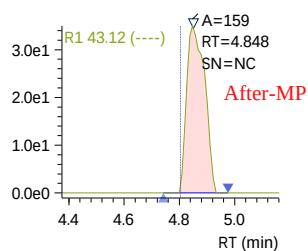
ISTD 315.10>270.00 (-)

9.68e4



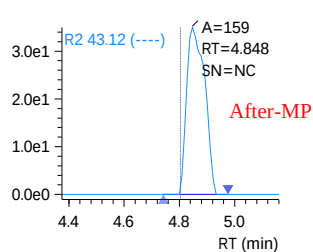
R1 295.00>84.90 (-)

3.50e1



R2 295.00>84.90 (-)

3.50e1





240201_005 (continued)

PFHxA
Conc. 0.0033

PFEESA
Conc. ----
R#1 0.00 (5.22)
R#2 0.00 (5.35)

13C3-HFPO-DA
Conc. 13.6079

13C3-HFPO-DA_IS
Conc. 10.0000

HFPO-DA
Conc. ----
R#1 0.00 (59.79)
R#2 0.00 (58.32)

Q 313.00>269.00 (-)

1.10e3

Q 314.80>135.00 (-)

4.40e1

Q 286.90>168.90 (-)

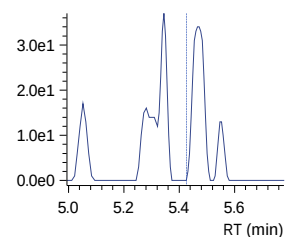
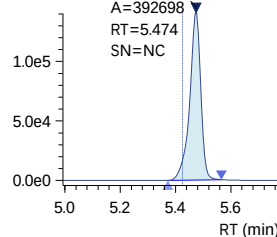
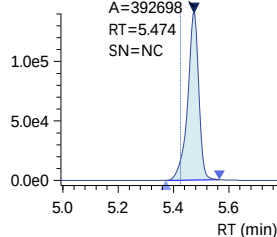
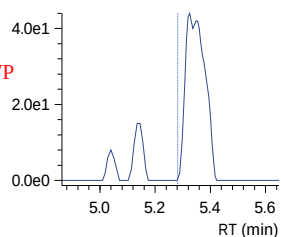
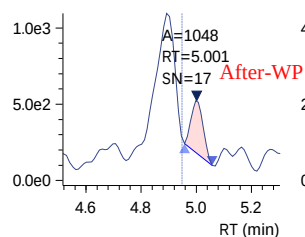
1.40e5

ISTD 286.90>168.90 (-)

1.40e5

Q 284.90>168.90 (-)

3.70e1

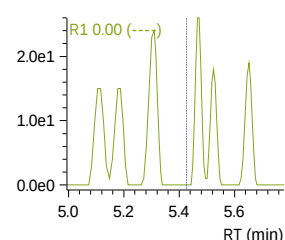
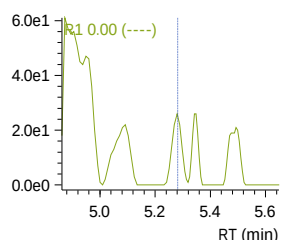


R1 314.80>82.90 (-)

6.10e1

R1 284.90>184.90 (-)

2.60e1

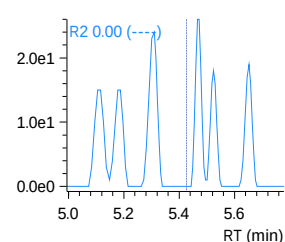
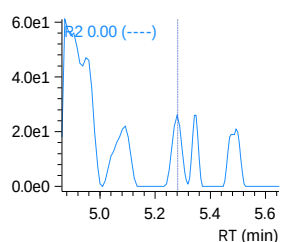


R2 314.80>82.90 (-)

6.10e1

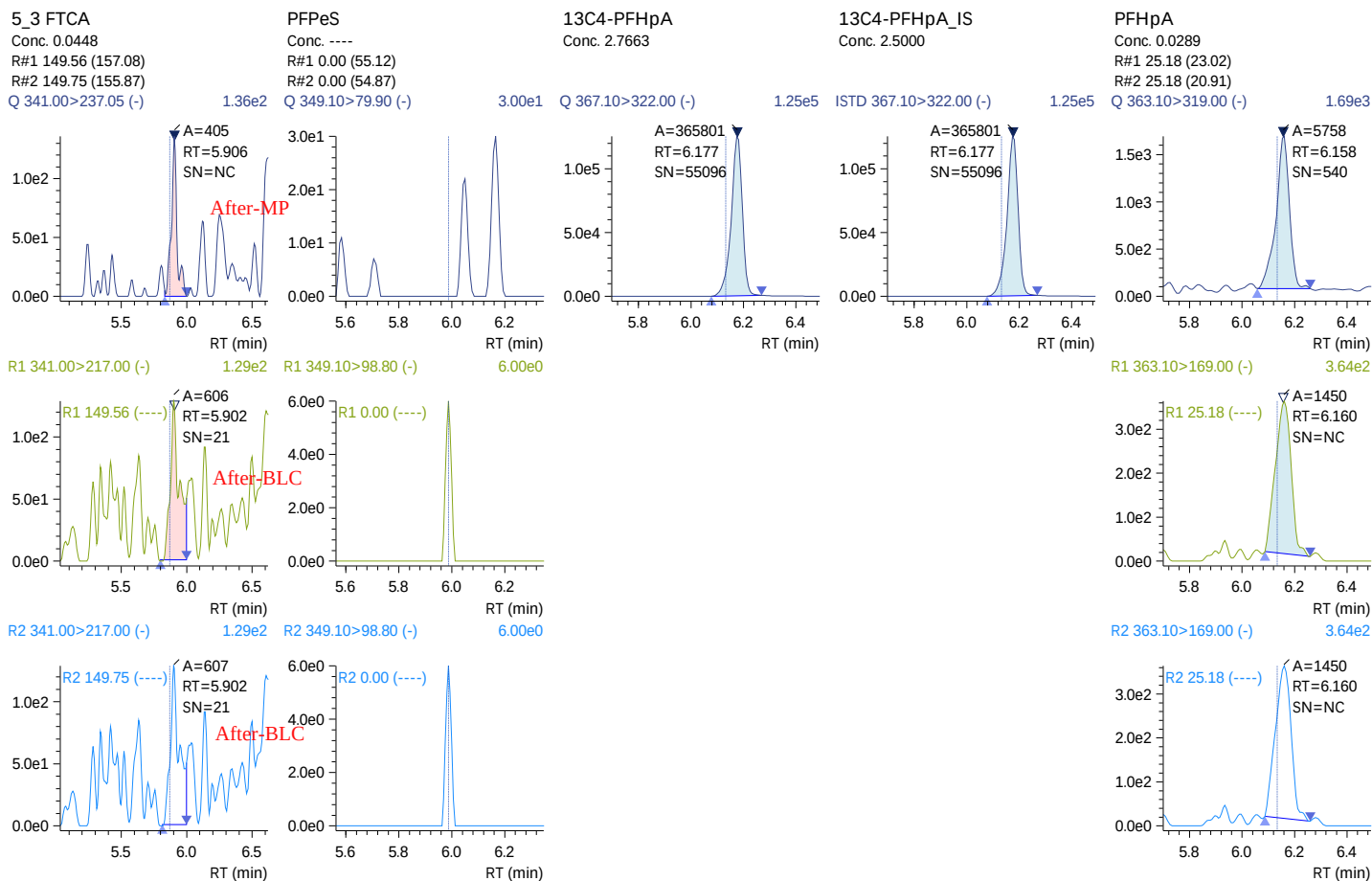
R2 284.90>184.90 (-)

2.60e1





240201_005 (continued)

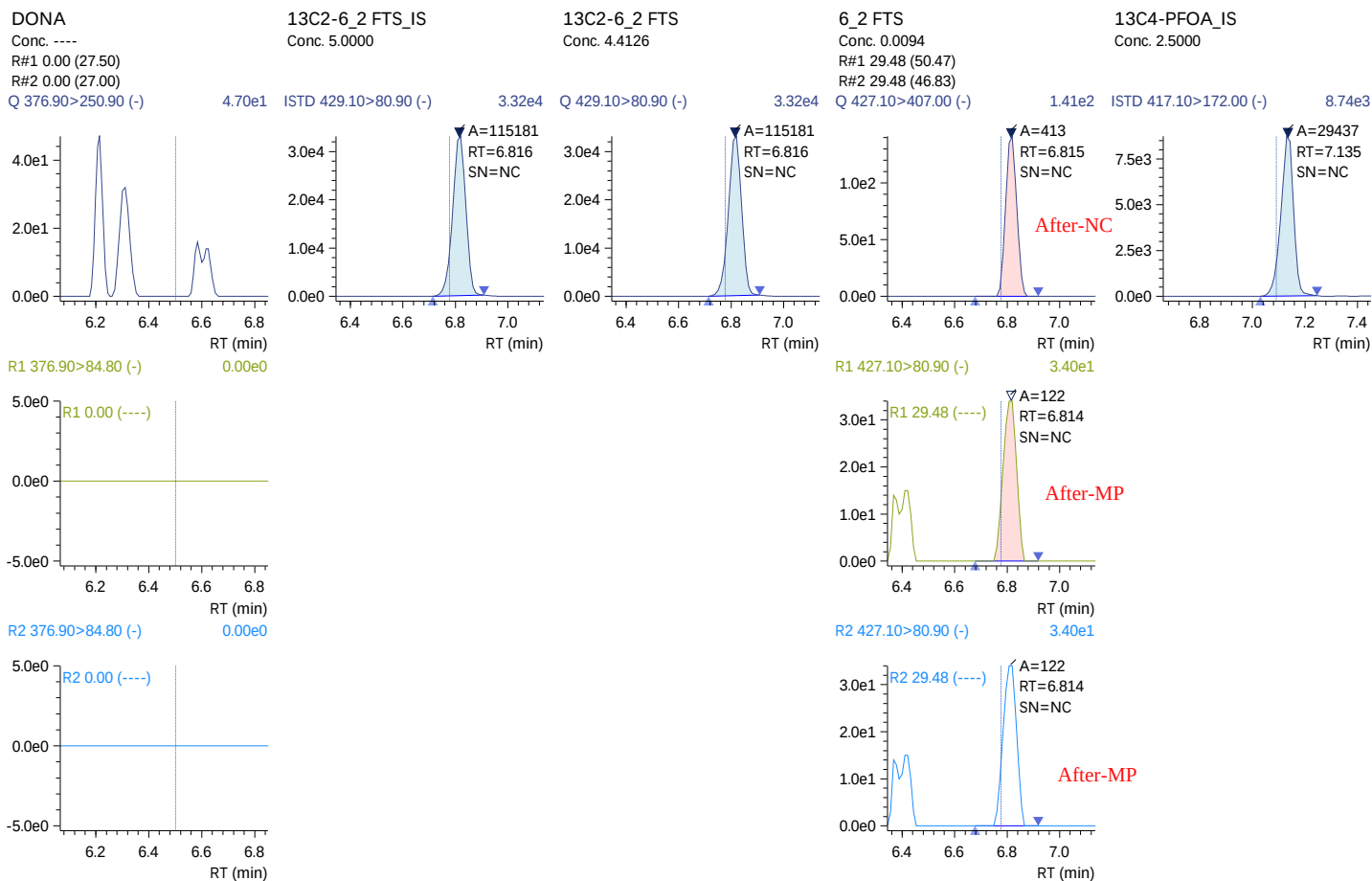


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_005 (continued)



J:\LCMS08\Data\240201_1633_RA\240201_1633_RA.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_005 (continued)

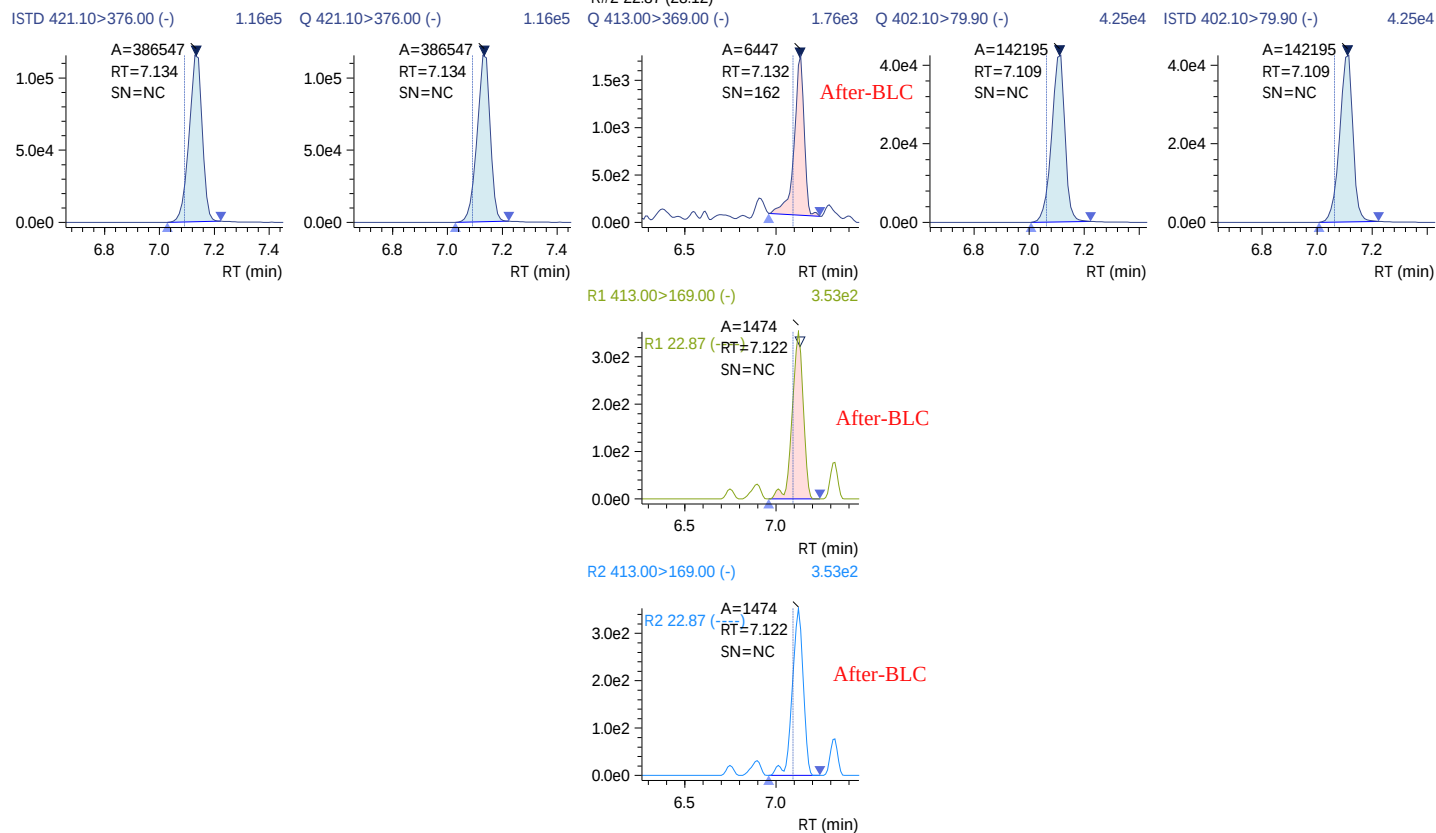
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.7534

PFOA
Conc. 0.0290
R#1 22.87 (28.77)
R#2 22.87 (28.12)

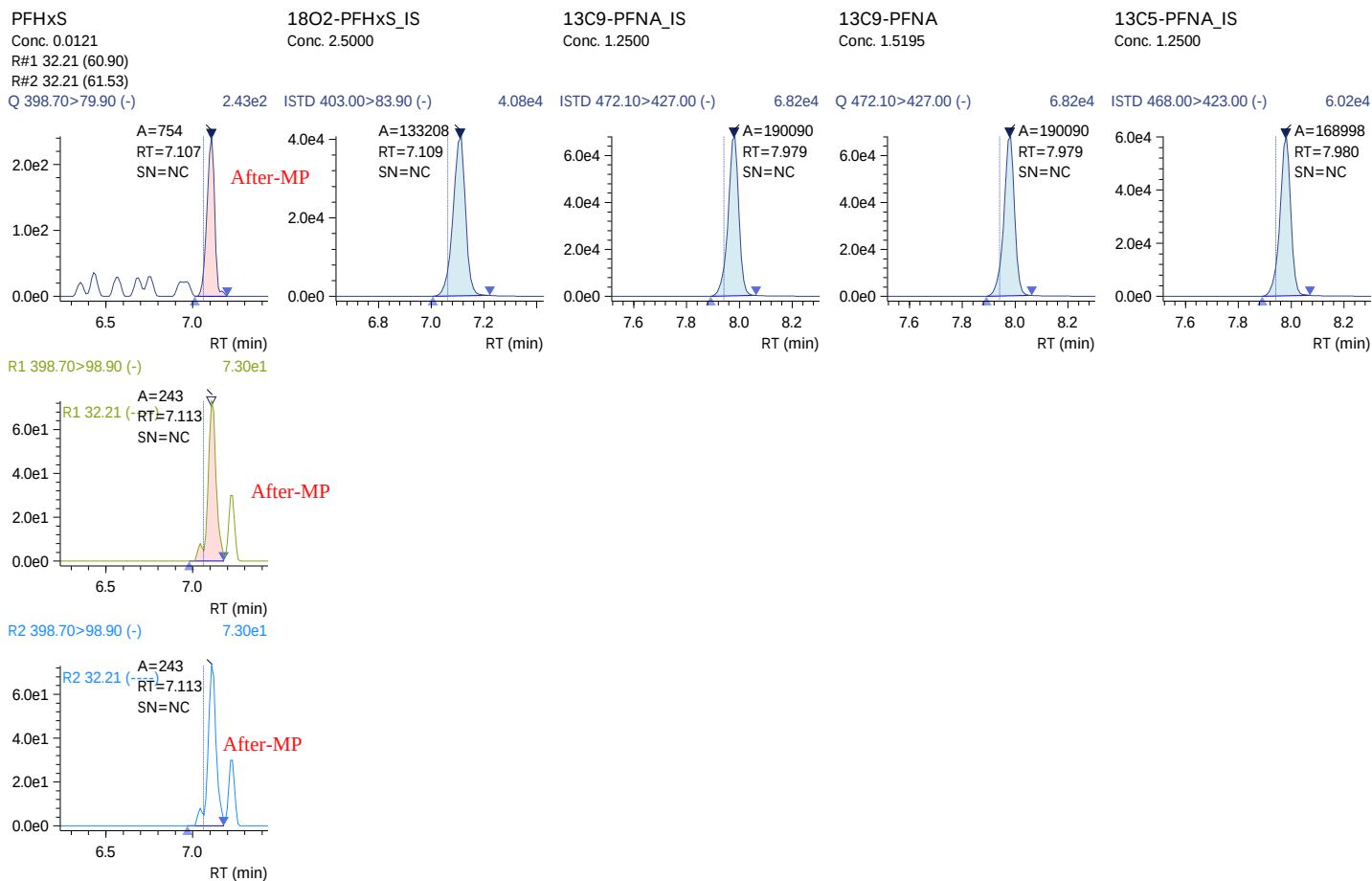
13C3-PFHxS
Conc. 3.0456

13C3-PFHxS_IS
Conc. 2.5000



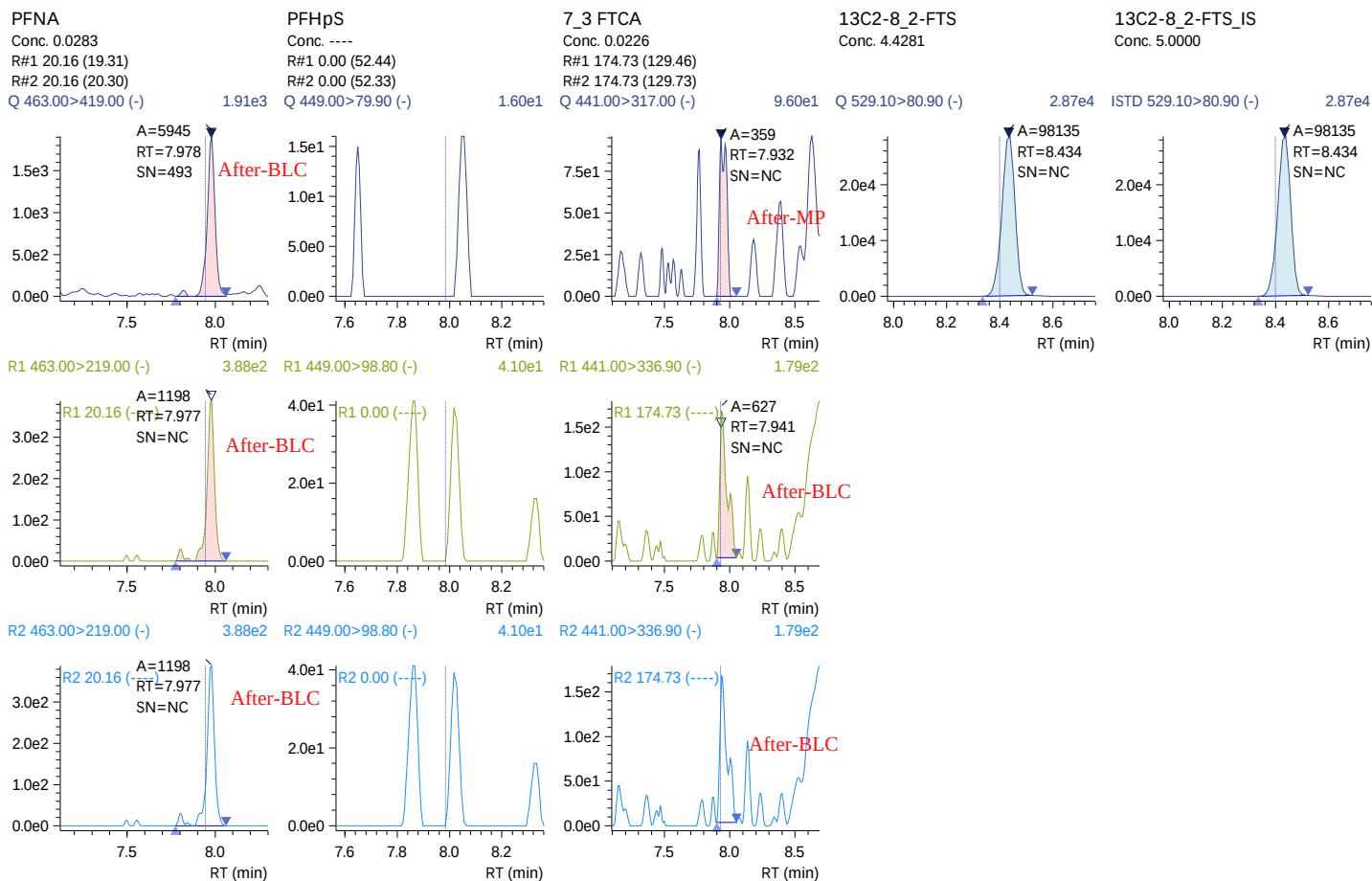


240201_005 (continued)





240201_005 (continued)

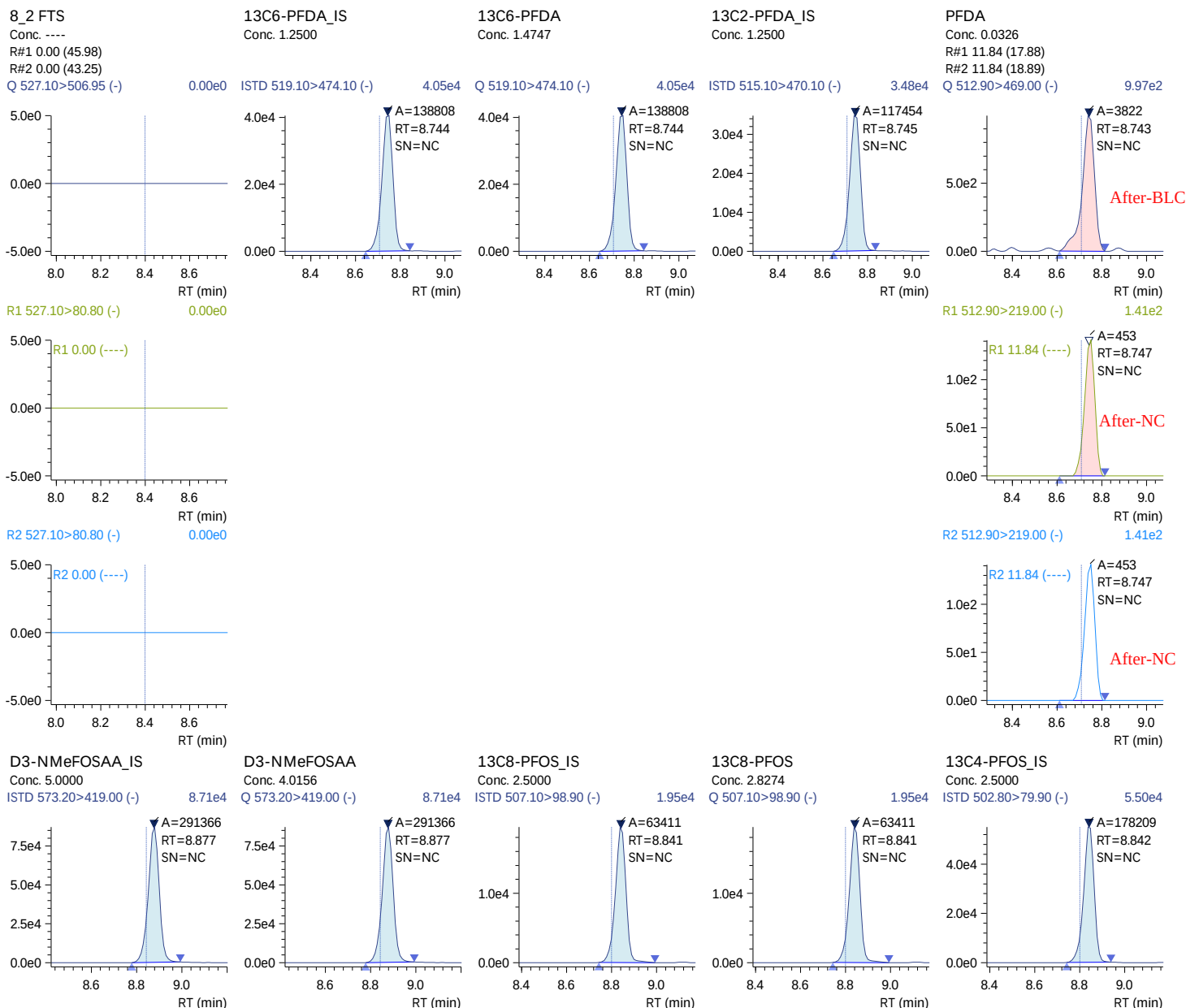


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.

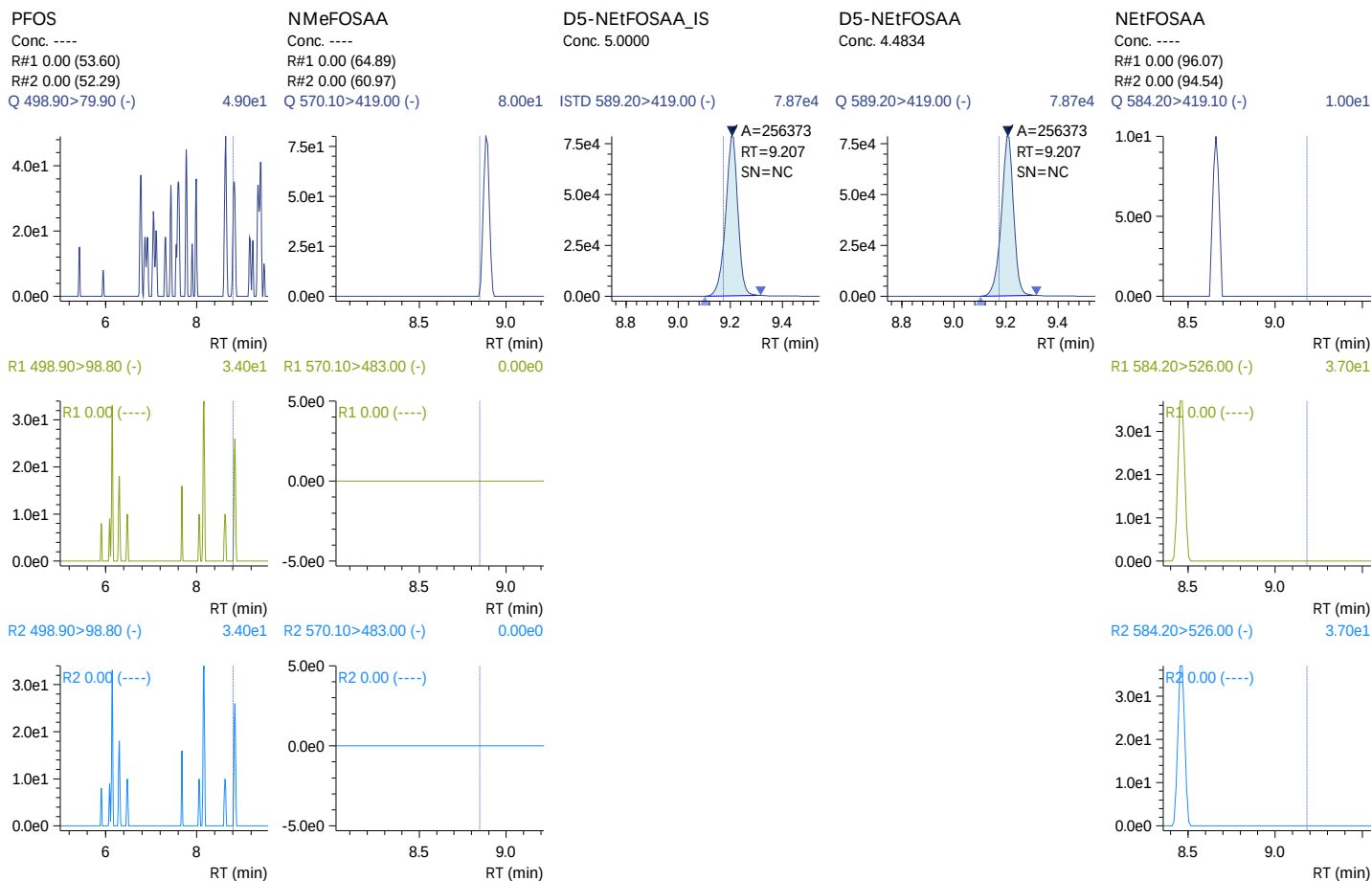


240201_005 (continued)





240201_005 (continued)



J:\LCMS08\Data\240201_1633_RA\240201_1633_RA.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_005 (continued)

9-CI-PF3ONS

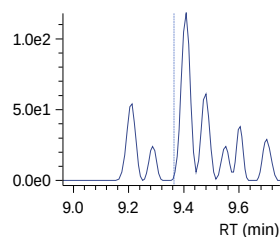
Conc. ----

R#1 0.00 (30.95)

R#2 0.00 (30.61)

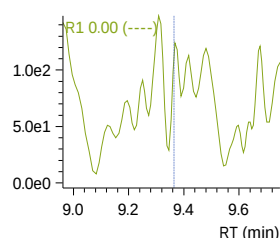
Q 530.80>351.00 (-)

1.18e2



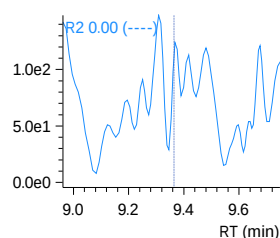
R1 532.80>353.00 (-)

1.48e2



R2 532.80>353.00 (-)

1.48e2



PFUnDA

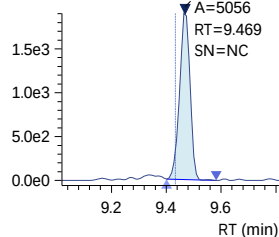
Conc. 0.0197

R#1 13.68 (11.01)

R#2 13.68 (12.02)

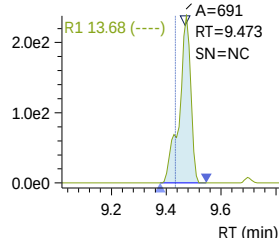
Q 563.10>519.00 (-)

1.91e3



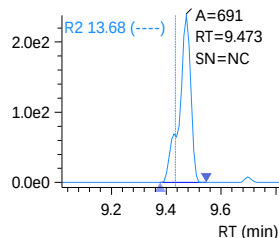
R1 563.10>269.10 (-)

2.38e2



R2 563.10>269.10 (-)

2.38e2

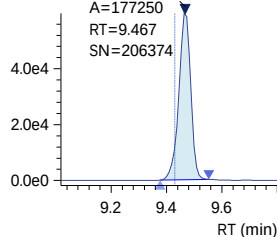


13C7-PFUnDA_IS

Conc. 1.2500

ISTD 570.00>525.10 (-)

5.99e4

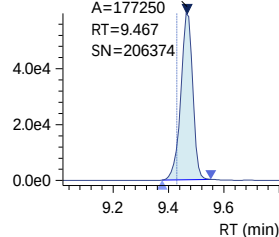


13C7-PFUnDA

Conc. 1.5155

Q 570.00>525.10 (-)

5.99e4



PFNS

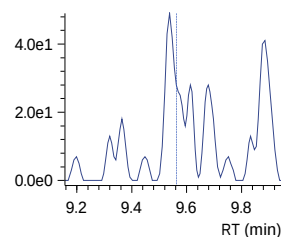
Conc. ----

R#1 0.00 (60.44)

R#2 0.00 (58.51)

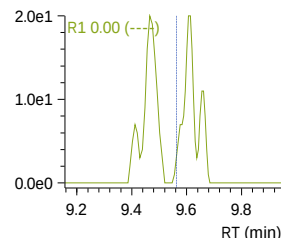
Q 548.80>79.90 (-)

4.90e1



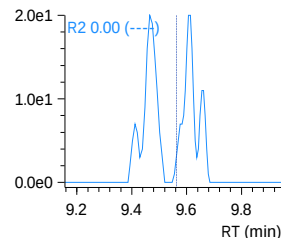
R1 548.80>98.80 (-)

2.00e1



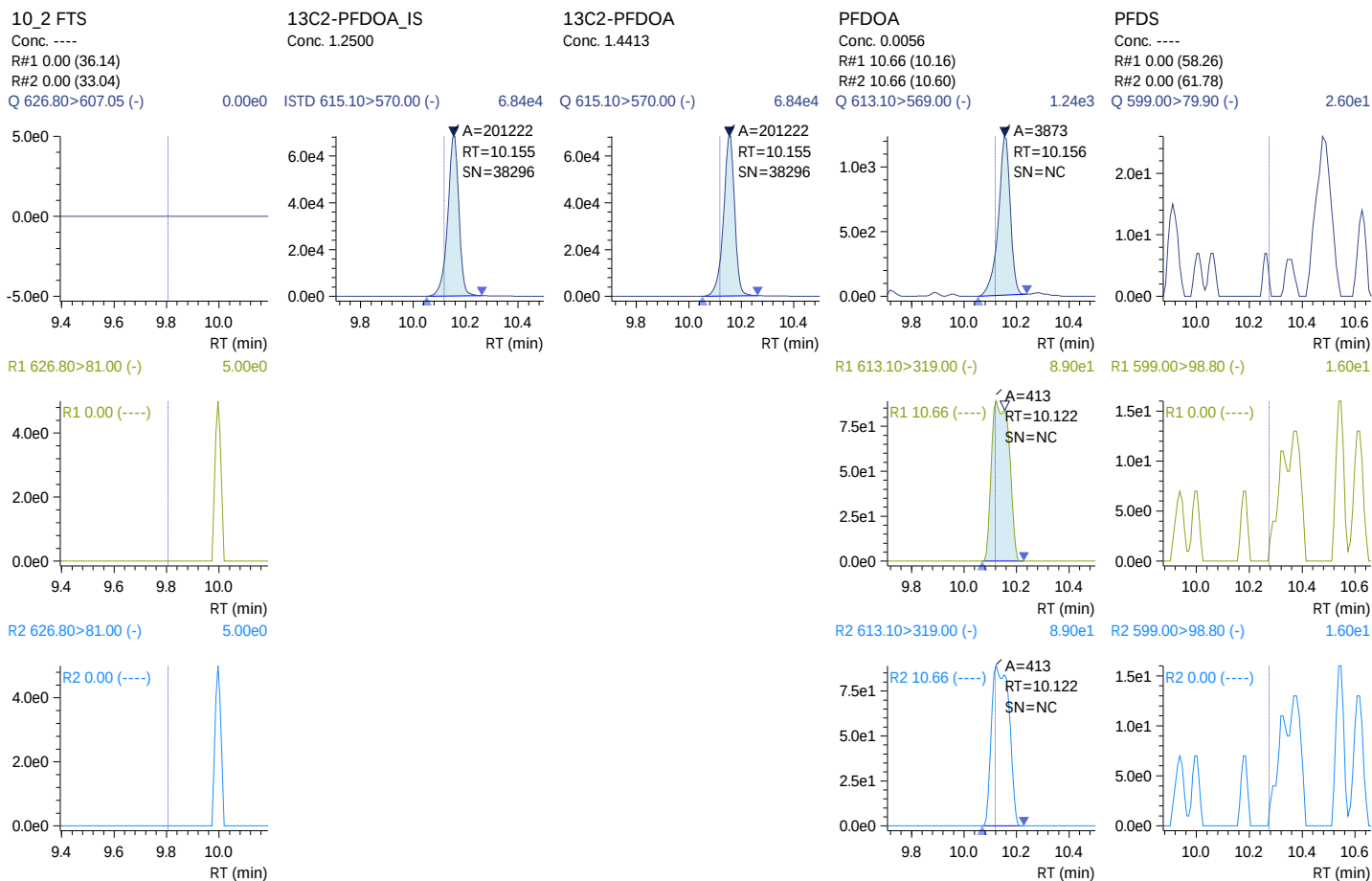
R2 548.80>98.80 (-)

2.00e1





240201_005 (continued)

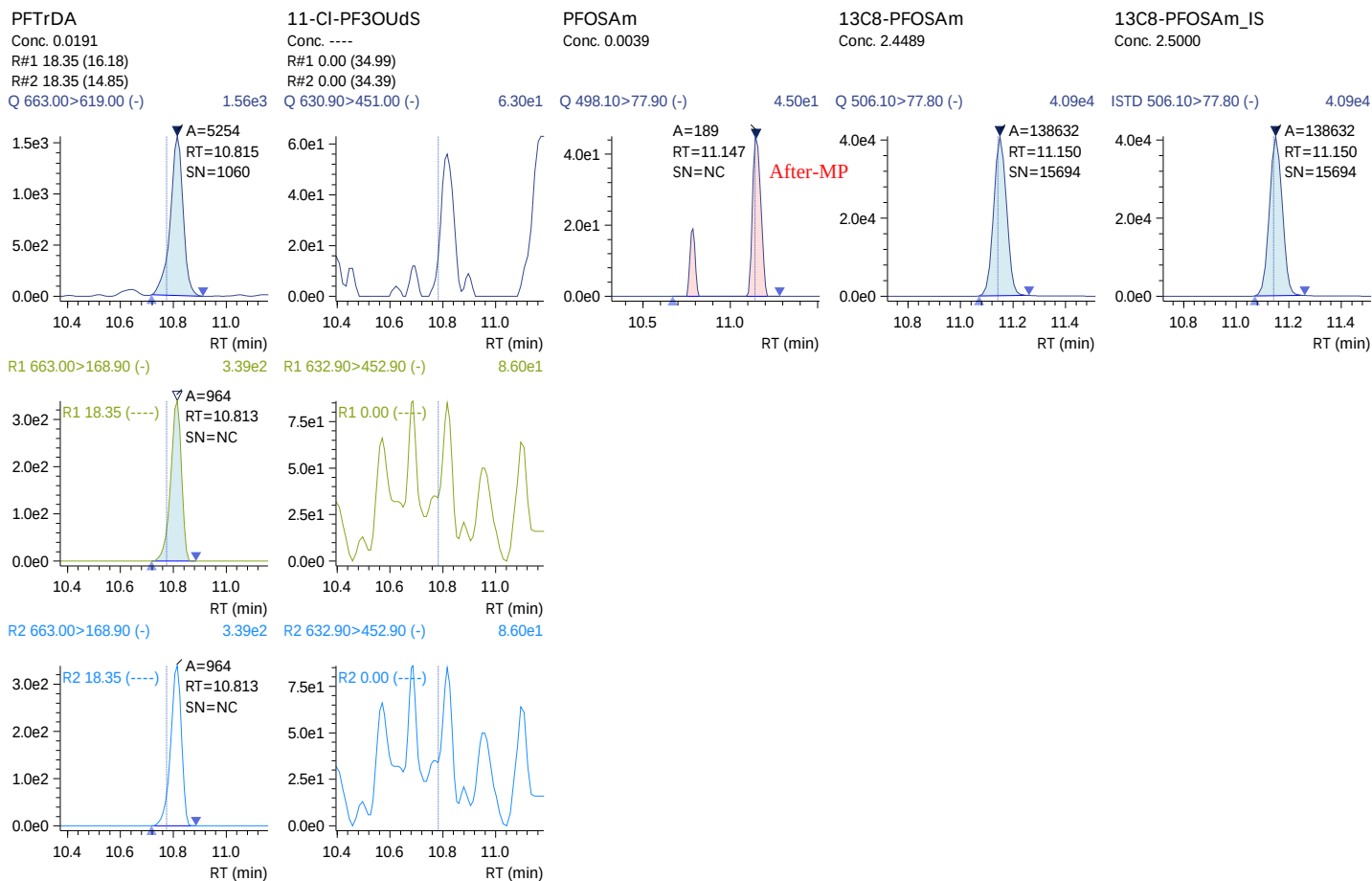


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_005 (continued)

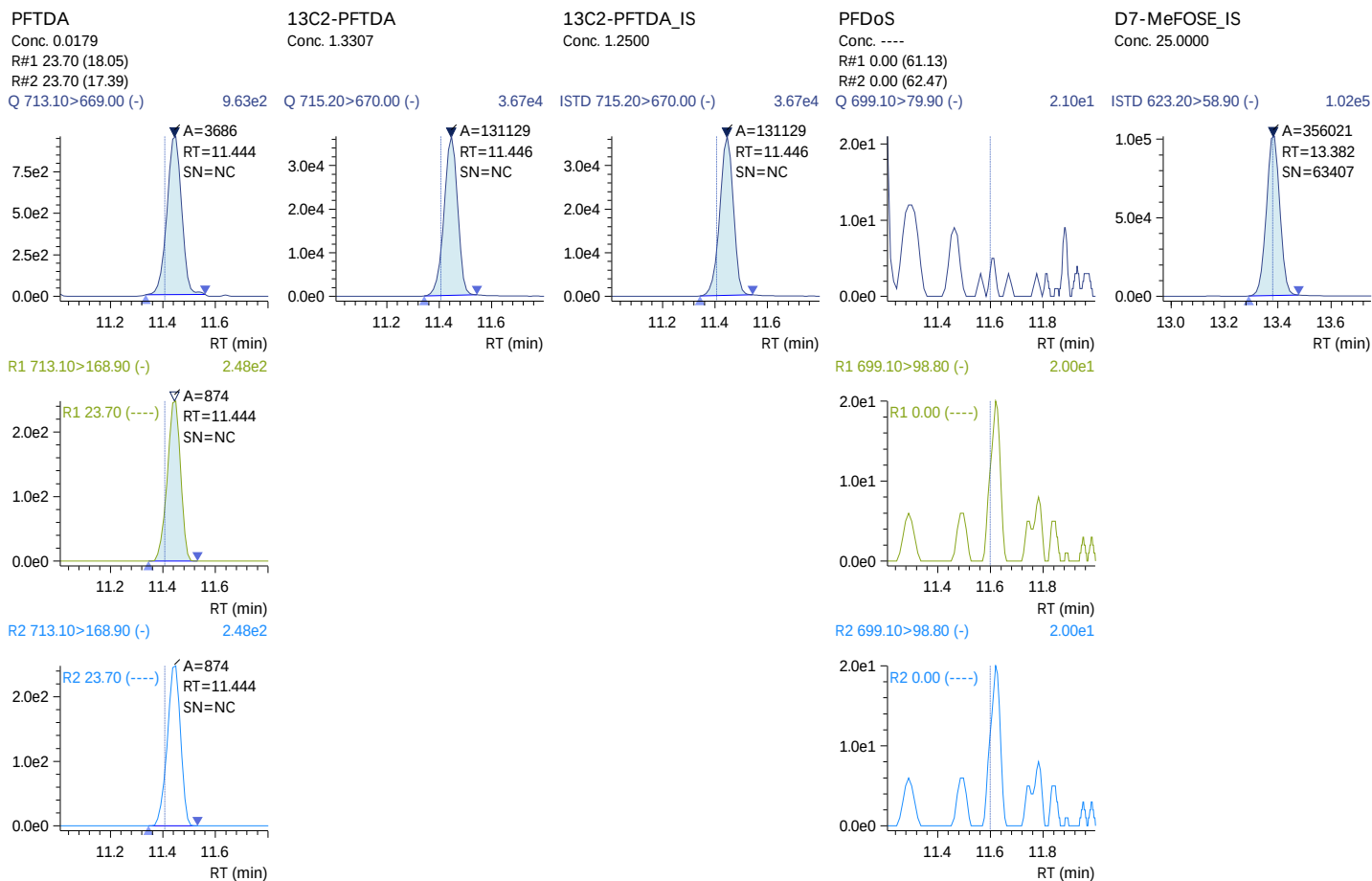


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_005 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_005 (continued)

D7-MeFOSE
Conc. 24.4982

MeFOSE
Conc. ----

13C2-PFHXA_IS
Conc. 2.5000

13C2-PFHXA
Conc. 2.5425

PFHXA
Conc. 0.0351
R#1 11.29 (11.66)
R#2 11.29 (10.99)

Q 623.20>58.90 (-)

1.02e5

Q 616.10>59.00 (-)

8.20e1

ISTD 815.00>770.05 (-)

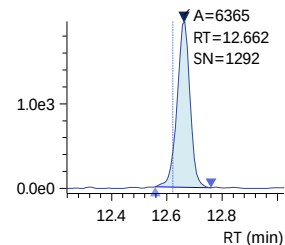
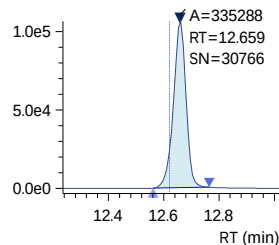
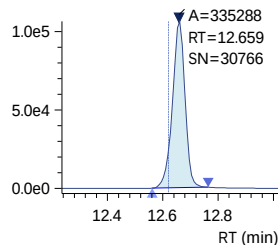
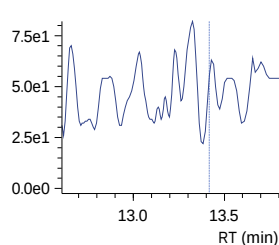
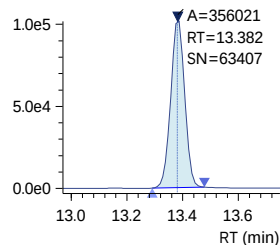
1.06e5

Q 815.00>770.05 (-)

1.06e5

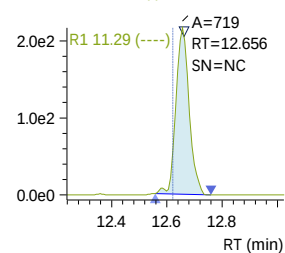
Q 813.00>768.95 (-)

1.97e3



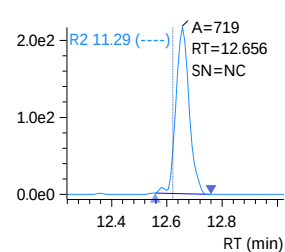
R1 813.00>218.95 (-)

2.17e2



R2 813.00>218.95 (-)

2.17e2





240201_005 (continued)

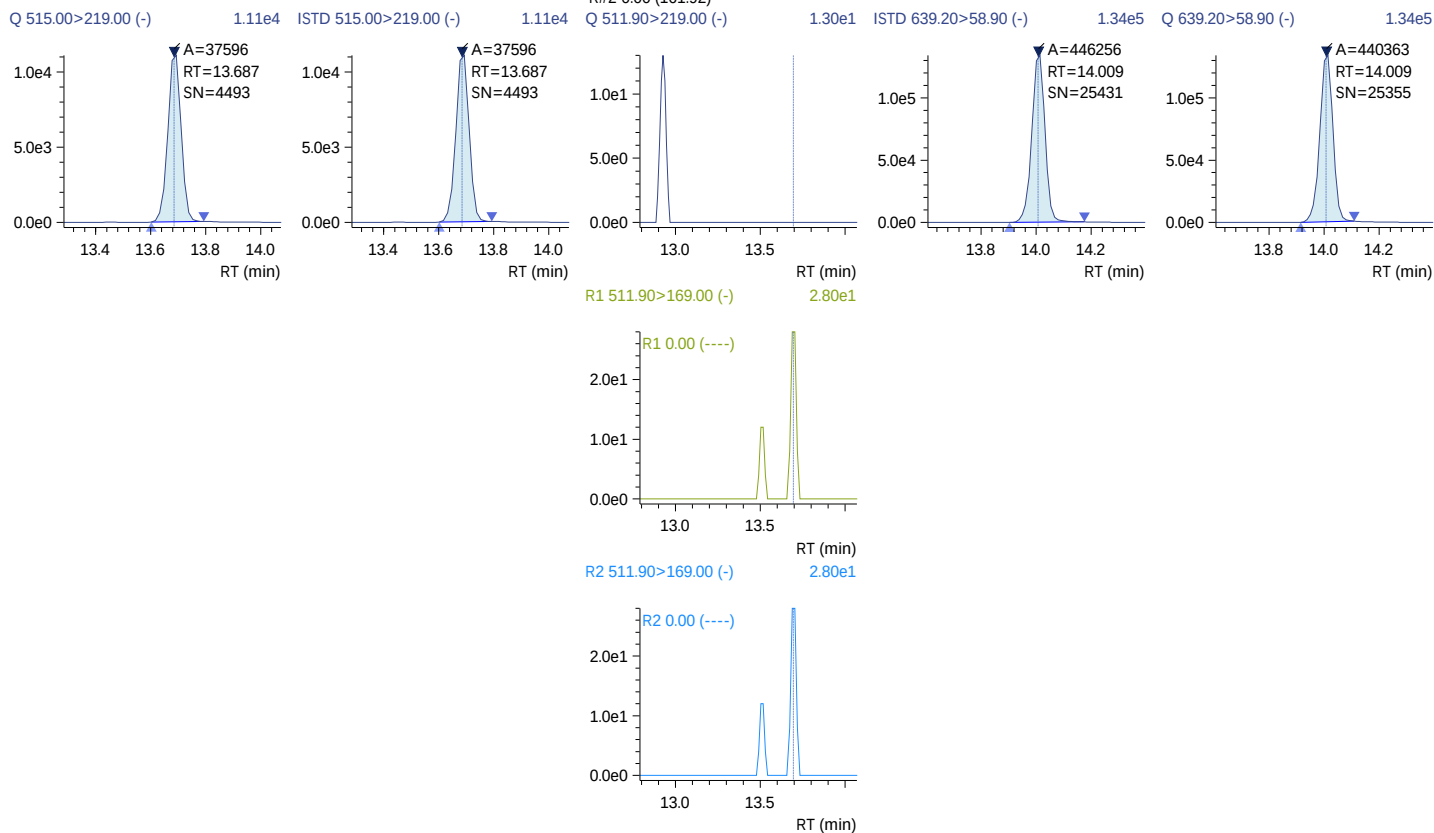
D3-MeFOSA
Conc. 2.5438

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. ----
R#1 0.00 (160.44)
R#2 0.00 (161.92)

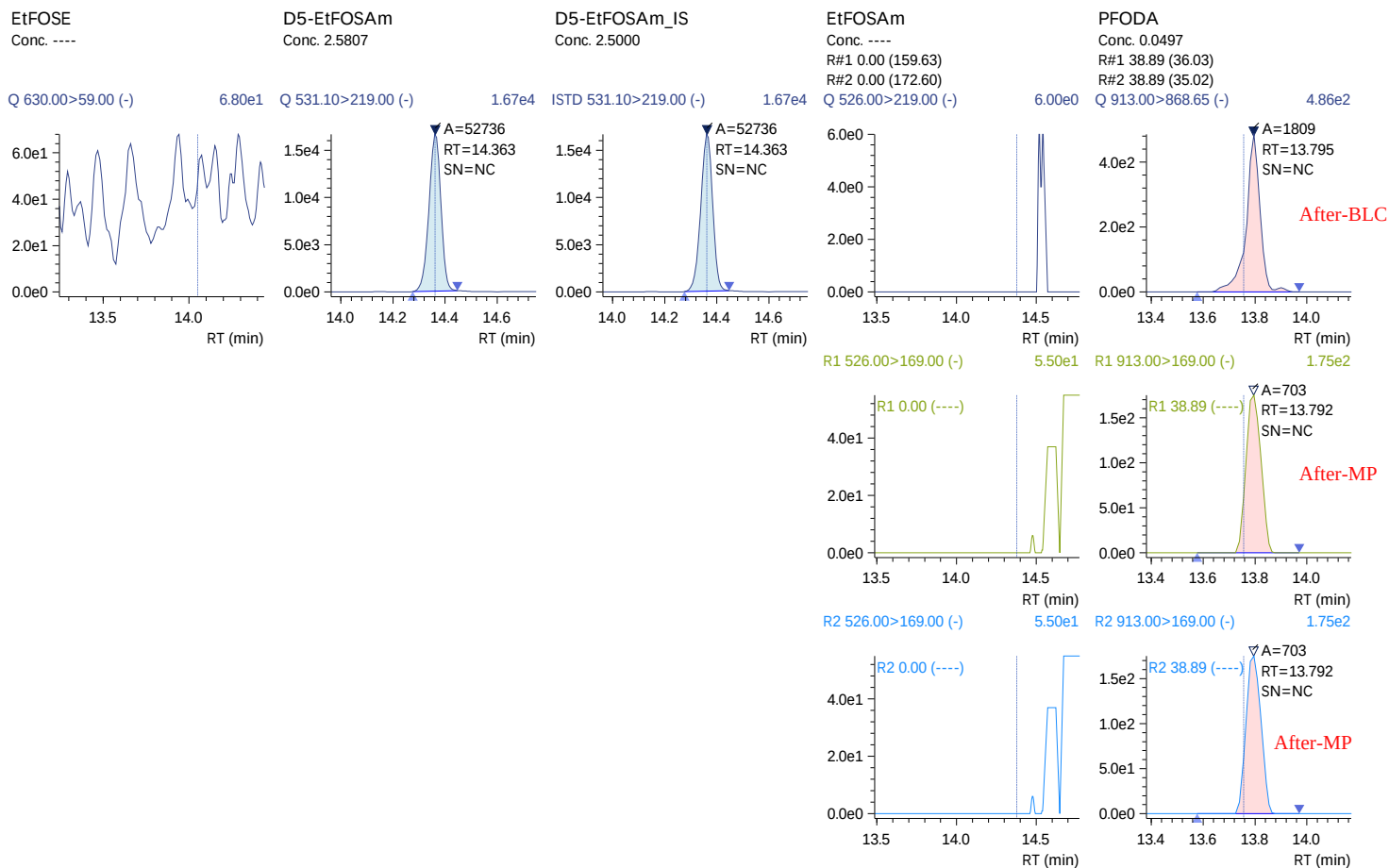
D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 24.7622





240201_005 (continued)



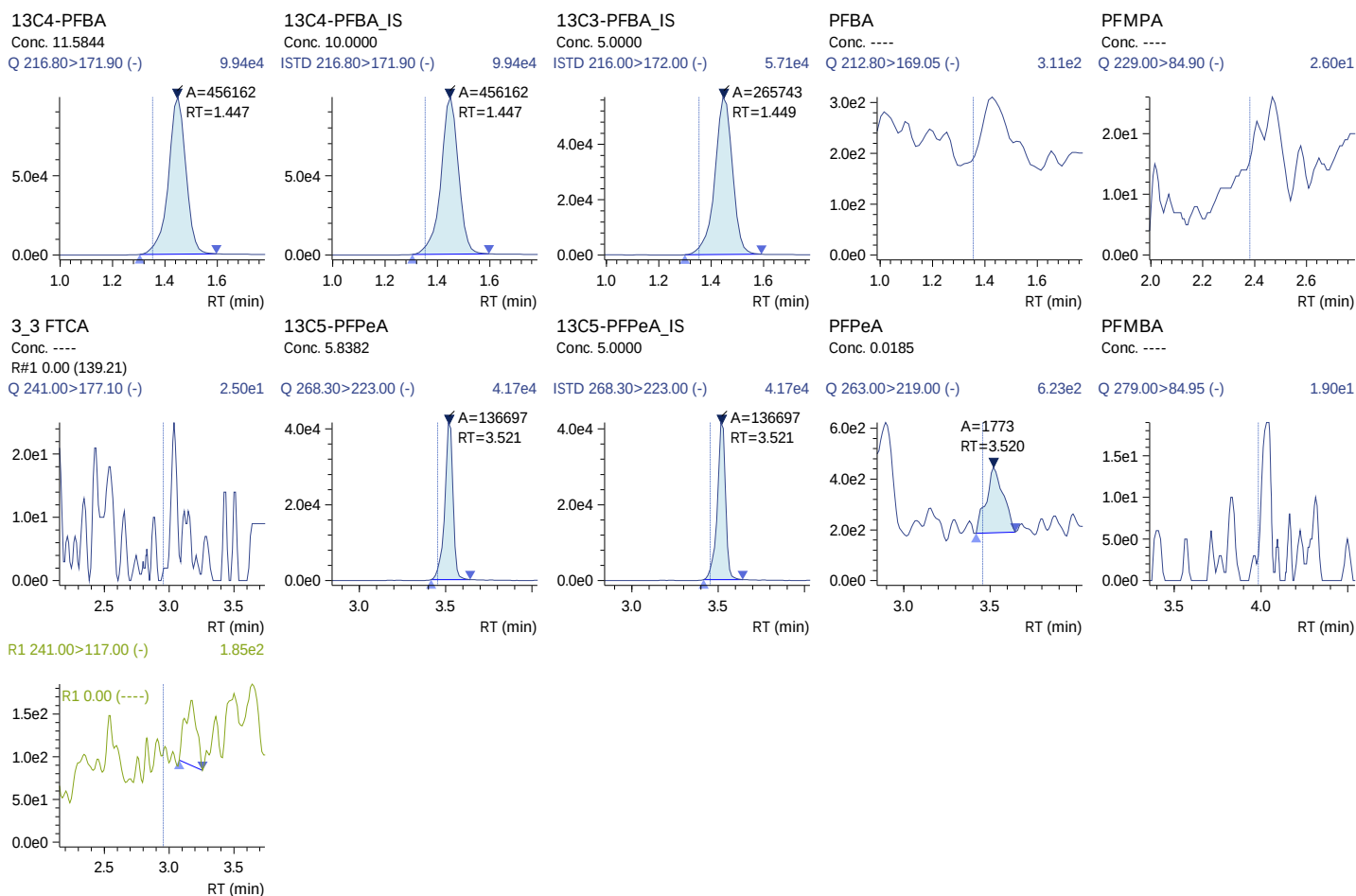
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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_005

Sample ID: 1633 CCB
 Date Acquired: 2/1/2024 11:55:26 AM
 Acquired by: System Administrator
 Data File: 240201_005
 Vial: 54 | Inj. Volume: 10.0000uL | Tray: 1





240201_005 (continued)

13C2-4_2 FTS
Conc. 4.2888

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. ----
R#1 0.00 (32.10)
R#2 0.00 (32.79)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. ----
R#1 0.00 (44.81)
R#2 0.00 (46.72)

Q 329.10>80.90 (-)

3.29e4

ISTD 329.10>80.90 (-)

3.29e4

Q 327.10>307.00 (-)

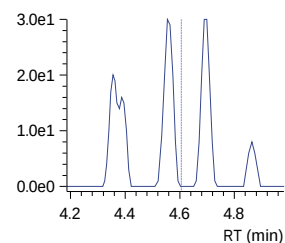
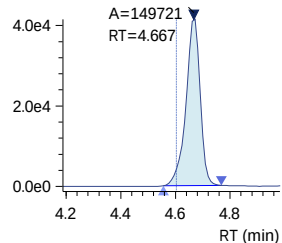
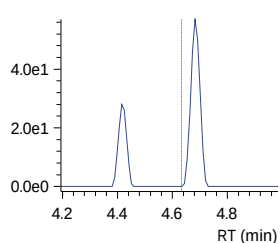
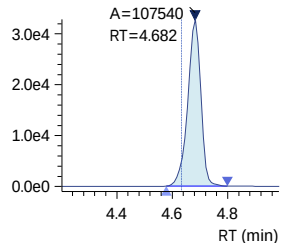
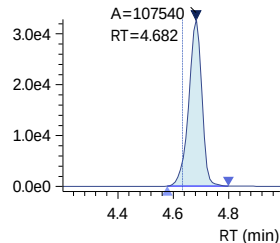
5.70e1

ISTD 302.10>79.90 (-)

4.15e4

Q 298.70>79.90 (-)

3.00e1

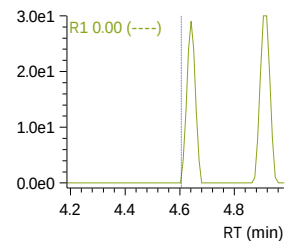
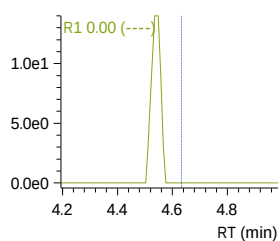


R1 327.10>80.90 (-)

1.40e1

R1 298.70>98.80 (-)

3.00e1

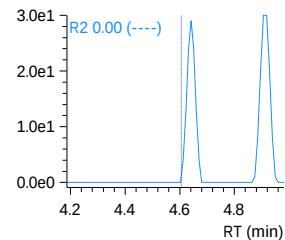
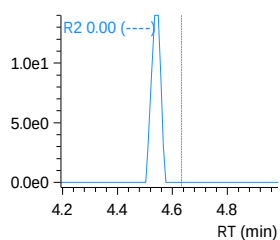


R2 327.10>80.90 (-)

1.40e1

R2 298.70>98.80 (-)

3.00e1





240201_005 (continued)

13C3-PFBS
 Conc. 3.0124

NFDHA
 Conc. ----
 R#1 0.00 (35.54)
 R#2 0.00 (37.91)

13C5-PFHxA
 Conc. 2.8802

13C5-PFHxA_IS
 Conc. 2.5000

13C2-PFHxA_IS
 Conc. 2.5000

Q 302.10>79.90 (-)

4.15e4

Q 295.00>201.00 (-)

1.03e2

Q 318.00>273.00 (-)

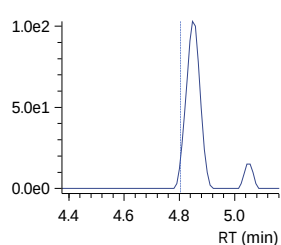
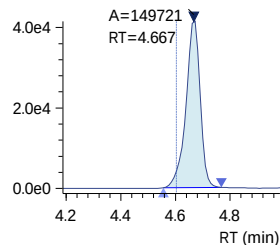
8.94e4

ISTD 318.00>273.00 (-)

8.94e4

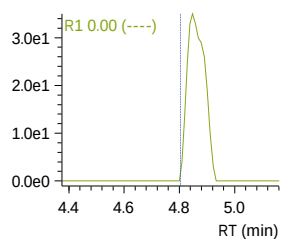
ISTD 315.10>270.00 (-)

9.68e4



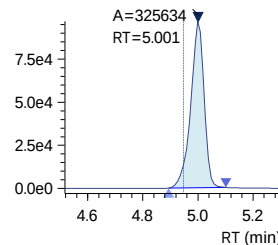
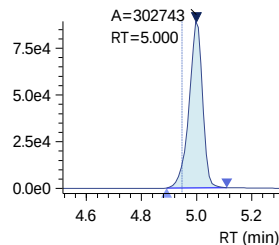
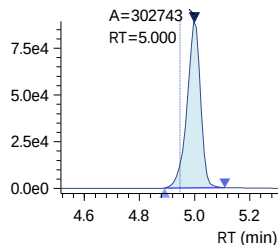
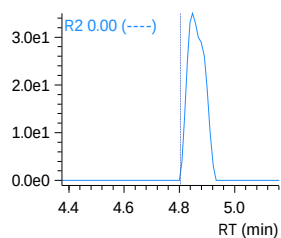
R1 295.00>84.90 (-)

3.50e1



R2 295.00>84.90 (-)

3.50e1





240201_005 (continued)

PFHxA
 Conc. 0.0425

PFEESA
 Conc. ----
 R#1 0.00 (5.22)
 R#2 0.00 (5.35)

13C3-HFPO-DA
 Conc. 13.6079

13C3-HFPO-DA_IS
 Conc. 10.0000

HFPO-DA
 Conc. ----
 R#1 0.00 (59.79)
 R#2 0.00 (58.32)

Q 313.00>269.00 (-)

1.10e3

Q 314.80>135.00 (-)

4.40e1

Q 286.90>168.90 (-)

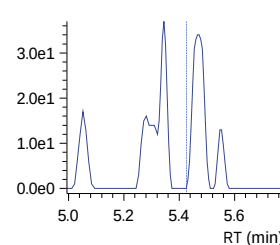
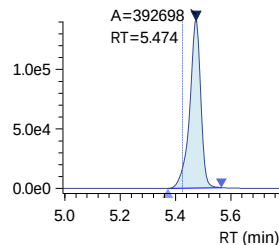
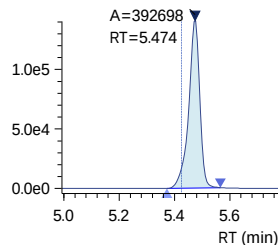
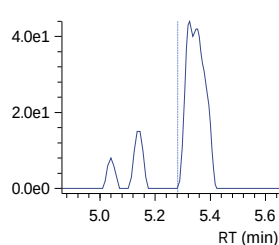
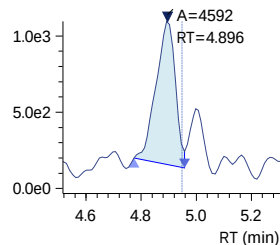
1.40e5

ISTD 286.90>168.90 (-)

1.40e5

Q 284.90>168.90 (-)

3.70e1

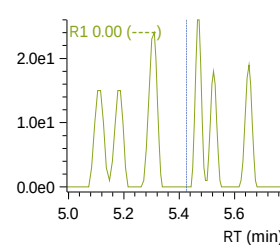
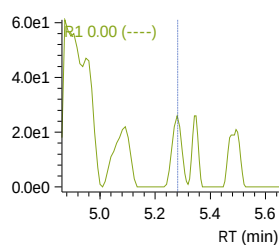


R1 314.80>82.90 (-)

6.10e1

R1 284.90>184.90 (-)

2.60e1

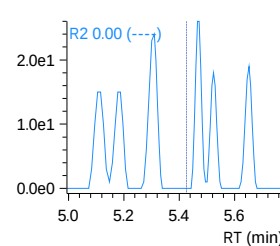
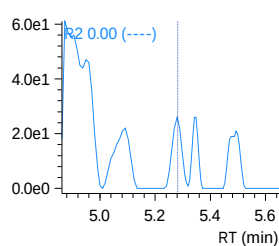


R2 314.80>82.90 (-)

6.10e1

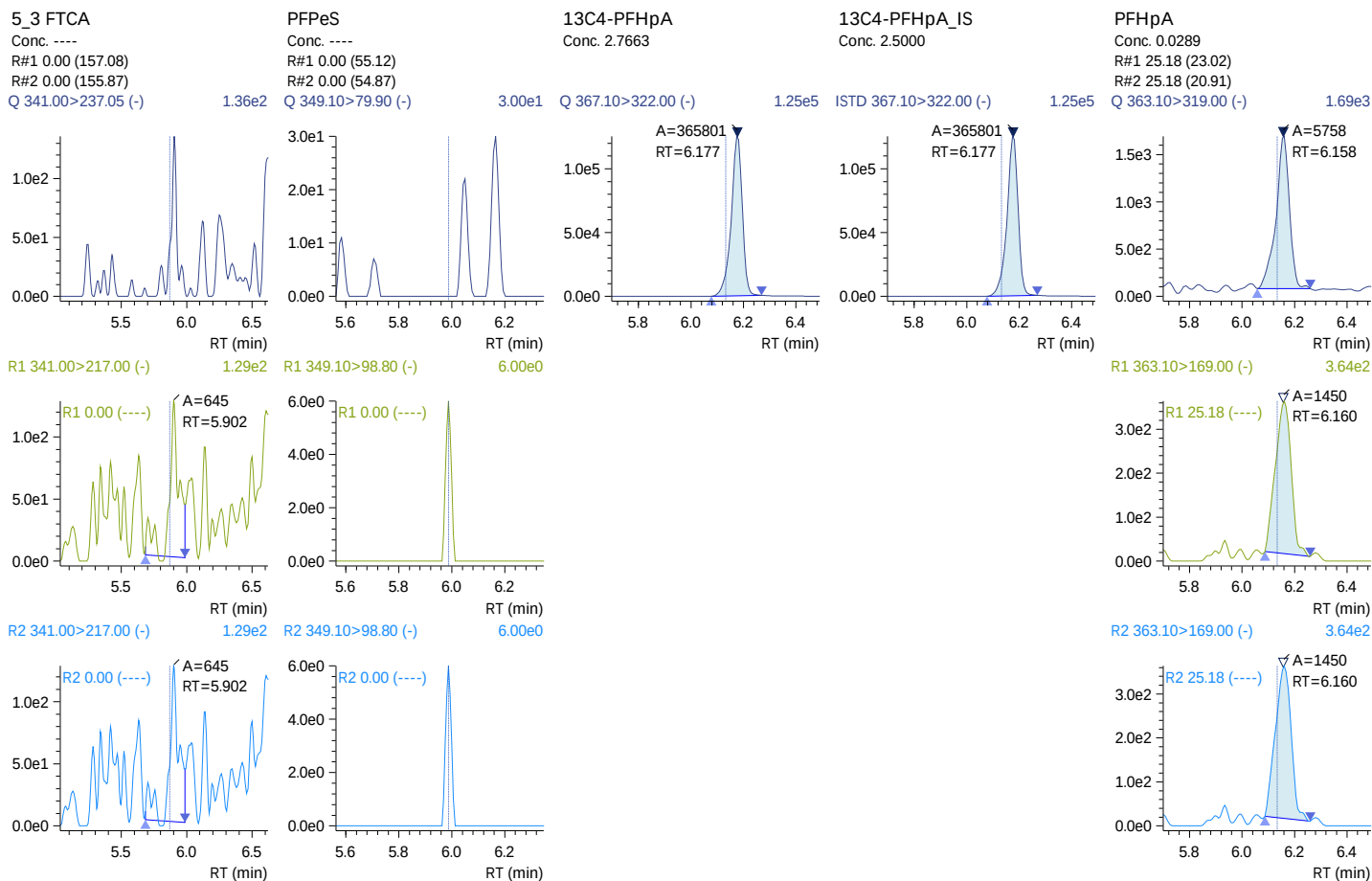
R2 284.90>184.90 (-)

2.60e1



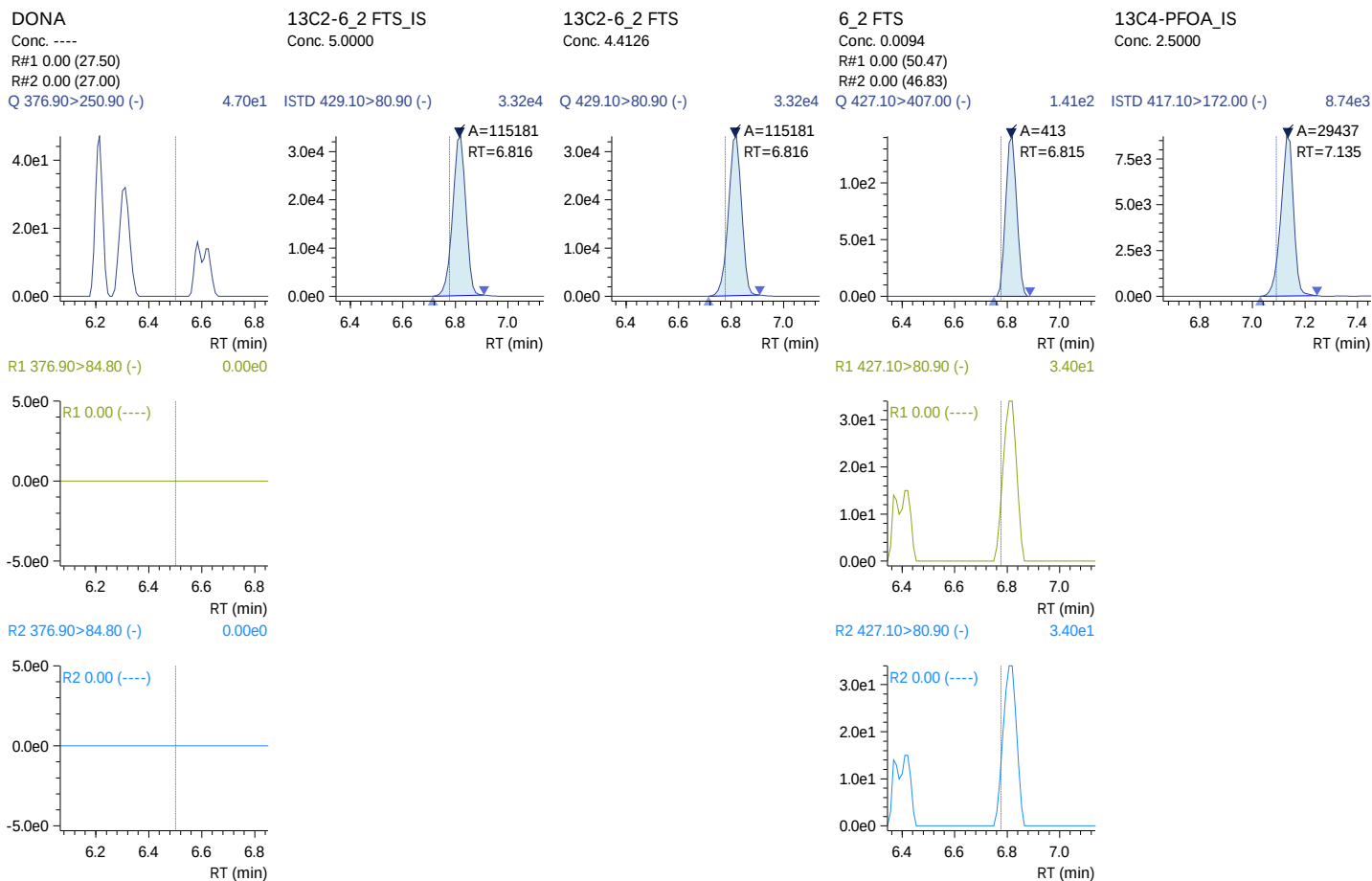


240201_005 (continued)





240201_005 (continued)





240201_005 (continued)

13C8-PFOA_IS
 Conc. 2.5000

13C8-PFOA
 Conc. 2.7534

PFOA
 Conc. 0.0242
 R#1 23.81 (28.77)
 R#2 23.81 (28.12)

13C3-PFHxS
 Conc. 3.0456

13C3-PFHxS_IS
 Conc. 2.5000

ISTD 421.10>376.00 (-)

1.16e5

Q 421.10>376.00 (-)

1.16e5

Q 413.00>369.00 (-)

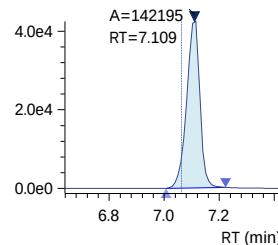
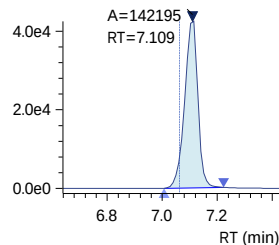
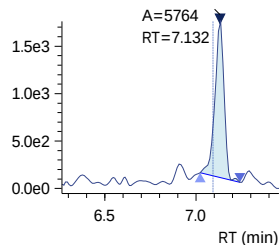
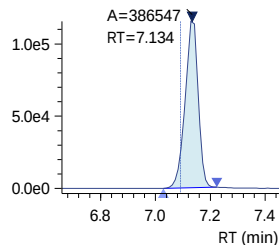
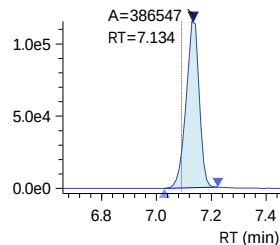
1.76e3

Q 402.10>79.90 (-)

4.25e4

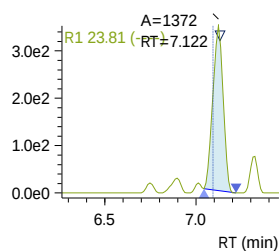
ISTD 402.10>79.90 (-)

4.25e4



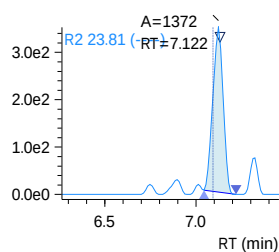
R1 413.00>169.00 (-)

3.53e2



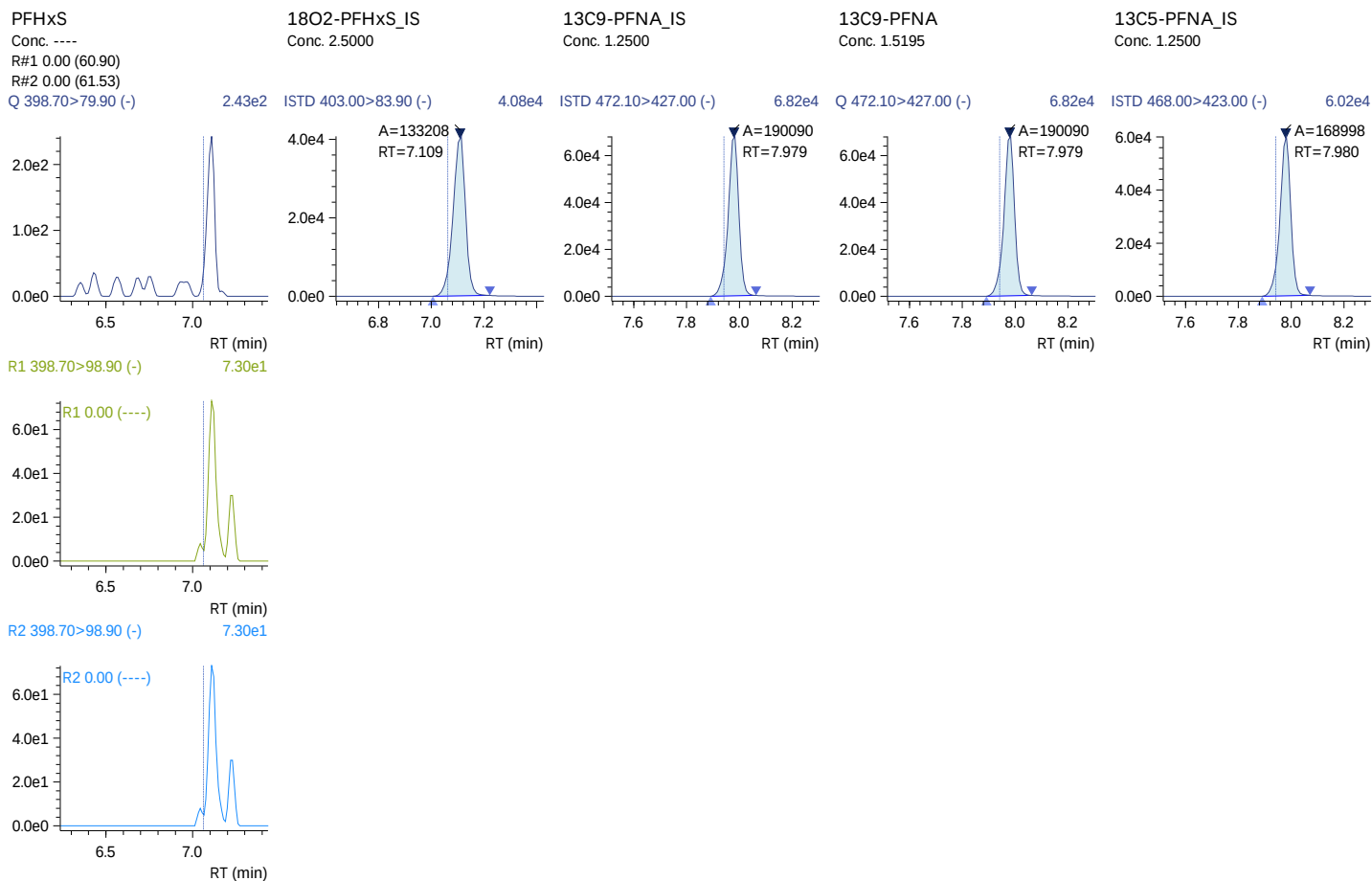
R2 413.00>169.00 (-)

3.53e2



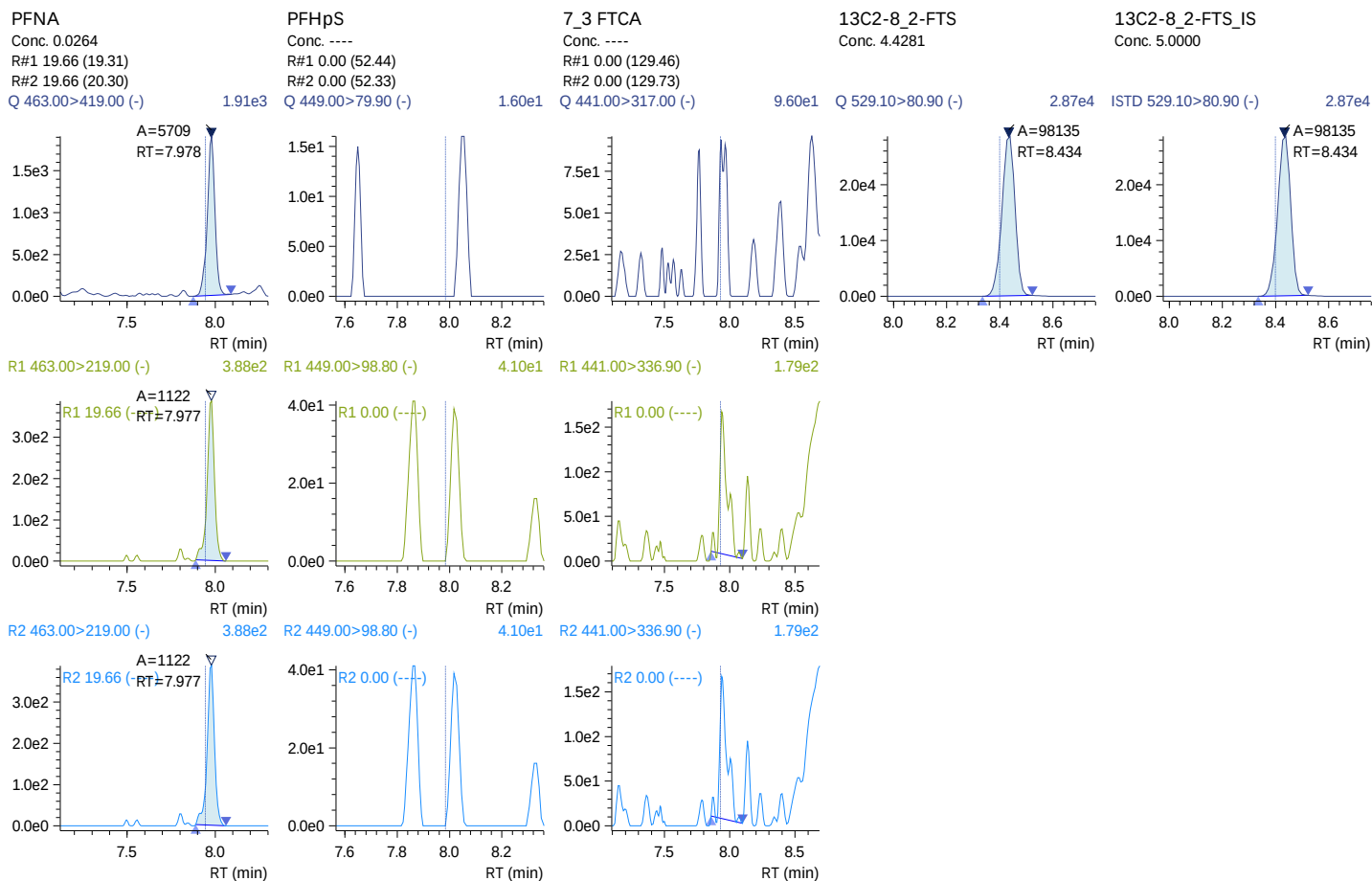


240201_005 (continued)



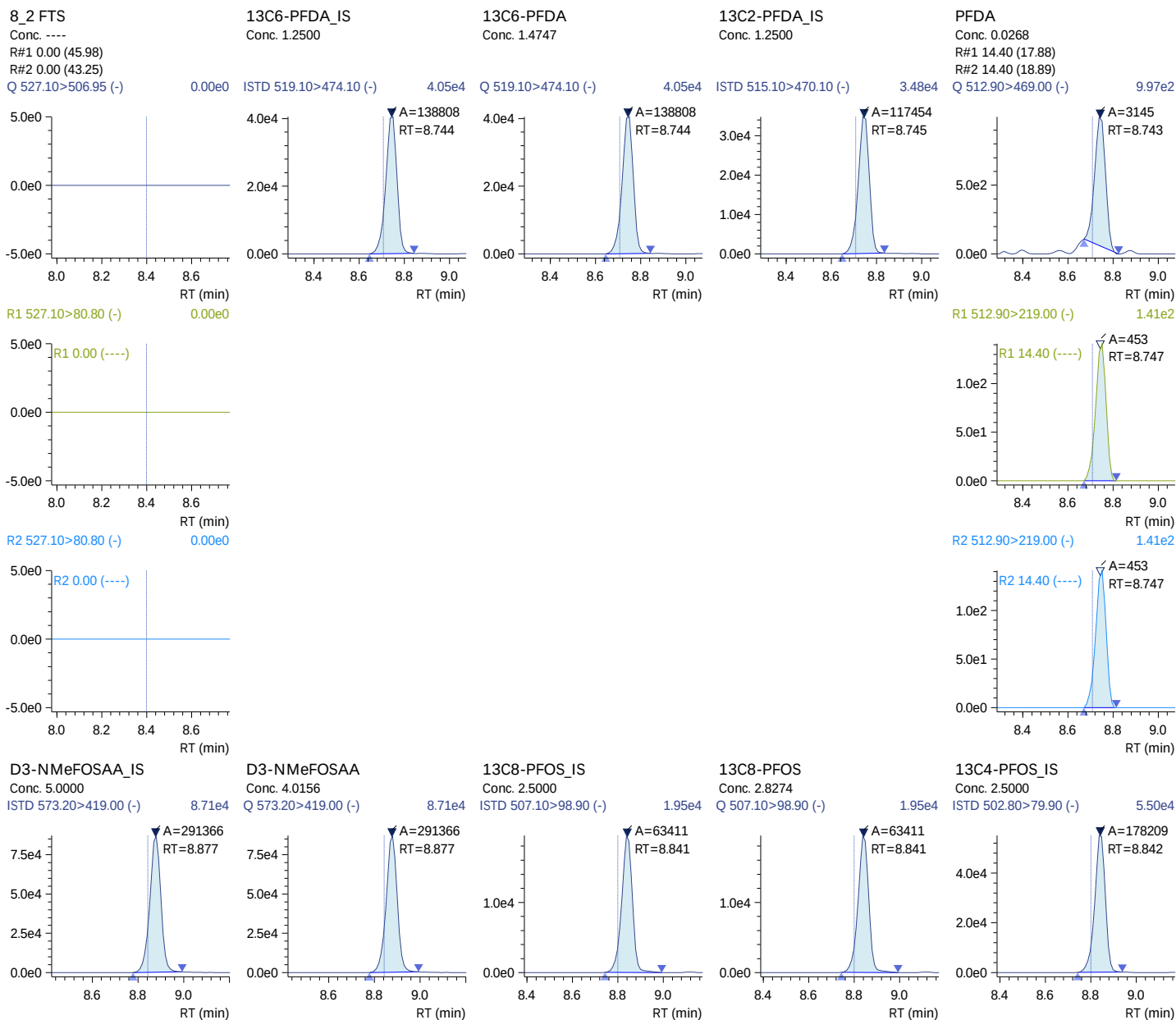


240201_005 (continued)



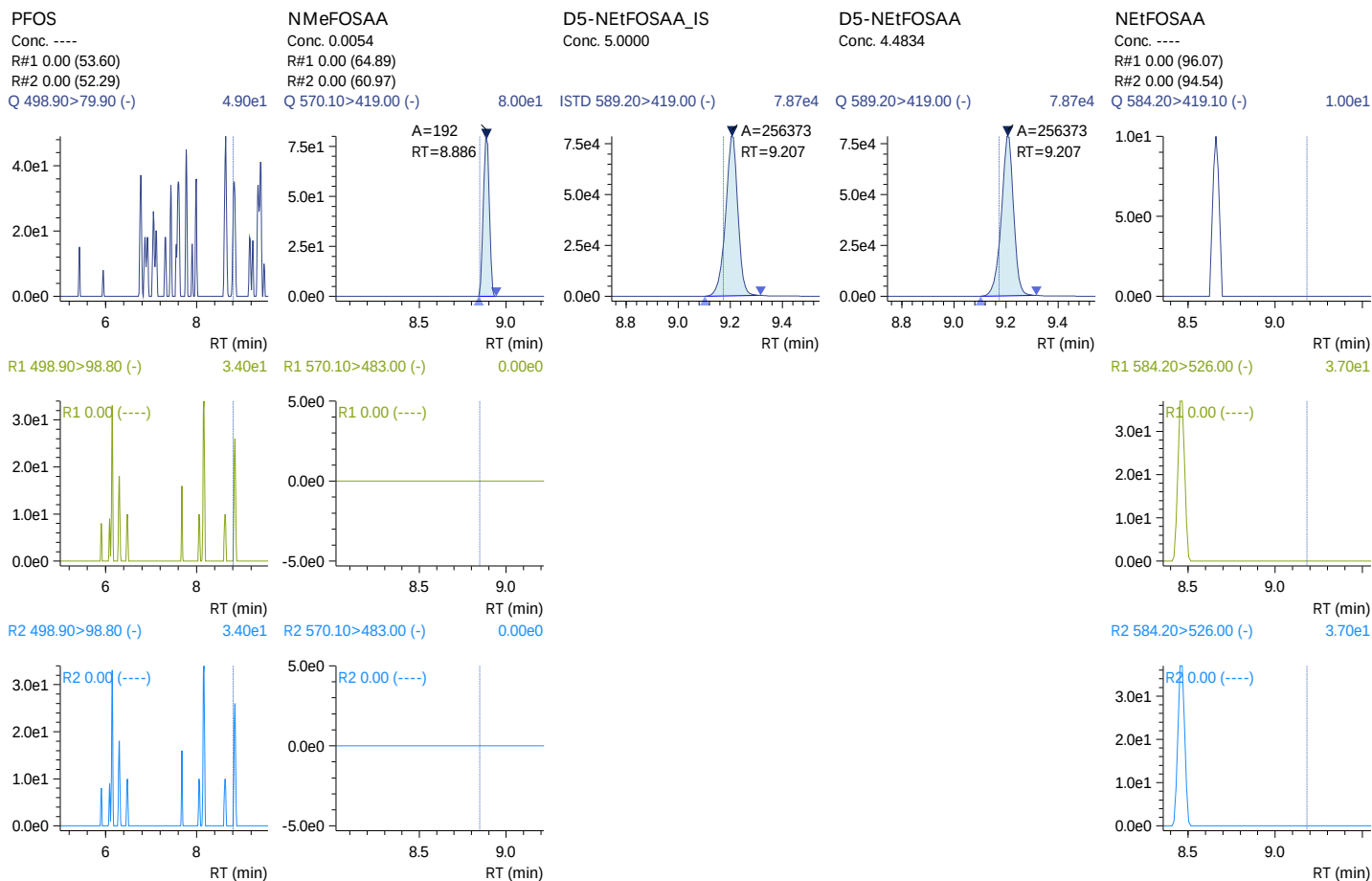


240201_005 (continued)





240201_005 (continued)





240201_005 (continued)

9-Cl-PF3ONS

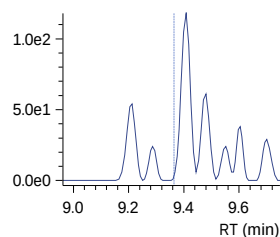
Conc. ----

R#1 0.00 (30.95)

R#2 0.00 (30.61)

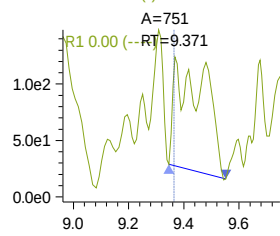
Q 530.80>351.00 (-)

1.18e2



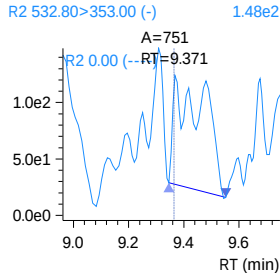
R1 532.80>353.00 (-)

1.48e2



R2 532.80>353.00 (-)

1.48e2



PFUnDA

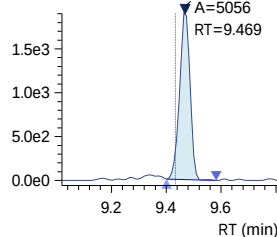
Conc. 0.0197

R#1 13.68 (11.01)

R#2 13.68 (12.02)

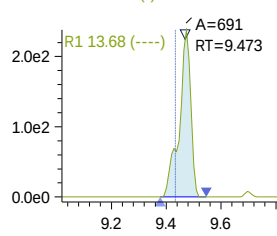
Q 563.10>519.00 (-)

1.91e3



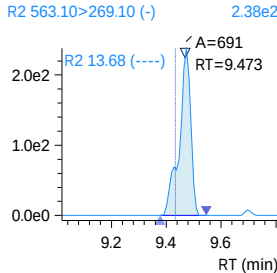
R1 563.10>269.10 (-)

2.38e2



R2 563.10>269.10 (-)

2.38e2

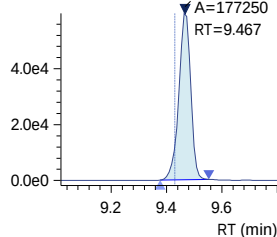


13C7-PFUnDA_IS

Conc. 1.2500

ISTD 570.00>525.10 (-)

5.99e4

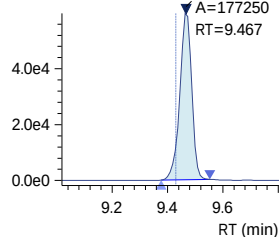


13C7-PFUnDA

Conc. 1.5155

Q 570.00>525.10 (-)

5.99e4



PFNS

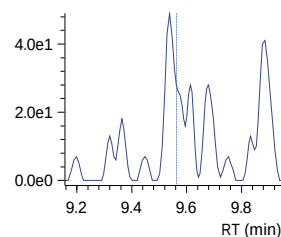
Conc. ----

R#1 0.00 (60.44)

R#2 0.00 (58.51)

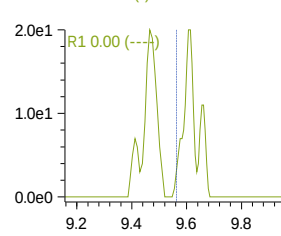
Q 548.80>79.90 (-)

4.90e1



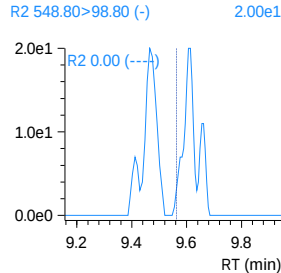
R1 548.80>98.80 (-)

2.00e1



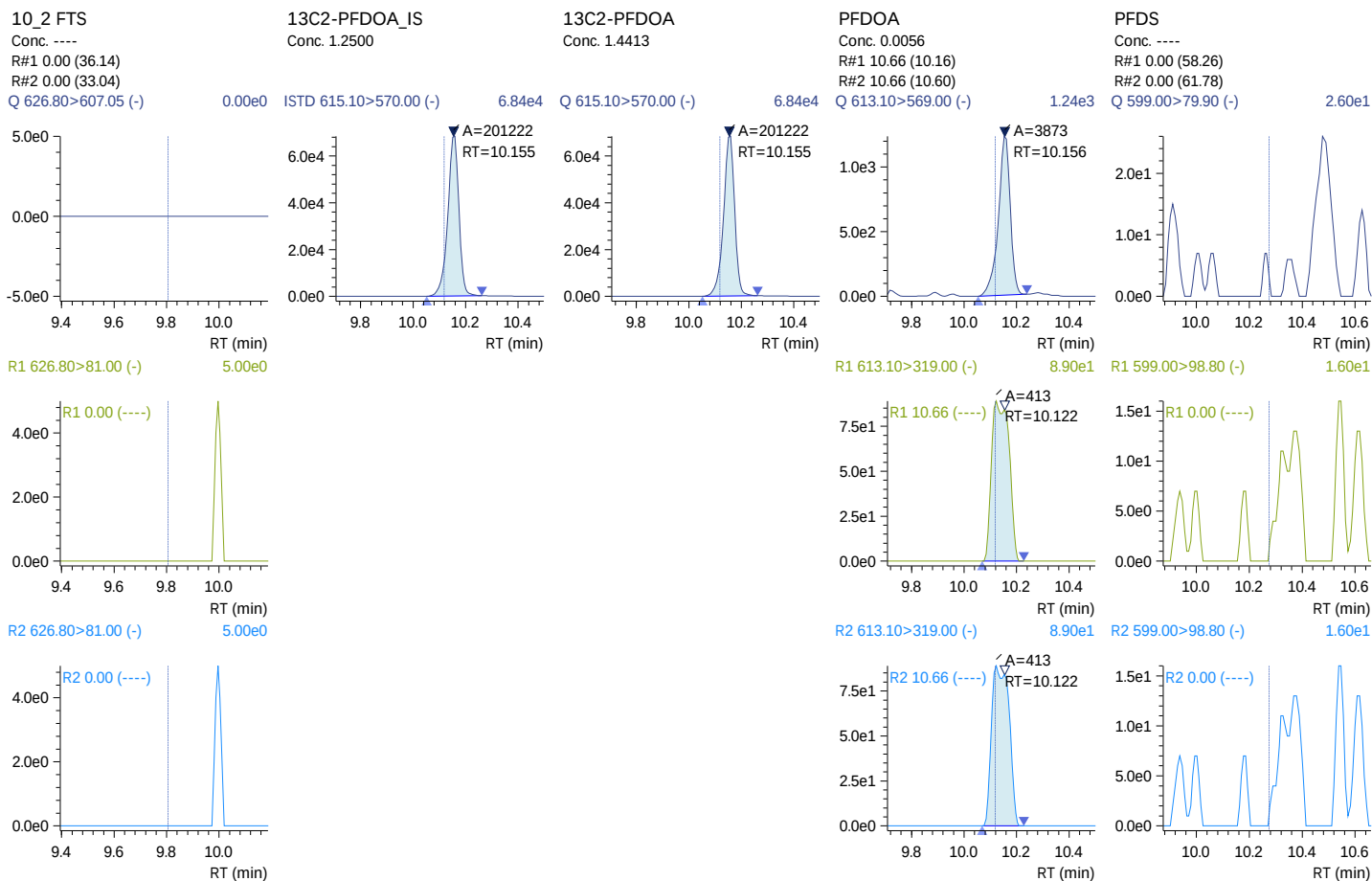
R2 548.80>98.80 (-)

2.00e1



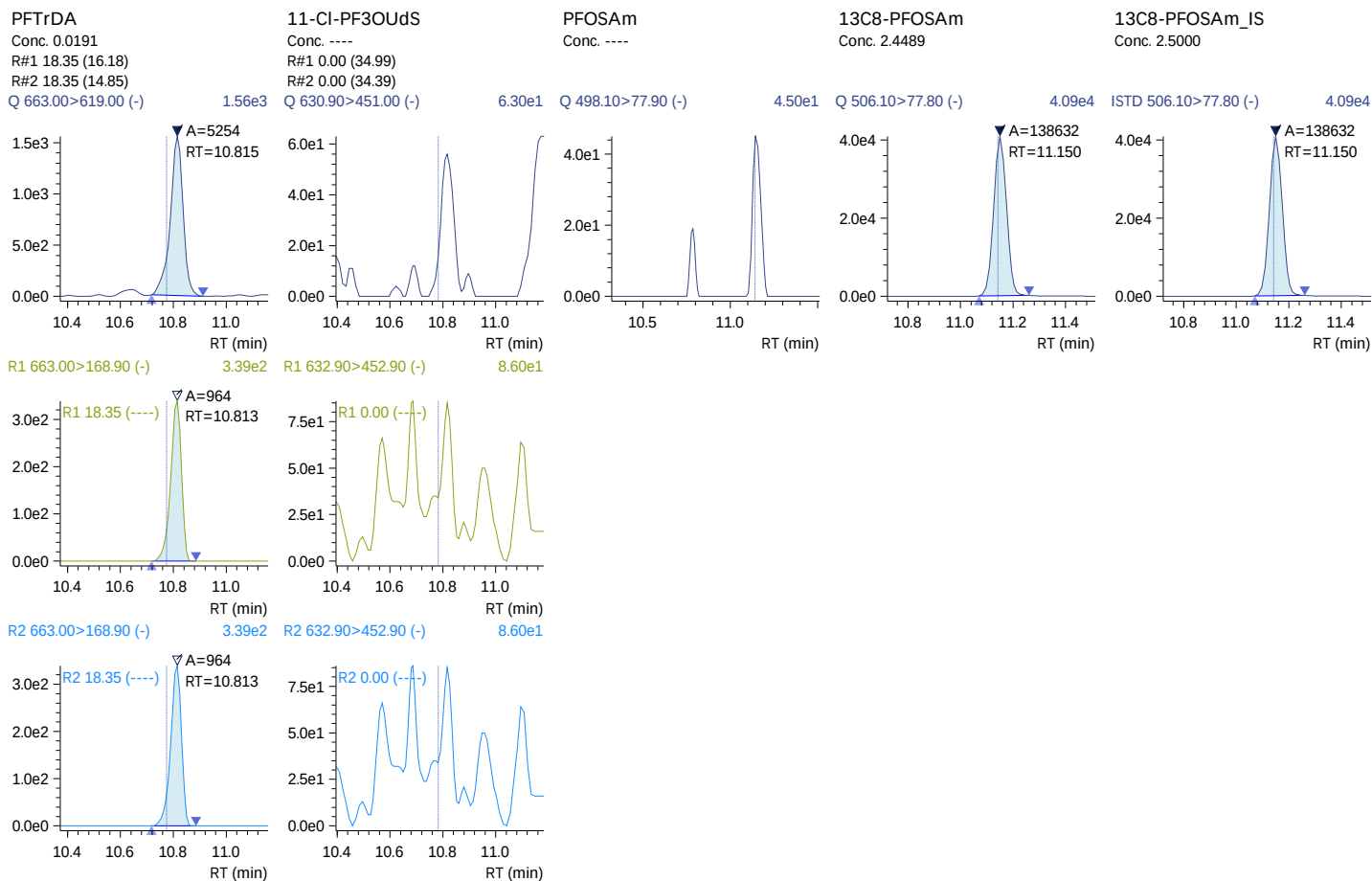


240201_005 (continued)



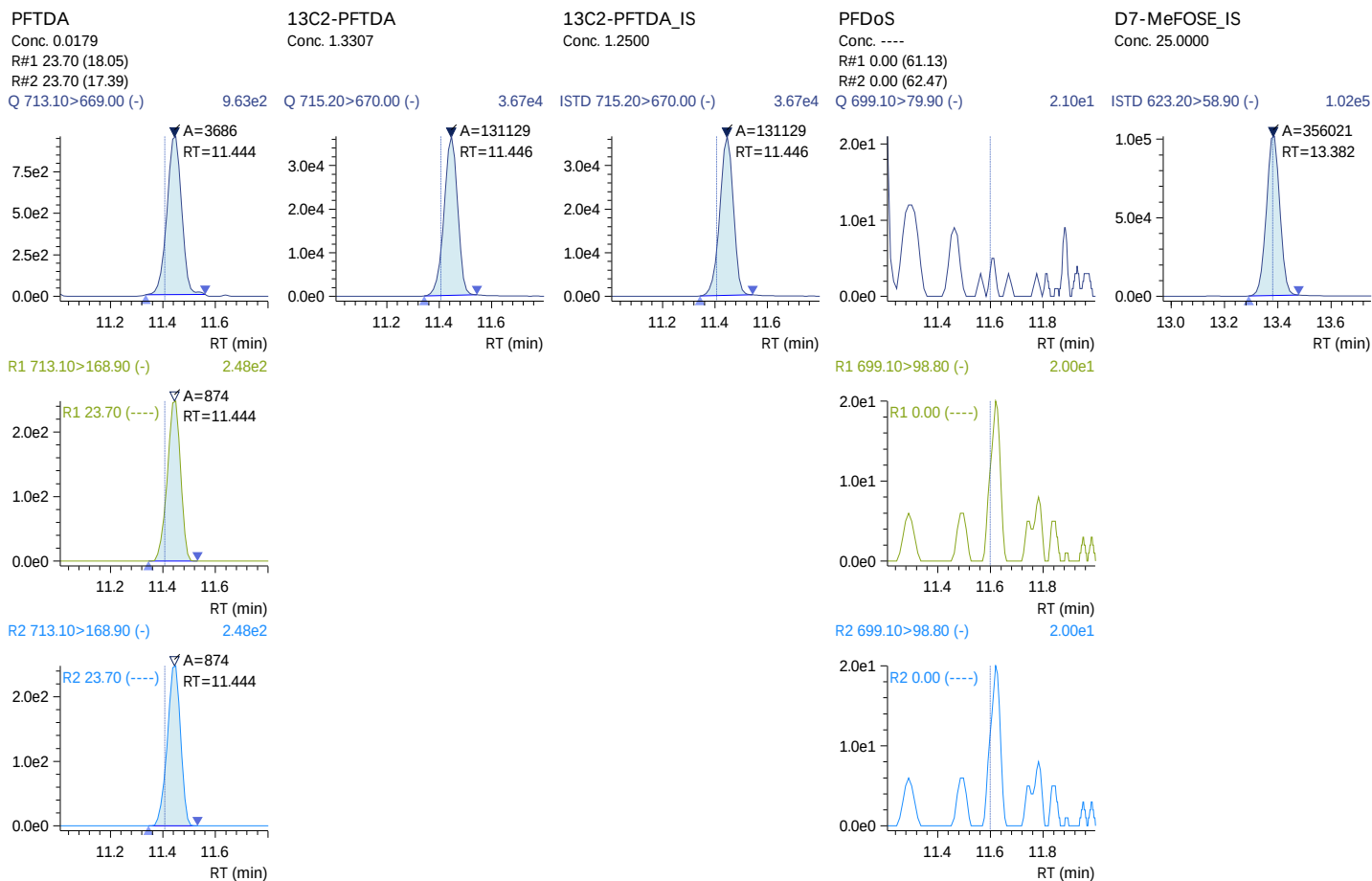


240201_005 (continued)





240201_005 (continued)





240201_005 (continued)

D7-MeFOSE
 Conc. 24.4982

MeFOSE
 Conc. ----

13C2-PFHDA_IS
 Conc. 2.5000

13C2-PFHDA
 Conc. 2.5425

PFHXDA
 Conc. 0.0351
 R#1 11.29 (11.66)
 R#2 11.29 (10.99)

Q 623.20>58.90 (-)

1.02e5

Q 616.10>59.00 (-)

8.20e1

ISTD 815.00>770.05 (-)

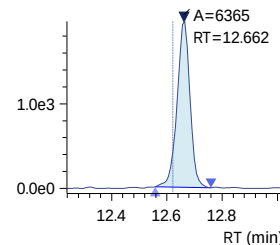
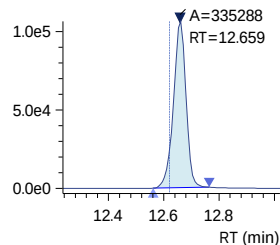
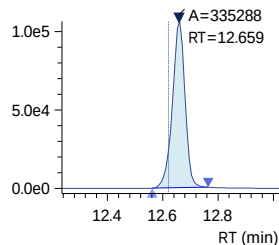
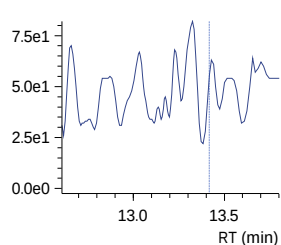
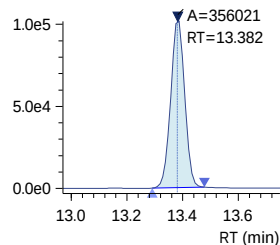
1.06e5

Q 815.00>770.05 (-)

1.06e5

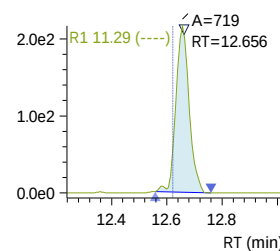
Q 813.00>768.95 (-)

1.97e3



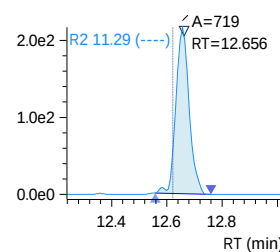
R1 813.00>218.95 (-)

2.17e2



R2 813.00>218.95 (-)

2.17e2





240201_005 (continued)

D3-MeFOSA
 Conc. 2.5438

D3-MeFOSA_IS
 Conc. 2.5000

MeFOSA
 Conc. ----
 R#1 0.00 (160.44)
 R#2 0.00 (161.92)

D9-EtFOSE_IS
 Conc. 25.0000

D9-EtFOSE
 Conc. 24.7622

Q 515.00>219.00 (-)

1.11e4

ISTD 515.00>219.00 (-)

1.11e4

Q 511.90>219.00 (-)

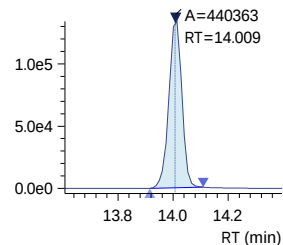
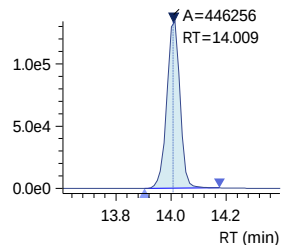
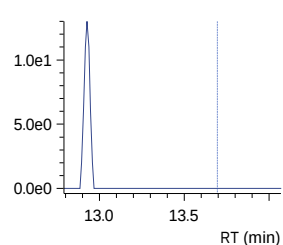
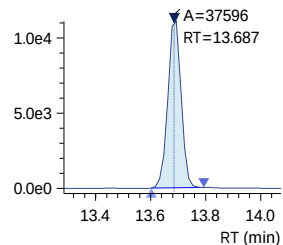
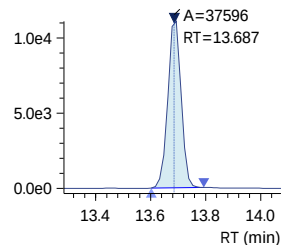
1.30e1

ISTD 639.20>58.90 (-)

1.34e5

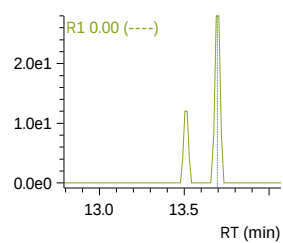
Q 639.20>58.90 (-)

1.34e5



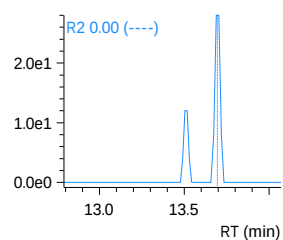
R1 511.90>169.00 (-)

2.80e1



R2 511.90>169.00 (-)

2.80e1





240201_005 (continued)

EtFOSE
 Conc. ----

D5-EtFOSAm
 Conc. 2.5807

D5-EtFOSAm_IS
 Conc. 2.5000

EtFOSAm
 Conc. ----

PFODA
 Conc. 0.0490

Q 630.00>59.00 (-)

6.80e1

Q 531.10>219.00 (-)

1.67e4

ISTD 531.10>219.00 (-)

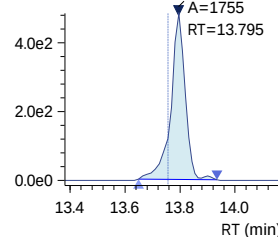
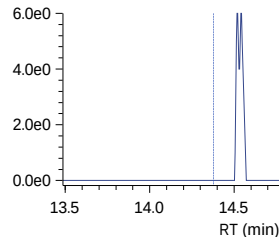
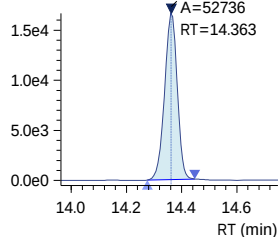
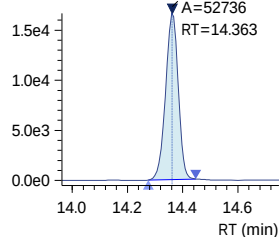
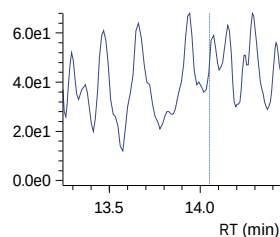
1.67e4

Q 526.00>219.00 (-)

6.00e0

Q 913.00>868.65 (-)

4.86e2

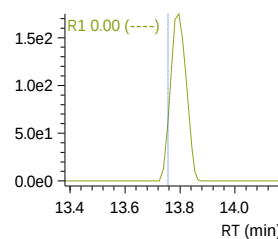
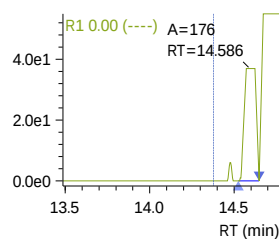


R1 526.00>169.00 (-)

5.50e1

R1 913.00>169.00 (-)

1.75e2

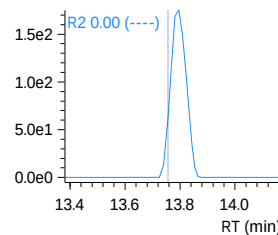
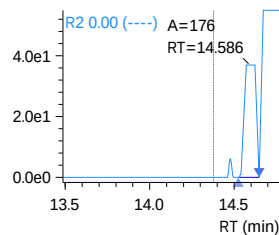


R2 526.00>169.00 (-)

5.50e1

R2 913.00>169.00 (-)

1.75e2



Validation Report

1st PS 02/06/24
2nd MS 02/06/24

Data File: J:\LCMS08\Data\240201_1633_RA\240201_012
Lab ID: KQ2401707-06
RunType: CCB
Matrix: Water

Date Acquired: 2/1/24 14:38
Batch ID: 831587
Analysis Method: 1633/PFAS_DOD5.4

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery		X
Continuing Calibration Recovery (Closing)	X	
Internal Standards	X	
Surrogates		X
Above Highest ICAL Level	X	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Continuing Calibration Recovery	13C2-4:2 FTS	66	70	130	NR in all samples
	13C2-8:2 FTS	65	70	130	
Surrogates	13C3-HFPO-DA	135	40	130	high bias, sample <MRL

Primary Review: _____

Secondary Review: _____

Quantitation Report

1st *PS* 02/06/24
2nd *MS* 02/06/24

Data File:	J:\LCMS08\Data\240201_1633_RA\240201_012	Instrument:	K-LCMS-08
Acqu Date:	2/1/24 14:38	Vial:	6
Run Type:	CCB	Dilution:	1
Lab ID:	KQ2401707-06	Raw Units:	ng/mL

Bottle ID:		Tier:	IV	Matrix:	Water
Prod Code:	PFAS_DOD5.4	Collect Date:	10/31/23	Receive Date:	11/7/23

Analysis Lot:	831587	Prep Lot:		Report Group:	KQ2401707
Analysis	1633	Prep Method:			
		Prep Date:			

Title:	Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM	Calibration ID:	KC2400048
		Report List ID:	24615

Internal Standard Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Area Criteria
18O2-PFHxS	7.076	+0.01	214971	2.5000	OK
13C4-PFOS	8.811	+0.01	302003	2.5000	OK
13C3-PFBA	1.404	+0.05	440343	5.0000	OK
13C2-PFHxA	4.973	+0.03	517713	2.5000	OK
13C4-PFOA	7.104	+0.01	39287	2.5000	OK
13C5-PFNA	7.953	+0.01	294584	1.2500	OK
13C2-PFDA	8.718	+0.01	187260	1.2500	OK

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
13C3-PFBS	4.637	+0.03	260563	3.2486	130	40 - 135	Y
13C3-PFHxS	7.075	+0.01	239957	3.1848	127	40 - 130	Y
13C8-PFOS	8.810	+0.01	109985	2.8938	116	40 - 130	Y
13C4-PFBA	1.403	+0.05	791580	12.1317	121	5 - 130	Y
13C5-PFPeA	3.495	+0.04	206707	5.5528	111	40 - 130	Y
13C5-PFHxA	4.972	+0.03	472469	2.8273	113	40 - 130	Y
13C4-PFHpA	6.149	+0.02	583336	2.7747	111	40 - 130	Y
13C8-PFOA	7.104	+0.01	526624	2.8107	112	40 - 130	Y
13C9-PFNA	7.953	+0.01	328504	1.5065	121	40 - 130	Y
13C6-PFDA	8.717	+0.01	222319	1.4815	119	40 - 130	Y
13C7-PFUnDA	9.439	+0.01	277516	1.4883	119	30 - 130	Y
13C2-PFDoDA	10.124	+0.01	321506	1.4444	116	10 - 130	Y
13C2-PFTeDA	11.412	+0.01	183780	1.1698	94	10 - 130	Y
13C8-FOSA	11.140	0.00	232977	2.4285	97	40 - 130	Y
D3-MeFOSA	13.682	0.00	61654	2.4616	98	10 - 130	Y
D5-EtFOSA	14.356	-0.01	81373	2.3498	94	10 - 130	Y
D7-MeFOSE	13.376	0.00	582620	23.6572	95	10 - 130	Y
D9-EtFOSE	14.004	0.00	701050	23.2619	93	10 - 130	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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			1st	02/06/24
Data File:	J:\LCMS08\Data\240201_1633_RA\240201_012	Instrument:	K-LCMS08	02/06/24
Acqu Date:	2/1/24 14:38	Vial:	6	
Run Type:	CCB	Dilution:	1	
Lab ID:	KQ2401707-06	Raw Units:	ng/mL	

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
D3-MeFOSAA	8.852	+0.01	490367	3.9880	80	40 - 170	Y
D5-EtFOSAA	9.181	+0.01	416905	4.3022	86	25 - 135	Y
13C2-4:2 FTS	4.658	+0.03	178248	4.4049	88	40 - 200	Y
13C2-6:2 FTS	6.790	+0.01	188206	4.4678	89	40 - 200	Y
13C2-8:2 FTS	8.408	+0.01	153467	4.2910	86	40 - 300	Y
13C3-HFPO-DA	5.447	+0.02	619734	13.5076	135 *	40 - 130	Y

Target Compounds

Final Conc.Units: ng/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Perfluorobutane sulfonic acid (PFBS)	4.640	+0.03	151	0.0012	0.024	U	Y
Perfluoropentane sulfonic acid (PFPeS)	0		0	0	0	U	Y
Perfluorohexane sulfonic acid (PFHxS)	7.076	+0.01	1396	0.0133	0.27	U	Y
Perfluoroheptane sulfonic acid (PFHpS)	7.983		101	0.0011	0.022	U	Y
Perfluorooctane sulfonic acid (PFOS)	8.606	-0.20	731	0.0078	0.16	U	Y
Perfluorononane sulfonic acid (PFNS)	0		0	0	0	U	Y
Perfluorodecane sulfonic acid (PFDS)	10.280	+0.00	93	0.0011	0.022	U	Y
Perfluorododecane sulfonic acid (PFDoS)	11.608	+0.01	71	0.0014	0.028	U	Y
Perfluorobutanoic acid (PFBA)	1.416	+0.06	1544	0.0082	0.16	U	Y
Perfluoropentanoic acid (PFPeA)	3.494	+0.04	1147	0.0079	0.16	U	Y
Perfluorohexanoic acid (PFHxA)	4.979	+0.03	1074	0.0001	0.0020	U	Y
Perfluoroheptanoic acid (PFHpA)	6.127	-0.01	5377	0.0096	0.19	U	Y
Perfluorooctanoic acid (PFOA)	7.103	+0.01	8932	0.0298	0.60	U	Y
Perfluorononanoic acid (PFNA)	7.952	+0.01	6494	0.0106	0.21	U	Y
Perfluorodecanoic acid (PFDA)	8.717	+0.01	4582	0.0244	0.49	U	Y
Perfluoroundecanoic acid (PFUnDA)	9.442	+0.01	4687	0.0026	0.052	U	Y
Perfluorododecanoic acid (PFDOA)	10.125	+0.01	3387	-0.0120	0	U	Y
Perfluorotridecanoic acid (PFTTrDA)	10.780	+0.01	4975	0.0059	0.12	U	Y
Perfluorotetradecanoic acid (PFTDA)	11.410	+0.00	3993	0.0087	0.17	U	Y
Perfluorooctane sulfonamide (PFOSAm)	11.148	+0.01	295	0.0036	0.072	U	Y
N-Methylperfluorooctane sulfonamide (MeFOSA)	0		0	0	0	U	Y
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	0		0	0	0	U	Y
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	0		0	0	0	U	Y
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	0		0	0	0	U	Y
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	8.873	+0.02	21	0.0003	0.0060	U	Y

U: Undetected at or above MDL

J: Analyte detected above MDL, but below MRL

B: Hit above MRL also found in Method Blank

E: Analyte concentration above high point of ICAL

N: Presumptive evidence of compound

D: Result from dilution

m: Manual integration performed

d: Compound manually deleted

NR: Analyte not reported from this analysis

*: Result fails acceptance criteria

#: Acceptance criteria not applicable

?: Insufficient information to determine acceptance

e: Result >= MRL, but MRL less than low point of ICAL

c: check for co-elution

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		1st	02/06/24
Data File:	J:\LCMS08\Data\240201_1633_RA\240201_012	Instrument:	K-LCMS08
Acqu Date:	2/1/24 14:38	Vial:	6
Run Type:	CCB	Dilution:	1
Lab ID:	KQ2401707-06	Raw Units:	ng/mL

Target Compounds

Final Conc.Units: ng/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	9.191	+0.01	19	0.0003	0.0060	U	Y
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	4.673	+0.04	64	0.0007	0.014	U	Y
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	6.779	+0.00	476	0.0066	0.13	U	Y
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	0		0	0	0	U	Y
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	0		0	0	0	U	Y
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	5.879	+0.01	247	0.0175	0.35	U	Y
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	7.936	+0.01	762	0.0307	0.61	U	Y
Perfluoro(2-ethoxyethane) sulfonic acid (PFEEESA)	0		0	0	0	U	Y
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	0		0	0	0	U	Y
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	0		0	0	0	U	Y
Perfluoro-3-methoxypropanoic acid (PFMPA)	2.437	+0.06	76	0.0013	0.026	U	Y
Perfluoro-4-methoxybutanoic acid (PFMBA)	4.012	+0.03	71	0.0008	0.016	U	Y
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	5.454	+0.03	336	0.0055	0.11	U	Y
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	4.832	+0.03	587	0.0060	0.12	U	Y
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	0		0	0	0	U	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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240201_012

Sample ID: 1633 CCB
Date Acquired: 2/1/2024 2:38:14 PM
Acquired by: System Administrator
Data File: 240201_012
Vial: 54 | Inj. Volume: 10.0000uL | Tray: 1

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	791580	----	----	----	----	----	----	
13C4-PFBA_IS	216.80>171.90	----	791580	----	----	----	----	----	----	
13C3-PFBA_IS	216.00>172.00	----	440343	----	----	----	----	----	----	
PFBA	212.80>169.05	----	1544	----	----	----	----	----	----	
PFMPA	229.00>84.90	----	76	----	----	----	----	----	----	
3_3 FTCA	241.00>177.10	241.00>117.00	----	0	0.00	139.21	----	----	----	
13C5-PFPeA	268.30>223.00	----	206707	----	----	----	----	----	----	
13C5-PFPeA_IS	268.30>223.00	----	206707	----	----	----	----	----	----	
PFPeA	263.00>219.00	----	1147	----	----	----	----	----	----	
PFMBA	279.00>84.95	----	71	----	----	----	----	----	----	
13C2-4_2 FTS	329.10>80.90	----	178248	----	----	----	----	----	----	
13C2-4_2 FTS_IS	329.10>80.90	----	178248	----	----	----	----	----	----	
4_2 FTS	327.10>307.00	327.10>80.90	64	101	158.11	32.10	101	158.11	32.79	IRr <MDL
13C3-PFBS_IS	302.10>79.90	----	260563	----	----	----	----	----	----	
PFBS	298.70>79.90	298.70>98.80	151	84	55.73	44.81	84	55.73	46.72	
13C3-PFBS	302.10>79.90	----	260563	----	----	----	----	----	----	
NFDHA	295.00>201.00	295.00>84.90	587	86	14.59	35.54	86	14.59	37.91	IRr <MDL
13C5-PFHxA	318.00>273.00	----	472469	----	----	----	----	----	----	
13C5-PFHxA_IS	318.00>273.00	----	472469	----	----	----	----	----	----	
13C2-PFHxA_IS	315.10>270.00	----	517713	----	----	----	----	----	----	
PFHxA	313.00>269.00	----	1074	----	----	----	----	----	----	
PFEESA	314.80>135.00	314.80>82.90	----	0	0.00	5.22	0	0.00	5.35	
13C3-HFPO-DA	286.90>168.90	----	619734	----	----	----	----	----	----	
13C3-HFPO-DA_IS	286.90>168.90	----	619734	----	----	----	----	----	----	
HFPO-DA	284.90>168.90	284.90>184.90	336	283	84.35	59.79	283	84.35	58.32	
5_3 FTCA	341.00>237.05	341.00>217.00	247	471	190.37	157.08	471	190.37	155.87	
PFPeS	349.10>79.90	349.10>98.80	----	0	0.00	55.12	0	0.00	54.87	
13C4-PFHpA	367.10>322.00	----	583336	----	----	----	----	----	----	
13C4-PFHpA_IS	367.10>322.00	----	583336	----	----	----	----	----	----	
PFHpA	363.10>319.00	363.10>169.00	5377	1008	18.74	23.02	1008	18.74	20.91	
DONA	376.90>250.90	376.90>84.80	----	0	0.00	27.50	0	0.00	27.00	
13C2-6_2 FTS_IS	429.10>80.90	----	188206	----	----	----	----	----	----	
13C2-6_2 FTS	429.10>80.90	----	188206	----	----	----	----	----	----	
6_2 FTS	427.10>407.00	427.10>80.90	476	206	43.28	50.47	206	43.28	46.83	
13C4-PFOA_IS	417.10>172.00	----	39287	----	----	----	----	----	----	
13C8-PFOA_IS	421.10>376.00	----	526624	----	----	----	----	----	----	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240201_012 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	526624	----	----	----	----	----	----	----
PFOA	413.00>369.00	413.00>169.00	8932	2032	22.75	28.77	2037	22.81	28.12	
13C3-PFHxS	402.10>79.90	----	239957	----	----	----	----	----	----	----
13C3-PFHxS_IS	402.10>79.90	----	239957	----	----	----	----	----	----	----
PFHxS	398.70>79.90	398.70>98.90	1396	620	44.42	60.90	620	44.42	61.53	
18O2-PFHxS_IS	403.00>83.90	----	214971	----	----	----	----	----	----	----
13C9-PFNA_IS	472.10>427.00	----	328504	----	----	----	----	----	----	----
13C9-PFNA	472.10>427.00	----	328504	----	----	----	----	----	----	----
13C5-PFNA_IS	468.00>423.00	----	294584	----	----	----	----	----	----	----
PFNA	463.00>419.00	463.00>219.00	6494	1188	18.30	19.31	1188	18.30	20.30	
PFHpS	449.00>79.90	449.00>98.80	101	29	28.30	52.44	29	28.30	52.33	
7_3 FTCA	441.00>317.00	441.00>336.90	762	973	127.65	129.46	973	127.65	129.73	
13C2-8_2-FTS	529.10>80.90	----	153467	----	----	----	----	----	----	----
13C2-8_2-FTS_IS	529.10>80.90	----	153467	----	----	----	----	----	----	----
8_2 FTS	527.10>506.95	527.10>80.80	----	0	0.00	45.98	0	0.00	43.25	
13C6-PFDA_IS	519.10>474.10	----	222319	----	----	----	----	----	----	----
13C6-PFDA	519.10>474.10	----	222319	----	----	----	----	----	----	----
13C2-PFDA_IS	515.10>470.10	----	187260	----	----	----	----	----	----	----
PFDA	512.90>469.00	512.90>219.00	4582	613	13.37	17.88	613	13.37	18.89	
D3-NMeFOSAA_IS	573.20>419.00	----	490367	----	----	----	----	----	----	----
D3-NMeFOSAA	573.20>419.00	----	490367	----	----	----	----	----	----	----
13C8-PFOS_IS	507.10>98.90	----	109985	----	----	----	----	----	----	----
13C8-PFOS	507.10>98.90	----	109985	----	----	----	----	----	----	----
13C4-PFOS_IS	502.80>79.90	----	302003	----	----	----	----	----	----	----
PFOS	498.90>79.90	498.90>98.80	731	255	34.88	53.60	255	34.88	52.29	RTi
NMeFOSAA	570.10>419.00	570.10>483.00	21	21	100.00	64.89	21	100.00	60.97	IRr <MDL
D5-NEtFOSAA_IS	589.20>419.00	----	416905	----	----	----	----	----	----	----
D5-NEtFOSAA	589.20>419.00	----	416905	----	----	----	----	----	----	----
NEtFOSAA	584.20>419.10	584.20>526.00	19	102	539.35	96.07	102	539.35	94.54	IRr <MDL
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	----	0	0.00	30.95	0	0.00	30.61	
PFUnDA	563.10>519.00	563.10>269.10	4687	423	9.02	11.01	423	9.02	12.02	
13C7-PFUnDA_IS	570.00>525.10	----	277516	----	----	----	----	----	----	----
13C7-PFUnDA	570.00>525.10	----	277516	----	----	----	----	----	----	----
PFNS	548.80>79.90	548.80>98.80	----	0	0.00	60.44	0	0.00	58.51	
10_2 FTS	626.80>607.05	626.80>81.00	46	25	55.09	36.14	25	55.09	33.04	IRr <MDL
13C2-PFDOA_IS	615.10>570.00	----	321506	----	----	----	----	----	----	----
13C2-PFDOA	615.10>570.00	----	321506	----	----	----	----	----	----	----
PFDOA	613.10>569.00	613.10>319.00	3387	340	10.05	10.16	340	10.05	10.60	
PFDS	599.00>79.90	599.00>98.80	93	26	28.36	58.26	26	28.36	61.78	IRr <MDL
PFTrDA	663.00>619.00	663.00>168.90	4975	669	13.44	16.18	669	13.44	14.85	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240201_012 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	----	0	0.00	34.99	0	0.00	34.39	
PFOSAm	498.10>77.90	----	295	----	----	----	----	----	----	
13C8-PFOSAm	506.10>77.80	----	232977	----	----	----	----	----	----	
13C8-PFOSAm_IS	506.10>77.80	----	232977	----	----	----	----	----	----	
PFTDA	713.10>669.00	713.10>168.90	3993	796	19.92	18.05	796	19.92	17.39	
13C2-PFTDA	715.20>670.00	----	183780	----	----	----	----	----	----	
13C2-PFTDA_IS	715.20>670.00	----	183780	----	----	----	----	----	----	
PFDoS	699.10>79.90	699.10>98.80	71	63	88.89	61.13	63	88.89	62.47	
D7-MeFOSE_IS	623.20>58.90	----	582620	----	----	----	----	----	----	
D7-MeFOSE	623.20>58.90	----	582620	----	----	----	----	----	----	
MeFOSE	616.10>59.00	----	----	----	----	----	----	----	----	
13C2-PFHxDA_IS	815.00>770.05	----	511311	----	----	----	----	----	----	
13C2-PFHxDA	815.00>770.05	----	511311	----	----	----	----	----	----	
PFHxDA	813.00>768.95	813.00>218.95	6347	479	7.55	11.66	479	7.55	10.99	
D3-MeFOSA	515.00>219.00	----	61654	----	----	----	----	----	----	
D3-MeFOSA_IS	515.00>219.00	----	61654	----	----	----	----	----	----	
MeFOSA	511.90>219.00	511.90>169.00	----	0	0.00	160.44	0	0.00	161.92	
D9-EtFOSE_IS	639.20>58.90	----	711658	----	----	----	----	----	----	
D9-EtFOSE	639.20>58.90	----	701050	----	----	----	----	----	----	
EtFOSE	630.00>59.00	----	----	----	----	----	----	----	----	
D5-EtFOSAm	531.10>219.00	----	81373	----	----	----	----	----	----	
D5-EtFOSAm_IS	531.10>219.00	----	81373	----	----	----	----	----	----	
EtFOSAm	526.00>219.00	526.00>169.00	----	0	0.00	159.63	0	0.00	172.60	
PFODA	913.00>868.65	913.00>169.00	1928	647	33.56	36.03	647	33.56	35.02	

Flag ID key: IRr: Ion Ratio (Relative), RTi: RT Diff (Absolute ISTD)



240201_012

Sample ID: 1633 CCB
Date Acquired: 2/1/2024 2:38:14 PM
Acquired by: System Administrator
Data File: 240201_012
Vial: 54 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.403	0.050	-0.001	791580	440343	13C3-PFBA_IS	12.1317	ng/mL	
13C4-PFBA_IS	Auto	1.403	0.050	----	791580	791580	----	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.404	0.049	----	440343	440343	----	5.0000	ng/mL	
PFBA	M	1.416	0.060	0.013	1544	791580	13C4-PFBA_IS	0.0082	ng/mL	
PFMPA	M	2.437	0.056	-1.058	76	206707	13C5-PFPeA_IS	0.0013	ng/mL	
3_3 FTCA	ND(W/B)	----	----	----	----	206707	13C5-PFPeA_IS	----	ng/mL	
13C5-PFPeA	Auto	3.495	0.040	-1.478	206707	517713	13C2-PFHxA_IS	5.5528	ng/mL	
13C5-PFPeA_IS	Auto	3.495	0.040	----	206707	206707	----	5.0000	ng/mL	
PFPeA	Auto	3.494	0.036	-0.001	1147	206707	13C5-PFPeA_IS	0.0079	ng/mL	
PFMBA	M	4.012	0.028	0.517	71	206707	13C5-PFPeA_IS	0.0008	ng/mL	
13C2-4_2 FTS	Auto	4.658	0.025	-2.418	178248	214971	18O2-PFHxS_IS	4.4049	ng/mL	
13C2-4_2 FTS_IS	Auto	4.658	0.025	----	178248	178248	----	5.0000	ng/mL	
4_2 FTS	M	4.673	0.040	0.015	64	178248	13C2-4_2 FTS_IS	0.0007	ng/mL	IRr
13C3-PFBS_IS	Auto	4.637	0.034	----	260563	260563	----	2.5000	ng/mL	
PFBS	M	4.640	0.035	0.003	151	260563	13C3-PFBS_IS	0.0012	ng/mL	
13C3-PFBS	Auto	4.637	0.034	-2.439	260563	214971	18O2-PFHxS_IS	3.2486	ng/mL	
NFDHA	M	4.832	0.027	-0.140	587	472469	13C5-PFHxA_IS	0.0060	ng/mL	IRr
13C5-PFHxA	Auto	4.972	0.025	-0.001	472469	517713	13C2-PFHxA_IS	2.8273	ng/mL	
13C5-PFHxA_IS	Auto	4.972	0.025	----	472469	472469	----	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	4.973	0.026	----	517713	517713	----	2.5000	ng/mL	
PFHxA	M	4.979	0.030	0.007	1074	472469	13C5-PFHxA_IS	0.0001	ng/mL	
PFEESA	ND(W/B)	----	----	----	----	472469	13C5-PFHxA_IS	----	ng/mL	
13C3-HFPO-DA	Auto	5.447	0.022	0.474	619734	517713	13C2-PFHxA_IS	13.5076	ng/mL	
13C3-HFPO-DA_IS	Auto	5.447	0.022	----	619734	619734	----	10.0000	ng/mL	
HFPO-DA	M	5.454	0.027	0.007	336	619734	13C3-HFPO-DA_IS	0.0055	ng/mL	
5_3 FTCA	M	5.879	0.011	0.907	247	472469	13C5-PFHxA_IS	0.0175	ng/mL	
PFPeS	ND(W/B)	----	----	----	----	239957	13C3-PFHxS_IS	----	ng/mL	
13C4-PFHpA	Auto	6.149	0.017	1.176	583336	517713	13C2-PFHxA_IS	2.7747	ng/mL	
13C4-PFHpA_IS	Auto	6.149	0.017	----	583336	583336	----	2.5000	ng/mL	
PFHpA	Auto	6.127	-0.007	-0.022	5377	583336	13C4-PFHpA_IS	0.0096	ng/mL	
DONA	ND(W/B)	----	----	----	----	619734	13C3-HFPO-DA_IS	----	ng/mL	
13C2-6_2 FTS_IS	Auto	6.790	0.012	----	188206	188206	----	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.790	0.012	-0.286	188206	214971	18O2-PFHxS_IS	4.4678	ng/mL	
6_2 FTS	M	6.779	0.002	-0.011	476	188206	13C2-6_2 FTS_IS	0.0066	ng/mL	
13C4-PFOA_IS	Auto	7.104	0.013	----	39287	39287	----	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.104	0.013	----	526624	526624	----	2.5000	ng/mL	
13C8-PFOA	Auto	7.104	0.013	0.000	526624	39287	13C4-PFOA_IS	2.8107	ng/mL	
PFOA	M	7.103	0.010	-0.001	8932	526624	13C8-PFOA_IS	0.0298	ng/mL	
13C3-PFHxS	Auto	7.075	0.013	-0.001	239957	214971	18O2-PFHxS_IS	3.1848	ng/mL	
13C3-PFHxS_IS	Auto	7.075	0.013	----	239957	239957	----	2.5000	ng/mL	
PFHxS	M	7.076	0.014	0.001	1396	239957	13C3-PFHxS_IS	0.0133	ng/mL	
18O2-PFHxS_IS	Auto	7.076	0.014	----	214971	214971	----	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.953	0.012	----	328504	328504	----	1.2500	ng/mL	
13C9-PFNA	Auto	7.953	0.012	0.000	328504	294584	13C5-PFNA_IS	1.5065	ng/mL	
13C5-PFNA_IS	Auto	7.953	0.011	----	294584	294584	----	1.2500	ng/mL	
PFNA	Auto	7.952	0.009	-0.001	6494	328504	13C9-PFNA_IS	0.0106	ng/mL	
PFHpS	M	7.983	0.000	-0.827	101	109985	13C8-PFOS_IS	0.0011	ng/mL	
7_3 FTCA	M	7.936	0.008	2.964	762	472469	13C5-PFHxA_IS	0.0307	ng/mL	
13C2-8_2-FTS	Auto	8.408	0.009	1.332	153467	214971	18O2-PFHxS_IS	4.2910	ng/mL	
13C2-8_2-FTS_IS	Auto	8.408	0.009	----	153467	153467	----	5.0000	ng/mL	
8_2 FTS	ND(W/B)	----	----	----	----	153467	13C2-8_2-FTS_IS	----	ng/mL	
13C6-PFDA_IS	Auto	8.717	0.010	----	222319	222319	----	1.2500	ng/mL	
13C6-PFDA	Auto	8.717	0.010	-0.001	222319	187260	13C2-PFDA_IS	1.4815	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_012 (continued)

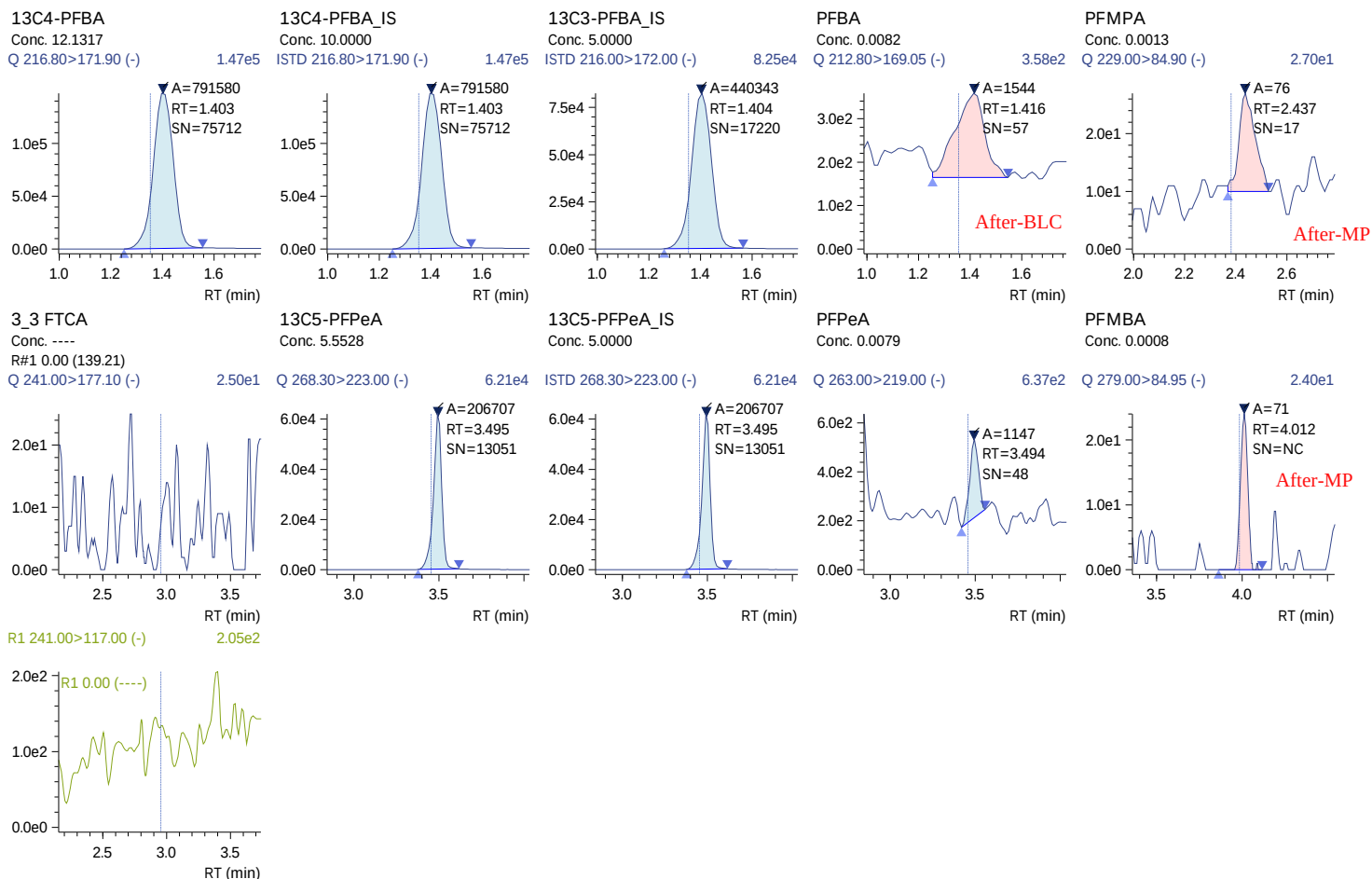
(Table continued from previous page)

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C2-PFDA_IS	Auto	8.718	0.010	----	187260	187260	----	1.2500	ng/mL	
PFDA	M	8.717	0.008	0.000	4582	222319	13C6-PFDA_IS	0.0244	ng/mL	
D3-NMeFOSAA_IS	Auto	8.852	0.009	----	490367	490367	----	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.852	0.009	0.041	490367	302003	13C4-PFOS_IS	3.9880	ng/mL	
13C8-PFOS_IS	Auto	8.810	0.010	----	109985	109985	----	2.5000	ng/mL	
13C8-PFOS	Auto	8.810	0.010	-0.001	109985	302003	13C4-PFOS_IS	2.8938	ng/mL	
13C4-PFOS_IS	Auto	8.811	0.011	----	302003	302003	----	2.5000	ng/mL	
PFOS	M	8.606	-0.195	-0.204	731	109985	13C8-PFOS_IS	0.0078	ng/mL	RTi
NMeFOSAA	M	8.873	0.025	0.021	21	490367	D3-NMeFOSAA_IS	0.0003	ng/mL	IRr
D5-NetFOSAA_IS	Auto	9.181	0.009	----	416905	416905	----	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.181	0.009	0.370	416905	302003	13C4-PFOS_IS	4.3022	ng/mL	
NetFOSAA	M	9.191	0.008	0.010	19	416905	D5-NetFOSAA_IS	0.0003	ng/mL	IRr
9-CI-PF3ONS	ND(W/B)	----	----	----	----	619734	13C3-HFPO-DA_IS	----	ng/mL	
PFUnDA	M	9.442	0.009	0.003	4687	277516	13C7-PFUnDA_IS	0.0026	ng/mL	
13C7-PFUnDA_IS	Auto	9.439	0.009	----	277516	277516	----	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.439	0.009	0.721	277516	187260	13C2-PFDA_IS	1.4883	ng/mL	
PFNS	ND(W/B)	----	----	----	----	109985	13C8-PFOS_IS	----	ng/mL	
10_2 FTS	M	9.811	0.005	1.403	46	153467	13C2-8_2-FTS_IS	0.0006	ng/mL	IRr
13C2-PFDOA_IS	Auto	10.124	0.006	----	321506	321506	----	1.2500	ng/mL	
13C2-PFDOA	Auto	10.124	0.006	1.406	321506	187260	13C2-PFDA_IS	1.4444	ng/mL	
PFDOA	Auto	10.125	0.006	0.001	3387	321506	13C2-PFDOA_IS	-0.0120	ng/mL	
PFDS	M	10.280	0.004	1.470	93	109985	13C8-PFOS_IS	0.0011	ng/mL	IRr
PFTDA	Auto	10.780	0.005	-0.632	4975	183780	13C2-PFTDA_IS	0.0059	ng/mL	
11-CI-PF3OUdS	ND(W/B)	----	----	----	----	619734	13C3-HFPO-DA_IS	----	ng/mL	
PFOSAm	M	11.148	0.006	0.008	295	232977	13C8-PFOSAm_IS	0.0036	ng/mL	
13C8-PFOSAm	Auto	11.140	-0.002	2.329	232977	302003	13C4-PFOS_IS	2.4285	ng/mL	
13C8-PFOSAm_IS	Auto	11.140	-0.002	----	232977	232977	----	2.5000	ng/mL	
PFTDA	Auto	11.410	0.002	-0.002	3993	183780	13C2-PFTDA_IS	0.0087	ng/mL	
13C2-PFTDA	Auto	11.412	0.006	2.694	183780	187260	13C2-PFDA_IS	1.1698	ng/mL	
13C2-PFTDA_IS	Auto	11.412	0.006	----	183780	183780	----	1.2500	ng/mL	
PFDoS	M	11.608	0.009	2.798	71	109985	13C8-PFOS_IS	0.0014	ng/mL	
D7-MeFOSE_IS	Auto	13.376	-0.004	----	582620	582620	----	25.0000	ng/mL	
D7-MeFOSE	Auto	13.376	-0.004	4.565	582620	302003	13C4-PFOS_IS	23.6572	ng/mL	
MeFOSE	ND(W/B)	----	----	----	----	582620	D7-MeFOSE_IS	----	ng/mL	
13C2-PFHXDA_IS	Auto	12.625	0.005	----	511311	511311	----	2.5000	ng/mL	
13C2-PFHXDA	Auto	12.625	0.005	3.907	511311	187260	13C2-PFDA_IS	2.4319	ng/mL	
PFHXDA	Auto	12.626	0.005	0.001	6347	511311	13C2-PFHXDA_IS	0.0230	ng/mL	
D3-MeFOSA	Auto	13.682	-0.003	4.871	61654	302003	13C4-PFOS_IS	2.4616	ng/mL	
D3-MeFOSA_IS	Auto	13.682	-0.003	----	61654	61654	----	2.5000	ng/mL	
MeFOSA	ND(W/B)	----	----	----	----	61654	D3-MeFOSA_IS	----	ng/mL	
D9-EtFOSE_IS	Auto	14.004	-0.004	----	711658	711658	----	25.0000	ng/mL	
D9-EtFOSE	Auto	14.004	-0.004	5.193	701050	302003	13C4-PFOS_IS	23.2619	ng/mL	
EtFOSE	ND(W/B)	----	----	----	----	711658	D9-EtFOSE_IS	----	ng/mL	
D5-EtFOSAm	Auto	14.356	-0.005	5.545	81373	302003	13C4-PFOS_IS	2.3498	ng/mL	
D5-EtFOSAm_IS	Auto	14.356	-0.005	----	81373	81373	----	2.5000	ng/mL	
EtFOSAm	ND(W/B)	----	----	----	----	81373	D5-EtFOSAm_IS	----	ng/mL	
PFODA	Auto	13.764	0.008	1.139	1928	511311	13C2-PFHXDA_IS	0.0422	ng/mL	

Flag ID key: IRr: Ion Ratio (Relative), RTi: RT Diff (Absolute ISTD)



240201_012 (continued)





240201_012 (continued)

13C2-4_2 FTS
Conc. 4.4049

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. 0.0007
R#1 158.11 (32.10)
R#2 158.11 (32.79)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 0.0012
R#1 55.73 (44.81)
R#2 55.73 (46.72)

Q 329.10>80.90 (-)

5.56e4

ISTD 329.10>80.90 (-)

5.56e4

Q 327.10>307.00 (-)

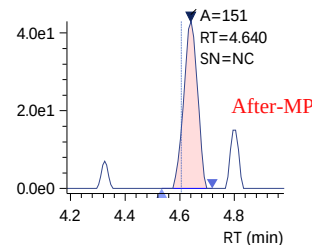
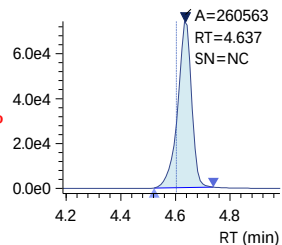
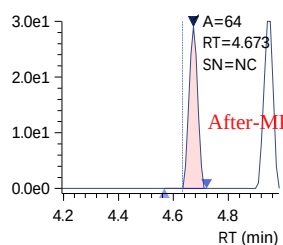
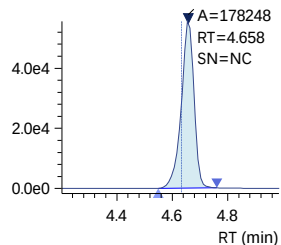
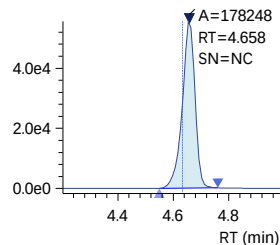
3.00e1

ISTD 302.10>79.90 (-)

7.44e4

Q 298.70>79.90 (-)

4.30e1

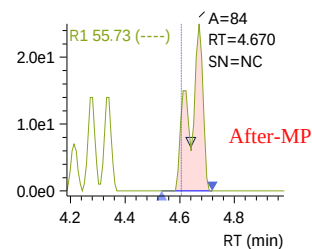
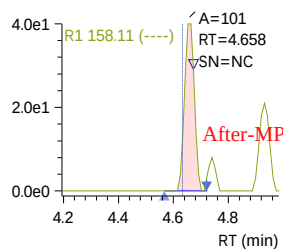


R1 327.10>80.90 (-)

4.00e1

R1 298.70>98.80 (-)

2.50e1

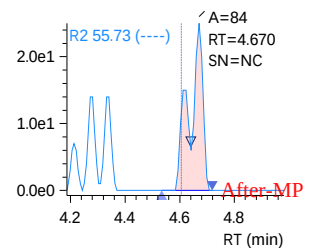
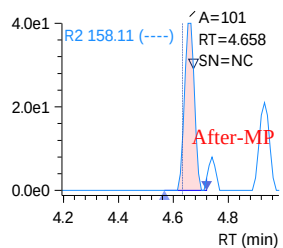


R2 327.10>80.90 (-)

4.00e1

R2 298.70>98.80 (-)

2.50e1





240201_012 (continued)

13C3-PFBS
Conc. 3.2486

NFDHA
Conc. 0.0060
R#1 14.59 (35.54)
R#2 14.59 (37.91)

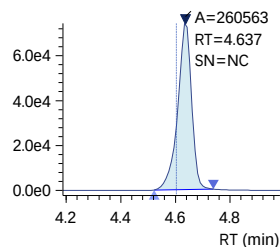
13C5-PFHxA
Conc. 2.8273

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

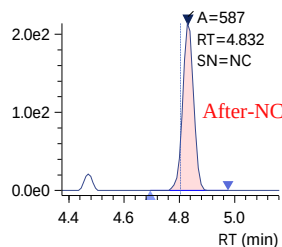
Q 302.10>79.90 (-)

7.44e4



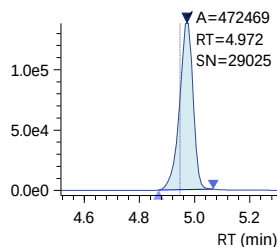
Q 295.00>201.00 (-)

2.14e2



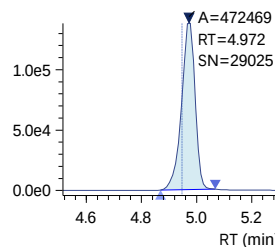
Q 318.00>273.00 (-)

1.38e5



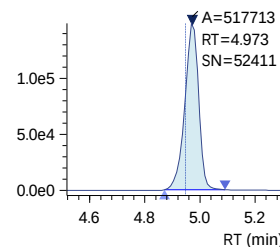
ISTD 318.00>273.00 (-)

1.38e5



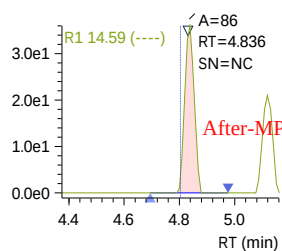
ISTD 315.10>270.00 (-)

1.49e5



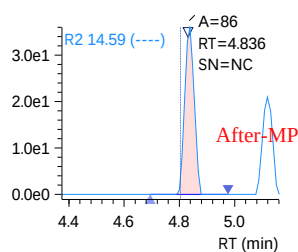
R1 295.00>84.90 (-)

3.60e1



R2 295.00>84.90 (-)

3.60e1





240201_012 (continued)

PFHxA
Conc. 0.0001

PFEESA
Conc. ----
R#1 0.00 (5.22)
R#2 0.00 (5.35)

13C3-HFPO-DA
Conc. 13.5076

13C3-HFPO-DA_IS
Conc. 10.0000

HFPO-DA
Conc. 0.0055

Q 313.00>269.00 (-)

1.09e3

Q 314.80>135.00 (-)

1.38e2

Q 286.90>168.90 (-)

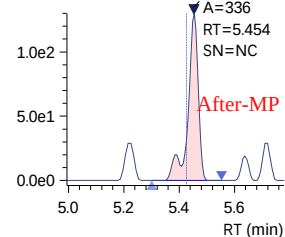
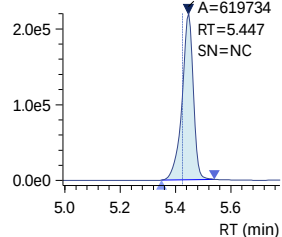
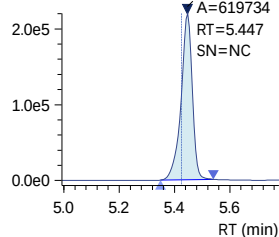
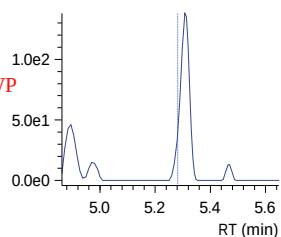
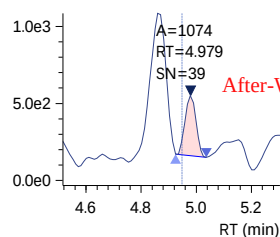
2.21e5

ISTD 286.90>168.90 (-)

2.21e5

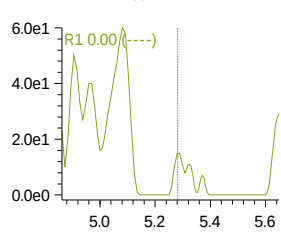
Q 284.90>168.90 (-)

1.30e2



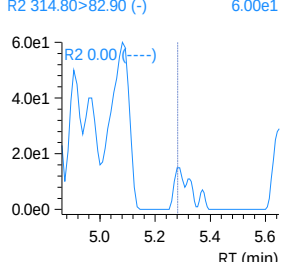
R1 314.80>82.90 (-)

6.00e1



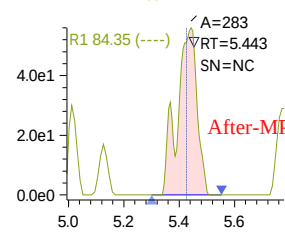
R2 314.80>82.90 (-)

6.00e1



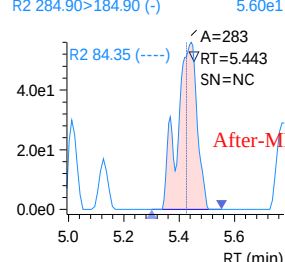
R1 284.90>184.90 (-)

5.60e1



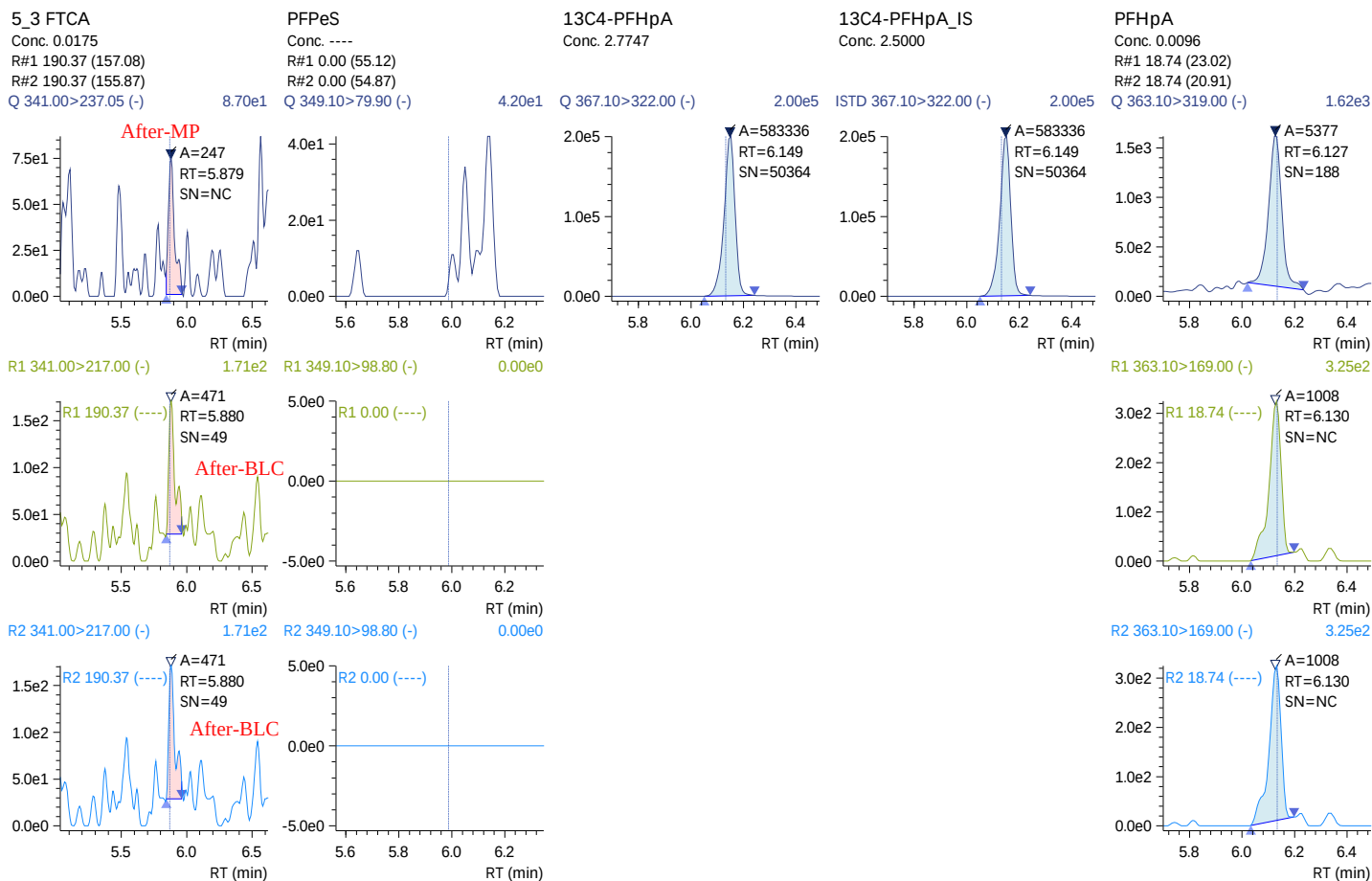
R2 284.90>184.90 (-)

5.60e1





240201_012 (continued)

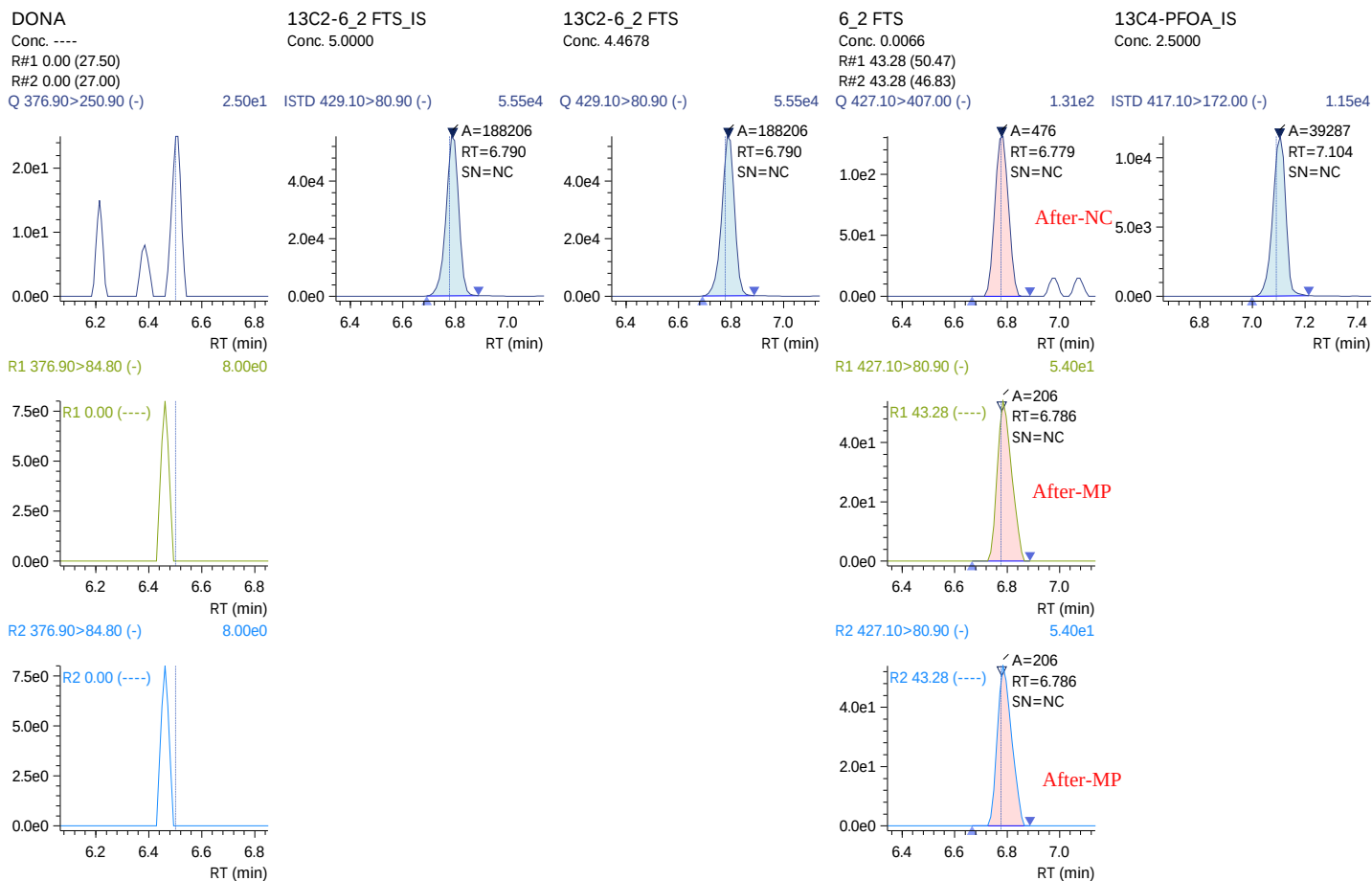


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_012 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_012 (continued)

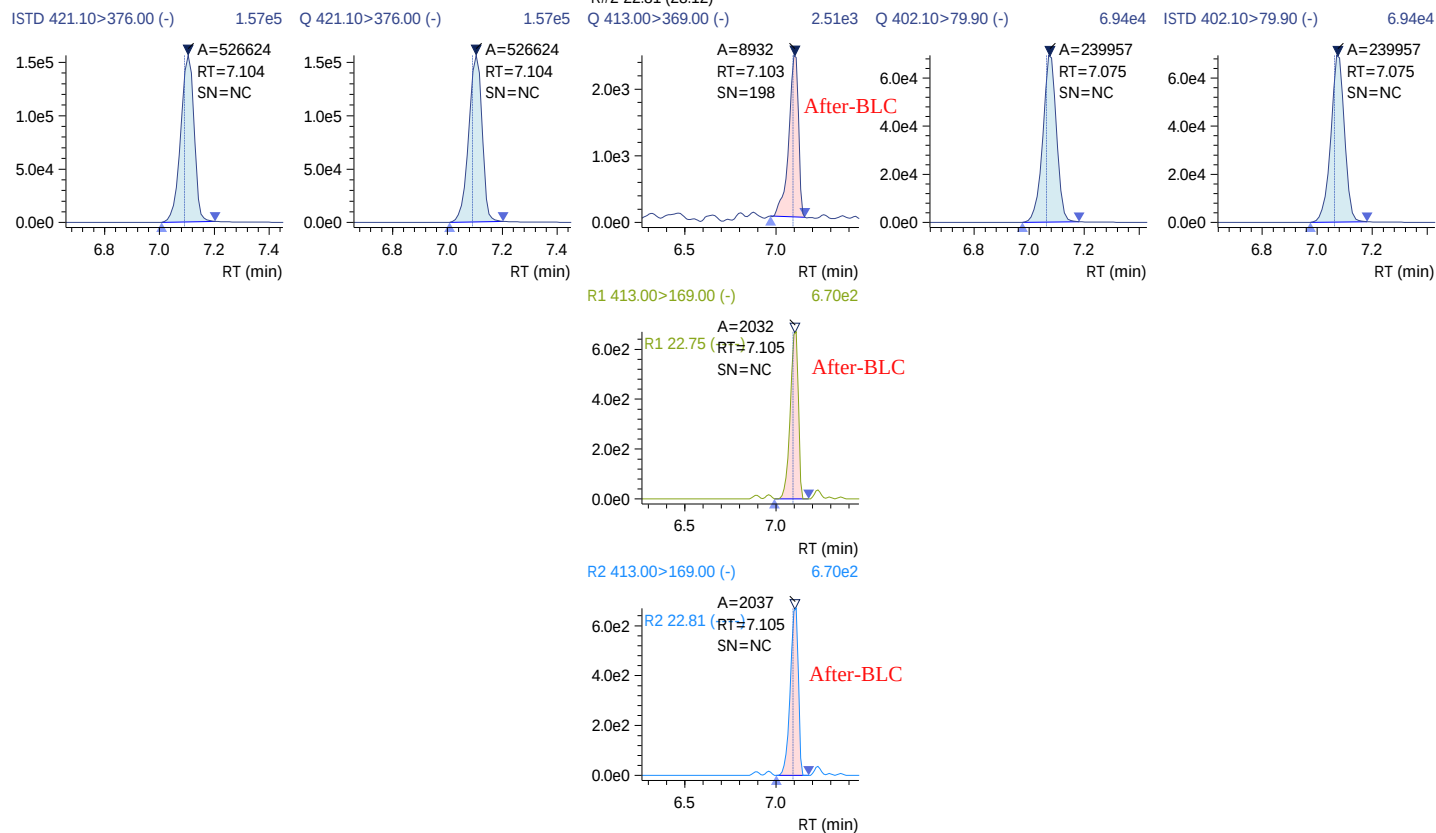
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.8107

PFOA
Conc. 0.0298
R#1 22.75 (28.77)
R#2 22.81 (28.12)

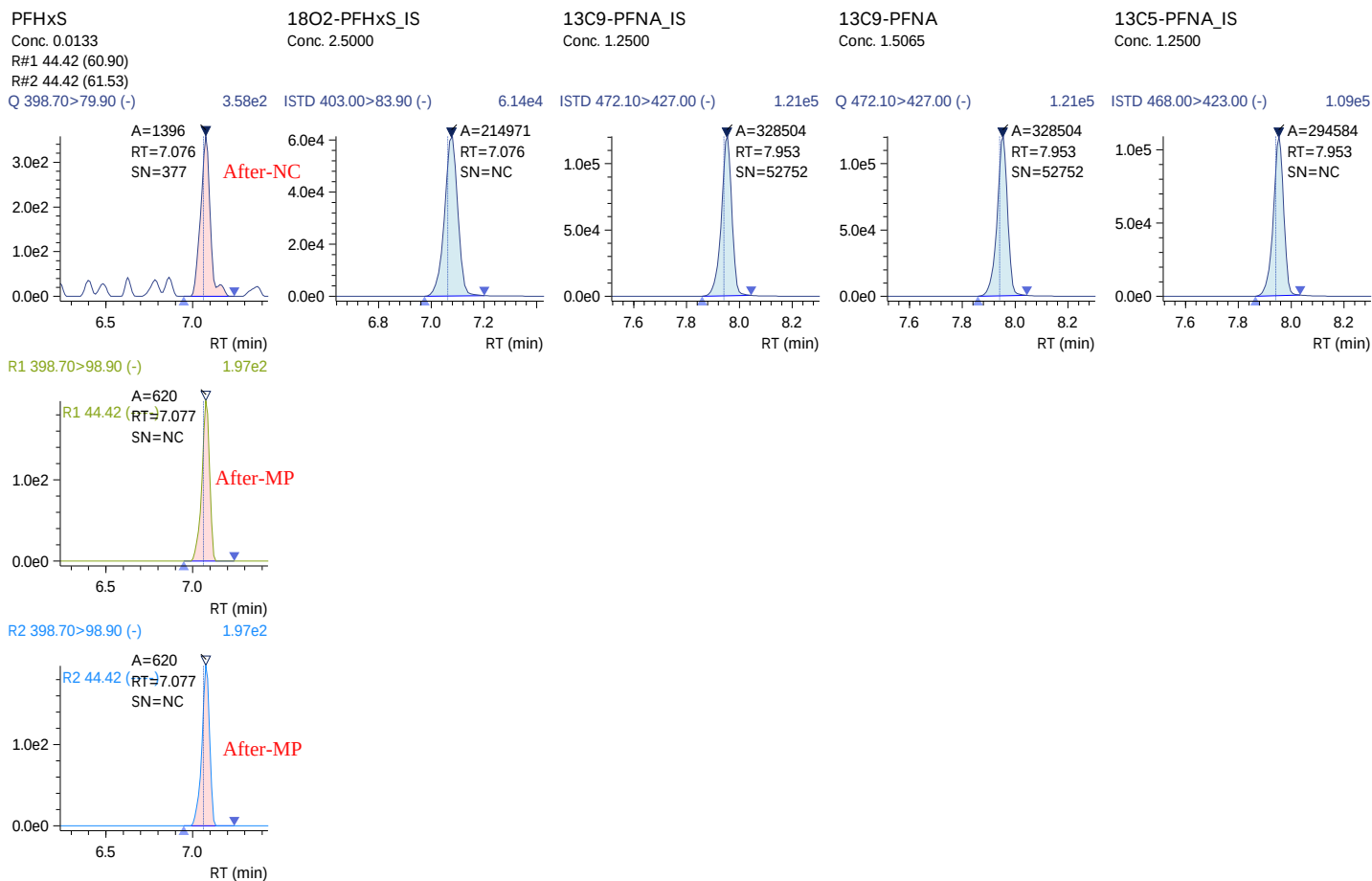
13C3-PFHxS
Conc. 3.1848

13C3-PFHxS_IS
Conc. 2.5000





240201_012 (continued)

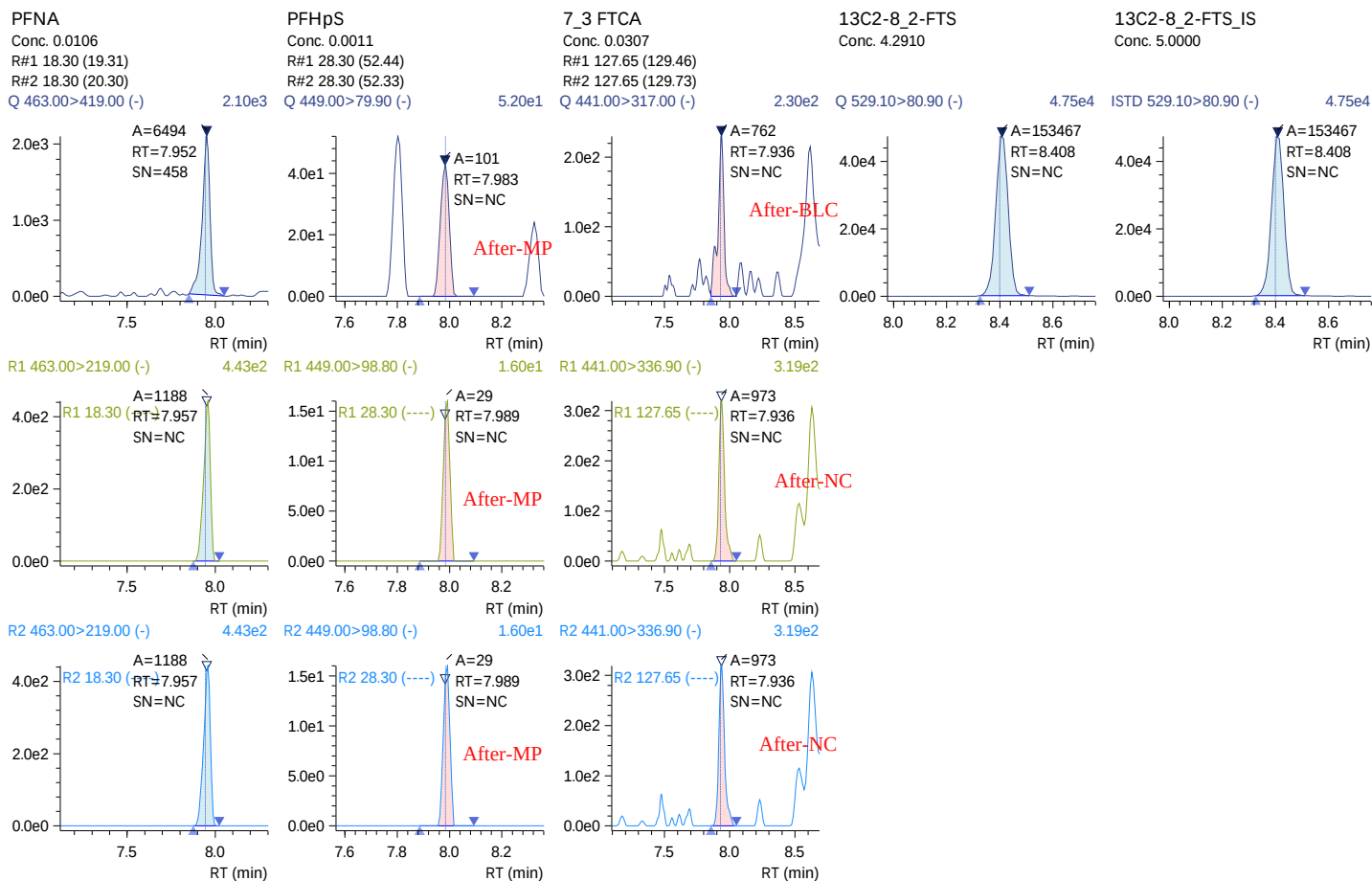


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.

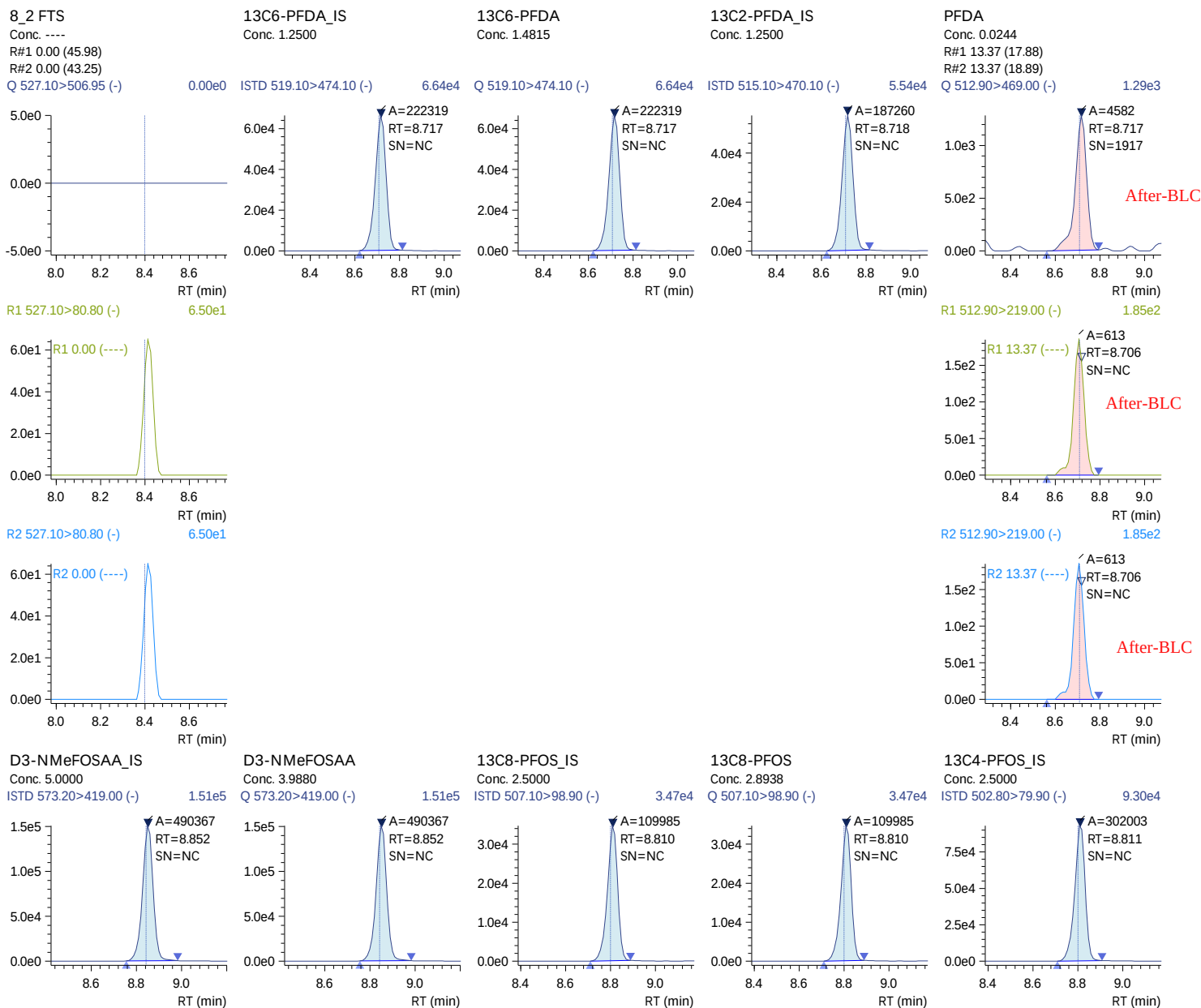


240201_012 (continued)





240201_012 (continued)

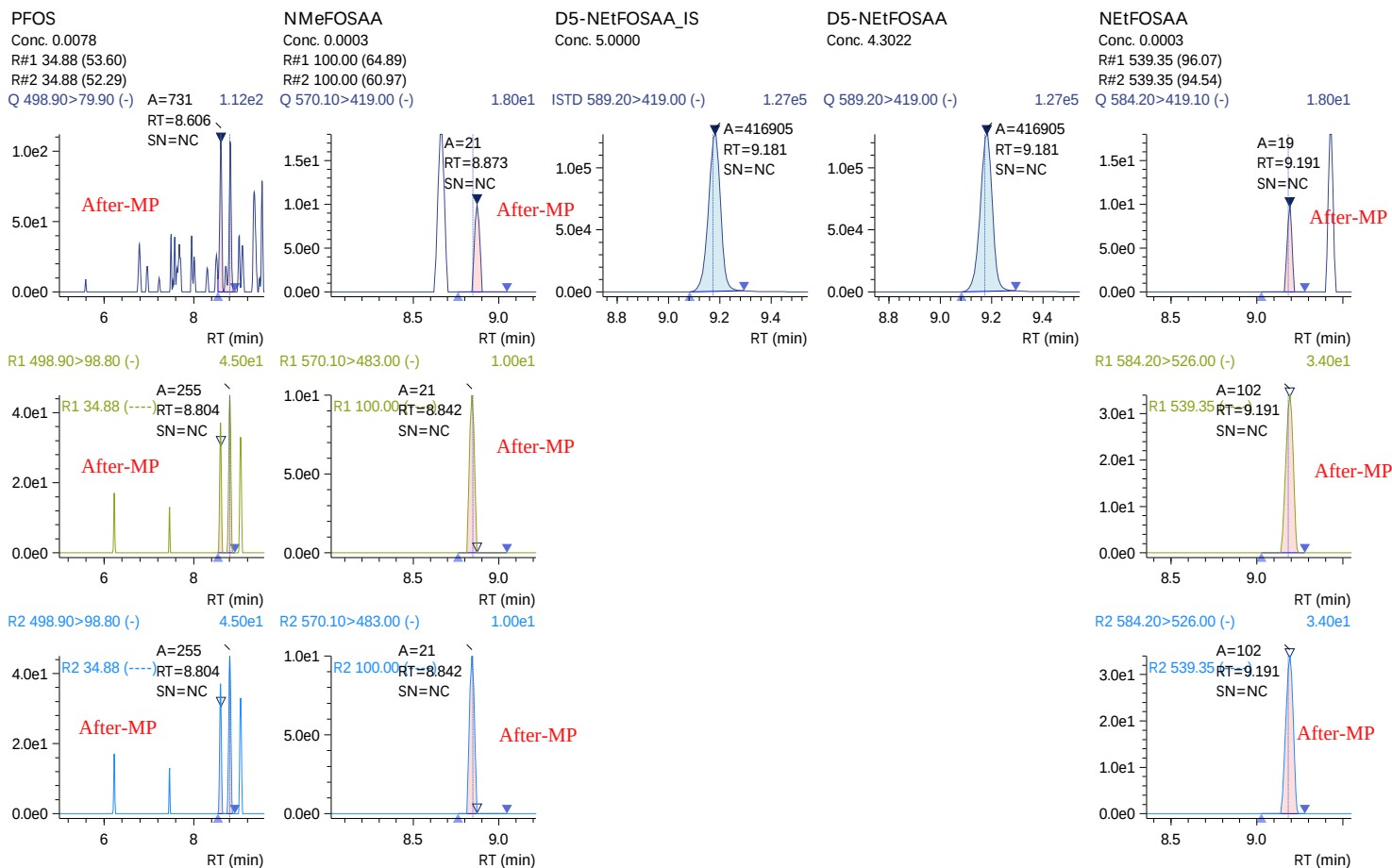


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_012 (continued)





240201_012 (continued)

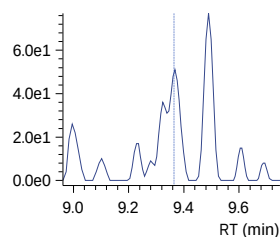
9-Cl-PF3ONS

Conc. ----

R#1 0.00 (30.95)

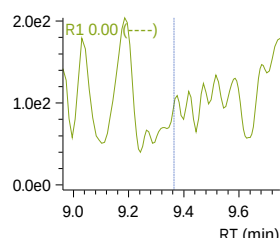
R#2 0.00 (30.61)

Q 530.80>351.00 (-)



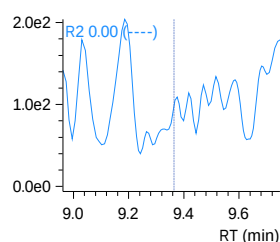
R1 532.80>353.00 (-)

2.04e2



R2 532.80>353.00 (-)

2.04e2



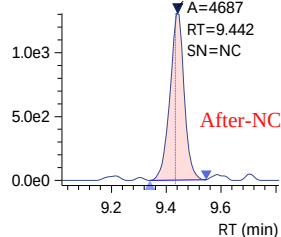
PFUnDA

Conc. 0.0026

R#1 9.02 (11.01)

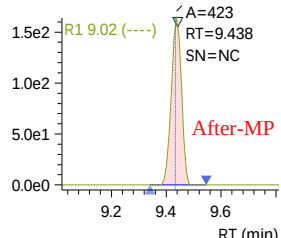
R#2 9.02 (12.02)

Q 563.10>519.00 (-)



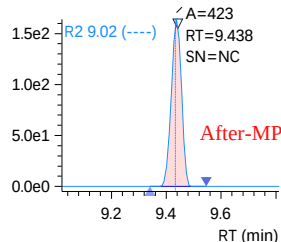
R1 563.10>269.10 (-)

1.64e2



R2 563.10>269.10 (-)

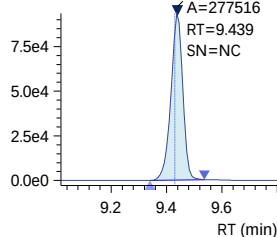
1.64e2



13C7-PFUnDA_IS

Conc. 1.2500

ISTD 570.00>525.10 (-)



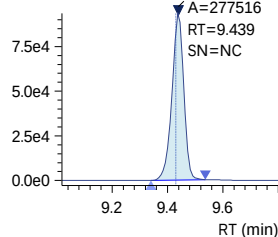
9.36e4



13C7-PFUnDA

Conc. 1.4883

Q 570.00>525.10 (-)



9.36e4



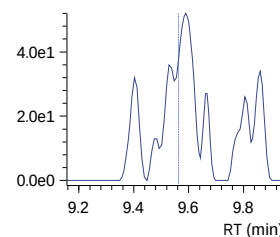
PFNS

Conc. ----

R#1 0.00 (60.44)

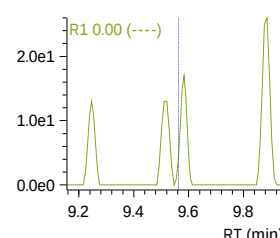
R#2 0.00 (58.51)

Q 548.80>79.90 (-)



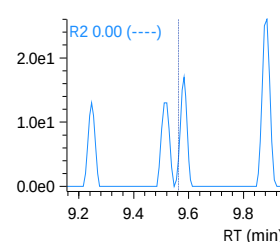
R1 548.80>98.80 (-)

2.60e1



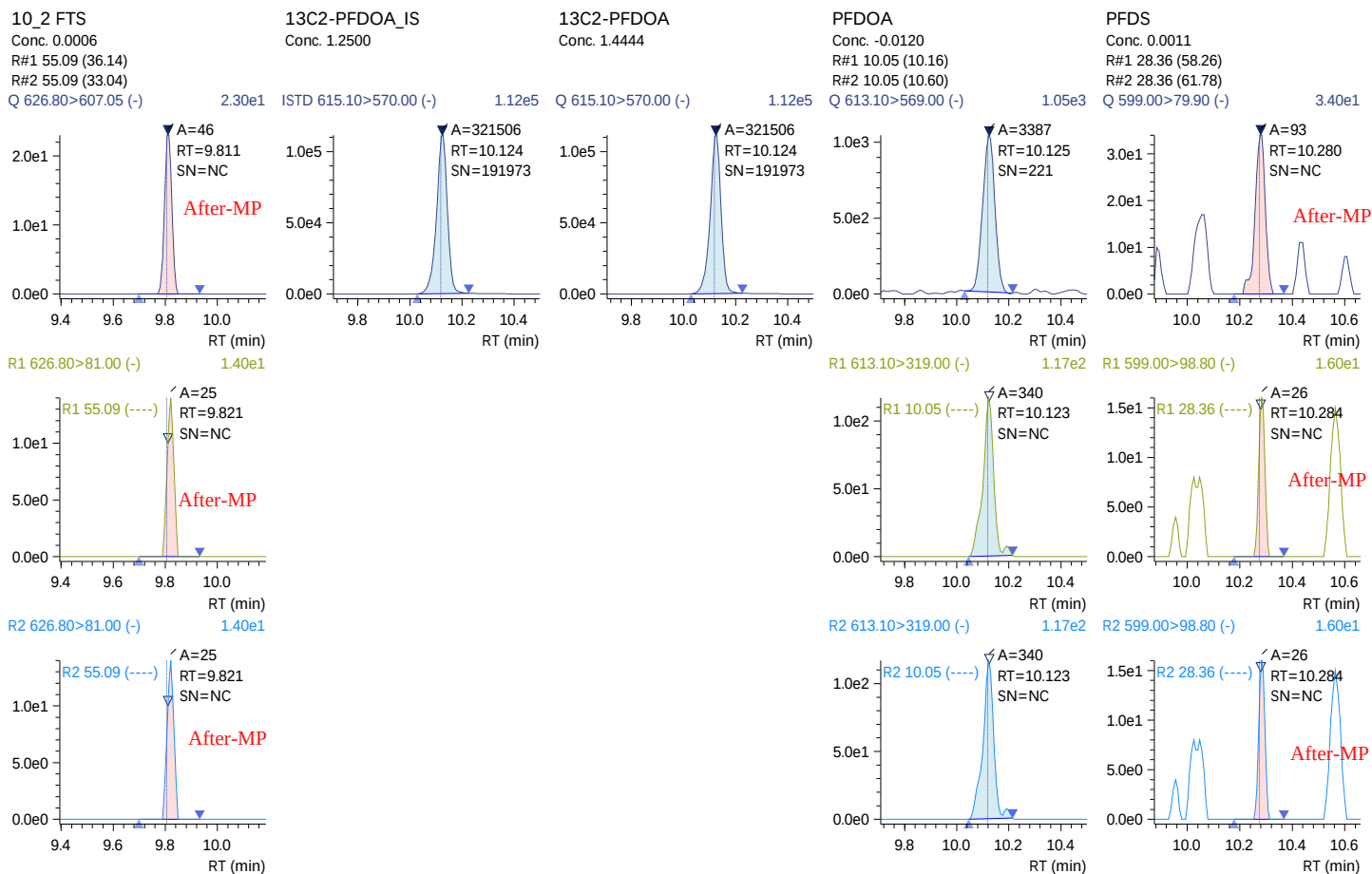
R2 548.80>98.80 (-)

2.60e1



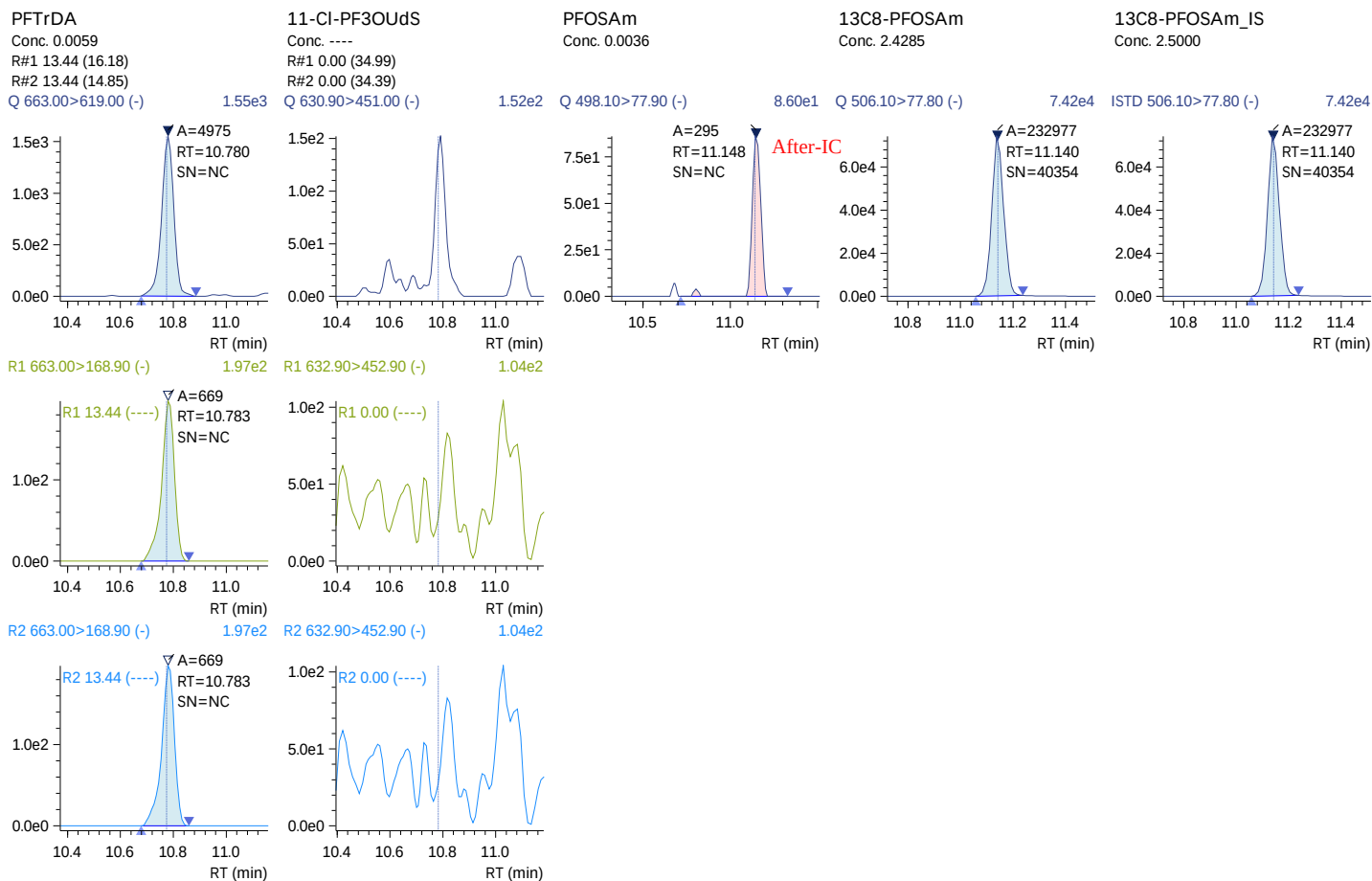


240201_012 (continued)





240201_012 (continued)

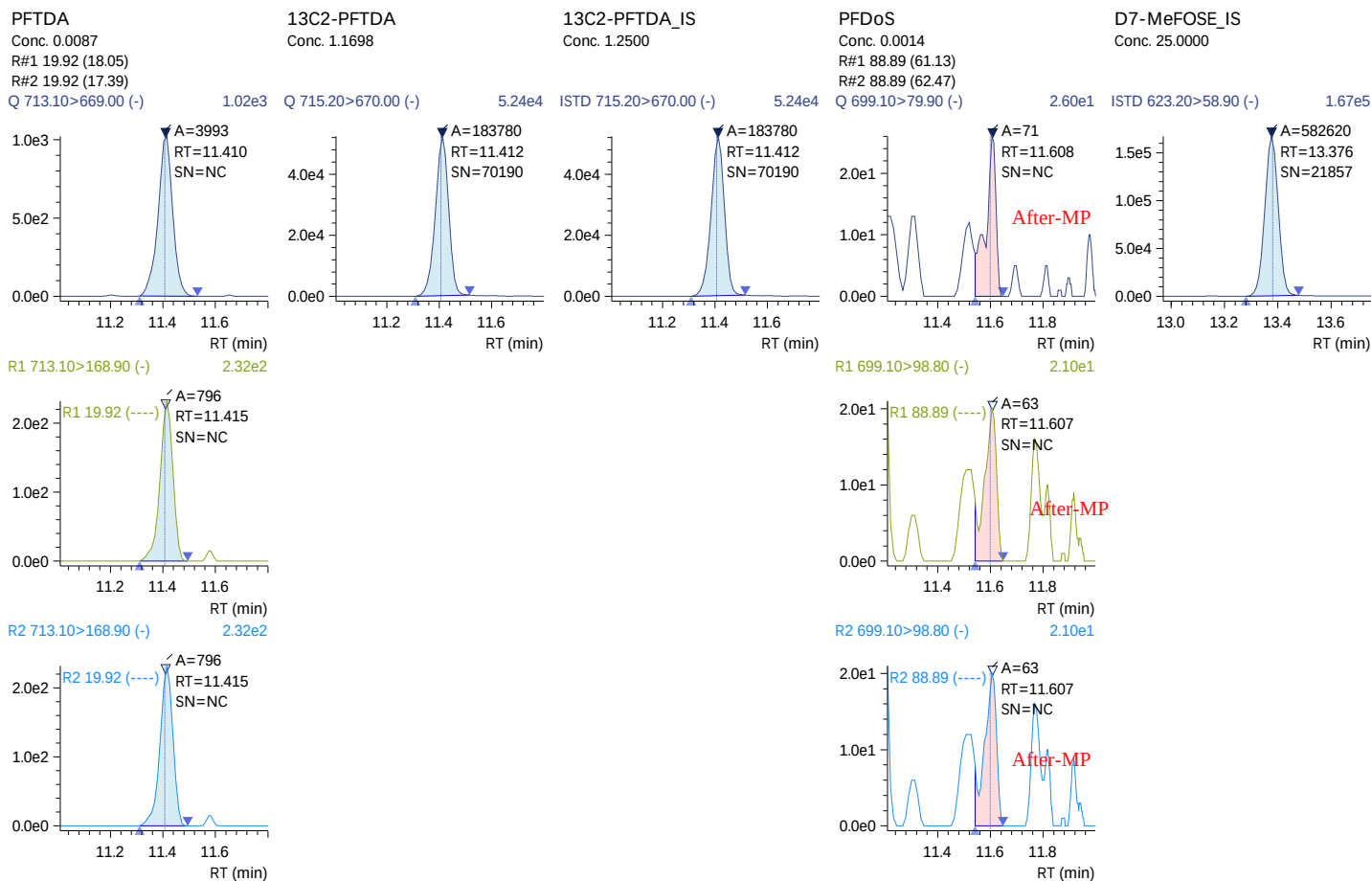


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_012 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_012 (continued)

D7-MeFOSE
Conc. 23.6572

MeFOSE
Conc. ----

13C2-PFHxDA_IS
Conc. 2.5000

13C2-PFHxDA
Conc. 2.4319

PFHxDA
Conc. 0.0230

R#1 7.55 (11.66)

R#2 7.55 (10.99)

Q 623.20>58.90 (-)

1.67e5

Q 616.10>59.00 (-)

1.02e2

ISTD 815.00>770.05 (-)

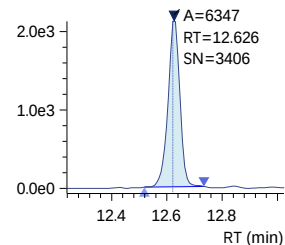
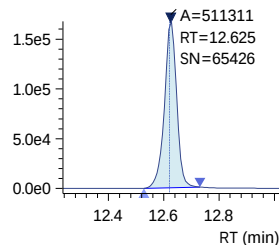
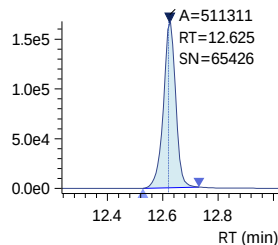
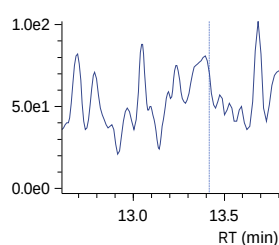
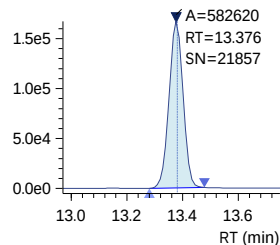
1.68e5

Q 815.00>770.05 (-)

1.68e5

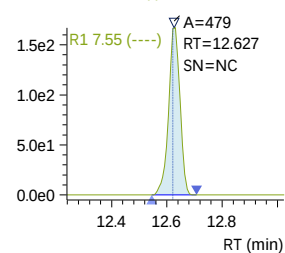
Q 813.00>768.95 (-)

2.13e3



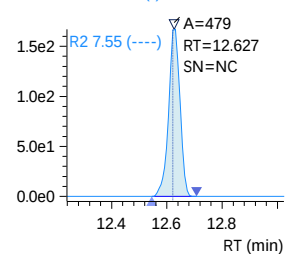
R1 813.00>218.95 (-)

1.67e2



R2 813.00>218.95 (-)

1.67e2





240201_012 (continued)

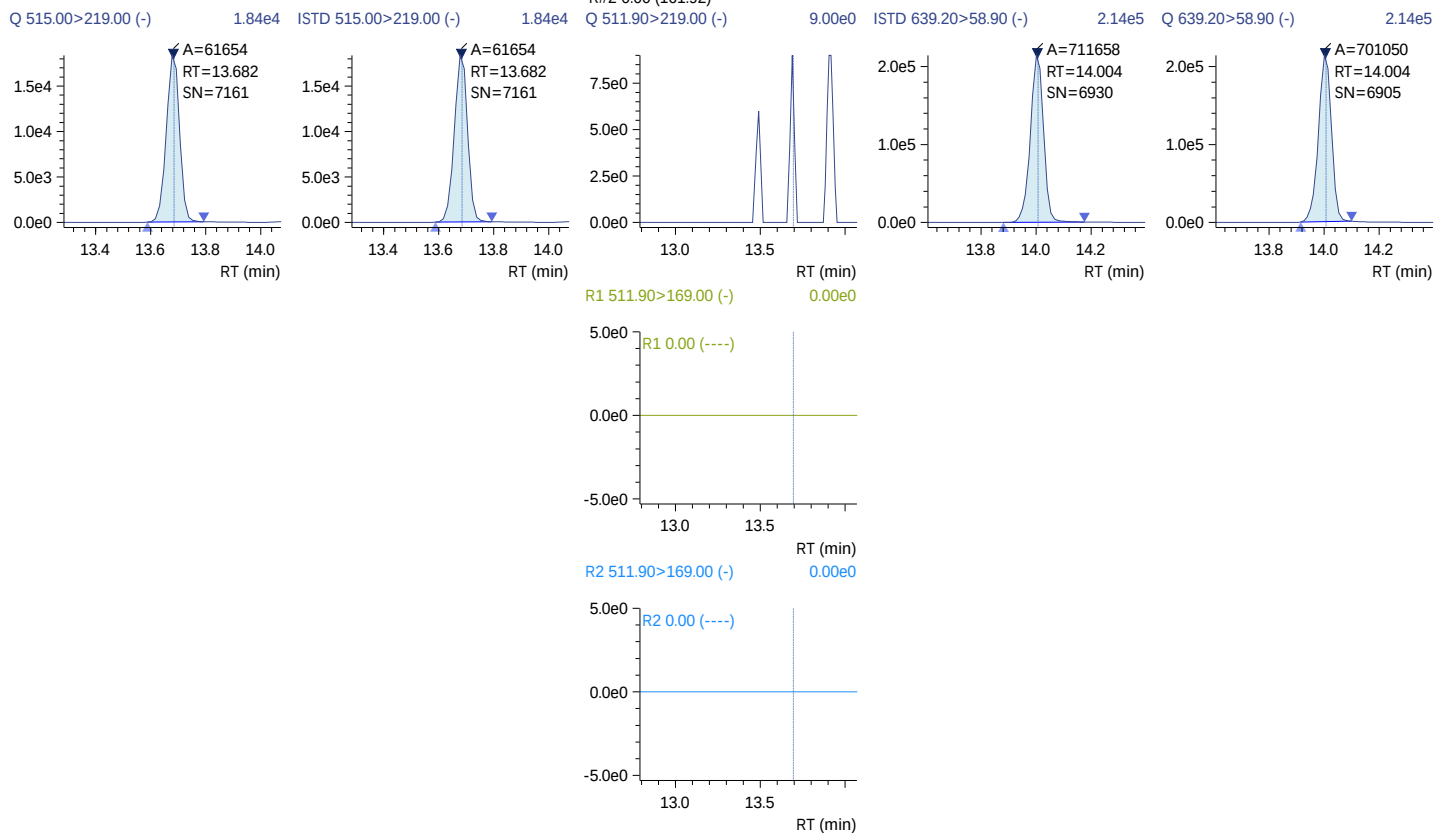
D3-MeFOSA
Conc. 2.4616

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. ----
R#1 0.00 (160.44)
R#2 0.00 (161.92)

D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 23.2619





240201_012 (continued)

EtFOSE
Conc. ----

D5-EtFOSAm
Conc. 2.3498

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. ----

PFODA

Conc. 0.0422

R#1 33.56 (36.03)

R#2 33.56 (35.02)

Q 630.00>59.00 (-)

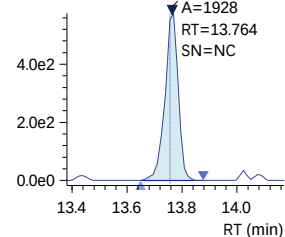
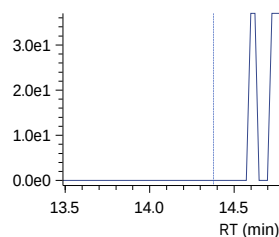
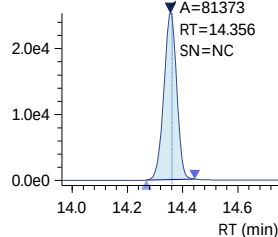
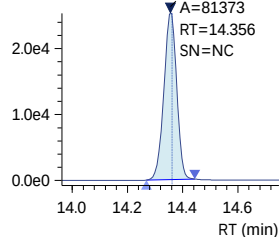
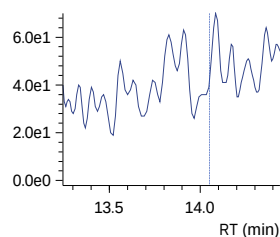
7.00e1 Q 531.10>219.00 (-)

2.54e4 ISTD 531.10>219.00 (-)

2.54e4 Q 526.00>219.00 (-)

3.70e1 Q 913.00>868.65 (-)

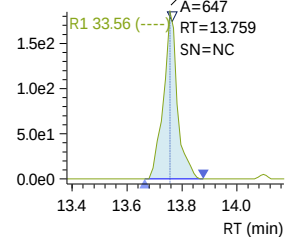
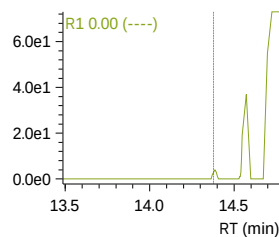
5.75e2



R1 526.00>169.00 (-)

7.30e1 R1 913.00>169.00 (-)

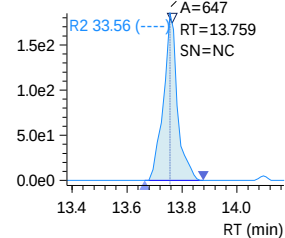
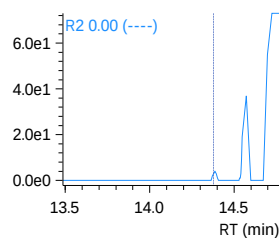
1.85e2



R2 526.00>169.00 (-)

7.30e1 R2 913.00>169.00 (-)

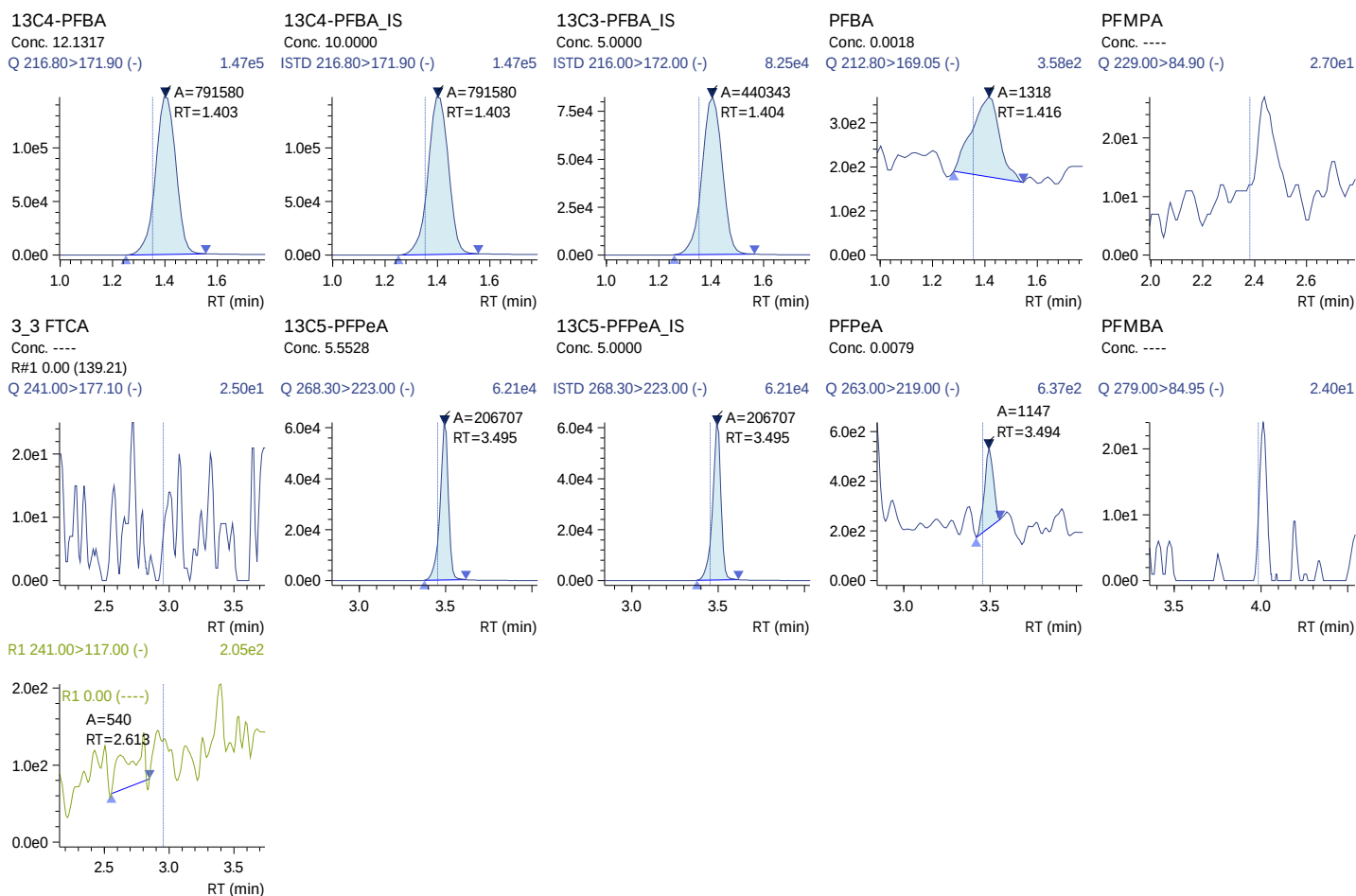
1.85e2





240201_012

Sample ID: 1633 CCB
Date Acquired: 2/1/2024 2:38:14 PM
Acquired by: System Administrator
Data File: 240201_012
Vial: 54 | Inj. Volume: 10.0000uL | Tray: 1





240201_012 (continued)

13C2-4_2 FTS
Conc. 4.4049

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. ----
R#1 0.00 (32.10)
R#2 0.00 (32.79)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. ----
R#1 0.00 (44.81)
R#2 0.00 (46.72)

Q 329.10>80.90 (-)

5.56e4

ISTD 329.10>80.90 (-)

5.56e4

Q 327.10>307.00 (-)

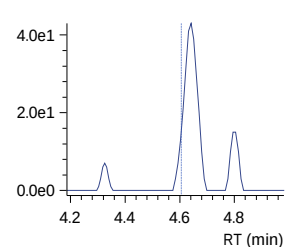
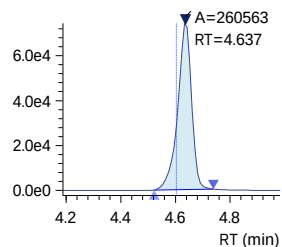
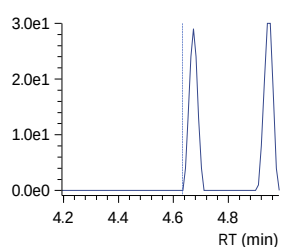
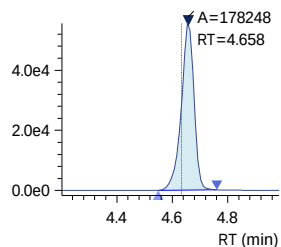
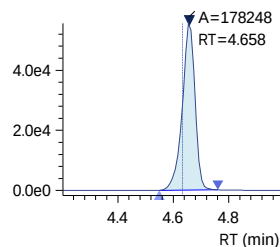
3.00e1

ISTD 302.10>79.90 (-)

7.44e4

Q 298.70>79.90 (-)

4.30e1

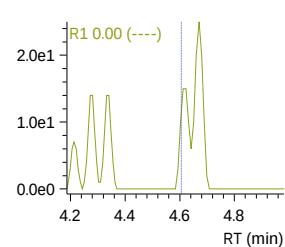
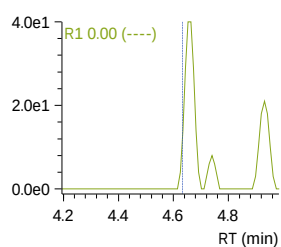


R1 327.10>80.90 (-)

4.00e1

R1 298.70>98.80 (-)

2.50e1

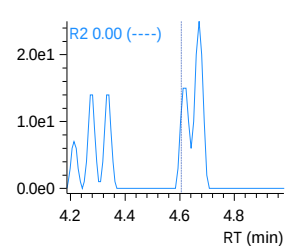
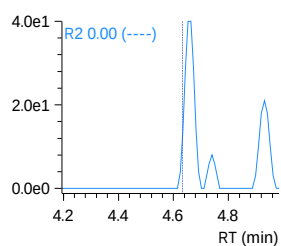


R2 327.10>80.90 (-)

4.00e1

R2 298.70>98.80 (-)

2.50e1





240201_012 (continued)

13C3-PFBS
 Conc. 3.2486

NFDHA
 Conc. 0.0060
 R#1 0.00 (35.54)
 R#2 0.00 (37.91)

13C5-PFHxA
 Conc. 2.8273

13C5-PFHxA_IS
 Conc. 2.5000

13C2-PFHxA_IS
 Conc. 2.5000

Q 302.10>79.90 (-)

7.44e4

Q 295.00>201.00 (-)

2.14e2

Q 318.00>273.00 (-)

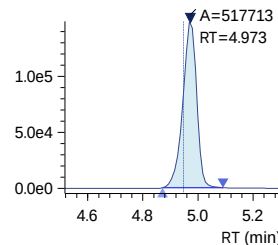
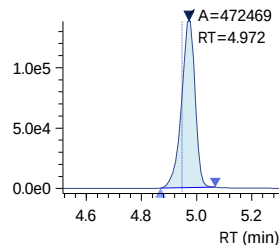
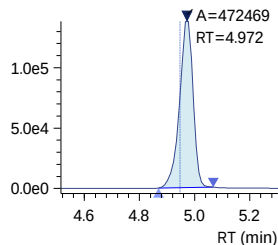
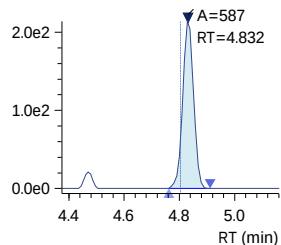
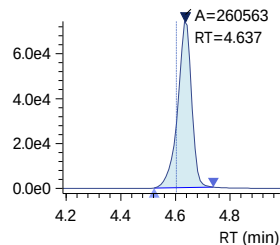
1.38e5

ISTD 318.00>273.00 (-)

1.38e5

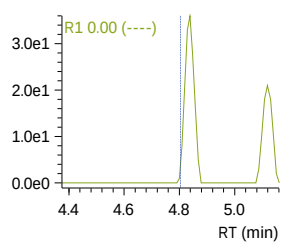
ISTD 315.10>270.00 (-)

1.49e5



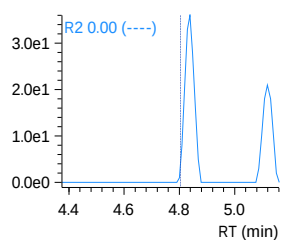
R1 295.00>84.90 (-)

3.60e1



R2 295.00>84.90 (-)

3.60e1





240201_012 (continued)

PFHxA
 Conc. 0.0229

PFEESA
 Conc. 0.0006
 R#1 0.00 (5.22)
 R#2 0.00 (5.35)

13C3-HFPO-DA
 Conc. 13.5076

13C3-HFPO-DA_IS
 Conc. 10.0000

HFPO-DA
 Conc. ----
 R#1 0.00 (59.79)
 R#2 0.00 (58.32)

Q 313.00>269.00 (-)

1.09e3

Q 314.80>135.00 (-)

1.38e2

Q 286.90>168.90 (-)

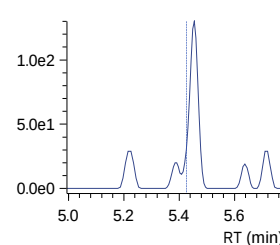
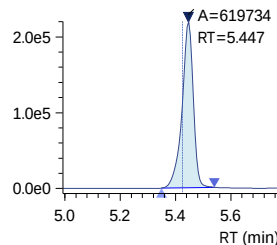
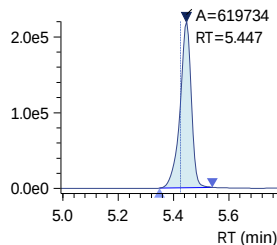
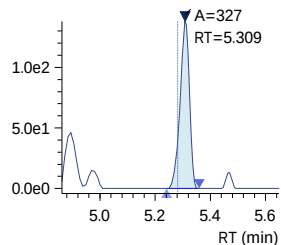
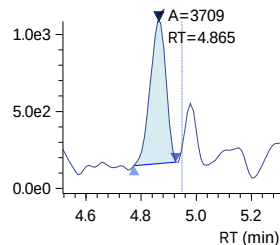
2.21e5

ISTD 286.90>168.90 (-)

2.21e5

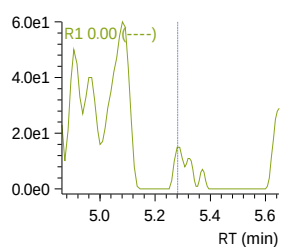
Q 284.90>168.90 (-)

1.30e2



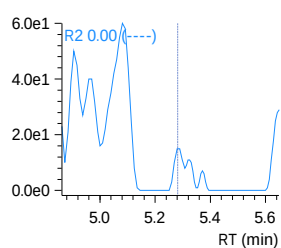
R1 314.80>82.90 (-)

6.00e1



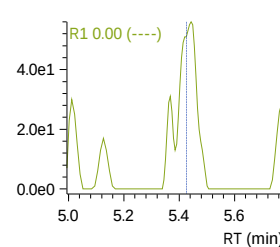
R2 314.80>82.90 (-)

6.00e1



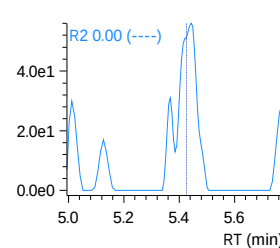
R1 284.90>184.90 (-)

5.60e1



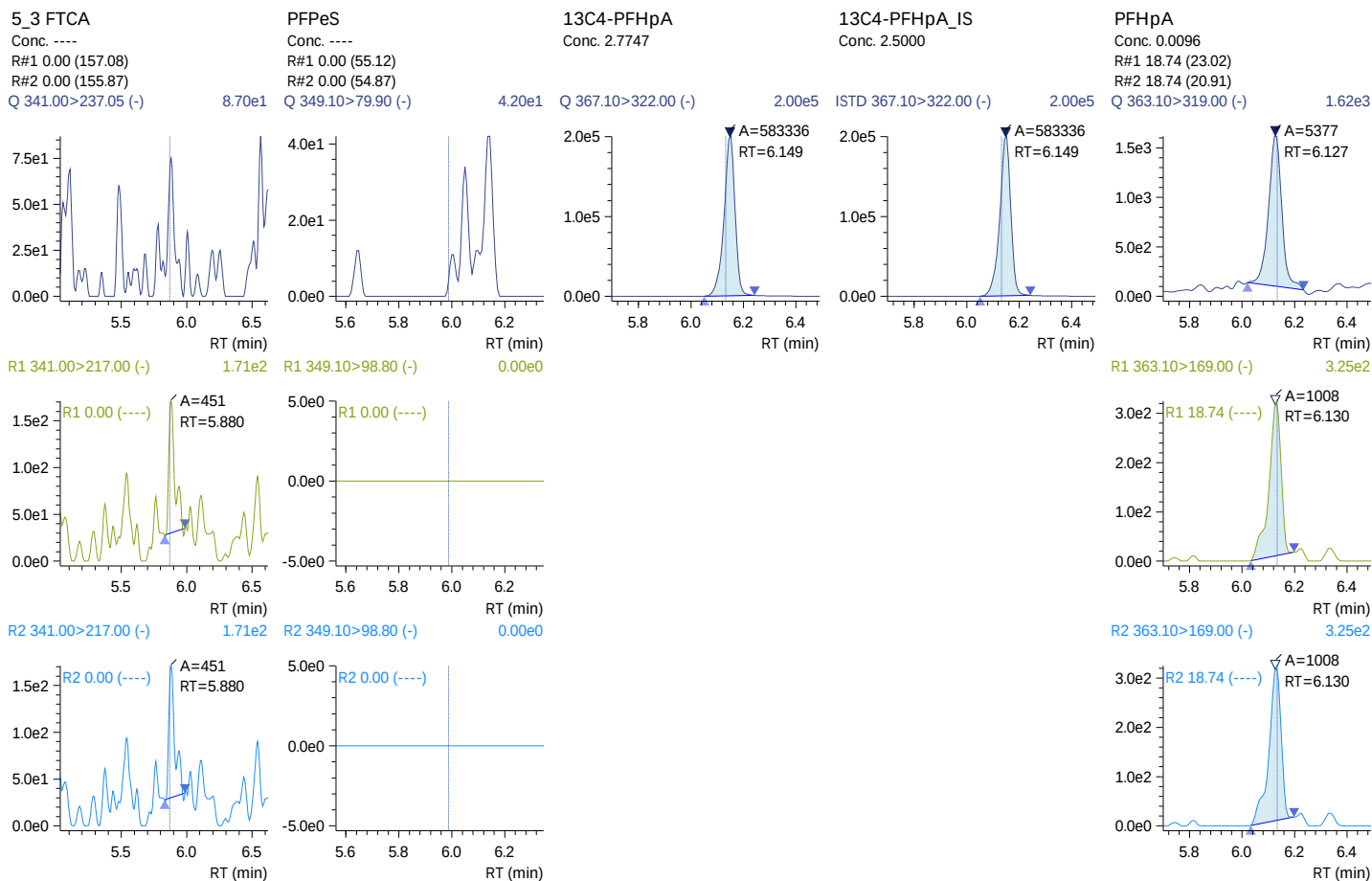
R2 284.90>184.90 (-)

5.60e1



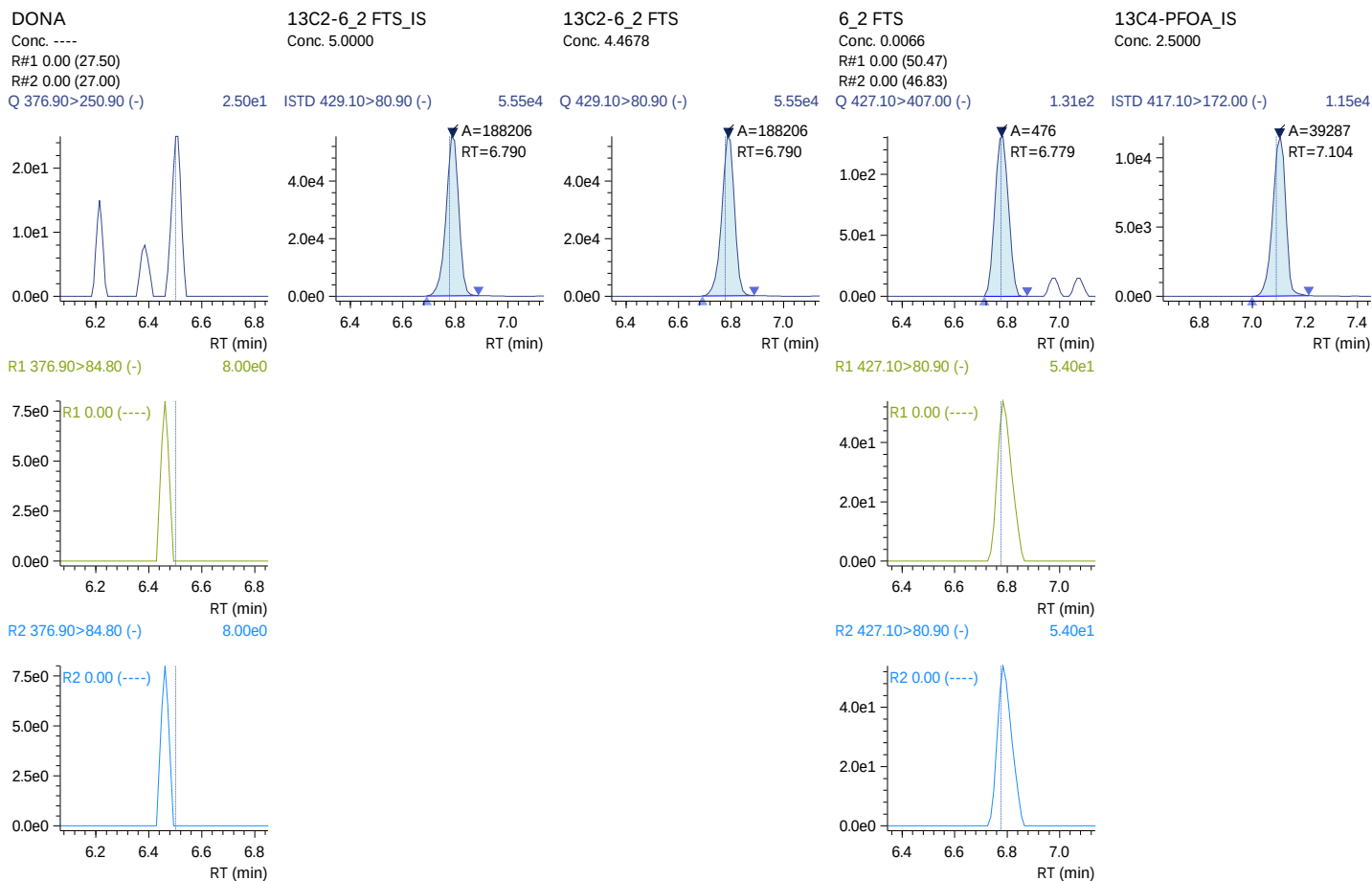


240201_012 (continued)





240201_012 (continued)





240201_012 (continued)

13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.8107

PFOA
Conc. 0.0274
R#1 24.05 (28.77)
R#2 24.05 (28.12)

13C3-PFHxS
Conc. 3.1848

13C3-PFHxS_IS
Conc. 2.5000

ISTD 421.10>376.00 (-)

1.57e5

Q 421.10>376.00 (-)

1.57e5

Q 413.00>369.00 (-)

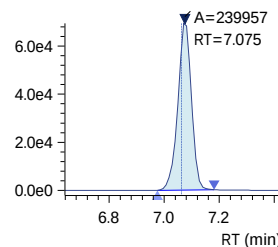
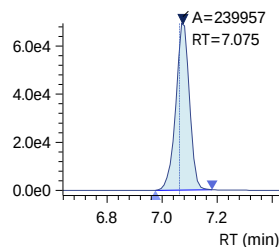
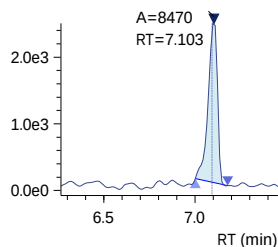
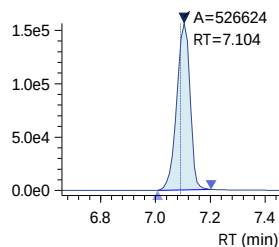
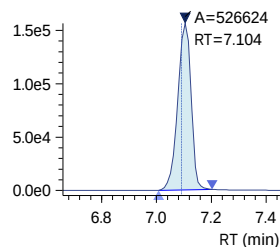
2.51e3

Q 402.10>79.90 (-)

6.94e4

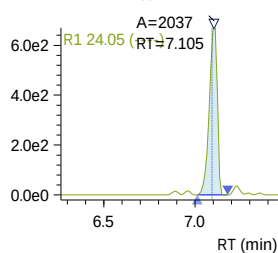
ISTD 402.10>79.90 (-)

6.94e4



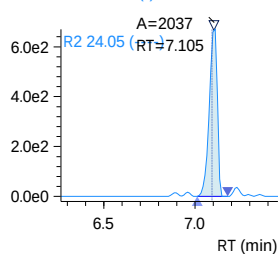
R1 413.00>169.00 (-)

6.70e2



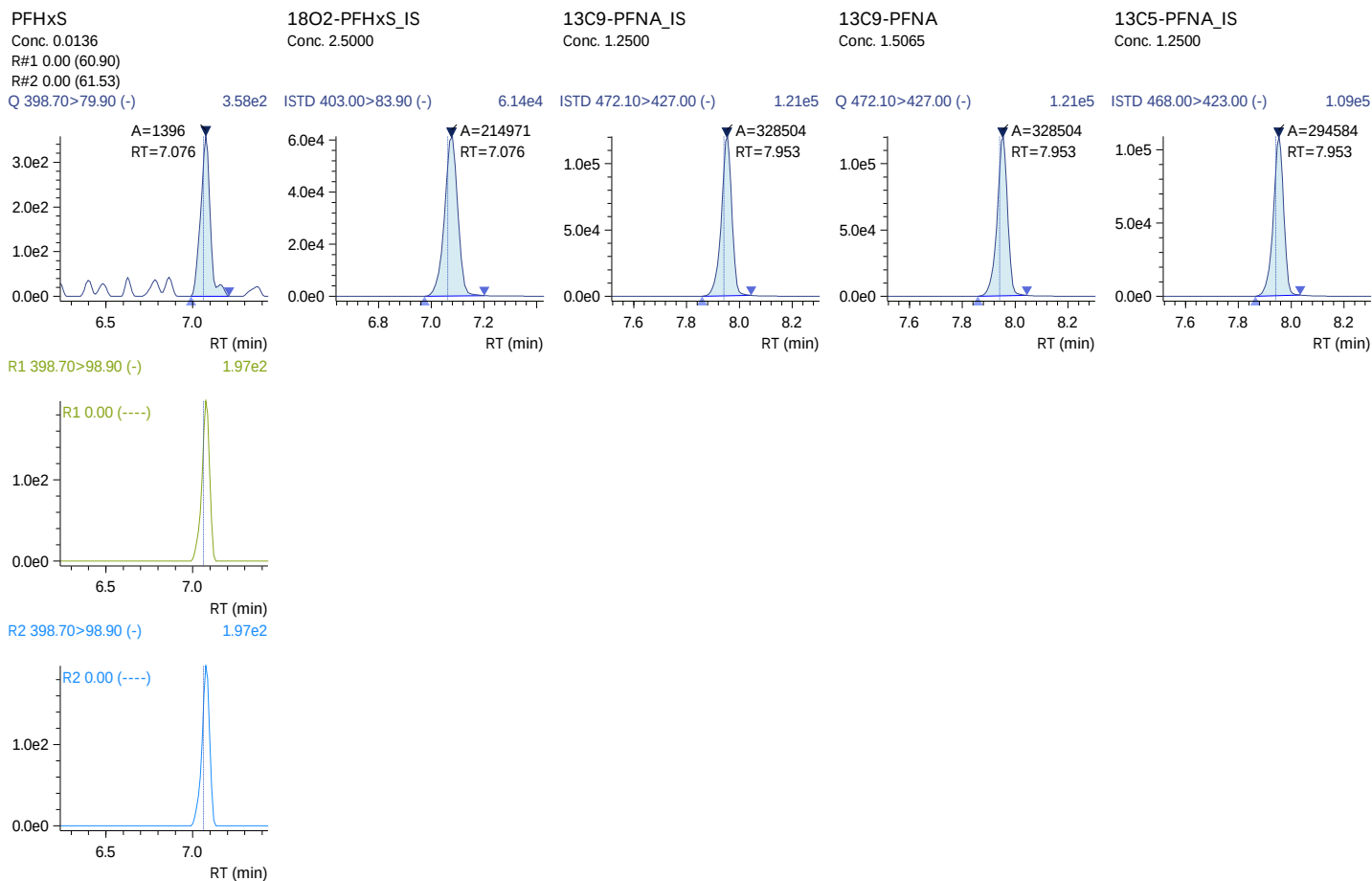
R2 413.00>169.00 (-)

6.70e2



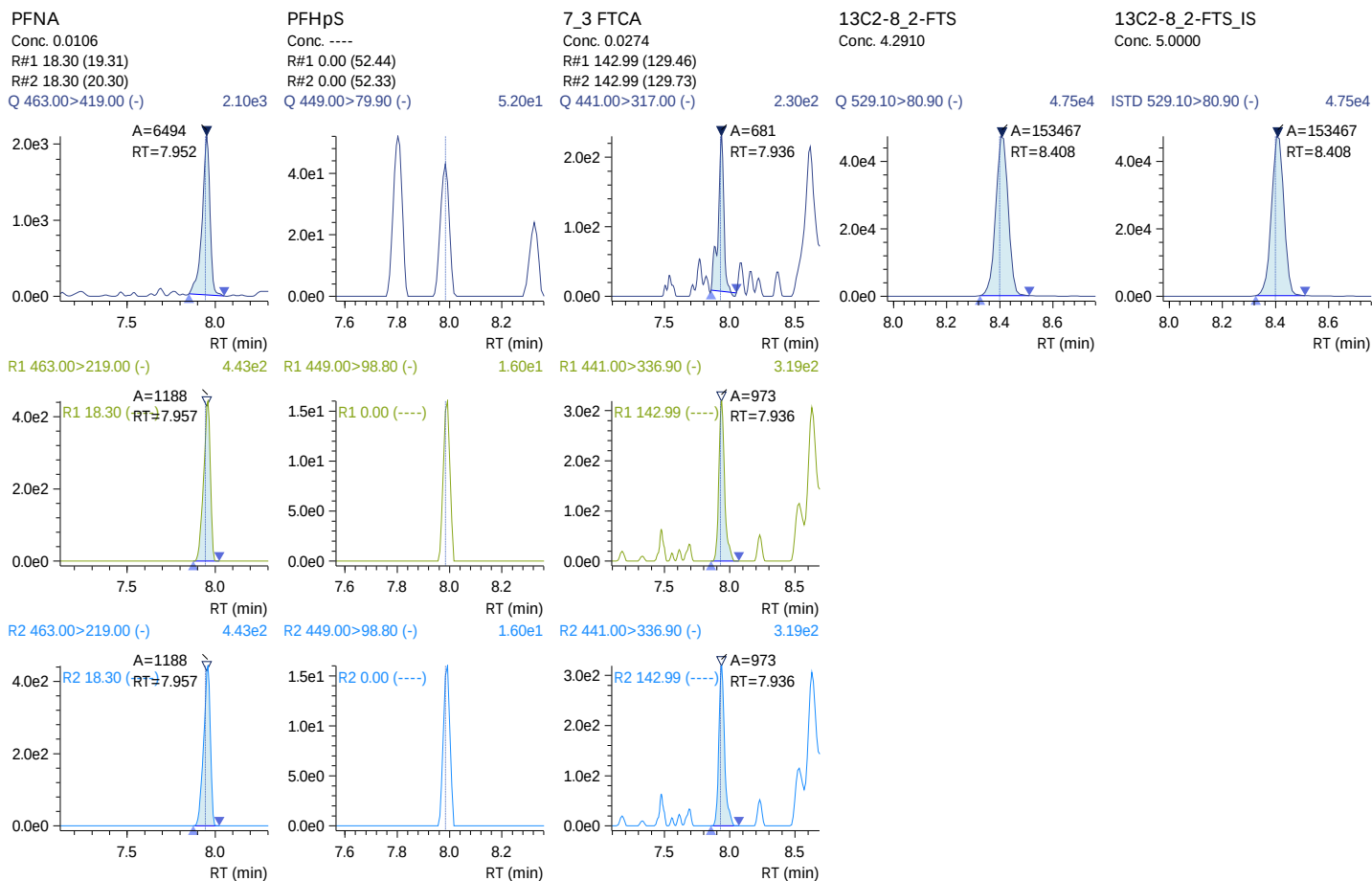


240201_012 (continued)



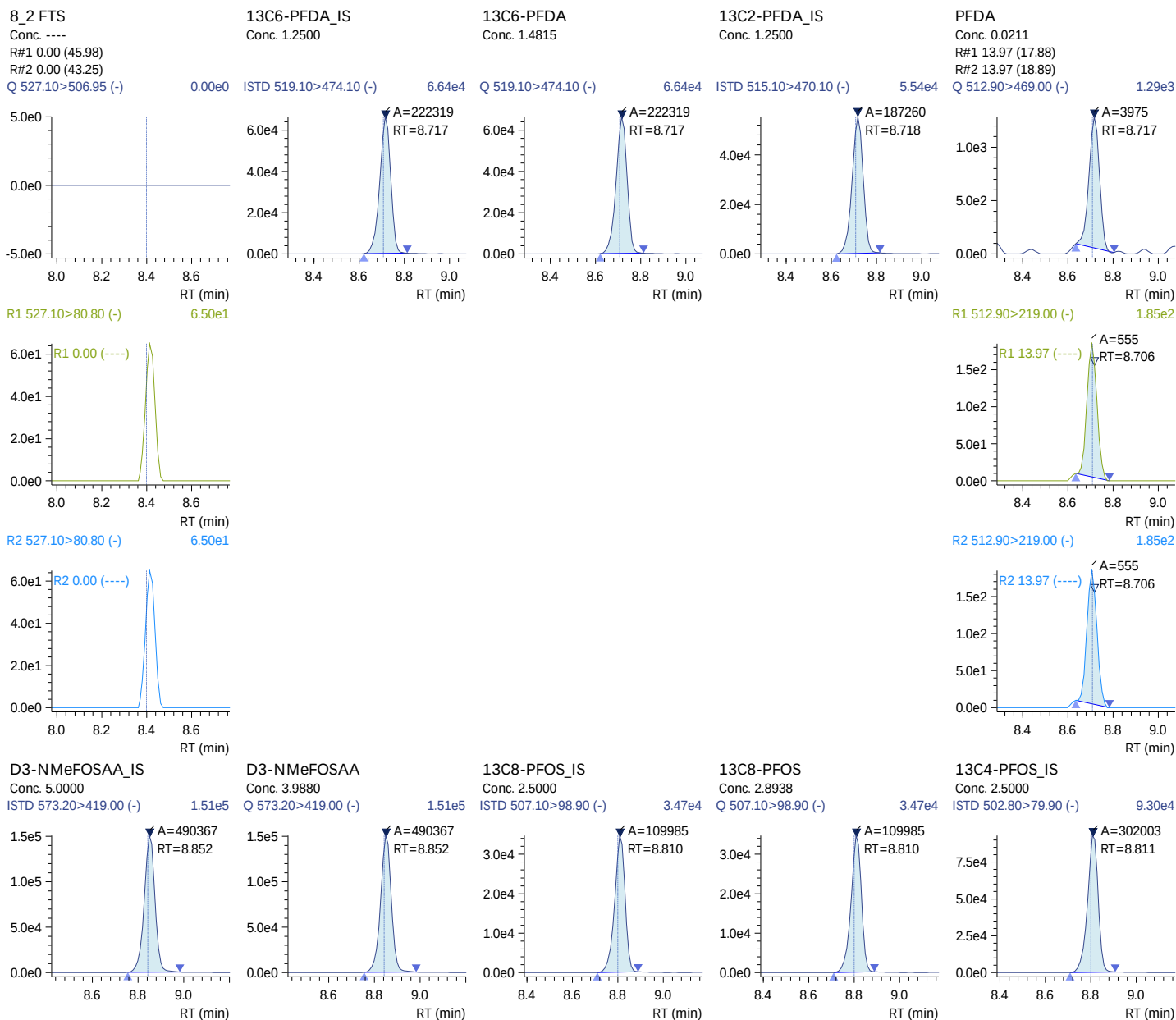


240201_012 (continued)



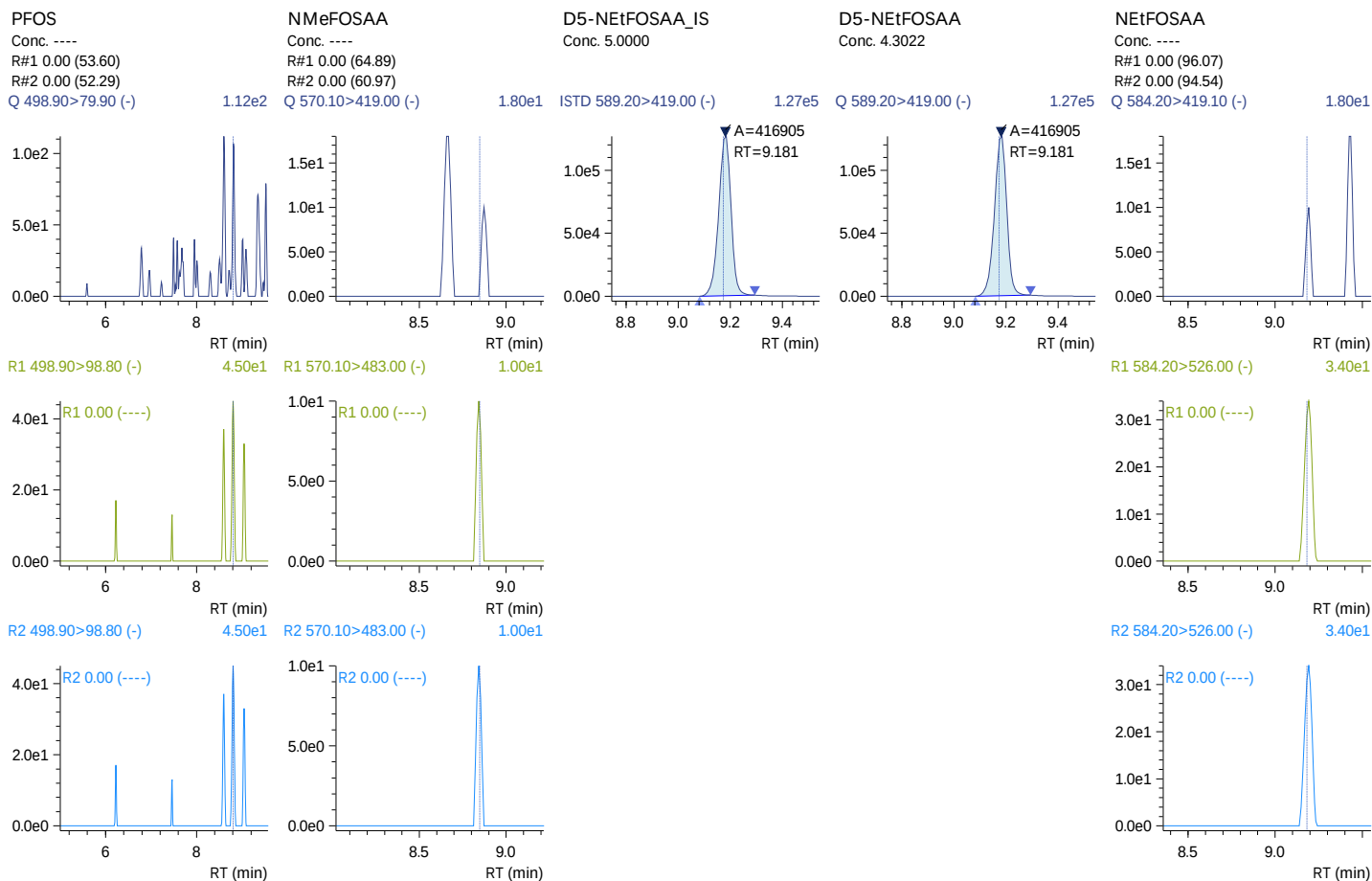


240201_012 (continued)





240201_012 (continued)





240201_012 (continued)

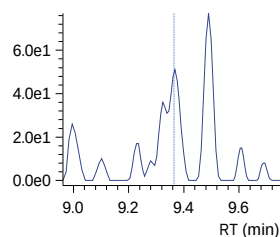
9-Cl-PF3ONS

Conc. ----

R#1 0.00 (30.95)

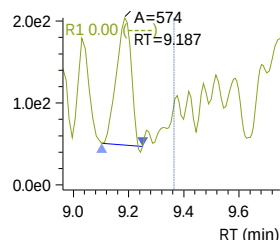
R#2 0.00 (30.61)

Q 530.80>351.00 (-)



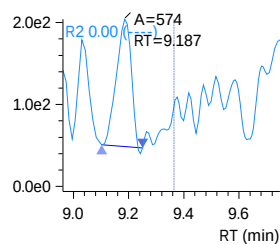
R1 532.80>353.00 (-)

2.04e2



R2 532.80>353.00 (-)

2.04e2



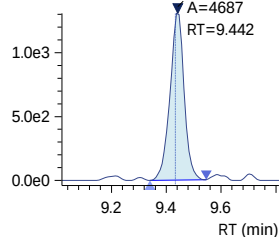
PFUnDA

Conc. 0.0026

R#1 0.00 (11.01)

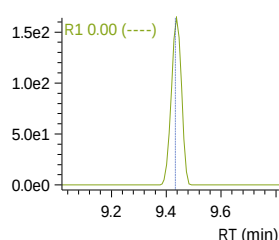
R#2 0.00 (12.02)

Q 563.10>519.00 (-)



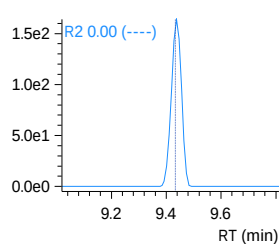
R1 563.10>269.10 (-)

1.64e2



R2 563.10>269.10 (-)

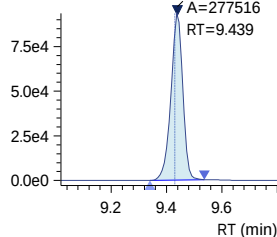
1.64e2



13C7-PFUnDA_IS

Conc. 1.2500

ISTD 570.00>525.10 (-)



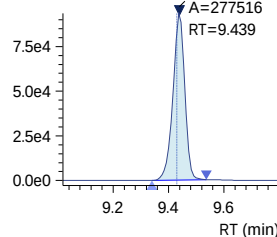
9.36e4



13C7-PFUnDA

Conc. 1.4883

Q 570.00>525.10 (-)



9.36e4



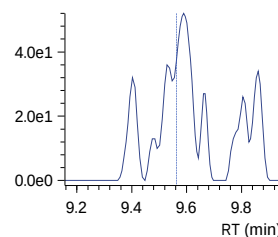
PFNS

Conc. ----

R#1 0.00 (60.44)

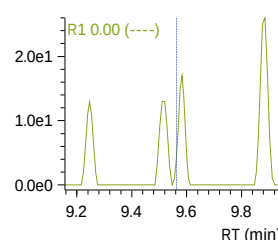
R#2 0.00 (58.51)

Q 548.80>79.90 (-)



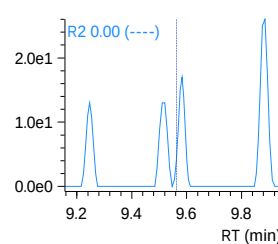
R1 548.80>98.80 (-)

2.60e1



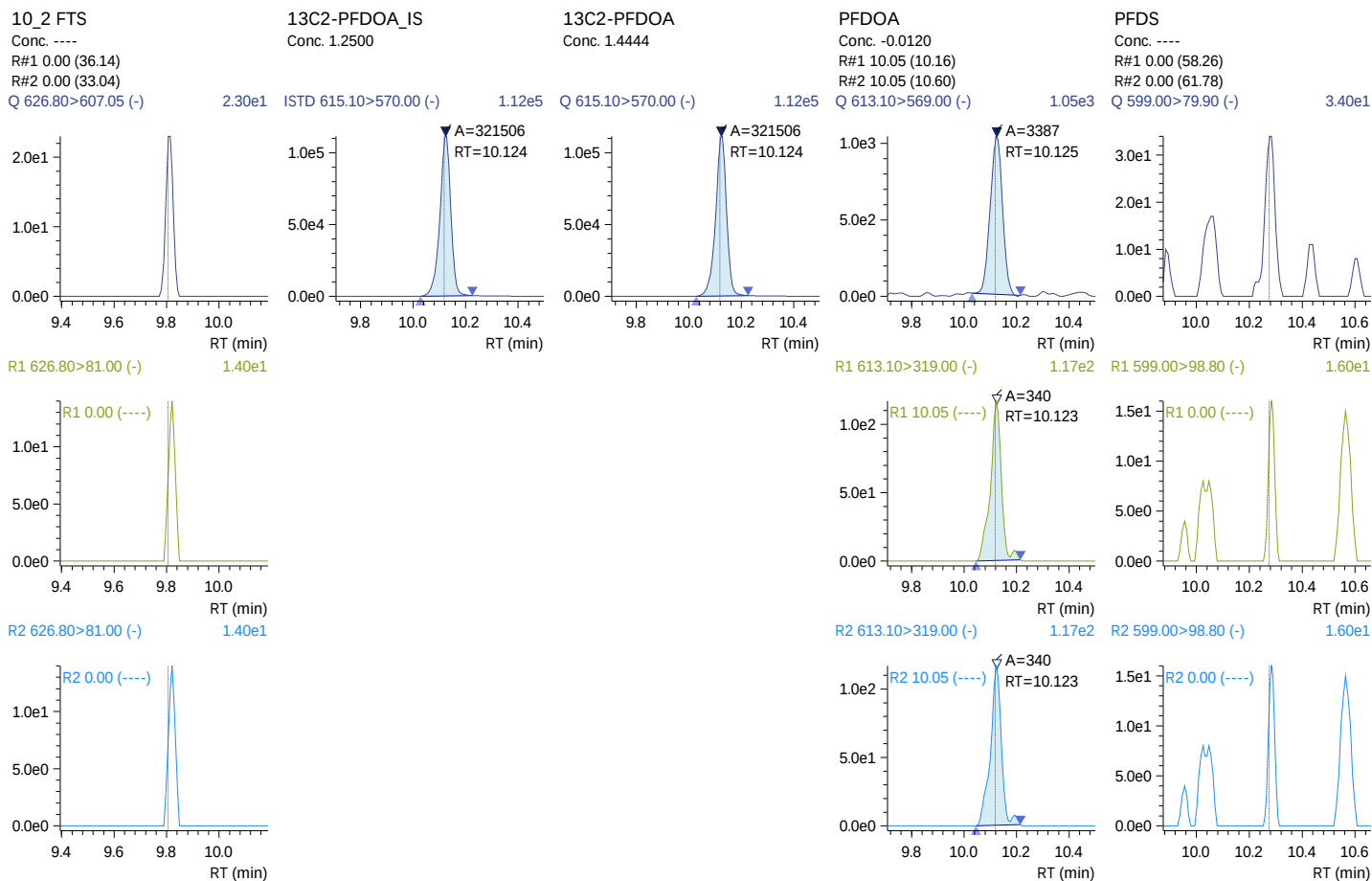
R2 548.80>98.80 (-)

2.60e1



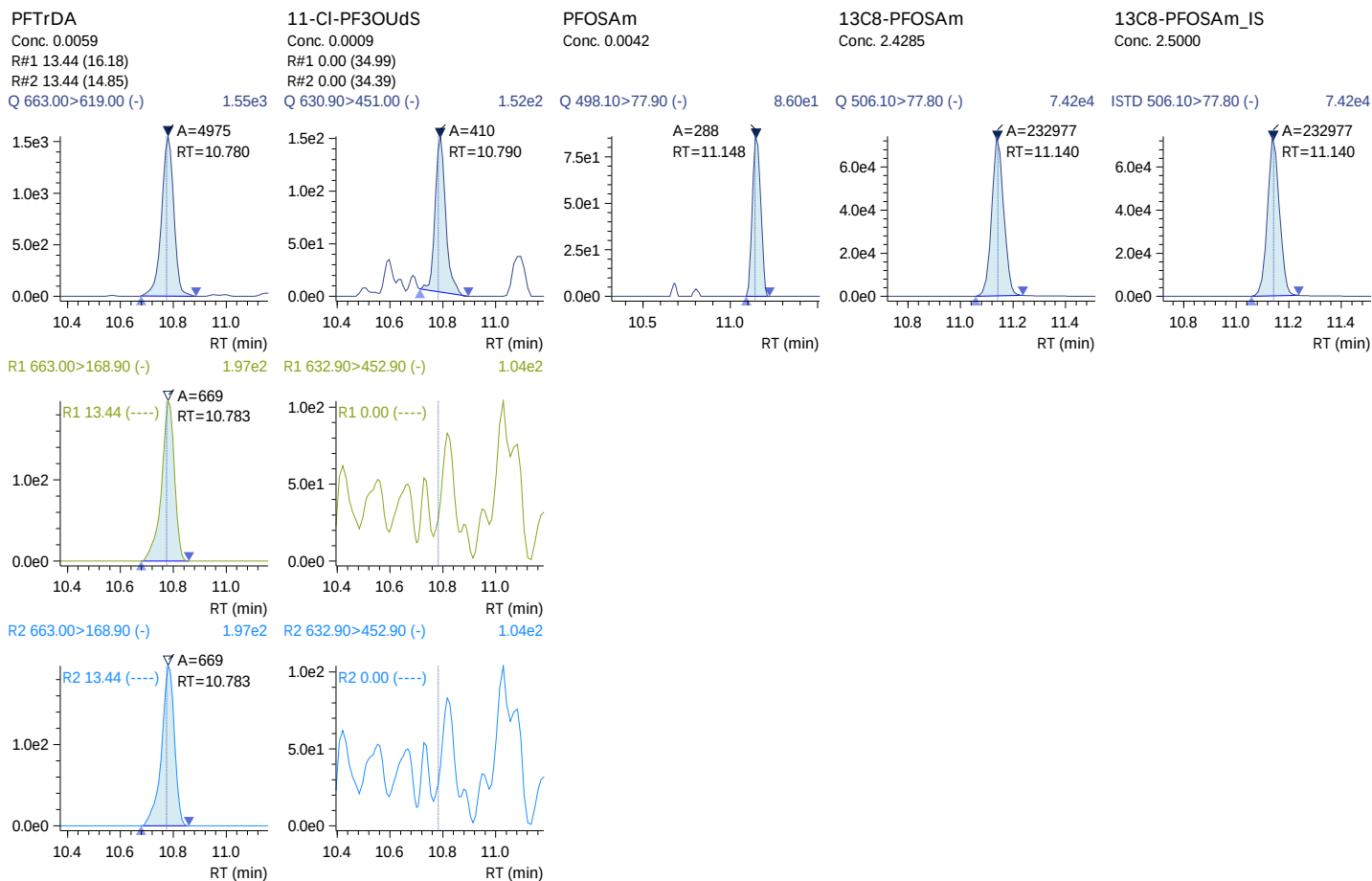


240201_012 (continued)



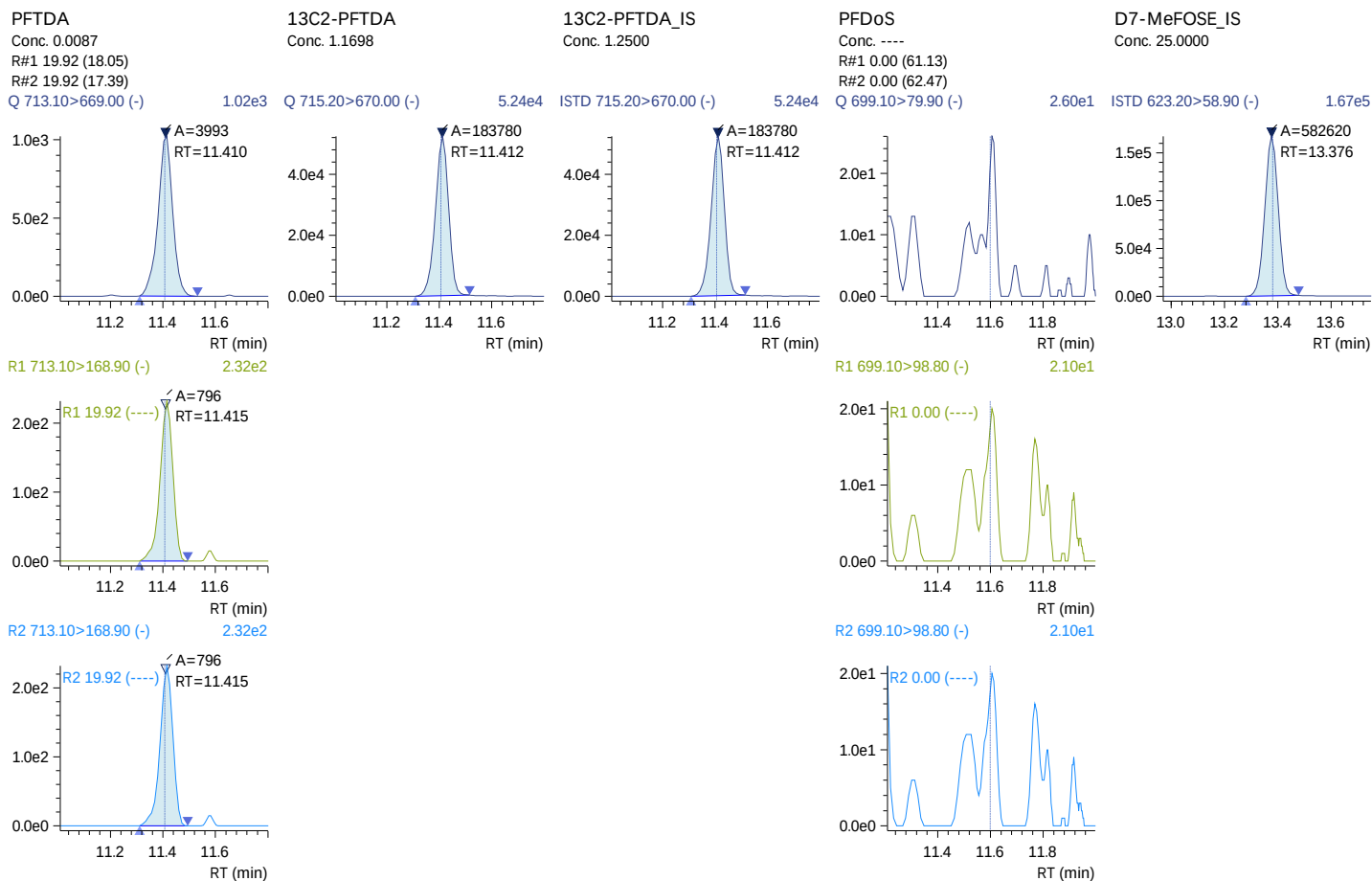


240201_012 (continued)





240201_012 (continued)





240201_012 (continued)

D7-MeFOSE
 Conc. 23.6572

MeFOSE
 Conc. 0.0071

¹³C2-PFHxDA_IS
 Conc. 2.5000

¹³C2-PFHxDA
 Conc. 2.4319

PFHxDA
 Conc. 0.0230

R#1 7.55 (11.66)

R#2 7.55 (10.99)

Q 623.20>58.90 (-)

1.67e5

Q 616.10>59.00 (-)

1.02e2

ISTD 815.00>770.05 (-)

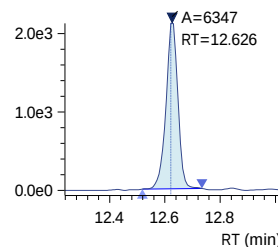
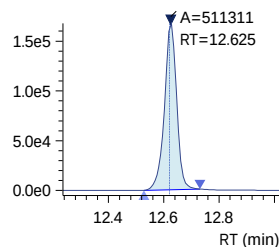
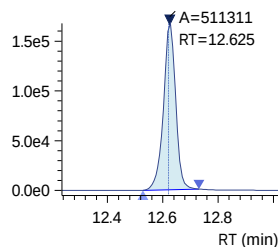
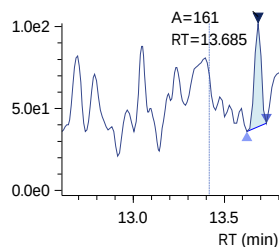
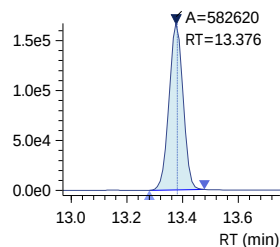
1.68e5

Q 815.00>770.05 (-)

1.68e5

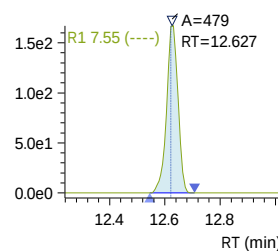
Q 813.00>768.95 (-)

2.13e3



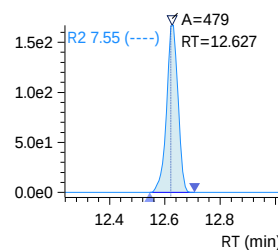
R1 813.00>218.95 (-)

1.67e2



R2 813.00>218.95 (-)

1.67e2





240201_012 (continued)

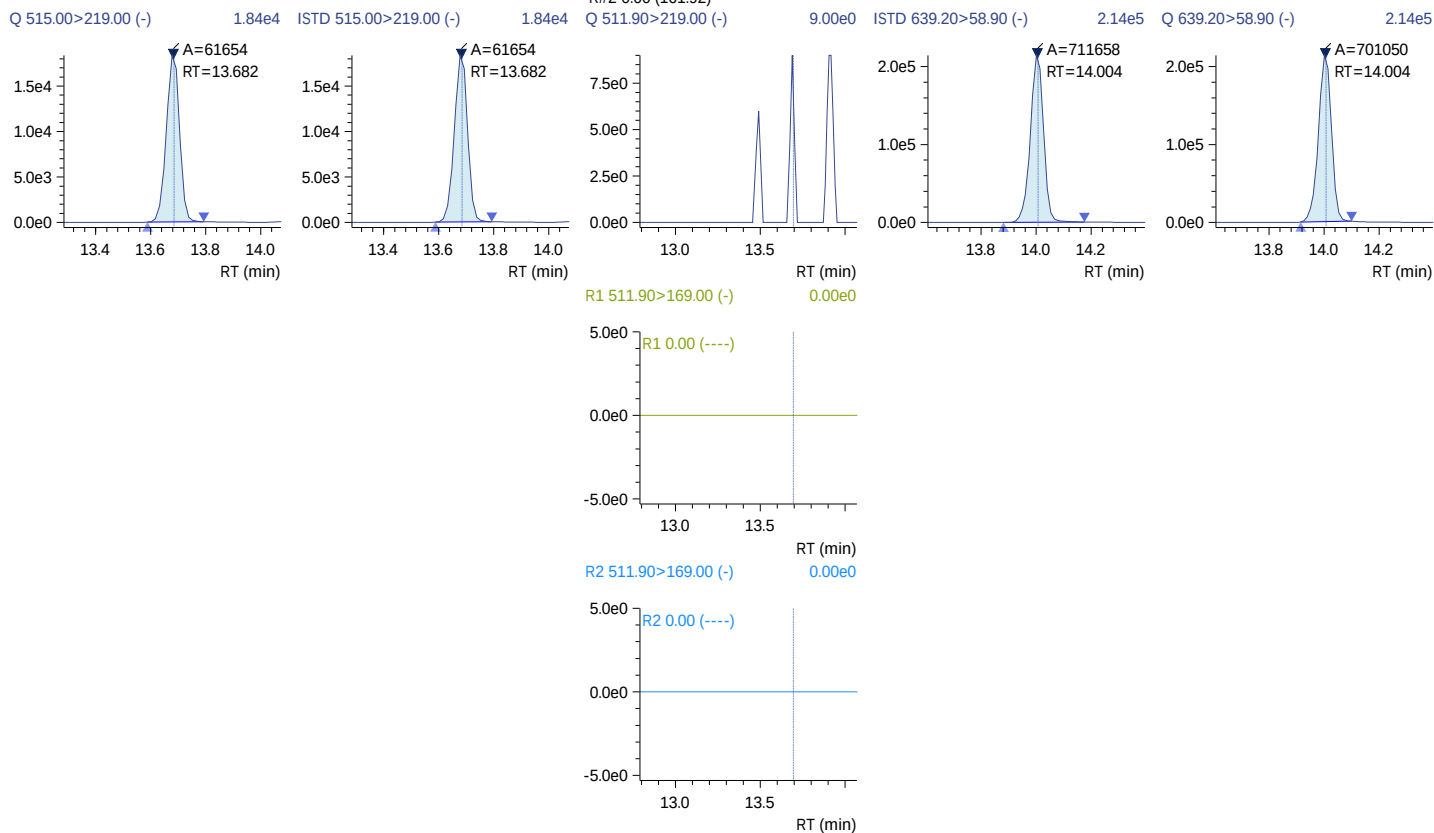
D3-MeFOSA
 Conc. 2.4616

D3-MeFOSA_IS
 Conc. 2.5000

MeFOSA
 Conc. ----
 R#1 0.00 (160.44)
 R#2 0.00 (161.92)

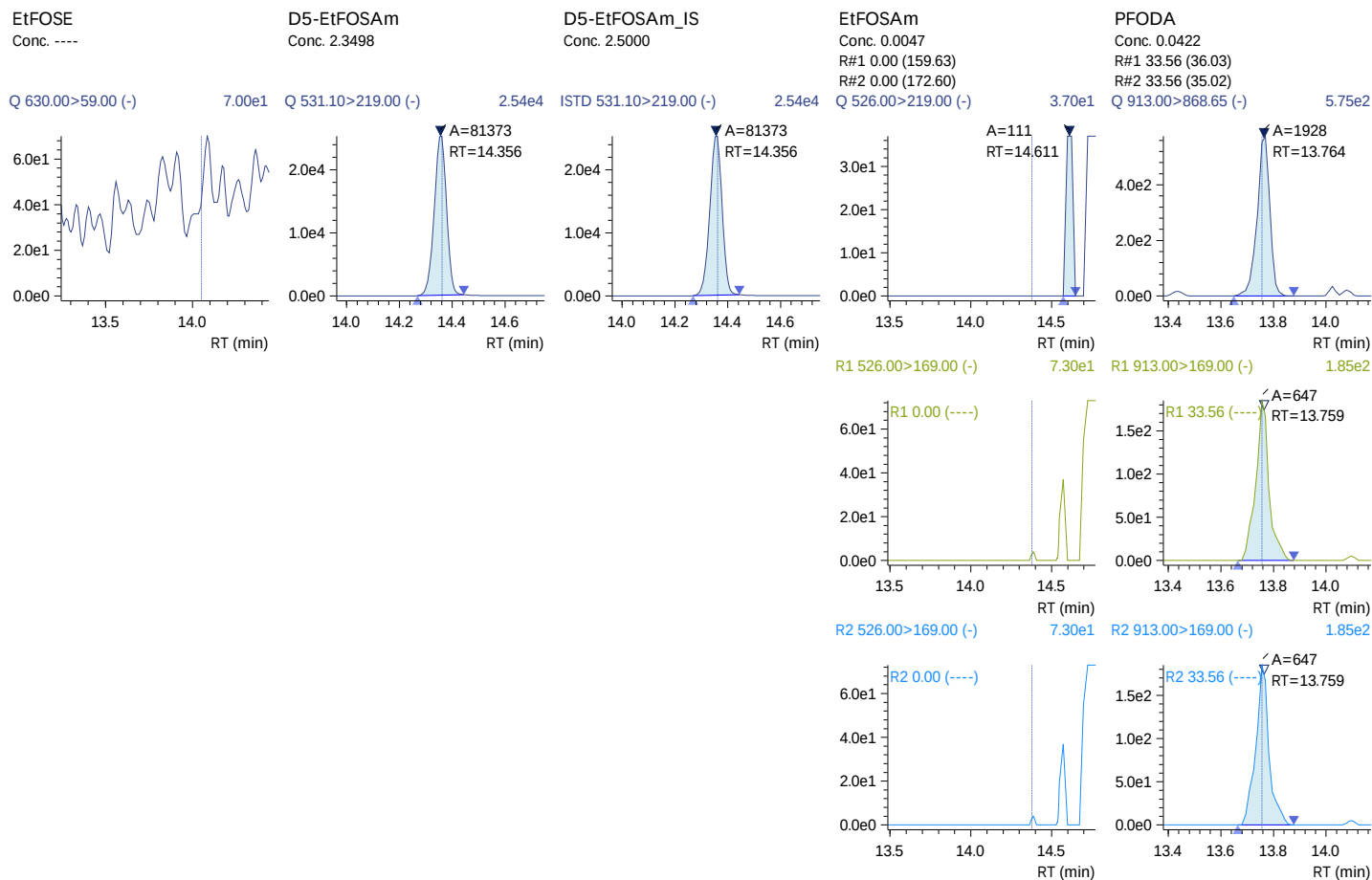
D9-EtFOSE_IS
 Conc. 25.0000

D9-EtFOSE
 Conc. 23.2619





240201_012 (continued)



Validation Report

1st *PS* 02/06/24
2nd *MS* 02/06/24

Data File: J:\LCMS08\Data\240201_1633_RA\240201_047
Lab ID: KQ2401707-07
RunType: CCB
Matrix: Water

Date Acquired: 2/2/24 04:12
Batch ID: 831587
Analysis Method: 1633/PFAS_DOD5.4

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery		X
Continuing Calibration Recovery (Closing)		X
Internal Standards	X	
Surrogates		X
Above Highest ICAL Level	X	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Continuing Calibration Recovery	D5-EtFOSAA	69	70	130	native in control
	13C2-8:2 FTS	65	70	130	NR in all samples
	13C2-4:2 FTS	68	70	130	
	13C2-6:2 FTS	68	70	130	
	D3-MeFOSAA	68	70	130	
Continuing Calibration Recovery (Closing)	D3-MeFOSAA	65	70	130	
	D5-EtFOSAA	69	70	130	native in control
Surrogates	13C3-HFPO-DA	147	40	130	high bias, sample <MRL

Primary Review: _____

Secondary Review: _____

Quantitation Report

1st *PS* 02/06/24
2nd *MS* 02/06/24

Data File:	J:\LCMS08\Data\240201_1633_RA\240201_047	Instrument:	K-LCMS-08
Acqu Date:	2/2/24 04:12	Vial:	23
Run Type:	CCB	Dilution:	1
Lab ID:	KQ2401707-07	Raw Units:	ng/mL

Bottle ID:		Tier:	II	Matrix:	Water
Prod Code:	PFAS_DOD5.4	Collect Date:	1/4/24	Receive Date:	1/4/24

Analysis Lot:	831587	Prep Lot:		Report Group:	KQ2401707
Analysis	1633	Prep Method:			
		Prep Date:			

Title:	Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM	Calibration ID:	KC2400048
		Report List ID:	24615

Internal Standard Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Area Criteria
18O2-PFHxS	7.081	+0.02	196762	2.5000	OK
13C4-PFOS	8.814	+0.02	252939	2.5000	OK
13C3-PFBA	1.403	+0.05	414290	5.0000	OK
13C2-PFHxA	4.977	+0.03	454347	2.5000	OK
13C4-PFOA	7.112	+0.02	35006	2.5000	OK
13C5-PFNA	7.956	+0.01	267388	1.2500	OK
13C2-PFDA	8.721	+0.01	177579	1.2500	OK

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
13C3-PFBS	4.639	+0.03	235711	3.2107	128	40 - 135	Y
13C3-PFHxS	7.080	+0.02	201927	2.9280	117	40 - 130	Y
13C8-PFOS	8.813	+0.02	92808	2.9155	117	40 - 130	Y
13C4-PFBA	1.403	+0.05	735028	11.9734	120	5 - 130	Y
13C5-PFPeA	3.496	+0.04	209581	6.4152	128	40 - 130	Y
13C5-PFHxA	4.977	+0.03	392155	2.6740	107	40 - 130	Y
13C4-PFHpA	6.154	+0.02	557742	3.0229	121	40 - 130	Y
13C8-PFOA	7.111	+0.02	540460	3.2373	129	40 - 130	Y
13C9-PFNA	7.956	+0.01	300069	1.5160	121	40 - 130	Y
13C6-PFDA	8.719	+0.01	197871	1.3905	111	40 - 130	Y
13C7-PFUnDA	9.443	+0.01	231927	1.3116	105	30 - 130	Y
13C2-PFDoDA	10.129	+0.01	287856	1.3637	109	10 - 130	Y
13C2-PFTeDA	11.417	+0.01	203873	1.3685	109	10 - 130	Y
13C8-FOSA	11.145	0.00	195971	2.4390	98	40 - 130	Y
D3-MeFOSA	13.677	-0.01	48536	2.3138	93	10 - 130	Y
D5-EtFOSA	14.354	0.00	74001	2.5514	102	10 - 130	Y
D7-MeFOSE	13.373	0.00	501200	24.2988	97	10 - 130	Y
D9-EtFOSE	14.001	0.00	603480	23.9086	96	10 - 130	Y

			1st	PS	02/06/24
			2nd	MS	02/06/24
Data File:	J:\LCMS08\Data\240201_1633_RA\240201_047		Instrument:	K-LCMS08	
Acqu Date:	2/2/24 04:12		Vial:	23	
Run Type:	CCB		Dilution:	1	
Lab ID:	KQ2401707-07		Raw Units:	ng/mL	

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
D3-MeFOSAA	8.856	+0.01	425440	4.1311	83	40 - 170	Y
D5-EtFOSAA	9.187	+0.01	353673	4.3576	87	25 - 135	Y
13C2-4:2 FTS	4.660	+0.02	166787	4.5031	90	40 - 200	Y
13C2-6:2 FTS	6.793	+0.02	145497	3.7736	75	40 - 200	Y
13C2-8:2 FTS	8.410	+0.01	135406	4.1364	83	40 - 300	Y
13C3-HFPO-DA	5.451	+0.02	592009	14.7029	147 *	40 - 130	Y

Target Compounds

Final Conc.Units: ng/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Perfluorobutane sulfonic acid (PFBS)	0		0	0	0	U	Y
Perfluoropentane sulfonic acid (PFPeS)	0		0	0	0	U	Y
Perfluorohexane sulfonic acid (PFHxS)	7.077	+0.01	1043	0.0118	0.24	U	Y
Perfluoroheptane sulfonic acid (PFHpS)	0		0	0	0	U	Y
Perfluorooctane sulfonic acid (PFOS)	0		0	0	0	U	Y
Perfluorononane sulfonic acid (PFNS)	9.583	+0.02	217	0.0028	0.056	U	Y
Perfluorodecane sulfonic acid (PFDS)	0		0	0	0	U	Y
Perfluorododecane sulfonic acid (PFDoS)	0		0	0	0	U	Y
Perfluorobutanoic acid (PFBA)	1.373	+0.02	1011	0.0020	0.040	U	Y
Perfluoropentanoic acid (PFPeA)	3.498	+0.04	1479	0.0101	0.20	U	Y
Perfluorohexanoic acid (PFHxA)	4.978	+0.03	903	0.0002	0.0040	U	Y
Perfluoroheptanoic acid (PFHpA)	6.135	0.00	6332	0.0159	0.32	U	Y
Perfluorooctanoic acid (PFOA)	7.109	+0.01	5507	0.0112	0.22	U	Y
Perfluorononanoic acid (PFNA)	7.954	+0.01	5420	0.0080	0.16	U	Y
Perfluorodecanoic acid (PFDA)	8.718	+0.01	4056	0.0242	0.48	U	Y
Perfluoroundecanoic acid (PFUnDA)	9.445	+0.01	4613	0.0070	0.14	U	Y
Perfluorododecanoic acid (PFDOA)	10.130	+0.01	3305	-0.0101	0	U	Y
Perfluorotridecanoic acid (PFTTrDA)	10.785	+0.01	5484	0.0058	0.12	U	Y
Perfluorotetradecanoic acid (PFTDA)	11.416	+0.01	3964	0.0054	0.11	U	Y
Perfluorooctane sulfonamide (PFOSAm)	11.150	+0.01	461	0.0067	0.13	U	Y
N-Methylperfluorooctane sulfonamide (MeFOSA)	0		0	0	0	U	Y
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	0		0	0	0	U	Y
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	0		0	0	0	U	Y
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	0		0	0	0	U	Y
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	0		0	0	0	U	Y

		1st	PS	02/06/24
Data File:	J:\LCMS08\Data\240201_1633_RA\240201_047	Instrument:	K-LCMS08	MS 02/06/24
Acqu Date:	2/2/24 04:12	Vial:	23	
Run Type:	CCB	Dilution:	1	
Lab ID:	KQ2401707-07	Raw Units:	ng/mL	

Target Compounds

Final Conc.Units: ng/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	0		0	0	0	U	Y
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	4.660	+0.02	166	0.0020	0.040	U	Y
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	6.778	0.00	537	0.0097	0.19	U	Y
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	8.426	+0.03	71	0.0014	0.028	U	Y
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	0		0	0	0	U	Y
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	5.892	+0.02	761	0.0650	1.3	U	Y
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	7.939	+0.00	858	0.0416	0.83	U	Y
Perfluoro(2-ethoxyethane) sulfonic acid (PFEEESA)	0		0	0	0	U	Y
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	0		0	0	0	U	Y
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	0		0	0	0	U	Y
Perfluoro-3-methoxypropanoic acid (PFMPA)	2.413	+0.03	155	0.0026	0.052	U	Y
Perfluoro-4-methoxybutanoic acid (PFMBA)	0		0	0	0	U	Y
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	5.454	+0.03	356	0.0061	0.12	U	Y
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	4.838	+0.03	465	0.0057	0.11	U	Y
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	6.529	+0.03	57	0.0001	0.0020	U	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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240201_047

Sample ID: 1633 CCB
Date Acquired: 2/2/2024 4:12:17 AM
Acquired by: System Administrator
Data File: 240201_047
Vial: 54 | Inj. Volume: 10.0000uL | Tray: 1

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	735028	----	----	----	----	----	----	
13C4-PFBA_IS	216.80>171.90	----	735028	----	----	----	----	----	----	
13C3-PFBA_IS	216.00>172.00	----	414290	----	----	----	----	----	----	
PFBA	212.80>169.05	----	1011	----	----	----	----	----	----	
PFMPA	229.00>84.90	----	155	----	----	----	----	----	----	
3_3 FTCA	241.00>177.10	241.00>117.00	----	0	0.00	139.21	----	----	----	
13C5-PFPeA	268.30>223.00	----	209581	----	----	----	----	----	----	
13C5-PFPeA_IS	268.30>223.00	----	209581	----	----	----	----	----	----	
PFPeA	263.00>219.00	----	1479	----	----	----	----	----	----	
PFMBA	279.00>84.95	----	----	----	----	----	----	----	----	
13C2-4_2 FTS	329.10>80.90	----	166787	----	----	----	----	----	----	
13C2-4_2 FTS_IS	329.10>80.90	----	166787	----	----	----	----	----	----	
4_2 FTS	327.10>307.00	327.10>80.90	166	166	100.35	32.10	166	100.35	32.79	IRr <MDL
13C3-PFBS_IS	302.10>79.90	----	235711	----	----	----	----	----	----	
PFBS	298.70>79.90	298.70>98.80	----	0	0.00	44.81	0	0.00	46.72	
13C3-PFBS	302.10>79.90	----	235711	----	----	----	----	----	----	
NFDHA	295.00>201.00	295.00>84.90	465	138	29.72	35.54	138	29.72	37.91	
13C5-PFHxA	318.00>273.00	----	392155	----	----	----	----	----	----	
13C5-PFHxA_IS	318.00>273.00	----	392155	----	----	----	----	----	----	
13C2-PFHxA_IS	315.10>270.00	----	454347	----	----	----	----	----	----	
PFHxA	313.00>269.00	----	903	----	----	----	----	----	----	
PFEESA	314.80>135.00	314.80>82.90	----	0	0.00	5.22	0	0.00	5.35	
13C3-HFPO-DA	286.90>168.90	----	592009	----	----	----	----	----	----	
13C3-HFPO-DA_IS	286.90>168.90	----	592009	----	----	----	----	----	----	
HFPO-DA	284.90>168.90	284.90>184.90	356	399	112.23	59.79	399	112.23	58.32	IRr <MDL
5_3 FTCA	341.00>237.05	341.00>217.00	761	1117	146.65	157.08	1117	146.65	155.87	
PFPeS	349.10>79.90	349.10>98.80	----	0	0.00	55.12	0	0.00	54.87	
13C4-PFHpA	367.10>322.00	----	557742	----	----	----	----	----	----	
13C4-PFHpA_IS	367.10>322.00	----	557742	----	----	----	----	----	----	
PFHpA	363.10>319.00	363.10>169.00	6332	1084	17.12	23.02	1084	17.12	20.91	
DONA	376.90>250.90	376.90>84.80	57	47	81.75	27.50	47	81.75	27.00	IRr <MDL
13C2-6_2 FTS_IS	429.10>80.90	----	145497	----	----	----	----	----	----	
13C2-6_2 FTS	429.10>80.90	----	145497	----	----	----	----	----	----	
6_2 FTS	427.10>407.00	427.10>80.90	537	190	35.38	50.47	190	35.38	46.83	
13C4-PFOA_IS	417.10>172.00	----	35006	----	----	----	----	----	----	
13C8-PFOA_IS	421.10>376.00	----	540460	----	----	----	----	----	----	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240201_047 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	540460	----	----	----	----	----	----	----
PFOA	413.00>369.00	413.00>169.00	5507	1986	36.06	28.77	1986	36.06	28.12	
13C3-PFHxS	402.10>79.90	----	201927	----	----	----	----	----	----	----
13C3-PFHxS_IS	402.10>79.90	----	201927	----	----	----	----	----	----	----
PFHxS	398.70>79.90	398.70>98.90	1043	390	37.43	60.90	390	37.43	61.53	
18O2-PFHxS_IS	403.00>83.90	----	196762	----	----	----	----	----	----	----
13C9-PFNA_IS	472.10>427.00	----	300069	----	----	----	----	----	----	----
13C9-PFNA	472.10>427.00	----	300069	----	----	----	----	----	----	----
13C5-PFNA_IS	468.00>423.00	----	267388	----	----	----	----	----	----	----
PFNA	463.00>419.00	463.00>219.00	5420	1027	18.95	19.31	1027	18.95	20.30	
PFHpS	449.00>79.90	449.00>98.80	----	0	0.00	52.44	0	0.00	52.33	
7_3 FTCA	441.00>317.00	441.00>336.90	858	1416	165.11	129.46	1416	165.11	129.73	
13C2-8_2-FTS	529.10>80.90	----	135406	----	----	----	----	----	----	----
13C2-8_2-FTS_IS	529.10>80.90	----	135406	----	----	----	----	----	----	----
8_2 FTS	527.10>506.95	527.10>80.80	71	43	60.91	45.98	43	60.91	43.25	
13C6-PFDA_IS	519.10>474.10	----	197871	----	----	----	----	----	----	----
13C6-PFDA	519.10>474.10	----	197871	----	----	----	----	----	----	----
13C2-PFDA_IS	515.10>470.10	----	177579	----	----	----	----	----	----	----
PFDA	512.90>469.00	512.90>219.00	4056	292	7.20	17.88	292	7.20	18.89	IRr <MDL
D3-NMeFOSAA_IS	573.20>419.00	----	425440	----	----	----	----	----	----	----
D3-NMeFOSAA	573.20>419.00	----	425440	----	----	----	----	----	----	----
13C8-PFOS_IS	507.10>98.90	----	92808	----	----	----	----	----	----	----
13C8-PFOS	507.10>98.90	----	92808	----	----	----	----	----	----	----
13C4-PFOS_IS	502.80>79.90	----	252939	----	----	----	----	----	----	----
PFOS	498.90>79.90	498.90>98.80	----	0	0.00	53.60	0	0.00	52.29	
NMeFOSAA	570.10>419.00	570.10>483.00	----	0	0.00	64.89	0	0.00	60.97	
D5-NEtFOSAA_IS	589.20>419.00	----	353673	----	----	----	----	----	----	----
D5-NEtFOSAA	589.20>419.00	----	353673	----	----	----	----	----	----	----
NEtFOSAA	584.20>419.10	584.20>526.00	----	0	0.00	96.07	0	0.00	94.54	
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	----	0	0.00	30.95	0	0.00	30.61	
PFUnDA	563.10>519.00	563.10>269.10	4613	208	4.52	11.01	208	4.52	12.02	IRr <MDL
13C7-PFUnDA_IS	570.00>525.10	----	231927	----	----	----	----	----	----	----
13C7-PFUnDA	570.00>525.10	----	231927	----	----	----	----	----	----	----
PFNS	548.80>79.90	548.80>98.80	217	90	41.51	60.44	90	41.51	58.51	
10_2 FTS	626.80>607.05	626.80>81.00	25	16	64.19	36.14	16	64.19	33.04	IRr <MDL
13C2-PFDOA_IS	615.10>570.00	----	287856	----	----	----	----	----	----	----
13C2-PFDOA	615.10>570.00	----	287856	----	----	----	----	----	----	----
PFDOA	613.10>569.00	613.10>319.00	3305	347	10.51	10.16	347	10.51	10.60	
PFDS	599.00>79.90	599.00>98.80	----	0	0.00	58.26	0	0.00	61.78	
PFTrDA	663.00>619.00	663.00>168.90	5484	804	14.66	16.18	804	14.66	14.85	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240201_047 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	----	0	0.00	34.99	0	0.00	34.39	
PFOSAm	498.10>77.90	----	461	----	----	----	----	----	----	
13C8-PFOSAm	506.10>77.80	----	195971	----	----	----	----	----	----	
13C8-PFOSAm_IS	506.10>77.80	----	195971	----	----	----	----	----	----	
PFTDA	713.10>669.00	713.10>168.90	3964	602	15.20	18.05	602	15.20	17.39	
13C2-PFTDA	715.20>670.00	----	203873	----	----	----	----	----	----	
13C2-PFTDA_IS	715.20>670.00	----	203873	----	----	----	----	----	----	
PFDoS	699.10>79.90	699.10>98.80	----	0	0.00	61.13	0	0.00	62.47	
D7-MeFOSE_IS	623.20>58.90	----	501200	----	----	----	----	----	----	
D7-MeFOSE	623.20>58.90	----	501200	----	----	----	----	----	----	
MeFOSE	616.10>59.00	----	----	----	----	----	----	----	----	
13C2-PFHxDA_IS	815.00>770.05	----	441854	----	----	----	----	----	----	
13C2-PFHxDA	815.00>770.05	----	441854	----	----	----	----	----	----	
PFHxDA	813.00>768.95	813.00>218.95	5573	795	14.26	11.66	795	14.26	10.99	
D3-MeFOSA	515.00>219.00	----	48536	----	----	----	----	----	----	
D3-MeFOSA_IS	515.00>219.00	----	48536	----	----	----	----	----	----	
MeFOSA	511.90>219.00	511.90>169.00	----	0	0.00	160.44	0	0.00	161.92	
D9-EtFOSE_IS	639.20>58.90	----	612488	----	----	----	----	----	----	
D9-EtFOSE	639.20>58.90	----	603480	----	----	----	----	----	----	
EtFOSE	630.00>59.00	----	----	----	----	----	----	----	----	
D5-EtFOSAm	531.10>219.00	----	74001	----	----	----	----	----	----	
D5-EtFOSAm_IS	531.10>219.00	----	74001	----	----	----	----	----	----	
EtFOSAm	526.00>219.00	526.00>169.00	----	0	0.00	159.63	0	0.00	172.60	
PFODA	913.00>868.65	913.00>169.00	1852	882	47.60	36.03	882	47.60	35.02	

Flag ID key: IRr: Ion Ratio (Relative)



240201_047

Sample ID: 1633 CCB
Date Acquired: 2/2/2024 4:12:17 AM
Acquired by: System Administrator
Data File: 240201_047
Vial: 54 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.403	0.050	0.000	735028	414290	13C3-PFBA_IS	11.9734	ng/mL	
13C4-PFBA_IS	Auto	1.403	0.050	----	735028	735028	----	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.403	0.048	----	414290	414290	----	5.0000	ng/mL	
PFBA	M	1.373	0.017	-0.030	1011	735028	13C4-PFBA_IS	0.0020	ng/mL	
PFMPA	M	2.413	0.032	-1.083	155	209581	13C5-PFPeA_IS	0.0026	ng/mL	
3_3 FTCA	ND(W/B)	----	----	----	----	209581	13C5-PFPeA_IS	----	ng/mL	
13C5-PFPeA	Auto	3.496	0.041	-1.481	209581	454347	13C2-PFHxA_IS	6.4152	ng/mL	
13C5-PFPeA_IS	Auto	3.496	0.041	----	209581	209581	----	5.0000	ng/mL	
PFPeA	M	3.498	0.040	0.002	1479	209581	13C5-PFPeA_IS	0.0101	ng/mL	
PFMBA	ND(W/B)	----	----	----	----	209581	13C5-PFPeA_IS	----	ng/mL	
13C2-4_2 FTS	Auto	4.660	0.027	-2.421	166787	196762	18O2-PFHxS_IS	4.5031	ng/mL	
13C2-4_2 FTS_IS	Auto	4.660	0.027	----	166787	166787	----	5.0000	ng/mL	
4_2 FTS	M	4.660	0.027	0.000	166	166787	13C2-4_2 FTS_IS	0.0020	ng/mL	IRr
13C3-PFBS_IS	Auto	4.639	0.036	----	235711	235711	----	2.5000	ng/mL	
PFBS	ND(W/B)	----	----	----	----	235711	13C3-PFBS_IS	----	ng/mL	
13C3-PFBS	Auto	4.639	0.036	-2.442	235711	196762	18O2-PFHxS_IS	3.2107	ng/mL	
NFDHA	M	4.838	0.033	-0.139	465	392155	13C5-PFHxA_IS	0.0057	ng/mL	
13C5-PFHxA	Auto	4.977	0.030	0.000	392155	454347	13C2-PFHxA_IS	2.6740	ng/mL	
13C5-PFHxA_IS	Auto	4.977	0.030	----	392155	392155	----	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	4.977	0.030	----	454347	454347	----	2.5000	ng/mL	
PFHxA	M	4.978	0.029	0.001	903	392155	13C5-PFHxA_IS	0.0002	ng/mL	
PFEESA	ND(W/B)	----	----	----	----	392155	13C5-PFHxA_IS	----	ng/mL	
13C3-HFPO-DA	Auto	5.451	0.026	0.474	592009	454347	13C2-PFHxA_IS	14.7029	ng/mL	
13C3-HFPO-DA_IS	Auto	5.451	0.026	----	592009	592009	----	10.0000	ng/mL	
HFPO-DA	M	5.454	0.027	0.003	356	592009	13C3-HFPO-DA_IS	0.0061	ng/mL	IRr
5_3 FTCA	M	5.892	0.024	0.915	761	392155	13C5-PFHxA_IS	0.0650	ng/mL	
PFPeS	ND(W/B)	----	----	----	----	201927	13C3-PFHxS_IS	----	ng/mL	
13C4-PFHpA	Auto	6.154	0.022	1.177	557742	454347	13C2-PFHxA_IS	3.0229	ng/mL	
13C4-PFHpA_IS	Auto	6.154	0.022	----	557742	557742	----	2.5000	ng/mL	
PFHpA	M	6.135	0.001	-0.019	6332	557742	13C4-PFHpA_IS	0.0159	ng/mL	
DONA	M	6.529	0.028	1.078	57	592009	13C3-HFPO-DA_IS	0.0001	ng/mL	IRr
13C2-6_2 FTS_IS	Auto	6.793	0.015	----	145497	145497	----	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.793	0.015	-0.288	145497	196762	18O2-PFHxS_IS	3.7736	ng/mL	
6_2 FTS	MI R1 R2	6.778	0.001	-0.015	537	145497	13C2-6_2 FTS_IS	0.0097	ng/mL	
13C4-PFOA_IS	Auto	7.112	0.021	----	35006	35006	----	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.111	0.020	----	540460	540460	----	2.5000	ng/mL	
13C8-PFOA	Auto	7.111	0.020	-0.001	540460	35006	13C4-PFOA_IS	3.2373	ng/mL	
PFOA	Auto	7.109	0.016	-0.002	5507	540460	13C8-PFOA_IS	0.0112	ng/mL	
13C3-PFHxS	Auto	7.080	0.018	-0.001	201927	196762	18O2-PFHxS_IS	2.9280	ng/mL	
13C3-PFHxS_IS	Auto	7.080	0.018	----	201927	201927	----	2.5000	ng/mL	
PFHxS	M	7.077	0.015	-0.003	1043	201927	13C3-PFHxS_IS	0.0118	ng/mL	
18O2-PFHxS_IS	Auto	7.081	0.019	----	196762	196762	----	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.956	0.015	----	300069	300069	----	1.2500	ng/mL	
13C9-PFNA	Auto	7.956	0.015	0.000	300069	267388	13C5-PFNA_IS	1.5160	ng/mL	
13C5-PFNA_IS	Auto	7.956	0.014	----	267388	267388	----	1.2500	ng/mL	
PFNA	M	7.954	0.011	-0.002	5420	300069	13C9-PFNA_IS	0.0080	ng/mL	
PFHpS	ND(W/B)	----	----	----	----	92808	13C8-PFOS_IS	----	ng/mL	
7_3 FTCA	M	7.939	0.011	2.962	858	392155	13C5-PFHxA_IS	0.0416	ng/mL	
13C2-8_2-FTS	Auto	8.410	0.011	1.329	135406	196762	18O2-PFHxS_IS	4.1364	ng/mL	
13C2-8_2-FTS_IS	Auto	8.410	0.011	----	135406	135406	----	5.0000	ng/mL	
8_2 FTS	M	8.426	0.028	0.016	71	135406	13C2-8_2-FTS_IS	0.0014	ng/mL	
13C6-PFDA_IS	Auto	8.719	0.012	----	197871	197871	----	1.2500	ng/mL	
13C6-PFDA	Auto	8.719	0.012	-0.002	197871	177579	13C2-PFDA_IS	1.3905	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_047 (continued)

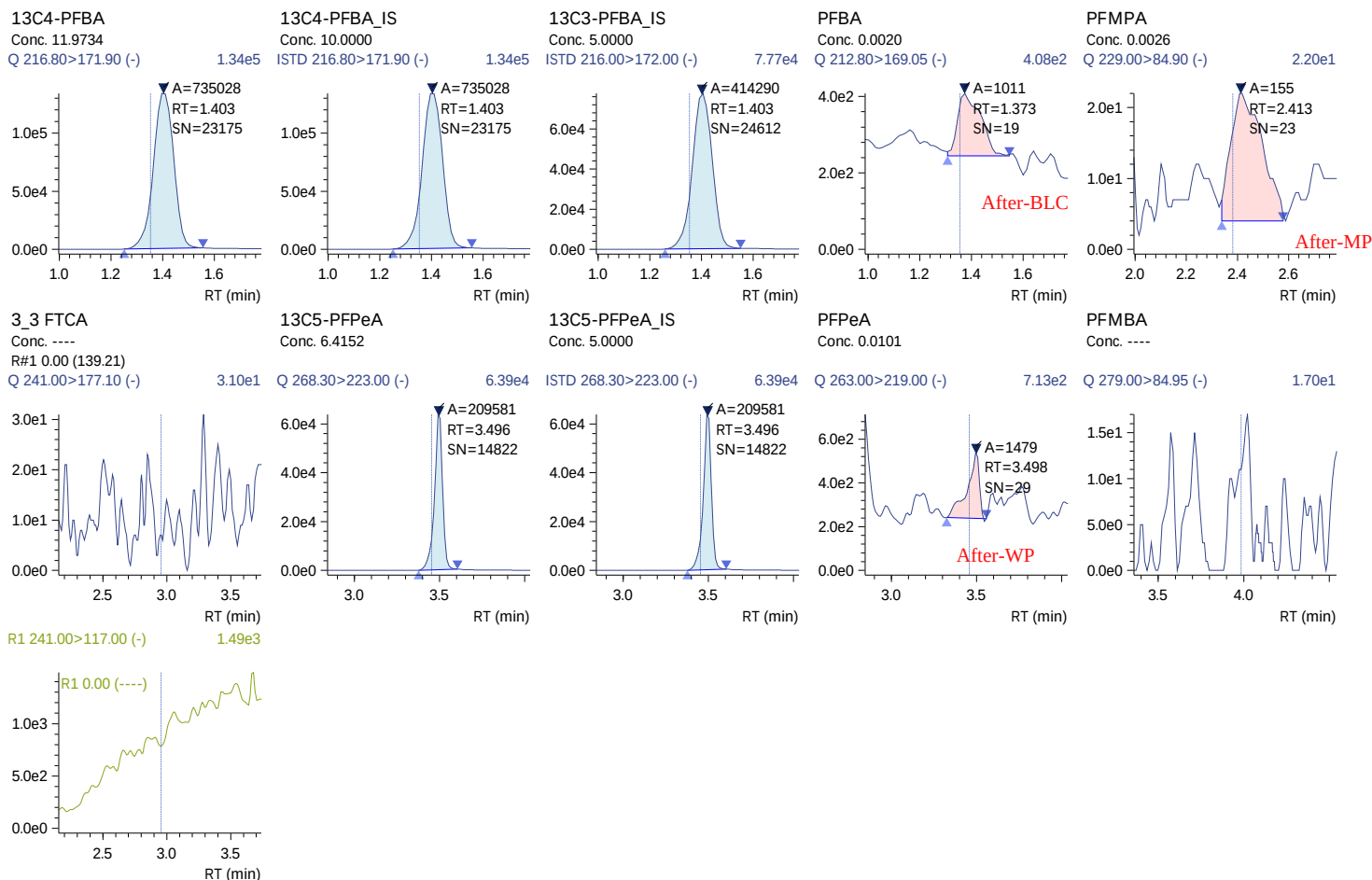
(Table continued from previous page)

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C2-PFDA_IS	Auto	8.721	0.013	----	177579	177579	----	1.2500	ng/mL	
PFDA	M	8.718	0.009	-0.001	4056	197871	13C6-PFDA_IS	0.0242	ng/mL	IRr
D3-NMeFOSAA_IS	Auto	8.856	0.013	----	425440	425440	----	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.856	0.013	0.042	425440	252939	13C4-PFOS_IS	4.1311	ng/mL	
13C8-PFOS_IS	Auto	8.813	0.013	----	92808	92808	----	2.5000	ng/mL	
13C8-PFOS	Auto	8.813	0.013	-0.001	92808	252939	13C4-PFOS_IS	2.9155	ng/mL	
13C4-PFOS_IS	Auto	8.814	0.014	----	252939	252939	----	2.5000	ng/mL	
PFOS	ND(W/B)	----	----	----	----	92808	13C8-PFOS_IS	----	ng/mL	
NMeFOSAA	ND(W/B)	----	----	----	----	425440	D3-NMeFOSAA_IS	----	ng/mL	
D5-NetFOSAA_IS	Auto	9.187	0.015	----	353673	353673	----	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.187	0.015	0.373	353673	252939	13C4-PFOS_IS	4.3576	ng/mL	
NetFOSAA	ND(W/B)	----	----	----	----	353673	D5-NetFOSAA_IS	----	ng/mL	
9-CI-PF3ONS	ND(W/B)	----	----	----	----	592009	13C3-HFPO-DA_IS	----	ng/mL	
PFUnDA	M	9.445	0.012	0.002	4613	231927	13C7-PFUnDA_IS	0.0070	ng/mL	IRr
13C7-PFUnDA_IS	Auto	9.443	0.013	----	231927	231927	----	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.443	0.013	0.722	231927	177579	13C2-PFDA_IS	1.3116	ng/mL	
PFNS	M	9.583	0.021	0.770	217	92808	13C8-PFOS_IS	0.0028	ng/mL	
10_2_FTS	M	9.813	0.007	1.403	25	135406	13C2-8_2-FTS_IS	0.0004	ng/mL	IRr
13C2-PFDOA_IS	Auto	10.129	0.011	----	287856	287856	----	1.2500	ng/mL	
13C2-PFDOA	Auto	10.129	0.011	1.408	287856	177579	13C2-PFDA_IS	1.3637	ng/mL	
PFDOA	Auto	10.130	0.011	0.001	3305	287856	13C2-PFDOA_IS	-0.0101	ng/mL	
PFDS	ND(W/B)	----	----	----	----	92808	13C8-PFOS_IS	----	ng/mL	
PFTDA	Auto	10.785	0.010	-0.632	5484	203873	13C2-PFTDA_IS	0.0058	ng/mL	
11-CI-PF3OUdS	ND(W/B)	----	----	----	----	592009	13C3-HFPO-DA_IS	----	ng/mL	
PFOSAm	Auto	11.150	0.008	0.006	461	195971	13C8-PFOSAm_IS	0.0067	ng/mL	
13C8-PFOSAm	Auto	11.145	0.002	2.330	195971	252939	13C4-PFOS_IS	2.4390	ng/mL	
13C8-PFOSAm_IS	Auto	11.145	0.002	----	195971	195971	----	2.5000	ng/mL	
PFTDA	Auto	11.416	0.008	-0.001	3964	203873	13C2-PFTDA_IS	0.0054	ng/mL	
13C2-PFTDA	Auto	11.417	0.011	2.696	203873	177579	13C2-PFDA_IS	1.3685	ng/mL	
13C2-PFTDA_IS	Auto	11.417	0.011	----	203873	203873	----	1.2500	ng/mL	
PFDoS	ND(W/B)	----	----	----	----	92808	13C8-PFOS_IS	----	ng/mL	
D7-MeFOSE_IS	Auto	13.373	-0.007	----	501200	501200	----	25.0000	ng/mL	
D7-MeFOSE	Auto	13.373	-0.007	4.559	501200	252939	13C4-PFOS_IS	24.2988	ng/mL	
MeFOSE	ND(W/B)	----	----	----	----	501200	D7-MeFOSE_IS	----	ng/mL	
13C2-PFHXDA_IS	Auto	12.626	0.006	----	441854	441854	----	2.5000	ng/mL	
13C2-PFHXDA	Auto	12.626	0.006	3.905	441854	177579	13C2-PFDA_IS	2.2161	ng/mL	
PFHXDA	Auto	12.630	0.009	0.004	5573	441854	13C2-PFHXDA_IS	0.0233	ng/mL	
D3-MeFOSA	Auto	13.677	-0.008	4.863	48536	252939	13C4-PFOS_IS	2.3138	ng/mL	
D3-MeFOSA_IS	Auto	13.677	-0.008	----	48536	48536	----	2.5000	ng/mL	
MeFOSA	ND(W/B)	----	----	----	----	48536	D3-MeFOSA_IS	----	ng/mL	
D9-EtFOSE_IS	Auto	14.001	-0.007	----	612488	612488	----	25.0000	ng/mL	
D9-EtFOSE	Auto	14.001	-0.007	5.187	603480	252939	13C4-PFOS_IS	23.9086	ng/mL	
EtFOSE	ND(W/B)	----	----	----	----	612488	D9-EtFOSE_IS	----	ng/mL	
D5-EtFOSAm	Auto	14.354	-0.007	5.540	74001	252939	13C4-PFOS_IS	2.5514	ng/mL	
D5-EtFOSAm_IS	Auto	14.354	-0.007	----	74001	74001	----	2.5000	ng/mL	
EtFOSAm	ND(W/B)	----	----	----	----	74001	D5-EtFOSAm_IS	----	ng/mL	
PFODA	Auto	13.754	-0.002	1.128	1852	441854	13C2-PFHXDA_IS	0.0441	ng/mL	

Flag ID key: IRr: Ion Ratio (Relative)



240201_047 (continued)





240201_047 (continued)

13C2-4_2 FTS
Conc. 4.5031

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. 0.0020
R#1 100.35 (32.10)
R#2 100.35 (32.79)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. ----
R#1 0.00 (44.81)
R#2 0.00 (46.72)

Q 329.10>80.90 (-)

5.26e4

ISTD 329.10>80.90 (-)

5.26e4

Q 327.10>307.00 (-)

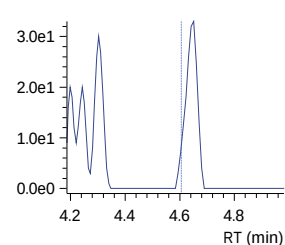
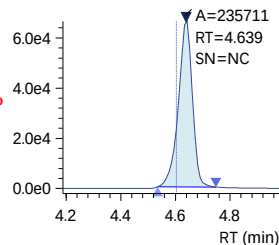
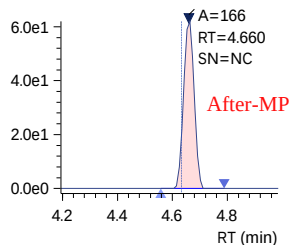
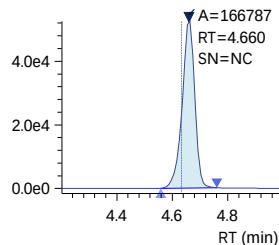
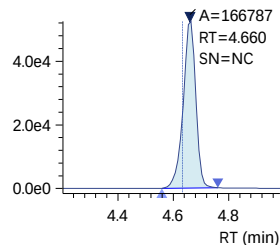
6.20e1

ISTD 302.10>79.90 (-)

6.66e4

Q 298.70>79.90 (-)

3.30e1

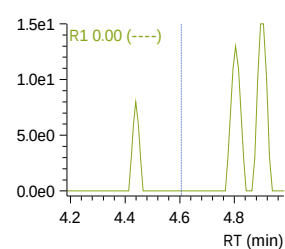
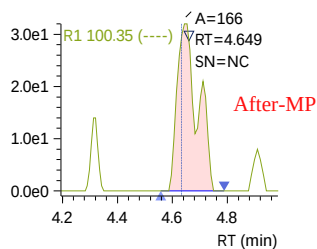


R1 327.10>80.90 (-)

3.20e1

R1 298.70>98.80 (-)

1.50e1

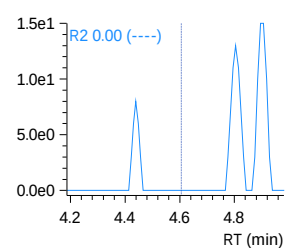
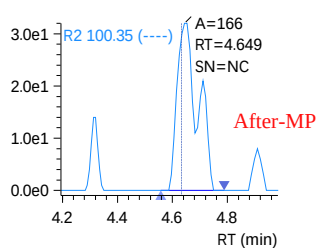


R2 327.10>80.90 (-)

3.20e1

R2 298.70>98.80 (-)

1.50e1





240201_047 (continued)

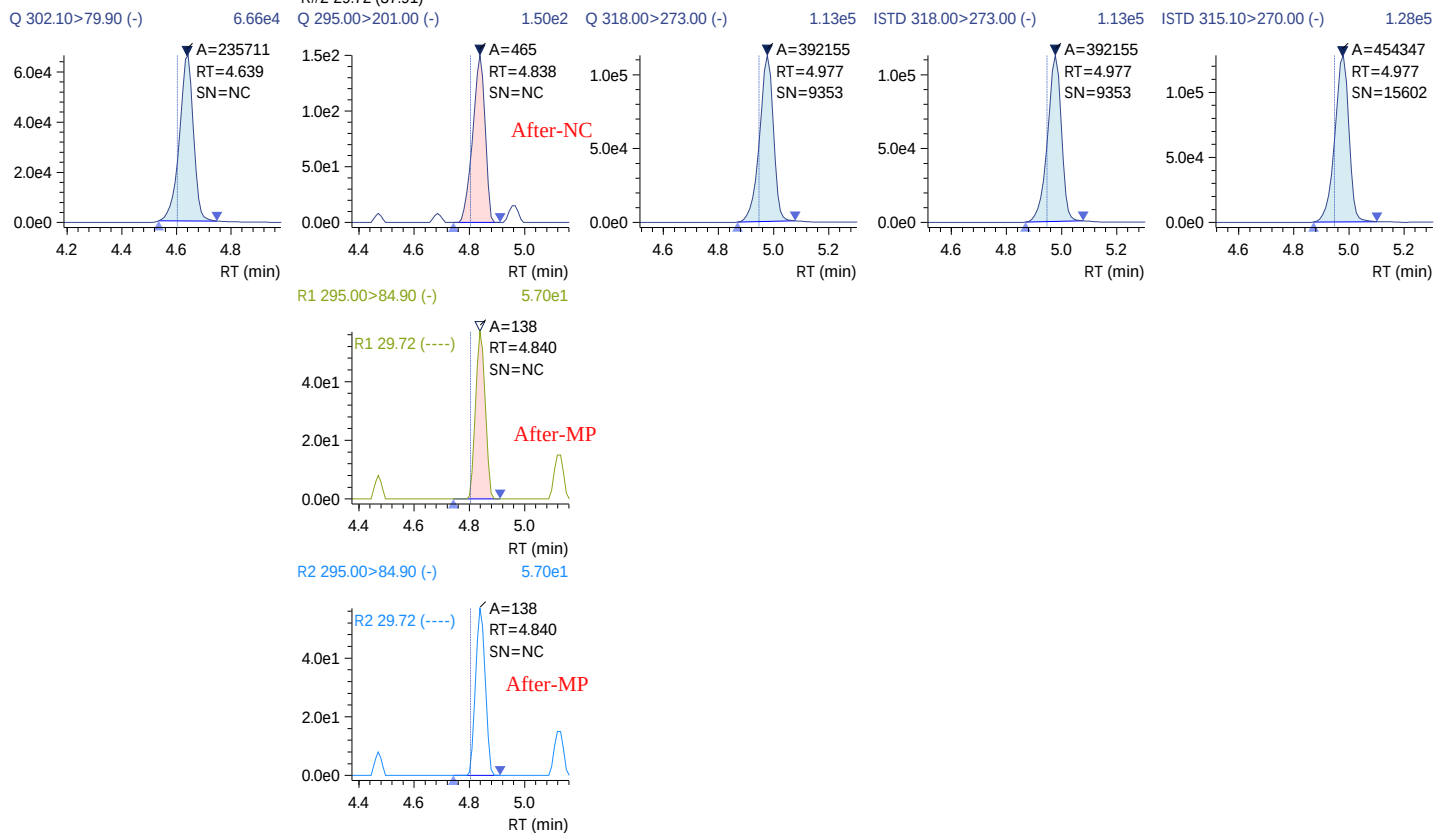
13C3-PFBS
Conc. 3.2107

NFDHA
Conc. 0.0057
R#1 29.72 (35.54)
R#2 29.72 (37.91)

13C5-PFHxA
Conc. 2.6740

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000





240201_047 (continued)

PFHxA
Conc. 0.0002

PFEESA
Conc. ----

13C3-HFPO-DA
Conc. 14.7029

13C3-HFPO-DA_IS
Conc. 10.0000

HFPO-DA
Conc. 0.0061

Q 313.00>269.00 (-)

9.87e2

Q 314.80>135.00 (-)

1.66e2

Q 286.90>168.90 (-)

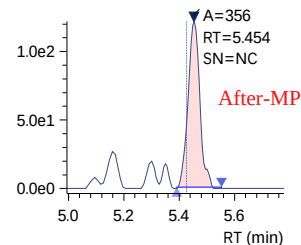
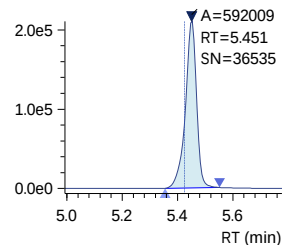
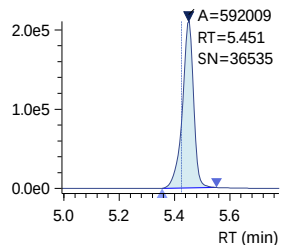
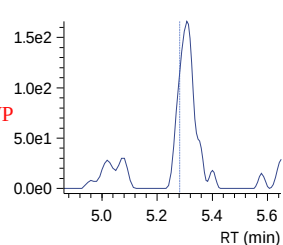
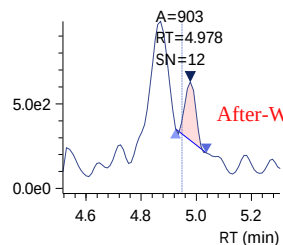
2.11e5

ISTD 286.90>168.90 (-)

2.11e5

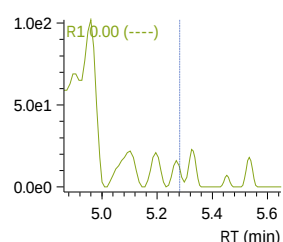
Q 284.90>168.90 (-)

1.22e2



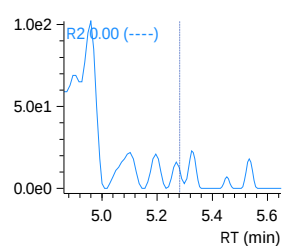
R1 314.80>82.90 (-)

1.02e2



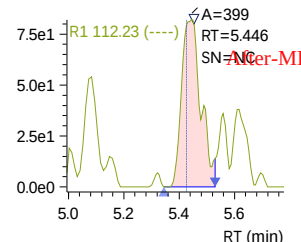
R2 314.80>82.90 (-)

1.02e2



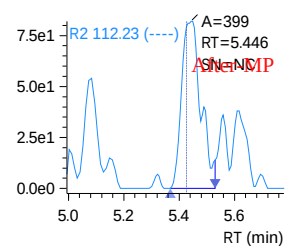
R1 284.90>184.90 (-)

8.20e1



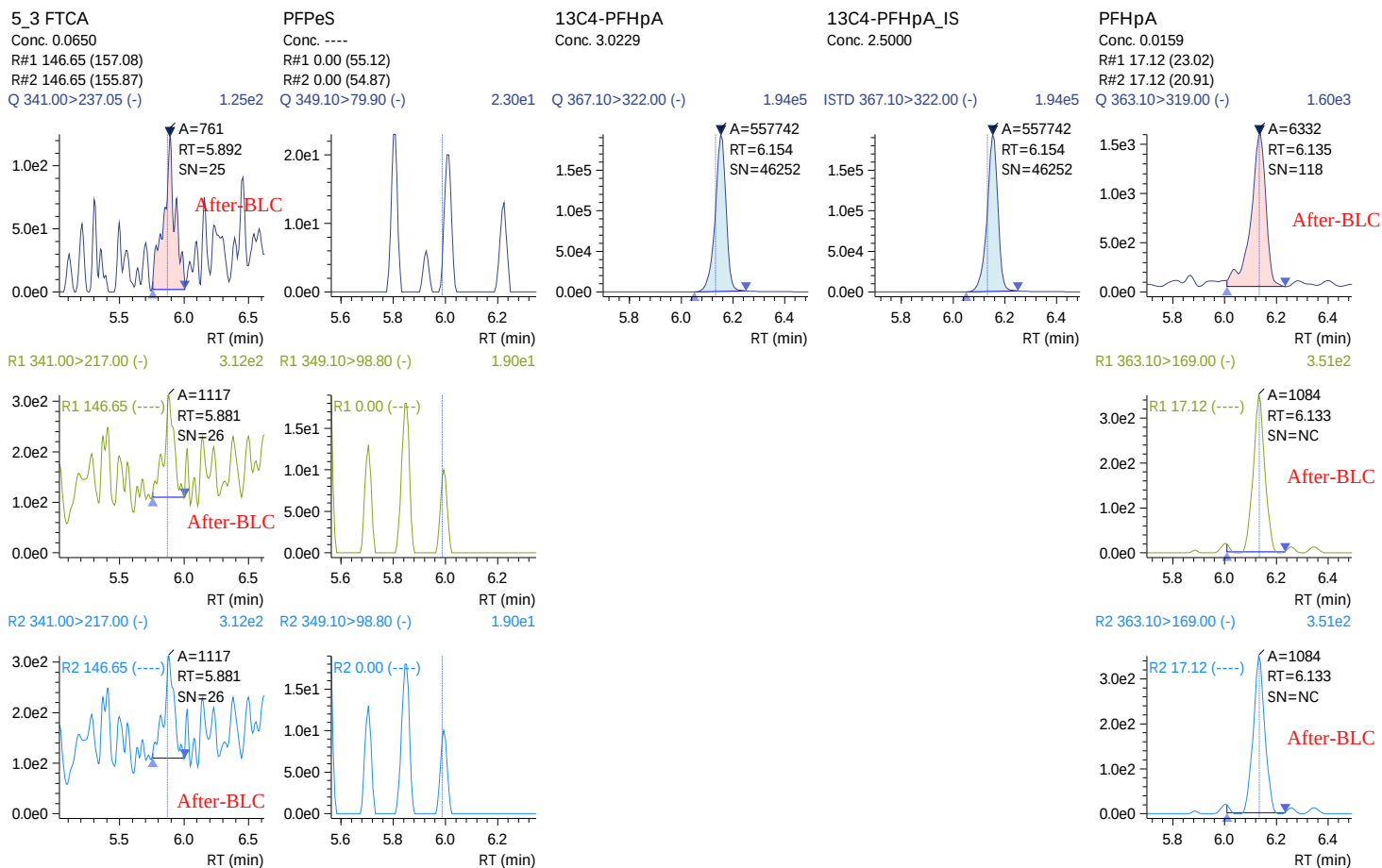
R2 284.90>184.90 (-)

8.20e1



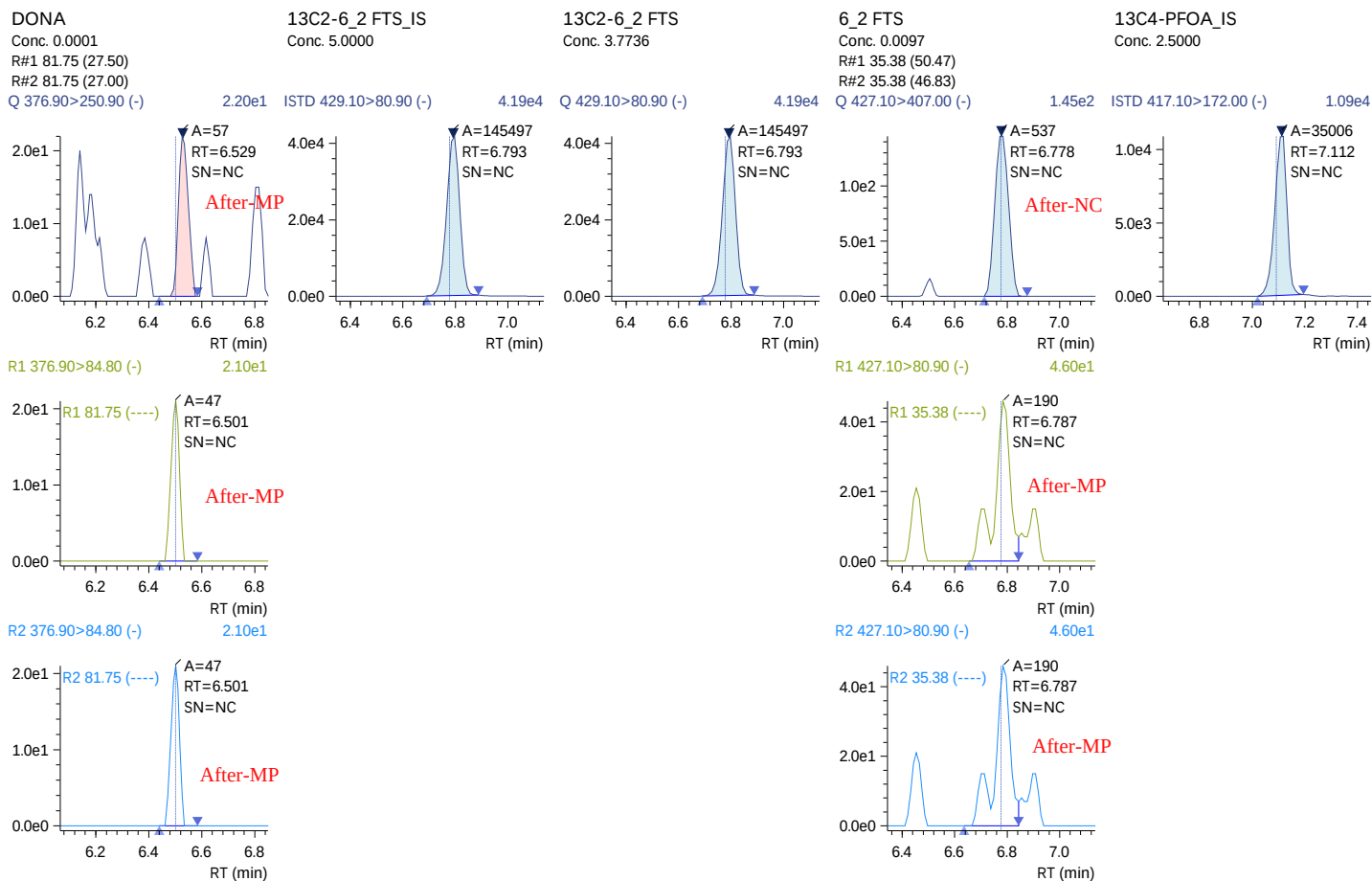


240201_047 (continued)





240201_047 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_047 (continued)

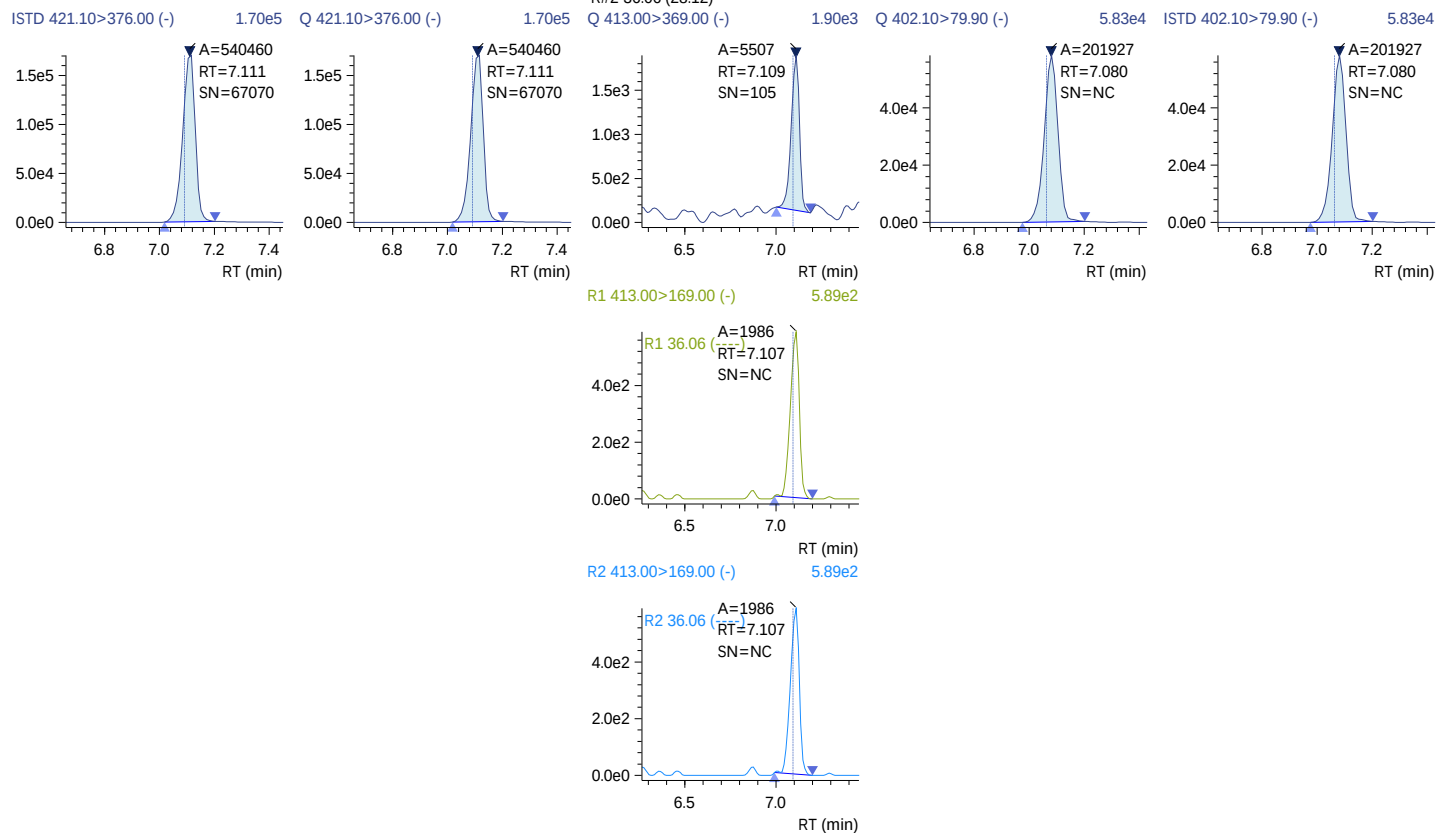
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 3.2373

PFOA
Conc. 0.0112
R#1 36.06 (28.77)
R#2 36.06 (28.12)

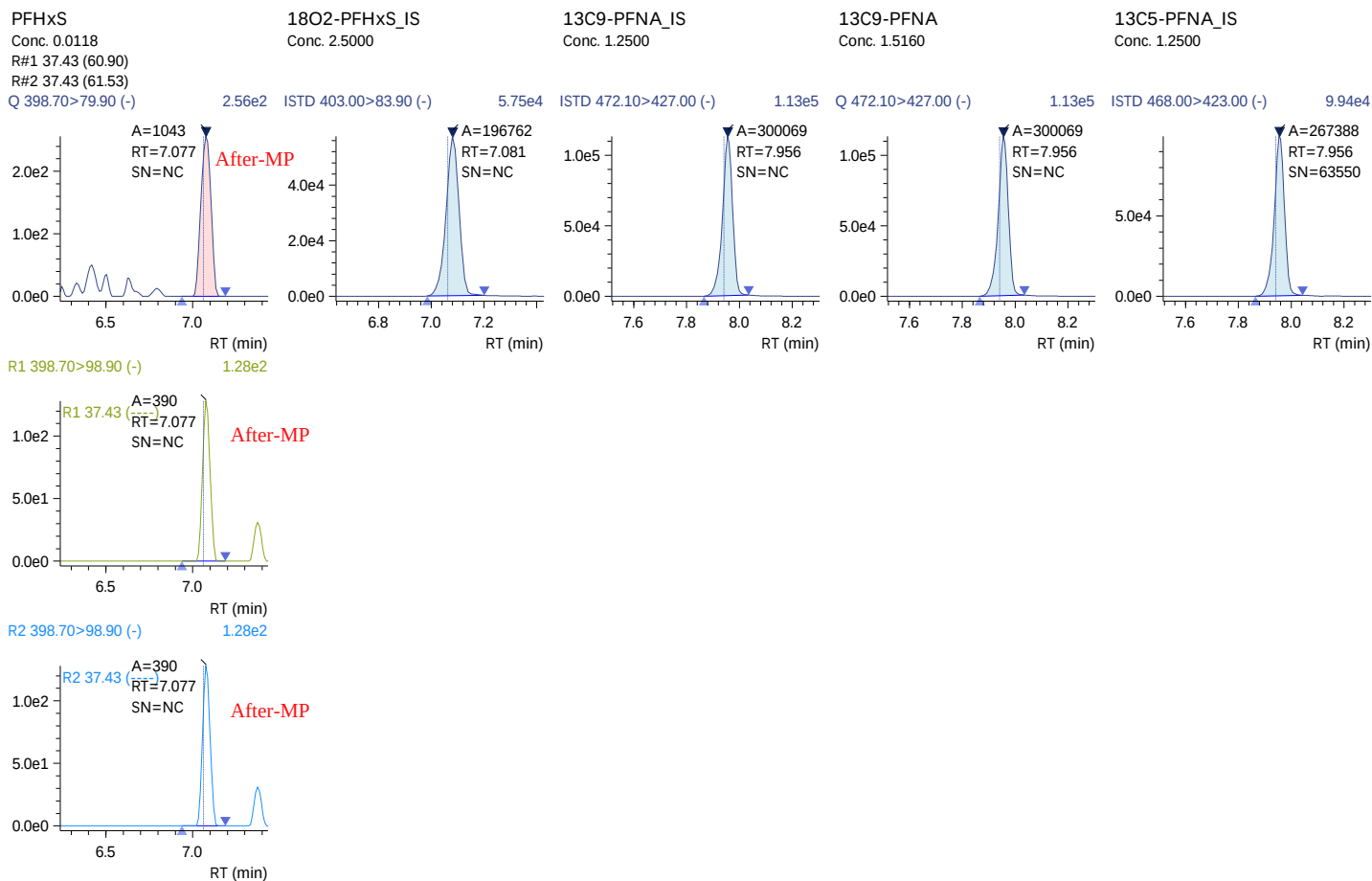
13C3-PFHxS
Conc. 2.9280

13C3-PFHxS_IS
Conc. 2.5000





240201_047 (continued)

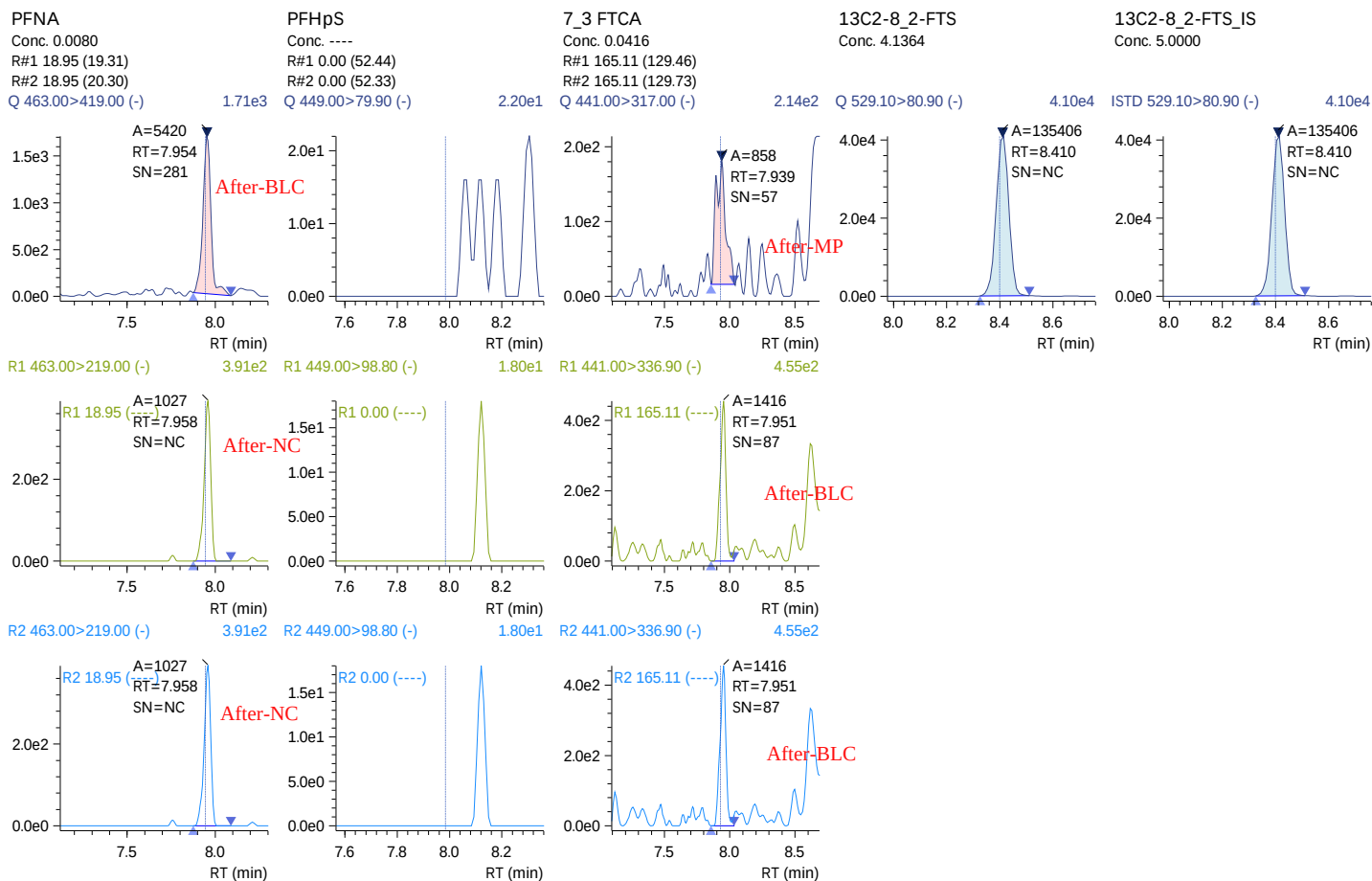


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_047 (continued)

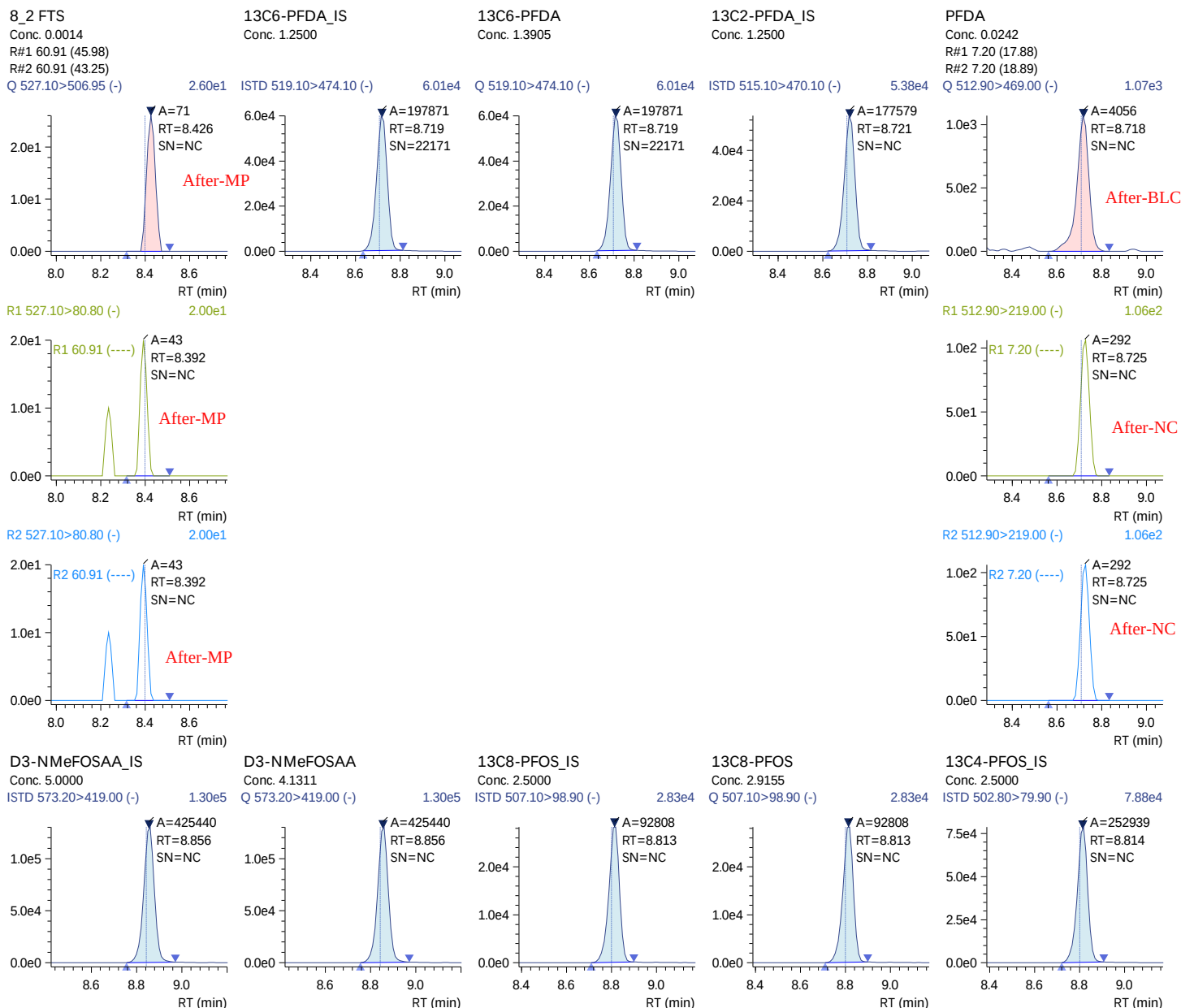


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_047 (continued)

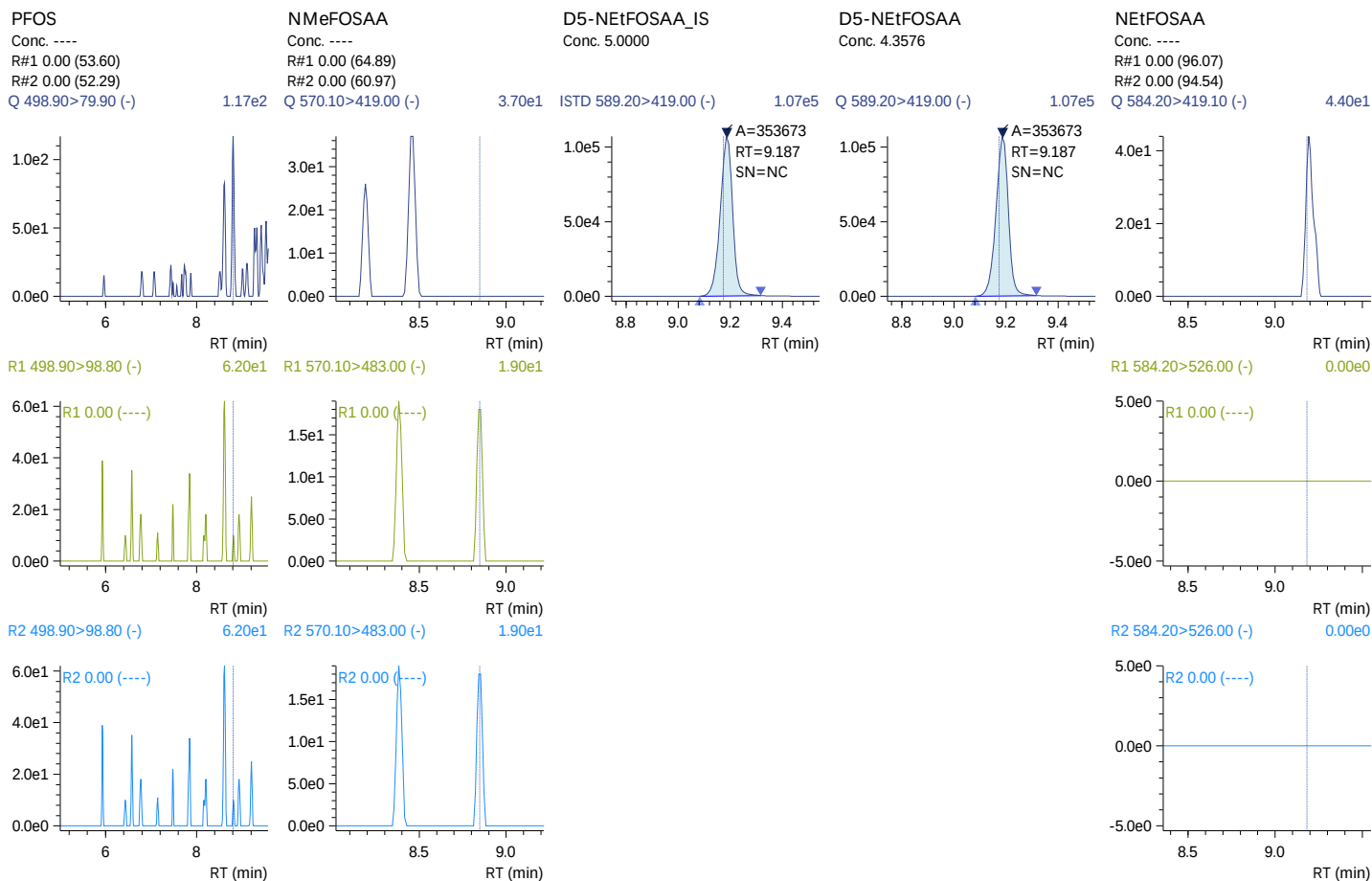


J:\LCMS08\Data\240201_1633_RA\240201_1633_RA.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_047 (continued)





240201_047 (continued)

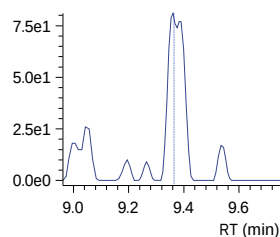
9-Cl-PF3ONS

Conc. ----

R#1 0.00 (30.95)

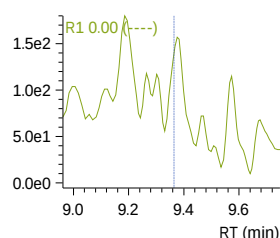
R#2 0.00 (30.61)

Q 530.80>351.00 (-)



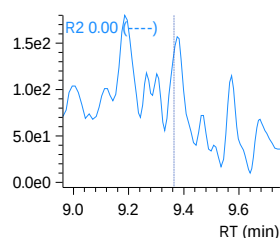
R1 532.80>353.00 (-)

1.80e2



R2 532.80>353.00 (-)

1.80e2



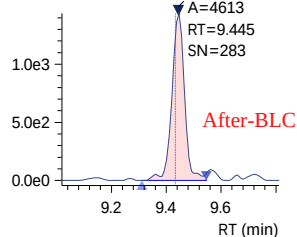
PFUnDA

Conc. 0.0070

R#1 4.52 (11.01)

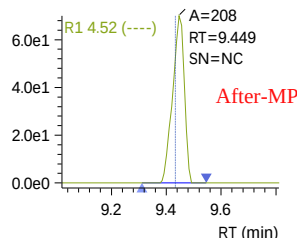
R#2 4.52 (12.02)

Q 563.10>519.00 (-)



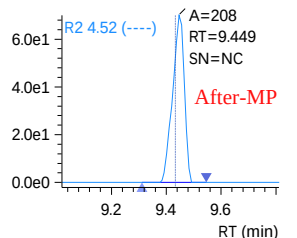
R1 563.10>269.10 (-)

7.00e1



R2 563.10>269.10 (-)

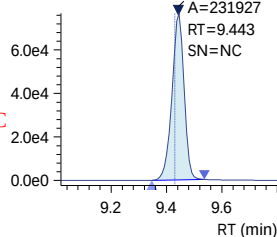
7.00e1



13C7-PFUnDA_IS

Conc. 1.2500

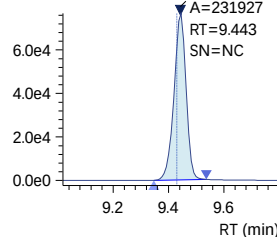
ISTD 570.00>525.10 (-)



13C7-PFUnDA

Conc. 1.3116

Q 570.00>525.10 (-)



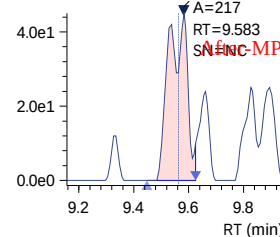
PFNS

Conc. 0.0028

R#1 41.51 (60.44)

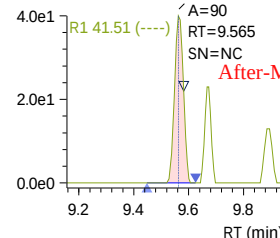
R#2 41.51 (58.51)

Q 548.80>79.90 (-)



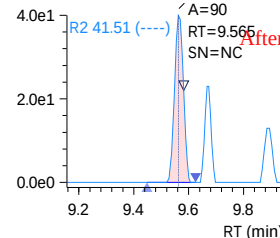
R1 548.80>98.80 (-)

4.00e1



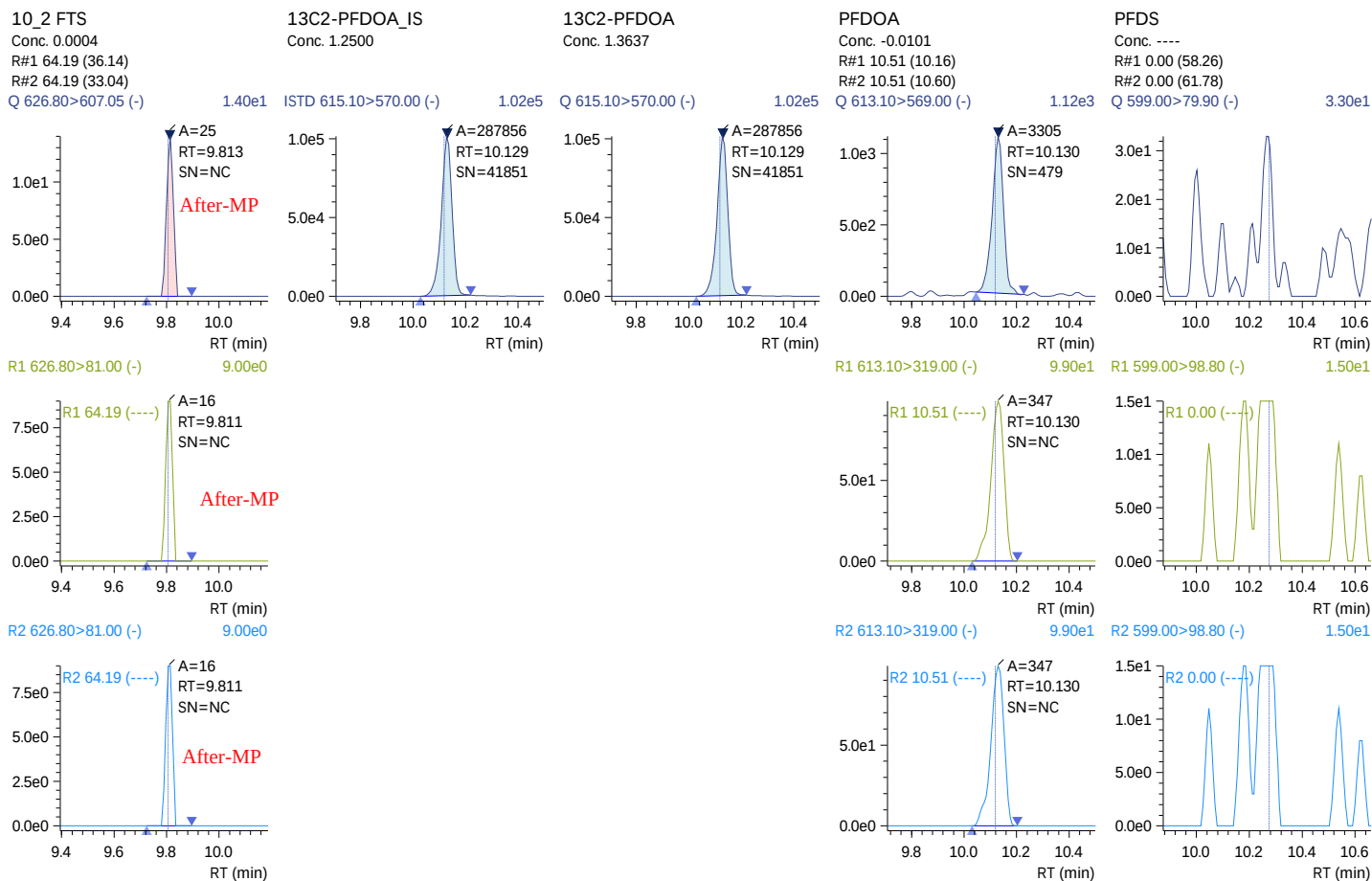
R2 548.80>98.80 (-)

4.00e1





240201_047 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_047 (continued)

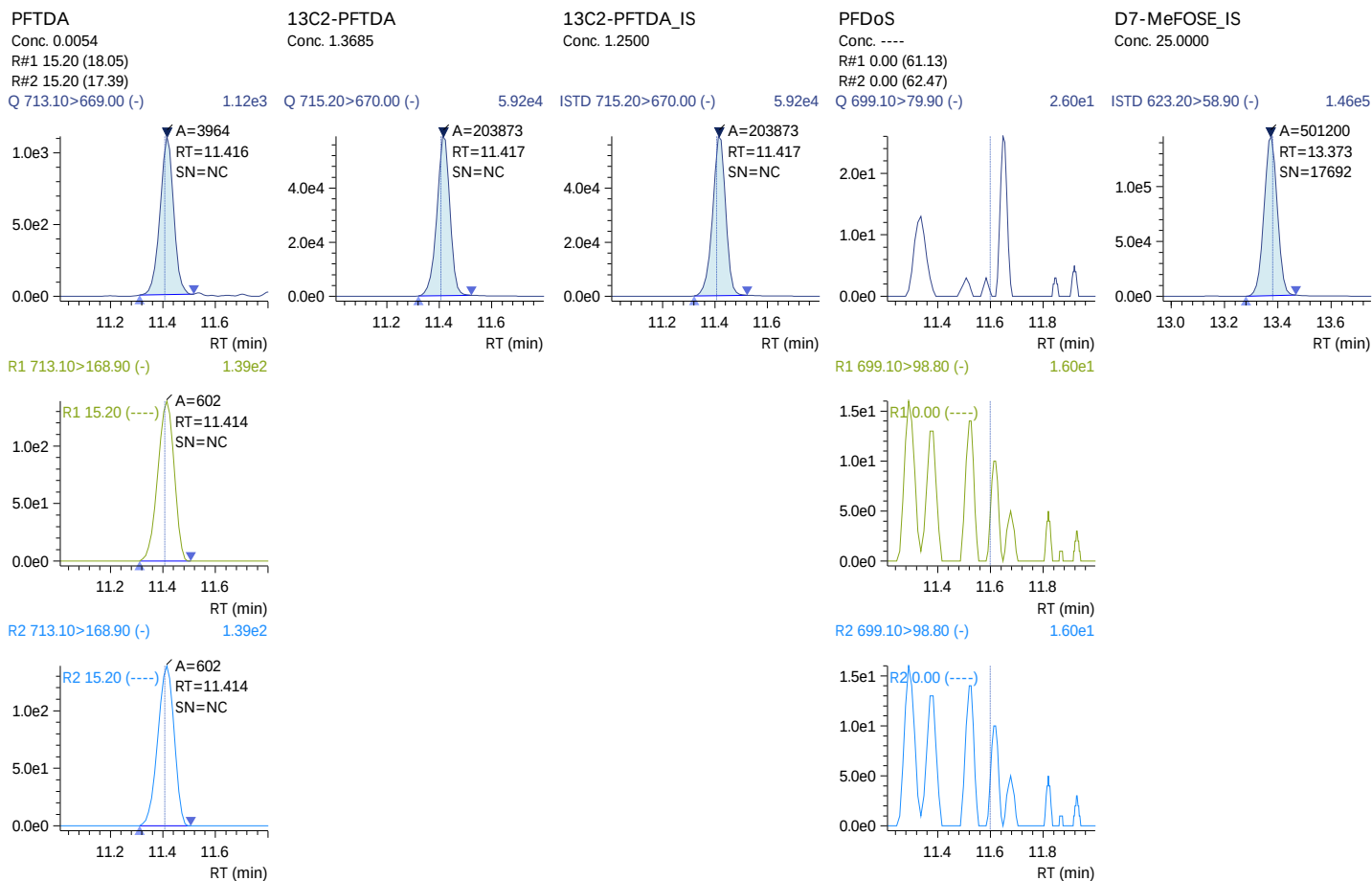


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_047 (continued)





240201_047 (continued)

D7-MeFOSE
Conc. 24.2988

MeFOSE
Conc. ----

13C2-PFHXA_IS
Conc. 2.5000

13C2-PFHXA
Conc. 2.2161

PFHXA
Conc. 0.0233
R#1 14.26 (11.66)
R#2 14.26 (10.99)

Q 623.20>58.90 (-)

1.46e5

Q 616.10>59.00 (-)

8.00e1

ISTD 815.00>770.05 (-)

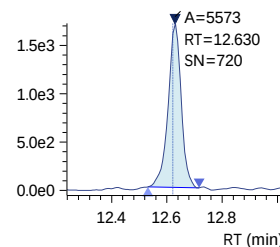
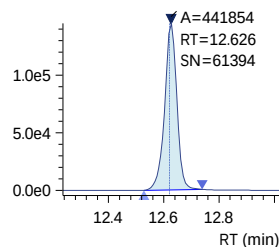
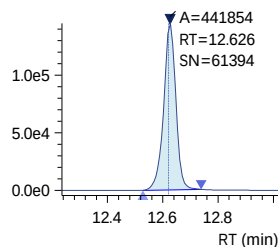
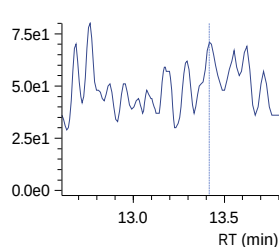
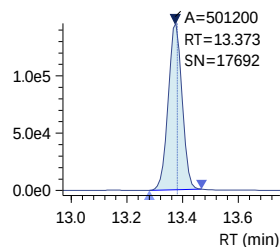
1.45e5

Q 815.00>770.05 (-)

1.45e5

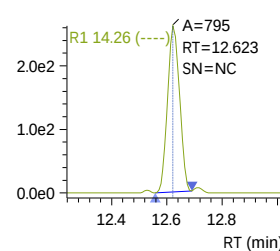
Q 813.00>768.95 (-)

1.73e3



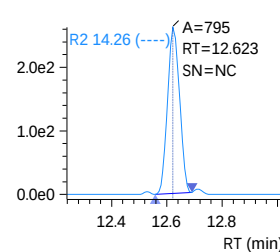
R1 813.00>218.95 (-)

2.63e2



R2 813.00>218.95 (-)

2.63e2





240201_047 (continued)

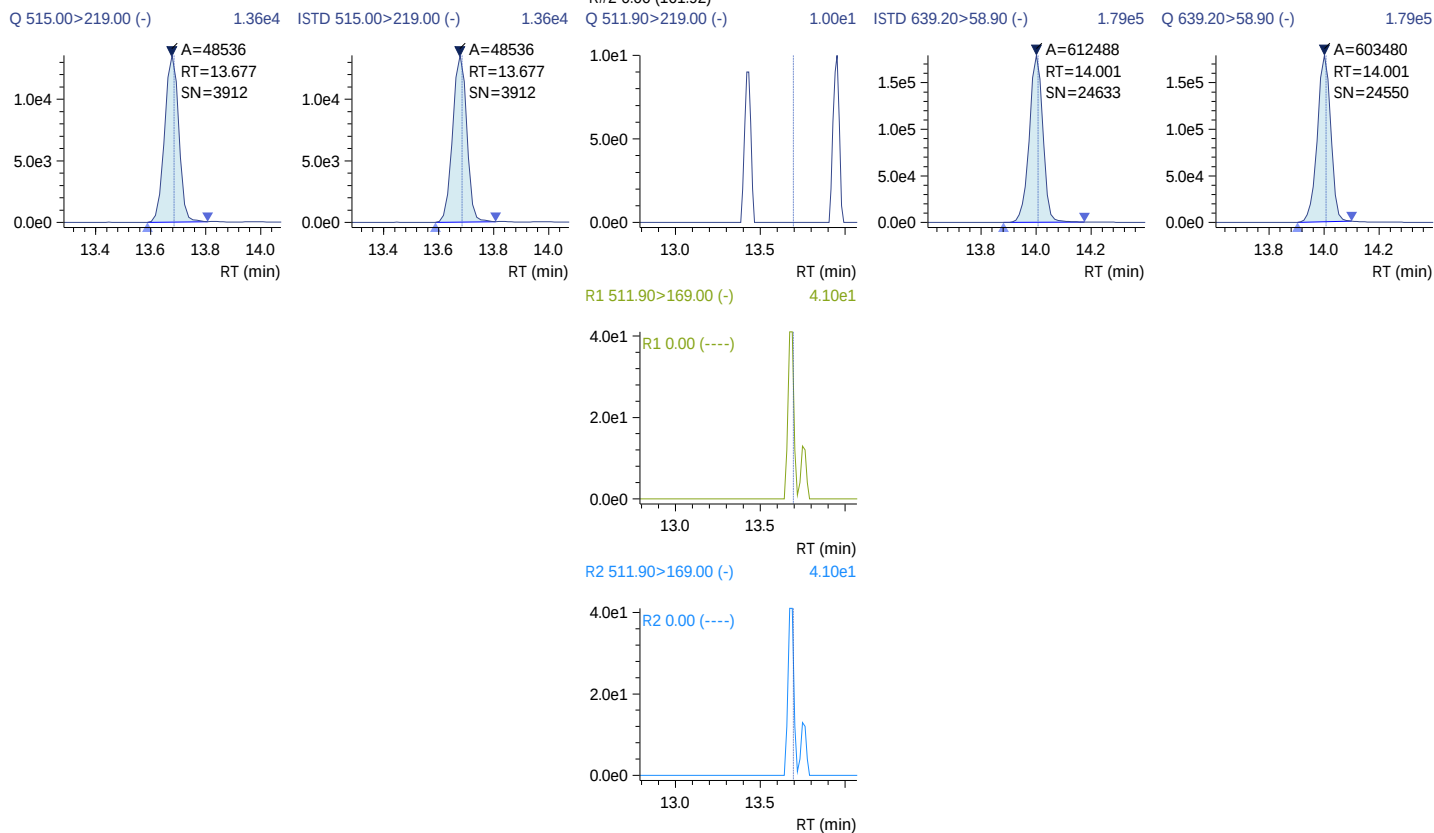
D3-MeFOSA
Conc. 2.3138

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. ----
R#1 0.00 (160.44)
R#2 0.00 (161.92)

D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 23.9086





240201_047 (continued)

EtFOSE
Conc. ----

D5-EtFOSAm
Conc. 2.5514

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. ----

PFODA
Conc. 0.0441

Q 630.00>59.00 (-)

6.20e1

Q 531.10>219.00 (-)

2.36e4

ISTD 531.10>219.00 (-)

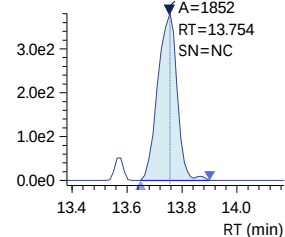
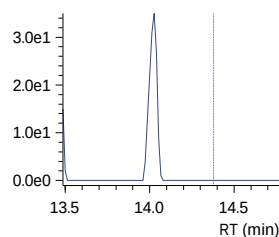
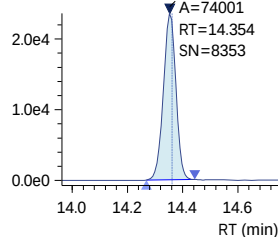
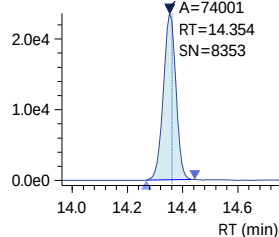
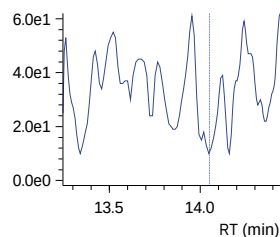
2.36e4

Q 526.00>219.00 (-)

3.50e1

Q 913.00>868.65 (-)

3.81e2

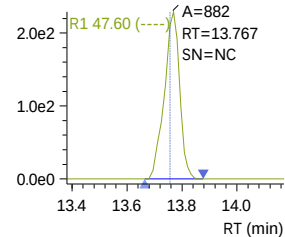
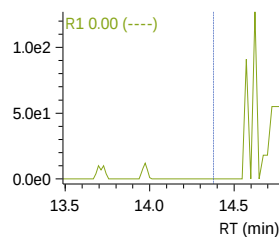


R1 526.00>169.00 (-)

1.27e2

R1 913.00>169.00 (-)

2.29e2

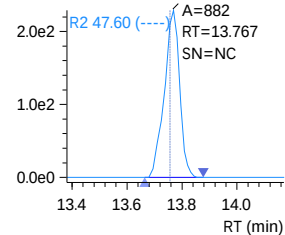
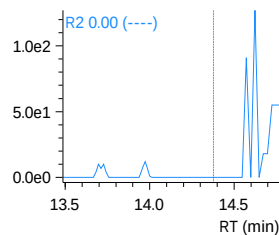


R2 526.00>169.00 (-)

1.27e2

R2 913.00>169.00 (-)

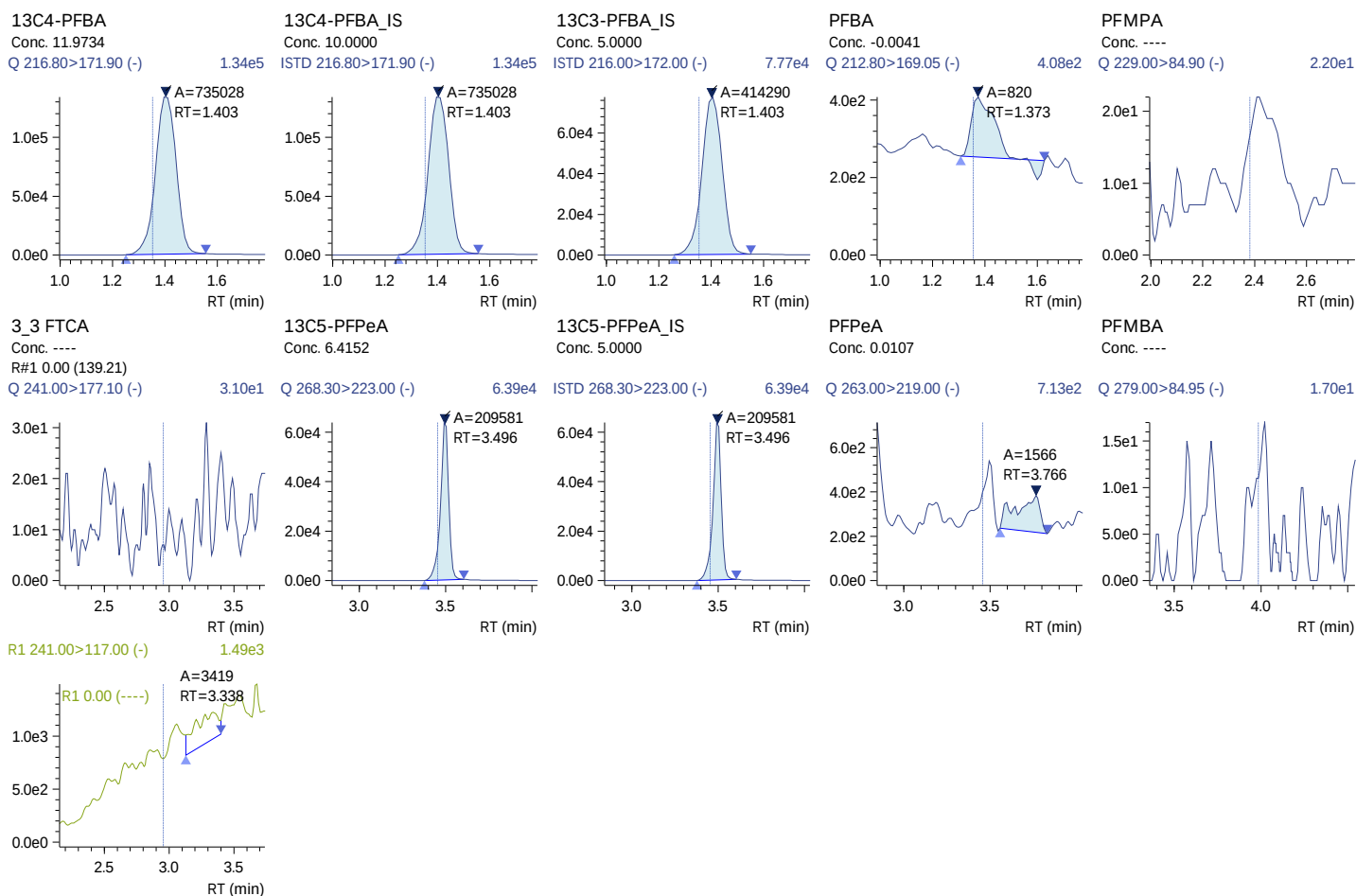
2.29e2





240201_047

Sample ID: 1633 CCB
Date Acquired: 2/2/2024 4:12:17 AM
Acquired by: System Administrator
Data File: 240201_047
Vial: 54 | Inj. Volume: 10.0000uL | Tray: 1





240201_047 (continued)

13C2-4_2 FTS
 Conc. 4.5031

13C2-4_2 FTS_IS
 Conc. 5.0000

4_2 FTS
 Conc. ----
 R#1 0.00 (32.10)
 R#2 0.00 (32.79)

13C3-PFBS_IS
 Conc. 2.5000

PFBS
 Conc. ----
 R#1 0.00 (44.81)
 R#2 0.00 (46.72)

Q 329.10>80.90 (-)

5.26e4

ISTD 329.10>80.90 (-)

5.26e4

Q 327.10>307.00 (-)

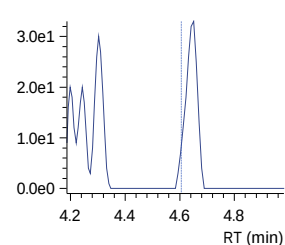
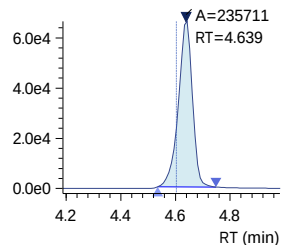
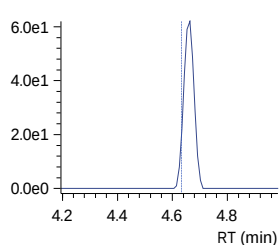
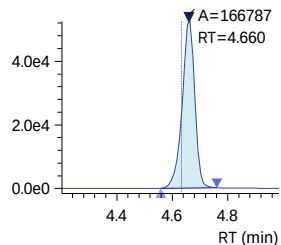
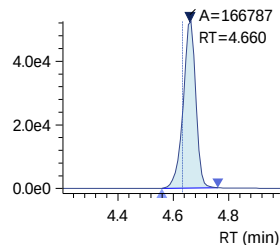
6.20e1

ISTD 302.10>79.90 (-)

6.66e4

Q 298.70>79.90 (-)

3.30e1

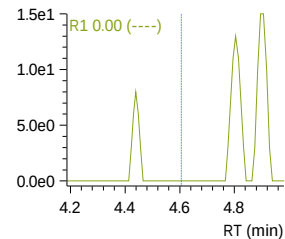
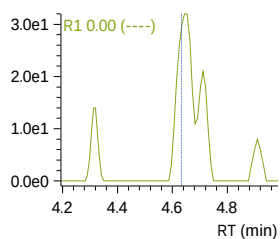


R1 327.10>80.90 (-)

3.20e1

R1 298.70>98.80 (-)

1.50e1

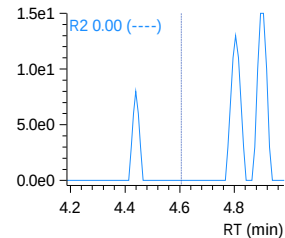
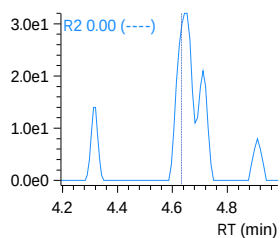


R2 327.10>80.90 (-)

3.20e1

R2 298.70>98.80 (-)

1.50e1





240201_047 (continued)

13C3-PFBS
 Conc. 3.2107

NFDHA
 Conc. 0.0057
 R#1 0.00 (35.54)
 R#2 0.00 (37.91)

13C5-PFHxA
 Conc. 2.6740

13C5-PFHxA_IS
 Conc. 2.5000

13C2-PFHxA_IS
 Conc. 2.5000

Q 302.10>79.90 (-)

6.66e4

Q 295.00>201.00 (-)

1.50e2

Q 318.00>273.00 (-)

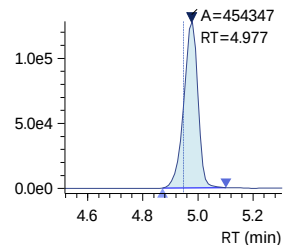
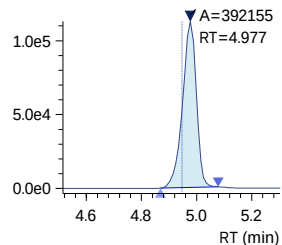
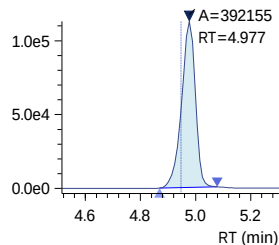
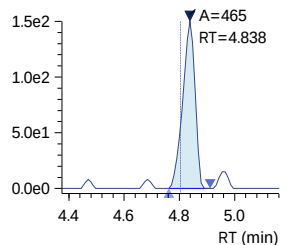
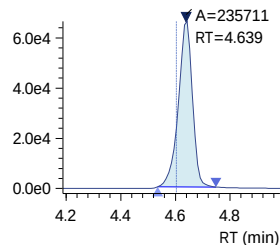
1.13e5

ISTD 318.00>273.00 (-)

1.13e5

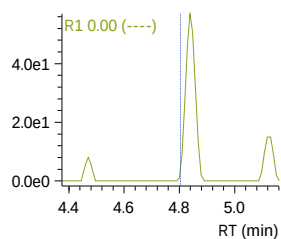
ISTD 315.10>270.00 (-)

1.28e5



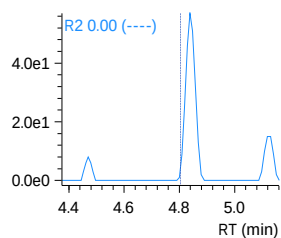
R1 295.00>84.90 (-)

5.70e1



R2 295.00>84.90 (-)

5.70e1





240201_047 (continued)

PFHxA
 Conc. 0.0277

PFEESA
 Conc. 0.0014
 R#1 0.00 (5.22)
 R#2 0.00 (5.35)

13C3-HFPO-DA
 Conc. 14.7029

13C3-HFPO-DA_IS
 Conc. 10.0000

HFPO-DA
 Conc. ----
 R#1 0.00 (59.79)
 R#2 0.00 (58.32)

Q 313.00>269.00 (-)

9.87e2

Q 314.80>135.00 (-)

1.66e2

Q 286.90>168.90 (-)

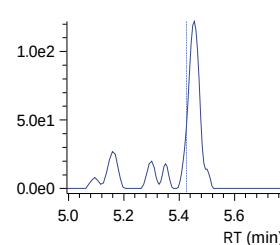
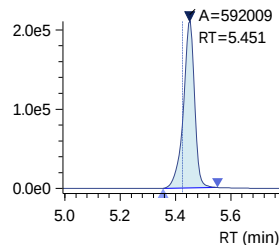
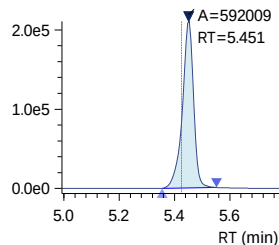
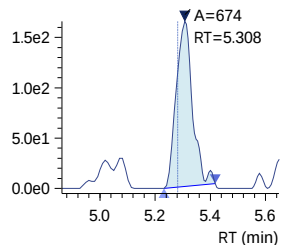
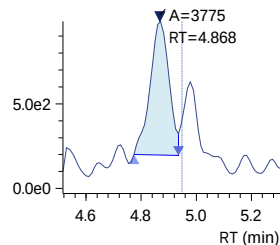
2.11e5

ISTD 286.90>168.90 (-)

2.11e5

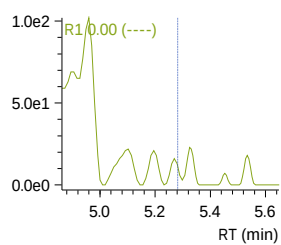
Q 284.90>168.90 (-)

1.22e2



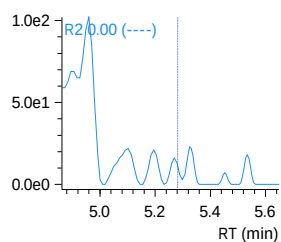
R1 314.80>82.90 (-)

1.02e2



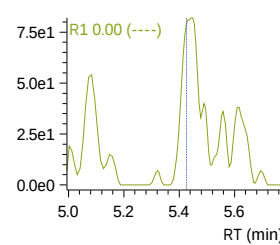
R2 314.80>82.90 (-)

1.02e2



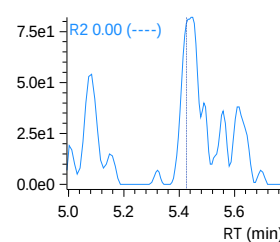
R1 284.90>184.90 (-)

8.20e1



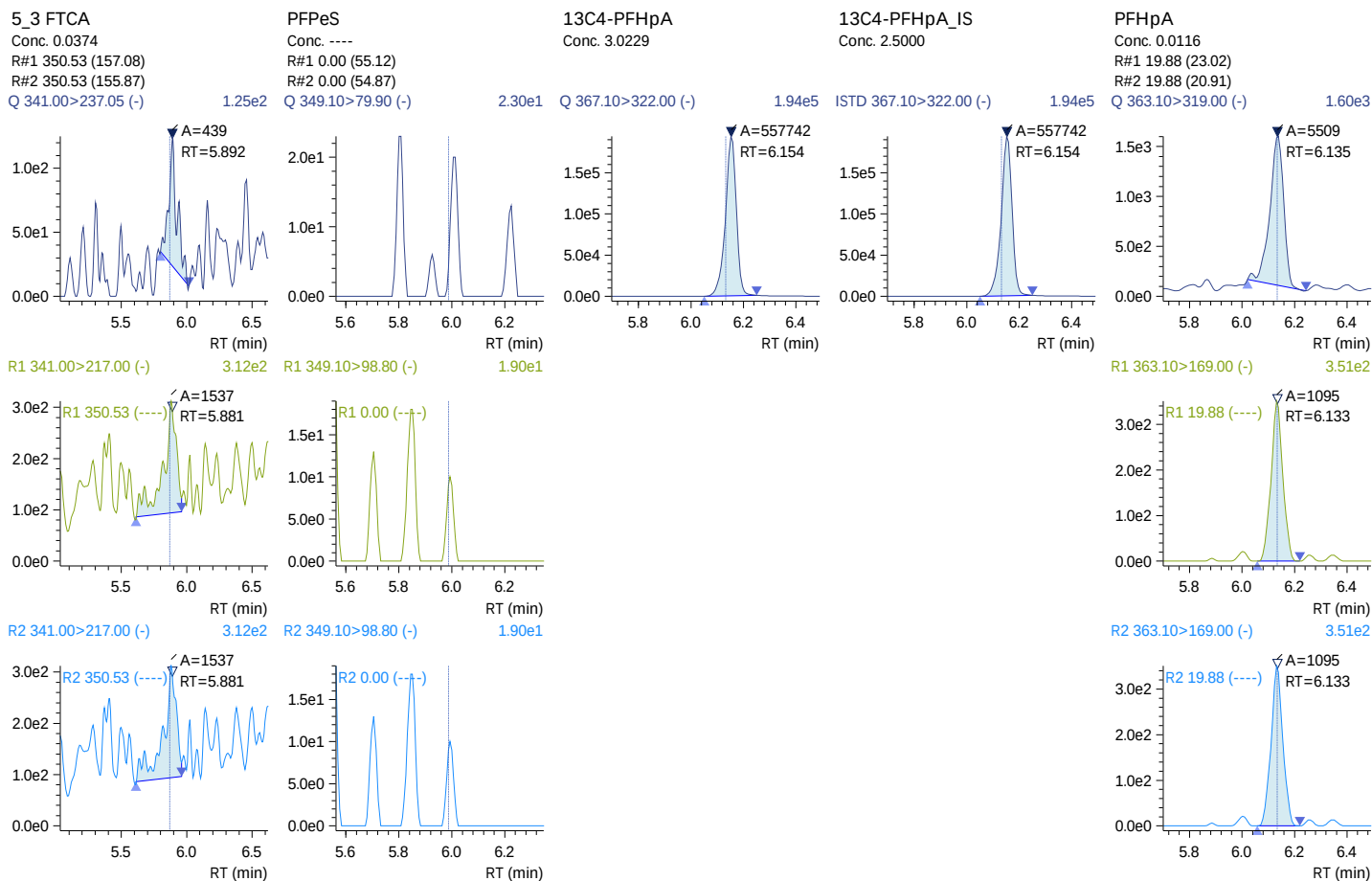
R2 284.90>184.90 (-)

8.20e1



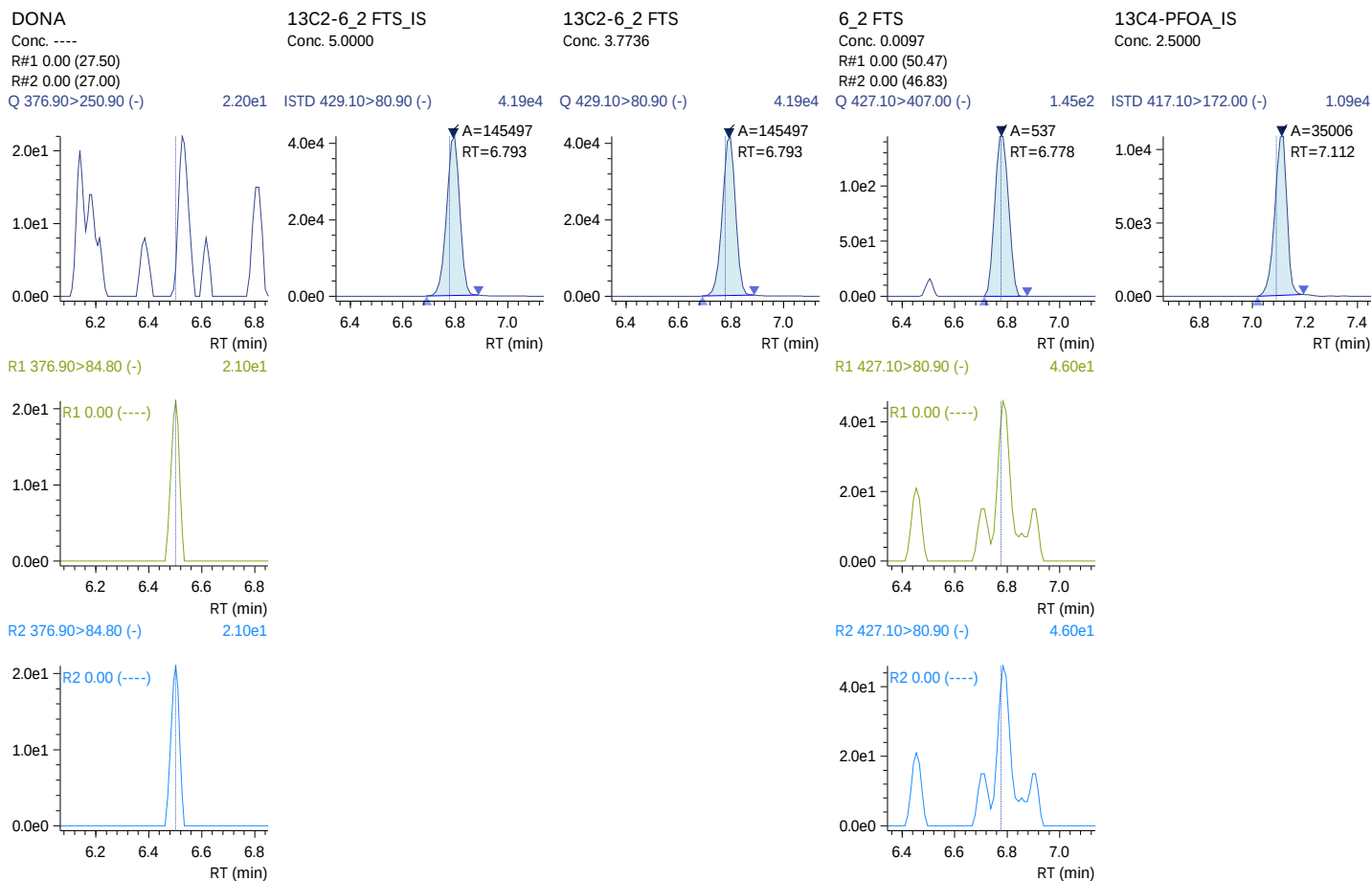


240201_047 (continued)





240201_047 (continued)





240201_047 (continued)

13C8-PFOA_IS
 Conc. 2.5000

13C8-PFOA
 Conc. 3.2373

PFOA
 Conc. 0.0112
 R#1 36.06 (28.77)
 R#2 36.06 (28.12)

13C3-PFHxS
 Conc. 2.9280

13C3-PFHxS_IS
 Conc. 2.5000

ISTD 421.10>376.00 (-)

1.70e5

Q 421.10>376.00 (-)

1.70e5

Q 413.00>369.00 (-)

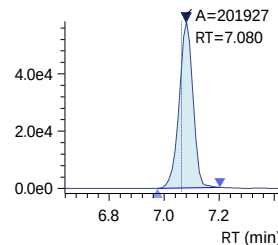
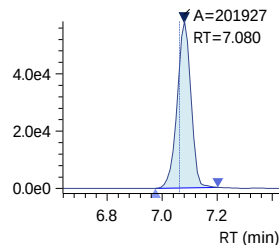
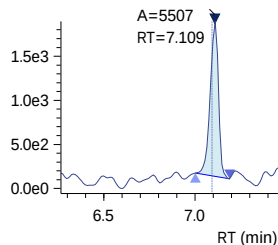
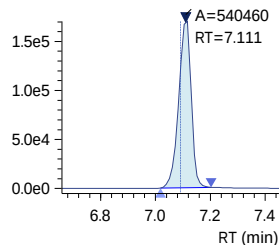
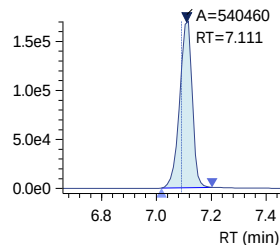
1.90e3

Q 402.10>79.90 (-)

5.83e4

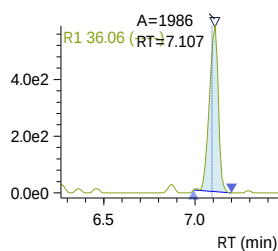
ISTD 402.10>79.90 (-)

5.83e4



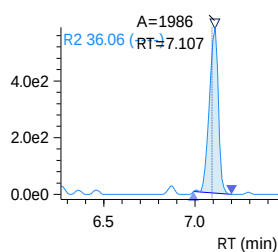
R1 413.00>169.00 (-)

5.89e2



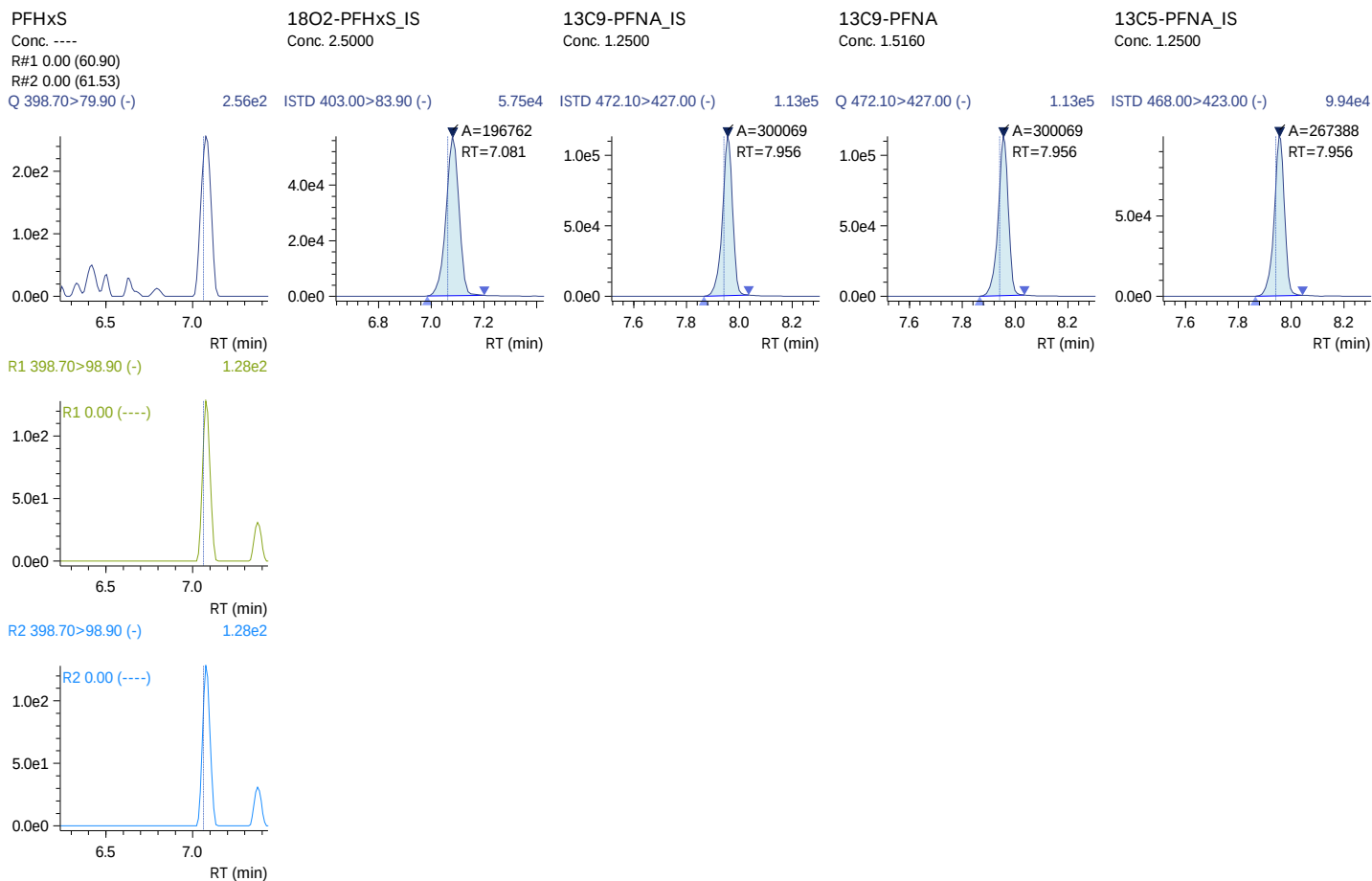
R2 413.00>169.00 (-)

5.89e2



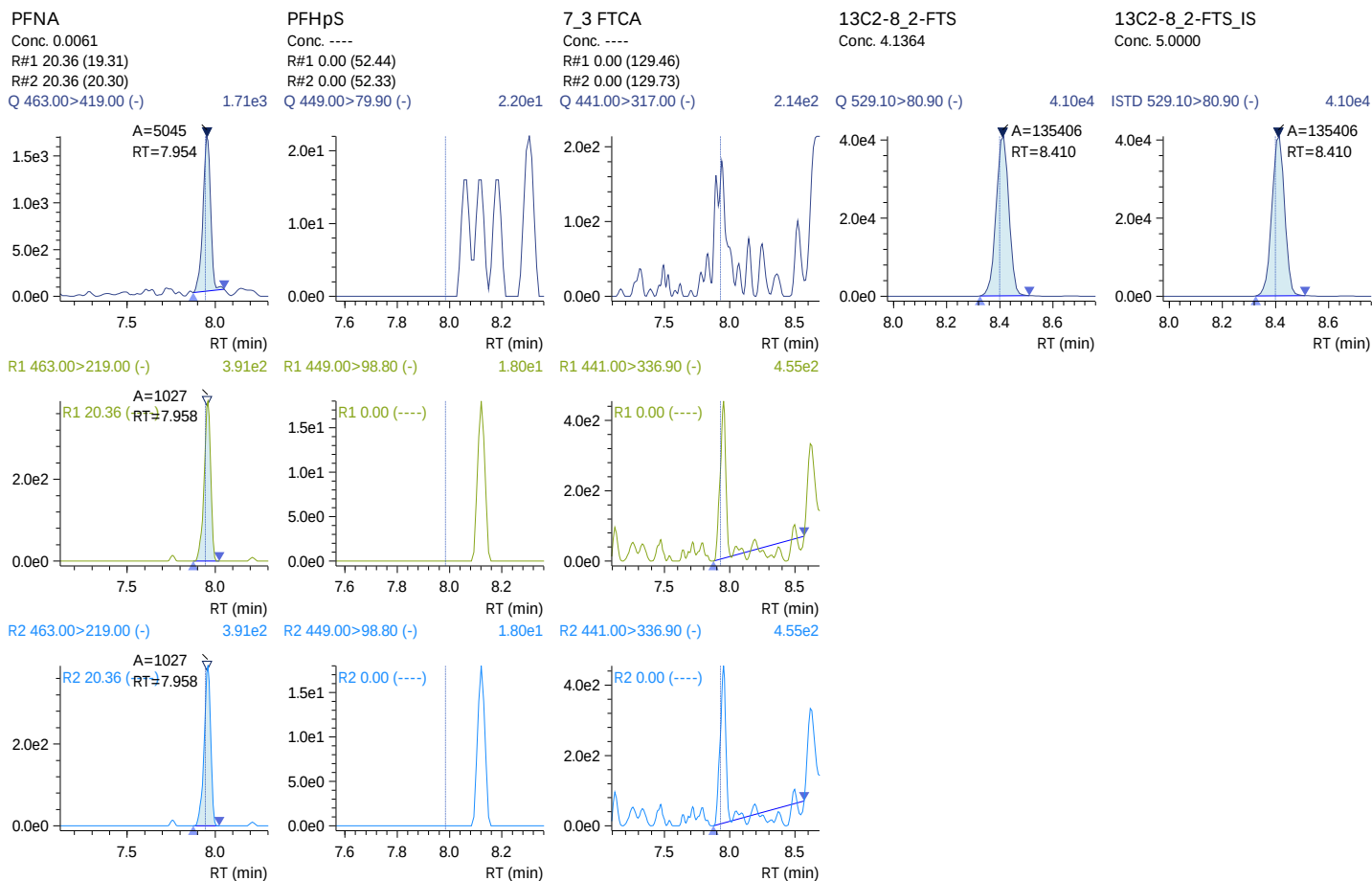


240201_047 (continued)



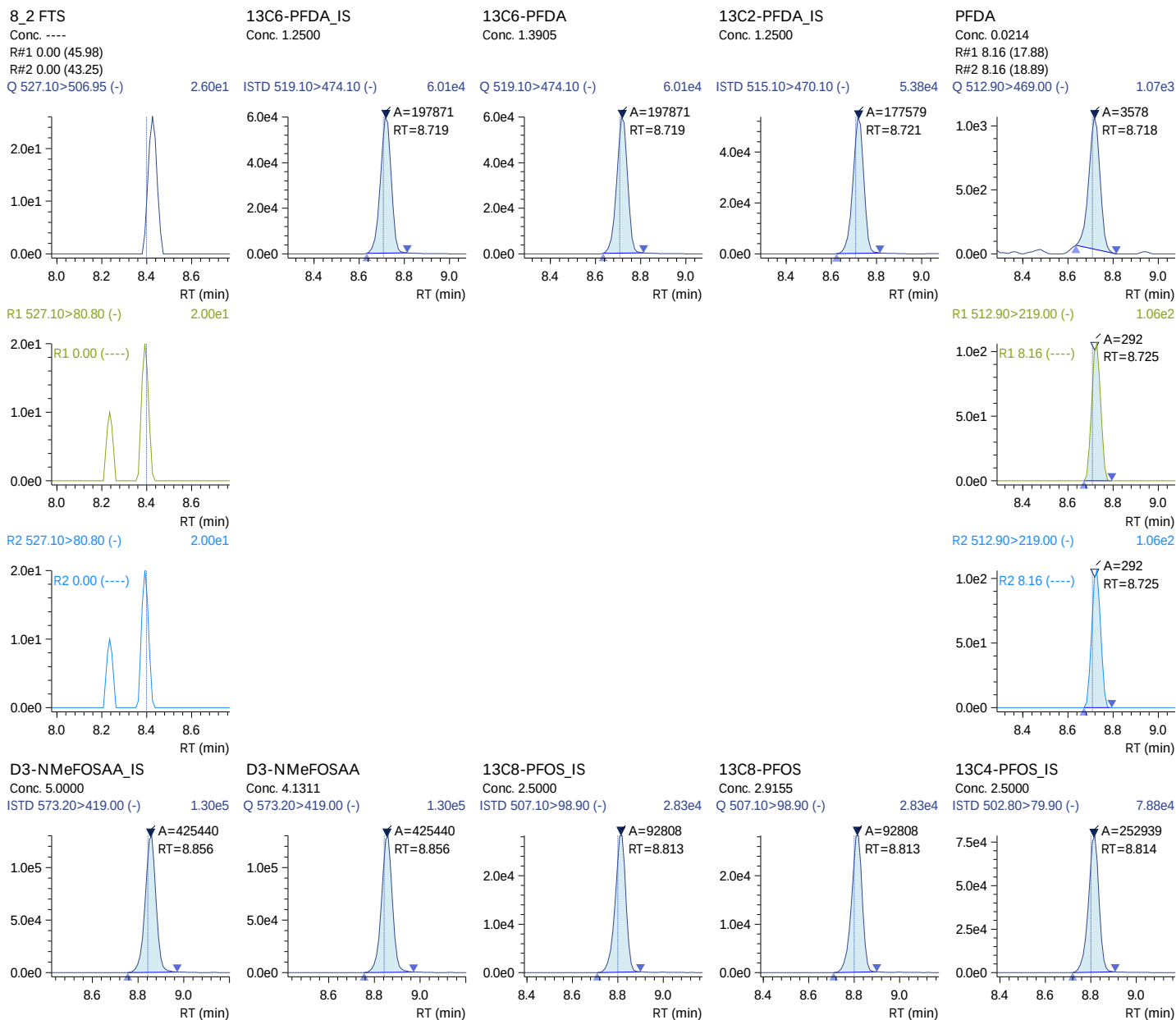


240201_047 (continued)



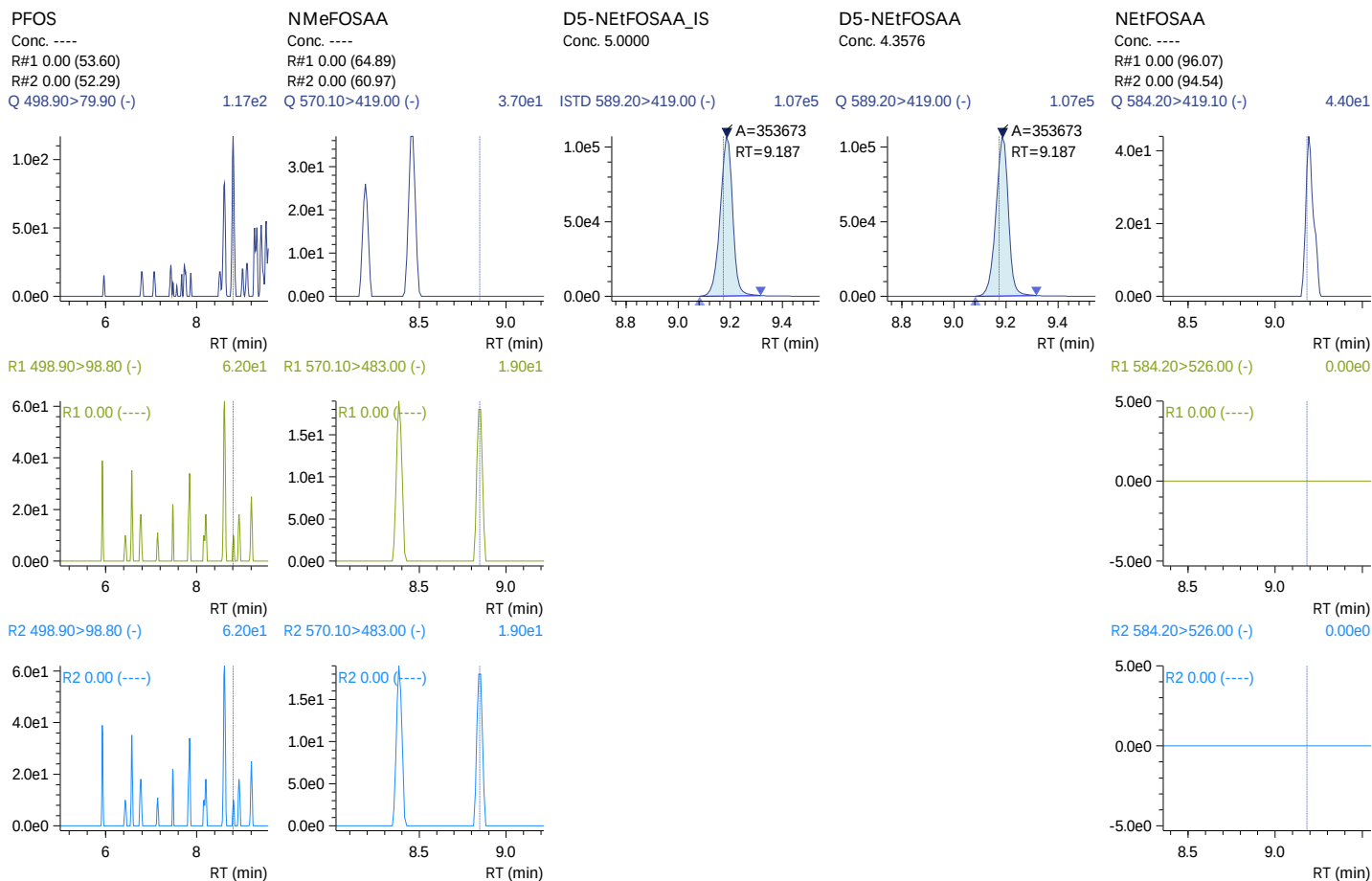


240201_047 (continued)





240201_047 (continued)

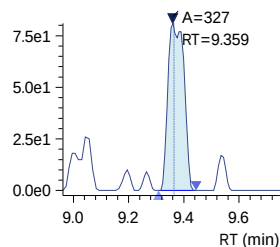




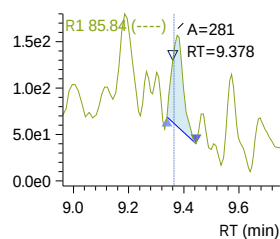
240201_047 (continued)

9-Cl-PF3ONS

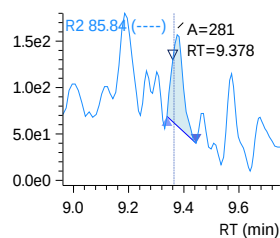
Conc. 0.0006
R#1 85.84 (30.95)
R#2 85.84 (30.61)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-) 1.80e2

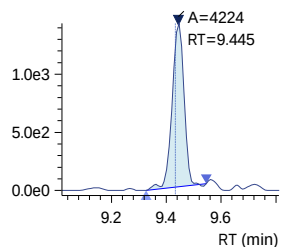


R2 532.80>353.00 (-) 1.80e2

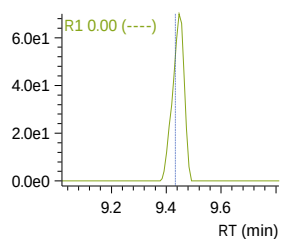


PFUnDA

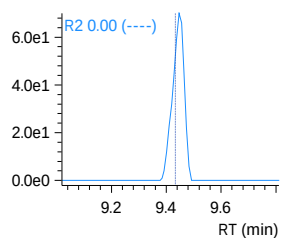
Conc. 0.0046
R#1 0.00 (11.01)
R#2 0.00 (12.02)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-) 7.00e1

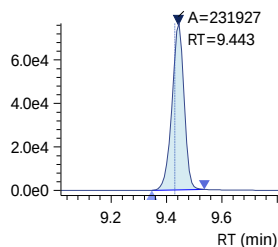


R2 563.10>269.10 (-) 7.00e1



13C7-PFUnDA_IS

Conc. 1.2500
ISTD 570.00>525.10 (-)



7.68e4

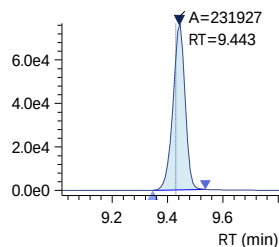


7.68e4



13C7-PFUnDA

Conc. 1.3116
Q 570.00>525.10 (-)



7.68e4

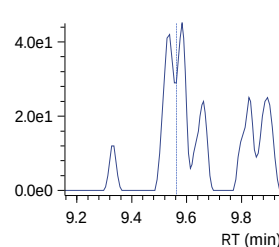


7.68e4

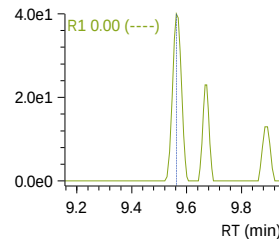


PFNS

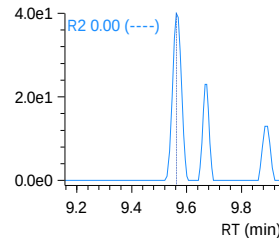
Conc. ----
R#1 0.00 (60.44)
R#2 0.00 (58.51)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-) 4.00e1

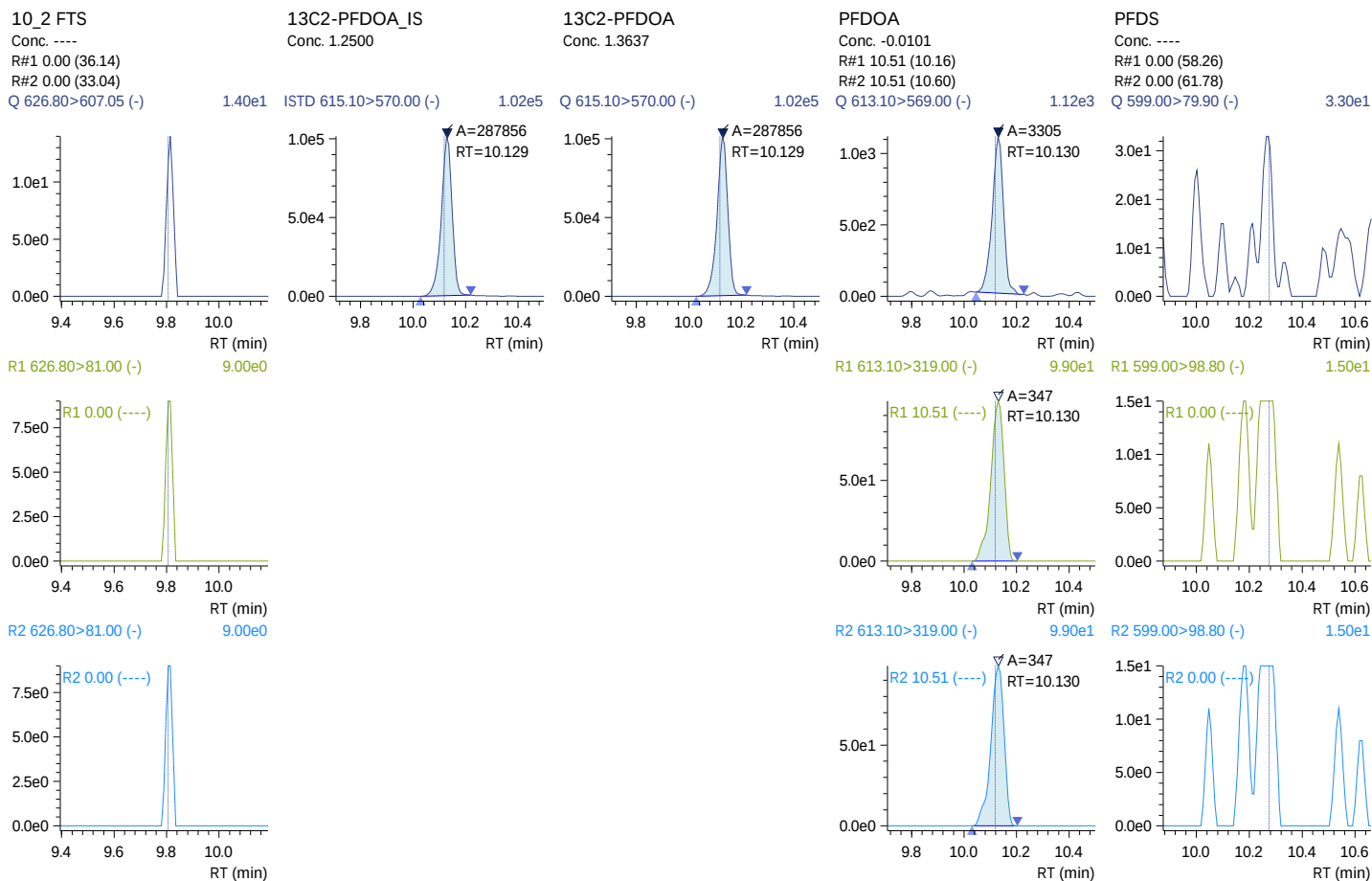


R2 548.80>98.80 (-) 4.00e1



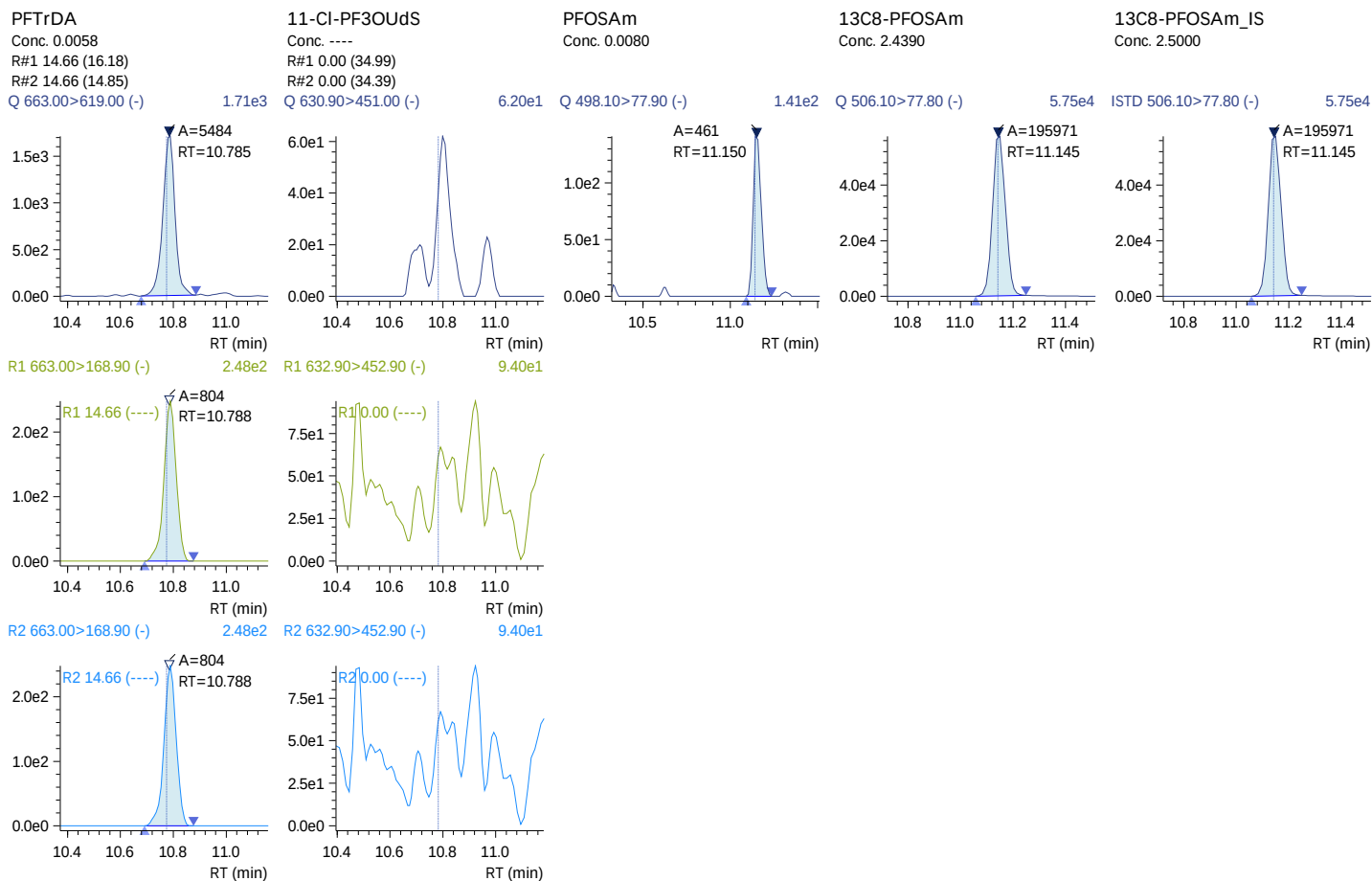


240201_047 (continued)



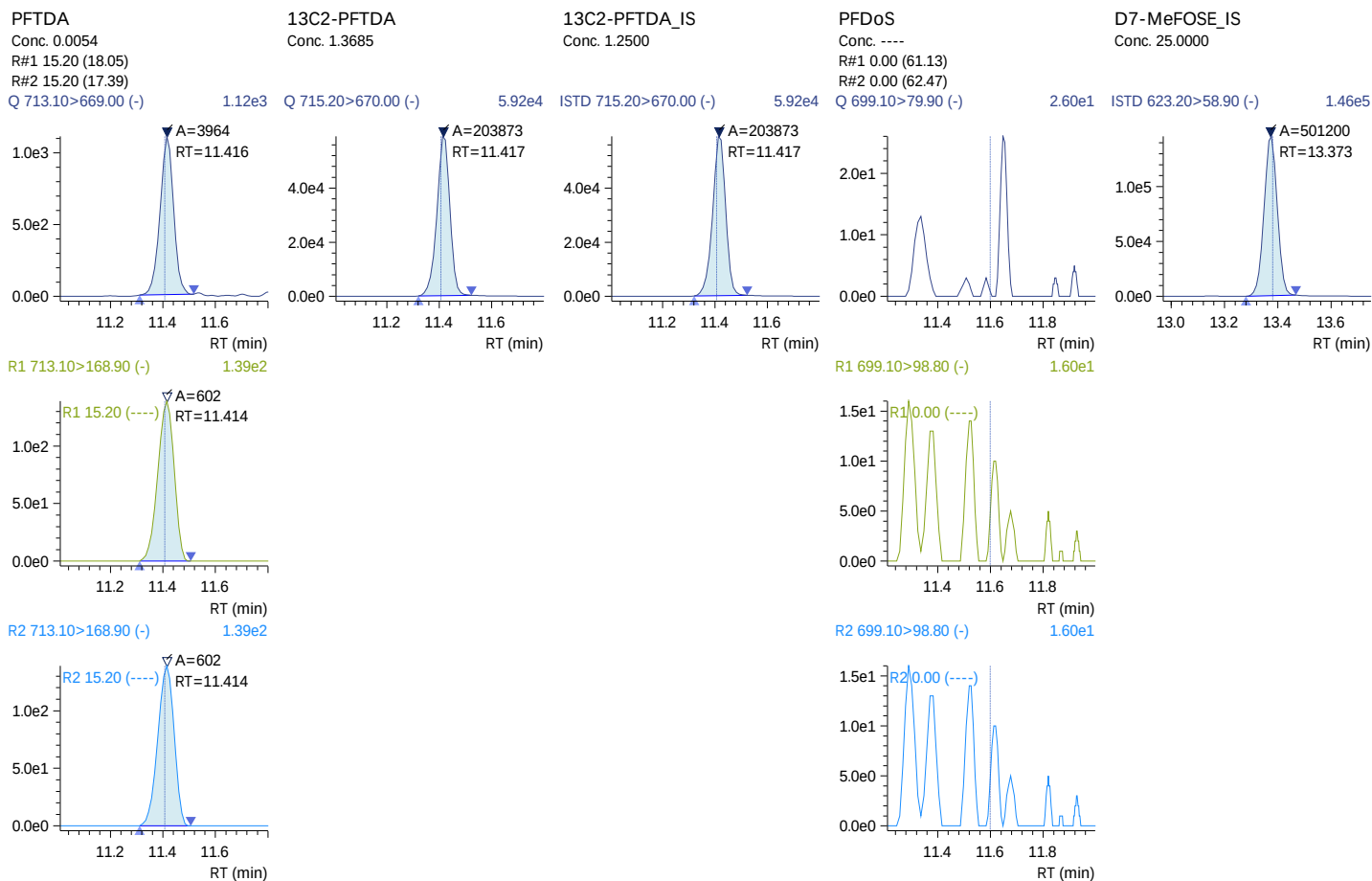


240201_047 (continued)





240201_047 (continued)





240201_047 (continued)

D7-MeFOSE
Conc. 24.2988

MeFOSE
Conc. ----

13C2-PFHXA_IS
Conc. 2.5000

13C2-PFHXA
Conc. 2.2161

PFHXA

Conc. 0.0233
R#1 14.26 (11.66)
R#2 14.26 (10.99)

Q 623.20>58.90 (-)

1.46e5

Q 616.10>59.00 (-)

8.00e1

ISTD 815.00>770.05 (-)

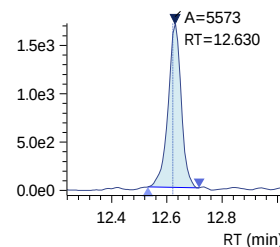
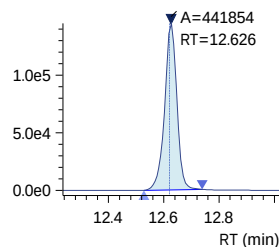
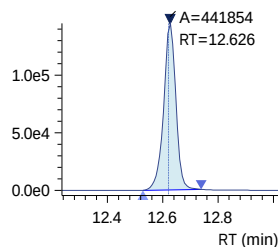
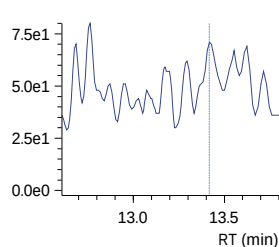
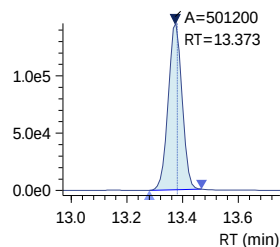
1.45e5

Q 815.00>770.05 (-)

1.45e5

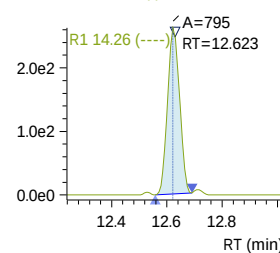
Q 813.00>768.95 (-)

1.73e3



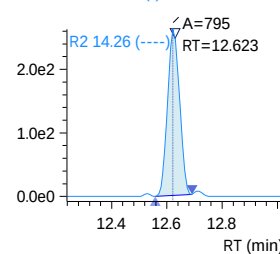
R1 813.00>218.95 (-)

2.63e2



R2 813.00>218.95 (-)

2.63e2





240201_047 (continued)

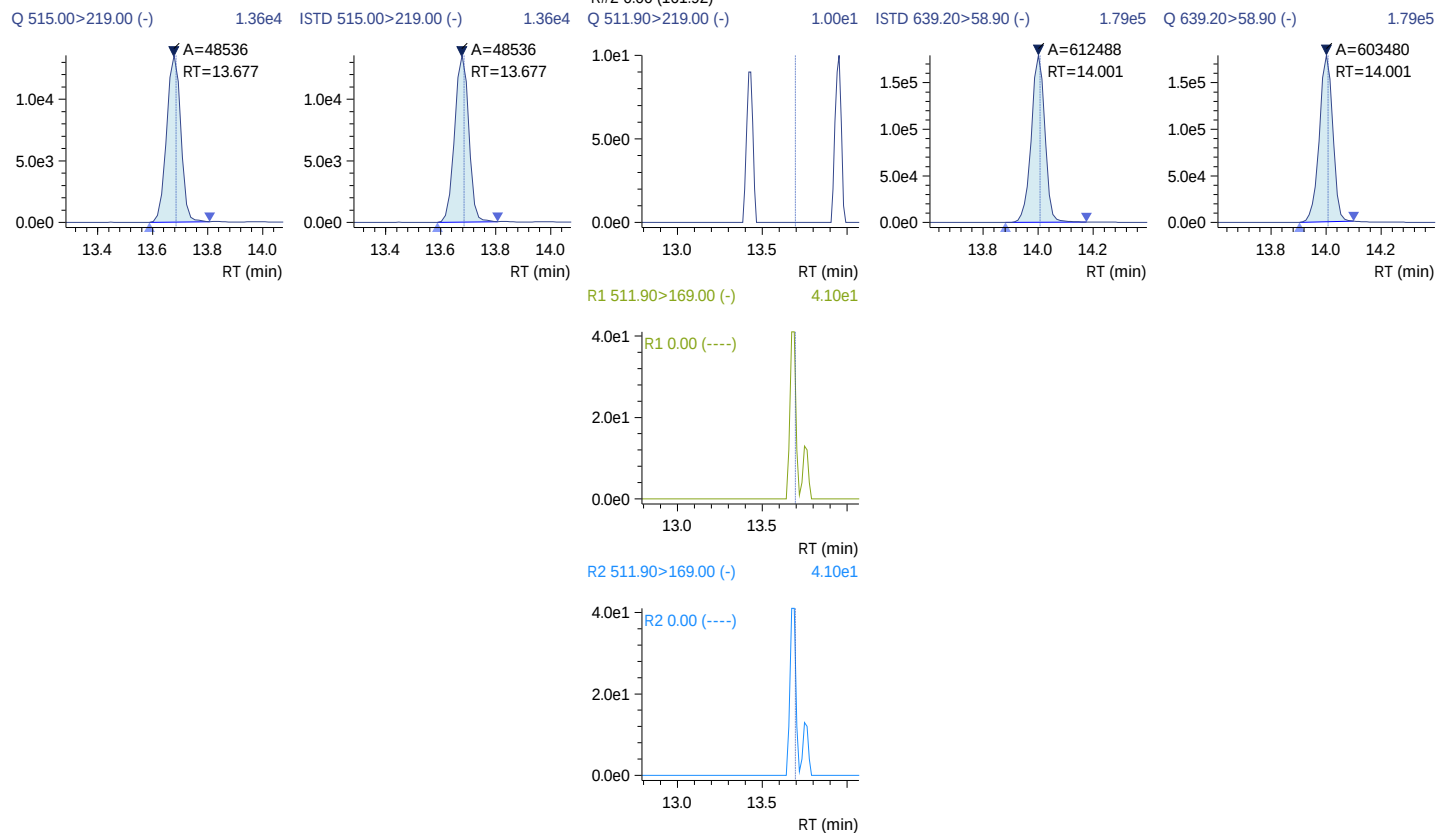
D3-MeFOSA
 Conc. 2.3138

D3-MeFOSA_IS
 Conc. 2.5000

MeFOSA
 Conc. ----
 R#1 0.00 (160.44)
 R#2 0.00 (161.92)

D9-EtFOSE_IS
 Conc. 25.0000

D9-EtFOSE
 Conc. 23.9086





240201_047 (continued)

EtFOSE
Conc. ----

D5-EtFOSAm
Conc. 2.5514

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. ----

PFODA
Conc. 0.0441

Q 630.00>59.00 (-)

6.20e1

Q 531.10>219.00 (-)

2.36e4

ISTD 531.10>219.00 (-)

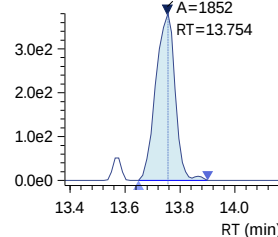
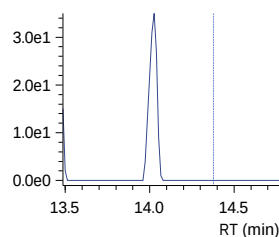
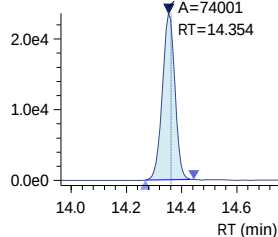
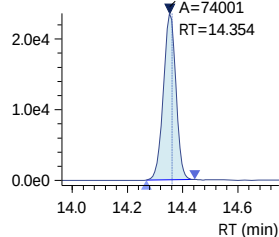
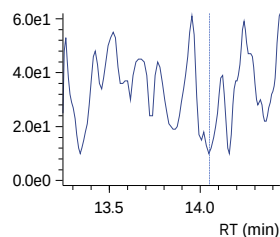
2.36e4

Q 526.00>219.00 (-)

3.50e1

Q 913.00>868.65 (-)

3.81e2

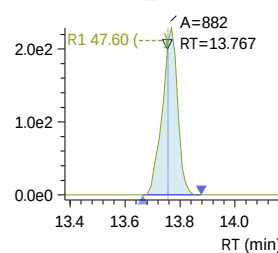
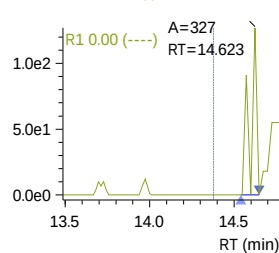


R1 526.00>169.00 (-)

1.27e2

R1 913.00>169.00 (-)

2.29e2

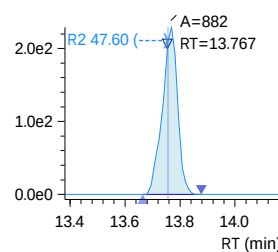
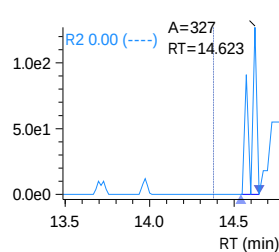


R2 526.00>169.00 (-)

1.27e2

R2 913.00>169.00 (-)

2.29e2



Validation Report

1st *PS* 02/06/24
2nd *MS* 02/06/24

Data File: J:\LCMS08\Data\240201_1633_RA\240201_062
Lab ID: KQ2401707-10
RunType: CCB
Matrix: Water

Date Acquired: 2/2/24 10:01
Batch ID: 831587
Analysis Method: 1633/PFAS_DOD5.4

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery		X
Continuing Calibration Recovery (Closing)		X
Internal Standards	X	
Surrogates		X
Above Highest ICAL Level	X	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Continuing Calibration Recovery	D3-MeFOSAA	65	70	130	native in control
	D5-EtFOSAA	69	70	130	
Continuing Calibration Recovery (Closing)	D3-MeFOSAA	68	70	130	
Surrogates	13C3-PFBS	141	40	135	high bias, sample <MRL
	13C3-HFPO-DA	141	40	130	

Primary Review: _____

Secondary Review: _____

Quantitation Report

1st *PS* 02/06/24
2nd *MS* 02/06/24

Data File:	J:\LCMS08\Data\240201_1633_RA\240201_062	Instrument:	K-LCMS-08
Acqu Date:	2/2/24 10:01	Vial:	37
Run Type:	CCB	Dilution:	1
Lab ID:	KQ2401707-10	Raw Units:	ng/mL

Bottle ID:		Tier:	IV	Matrix:	Water
Prod Code:	PFAS_DOD5.4	Collect Date:	1/3/24	Receive Date:	1/3/24

Analysis Lot:	831587	Prep Lot:		Report Group:	KQ2401707
Analysis	1633	Prep Method:			
		Prep Date:			

Title:	Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM	Calibration ID:	KC2400048
		Report List ID:	24615

Internal Standard Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Area Criteria
18O2-PFHxS	7.088	+0.02	172151	2.5000	OK
13C4-PFOS	8.822	+0.01	243119	2.5000	OK
13C3-PFBA	1.411	+0.06	380591	5.0000	OK
13C2-PFHxA	4.986	+0.03	457166	2.5000	OK
13C4-PFOA	7.115	+0.01	30888	2.5000	OK
13C5-PFNA	7.964	+0.01	232126	1.2500	OK
13C2-PFDA	8.728	+0.01	143159	1.2500	OK

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
13C3-PFBS	4.649	+0.04	227075	3.5352	141 *	40 - 135	Y
13C3-PFHxS	7.087	+0.02	193297	3.2036	128	40 - 130	Y
13C8-PFOS	8.822	+0.02	89785	2.9344	117	40 - 130	Y
13C4-PFBA	1.411	+0.06	706780	12.5327	125	5 - 130	Y
13C5-PFPeA	3.505	+0.04	187583	5.7064	114	40 - 130	Y
13C5-PFHxA	4.986	+0.03	374054	2.5348	101	40 - 130	Y
13C4-PFHpA	6.162	+0.02	527714	2.8425	114	40 - 130	Y
13C8-PFOA	7.115	+0.02	438447	2.9764	119	40 - 130	Y
13C9-PFNA	7.964	+0.01	270971	1.5770	126	40 - 130	Y
13C6-PFDA	8.729	+0.01	174242	1.5188	122	40 - 130	Y
13C7-PFUnDA	9.450	+0.01	217810	1.5279	122	30 - 130	Y
13C2-PFDoDA	10.137	+0.02	262359	1.5417	123	10 - 130	Y
13C2-PFTeDA	11.424	+0.01	177186	1.4753	118	10 - 130	Y
13C8-FOSA	11.155	+0.00	193147	2.5009	100	40 - 130	Y
D3-MeFOSA	13.683	0.00	49732	2.4666	99	10 - 130	Y
D5-EtFOSA	14.358	0.00	68542	2.4587	98	10 - 130	Y
D7-MeFOSE	13.378	0.00	458765	23.1399	93	10 - 130	Y
D9-EtFOSE	14.006	0.00	594110	24.4881	98	10 - 130	Y

			1st	PS	02/06/24
			2nd	MS	02/06/24
Data File:	J:\LCMS08\Data\240201_1633_RA\240201_062		Instrument:	K-LCMS08	
Acqu Date:	2/2/24 10:01		Vial:	37	
Run Type:	CCB		Dilution:	1	
Lab ID:	KQ2401707-10		Raw Units:	ng/mL	

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
D3-MeFOSAA	8.864	+0.01	398382	4.0246	80	40 - 170	Y
D5-EtFOSAA	9.195	+0.01	320689	4.1108	82	25 - 135	Y
13C2-4:2 FTS	4.670	+0.03	150480	4.6437	93	40 - 200	Y
13C2-6:2 FTS	6.802	+0.01	152621	4.5242	90	40 - 200	Y
13C2-8:2 FTS	8.420	+0.01	128341	4.4810	90	40 - 300	Y
13C3-HFPO-DA	5.460	+0.02	569428	14.0548	141 *	40 - 130	Y

Target Compounds

Final Conc.Units: ng/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Perfluorobutane sulfonic acid (PFBS)	0		0	0	0	U	Y
Perfluoropentane sulfonic acid (PFPeS)	0		0	0	0	U	Y
Perfluorohexane sulfonic acid (PFHxS)	7.091	+0.02	1031	0.0122	0.24	U	Y
Perfluoroheptane sulfonic acid (PFHpS)	0		0	0	0	U	Y
Perfluorooctane sulfonic acid (PFOS)	0		0	0	0	U	Y
Perfluorononane sulfonic acid (PFNS)	0		0	0	0	U	Y
Perfluorodecane sulfonic acid (PFDS)	0		0	0	0	U	Y
Perfluorododecane sulfonic acid (PFDoS)	0		0	0	0	U	Y
Perfluorobutanoic acid (PFBA)	1.395	+0.04	1222	0.0058	0.12	U	Y
Perfluoropentanoic acid (PFPeA)	3.506	+0.04	1162	0.0088	0.18	U	Y
Perfluorohexanoic acid (PFHxA)	4.989	+0.03	555	-0.0020	0	U	Y
Perfluoroheptanoic acid (PFHpA)	6.144	0.00	5508	0.0132	0.26	U	Y
Perfluorooctanoic acid (PFOA)	7.114	+0.01	7602	0.0308	0.62	U	Y
Perfluorononanoic acid (PFNA)	7.964	+0.01	4499	0.0057	0.11	U	Y
Perfluorodecanoic acid (PFDA)	8.728	+0.01	3596	0.0244	0.49	U	Y
Perfluoroundecanoic acid (PFUnDA)	9.450	+0.01	4482	0.0081	0.16	U	Y
Perfluorododecanoic acid (PFDOA)	10.138	+0.02	3374	-0.0073	0	U	Y
Perfluorotridecanoic acid (PFTTrDA)	10.792	+0.01	4442	0.0039	0.078	U	Y
Perfluorotetradecanoic acid (PFTDA)	11.420	+0.01	3984	0.0098	0.20	U	Y
Perfluorooctane sulfonamide (PFOSAm)	11.149	+0.00	294	0.0043	0.086	U	Y
N-Methylperfluorooctane sulfonamide (MeFOSA)	0		0	0	0	U	Y
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	0		0	0	0	U	Y
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	0		0	0	0	U	Y
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	0		0	0	0	U	Y
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	0		0	0	0	U	Y

		1st	PS	02/06/24
Data File:	J:\LCMS08\Data\240201_1633_RA\240201_062	Instrument:	K-LCMS08	MS 02/06/24
Acqu Date:	2/2/24 10:01	Vial:	37	
Run Type:	CCB	Dilution:	1	
Lab ID:	KQ2401707-10	Raw Units:	ng/mL	

Target Compounds

Target Compounds			Final Conc.Units: ng/L				
Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	0		0	0	0	U	Y
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	0		0	0	0	U	Y
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	6.798	+0.01	495	0.0085	0.17	U	Y
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	0		0	0	0	U	Y
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	0		0	0	0	U	Y
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	0		0	0	0	U	Y
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	7.954	+0.01	1140	0.0580	1.2	U	Y
Perfluoro(2-ethoxyethane) sulfonic acid (PFEEESA)	0		0	0	0	U	Y
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	0		0	0	0	U	Y
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	0		0	0	0	U	Y
Perfluoro-3-methoxypropanoic acid (PFMPA)	2.450	+0.06	149	0.0028	0.056	U	Y
Perfluoro-4-methoxybutanoic acid (PFMBA)	4.025	+0.03	136	0.0017	0.034	U	Y
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	0		0	0	0	U	Y
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	4.848	+0.03	415	0.0054	0.11	U	Y
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	0		0	0	0	U	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 2/6/24 11:52

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240201_062

Sample ID: 1633 CCB
Date Acquired: 2/2/2024 10:01:08 AM
Acquired by: System Administrator
Data File: 240201_062
Vial: 54 | Inj. Volume: 10.0000uL | Tray: 1

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	706780	----	----	----	----	----	----	----
13C4-PFBA_IS	216.80>171.90	----	706780	----	----	----	----	----	----	----
13C3-PFBA_IS	216.00>172.00	----	380591	----	----	----	----	----	----	----
PFBA	212.80>169.05	----	1222	----	----	----	----	----	----	----
PFMPA	229.00>84.90	----	149	----	----	----	----	----	----	----
3_3 FTCA	241.00>177.10	241.00>117.00	----	0	0.00	139.21	----	----	----	----
13C5-PFPeA	268.30>223.00	----	187583	----	----	----	----	----	----	----
13C5-PFPeA_IS	268.30>223.00	----	187583	----	----	----	----	----	----	----
PFPeA	263.00>219.00	----	1162	----	----	----	----	----	----	----
PFMBA	279.00>84.95	----	136	----	----	----	----	----	----	----
13C2-4_2 FTS	329.10>80.90	----	150480	----	----	----	----	----	----	----
13C2-4_2 FTS_IS	329.10>80.90	----	150480	----	----	----	----	----	----	----
4_2 FTS	327.10>307.00	327.10>80.90	----	0	0.00	32.10	0	0.00	32.79	----
13C3-PFBS_IS	302.10>79.90	----	227075	----	----	----	----	----	----	----
PFBS	298.70>79.90	298.70>98.80	----	0	0.00	44.81	0	0.00	46.72	----
13C3-PFBS	302.10>79.90	----	227075	----	----	----	----	----	----	----
NFDHA	295.00>201.00	295.00>84.90	415	154	37.03	35.54	154	37.03	37.91	----
13C5-PFHxA	318.00>273.00	----	374054	----	----	----	----	----	----	----
13C5-PFHxA_IS	318.00>273.00	----	374054	----	----	----	----	----	----	----
13C2-PFHxA_IS	315.10>270.00	----	457166	----	----	----	----	----	----	----
PFHxA	313.00>269.00	----	555	----	----	----	----	----	----	----
PFEESA	314.80>135.00	314.80>82.90	----	0	0.00	5.22	0	0.00	5.35	----
13C3-HFPO-DA	286.90>168.90	----	569428	----	----	----	----	----	----	----
13C3-HFPO-DA_IS	286.90>168.90	----	569428	----	----	----	----	----	----	----
HFPO-DA	284.90>168.90	284.90>184.90	----	0	0.00	59.79	0	0.00	58.32	----
5_3 FTCA	341.00>237.05	341.00>217.00	----	0	0.00	157.08	0	0.00	155.87	----
PFPeS	349.10>79.90	349.10>98.80	----	0	0.00	55.12	0	0.00	54.87	----
13C4-PFHpA	367.10>322.00	----	527714	----	----	----	----	----	----	----
13C4-PFHpA_IS	367.10>322.00	----	527714	----	----	----	----	----	----	----
PFHpA	363.10>319.00	363.10>169.00	5508	1301	23.61	23.02	1301	23.61	20.91	----
DONA	376.90>250.90	376.90>84.80	----	0	0.00	27.50	0	0.00	27.00	----
13C2-6_2 FTS_IS	429.10>80.90	----	152621	----	----	----	----	----	----	----
13C2-6_2 FTS	429.10>80.90	----	152621	----	----	----	----	----	----	----
6_2 FTS	427.10>407.00	427.10>80.90	495	434	87.68	50.47	434	87.68	46.83	IRr
13C4-PFOA_IS	417.10>172.00	----	30888	----	----	----	----	----	----	----
13C8-PFOA_IS	421.10>376.00	----	438447	----	----	----	----	----	----	----

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240201_062 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	438447	----	----	----	----	----	----	----
PFOA	413.00>369.00	413.00>169.00	7602	1226	16.13	28.77	1226	16.13	28.12	
13C3-PFHxS	402.10>79.90	----	193297	----	----	----	----	----	----	----
13C3-PFHxS_IS	402.10>79.90	----	193297	----	----	----	----	----	----	----
PFHxS	398.70>79.90	398.70>98.90	1031	498	48.33	60.90	498	48.33	61.53	
18O2-PFHxS_IS	403.00>83.90	----	172151	----	----	----	----	----	----	----
13C9-PFNA_IS	472.10>427.00	----	270971	----	----	----	----	----	----	----
13C9-PFNA	472.10>427.00	----	270971	----	----	----	----	----	----	----
13C5-PFNA_IS	468.00>423.00	----	232126	----	----	----	----	----	----	----
PFNA	463.00>419.00	463.00>219.00	4499	1218	27.07	19.31	1218	27.07	20.30	
PFHpS	449.00>79.90	449.00>98.80	----	0	0.00	52.44	0	0.00	52.33	
7_3 FTCA	441.00>317.00	441.00>336.90	1140	991	86.91	129.46	991	86.91	129.73	
13C2-8_2-FTS	529.10>80.90	----	128341	----	----	----	----	----	----	----
13C2-8_2-FTS_IS	529.10>80.90	----	128341	----	----	----	----	----	----	----
8_2 FTS	527.10>506.95	527.10>80.80	----	0	0.00	45.98	0	0.00	43.25	
13C6-PFDA_IS	519.10>474.10	----	174242	----	----	----	----	----	----	----
13C6-PFDA	519.10>474.10	----	174242	----	----	----	----	----	----	----
13C2-PFDA_IS	515.10>470.10	----	143159	----	----	----	----	----	----	----
PFDA	512.90>469.00	512.90>219.00	3596	700	19.45	17.88	700	19.45	18.89	
D3-NMeFOSAA_IS	573.20>419.00	----	398382	----	----	----	----	----	----	----
D3-NMeFOSAA	573.20>419.00	----	398382	----	----	----	----	----	----	----
13C8-PFOS_IS	507.10>98.90	----	89785	----	----	----	----	----	----	----
13C8-PFOS	507.10>98.90	----	89785	----	----	----	----	----	----	----
13C4-PFOS_IS	502.80>79.90	----	243119	----	----	----	----	----	----	----
PFOS	498.90>79.90	498.90>98.80	----	0	0.00	53.60	0	0.00	52.29	
NMeFOSAA	570.10>419.00	570.10>483.00	----	0	0.00	64.89	0	0.00	60.97	
D5-NEtFOSAA_IS	589.20>419.00	----	320689	----	----	----	----	----	----	----
D5-NEtFOSAA	589.20>419.00	----	320689	----	----	----	----	----	----	----
NEtFOSAA	584.20>419.10	584.20>526.00	----	0	0.00	96.07	0	0.00	94.54	
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	----	0	0.00	30.95	0	0.00	30.61	
PFUnDA	563.10>519.00	563.10>269.10	4482	192	4.28	11.01	192	4.28	12.02	IRr
13C7-PFUnDA_IS	570.00>525.10	----	217810	----	----	----	----	----	----	----
13C7-PFUnDA	570.00>525.10	----	217810	----	----	----	----	----	----	----
PFNS	548.80>79.90	548.80>98.80	----	0	0.00	60.44	0	0.00	58.51	
10_2 FTS	626.80>607.05	626.80>81.00	----	0	0.00	36.14	0	0.00	33.04	
13C2-PFDOA_IS	615.10>570.00	----	262359	----	----	----	----	----	----	----
13C2-PFDOA	615.10>570.00	----	262359	----	----	----	----	----	----	----
PFDOA	613.10>569.00	613.10>319.00	3374	330	9.78	10.16	330	9.78	10.60	
PFDS	599.00>79.90	599.00>98.80	----	0	0.00	58.26	0	0.00	61.78	
PFTrDA	663.00>619.00	663.00>168.90	4442	912	20.54	16.18	912	20.54	14.85	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240201_062 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	----	0	0.00	34.99	0	0.00	34.39	
PFOSAm	498.10>77.90	----	294	----	----	----	----	----	----	
13C8-PFOSAm	506.10>77.80	----	193147	----	----	----	----	----	----	
13C8-PFOSAm_IS	506.10>77.80	----	193147	----	----	----	----	----	----	
PFTDA	713.10>669.00	713.10>168.90	3984	849	21.32	18.05	849	21.32	17.39	
13C2-PFTDA	715.20>670.00	----	177186	----	----	----	----	----	----	
13C2-PFTDA_IS	715.20>670.00	----	177186	----	----	----	----	----	----	
PFDoS	699.10>79.90	699.10>98.80	----	0	0.00	61.13	0	0.00	62.47	
D7-MeFOSE_IS	623.20>58.90	----	458765	----	----	----	----	----	----	
D7-MeFOSE	623.20>58.90	----	458765	----	----	----	----	----	----	
MeFOSE	616.10>59.00	----	----	----	----	----	----	----	----	
13C2-PFHxDA_IS	815.00>770.05	----	416695	----	----	----	----	----	----	
13C2-PFHxDA	815.00>770.05	----	416695	----	----	----	----	----	----	
PFHxDA	813.00>768.95	813.00>218.95	5970	809	13.55	11.66	809	13.55	10.99	
D3-MeFOSA	515.00>219.00	----	49732	----	----	----	----	----	----	
D3-MeFOSA_IS	515.00>219.00	----	49732	----	----	----	----	----	----	
MeFOSA	511.90>219.00	511.90>169.00	----	0	0.00	160.44	0	0.00	161.92	
D9-EtFOSE_IS	639.20>58.90	----	602640	----	----	----	----	----	----	
D9-EtFOSE	639.20>58.90	----	594110	----	----	----	----	----	----	
EtFOSE	630.00>59.00	----	----	----	----	----	----	----	----	
D5-EtFOSAm	531.10>219.00	----	68542	----	----	----	----	----	----	
D5-EtFOSAm_IS	531.10>219.00	----	68542	----	----	----	----	----	----	
EtFOSAm	526.00>219.00	526.00>169.00	----	0	0.00	159.63	0	0.00	172.60	
PFODA	913.00>868.65	913.00>169.00	2382	715	30.02	36.03	715	30.02	35.02	

Flag ID key: IRr: Ion Ratio (Relative)



240201_062

Sample ID: 1633 CCB
Date Acquired: 2/2/2024 10:01:08 AM
Acquired by: System Administrator
Data File: 240201_062
Vial: 54 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.411	0.058	0.000	706780	380591	13C3-PFBA_IS	12.5327	ng/mL	
13C4-PFBA_IS	Auto	1.411	0.058	----	706780	706780	----	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.411	0.056	----	380591	380591	----	5.0000	ng/mL	
PFBA	M	1.395	0.039	-0.016	1222	706780	13C4-PFBA_IS	0.0058	ng/mL	
PFMPA	M	2.450	0.069	-1.055	149	187583	13C5-PFPeA_IS	0.0028	ng/mL	
3_3 FTCA	ND(W/B)	----	----	----	----	187583	13C5-PFPeA_IS	----	ng/mL	
13C5-PFPeA	Auto	3.505	0.050	-1.481	187583	457166	13C2-PFHxA_IS	5.7064	ng/mL	
13C5-PFPeA_IS	Auto	3.505	0.050	----	187583	187583	----	5.0000	ng/mL	
PFPeA	Auto	3.506	0.048	0.001	1162	187583	13C5-PFPeA_IS	0.0088	ng/mL	
PFMBA	M	4.025	0.041	0.520	136	187583	13C5-PFPeA_IS	0.0017	ng/mL	
13C2-4_2 FTS	Auto	4.670	0.037	-2.418	150480	172151	18O2-PFHxS_IS	4.6437	ng/mL	
13C2-4_2 FTS_IS	Auto	4.670	0.037	----	150480	150480	----	5.0000	ng/mL	
4_2 FTS	ND(W/B)	----	----	----	----	150480	13C2-4_2 FTS_IS	----	ng/mL	
13C3-PFBS_IS	Auto	4.649	0.046	----	227075	227075	----	2.5000	ng/mL	
PFBS	ND(W/B)	----	----	----	----	227075	13C3-PFBS_IS	----	ng/mL	
13C3-PFBS	Auto	4.649	0.046	-2.439	227075	172151	18O2-PFHxS_IS	3.5352	ng/mL	
NFDHA	M	4.848	0.043	-0.138	415	374054	13C5-PFHxA_IS	0.0054	ng/mL	
13C5-PFHxA	Auto	4.986	0.039	0.000	374054	457166	13C2-PFHxA_IS	2.5348	ng/mL	
13C5-PFHxA_IS	Auto	4.986	0.039	----	374054	374054	----	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	4.986	0.039	----	457166	457166	----	2.5000	ng/mL	
PFHxA	M	4.989	0.040	0.003	555	374054	13C5-PFHxA_IS	-0.0020	ng/mL	
PFEESA	ND(W/B)	----	----	----	----	374054	13C5-PFHxA_IS	----	ng/mL	
13C3-HFPO-DA	Auto	5.460	0.035	0.474	569428	457166	13C2-PFHxA_IS	14.0548	ng/mL	
13C3-HFPO-DA_IS	Auto	5.460	0.035	----	569428	569428	----	10.0000	ng/mL	
HFPO-DA	ND(W/B)	----	----	----	----	569428	13C3-HFPO-DA_IS	----	ng/mL	
5_3 FTCA	ND(W/B)	----	----	----	----	374054	13C5-PFHxA_IS	----	ng/mL	
PFPeS	ND(W/B)	----	----	----	----	193297	13C3-PFHxS_IS	----	ng/mL	
13C4-PFHpA	Auto	6.162	0.030	1.176	527714	457166	13C2-PFHxA_IS	2.8425	ng/mL	
13C4-PFHpA_IS	Auto	6.162	0.030	----	527714	527714	----	2.5000	ng/mL	
PFHpA	Auto	6.144	0.010	-0.018	5508	527714	13C4-PFHpA_IS	0.0132	ng/mL	
DONA	ND(W/B)	----	----	----	----	569428	13C3-HFPO-DA_IS	----	ng/mL	
13C2-6_2 FTS_IS	Auto	6.802	0.024	----	152621	152621	----	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.802	0.024	-0.286	152621	172151	18O2-PFHxS_IS	4.5242	ng/mL	
6_2 FTS	Auto	6.798	0.021	-0.004	495	152621	13C2-6_2 FTS_IS	0.0085	ng/mL	IRr
13C4-PFOA_IS	Auto	7.115	0.024	----	30888	30888	----	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.115	0.024	----	438447	438447	----	2.5000	ng/mL	
13C8-PFOA	Auto	7.115	0.024	0.000	438447	30888	13C4-PFOA_IS	2.9764	ng/mL	
PFOA	Auto	7.114	0.021	-0.001	7602	438447	13C8-PFOA_IS	0.0308	ng/mL	
13C3-PFHxS	Auto	7.087	0.025	-0.001	193297	172151	18O2-PFHxS_IS	3.2036	ng/mL	
13C3-PFHxS_IS	Auto	7.087	0.025	----	193297	193297	----	2.5000	ng/mL	
PFHxS	M	7.091	0.029	0.004	1031	193297	13C3-PFHxS_IS	0.0122	ng/mL	
18O2-PFHxS_IS	Auto	7.088	0.026	----	172151	172151	----	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.964	0.023	----	270971	270971	----	1.2500	ng/mL	
13C9-PFNA	Auto	7.964	0.023	0.000	270971	232126	13C5-PFNA_IS	1.5770	ng/mL	
13C5-PFNA_IS	Auto	7.964	0.022	----	232126	232126	----	1.2500	ng/mL	
PFNA	Auto	7.964	0.021	0.000	4499	270971	13C9-PFNA_IS	0.0057	ng/mL	
PFHpS	ND(W/B)	----	----	----	----	89785	13C8-PFOS_IS	----	ng/mL	
7_3 FTCA	M	7.954	0.026	2.968	1140	374054	13C5-PFHxA_IS	0.0580	ng/mL	
13C2-8_2-FTS	Auto	8.420	0.021	1.332	128341	172151	18O2-PFHxS_IS	4.4810	ng/mL	
13C2-8_2-FTS_IS	Auto	8.420	0.021	----	128341	128341	----	5.0000	ng/mL	
8_2 FTS	ND(W/B)	----	----	----	----	128341	13C2-8_2-FTS_IS	----	ng/mL	
13C6-PFDA_IS	Auto	8.729	0.022	----	174242	174242	----	1.2500	ng/mL	
13C6-PFDA	Auto	8.729	0.022	0.001	174242	143159	13C2-PFDA_IS	1.5188	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_062 (continued)

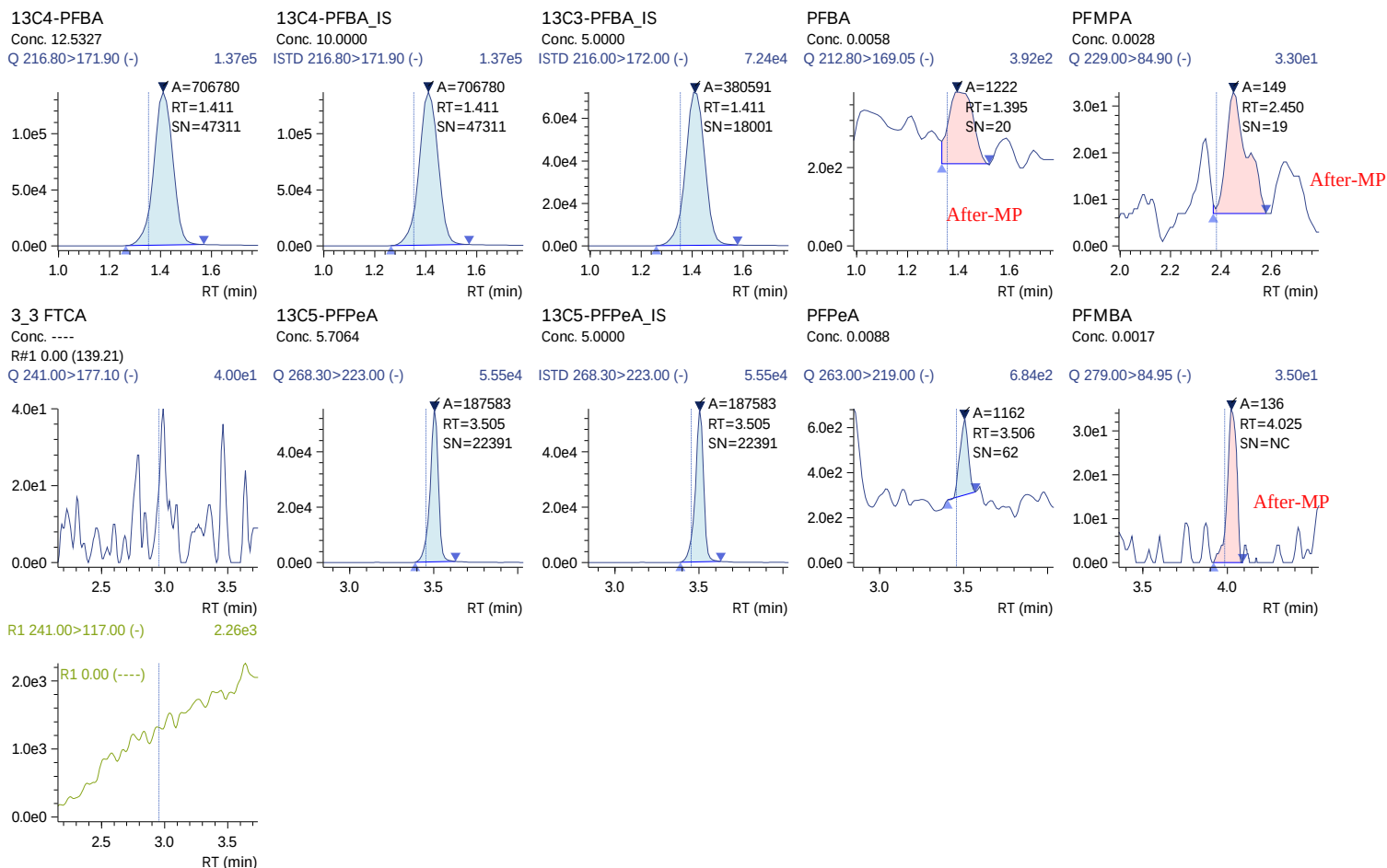
(Table continued from previous page)

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C2-PFDA_IS	Auto	8.728	0.020	----	143159	143159	----	1.2500	ng/mL	
PFDA	Auto	8.728	0.019	-0.001	3596	174242	13C6-PFDA_IS	0.0244	ng/mL	
D3-NMeFOSAA_IS	Auto	8.864	0.021	----	398382	398382	----	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.864	0.021	0.042	398382	243119	13C4-PFOS_IS	4.0246	ng/mL	
13C8-PFOS_IS	Auto	8.822	0.022	----	89785	89785	----	2.5000	ng/mL	
13C8-PFOS	Auto	8.822	0.022	0.000	89785	243119	13C4-PFOS_IS	2.9344	ng/mL	
13C4-PFOS_IS	Auto	8.822	0.022	----	243119	243119	----	2.5000	ng/mL	
PFOS	ND(W/B)	----	----	----	----	89785	13C8-PFOS_IS	----	ng/mL	
NMeFOSAA	ND(W/B)	----	----	----	----	398382	D3-NMeFOSAA_IS	----	ng/mL	
D5-NetFOSAA_IS	Auto	9.195	0.023	----	320689	320689	----	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.195	0.023	0.373	320689	243119	13C4-PFOS_IS	4.1108	ng/mL	
NetFOSAA	ND(W/B)	----	----	----	----	320689	D5-NetFOSAA_IS	----	ng/mL	
9-CI-PF3ONS	ND(W/B)	----	----	----	----	569428	13C3-HFPO-DA_IS	----	ng/mL	
PFUnDA	M	9.450	0.017	0.000	4482	217810	13C7-PFUnDA_IS	0.0081	ng/mL	IRr
13C7-PFUnDA_IS	Auto	9.450	0.020	----	217810	217810	----	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.450	0.020	0.722	217810	143159	13C2-PFDA_IS	1.5279	ng/mL	
PFNS	ND(W/B)	----	----	----	----	89785	13C8-PFOS_IS	----	ng/mL	
10_2_FTS	ND(W/B)	----	----	----	----	128341	13C2-8_2-FTS_IS	----	ng/mL	
13C2-PFDOA_IS	Auto	10.137	0.019	----	262359	262359	----	1.2500	ng/mL	
13C2-PFDOA	Auto	10.137	0.019	1.409	262359	143159	13C2-PFDA_IS	1.5417	ng/mL	
PFDOA	Auto	10.138	0.019	0.001	3374	262359	13C2-PFDOA_IS	-0.0073	ng/mL	
PFDS	ND(W/B)	----	----	----	----	89785	13C8-PFOS_IS	----	ng/mL	
PFTDA	Auto	10.792	0.017	-0.632	4442	177186	13C2-PFTDA_IS	0.0039	ng/mL	
11-CI-PF3OUdS	ND(W/B)	----	----	----	----	569428	13C3-HFPO-DA_IS	----	ng/mL	
PFOSAm	M	11.149	0.007	-0.006	294	193147	13C8-PFOSAm_IS	0.0043	ng/mL	
13C8-PFOSAm	Auto	11.155	0.013	2.333	193147	243119	13C4-PFOS_IS	2.5009	ng/mL	
13C8-PFOSAm_IS	Auto	11.155	0.013	----	193147	193147	----	2.5000	ng/mL	
PFTDA	Auto	11.420	0.012	-0.004	3984	177186	13C2-PFTDA_IS	0.0098	ng/mL	
13C2-PFTDA	Auto	11.424	0.018	2.696	177186	143159	13C2-PFDA_IS	1.4753	ng/mL	
13C2-PFTDA_IS	Auto	11.424	0.018	----	177186	177186	----	1.2500	ng/mL	
PFDoS	ND(W/B)	----	----	----	----	89785	13C8-PFOS_IS	----	ng/mL	
D7-MeFOSE_IS	Auto	13.378	-0.002	----	458765	458765	----	25.0000	ng/mL	
D7-MeFOSE	Auto	13.378	-0.002	4.556	458765	243119	13C4-PFOS_IS	23.1399	ng/mL	
MeFOSE	ND(W/B)	----	----	----	----	458765	D7-MeFOSE_IS	----	ng/mL	
13C2-PFHxDA_IS	Auto	12.632	0.012	----	416695	416695	----	2.5000	ng/mL	
13C2-PFHxDA	Auto	12.632	0.012	3.904	416695	143159	13C2-PFDA_IS	2.5924	ng/mL	
PFHXDA	Auto	12.634	0.013	0.002	5970	416695	13C2-PFHxDA_IS	0.0265	ng/mL	
D3-MeFOSA	Auto	13.683	-0.002	4.861	49732	243119	13C4-PFOS_IS	2.4666	ng/mL	
D3-MeFOSA_IS	Auto	13.683	-0.002	----	49732	49732	----	2.5000	ng/mL	
MeFOSA	ND(W/B)	----	----	----	----	49732	D3-MeFOSA_IS	----	ng/mL	
D9-EtFOSE_IS	Auto	14.006	-0.002	----	602640	602640	----	25.0000	ng/mL	
D9-EtFOSE	Auto	14.006	-0.002	5.184	594110	243119	13C4-PFOS_IS	24.4881	ng/mL	
EtFOSE	ND(W/B)	----	----	----	----	602640	D9-EtFOSE_IS	----	ng/mL	
D5-EtFOSAm	Auto	14.358	-0.003	5.536	68542	243119	13C4-PFOS_IS	2.4587	ng/mL	
D5-EtFOSAm_IS	Auto	14.358	-0.003	----	68542	68542	----	2.5000	ng/mL	
EtFOSAm	ND(W/B)	----	----	----	----	68542	D5-EtFOSAm_IS	----	ng/mL	
PFODA	M	13.770	0.014	1.138	2382	416695	13C2-PFHxDA_IS	0.0512	ng/mL	

Flag ID key: IRr: Ion Ratio (Relative)



240201_062 (continued)





240201_062 (continued)

13C2-4_2 FTS
Conc. 4.6437

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. ----
R#1 0.00 (32.10)
R#2 0.00 (32.79)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. ----
R#1 0.00 (44.81)
R#2 0.00 (46.72)

Q 329.10>80.90 (-)

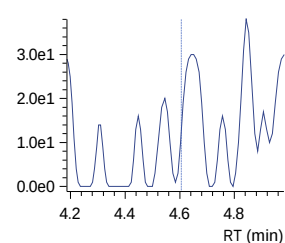
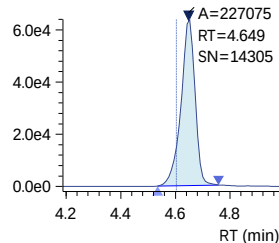
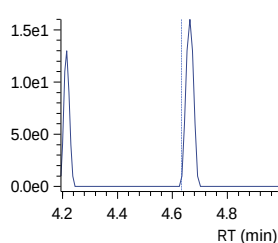
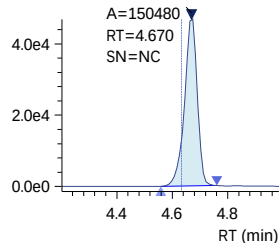
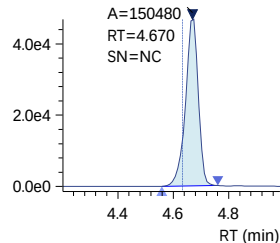
4.69e4 ISTD 329.10>80.90 (-)

4.69e4 Q 327.10>307.00 (-)

1.60e1 ISTD 302.10>79.90 (-)

6.40e4 Q 298.70>79.90 (-)

3.80e1

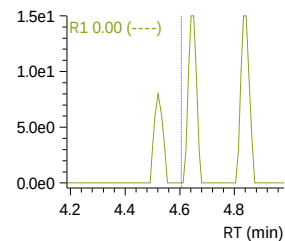
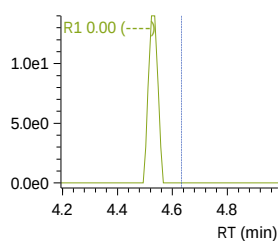


R1 327.10>80.90 (-)

1.40e1

R1 298.70>98.80 (-)

1.50e1

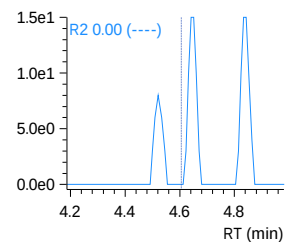
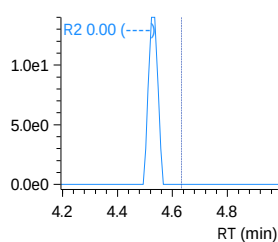


R2 327.10>80.90 (-)

1.40e1

R2 298.70>98.80 (-)

1.50e1





240201_062 (continued)

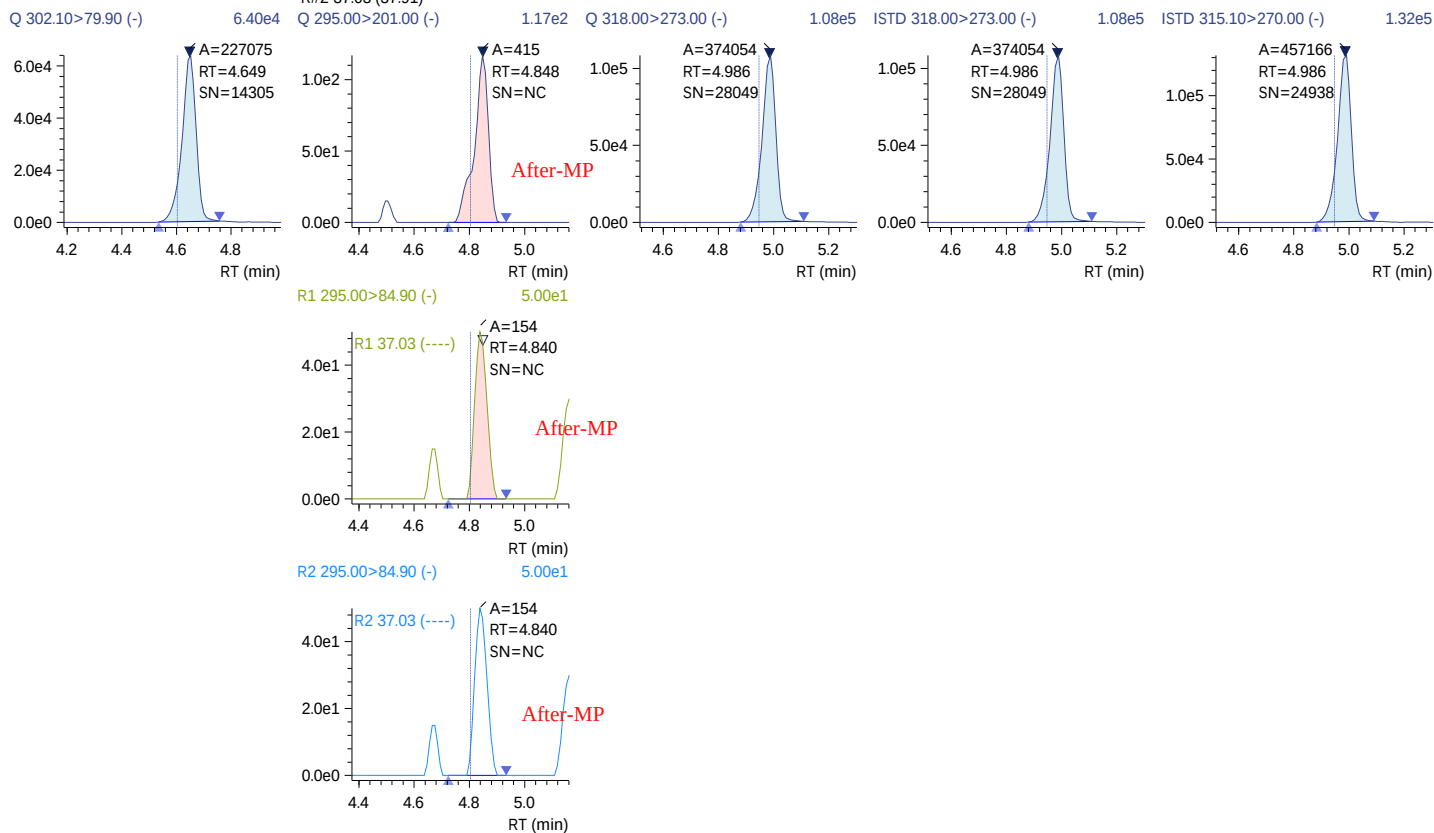
13C3-PFBS
Conc. 3.5352

NFDHA
Conc. 0.0054
R#1 37.03 (35.54)
R#2 37.03 (37.91)

13C5-PFHxA
Conc. 2.5348

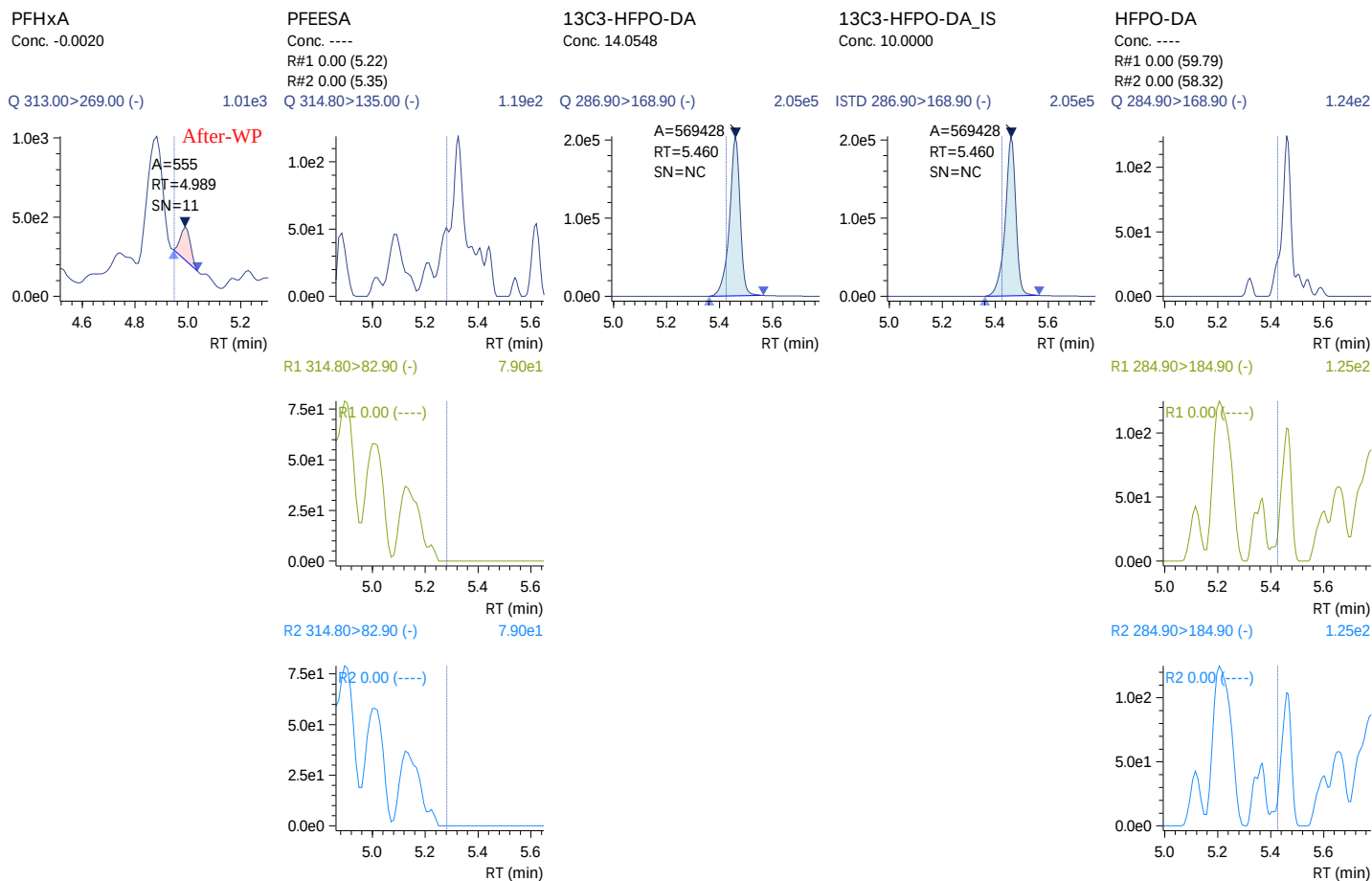
13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000



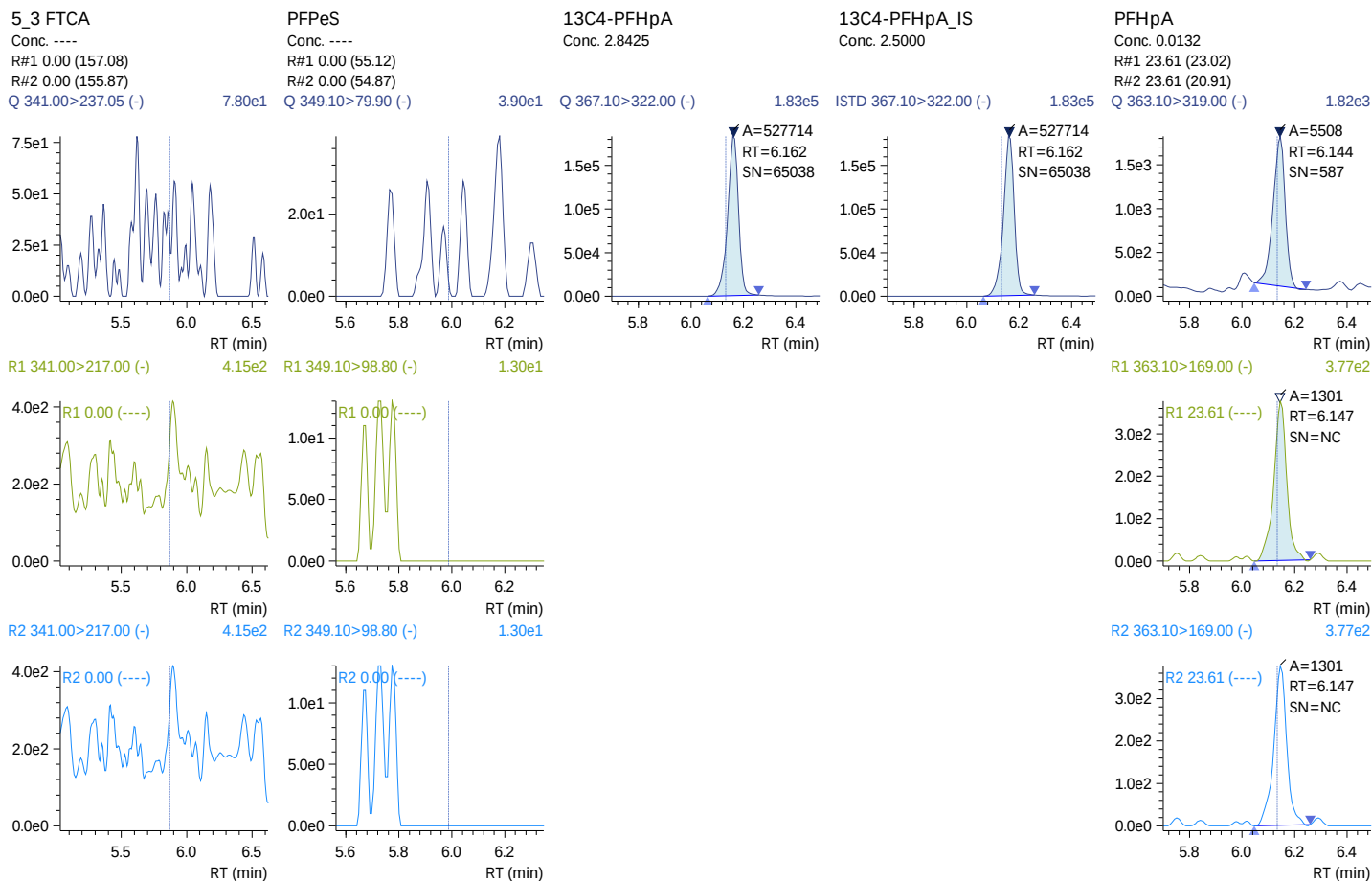


240201_062 (continued)



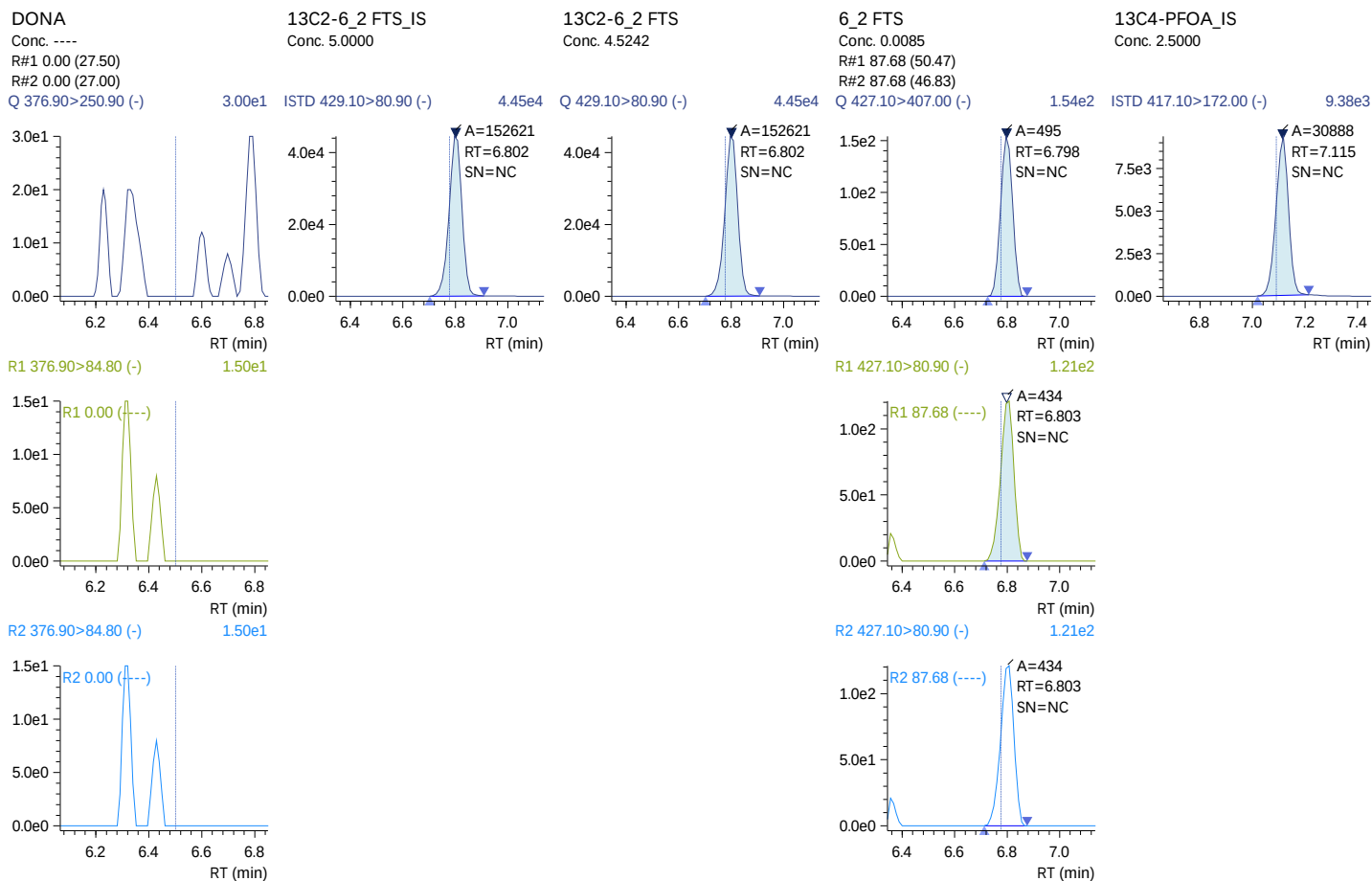


240201_062 (continued)





240201_062 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_062 (continued)

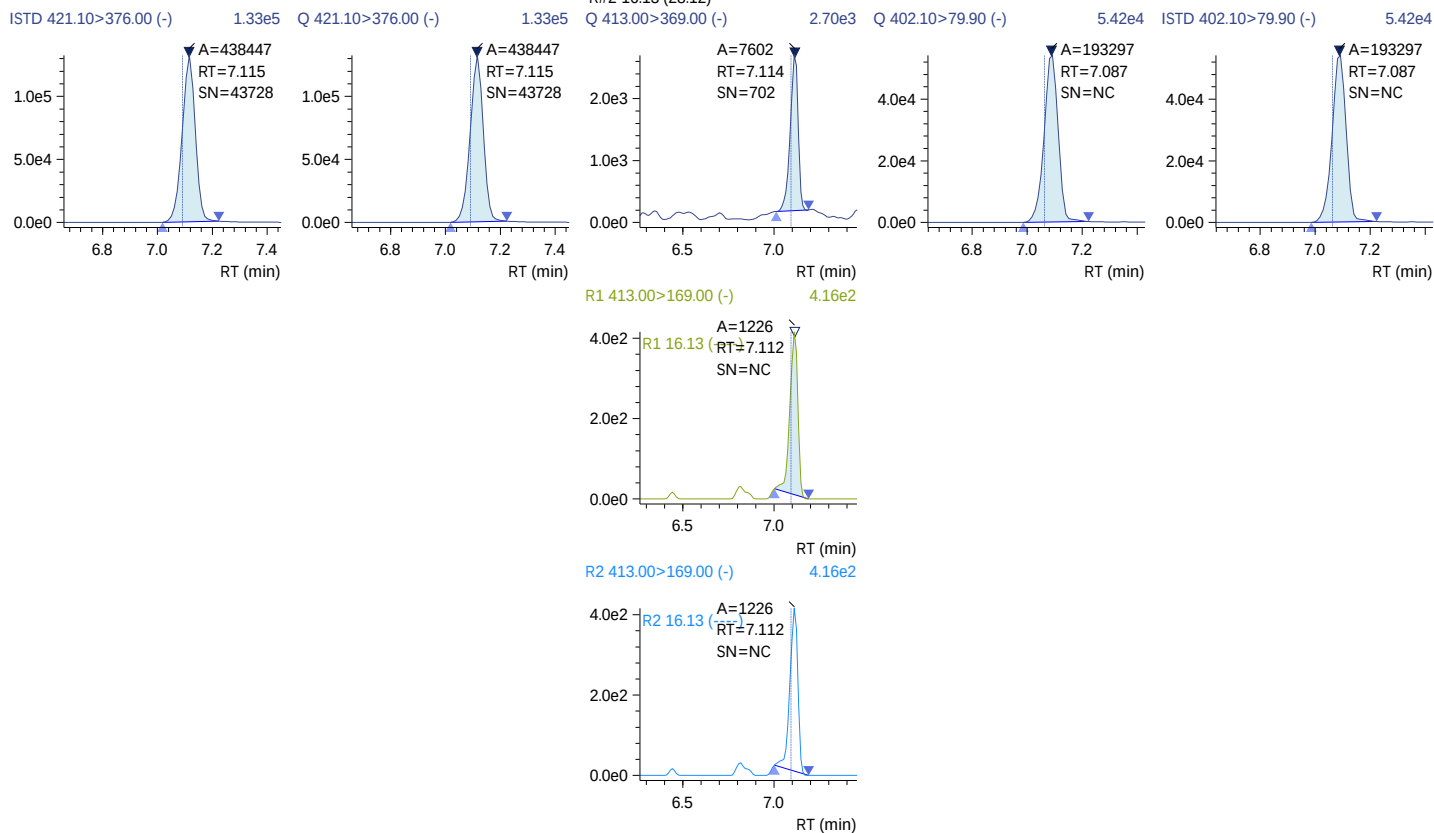
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.9764

PFOA
Conc. 0.0308
R#1 16.13 (28.77)
R#2 16.13 (28.12)

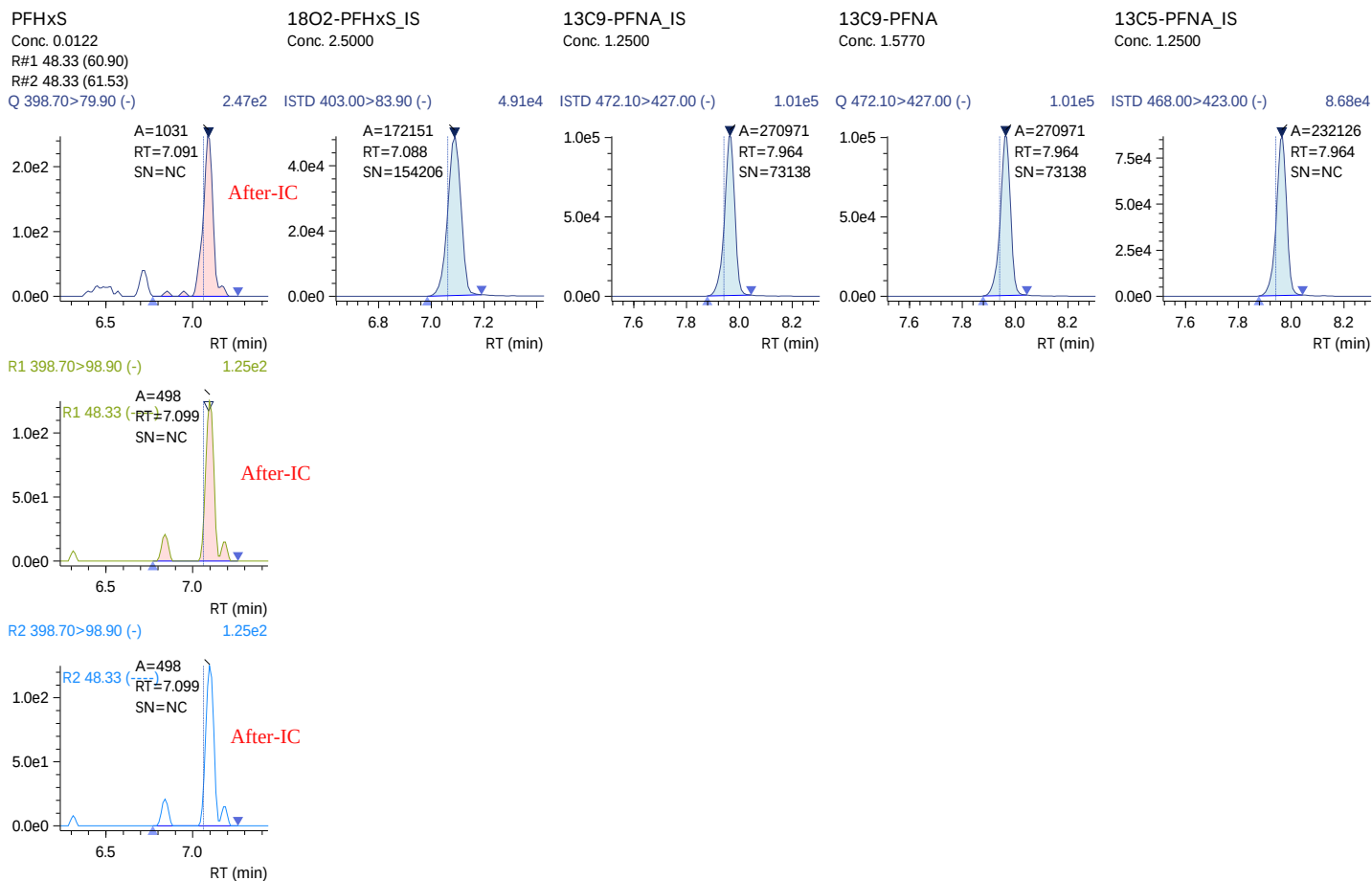
13C3-PFHxS
Conc. 3.2036

13C3-PFHxS_IS
Conc. 2.5000



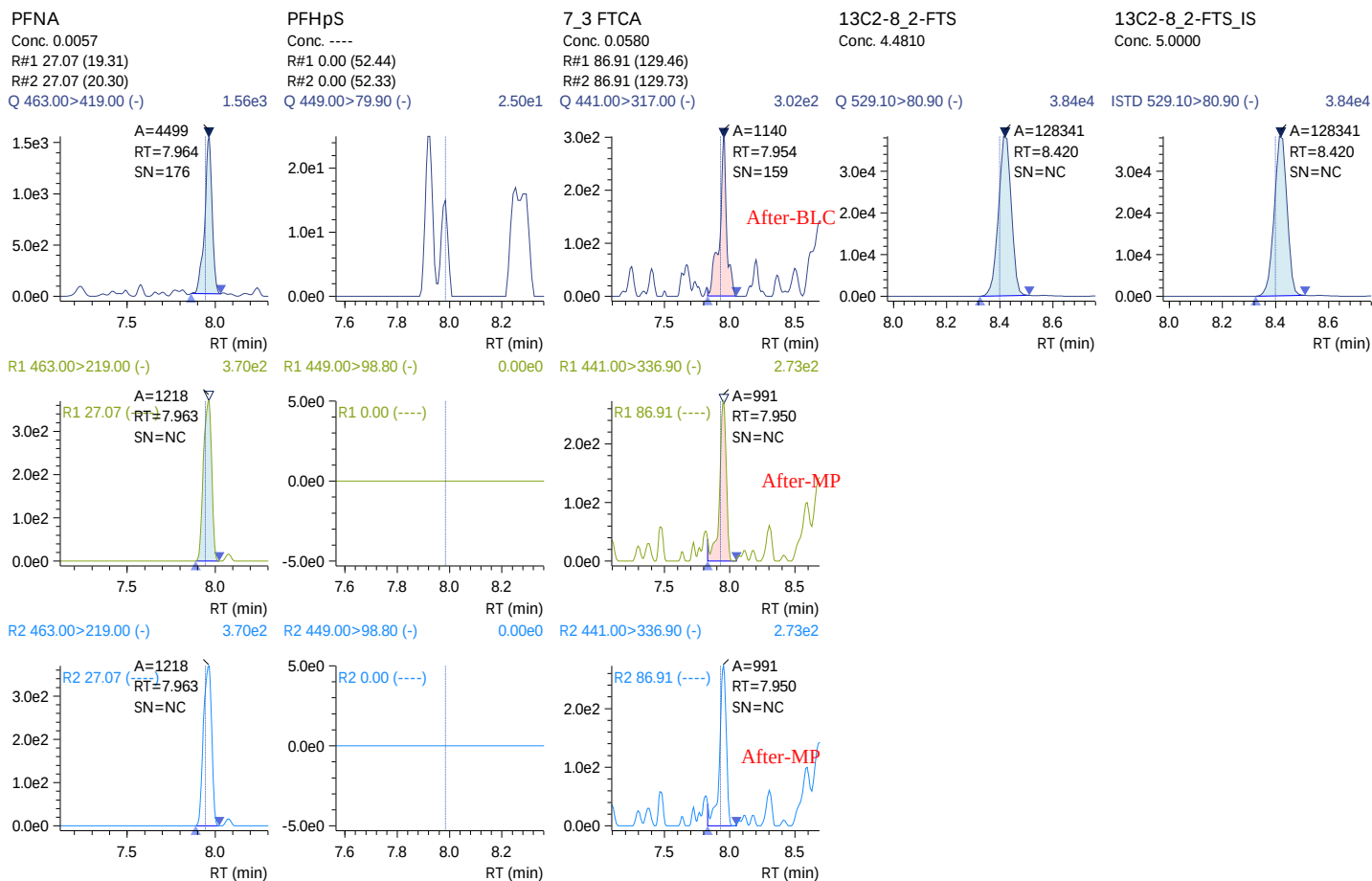


240201_062 (continued)





240201_062 (continued)

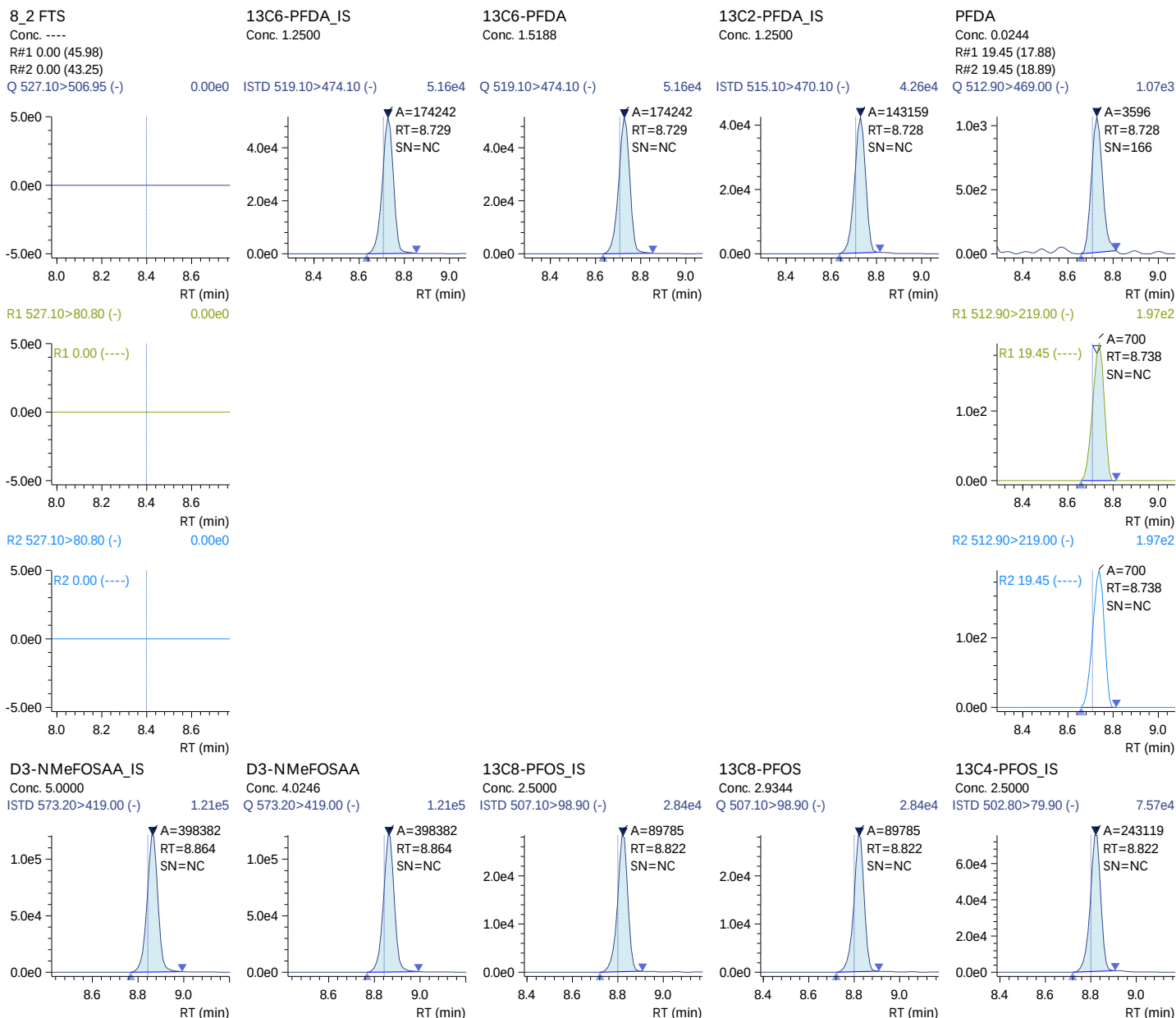


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_062 (continued)

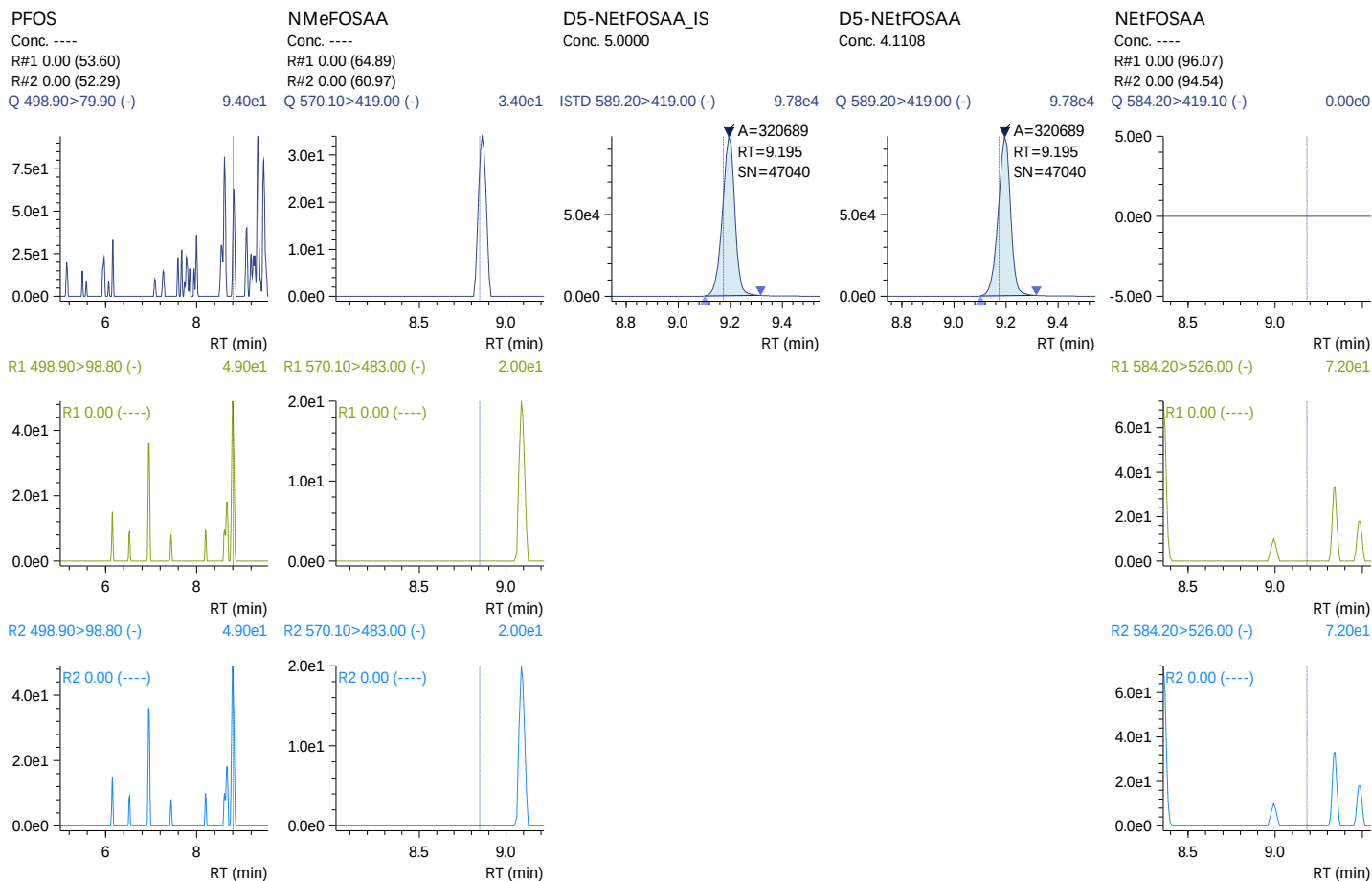


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_062 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_062 (continued)

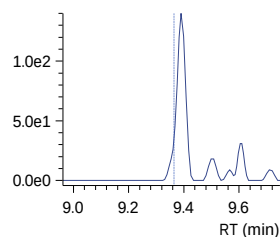
9-Cl-PF3ONS

Conc. ----

R#1 0.00 (30.95)

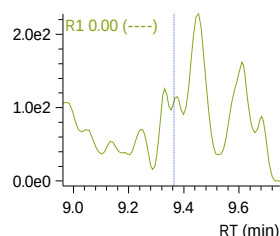
R#2 0.00 (30.61)

Q 530.80>351.00 (-)



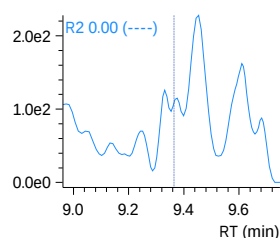
R1 532.80>353.00 (-)

2.28e2



R2 532.80>353.00 (-)

2.28e2



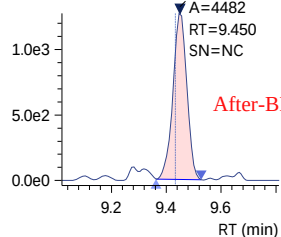
PFUnDA

Conc. 0.0081

R#1 4.28 (11.01)

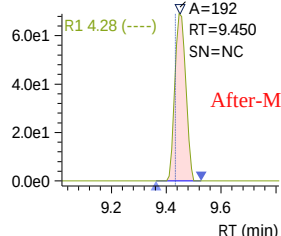
R#2 4.28 (12.02)

Q 563.10>519.00 (-)



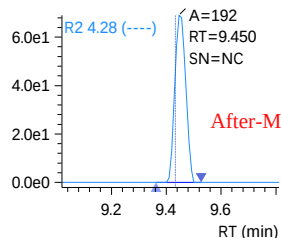
R1 563.10>269.10 (-)

6.90e1



R2 563.10>269.10 (-)

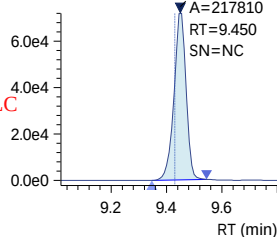
6.90e1



13C7-PFUnDA_IS

Conc. 1.2500

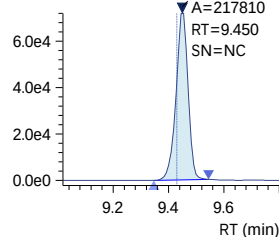
ISTD 570.00>525.10 (-)



13C7-PFUnDA

Conc. 1.5279

Q 570.00>525.10 (-)



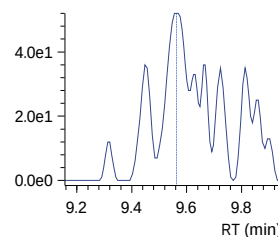
PFNS

Conc. ----

R#1 0.00 (60.44)

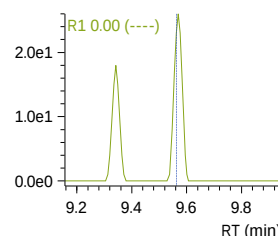
R#2 0.00 (58.51)

Q 548.80>79.90 (-)



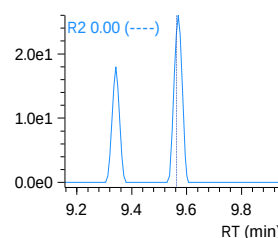
R1 548.80>98.80 (-)

2.60e1



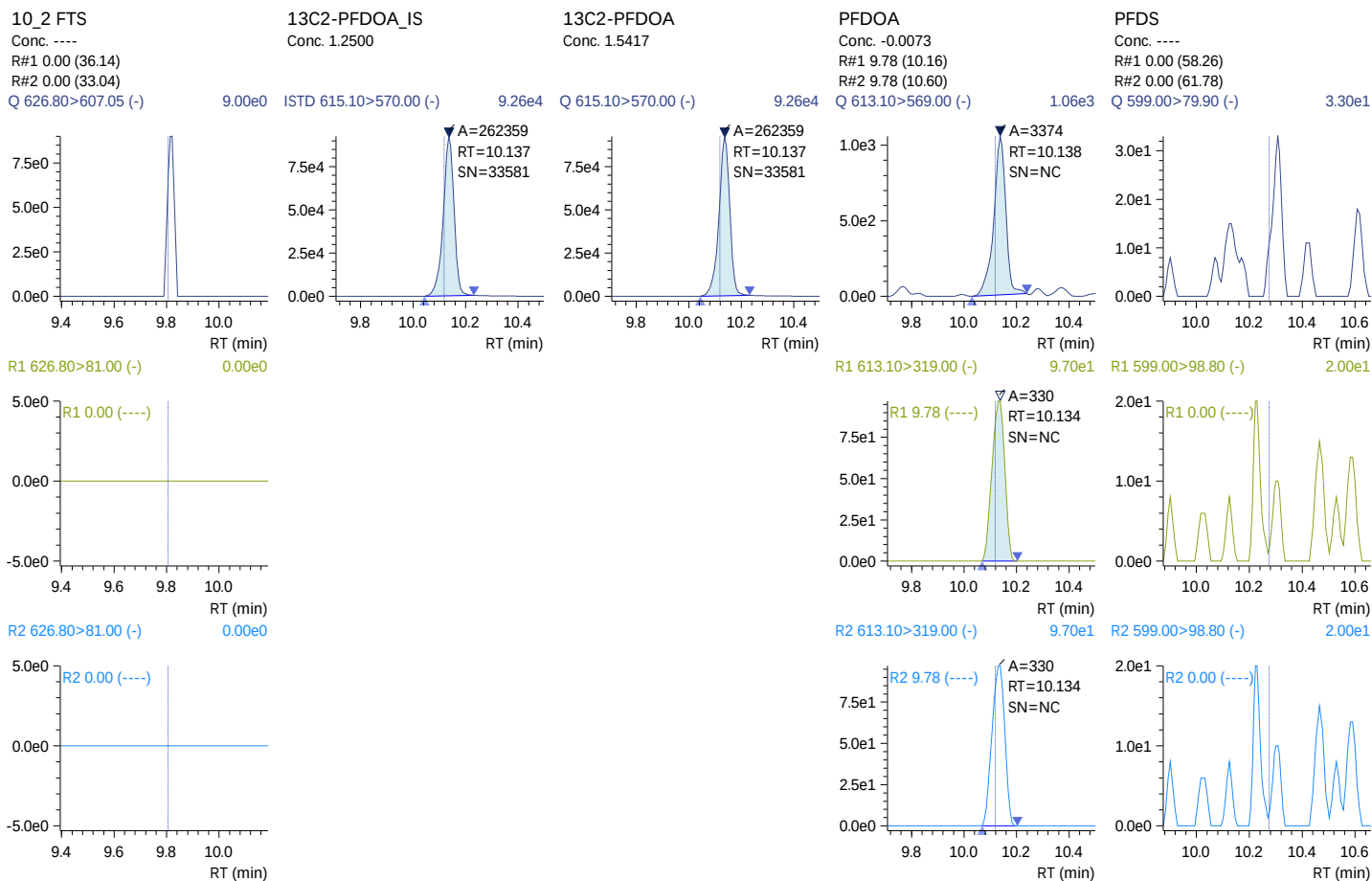
R2 548.80>98.80 (-)

2.60e1





240201_062 (continued)

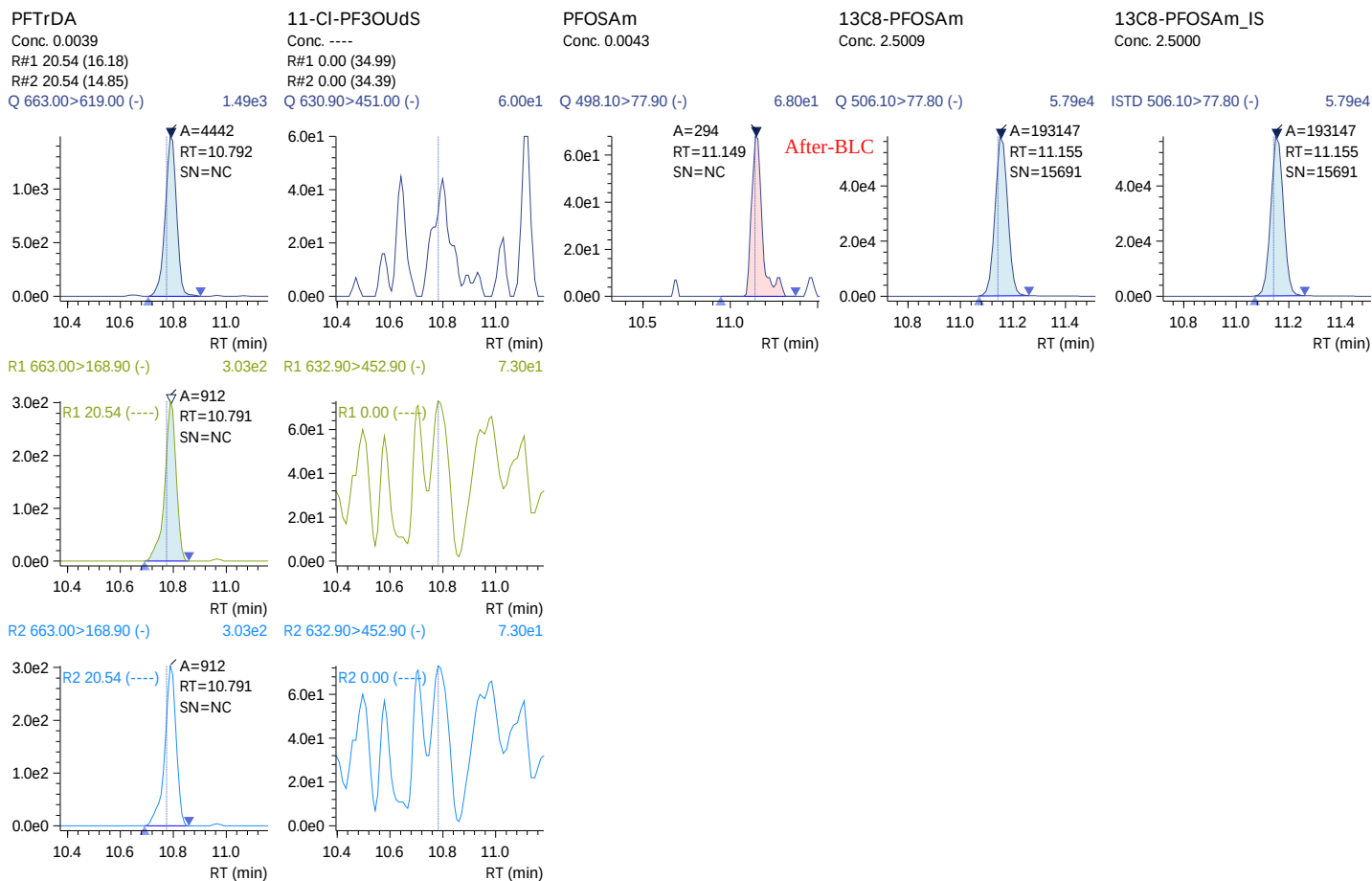


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.

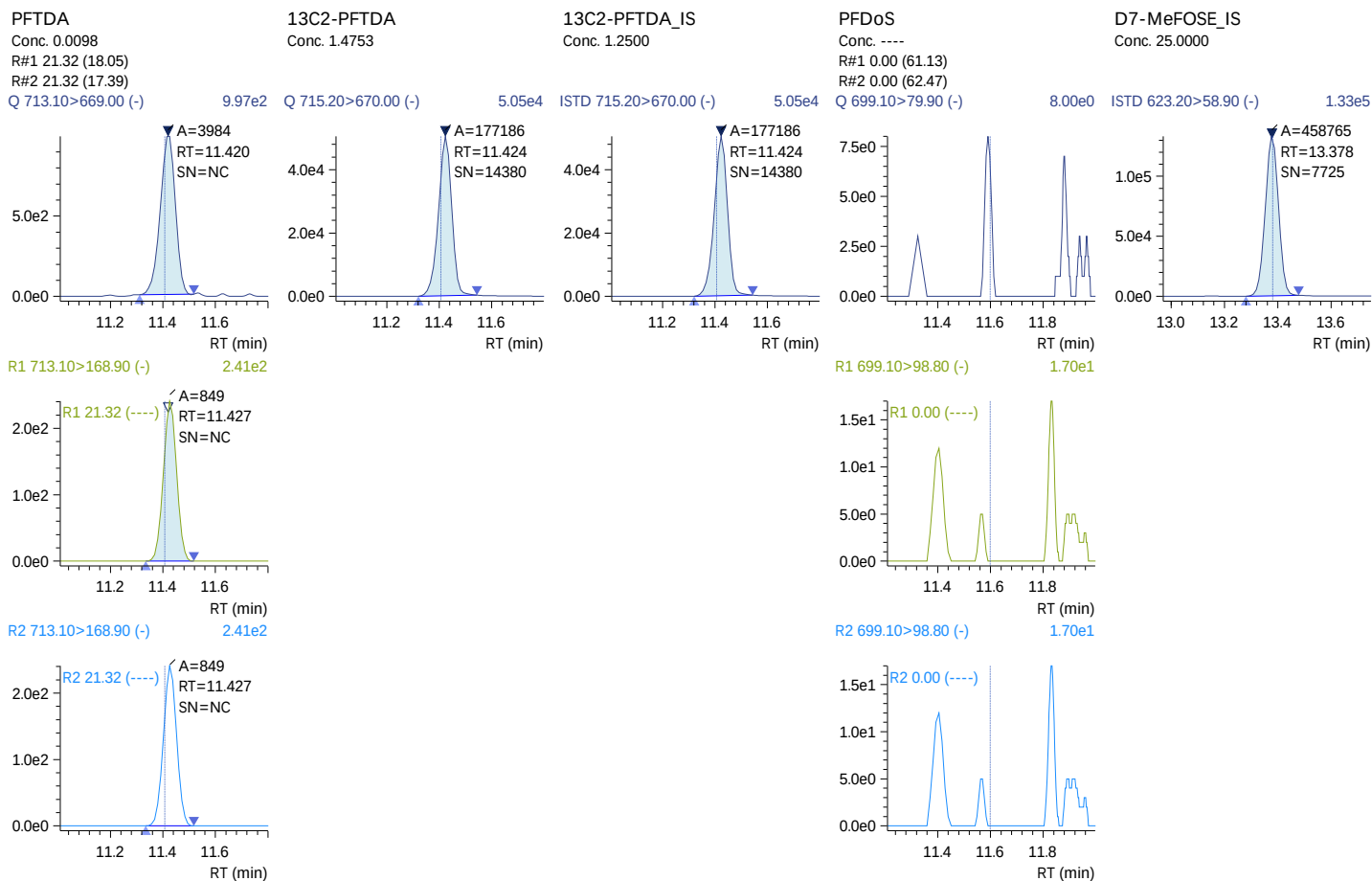


240201_062 (continued)





240201_062 (continued)





240201_062 (continued)

D7-MeFOSE
Conc. 23.1399

MeFOSE
Conc. ----

13C2-PFHXA_IS
Conc. 2.5000

13C2-PFHXA
Conc. 2.5924

PFHXA
Conc. 0.0265
R#1 13.55 (11.66)
R#2 13.55 (10.99)

Q 623.20>58.90 (-)

1.33e5

Q 616.10>59.00 (-)

9.10e1

ISTD 815.00>770.05 (-)

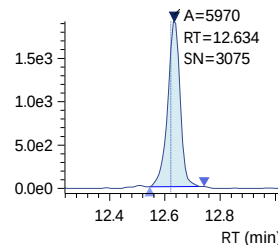
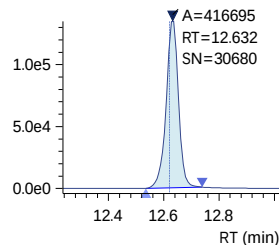
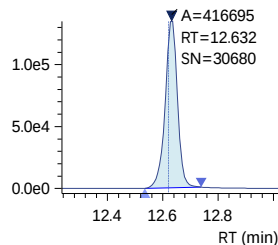
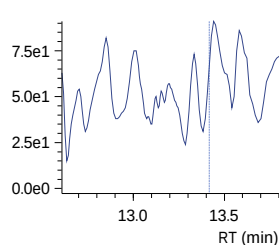
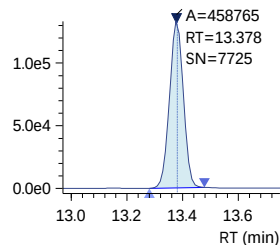
1.35e5

Q 815.00>770.05 (-)

1.35e5

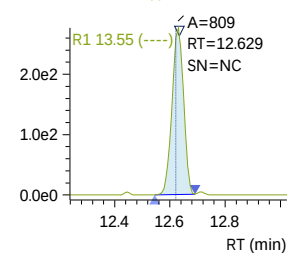
Q 813.00>768.95 (-)

1.93e3



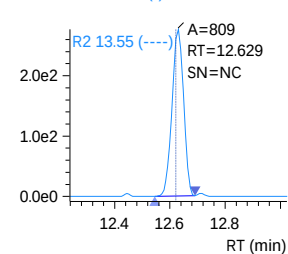
R1 813.00>218.95 (-)

2.77e2



R2 813.00>218.95 (-)

2.77e2





240201_062 (continued)

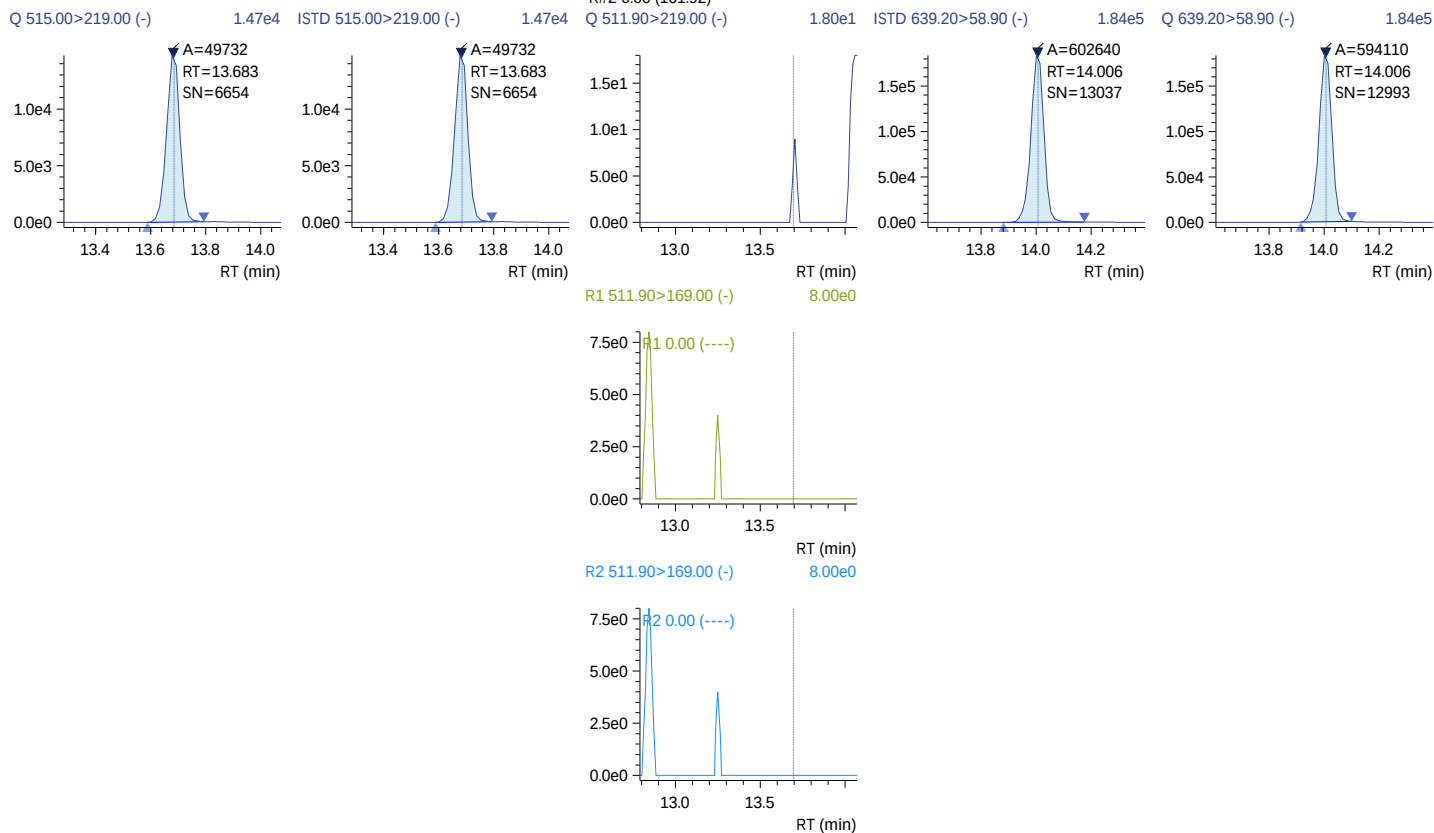
D3-MeFOSA
Conc. 2.4666

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. ----
R#1 0.00 (160.44)
R#2 0.00 (161.92)

D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 24.4881





240201_062 (continued)

EtFOSE
Conc. ----

D5-EtFOSAm
Conc. 2.4587

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. ----

PFODA

Conc. 0.0512

R#1 30.02 (36.03)

R#2 30.02 (35.02)

Q 630.00>59.00 (-)

5.30e1

Q 531.10>219.00 (-)

2.14e4

ISTD 531.10>219.00 (-)

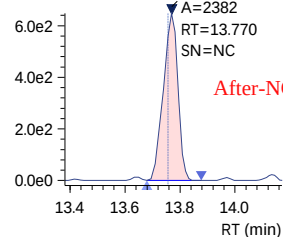
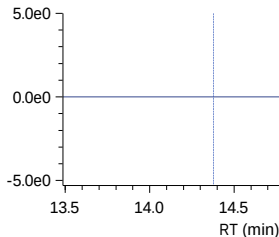
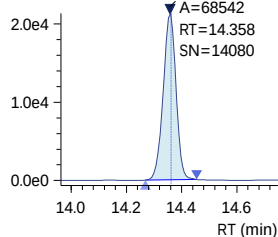
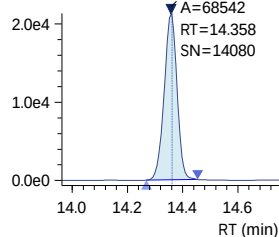
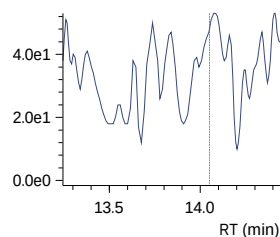
2.14e4

Q 526.00>219.00 (-)

0.00e0

Q 913.00>868.65 (-)

6.48e2

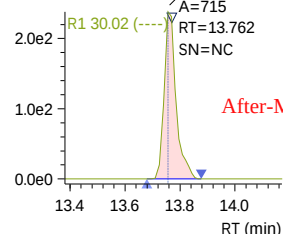
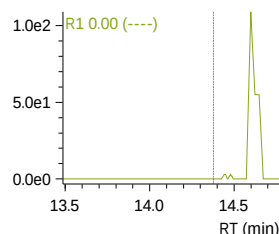


R1 526.00>169.00 (-)

1.09e2

R1 913.00>169.00 (-)

2.38e2

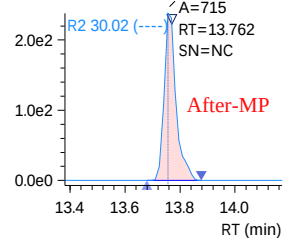
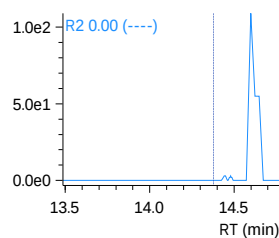


R2 526.00>169.00 (-)

1.09e2

R2 913.00>169.00 (-)

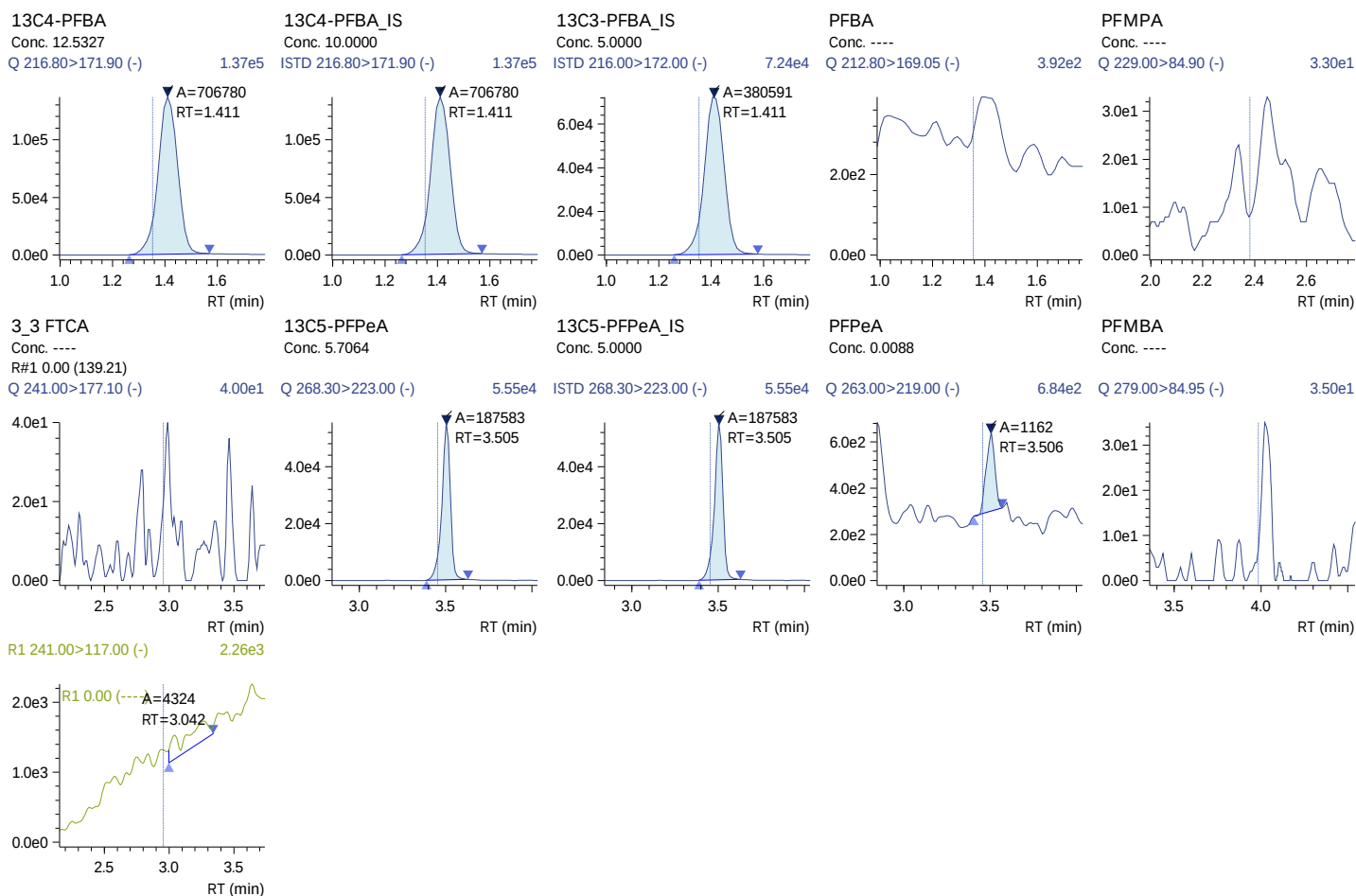
2.38e2





240201_062

Sample ID: 1633 CCB
Date Acquired: 2/2/2024 10:01:08 AM
Acquired by: System Administrator
Data File: 240201_062
Vial: 54 | Inj. Volume: 10.0000uL | Tray: 1





240201_062 (continued)

13C2-4_2 FTS
Conc. 4.6437

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. ----
R#1 0.00 (32.10)
R#2 0.00 (32.79)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. ----
R#1 0.00 (44.81)
R#2 0.00 (46.72)

Q 329.10>80.90 (-)

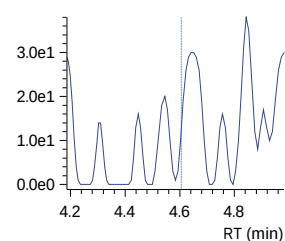
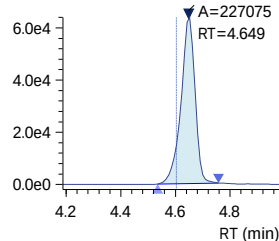
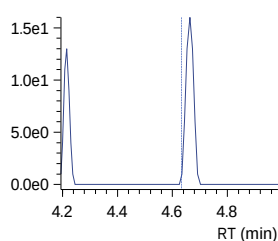
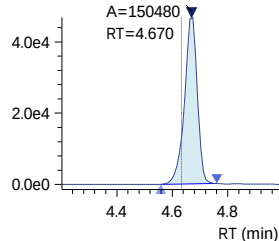
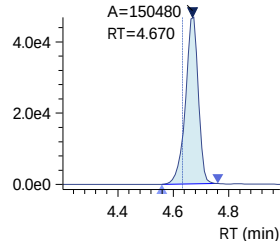
4.69e4 ISTD 329.10>80.90 (-)

4.69e4 Q 327.10>307.00 (-)

1.60e1 ISTD 302.10>79.90 (-)

6.40e4 Q 298.70>79.90 (-)

3.80e1

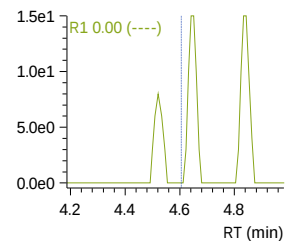
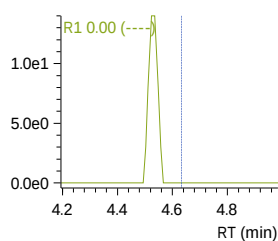


R1 327.10>80.90 (-)

1.40e1

R1 298.70>98.80 (-)

1.50e1

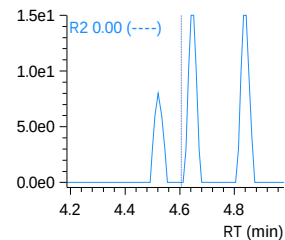
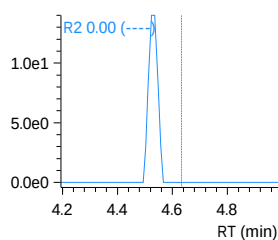


R2 327.10>80.90 (-)

1.40e1

R2 298.70>98.80 (-)

1.50e1





240201_062 (continued)

13C3-PFBS
 Conc. 3.5352

NFDHA
 Conc. ----
 R#1 0.00 (35.54)
 R#2 0.00 (37.91)

13C5-PFHxA
 Conc. 2.5348

13C5-PFHxA_IS
 Conc. 2.5000

13C2-PFHxA_IS
 Conc. 2.5000

Q 302.10>79.90 (-)

6.40e4

Q 295.00>201.00 (-)

1.17e2

Q 318.00>273.00 (-)

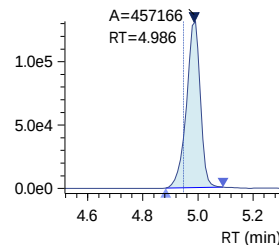
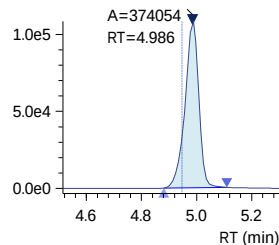
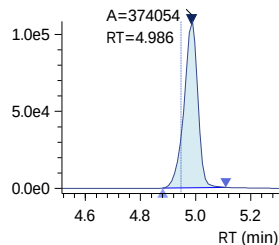
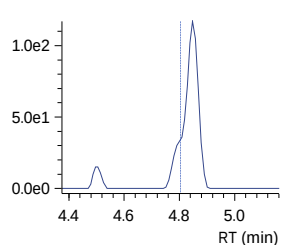
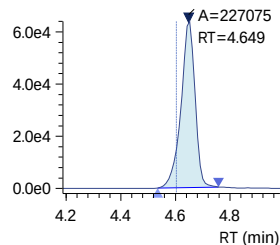
1.08e5

ISTD 318.00>273.00 (-)

1.08e5

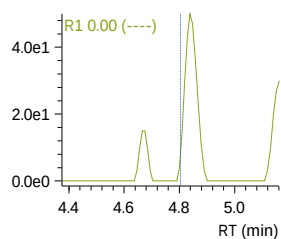
ISTD 315.10>270.00 (-)

1.32e5



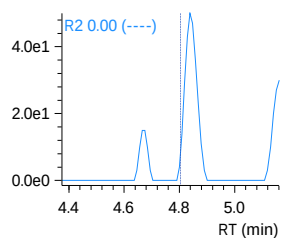
R1 295.00>84.90 (-)

5.00e1



R2 295.00>84.90 (-)

5.00e1





240201_062 (continued)

PFHxA
Conc. 0.0229

PFEESA
Conc. ----
R#1 0.00 (5.22)
R#2 0.00 (5.35)

13C3-HFPO-DA
Conc. 14.0548

13C3-HFPO-DA_IS
Conc. 10.0000

HFPO-DA
Conc. ----
R#1 0.00 (59.79)
R#2 0.00 (58.32)

Q 313.00>269.00 (-)

1.01e3

Q 314.80>135.00 (-)

1.19e2

Q 286.90>168.90 (-)

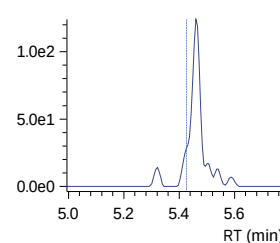
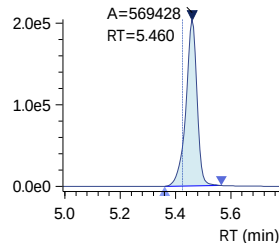
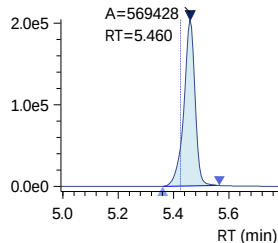
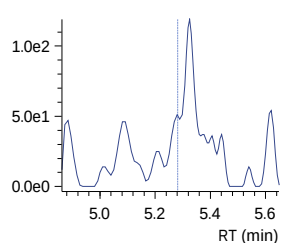
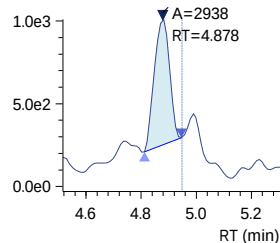
2.05e5

ISTD 286.90>168.90 (-)

2.05e5

Q 284.90>168.90 (-)

1.24e2

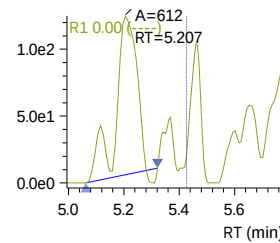
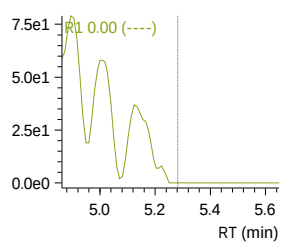


R1 314.80>82.90 (-)

7.90e1

R1 284.90>184.90 (-)

1.25e2

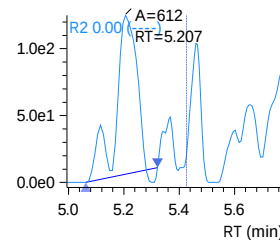
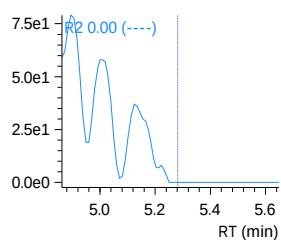


R2 314.80>82.90 (-)

7.90e1

R2 284.90>184.90 (-)

1.25e2





240201_062 (continued)

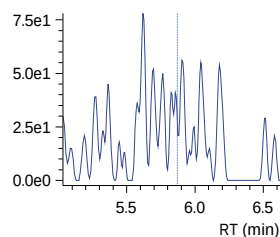
5_3 FTCA

Conc. ----

R#1 0.00 (157.08)

R#2 0.00 (155.87)

Q 341.00>237.05 (-)



R1 341.00>217.00 (-)

4.15e2

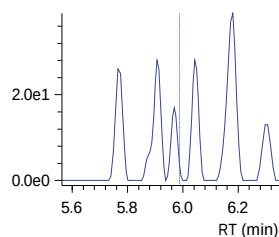
PFPeS

Conc. ----

R#1 0.00 (55.12)

R#2 0.00 (54.87)

Q 349.10>79.90 (-)



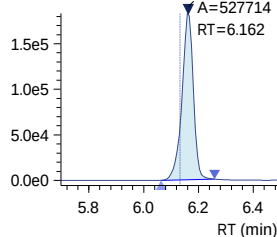
R1 349.10>98.80 (-)

1.30e1

13C4-PFHpa

Conc. 2.8425

Q 367.10>322.00 (-)

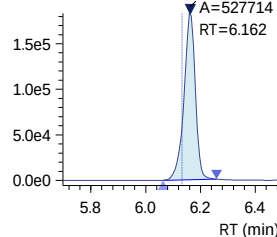


1.83e5

13C4-PFHpa_IS

Conc. 2.5000

ISTD 367.10>322.00 (-)



1.83e5

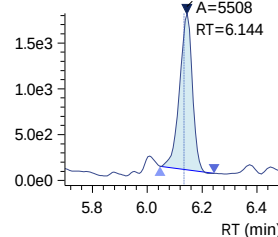
PFHpA

Conc. 0.0132

R#1 23.61 (23.02)

R#2 23.61 (20.91)

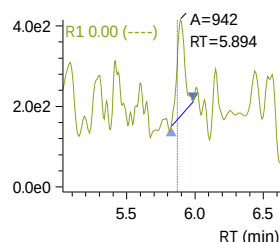
Q 363.10>319.00 (-)



1.82e3

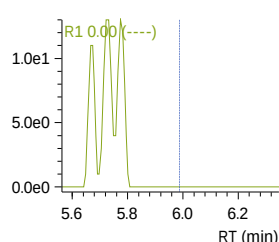
R1 363.10>169.00 (-)

3.77e2



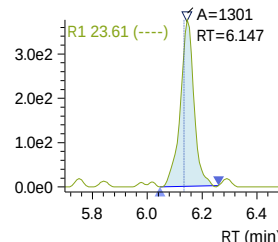
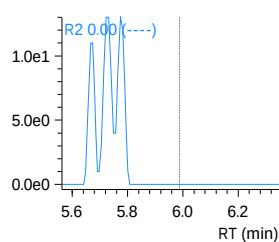
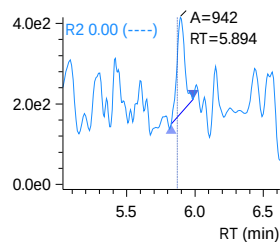
R2 341.00>217.00 (-)

4.15e2



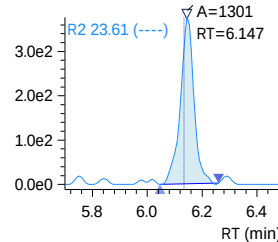
R2 349.10>98.80 (-)

1.30e1



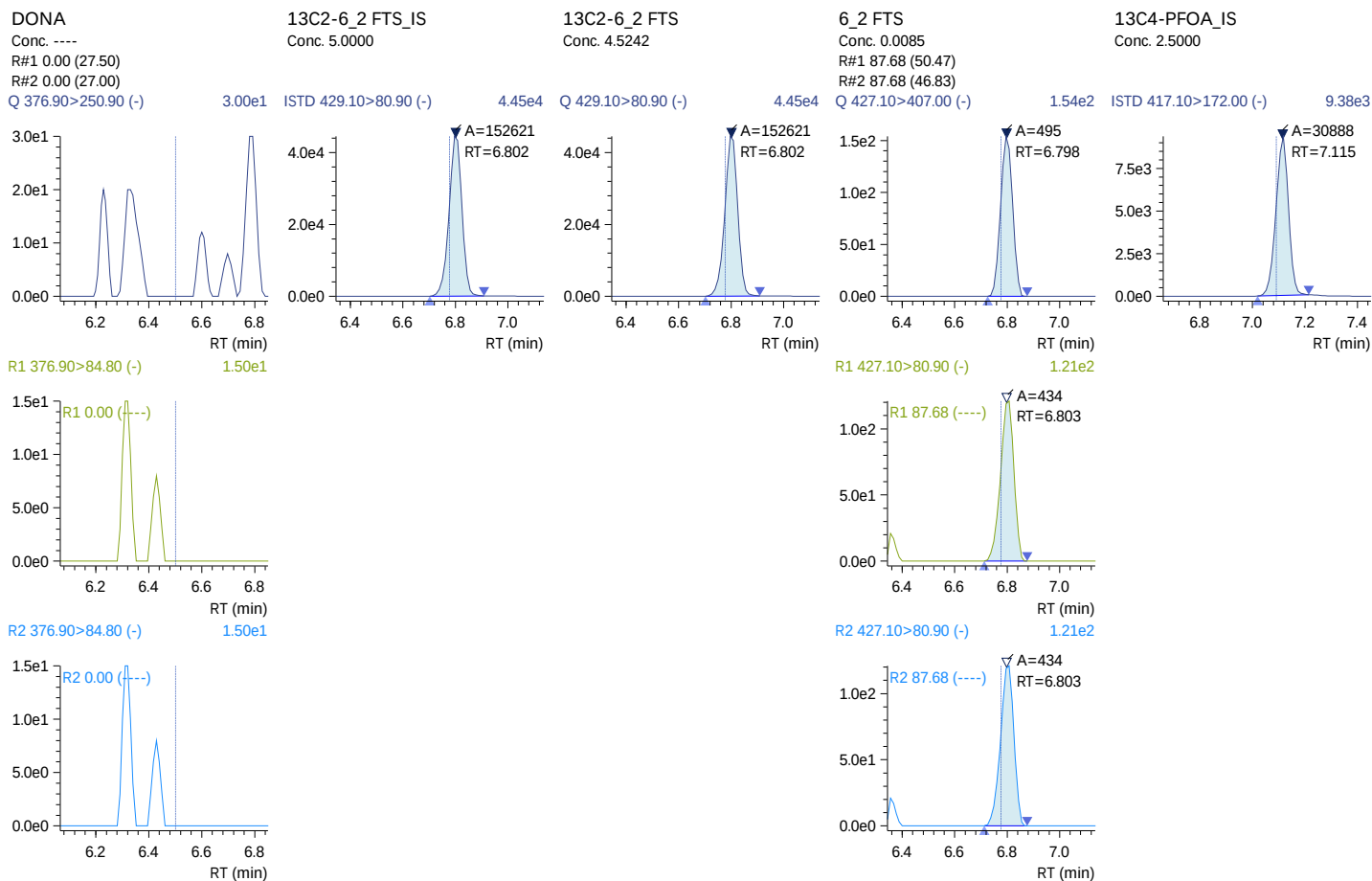
R2 363.10>169.00 (-)

3.77e2





240201_062 (continued)





240201_062 (continued)

13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.9764

PFOA
Conc. 0.0308
R#1 16.13 (28.77)
R#2 16.13 (28.12)

13C3-PFHxS
Conc. 3.2036

13C3-PFHxS_IS
Conc. 2.5000

ISTD 421.10>376.00 (-)

1.33e5

Q 421.10>376.00 (-)

1.33e5

Q 413.00>369.00 (-)

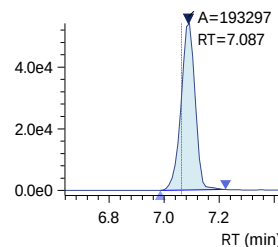
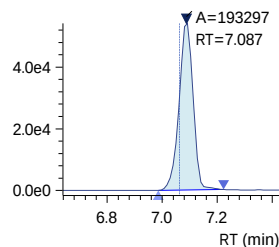
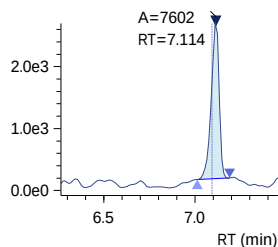
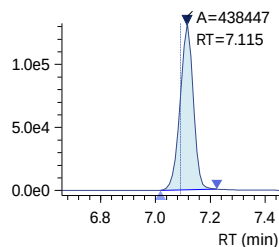
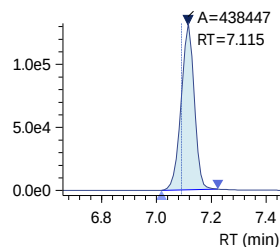
2.70e3

Q 402.10>79.90 (-)

5.42e4

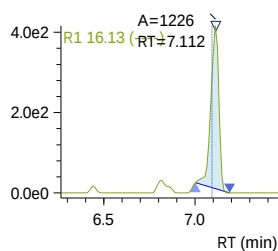
ISTD 402.10>79.90 (-)

5.42e4



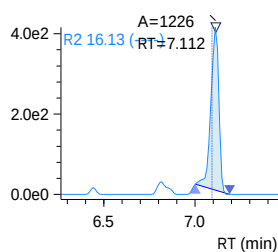
R1 413.00>169.00 (-)

4.16e2



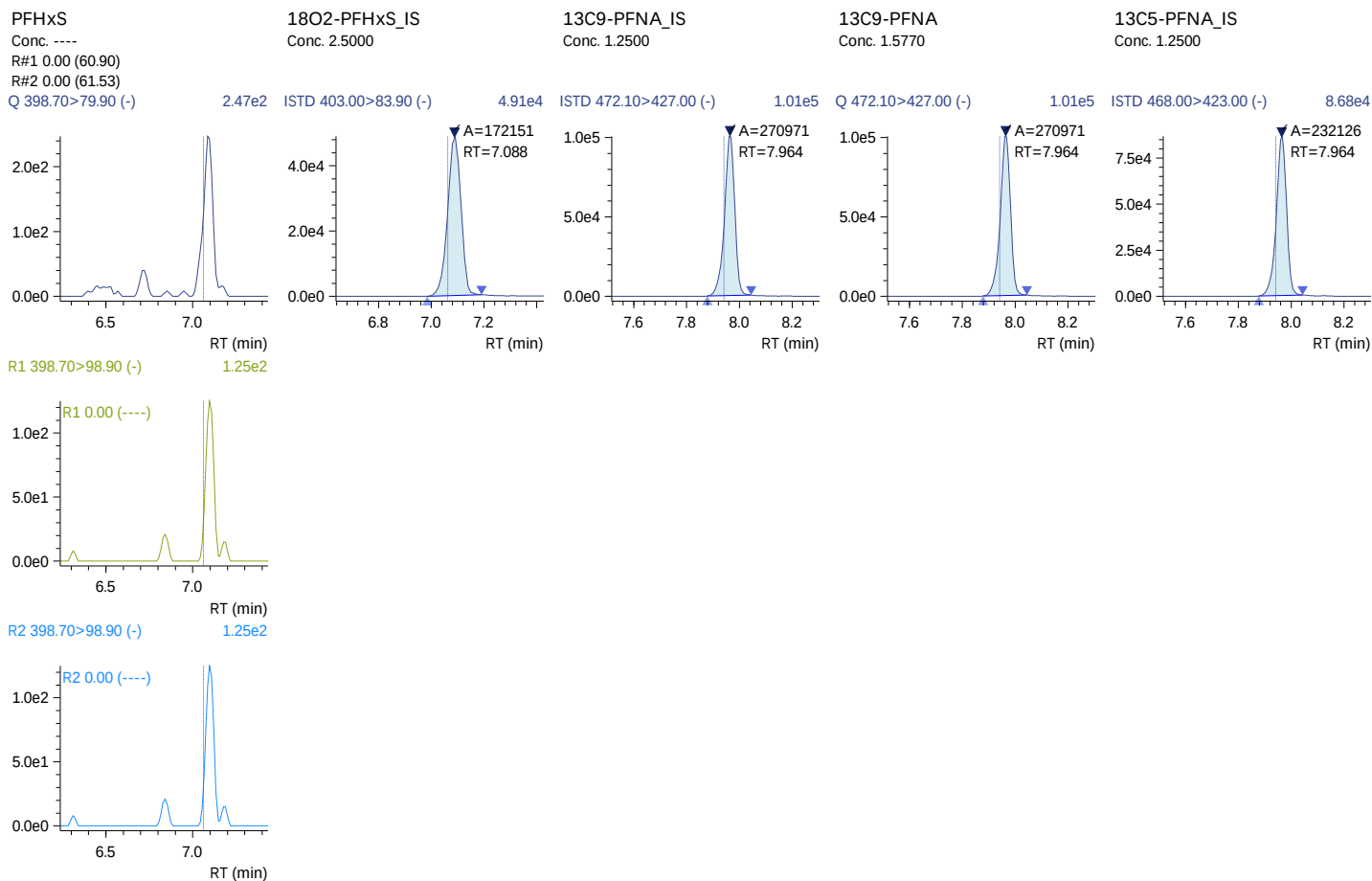
R2 413.00>169.00 (-)

4.16e2



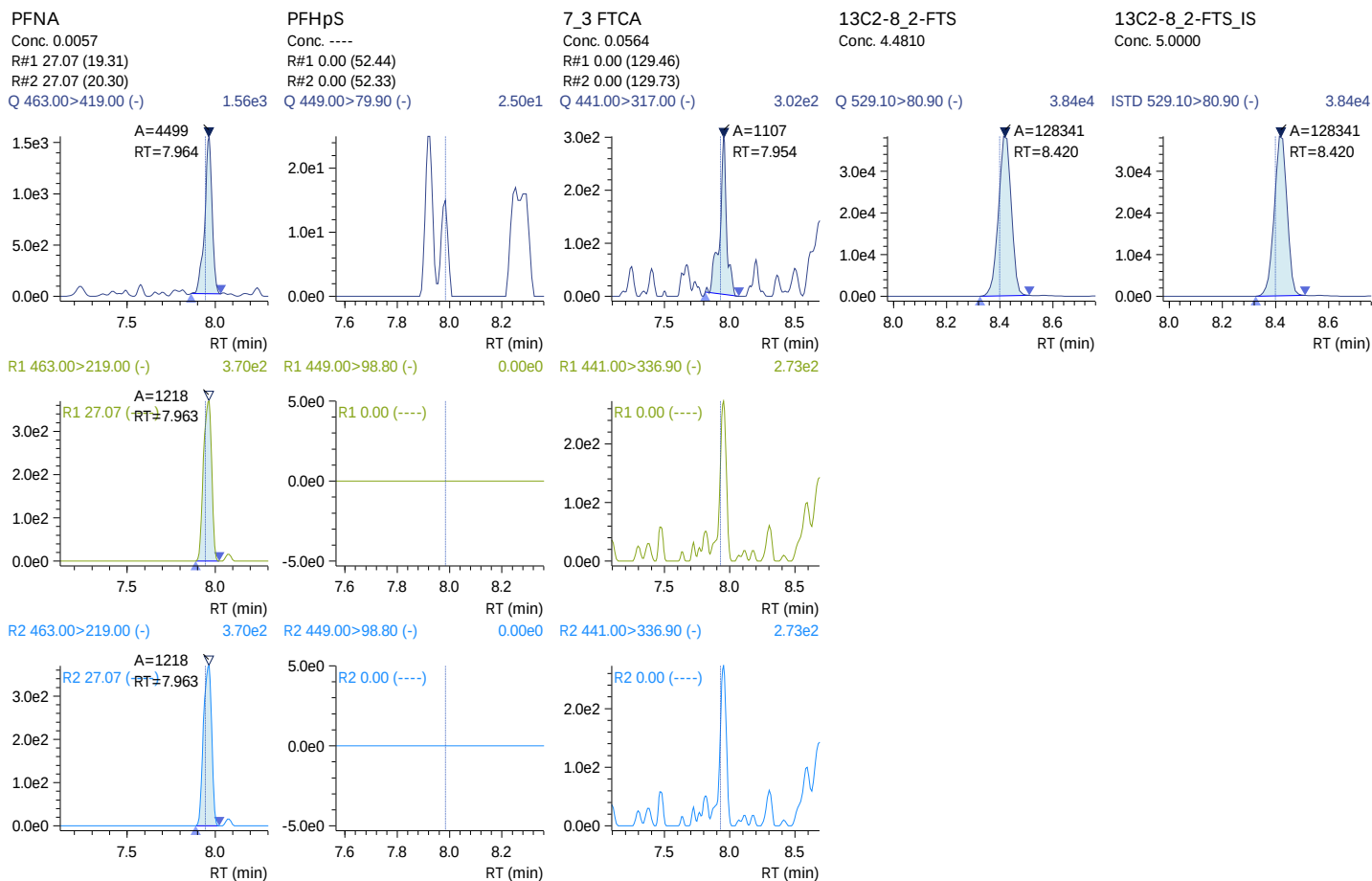


240201_062 (continued)



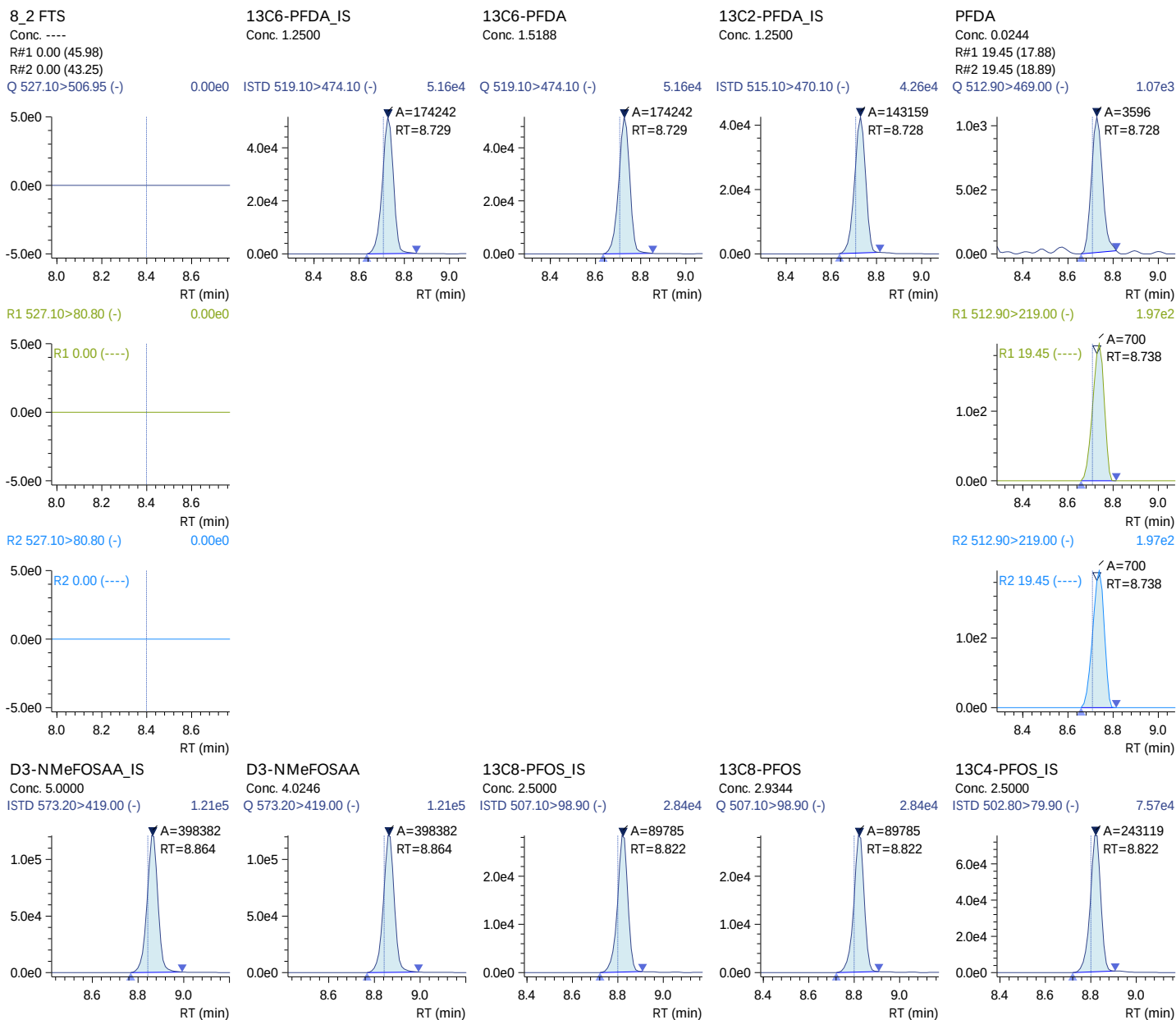


240201_062 (continued)



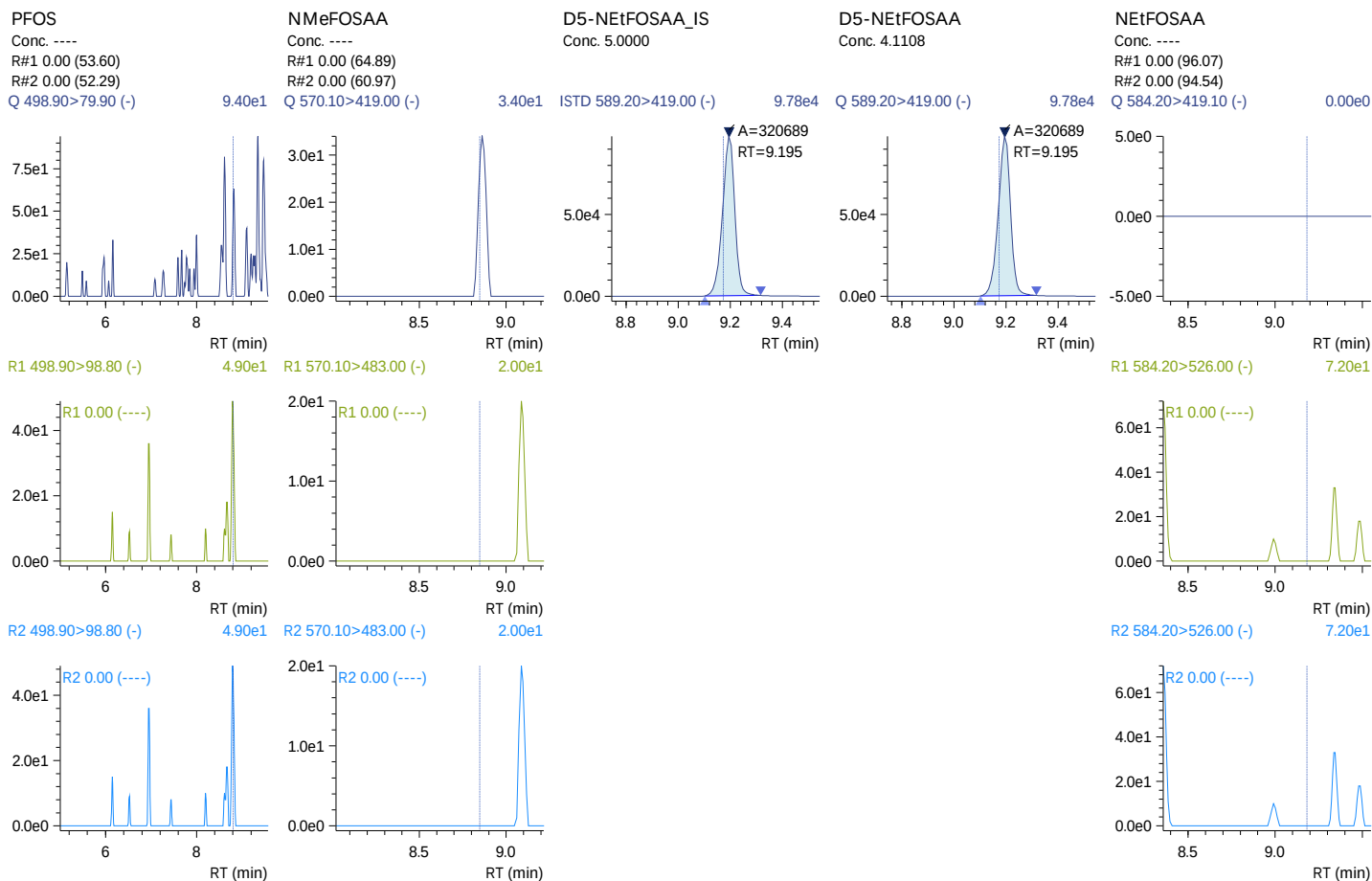


240201_062 (continued)





240201_062 (continued)

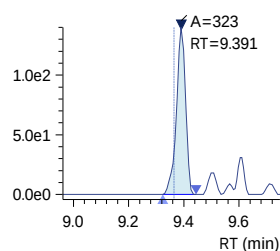




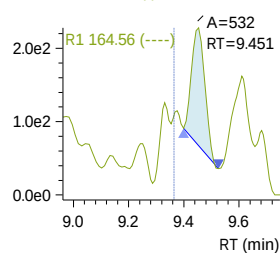
240201_062 (continued)

9-Cl-PF3ONS

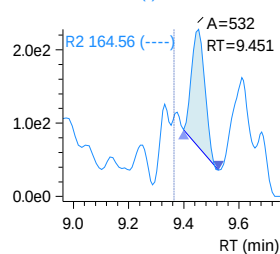
Conc. 0.0006
R#1 164.56 (30.95)
R#2 164.56 (30.61)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-) 2.28e2

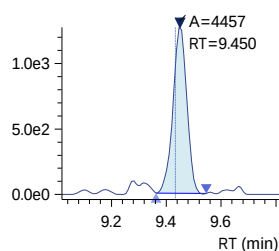


R2 532.80>353.00 (-) 2.28e2

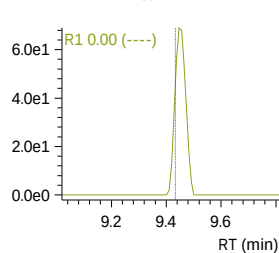


PFUnDA

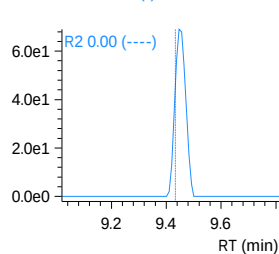
Conc. 0.0079
R#1 0.00 (11.01)
R#2 0.00 (12.02)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-) 6.90e1

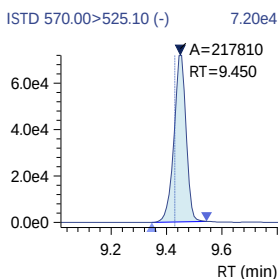


R2 563.10>269.10 (-) 6.90e1



13C7-PFUnDA_IS

Conc. 1.2500



ISTD 570.00>525.10 (-) 7.20e4

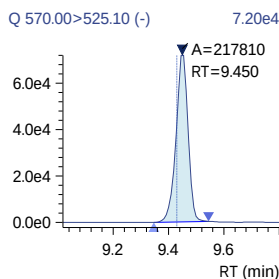


R2 0.00 (-) 6.90e1



13C7-PFUnDA

Conc. 1.5279



Q 570.00>525.10 (-) 7.20e4

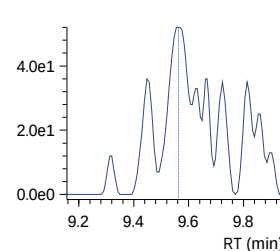


R2 0.00 (-) 6.90e1

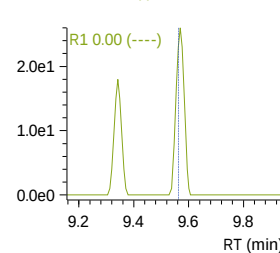


PFNS

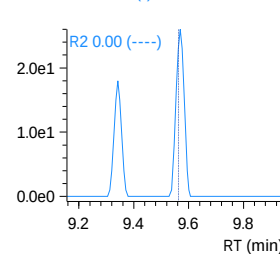
Conc. ----
R#1 0.00 (60.44)
R#2 0.00 (58.51)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-) 2.60e1

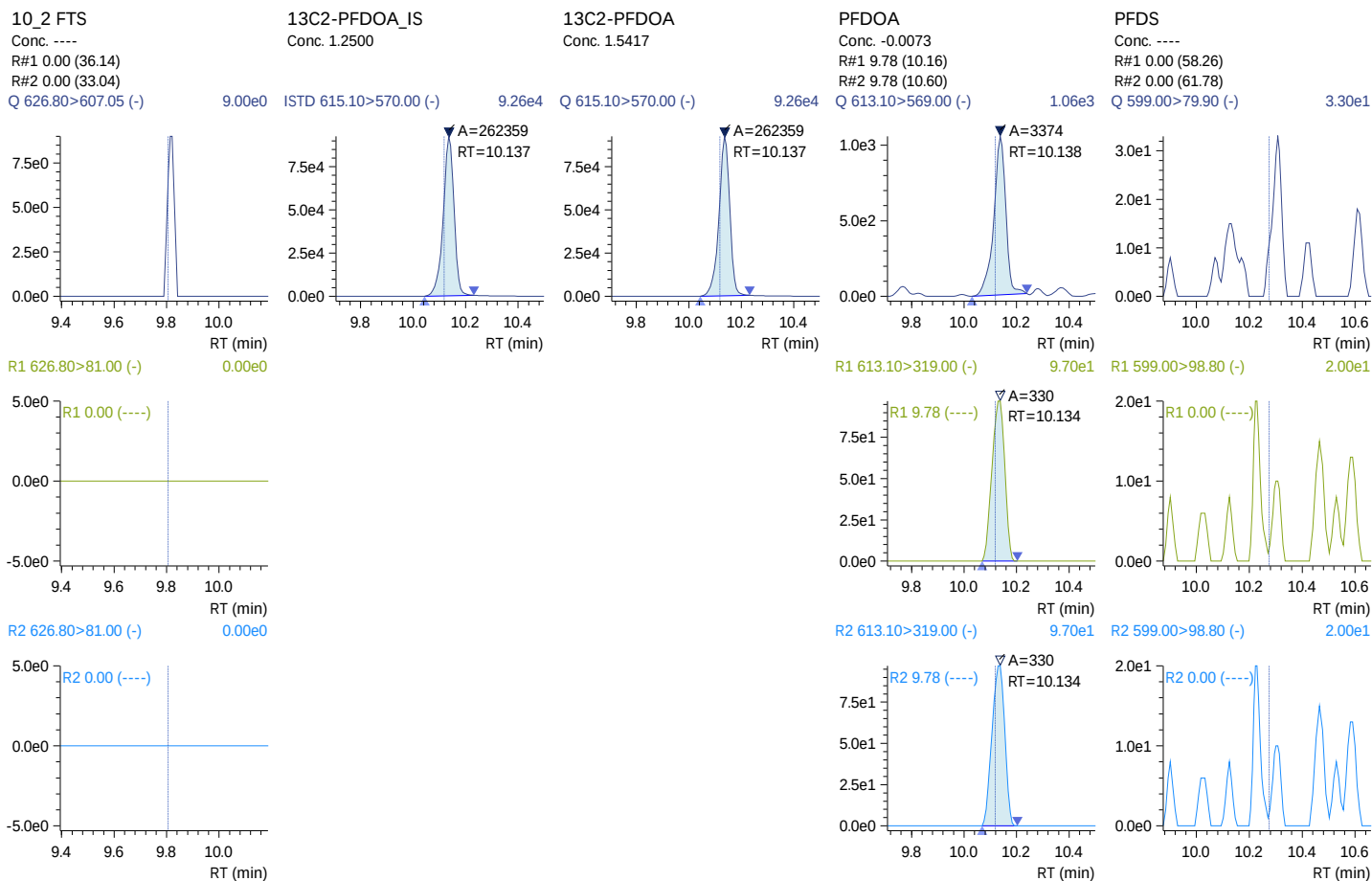


R2 548.80>98.80 (-) 2.60e1



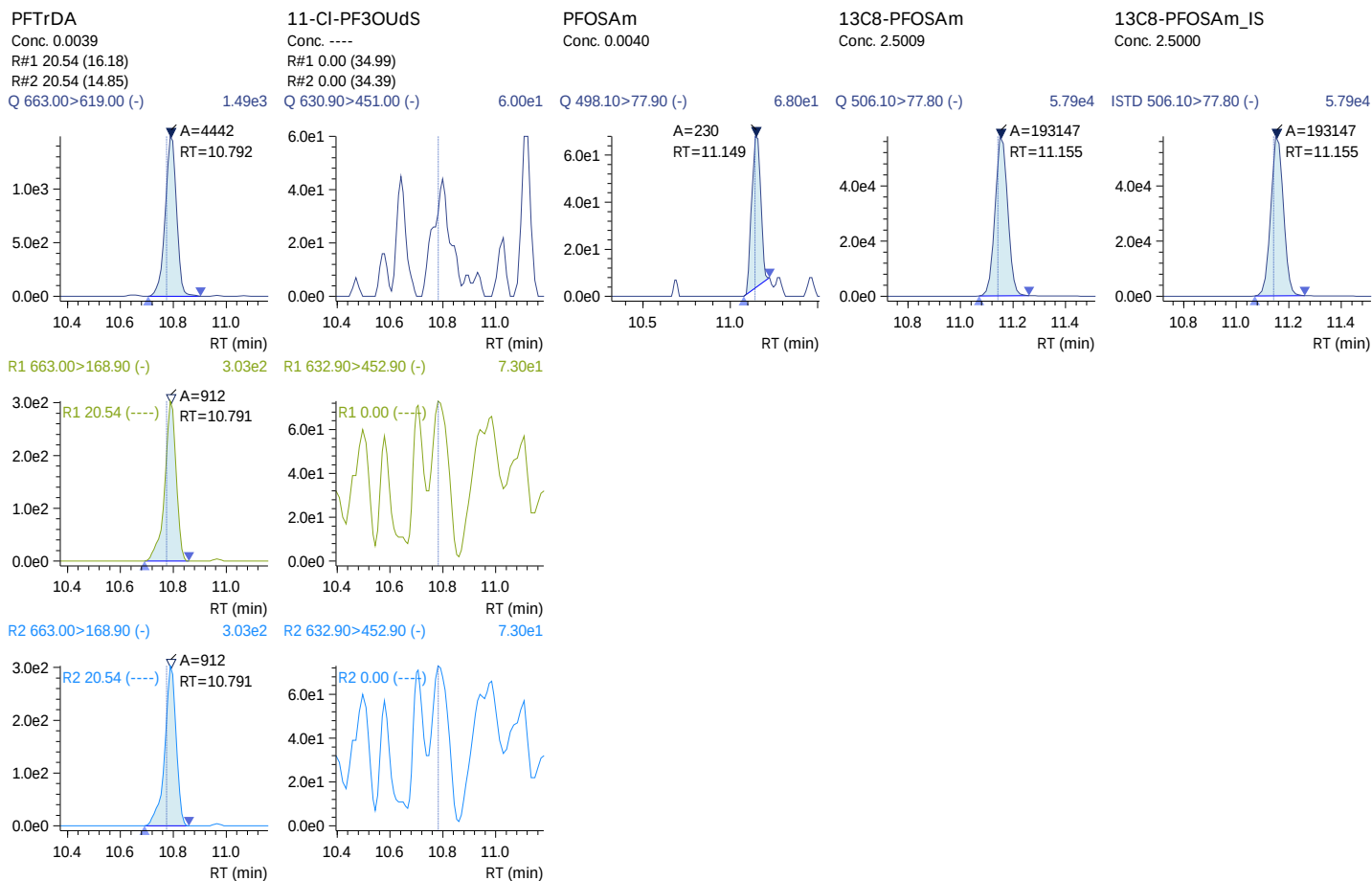


240201_062 (continued)



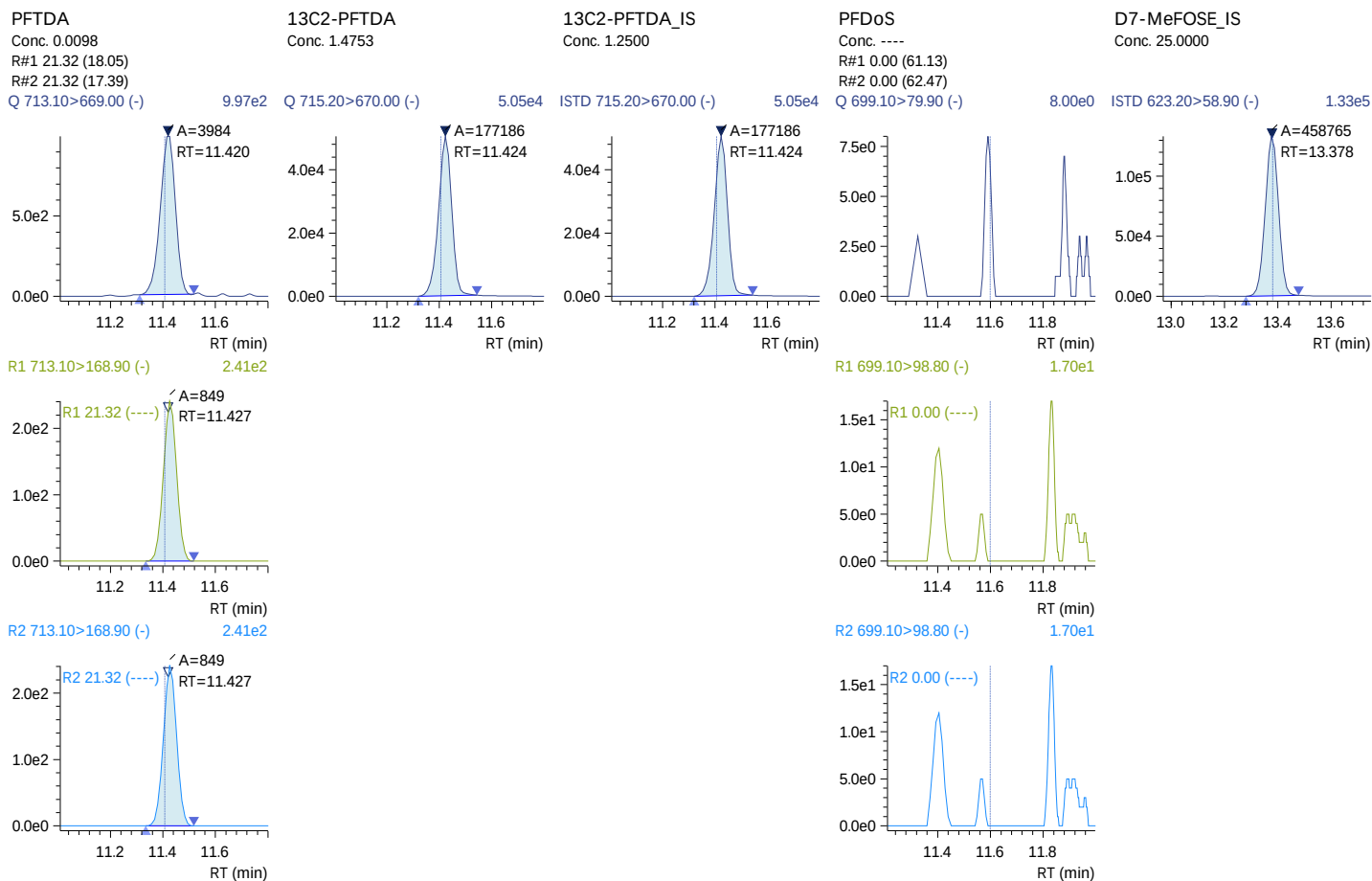


240201_062 (continued)





240201_062 (continued)





240201_062 (continued)

D7-MeFOSE
 Conc. 23.1399

MeFOSE
 Conc. 0.0156

13C2-PFHDA_IS
 Conc. 2.5000

13C2-PFHDA
 Conc. 2.5924

PFHXDA
 Conc. 0.0265
 R#1 13.55 (11.66)
 R#2 13.55 (10.99)

Q 623.20>58.90 (-)

1.33e5

Q 616.10>59.00 (-)

9.10e1

ISTD 815.00>770.05 (-)

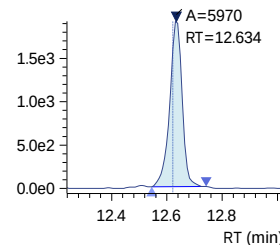
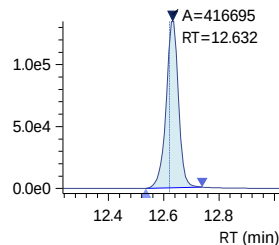
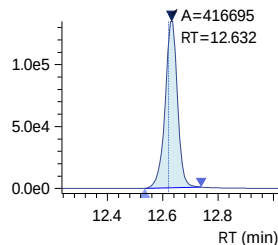
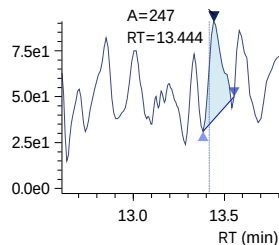
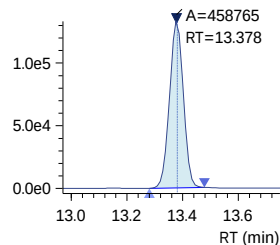
1.35e5

Q 815.00>770.05 (-)

1.35e5

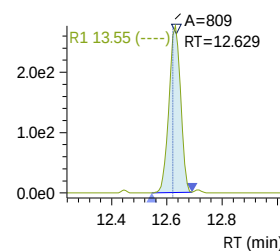
Q 813.00>768.95 (-)

1.93e3



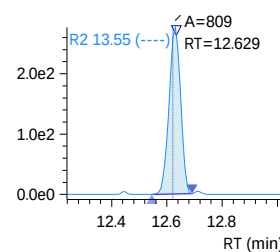
R1 813.00>218.95 (-)

2.77e2



R2 813.00>218.95 (-)

2.77e2





240201_062 (continued)

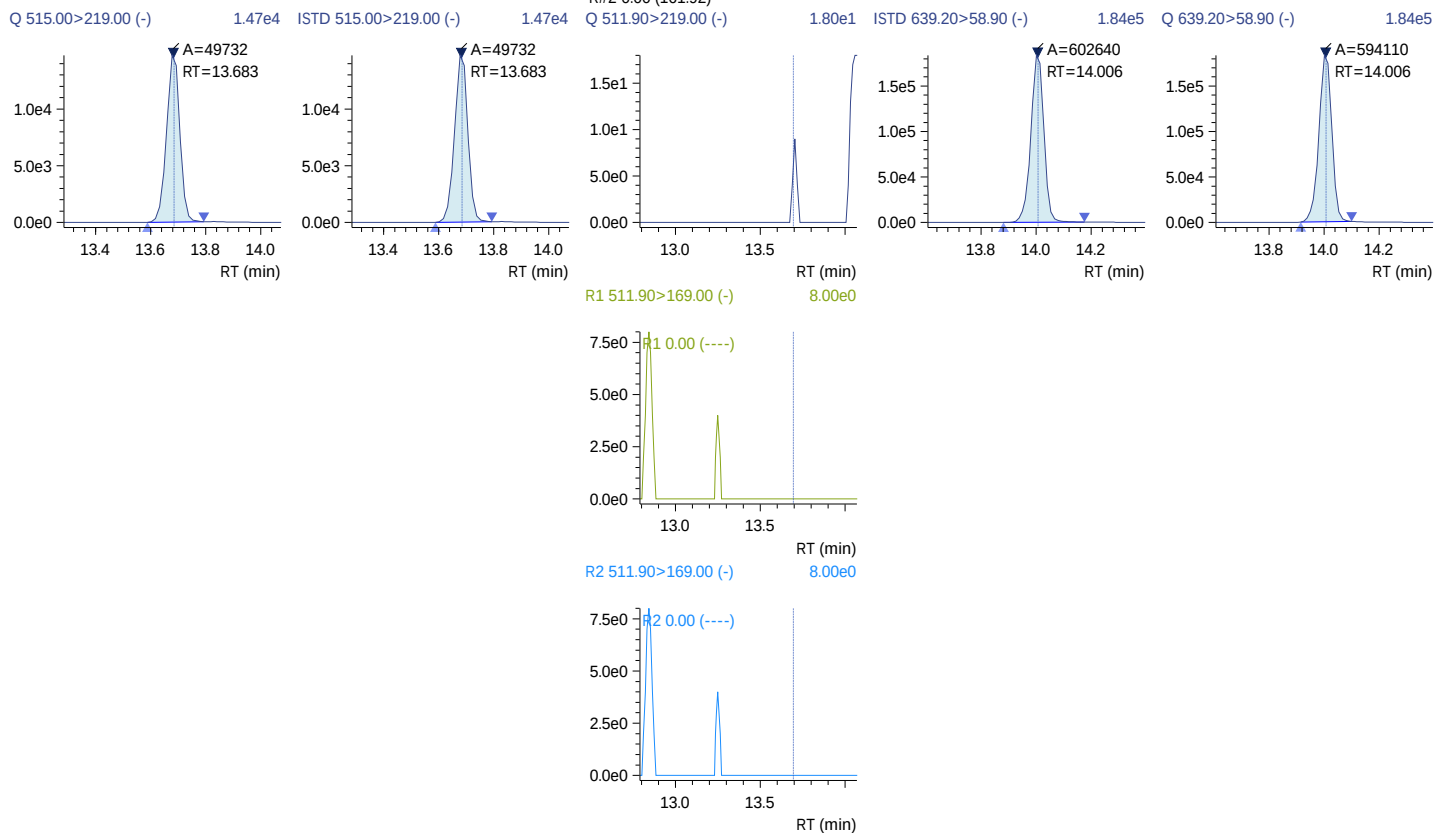
D3-MeFOSA
 Conc. 2.4666

D3-MeFOSA_IS
 Conc. 2.5000

MeFOSA
 Conc. ----
 R#1 0.00 (160.44)
 R#2 0.00 (161.92)

D9-EtFOSE_IS
 Conc. 25.0000

D9-EtFOSE
 Conc. 24.4881





240201_062 (continued)

EtFOSE
 Conc. ----

D5-EtFOSAm
 Conc. 2.4587

D5-EtFOSAm_IS
 Conc. 2.5000

EtFOSAm
 Conc. ----

PFODA
 Conc. 0.0512

Q 630.00>59.00 (-)

5.30e1

Q 531.10>219.00 (-)

2.14e4

ISTD 531.10>219.00 (-)

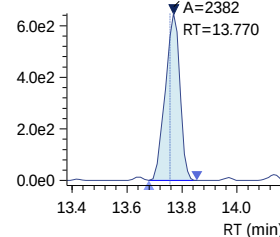
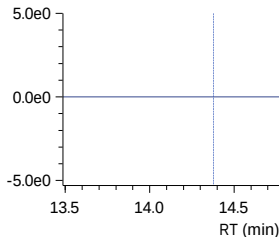
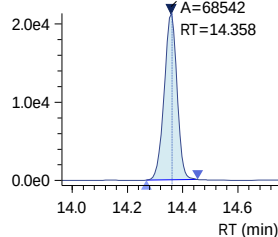
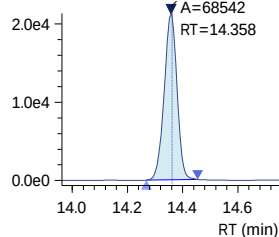
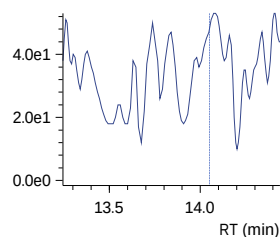
2.14e4

Q 526.00>219.00 (-)

0.00e0

Q 913.00>868.65 (-)

6.48e2

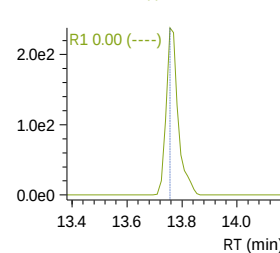
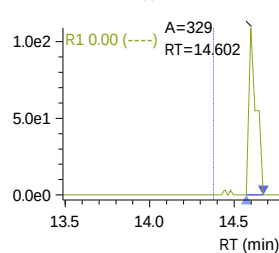


R1 526.00>169.00 (-)

1.09e2

R1 913.00>169.00 (-)

2.38e2

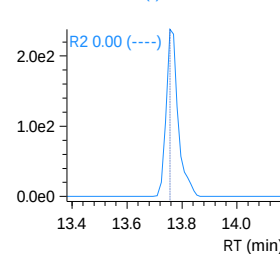
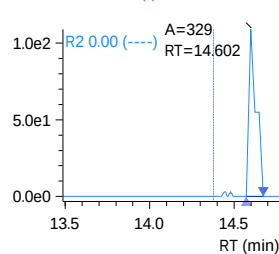


R2 526.00>169.00 (-)

1.09e2

R2 913.00>169.00 (-)

2.38e2



Validation Report

1st *PS* 02/06/24
2nd *MS* 02/06/24

Data File: J:\LCMS08\Data\240201_1633_RA\240201_069
Lab ID: KQ2401707-11
RunType: CCB
Matrix: Water

Date Acquired: 2/2/24 12:43
Batch ID: 831587
Analysis Method: 1633/PFAS_DOD5.4

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery		X
Internal Standards	X	
Surrogates		X
Above Highest ICAL Level	X	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Continuing Calibration Recovery	D3-MeFOSAA	68	70	130	native in control
Surrogates	13C3-PFBS	147	40	135	NR in all samples
	13C3-HFPO-DA	139	40	130	high bias, sample <MRL

Primary Review: _____

Secondary Review: _____

Quantitation Report

1st *PS* 02/06/24
2nd *MS* 02/06/24

Data File:	J:\LCMS08\Data\240201_1633_RA\240201_069	Instrument:	K-LCMS-08
Acqu Date:	2/2/24 12:43	Vial:	44
Run Type:	CCB	Dilution:	1
Lab ID:	KQ2401707-11	Raw Units:	ng/mL

Bottle ID:		Tier:	II	Matrix:	Water
Prod Code:	PFAS_DOD5.4	Collect Date:	1/3/24	Receive Date:	1/3/24

Analysis Lot:	831587	Prep Lot:		Report Group:	KQ2401707
Analysis	1633	Prep Method:			
		Prep Date:			

Title:	Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM	Calibration ID:	KC2400048
		Report List ID:	24615

Internal Standard Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Area Criteria
18O2-PFHxS	7.101	+0.03	167965	2.5000	OK
13C4-PFOS	8.830	+0.02	253661	2.5000	OK
13C3-PFBA	1.414	+0.06	380501	5.0000	OK
13C2-PFHxA	5.000	+0.03	460432	2.5000	OK
13C4-PFOA	7.127	+0.02	33232	2.5000	OK
13C5-PFNA	7.974	+0.02	216623	1.2500	OK
13C2-PFDA	8.735	+0.02	141296	1.2500	OK

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
13C3-PFBS	4.662	+0.04	230435	3.6770	147 *	40 - 135	Y
13C3-PFHxS	7.101	+0.03	191408	3.2514	130	40 - 130	Y
13C8-PFOS	8.830	+0.02	88794	2.7815	111	40 - 130	Y
13C4-PFBA	1.414	+0.06	718420	12.7421	127	5 - 130	Y
13C5-PFPeA	3.518	+0.04	184731	5.5798	112	40 - 130	Y
13C5-PFHxA	4.999	+0.03	392816	2.6431	106	40 - 130	Y
13C4-PFHpA	6.174	+0.03	525147	2.8086	112	40 - 130	Y
13C8-PFOA	7.129	+0.03	472833	2.9834	119	40 - 130	Y
13C9-PFNA	7.973	+0.02	252113	1.5722	126	40 - 130	Y
13C6-PFDA	8.734	+0.02	170286	1.5039	120	40 - 130	Y
13C7-PFUnDA	9.456	+0.02	218876	1.5557	124	30 - 130	Y
13C2-PFDoDA	10.142	+0.02	260033	1.5482	124	10 - 130	Y
13C2-PFTeDA	11.426	+0.02	171261	1.4447	116	10 - 130	Y
13C8-FOSA	11.158	+0.00	189707	2.3543	94	40 - 130	Y
D3-MeFOSA	13.683	0.00	52232	2.4829	99	10 - 130	Y
D5-EtFOSA	14.359		68472	2.3541	94	10 - 130	Y
D7-MeFOSE	13.380	+0.00	476446	23.0329	92	10 - 130	Y
D9-EtFOSE	14.006	0.00	600784	23.7341	95	10 - 130	Y

			1st	PS	02/06/24
Data File:	J:\LCMS08\Data\240201_1633_RA\240201_069	Instrument:	K-LCMS08	MS	02/06/24
Acqu Date:	2/2/24 12:43	Vial:	44		
Run Type:	CCB	Dilution:	1		
Lab ID:	KQ2401707-11	Raw Units:	ng/mL		

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
D3-MeFOSAA	8.872	+0.02	391853	3.7941	76	40 - 170	Y
D5-EtFOSAA	9.203	+0.02	329776	4.0516	81	25 - 135	Y
13C2-4:2 FTS	4.682	+0.03	149976	4.7435	95	40 - 200	Y
13C2-6:2 FTS	6.814	+0.02	154906	4.7064	94	40 - 200	Y
13C2-8:2 FTS	8.429	+0.02	128862	4.6114	92	40 - 300	Y
13C3-HFPO-DA	5.473	+0.03	565565	13.8605	139 *	40 - 130	Y

Target Compounds

Final Conc.Units: ng/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Perfluorobutane sulfonic acid (PFBS)	0		0	0	0	U	Y
Perfluoropentane sulfonic acid (PFPeS)	0		0	0	0	U	Y
Perfluorohexane sulfonic acid (PFHxS)	7.102	+0.03	1034	0.0124	0.25	U	Y
Perfluoroheptane sulfonic acid (PFHpS)	0		0	0	0	U	Y
Perfluorooctane sulfonic acid (PFOS)	8.832	+0.02	306	0.0040	0.080	U	Y
Perfluorononane sulfonic acid (PFNS)	0		0	0	0	U	Y
Perfluorodecane sulfonic acid (PFDS)	0		0	0	0	U	Y
Perfluorododecane sulfonic acid (PFDoS)	0		0	0	0	U	Y
Perfluorobutanoic acid (PFBA)	1.423	+0.07	1080	0.0034	0.068	U	Y
Perfluoropentanoic acid (PFPeA)	3.517	+0.04	2256	0.0174	0.35	U	Y
Perfluorohexanoic acid (PFHxA)	5.000	+0.03	1635	0.0052	0.10	U	Y
Perfluoroheptanoic acid (PFHpA)	6.154	+0.00	5762	0.0148	0.30	U	Y
Perfluorooctanoic acid (PFOA)	7.126	+0.02	8005	0.0297	0.59	U	Y
Perfluorononanoic acid (PFNA)	7.971	+0.02	5516	0.0139	0.28	U	Y
Perfluorodecanoic acid (PFDA)	8.731	+0.01	3686	0.0256	0.51	U	Y
Perfluoroundecanoic acid (PFUnDA)	9.455	+0.02	4049	0.0050	0.10	U	Y
Perfluorododecanoic acid (PFDOA)	10.143	+0.02	3009	-0.0099	0	U	Y
Perfluorotridecanoic acid (PFTTrDA)	10.800	+0.02	4578	0.0056	0.11	U	Y
Perfluorotetradecanoic acid (PFTDA)	11.426	+0.01	3580	0.0075	0.15	U	Y
Perfluorooctane sulfonamide (PFOSAm)	11.151	+0.00	273	0.0041	0.082	U	Y
N-Methylperfluorooctane sulfonamide (MeFOSA)	0		0	0	0	U	Y
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	0		0	0	0	U	Y
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	0		0	0	0	U	Y
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	0		0	0	0	U	Y
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	8.868	+0.01	82	0.0015	0.030	U	Y

		1st	PS	02/06/24
Data File:	J:\LCMS08\Data\240201_1633_RA\240201_069	Instrument:	K-LCMS08	MS 02/06/24
Acqu Date:	2/2/24 12:43	Vial:	44	
Run Type:	CCB	Dilution:	1	
Lab ID:	KQ2401707-11	Raw Units:	ng/mL	

Target Compounds

Final Conc.Units: ng/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	0		0	0	0	U	Y
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	0		0	0	0	U	Y
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	6.806	+0.02	744	0.0126	0.25	U	Y
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	0		0	0	0	U	Y
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	0		0	0	0	U	Y
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	0		0	0	0	U	Y
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	7.965	+0.02	813	0.0394	0.79	U	Y
Perfluoro(2-ethoxyethane) sulfonic acid (PFEEESA)	0		0	0	0	U	Y
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	0		0	0	0	U	Y
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	0		0	0	0	U	Y
Perfluoro-3-methoxypropanoic acid (PFMPA)	2.463	+0.06	102	0.0019	0.038	U	Y
Perfluoro-4-methoxybutanoic acid (PFMBA)	4.043	+0.04	121	0.0015	0.030	U	Y
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	0		0	0	0	U	Y
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	4.851	+0.03	517	0.0063	0.13	U	Y
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	6.542	+0.03	234	0.0005	0.010	U	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 2/6/24 11:52

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240201_069

Sample ID: 1633 CCB
Date Acquired: 2/2/2024 12:43:55 PM
Acquired by: System Administrator
Data File: 240201_069
Vial: 54 | Inj. Volume: 10.0000uL | Tray: 1

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	718420	----	----	----	----	----	----	
13C4-PFBA_IS	216.80>171.90	----	718420	----	----	----	----	----	----	
13C3-PFBA_IS	216.00>172.00	----	380501	----	----	----	----	----	----	
PFBA	212.80>169.05	----	1080	----	----	----	----	----	----	
PFMPA	229.00>84.90	----	102	----	----	----	----	----	----	
3_3 FTCA	241.00>177.10	241.00>117.00	----	0	0.00	139.21	----	----	----	
13C5-PFPeA	268.30>223.00	----	184731	----	----	----	----	----	----	
13C5-PFPeA_IS	268.30>223.00	----	184731	----	----	----	----	----	----	
PFPeA	263.00>219.00	----	2256	----	----	----	----	----	----	
PFMBA	279.00>84.95	----	121	----	----	----	----	----	----	
13C2-4_2 FTS	329.10>80.90	----	149976	----	----	----	----	----	----	
13C2-4_2 FTS_IS	329.10>80.90	----	149976	----	----	----	----	----	----	
4_2 FTS	327.10>307.00	327.10>80.90	----	0	0.00	32.10	0	0.00	32.79	
13C3-PFBS_IS	302.10>79.90	----	230435	----	----	----	----	----	----	
PFBS	298.70>79.90	298.70>98.80	----	0	0.00	44.81	0	0.00	46.72	
13C3-PFBS	302.10>79.90	----	230435	----	----	----	----	----	----	
NFDHA	295.00>201.00	295.00>84.90	517	191	36.88	35.54	191	36.88	37.91	
13C5-PFHxA	318.00>273.00	----	392816	----	----	----	----	----	----	
13C5-PFHxA_IS	318.00>273.00	----	392816	----	----	----	----	----	----	
13C2-PFHxA_IS	315.10>270.00	----	460432	----	----	----	----	----	----	
PFHxA	313.00>269.00	----	1635	----	----	----	----	----	----	
PFEESA	314.80>135.00	314.80>82.90	----	0	0.00	5.22	0	0.00	5.35	
13C3-HFPO-DA	286.90>168.90	----	565565	----	----	----	----	----	----	
13C3-HFPO-DA_IS	286.90>168.90	----	565565	----	----	----	----	----	----	
HFPO-DA	284.90>168.90	284.90>184.90	----	0	0.00	59.79	0	0.00	58.32	
5_3 FTCA	341.00>237.05	341.00>217.00	----	0	0.00	157.08	0	0.00	155.87	
PFPeS	349.10>79.90	349.10>98.80	----	0	0.00	55.12	0	0.00	54.87	
13C4-PFHpA	367.10>322.00	----	525147	----	----	----	----	----	----	
13C4-PFHpA_IS	367.10>322.00	----	525147	----	----	----	----	----	----	
PFHpA	363.10>319.00	363.10>169.00	5762	1619	28.09	23.02	1619	28.09	20.91	
DONA	376.90>250.90	376.90>84.80	234	102	43.76	27.50	102	43.76	27.00	IRr
13C2-6_2 FTS_IS	429.10>80.90	----	154906	----	----	----	----	----	----	
13C2-6_2 FTS	429.10>80.90	----	154906	----	----	----	----	----	----	
6_2 FTS	427.10>407.00	427.10>80.90	744	169	22.73	50.47	169	22.73	46.83	IRr
13C4-PFOA_IS	417.10>172.00	----	33232	----	----	----	----	----	----	
13C8-PFOA_IS	421.10>376.00	----	472833	----	----	----	----	----	----	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240201_069 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	472833	----	----	----	----	----	----	----
PFOA	413.00>369.00	413.00>169.00	8005	2529	31.59	28.77	2529	31.59	28.12	
13C3-PFHxS	402.10>79.90	----	191408	----	----	----	----	----	----	----
13C3-PFHxS_IS	402.10>79.90	----	191408	----	----	----	----	----	----	----
PFHxS	398.70>79.90	398.70>98.90	1034	652	63.12	60.90	652	63.12	61.53	
18O2-PFHxS_IS	403.00>83.90	----	167965	----	----	----	----	----	----	----
13C9-PFNA_IS	472.10>427.00	----	252113	----	----	----	----	----	----	----
13C9-PFNA	472.10>427.00	----	252113	----	----	----	----	----	----	----
13C5-PFNA_IS	468.00>423.00	----	216623	----	----	----	----	----	----	----
PFNA	463.00>419.00	463.00>219.00	5516	1112	20.16	19.31	1112	20.16	20.30	
PFHpS	449.00>79.90	449.00>98.80	----	0	0.00	52.44	0	0.00	52.33	
7_3 FTCA	441.00>317.00	441.00>336.90	813	630	77.53	129.46	630	77.53	129.73	
13C2-8_2-FTS	529.10>80.90	----	128862	----	----	----	----	----	----	----
13C2-8_2-FTS_IS	529.10>80.90	----	128862	----	----	----	----	----	----	----
8_2 FTS	527.10>506.95	527.10>80.80	----	0	0.00	45.98	0	0.00	43.25	
13C6-PFDA_IS	519.10>474.10	----	170286	----	----	----	----	----	----	----
13C6-PFDA	519.10>474.10	----	170286	----	----	----	----	----	----	----
13C2-PFDA_IS	515.10>470.10	----	141296	----	----	----	----	----	----	----
PFDA	512.90>469.00	512.90>219.00	3686	581	15.77	17.88	581	15.77	18.89	
D3-NMeFOSAA_IS	573.20>419.00	----	391853	----	----	----	----	----	----	----
D3-NMeFOSAA	573.20>419.00	----	391853	----	----	----	----	----	----	----
13C8-PFOS_IS	507.10>98.90	----	88794	----	----	----	----	----	----	----
13C8-PFOS	507.10>98.90	----	88794	----	----	----	----	----	----	----
13C4-PFOS_IS	502.80>79.90	----	253661	----	----	----	----	----	----	----
PFOS	498.90>79.90	498.90>98.80	306	127	41.45	53.60	127	41.45	52.29	
NMeFOSAA	570.10>419.00	570.10>483.00	82	41	50.00	64.89	41	50.00	60.97	
D5-NetFOSAA_IS	589.20>419.00	----	329776	----	----	----	----	----	----	----
D5-NetFOSAA	589.20>419.00	----	329776	----	----	----	----	----	----	----
NetFOSAA	584.20>419.10	584.20>526.00	----	0	0.00	96.07	0	0.00	94.54	
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	----	0	0.00	30.95	0	0.00	30.61	
PFUnDA	563.10>519.00	563.10>269.10	4049	500	12.36	11.01	500	12.36	12.02	
13C7-PFUnDA_IS	570.00>525.10	----	218876	----	----	----	----	----	----	----
13C7-PFUnDA	570.00>525.10	----	218876	----	----	----	----	----	----	----
PFNS	548.80>79.90	548.80>98.80	----	0	0.00	60.44	0	0.00	58.51	
10_2 FTS	626.80>607.05	626.80>81.00	----	0	0.00	36.14	0	0.00	33.04	
13C2-PFDOA_IS	615.10>570.00	----	260033	----	----	----	----	----	----	----
13C2-PFDOA	615.10>570.00	----	260033	----	----	----	----	----	----	----
PFDOA	613.10>569.00	613.10>319.00	3009	383	12.72	10.16	383	12.72	10.60	
PFDS	599.00>79.90	599.00>98.80	----	0	0.00	58.26	0	0.00	61.78	
PFTTrDA	663.00>619.00	663.00>168.90	4578	807	17.62	16.18	807	17.62	14.85	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240201_069 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	----	0	0.00	34.99	0	0.00	34.39	
PFOSAm	498.10>77.90	----	273	----	----	----	----	----	----	
13C8-PFOSAm	506.10>77.80	----	189707	----	----	----	----	----	----	
13C8-PFOSAm_IS	506.10>77.80	----	189707	----	----	----	----	----	----	
PFTDA	713.10>669.00	713.10>168.90	3580	635	17.73	18.05	635	17.73	17.39	
13C2-PFTDA	715.20>670.00	----	171261	----	----	----	----	----	----	
13C2-PFTDA_IS	715.20>670.00	----	171261	----	----	----	----	----	----	
PFDoS	699.10>79.90	699.10>98.80	----	0	0.00	61.13	0	0.00	62.47	
D7-MeFOSE_IS	623.20>58.90	----	476446	----	----	----	----	----	----	
D7-MeFOSE	623.20>58.90	----	476446	----	----	----	----	----	----	
MeFOSE	616.10>59.00	----	----	----	----	----	----	----	----	
13C2-PFHxDA_IS	815.00>770.05	----	413589	----	----	----	----	----	----	
13C2-PFHxDA	815.00>770.05	----	413589	----	----	----	----	----	----	
PFHxDA	813.00>768.95	813.00>218.95	6559	720	10.98	11.66	720	10.98	10.99	
D3-MeFOSA	515.00>219.00	----	52232	----	----	----	----	----	----	
D3-MeFOSA_IS	515.00>219.00	----	52232	----	----	----	----	----	----	
MeFOSA	511.90>219.00	511.90>169.00	----	0	0.00	160.44	0	0.00	161.92	
D9-EtFOSE_IS	639.20>58.90	----	607572	----	----	----	----	----	----	
D9-EtFOSE	639.20>58.90	----	600784	----	----	----	----	----	----	
EtFOSE	630.00>59.00	----	----	----	----	----	----	----	----	
D5-EtFOSAm	531.10>219.00	----	68472	----	----	----	----	----	----	
D5-EtFOSAm_IS	531.10>219.00	----	68472	----	----	----	----	----	----	
EtFOSAm	526.00>219.00	526.00>169.00	----	0	0.00	159.63	0	0.00	172.60	
PFODA	913.00>868.65	913.00>169.00	2640	551	20.86	36.03	551	20.86	35.02	

Flag ID key: IRr: Ion Ratio (Relative)



240201_069

Sample ID: 1633 CCB
Date Acquired: 2/2/2024 12:43:55 PM
Acquired by: System Administrator
Data File: 240201_069
Vial: 54 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.414	0.061	0.000	718420	380501	13C3-PFBA_IS	12.7421	ng/mL	
13C4-PFBA_IS	Auto	1.414	0.061	----	718420	718420	----	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.414	0.059	----	380501	380501	----	5.0000	ng/mL	
PFBA	M	1.423	0.067	0.009	1080	718420	13C4-PFBA_IS	0.0034	ng/mL	
PFMPA	M	2.463	0.082	-1.055	102	184731	13C5-PFPeA_IS	0.0019	ng/mL	
3_3 FTCA	ND(W/B)	----	----	----	----	184731	13C5-PFPeA_IS	----	ng/mL	
13C5-PFPeA	Auto	3.518	0.063	-1.482	184731	460432	13C2-PFHxA_IS	5.5798	ng/mL	
13C5-PFPeA_IS	Auto	3.518	0.063	----	184731	184731	----	5.0000	ng/mL	
PFPeA	Auto	3.517	0.059	-0.001	2256	184731	13C5-PFPeA_IS	0.0174	ng/mL	
PFMBA	M	4.043	0.059	0.525	121	184731	13C5-PFPeA_IS	0.0015	ng/mL	
13C2-4_2 FTS	Auto	4.682	0.049	-2.419	149976	167965	18O2-PFHxS_IS	4.7435	ng/mL	
13C2-4_2 FTS_IS	Auto	4.682	0.049	----	149976	149976	----	5.0000	ng/mL	
4_2 FTS	ND(W/B)	----	----	----	----	149976	13C2-4_2 FTS_IS	----	ng/mL	
13C3-PFBS_IS	Auto	4.662	0.059	----	230435	230435	----	2.5000	ng/mL	
PFBS	ND(W/B)	----	----	----	----	230435	13C3-PFBS_IS	----	ng/mL	
13C3-PFBS	Auto	4.662	0.059	-2.439	230435	167965	18O2-PFHxS_IS	3.6770	ng/mL	
NFDHA	M	4.851	0.046	-0.148	517	392816	13C5-PFHxA_IS	0.0063	ng/mL	
13C5-PFHxA	Auto	4.999	0.052	-0.001	392816	460432	13C2-PFHxA_IS	2.6431	ng/mL	
13C5-PFHxA_IS	Auto	4.999	0.052	----	392816	392816	----	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	5.000	0.053	----	460432	460432	----	2.5000	ng/mL	
PFHxA	M	5.000	0.051	0.001	1635	392816	13C5-PFHxA_IS	0.0052	ng/mL	
PFEESA	ND(W/B)	----	----	----	----	392816	13C5-PFHxA_IS	----	ng/mL	
13C3-HFPO-DA	Auto	5.473	0.047	0.472	565565	460432	13C2-PFHxA_IS	13.8605	ng/mL	
13C3-HFPO-DA_IS	Auto	5.473	0.047	----	565565	565565	----	10.0000	ng/mL	
HFPO-DA	ND(W/B)	----	----	----	----	565565	13C3-HFPO-DA_IS	----	ng/mL	
5_3 FTCA	ND(W/B)	----	----	----	----	392816	13C5-PFHxA_IS	----	ng/mL	
PFPeS	ND(W/B)	----	----	----	----	191408	13C3-PFHxS_IS	----	ng/mL	
13C4-PFHpA	Auto	6.174	0.042	1.174	525147	460432	13C2-PFHxA_IS	2.8086	ng/mL	
13C4-PFHpA_IS	Auto	6.174	0.042	----	525147	525147	----	2.5000	ng/mL	
PFHpA	Auto	6.154	0.020	-0.020	5762	525147	13C4-PFHpA_IS	0.0148	ng/mL	
DONA	M	6.542	0.041	1.070	234	565565	13C3-HFPO-DA_IS	0.0005	ng/mL	IRr
13C2-6_2 FTS_IS	Auto	6.814	0.036	----	154906	154906	----	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.814	0.036	-0.287	154906	167965	18O2-PFHxS_IS	4.7064	ng/mL	
6_2 FTS	M	6.806	0.029	-0.008	744	154906	13C2-6_2 FTS_IS	0.0126	ng/mL	IRr
13C4-PFOA_IS	Auto	7.127	0.036	----	33232	33232	----	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.129	0.038	----	472833	472833	----	2.5000	ng/mL	
13C8-PFOA	Auto	7.129	0.038	0.002	472833	33232	13C4-PFOA_IS	2.9834	ng/mL	
PFOA	Auto	7.126	0.033	-0.003	8005	472833	13C8-PFOA_IS	0.0297	ng/mL	
13C3-PFHxS	Auto	7.101	0.039	0.000	191408	167965	18O2-PFHxS_IS	3.2514	ng/mL	
13C3-PFHxS_IS	Auto	7.101	0.039	----	191408	191408	----	2.5000	ng/mL	
PFHxS	M	7.102	0.040	0.001	1034	191408	13C3-PFHxS_IS	0.0124	ng/mL	
18O2-PFHxS_IS	Auto	7.101	0.039	----	167965	167965	----	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.973	0.032	----	252113	252113	----	1.2500	ng/mL	
13C9-PFNA	Auto	7.973	0.032	-0.001	252113	216623	13C5-PFNA_IS	1.5722	ng/mL	
13C5-PFNA_IS	Auto	7.974	0.032	----	216623	216623	----	1.2500	ng/mL	
PFNA	Auto	7.971	0.028	-0.002	5516	252113	13C9-PFNA_IS	0.0139	ng/mL	
PFHpS	ND(W/B)	----	----	----	----	88794	13C8-PFOS_IS	----	ng/mL	
7_3 FTCA	M	7.965	0.037	2.966	813	392816	13C5-PFHxA_IS	0.0394	ng/mL	
13C2-8_2-FTS	Auto	8.429	0.030	1.328	128862	167965	18O2-PFHxS_IS	4.6114	ng/mL	
13C2-8_2-FTS_IS	Auto	8.429	0.030	----	128862	128862	----	5.0000	ng/mL	
8_2 FTS	ND(W/B)	----	----	----	----	128862	13C2-8_2-FTS_IS	----	ng/mL	
13C6-PFDA_IS	Auto	8.734	0.027	----	170286	170286	----	1.2500	ng/mL	
13C6-PFDA	Auto	8.734	0.027	-0.001	170286	141296	13C2-PFDA_IS	1.5039	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_069 (continued)

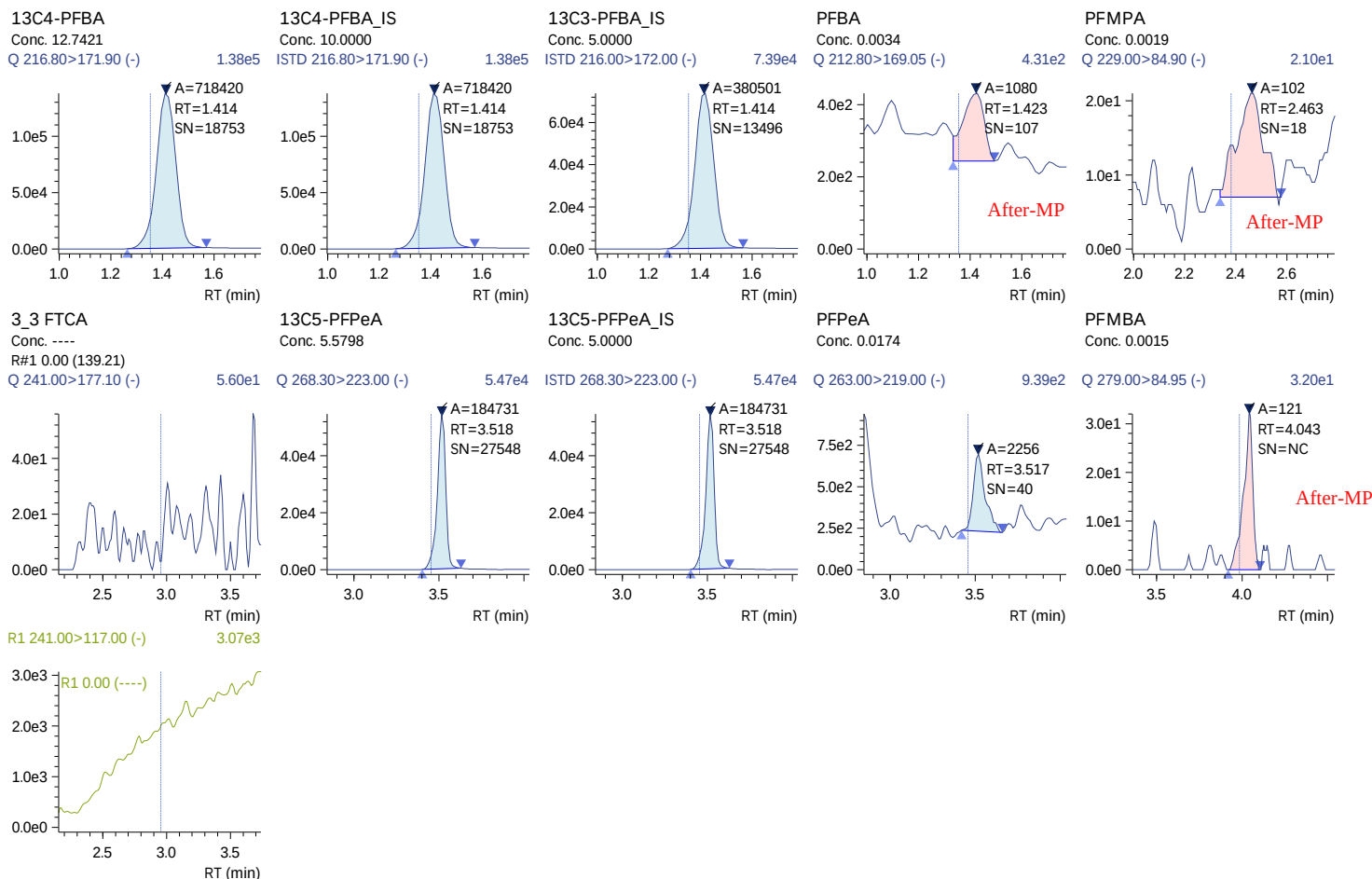
(Table continued from previous page)

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C2-PFDA_IS	Auto	8.735	0.027	----	141296	141296	----	1.2500	ng/mL	
PFDA	Auto	8.731	0.022	-0.003	3686	170286	13C6-PFDA_IS	0.0256	ng/mL	
D3-NMeFOSAA_IS	Auto	8.872	0.029	----	391853	391853	----	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.872	0.029	0.042	391853	253661	13C4-PFOS_IS	3.7941	ng/mL	
13C8-PFOS_IS	Auto	8.830	0.030	----	88794	88794	----	2.5000	ng/mL	
13C8-PFOS	Auto	8.830	0.030	0.000	88794	253661	13C4-PFOS_IS	2.7815	ng/mL	
13C4-PFOS_IS	Auto	8.830	0.030	----	253661	253661	----	2.5000	ng/mL	
PFOS	M	8.832	0.031	0.002	306	88794	13C8-PFOS_IS	0.0040	ng/mL	
NMeFOSAA	M	8.868	0.020	-0.004	82	391853	D3-NMeFOSAA_IS	0.0015	ng/mL	
D5-NetFOSAA_IS	Auto	9.203	0.031	----	329776	329776	----	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.203	0.031	0.373	329776	253661	13C4-PFOS_IS	4.0516	ng/mL	
NetFOSAA	ND(W/B)	----	----	----	----	329776	D5-NetFOSAA_IS	----	ng/mL	
9-CI-PF3ONS	ND(W/B)	----	----	----	----	565565	13C3-HFPO-DA_IS	----	ng/mL	
PFUnDA	M	9.455	0.022	-0.001	4049	218876	13C7-PFUnDA_IS	0.0050	ng/mL	
13C7-PFUnDA_IS	Auto	9.456	0.026	----	218876	218876	----	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.456	0.026	0.721	218876	141296	13C2-PFDA_IS	1.5557	ng/mL	
PFNS	ND(W/B)	----	----	----	----	88794	13C8-PFOS_IS	----	ng/mL	
10_2 FTS	ND(W/B)	----	----	----	----	128862	13C2-8_2-FTS_IS	----	ng/mL	
13C2-PFDOA_IS	Auto	10.142	0.024	----	260033	260033	----	1.2500	ng/mL	
13C2-PFDOA	Auto	10.142	0.024	1.407	260033	141296	13C2-PFDA_IS	1.5482	ng/mL	
PFDOA	Auto	10.143	0.024	0.001	3009	260033	13C2-PFDOA_IS	-0.0099	ng/mL	
PFDS	ND(W/B)	----	----	----	----	88794	13C8-PFOS_IS	----	ng/mL	
PFTDA	Auto	10.800	0.025	-0.626	4578	171261	13C2-PFTDA_IS	0.0056	ng/mL	
11-CI-PF3OUdS	ND(W/B)	----	----	----	----	565565	13C3-HFPO-DA_IS	----	ng/mL	
PFOSAm	Auto	11.151	0.009	-0.007	273	189707	13C8-PFOSAm_IS	0.0041	ng/mL	
13C8-PFOSAm	Auto	11.158	0.016	2.328	189707	253661	13C4-PFOS_IS	2.3543	ng/mL	
13C8-PFOSAm_IS	Auto	11.158	0.016	----	189707	189707	----	2.5000	ng/mL	
PFTDA	Auto	11.426	0.018	0.000	3580	171261	13C2-PFTDA_IS	0.0075	ng/mL	
13C2-PFTDA	Auto	11.426	0.020	2.691	171261	141296	13C2-PFDA_IS	1.4447	ng/mL	
13C2-PFTDA_IS	Auto	11.426	0.020	----	171261	171261	----	1.2500	ng/mL	
PFDoS	ND(W/B)	----	----	----	----	88794	13C8-PFOS_IS	----	ng/mL	
D7-MeFOSE_IS	Auto	13.380	0.000	----	476446	476446	----	25.0000	ng/mL	
D7-MeFOSE	Auto	13.380	0.000	4.550	476446	253661	13C4-PFOS_IS	23.0329	ng/mL	
MeFOSE	ND(W/B)	----	----	----	----	476446	D7-MeFOSE_IS	----	ng/mL	
13C2-PFHxDA_IS	Auto	12.637	0.017	----	413589	413589	----	2.5000	ng/mL	
13C2-PFHxDA	Auto	12.637	0.017	3.902	413589	141296	13C2-PFDA_IS	2.6070	ng/mL	
PFHxDA	Auto	12.637	0.016	0.000	6559	413589	13C2-PFHxDA_IS	0.0293	ng/mL	
D3-MeFOSA	Auto	13.683	-0.002	4.853	52232	253661	13C4-PFOS_IS	2.4829	ng/mL	
D3-MeFOSA_IS	Auto	13.683	-0.002	----	52232	52232	----	2.5000	ng/mL	
MeFOSA	ND(W/B)	----	----	----	----	52232	D3-MeFOSA_IS	----	ng/mL	
D9-EtFOSE_IS	Auto	14.006	-0.002	----	607572	607572	----	25.0000	ng/mL	
D9-EtFOSE	Auto	14.006	-0.002	5.176	600784	253661	13C4-PFOS_IS	23.7341	ng/mL	
EtFOSE	ND(W/B)	----	----	----	----	607572	D9-EtFOSE_IS	----	ng/mL	
D5-EtFOSAm	Auto	14.359	-0.002	5.529	68472	253661	13C4-PFOS_IS	2.3541	ng/mL	
D5-EtFOSAm_IS	Auto	14.359	-0.002	----	68472	68472	----	2.5000	ng/mL	
EtFOSAm	ND(W/B)	----	----	----	----	68472	D5-EtFOSAm_IS	----	ng/mL	
PFODA	M	13.769	0.013	1.132	2640	413589	13C2-PFHxDA_IS	0.0543	ng/mL	

Flag ID key: IRr: Ion Ratio (Relative)



240201_069 (continued)





240201_069 (continued)

13C2-4_2 FTS
Conc. 4.7435

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. ----
R#1 0.00 (32.10)
R#2 0.00 (32.79)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. ----
R#1 0.00 (44.81)
R#2 0.00 (46.72)

Q 329.10>80.90 (-)

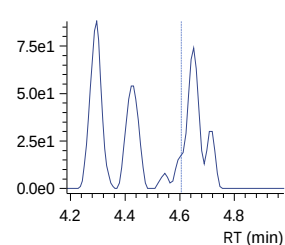
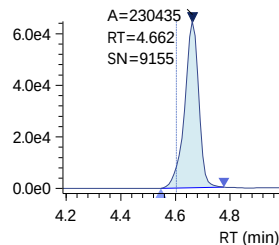
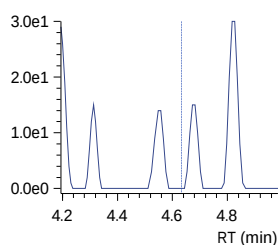
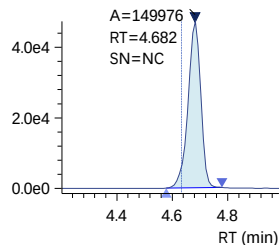
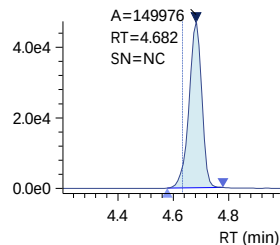
4.73e4 ISTD 329.10>80.90 (-)

4.73e4 Q 327.10>307.00 (-)

3.00e1 ISTD 302.10>79.90 (-)

6.48e4 Q 298.70>79.90 (-)

8.80e1

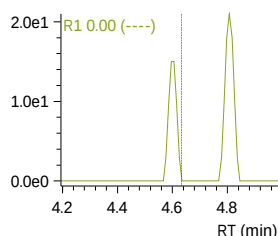


R1 327.10>80.90 (-)

2.10e1

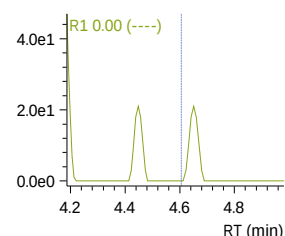
R1 298.70>98.80 (-)

4.70e1



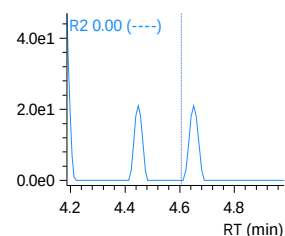
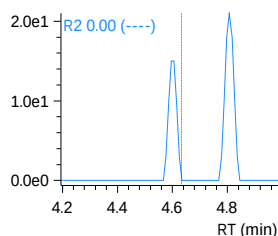
R2 327.10>80.90 (-)

2.10e1



R2 298.70>98.80 (-)

4.70e1





240201_069 (continued)

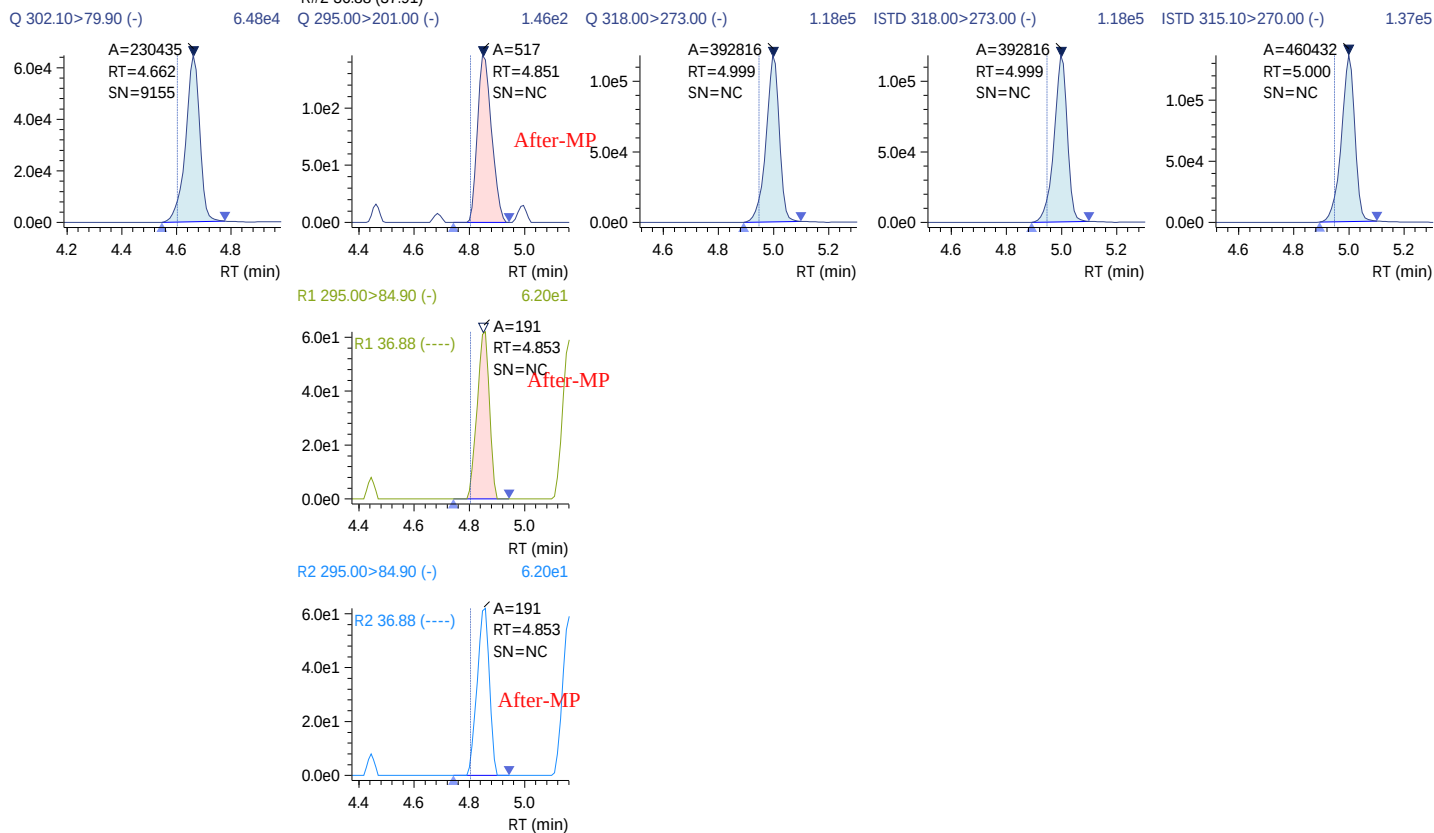
13C3-PFBS
Conc. 3.6770

NFDHA
Conc. 0.0063
R#1 36.88 (35.54)
R#2 36.88 (37.91)

13C5-PFHxA
Conc. 2.6431

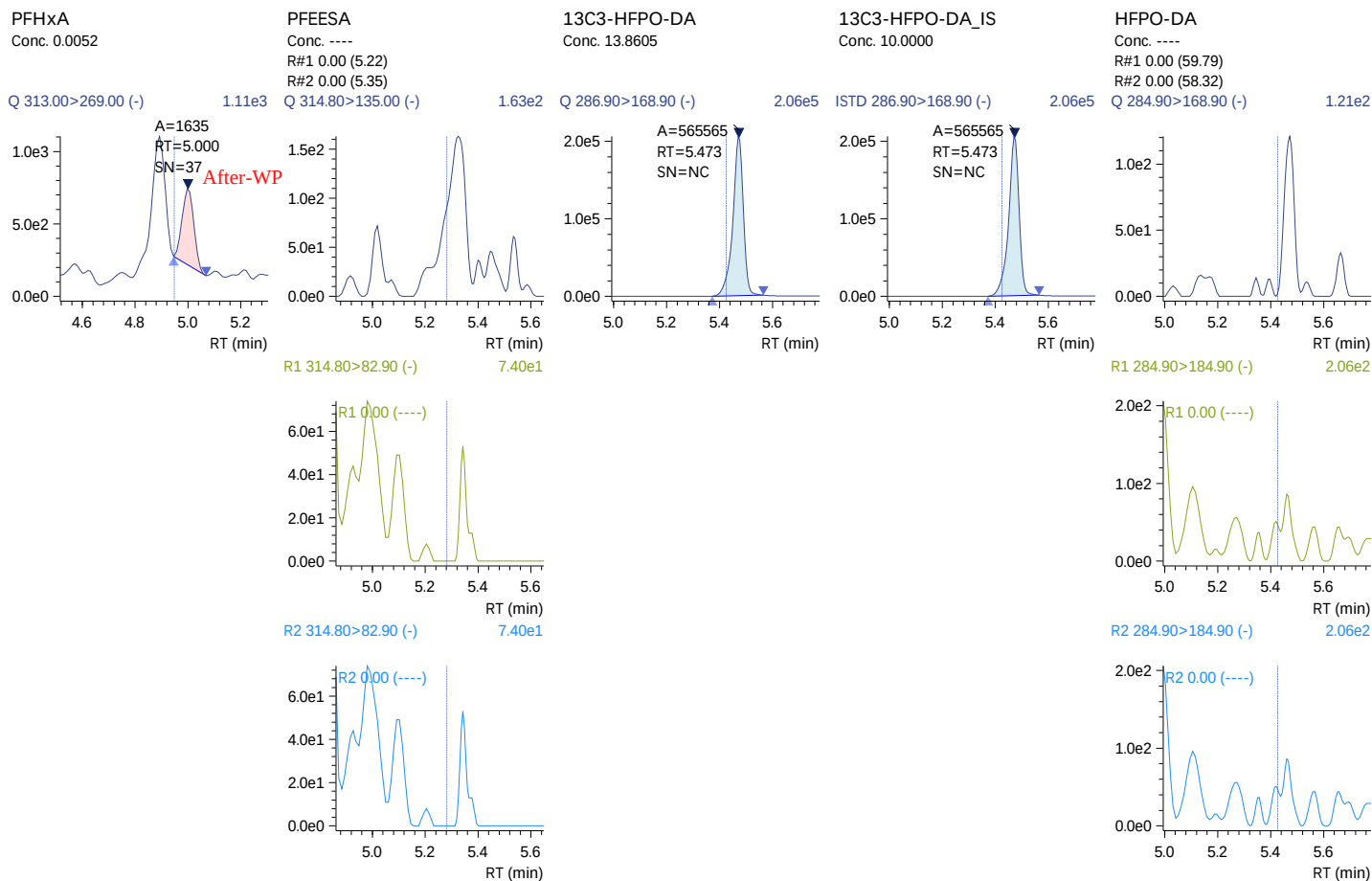
13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000





240201_069 (continued)

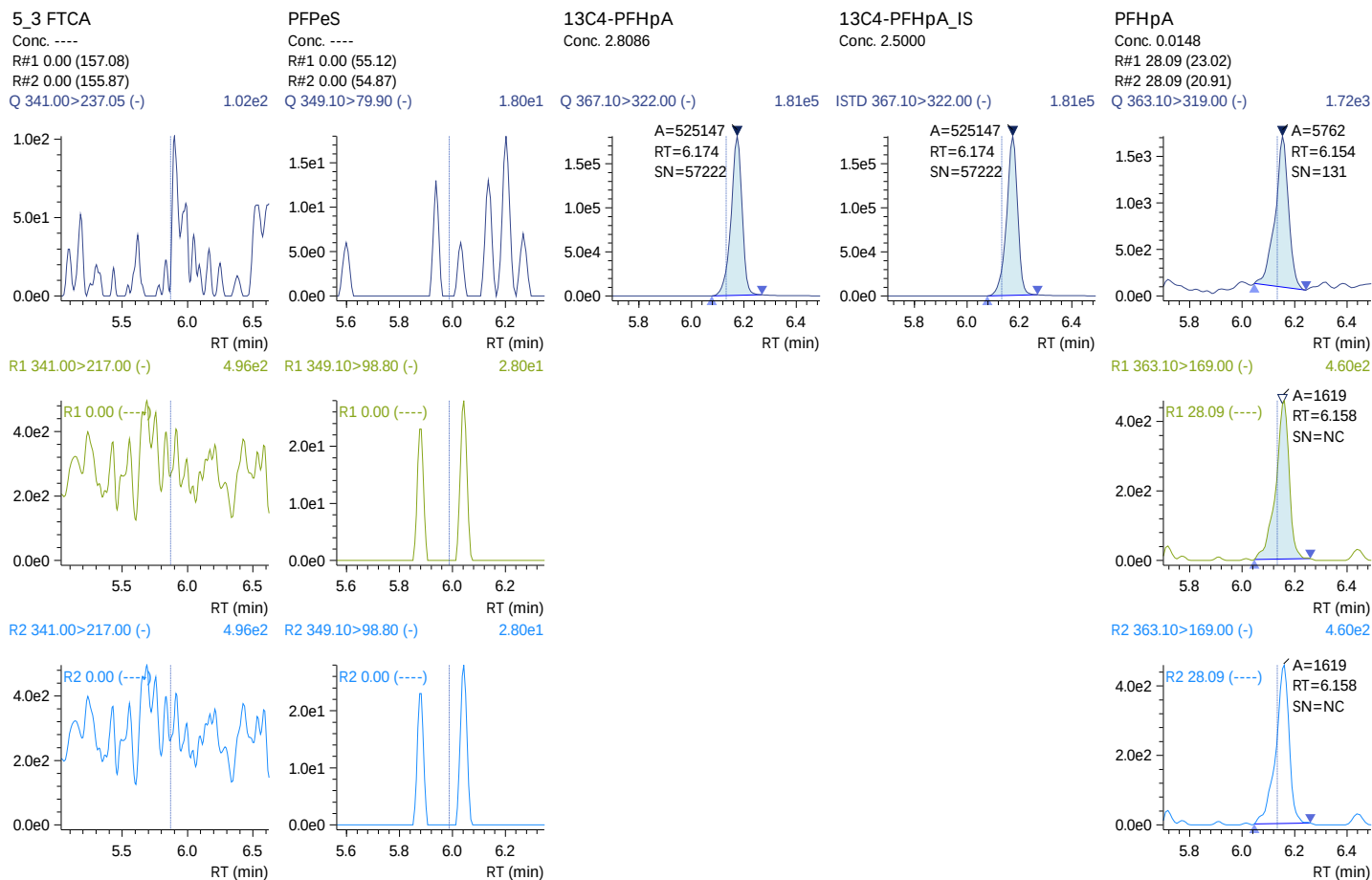


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.

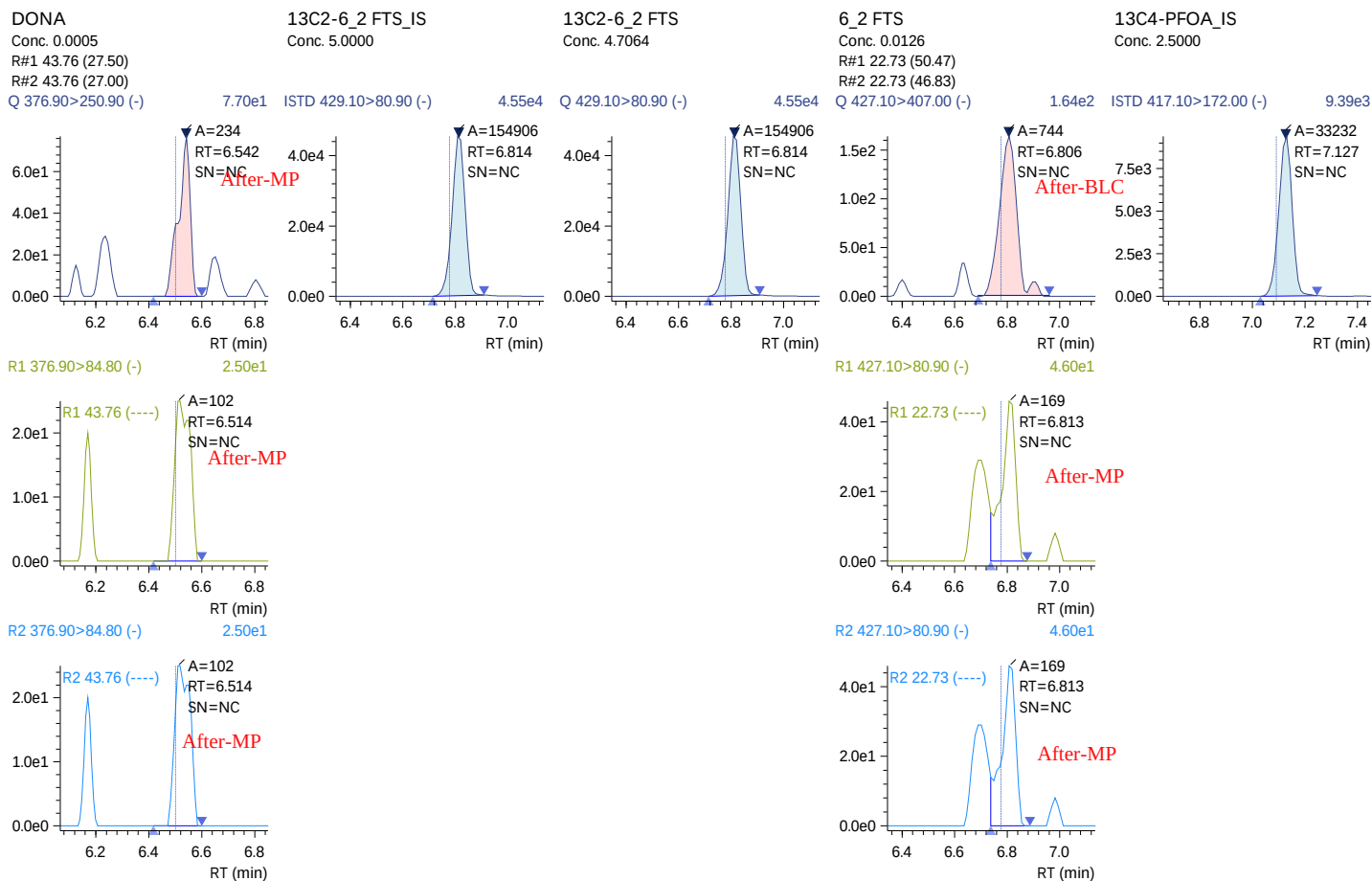


240201_069 (continued)





240201_069 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_069 (continued)

13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.9834

PFOA
Conc. 0.0297
R#1 31.59 (28.77)
R#2 31.59 (28.12)

13C3-PFHxS
Conc. 3.2514

13C3-PFHxS_IS
Conc. 2.5000

ISTD 421.10>376.00 (-)

1.39e5

Q 421.10>376.00 (-)

1.39e5

Q 413.00>369.00 (-)

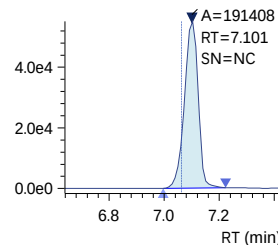
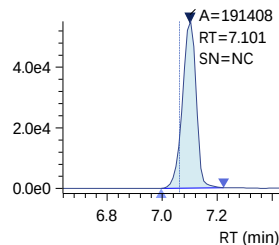
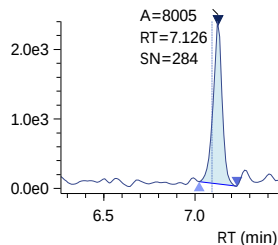
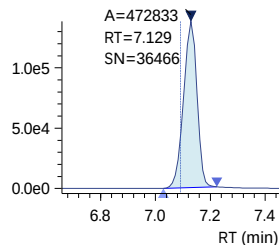
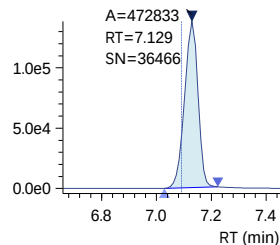
2.40e3

Q 402.10>79.90 (-)

5.51e4

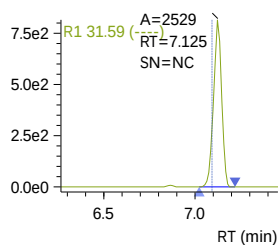
ISTD 402.10>79.90 (-)

5.51e4



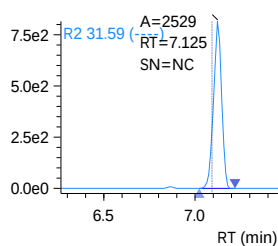
R1 413.00>169.00 (-)

8.15e2



R2 413.00>169.00 (-)

8.15e2





240201_069 (continued)

PFHxS

Conc. 0.0124

R#1 63.12 (60.90)

R#2 63.12 (61.53)

Q 398.70 > 79.90 (-)

1802-PFHxS IS

Conc. 2.5000

ISTD 403.00>83.90 (-)

13C9-PFNA IS

Conc. 1.2500

ISTD 472.10>427.00 (-)

13C9-PFNA

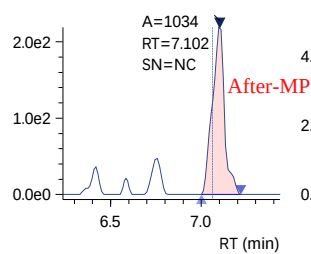
Conc. 1.5722

Q 472.10>427.00 (-)

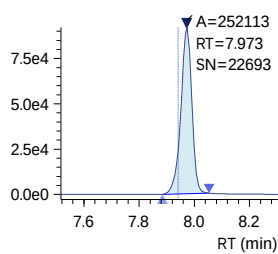
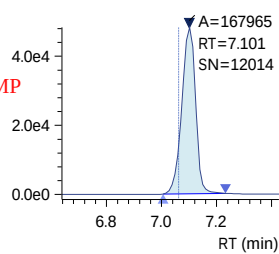
13C5-PFNA IS

Conc. 1.2500

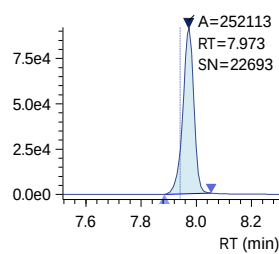
ISTD 468.00>423.00 (-)



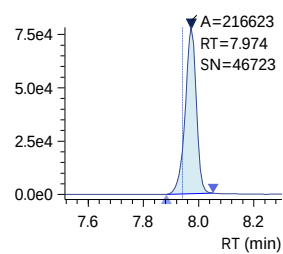
After-MP



1111



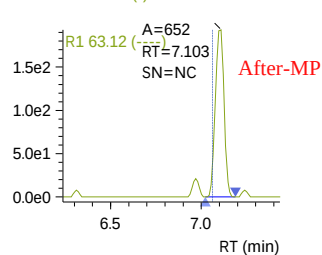
1111



100

R1 398.70>98.90 (-)

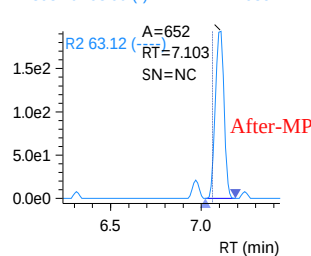
1.93e2



After-MP

R2 398.70>98.90 (-)

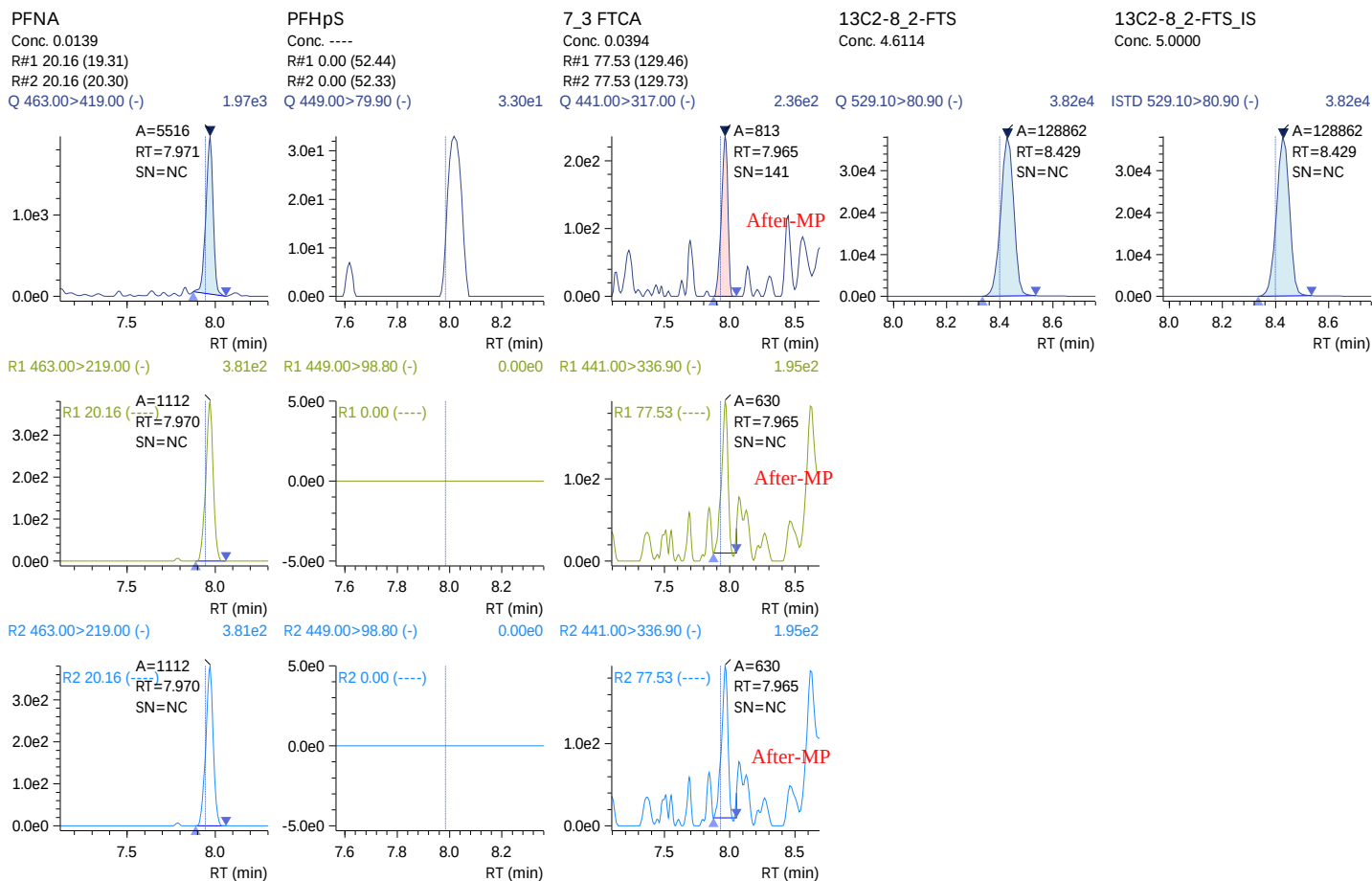
1.93e2



After-MP



240201_069 (continued)

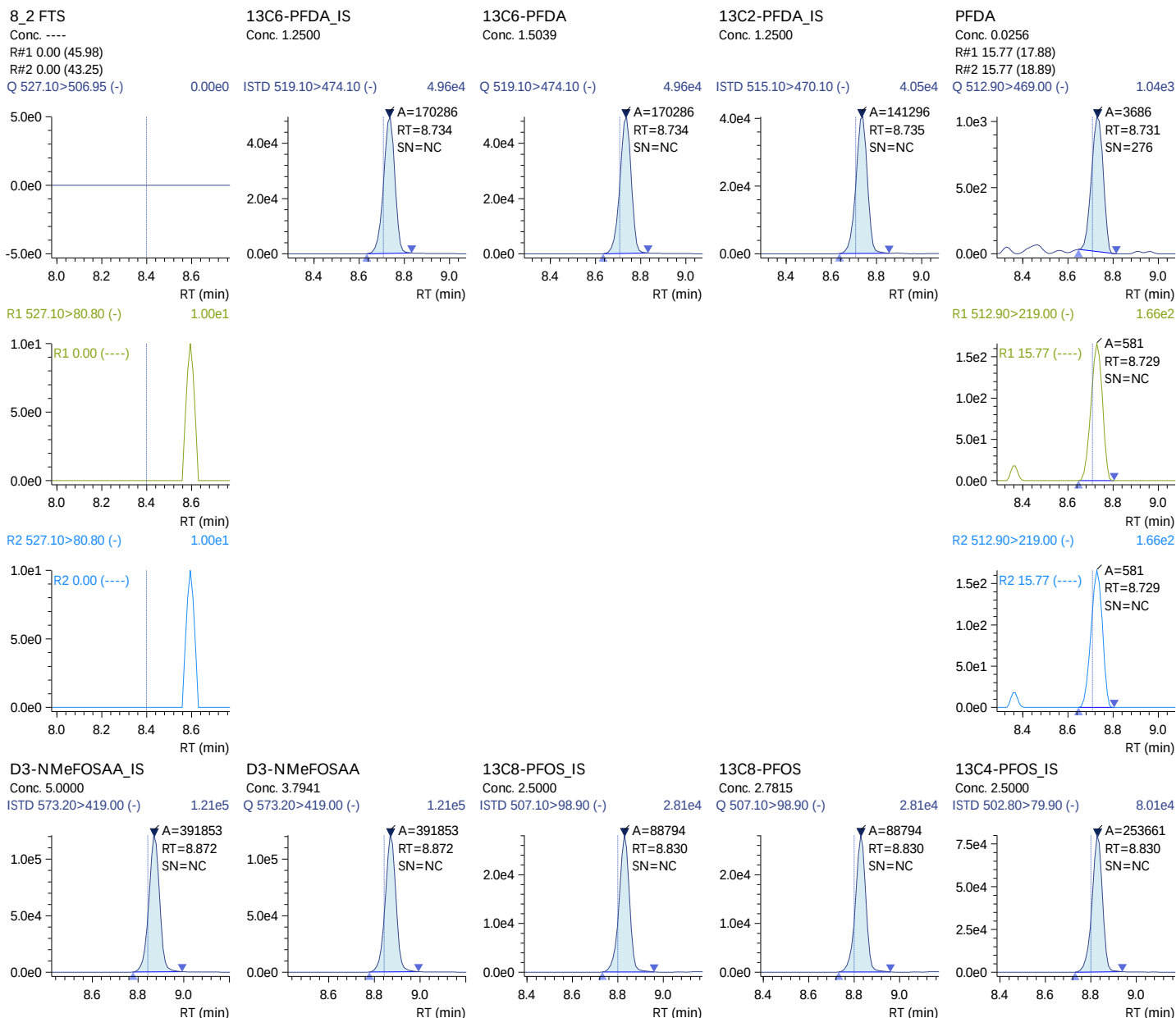


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_069 (continued)

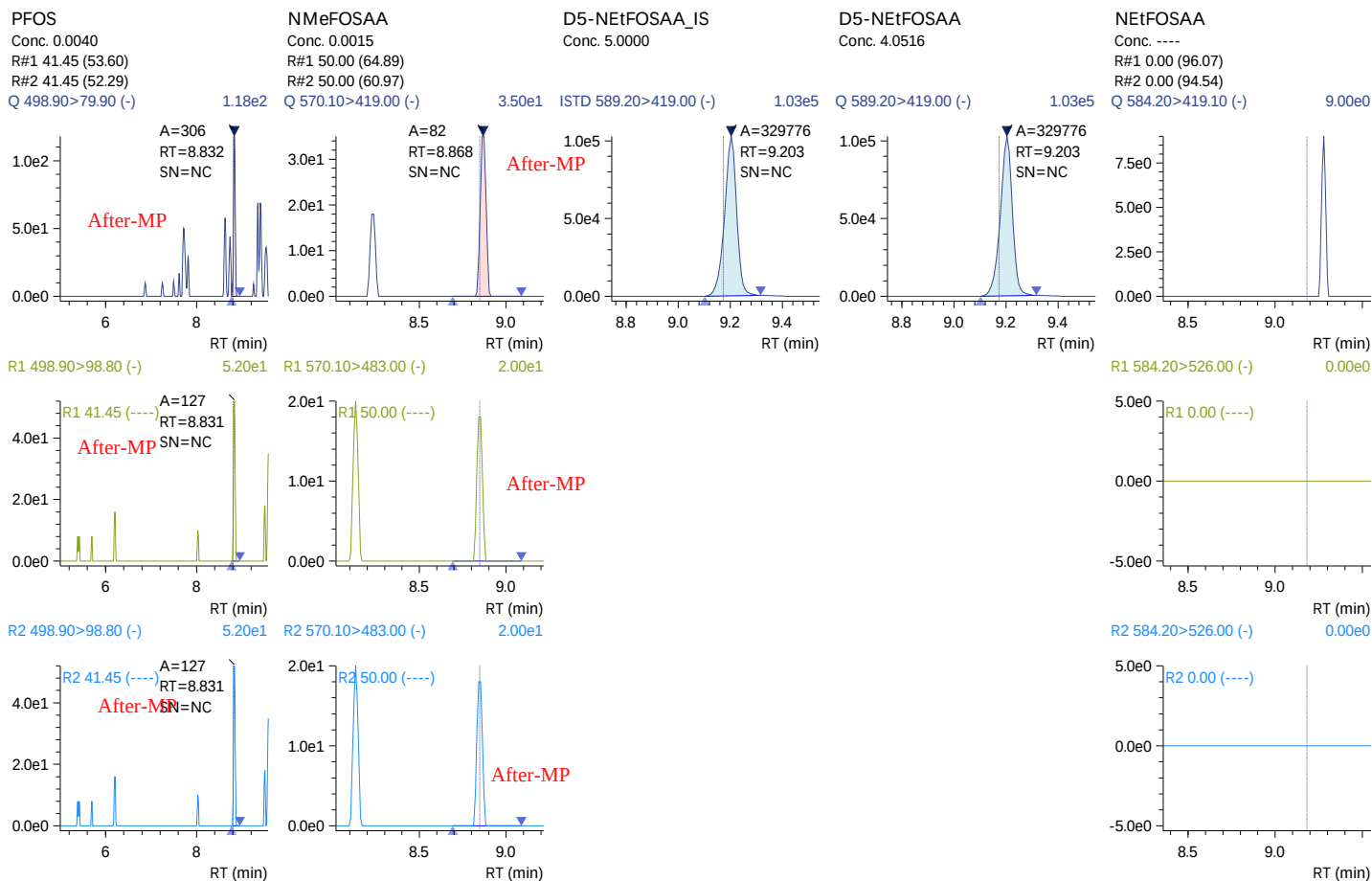


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_069 (continued)





240201_069 (continued)

9-Cl-PF3ONS

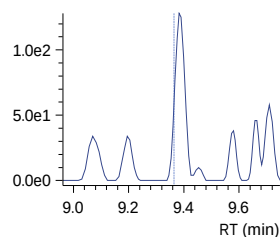
Conc. ----

R#1 0.00 (30.95)

R#2 0.00 (30.61)

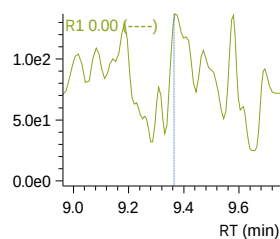
Q 530.80>351.00 (-)

1.28e2



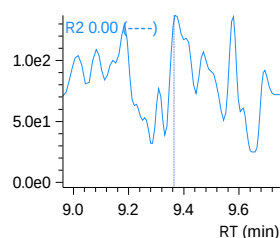
R1 532.80>353.00 (-)

1.37e2



R2 532.80>353.00 (-)

1.37e2



PFUnDA

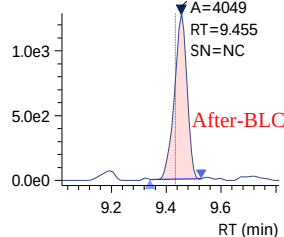
Conc. 0.0050

R#1 12.36 (11.01)

R#2 12.36 (12.02)

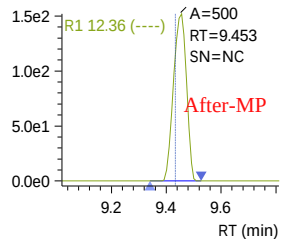
Q 563.10>519.00 (-)

1.29e3



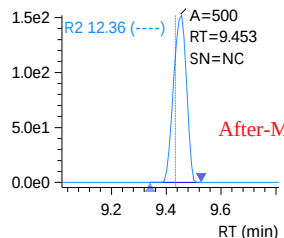
R1 563.10>269.10 (-)

1.52e2



R2 563.10>269.10 (-)

1.52e2

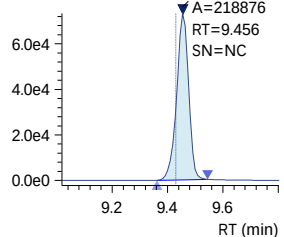


13C7-PFUnDA_IS

Conc. 1.2500

ISTD 570.00>525.10 (-)

7.34e4

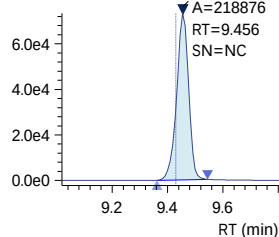


13C7-PFUnDA

Conc. 1.5557

Q 570.00>525.10 (-)

7.34e4



PFNS

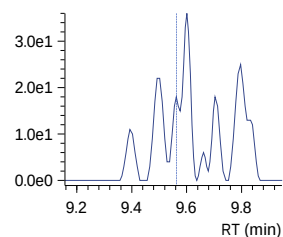
Conc. ----

R#1 0.00 (60.44)

R#2 0.00 (58.51)

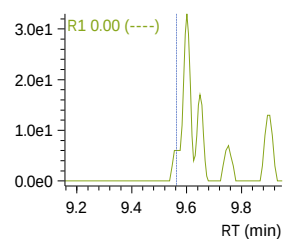
Q 548.80>79.90 (-)

3.60e1



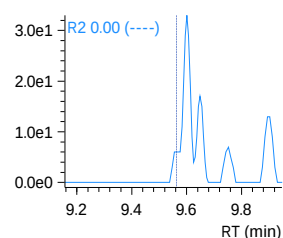
R1 548.80>98.80 (-)

3.30e1



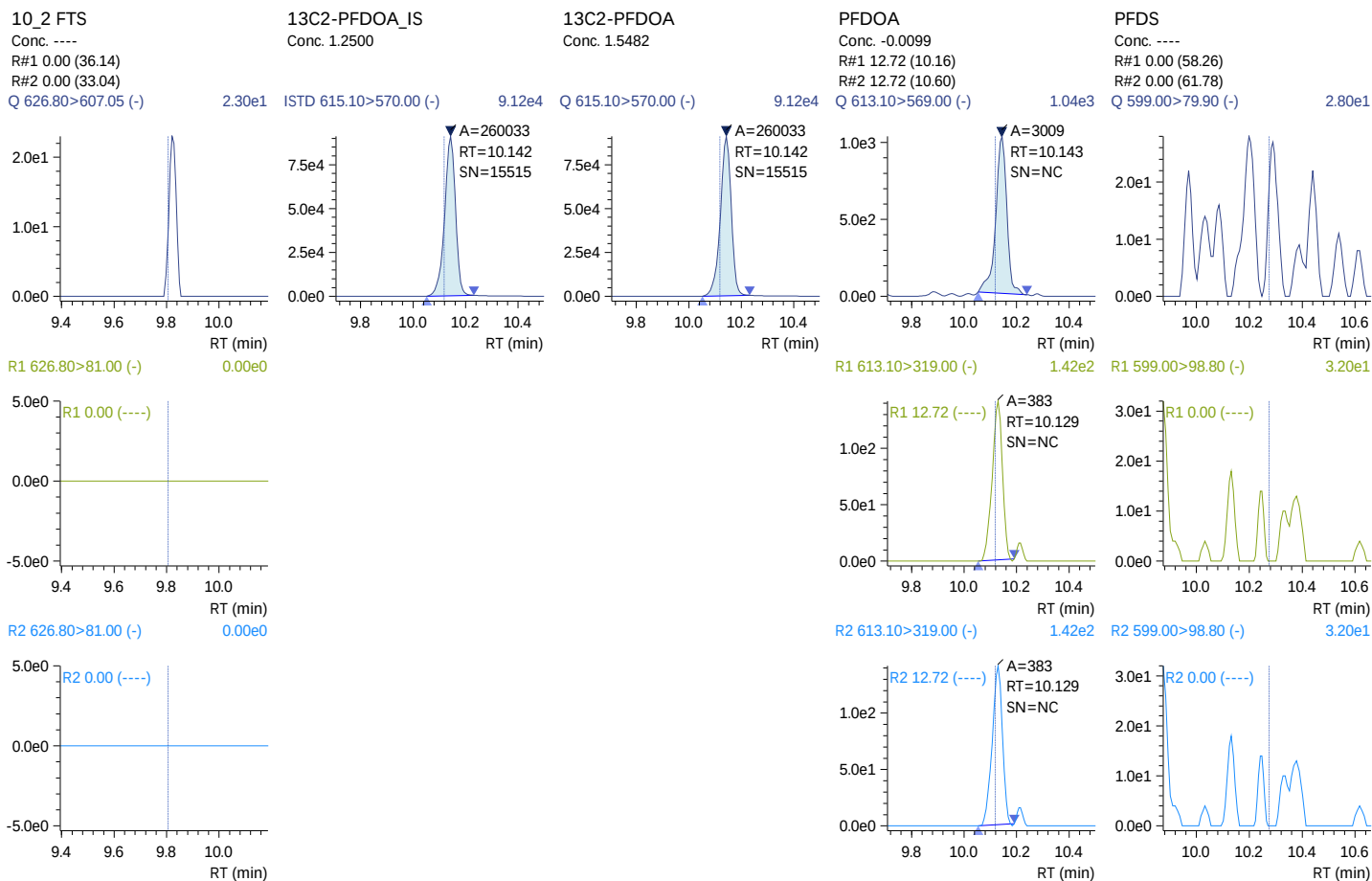
R2 548.80>98.80 (-)

3.30e1





240201_069 (continued)

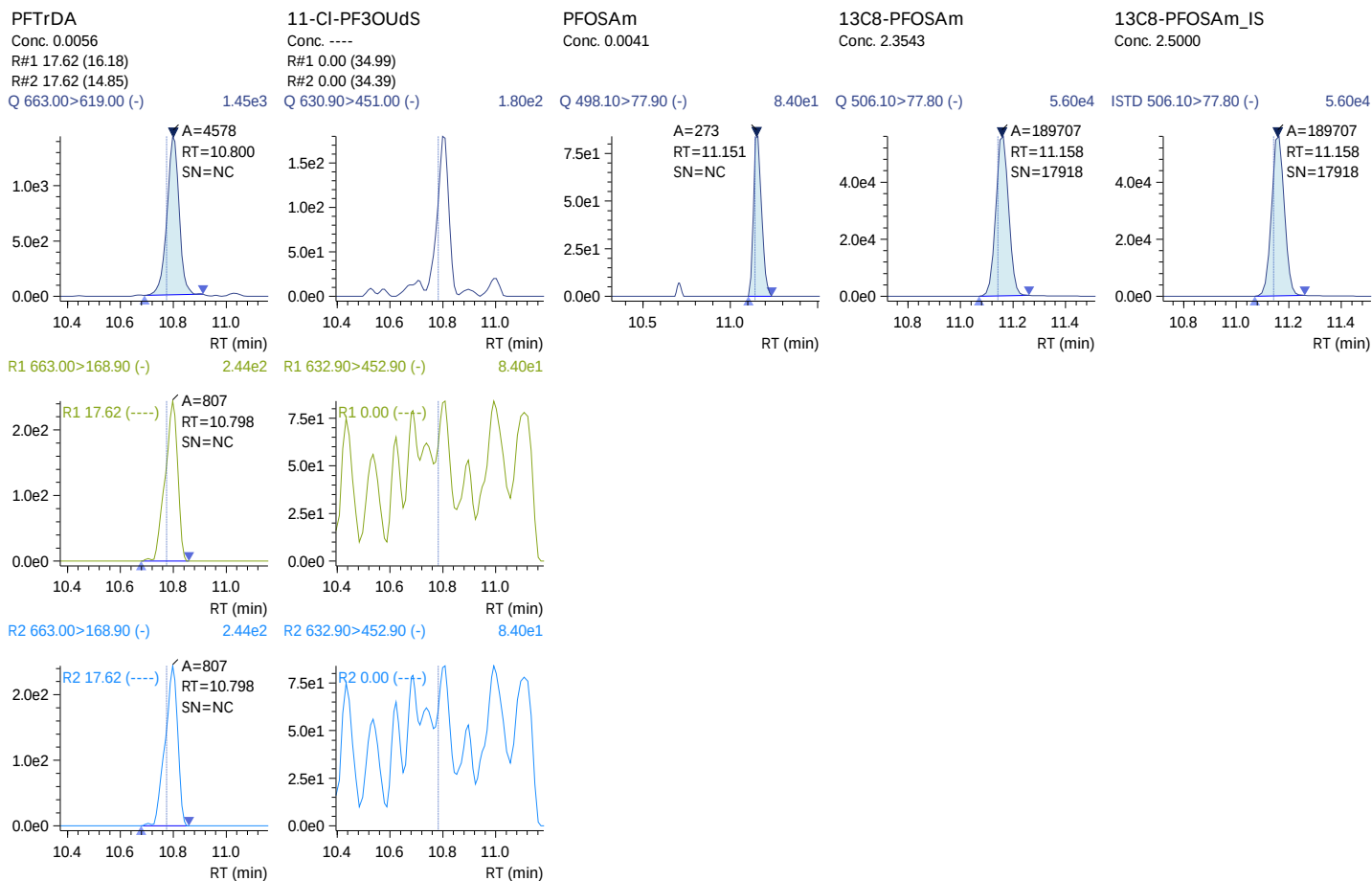


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_069 (continued)

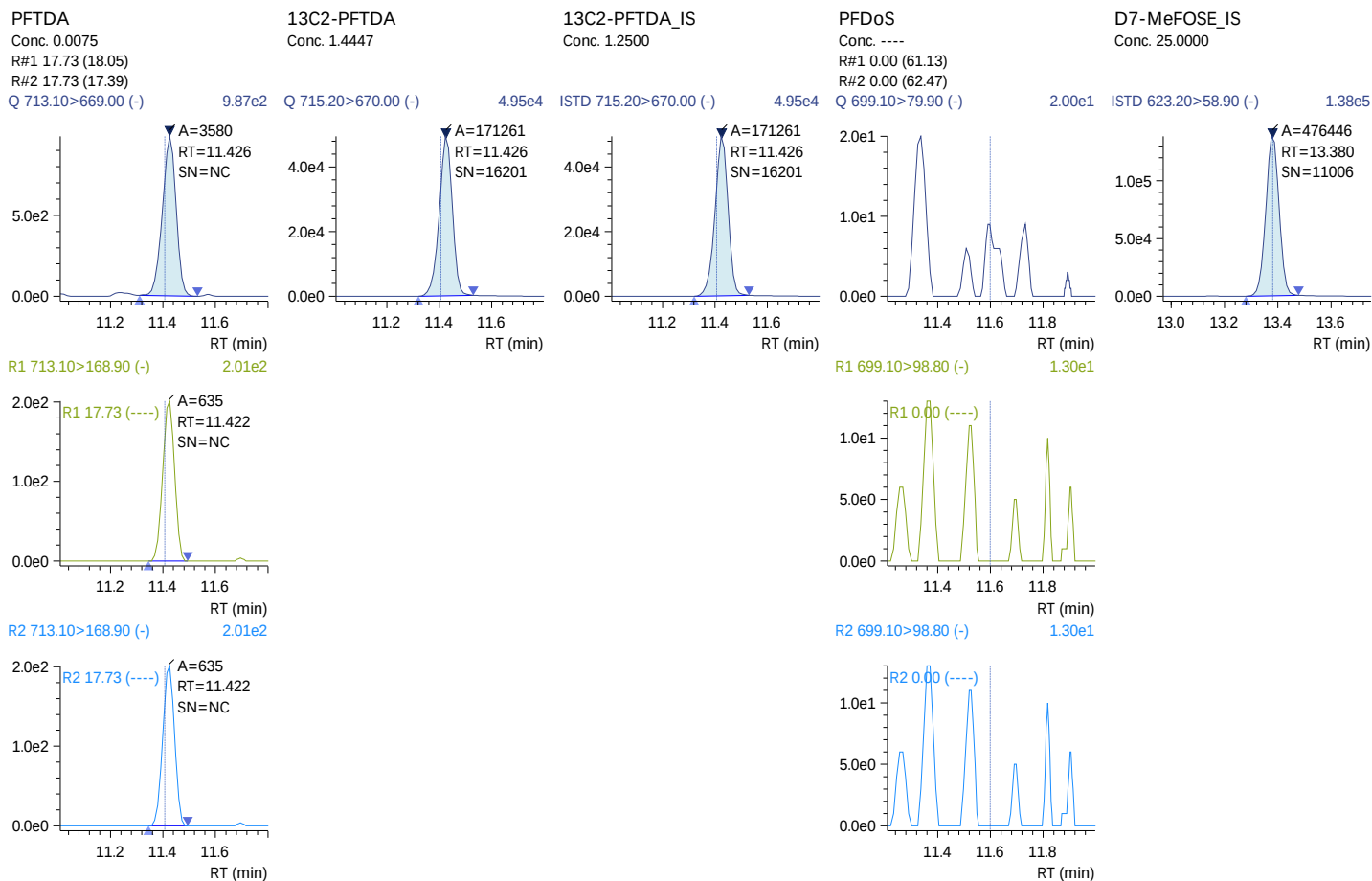


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_069 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_069 (continued)

D7-MeFOSE
Conc. 23.0329

MeFOSE
Conc. ----

13C2-PFHXA_IS
Conc. 2.5000

13C2-PFHXA
Conc. 2.6070

PFHXA

Conc. 0.0293
R#1 10.98 (11.66)
R#2 10.98 (10.99)

Q 623.20>58.90 (-)

1.38e5

Q 616.10>59.00 (-)

8.60e1

ISTD 815.00>770.05 (-)

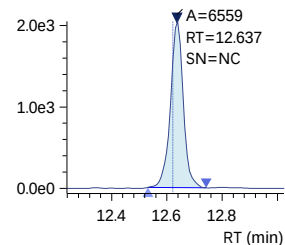
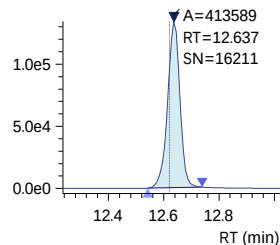
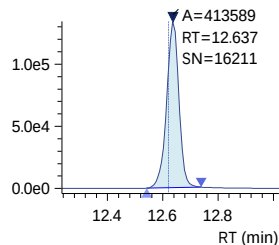
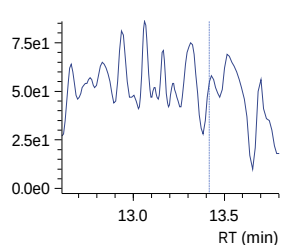
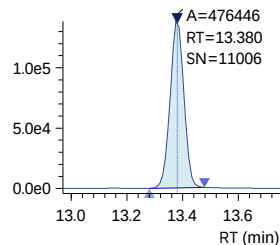
1.34e5

Q 815.00>770.05 (-)

1.34e5

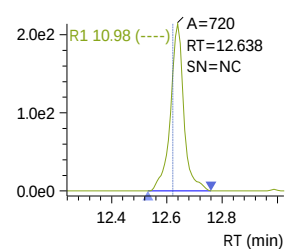
Q 813.00>768.95 (-)

2.05e3



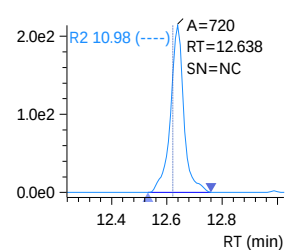
R1 813.00>218.95 (-)

2.14e2



R2 813.00>218.95 (-)

2.14e2





240201_069 (continued)

D3-MeFOSA
Conc. 2.4829

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. ----
R#1 0.00 (160.44)
R#2 0.00 (161.92)

D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 23.7341

Q 515.00>219.00 (-)

1.56e4

ISTD 515.00>219.00 (-)

1.56e4

Q 511.90>219.00 (-)

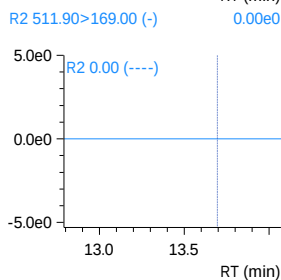
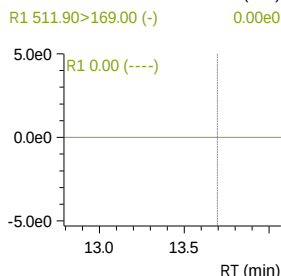
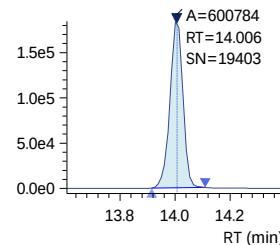
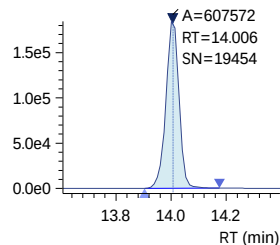
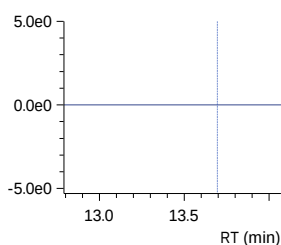
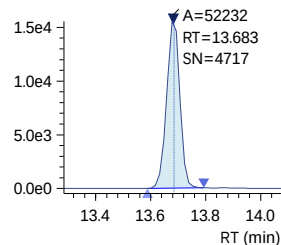
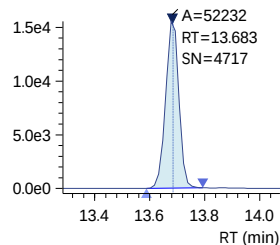
0.00e0

ISTD 639.20>58.90 (-)

1.84e5

Q 639.20>58.90 (-)

1.84e5





240201_069 (continued)

EtFOSE
Conc. ----

D5-EtFOSAm
Conc. 2.3541

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. ----

PFODA
Conc. 0.0543

Q 630.00>59.00 (-)

6.20e1

Q 531.10>219.00 (-)

2.18e4

ISTD 531.10>219.00 (-)

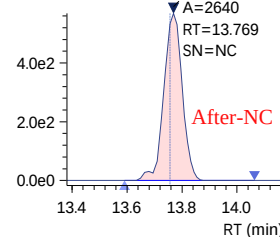
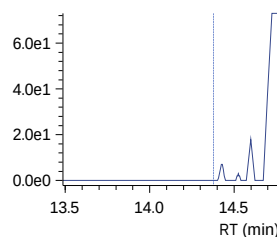
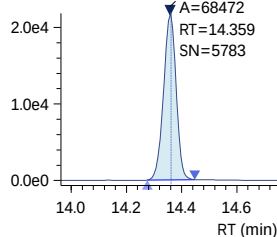
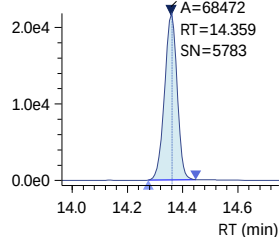
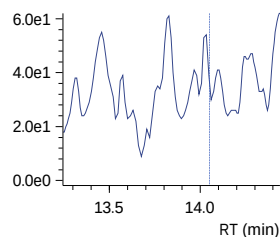
2.18e4

Q 526.00>219.00 (-)

7.30e1

Q 913.00>868.65 (-)

5.69e2

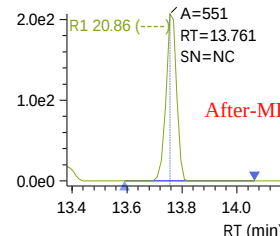
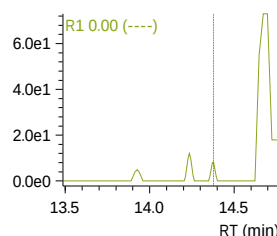


R1 526.00>169.00 (-)

7.30e1

R1 913.00>169.00 (-)

2.07e2

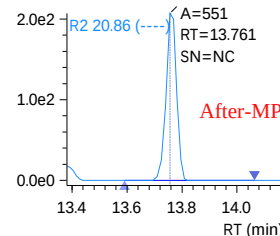
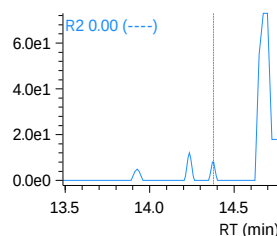


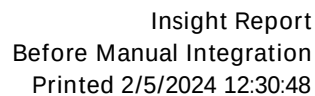
R2 526.00>169.00 (-)

7.30e1

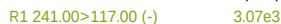
R2 913.00>169.00 (-)

2.07e2





Sample ID: 1633 CCB
Date Acquired: 2/2/2024 12:43:55 PM
Acquired by: System Administrator
Data File: 240201_069
Vial: 54 | Inj. Volume: 10.0000uL | Tray: 1





240201_069 (continued)

13C2-4_2 FTS
Conc. 4.7435

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. ----
R#1 0.00 (32.10)
R#2 0.00 (32.79)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. ----
R#1 0.00 (44.81)
R#2 0.00 (46.72)

Q 329.10>80.90 (-)

4.73e4

ISTD 329.10>80.90 (-)

4.73e4

Q 327.10>307.00 (-)

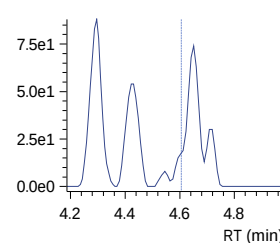
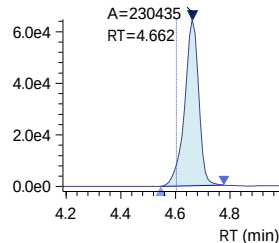
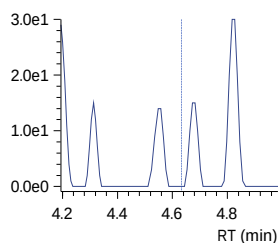
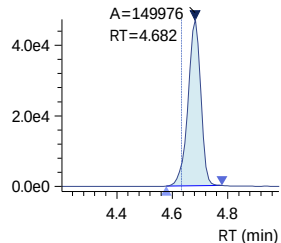
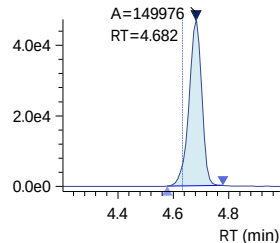
3.00e1

ISTD 302.10>79.90 (-)

6.48e4

Q 298.70>79.90 (-)

8.80e1

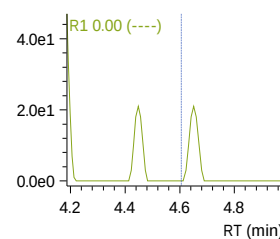
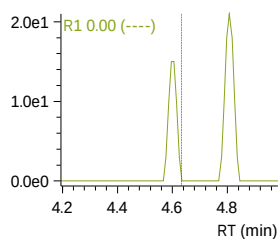


R1 327.10>80.90 (-)

2.10e1

R1 298.70>98.80 (-)

4.70e1

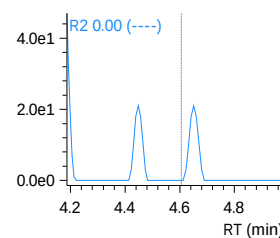
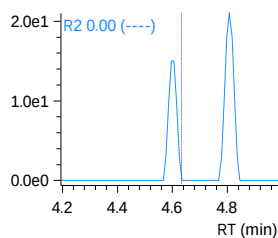


R2 327.10>80.90 (-)

2.10e1

R2 298.70>98.80 (-)

4.70e1





240201_069 (continued)

13C3-PFBS
 Conc. 3.6770

NFDHA
 Conc. ----
 R#1 0.00 (35.54)
 R#2 0.00 (37.91)

13C5-PFHxA
 Conc. 2.6431

13C5-PFHxA_IS
 Conc. 2.5000

13C2-PFHxA_IS
 Conc. 2.5000

Q 302.10>79.90 (-)

6.48e4

Q 295.00>201.00 (-)

1.46e2

Q 318.00>273.00 (-)

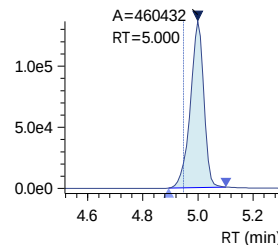
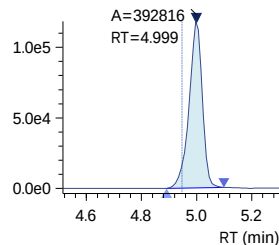
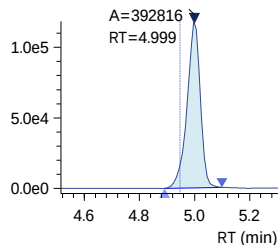
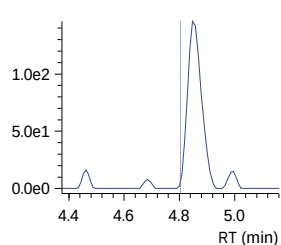
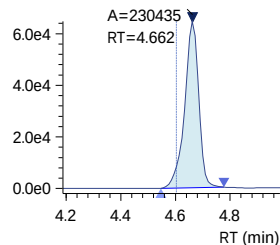
1.18e5

ISTD 318.00>273.00 (-)

1.18e5

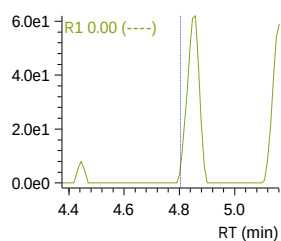
ISTD 315.10>270.00 (-)

1.37e5



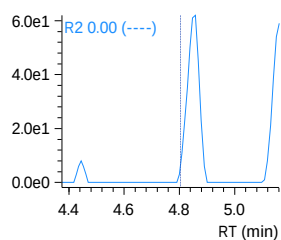
R1 295.00>84.90 (-)

6.20e1



R2 295.00>84.90 (-)

6.20e1





240201_069 (continued)

PFHxA
Conc. 0.0203

PFEESA
Conc. 0.0013
R#1 0.00 (5.22)
R#2 0.00 (5.35)

13C3-HFPO-DA
Conc. 13.8605

13C3-HFPO-DA_IS
Conc. 10.0000

HFPO-DA
Conc. ----
R#1 0.00 (59.79)
R#2 0.00 (58.32)

Q 313.00>269.00 (-)

1.11e3

Q 314.80>135.00 (-)

1.63e2

Q 286.90>168.90 (-)

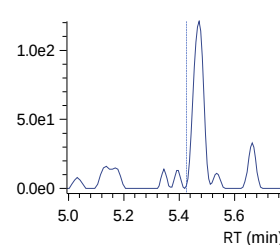
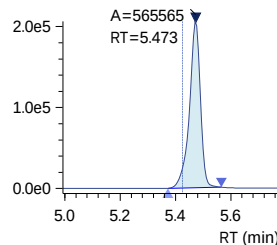
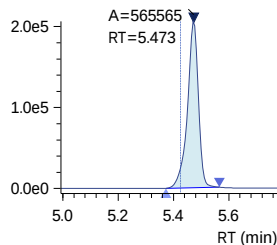
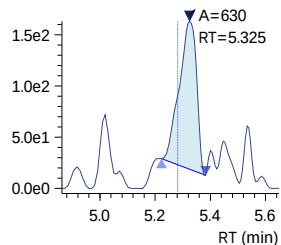
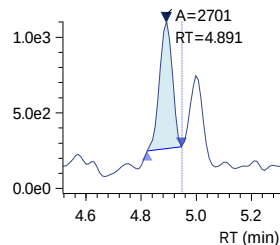
2.06e5

ISTD 286.90>168.90 (-)

2.06e5

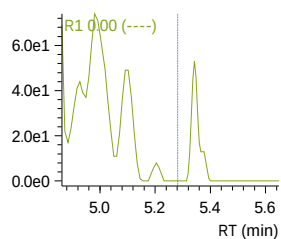
Q 284.90>168.90 (-)

1.21e2



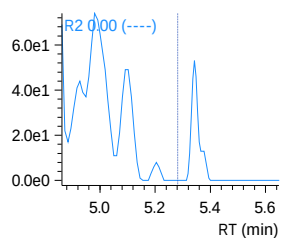
R1 314.80>82.90 (-)

7.40e1



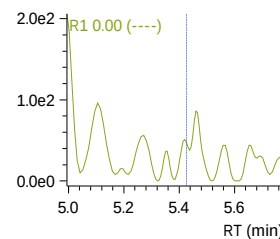
R2 314.80>82.90 (-)

7.40e1



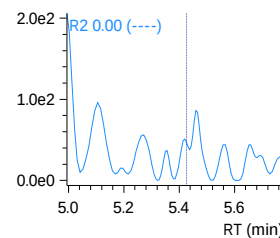
R1 284.90>184.90 (-)

2.06e2



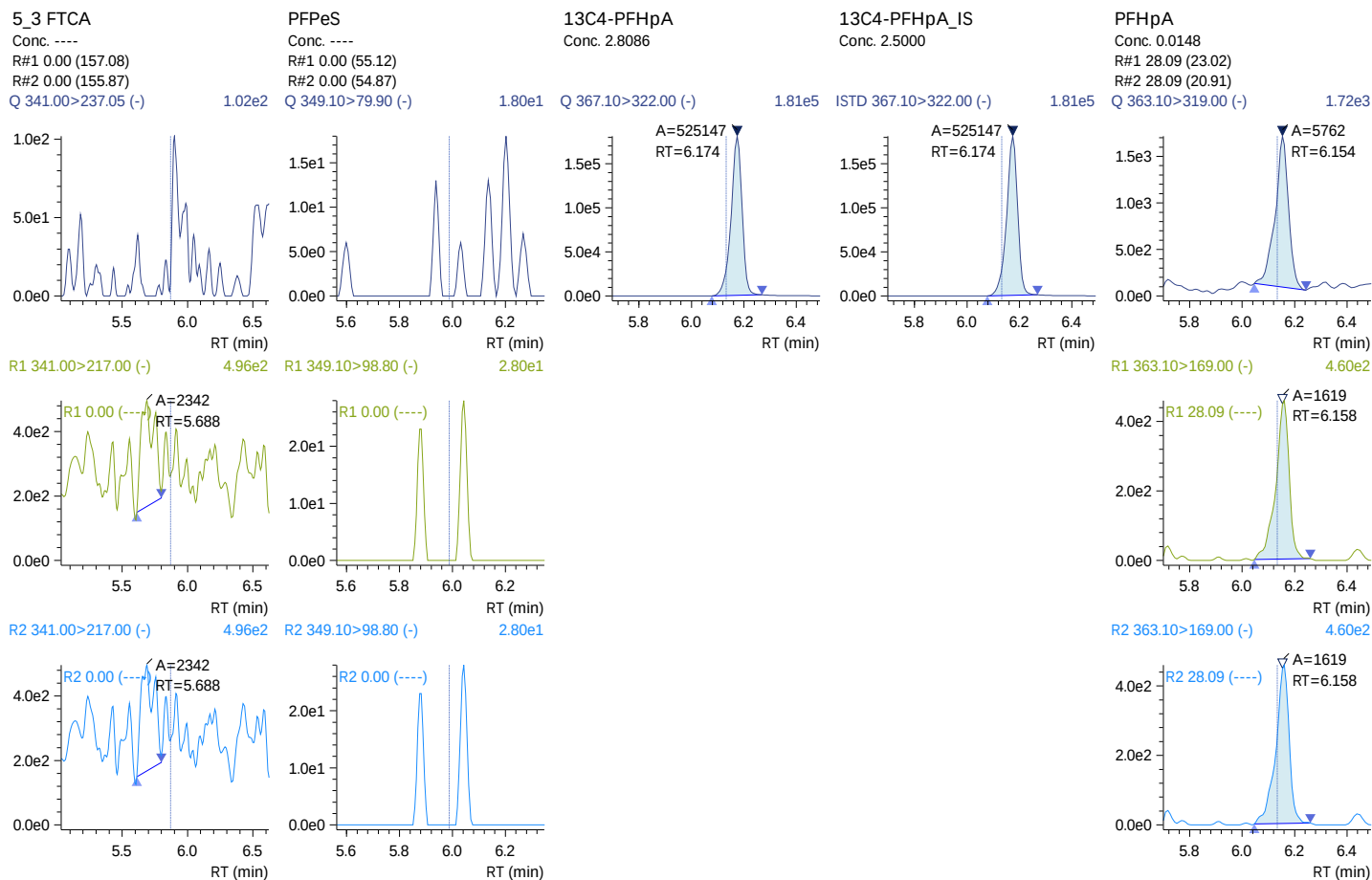
R2 284.90>184.90 (-)

2.06e2



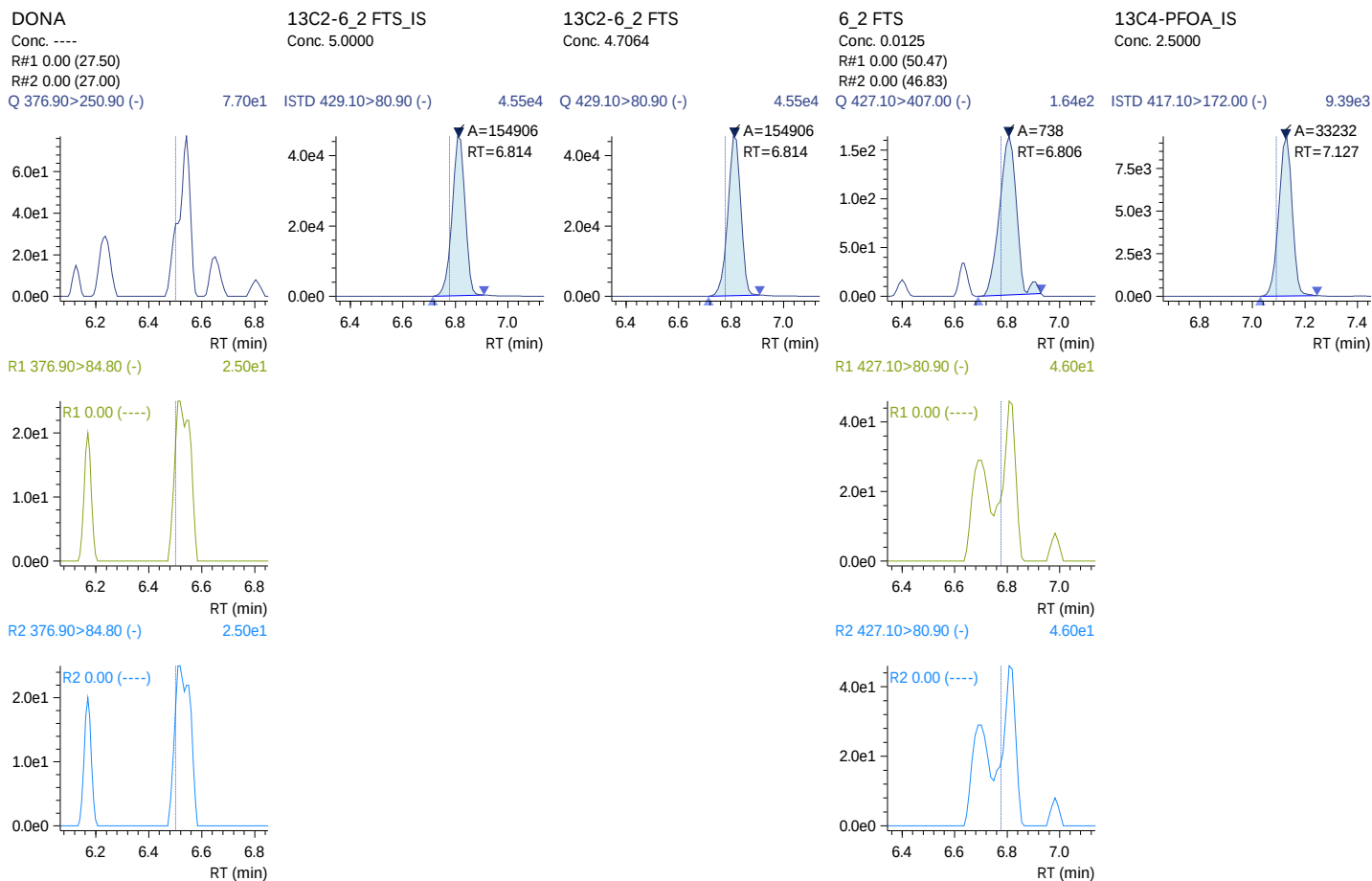


240201_069 (continued)





240201_069 (continued)





240201_069 (continued)

13C8-PFOA_IS
 Conc. 2.5000

13C8-PFOA
 Conc. 2.9834

PFOA
 Conc. 0.0297
 R#1 31.59 (28.77)
 R#2 31.59 (28.12)

13C3-PFHxS
 Conc. 3.2514

13C3-PFHxS_IS
 Conc. 2.5000

ISTD 421.10>376.00 (-)

1.39e5

Q 421.10>376.00 (-)

1.39e5

Q 413.00>369.00 (-)

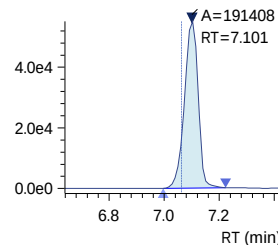
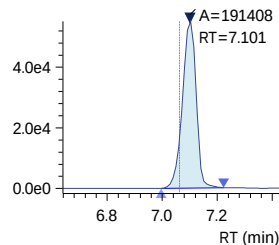
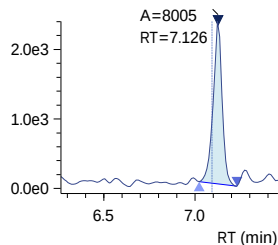
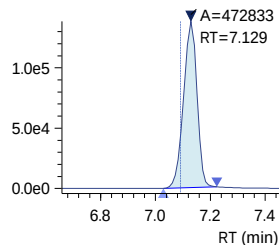
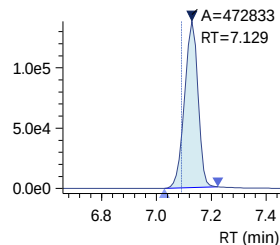
2.40e3

Q 402.10>79.90 (-)

5.51e4

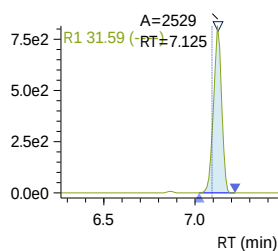
ISTD 402.10>79.90 (-)

5.51e4



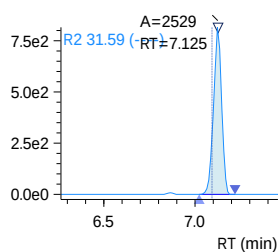
R1 413.00>169.00 (-)

8.15e2



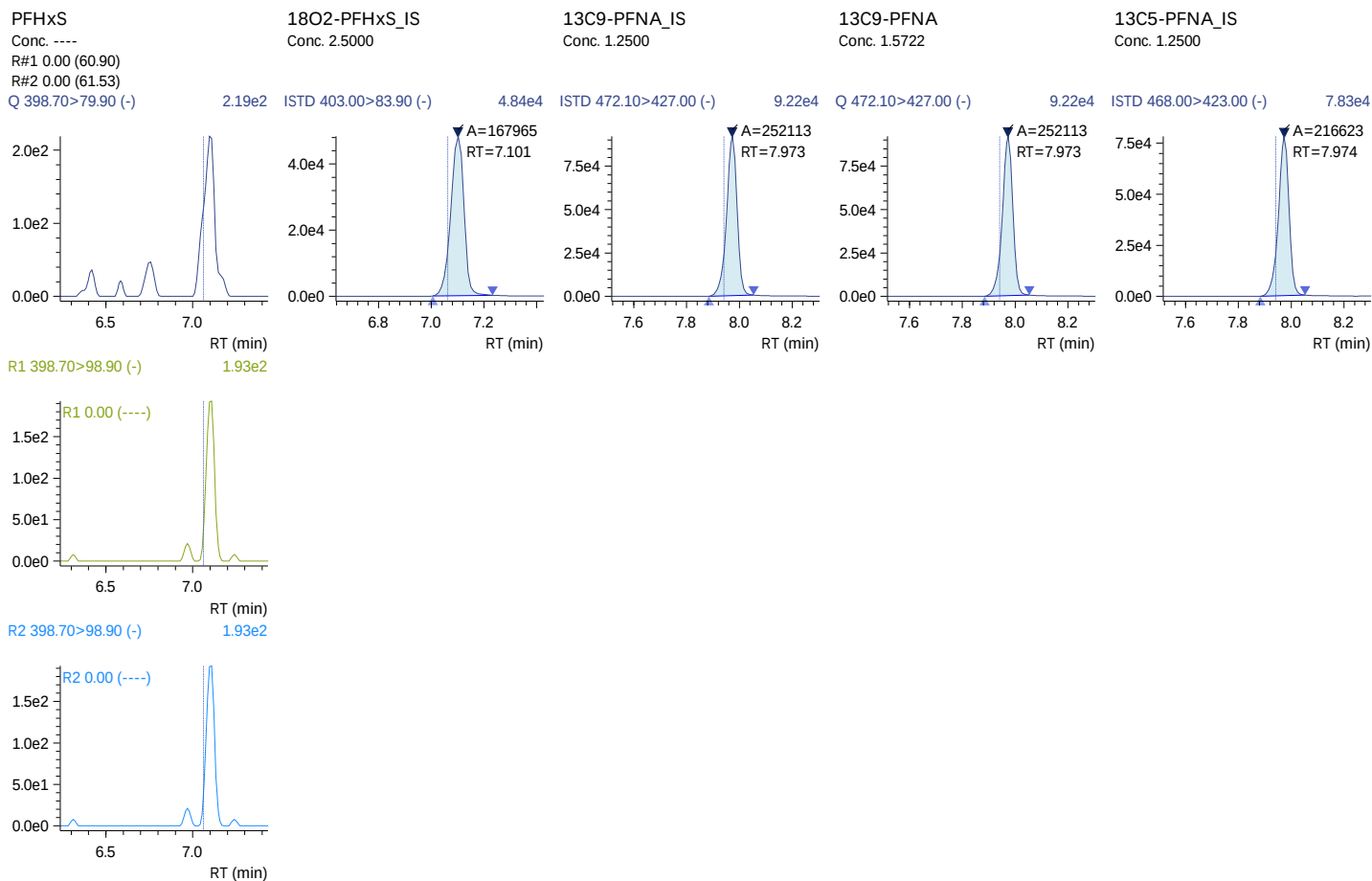
R2 413.00>169.00 (-)

8.15e2



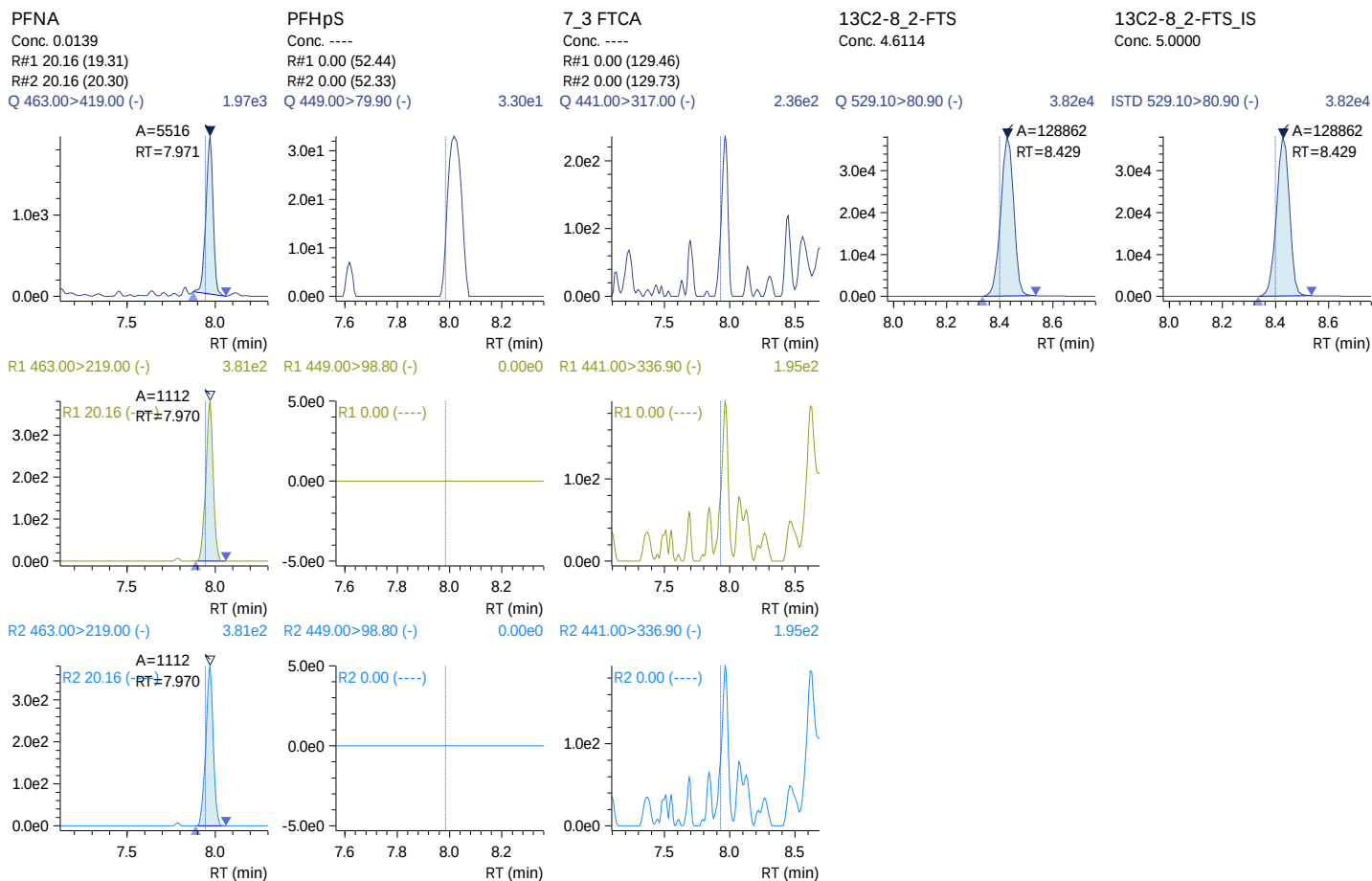


240201_069 (continued)



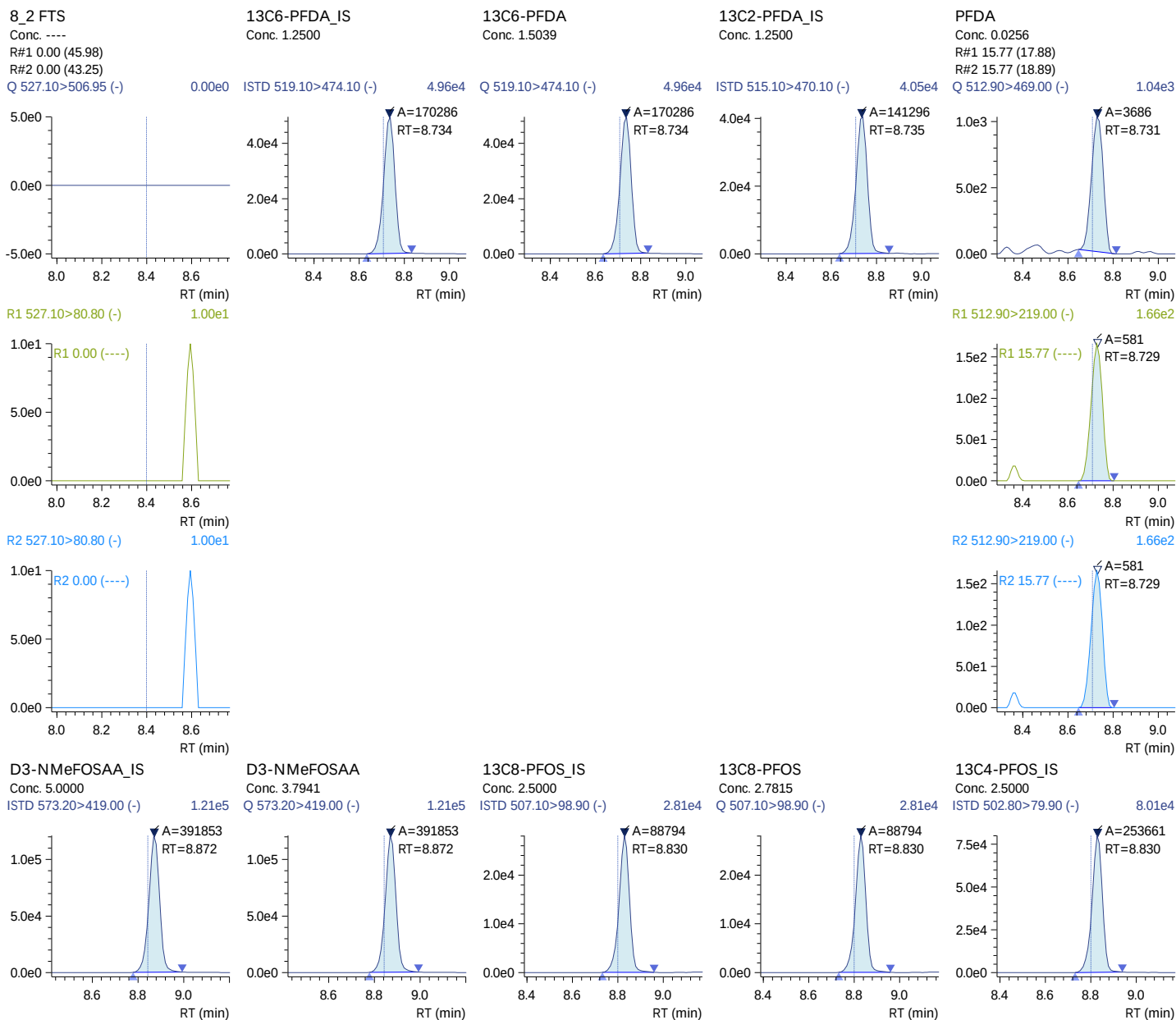


240201_069 (continued)



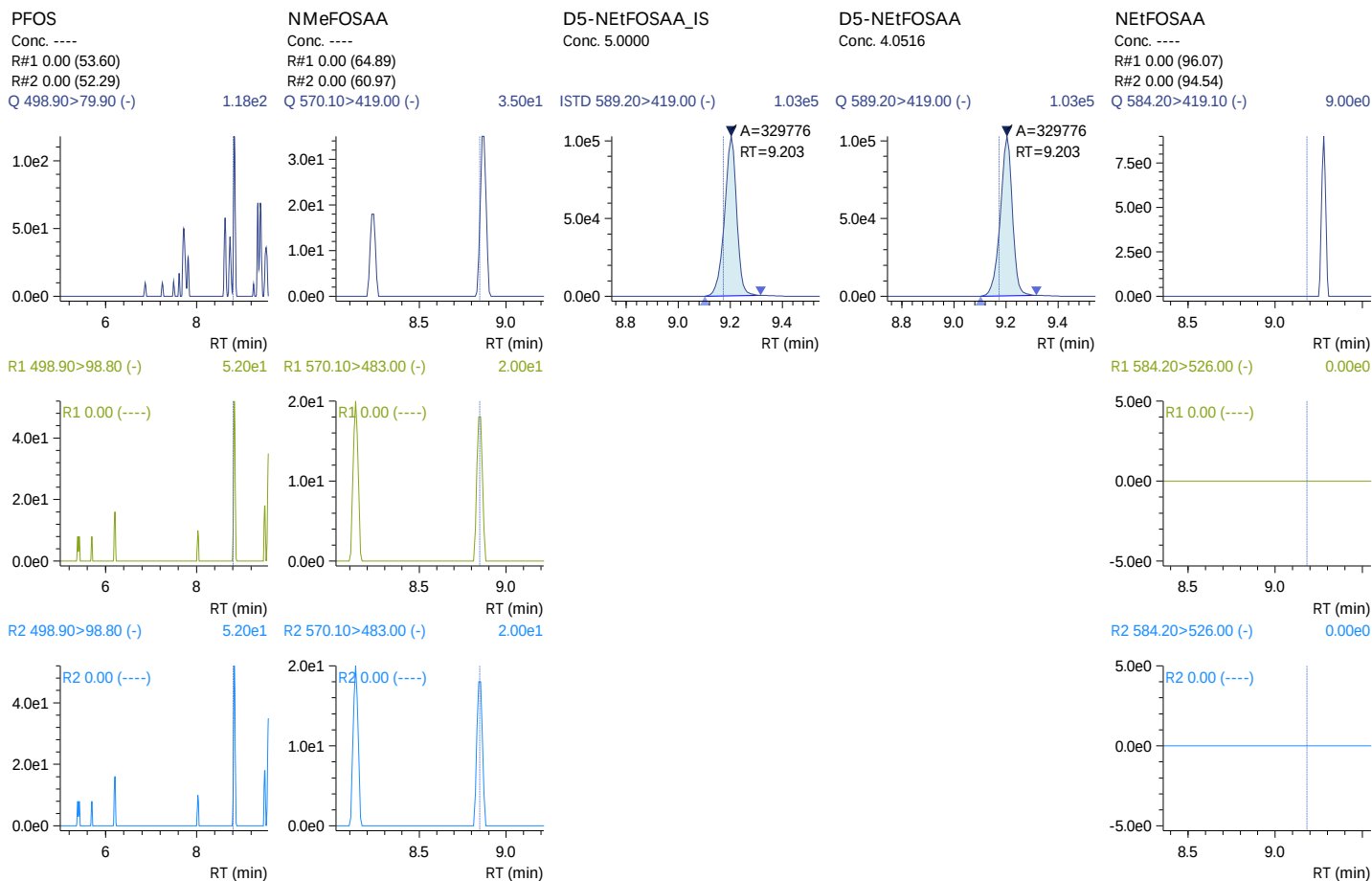


240201_069 (continued)





240201_069 (continued)

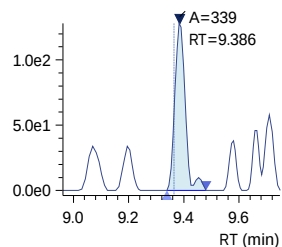




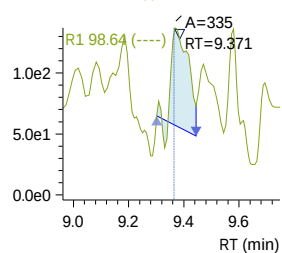
240201_069 (continued)

9-Cl-PF3ONS

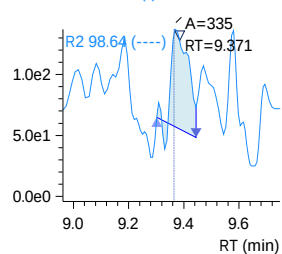
Conc. 0.0006
R#1 98.64 (30.95)
R#2 98.64 (30.61)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-) 1.37e2

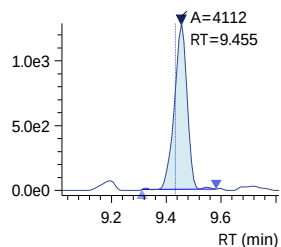


R2 532.80>353.00 (-) 1.37e2

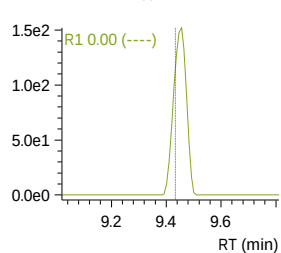


PFUnDA

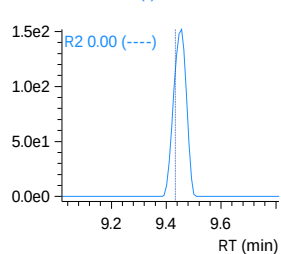
Conc. 0.0054
R#1 0.00 (11.01)
R#2 0.00 (12.02)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-) 1.52e2

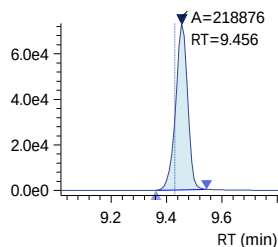


R2 563.10>269.10 (-) 1.52e2



13C7-PFUnDA_IS

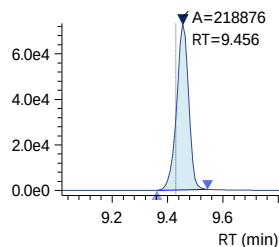
Conc. 1.2500
ISTD 570.00>525.10 (-)



7.34e4

13C7-PFUnDA

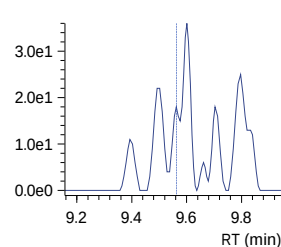
Conc. 1.5557
Q 570.00>525.10 (-)



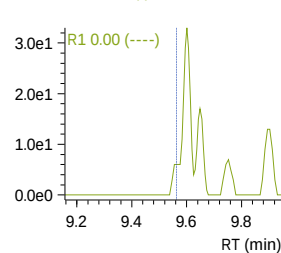
7.34e4

PFNS

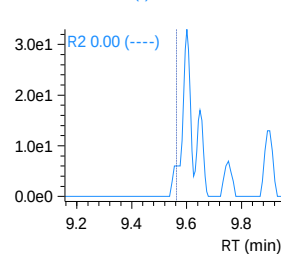
Conc. ----
R#1 0.00 (60.44)
R#2 0.00 (58.51)
Q 548.80>79.90 (-)



3.60e1



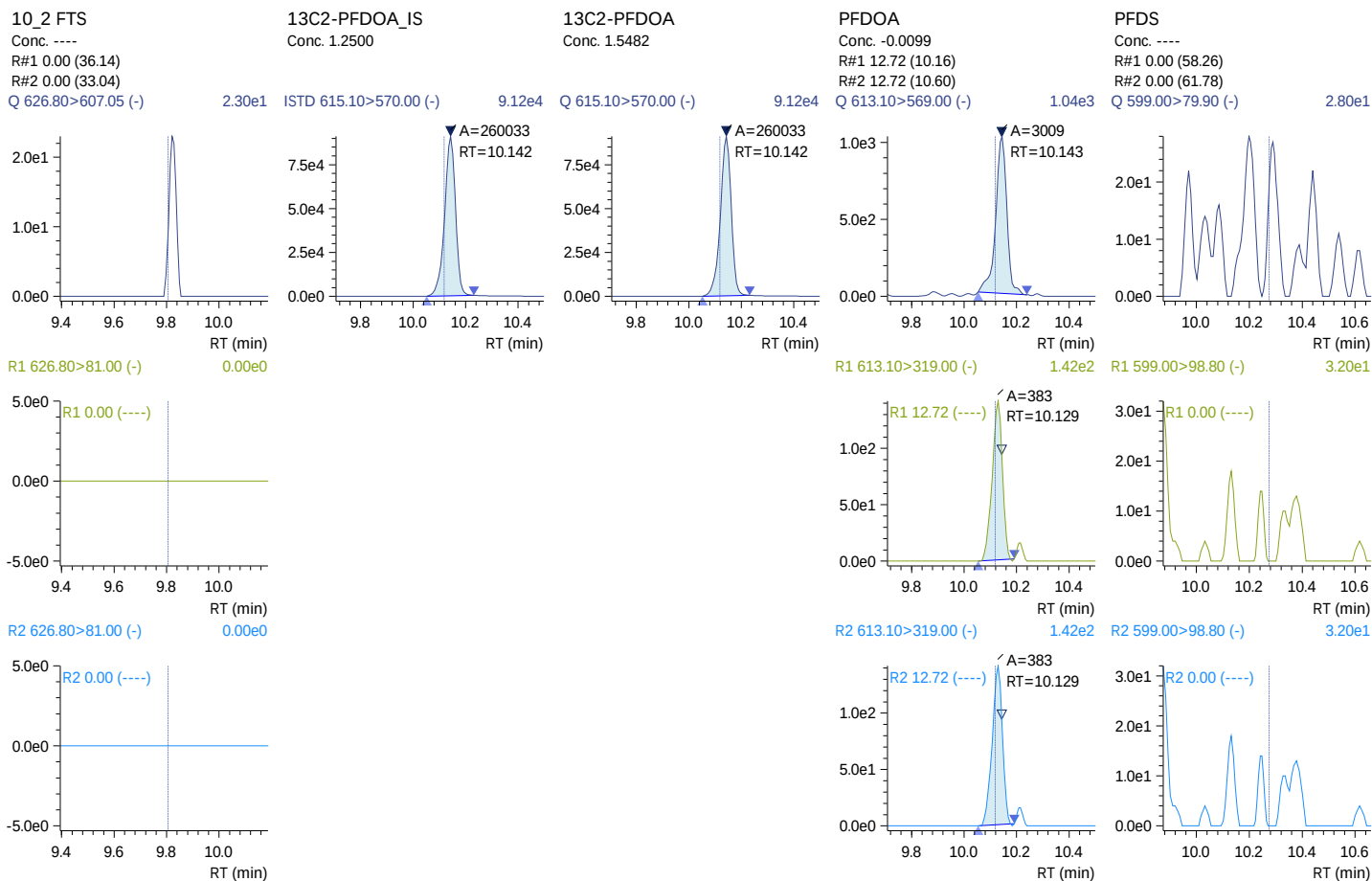
R1 548.80>98.80 (-) 3.30e1



R2 548.80>98.80 (-) 3.30e1

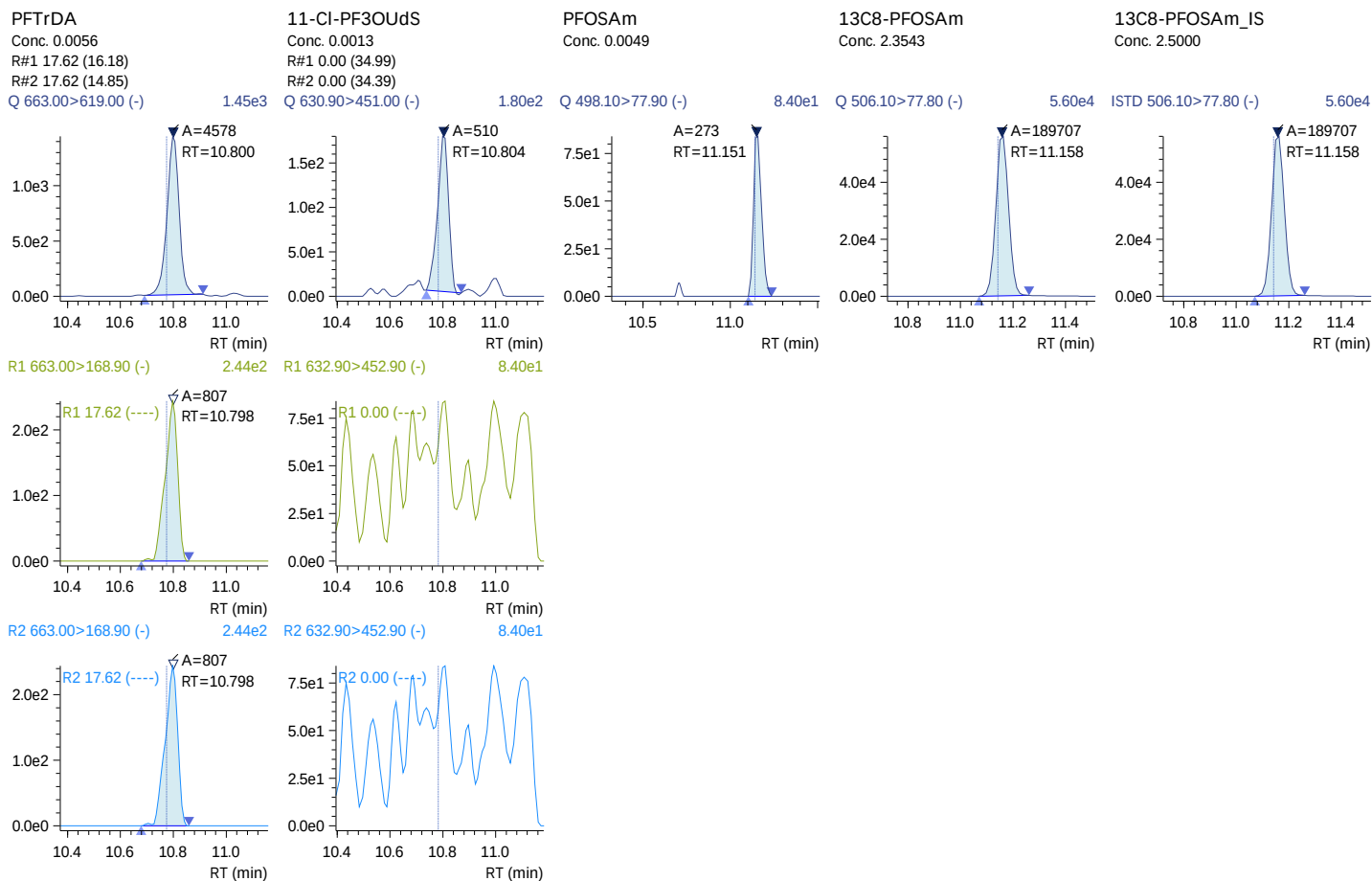


240201_069 (continued)



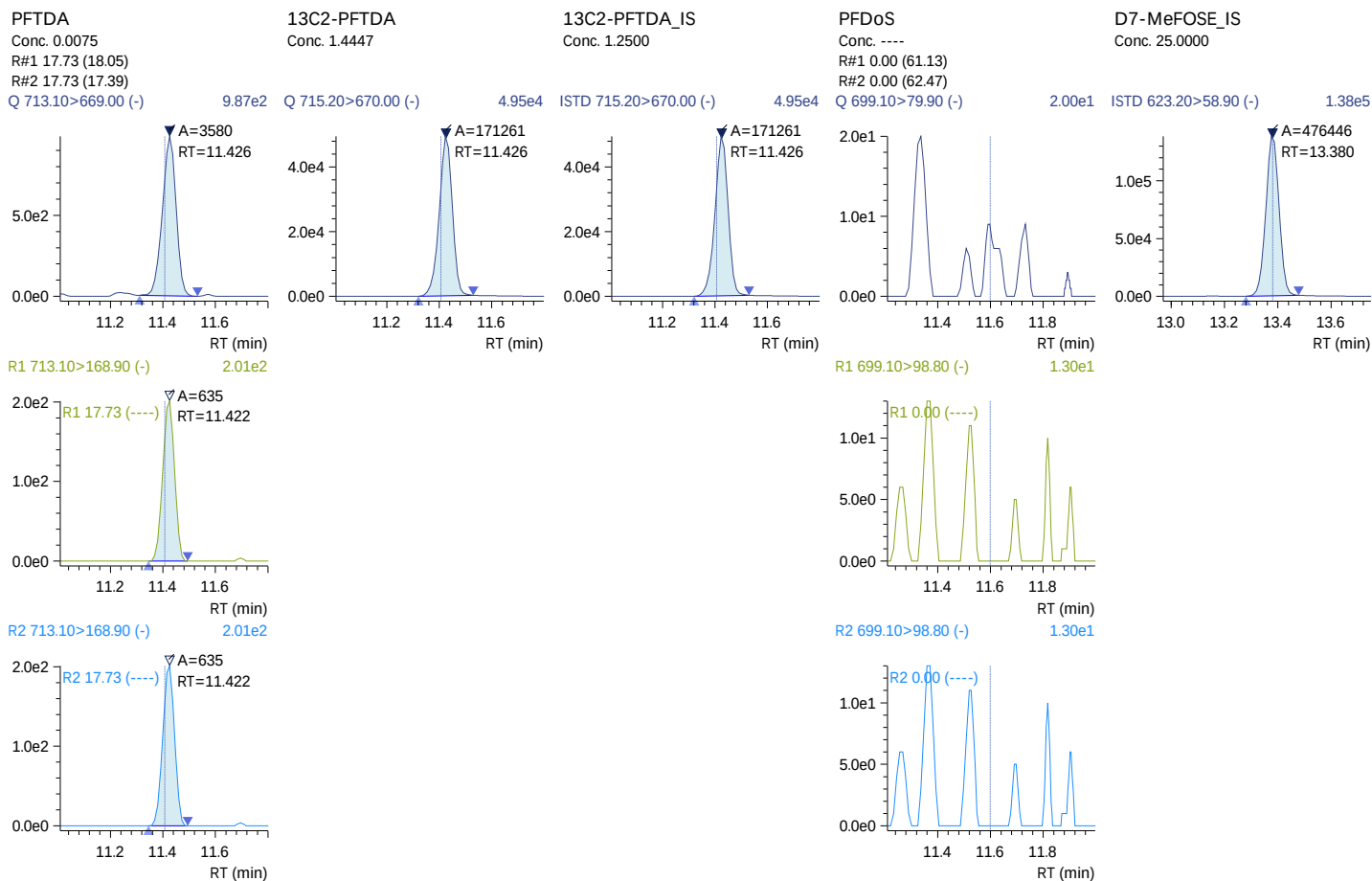


240201_069 (continued)





240201_069 (continued)





240201_069 (continued)

D7-MeFOSE
Conc. 23.0329

MeFOSE
Conc. 0.0037

13C2-PFHDA_IS
Conc. 2.5000

13C2-PFHDA
Conc. 2.6070

PFHXDA

Conc. 0.0293
R#1 10.98 (11.66)
R#2 10.98 (10.99)

Q 623.20>58.90 (-)

1.38e5

Q 616.10>59.00 (-)

8.60e1

ISTD 815.00>770.05 (-)

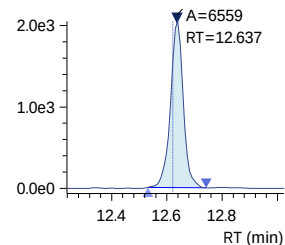
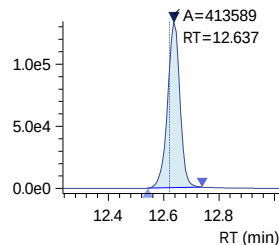
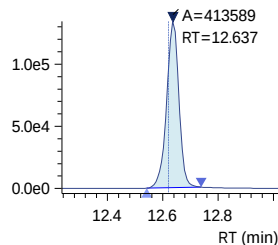
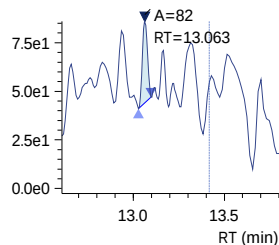
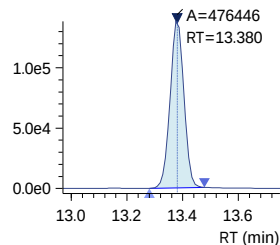
1.34e5

Q 815.00>770.05 (-)

1.34e5

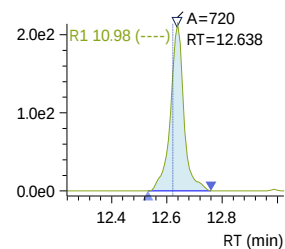
Q 813.00>768.95 (-)

2.05e3



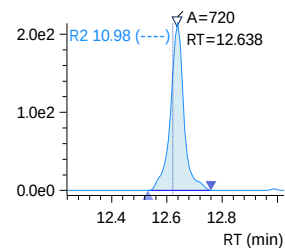
R1 813.00>218.95 (-)

2.14e2



R2 813.00>218.95 (-)

2.14e2





240201_069 (continued)

D3-MeFOSA
 Conc. 2.4829

D3-MeFOSA_IS
 Conc. 2.5000

MeFOSA
 Conc. ----
 R#1 0.00 (160.44)
 R#2 0.00 (161.92)

D9-EtFOSE_IS
 Conc. 25.0000

D9-EtFOSE
 Conc. 23.7341

Q 515.00>219.00 (-)

1.56e4

ISTD 515.00>219.00 (-)

1.56e4

Q 511.90>219.00 (-)

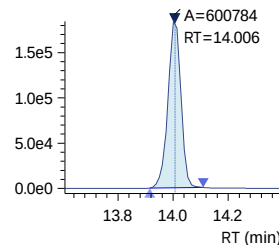
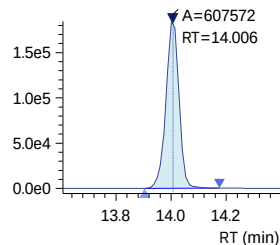
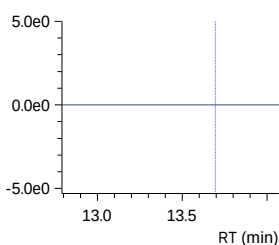
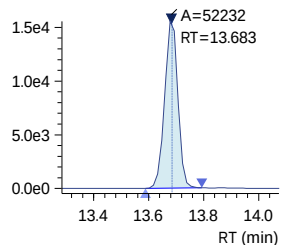
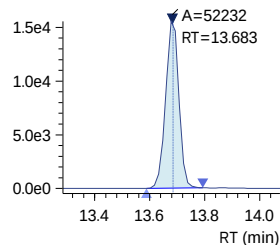
0.00e0

ISTD 639.20>58.90 (-)

1.84e5

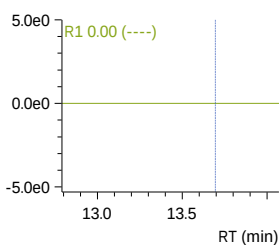
Q 639.20>58.90 (-)

1.84e5



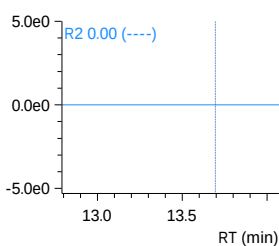
R1 511.90>169.00 (-)

0.00e0



R2 511.90>169.00 (-)

0.00e0





240201_069 (continued)

EtFOSE
 Conc. ----

D5-EtFOSAm
 Conc. 2.3541

D5-EtFOSAm_IS
 Conc. 2.5000

EtFOSAm
 Conc. ----

PFODA
 Conc. 0.0543

Q 630.00>59.00 (-)

6.20e1

Q 531.10>219.00 (-)

2.18e4

ISTD 531.10>219.00 (-)

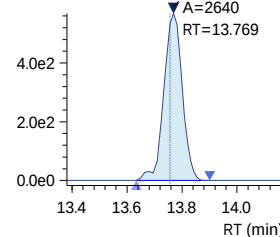
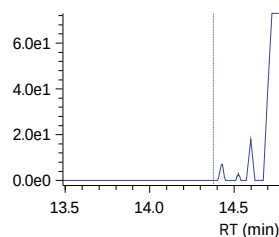
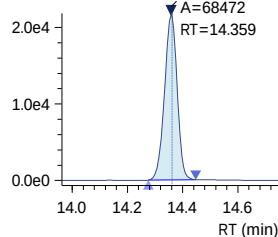
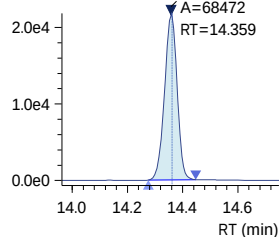
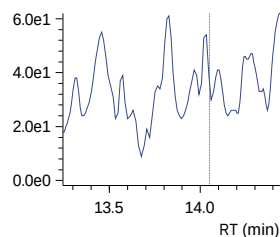
2.18e4

Q 526.00>219.00 (-)

7.30e1

Q 913.00>868.65 (-)

5.69e2

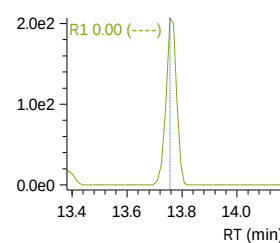
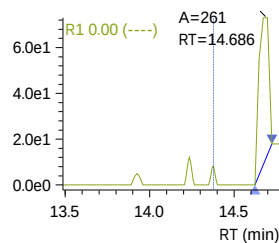


R1 526.00>169.00 (-)

7.30e1

R1 913.00>169.00 (-)

2.07e2

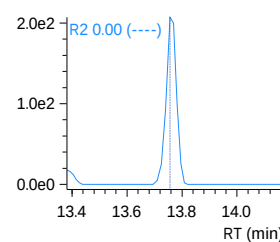
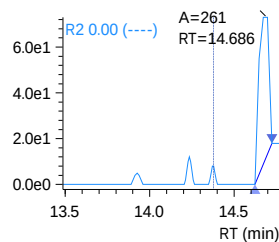


R2 526.00>169.00 (-)

7.30e1

R2 913.00>169.00 (-)

2.07e2



Validation Report

1st *PS* 02/06/24
2nd *MS* 02/06/24

Data File: J:\LCMS08\Data\240201_1633_RA\240201_032
Lab ID: KQ2401707-14
RunType: CCB
Matrix: Water

Date Acquired: 2/1/24 22:23
Batch ID: 831587
Analysis Method: 1633/PFAS_DOD5.4

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery	X	
Continuing Calibration Recovery (Closing)		X
Internal Standards	X	
Surrogates	X	
Above Highest ICAL Level	X	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Continuing Calibration Recovery (Closing)	13C2-6:2 FTS	68	70	130	NR in all samples
	D3-MeFOSAA	68	70	130	NR in all samples
	13C2-8:2 FTS	65	70	130	NR in all samples
	13C2-4:2 FTS	68	70	130	NR in all samples
	D5-EtFOSAA	69	70	130	native in control

Primary Review: _____

Secondary Review: _____

Quantitation Report

1st *PS* 02/06/24
2nd *MS* 02/06/24

Data File:	J:\LCMS08\Data\240201_1633_RA\240201_032	Instrument:	K-LCMS-08
Acqu Date:	2/1/24 22:23	Vial:	8
Run Type:	CCB	Dilution:	1
Lab ID:	KQ2401707-14	Raw Units:	ng/mL

Bottle ID:		Tier:	IV	Matrix:	Water
Prod Code:	PFAS_DOD5.4	Collect Date:	10/31/23	Receive Date:	11/7/23

Analysis Lot:	831587	Prep Lot:		Report Group:	KQ2401707
Analysis	1633	Prep Method:			
		Prep Date:			

Title:	Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM	Calibration ID:	KC2400048
		Report List ID:	24615

Internal Standard Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Area Criteria
18O2-PFHxS	7.076	+0.01	240033	2.5000	OK
13C4-PFOS	8.811	+0.01	309271	2.5000	OK
13C3-PFBA	1.391	+0.04	457635	5.0000	OK
13C2-PFHxA	4.969	+0.02	536476	2.5000	OK
13C4-PFOA	7.106	+0.01	39969	2.5000	OK
13C5-PFNA	7.953	+0.01	314302	1.2500	OK
13C2-PFDA	8.718	+0.01	198870	1.2500	OK

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
13C3-PFBS	4.629	+0.03	287554	3.2108		40 - 135	Y
13C3-PFHxS	7.075	+0.01	252705	3.0038		40 - 130	Y
13C8-PFOS	8.811	+0.01	110475	2.8384		40 - 130	Y
13C4-PFBA	1.391	+0.04	844439	12.4528		5 - 130	Y
13C5-PFPeA	3.485	+0.03	248188	6.4339		40 - 130	Y
13C5-PFHxA	4.969	+0.02	468960	2.7081		40 - 130	Y
13C4-PFHpA	6.149	+0.02	680582	3.1240		40 - 130	Y
13C8-PFOA	7.106	+0.02	582328	3.0550		40 - 130	Y
13C9-PFNA	7.953	+0.01	357203	1.5353		40 - 130	Y
13C6-PFDA	8.718	+0.01	234835	1.4736		40 - 130	Y
13C7-PFUnDA	9.440	+0.01	285961	1.4441		30 - 130	Y
13C2-PFDoDA	10.126	+0.01	334382	1.4145		10 - 130	Y
13C2-PFTeDA	11.414	+0.01	229652	1.3765		10 - 130	Y
13C8-FOSA	11.147	0.00	220280	2.2422		40 - 130	Y
D3-MeFOSA	13.684	0.00	65148	2.5400		10 - 130	Y
D5-EtFOSA	14.361	0.00	88608	2.4986		10 - 130	Y
D7-MeFOSE	13.380	0.00	620149	24.5893		10 - 130	Y
D9-EtFOSE	14.007	0.00	788900	25.5618		10 - 130	Y

			1st	PS	02/06/24
Data File:	J:\LCMS08\Data\240201_1633_RA\240201_032	Instrument:	K-LCMS08	MS	02/06/24
Acqu Date:	2/1/24 22:23	Vial:	8		
Run Type:	CCB	Dilution:	1		
Lab ID:	KQ2401707-14	Raw Units:	ng/mL		

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
D3-MeFOSAA	8.855	+0.01	487185	3.8690		40 - 170	Y
D5-EtFOSAA	9.187	+0.01	419571	4.2280		25 - 135	Y
13C2-4:2 FTS	4.654	+0.02	189003	4.1830		40 - 200	Y
13C2-6:2 FTS	6.791	+0.01	198498	4.2201		40 - 200	Y
13C2-8:2 FTS	8.408	+0.01	165757	4.1507		40 - 300	Y
13C3-HFPO-DA	5.444	+0.02	726325	15.2771		40 - 130	Y

Target Compounds

Final Conc.Units: ng/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Perfluorobutane sulfonic acid (PFBS)	0		0	0	0	U	Y
Perfluoropentane sulfonic acid (PFPeS)	0		0	0	0	U	Y
Perfluorohexane sulfonic acid (PFHxS)	7.080	+0.02	783	0.0071	0.14	U	Y
Perfluoroheptane sulfonic acid (PFHpS)	7.995	+0.01	63	0.0007	0.014	U	Y
Perfluorooctane sulfonic acid (PFOS)	8.612	-0.19	852	0.0090	0.18	U	Y
Perfluorononane sulfonic acid (PFNS)	9.592	+0.03	148	0.0016	0.032	U	Y
Perfluorodecane sulfonic acid (PFDS)	0		0	0	0	U	Y
Perfluorododecane sulfonic acid (PFDoS)	11.607	+0.01	140	0.0027	0.054	U	Y
Perfluorobutanoic acid (PFBA)	1.350	0.00	972	-0.0004	0	U	Y
Perfluoropentanoic acid (PFPeA)	3.498	+0.04	2035	0.0117	0.23	U	Y
Perfluorohexanoic acid (PFHxA)	4.963	+0.01	843	-0.0012	0	U	Y
Perfluoroheptanoic acid (PFHpA)	6.129	-0.01	6327	0.0099	0.20	U	Y
Perfluorooctanoic acid (PFOA)	7.106	+0.01	8037	0.0211	0.42	U	Y
Perfluorononanoic acid (PFNA)	7.951	+0.01	5137	0.0023	0.046	U	Y
Perfluorodecanoic acid (PFDA)	8.717	+0.01	4188	0.0211	0.42	U	Y
Perfluoroundecanoic acid (PFUnDA)	9.441	+0.01	5029	0.0037	0.074	U	Y
Perfluorododecanoic acid (PFDOA)	10.127	+0.01	3679	-0.0110	0	U	Y
Perfluorotridecanoic acid (PFTTrDA)	10.783	+0.01	4456	-0.0018	0	U	Y
Perfluorotetradecanoic acid (PFTDA)	11.417	+0.01	3153	-0.0029	0	U	Y
Perfluorooctane sulfonamide (PFOSAm)	11.141	-0.01	298	0.0039	0.078	U	Y
N-Methylperfluorooctane sulfonamide (MeFOSA)	0		0	0	0	U	Y
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	0		0	0	0	U	Y
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	0		0	0	0	U	Y
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	0		0	0	0	U	Y
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	0		0	0	0	U	Y

		1st	PS	02/06/24
Data File:	J:\LCMS08\Data\240201_1633_RA\240201_032	Instrument:	K-LCMS08	MS 02/06/24
Acqu Date:	2/1/24 22:23	Vial:	8	
Run Type:	CCB	Dilution:	1	
Lab ID:	KQ2401707-14	Raw Units:	ng/mL	

Target Compounds

Final Conc.Units: ng/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	0		0	0	0	U	Y
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	0		0	0	0	U	Y
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	6.788	+0.01	518	0.0068	0.14	U	Y
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	0		0	0	0	U	Y
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	0		0	0	0	U	Y
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	0		0	0	0	U	Y
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	7.947	+0.01	991	0.0402	0.80	U	Y
Perfluoro(2-ethoxyethane) sulfonic acid (PFEEESA)	0		0	0	0	U	Y
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	0		0	0	0	U	Y
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	0		0	0	0	U	Y
Perfluoro-3-methoxypropanoic acid (PFMPA)	0		0	0	0	U	Y
Perfluoro-4-methoxybutanoic acid (PFMBA)	4.012	+0.03	63	0.0006	0.012	U	Y
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	0		0	0	0	U	Y
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	4.820	+0.02	392	0.0040	0.080	U	Y
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	0		0	0	0	U	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 2/6/24 11:52

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240201_032

Sample ID: 1633 CCB
Date Acquired: 2/1/2024 10:23:25 PM
Acquired by: System Administrator
Data File: 240201_032
Vial: 54 | Inj. Volume: 10.0000uL | Tray: 1

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	844439	----	----	----	----	----	----	
13C4-PFBA_IS	216.80>171.90	----	844439	----	----	----	----	----	----	
13C3-PFBA_IS	216.00>172.00	----	457635	----	----	----	----	----	----	
PFBA	212.80>169.05	----	972	----	----	----	----	----	----	
PFMPA	229.00>84.90	----	----	----	----	----	----	----	----	
3_3 FTCA	241.00>177.10	241.00>117.00	----	0	0.00	139.21	----	----	----	
13C5-PFPeA	268.30>223.00	----	248188	----	----	----	----	----	----	
13C5-PFPeA_IS	268.30>223.00	----	248188	----	----	----	----	----	----	
PFPeA	263.00>219.00	----	2035	----	----	----	----	----	----	
PFMBA	279.00>84.95	----	63	----	----	----	----	----	----	
13C2-4_2 FTS	329.10>80.90	----	189003	----	----	----	----	----	----	
13C2-4_2 FTS_IS	329.10>80.90	----	189003	----	----	----	----	----	----	
4_2 FTS	327.10>307.00	327.10>80.90	----	0	0.00	32.10	0	0.00	32.79	
13C3-PFBS_IS	302.10>79.90	----	287554	----	----	----	----	----	----	
PFBS	298.70>79.90	298.70>98.80	----	0	0.00	44.81	0	0.00	46.72	
13C3-PFBS	302.10>79.90	----	287554	----	----	----	----	----	----	
NFDHA	295.00>201.00	295.00>84.90	392	118	30.16	35.54	118	30.16	37.91	
13C5-PFHxA	318.00>273.00	----	468960	----	----	----	----	----	----	
13C5-PFHxA_IS	318.00>273.00	----	468960	----	----	----	----	----	----	
13C2-PFHxA_IS	315.10>270.00	----	536476	----	----	----	----	----	----	
PFHxA	313.00>269.00	----	843	----	----	----	----	----	----	
PFEESA	314.80>135.00	314.80>82.90	----	0	0.00	5.22	0	0.00	5.35	
13C3-HFPO-DA	286.90>168.90	----	726325	----	----	----	----	----	----	
13C3-HFPO-DA_IS	286.90>168.90	----	726325	----	----	----	----	----	----	
HFPO-DA	284.90>168.90	284.90>184.90	----	0	0.00	59.79	0	0.00	58.32	
5_3 FTCA	341.00>237.05	341.00>217.00	----	0	0.00	157.08	0	0.00	155.87	
PFPeS	349.10>79.90	349.10>98.80	----	0	0.00	55.12	0	0.00	54.87	
13C4-PFHpA	367.10>322.00	----	680582	----	----	----	----	----	----	
13C4-PFHpA_IS	367.10>322.00	----	680582	----	----	----	----	----	----	
PFHpA	363.10>319.00	363.10>169.00	6327	1259	19.90	23.02	1259	19.90	20.91	
DONA	376.90>250.90	376.90>84.80	----	0	0.00	27.50	0	0.00	27.00	
13C2-6_2 FTS_IS	429.10>80.90	----	198498	----	----	----	----	----	----	
13C2-6_2 FTS	429.10>80.90	----	198498	----	----	----	----	----	----	
6_2 FTS	427.10>407.00	427.10>80.90	518	99	19.18	50.47	99	19.18	46.83	IRr <MDL
13C4-PFOA_IS	417.10>172.00	----	39969	----	----	----	----	----	----	
13C8-PFOA_IS	421.10>376.00	----	582328	----	----	----	----	----	----	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240201_032 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	582328	----	----	----	----	----	----	----
PFOA	413.00>369.00	413.00>169.00	8037	1667	20.74	28.77	1667	20.74	28.12	
13C3-PFHxS	402.10>79.90	----	252705	----	----	----	----	----	----	----
13C3-PFHxS_IS	402.10>79.90	----	252705	----	----	----	----	----	----	----
PFHxS	398.70>79.90	398.70>98.90	783	683	87.18	60.90	683	87.18	61.53	
18O2-PFHxS_IS	403.00>83.90	----	240033	----	----	----	----	----	----	----
13C9-PFNA_IS	472.10>427.00	----	357203	----	----	----	----	----	----	----
13C9-PFNA	472.10>427.00	----	357203	----	----	----	----	----	----	----
13C5-PFNA_IS	468.00>423.00	----	314302	----	----	----	----	----	----	----
PFNA	463.00>419.00	463.00>219.00	5137	1000	19.46	19.31	1000	19.46	20.30	
PFHpS	449.00>79.90	449.00>98.80	63	30	48.24	52.44	30	48.24	52.33	
7_3 FTCA	441.00>317.00	441.00>336.90	991	1231	124.22	129.46	1231	124.22	129.73	
13C2-8_2-FTS	529.10>80.90	----	165757	----	----	----	----	----	----	----
13C2-8_2-FTS_IS	529.10>80.90	----	165757	----	----	----	----	----	----	----
8_2 FTS	527.10>506.95	527.10>80.80	----	0	0.00	45.98	0	0.00	43.25	
13C6-PFDA_IS	519.10>474.10	----	234835	----	----	----	----	----	----	----
13C6-PFDA	519.10>474.10	----	234835	----	----	----	----	----	----	----
13C2-PFDA_IS	515.10>470.10	----	198870	----	----	----	----	----	----	----
PFDA	512.90>469.00	512.90>219.00	4188	907	21.66	17.88	907	21.66	18.89	
D3-NMeFOSAA_IS	573.20>419.00	----	487185	----	----	----	----	----	----	----
D3-NMeFOSAA	573.20>419.00	----	487185	----	----	----	----	----	----	----
13C8-PFOS_IS	507.10>98.90	----	110475	----	----	----	----	----	----	----
13C8-PFOS	507.10>98.90	----	110475	----	----	----	----	----	----	----
13C4-PFOS_IS	502.80>79.90	----	309271	----	----	----	----	----	----	----
PFOS	498.90>79.90	498.90>98.80	852	776	91.04	53.60	776	91.04	52.29	IRr, RTi <MDL
NMeFOSAA	570.10>419.00	570.10>483.00	----	0	0.00	64.89	0	0.00	60.97	
D5-NEtFOSAA_IS	589.20>419.00	----	419571	----	----	----	----	----	----	----
D5-NEtFOSAA	589.20>419.00	----	419571	----	----	----	----	----	----	----
NEtFOSAA	584.20>419.10	584.20>526.00	----	0	0.00	96.07	0	0.00	94.54	
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	----	0	0.00	30.95	0	0.00	30.61	
PFUnDA	563.10>519.00	563.10>269.10	5029	422	8.40	11.01	422	8.40	12.02	
13C7-PFUnDA_IS	570.00>525.10	----	285961	----	----	----	----	----	----	----
13C7-PFUnDA	570.00>525.10	----	285961	----	----	----	----	----	----	----
PFNS	548.80>79.90	548.80>98.80	148	72	48.24	60.44	72	48.24	58.51	
10_2 FTS	626.80>607.05	626.80>81.00	----	0	0.00	36.14	0	0.00	33.04	
13C2-PFDOA_IS	615.10>570.00	----	334382	----	----	----	----	----	----	----
13C2-PFDOA	615.10>570.00	----	334382	----	----	----	----	----	----	----
PFDOA	613.10>569.00	613.10>319.00	3679	322	8.75	10.16	322	8.75	10.60	
PFDS	599.00>79.90	599.00>98.80	----	0	0.00	58.26	0	0.00	61.78	
PFTrDA	663.00>619.00	663.00>168.90	4456	632	14.19	16.18	632	14.19	14.85	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240201_032 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	----	0	0.00	34.99	0	0.00	34.39	
PFOSAm	498.10>77.90	----	298	----	----	----	----	----	----	
13C8-PFOSAm	506.10>77.80	----	220280	----	----	----	----	----	----	
13C8-PFOSAm_IS	506.10>77.80	----	220280	----	----	----	----	----	----	
PFTDA	713.10>669.00	713.10>168.90	3153	634	20.11	18.05	634	20.11	17.39	
13C2-PFTDA	715.20>670.00	----	229652	----	----	----	----	----	----	
13C2-PFTDA_IS	715.20>670.00	----	229652	----	----	----	----	----	----	
PFDoS	699.10>79.90	699.10>98.80	140	31	22.27	61.13	31	22.27	62.47	IRr <MDL
D7-MeFOSE_IS	623.20>58.90	----	620149	----	----	----	----	----	----	
D7-MeFOSE	623.20>58.90	----	620149	----	----	----	----	----	----	
MeFOSE	616.10>59.00	----	----	----	----	----	----	----	----	
13C2-PFHxDA_IS	815.00>770.05	----	524710	----	----	----	----	----	----	
13C2-PFHxDA	815.00>770.05	----	524710	----	----	----	----	----	----	
PFHxDA	813.00>768.95	813.00>218.95	6837	654	9.56	11.66	654	9.56	10.99	
D3-MeFOSA	515.00>219.00	----	65148	----	----	----	----	----	----	
D3-MeFOSA_IS	515.00>219.00	----	65148	----	----	----	----	----	----	
MeFOSA	511.90>219.00	511.90>169.00	----	0	0.00	160.44	0	0.00	161.92	
D9-EtFOSE_IS	639.20>58.90	----	798240	----	----	----	----	----	----	
D9-EtFOSE	639.20>58.90	----	788900	----	----	----	----	----	----	
EtFOSE	630.00>59.00	----	----	----	----	----	----	----	----	
D5-EtFOSAm	531.10>219.00	----	88608	----	----	----	----	----	----	
D5-EtFOSAm_IS	531.10>219.00	----	88608	----	----	----	----	----	----	
EtFOSAm	526.00>219.00	526.00>169.00	----	0	0.00	159.63	0	0.00	172.60	
PFODA	913.00>868.65	913.00>169.00	2689	937	34.84	36.03	937	34.84	35.02	

Flag ID key: IRr: Ion Ratio (Relative), RTi: RT Diff (Absolute ISTD)



240201_032

Sample ID: 1633 CCB
Date Acquired: 2/1/2024 10:23:25 PM
Acquired by: System Administrator
Data File: 240201_032
Vial: 54 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.391	0.038	0.000	844439	457635	13C3-PFBA_IS	12.4528	ng/mL	
13C4-PFBA_IS	Auto	1.391	0.038	----	844439	844439	----	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.391	0.036	----	457635	457635	----	5.0000	ng/mL	
PFBA	M	1.350	-0.006	-0.041	972	844439	13C4-PFBA_IS	-0.0004	ng/mL	
PFMPA	ND(W/B)	----	----	----	----	248188	13C5-PFPeA_IS	----	ng/mL	
3_3 FTCA	ND(W/B)	----	----	----	----	248188	13C5-PFPeA_IS	----	ng/mL	
13C5-PFPeA	Auto	3.485	0.030	-1.484	248188	536476	13C2-PFHxA_IS	6.4339	ng/mL	
13C5-PFPeA_IS	Auto	3.485	0.030	----	248188	248188	----	5.0000	ng/mL	
PFPeA	Auto	3.498	0.040	0.013	2035	248188	13C5-PFPeA_IS	0.0117	ng/mL	
PFMBA	M	4.012	0.028	0.527	63	248188	13C5-PFPeA_IS	0.0006	ng/mL	
13C2-4_2 FTS	Auto	4.654	0.021	-2.422	189003	240033	18O2-PFHxS_IS	4.1830	ng/mL	
13C2-4_2 FTS_IS	Auto	4.654	0.021	----	189003	189003	----	5.0000	ng/mL	
4_2 FTS	ND(W/B)	----	----	----	----	189003	13C2-4_2 FTS_IS	----	ng/mL	
13C3-PFBS_IS	Auto	4.629	0.026	----	287554	287554	----	2.5000	ng/mL	
PFBS	ND(W/B)	----	----	----	----	287554	13C3-PFBS_IS	----	ng/mL	
13C3-PFBS	Auto	4.629	0.026	-2.447	287554	240033	18O2-PFHxS_IS	3.2108	ng/mL	
NFDHA	M	4.820	0.015	-0.149	392	468960	13C5-PFHxA_IS	0.0040	ng/mL	
13C5-PFHxA	Auto	4.969	0.022	0.000	468960	536476	13C2-PFHxA_IS	2.7081	ng/mL	
13C5-PFHxA_IS	Auto	4.969	0.022	----	468960	468960	----	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	4.969	0.022	----	536476	536476	----	2.5000	ng/mL	
PFHxA	M	4.963	0.014	-0.006	843	468960	13C5-PFHxA_IS	-0.0012	ng/mL	
PFEESA	ND(W/B)	----	----	----	----	468960	13C5-PFHxA_IS	----	ng/mL	
13C3-HFPO-DA	Auto	5.444	0.019	0.475	726325	536476	13C2-PFHxA_IS	15.2771	ng/mL	
13C3-HFPO-DA_IS	Auto	5.444	0.019	----	726325	726325	----	10.0000	ng/mL	
HFPO-DA	ND(W/B)	----	----	----	----	726325	13C3-HFPO-DA_IS	----	ng/mL	
5_3 FTCA	ND(W/B)	----	----	----	----	468960	13C5-PFHxA_IS	----	ng/mL	
PFPeS	ND(W/B)	----	----	----	----	252705	13C3-PFHxS_IS	----	ng/mL	
13C4-PFHpA	Auto	6.149	0.017	1.180	680582	536476	13C2-PFHxA_IS	3.1240	ng/mL	
13C4-PFHpA_IS	Auto	6.149	0.017	----	680582	680582	----	2.5000	ng/mL	
PFHpA	Auto	6.129	-0.005	-0.020	6327	680582	13C4-PFHpA_IS	0.0099	ng/mL	
DONA	ND(W/B)	----	----	----	----	726325	13C3-HFPO-DA_IS	----	ng/mL	
13C2-6_2 FTS_IS	Auto	6.791	0.013	----	198498	198498	----	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.791	0.013	-0.285	198498	240033	18O2-PFHxS_IS	4.2201	ng/mL	
6_2 FTS	M	6.788	0.011	-0.003	518	198498	13C2-6_2 FTS_IS	0.0068	ng/mL	IRr
13C4-PFOA_IS	Auto	7.106	0.015	----	39969	39969	----	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.106	0.015	----	582328	582328	----	2.5000	ng/mL	
13C8-PFOA	Auto	7.106	0.015	0.000	582328	39969	13C4-PFOA_IS	3.0550	ng/mL	
PFOA	Auto	7.106	0.013	0.000	8037	582328	13C8-PFOA_IS	0.0211	ng/mL	
13C3-PFHxS	Auto	7.075	0.013	-0.001	252705	240033	18O2-PFHxS_IS	3.0038	ng/mL	
13C3-PFHxS_IS	Auto	7.075	0.013	----	252705	252705	----	2.5000	ng/mL	
PFHxS	M	7.080	0.018	0.005	783	252705	13C3-PFHxS_IS	0.0071	ng/mL	
18O2-PFHxS_IS	Auto	7.076	0.014	----	240033	240033	----	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.953	0.012	----	357203	357203	----	1.2500	ng/mL	
13C9-PFNA	Auto	7.953	0.012	0.000	357203	314302	13C5-PFNA_IS	1.5353	ng/mL	
13C5-PFNA_IS	Auto	7.953	0.011	----	314302	314302	----	1.2500	ng/mL	
PFNA	Auto	7.951	0.008	-0.002	5137	357203	13C9-PFNA_IS	0.0023	ng/mL	
PFHpS	M	7.995	0.012	-0.816	63	110475	13C8-PFOS_IS	0.0007	ng/mL	
7_3 FTCA	M	7.947	0.019	2.978	991	468960	13C5-PFHxA_IS	0.0402	ng/mL	
13C2-8_2-FTS	Auto	8.408	0.009	1.332	165757	240033	18O2-PFHxS_IS	4.1507	ng/mL	
13C2-8_2-FTS_IS	Auto	8.408	0.009	----	165757	165757	----	5.0000	ng/mL	
8_2 FTS	ND(W/B)	----	----	----	----	165757	13C2-8_2-FTS_IS	----	ng/mL	
13C6-PFDA_IS	Auto	8.718	0.011	----	234835	234835	----	1.2500	ng/mL	
13C6-PFDA	Auto	8.718	0.011	0.000	234835	198870	13C2-PFDA_IS	1.4736	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_032 (continued)

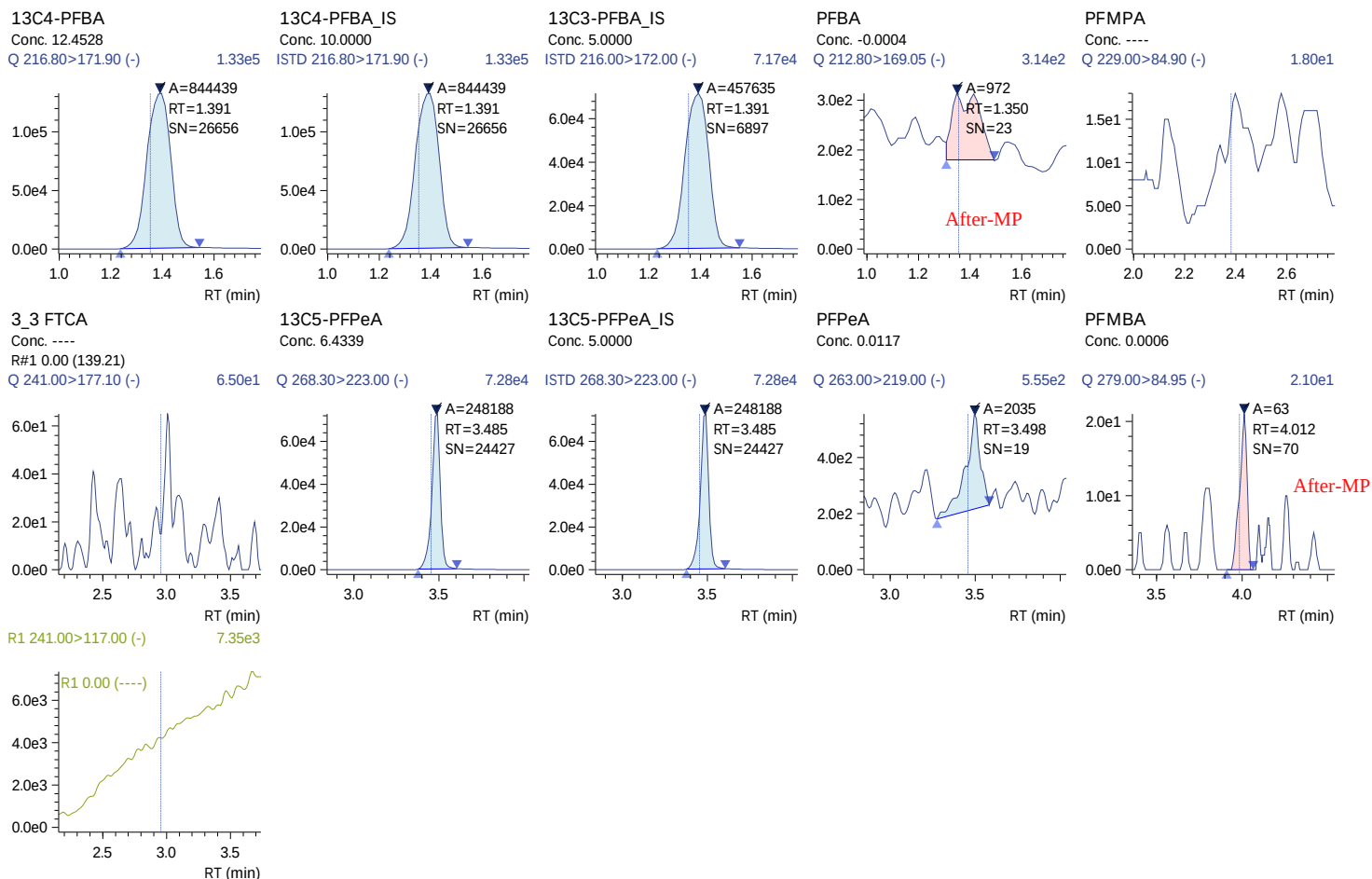
(Table continued from previous page)

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C2-PFDA_IS	Auto	8.718	0.010	----	198870	198870	----	1.2500	ng/mL	
PFDA	Auto	8.717	0.008	-0.001	4188	234835	13C6-PFDA_IS	0.0211	ng/mL	
D3-NMeFOSAA_IS	Auto	8.855	0.012	----	487185	487185	----	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.855	0.012	0.044	487185	309271	13C4-PFOS_IS	3.8690	ng/mL	
13C8-PFOS_IS	Auto	8.811	0.011	----	110475	110475	----	2.5000	ng/mL	
13C8-PFOS	Auto	8.811	0.011	0.000	110475	309271	13C4-PFOS_IS	2.8384	ng/mL	
13C4-PFOS_IS	Auto	8.811	0.011	----	309271	309271	----	2.5000	ng/mL	
PFOS	M	8.612	-0.189	-0.199	852	110475	13C8-PFOS_IS	0.0090	ng/mL	IRr, RTi
NMeFOSAA	ND(W/B)	----	----	----	----	487185	D3-NMeFOSAA_IS	----	ng/mL	
D5-NetFOSAA_IS	Auto	9.187	0.015	----	419571	419571	----	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.187	0.015	0.376	419571	309271	13C4-PFOS_IS	4.2280	ng/mL	
NetFOSAA	ND(W/B)	----	----	----	----	419571	D5-NetFOSAA_IS	----	ng/mL	
9-CI-PF3ONS	ND(W/B)	----	----	----	----	726325	13C3-HFPO-DA_IS	----	ng/mL	
PFUnDA	M	9.441	0.008	0.001	5029	285961	13C7-PFUnDA_IS	0.0037	ng/mL	
13C7-PFUnDA_IS	Auto	9.440	0.010	----	285961	285961	----	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.440	0.010	0.722	285961	198870	13C2-PFDA_IS	1.4441	ng/mL	
PFNS	M	9.592	0.030	0.781	148	110475	13C8-PFOS_IS	0.0016	ng/mL	
10_2 FTS	ND(W/B)	----	----	----	----	165757	13C2-8_2-FTS_IS	----	ng/mL	
13C2-PFDOA_IS	Auto	10.126	0.008	----	334382	334382	----	1.2500	ng/mL	
13C2-PFDOA	Auto	10.126	0.008	1.408	334382	198870	13C2-PFDA_IS	1.4145	ng/mL	
PFDOA	Auto	10.127	0.008	0.001	3679	334382	13C2-PFDOA_IS	-0.0110	ng/mL	
PFDS	ND(W/B)	----	----	----	----	110475	13C8-PFOS_IS	----	ng/mL	
PFTDA	Auto	10.783	0.008	-0.631	4456	229652	13C2-PFTDA_IS	-0.0018	ng/mL	
11-CI-PF3OUdS	ND(W/B)	----	----	----	----	726325	13C3-HFPO-DA_IS	----	ng/mL	
PFOSAm	M	11.141	-0.001	-0.006	298	220280	13C8-PFOSAm_IS	0.0039	ng/mL	
13C8-PFOSAm	Auto	11.147	0.005	2.336	220280	309271	13C4-PFOS_IS	2.2422	ng/mL	
13C8-PFOSAm_IS	Auto	11.147	0.005	----	220280	220280	----	2.5000	ng/mL	
PFTDA	Auto	11.417	0.009	0.003	3153	229652	13C2-PFTDA_IS	-0.0029	ng/mL	
13C2-PFTDA	Auto	11.414	0.008	2.696	229652	198870	13C2-PFDA_IS	1.3765	ng/mL	
13C2-PFTDA_IS	Auto	11.414	0.008	----	229652	229652	----	1.2500	ng/mL	
PFDoS	M	11.607	0.008	2.796	140	110475	13C8-PFOS_IS	0.0027	ng/mL	IRr
D7-MeFOSE_IS	Auto	13.380	0.000	----	620149	620149	----	25.0000	ng/mL	
D7-MeFOSE	Auto	13.380	0.000	4.569	620149	309271	13C4-PFOS_IS	24.5893	ng/mL	
MeFOSE	ND(W/B)	----	----	----	----	620149	D7-MeFOSE_IS	----	ng/mL	
13C2-PFHxDA_IS	Auto	12.627	0.007	----	524710	524710	----	2.5000	ng/mL	
13C2-PFHxDA	Auto	12.627	0.007	3.909	524710	198870	13C2-PFDA_IS	2.3499	ng/mL	
PFHxDA	Auto	12.629	0.008	0.002	6837	524710	13C2-PFHxDA_IS	0.0241	ng/mL	
D3-MeFOSA	Auto	13.684	-0.001	4.873	65148	309271	13C4-PFOS_IS	2.5400	ng/mL	
D3-MeFOSA_IS	Auto	13.684	-0.001	----	65148	65148	----	2.5000	ng/mL	
MeFOSA	ND(W/B)	----	----	----	----	65148	D3-MeFOSA_IS	----	ng/mL	
D9-EtFOSE_IS	Auto	14.007	-0.001	----	798240	798240	----	25.0000	ng/mL	
D9-EtFOSE	Auto	14.007	-0.001	5.196	788900	309271	13C4-PFOS_IS	25.5618	ng/mL	
EtFOSE	ND(W/B)	----	----	----	----	798240	D9-EtFOSE_IS	----	ng/mL	
D5-EtFOSAm	Auto	14.361	0.000	5.550	88608	309271	13C4-PFOS_IS	2.4986	ng/mL	
D5-EtFOSAm_IS	Auto	14.361	0.000	----	88608	88608	----	2.5000	ng/mL	
EtFOSAm	ND(W/B)	----	----	----	----	88608	D5-EtFOSAm_IS	----	ng/mL	
PFODA	Auto	13.762	0.006	1.135	2689	524710	13C2-PFHxDA_IS	0.0485	ng/mL	

Flag ID key: IRr: Ion Ratio (Relative), RTi: RT Diff (Absolute ISTD)



240201_032 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_032 (continued)

13C2-4_2_FTS
Conc. 4.1830

13C2-4_2_FTS_IS
Conc. 5.0000

4_2_FTS
Conc. ----
R#1 0.00 (32.10)
R#2 0.00 (32.79)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. ----
R#1 0.00 (44.81)
R#2 0.00 (46.72)

Q 329.10>80.90 (-)

5.87e4

ISTD 329.10>80.90 (-)

5.87e4

Q 327.10>307.00 (-)

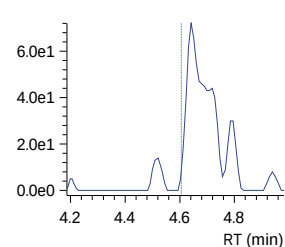
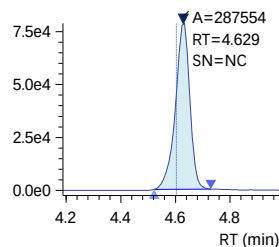
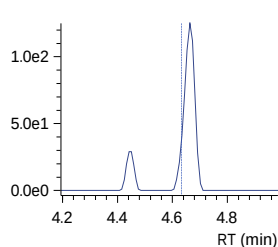
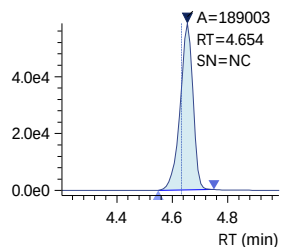
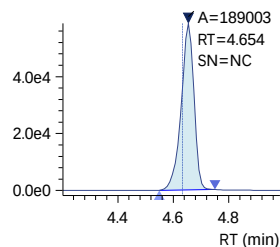
1.25e2

ISTD 302.10>79.90 (-)

7.89e4

Q 298.70>79.90 (-)

7.20e1

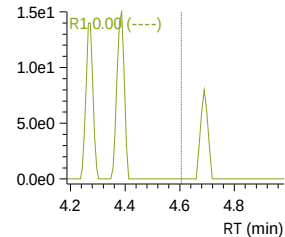
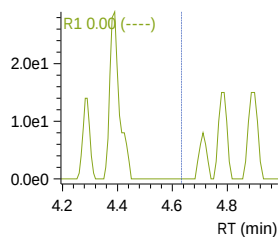


R1 327.10>80.90 (-)

2.90e1

R1 298.70>98.80 (-)

1.50e1

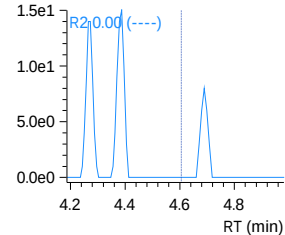
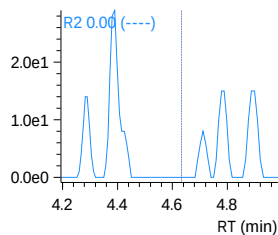


R2 327.10>80.90 (-)

2.90e1

R2 298.70>98.80 (-)

1.50e1





240201_032 (continued)

13C3-PFBS
Conc. 3.2108

NFDHA
Conc. 0.0040
R#1 30.16 (35.54)
R#2 30.16 (37.91)

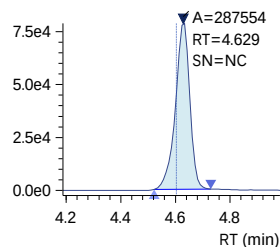
13C5-PFHxA
Conc. 2.7081

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

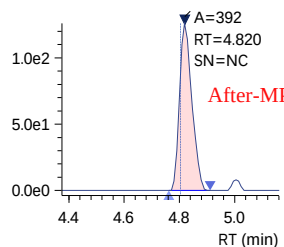
Q 302.10>79.90 (-)

7.89e4



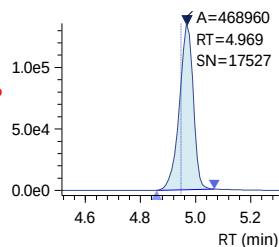
Q 295.00>201.00 (-)

1.26e2



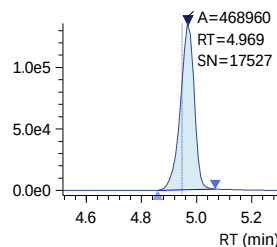
Q 318.00>273.00 (-)

1.36e5



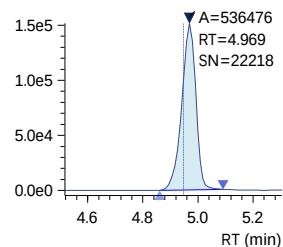
ISTD 318.00>273.00 (-)

1.36e5



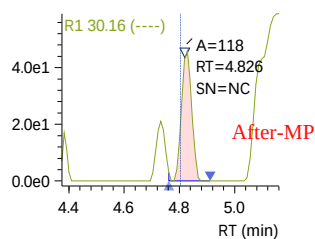
ISTD 315.10>270.00 (-)

1.52e5



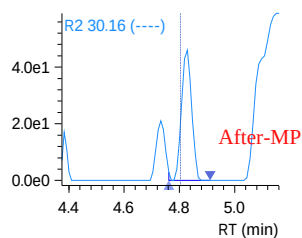
R1 295.00>84.90 (-)

5.90e1



R2 295.00>84.90 (-)

5.90e1



PFHxA
Conc. -0.0012

PFEESA
Conc. ----
R#1 0.00 (5.22)
R#2 0.00 (5.25)

13C3-HFPO-DA
Conc. 15.2771

13C3-HFPO-DA_IS
Conc. 10.0000

HFPO-DA
Conc. ----

Q 313.00>269.00 (-)

1.06e3 Q 314.80>135.00 (-)

1.67e2 Q 286.90>168.90 (-)

2.62e5 ISTD 286.90>168.90 (-)

Q 284.90 > 168.90 (-)

A=843
RT=4.963
SN=19

After-

3 After-WP

R1 314.80>82.90 (-)

6.80e1

A=726325
RT=5.444
SN=88558

2.0e5
1.0e5
0.0e0

5.0 5.2 5.4 5.6
RT (min)

R1 284.90>184.90 (-)

9.30e1

R2 314.80>82.90 (-)

6.80e1

3. 10.00 (---

R2 284.90>184.90 (-)

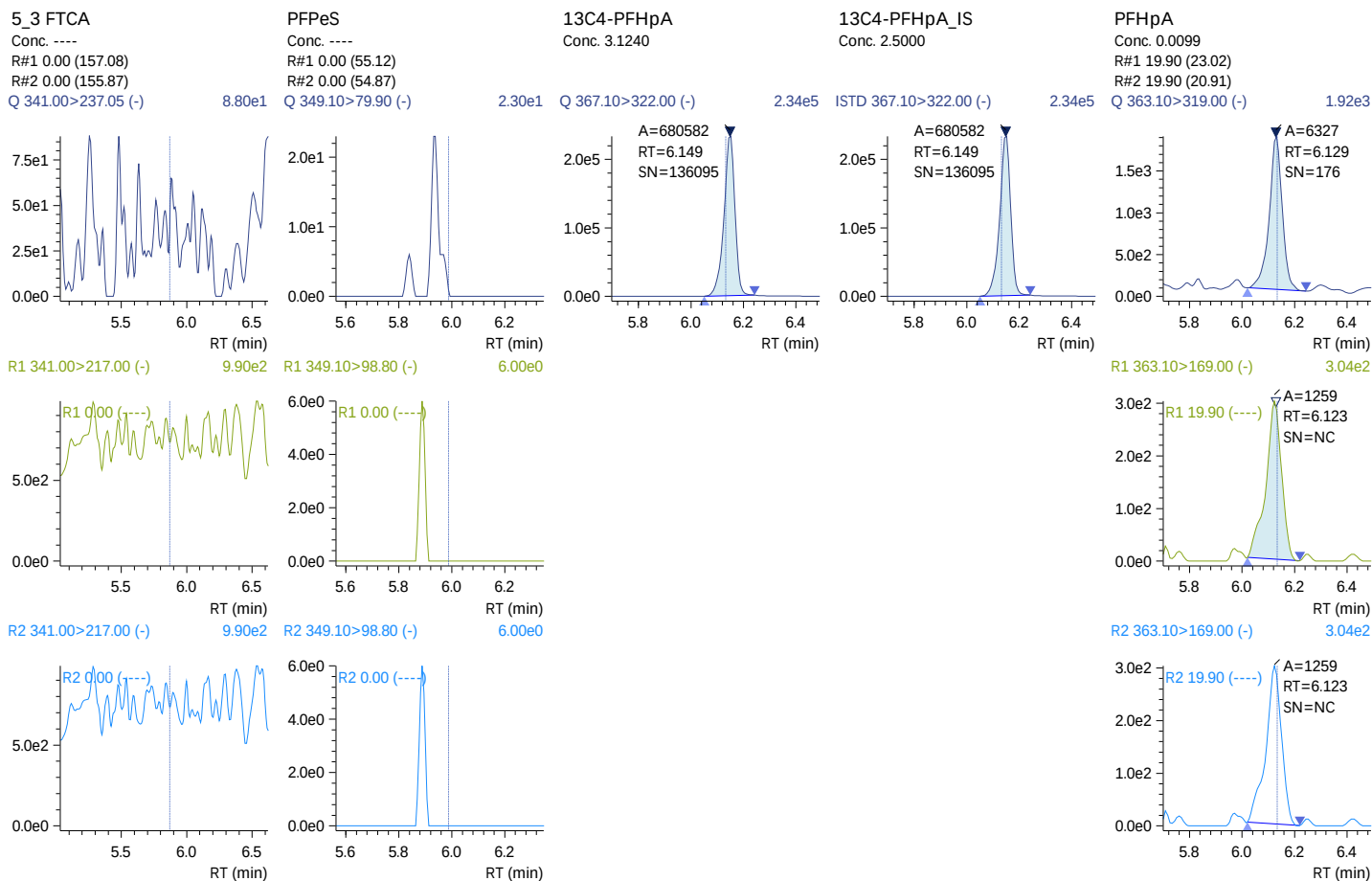
9.30e1

1P2 0.00 (----)

As



240201_032 (continued)

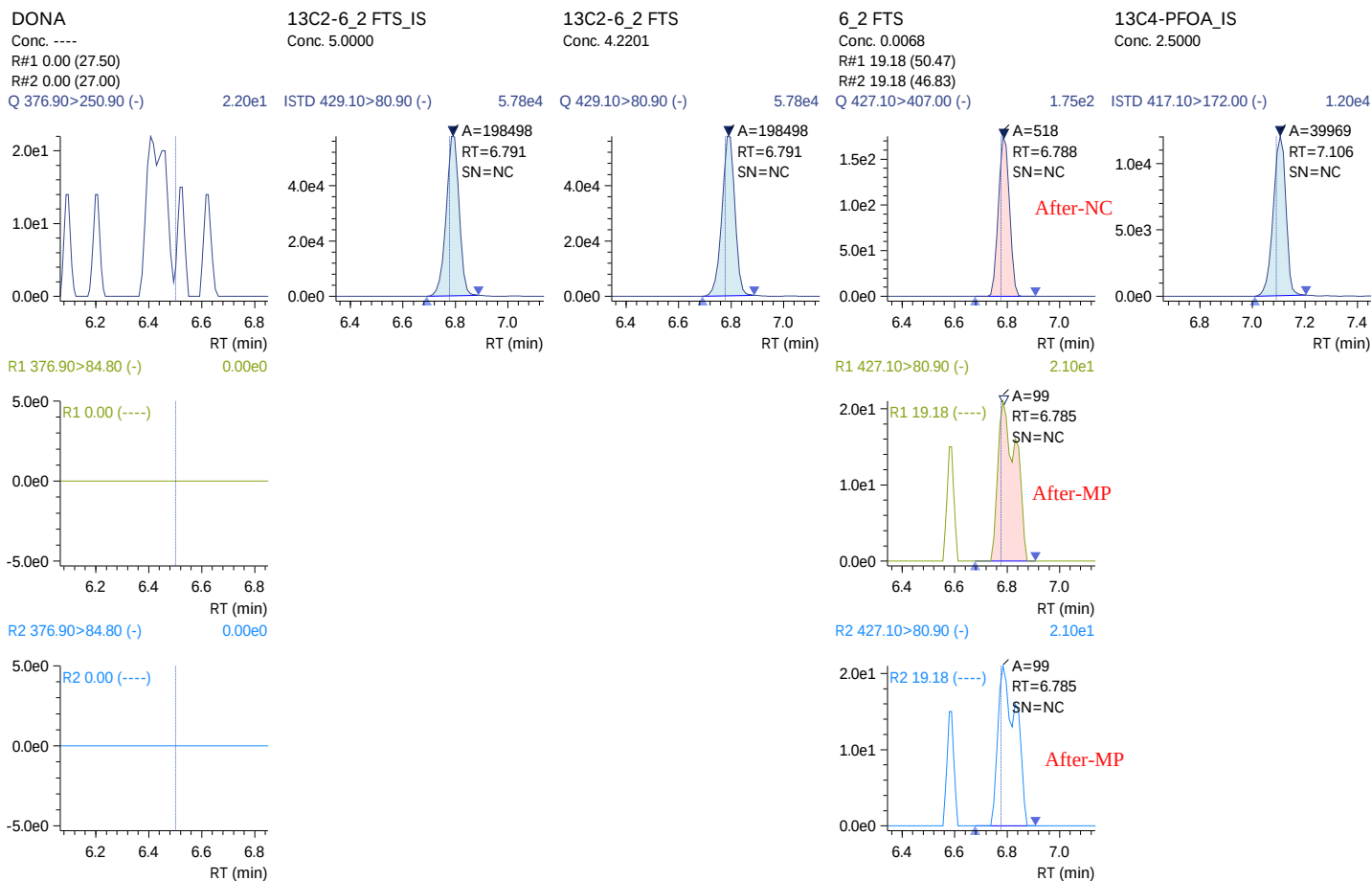


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_032 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_032 (continued)

13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 3.0550

PFOA
Conc. 0.0211
R#1 20.74 (28.77)
R#2 20.74 (28.12)

13C3-PFHxS
Conc. 3.0038

13C3-PFHxS_IS
Conc. 2.5000

ISTD 421.10>376.00 (-)

1.75e5

Q 421.10>376.00 (-)

1.75e5

Q 413.00>369.00 (-)

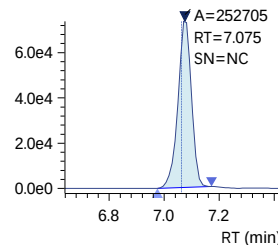
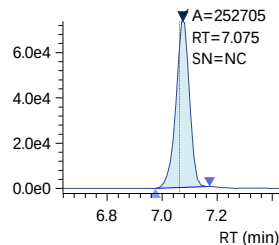
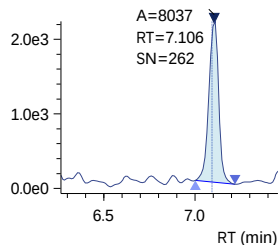
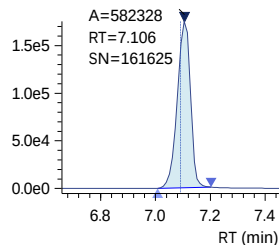
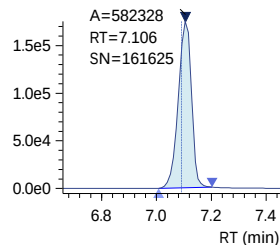
2.24e3

Q 402.10>79.90 (-)

7.38e4

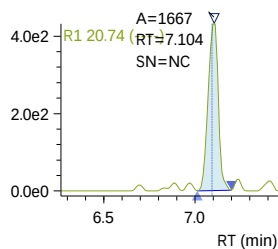
ISTD 402.10>79.90 (-)

7.38e4



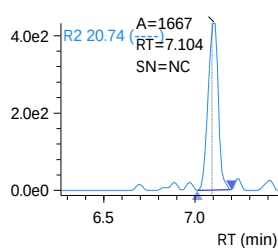
R1 413.00>169.00 (-)

4.32e2



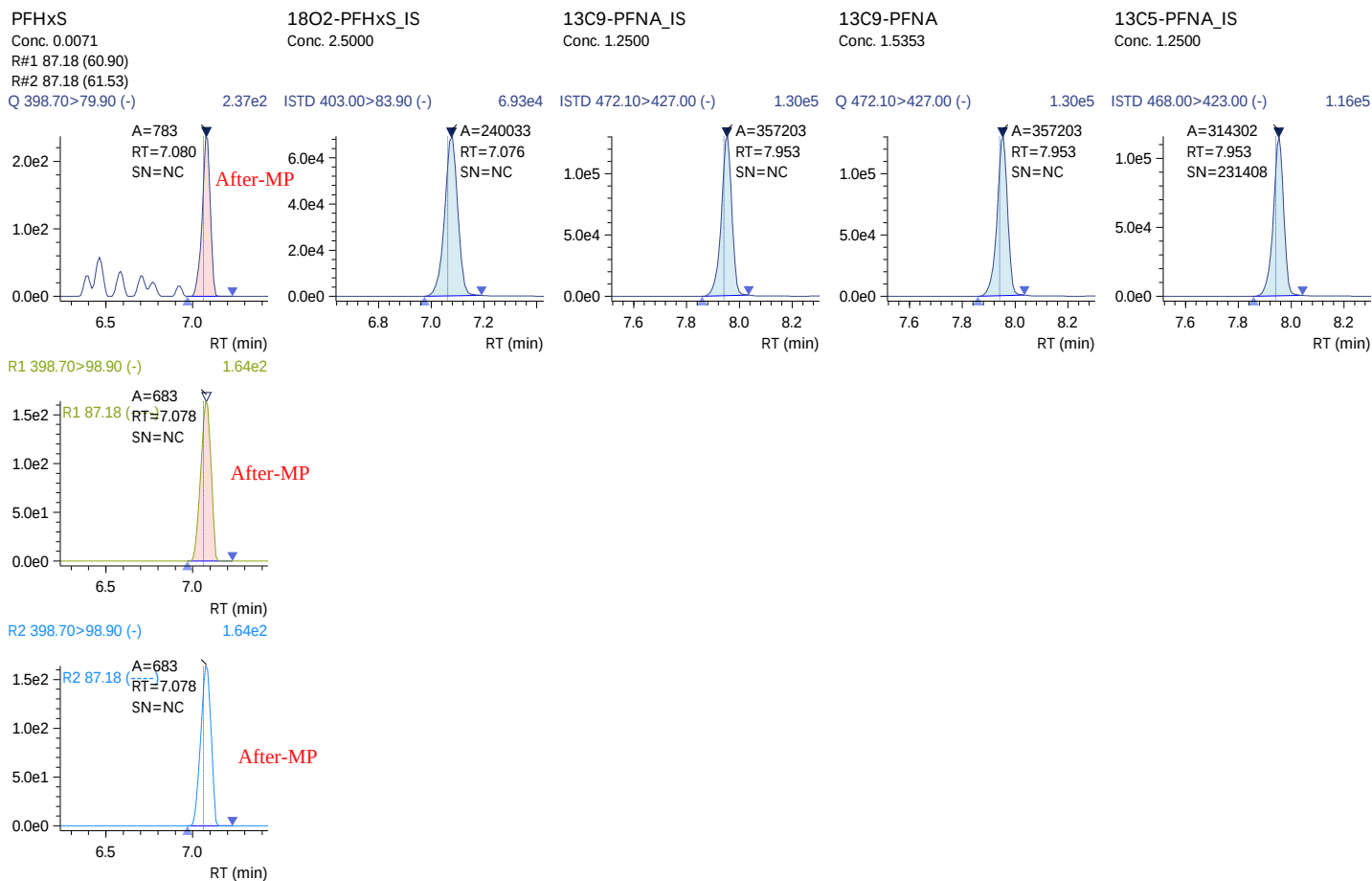
R2 413.00>169.00 (-)

4.32e2



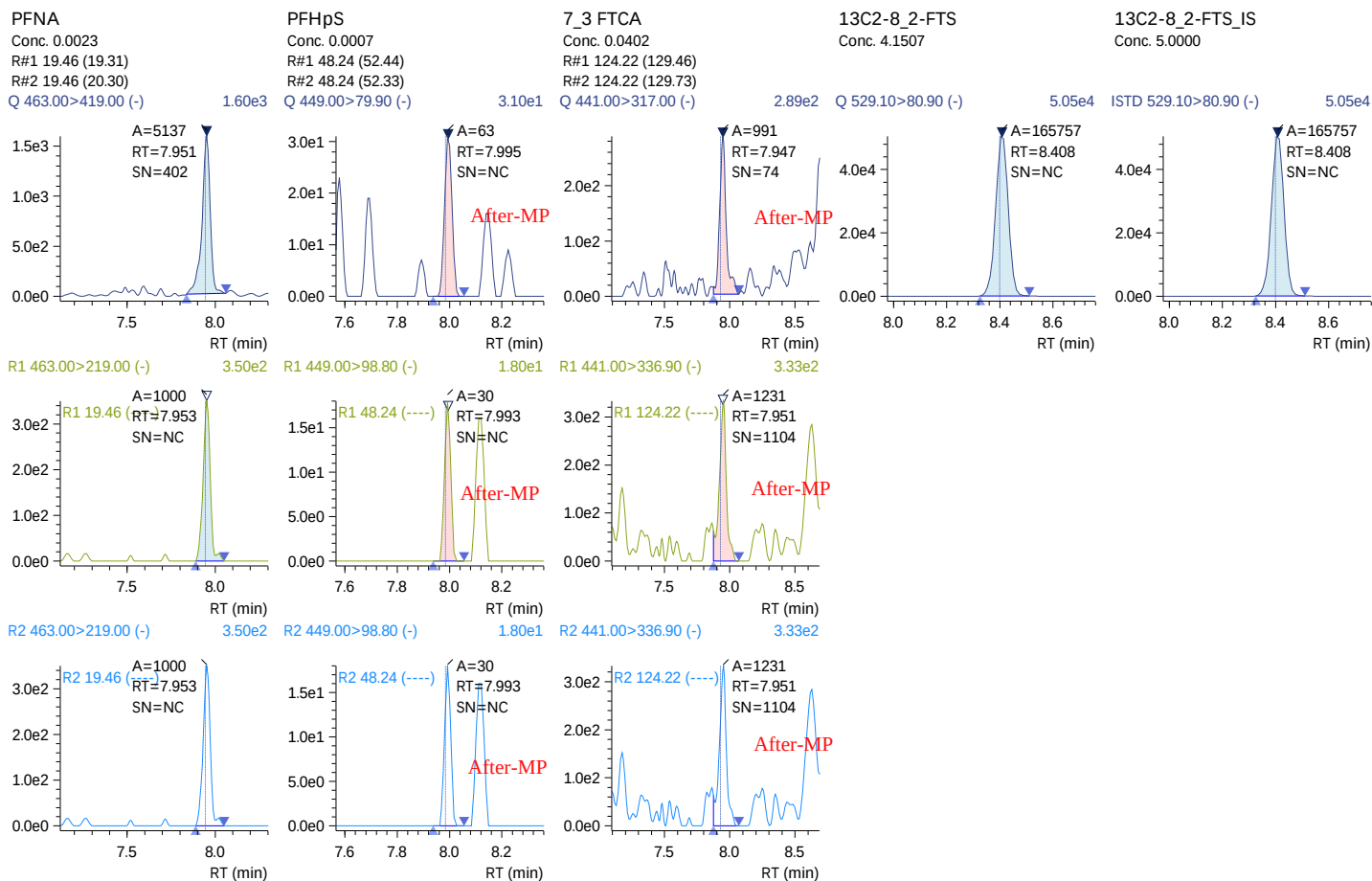


240201_032 (continued)





240201_032 (continued)

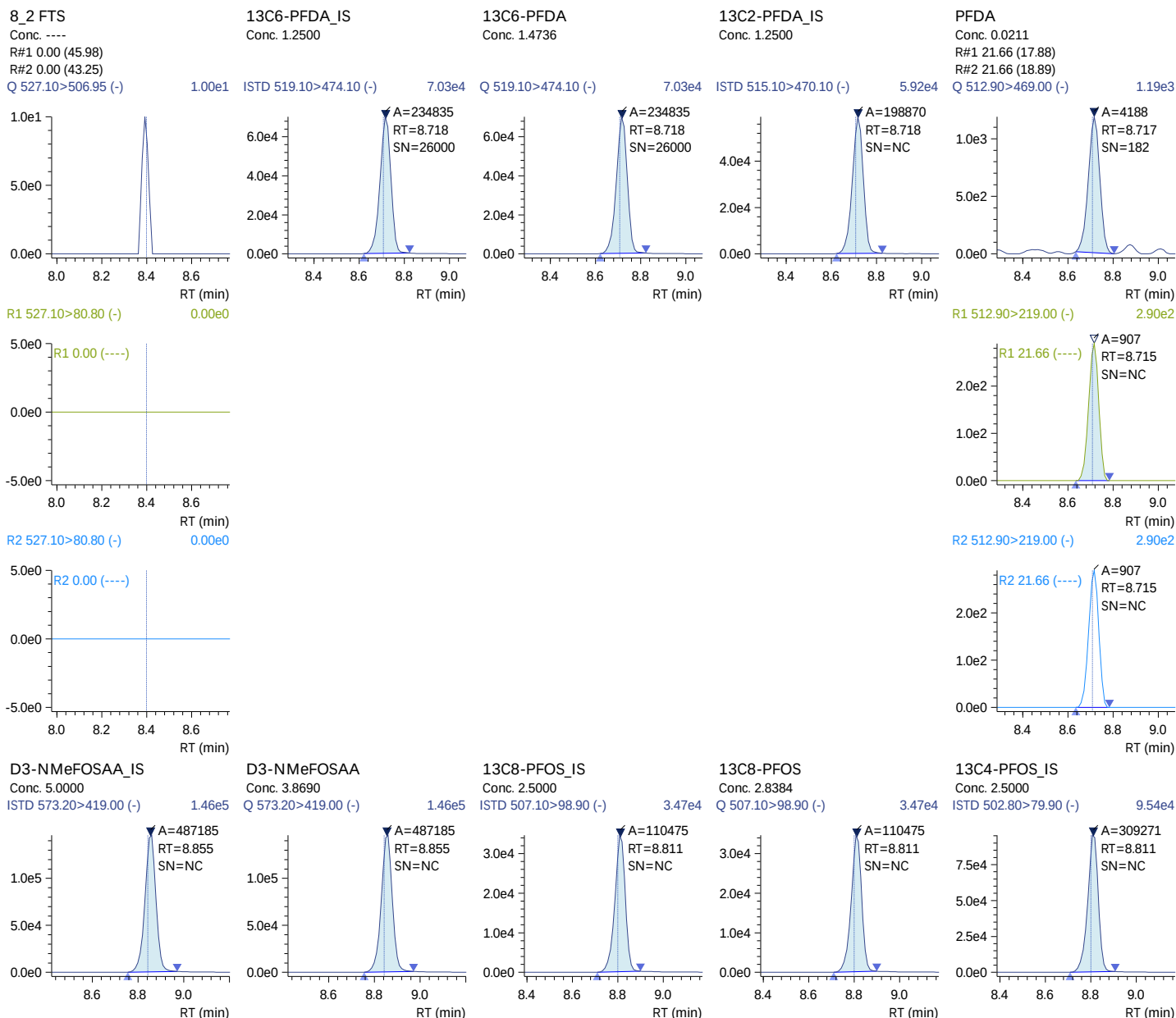


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_032 (continued)

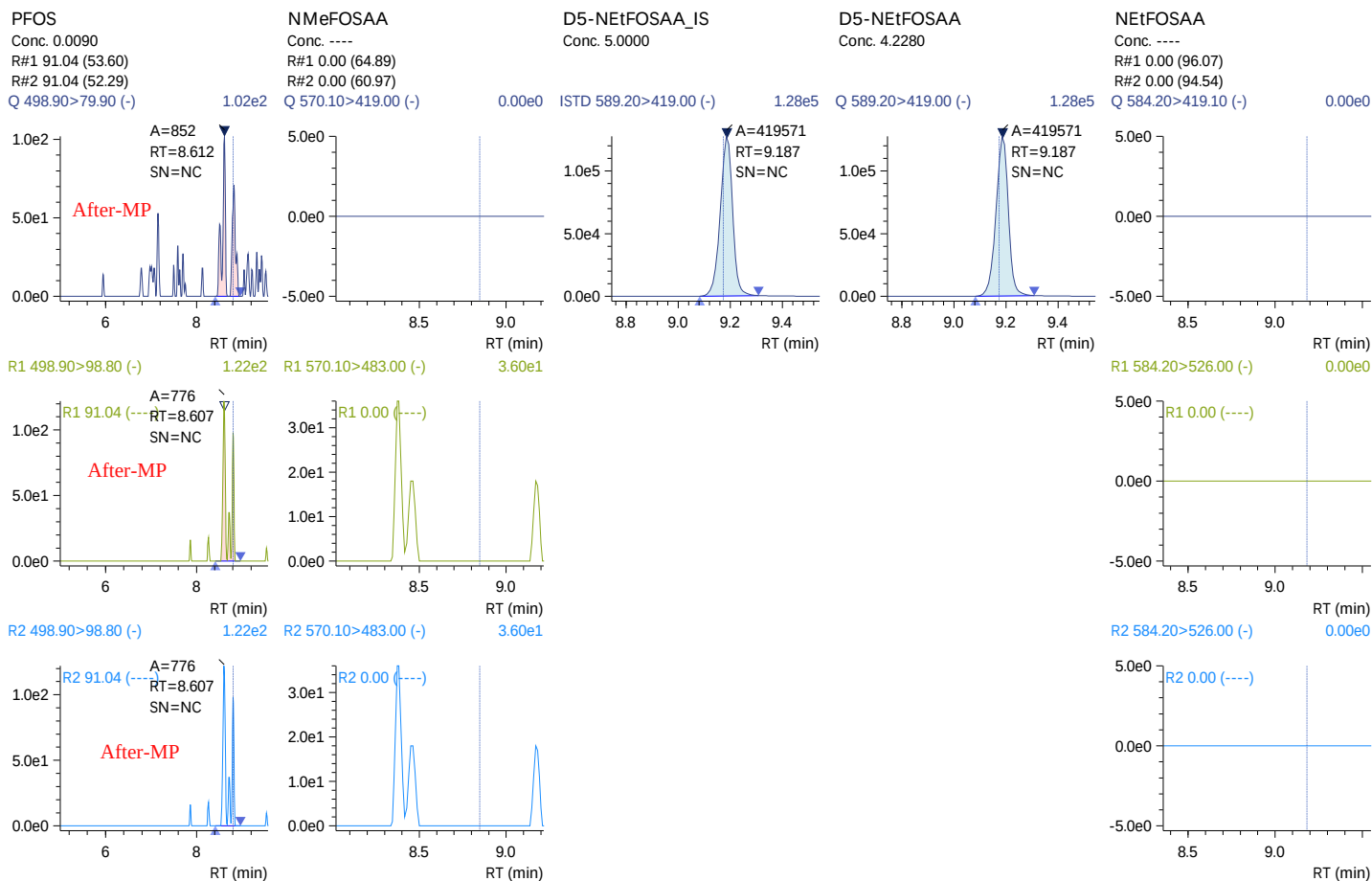


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_032 (continued)





240201_032 (continued)

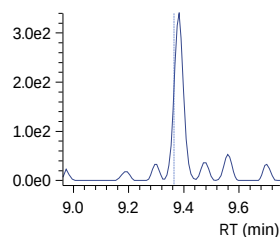
9-Cl-PF3ONS

Conc. ----

R#1 0.00 (30.95)

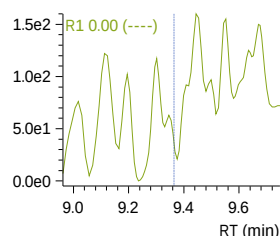
R#2 0.00 (30.61)

Q 530.80>351.00 (-)



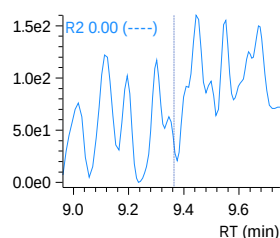
R1 532.80>353.00 (-)

1.60e2



R2 532.80>353.00 (-)

1.60e2



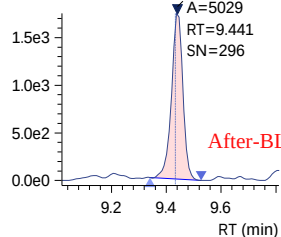
PFUnDA

Conc. 0.0037

R#1 8.40 (11.01)

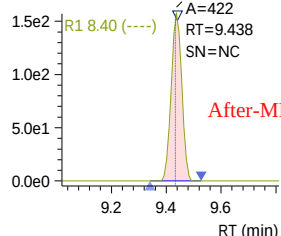
R#2 8.40 (12.02)

Q 563.10>519.00 (-)



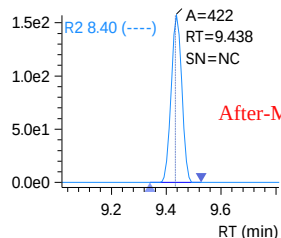
R1 563.10>269.10 (-)

1.57e2



R2 563.10>269.10 (-)

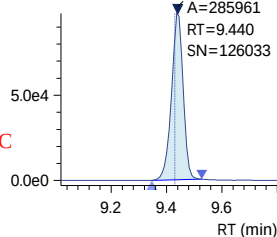
1.57e2



13C7-PFUnDA_IS

Conc. 1.2500

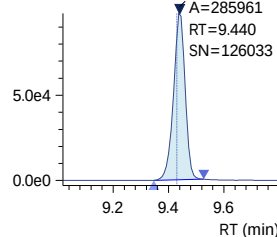
ISTD 570.00>525.10 (-)



13C7-PFUnDA

Conc. 1.4441

Q 570.00>525.10 (-)



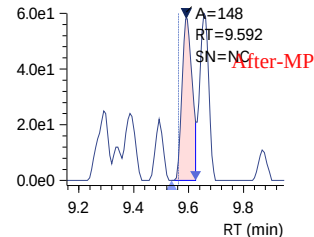
PFNS

Conc. 0.0016

R#1 48.24 (60.44)

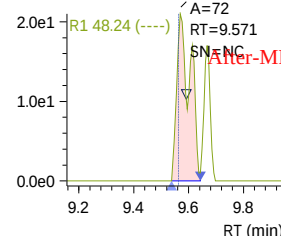
R#2 48.24 (58.51)

Q 548.80>79.90 (-)



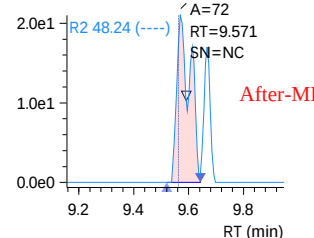
R1 548.80>98.80 (-)

2.10e1



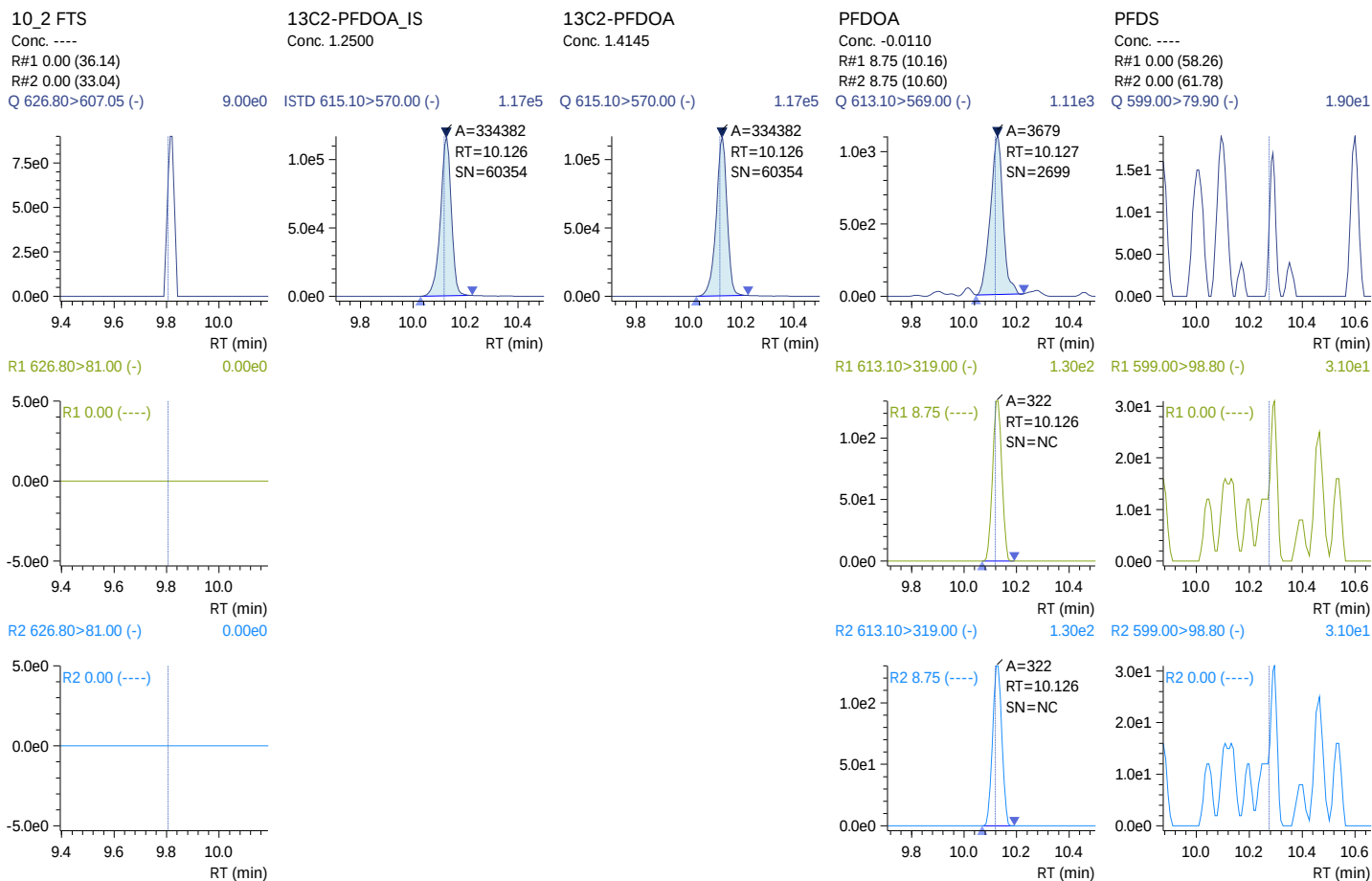
R2 548.80>98.80 (-)

2.10e1





240201_032 (continued)

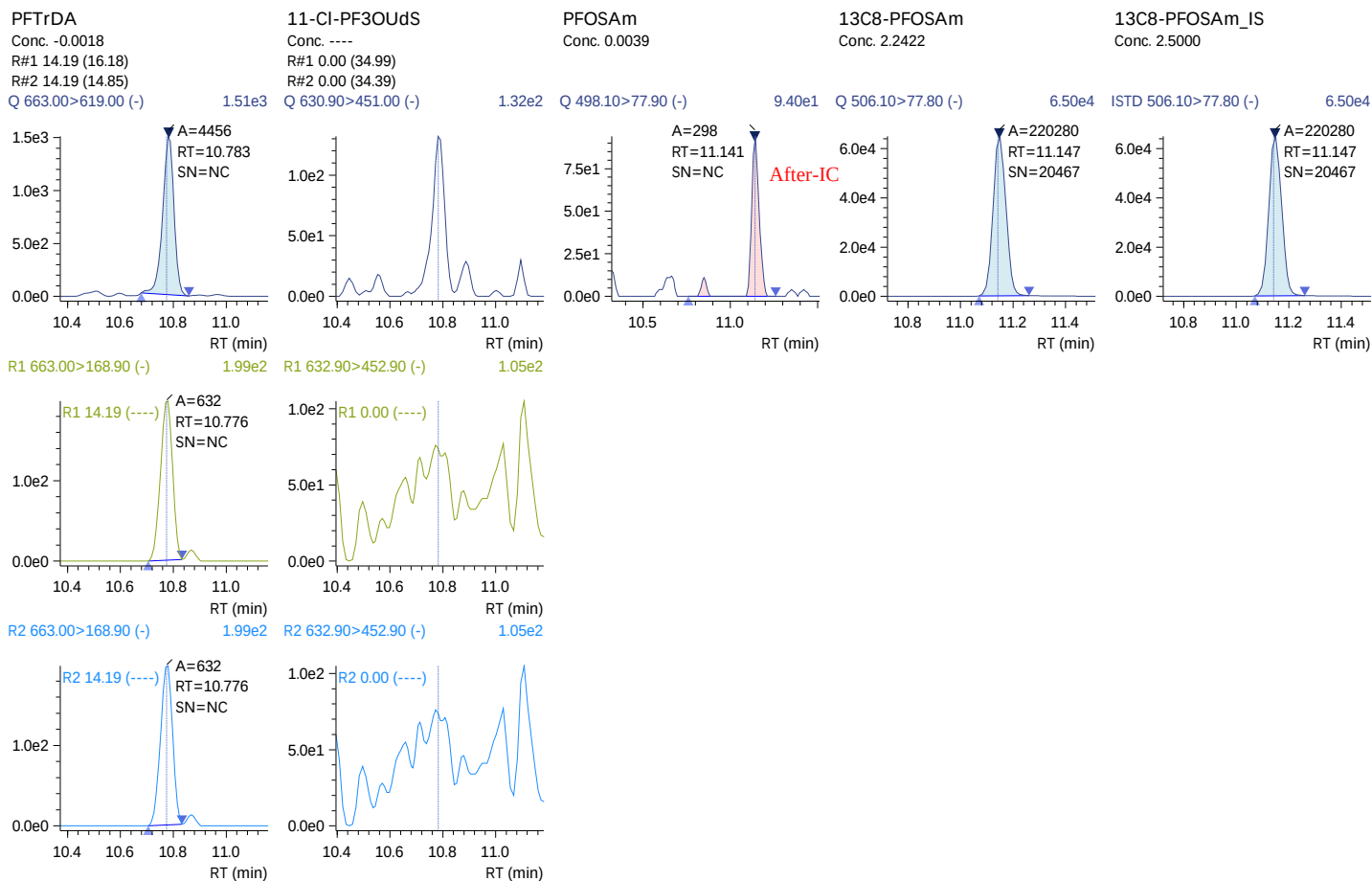


J:\LCMS08\Data\240201_1633_RA\240201_1633_RA.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_032 (continued)

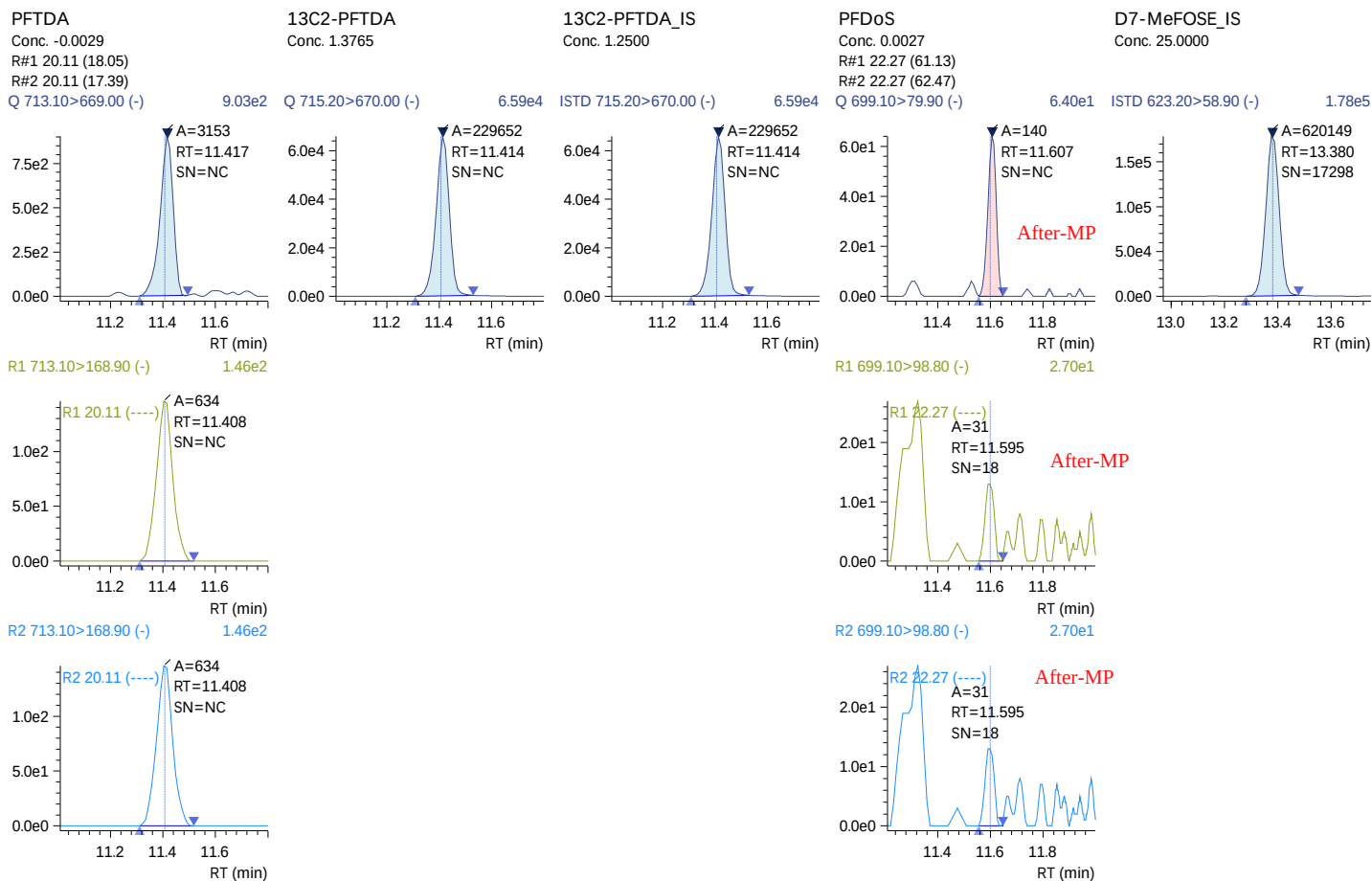


J:\LCMS08\Data\240201_1633_RA\240201_1633_RA.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_032 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_032 (continued)

D7-MeFOSE
Conc. 24.5893

MeFOSE
Conc. ----

13C2-PFHDA-IS
Conc. 2.5000

13C2-PFHDA
Conc. 2.3499

PFHXDA

Conc. 0.0241
R#1 9.56 (11.66)
R#2 9.56 (10.99)

Q 623.20>58.90 (-)

1.78e5

Q 616.10>59.00 (-)

8.80e1

ISTD 815.00>770.05 (-)

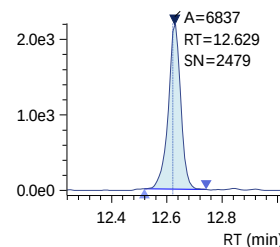
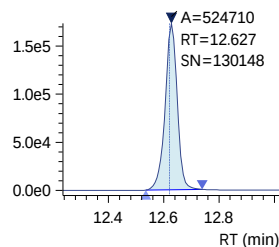
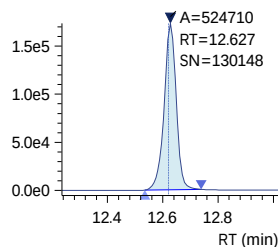
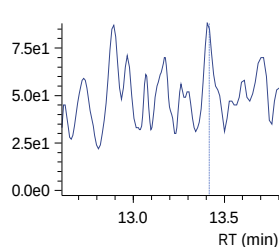
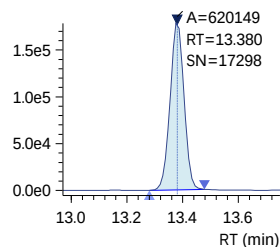
1.74e5

Q 815.00>770.05 (-)

1.74e5

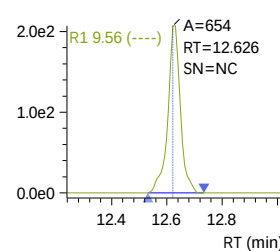
Q 813.00>768.95 (-)

2.21e3



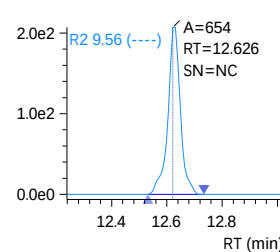
R1 813.00>218.95 (-)

2.07e2



R2 813.00>218.95 (-)

2.07e2





240201_032 (continued)

D3-MeFOSA
Conc. 2.5400

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. ----
R#1 0.00 (160.44)
R#2 0.00 (161.92)

D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 25.5618

Q 515.00>219.00 (-)

1.89e4

ISTD 515.00>219.00 (-)

1.89e4

Q 511.90>219.00 (-)

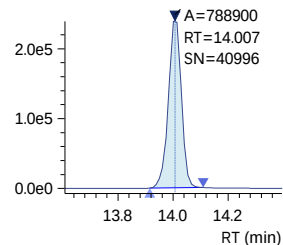
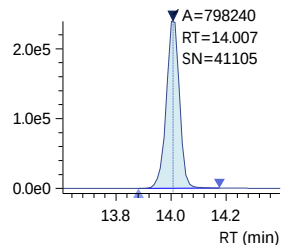
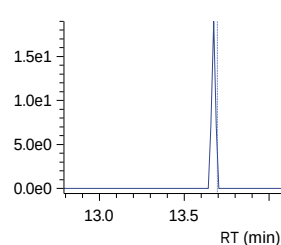
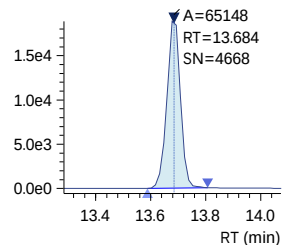
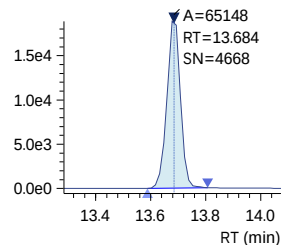
1.90e1

ISTD 639.20>58.90 (-)

2.39e5

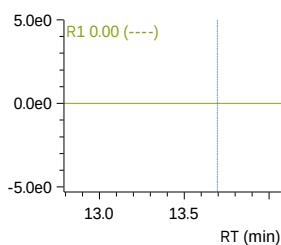
Q 639.20>58.90 (-)

2.39e5



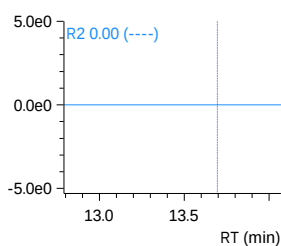
R1 511.90>169.00 (-)

0.00e0



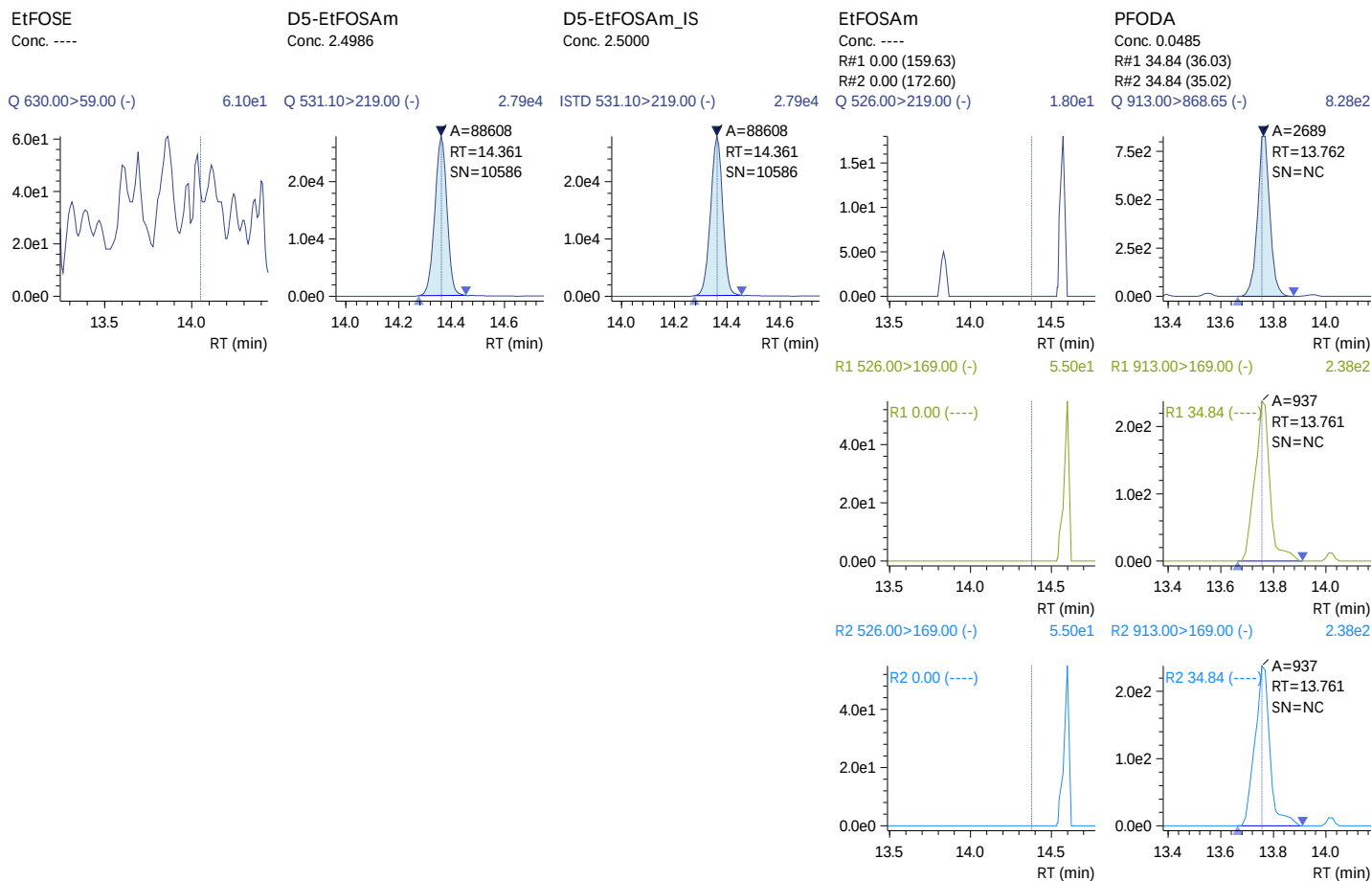
R2 511.90>169.00 (-)

0.00e0





240201_032 (continued)



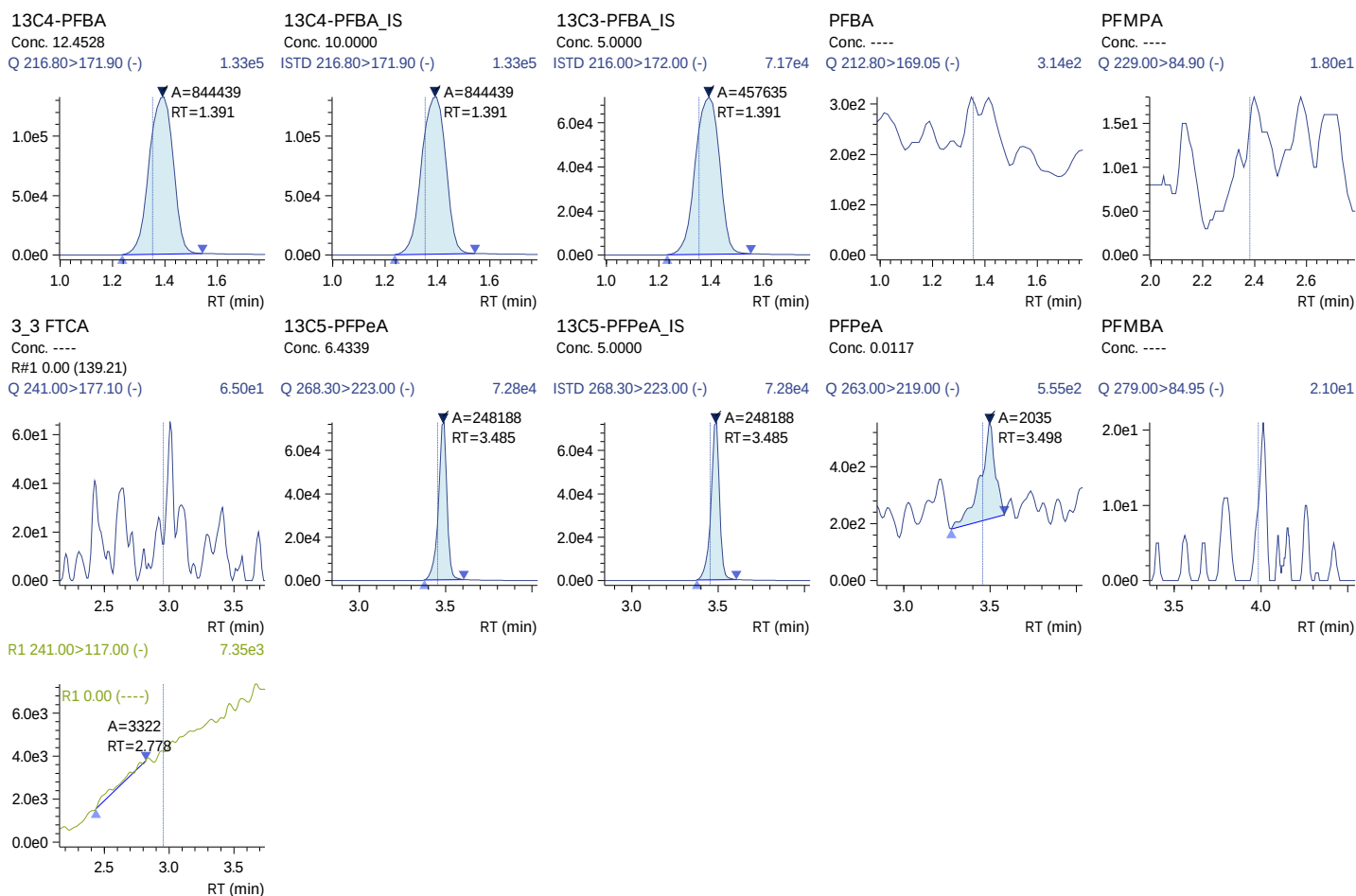
J:\LCMS08\Data\240201_1633_RA\240201_1633_RA.dam\lp

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_032

Sample ID: 1633 CCB
Date Acquired: 2/1/2024 10:23:25 PM
Acquired by: System Administrator
Data File: 240201_032
Vial: 54 | Inj. Volume: 10.0000uL | Tray: 1





240201_032 (continued)

13C2-4_2 FTS
 Conc. 4.1830

13C2-4_2 FTS_IS
 Conc. 5.0000

4_2 FTS
 Conc. 0.0036
 R#1 0.00 (32.10)
 R#2 0.00 (32.79)

13C3-PFBS_IS
 Conc. 2.5000

PFBS
 Conc. ----
 R#1 0.00 (44.81)
 R#2 0.00 (46.72)

Q 329.10>80.90 (-)

5.87e4

ISTD 329.10>80.90 (-)

5.87e4

Q 327.10>307.00 (-)

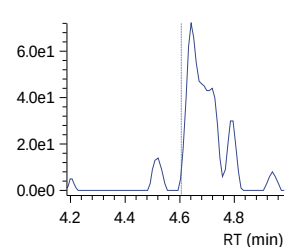
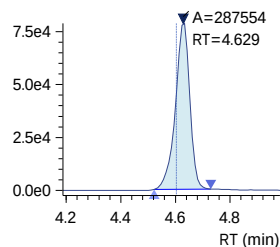
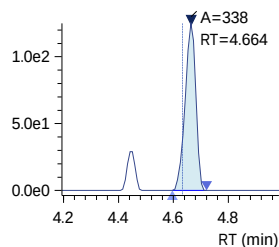
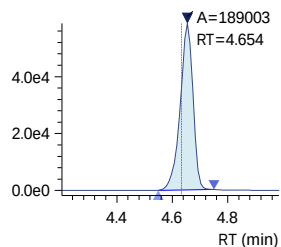
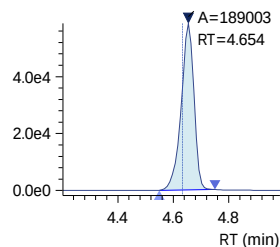
1.25e2

ISTD 302.10>79.90 (-)

7.89e4

Q 298.70>79.90 (-)

7.20e1

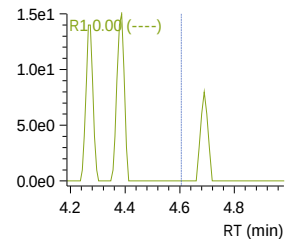
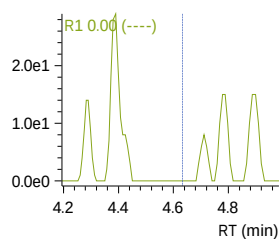


R1 327.10>80.90 (-)

2.90e1

R1 298.70>98.80 (-)

1.50e1

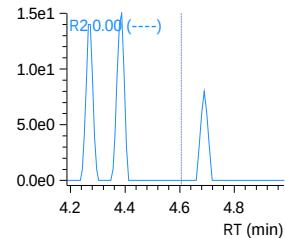
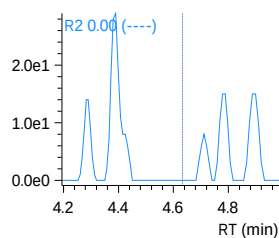


R2 327.10>80.90 (-)

2.90e1

R2 298.70>98.80 (-)

1.50e1





240201_032 (continued)

13C3-PFBS
Conc. 3.2108

NFDHA
Conc. ----
R#1 0.00 (35.54)
R#2 0.00 (37.91)

13C5-PFHxA
Conc. 2.7081

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

Q 302.10>79.90 (-)

7.89e4

Q 295.00>201.00 (-)

1.26e2

Q 318.00>273.00 (-)

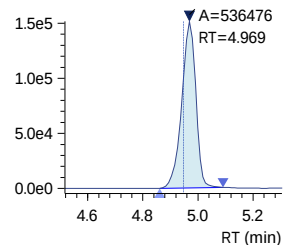
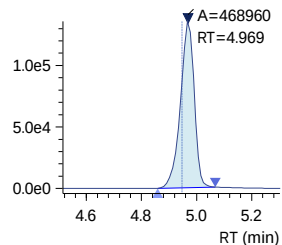
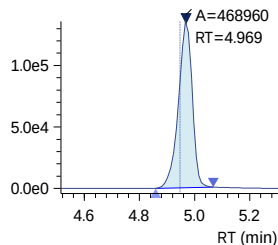
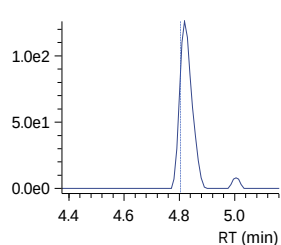
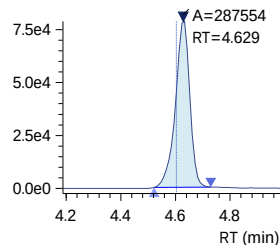
1.36e5

ISTD 318.00>273.00 (-)

1.36e5

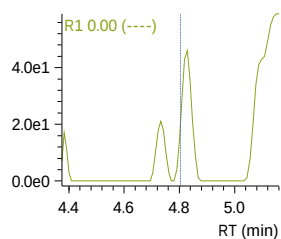
ISTD 315.10>270.00 (-)

1.52e5



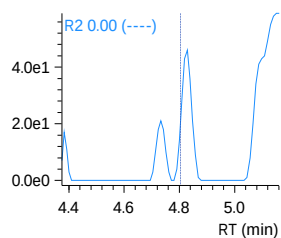
R1 295.00>84.90 (-)

5.90e1



R2 295.00>84.90 (-)

5.90e1





240201_032 (continued)

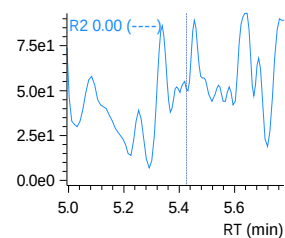
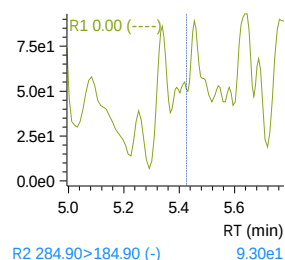
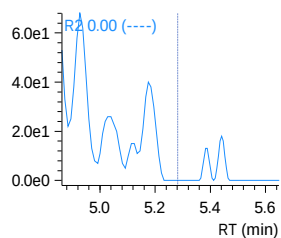
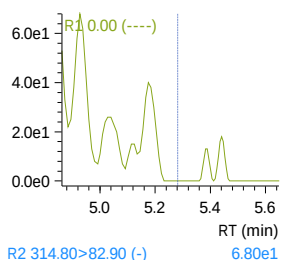
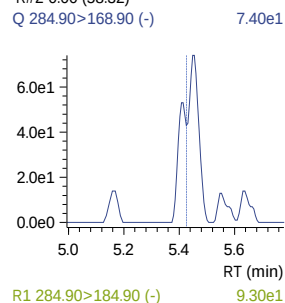
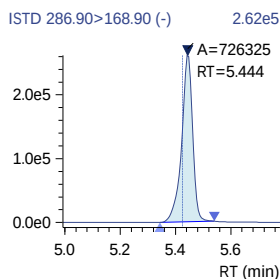
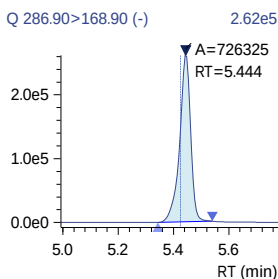
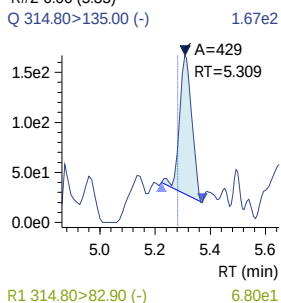
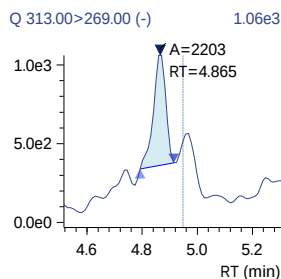
PFHxA
 Conc. 0.0144

PFEESA
 Conc. 0.0007
 R#1 0.00 (5.22)
 R#2 0.00 (5.35)

13C3-HFPO-DA
 Conc. 15.2771

13C3-HFPO-DA_IS
 Conc. 10.0000

HFPO-DA
 Conc. ----
 R#1 0.00 (59.79)
 R#2 0.00 (58.32)





240201_032 (continued)

5_3 FTCA

Conc. ----

R#1 0.00 (157.08)

R#2 0.00 (155.87)

Q 341.00>237.05 (-)

8.80e1

PFPeS

Conc. ----

R#1 0.00 (55.12)

R#2 0.00 (54.87)

Q 349.10>79.90 (-)

2.30e1

13C4-PFHpa

Conc. 3.1240

Q 367.10>322.00 (-)

2.34e5

13C4-PFHpa_IS

Conc. 2.5000

ISTD 367.10>322.00 (-)

2.34e5

PFHpA

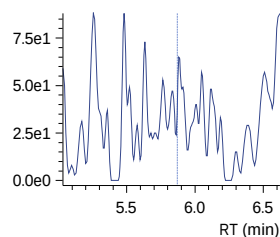
Conc. 0.0099

R#1 19.90 (23.02)

R#2 19.90 (20.91)

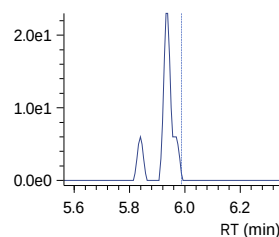
Q 363.10>319.00 (-)

1.92e3



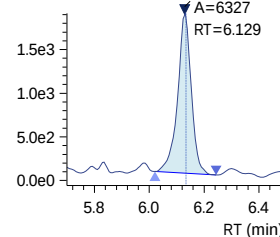
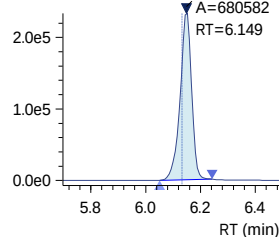
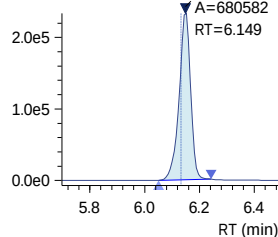
R1 341.00>217.00 (-)

9.90e2



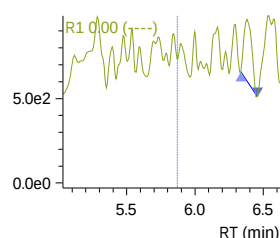
R1 349.10>98.80 (-)

6.00e0



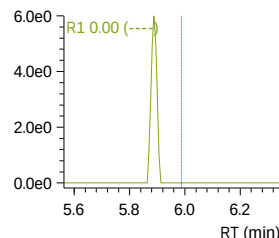
R1 363.10>169.00 (-)

3.04e2



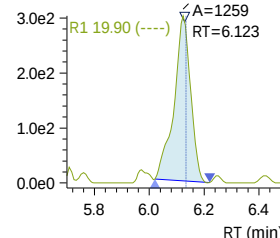
R2 341.00>217.00 (-)

9.90e2



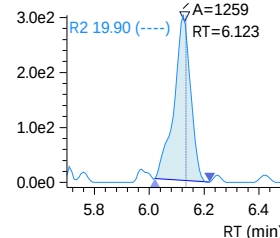
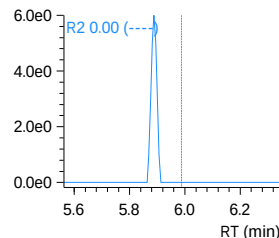
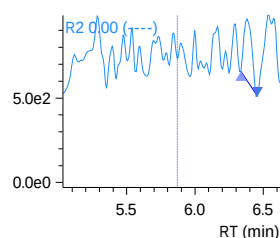
R2 349.10>98.80 (-)

6.00e0



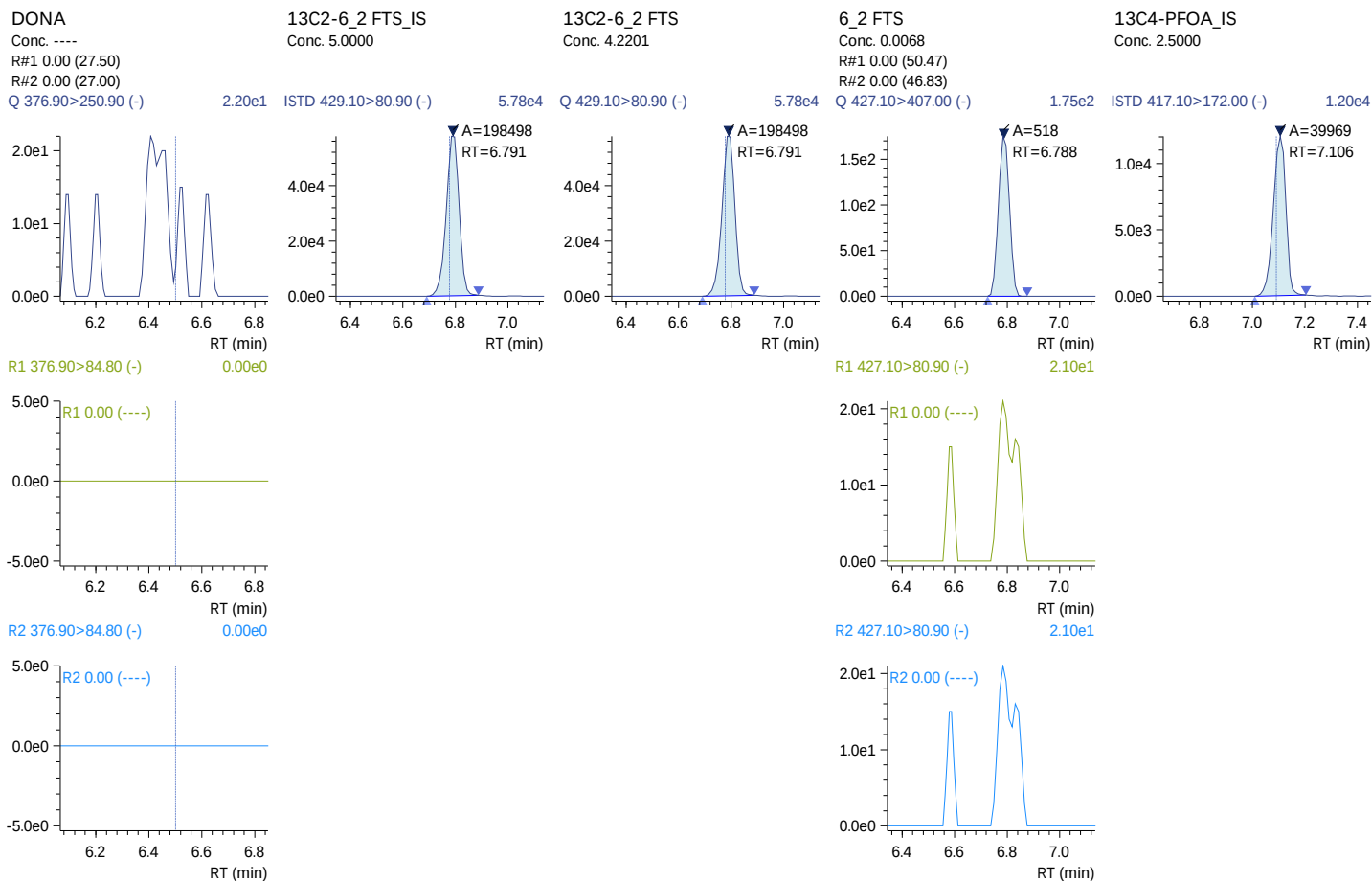
R2 363.10>169.00 (-)

3.04e2





240201_032 (continued)





240201_032 (continued)

13C8-PFOA_IS
 Conc. 2.5000

13C8-PFOA
 Conc. 3.0550

PFOA
 Conc. 0.0211
 R#1 20.74 (28.77)
 R#2 20.74 (28.12)

13C3-PFHxS
 Conc. 3.0038

13C3-PFHxS_IS
 Conc. 2.5000

ISTD 421.10>376.00 (-)

1.75e5

Q 421.10>376.00 (-)

1.75e5

Q 413.00>369.00 (-)

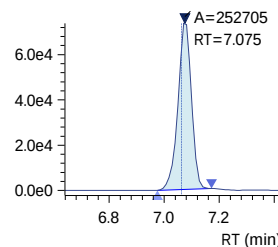
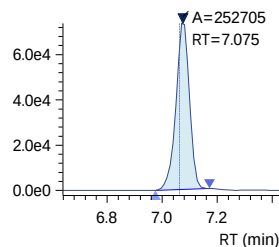
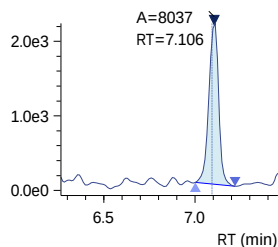
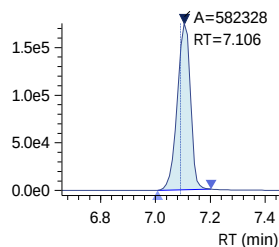
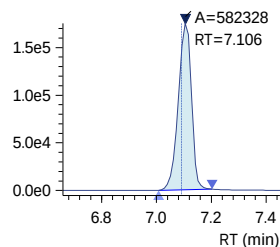
2.24e3

Q 402.10>79.90 (-)

7.38e4

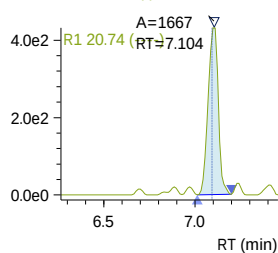
ISTD 402.10>79.90 (-)

7.38e4



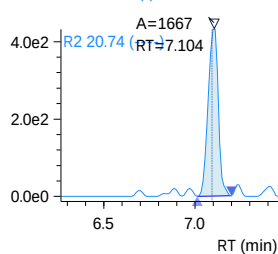
R1 413.00>169.00 (-)

4.32e2



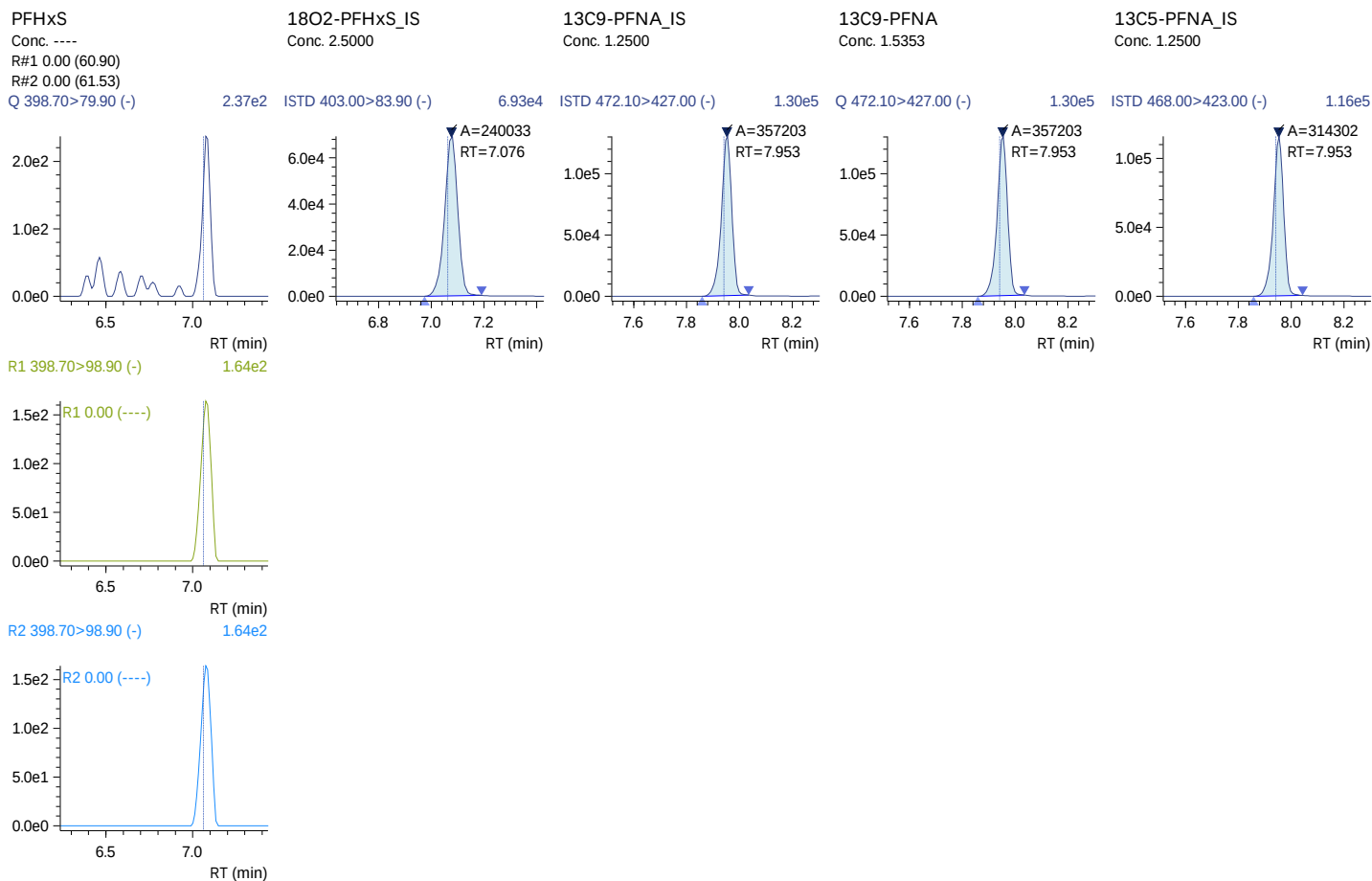
R2 413.00>169.00 (-)

4.32e2



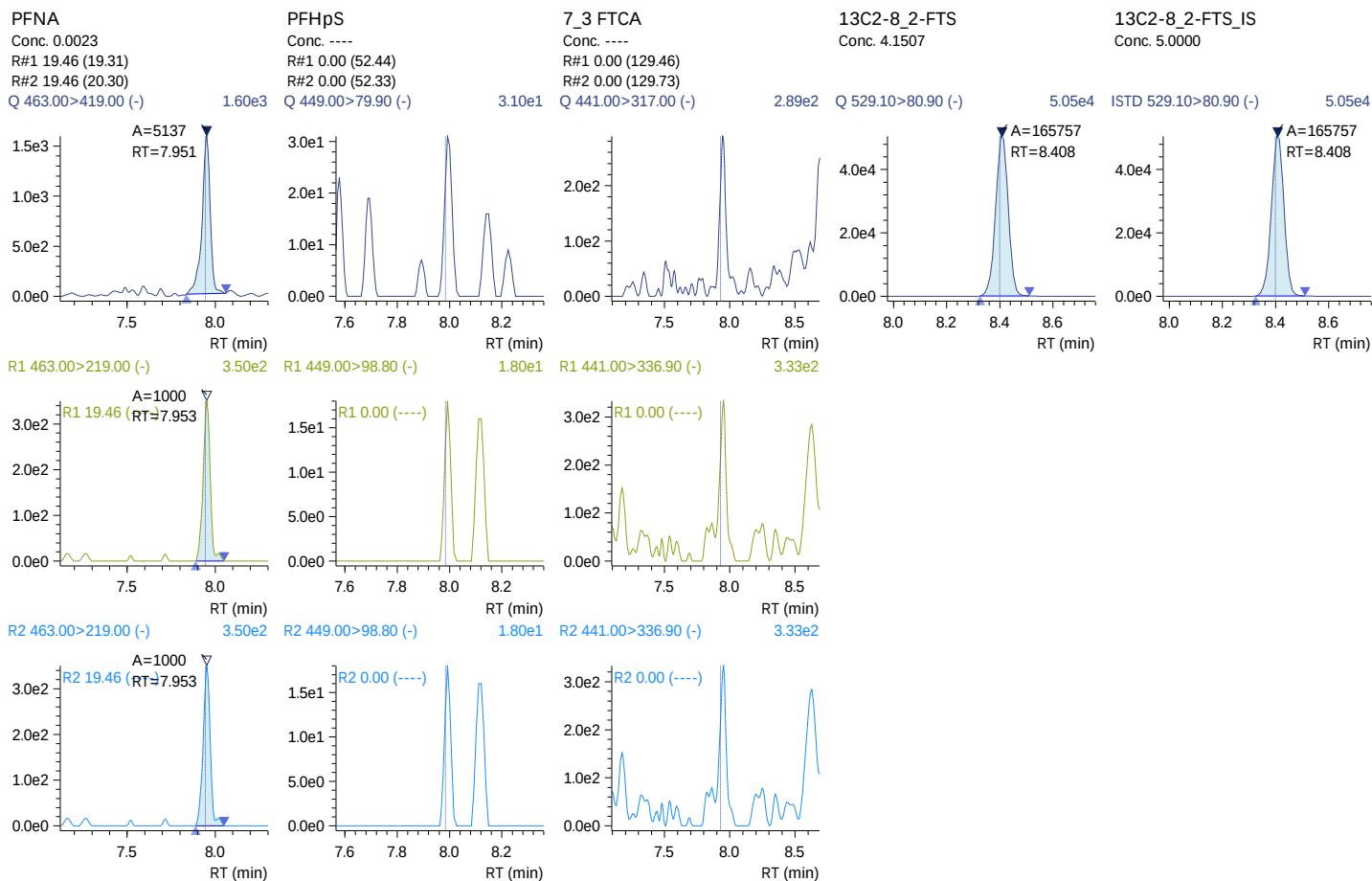


240201_032 (continued)



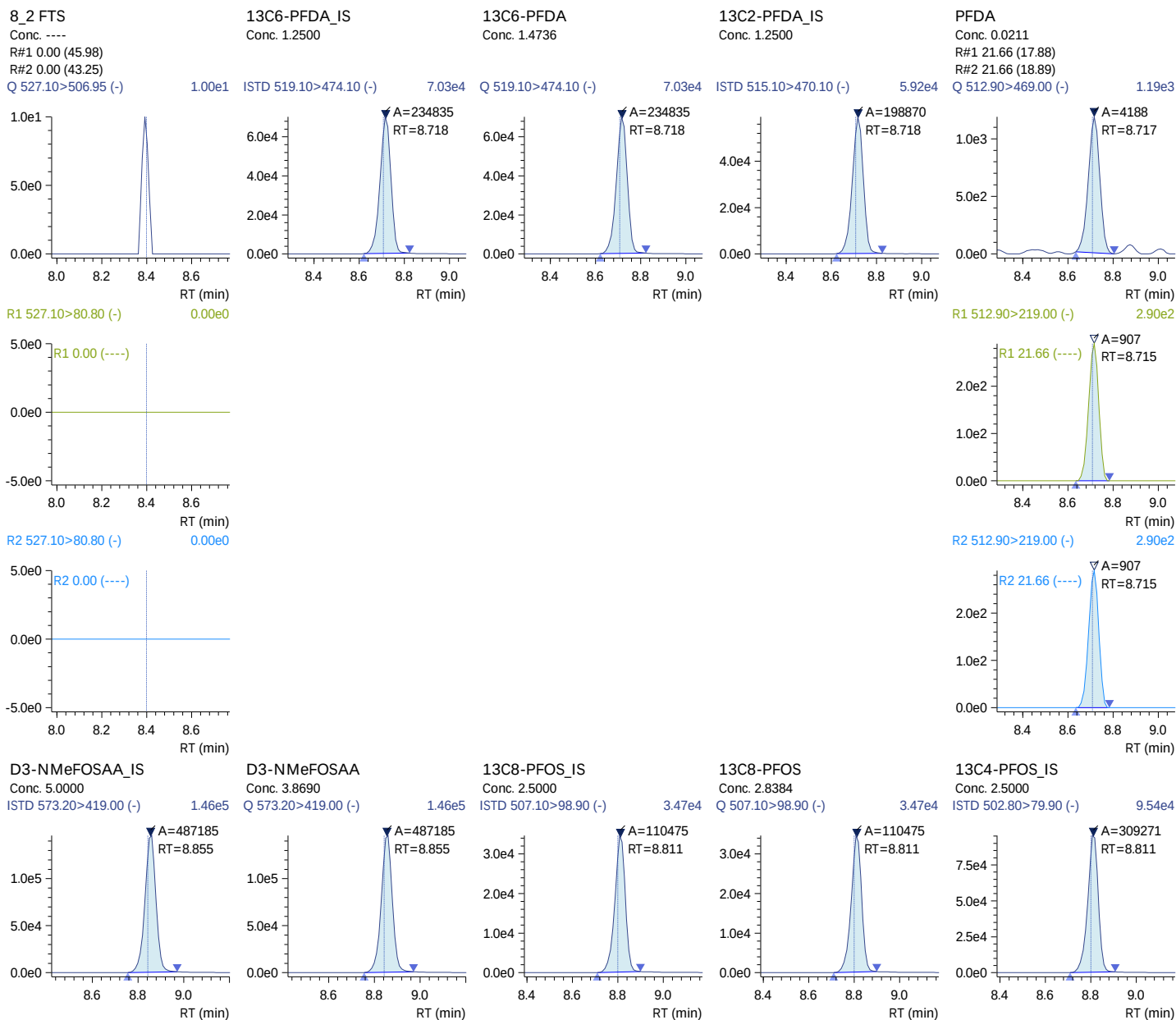


240201_032 (continued)



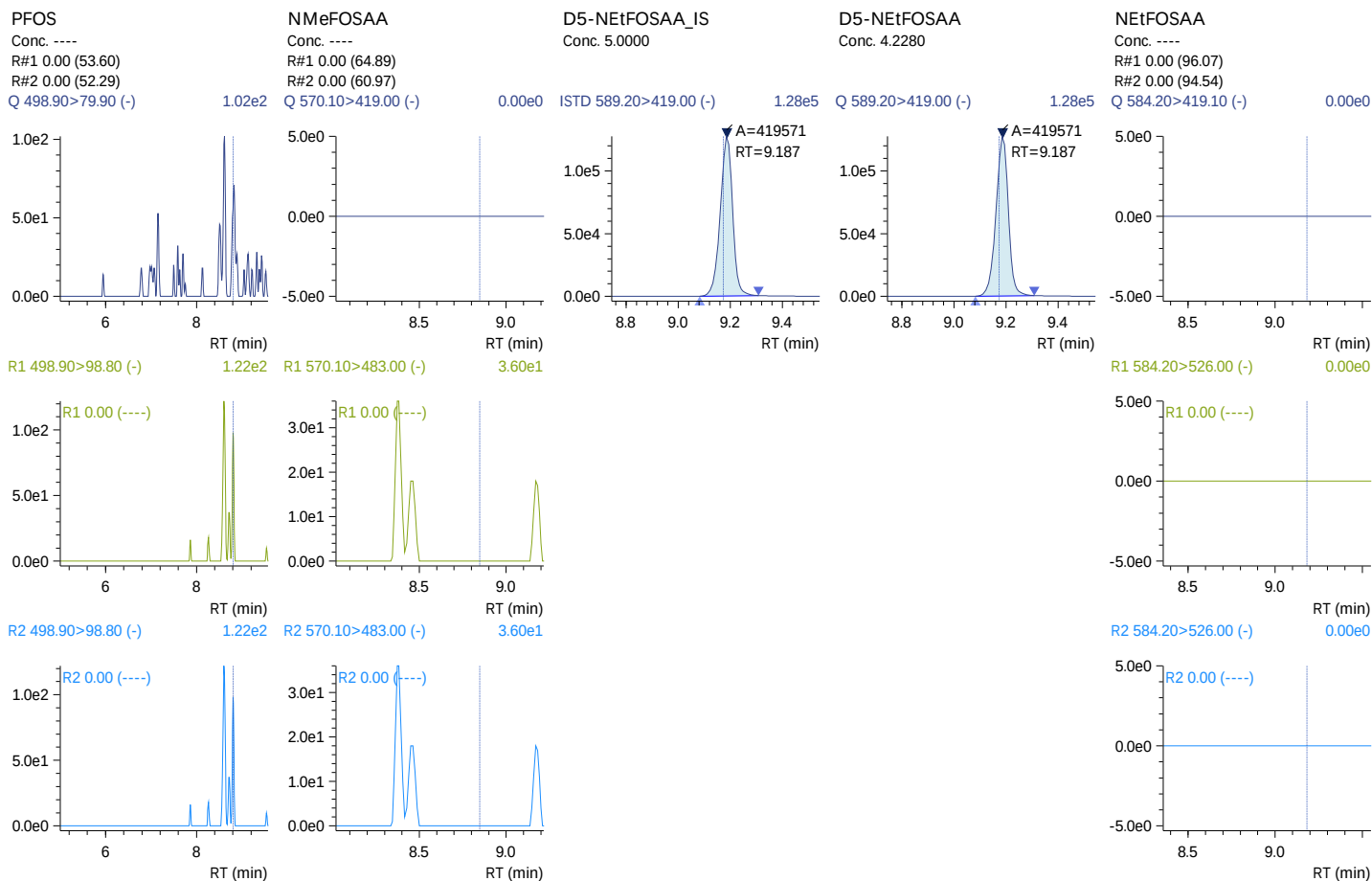


240201_032 (continued)





240201_032 (continued)

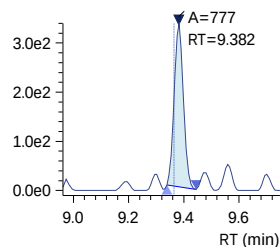




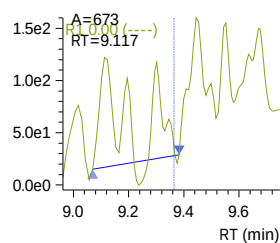
240201_032 (continued)

9-Cl-PF3ONS

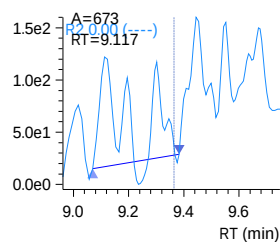
Conc. 0.0011
R#1 0.00 (30.95)
R#2 0.00 (30.61)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-) 1.60e2

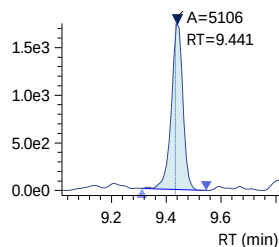


R2 532.80>353.00 (-) 1.60e2

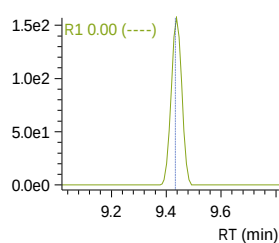


PFUnDA

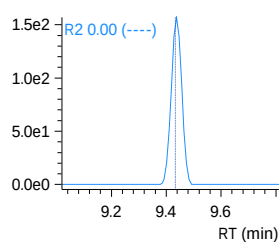
Conc. 0.0040
R#1 0.00 (11.01)
R#2 0.00 (12.02)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-) 1.57e2

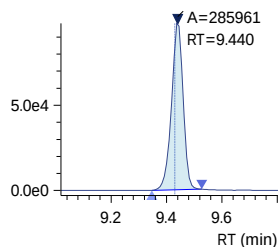


R2 563.10>269.10 (-) 1.57e2



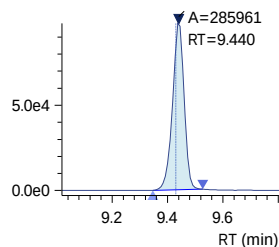
13C7-PFUnDA_IS

Conc. 1.2500
ISTD 570.00>525.10 (-)



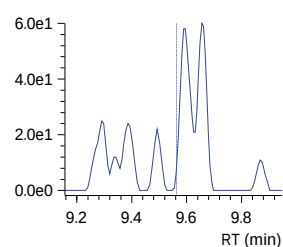
13C7-PFUnDA

Conc. 1.4441
Q 570.00>525.10 (-)

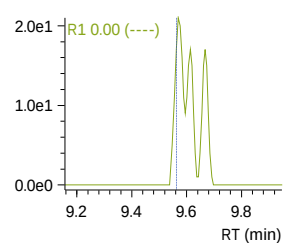


PFNS

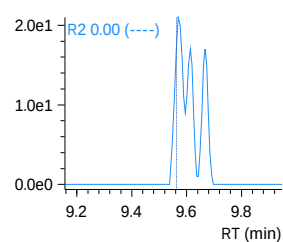
Conc. ----
R#1 0.00 (60.44)
R#2 0.00 (58.51)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-) 2.10e1

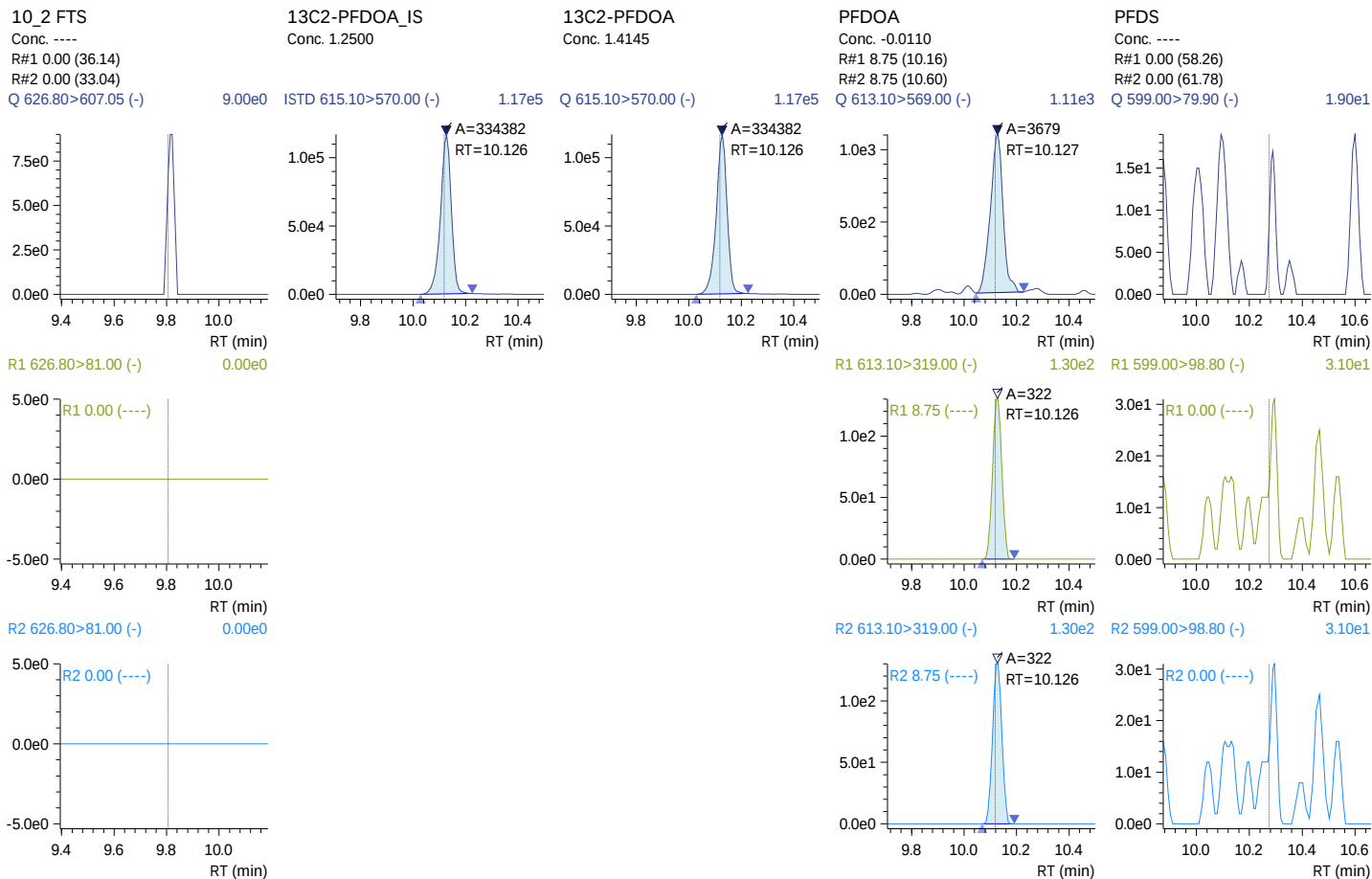


R2 548.80>98.80 (-) 2.10e1



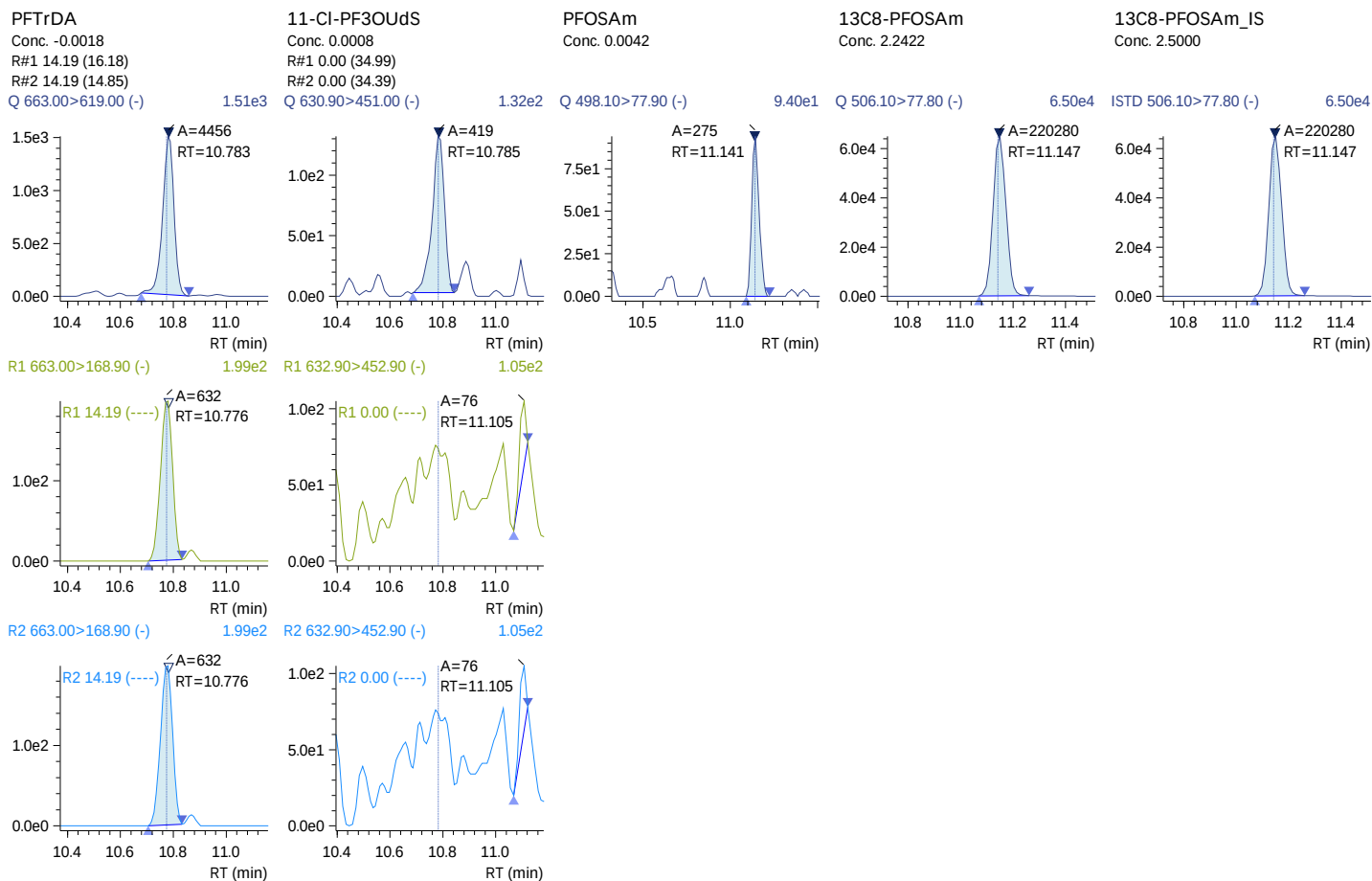


240201_032 (continued)



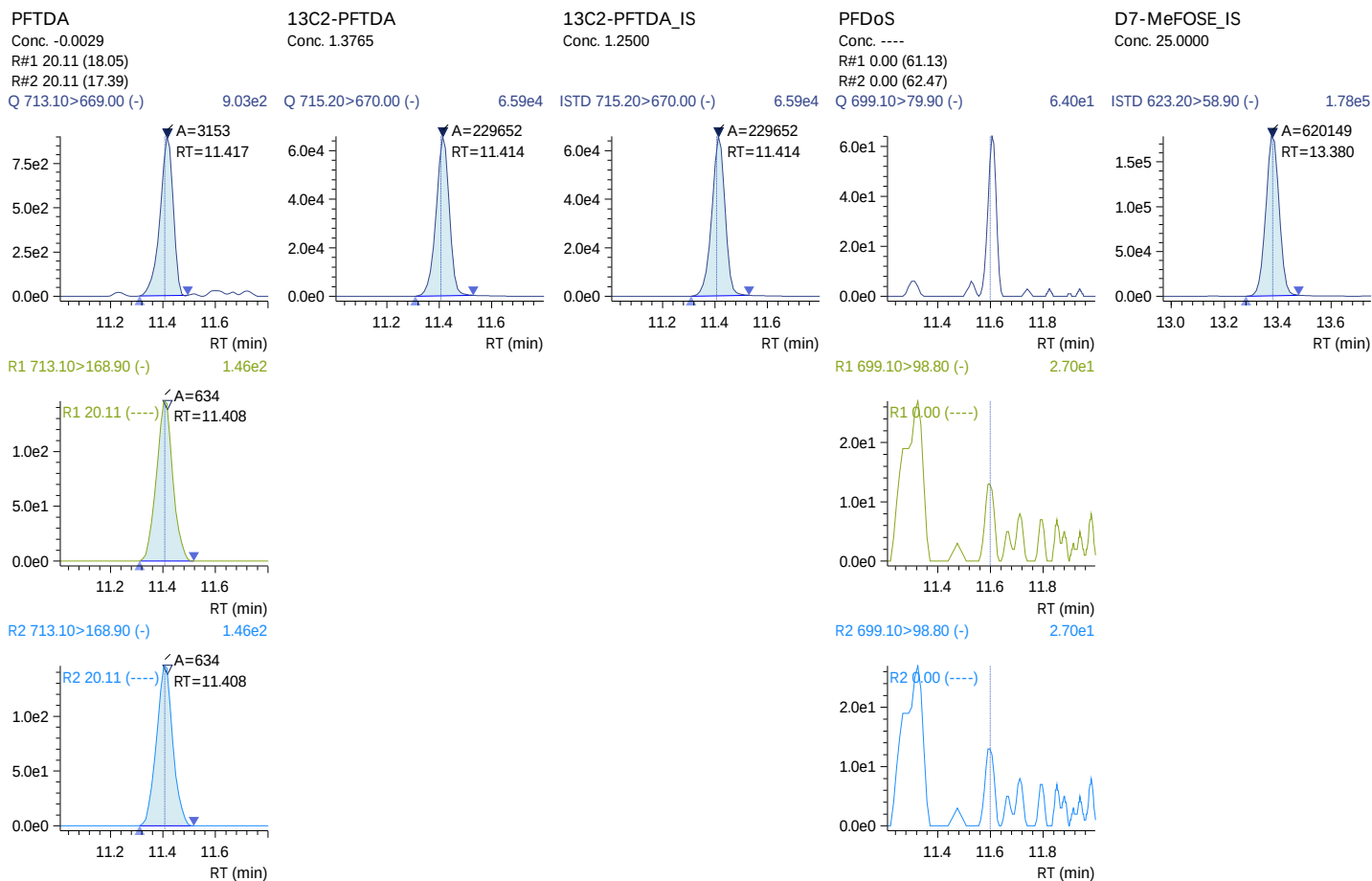


240201_032 (continued)





240201_032 (continued)





240201_032 (continued)

D7-MeFOSE
 Conc. 24.5893

MeFOSE
 Conc. ----

¹³C2-PFHxDA_IS
 Conc. 2.5000

¹³C2-PFHxDA
 Conc. 2.3499

PFHxDA

Conc. 0.0241
 R#1 9.56 (11.66)
 R#2 9.56 (10.99)

Q 623.20>58.90 (-)

1.78e5

Q 616.10>59.00 (-)

8.80e1

ISTD 815.00>770.05 (-)

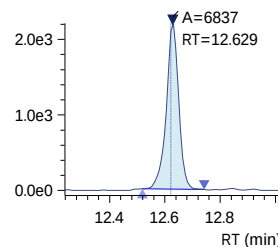
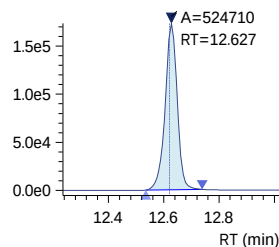
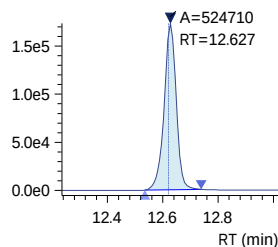
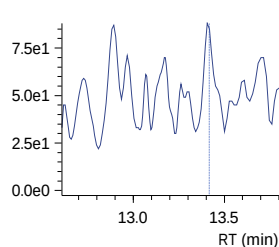
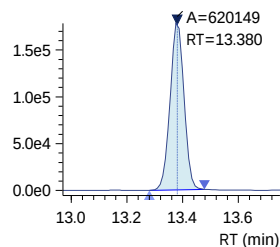
1.74e5

Q 815.00>770.05 (-)

1.74e5

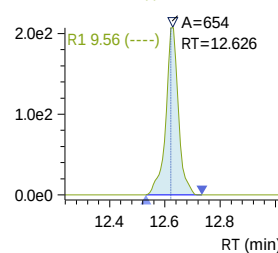
Q 813.00>768.95 (-)

2.21e3



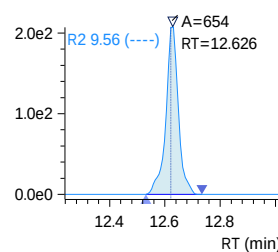
R1 813.00>218.95 (-)

2.07e2



R2 813.00>218.95 (-)

2.07e2





240201_032 (continued)

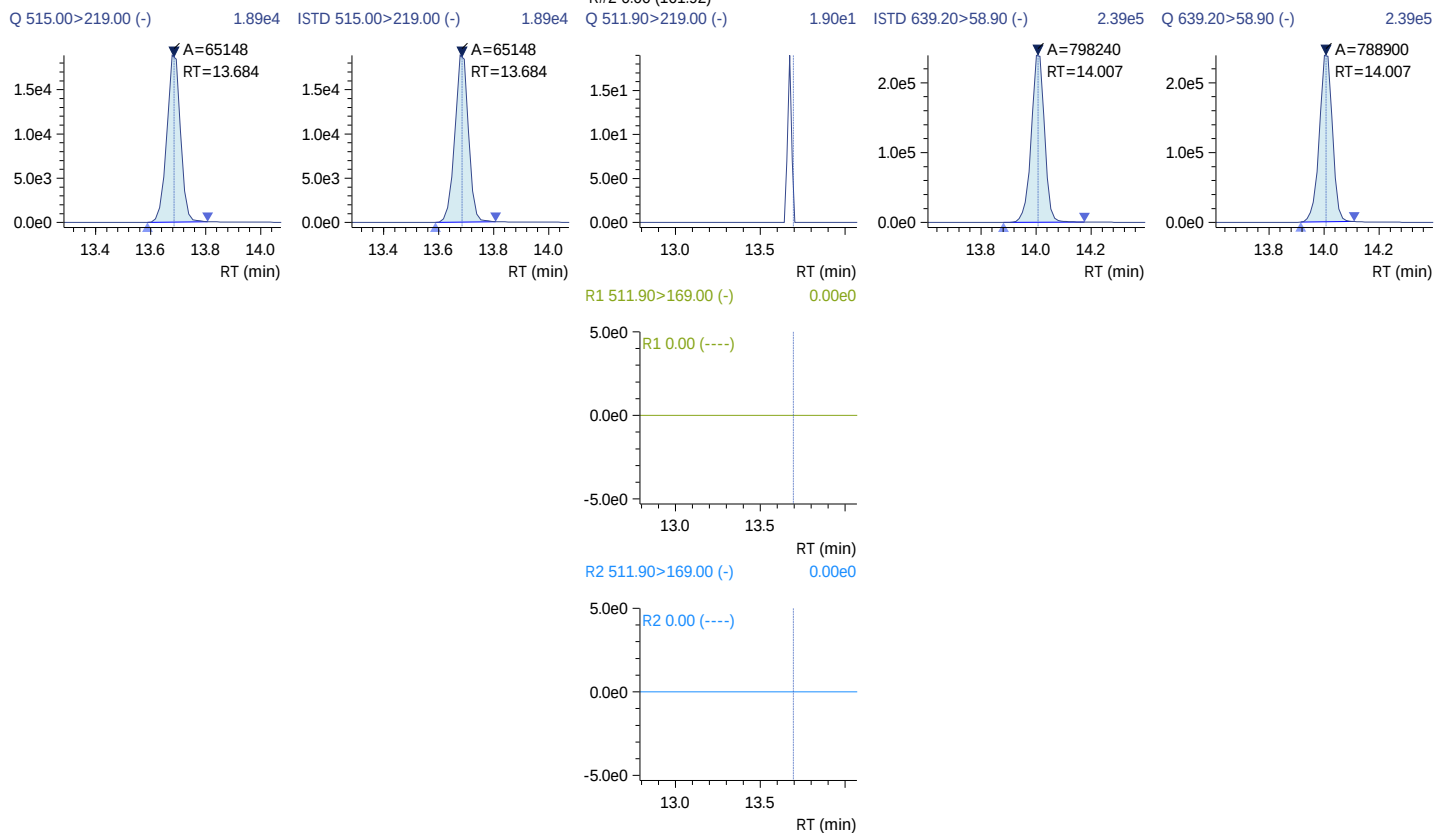
D3-MeFOSA
 Conc. 2.5400

D3-MeFOSA_IS
 Conc. 2.5000

MeFOSA
 Conc. ----
 R#1 0.00 (160.44)
 R#2 0.00 (161.92)

D9-EtFOSE_IS
 Conc. 25.0000

D9-EtFOSE
 Conc. 25.5618





240201_032 (continued)

EtFOSE
Conc. ----

D5-EtFOSAm
Conc. 2.4986

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. ----

PFODA

Conc. 0.0485

R#1 34.84 (36.03)

R#2 34.84 (35.02)

Q 630.00>59.00 (-)

6.10e1

Q 531.10>219.00 (-)

2.79e4

ISTD 531.10>219.00 (-)

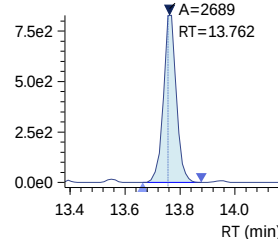
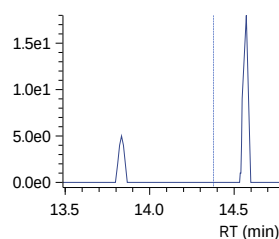
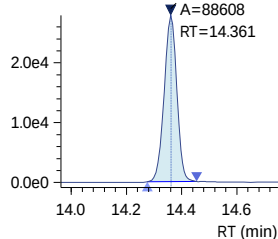
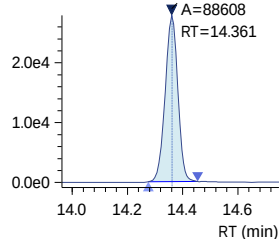
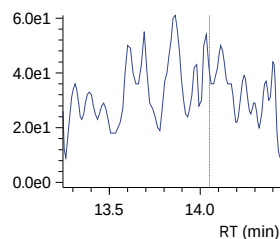
2.79e4

Q 526.00>219.00 (-)

1.80e1

Q 913.00>868.65 (-)

8.28e2

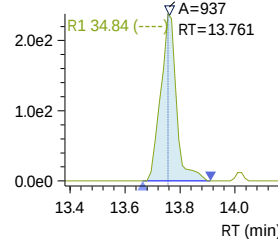
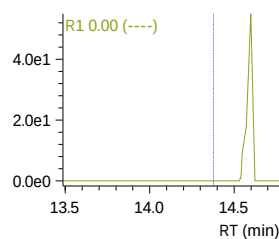


R1 526.00>169.00 (-)

5.50e1

R1 913.00>169.00 (-)

2.38e2

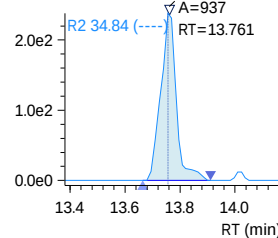
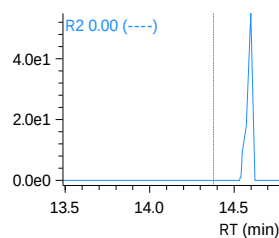


R2 526.00>169.00 (-)

5.50e1

R2 913.00>169.00 (-)

2.38e2



Validation Report

1st PS 01/25/24
2nd MS 01/25/24

Data File: J:\LCMS08\Data\240122_1633_B1\240122_007
Lab ID: KQ2401073-11
RunType: LLCCV
Matrix: Water

Date Acquired: 1/22/24 12:04
Batch ID: 830573
Analysis Method: 1633/PFAS_DOD5.4

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Internal Standards	X	

Primary Review: _____

Secondary Review: _____

Quantitation Report

1st *PS* 01/25/24
2nd *MS* 01/25/24

Data File:	J:\LCMS08\Data\240122_1633_B1\240122_007	Instrument:	K-LCMS-08
Acqu Date:	1/22/24 12:04	Vial:	20
Run Type:	LLCCV	Dilution:	1
Lab ID:	KQ2401073-11	Raw Units:	ng/mL

Bottle ID:		Tier:	IV	Matrix:	Water
Prod Code:	PFAS_DOD5.4	Collect Date:	12/20/23	Receive Date:	12/20/23

Analysis Lot:	830573	Prep Lot:		Report Group:	KQ2401073
Analysis	1633	Prep Method:			
		Prep Date:			

Title:	Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM	Calibration ID:	KC2400027
		Report List ID:	24615

Internal Standard Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Area Criteria
18O2-PFHxS	7.071		180064	2.5000	OK
13C4-PFOS	8.812		217179	2.5000	OK
13C3-PFBA	1.391		502244	5.0000	OK
13C2-PFHxA	4.954		549058	2.5000	OK
13C4-PFOA	7.099		37085	2.5000	OK
13C5-PFNA	7.950		256514	1.2500	OK
13C2-PFDA	8.717		188279	1.2500	OK

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Rpt?
13C3-PFBS	4.614		253058	2.4765	40 - 135 Y
13C3-PFHxS	7.071		184670	2.3894	40 - 130 Y
13C8-PFOS	8.811		79065	2.1829	40 - 130 Y
13C4-PFBA	1.390		1133594	10.0979	5 - 130 Y
13C5-PFPeA	3.465		112294	4.5310	40 - 130 Y
13C5-PFHxA	4.953		556122	2.4033	40 - 130 Y
13C4-PFHpA	6.139		567895	2.7110	40 - 130 Y
13C8-PFOA	7.099		547441	2.6411	40 - 130 Y
13C9-PFNA	7.950		271996	1.3543	40 - 130 Y
13C6-PFDA	8.716		214018	1.4129	40 - 130 Y
13C7-PFUnDA	9.442		220945	1.2228	30 - 130 Y
13C2-PFDoDA	10.132		259850	1.2518	10 - 130 Y
13C2-PFTeDA	11.420		110135	1.2288	10 - 130 Y
13C8-FOSA	11.163		252989	2.7440	40 - 130 Y
D3-MeFOSA	13.709		43264	2.3302	10 - 130 Y
D5-EtFOSA	14.387		69612	2.8161	10 - 130 Y
D7-MeFOSE	13.401		708877	31.1858	10 - 130 Y
D9-EtFOSE	14.031		729177	31.5844	10 - 130 Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 1/25/24 15:28

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Data File: J:\LCMS08\Data\240122_1633_B1\240122_007		Instrument: K-LCMS08	
Acqu Date: 1/22/24 12:04		Vial: 20	
Run Type: LLCCV		Dilution: 1	
Lab ID: KQ2401073-11		Raw Units: ng/mL	

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc		Rpt?
D3-MeFOSAA	8.853		249505	6.6193	40 - 170	Y
D5-EtFOSAA	9.186		269021	5.9656	25 - 135	Y
13C2-4:2 FTS	4.638		186517	7.5272	40 - 200	Y
13C2-6:2 FTS	6.782		184785	7.8846	40 - 200	Y
13C2-8:2 FTS	8.405		144718	7.5172	40 - 300	Y
13C3-HFPO-DA	5.432		584662	10.8778	40 - 130	Y

Target Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc		Rpt?
Perfluorobutane sulfonic acid (PFBS)	4.614		30178	0.2330		Y
Perfluoropentane sulfonic acid (PFPeS)	5.996		22051	0.2274		Y
Perfluorohexane sulfonic acid (PFHxS)	7.073		26085	0.2751		Y
Perfluoroheptane sulfonic acid (PFHpS)	7.994		16762	0.2716		Y
Perfluorooctane sulfonic acid (PFOS)	8.813		22851	0.2779		Y
Perfluorononane sulfonic acid (PFNS)	9.578		17179	0.2860		Y
Perfluorodecane sulfonic acid (PFDS)	10.291		13659	0.2554		Y
Perfluorododecane sulfonic acid (PFDoS)	11.616		7868	0.2481		Y
Perfluorobutanoic acid (PFBA)	1.394		24967	0.2563		Y
Perfluoropentanoic acid (PFPeA)	3.468		39240	0.2698		Y
Perfluorohexanoic acid (PFHxA)	4.955		48800	0.2552		Y
Perfluoroheptanoic acid (PFHpA)	6.139		59719	0.2188		Y
Perfluorooctanoic acid (PFOA)	7.101		37917	0.2246		Y
Perfluorononanoic acid (PFNA)	7.952		41015	0.2341		Y
Perfluorodecanoic acid (PFDA)	8.718		52418	0.2315		Y
Perfluoroundecanoic acid (PFUnDA)	9.445		38620	0.2117		Y
Perfluorododecanoic acid (PFDOA)	10.133		38022	0.2273		Y
Perfluorotridecanoic acid (PFTTrDA)	10.790		40386	0.2290		Y
Perfluorotetradecanoic acid (PFTDA)	11.420		35457	0.2718		Y
Perfluorooctane sulfonamide (PFOSAm)	11.161		43252	0.5187		Y
N-Methylperfluorooctane sulfonamide (MeFOSA)	13.719		7433	0.2383		Y
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	14.405		9659	0.2383		Y
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	13.440		7055	0.2710		Y
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	14.075		9906	0.2582		Y
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	8.858		15353	0.2268		Y

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N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

		1st	PS	01/25/24
Data File:	J:\LCMS08\Data\240122_1633_B1\240122_007	Instrument:	K-LCMS08	MS 01/25/24
Acqu Date:	1/22/24 12:04	Vial:	20	
Run Type:	LLCCV	Dilution:	1	
Lab ID:	KQ2401073-11	Raw Units:	ng/mL	

Target Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Rpt?
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	9.196		10193	0.2837	Y
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	4.637		23111	0.2519	Y
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	6.782		16333	0.1941	Y
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	8.407		14175	0.2280	Y
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	2.968		27001	10.8432	Y
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	5.872		137115	9.5320	Y
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	7.937		183244	9.5423	Y
Perfluoro(2-ethoxyethane) sulfonic acid (PFEEESA)	5.291		122469	0.1966	Y
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	9.379		95364	0.1978	Y
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	10.801		66330	0.1875	Y
Perfluoro-3-methoxypropanoic acid (PFMPA)	2.406		22180	0.3056	Y
Perfluoro-4-methoxybutanoic acid (PFMBA)	3.992		26859	0.2612	Y
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	5.434		16381	0.2537	Y
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	4.813		32187	0.2609	Y
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	6.507		100005	0.2207	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 1/25/24 15:28

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240122_007

Sample ID: 1633 ICAL 0.25PPB
Date Acquired: 1/22/2024 12:04:37 PM
Acquired by: System Administrator
Data File: 240122_007
Vial: 3 | Inj. Volume: 10.0000uL | Tray: 1

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	1133594	----	----	----	----	----	----	
13C4-PFBA_IS	216.80>171.90	----	1133594	----	----	----	----	----	----	
13C3-PFBA_IS	216.00>172.00	----	502244	----	----	----	----	----	----	
PFBA	212.80>169.05	----	24967	----	----	----	----	----	----	
PFMPA	229.00>84.90	----	22180	----	----	----	----	----	----	
3_3 FTCA	241.00>177.10	241.00>117.00	27001	35804	132.60	141.17	35804	132.60	135.52	
13C5-PFPeA	268.30>223.00	----	112294	----	----	----	----	----	----	
13C5-PFPeA_IS	268.30>223.00	----	112294	----	----	----	----	----	----	
PFPeA	263.00>219.00	----	39240	----	----	----	----	----	----	
PFMBA	279.00>84.95	----	26859	----	----	----	----	----	----	
13C2-4_2 FTS	329.10>80.90	----	186517	----	----	----	----	----	----	AC
13C2-4_2 FTS_IS	329.10>80.90	----	186517	----	----	----	----	----	----	
4_2 FTS	327.10>307.00	327.10>80.90	23111	6804	29.44	29.06	6804	29.44	35.34	
13C3-PFBS_IS	302.10>79.90	----	253058	----	----	----	----	----	----	
PFBS	298.70>79.90	298.70>98.80	30178	12895	42.73	46.72	12895	42.73	49.78	
13C3-PFBS	302.10>79.90	----	253058	----	----	----	----	----	----	
NFDHA	295.00>201.00	295.00>84.90	32187	13045	40.53	40.25	13045	40.53	37.18	
13C5-PFHxA	318.00>273.00	----	556122	----	----	----	----	----	----	
13C5-PFHxA_IS	318.00>273.00	----	556122	----	----	----	----	----	----	
13C2-PFHxA_IS	315.10>270.00	----	549058	----	----	----	----	----	----	
PFHxA	313.00>269.00	----	48800	----	----	----	----	----	----	
PFEESA	314.80>135.00	314.80>82.90	122469	7191	5.87	6.11	7191	5.87	5.72	
13C3-HFPO-DA	286.90>168.90	----	584662	----	----	----	----	----	----	
13C3-HFPO-DA_IS	286.90>168.90	----	584662	----	----	----	----	----	----	
HFPO-DA	284.90>168.90	284.90>184.90	16381	12402	75.71	65.61	12402	75.71	60.94	
5_3 FTCA	341.00>237.05	341.00>217.00	137115	227103	165.63	158.86	227103	165.63	155.83	
PFPeS	349.10>79.90	349.10>98.80	22051	12213	55.38	55.80	12213	55.38	56.73	
13C4-PFHpA	367.10>322.00	----	567895	----	----	----	----	----	----	
13C4-PFHpA_IS	367.10>322.00	----	567895	----	----	----	----	----	----	
PFHpA	363.10>319.00	363.10>169.00	59719	13689	22.92	21.50	13689	22.92	21.92	
DONA	376.90>250.90	376.90>84.80	100005	27669	27.67	29.66	27669	27.67	30.77	
13C2-6_2 FTS_IS	429.10>80.90	----	184785	----	----	----	----	----	----	
13C2-6_2 FTS	429.10>80.90	----	184785	----	----	----	----	----	----	AC
6_2 FTS	427.10>407.00	427.10>80.90	16333	7798	47.74	41.15	7798	47.74	40.98	
13C4-PFOA_IS	417.10>172.00	----	37085	----	----	----	----	----	----	
13C8-PFOA_IS	421.10>376.00	----	547441	----	----	----	----	----	----	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240122_007 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	547441	----	----	----	----	----	----	----
PFOA	413.00>369.00	413.00>169.00	37917	13378	35.28	31.89	13378	35.28	32.23	
13C3-PFHxS	402.10>79.90	----	184670	----	----	----	----	----	----	----
13C3-PFHxS_IS	402.10>79.90	----	184670	----	----	----	----	----	----	----
PFHxS	398.70>79.90	398.70>98.90	26085	13824	53.00	56.62	13824	53.00	60.26	
18O2-PFHxS_IS	403.00>83.90	----	180064	----	----	----	----	----	----	----
13C9-PFNA_IS	472.10>427.00	----	271996	----	----	----	----	----	----	----
13C9-PFNA	472.10>427.00	----	271996	----	----	----	----	----	----	----
13C5-PFNA_IS	468.00>423.00	----	256514	----	----	----	----	----	----	----
PFNA	463.00>419.00	463.00>219.00	41015	9155	22.32	23.17	9155	22.32	23.63	
PFHpS	449.00>79.90	449.00>98.80	16762	10289	61.38	56.96	10289	61.38	59.06	
7_3 FTCA	441.00>317.00	441.00>336.90	183244	231656	126.42	117.47	231656	126.42	125.53	
13C2-8_2-FTS	529.10>80.90	----	144718	----	----	----	----	----	----	AC
13C2-8_2-FTS_IS	529.10>80.90	----	144718	----	----	----	----	----	----	----
8_2 FTS	527.10>506.95	527.10>80.80	14175	7221	50.94	49.59	7221	50.94	44.81	
13C6-PFDA_IS	519.10>474.10	----	214018	----	----	----	----	----	----	----
13C6-PFDA	519.10>474.10	----	214018	----	----	----	----	----	----	----
13C2-PFDA_IS	515.10>470.10	----	188279	----	----	----	----	----	----	----
PFDA	512.90>469.00	512.90>219.00	52418	9058	17.28	19.00	9058	17.28	19.15	
D3-NMeFOSAA_IS	573.20>419.00	----	249505	----	----	----	----	----	----	----
D3-NMeFOSAA	573.20>419.00	----	249505	----	----	----	----	----	----	AC
13C8-PFOS_IS	507.10>98.90	----	79065	----	----	----	----	----	----	----
13C8-PFOS	507.10>98.90	----	79065	----	----	----	----	----	----	----
13C4-PFOS_IS	502.80>79.90	----	217179	----	----	----	----	----	----	----
PFOS	498.90>79.90	498.90>98.80	22851	10945	47.90	52.47	10945	47.90	53.10	
NMeFOSAA	570.10>419.00	570.10>483.00	15353	11067	72.08	55.15	11067	72.08	60.69	
D5-NEtFOSAA_IS	589.20>419.00	----	269021	----	----	----	----	----	----	----
D5-NEtFOSAA	589.20>419.00	----	269021	----	----	----	----	----	----	----
NEtFOSAA	584.20>419.10	584.20>526.00	10193	6723	65.96	81.95	6723	65.96	73.27	
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	95364	31473	33.00	32.76	31473	33.00	32.59	
PFUnDA	563.10>519.00	563.10>269.10	38620	6966	18.04	13.12	6966	18.04	14.36	
13C7-PFUnDA_IS	570.00>525.10	----	220945	----	----	----	----	----	----	----
13C7-PFUnDA	570.00>525.10	----	220945	----	----	----	----	----	----	----
PFNS	548.80>79.90	548.80>98.80	17179	10214	59.46	65.22	10214	59.46	65.31	
10_2 FTS	626.80>607.05	626.80>81.00	15658	5725	36.56	37.13	5725	36.56	38.76	
13C2-PFDOA_IS	615.10>570.00	----	259850	----	----	----	----	----	----	----
13C2-PFDOA	615.10>570.00	----	259850	----	----	----	----	----	----	----
PFDOA	613.10>569.00	613.10>319.00	38022	3866	10.17	11.29	3866	10.17	11.19	
PFDS	599.00>79.90	599.00>98.80	13659	8481	62.09	60.18	8481	62.09	65.65	
PFTrDA	663.00>619.00	663.00>168.90	40386	7147	17.70	17.64	7147	17.70	19.81	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240122_007 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	66330	23404	35.28	36.44	23404	35.28	35.86	
PFOSAm	498.10>77.90	----	43252	----	----	----	----	----	----	
13C8-PFOSAm	506.10>77.80	----	252989	----	----	----	----	----	----	
13C8-PFOSAm_IS	506.10>77.80	----	252989	----	----	----	----	----	----	
PFTDA	713.10>669.00	713.10>168.90	35457	7608	21.46	22.96	7608	21.46	25.01	
13C2-PFTDA	715.20>670.00	----	110135	----	----	----	----	----	----	
13C2-PFTDA_IS	715.20>670.00	----	110135	----	----	----	----	----	----	
PFDoS	699.10>79.90	699.10>98.80	7868	5443	69.17	67.40	5443	69.17	73.46	
D7-MeFOSE_IS	623.20>58.90	----	708877	----	----	----	----	----	----	
D7-MeFOSE	623.20>58.90	----	708877	----	----	----	----	----	----	
MeFOSE	616.10>59.00	----	7055	----	----	----	----	----	----	
13C2-PFHxDA_IS	815.00>770.05	----	417607	----	----	----	----	----	----	
13C2-PFHxDA	815.00>770.05	----	417607	----	----	----	----	----	----	
PFHxDA	813.00>768.95	813.00>218.95	45709	6358	13.91	13.90	6358	13.91	15.85	
D3-MeFOSA	515.00>219.00	----	43264	----	----	----	----	----	----	
D3-MeFOSA_IS	515.00>219.00	----	43264	----	----	----	----	----	----	
MeFOSA	511.90>219.00	511.90>169.00	7433	12317	165.70	140.79	12317	165.70	150.13	
D9-EtFOSE_IS	639.20>58.90	----	729177	----	----	----	----	----	----	
D9-EtFOSE	639.20>58.90	----	729177	----	----	----	----	----	----	
EtFOSE	630.00>59.00	----	9906	----	----	----	----	----	----	
D5-EtFOSAm	531.10>219.00	----	69612	----	----	----	----	----	----	
D5-EtFOSAm_IS	531.10>219.00	----	69612	----	----	----	----	----	----	
EtFOSAm	526.00>219.00	526.00>169.00	9659	14489	150.00	163.90	14489	150.00	152.08	
PFODA	913.00>868.65	913.00>169.00	25837	5920	22.91	27.03	5920	22.91	26.29	

Flag ID key: AC: Accuracy%



240122_007

Sample ID: 1633 ICAL 0.25PPB
Date Acquired: 1/22/2024 12:04:37 PM
Acquired by: System Administrator
Data File: 240122_007
Vial: 3 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.390	-0.001	-0.001	1133594	502244	13C3-PFBA_IS	10.0979	ng/mL	
13C4-PFBA_IS	Auto	1.390	-0.001	----	1133594	1133594	----	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.391	0.000	----	502244	502244	----	5.0000	ng/mL	
PFBA	Auto	1.394	-0.001	0.004	24967	1133594	13C4-PFBA_IS	0.2563	ng/mL	
PFMPA	Auto	2.406	0.000	-1.059	22180	112294	13C5-PFPeA_IS	0.3056	ng/mL	
3_3 FTCA	Auto	2.968	0.000	-0.497	27001	112294	13C5-PFPeA_IS	10.8432	ng/mL	
13C5-PFPeA	Auto	3.465	0.000	-1.489	112294	549058	13C2-PFHxA_IS	4.5310	ng/mL	
13C5-PFPeA_IS	Auto	3.465	0.000	----	112294	112294	----	5.0000	ng/mL	
PFPeA	Auto	3.468	0.001	0.003	39240	112294	13C5-PFPeA_IS	0.2698	ng/mL	
PFMBA	Auto	3.992	0.001	0.527	26859	112294	13C5-PFPeA_IS	0.2612	ng/mL	
13C2-4_2 FTS	Auto	4.638	0.002	-2.433	186517	180064	18O2-PFHxS_IS	7.5272	ng/mL	AC
13C2-4_2 FTS_IS	Auto	4.638	0.002	----	186517	186517	----	5.0000	ng/mL	
4_2 FTS	Auto	4.637	0.000	-0.001	23111	186517	13C2-4_2 FTS_IS	0.2519	ng/mL	
13C3-PFBS_IS	Auto	4.614	0.002	----	253058	253058	----	2.5000	ng/mL	
PFBS	Auto	4.614	0.001	0.000	30178	253058	13C3-PFBS_IS	0.2330	ng/mL	
13C3-PFBS	Auto	4.614	0.002	-2.457	253058	180064	18O2-PFHxS_IS	2.4765	ng/mL	
NFDHA	Auto	4.813	0.003	-0.140	32187	556122	13C5-PFHxA_IS	0.2609	ng/mL	
13C5-PFHxA	Auto	4.953	0.001	-0.001	556122	549058	13C2-PFHxA_IS	2.4033	ng/mL	
13C5-PFHxA_IS	Auto	4.953	0.001	----	556122	556122	----	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	4.954	0.001	----	549058	549058	----	2.5000	ng/mL	
PFHxA	M	4.955	0.001	0.002	48800	556122	13C5-PFHxA_IS	0.2552	ng/mL	
PFEESA	Auto	5.291	0.002	0.338	122469	556122	13C5-PFHxA_IS	0.1966	ng/mL	
13C3-HFPO-DA	Auto	5.432	0.002	0.478	584662	549058	13C2-PFHxA_IS	10.8778	ng/mL	
13C3-HFPO-DA_IS	Auto	5.432	0.002	----	584662	584662	----	10.0000	ng/mL	
HFPO-DA	Auto	5.434	0.003	0.002	16381	584662	13C3-HFPO-DA_IS	0.2537	ng/mL	
5_3 FTCA	Auto	5.872	0.002	0.919	137115	556122	13C5-PFHxA_IS	9.5320	ng/mL	
PFPeS	Auto	5.996	0.002	-1.075	22051	184670	13C3-PFHxS_IS	0.2274	ng/mL	
13C4-PFHpA	Auto	6.139	0.002	1.185	567895	549058	13C2-PFHxA_IS	2.7110	ng/mL	
13C4-PFHpA_IS	Auto	6.139	0.002	----	567895	567895	----	2.5000	ng/mL	
PFHpA	Auto	6.139	0.000	0.000	59719	567895	13C4-PFHpA_IS	0.2188	ng/mL	
DONA	Auto	6.507	0.003	1.075	100005	584662	13C3-HFPO-DA_IS	0.2207	ng/mL	
13C2-6_2 FTS_IS	Auto	6.782	0.001	----	184785	184785	----	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.782	0.001	-0.289	184785	180064	18O2-PFHxS_IS	7.8846	ng/mL	AC
6_2 FTS	Auto	6.782	0.001	0.000	16333	184785	13C2-6_2 FTS_IS	0.1941	ng/mL	
13C4-PFOA_IS	Auto	7.099	0.002	----	37085	37085	----	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.099	0.003	----	547441	547441	----	2.5000	ng/mL	
13C8-PFOA	Auto	7.099	0.003	0.000	547441	37085	13C4-PFOA_IS	2.6411	ng/mL	
PFOA	Auto	7.101	0.003	0.002	37917	547441	13C8-PFOA_IS	0.2246	ng/mL	
13C3-PFHxS	Auto	7.071	0.003	0.000	184670	180064	18O2-PFHxS_IS	2.3894	ng/mL	
13C3-PFHxS_IS	Auto	7.071	0.003	----	184670	184670	----	2.5000	ng/mL	
PFHxS	M	7.073	0.004	0.002	26085	184670	13C3-PFHxS_IS	0.2751	ng/mL	
18O2-PFHxS_IS	Auto	7.071	0.002	----	180064	180064	----	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.950	0.003	----	271996	271996	----	1.2500	ng/mL	
13C9-PFNA	Auto	7.950	0.003	0.000	271996	256514	13C5-PFNA_IS	1.3543	ng/mL	
13C5-PFNA_IS	Auto	7.950	0.002	----	256514	256514	----	1.2500	ng/mL	
PFNA	Auto	7.952	0.004	0.002	41015	271996	13C9-PFNA_IS	0.2341	ng/mL	
PFHpS	Auto	7.994	0.002	-0.817	16762	79065	13C8-PFOS_IS	0.2716	ng/mL	
7_3 FTCA	Auto	7.937	0.001	2.984	183244	556122	13C5-PFHxA_IS	9.5423	ng/mL	
13C2-8_2-FTS	Auto	8.405	0.002	1.334	144718	180064	18O2-PFHxS_IS	7.5172	ng/mL	AC
13C2-8_2-FTS_IS	Auto	8.405	0.002	----	144718	144718	----	5.0000	ng/mL	
8_2 FTS	Auto	8.407	0.003	0.002	14175	144718	13C2-8_2-FTS_IS	0.2280	ng/mL	
13C6-PFDA_IS	Auto	8.716	0.003	----	214018	214018	----	1.2500	ng/mL	
13C6-PFDA	Auto	8.716	0.003	-0.001	214018	188279	13C2-PFDA_IS	1.4129	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_007 (continued)

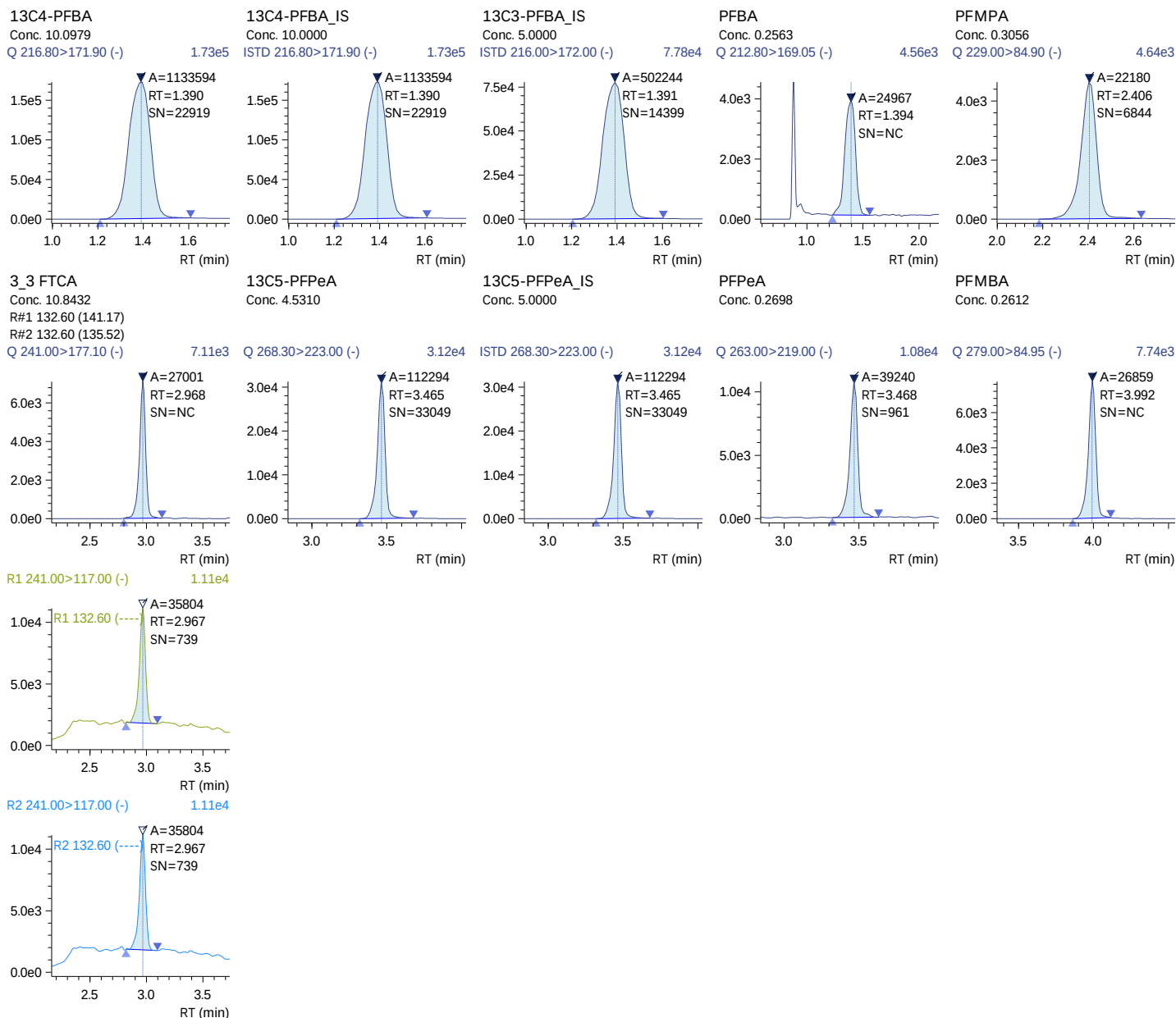
(Table continued from previous page)

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C2-PFDA_IS	Auto	8.717	0.004	----	188279	188279	----	1.2500	ng/mL	
PFDA	Auto	8.718	0.003	0.002	52418	214018	13C6-PFDA_IS	0.2315	ng/mL	
D3-NMeFOSAA_IS	Auto	8.853	0.002	----	249505	249505	----	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.853	0.002	0.041	249505	217179	13C4-PFOS_IS	6.6193	ng/mL	AC
13C8-PFOS_IS	Auto	8.811	0.003	----	79065	79065	----	2.5000	ng/mL	
13C8-PFOS	Auto	8.811	0.003	-0.001	79065	217179	13C4-PFOS_IS	2.1829	ng/mL	
13C4-PFOS_IS	Auto	8.812	0.003	----	217179	217179	----	2.5000	ng/mL	
PFOS	M	8.813	0.004	0.002	22851	79065	13C8-PFOS_IS	0.2779	ng/mL	
NMeFOSAA	M	8.858	0.001	0.005	15353	249505	D3-NMeFOSAA_IS	0.2268	ng/mL	
D5-NetFOSAA_IS	Auto	9.186	0.003	----	269021	269021	----	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.186	0.003	0.374	269021	217179	13C4-PFOS_IS	5.9656	ng/mL	
NetFOSAA	M	9.196	0.004	0.010	10193	269021	D5-NetFOSAA_IS	0.2837	ng/mL	
9-CI-PF3ONS	Auto	9.379	0.004	3.947	95364	584662	13C3-HFPO-DA_IS	0.1978	ng/mL	
PFUnDA	Auto	9.445	0.005	0.003	38620	220945	13C7-PFUnDA_IS	0.2117	ng/mL	
13C7-PFUnDA_IS	Auto	9.442	0.004	----	220945	220945	----	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.442	0.004	0.725	220945	188279	13C2-PFDA_IS	1.2228	ng/mL	
PFNS	Auto	9.578	0.005	0.767	17179	79065	13C8-PFOS_IS	0.2860	ng/mL	
10_2_FTS	Auto	9.817	0.002	1.412	15658	144718	13C2-8_2-FTS_IS	0.2070	ng/mL	
13C2-PFDOA_IS	Auto	10.132	0.004	----	259850	259850	----	1.2500	ng/mL	
13C2-PFDOA	Auto	10.132	0.004	1.415	259850	188279	13C2-PFDA_IS	1.2518	ng/mL	
PFDOA	Auto	10.133	0.004	0.001	38022	259850	13C2-PFDOA_IS	0.2273	ng/mL	
PFDS	Auto	10.291	0.003	1.480	13659	79065	13C8-PFOS_IS	0.2554	ng/mL	
PFTDA	Auto	10.790	0.002	-0.630	40386	110135	13C2-PFTDA_IS	0.2290	ng/mL	
11-CI-PF3OUdS	Auto	10.801	0.003	5.369	66330	584662	13C3-HFPO-DA_IS	0.1875	ng/mL	
PFOSAm	M	11.161	-0.001	-0.002	43252	252989	13C8-PFOSAm_IS	0.5187	ng/mL	
13C8-PFOSAm	Auto	11.163	-0.001	2.351	252989	217179	13C4-PFOS_IS	2.7440	ng/mL	
13C8-PFOSAm_IS	Auto	11.163	-0.001	----	252989	252989	----	2.5000	ng/mL	
PFTDA	Auto	11.420	-0.001	0.000	35457	110135	13C2-PFTDA_IS	0.2718	ng/mL	
13C2-PFTDA	Auto	11.420	0.001	2.703	110135	188279	13C2-PFDA_IS	1.2288	ng/mL	
13C2-PFTDA_IS	Auto	11.420	0.001	----	110135	110135	----	1.2500	ng/mL	
PFDoS	Auto	11.616	0.001	2.805	7868	79065	13C8-PFOS_IS	0.2481	ng/mL	
D7-MeFOSE_IS	Auto	13.401	-0.001	----	708877	708877	----	25.0000	ng/mL	
D7-MeFOSE	Auto	13.401	-0.001	4.589	708877	217179	13C4-PFOS_IS	31.1858	ng/mL	
MeFOSE	M	13.440	-0.001	0.039	7055	708877	D7-MeFOSE_IS	0.2710	ng/mL	
13C2-PFHxDA_IS	Auto	12.636	0.000	----	417607	417607	----	2.5000	ng/mL	
13C2-PFHxDA	Auto	12.636	0.000	3.919	417607	188279	13C2-PFDA_IS	2.3878	ng/mL	
PFHxDA	Auto	12.638	0.001	0.002	45709	417607	13C2-PFHxDA_IS	0.2391	ng/mL	
D3-MeFOSA	Auto	13.709	-0.002	4.897	43264	217179	13C4-PFOS_IS	2.3302	ng/mL	
D3-MeFOSA_IS	Auto	13.709	-0.002	----	43264	43264	----	2.5000	ng/mL	
MeFOSA	M	13.719	0.001	0.010	7433	43264	D3-MeFOSA_IS	0.2383	ng/mL	
D9-EtFOSE_IS	Auto	14.031	-0.001	----	729177	729177	----	25.0000	ng/mL	
D9-EtFOSE	Auto	14.031	-0.001	5.219	729177	217179	13C4-PFOS_IS	31.5844	ng/mL	
EtFOSE	M	14.075	-0.001	0.044	9906	729177	D9-EtFOSE_IS	0.2582	ng/mL	
D5-EtFOSAm	Auto	14.387	0.000	5.575	69612	217179	13C4-PFOS_IS	2.8161	ng/mL	
D5-EtFOSAm_IS	Auto	14.387	0.000	----	69612	69612	----	2.5000	ng/mL	
EtFOSAm	M	14.405	-0.008	0.018	9659	69612	D5-EtFOSAm_IS	0.2383	ng/mL	
PFODA	Auto	13.775	0.001	1.139	25837	417607	13C2-PFHxDA_IS	0.2736	ng/mL	

Flag ID key: AC: Accuracy%



240122_007 (continued)





240122_007 (continued)

13C2-4_2_FTS
Conc. 7.5272

13C2-4_2_FTS_IS
Conc. 5.0000

4_2_FTS
Conc. 0.2519
R#1 29.44 (29.06)
R#2 29.44 (35.34)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 0.2330
R#1 42.73 (46.72)
R#2 42.73 (49.78)

Q 329.10>80.90 (-)

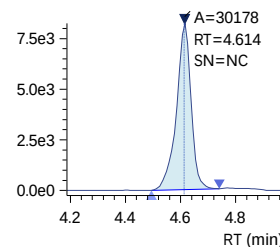
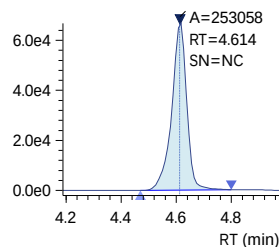
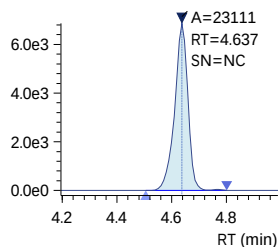
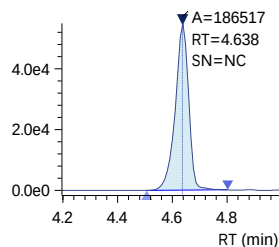
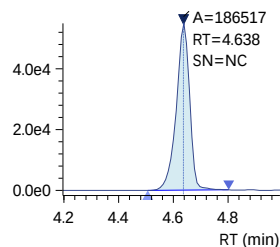
5.50e4 ISTD 329.10>80.90 (-)

5.50e4 Q 327.10>307.00 (-)

6.87e3 ISTD 302.10>79.90 (-)

6.68e4 Q 298.70>98.80 (-)

8.25e3

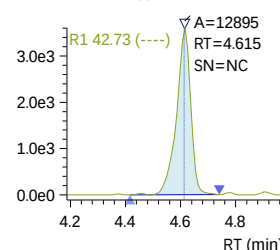
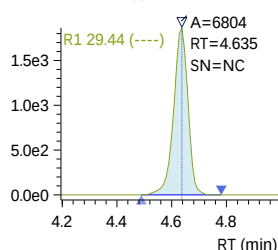


R1 327.10>80.90 (-)

1.86e3

R1 298.70>98.80 (-)

3.61e3

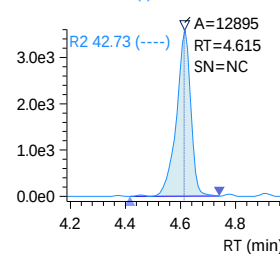
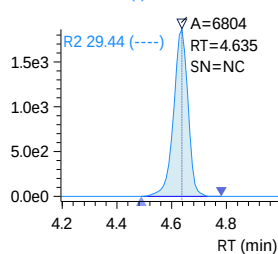


R2 327.10>80.90 (-)

1.86e3

R2 298.70>98.80 (-)

3.61e3





240122_007 (continued)

13C3-PFBS
Conc. 2.4765

NFDHA
Conc. 0.2609
R#1 40.53 (40.25)
R#2 40.53 (37.18)

13C5-PFHxA
Conc. 2.4033

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

Q 302.10>79.90 (-)

6.68e4

Q 295.00>201.00 (-)

9.05e3

Q 318.00>273.00 (-)

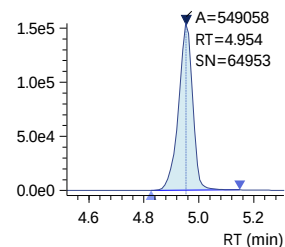
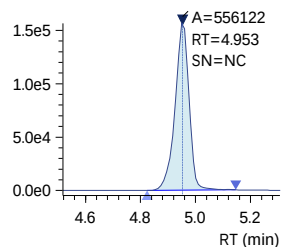
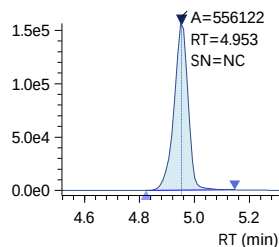
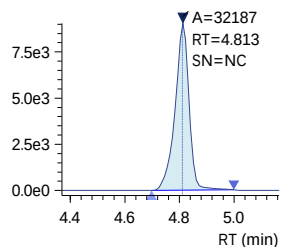
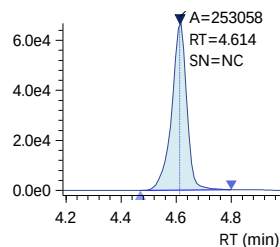
1.57e5

ISTD 318.00>273.00 (-)

1.57e5

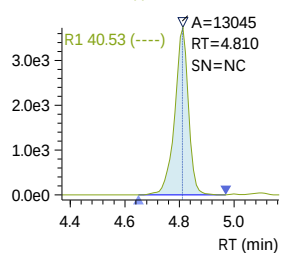
ISTD 315.10>270.00 (-)

1.54e5



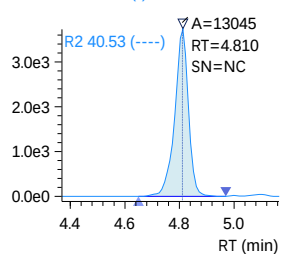
R1 295.00>84.90 (-)

3.73e3



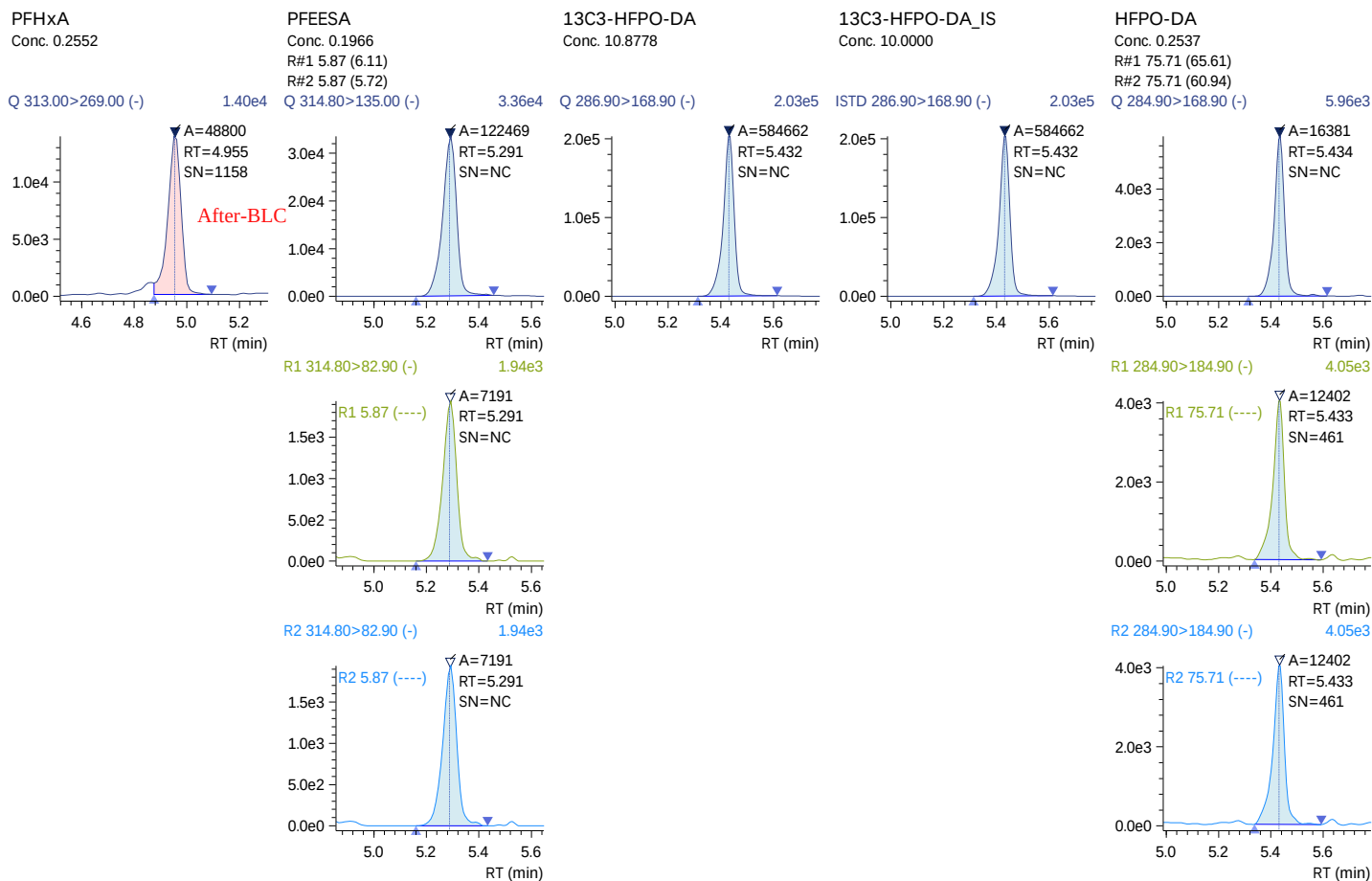
R2 295.00>84.90 (-)

3.73e3



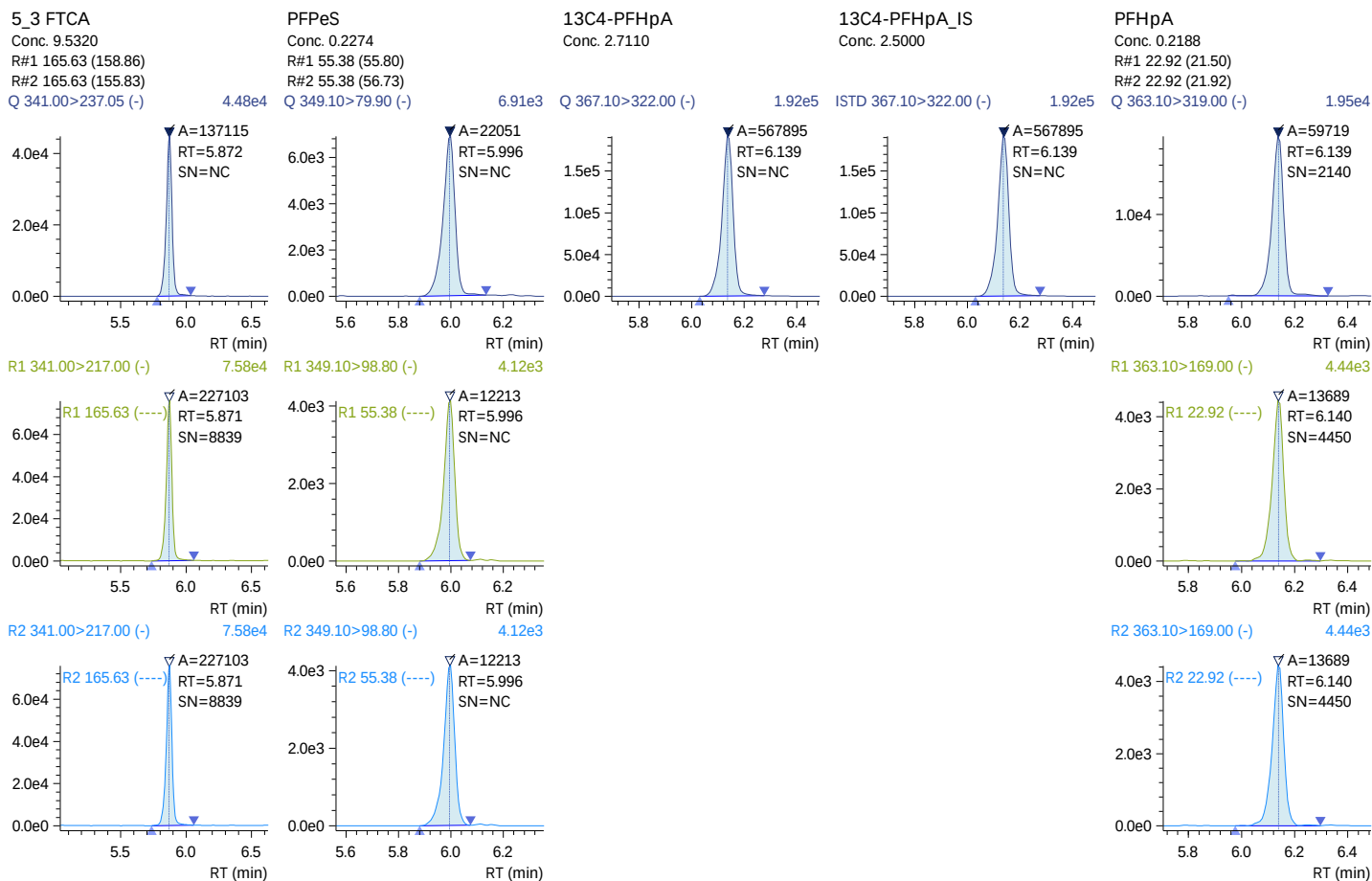


240122_007 (continued)



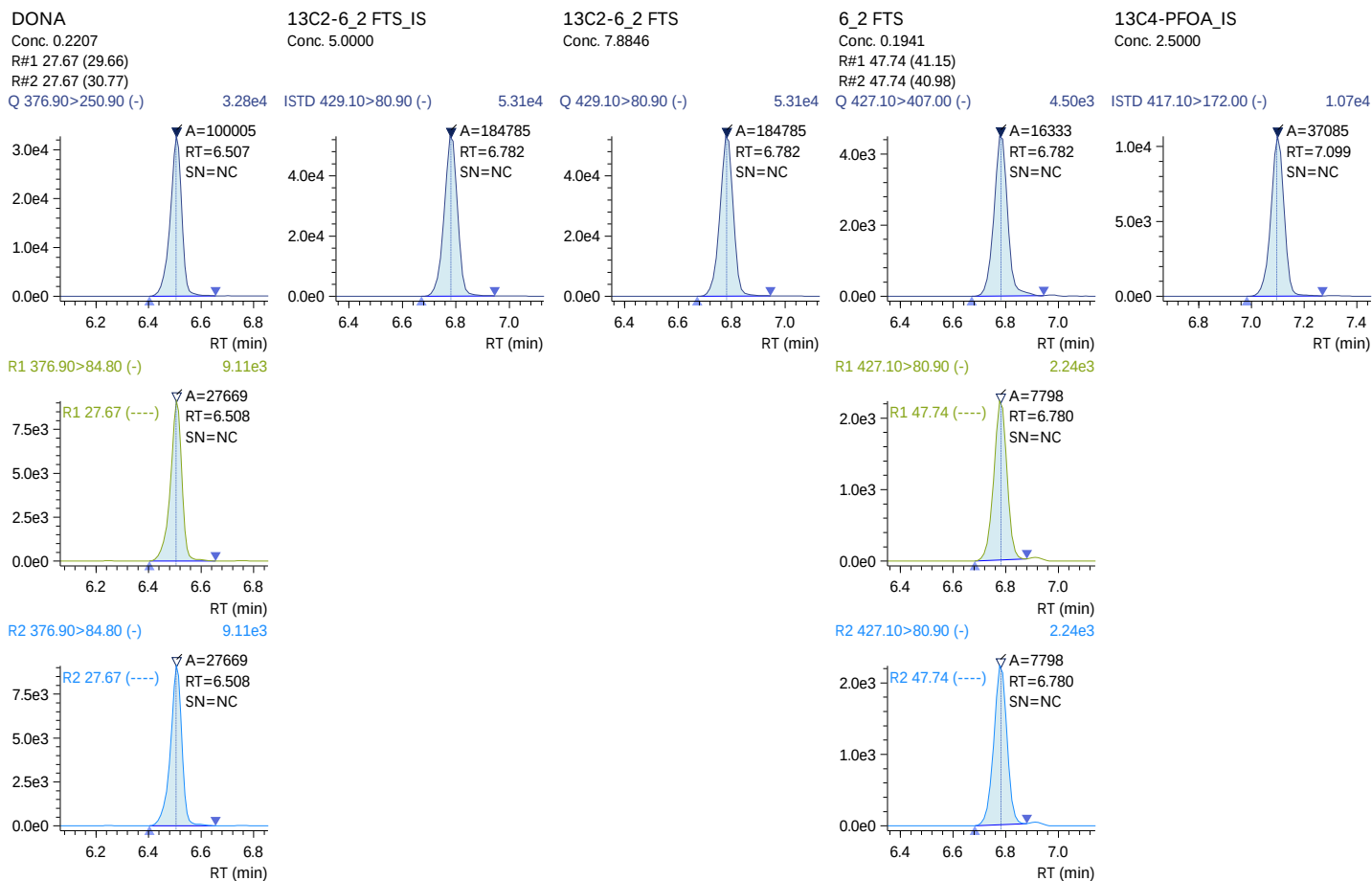


240122_007 (continued)





240122_007 (continued)





240122_007 (continued)

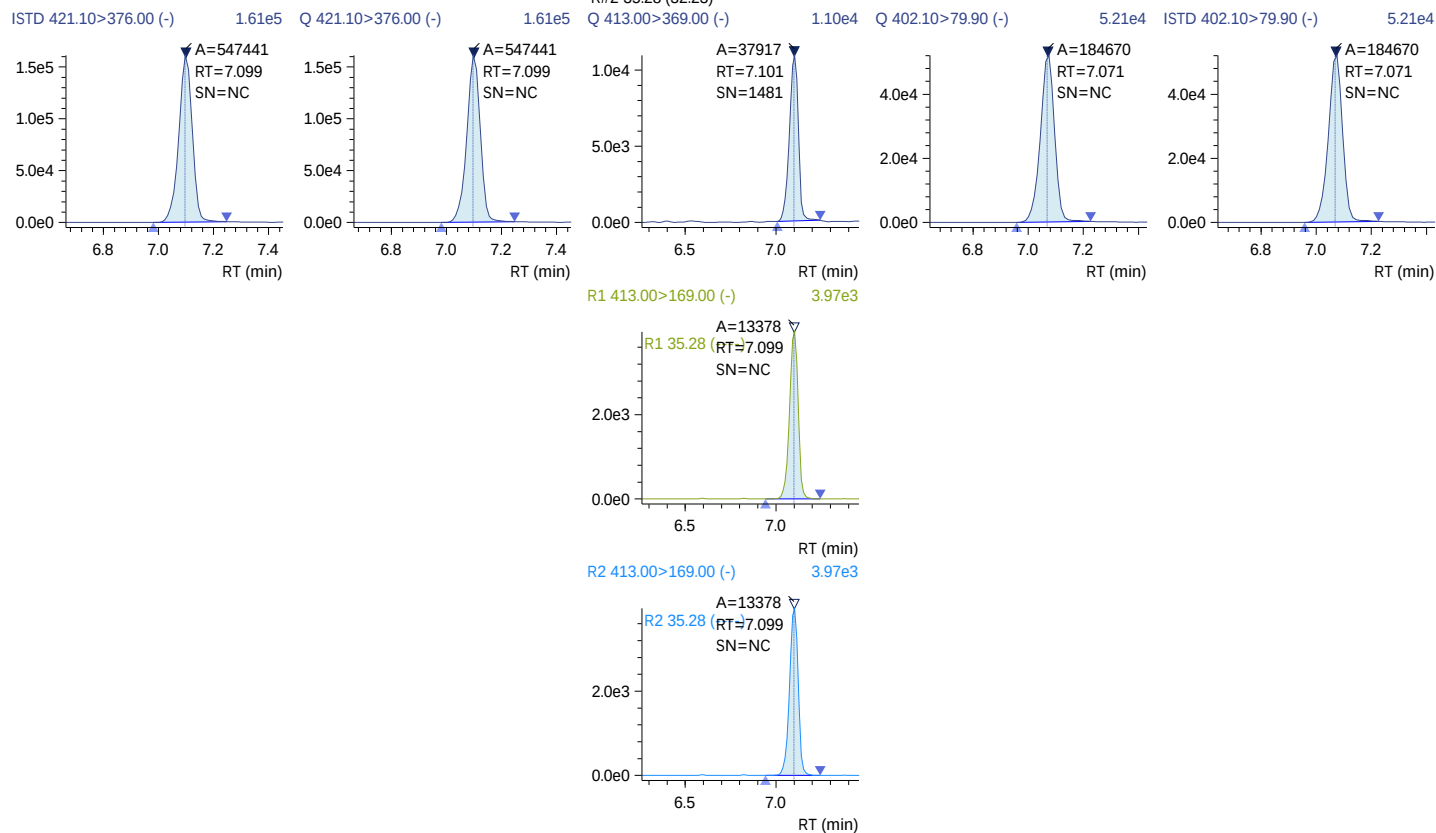
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.6411

PFOA
Conc. 0.2246
R#1 35.28 (31.89)
R#2 35.28 (32.23)

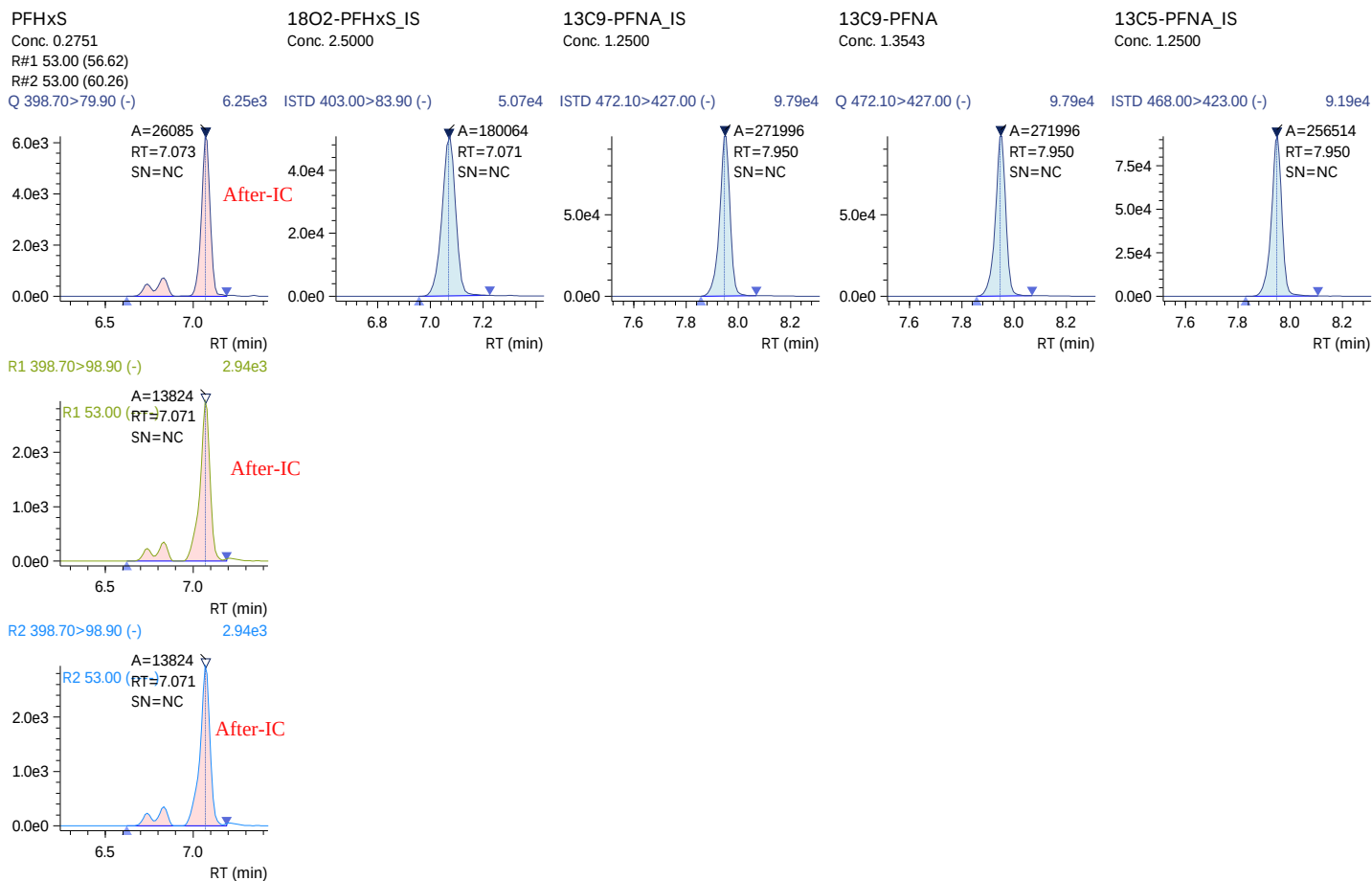
13C3-PFHxS
Conc. 2.3894

13C3-PFHxS_IS
Conc. 2.5000



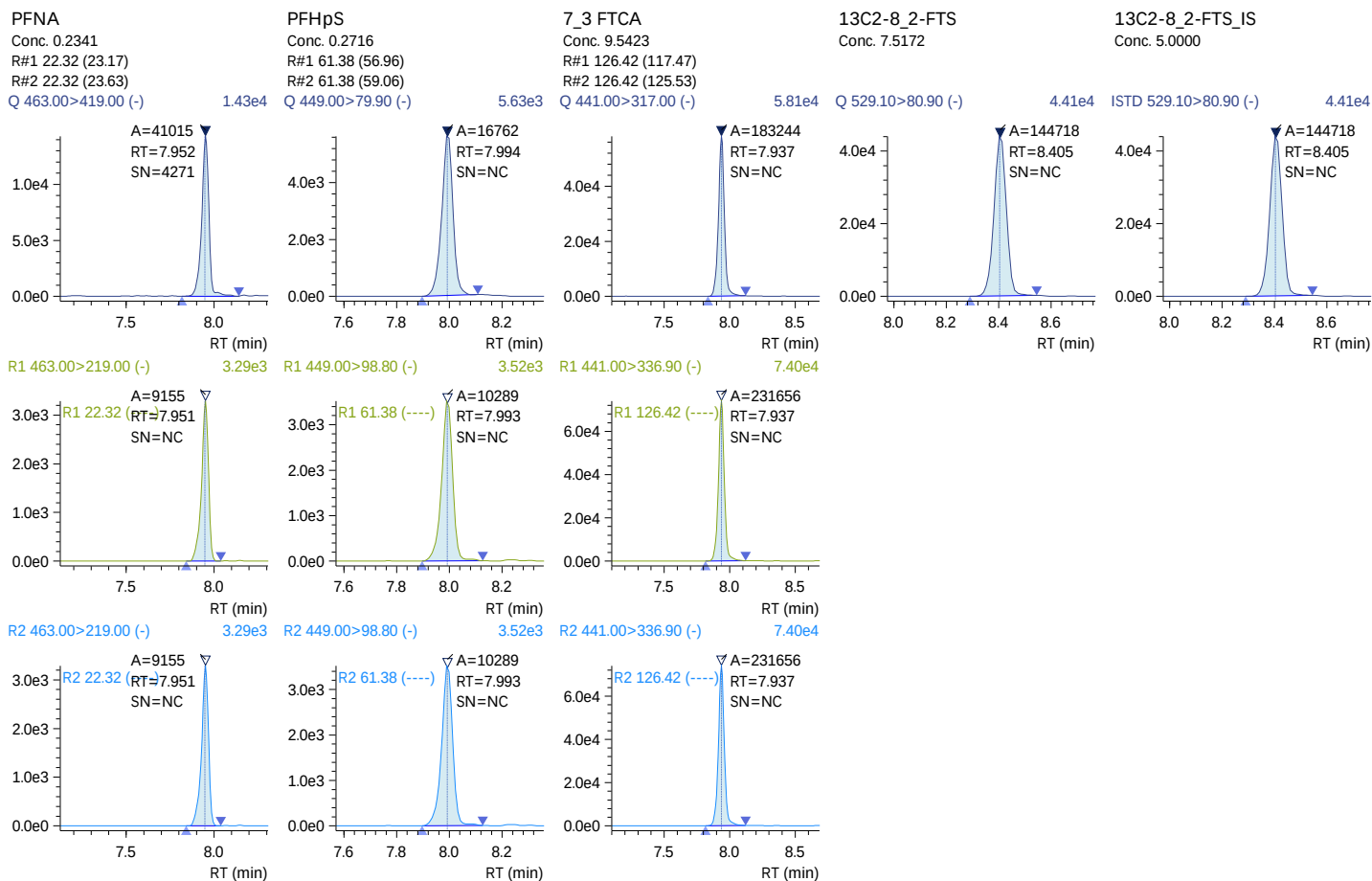


240122_007 (continued)



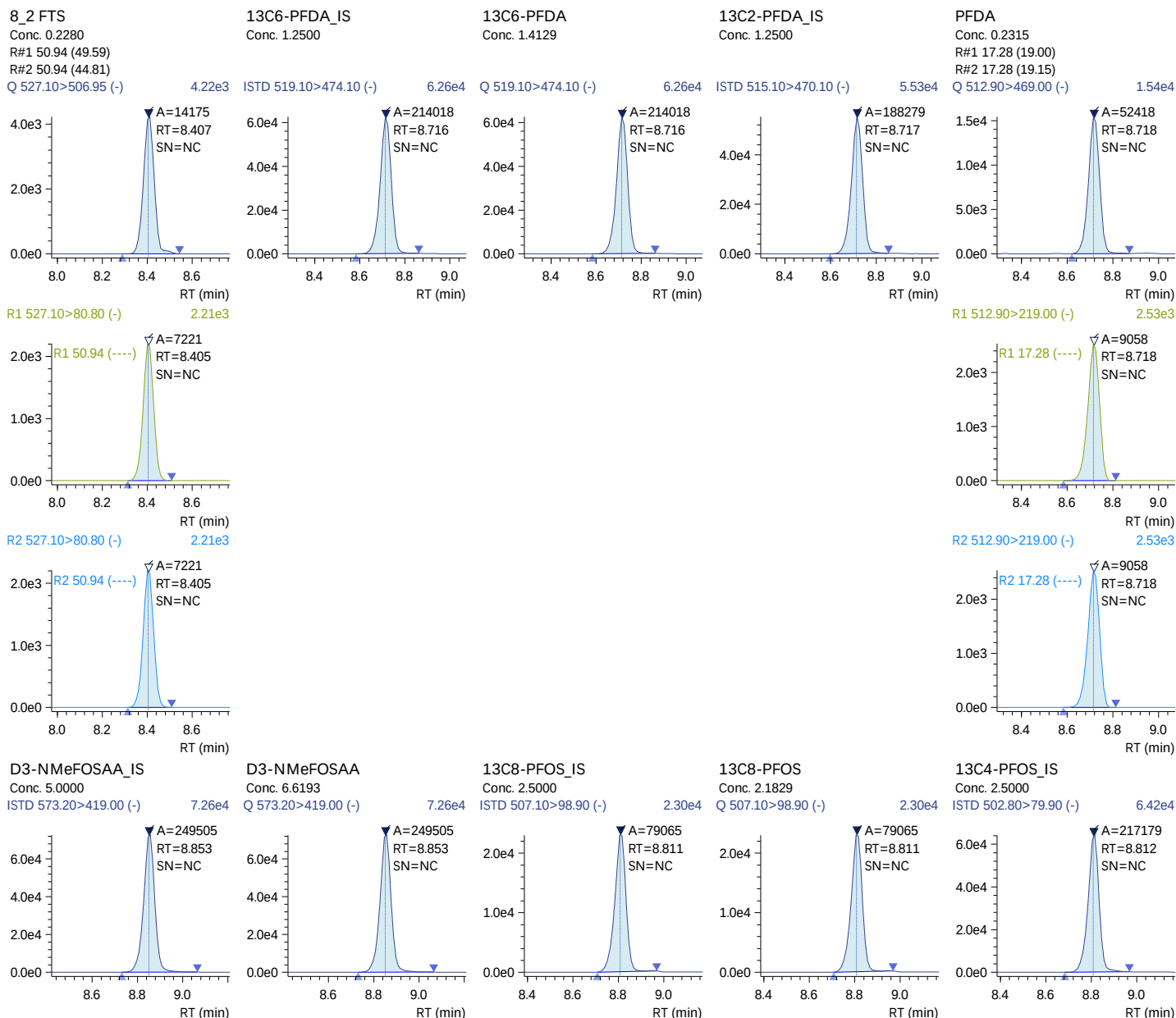


240122_007 (continued)





240122_007 (continued)

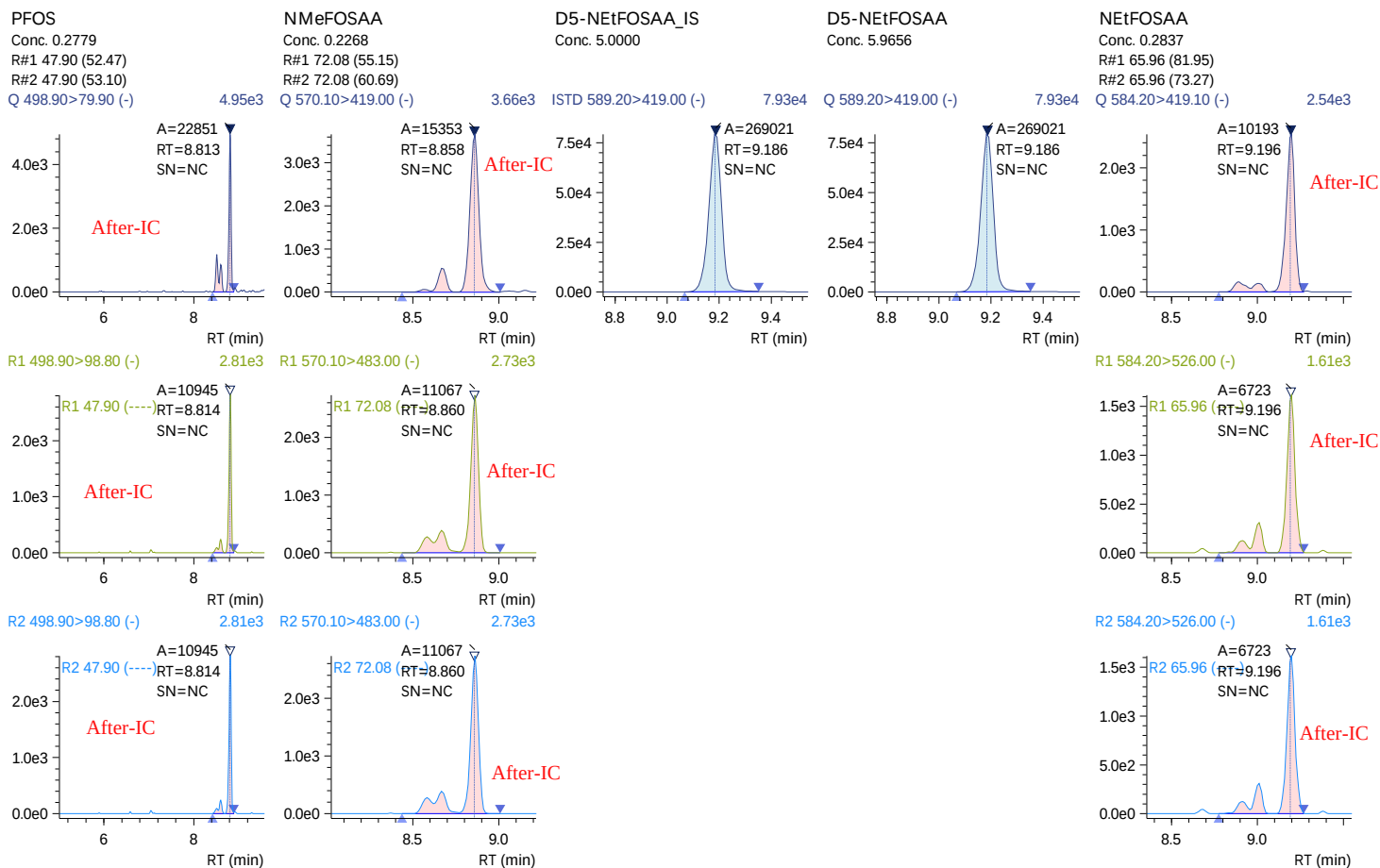


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_007 (continued)

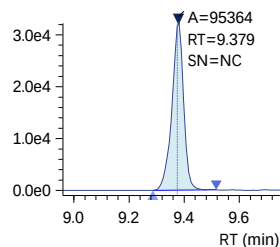




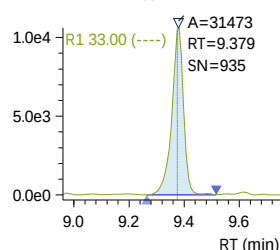
240122_007 (continued)

9-Cl-PF3ONS

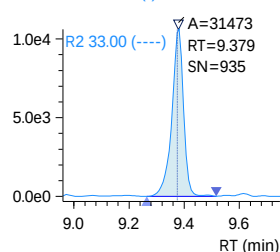
Conc. 0.1978
R#1 33.00 (32.76)
R#2 33.00 (32.59)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-) 1.06e4

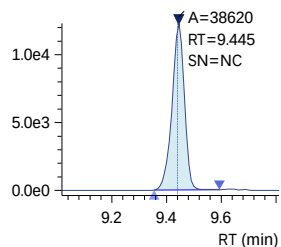


R2 532.80>353.00 (-) 1.06e4

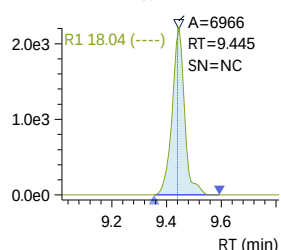


PFUnDA

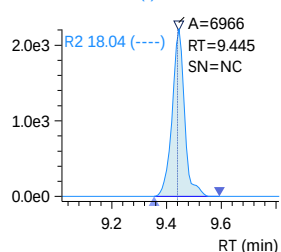
Conc. 0.2117
R#1 18.04 (13.12)
R#2 18.04 (14.36)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-) 2.21e3



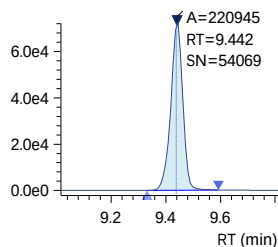
R2 563.10>269.10 (-) 2.21e3



13C7-PFUnDA_IS

Conc. 1.2500

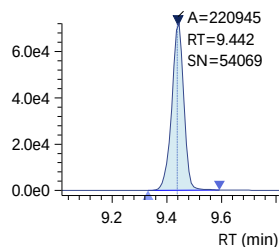
ISTD 570.00>525.10 (-)



13C7-PFUnDA

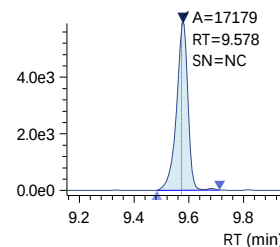
Conc. 1.2228

Q 570.00>525.10 (-)

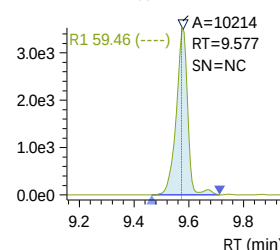


PFNS

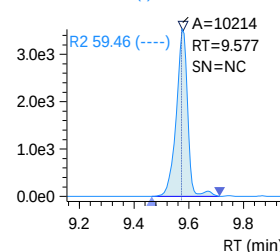
Conc. 0.2860
R#1 59.46 (65.22)
R#2 59.46 (65.31)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-) 3.53e3

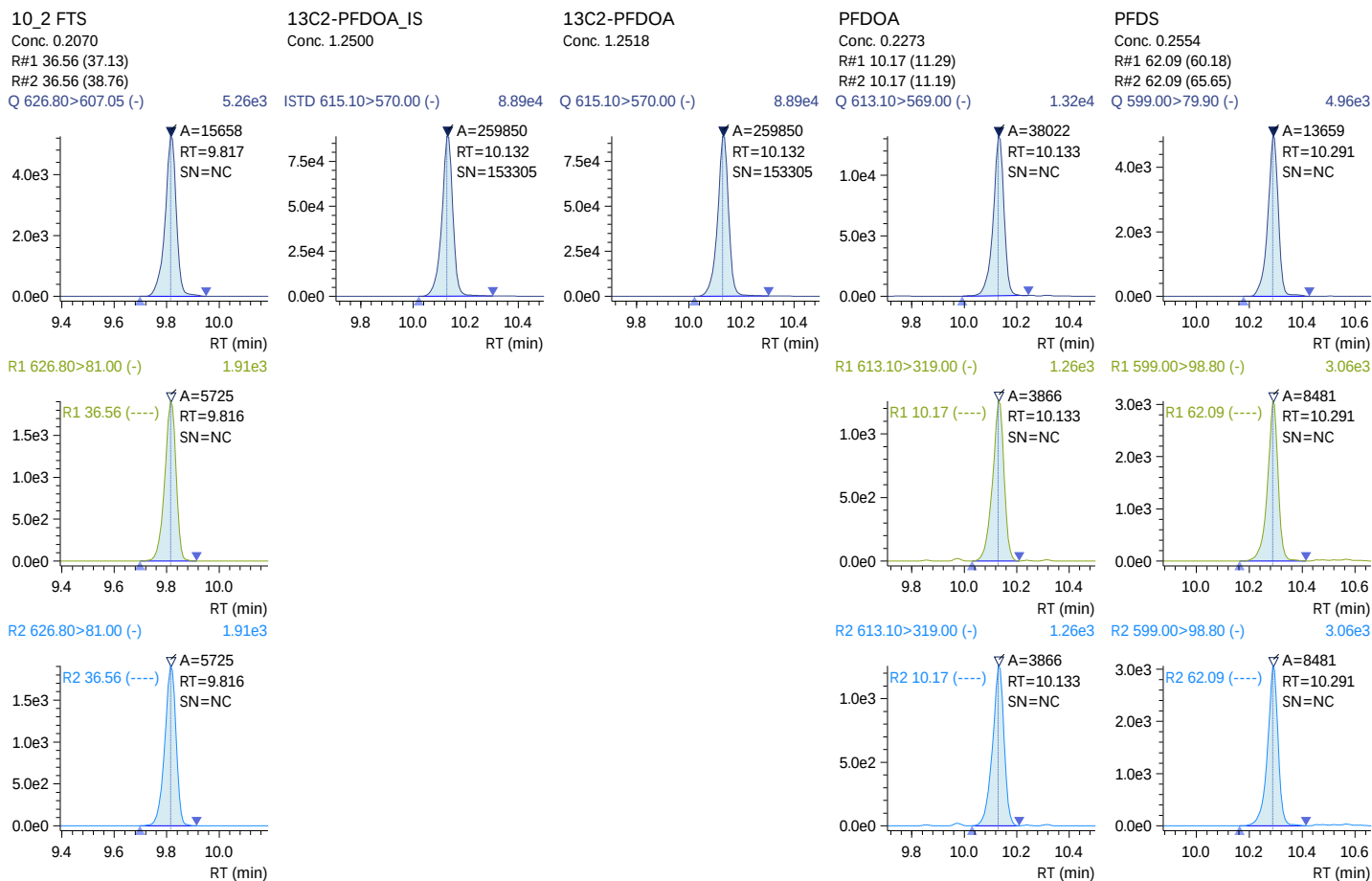


R2 548.80>98.80 (-) 3.53e3



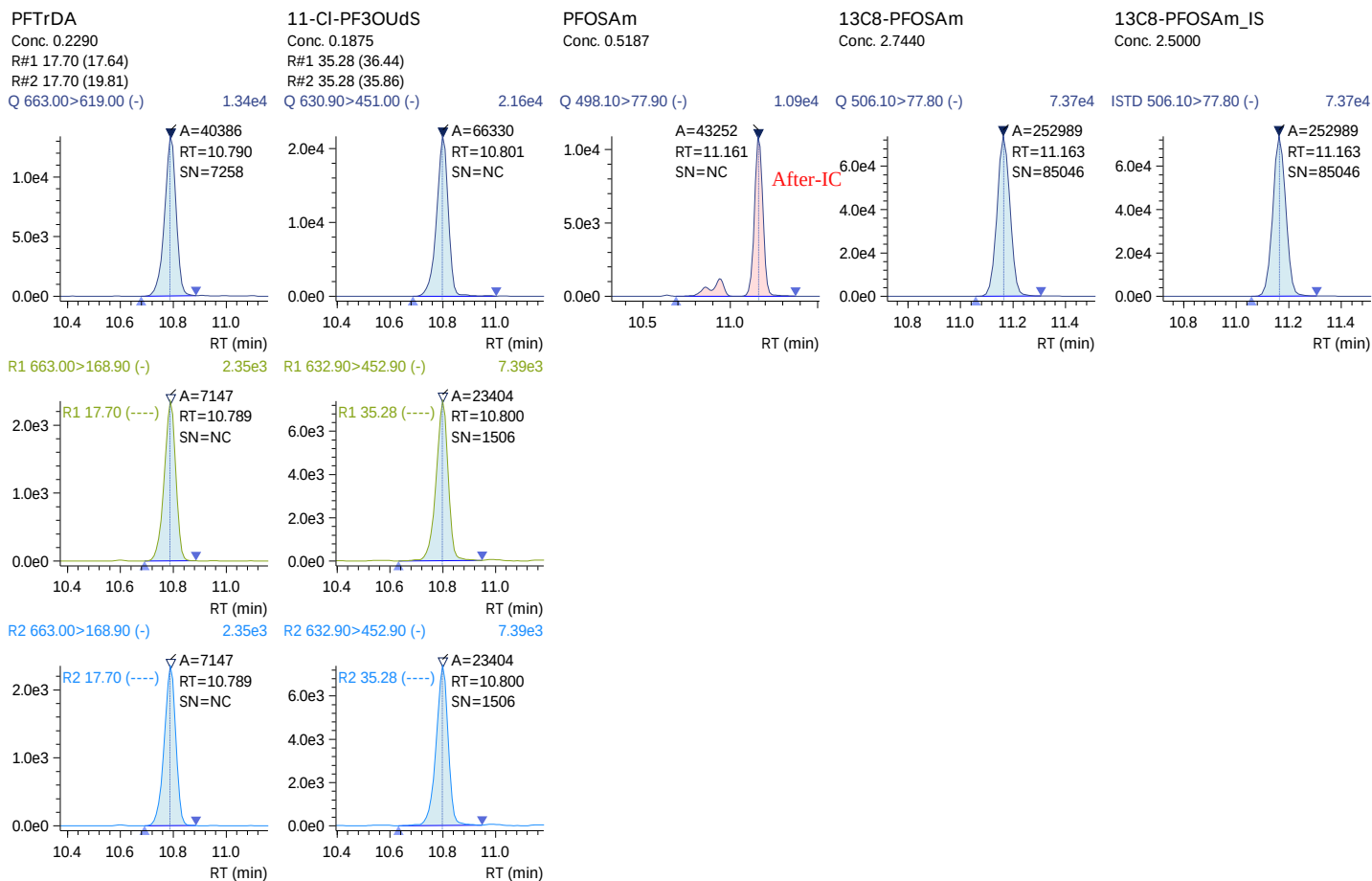


240122_007 (continued)





240122_007 (continued)

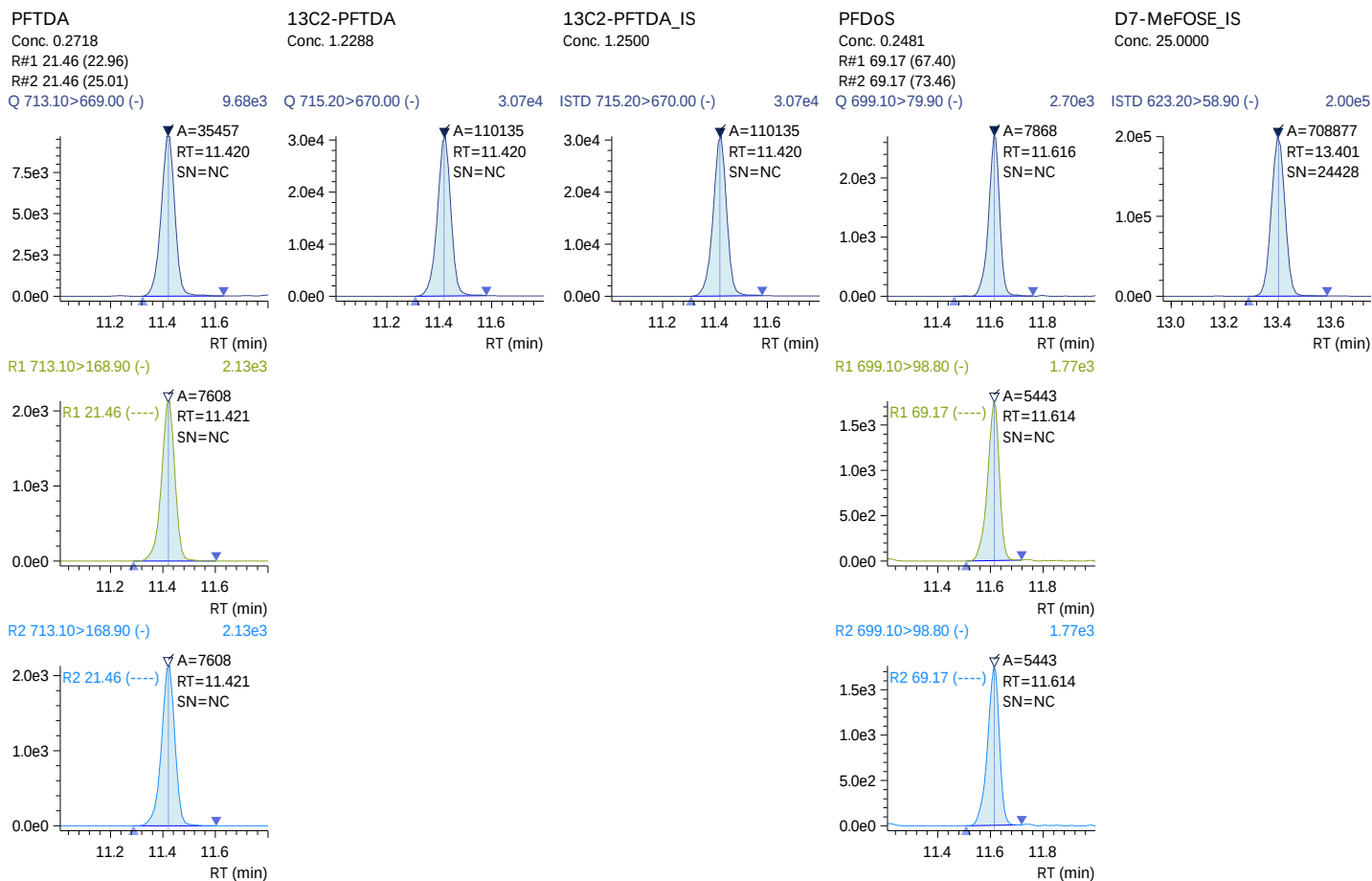


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_007 (continued)





240122_007 (continued)

D7-MeFOSE
Conc. 31.1858

MeFOSE
Conc. 0.2710

13C2-PFHXA_IS
Conc. 2.5000

13C2-PFHXA
Conc. 2.3878

PFHXA

Conc. 0.2391
R#1 13.91 (13.90)
R#2 13.91 (15.85)

Q 623.20>58.90 (-)

2.00e5

Q 616.10>59.00 (-)

1.21e3

ISTD 815.00>770.05 (-)

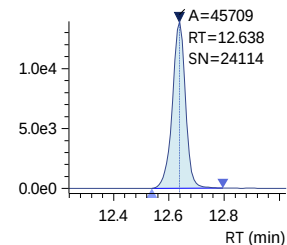
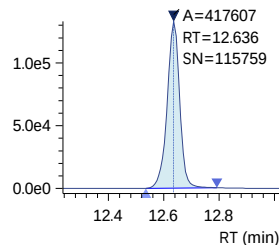
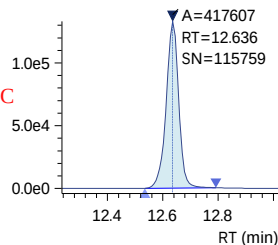
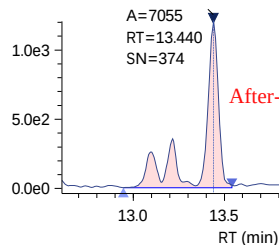
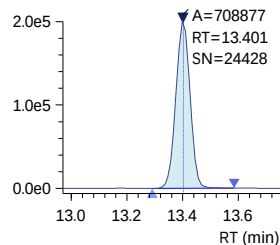
1.33e5

Q 815.00>770.05 (-)

1.33e5

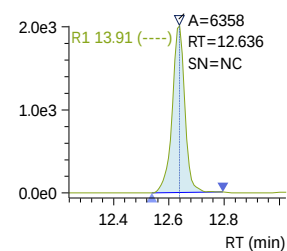
Q 813.00>768.95 (-)

1.39e4



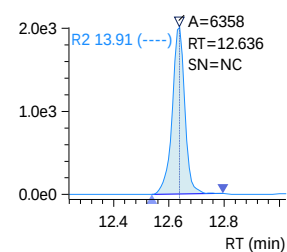
R1 813.00>218.95 (-)

2.01e3



R2 813.00>218.95 (-)

2.01e3





240122_007 (continued)

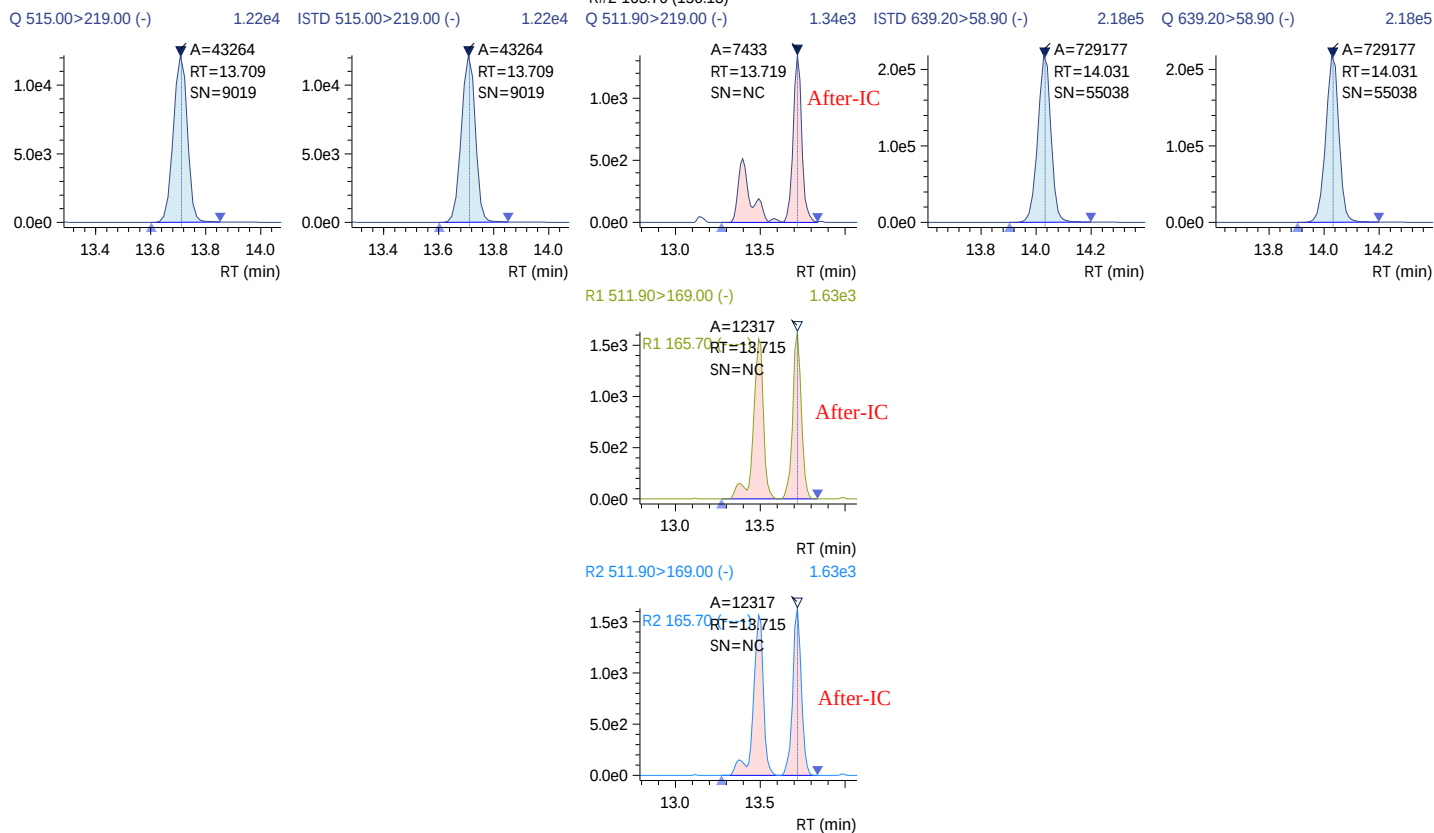
D3-MeFOSA
Conc. 2.3302

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. 0.2383
R#1 165.70 (140.79)
R#2 165.70 (150.13)

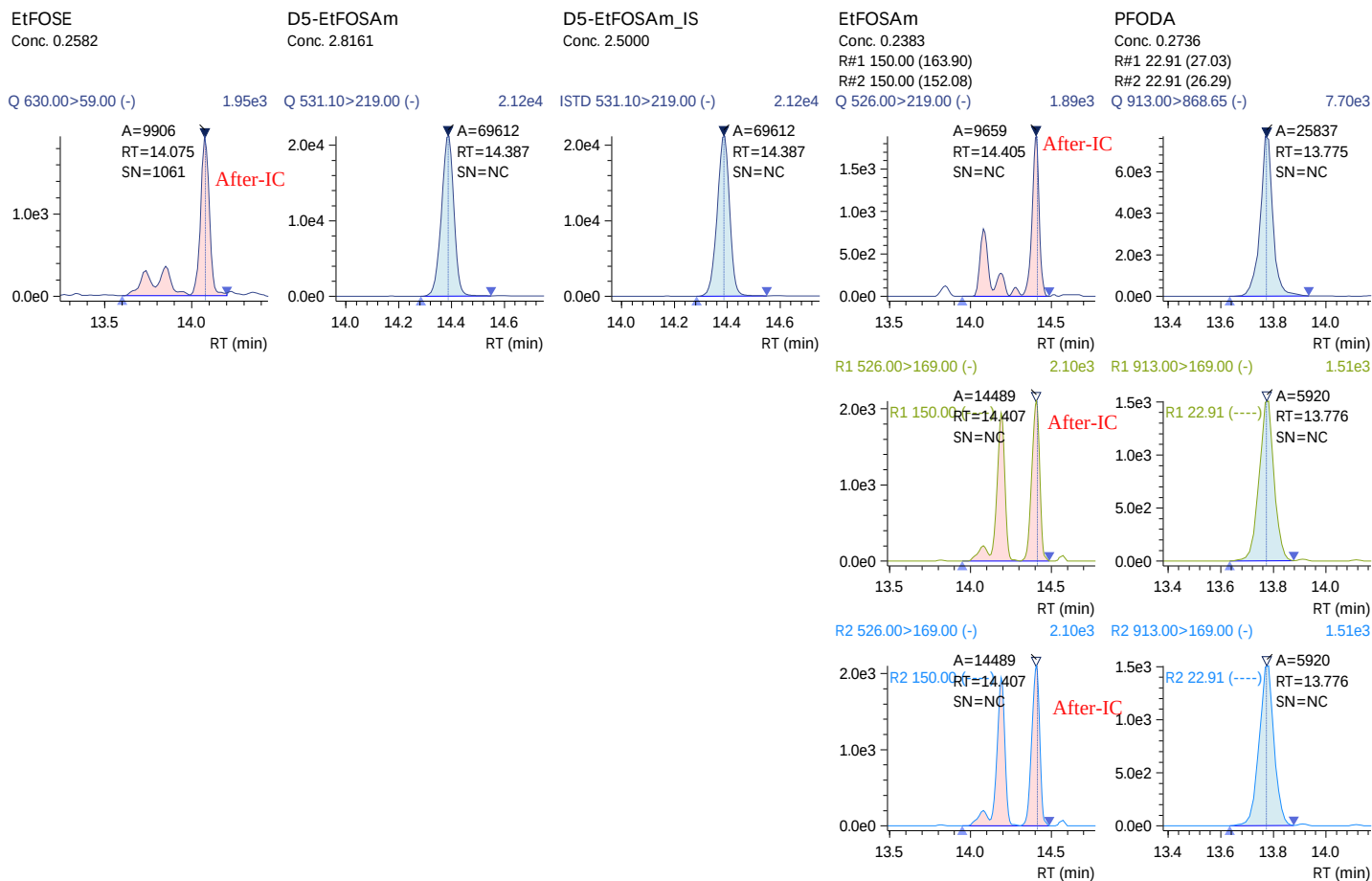
D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 31.5844





240122_007 (continued)



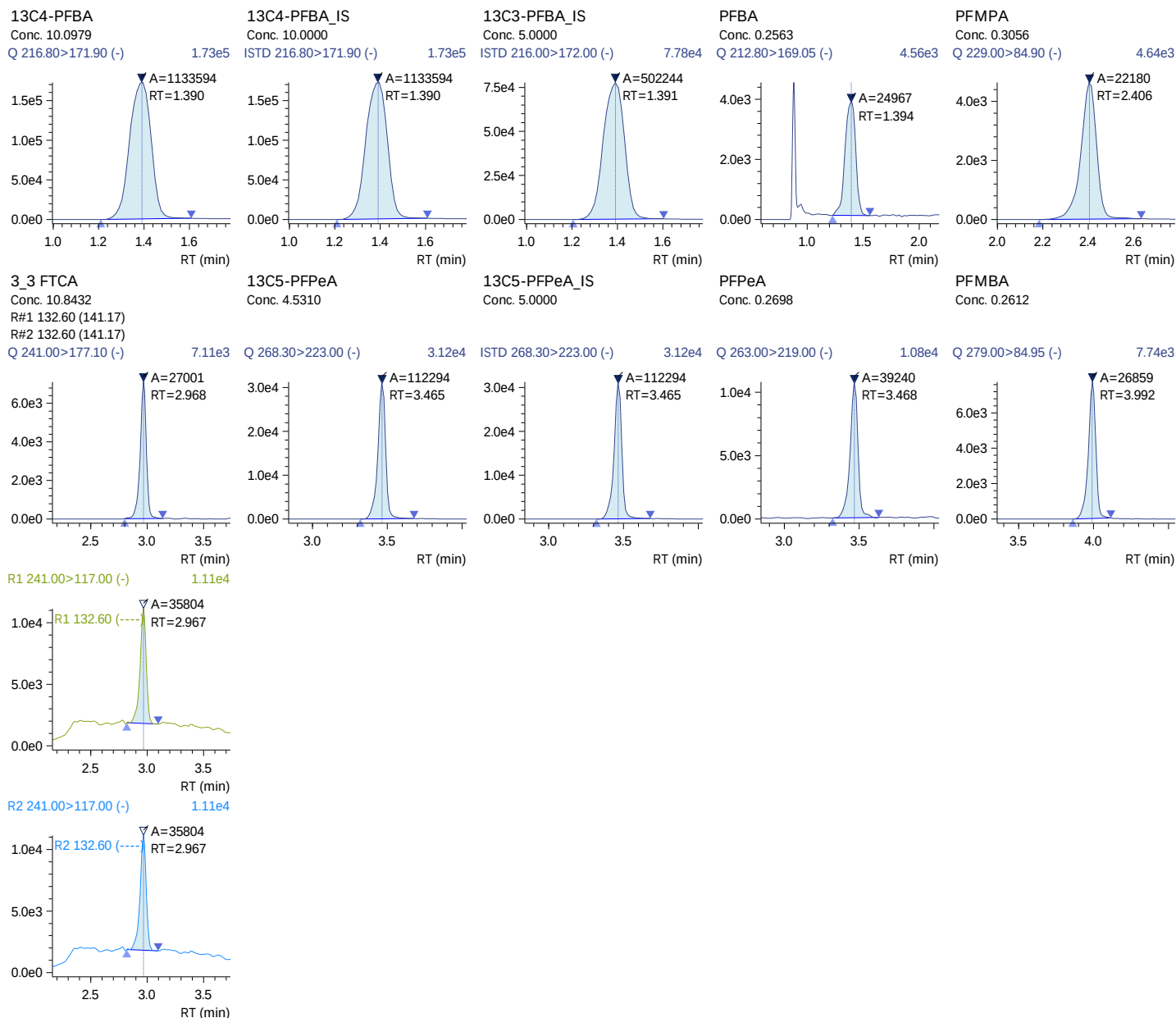
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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_007

Sample ID: 1633 ICAL 0.25PPB
Date Acquired: 1/22/2024 12:04:37 PM
Acquired by: System Administrator
Data File: 240122_007
Vial: 3 | Inj. Volume: 10.0000uL | Tray: 1





240122_007 (continued)

13C2-4_2 FTS
Conc. 7.5272

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. 0.2519
R#1 29.44 (29.06)
R#2 29.44 (29.06)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 0.2330
R#1 42.73 (46.72)
R#2 42.73 (46.72)

Q 329.10>80.90 (-)

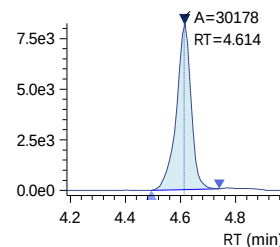
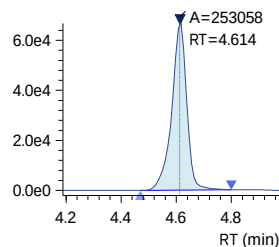
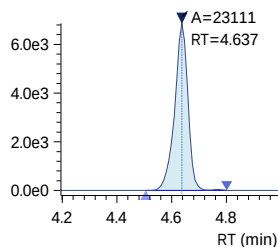
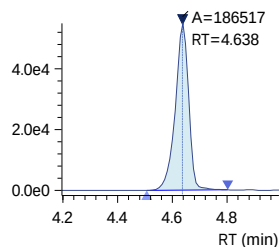
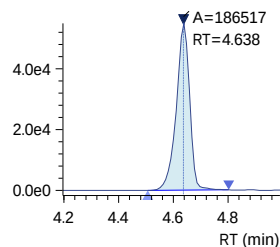
5.50e4 ISTD 329.10>80.90 (-)

5.50e4 Q 327.10>307.00 (-)

6.87e3 ISTD 302.10>79.90 (-)

6.68e4 Q 298.70>79.90 (-)

8.25e3

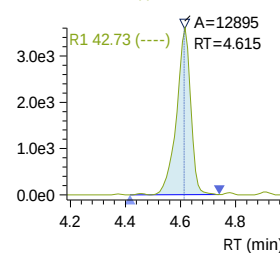
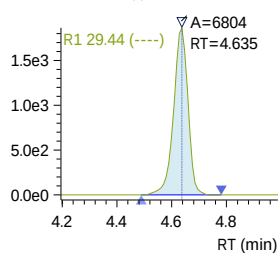


R1 327.10>80.90 (-)

1.86e3

R1 298.70>98.80 (-)

3.61e3

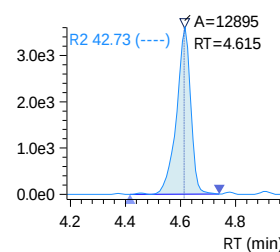
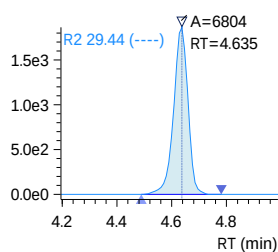


R2 327.10>80.90 (-)

1.86e3

R2 298.70>98.80 (-)

3.61e3





240122_007 (continued)

13C3-PFBS
 Conc. 2.4765

NFDHA
 Conc. 0.2609
 R#1 40.53 (40.25)
 R#2 40.53 (40.25)

13C5-PFHxA
 Conc. 2.4033

13C5-PFHxA_IS
 Conc. 2.5000

13C2-PFHxA_IS
 Conc. 2.5000

Q 302.10>79.90 (-)

6.68e4

Q 295.00>201.00 (-)

9.05e3

Q 318.00>273.00 (-)

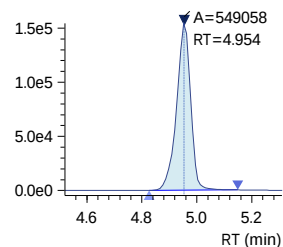
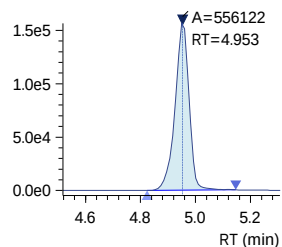
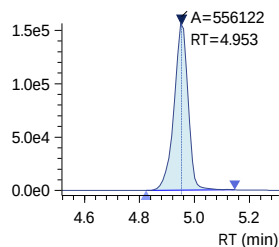
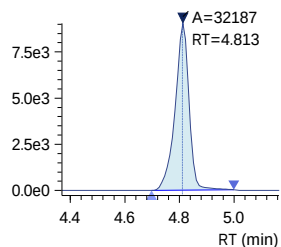
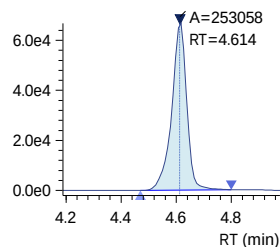
1.57e5

ISTD 318.00>273.00 (-)

1.57e5

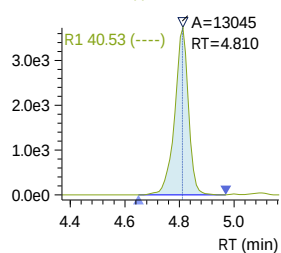
ISTD 315.10>270.00 (-)

1.54e5



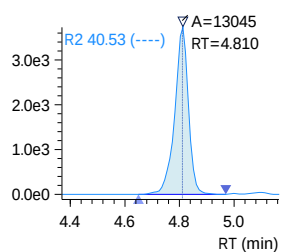
R1 295.00>84.90 (-)

3.73e3



R2 295.00>84.90 (-)

3.73e3

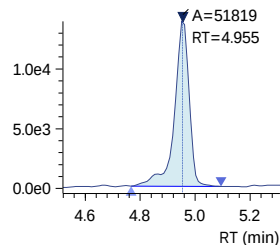




240122_007 (continued)

PFHxA
Conc. 0.2716

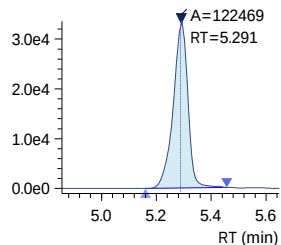
Q 313.00>269.00 (-)



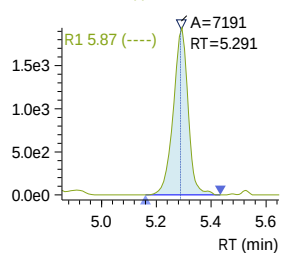
PFEESA
Conc. 0.1966

R#1 5.87 (6.11)
R#2 5.87 (6.11)

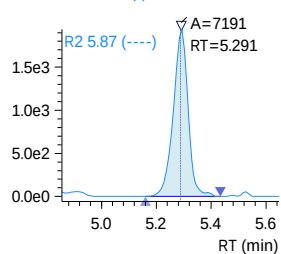
Q 314.80>135.00 (-)



R1 314.80>82.90 (-)

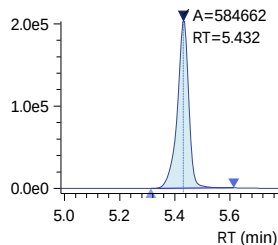


R2 314.80>82.90 (-)



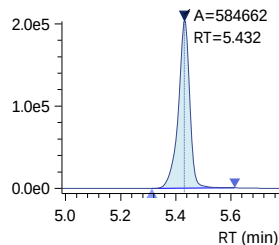
13C3-HFPO-DA
Conc. 10.8778

Q 286.90>168.90 (-)



13C3-HFPO-DA_IS
Conc. 10.0000

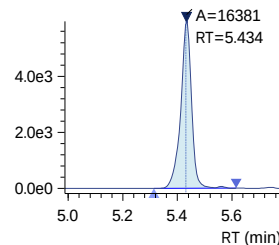
ISTD 286.90>168.90 (-)



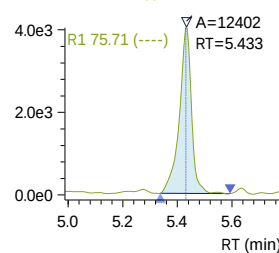
HFPO-DA
Conc. 0.2537

R#1 75.71 (65.61)
R#2 75.71 (65.61)

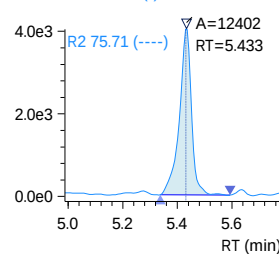
Q 284.90>168.90 (-)



R1 284.90>184.90 (-)

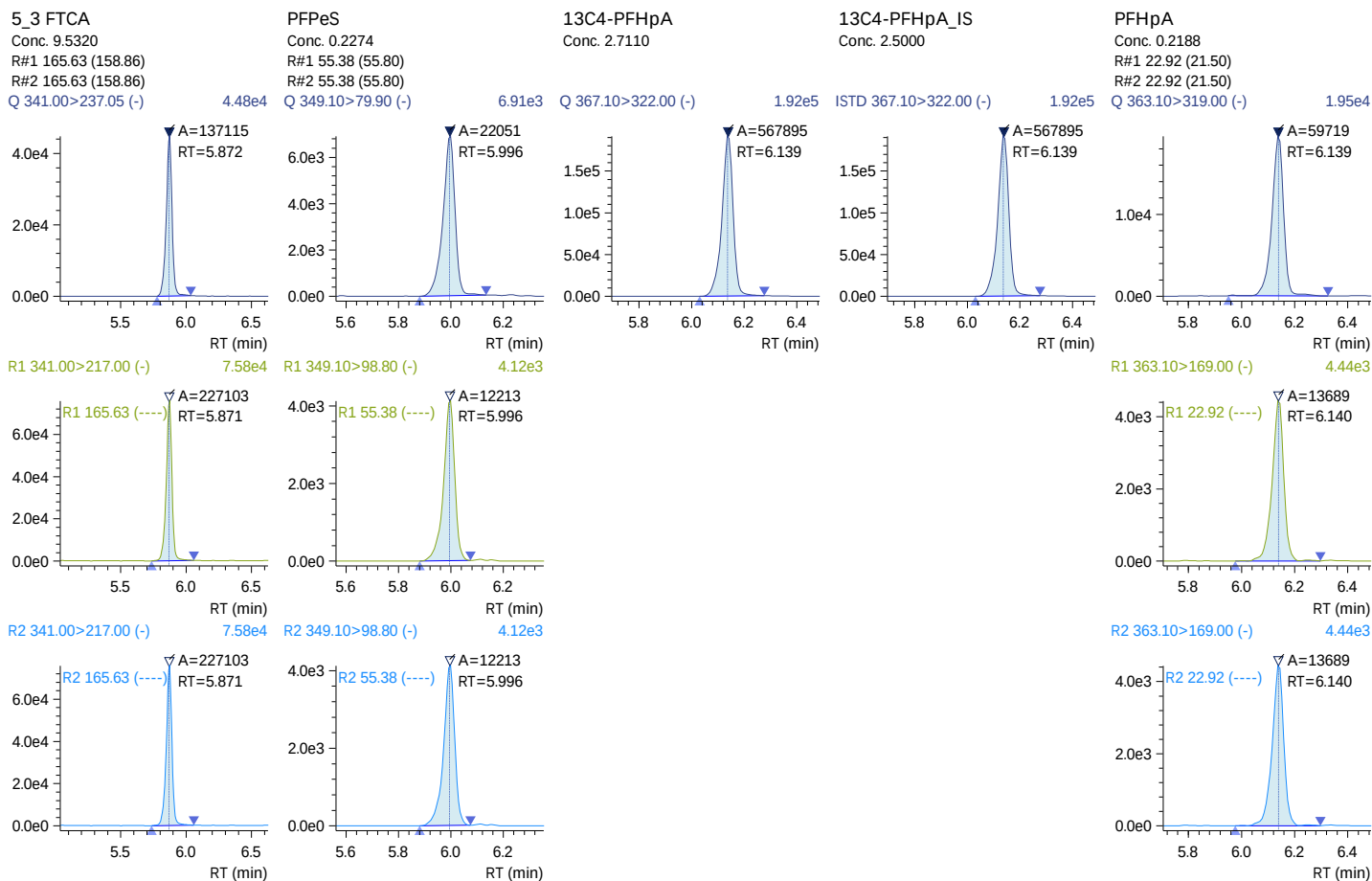


R2 284.90>184.90 (-)



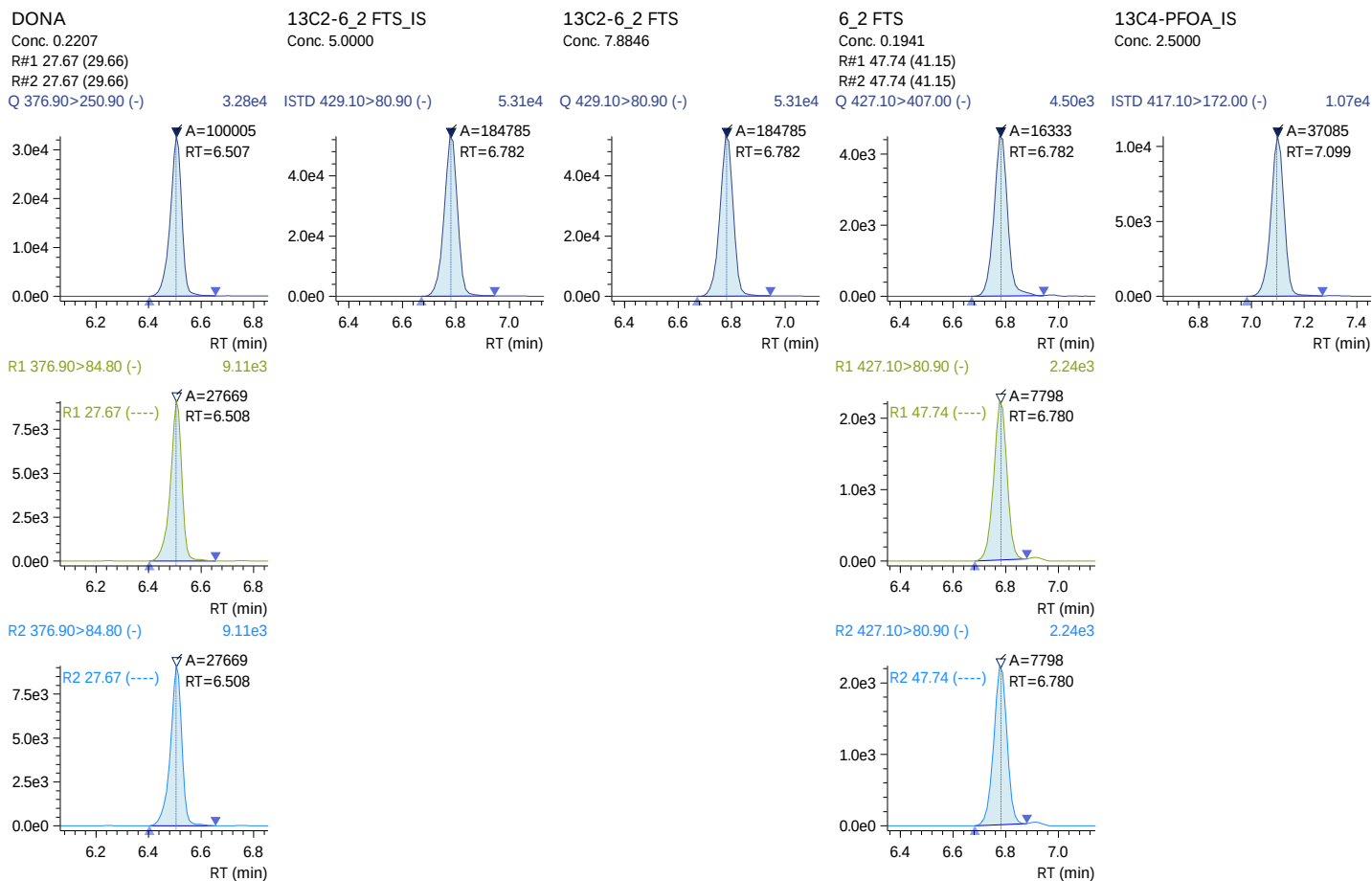


240122_007 (continued)





240122_007 (continued)





240122_007 (continued)

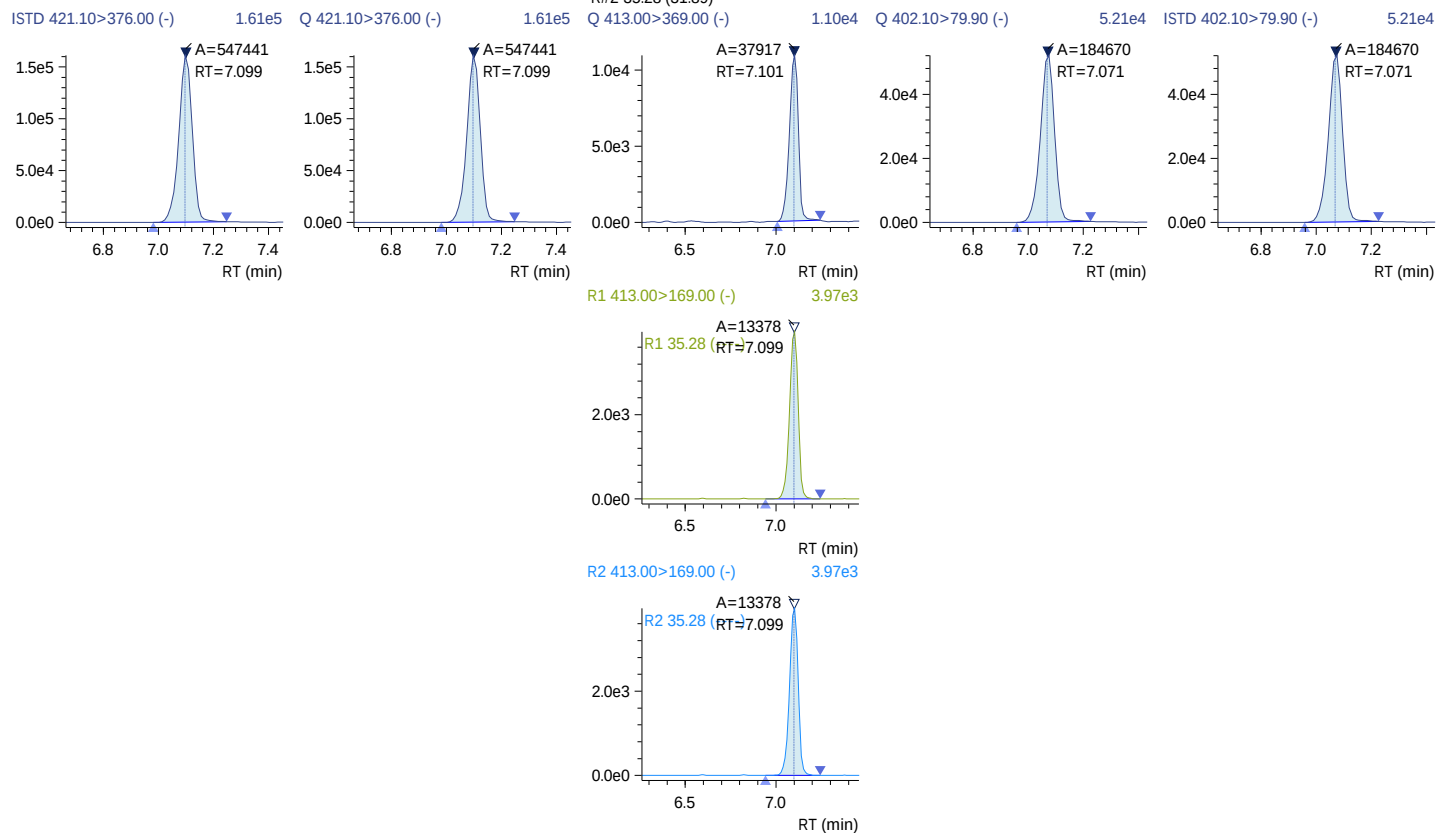
13C8-PFOA_IS
 Conc. 2.5000

13C8-PFOA
 Conc. 2.6411

PFOA
 Conc. 0.2246
 R#1 35.28 (31.89)
 R#2 35.28 (31.89)

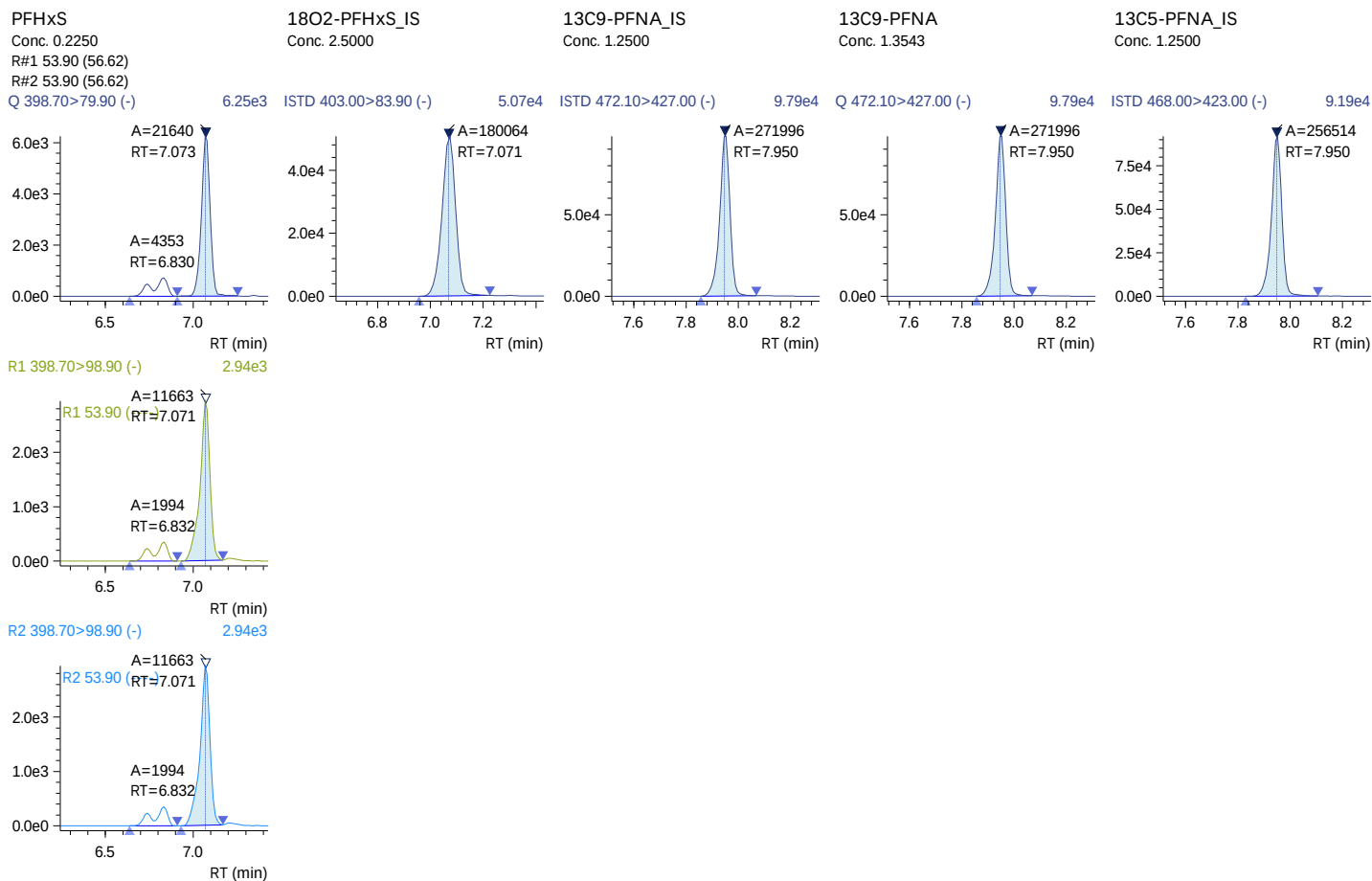
13C3-PFHxS
 Conc. 2.3894

13C3-PFHxS_IS
 Conc. 2.5000



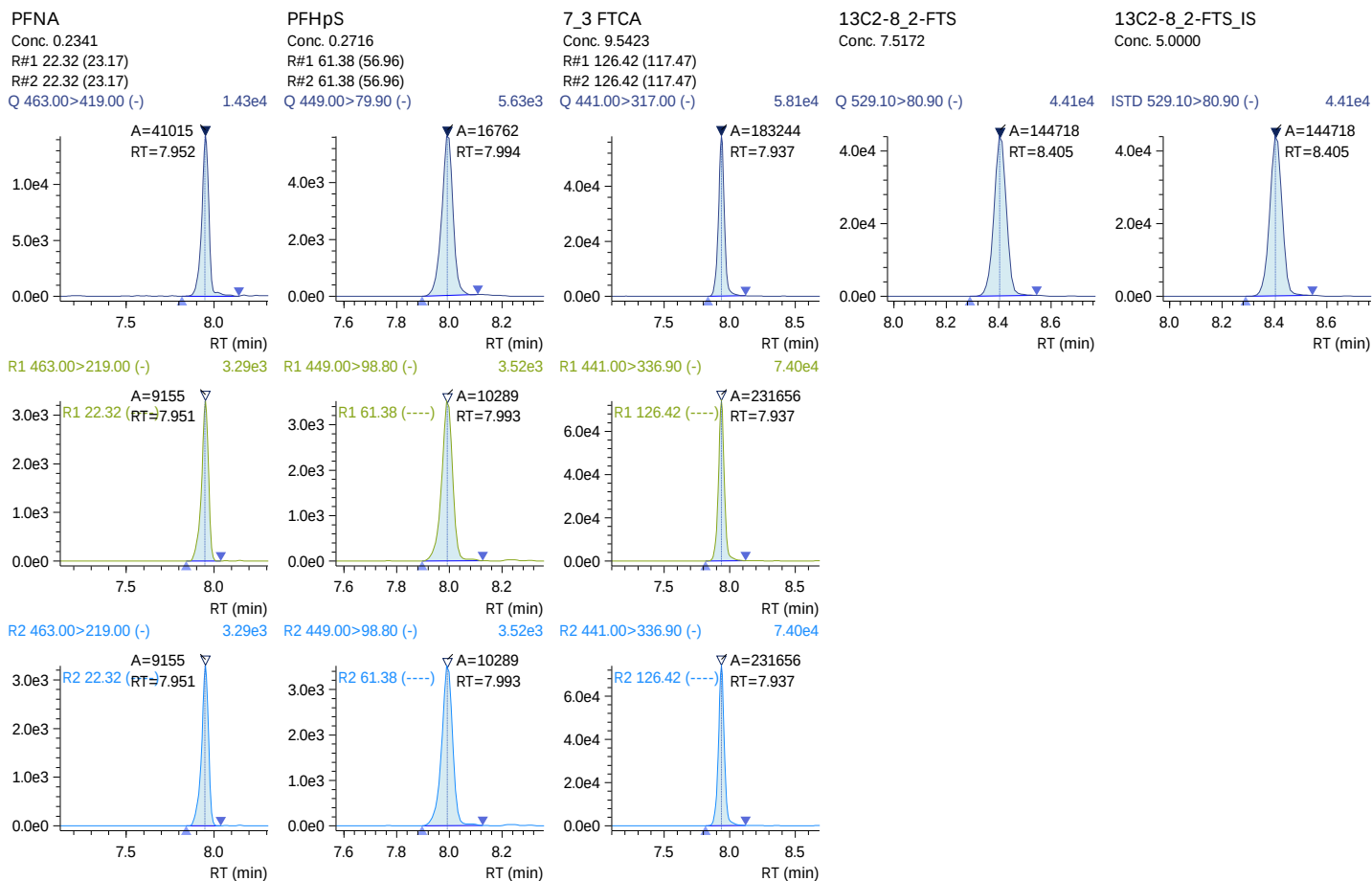


240122_007 (continued)



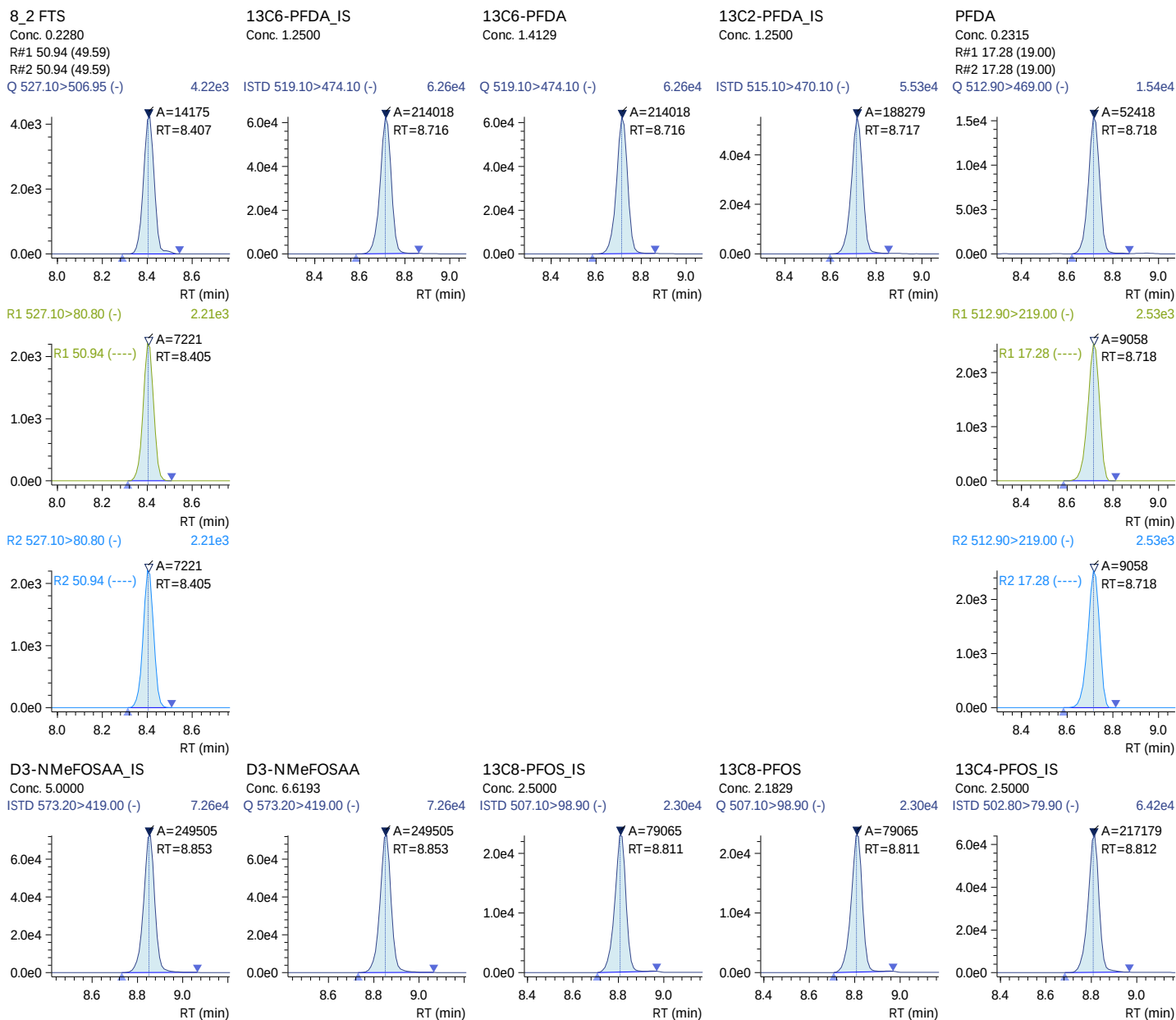


240122_007 (continued)



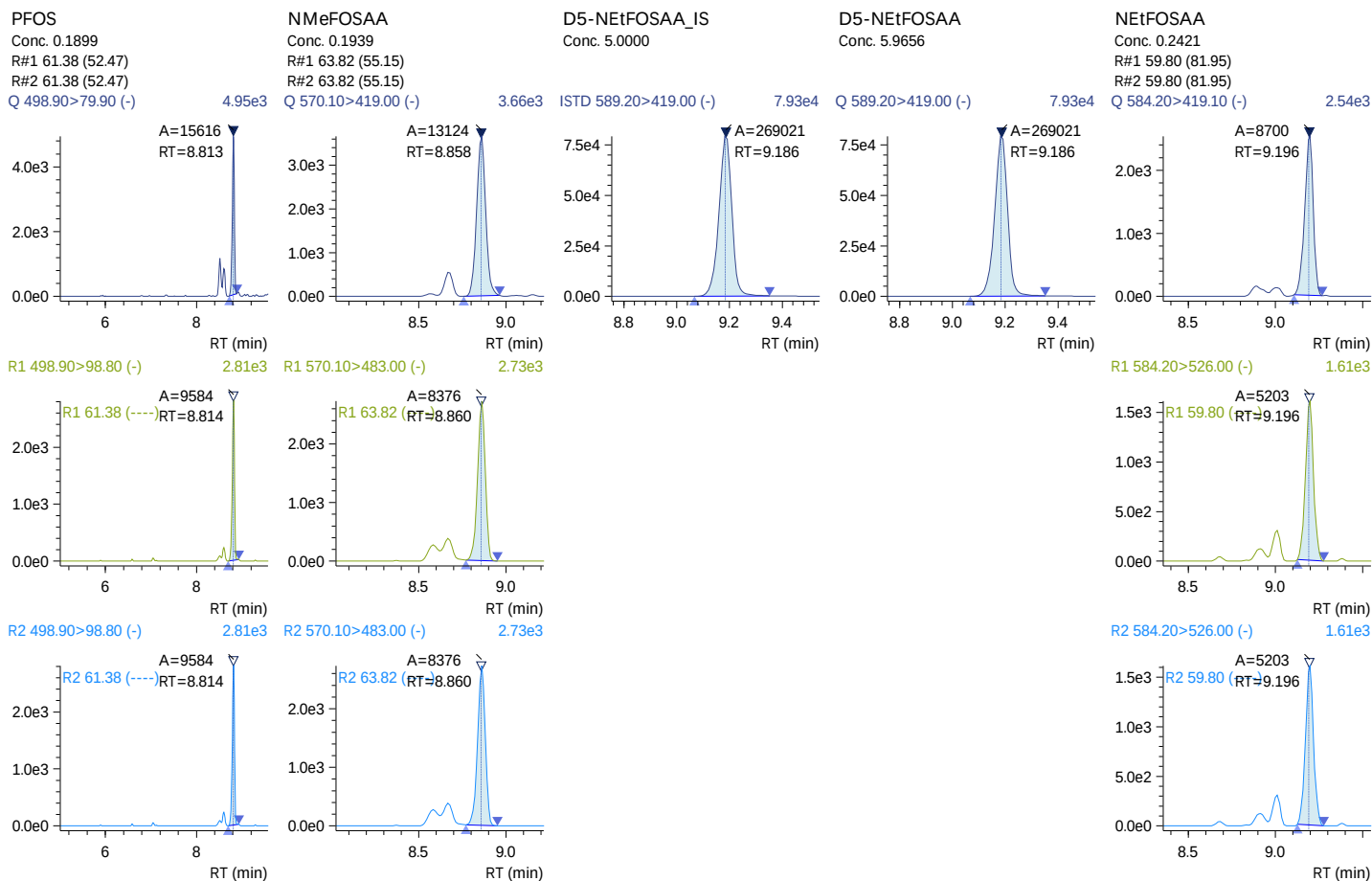


240122_007 (continued)





240122_007 (continued)

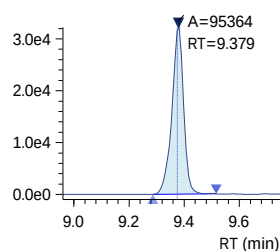




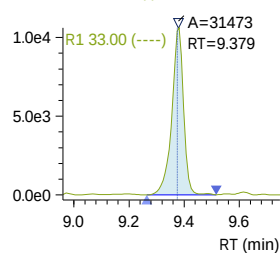
240122_007 (continued)

9-Cl-PF3ONS

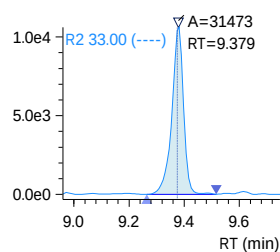
Conc. 0.1978
R#1 33.00 (32.76)
R#2 33.00 (32.76)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-) 1.06e4

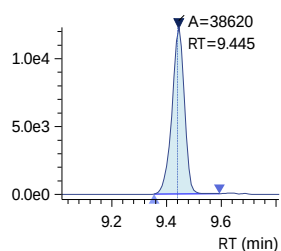


R2 532.80>353.00 (-) 1.06e4

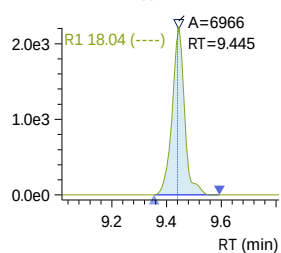


PFUnDA

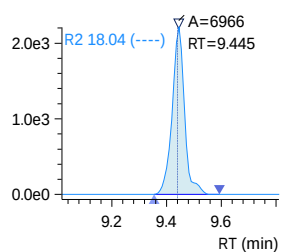
Conc. 0.2117
R#1 18.04 (13.12)
R#2 18.04 (13.12)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-) 2.21e3

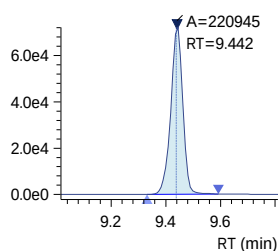


R2 563.10>269.10 (-) 2.21e3



13C7-PFUnDA_IS

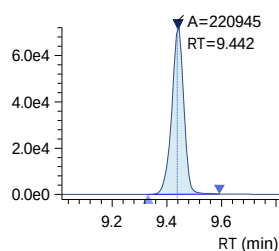
Conc. 1.2500
ISTD 570.00>525.10 (-)



7.22e4

13C7-PFUnDA

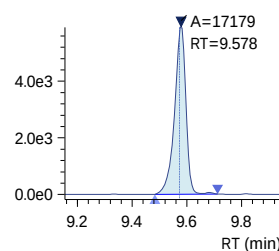
Conc. 1.2228
Q 570.00>525.10 (-)



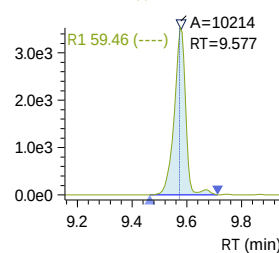
7.22e4

PFNS

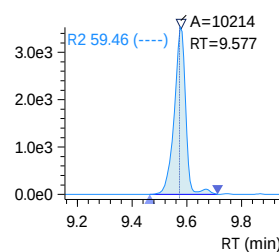
Conc. 0.2860
R#1 59.46 (65.22)
R#2 59.46 (65.22)
Q 548.80>79.90 (-)



5.90e3

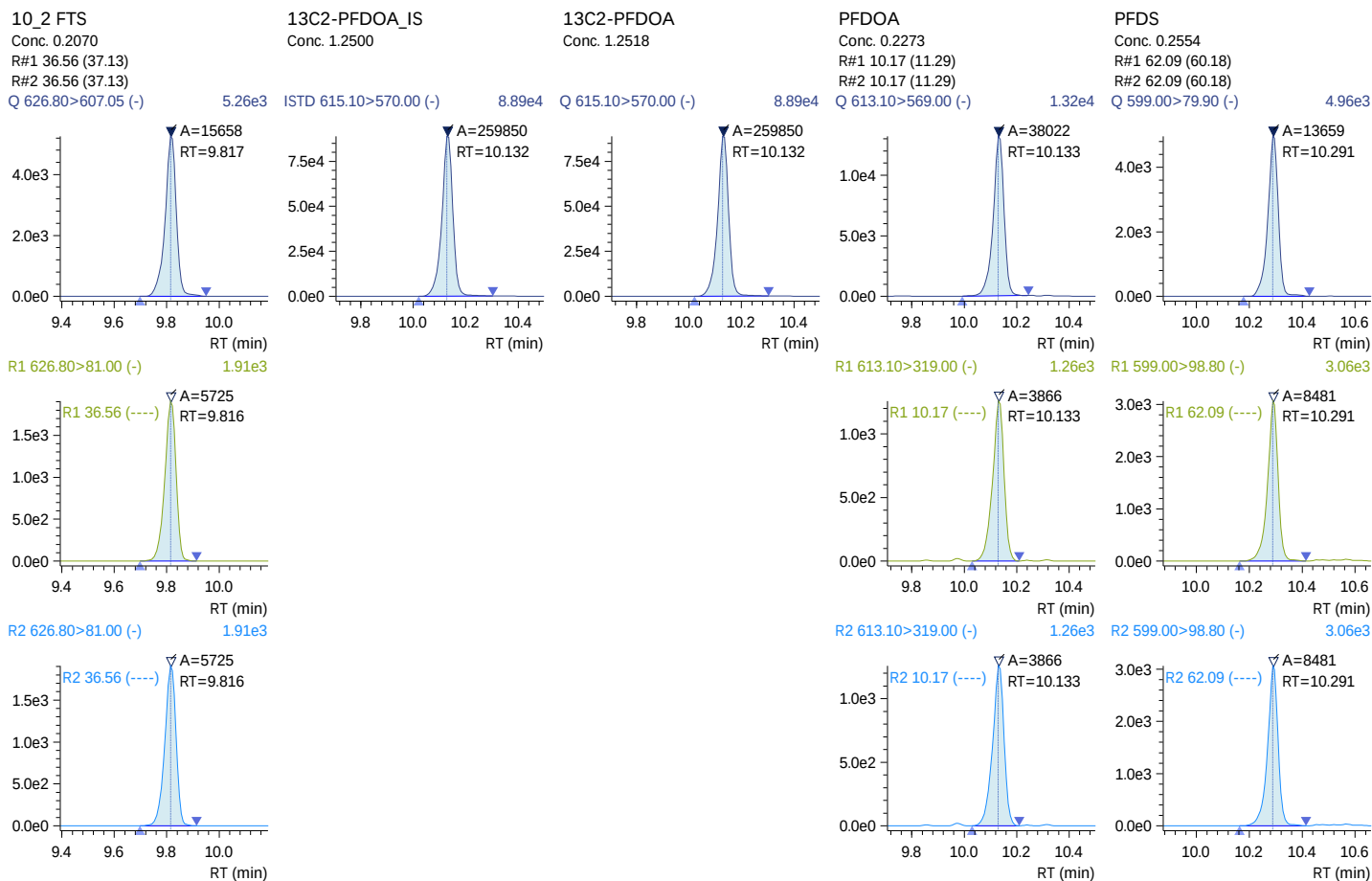


R2 548.80>98.80 (-) 3.53e3



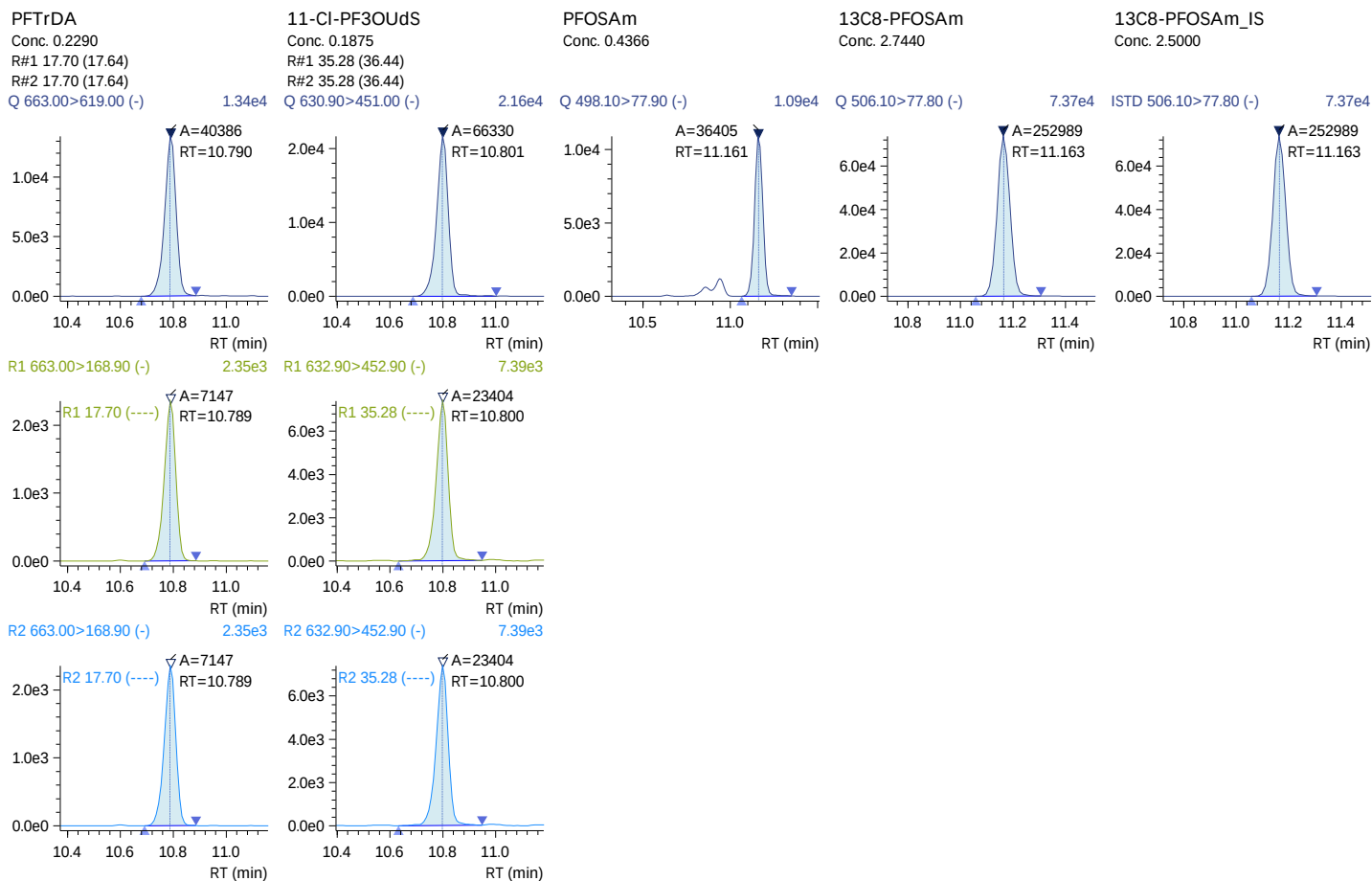


240122_007 (continued)



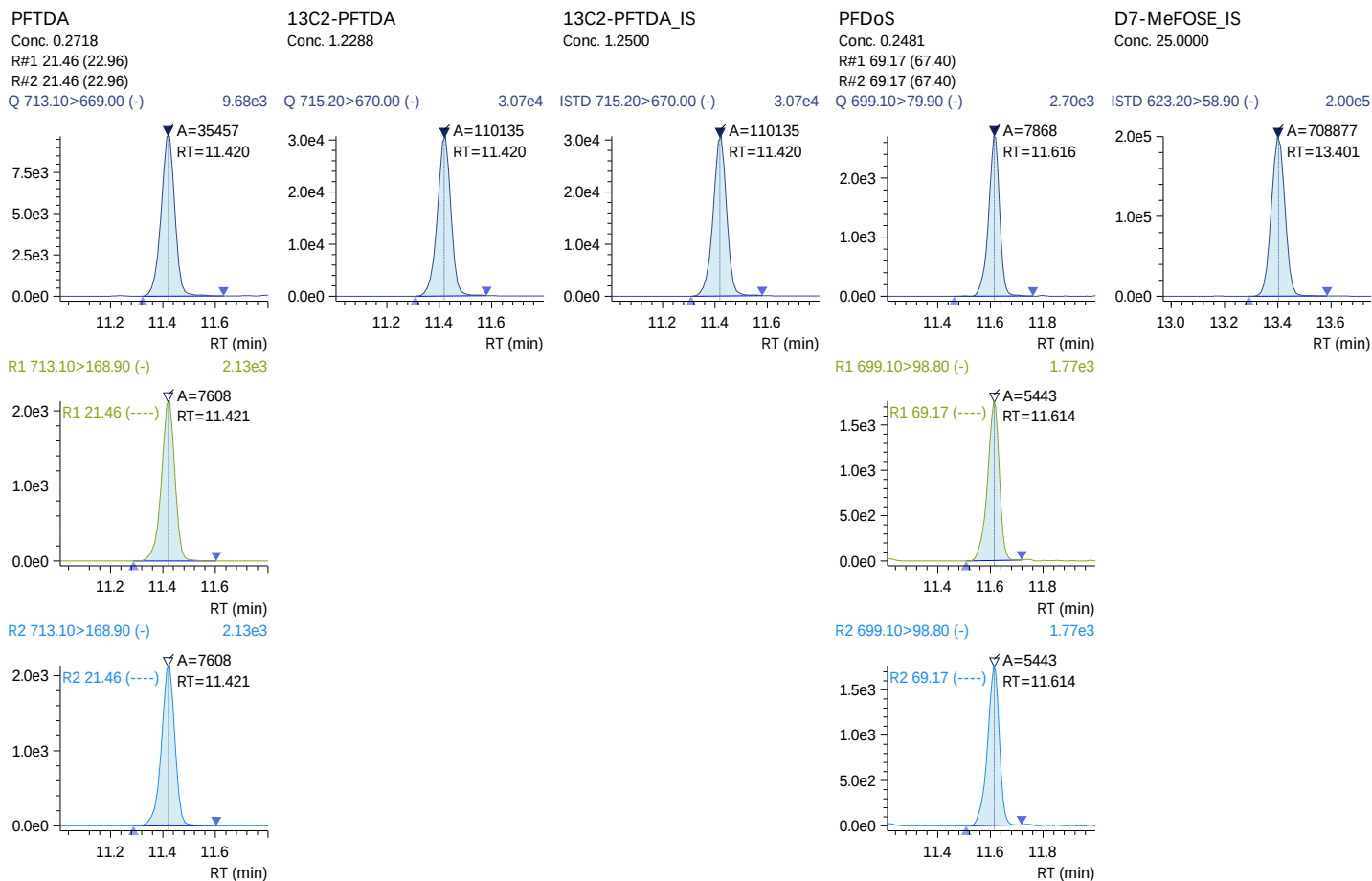


240122_007 (continued)





240122_007 (continued)





240122_007 (continued)

D7-MeFOSE
 Conc. 31.1858

MeFOSE
 Conc. 0.1715

13C2-PFHXA_IS
 Conc. 2.5000

13C2-PFHXA
 Conc. 2.3878

PFHXA

Conc. 0.2391
 R#1 13.91 (13.90)
 R#2 13.91 (13.90)

Q 623.20>58.90 (-)

2.00e5

Q 616.10>59.00 (-)

1.21e3

ISTD 815.00>770.05 (-)

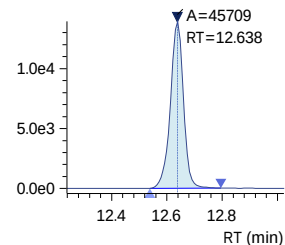
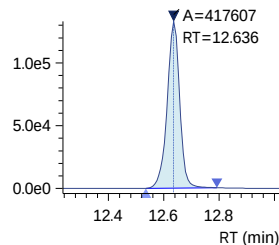
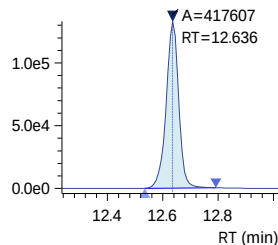
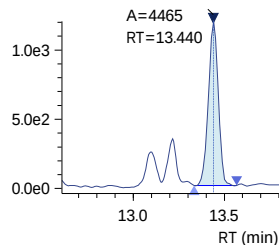
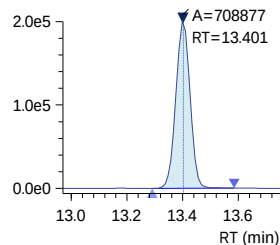
1.33e5

Q 815.00>770.05 (-)

1.33e5

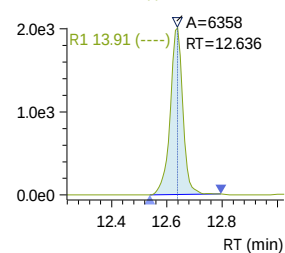
Q 813.00>768.95 (-)

1.39e4



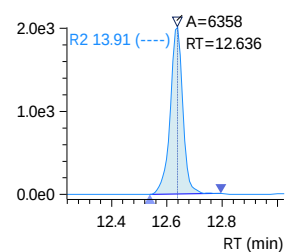
R1 813.00>218.95 (-)

2.01e3



R2 813.00>218.95 (-)

2.01e3





240122_007 (continued)

D3-MeFOSA
Conc. 2.3302

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. 0.1518
R#1 122.06 (140.79)
R#2 122.06 (140.79)

D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 31.5844

Q 515.00>219.00 (-)

1.22e4

ISTD 515.00>219.00 (-)

1.22e4

Q 511.90>219.00 (-)

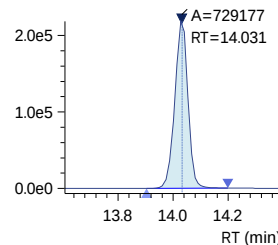
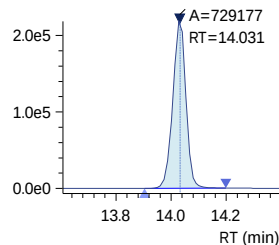
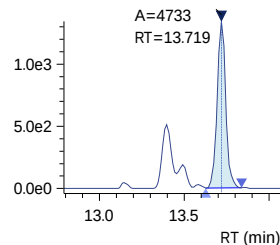
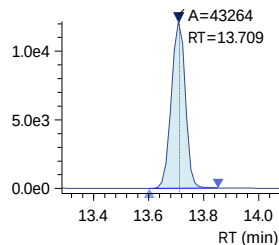
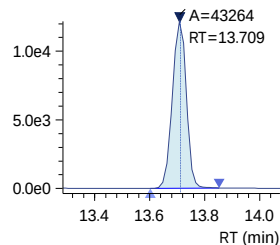
1.34e3

ISTD 639.20>58.90 (-)

2.18e5

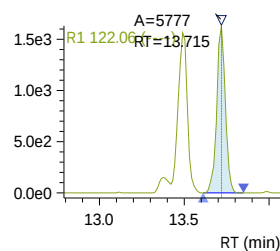
Q 639.20>58.90 (-)

2.18e5



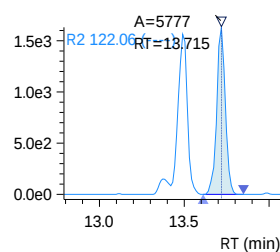
R1 511.90>169.00 (-)

1.63e3



R2 511.90>169.00 (-)

1.63e3





240122_007 (continued)

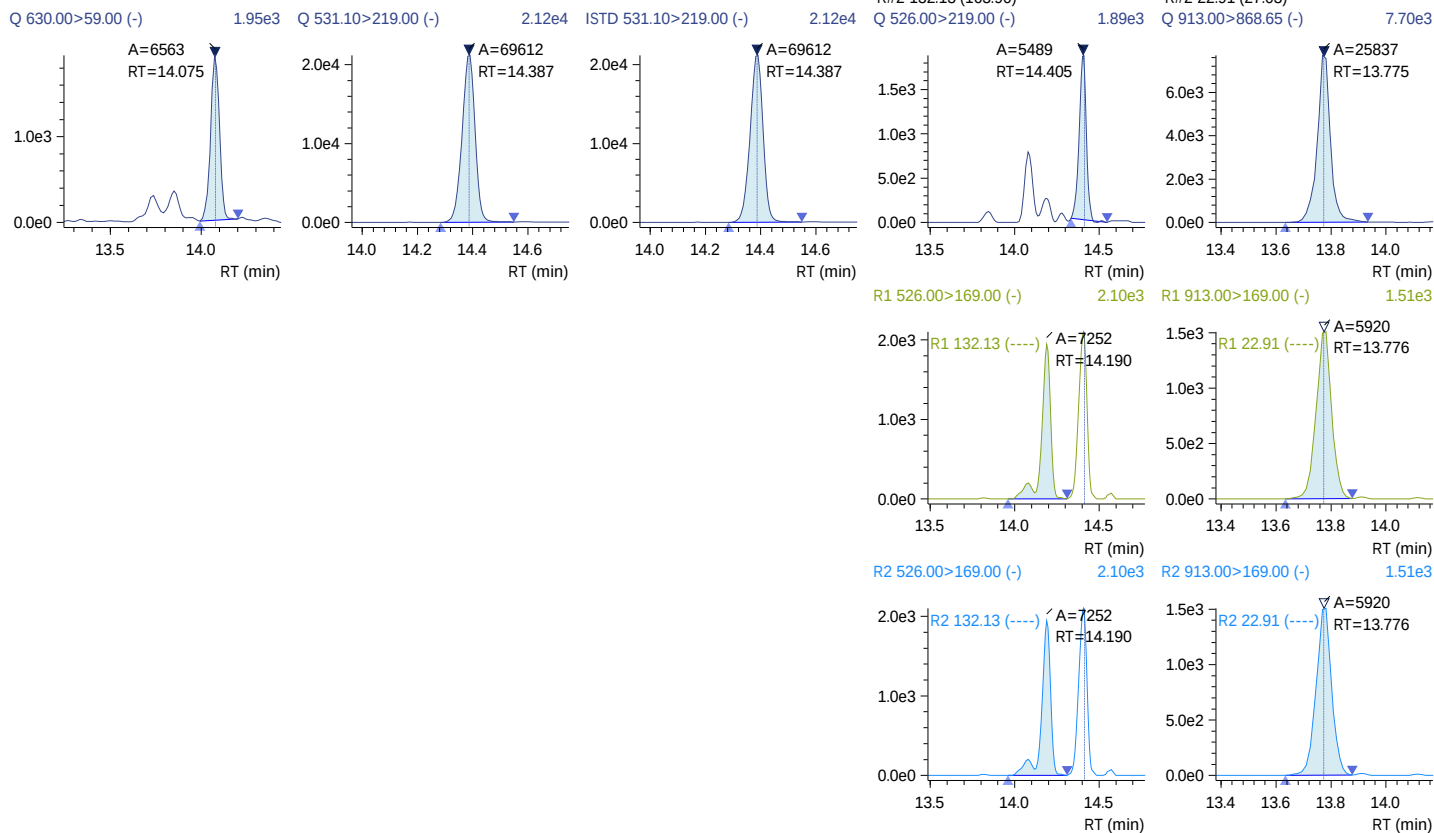
EtFOSE
 Conc. 0.1711

D5-EtFOSAm
 Conc. 2.8161

D5-EtFOSAm_IS
 Conc. 2.5000

EtFOSAm
 Conc. 0.1354
 R#1 132.13 (163.90)
 R#2 132.13 (163.90)

PFODA
 Conc. 0.2736
 R#1 22.91 (27.03)
 R#2 22.91 (27.03)



Validation Report

1st PS 01/25/24
2nd MS 01/25/24

Data File: J:\LCMS08\Data\240122_1633_B1\240122_028
Lab ID: KQ2401073-15
RunType: CCV
Matrix: Water

Date Acquired: 1/22/24 20:13
Batch ID: 830573
Analysis Method: 1633/PFAS_DOD5.4

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Internal Standards	X	

Primary Review: _____

Secondary Review: _____

Quantitation Report

1st *PS* 01/25/24
2nd *MS* 01/25/24

Data File:	J:\LCMS08\Data\240122_1633_B1\240122_028	Instrument:	K-LCMS-08
Acqu Date:	1/22/24 20:13	Vial:	24
Run Type:	CCV	Dilution:	1
Lab ID:	KQ2401073-15	Raw Units:	ng/mL

Bottle ID:		Tier:	IV	Matrix:	Water
Prod Code:	PFAS_DOD5.4	Collect Date:	12/20/23	Receive Date:	12/20/23

Analysis Lot:	830573	Prep Lot:		Report Group:	KQ2401073
Analysis	1633	Prep Method:			
		Prep Date:			

Title:	Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM	Calibration ID:	KC2400027
		Report List ID:	24615

Internal Standard Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Area Criteria
18O2-PFHxS	7.073		201482	2.5000	OK
13C4-PFOS	8.815		230431	2.5000	OK
13C3-PFBA	1.390		538533	5.0000	OK
13C2-PFHxA	4.957		656287	2.5000	OK
13C4-PFOA	7.101		44253	2.5000	OK
13C5-PFNA	7.952		284248	1.2500	OK
13C2-PFDA	8.720		212168	1.2500	OK

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Rpt?
13C3-PFBS	4.617		280659	2.4546	Y
13C3-PFHxS	7.073		210124	2.4297	Y
13C8-PFOS	8.814		80073	2.0836	Y
13C4-PFBA	1.389		1240441	10.3051	Y
13C5-PFPeA	3.468		118780	4.0096	Y
13C5-PFHxA	4.957		609558	2.2038	Y
13C4-PFHpA	6.141		646639	2.5826	Y
13C8-PFOA	7.101		669574	2.7071	Y
13C9-PFNA	7.952		299869	1.3474	Y
13C6-PFDA	8.719		219877	1.2881	Y
13C7-PFUnDA	9.444		240487	1.1811	Y
13C2-PFDoDA	10.132		277777	1.1875	Y
13C2-PFTeDA	11.424		115636	1.1449	Y
13C8-FOSA	11.172		270486	2.7651	Y
D3-MeFOSA	13.717		52204	2.6500	Y
D5-EtFOSA	14.395		74479	2.8397	Y
D7-MeFOSE	13.409		767673	31.8302	Y
D9-EtFOSE	14.039		765767	31.2618	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 1/25/24 15:28

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		1st	PS	01/25/24
Data File:	J:\LCMS08\Data\240122_1633_B1\240122_028	Instrument:	K-LCMS08	MS 01/25/24
Acqu Date:	1/22/24 20:13	Vial:	24	
Run Type:	CCV	Dilution:	1	
Lab ID:	KQ2401073-15	Raw Units:	ng/mL	

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Rpt?
D3-MeFOSAA	8.859		275192	6.8809	Y
D5-EtFOSAA	9.192		289797	6.0568	Y
13C2-4:2 FTS	4.641		225692	8.1399	Y
13C2-6:2 FTS	6.785		223207	8.5116	Y
13C2-8:2 FTS	8.408		174301	8.0914	Y
13C3-HFPO-DA	5.435		665691	10.3618	Y

Target Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Rpt?
Perfluorobutane sulfonic acid (PFBS)	4.618		125272	0.8720	Y
Perfluoropentane sulfonic acid (PFPeS)	5.999		103452	0.9375	Y
Perfluorohexane sulfonic acid (PFHxS)	7.073		104087	1.0129	Y
Perfluoroheptane sulfonic acid (PFHpS)	7.995		75815	1.2130	Y
Perfluorooctane sulfonic acid (PFOS)	8.815		88103	1.0579	Y
Perfluorononane sulfonic acid (PFNS)	9.578		72743	1.1956	Y
Perfluorodecane sulfonic acid (PFDS)	10.292		59231	1.1139	Y
Perfluorododecane sulfonic acid (PFDoS)	11.617		30257	0.9422	Y
Perfluorobutanoic acid (PFBA)	1.391		101530	0.9526	Y
Perfluoropentanoic acid (PFPeA)	3.471		168399	1.0946	Y
Perfluorohexanoic acid (PFHxA)	4.958		203271	0.9935	Y
Perfluoroheptanoic acid (PFHpA)	6.143		243303	0.8725	Y
Perfluorooctanoic acid (PFOA)	7.105		159500	0.8792	Y
Perfluorononanoic acid (PFNA)	7.953		163523	0.9273	Y
Perfluorodecanoic acid (PFDA)	8.721		191179	0.8867	Y
Perfluoroundecanoic acid (PFUnDA)	9.446		159221	0.8847	Y
Perfluorododecanoic acid (PFDOA)	10.133		154835	0.9582	Y
Perfluorotridecanoic acid (PFTTrDA)	10.792		161655	0.9600	Y
Perfluorotetradecanoic acid (PFTDA)	11.425		125329	0.9808	Y
Perfluorooctane sulfonamide (PFOSAm)	11.170		176154	1.9758	Y
N-Methylperfluorooctane sulfonamide (MeFOSA)	13.726		38872	1.0330	Y
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	14.413		37910	0.8743	Y
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	13.447		26761	0.9492	Y
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	14.086		40913	1.0155	Y
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	8.864		81508	1.0916	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 1/25/24 15:28

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		1st	PS	01/25/24
Data File:	J:\LCMS08\Data\240122_1633_B1\240122_028	Instrument:	K-LCMS08	MS 01/25/24
Acqu Date:	1/22/24 20:13	Vial:	24	
Run Type:	CCV	Dilution:	1	
Lab ID:	KQ2401073-15	Raw Units:	ng/mL	

Target Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Rpt?
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	9.202		52614	1.3594	Y
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	4.641		96297	0.8675	Y
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	6.786		83780	0.8243	Y
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	8.408		59946	0.8004	Y
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	2.973		57186	21.7113	Y
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	5.879		308334	19.5558	Y
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	7.946		391431	18.5966	Y
Perfluoro(2-ethoxyethane) sulfonic acid (PFEEESA)	5.294		567884	0.8318	Y
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	9.380		399055	0.7271	Y
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	10.802		271068	0.7171	Y
Perfluoro-3-methoxypropanoic acid (PFMPA)	2.407		91369	1.1903	Y
Perfluoro-4-methoxybutanoic acid (PFMBA)	3.995		111369	1.0241	Y
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	5.437		68406	0.9304	Y
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	4.814		153376	1.1341	Y
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	6.509		445859	0.8641	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 1/25/24 15:28

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240122_028

Sample ID: 1633 ICAL 1.0PPB
Date Acquired: 1/22/2024 8:13:23 PM
Acquired by: System Administrator
Data File: 240122_028
Vial: 5 | Inj. Volume: 10.0000uL | Tray: 1

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	1240441	----	----	----	----	----	----	
13C4-PFBA_IS	216.80>171.90	----	1240441	----	----	----	----	----	----	
13C3-PFBA_IS	216.00>172.00	----	538533	----	----	----	----	----	----	
PFBA	212.80>169.05	----	101530	----	----	----	----	----	----	
PFMPA	229.00>84.90	----	91369	----	----	----	----	----	----	
3_3 FTCA	241.00>177.10	241.00>117.00	57186	86969	152.08	141.17	86969	152.08	135.52	
13C5-PFPeA	268.30>223.00	----	118780	----	----	----	----	----	----	
13C5-PFPeA_IS	268.30>223.00	----	118780	----	----	----	----	----	----	
PFPeA	263.00>219.00	----	168399	----	----	----	----	----	----	
PFMBA	279.00>84.95	----	111369	----	----	----	----	----	----	
13C2-4_2 FTS	329.10>80.90	----	225692	----	----	----	----	----	----	AC
13C2-4_2 FTS_IS	329.10>80.90	----	225692	----	----	----	----	----	----	
4_2 FTS	327.10>307.00	327.10>80.90	96297	32113	33.35	29.06	32113	33.35	35.34	
13C3-PFBS_IS	302.10>79.90	----	280659	----	----	----	----	----	----	
PFBS	298.70>79.90	298.70>98.80	125272	62605	49.98	46.72	62605	49.98	49.78	
13C3-PFBS	302.10>79.90	----	280659	----	----	----	----	----	----	
NFDHA	295.00>201.00	295.00>84.90	153376	56883	37.09	40.25	56883	37.09	37.18	
13C5-PFHxA	318.00>273.00	----	609558	----	----	----	----	----	----	
13C5-PFHxA_IS	318.00>273.00	----	609558	----	----	----	----	----	----	
13C2-PFHxA_IS	315.10>270.00	----	656287	----	----	----	----	----	----	
PFHxA	313.00>269.00	----	203271	----	----	----	----	----	----	
PFEESA	314.80>135.00	314.80>82.90	567884	32485	5.72	6.11	32485	5.72	5.72	
13C3-HFPO-DA	286.90>168.90	----	665691	----	----	----	----	----	----	
13C3-HFPO-DA_IS	286.90>168.90	----	665691	----	----	----	----	----	----	
HFPO-DA	284.90>168.90	284.90>184.90	68406	44942	65.70	65.61	44942	65.70	60.94	
5_3 FTCA	341.00>237.05	341.00>217.00	308334	486658	157.84	158.86	486658	157.84	155.83	
PFPeS	349.10>79.90	349.10>98.80	103452	54681	52.86	55.80	54681	52.86	56.73	
13C4-PFHpA	367.10>322.00	----	646639	----	----	----	----	----	----	
13C4-PFHpA_IS	367.10>322.00	----	646639	----	----	----	----	----	----	
PFHpA	363.10>319.00	363.10>169.00	243303	57315	23.56	21.50	57315	23.56	21.92	
DONA	376.90>250.90	376.90>84.80	445859	122629	27.50	29.66	122629	27.50	30.77	
13C2-6_2 FTS_IS	429.10>80.90	----	223207	----	----	----	----	----	----	
13C2-6_2 FTS	429.10>80.90	----	223207	----	----	----	----	----	----	AC
6_2 FTS	427.10>407.00	427.10>80.90	83780	41063	49.01	41.15	41063	49.01	40.98	
13C4-PFOA_IS	417.10>172.00	----	44253	----	----	----	----	----	----	
13C8-PFOA_IS	421.10>376.00	----	669574	----	----	----	----	----	----	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240122_028 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	669574	----	----	----	----	----	----	----
PFOA	413.00>369.00	413.00>169.00	159500	46239	28.99	31.89	46239	28.99	32.23	
13C3-PFHxS	402.10>79.90	----	210124	----	----	----	----	----	----	----
13C3-PFHxS_IS	402.10>79.90	----	210124	----	----	----	----	----	----	----
PFHxS	398.70>79.90	398.70>98.90	104087	66127	63.53	56.62	66127	63.53	60.26	
18O2-PFHxS_IS	403.00>83.90	----	201482	----	----	----	----	----	----	----
13C9-PFNA_IS	472.10>427.00	----	299869	----	----	----	----	----	----	----
13C9-PFNA	472.10>427.00	----	299869	----	----	----	----	----	----	----
13C5-PFNA_IS	468.00>423.00	----	284248	----	----	----	----	----	----	----
PFNA	463.00>419.00	463.00>219.00	163523	34733	21.24	23.17	34733	21.24	23.63	
PFHpS	449.00>79.90	449.00>98.80	75815	40334	53.20	56.96	40334	53.20	59.06	
7_3 FTCA	441.00>317.00	441.00>336.90	391431	500115	127.77	117.47	500115	127.77	125.53	
13C2-8_2-FTS	529.10>80.90	----	174301	----	----	----	----	----	----	AC
13C2-8_2-FTS_IS	529.10>80.90	----	174301	----	----	----	----	----	----	----
8_2 FTS	527.10>506.95	527.10>80.80	59946	30846	51.46	49.59	30846	51.46	44.81	
13C6-PFDA_IS	519.10>474.10	----	219877	----	----	----	----	----	----	----
13C6-PFDA	519.10>474.10	----	219877	----	----	----	----	----	----	----
13C2-PFDA_IS	515.10>470.10	----	212168	----	----	----	----	----	----	----
PFDA	512.90>469.00	512.90>219.00	191179	35794	18.72	19.00	35794	18.72	19.15	
D3-NMeFOSAA_IS	573.20>419.00	----	275192	----	----	----	----	----	----	----
D3-NMeFOSAA	573.20>419.00	----	275192	----	----	----	----	----	----	AC
13C8-PFOS_IS	507.10>98.90	----	80073	----	----	----	----	----	----	----
13C8-PFOS	507.10>98.90	----	80073	----	----	----	----	----	----	----
13C4-PFOS_IS	502.80>79.90	----	230431	----	----	----	----	----	----	----
PFOS	498.90>79.90	498.90>98.80	88103	48407	54.94	52.47	48407	54.94	53.10	
NMeFOSAA	570.10>419.00	570.10>483.00	81508	49223	60.39	55.15	49223	60.39	60.69	
D5-NetFOSAA_IS	589.20>419.00	----	289797	----	----	----	----	----	----	----
D5-NetFOSAA	589.20>419.00	----	289797	----	----	----	----	----	----	----
NetFOSAA	584.20>419.10	584.20>526.00	52614	37039	70.40	81.95	37039	70.40	73.27	AC
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	399055	129219	32.38	32.76	129219	32.38	32.59	
PFUnDA	563.10>519.00	563.10>269.10	159221	23782	14.94	13.12	23782	14.94	14.36	
13C7-PFUnDA_IS	570.00>525.10	----	240487	----	----	----	----	----	----	----
13C7-PFUnDA	570.00>525.10	----	240487	----	----	----	----	----	----	----
PFNS	548.80>79.90	548.80>98.80	72743	43800	60.21	65.22	43800	60.21	65.31	
10_2 FTS	626.80>607.05	626.80>81.00	76879	26951	35.06	37.13	26951	35.06	38.76	
13C2-PFDOA_IS	615.10>570.00	----	277777	----	----	----	----	----	----	----
13C2-PFDOA	615.10>570.00	----	277777	----	----	----	----	----	----	----
PFDOA	613.10>569.00	613.10>319.00	154835	16241	10.49	11.29	16241	10.49	11.19	
PFDS	599.00>79.90	599.00>98.80	59231	36780	62.10	60.18	36780	62.10	65.65	
PFTrDA	663.00>619.00	663.00>168.90	161655	30055	18.59	17.64	30055	18.59	19.81	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240122_028 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	271068	97111	35.83	36.44	97111	35.83	35.86	
PFOSAm	498.10>77.90	----	176154	----	----	----	----	----	----	
13C8-PFOSAm	506.10>77.80	----	270486	----	----	----	----	----	----	
13C8-PFOSAm_IS	506.10>77.80	----	270486	----	----	----	----	----	----	
PFTDA	713.10>669.00	713.10>168.90	125329	28777	22.96	22.96	28777	22.96	25.01	
13C2-PFTDA	715.20>670.00	----	115636	----	----	----	----	----	----	
13C2-PFTDA_IS	715.20>670.00	----	115636	----	----	----	----	----	----	
PFDoS	699.10>79.90	699.10>98.80	30257	21021	69.47	67.40	21021	69.47	73.46	
D7-MeFOSE_IS	623.20>58.90	----	767673	----	----	----	----	----	----	
D7-MeFOSE	623.20>58.90	----	767673	----	----	----	----	----	----	
MeFOSE	616.10>59.00	----	26761	----	----	----	----	----	----	
13C2-PFHxDA_IS	815.00>770.05	----	444379	----	----	----	----	----	----	
13C2-PFHxDA	815.00>770.05	----	444379	----	----	----	----	----	----	
PFHxDA	813.00>768.95	813.00>218.95	182554	26428	14.48	13.90	26428	14.48	15.85	
D3-MeFOSA	515.00>219.00	----	52204	----	----	----	----	----	----	
D3-MeFOSA_IS	515.00>219.00	----	52204	----	----	----	----	----	----	
MeFOSA	511.90>219.00	511.90>169.00	38872	53213	136.89	140.79	53213	136.89	150.13	
D9-EtFOSE_IS	639.20>58.90	----	765767	----	----	----	----	----	----	
D9-EtFOSE	639.20>58.90	----	765767	----	----	----	----	----	----	
EtFOSE	630.00>59.00	----	40913	----	----	----	----	----	----	
D5-EtFOSAm	531.10>219.00	----	74479	----	----	----	----	----	----	
D5-EtFOSAm_IS	531.10>219.00	----	74479	----	----	----	----	----	----	
EtFOSAm	526.00>219.00	526.00>169.00	37910	57259	151.04	163.90	57259	151.04	152.08	
PFODA	913.00>868.65	913.00>169.00	94555	25922	27.42	27.03	25922	27.42	26.29	

Flag ID key: AC: Accuracy%



240122_028

Sample ID: 1633 ICAL 1.0PPB
Date Acquired: 1/22/2024 8:13:23 PM
Acquired by: System Administrator
Data File: 240122_028
Vial: 5 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.389	-0.002	-0.001	1240441	538533	13C3-PFBA_IS	10.3051	ng/mL	
13C4-PFBA_IS	Auto	1.389	-0.002	----	1240441	1240441	----	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.390	-0.001	----	538533	538533	----	5.0000	ng/mL	
PFBA	Auto	1.391	-0.004	0.002	101530	1240441	13C4-PFBA_IS	0.9526	ng/mL	
PFMPA	Auto	2.407	0.001	-1.061	91369	118780	13C5-PFPeA_IS	1.1903	ng/mL	
3_3 FTCA	Auto	2.973	0.005	-0.495	57186	118780	13C5-PFPeA_IS	21.7113	ng/mL	
13C5-PFPeA	Auto	3.468	0.003	-1.489	118780	656287	13C2-PFHxA_IS	4.0096	ng/mL	
13C5-PFPeA_IS	Auto	3.468	0.003	----	118780	118780	----	5.0000	ng/mL	
PFPeA	Auto	3.471	0.004	0.003	168399	118780	13C5-PFPeA_IS	1.0946	ng/mL	
PFMBA	Auto	3.995	0.004	0.527	111369	118780	13C5-PFPeA_IS	1.0241	ng/mL	
13C2-4_2 FTS	Auto	4.641	0.005	-2.432	225692	201482	18O2-PFHxS_IS	8.1399	ng/mL	AC
13C2-4_2 FTS_IS	Auto	4.641	0.005	----	225692	225692	----	5.0000	ng/mL	
4_2 FTS	Auto	4.641	0.004	0.000	96297	225692	13C2-4_2 FTS_IS	0.8675	ng/mL	
13C3-PFBS_IS	Auto	4.617	0.005	----	280659	280659	----	2.5000	ng/mL	
PFBS	Auto	4.618	0.005	0.001	125272	280659	13C3-PFBS_IS	0.8720	ng/mL	
13C3-PFBS	Auto	4.617	0.005	-2.456	280659	201482	18O2-PFHxS_IS	2.4546	ng/mL	
NFDHA	Auto	4.814	0.004	-0.143	153376	609558	13C5-PFHxA_IS	1.1341	ng/mL	
13C5-PFHxA	Auto	4.957	0.005	0.000	609558	656287	13C2-PFHxA_IS	2.2038	ng/mL	
13C5-PFHxA_IS	Auto	4.957	0.005	----	609558	609558	----	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	4.957	0.004	----	656287	656287	----	2.5000	ng/mL	
PFHxA	Auto	4.958	0.004	0.001	203271	609558	13C5-PFHxA_IS	0.9935	ng/mL	
PFEESA	Auto	5.294	0.005	0.337	567884	609558	13C5-PFHxA_IS	0.8318	ng/mL	
13C3-HFPO-DA	Auto	5.435	0.005	0.478	665691	656287	13C2-PFHxA_IS	10.3618	ng/mL	
13C3-HFPO-DA_IS	Auto	5.435	0.005	----	665691	665691	----	10.0000	ng/mL	
HFPO-DA	Auto	5.437	0.006	0.002	68406	665691	13C3-HFPO-DA_IS	0.9304	ng/mL	
5_3 FTCA	Auto	5.879	0.009	0.922	308334	609558	13C5-PFHxA_IS	19.5558	ng/mL	
PFPeS	Auto	5.999	0.005	-1.073	103452	210124	13C3-PFHxS_IS	0.9375	ng/mL	
13C4-PFHpA	Auto	6.141	0.004	1.184	646639	656287	13C2-PFHxA_IS	2.5826	ng/mL	
13C4-PFHpA_IS	Auto	6.141	0.004	----	646639	646639	----	2.5000	ng/mL	
PFHpA	Auto	6.143	0.004	0.002	243303	646639	13C4-PFHpA_IS	0.8725	ng/mL	
DONA	Auto	6.509	0.005	1.074	445859	665691	13C3-HFPO-DA_IS	0.8641	ng/mL	
13C2-6_2 FTS_IS	Auto	6.785	0.004	----	223207	223207	----	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.785	0.004	-0.288	223207	201482	18O2-PFHxS_IS	8.5116	ng/mL	AC
6_2 FTS	Auto	6.786	0.005	0.001	83780	223207	13C2-6_2 FTS_IS	0.8243	ng/mL	
13C4-PFOA_IS	Auto	7.101	0.004	----	44253	44253	----	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.101	0.005	----	669574	669574	----	2.5000	ng/mL	
13C8-PFOA	Auto	7.101	0.005	0.000	669574	44253	13C4-PFOA_IS	2.7071	ng/mL	
PFOA	Auto	7.105	0.007	0.004	159500	669574	13C8-PFOA_IS	0.8792	ng/mL	
13C3-PFHxS	Auto	7.073	0.004	-0.001	210124	201482	18O2-PFHxS_IS	2.4297	ng/mL	
13C3-PFHxS_IS	Auto	7.073	0.004	----	210124	210124	----	2.5000	ng/mL	
PFHxS	M	7.073	0.004	0.001	104087	210124	13C3-PFHxS_IS	1.0129	ng/mL	
18O2-PFHxS_IS	Auto	7.073	0.004	----	201482	201482	----	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.952	0.005	----	299869	299869	----	1.2500	ng/mL	
13C9-PFNA	Auto	7.952	0.005	0.000	299869	284248	13C5-PFNA_IS	1.3474	ng/mL	
13C5-PFNA_IS	Auto	7.952	0.004	----	284248	284248	----	1.2500	ng/mL	
PFNA	Auto	7.953	0.005	0.001	163523	299869	13C9-PFNA_IS	0.9273	ng/mL	
PFHpS	Auto	7.995	0.003	-0.819	75815	80073	13C8-PFOS_IS	1.2130	ng/mL	
7_3 FTCA	Auto	7.946	0.010	2.989	391431	609558	13C5-PFHxA_IS	18.5966	ng/mL	
13C2-8_2-FTS	Auto	8.408	0.005	1.335	174301	201482	18O2-PFHxS_IS	8.0914	ng/mL	AC
13C2-8_2-FTS_IS	Auto	8.408	0.005	----	174301	174301	----	5.0000	ng/mL	
8_2 FTS	Auto	8.408	0.004	0.000	59946	174301	13C2-8_2-FTS_IS	0.8004	ng/mL	
13C6-PFDA_IS	Auto	8.719	0.006	----	219877	219877	----	1.2500	ng/mL	
13C6-PFDA	Auto	8.719	0.006	-0.001	219877	212168	13C2-PFDA_IS	1.2881	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_028 (continued)

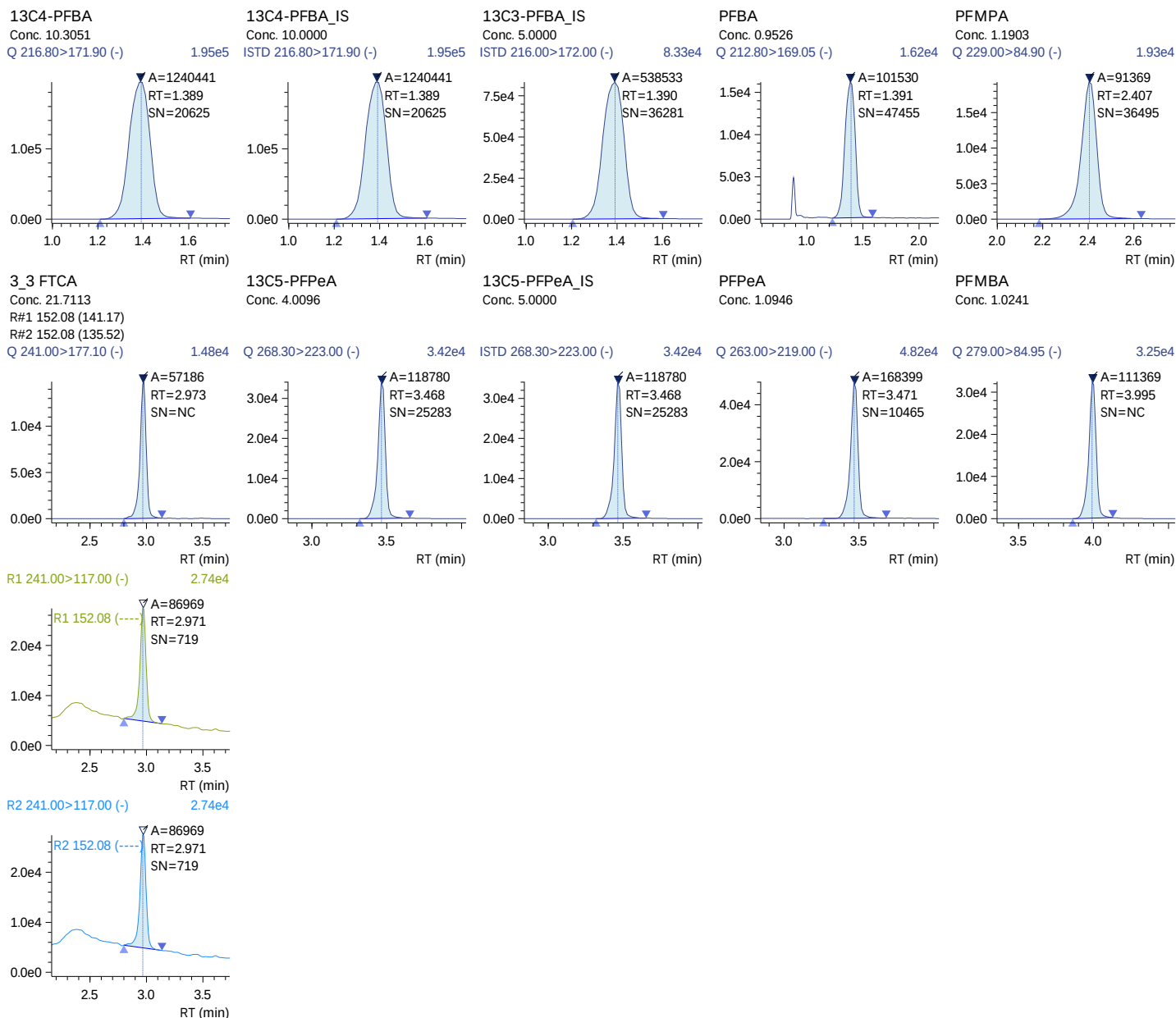
(Table continued from previous page)

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C2-PFDA_IS	Auto	8.720	0.007	----	212168	212168	----	1.2500	ng/mL	
PFDA	Auto	8.721	0.005	0.001	191179	219877	13C6-PFDA_IS	0.8867	ng/mL	
D3-NMeFOSAA_IS	Auto	8.859	0.008	----	275192	275192	----	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.859	0.008	0.044	275192	230431	13C4-PFOS_IS	6.8809	ng/mL	AC
13C8-PFOS_IS	Auto	8.814	0.006	----	80073	80073	----	2.5000	ng/mL	
13C8-PFOS	Auto	8.814	0.006	-0.001	80073	230431	13C4-PFOS_IS	2.0836	ng/mL	
13C4-PFOS_IS	Auto	8.815	0.006	----	230431	230431	----	2.5000	ng/mL	
PFOS	M	8.815	0.006	0.001	88103	80073	13C8-PFOS_IS	1.0579	ng/mL	
NMeFOSAA	M	8.864	0.007	0.005	81508	275192	D3-NMeFOSAA_IS	1.0916	ng/mL	
D5-NetFOSAA_IS	Auto	9.192	0.009	----	289797	289797	----	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.192	0.009	0.377	289797	230431	13C4-PFOS_IS	6.0568	ng/mL	
NetFOSAA	M	9.202	0.010	0.010	52614	289797	D5-NetFOSAA_IS	1.3594	ng/mL	AC
9-CI-PF3ONS	Auto	9.380	0.005	3.945	399055	665691	13C3-HFPO-DA_IS	0.7271	ng/mL	
PFUnDA	Auto	9.446	0.006	0.002	159221	240487	13C7-PFUnDA_IS	0.8847	ng/mL	
13C7-PFUnDA_IS	Auto	9.444	0.006	----	240487	240487	----	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.444	0.006	0.724	240487	212168	13C2-PFDA_IS	1.1811	ng/mL	
PFNS	Auto	9.578	0.005	0.764	72743	80073	13C8-PFOS_IS	1.1956	ng/mL	
10_2_FTS	Auto	9.820	0.005	1.412	76879	174301	13C2-8_2-FTS_IS	0.8436	ng/mL	
13C2-PFDOA_IS	Auto	10.132	0.004	----	277777	277777	----	1.2500	ng/mL	
13C2-PFDOA	Auto	10.132	0.004	1.412	277777	212168	13C2-PFDA_IS	1.1875	ng/mL	
PFDOA	Auto	10.133	0.004	0.001	154835	277777	13C2-PFDOA_IS	0.9582	ng/mL	
PFDS	Auto	10.292	0.004	1.478	59231	80073	13C8-PFOS_IS	1.1139	ng/mL	
PFTDA	Auto	10.792	0.004	-0.632	161655	115636	13C2-PFTDA_IS	0.9600	ng/mL	
11-CI-PF3OUdS	Auto	10.802	0.004	5.367	271068	665691	13C3-HFPO-DA_IS	0.7171	ng/mL	
PFOSAm	M	11.170	0.008	-0.002	176154	270486	13C8-PFOSAm_IS	1.9758	ng/mL	
13C8-PFOSAm	Auto	11.172	0.008	2.357	270486	230431	13C4-PFOS_IS	2.7651	ng/mL	
13C8-PFOSAm_IS	Auto	11.172	0.008	----	270486	270486	----	2.5000	ng/mL	
PFTDA	Auto	11.425	0.004	0.001	125329	115636	13C2-PFTDA_IS	0.9808	ng/mL	
13C2-PFTDA	Auto	11.424	0.005	2.704	115636	212168	13C2-PFDA_IS	1.1449	ng/mL	
13C2-PFTDA_IS	Auto	11.424	0.005	----	115636	115636	----	1.2500	ng/mL	
PFDoS	Auto	11.617	0.002	2.803	30257	80073	13C8-PFOS_IS	0.9422	ng/mL	
D7-MeFOSE_IS	Auto	13.409	0.007	----	767673	767673	----	25.0000	ng/mL	
D7-MeFOSE	Auto	13.409	0.007	4.594	767673	230431	13C4-PFOS_IS	31.8302	ng/mL	
MeFOSE	M	13.447	0.006	0.038	26761	767673	D7-MeFOSE_IS	0.9492	ng/mL	
13C2-PFHxDA_IS	Auto	12.640	0.004	----	444379	444379	----	2.5000	ng/mL	
13C2-PFHxDA	Auto	12.640	0.004	3.920	444379	212168	13C2-PFDA_IS	2.2548	ng/mL	
PFHxDA	Auto	12.642	0.005	0.002	182554	444379	13C2-PFHxDA_IS	0.9741	ng/mL	
D3-MeFOSA	Auto	13.717	0.006	4.902	52204	230431	13C4-PFOS_IS	2.6500	ng/mL	
D3-MeFOSA_IS	Auto	13.717	0.006	----	52204	52204	----	2.5000	ng/mL	
MeFOSA	M	13.726	0.008	0.009	38872	52204	D3-MeFOSA_IS	1.0330	ng/mL	
D9-EtFOSE_IS	Auto	14.039	0.007	----	765767	765767	----	25.0000	ng/mL	
D9-EtFOSE	Auto	14.039	0.007	5.224	765767	230431	13C4-PFOS_IS	31.2618	ng/mL	
EtFOSE	M	14.086	0.010	0.047	40913	765767	D9-EtFOSE_IS	1.0155	ng/mL	
D5-EtFOSAm	Auto	14.395	0.008	5.580	74479	230431	13C4-PFOS_IS	2.8397	ng/mL	
D5-EtFOSAm_IS	Auto	14.395	0.008	----	74479	74479	----	2.5000	ng/mL	
EtFOSAm	M	14.413	0.000	0.018	37910	74479	D5-EtFOSAm_IS	0.8743	ng/mL	
PFODA	Auto	13.778	0.004	1.138	94555	444379	13C2-PFHxDA_IS	0.9409	ng/mL	

Flag ID key: AC: Accuracy%



240122_028 (continued)





240122_028 (continued)

13C2-4_2 FTS
Conc. 8.1399

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. 0.8675
R#1 33.35 (29.06)
R#2 33.35 (35.34)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 0.8720
R#1 49.98 (46.72)
R#2 49.98 (49.78)

Q 329.10>80.90 (-)

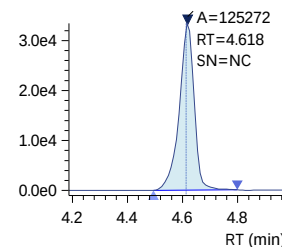
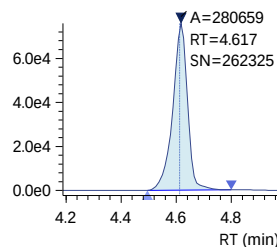
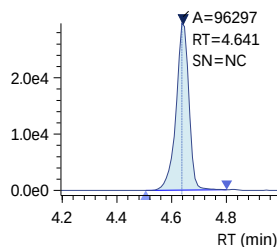
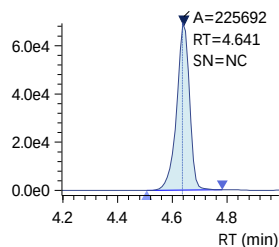
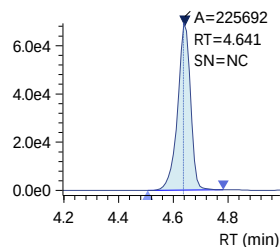
6.92e4 ISTD 329.10>80.90 (-)

6.92e4 Q 327.10>307.00 (-)

2.97e4 ISTD 302.10>79.90 (-)

7.59e4 Q 298.70>79.90 (-)

3.34e4

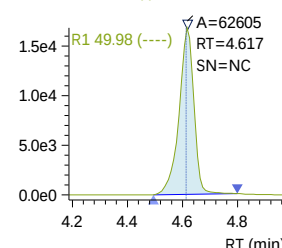
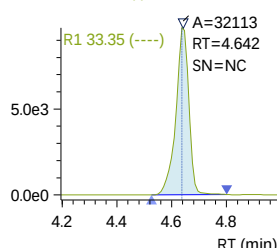


R1 327.10>80.90 (-)

9.72e3

R1 298.70>98.80 (-)

1.68e4

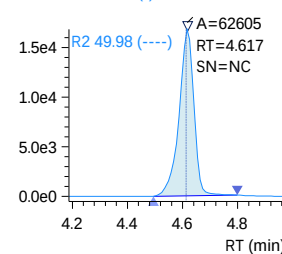
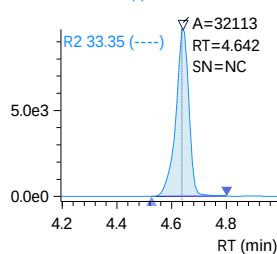


R2 327.10>80.90 (-)

9.72e3

R2 298.70>98.80 (-)

1.68e4





240122_028 (continued)

13C3-PFBS
Conc. 2.4546

NFDHA
Conc. 1.1341
R#1 37.09 (40.25)
R#2 37.09 (37.18)

13C5-PFHxA
Conc. 2.2038

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

Q 302.10>79.90 (-)

7.59e4

Q 295.00>201.00 (-)

4.58e4

Q 318.00>273.00 (-)

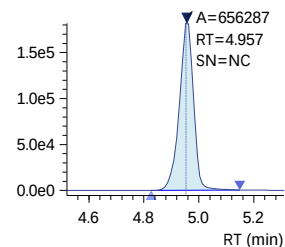
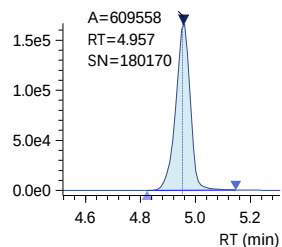
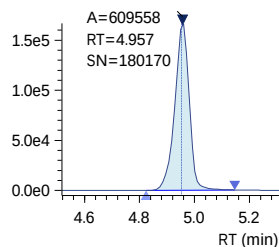
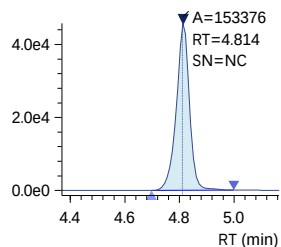
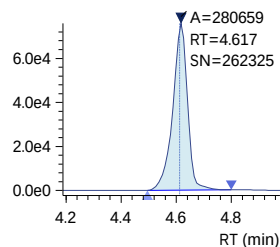
1.67e5

ISTD 318.00>273.00 (-)

1.67e5

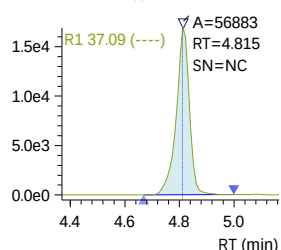
ISTD 315.10>270.00 (-)

1.82e5



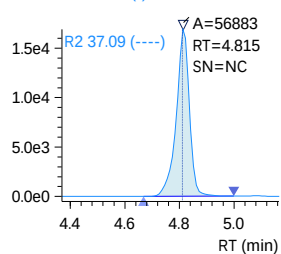
R1 295.00>84.90 (-)

1.69e4



R2 295.00>84.90 (-)

1.69e4





240122_028 (continued)

PFHxA
Conc. 0.9935

PFEESA
Conc. 0.8318
R#1 5.72 (6.11)
R#2 5.72 (5.72)

13C3-HFPO-DA
Conc. 10.3618

13C3-HFPO-DA_IS
Conc. 10.0000

HFPO-DA
Conc. 0.9304
R#1 65.70 (65.61)
R#2 65.70 (60.94)

Q 313.00>269.00 (-)

5.62e4

Q 314.80>135.00 (-)

1.64e5

Q 286.90>168.90 (-)

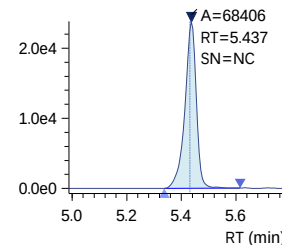
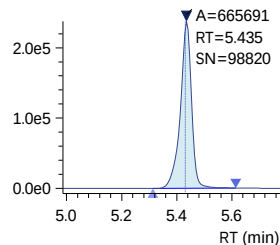
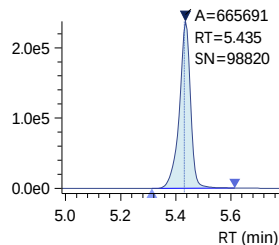
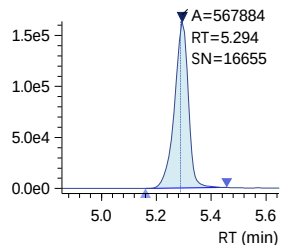
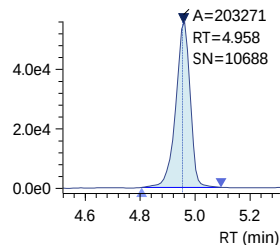
2.38e5

ISTD 286.90>168.90 (-)

2.38e5

Q 284.90>168.90 (-)

2.38e4

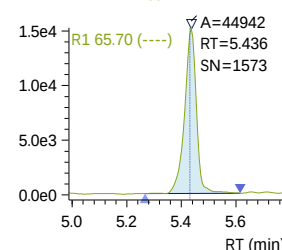
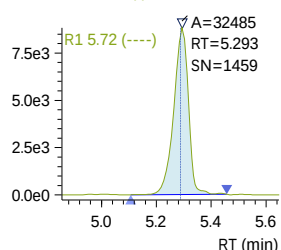


R1 314.80>82.90 (-)

8.83e3

R1 284.90>184.90 (-)

1.53e4

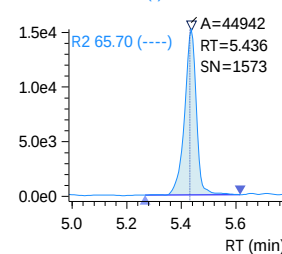
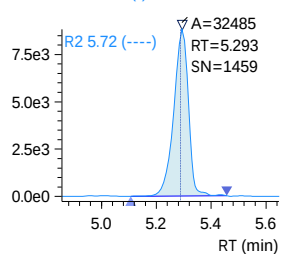


R2 314.80>82.90 (-)

8.83e3

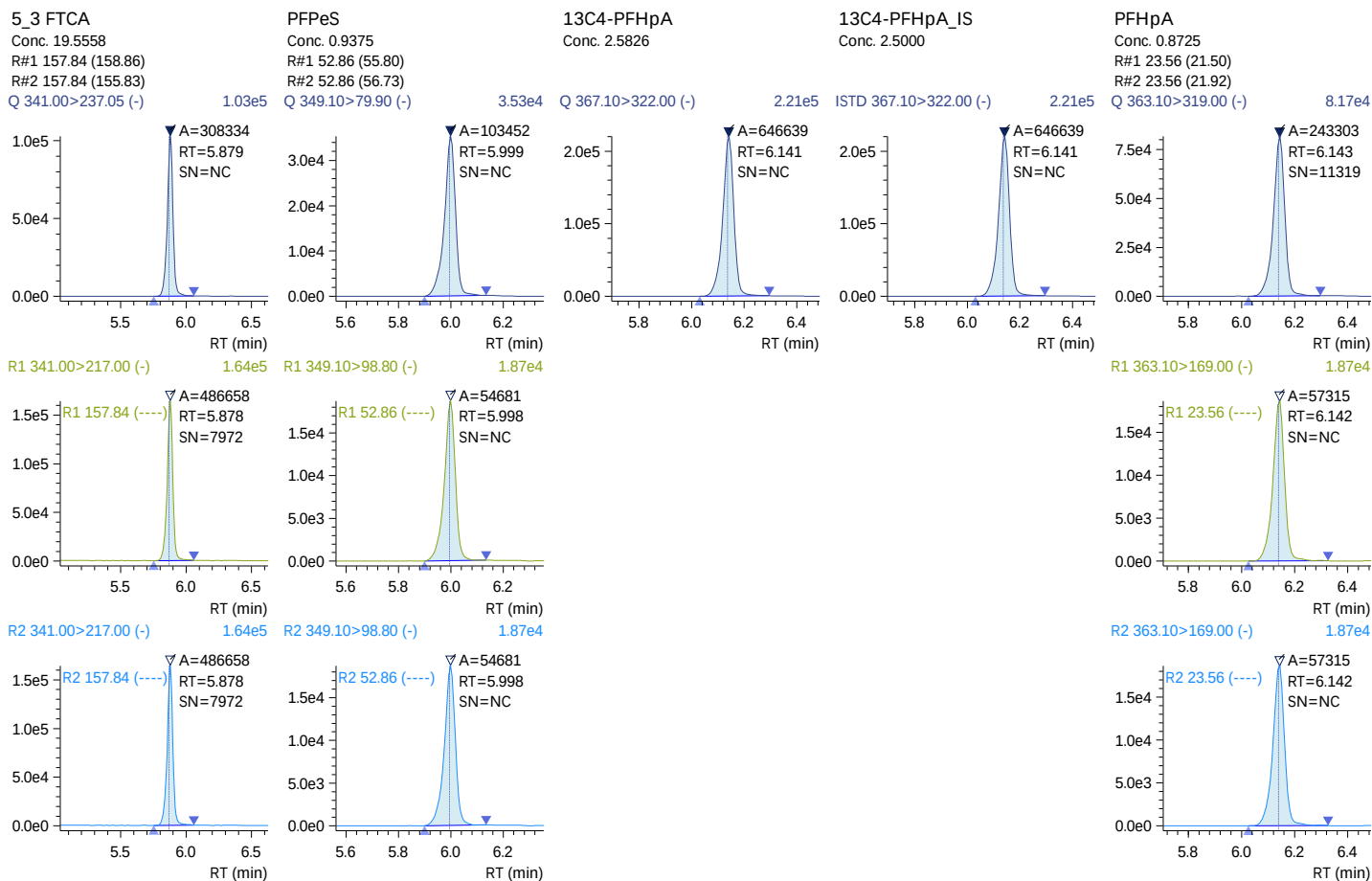
R2 284.90>184.90 (-)

1.53e4



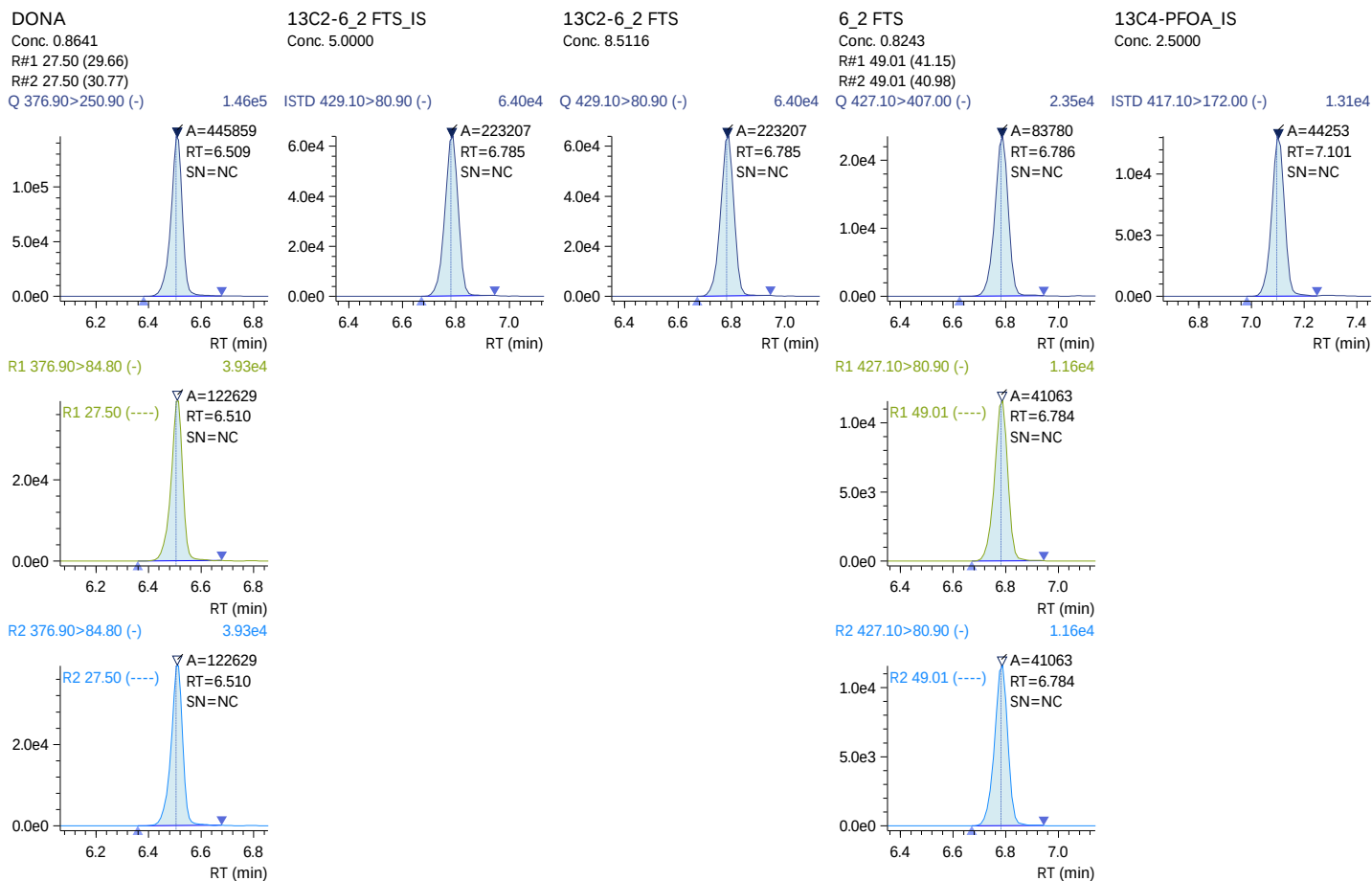


240122_028 (continued)





240122_028 (continued)





240122_028 (continued)

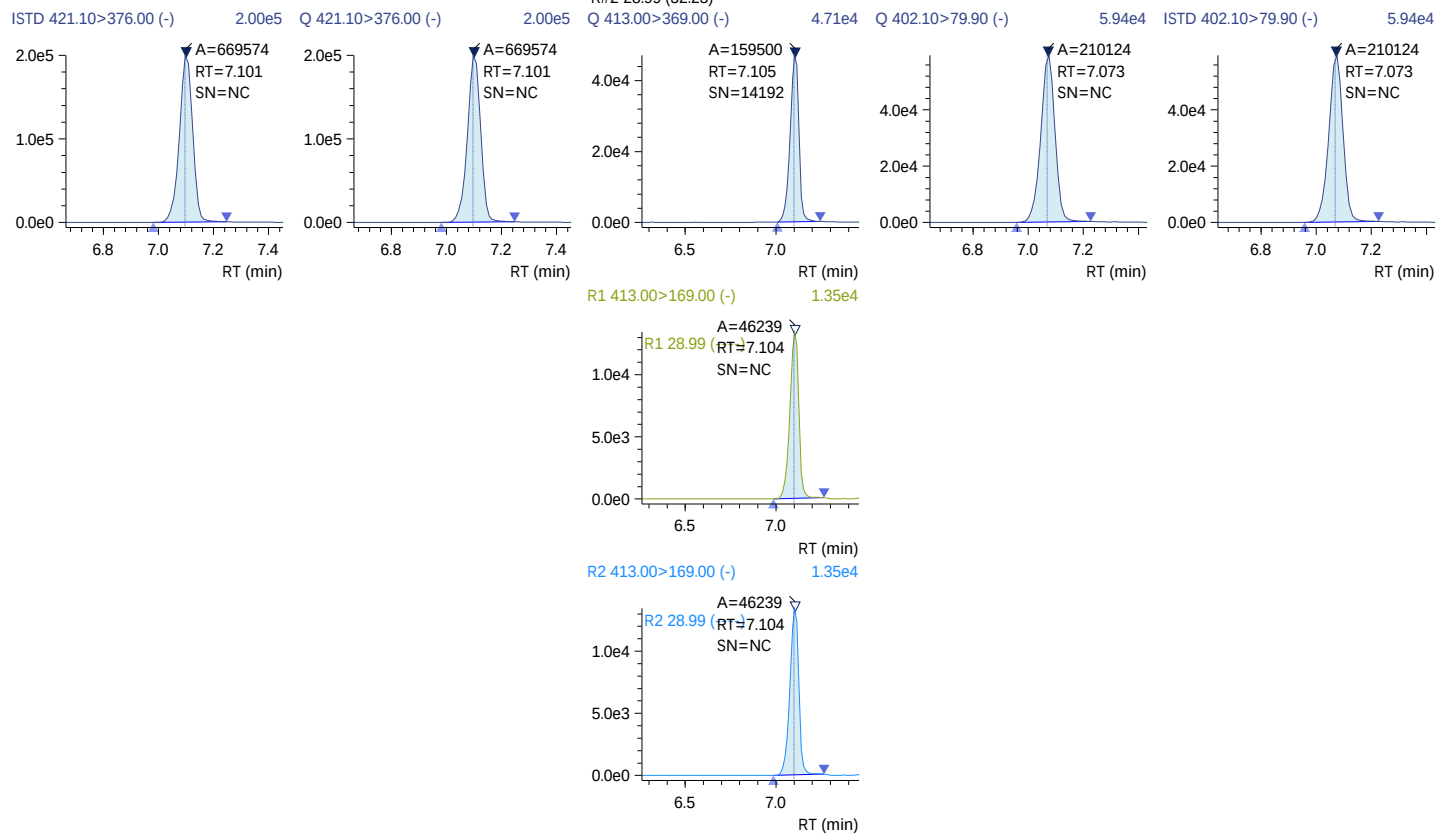
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.7071

PFOA
Conc. 0.8792
R#1 28.99 (31.89)
R#2 28.99 (32.23)

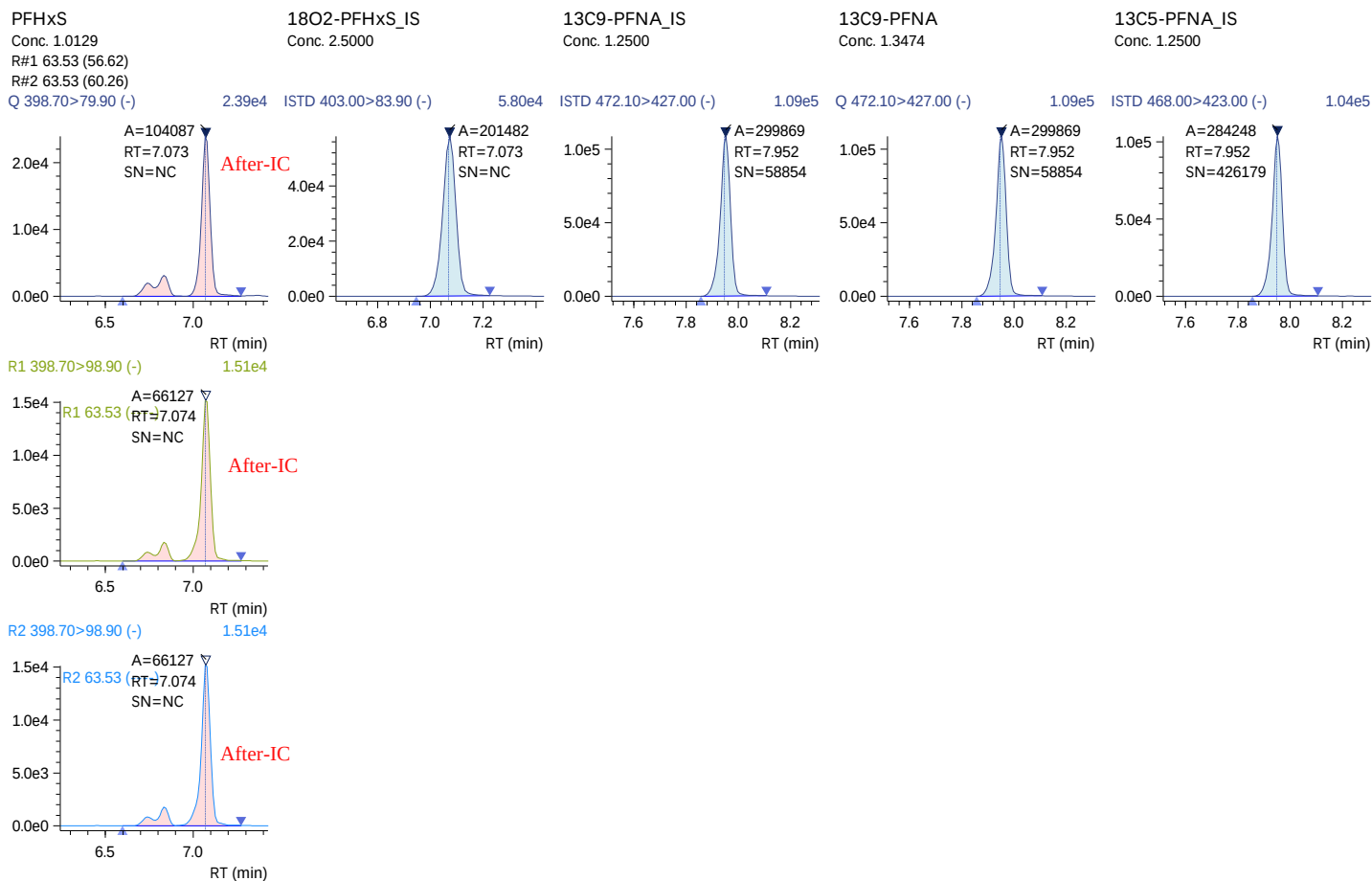
13C3-PFHxS
Conc. 2.4297

13C3-PFHxS_IS
Conc. 2.5000





240122_028 (continued)

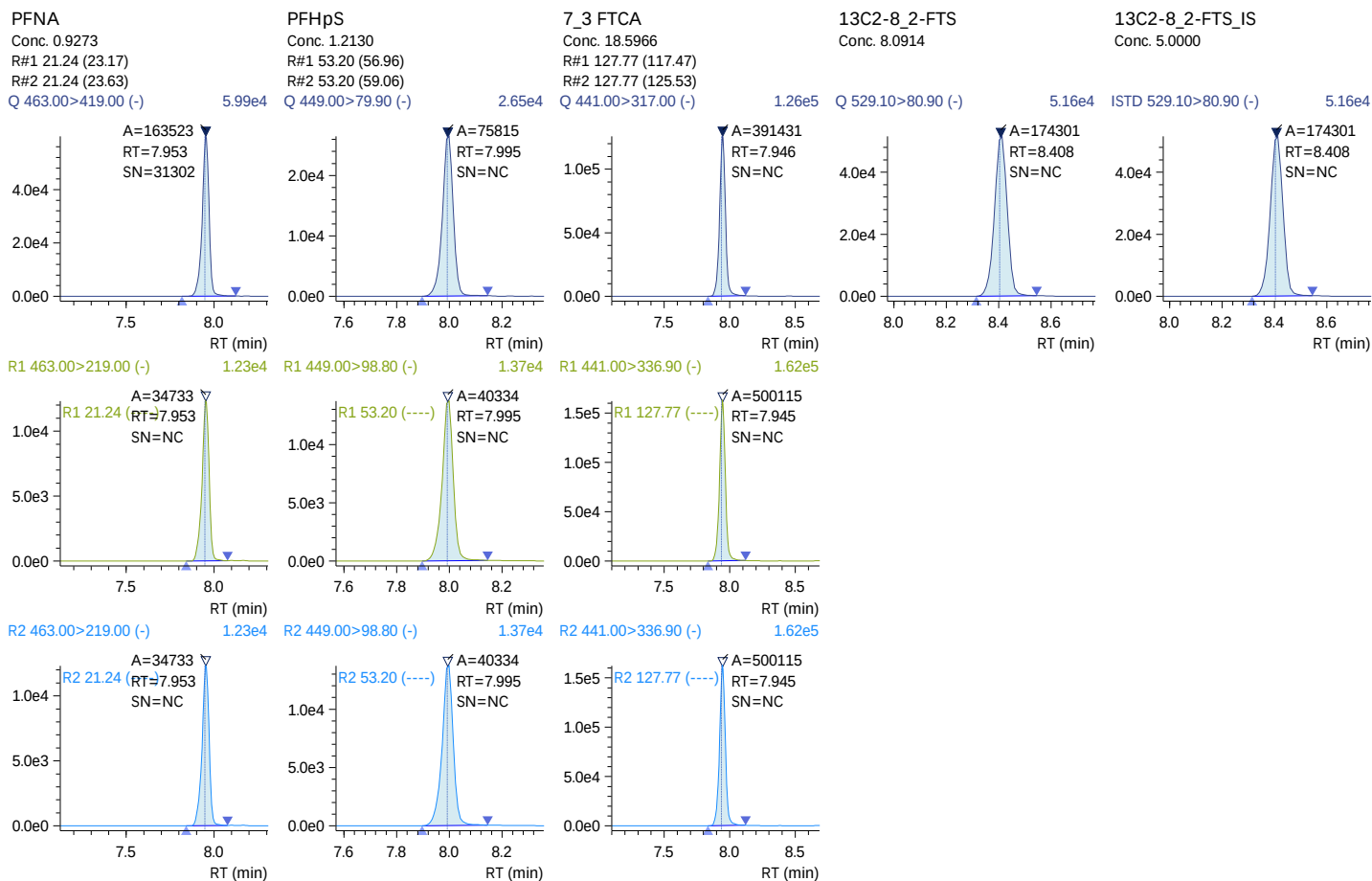


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_028 (continued)

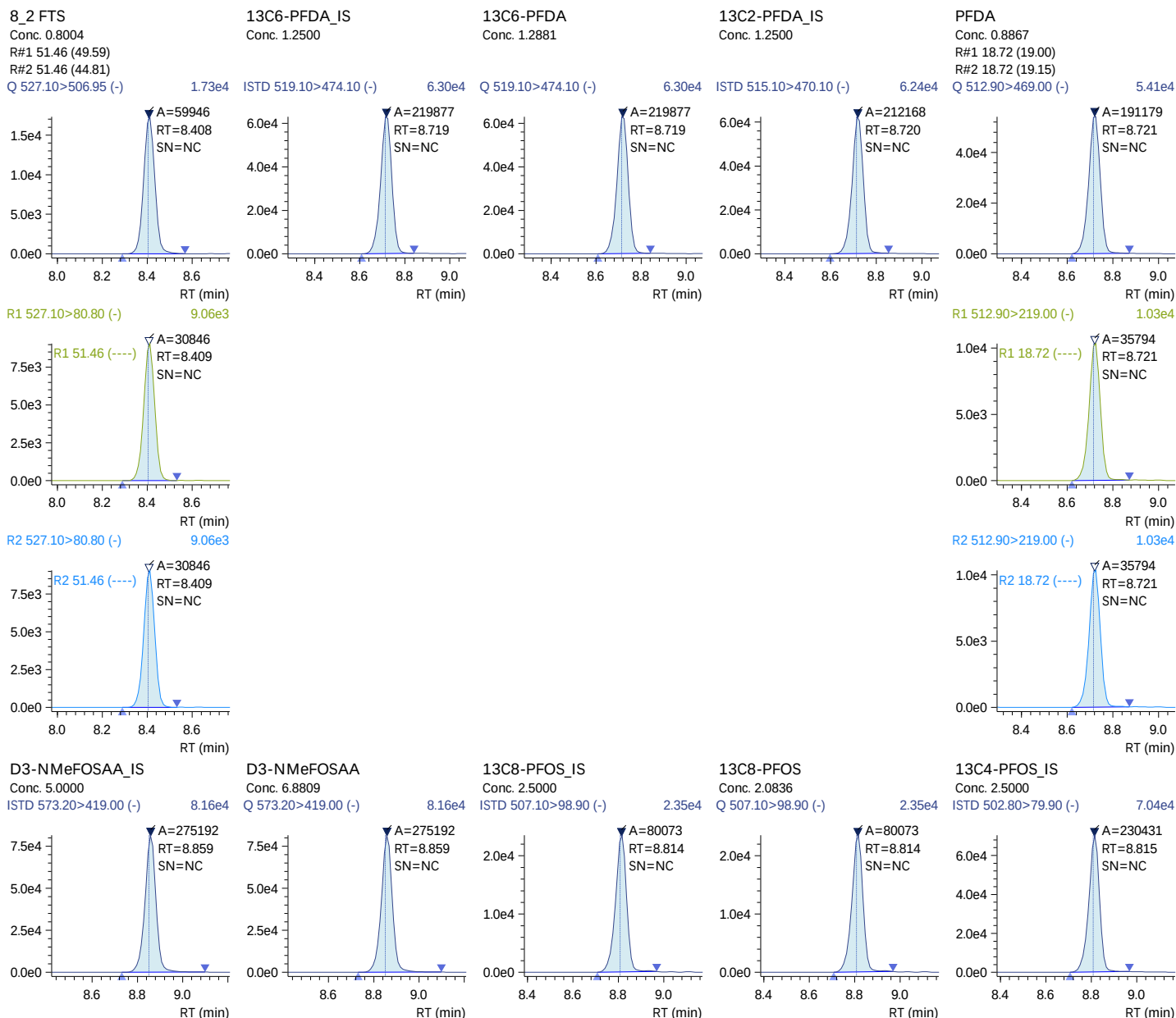


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.

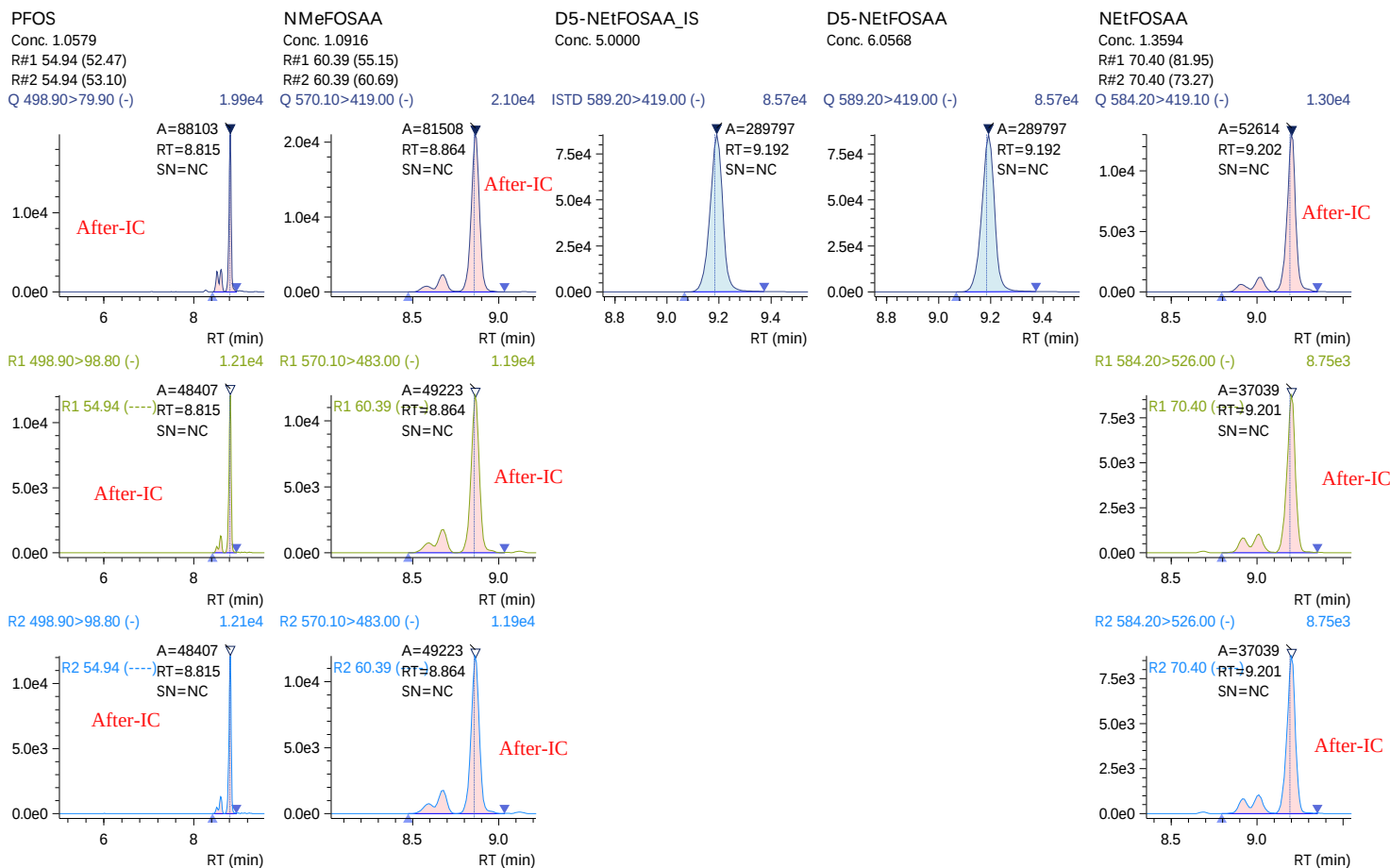


240122_028 (continued)





240122_028 (continued)



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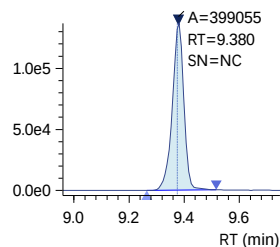
SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



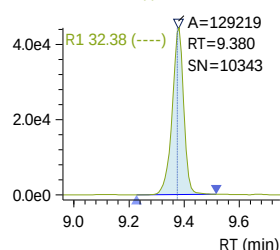
240122_028 (continued)

9-Cl-PF3ONS

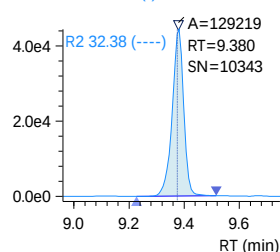
Conc. 0.7271
R#1 32.38 (32.76)
R#2 32.38 (32.59)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-) 4.44e4

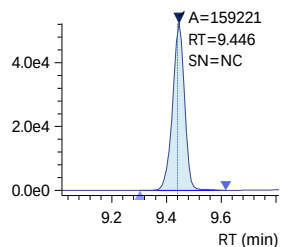


R2 532.80>353.00 (-) 4.44e4

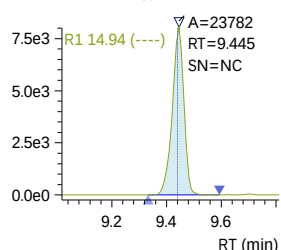


PFUnDA

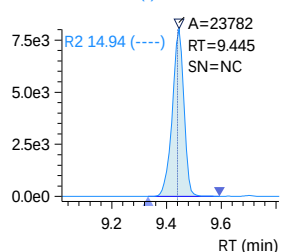
Conc. 0.8847
R#1 14.94 (13.12)
R#2 14.94 (14.36)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-) 8.02e3

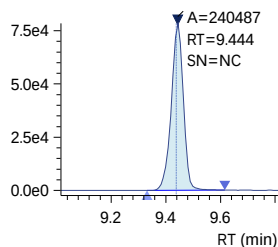


R2 563.10>269.10 (-) 8.02e3



13C7-PFUnDA_IS

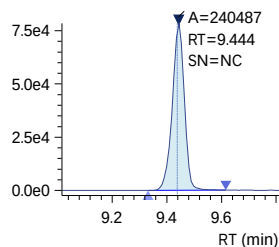
Conc. 1.2500
ISTD 570.00>525.10 (-)



7.84e4

13C7-PFUnDA

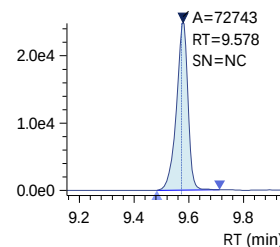
Conc. 1.1811
Q 570.00>525.10 (-)



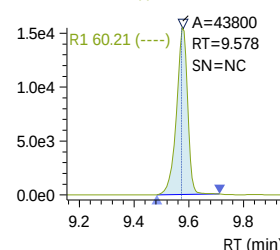
7.84e4

PFNS

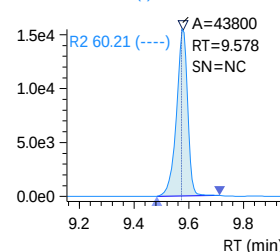
Conc. 1.1956
R#1 60.21 (65.22)
R#2 60.21 (65.31)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-) 1.55e4

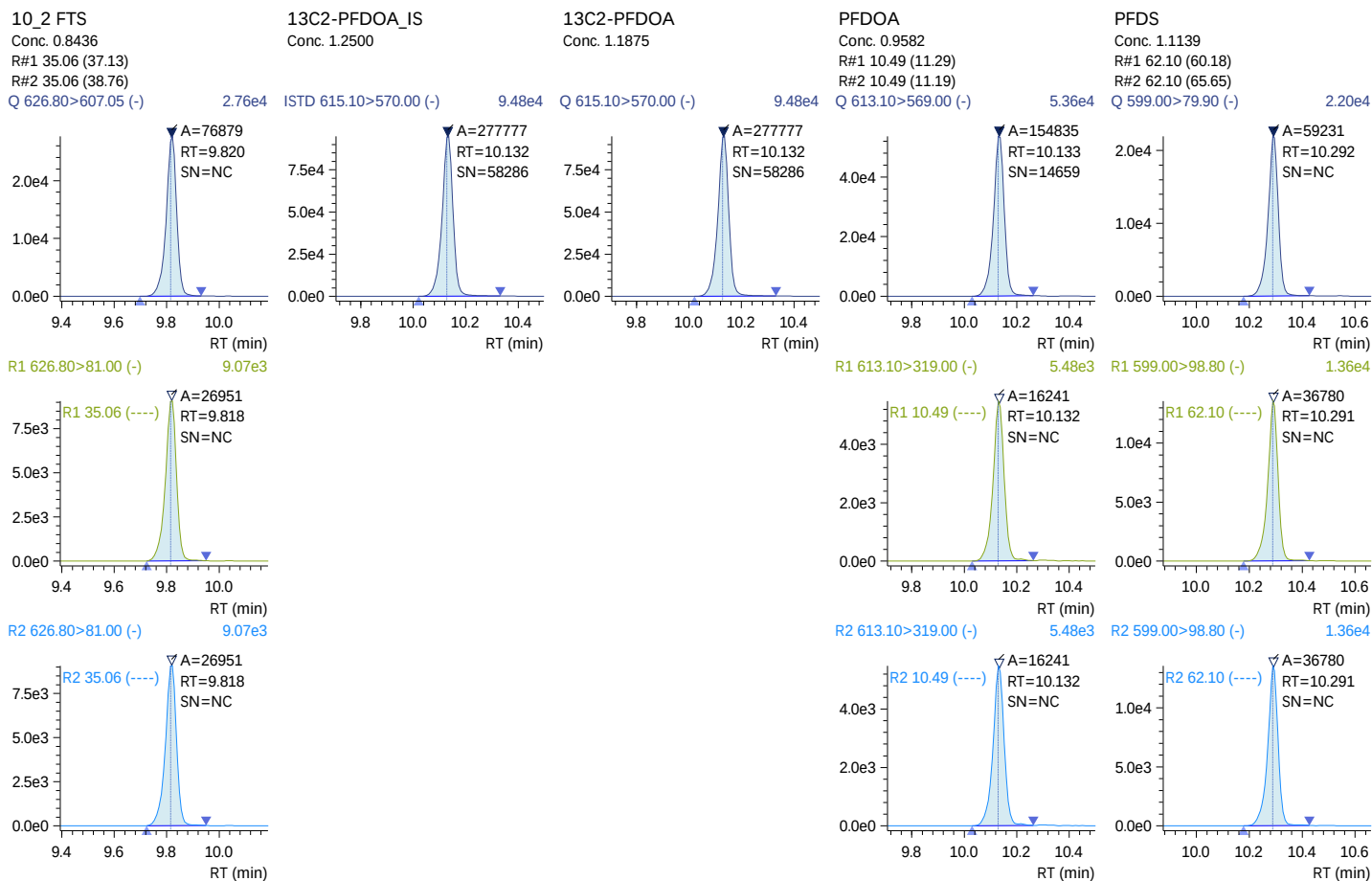


R2 548.80>98.80 (-) 1.55e4





240122_028 (continued)

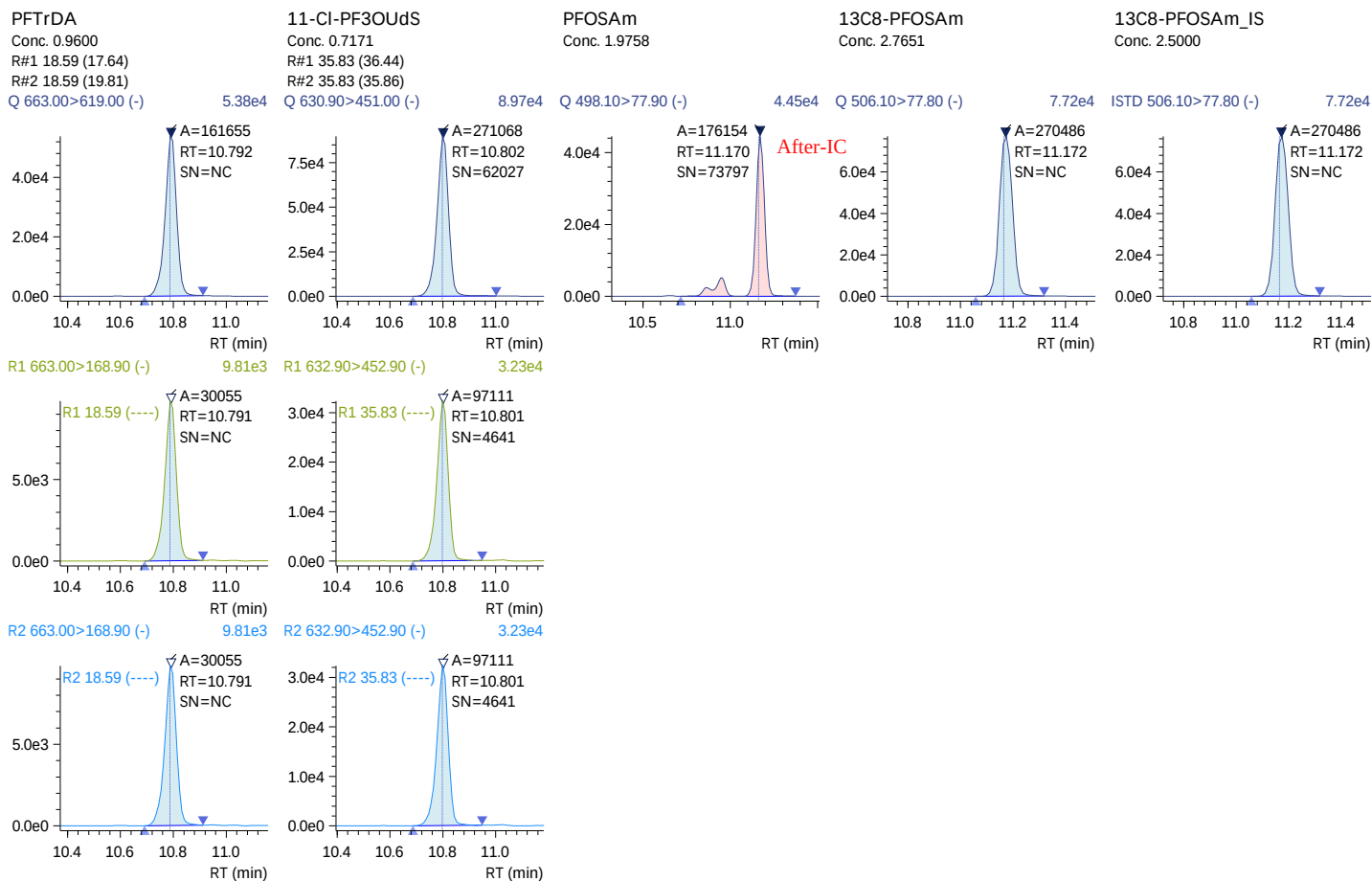


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.

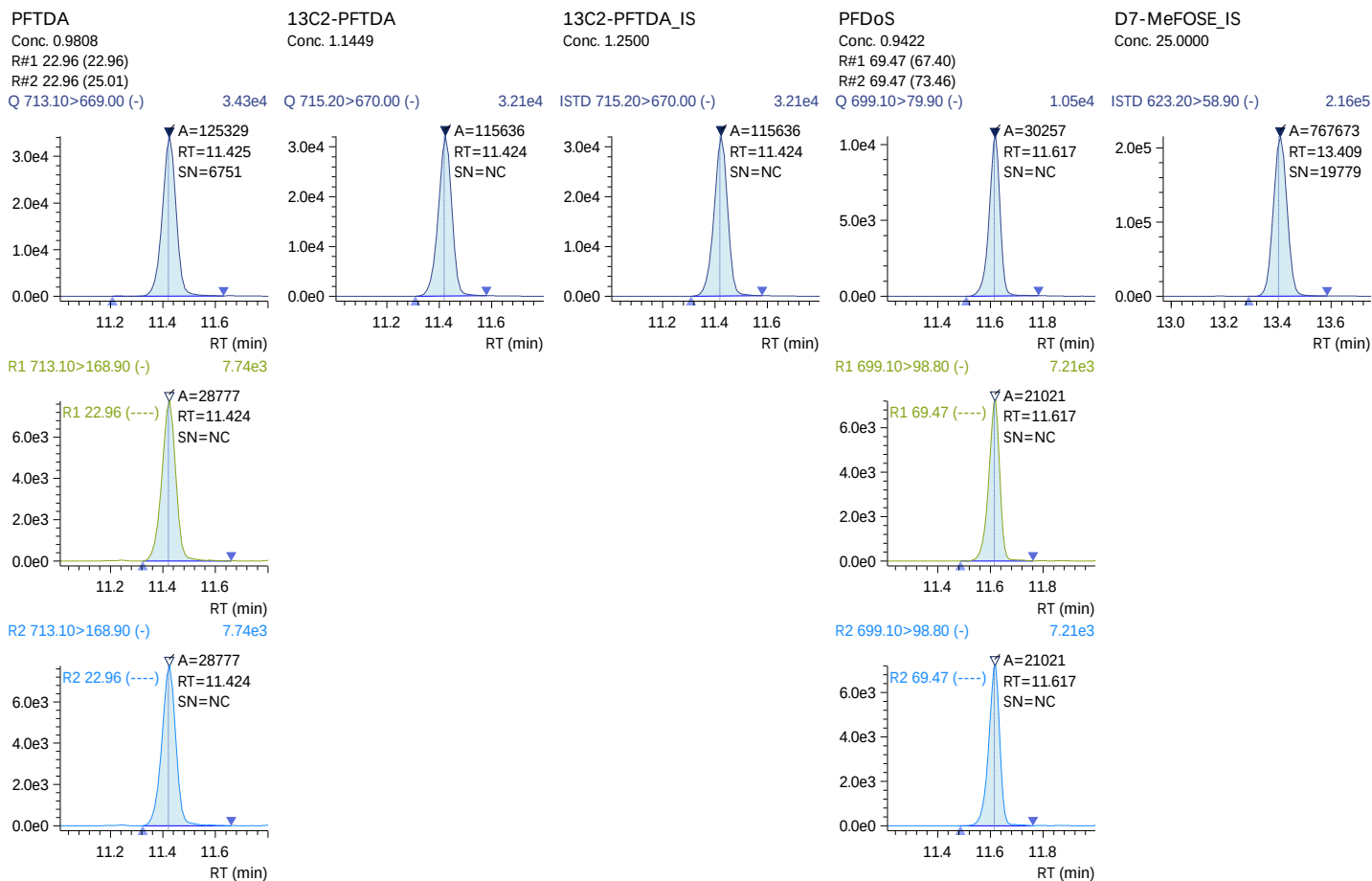


240122_028 (continued)





240122_028 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_028 (continued)

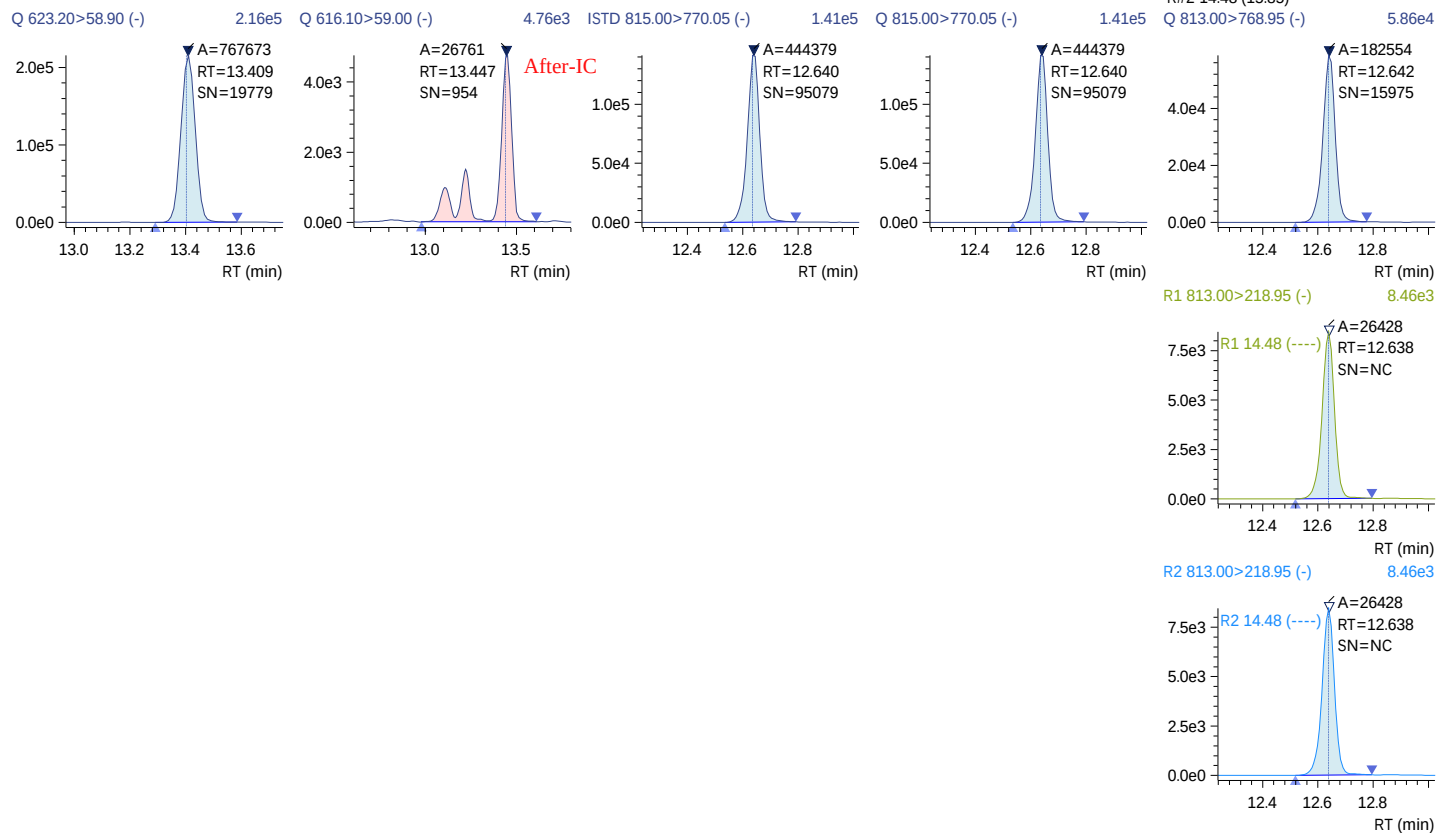
D7-MeFOSE
Conc. 31.8302

MeFOSE
Conc. 0.9492

13C2-PFHXA_IS
Conc. 2.5000

13C2-PFHXA
Conc. 2.2548

PFHXA
Conc. 0.9741
R#1 14.48 (13.90)
R#2 14.48 (15.85)





240122_028 (continued)

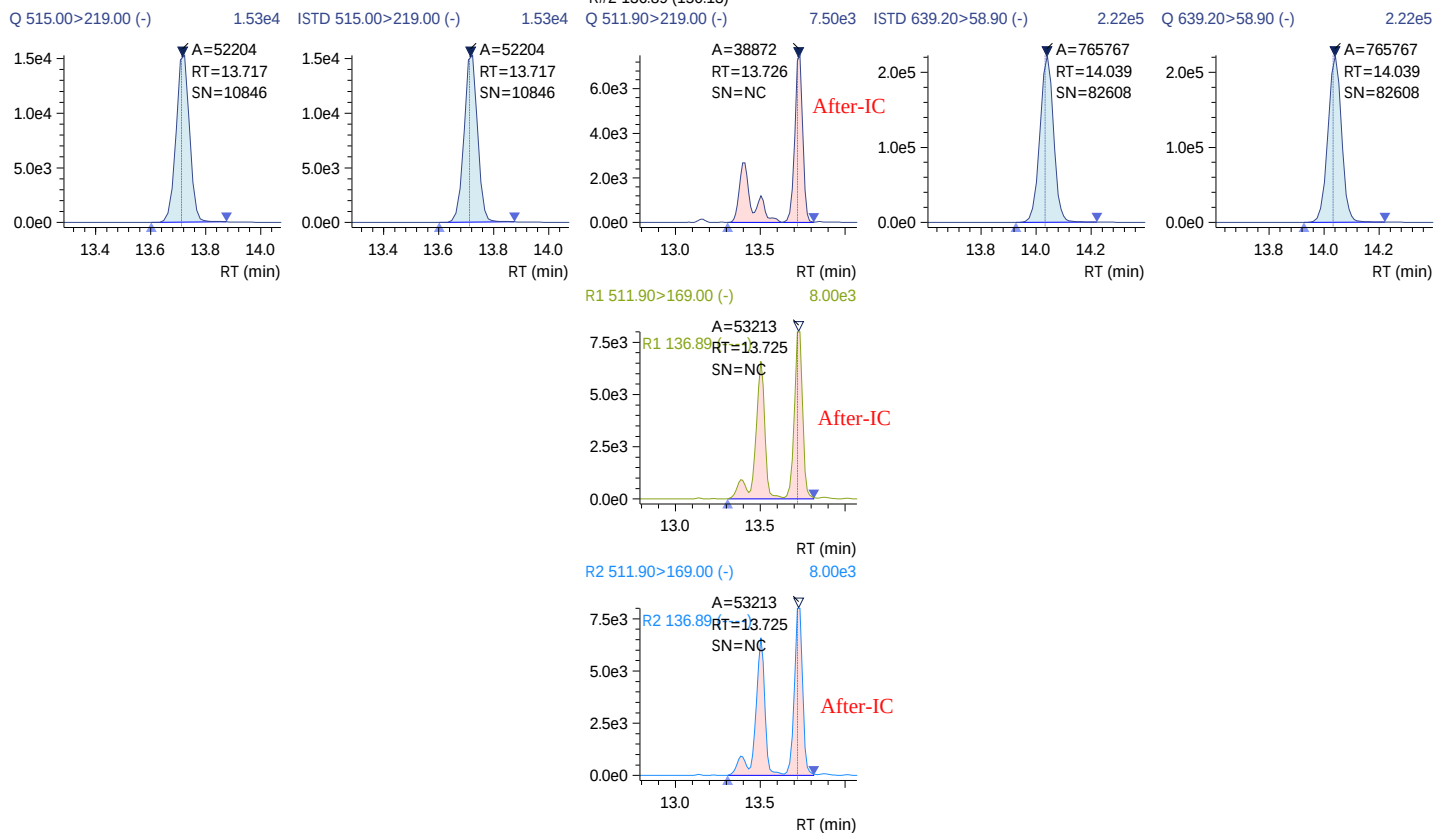
D3-MeFOSA
Conc. 2.6500

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. 1.0330
R#1 136.89 (140.79)
R#2 136.89 (150.13)

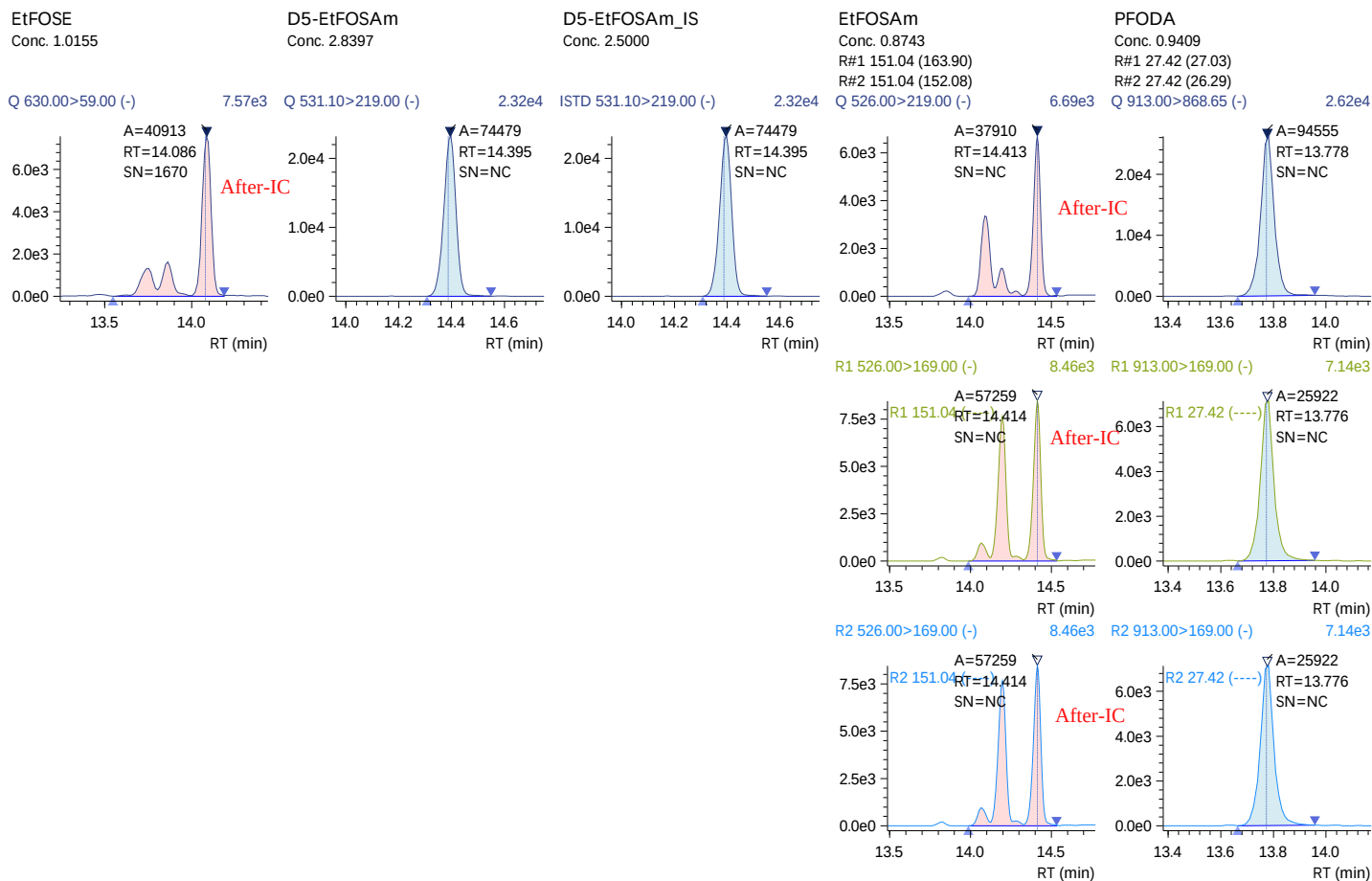
D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 31.2618





240122_028 (continued)



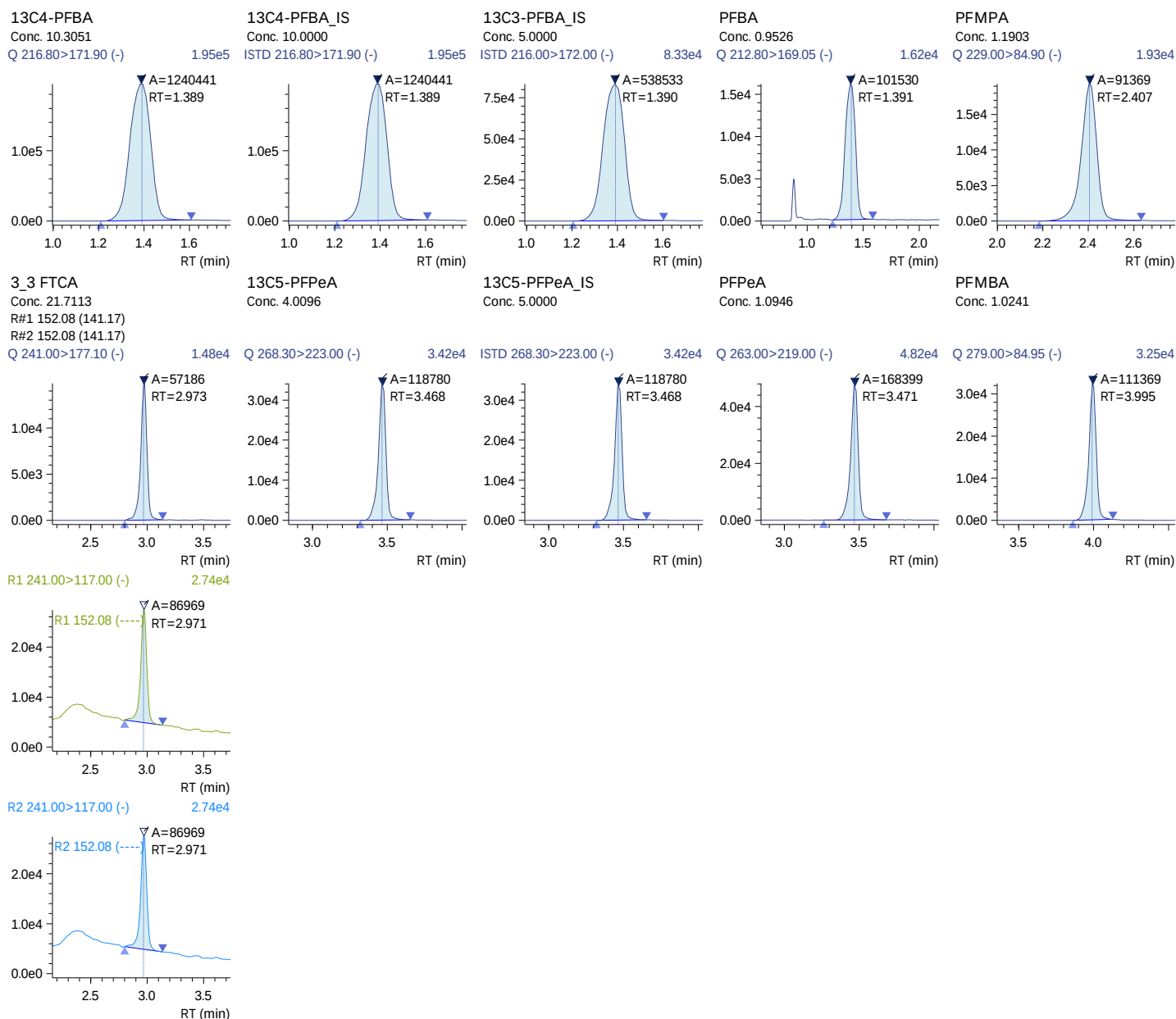
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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_028

Sample ID: 1633 ICAL 1.0PPB
Date Acquired: 1/22/2024 8:13:23 PM
Acquired by: System Administrator
Data File: 240122_028
Vial: 5 | Inj. Volume: 10.0000uL | Tray: 1





240122_028 (continued)

13C2-4_2 FTS
 Conc. 8.1399

13C2-4_2 FTS_IS
 Conc. 5.0000

4_2 FTS
 Conc. 0.8675
 R#1 33.35 (29.06)
 R#2 33.35 (29.06)

13C3-PFBS_IS
 Conc. 2.5000

PFBS
 Conc. 0.8720
 R#1 49.98 (46.72)
 R#2 49.98 (46.72)

Q 329.10>80.90 (-)

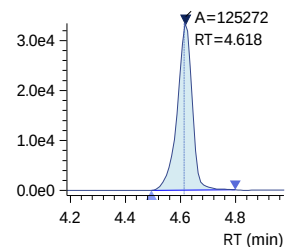
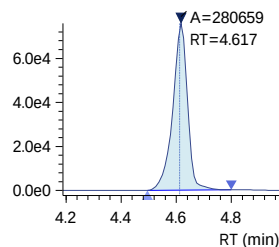
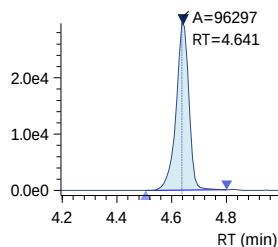
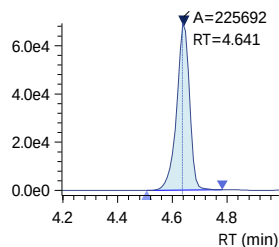
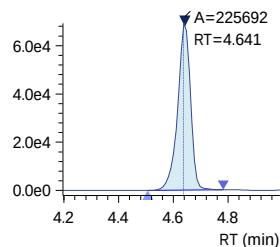
6.92e4 ISTD 329.10>80.90 (-)

6.92e4 Q 327.10>307.00 (-)

2.97e4 ISTD 302.10>79.90 (-)

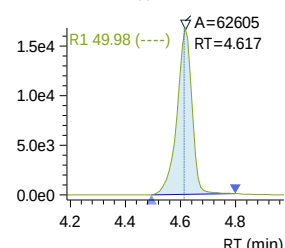
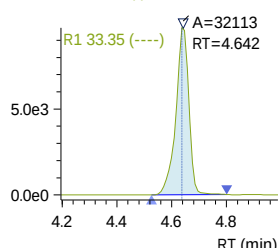
7.59e4 Q 298.70>79.90 (-)

3.34e4



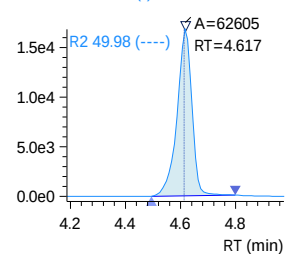
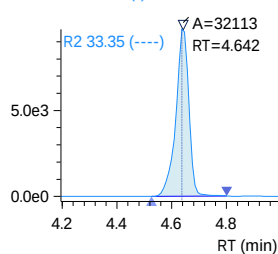
R1 327.10>80.90 (-) 9.72e3

R1 298.70>98.80 (-) 1.68e4



R2 327.10>80.90 (-) 9.72e3

R2 298.70>98.80 (-) 1.68e4





240122_028 (continued)

13C3-PFBS
 Conc. 2.4546

NFDHA
 Conc. 1.1341
 R#1 37.09 (40.25)
 R#2 37.09 (40.25)

13C5-PFHxA
 Conc. 2.2038

13C5-PFHxA_IS
 Conc. 2.5000

13C2-PFHxA_IS
 Conc. 2.5000

Q 302.10>79.90 (-)

7.59e4

Q 295.00>201.00 (-)

4.58e4

Q 318.00>273.00 (-)

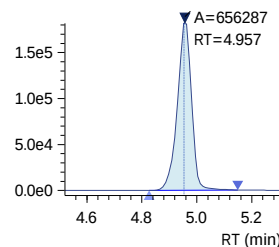
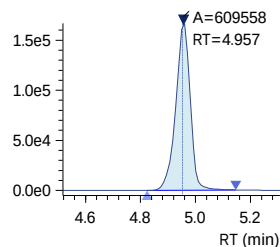
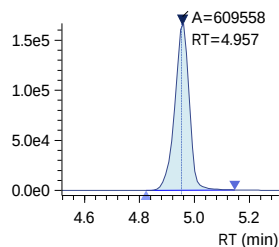
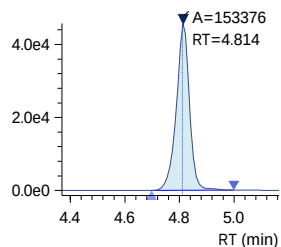
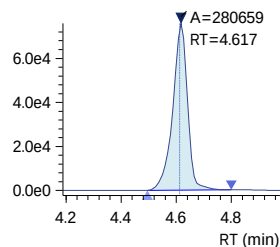
1.67e5

ISTD 318.00>273.00 (-)

1.67e5

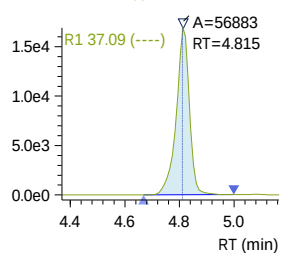
ISTD 315.10>270.00 (-)

1.82e5



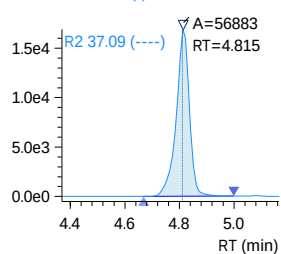
R1 295.00>84.90 (-)

1.69e4



R2 295.00>84.90 (-)

1.69e4

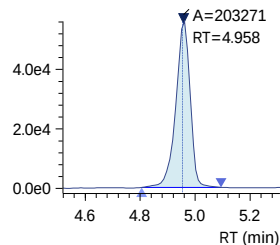




240122_028 (continued)

PFHxA
Conc. 0.9935

Q 313.00>269.00 (-) 5.62e4

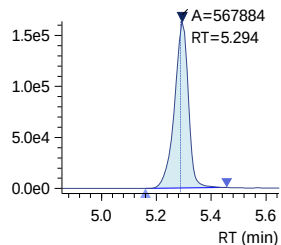


PFEESA
Conc. 0.8318

R#1 5.72 (6.11)

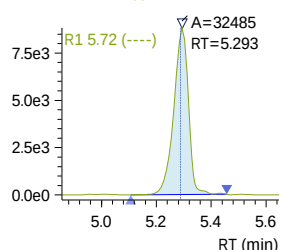
R#2 5.72 (6.11)

Q 314.80>135.00 (-) 1.64e5



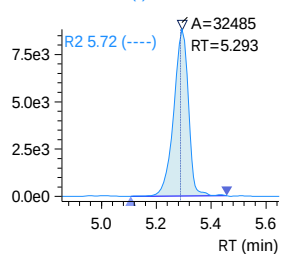
R1 314.80>82.90 (-)

8.83e3



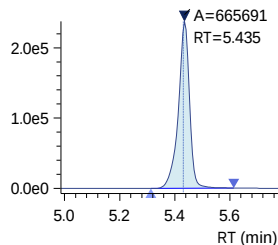
R2 314.80>82.90 (-)

8.83e3



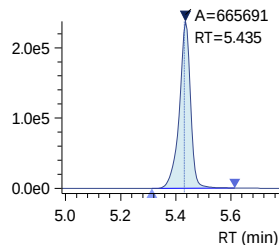
13C3-HFPO-DA
Conc. 10.3618

Q 286.90>168.90 (-) 2.38e5



13C3-HFPO-DA_IS
Conc. 10.0000

ISTD 286.90>168.90 (-) 2.38e5

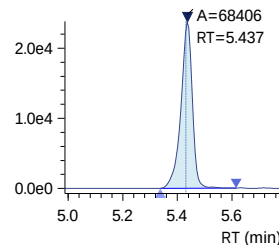


HFPO-DA
Conc. 0.9304

R#1 65.70 (65.61)

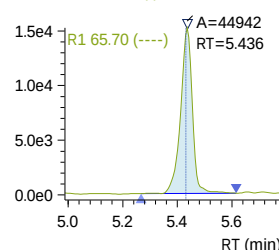
R#2 65.70 (65.61)

Q 284.90>168.90 (-) 2.38e4



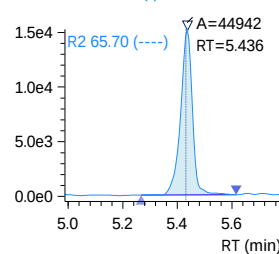
R1 284.90>184.90 (-)

1.53e4



R2 284.90>184.90 (-)

1.53e4

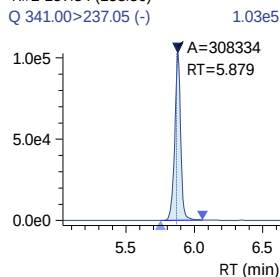




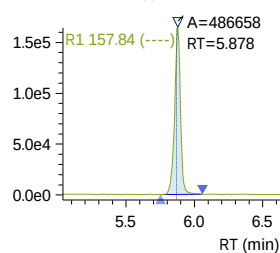
240122_028 (continued)

5_3 FTCA

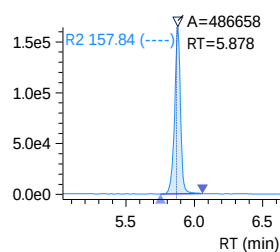
Conc. 19.5558
R#1 157.84 (158.86)
R#2 157.84 (158.86)
Q 341.00>237.05 (-)



R1 341.00>217.00 (-) 1.64e5

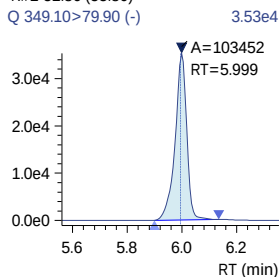


R2 341.00>217.00 (-) 1.64e5

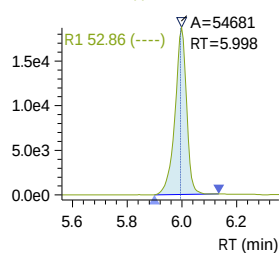


PFPeS

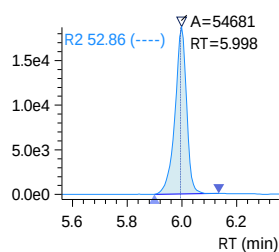
Conc. 0.9375
R#1 52.86 (55.80)
R#2 52.86 (55.80)
Q 349.10>79.90 (-)



R1 349.10>98.80 (-) 1.87e4

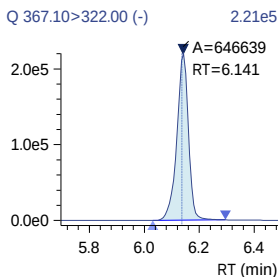


R2 349.10>98.80 (-) 1.87e4



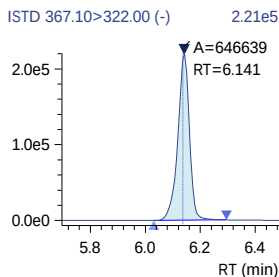
13C4-PFHpa

Conc. 2.5826
Q 367.10>322.00 (-)



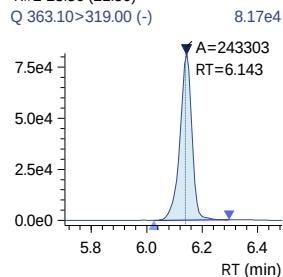
13C4-PFHpa_IS

Conc. 2.5000
ISTD 367.10>322.00 (-)

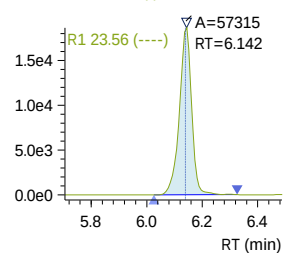


PFHpA

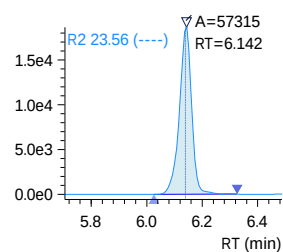
Conc. 0.8725
R#1 23.56 (21.50)
R#2 23.56 (21.50)
Q 363.10>319.00 (-)



R1 363.10>169.00 (-) 1.87e4

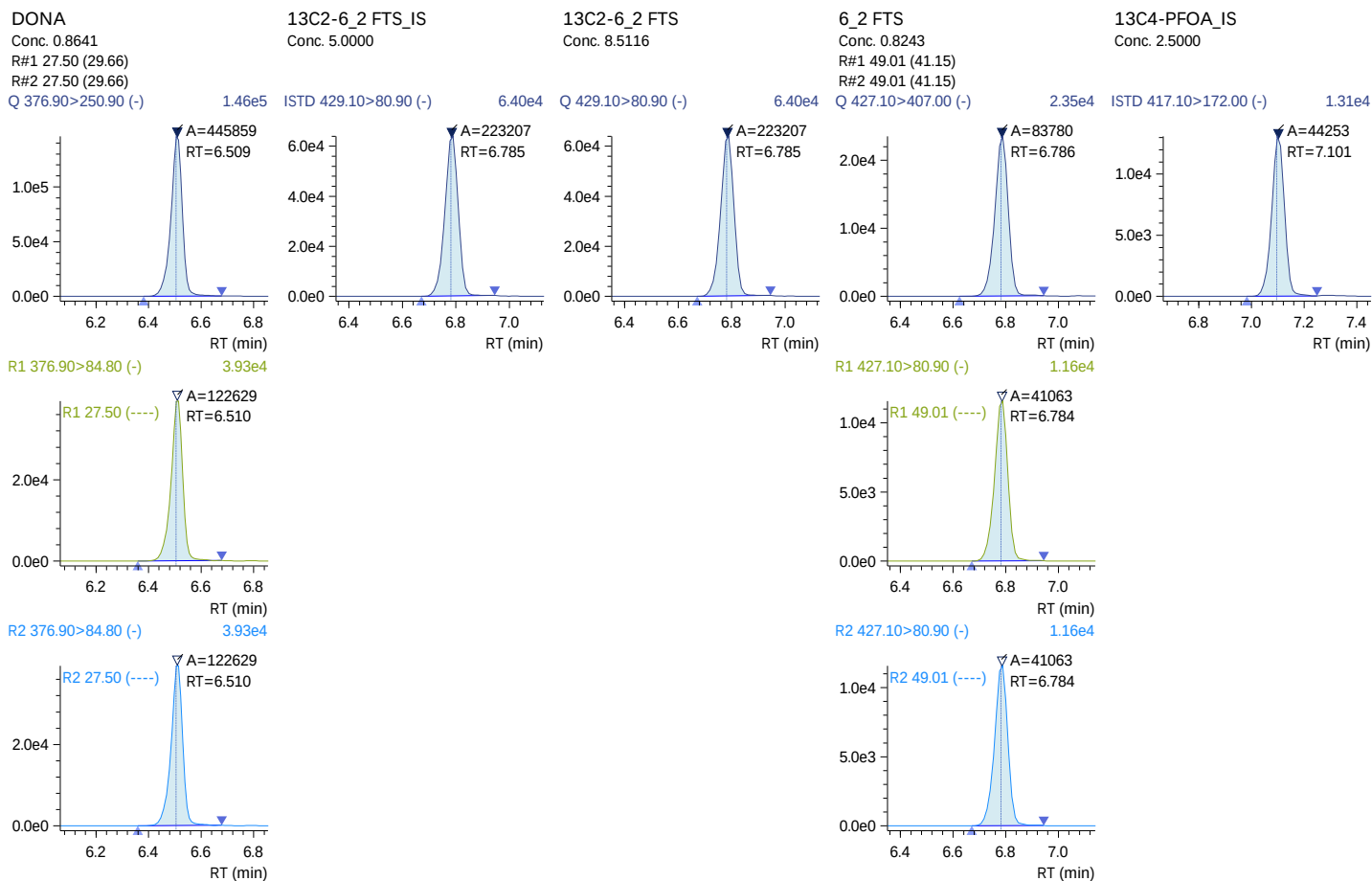


R2 363.10>169.00 (-) 1.87e4





240122_028 (continued)





240122_028 (continued)

13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.7071

PFOA
Conc. 0.8792
R#1 28.99 (31.89)
R#2 28.99 (31.89)

13C3-PFHxS
Conc. 2.4297

13C3-PFHxS_IS
Conc. 2.5000

ISTD 421.10>376.00 (-)

2.00e5

Q 421.10>376.00 (-)

2.00e5

Q 413.00>369.00 (-)

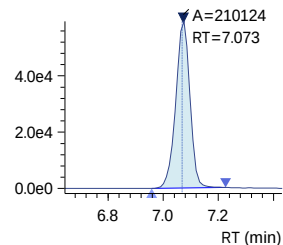
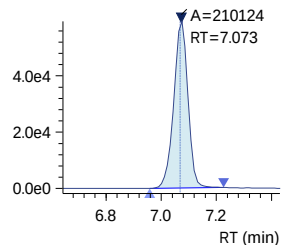
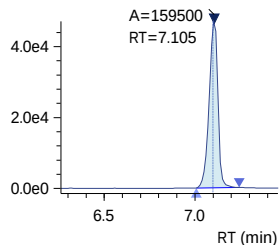
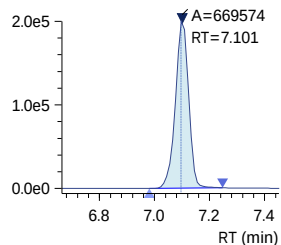
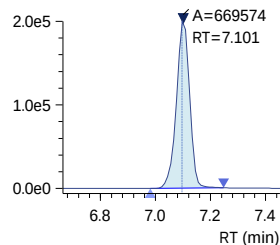
4.71e4

Q 402.10>79.90 (-)

5.94e4

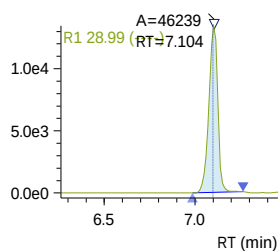
ISTD 402.10>79.90 (-)

5.94e4



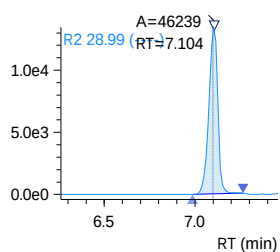
R1 413.00>169.00 (-)

1.35e4



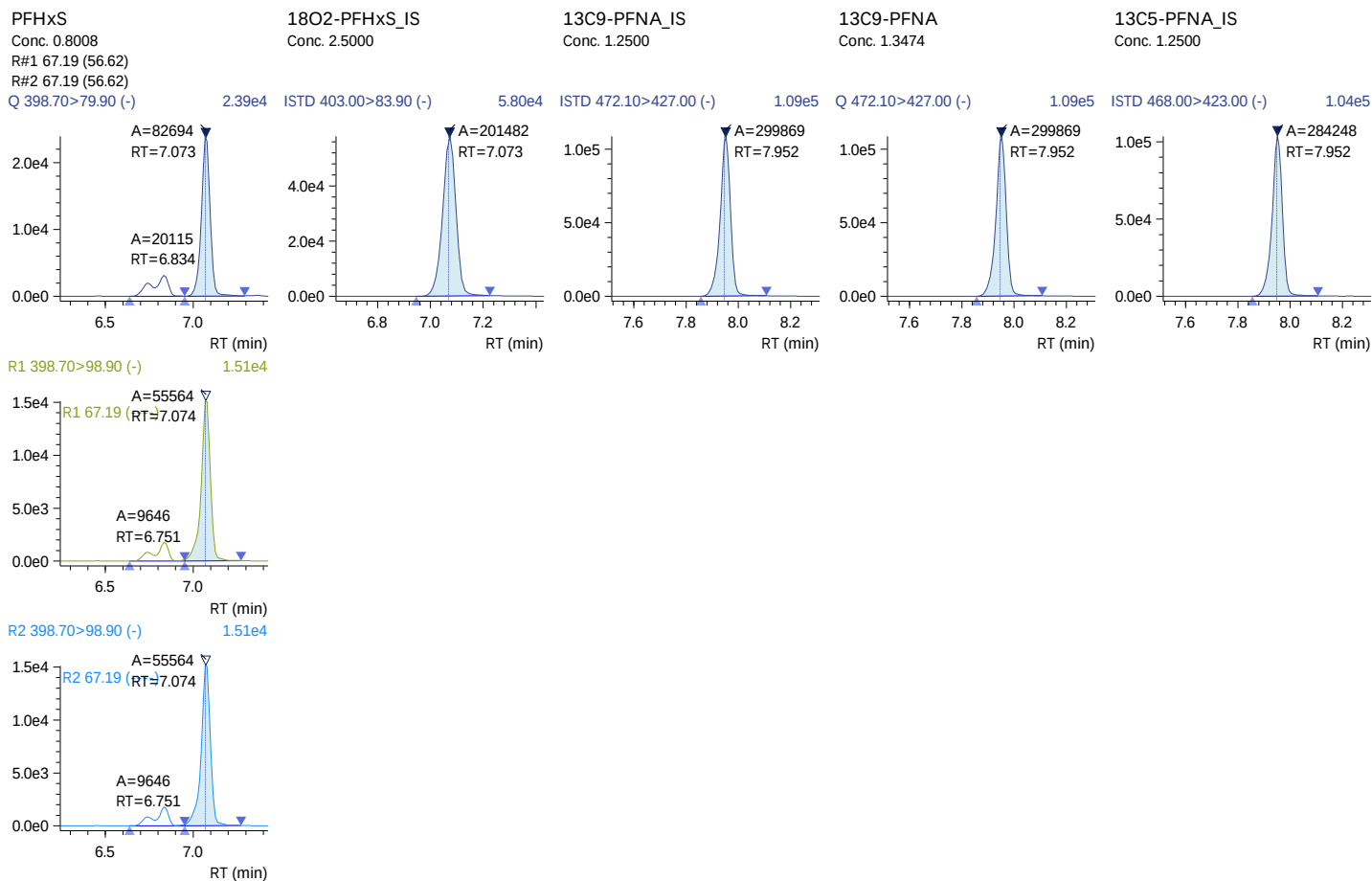
R2 413.00>169.00 (-)

1.35e4



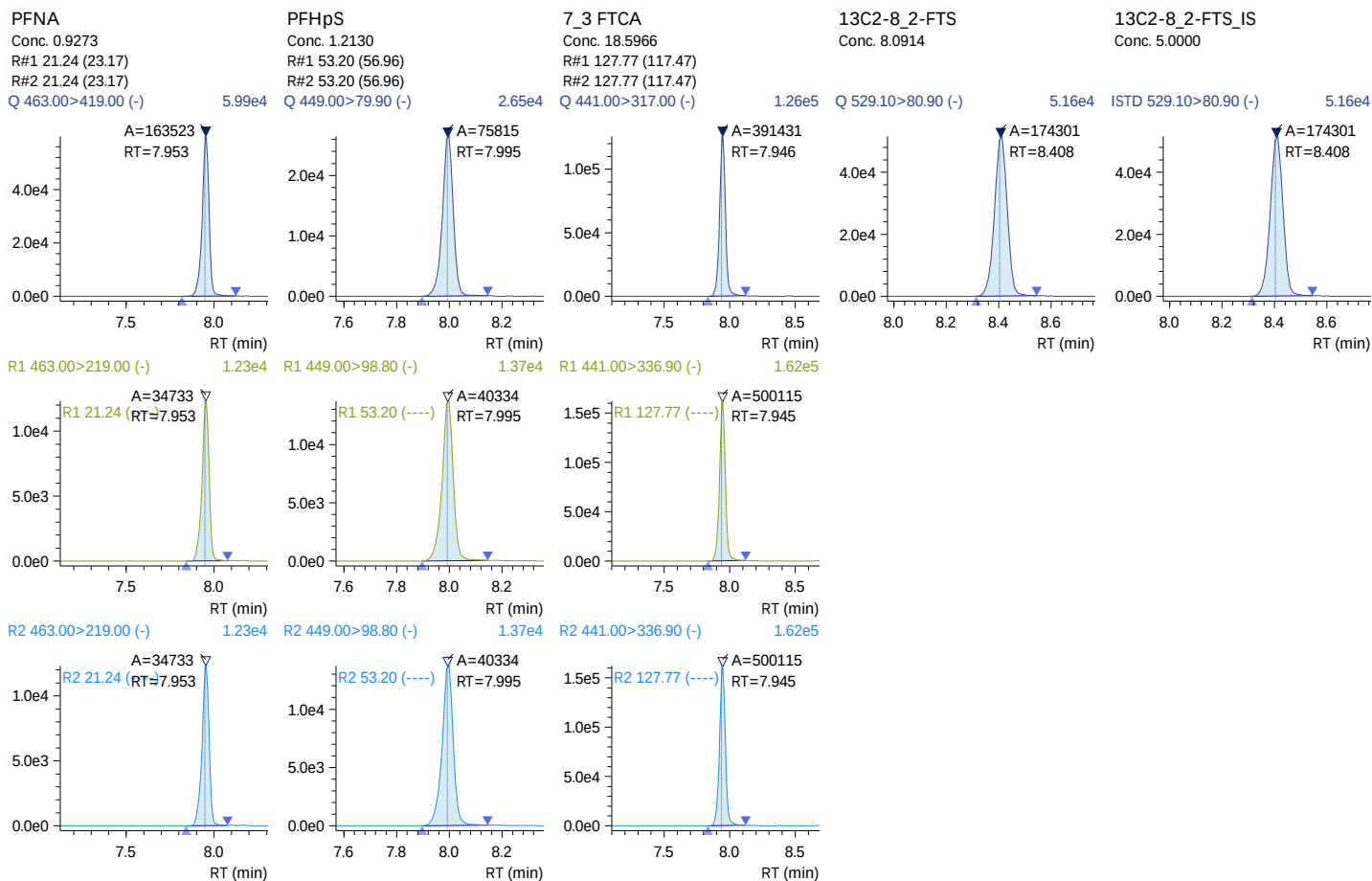


240122_028 (continued)



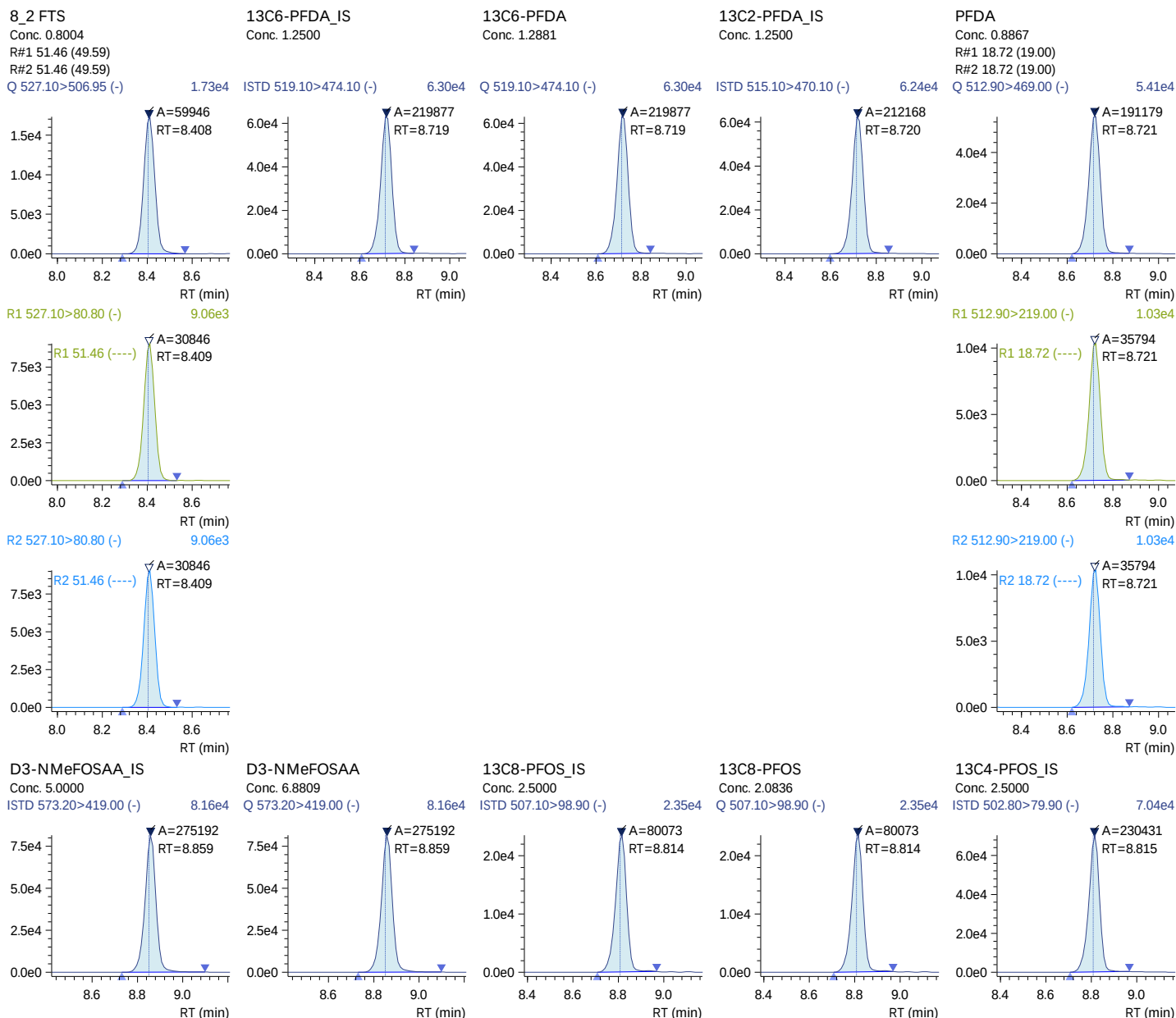


240122_028 (continued)



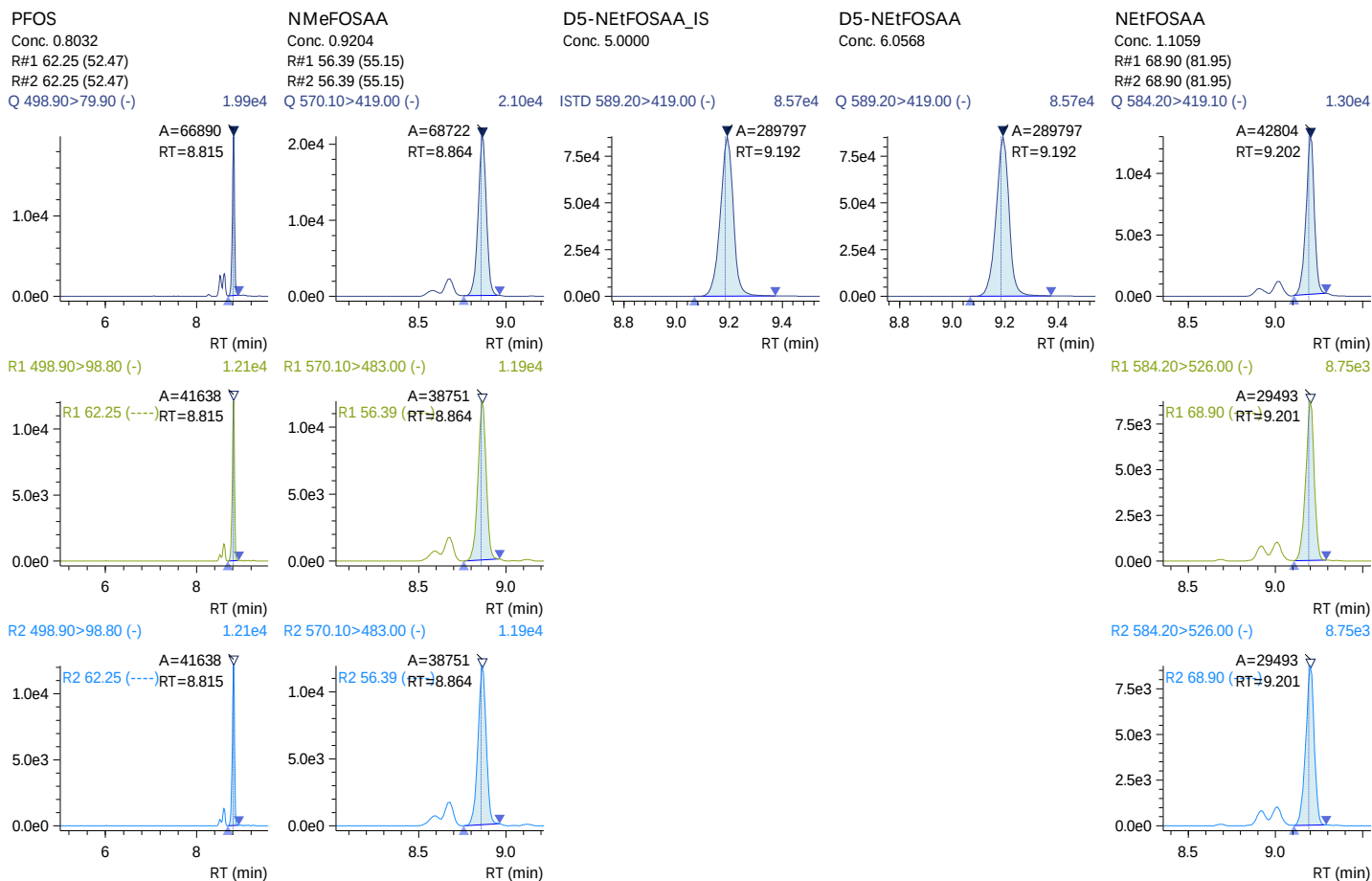


240122_028 (continued)





240122_028 (continued)

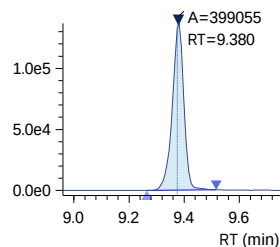




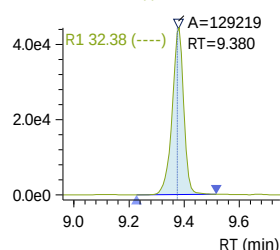
240122_028 (continued)

9-Cl-PF3ONS

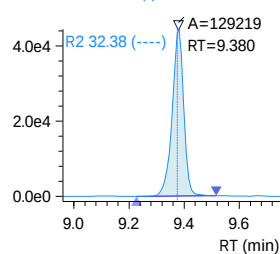
Conc. 0.7271
R#1 32.38 (32.76)
R#2 32.38 (32.76)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-) 4.44e4

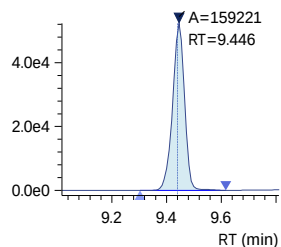


R2 532.80>353.00 (-) 4.44e4

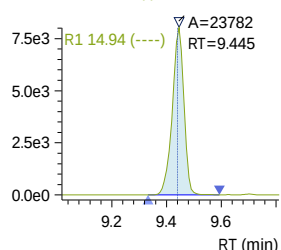


PFUnDA

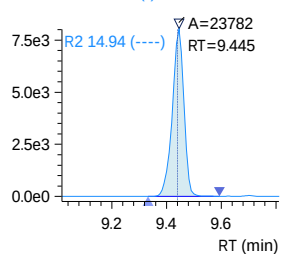
Conc. 0.8847
R#1 14.94 (13.12)
R#2 14.94 (13.12)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-) 8.02e3

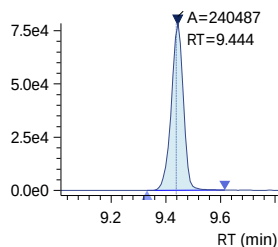


R2 563.10>269.10 (-) 8.02e3



13C7-PFUnDA_IS

Conc. 1.2500
ISTD 570.00>525.10 (-)



Q 570.00>525.10 (-) 7.84e4

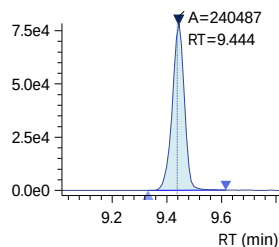


Q 570.00>525.10 (-) 7.84e4



13C7-PFUnDA

Conc. 1.1811
Q 570.00>525.10 (-)



Q 570.00>525.10 (-) 7.84e4

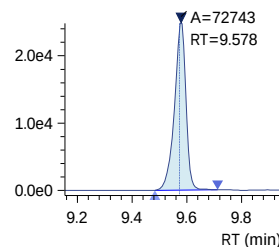


Q 570.00>525.10 (-) 7.84e4

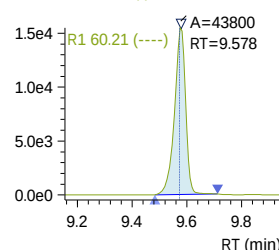


PFNS

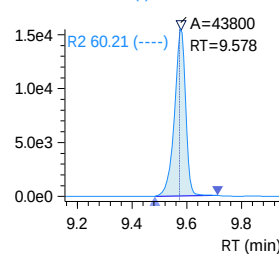
Conc. 1.1956
R#1 60.21 (65.22)
R#2 60.21 (65.22)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-) 1.55e4



R2 548.80>98.80 (-) 1.55e4





240122_028 (continued)

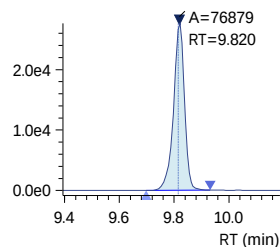
10_2_FTS

Conc. 0.8436

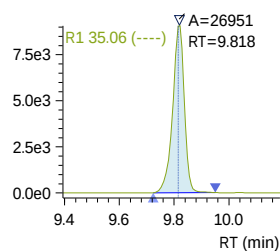
R#1 35.06 (37.13)

R#2 35.06 (37.13)

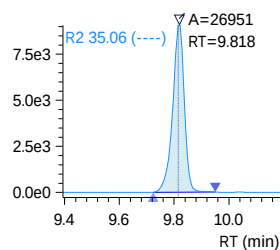
Q 626.80>607.05 (-)



R1 626.80>81.00 (-) 9.07e3



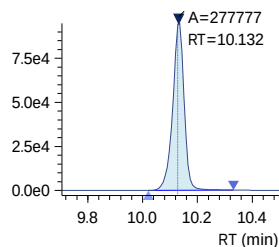
R2 626.80>81.00 (-) 9.07e3



13C2-PFDOA_IS

Conc. 1.2500

ISTD 615.10>570.00 (-)



Q 615.10>570.00 (-) 9.48e4



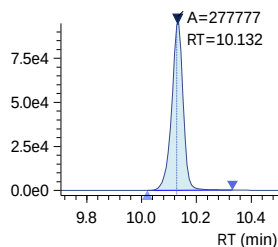
Q 615.10>570.00 (-) 9.48e4



13C2-PFDOA

Conc. 1.1875

Q 615.10>570.00 (-)



Q 615.10>570.00 (-) 9.48e4



Q 615.10>570.00 (-) 9.48e4



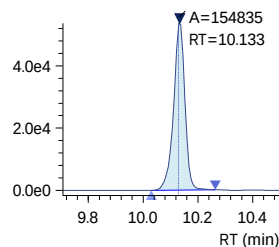
PFDOA

Conc. 0.9582

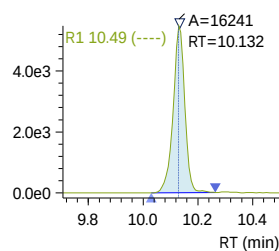
R#1 10.49 (11.29)

R#2 10.49 (11.29)

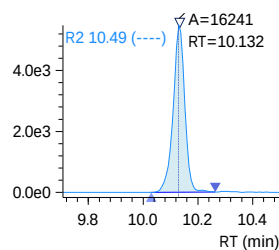
Q 613.10>569.00 (-)



R1 613.10>319.00 (-) 5.48e3



R2 613.10>319.00 (-) 5.48e3



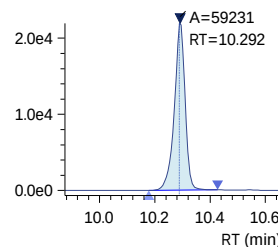
PFDS

Conc. 1.1139

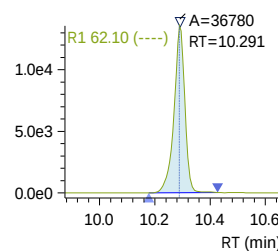
R#1 62.10 (60.18)

R#2 62.10 (60.18)

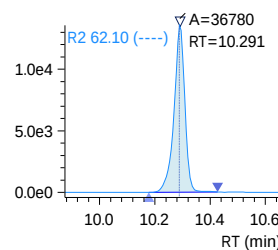
Q 599.00>79.90 (-)



R1 599.00>98.80 (-) 1.36e4

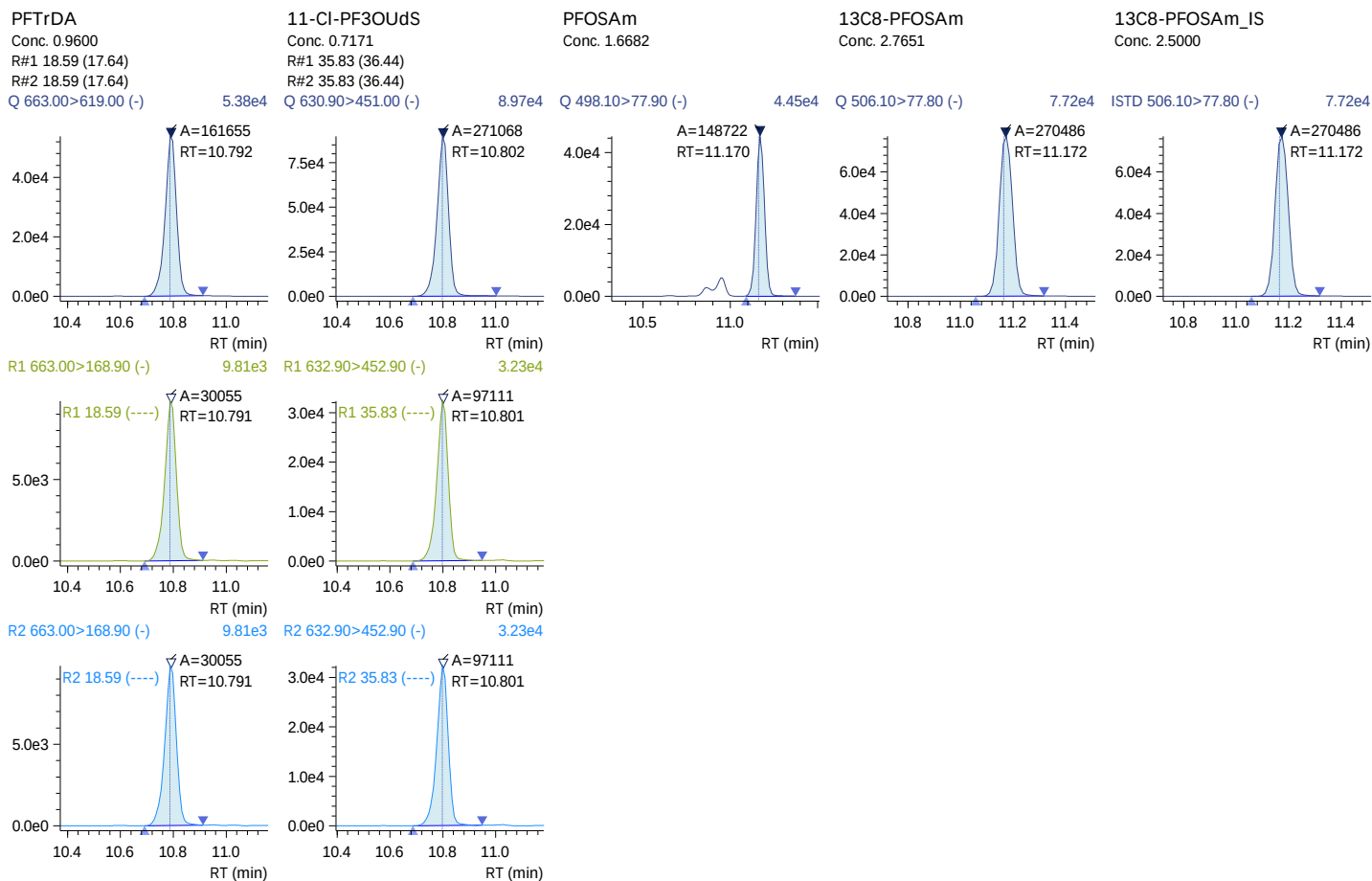


R2 599.00>98.80 (-) 1.36e4



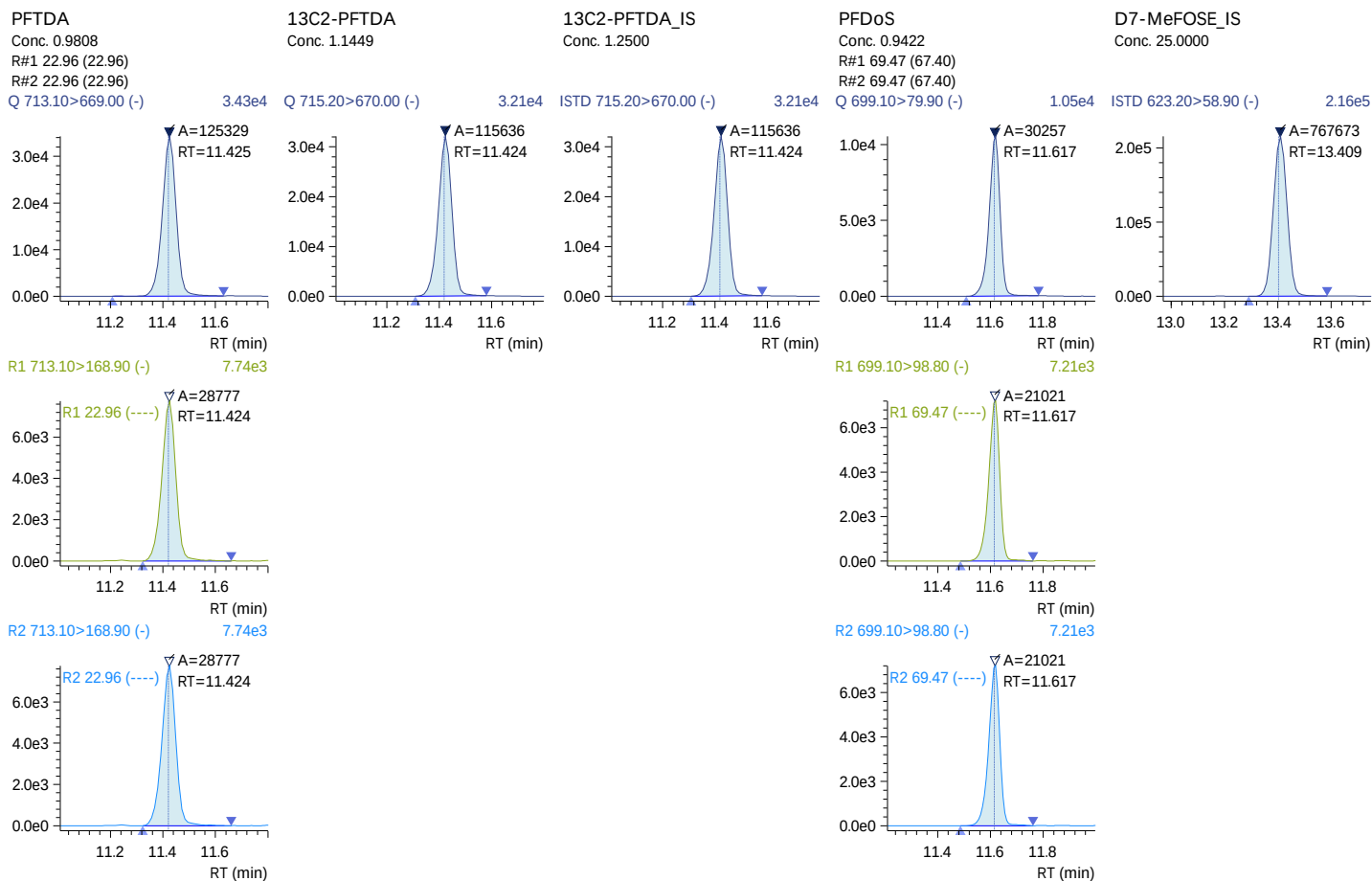


240122_028 (continued)





240122_028 (continued)





240122_028 (continued)

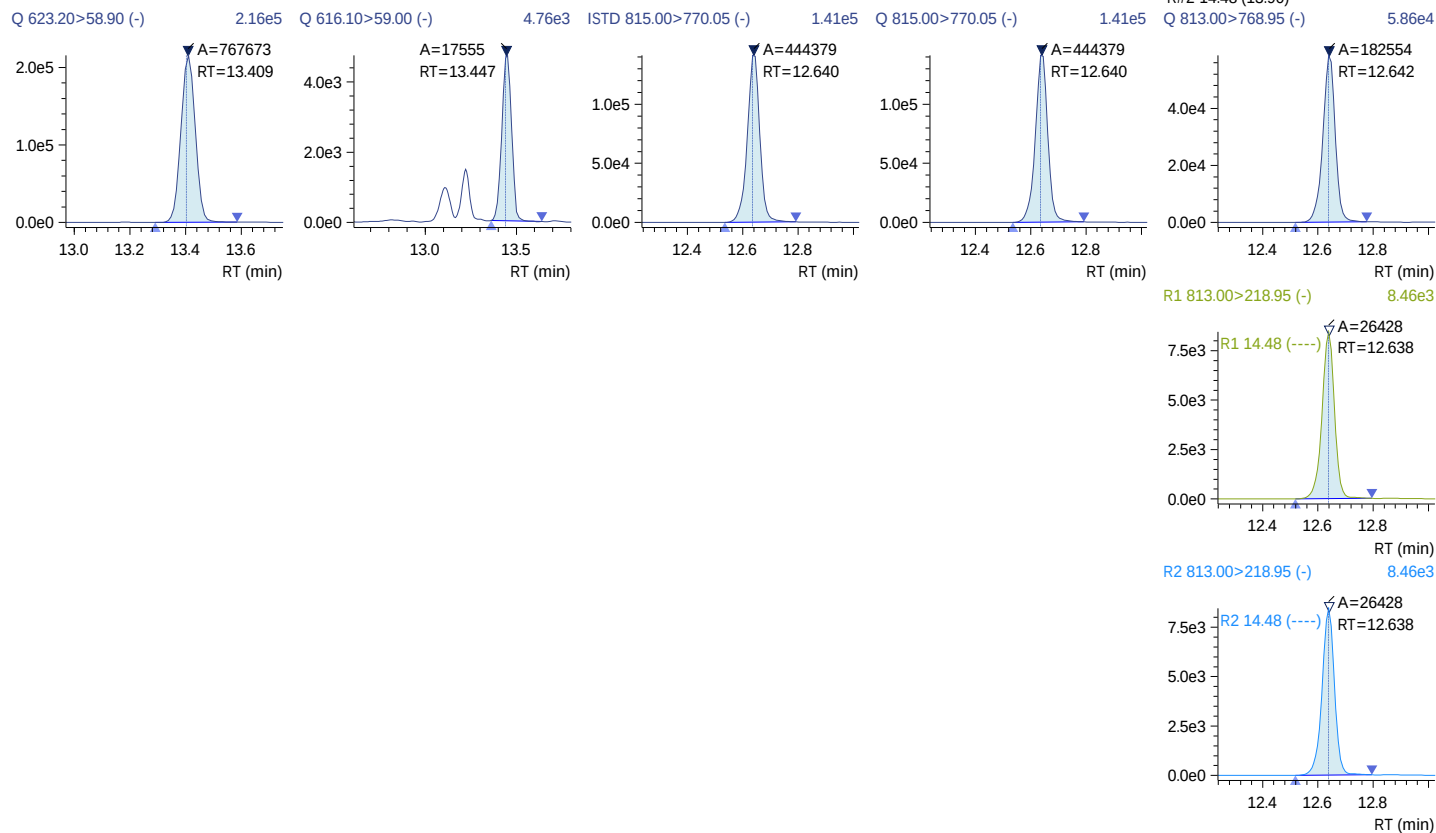
D7-MeFOSE
 Conc. 31.8302

MeFOSE
 Conc. 0.6227

13C2-PFHXA_IS
 Conc. 2.5000

13C2-PFHXA
 Conc. 2.2548

PFHXA
 Conc. 0.9741
 R#1 14.48 (13.90)
 R#2 14.48 (13.90)





240122_028 (continued)

D3-MeFOSA
Conc. 2.6500

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. 0.6471
R#1 109.12 (140.79)
R#2 109.12 (140.79)

D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 31.2618

Q 515.00>219.00 (-)

1.53e4

ISTD 515.00>219.00 (-)

1.53e4

Q 511.90>219.00 (-)

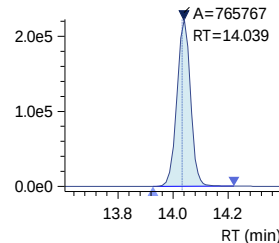
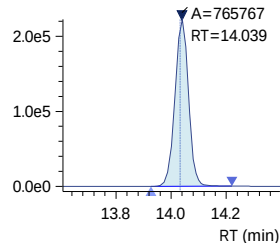
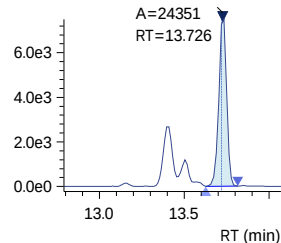
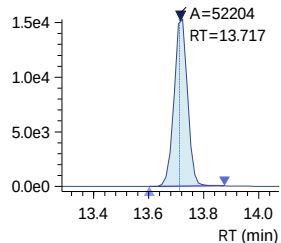
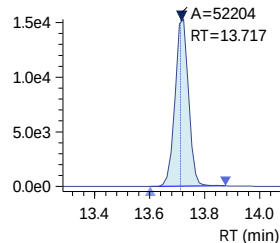
7.50e3

ISTD 639.20>58.90 (-)

2.22e5

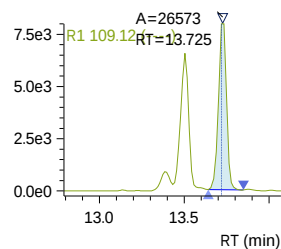
Q 639.20>58.90 (-)

2.22e5



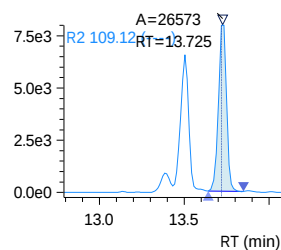
R1 511.90>169.00 (-)

8.00e3



R2 511.90>169.00 (-)

8.00e3





240122_028 (continued)

EtFOSE
Conc. 0.6696

D5-EtFOSAm
Conc. 2.8397

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. 0.4665

PFODA
Conc. 0.9409

Q 630.00>59.00 (-)

7.57e3

Q 531.10>219.00 (-)

2.32e4

ISTD 531.10>219.00 (-)

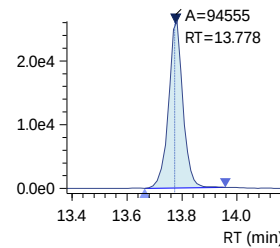
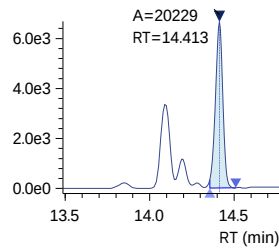
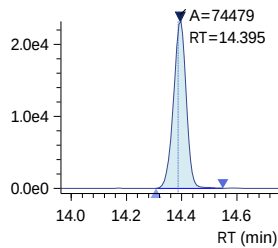
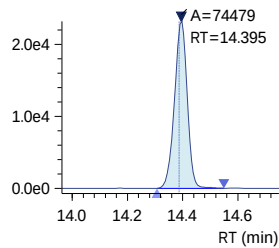
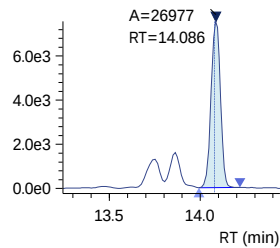
2.32e4

Q 526.00>219.00 (-)

6.69e3

Q 913.00>868.65 (-)

2.62e4

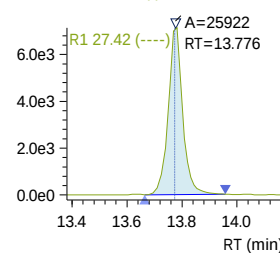
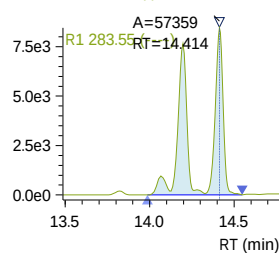


R1 526.00>169.00 (-)

8.46e3

R1 913.00>169.00 (-)

7.14e3

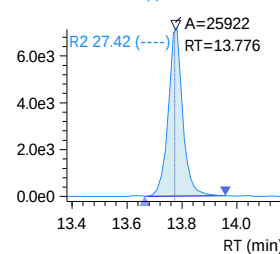
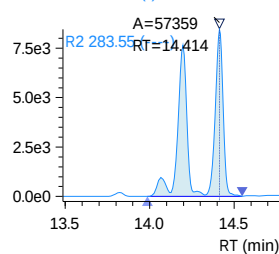


R2 526.00>169.00 (-)

8.46e3

R2 913.00>169.00 (-)

7.14e3



Validation Report

1st PS 01/25/24
2nd MS 01/25/24

Data File: J:\LCMS08\Data\240122_1633_B1\240122_045
Lab ID: KQ2401073-18
RunType: CCV
Matrix: Water

Date Acquired: 1/23/24 02:48
Batch ID: 830573
Analysis Method: 1633/PFAS_DOD5.4

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Internal Standards	X	

Primary Review: _____

Secondary Review: _____

Quantitation Report

1st *PS* 01/25/24
2nd *MS* 01/25/24

Data File:	J:\LCMS08\Data\240122_1633_B1\240122_045	Instrument:	K-LCMS-08
Acqu Date:	1/23/24 02:48	Vial:	36
Run Type:	CCV	Dilution:	1
Lab ID:	KQ2401073-18	Raw Units:	ng/mL

Bottle ID:		Tier:	IV	Matrix:	Water
Prod Code:	PFAS_DOD5.4	Collect Date:	12/27/23	Receive Date:	12/28/23

Analysis Lot:	830573	Prep Lot:		Report Group:	KQ2401073
Analysis	1633	Prep Method:			
		Prep Date:			

Title:	Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM	Calibration ID:	KC2400027
		Report List ID:	24615

Internal Standard Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Area Criteria
18O2-PFHxS	7.064		198174	2.5000	OK
13C4-PFOS	8.804		227026	2.5000	OK
13C3-PFBA	1.389		546868	5.0000	OK
13C2-PFHxA	4.949		558301	2.5000	OK
13C4-PFOA	7.091		42340	2.5000	OK
13C5-PFNA	7.942		265683	1.2500	OK
13C2-PFDA	8.709		193334	1.2500	OK

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Rpt?
13C3-PFBS	4.610		279734	2.4874	Y
13C3-PFHxS	7.063		189086	2.2229	Y
13C8-PFOS	8.803		81306	2.1474	Y
13C4-PFBA	1.390		1298558	10.6235	Y
13C5-PFPeA	3.462		103499	4.1070	Y
13C5-PFHxA	4.948		549254	2.3343	Y
13C4-PFHpA	6.133		628205	2.9493	Y
13C8-PFOA	7.091		615496	2.6009	Y
13C9-PFNA	7.942		286957	1.3794	Y
13C6-PFDA	8.708		214491	1.3790	Y
13C7-PFUnDA	9.433		242275	1.3058	Y
13C2-PFDoDA	10.121		259098	1.2155	Y
13C2-PFTeDA	11.411		121542	1.3206	Y
13C8-FOSA	11.162		251550	2.6101	Y
D3-MeFOSA	13.705		49098	2.5297	Y
D5-EtFOSA	14.382		71873	2.7814	Y
D7-MeFOSE	13.397		721774	30.3759	Y
D9-EtFOSE	14.027		788404	32.6686	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 1/25/24 15:28

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Data File: J:\LCMS08\Data\240122_1633_B1\240122_045		Instrument: K-LCMS08	
Acqu Date: 1/23/24 02:48		Vial: 36	
Run Type: CCV		Dilution: 1	
Lab ID: KQ2401073-18		Raw Units: ng/mL	

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Rpt?
D3-MeFOSAA	8.847		279257	7.0873	Y
D5-EtFOSAA	9.179		255703	5.4244	Y
13C2-4:2 FTS	4.633		213304	7.8216	Y
13C2-6:2 FTS	6.775		175785	6.8152	Y
13C2-8:2 FTS	8.398		150882	7.1212	Y
13C3-HFPO-DA	5.427		647172	11.8415	Y

Target Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Rpt?
Perfluorobutane sulfonic acid (PFBS)	4.610		125536	0.8767	Y
Perfluoropentane sulfonic acid (PFPeS)	5.990		95220	0.9589	Y
Perfluorohexane sulfonic acid (PFHxS)	7.064		97793	1.0584	Y
Perfluoroheptane sulfonic acid (PFHpS)	7.987		72506	1.1425	Y
Perfluorooctane sulfonic acid (PFOS)	8.804		90047	1.0648	Y
Perfluorononane sulfonic acid (PFNS)	9.566		67363	1.0904	Y
Perfluorodecane sulfonic acid (PFDS)	10.280		58048	1.0749	Y
Perfluorododecane sulfonic acid (PFDoS)	11.605		27314	0.8377	Y
Perfluorobutanoic acid (PFBA)	1.394		106405	0.9537	Y
Perfluoropentanoic acid (PFPeA)	3.464		157029	1.1714	Y
Perfluorohexanoic acid (PFHxA)	4.950		183945	0.9978	Y
Perfluoroheptanoic acid (PFHpA)	6.135		233995	0.8634	Y
Perfluorooctanoic acid (PFOA)	7.094		160614	0.9673	Y
Perfluorononanoic acid (PFNA)	7.943		149467	0.8844	Y
Perfluorodecanoic acid (PFDA)	8.710		181236	0.8610	Y
Perfluoroundecanoic acid (PFUnDA)	9.434		145229	0.7982	Y
Perfluorododecanoic acid (PFDOA)	10.121		137017	0.9074	Y
Perfluorotridecanoic acid (PFTTrDA)	10.780		158647	0.8943	Y
Perfluorotetradecanoic acid (PFTDA)	11.412		114996	0.8527	Y
Perfluorooctane sulfonamide (PFOSAm)	11.161		165010	1.9902	Y
N-Methylperfluorooctane sulfonamide (MeFOSA)	13.711		36189	1.0225	Y
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	14.399		38571	0.9218	Y
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	13.435		27010	1.0190	Y
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	14.072		39847	0.9606	Y
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	8.853		73868	0.9749	Y

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m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

		1st	PS	01/25/24
Data File:	J:\LCMS08\Data\240122_1633_B1\240122_045	Instrument:	K-LCMS08	MS 01/25/24
Acqu Date:	1/23/24 02:48	Vial:	36	
Run Type:	CCV	Dilution:	1	
Lab ID:	KQ2401073-18	Raw Units:	ng/mL	

Target Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Rpt?
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	9.191		54599	1.5988	Y
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	4.633		91346	0.8707	Y
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	6.777		74385	0.9293	Y
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	8.398		55566	0.8570	Y
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	2.970		58421	25.4547	Y
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	5.873		294091	20.7004	Y
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	7.937		353759	18.6521	Y
Perfluoro(2-ethoxyethane) sulfonic acid (PFEEESA)	5.286		514234	0.8359	Y
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	9.369		413714	0.7754	Y
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	10.790		261511	0.7115	Y
Perfluoro-3-methoxypropanoic acid (PFMPA)	2.403		90557	1.3539	Y
Perfluoro-4-methoxybutanoic acid (PFMBA)	3.990		109497	1.1555	Y
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	5.428		68244	0.9548	Y
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	4.807		141658	1.1625	Y
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	6.500		425304	0.8479	Y

U: Undetected at or above MDL
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E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 1/25/24 15:28

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240122_045

Sample ID: 1633 ICAL 1.0PPB
Date Acquired: 1/23/2024 2:48:48 AM
Acquired by: System Administrator
Data File: 240122_045
Vial: 5 | Inj. Volume: 10.0000uL | Tray: 1

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	1298558	----	----	----	----	----	----	
13C4-PFBA_IS	216.80>171.90	----	1298558	----	----	----	----	----	----	
13C3-PFBA_IS	216.00>172.00	----	546868	----	----	----	----	----	----	
PFBA	212.80>169.05	----	106405	----	----	----	----	----	----	
PFMPA	229.00>84.90	----	90557	----	----	----	----	----	----	AC
3_3 FTCA	241.00>177.10	241.00>117.00	58421	82828	141.78	141.17	82828	141.78	135.52	
13C5-PFPeA	268.30>223.00	----	103499	----	----	----	----	----	----	
13C5-PFPeA_IS	268.30>223.00	----	103499	----	----	----	----	----	----	
PFPeA	263.00>219.00	----	157029	----	----	----	----	----	----	
PFMBA	279.00>84.95	----	109497	----	----	----	----	----	----	
13C2-4_2 FTS	329.10>80.90	----	213304	----	----	----	----	----	----	AC
13C2-4_2 FTS_IS	329.10>80.90	----	213304	----	----	----	----	----	----	
4_2 FTS	327.10>307.00	327.10>80.90	91346	30902	33.83	29.06	30902	33.83	35.34	
13C3-PFBS_IS	302.10>79.90	----	279734	----	----	----	----	----	----	
PFBS	298.70>79.90	298.70>98.80	125536	59886	47.71	46.72	59886	47.71	49.78	
13C3-PFBS	302.10>79.90	----	279734	----	----	----	----	----	----	
NFDHA	295.00>201.00	295.00>84.90	141658	50217	35.45	40.25	50217	35.45	37.18	
13C5-PFHxA	318.00>273.00	----	549254	----	----	----	----	----	----	
13C5-PFHxA_IS	318.00>273.00	----	549254	----	----	----	----	----	----	
13C2-PFHxA_IS	315.10>270.00	----	558301	----	----	----	----	----	----	
PFHxA	313.00>269.00	----	183945	----	----	----	----	----	----	
PFEESA	314.80>135.00	314.80>82.90	514234	29443	5.73	6.11	29443	5.73	5.72	
13C3-HFPO-DA	286.90>168.90	----	647172	----	----	----	----	----	----	
13C3-HFPO-DA_IS	286.90>168.90	----	647172	----	----	----	----	----	----	
HFPO-DA	284.90>168.90	284.90>184.90	68244	41753	61.18	65.61	41753	61.18	60.94	
5_3 FTCA	341.00>237.05	341.00>217.00	294091	461457	156.91	158.86	461457	156.91	155.83	
PFPeS	349.10>79.90	349.10>98.80	95220	52320	54.95	55.80	52320	54.95	56.73	
13C4-PFHpA	367.10>322.00	----	628205	----	----	----	----	----	----	
13C4-PFHpA_IS	367.10>322.00	----	628205	----	----	----	----	----	----	
PFHpA	363.10>319.00	363.10>169.00	233995	55888	23.88	21.50	55888	23.88	21.92	
DONA	376.90>250.90	376.90>84.80	425304	122904	28.90	29.66	122904	28.90	30.77	
13C2-6_2 FTS_IS	429.10>80.90	----	175785	----	----	----	----	----	----	
13C2-6_2 FTS	429.10>80.90	----	175785	----	----	----	----	----	----	AC
6_2 FTS	427.10>407.00	427.10>80.90	74385	33120	44.53	41.15	33120	44.53	40.98	
13C4-PFOA_IS	417.10>172.00	----	42340	----	----	----	----	----	----	
13C8-PFOA_IS	421.10>376.00	----	615496	----	----	----	----	----	----	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240122_045 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	615496	----	----	----	----	----	----	----
PFOA	413.00>369.00	413.00>169.00	160614	48255	30.04	31.89	48255	30.04	32.23	
13C3-PFHxS	402.10>79.90	----	189086	----	----	----	----	----	----	----
13C3-PFHxS_IS	402.10>79.90	----	189086	----	----	----	----	----	----	----
PFHxS	398.70>79.90	398.70>98.90	97793	53371	54.58	56.62	53371	54.58	60.26	
18O2-PFHxS_IS	403.00>83.90	----	198174	----	----	----	----	----	----	----
13C9-PFNA_IS	472.10>427.00	----	286957	----	----	----	----	----	----	----
13C9-PFNA	472.10>427.00	----	286957	----	----	----	----	----	----	----
13C5-PFNA_IS	468.00>423.00	----	265683	----	----	----	----	----	----	----
PFNA	463.00>419.00	463.00>219.00	149467	36074	24.14	23.17	36074	24.14	23.63	
PFHpS	449.00>79.90	449.00>98.80	72506	39445	54.40	56.96	39445	54.40	59.06	
7_3 FTCA	441.00>317.00	441.00>336.90	353759	467707	132.21	117.47	467707	132.21	125.53	
13C2-8_2-FTS	529.10>80.90	----	150882	----	----	----	----	----	----	AC
13C2-8_2-FTS_IS	529.10>80.90	----	150882	----	----	----	----	----	----	----
8_2 FTS	527.10>506.95	527.10>80.80	55566	26419	47.55	49.59	26419	47.55	44.81	
13C6-PFDA_IS	519.10>474.10	----	214491	----	----	----	----	----	----	----
13C6-PFDA	519.10>474.10	----	214491	----	----	----	----	----	----	----
13C2-PFDA_IS	515.10>470.10	----	193334	----	----	----	----	----	----	----
PFDA	512.90>469.00	512.90>219.00	181236	38544	21.27	19.00	38544	21.27	19.15	
D3-NMeFOSAA_IS	573.20>419.00	----	279257	----	----	----	----	----	----	----
D3-NMeFOSAA	573.20>419.00	----	279257	----	----	----	----	----	----	AC
13C8-PFOS_IS	507.10>98.90	----	81306	----	----	----	----	----	----	----
13C8-PFOS	507.10>98.90	----	81306	----	----	----	----	----	----	----
13C4-PFOS_IS	502.80>79.90	----	227026	----	----	----	----	----	----	----
PFOS	498.90>79.90	498.90>98.80	90047	45309	50.32	52.47	45309	50.32	53.10	
NMeFOSAA	570.10>419.00	570.10>483.00	73868	43939	59.48	55.15	43939	59.48	60.69	
D5-NEtFOSAA_IS	589.20>419.00	----	255703	----	----	----	----	----	----	----
D5-NEtFOSAA	589.20>419.00	----	255703	----	----	----	----	----	----	----
NEtFOSAA	584.20>419.10	584.20>526.00	54599	37237	68.20	81.95	37237	68.20	73.27	AC
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	413714	131457	31.78	32.76	131457	31.78	32.59	
PFUnDA	563.10>519.00	563.10>269.10	145229	22487	15.48	13.12	22487	15.48	14.36	
13C7-PFUnDA_IS	570.00>525.10	----	242275	----	----	----	----	----	----	----
13C7-PFUnDA	570.00>525.10	----	242275	----	----	----	----	----	----	----
PFNS	548.80>79.90	548.80>98.80	67363	43921	65.20	65.22	43921	65.20	65.31	
10_2 FTS	626.80>607.05	626.80>81.00	72582	27664	38.12	37.13	27664	38.12	38.76	
13C2-PFDOA_IS	615.10>570.00	----	259098	----	----	----	----	----	----	----
13C2-PFDOA	615.10>570.00	----	259098	----	----	----	----	----	----	----
PFDOA	613.10>569.00	613.10>319.00	137017	15603	11.39	11.29	15603	11.39	11.19	
PFDS	599.00>79.90	599.00>98.80	58048	35001	60.30	60.18	35001	60.30	65.65	
PFTrDA	663.00>619.00	663.00>168.90	158647	28023	17.66	17.64	28023	17.66	19.81	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240122_045 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	261511	93450	35.73	36.44	93450	35.73	35.86	
PFOSAm	498.10>77.90	----	165010	----	----	----	----	----	----	
13C8-PFOSAm	506.10>77.80	----	251550	----	----	----	----	----	----	
13C8-PFOSAm_IS	506.10>77.80	----	251550	----	----	----	----	----	----	
PFTDA	713.10>669.00	713.10>168.90	114996	29702	25.83	22.96	29702	25.83	25.01	
13C2-PFTDA	715.20>670.00	----	121542	----	----	----	----	----	----	
13C2-PFTDA_IS	715.20>670.00	----	121542	----	----	----	----	----	----	
PFDoS	699.10>79.90	699.10>98.80	27314	20230	74.07	67.40	20230	74.07	73.46	
D7-MeFOSE_IS	623.20>58.90	----	721774	----	----	----	----	----	----	
D7-MeFOSE	623.20>58.90	----	721774	----	----	----	----	----	----	
MeFOSE	616.10>59.00	----	27010	----	----	----	----	----	----	
13C2-PFHxDA_IS	815.00>770.05	----	422333	----	----	----	----	----	----	
13C2-PFHxDA	815.00>770.05	----	422333	----	----	----	----	----	----	
PFHxDA	813.00>768.95	813.00>218.95	176452	27234	15.43	13.90	27234	15.43	15.85	
D3-MeFOSA	515.00>219.00	----	49098	----	----	----	----	----	----	
D3-MeFOSA_IS	515.00>219.00	----	49098	----	----	----	----	----	----	
MeFOSA	511.90>219.00	511.90>169.00	36189	53717	148.43	140.79	53717	148.43	150.13	
D9-EtFOSE_IS	639.20>58.90	----	788404	----	----	----	----	----	----	
D9-EtFOSE	639.20>58.90	----	788404	----	----	----	----	----	----	AC
EtFOSE	630.00>59.00	----	39847	----	----	----	----	----	----	
D5-EtFOSAm	531.10>219.00	----	71873	----	----	----	----	----	----	
D5-EtFOSAm_IS	531.10>219.00	----	71873	----	----	----	----	----	----	
EtFOSAm	526.00>219.00	526.00>169.00	38571	60952	158.03	163.90	60952	158.03	152.08	
PFODA	913.00>868.65	913.00>169.00	99402	26692	26.85	27.03	26692	26.85	26.29	

Flag ID key: AC: Accuracy%



240122_045

Sample ID: 1633 ICAL 1.0PPB
Date Acquired: 1/23/2024 2:48:48 AM
Acquired by: System Administrator
Data File: 240122_045
Vial: 5 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.390	-0.001	0.001	1298558	546868	13C3-PFBA_IS	10.6235	ng/mL	
13C4-PFBA_IS	Auto	1.390	-0.001	----	1298558	1298558	----	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.389	-0.002	----	546868	546868	----	5.0000	ng/mL	
PFBA	Auto	1.394	-0.001	0.004	106405	1298558	13C4-PFBA_IS	0.9537	ng/mL	
PFMPA	Auto	2.403	-0.003	-1.059	90557	103499	13C5-PFPeA_IS	1.3539	ng/mL	AC
3_3 FTCA	Auto	2.970	0.002	-0.492	58421	103499	13C5-PFPeA_IS	25.4547	ng/mL	
13C5-PFPeA	Auto	3.462	-0.003	-1.487	103499	558301	13C2-PFHxA_IS	4.1070	ng/mL	
13C5-PFPeA_IS	Auto	3.462	-0.003	----	103499	103499	----	5.0000	ng/mL	
PFPeA	Auto	3.464	-0.003	0.002	157029	103499	13C5-PFPeA_IS	1.1714	ng/mL	
PFMBA	Auto	3.990	-0.001	0.528	109497	103499	13C5-PFPeA_IS	1.1555	ng/mL	
13C2-4_2 FTS	Auto	4.633	-0.003	-2.431	213304	198174	18O2-PFHxS_IS	7.8216	ng/mL	AC
13C2-4_2 FTS_IS	Auto	4.633	-0.003	----	213304	213304	----	5.0000	ng/mL	
4_2 FTS	Auto	4.633	-0.004	0.000	91346	213304	13C2-4_2 FTS_IS	0.8707	ng/mL	
13C3-PFBS_IS	Auto	4.610	-0.002	----	279734	279734	----	2.5000	ng/mL	
PFBS	Auto	4.610	-0.003	0.000	125536	279734	13C3-PFBS_IS	0.8767	ng/mL	
13C3-PFBS	Auto	4.610	-0.002	-2.454	279734	198174	18O2-PFHxS_IS	2.4874	ng/mL	
NFDHA	Auto	4.807	-0.003	-0.141	141658	549254	13C5-PFHxA_IS	1.1625	ng/mL	
13C5-PFHxA	Auto	4.948	-0.004	-0.001	549254	558301	13C2-PFHxA_IS	2.3343	ng/mL	
13C5-PFHxA_IS	Auto	4.948	-0.004	----	549254	549254	----	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	4.949	-0.004	----	558301	558301	----	2.5000	ng/mL	
PFHxA	Auto	4.950	-0.004	0.002	183945	549254	13C5-PFHxA_IS	0.9978	ng/mL	
PFEESA	Auto	5.286	-0.003	0.338	514234	549254	13C5-PFHxA_IS	0.8359	ng/mL	
13C3-HFPO-DA	Auto	5.427	-0.003	0.478	647172	558301	13C2-PFHxA_IS	11.8415	ng/mL	
13C3-HFPO-DA_IS	Auto	5.427	-0.003	----	647172	647172	----	10.0000	ng/mL	
HFPO-DA	Auto	5.428	-0.003	0.001	68244	647172	13C3-HFPO-DA_IS	0.9548	ng/mL	
5_3 FTCA	Auto	5.873	0.003	0.925	294091	549254	13C5-PFHxA_IS	20.7004	ng/mL	
PFPeS	Auto	5.990	-0.004	-1.073	95220	189086	13C3-PFHxS_IS	0.9589	ng/mL	
13C4-PFHpA	Auto	6.133	-0.004	1.184	628205	558301	13C2-PFHxA_IS	2.9493	ng/mL	
13C4-PFHpA_IS	Auto	6.133	-0.004	----	628205	628205	----	2.5000	ng/mL	
PFHpA	Auto	6.135	-0.004	0.002	233995	628205	13C4-PFHpA_IS	0.8634	ng/mL	
DONA	Auto	6.500	-0.004	1.073	425304	647172	13C3-HFPO-DA_IS	0.8479	ng/mL	
13C2-6_2 FTS_IS	Auto	6.775	-0.006	----	175785	175785	----	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.775	-0.006	-0.289	175785	198174	18O2-PFHxS_IS	6.8152	ng/mL	AC
6_2 FTS	Auto	6.777	-0.004	0.002	74385	175785	13C2-6_2 FTS_IS	0.9293	ng/mL	
13C4-PFOA_IS	Auto	7.091	-0.006	----	42340	42340	----	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.091	-0.005	----	615496	615496	----	2.5000	ng/mL	
13C8-PFOA	Auto	7.091	-0.005	0.000	615496	42340	13C4-PFOA_IS	2.6009	ng/mL	
PFOA	Auto	7.094	-0.004	0.003	160614	615496	13C8-PFOA_IS	0.9673	ng/mL	
13C3-PFHxS	Auto	7.063	-0.005	-0.001	189086	198174	18O2-PFHxS_IS	2.2229	ng/mL	
13C3-PFHxS_IS	Auto	7.063	-0.005	----	189086	189086	----	2.5000	ng/mL	
PFHxS	M	7.064	-0.005	0.001	97793	189086	13C3-PFHxS_IS	1.0584	ng/mL	
18O2-PFHxS_IS	Auto	7.064	-0.005	----	198174	198174	----	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.942	-0.005	----	286957	286957	----	1.2500	ng/mL	
13C9-PFNA	Auto	7.942	-0.005	0.000	286957	265683	13C5-PFNA_IS	1.3794	ng/mL	
13C5-PFNA_IS	Auto	7.942	-0.006	----	265683	265683	----	1.2500	ng/mL	
PFNA	Auto	7.943	-0.005	0.001	149467	286957	13C9-PFNA_IS	0.8844	ng/mL	
PFHpS	Auto	7.987	-0.005	-0.816	72506	81306	13C8-PFOS_IS	1.1425	ng/mL	
7_3 FTCA	Auto	7.937	0.001	2.989	353759	549254	13C5-PFHxA_IS	18.6521	ng/mL	
13C2-8_2-FTS	Auto	8.398	-0.005	1.334	150882	198174	18O2-PFHxS_IS	7.1212	ng/mL	AC
13C2-8_2-FTS_IS	Auto	8.398	-0.005	----	150882	150882	----	5.0000	ng/mL	
8_2 FTS	Auto	8.398	-0.006	0.000	55566	150882	13C2-8_2-FTS_IS	0.8570	ng/mL	
13C6-PFDA_IS	Auto	8.708	-0.005	----	214491	214491	----	1.2500	ng/mL	
13C6-PFDA	Auto	8.708	-0.005	-0.001	214491	193334	13C2-PFDA_IS	1.3790	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_045 (continued)

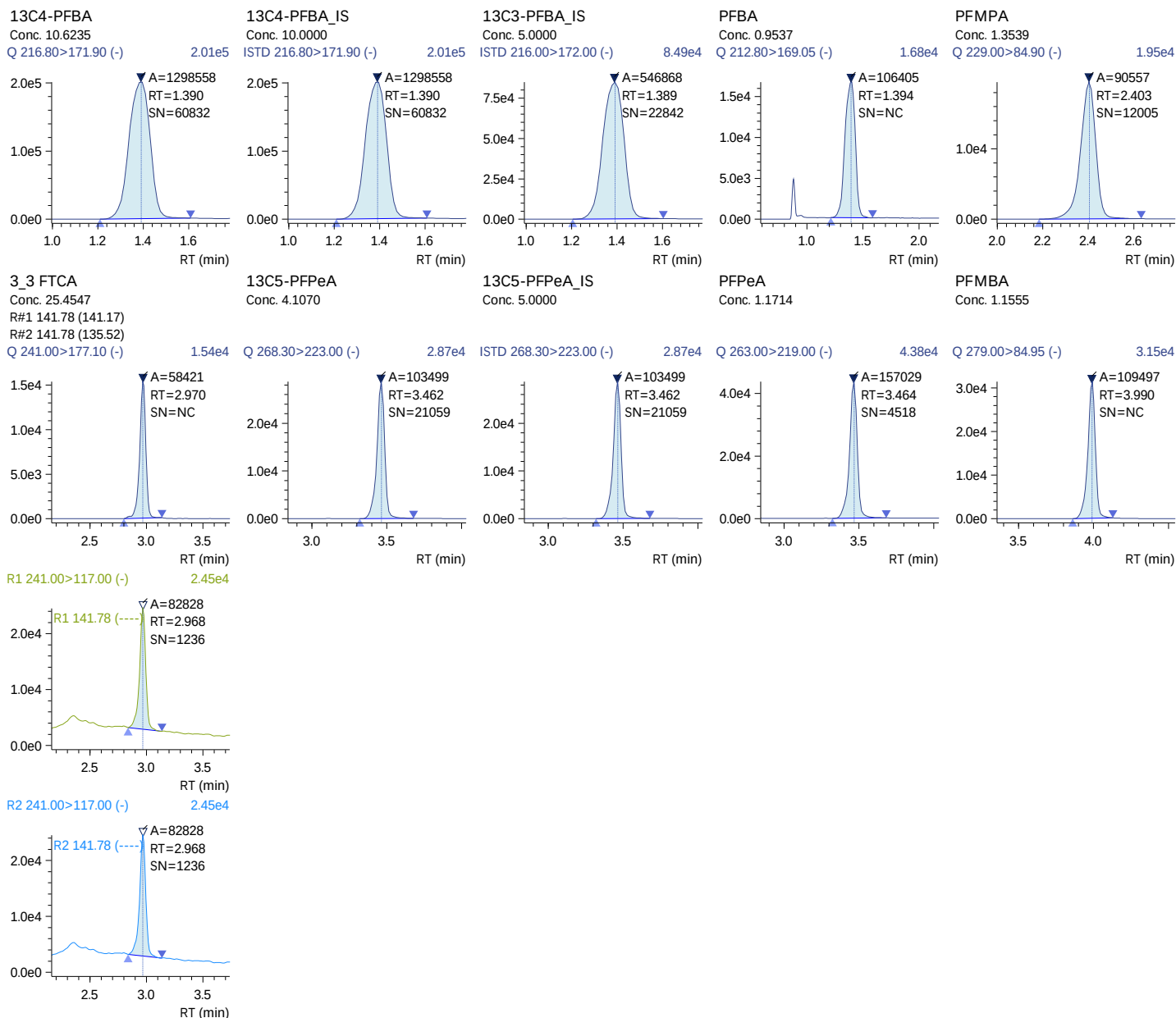
(Table continued from previous page)

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C2-PFDA_IS	Auto	8.709	-0.004	----	193334	193334	----	1.2500	ng/mL	
PFDA	Auto	8.710	-0.005	0.002	181236	214491	13C6-PFDA_IS	0.8610	ng/mL	
D3-NMeFOSAA_IS	Auto	8.847	-0.004	----	279257	279257	----	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.847	-0.004	0.043	279257	227026	13C4-PFOS_IS	7.0873	ng/mL	AC
13C8-PFOS_IS	Auto	8.803	-0.005	----	81306	81306	----	2.5000	ng/mL	
13C8-PFOS	Auto	8.803	-0.005	-0.001	81306	227026	13C4-PFOS_IS	2.1474	ng/mL	
13C4-PFOS_IS	Auto	8.804	-0.005	----	227026	227026	----	2.5000	ng/mL	
PFOS	M	8.804	-0.005	0.001	90047	81306	13C8-PFOS_IS	1.0648	ng/mL	
NMeFOSAA	M	8.853	-0.004	0.006	73868	279257	D3-NMeFOSAA_IS	0.9749	ng/mL	
D5-NetFOSAA_IS	Auto	9.179	-0.004	----	255703	255703	----	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.179	-0.004	0.375	255703	227026	13C4-PFOS_IS	5.4244	ng/mL	
NetFOSAA	M	9.191	-0.001	0.012	54599	255703	D5-NetFOSAA_IS	1.5988	ng/mL	AC
9-CI-PF3ONS	Auto	9.369	-0.006	3.942	413714	647172	13C3-HFPO-DA_IS	0.7754	ng/mL	
PFUnDA	Auto	9.434	-0.006	0.001	145229	242275	13C7-PFUnDA_IS	0.7982	ng/mL	
13C7-PFUnDA_IS	Auto	9.433	-0.005	----	242275	242275	----	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.433	-0.005	0.724	242275	193334	13C2-PFDA_IS	1.3058	ng/mL	
PFNS	Auto	9.566	-0.007	0.763	67363	81306	13C8-PFOS_IS	1.0904	ng/mL	
10_2_FTS	Auto	9.808	-0.007	1.410	72582	150882	13C2-8_2-FTS_IS	0.9201	ng/mL	
13C2-PFDOA_IS	Auto	10.121	-0.007	----	259098	259098	----	1.2500	ng/mL	
13C2-PFDOA	Auto	10.121	-0.007	1.412	259098	193334	13C2-PFDA_IS	1.2155	ng/mL	
PFDOA	Auto	10.121	-0.008	0.000	137017	259098	13C2-PFDOA_IS	0.9074	ng/mL	
PFDS	Auto	10.280	-0.008	1.477	58048	81306	13C8-PFOS_IS	1.0749	ng/mL	
PFTDA	Auto	10.780	-0.008	-0.631	158647	121542	13C2-PFTDA_IS	0.8943	ng/mL	
11-CI-PF3OUdS	Auto	10.790	-0.008	5.363	261511	647172	13C3-HFPO-DA_IS	0.7115	ng/mL	
PFOSAm	M	11.161	-0.001	-0.001	165010	251550	13C8-PFOSAm_IS	1.9902	ng/mL	
13C8-PFOSAm	Auto	11.162	-0.002	2.358	251550	227026	13C4-PFOS_IS	2.6101	ng/mL	
13C8-PFOSAm_IS	Auto	11.162	-0.002	----	251550	251550	----	2.5000	ng/mL	
PFTDA	Auto	11.412	-0.009	0.001	114996	121542	13C2-PFTDA_IS	0.8527	ng/mL	
13C2-PFTDA	Auto	11.411	-0.008	2.702	121542	193334	13C2-PFDA_IS	1.3206	ng/mL	
13C2-PFTDA_IS	Auto	11.411	-0.008	----	121542	121542	----	1.2500	ng/mL	
PFDoS	Auto	11.605	-0.010	2.802	27314	81306	13C8-PFOS_IS	0.8377	ng/mL	
D7-MeFOSE_IS	Auto	13.397	-0.005	----	721774	721774	----	25.0000	ng/mL	
D7-MeFOSE	Auto	13.397	-0.005	4.593	721774	227026	13C4-PFOS_IS	30.3759	ng/mL	
MeFOSE	M	13.435	-0.006	0.038	27010	721774	D7-MeFOSE_IS	1.0190	ng/mL	
13C2-PFHxDA_IS	Auto	12.627	-0.009	----	422333	422333	----	2.5000	ng/mL	
13C2-PFHxDA	Auto	12.627	-0.009	3.918	422333	193334	13C2-PFDA_IS	2.3517	ng/mL	
PFHxDA	Auto	12.629	-0.008	0.002	176452	422333	13C2-PFHxDA_IS	0.9911	ng/mL	
D3-MeFOSA	Auto	13.705	-0.006	4.901	49098	227026	13C4-PFOS_IS	2.5297	ng/mL	
D3-MeFOSA_IS	Auto	13.705	-0.006	----	49098	49098	----	2.5000	ng/mL	
MeFOSA	M	13.711	-0.007	0.006	36189	49098	D3-MeFOSA_IS	1.0225	ng/mL	
D9-EtFOSE_IS	Auto	14.027	-0.005	----	788404	788404	----	25.0000	ng/mL	
D9-EtFOSE	Auto	14.027	-0.005	5.223	788404	227026	13C4-PFOS_IS	32.6686	ng/mL	AC
EtFOSE	M	14.072	-0.004	0.045	39847	788404	D9-EtFOSE_IS	0.9606	ng/mL	
D5-EtFOSAm	Auto	14.382	-0.005	5.578	71873	227026	13C4-PFOS_IS	2.7814	ng/mL	
D5-EtFOSAm_IS	Auto	14.382	-0.005	----	71873	71873	----	2.5000	ng/mL	
EtFOSAm	M	14.399	-0.014	0.017	38571	71873	D5-EtFOSAm_IS	0.9218	ng/mL	
PFODA	Auto	13.763	-0.011	1.136	99402	422333	13C2-PFHxDA_IS	1.0408	ng/mL	

Flag ID key: AC: Accuracy%



240122_045 (continued)





240122_045 (continued)

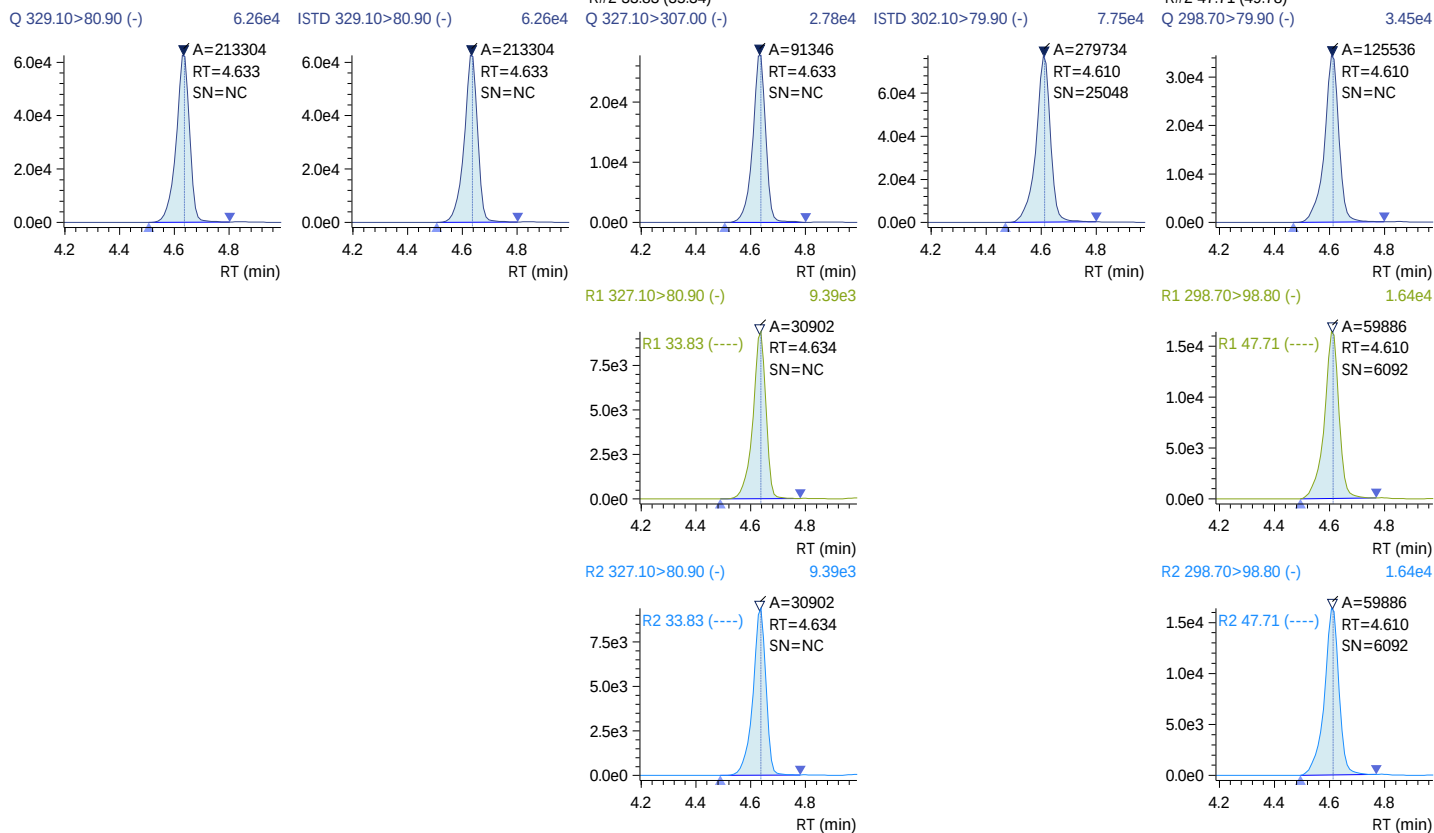
13C2-4_2_FTS
Conc. 7.8216

13C2-4_2_FTS_IS
Conc. 5.0000

4_2_FTS
Conc. 0.8707
R#1 33.83 (29.06)
R#2 33.83 (35.34)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 0.8767
R#1 47.71 (46.72)
R#2 47.71 (49.78)





240122_045 (continued)

13C3-PFBS
Conc. 2.4874

NFDHA
Conc. 1.1625
R#1 35.45 (40.25)
R#2 35.45 (37.18)

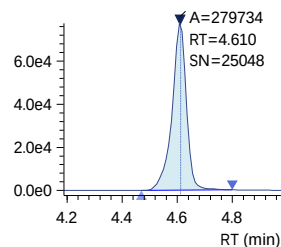
13C5-PFHxA
Conc. 2.3343

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

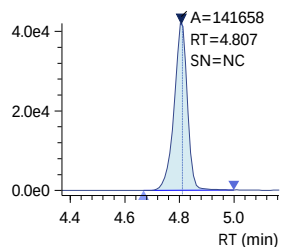
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7.75e4



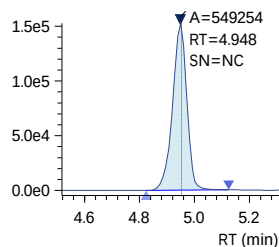
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4.20e4



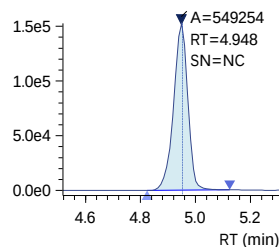
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1.53e5



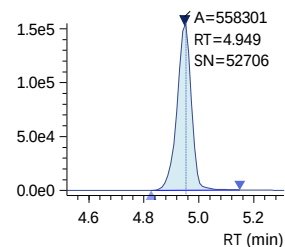
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1.53e5



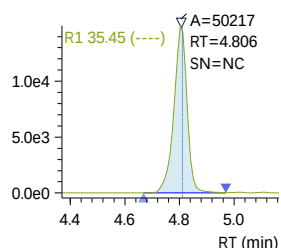
ISTD 315.10>270.00 (-)

1.55e5



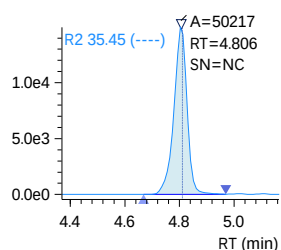
R1 295.00>84.90 (-)

1.50e4



R2 295.00>84.90 (-)

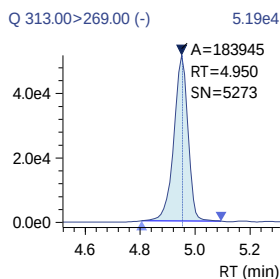
1.50e4





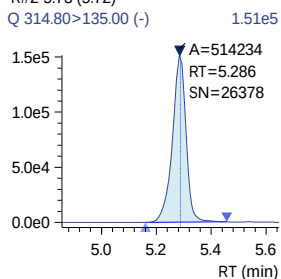
240122_045 (continued)

PFHxA
Conc. 0.9978

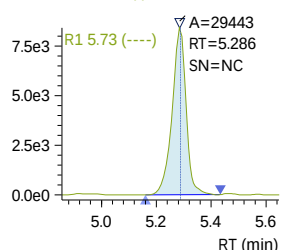


PFEESA
Conc. 0.8359

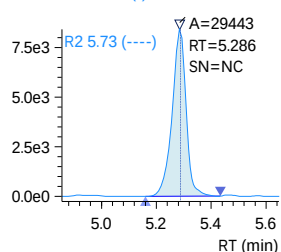
R#1 5.73 (6.11)
R#2 5.73 (5.72)



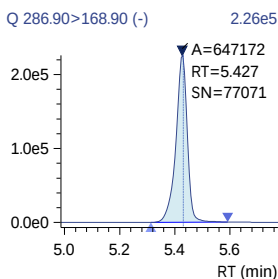
R1 314.80>82.90 (-) 8.42e3



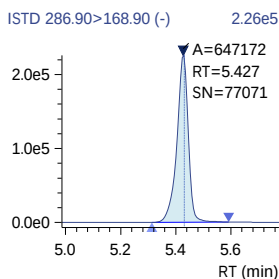
R2 314.80>82.90 (-) 8.42e3



13C3-HFPO-DA
Conc. 11.8415

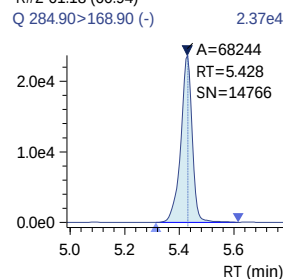


13C3-HFPO-DA_IS
Conc. 10.0000

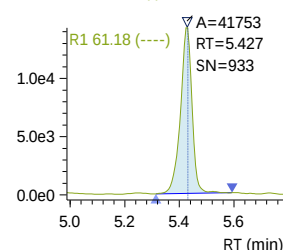


HFPO-DA
Conc. 0.9548

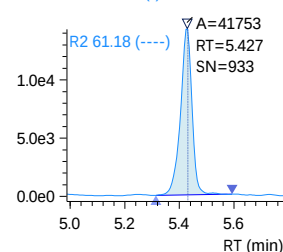
R#1 61.18 (65.61)
R#2 61.18 (60.94)



R1 284.90>184.90 (-) 1.43e4

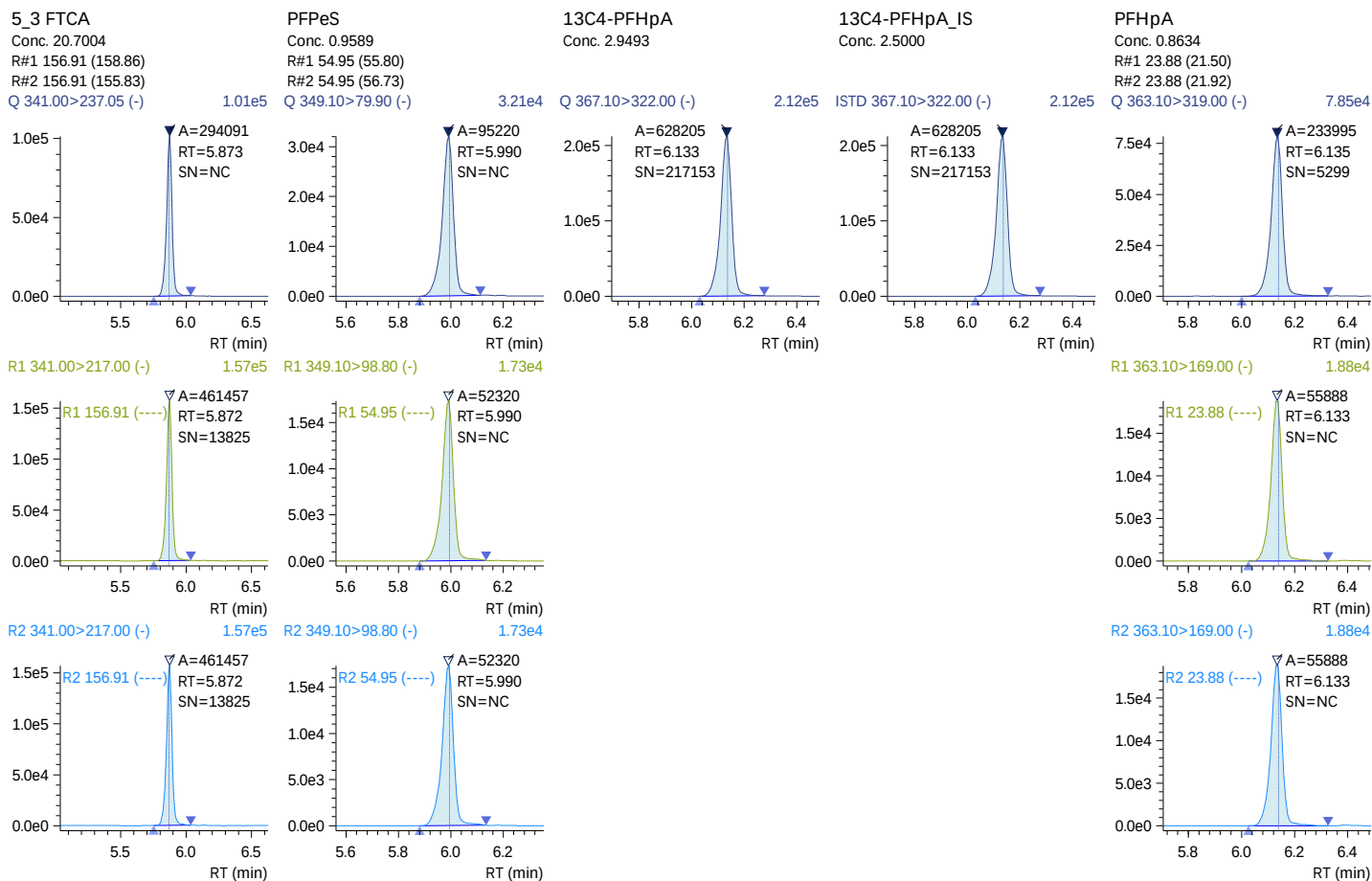


R2 284.90>184.90 (-) 1.43e4



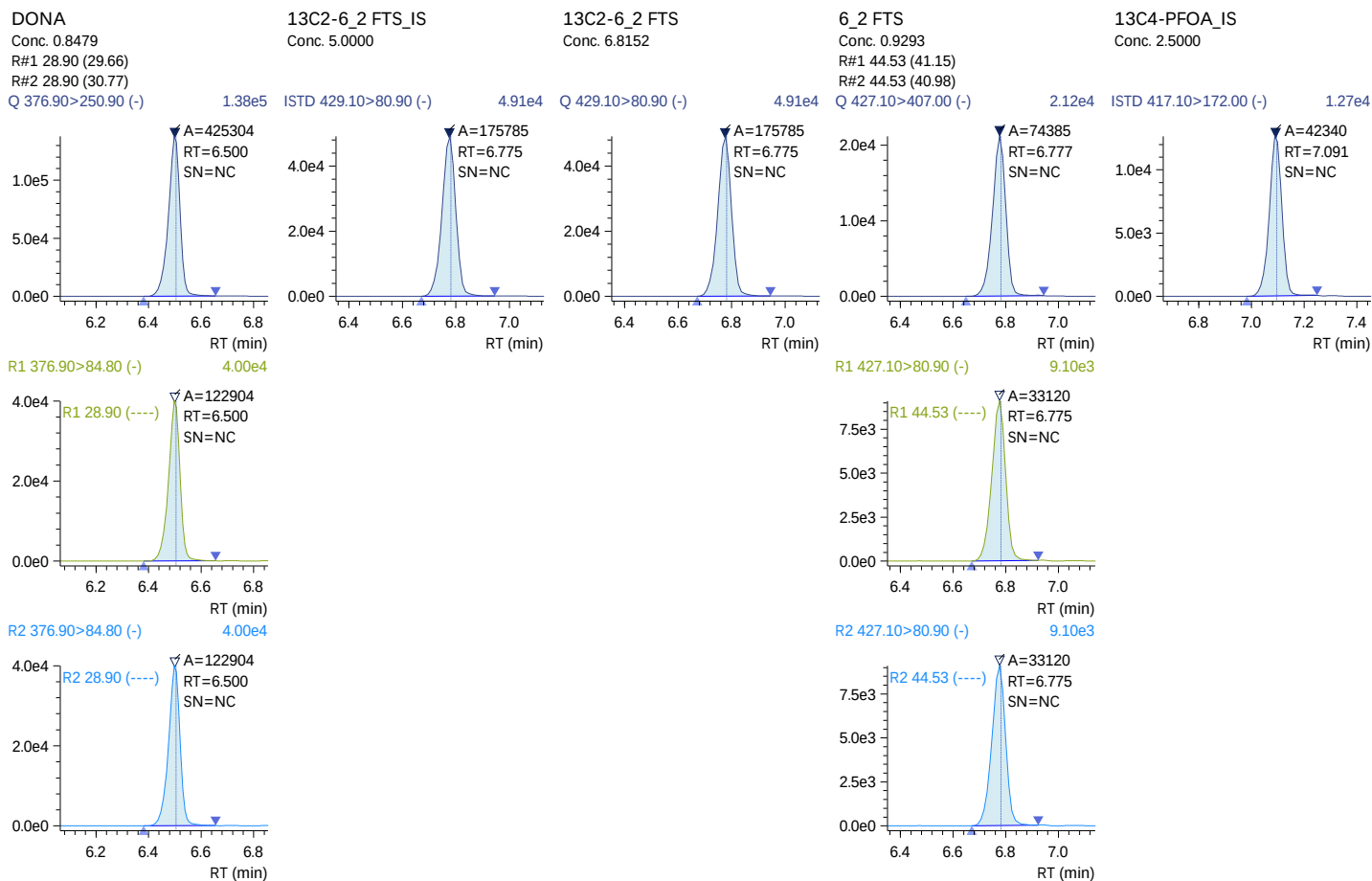


240122_045 (continued)





240122_045 (continued)





240122_045 (continued)

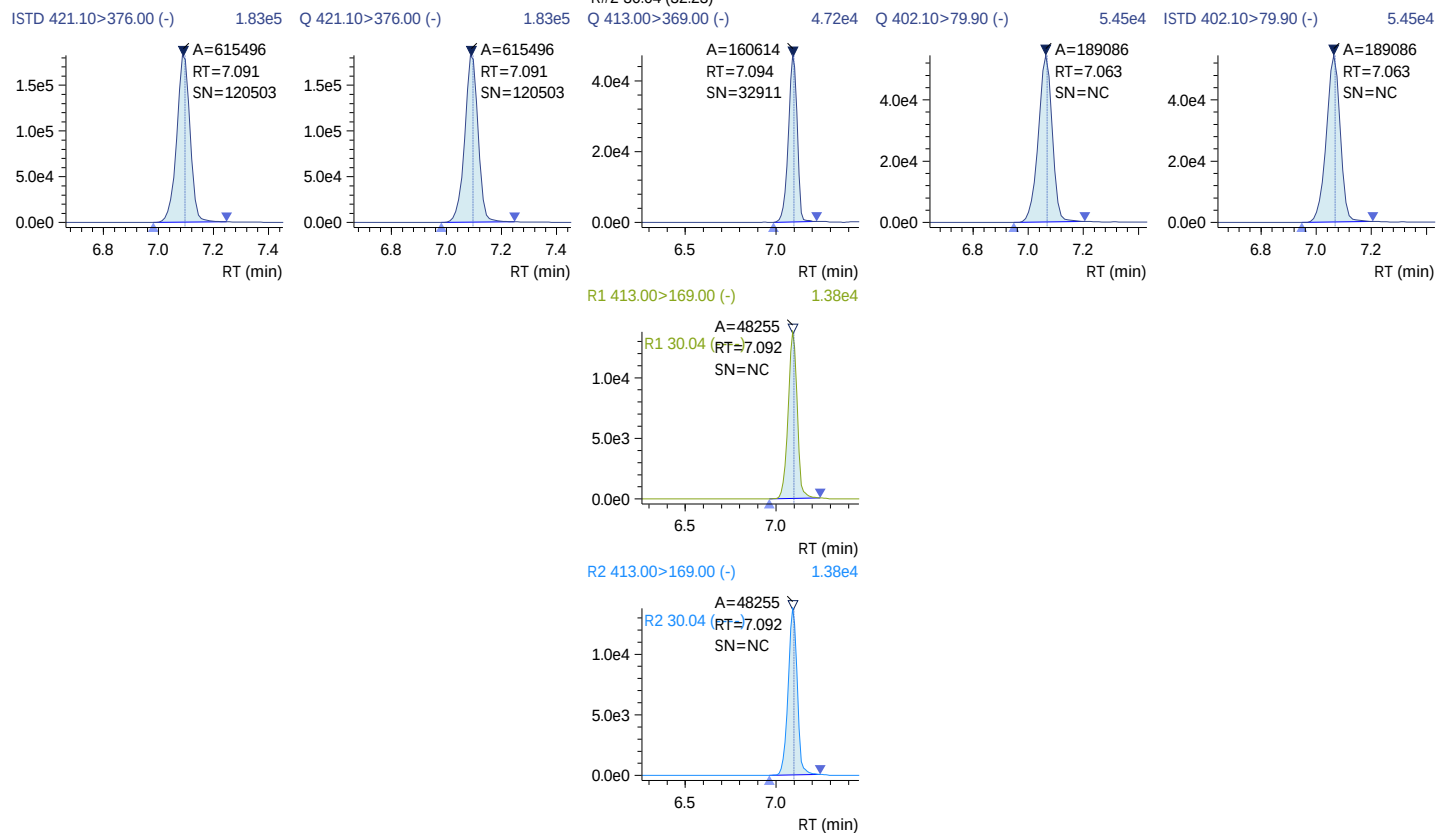
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.6009

PFOA
Conc. 0.9673
R#1 30.04 (31.89)
R#2 30.04 (32.23)

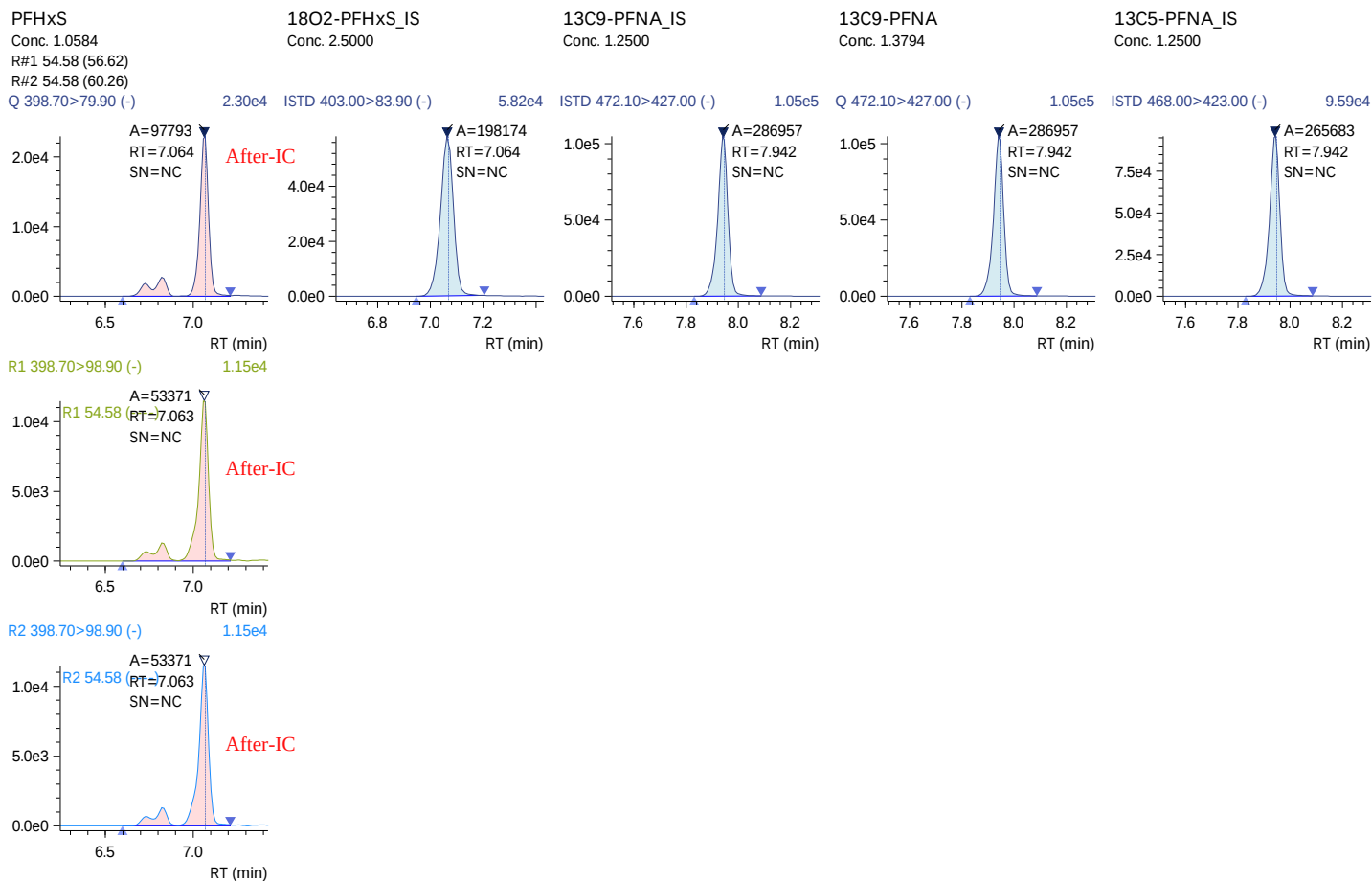
13C3-PFHxS
Conc. 2.2229

13C3-PFHxS_IS
Conc. 2.5000





240122_045 (continued)

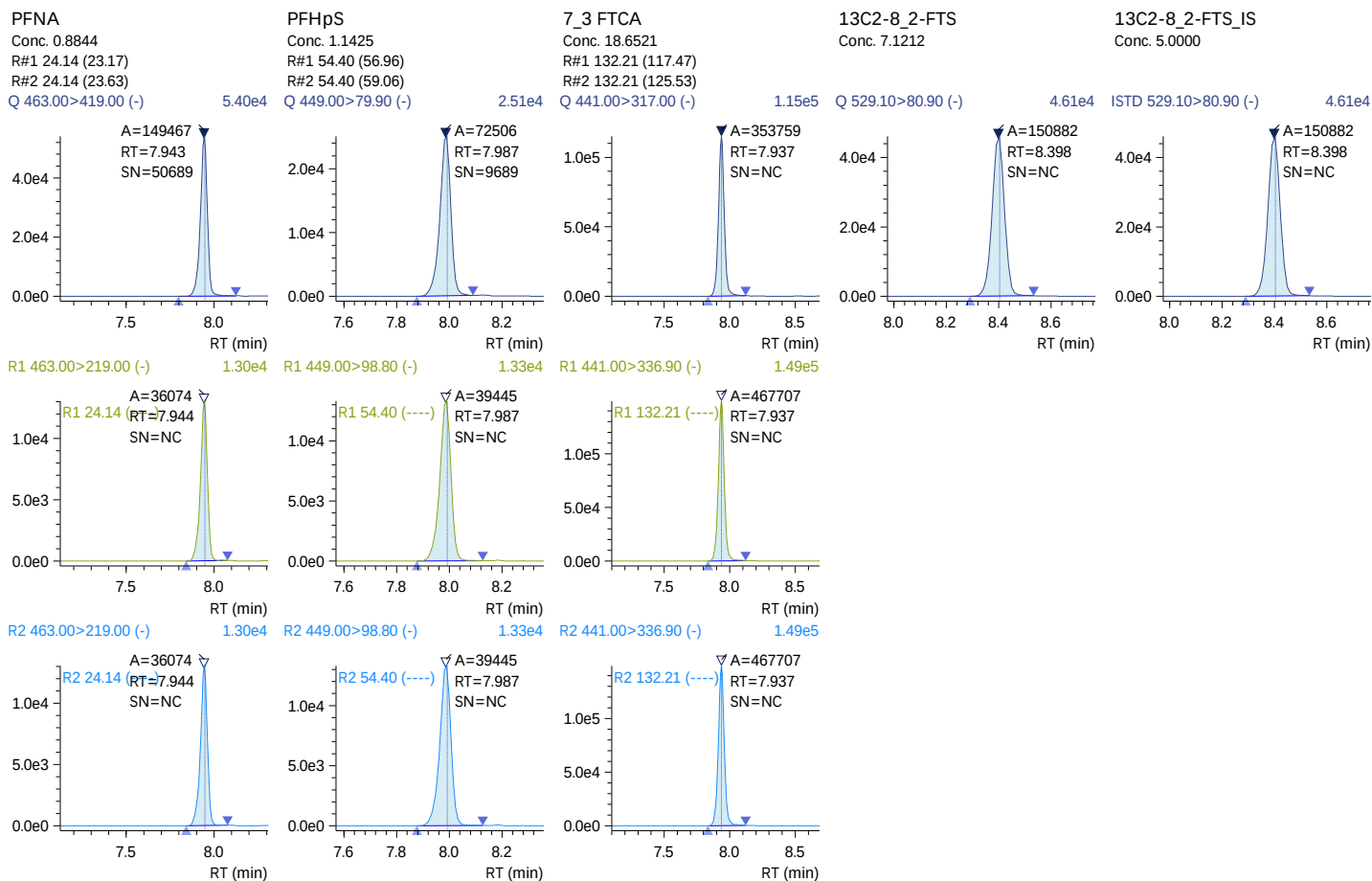


J:\LCMS08\Data\240122_1633_B1\240122_1633_B1.dampl

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.

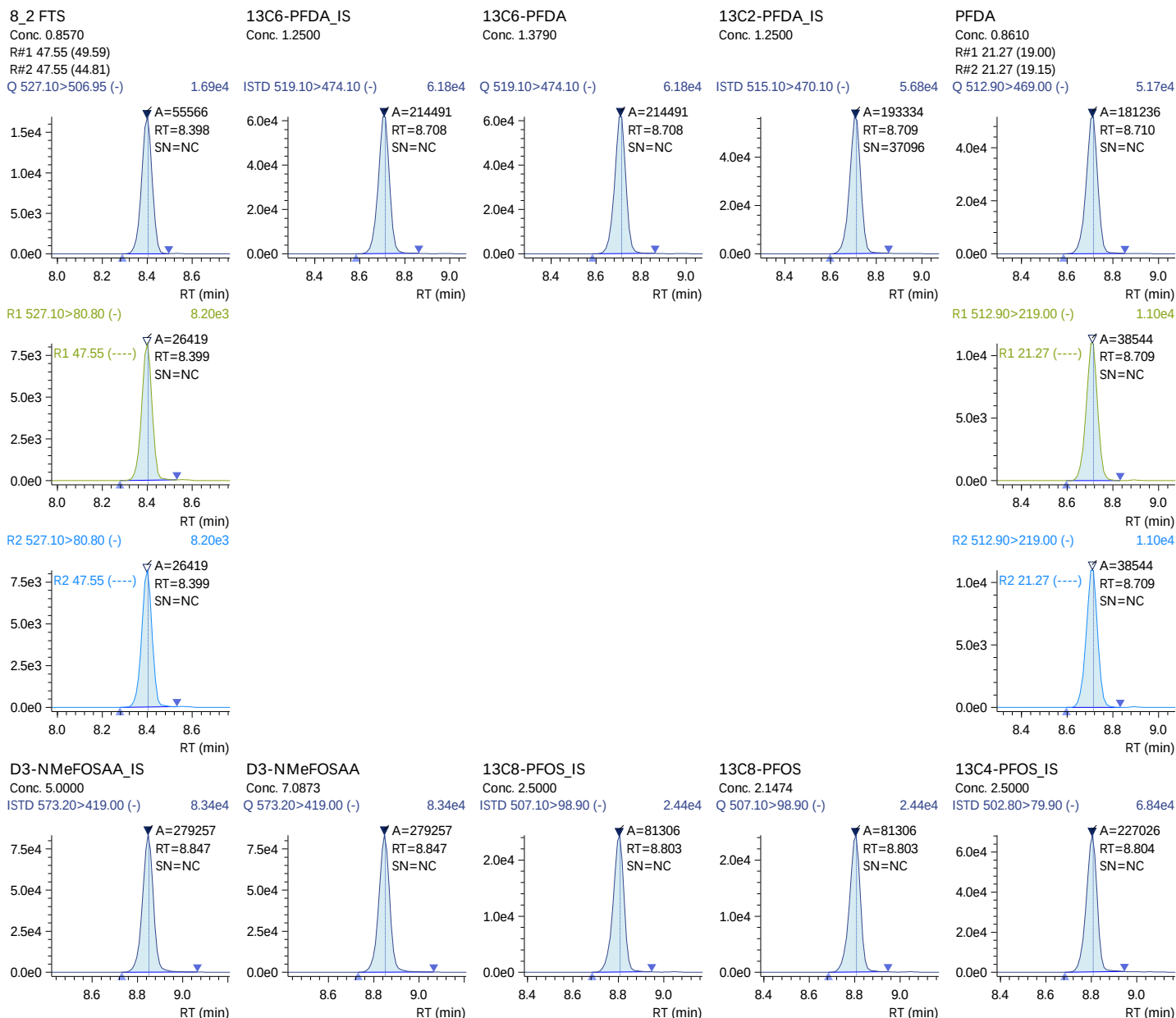


240122_045 (continued)





240122_045 (continued)

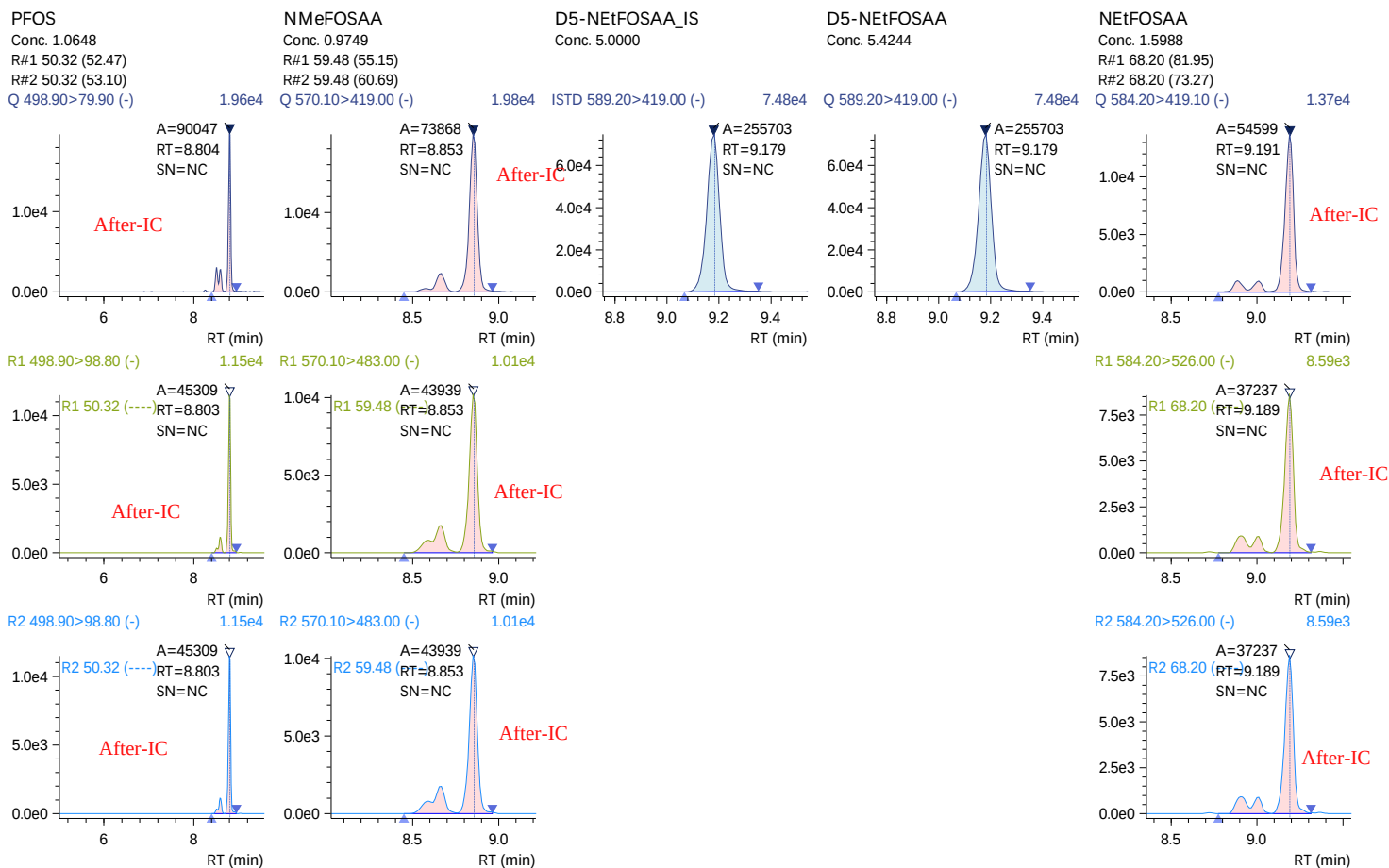


J:\LCMS08\Data\240122_1633_B1\240122_1633_B1.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_045 (continued)

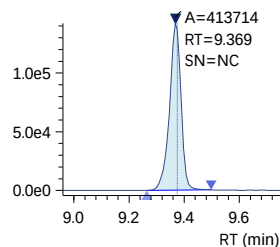




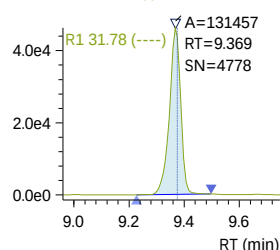
240122_045 (continued)

9-Cl-PF3ONS

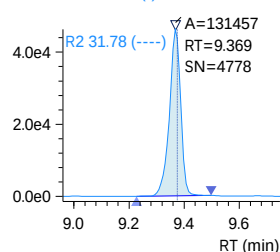
Conc. 0.7754
R#1 31.78 (32.76)
R#2 31.78 (32.59)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-) 4.63e4

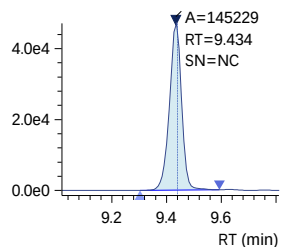


R2 532.80>353.00 (-) 4.63e4

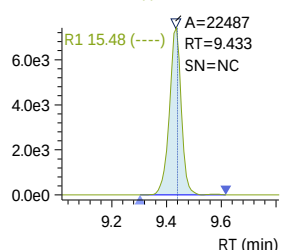


PFUnDA

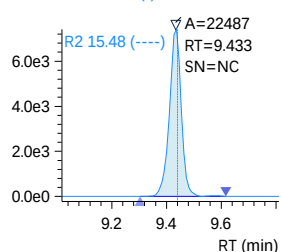
Conc. 0.7982
R#1 15.48 (13.12)
R#2 15.48 (14.36)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-) 7.42e3

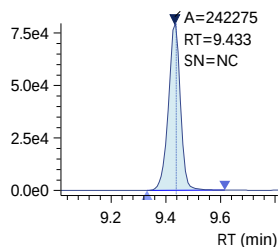


R2 563.10>269.10 (-) 7.42e3



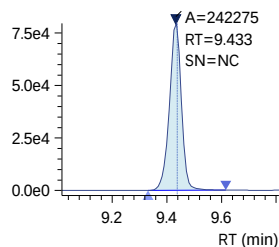
13C7-PFUnDA_IS

Conc. 1.2500
ISTD 570.00>525.10 (-)



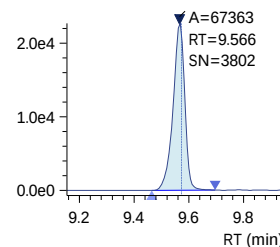
13C7-PFUnDA

Conc. 1.3058
Q 570.00>525.10 (-)

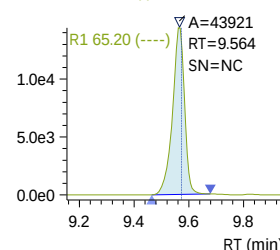


PFNS

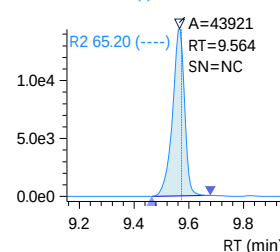
Conc. 1.0904
R#1 65.20 (65.22)
R#2 65.20 (65.31)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-) 1.44e4

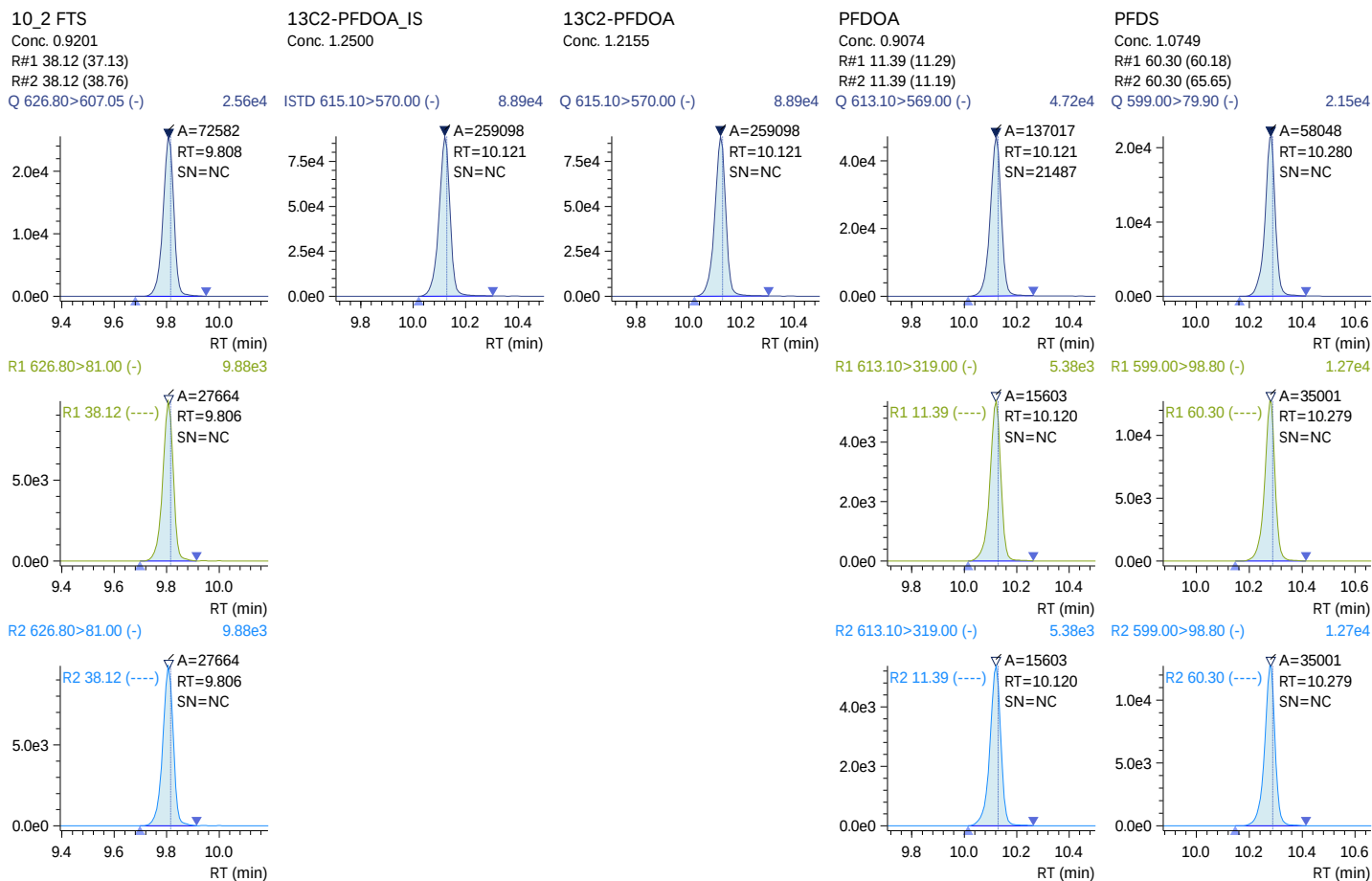


R2 548.80>98.80 (-) 1.44e4



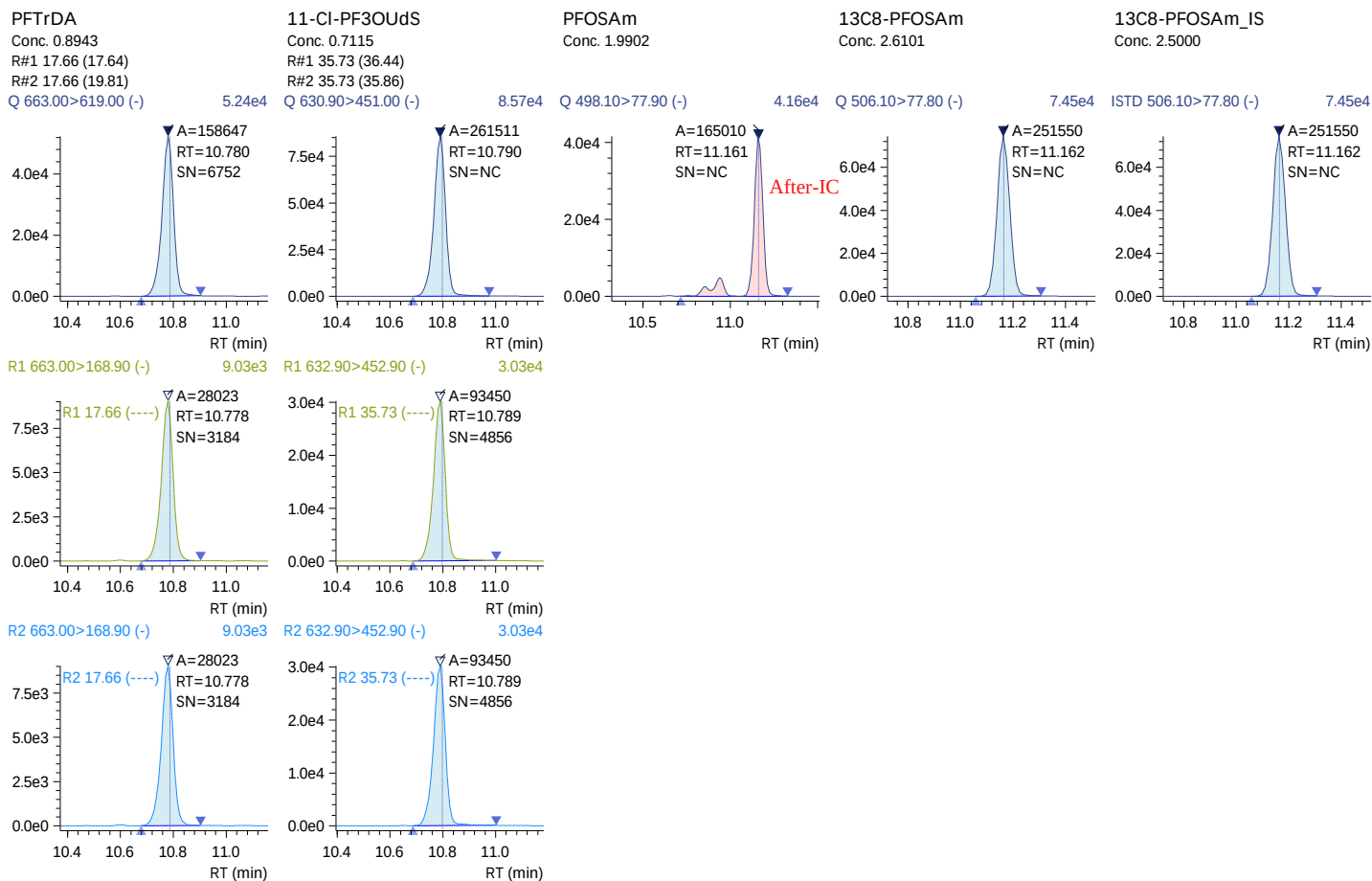


240122_045 (continued)



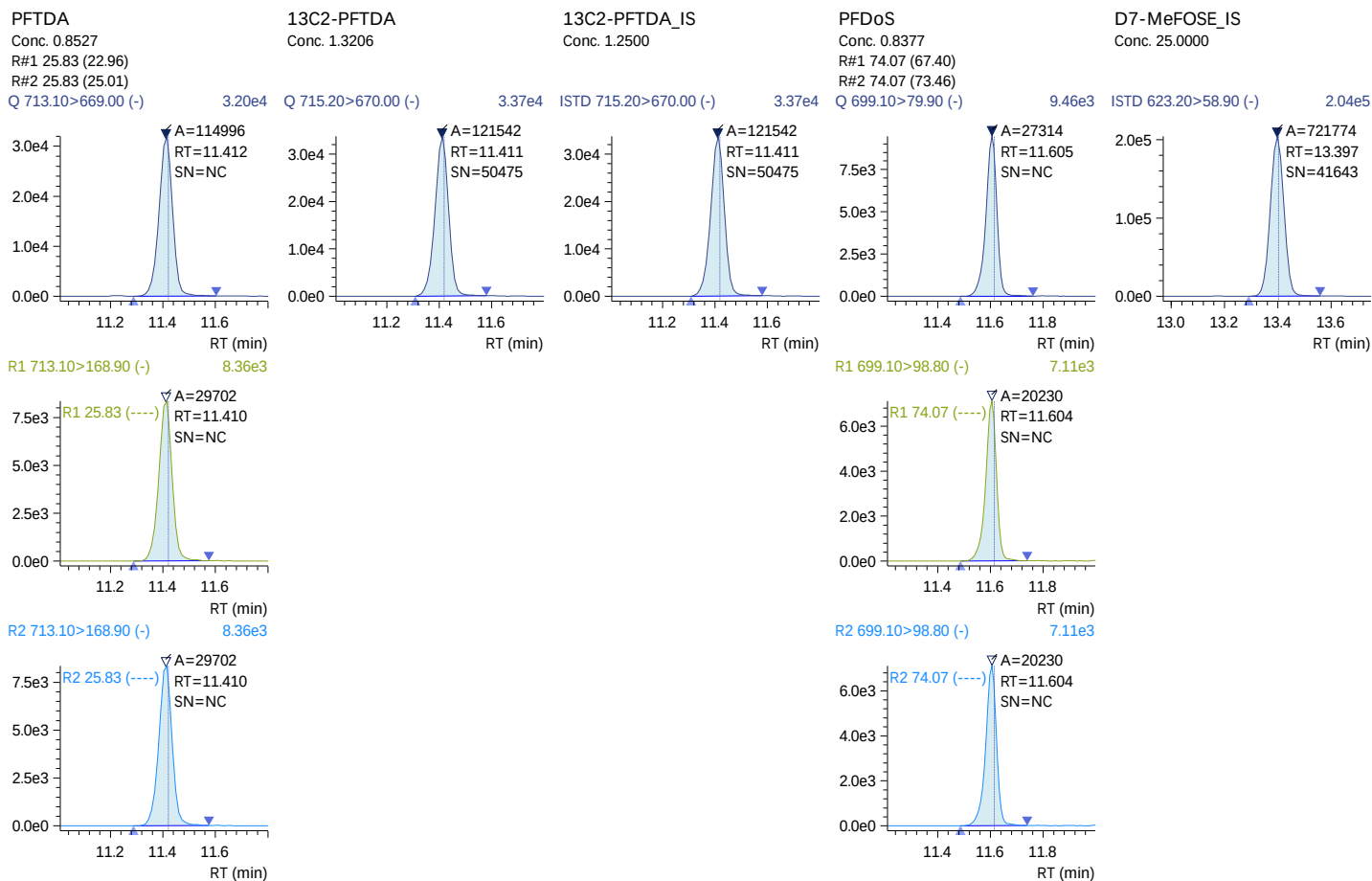


240122_045 (continued)





240122_045 (continued)





240122_045 (continued)

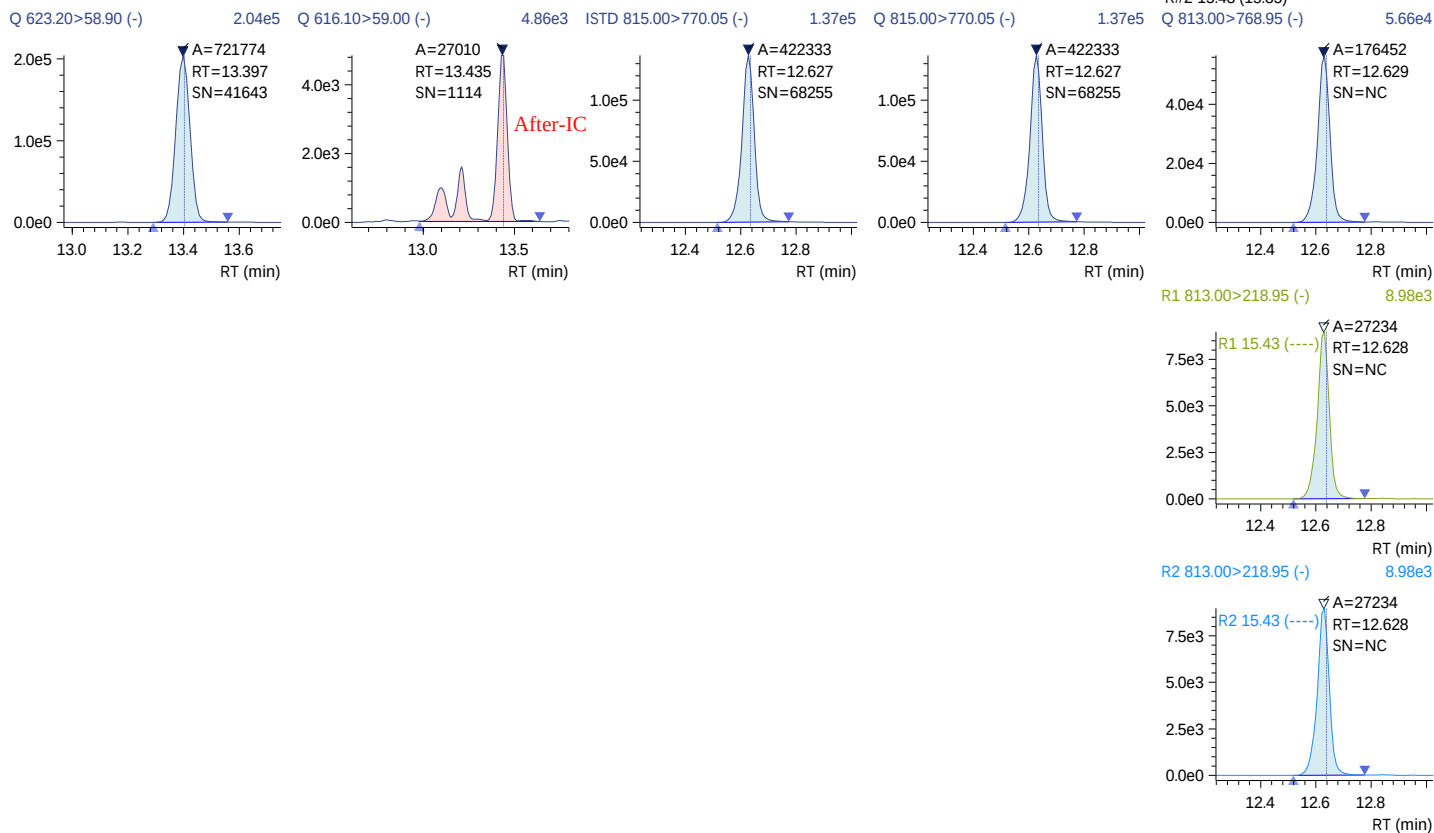
D7-MeFOSE
Conc. 30.3759

MeFOSE
Conc. 1.0190

13C2-PFHXA_IS
Conc. 2.5000

13C2-PFHXA
Conc. 2.3517

PFHXA
Conc. 0.9911
R#1 15.43 (13.90)
R#2 15.43 (15.85)





240122_045 (continued)

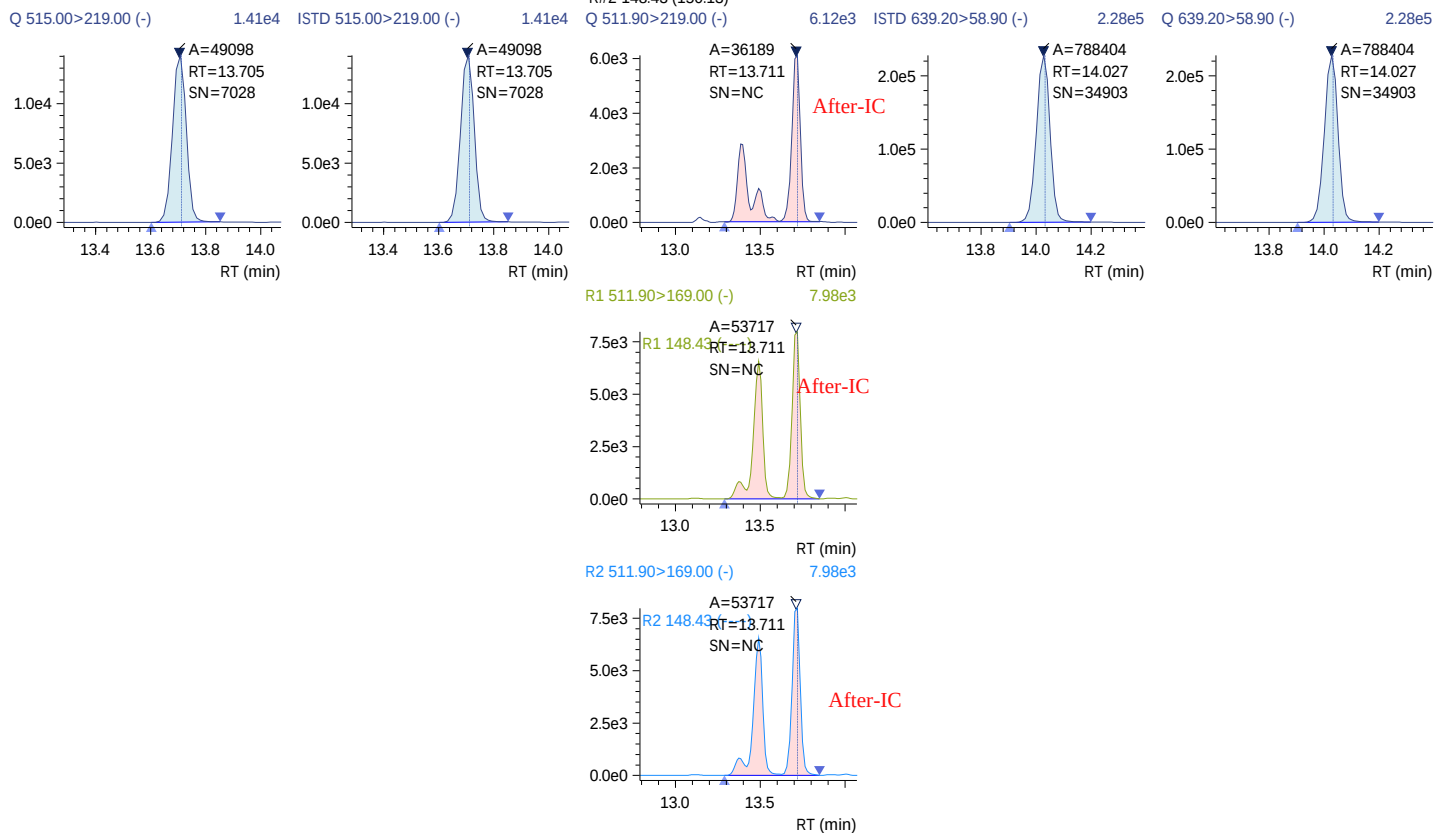
D3-MeFOSA
Conc. 2.5297

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. 1.0225
R#1 148.43 (140.79)
R#2 148.43 (150.13)

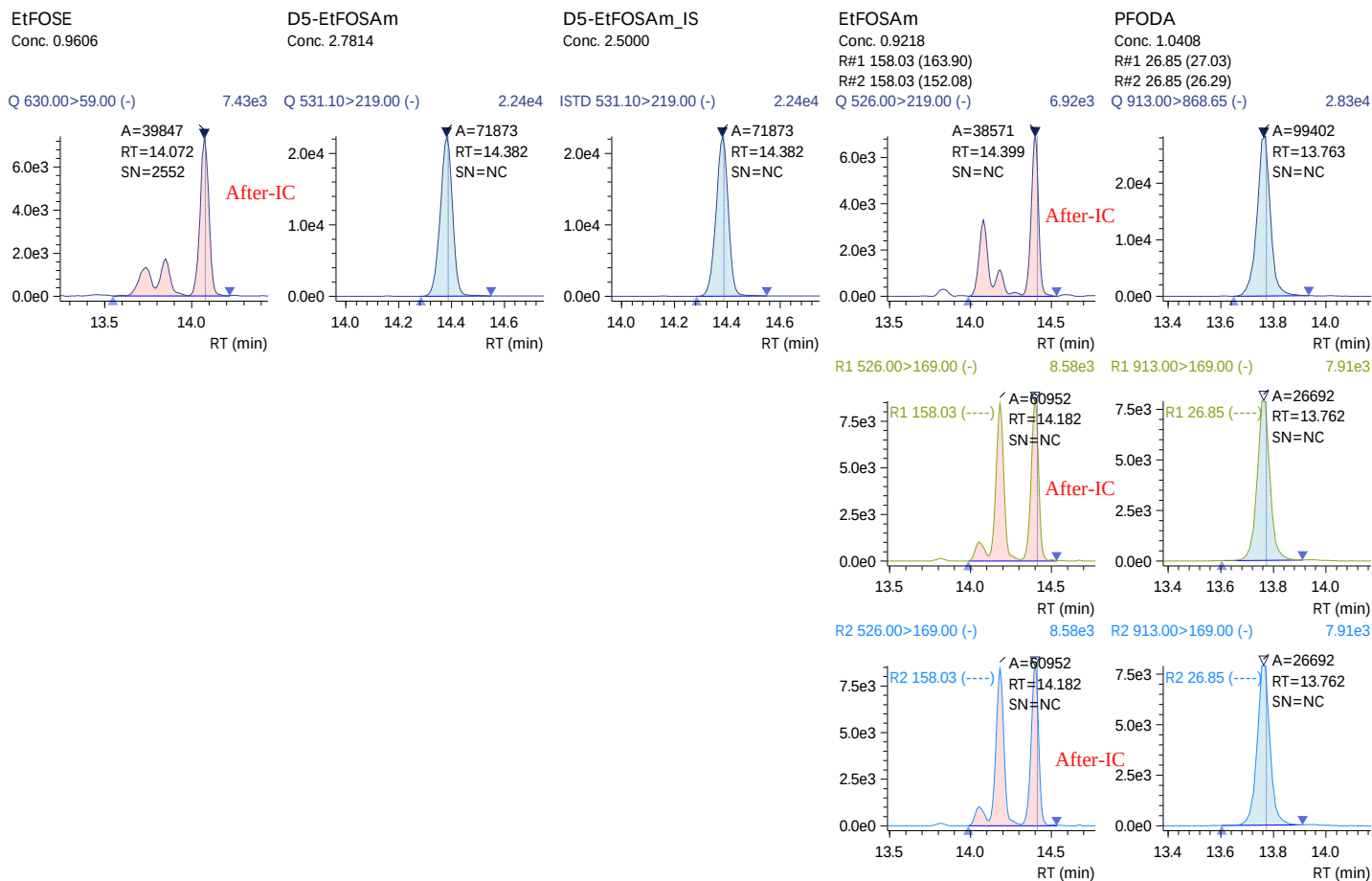
D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 32.6686





240122_045 (continued)



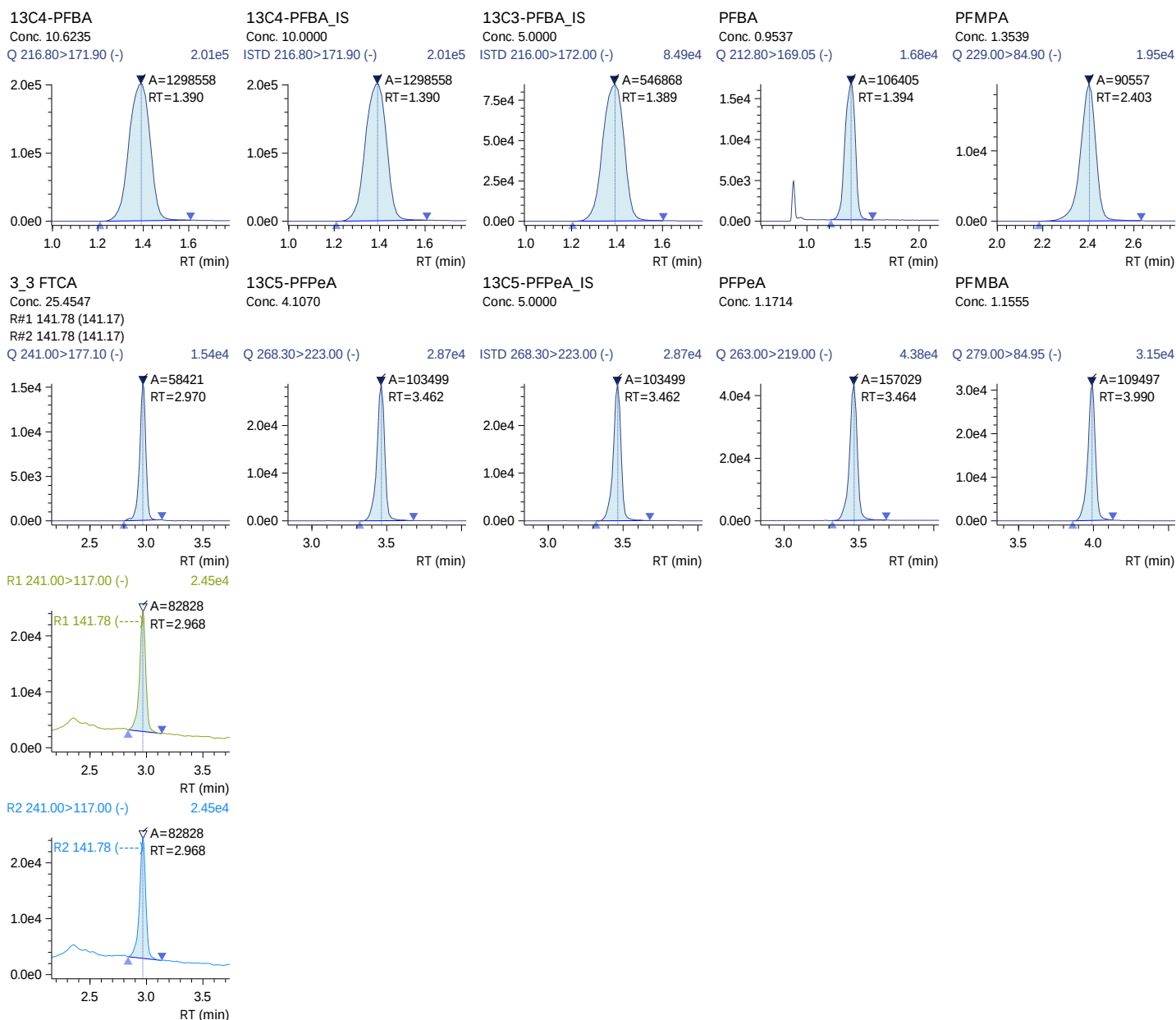
J:\LCMS08\Data\240122_1633_B1\240122_1633_B1.dampl

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_045

Sample ID: 1633 ICAL 1.0PPB
Date Acquired: 1/23/2024 2:48:48 AM
Acquired by: System Administrator
Data File: 240122_045
Vial: 5 | Inj. Volume: 10.0000uL | Tray: 1





240122_045 (continued)

13C2-4_2 FTS
Conc. 7.8216

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. 0.8707
R#1 33.83 (29.06)
R#2 33.83 (29.06)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 0.8767
R#1 47.71 (46.72)
R#2 47.71 (46.72)

Q 329.10>80.90 (-)

6.26e4

ISTD 329.10>80.90 (-)

6.26e4

Q 327.10>307.00 (-)

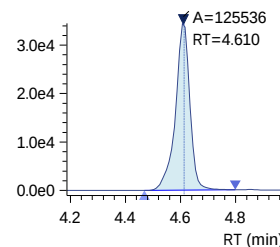
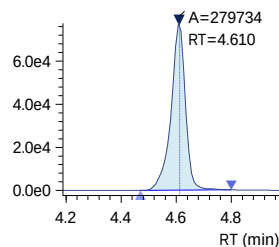
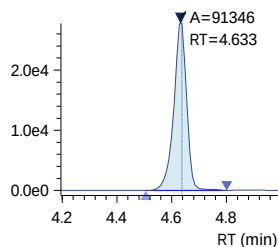
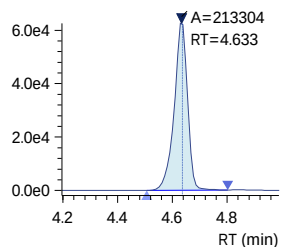
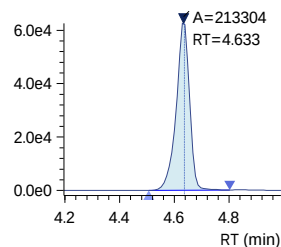
2.78e4

ISTD 302.10>79.90 (-)

7.75e4

Q 298.70>79.90 (-)

3.45e4

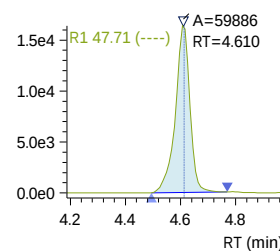
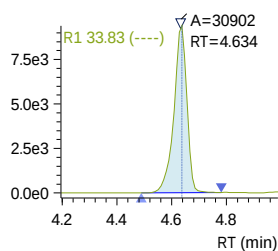


R1 327.10>80.90 (-)

9.39e3

R1 298.70>98.80 (-)

1.64e4

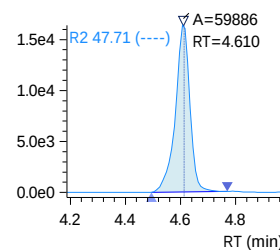
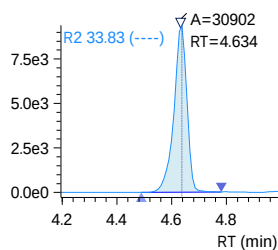


R2 327.10>80.90 (-)

9.39e3

R2 298.70>98.80 (-)

1.64e4





240122_045 (continued)

13C3-PFBS
 Conc. 2.4874

NFDHA
 Conc. 1.1625
 R#1 35.45 (40.25)
 R#2 35.45 (40.25)

13C5-PFHxA
 Conc. 2.3343

13C5-PFHxA_IS
 Conc. 2.5000

13C2-PFHxA_IS
 Conc. 2.5000

Q 302.10>79.90 (-)

7.75e4

Q 295.00>201.00 (-)

4.20e4

Q 318.00>273.00 (-)

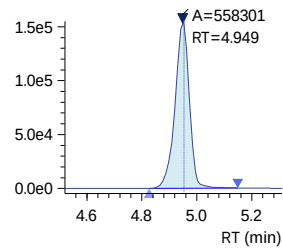
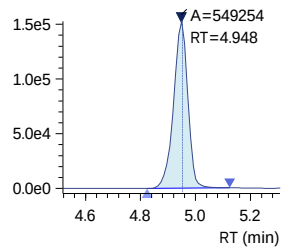
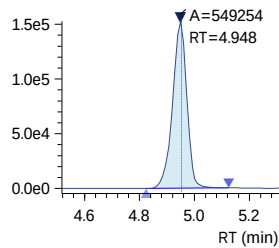
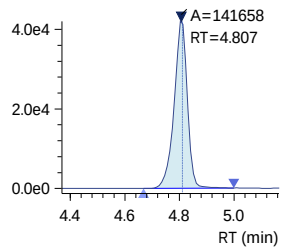
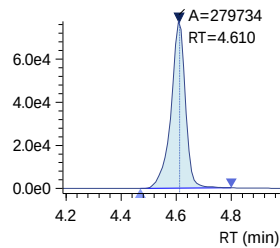
1.53e5

ISTD 318.00>273.00 (-)

1.53e5

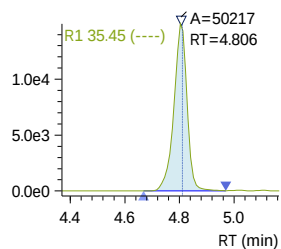
ISTD 315.10>270.00 (-)

1.55e5



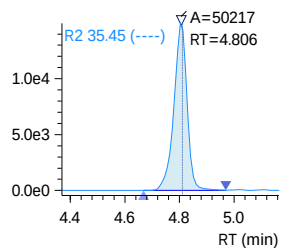
R1 295.00>84.90 (-)

1.50e4



R2 295.00>84.90 (-)

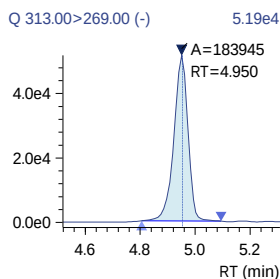
1.50e4





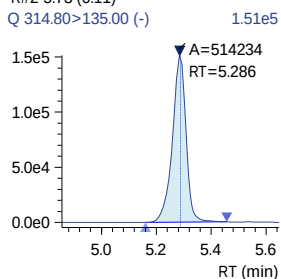
240122_045 (continued)

PFHxA
Conc. 0.9978

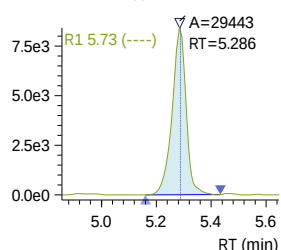


PFEESA
Conc. 0.8359

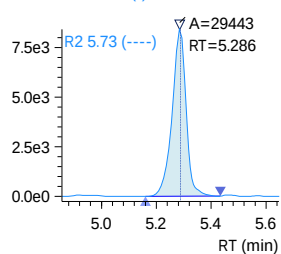
R#1 5.73 (6.11)
R#2 5.73 (6.11)



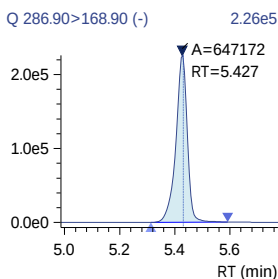
R1 314.80>82.90 (-) 8.42e3



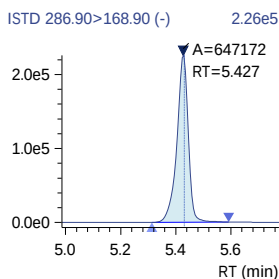
R2 314.80>82.90 (-) 8.42e3



13C3-HFPO-DA
Conc. 11.8415

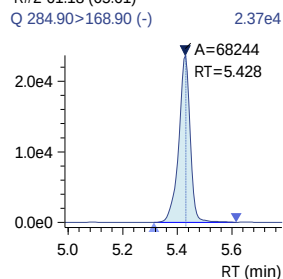


13C3-HFPO-DA_IS
Conc. 10.0000

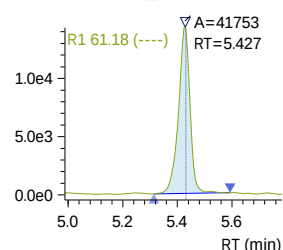


HFPO-DA
Conc. 0.9548

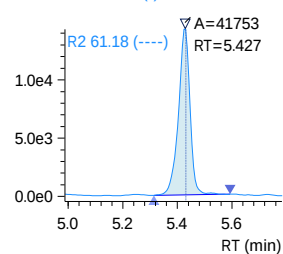
R#1 61.18 (65.61)
R#2 61.18 (65.61)



R1 284.90>184.90 (-) 1.43e4



R2 284.90>184.90 (-) 1.43e4





240122_045 (continued)

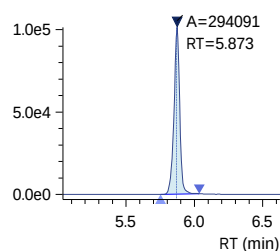
5_3 FTCA

Conc. 20.7004

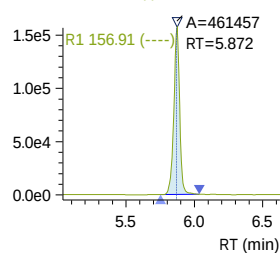
R#1 156.91 (158.86)

R#2 156.91 (158.86)

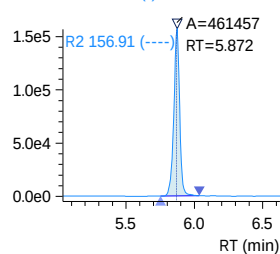
Q 341.00>237.05 (-)



R1 341.00>217.00 (-)



R2 341.00>217.00 (-)



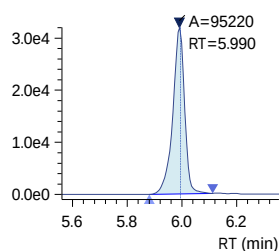
PFPeS

Conc. 0.9589

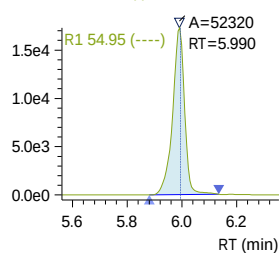
R#1 54.95 (55.80)

R#2 54.95 (55.80)

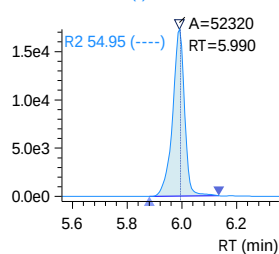
Q 349.10>79.90 (-)



R1 349.10>98.80 (-)



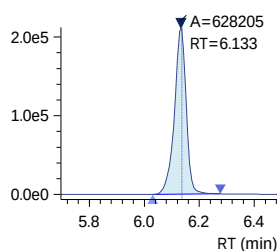
R2 349.10>98.80 (-)



13C4-PFHpA

Conc. 2.9493

Q 367.10>322.00 (-)



R1 367.10>322.00 (-)



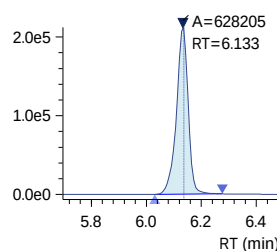
R2 367.10>322.00 (-)



13C4-PFHpA_IS

Conc. 2.5000

ISTD 367.10>322.00 (-)



R1 367.10>322.00 (-)



R2 367.10>322.00 (-)



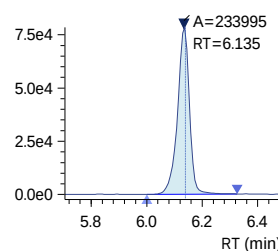
PFHpA

Conc. 0.8634

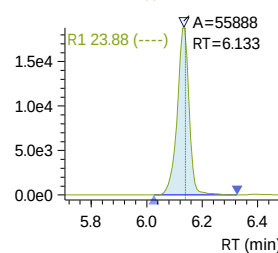
R#1 23.88 (21.50)

R#2 23.88 (21.50)

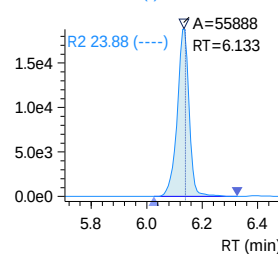
Q 363.10>319.00 (-)



R1 363.10>169.00 (-)

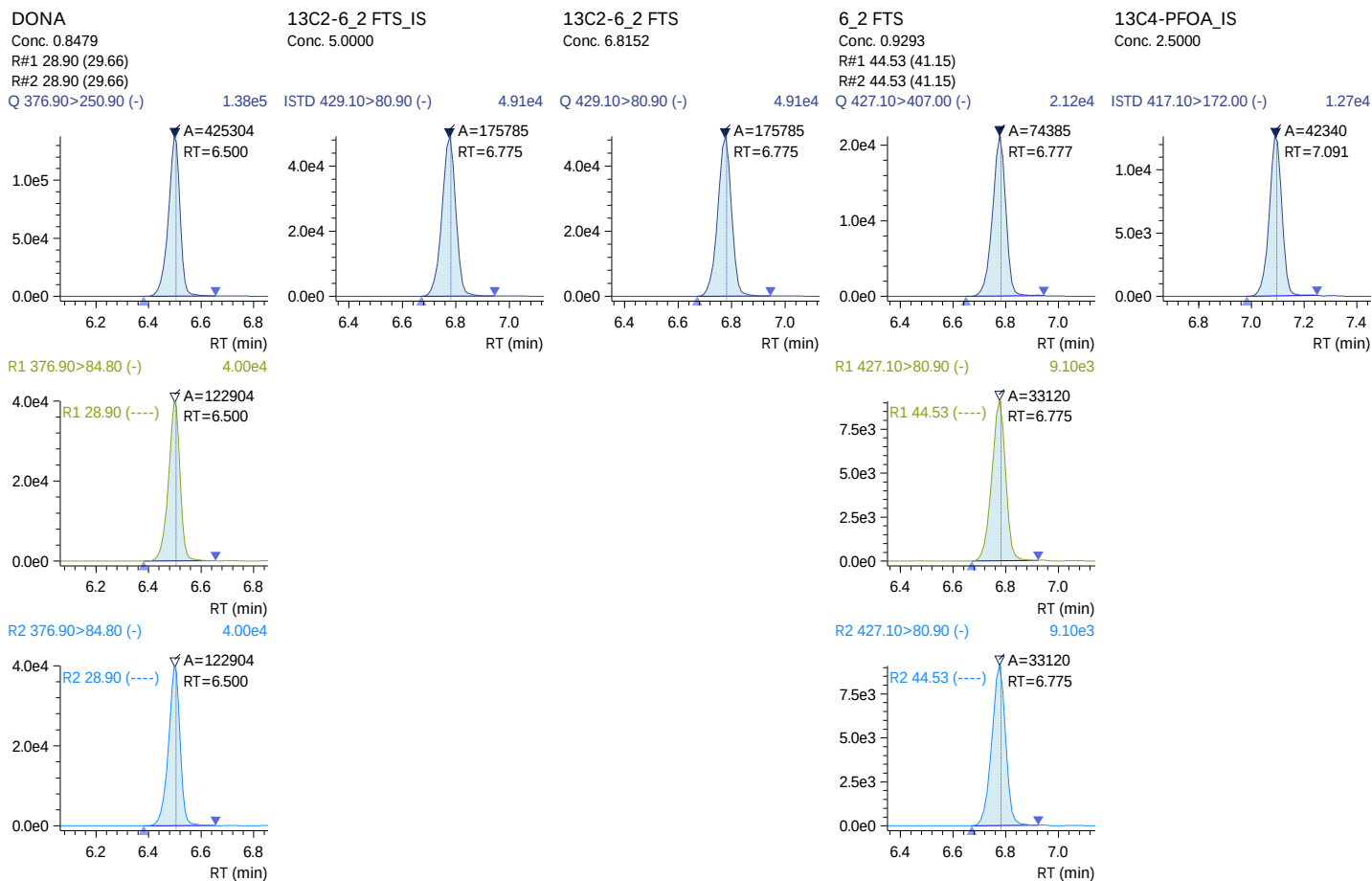


R2 363.10>169.00 (-)





240122_045 (continued)





240122_045 (continued)

13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.6009

PFOA
Conc. 0.9673
R#1 30.04 (31.89)
R#2 30.04 (31.89)

13C3-PFHxS
Conc. 2.2229

13C3-PFHxS_IS
Conc. 2.5000

ISTD 421.10>376.00 (-)

1.83e5

Q 421.10>376.00 (-)

1.83e5

Q 413.00>369.00 (-)

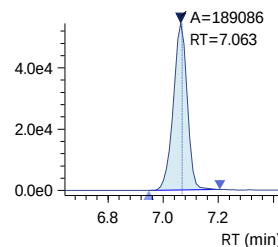
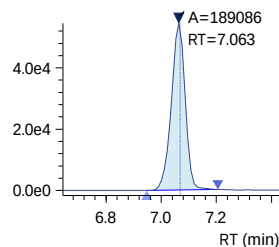
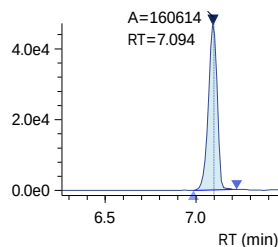
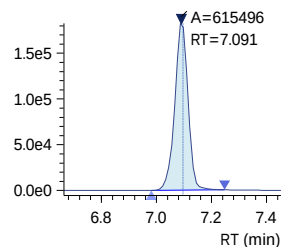
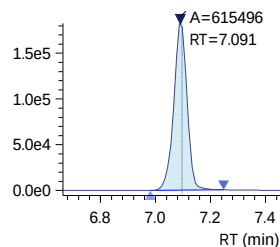
4.72e4

Q 402.10>79.90 (-)

5.45e4

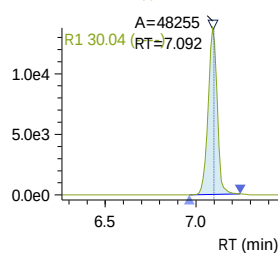
ISTD 402.10>79.90 (-)

5.45e4



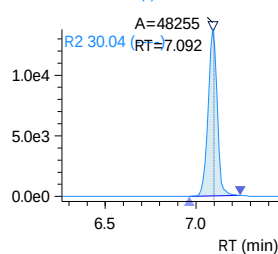
R1 413.00>169.00 (-)

1.38e4



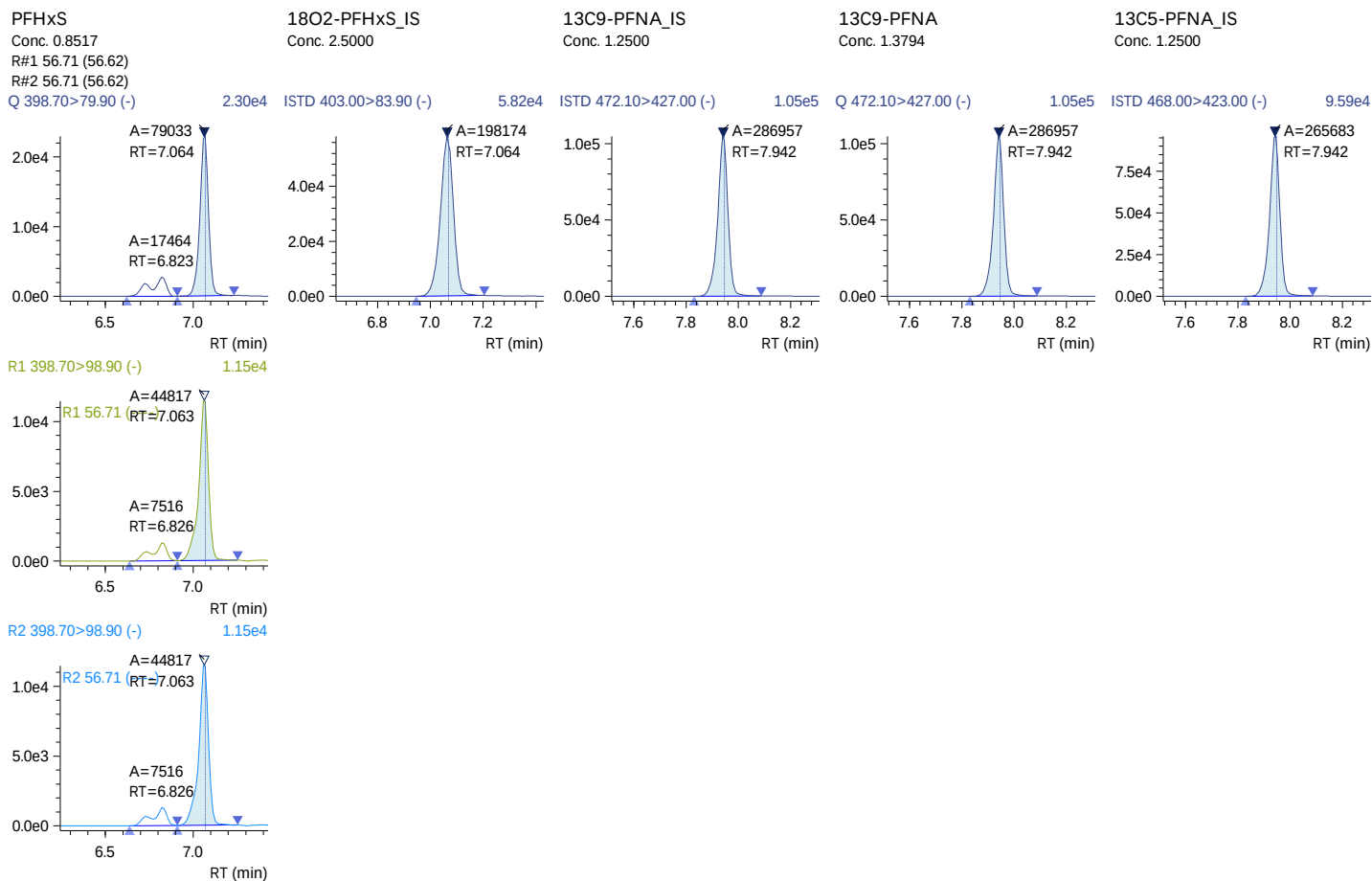
R2 413.00>169.00 (-)

1.38e4



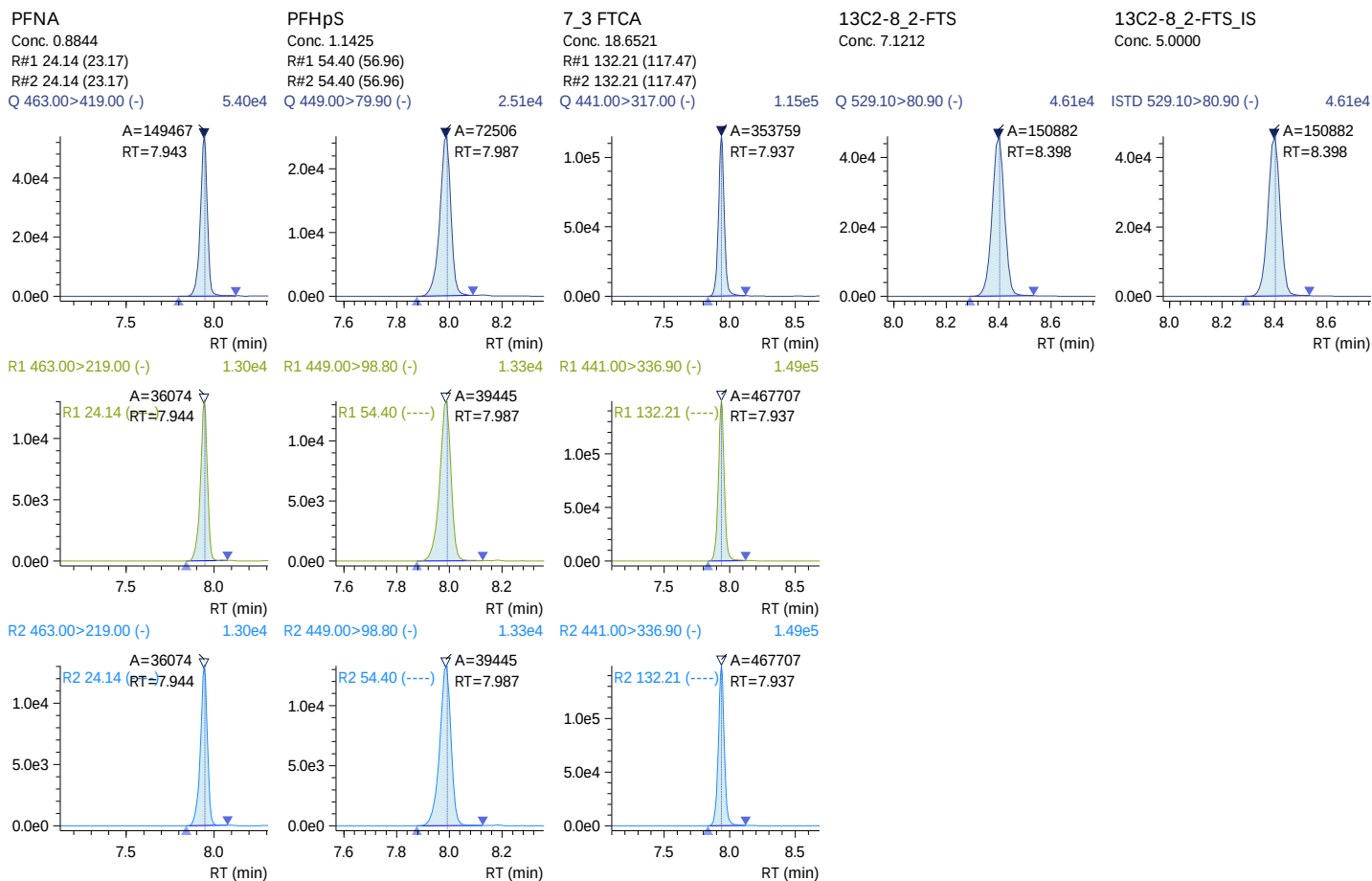


240122_045 (continued)



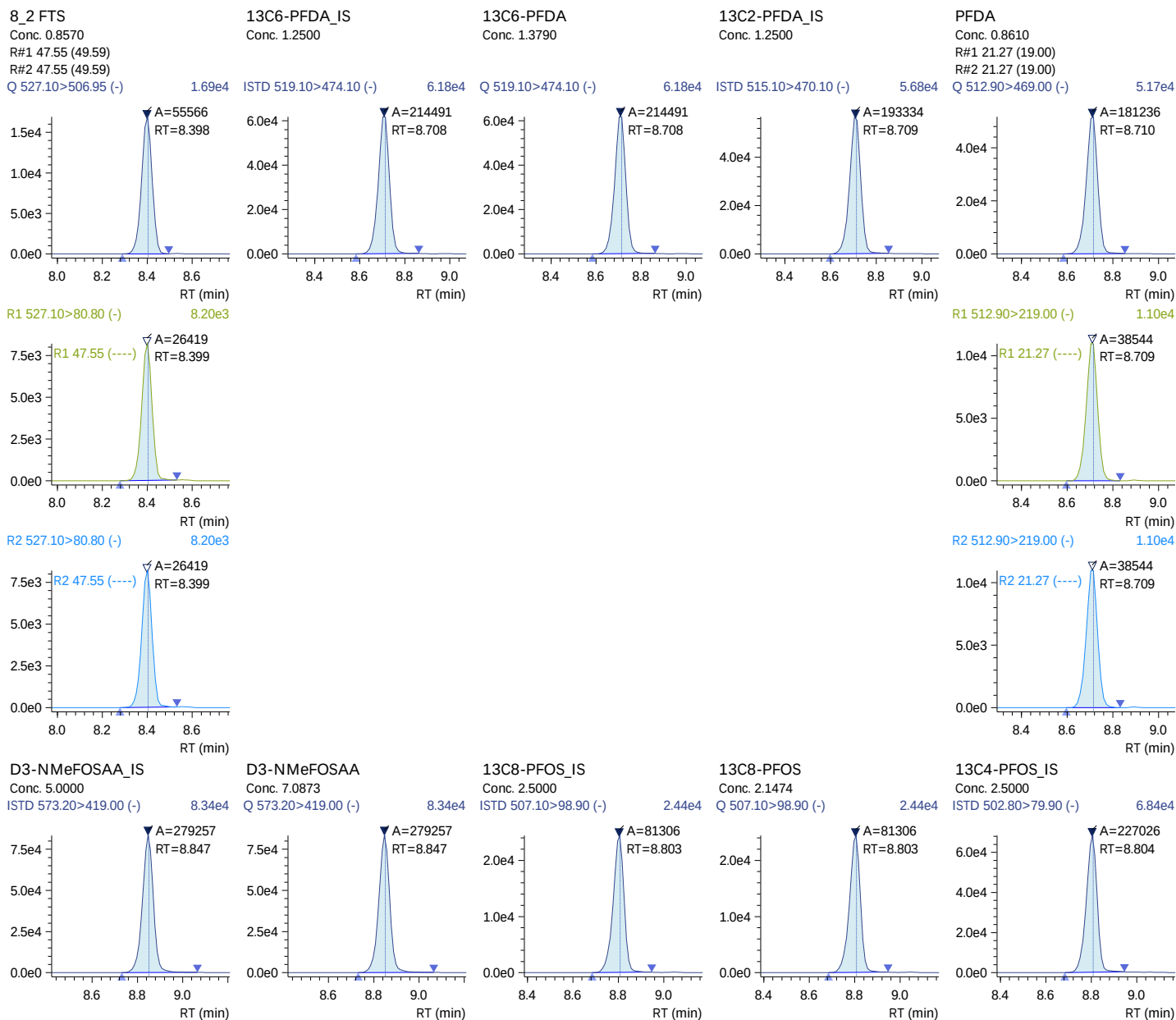


240122_045 (continued)



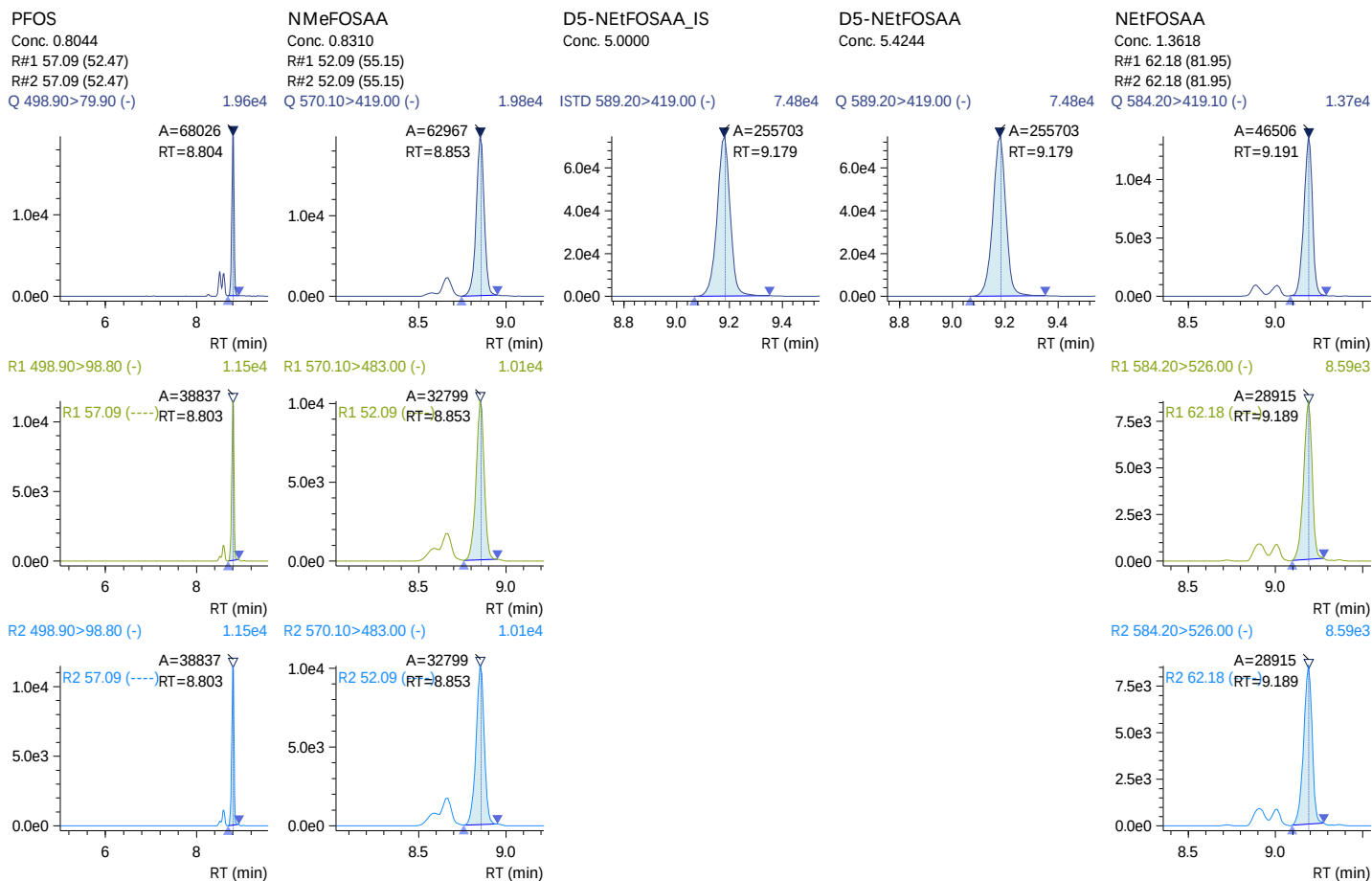


240122_045 (continued)





240122_045 (continued)

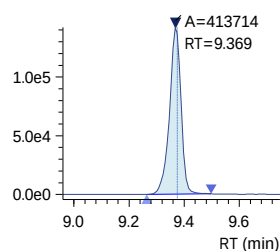




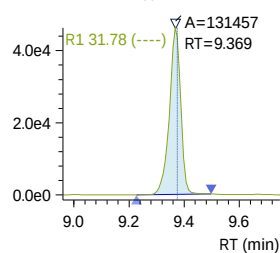
240122_045 (continued)

9-Cl-PF3ONS

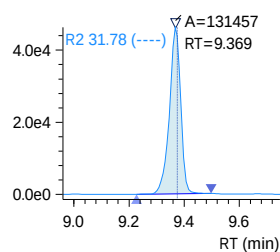
Conc. 0.7754
R#1 31.78 (32.76)
R#2 31.78 (32.76)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-) 4.63e4

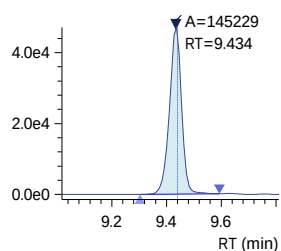


R2 532.80>353.00 (-) 4.63e4

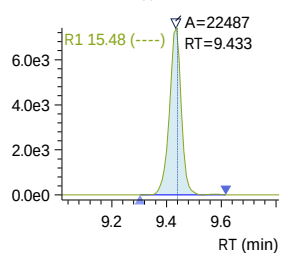


PFUnDA

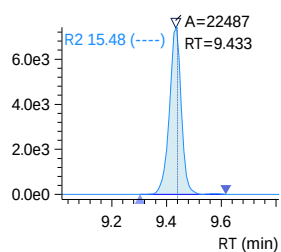
Conc. 0.7982
R#1 15.48 (13.12)
R#2 15.48 (13.12)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-) 7.42e3

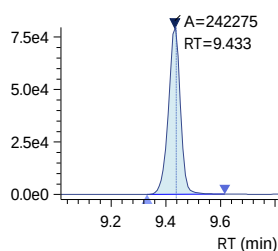


R2 563.10>269.10 (-) 7.42e3



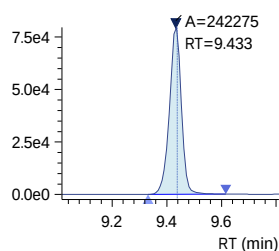
13C7-PFUnDA_IS

Conc. 1.2500
ISTD 570.00>525.10 (-)



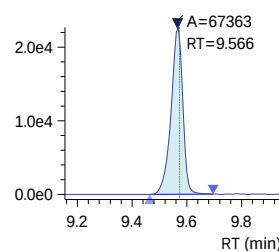
13C7-PFUnDA

Conc. 1.3058
Q 570.00>525.10 (-)

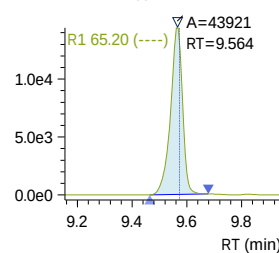


PFNS

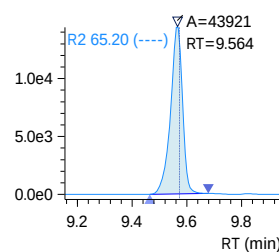
Conc. 1.0904
R#1 65.20 (65.22)
R#2 65.20 (65.22)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-) 1.44e4

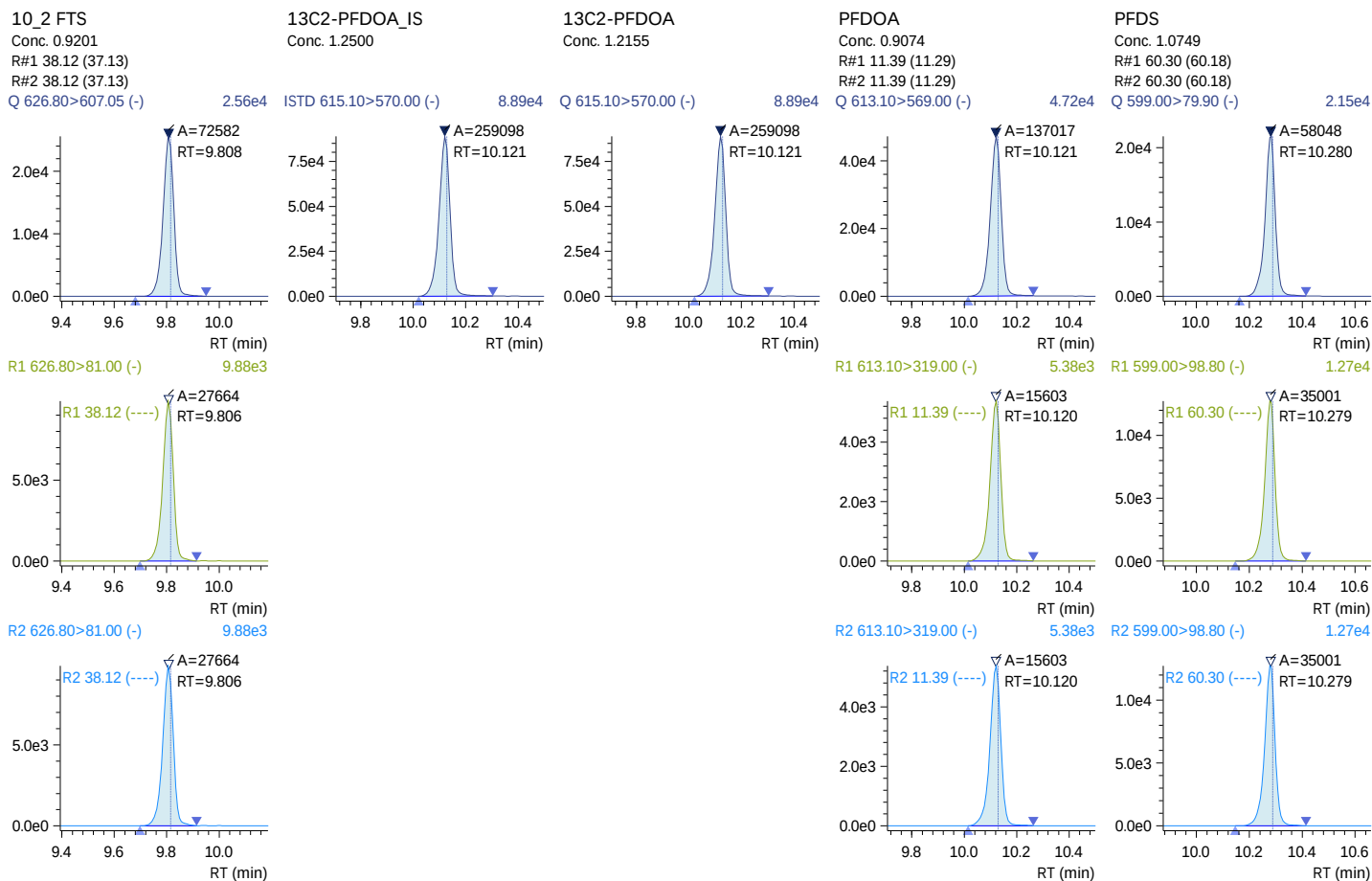


R2 548.80>98.80 (-) 1.44e4





240122_045 (continued)

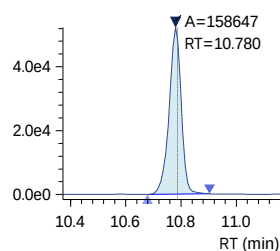




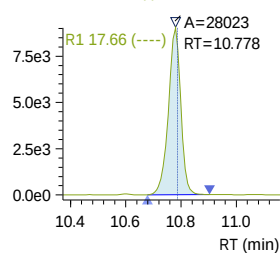
240122_045 (continued)

PFTrDA

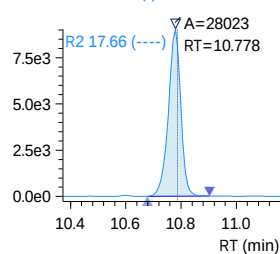
Conc. 0.8943
R#1 17.66 (17.64)
R#2 17.66 (17.64)
Q 663.00>619.00 (-)



R1 663.00>168.90 (-) 9.03e3

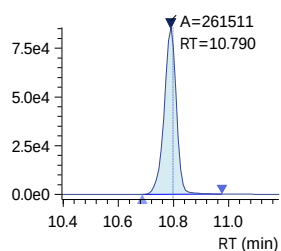


R2 663.00>168.90 (-) 9.03e3

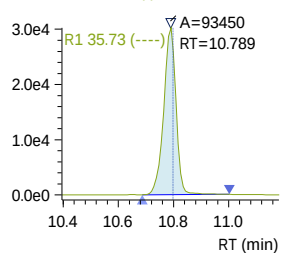


11-Cl-PF3OUdS

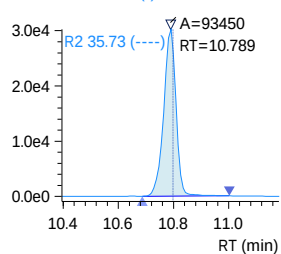
Conc. 0.7115
R#1 35.73 (36.44)
R#2 35.73 (36.44)
Q 630.90>451.00 (-)



R1 632.90>452.90 (-) 3.03e4



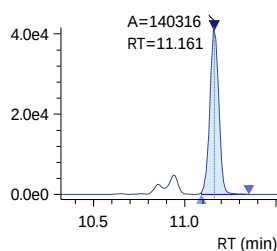
R2 632.90>452.90 (-) 3.03e4



PFOSAm

Conc. 1.6923

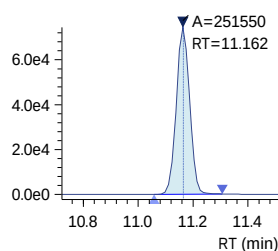
Q 498.10>77.90 (-)



13C8-PFOSAm

Conc. 2.6101

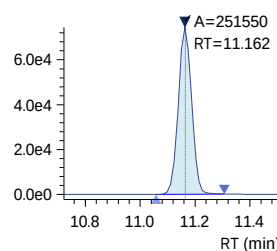
Q 506.10>77.80 (-)



13C8-PFOSAm_IS

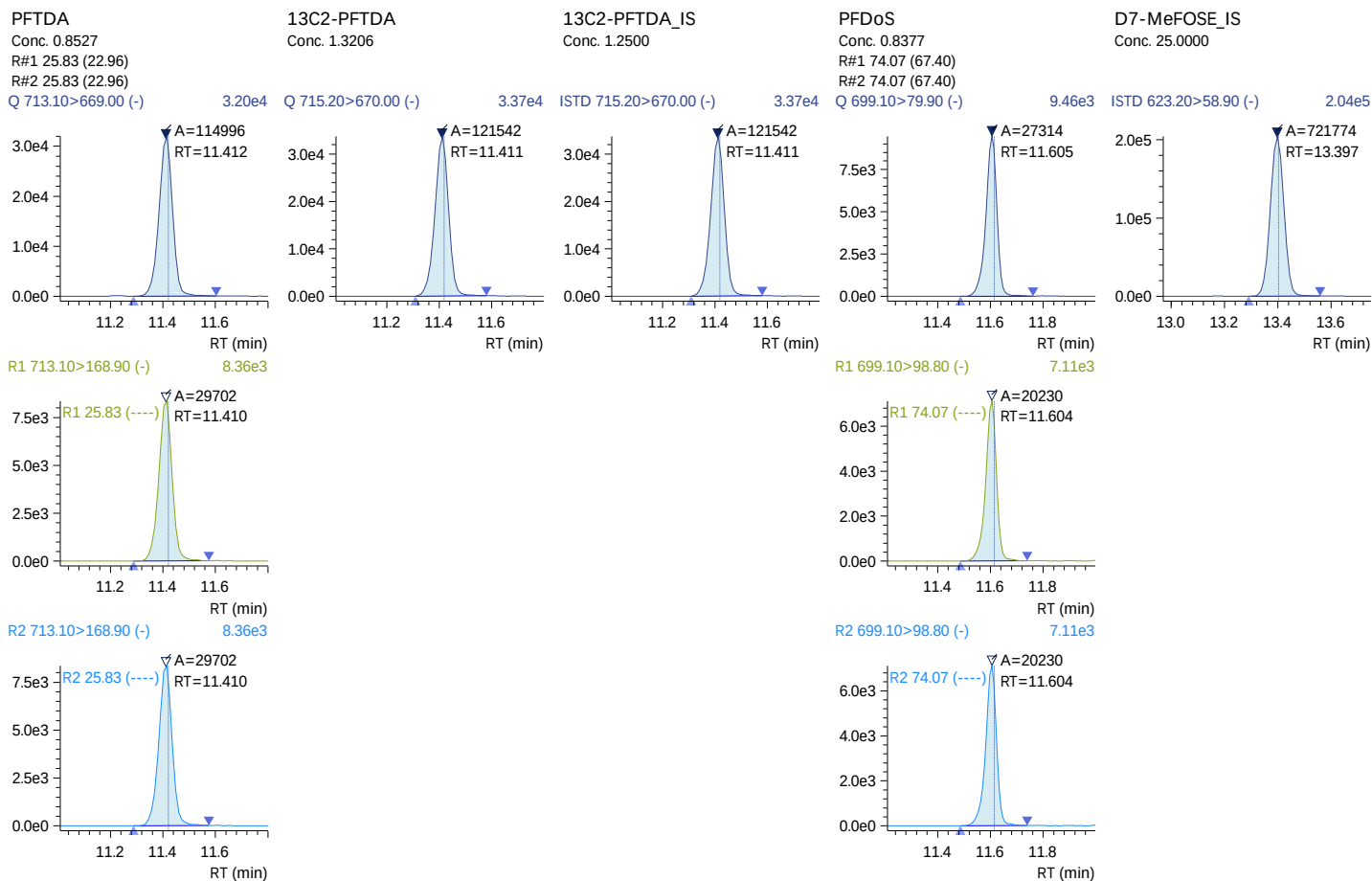
Conc. 2.5000

ISTD 506.10>77.80 (-)





240122_045 (continued)





240122_045 (continued)

D7-MeFOSE
 Conc. 30.3759

MeFOSE
 Conc. 0.6494

¹³C2-PFHXA_IS
 Conc. 2.5000

¹³C2-PFHXA
 Conc. 2.3517

PFHXA
 Conc. 0.9911
 R#1 15.43 (13.90)
 R#2 15.43 (13.90)

Q 623.20>58.90 (-)

2.04e5

Q 616.10>59.00 (-)

4.86e3

ISTD 815.00>770.05 (-)

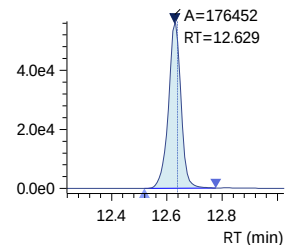
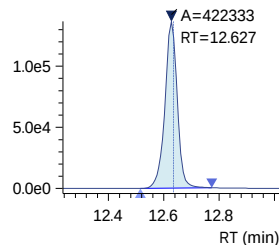
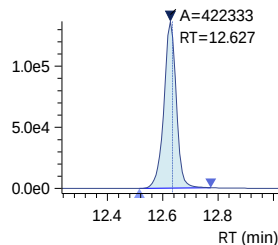
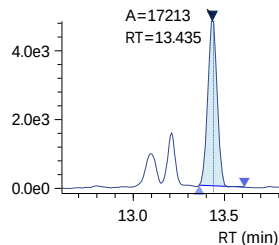
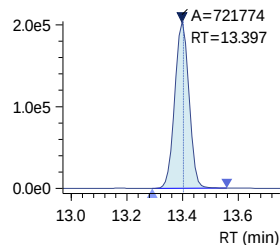
1.37e5

Q 815.00>770.05 (-)

1.37e5

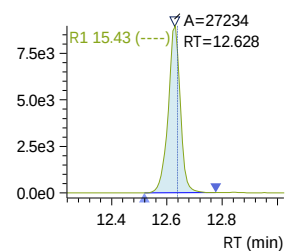
Q 813.00>768.95 (-)

5.66e4



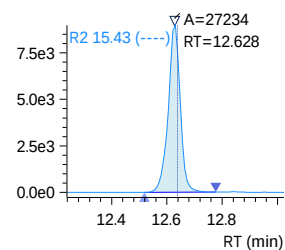
R1 813.00>218.95 (-)

8.98e3



R2 813.00>218.95 (-)

8.98e3





240122_045 (continued)

D3-MeFOSA
 Conc. 2.5297

D3-MeFOSA_IS
 Conc. 2.5000

MeFOSA
 Conc. 0.5983
 R#1 125.07 (140.79)
 R#2 125.07 (140.79)

D9-EtFOSE_IS
 Conc. 25.0000

D9-EtFOSE
 Conc. 32.6686

Q 515.00>219.00 (-)

1.41e4

ISTD 515.00>219.00 (-)

1.41e4

Q 511.90>219.00 (-)

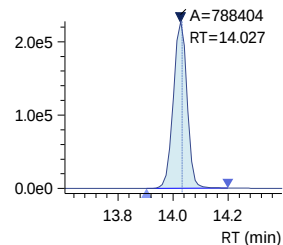
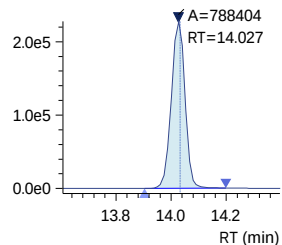
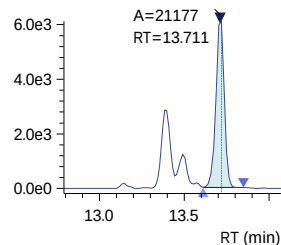
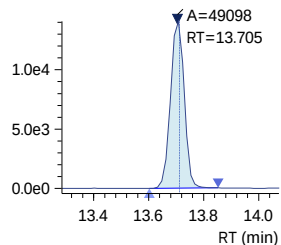
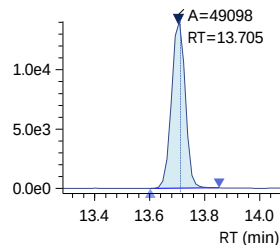
6.12e3

ISTD 639.20>58.90 (-)

2.28e5

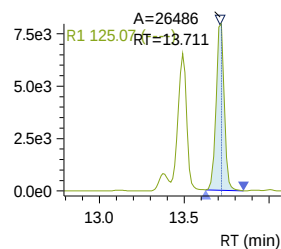
Q 639.20>58.90 (-)

2.28e5



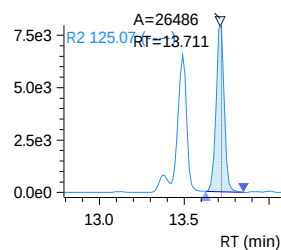
R1 511.90>169.00 (-)

7.98e3



R2 511.90>169.00 (-)

7.98e3





240122_045 (continued)

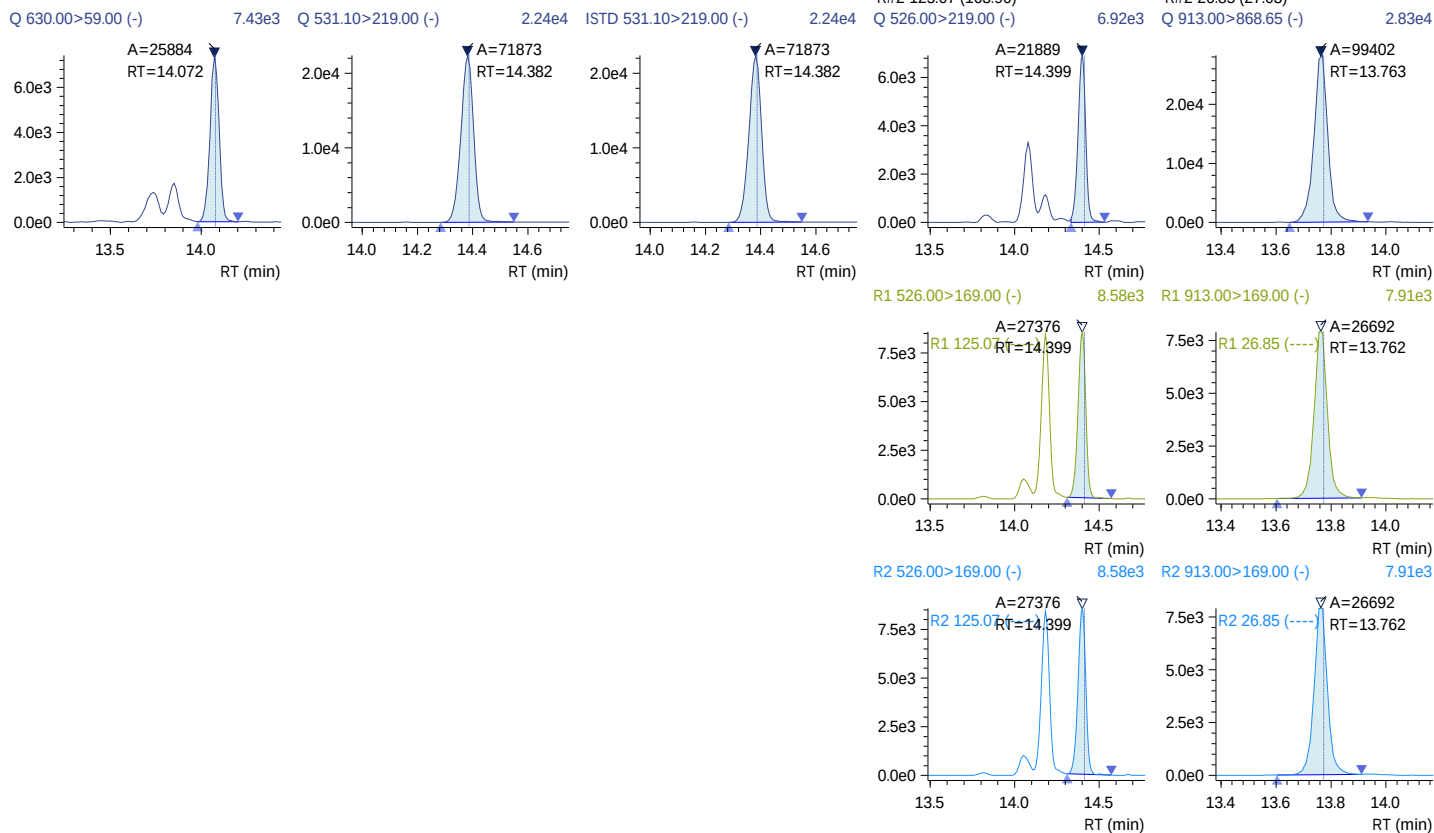
EtFOSE
 Conc. 0.6240

D5-EtFOSAm
 Conc. 2.7814

D5-EtFOSAm_IS
 Conc. 2.5000

EtFOSAm
 Conc. 0.5231
 R#1 125.07 (163.90)
 R#2 125.07 (163.90)

PFODA
 Conc. 1.0408
 R#1 26.85 (27.03)
 R#2 26.85 (27.03)



Validation Report

1st PS 02/06/24
2nd MS 02/06/24

Data File: J:\LCMS08\Data\240201_1633_RA\240201_006
Lab ID: KQ2401707-02
RunType: LLCCV
Matrix: Water

Date Acquired: 2/1/24 12:18
Batch ID: 831587
Analysis Method: 1633/PFAS_DOD5.4

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Internal Standards	X	

Primary Review: _____

Secondary Review: _____

Quantitation Report

1st *PS* 02/06/24
2nd *MS* 02/06/24

Data File:	J:\LCMS08\Data\240201_1633_RA\240201_006	Instrument:	K-LCMS-08
Acqu Date:	2/1/24 12:18	Vial:	2
Run Type:	LLCCV	Dilution:	1
Lab ID:	KQ2401707-02	Raw Units:	ng/mL

Bottle ID:		Tier:	IV	Matrix:	Water
Prod Code:	PFAS_DOD5.4	Collect Date:	10/31/23	Receive Date:	11/7/23

Analysis Lot:	831587	Prep Lot:		Report Group:	KQ2401707
Analysis	1633	Prep Method:			
		Prep Date:			

Title:	Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM	Calibration ID:	KC2400048
		Report List ID:	24615

Internal Standard Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Area Criteria
18O2-PFHxS	7.069		288696	2.5000	OK
13C4-PFOS	8.807		371416	2.5000	OK
13C3-PFBA	1.360		593925	5.0000	OK
13C2-PFHxA	4.955		655651	2.5000	OK
13C4-PFOA	7.098		59269	2.5000	OK
13C5-PFNA	7.948		409996	1.2500	OK
13C2-PFDA	8.712		261376	1.2500	OK

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Rpt?
13C3-PFBS	4.612		291265	2.7040	40 - 135 Y
13C3-PFHxS	7.068		260045	2.5700	40 - 130 Y
13C8-PFOS	8.805		117032	2.5037	40 - 130 Y
13C4-PFBA	1.360		868855	9.8726	5 - 130 Y
13C5-PFPeA	3.461		245836	5.2146	40 - 130 Y
13C5-PFHxA	4.955		507654	2.3987	40 - 130 Y
13C4-PFHpA	6.140		687725	2.5830	40 - 130 Y
13C8-PFOA	7.098		701728	2.4826	40 - 130 Y
13C9-PFNA	7.947		380526	1.2538	40 - 130 Y
13C6-PFDA	8.712		250901	1.1979	40 - 130 Y
13C7-PFUnDA	9.437		317208	1.2188	30 - 130 Y
13C2-PFDoDA	10.126		374951	1.2068	10 - 130 Y
13C2-PFTeDA	11.414		257536	1.1745	10 - 130 Y
13C8-FOSA	11.141		274091	2.3231	40 - 130 Y
D3-MeFOSA	13.683		75805	2.4610	10 - 130 Y
D5-EtFOSA	14.359		100334	2.3559	10 - 130 Y
D7-MeFOSE	13.378		687449	22.6971	10 - 130 Y
D9-EtFOSE	14.005		863483	23.2971	10 - 130 Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 2/6/24 11:52

\\alprews001\starlims\LIMSReps\QuantValidation.rpt

		1st	PS	02/06/24
Data File:	J:\LCMS08\Data\240201_1633_RA\240201_006	Instrument:	K-LCMS08	MS 02/06/24
Acqu Date:	2/1/24 12:18	Vial:	2	
Run Type:	LLCCV	Dilution:	1	
Lab ID:	KQ2401707-02	Raw Units:	ng/mL	

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc		Rpt?
D3-MeFOSAA	8.848		546387	3.6131	40 - 170	Y
D5-EtFOSAA	9.178		485182	4.0711	25 - 135	Y
13C2-4:2 FTS	4.640		212907	3.9178	40 - 200	Y
13C2-6:2 FTS	6.784		187079	3.3069	40 - 200	Y
13C2-8:2 FTS	8.405		173194	3.6059	40 - 300	Y
13C3-HFPO-DA	5.433		721954	12.4251	40 - 130	Y

Target Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc		Rpt?
Perfluorobutane sulfonic acid (PFBS)	4.614		31269	0.2166		Y
Perfluoropentane sulfonic acid (PFPeS)	5.995		25153	0.2444		Y
Perfluorohexane sulfonic acid (PFHxS)	7.069		27215	0.2394		Y
Perfluoroheptane sulfonic acid (PFHpS)	7.990		23143	0.2352		Y
Perfluorooctane sulfonic acid (PFOS)	8.806		22052	0.2206		Y
Perfluorononane sulfonic acid (PFNS)	9.570		24897	0.2514		Y
Perfluorodecane sulfonic acid (PFDS)	10.284		20067	0.2307		Y
Perfluorododecane sulfonic acid (PFDoS)	11.609		12410	0.2288		Y
Perfluorobutanoic acid (PFBA)	1.363		20686	0.2434		Y
Perfluoropentanoic acid (PFPeA)	3.464		41332	0.2401		Y
Perfluorohexanoic acid (PFHxA)	4.957		44044	0.2270		Y
Perfluoroheptanoic acid (PFHpA)	6.141		63385	0.2542		Y
Perfluorooctanoic acid (PFOA)	7.101		65249	0.2384		Y
Perfluorononanoic acid (PFNA)	7.949		65404	0.2451		Y
Perfluorodecanoic acid (PFDA)	8.714		53603	0.2526		Y
Perfluoroundecanoic acid (PFUnDA)	9.439		57380	0.2438		Y
Perfluorododecanoic acid (PFDOA)	10.127		49238	0.2315		Y
Perfluorotridecanoic acid (PFTTrDA)	10.782		68412	0.2479		Y
Perfluorotetradecanoic acid (PFTDA)	11.415		45609	0.2334		Y
Perfluorooctane sulfonamide (PFOSAm)	11.140		43529	0.4539		Y
N-Methylperfluorooctane sulfonamide (MeFOSA)	13.691		10341	0.2391		Y
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	14.378		12462	0.2264		Y
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	13.415		9343	0.2628		Y
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	14.048		10627	0.2534		Y
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	8.853		18738	0.2422		Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 2/6/24 11:52

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		1st	PS	02/06/24
Data File:	J:\LCMS08\Data\240201_1633_RA\240201_006	Instrument:	K-LCMS08	MS 02/06/24
Acqu Date:	2/1/24 12:18	Vial:	2	
Run Type:	LLCCV	Dilution:	1	
Lab ID:	KQ2401707-02	Raw Units:	ng/mL	

Target Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Rpt?
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	9.189		19221	0.2413	Y
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	4.641		26157	0.2478	Y
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	6.784		19884	0.2787	Y
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	8.404		16479	0.2496	Y
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	2.963		33383	9.4801	Y
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	5.874		146612	9.6614	Y
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	7.932		251119	9.4174	Y
Perfluoro(2-ethoxyethane) sulfonic acid (PFEEESA)	5.291		154552	0.2450	Y
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	9.373		142858	0.2018	Y
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	10.791		96229	0.1904	Y
Perfluoro-3-methoxypropanoic acid (PFMPA)	2.390		15914	0.2267	Y
Perfluoro-4-methoxybutanoic acid (PFMBA)	3.993		25681	0.2387	Y
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	5.434		17433	0.2456	Y
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	4.813		28245	0.2682	Y
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	6.507		116060	0.1907	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution



240201_006

Sample ID: 1633 ICAL 0.25PPB
Date Acquired: 2/1/2024 12:18:42 PM
Acquired by: System Administrator
Data File: 240201_006
Vial: 3 | Inj. Volume: 10.0000uL | Tray: 1

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	868855	----	----	----	----	----	----	
13C4-PFBA_IS	216.80>171.90	----	868855	----	----	----	----	----	----	
13C3-PFBA_IS	216.00>172.00	----	593925	----	----	----	----	----	----	
PFBA	212.80>169.05	----	20686	----	----	----	----	----	----	
PFMPA	229.00>84.90	----	15914	----	----	----	----	----	----	
3_3 FTCA	241.00>177.10	241.00>117.00	33383	48162	144.27	139.21	----	----	----	
13C5-PFPeA	268.30>223.00	----	245836	----	----	----	----	----	----	
13C5-PFPeA_IS	268.30>223.00	----	245836	----	----	----	----	----	----	
PFPeA	263.00>219.00	----	41332	----	----	----	----	----	----	
PFMBA	279.00>84.95	----	25681	----	----	----	----	----	----	
13C2-4_2 FTS	329.10>80.90	----	212907	----	----	----	----	----	----	
13C2-4_2 FTS_IS	329.10>80.90	----	212907	----	----	----	----	----	----	
4_2 FTS	327.10>307.00	327.10>80.90	26157	7544	28.84	32.10	7544	28.84	32.79	
13C3-PFBS_IS	302.10>79.90	----	291265	----	----	----	----	----	----	
PFBS	298.70>79.90	298.70>98.80	31269	13804	44.14	44.81	13804	44.14	46.72	
13C3-PFBS	302.10>79.90	----	291265	----	----	----	----	----	----	
NFDHA	295.00>201.00	295.00>84.90	28245	10402	36.83	35.54	10402	36.83	37.91	
13C5-PFHxA	318.00>273.00	----	507654	----	----	----	----	----	----	
13C5-PFHxA_IS	318.00>273.00	----	507654	----	----	----	----	----	----	
13C2-PFHxA_IS	315.10>270.00	----	655651	----	----	----	----	----	----	
PFHxA	313.00>269.00	----	44044	----	----	----	----	----	----	
PFEESA	314.80>135.00	314.80>82.90	154552	9067	5.87	5.22	9067	5.87	5.35	
13C3-HFPO-DA	286.90>168.90	----	721954	----	----	----	----	----	----	
13C3-HFPO-DA_IS	286.90>168.90	----	721954	----	----	----	----	----	----	
HFPO-DA	284.90>168.90	284.90>184.90	17433	11262	64.60	59.79	11262	64.60	58.32	
5_3 FTCA	341.00>237.05	341.00>217.00	146612	233106	159.00	157.08	233106	159.00	155.87	
PFPeS	349.10>79.90	349.10>98.80	25153	14000	55.66	55.12	14000	55.66	54.87	
13C4-PFHpA	367.10>322.00	----	687725	----	----	----	----	----	----	
13C4-PFHpA_IS	367.10>322.00	----	687725	----	----	----	----	----	----	
PFHpA	363.10>319.00	363.10>169.00	63385	13070	20.62	23.02	13070	20.62	20.91	
DONA	376.90>250.90	376.90>84.80	116060	33385	28.77	27.50	33385	28.77	27.00	
13C2-6_2 FTS_IS	429.10>80.90	----	187079	----	----	----	----	----	----	
13C2-6_2 FTS	429.10>80.90	----	187079	----	----	----	----	----	----	AC
6_2 FTS	427.10>407.00	427.10>80.90	19884	8943	44.98	50.47	8943	44.98	46.83	
13C4-PFOA_IS	417.10>172.00	----	59269	----	----	----	----	----	----	
13C8-PFOA_IS	421.10>376.00	----	701728	----	----	----	----	----	----	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240201_006 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	701728	----	----	----	----	----	----	----
PFOA	413.00>369.00	413.00>169.00	65249	15735	24.12	28.77	15735	24.12	28.12	
13C3-PFHxS	402.10>79.90	----	260045	----	----	----	----	----	----	----
13C3-PFHxS_IS	402.10>79.90	----	260045	----	----	----	----	----	----	----
PFHxS	398.70>79.90	398.70>98.90	27215	15489	56.91	60.90	15489	56.91	61.53	
18O2-PFHxS_IS	403.00>83.90	----	288696	----	----	----	----	----	----	----
13C9-PFNA_IS	472.10>427.00	----	380526	----	----	----	----	----	----	----
13C9-PFNA	472.10>427.00	----	380526	----	----	----	----	----	----	----
13C5-PFNA_IS	468.00>423.00	----	409996	----	----	----	----	----	----	----
PFNA	463.00>419.00	463.00>219.00	65404	13520	20.67	19.31	13520	20.67	20.30	
PFHpS	449.00>79.90	449.00>98.80	23143	12464	53.86	52.44	12464	53.86	52.33	
7_3 FTCA	441.00>317.00	441.00>336.90	251119	343115	136.64	129.46	343115	136.64	129.73	
13C2-8_2-FTS	529.10>80.90	----	173194	----	----	----	----	----	----	----
13C2-8_2-FTS_IS	529.10>80.90	----	173194	----	----	----	----	----	----	----
8_2 FTS	527.10>506.95	527.10>80.80	16479	7814	47.42	45.98	7814	47.42	43.25	
13C6-PFDA_IS	519.10>474.10	----	250901	----	----	----	----	----	----	----
13C6-PFDA	519.10>474.10	----	250901	----	----	----	----	----	----	----
13C2-PFDA_IS	515.10>470.10	----	261376	----	----	----	----	----	----	----
PFDA	512.90>469.00	512.90>219.00	53603	8372	15.62	17.88	8372	15.62	18.89	
D3-NMeFOSAA_IS	573.20>419.00	----	546387	----	----	----	----	----	----	----
D3-NMeFOSAA	573.20>419.00	----	546387	----	----	----	----	----	----	----
13C8-PFOS_IS	507.10>98.90	----	117032	----	----	----	----	----	----	----
13C8-PFOS	507.10>98.90	----	117032	----	----	----	----	----	----	----
13C4-PFOS_IS	502.80>79.90	----	371416	----	----	----	----	----	----	----
PFOS	498.90>79.90	498.90>98.80	22052	12244	55.52	53.60	12245	55.53	52.29	
NMeFOSAA	570.10>419.00	570.10>483.00	18738	12383	66.08	64.89	12383	66.08	60.97	
D5-NEtFOSAA_IS	589.20>419.00	----	485182	----	----	----	----	----	----	----
D5-NEtFOSAA	589.20>419.00	----	485182	----	----	----	----	----	----	----
NEtFOSAA	584.20>419.10	584.20>526.00	19221	16147	84.00	96.07	16147	84.00	94.54	
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	142858	42920	30.04	30.95	42920	30.04	30.61	
PFUnDA	563.10>519.00	563.10>269.10	57380	7284	12.70	11.01	7284	12.70	12.02	
13C7-PFUnDA_IS	570.00>525.10	----	317208	----	----	----	----	----	----	----
13C7-PFUnDA	570.00>525.10	----	317208	----	----	----	----	----	----	----
PFNS	548.80>79.90	548.80>98.80	24897	13675	54.93	60.44	13675	54.93	58.51	
10_2 FTS	626.80>607.05	626.80>81.00	21818	7235	33.16	36.14	7235	33.16	33.04	
13C2-PFDOA_IS	615.10>570.00	----	374951	----	----	----	----	----	----	----
13C2-PFDOA	615.10>570.00	----	374951	----	----	----	----	----	----	----
PFDOA	613.10>569.00	613.10>319.00	49238	5423	11.01	10.16	5423	11.01	10.60	
PFDS	599.00>79.90	599.00>98.80	20067	11800	58.80	58.26	11800	58.80	61.78	
PFTrDA	663.00>619.00	663.00>168.90	68412	10003	14.62	16.18	10003	14.62	14.85	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240201_006 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	96229	31547	32.78	34.99	31547	32.78	34.39	
PFOSAm	498.10>77.90	----	43529	----	----	----	----	----	----	
13C8-PFOSAm	506.10>77.80	----	274091	----	----	----	----	----	----	
13C8-PFOSAm_IS	506.10>77.80	----	274091	----	----	----	----	----	----	
PFTDA	713.10>669.00	713.10>168.90	45609	8833	19.37	18.05	8833	19.37	17.39	
13C2-PFTDA	715.20>670.00	----	257536	----	----	----	----	----	----	
13C2-PFTDA_IS	715.20>670.00	----	257536	----	----	----	----	----	----	
PFDoS	699.10>79.90	699.10>98.80	12410	7609	61.32	61.13	7609	61.32	62.47	
D7-MeFOSE_IS	623.20>58.90	----	687449	----	----	----	----	----	----	
D7-MeFOSE	623.20>58.90	----	687449	----	----	----	----	----	----	
MeFOSE	616.10>59.00	----	9343	----	----	----	----	----	----	
13C2-PFHxDA_IS	815.00>770.05	----	686647	----	----	----	----	----	----	
13C2-PFHxDA	815.00>770.05	----	686647	----	----	----	----	----	----	
PFHxDA	813.00>768.95	813.00>218.95	93121	10362	11.13	11.66	10362	11.13	10.99	
D3-MeFOSA	515.00>219.00	----	75805	----	----	----	----	----	----	
D3-MeFOSA_IS	515.00>219.00	----	75805	----	----	----	----	----	----	
MeFOSA	511.90>219.00	511.90>169.00	10341	15412	149.03	160.44	15412	149.03	161.92	
D9-EtFOSE_IS	639.20>58.90	----	874409	----	----	----	----	----	----	
D9-EtFOSE	639.20>58.90	----	863483	----	----	----	----	----	----	
EtFOSE	630.00>59.00	----	10627	----	----	----	----	----	----	
D5-EtFOSAm	531.10>219.00	----	100334	----	----	----	----	----	----	
D5-EtFOSAm_IS	531.10>219.00	----	100334	----	----	----	----	----	----	
EtFOSAm	526.00>219.00	526.00>169.00	12462	20727	166.32	159.63	20727	166.32	172.60	
PFODA	913.00>868.65	913.00>169.00	35999	12042	33.45	36.03	12042	33.45	35.02	

Flag ID key: AC: Accuracy%



240201_006

Sample ID: 1633 ICAL 0.25PPB
Date Acquired: 2/1/2024 12:18:42 PM
Acquired by: System Administrator
Data File: 240201_006
Vial: 3 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.360	0.007	0.000	868855	593925	13C3-PFBA_IS	9.8726	ng/mL	
13C4-PFBA_IS	Auto	1.360	0.007	----	868855	868855	----	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.360	0.005	----	593925	593925	----	5.0000	ng/mL	
PFBA	Auto	1.363	0.007	0.003	20686	868855	13C4-PFBA_IS	0.2434	ng/mL	
PFMPA	Auto	2.390	0.009	-1.071	15914	245836	13C5-PFPeA_IS	0.2267	ng/mL	
3_3 FTCA	Auto	2.963	0.007	-0.498	33383	245836	13C5-PFPeA_IS	9.4801	ng/mL	
13C5-PFPeA	Auto	3.461	0.006	-1.494	245836	655651	13C2-PFHxA_IS	5.2146	ng/mL	
13C5-PFPeA_IS	Auto	3.461	0.006	----	245836	245836	----	5.0000	ng/mL	
PFPeA	Auto	3.464	0.006	0.003	41332	245836	13C5-PFPeA_IS	0.2401	ng/mL	
PFMBA	Auto	3.993	0.009	0.532	25681	245836	13C5-PFPeA_IS	0.2387	ng/mL	
13C2-4_2 FTS	Auto	4.640	0.007	-2.429	212907	288696	18O2-PFHxS_IS	3.9178	ng/mL	
13C2-4_2 FTS_IS	Auto	4.640	0.007	----	212907	212907	----	5.0000	ng/mL	
4_2 FTS	Auto	4.641	0.008	0.001	26157	212907	13C2-4_2 FTS_IS	0.2478	ng/mL	
13C3-PFBS_IS	Auto	4.612	0.009	----	291265	291265	----	2.5000	ng/mL	
PFBS	Auto	4.614	0.009	0.002	31269	291265	13C3-PFBS_IS	0.2166	ng/mL	
13C3-PFBS	Auto	4.612	0.009	-2.457	291265	288696	18O2-PFHxS_IS	2.7040	ng/mL	
NFDHA	Auto	4.813	0.008	-0.142	28245	507654	13C5-PFHxA_IS	0.2682	ng/mL	
13C5-PFHxA	Auto	4.955	0.008	0.000	507654	655651	13C2-PFHxA_IS	2.3987	ng/mL	
13C5-PFHxA_IS	Auto	4.955	0.008	----	507654	507654	----	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	4.955	0.008	----	655651	655651	----	2.5000	ng/mL	
PFHxA	Auto	4.957	0.008	0.002	44044	507654	13C5-PFHxA_IS	0.2270	ng/mL	
PFEESA	Auto	5.291	0.009	0.336	154552	507654	13C5-PFHxA_IS	0.2450	ng/mL	
13C3-HFPO-DA	Auto	5.433	0.008	0.478	721954	655651	13C2-PFHxA_IS	12.4251	ng/mL	
13C3-HFPO-DA_IS	Auto	5.433	0.008	----	721954	721954	----	10.0000	ng/mL	
HFPO-DA	Auto	5.434	0.007	0.001	17433	721954	13C3-HFPO-DA_IS	0.2456	ng/mL	
5_3 FTCA	Auto	5.874	0.006	0.919	146612	507654	13C5-PFHxA_IS	9.6614	ng/mL	
PFPeS	Auto	5.995	0.007	-1.073	25153	260045	13C3-PFHxS_IS	0.2444	ng/mL	
13C4-PFHpA	Auto	6.140	0.008	1.185	687725	655651	13C2-PFHxA_IS	2.5830	ng/mL	
13C4-PFHpA_IS	Auto	6.140	0.008	----	687725	687725	----	2.5000	ng/mL	
PFHpA	Auto	6.141	0.007	0.001	63385	687725	13C4-PFHpA_IS	0.2542	ng/mL	
DONA	Auto	6.507	0.006	1.074	116060	721954	13C3-HFPO-DA_IS	0.1907	ng/mL	
13C2-6_2 FTS_IS	Auto	6.784	0.006	----	187079	187079	----	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.784	0.006	-0.285	187079	288696	18O2-PFHxS_IS	3.3069	ng/mL	AC
6_2 FTS	Auto	6.784	0.007	0.000	19884	187079	13C2-6_2 FTS_IS	0.2787	ng/mL	
13C4-PFOA_IS	Auto	7.098	0.007	----	59269	59269	----	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.098	0.007	----	701728	701728	----	2.5000	ng/mL	
13C8-PFOA	Auto	7.098	0.007	0.000	701728	59269	13C4-PFOA_IS	2.4826	ng/mL	
PFOA	Auto	7.101	0.008	0.003	65249	701728	13C8-PFOA_IS	0.2384	ng/mL	
13C3-PFHxS	Auto	7.068	0.006	-0.001	260045	288696	18O2-PFHxS_IS	2.5700	ng/mL	
13C3-PFHxS_IS	Auto	7.068	0.006	----	260045	260045	----	2.5000	ng/mL	
PFHxS	Auto	7.069	0.007	0.001	27215	260045	13C3-PFHxS_IS	0.2394	ng/mL	
18O2-PFHxS_IS	Auto	7.069	0.007	----	288696	288696	----	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.947	0.006	----	380526	380526	----	1.2500	ng/mL	
13C9-PFNA	Auto	7.947	0.006	-0.001	380526	409996	13C5-PFNA_IS	1.2538	ng/mL	
13C5-PFNA_IS	Auto	7.948	0.006	----	409996	409996	----	1.2500	ng/mL	
PFNA	Auto	7.949	0.006	0.002	65404	380526	13C9-PFNA_IS	0.2451	ng/mL	
PFHpS	Auto	7.990	0.007	-0.815	23143	117032	13C8-PFOS_IS	0.2352	ng/mL	
7_3 FTCA	Auto	7.932	0.004	2.977	251119	507654	13C5-PFHxA_IS	9.4174	ng/mL	
13C2-8_2-FTS	Auto	8.405	0.006	1.336	173194	288696	18O2-PFHxS_IS	3.6059	ng/mL	
13C2-8_2-FTS_IS	Auto	8.405	0.006	----	173194	173194	----	5.0000	ng/mL	
8_2 FTS	Auto	8.404	0.006	-0.001	16479	173194	13C2-8_2-FTS_IS	0.2496	ng/mL	
13C6-PFDA_IS	Auto	8.712	0.005	----	250901	250901	----	1.2500	ng/mL	
13C6-PFDA	Auto	8.712	0.005	0.000	250901	261376	13C2-PFDA_IS	1.1979	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_006 (continued)

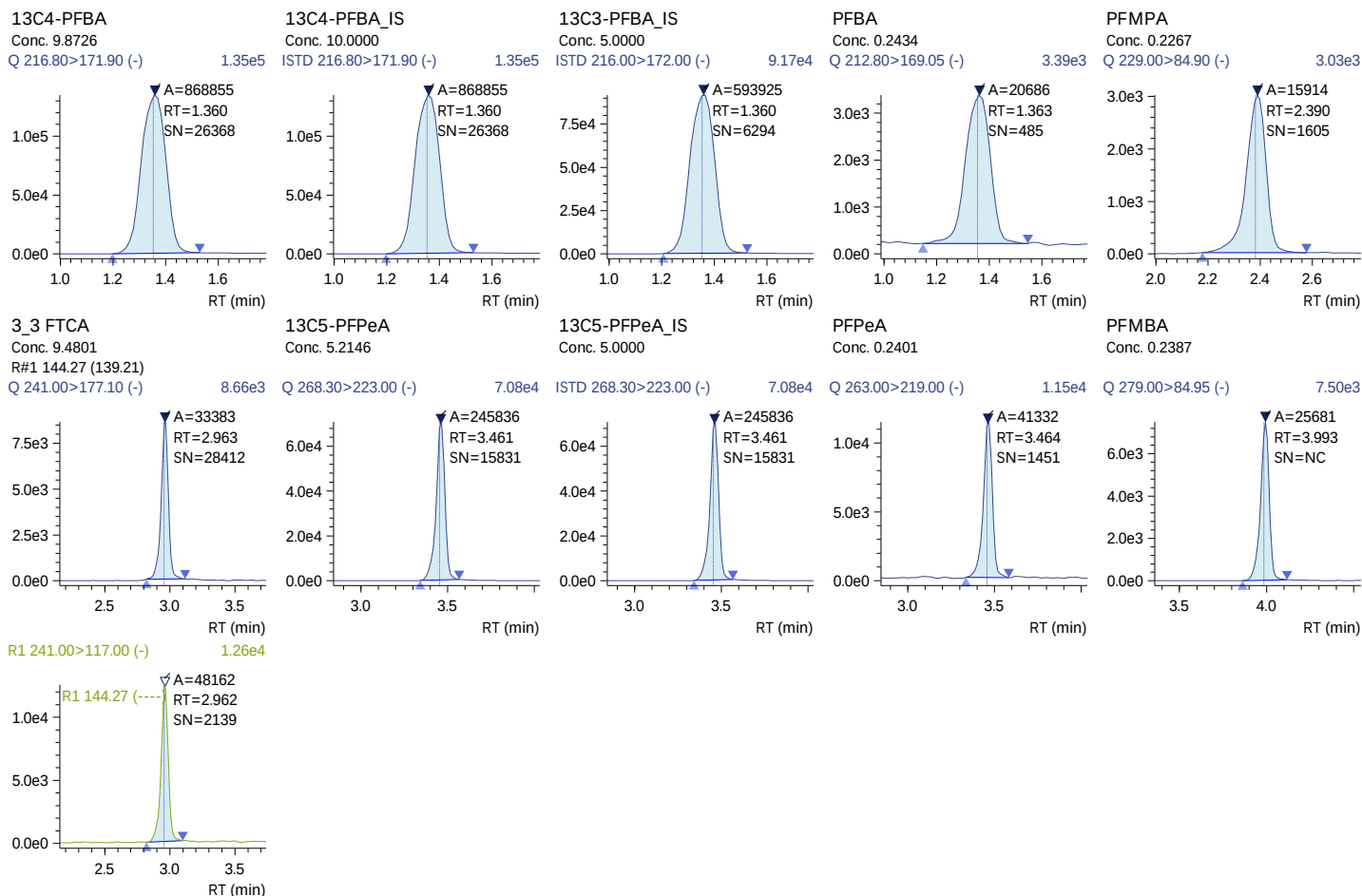
(Table continued from previous page)

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C2-PFDA_IS	Auto	8.712	0.004	----	261376	261376	----	1.2500	ng/mL	
PFDA	Auto	8.714	0.005	0.002	53603	250901	13C6-PFDA_IS	0.2526	ng/mL	
D3-NMeFOSAA_IS	Auto	8.848	0.005	----	546387	546387	----	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.848	0.005	0.041	546387	371416	13C4-PFOS_IS	3.6131	ng/mL	
13C8-PFOS_IS	Auto	8.805	0.005	----	117032	117032	----	2.5000	ng/mL	
13C8-PFOS	Auto	8.805	0.005	-0.002	117032	371416	13C4-PFOS_IS	2.5037	ng/mL	
13C4-PFOS_IS	Auto	8.807	0.007	----	371416	371416	----	2.5000	ng/mL	
PFOS	MI R1 R2	8.806	0.005	0.001	22052	117032	13C8-PFOS_IS	0.2206	ng/mL	
NMeFOSAA	M	8.853	0.005	0.005	18738	546387	D3-NMeFOSAA_IS	0.2422	ng/mL	
D5-NetFOSAA_IS	Auto	9.178	0.006	----	485182	485182	----	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.178	0.006	0.371	485182	371416	13C4-PFOS_IS	4.0711	ng/mL	
NetFOSAA	M	9.189	0.006	0.011	19221	485182	D5-NetFOSAA_IS	0.2413	ng/mL	
9-CI-PF3ONS	Auto	9.373	0.008	3.940	142858	721954	13C3-HFPO-DA_IS	0.2018	ng/mL	
PFUnDA	Auto	9.439	0.006	0.002	57380	317208	13C7-PFUnDA_IS	0.2438	ng/mL	
13C7-PFUnDA_IS	Auto	9.437	0.007	----	317208	317208	----	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.437	0.007	0.725	317208	261376	13C2-PFDA_IS	1.2188	ng/mL	
PFNS	Auto	9.570	0.008	0.765	24897	117032	13C8-PFOS_IS	0.2514	ng/mL	
10_2_FTS	Auto	9.814	0.008	1.409	21818	173194	13C2-8_2-FTS_IS	0.2494	ng/mL	
13C2-PFDOA_IS	Auto	10.126	0.008	----	374951	374951	----	1.2500	ng/mL	
13C2-PFDOA	Auto	10.126	0.008	1.414	374951	261376	13C2-PFDA_IS	1.2068	ng/mL	
PFDOA	Auto	10.127	0.008	0.001	49238	374951	13C2-PFDOA_IS	0.2315	ng/mL	
PFDS	Auto	10.284	0.008	1.479	20067	117032	13C8-PFOS_IS	0.2307	ng/mL	
PFTDA	Auto	10.782	0.007	-0.632	68412	257536	13C2-PFTDA_IS	0.2479	ng/mL	
11-CI-PF3OUdS	Auto	10.791	0.008	5.358	96229	721954	13C3-HFPO-DA_IS	0.1904	ng/mL	
PFOSAm	M	11.140	-0.002	-0.001	43529	274091	13C8-PFOSAm_IS	0.4539	ng/mL	
13C8-PFOSAm	Auto	11.141	-0.001	2.334	274091	371416	13C4-PFOS_IS	2.3231	ng/mL	
13C8-PFOSAm_IS	Auto	11.141	-0.001	----	274091	274091	----	2.5000	ng/mL	
PFTDA	Auto	11.415	0.007	0.001	45609	257536	13C2-PFTDA_IS	0.2334	ng/mL	
13C2-PFTDA	Auto	11.414	0.008	2.702	257536	261376	13C2-PFDA_IS	1.1745	ng/mL	
13C2-PFTDA_IS	Auto	11.414	0.008	----	257536	257536	----	1.2500	ng/mL	
PFDoS	Auto	11.609	0.009	2.803	12410	117032	13C8-PFOS_IS	0.2288	ng/mL	
D7-MeFOSE_IS	Auto	13.378	-0.002	----	687449	687449	----	25.0000	ng/mL	
D7-MeFOSE	Auto	13.378	-0.002	4.571	687449	371416	13C4-PFOS_IS	22.6971	ng/mL	
MeFOSE	M	13.415	-0.002	0.037	9343	687449	D7-MeFOSE_IS	0.2628	ng/mL	
13C2-PFHxDA_IS	Auto	12.627	0.007	----	686647	686647	----	2.5000	ng/mL	
13C2-PFHxDA	Auto	12.627	0.007	3.915	686647	261376	13C2-PFDA_IS	2.3398	ng/mL	
PFHxDA	Auto	12.628	0.007	0.001	93121	686647	13C2-PFHxDA_IS	0.2510	ng/mL	
D3-MeFOSA	Auto	13.683	-0.002	4.876	75805	371416	13C4-PFOS_IS	2.4610	ng/mL	
D3-MeFOSA_IS	Auto	13.683	-0.002	----	75805	75805	----	2.5000	ng/mL	
MeFOSA	M	13.691	-0.003	0.008	10341	75805	D3-MeFOSA_IS	0.2391	ng/mL	
D9-EtFOSE_IS	Auto	14.005	-0.003	----	874409	874409	----	25.0000	ng/mL	
D9-EtFOSE	Auto	14.005	-0.003	5.198	863483	371416	13C4-PFOS_IS	23.2971	ng/mL	
EtFOSE	M	14.048	-0.002	0.043	10627	874409	D9-EtFOSE_IS	0.2534	ng/mL	
D5-EtFOSAm	Auto	14.359	-0.002	5.552	100334	371416	13C4-PFOS_IS	2.3559	ng/mL	
D5-EtFOSAm_IS	Auto	14.359	-0.002	----	100334	100334	----	2.5000	ng/mL	
EtFOSAm	M	14.378	-0.001	0.019	12462	100334	D5-EtFOSAm_IS	0.2264	ng/mL	
PFODA	Auto	13.762	0.006	1.135	35999	686647	13C2-PFHxDA_IS	0.2692	ng/mL	

Flag ID key: AC: Accuracy%



240201_006 (continued)





240201_006 (continued)

13C2-4_2 FTS
Conc. 3.9178

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. 0.2478
R#1 28.84 (32.10)
R#2 28.84 (32.79)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 0.2166
R#1 44.14 (44.81)
R#2 44.14 (46.72)

Q 329.10>80.90 (-)

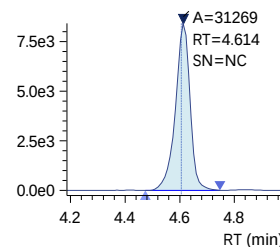
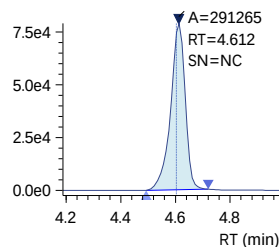
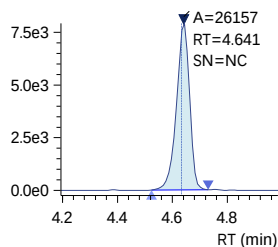
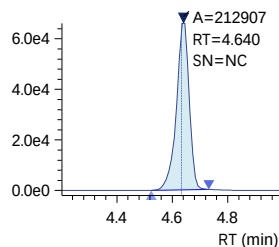
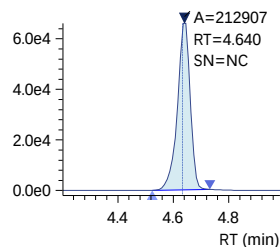
6.61e4 ISTD 329.10>80.90 (-)

6.61e4 Q 327.10>307.00 (-)

7.92e3 ISTD 302.10>79.90 (-)

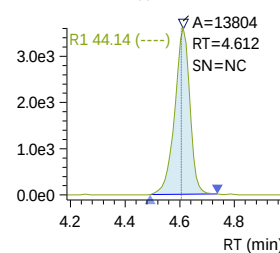
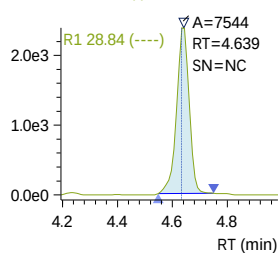
7.91e4 Q 298.70>79.90 (-)

8.42e3



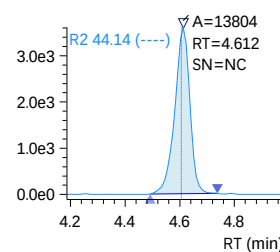
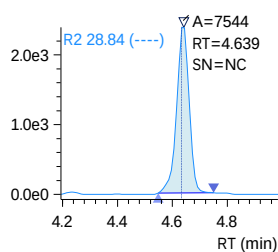
R1 327.10>80.90 (-) 2.40e3

R1 298.70>98.80 (-) 3.62e3



R2 327.10>80.90 (-) 2.40e3

R2 298.70>98.80 (-) 3.62e3





240201_006 (continued)

13C3-PFBS
Conc. 2.7040

NFDHA
Conc. 0.2682
R#1 36.83 (35.54)
R#2 36.83 (37.91)

13C5-PFHxA
Conc. 2.3987

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

Q 302.10>79.90 (-)

7.91e4

Q 295.00>201.00 (-)

8.35e3

Q 318.00>273.00 (-)

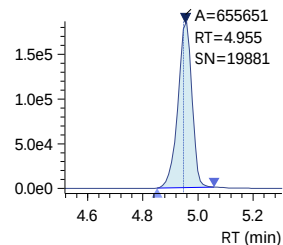
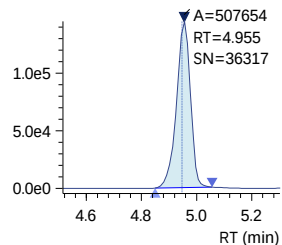
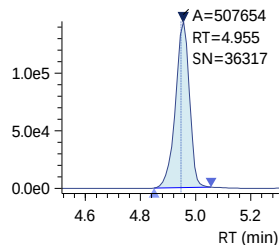
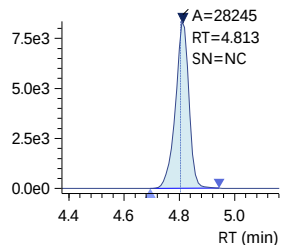
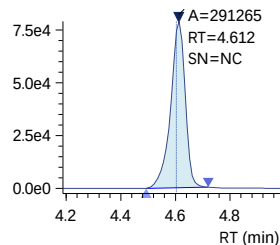
1.45e5

ISTD 318.00>273.00 (-)

1.45e5

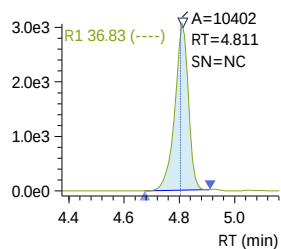
ISTD 315.10>270.00 (-)

1.87e5



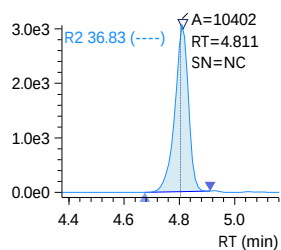
R1 295.00>84.90 (-)

3.07e3



R2 295.00>84.90 (-)

3.07e3





240201_006 (continued)

PFHxA
Conc. 0.2270

PFEESA
Conc. 0.2450

13C3-HFPO-DA
Conc. 12.4251

13C3-HFPO-DA_IS
Conc. 10.0000

HFPO-DA
Conc. 0.2456

Q 313.00>269.00 (-)

1.31e4

Q 314.80>135.00 (-)

4.51e4

Q 286.90>168.90 (-)

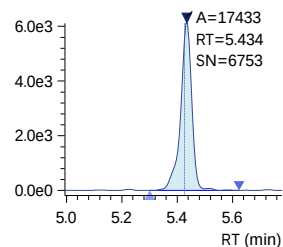
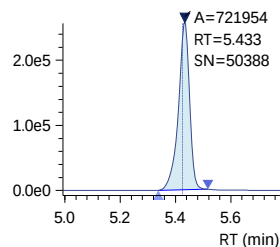
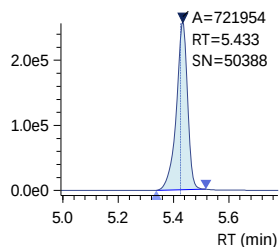
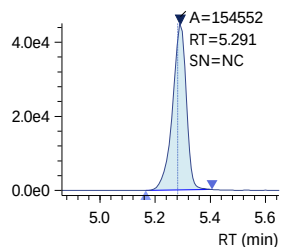
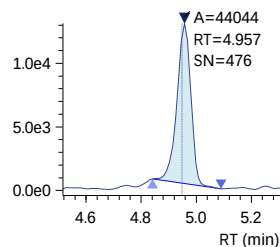
2.57e5

ISTD 286.90>168.90 (-)

2.57e5

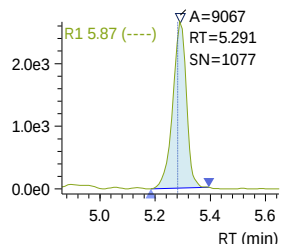
Q 284.90>168.90 (-)

6.11e3



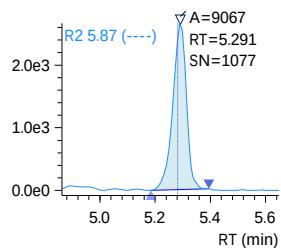
R1 314.80>82.90 (-)

2.67e3



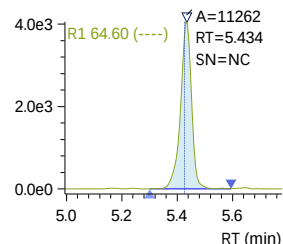
R2 314.80>82.90 (-)

2.67e3



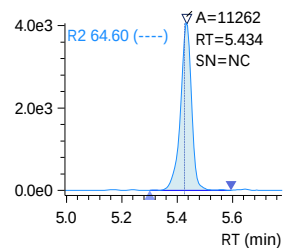
R1 284.90>184.90 (-)

4.06e3



R2 284.90>184.90 (-)

4.06e3



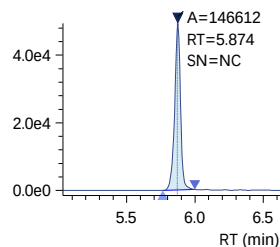


240201_006 (continued)

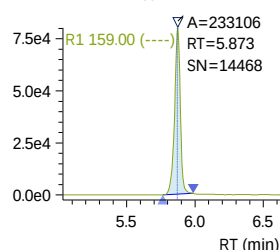
5_3 FTCA
Conc. 9.6614

R#1 159.00 (157.08)
R#2 159.00 (155.87)

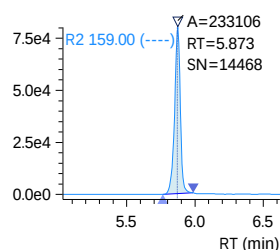
Q 341.00>237.05 (-)



R1 341.00>217.00 (-)



R2 341.00>217.00 (-)

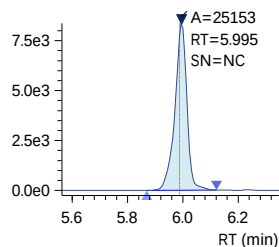


PFPeS

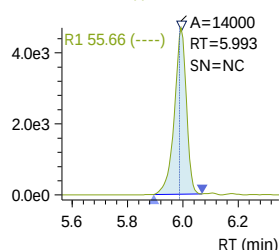
Conc. 0.2444

R#1 55.66 (55.12)
R#2 55.66 (54.87)

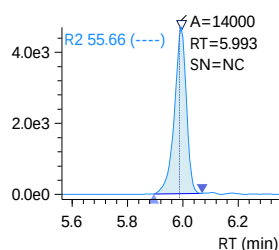
Q 349.10>79.90 (-)



R1 349.10>98.80 (-)

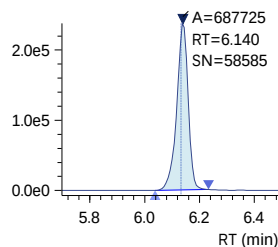


R2 349.10>98.80 (-)



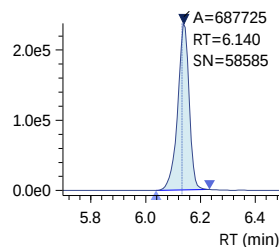
13C4-PFHpA
Conc. 2.5830

Q 367.10>322.00 (-)



13C4-PFHpA_IS
Conc. 2.5000

ISTD 367.10>322.00 (-)

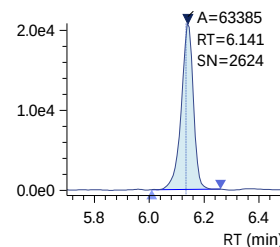


PFHpA

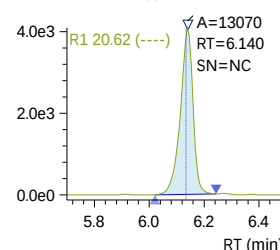
Conc. 0.2542

R#1 20.62 (23.02)
R#2 20.62 (20.91)

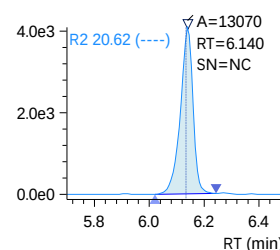
Q 363.10>319.00 (-)



R1 363.10>169.00 (-)

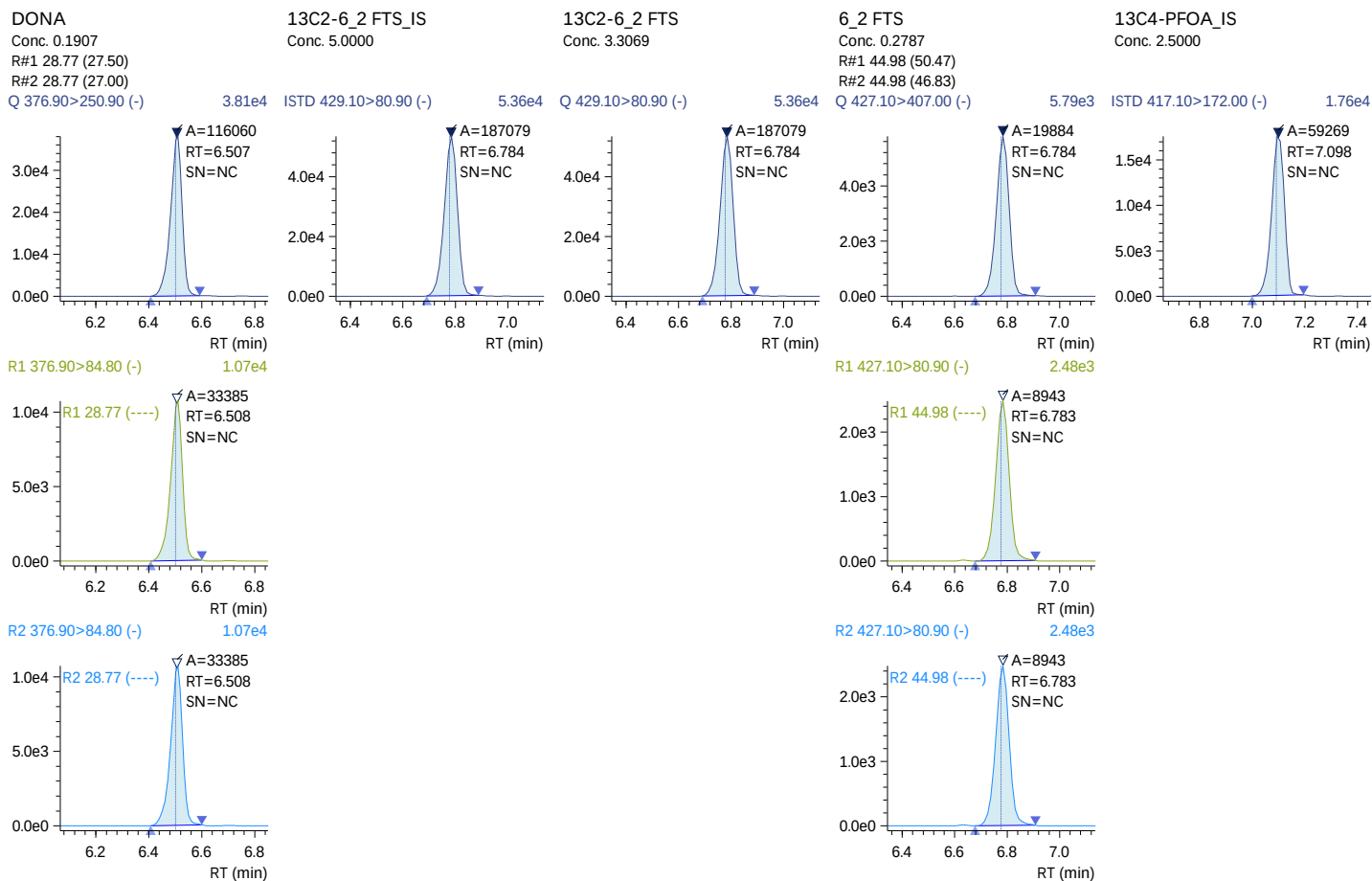


R2 363.10>169.00 (-)





240201_006 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_006 (continued)

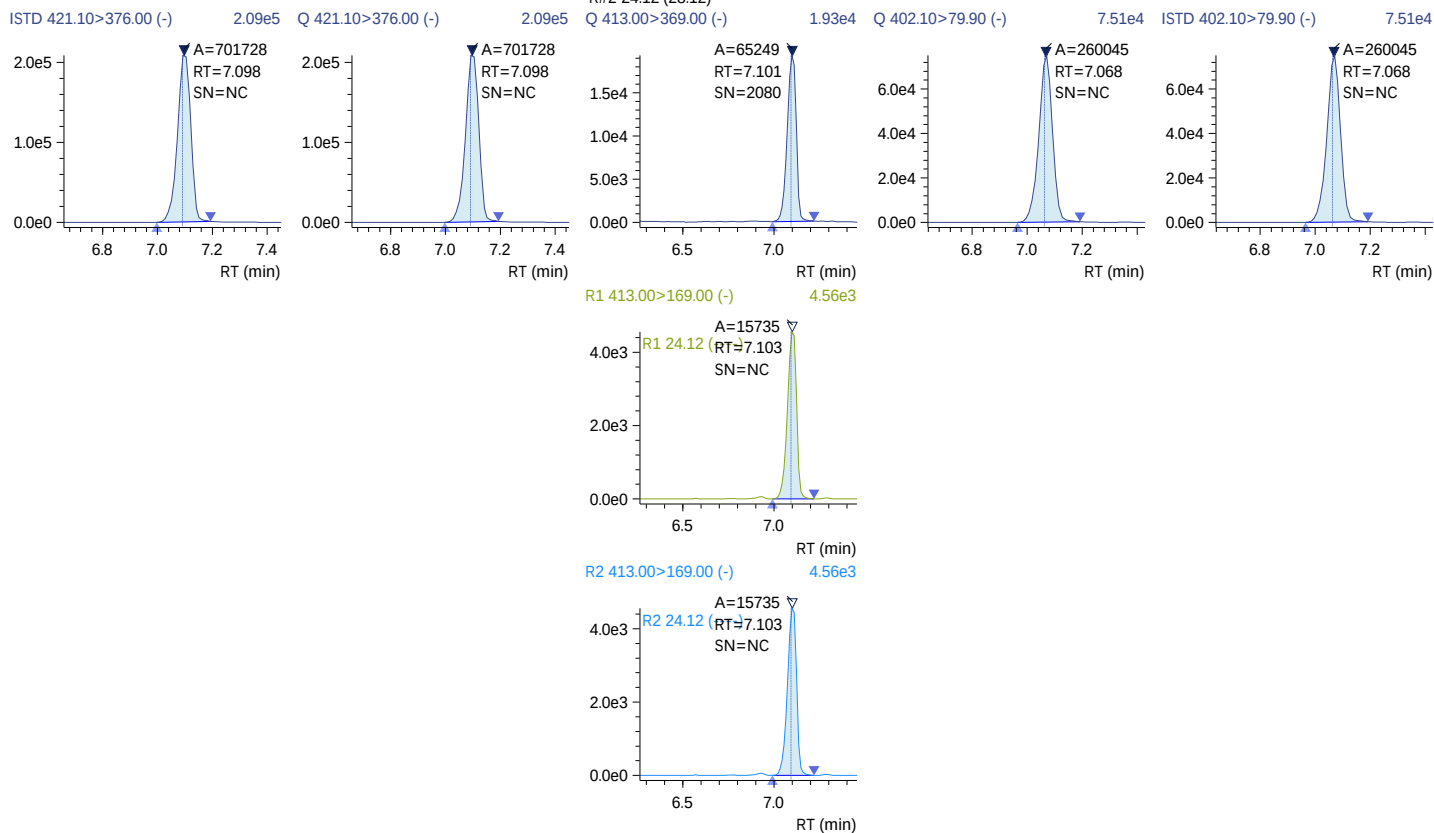
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.4826

PFOA
Conc. 0.2384
R#1 24.12 (28.77)
R#2 24.12 (28.12)

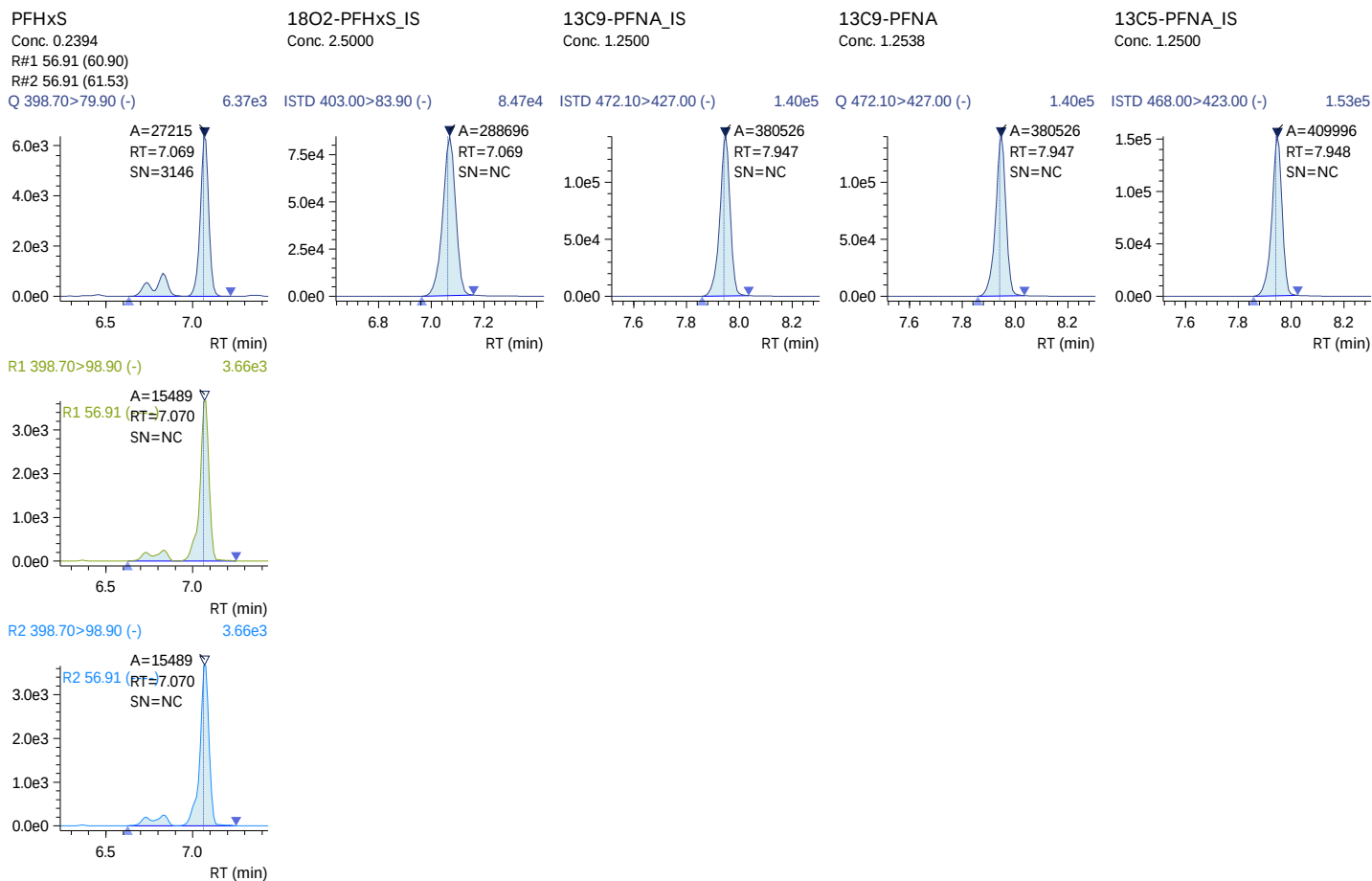
13C3-PFHxS
Conc. 2.5700

13C3-PFHxS_IS
Conc. 2.5000



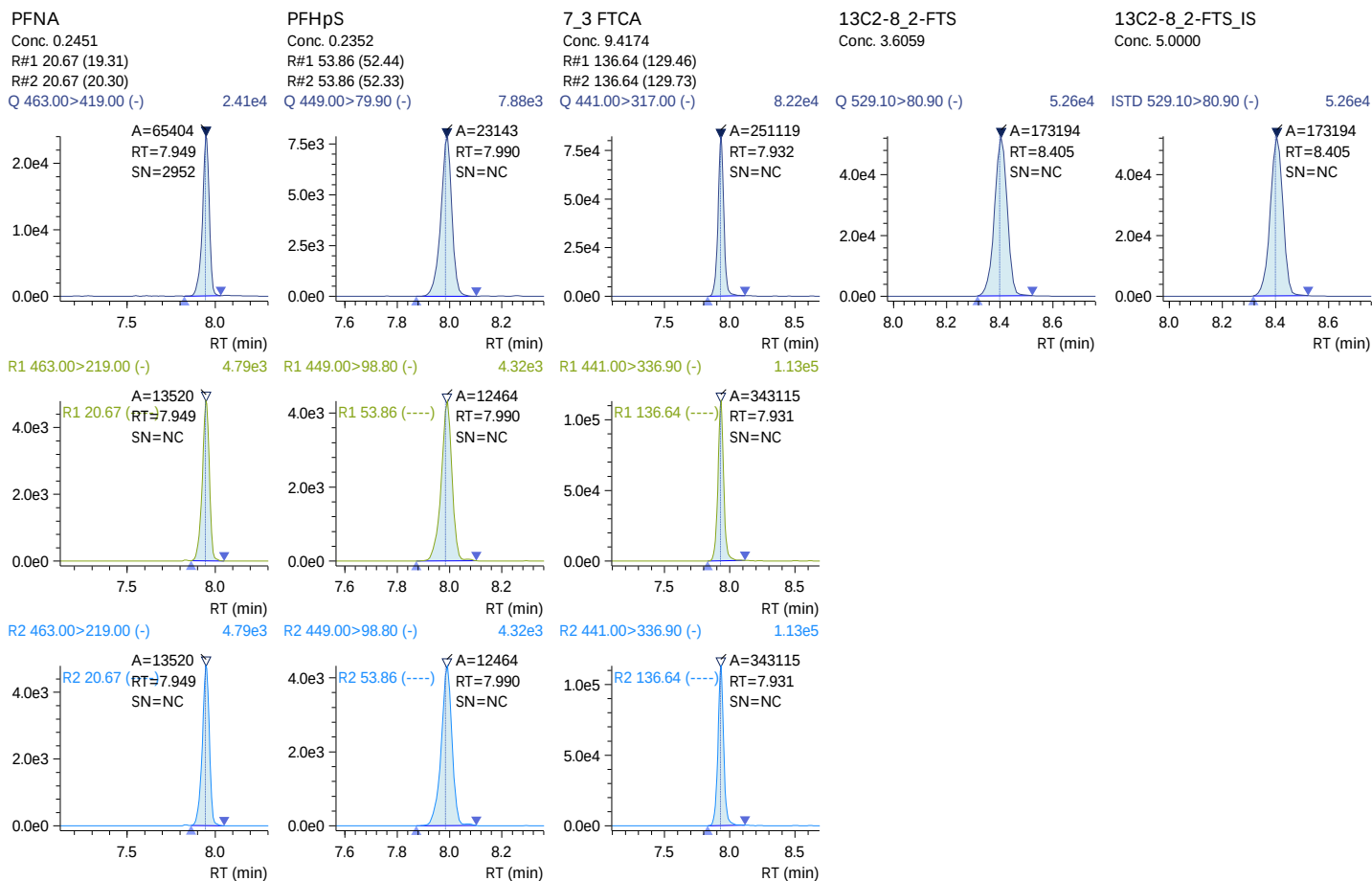


240201_006 (continued)



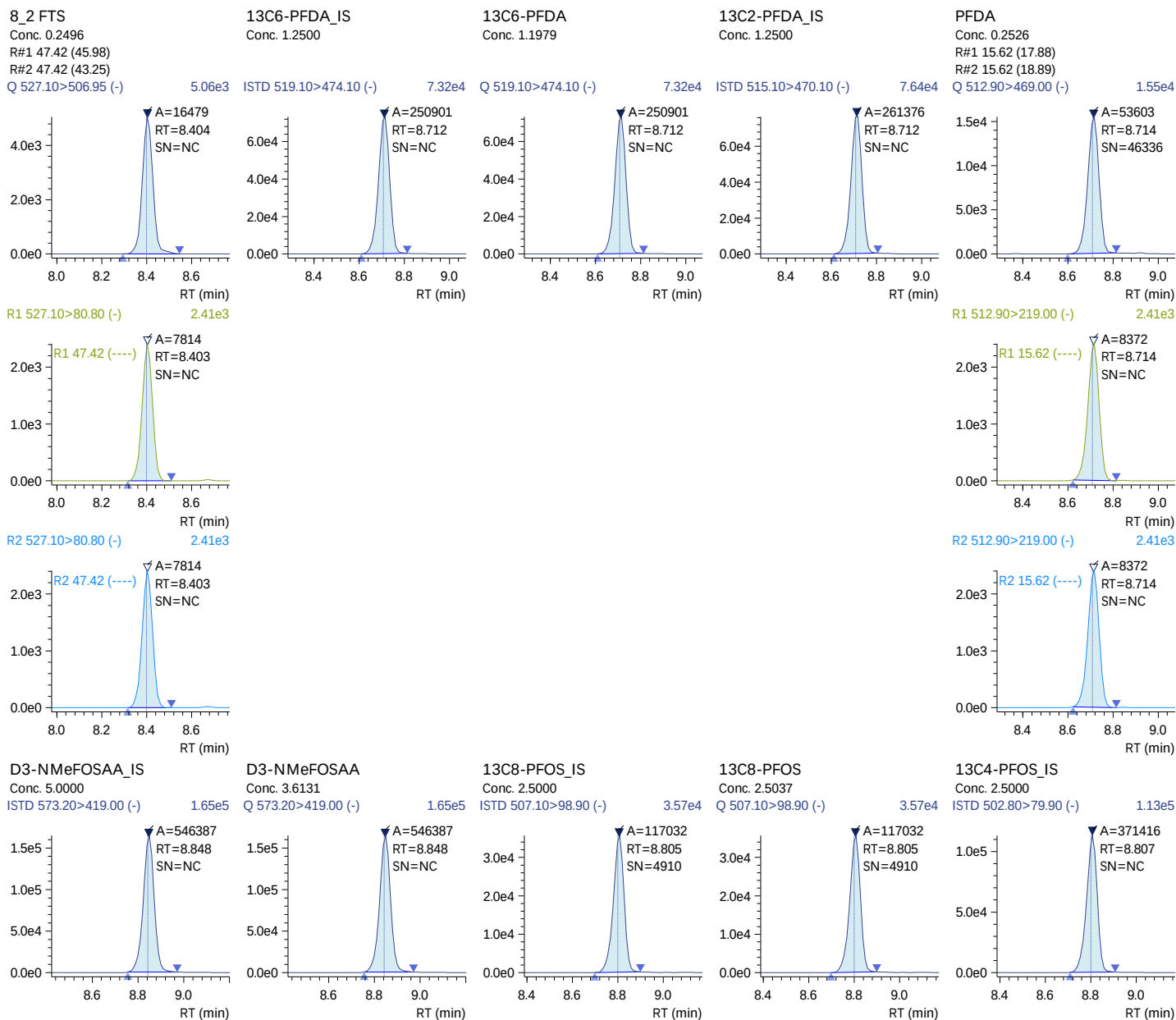


240201_006 (continued)





240201_006 (continued)

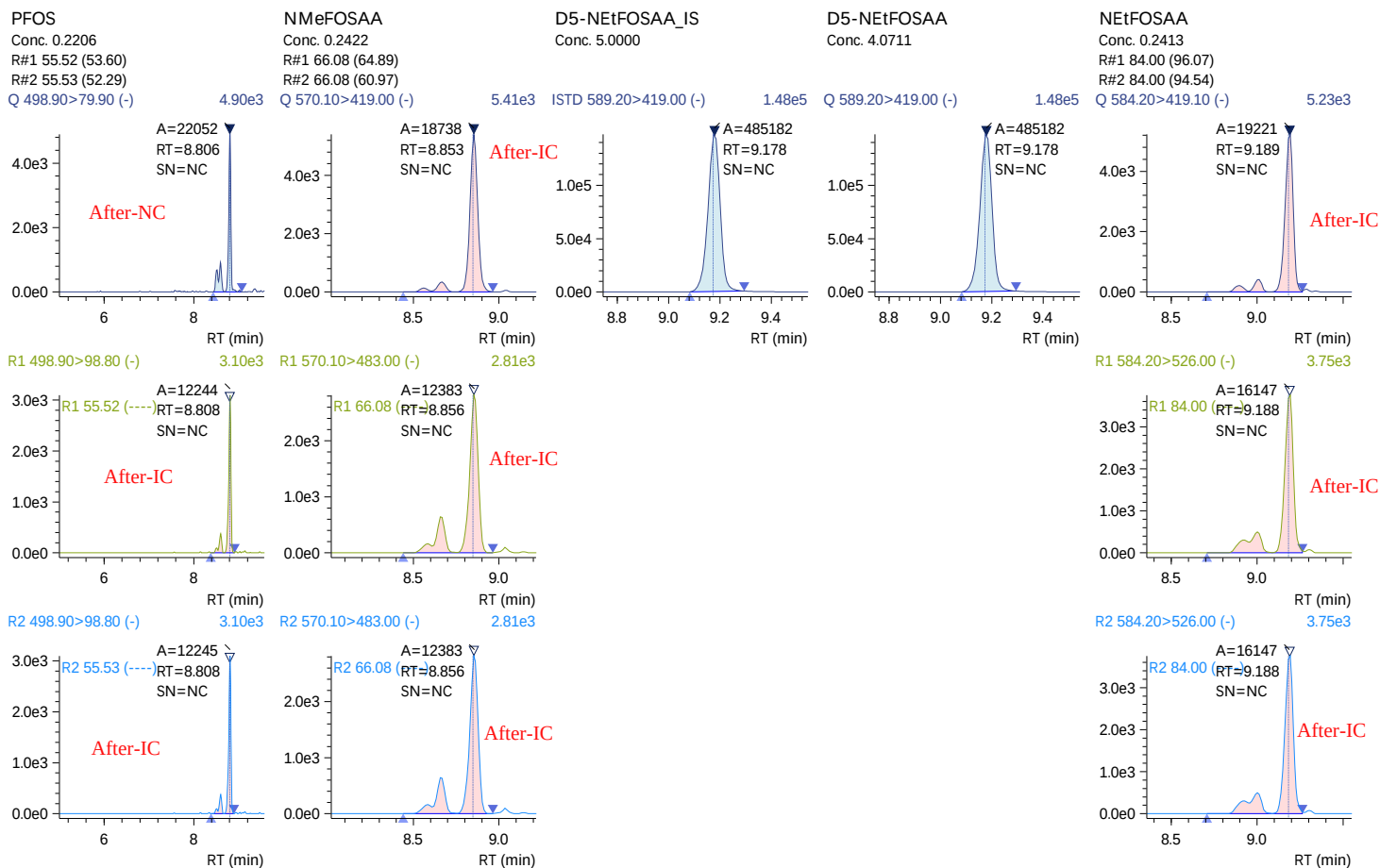


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_006 (continued)



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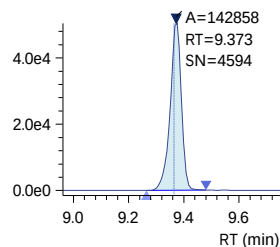
SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



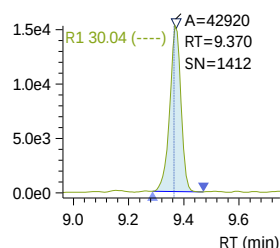
240201_006 (continued)

9-CI-PF3ONS

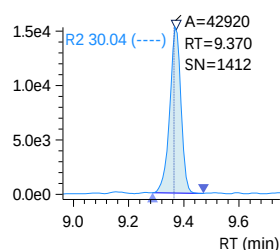
Conc. 0.2018
R#1 30.04 (30.95)
R#2 30.04 (30.61)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-) 1.54e4

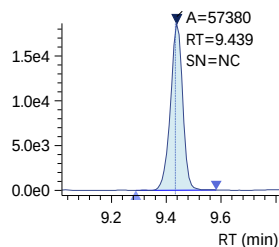


R2 532.80>353.00 (-) 1.54e4

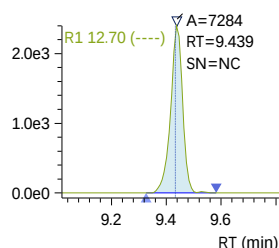


PFUnDA

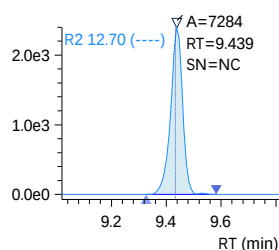
Conc. 0.2438
R#1 12.70 (11.01)
R#2 12.70 (12.02)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-) 2.40e3



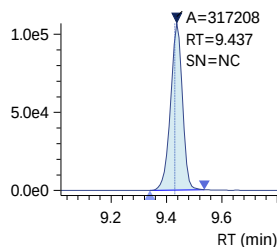
R2 563.10>269.10 (-) 2.40e3



13C7-PFUnDA_IS

Conc. 1.2500

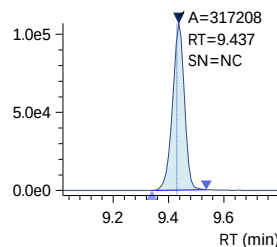
ISTD 570.00>525.10 (-)



13C7-PFUnDA

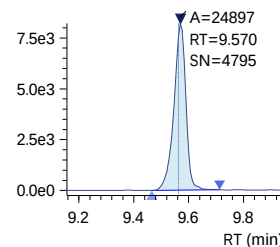
Conc. 1.2188

Q 570.00>525.10 (-)

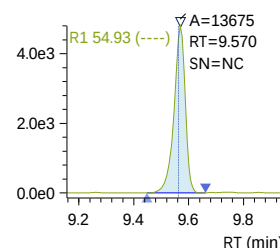


PFNS

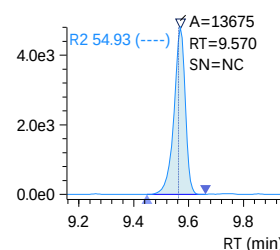
Conc. 0.2514
R#1 54.93 (60.44)
R#2 54.93 (58.51)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-) 4.80e3

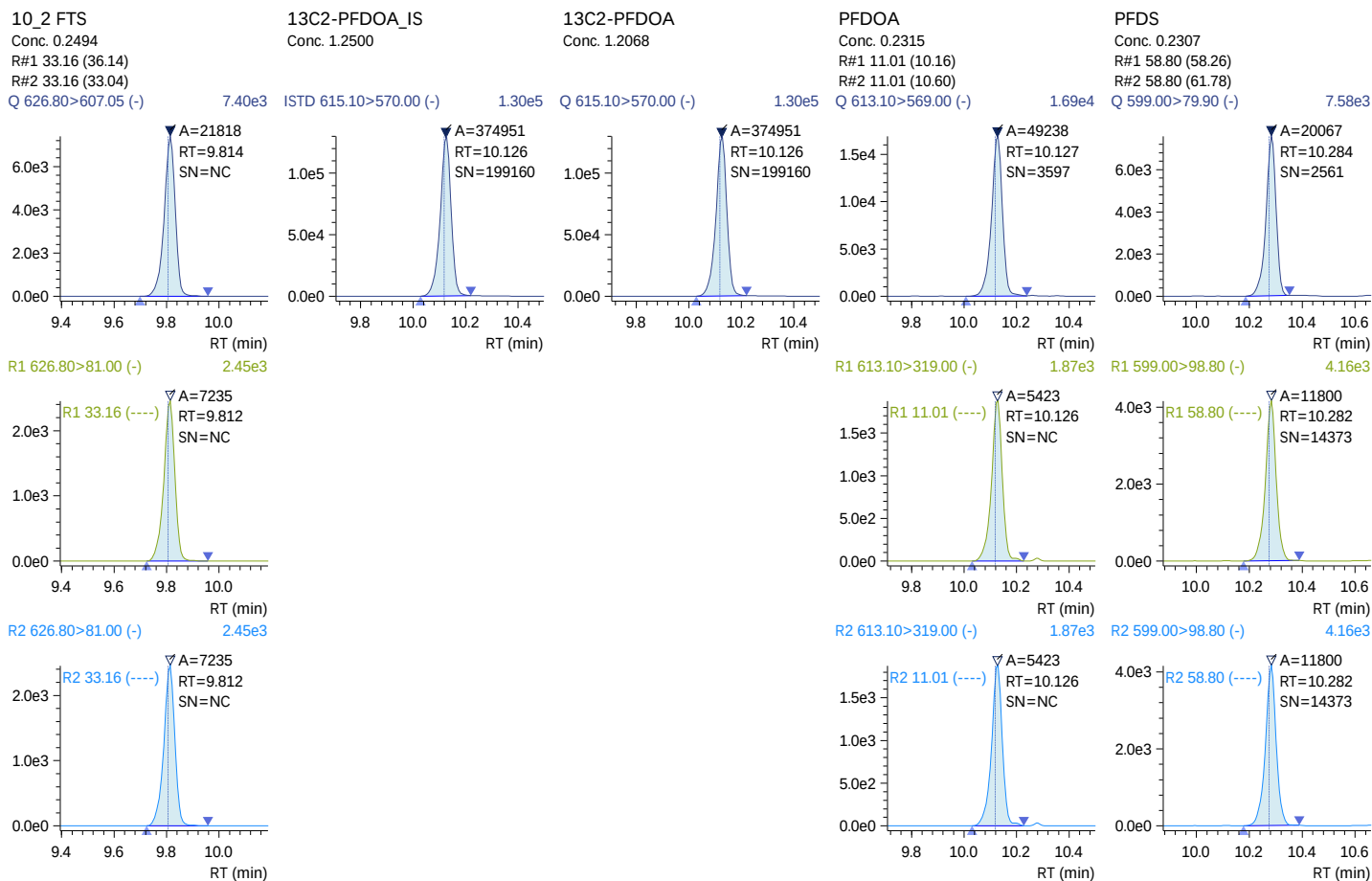


R2 548.80>98.80 (-) 4.80e3





240201_006 (continued)

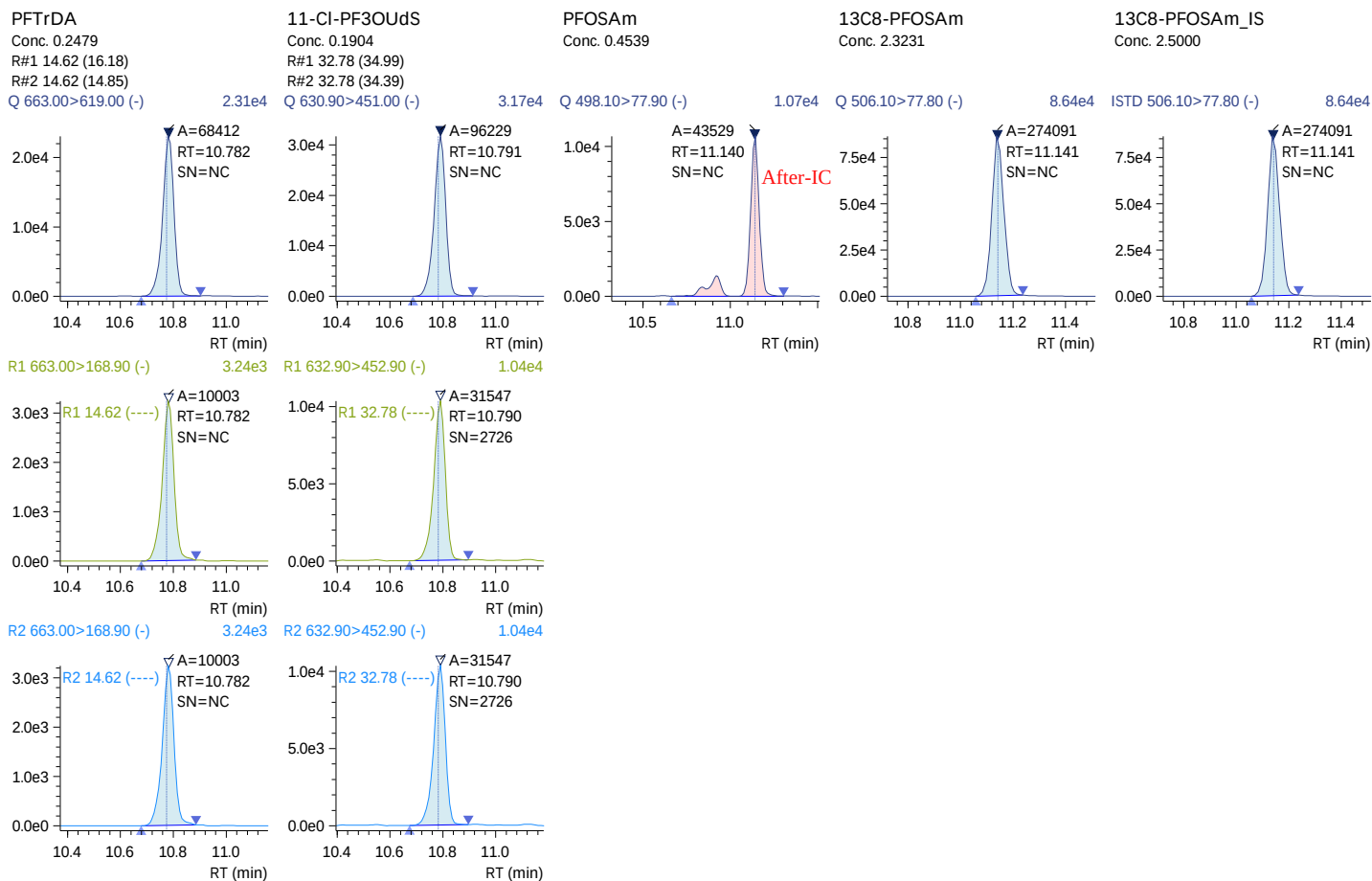


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.

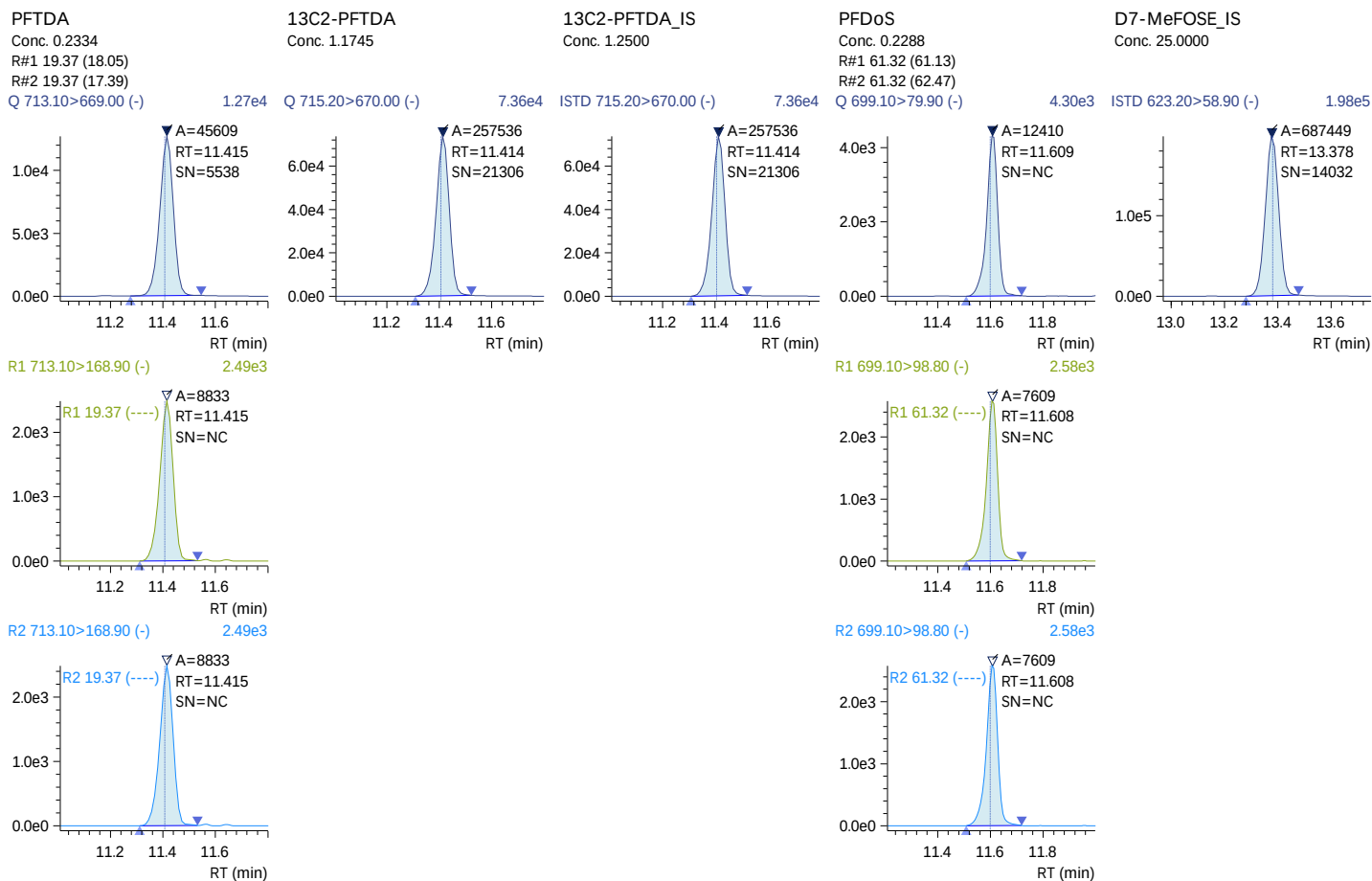


240201_006 (continued)





240201_006 (continued)



J:\LCMS08\Data\240201_1633_RA\240201_1633_RA.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_006 (continued)

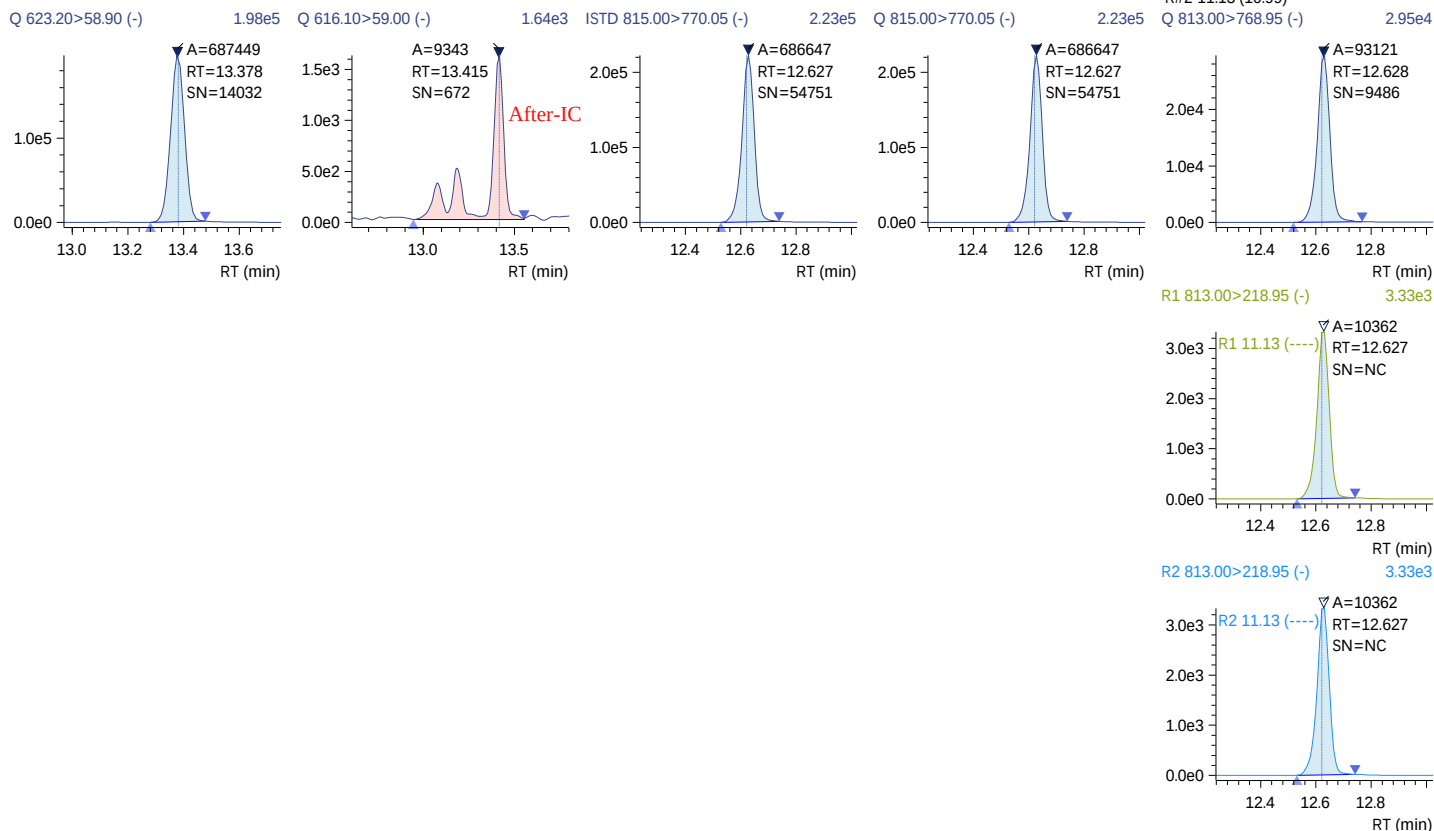
D7-MeFOSE
Conc. 22.6971

MeFOSE
Conc. 0.2628

13C2-PFHXA_IS
Conc. 2.5000

13C2-PFHXA
Conc. 2.3398

PFHXA
Conc. 0.2510
R#1 11.13 (11.66)
R#2 11.13 (10.99)





240201_006 (continued)

D3-MeFOSA
Conc. 2.4610

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. 0.2391
R#1 149.03 (160.44)
R#2 149.03 (161.92)

D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 23.2971

Q 515.00>219.00 (-)

2.26e4

ISTD 515.00>219.00 (-)

2.26e4

Q 511.90>219.00 (-)

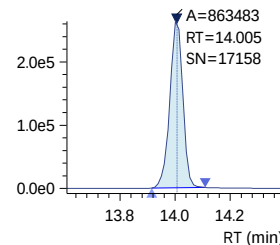
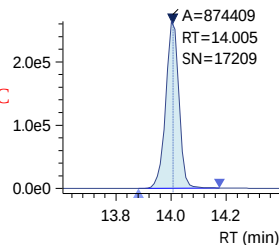
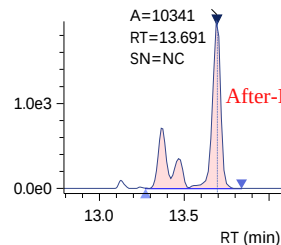
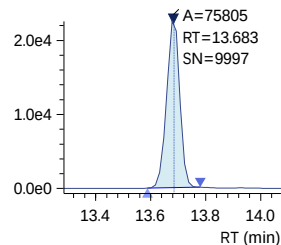
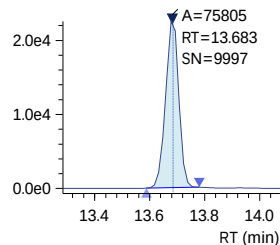
1.97e3

ISTD 639.20>58.90 (-)

2.64e5

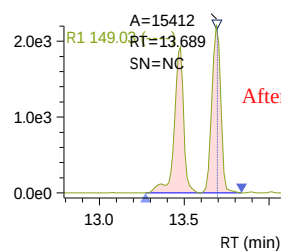
Q 639.20>58.90 (-)

2.64e5



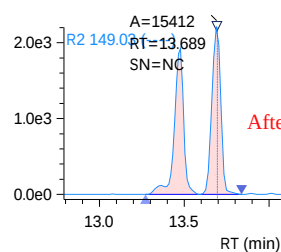
R1 511.90>169.00 (-)

2.20e3



R2 511.90>169.00 (-)

2.20e3





240201_006 (continued)

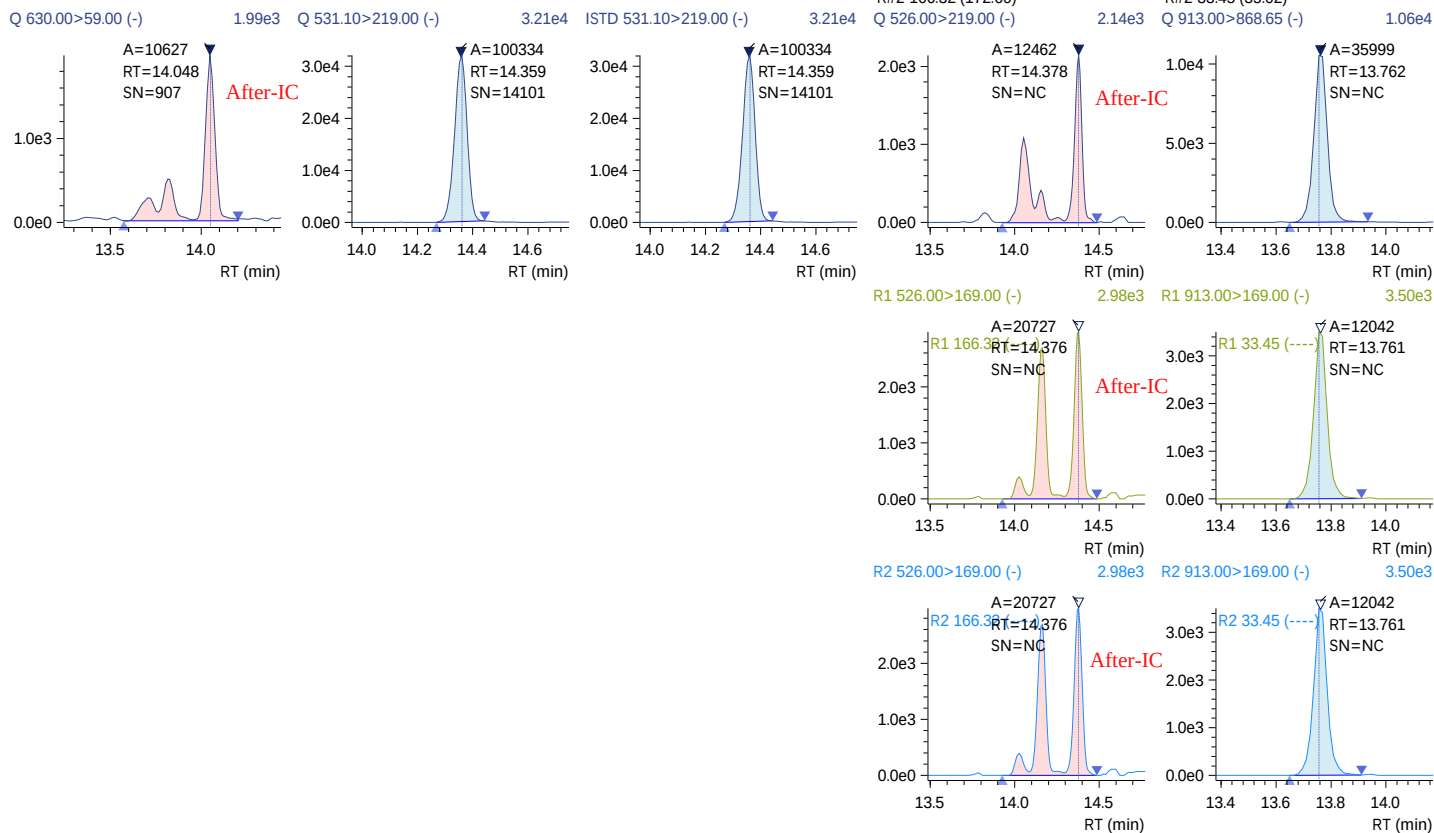
EtFOSE
Conc. 0.2534

D5-EtFOSAm
Conc. 2.3559

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. 0.2264
R#1 166.32 (159.63)
R#2 166.32 (172.60)

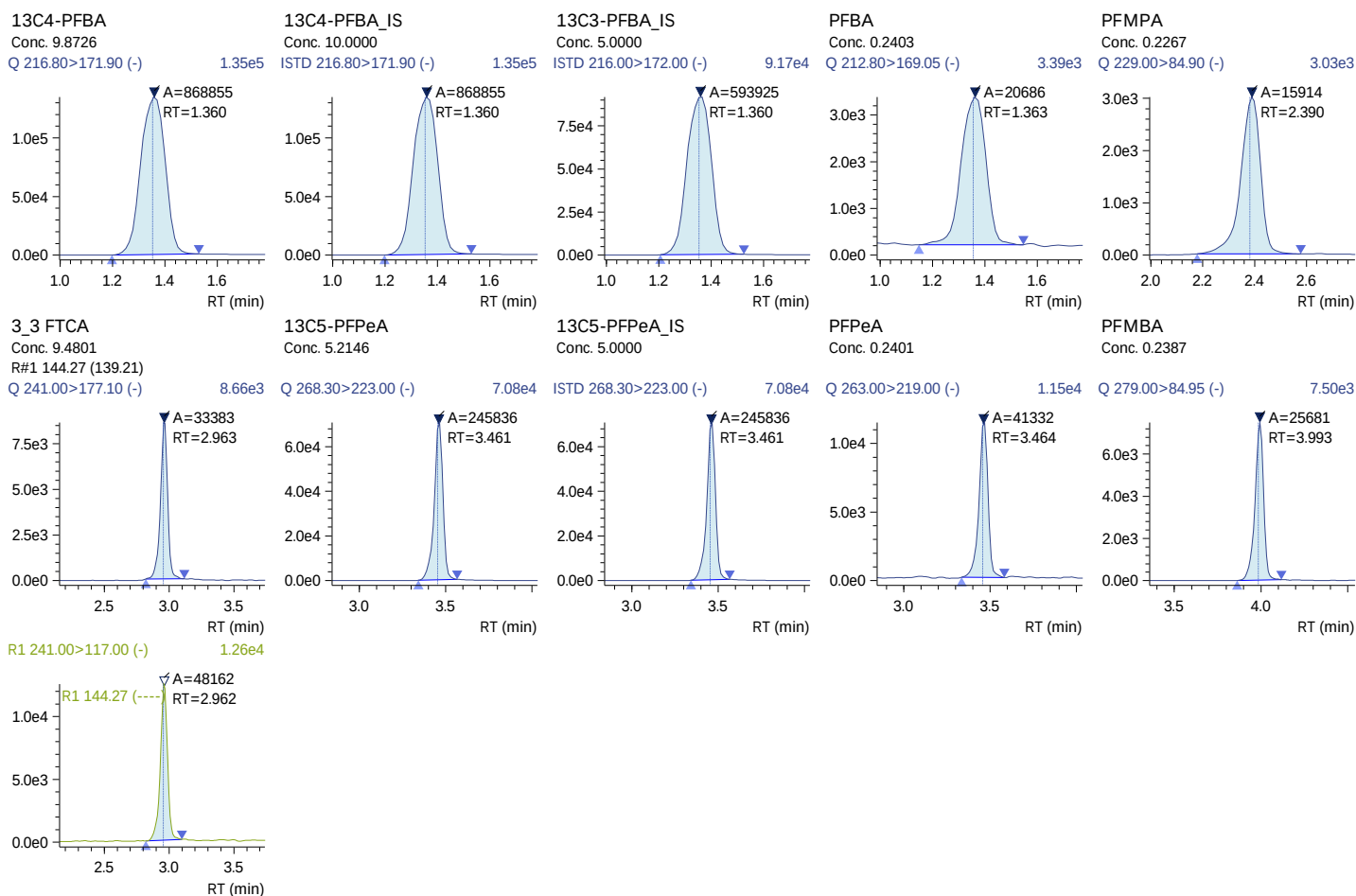
PFODA
Conc. 0.2692
R#1 33.45 (36.03)
R#2 33.45 (35.02)





240201_006

Sample ID: 1633 ICAL 0.25PPB
Date Acquired: 2/1/2024 12:18:42 PM
Acquired by: System Administrator
Data File: 240201_006
Vial: 3 | Inj. Volume: 10.0000uL | Tray: 1





240201_006 (continued)

13C2-4_2 FTS
Conc. 3.9178

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. 0.2478
R#1 28.84 (32.10)
R#2 28.84 (32.79)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 0.2166
R#1 44.14 (44.81)
R#2 44.14 (46.72)

Q 329.10>80.90 (-)

6.61e4

ISTD 329.10>80.90 (-)

6.61e4

Q 327.10>307.00 (-)

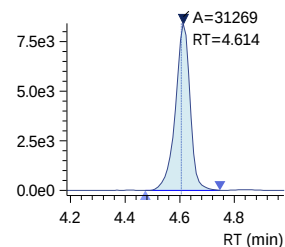
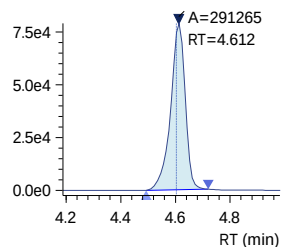
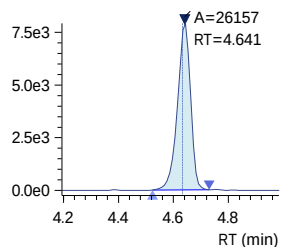
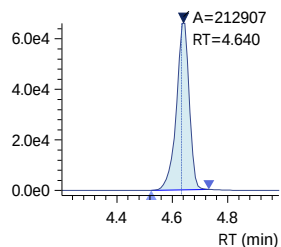
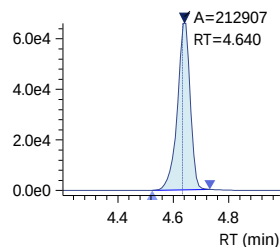
7.92e3

ISTD 302.10>79.90 (-)

7.91e4

Q 298.70>79.90 (-)

8.42e3

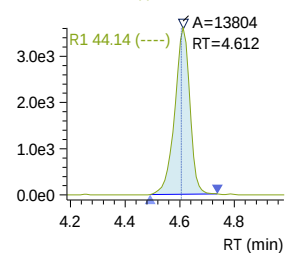
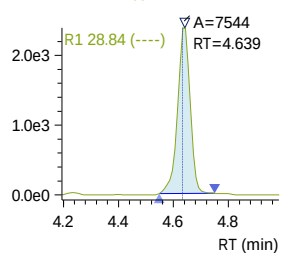


R1 327.10>80.90 (-)

2.40e3

R1 298.70>98.80 (-)

3.62e3

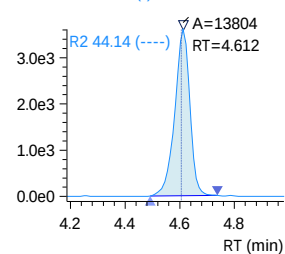
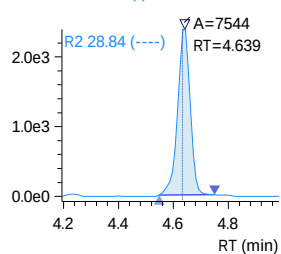


R2 327.10>80.90 (-)

2.40e3

R2 298.70>98.80 (-)

3.62e3





240201_006 (continued)

13C3-PFBS
 Conc. 2.7040

NFDHA
 Conc. 0.2682
 R#1 36.83 (35.54)
 R#2 36.83 (37.91)

13C5-PFHxA
 Conc. 2.3987

13C5-PFHxA_IS
 Conc. 2.5000

13C2-PFHxA_IS
 Conc. 2.5000

Q 302.10>79.90 (-)

7.91e4

Q 295.00>201.00 (-)

8.35e3

Q 318.00>273.00 (-)

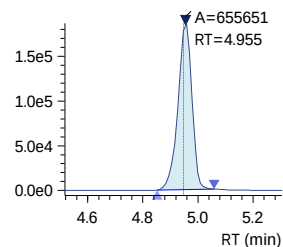
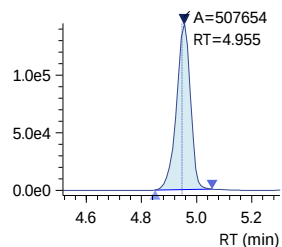
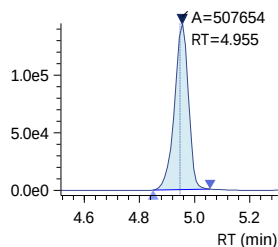
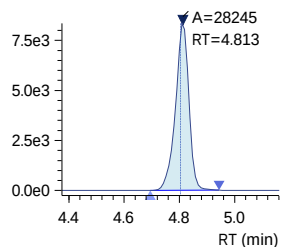
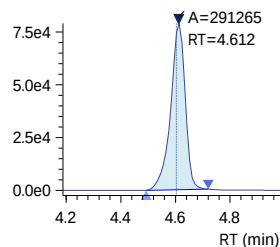
1.45e5

ISTD 318.00>273.00 (-)

1.45e5

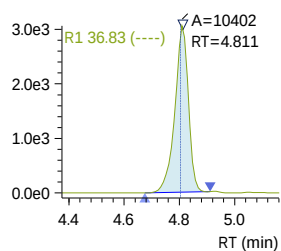
ISTD 315.10>270.00 (-)

1.87e5



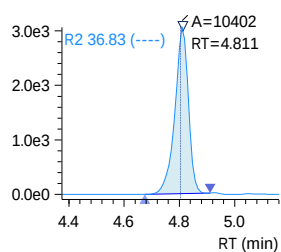
R1 295.00>84.90 (-)

3.07e3



R2 295.00>84.90 (-)

3.07e3





240201_006 (continued)

PFHxA
Conc. 0.2346

PFEESA
Conc. 0.2450

13C3-HFPO-DA
Conc. 12.4251

13C3-HFPO-DA_IS
Conc. 10.0000

HFPO-DA
Conc. 0.2456

Q 313.00>269.00 (-)

1.31e4

Q 314.80>135.00 (-)

4.51e4

Q 286.90>168.90 (-)

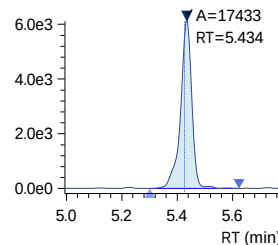
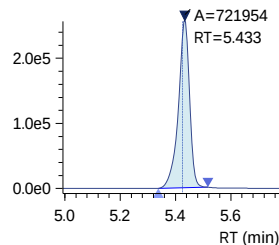
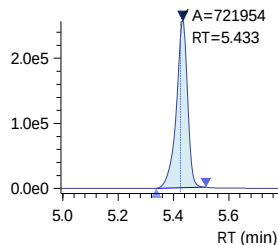
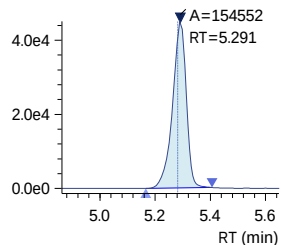
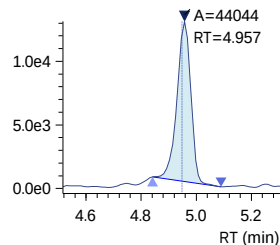
2.57e5

ISTD 286.90>168.90 (-)

2.57e5

Q 284.90>168.90 (-)

6.11e3

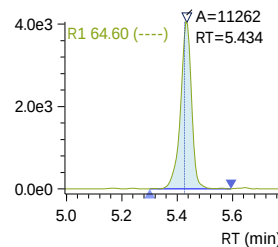
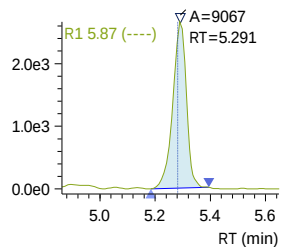


R1 314.80>82.90 (-)

2.67e3

R1 284.90>184.90 (-)

4.06e3

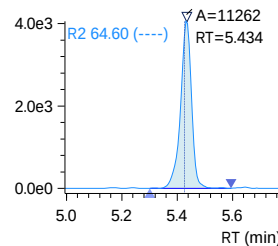
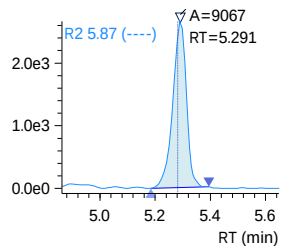


R2 314.80>82.90 (-)

2.67e3

R2 284.90>184.90 (-)

4.06e3





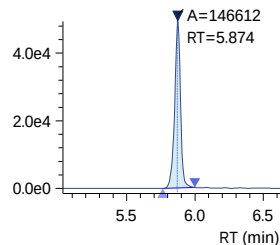
240201_006 (continued)

5_3 FTCA
Conc. 9.6614

R#1 159.00 (157.08)
R#2 159.00 (155.87)

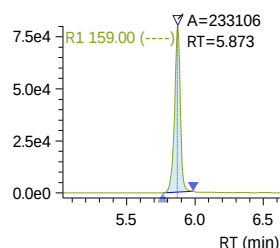
Q 341.00>237.05 (-)

4.94e4



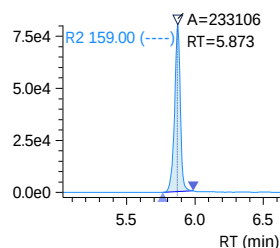
R1 341.00>217.00 (-)

8.03e4



R2 341.00>217.00 (-)

8.03e4



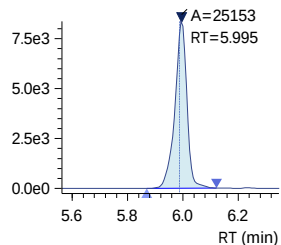
PFPeS

Conc. 0.2444

R#1 55.66 (55.12)
R#2 55.66 (54.87)

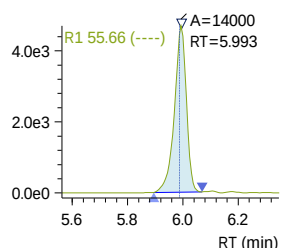
Q 349.10>79.90 (-)

8.37e3



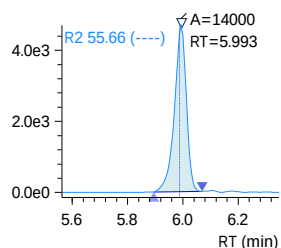
R1 349.10>98.80 (-)

4.71e3



R2 349.10>98.80 (-)

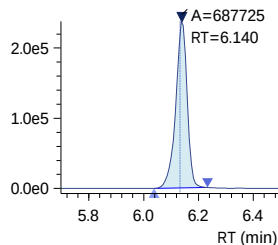
4.71e3



13C4-PFHpA
Conc. 2.5830

Q 367.10>322.00 (-)

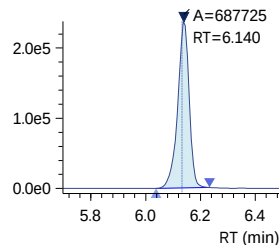
2.38e5



13C4-PFHpA_IS
Conc. 2.5000

ISTD 367.10>322.00 (-)

2.38e5



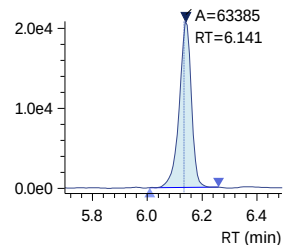
PFHpA

Conc. 0.2542

R#1 20.62 (23.02)
R#2 20.62 (20.91)

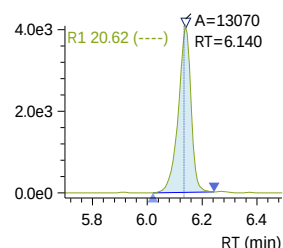
Q 363.10>319.00 (-)

2.09e4



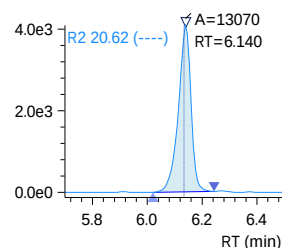
R1 363.10>169.00 (-)

4.09e3



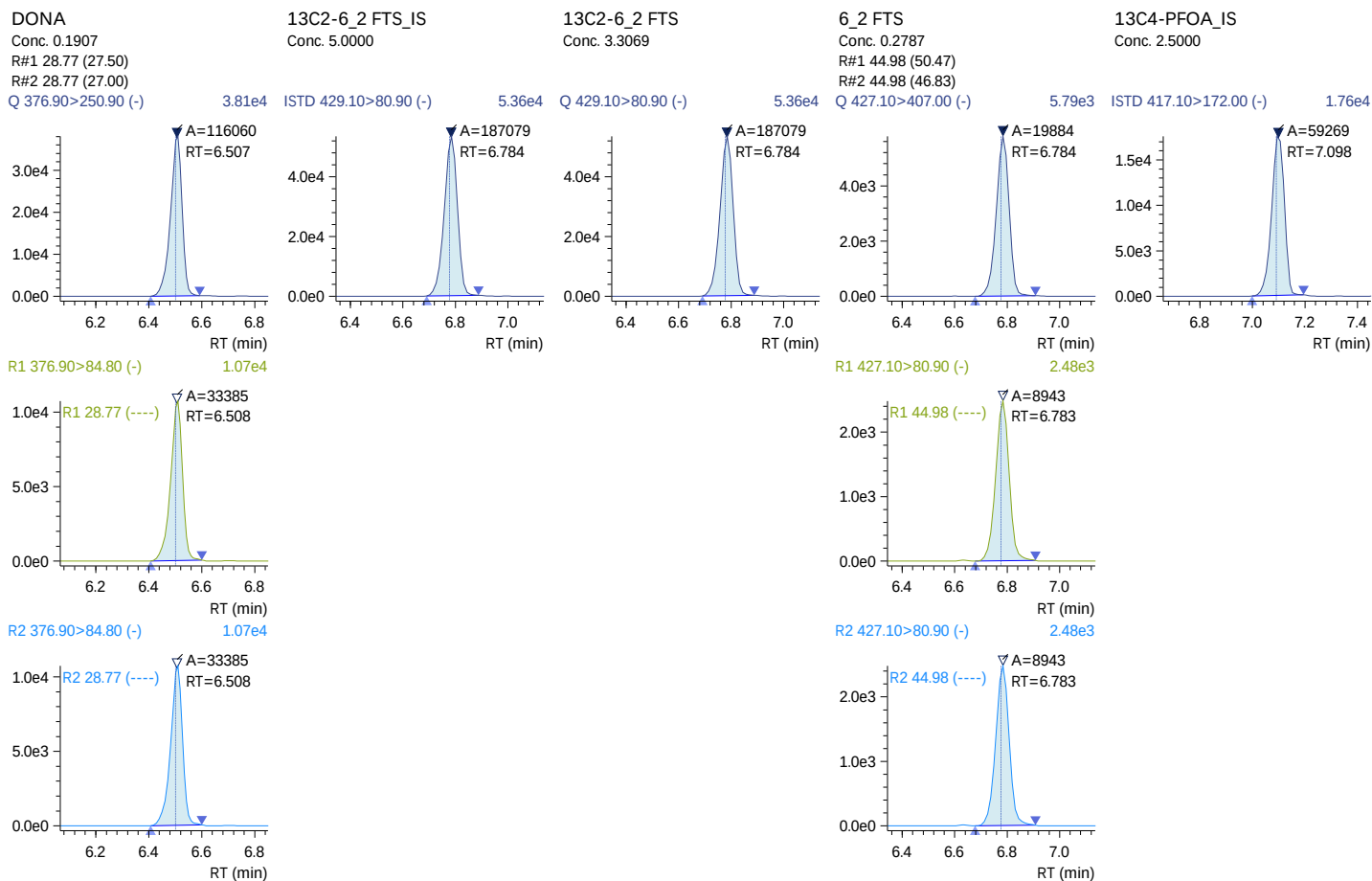
R2 363.10>169.00 (-)

4.09e3





240201_006 (continued)





240201_006 (continued)

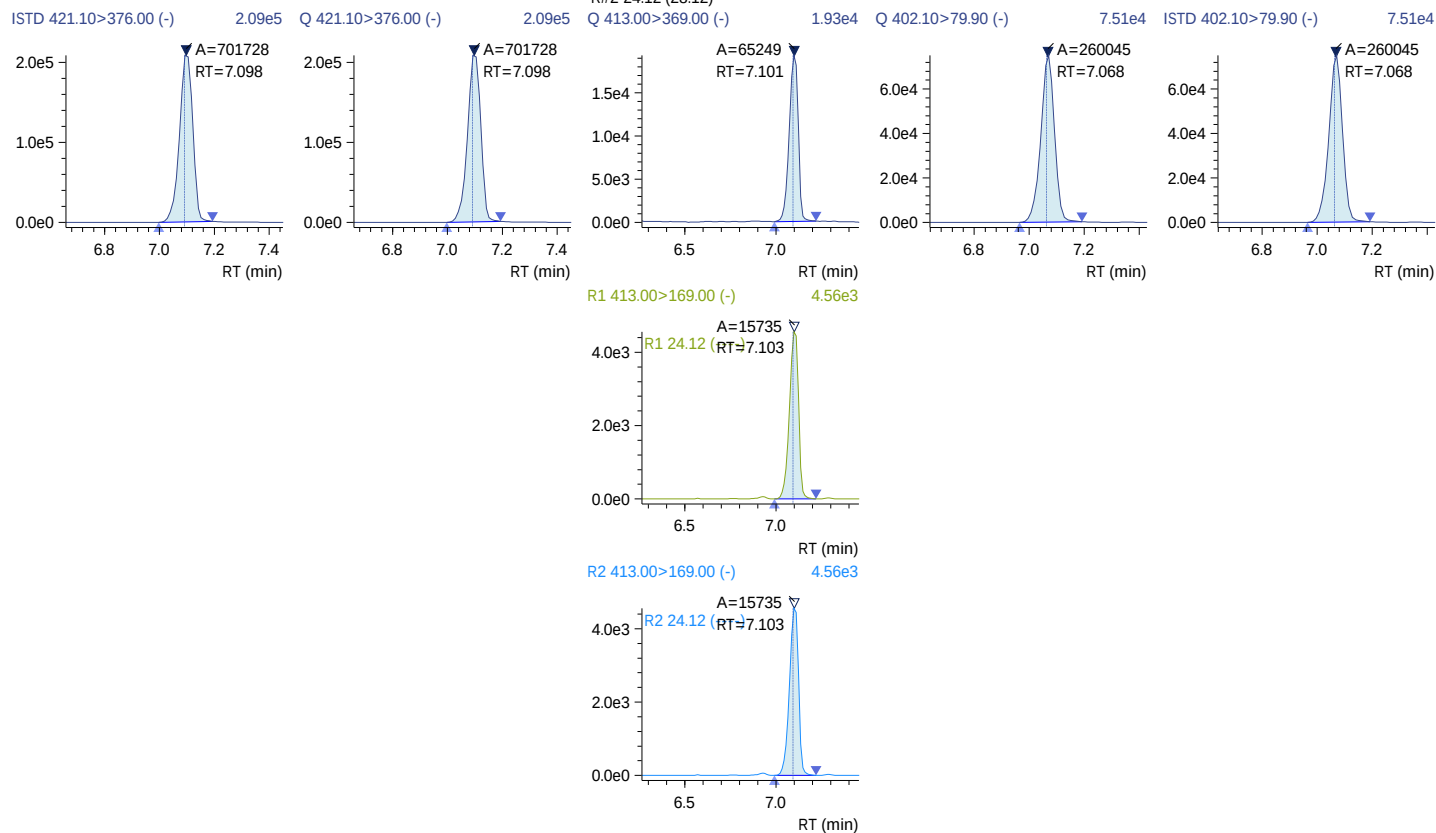
13C8-PFOA_IS
 Conc. 2.5000

13C8-PFOA
 Conc. 2.4826

PFOA
 Conc. 0.2384
 R#1 24.12 (28.77)
 R#2 24.12 (28.12)

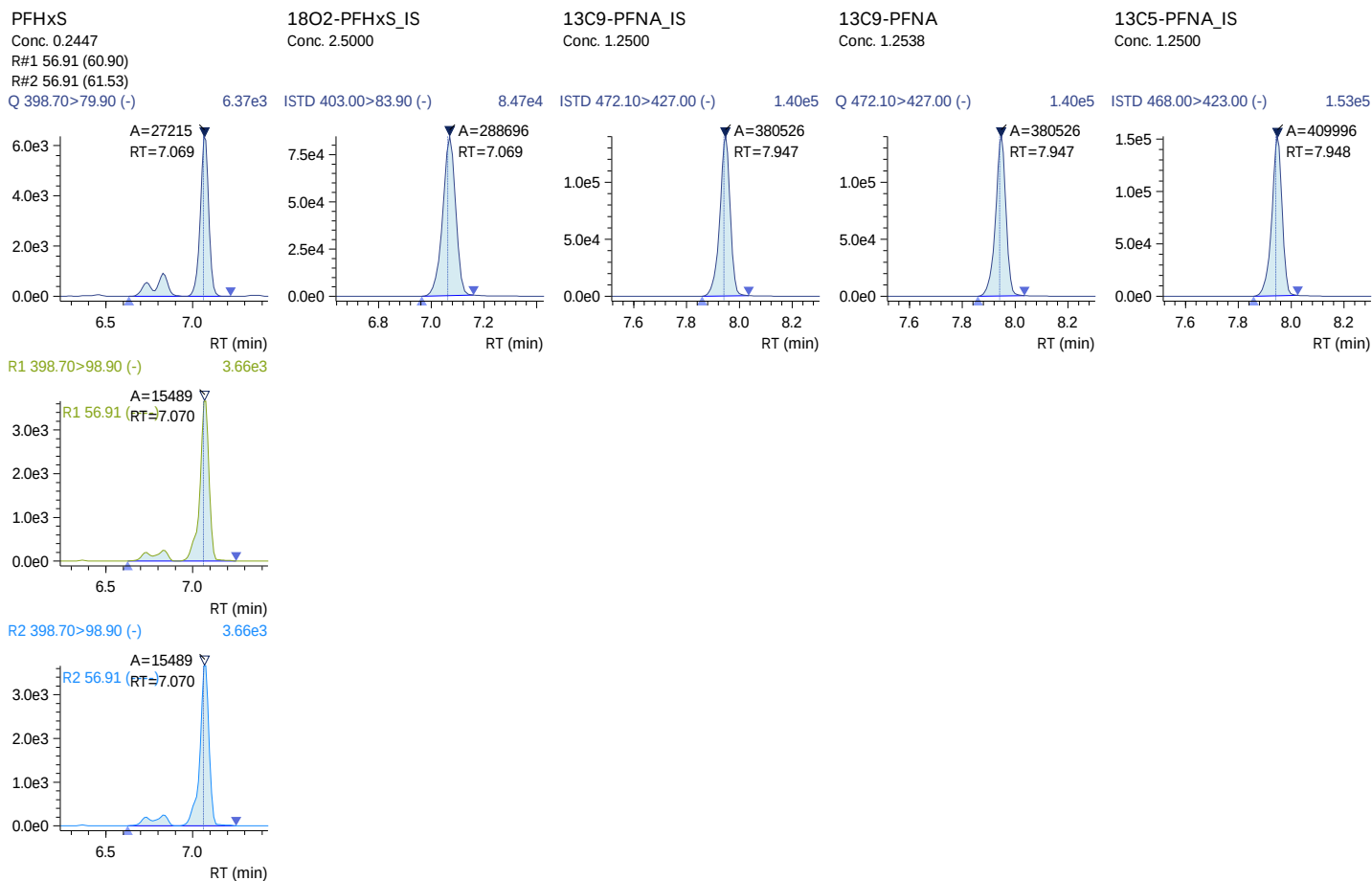
13C3-PFHxS
 Conc. 2.5700

13C3-PFHxS_IS
 Conc. 2.5000



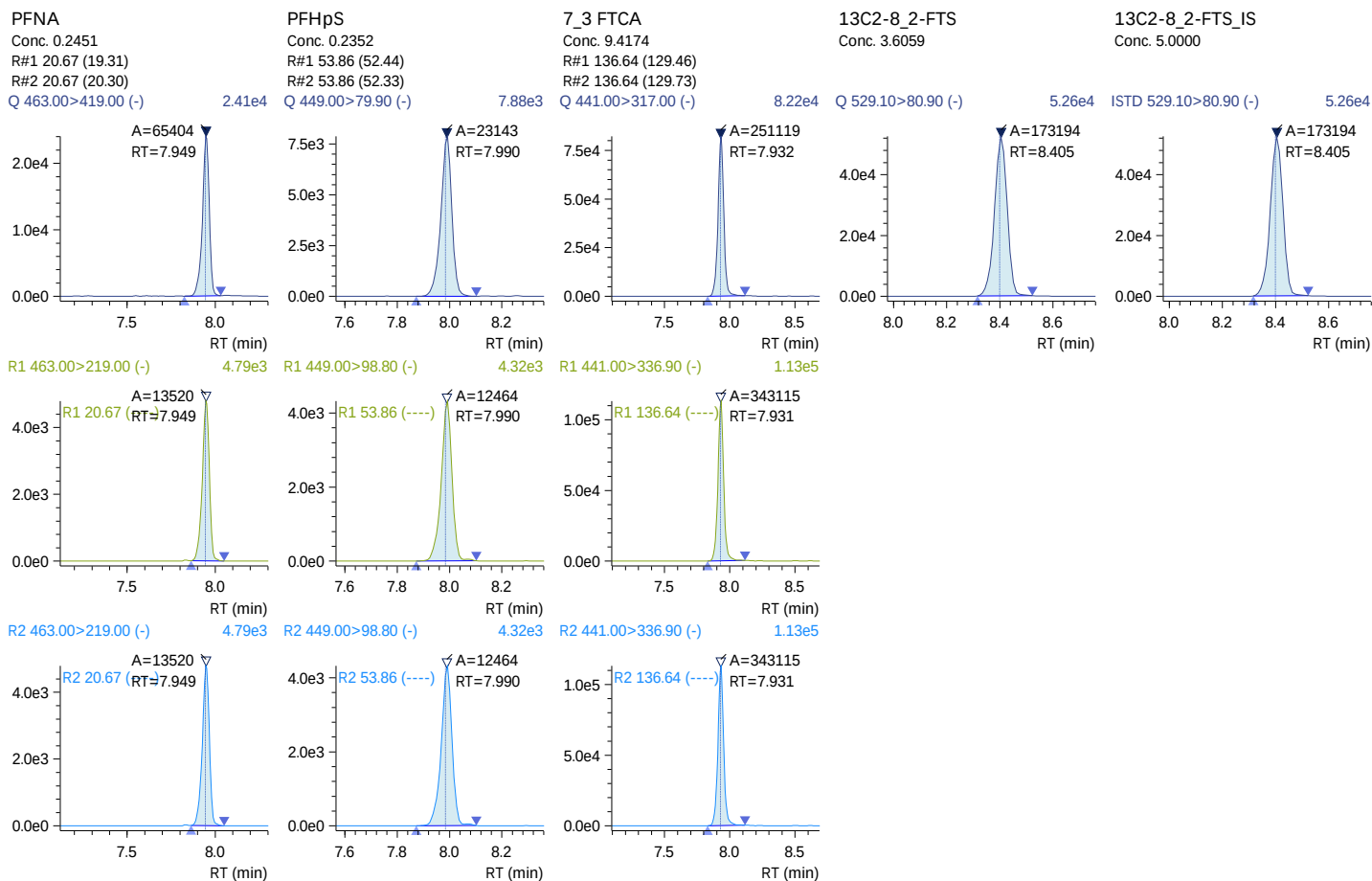


240201_006 (continued)



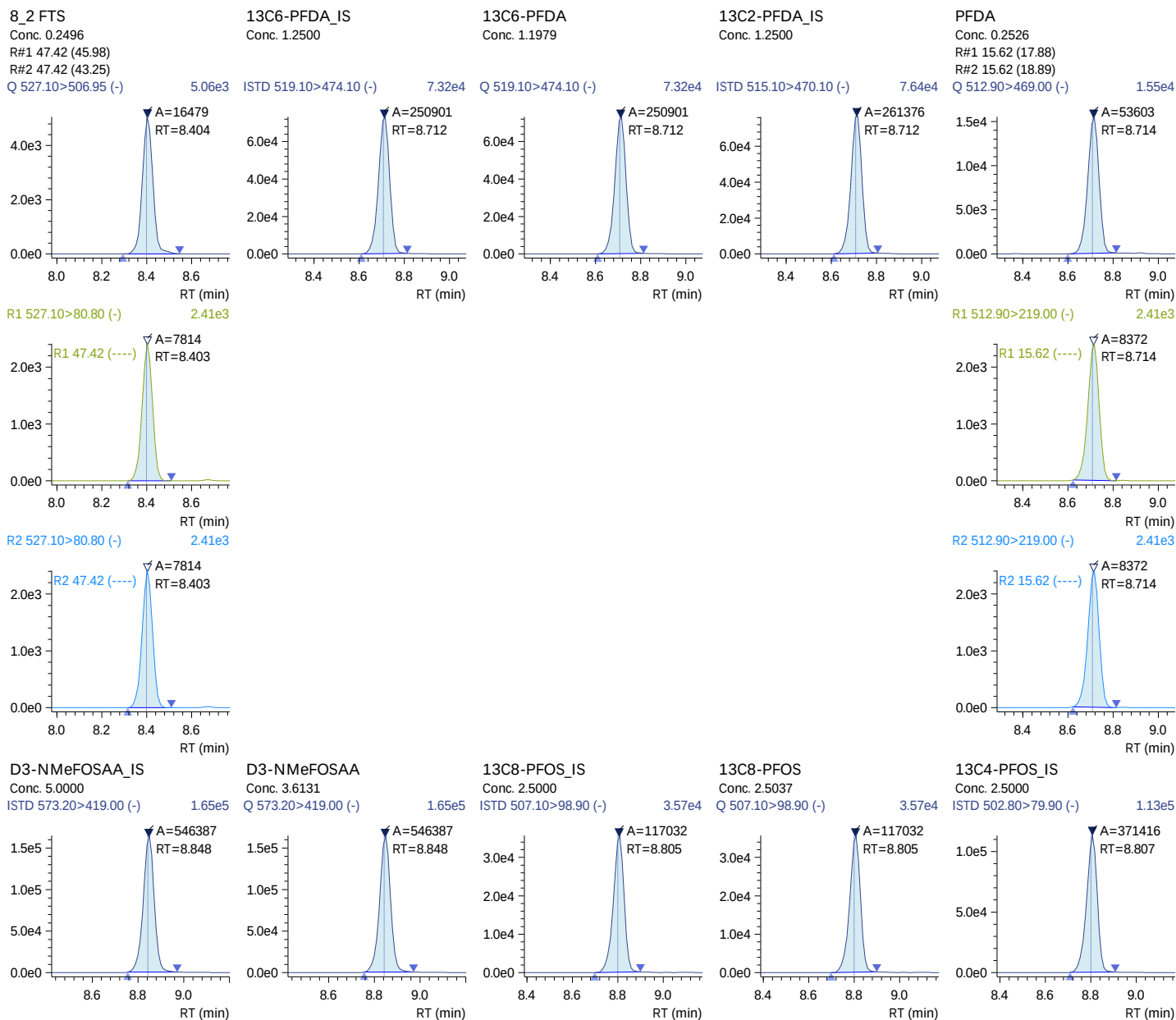


240201_006 (continued)



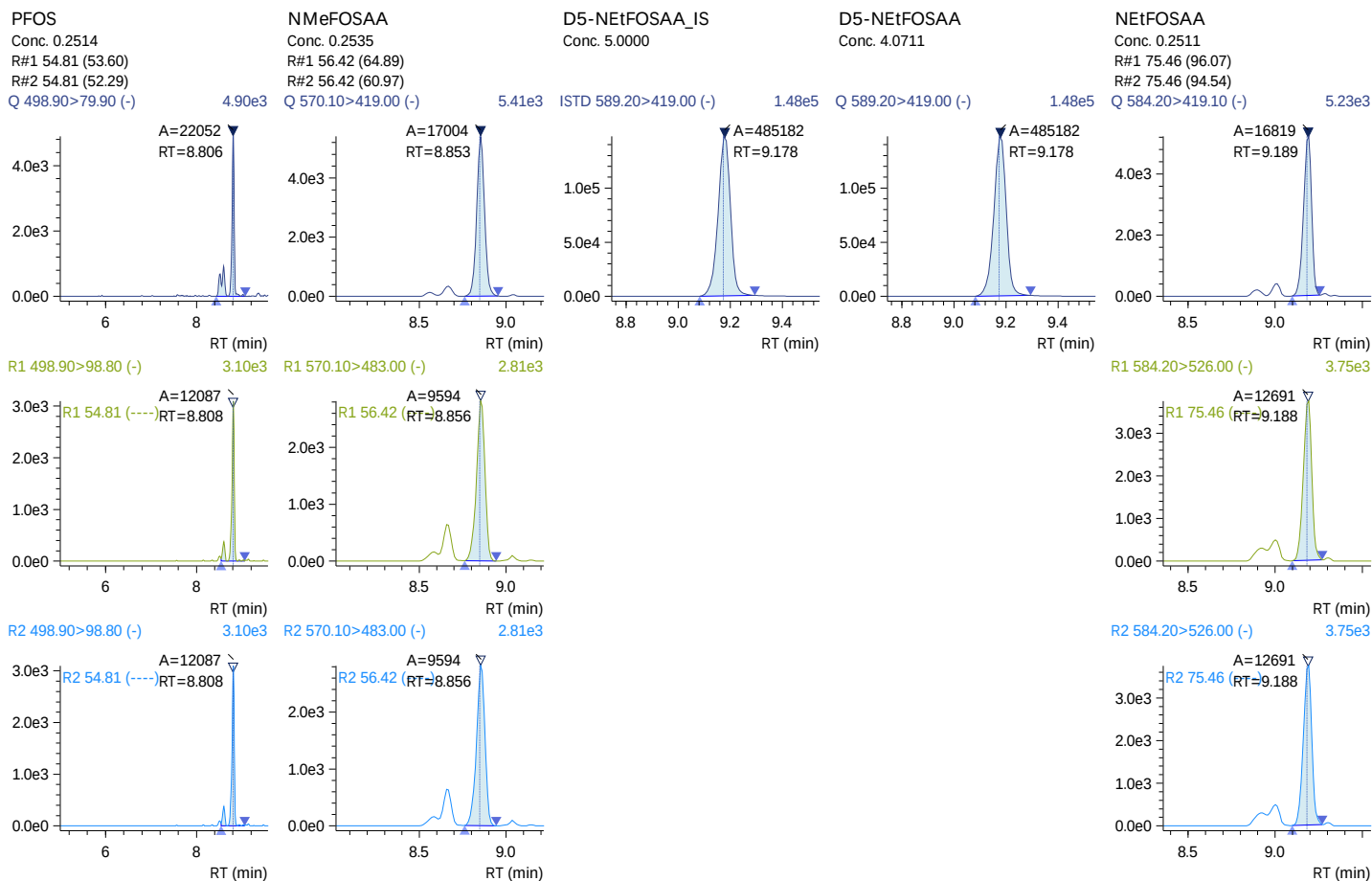


240201_006 (continued)





240201_006 (continued)

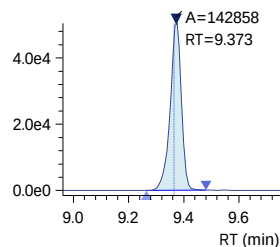




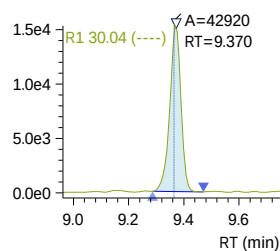
240201_006 (continued)

9-CI-PF3ONS

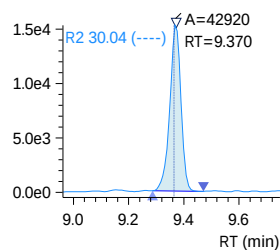
Conc. 0.2018
 R#1 30.04 (30.95)
 R#2 30.04 (30.61)
 Q 530.80>351.00 (-)



R1 532.80>353.00 (-) 1.54e4

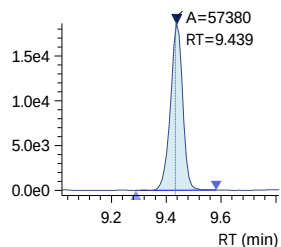


R2 532.80>353.00 (-) 1.54e4

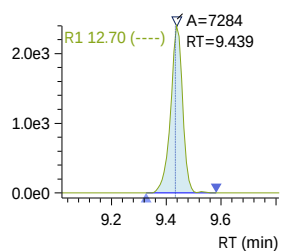


PFUnDA

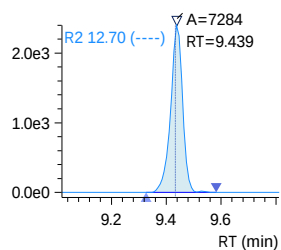
Conc. 0.2438
 R#1 12.70 (11.01)
 R#2 12.70 (12.02)
 Q 563.10>519.00 (-)



R1 563.10>269.10 (-) 2.40e3

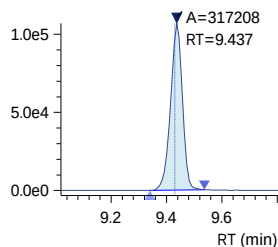


R2 563.10>269.10 (-) 2.40e3



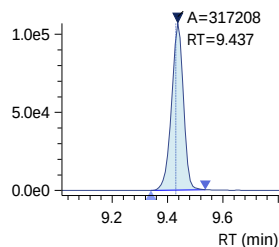
13C7-PFUnDA_IS

Conc. 1.2500
 ISTD 570.00>525.10 (-)



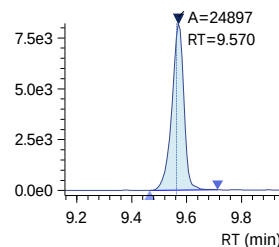
13C7-PFUnDA

Conc. 1.2188
 Q 570.00>525.10 (-)

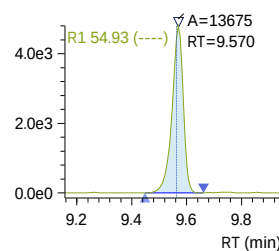


PFNS

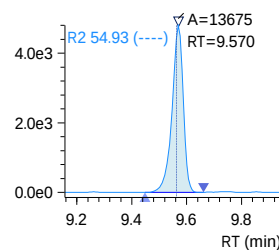
Conc. 0.2514
 R#1 54.93 (60.44)
 R#2 54.93 (58.51)
 Q 548.80>79.90 (-)



R1 548.80>98.80 (-) 4.80e3

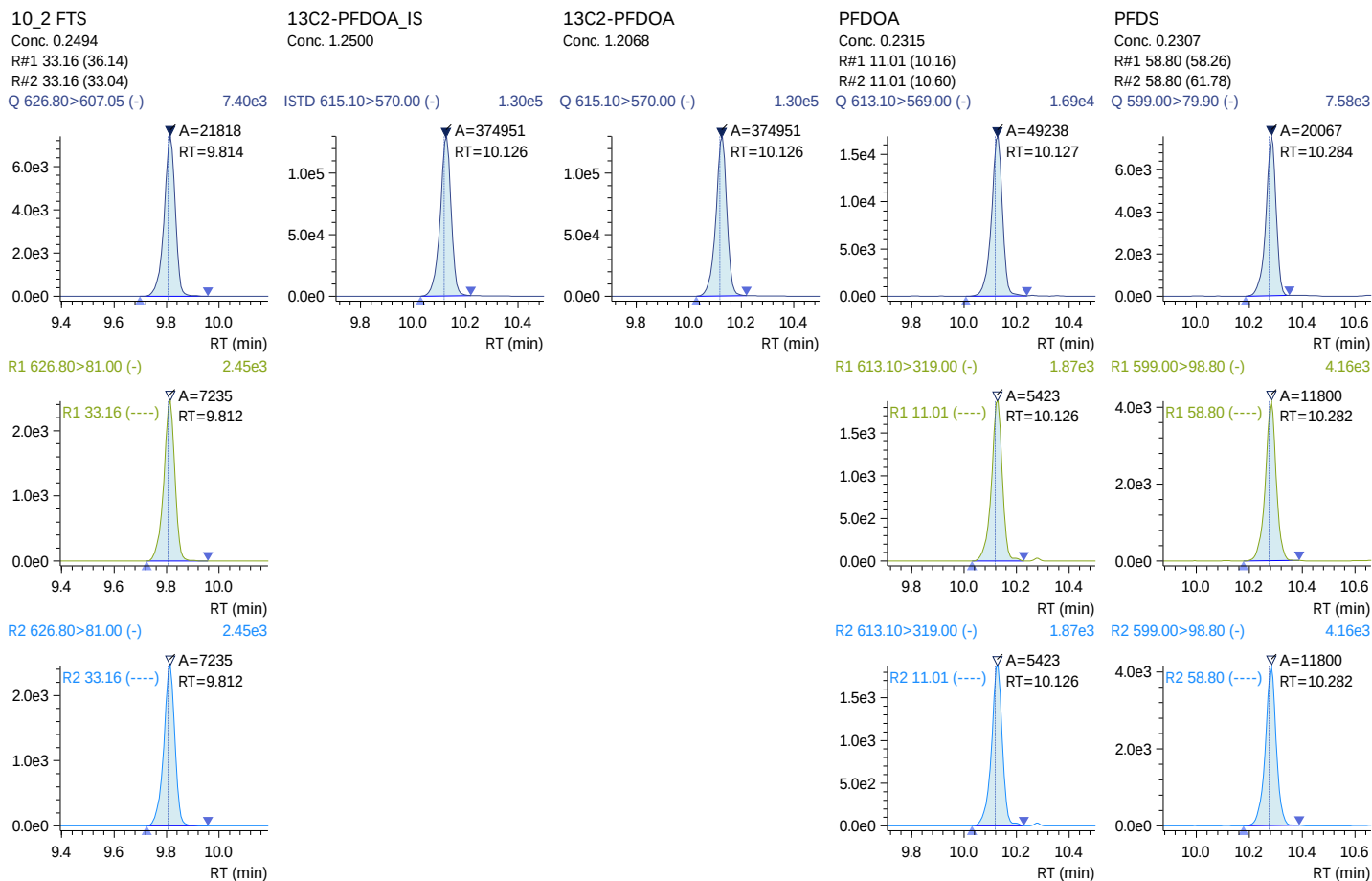


R2 548.80>98.80 (-) 4.80e3





240201_006 (continued)





240201_006 (continued)

PFTTrDA

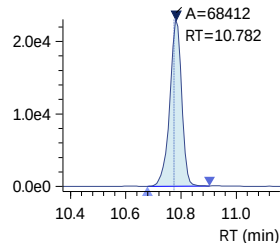
Conc. 0.2479

R#1 14.62 (16.18)

R#2 14.62 (14.85)

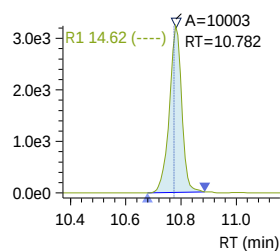
Q 663.00>619.00 (-)

2.31e4



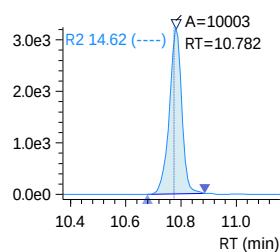
R1 663.00>168.90 (-)

3.24e3



R2 663.00>168.90 (-)

3.24e3



11-CI-PF3OUdS

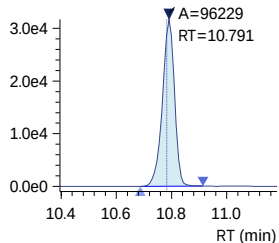
Conc. 0.1904

R#1 32.78 (34.99)

R#2 32.78 (34.39)

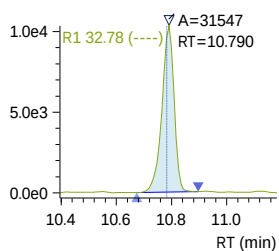
Q 630.90>451.00 (-)

3.17e4



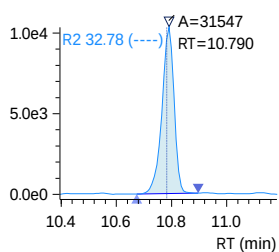
R1 632.90>452.90 (-)

1.04e4



R2 632.90>452.90 (-)

1.04e4

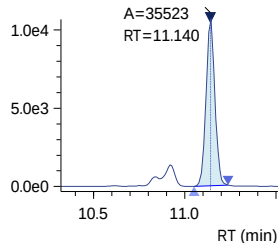


PFOSAm

Conc. 0.4396

Q 498.10>77.90 (-)

1.07e4

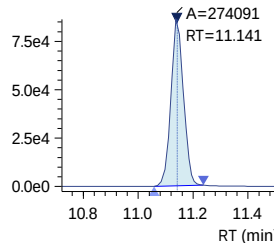


13C8-PFOSAm

Conc. 2.3231

Q 506.10>77.80 (-)

8.64e4

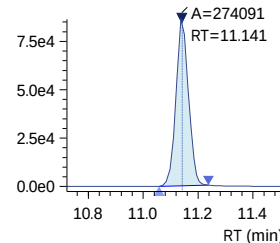


13C8-PFOSAm_IS

Conc. 2.5000

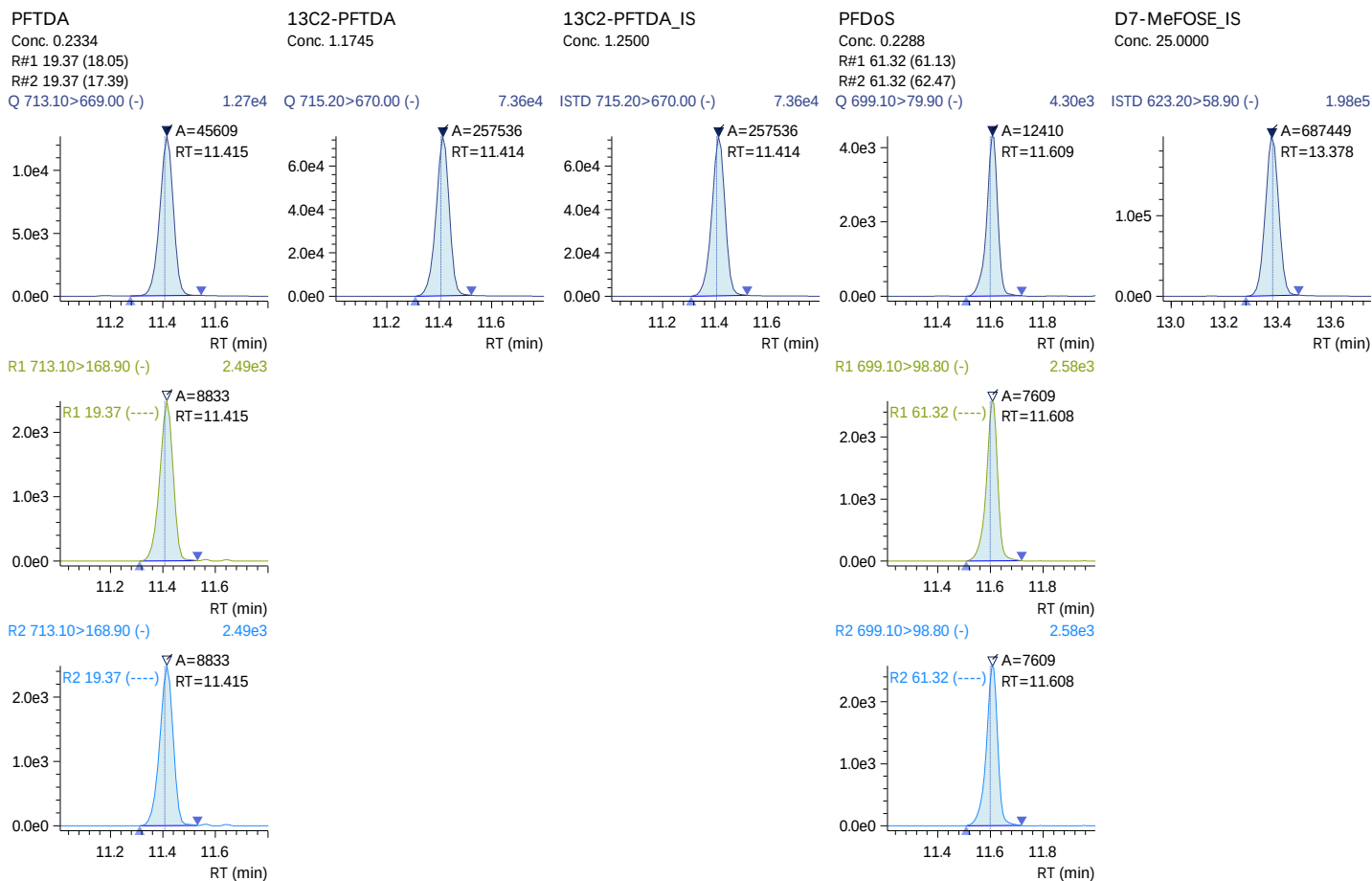
ISTD 506.10>77.80 (-)

8.64e4





240201_006 (continued)





240201_006 (continued)

D7-MeFOSE
 Conc. 22.6971

MeFOSE
 Conc. 0.2510

¹³C2-PFHXA_IS
 Conc. 2.5000

¹³C2-PFHXA
 Conc. 2.3398

PFHXA
 Conc. 0.2510
 R#1 11.13 (11.66)
 R#2 11.13 (10.99)

Q 623.20>58.90 (-)

1.98e5

Q 616.10>59.00 (-)

1.64e3

ISTD 815.00>770.05 (-)

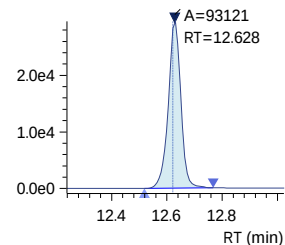
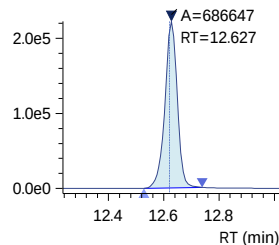
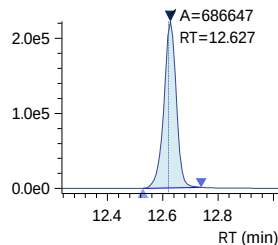
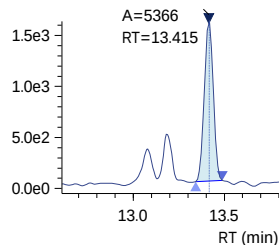
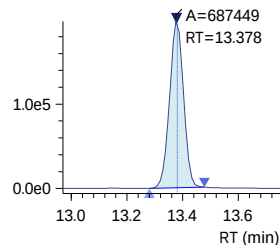
2.23e5

Q 815.00>770.05 (-)

2.23e5

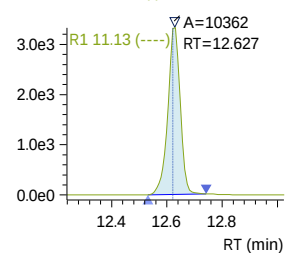
Q 813.00>768.95 (-)

2.95e4



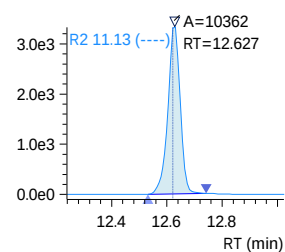
R1 813.00>218.95 (-)

3.33e3



R2 813.00>218.95 (-)

3.33e3





240201_006 (continued)

D3-MeFOSA
 Conc. 2.4610

D3-MeFOSA_IS
 Conc. 2.5000

MeFOSA
 Conc. 0.2410
 R#1 125.59 (160.44)
 R#2 125.59 (161.92)

D9-EtFOSE_IS
 Conc. 25.0000

D9-EtFOSE
 Conc. 23.2971

Q 515.00>219.00 (-)

2.26e4

ISTD 515.00>219.00 (-)

2.26e4

Q 511.90>219.00 (-)

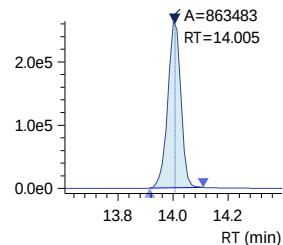
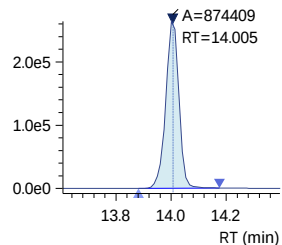
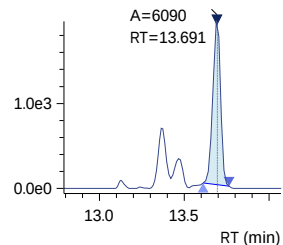
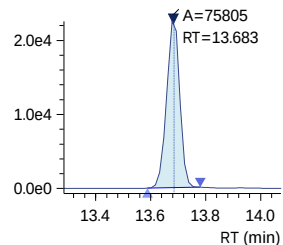
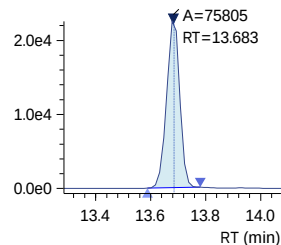
1.97e3

ISTD 639.20>58.90 (-)

2.64e5

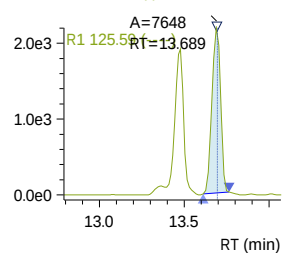
Q 639.20>58.90 (-)

2.64e5



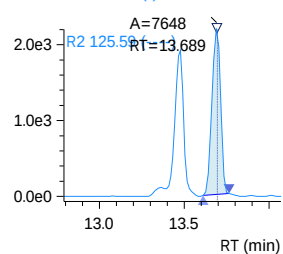
R1 511.90>169.00 (-)

2.20e3



R2 511.90>169.00 (-)

2.20e3





240201_006 (continued)

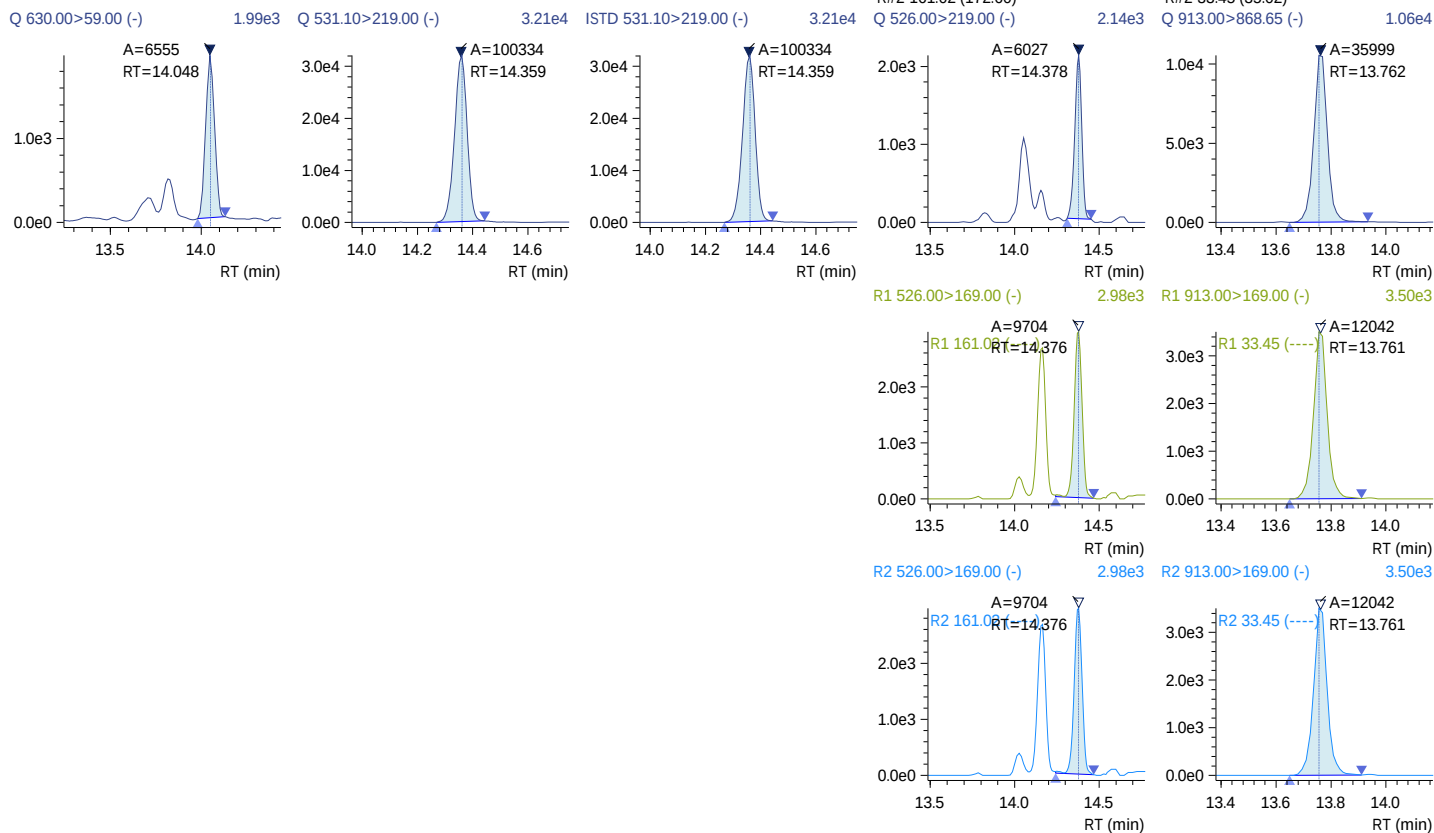
EtFOSE
 Conc. 0.2466

D5-EtFOSAm
 Conc. 2.3559

D5-EtFOSAm_IS
 Conc. 2.5000

EtFOSAm
 Conc. 0.2074
 R#1 161.02 (159.63)
 R#2 161.02 (172.60)

PFODA
 Conc. 0.2692
 R#1 33.45 (36.03)
 R#2 33.45 (35.02)



Validation Report

1st PS 02/06/24
2nd MS 02/06/24

Data File: J:\LCMS08\Data\240201_1633_RA\240201_046
Lab ID: KQ2401707-08
RunType: CCV
Matrix: Water

Date Acquired: 2/2/24 03:49
Batch ID: 831587
Analysis Method: 1633/PFAS_DOD5.4

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Internal Standards	X	

Primary Review: _____

Secondary Review: _____

Quantitation Report

1st *PS* 02/06/24
2nd *MS* 02/06/24

Data File:	J:\LCMS08\Data\240201_1633_RA\240201_046	Instrument:	K-LCMS-08
Acqu Date:	2/2/24 03:49	Vial:	22
Run Type:	CCV	Dilution:	1
Lab ID:	KQ2401707-08	Raw Units:	ng/mL

Bottle ID:		Tier:	II	Matrix:	Water
Prod Code:	PFAS_DOD5.4	Collect Date:	1/4/24	Receive Date:	1/4/24

Analysis Lot:	831587	Prep Lot:		Report Group:	KQ2401707
Analysis	1633	Prep Method:			
		Prep Date:			

Title:	Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM	Calibration ID:	KC2400048
		Report List ID:	24615

Internal Standard Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Area Criteria
18O2-PFHxS	7.063		291132	2.5000	OK
13C4-PFOS	8.798		374053	2.5000	OK
13C3-PFBA	1.354		587026	5.0000	OK
13C2-PFHxA	4.951		670095	2.5000	OK
13C4-PFOA	7.093		50894	2.5000	OK
13C5-PFNA	7.944		377080	1.2500	OK
13C2-PFDA	8.707		238365	1.2500	OK

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Rpt?
13C3-PFBS	4.606		291934	2.6875	Y
13C3-PFHxS	7.063		275180	2.6968	Y
13C8-PFOS	8.798		107481	2.2832	Y
13C4-PFBA	1.352		906805	10.4250	Y
13C5-PFPeA	3.457		244048	5.0651	Y
13C5-PFHxA	4.950		483471	2.2352	Y
13C4-PFHpA	6.134		670675	2.4647	Y
13C8-PFOA	7.093		605347	2.4940	Y
13C9-PFNA	7.944		360859	1.2928	Y
13C6-PFDA	8.706		251277	1.3155	Y
13C7-PFUnDA	9.430		292518	1.2324	Y
13C2-PFDoDA	10.119		347270	1.2256	Y
13C2-PFTeDA	11.407		246605	1.2332	Y
13C8-FOSA	11.146		230347	1.9386	Y
D3-MeFOSA	13.683		67447	2.1742	Y
D5-EtFOSA	14.358		93348	2.1764	Y
D7-MeFOSE	13.377		629365	20.6328	Y
D9-EtFOSE	14.005		821256	22.0015	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 2/6/24 11:52

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		1st	PS	02/06/24
Data File:	J:\LCMS08\Data\240201_1633_RA\240201_046	Instrument:	K-LCMS08	MS 02/06/24
Acqu Date:	2/2/24 03:49	Vial:	22	
Run Type:	CCV	Dilution:	1	
Lab ID:	KQ2401707-08	Raw Units:	ng/mL	

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Rpt?
D3-MeFOSAA	8.843		517320	3.3968	Y
D5-EtFOSAA	9.173		414432	3.4529	Y
13C2-4:2 FTS	4.636		186506	3.4033	Y
13C2-6:2 FTS	6.778		194100	3.4023	Y
13C2-8:2 FTS	8.400		157768	3.2573	Y
13C3-HFPO-DA	5.428		718622	12.1011	Y

Target Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Rpt?
Perfluorobutane sulfonic acid (PFBS)	4.606		128975	0.8915	Y
Perfluoropentane sulfonic acid (PFPeS)	5.988		103283	0.9483	Y
Perfluorohexane sulfonic acid (PFHxS)	7.063		96999	0.8065	Y
Perfluoroheptane sulfonic acid (PFHpS)	7.985		86988	0.9626	Y
Perfluorooctane sulfonic acid (PFOS)	8.799		82632	0.9001	Y
Perfluorononane sulfonic acid (PFNS)	9.562		88366	0.9714	Y
Perfluorodecane sulfonic acid (PFDS)	10.276		73382	0.9187	Y
Perfluorododecane sulfonic acid (PFDoS)	11.599		45631	0.9160	Y
Perfluorobutanoic acid (PFBA)	1.354		86298	1.0114	Y
Perfluoropentanoic acid (PFPeA)	3.459		157618	0.9224	Y
Perfluorohexanoic acid (PFHxA)	4.952		172708	0.9532	Y
Perfluoroheptanoic acid (PFHpA)	6.136		214469	0.9254	Y
Perfluorooctanoic acid (PFOA)	7.095		214551	0.9558	Y
Perfluorononanoic acid (PFNA)	7.945		213820	0.8935	Y
Perfluorodecanoic acid (PFDA)	8.709		197197	0.9279	Y
Perfluoroundecanoic acid (PFUnDA)	9.432		211552	1.0415	Y
Perfluorododecanoic acid (PFDOA)	10.120		163055	0.9134	Y
Perfluorotridecanoic acid (PFTTrDA)	10.777		228315	0.9177	Y
Perfluorotetradecanoic acid (PFTDA)	11.408		165515	0.9482	Y
Perfluorooctane sulfonamide (PFOSAm)	11.145		166206	2.0622	Y
N-Methylperfluorooctane sulfonamide (MeFOSA)	13.691		33684	0.8752	Y
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	14.375		43010	0.8399	Y
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	13.413		31774	1.0259	Y
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	14.047		35546	0.8902	Y
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	8.848		79025	1.0788	Y

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D: Result from dilution

m: Manual integration performed

d: Compound manually deleted

NR: Analyte not reported from this analysis

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#: Acceptance criteria not applicable

?: Insufficient information to determine acceptance

e: Result >= MRL, but MRL less than low point of ICAL

c: check for co-elution

Printed: 2/6/24 11:52

\\alprews001\starlims\LIMSReps\QuantValidation.rpt

		1st	PS	02/06/24
Data File:	J:\LCMS08\Data\240201_1633_RA\240201_046	Instrument:	K-LCMS08	MS 02/06/24
Acqu Date:	2/2/24 03:49	Vial:	22	
Run Type:	CCV	Dilution:	1	
Lab ID:	KQ2401707-08	Raw Units:	ng/mL	

Target Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Rpt?
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	9.183		68204	1.0022	Y
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	4.637		91008	0.9844	Y
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	6.779		71356	0.9640	Y
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	8.400		54958	0.9138	Y
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	2.962		58740	16.8030	Y
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	5.875		251230	17.3835	Y
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	7.935		413453	16.2807	Y
Perfluoro(2-ethoxyethane) sulfonic acid (PFEEESA)	5.284		631183	1.0508	Y
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	9.364		542360	0.7697	Y
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	10.785		366842	0.7293	Y
Perfluoro-3-methoxypropanoic acid (PFMPA)	2.384		57328	0.8227	Y
Perfluoro-4-methoxybutanoic acid (PFMBA)	3.986		98894	0.9260	Y
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	5.429		73570	1.0411	Y
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	4.808		96142	0.9587	Y
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	6.501		405692	0.6697	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

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D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution



240201_046

Sample ID: 1633 ICAL 1.0PPB
Date Acquired: 2/2/2024 3:49:02 AM
Acquired by: System Administrator
Data File: 240201_046
Vial: 5 | Inj. Volume: 10.0000uL | Tray: 1

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	906805	----	----	----	----	----	----	
13C4-PFBA_IS	216.80>171.90	----	906805	----	----	----	----	----	----	
13C3-PFBA_IS	216.00>172.00	----	587026	----	----	----	----	----	----	
PFBA	212.80>169.05	----	86298	----	----	----	----	----	----	
PFMPA	229.00>84.90	----	57328	----	----	----	----	----	----	
3_3 FTCA	241.00>177.10	241.00>117.00	58740	82724	140.83	139.21	----	----	----	
13C5-PFPeA	268.30>223.00	----	244048	----	----	----	----	----	----	
13C5-PFPeA_IS	268.30>223.00	----	244048	----	----	----	----	----	----	
PFPeA	263.00>219.00	----	157618	----	----	----	----	----	----	
PFMBA	279.00>84.95	----	98894	----	----	----	----	----	----	
13C2-4_2 FTS	329.10>80.90	----	186506	----	----	----	----	----	----	AC
13C2-4_2 FTS_IS	329.10>80.90	----	186506	----	----	----	----	----	----	
4_2 FTS	327.10>307.00	327.10>80.90	91008	28024	30.79	32.10	28024	30.79	32.79	
13C3-PFBS_IS	302.10>79.90	----	291934	----	----	----	----	----	----	
PFBS	298.70>79.90	298.70>98.80	128975	57755	44.78	44.81	57755	44.78	46.72	
13C3-PFBS	302.10>79.90	----	291934	----	----	----	----	----	----	
NFDHA	295.00>201.00	295.00>84.90	96142	32965	34.29	35.54	32965	34.29	37.91	
13C5-PFHxA	318.00>273.00	----	483471	----	----	----	----	----	----	
13C5-PFHxA_IS	318.00>273.00	----	483471	----	----	----	----	----	----	
13C2-PFHxA_IS	315.10>270.00	----	670095	----	----	----	----	----	----	
PFHxA	313.00>269.00	----	172708	----	----	----	----	----	----	
PFEESA	314.80>135.00	314.80>82.90	631183	34254	5.43	5.22	34254	5.43	5.35	
13C3-HFPO-DA	286.90>168.90	----	718622	----	----	----	----	----	----	
13C3-HFPO-DA_IS	286.90>168.90	----	718622	----	----	----	----	----	----	
HFPO-DA	284.90>168.90	284.90>184.90	73570	43407	59.00	59.79	43407	59.00	58.32	
5_3 FTCA	341.00>237.05	341.00>217.00	251230	383033	152.46	157.08	383033	152.46	155.87	
PFPeS	349.10>79.90	349.10>98.80	103283	55860	54.08	55.12	55860	54.08	54.87	
13C4-PFHpA	367.10>322.00	----	670675	----	----	----	----	----	----	
13C4-PFHpA_IS	367.10>322.00	----	670675	----	----	----	----	----	----	
PFHpA	363.10>319.00	363.10>169.00	214469	48740	22.73	23.02	48740	22.73	20.91	
DONA	376.90>250.90	376.90>84.80	405692	116134	28.63	27.50	116134	28.63	27.00	
13C2-6_2 FTS_IS	429.10>80.90	----	194100	----	----	----	----	----	----	
13C2-6_2 FTS	429.10>80.90	----	194100	----	----	----	----	----	----	AC
6_2 FTS	427.10>407.00	427.10>80.90	71356	30014	42.06	50.47	30014	42.06	46.83	
13C4-PFOA_IS	417.10>172.00	----	50894	----	----	----	----	----	----	
13C8-PFOA_IS	421.10>376.00	----	605347	----	----	----	----	----	----	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240201_046 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	605347	----	----	----	----	----	----	----
PFOA	413.00>369.00	413.00>169.00	214551	58557	27.29	28.77	58557	27.29	28.12	
13C3-PFHxS	402.10>79.90	----	275180	----	----	----	----	----	----	----
13C3-PFHxS_IS	402.10>79.90	----	275180	----	----	----	----	----	----	----
PFHxS	398.70>79.90	398.70>98.90	96999	57757	59.54	60.90	57757	59.54	61.53	
18O2-PFHxS_IS	403.00>83.90	----	291132	----	----	----	----	----	----	----
13C9-PFNA_IS	472.10>427.00	----	360859	----	----	----	----	----	----	----
13C9-PFNA	472.10>427.00	----	360859	----	----	----	----	----	----	----
13C5-PFNA_IS	468.00>423.00	----	377080	----	----	----	----	----	----	----
PFNA	463.00>419.00	463.00>219.00	213820	42931	20.08	19.31	42931	20.08	20.30	
PFHpS	449.00>79.90	449.00>98.80	86988	44017	50.60	52.44	44017	50.60	52.33	
7_3 FTCA	441.00>317.00	441.00>336.90	413453	547631	132.45	129.46	547631	132.45	129.73	
13C2-8_2-FTS	529.10>80.90	----	157768	----	----	----	----	----	----	AC
13C2-8_2-FTS_IS	529.10>80.90	----	157768	----	----	----	----	----	----	----
8_2 FTS	527.10>506.95	527.10>80.80	54958	25079	45.63	45.98	25079	45.63	43.25	
13C6-PFDA_IS	519.10>474.10	----	251277	----	----	----	----	----	----	----
13C6-PFDA	519.10>474.10	----	251277	----	----	----	----	----	----	----
13C2-PFDA_IS	515.10>470.10	----	238365	----	----	----	----	----	----	----
PFDA	512.90>469.00	512.90>219.00	197197	32673	16.57	17.88	32673	16.57	18.89	
D3-NMeFOSAA_IS	573.20>419.00	----	517320	----	----	----	----	----	----	----
D3-NMeFOSAA	573.20>419.00	----	517320	----	----	----	----	----	----	AC
13C8-PFOS_IS	507.10>98.90	----	107481	----	----	----	----	----	----	----
13C8-PFOS	507.10>98.90	----	107481	----	----	----	----	----	----	----
13C4-PFOS_IS	502.80>79.90	----	374053	----	----	----	----	----	----	----
PFOS	498.90>79.90	498.90>98.80	82632	41436	50.15	53.60	41436	50.15	52.29	
NMeFOSAA	570.10>419.00	570.10>483.00	79025	46481	58.82	64.89	46481	58.82	60.97	
D5-NEtFOSAA_IS	589.20>419.00	----	414432	----	----	----	----	----	----	----
D5-NEtFOSAA	589.20>419.00	----	414432	----	----	----	----	----	----	AC
NEtFOSAA	584.20>419.10	584.20>526.00	68204	56265	82.50	96.07	56265	82.50	94.54	
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	542360	170670	31.47	30.95	170670	31.47	30.61	
PFUnDA	563.10>519.00	563.10>269.10	211552	26056	12.32	11.01	26056	12.32	12.02	
13C7-PFUnDA_IS	570.00>525.10	----	292518	----	----	----	----	----	----	----
13C7-PFUnDA	570.00>525.10	----	292518	----	----	----	----	----	----	----
PFNS	548.80>79.90	548.80>98.80	88366	52530	59.45	60.44	52530	59.45	58.51	
10_2 FTS	626.80>607.05	626.80>81.00	75899	25809	34.01	36.14	25809	34.01	33.04	
13C2-PFDOA_IS	615.10>570.00	----	347270	----	----	----	----	----	----	----
13C2-PFDOA	615.10>570.00	----	347270	----	----	----	----	----	----	----
PFDOA	613.10>569.00	613.10>319.00	163055	16724	10.26	10.16	16724	10.26	10.60	
PFDS	599.00>79.90	599.00>98.80	73382	43338	59.06	58.26	43338	59.06	61.78	
PFTDA	663.00>619.00	663.00>168.90	228315	33766	14.79	16.18	33766	14.79	14.85	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240201_046 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	366842	125172	34.12	34.99	125172	34.12	34.39	
PFOSAm	498.10>77.90	----	166206	----	----	----	----	----	----	
13C8-PFOSAm	506.10>77.80	----	230347	----	----	----	----	----	----	
13C8-PFOSAm_IS	506.10>77.80	----	230347	----	----	----	----	----	----	
PFTDA	713.10>669.00	713.10>168.90	165515	29523	17.84	18.05	29523	17.84	17.39	
13C2-PFTDA	715.20>670.00	----	246605	----	----	----	----	----	----	
13C2-PFTDA_IS	715.20>670.00	----	246605	----	----	----	----	----	----	
PFDoS	699.10>79.90	699.10>98.80	45631	28077	61.53	61.13	28077	61.53	62.47	
D7-MeFOSE_IS	623.20>58.90	----	629365	----	----	----	----	----	----	
D7-MeFOSE	623.20>58.90	----	629365	----	----	----	----	----	----	
MeFOSE	616.10>59.00	----	31774	----	----	----	----	----	----	
13C2-PFHxDA_IS	815.00>770.05	----	559305	----	----	----	----	----	----	
13C2-PFHxDA	815.00>770.05	----	559305	----	----	----	----	----	----	
PFHxDA	813.00>768.95	813.00>218.95	315872	36756	11.64	11.66	36756	11.64	10.99	
D3-MeFOSA	515.00>219.00	----	67447	----	----	----	----	----	----	
D3-MeFOSA_IS	515.00>219.00	----	67447	----	----	----	----	----	----	
MeFOSA	511.90>219.00	511.90>169.00	33684	52560	156.04	160.44	52560	156.04	161.92	
D9-EtFOSE_IS	639.20>58.90	----	832573	----	----	----	----	----	----	
D9-EtFOSE	639.20>58.90	----	821256	----	----	----	----	----	----	
EtFOSE	630.00>59.00	----	35546	----	----	----	----	----	----	
D5-EtFOSAm	531.10>219.00	----	93348	----	----	----	----	----	----	
D5-EtFOSAm_IS	531.10>219.00	----	93348	----	----	----	----	----	----	
EtFOSAm	526.00>219.00	526.00>169.00	43010	71894	167.16	159.63	71894	167.16	172.60	
PFODA	913.00>868.65	913.00>169.00	116885	44312	37.91	36.03	44312	37.91	35.02	

Flag ID key: AC: Accuracy%



240201_046

Sample ID: 1633 ICAL 1.0PPB
Date Acquired: 2/2/2024 3:49:02 AM
Acquired by: System Administrator
Data File: 240201_046
Vial: 5 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.352	-0.001	-0.002	906805	587026	13C3-PFBA_IS	10.4250	ng/mL	
13C4-PFBA_IS	Auto	1.352	-0.001	----	906805	906805	----	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.354	-0.001	----	587026	587026	----	5.0000	ng/mL	
PFBA	Auto	1.354	-0.002	0.002	86298	906805	13C4-PFBA_IS	1.0114	ng/mL	
PFMPA	Auto	2.384	0.003	-1.073	57328	244048	13C5-PFPeA_IS	0.8227	ng/mL	
3_3 FTCA	Auto	2.962	0.006	-0.495	58740	244048	13C5-PFPeA_IS	16.8030	ng/mL	
13C5-PFPeA	Auto	3.457	0.002	-1.494	244048	670095	13C2-PFHxA_IS	5.0651	ng/mL	
13C5-PFPeA_IS	Auto	3.457	0.002	----	244048	244048	----	5.0000	ng/mL	
PFPeA	Auto	3.459	0.001	0.002	157618	244048	13C5-PFPeA_IS	0.9224	ng/mL	
PFMBA	Auto	3.986	0.002	0.529	98894	244048	13C5-PFPeA_IS	0.9260	ng/mL	
13C2-4_2 FTS	Auto	4.636	0.003	-2.427	186506	291132	18O2-PFHxS_IS	3.4033	ng/mL	AC
13C2-4_2 FTS_IS	Auto	4.636	0.003	----	186506	186506	----	5.0000	ng/mL	
4_2 FTS	Auto	4.637	0.004	0.001	91008	186506	13C2-4_2 FTS_IS	0.9844	ng/mL	
13C3-PFBS_IS	Auto	4.606	0.003	----	291934	291934	----	2.5000	ng/mL	
PFBS	Auto	4.606	0.001	0.000	128975	291934	13C3-PFBS_IS	0.8915	ng/mL	
13C3-PFBS	Auto	4.606	0.003	-2.457	291934	291132	18O2-PFHxS_IS	2.6875	ng/mL	
NFDHA	Auto	4.808	0.003	-0.142	96142	483471	13C5-PFHxA_IS	0.9587	ng/mL	
13C5-PFHxA	Auto	4.950	0.003	-0.001	483471	670095	13C2-PFHxA_IS	2.2352	ng/mL	
13C5-PFHxA_IS	Auto	4.950	0.003	----	483471	483471	----	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	4.951	0.004	----	670095	670095	----	2.5000	ng/mL	
PFHxA	Auto	4.952	0.003	0.002	172708	483471	13C5-PFHxA_IS	0.9532	ng/mL	
PFEESA	Auto	5.284	0.002	0.334	631183	483471	13C5-PFHxA_IS	1.0508	ng/mL	
13C3-HFPO-DA	Auto	5.428	0.003	0.477	718622	670095	13C2-PFHxA_IS	12.1011	ng/mL	
13C3-HFPO-DA_IS	Auto	5.428	0.003	----	718622	718622	----	10.0000	ng/mL	
HFPO-DA	Auto	5.429	0.002	0.001	73570	718622	13C3-HFPO-DA_IS	1.0411	ng/mL	
5_3 FTCA	Auto	5.875	0.007	0.925	251230	483471	13C5-PFHxA_IS	17.3835	ng/mL	
PFPeS	Auto	5.988	0.000	-1.075	103283	275180	13C3-PFHxS_IS	0.9483	ng/mL	
13C4-PFHpA	Auto	6.134	0.002	1.183	670675	670095	13C2-PFHxA_IS	2.4647	ng/mL	
13C4-PFHpA_IS	Auto	6.134	0.002	----	670675	670675	----	2.5000	ng/mL	
PFHpA	Auto	6.136	0.002	0.002	214469	670675	13C4-PFHpA_IS	0.9254	ng/mL	
DONA	Auto	6.501	0.000	1.073	405692	718622	13C3-HFPO-DA_IS	0.6697	ng/mL	
13C2-6_2 FTS_IS	Auto	6.778	0.000	----	194100	194100	----	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.778	0.000	-0.285	194100	291132	18O2-PFHxS_IS	3.4023	ng/mL	AC
6_2 FTS	Auto	6.779	0.002	0.001	71356	194100	13C2-6_2 FTS_IS	0.9640	ng/mL	
13C4-PFOA_IS	Auto	7.093	0.002	----	50894	50894	----	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.093	0.002	----	605347	605347	----	2.5000	ng/mL	
13C8-PFOA	Auto	7.093	0.002	0.000	605347	50894	13C4-PFOA_IS	2.4940	ng/mL	
PFOA	Auto	7.095	0.002	0.002	214551	605347	13C8-PFOA_IS	0.9558	ng/mL	
13C3-PFHxS	Auto	7.063	0.001	0.000	275180	291132	18O2-PFHxS_IS	2.6968	ng/mL	
13C3-PFHxS_IS	Auto	7.063	0.001	----	275180	275180	----	2.5000	ng/mL	
PFHxS	Auto	7.063	0.001	0.000	96999	275180	13C3-PFHxS_IS	0.8065	ng/mL	
18O2-PFHxS_IS	Auto	7.063	0.001	----	291132	291132	----	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.944	0.003	----	360859	360859	----	1.2500	ng/mL	
13C9-PFNA	Auto	7.944	0.003	0.000	360859	377080	13C5-PFNA_IS	1.2928	ng/mL	
13C5-PFNA_IS	Auto	7.944	0.002	----	377080	377080	----	1.2500	ng/mL	
PFNA	Auto	7.945	0.002	0.001	213820	360859	13C9-PFNA_IS	0.8935	ng/mL	
PFHpS	Auto	7.985	0.002	-0.813	86988	107481	13C8-PFOS_IS	0.9626	ng/mL	
7_3 FTCA	Auto	7.935	0.007	2.985	413453	483471	13C5-PFHxA_IS	16.2807	ng/mL	
13C2-8_2-FTS	Auto	8.400	0.001	1.337	157768	291132	18O2-PFHxS_IS	3.2573	ng/mL	AC
13C2-8_2-FTS_IS	Auto	8.400	0.001	----	157768	157768	----	5.0000	ng/mL	
8_2 FTS	Auto	8.400	0.002	0.000	54958	157768	13C2-8_2-FTS_IS	0.9138	ng/mL	
13C6-PFDA_IS	Auto	8.706	-0.001	----	251277	251277	----	1.2500	ng/mL	
13C6-PFDA	Auto	8.706	-0.001	-0.001	251277	238365	13C2-PFDA_IS	1.3155	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_046 (continued)

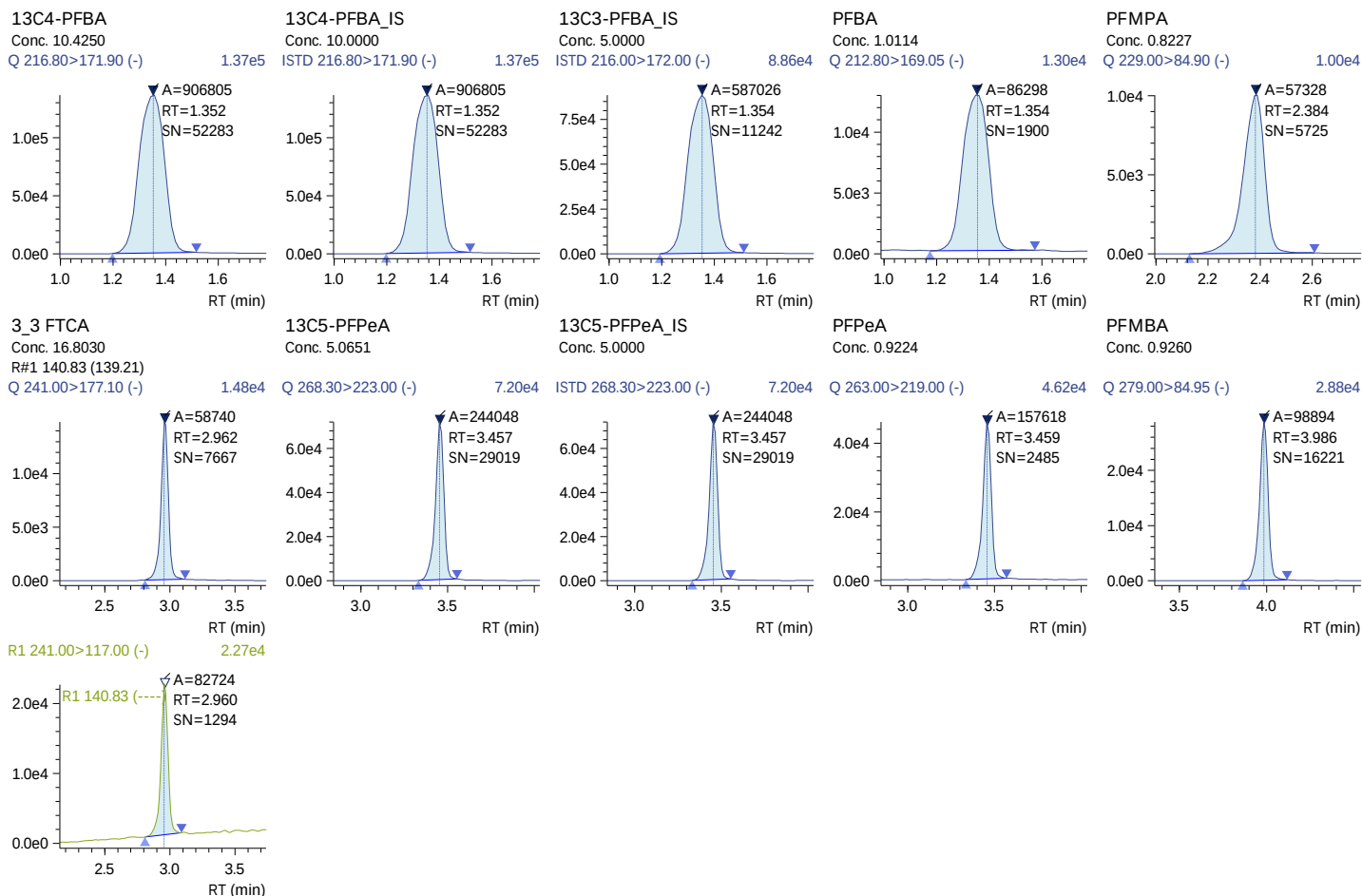
(Table continued from previous page)

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C2-PFDA_IS	Auto	8.707	-0.001	----	238365	238365	----	1.2500	ng/mL	
PFDA	Auto	8.709	0.000	0.003	197197	251277	13C6-PFDA_IS	0.9279	ng/mL	
D3-NMeFOSAA_IS	Auto	8.843	0.000	----	517320	517320	----	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.843	0.000	0.045	517320	374053	13C4-PFOS_IS	3.3968	ng/mL	AC
13C8-PFOS_IS	Auto	8.798	-0.002	----	107481	107481	----	2.5000	ng/mL	
13C8-PFOS	Auto	8.798	-0.002	0.000	107481	374053	13C4-PFOS_IS	2.2832	ng/mL	
13C4-PFOS_IS	Auto	8.798	-0.002	----	374053	374053	----	2.5000	ng/mL	
PFOS	M	8.799	-0.002	0.001	82632	107481	13C8-PFOS_IS	0.9001	ng/mL	
NMeFOSAA	M	8.848	0.000	0.005	79025	517320	D3-NMeFOSAA_IS	1.0788	ng/mL	
D5-NetFOSAA_IS	Auto	9.173	0.001	----	414432	414432	----	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.173	0.001	0.375	414432	374053	13C4-PFOS_IS	3.4529	ng/mL	AC
NetFOSAA	M	9.183	0.000	0.010	68204	414432	D5-NetFOSAA_IS	1.0022	ng/mL	
9-CI-PF3ONS	Auto	9.364	-0.001	3.936	542360	718622	13C3-HFPO-DA_IS	0.7697	ng/mL	
PFUnDA	Auto	9.432	-0.001	0.002	211552	292518	13C7-PFUnDA_IS	1.0415	ng/mL	
13C7-PFUnDA_IS	Auto	9.430	0.000	----	292518	292518	----	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.430	0.000	0.723	292518	238365	13C2-PFDA_IS	1.2324	ng/mL	
PFNS	Auto	9.562	0.000	0.764	88366	107481	13C8-PFOS_IS	0.9714	ng/mL	
10_2_FTS	Auto	9.806	0.000	1.406	75899	157768	13C2-8_2-FTS_IS	0.9524	ng/mL	
13C2-PFDOA_IS	Auto	10.119	0.001	----	347270	347270	----	1.2500	ng/mL	
13C2-PFDOA	Auto	10.119	0.001	1.412	347270	238365	13C2-PFDA_IS	1.2256	ng/mL	
PFDOA	Auto	10.120	0.001	0.001	163055	347270	13C2-PFDOA_IS	0.9134	ng/mL	
PFDS	Auto	10.276	0.000	1.478	73382	107481	13C8-PFOS_IS	0.9187	ng/mL	
PFTDA	Auto	10.777	0.002	-0.630	228315	246605	13C2-PFTDA_IS	0.9177	ng/mL	
11-CI-PF3OUdS	Auto	10.785	0.002	5.357	366842	718622	13C3-HFPO-DA_IS	0.7293	ng/mL	
PFOSAm	M	11.145	0.003	-0.001	166206	230347	13C8-PFOSAm_IS	2.0622	ng/mL	
13C8-PFOSAm	Auto	11.146	0.004	2.348	230347	374053	13C4-PFOS_IS	1.9386	ng/mL	
13C8-PFOSAm_IS	Auto	11.146	0.004	----	230347	230347	----	2.5000	ng/mL	
PFTDA	Auto	11.408	0.000	0.001	165515	246605	13C2-PFTDA_IS	0.9482	ng/mL	
13C2-PFTDA	Auto	11.407	0.001	2.700	246605	238365	13C2-PFDA_IS	1.2332	ng/mL	
13C2-PFTDA_IS	Auto	11.407	0.001	----	246605	246605	----	1.2500	ng/mL	
PFDoS	Auto	11.599	0.000	2.801	45631	107481	13C8-PFOS_IS	0.9160	ng/mL	
D7-MeFOSE_IS	Auto	13.377	-0.003	----	629365	629365	----	25.0000	ng/mL	
D7-MeFOSE	Auto	13.377	-0.003	4.579	629365	374053	13C4-PFOS_IS	20.6328	ng/mL	
MeFOSE	M	13.413	-0.004	0.036	31774	629365	D7-MeFOSE_IS	1.0259	ng/mL	
13C2-PFHxDA_IS	Auto	12.619	-0.001	----	559305	559305	----	2.5000	ng/mL	
13C2-PFHxDA	Auto	12.619	-0.001	3.912	559305	238365	13C2-PFDA_IS	2.0898	ng/mL	
PFHxDA	Auto	12.621	0.000	0.002	315872	559305	13C2-PFHxDA_IS	1.0451	ng/mL	
D3-MeFOSA	Auto	13.683	-0.002	4.885	67447	374053	13C4-PFOS_IS	2.1742	ng/mL	
D3-MeFOSA_IS	Auto	13.683	-0.002	----	67447	67447	----	2.5000	ng/mL	
MeFOSA	M	13.691	-0.003	0.008	33684	67447	D3-MeFOSA_IS	0.8752	ng/mL	
D9-EtFOSE_IS	Auto	14.005	-0.003	----	832573	832573	----	25.0000	ng/mL	
D9-EtFOSE	Auto	14.005	-0.003	5.207	821256	374053	13C4-PFOS_IS	22.0015	ng/mL	
EtFOSE	M	14.047	-0.003	0.042	35546	832573	D9-EtFOSE_IS	0.8902	ng/mL	
D5-EtFOSAm	Auto	14.358	-0.003	5.560	93348	374053	13C4-PFOS_IS	2.1764	ng/mL	
D5-EtFOSAm_IS	Auto	14.358	-0.003	----	93348	93348	----	2.5000	ng/mL	
EtFOSAm	M	14.375	-0.004	0.017	43010	93348	D5-EtFOSAm_IS	0.8399	ng/mL	
PFODA	Auto	13.750	-0.006	1.131	116885	559305	13C2-PFHxDA_IS	0.9997	ng/mL	

Flag ID key: AC: Accuracy%



240201_046 (continued)





240201_046 (continued)

13C2-4_2 FTS
Conc. 3.4033

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. 0.9844
R#1 30.79 (32.10)
R#2 30.79 (32.79)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 0.8915
R#1 44.78 (44.81)
R#2 44.78 (46.72)

Q 329.10>80.90 (-)

5.78e4

ISTD 329.10>80.90 (-)

5.78e4

Q 327.10>307.00 (-)

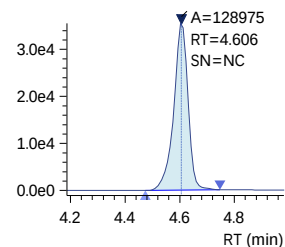
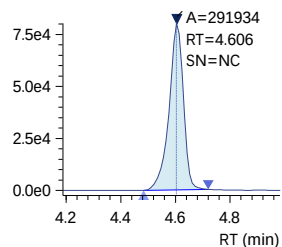
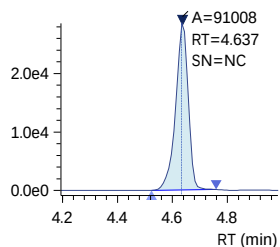
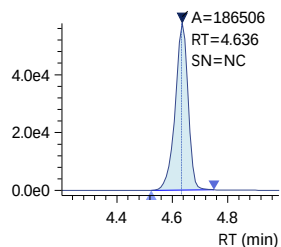
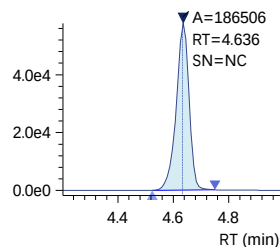
2.86e4

ISTD 302.10>79.90 (-)

8.03e4

Q 298.70>79.90 (-)

3.55e4

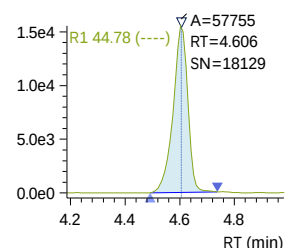
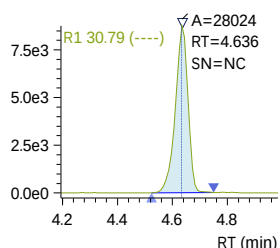


R1 327.10>80.90 (-)

8.76e3

R1 298.70>98.80 (-)

1.56e4

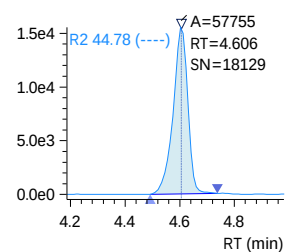
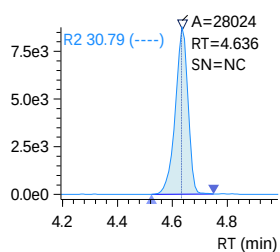


R2 327.10>80.90 (-)

8.76e3

R2 298.70>98.80 (-)

1.56e4





240201_046 (continued)

13C3-PFBS
Conc. 2.6875

NFDHA
Conc. 0.9587
R#1 34.29 (35.54)
R#2 34.29 (37.91)

13C5-PFHxA
Conc. 2.2352

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

Q 302.10>79.90 (-)

8.03e4

Q 295.00>201.00 (-)

2.83e4

Q 318.00>273.00 (-)

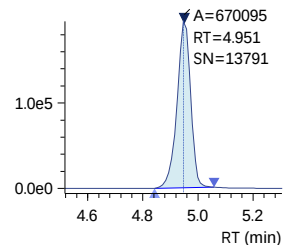
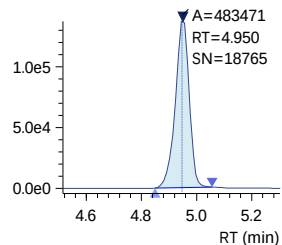
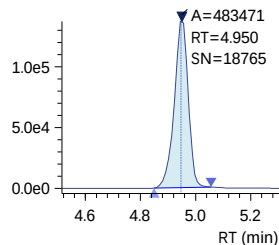
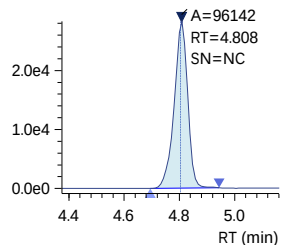
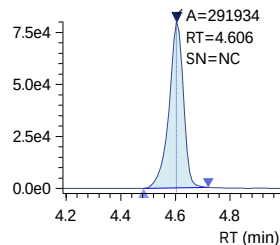
1.37e5

ISTD 318.00>273.00 (-)

1.37e5

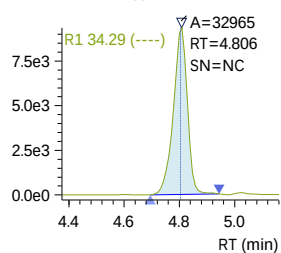
ISTD 315.10>270.00 (-)

1.96e5



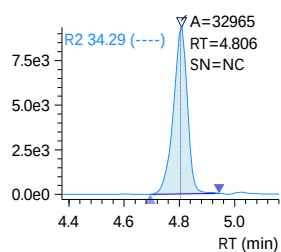
R1 295.00>84.90 (-)

9.36e3



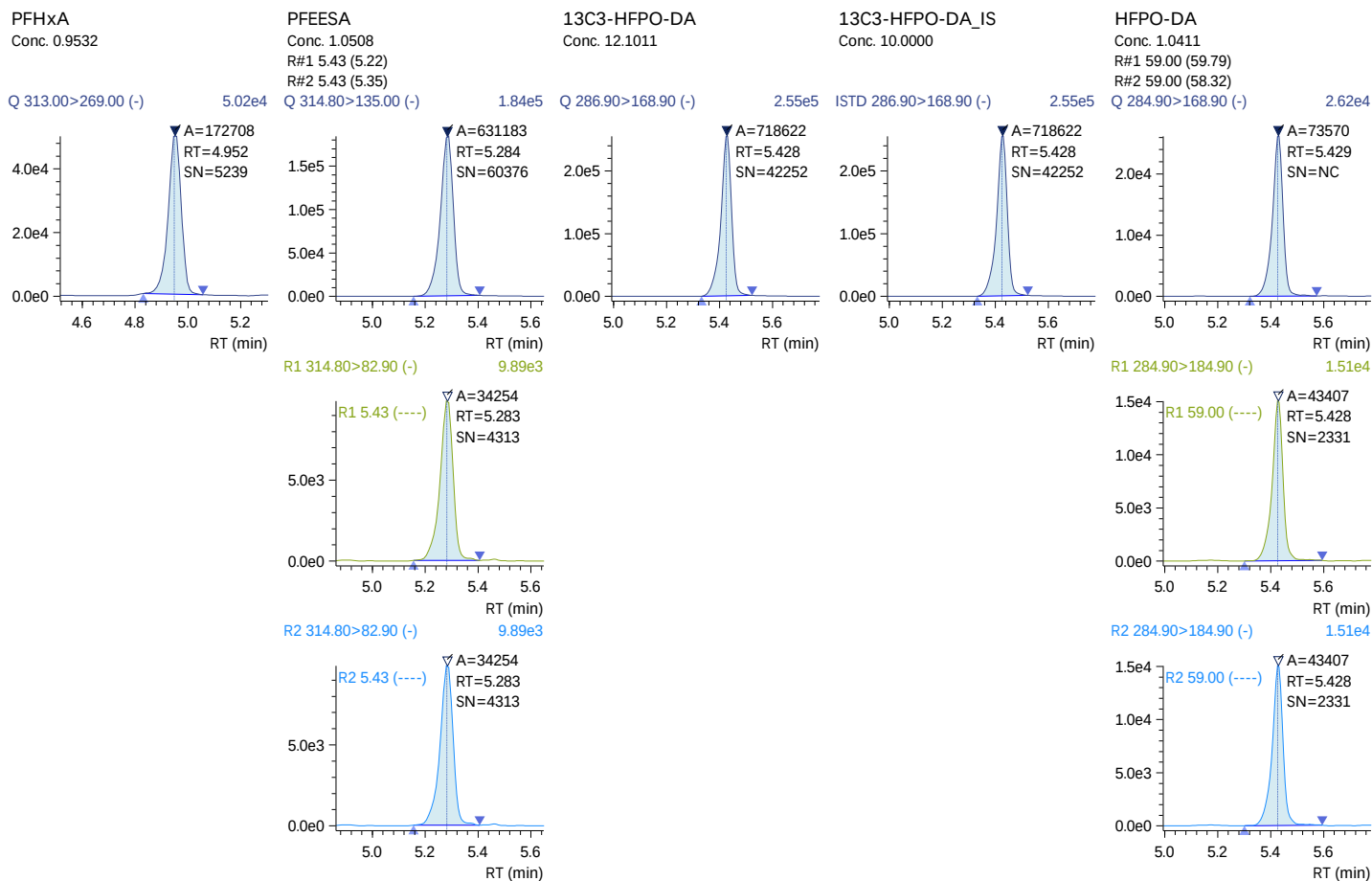
R2 295.00>84.90 (-)

9.36e3





240201_046 (continued)

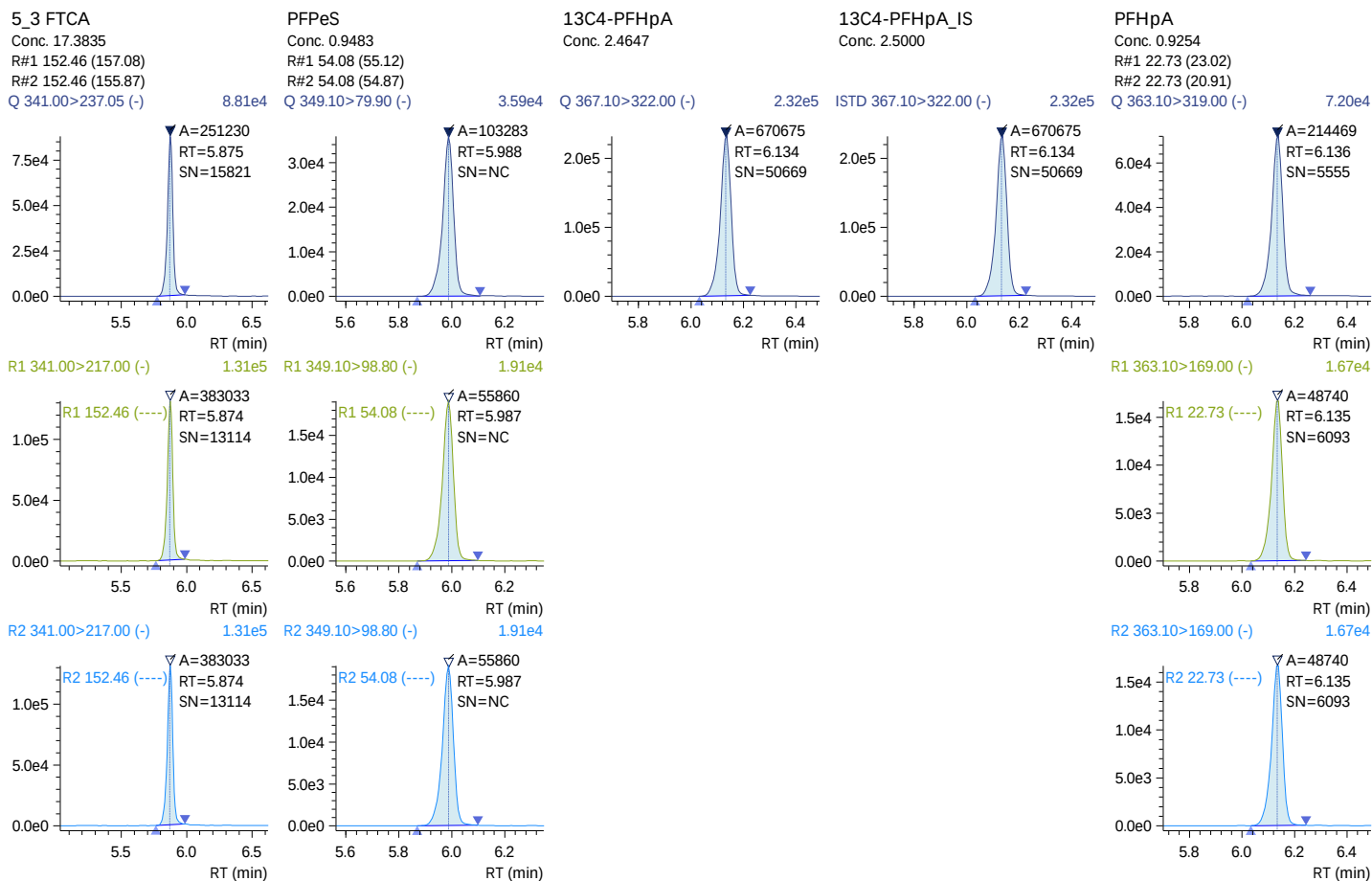


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.

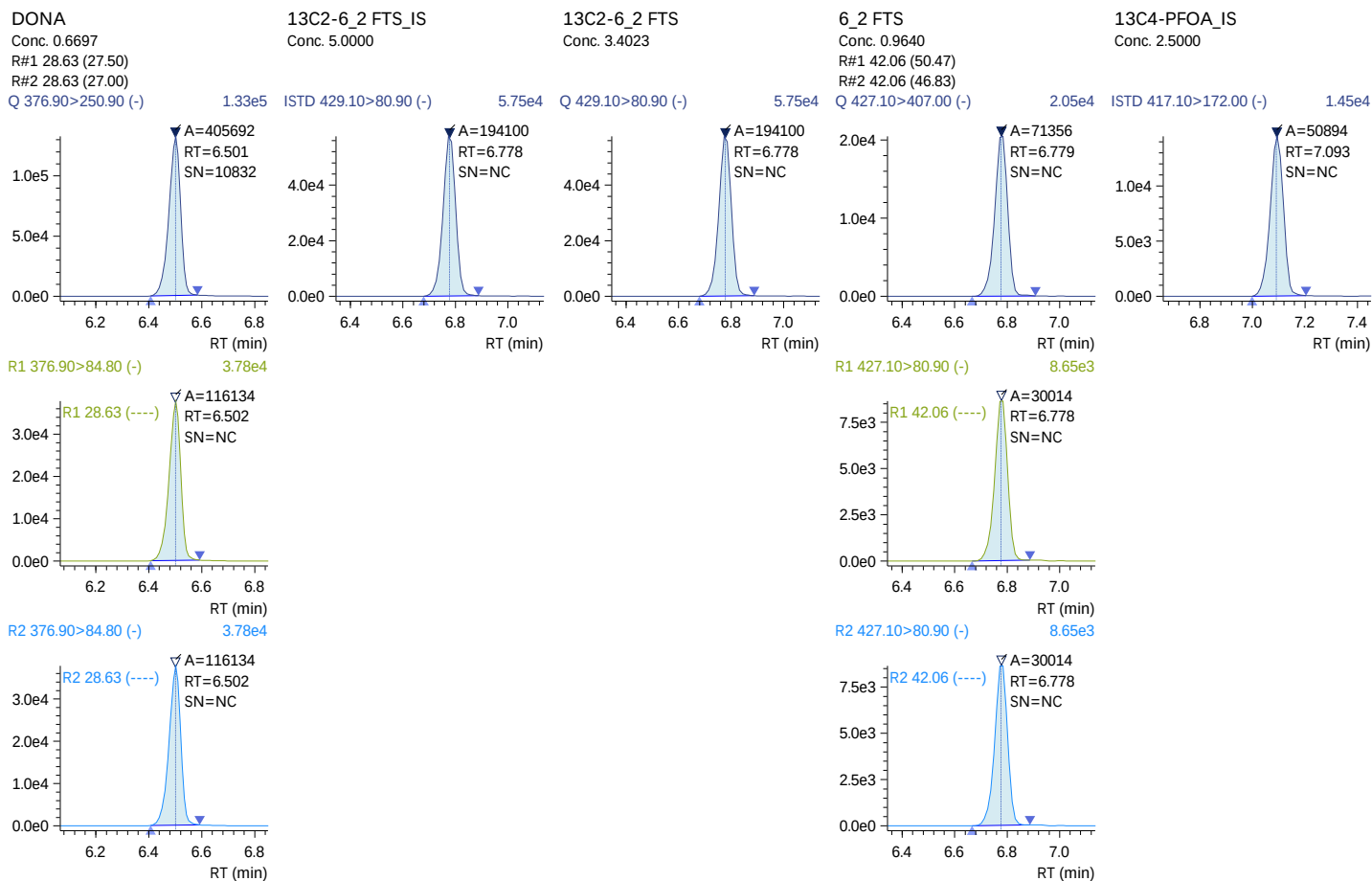


240201_046 (continued)





240201_046 (continued)





240201_046 (continued)

13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.4940

PFOA
Conc. 0.9558
R#1 27.29 (28.77)
R#2 27.29 (28.12)

13C3-PFHxS
Conc. 2.6968

13C3-PFHxS_IS
Conc. 2.5000

ISTD 421.10>376.00 (-)

1.78e5

Q 421.10>376.00 (-)

1.78e5

Q 413.00>369.00 (-)

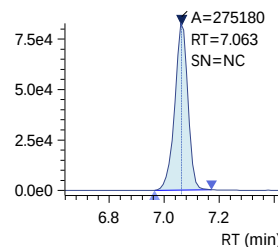
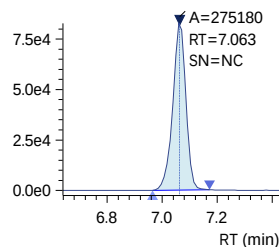
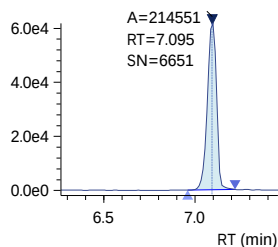
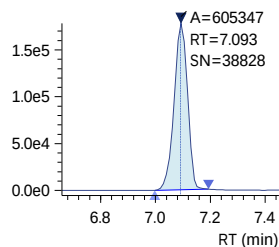
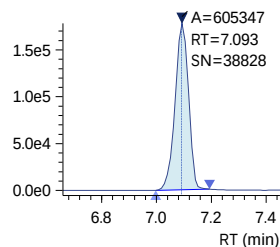
6.18e4

Q 402.10>79.90 (-)

8.28e4

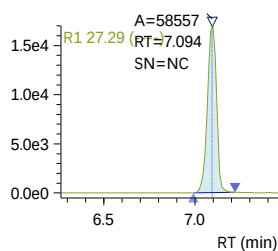
ISTD 402.10>79.90 (-)

8.28e4



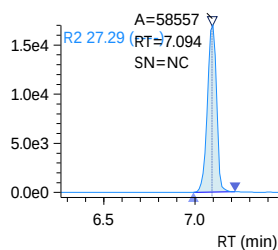
R1 413.00>169.00 (-)

1.70e4



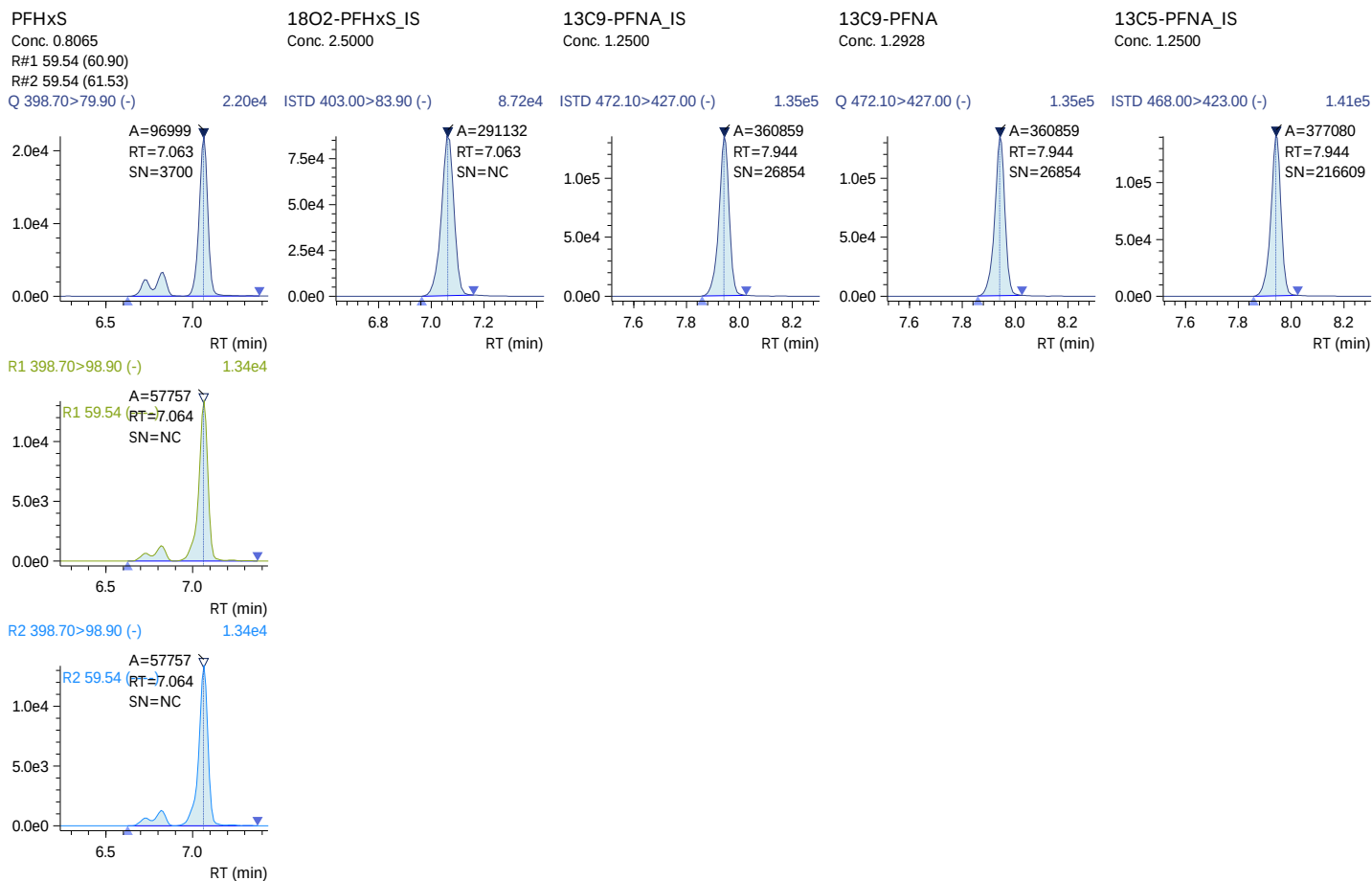
R2 413.00>169.00 (-)

1.70e4



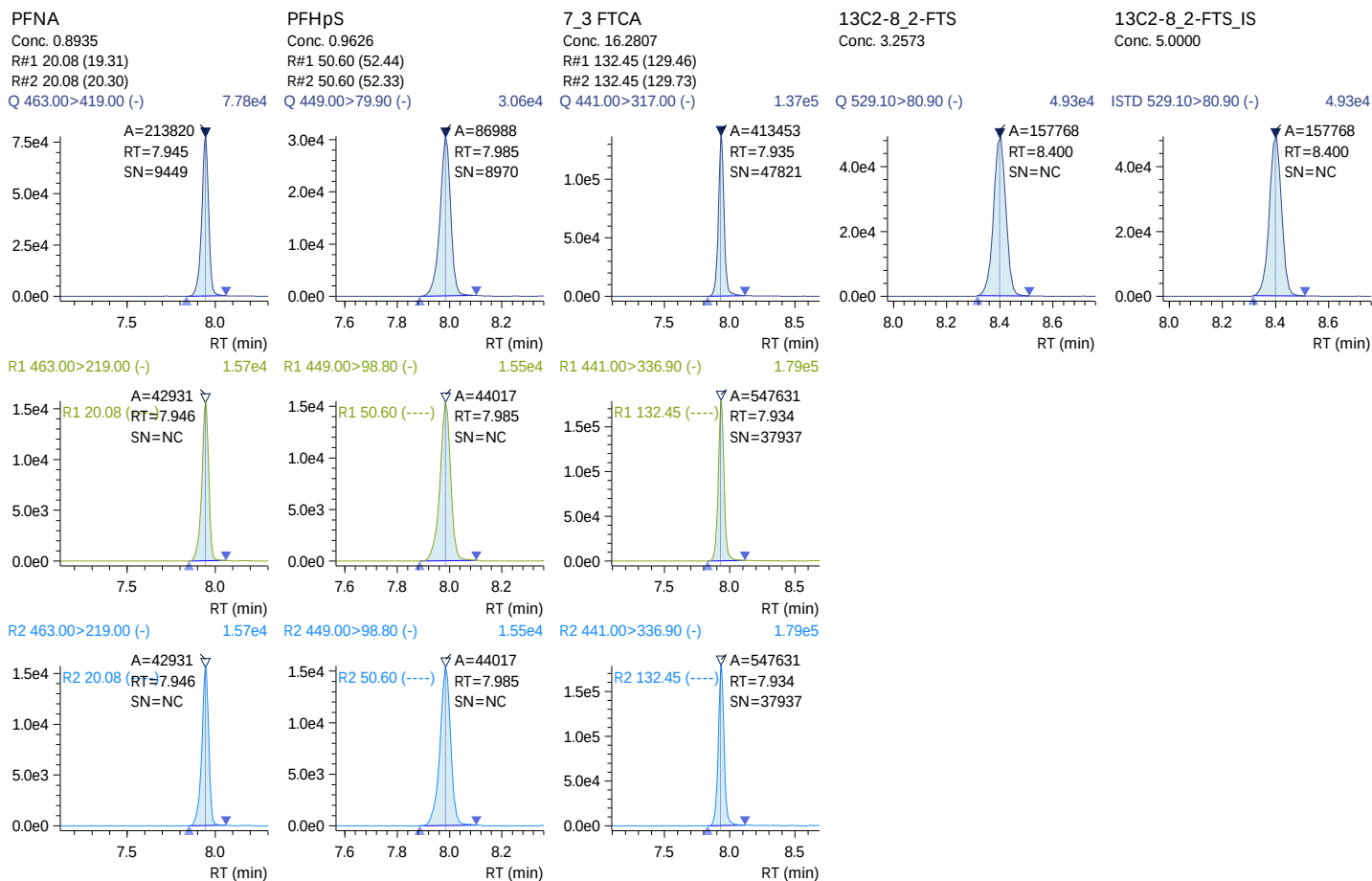


240201_046 (continued)





240201_046 (continued)

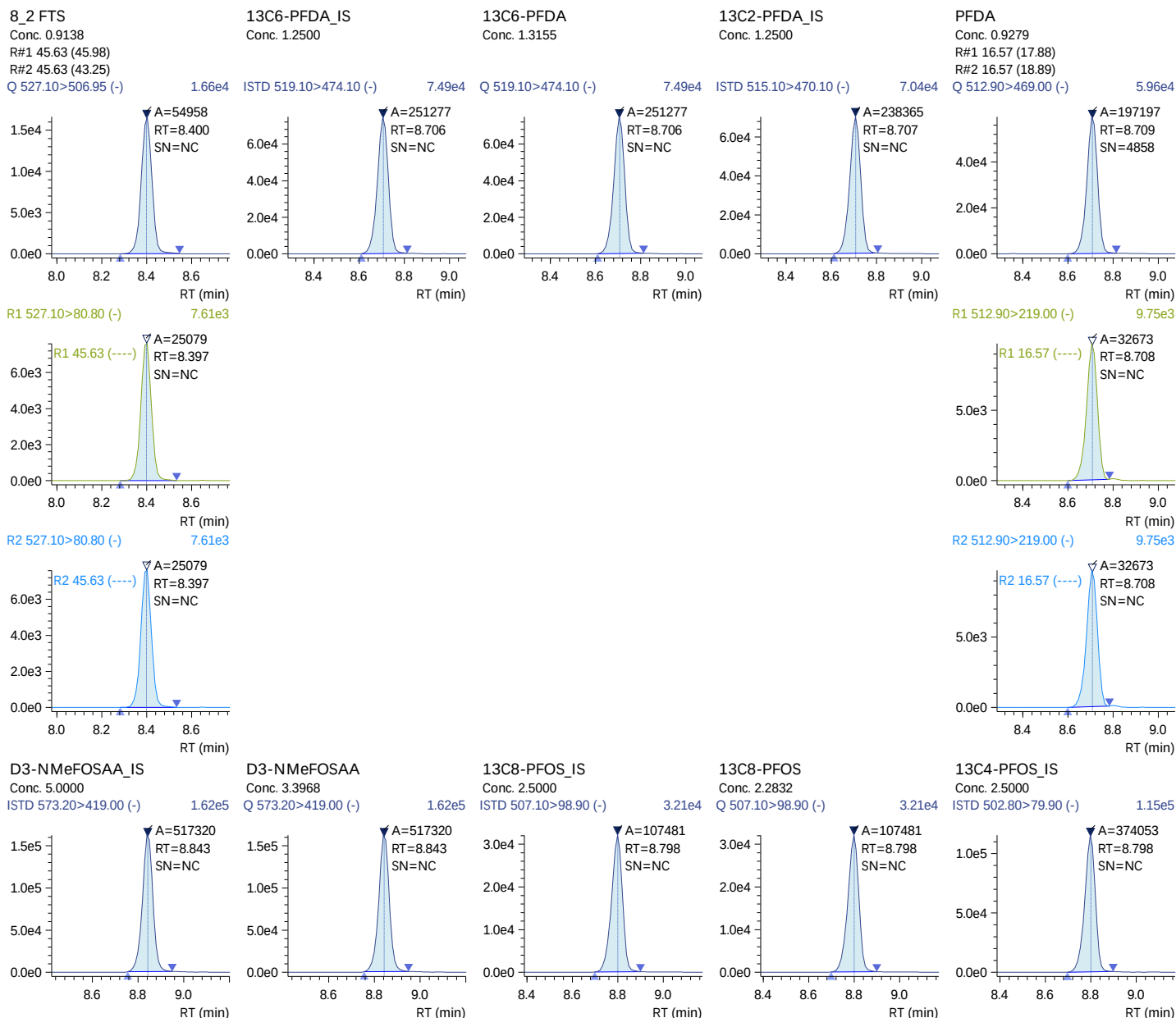


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_046 (continued)

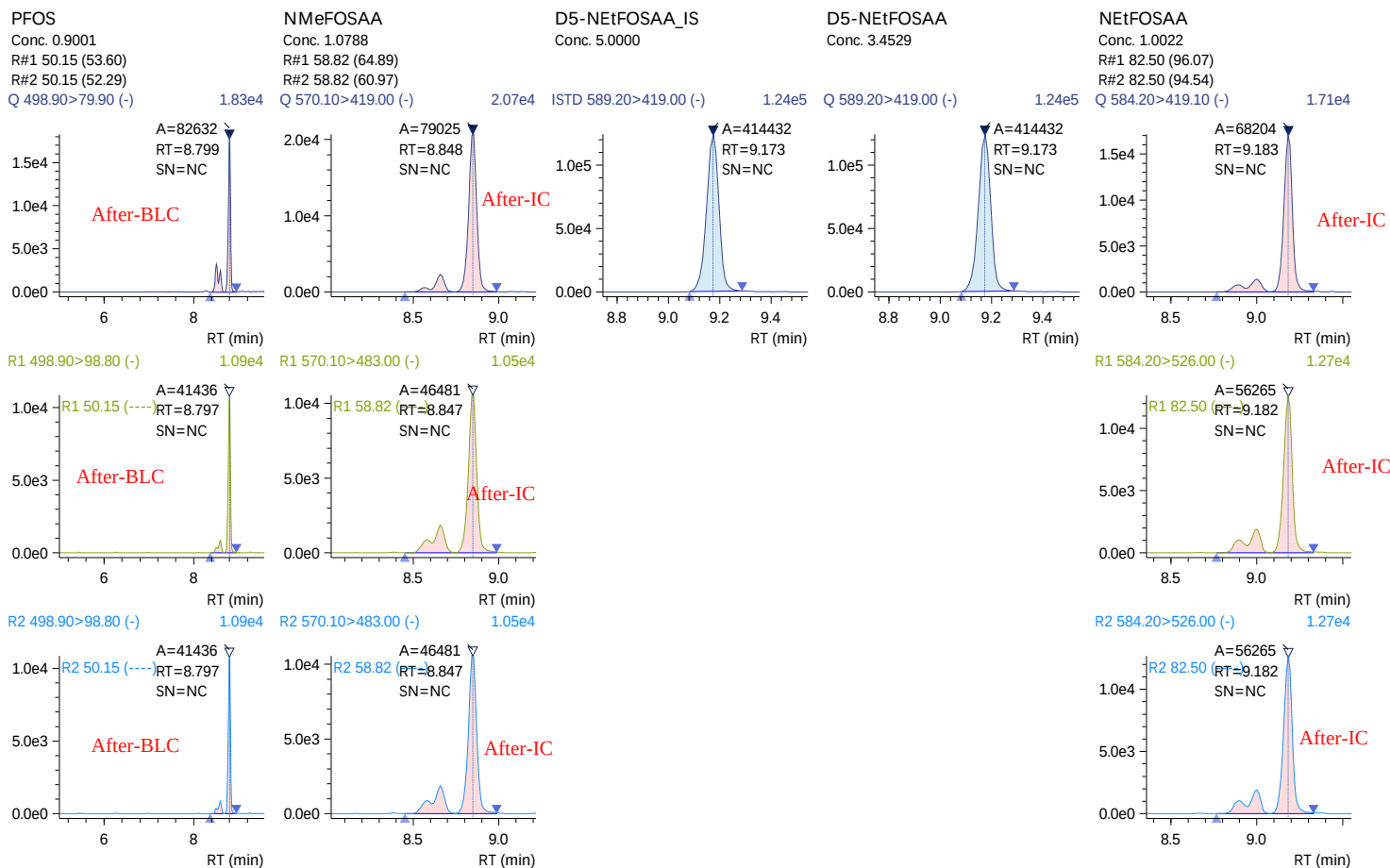


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_046 (continued)



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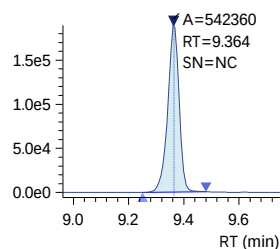
SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



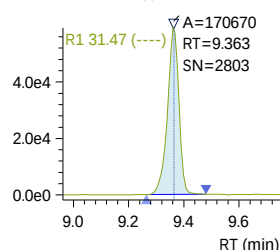
240201_046 (continued)

9-Cl-PF3ONS

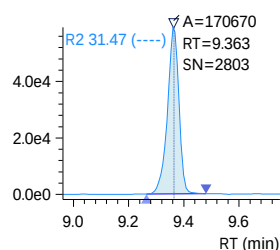
Conc. 0.7697
R#1 31.47 (30.95)
R#2 31.47 (30.61)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-) 5.92e4

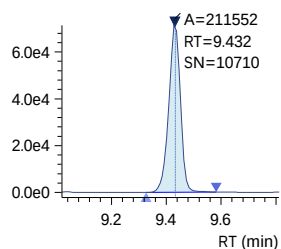


R2 532.80>353.00 (-) 5.92e4

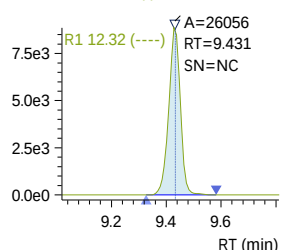


PFUnDA

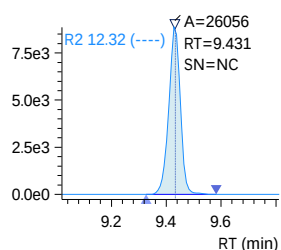
Conc. 1.0415
R#1 12.32 (11.01)
R#2 12.32 (12.02)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-) 8.86e3

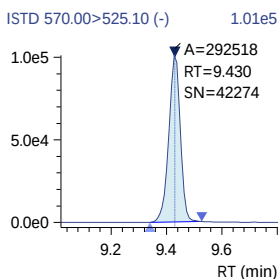


R2 563.10>269.10 (-) 8.86e3



13C7-PFUnDA_IS

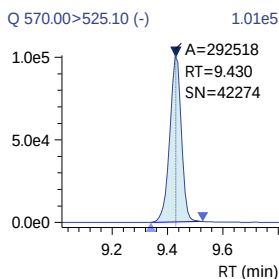
Conc. 1.2500



ISTD 570.00>525.10 (-) 1.01e5

13C7-PFUnDA

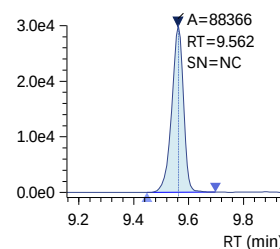
Conc. 1.2324



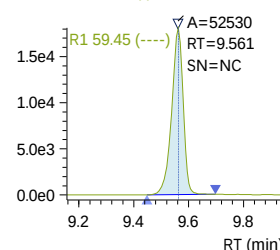
Q 570.00>525.10 (-) 1.01e5

PFNS

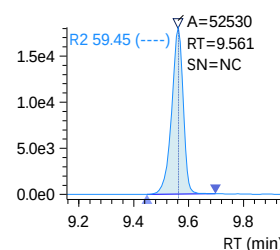
Conc. 0.9714
R#1 59.45 (60.44)
R#2 59.45 (58.51)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-) 1.81e4

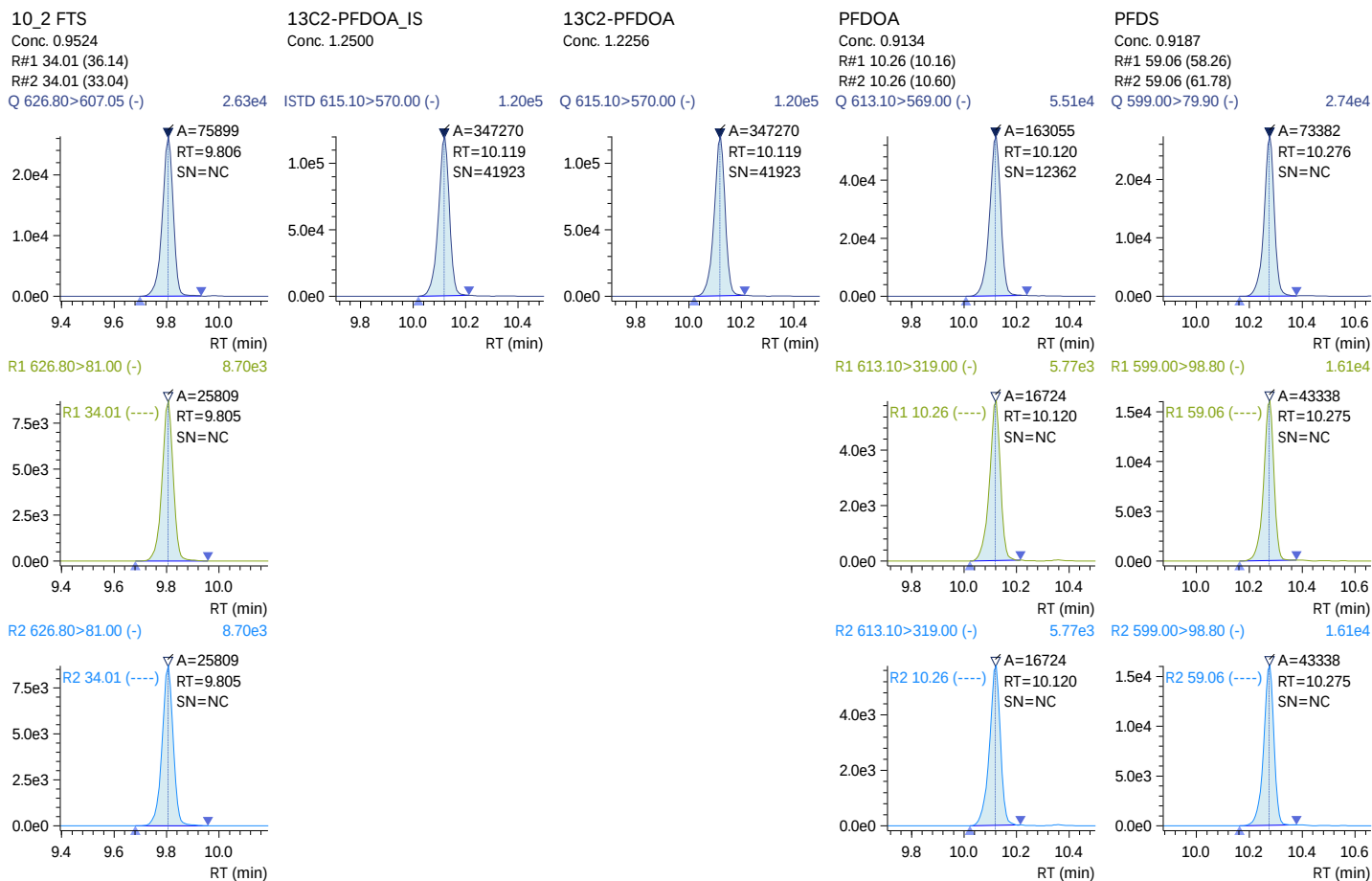


R2 548.80>98.80 (-) 1.81e4





240201_046 (continued)

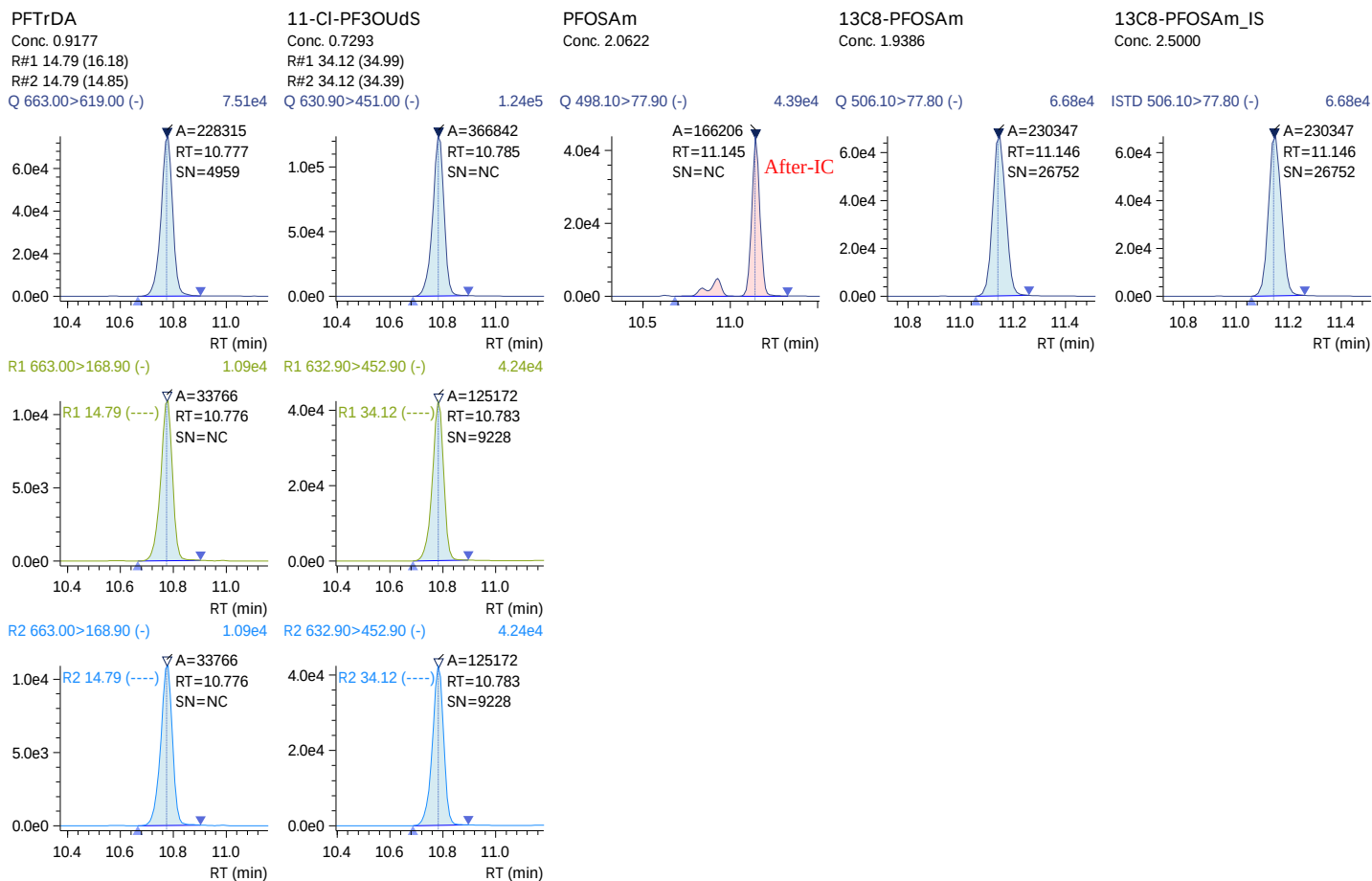


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.

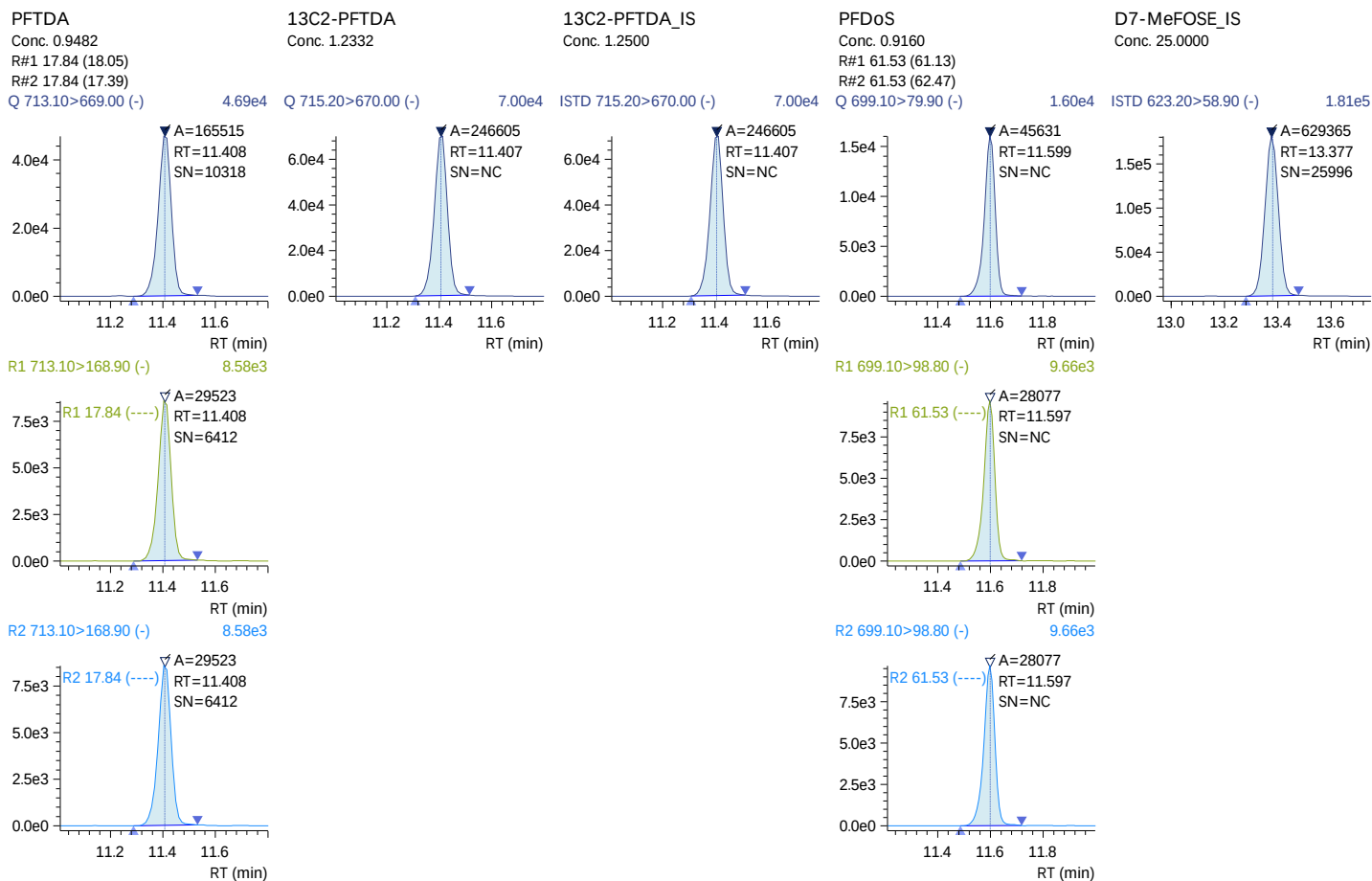


240201_046 (continued)





240201_046 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_046 (continued)

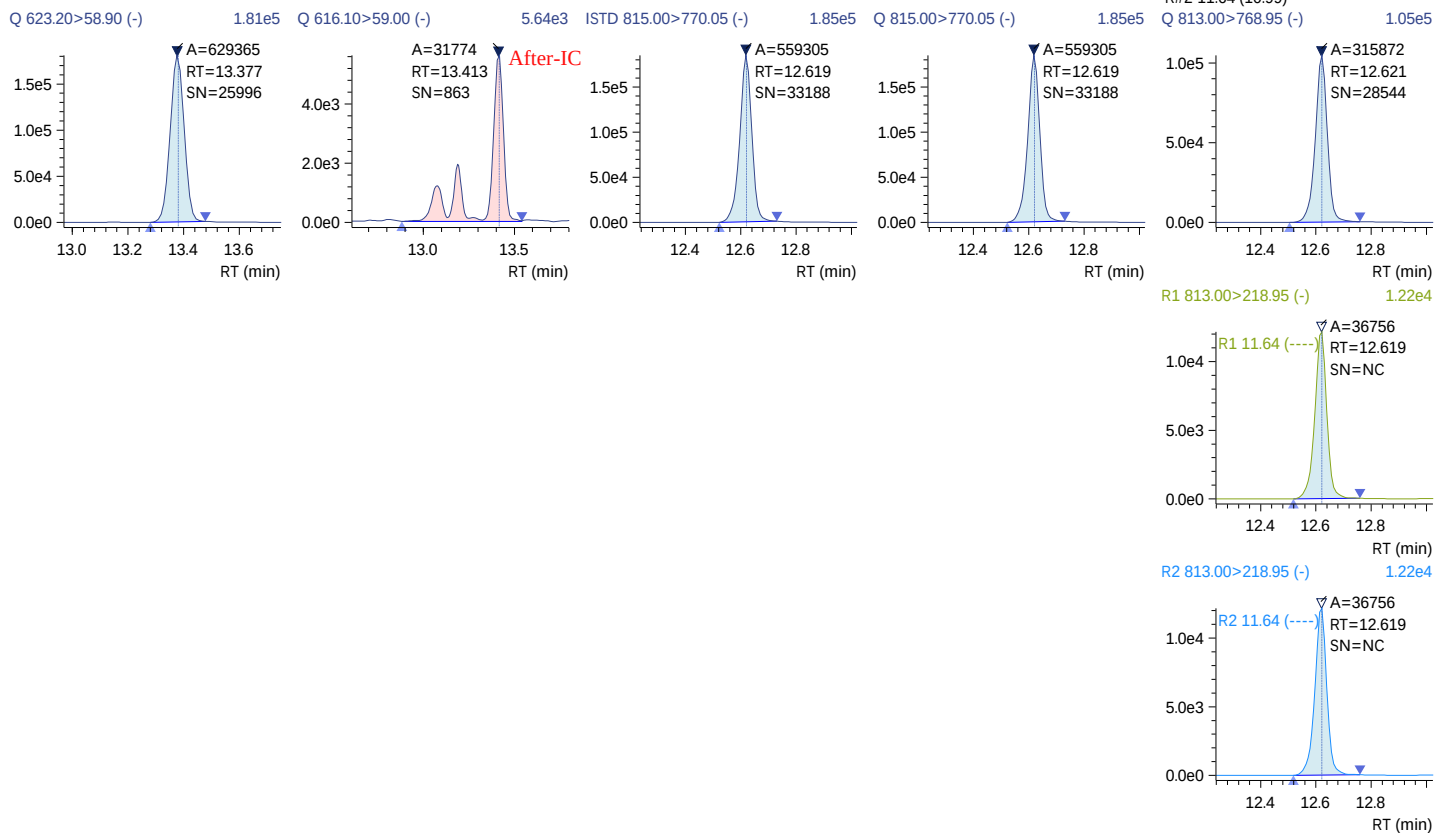
D7-MeFOSE
Conc. 20.6328

MeFOSE
Conc. 1.0259

13C2-PFHXA_IS
Conc. 2.5000

13C2-PFHXA
Conc. 2.0898

PFHXA
Conc. 1.0451
R#1 11.64 (11.66)
R#2 11.64 (10.99)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_046 (continued)

D3-MeFOSA
Conc. 2.1742

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. 0.8752
R#1 156.04 (160.44)
R#2 156.04 (161.92)

D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 22.0015

Q 515.00>219.00 (-)

2.01e4

ISTD 515.00>219.00 (-)

2.01e4

Q 511.90>219.00 (-)

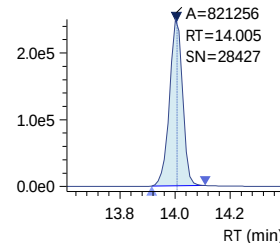
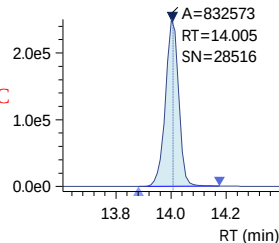
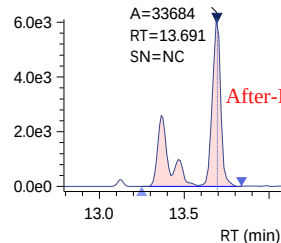
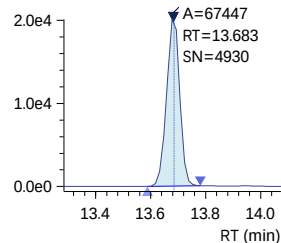
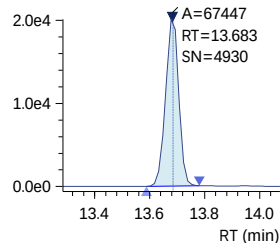
6.11e3

ISTD 639.20>58.90 (-)

2.50e5

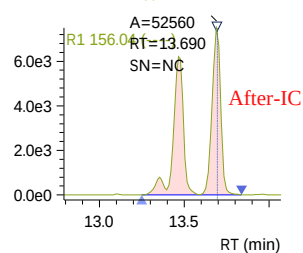
Q 639.20>58.90 (-)

2.50e5



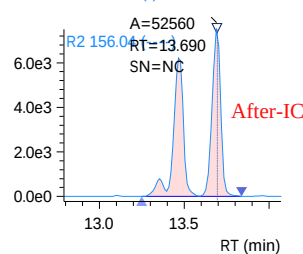
R1 511.90>169.00 (-)

7.50e3



R2 511.90>169.00 (-)

7.50e3





240201_046 (continued)

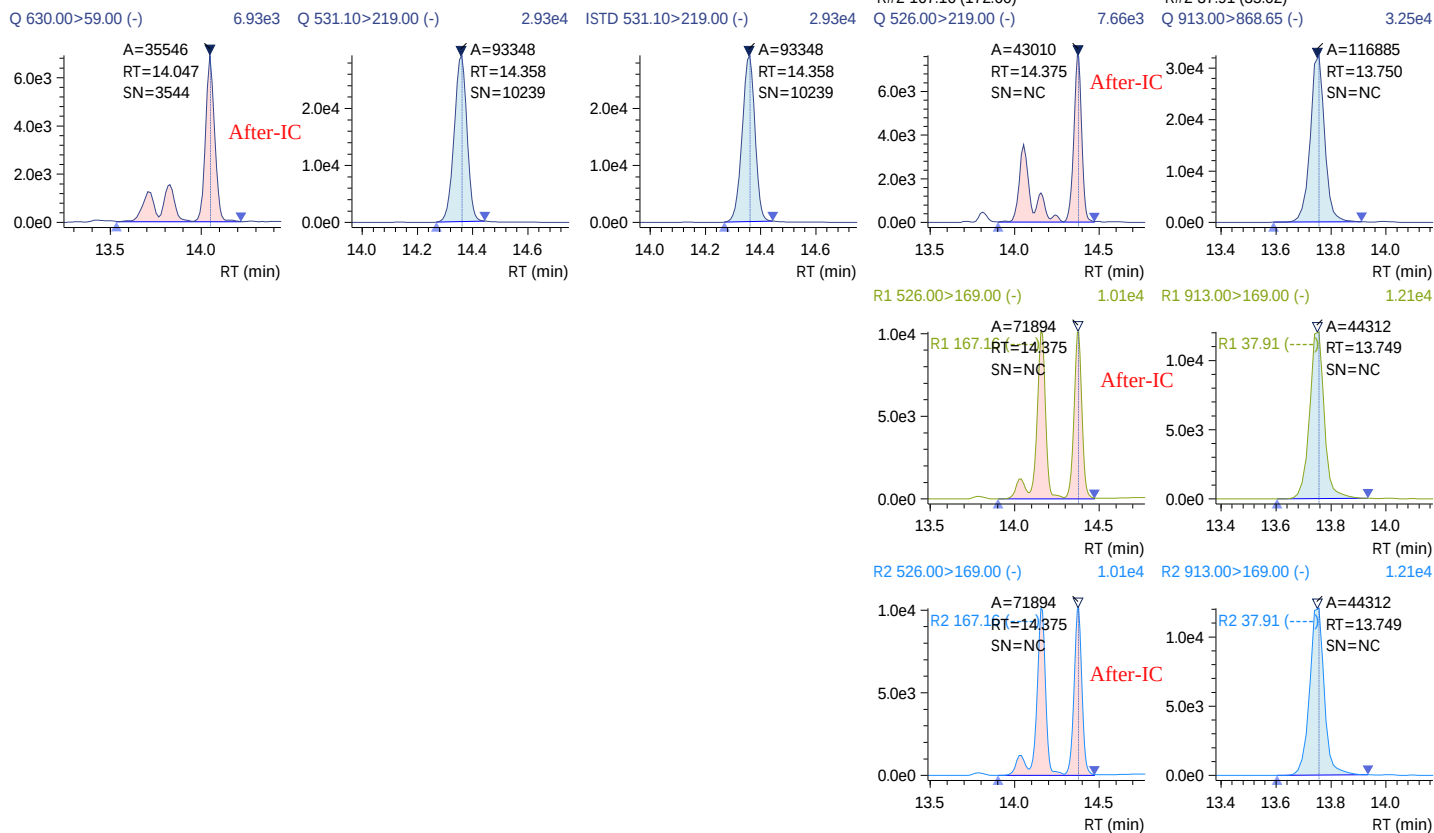
EtFOSE
Conc. 0.8902

D5-EtFOSAm
Conc. 2.1764

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. 0.8399
R#1 167.16 (159.63)

PFODA
Conc. 0.9997
R#1 37.91 (36.03)



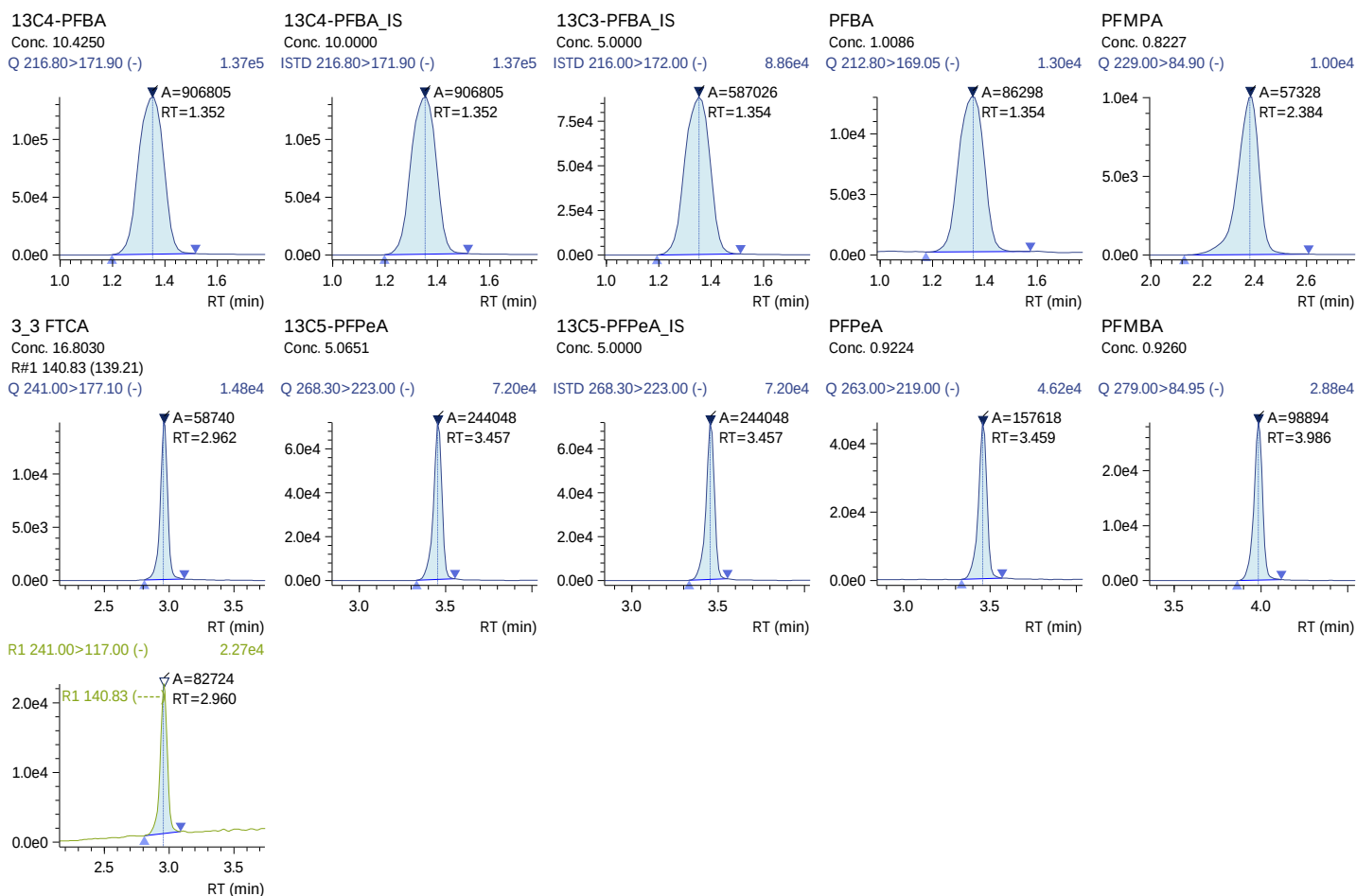
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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window. Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_046

Sample ID: 1633 ICAL 1.0PPB
Date Acquired: 2/2/2024 3:49:02 AM
Acquired by: System Administrator
Data File: 240201_046
Vial: 5 | Inj. Volume: 10.0000uL | Tray: 1





240201_046 (continued)

13C2-4_2 FTS
 Conc. 3.4033

13C2-4_2 FTS_IS
 Conc. 5.0000

4_2 FTS
 Conc. 0.9844
 R#1 30.79 (32.10)
 R#2 30.79 (32.79)

13C3-PFBS_IS
 Conc. 2.5000

PFBS
 Conc. 0.8915
 R#1 44.78 (44.81)
 R#2 44.78 (46.72)

Q 329.10>80.90 (-)

5.78e4

ISTD 329.10>80.90 (-)

5.78e4

Q 327.10>307.00 (-)

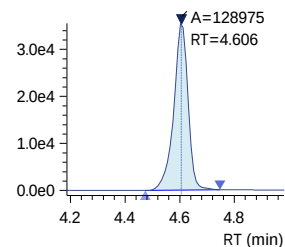
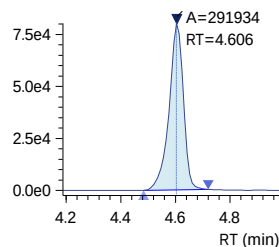
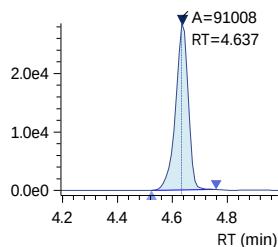
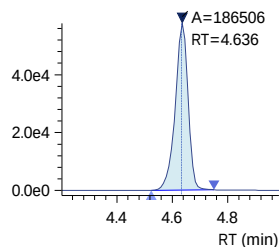
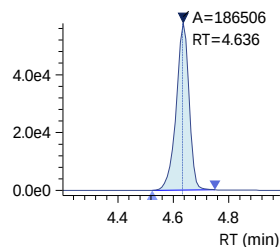
2.86e4

ISTD 302.10>79.90 (-)

8.03e4

Q 298.70>79.90 (-)

3.55e4

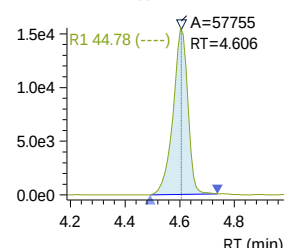
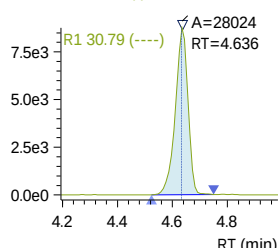


R1 327.10>80.90 (-)

8.76e3

R1 298.70>98.80 (-)

1.56e4

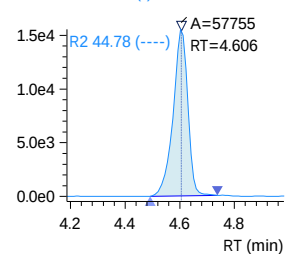
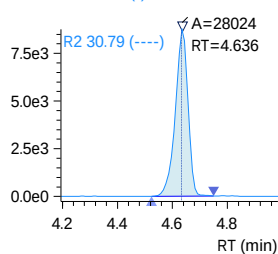


R2 327.10>80.90 (-)

8.76e3

R2 298.70>98.80 (-)

1.56e4





240201_046 (continued)

13C3-PFBS
Conc. 2.6875

NFDHA
Conc. 0.9587
R#1 34.29 (35.54)
R#2 34.29 (37.91)

13C5-PFHxA
Conc. 2.2352

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

Q 302.10>79.90 (-)

8.03e4

Q 295.00>201.00 (-)

2.83e4

Q 318.00>273.00 (-)

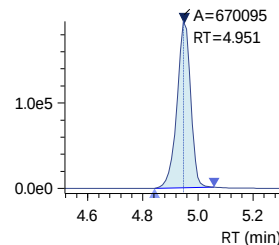
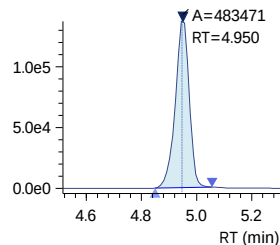
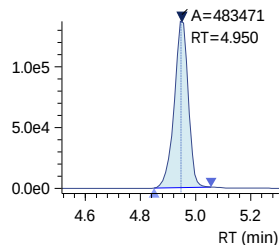
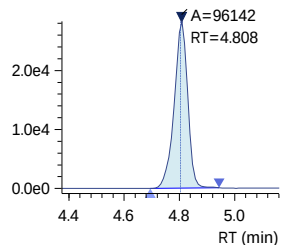
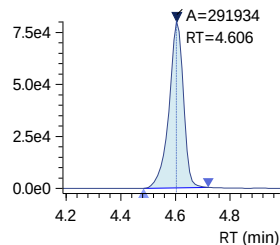
1.37e5

ISTD 318.00>273.00 (-)

1.37e5

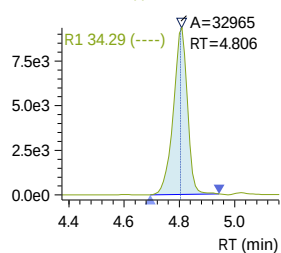
ISTD 315.10>270.00 (-)

1.96e5



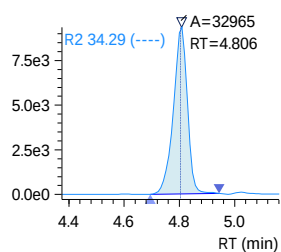
R1 295.00>84.90 (-)

9.36e3



R2 295.00>84.90 (-)

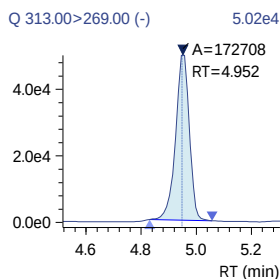
9.36e3





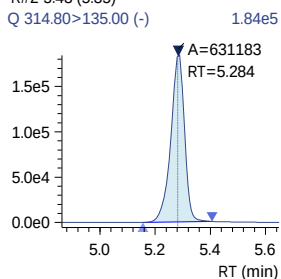
240201_046 (continued)

PFHxA
 Conc. 0.9602

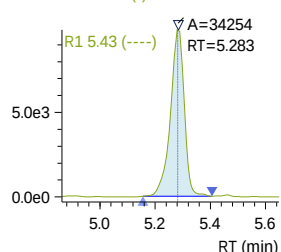


PFEESA
 Conc. 1.0508

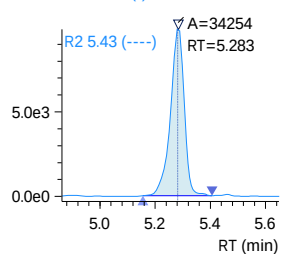
R#1 5.43 (5.22)
 R#2 5.43 (5.35)



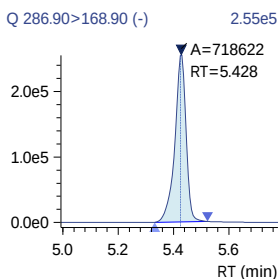
R1 314.80>82.90 (-) 9.89e3



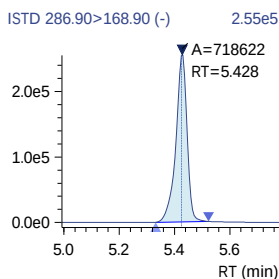
R2 314.80>82.90 (-) 9.89e3



13C3-HFPO-DA
 Conc. 12.1011

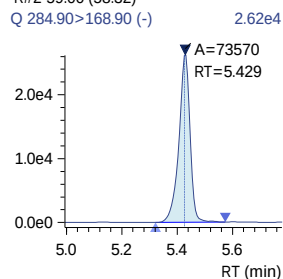


13C3-HFPO-DA_IS
 Conc. 10.0000

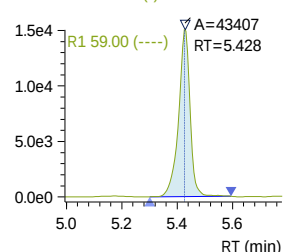


HFPO-DA
 Conc. 1.0411

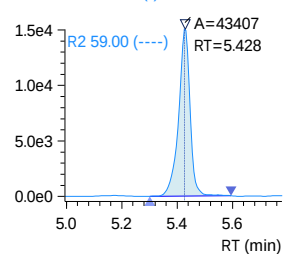
R#1 59.00 (59.79)
 R#2 59.00 (58.32)



R1 284.90>184.90 (-) 1.51e4



R2 284.90>184.90 (-) 1.51e4

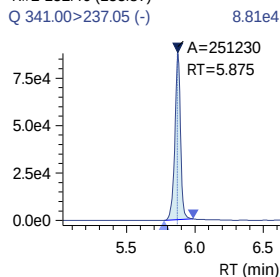




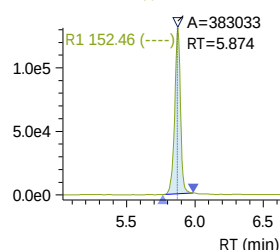
240201_046 (continued)

5_3 FTCA

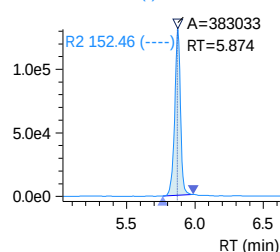
Conc. 17.3835
 R#1 152.46 (157.08)
 R#2 152.46 (155.87)
 Q 341.00>237.05 (-)



R1 341.00>217.00 (-) 1.31e5

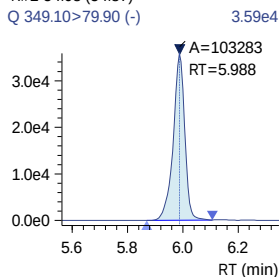


R2 341.00>217.00 (-) 1.31e5

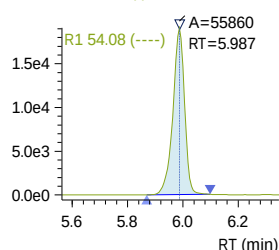


PFPeS

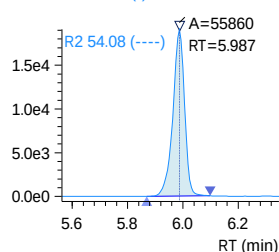
Conc. 0.9483
 R#1 54.08 (55.12)
 R#2 54.08 (54.87)
 Q 349.10>79.90 (-)



R1 349.10>98.80 (-) 1.91e4

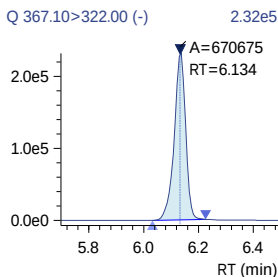


R2 349.10>98.80 (-) 1.91e4



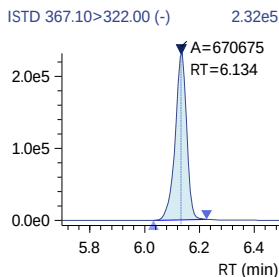
13C4-PFHpa

Conc. 2.4647



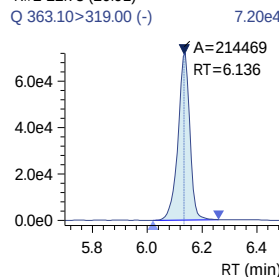
13C4-PFHpa_IS

Conc. 2.5000

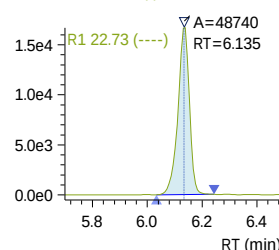


PFHpA

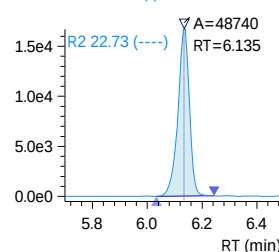
Conc. 0.9254
 R#1 22.73 (23.02)
 R#2 22.73 (20.91)
 Q 363.10>319.00 (-)



R1 363.10>169.00 (-) 1.67e4

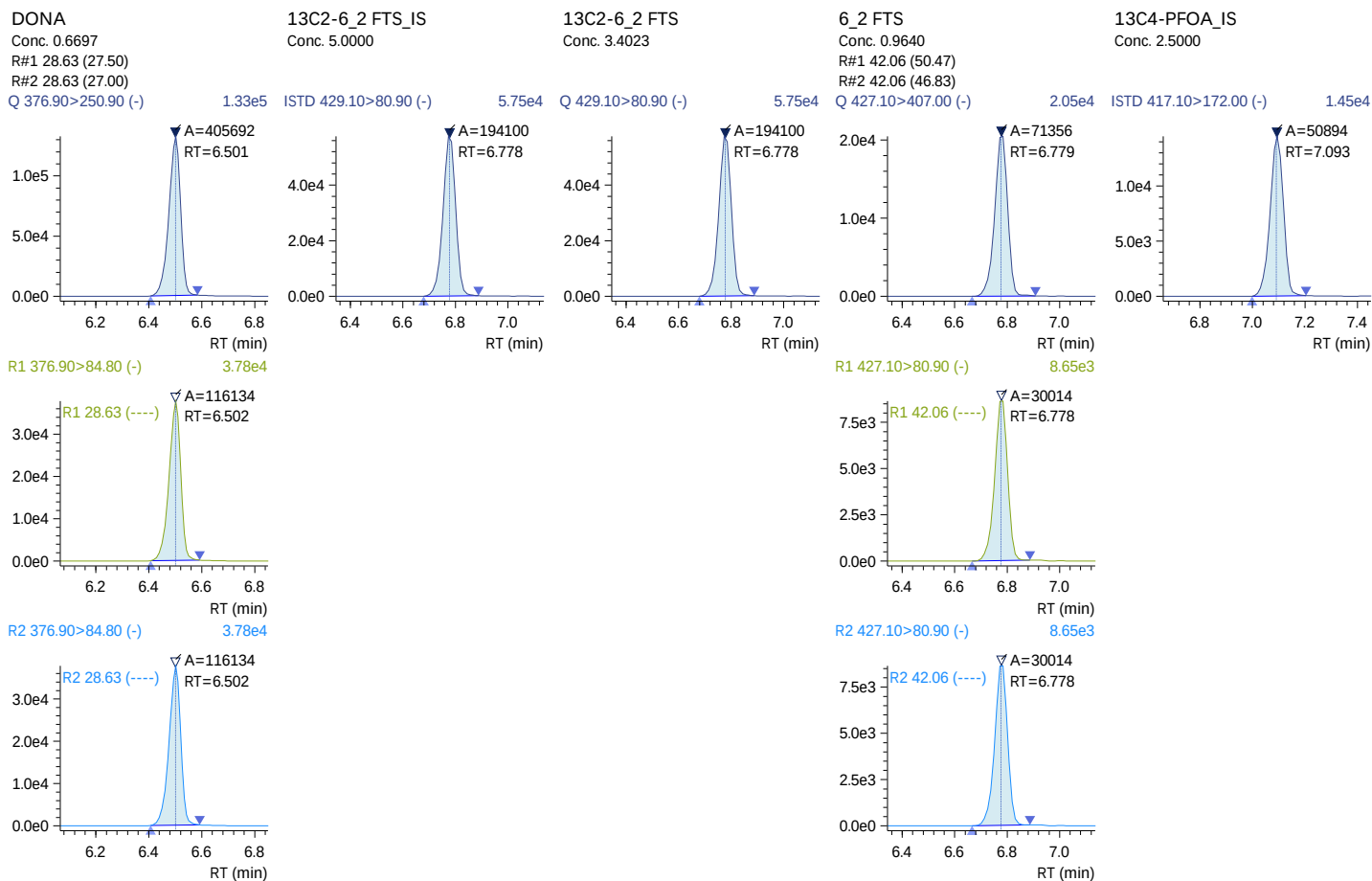


R2 363.10>169.00 (-) 1.67e4





240201_046 (continued)





240201_046 (continued)

13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.4940

PFOA
Conc. 0.9558
R#1 27.29 (28.77)
R#2 27.29 (28.12)

13C3-PFHxS
Conc. 2.6968

13C3-PFHxS_IS
Conc. 2.5000

ISTD 421.10>376.00 (-)

1.78e5

Q 421.10>376.00 (-)

1.78e5

Q 413.00>369.00 (-)

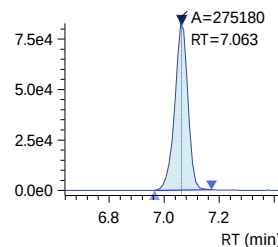
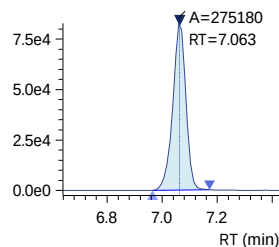
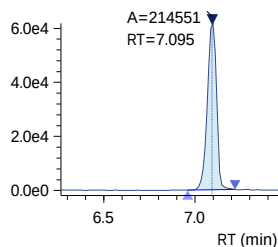
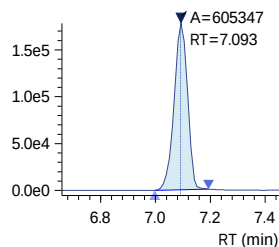
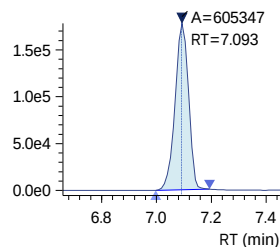
6.18e4

Q 402.10>79.90 (-)

8.28e4

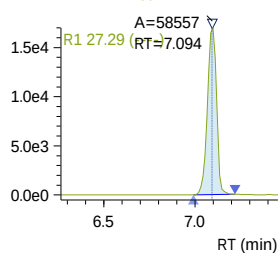
ISTD 402.10>79.90 (-)

8.28e4



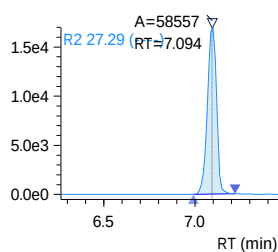
R1 413.00>169.00 (-)

1.70e4



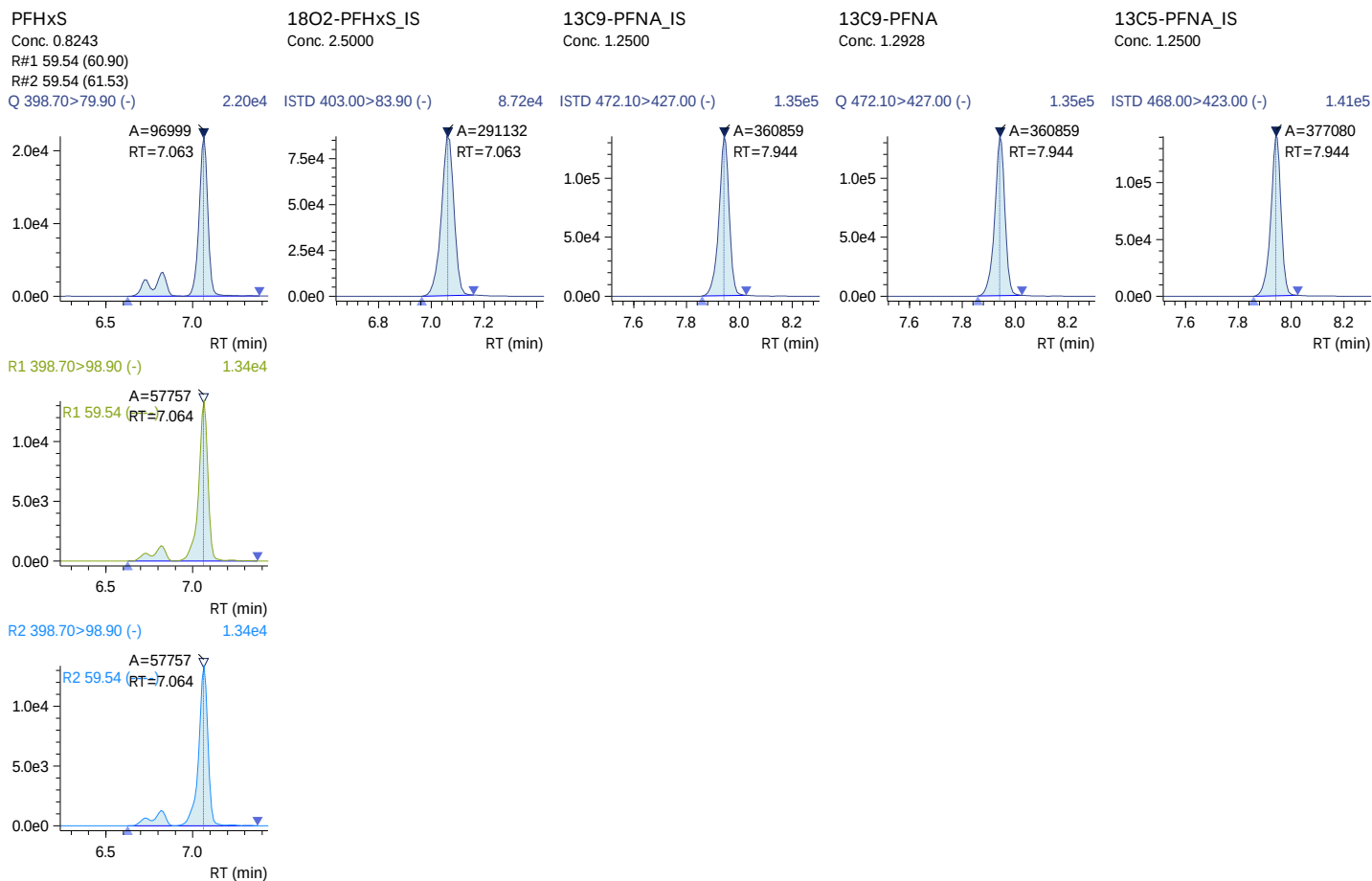
R2 413.00>169.00 (-)

1.70e4



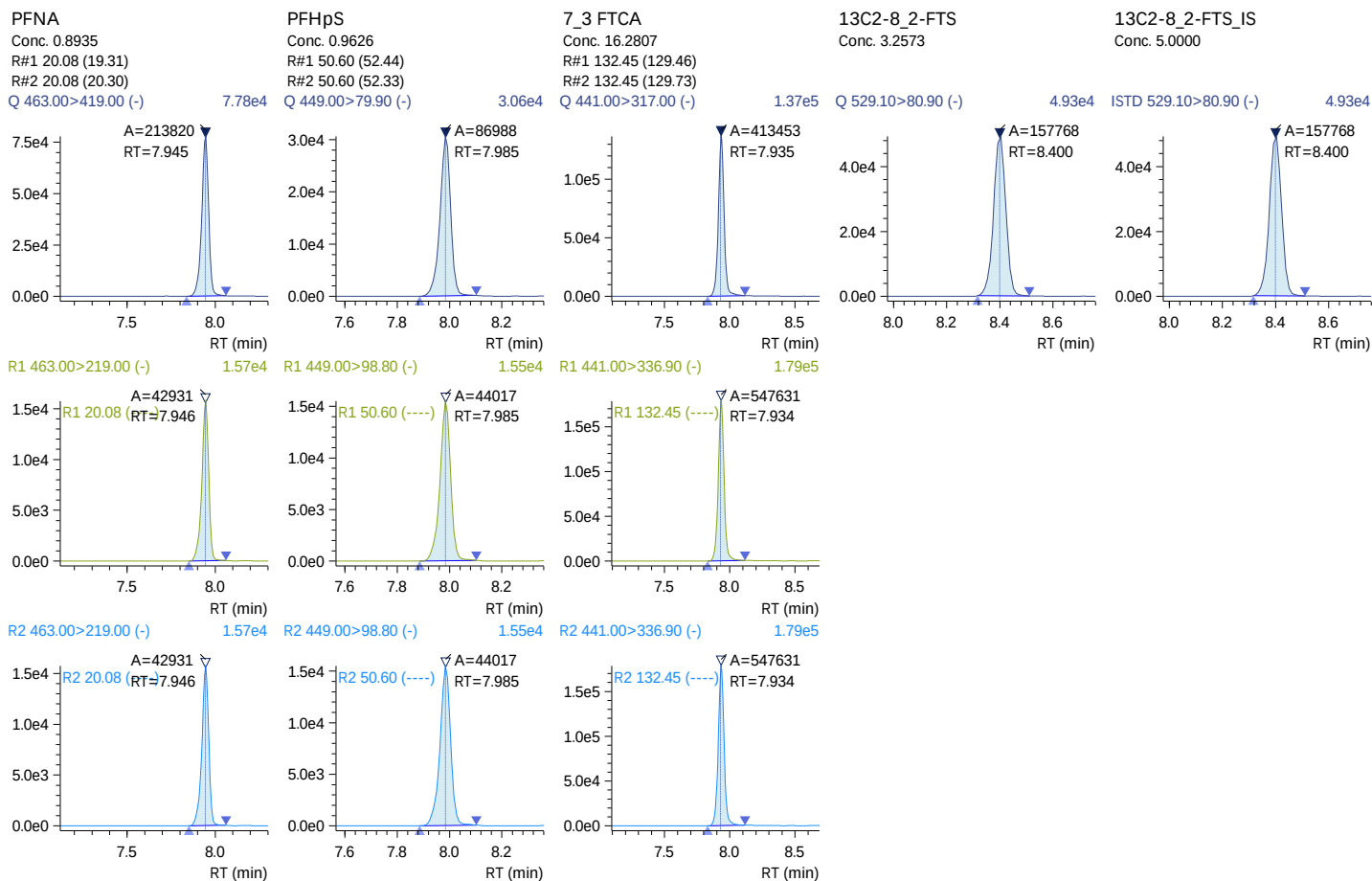


240201_046 (continued)



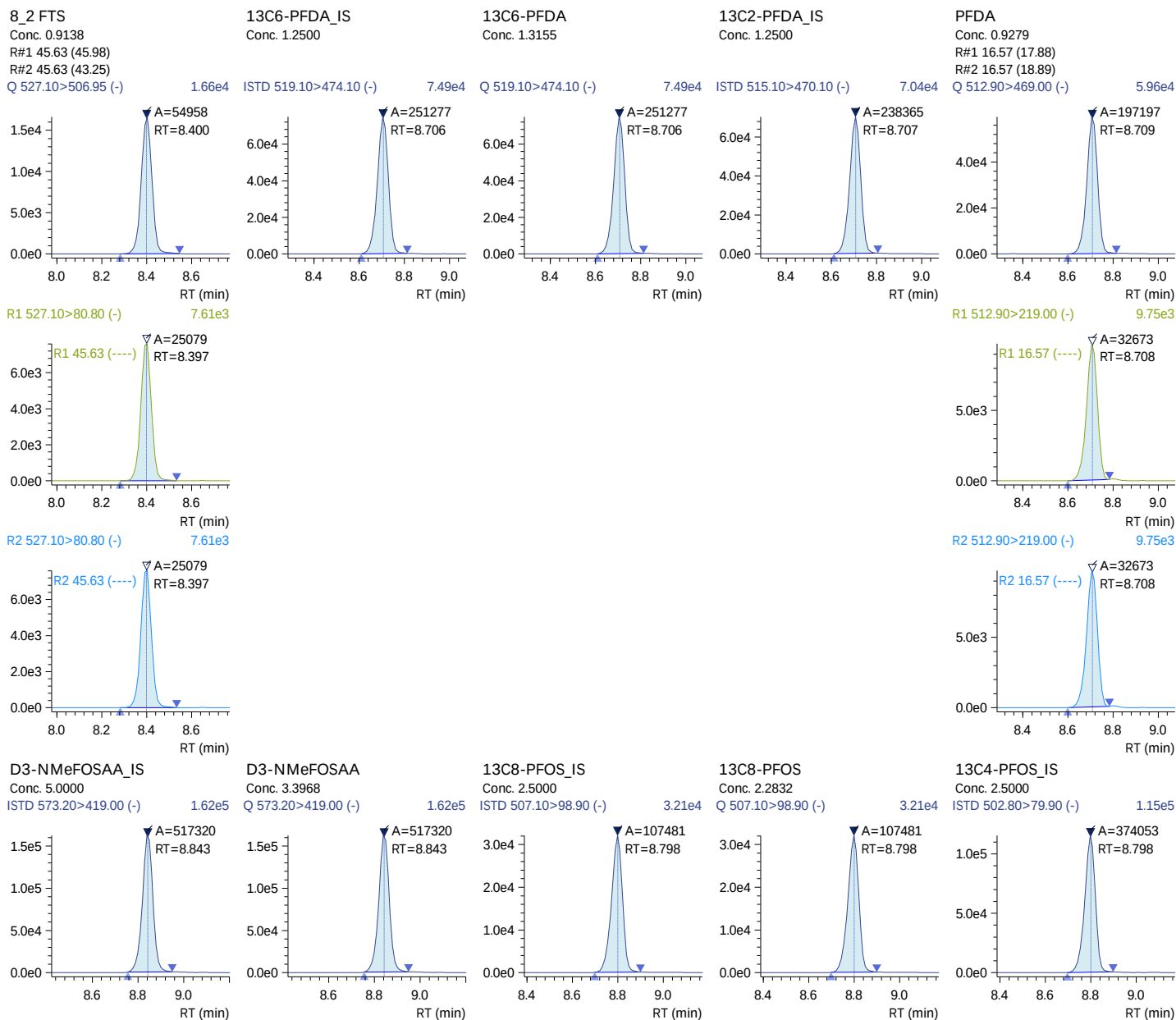


240201_046 (continued)



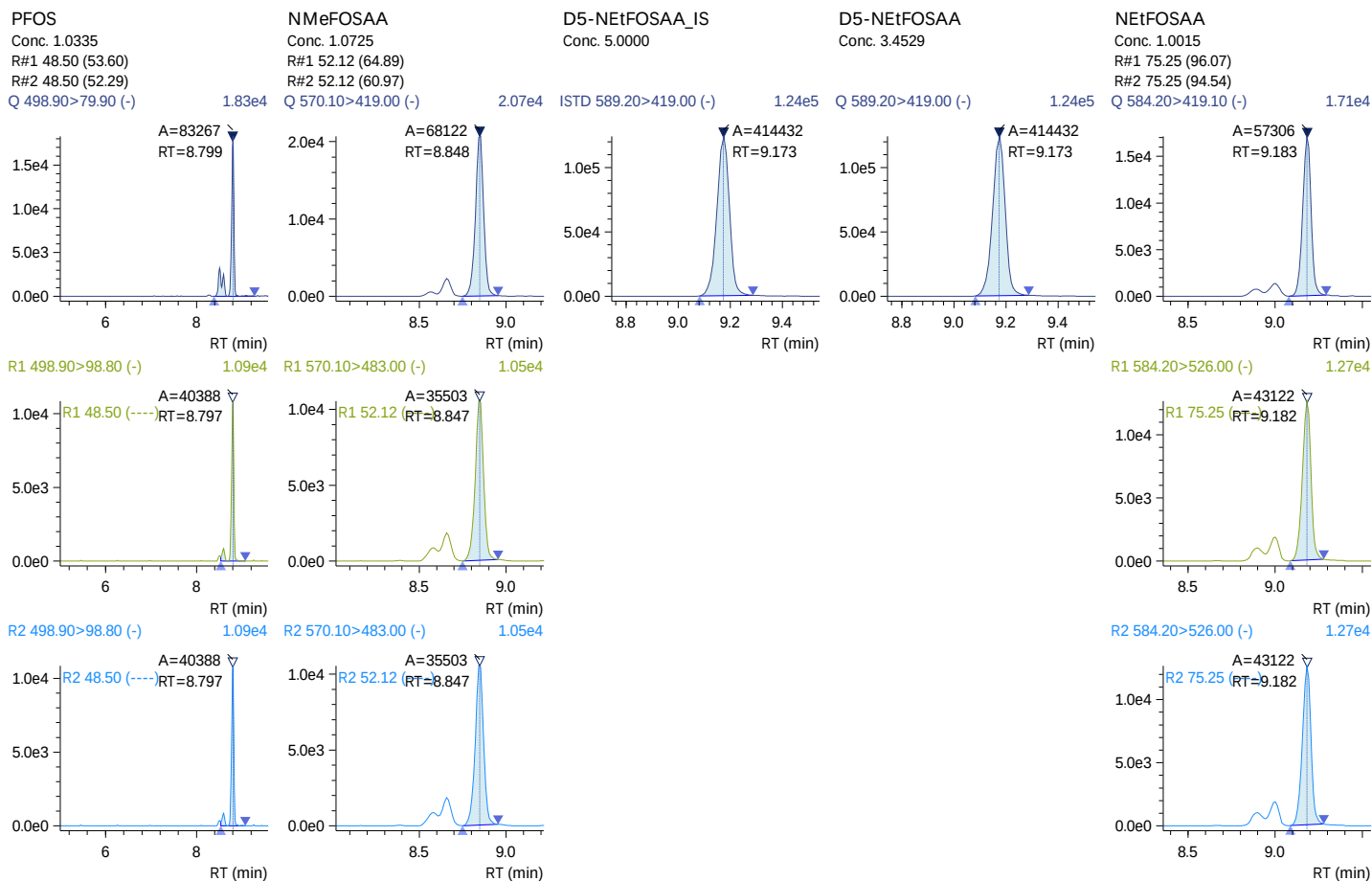


240201_046 (continued)





240201_046 (continued)

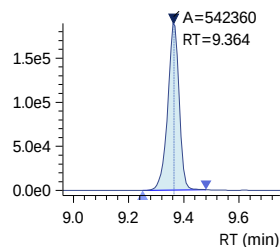




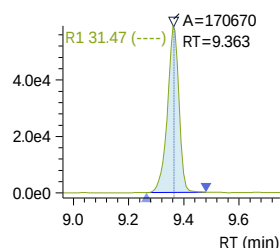
240201_046 (continued)

9-Cl-PF3ONS

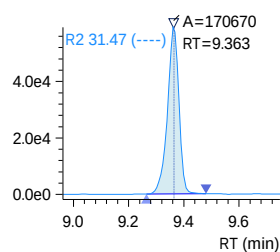
Conc. 0.7697
R#1 31.47 (30.95)
R#2 31.47 (30.61)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-) 5.92e4

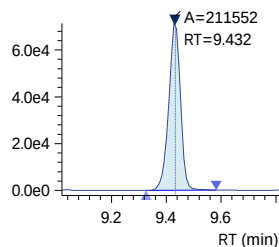


R2 532.80>353.00 (-) 5.92e4

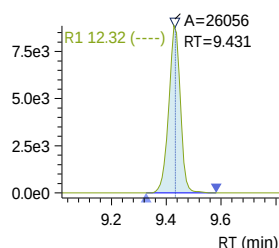


PFUnDA

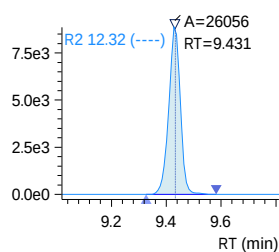
Conc. 1.0415
R#1 12.32 (11.01)
R#2 12.32 (12.02)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-) 8.86e3

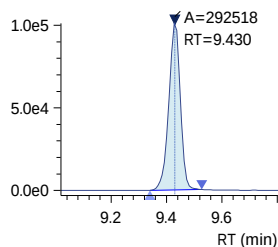


R2 563.10>269.10 (-) 8.86e3



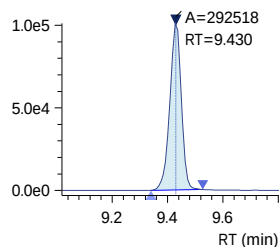
13C7-PFUnDA_IS

Conc. 1.2500
ISTD 570.00>525.10 (-)



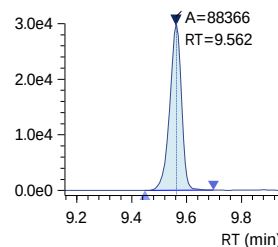
13C7-PFUnDA

Conc. 1.2324
Q 570.00>525.10 (-)

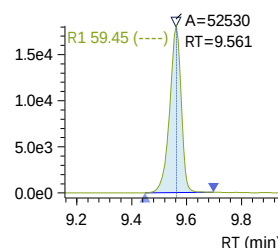


PFNS

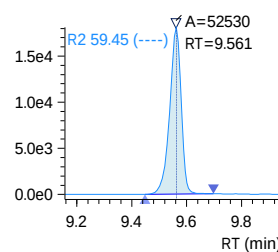
Conc. 0.9714
R#1 59.45 (60.44)
R#2 59.45 (58.51)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-) 1.81e4



R2 548.80>98.80 (-) 1.81e4





240201_046 (continued)

10_2 FTS

Conc. 0.9524

R#1 34.01 (36.14)

R#2 34.01 (33.04)

Q 626.80>607.05 (-)

2.63e4

13C2-PFDOA_IS

Conc. 1.2500

ISTD 615.10>570.00 (-)

1.20e5

13C2-PFDOA

Conc. 1.2256

Q 615.10>570.00 (-)

1.20e5

PFDOA

Conc. 0.9134

R#1 10.26 (10.16)

R#2 10.26 (10.60)

Q 613.10>569.00 (-)

5.51e4

PFDS

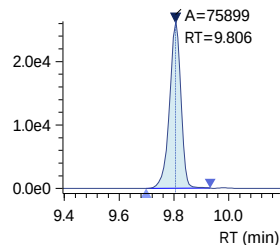
Conc. 0.9187

R#1 59.06 (58.26)

R#2 59.06 (61.78)

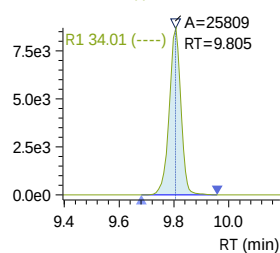
Q 599.00>79.90 (-)

2.74e4



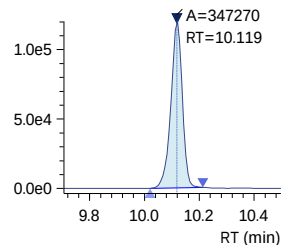
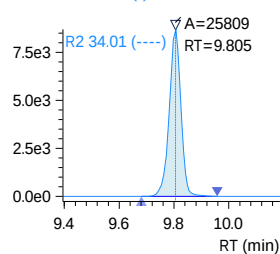
R1 626.80>81.00 (-)

8.70e3



R2 626.80>81.00 (-)

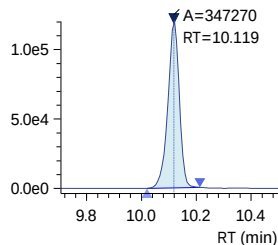
8.70e3



ISTD 615.10>570.00 (-)



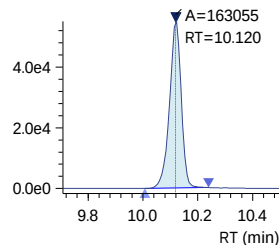
ISTD 615.10>570.00 (-)



Q 615.10>570.00 (-)

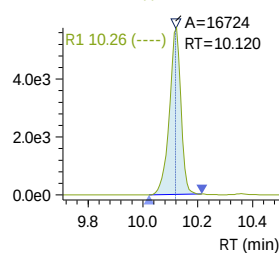


Q 615.10>570.00 (-)



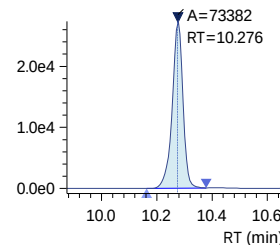
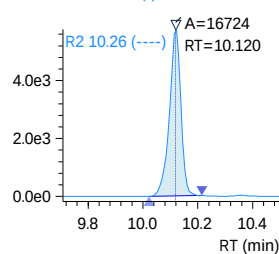
R1 613.10>319.00 (-)

5.77e3



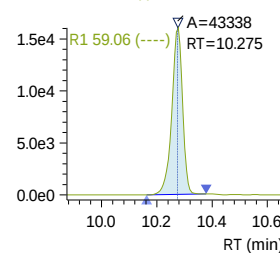
R2 613.10>319.00 (-)

5.77e3



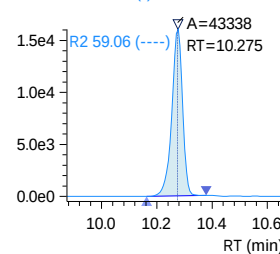
R1 599.00>98.80 (-)

1.61e4



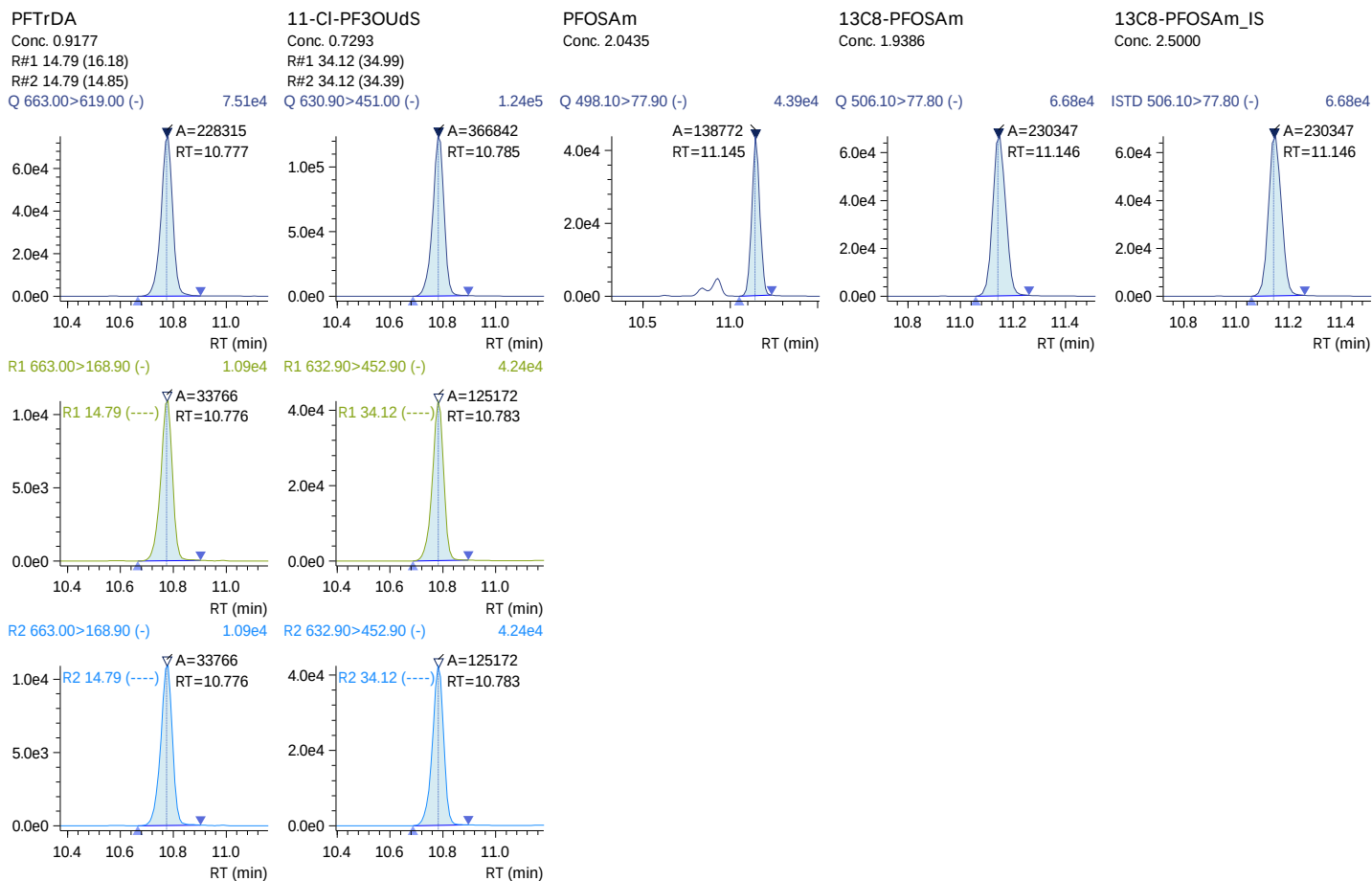
R2 599.00>98.80 (-)

1.61e4



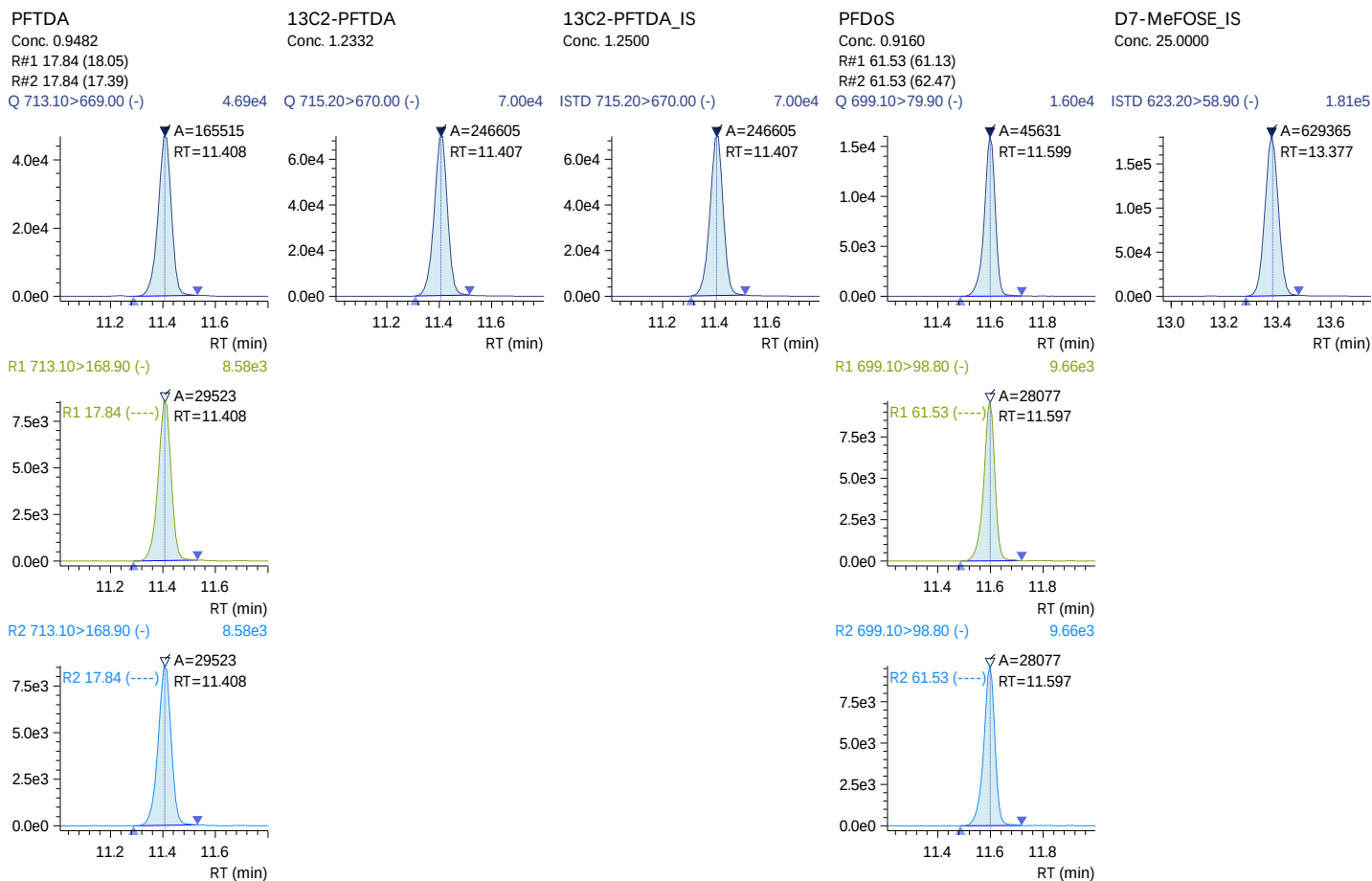


240201_046 (continued)





240201_046 (continued)





240201_046 (continued)

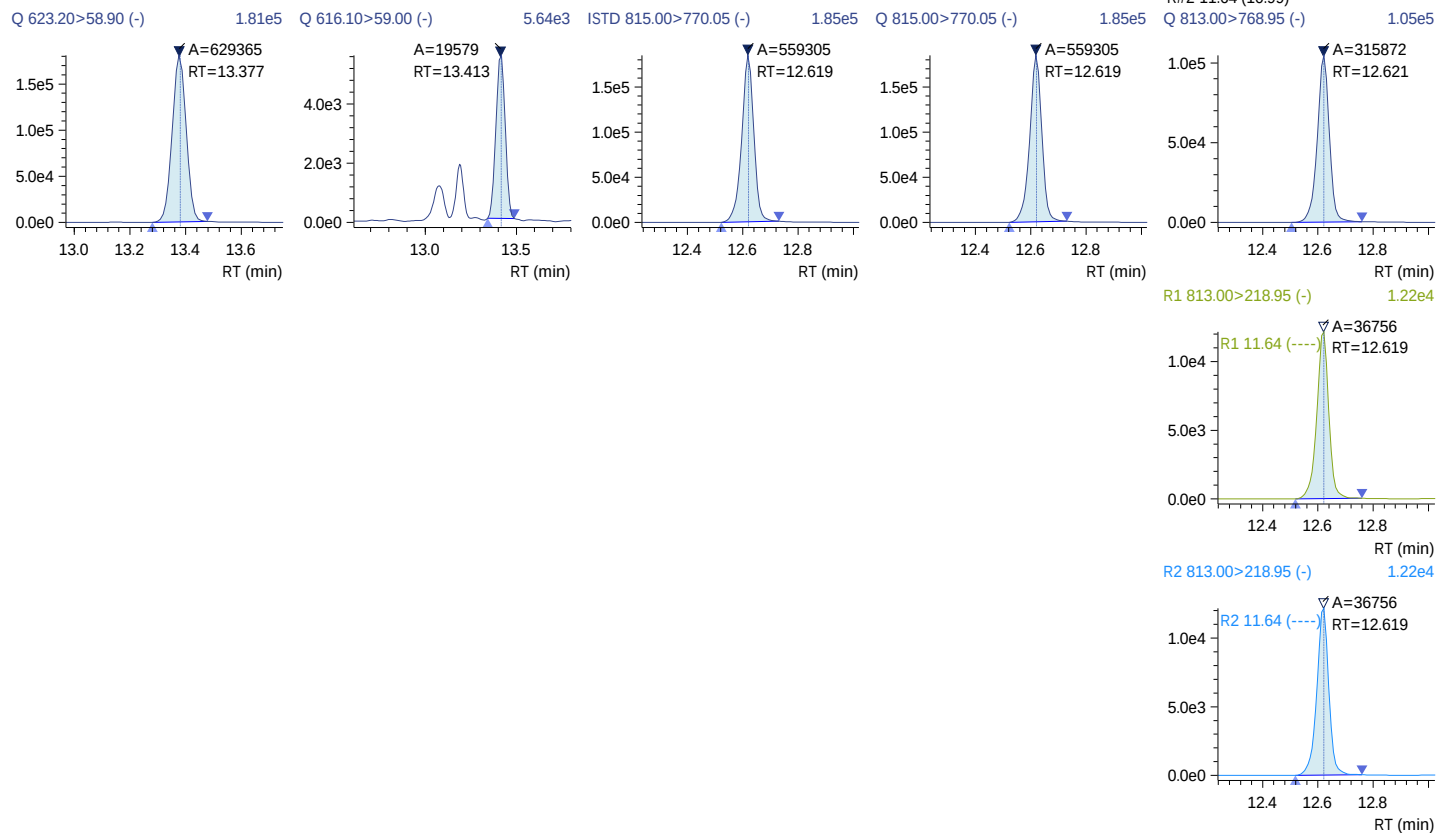
D7-MeFOSE
 Conc. 20.6328

MeFOSE
 Conc. 1.0060

¹³C2-PFHXA_IS
 Conc. 2.5000

¹³C2-PFHXA
 Conc. 2.0898

PFHXA
 Conc. 1.0451
 R#1 11.64 (11.66)
 R#2 11.64 (10.99)





240201_046 (continued)

D3-MeFOSA
Conc. 2.1742

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. 0.8612
R#1 124.94 (160.44)
R#2 124.94 (161.92)

D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 22.0015

Q 515.00>219.00 (-)

2.01e4

ISTD 515.00>219.00 (-)

2.01e4

Q 511.90>219.00 (-)

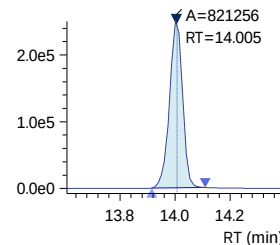
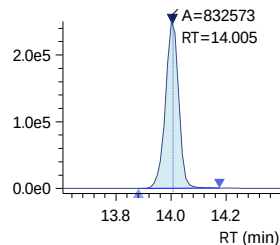
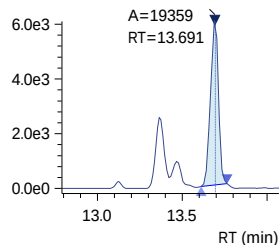
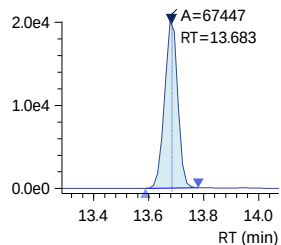
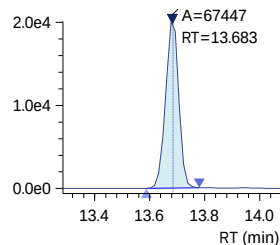
6.11e3

ISTD 639.20>58.90 (-)

2.50e5

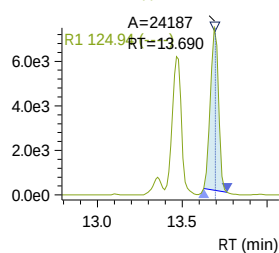
Q 639.20>58.90 (-)

2.50e5



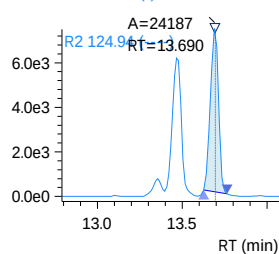
R1 511.90>169.00 (-)

7.50e3



R2 511.90>169.00 (-)

7.50e3





240201_046 (continued)

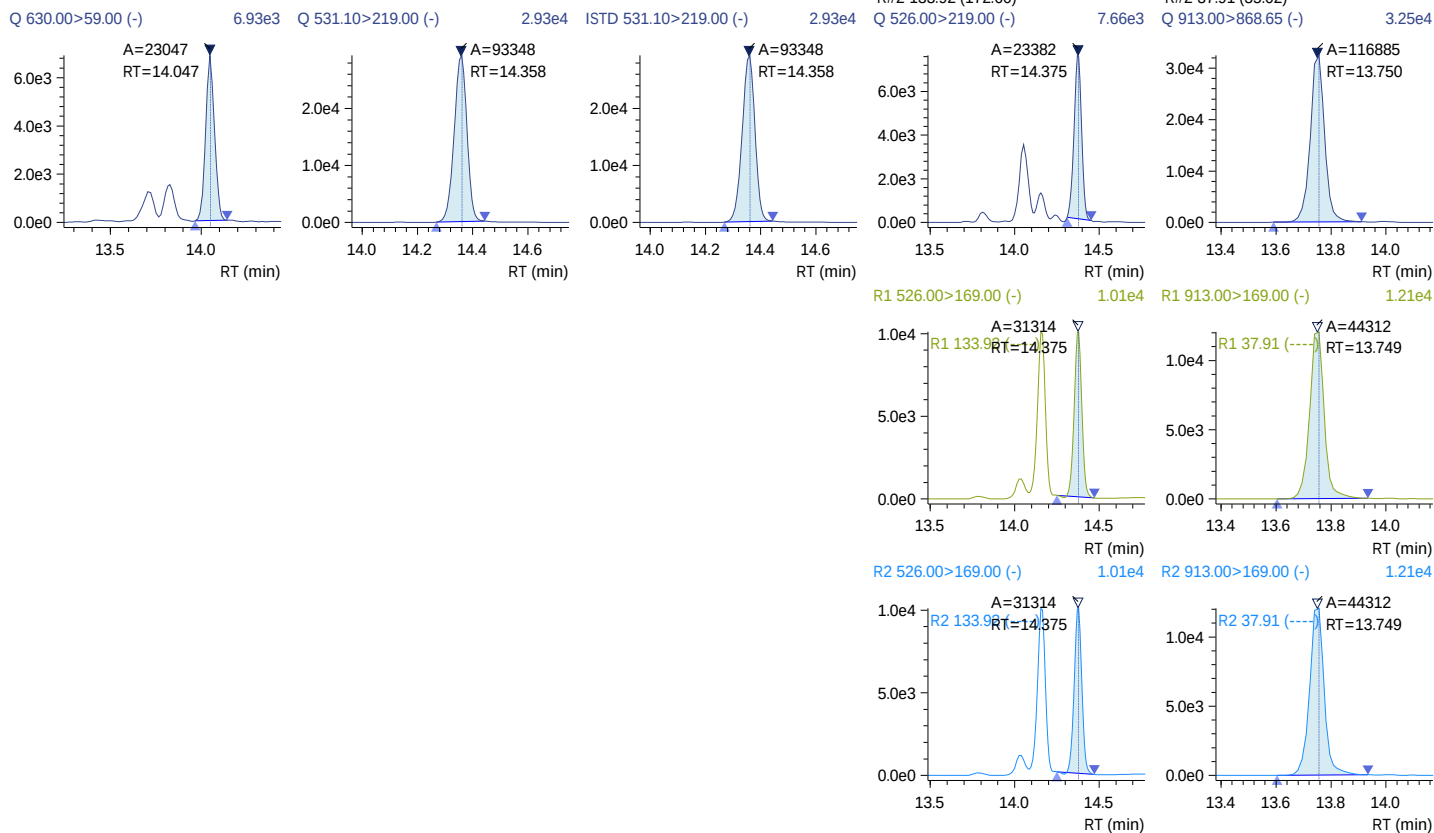
EtFOSE
Conc. 0.9105

D5-EtFOSAm
Conc. 2.1764

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. 0.8649
R#1 133.92 (159.63)
R#2 133.92 (172.60)

PFODA
Conc. 0.9997
R#1 37.91 (36.03)
R#2 37.91 (35.02)



Validation Report

1st PS 02/06/24
2nd MS 02/06/24

Data File: J:\LCMS08\Data\240201_1633_RA\240201_031
Lab ID: KQ2401707-13
RunType: CCV
Matrix: Water

Date Acquired: 2/1/24 22:00
Batch ID: 831587
Analysis Method: 1633/PFAS_DOD5.4

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Internal Standards	X	

Primary Review: _____

Secondary Review: _____

Quantitation Report

1st *PS* 02/06/24
2nd *MS* 02/06/24

Data File:	J:\LCMS08\Data\240201_1633_RA\240201_031	Instrument:	K-LCMS-08
Acqu Date:	2/1/24 22:00	Vial:	7
Run Type:	CCV	Dilution:	1
Lab ID:	KQ2401707-13	Raw Units:	ng/mL

Bottle ID:		Tier:	IV	Matrix:	Water
Prod Code:	PFAS_DOD5.4	Collect Date:	10/31/23	Receive Date:	11/7/23

Analysis Lot:	831587	Prep Lot:		Report Group:	KQ2401707
Analysis	1633	Prep Method:			
		Prep Date:			

Title:	Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM	Calibration ID:	KC2400048
		Report List ID:	24615

Internal Standard Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Area Criteria
18O2-PFHxS	7.062		308645	2.5000	OK
13C4-PFOS	8.799		388948	2.5000	OK
13C3-PFBA	1.351		557792	5.0000	OK
13C2-PFHxA	4.947		669414	2.5000	OK
13C4-PFOA	7.092		50390	2.5000	OK
13C5-PFNA	7.942		384748	1.2500	OK
13C2-PFDA	8.707		252316	1.2500	OK

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Rpt?
13C3-PFBS	4.603		306935	2.6653	Y
13C3-PFHxS	7.061		270121	2.4970	Y
13C8-PFOS	8.798		119085	2.4328	Y
13C4-PFBA	1.351		876294	10.6022	Y
13C5-PFPeA	3.455		245691	5.1043	Y
13C5-PFHxA	4.947		490088	2.2681	Y
13C4-PFHpA	6.132		719944	2.6484	Y
13C8-PFOA	7.091		629729	2.6204	Y
13C9-PFNA	7.941		374898	1.3163	Y
13C6-PFDA	8.707		256272	1.2674	Y
13C7-PFUnDA	9.432		295816	1.1774	Y
13C2-PFDoDA	10.120		352277	1.1746	Y
13C2-PFTeDA	11.407		249222	1.1774	Y
13C8-FOSA	11.150		233885	1.8930	Y
D3-MeFOSA	13.686		66602	2.0648	Y
D5-EtFOSA	14.362		95909	2.1505	Y
D7-MeFOSE	13.382		661825	20.8661	Y
D9-EtFOSE	14.009		844588	21.7601	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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		1st	PS	02/06/24
Data File:	J:\LCMS08\Data\240201_1633_RA\240201_031	Instrument:	K-LCMS08	MS 02/06/24
Acqu Date:	2/1/24 22:00	Vial:	7	
Run Type:	CCV	Dilution:	1	
Lab ID:	KQ2401707-13	Raw Units:	ng/mL	

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Rpt?
D3-MeFOSAA	8.846		520248	3.2852	Y
D5-EtFOSAA	9.179		427148	3.4226	Y
13C2-4:2 FTS	4.633		206461	3.5536	Y
13C2-6:2 FTS	6.777		222066	3.6717	Y
13C2-8:2 FTS	8.398		175270	3.4133	Y
13C3-HFPO-DA	5.425		759079	12.7954	Y

Target Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Rpt?
Perfluorobutane sulfonic acid (PFBS)	4.604		127045	0.8353	Y
Perfluoropentane sulfonic acid (PFPeS)	5.986		105134	0.9834	Y
Perfluorohexane sulfonic acid (PFHxS)	7.061		103087	0.8731	Y
Perfluoroheptane sulfonic acid (PFHpS)	7.984		92622	0.9251	Y
Perfluorooctane sulfonic acid (PFOS)	8.801		82573	0.8118	Y
Perfluorononane sulfonic acid (PFNS)	9.563		92791	0.9207	Y
Perfluorodecane sulfonic acid (PFDS)	10.276		76836	0.8682	Y
Perfluorododecane sulfonic acid (PFDoS)	11.600		46975	0.8511	Y
Perfluorobutanoic acid (PFBA)	1.353		79255	0.9606	Y
Perfluoropentanoic acid (PFPeA)	3.459		158198	0.9196	Y
Perfluorohexanoic acid (PFHxA)	4.949		169992	0.9254	Y
Perfluoroheptanoic acid (PFHpA)	6.134		230309	0.9257	Y
Perfluorooctanoic acid (PFOA)	7.094		234094	1.0033	Y
Perfluorononanoic acid (PFNA)	7.943		223028	0.8972	Y
Perfluorodecanoic acid (PFDA)	8.709		186899	0.8623	Y
Perfluoroundecanoic acid (PFUnDA)	9.434		212568	1.0347	Y
Perfluorododecanoic acid (PFDOA)	10.120		171419	0.9478	Y
Perfluorotridecanoic acid (PFTTrDA)	10.776		237459	0.9450	Y
Perfluorotetradecanoic acid (PFTDA)	11.409		172603	0.9791	Y
Perfluorooctane sulfonamide (PFOSAm)	11.147		173577	2.1211	Y
N-Methylperfluorooctane sulfonamide (MeFOSA)	13.694		33883	0.8915	Y
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	14.379		44359	0.8431	Y
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	13.419		32704	1.0037	Y
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	14.052		38438	0.9397	Y
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	8.852		76569	1.0394	Y

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D: Result from dilution

m: Manual integration performed

d: Compound manually deleted

NR: Analyte not reported from this analysis

*: Result fails acceptance criteria

#: Acceptance criteria not applicable

?: Insufficient information to determine acceptance

e: Result >= MRL, but MRL less than low point of ICAL

c: check for co-elution

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		1st	PS	02/06/24
Data File:	J:\LCMS08\Data\240201_1633_RA\240201_031	Instrument:	K-LCMS08	MS 02/06/24
Acqu Date:	2/1/24 22:00	Vial:	7	
Run Type:	CCV	Dilution:	1	
Lab ID:	KQ2401707-13	Raw Units:	ng/mL	

Target Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Rpt?
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	9.189		69034	0.9842	Y
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	4.632		95553	0.9337	Y
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	6.777		77609	0.9165	Y
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	8.399		56522	0.8460	Y
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	2.962		59584	16.9305	Y
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	5.874		250064	17.0693	Y
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	7.937		407778	15.8404	Y
Perfluoro(2-ethoxyethane) sulfonic acid (PFEEESA)	5.281		640612	1.0521	Y
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	9.366		539155	0.7243	Y
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	10.783		357982	0.6738	Y
Perfluoro-3-methoxypropanoic acid (PFMPA)	2.384		55159	0.7862	Y
Perfluoro-4-methoxybutanoic acid (PFMBA)	3.984		97483	0.9067	Y
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	5.426		74054	0.9921	Y
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	4.804		98427	0.9682	Y
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	6.500		414669	0.6480	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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240201_031

Sample ID: 1633 ICAL 1.0PPB
Date Acquired: 2/1/2024 10:00:10 PM
Acquired by: System Administrator
Data File: 240201_031
Vial: 5 | Inj. Volume: 10.0000uL | Tray: 1

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	876294	----	----	----	----	----	----	
13C4-PFBA_IS	216.80>171.90	----	876294	----	----	----	----	----	----	
13C3-PFBA_IS	216.00>172.00	----	557792	----	----	----	----	----	----	
PFBA	212.80>169.05	----	79255	----	----	----	----	----	----	
PFMPA	229.00>84.90	----	55159	----	----	----	----	----	----	
3_3 FTCA	241.00>177.10	241.00>117.00	59584	83810	140.66	139.21	----	----	----	
13C5-PFPeA	268.30>223.00	----	245691	----	----	----	----	----	----	
13C5-PFPeA_IS	268.30>223.00	----	245691	----	----	----	----	----	----	
PFPeA	263.00>219.00	----	158198	----	----	----	----	----	----	
PFMBA	279.00>84.95	----	97483	----	----	----	----	----	----	
13C2-4_2 FTS	329.10>80.90	----	206461	----	----	----	----	----	----	
13C2-4_2 FTS_IS	329.10>80.90	----	206461	----	----	----	----	----	----	
4_2 FTS	327.10>307.00	327.10>80.90	95553	31409	32.87	32.10	31409	32.87	32.79	
13C3-PFBS_IS	302.10>79.90	----	306935	----	----	----	----	----	----	
PFBS	298.70>79.90	298.70>98.80	127045	59866	47.12	44.81	59866	47.12	46.72	
13C3-PFBS	302.10>79.90	----	306935	----	----	----	----	----	----	
NFDHA	295.00>201.00	295.00>84.90	98427	32819	33.34	35.54	32819	33.34	37.91	
13C5-PFHxA	318.00>273.00	----	490088	----	----	----	----	----	----	
13C5-PFHxA_IS	318.00>273.00	----	490088	----	----	----	----	----	----	
13C2-PFHxA_IS	315.10>270.00	----	669414	----	----	----	----	----	----	
PFHxA	313.00>269.00	----	169992	----	----	----	----	----	----	
PFEESA	314.80>135.00	314.80>82.90	640612	36008	5.62	5.22	36008	5.62	5.35	
13C3-HFPO-DA	286.90>168.90	----	759079	----	----	----	----	----	----	
13C3-HFPO-DA_IS	286.90>168.90	----	759079	----	----	----	----	----	----	
HFPO-DA	284.90>168.90	284.90>184.90	74054	42564	57.48	59.79	42564	57.48	58.32	
5_3 FTCA	341.00>237.05	341.00>217.00	250064	384800	153.88	157.08	384800	153.88	155.87	
PFPeS	349.10>79.90	349.10>98.80	105134	56700	53.93	55.12	56700	53.93	54.87	
13C4-PFHpA	367.10>322.00	----	719944	----	----	----	----	----	----	
13C4-PFHpA_IS	367.10>322.00	----	719944	----	----	----	----	----	----	
PFHpA	363.10>319.00	363.10>169.00	230309	50787	22.05	23.02	50787	22.05	20.91	
DONA	376.90>250.90	376.90>84.80	414669	112696	27.18	27.50	112696	27.18	27.00	AC
13C2-6_2 FTS_IS	429.10>80.90	----	222066	----	----	----	----	----	----	
13C2-6_2 FTS	429.10>80.90	----	222066	----	----	----	----	----	----	
6_2 FTS	427.10>407.00	427.10>80.90	77609	39854	51.35	50.47	39854	51.35	46.83	
13C4-PFOA_IS	417.10>172.00	----	50390	----	----	----	----	----	----	
13C8-PFOA_IS	421.10>376.00	----	629729	----	----	----	----	----	----	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240201_031 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	629729	----	----	----	----	----	----	----
PFOA	413.00>369.00	413.00>169.00	234094	57454	24.54	28.77	57454	24.54	28.12	
13C3-PFHxS	402.10>79.90	----	270121	----	----	----	----	----	----	----
13C3-PFHxS_IS	402.10>79.90	----	270121	----	----	----	----	----	----	----
PFHxS	398.70>79.90	398.70>98.90	103087	58212	56.47	60.90	58212	56.47	61.53	
18O2-PFHxS_IS	403.00>83.90	----	308645	----	----	----	----	----	----	----
13C9-PFNA_IS	472.10>427.00	----	374898	----	----	----	----	----	----	----
13C9-PFNA	472.10>427.00	----	374898	----	----	----	----	----	----	----
13C5-PFNA_IS	468.00>423.00	----	384748	----	----	----	----	----	----	----
PFNA	463.00>419.00	463.00>219.00	223028	44627	20.01	19.31	44627	20.01	20.30	
PFHpS	449.00>79.90	449.00>98.80	92622	46911	50.65	52.44	46911	50.65	52.33	
7_3 FTCA	441.00>317.00	441.00>336.90	407778	561153	137.61	129.46	561153	137.61	129.73	
13C2-8_2-FTS	529.10>80.90	----	175270	----	----	----	----	----	----	AC
13C2-8_2-FTS_IS	529.10>80.90	----	175270	----	----	----	----	----	----	----
8_2 FTS	527.10>506.95	527.10>80.80	56522	25914	45.85	45.98	25914	45.85	43.25	
13C6-PFDA_IS	519.10>474.10	----	256272	----	----	----	----	----	----	----
13C6-PFDA	519.10>474.10	----	256272	----	----	----	----	----	----	----
13C2-PFDA_IS	515.10>470.10	----	252316	----	----	----	----	----	----	----
PFDA	512.90>469.00	512.90>219.00	186899	30179	16.15	17.88	30179	16.15	18.89	
D3-NMeFOSAA_IS	573.20>419.00	----	520248	----	----	----	----	----	----	----
D3-NMeFOSAA	573.20>419.00	----	520248	----	----	----	----	----	----	AC
13C8-PFOS_IS	507.10>98.90	----	119085	----	----	----	----	----	----	----
13C8-PFOS	507.10>98.90	----	119085	----	----	----	----	----	----	----
13C4-PFOS_IS	502.80>79.90	----	388948	----	----	----	----	----	----	----
PFOS	498.90>79.90	498.90>98.80	82573	40088	48.55	53.60	40088	48.55	52.29	
NMeFOSAA	570.10>419.00	570.10>483.00	76569	50940	66.53	64.89	50940	66.53	60.97	
D5-NEtFOSAA_IS	589.20>419.00	----	427148	----	----	----	----	----	----	----
D5-NEtFOSAA	589.20>419.00	----	427148	----	----	----	----	----	----	AC
NEtFOSAA	584.20>419.10	584.20>526.00	69034	58200	84.31	96.07	58200	84.31	94.54	
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	539155	170389	31.60	30.95	170389	31.60	30.61	
PFUnDA	563.10>519.00	563.10>269.10	212568	25272	11.89	11.01	25272	11.89	12.02	
13C7-PFUnDA_IS	570.00>525.10	----	295816	----	----	----	----	----	----	----
13C7-PFUnDA	570.00>525.10	----	295816	----	----	----	----	----	----	----
PFNS	548.80>79.90	548.80>98.80	92791	55910	60.25	60.44	55910	60.25	58.51	
10_2 FTS	626.80>607.05	626.80>81.00	79916	27204	34.04	36.14	27204	34.04	33.04	
13C2-PFDOA_IS	615.10>570.00	----	352277	----	----	----	----	----	----	----
13C2-PFDOA	615.10>570.00	----	352277	----	----	----	----	----	----	----
PFDOA	613.10>569.00	613.10>319.00	171419	18080	10.55	10.16	18080	10.55	10.60	
PFDS	599.00>79.90	599.00>98.80	76836	44506	57.92	58.26	44506	57.92	61.78	
PFTDA	663.00>619.00	663.00>168.90	237459	35023	14.75	16.18	35023	14.75	14.85	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240201_031 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	357982	124922	34.90	34.99	124922	34.90	34.39	
PFOSAm	498.10>77.90	----	173577	----	----	----	----	----	----	
13C8-PFOSAm	506.10>77.80	----	233885	----	----	----	----	----	----	
13C8-PFOSAm_IS	506.10>77.80	----	233885	----	----	----	----	----	----	
PFTDA	713.10>669.00	713.10>168.90	172603	29357	17.01	18.05	29357	17.01	17.39	
13C2-PFTDA	715.20>670.00	----	249222	----	----	----	----	----	----	
13C2-PFTDA_IS	715.20>670.00	----	249222	----	----	----	----	----	----	
PFDoS	699.10>79.90	699.10>98.80	46975	29607	63.03	61.13	29607	63.03	62.47	
D7-MeFOSE_IS	623.20>58.90	----	661825	----	----	----	----	----	----	
D7-MeFOSE	623.20>58.90	----	661825	----	----	----	----	----	----	
MeFOSE	616.10>59.00	----	32704	----	----	----	----	----	----	
13C2-PFHxDA_IS	815.00>770.05	----	573106	----	----	----	----	----	----	
13C2-PFHxDA	815.00>770.05	----	573106	----	----	----	----	----	----	
PFHxDA	813.00>768.95	813.00>218.95	317258	37846	11.93	11.66	37846	11.93	10.99	
D3-MeFOSA	515.00>219.00	----	66602	----	----	----	----	----	----	
D3-MeFOSA_IS	515.00>219.00	----	66602	----	----	----	----	----	----	
MeFOSA	511.90>219.00	511.90>169.00	33883	55633	164.20	160.44	55633	164.20	161.92	
D9-EtFOSE_IS	639.20>58.90	----	852935	----	----	----	----	----	----	
D9-EtFOSE	639.20>58.90	----	844588	----	----	----	----	----	----	
EtFOSE	630.00>59.00	----	38438	----	----	----	----	----	----	
D5-EtFOSAm	531.10>219.00	----	95909	----	----	----	----	----	----	
D5-EtFOSAm_IS	531.10>219.00	----	95909	----	----	----	----	----	----	
EtFOSAm	526.00>219.00	526.00>169.00	44359	75629	170.49	159.63	75629	170.49	172.60	
PFODA	913.00>868.65	913.00>169.00	117304	40166	34.24	36.03	40166	34.24	35.02	

Flag ID key: AC: Accuracy%



240201_031

Sample ID: 1633 ICAL 1.0PPB
Date Acquired: 2/1/2024 10:00:10 PM
Acquired by: System Administrator
Data File: 240201_031
Vial: 5 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.351	-0.002	0.000	876294	557792	13C3-PFBA_IS	10.6022	ng/mL	
13C4-PFBA_IS	Auto	1.351	-0.002	----	876294	876294	----	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.351	-0.004	----	557792	557792	----	5.0000	ng/mL	
PFBA	Auto	1.353	-0.003	0.002	79255	876294	13C4-PFBA_IS	0.9606	ng/mL	
PFMPA	Auto	2.384	0.003	-1.071	55159	245691	13C5-PFPeA_IS	0.7862	ng/mL	
3_3 FTCA	Auto	2.962	0.006	-0.493	59584	245691	13C5-PFPeA_IS	16.9305	ng/mL	
13C5-PFPeA	Auto	3.455	0.000	-1.492	245691	669414	13C2-PFHxA_IS	5.1043	ng/mL	
13C5-PFPeA_IS	Auto	3.455	0.000	----	245691	245691	----	5.0000	ng/mL	
PFPeA	Auto	3.459	0.001	0.004	158198	245691	13C5-PFPeA_IS	0.9196	ng/mL	
PFMBA	Auto	3.984	0.000	0.529	97483	245691	13C5-PFPeA_IS	0.9067	ng/mL	
13C2-4_2 FTS	Auto	4.633	0.000	-2.429	206461	308645	18O2-PFHxS_IS	3.5536	ng/mL	
13C2-4_2 FTS_IS	Auto	4.633	0.000	----	206461	206461	----	5.0000	ng/mL	
4_2 FTS	Auto	4.632	-0.001	-0.001	95553	206461	13C2-4_2 FTS_IS	0.9337	ng/mL	
13C3-PFBS_IS	Auto	4.603	0.000	----	306935	306935	----	2.5000	ng/mL	
PFBS	Auto	4.604	-0.001	0.001	127045	306935	13C3-PFBS_IS	0.8353	ng/mL	
13C3-PFBS	Auto	4.603	0.000	-2.459	306935	308645	18O2-PFHxS_IS	2.6653	ng/mL	
NFDHA	Auto	4.804	-0.001	-0.143	98427	490088	13C5-PFHxA_IS	0.9682	ng/mL	
13C5-PFHxA	Auto	4.947	0.000	0.000	490088	669414	13C2-PFHxA_IS	2.2681	ng/mL	
13C5-PFHxA_IS	Auto	4.947	0.000	----	490088	490088	----	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	4.947	0.000	----	669414	669414	----	2.5000	ng/mL	
PFHxA	Auto	4.949	0.000	0.002	169992	490088	13C5-PFHxA_IS	0.9254	ng/mL	
PFEESA	Auto	5.281	-0.001	0.334	640612	490088	13C5-PFHxA_IS	1.0521	ng/mL	
13C3-HFPO-DA	Auto	5.425	0.000	0.478	759079	669414	13C2-PFHxA_IS	12.7954	ng/mL	
13C3-HFPO-DA_IS	Auto	5.425	0.000	----	759079	759079	----	10.0000	ng/mL	
HFPO-DA	Auto	5.426	-0.001	0.001	74054	759079	13C3-HFPO-DA_IS	0.9921	ng/mL	
5_3 FTCA	Auto	5.874	0.006	0.927	250064	490088	13C5-PFHxA_IS	17.0693	ng/mL	
PFPeS	Auto	5.986	-0.002	-1.075	105134	270121	13C3-PFHxS_IS	0.9834	ng/mL	
13C4-PFHpA	Auto	6.132	0.000	1.185	719944	669414	13C2-PFHxA_IS	2.6484	ng/mL	
13C4-PFHpA_IS	Auto	6.132	0.000	----	719944	719944	----	2.5000	ng/mL	
PFHpA	Auto	6.134	0.000	0.002	230309	719944	13C4-PFHpA_IS	0.9257	ng/mL	
DONA	Auto	6.500	-0.001	1.075	414669	759079	13C3-HFPO-DA_IS	0.6480	ng/mL	AC
13C2-6_2 FTS_IS	Auto	6.777	-0.001	----	222066	222066	----	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.777	-0.001	-0.285	222066	308645	18O2-PFHxS_IS	3.6717	ng/mL	
6_2 FTS	Auto	6.777	0.000	0.000	77609	222066	13C2-6_2 FTS_IS	0.9165	ng/mL	
13C4-PFOA_IS	Auto	7.092	0.001	----	50390	50390	----	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.091	0.000	----	629729	629729	----	2.5000	ng/mL	
13C8-PFOA	Auto	7.091	0.000	-0.001	629729	50390	13C4-PFOA_IS	2.6204	ng/mL	
PFOA	Auto	7.094	0.001	0.003	234094	629729	13C8-PFOA_IS	1.0033	ng/mL	
13C3-PFHxS	Auto	7.061	-0.001	-0.001	270121	308645	18O2-PFHxS_IS	2.4970	ng/mL	
13C3-PFHxS_IS	Auto	7.061	-0.001	----	270121	270121	----	2.5000	ng/mL	
PFHxS	Auto	7.061	-0.001	0.000	103087	270121	13C3-PFHxS_IS	0.8731	ng/mL	
18O2-PFHxS_IS	Auto	7.062	0.000	----	308645	308645	----	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.941	0.000	----	374898	374898	----	1.2500	ng/mL	
13C9-PFNA	Auto	7.941	0.000	-0.001	374898	384748	13C5-PFNA_IS	1.3163	ng/mL	
13C5-PFNA_IS	Auto	7.942	0.000	----	384748	384748	----	1.2500	ng/mL	
PFNA	Auto	7.943	0.000	0.002	223028	374898	13C9-PFNA_IS	0.8972	ng/mL	
PFHpS	Auto	7.984	0.001	-0.814	92622	119085	13C8-PFOS_IS	0.9251	ng/mL	
7_3 FTCA	Auto	7.937	0.009	2.990	407778	490088	13C5-PFHxA_IS	15.8404	ng/mL	
13C2-8_2-FTS	Auto	8.398	-0.001	1.336	175270	308645	18O2-PFHxS_IS	3.4133	ng/mL	AC
13C2-8_2-FTS_IS	Auto	8.398	-0.001	----	175270	175270	----	5.0000	ng/mL	
8_2 FTS	Auto	8.399	0.001	0.001	56522	175270	13C2-8_2-FTS_IS	0.8460	ng/mL	
13C6-PFDA_IS	Auto	8.707	0.000	----	256272	256272	----	1.2500	ng/mL	
13C6-PFDA	Auto	8.707	0.000	0.000	256272	252316	13C2-PFDA_IS	1.2674	ng/mL	

J:\LCMS08\Data\240201_1633_RA\240201_1633_RA.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_031 (continued)

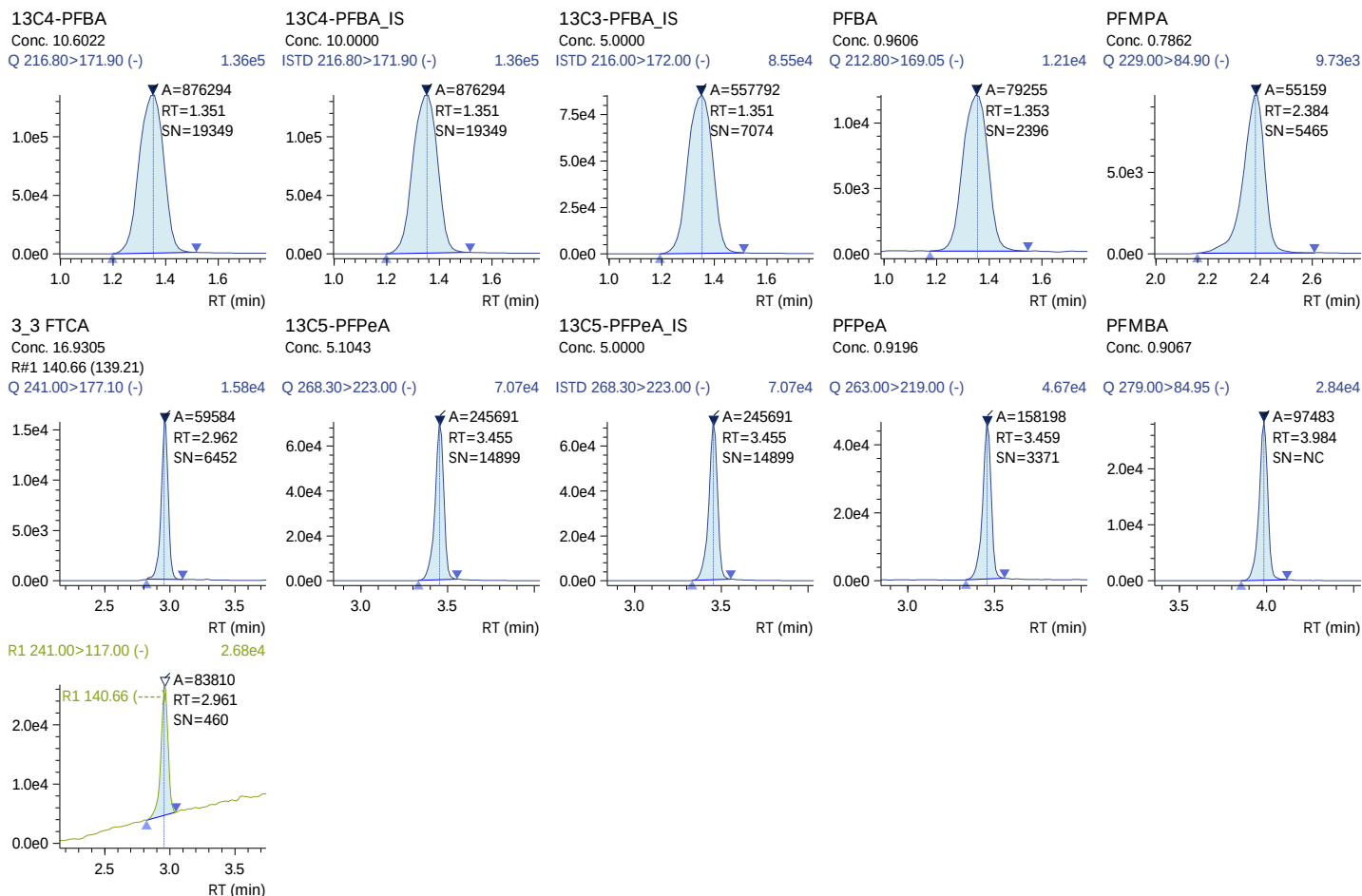
(Table continued from previous page)

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C2-PFDA_IS	Auto	8.707	-0.001	----	252316	252316	----	1.2500	ng/mL	
PFDA	Auto	8.709	0.000	0.002	186899	256272	13C6-PFDA_IS	0.8623	ng/mL	
D3-NMeFOSAA_IS	Auto	8.846	0.003	----	520248	520248	----	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.846	0.003	0.047	520248	388948	13C4-PFOS_IS	3.2852	ng/mL	AC
13C8-PFOS_IS	Auto	8.798	-0.002	----	119085	119085	----	2.5000	ng/mL	
13C8-PFOS	Auto	8.798	-0.002	-0.001	119085	388948	13C4-PFOS_IS	2.4328	ng/mL	
13C4-PFOS_IS	Auto	8.799	-0.001	----	388948	388948	----	2.5000	ng/mL	
PFOS	M	8.801	0.000	0.003	82573	119085	13C8-PFOS_IS	0.8118	ng/mL	
NMeFOSAA	M	8.852	0.004	0.006	76569	520248	D3-NMeFOSAA_IS	1.0394	ng/mL	
D5-NetFOSAA_IS	Auto	9.179	0.007	----	427148	427148	----	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.179	0.007	0.380	427148	388948	13C4-PFOS_IS	3.4226	ng/mL	AC
NetFOSAA	M	9.189	0.005	0.009	69034	427148	D5-NetFOSAA_IS	0.9842	ng/mL	
9-CI-PF3ONS	Auto	9.366	0.001	3.941	539155	759079	13C3-HFPO-DA_IS	0.7243	ng/mL	
PFUnDA	Auto	9.434	0.001	0.002	212568	295816	13C7-PFUnDA_IS	1.0347	ng/mL	
13C7-PFUnDA_IS	Auto	9.432	0.002	----	295816	295816	----	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.432	0.002	0.725	295816	252316	13C2-PFDA_IS	1.1774	ng/mL	
PFNS	Auto	9.563	0.001	0.765	92791	119085	13C8-PFOS_IS	0.9207	ng/mL	
10_2_FTS	Auto	9.808	0.002	1.410	79916	175270	13C2-8_2-FTS_IS	0.9027	ng/mL	
13C2-PFDOA_IS	Auto	10.120	0.002	----	352277	352277	----	1.2500	ng/mL	
13C2-PFDOA	Auto	10.120	0.002	1.413	352277	252316	13C2-PFDA_IS	1.1746	ng/mL	
PFDOA	Auto	10.120	0.001	0.000	171419	352277	13C2-PFDOA_IS	0.9478	ng/mL	
PFDS	Auto	10.276	0.000	1.478	76836	119085	13C8-PFOS_IS	0.8682	ng/mL	
PFTDA	Auto	10.776	0.001	-0.631	237459	249222	13C2-PFTDA_IS	0.9450	ng/mL	
11-CI-PF3OUdS	Auto	10.783	0.000	5.358	357982	759079	13C3-HFPO-DA_IS	0.6738	ng/mL	
PFOSAm	M	11.147	0.005	-0.003	173577	233885	13C8-PFOSAm_IS	2.1211	ng/mL	
13C8-PFOSAm	Auto	11.150	0.008	2.351	233885	388948	13C4-PFOS_IS	1.8930	ng/mL	
13C8-PFOSAm_IS	Auto	11.150	0.008	----	233885	233885	----	2.5000	ng/mL	
PFTDA	Auto	11.409	0.001	0.002	172603	249222	13C2-PFTDA_IS	0.9791	ng/mL	
13C2-PFTDA	Auto	11.407	0.001	2.700	249222	252316	13C2-PFDA_IS	1.1774	ng/mL	
13C2-PFTDA_IS	Auto	11.407	0.001	----	249222	249222	----	1.2500	ng/mL	
PFDoS	Auto	11.600	0.001	2.802	46975	119085	13C8-PFOS_IS	0.8511	ng/mL	
D7-MeFOSE_IS	Auto	13.382	0.002	----	661825	661825	----	25.0000	ng/mL	
D7-MeFOSE	Auto	13.382	0.002	4.583	661825	388948	13C4-PFOS_IS	20.8661	ng/mL	
MeFOSE	M	13.419	0.002	0.037	32704	661825	D7-MeFOSE_IS	1.0037	ng/mL	
13C2-PFHxDA_IS	Auto	12.620	0.000	----	573106	573106	----	2.5000	ng/mL	
13C2-PFHxDA	Auto	12.620	0.000	3.913	573106	252316	13C2-PFDA_IS	2.0230	ng/mL	
PFHxDA	Auto	12.622	0.001	0.002	317258	573106	13C2-PFHxDA_IS	1.0244	ng/mL	
D3-MeFOSA	Auto	13.686	0.001	4.887	66602	388948	13C4-PFOS_IS	2.0648	ng/mL	
D3-MeFOSA_IS	Auto	13.686	0.001	----	66602	66602	----	2.5000	ng/mL	
MeFOSA	M	13.694	0.000	0.008	33883	66602	D3-MeFOSA_IS	0.8915	ng/mL	
D9-EtFOSE_IS	Auto	14.009	0.001	----	852935	852935	----	25.0000	ng/mL	
D9-EtFOSE	Auto	14.009	0.001	5.210	844588	388948	13C4-PFOS_IS	21.7601	ng/mL	
EtFOSE	M	14.052	0.002	0.043	38438	852935	D9-EtFOSE_IS	0.9397	ng/mL	
D5-EtFOSAm	Auto	14.362	0.001	5.563	95909	388948	13C4-PFOS_IS	2.1505	ng/mL	
D5-EtFOSAm_IS	Auto	14.362	0.001	----	95909	95909	----	2.5000	ng/mL	
EtFOSAm	M	14.379	0.000	0.017	44359	95909	D5-EtFOSAm_IS	0.8431	ng/mL	
PFODA	Auto	13.756	0.000	1.136	117304	573106	13C2-PFHxDA_IS	0.9796	ng/mL	

Flag ID key: AC: Accuracy%



240201_031 (continued)





240201_031 (continued)

13C2-4_2_FTS
Conc. 3.5536

13C2-4_2_FTS_IS
Conc. 5.0000

4_2_FTS
Conc. 0.9337
R#1 32.87 (32.10)
R#2 32.87 (32.79)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 0.8353
R#1 47.12 (44.81)
R#2 47.12 (46.72)

Q 329.10>80.90 (-)

6.28e4

ISTD 329.10>80.90 (-)

6.28e4

Q 327.10>307.00 (-)

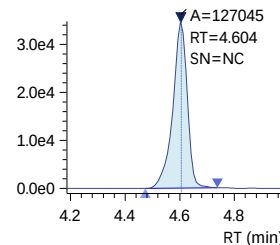
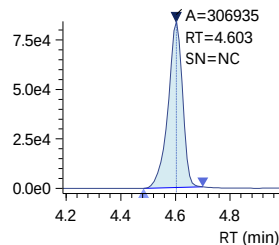
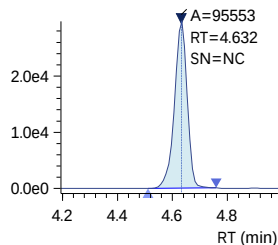
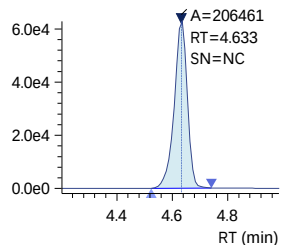
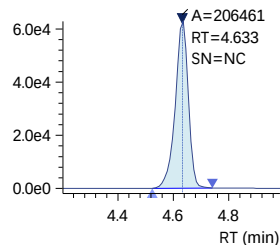
2.97e4

ISTD 302.10>79.90 (-)

8.43e4

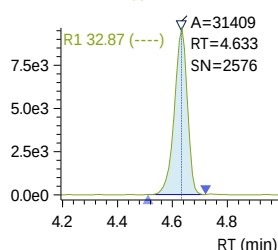
Q 298.70>79.90 (-)

3.48e4



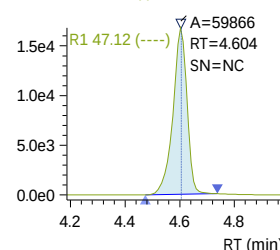
R1 327.10>80.90 (-)

9.67e3



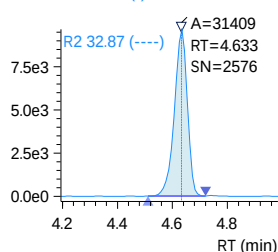
R1 298.70>98.80 (-)

1.68e4



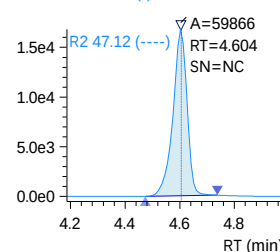
R2 327.10>80.90 (-)

9.67e3



R2 298.70>98.80 (-)

1.68e4





240201_031 (continued)

13C3-PFBS
Conc. 2.6653

NFDHA
Conc. 0.9682
R#1 33.34 (35.54)
R#2 33.34 (37.91)

13C5-PFHxA
Conc. 2.2681

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

Q 302.10>79.90 (-)

8.43e4

Q 295.00>201.00 (-)

2.95e4

Q 318.00>273.00 (-)

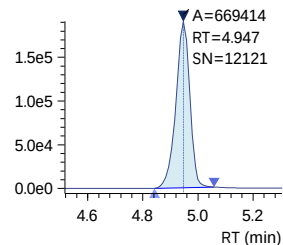
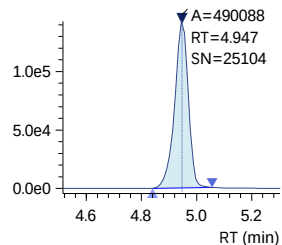
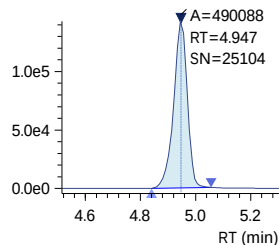
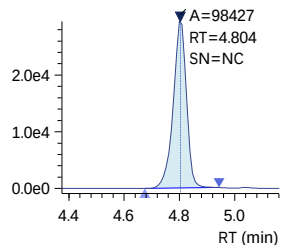
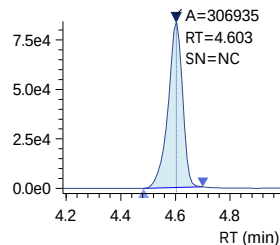
1.43e5

ISTD 318.00>273.00 (-)

1.43e5

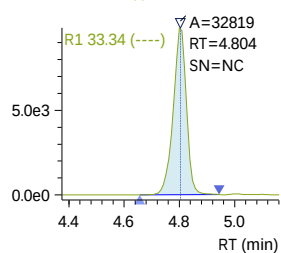
ISTD 315.10>270.00 (-)

1.91e5



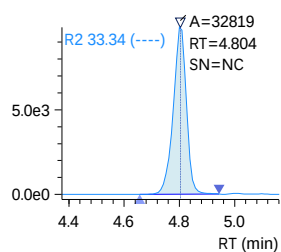
R1 295.00>84.90 (-)

9.87e3



R2 295.00>84.90 (-)

9.87e3





240201_031 (continued)

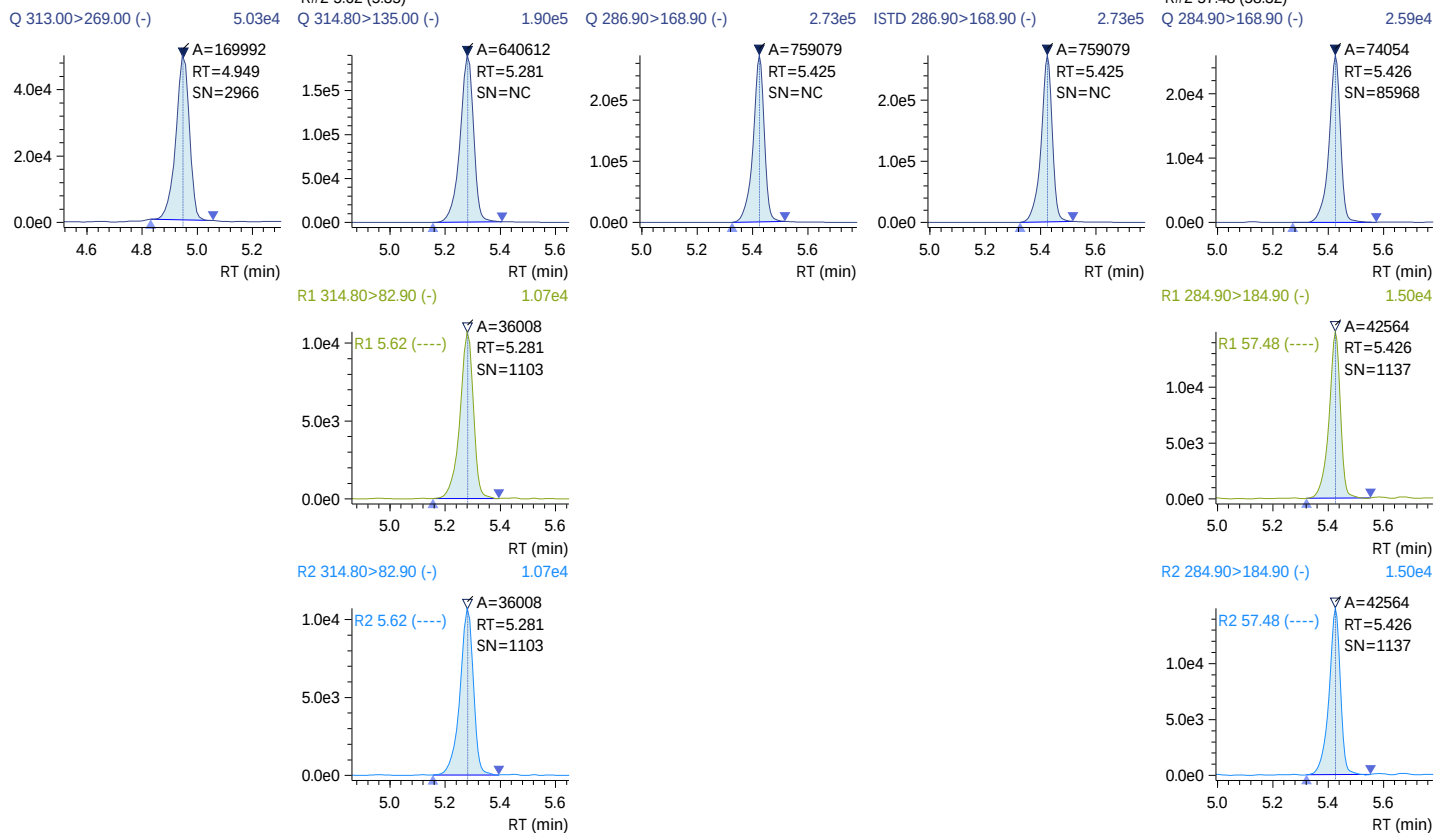
PFHxA
Conc. 0.9254

PFEESA
Conc. 1.0521
R#1 5.62 (5.22)
R#2 5.62 (5.35)

13C3-HFPO-DA
Conc. 12.7954

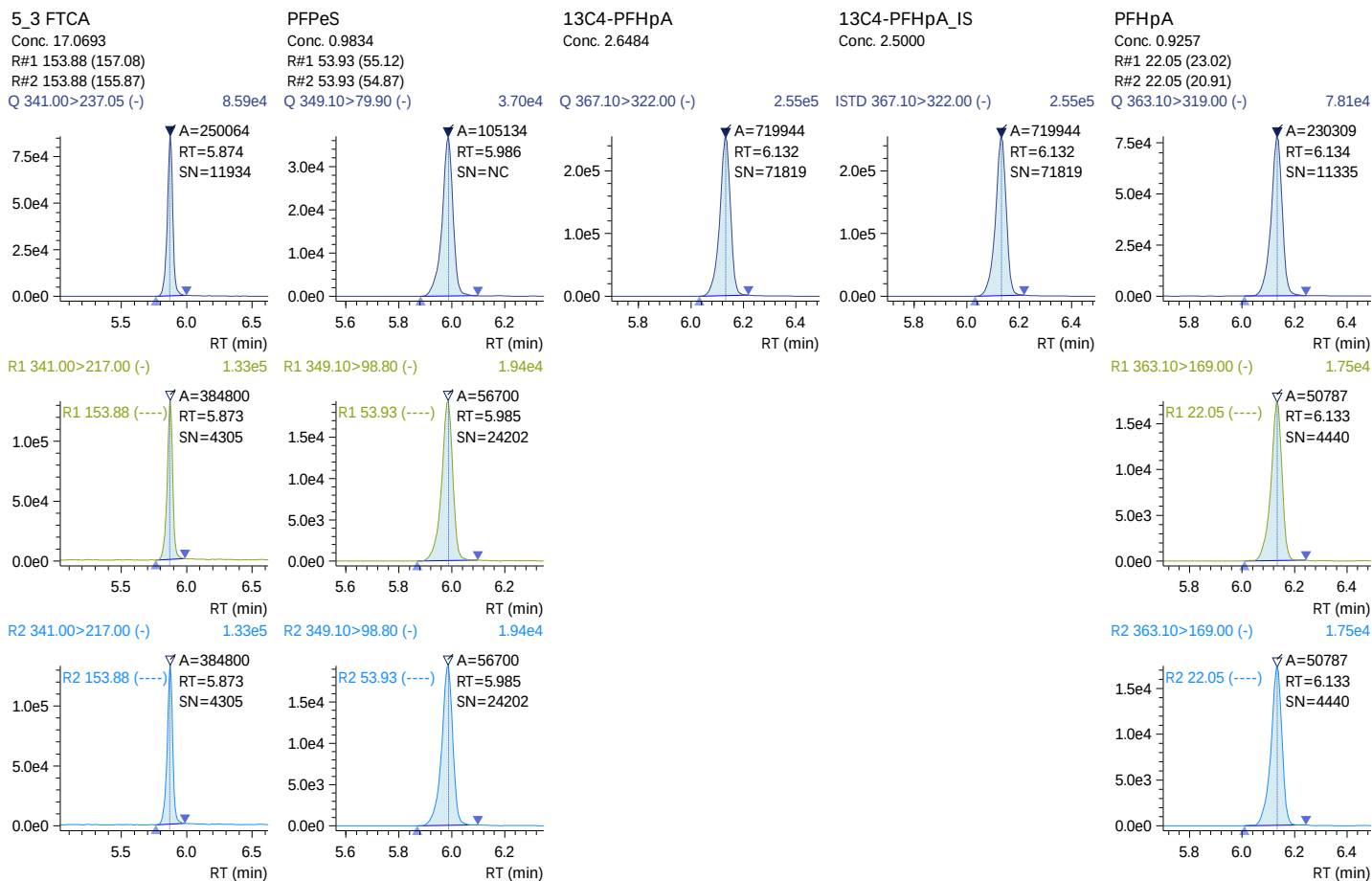
13C3-HFPO-DA_IS
Conc. 10.0000

HFPO-DA
Conc. 0.9921
R#1 57.48 (59.79)
R#2 57.48 (58.32)



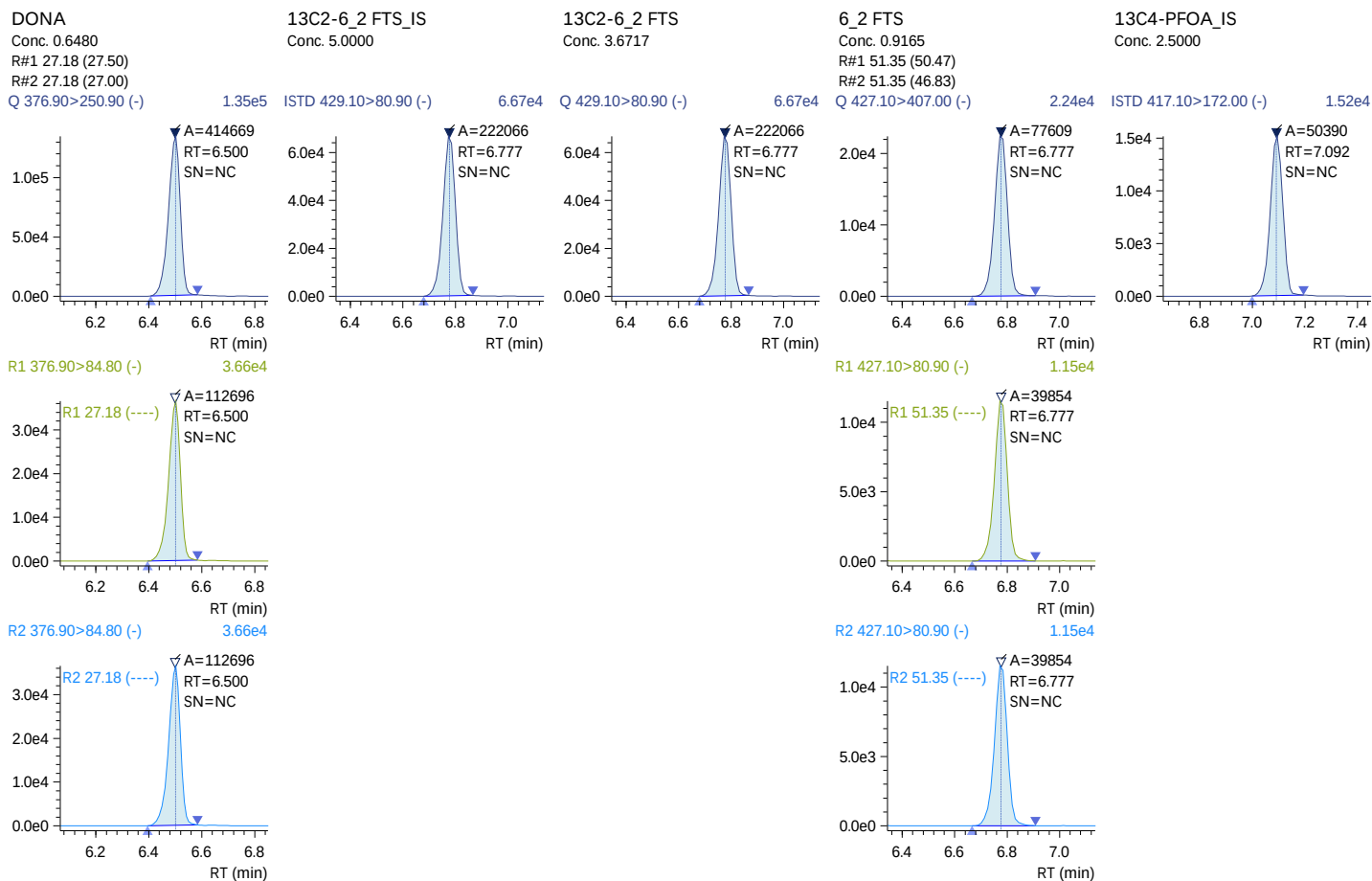


240201_031 (continued)





240201_031 (continued)





240201_031 (continued)

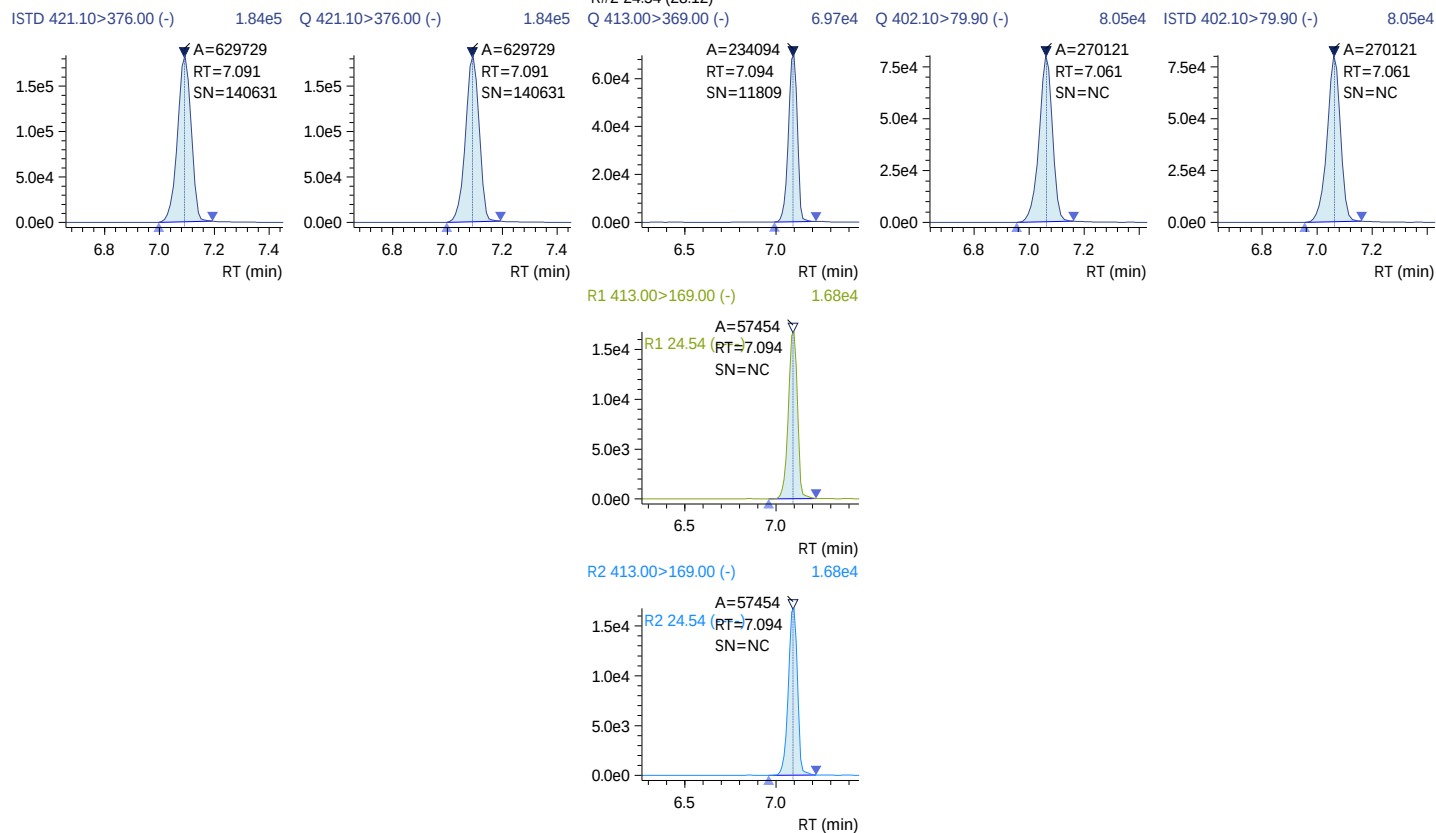
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.6204

PFOA
Conc. 1.0033
R#1 24.54 (28.77)
R#2 24.54 (28.12)

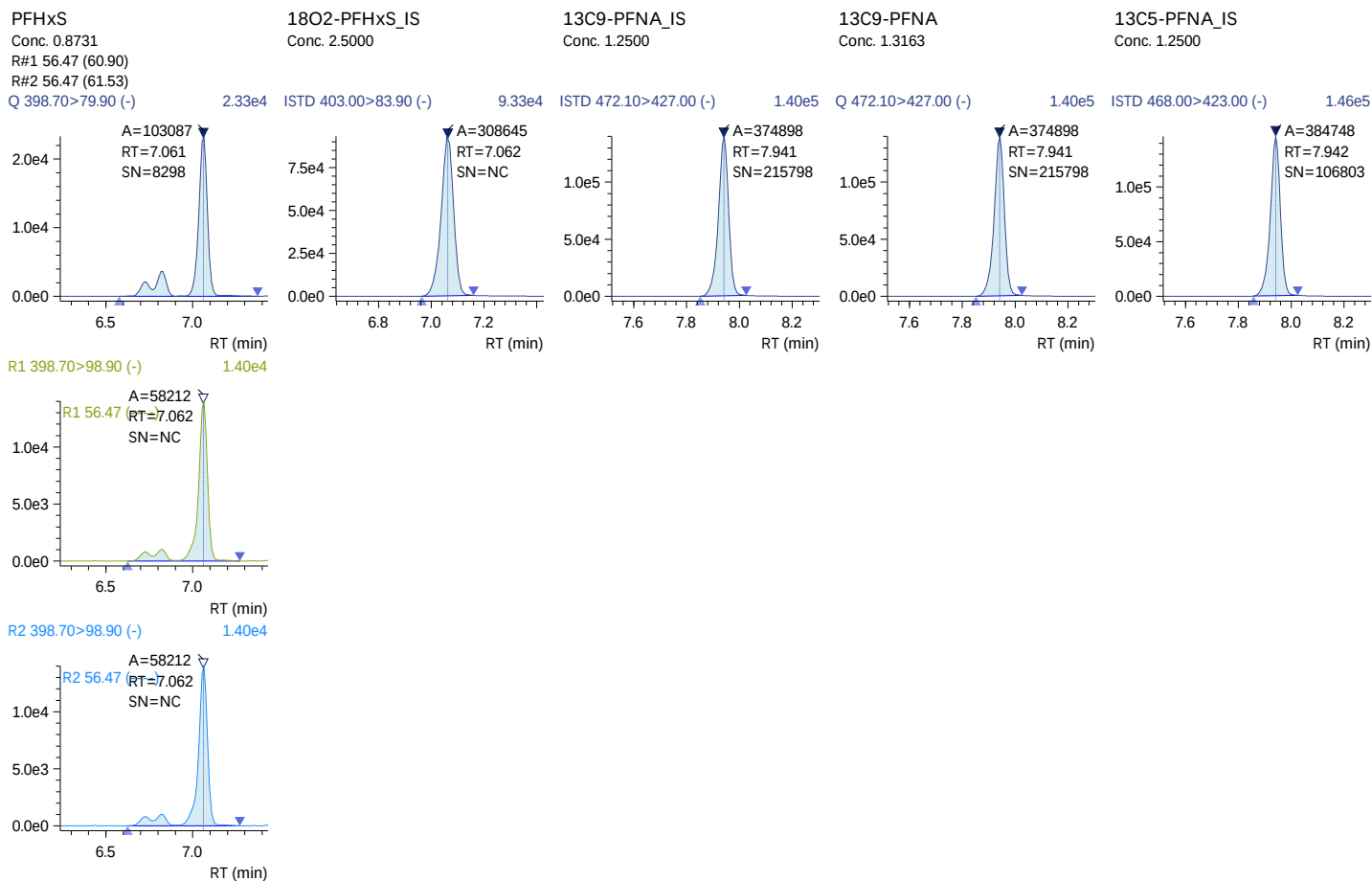
13C3-PFHxS
Conc. 2.4970

13C3-PFHxS_IS
Conc. 2.5000



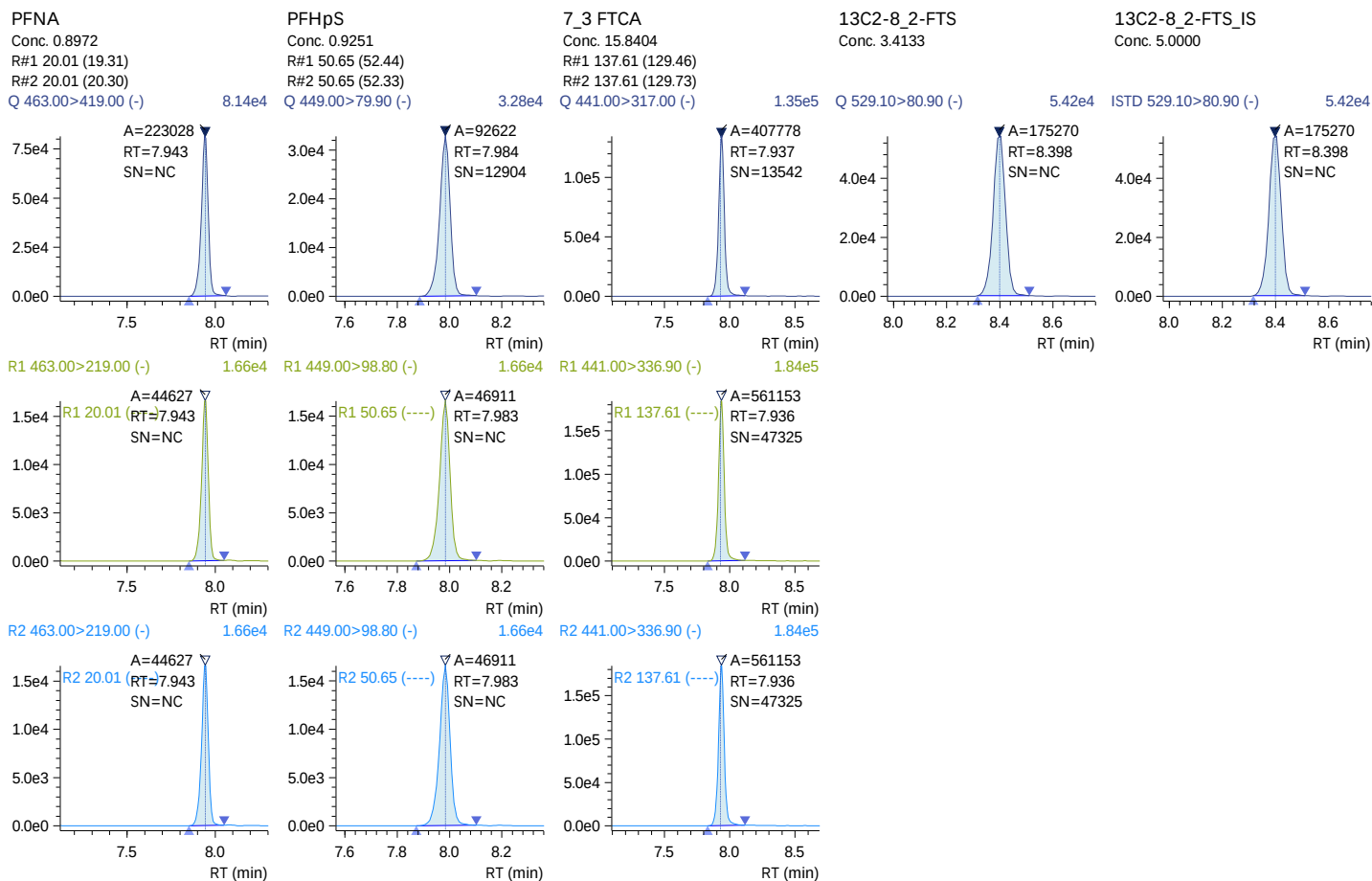


240201_031 (continued)





240201_031 (continued)

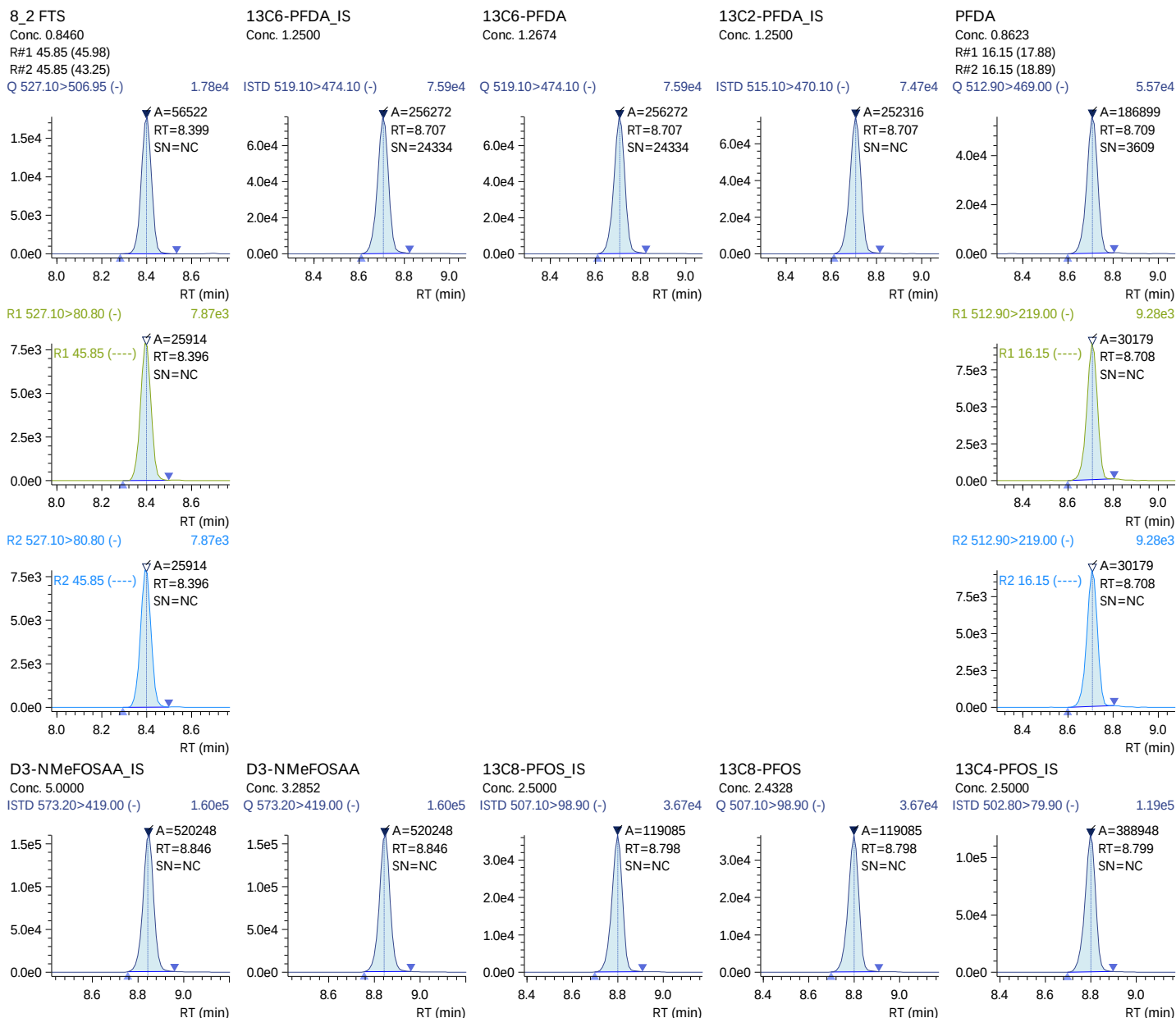


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.

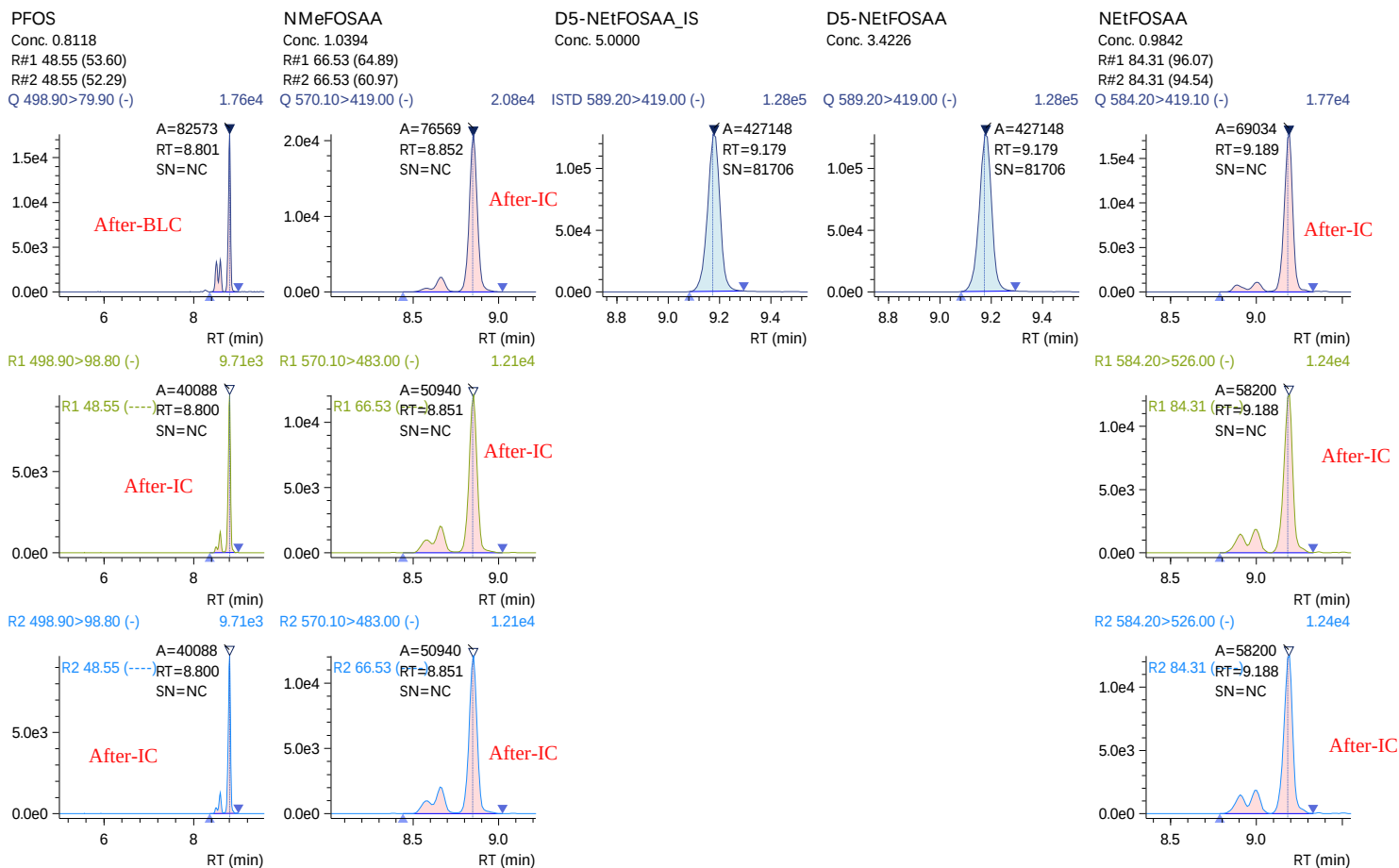


240201_031 (continued)





240201_031 (continued)

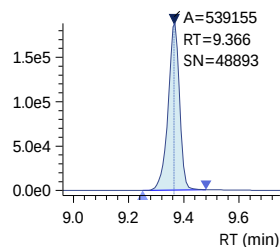




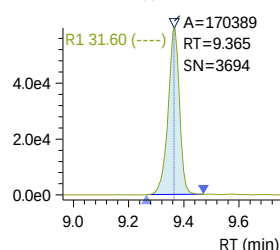
240201_031 (continued)

9-Cl-PF3ONS

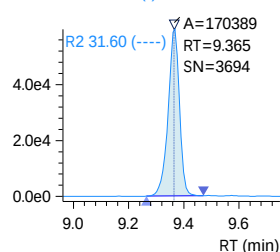
Conc. 0.7243
R#1 31.60 (30.95)
R#2 31.60 (30.61)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-)

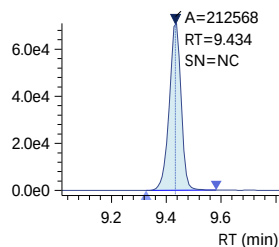


R2 532.80>353.00 (-)

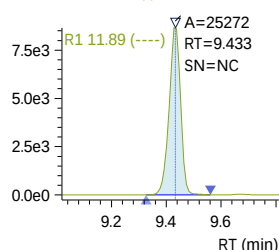


PFUnDA

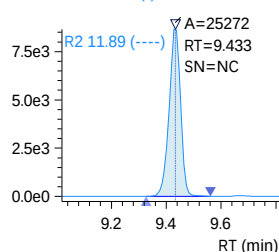
Conc. 1.0347
R#1 11.89 (11.01)
R#2 11.89 (12.02)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-)



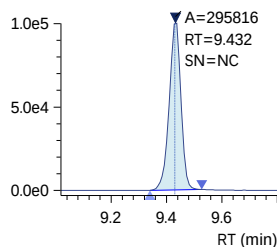
R2 563.10>269.10 (-)



13C7-PFUnDA_IS

Conc. 1.2500

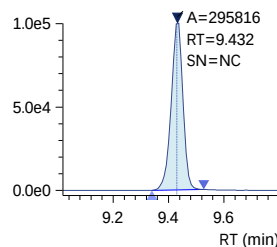
ISTD 570.00>525.10 (-)



13C7-PFUnDA

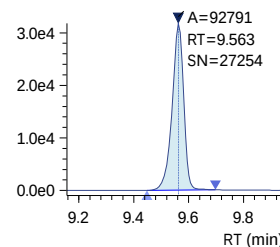
Conc. 1.1774

Q 570.00>525.10 (-)

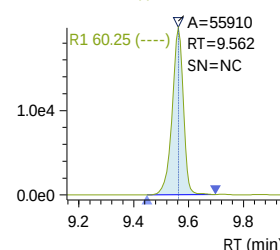


PFNS

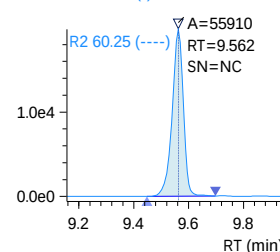
Conc. 0.9207
R#1 60.25 (60.44)
R#2 60.25 (58.51)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-)

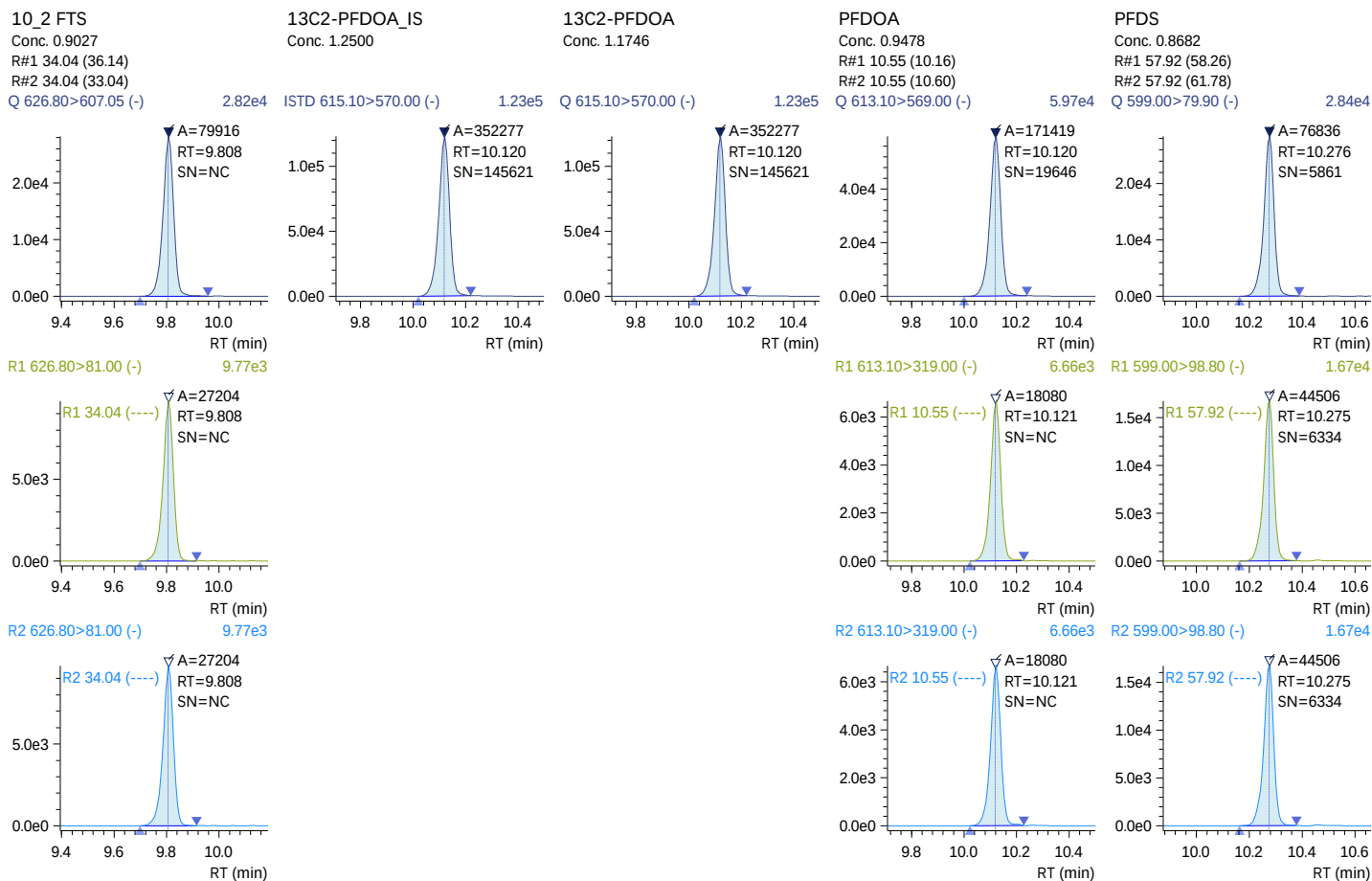


R2 548.80>98.80 (-)



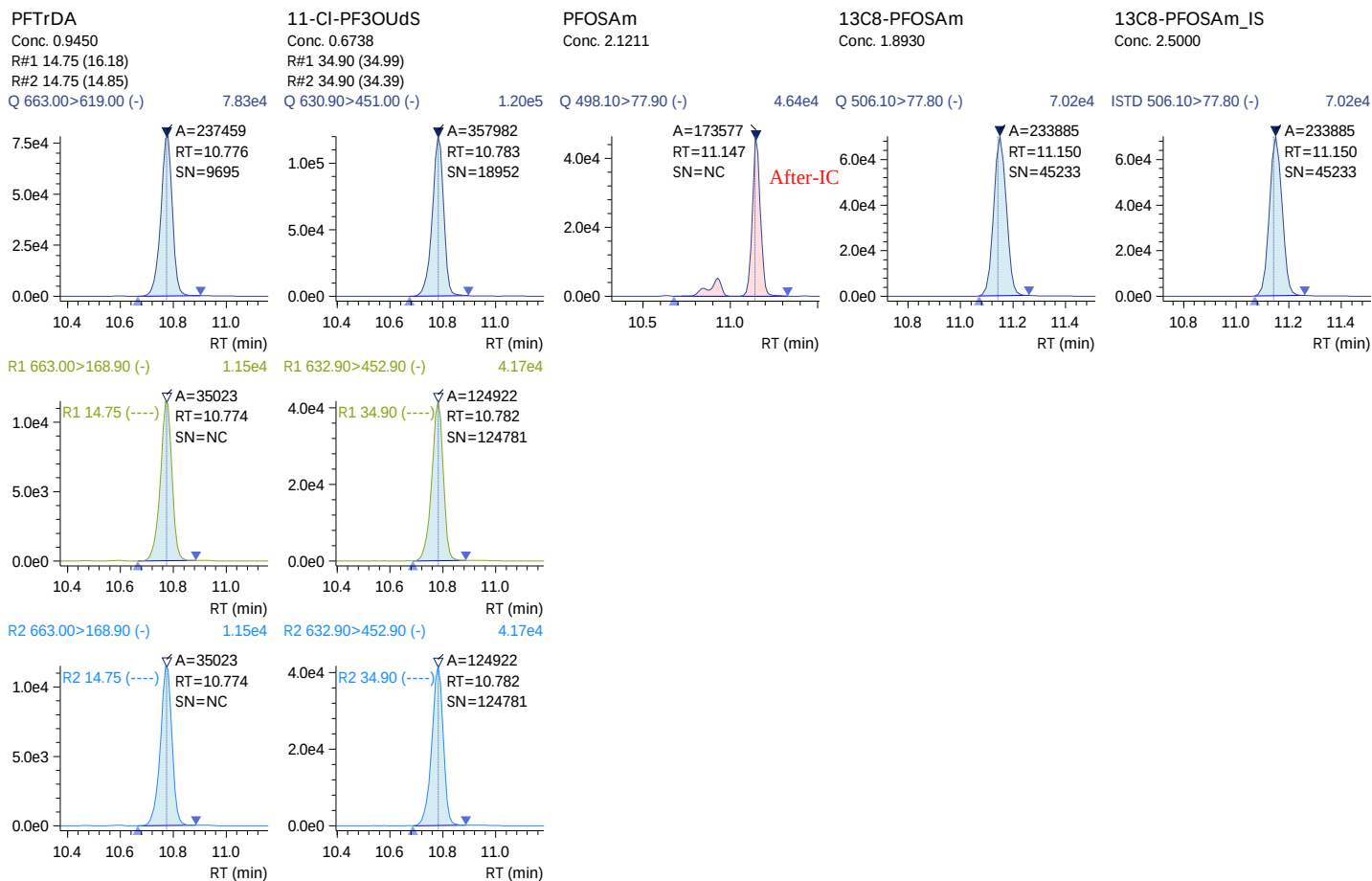


240201_031 (continued)





240201_031 (continued)

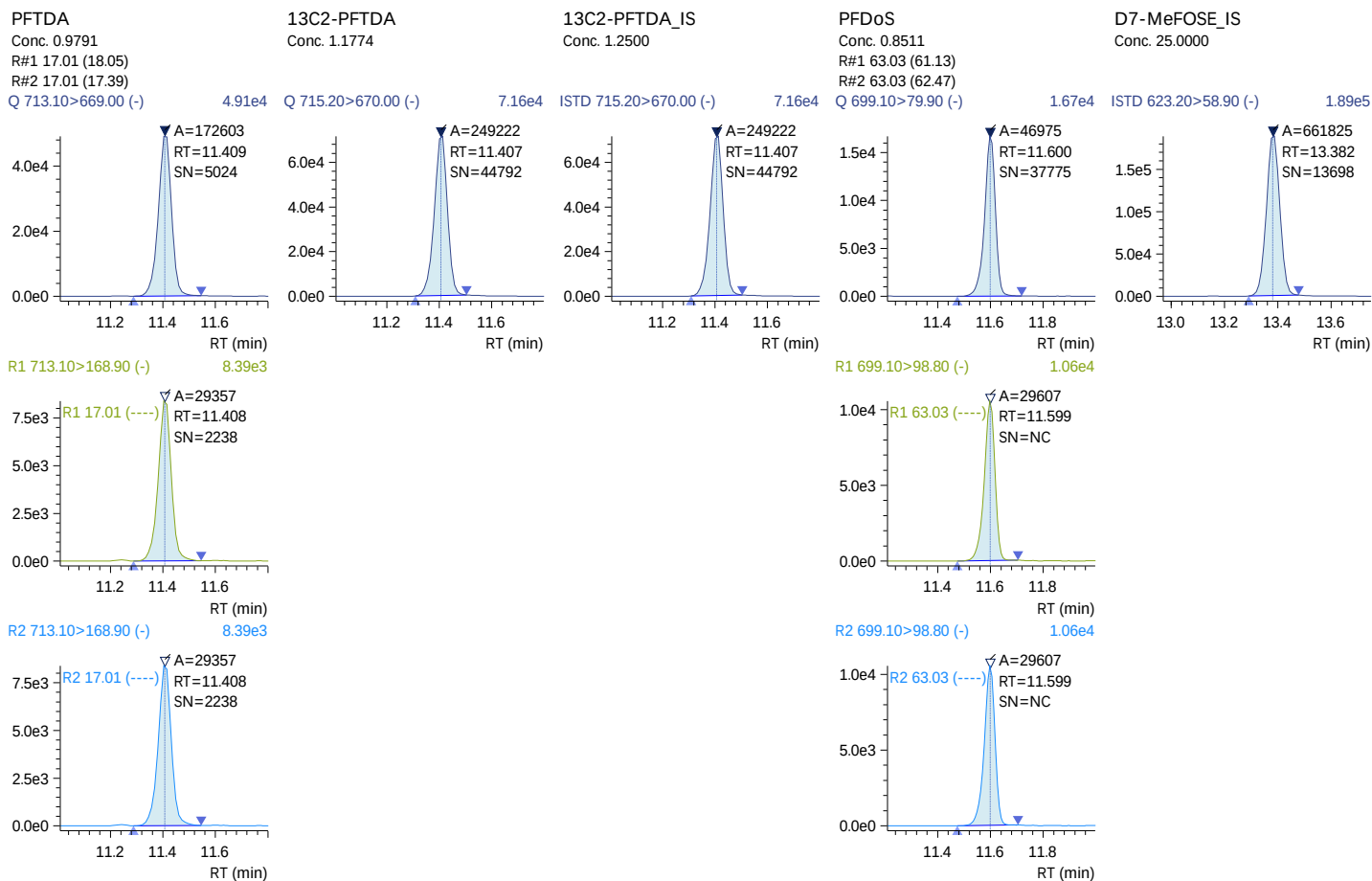


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_031 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_031 (continued)

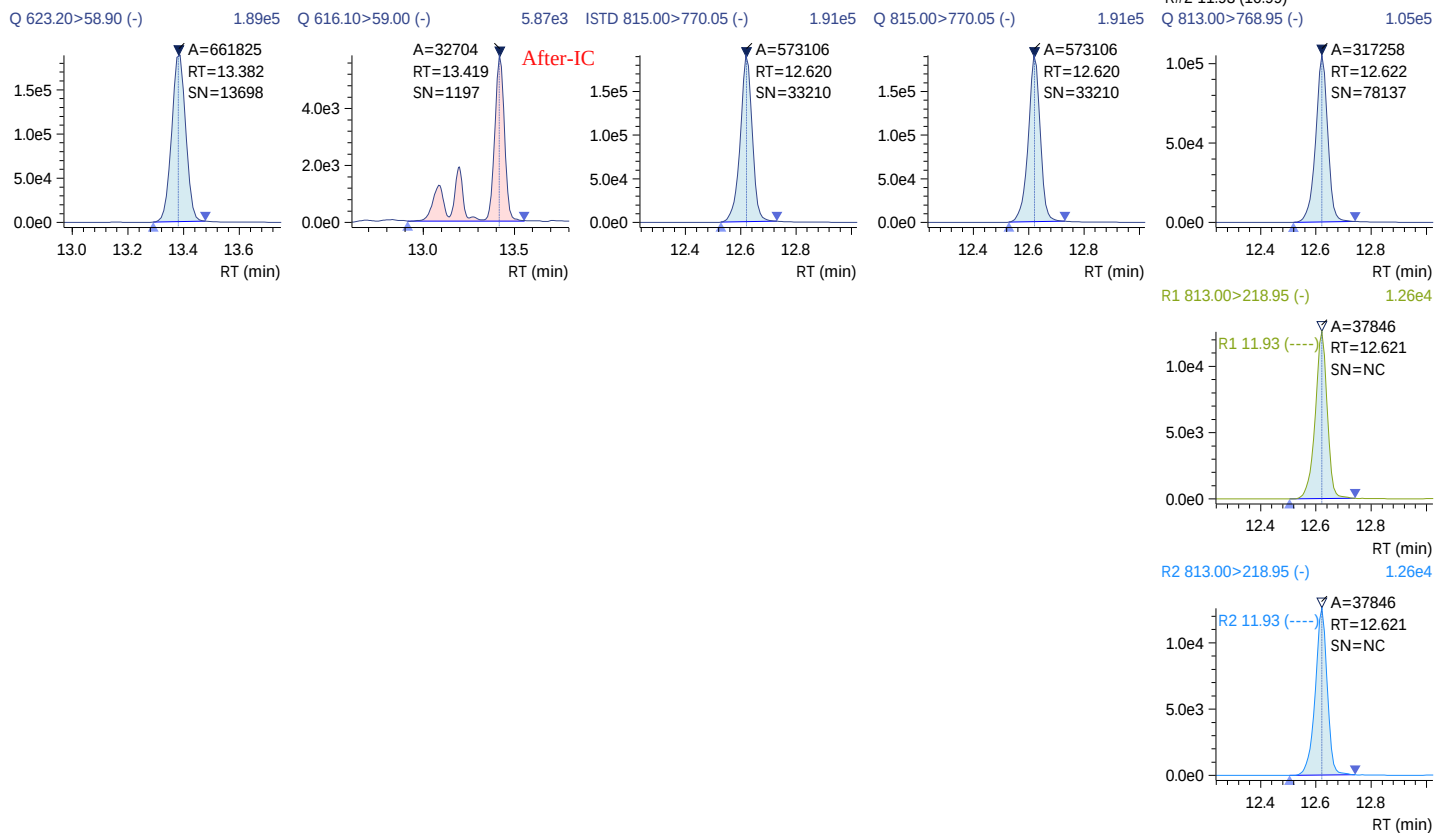
D7-MeFOSE
Conc. 20.8661

MeFOSE
Conc. 1.0037

13C2-PFHXA_IS
Conc. 2.5000

13C2-PFHXA
Conc. 2.0230

PFHXA
Conc. 1.0244
R#1 11.93 (11.66)
R#2 11.93 (10.99)





240201_031 (continued)

D3-MeFOSA
Conc. 2.0648

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. 0.8915
R#1 164.20 (160.44)
R#2 164.20 (161.92)

D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 21.7601

Q 515.00>219.00 (-)

1.97e4

ISTD 515.00>219.00 (-)

1.97e4

Q 511.90>219.00 (-)

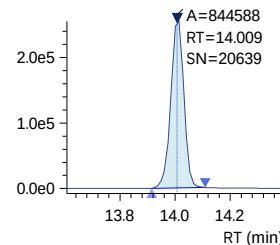
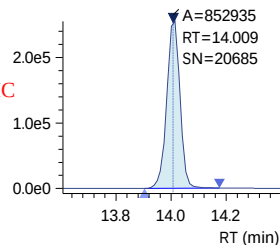
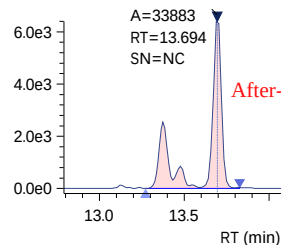
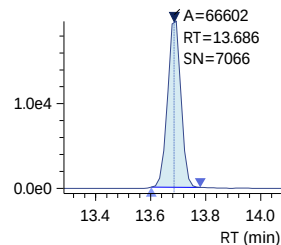
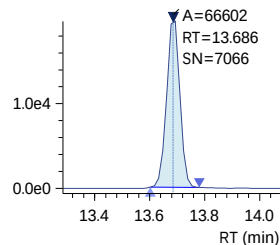
6.40e3

ISTD 639.20>58.90 (-)

2.55e5

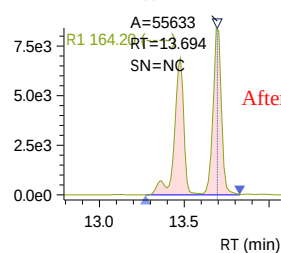
Q 639.20>58.90 (-)

2.55e5



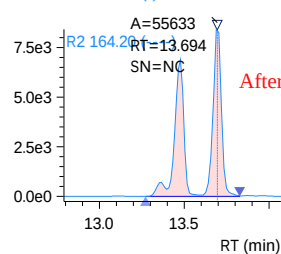
R1 511.90>169.00 (-)

8.42e3



R2 511.90>169.00 (-)

8.42e3





240201_031 (continued)

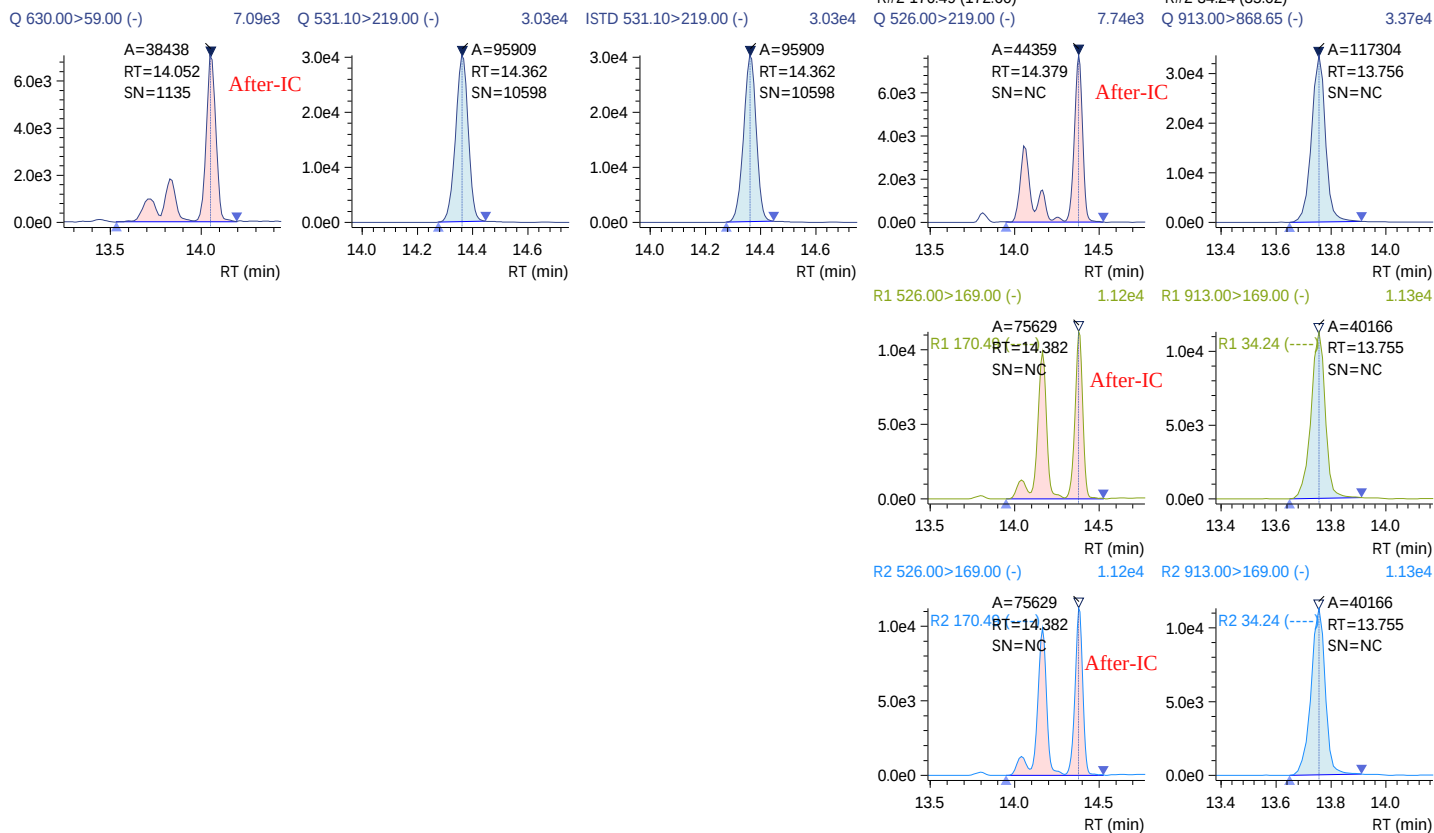
EtFOSE
Conc. 0.9397

D5-EtFOSAm
Conc. 2.1505

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. 0.8431
R#1 170.49 (159.63)
R#2 170.49 (172.60)

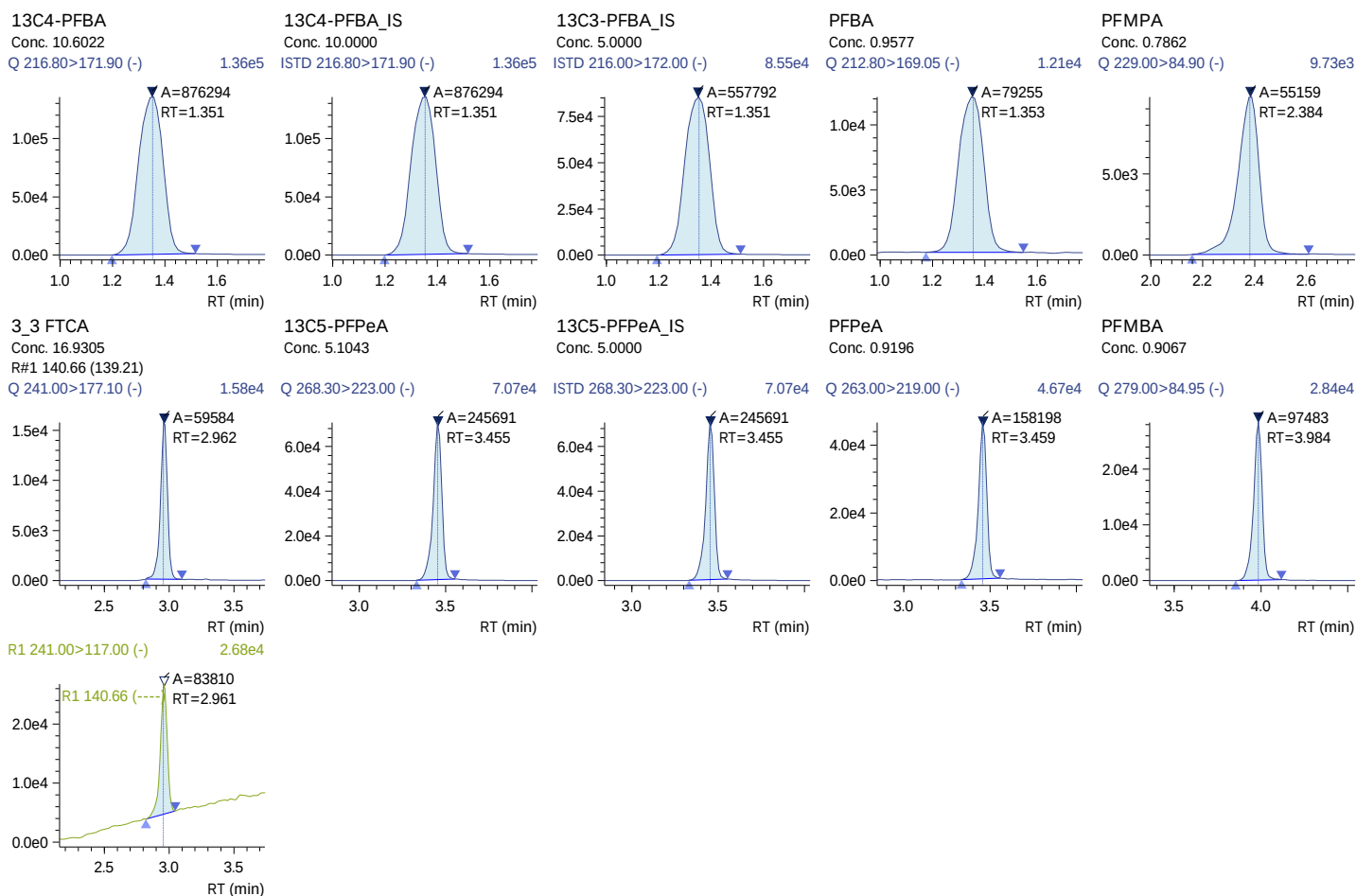
PFODA
Conc. 0.9796
R#1 34.24 (36.03)
R#2 34.24 (35.02)





240201_031

Sample ID: 1633 ICAL 1.0PPB
Date Acquired: 2/1/2024 10:00:10 PM
Acquired by: System Administrator
Data File: 240201_031
Vial: 5 | Inj. Volume: 10.0000uL | Tray: 1





240201_031 (continued)

13C2-4_2 FTS
 Conc. 3.5536

13C2-4_2 FTS_IS
 Conc. 5.0000

4_2 FTS
 Conc. 0.9337
 R#1 32.87 (32.10)
 R#2 32.87 (32.79)

13C3-PFBS_IS
 Conc. 2.5000

PFBS
 Conc. 0.8353
 R#1 47.12 (44.81)
 R#2 47.12 (46.72)

Q 329.10>80.90 (-)

6.28e4

ISTD 329.10>80.90 (-)

6.28e4

Q 327.10>307.00 (-)

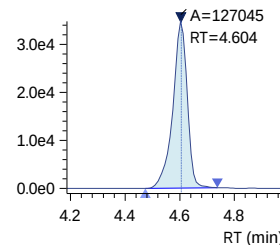
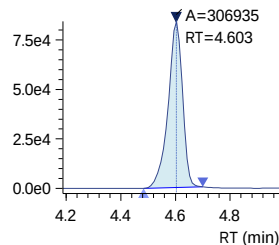
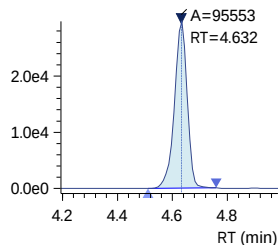
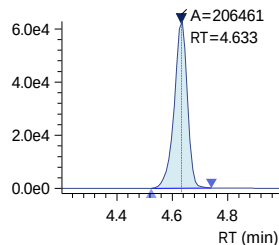
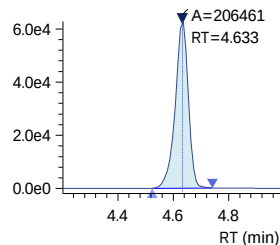
2.97e4

ISTD 302.10>79.90 (-)

8.43e4

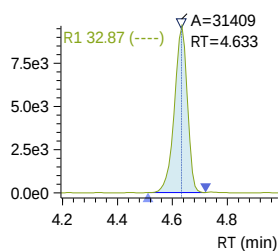
Q 298.70>79.90 (-)

3.48e4



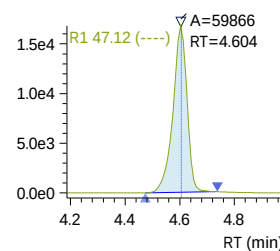
R1 327.10>80.90 (-)

9.67e3



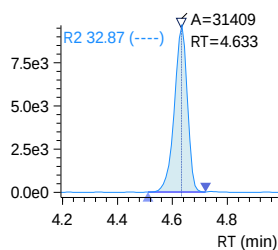
R1 298.70>98.80 (-)

1.68e4



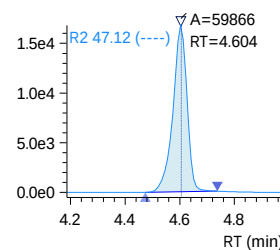
R2 327.10>80.90 (-)

9.67e3



R2 298.70>98.80 (-)

1.68e4





240201_031 (continued)

13C3-PFBS
 Conc. 2.6653

NFDHA
 Conc. 0.9682
 R#1 33.34 (35.54)
 R#2 33.34 (37.91)

13C5-PFHxA
 Conc. 2.2681

13C5-PFHxA_IS
 Conc. 2.5000

13C2-PFHxA_IS
 Conc. 2.5000

Q 302.10>79.90 (-)

8.43e4

Q 295.00>201.00 (-)

2.95e4

Q 318.00>273.00 (-)

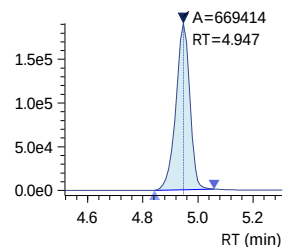
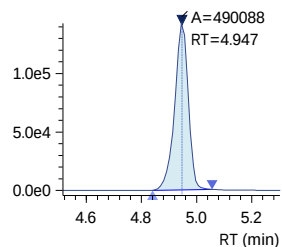
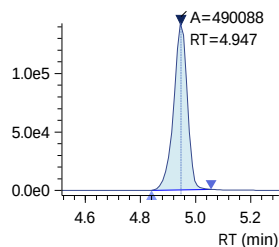
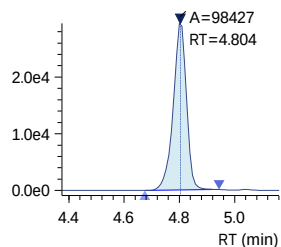
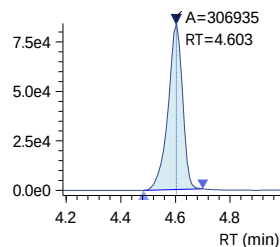
1.43e5

ISTD 318.00>273.00 (-)

1.43e5

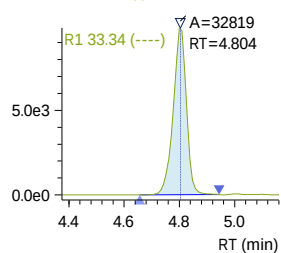
ISTD 315.10>270.00 (-)

1.91e5



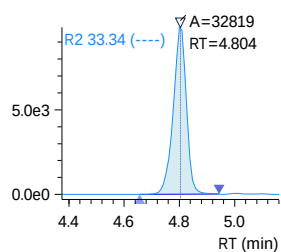
R1 295.00>84.90 (-)

9.87e3



R2 295.00>84.90 (-)

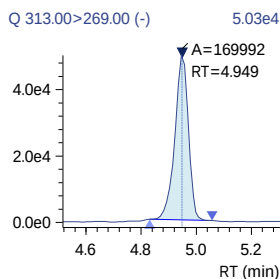
9.87e3





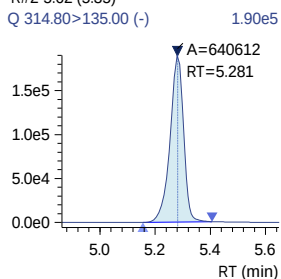
240201_031 (continued)

PFHxA
 Conc. 0.9324

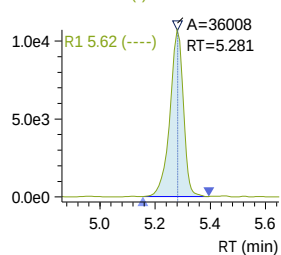


PFEESA
 Conc. 1.0521

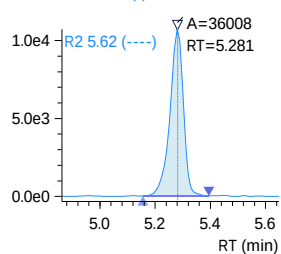
R#1 5.62 (5.22)
 R#2 5.62 (5.35)



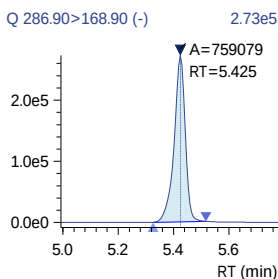
R1 314.80>82.90 (-) 1.07e4



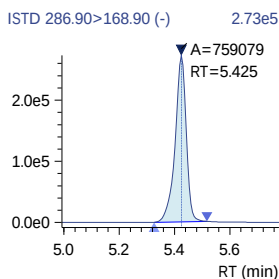
R2 314.80>82.90 (-) 1.07e4



13C3-HFPO-DA
 Conc. 12.7954

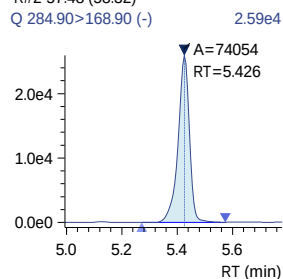


13C3-HFPO-DA_IS
 Conc. 10.0000

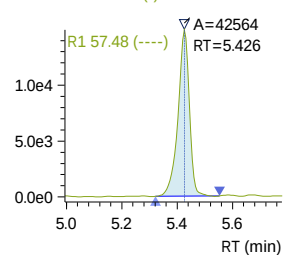


HFPO-DA
 Conc. 0.9921

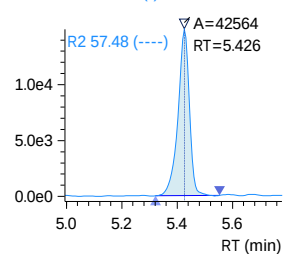
R#1 57.48 (59.79)
 R#2 57.48 (58.32)



R1 284.90>184.90 (-) 1.50e4



R2 284.90>184.90 (-) 1.50e4

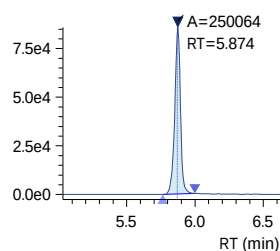




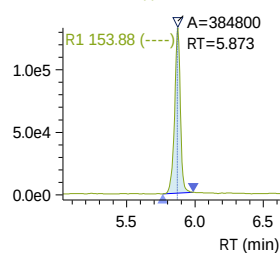
240201_031 (continued)

5_3 FTCA

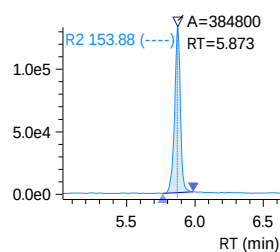
Conc. 17.0693
R#1 153.88 (157.08)
R#2 153.88 (155.87)
Q 341.00>237.05 (-)



R1 341.00>217.00 (-) 1.33e5

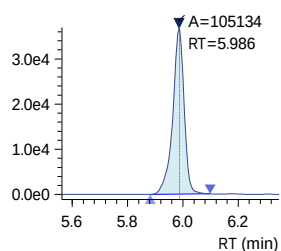


R2 341.00>217.00 (-) 1.33e5

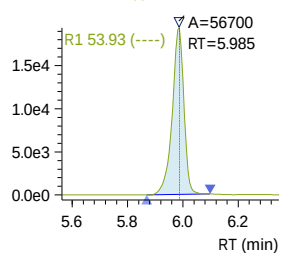


PFPeS

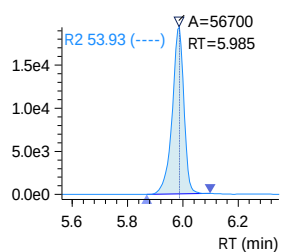
Conc. 0.9834
R#1 53.93 (55.12)
R#2 53.93 (54.87)
Q 349.10>79.90 (-)



R1 349.10>98.80 (-) 1.94e4

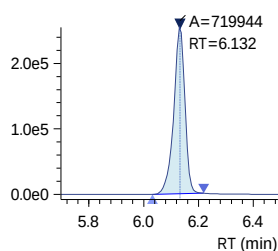


R2 349.10>98.80 (-) 1.94e4



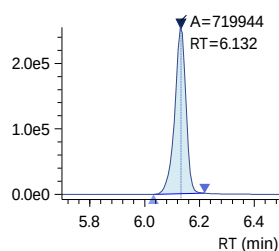
13C4-PFHpA

Conc. 2.6484
Q 367.10>322.00 (-)



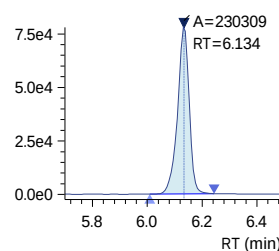
13C4-PFHpA_IS

Conc. 2.5000
ISTD 367.10>322.00 (-)

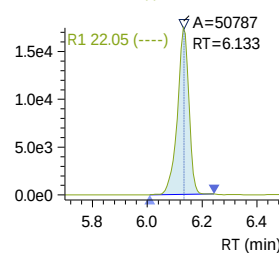


PFHpA

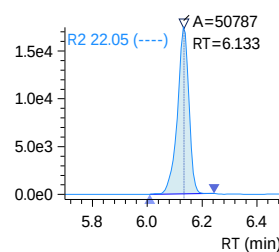
Conc. 0.9257
R#1 22.05 (23.02)
R#2 22.05 (20.91)
Q 363.10>319.00 (-)



R1 363.10>169.00 (-) 1.75e4

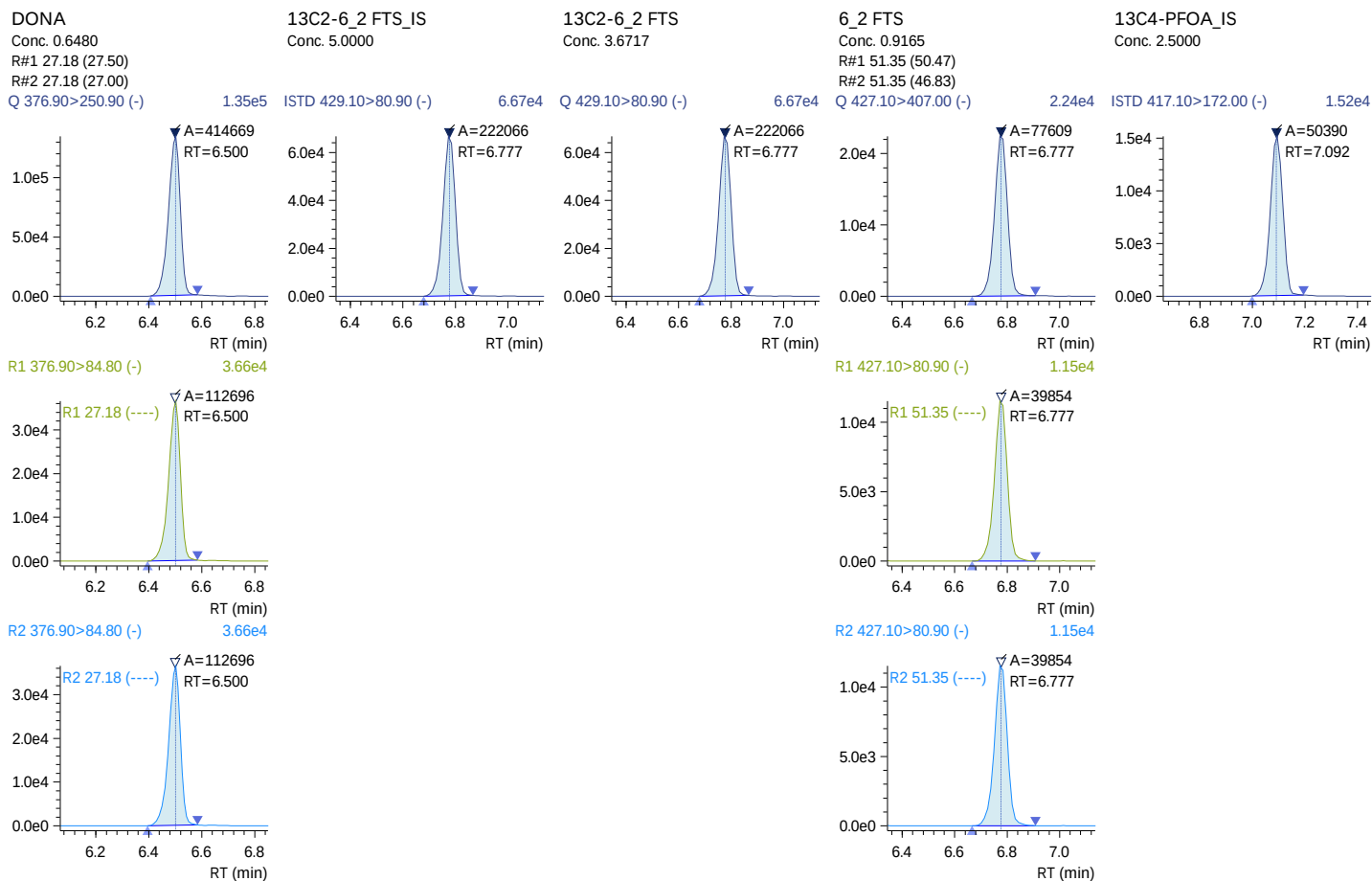


R2 363.10>169.00 (-) 1.75e4





240201_031 (continued)





240201_031 (continued)

13C8-PFOA_IS
 Conc. 2.5000

13C8-PFOA
 Conc. 2.6204

PFOA
 Conc. 1.0033
 R#1 24.54 (28.77)
 R#2 24.54 (28.12)

13C3-PFHxS
 Conc. 2.4970

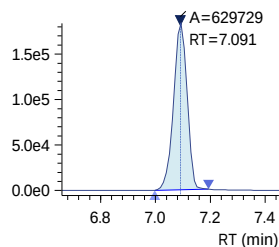
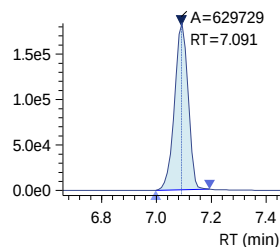
13C3-PFHxS_IS
 Conc. 2.5000

ISTD 421.10>376.00 (-)

1.84e5

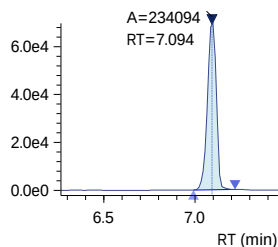
Q 421.10>376.00 (-)

1.84e5



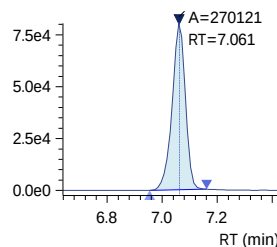
Q 413.00>369.00 (-)

6.97e4



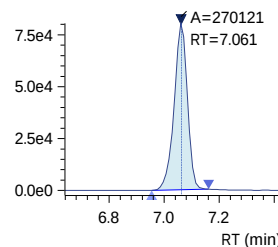
Q 402.10>79.90 (-)

8.05e4



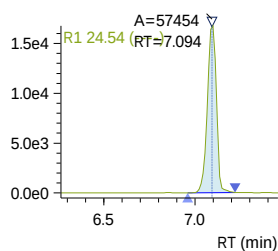
ISTD 402.10>79.90 (-)

8.05e4



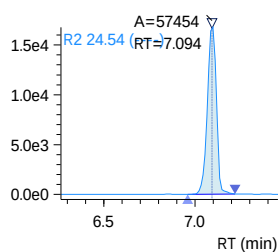
R1 413.00>169.00 (-)

1.68e4



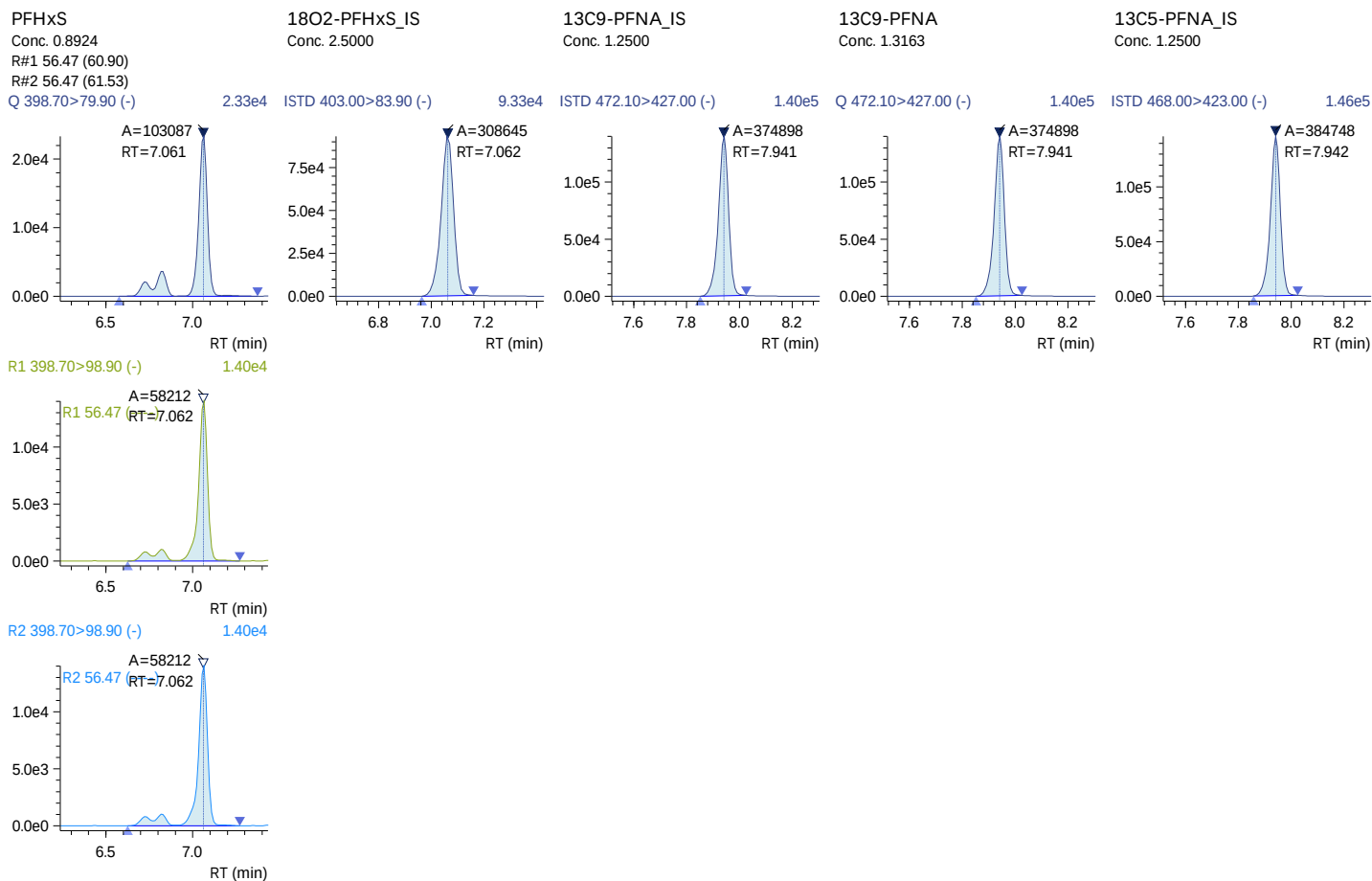
R2 413.00>169.00 (-)

1.68e4



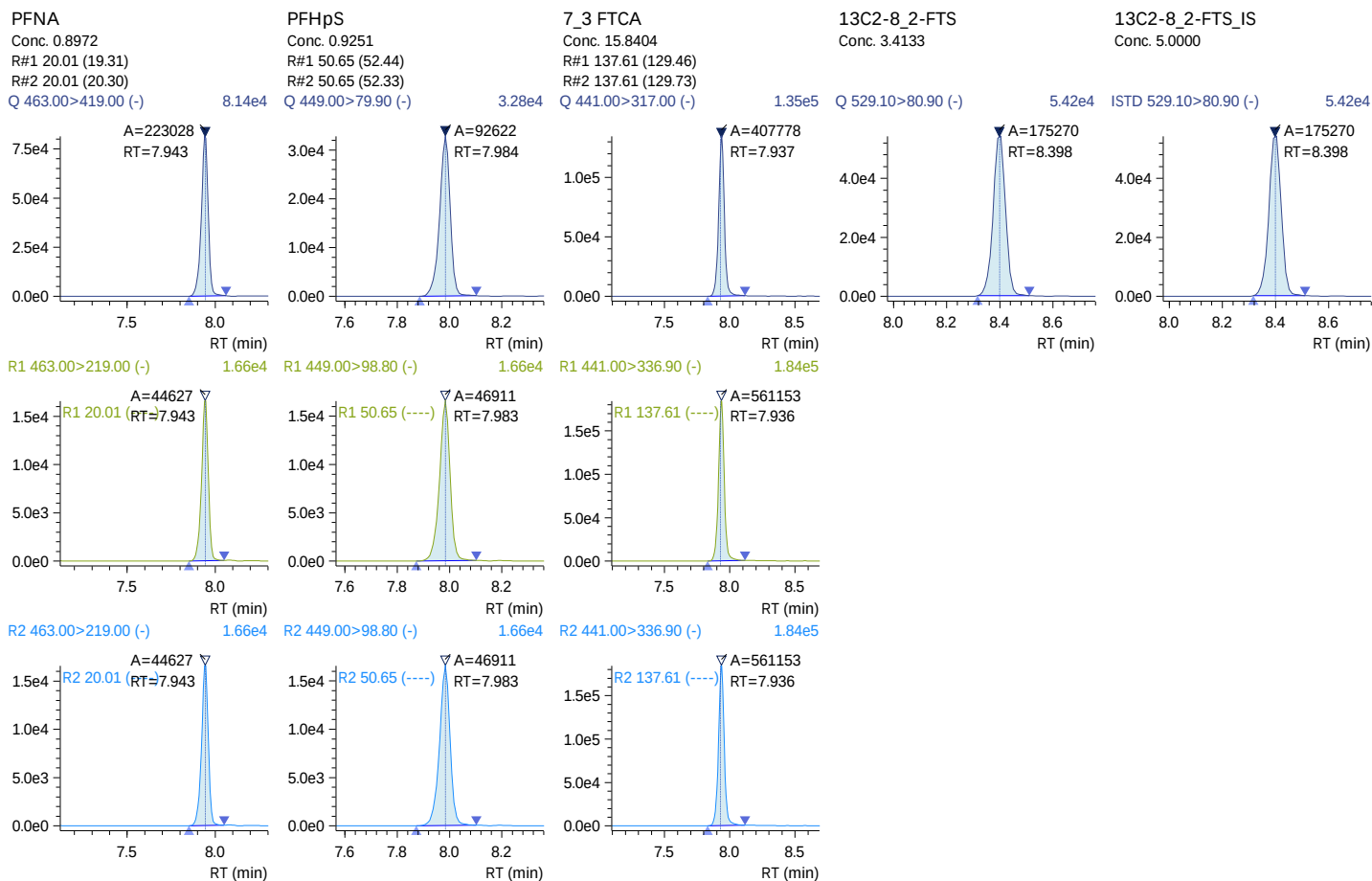


240201_031 (continued)



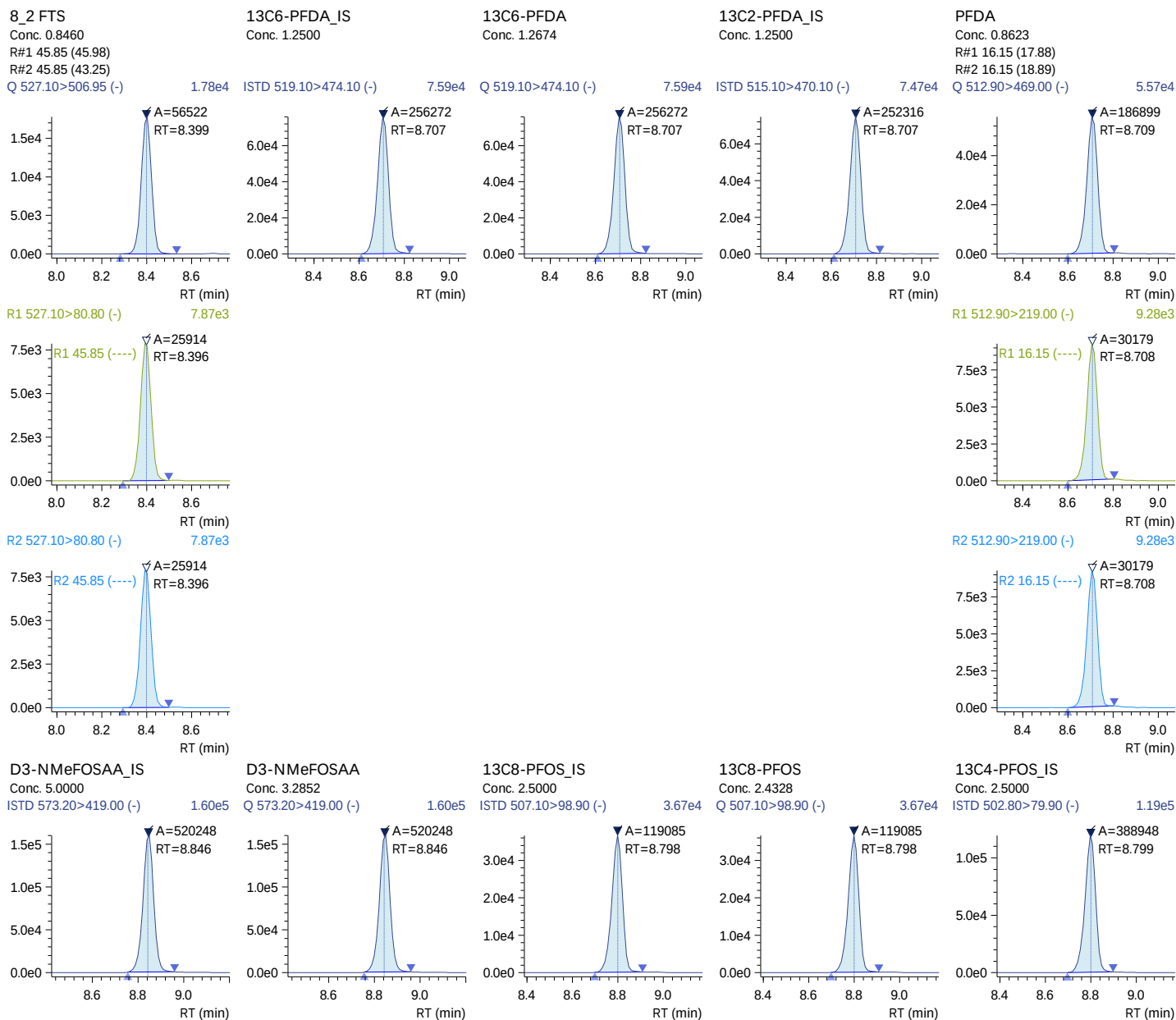


240201_031 (continued)



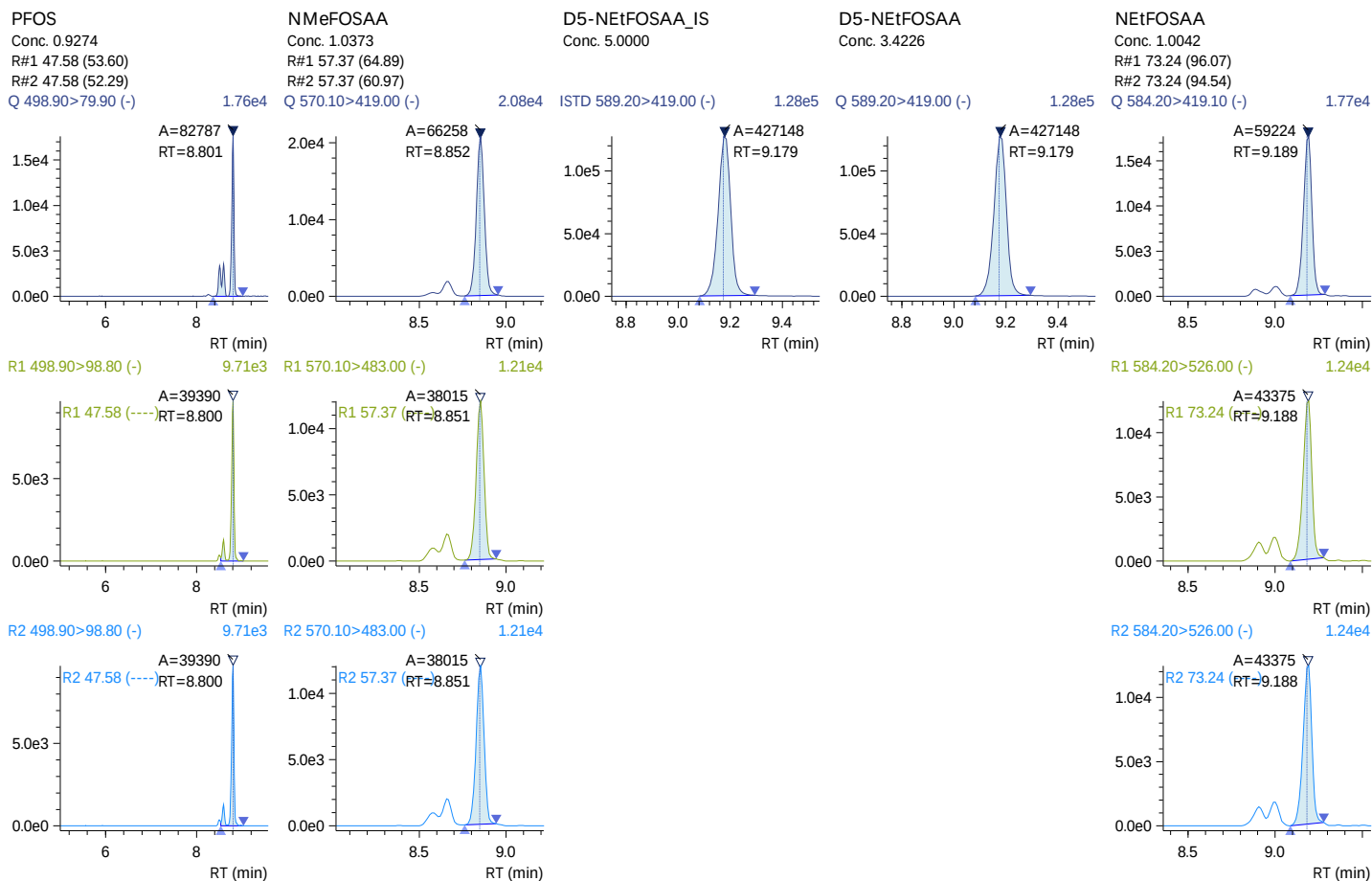


240201_031 (continued)





240201_031 (continued)

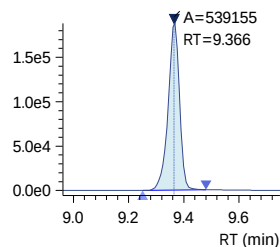




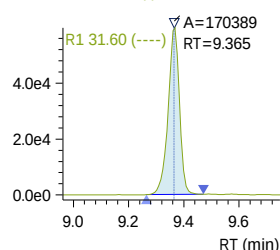
240201_031 (continued)

9-Cl-PF3ONS

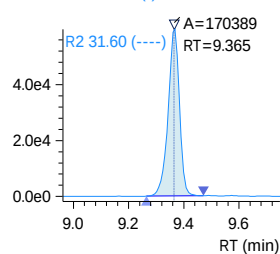
Conc. 0.7243
R#1 31.60 (30.95)
R#2 31.60 (30.61)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-) 5.98e4

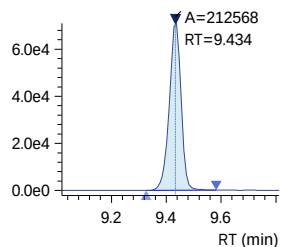


R2 532.80>353.00 (-) 5.98e4

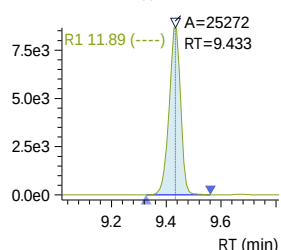


PFUnDA

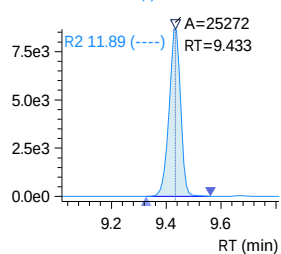
Conc. 1.0347
R#1 11.89 (11.01)
R#2 11.89 (12.02)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-) 8.66e3

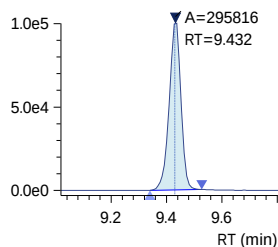


R2 563.10>269.10 (-) 8.66e3



13C7-PFUnDA_IS

Conc. 1.2500
ISTD 570.00>525.10 (-)



Q 570.00>525.10 (-) 1.00e5

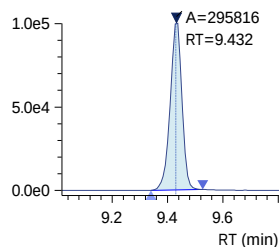


Q 570.00>525.10 (-) 1.00e5



13C7-PFUnDA

Conc. 1.1774
Q 570.00>525.10 (-)



Q 570.00>525.10 (-) 1.00e5

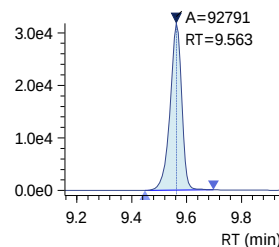


Q 570.00>525.10 (-) 1.00e5

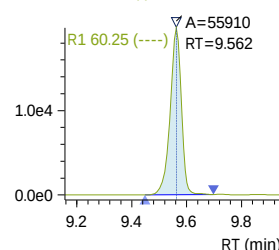


PFNS

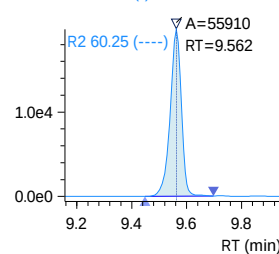
Conc. 0.9207
R#1 60.25 (60.44)
R#2 60.25 (58.51)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-) 1.98e4



R2 548.80>98.80 (-) 1.98e4





240201_031 (continued)

10_2 FTS

Conc. 0.9027

R#1 34.04 (36.14)

R#2 34.04 (33.04)

Q 626.80>607.05 (-)

2.82e4

13C2-PFDOA_IS

Conc. 1.2500

ISTD 615.10>570.00 (-)

1.23e5

13C2-PFDOA

Conc. 1.1746

Q 615.10>570.00 (-)

1.23e5

PFDOA

Conc. 0.9478

R#1 10.55 (10.16)

R#2 10.55 (10.60)

Q 613.10>569.00 (-)

5.97e4

PFDS

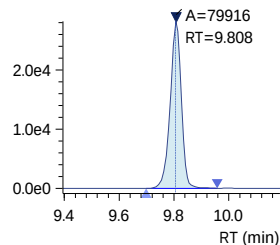
Conc. 0.8682

R#1 57.92 (58.26)

R#2 57.92 (61.78)

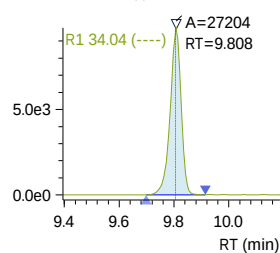
Q 599.00>79.90 (-)

2.84e4



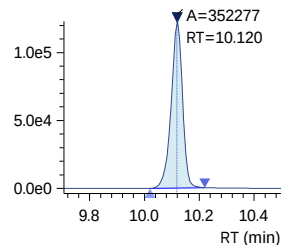
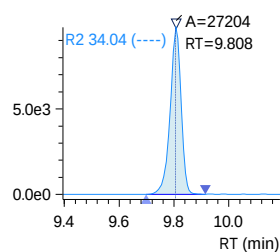
R1 626.80>81.00 (-)

9.77e3



R2 626.80>81.00 (-)

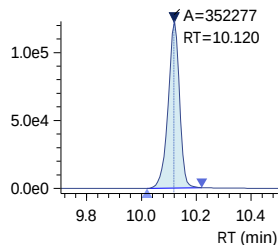
9.77e3



ISTD 615.10>570.00 (-)



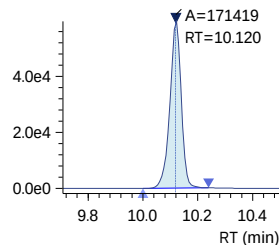
ISTD 615.10>570.00 (-)



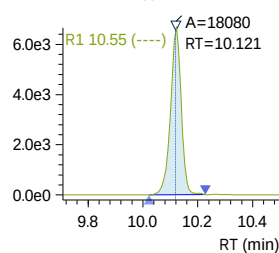
Q 615.10>570.00 (-)



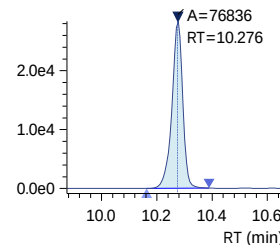
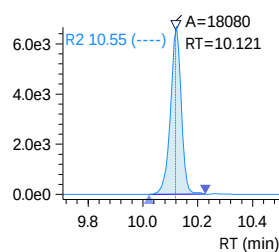
Q 615.10>570.00 (-)



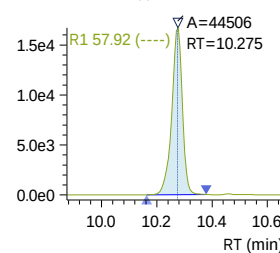
Q 613.10>569.00 (-)



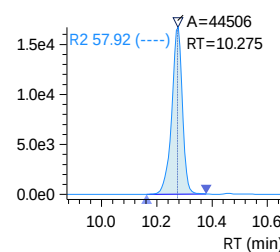
R2 613.10>319.00 (-)



Q 599.00>79.90 (-)

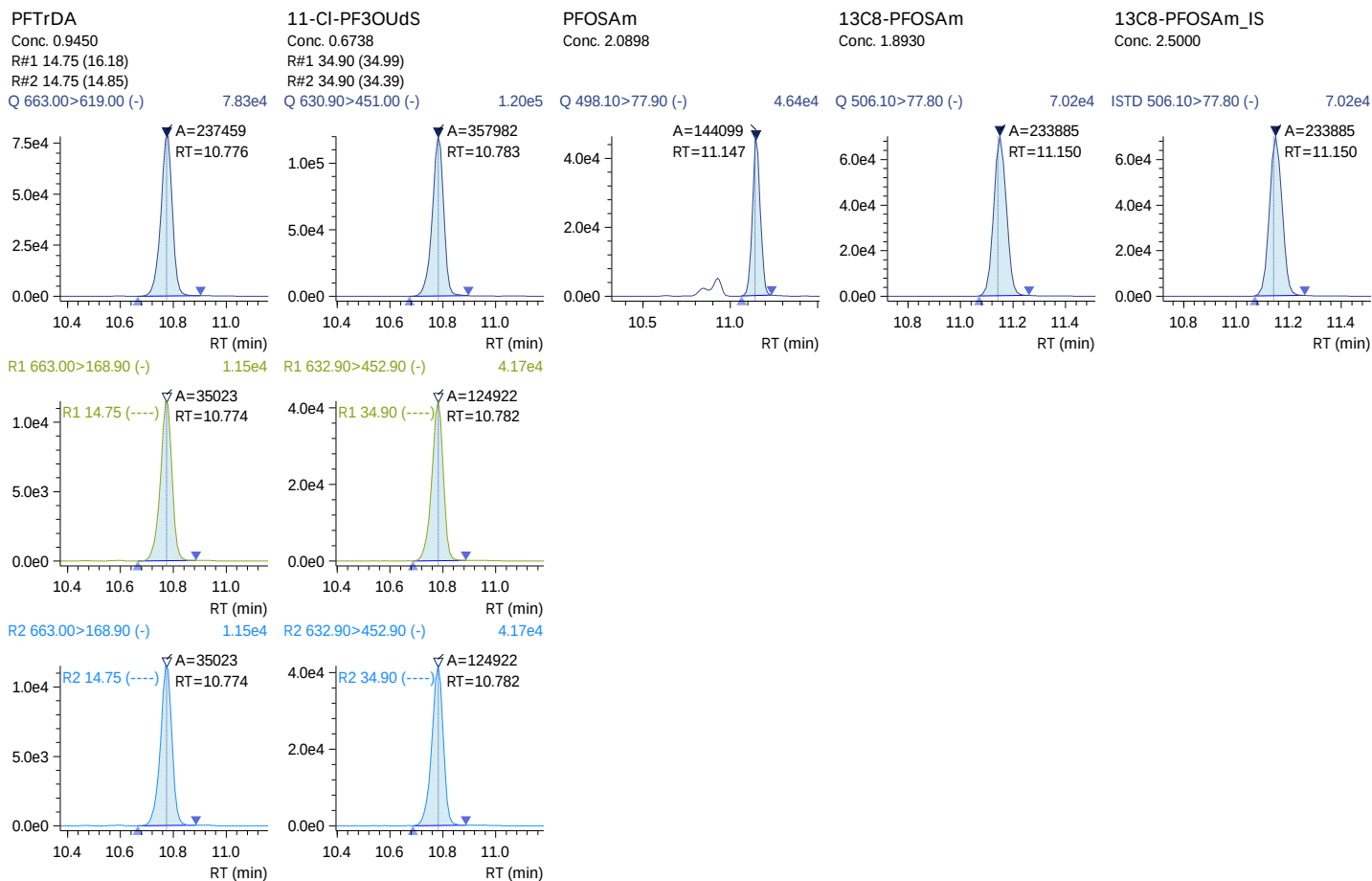


R2 599.00>98.80 (-)



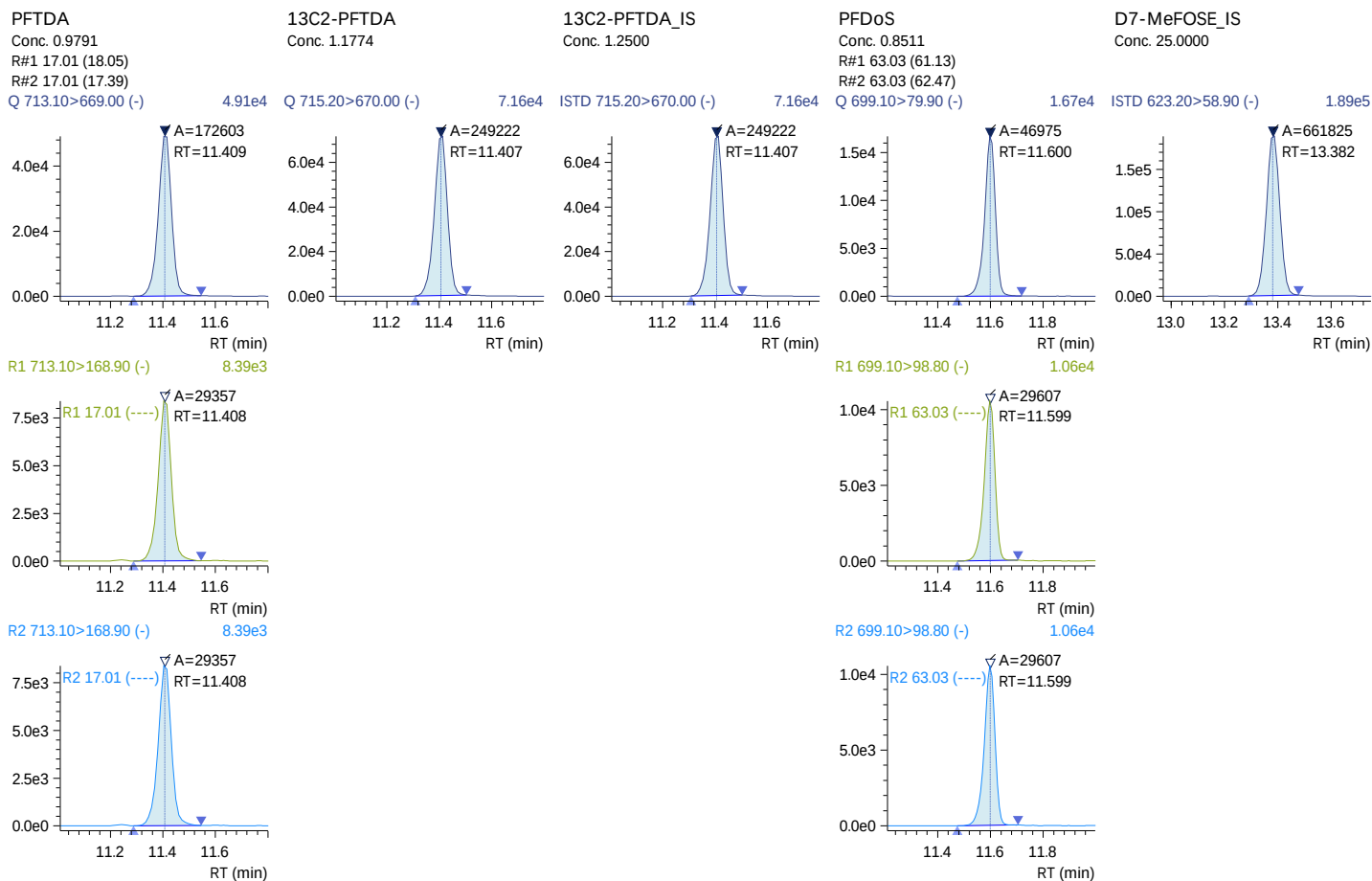


240201_031 (continued)





240201_031 (continued)





240201_031 (continued)

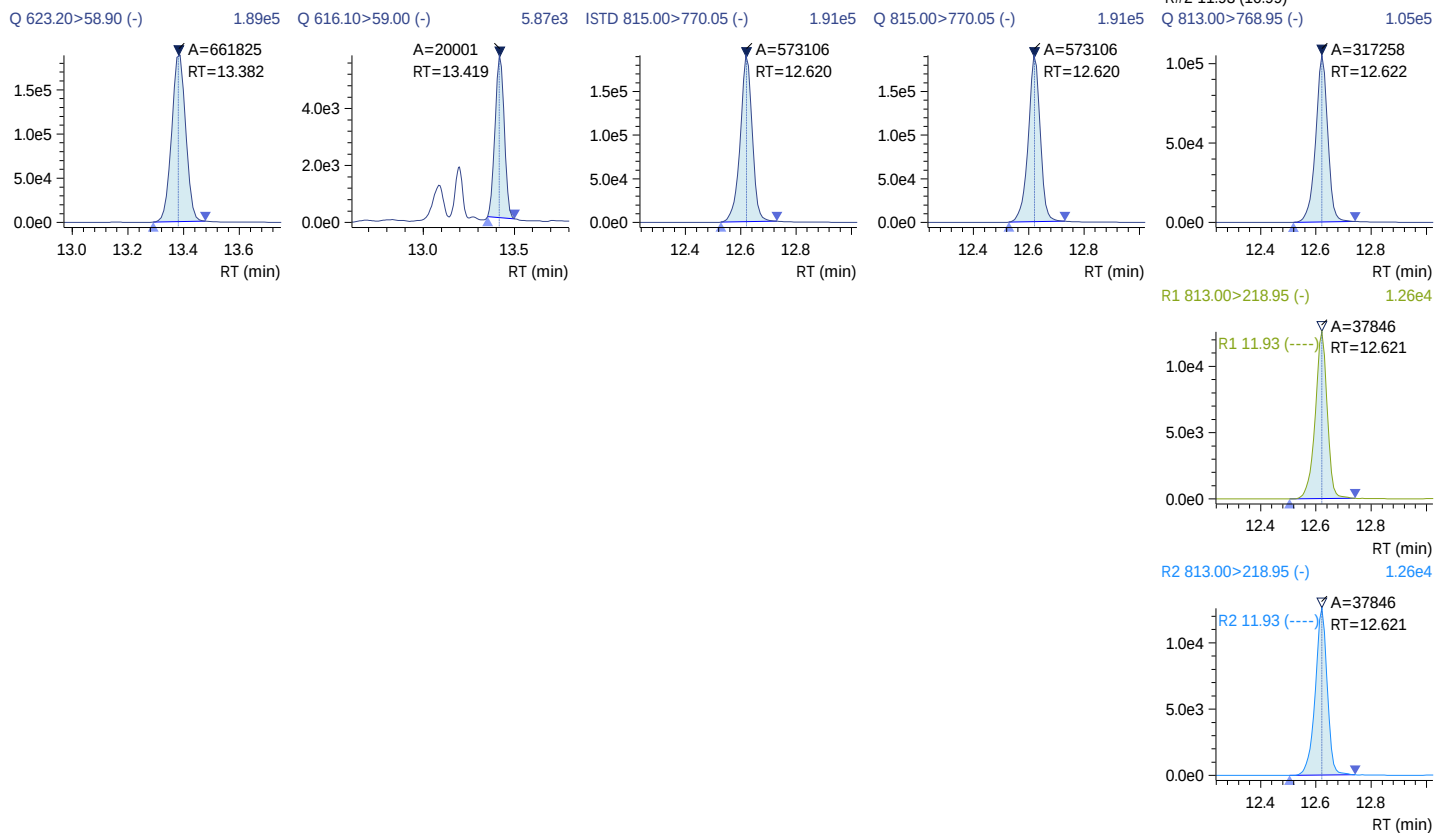
D7-MeFOSE
 Conc. 20.8661

MeFOSE
 Conc. 0.9772

13C2-PFHxDA_IS
 Conc. 2.5000

13C2-PFHxDA
 Conc. 2.0230

PFHxDA
 Conc. 1.0244
 R#1 11.93 (11.66)
 R#2 11.93 (10.99)





240201_031 (continued)

D3-MeFOSA
Conc. 2.0648

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. 0.9282
R#1 128.91 (160.44)
R#2 128.91 (161.92)

D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 21.7601

Q 515.00>219.00 (-)

1.97e4

ISTD 515.00>219.00 (-)

1.97e4

Q 511.90>219.00 (-)

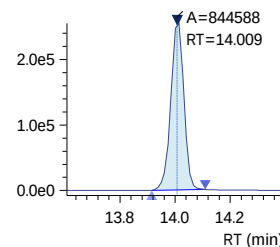
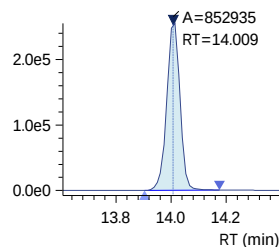
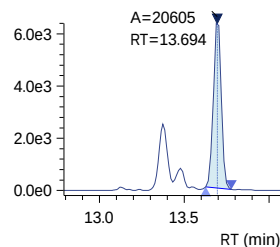
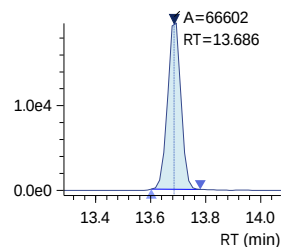
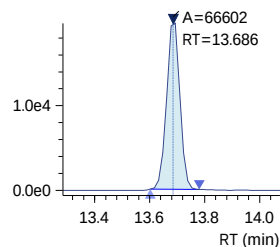
6.40e3

ISTD 639.20>58.90 (-)

2.55e5

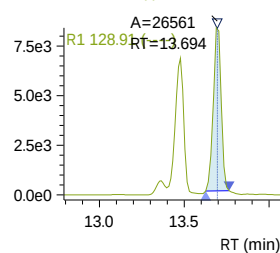
Q 639.20>58.90 (-)

2.55e5



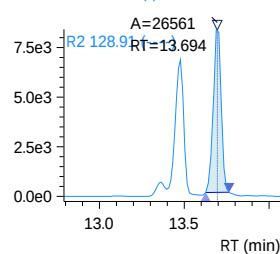
R1 511.90>169.00 (-)

8.42e3



R2 511.90>169.00 (-)

8.42e3





240201_031 (continued)

EtFOSE
 Conc. 0.9475

D5-EtFOSAm
 Conc. 2.1505

D5-EtFOSAm_IS
 Conc. 2.5000

EtFOSAm
 Conc. 0.8914

PFODA
 Conc. 0.9796

Q 630.00>59.00 (-)

7.09e3

Q 531.10>219.00 (-)

3.03e4

ISTD 531.10>219.00 (-)

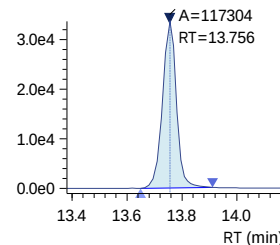
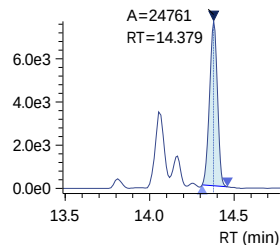
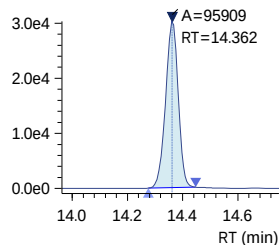
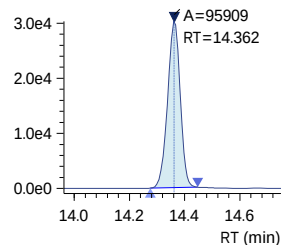
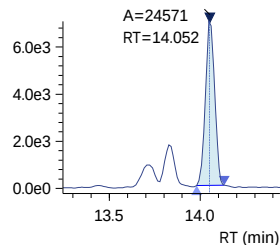
3.03e4

Q 526.00>219.00 (-)

7.74e3

Q 913.00>868.65 (-)

3.37e4

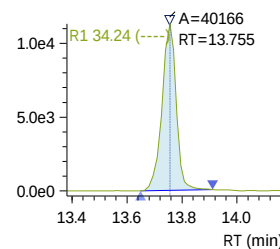
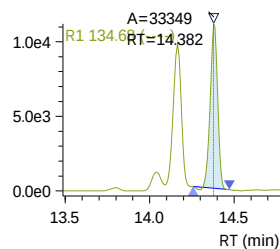


R1 526.00>169.00 (-)

1.12e4

R1 913.00>169.00 (-)

1.13e4

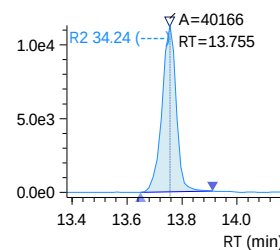
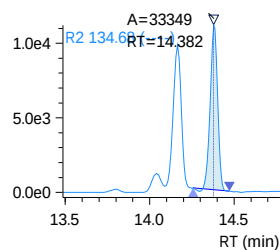


R2 526.00>169.00 (-)

1.12e4

R2 913.00>169.00 (-)

1.13e4



Validation Report

1st *PS* 01/25/24
2nd *MS* 01/25/24

Data File: J:\LCMS08\Data\240122_1633_B1\240122_033
Lab ID: KQ2400483-03
RunType: LCS_LL
Matrix: Water

Date Acquired: 1/22/24 22:09
Batch ID: 830573
Analysis Method: 1633/PFAS_DOD5.4

Validations

Validation Categories	Pass	Fail
Analytical Hold Time	X	
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery		X
Continuing Calibration Recovery (Closing)		X
Internal Standards	X	
Surrogates	X	
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Continuing Calibration Recovery	N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	136	70	130	rerun with any samples with hits
	D3-MeFOSAA	138	70	130	native in control
	13C2-4:2 FTS	163	70	130	
	13C2-6:2 FTS	170	70	130	
	13C2-8:2 FTS	162	70	130	
Continuing Calibration Recovery (Closing)	N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	160	70	130	rerun with any samples with hits
	Perfluoro-3-methoxypropanoic acid (PFMPA)	135	70	130	
	D9-EtFOSE	131	70	130	native in control
	D3-MeFOSAA	142	70	130	
	13C2-4:2 FTS	156	70	130	
	13C2-6:2 FTS	136	70	130	
	13C2-8:2 FTS	142	70	130	

Primary Review: _____

Secondary Review: _____

Quantitation Report

1st *PS* 01/25/24
2nd *MS* 01/25/24

Data File:	J:\LCMS08\Data\240122_1633_B1\240122_033	Instrument:	K-LCMS-08
Acqu Date:	1/22/24 22:09	Vial:	49
Run Type:	LCS_LL	Dilution:	1
Lab ID:	KQ2400483-03	Raw Units:	ng/mL

Bottle ID:		Tier:	IV	Matrix:	Water
Prod Code:	PFAS_DOD5.4	Collect Date:	12/27/23	Receive Date:	12/28/23

Analysis Lot:	830573	Prep Lot:	432516	Report Group:	KQ2400483
Analysis	1633	Prep Method:	Method		
		Prep Date:	1/11/24		

Title:	Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM	Calibration ID:	KC2400027
		Report List ID:	24615

Internal Standard Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Area Criteria
18O2-PFHxS	7.074	+0.00	176343	2.5000	OK
13C4-PFOS	8.813	0.00	203603	2.5000	OK
13C3-PFBA	1.410	+0.02	472259	5.0000	OK
13C2-PFHxA	4.960	+0.00	502291	2.5000	OK
13C4-PFOA	7.102	+0.00	39325	2.5000	OK
13C5-PFNA	7.952		238986	1.2500	OK
13C2-PFDA	8.718	0.00	176625	1.2500	OK

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
13C3-PFBS	4.623	+0.01	221805	2.2164	89	40 - 135	Y
13C3-PFHxS	7.074	+0.00	158753	2.0974	84	40 - 130	Y
13C8-PFOS	8.812	0.00	61360	1.8071	72	40 - 130	Y
13C4-PFBA	1.409	+0.02	1013382	9.6002	96	5 - 130	Y
13C5-PFPeA	3.479	+0.01	87751	3.8704	77	40 - 130	Y
13C5-PFHxA	4.960	+0.00	451548	2.1331	85	40 - 130	Y
13C4-PFHpA	6.143	+0.00	507690	2.6493	106	40 - 130	Y
13C8-PFOA	7.101		498381	2.2674	91	40 - 130	Y
13C9-PFNA	7.951	0.00	230332	1.2309	98	40 - 130	Y
13C6-PFDA	8.717	0.00	177232	1.2472	100	40 - 130	Y
13C7-PFUnDA	9.443	0.00	183370	1.0818	87	30 - 130	Y
13C2-PFDODA	10.131	0.00	203719	1.0461	84	10 - 130	Y
13C2-PFTeDA	11.422	0.00	79730	0.9483	76	10 - 130	Y
13C8-FOSA	11.165	-0.01	194824	2.2540	90	40 - 130	Y
D3-MeFOSA	13.712	-0.01	29633	1.7025	68	10 - 130	Y
D5-EtFOSA	14.388	-0.01	41298	1.7821	71	10 - 130	Y
D7-MeFOSE	13.403	-0.01	508393	23.8573	95	10 - 130	Y
D9-EtFOSE	14.033	-0.01	520657	24.0562	96	10 - 130	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 1/25/24 15:28

\\alprews001\starlims\LIMSRpts\QuantValidation.rpt

			1st	PS	01/25/24
Data File:	J:\LCMS08\Data\240122_1633_B1\240122_033	Instrument:	K-LCMS08	MS	01/25/24
Acqu Date:	1/22/24 22:09	Vial:	49		
Run Type:	LCS_LL	Dilution:	1		
Lab ID:	KQ2400483-03	Raw Units:	ng/mL		

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
D3-MeFOSAA	8.855	0.00	203540	5.7600	115	40 - 170	Y
D5-EtFOSAA	9.188	0.00	202238	4.7837	96	25 - 135	Y
13C2-4:2 FTS	4.644	+0.00	184298	7.5946	152	40 - 200	Y
13C2-6:2 FTS	6.784	0.00	159216	6.9370	139	40 - 200	Y
13C2-8:2 FTS	8.407	0.00	125417	6.6521	133	40 - 300	Y
13C3-HFPO-DA	5.437	+0.00	554723	11.2818	113	40 - 130	Y

Target Compounds

Final Conc.Units: ng/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Perfluorobutane sulfonic acid (PFBS)	4.626	+0.01	61762	0.5440	10.9		Y
Perfluoropentane sulfonic acid (PFPeS)	6.002	+0.00	46628	0.5593	11.2		Y
Perfluorohexane sulfonic acid (PFHxS)	7.074	+0.00	46813	0.5952	11.9		Y
Perfluoroheptane sulfonic acid (PFHpS)	7.996	+0.00	32554	0.6797	13.6		Y
Perfluorooctane sulfonic acid (PFOS)	8.814	0.00	39411	0.6175	12.4		Y
Perfluorononane sulfonic acid (PFNS)	9.579	+0.00	29016	0.6224	12.4		Y
Perfluorodecane sulfonic acid (PFDS)	10.291	0.00	26234	0.6412	12.8		Y
Perfluorododecane sulfonic acid (PFDoS)	11.618	+0.00	11127	0.4522	9.04		Y
Perfluorobutanoic acid (PFBA)	1.411	+0.02	51769	0.5946	11.9		Y
Perfluoropentanoic acid (PFPeA)	3.482	+0.01	79072	0.6957	13.9		Y
Perfluorohexanoic acid (PFHxA)	4.962	+0.00	89299	0.5858	11.7		Y
Perfluoroheptanoic acid (PFHpA)	6.144	+0.00	118333	0.5273	10.5		Y
Perfluorooctanoic acid (PFOA)	7.103	0.00	75425	0.5426	10.9		Y
Perfluorononanoic acid (PFNA)	7.953		76273	0.5510	11.0		Y
Perfluorodecanoic acid (PFDA)	8.719	0.00	94922	0.5364	10.7		Y
Perfluoroundecanoic acid (PFUnDA)	9.445	0.00	72682	0.5177	10.4		Y
Perfluorododecanoic acid (PFDOA)	10.133		66808	0.5502	11.0		Y
Perfluorotridecanoic acid (PFTTrDA)	10.790	0.00	68168	0.5751	11.5		Y
Perfluorotetradecanoic acid (PFTDA)	11.423	0.00	49098	0.5453	10.9		Y
Perfluorooctane sulfonamide (PFOSAm)	11.164	-0.01	38786	0.6040	12.1		Y
N-Methylperfluorooctane sulfonamide (MeFOSA)	13.717	-0.01	10482	0.4907	9.81		Y
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	14.406	-0.01	10827	0.4503	9.01		Y
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	13.442	0.00	10383	0.5561	11.1		Y
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	14.077	-0.01	15450	0.5640	11.3		Y
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	8.861	0.00	31817	0.5761	11.5		Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICal
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICal
c: check for co-elution

			1st	PS	01/25/24
Data File:	J:\LCMS08\Data\240122_1633_B1\240122_033	Instrument:	K-LCMS08	MS	01/25/24
Acqu Date:	1/22/24 22:09	Vial:	49		
Run Type:	LCS_LL	Dilution:	1		
Lab ID:	KQ2400483-03	Raw Units:	ng/mL		

<i>Target Compounds</i>		Final Conc.Units: ng/L				
Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q Rpt?
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	9.198	0.00	23248	0.8607	17.2	Y
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	4.644	+0.00	49213	0.5429	10.9	Y
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	6.785	0.00	37179	0.5128	10.3	Y
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	8.407	0.00	27392	0.5083	10.2	Y
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	2.988	+0.02	42772	21.9811	440	Y
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	5.879		213912	18.3147	366	Y
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	7.943	0.00	263230	16.8821	338	Y
Perfluoro(2-ethoxyethane) sulfonic acid (PFEEESA)	5.299	+0.01	268888	0.5316	10.6	Y
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	9.380		184198	0.4028	8.06	Y
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	10.800	0.00	115285	0.3577	7.15	Y
Perfluoro-3-methoxypropanoic acid (PFMPA)	2.424	+0.02	44539	0.7854	15.7	Y
Perfluoro-4-methoxybutanoic acid (PFMBA)	4.004	+0.01	54367	0.6767	13.5	Y
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	5.439	+0.00	36554	0.5966	11.9	Y
Nonafluoro-3,6-dioxahexanoic acid (NFDHA)	4.818	+0.00	74793	0.7466	14.9	Y
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	6.510	+0.00	214384	0.4986	9.97	Y

Prep Amount:	250 mL	Dilution:	1
Prep Final Amount:	5.00 mL	Basis Factor:	100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution



240122_033

Sample ID: KQ2400483-03
Date Acquired: 1/22/2024 10:09:41 PM
Acquired by: System Administrator
Data File: 240122_033
Vial: 13 | Inj. Volume: 10.0000uL | Tray: 2

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	1013382	----	----	----	----	----	----	
13C4-PFBA_IS	216.80>171.90	----	1013382	----	----	----	----	----	----	
13C3-PFBA_IS	216.00>172.00	----	472259	----	----	----	----	----	----	
PFBA	212.80>169.05	----	51769	----	----	----	----	----	----	
PFMPA	229.00>84.90	----	44539	----	----	----	----	----	----	AC
3_3 FTCA	241.00>177.10	241.00>117.00	42772	58100	135.84	141.17	58100	135.84	135.52	AC
13C5-PFPeA	268.30>223.00	----	87751	----	----	----	----	----	----	
13C5-PFPeA_IS	268.30>223.00	----	87751	----	----	----	----	----	----	
PFPeA	263.00>219.00	----	79072	----	----	----	----	----	----	AC
PFMBA	279.00>84.95	----	54367	----	----	----	----	----	----	
13C2-4_2 FTS	329.10>80.90	----	184298	----	----	----	----	----	----	
13C2-4_2 FTS_IS	329.10>80.90	----	184298	----	----	----	----	----	----	
4_2 FTS	327.10>307.00	327.10>80.90	49213	17101	34.75	29.06	17101	34.75	35.34	
13C3-PFBS_IS	302.10>79.90	----	221805	----	----	----	----	----	----	
PFBS	298.70>79.90	298.70>98.80	61762	29513	47.79	46.72	29513	47.79	49.78	
13C3-PFBS	302.10>79.90	----	221805	----	----	----	----	----	----	
NFDHA	295.00>201.00	295.00>84.90	74793	27035	36.15	40.25	27035	36.15	37.18	
13C5-PFHxA	318.00>273.00	----	451548	----	----	----	----	----	----	
13C5-PFHxA_IS	318.00>273.00	----	451548	----	----	----	----	----	----	
13C2-PFHxA_IS	315.10>270.00	----	502291	----	----	----	----	----	----	
PFHxA	313.00>269.00	----	89299	----	----	----	----	----	----	
PFEESA	314.80>135.00	314.80>82.90	268888	16710	6.22	6.11	16710	6.22	5.72	
13C3-HFPO-DA	286.90>168.90	----	554723	----	----	----	----	----	----	
13C3-HFPO-DA_IS	286.90>168.90	----	554723	----	----	----	----	----	----	
HFPO-DA	284.90>168.90	284.90>184.90	36554	22084	60.41	65.61	22084	60.41	60.94	
5_3 FTCA	341.00>237.05	341.00>217.00	213912	332238	155.32	158.86	332238	155.32	155.83	
PFPeS	349.10>79.90	349.10>98.80	46628	23952	51.37	55.80	23952	51.37	56.73	
13C4-PFHpA	367.10>322.00	----	507690	----	----	----	----	----	----	
13C4-PFHpA_IS	367.10>322.00	----	507690	----	----	----	----	----	----	
PFHpA	363.10>319.00	363.10>169.00	118333	27417	23.17	21.50	27417	23.17	21.92	
DONA	376.90>250.90	376.90>84.80	214384	59832	27.91	29.66	59832	27.91	30.77	
13C2-6_2 FTS_IS	429.10>80.90	----	159216	----	----	----	----	----	----	
13C2-6_2 FTS	429.10>80.90	----	159216	----	----	----	----	----	----	
6_2 FTS	427.10>407.00	427.10>80.90	37179	15895	42.75	41.15	15895	42.75	40.98	
13C4-PFOA_IS	417.10>172.00	----	39325	----	----	----	----	----	----	
13C8-PFOA_IS	421.10>376.00	----	498381	----	----	----	----	----	----	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240122_033 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	498381	----	----	----	----	----	----	----
PFOA	413.00>369.00	413.00>169.00	75425	22530	29.87	31.89	22530	29.87	32.23	
13C3-PFHxS	402.10>79.90	----	158753	----	----	----	----	----	----	----
13C3-PFHxS_IS	402.10>79.90	----	158753	----	----	----	----	----	----	----
PFHxS	398.70>79.90	398.70>98.90	46813	27702	59.17	56.62	27702	59.17	60.26	
18O2-PFHxS_IS	403.00>83.90	----	176343	----	----	----	----	----	----	----
13C9-PFNA_IS	472.10>427.00	----	230332	----	----	----	----	----	----	----
13C9-PFNA	472.10>427.00	----	230332	----	----	----	----	----	----	----
13C5-PFNA_IS	468.00>423.00	----	238986	----	----	----	----	----	----	----
PFNA	463.00>419.00	463.00>219.00	76273	17697	23.20	23.17	17697	23.20	23.63	
PFHpS	449.00>79.90	449.00>98.80	32554	18822	57.82	56.96	18822	57.82	59.06	
7_3 FTCA	441.00>317.00	441.00>336.90	263230	341104	129.58	117.47	341104	129.58	125.53	
13C2-8_2-FTS	529.10>80.90	----	125417	----	----	----	----	----	----	----
13C2-8_2-FTS_IS	529.10>80.90	----	125417	----	----	----	----	----	----	----
8_2 FTS	527.10>506.95	527.10>80.80	27392	13873	50.65	49.59	13873	50.65	44.81	
13C6-PFDA_IS	519.10>474.10	----	177232	----	----	----	----	----	----	----
13C6-PFDA	519.10>474.10	----	177232	----	----	----	----	----	----	----
13C2-PFDA_IS	515.10>470.10	----	176625	----	----	----	----	----	----	----
PFDA	512.90>469.00	512.90>219.00	94922	19040	20.06	19.00	19040	20.06	19.15	
D3-NMeFOSAA_IS	573.20>419.00	----	203540	----	----	----	----	----	----	----
D3-NMeFOSAA	573.20>419.00	----	203540	----	----	----	----	----	----	----
13C8-PFOS_IS	507.10>98.90	----	61360	----	----	----	----	----	----	----
13C8-PFOS	507.10>98.90	----	61360	----	----	----	----	----	----	----
13C4-PFOS_IS	502.80>79.90	----	203603	----	----	----	----	----	----	----
PFOS	498.90>79.90	498.90>98.80	39411	19523	49.54	52.47	19523	49.54	53.10	
NMeFOSAA	570.10>419.00	570.10>483.00	31817	18816	59.14	55.15	18816	59.14	60.69	
D5-NEtFOSAA_IS	589.20>419.00	----	202238	----	----	----	----	----	----	----
D5-NEtFOSAA	589.20>419.00	----	202238	----	----	----	----	----	----	----
NEtFOSAA	584.20>419.10	584.20>526.00	23248	15858	68.21	81.95	15858	68.21	73.27	AC
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	184198	60147	32.65	32.76	60147	32.65	32.59	
PFUnDA	563.10>519.00	563.10>269.10	72682	9983	13.74	13.12	9983	13.74	14.36	
13C7-PFUnDA_IS	570.00>525.10	----	183370	----	----	----	----	----	----	----
13C7-PFUnDA	570.00>525.10	----	183370	----	----	----	----	----	----	----
PFNS	548.80>79.90	548.80>98.80	29016	20503	70.66	65.22	20503	70.66	65.31	
10_2 FTS	626.80>607.05	626.80>81.00	31060	11879	38.25	37.13	11879	38.25	38.76	
13C2-PFDOA_IS	615.10>570.00	----	203719	----	----	----	----	----	----	----
13C2-PFDOA	615.10>570.00	----	203719	----	----	----	----	----	----	----
PFDOA	613.10>569.00	613.10>319.00	66808	8478	12.69	11.29	8478	12.69	11.19	
PFDS	599.00>79.90	599.00>98.80	26234	15131	57.68	60.18	15131	57.68	65.65	
PFTrDA	663.00>619.00	663.00>168.90	68168	12055	17.68	17.64	12055	17.68	19.81	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240122_033 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	115285	41121	35.67	36.44	41121	35.67	35.86	
PFOSAm	498.10>77.90	----	38786	----	----	----	----	----	----	AC
13C8-PFOSAm	506.10>77.80	----	194824	----	----	----	----	----	----	
13C8-PFOSAm_IS	506.10>77.80	----	194824	----	----	----	----	----	----	
PFTDA	713.10>669.00	713.10>168.90	49098	12202	24.85	22.96	12202	24.85	25.01	
13C2-PFTDA	715.20>670.00	----	79730	----	----	----	----	----	----	
13C2-PFTDA_IS	715.20>670.00	----	79730	----	----	----	----	----	----	
PFDoS	699.10>79.90	699.10>98.80	11127	8050	72.35	67.40	8050	72.35	73.46	
D7-MeFOSE_IS	623.20>58.90	----	508393	----	----	----	----	----	----	
D7-MeFOSE	623.20>58.90	----	508393	----	----	----	----	----	----	
MeFOSE	616.10>59.00	----	10383	----	----	----	----	----	----	
13C2-PFHxDA_IS	815.00>770.05	----	265712	----	----	----	----	----	----	
13C2-PFHxDA	815.00>770.05	----	265712	----	----	----	----	----	----	
PFHxDA	813.00>768.95	813.00>218.95	61786	9279	15.02	13.90	9279	15.02	15.85	
D3-MeFOSA	515.00>219.00	----	29633	----	----	----	----	----	----	
D3-MeFOSA_IS	515.00>219.00	----	29633	----	----	----	----	----	----	
MeFOSA	511.90>219.00	511.90>169.00	10482	13344	127.30	140.79	13344	127.30	150.13	
D9-EtFOSE_IS	639.20>58.90	----	520657	----	----	----	----	----	----	
D9-EtFOSE	639.20>58.90	----	520657	----	----	----	----	----	----	
EtFOSE	630.00>59.00	----	15450	----	----	----	----	----	----	
D5-EtFOSAm	531.10>219.00	----	41298	----	----	----	----	----	----	
D5-EtFOSAm_IS	531.10>219.00	----	41298	----	----	----	----	----	----	
EtFOSAm	526.00>219.00	526.00>169.00	10827	13810	127.55	163.90	13810	127.55	152.08	
PFODA	913.00>868.65	913.00>169.00	30061	8221	27.35	27.03	8221	27.35	26.29	

Flag ID key: AC: Accuracy%



240122_033

Sample ID: KQ2400483-03
Date Acquired: 1/22/2024 10:09:41 PM
Acquired by: System Administrator
Data File: 240122_033
Vial: 13 | Inj. Volume: 10.0000uL | Tray: 2

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.409	0.018	-0.001	1013382	472259	13C3-PFBA_IS	9.6002	ng/mL	
13C4-PFBA_IS	Auto	1.409	0.018	----	1013382	1013382	----	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.410	0.019	----	472259	472259	----	5.0000	ng/mL	
PFBA	Auto	1.411	0.016	0.002	51769	1013382	13C4-PFBA_IS	0.5946	ng/mL	
PFMPA	Auto	2.424	0.018	-1.055	44539	87751	13C5-PFPeA_IS	0.7854	ng/mL	AC
3_3 FTCA	Auto	2.988	0.020	-0.491	42772	87751	13C5-PFPeA_IS	21.9811	ng/mL	AC
13C5-PFPeA	Auto	3.479	0.014	-1.481	87751	502291	13C2-PFHxA_IS	3.8704	ng/mL	
13C5-PFPeA_IS	Auto	3.479	0.014	----	87751	87751	----	5.0000	ng/mL	
PFPeA	Auto	3.482	0.015	0.003	79072	87751	13C5-PFPeA_IS	0.6957	ng/mL	AC
PFMBA	Auto	4.004	0.013	0.525	54367	87751	13C5-PFPeA_IS	0.6767	ng/mL	
13C2-4_2 FTS	Auto	4.644	0.008	-2.430	184298	176343	18O2-PFHxS_IS	7.5946	ng/mL	
13C2-4_2 FTS_IS	Auto	4.644	0.008	----	184298	184298	----	5.0000	ng/mL	
4_2 FTS	Auto	4.644	0.007	0.000	49213	184298	13C2-4_2 FTS_IS	0.5429	ng/mL	
13C3-PFBS_IS	Auto	4.623	0.011	----	221805	221805	----	2.5000	ng/mL	
PFBS	Auto	4.626	0.013	0.003	61762	221805	13C3-PFBS_IS	0.5440	ng/mL	
13C3-PFBS	Auto	4.623	0.011	-2.451	221805	176343	18O2-PFHxS_IS	2.2164	ng/mL	
NFDHA	Auto	4.818	0.008	-0.142	74793	451548	13C5-PFHxA_IS	0.7466	ng/mL	
13C5-PFHxA	Auto	4.960	0.008	0.000	451548	502291	13C2-PFHxA_IS	2.1331	ng/mL	
13C5-PFHxA_IS	Auto	4.960	0.008	----	451548	451548	----	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	4.960	0.007	----	502291	502291	----	2.5000	ng/mL	
PFHxA	Auto	4.962	0.008	0.002	89299	451548	13C5-PFHxA_IS	0.5858	ng/mL	
PFEESA	Auto	5.299	0.010	0.339	268888	451548	13C5-PFHxA_IS	0.5316	ng/mL	
13C3-HFPO-DA	Auto	5.437	0.007	0.477	554723	502291	13C2-PFHxA_IS	11.2818	ng/mL	
13C3-HFPO-DA_IS	Auto	5.437	0.007	----	554723	554723	----	10.0000	ng/mL	
HFPO-DA	Auto	5.439	0.008	0.002	36554	554723	13C3-HFPO-DA_IS	0.5966	ng/mL	
5_3 FTCA	Auto	5.879	0.009	0.919	213912	451548	13C5-PFHxA_IS	18.3147	ng/mL	
PFPeS	Auto	6.002	0.008	-1.072	46628	158753	13C3-PFHxS_IS	0.5593	ng/mL	
13C4-PFHpA	Auto	6.143	0.006	1.183	507690	502291	13C2-PFHxA_IS	2.6493	ng/mL	
13C4-PFHpA_IS	Auto	6.143	0.006	----	507690	507690	----	2.5000	ng/mL	
PFHpA	Auto	6.144	0.005	0.001	118333	507690	13C4-PFHpA_IS	0.5273	ng/mL	
DONA	Auto	6.510	0.006	1.073	214384	554723	13C3-HFPO-DA_IS	0.4986	ng/mL	
13C2-6_2 FTS_IS	Auto	6.784	0.003	----	159216	159216	----	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.784	0.003	-0.290	159216	176343	18O2-PFHxS_IS	6.9370	ng/mL	
6_2 FTS	Auto	6.785	0.004	0.001	37179	159216	13C2-6_2 FTS_IS	0.5128	ng/mL	
13C4-PFOA_IS	Auto	7.102	0.005	----	39325	39325	----	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.101	0.005	----	498381	498381	----	2.5000	ng/mL	
13C8-PFOA	Auto	7.101	0.005	-0.001	498381	39325	13C4-PFOA_IS	2.2674	ng/mL	
PFOA	Auto	7.103	0.005	0.002	75425	498381	13C8-PFOA_IS	0.5426	ng/mL	
13C3-PFHxS	Auto	7.074	0.006	0.000	158753	176343	18O2-PFHxS_IS	2.0974	ng/mL	
13C3-PFHxS_IS	Auto	7.074	0.006	----	158753	158753	----	2.5000	ng/mL	
PFHxS	M	7.074	0.005	0.000	46813	158753	13C3-PFHxS_IS	0.5952	ng/mL	
18O2-PFHxS_IS	Auto	7.074	0.005	----	176343	176343	----	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.951	0.004	----	230332	230332	----	1.2500	ng/mL	
13C9-PFNA	Auto	7.951	0.004	-0.001	230332	238986	13C5-PFNA_IS	1.2309	ng/mL	
13C5-PFNA_IS	Auto	7.952	0.004	----	238986	238986	----	1.2500	ng/mL	
PFNA	Auto	7.953	0.005	0.002	76273	230332	13C9-PFNA_IS	0.5510	ng/mL	
PFHpS	Auto	7.996	0.004	-0.816	32554	61360	13C8-PFOS_IS	0.6797	ng/mL	
7_3 FTCA	Auto	7.943	0.007	2.983	263230	451548	13C5-PFHxA_IS	16.8821	ng/mL	
13C2-8_2-FTS	Auto	8.407	0.004	1.333	125417	176343	18O2-PFHxS_IS	6.6521	ng/mL	
13C2-8_2-FTS_IS	Auto	8.407	0.004	----	125417	125417	----	5.0000	ng/mL	
8_2 FTS	Auto	8.407	0.003	0.000	27392	125417	13C2-8_2-FTS_IS	0.5083	ng/mL	
13C6-PFDA_IS	Auto	8.717	0.004	----	177232	177232	----	1.2500	ng/mL	
13C6-PFDA	Auto	8.717	0.004	-0.001	177232	176625	13C2-PFDA_IS	1.2472	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_033 (continued)

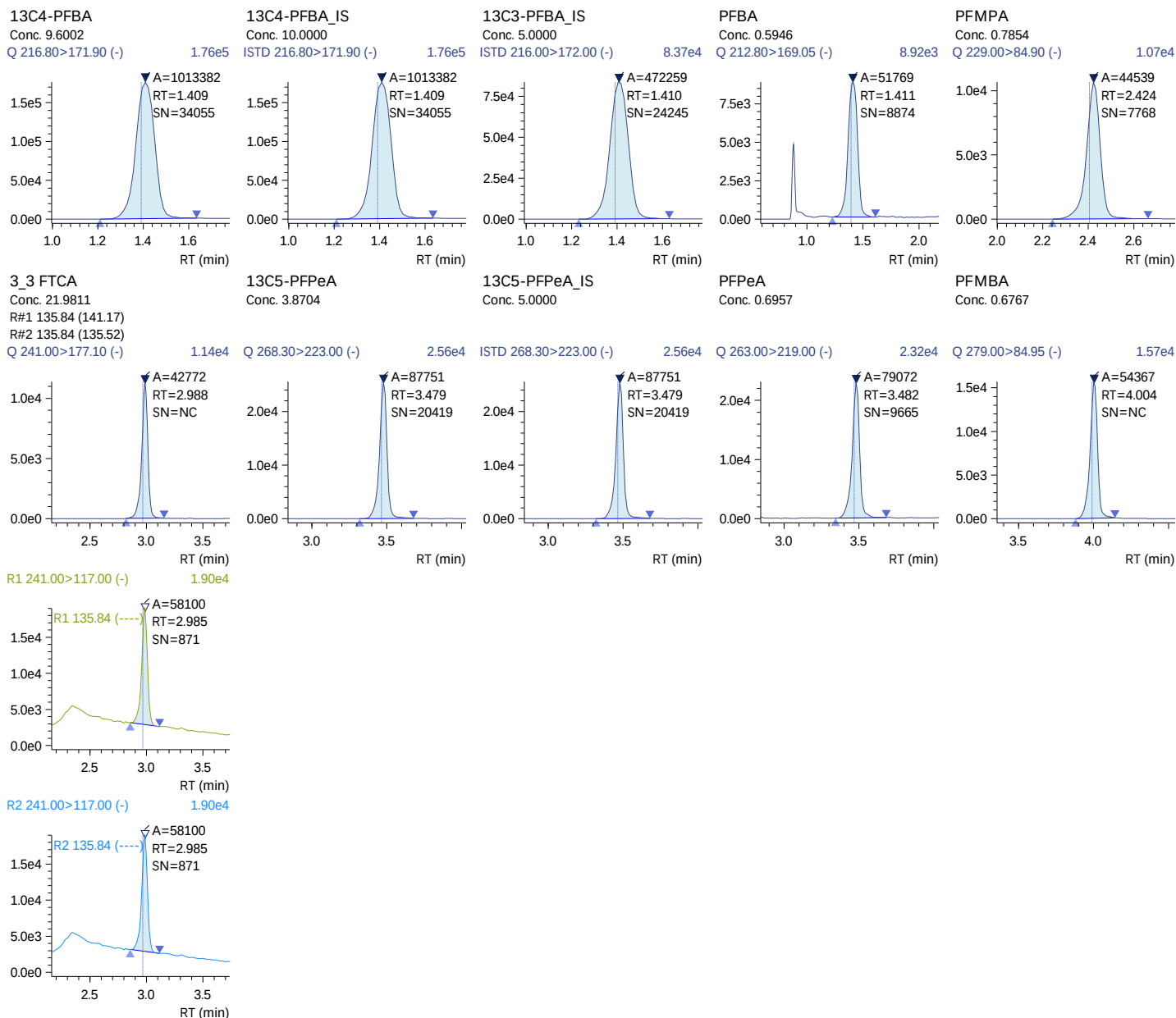
(Table continued from previous page)

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C2-PFDA_IS	Auto	8.718	0.005	----	176625	176625	----	1.2500	ng/mL	
PFDA	Auto	8.719	0.004	0.002	94922	177232	13C6-PFDA_IS	0.5364	ng/mL	
D3-NMeFOSAA_IS	Auto	8.855	0.004	----	203540	203540	----	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.855	0.004	0.042	203540	203603	13C4-PFOS_IS	5.7600	ng/mL	
13C8-PFOS_IS	Auto	8.812	0.004	----	61360	61360	----	2.5000	ng/mL	
13C8-PFOS	Auto	8.812	0.004	-0.001	61360	203603	13C4-PFOS_IS	1.8071	ng/mL	
13C4-PFOS_IS	Auto	8.813	0.004	----	203603	203603	----	2.5000	ng/mL	
PFOS	M	8.814	0.005	0.002	39411	61360	13C8-PFOS_IS	0.6175	ng/mL	
NMeFOSAA	M	8.861	0.004	0.006	31817	203540	D3-NMeFOSAA_IS	0.5761	ng/mL	
D5-NetFOSAA_IS	Auto	9.188	0.005	----	202238	202238	----	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.188	0.005	0.375	202238	203603	13C4-PFOS_IS	4.7837	ng/mL	
NetFOSAA	M	9.198	0.006	0.010	23248	202238	D5-NetFOSAA_IS	0.8607	ng/mL	AC
9-CI-PF3ONS	Auto	9.380	0.005	3.943	184198	554723	13C3-HFPO-DA_IS	0.4028	ng/mL	
PFUnDA	Auto	9.445	0.005	0.002	72682	183370	13C7-PFUnDA_IS	0.5177	ng/mL	
13C7-PFUnDA_IS	Auto	9.443	0.005	----	183370	183370	----	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.443	0.005	0.725	183370	176625	13C2-PFDA_IS	1.0818	ng/mL	
PFNS	Auto	9.579	0.006	0.767	29016	61360	13C8-PFOS_IS	0.6224	ng/mL	
10_2_FTS	Auto	9.818	0.003	1.411	31060	125417	13C2-8_2-FTS_IS	0.4737	ng/mL	
13C2-PFDOA_IS	Auto	10.131	0.003	----	203719	203719	----	1.2500	ng/mL	
13C2-PFDOA	Auto	10.131	0.003	1.413	203719	176625	13C2-PFDA_IS	1.0461	ng/mL	
PFDOA	Auto	10.133	0.004	0.002	66808	203719	13C2-PFDOA_IS	0.5502	ng/mL	
PFDS	Auto	10.291	0.003	1.479	26234	61360	13C8-PFOS_IS	0.6412	ng/mL	
PFTDA	Auto	10.790	0.002	-0.632	68168	79730	13C2-PFTDA_IS	0.5751	ng/mL	
11-CI-PF3OUdS	Auto	10.800	0.002	5.363	115285	554723	13C3-HFPO-DA_IS	0.3577	ng/mL	
PFOSAm	Auto	11.164	0.002	-0.001	38786	194824	13C8-PFOSAm_IS	0.6040	ng/mL	AC
13C8-PFOSAm	Auto	11.165	0.001	2.352	194824	203603	13C4-PFOS_IS	2.2540	ng/mL	
13C8-PFOSAm_IS	Auto	11.165	0.001	----	194824	194824	----	2.5000	ng/mL	
PFTDA	Auto	11.423	0.002	0.001	49098	79730	13C2-PFTDA_IS	0.5453	ng/mL	
13C2-PFTDA	Auto	11.422	0.003	2.704	79730	176625	13C2-PFDA_IS	0.9483	ng/mL	
13C2-PFTDA_IS	Auto	11.422	0.003	----	79730	79730	----	1.2500	ng/mL	
PFDoS	Auto	11.618	0.003	2.806	11127	61360	13C8-PFOS_IS	0.4522	ng/mL	
D7-MeFOSE_IS	Auto	13.403	0.001	----	508393	508393	----	25.0000	ng/mL	
D7-MeFOSE	Auto	13.403	0.001	4.590	508393	203603	13C4-PFOS_IS	23.8573	ng/mL	
MeFOSE	Auto	13.442	0.001	0.039	10383	508393	D7-MeFOSE_IS	0.5561	ng/mL	
13C2-PFHxDA_IS	Auto	12.640	0.004	----	265712	265712	----	2.5000	ng/mL	
13C2-PFHxDA	Auto	12.640	0.004	3.922	265712	176625	13C2-PFDA_IS	1.6196	ng/mL	
PFHxDA	Auto	12.642	0.005	0.002	61786	265712	13C2-PFHxDA_IS	0.5392	ng/mL	
D3-MeFOSA	Auto	13.712	0.001	4.899	29633	203603	13C4-PFOS_IS	1.7025	ng/mL	
D3-MeFOSA_IS	Auto	13.712	0.001	----	29633	29633	----	2.5000	ng/mL	
MeFOSA	Auto	13.717	-0.001	0.005	10482	29633	D3-MeFOSA_IS	0.4907	ng/mL	
D9-EtFOSE_IS	Auto	14.033	0.001	----	520657	520657	----	25.0000	ng/mL	
D9-EtFOSE	Auto	14.033	0.001	5.220	520657	203603	13C4-PFOS_IS	24.0562	ng/mL	
EtFOSE	Auto	14.077	0.001	0.044	15450	520657	D9-EtFOSE_IS	0.5640	ng/mL	
D5-EtFOSAm	Auto	14.388	0.001	5.575	41298	203603	13C4-PFOS_IS	1.7821	ng/mL	
D5-EtFOSAm_IS	Auto	14.388	0.001	----	41298	41298	----	2.5000	ng/mL	
EtFOSAm	Auto	14.406	-0.007	0.018	10827	41298	D5-EtFOSAm_IS	0.4503	ng/mL	
PFODA	Auto	13.777	0.003	1.137	30061	265712	13C2-PFHxDA_IS	0.5003	ng/mL	

Flag ID key: AC: Accuracy%



240122_033 (continued)





240122_033 (continued)

13C2-4_2 FTS
Conc. 7.5946

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. 0.5429
R#1 34.75 (29.06)
R#2 34.75 (35.34)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 0.5440
R#1 47.79 (46.72)
R#2 47.79 (49.78)

Q 329.10>80.90 (-)

5.53e4

ISTD 329.10>80.90 (-)

5.53e4

Q 327.10>307.00 (-)

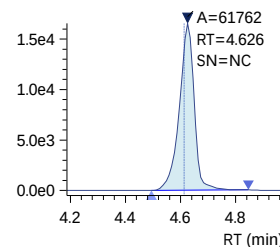
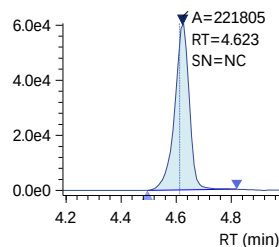
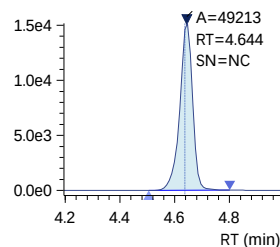
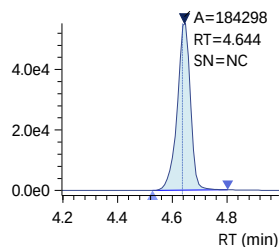
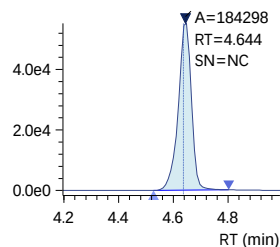
1.52e4

ISTD 302.10>79.90 (-)

6.06e4

Q 298.70>79.90 (-)

1.66e4

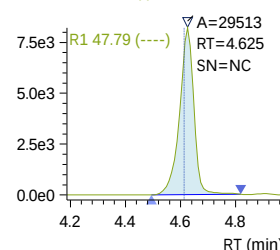
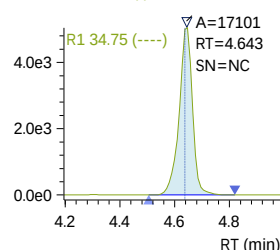


R1 327.10>80.90 (-)

5.05e3

R1 298.70>98.80 (-)

8.22e3

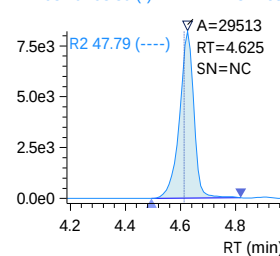
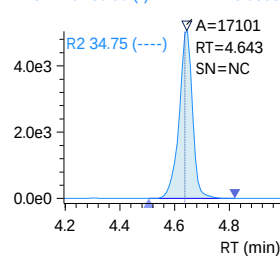


R2 327.10>80.90 (-)

5.05e3

R2 298.70>98.80 (-)

8.22e3





240122_033 (continued)

13C3-PFBS
Conc. 2.2164

NFDHA
Conc. 0.7466
R#1 36.15 (40.25)
R#2 36.15 (37.18)

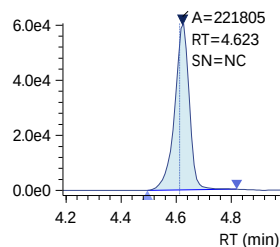
13C5-PFHxA
Conc. 2.1331

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

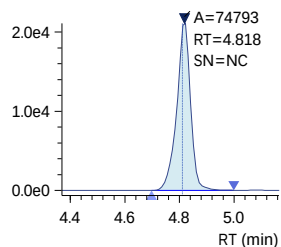
Q 302.10>79.90 (-)

6.06e4



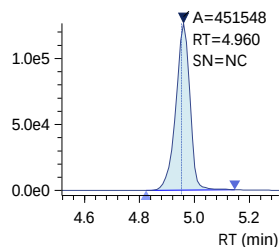
Q 295.00>201.00 (-)

2.11e4



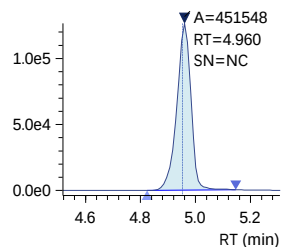
Q 318.00>273.00 (-)

1.27e5



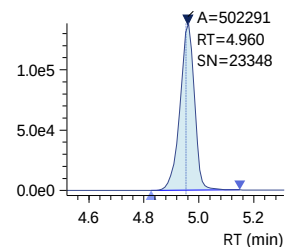
ISTD 318.00>273.00 (-)

1.27e5



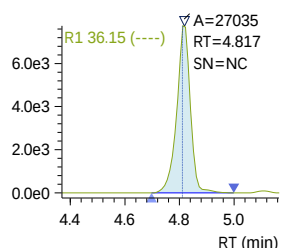
ISTD 315.10>270.00 (-)

1.38e5



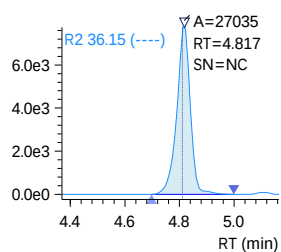
R1 295.00>84.90 (-)

7.74e3



R2 295.00>84.90 (-)

7.74e3





240122_033 (continued)

PFHxA
Conc. 0.5858

PFEESA
Conc. 0.5316
R#1 6.22 (6.11)
R#2 6.22 (5.72)

13C3-HFPO-DA
Conc. 11.2818

13C3-HFPO-DA_IS
Conc. 10.0000

HFPO-DA
Conc. 0.5966
R#1 60.41 (65.61)
R#2 60.41 (60.94)

Q 313.00>269.00 (-)

2.55e4

Q 314.80>135.00 (-)

7.69e4

Q 286.90>168.90 (-)

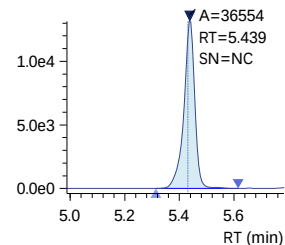
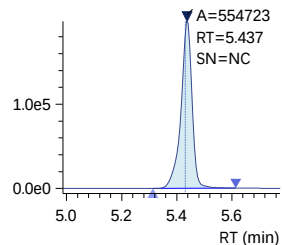
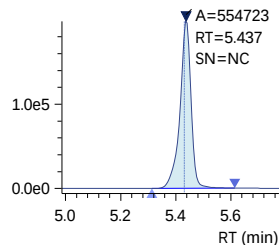
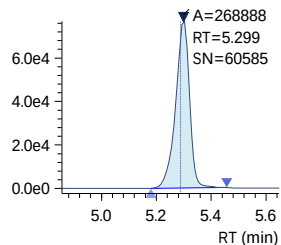
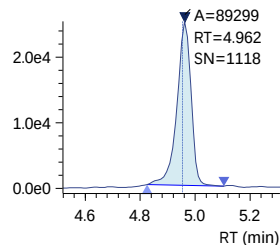
1.98e5

ISTD 286.90>168.90 (-)

1.98e5

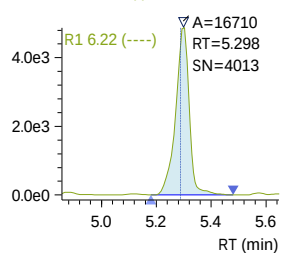
Q 284.90>168.90 (-)

1.31e4



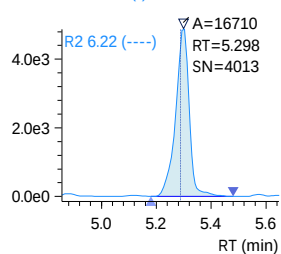
R1 314.80>82.90 (-)

4.87e3



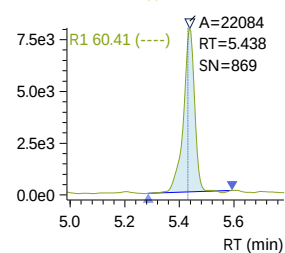
R2 314.80>82.90 (-)

4.87e3



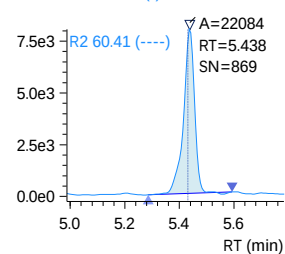
R1 284.90>184.90 (-)

8.07e3



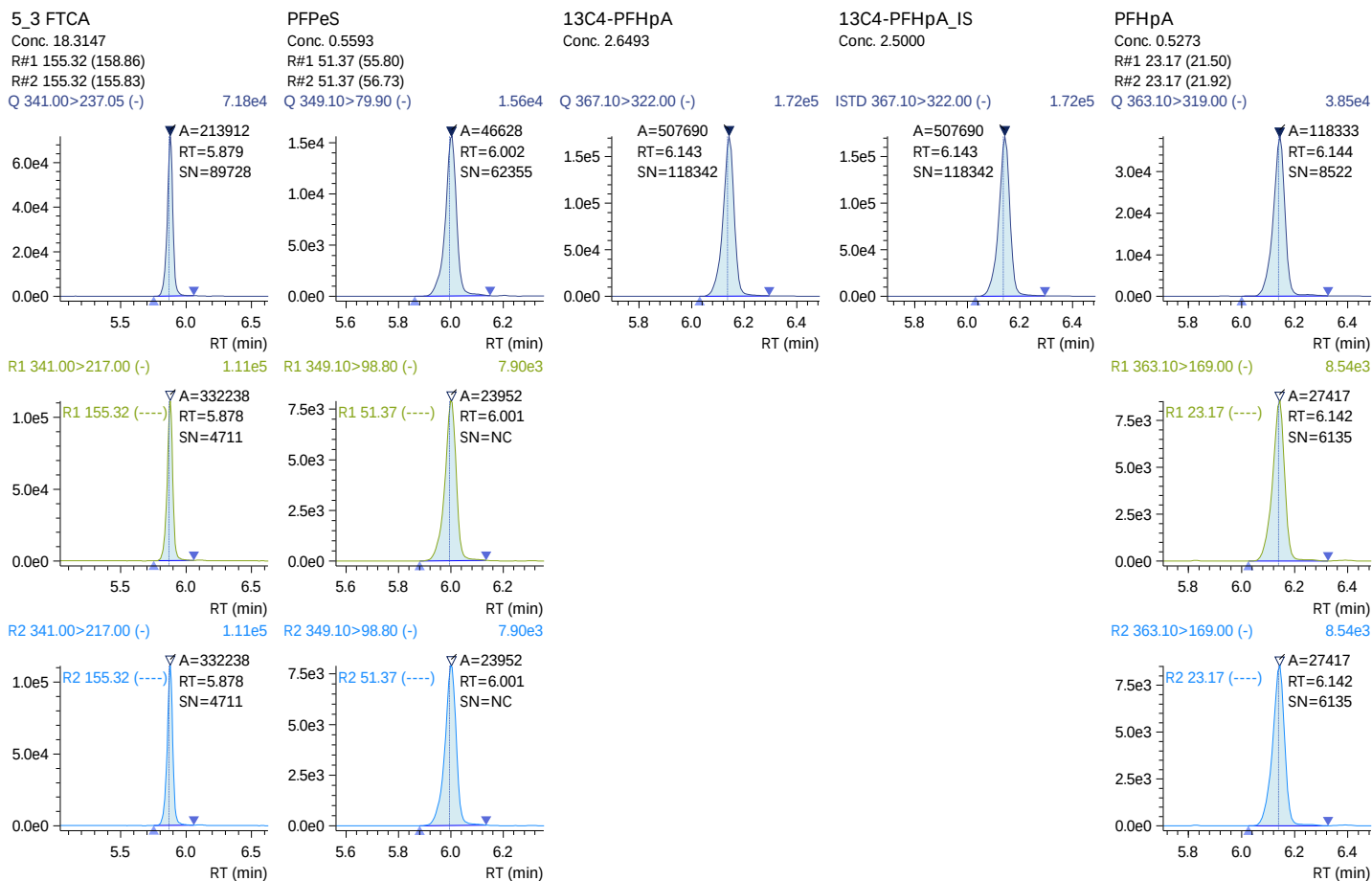
R2 284.90>184.90 (-)

8.07e3



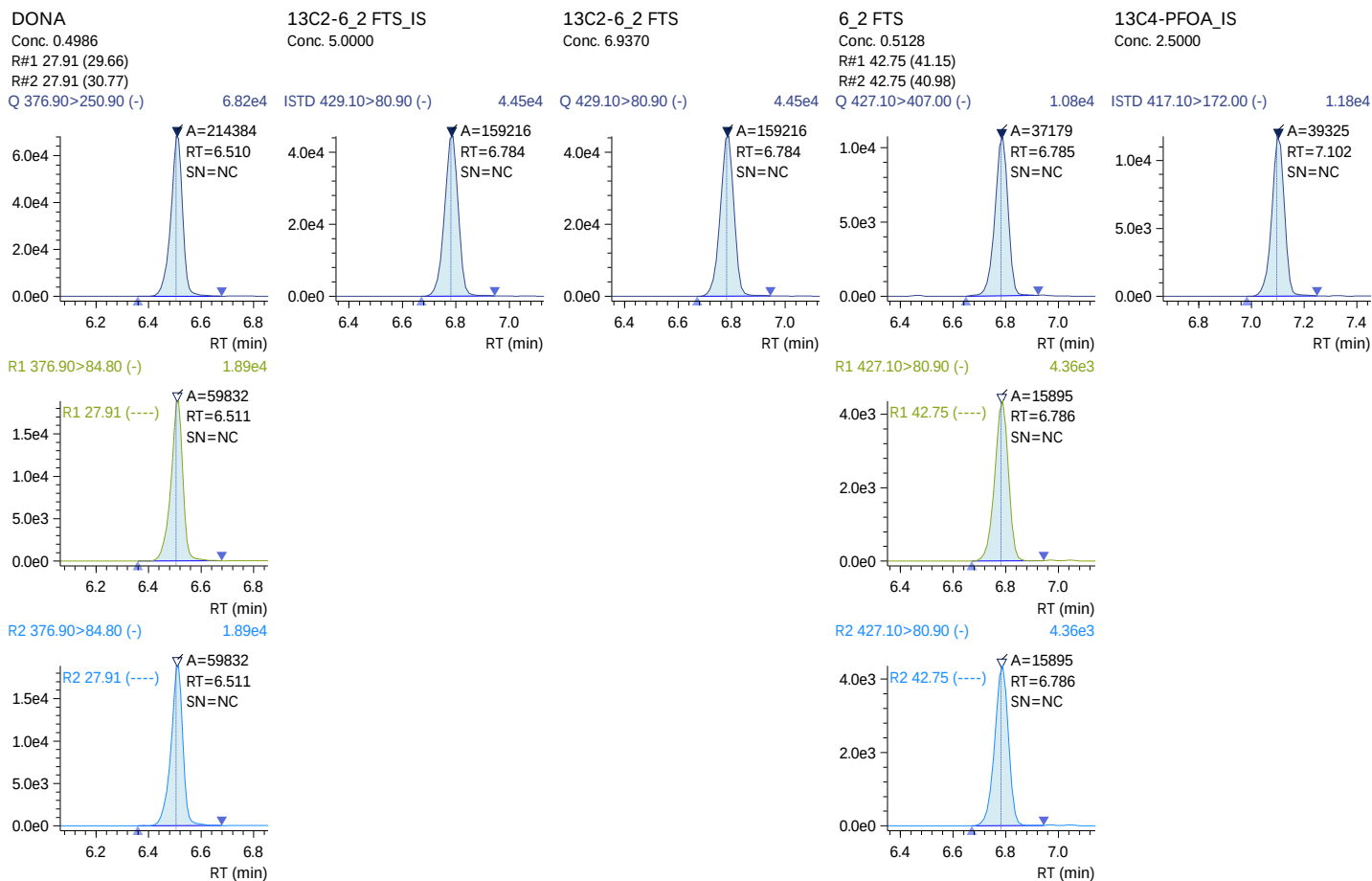


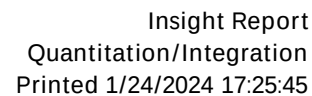
240122_033 (continued)





240122_033 (continued)





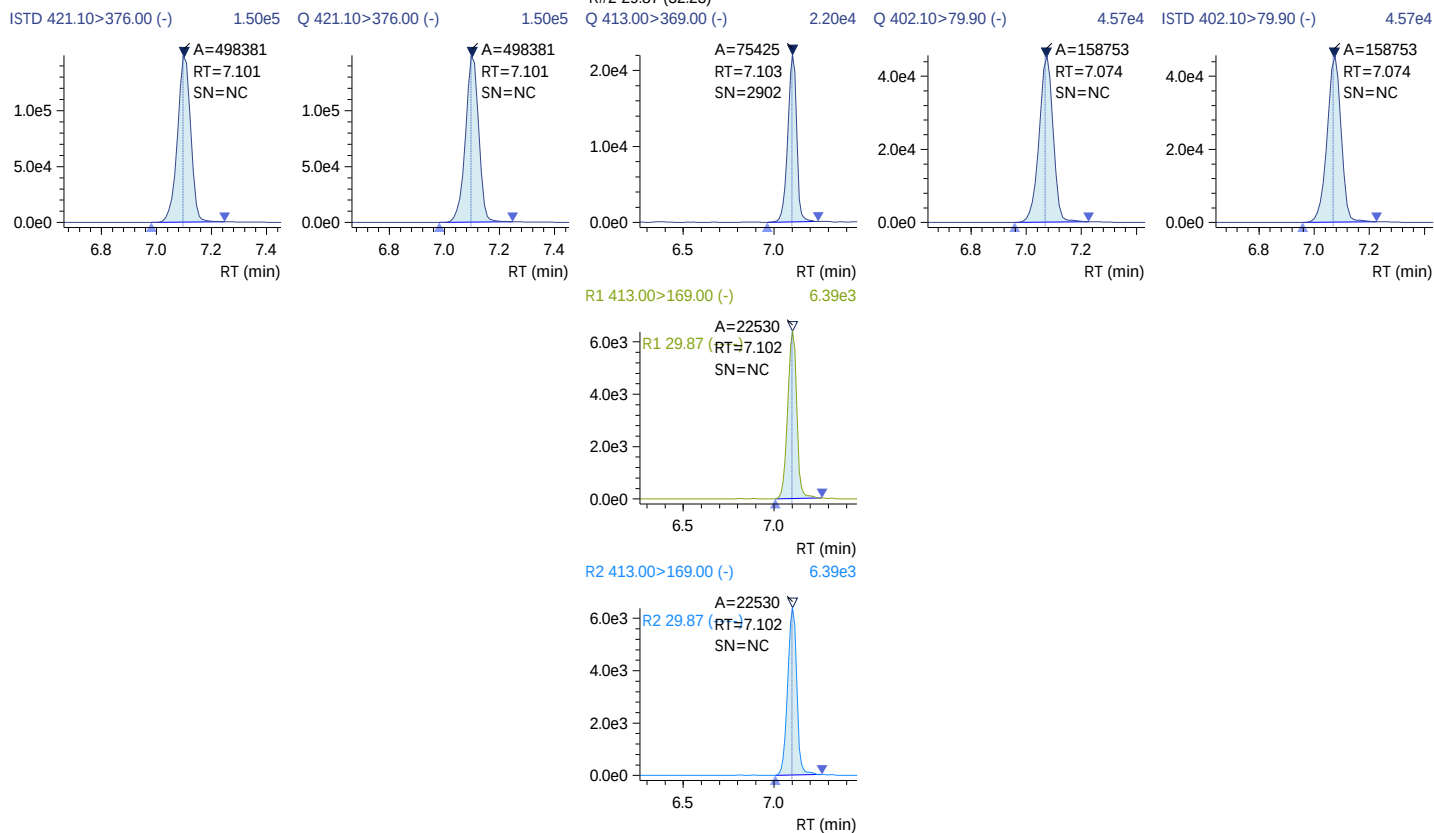
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.2674

PFOA
Conc. 0.5426
R#1 29.87 (31.89)
R#2 29.87 (32.23)

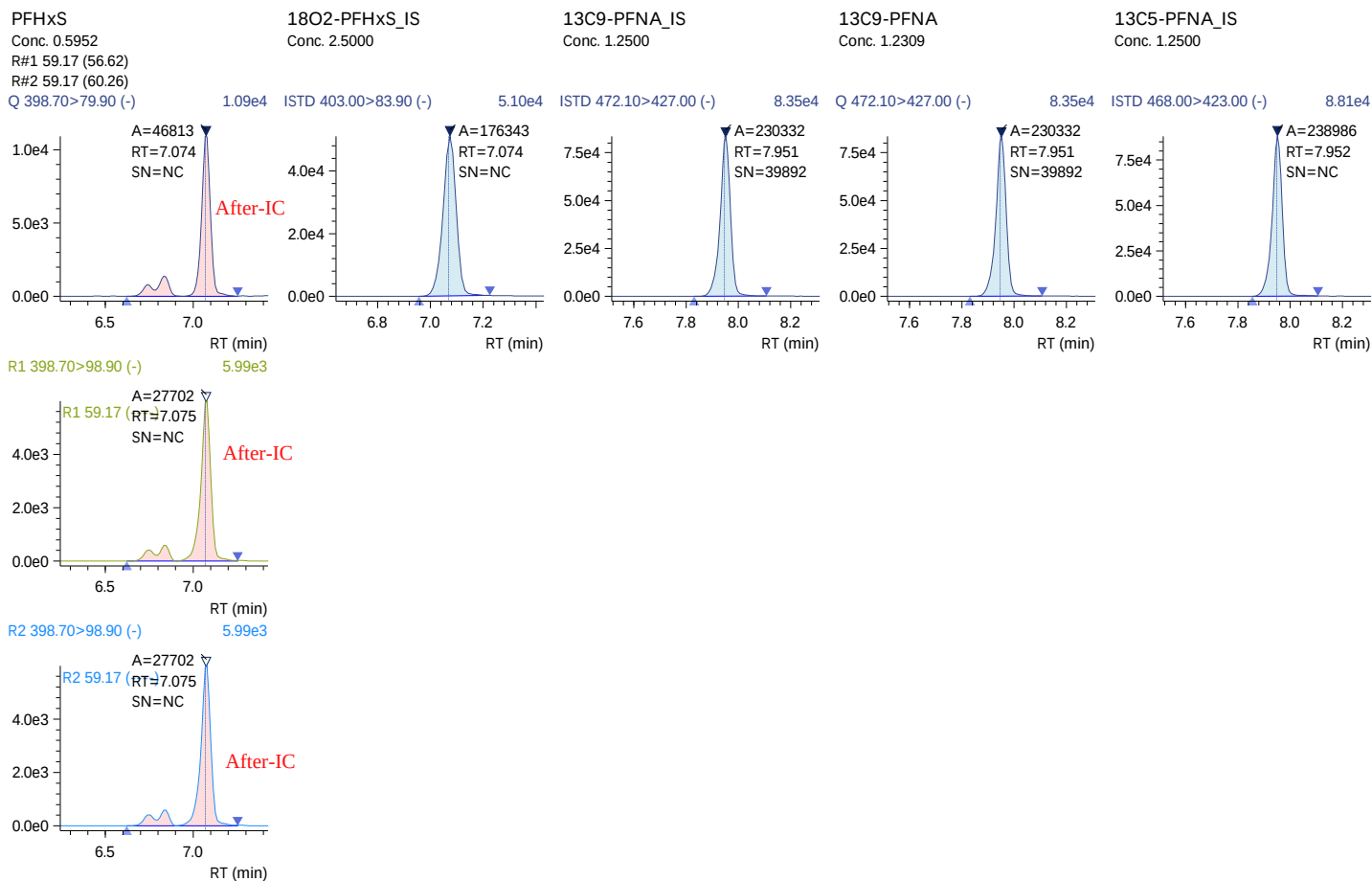
13C3-PFHxS
Conc. 2.0974

13C3-PFHxS_IS
Conc. 2.5000



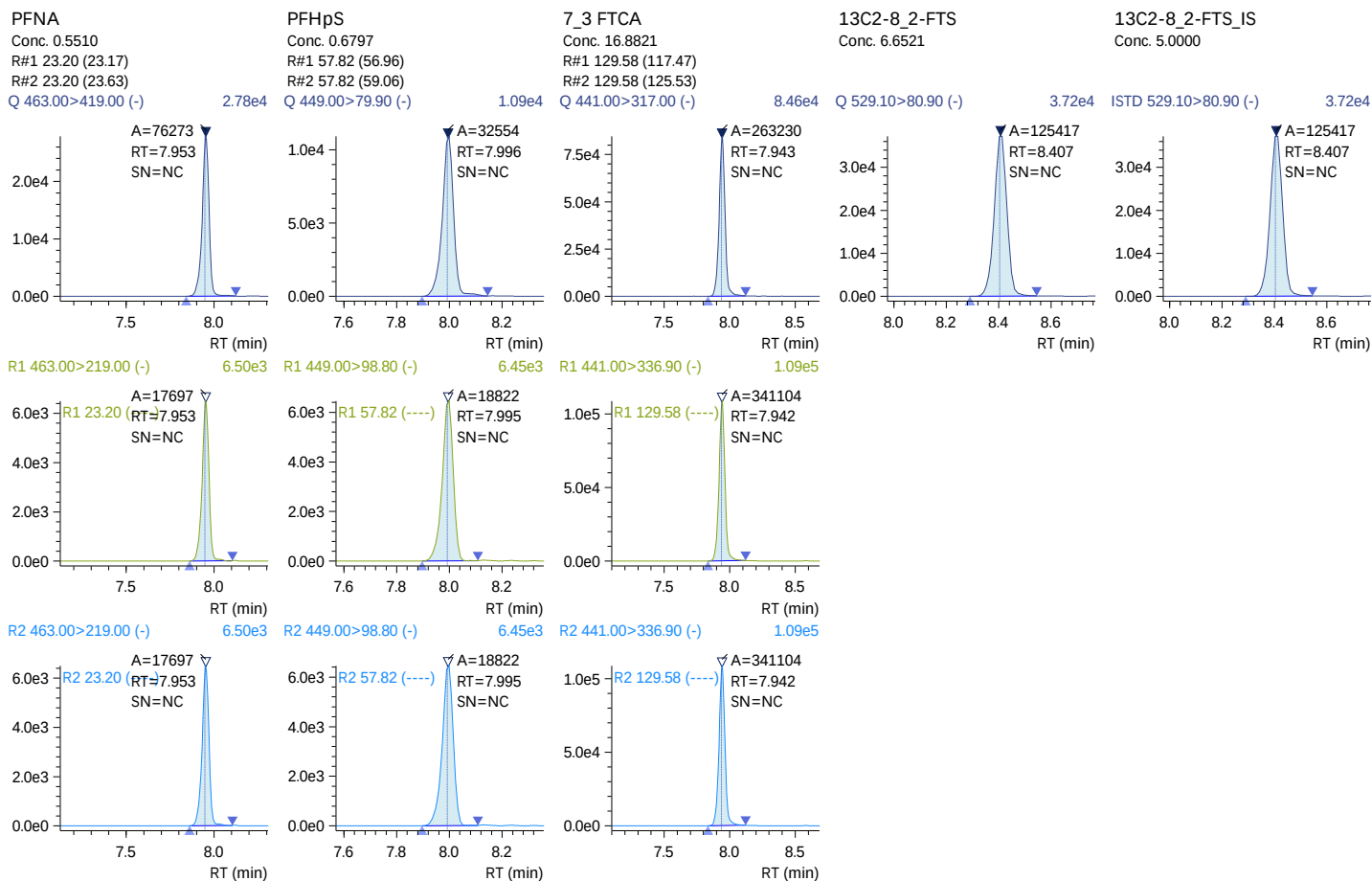


240122_033 (continued)



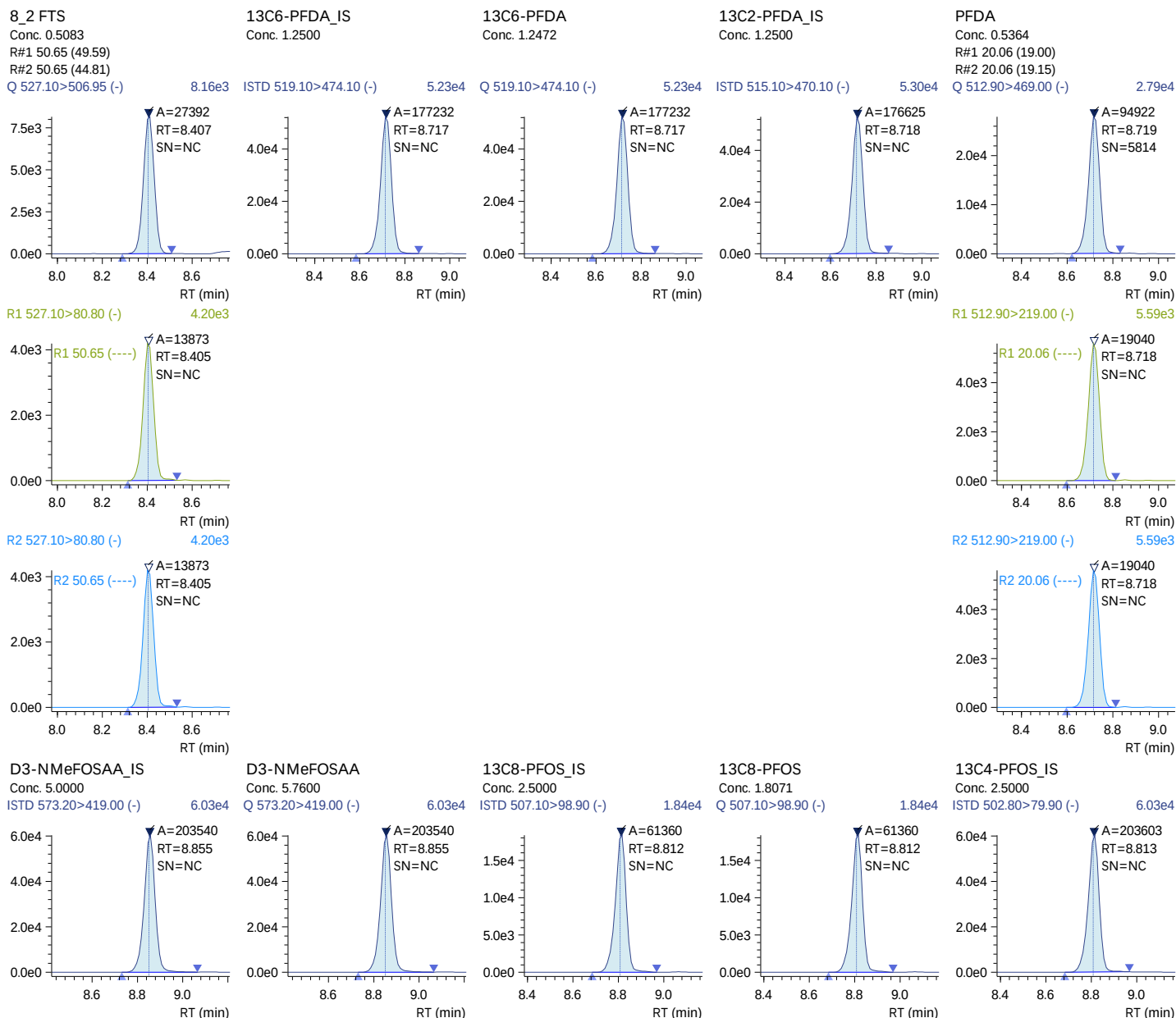


240122_033 (continued)





240122_033 (continued)

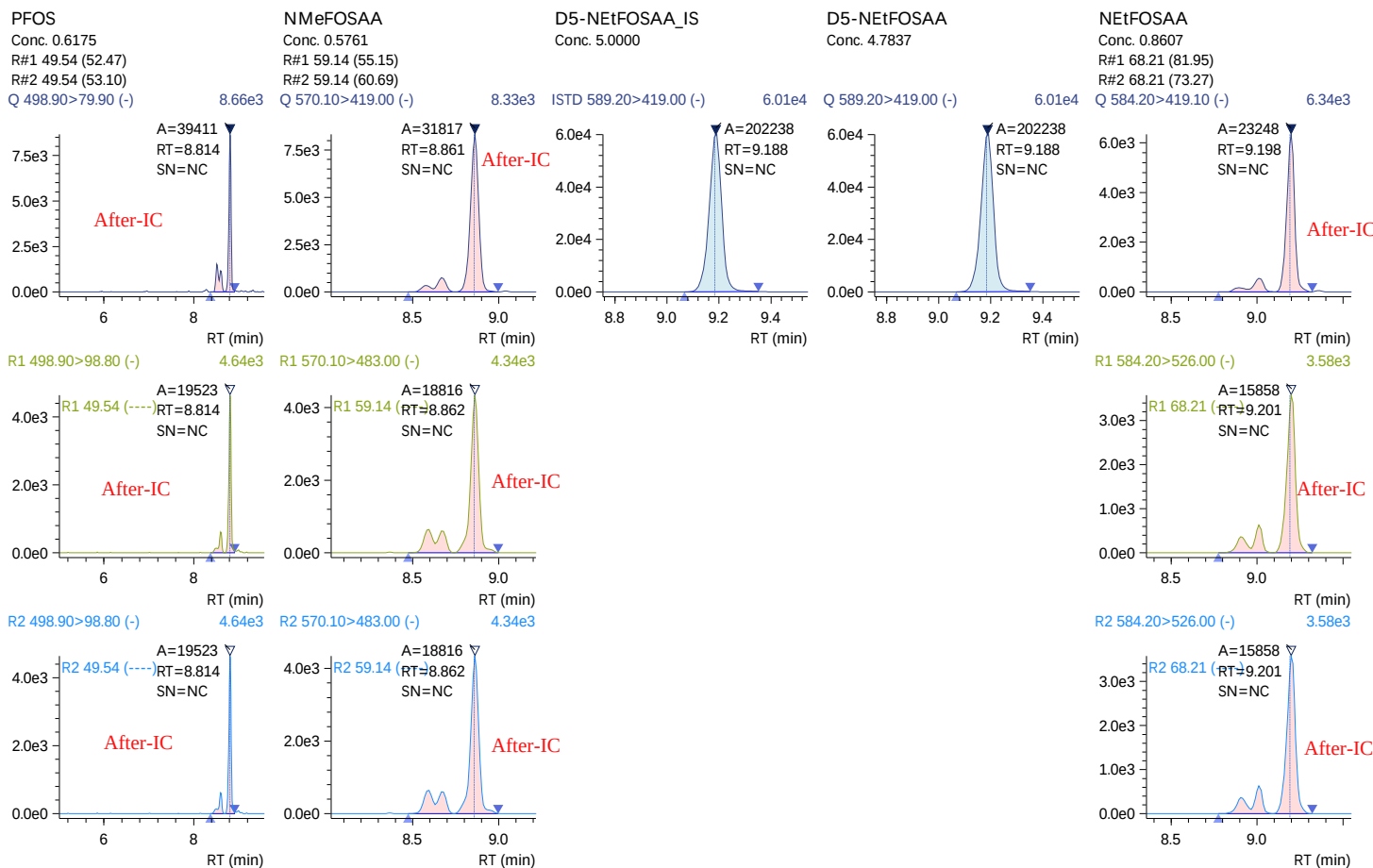


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_033 (continued)



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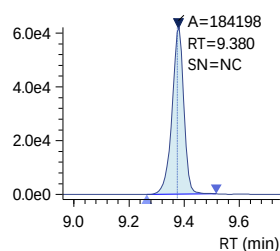
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Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



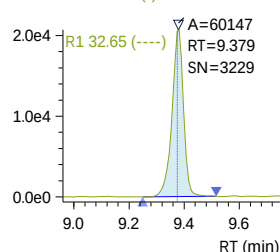
240122_033 (continued)

9-Cl-PF3ONS

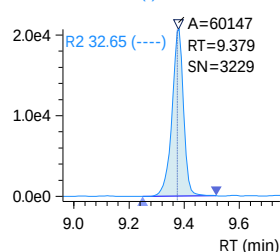
Conc. 0.4028
R#1 32.65 (32.76)
R#2 32.65 (32.59)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-)

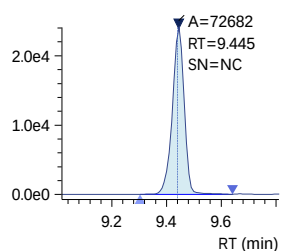


R2 532.80>353.00 (-)

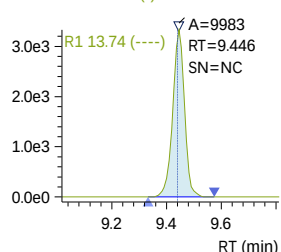


PFUnDA

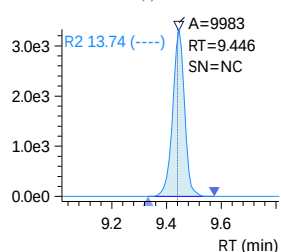
Conc. 0.5177
R#1 13.74 (13.12)
R#2 13.74 (14.36)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-)

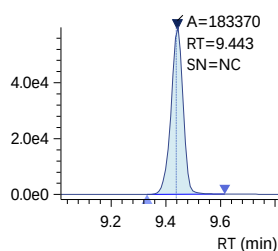


R2 563.10>269.10 (-)



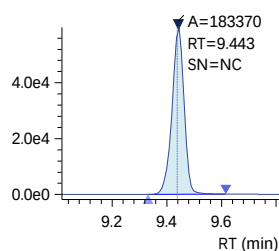
13C7-PFUnDA_IS

Conc. 1.2500
ISTD 570.00>525.10 (-)



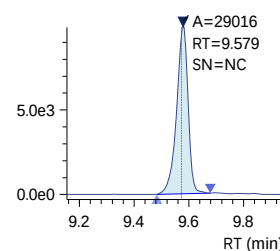
13C7-PFUnDA

Conc. 1.0818
Q 570.00>525.10 (-)

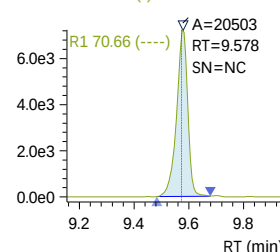


PFNS

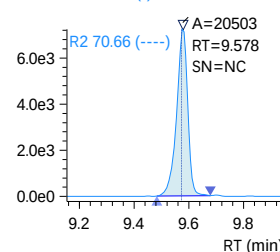
Conc. 0.6224
R#1 70.66 (65.22)
R#2 70.66 (65.31)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-)

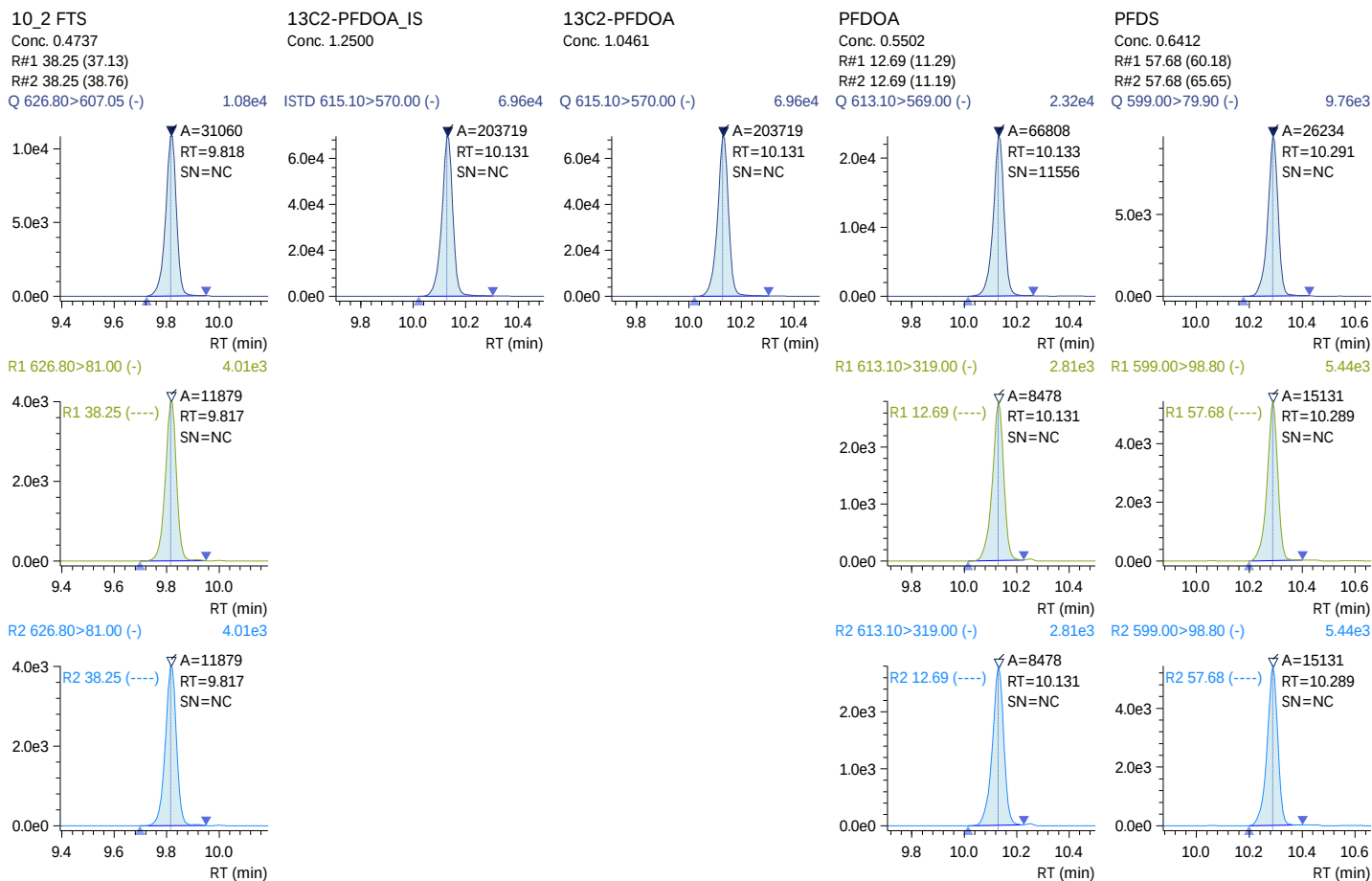


R2 548.80>98.80 (-)





240122_033 (continued)

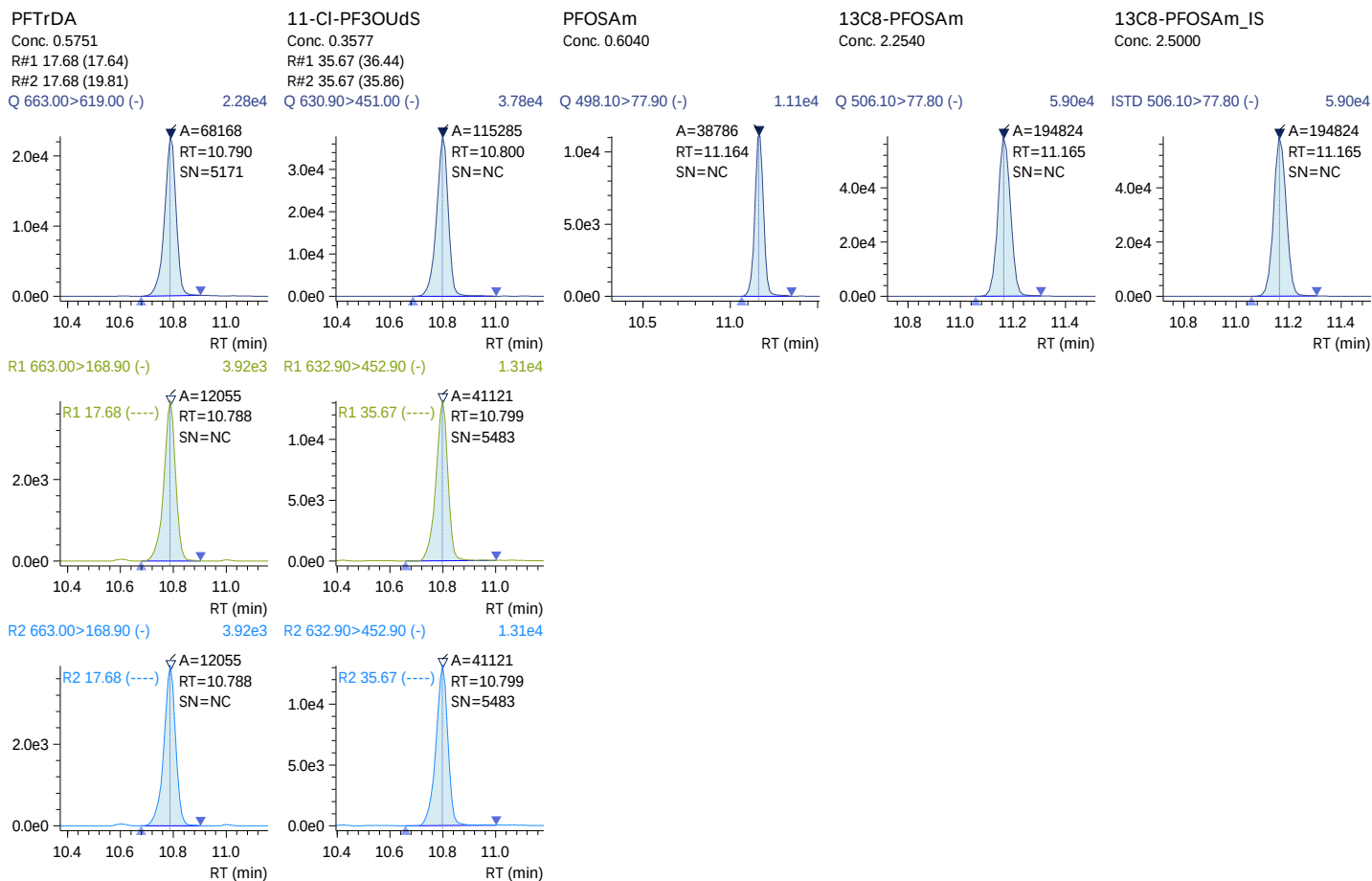


J:\LCMS08\Data\240122_1633_B1\240122_1633_B1.damip

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_033 (continued)

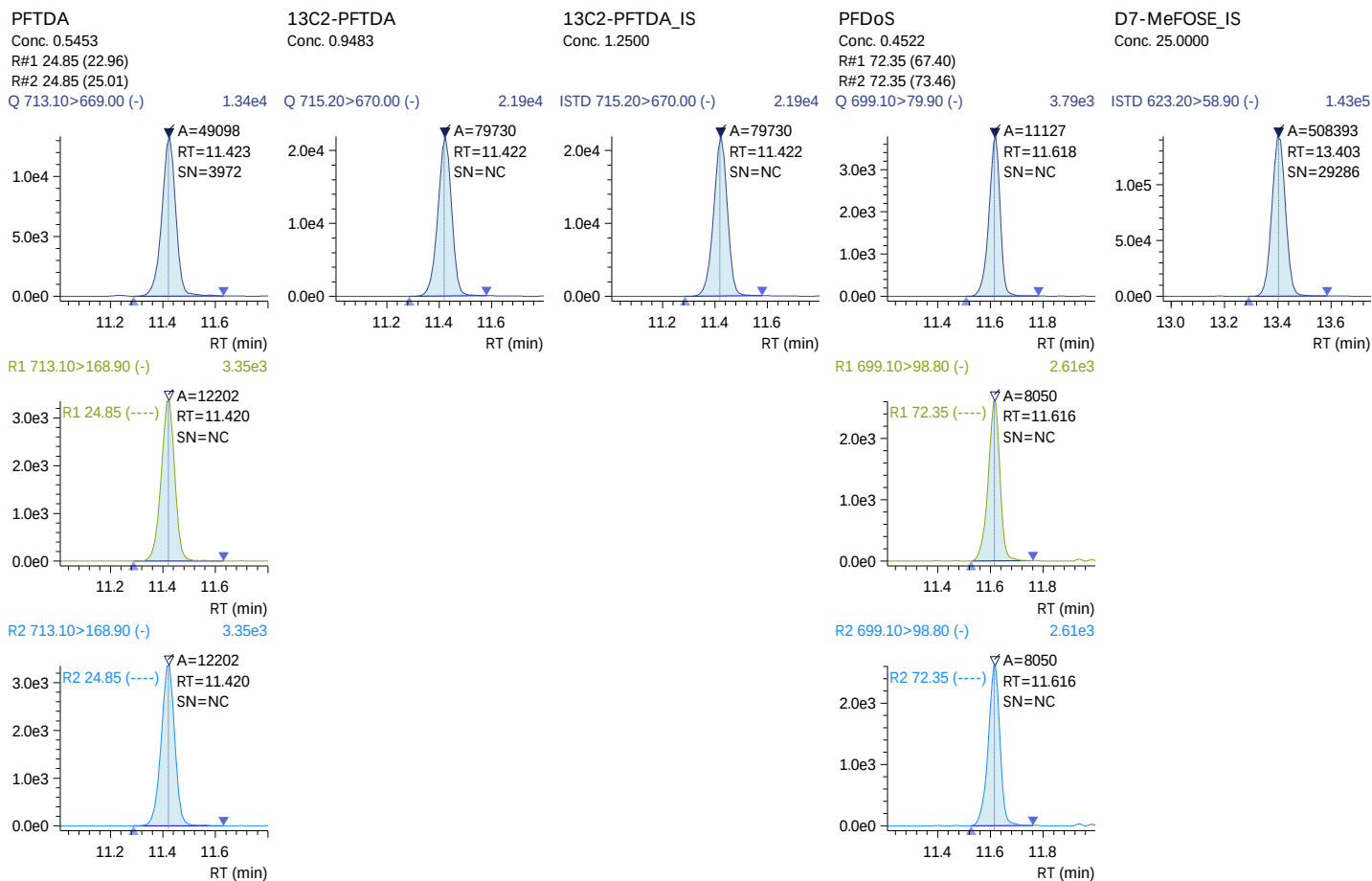


J:\LCMS08\Data\240122_1633_B1\240122_1633_B1.dampl

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_033 (continued)





240122_033 (continued)

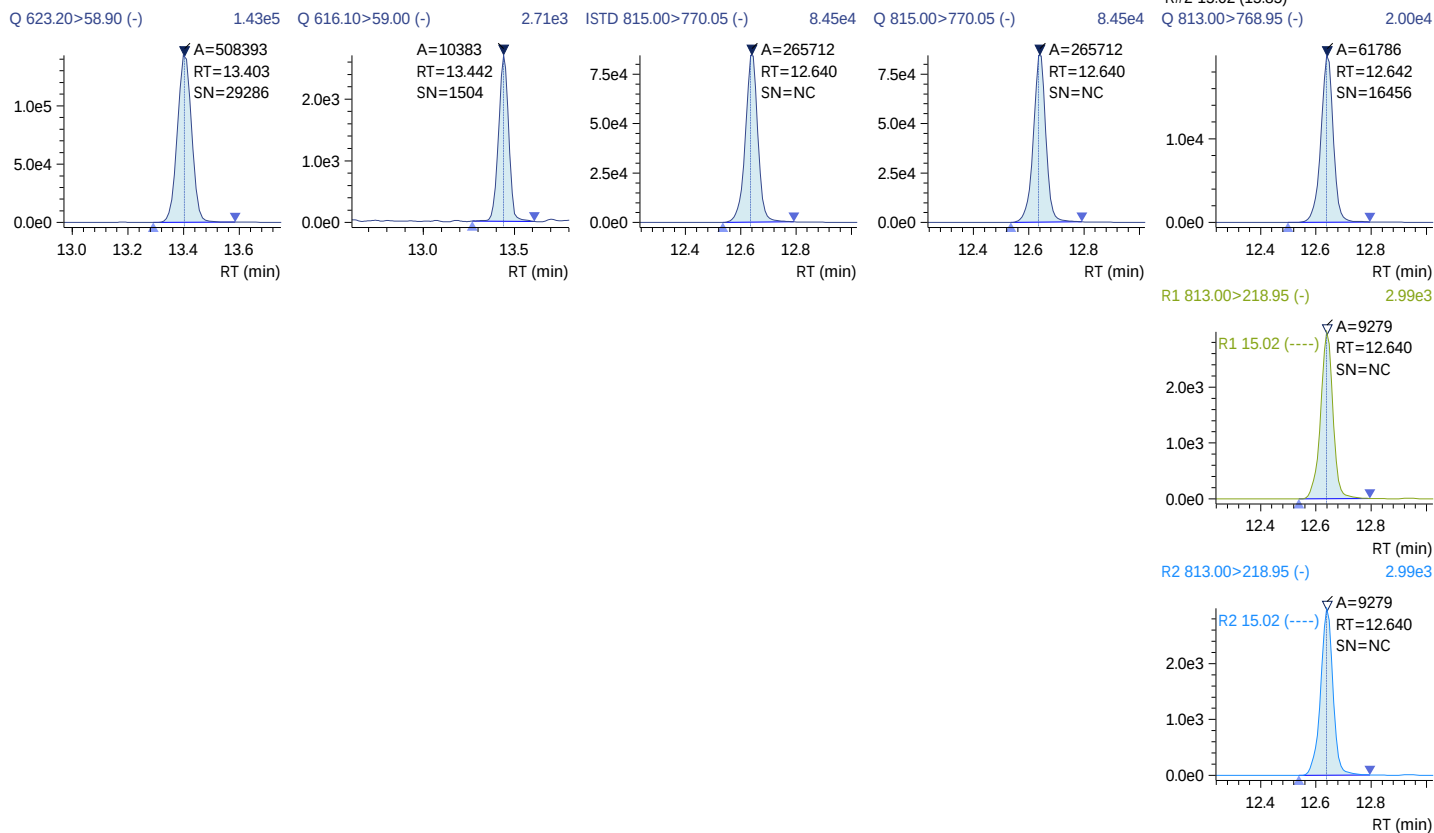
D7-MeFOSE
Conc. 23.8573

MeFOSE
Conc. 0.5561

13C2-PFHXA_IS
Conc. 2.5000

13C2-PFHXA
Conc. 1.6196

PFHXA
Conc. 0.5392
R#1 15.02 (13.90)
R#2 15.02 (15.85)





240122_033 (continued)

D3-MeFOSA
Conc. 1.7025

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. 0.4907
R#1 127.30 (140.79)
R#2 127.30 (150.13)

D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 24.0562

Q 515.00>219.00 (-)

8.64e3

ISTD 515.00>219.00 (-)

8.64e3

Q 511.90>219.00 (-)

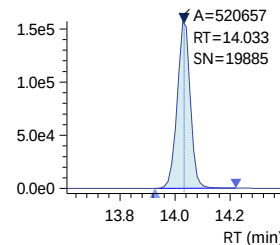
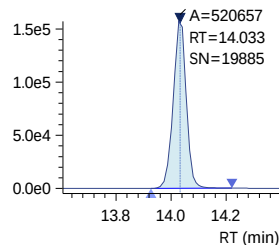
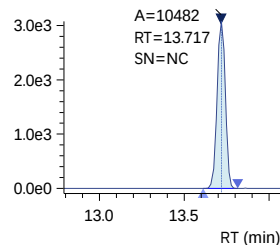
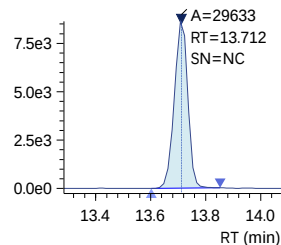
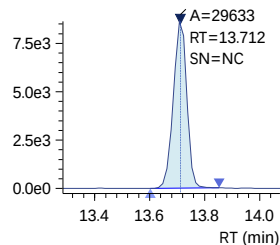
3.08e3

ISTD 639.20>58.90 (-)

1.57e5

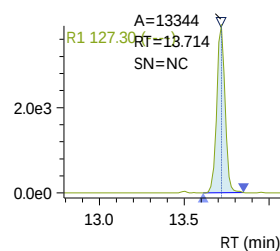
Q 639.20>58.90 (-)

1.57e5



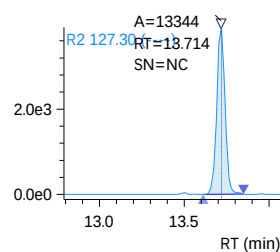
R1 511.90>169.00 (-)

3.92e3



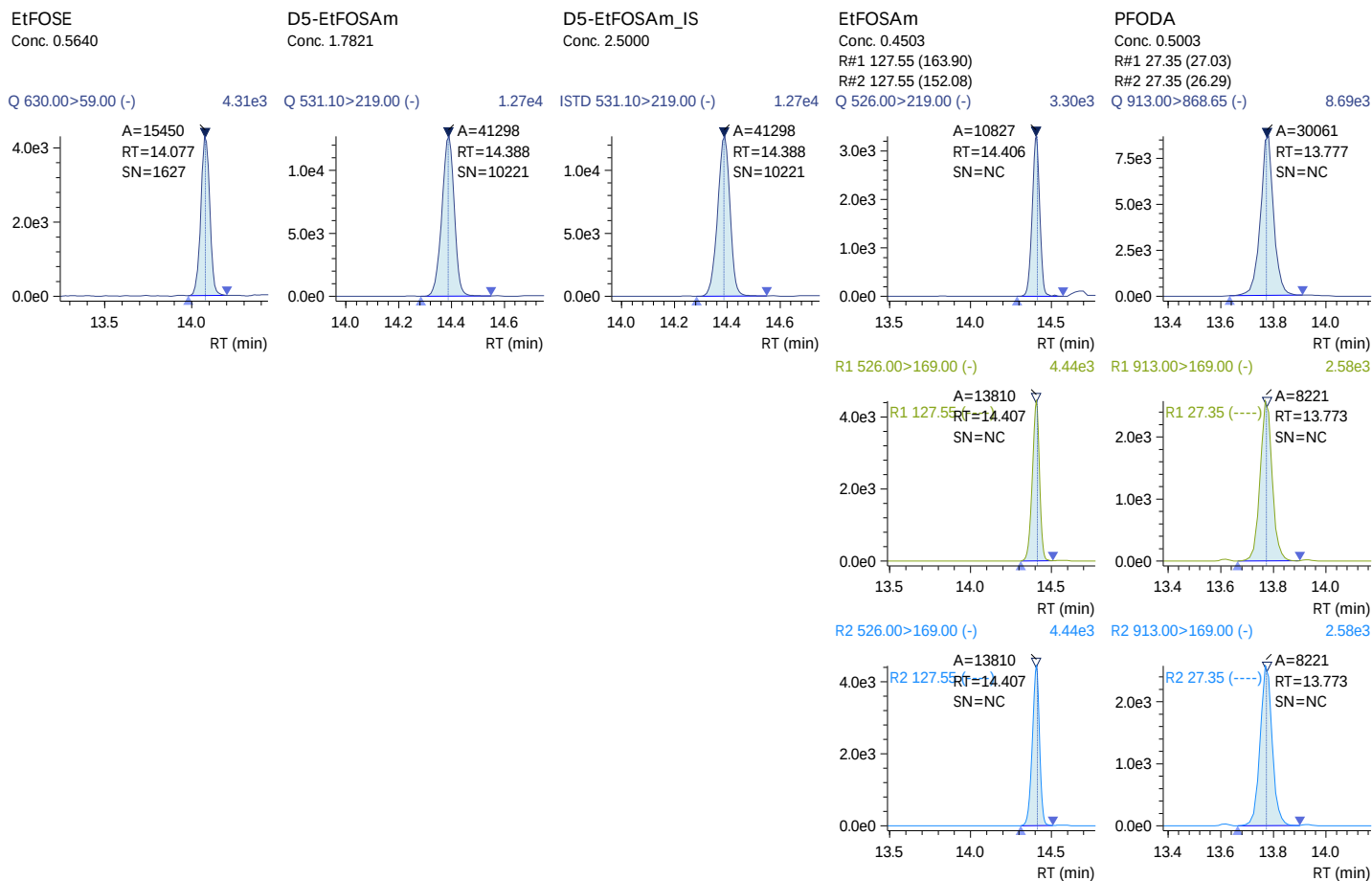
R2 511.90>169.00 (-)

3.92e3





240122_033 (continued)



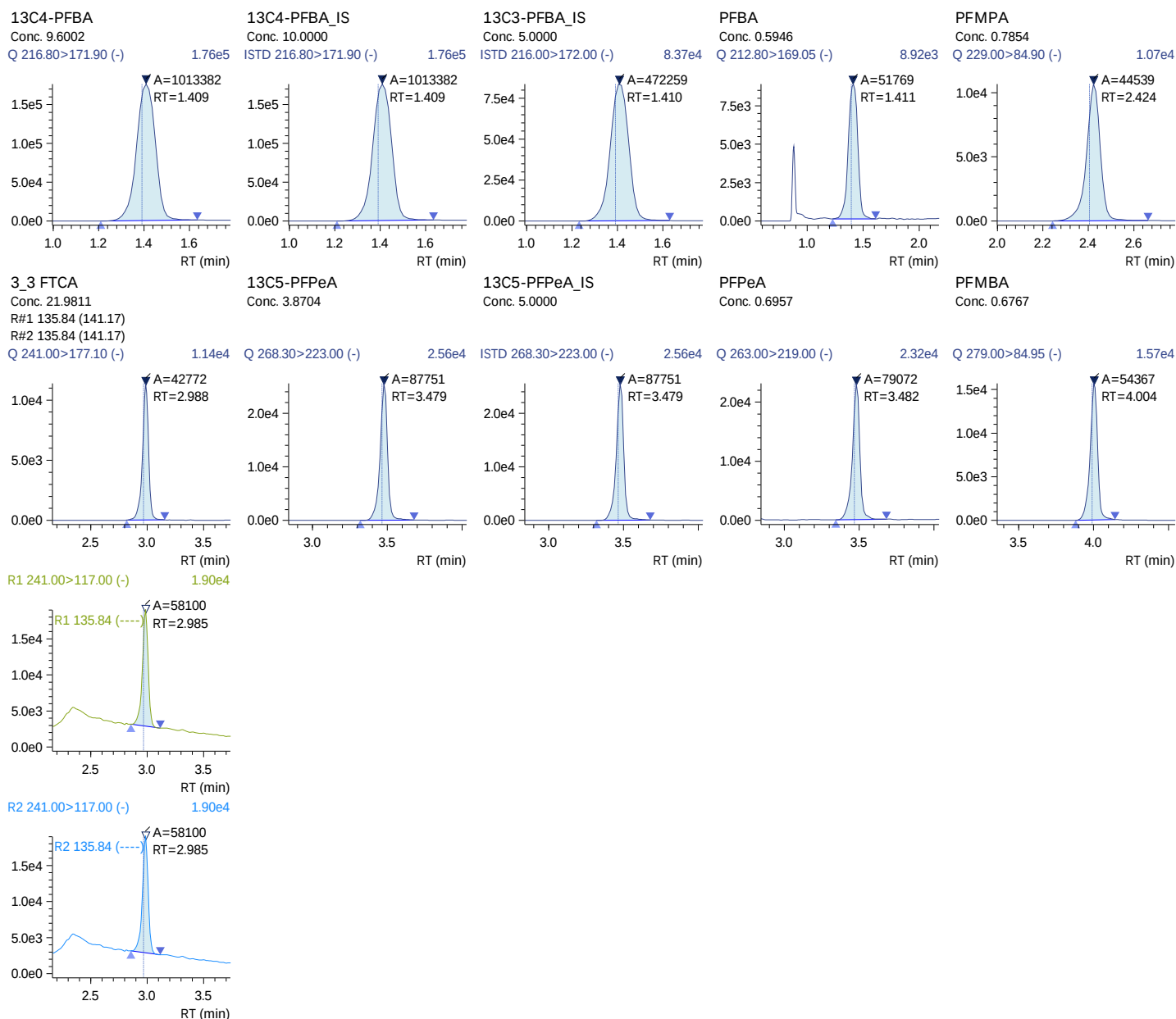
J:\LCMS08\Data\240122_1633_B1\240122_1633_B1.damip

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_033

Sample ID: KQ2400483-03
Date Acquired: 1/22/2024 10:09:41 PM
Acquired by: System Administrator
Data File: 240122_033
Vial: 13 | Inj. Volume: 10.0000uL | Tray: 2





240122_033 (continued)

13C2-4_2 FTS
 Conc. 7.5946

13C2-4_2 FTS_IS
 Conc. 5.0000

4_2 FTS
 Conc. 0.5429
 R#1 34.75 (29.06)
 R#2 34.75 (29.06)

13C3-PFBS_IS
 Conc. 2.5000

PFBS
 Conc. 0.5440
 R#1 47.79 (46.72)
 R#2 47.79 (46.72)

Q 329.10>80.90 (-)

5.53e4

ISTD 329.10>80.90 (-)

5.53e4

Q 327.10>307.00 (-)

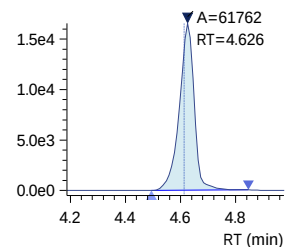
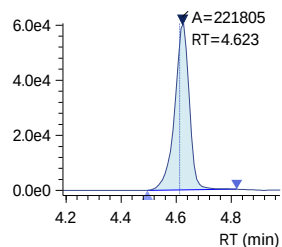
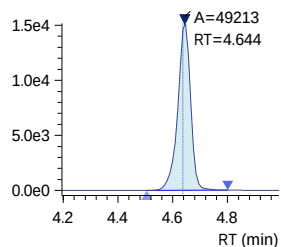
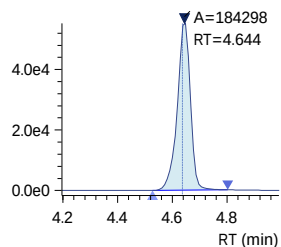
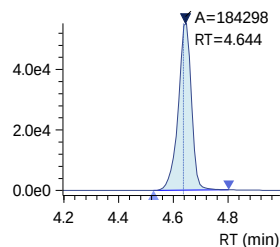
1.52e4

ISTD 302.10>79.90 (-)

6.06e4

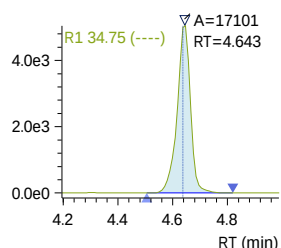
Q 298.70>79.90 (-)

1.66e4



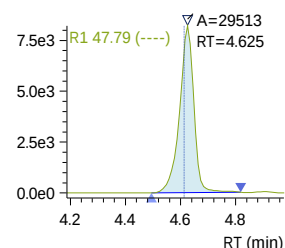
R1 327.10>80.90 (-)

5.05e3



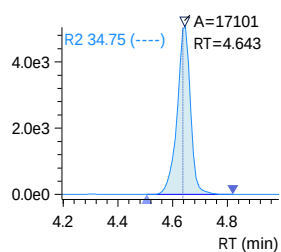
R1 298.70>98.80 (-)

8.22e3



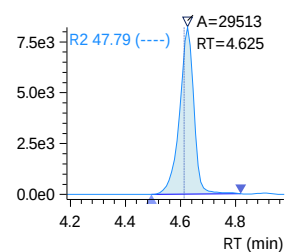
R2 327.10>80.90 (-)

5.05e3



R2 298.70>98.80 (-)

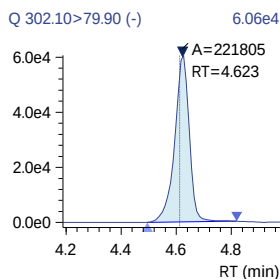
8.22e3



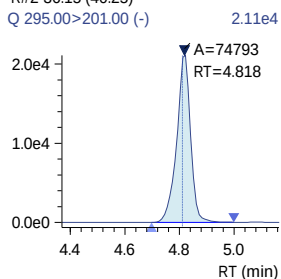


240122_033 (continued)

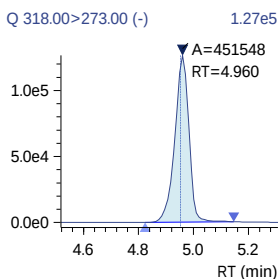
13C3-PFBS
Conc. 2.2164



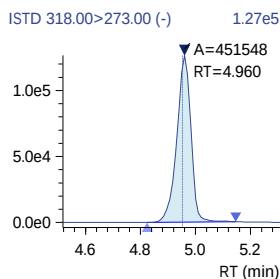
NFDHA
Conc. 0.7466
R#1 36.15 (40.25)
R#2 36.15 (40.25)



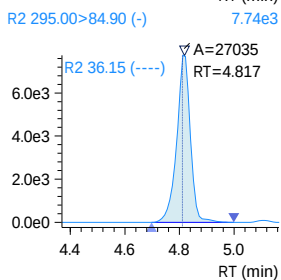
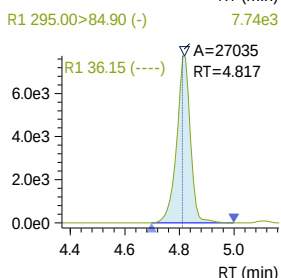
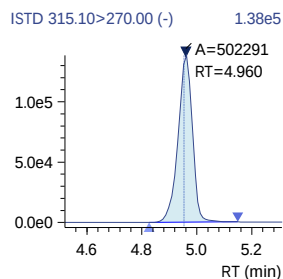
13C5-PFHxA
Conc. 2.1331



13C5-PFHxA_IS
Conc. 2.5000



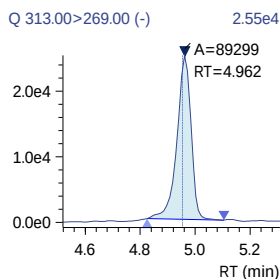
13C2-PFHxA_IS
Conc. 2.5000





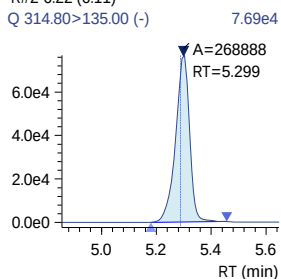
240122_033 (continued)

PFHxA
Conc. 0.5858

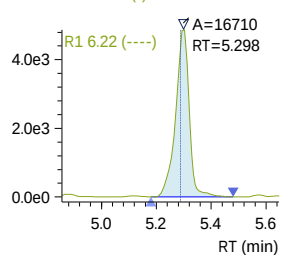


PFEESA
Conc. 0.5316

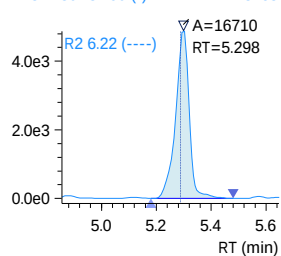
R#1 6.22 (6.11)
R#2 6.22 (6.11)



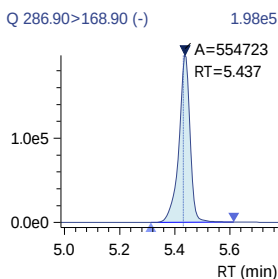
R1 314.80>82.90 (-)



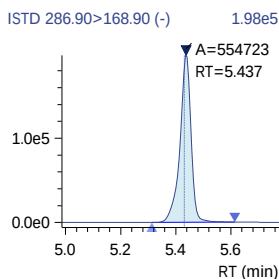
R2 314.80>82.90 (-)



13C3-HFPO-DA
Conc. 11.2818

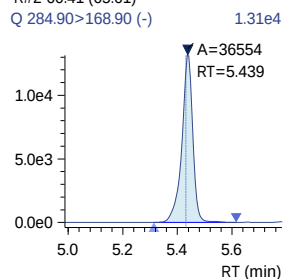


13C3-HFPO-DA_IS
Conc. 10.0000

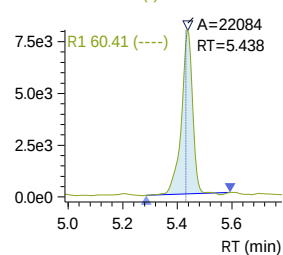


HFPO-DA
Conc. 0.5966

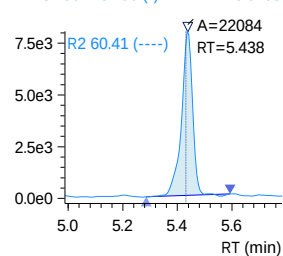
R#1 60.41 (65.61)
R#2 60.41 (65.61)



R1 284.90>184.90 (-)

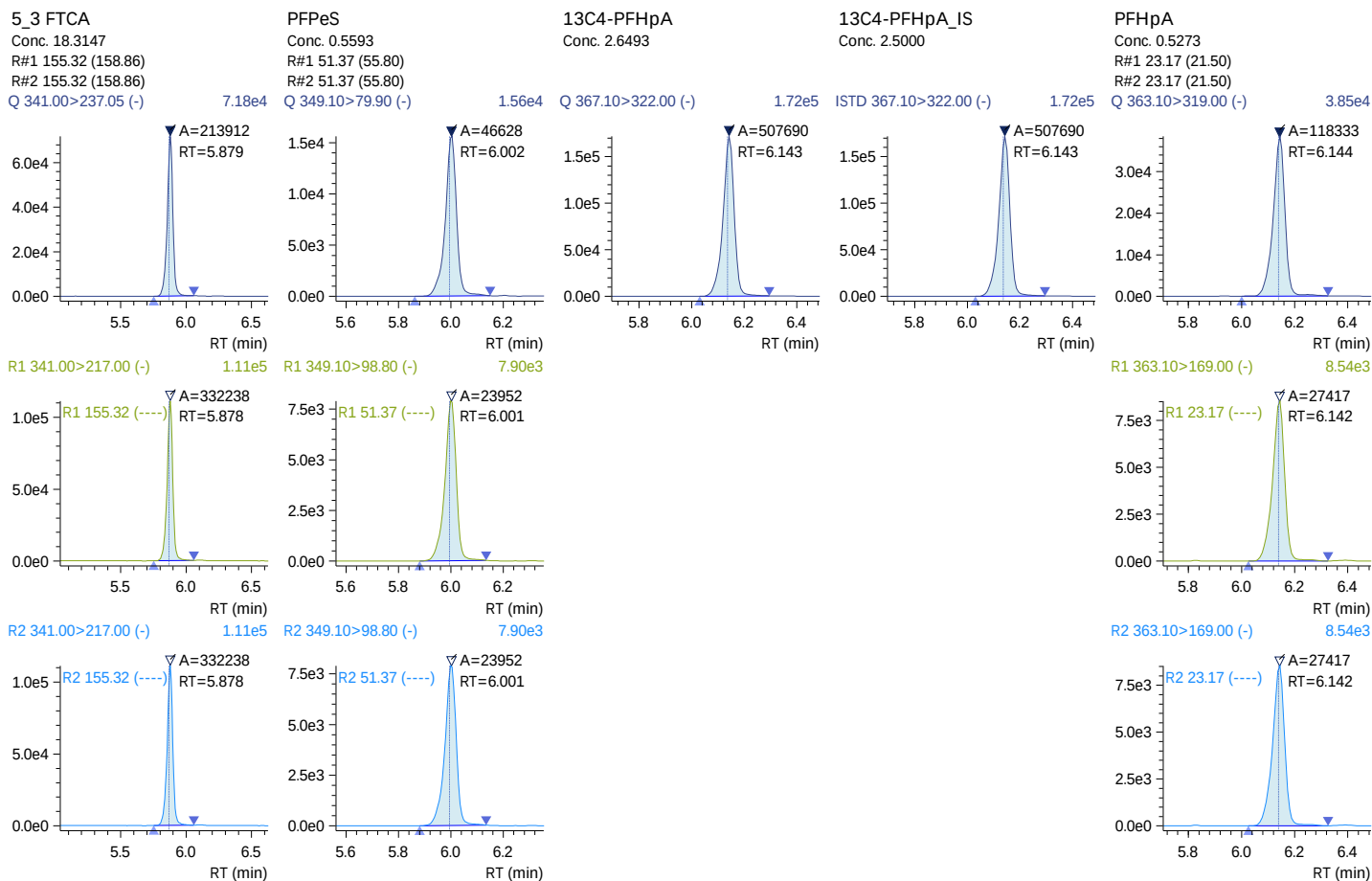


R2 284.90>184.90 (-)



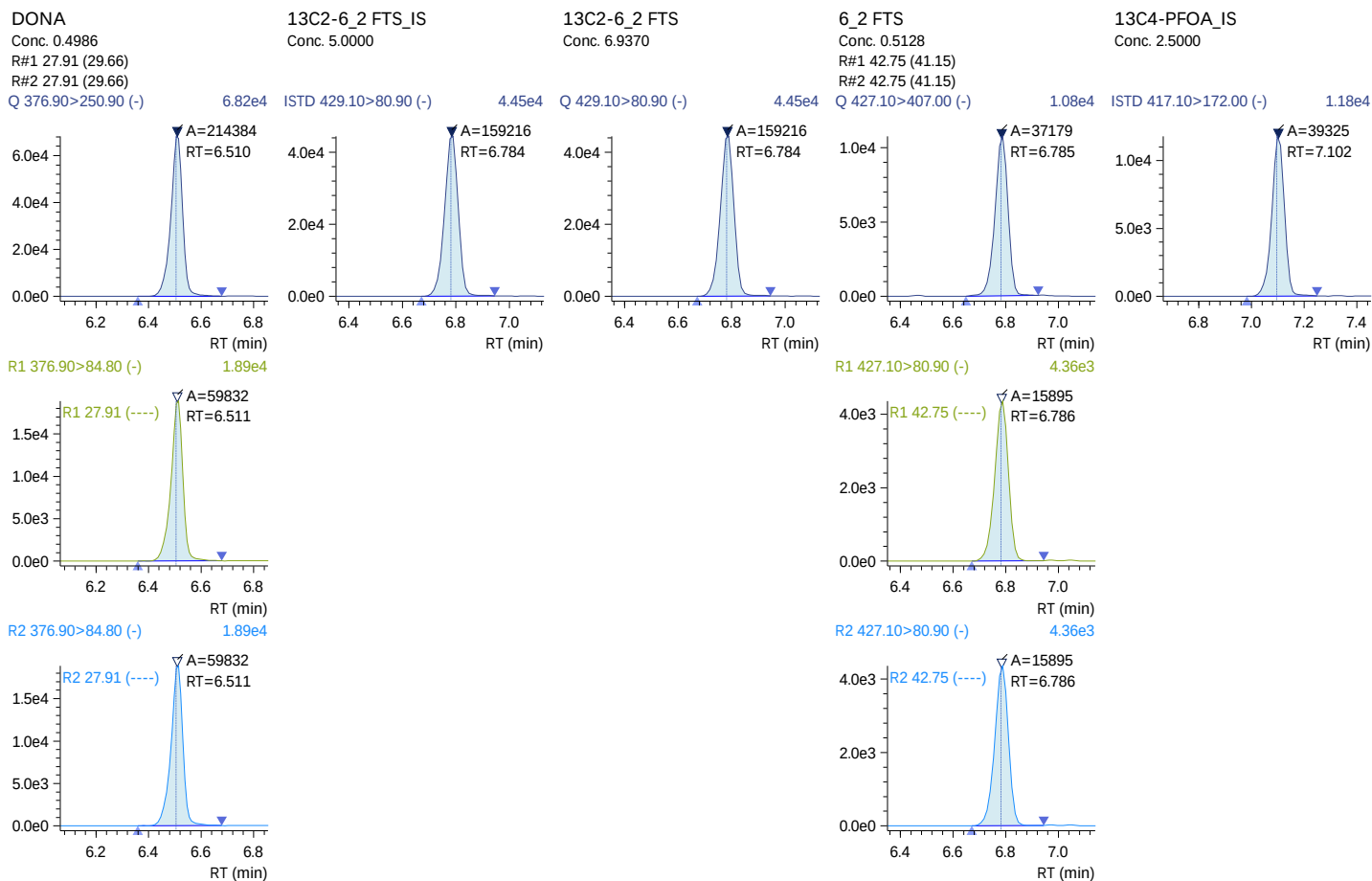


240122_033 (continued)





240122_033 (continued)





240122_033 (continued)

13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.2674

PFOA
Conc. 0.5426
R#1 29.87 (31.89)
R#2 29.87 (31.89)

13C3-PFHxS
Conc. 2.0974

13C3-PFHxS_IS
Conc. 2.5000

ISTD 421.10>376.00 (-)

1.50e5

Q 421.10>376.00 (-)

1.50e5

Q 413.00>369.00 (-)

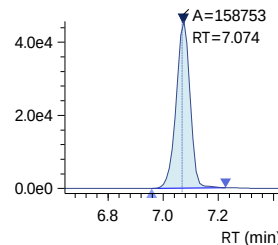
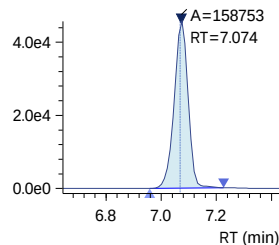
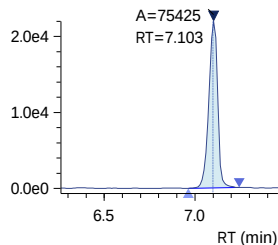
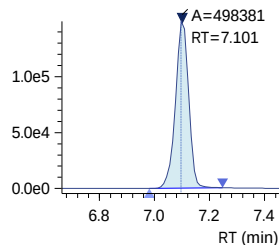
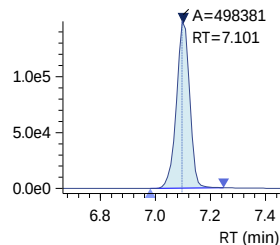
2.20e4

Q 402.10>79.90 (-)

4.57e4

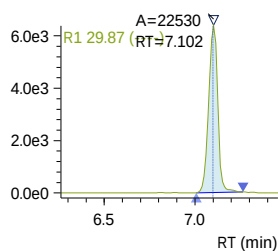
ISTD 402.10>79.90 (-)

4.57e4



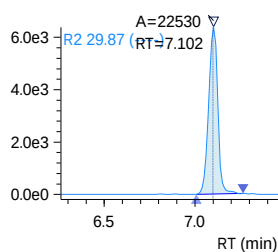
R1 413.00>169.00 (-)

6.39e3



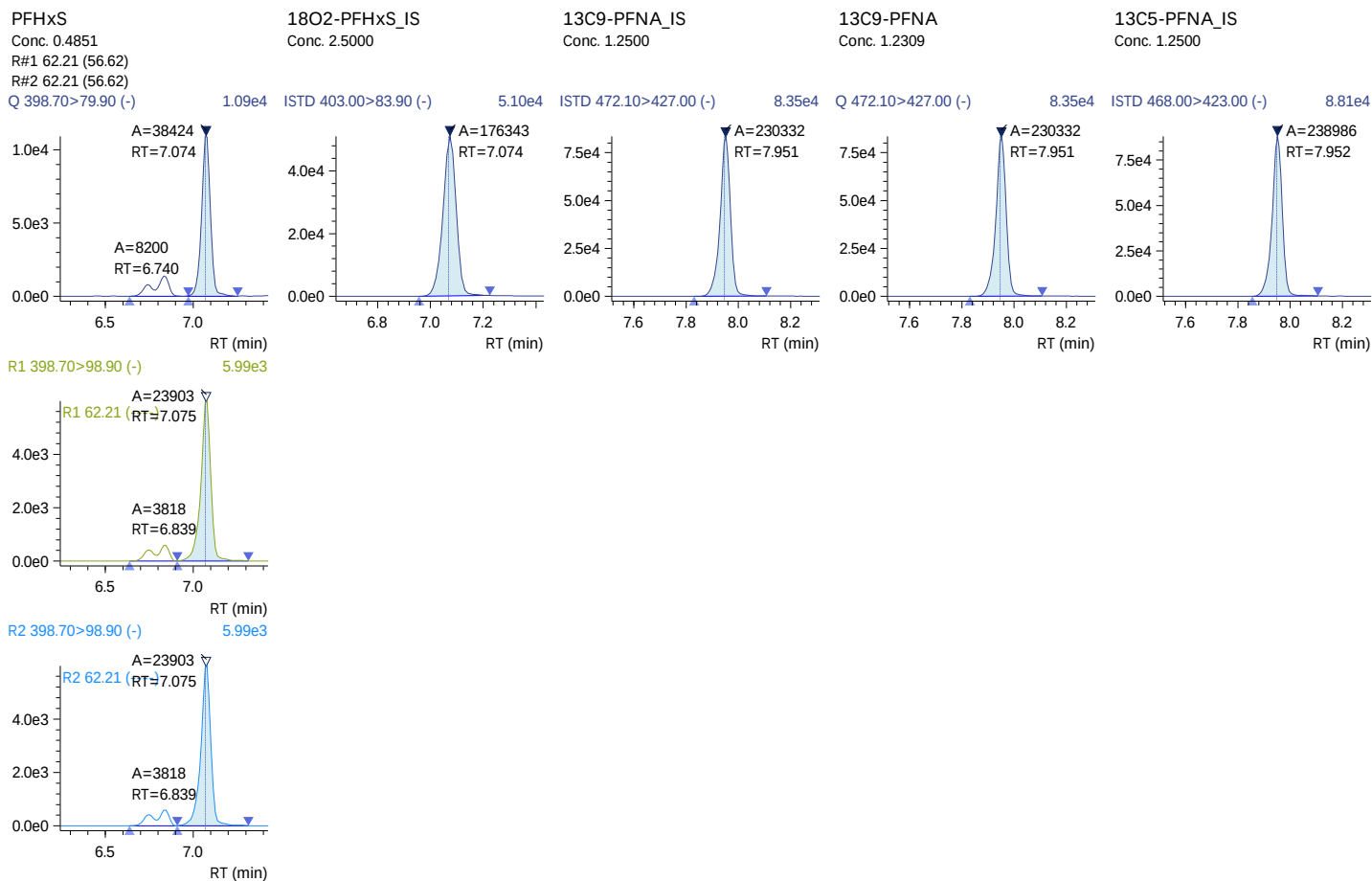
R2 413.00>169.00 (-)

6.39e3



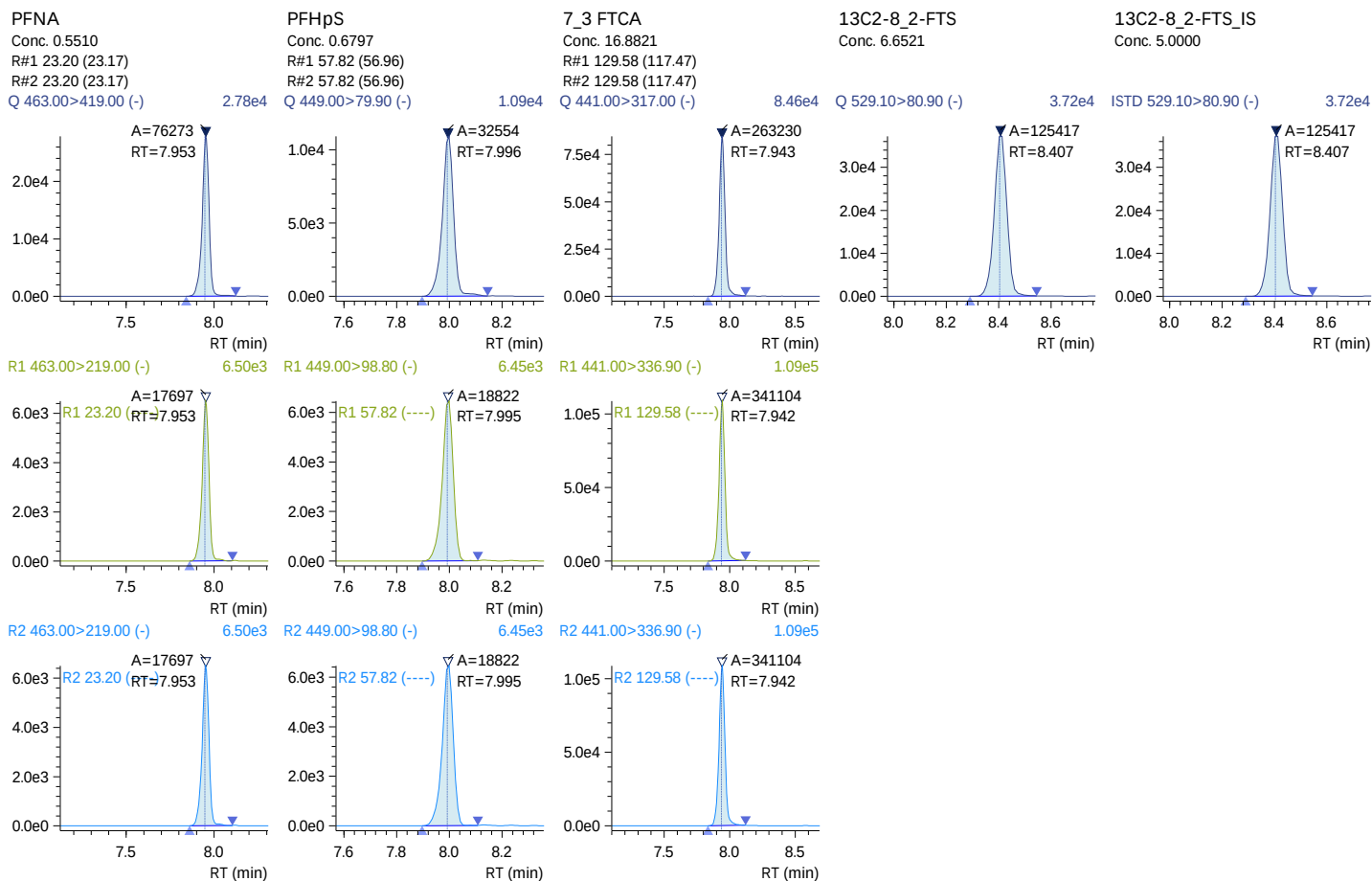


240122_033 (continued)



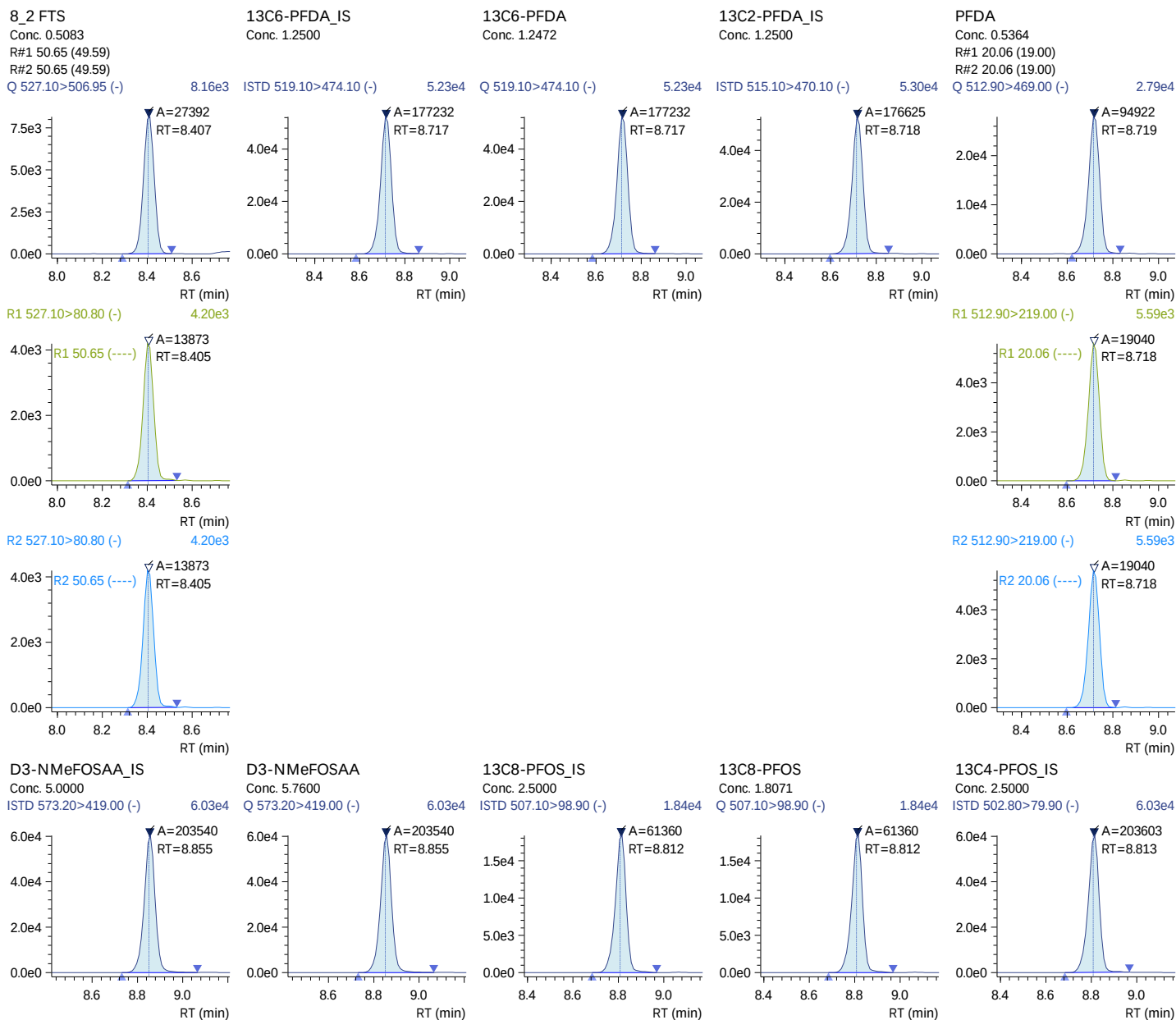


240122_033 (continued)



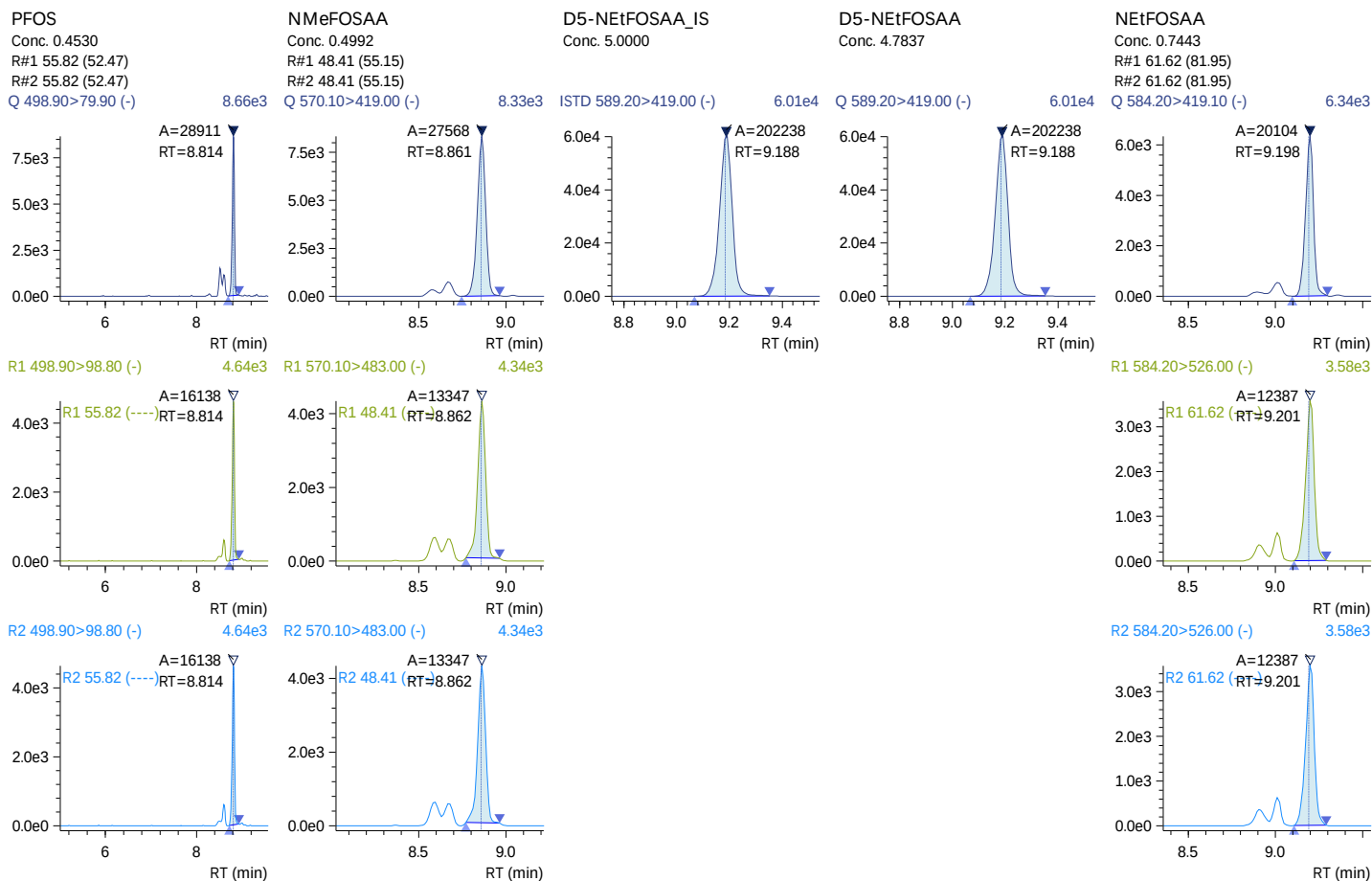


240122_033 (continued)





240122_033 (continued)

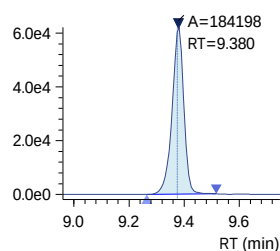




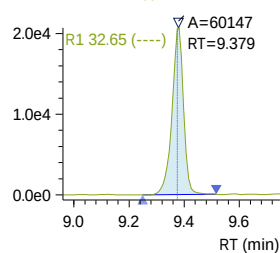
240122_033 (continued)

9-Cl-PF3ONS

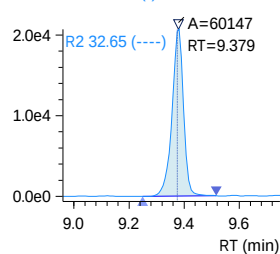
Conc. 0.4028
R#1 32.65 (32.76)
R#2 32.65 (32.76)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-)

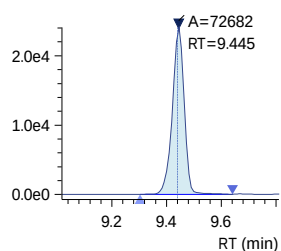


R2 532.80>353.00 (-)

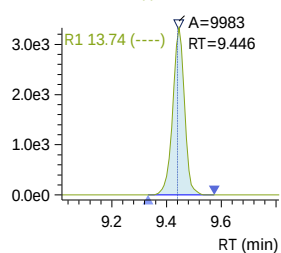


PFUnDA

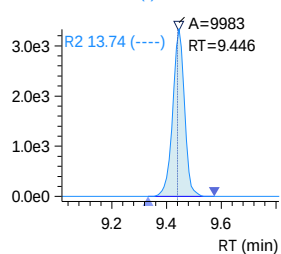
Conc. 0.5177
R#1 13.74 (13.12)
R#2 13.74 (13.12)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-)



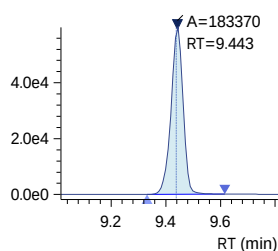
R2 563.10>269.10 (-)



13C7-PFUnDA_IS

Conc. 1.2500

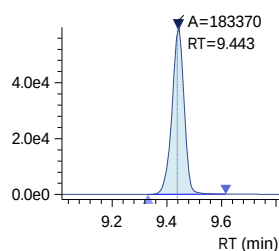
ISTD 570.00>525.10 (-)



13C7-PFUnDA

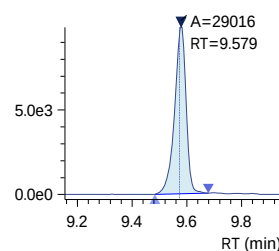
Conc. 1.0818

Q 570.00>525.10 (-)

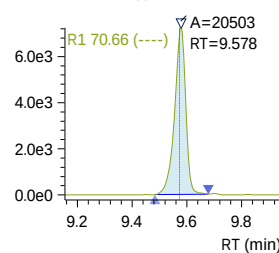


PFNS

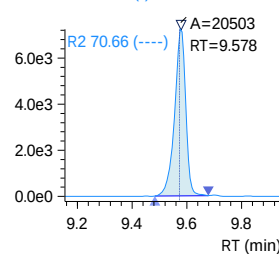
Conc. 0.6224
R#1 70.66 (65.22)
R#2 70.66 (65.22)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-)

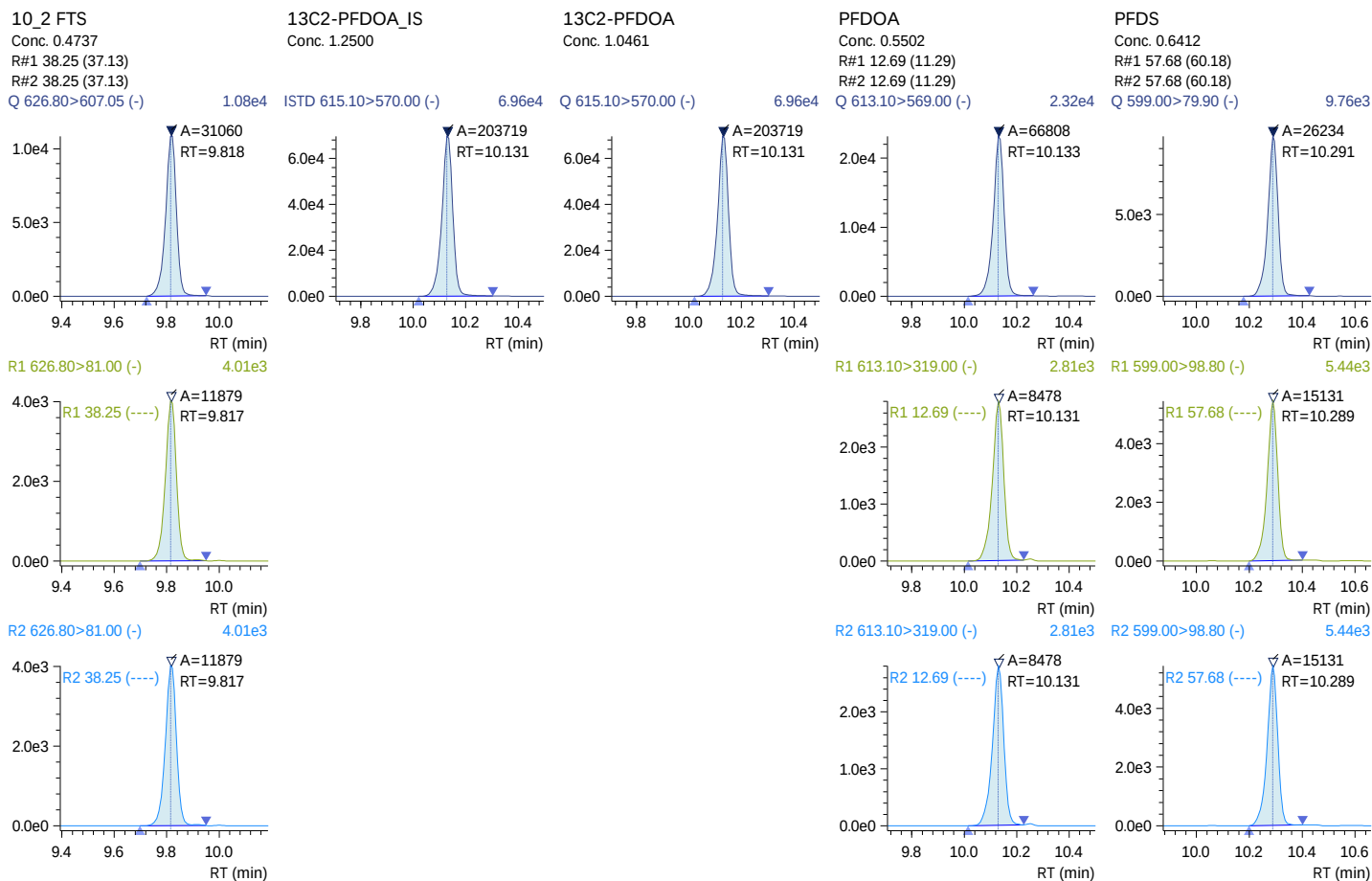


R2 548.80>98.80 (-)



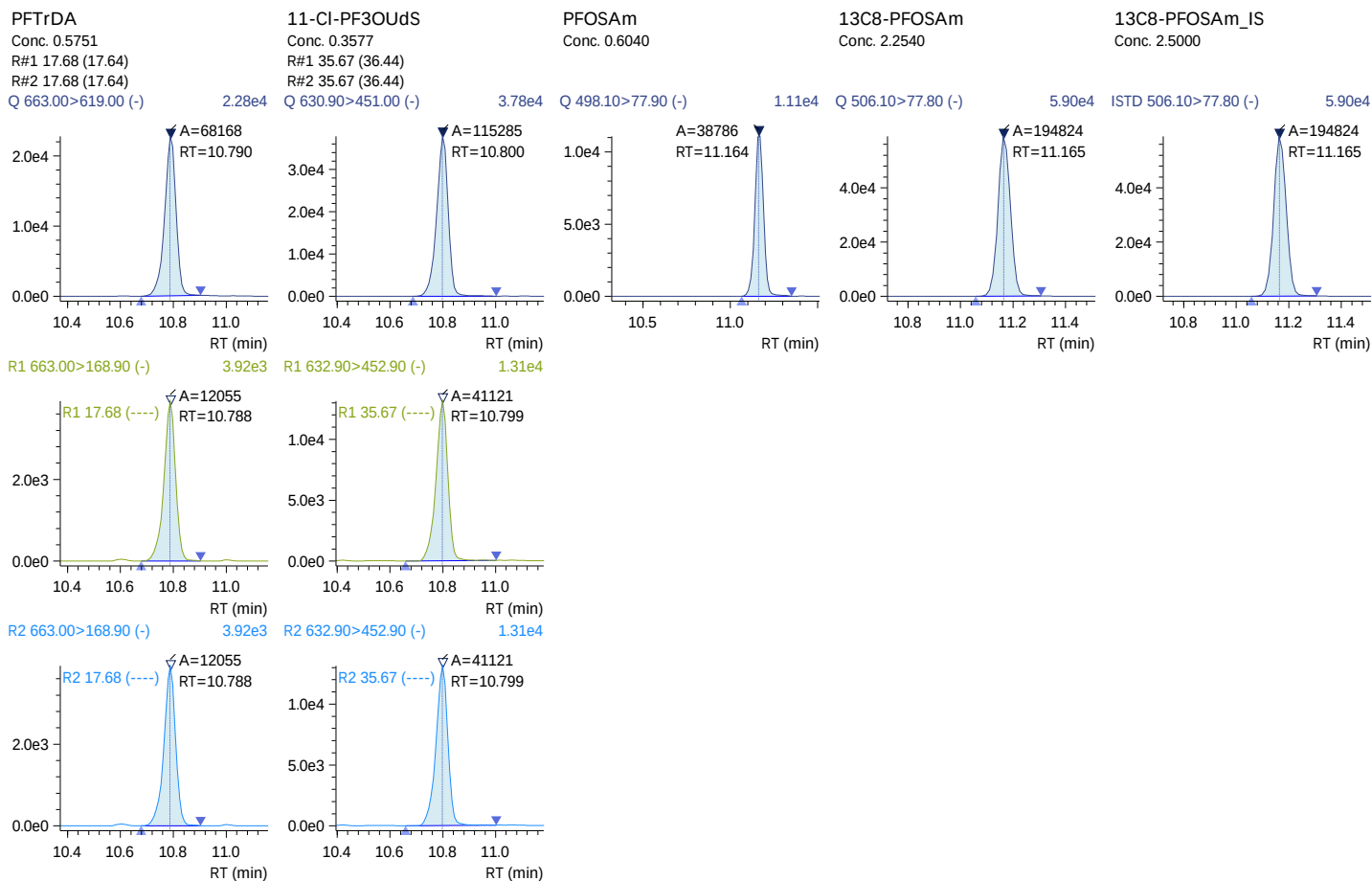


240122_033 (continued)



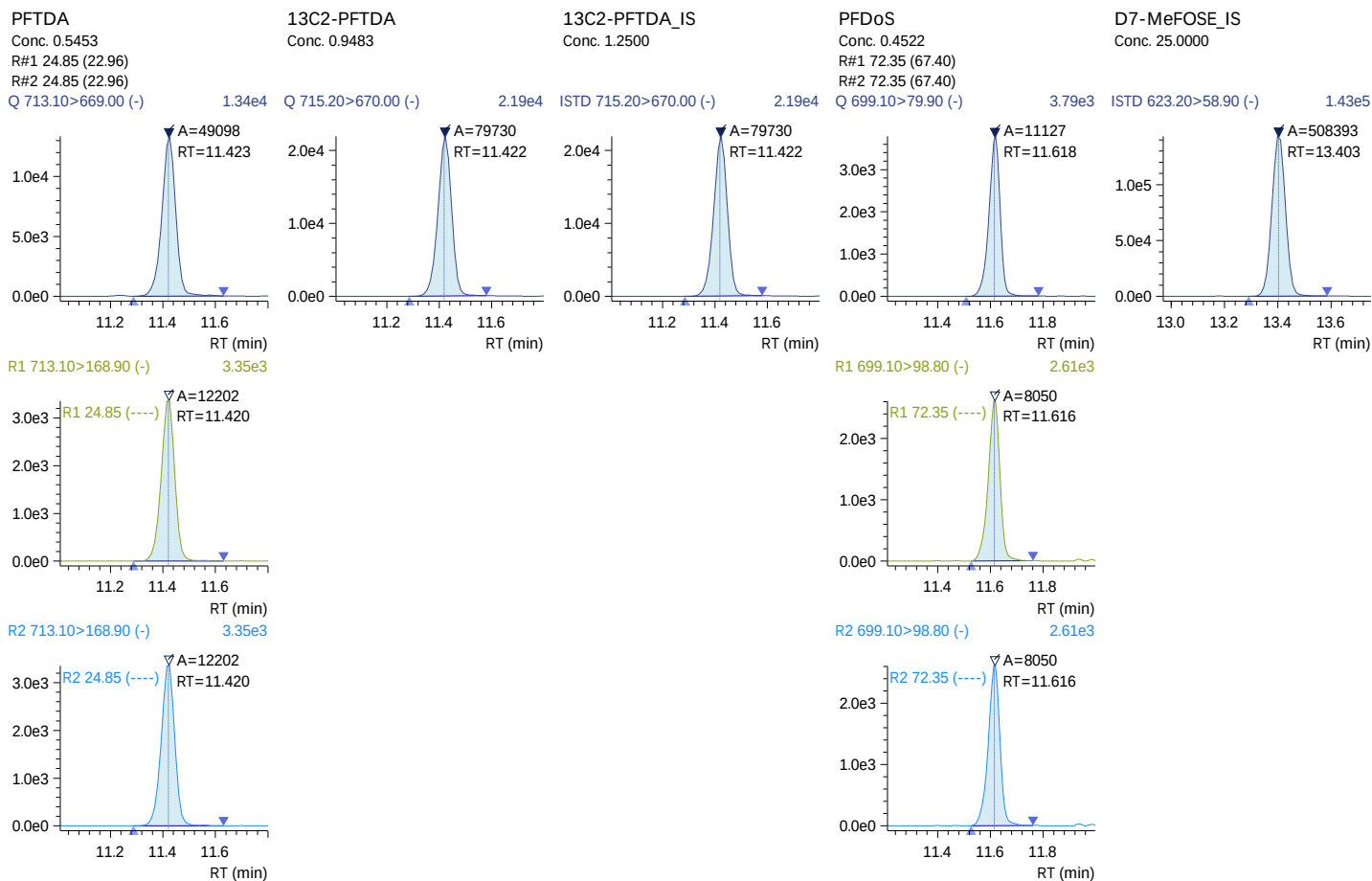


240122_033 (continued)





240122_033 (continued)





240122_033 (continued)

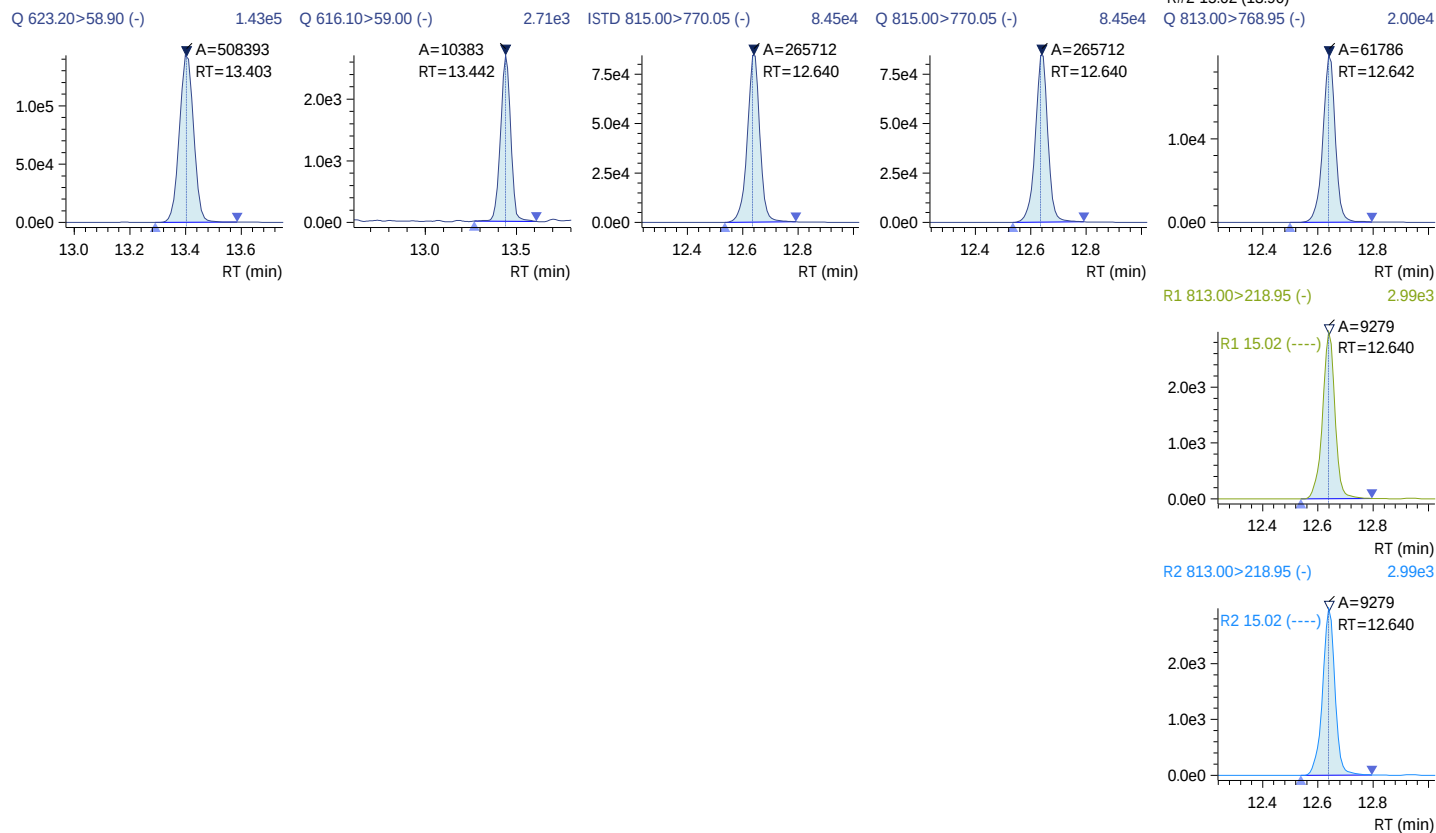
D7-MeFOSE
 Conc. 23.8573

MeFOSE
 Conc. 0.5561

13C2-PFHxDA_IS
 Conc. 2.5000

13C2-PFHxDA
 Conc. 1.6196

PFHxDA
 Conc. 0.5392
 R#1 15.02 (13.90)
 R#2 15.02 (13.90)





240122_033 (continued)

D3-MeFOSA
 Conc. 1.7025

D3-MeFOSA_IS
 Conc. 2.5000

MeFOSA
 Conc. 0.4907
 R#1 127.30 (140.79)
 R#2 127.30 (140.79)

D9-EtFOSE_IS
 Conc. 25.0000

D9-EtFOSE
 Conc. 24.0562

Q 515.00>219.00 (-)

8.64e3

ISTD 515.00>219.00 (-)

8.64e3

Q 511.90>219.00 (-)

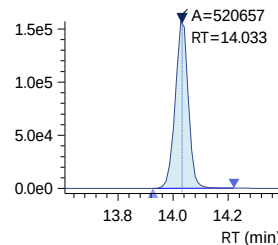
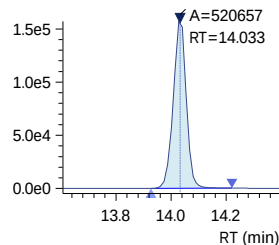
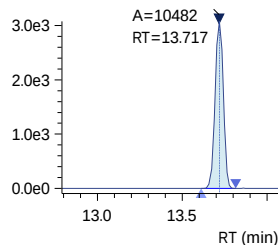
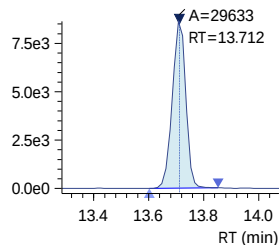
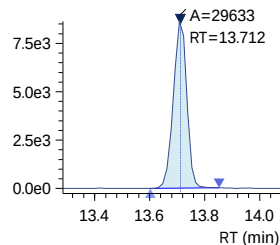
3.08e3

ISTD 639.20>58.90 (-)

1.57e5

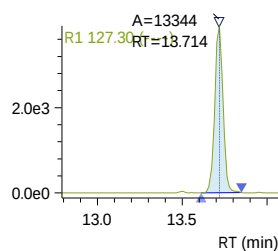
Q 639.20>58.90 (-)

1.57e5



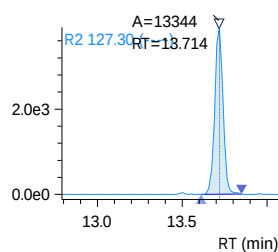
R1 511.90>169.00 (-)

3.92e3



R2 511.90>169.00 (-)

3.92e3





240122_033 (continued)

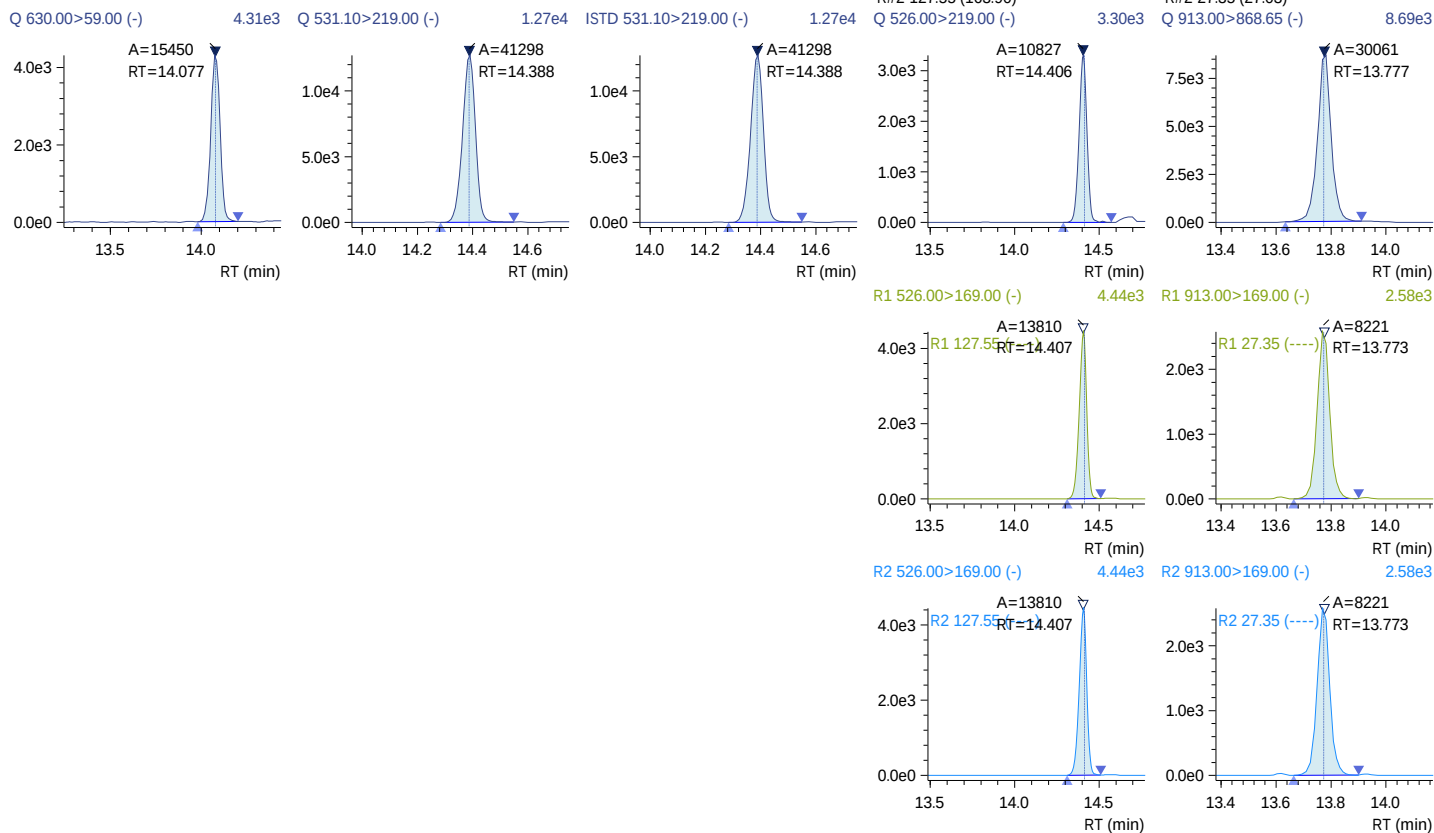
EtFOSE
Conc. 0.5640

D5-EtFOSAm
Conc. 1.7821

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. 0.4503
R#1 127.55 (163.90)
R#2 127.55 (163.90)

PFODA
Conc. 0.5003
R#1 27.35 (27.03)
R#2 27.35 (27.03)



Validation Report

1st *PS* 02/06/24
2nd *MS* 02/06/24

Data File: J:\LCMS08\Data\240201_1633_RA\240201_033
Lab ID: KQ2400483-03
RunType: LCS_LL
Matrix: Water

Date Acquired: 2/1/24 22:46
Batch ID: 831587
Analysis Method: 1633/PFAS_DOD5.4

Validations

Validation Categories	Pass	Fail
Analytical Hold Time	X	
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery	X	
Continuing Calibration Recovery (Closing)		X
Internal Standards	X	
Surrogates	X	
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	

Analyte Exceptions

Only reanalyzed for PFPeA surrogate and assoiated natives

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Continuing Calibration Recovery (Closing)	13C2-6:2 FTS	68	70	130	NR in all samples
	D3-MeFOSAA	68	70	130	
	13C2-8:2 FTS	65	70	130	
	13C2-4:2 FTS	68	70	130	
	D5-EtFOSAA	69	70	130	

Primary Review: _____

Secondary Review: _____

Quantitation Report

1st *PS* 02/06/24
2nd *MS* 02/06/24

Data File:	J:\LCMS08\Data\240201_1633_RA\240201_033	Instrument:	K-LCMS-08
Acqu Date:	2/1/24 22:46	Vial:	10
Run Type:	LCS_LL	Dilution:	1
Lab ID:	KQ2400483-03	Raw Units:	ng/mL

Bottle ID:		Tier:	IV	Matrix:	Water
Prod Code:	PFAS_DOD5.4	Collect Date:	12/27/23	Receive Date:	12/28/23

Analysis Lot:	831587	Prep Lot:	432516	Report Group:	KQ2400483
Analysis	1633	Prep Method:	Method		
		Prep Date:	1/11/24		

Title:	Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM	Calibration ID:	KC2400048
		Report List ID:	23868

Internal Standard Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Area Criteria
18O2-PFHxS	7.080	+0.02	219518	2.5000	OK
13C4-PFOS	8.813	+0.01	284956	2.5000	OK
13C3-PFBA	1.411	+0.06	446550	5.0000	OK
13C2-PFHxA	4.976	+0.03	541299	2.5000	OK
13C4-PFOA	7.109	+0.02	41164	2.5000	OK
13C5-PFNA	7.956	+0.01	302317	1.2500	OK
13C2-PFDA	8.720	+0.01	196750	1.2500	OK

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
13C3-PFBS	4.640	+0.04	244697	2.9876	120	40 - 135	N
13C3-PFHxS	7.079	+0.02	203982	2.6512	106	40 - 130	N
13C8-PFOS	8.812	+0.01	91497	2.5514	102	40 - 130	N
13C4-PFBA	1.411	+0.06	743686	11.2392	112	5 - 130	N
13C5-PFPeA	3.496	+0.04	211628	5.4373	109	40 - 130	Y
13C5-PFHxA	4.975	+0.03	410516	2.3495	94	40 - 130	N
13C4-PFHpA	6.153	+0.02	570990	2.5976	104	40 - 130	N
13C8-PFOA	7.109	+0.02	517356	2.6353	105	40 - 130	N
13C9-PFNA	7.955	+0.01	296087	1.3231	106	40 - 130	N
13C6-PFDA	8.719	+0.01	203936	1.2935	103	40 - 130	N
13C7-PFUnDA	9.440	+0.01	225995	1.1535	92	30 - 130	N
13C2-PFDoDA	10.127	+0.01	257455	1.1008	88	10 - 130	N
13C2-PFTeDA	11.415	+0.01	162267	0.9831	79	10 - 130	N
13C2-PFHxDA	12.624	+0.00	339332	1.5361	61	20 - 150	N
13C8-FOSA	11.143	-0.01	173112	1.9124	76	40 - 130	N
D3-MeFOSA	13.679	-0.01	38924	1.6471	66	10 - 130	N
D5-EtFOSA	14.353	-0.01	56748	1.7367	69	10 - 130	N
D7-MeFOSE	13.372	-0.01	439230	18.9018	76	10 - 130	N

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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			1st	02/06/24
Data File:	J:\LCMS08\Data\240201_1633_RA\240201_033	Instrument:	K-LCMS08	02/06/24
Acqu Date:	2/1/24 22:46	Vial:	10	
Run Type:	LCS_LL	Dilution:	1	
Lab ID:	KQ2400483-03	Raw Units:	ng/mL	

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
D9-EtFOSE	13.999	-0.01	519683	18.2754	73	10 - 130	N
D3-MeFOSAA	8.854	+0.01	396453	3.4171	68	40 - 170	N
D5-EtFOSAA	9.185	+0.01	304278	3.3278	67	25 - 135	N
13C2-4:2 FTS	4.660	+0.03	167060	4.0429	81	40 - 200	N
13C2-6:2 FTS	6.792	+0.01	166633	3.8737	77	40 - 200	N
13C2-8:2 FTS	8.410	+0.01	129503	3.5460	71	40 - 300	N
13C3-HFPO-DA	5.449	+0.02	615919	12.8395	128	40 - 130	N

Target Compounds

Final Conc.Units: ng/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Perfluorobutane sulfonic acid (PFBS)	4.641	+0.04	66288	0.5467	10.9		N
Perfluoropentane sulfonic acid (PFPeS)	6.011	+0.03	56815	0.7037	14.1		N
Perfluorohexane sulfonic acid (PFHxS)	7.079	+0.02	55835	0.6262	12.5		N
Perfluoroheptane sulfonic acid (PFHpS)	7.999	+0.02	47647	0.6194	12.4		N
Perfluorooctane sulfonic acid (PFOS)	8.814	+0.01	42209	0.5401	10.8		N
Perfluorononane sulfonic acid (PFNS)	9.574	+0.01	47351	0.6115	12.2		N
Perfluorodecane sulfonic acid (PFDS)	10.286	+0.01	36233	0.5328	10.7		N
Perfluorododecane sulfonic acid (PFDoS)	11.606	+0.01	20062	0.4731	9.46		N
Perfluorobutanoic acid (PFBA)	1.413	+0.06	46897	0.6659	13.3		N
Perfluoropentanoic acid (PFPeA)	3.498	+0.04	89258	0.6024	12.0		Y
Perfluorohexanoic acid (PFHxA)	4.977	+0.03	90941	0.5889	11.8		N
Perfluoroheptanoic acid (PFHpA)	6.155	+0.02	127955	0.6432	12.9		N
Perfluorooctanoic acid (PFOA)	7.109	+0.02	114072	0.5883	11.8		N
Perfluorononanoic acid (PFNA)	7.957	+0.01	115038	0.5791	11.6		N
Perfluorodecanoic acid (PFDA)	8.720	+0.01	98426	0.5707	11.4		N
Perfluoroundecanoic acid (PFUnDA)	9.442	+0.01	104844	0.6601	13.2		N
Perfluorododecanoic acid (PFDOA)	10.128	+0.01	82759	0.6148	12.3		N
Perfluorotridecanoic acid (PFTTrDA)	10.785	+0.01	113008	0.6850	13.7		N
Perfluorotetradecanoic acid (PFTDA)	11.416	+0.01	76597	0.6601	13.2		N
Perfluorohexadecanoic acid (PFHXDA)	12.626	+0.00	121706	0.6637	13.3		N
Perfluorooctadecanoic acid (PFODA)	13.760	+0.00	34638	0.5008	10.0		N
Perfluorooctane sulfonamide (PFOSAm)	11.143	0.00	39460	0.6515	13.0		N
N-Methylperfluorooctane sulfonamide (MeFOSA)	13.686	-0.01	10646	0.4793	9.59		N
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	14.373	-0.01	14410	0.4629	9.26		N
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	13.409	-0.01	13287	0.6074	12.1		N
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	14.042	-0.01	15037	0.5961	11.9		N

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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			1st	PS	02/06/24
Data File:	J:\LCMS08\Data\240201_1633_RA\240201_033	Instrument:	K-LCMS08	MS	02/06/24
Acqu Date:	2/1/24 22:46	Vial:	10		
Run Type:	LCS_LL	Dilution:	1		
Lab ID:	KQ2400483-03	Raw Units:	ng/mL		

<i>Target Compounds</i>		Final Conc.Units: ng/L				
Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q Rpt?
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	8.860	+0.01	39736	0.7079	14.2	N
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	9.196	+0.01	33899	0.6784	13.6	N
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	4.660	+0.03	47409	0.5725	11.5	N
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	6.793	+0.02	36148	0.5689	11.4	N
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	8.411	+0.01	28726	0.5819	11.6	N
1H, 1H, 2H, 2H-perfluorododecane sulfonic acid (10:2 FTS)	9.815	+0.01	33177	0.5072	10.1	N
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	3.008	+0.05	41166	13.5799	272	Y
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	5.890	+0.02	177439	14.4596	289	N
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	7.944	+0.01	296098	13.7317	275	N
Perfluoro(2-ethoxyethane) sulfonic acid (PFEEESA)	5.314	+0.03	373489	0.7323	14.6	N
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	9.376	+0.01	261145	0.4324	8.65	N
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	10.795	+0.01	178385	0.4138	8.28	N
Perfluoro-3-methoxypropanoic acid (PFMPA)	2.442	+0.06	30974	0.5126	10.3	Y
Perfluoro-4-methoxybutanoic acid (PFMBA)	4.022	+0.04	57779	0.6239	12.5	Y
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	5.451	+0.02	38241	0.6314	12.6	N
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	4.833	+0.03	52430	0.6157	12.3	N
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	6.518	+0.02	224627	0.4326	8.65	N
Prep Amount:	250 mL	Dilution:	1			
Prep Final Amount:	5.00 mL	Basis Factor:	100.00			



240201_033

Sample ID: KQ2400483-04
Date Acquired: 2/1/2024 10:46:41 PM
Acquired by: System Administrator
Data File: 240201_033
Vial: 11 | Inj. Volume: 10.0000uL | Tray: 2

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	743686	----	----	----	----	----	----	
13C4-PFBA_IS	216.80>171.90	----	743686	----	----	----	----	----	----	
13C3-PFBA_IS	216.00>172.00	----	446550	----	----	----	----	----	----	
PFBA	212.80>169.05	----	46897	----	----	----	----	----	----	
PFMPA	229.00>84.90	----	30974	----	----	----	----	----	----	
3_3 FTCA	241.00>177.10	241.00>117.00	41166	61176	148.61	139.21	----	----	----	
13C5-PFPeA	268.30>223.00	----	211628	----	----	----	----	----	----	
13C5-PFPeA_IS	268.30>223.00	----	211628	----	----	----	----	----	----	
PFPeA	263.00>219.00	----	89258	----	----	----	----	----	----	
PFMBA	279.00>84.95	----	57779	----	----	----	----	----	----	
13C2-4_2 FTS	329.10>80.90	----	167060	----	----	----	----	----	----	
13C2-4_2 FTS_IS	329.10>80.90	----	167060	----	----	----	----	----	----	
4_2 FTS	327.10>307.00	327.10>80.90	47409	15902	33.54	32.10	15902	33.54	32.79	
13C3-PFBS_IS	302.10>79.90	----	244697	----	----	----	----	----	----	
PFBS	298.70>79.90	298.70>98.80	66288	30041	45.32	44.81	30041	45.32	46.72	
13C3-PFBS	302.10>79.90	----	244697	----	----	----	----	----	----	
NFDHA	295.00>201.00	295.00>84.90	52430	18017	34.37	35.54	18017	34.37	37.91	
13C5-PFHxA	318.00>273.00	----	410516	----	----	----	----	----	----	
13C5-PFHxA_IS	318.00>273.00	----	410516	----	----	----	----	----	----	
13C2-PFHxA_IS	315.10>270.00	----	541299	----	----	----	----	----	----	
PFHxA	313.00>269.00	----	90941	----	----	----	----	----	----	
PFEESA	314.80>135.00	314.80>82.90	373489	19473	5.21	5.22	19473	5.21	5.35	AC
13C3-HFPO-DA	286.90>168.90	----	615919	----	----	----	----	----	----	
13C3-HFPO-DA_IS	286.90>168.90	----	615919	----	----	----	----	----	----	
HFPO-DA	284.90>168.90	284.90>184.90	38241	23052	60.28	59.79	23052	60.28	58.32	
5_3 FTCA	341.00>237.05	341.00>217.00	177439	276146	155.63	157.08	276146	155.63	155.87	
PFPeS	349.10>79.90	349.10>98.80	56815	29400	51.75	55.12	29400	51.75	54.87	AC
13C4-PFHpA	367.10>322.00	----	570990	----	----	----	----	----	----	
13C4-PFHpA_IS	367.10>322.00	----	570990	----	----	----	----	----	----	
PFHpA	363.10>319.00	363.10>169.00	127955	26688	20.86	23.02	26688	20.86	20.91	
DONA	376.90>250.90	376.90>84.80	224627	62088	27.64	27.50	62088	27.64	27.00	
13C2-6_2 FTS_IS	429.10>80.90	----	166633	----	----	----	----	----	----	
13C2-6_2 FTS	429.10>80.90	----	166633	----	----	----	----	----	----	
6_2 FTS	427.10>407.00	427.10>80.90	36148	18353	50.77	50.47	18353	50.77	46.83	
13C4-PFOA_IS	417.10>172.00	----	41164	----	----	----	----	----	----	
13C8-PFOA_IS	421.10>376.00	----	517356	----	----	----	----	----	----	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240201_033 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	517356	----	----	----	----	----	----	----
PFOA	413.00>369.00	413.00>169.00	114072	28959	25.39	28.77	28959	25.39	28.12	
13C3-PFHxS	402.10>79.90	----	203982	----	----	----	----	----	----	----
13C3-PFHxS_IS	402.10>79.90	----	203982	----	----	----	----	----	----	----
PFHxS	398.70>79.90	398.70>98.90	55835	31302	56.06	60.90	31302	56.06	61.53	
18O2-PFHxS_IS	403.00>83.90	----	219518	----	----	----	----	----	----	----
13C9-PFNA_IS	472.10>427.00	----	296087	----	----	----	----	----	----	----
13C9-PFNA	472.10>427.00	----	296087	----	----	----	----	----	----	----
13C5-PFNA_IS	468.00>423.00	----	302317	----	----	----	----	----	----	----
PFNA	463.00>419.00	463.00>219.00	115038	23664	20.57	19.31	23664	20.57	20.30	
PFHpS	449.00>79.90	449.00>98.80	47647	25615	53.76	52.44	25615	53.76	52.33	
7_3 FTCA	441.00>317.00	441.00>336.90	296098	415685	140.39	129.46	415685	140.39	129.73	
13C2-8_2-FTS	529.10>80.90	----	129503	----	----	----	----	----	----	----
13C2-8_2-FTS_IS	529.10>80.90	----	129503	----	----	----	----	----	----	----
8_2 FTS	527.10>506.95	527.10>80.80	28726	13921	48.46	45.98	13921	48.46	43.25	
13C6-PFDA_IS	519.10>474.10	----	203936	----	----	----	----	----	----	----
13C6-PFDA	519.10>474.10	----	203936	----	----	----	----	----	----	----
13C2-PFDA_IS	515.10>470.10	----	196750	----	----	----	----	----	----	----
PFDA	512.90>469.00	512.90>219.00	98426	17575	17.86	17.88	17575	17.86	18.89	
D3-NMeFOSAA_IS	573.20>419.00	----	396453	----	----	----	----	----	----	----
D3-NMeFOSAA	573.20>419.00	----	396453	----	----	----	----	----	----	----
13C8-PFOS_IS	507.10>98.90	----	91497	----	----	----	----	----	----	----
13C8-PFOS	507.10>98.90	----	91497	----	----	----	----	----	----	----
13C4-PFOS_IS	502.80>79.90	----	284956	----	----	----	----	----	----	----
PFOS	498.90>79.90	498.90>98.80	42209	23171	54.90	53.60	23171	54.90	52.29	
NMeFOSAA	570.10>419.00	570.10>483.00	39736	26413	66.47	64.89	26413	66.47	60.97	AC
D5-NEtFOSAA_IS	589.20>419.00	----	304278	----	----	----	----	----	----	----
D5-NEtFOSAA	589.20>419.00	----	304278	----	----	----	----	----	----	----
NEtFOSAA	584.20>419.10	584.20>526.00	33899	26452	78.03	96.07	26452	78.03	94.54	
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	261145	76701	29.37	30.95	76701	29.37	30.61	
PFUnDA	563.10>519.00	563.10>269.10	104844	13429	12.81	11.01	13429	12.81	12.02	
13C7-PFUnDA_IS	570.00>525.10	----	225995	----	----	----	----	----	----	----
13C7-PFUnDA	570.00>525.10	----	225995	----	----	----	----	----	----	----
PFNS	548.80>79.90	548.80>98.80	47351	27837	58.79	60.44	27837	58.79	58.51	
10_2 FTS	626.80>607.05	626.80>81.00	33177	11185	33.71	36.14	11185	33.71	33.04	
13C2-PFDOA_IS	615.10>570.00	----	257455	----	----	----	----	----	----	----
13C2-PFDOA	615.10>570.00	----	257455	----	----	----	----	----	----	----
PFDOA	613.10>569.00	613.10>319.00	82759	7883	9.53	10.16	7883	9.53	10.60	
PFDS	599.00>79.90	599.00>98.80	36233	22121	61.05	58.26	22121	61.05	61.78	
PFTrDA	663.00>619.00	663.00>168.90	113008	15996	14.16	16.18	15996	14.16	14.85	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240201_033 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	178385	61145	34.28	34.99	61145	34.28	34.39	
PFOSAm	498.10>77.90	----	39460	----	----	----	----	----	----	AC
13C8-PFOSAm	506.10>77.80	----	173112	----	----	----	----	----	----	
13C8-PFOSAm_IS	506.10>77.80	----	173112	----	----	----	----	----	----	
PFTDA	713.10>669.00	713.10>168.90	76597	13586	17.74	18.05	13586	17.74	17.39	
13C2-PFTDA	715.20>670.00	----	162267	----	----	----	----	----	----	
13C2-PFTDA_IS	715.20>670.00	----	162267	----	----	----	----	----	----	
PFDoS	699.10>79.90	699.10>98.80	20062	12906	64.33	61.13	12906	64.33	62.47	
D7-MeFOSE_IS	623.20>58.90	----	439230	----	----	----	----	----	----	
D7-MeFOSE	623.20>58.90	----	439230	----	----	----	----	----	----	
MeFOSE	616.10>59.00	----	13287	----	----	----	----	----	----	
13C2-PFHxDA_IS	815.00>770.05	----	339332	----	----	----	----	----	----	
13C2-PFHxDA	815.00>770.05	----	339332	----	----	----	----	----	----	
PFHxDA	813.00>768.95	813.00>218.95	121706	13134	10.79	11.66	13134	10.79	10.99	
D3-MeFOSA	515.00>219.00	----	38924	----	----	----	----	----	----	
D3-MeFOSA_IS	515.00>219.00	----	38924	----	----	----	----	----	----	
MeFOSA	511.90>219.00	511.90>169.00	10646	12378	116.26	160.44	12378	116.26	161.92	
D9-EtFOSE_IS	639.20>58.90	----	525997	----	----	----	----	----	----	
D9-EtFOSE	639.20>58.90	----	519683	----	----	----	----	----	----	
EtFOSE	630.00>59.00	----	15037	----	----	----	----	----	----	
D5-EtFOSAm	531.10>219.00	----	56748	----	----	----	----	----	----	
D5-EtFOSAm_IS	531.10>219.00	----	56748	----	----	----	----	----	----	
EtFOSAm	526.00>219.00	526.00>169.00	14410	18039	125.19	159.63	18039	125.19	172.60	
PFODA	913.00>868.65	913.00>169.00	34638	12494	36.07	36.03	12494	36.07	35.02	

Flag ID key: AC: Accuracy%



240201_033

Sample ID: KQ2400483-04
Date Acquired: 2/1/2024 10:46:41 PM
Acquired by: System Administrator
Data File: 240201_033
Vial: 11 | Inj. Volume: 10.0000uL | Tray: 2

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.411	0.058	0.000	743686	446550	13C3-PFBA_IS	11.2392	ng/mL	
13C4-PFBA_IS	Auto	1.411	0.058	----	743686	743686	----	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.411	0.056	----	446550	446550	----	5.0000	ng/mL	
PFBA	Auto	1.413	0.057	0.002	46897	743686	13C4-PFBA_IS	0.6659	ng/mL	
PFMPA	Auto	2.442	0.061	-1.054	30974	211628	13C5-PFPeA_IS	0.5126	ng/mL	
3_3 FTCA	Auto	3.008	0.052	-0.488	41166	211628	13C5-PFPeA_IS	13.5799	ng/mL	
13C5-PFPeA	Auto	3.496	0.041	-1.480	211628	541299	13C2-PFHxA_IS	5.4373	ng/mL	
13C5-PFPeA_IS	Auto	3.496	0.041	----	211628	211628	----	5.0000	ng/mL	
PFPeA	Auto	3.498	0.040	0.002	89258	211628	13C5-PFPeA_IS	0.6024	ng/mL	
PFMBA	Auto	4.022	0.038	0.526	57779	211628	13C5-PFPeA_IS	0.6239	ng/mL	
13C2-4_2 FTS	Auto	4.660	0.027	-2.420	167060	219518	18O2-PFHxS_IS	4.0429	ng/mL	
13C2-4_2 FTS_IS	Auto	4.660	0.027	----	167060	167060	----	5.0000	ng/mL	
4_2 FTS	Auto	4.660	0.027	0.000	47409	167060	13C2-4_2 FTS_IS	0.5725	ng/mL	
13C3-PFBS_IS	Auto	4.640	0.037	----	244697	244697	----	2.5000	ng/mL	
PFBS	Auto	4.641	0.036	0.001	66288	244697	13C3-PFBS_IS	0.5467	ng/mL	
13C3-PFBS	Auto	4.640	0.037	-2.440	244697	219518	18O2-PFHxS_IS	2.9876	ng/mL	
NFDHA	Auto	4.833	0.028	-0.142	52430	410516	13C5-PFHxA_IS	0.6157	ng/mL	
13C5-PFHxA	Auto	4.975	0.028	-0.001	410516	541299	13C2-PFHxA_IS	2.3495	ng/mL	
13C5-PFHxA_IS	Auto	4.975	0.028	----	410516	410516	----	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	4.976	0.029	----	541299	541299	----	2.5000	ng/mL	
PFHxA	Auto	4.977	0.028	0.002	90941	410516	13C5-PFHxA_IS	0.5889	ng/mL	
PFEESA	Auto	5.314	0.032	0.339	373489	410516	13C5-PFHxA_IS	0.7323	ng/mL	AC
13C3-HFPO-DA	Auto	5.449	0.024	0.473	615919	541299	13C2-PFHxA_IS	12.8395	ng/mL	
13C3-HFPO-DA_IS	Auto	5.449	0.024	----	615919	615919	----	10.0000	ng/mL	
HFPO-DA	Auto	5.451	0.024	0.002	38241	615919	13C3-HFPO-DA_IS	0.6314	ng/mL	
5_3 FTCA	Auto	5.890	0.022	0.915	177439	410516	13C5-PFHxA_IS	14.4596	ng/mL	
PFPeS	Auto	6.011	0.023	-1.068	56815	203982	13C3-PFHxS_IS	0.7037	ng/mL	AC
13C4-PFHpA	Auto	6.153	0.021	1.177	570990	541299	13C2-PFHxA_IS	2.5976	ng/mL	
13C4-PFHpA_IS	Auto	6.153	0.021	----	570990	570990	----	2.5000	ng/mL	
PFHpA	Auto	6.155	0.021	0.002	127955	570990	13C4-PFHpA_IS	0.6432	ng/mL	
DONA	Auto	6.518	0.017	1.069	224627	615919	13C3-HFPO-DA_IS	0.4326	ng/mL	
13C2-6_2 FTS_IS	Auto	6.792	0.014	----	166633	166633	----	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.792	0.014	-0.288	166633	219518	18O2-PFHxS_IS	3.8737	ng/mL	
6_2 FTS	Auto	6.793	0.016	0.001	36148	166633	13C2-6_2 FTS_IS	0.5689	ng/mL	
13C4-PFOA_IS	Auto	7.109	0.018	----	41164	41164	----	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.109	0.018	----	517356	517356	----	2.5000	ng/mL	
13C8-PFOA	Auto	7.109	0.018	0.000	517356	41164	13C4-PFOA_IS	2.6353	ng/mL	
PFOA	Auto	7.109	0.016	0.000	114072	517356	13C8-PFOA_IS	0.5883	ng/mL	
13C3-PFHxS	Auto	7.079	0.017	-0.001	203982	219518	18O2-PFHxS_IS	2.6512	ng/mL	
13C3-PFHxS_IS	Auto	7.079	0.017	----	203982	203982	----	2.5000	ng/mL	
PFHxS	Auto	7.079	0.017	0.000	55835	203982	13C3-PFHxS_IS	0.6262	ng/mL	
18O2-PFHxS_IS	Auto	7.080	0.018	----	219518	219518	----	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.955	0.014	----	296087	296087	----	1.2500	ng/mL	
13C9-PFNA	Auto	7.955	0.014	-0.001	296087	302317	13C5-PFNA_IS	1.3231	ng/mL	
13C5-PFNA_IS	Auto	7.956	0.014	----	302317	302317	----	1.2500	ng/mL	
PFNA	Auto	7.957	0.014	0.002	115038	296087	13C9-PFNA_IS	0.5791	ng/mL	
PFHpS	Auto	7.999	0.016	-0.813	47647	91497	13C8-PFOS_IS	0.6194	ng/mL	
7_3 FTCA	Auto	7.944	0.016	2.969	296098	410516	13C5-PFHxA_IS	13.7317	ng/mL	
13C2-8_2-FTS	Auto	8.410	0.011	1.330	129503	219518	18O2-PFHxS_IS	3.5460	ng/mL	
13C2-8_2-FTS_IS	Auto	8.410	0.011	----	129503	129503	----	5.0000	ng/mL	
8_2 FTS	Auto	8.411	0.013	0.001	28726	129503	13C2-8_2-FTS_IS	0.5819	ng/mL	
13C6-PFDA_IS	Auto	8.719	0.012	----	203936	203936	----	1.2500	ng/mL	
13C6-PFDA	Auto	8.719	0.012	-0.001	203936	196750	13C2-PFDA_IS	1.2935	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_033 (continued)

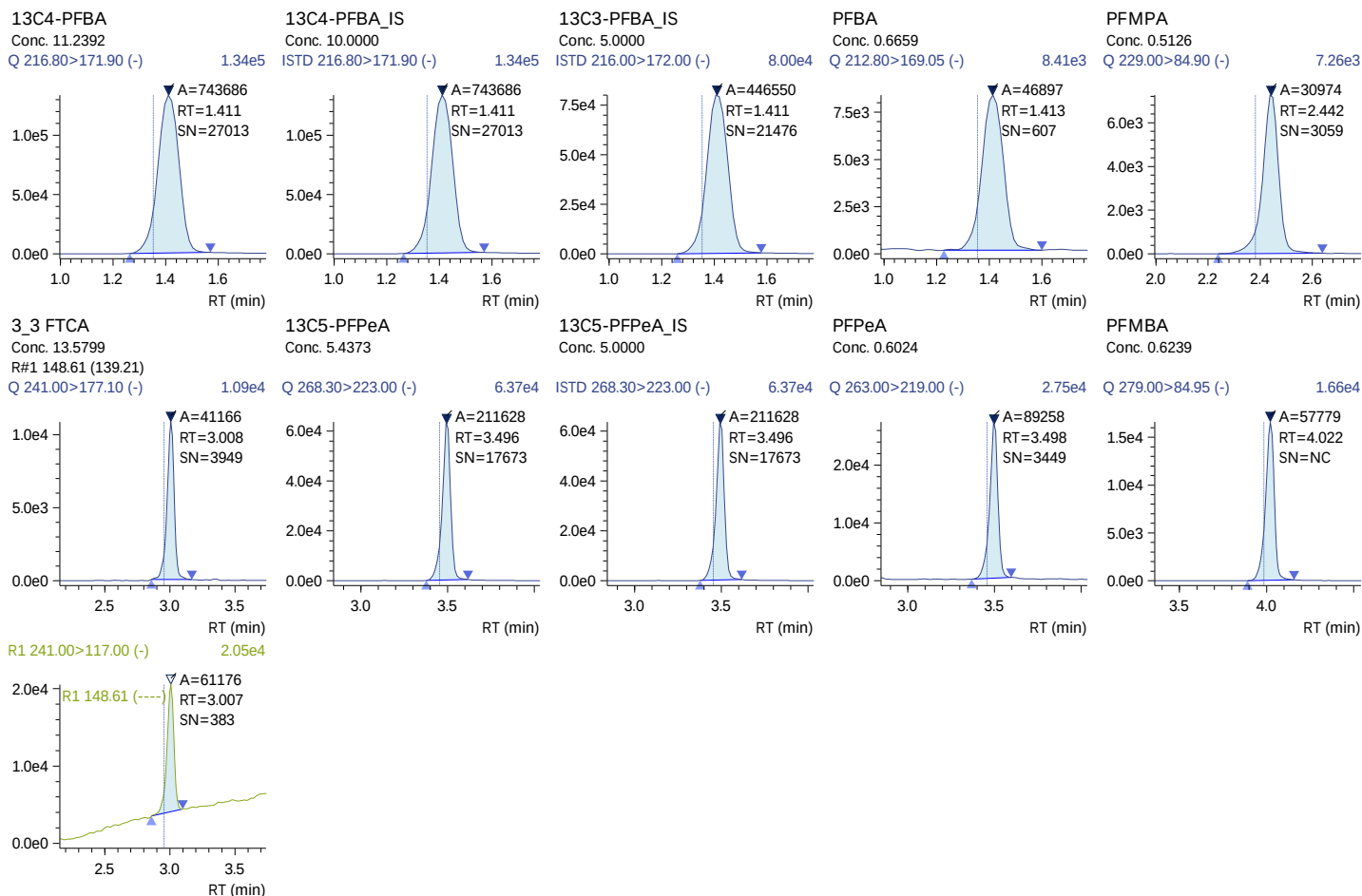
(Table continued from previous page)

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C2-PFDA_IS	Auto	8.720	0.012	----	196750	196750	----	1.2500	ng/mL	
PFDA	Auto	8.720	0.011	0.001	98426	203936	13C6-PFDA_IS	0.5707	ng/mL	
D3-NMeFOSAA_IS	Auto	8.854	0.011	----	396453	396453	----	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.854	0.011	0.041	396453	284956	13C4-PFOS_IS	3.4171	ng/mL	
13C8-PFOS_IS	Auto	8.812	0.012	----	91497	91497	----	2.5000	ng/mL	
13C8-PFOS	Auto	8.812	0.012	-0.001	91497	284956	13C4-PFOS_IS	2.5514	ng/mL	
13C4-PFOS_IS	Auto	8.813	0.013	----	284956	284956	----	2.5000	ng/mL	
PFOS	Auto	8.814	0.013	0.002	42209	91497	13C8-PFOS_IS	0.5401	ng/mL	
NMeFOSAA	M	8.860	0.012	0.006	39736	396453	D3-NMeFOSAA_IS	0.7079	ng/mL	AC
D5-NetFOSAA_IS	Auto	9.185	0.013	----	304278	304278	----	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.185	0.013	0.372	304278	284956	13C4-PFOS_IS	3.3278	ng/mL	
NetFOSAA	M	9.196	0.013	0.011	33899	304278	D5-NetFOSAA_IS	0.6784	ng/mL	
9-CI-PF3ONS	Auto	9.376	0.011	3.927	261145	615919	13C3-HFPO-DA_IS	0.4324	ng/mL	
PFUnDA	Auto	9.442	0.009	0.002	104844	225995	13C7-PFUnDA_IS	0.6601	ng/mL	
13C7-PFUnDA_IS	Auto	9.440	0.010	----	225995	225995	----	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.440	0.010	0.720	225995	196750	13C2-PFDA_IS	1.1535	ng/mL	
PFNS	Auto	9.574	0.012	0.762	47351	91497	13C8-PFOS_IS	0.6115	ng/mL	
10_2_FTS	Auto	9.815	0.009	1.405	33177	129503	13C2-8_2-FTS_IS	0.5072	ng/mL	
13C2-PFDOA_IS	Auto	10.127	0.009	----	257455	257455	----	1.2500	ng/mL	
13C2-PFDOA	Auto	10.127	0.009	1.407	257455	196750	13C2-PFDA_IS	1.1008	ng/mL	
PFDOA	Auto	10.128	0.009	0.001	82759	257455	13C2-PFDOA_IS	0.6148	ng/mL	
PFDS	Auto	10.286	0.010	1.474	36233	91497	13C8-PFOS_IS	0.5328	ng/mL	
PFTDA	Auto	10.785	0.010	-0.630	113008	162267	13C2-PFTDA_IS	0.6850	ng/mL	
11-CI-PF3OUdS	Auto	10.795	0.012	5.346	178385	615919	13C3-HFPO-DA_IS	0.4138	ng/mL	
PFOSAm	Auto	11.143	0.001	0.000	39460	173112	13C8-PFOSAm_IS	0.6515	ng/mL	AC
13C8-PFOSAm	Auto	11.143	0.001	2.330	173112	284956	13C4-PFOS_IS	1.9124	ng/mL	
13C8-PFOSAm_IS	Auto	11.143	0.001	----	173112	173112	----	2.5000	ng/mL	
PFTDA	Auto	11.416	0.008	0.001	76597	162267	13C2-PFTDA_IS	0.6601	ng/mL	
13C2-PFTDA	Auto	11.415	0.009	2.695	162267	196750	13C2-PFDA_IS	0.9831	ng/mL	
13C2-PFTDA_IS	Auto	11.415	0.009	----	162267	162267	----	1.2500	ng/mL	
PFDoS	Auto	11.606	0.007	2.794	20062	91497	13C8-PFOS_IS	0.4731	ng/mL	
D7-MeFOSE_IS	Auto	13.372	-0.008	----	439230	439230	----	25.0000	ng/mL	
D7-MeFOSE	Auto	13.372	-0.008	4.559	439230	284956	13C4-PFOS_IS	18.9018	ng/mL	
MeFOSE	Auto	13.409	-0.008	0.037	13287	439230	D7-MeFOSE_IS	0.6074	ng/mL	
13C2-PFHxDA_IS	Auto	12.624	0.004	----	339332	339332	----	2.5000	ng/mL	
13C2-PFHxDA	Auto	12.624	0.004	3.904	339332	196750	13C2-PFDA_IS	1.5361	ng/mL	
PFHXDA	Auto	12.626	0.005	0.002	121706	339332	13C2-PFHxDA_IS	0.6637	ng/mL	
D3-MeFOSA	Auto	13.679	-0.006	4.866	38924	284956	13C4-PFOS_IS	1.6471	ng/mL	
D3-MeFOSA_IS	Auto	13.679	-0.006	----	38924	38924	----	2.5000	ng/mL	
MeFOSA	M	13.686	-0.008	0.007	10646	38924	D3-MeFOSA_IS	0.4793	ng/mL	
D9-EtFOSE_IS	Auto	13.999	-0.009	----	525997	525997	----	25.0000	ng/mL	
D9-EtFOSE	Auto	13.999	-0.009	5.186	519683	284956	13C4-PFOS_IS	18.2754	ng/mL	
EtFOSE	Auto	14.042	-0.008	0.043	15037	525997	D9-EtFOSE_IS	0.5961	ng/mL	
D5-EtFOSAm	Auto	14.353	-0.008	5.540	56748	284956	13C4-PFOS_IS	1.7367	ng/mL	
D5-EtFOSAm_IS	Auto	14.353	-0.008	----	56748	56748	----	2.5000	ng/mL	
EtFOSAm	Auto	14.373	-0.006	0.020	14410	56748	D5-EtFOSAm_IS	0.4629	ng/mL	
PFODA	Auto	13.760	0.004	1.136	34638	339332	13C2-PFHxDA_IS	0.5008	ng/mL	

Flag ID key: AC: Accuracy%



240201_033 (continued)





240201_033 (continued)

13C2-4_2 FTS
Conc. 4.0429

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. 0.5725
R#1 33.54 (32.10)
R#2 33.54 (32.79)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 0.5467
R#1 45.32 (44.81)
R#2 45.32 (46.72)

Q 329.10>80.90 (-)

5.06e4

ISTD 329.10>80.90 (-)

5.06e4

Q 327.10>307.00 (-)

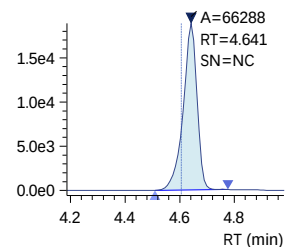
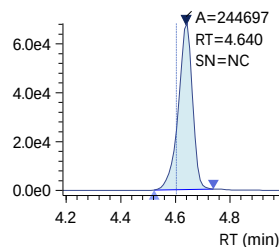
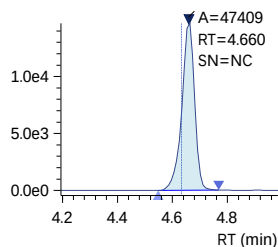
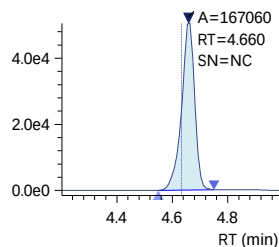
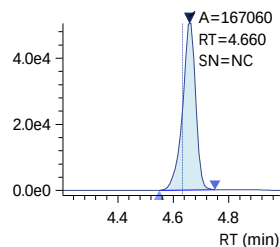
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ISTD 302.10>79.90 (-)

6.84e4

Q 298.70>79.90 (-)

1.89e4

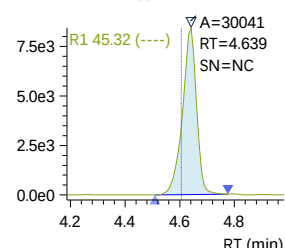
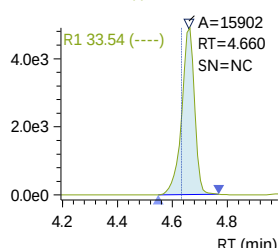


R1 327.10>80.90 (-)

4.91e3

R1 298.70>98.80 (-)

8.44e3

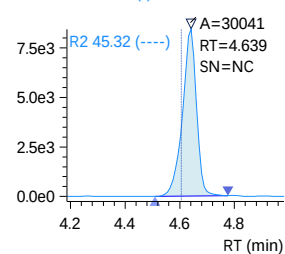
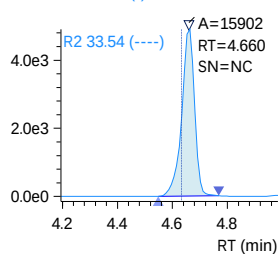


R2 327.10>80.90 (-)

4.91e3

R2 298.70>98.80 (-)

8.44e3





240201_033 (continued)

13C3-PFBS
Conc. 2.9876

NFDHA
Conc. 0.6157
R#1 34.37 (35.54)
R#2 34.37 (37.91)

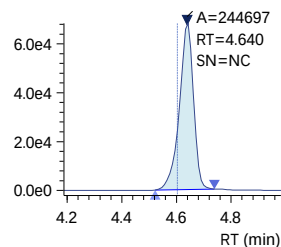
13C5-PFHxA
Conc. 2.3495

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

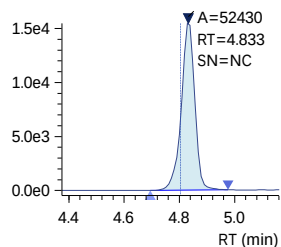
Q 302.10>79.90 (-)

6.84e4



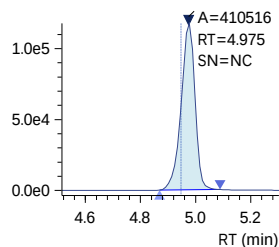
Q 295.00>201.00 (-)

1.55e4



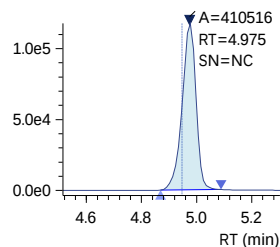
Q 318.00>273.00 (-)

1.18e5



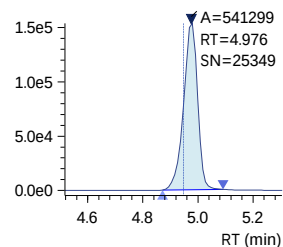
ISTD 318.00>273.00 (-)

1.18e5



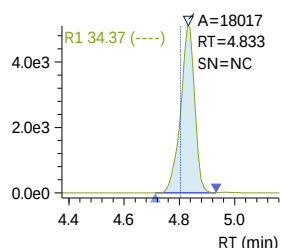
ISTD 315.10>270.00 (-)

1.54e5



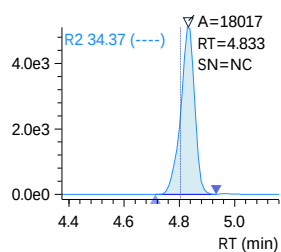
R1 295.00>84.90 (-)

5.10e3



R2 295.00>84.90 (-)

5.10e3





240201_033 (continued)

PFHxA
Conc. 0.5889

PFEESA
Conc. 0.7323
R#1 5.21 (5.22)
R#2 5.21 (5.35)

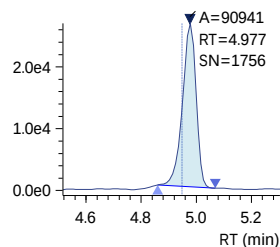
13C3-HFPO-DA
Conc. 12.8395

13C3-HFPO-DA_IS
Conc. 10.0000

HFPO-DA
Conc. 0.6314
R#1 60.28 (59.79)
R#2 60.28 (58.32)

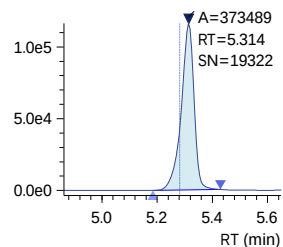
Q 313.00>269.00 (-)

2.71e4



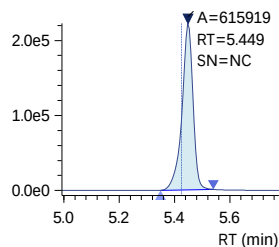
Q 314.80>135.00 (-)

1.16e5



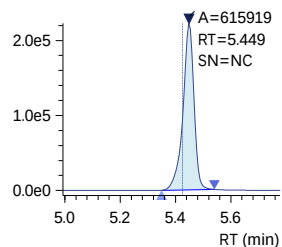
Q 286.90>168.90 (-)

2.23e5



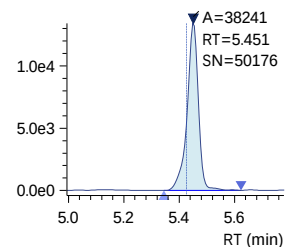
ISTD 286.90>168.90 (-)

2.23e5



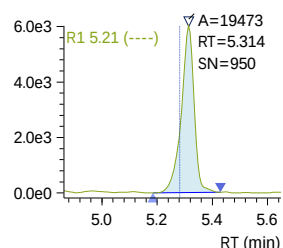
Q 284.90>168.90 (-)

1.34e4



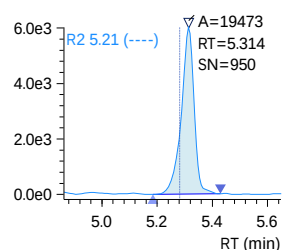
R1 314.80>82.90 (-)

6.03e3



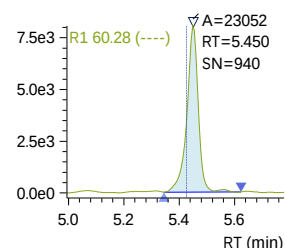
R2 314.80>82.90 (-)

6.03e3



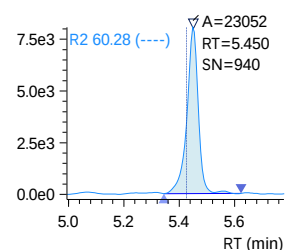
R1 284.90>184.90 (-)

8.08e3



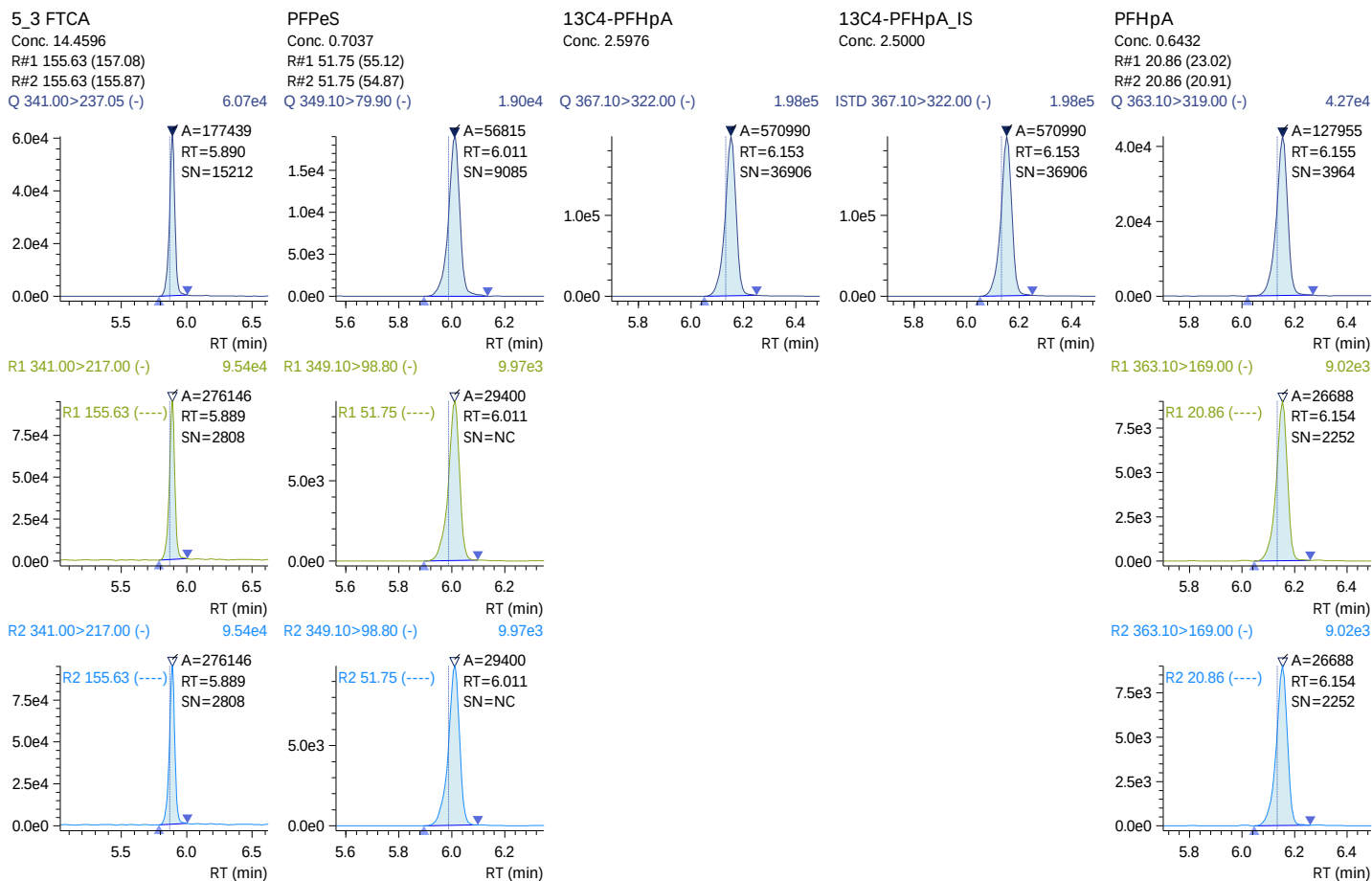
R2 284.90>184.90 (-)

8.08e3





240201_033 (continued)

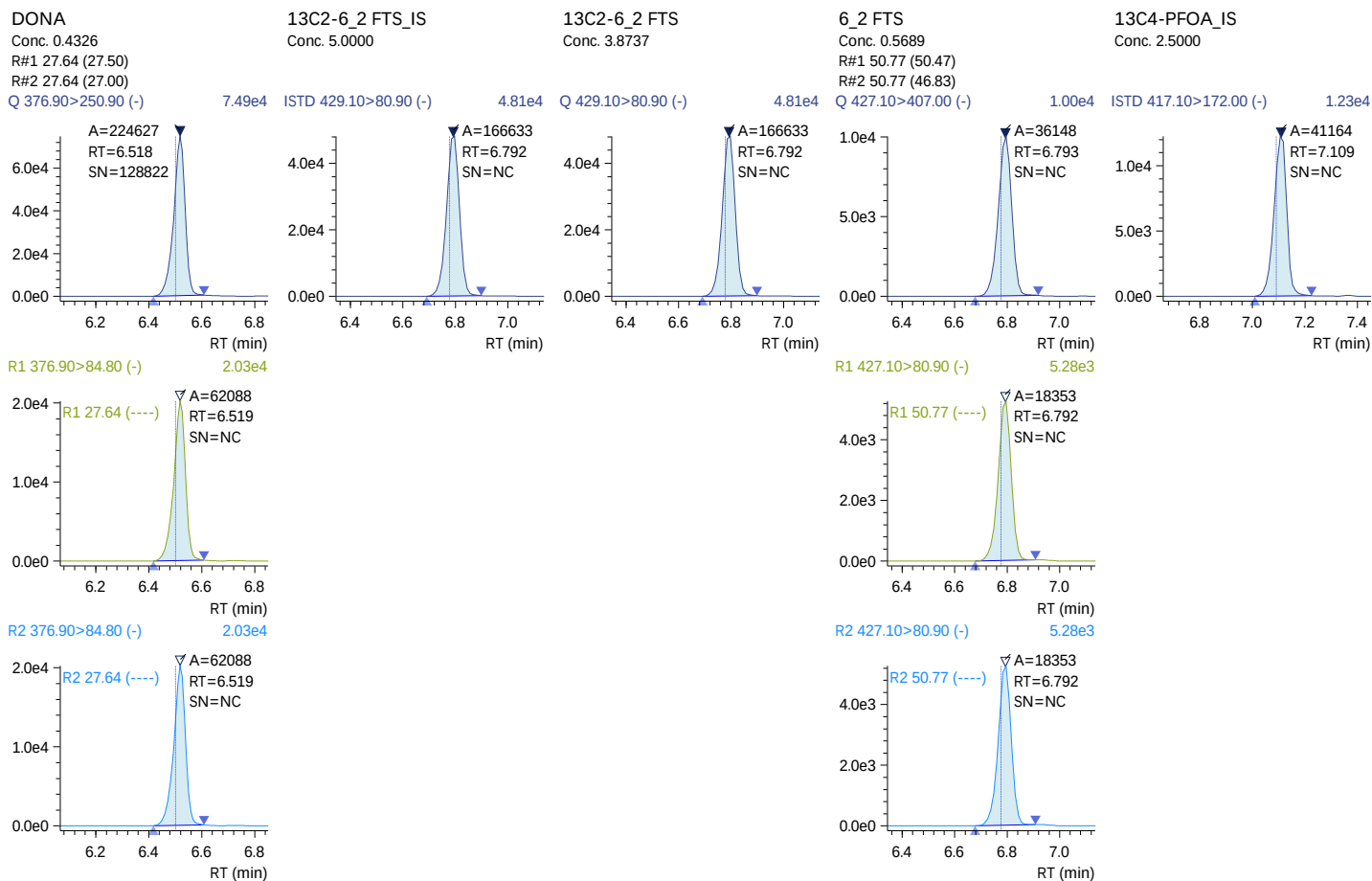


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_033 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_033 (continued)

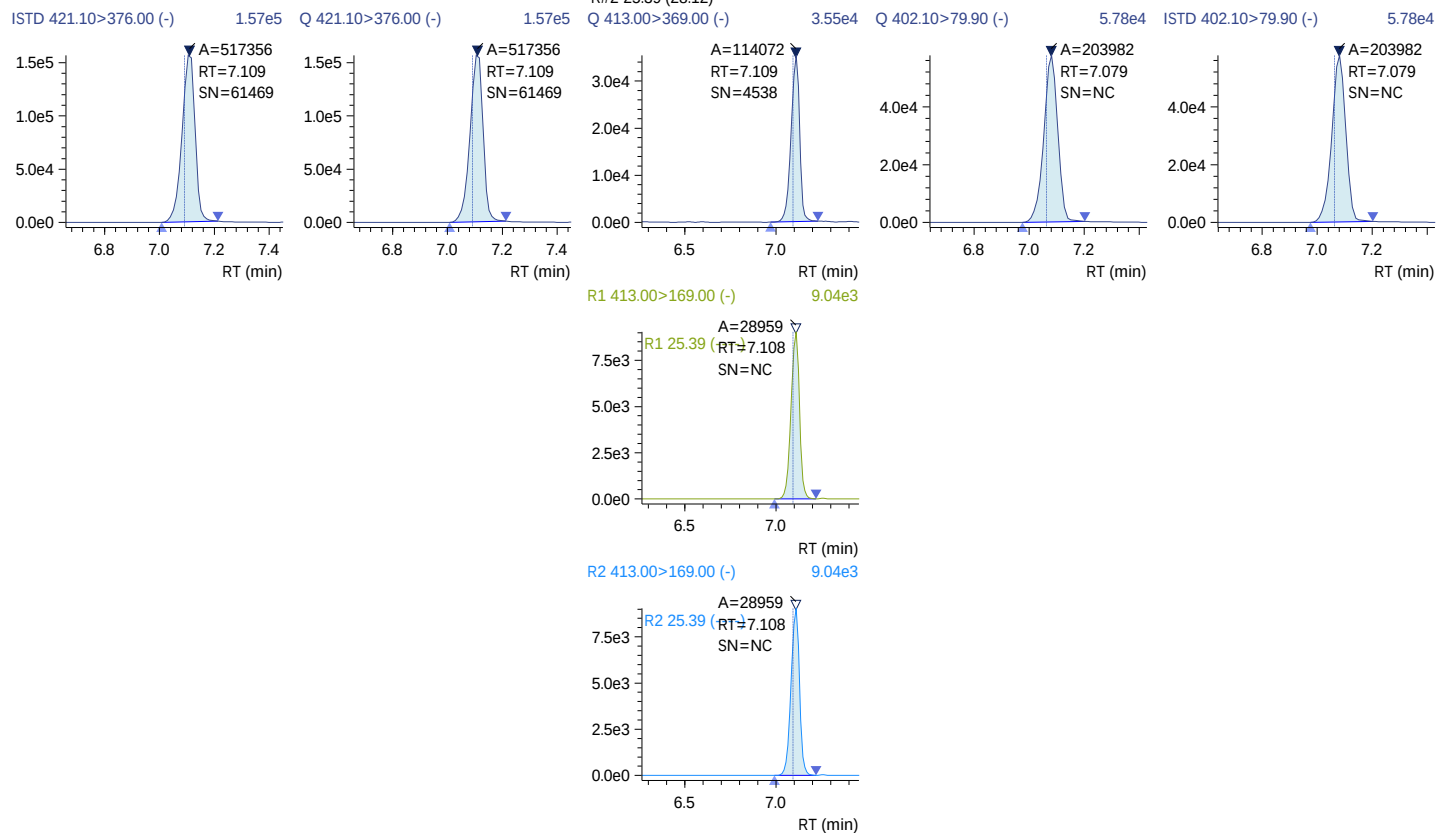
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.6353

PFOA
Conc. 0.5883
R#1 25.39 (28.77)
R#2 25.39 (28.12)

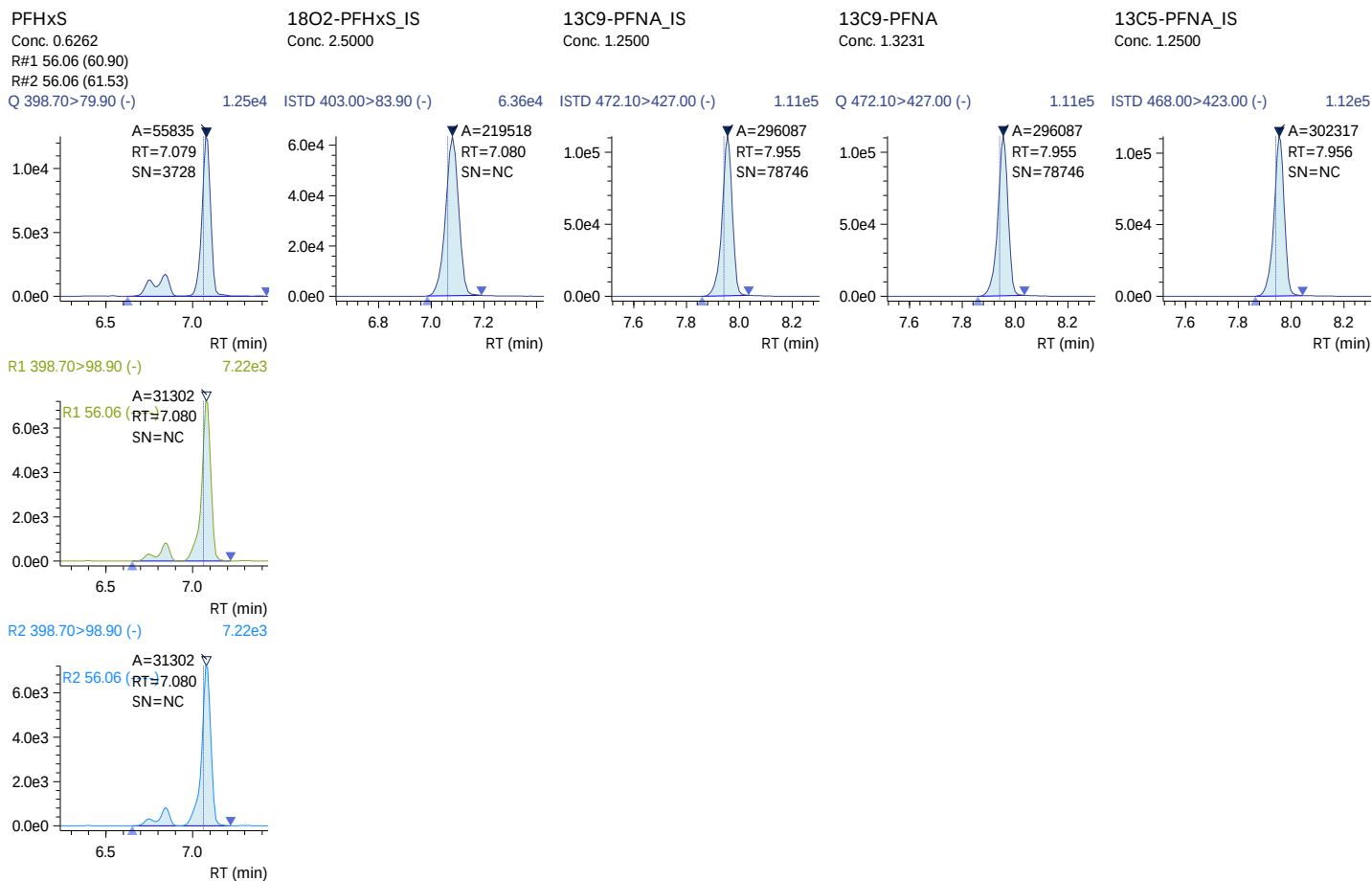
13C3-PFHxS
Conc. 2.6512

13C3-PFHxS_IS
Conc. 2.5000





240201_033 (continued)

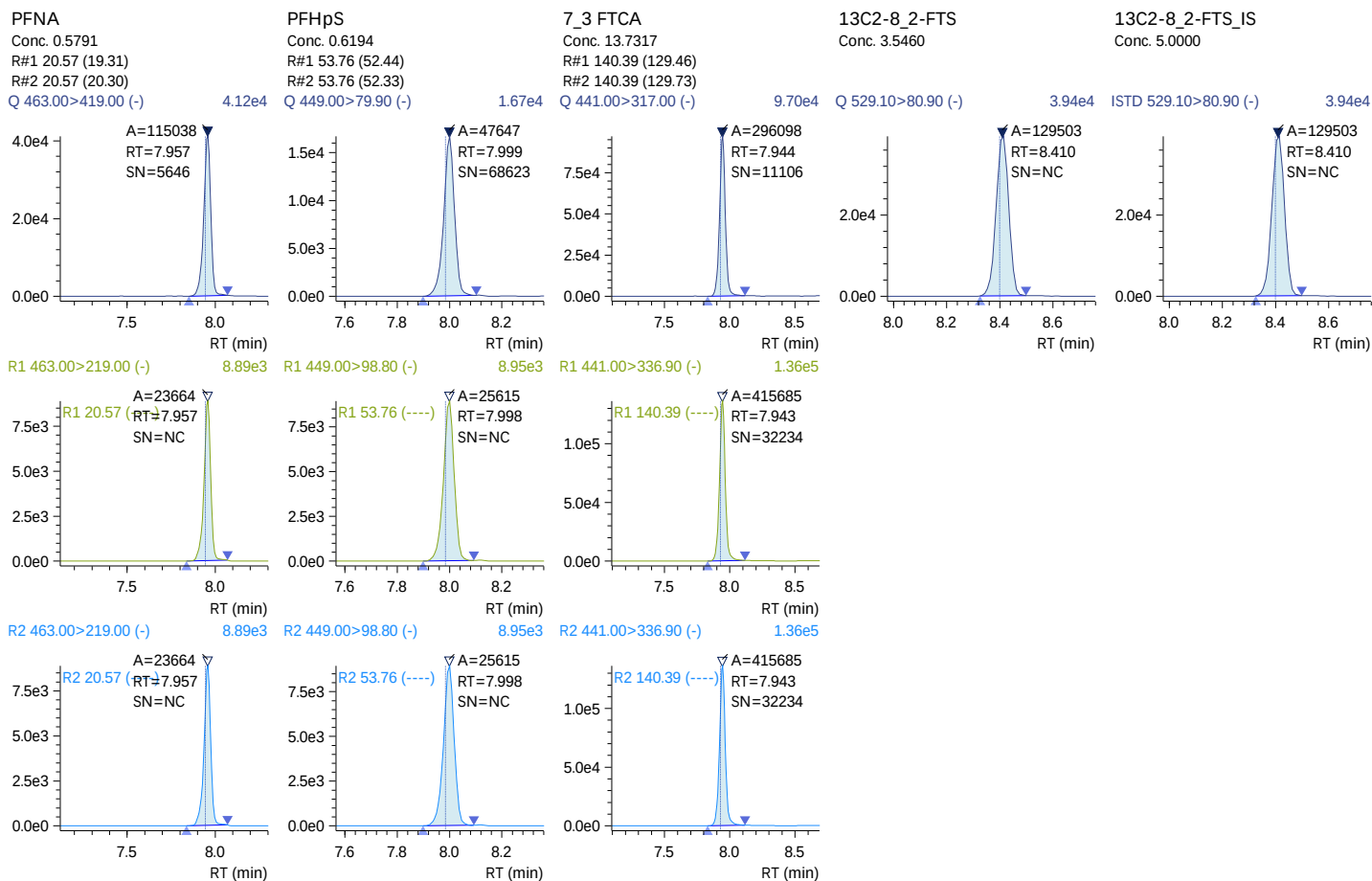


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_033 (continued)

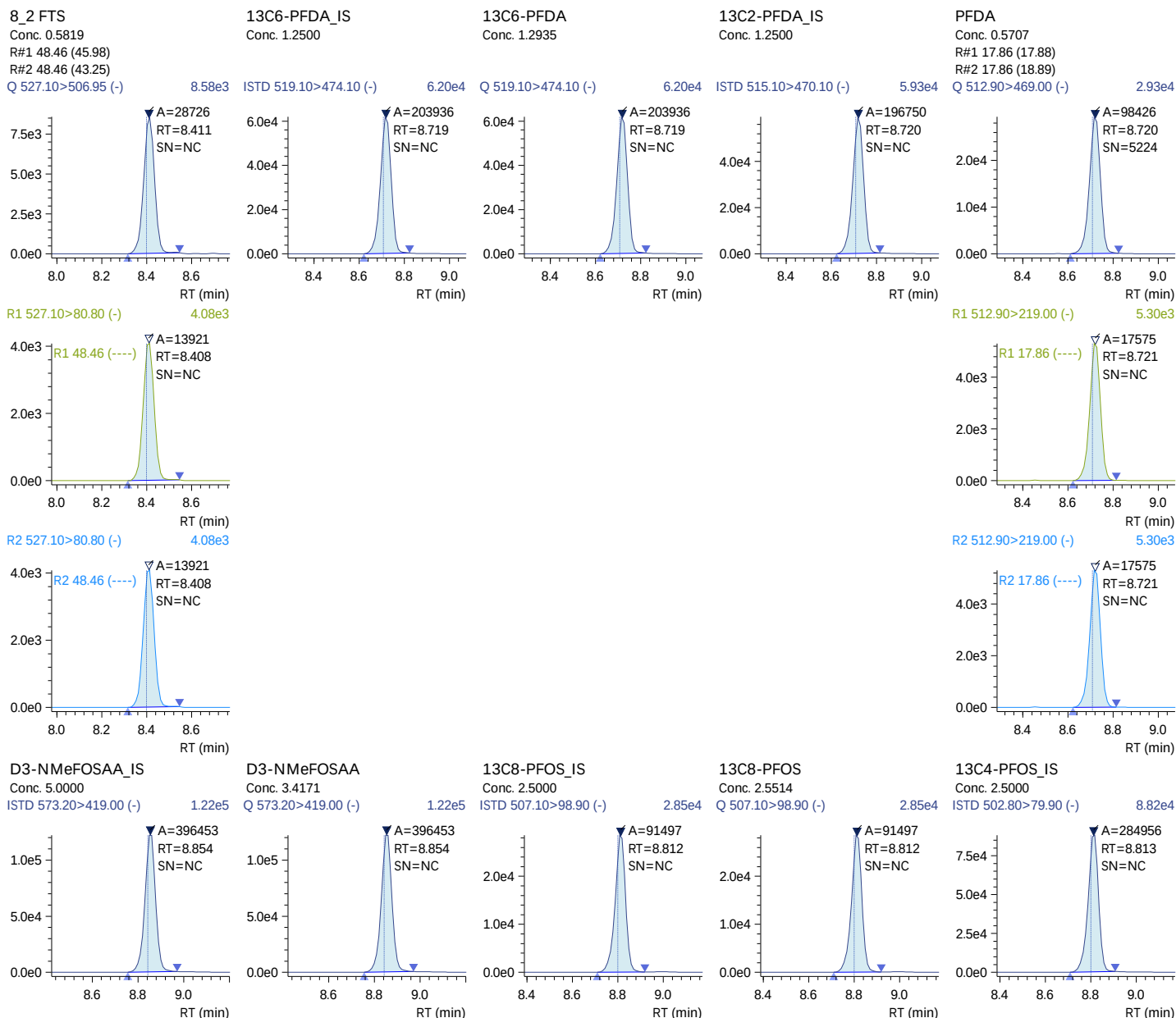


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.

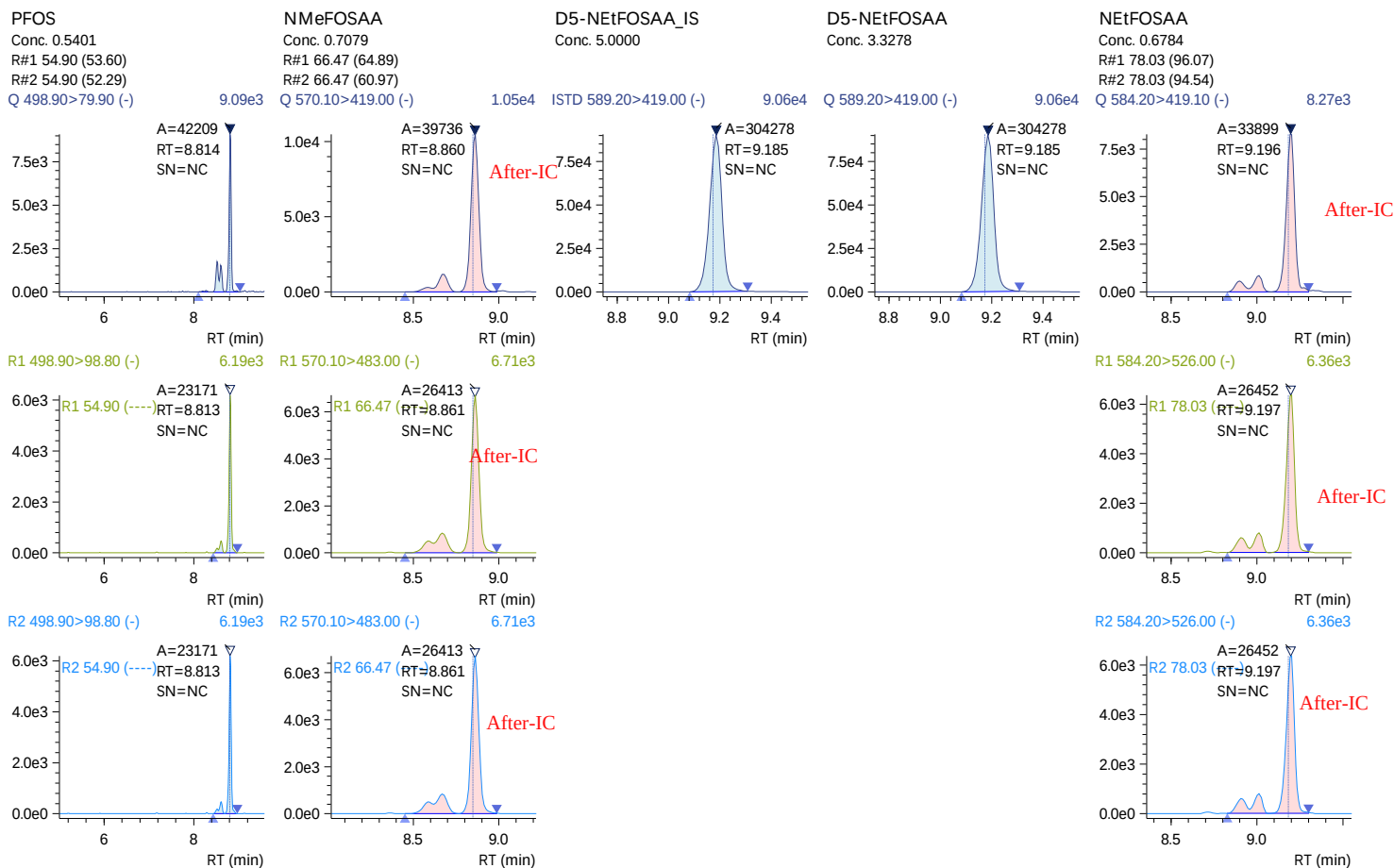


240201_033 (continued)





240201_033 (continued)



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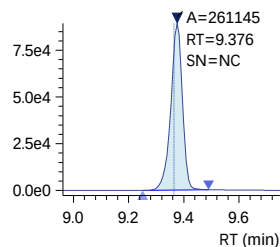
SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



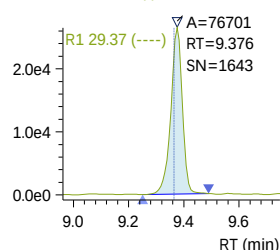
240201_033 (continued)

9-Cl-PF3ONS

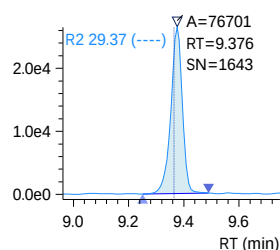
Conc. 0.4324
R#1 29.37 (30.95)
R#2 29.37 (30.61)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-) 2.65e4

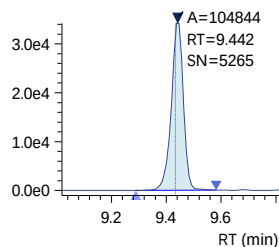


R2 532.80>353.00 (-) 2.65e4

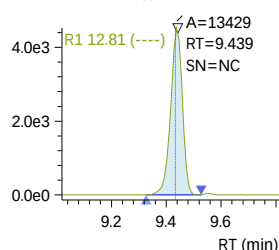


PFUnDA

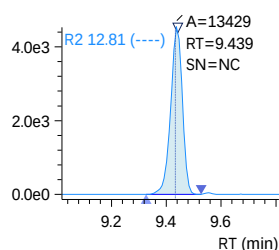
Conc. 0.6601
R#1 12.81 (11.01)
R#2 12.81 (12.02)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-) 4.53e3



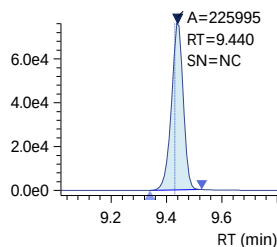
R2 563.10>269.10 (-) 4.53e3



13C7-PFUnDA_IS

Conc. 1.2500

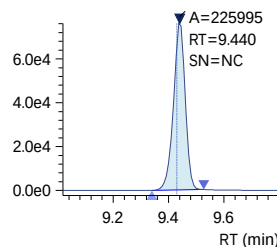
ISTD 570.00>525.10 (-)



13C7-PFUnDA

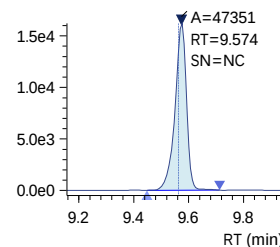
Conc. 1.1535

Q 570.00>525.10 (-)

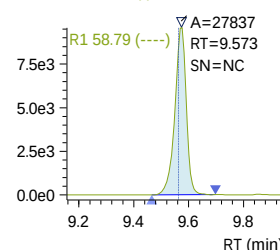


PFNS

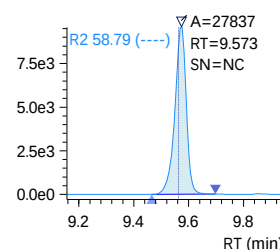
Conc. 0.6115
R#1 58.79 (60.44)
R#2 58.79 (58.51)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-) 9.57e3

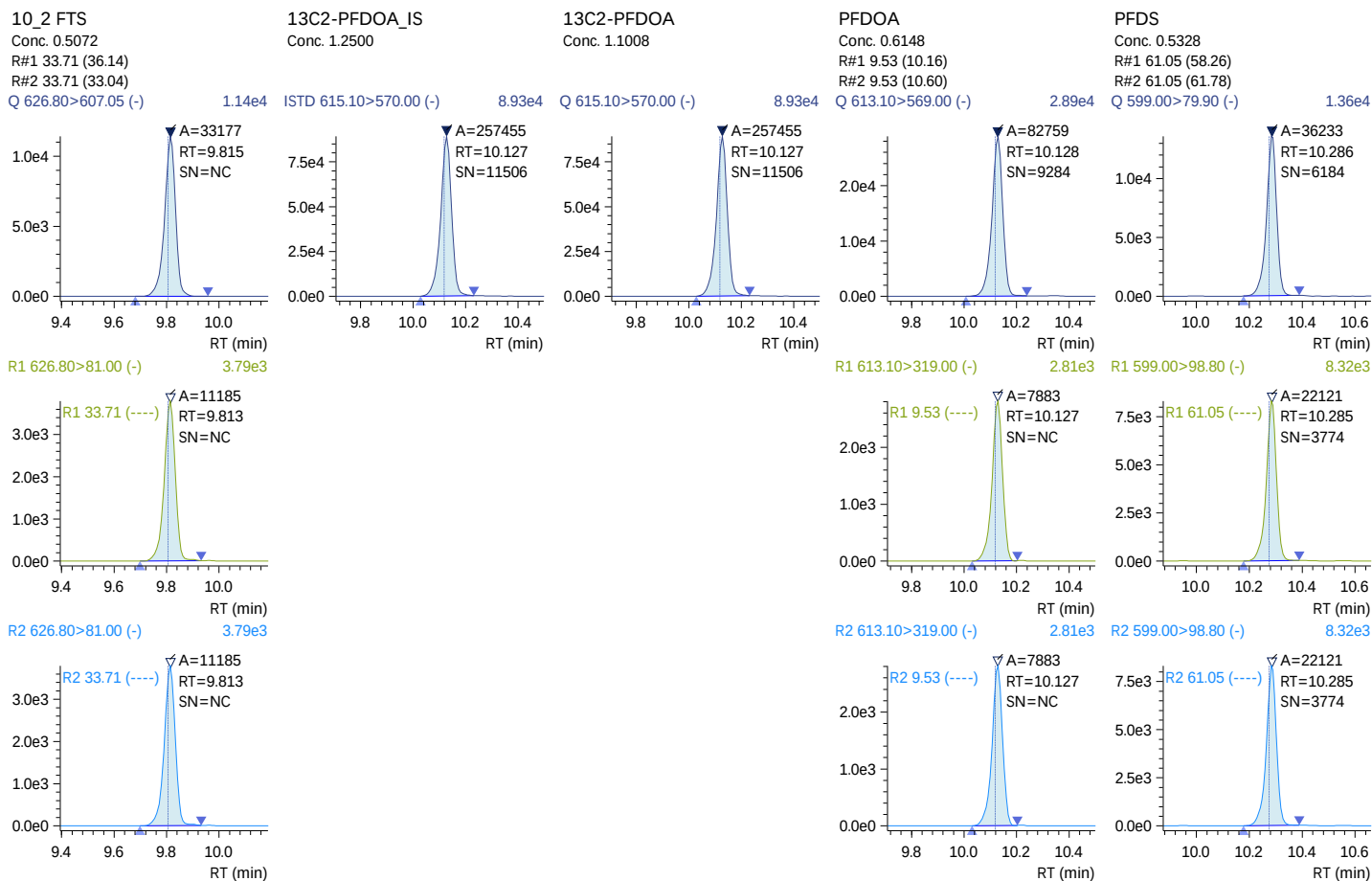


R2 548.80>98.80 (-) 9.57e3





240201_033 (continued)

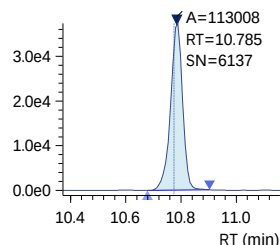




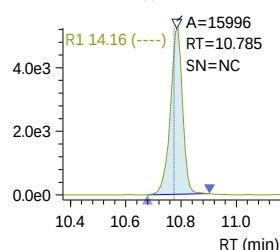
240201_033 (continued)

PFTTrDA

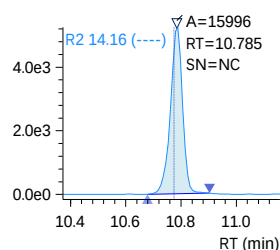
Conc. 0.6850
R#1 14.16 (16.18)
R#2 14.16 (14.85)
Q 663.00>619.00 (-)



R1 663.00>168.90 (-) 5.25e3

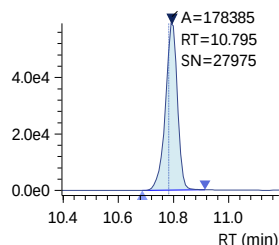


R2 663.00>168.90 (-) 5.25e3

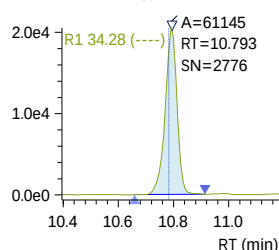


11-CI-PF3OUdS

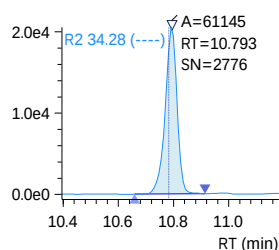
Conc. 0.4138
R#1 34.28 (34.99)
R#2 34.28 (34.39)
Q 630.90>451.00 (-)



R1 632.90>452.90 (-) 2.06e4



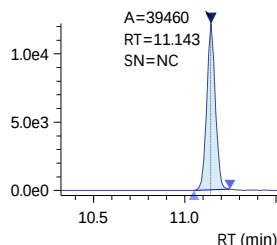
R2 632.90>452.90 (-) 2.06e4



PFOSAm

Conc. 0.6515

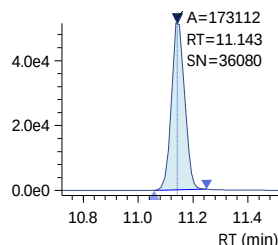
Q 498.10>77.90 (-)



13C8-PFOSAm

Conc. 1.9124

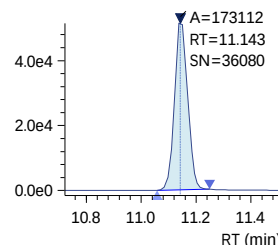
Q 506.10>77.80 (-)



13C8-PFOSAm_IS

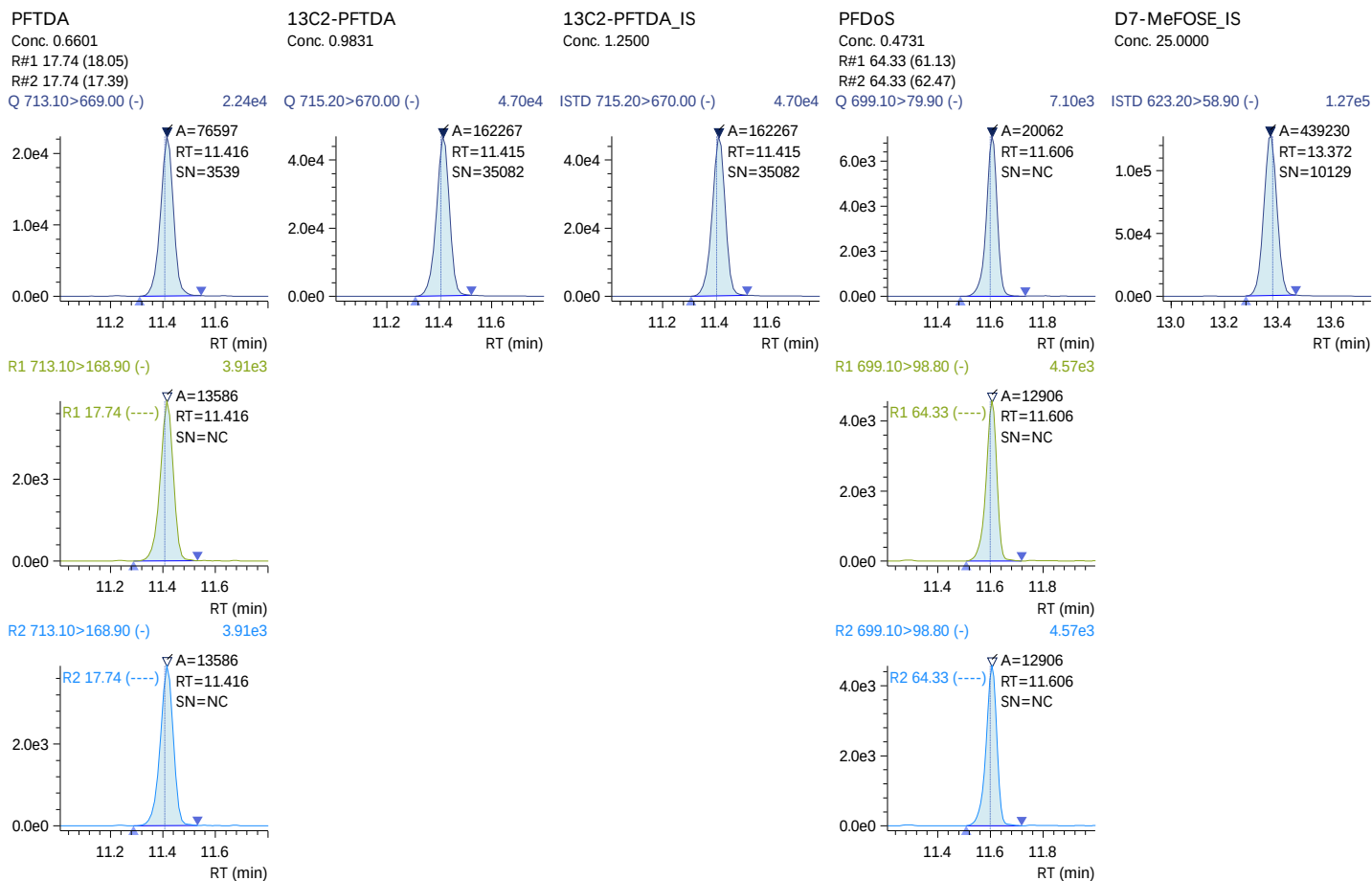
Conc. 2.5000

ISTD 506.10>77.80 (-)





240201_033 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_033 (continued)

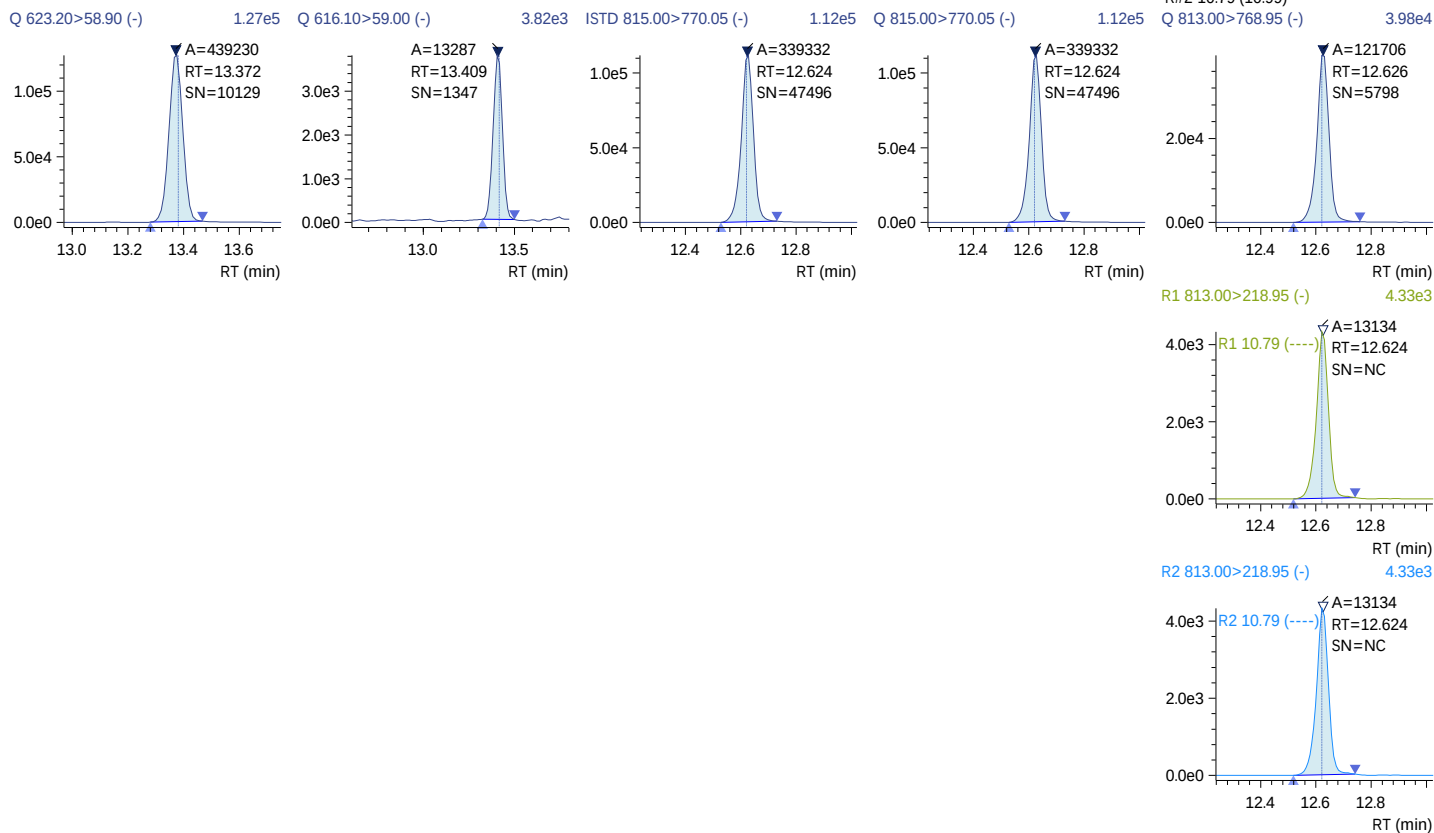
D7-MeFOSE
Conc. 18.9018

MeFOSE
Conc. 0.6074

13C2-PFHxDA_IS
Conc. 2.5000

13C2-PFHxDA
Conc. 1.5361

PFHxDA
Conc. 0.6637
R#1 10.79 (11.66)
R#2 10.79 (10.99)





240201_033 (continued)

D3-MeFOSA
Conc. 1.6471

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. 0.4793
R#1 116.26 (160.44)
R#2 116.26 (161.92)

D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 18.2754

Q 515.00>219.00 (-)

1.12e4

ISTD 515.00>219.00 (-)

1.12e4

Q 511.90>219.00 (-)

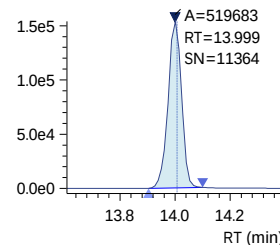
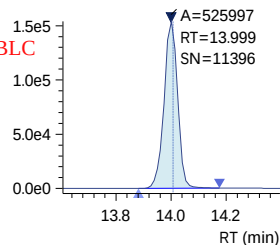
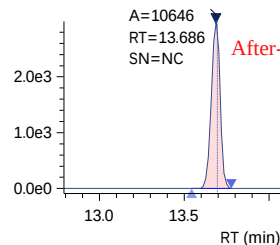
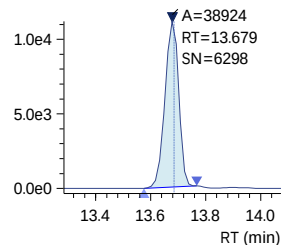
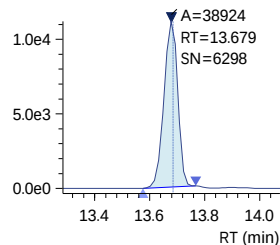
2.99e3

ISTD 639.20>58.90 (-)

1.54e5

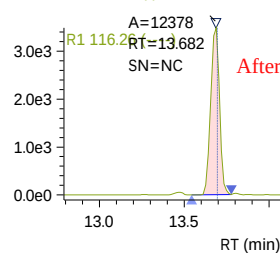
Q 639.20>58.90 (-)

1.54e5



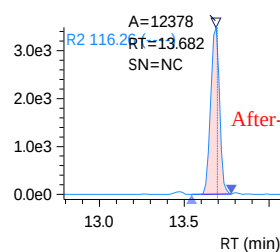
R1 511.90>169.00 (-)

3.49e3



R2 511.90>169.00 (-)

3.49e3





240201_033 (continued)

EtFOSE
Conc. 0.5961

D5-EtFOSAm
Conc. 1.7367

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. 0.4629

PFODA
Conc. 0.5008

Q 630.00>59.00 (-)

4.43e3

Q 531.10>219.00 (-)

1.76e4

ISTD 531.10>219.00 (-)

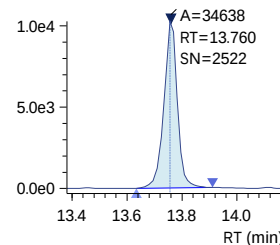
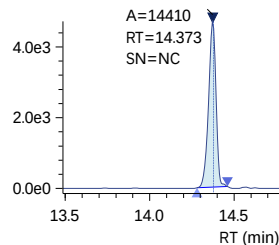
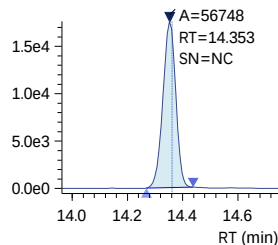
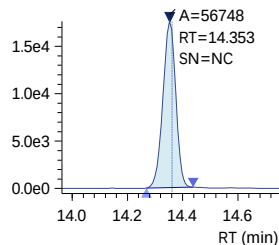
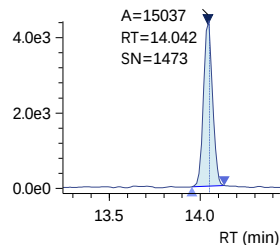
1.76e4

Q 526.00>219.00 (-)

4.72e3

Q 913.00>868.65 (-)

1.03e4

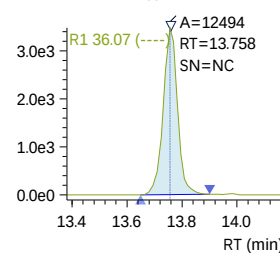
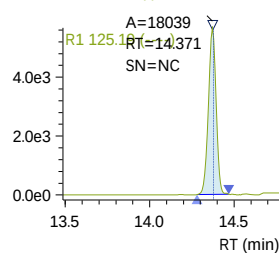


R1 526.00>169.00 (-)

5.68e3

R1 913.00>169.00 (-)

3.48e3

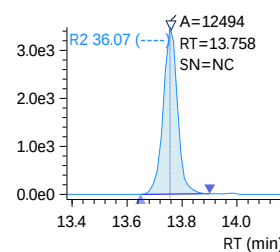
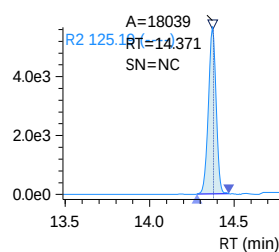


R2 526.00>169.00 (-)

5.68e3

R2 913.00>169.00 (-)

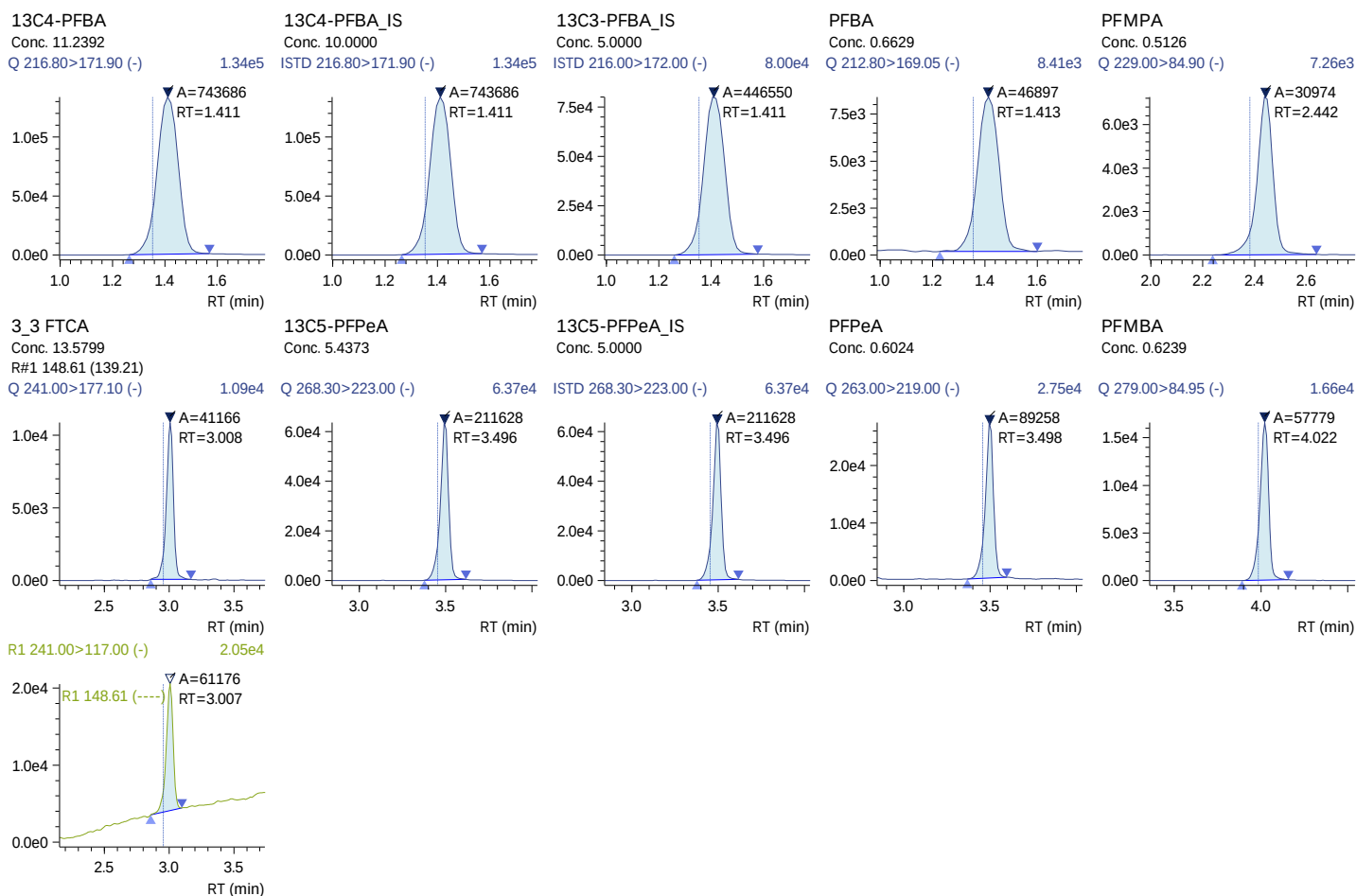
3.48e3





240201_033

Sample ID: KQ2400483-04
Date Acquired: 2/1/2024 10:46:41 PM
Acquired by: System Administrator
Data File: 240201_033
Vial: 11 | Inj. Volume: 10.0000uL | Tray: 2





240201_033 (continued)

13C2-4_2 FTS
 Conc. 4.0429

13C2-4_2 FTS_IS
 Conc. 5.0000

4_2 FTS
 Conc. 0.5725
 R#1 33.54 (32.10)
 R#2 33.54 (32.79)

13C3-PFBS_IS
 Conc. 2.5000

PFBS
 Conc. 0.5467
 R#1 45.32 (44.81)
 R#2 45.32 (46.72)

Q 329.10>80.90 (-)

5.06e4

ISTD 329.10>80.90 (-)

5.06e4

Q 327.10>307.00 (-)

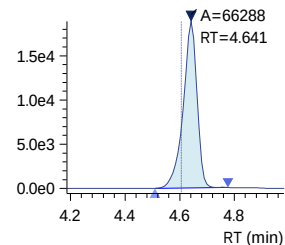
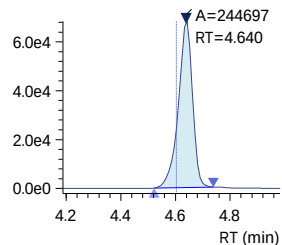
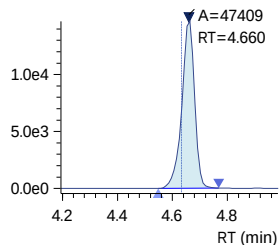
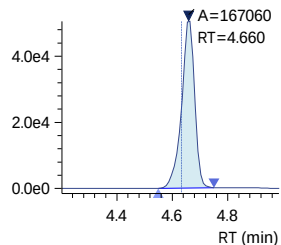
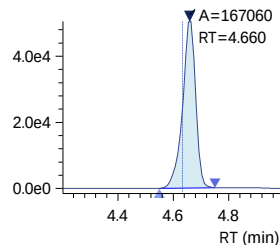
1.47e4

ISTD 302.10>79.90 (-)

6.84e4

Q 298.70>79.90 (-)

1.89e4

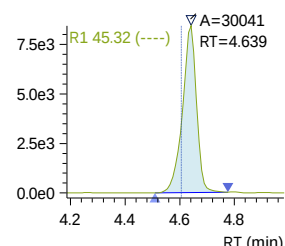
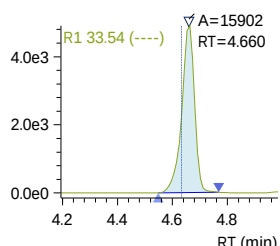


R1 327.10>80.90 (-)

4.91e3

R1 298.70>98.80 (-)

8.44e3

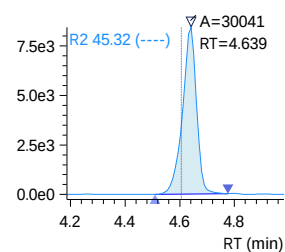
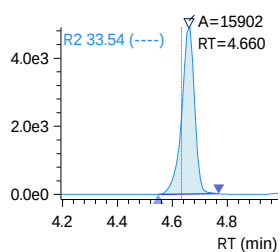


R2 327.10>80.90 (-)

4.91e3

R2 298.70>98.80 (-)

8.44e3





240201_033 (continued)

13C3-PFBS
 Conc. 2.9876

NFDHA
 Conc. 0.6157
 R#1 34.37 (35.54)
 R#2 34.37 (37.91)

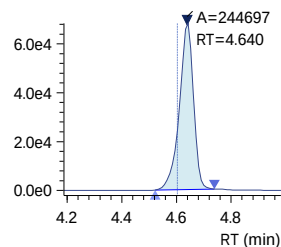
13C5-PFHxA
 Conc. 2.3495

13C5-PFHxA_IS
 Conc. 2.5000

13C2-PFHxA_IS
 Conc. 2.5000

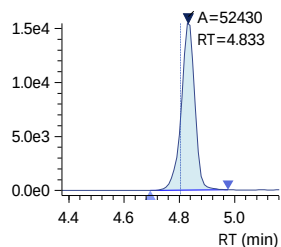
Q 302.10>79.90 (-)

6.84e4



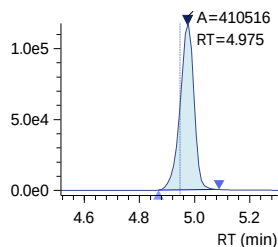
Q 295.00>201.00 (-)

1.55e4



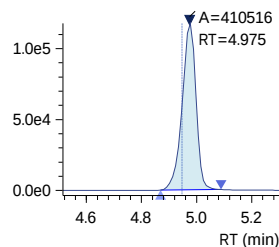
Q 318.00>273.00 (-)

1.18e5



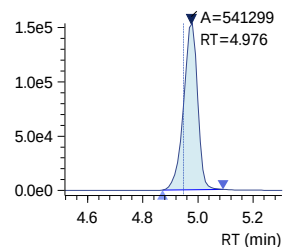
ISTD 318.00>273.00 (-)

1.18e5



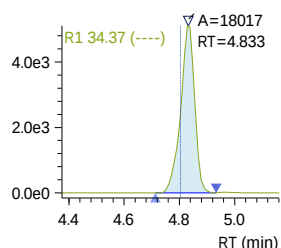
ISTD 315.10>270.00 (-)

1.54e5



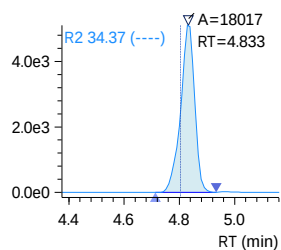
R1 295.00>84.90 (-)

5.10e3



R2 295.00>84.90 (-)

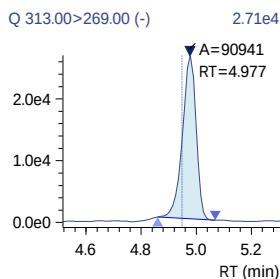
5.10e3





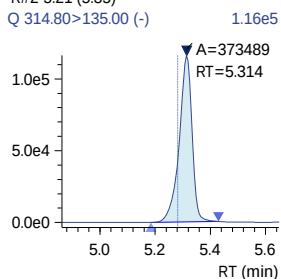
240201_033 (continued)

PFHxA
 Conc. 0.5961

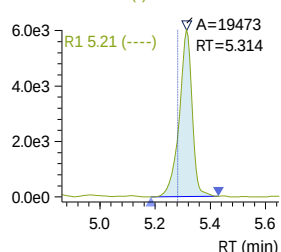


PFEESA
 Conc. 0.7323

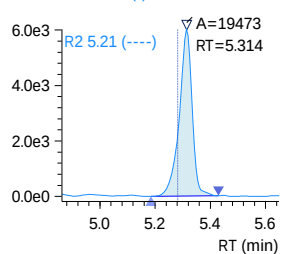
R#1 5.21 (5.22)
 R#2 5.21 (5.35)



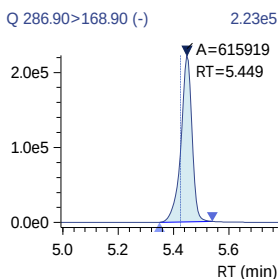
R1 314.80>82.90 (-) 6.03e3



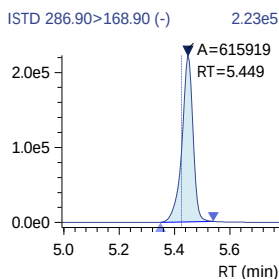
R2 314.80>82.90 (-) 6.03e3



13C3-HFPO-DA
 Conc. 12.8395

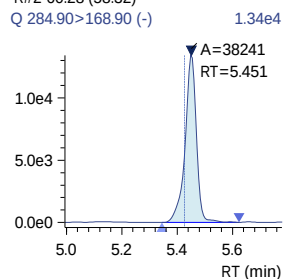


13C3-HFPO-DA_IS
 Conc. 10.0000

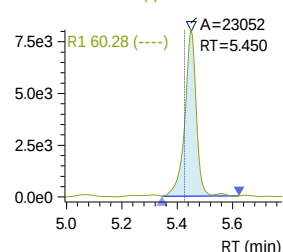


HFPO-DA
 Conc. 0.6314

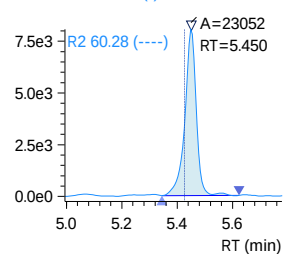
R#1 60.28 (59.79)
 R#2 60.28 (58.32)



R1 284.90>184.90 (-) 8.08e3



R2 284.90>184.90 (-) 8.08e3

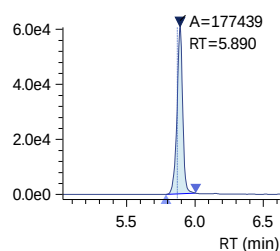




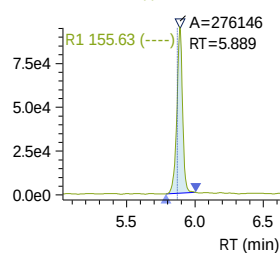
240201_033 (continued)

5_3 FTCA

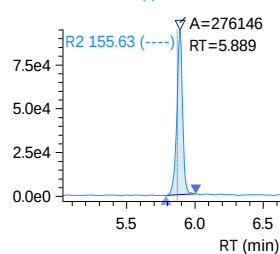
Conc. 14.4596
R#1 155.63 (157.08)
R#2 155.63 (155.87)
Q 341.00>237.05 (-)



R1 341.00>217.00 (-)

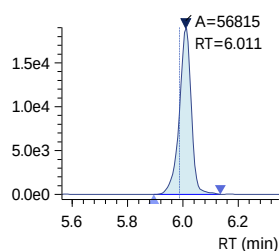


R2 341.00>217.00 (-)

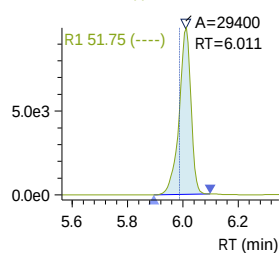


PFPeS

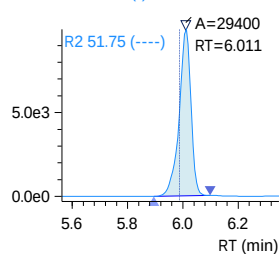
Conc. 0.7037
R#1 51.75 (55.12)
R#2 51.75 (54.87)
Q 349.10>79.90 (-)



R1 349.10>98.80 (-)

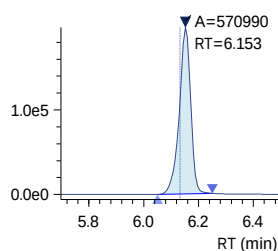


R2 349.10>98.80 (-)



13C4-PFHpA

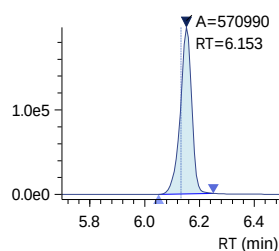
Conc. 2.5976
Q 367.10>322.00 (-)



Q 367.10>322.00 (-)

13C4-PFHpA_IS

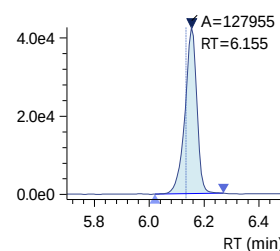
Conc. 2.5000
ISTD 367.10>322.00 (-)



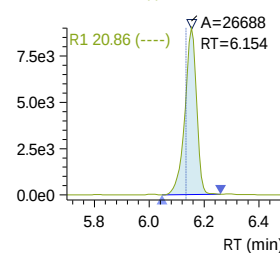
ISTD 367.10>322.00 (-)

PFHpA

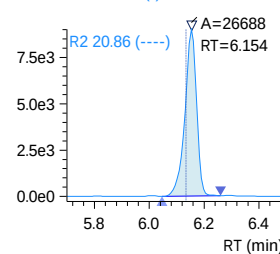
Conc. 0.6432
R#1 20.86 (23.02)
R#2 20.86 (20.91)
Q 363.10>319.00 (-)



R1 363.10>169.00 (-)

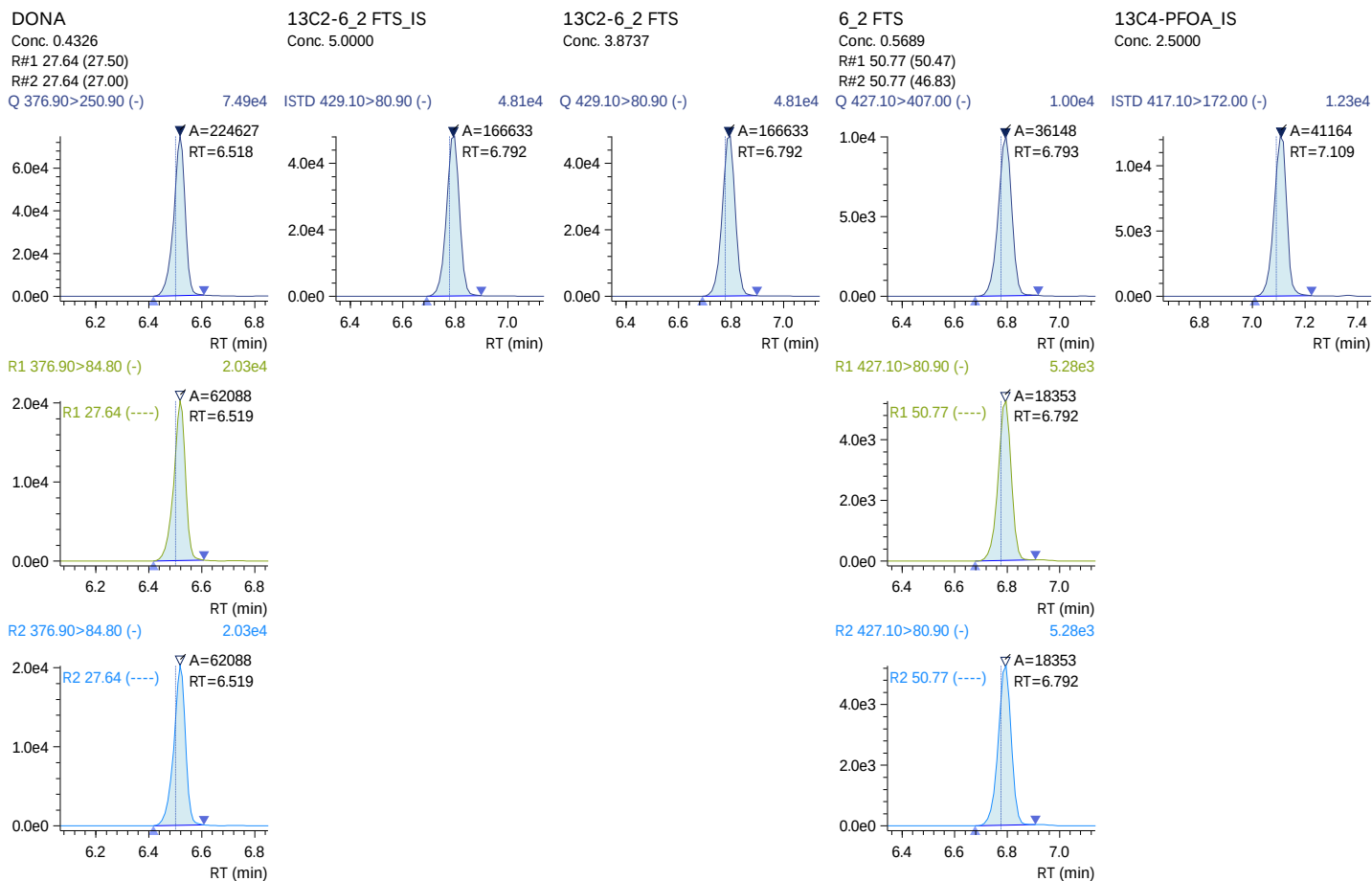


R2 363.10>169.00 (-)





240201_033 (continued)





240201_033 (continued)

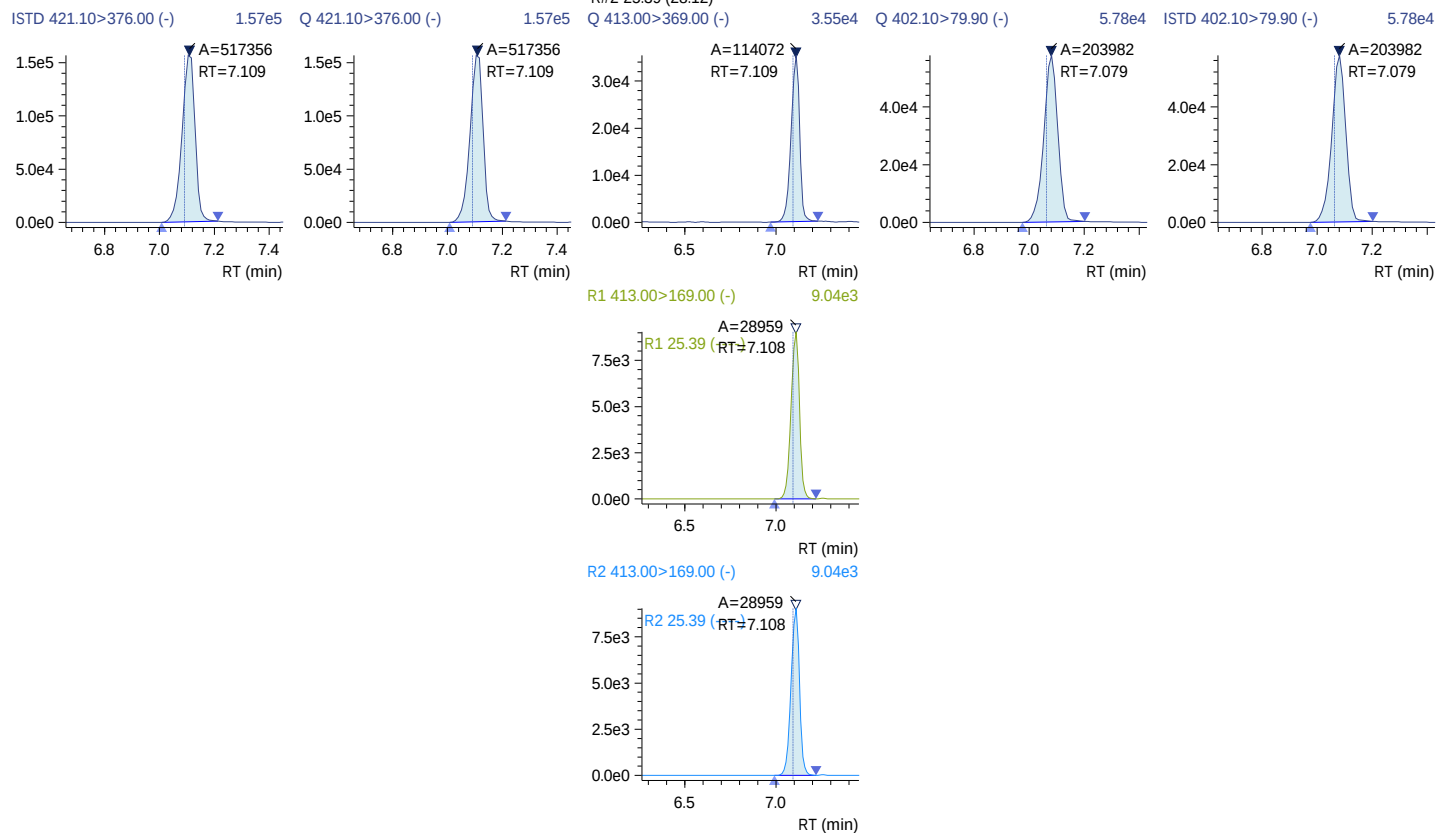
13C8-PFOA_IS
 Conc. 2.5000

13C8-PFOA
 Conc. 2.6353

PFOA
 Conc. 0.5883
 R#1 25.39 (28.77)
 R#2 25.39 (28.12)

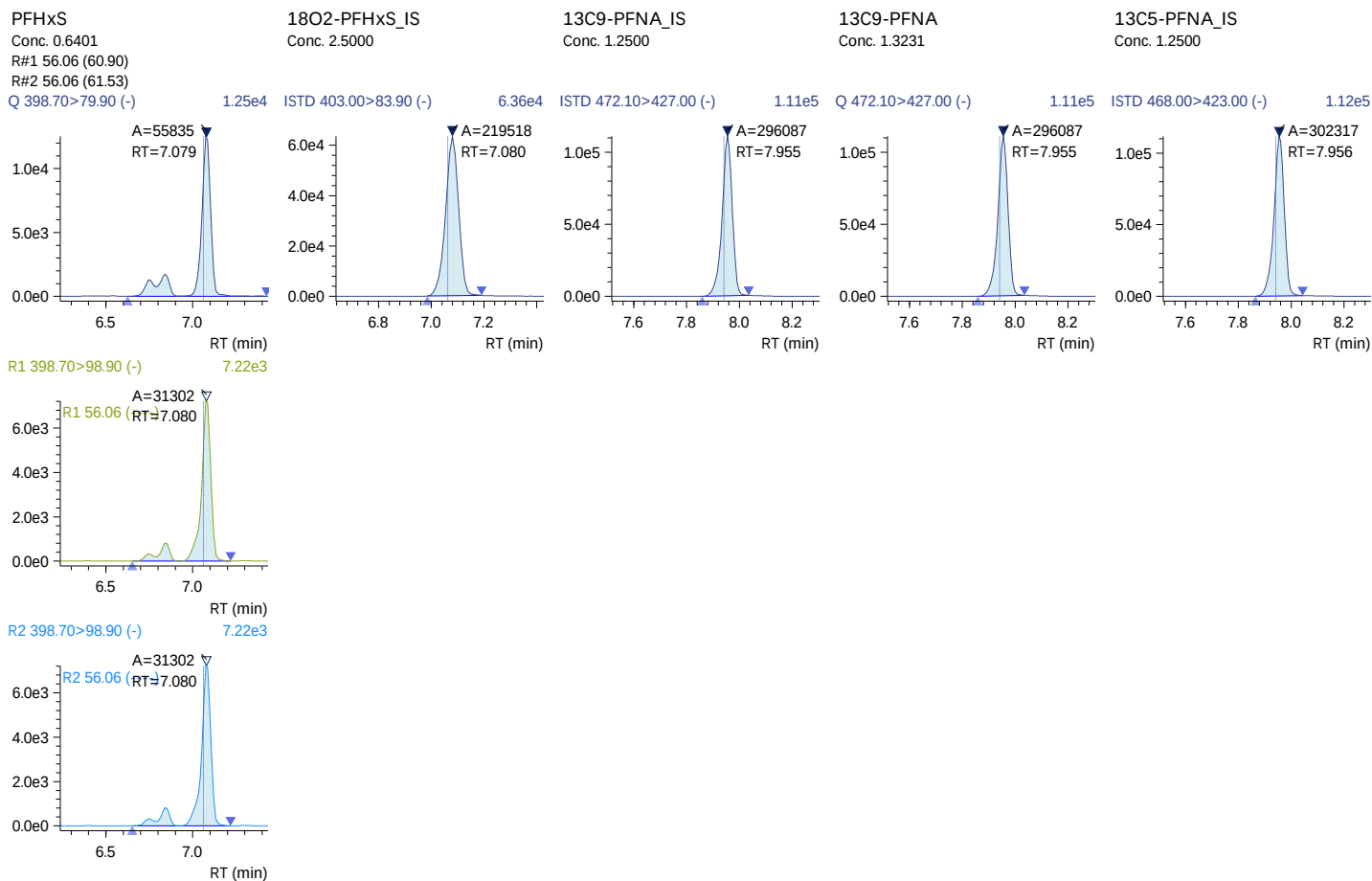
13C3-PFHxS
 Conc. 2.6512

13C3-PFHxS_IS
 Conc. 2.5000



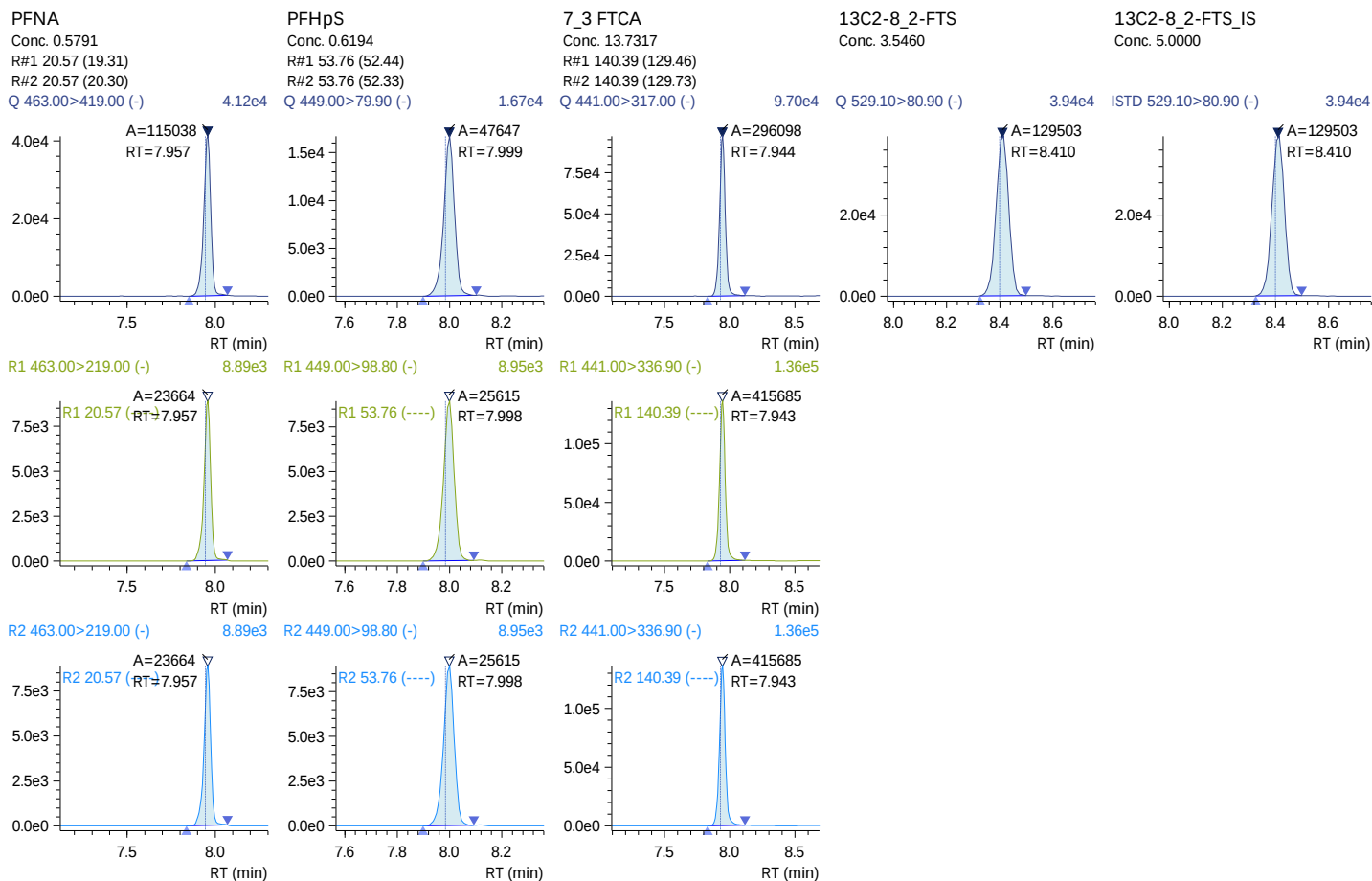


240201_033 (continued)



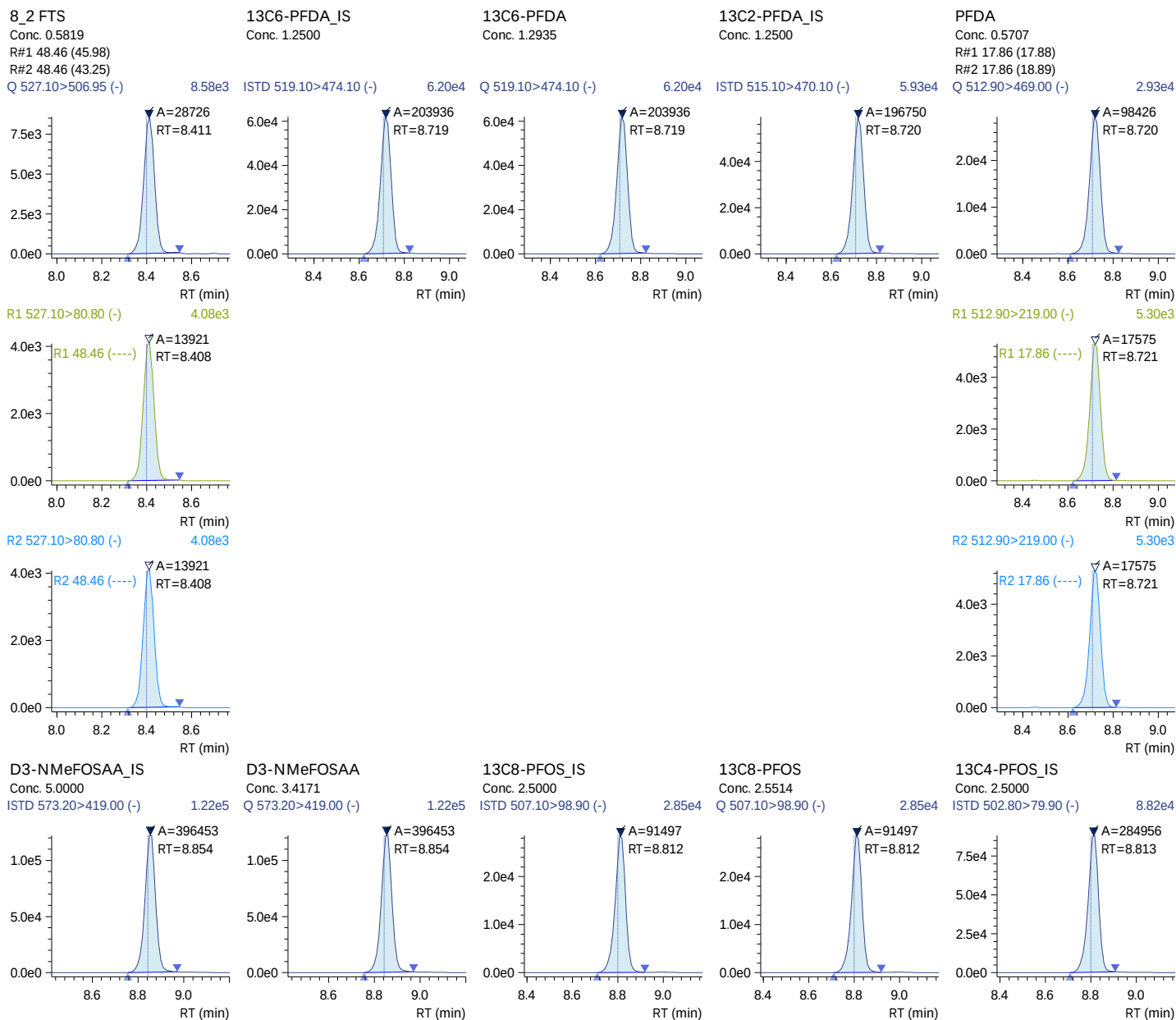


240201_033 (continued)



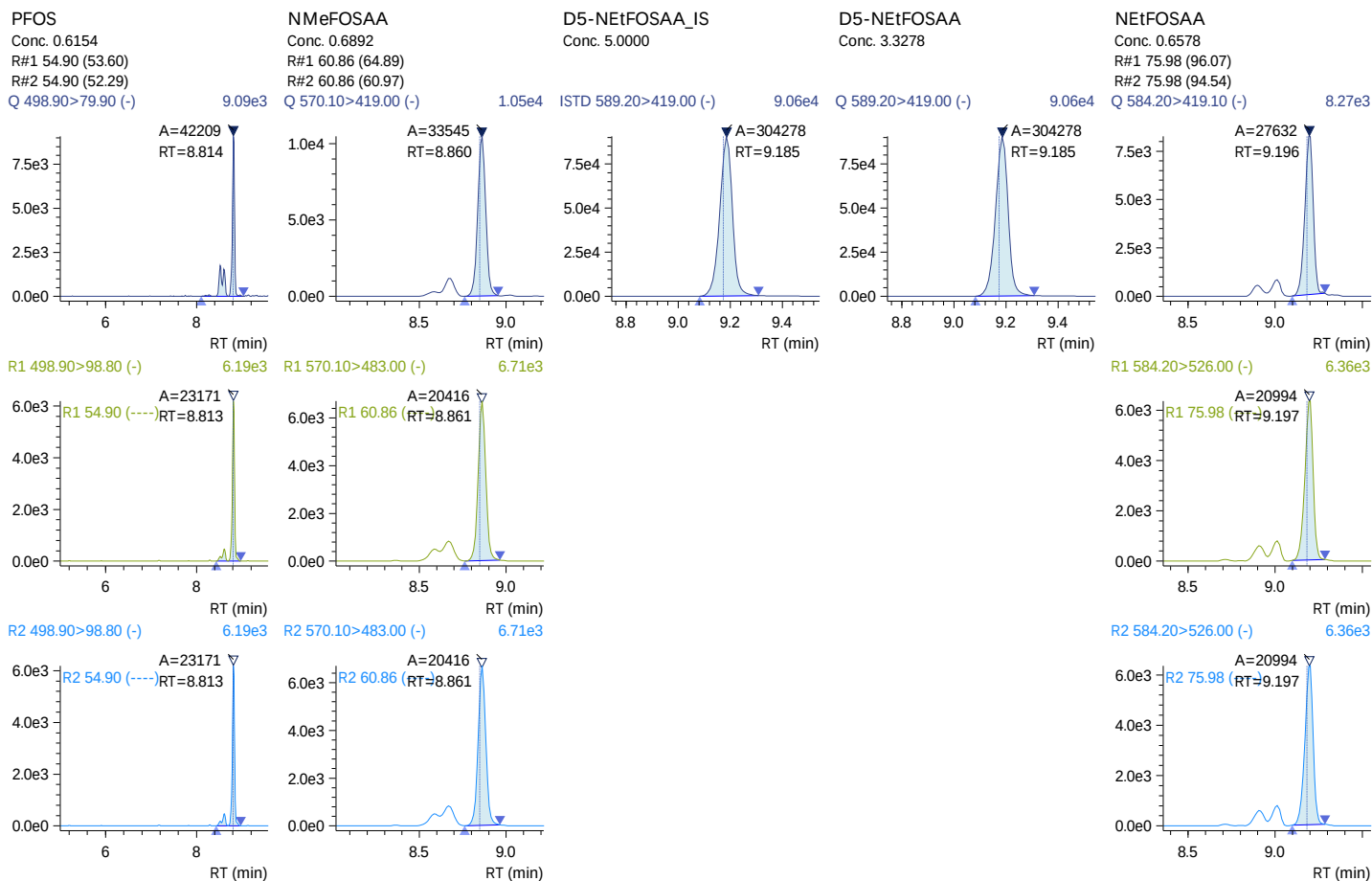


240201_033 (continued)





240201_033 (continued)

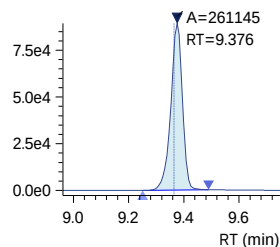




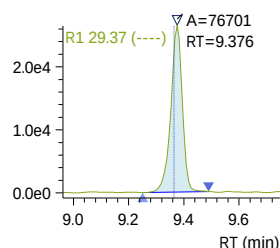
240201_033 (continued)

9-Cl-PF3ONS

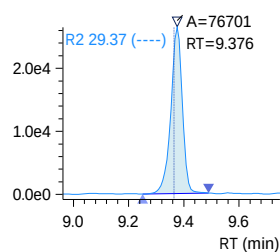
Conc. 0.4324
R#1 29.37 (30.95)
R#2 29.37 (30.61)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-) 2.65e4

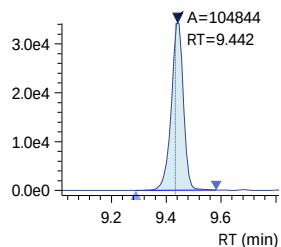


R2 532.80>353.00 (-) 2.65e4

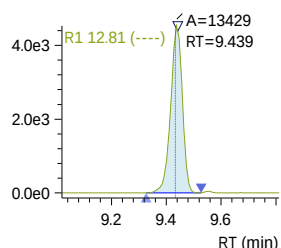


PFUnDA

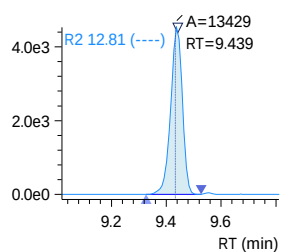
Conc. 0.6601
R#1 12.81 (11.01)
R#2 12.81 (12.02)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-) 4.53e3

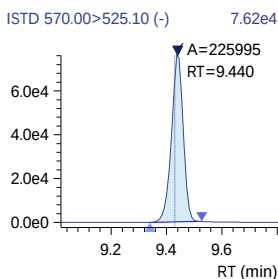


R2 563.10>269.10 (-) 4.53e3



13C7-PFUnDA_IS

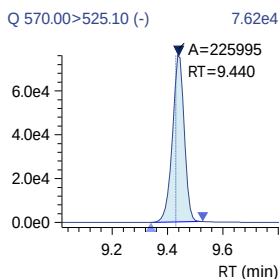
Conc. 1.2500



ISTD 570.00>525.10 (-) 7.62e4

13C7-PFUnDA

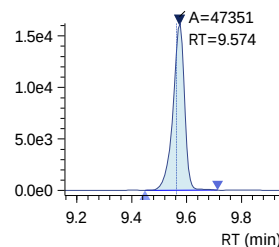
Conc. 1.1535



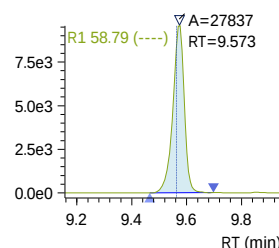
Q 570.00>525.10 (-) 7.62e4

PFNS

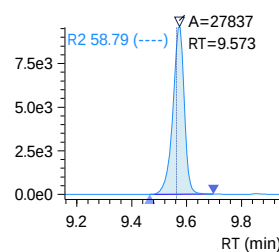
Conc. 0.6115
R#1 58.79 (60.44)
R#2 58.79 (58.51)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-) 9.57e3



R2 548.80>98.80 (-) 9.57e3





240201_033 (continued)

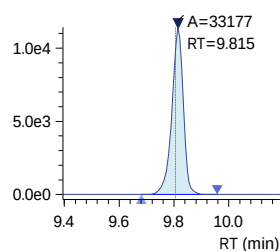
10_2_FTS

Conc. 0.5072

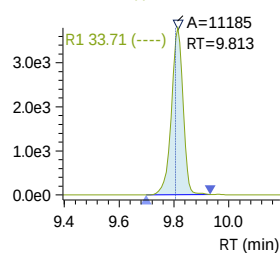
R#1 33.71 (36.14)

R#2 33.71 (33.04)

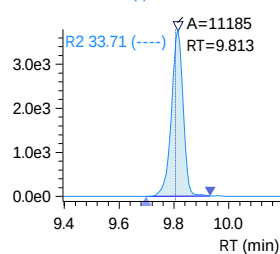
Q 626.80>607.05 (-)



R1 626.80>81.00 (-) 3.79e3

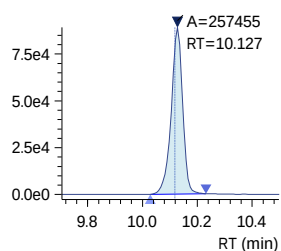


R2 626.80>81.00 (-) 3.79e3



13C2-PFDOA_IS

Conc. 1.2500



ISTD 615.10>570.00 (-) 8.93e4

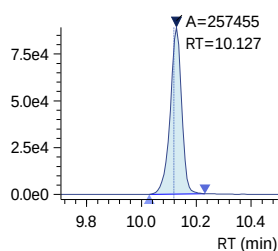


Q 615.10>570.00 (-) 8.93e4



13C2-PFDOA

Conc. 1.1008



Q 613.10>569.00 (-) 2.89e4



R2 613.10>319.00 (-) 2.81e3



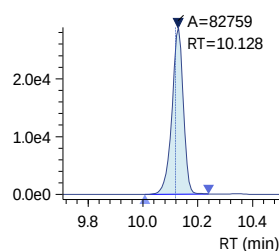
PFDOA

Conc. 0.6148

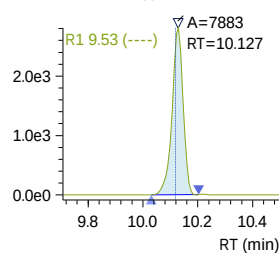
R#1 9.53 (10.16)

R#2 9.53 (10.60)

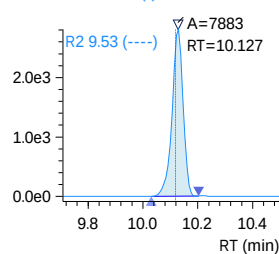
Q 613.10>569.00 (-)



R1 613.10>319.00 (-) 2.81e3



R2 613.10>319.00 (-) 2.81e3



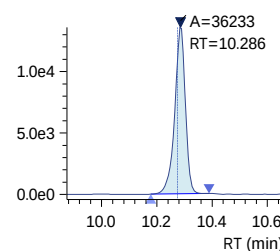
PFDS

Conc. 0.5328

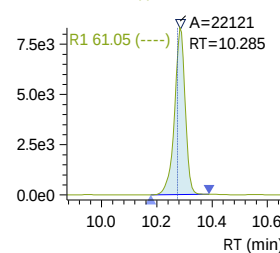
R#1 61.05 (58.26)

R#2 61.05 (61.78)

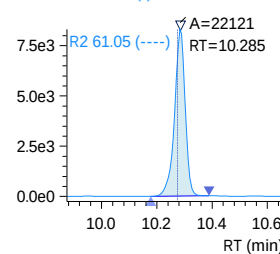
Q 599.00>79.90 (-)



R1 599.00>98.80 (-) 8.32e3



R2 599.00>98.80 (-) 8.32e3

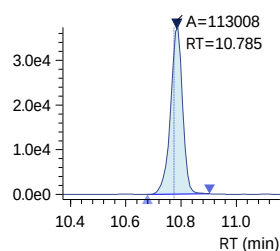




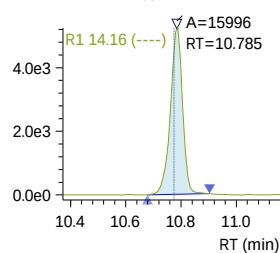
240201_033 (continued)

PFTTrDA

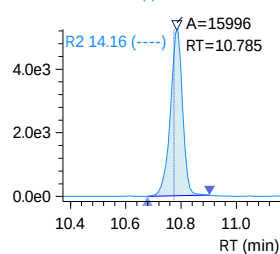
Conc. 0.6850
 R#1 14.16 (16.18)
 R#2 14.16 (14.85)
 Q 663.00>619.00 (-)



R1 663.00>168.90 (-) 5.25e3

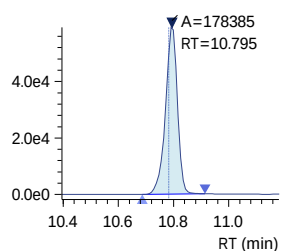


R2 663.00>168.90 (-) 5.25e3

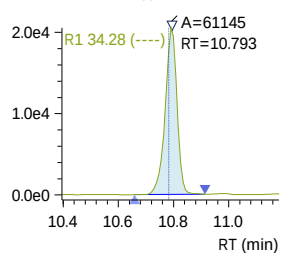


11-CI-PF3OUdS

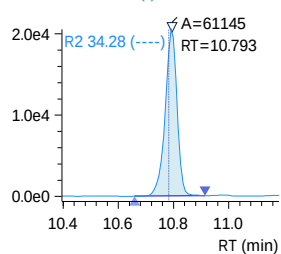
Conc. 0.4138
 R#1 34.28 (34.99)
 R#2 34.28 (34.39)
 Q 630.90>451.00 (-)



R1 632.90>452.90 (-) 2.06e4

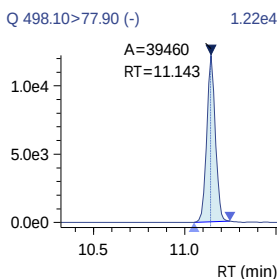


R2 632.90>452.90 (-) 2.06e4



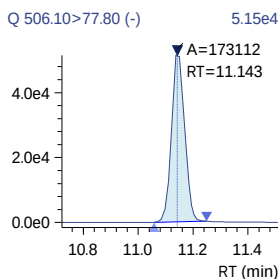
PFOSAm

Conc. 0.7732



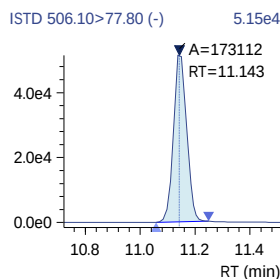
13C8-PFOSAm

Conc. 1.9124



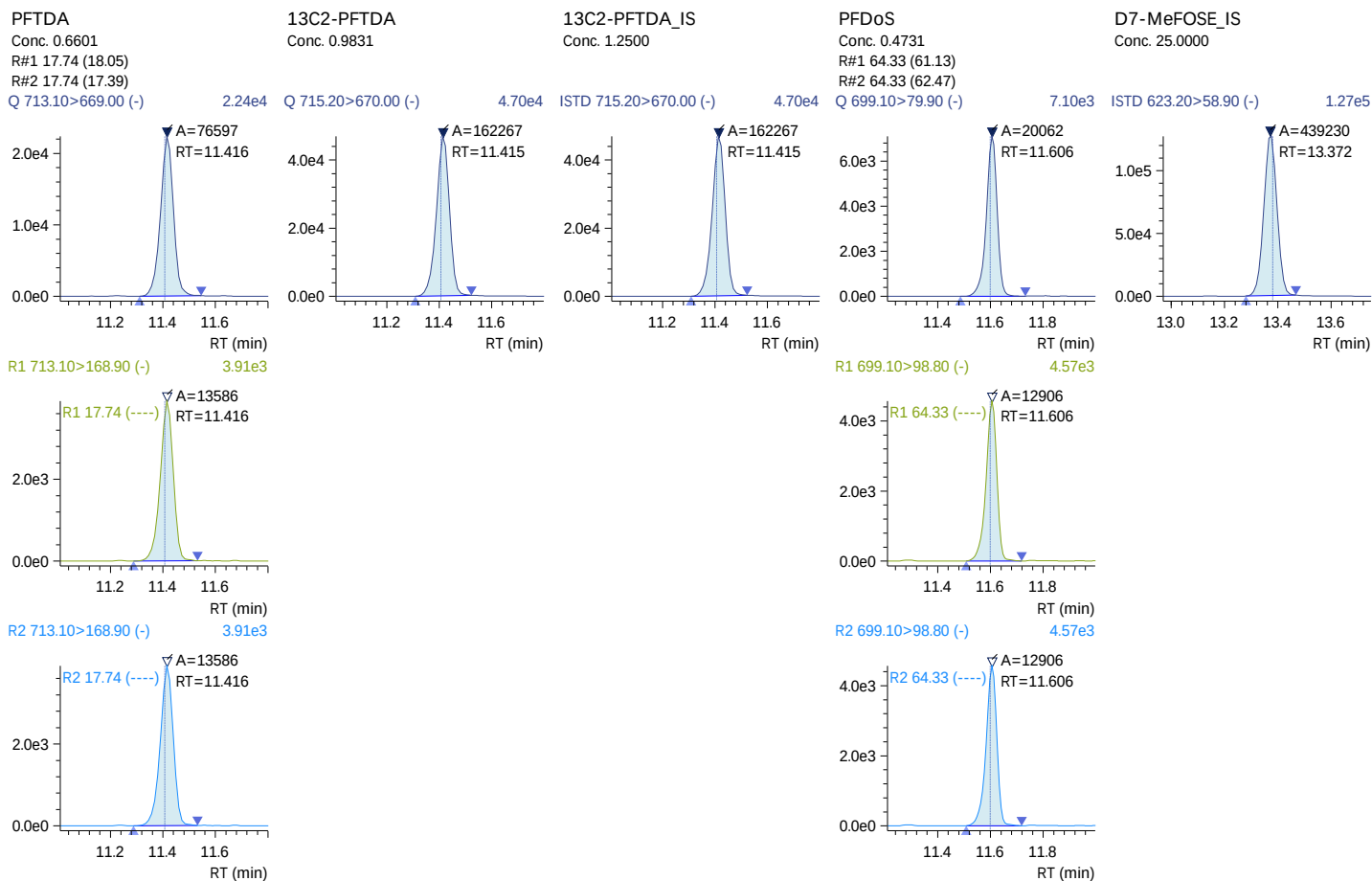
13C8-PFOSAm_IS

Conc. 2.5000





240201_033 (continued)





240201_033 (continued)

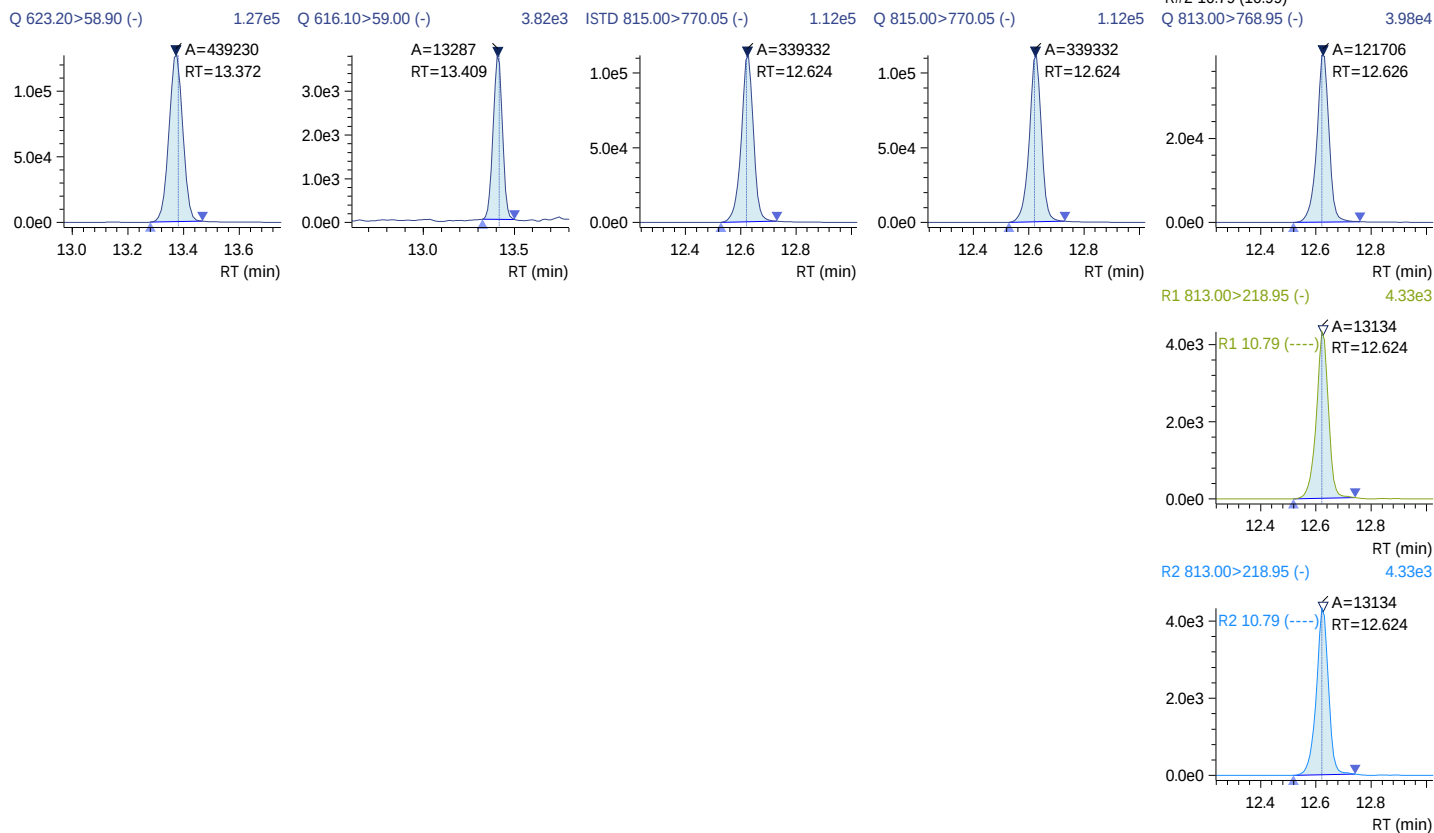
D7-MeFOSE
 Conc. 18.9018

MeFOSE
 Conc. 0.9781

¹³C2-PFHxDA_IS
 Conc. 2.5000

¹³C2-PFHxDA
 Conc. 1.5361

PFHXDA
 Conc. 0.6637
 R#1 10.79 (11.66)
 R#2 10.79 (10.99)





240201_033 (continued)

D3-MeFOSA
 Conc. 1.6471

D3-MeFOSA_IS
 Conc. 2.5000

MeFOSA
 Conc. 0.8046
 R#1 118.75 (160.44)
 R#2 118.75 (161.92)

D9-EtFOSE_IS
 Conc. 25.0000

D9-EtFOSE
 Conc. 18.2754

Q 515.00>219.00 (-)

1.12e4

ISTD 515.00>219.00 (-)

1.12e4

Q 511.90>219.00 (-)

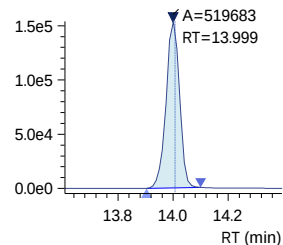
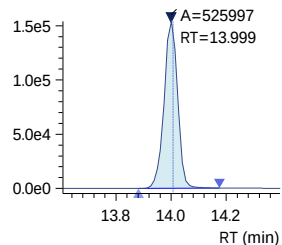
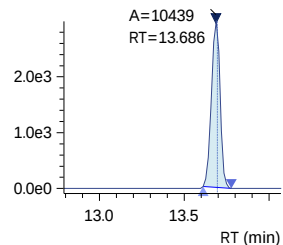
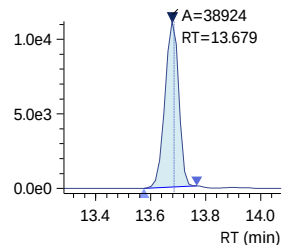
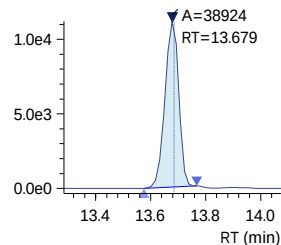
2.99e3

ISTD 639.20>58.90 (-)

1.54e5

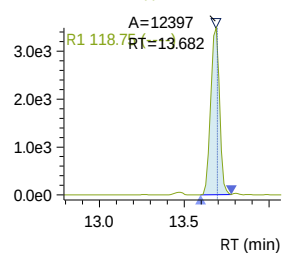
Q 639.20>58.90 (-)

1.54e5



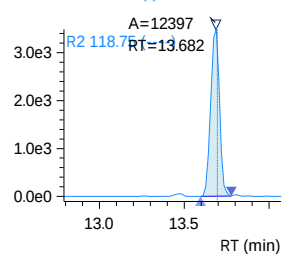
R1 511.90>169.00 (-)

3.49e3



R2 511.90>169.00 (-)

3.49e3





240201_033 (continued)

EtFOSE
Conc. 0.9403

D5-EtFOSAm
Conc. 1.7367

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. 0.8768

PFODA
Conc. 0.5008

Q 630.00>59.00 (-)

4.43e3

Q 531.10>219.00 (-)

1.76e4

ISTD 531.10>219.00 (-)

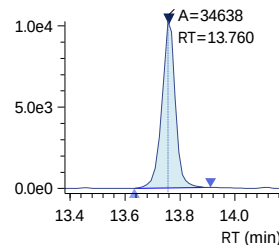
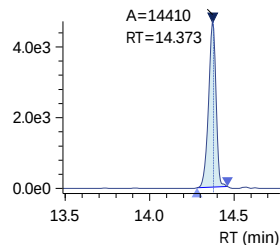
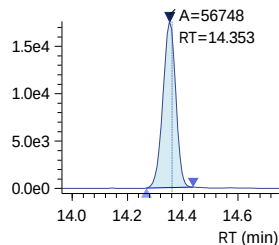
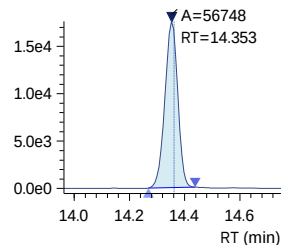
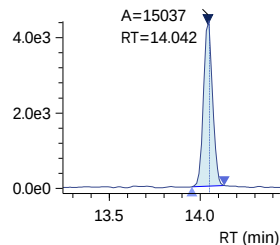
1.76e4

Q 526.00>219.00 (-)

4.72e3

Q 913.00>868.65 (-)

1.03e4

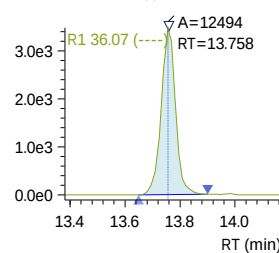
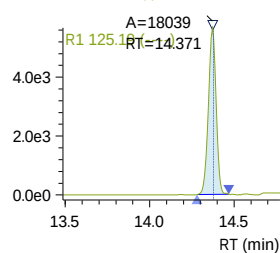


R1 526.00>169.00 (-)

5.68e3

R1 913.00>169.00 (-)

3.48e3

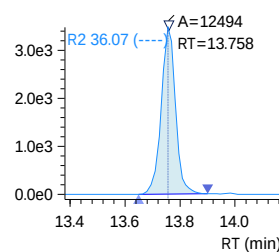
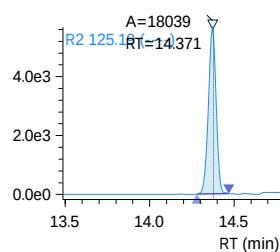


R2 526.00>169.00 (-)

5.68e3

R2 913.00>169.00 (-)

3.48e3





240122_005

Check PFOS

Sample ID: TDCA CHECK
Date Acquired: 1/22/2024 11:18:07 AM
Acquired by: System Administrator
Data File: 240122_005
Vial: 12 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C4-PFBA	ND(W/B)	----	----	----	----	----	13C3-PFBA_IS	ISTD Error	ng/mL	
13C4-PFBA_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
13C3-PFBA_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
PFBA	Auto	0.881	-0.514	----	8472	----	13C4-PFBA_IS	ISTD Error	ng/mL	RT
PFMPA	ND(W/B)	----	----	----	----	----	13C5-PFPeA_IS	ISTD Error	ng/mL	
3_3 FTCA	ND(W/B)	----	----	----	----	----	13C5-PFPeA_IS	ISTD Error	ng/mL	
13C5-PFPeA	ND(W/B)	----	----	----	----	----	13C2-PFHxA_IS	ISTD Error	ng/mL	
13C5-PFPeA_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
PFPeA	ND(W/B)	----	----	----	----	----	13C5-PFPeA_IS	ISTD Error	ng/mL	
PFMBA	ND(W/B)	----	----	----	----	----	13C5-PFPeA_IS	ISTD Error	ng/mL	
13C2-4_2 FTS	ND(W/B)	----	----	----	----	----	18O2-PFHxS_IS	ISTD Error	ng/mL	
13C2-4_2 FTS_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
4_2 FTS	ND(W/B)	----	----	----	----	----	13C2-4_2 FTS_IS	ISTD Error	ng/mL	
13C3-PFBS_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
PFBS	ND(W/B)	----	----	----	----	----	13C3-PFBS_IS	ISTD Error	ng/mL	
13C3-PFBS	ND(W/B)	----	----	----	----	----	18O2-PFHxS_IS	ISTD Error	ng/mL	
NFDHA	ND(W/B)	----	----	----	----	----	13C5-PFHxA_IS	ISTD Error	ng/mL	
13C5-PFHxA	ND(W/B)	----	----	----	----	----	13C2-PFHxA_IS	ISTD Error	ng/mL	
13C5-PFHxA_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
13C2-PFHxA_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
PFHxA	Auto	4.850	-0.104	----	3642	----	13C5-PFHxA_IS	ISTD Error	ng/mL	
PFEESA	ND(W/B)	----	----	----	----	----	13C5-PFHxA_IS	ISTD Error	ng/mL	
13C3-HFPO-DA	ND(W/B)	----	----	----	----	----	13C2-PFHxA_IS	ISTD Error	ng/mL	
13C3-HFPO-DA_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
HFPO-DA	ND(W/B)	----	----	----	----	----	13C3-HFPO-DA_IS	ISTD Error	ng/mL	
5_3 FTCA	ND(W/B)	----	----	----	----	----	13C5-PFHxA_IS	ISTD Error	ng/mL	
PFPeS	ND(W/B)	----	----	----	----	----	13C3-PFHxS_IS	ISTD Error	ng/mL	
13C4-PFHpA	ND(W/B)	----	----	----	----	----	13C2-PFHxA_IS	ISTD Error	ng/mL	
13C4-PFHpA_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
PFHpA	Auto	6.121	-0.018	----	5512	----	13C4-PFHpA_IS	ISTD Error	ng/mL	IRr
DONA	ND(W/B)	----	----	----	----	----	13C3-HFPO-DA_IS	ISTD Error	ng/mL	
13C2-6_2 FTS_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
13C2-6_2 FTS	ND(W/B)	----	----	----	----	----	18O2-PFHxS_IS	ISTD Error	ng/mL	
6_2 FTS	ND(W/B)	----	----	----	----	----	13C2-6_2 FTS_IS	ISTD Error	ng/mL	
13C4-PFOA_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
13C8-PFOA_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
13C8-PFOA	ND(W/B)	----	----	----	----	----	13C4-PFOA_IS	ISTD Error	ng/mL	
PFOA	Auto	7.094	-0.004	----	4294	----	13C8-PFOA_IS	ISTD Error	ng/mL	
13C3-PFHxS	ND(W/B)	----	----	----	----	----	18O2-PFHxS_IS	ISTD Error	ng/mL	
13C3-PFHxS_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
PFHxS	ND(W/B)	----	----	----	----	----	13C3-PFHxS_IS	ISTD Error	ng/mL	
18O2-PFHxS_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
13C9-PFNA_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
13C9-PFNA	ND(W/B)	----	----	----	----	----	13C5-PFNA_IS	ISTD Error	ng/mL	
13C5-PFNA_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
PFNA	Auto	7.953	0.005	----	3209	----	13C9-PFNA_IS	ISTD Error	ng/mL	IRr
PFHpS	ND(W/B)	----	----	----	----	----	13C8-PFOS_IS	ISTD Error	ng/mL	
7_3 FTCA	ND(W/B)	----	----	----	----	----	13C5-PFHxA_IS	ISTD Error	ng/mL	
13C2-8_2-FTS	ND(W/B)	----	----	----	----	----	18O2-PFHxS_IS	ISTD Error	ng/mL	
13C2-8_2-FTS_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
8_2 FTS	ND(W/B)	----	----	----	----	----	13C2-8_2-FTS_IS	ISTD Error	ng/mL	
13C6-PFDA_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
13C6-PFDA	ND(W/B)	----	----	----	----	----	13C2-PFDA_IS	ISTD Error	ng/mL	

J:\LCMS08\Data\240122_1633_B1\240122_1633_B1.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_005 (continued)

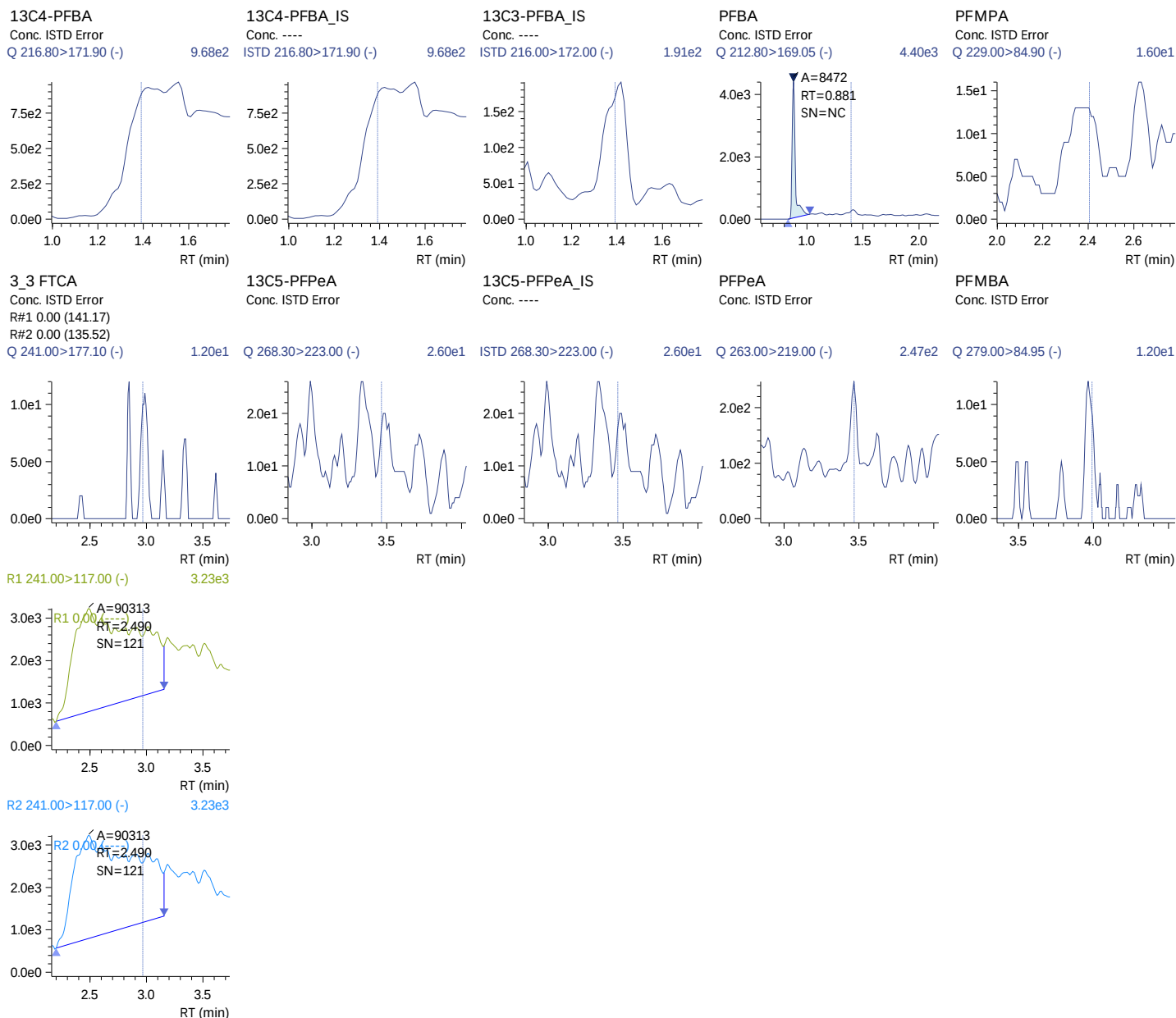
(Table continued from previous page)

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C2-PFDA_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
PFDA	Auto	8.719	0.004	----	3971	----	13C6-PFDA_IS	ISTD Error	ng/mL	IRr
D3-NMeFOSAA_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
D3-NMeFOSAA	ND(W/B)	----	----	----	----	1868	13C4-PFOS_IS	----	ng/mL	
13C8-PFOS_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
13C8-PFOS	ND(W/B)	----	----	----	----	1868	13C4-PFOS_IS	----	ng/mL	
13C4-PFOS_IS	Auto	8.813	0.004	----	1868	1868	----	2.5000	ng/mL	
PFOS	ND(W/B)	----	----	----	----	----	13C8-PFOS_IS	ISTD Error	ng/mL	
NMeFOSAA	ND(W/B)	----	----	----	----	----	D3-NMeFOSAA_IS	ISTD Error	ng/mL	
D5-NetFOSAA_IS	Auto	9.182	-0.001	----	1838	1838	----	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.182	-0.001	0.369	1838	1868	13C4-PFOS_IS	4.7382	ng/mL	
NetFOSAA	ND(W/B)	----	----	----	----	1838	D5-NetFOSAA_IS	----	ng/mL	
9-CI-PF3ONS	ND(W/B)	----	----	----	----	----	13C3-HFPO-DA_IS	ISTD Error	ng/mL	
PFUnDA	Auto	9.444	0.004	----	3079	----	13C7-PFUnDA_IS	ISTD Error	ng/mL	IRr
13C7-PFUnDA_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
13C7-PFUnDA	ND(W/B)	----	----	----	----	----	13C2-PFDA_IS	ISTD Error	ng/mL	
PFNS	ND(W/B)	----	----	----	----	----	13C8-PFOS_IS	ISTD Error	ng/mL	
10_2_FTS	ND(W/B)	----	----	----	----	----	13C2-8_2-FTS_IS	ISTD Error	ng/mL	
13C2-PFDOA_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
13C2-PFDOA	ND(W/B)	----	----	----	----	----	13C2-PFDA_IS	ISTD Error	ng/mL	
PFDOA	Auto	10.132	0.003	----	2468	----	13C2-PFDOA_IS	ISTD Error	ng/mL	IRr
PFDS	ND(W/B)	----	----	----	----	----	13C8-PFOS_IS	ISTD Error	ng/mL	
PFTDA	Auto	10.789	0.001	----	2956	----	13C2-PFTDA_IS	ISTD Error	ng/mL	
11-CI-PF3OUdS	ND(W/B)	----	----	----	----	----	13C3-HFPO-DA_IS	ISTD Error	ng/mL	
PFOSAm	ND(W/B)	----	----	----	----	----	13C8-PFOSAm_IS	ISTD Error	ng/mL	
13C8-PFOSAm	ND(W/B)	----	----	----	----	1868	13C4-PFOS_IS	----	ng/mL	
13C8-PFOSAm_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
PFTDA	ND(W/B)	----	----	----	----	----	13C2-PFTDA_IS	ISTD Error	ng/mL	
13C2-PFTDA	ND(W/B)	----	----	----	----	----	13C2-PFDA_IS	ISTD Error	ng/mL	
13C2-PFTDA_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
PFDoS	ND(W/B)	----	----	----	----	----	13C8-PFOS_IS	ISTD Error	ng/mL	
D7-MeFOSE_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
D7-MeFOSE	ND(W/B)	----	----	----	----	1868	13C4-PFOS_IS	----	ng/mL	
MeFOSE	ND(W/B)	----	----	----	----	----	D7-MeFOSE_IS	ISTD Error	ng/mL	
13C2-PFHXA_IS	Auto	12.643	0.007	----	1504	1504	----	2.5000	ng/mL	
13C2-PFHXA	Auto	12.643	0.007	----	1504	----	13C2-PFDA_IS	ISTD Error	ng/mL	
PFHXDA	Auto	12.644	0.007	0.001	2993	1504	13C2-PFHXA_IS	4.8259	ng/mL	IRr
D3-MeFOSA	ND(W/B)	----	----	----	----	1868	13C4-PFOS_IS	----	ng/mL	
D3-MeFOSA_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
MeFOSA	ND(W/B)	----	----	----	----	----	D3-MeFOSA_IS	ISTD Error	ng/mL	
D9-EtFOSE_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
D9-EtFOSE	ND(W/B)	----	----	----	----	1868	13C4-PFOS_IS	----	ng/mL	
EtFOSE	ND(W/B)	----	----	----	----	----	D9-EtFOSE_IS	ISTD Error	ng/mL	
D5-EtFOSAm	ND(W/B)	----	----	----	----	1868	13C4-PFOS_IS	----	ng/mL	
D5-EtFOSAm_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
EtFOSAm	ND(W/B)	----	----	----	----	----	D5-EtFOSAm_IS	ISTD Error	ng/mL	
PFODA	Auto	13.767	-0.007	1.124	1326	1504	13C2-PFHXA_IS	3.8988	ng/mL	IRr

Flag ID key: IRr: Ion Ratio (Relative), RT: RT Diff (Absolute)



240122_005 (continued)





240122_005 (continued)

13C2-4_2 FTS
Conc. ISTD Error

13C2-4_2 FTS_IS
Conc. ----

4_2 FTS
Conc. ISTD Error
R#1 0.00 (29.06)
R#2 0.00 (35.34)

13C3-PFBS_IS
Conc. ----

PFBS
Conc. ISTD Error
R#1 0.00 (46.72)
R#2 0.00 (49.78)

Q 329.10>80.90 (-)

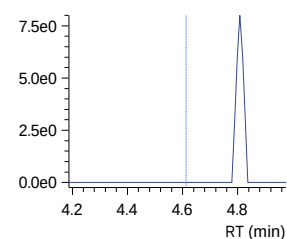
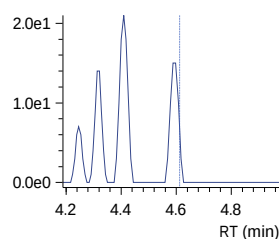
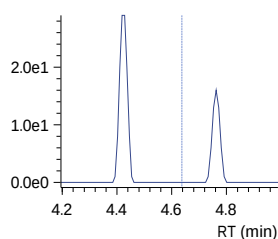
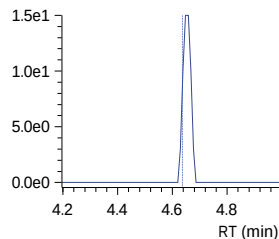
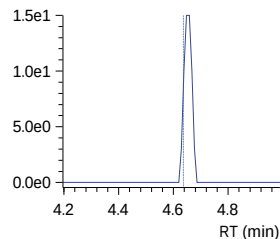
1.50e1 ISTD 329.10>80.90 (-)

1.50e1 Q 327.10>307.00 (-)

2.90e1 ISTD 302.10>79.90 (-)

2.10e1 Q 298.70>79.90 (-)

8.00e0

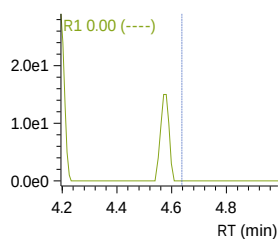


R1 327.10>80.90 (-)

2.90e1

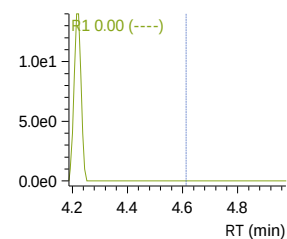
R1 298.70>98.80 (-)

1.40e1



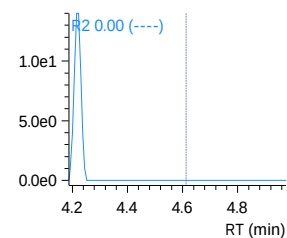
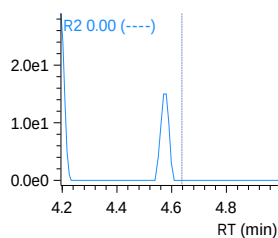
R2 327.10>80.90 (-)

2.90e1



R2 298.70>98.80 (-)

1.40e1





240122_005 (continued)

13C3-PFBS
Conc. ISTD Error

NFDHA
Conc. ISTD Error
R#1 0.00 (40.25)
R#2 0.00 (37.18)

13C5-PFHxA
Conc. ISTD Error

13C5-PFHxA_IS
Conc. ----

13C2-PFHxA_IS
Conc. ----

Q 302.10>79.90 (-)

2.10e1

Q 295.00>201.00 (-)

0.00e0

Q 318.00>273.00 (-)

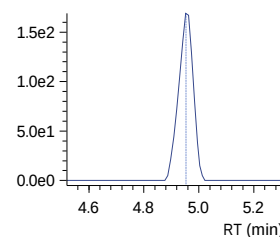
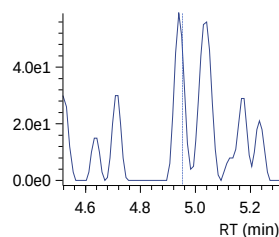
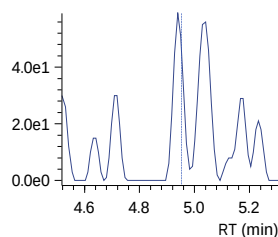
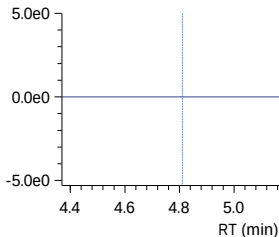
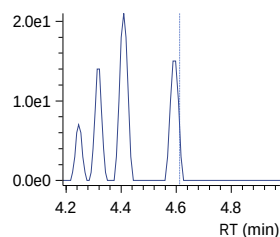
5.90e1

ISTD 318.00>273.00 (-)

5.90e1

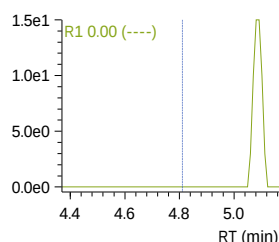
ISTD 315.10>270.00 (-)

1.69e2



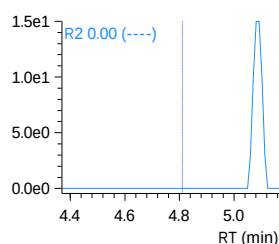
R1 295.00>84.90 (-)

1.50e1



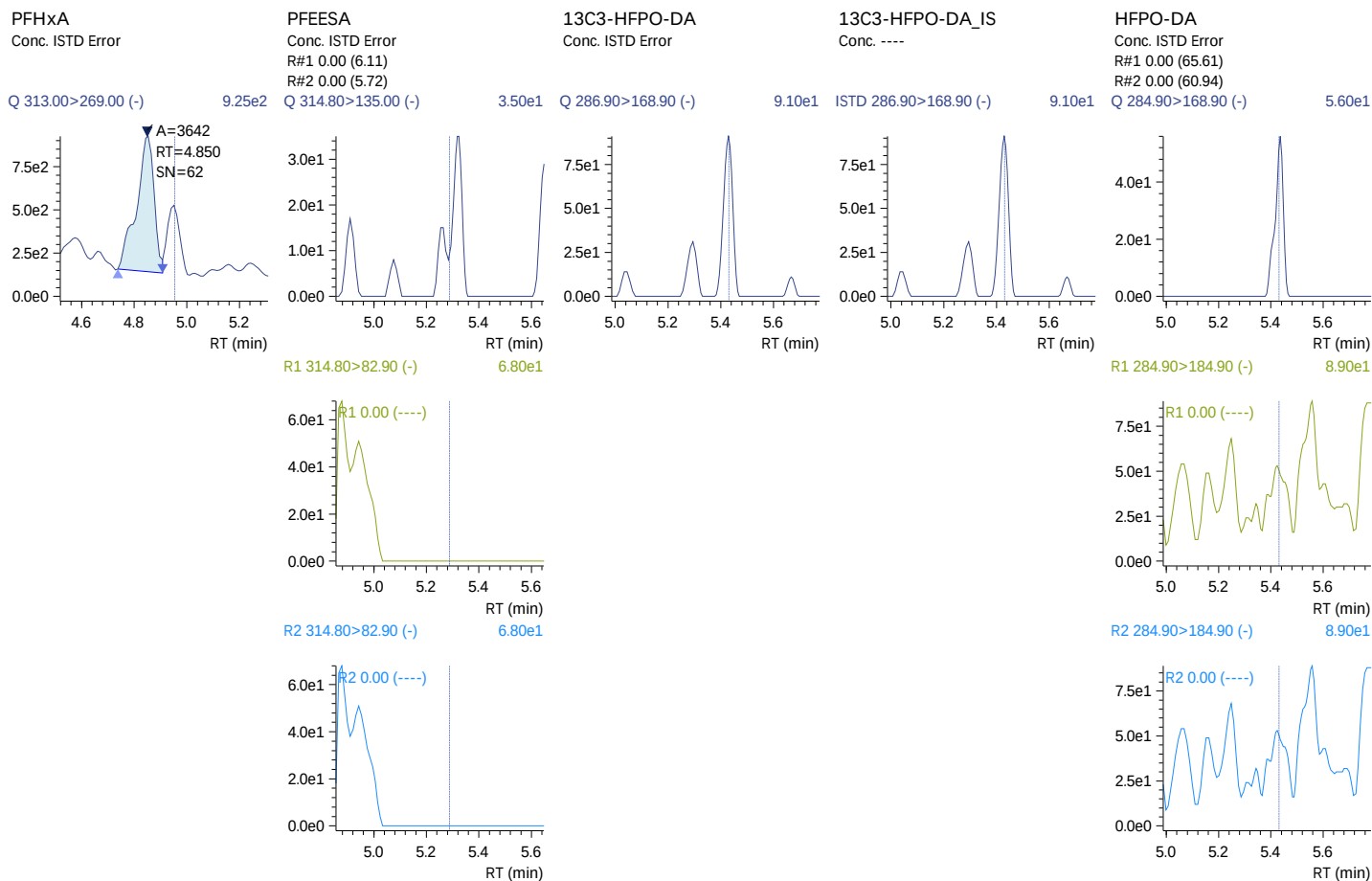
R2 295.00>84.90 (-)

1.50e1



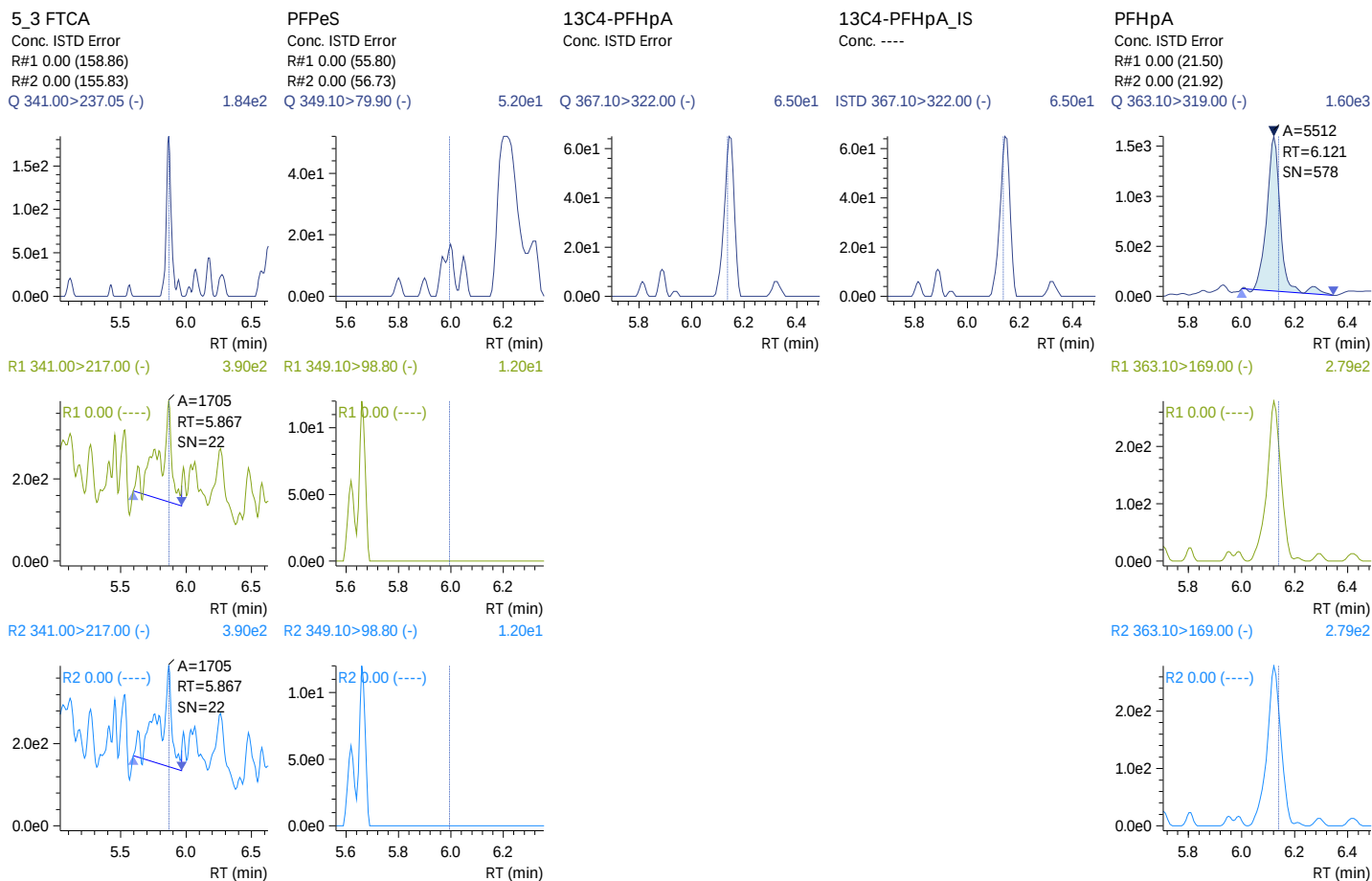


240122_005 (continued)





240122_005 (continued)

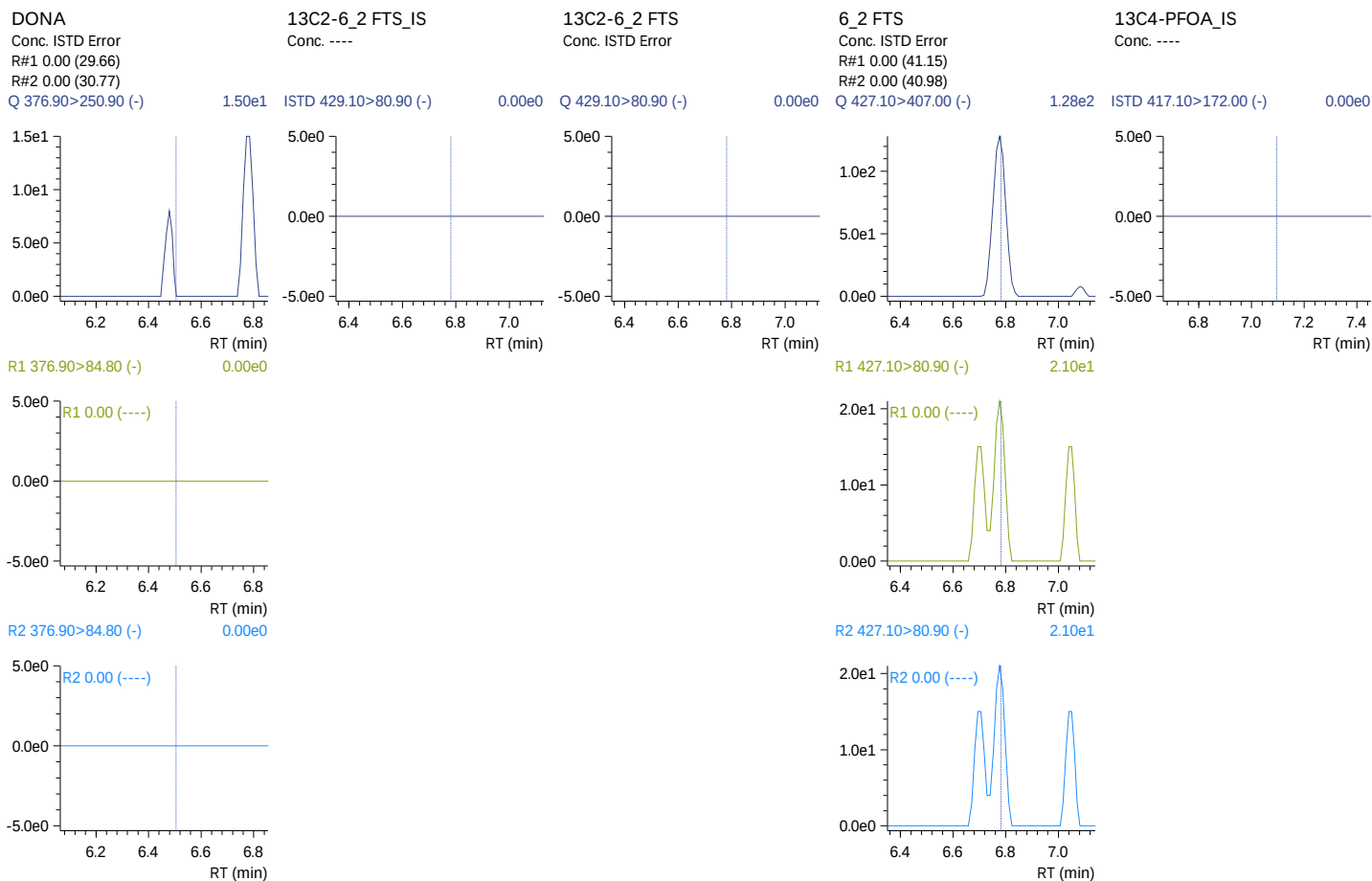


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_005 (continued)





240122_005 (continued)

13C8-PFOA_IS
Conc. ----

13C8-PFOA
Conc. ISTD Error

PFOA
Conc. ISTD Error
R#1 25.31 (31.89)
R#2 25.31 (32.23)

13C3-PFHxS
Conc. ISTD Error

13C3-PFHxS_IS
Conc. ----

ISTD 421.10>376.00 (-)

1.40e1

Q 421.10>376.00 (-)

1.40e1

Q 413.00>369.00 (-)

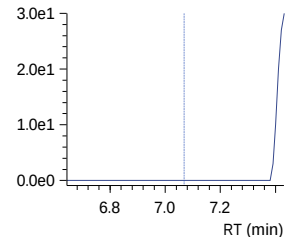
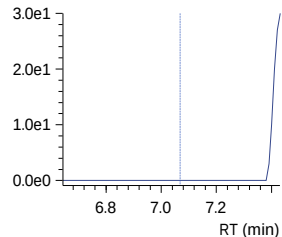
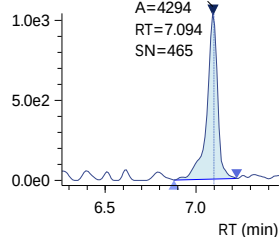
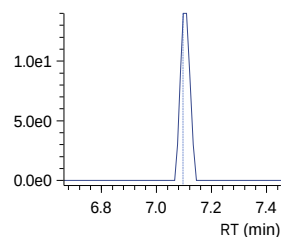
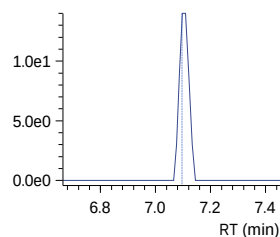
1.04e3

Q 402.10>79.90 (-)

3.00e1

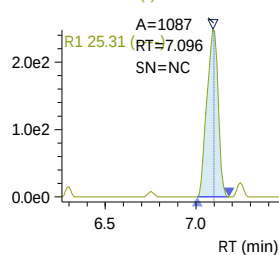
ISTD 402.10>79.90 (-)

3.00e1



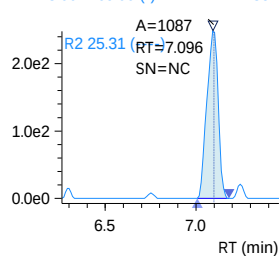
R1 413.00>169.00 (-)

2.48e2



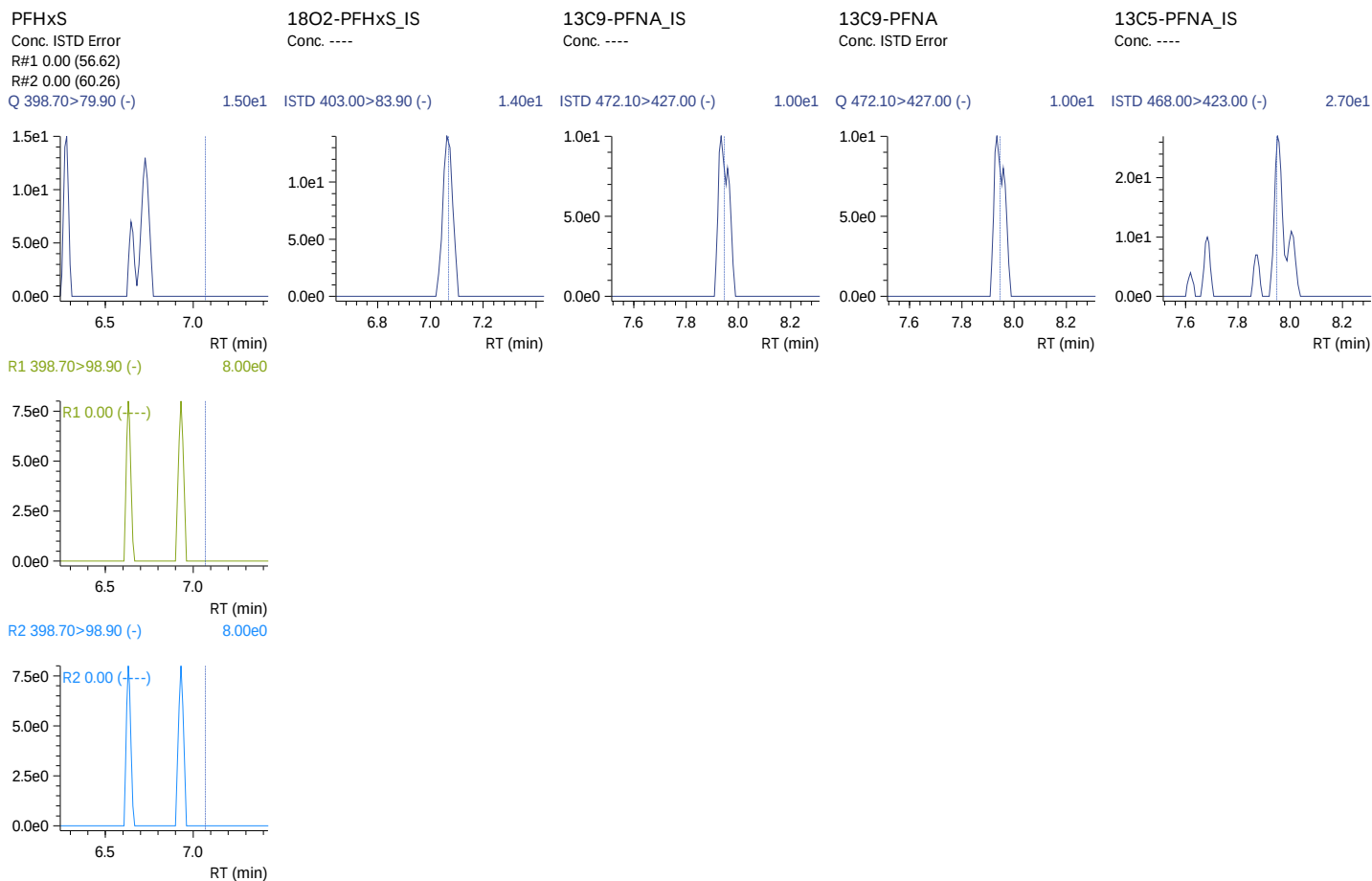
R2 413.00>169.00 (-)

2.48e2



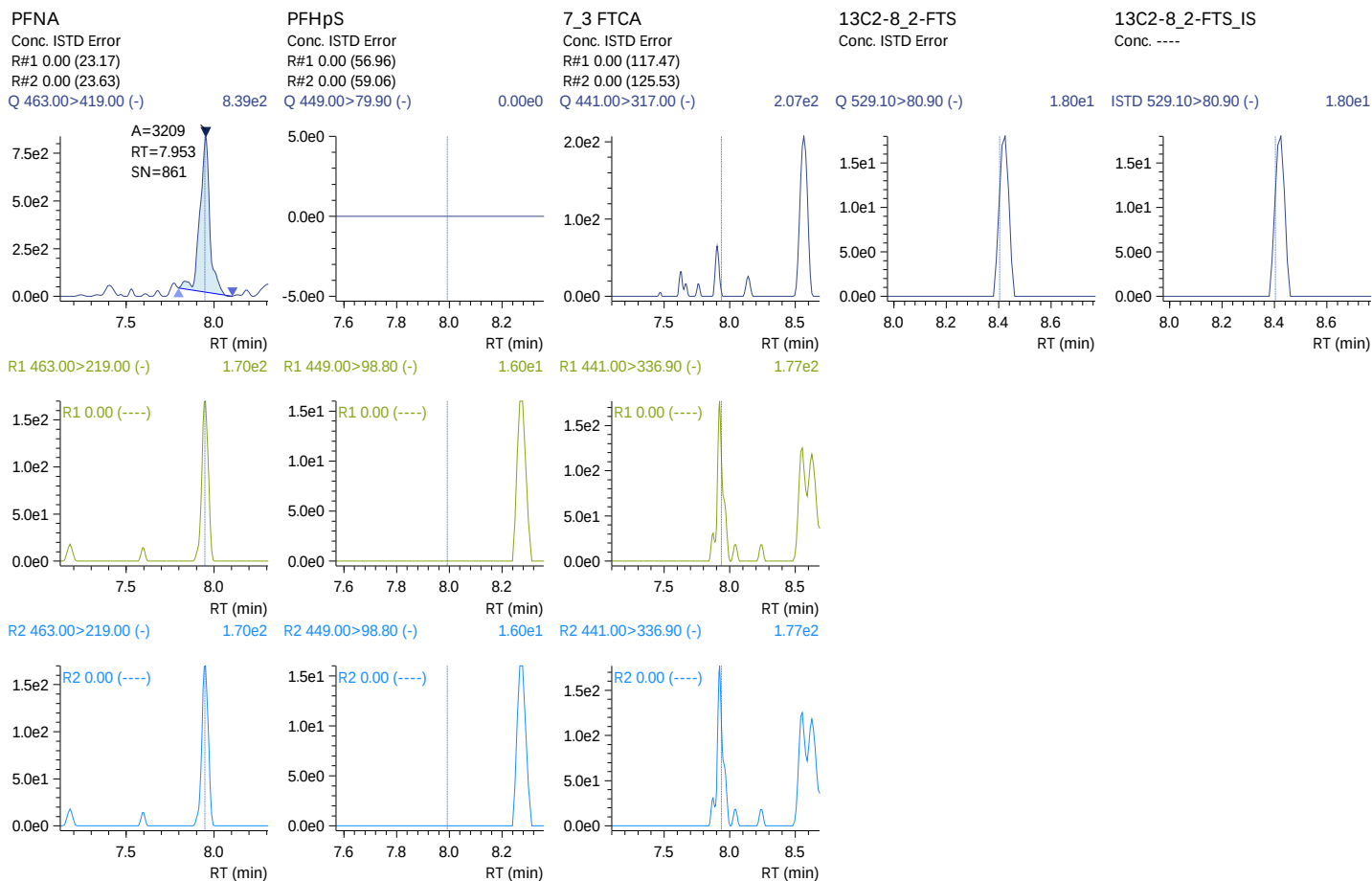


240122_005 (continued)



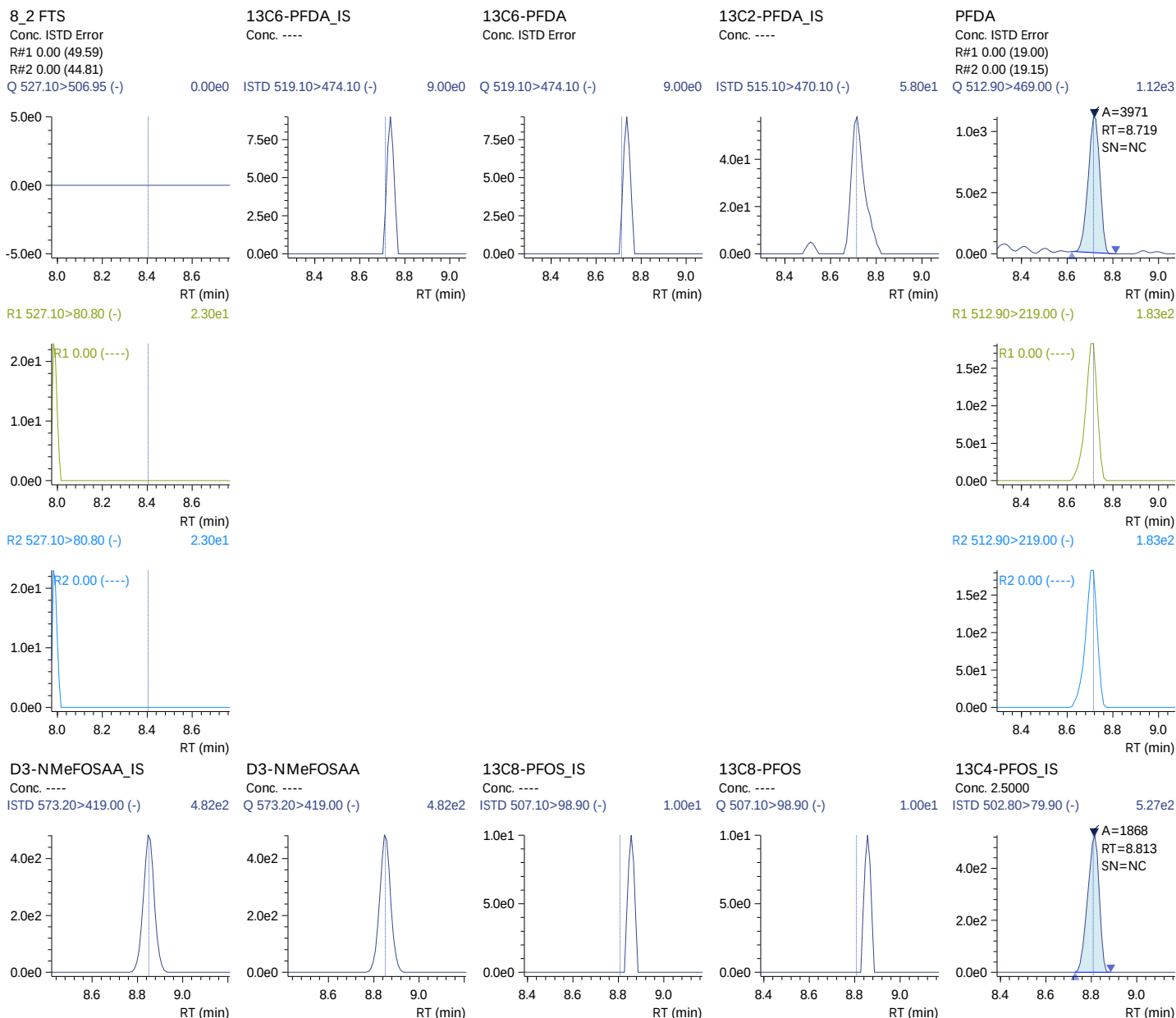


240122_005 (continued)



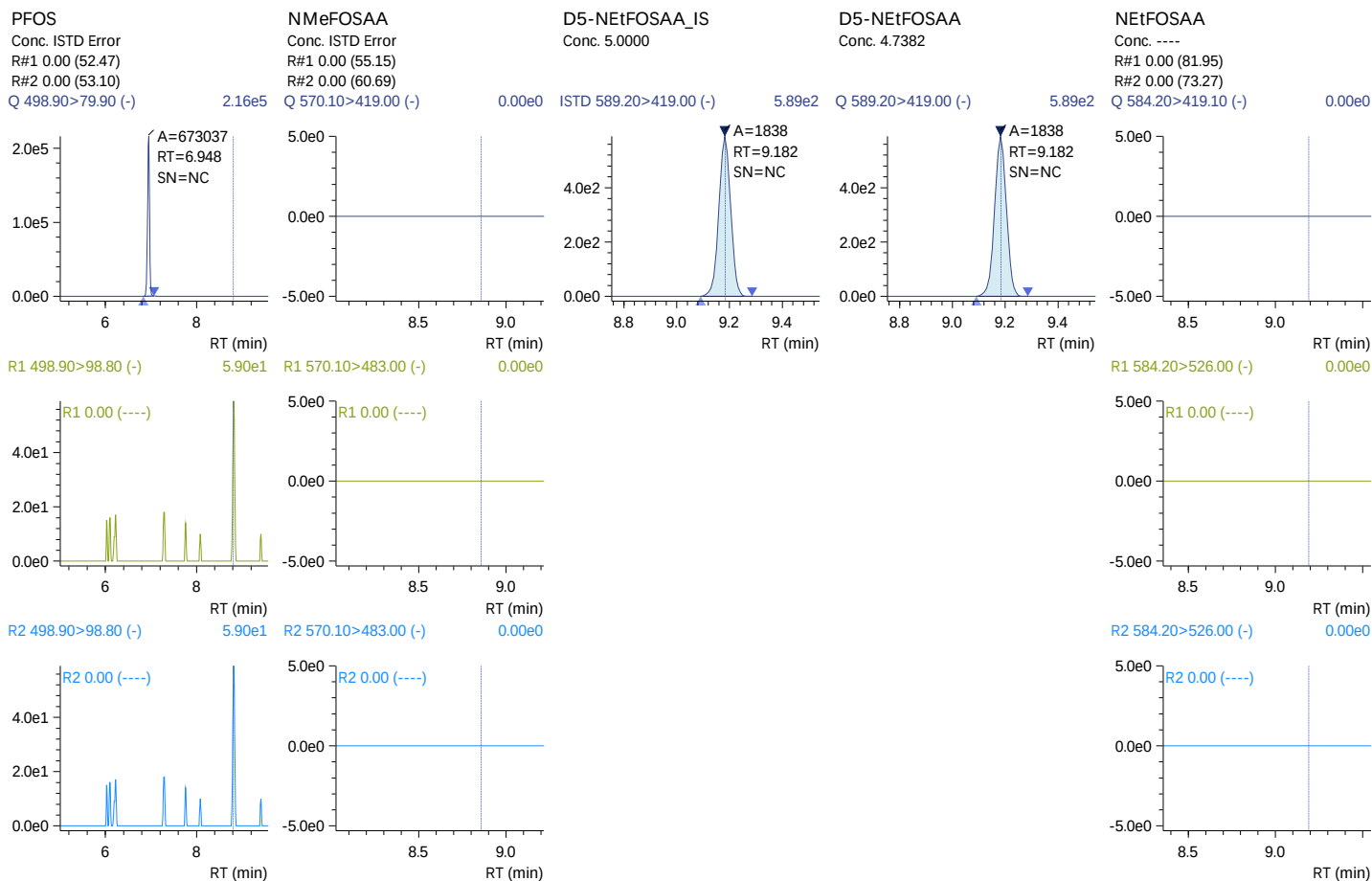


240122_005 (continued)





240122_005 (continued)



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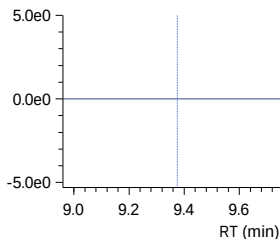
SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_005 (continued)

9-CI-PF3ONS

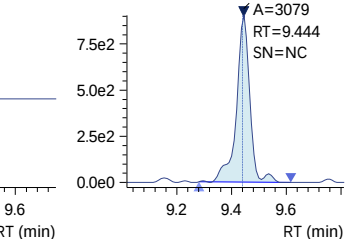
Conc. ISTD Error
R#1 0.00 (32.76)
R#2 0.00 (32.59)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-)

PFUnDA

Conc. ISTD Error
R#1 0.00 (13.12)
R#2 0.00 (14.36)
Q 563.10>519.00 (-)

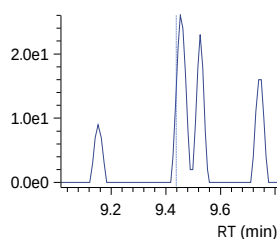


R1 563.10>269.10 (-)

13C7-PFUnDA_IS

Conc. ----

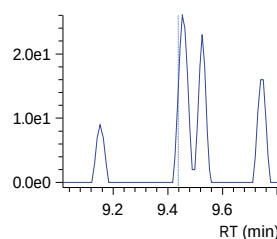
ISTD 570.00>525.10 (-)



13C7-PFUnDA

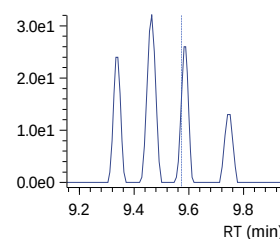
Conc. ISTD Error

Q 570.00>525.10 (-)

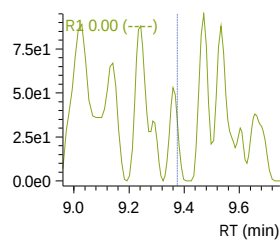


PFNS

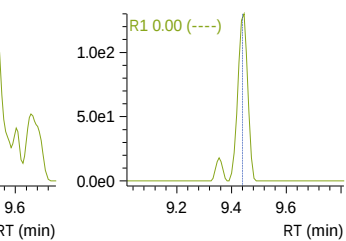
Conc. ISTD Error
R#1 0.00 (65.22)
R#2 0.00 (65.31)
Q 548.80>79.90 (-)



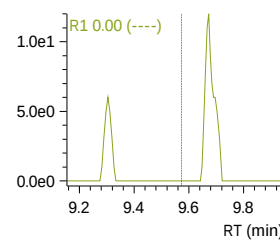
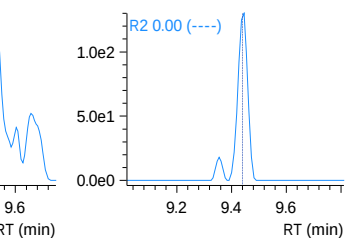
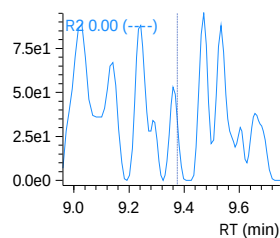
R1 548.80>98.80 (-)



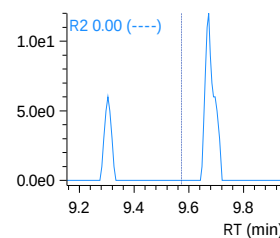
R2 532.80>353.00 (-)



R2 563.10>269.10 (-)

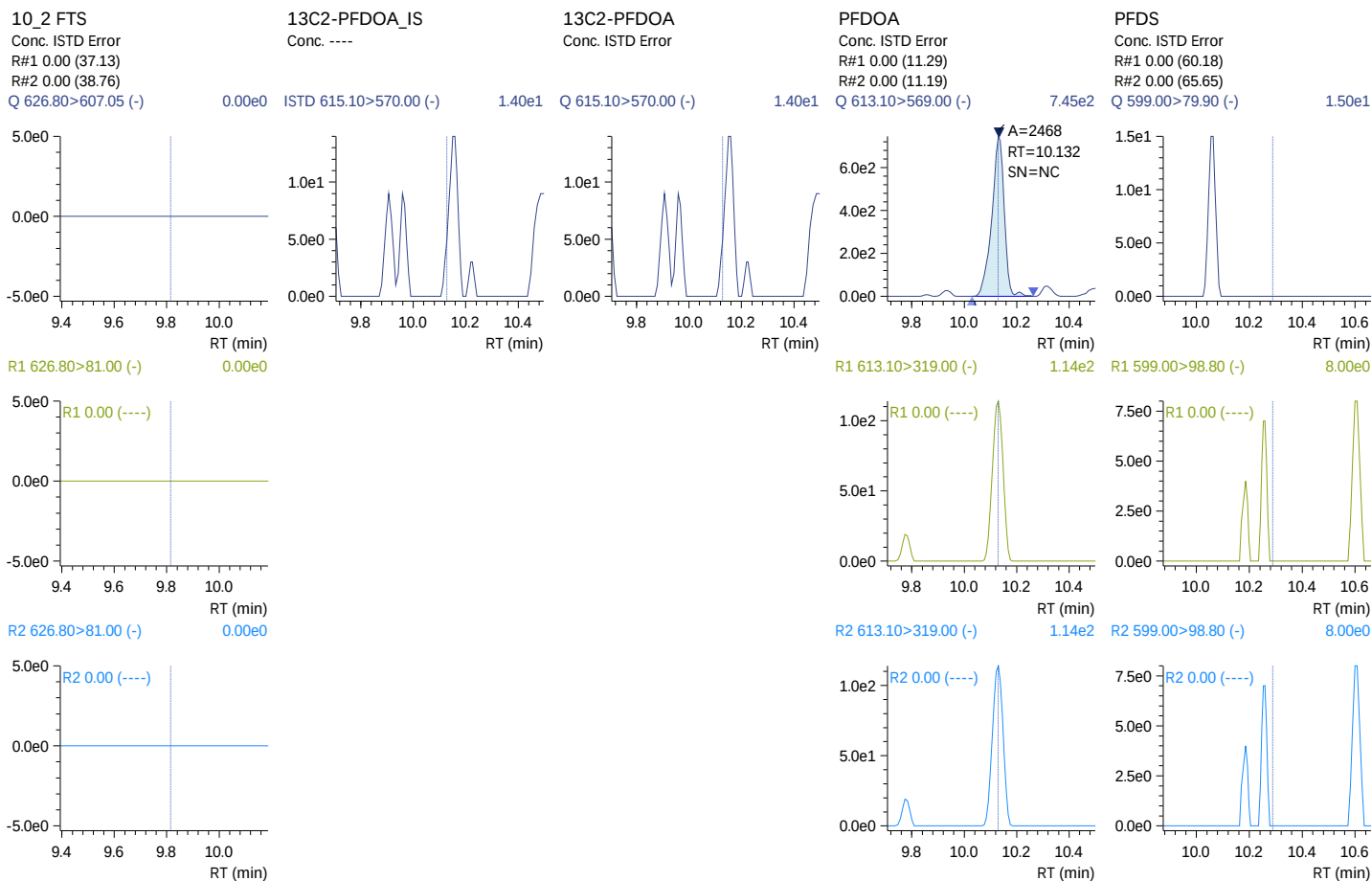


R2 548.80>98.80 (-)





240122_005 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_005 (continued)

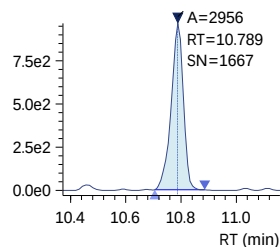
PFTrDA

Conc. ISTD Error

R#1 14.63 (17.64)

R#2 14.63 (19.81)

Q 663.00>619.00 (-)



R1 663.00>168.90 (-)

1.70e2

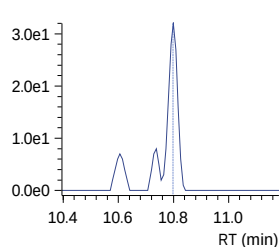
11-CI-PF3OUdS

Conc. ISTD Error

R#1 0.00 (36.44)

R#2 0.00 (35.86)

Q 630.90>451.00 (-)



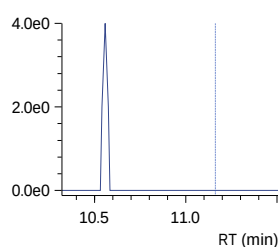
R1 632.90>452.90 (-)

5.70e1

PFOSAm

Conc. ISTD Error

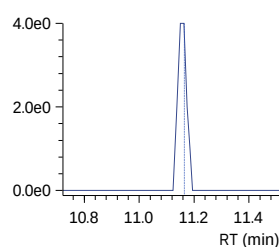
Q 498.10>77.90 (-)



13C8-PFOSAm

Conc. ----

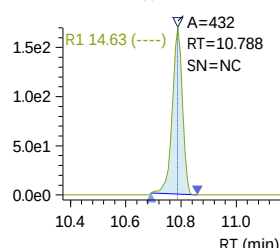
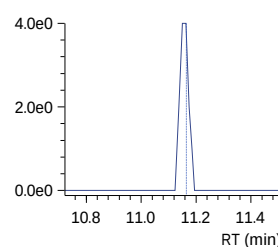
Q 506.10>77.80 (-)



13C8-PFOSAm_IS

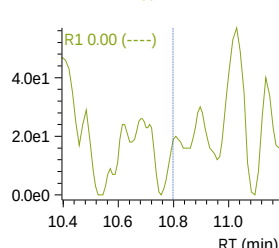
Conc. ----

ISTD 506.10>77.80 (-)



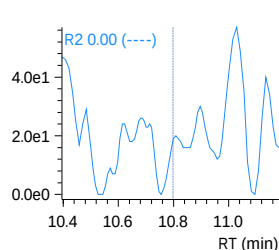
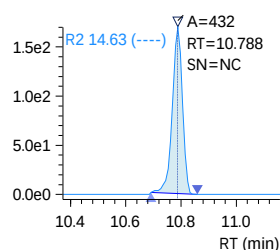
R2 663.00>168.90 (-)

1.70e2



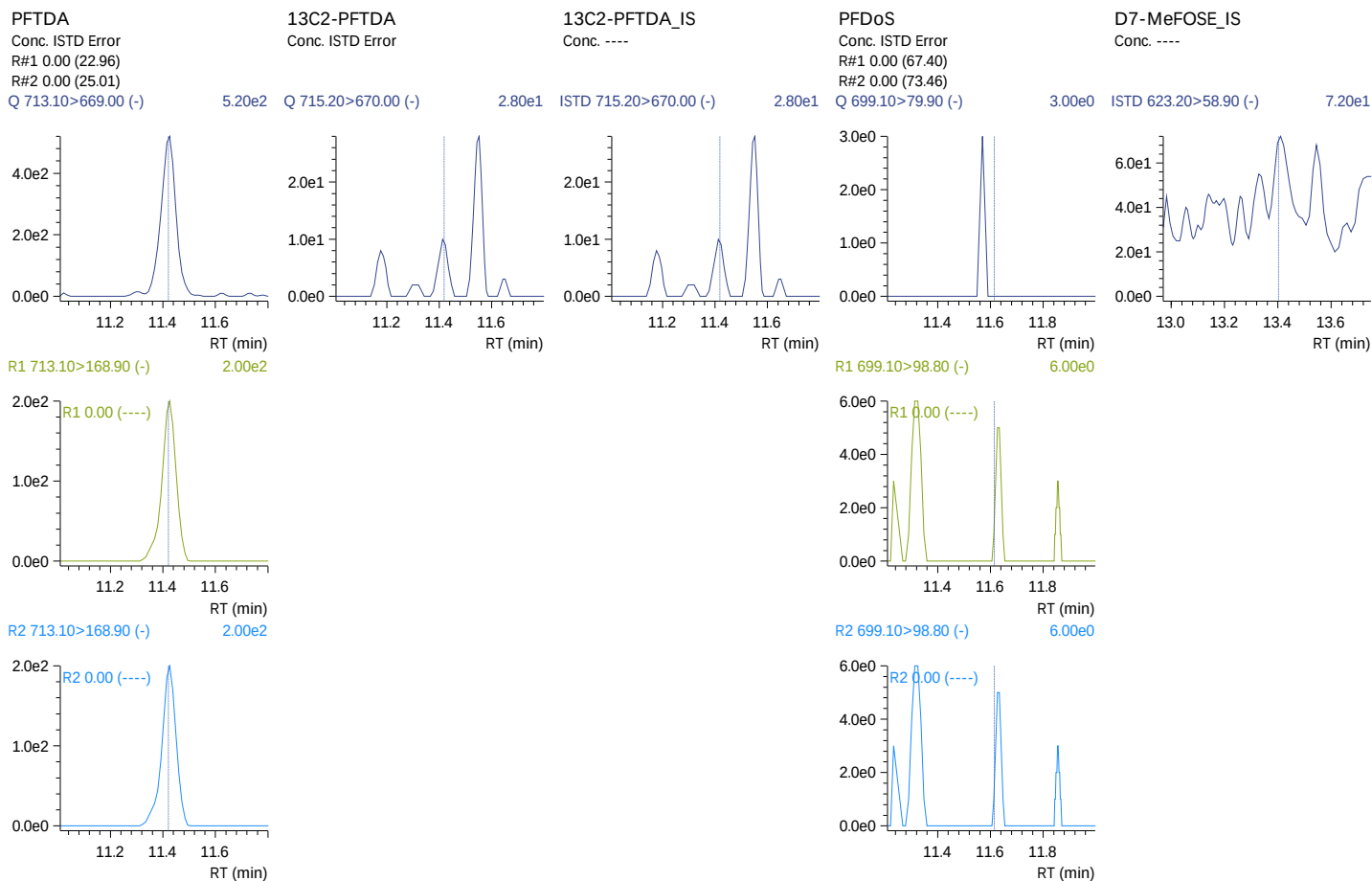
R2 632.90>452.90 (-)

5.70e1





240122_005 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_005 (continued)

D7-MeFOSE
Conc. ----

MeFOSE
Conc. ISTD Error

13C2-PFHxDA_IS
Conc. 2.5000

13C2-PFHxDA
Conc. ISTD Error

PFHxDA
Conc. 4.8259
R#1 0.00 (13.90)
R#2 0.00 (15.85)

Q 623.20>58.90 (-)

7.20e1

Q 616.10>59.00 (-)

5.00e1

ISTD 815.00>770.05 (-)

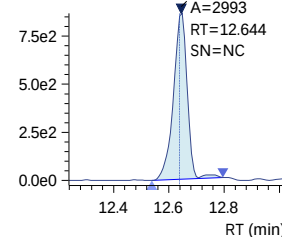
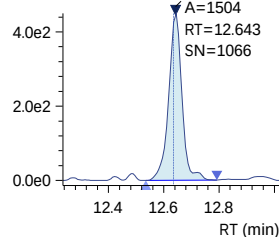
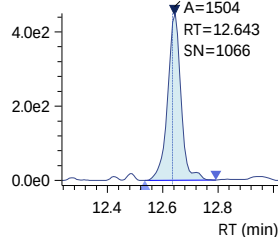
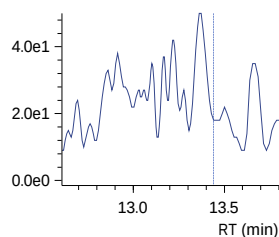
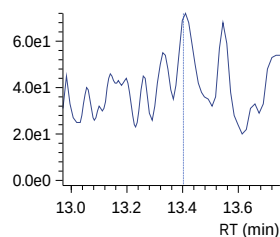
4.50e2

Q 815.00>770.05 (-)

4.50e2

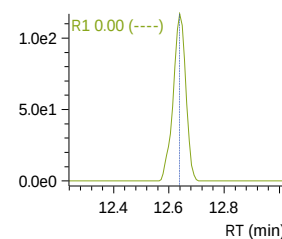
Q 813.00>768.95 (-)

8.68e2



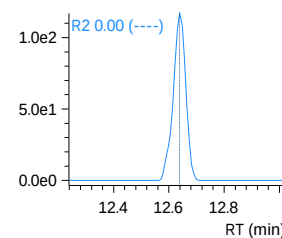
R1 813.00>218.95 (-)

1.17e2



R2 813.00>218.95 (-)

1.17e2

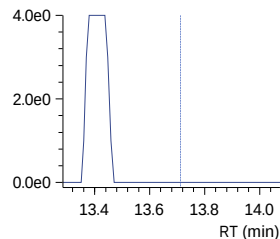




240122_005 (continued)

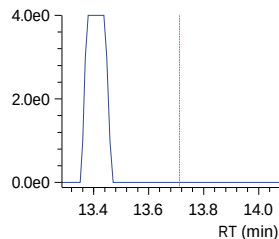
D3-MeFOSA
Conc. ----

Q 515.00>219.00 (-)



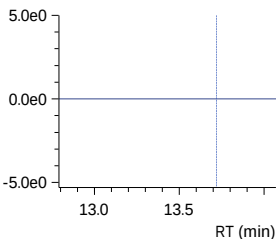
D3-MeFOSA_IS
Conc. ----

ISTD 515.00>219.00 (-)

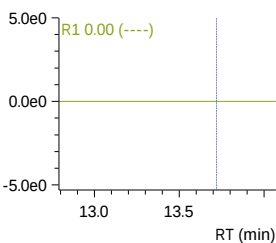


MeFOSA
Conc. ISTD Error
R#1 0.00 (140.79)
R#2 0.00 (150.13)

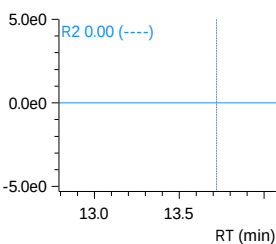
Q 511.90>219.00 (-)



R1 511.90>169.00 (-)

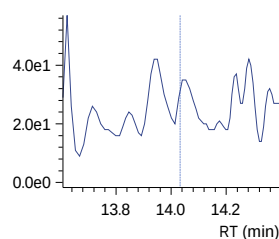


R2 511.90>169.00 (-)



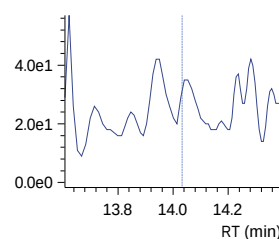
D9-EtFOSE_IS
Conc. ----

ISTD 639.20>58.90 (-)



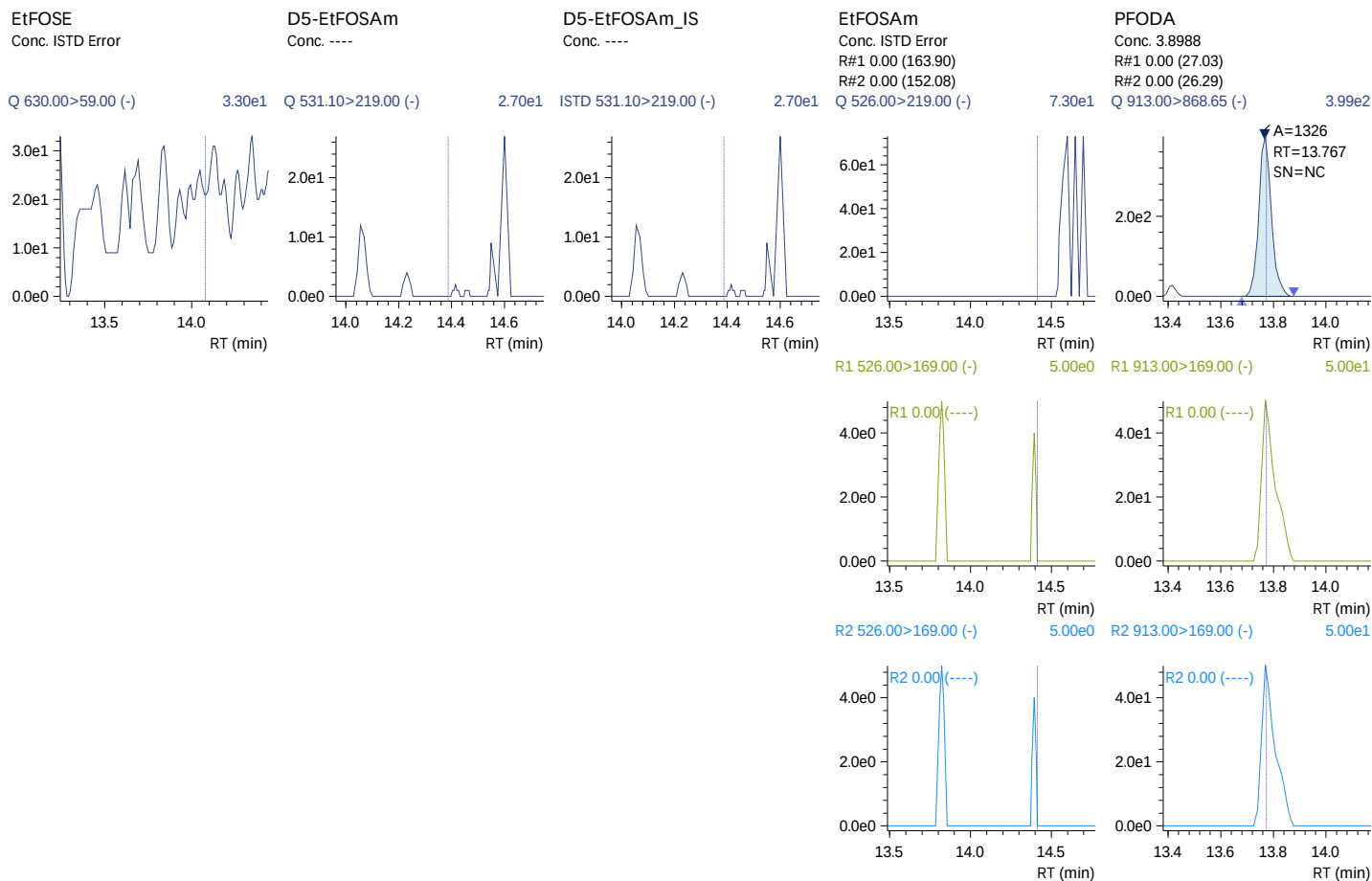
D9-EtFOSE
Conc. ----

Q 639.20>58.90 (-)





240122_005 (continued)



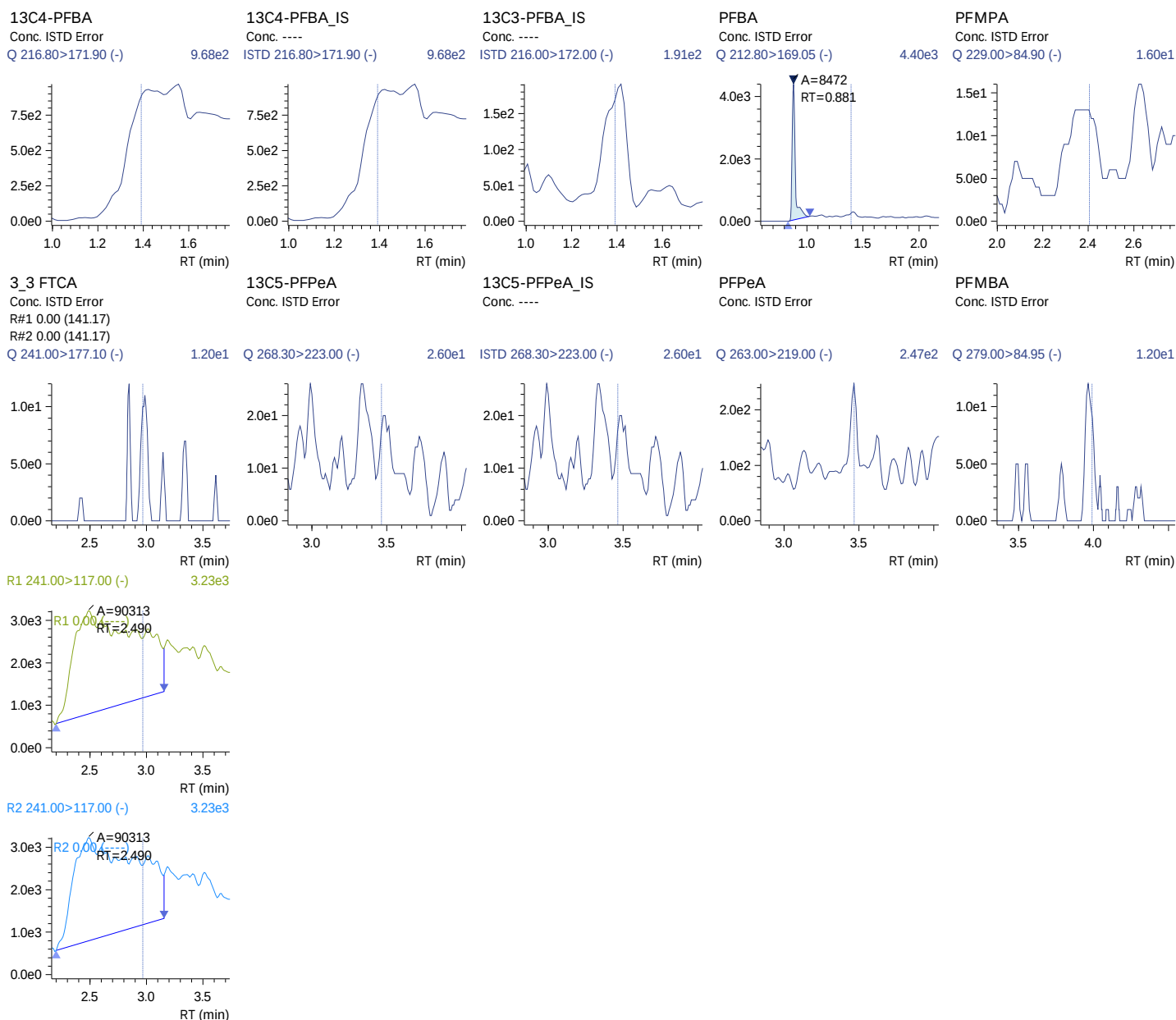
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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_005

Sample ID: TDCA CHECK
Date Acquired: 1/22/2024 11:18:07 AM
Acquired by: System Administrator
Data File: 240122_005
Vial: 12 | Inj. Volume: 10.0000uL | Tray: 1





240122_005 (continued)

13C2-4_2 FTS
 Conc. ISTD Error

13C2-4_2 FTS_IS
 Conc. ----

4_2 FTS
 Conc. ISTD Error
 R#1 0.00 (29.06)
 R#2 0.00 (29.06)

13C3-PFBS_IS
 Conc. ----

PFBS
 Conc. ISTD Error
 R#1 0.00 (46.72)
 R#2 0.00 (46.72)

Q 329.10>80.90 (-)

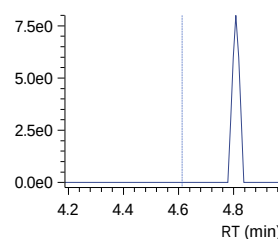
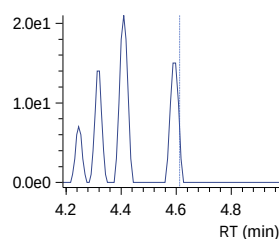
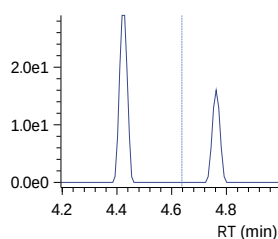
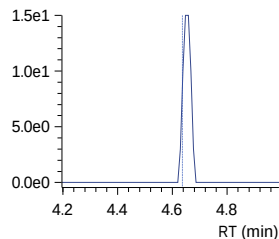
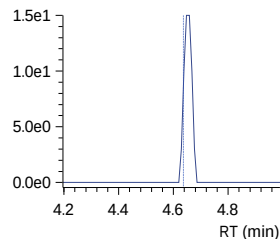
1.50e1 ISTD 329.10>80.90 (-)

1.50e1 Q 327.10>307.00 (-)

2.90e1 ISTD 302.10>79.90 (-)

2.10e1 Q 298.70>79.90 (-)

8.00e0

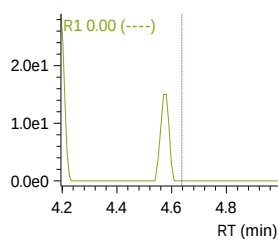


R1 327.10>80.90 (-)

2.90e1

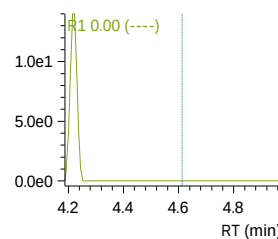
R1 298.70>98.80 (-)

1.40e1



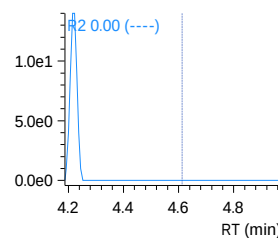
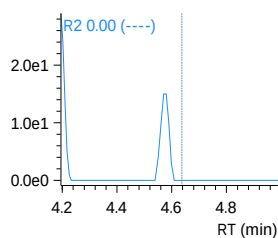
R2 327.10>80.90 (-)

2.90e1



R2 298.70>98.80 (-)

1.40e1

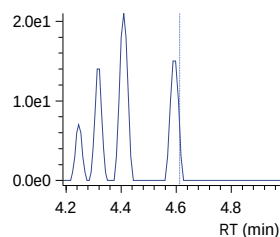




240122_005 (continued)

13C3-PFBS
 Conc. ISTD Error

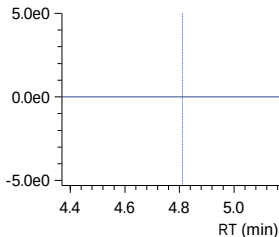
Q 302.10>79.90 (-)



2.10e1

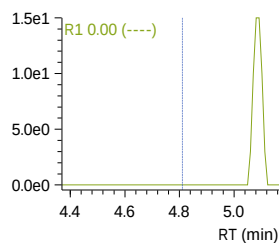
NFDHA
 Conc. ISTD Error
 R#1 0.00 (40.25)
 R#2 0.00 (40.25)

Q 295.00>201.00 (-)



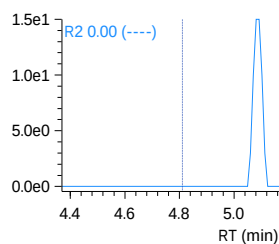
R1 295.00>84.90 (-)

1.50e1



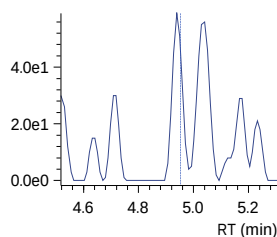
R2 295.00>84.90 (-)

1.50e1



13C5-PFHxA
 Conc. ISTD Error

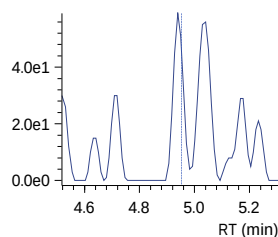
Q 318.00>273.00 (-)



5.90e1

13C5-PFHxA_IS
 Conc. ----

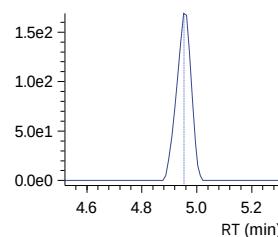
ISTD 318.00>273.00 (-)



5.90e1

13C2-PFHxA_IS
 Conc. ----

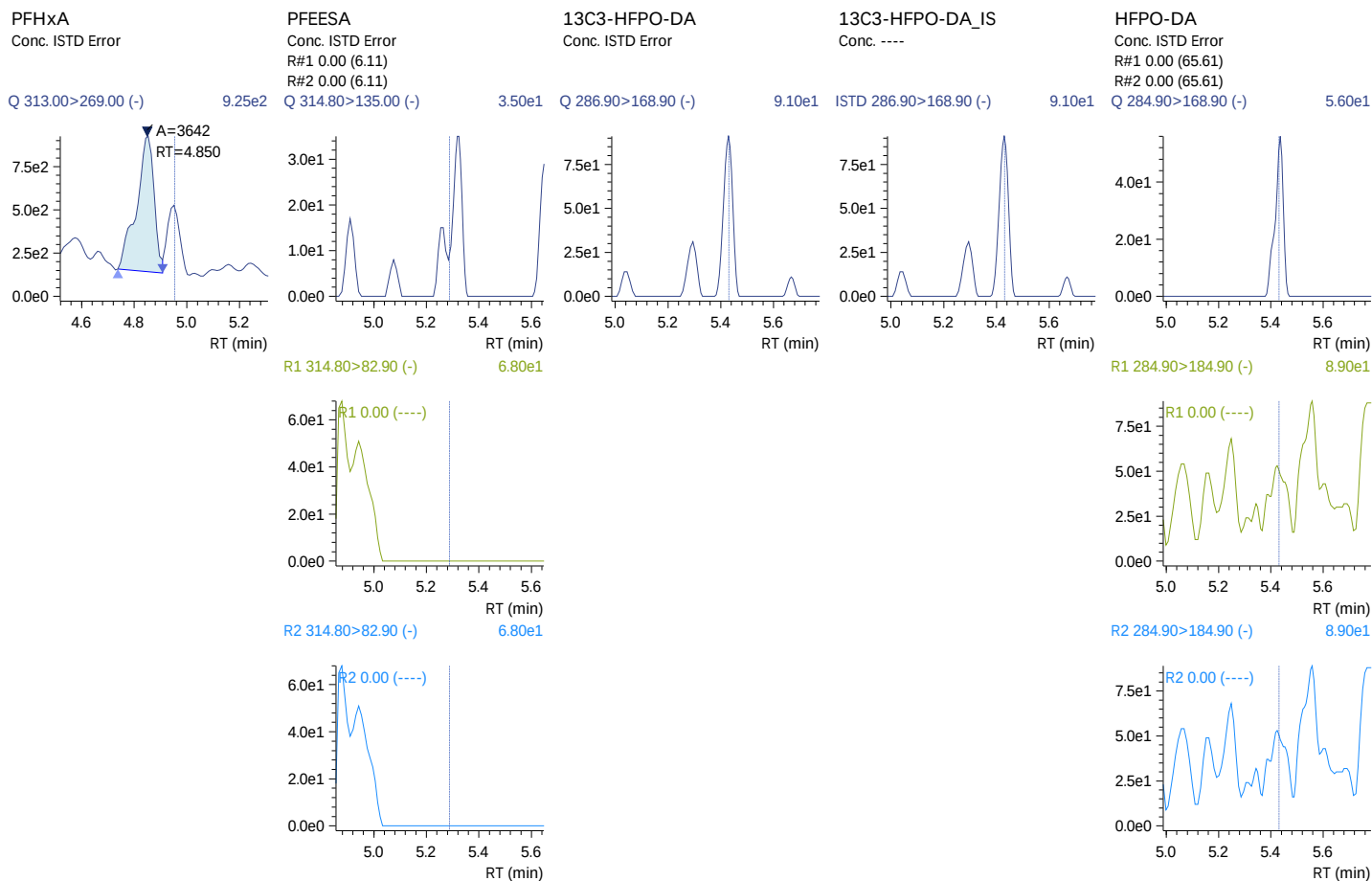
ISTD 315.10>270.00 (-)



1.69e2



240122_005 (continued)

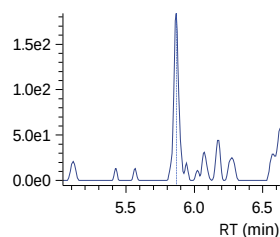




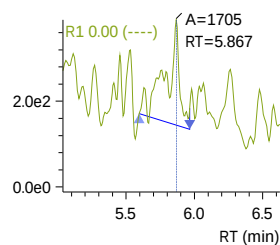
240122_005 (continued)

5_3 FTCA

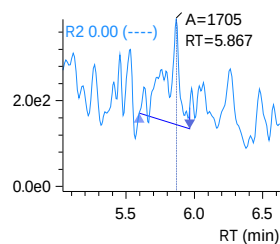
Conc. ISTD Error
R#1 0.00 (158.86)
R#2 0.00 (158.86)
Q 341.00>237.05 (-)



R1 341.00>217.00 (-) 3.90e2

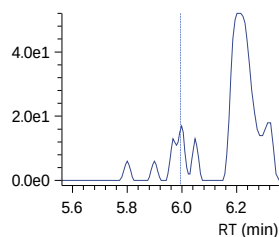


R2 341.00>217.00 (-) 3.90e2

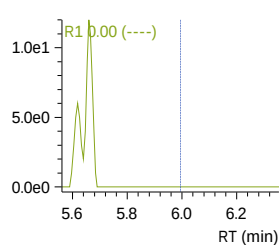


PFPeS

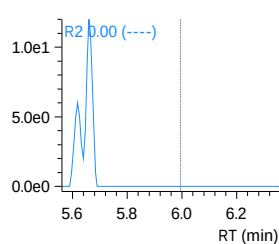
Conc. ISTD Error
R#1 0.00 (55.80)
R#2 0.00 (55.80)
Q 349.10>79.90 (-)



R1 349.10>98.80 (-) 1.20e1

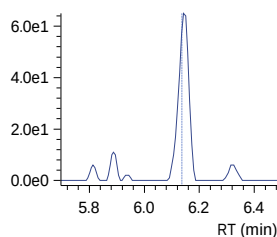


R2 349.10>98.80 (-) 1.20e1



13C4-PFHpA

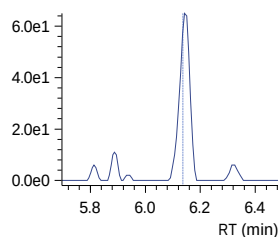
Conc. ISTD Error
Q 367.10>322.00 (-)



Q 367.10>322.00 (-) 6.50e1

13C4-PFHpA_IS

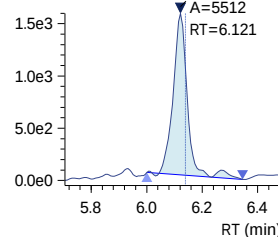
Conc. ----
ISTD 367.10>322.00 (-)



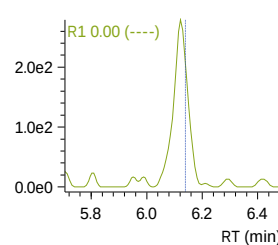
ISTD 367.10>322.00 (-) 6.50e1

PFHpA

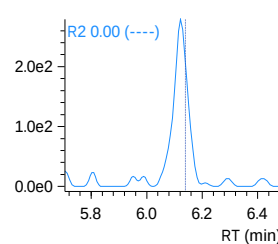
Conc. ISTD Error
R#1 0.00 (21.50)
R#2 0.00 (21.50)
Q 363.10>319.00 (-)



R1 363.10>169.00 (-) 2.79e2

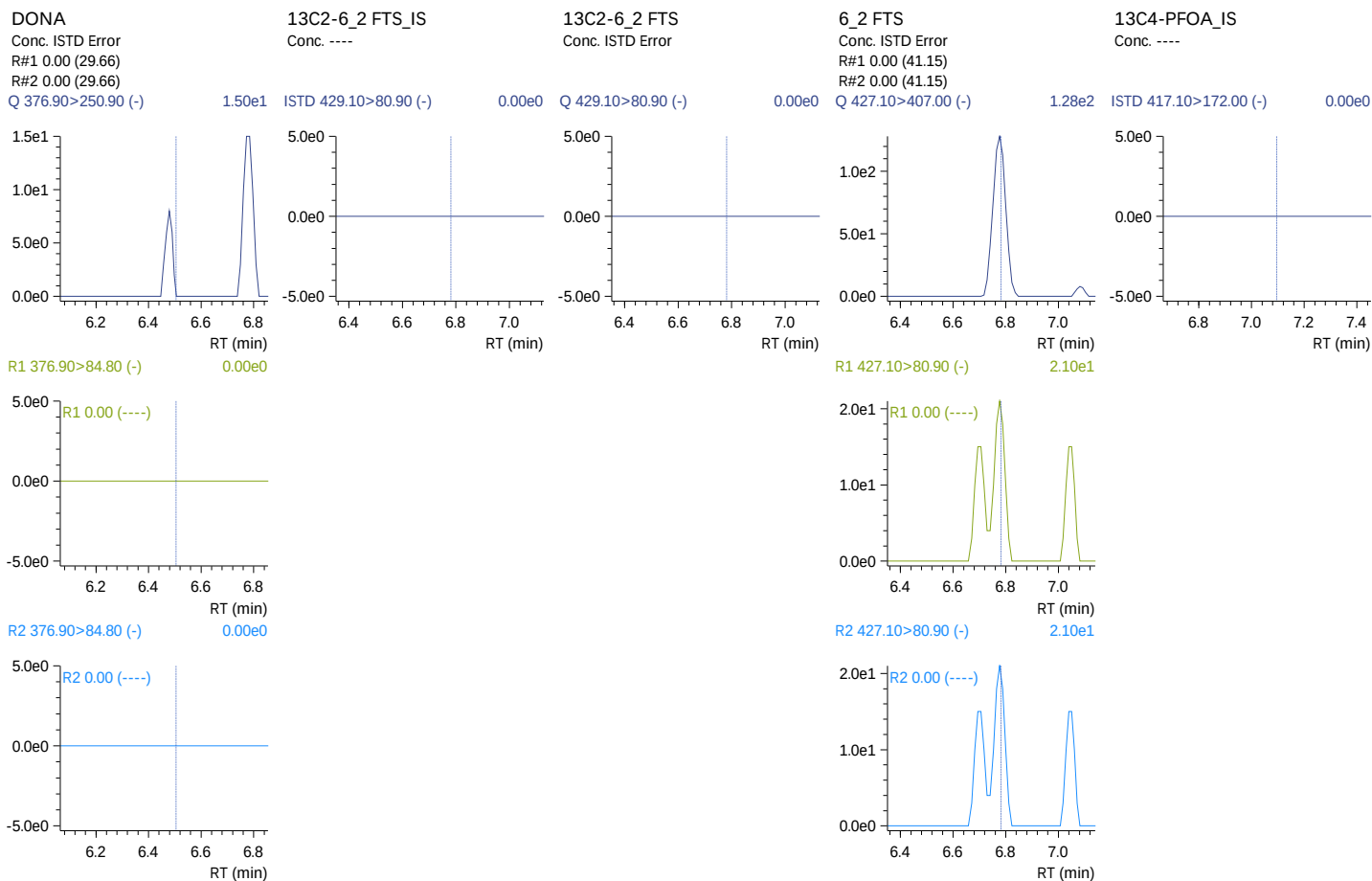


R2 363.10>169.00 (-) 2.79e2





240122_005 (continued)





240122_005 (continued)

13C8-PFOA_IS
 Conc. ----

13C8-PFOA
 Conc. ISTD Error

PFOA
 Conc. ISTD Error
 R#1 25.31 (31.89)
 R#2 25.31 (31.89)

13C3-PFHxS
 Conc. ISTD Error

13C3-PFHxS_IS
 Conc. ----

ISTD 421.10>376.00 (-)

1.40e1

Q 421.10>376.00 (-)

1.40e1

Q 413.00>369.00 (-)

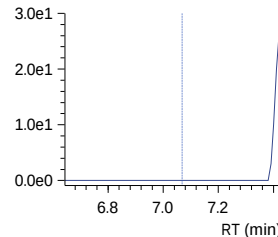
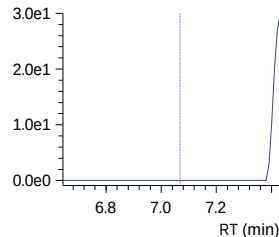
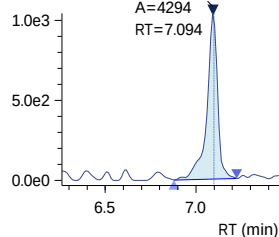
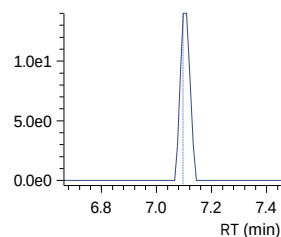
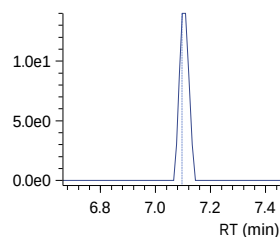
1.04e3

Q 402.10>79.90 (-)

3.00e1

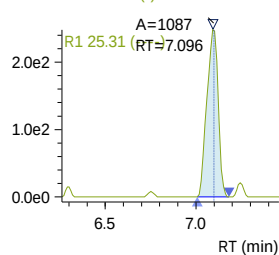
ISTD 402.10>79.90 (-)

3.00e1



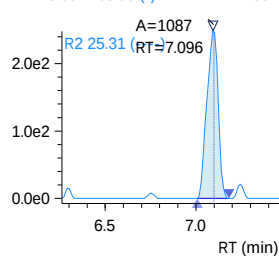
R1 413.00>169.00 (-)

2.48e2



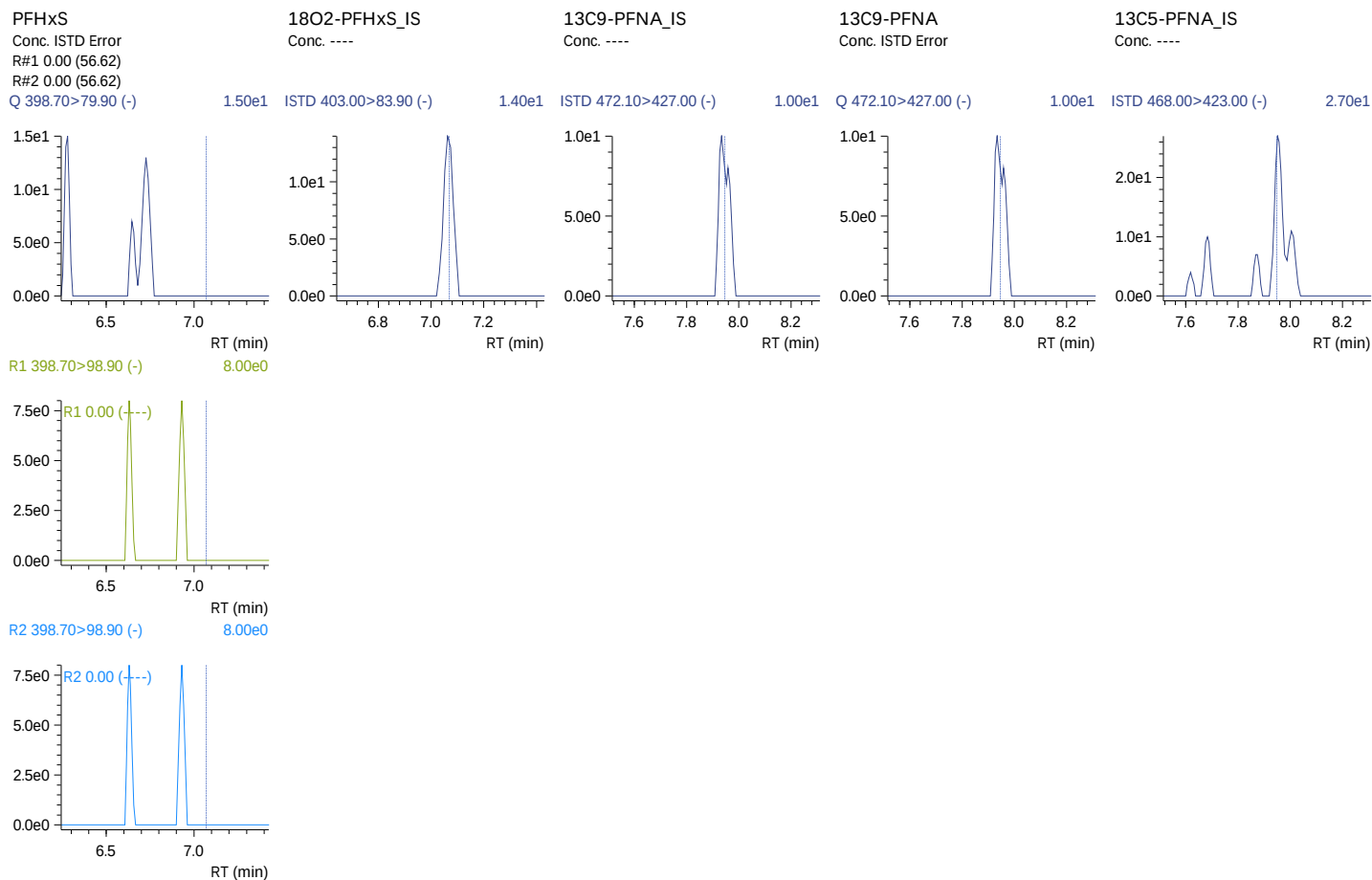
R2 413.00>169.00 (-)

2.48e2



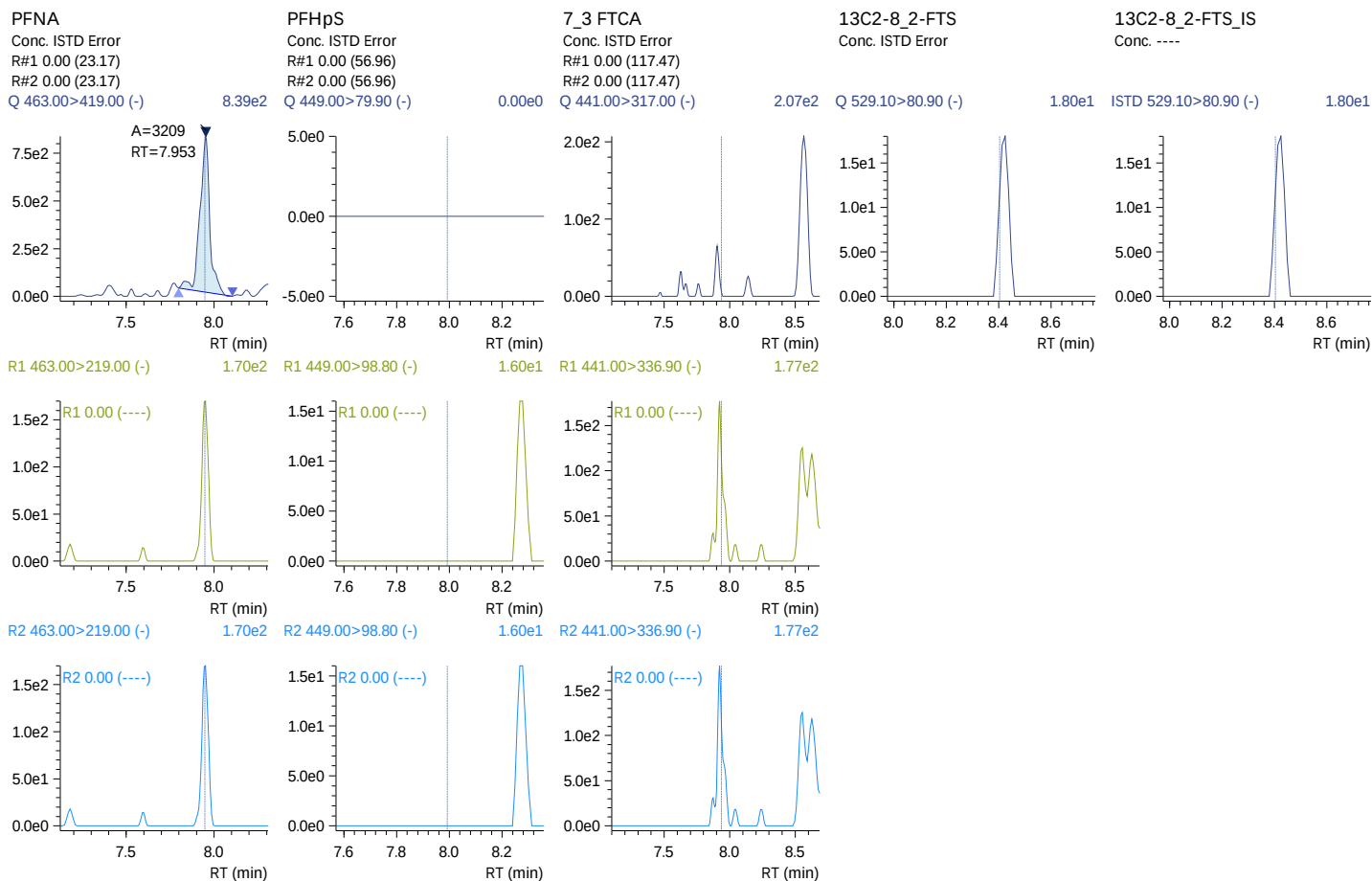


240122_005 (continued)



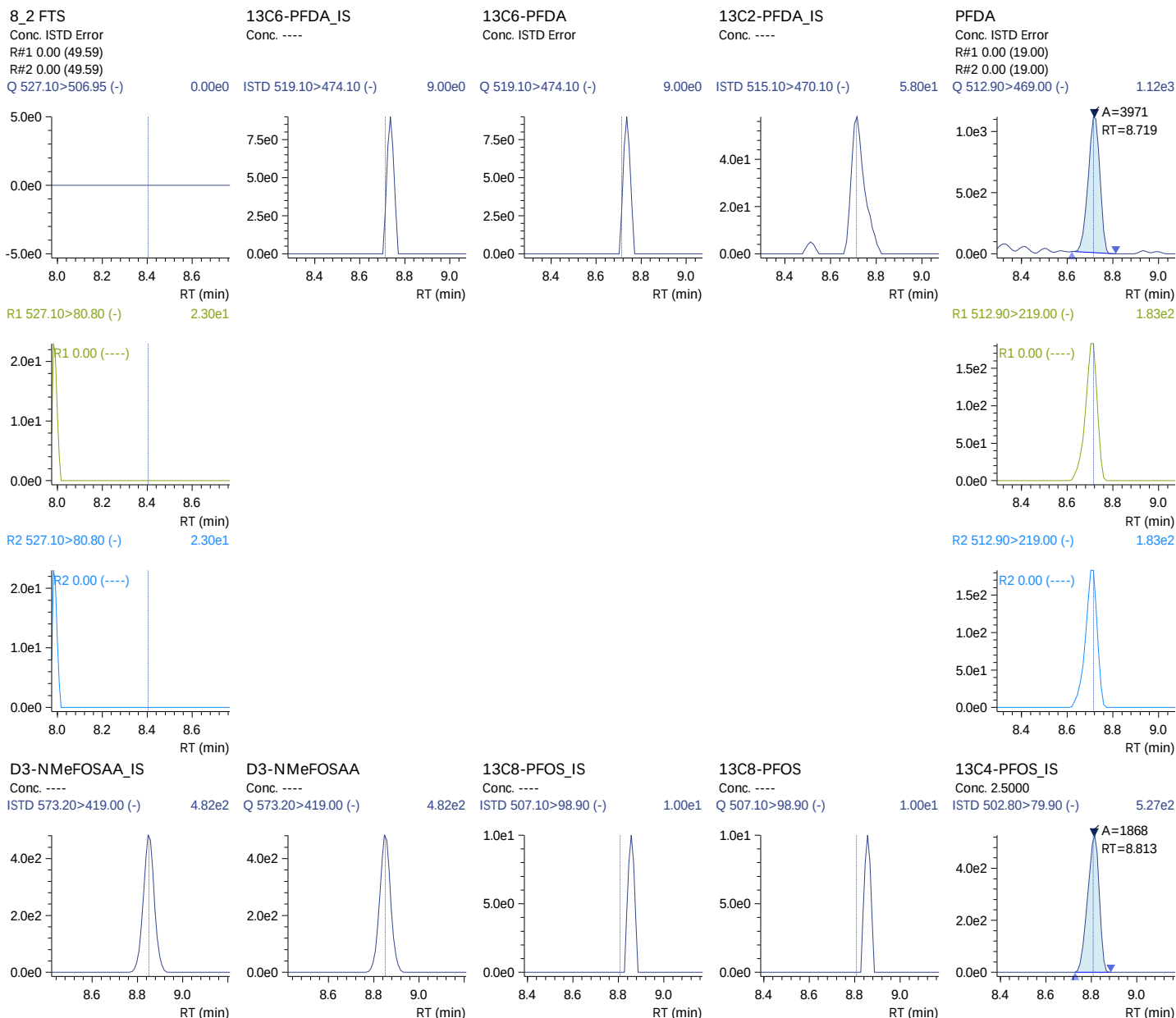


240122_005 (continued)



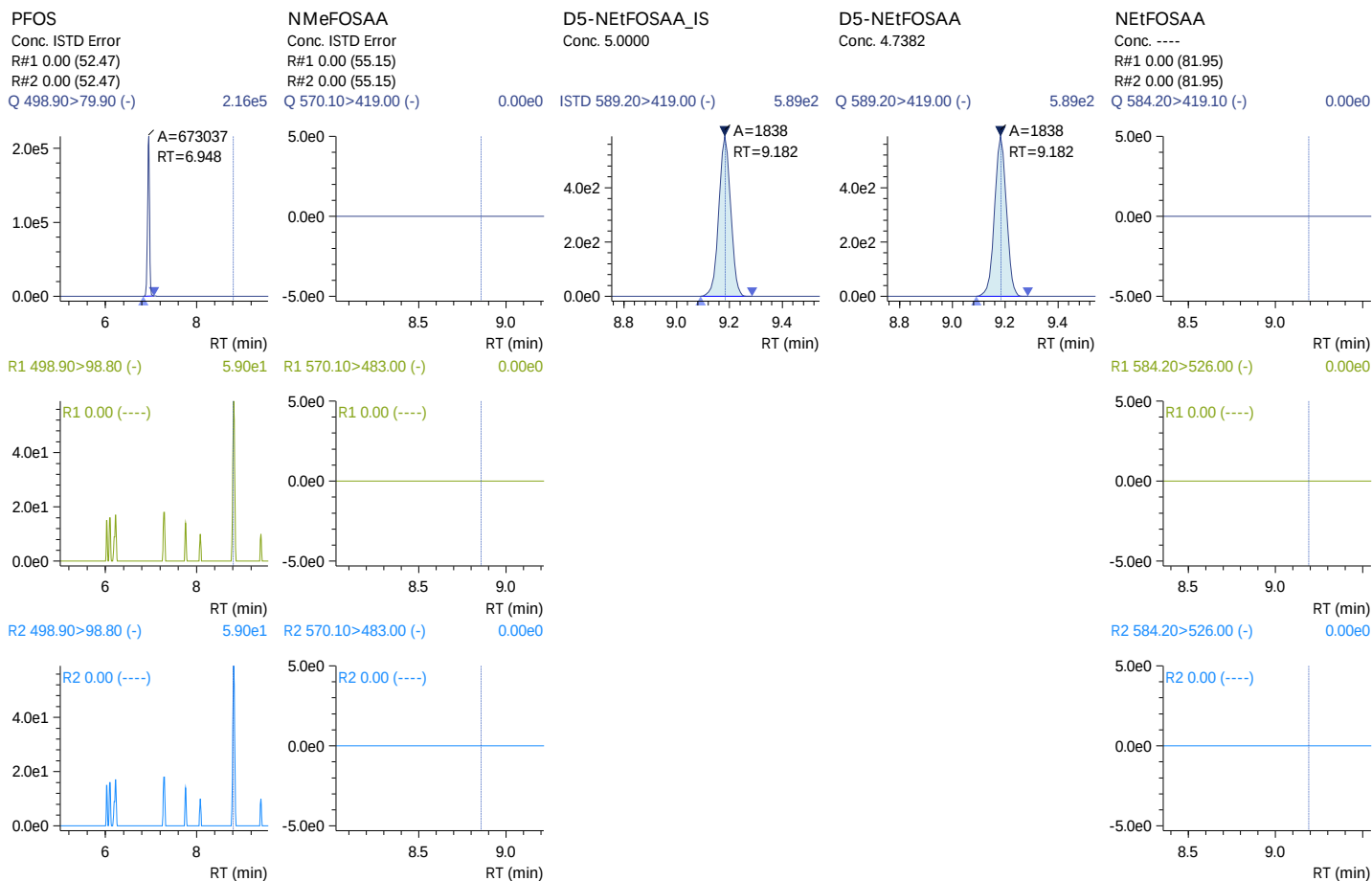


240122_005 (continued)





240122_005 (continued)

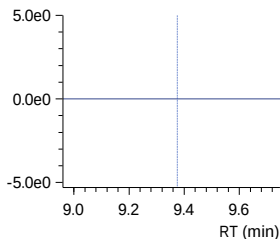




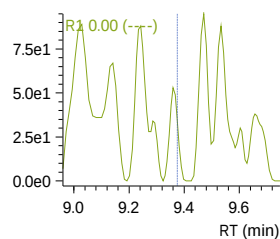
240122_005 (continued)

9-Cl-PF3ONS

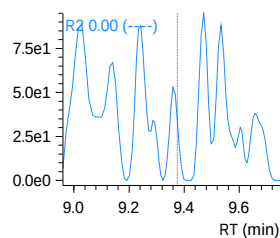
Conc. ISTD Error
R#1 0.00 (32.76)
R#2 0.00 (32.76)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-) 9.50e1

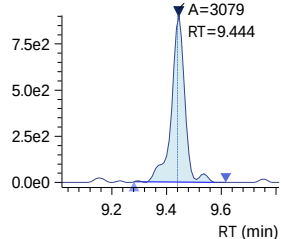


R2 532.80>353.00 (-) 9.50e1

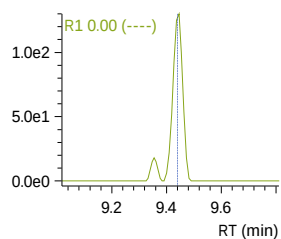


PFUnDA

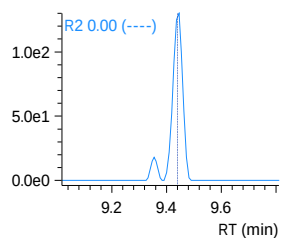
Conc. ISTD Error
R#1 0.00 (13.12)
R#2 0.00 (13.12)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-) 1.30e2

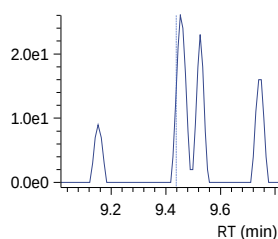


R2 563.10>269.10 (-) 1.30e2



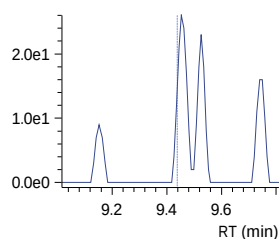
13C7-PFUnDA_IS

Conc. ----
ISTD 570.00>525.10 (-)



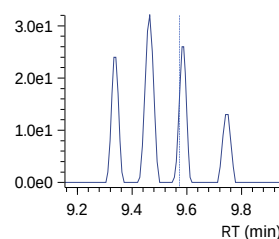
13C7-PFUnDA

Conc. ISTD Error
Q 570.00>525.10 (-)

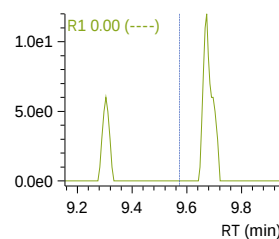


PFNS

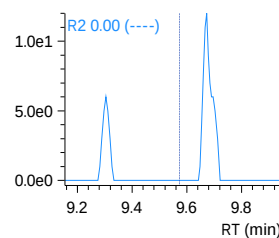
Conc. ISTD Error
R#1 0.00 (65.22)
R#2 0.00 (65.22)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-) 1.20e1

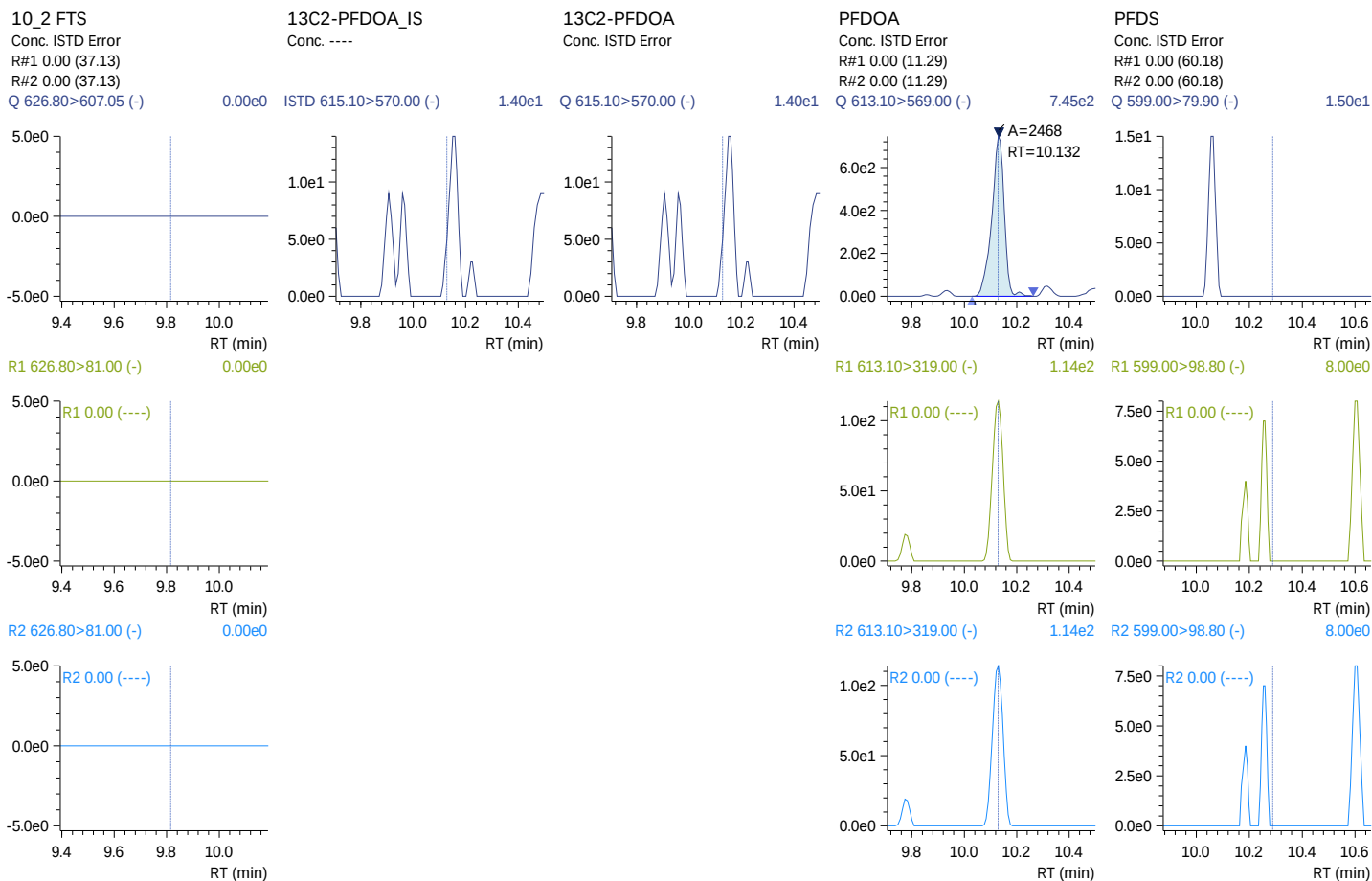


R2 548.80>98.80 (-) 1.20e1





240122_005 (continued)





240122_005 (continued)

PFTrDA

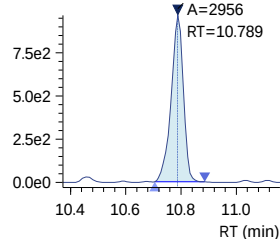
Conc. ISTD Error

R#1 14.63 (17.64)

R#2 14.63 (17.64)

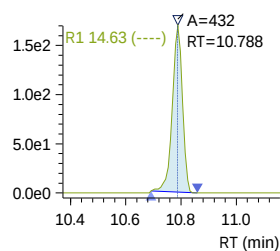
Q 663.00>619.00 (-)

9.67e2



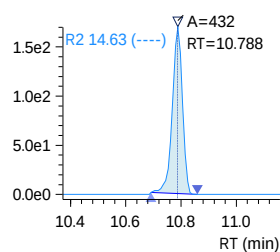
R1 663.00>168.90 (-)

1.70e2



R2 663.00>168.90 (-)

1.70e2



11-CI-PF3OUdS

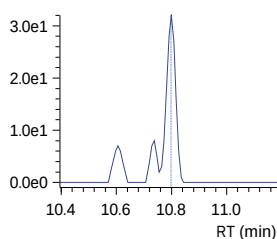
Conc. ISTD Error

R#1 0.00 (36.44)

R#2 0.00 (36.44)

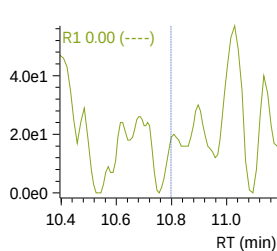
Q 630.90>451.00 (-)

3.20e1



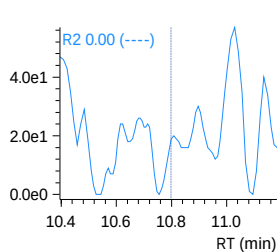
R1 632.90>452.90 (-)

5.70e1



R2 632.90>452.90 (-)

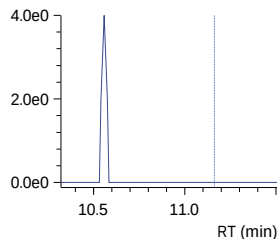
5.70e1



PFOSAm

Conc. ISTD Error

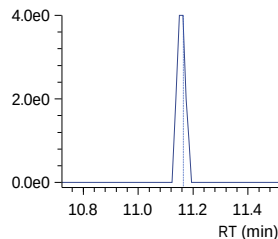
Q 498.10>77.90 (-)



13C8-PFOSAm

Conc. ----

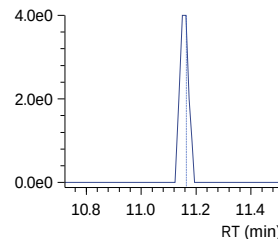
Q 506.10>77.80 (-)



13C8-PFOSAm_IS

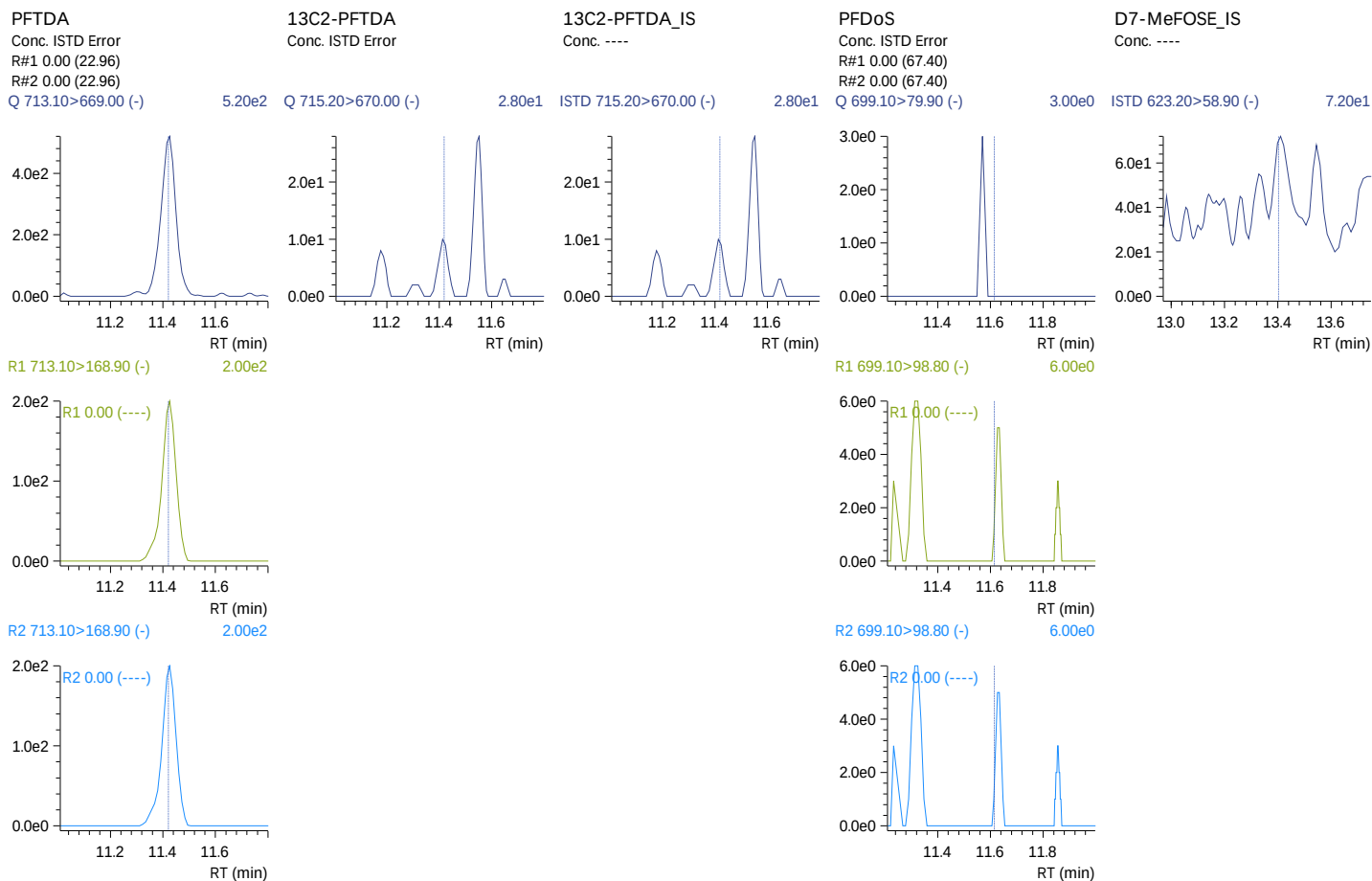
Conc. ----

ISTD 506.10>77.80 (-)





240122_005 (continued)





240122_005 (continued)

D7-MeFOSE
 Conc. ----

MeFOSE
 Conc. ISTD Error

13C2-PFHxDA_IS
 Conc. 2.5000

13C2-PFHxDA
 Conc. ISTD Error

PFHxDA
 Conc. 4.8259

R#1 0.00 (13.90)

R#2 0.00 (13.90)

Q 623.20>58.90 (-)

7.20e1

Q 616.10>59.00 (-)

5.00e1

ISTD 815.00>770.05 (-)

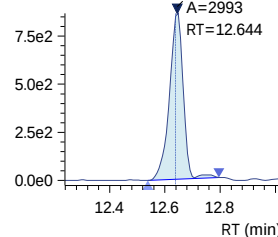
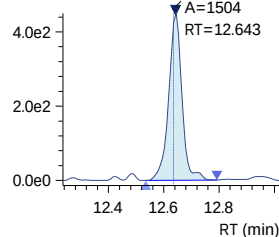
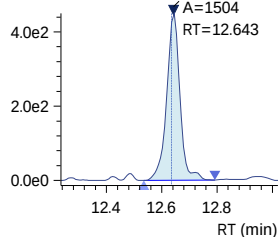
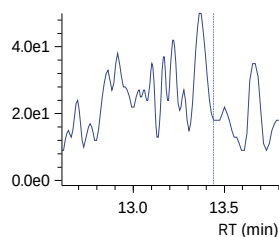
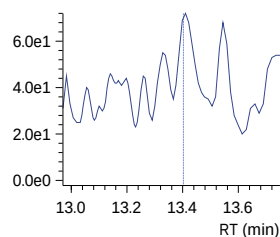
4.50e2

Q 815.00>770.05 (-)

4.50e2

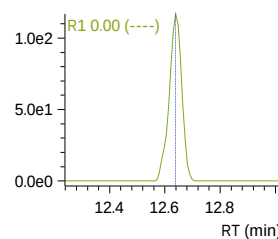
Q 813.00>768.95 (-)

8.68e2



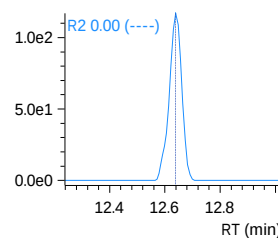
R1 813.00>218.95 (-)

1.17e2



R2 813.00>218.95 (-)

1.17e2

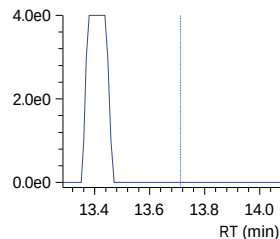




240122_005 (continued)

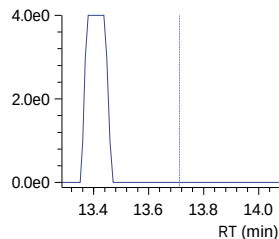
D3-MeFOSA
 Conc. ----

Q 515.00>219.00 (-)



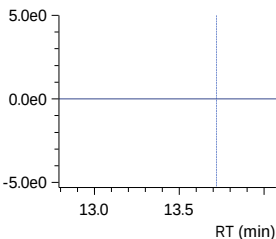
D3-MeFOSA_IS
 Conc. ----

ISTD 515.00>219.00 (-)

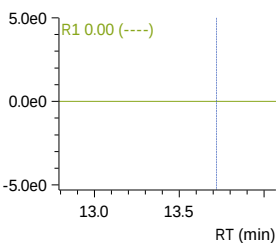


MeFOSA
 Conc. ISTD Error
 R#1 0.00 (140.79)
 R#2 0.00 (140.79)

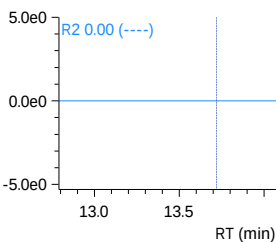
Q 511.90>219.00 (-)



R1 511.90>169.00 (-)

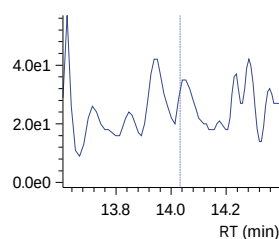


R2 511.90>169.00 (-)



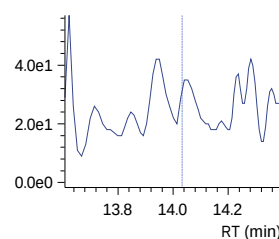
D9-EtFOSE_IS
 Conc. ----

ISTD 639.20>58.90 (-)



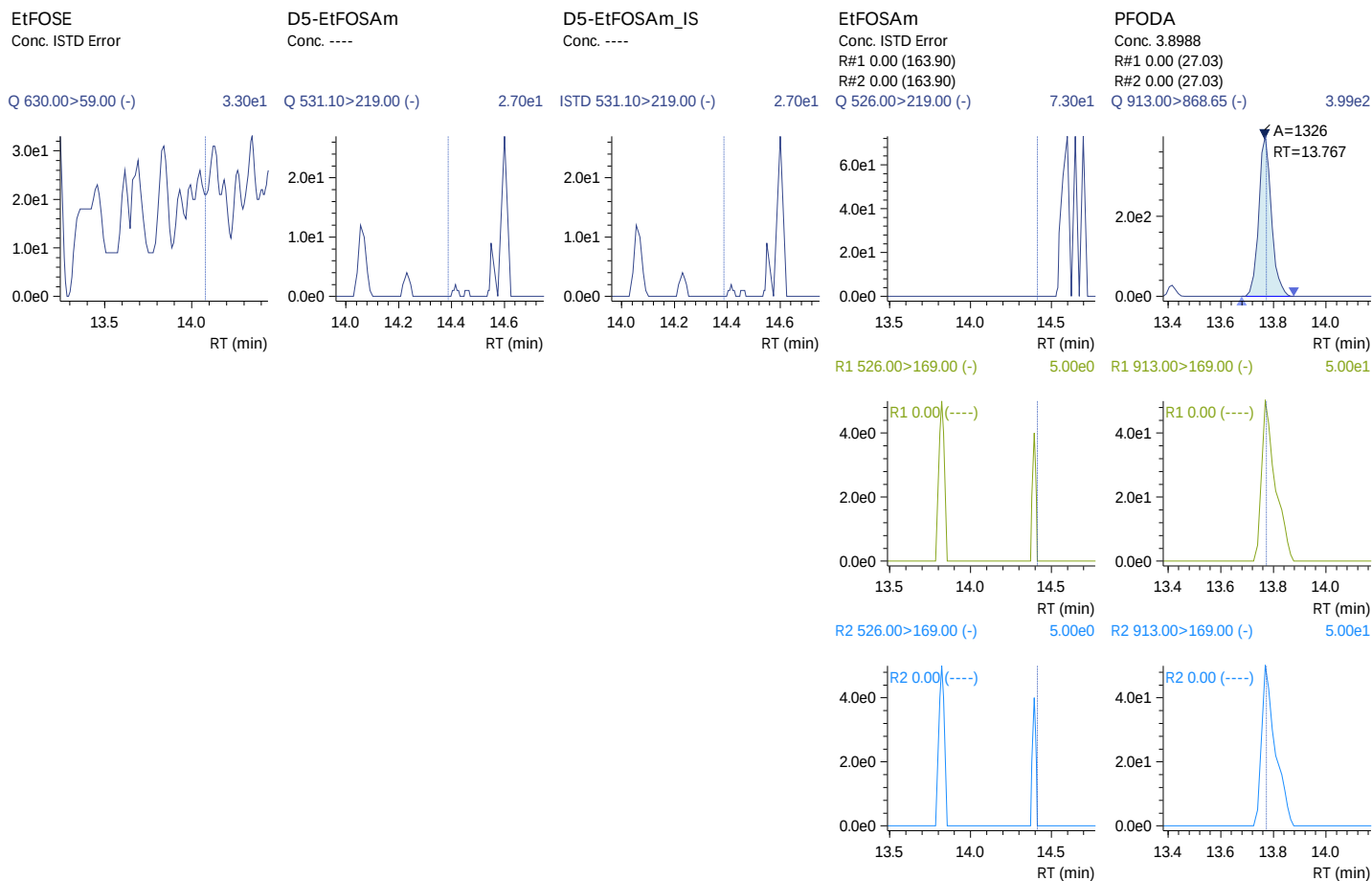
D9-EtFOSE
 Conc. ----

Q 639.20>58.90 (-)





240122_005 (continued)





240122_011

Sample ID: 1633 QIS
Date Acquired: 1/22/2024 1:37:38 PM
Acquired by: System Administrator
Data File: 240122_011
Vial: 13 | Inj. Volume: 10.0000uL | Tray: 1

Check PFOA and PFNA

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.391	0.000	-0.002	1187677	514220	13C3-PFBA_IS	10.3333	ng/mL	
13C4-PFBA_IS	Auto	1.391	0.000	----	1187677	1187677	----	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.393	0.002	----	514220	514220	----	5.0000	ng/mL	
PFBA	Auto	0.880	-0.515	-0.511	9302	1187677	13C4-PFBA_IS	0.0912	ng/mL	RT, RTi
PFMPA	ND(W/B)	----	----	----	----	114615	13C5-PFPeA_IS	----	ng/mL	
3_3 FTCA	ND(W/B)	----	----	----	----	114615	13C5-PFPeA_IS	----	ng/mL	
13C5-PFPeA	Auto	3.468	0.003	-1.485	114615	555873	13C2-PFHxA_IS	4.5679	ng/mL	
13C5-PFPeA_IS	Auto	3.468	0.003	----	114615	114615	----	5.0000	ng/mL	
PFPeA	Auto	3.462	-0.005	-0.006	1660	114615	13C5-PFPeA_IS	0.0112	ng/mL	
PFMBA	ND(W/B)	----	----	----	----	114615	13C5-PFPeA_IS	----	ng/mL	
13C2-4_2 FTS	Auto	4.637	0.001	-2.430	208741	190850	18O2-PFHxS_IS	7.9480	ng/mL	
13C2-4_2 FTS_IS	Auto	4.637	0.001	----	208741	208741	----	5.0000	ng/mL	
4_2 FTS	ND(W/B)	----	----	----	----	208741	13C2-4_2 FTS_IS	----	ng/mL	
13C3-PFBS_IS	Auto	4.613	0.001	----	256491	256491	----	2.5000	ng/mL	
PFBS	ND(W/B)	----	----	----	----	256491	13C3-PFBS_IS	----	ng/mL	
13C3-PFBS	Auto	4.613	0.001	-2.454	256491	190850	18O2-PFHxS_IS	2.3682	ng/mL	
NFDHA	ND(W/B)	----	----	----	----	561829	13C5-PFHxA_IS	----	ng/mL	
13C5-PFHxA	Auto	4.952	0.000	-0.001	561829	555873	13C2-PFHxA_IS	2.3982	ng/mL	
13C5-PFHxA_IS	Auto	4.952	0.000	----	561829	561829	----	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	4.953	0.000	----	555873	555873	----	2.5000	ng/mL	
PFHxA	Auto	4.841	-0.113	-0.111	2538	561829	13C5-PFHxA_IS	0.0052	ng/mL	RTi
PFEESA	ND(W/B)	----	----	----	----	561829	13C5-PFHxA_IS	----	ng/mL	
13C3-HFPO-DA	Auto	5.430	0.000	0.477	625604	555873	13C2-PFHxA_IS	11.4969	ng/mL	
13C3-HFPO-DA_IS	Auto	5.430	0.000	----	625604	625604	----	10.0000	ng/mL	
HFPO-DA	ND(W/B)	----	----	----	----	625604	13C3-HFPO-DA_IS	----	ng/mL	
5_3 FTCA	ND(W/B)	----	----	----	----	561829	13C5-PFHxA_IS	----	ng/mL	
PFPeS	ND(W/B)	----	----	----	----	195600	13C3-PFHxS_IS	----	ng/mL	
13C4-PFHpA	Auto	6.136	-0.001	1.183	576943	555873	13C2-PFHxA_IS	2.7205	ng/mL	
13C4-PFHpA_IS	Auto	6.136	-0.001	----	576943	576943	----	2.5000	ng/mL	
PFHpA	Auto	6.122	-0.017	-0.014	7577	576943	13C4-PFHpA_IS	-0.0031	ng/mL	
DONA	ND(W/B)	----	----	----	----	625604	13C3-HFPO-DA_IS	----	ng/mL	
13C2-6_2 FTS_IS	Auto	6.780	-0.001	----	191249	191249	----	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.780	-0.001	-0.287	191249	190850	18O2-PFHxS_IS	7.6992	ng/mL	
6_2 FTS	Auto	6.779	-0.002	-0.001	908	191249	13C2-6_2 FTS_IS	0.0104	ng/mL	IRr
13C4-PFOA_IS	Auto	7.094	-0.003	----	39140	39140	----	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.094	-0.002	----	535090	535090	----	2.5000	ng/mL	
13C8-PFOA	Auto	7.094	-0.002	0.000	535090	39140	13C4-PFOA_IS	2.4460	ng/mL	
PFOA	M	7.096	-0.002	0.002	141260	535090	13C8-PFOA_IS	0.9791	ng/mL	
13C3-PFHxS	Auto	7.067	-0.001	0.000	195600	190850	18O2-PFHxS_IS	2.3878	ng/mL	
13C3-PFHxS_IS	Auto	7.067	-0.001	----	195600	195600	----	2.5000	ng/mL	
PFHxS	Auto	7.062	-0.007	-0.005	876	195600	13C3-PFHxS_IS	-0.0098	ng/mL	
18O2-PFHxS_IS	Auto	7.067	-0.002	----	190850	190850	----	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.945	-0.002	----	274863	274863	----	1.2500	ng/mL	
13C9-PFNA	Auto	7.945	-0.002	0.000	274863	252943	13C5-PFNA_IS	1.3878	ng/mL	
13C5-PFNA_IS	Auto	7.945	-0.003	----	252943	252943	----	1.2500	ng/mL	
PFNA	M	7.683	-0.265	-0.262	402210	274863	13C9-PFNA_IS	2.5403	ng/mL	RTi
PFHpS	ND(W/B)	----	----	----	----	82580	13C8-PFOS_IS	----	ng/mL	
7_3 FTCA	ND(W/B)	----	----	----	----	561829	13C5-PFHxA_IS	----	ng/mL	
13C2-8_2-FTS	Auto	8.403	0.000	1.336	143251	190850	18O2-PFHxS_IS	7.0205	ng/mL	
13C2-8_2-FTS_IS	Auto	8.403	0.000	----	143251	143251	----	5.0000	ng/mL	
8_2 FTS	ND(W/B)	----	----	----	----	143251	13C2-8_2-FTS_IS	----	ng/mL	
13C6-PFDA_IS	Auto	8.712	-0.001	----	193675	193675	----	1.2500	ng/mL	
13C6-PFDA	Auto	8.712	-0.001	0.000	193675	175924	13C2-PFDA_IS	1.3684	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_011 (continued)

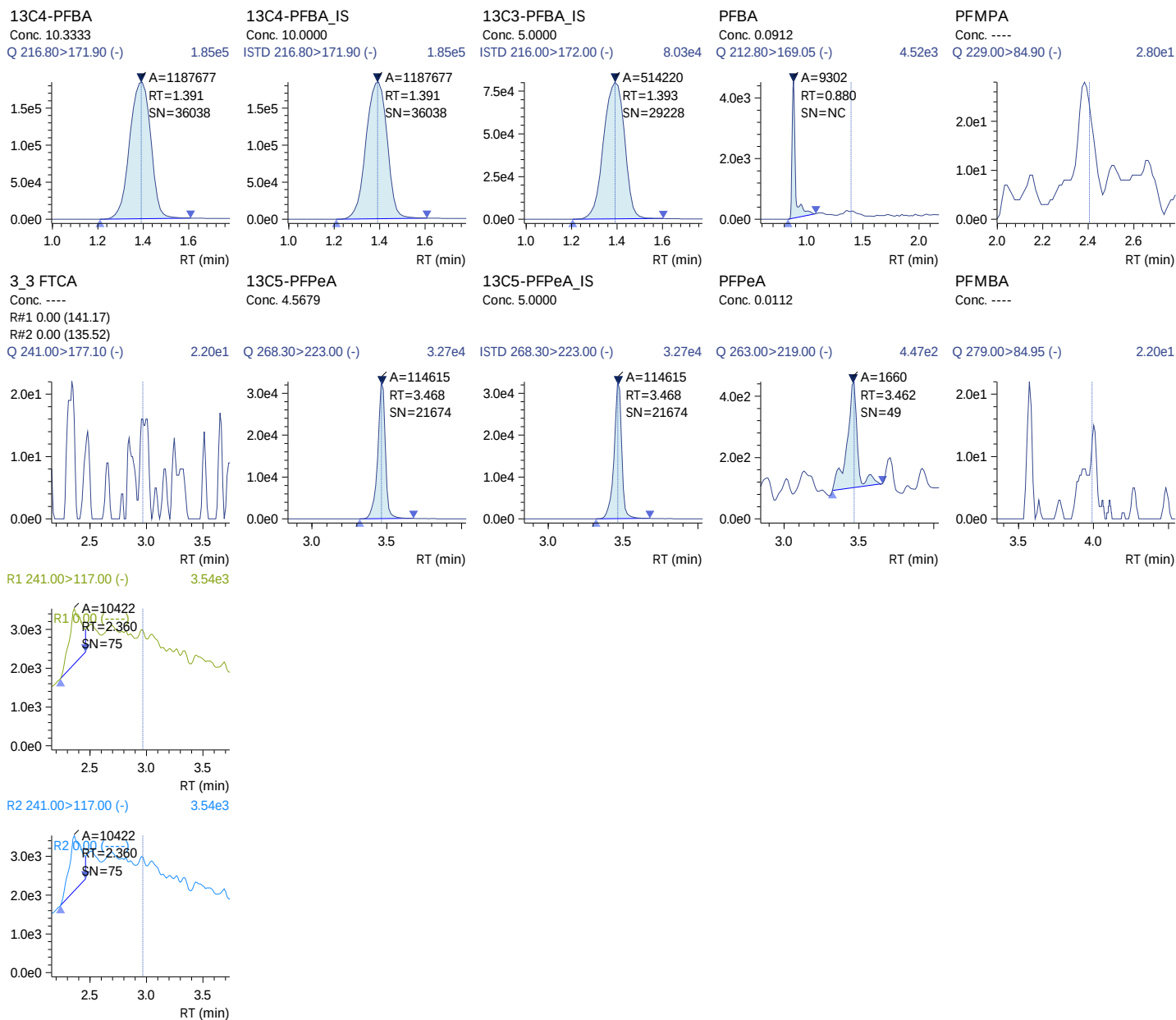
(Table continued from previous page)

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C2-PFDA_IS	Auto	8.712	-0.001	----	175924	175924	----	1.2500	ng/mL	
PFDA	Auto	8.715	0.000	0.003	4063	193675	13C6-PFDA_IS	-0.0035	ng/mL	IRr
D3-NMeFOSAA_IS	Auto	8.850	-0.001	----	262935	262935	----	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.850	-0.001	0.042	262935	221403	13C4-PFOS_IS	6.8426	ng/mL	
13C8-PFOS_IS	Auto	8.808	0.000	----	82580	82580	----	2.5000	ng/mL	
13C8-PFOS	Auto	8.808	0.000	0.000	82580	221403	13C4-PFOS_IS	2.2365	ng/mL	
13C4-PFOS_IS	Auto	8.808	-0.001	----	221403	221403	----	2.5000	ng/mL	
PFOS	Auto	8.789	-0.020	-0.019	315	82580	13C8-PFOS_IS	0.0037	ng/mL	IRr
NMeFOSAA	ND(W/B)	----	----	----	----	262935	D3-NMeFOSAA_IS	----	ng/mL	
D5-NetFOSAA_IS	Auto	9.183	0.000	----	270026	270026	----	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.183	0.000	0.375	270026	221403	13C4-PFOS_IS	5.8737	ng/mL	
NetFOSAA	ND(W/B)	----	----	----	----	270026	D5-NetFOSAA_IS	----	ng/mL	
9-CI-PF3ONS	ND(W/B)	----	----	----	----	625604	13C3-HFPO-DA_IS	----	ng/mL	
PFUnDA	Auto	9.441	0.001	0.003	3394	230609	13C7-PFUnDA_IS	-0.0094	ng/mL	IRr
13C7-PFUnDA_IS	Auto	9.438	0.000	----	230609	230609	----	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.438	0.000	0.726	230609	175924	13C2-PFDA_IS	1.3659	ng/mL	
PFNS	ND(W/B)	----	----	----	----	82580	13C8-PFOS_IS	----	ng/mL	
10_2_FTS	ND(W/B)	----	----	----	----	143251	13C2-8_2-FTS_IS	----	ng/mL	
13C2-PFDOA_IS	Auto	10.126	-0.002	----	251152	251152	----	1.2500	ng/mL	
13C2-PFDOA	Auto	10.126	-0.002	1.414	251152	175924	13C2-PFDA_IS	1.2949	ng/mL	
PFDOA	Auto	10.129	0.000	0.003	2961	251152	13C2-PFDOA_IS	-0.0119	ng/mL	IRr
PFDS	ND(W/B)	----	----	----	----	82580	13C8-PFOS_IS	----	ng/mL	
PFTDA	Auto	10.786	-0.002	-0.632	2955	118446	13C2-PFTDA_IS	-0.0133	ng/mL	
11-CI-PF3OUdS	ND(W/B)	----	----	----	----	625604	13C3-HFPO-DA_IS	----	ng/mL	
PFOSAm	Auto	11.161	-0.001	-0.001	59194	252288	13C8-PFOSAm_IS	0.7118	ng/mL	
13C8-PFOSAm	Auto	11.162	-0.002	2.354	252288	221403	13C4-PFOS_IS	2.6842	ng/mL	
13C8-PFOSAm_IS	Auto	11.162	-0.002	----	252288	252288	----	2.5000	ng/mL	
PFTDA	ND(W/B)	----	----	----	----	118446	13C2-PFTDA_IS	----	ng/mL	
13C2-PFTDA	Auto	11.418	-0.001	2.706	118446	175924	13C2-PFDA_IS	1.4144	ng/mL	
13C2-PFTDA_IS	Auto	11.418	-0.001	----	118446	118446	----	1.2500	ng/mL	
PFDoS	ND(W/B)	----	----	----	----	82580	13C8-PFOS_IS	----	ng/mL	
D7-MeFOSE_IS	Auto	13.402	0.000	----	747798	747798	----	25.0000	ng/mL	
D7-MeFOSE	Auto	13.402	0.000	4.594	747798	221403	13C4-PFOS_IS	32.2705	ng/mL	
MeFOSE	Auto	13.440	-0.001	0.038	17518	747798	D7-MeFOSE_IS	0.6379	ng/mL	
13C2-PFHxDA_IS	Auto	12.635	-0.001	----	413939	413939	----	2.5000	ng/mL	
13C2-PFHxDA	Auto	12.635	-0.001	3.923	413939	175924	13C2-PFDA_IS	2.5331	ng/mL	
PFHxDA	Auto	12.638	0.001	0.003	3325	413939	13C2-PFHxDA_IS	-0.0083	ng/mL	IRr
D3-MeFOSA	Auto	13.710	-0.001	4.902	47678	221403	13C4-PFOS_IS	2.5189	ng/mL	
D3-MeFOSA_IS	Auto	13.710	-0.001	----	47678	47678	----	2.5000	ng/mL	
MeFOSA	ND(W/B)	----	----	----	----	47678	D3-MeFOSA_IS	----	ng/mL	
D9-EtFOSE_IS	Auto	14.031	-0.001	----	780590	780590	----	25.0000	ng/mL	
D9-EtFOSE	Auto	14.031	-0.001	5.223	780590	221403	13C4-PFOS_IS	33.1664	ng/mL	
EtFOSE	Auto	14.075	-0.001	0.044	28198	780590	D9-EtFOSE_IS	0.6866	ng/mL	
D5-EtFOSAm	Auto	14.386	-0.001	5.578	70372	221403	13C4-PFOS_IS	2.7925	ng/mL	
D5-EtFOSAm_IS	Auto	14.386	-0.001	----	70372	70372	----	2.5000	ng/mL	
EtFOSAm	ND(W/B)	----	----	----	----	70372	D5-EtFOSAm_IS	----	ng/mL	
PFODA	Auto	13.772	-0.002	1.137	1746	413939	13C2-PFHxDA_IS	0.0186	ng/mL	

Flag ID key: IRr: Ion Ratio (Relative), RT: RT Diff (Absolute), RTi: RT Diff (Absolute ISTD)



240122_011 (continued)





240122_011 (continued)

13C2-4_2 FTS
Conc. 7.9480

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. ----
R#1 0.00 (29.06)
R#2 0.00 (35.34)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. ----
R#1 0.00 (46.72)
R#2 0.00 (49.78)

Q 329.10>80.90 (-)

6.35e4

ISTD 329.10>80.90 (-)

6.35e4

Q 327.10>307.00 (-)

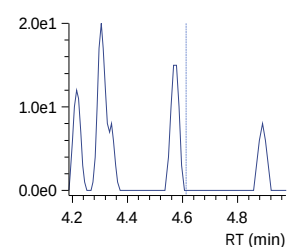
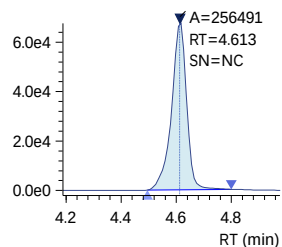
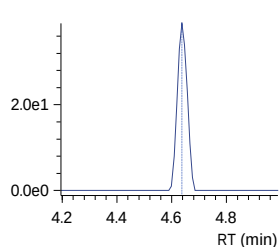
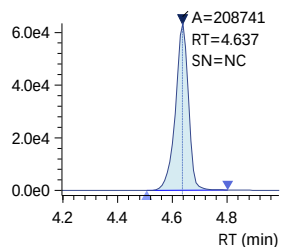
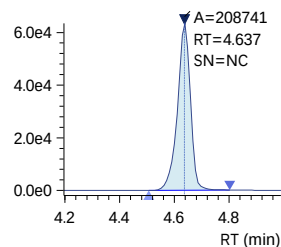
3.90e1

ISTD 302.10>79.90 (-)

6.76e4

Q 298.70>79.90 (-)

2.00e1

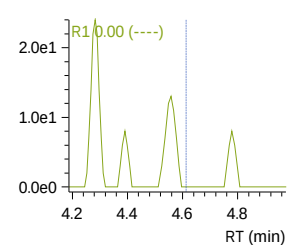
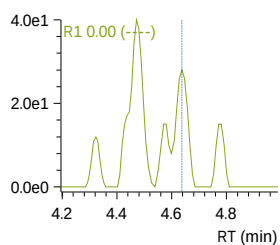


R1 327.10>80.90 (-)

4.00e1

R1 298.70>98.80 (-)

2.40e1

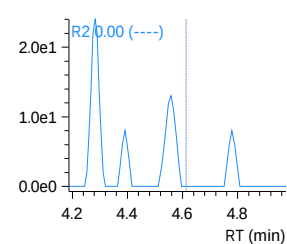
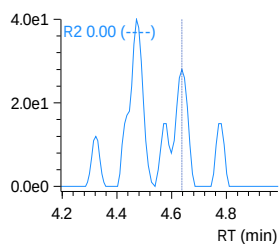


R2 327.10>80.90 (-)

4.00e1

R2 298.70>98.80 (-)

2.40e1





240122_011 (continued)

13C3-PFBS
Conc. 2.3682

NFDHA
Conc. ----
R#1 0.00 (40.25)
R#2 0.00 (37.18)

13C5-PFHxA
Conc. 2.3982

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

Q 302.10>79.90 (-)

6.76e4

Q 295.00>201.00 (-)

3.07e2

Q 318.00>273.00 (-)

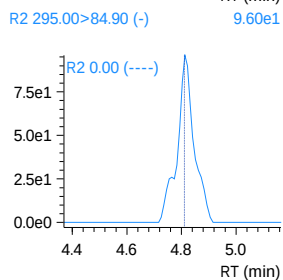
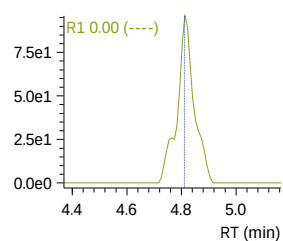
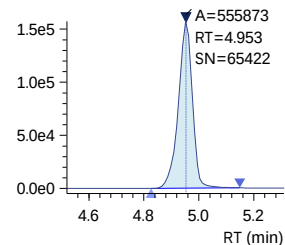
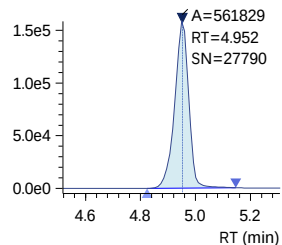
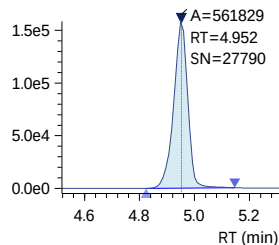
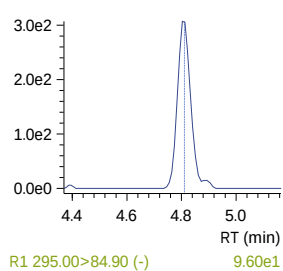
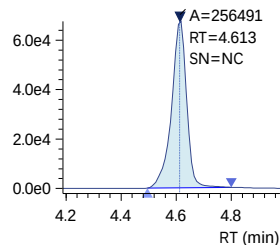
1.58e5

ISTD 318.00>273.00 (-)

1.58e5

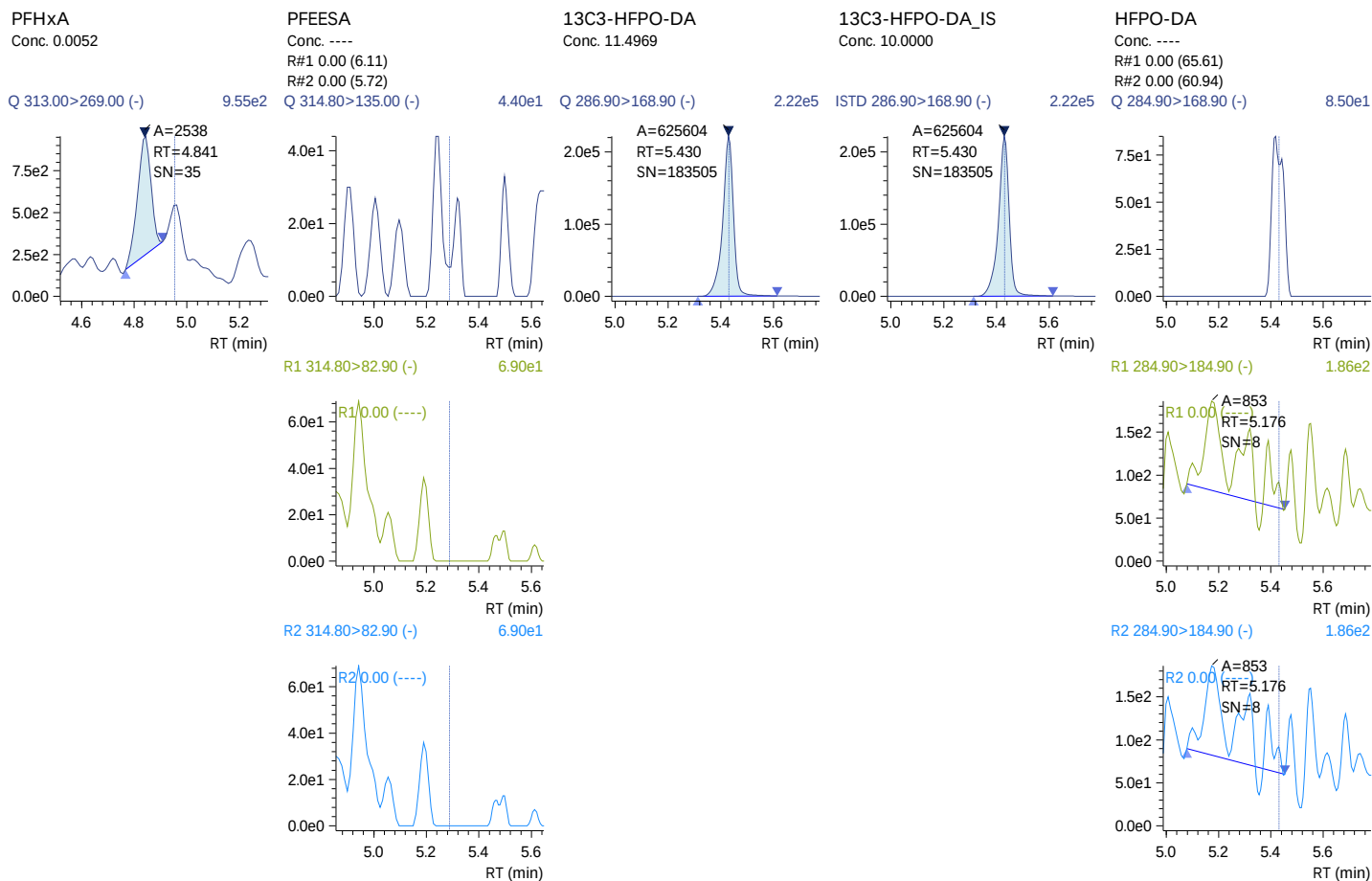
ISTD 315.10>270.00 (-)

1.57e5





240122_011 (continued)

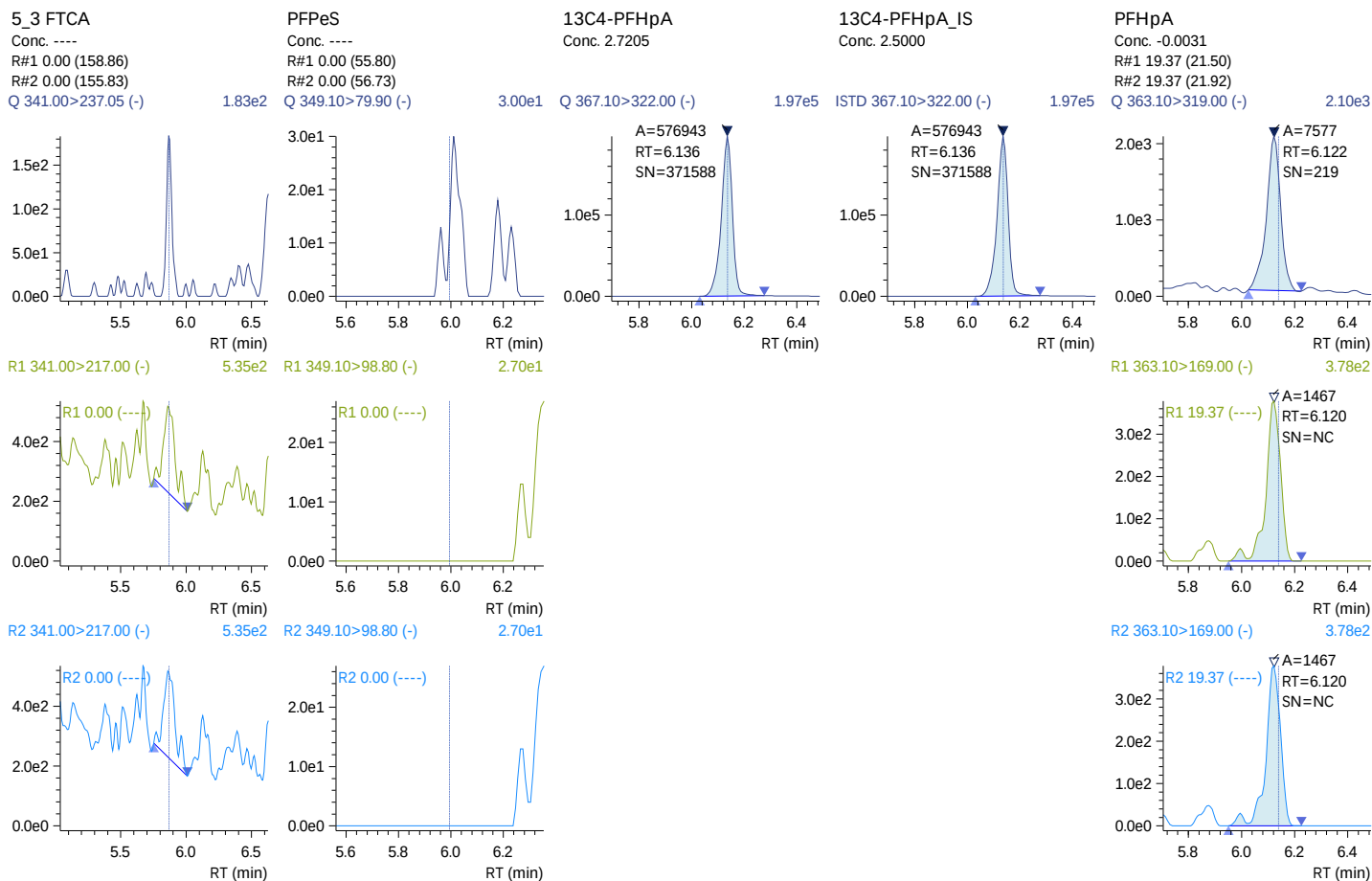


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_011 (continued)

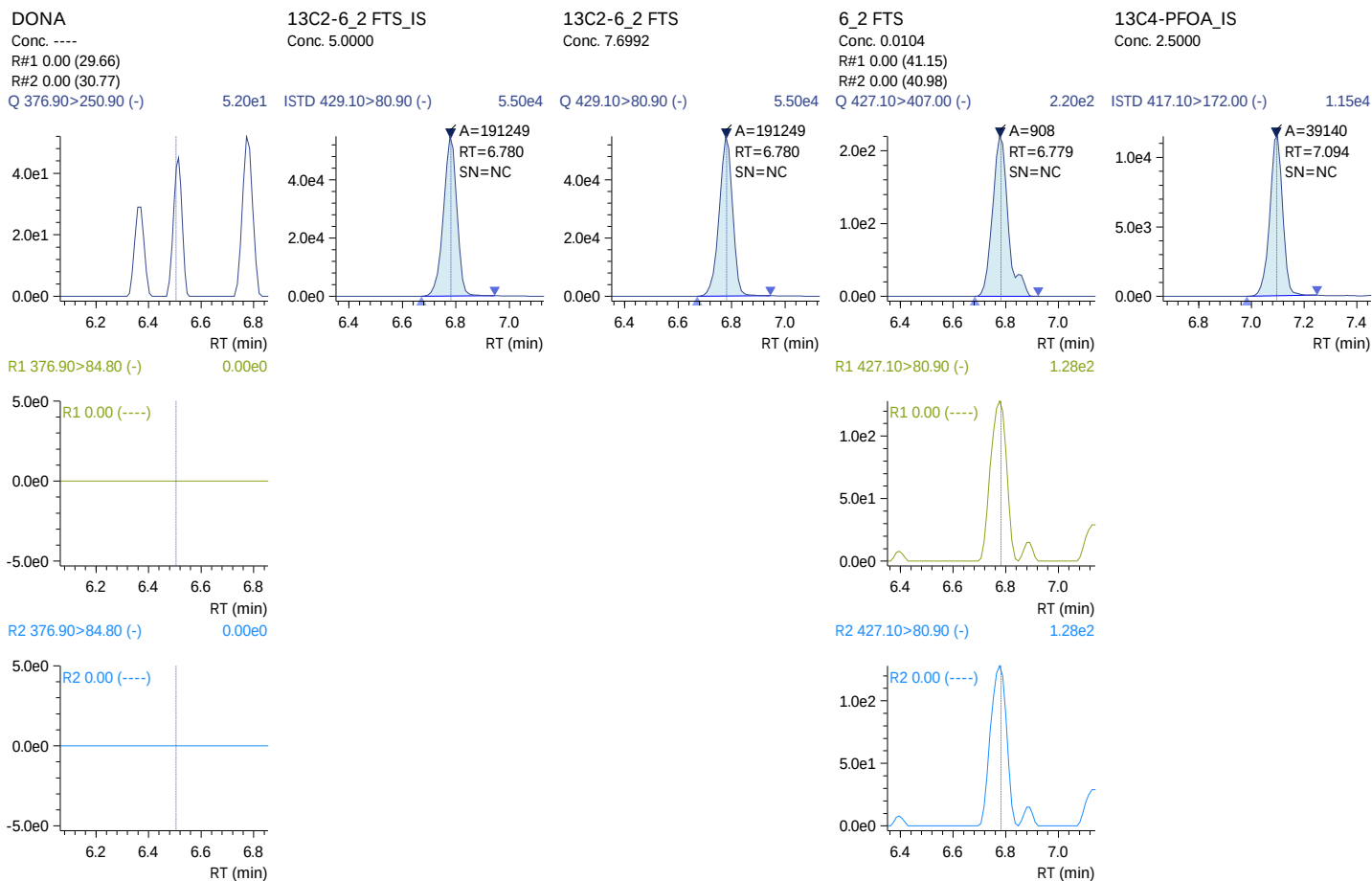


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_011 (continued)



J:\LCMS08\Data\240122_1633_B1\240122_1633_B1.damip

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_011 (continued)

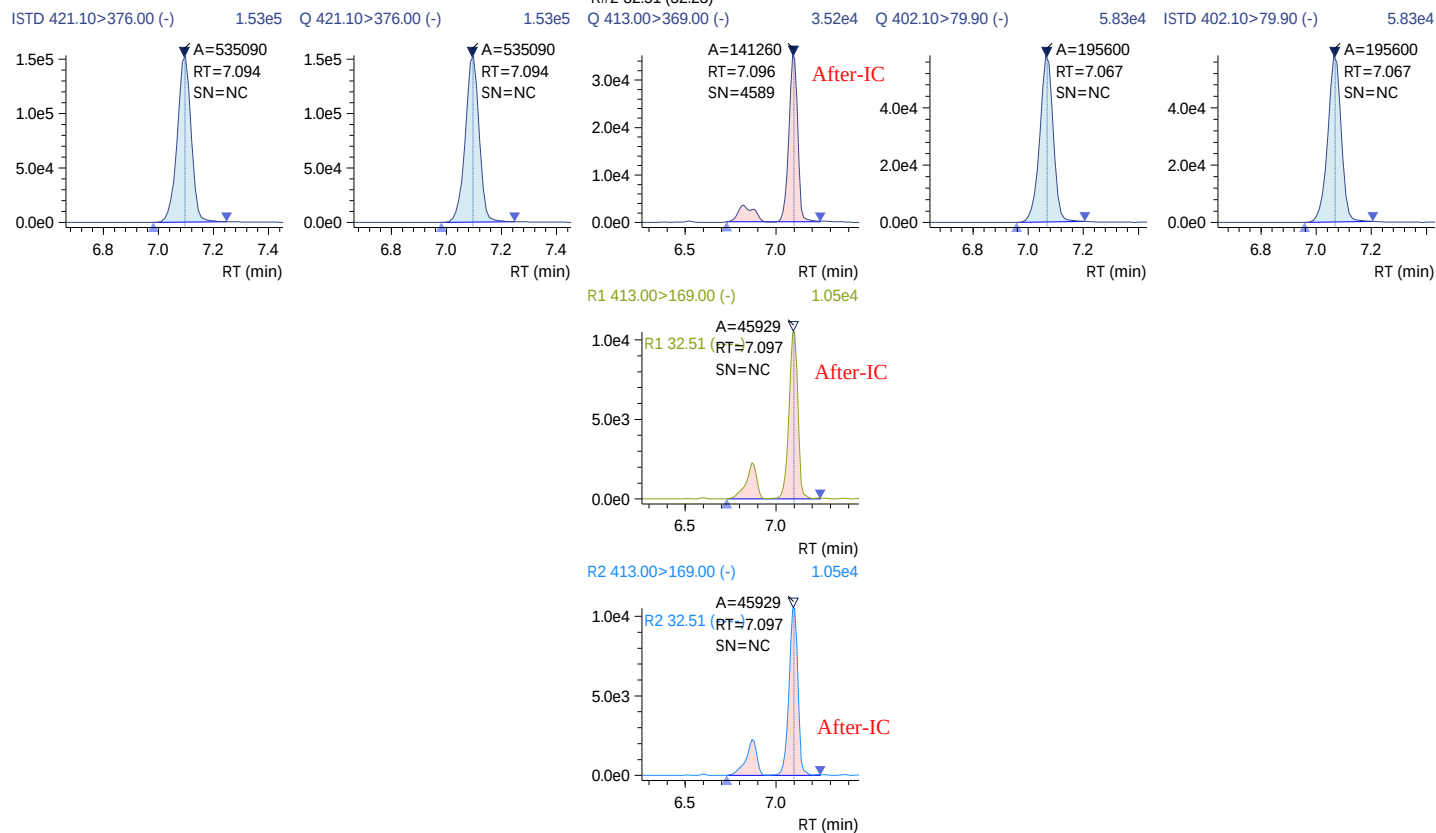
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.4460

PFOA
Conc. 0.9791
R#1 32.51 (31.89)
R#2 32.51 (32.23)

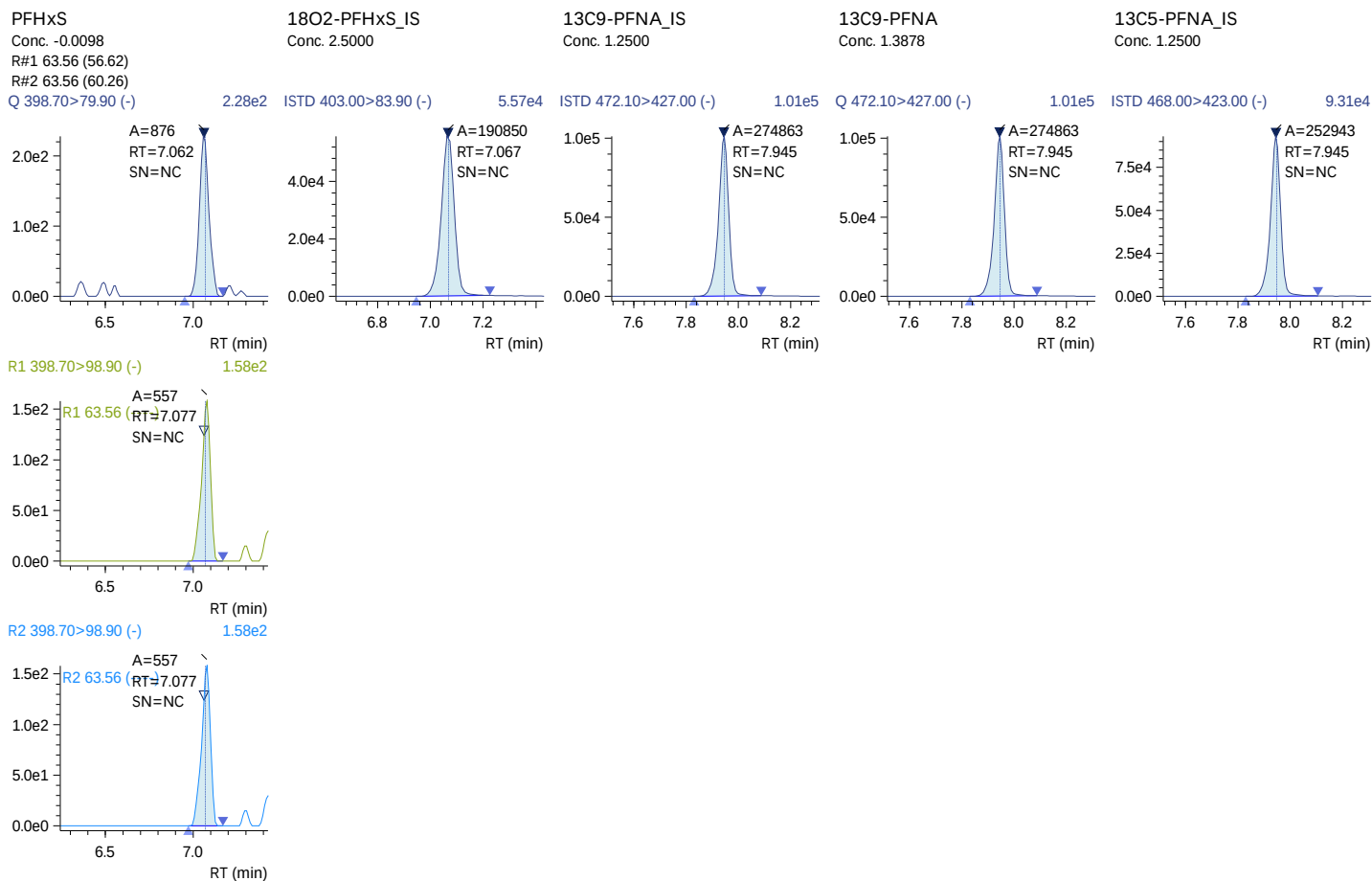
13C3-PFHxS
Conc. 2.3878

13C3-PFHxS_IS
Conc. 2.5000



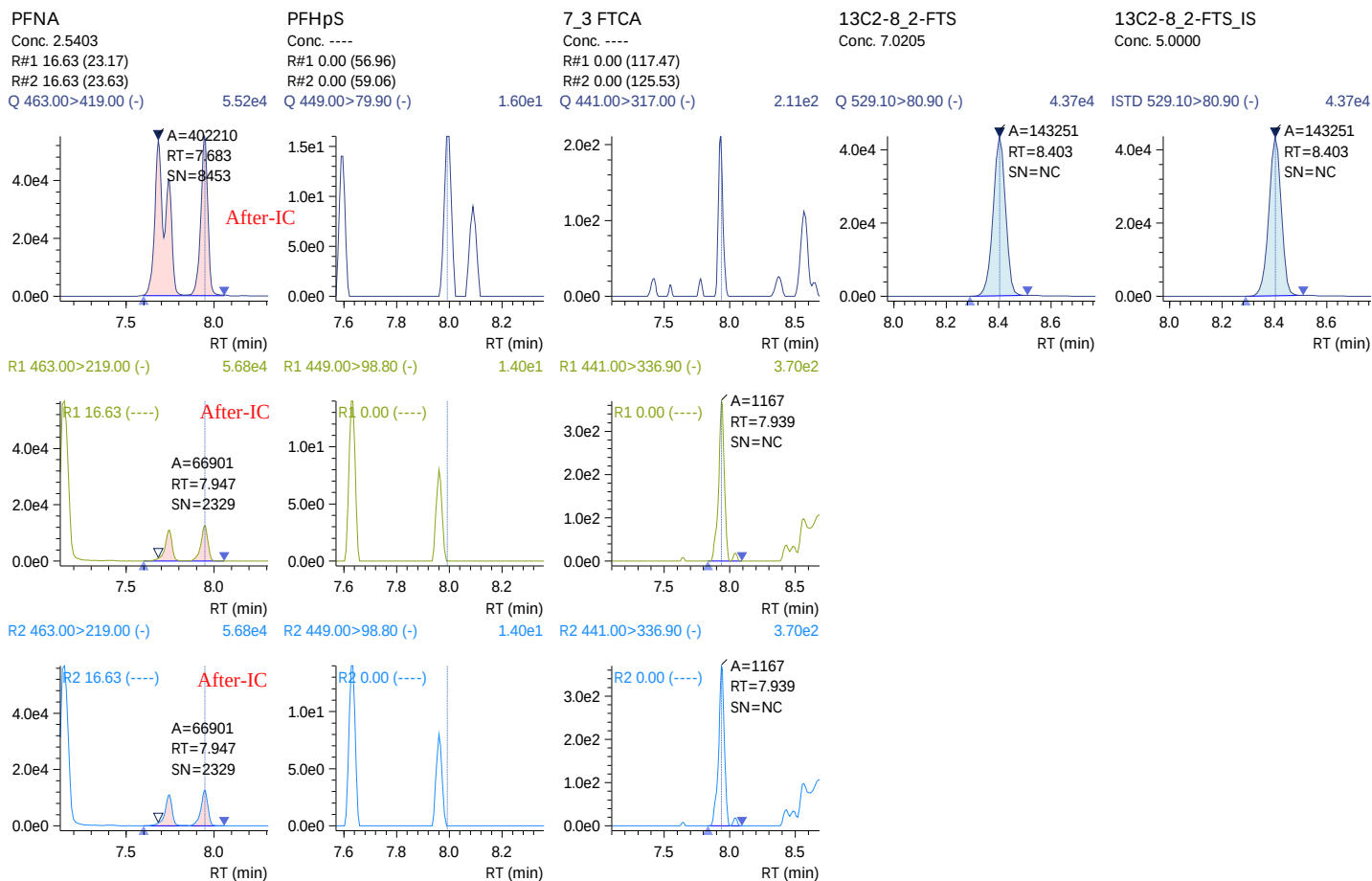


240122_011 (continued)



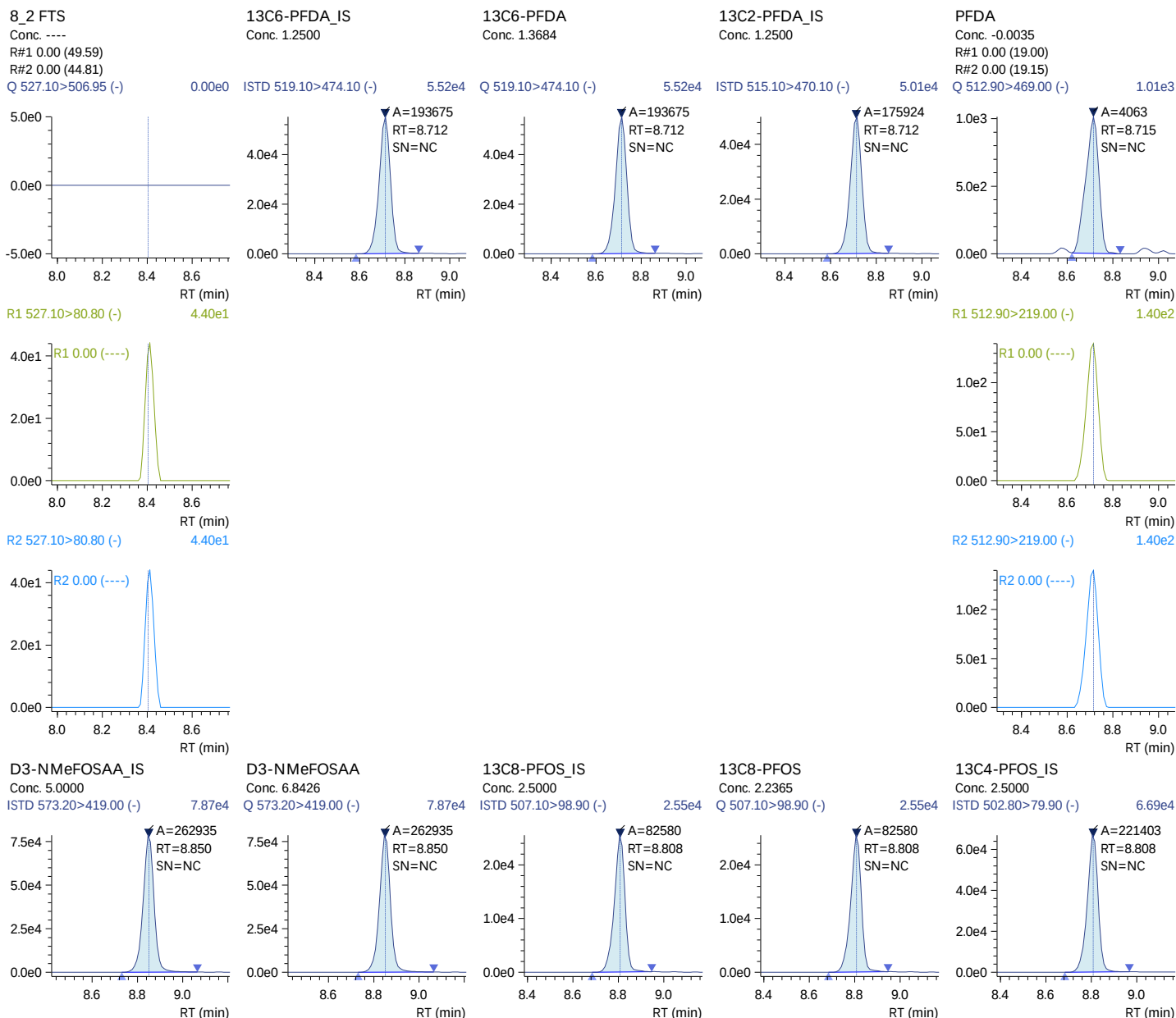


240122_011 (continued)





240122_011 (continued)

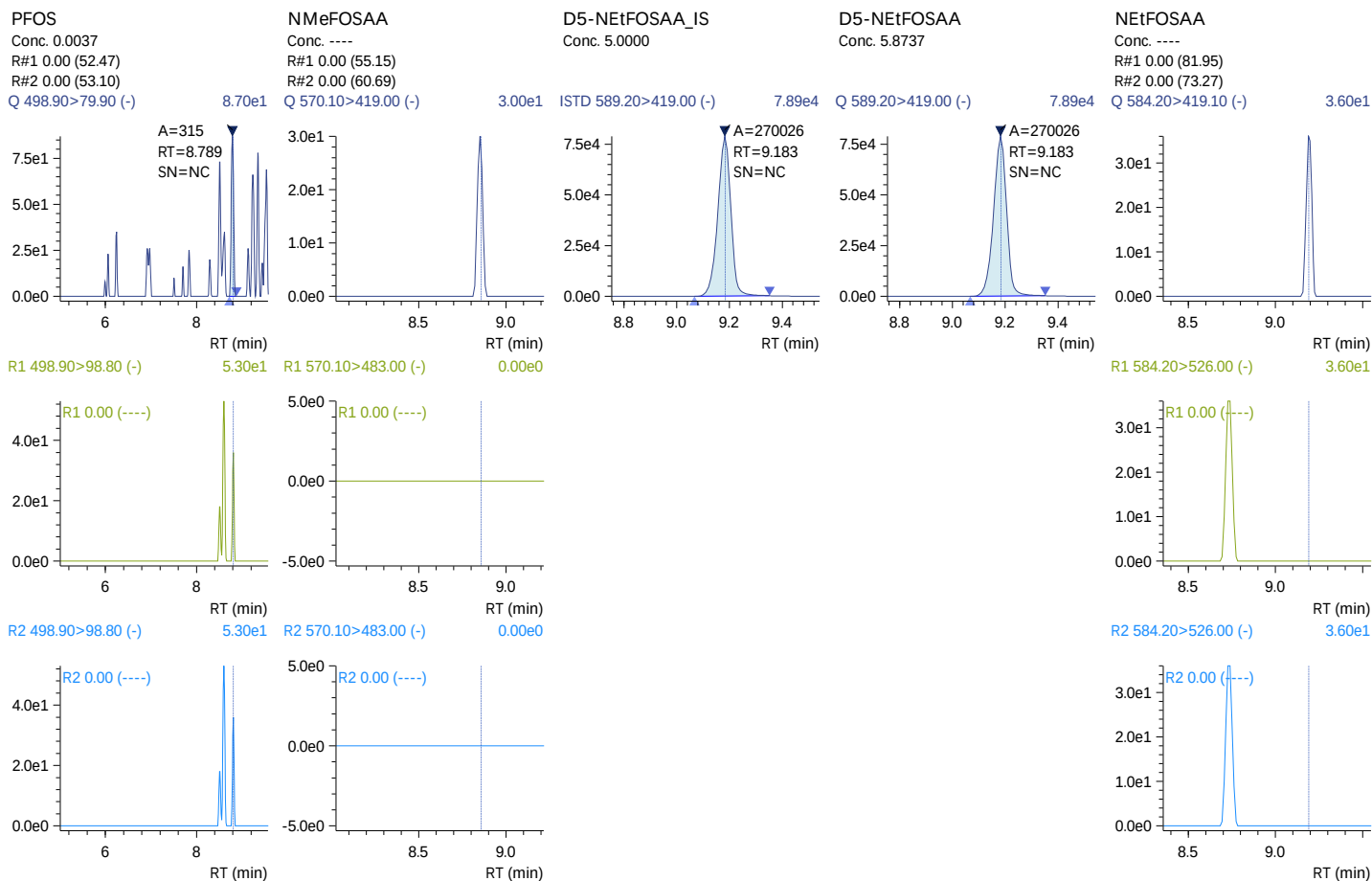


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240122_011 (continued)





240122_011 (continued)

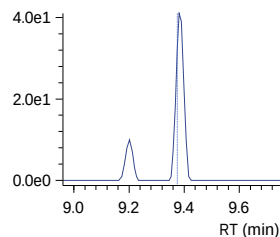
9-Cl-PF3ONS

Conc. ----

R#1 0.00 (32.76)

R#2 0.00 (32.59)

Q 530.80>351.00 (-)



R1 532.80>353.00 (-)

4.10e1

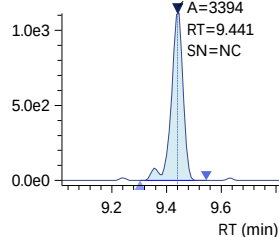
PFUnDA

Conc. -0.0094

R#1 0.00 (13.12)

R#2 0.00 (14.36)

Q 563.10>519.00 (-)



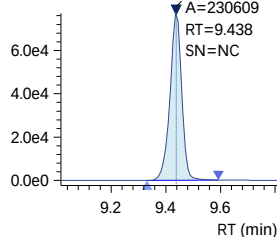
R1 563.10>269.10 (-)

1.11e3

13C7-PFUnDA_IS

Conc. 1.2500

ISTD 570.00>525.10 (-)

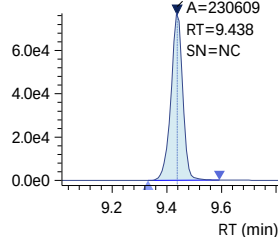


7.71e4

13C7-PFUnDA

Conc. 1.3659

Q 570.00>525.10 (-)



7.71e4

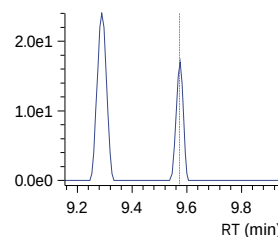
PFNS

Conc. ----

R#1 0.00 (65.22)

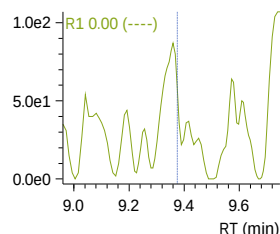
R#2 0.00 (65.31)

Q 548.80>79.90 (-)



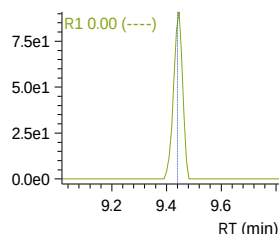
R1 548.80>98.80 (-)

2.40e1



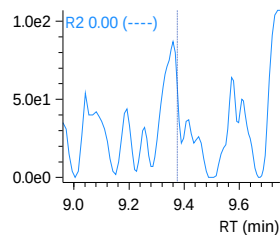
R2 532.80>353.00 (-)

1.07e2



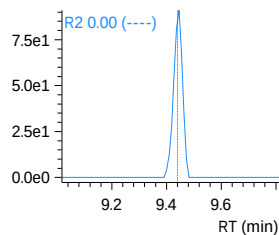
R2 563.10>269.10 (-)

9.10e1



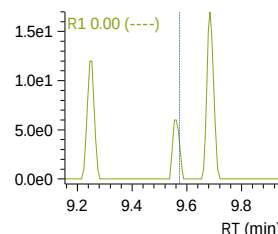
R2 532.80>353.00 (-)

1.07e2



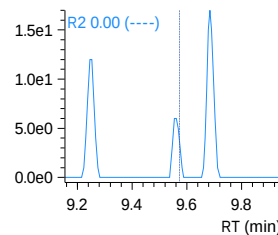
R2 563.10>269.10 (-)

9.10e1



R2 548.80>98.80 (-)

1.70e1

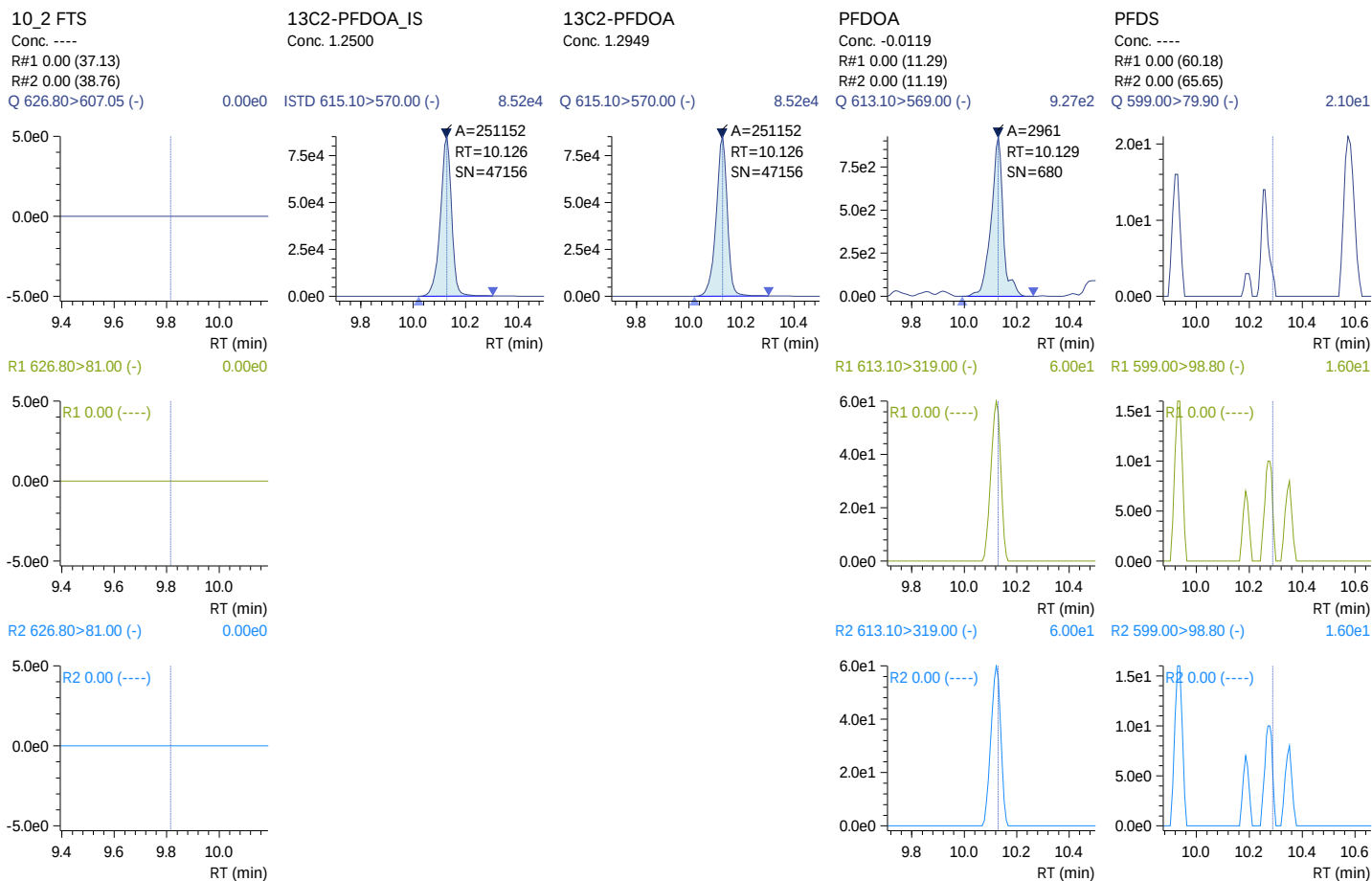


R2 548.80>98.80 (-)

1.70e1



240122_011 (continued)

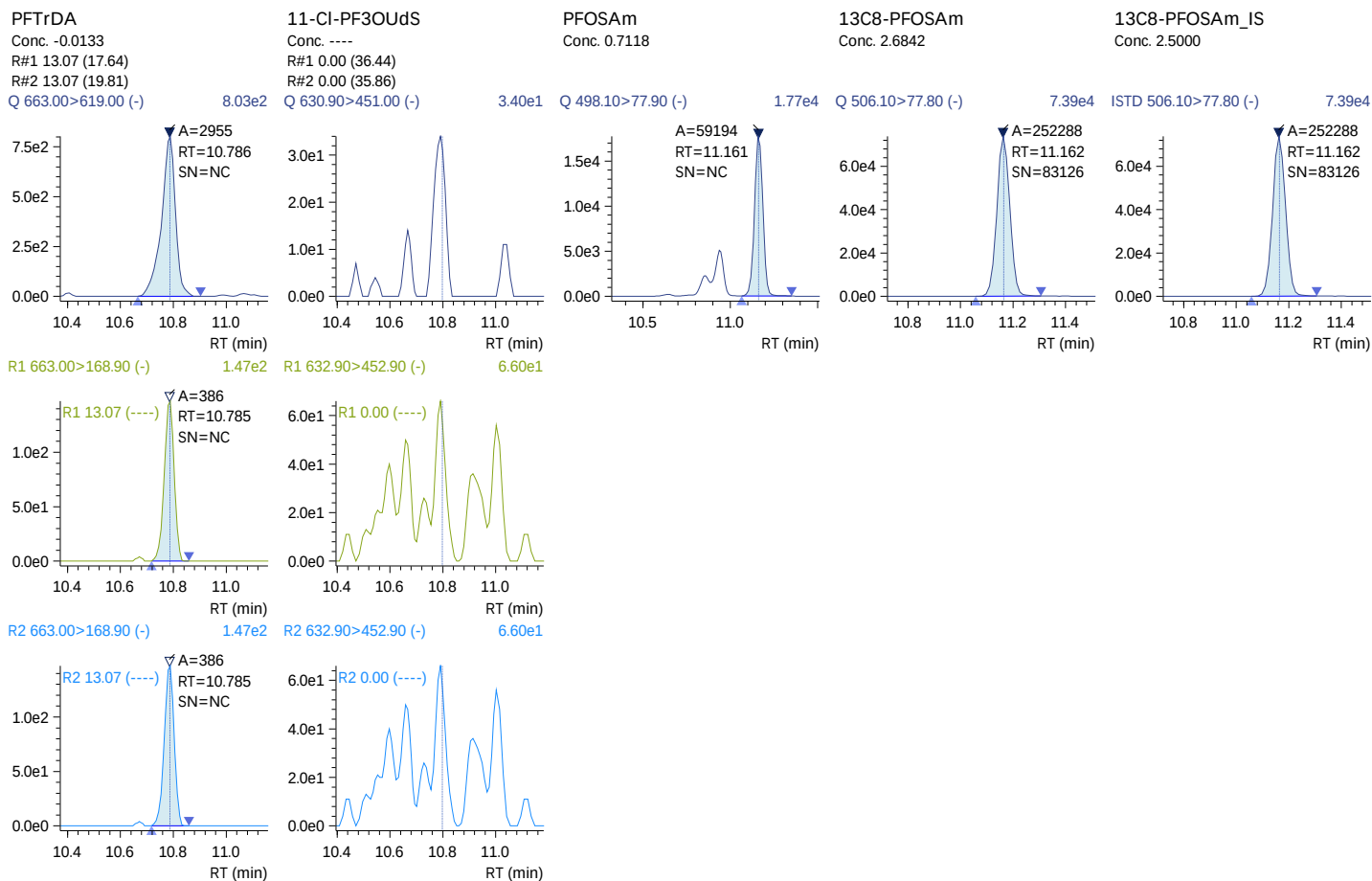


J:\LCMS08\Data\240122_1633_B1\240122_1633_B1.dampl

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.

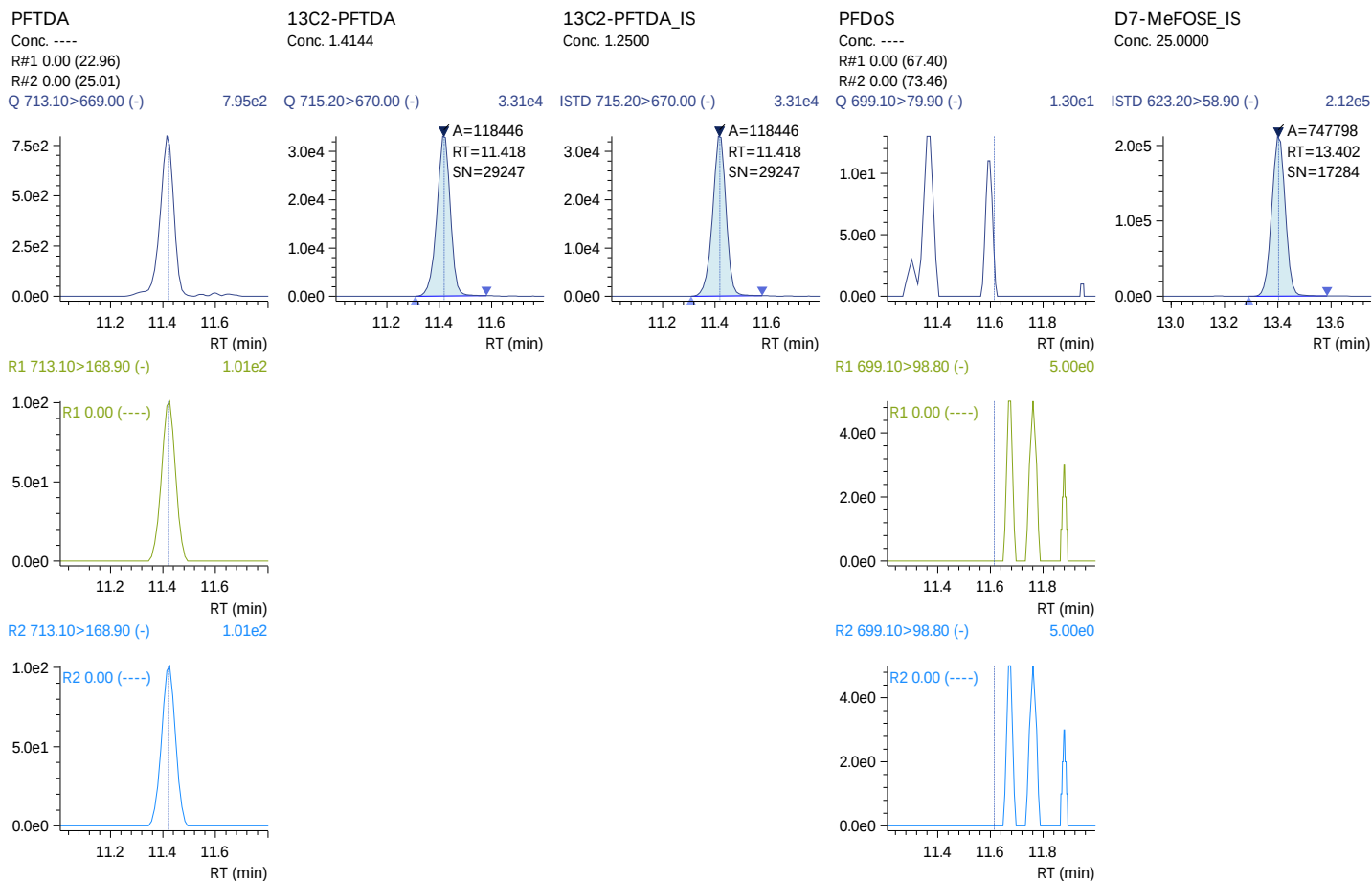


240122_011 (continued)





240122_011 (continued)





240122_011 (continued)

D7-MeFOSE
Conc. 32.2705

MeFOSE
Conc. 0.6379

13C2-PFHXA_IS
Conc. 2.5000

13C2-PFHXA
Conc. 2.5331

PFHXA
Conc. -0.0083
R#1 0.00 (13.90)
R#2 0.00 (15.85)

Q 623.20>58.90 (-)

2.12e5

Q 616.10>59.00 (-)

4.82e3

ISTD 815.00>770.05 (-)

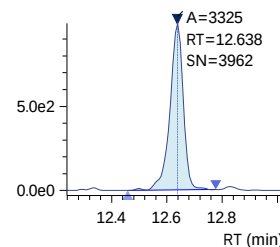
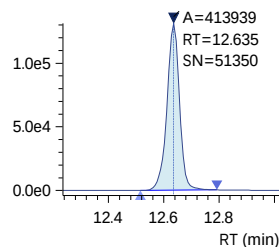
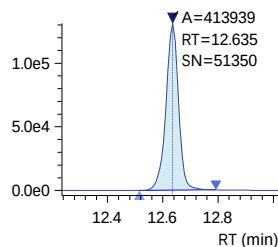
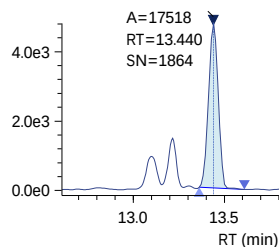
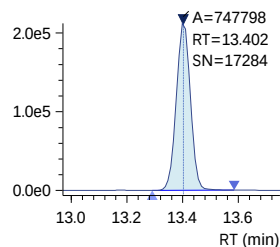
1.31e5

Q 815.00>770.05 (-)

1.31e5

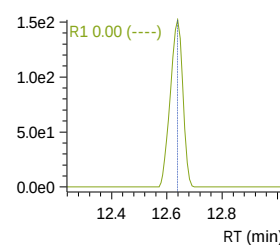
Q 813.00>768.95 (-)

9.94e2



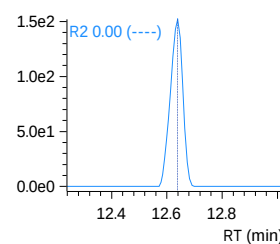
R1 813.00>218.95 (-)

1.52e2



R2 813.00>218.95 (-)

1.52e2





240122_011 (continued)

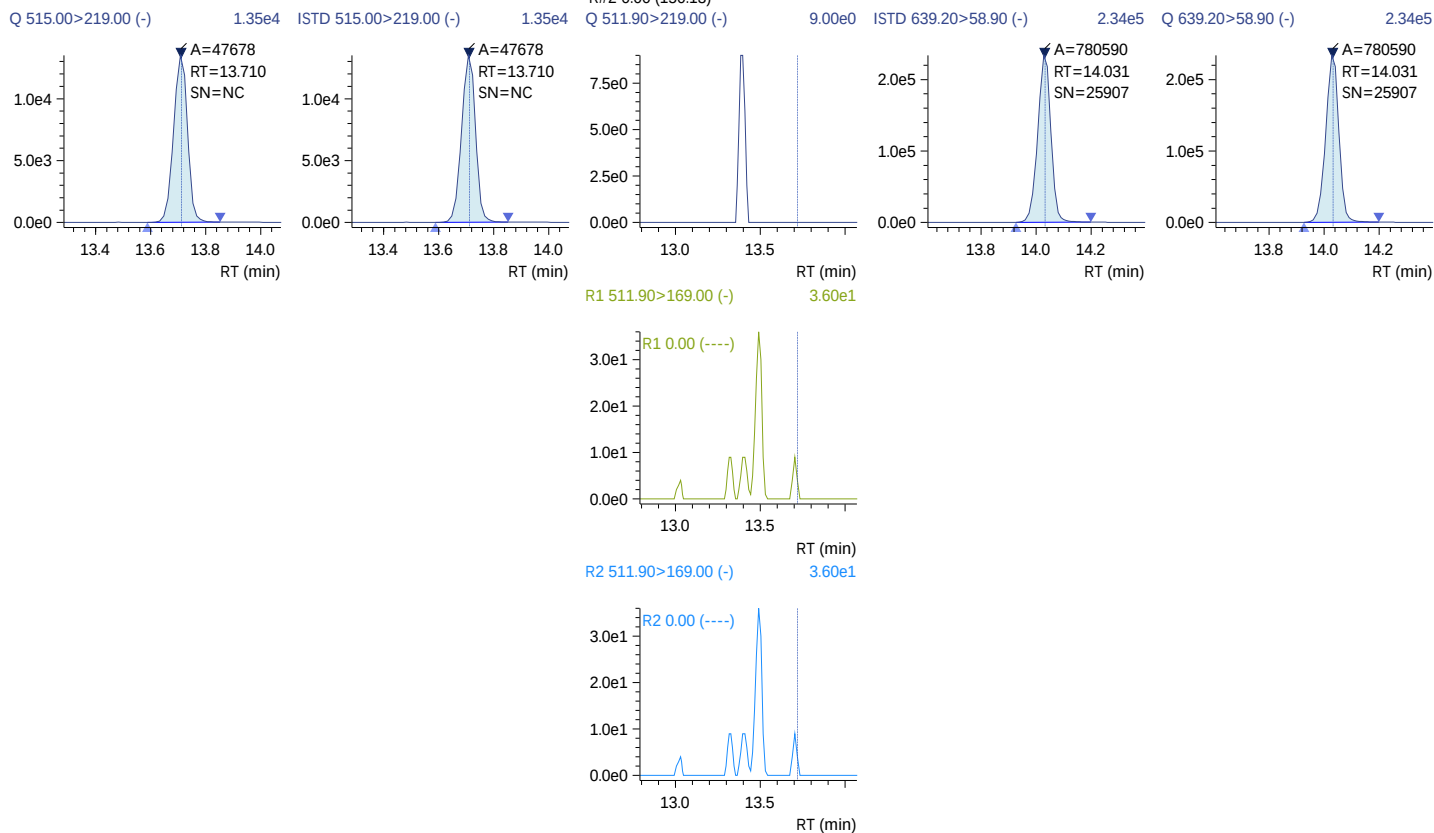
D3-MeFOSA
Conc. 2.5189

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. ----
R#1 0.00 (140.79)
R#2 0.00 (150.13)

D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 33.1664





240122_011 (continued)

EtFOSE
Conc. 0.6866

D5-EtFOSAm
Conc. 2.7925

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. ----

PFODA
Conc. 0.0186

Q 630.00>59.00 (-)

8.22e3

Q 531.10>219.00 (-)

2.17e4

ISTD 531.10>219.00 (-)

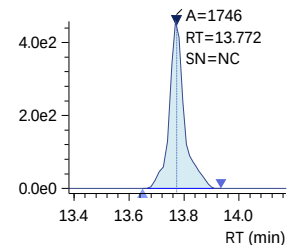
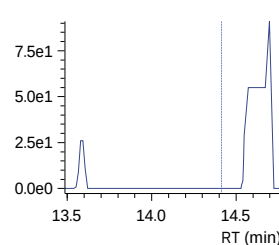
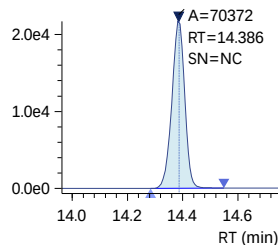
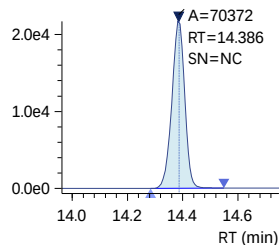
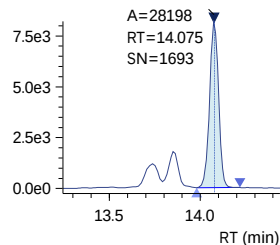
2.17e4

Q 526.00>219.00 (-)

9.10e1

Q 913.00>868.65 (-)

4.58e2

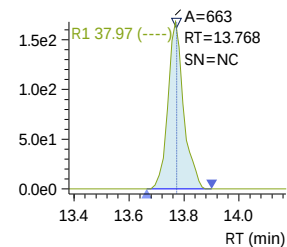
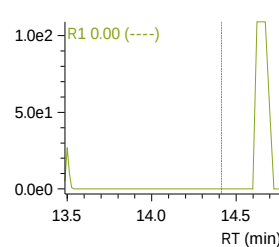


R1 526.00>169.00 (-)

1.09e2

R1 913.00>169.00 (-)

1.68e2

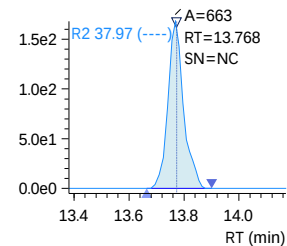
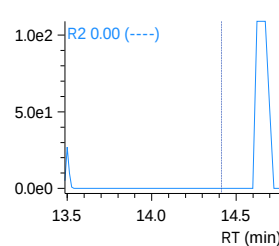


R2 526.00>169.00 (-)

1.09e2

R2 913.00>169.00 (-)

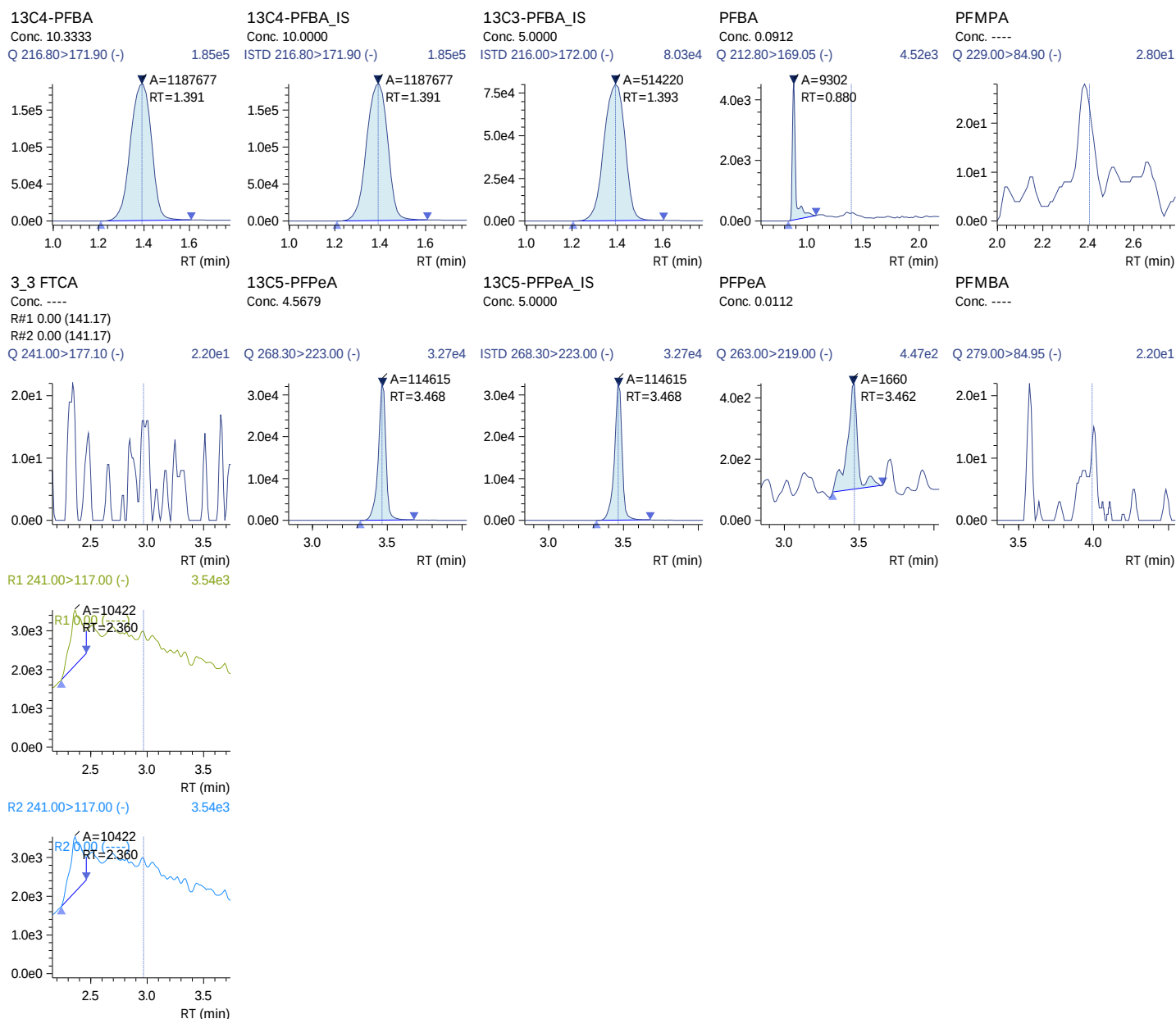
1.68e2





240122_011

Sample ID: 1633 QIS
Date Acquired: 1/22/2024 1:37:38 PM
Acquired by: System Administrator
Data File: 240122_011
Vial: 13 | Inj. Volume: 10.0000uL | Tray: 1





240122_011 (continued)

13C2-4_2 FTS
 Conc. 7.9480

13C2-4_2 FTS_IS
 Conc. 5.0000

4_2 FTS
 Conc. ----
 R#1 0.00 (29.06)
 R#2 0.00 (29.06)

13C3-PFBS_IS
 Conc. 2.5000

PFBS
 Conc. ----
 R#1 0.00 (46.72)
 R#2 0.00 (46.72)

Q 329.10>80.90 (-)

6.35e4

ISTD 329.10>80.90 (-)

6.35e4

Q 327.10>307.00 (-)

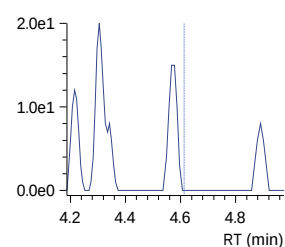
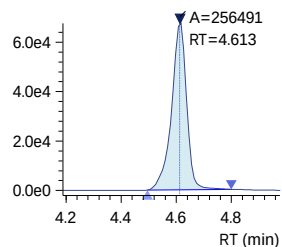
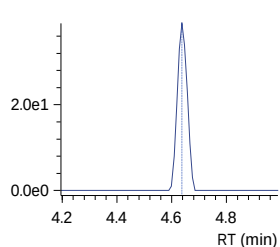
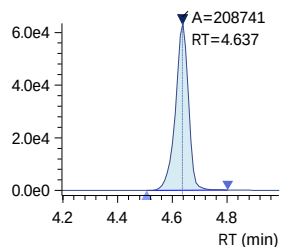
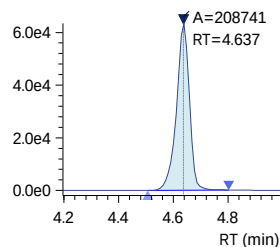
3.90e1

ISTD 302.10>79.90 (-)

6.76e4

Q 298.70>79.90 (-)

2.00e1

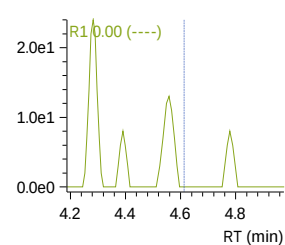
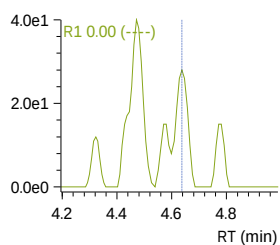


R1 327.10>80.90 (-)

4.00e1

R1 298.70>98.80 (-)

2.40e1

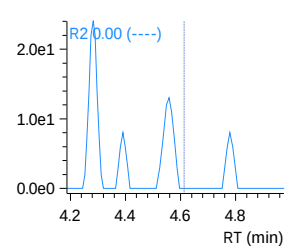
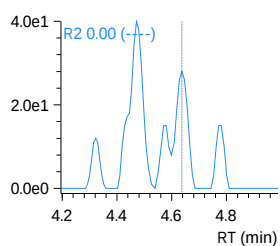


R2 327.10>80.90 (-)

4.00e1

R2 298.70>98.80 (-)

2.40e1





240122_011 (continued)

13C3-PFBS
 Conc. 2.3682

NFDHA
 Conc. ----
 R#1 0.00 (40.25)
 R#2 0.00 (40.25)

13C5-PFHxA
 Conc. 2.3982

13C5-PFHxA_IS
 Conc. 2.5000

13C2-PFHxA_IS
 Conc. 2.5000

Q 302.10>79.90 (-)

6.76e4

Q 295.00>201.00 (-)

3.07e2

Q 318.00>273.00 (-)

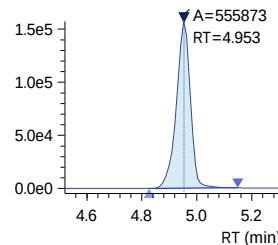
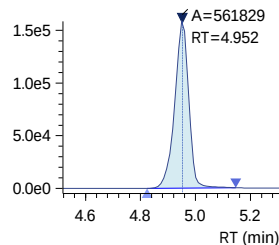
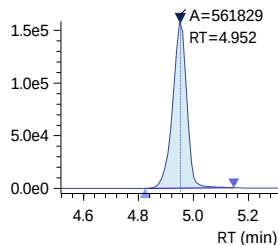
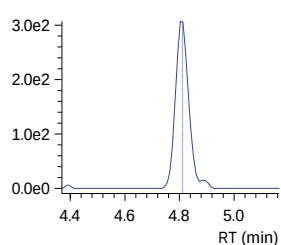
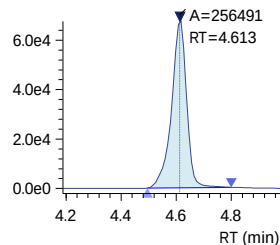
1.58e5

ISTD 318.00>273.00 (-)

1.58e5

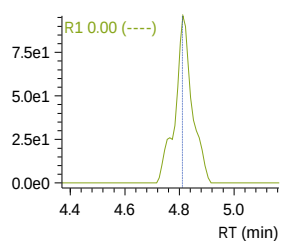
ISTD 315.10>270.00 (-)

1.57e5



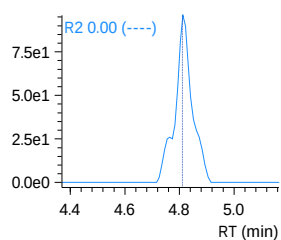
R1 295.00>84.90 (-)

9.60e1



R2 295.00>84.90 (-)

9.60e1

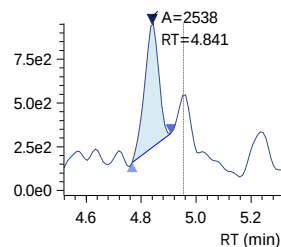




240122_011 (continued)

PFHxA
Conc. 0.0052

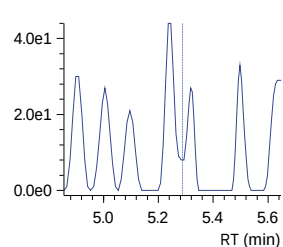
Q 313.00>269.00 (-)



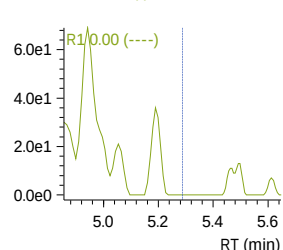
PFEESA
Conc. ----

R#1 0.00 (6.11)
R#2 0.00 (6.11)

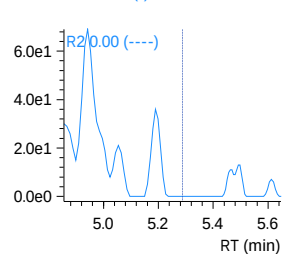
Q 314.80>135.00 (-)



R1 314.80>82.90 (-)

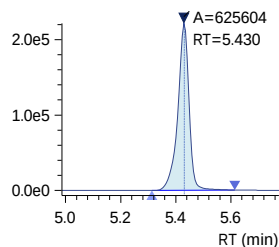


R2 314.80>82.90 (-)



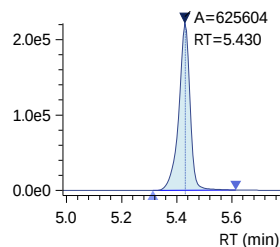
13C3-HFPO-DA
Conc. 11.4969

Q 286.90>168.90 (-)



13C3-HFPO-DA_IS
Conc. 10.0000

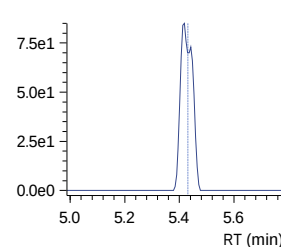
ISTD 286.90>168.90 (-)



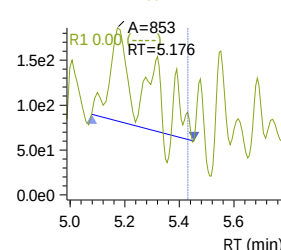
HFPO-DA
Conc. ----

R#1 0.00 (65.61)
R#2 0.00 (65.61)

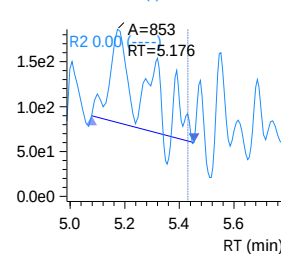
Q 284.90>168.90 (-)



R1 284.90>184.90 (-)

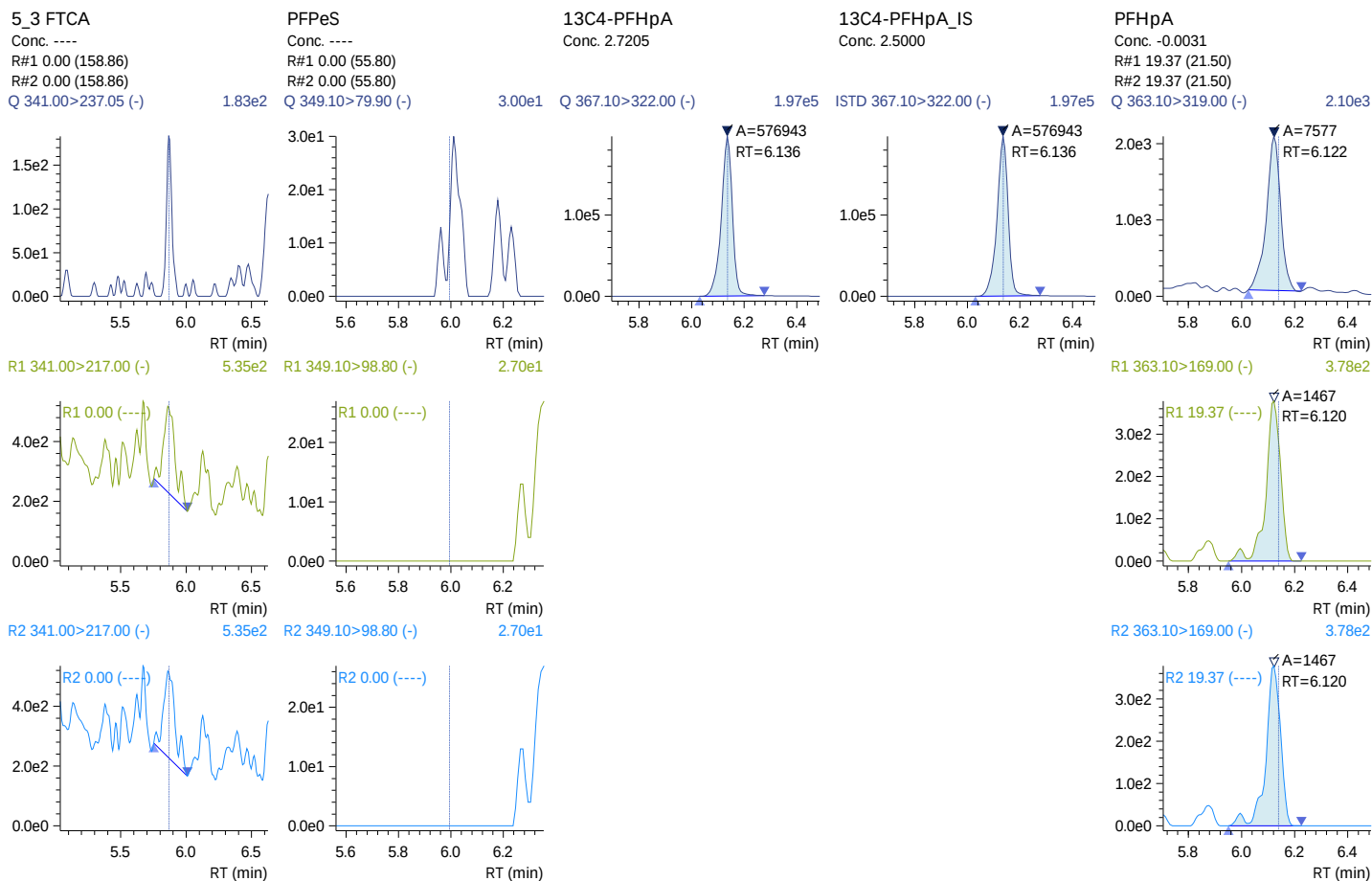


R2 284.90>184.90 (-)



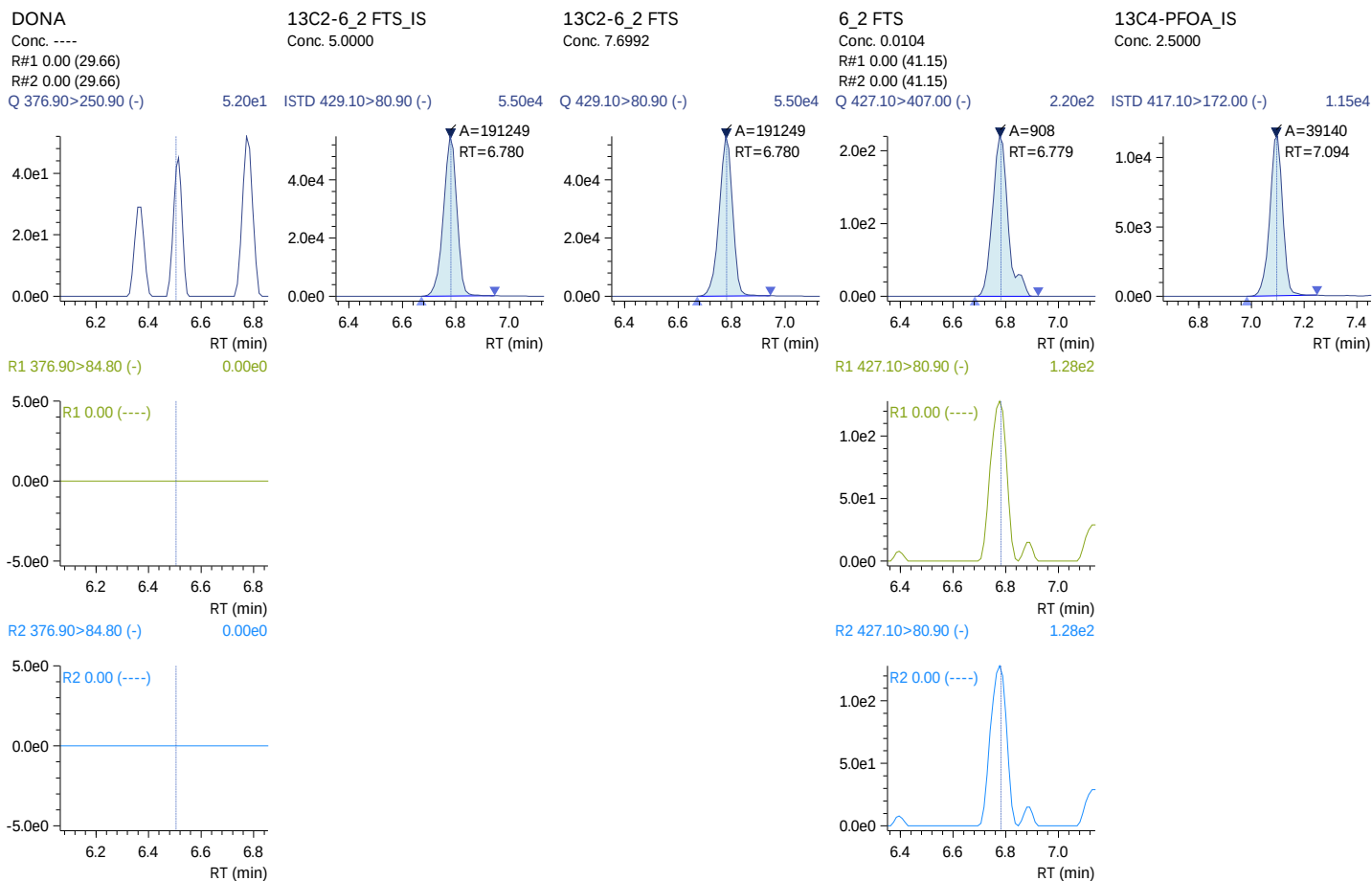


240122_011 (continued)





240122_011 (continued)





240122_011 (continued)

13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.4460

PFOA
Conc. 0.8277
R#1 30.00 (31.89)
R#2 30.00 (31.89)

13C3-PFHxS
Conc. 2.3878

13C3-PFHxS_IS
Conc. 2.5000

ISTD 421.10>376.00 (-)

1.53e5

Q 421.10>376.00 (-)

1.53e5

Q 413.00>369.00 (-)

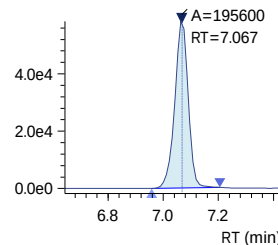
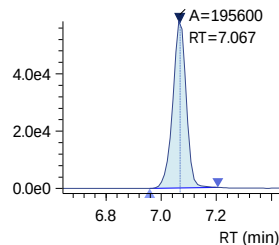
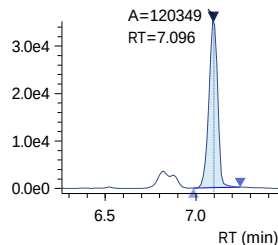
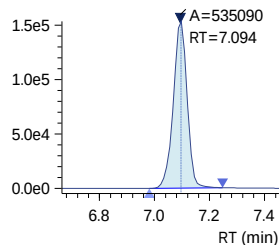
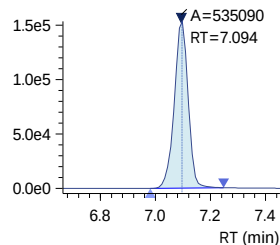
3.52e4

Q 402.10>79.90 (-)

5.83e4

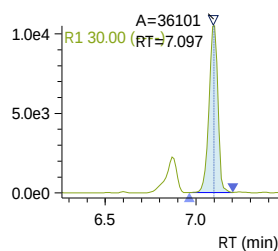
ISTD 402.10>79.90 (-)

5.83e4



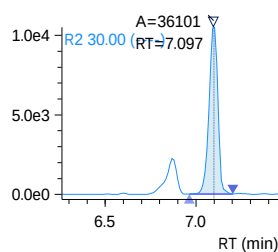
R1 413.00>169.00 (-)

1.05e4



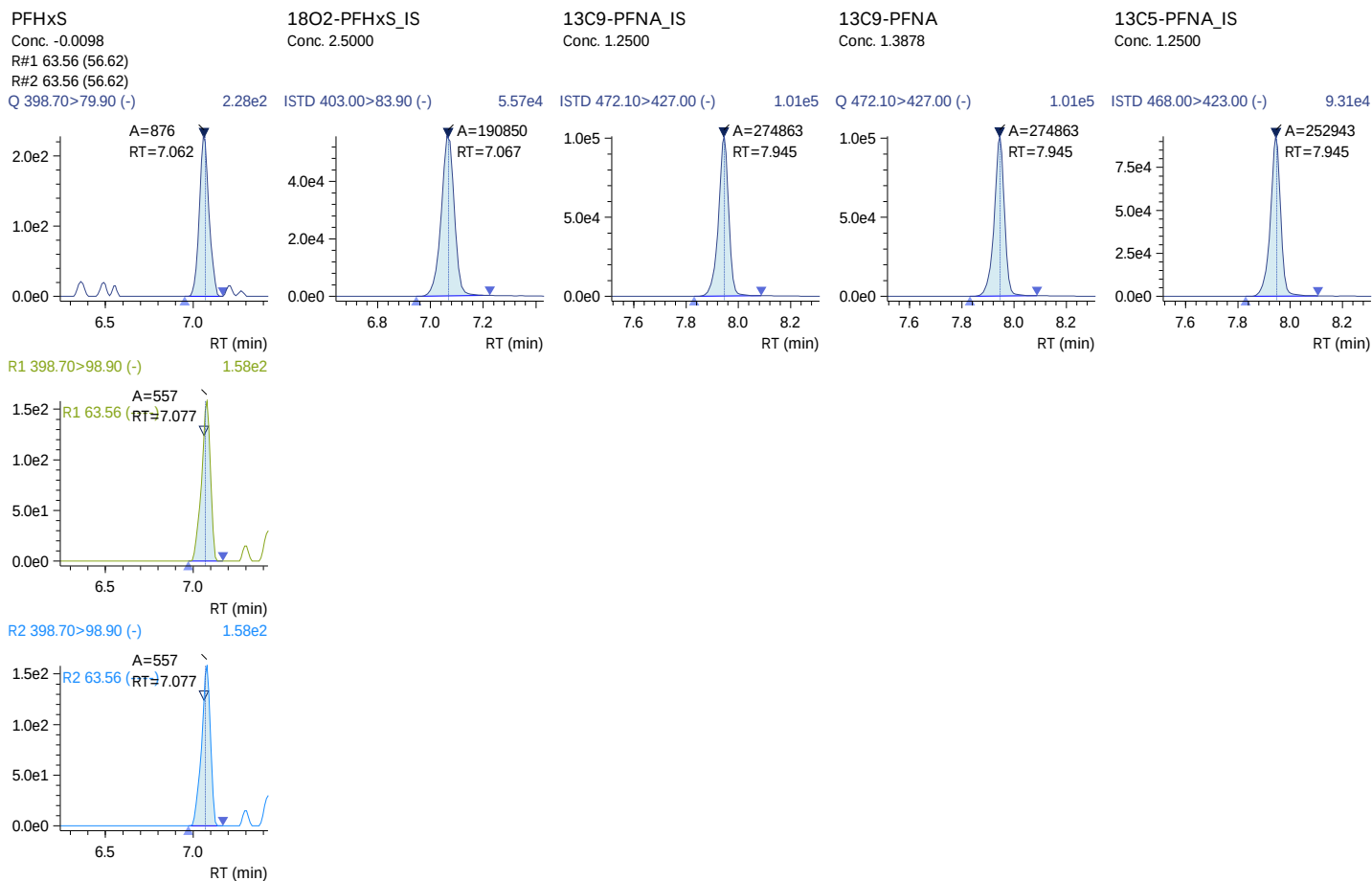
R2 413.00>169.00 (-)

1.05e4



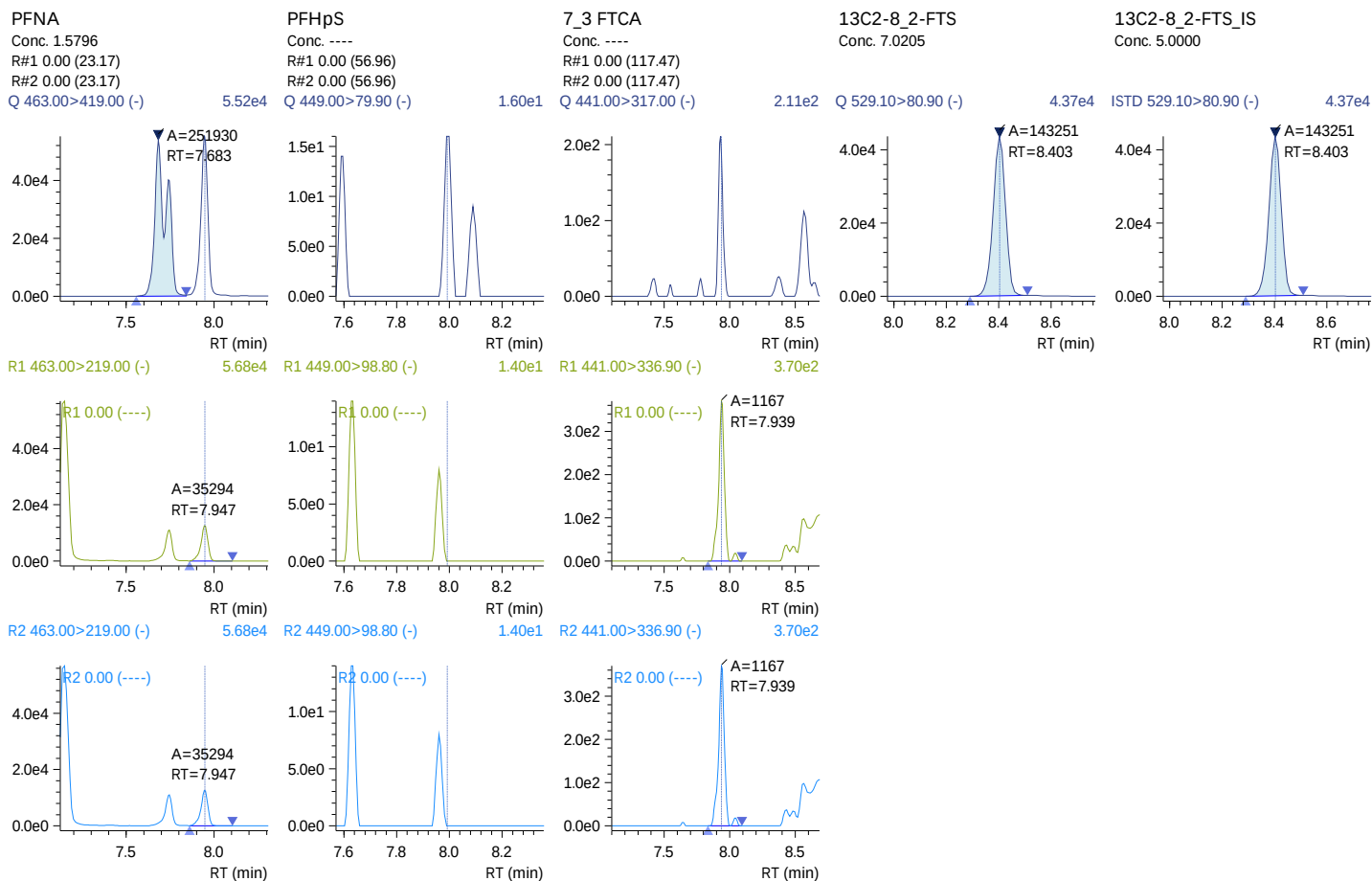


240122_011 (continued)



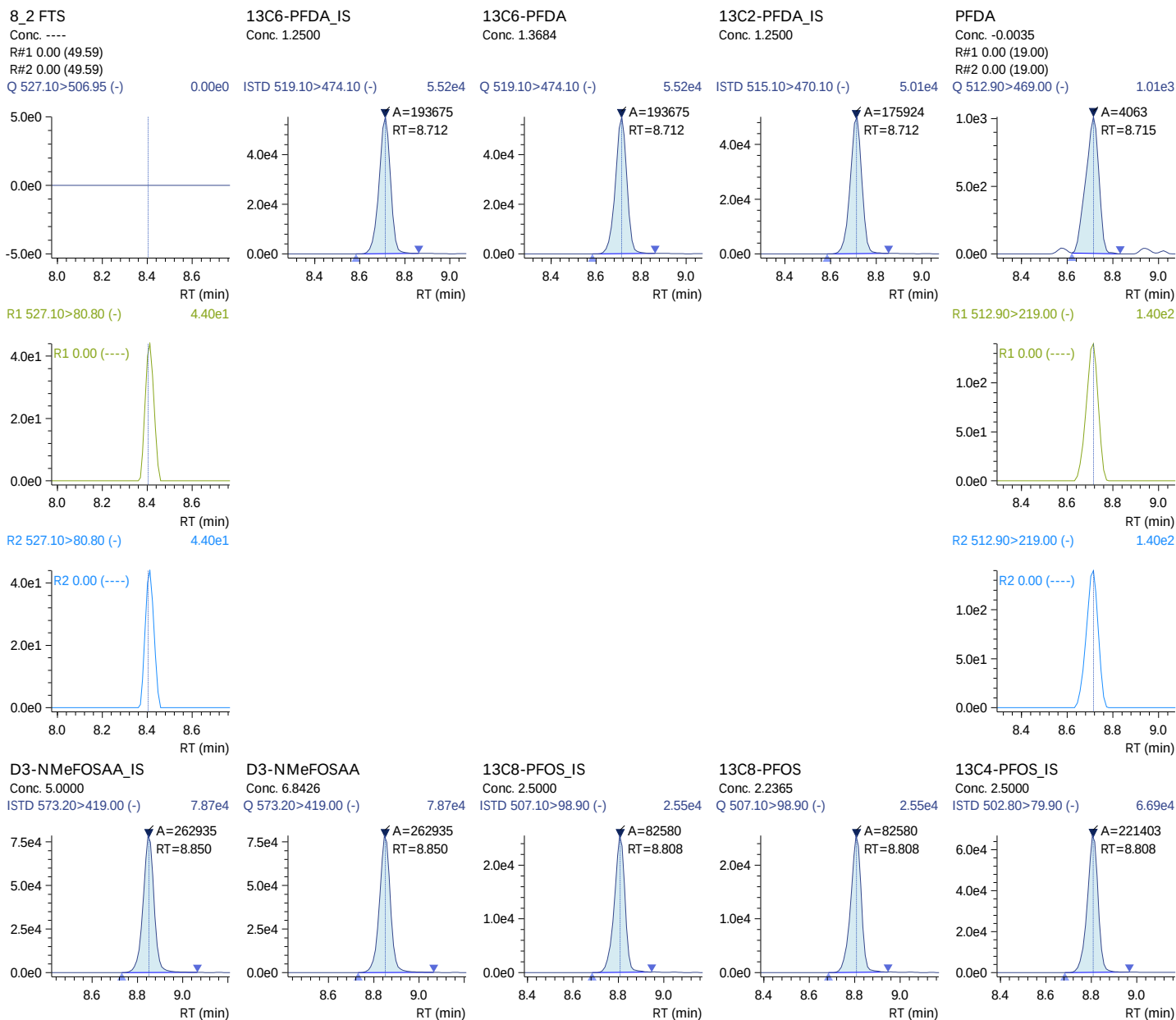


240122_011 (continued)



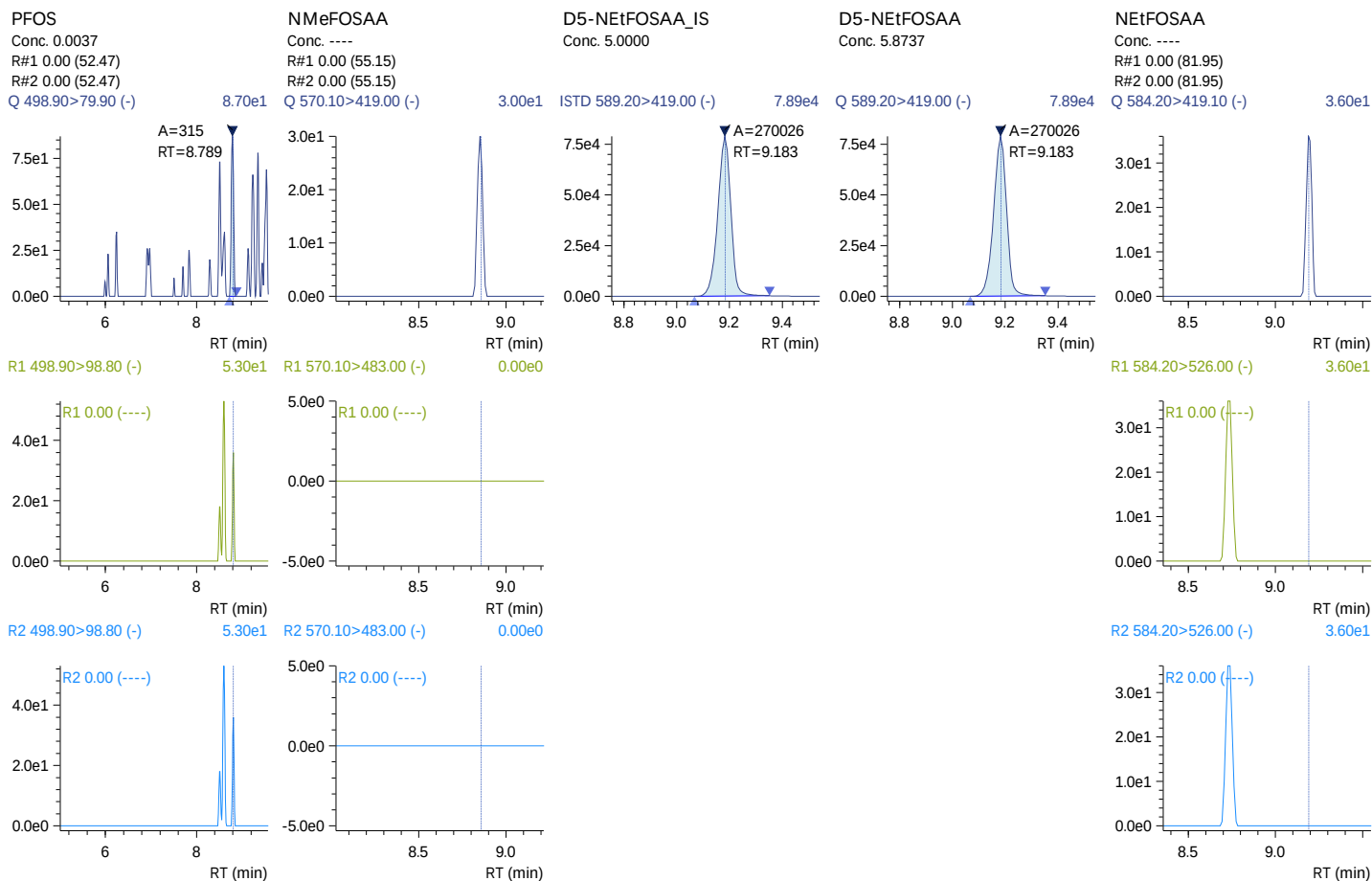


240122_011 (continued)





240122_011 (continued)





240122_011 (continued)

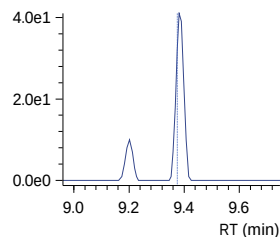
9-Cl-PF3ONS

Conc. ----

R#1 0.00 (32.76)

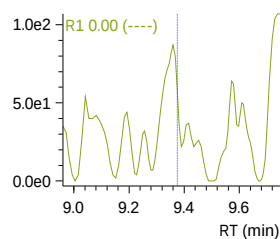
R#2 0.00 (32.76)

Q 530.80>351.00 (-)



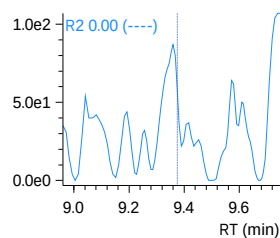
R1 532.80>353.00 (-)

1.07e2



R2 532.80>353.00 (-)

1.07e2



RT (min)

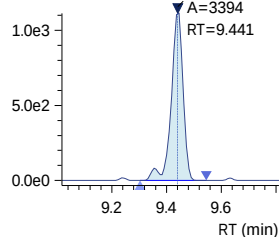
PFUnDA

Conc. -0.0094

R#1 0.00 (13.12)

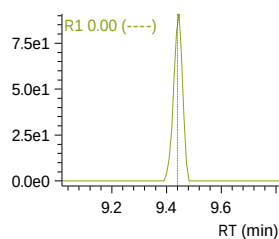
R#2 0.00 (13.12)

Q 563.10>519.00 (-)



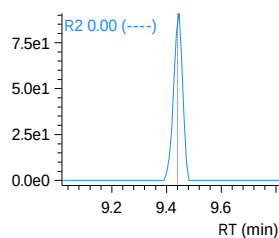
R1 563.10>269.10 (-)

9.10e1



R2 563.10>269.10 (-)

9.10e1

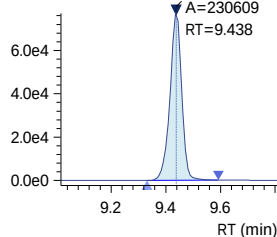


RT (min)

13C7-PFUnDA_IS

Conc. 1.2500

ISTD 570.00>525.10 (-)



A=230609
RT=9.438

7.71e4



A=230609
RT=9.438

7.71e4

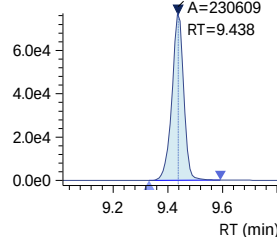


RT (min)

13C7-PFUnDA

Conc. 1.3659

Q 570.00>525.10 (-)



A=230609
RT=9.438

7.71e4



A=230609
RT=9.438

7.71e4



RT (min)

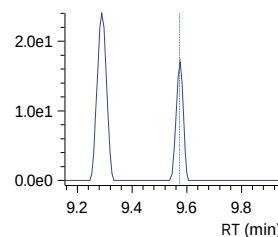
PFNS

Conc. ----

R#1 0.00 (65.22)

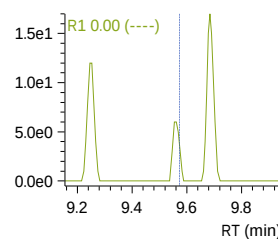
R#2 0.00 (65.22)

Q 548.80>79.90 (-)



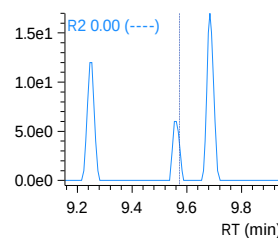
R1 548.80>98.80 (-)

1.70e1



R2 548.80>98.80 (-)

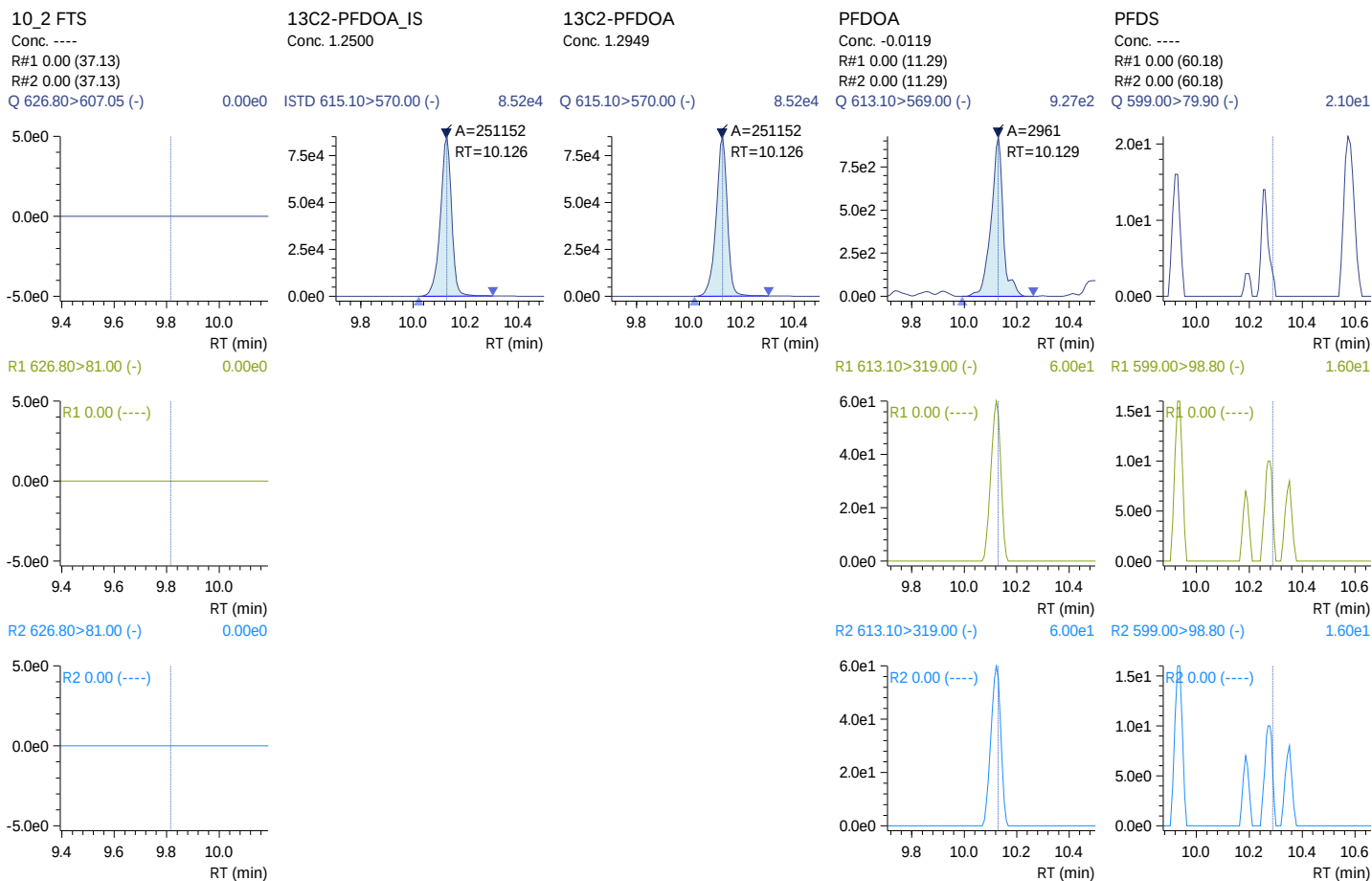
1.70e1



RT (min)

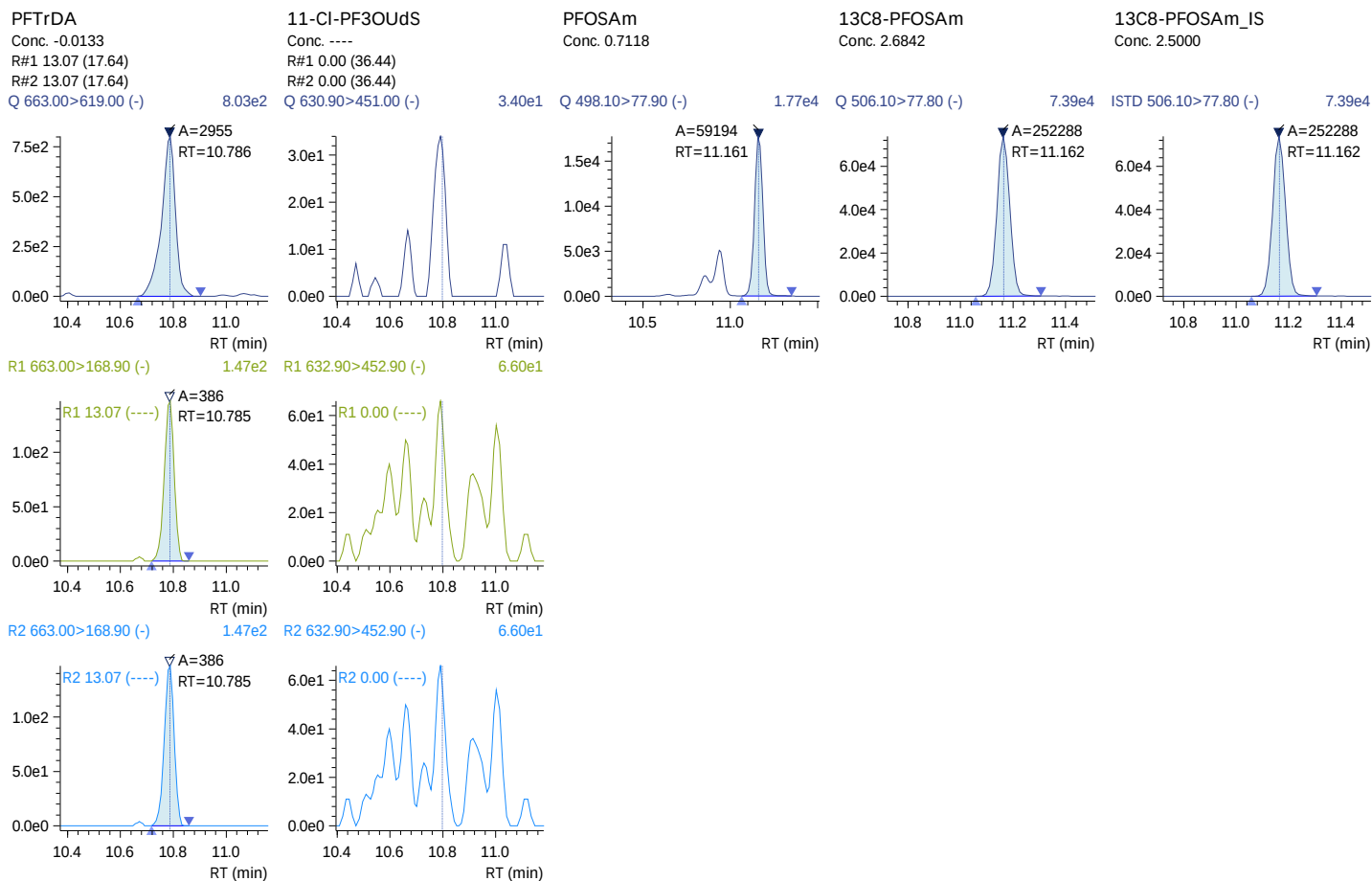


240122_011 (continued)



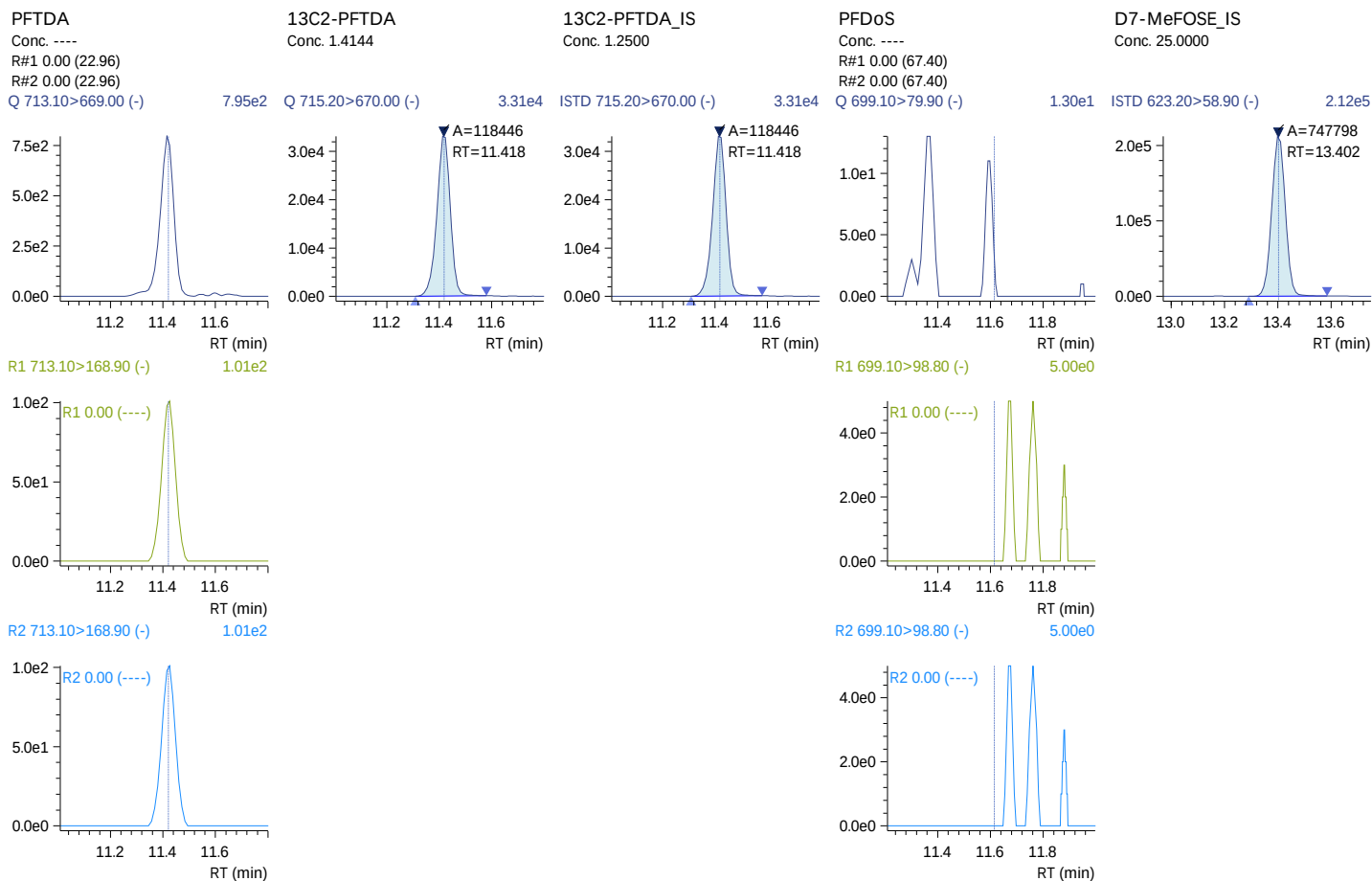


240122_011 (continued)





240122_011 (continued)





240122_011 (continued)

D7-MeFOSE
 Conc. 32.2705

MeFOSE
 Conc. 0.6379

13C2-PFHXA_IS
 Conc. 2.5000

13C2-PFHXA
 Conc. 2.5331

PFHXA
 Conc. -0.0083
 R#1 0.00 (13.90)
 R#2 0.00 (13.90)

Q 623.20>58.90 (-)

2.12e5

Q 616.10>59.00 (-)

4.82e3

ISTD 815.00>770.05 (-)

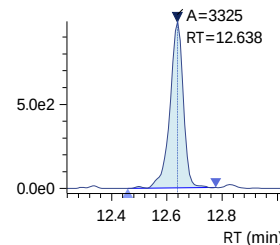
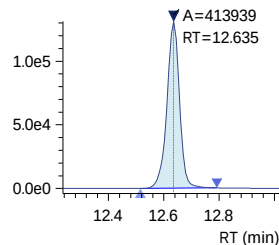
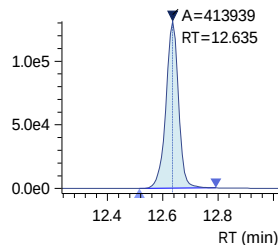
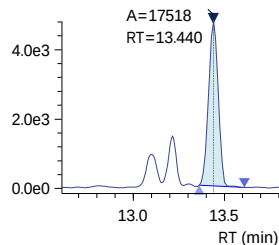
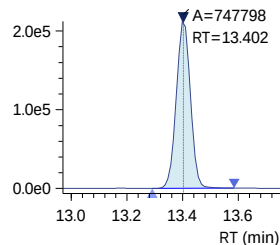
1.31e5

Q 815.00>770.05 (-)

1.31e5

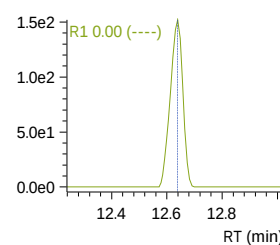
Q 813.00>768.95 (-)

9.94e2



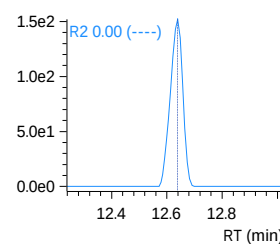
R1 813.00>218.95 (-)

1.52e2



R2 813.00>218.95 (-)

1.52e2





240122_011 (continued)

D3-MeFOSA
 Conc. 2.5189

D3-MeFOSA_IS
 Conc. 2.5000

MeFOSA
 Conc. ----
 R#1 0.00 (140.79)
 R#2 0.00 (140.79)

D9-EtFOSE_IS
 Conc. 25.0000

D9-EtFOSE
 Conc. 33.1664

Q 515.00>219.00 (-)

1.35e4

ISTD 515.00>219.00 (-)

1.35e4

Q 511.90>219.00 (-)

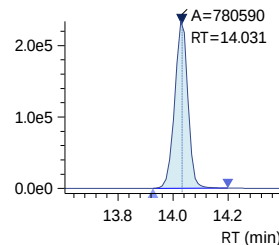
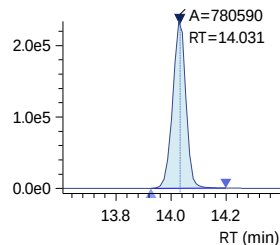
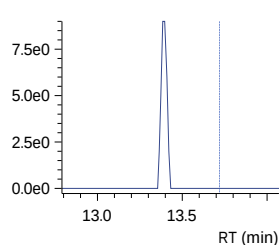
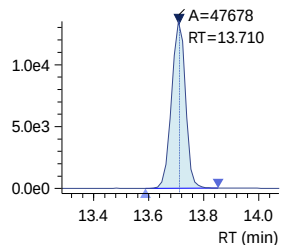
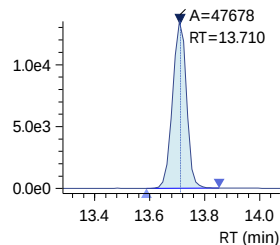
9.00e0

ISTD 639.20>58.90 (-)

2.34e5

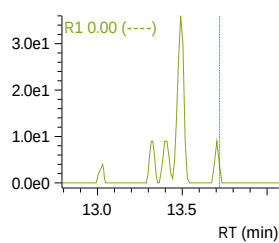
Q 639.20>58.90 (-)

2.34e5



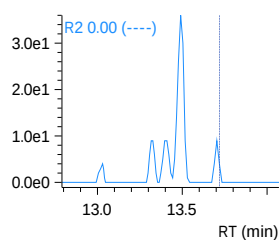
R1 511.90>169.00 (-)

3.60e1



R2 511.90>169.00 (-)

3.60e1





240122_011 (continued)

EtFOSE
Conc. 0.6866

D5-EtFOSAm
Conc. 2.7925

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. ----

PFODA
Conc. 0.0186

Q 630.00>59.00 (-)

8.22e3

Q 531.10>219.00 (-)

2.17e4

ISTD 531.10>219.00 (-)

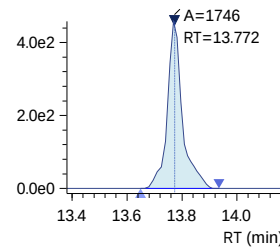
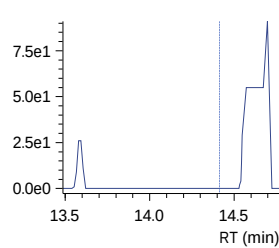
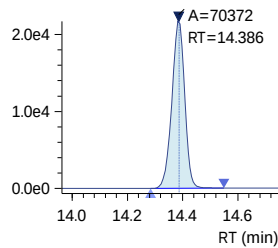
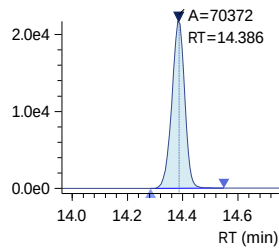
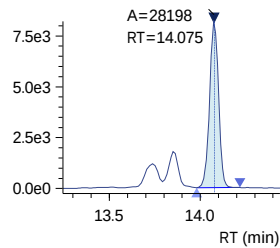
2.17e4

Q 526.00>219.00 (-)

9.10e1

Q 913.00>868.65 (-)

4.58e2

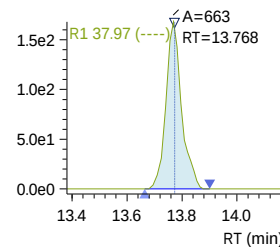
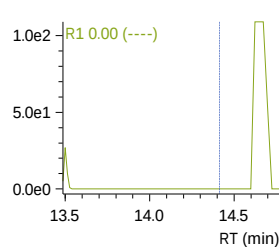


R1 526.00>169.00 (-)

1.09e2

R1 913.00>169.00 (-)

1.68e2

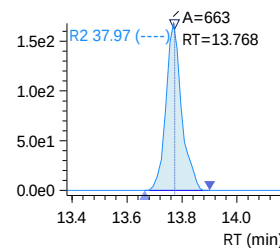
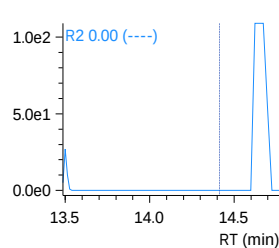


R2 526.00>169.00 (-)

1.09e2

R2 913.00>169.00 (-)

1.68e2





240201_010

Sample ID: 1633 QIS
Date Acquired: 2/1/2024 1:51:42 PM
Acquired by: System Administrator
Data File: 240201_010
Vial: 13 | Inj. Volume: 10.0000uL | Tray: 1

Check PFOA and PFNA

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.395	0.042	0.000	916841	519553	13C3-PFBA_IS	11.9092	ng/mL	
13C4-PFBA_IS	Auto	1.395	0.042	----	916841	916841	----	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.395	0.040	----	519553	519553	----	5.0000	ng/mL	
PFBA	ND(W/B)	----	----	----	----	916841	13C4-PFBA_IS	----	ng/mL	
PFMPA	ND(W/B)	----	----	----	----	237070	13C5-PFPeA_IS	----	ng/mL	
3_3 FTCA	ND(W/B)	----	----	----	----	237070	13C5-PFPeA_IS	----	ng/mL	
13C5-PFPeA	Auto	3.481	0.026	-1.482	237070	603446	13C2-PFHxA_IS	5.4637	ng/mL	
13C5-PFPeA_IS	Auto	3.481	0.026	----	237070	237070	----	5.0000	ng/mL	
PFPeA	Auto	3.484	0.026	0.003	1452	237070	13C5-PFPeA_IS	0.0087	ng/mL	
PFMBA	ND(W/B)	----	----	----	----	237070	13C5-PFPeA_IS	----	ng/mL	
13C2-4_2 FTS	Auto	4.648	0.015	-2.425	213569	263834	18O2-PFHxS_IS	4.3003	ng/mL	
13C2-4_2 FTS_IS	Auto	4.648	0.015	----	213569	213569	----	5.0000	ng/mL	
4_2 FTS	ND(W/B)	----	----	----	----	213569	13C2-4_2 FTS_IS	----	ng/mL	
13C3-PFBS_IS	Auto	4.625	0.022	----	301963	301963	----	2.5000	ng/mL	
PFBS	ND(W/B)	----	----	----	----	301963	13C3-PFBS_IS	----	ng/mL	
13C3-PFBS	Auto	4.625	0.022	-2.448	301963	263834	18O2-PFHxS_IS	3.0675	ng/mL	
NFDHA	ND(W/B)	----	----	----	----	520449	13C5-PFHxA_IS	----	ng/mL	
13C5-PFHxA	Auto	4.962	0.015	-0.001	520449	603446	13C2-PFHxA_IS	2.6719	ng/mL	
13C5-PFHxA_IS	Auto	4.962	0.015	----	520449	520449	----	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	4.963	0.016	----	603446	603446	----	2.5000	ng/mL	
PFHxA	Auto	4.853	-0.096	-0.109	2666	520449	13C5-PFHxA_IS	0.0077	ng/mL	RTi
PFEESA	ND(W/B)	----	----	----	----	520449	13C5-PFHxA_IS	----	ng/mL	
13C3-HFPO-DA	Auto	5.438	0.013	0.475	739617	603446	13C2-PFHxA_IS	13.8303	ng/mL	
13C3-HFPO-DA_IS	Auto	5.438	0.013	----	739617	739617	----	10.0000	ng/mL	
HFPO-DA	ND(W/B)	----	----	----	----	739617	13C3-HFPO-DA_IS	----	ng/mL	
5_3 FTCA	Auto	6.145	0.277	1.183	707	520449	13C5-PFHxA_IS	0.0454	ng/mL	IRr
PFPeS	ND(W/B)	----	----	----	----	286982	13C3-PFHxS_IS	----	ng/mL	
13C4-PFHpA	Auto	6.143	0.011	1.180	676479	603446	13C2-PFHxA_IS	2.7606	ng/mL	
13C4-PFHpA_IS	Auto	6.143	0.011	----	676479	676479	----	2.5000	ng/mL	
PFHpA	Auto	6.132	-0.002	-0.011	7751	676479	13C4-PFHpA_IS	0.0162	ng/mL	
DONA	ND(W/B)	----	----	----	----	739617	13C3-HFPO-DA_IS	----	ng/mL	
13C2-6_2 FTS_IS	Auto	6.787	0.009	----	199872	199872	----	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.787	0.009	-0.286	199872	263834	18O2-PFHxS_IS	3.8660	ng/mL	
6_2 FTS	Auto	6.777	0.000	-0.010	496	199872	13C2-6_2 FTS_IS	0.0065	ng/mL	IRr
13C4-PFOA_IS	Auto	7.101	0.010	----	47747	47747	----	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.101	0.010	----	638968	638968	----	2.5000	ng/mL	
13C8-PFOA	Auto	7.101	0.010	0.000	638968	47747	13C4-PFOA_IS	2.8060	ng/mL	
PFOA	M	7.105	0.012	0.004	230064	638968	13C8-PFOA_IS	0.9713	ng/mL	
13C3-PFHxS	Auto	7.073	0.011	0.000	286982	263834	18O2-PFHxS_IS	3.1035	ng/mL	
13C3-PFHxS_IS	Auto	7.073	0.011	----	286982	286982	----	2.5000	ng/mL	
PFHxS	ND(W/B)	----	----	----	----	286982	13C3-PFHxS_IS	----	ng/mL	
18O2-PFHxS_IS	Auto	7.073	0.011	----	263834	263834	----	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.950	0.009	----	386245	386245	----	1.2500	ng/mL	
13C9-PFNA	Auto	7.950	0.009	0.000	386245	356733	13C5-PFNA_IS	1.4627	ng/mL	
13C5-PFNA_IS	Auto	7.950	0.008	----	356733	356733	----	1.2500	ng/mL	
PFNA	M	7.951	0.008	0.001	714850	386245	13C9-PFNA_IS	2.8332	ng/mL	
PFHpS	ND(W/B)	----	----	----	----	130575	13C8-PFOS_IS	----	ng/mL	
7_3 FTCA	ND(W/B)	----	----	----	----	520449	13C5-PFHxA_IS	----	ng/mL	
13C2-8_2-FTS	Auto	8.407	0.008	1.334	185587	263834	18O2-PFHxS_IS	4.2281	ng/mL	
13C2-8_2-FTS_IS	Auto	8.407	0.008	----	185587	185587	----	5.0000	ng/mL	
8_2 FTS	ND(W/B)	----	----	----	----	185587	13C2-8_2-FTS_IS	----	ng/mL	
13C6-PFDA_IS	Auto	8.715	0.008	----	241538	241538	----	1.2500	ng/mL	
13C6-PFDA	Auto	8.715	0.008	-0.001	241538	212419	13C2-PFDA_IS	1.4189	ng/mL	

J:\LCMS08\Data\240201_1633_RA\240201_1633_RA.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_010 (continued)

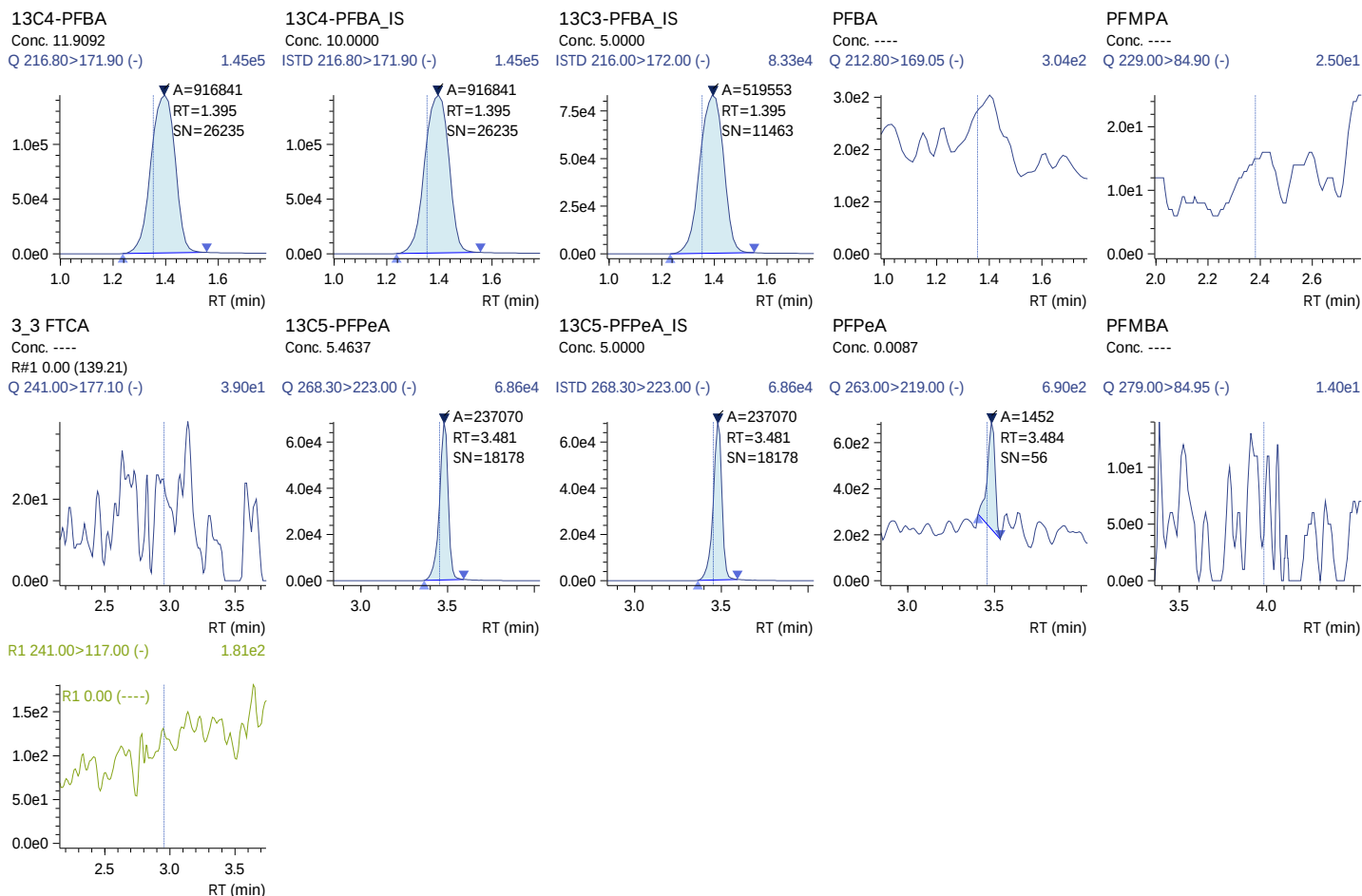
(Table continued from previous page)

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C2-PFDA_IS	Auto	8.716	0.008	----	212419	212419	----	1.2500	ng/mL	
PFDA	Auto	8.718	0.009	0.003	3833	241538	13C6-PFDA_IS	0.0188	ng/mL	IRr
D3-NMeFOSAA_IS	Auto	8.851	0.008	----	554668	554668	----	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.851	0.008	0.041	554668	340389	13C4-PFOS_IS	4.0022	ng/mL	
13C8-PFOS_IS	Auto	8.810	0.010	----	130575	130575	----	2.5000	ng/mL	
13C8-PFOS	Auto	8.810	0.010	0.000	130575	340389	13C4-PFOS_IS	3.0481	ng/mL	
13C4-PFOS_IS	Auto	8.810	0.010	----	340389	340389	----	2.5000	ng/mL	
PFOS	ND(W/B)	----	----	----	----	130575	13C8-PFOS_IS	----	ng/mL	
NMeFOSAA	ND(W/B)	----	----	----	----	554668	D3-NMeFOSAA_IS	----	ng/mL	
D5-NetFOSAA_IS	Auto	9.181	0.009	----	473001	473001	----	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.181	0.009	0.371	473001	340389	13C4-PFOS_IS	4.3306	ng/mL	
NetFOSAA	ND(W/B)	----	----	----	----	473001	D5-NetFOSAA_IS	----	ng/mL	
9-CI-PF3ONS	ND(W/B)	----	----	----	----	739617	13C3-HFPO-DA_IS	----	ng/mL	
PFUnDA	Auto	9.440	0.007	0.001	4184	335208	13C7-PFUnDA_IS	-0.0039	ng/mL	IRr
13C7-PFUnDA_IS	Auto	9.439	0.009	----	335208	335208	----	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.439	0.009	0.723	335208	212419	13C2-PFDA_IS	1.5848	ng/mL	
PFNS	ND(W/B)	----	----	----	----	130575	13C8-PFOS_IS	----	ng/mL	
10_2_FTS	ND(W/B)	----	----	----	----	185587	13C2-8_2-FTS_IS	----	ng/mL	
13C2-PFDOA_IS	Auto	10.126	0.008	----	368995	368995	----	1.2500	ng/mL	
13C2-PFDOA	Auto	10.126	0.008	1.410	368995	212419	13C2-PFDA_IS	1.4614	ng/mL	
PFDOA	Auto	10.127	0.008	0.001	4029	368995	13C2-PFDOA_IS	-0.0112	ng/mL	
PFDS	ND(W/B)	----	----	----	----	130575	13C8-PFOS_IS	----	ng/mL	
PFTDA	Auto	10.782	0.007	-0.633	5428	240192	13C2-PFTDA_IS	0.0014	ng/mL	
11-CI-PF3OUdS	ND(W/B)	----	----	----	----	739617	13C3-HFPO-DA_IS	----	ng/mL	
PFOSAm	M	11.141	-0.001	-0.002	100818	269045	13C8-PFOSAm_IS	1.0710	ng/mL	
13C8-PFOSAm	Auto	11.143	0.001	2.333	269045	340389	13C4-PFOS_IS	2.4882	ng/mL	
13C8-PFOSAm_IS	Auto	11.143	0.001	----	269045	269045	----	2.5000	ng/mL	
PFTDA	Auto	11.417	0.009	0.002	5082	240192	13C2-PFTDA_IS	0.0078	ng/mL	
13C2-PFTDA	Auto	11.415	0.009	2.699	240192	212419	13C2-PFDA_IS	1.3478	ng/mL	
13C2-PFTDA_IS	Auto	11.415	0.009	----	240192	240192	----	1.2500	ng/mL	
PFDoS	ND(W/B)	----	----	----	----	130575	13C8-PFOS_IS	----	ng/mL	
D7-MeFOSE_IS	Auto	13.379	-0.001	----	714538	714538	----	25.0000	ng/mL	
D7-MeFOSE	Auto	13.379	-0.001	4.569	714538	340389	13C4-PFOS_IS	25.7419	ng/mL	
MeFOSE	Auto	13.416	-0.001	0.037	22685	714538	D7-MeFOSE_IS	0.6384	ng/mL	
13C2-PFHxDA_IS	Auto	12.627	0.007	----	624562	624562	----	2.5000	ng/mL	
13C2-PFHxDA	Auto	12.627	0.007	3.911	624562	212419	13C2-PFDA_IS	2.6187	ng/mL	
PFHxDA	Auto	12.628	0.007	0.001	7599	624562	13C2-PFHxDA_IS	0.0225	ng/mL	
D3-MeFOSA	Auto	13.684	-0.001	4.874	78426	340389	13C4-PFOS_IS	2.7782	ng/mL	
D3-MeFOSA_IS	Auto	13.684	-0.001	----	78426	78426	----	2.5000	ng/mL	
MeFOSA	ND(W/B)	----	----	----	----	78426	D3-MeFOSA_IS	----	ng/mL	
D9-EtFOSE_IS	Auto	14.006	-0.002	----	889802	889802	----	25.0000	ng/mL	
D9-EtFOSE	Auto	14.006	-0.002	5.196	879908	340389	13C4-PFOS_IS	25.9042	ng/mL	
EtFOSE	Auto	14.049	-0.001	0.043	28956	889802	D9-EtFOSE_IS	0.6785	ng/mL	
D5-EtFOSAm	Auto	14.359	-0.002	5.549	98002	340389	13C4-PFOS_IS	2.5108	ng/mL	
D5-EtFOSAm_IS	Auto	14.359	-0.002	----	98002	98002	----	2.5000	ng/mL	
EtFOSAm	Auto	14.611	0.232	0.252	219	98002	D5-EtFOSAm_IS	0.0041	ng/mL	IRr, RTi
PFODA	Auto	13.760	0.004	1.133	2901	624562	13C2-PFHxDA_IS	0.0462	ng/mL	IRr

Flag ID key: IRr: Ion Ratio (Relative), RTi: RT Diff (Absolute ISTD)



240201_010 (continued)





240201_010 (continued)

13C2-4_2_FTS
 Conc. 4.3003

13C2-4_2_FTS_IS
 Conc. 5.0000

4_2_FTS
 Conc. ----
 R#1 0.00 (32.10)
 R#2 0.00 (32.79)

13C3-PFBS_IS
 Conc. 2.5000

PFBS
 Conc. ----
 R#1 0.00 (44.81)
 R#2 0.00 (46.72)

Q 329.10>80.90 (-)

6.70e4

ISTD 329.10>80.90 (-)

6.70e4

Q 327.10>307.00 (-)

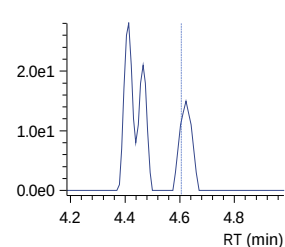
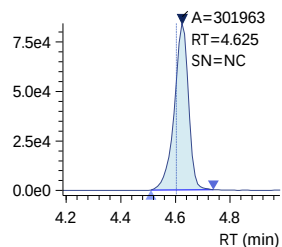
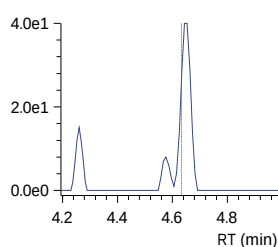
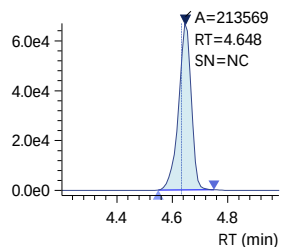
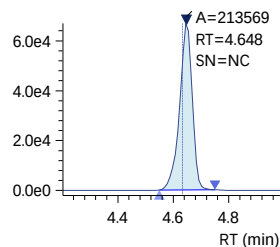
4.00e1

ISTD 302.10>79.90 (-)

8.44e4

Q 298.70>79.90 (-)

2.80e1

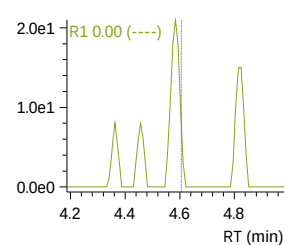
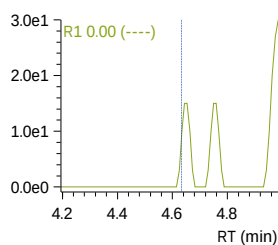


R1 327.10>80.90 (-)

3.00e1

R1 298.70>98.80 (-)

2.10e1

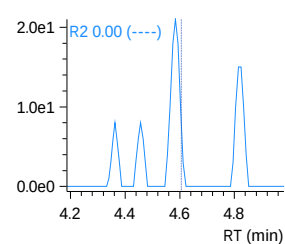
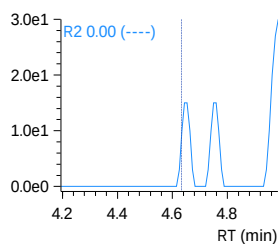


R2 327.10>80.90 (-)

3.00e1

R2 298.70>98.80 (-)

2.10e1





240201_010 (continued)

13C3-PFBS
Conc. 3.0675

NFDHA
Conc. ----
R#1 0.00 (35.54)
R#2 0.00 (37.91)

13C5-PFHxA
Conc. 2.6719

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

Q 302.10>79.90 (-)

8.44e4

Q 295.00>201.00 (-)

1.38e2

Q 318.00>273.00 (-)

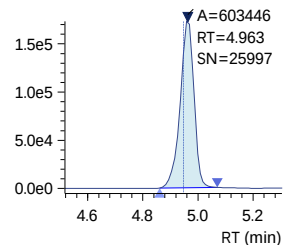
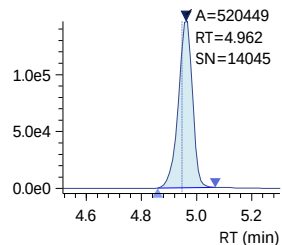
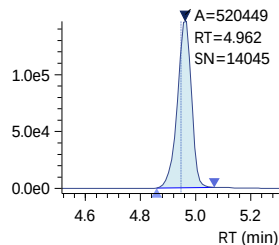
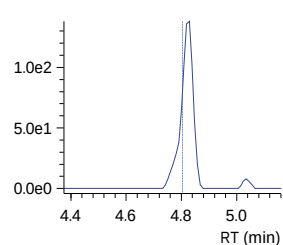
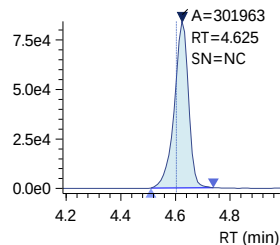
1.47e5

ISTD 318.00>273.00 (-)

1.47e5

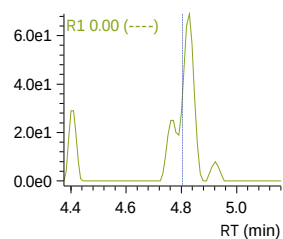
ISTD 315.10>270.00 (-)

1.73e5



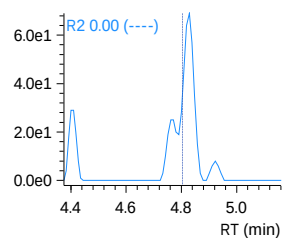
R1 295.00>84.90 (-)

6.90e1



R2 295.00>84.90 (-)

6.90e1





240201_010 (continued)

PFHxA
Conc. 0.0077

PFEESA
Conc. ----
R#1 0.00 (5.22)
R#2 0.00 (5.35)

13C3-HFPO-DA
Conc. 13.8303

13C3-HFPO-DA_IS
Conc. 10.0000

HFPO-DA
Conc. ----
R#1 0.00 (59.79)
R#2 0.00 (58.32)

Q 313.00>269.00 (-)

1.03e3

Q 314.80>135.00 (-)

6.20e1

Q 286.90>168.90 (-)

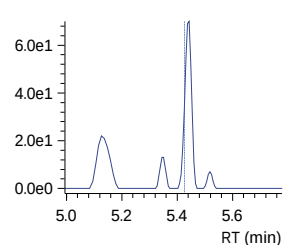
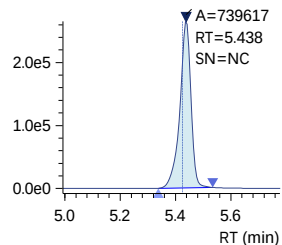
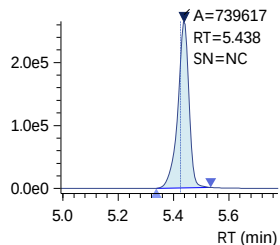
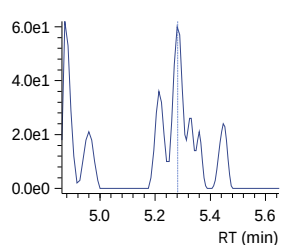
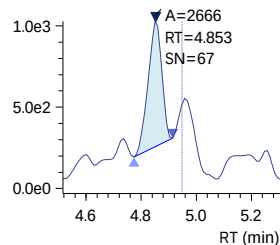
2.65e5

ISTD 286.90>168.90 (-)

2.65e5

Q 284.90>168.90 (-)

7.00e1

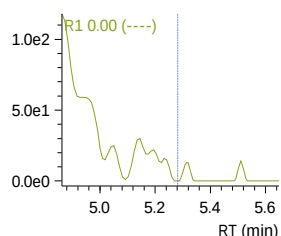


R1 314.80>82.90 (-)

1.18e2

R1 284.90>184.90 (-)

5.60e1

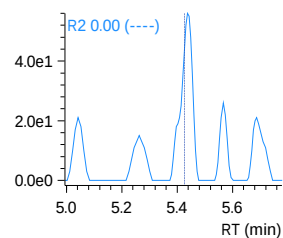
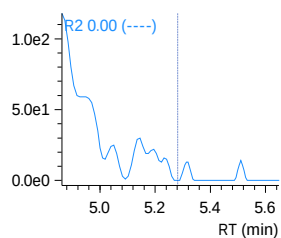


R2 314.80>82.90 (-)

1.18e2

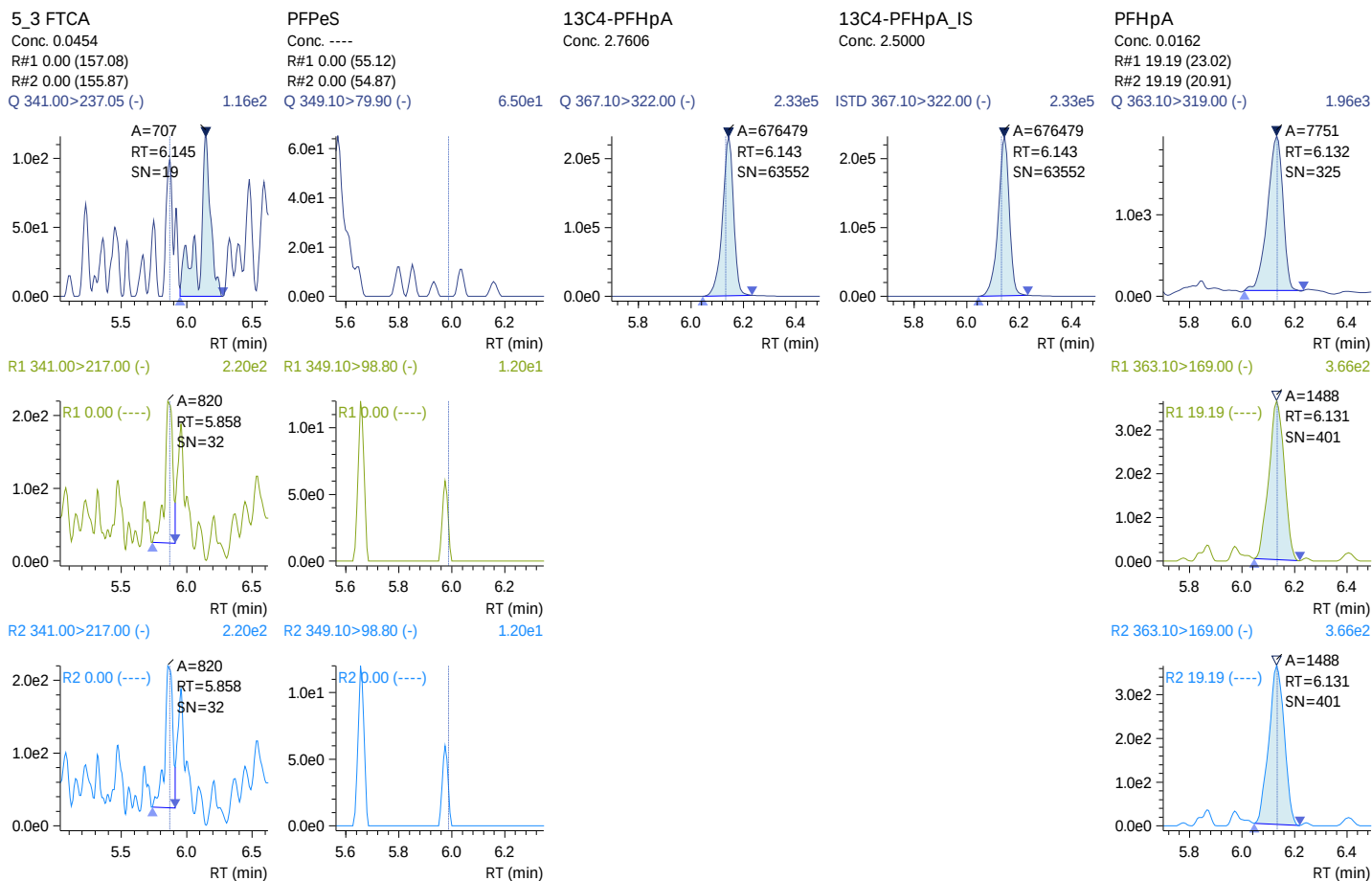
R2 284.90>184.90 (-)

5.60e1



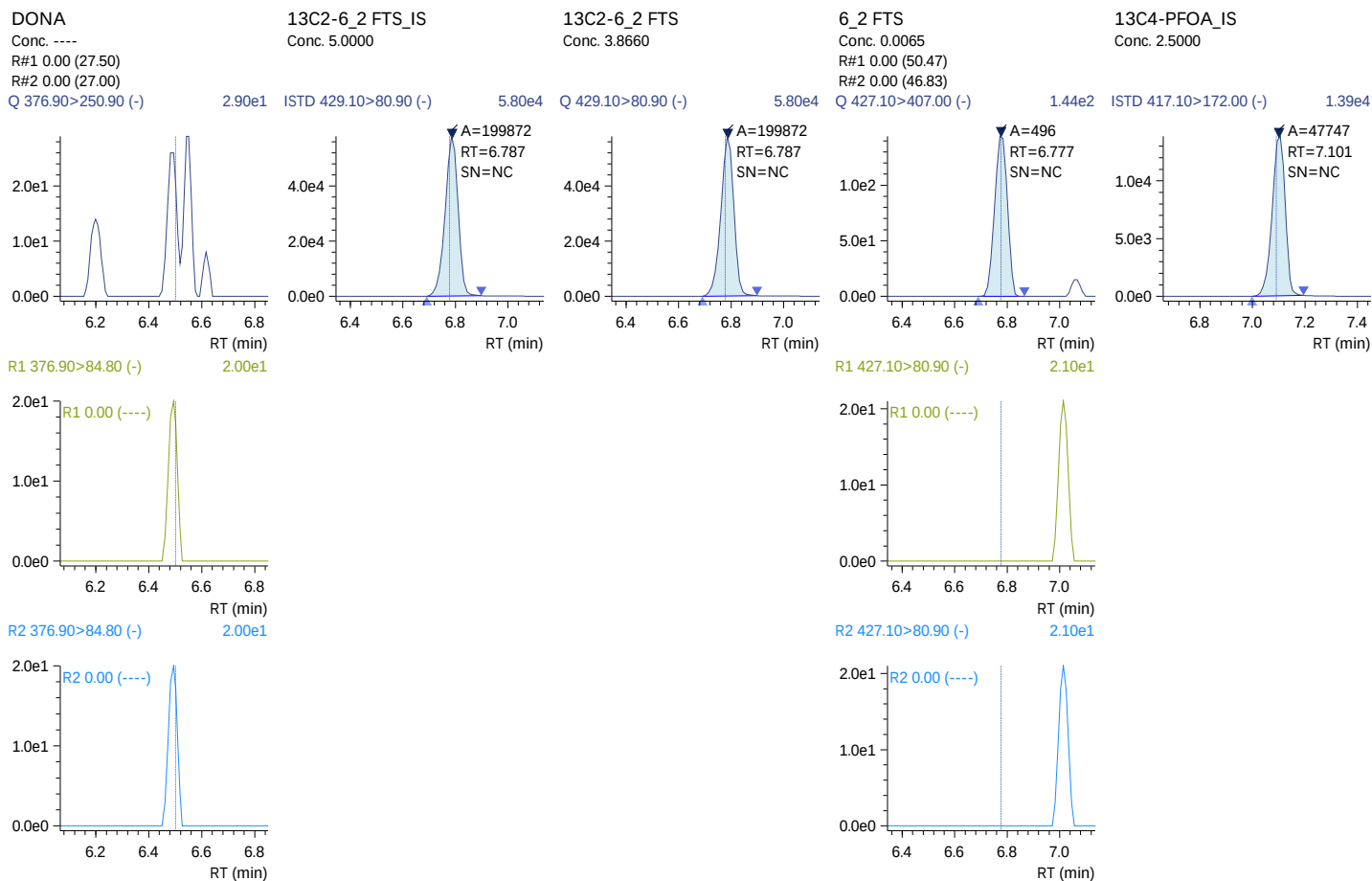


240201_010 (continued)





240201_010 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_010 (continued)

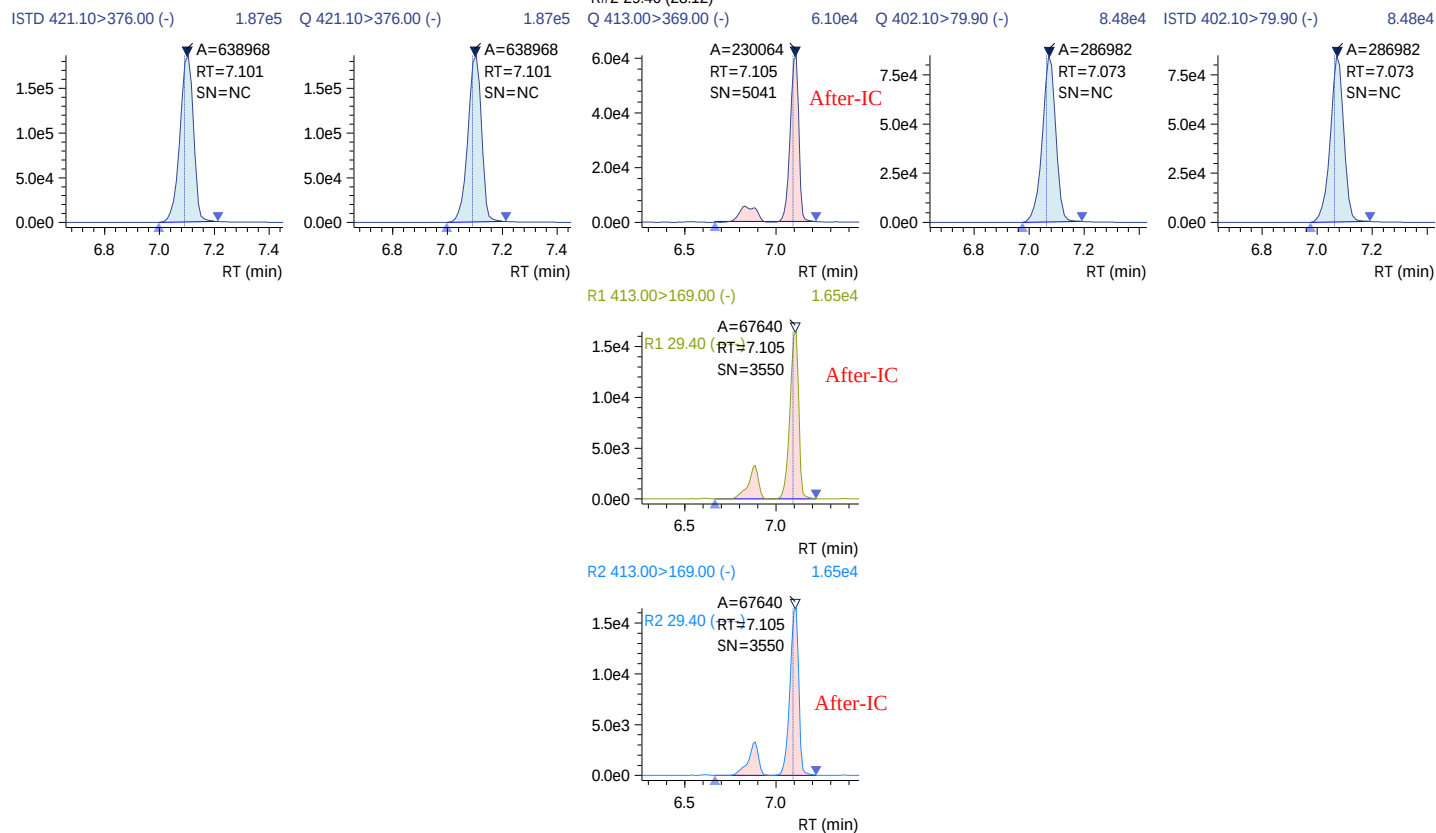
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.8060

PFOA
Conc. 0.9713
R#1 29.40 (28.77)
R#2 29.40 (28.12)

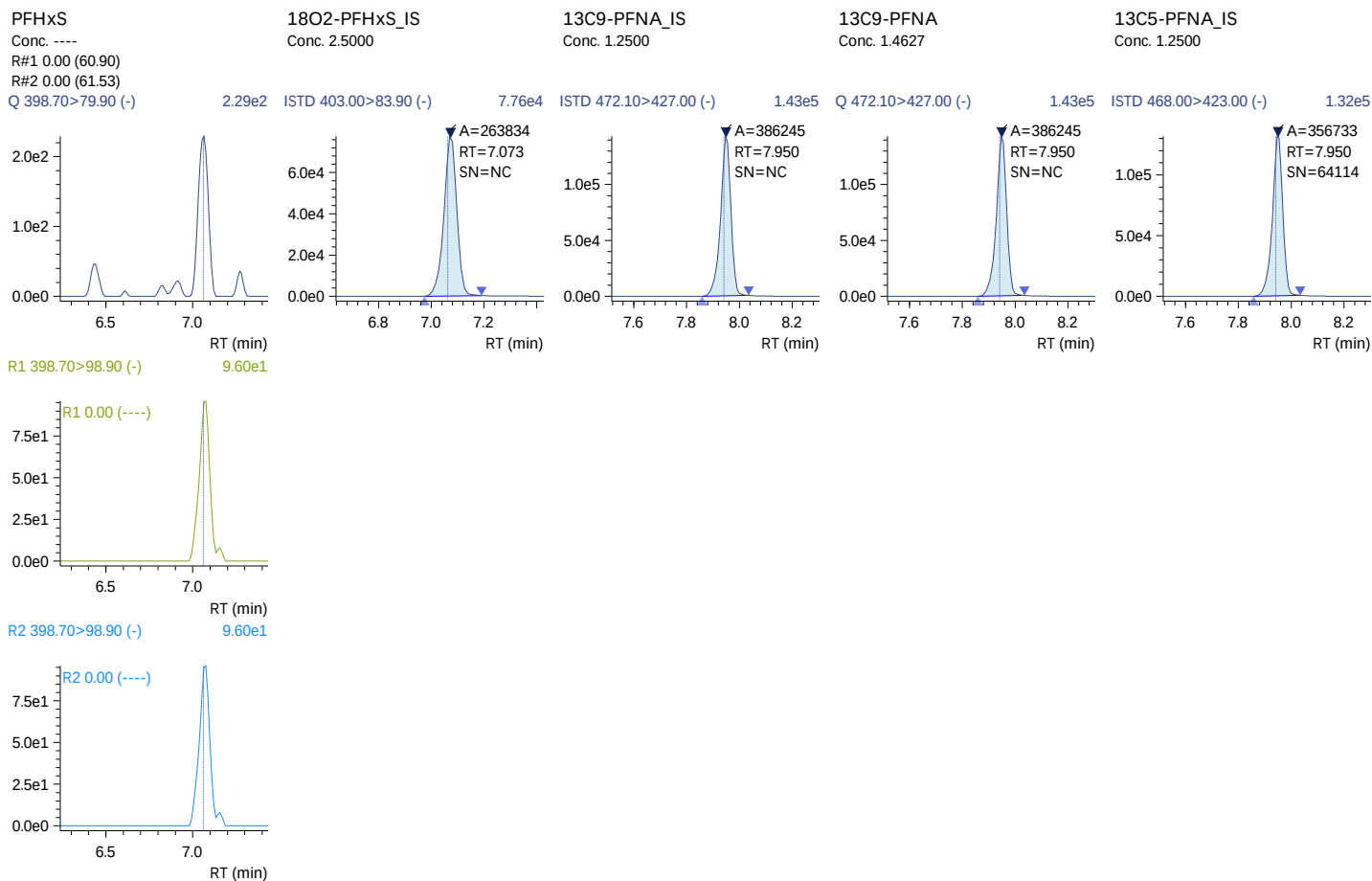
13C3-PFHxS
Conc. 3.1035

13C3-PFHxS_IS
Conc. 2.5000





240201_010 (continued)

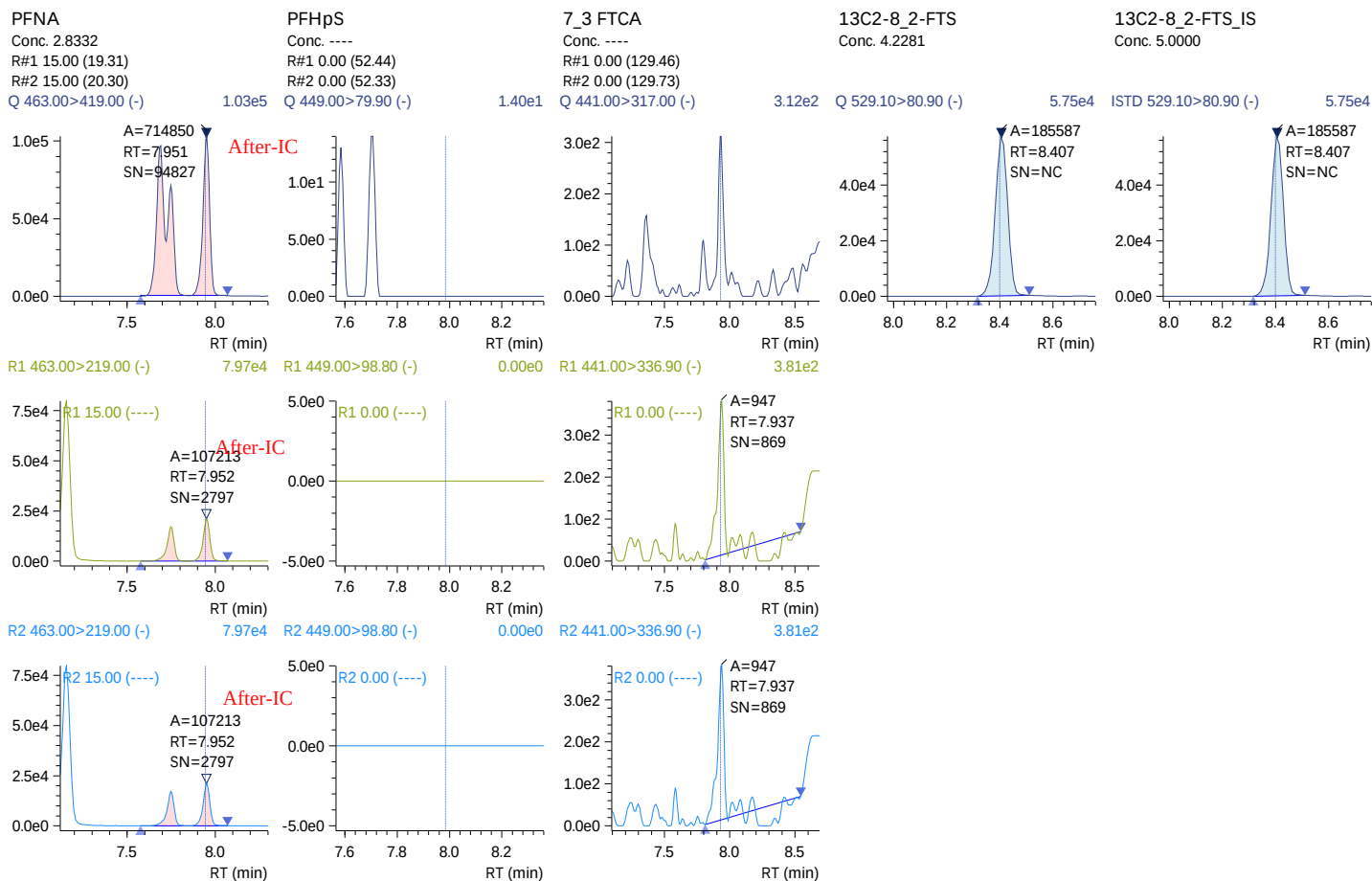


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_010 (continued)

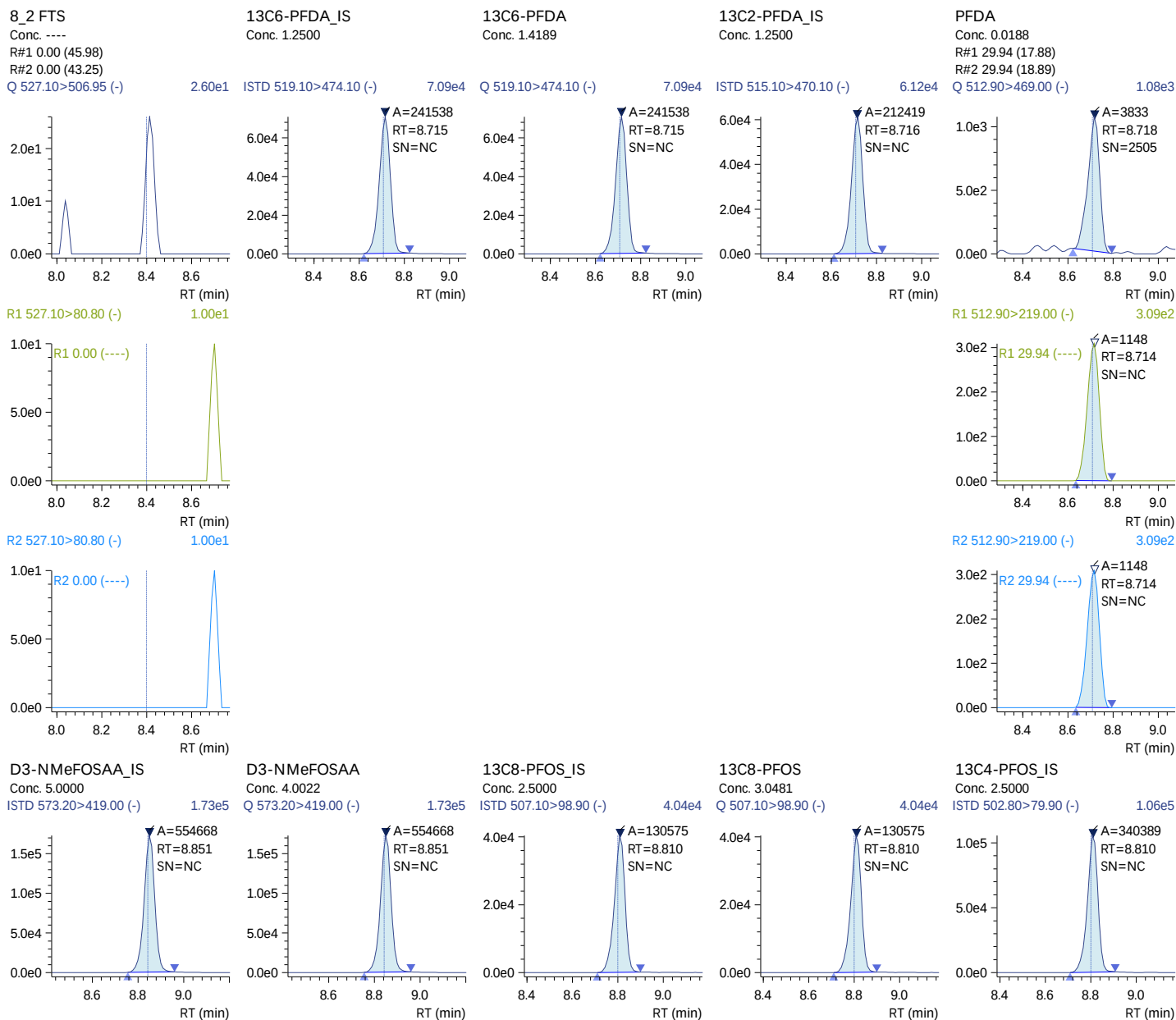


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_010 (continued)

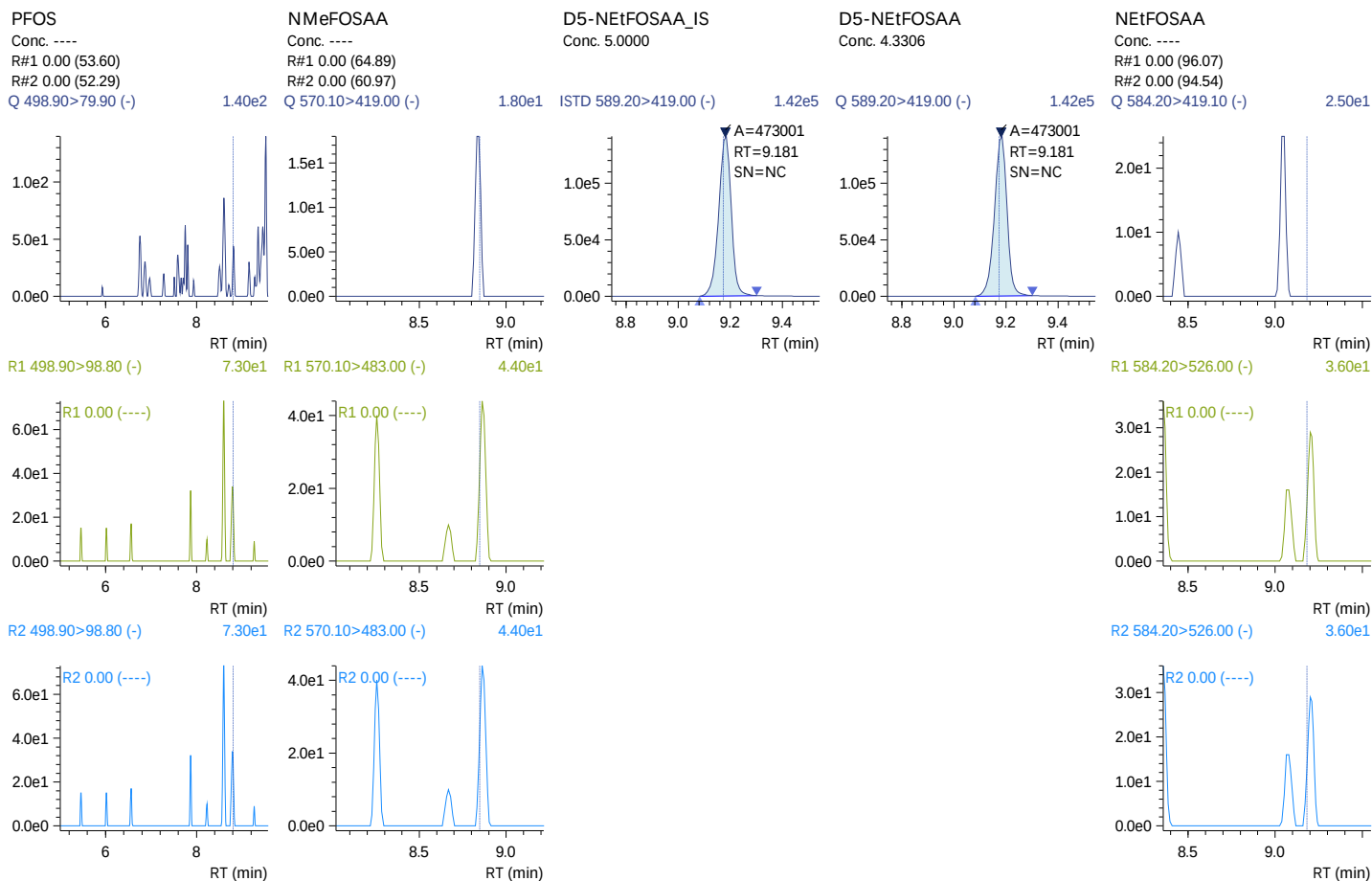


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_010 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_010 (continued)

9-Cl-PF3ONS

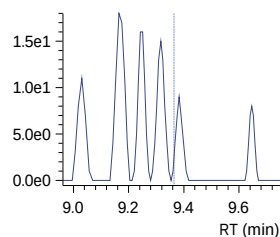
Conc. ----

R#1 0.00 (30.95)

R#2 0.00 (30.61)

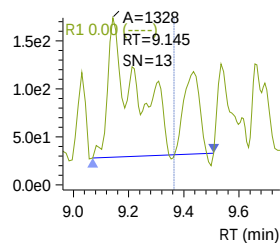
Q 530.80>351.00 (-)

1.80e1



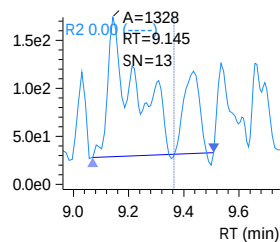
R1 532.80>353.00 (-)

1.74e2



R2 532.80>353.00 (-)

1.74e2



PFUnDA

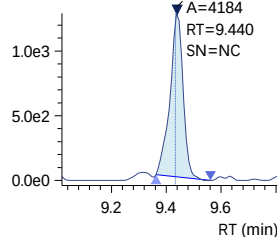
Conc. -0.0039

R#1 0.00 (11.01)

R#2 0.00 (12.02)

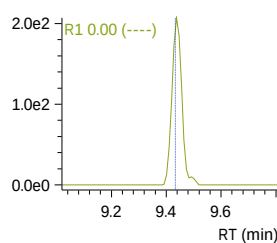
Q 563.10>519.00 (-)

1.29e3



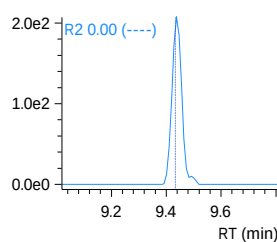
R1 563.10>269.10 (-)

2.07e2



R2 563.10>269.10 (-)

2.07e2

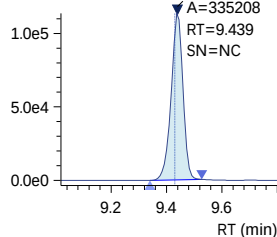


13C7-PFUnDA_IS

Conc. 1.2500

ISTD 570.00>525.10 (-)

1.14e5

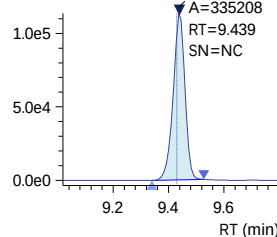


13C7-PFUnDA

Conc. 1.5848

Q 570.00>525.10 (-)

1.14e5



PFNS

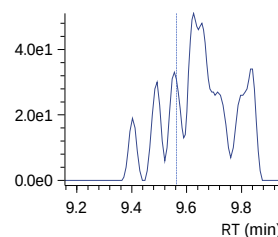
Conc. ----

R#1 0.00 (60.44)

R#2 0.00 (58.51)

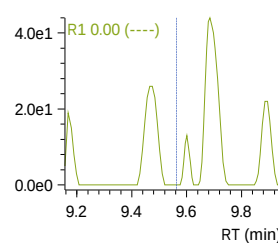
Q 548.80>79.90 (-)

5.10e1



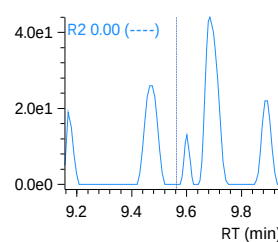
R1 548.80>98.80 (-)

4.40e1



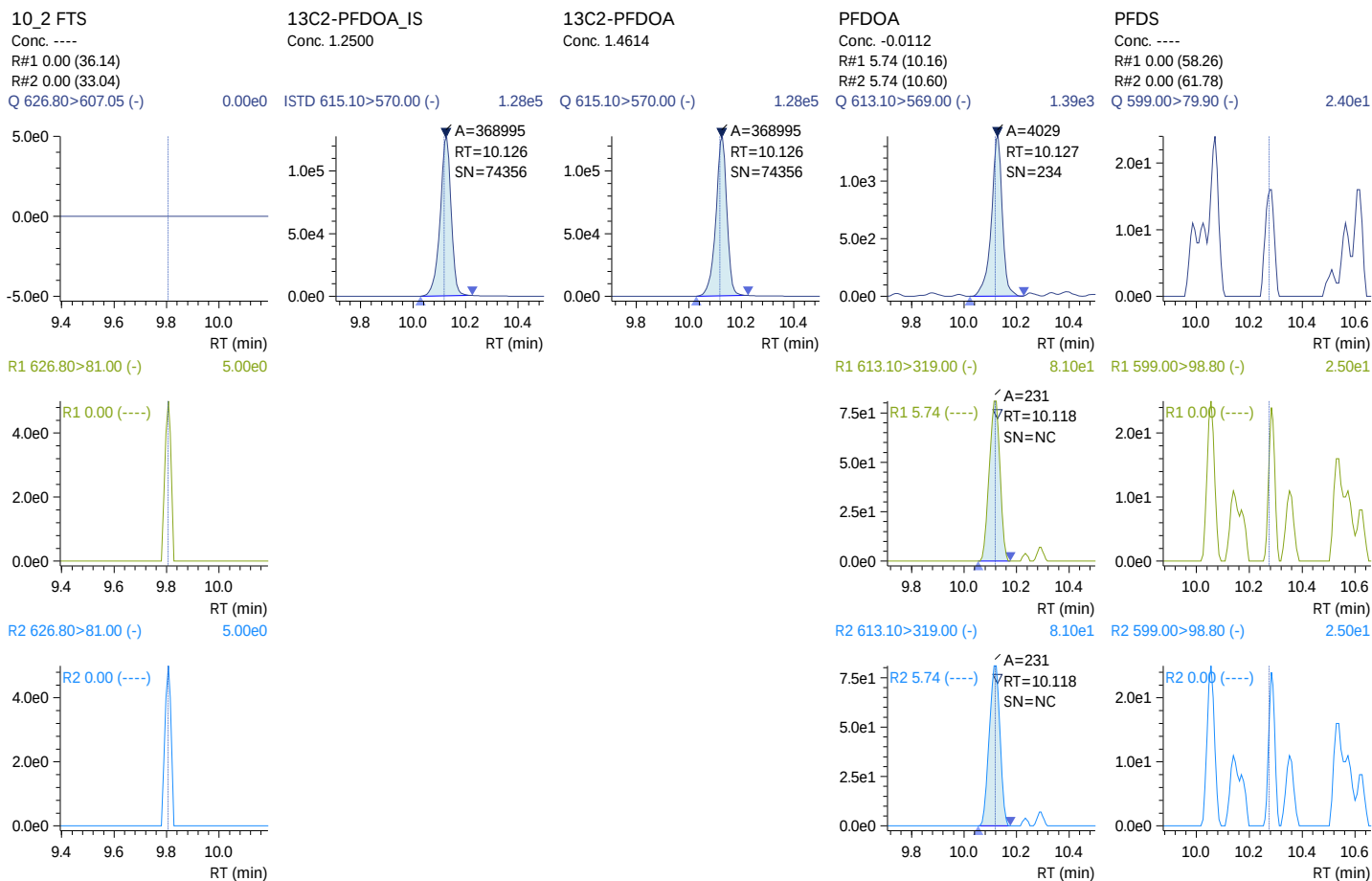
R2 548.80>98.80 (-)

4.40e1



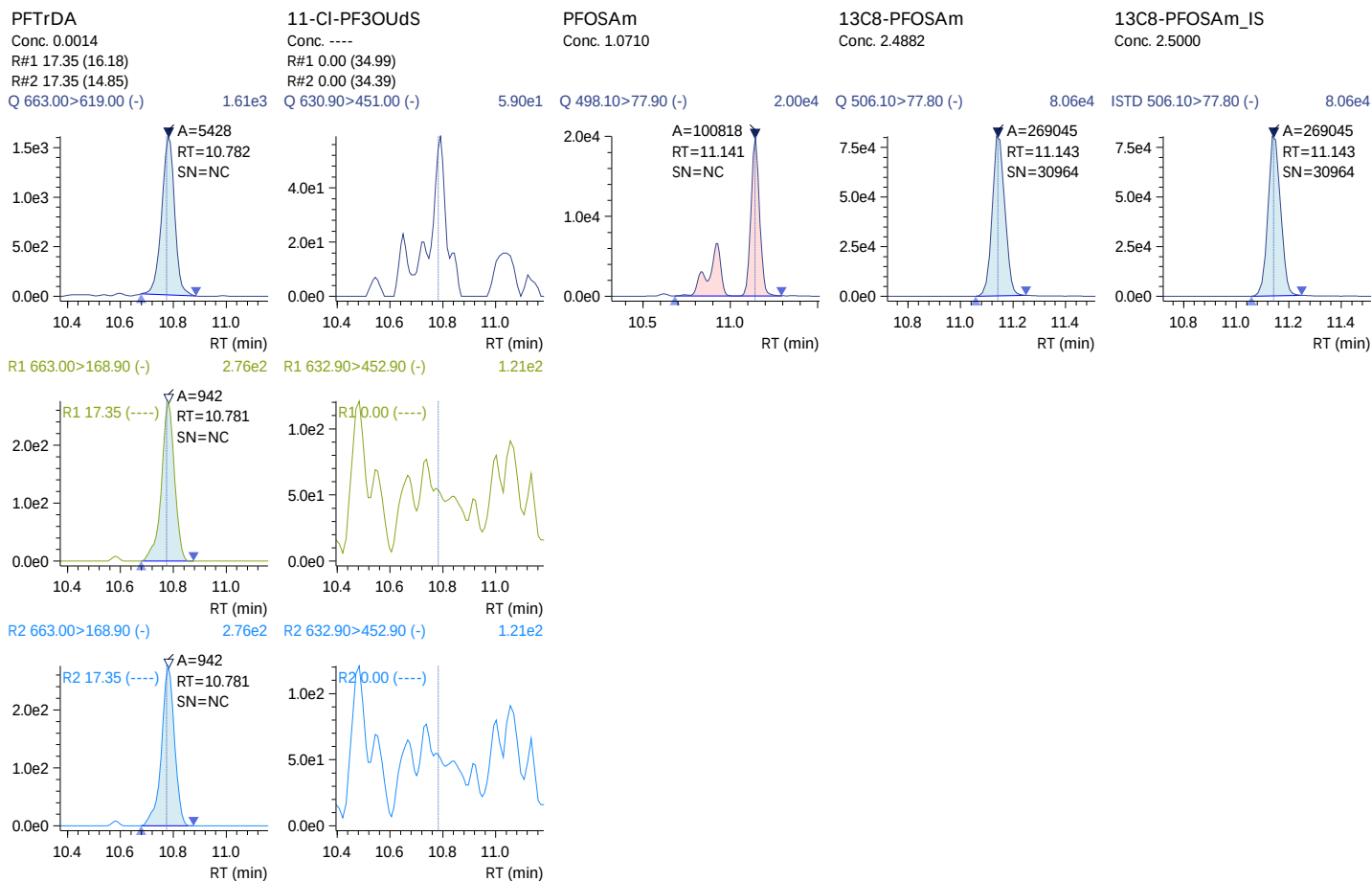


240201_010 (continued)



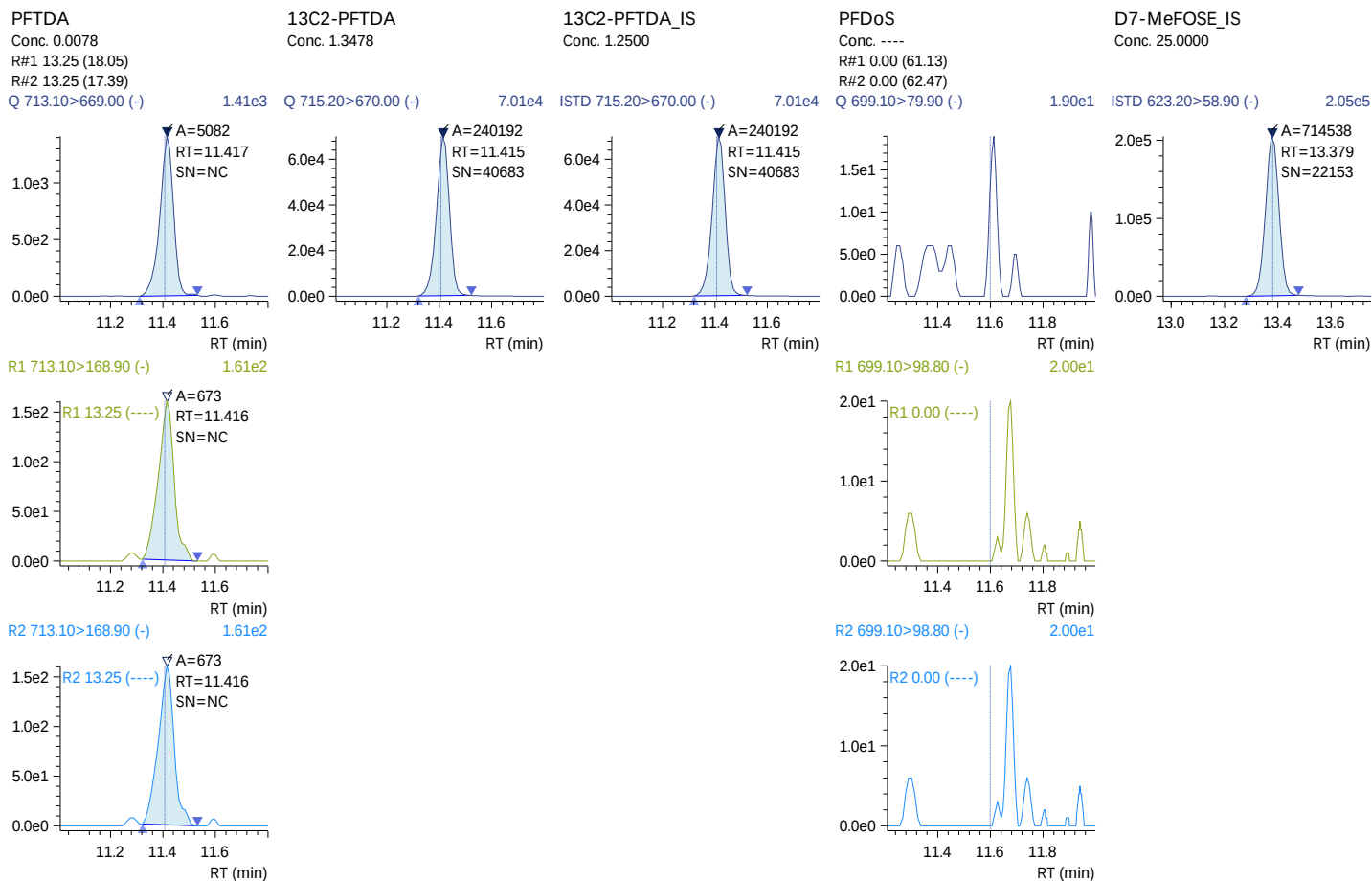


240201_010 (continued)





240201_010 (continued)





240201_010 (continued)

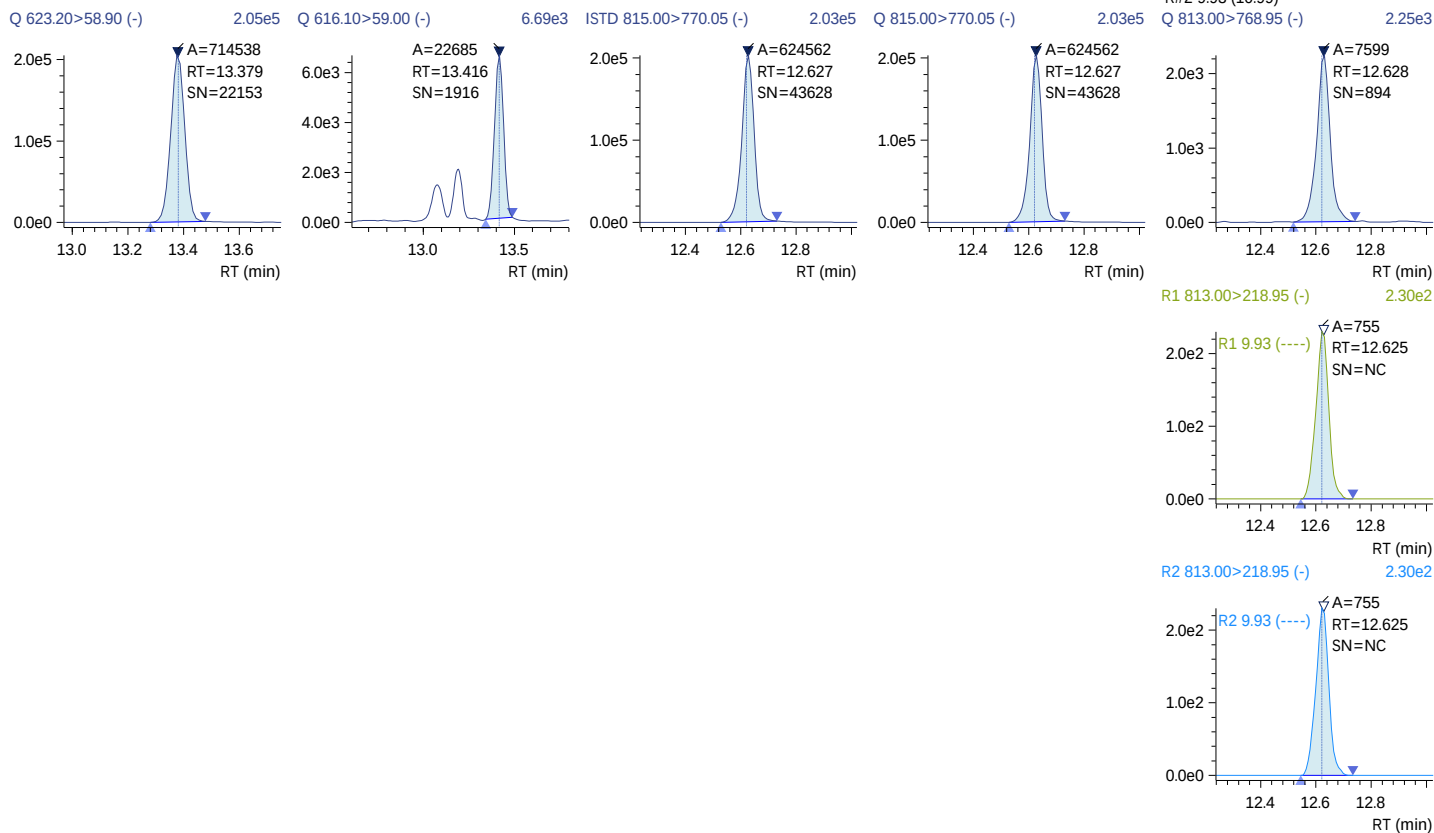
D7-MeFOSE
Conc. 25.7419

MeFOSE
Conc. 0.6384

13C2-PFHDA_IS
Conc. 2.5000

13C2-PFHDA
Conc. 2.6187

PFHXDA
Conc. 0.0225
R#1 9.93 (11.66)
R#2 9.93 (10.99)





240201_010 (continued)

D3-MeFOSA
Conc. 2.7782

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. ----
R#1 0.00 (160.44)
R#2 0.00 (161.92)

D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 25.9042

Q 515.00>219.00 (-)

2.38e4

ISTD 515.00>219.00 (-)

2.38e4

Q 511.90>219.00 (-)

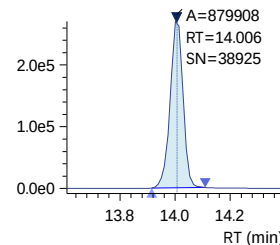
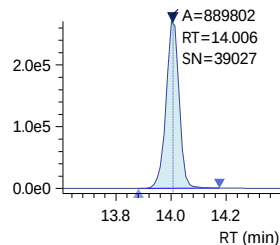
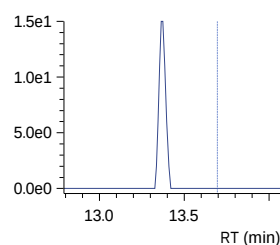
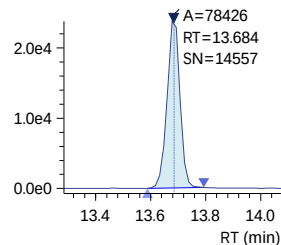
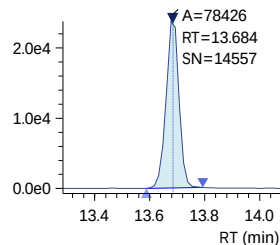
1.50e1

ISTD 639.20>58.90 (-)

2.71e5

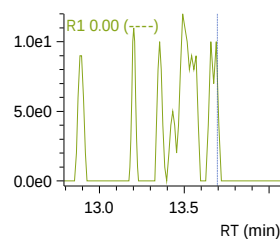
Q 639.20>58.90 (-)

2.71e5



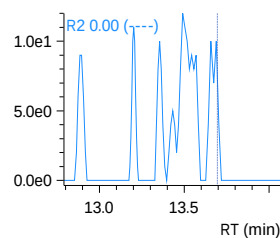
R1 511.90>169.00 (-)

1.20e1



R2 511.90>169.00 (-)

1.20e1





240201_010 (continued)

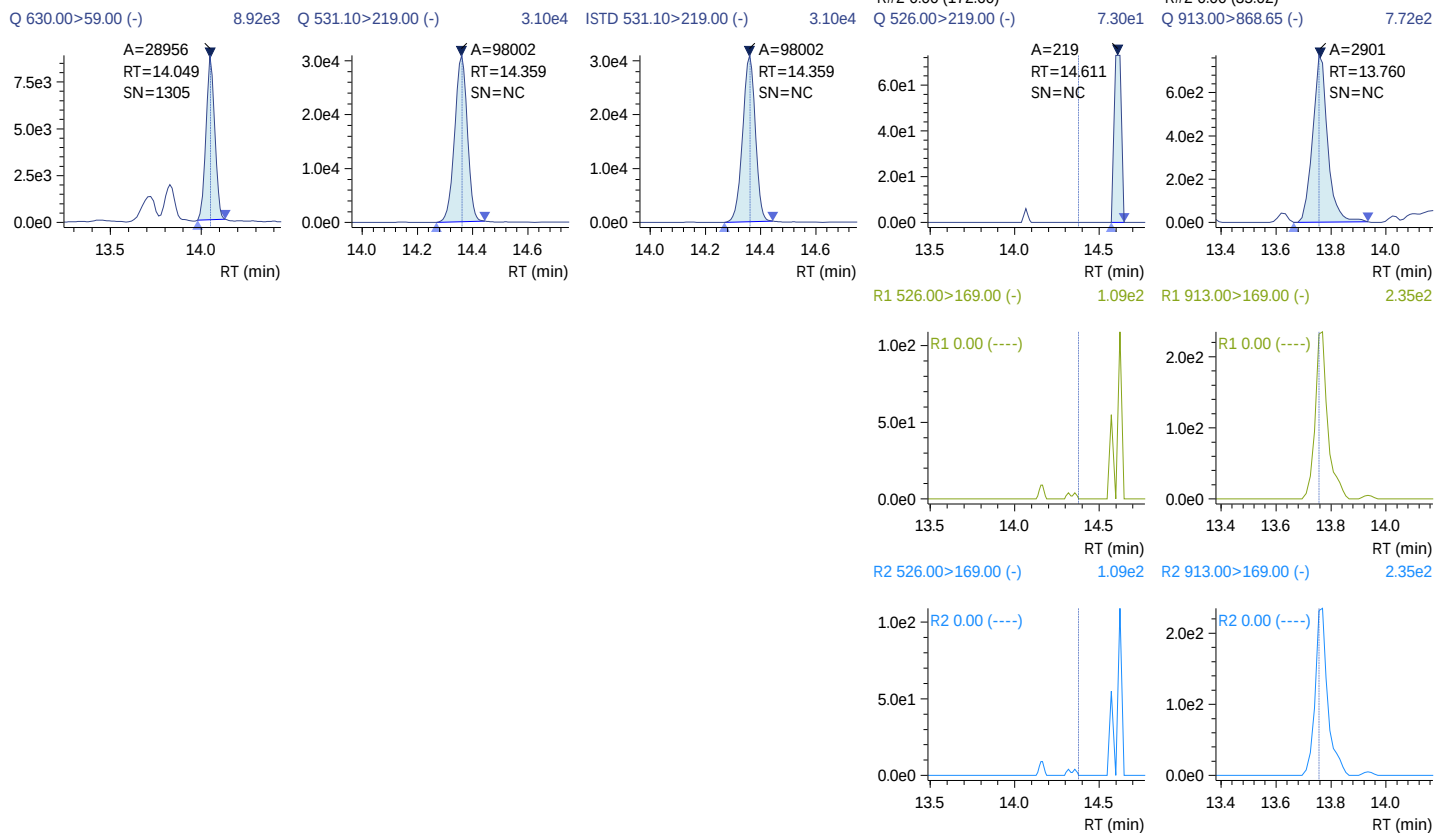
EtFOSE
Conc. 0.6785

D5-EtFOSAm
Conc. 2.5108

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. 0.0041
R#1 0.00 (159.63)
R#2 0.00 (172.60)

PFODA
Conc. 0.0462
R#1 0.00 (36.03)
R#2 0.00 (35.02)



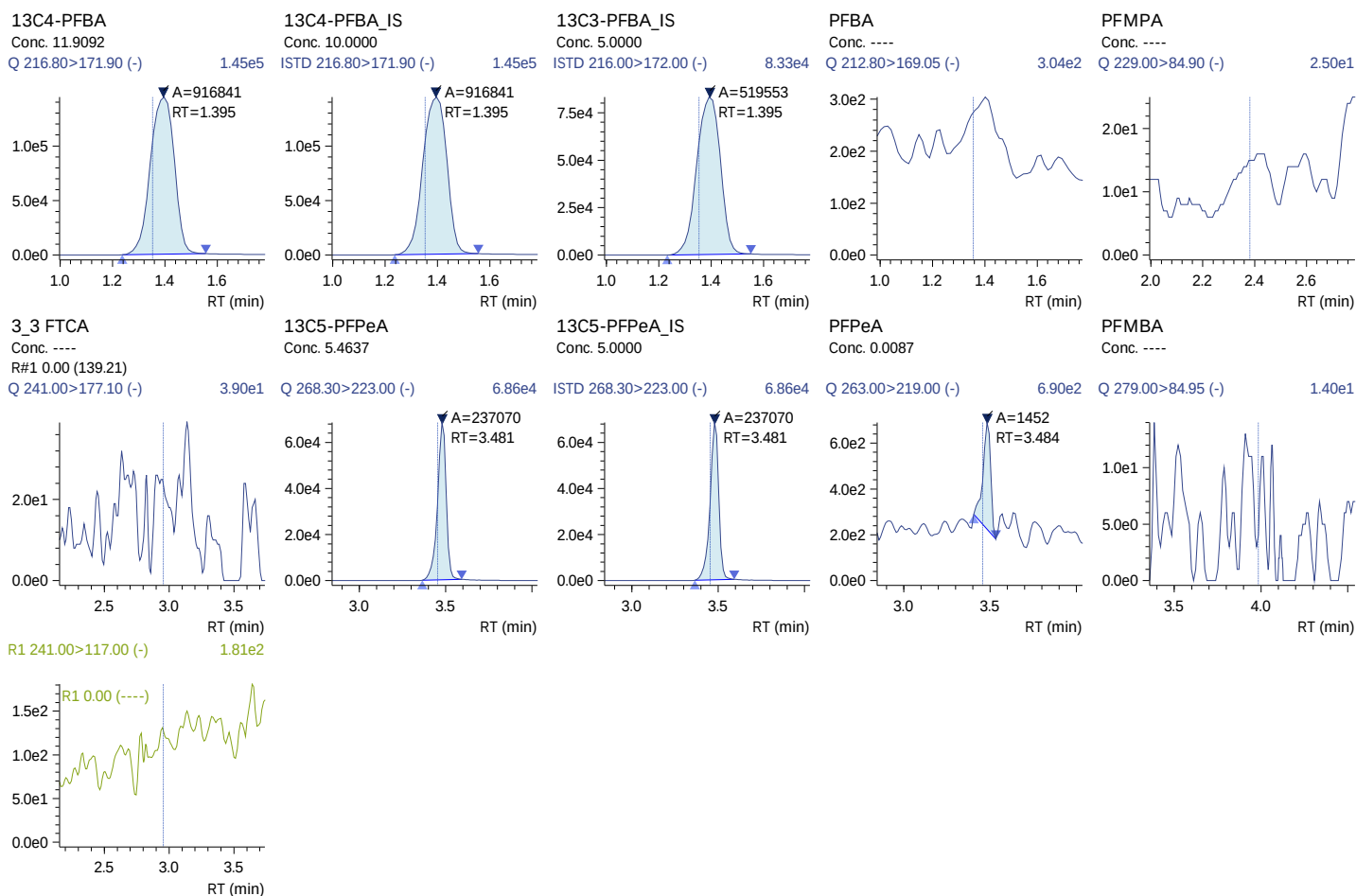
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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_010

Sample ID: 1633 QIS
Date Acquired: 2/1/2024 1:51:42 PM
Acquired by: System Administrator
Data File: 240201_010
Vial: 13 | Inj. Volume: 10.0000uL | Tray: 1





240201_010 (continued)

13C2-4_2 FTS
 Conc. 4.3003

13C2-4_2 FTS_IS
 Conc. 5.0000

4_2 FTS
 Conc. ----
 R#1 0.00 (32.10)
 R#2 0.00 (32.79)

13C3-PFBS_IS
 Conc. 2.5000

PFBS
 Conc. ----
 R#1 0.00 (44.81)
 R#2 0.00 (46.72)

Q 329.10>80.90 (-)

6.70e4

ISTD 329.10>80.90 (-)

6.70e4

Q 327.10>307.00 (-)

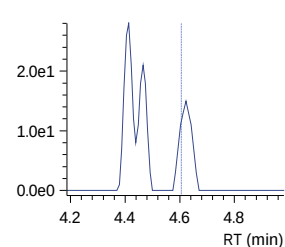
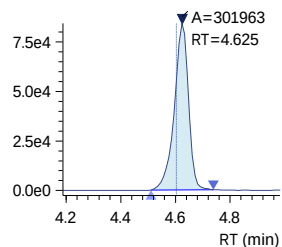
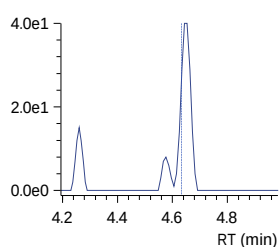
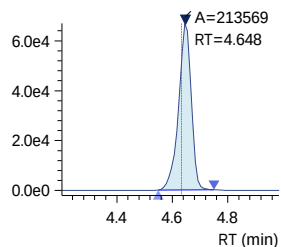
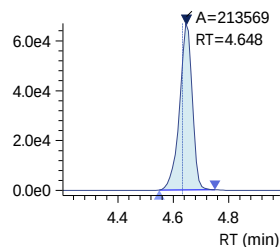
4.00e1

ISTD 302.10>79.90 (-)

8.44e4

Q 298.70>79.90 (-)

2.80e1

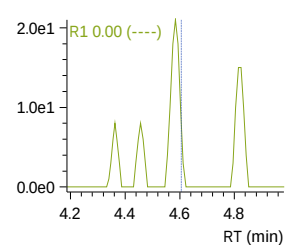
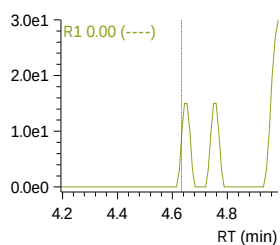


R1 327.10>80.90 (-)

3.00e1

R1 298.70>98.80 (-)

2.10e1

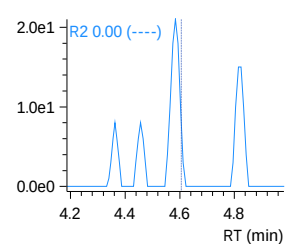
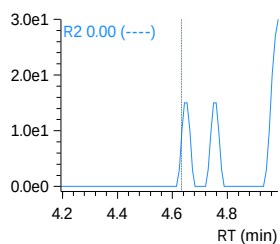


R2 327.10>80.90 (-)

3.00e1

R2 298.70>98.80 (-)

2.10e1





240201_010 (continued)

13C3-PFBS
 Conc. 3.0675

NFDHA
 Conc. ----
 R#1 0.00 (35.54)
 R#2 0.00 (37.91)

13C5-PFHxA
 Conc. 2.6719

13C5-PFHxA_IS
 Conc. 2.5000

13C2-PFHxA_IS
 Conc. 2.5000

Q 302.10>79.90 (-)

8.44e4

Q 295.00>201.00 (-)

1.38e2

Q 318.00>273.00 (-)

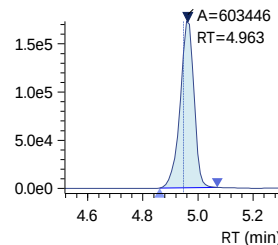
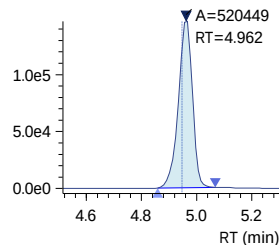
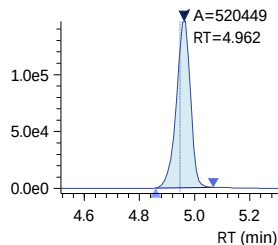
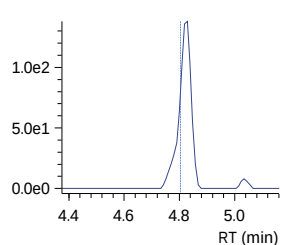
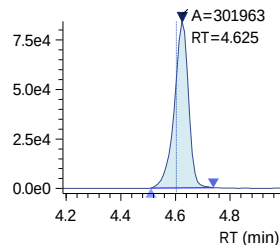
1.47e5

ISTD 318.00>273.00 (-)

1.47e5

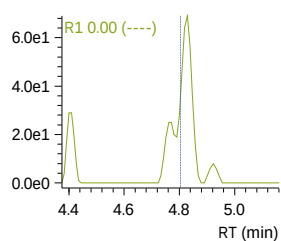
ISTD 315.10>270.00 (-)

1.73e5



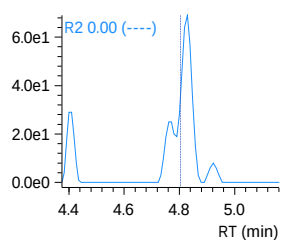
R1 295.00>84.90 (-)

6.90e1



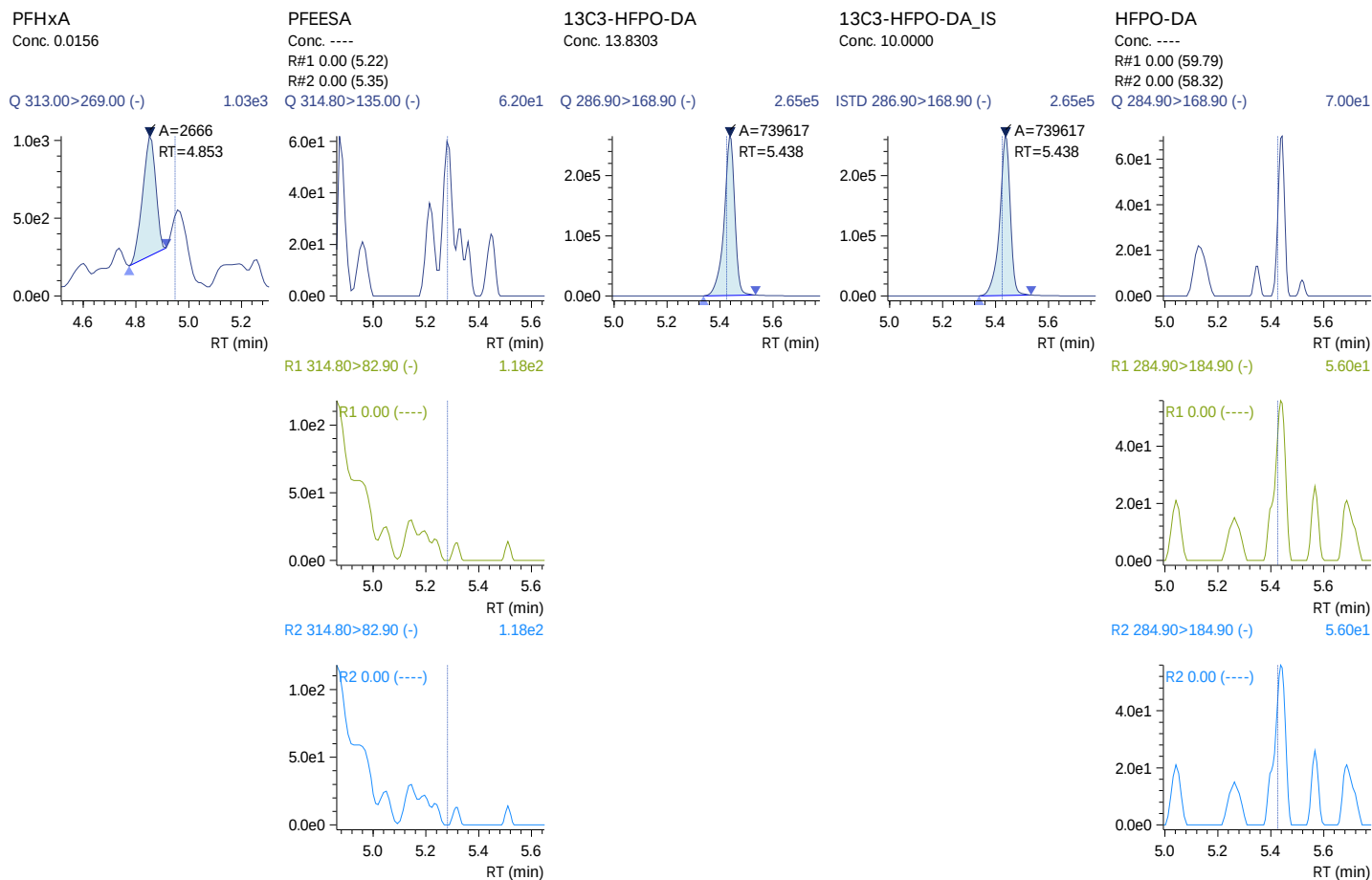
R2 295.00>84.90 (-)

6.90e1



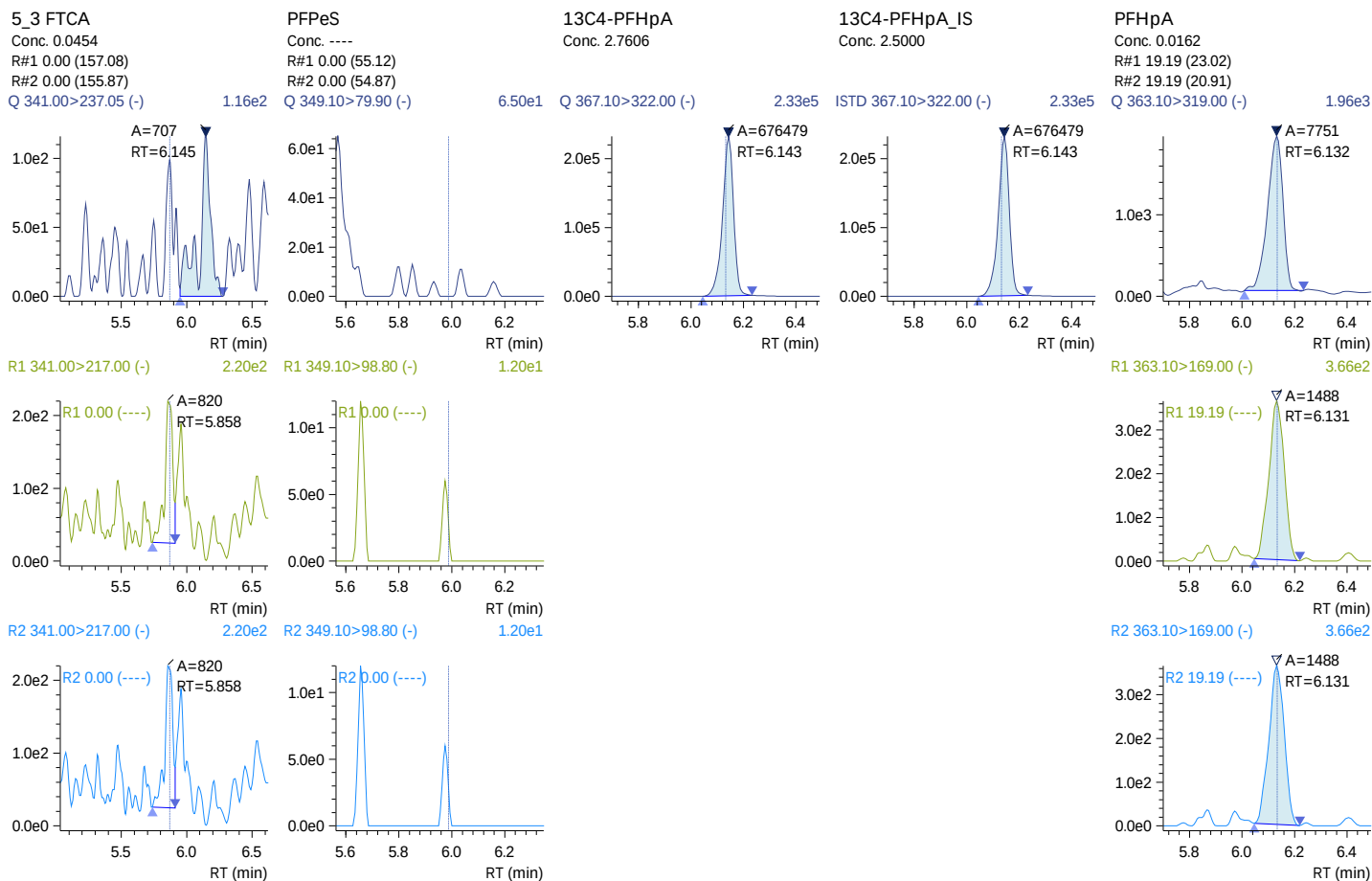


240201_010 (continued)



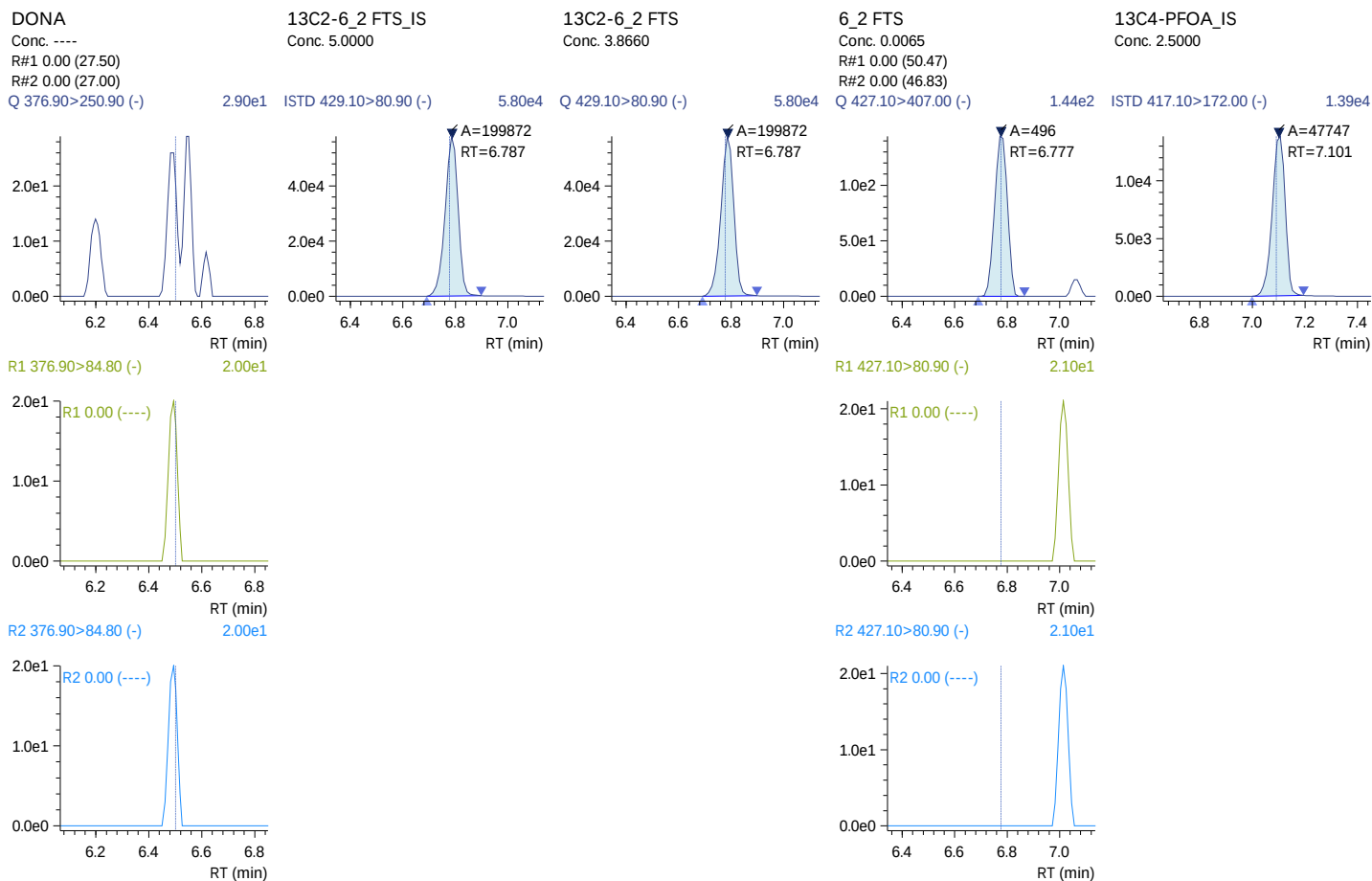


240201_010 (continued)





240201_010 (continued)





240201_010 (continued)

13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.8060

PFOA
Conc. 0.8305
R#1 27.44 (28.77)
R#2 27.44 (28.12)

13C3-PFHxS
Conc. 3.1035

13C3-PFHxS_IS
Conc. 2.5000

ISTD 421.10>376.00 (-)

1.87e5

Q 421.10>376.00 (-)

1.87e5

Q 413.00>369.00 (-)

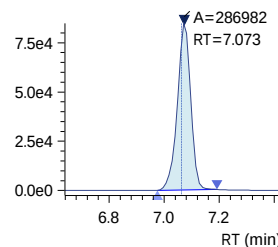
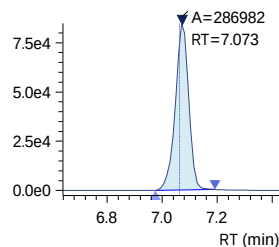
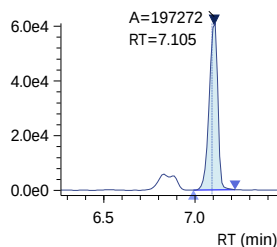
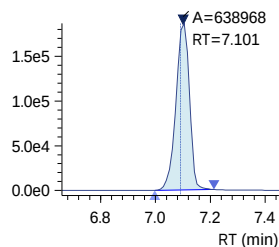
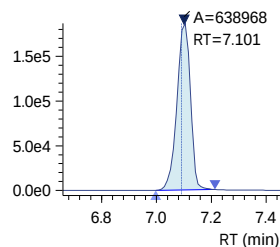
6.10e4

Q 402.10>79.90 (-)

8.48e4

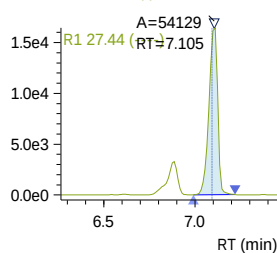
ISTD 402.10>79.90 (-)

8.48e4



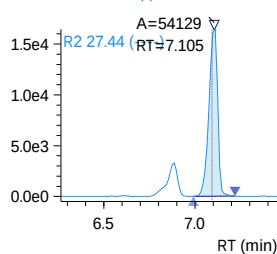
R1 413.00>169.00 (-)

1.65e4



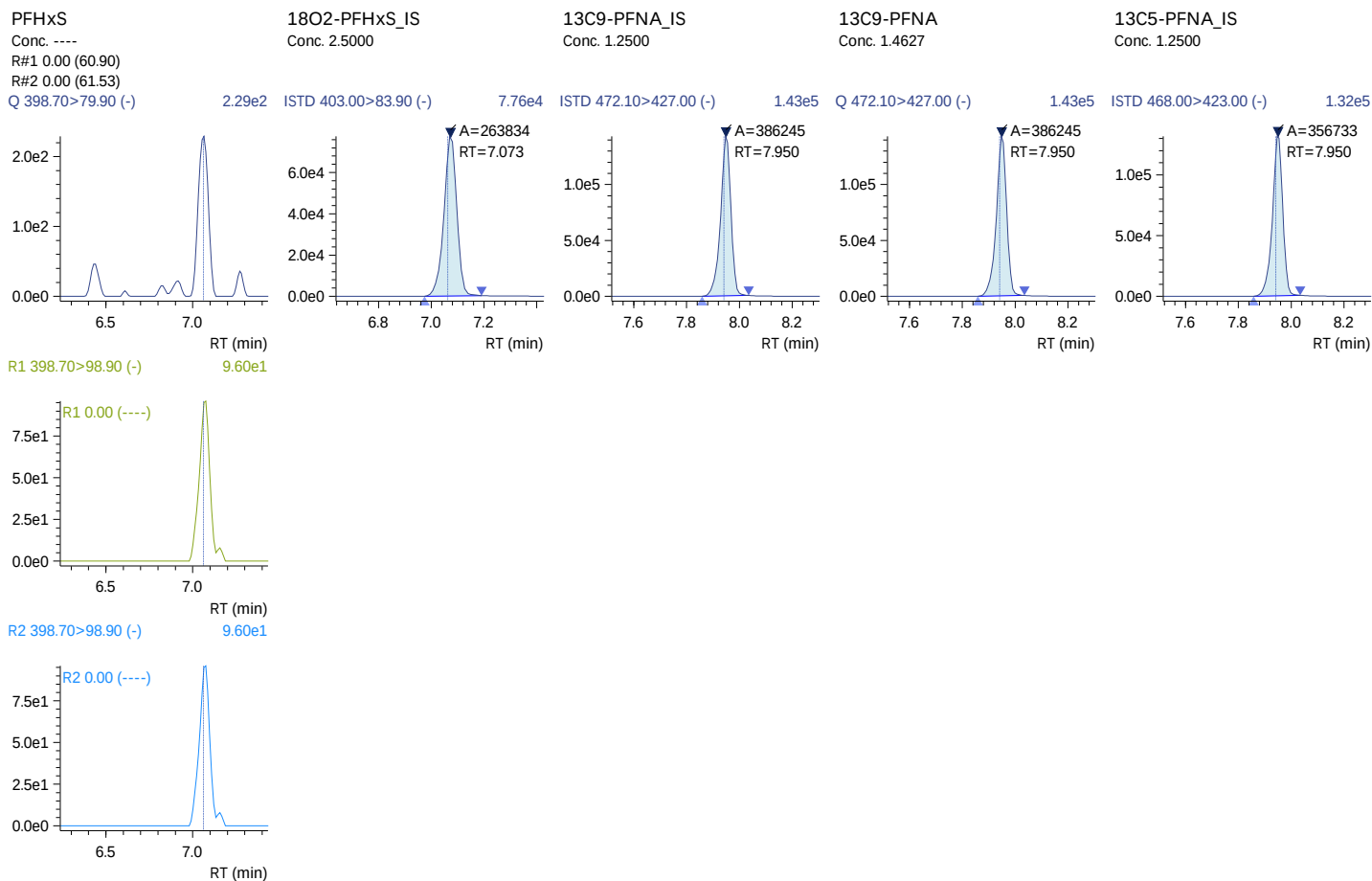
R2 413.00>169.00 (-)

1.65e4



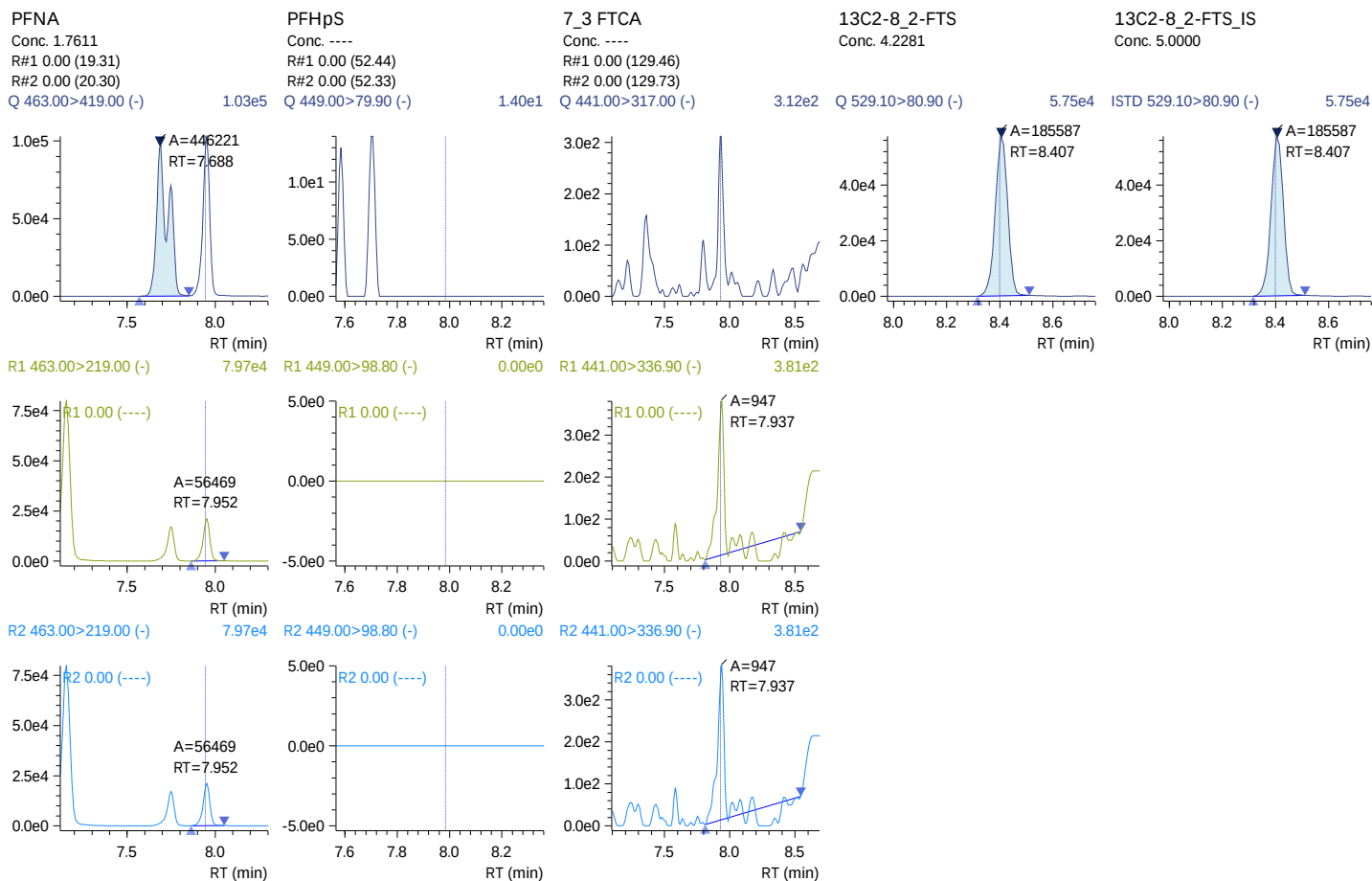


240201_010 (continued)



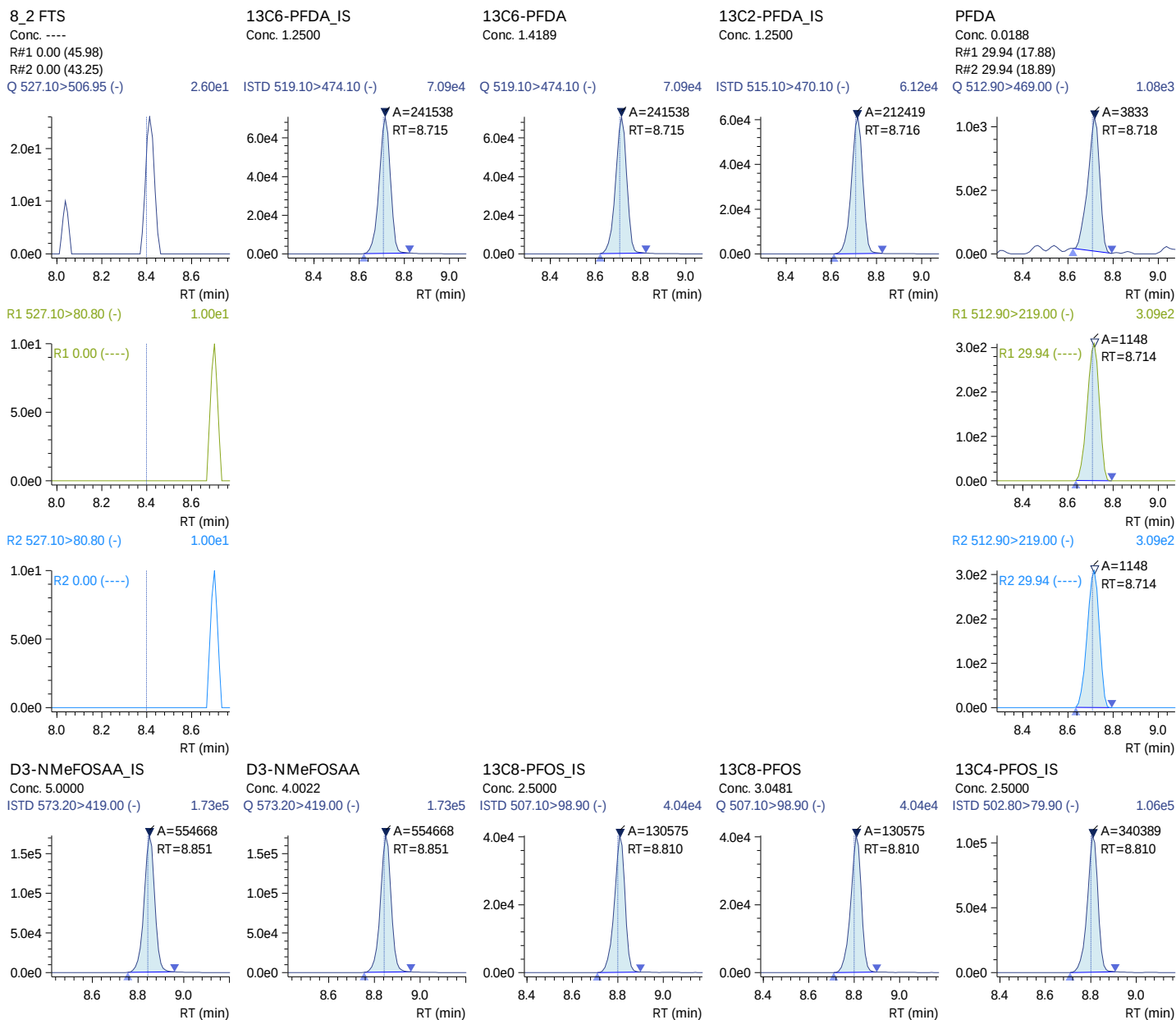


240201_010 (continued)



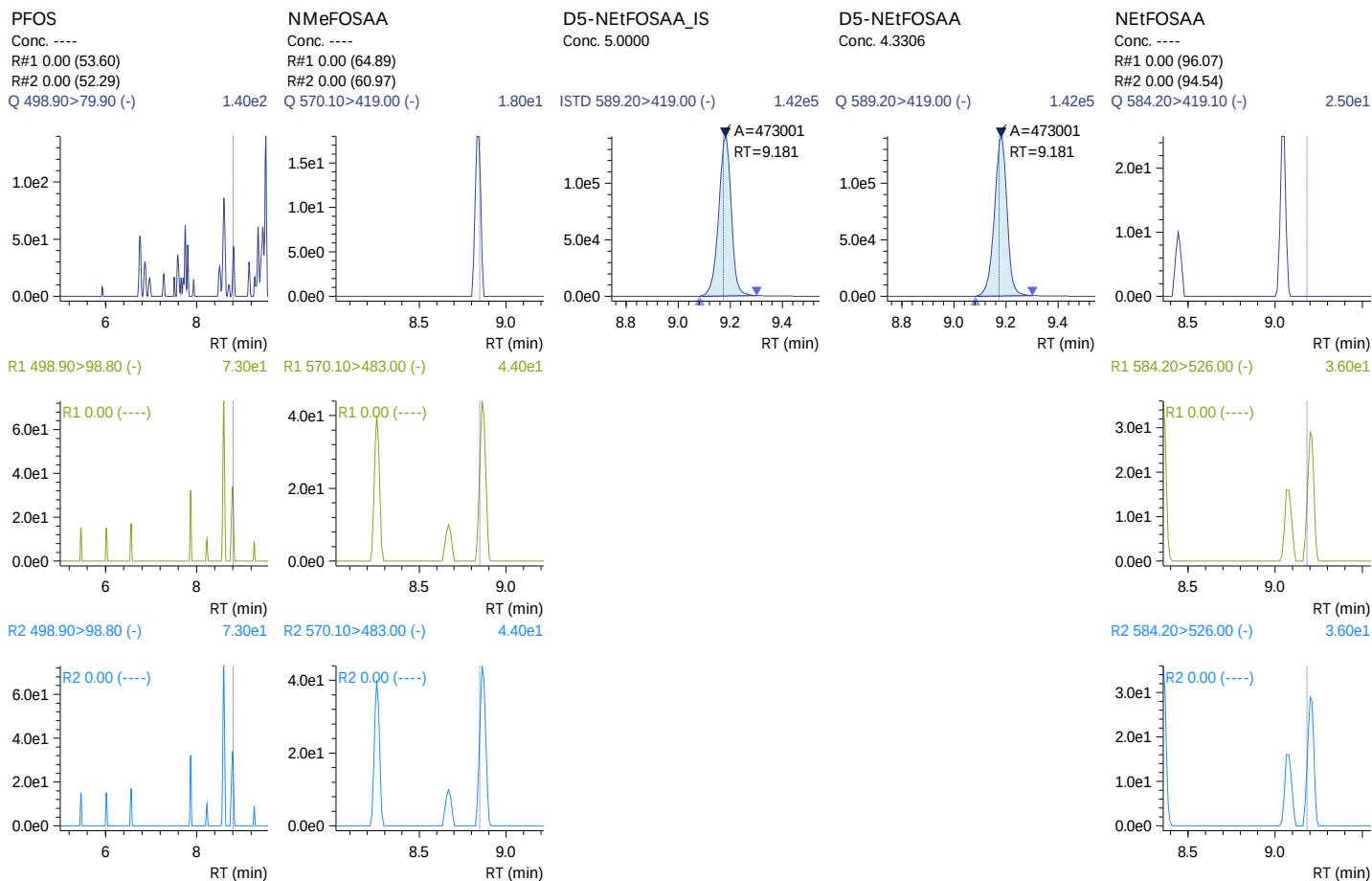


240201_010 (continued)





240201_010 (continued)





240201_010 (continued)

9-CI-PF3ONS

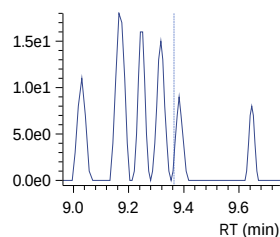
Conc. ----

R#1 0.00 (30.95)

R#2 0.00 (30.61)

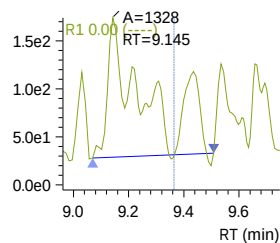
Q 530.80>351.00 (-)

1.80e1



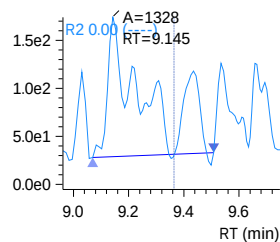
R1 532.80>353.00 (-)

1.74e2



R2 532.80>353.00 (-)

1.74e2



PFUnDA

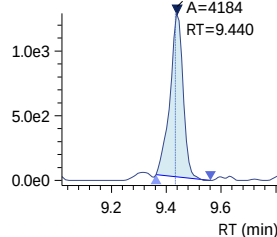
Conc. -0.0039

R#1 0.00 (11.01)

R#2 0.00 (12.02)

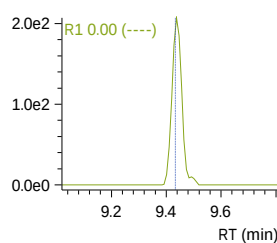
Q 563.10>519.00 (-)

1.29e3



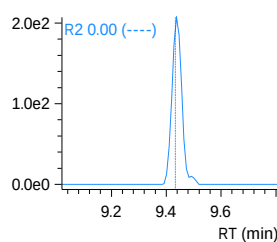
R1 563.10>269.10 (-)

2.07e2



R2 563.10>269.10 (-)

2.07e2

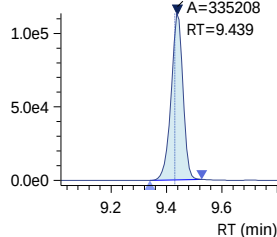


13C7-PFUnDA_IS

Conc. 1.2500

ISTD 570.00>525.10 (-)

1.14e5

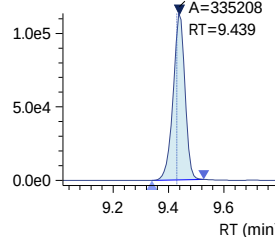


13C7-PFUnDA

Conc. 1.5848

Q 570.00>525.10 (-)

1.14e5



PFNS

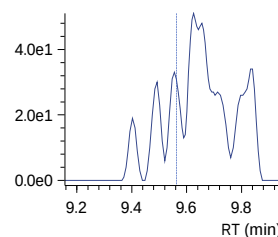
Conc. ----

R#1 0.00 (60.44)

R#2 0.00 (58.51)

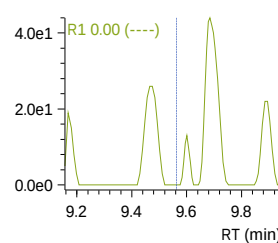
Q 548.80>79.90 (-)

5.10e1



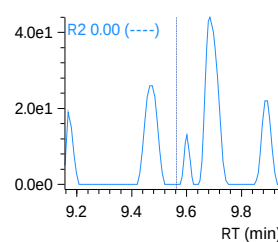
R1 548.80>98.80 (-)

4.40e1



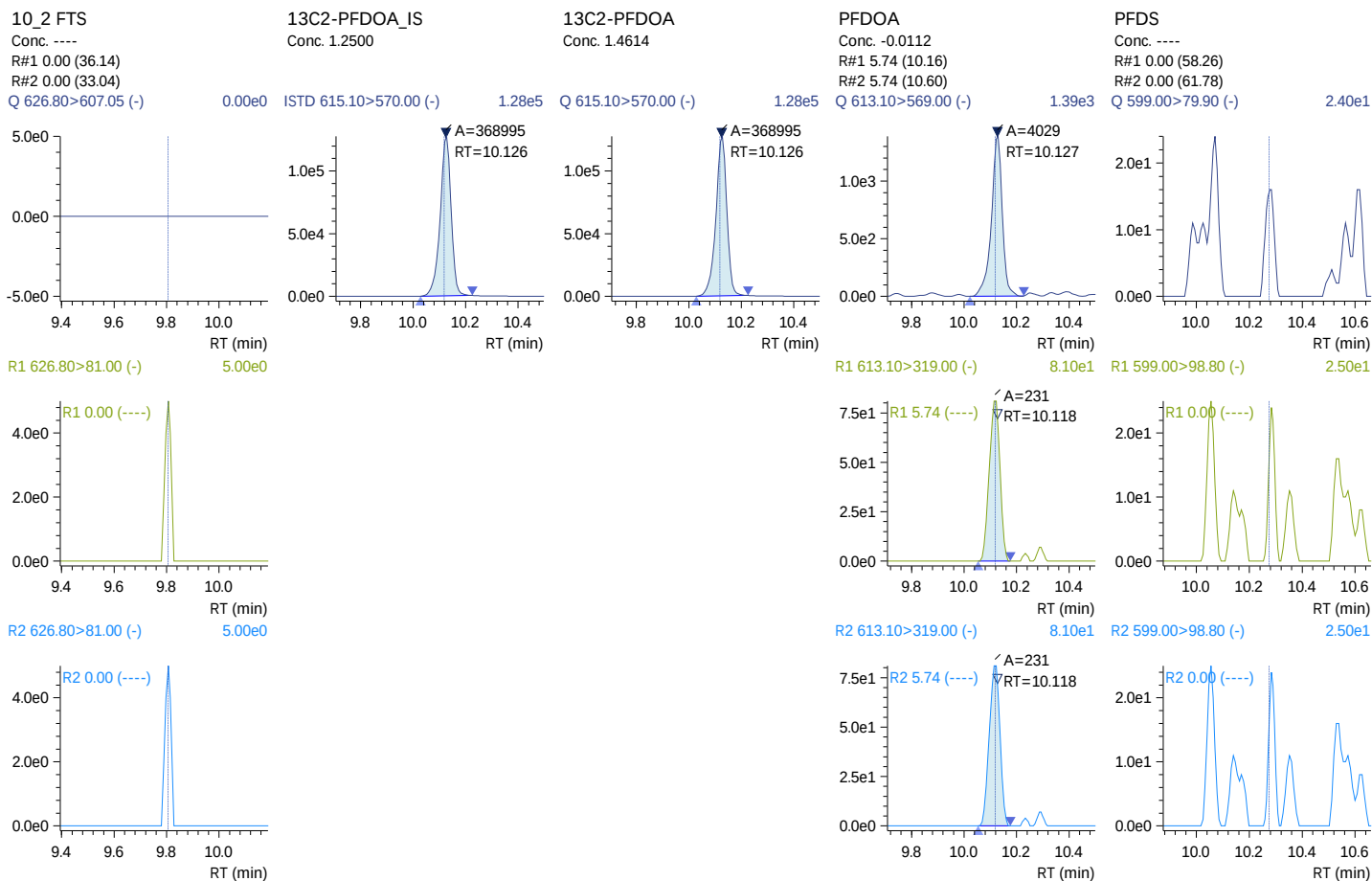
R2 548.80>98.80 (-)

4.40e1





240201_010 (continued)





240201_010 (continued)

PFTTrDA

Conc. 0.0014

R#1 17.35 (16.18)

R#2 17.35 (14.85)

Q 663.00>619.00 (-)

1.61e3

11-Cl-PF3OUDS

Conc. ----

R#1 0.00 (34.99)

R#2 0.00 (34.39)

Q 630.90>451.00 (-)

5.90e1

PFOSAm

Conc. 0.8260

Q 498.10>77.90 (-)

2.00e4

13C8-PFOSAm

Conc. 2.4882

Q 506.10>77.80 (-)

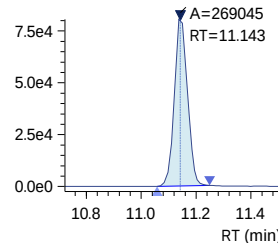
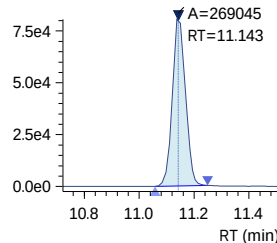
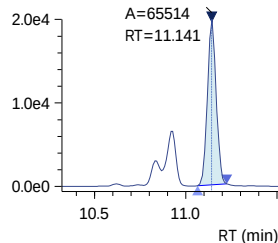
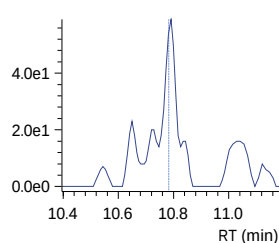
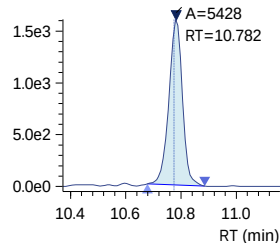
8.06e4

13C8-PFOSAm_IS

Conc. 2.5000

ISTD 506.10>77.80 (-)

8.06e4

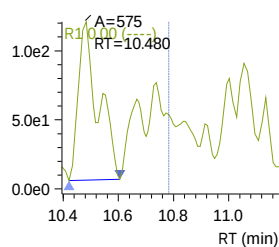
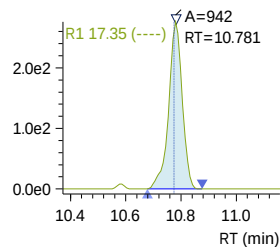


R1 663.00>168.90 (-)

2.76e2

R1 632.90>452.90 (-)

1.21e2

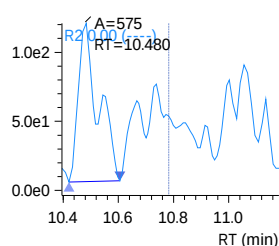
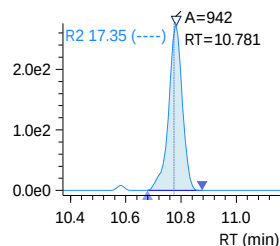


R2 663.00>168.90 (-)

2.76e2

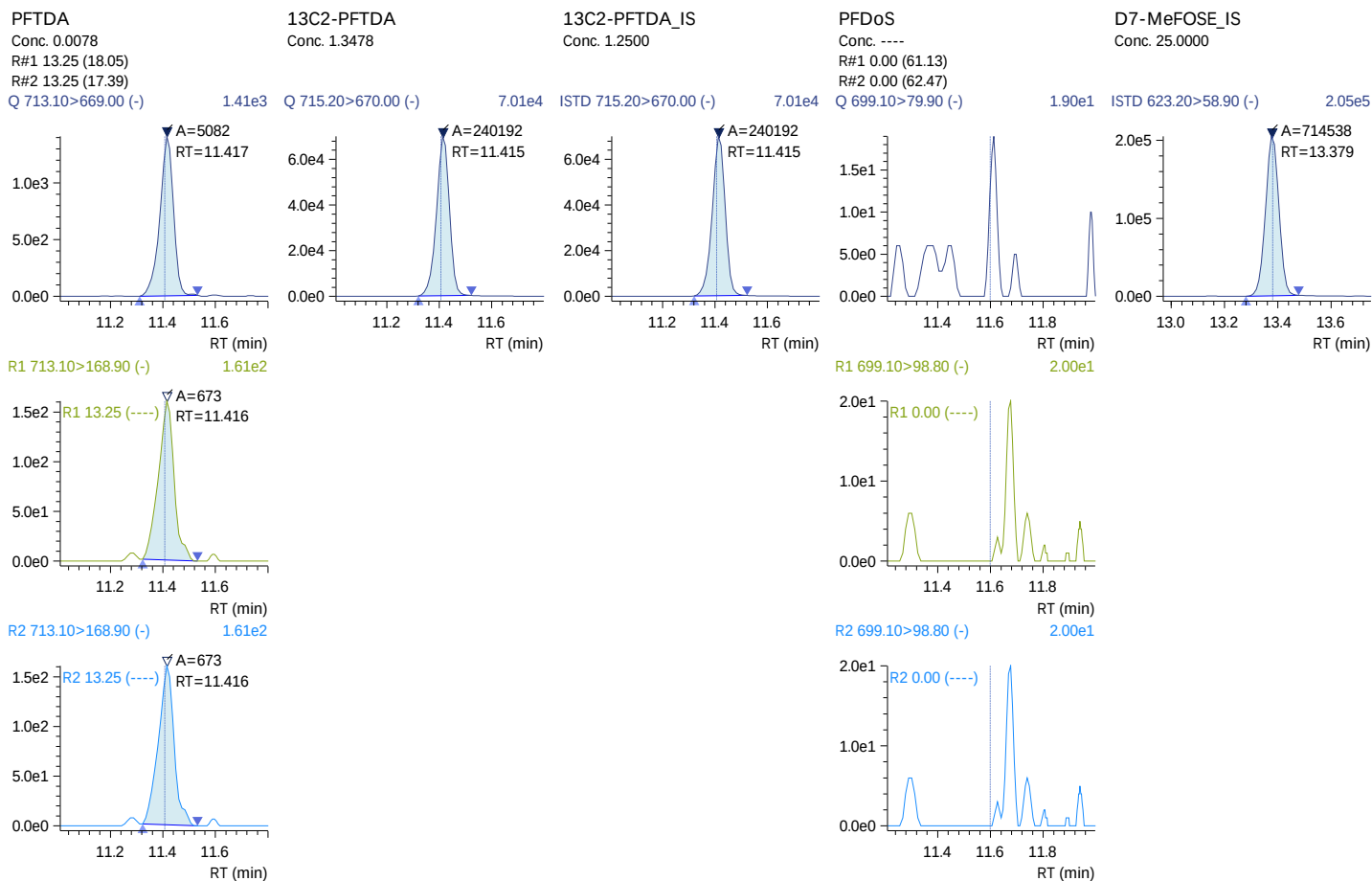
R2 632.90>452.90 (-)

1.21e2





240201_010 (continued)





240201_010 (continued)

D7-MeFOSE
 Conc. 25.7419

MeFOSE
 Conc. 1.0267

¹³C2-PFHDA-IS
 Conc. 2.5000

¹³C2-PFHDA
 Conc. 2.6187

PFHXDA

Conc. 0.0225
 R#1 9.93 (11.66)
 R#2 9.93 (10.99)

Q 623.20>58.90 (-)

2.05e5

Q 616.10>59.00 (-)

6.69e3

ISTD 815.00>770.05 (-)

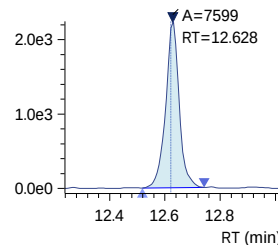
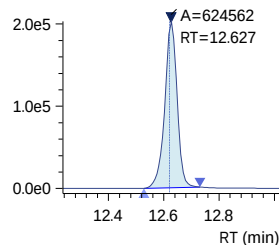
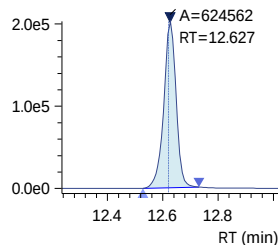
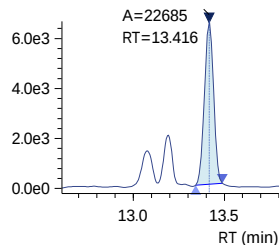
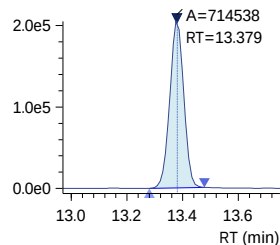
2.03e5

Q 815.00>770.05 (-)

2.03e5

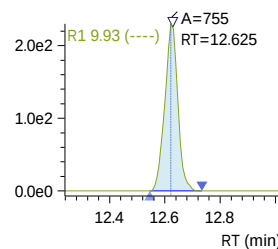
Q 813.00>768.95 (-)

2.25e3



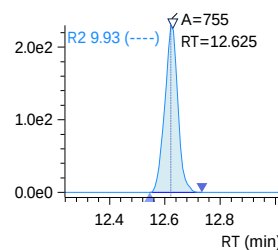
R1 813.00>218.95 (-)

2.30e2



R2 813.00>218.95 (-)

2.30e2





240201_010 (continued)

D3-MeFOSA
 Conc. 2.7782

D3-MeFOSA_IS
 Conc. 2.5000

MeFOSA
 Conc. ----
 R#1 0.00 (160.44)
 R#2 0.00 (161.92)

D9-EtFOSE_IS
 Conc. 25.0000

D9-EtFOSE
 Conc. 25.9042

Q 515.00>219.00 (-)

2.38e4

ISTD 515.00>219.00 (-)

2.38e4

Q 511.90>219.00 (-)

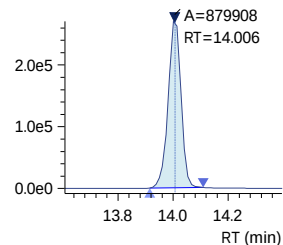
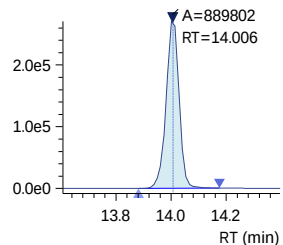
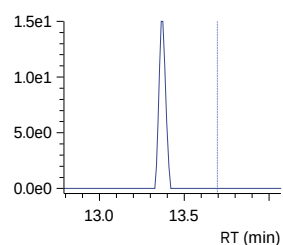
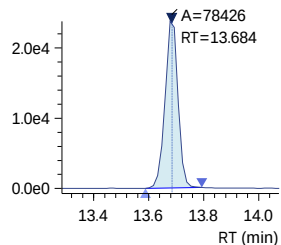
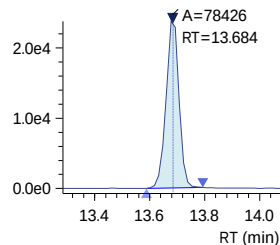
1.50e1

ISTD 639.20>58.90 (-)

2.71e5

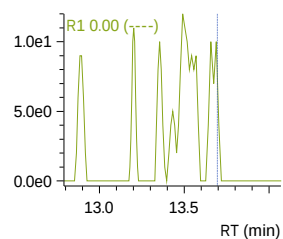
Q 639.20>58.90 (-)

2.71e5



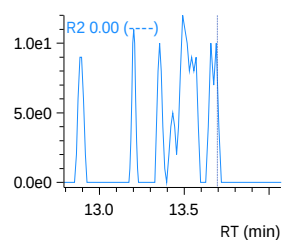
R1 511.90>169.00 (-)

1.20e1



R2 511.90>169.00 (-)

1.20e1





240201_010 (continued)

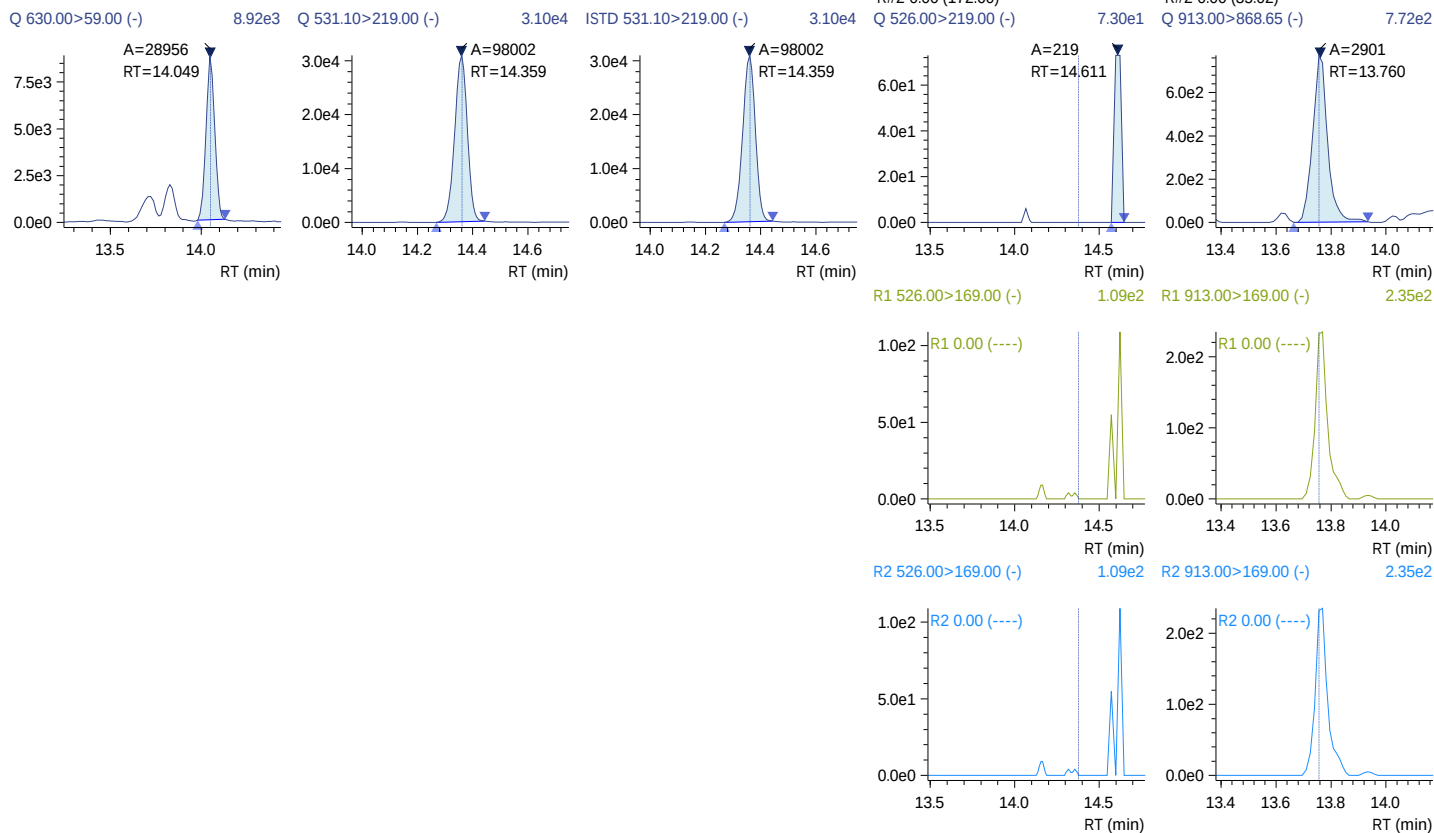
EtFOSE
 Conc. 1.0703

D5-EtFOSAm
 Conc. 2.5108

D5-EtFOSAm_IS
 Conc. 2.5000

EtFOSAm
 Conc. 0.0077
 R#1 0.00 (159.63)
 R#2 0.00 (172.60)

PFODA
 Conc. 0.0462
 R#1 0.00 (36.03)
 R#2 0.00 (35.02)





240201_011

Sample ID: TDCA CHECK
Date Acquired: 2/1/2024 2:14:58 PM
Acquired by: System Administrator
Data File: 240201_011
Vial: 12 | Inj. Volume: 10.0000uL | Tray: 1

Check PFOS

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.432	0.079	0.041	936	171	13C3-PFBA_IS	36.9915	ng/mL	
13C4-PFBA_IS	Auto	1.432	0.079	----	936	936	----	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.391	0.036	----	171	171	----	5.0000	ng/mL	ISs
PFBA	ND(W/B)	----	----	----	----	936	13C4-PFBA_IS	----	ng/mL	
PFMPA	ND(W/B)	----	----	----	----	218	13C5-PFPeA_IS	----	ng/mL	
3_3 FTCA	ND(W/B)	----	----	----	----	218	13C5-PFPeA_IS	----	ng/mL	
13C5-PFPeA	Auto	3.187	-0.268	-1.468	218	44	13C2-PFHxA_IS	69.1938	ng/mL	
13C5-PFPeA_IS	Auto	3.187	-0.268	----	218	218	----	5.0000	ng/mL	
PFPeA	Auto	3.454	-0.004	0.267	906	218	13C5-PFPeA_IS	5.9389	ng/mL	RTi
PFMBA	ND(W/B)	----	----	----	----	218	13C5-PFPeA_IS	----	ng/mL	
13C2-4_2 FTS	Auto	4.712	0.079	----	48	----	18O2-PFHxS_IS	ISTD Error	ng/mL	
13C2-4_2 FTS_IS	Auto	4.712	0.079	----	48	48	----	5.0000	ng/mL	
4_2 FTS	ND(W/B)	----	----	----	----	48	13C2-4_2 FTS_IS	----	ng/mL	
13C3-PFBS_IS	Auto	4.486	-0.117	----	78	78	----	2.5000	ng/mL	
PFBS	ND(W/B)	----	----	----	----	78	13C3-PFBS_IS	----	ng/mL	
13C3-PFBS	Auto	4.486	-0.117	----	78	----	18O2-PFHxS_IS	ISTD Error	ng/mL	
NFDHA	ND(W/B)	----	----	----	----	186	13C5-PFHxA_IS	----	ng/mL	
13C5-PFHxA	Auto	4.551	-0.396	-0.104	186	44	13C2-PFHxA_IS	13.1565	ng/mL	
13C5-PFHxA_IS	Auto	4.551	-0.396	----	186	186	----	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	4.655	-0.292	----	44	44	----	2.5000	ng/mL	ISs
PFHxA	Auto	4.832	-0.117	0.281	2757	186	13C5-PFHxA_IS	39.8116	ng/mL	RTi
PFEESA	ND(W/B)	----	----	----	----	186	13C5-PFHxA_IS	----	ng/mL	
13C3-HFPO-DA	Auto	5.093	-0.332	0.438	53	44	13C2-PFHxA_IS	13.6069	ng/mL	
13C3-HFPO-DA_IS	Auto	5.093	-0.332	----	53	53	----	10.0000	ng/mL	
HFPO-DA	ND(W/B)	----	----	----	----	53	13C3-HFPO-DA_IS	----	ng/mL	
5_3 FTCA	ND(W/B)	----	----	----	----	186	13C5-PFHxA_IS	----	ng/mL	
PFPeS	ND(W/B)	----	----	----	----	----	13C3-PFHxS_IS	ISTD Error	ng/mL	
13C4-PFHpA	Auto	6.138	0.006	1.483	78	44	13C2-PFHxA_IS	4.3607	ng/mL	SN
13C4-PFHpA_IS	Auto	6.138	0.006	----	78	78	----	2.5000	ng/mL	SN
PFHpA	Auto	6.105	-0.029	-0.033	5818	78	13C4-PFHpA_IS	221.2788	ng/mL	
DONA	ND(W/B)	----	----	----	----	53	13C3-HFPO-DA_IS	----	ng/mL	
13C2-6_2 FTS_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
13C2-6_2 FTS	ND(W/B)	----	----	----	----	----	18O2-PFHxS_IS	ISTD Error	ng/mL	
6_2 FTS	ND(W/B)	----	----	----	----	----	13C2-6_2 FTS_IS	ISTD Error	ng/mL	
13C4-PFOA_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
13C8-PFOA_IS	Auto	7.092	0.001	----	47	47	----	2.5000	ng/mL	
13C8-PFOA	Auto	7.092	0.001	----	47	----	13C4-PFOA_IS	ISTD Error	ng/mL	
PFOA	Auto	7.084	-0.009	-0.008	6105	47	13C8-PFOA_IS	357.9003	ng/mL	
13C3-PFHxS	ND(W/B)	----	----	----	----	----	18O2-PFHxS_IS	ISTD Error	ng/mL	
13C3-PFHxS_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
PFHxS	ND(W/B)	----	----	----	----	----	13C3-PFHxS_IS	ISTD Error	ng/mL	
18O2-PFHxS_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
13C9-PFNA_IS	Auto	7.549	-0.392	----	25	25	----	1.2500	ng/mL	
13C9-PFNA	Auto	7.549	-0.392	-0.380	25	60	13C5-PFNA_IS	0.5717	ng/mL	
13C5-PFNA_IS	Auto	7.929	-0.013	----	60	60	----	1.2500	ng/mL	ISs
PFNA	Auto	7.933	-0.010	0.384	5292	25	13C9-PFNA_IS	321.7524	ng/mL	RTi
PFHpS	ND(W/B)	----	----	----	----	83	13C8-PFOS_IS	----	ng/mL	
7_3 FTCA	ND(W/B)	----	----	----	----	186	13C5-PFHxA_IS	----	ng/mL	
13C2-8_2-FTS	ND(W/B)	----	----	----	----	----	18O2-PFHxS_IS	ISTD Error	ng/mL	
13C2-8_2-FTS_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
8_2 FTS	ND(W/B)	----	----	----	----	----	13C2-8_2-FTS_IS	ISTD Error	ng/mL	
13C6-PFDA_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
13C6-PFDA	ND(W/B)	----	----	----	----	----	13C2-PFDA_IS	ISTD Error	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_011 (continued)

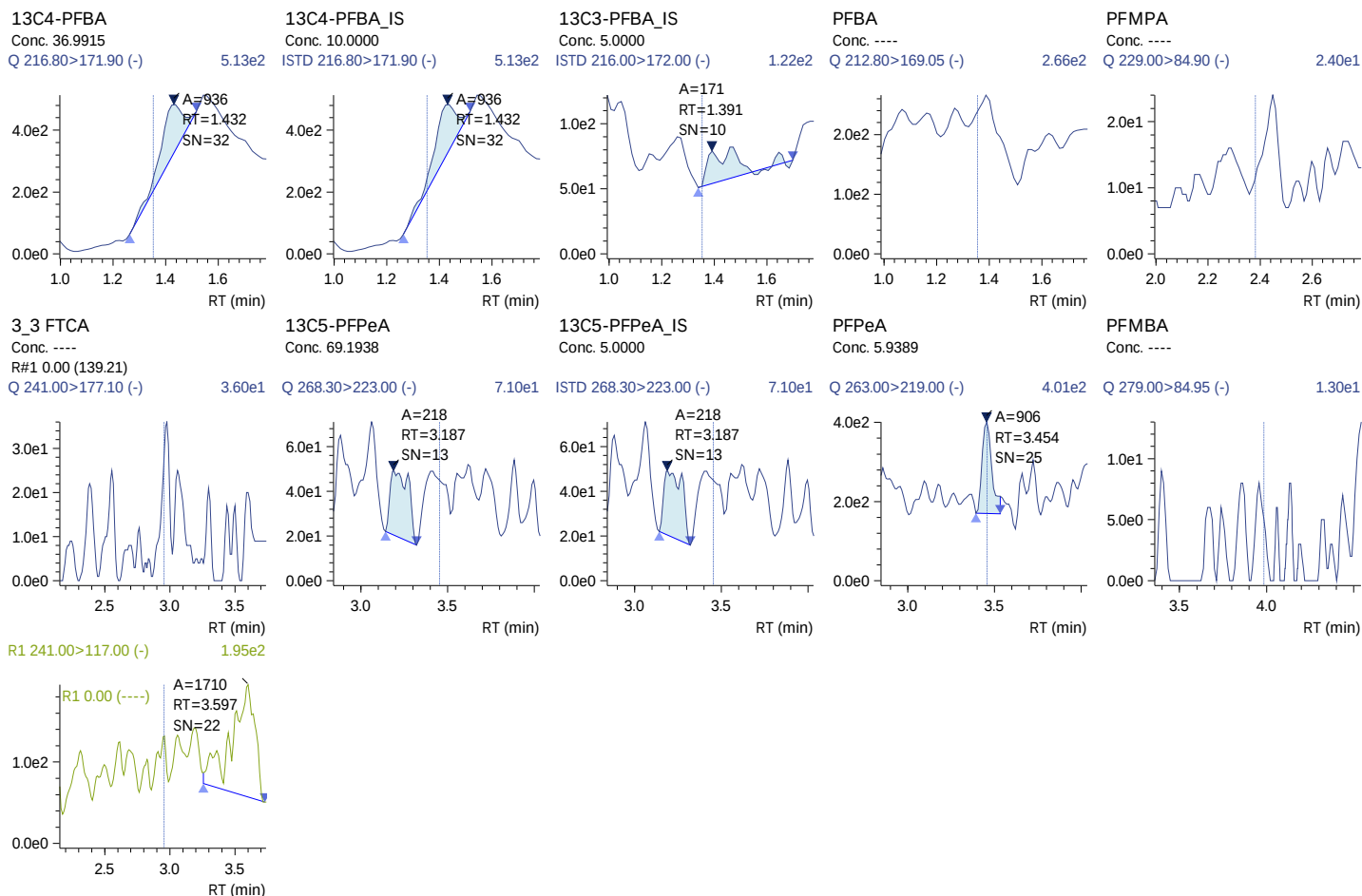
(Table continued from previous page)

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C2-PFDA_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
PFDA	Auto	8.701	-0.008	----	3535	----	13C6-PFDA_IS	ISTD Error	ng/mL	
D3-NMeFOSAA_IS	Auto	8.843	0.000	----	130	130	----	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.843	0.000	----	130	----	13C4-PFOS_IS	ISTD Error	ng/mL	
13C8-PFOS_IS	Auto	8.914	0.114	----	83	83	----	2.5000	ng/mL	
13C8-PFOS	Auto	8.914	0.114	----	83	----	13C4-PFOS_IS	ISTD Error	ng/mL	
13C4-PFOS_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
PFOS	ND(W/B)	----	----	----	----	83	13C8-PFOS_IS	----	ng/mL	
NMeFOSAA	ND(W/B)	----	----	----	----	130	D3-NMeFOSAA_IS	----	ng/mL	
D5-NetFOSAA_IS	Auto	9.172	0.000	----	104	104	----	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.172	0.000	----	104	----	13C4-PFOS_IS	ISTD Error	ng/mL	
NetFOSAA	ND(W/B)	----	----	----	----	104	D5-NetFOSAA_IS	----	ng/mL	
9-CI-PF3ONS	ND(W/B)	----	----	----	----	53	13C3-HFPO-DA_IS	----	ng/mL	
PFUnDA	Auto	9.420	-0.013	0.225	4239	55	13C7-PFUnDA_IS	112.6195	ng/mL	IRr, RTi
13C7-PFUnDA_IS	Auto	9.195	-0.235	----	55	55	----	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.195	-0.235	----	55	----	13C2-PFDA_IS	ISTD Error	ng/mL	
PFNS	ND(W/B)	----	----	----	----	83	13C8-PFOS_IS	----	ng/mL	
10_2 FTS	ND(W/B)	----	----	----	----	----	13C2-8_2-FTS_IS	ISTD Error	ng/mL	
13C2-PFDOA_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
13C2-PFDOA	ND(W/B)	----	----	----	----	----	13C2-PFDA_IS	ISTD Error	ng/mL	
PFDOA	Auto	10.108	-0.011	----	3683	----	13C2-PFDOA_IS	ISTD Error	ng/mL	
PFDS	ND(W/B)	----	----	----	----	83	13C8-PFOS_IS	----	ng/mL	
PFTDA	Auto	10.769	-0.006	-0.630	4609	108	13C2-PFTDA_IS	43.1395	ng/mL	
11-CI-PF3OUdS	ND(W/B)	----	----	----	----	53	13C3-HFPO-DA_IS	----	ng/mL	
PFOSAm	ND(W/B)	----	----	----	----	----	13C8-PFOSAm_IS	ISTD Error	ng/mL	
13C8-PFOSAm	ND(W/B)	----	----	----	----	----	13C4-PFOS_IS	ISTD Error	ng/mL	
13C8-PFOSAm_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
PFTDA	Auto	11.397	-0.011	-0.002	3598	108	13C2-PFTDA_IS	48.0197	ng/mL	
13C2-PFTDA	Auto	11.399	-0.007	----	108	----	13C2-PFDA_IS	ISTD Error	ng/mL	
13C2-PFTDA_IS	Auto	11.399	-0.007	----	108	108	----	1.2500	ng/mL	
PFDoS	ND(W/B)	----	----	----	----	83	13C8-PFOS_IS	----	ng/mL	
D7-MeFOSE_IS	Auto	13.376	-0.004	----	364	364	----	25.0000	ng/mL	
D7-MeFOSE	Auto	13.376	-0.004	----	364	----	13C4-PFOS_IS	ISTD Error	ng/mL	
MeFOSE	ND(W/B)	----	----	----	----	364	D7-MeFOSE_IS	----	ng/mL	
13C2-PFHxDA_IS	Auto	12.613	-0.007	----	484	484	----	2.5000	ng/mL	
13C2-PFHxDA	Auto	12.613	-0.007	----	484	----	13C2-PFDA_IS	ISTD Error	ng/mL	
PFHXDA	Auto	12.613	-0.008	0.000	5724	484	13C2-PFHxDA_IS	21.8654	ng/mL	
D3-MeFOSA	Auto	13.904	0.219	----	31	----	13C4-PFOS_IS	ISTD Error	ng/mL	
D3-MeFOSA_IS	Auto	13.904	0.219	----	31	31	----	2.5000	ng/mL	
MeFOSA	ND(W/B)	----	----	----	----	31	D3-MeFOSA_IS	----	ng/mL	
D9-EtFOSE_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
D9-EtFOSE	Auto	14.007	-0.001	----	273	----	13C4-PFOS_IS	ISTD Error	ng/mL	
EtFOSE	ND(W/B)	----	----	----	----	----	D9-EtFOSE_IS	ISTD Error	ng/mL	
D5-EtFOSAm	ND(W/B)	----	----	----	----	----	13C4-PFOS_IS	ISTD Error	ng/mL	
D5-EtFOSAm_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
EtFOSAm	ND(W/B)	----	----	----	----	----	D5-EtFOSAm_IS	ISTD Error	ng/mL	
PFODA	Auto	13.747	-0.009	1.134	2067	484	13C2-PFHxDA_IS	19.9336	ng/mL	

Flag ID key: IRr: Ion Ratio (Relative), ISS: ISTD Peak Area Deviation (Standards), RTi: RT Diff (Absolute ISTD), SN: S/N



240201_011 (continued)





240201_011 (continued)

13C2-4_2 FTS
 Conc. ISTD Error

13C2-4_2 FTS_IS
 Conc. 5.0000

4_2 FTS
 Conc. ----
 R#1 0.00 (32.10)
 R#2 0.00 (32.79)

13C3-PFBS_IS
 Conc. 2.5000

PFBS
 Conc. ----
 R#1 0.00 (44.81)
 R#2 0.00 (46.72)

Q 329.10>80.90 (-)

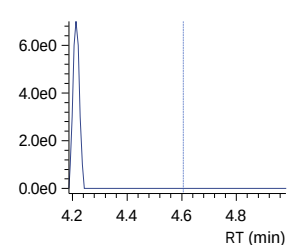
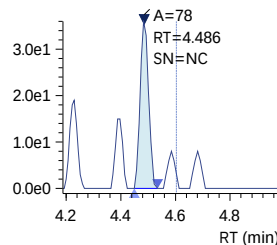
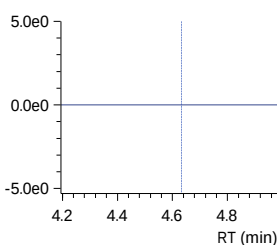
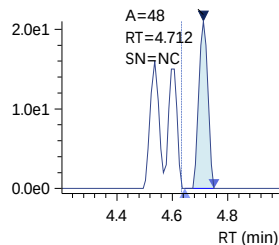
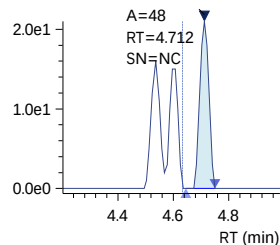
2.10e1 ISTD 329.10>80.90 (-)

2.10e1 Q 327.10>307.00 (-)

0.00e0 ISTD 302.10>79.90 (-)

3.60e1 Q 298.70>79.90 (-)

7.00e0

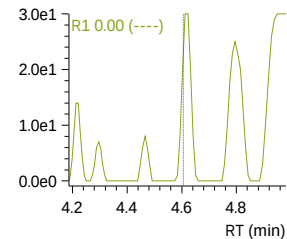
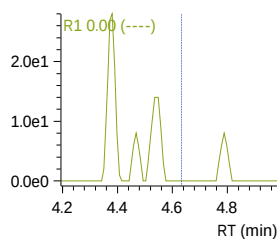


R1 327.10>80.90 (-)

2.80e1

R1 298.70>98.80 (-)

3.00e1

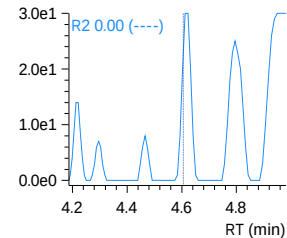
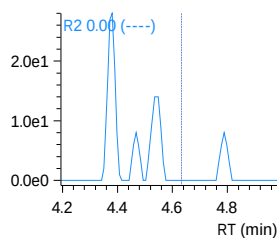


R2 327.10>80.90 (-)

2.80e1

R2 298.70>98.80 (-)

3.00e1





240201_011 (continued)

13C3-PFBS
Conc. ISTD Error

NFDHA
Conc. ----
R#1 0.00 (35.54)
R#2 0.00 (37.91)

13C5-PFHxA
Conc. 13.1565

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

Q 302.10>79.90 (-)

3.60e1

Q 295.00>201.00 (-)

0.00e0

Q 318.00>273.00 (-)

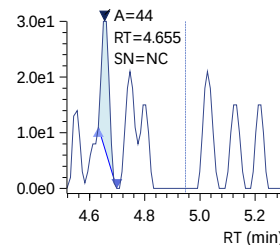
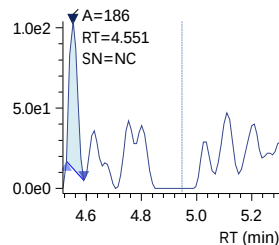
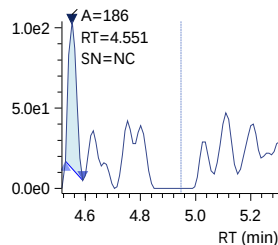
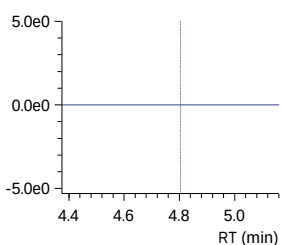
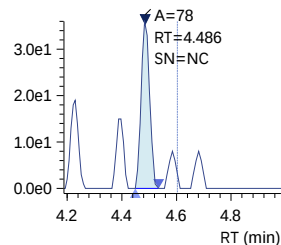
1.04e2

ISTD 318.00>273.00 (-)

1.04e2

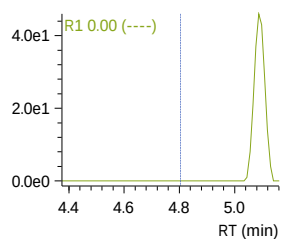
ISTD 315.10>270.00 (-)

3.00e1



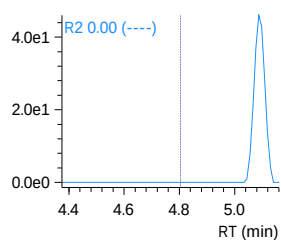
R1 295.00>84.90 (-)

4.60e1



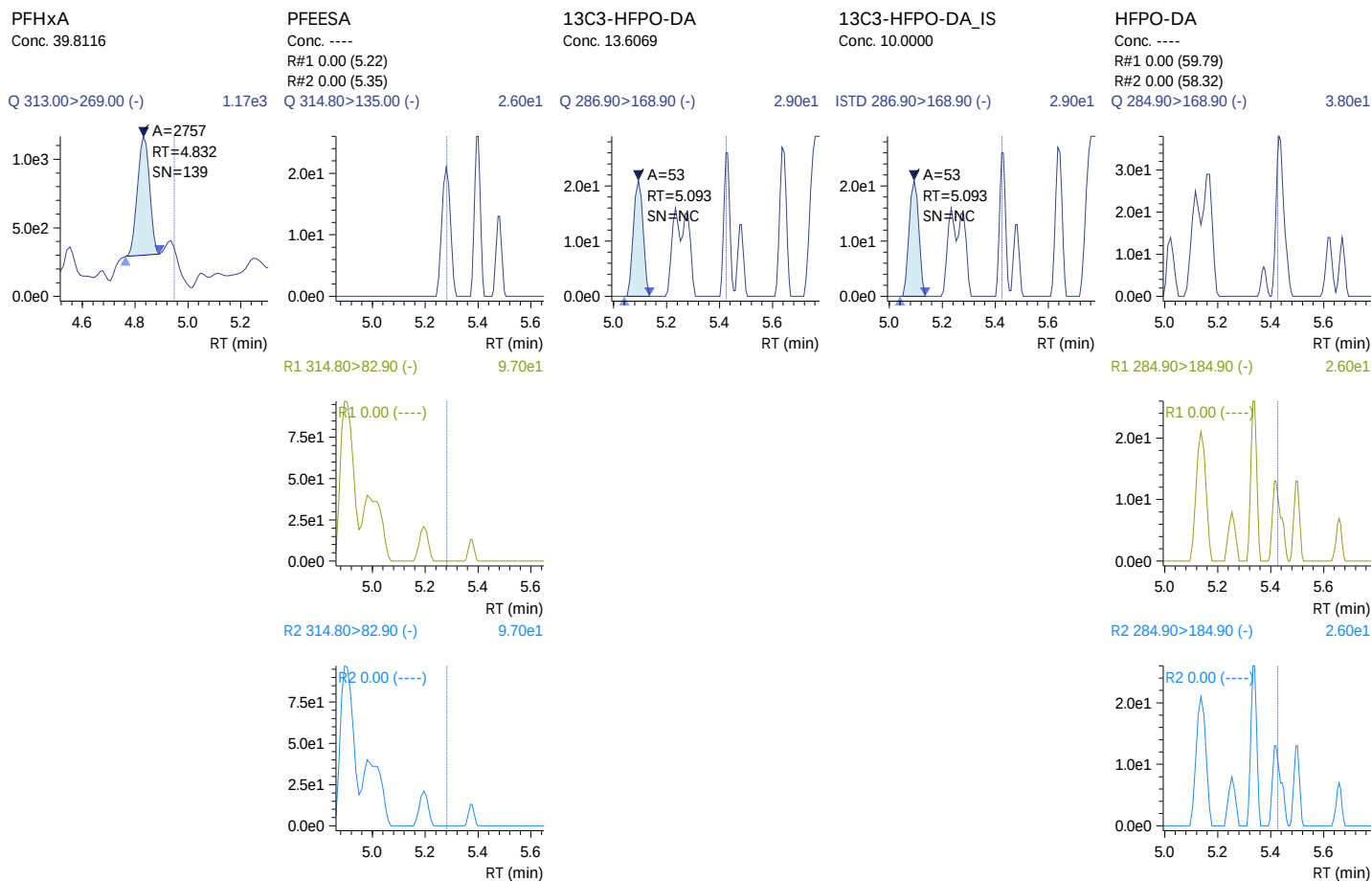
R2 295.00>84.90 (-)

4.60e1



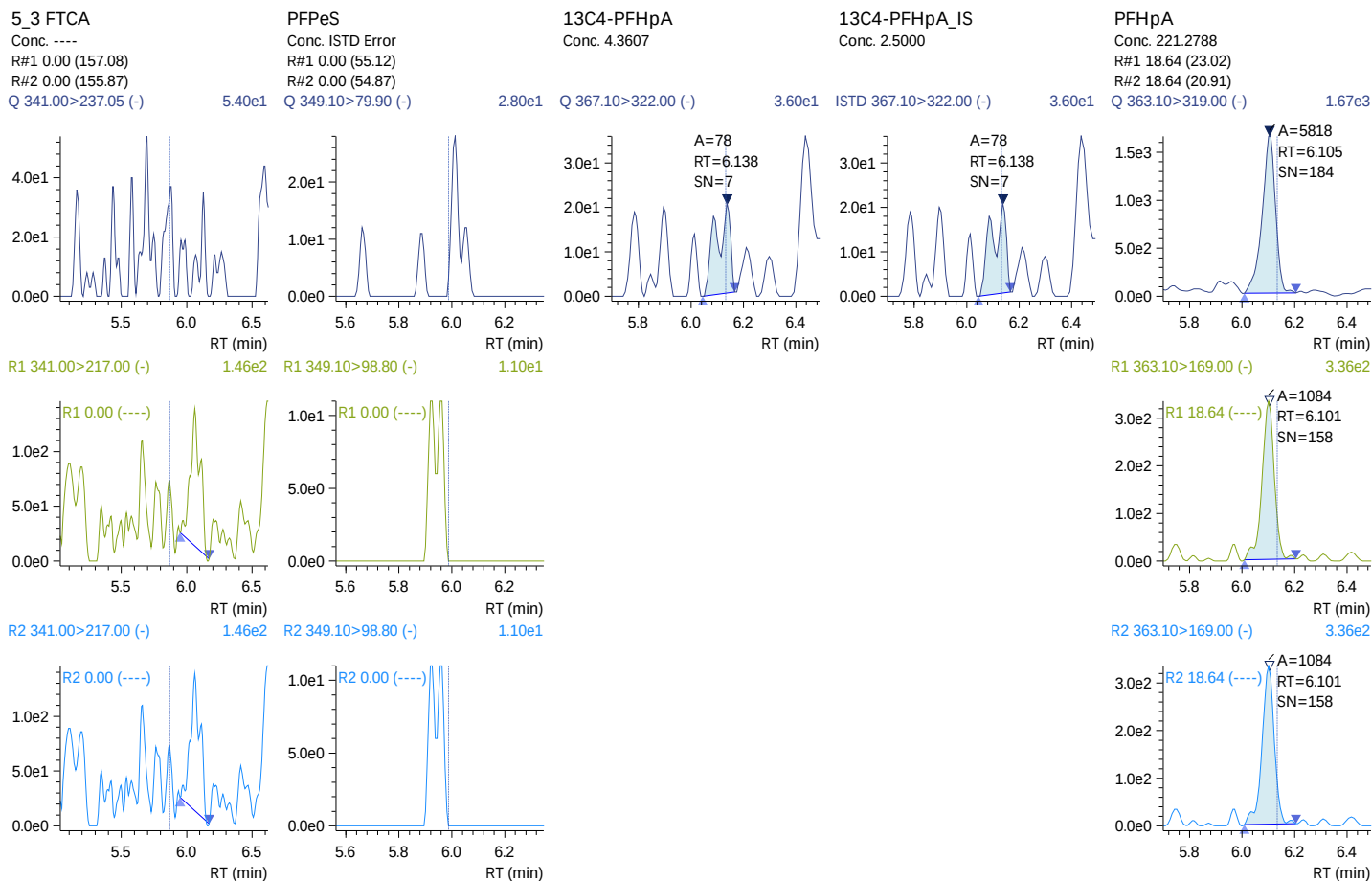


240201_011 (continued)



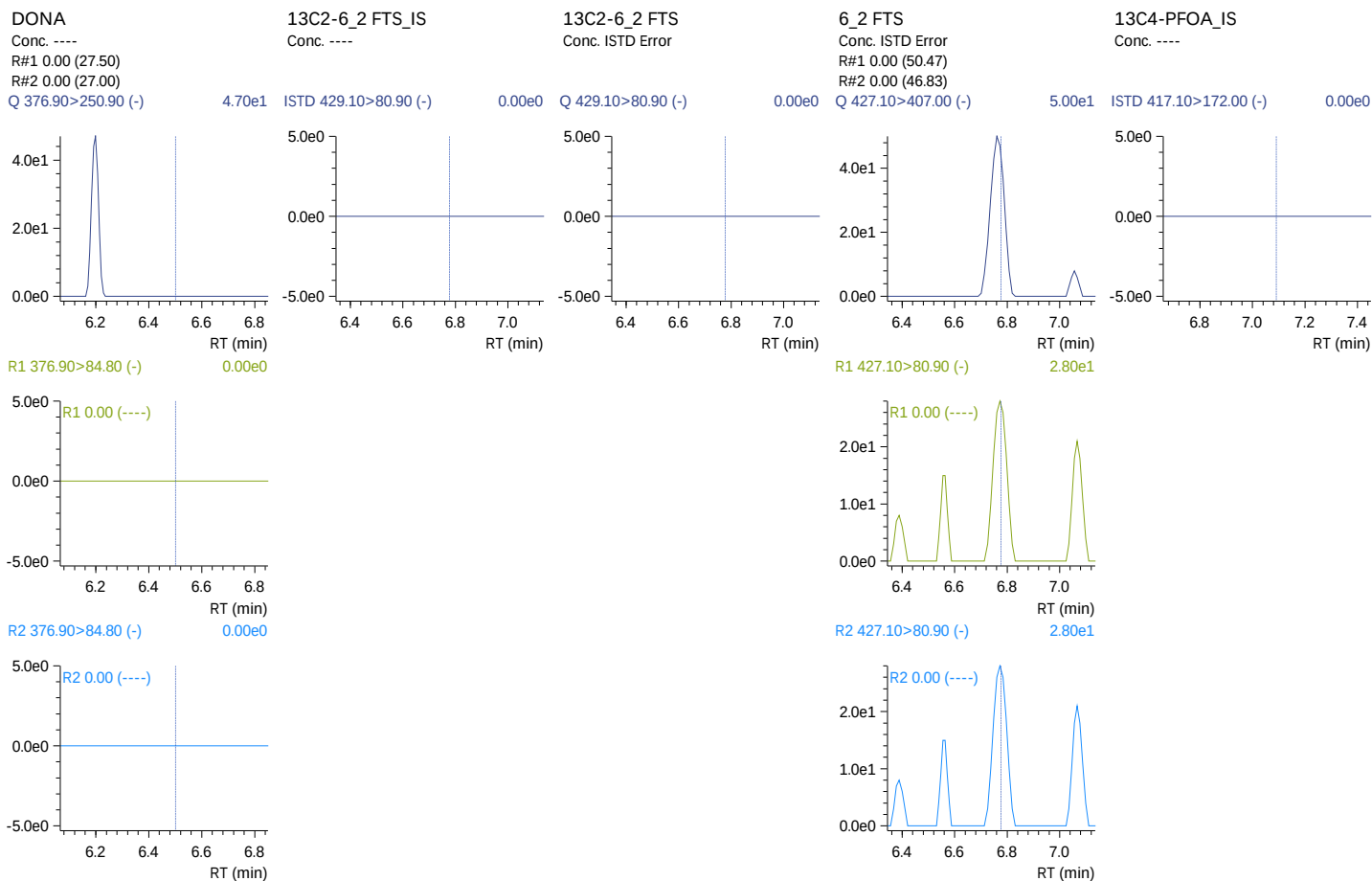


240201_011 (continued)





240201_011 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_011 (continued)

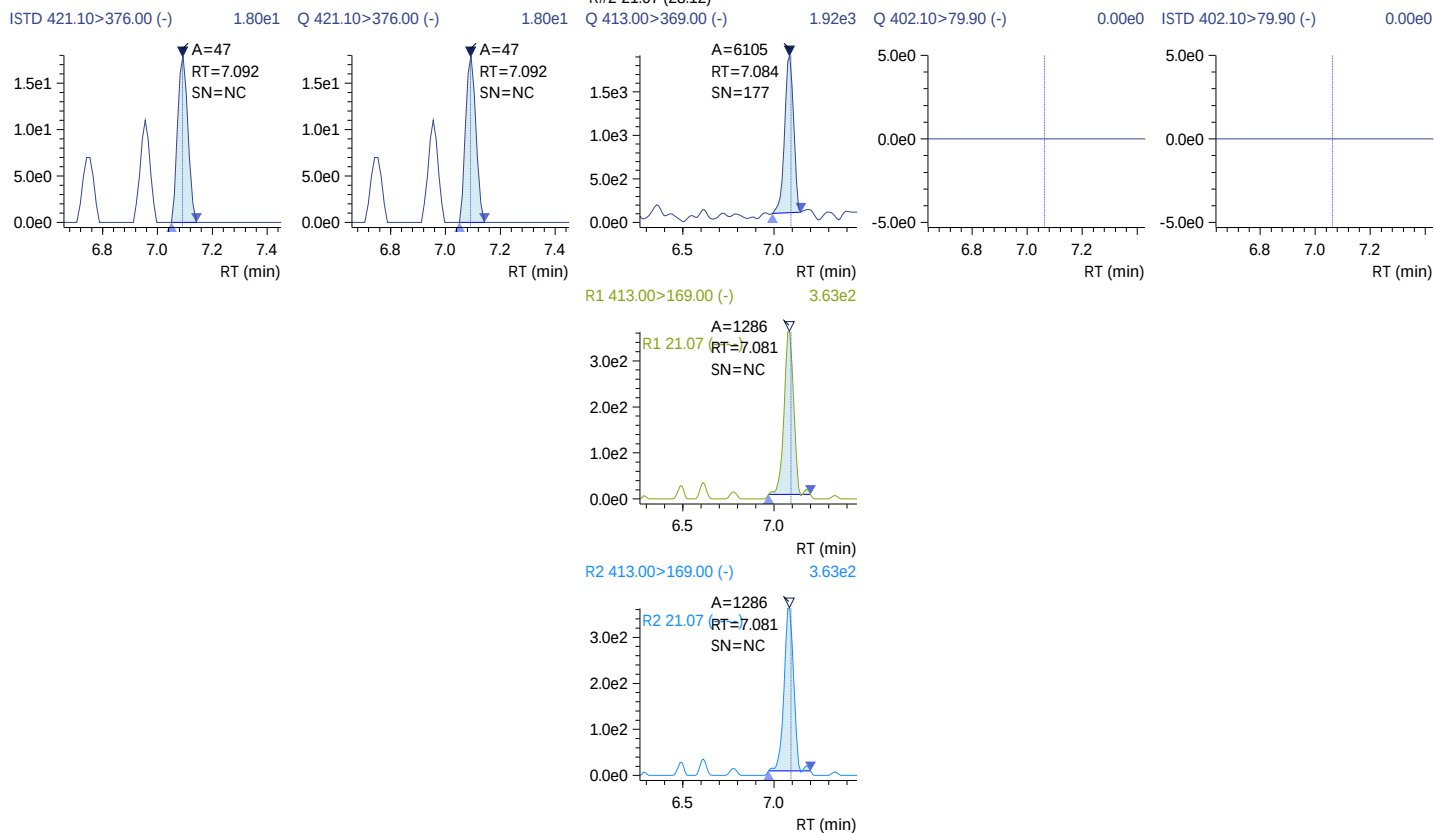
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. ISTD Error

PFOA
Conc. 357.9003
R#1 21.07 (28.77)
R#2 21.07 (28.12)

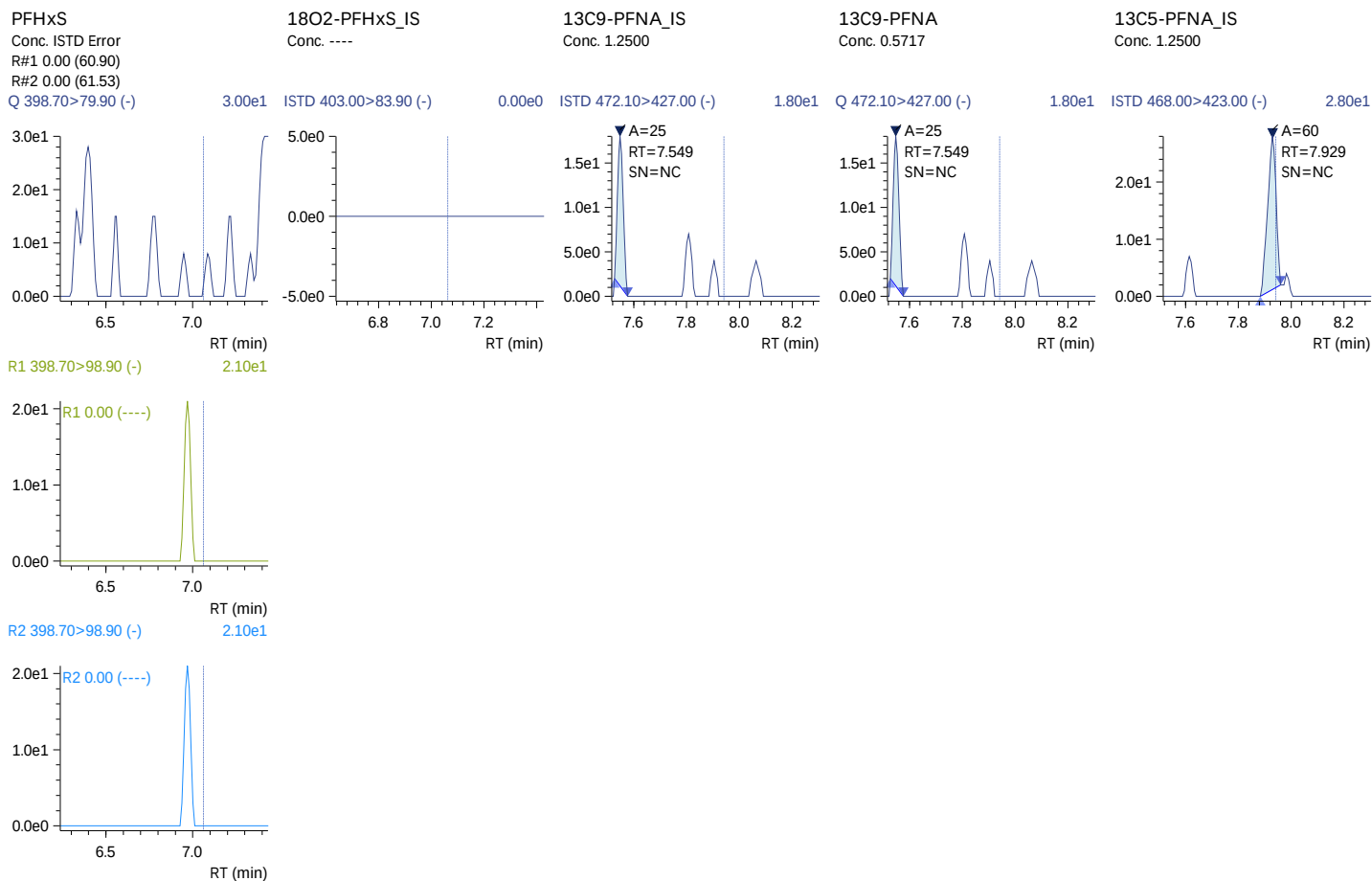
13C3-PFHxS
Conc. ISTD Error

13C3-PFHxS_IS
Conc. ----



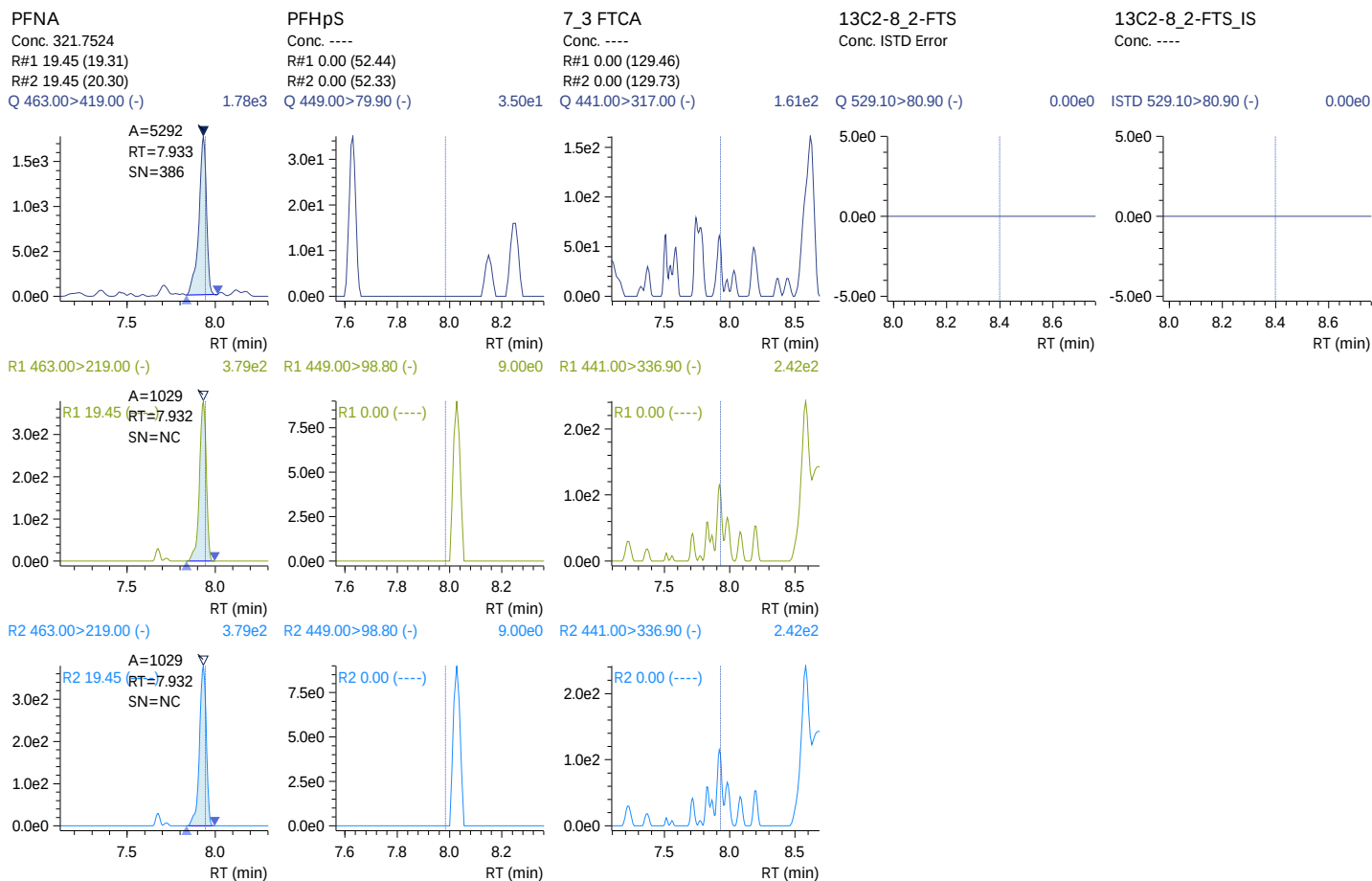


240201_011 (continued)



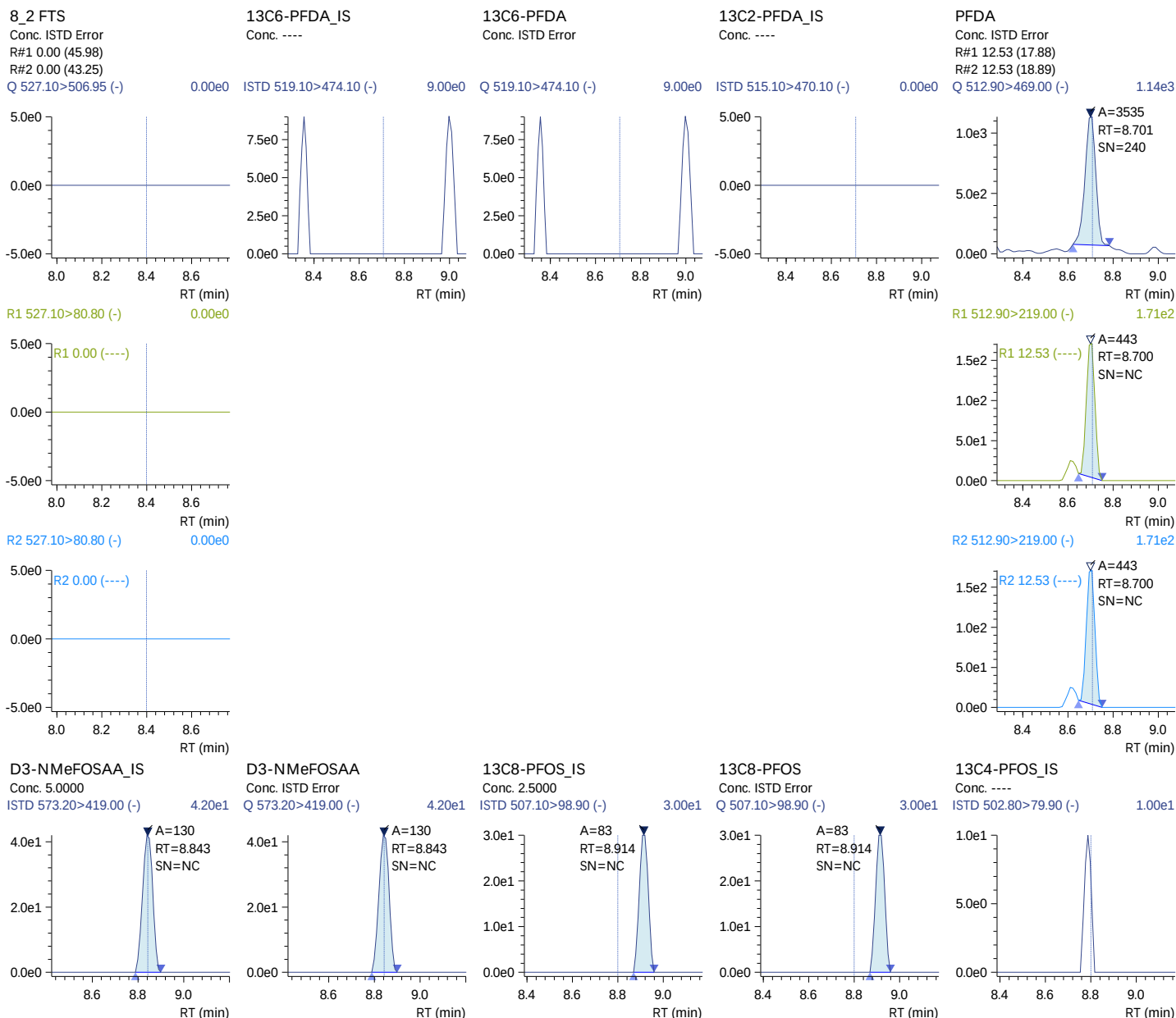


240201_011 (continued)



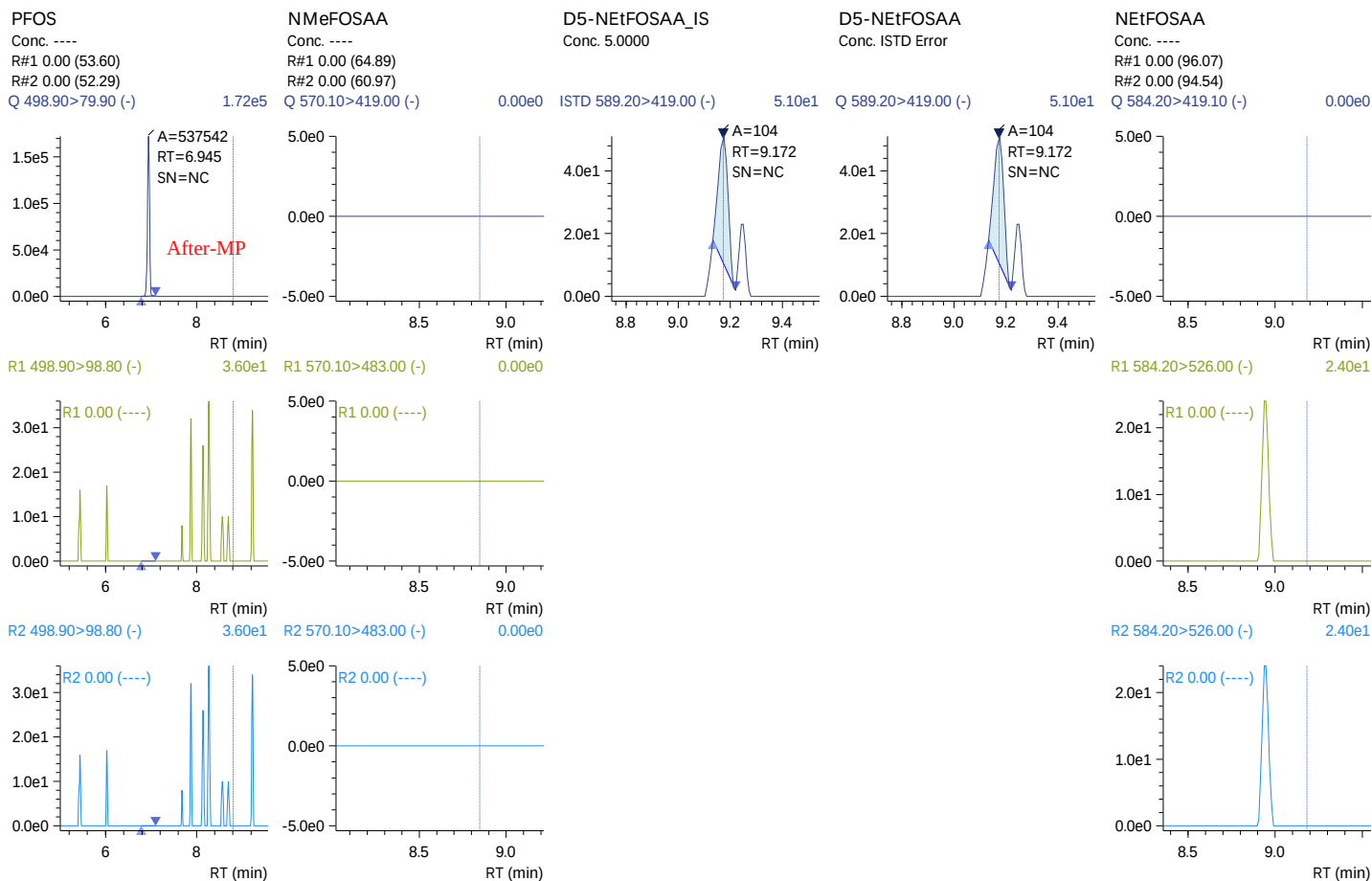


240201_011 (continued)





240201_011 (continued)





240201_011 (continued)

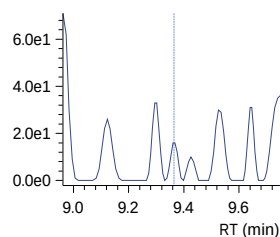
9-Cl-PF3ONS

Conc. ----

R#1 0.00 (30.95)

R#2 0.00 (30.61)

Q 530.80>351.00 (-)



R1 532.80>353.00 (-)

7.10e1

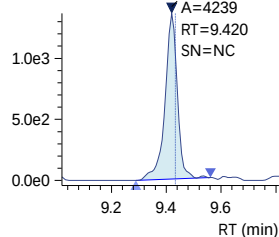
PFUnDA

Conc. 112.6195

R#1 0.00 (11.01)

R#2 0.00 (12.02)

Q 563.10>519.00 (-)



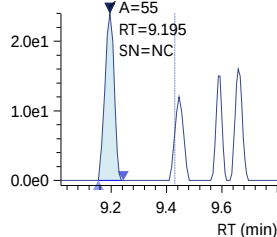
R1 563.10>269.10 (-)

1.37e3

13C7-PFUnDA_IS

Conc. 1.2500

ISTD 570.00>525.10 (-)

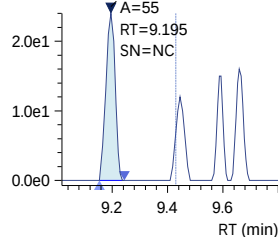


2.40e1

13C7-PFUnDA

Conc. ISTD Error

Q 570.00>525.10 (-)



2.40e1

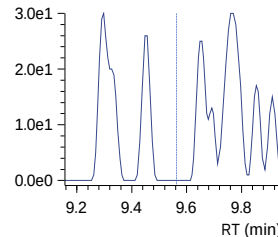
PFNS

Conc. ----

R#1 0.00 (60.44)

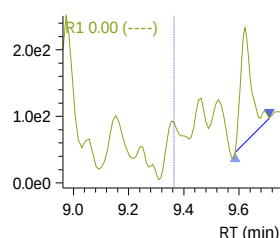
R#2 0.00 (58.51)

Q 548.80>79.90 (-)



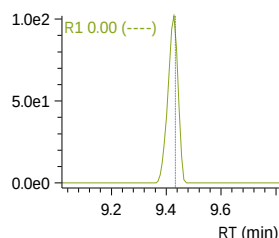
R1 548.80>98.80 (-)

3.00e1



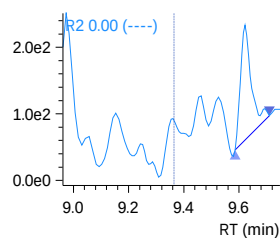
R2 532.80>353.00 (-)

2.51e2

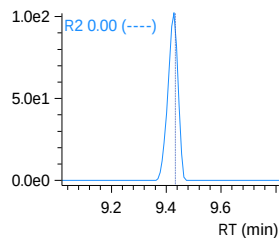


R2 563.10>269.10 (-)

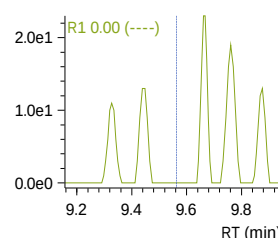
1.02e2



RT (min)

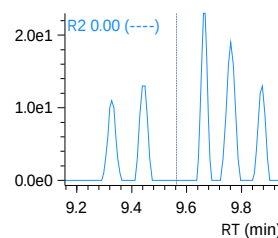


RT (min)



R2 548.80>98.80 (-)

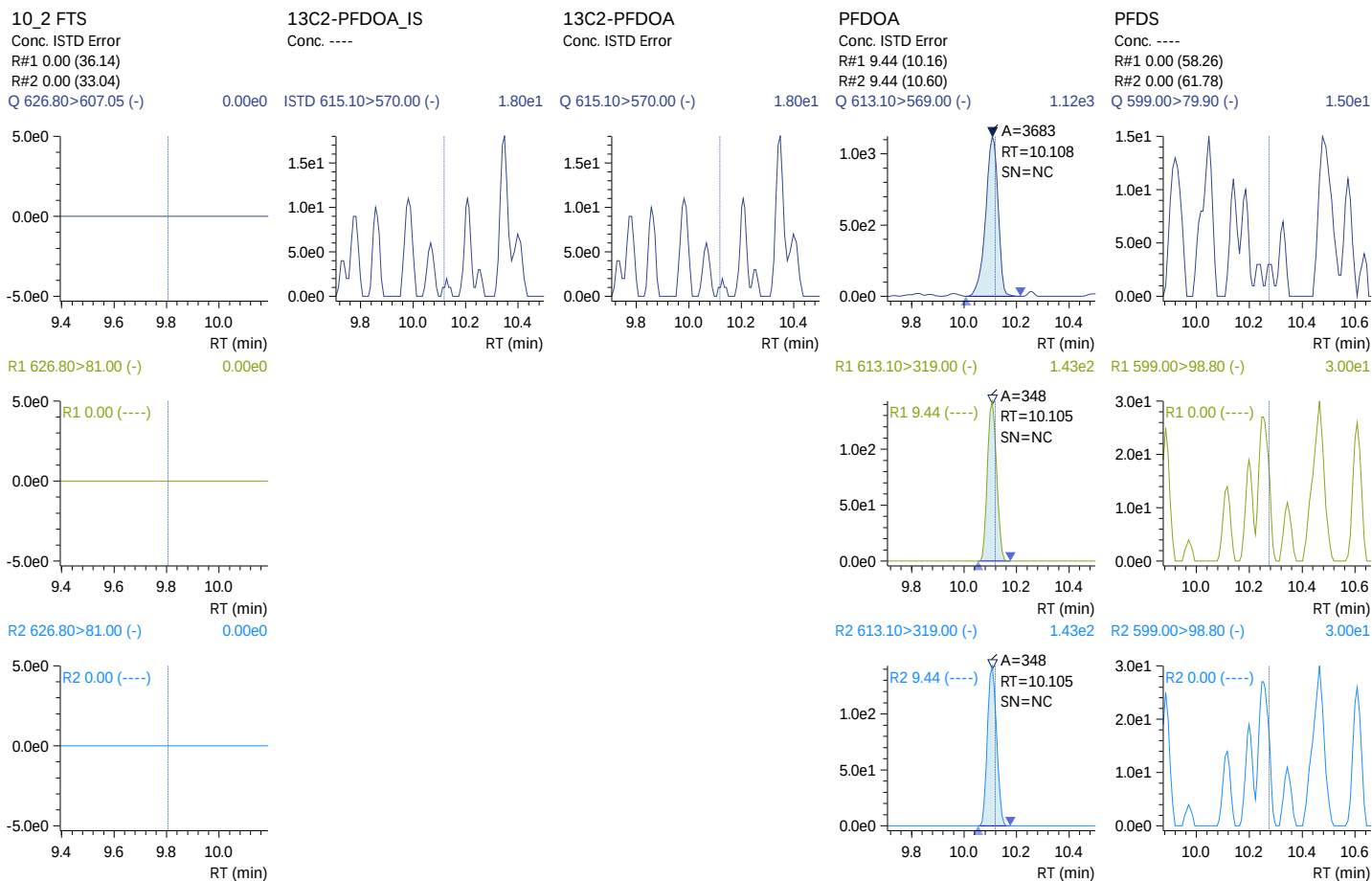
2.30e1



RT (min)

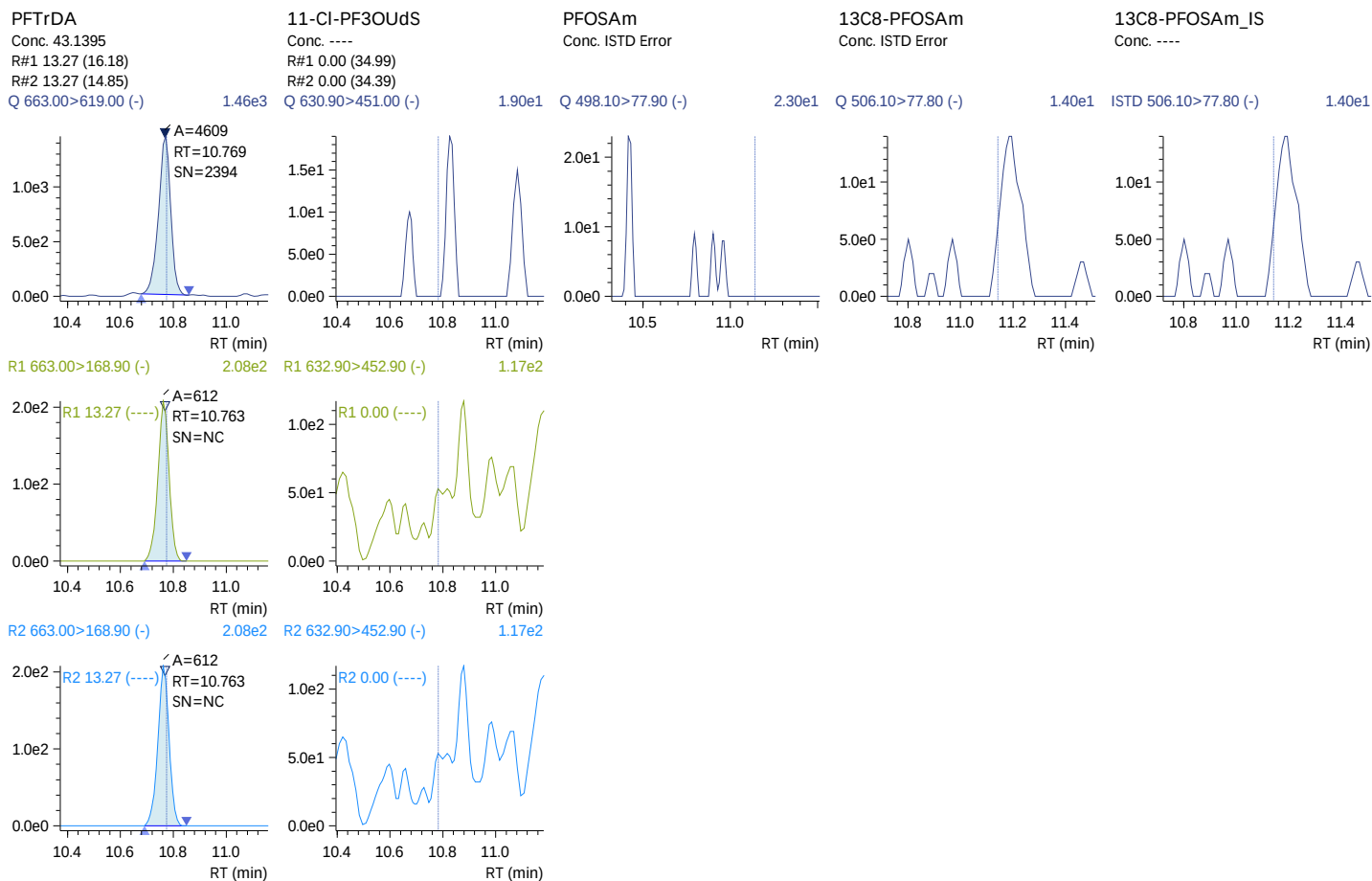


240201_011 (continued)





240201_011 (continued)

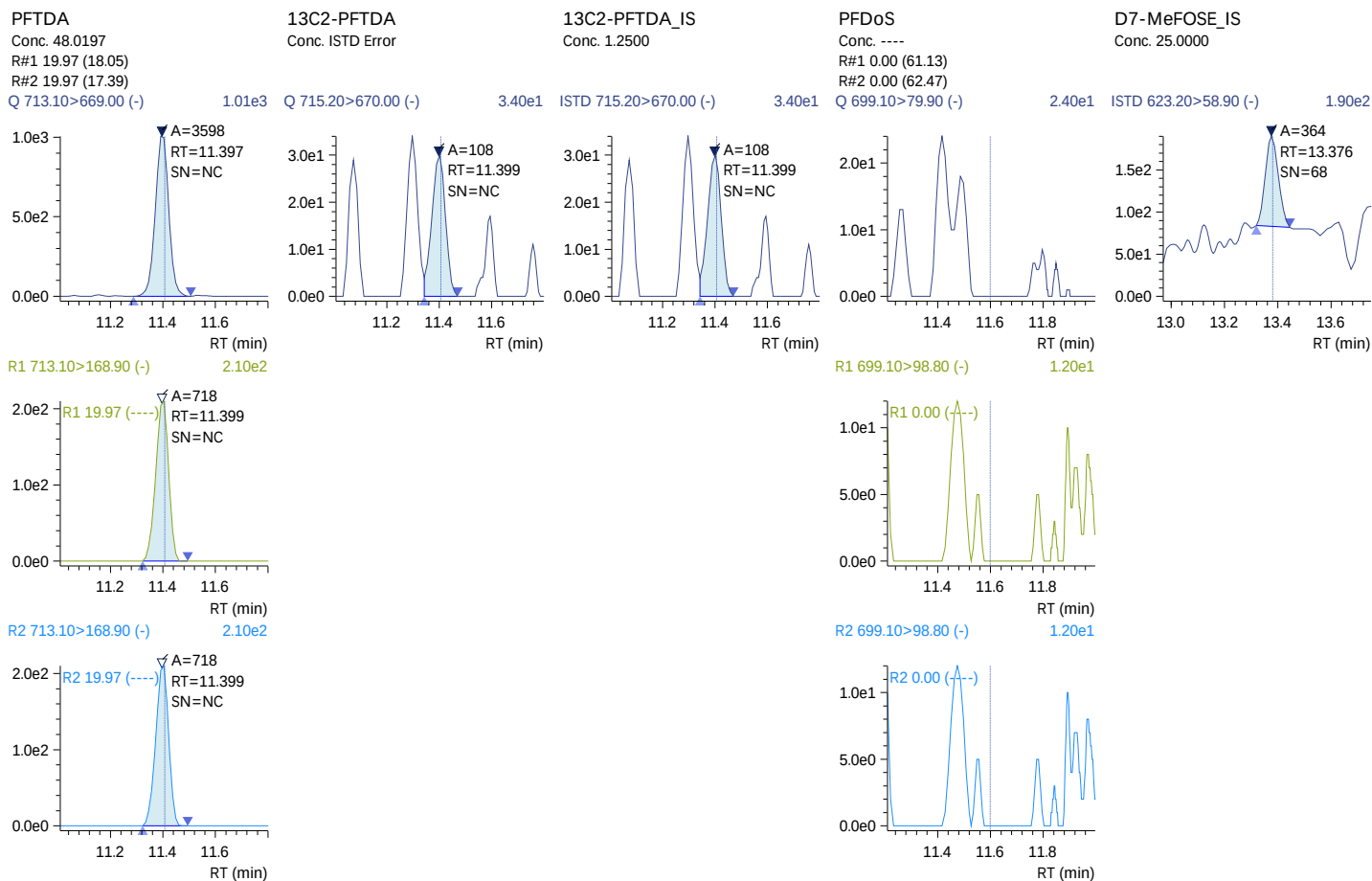


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_011 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_011 (continued)

D7-MeFOSE
Conc. ISTD Error

MeFOSE
Conc. ----

13C2-PFHXA_IS
Conc. 2.5000

13C2-PFHXA
Conc. ISTD Error

PFHXA

Conc. 21.8654
R#1 10.70 (11.66)
R#2 10.70 (10.99)

Q 623.20>58.90 (-)

1.90e2

Q 616.10>59.00 (-)

8.30e1

ISTD 815.00>770.05 (-)

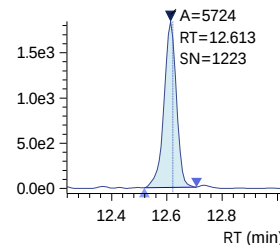
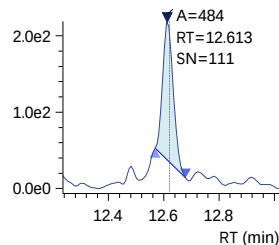
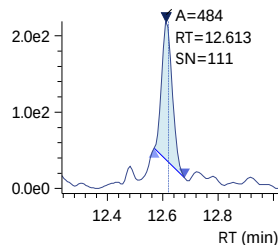
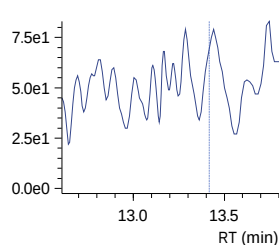
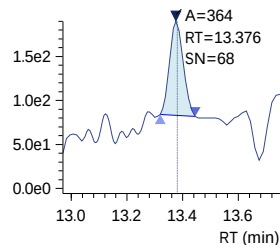
2.19e2

Q 815.00>770.05 (-)

2.19e2

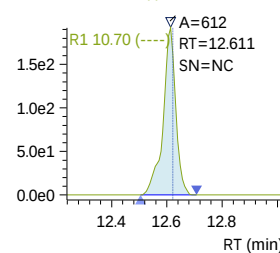
Q 813.00>768.95 (-)

1.85e3



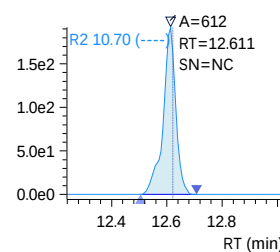
R1 813.00>218.95 (-)

1.92e2



R2 813.00>218.95 (-)

1.92e2





240201_011 (continued)

D3-MeFOSA
Conc. ISTD Error

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. ----
R#1 0.00 (160.44)
R#2 0.00 (161.92)

D9-EtFOSE_IS
Conc. ----

D9-EtFOSE
Conc. ISTD Error

Q 515.00>219.00 (-)

1.20e1

ISTD 515.00>219.00 (-)

1.20e1

Q 511.90>219.00 (-)

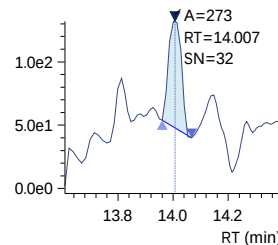
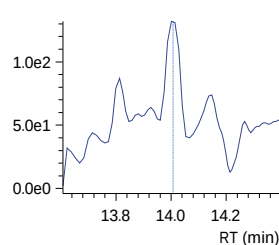
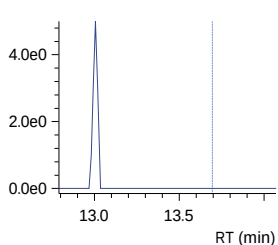
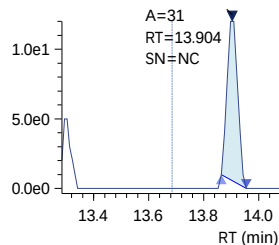
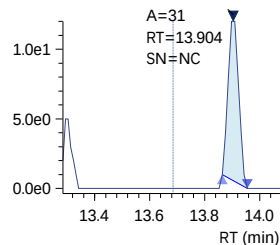
5.00e0

ISTD 639.20>58.90 (-)

1.32e2

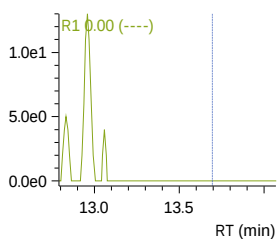
Q 639.20>58.90 (-)

1.32e2



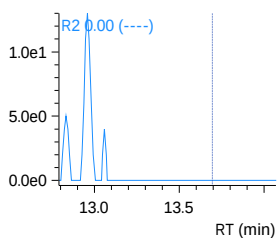
R1 511.90>169.00 (-)

1.30e1



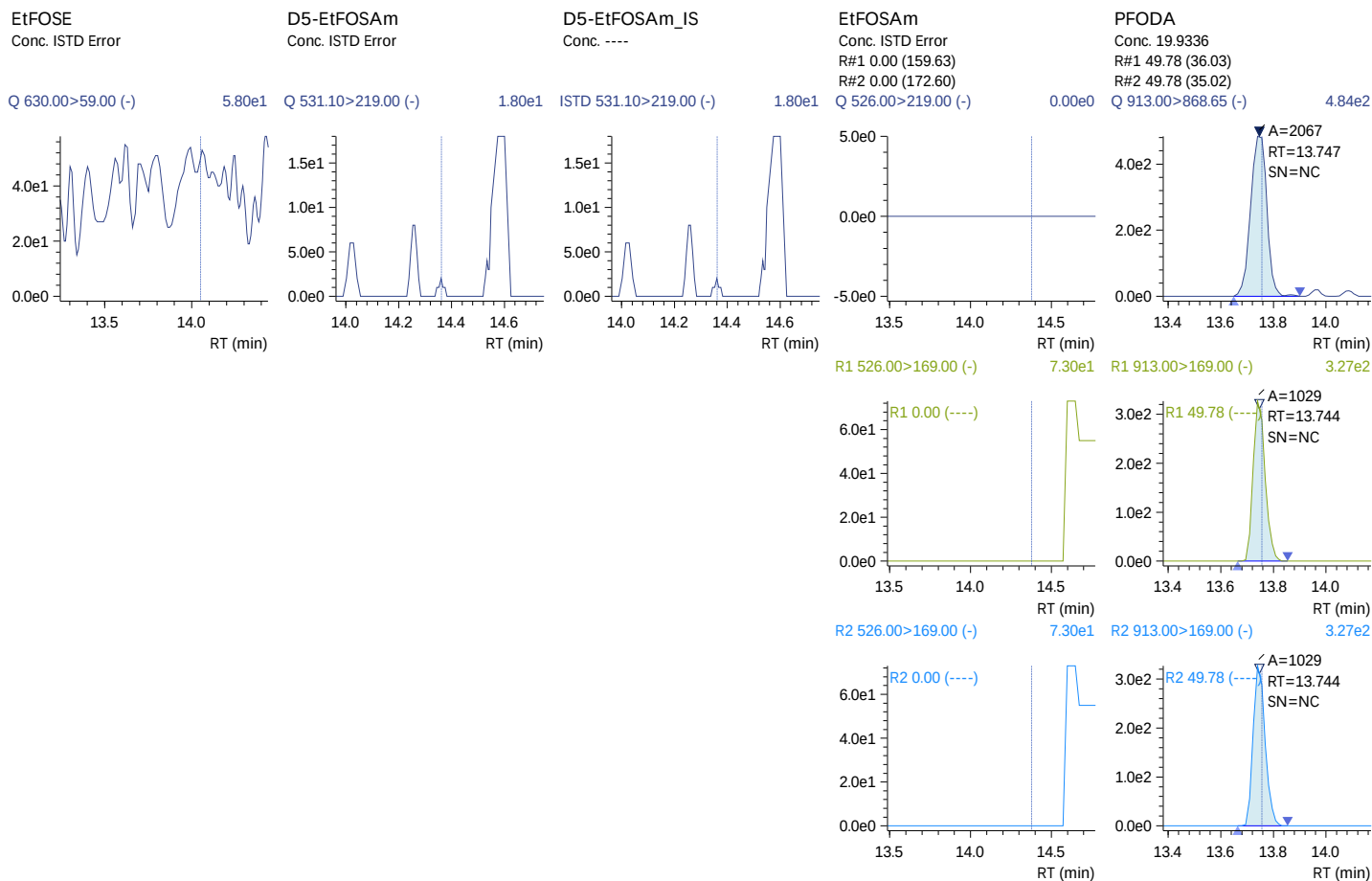
R2 511.90>169.00 (-)

1.30e1





240201_011 (continued)



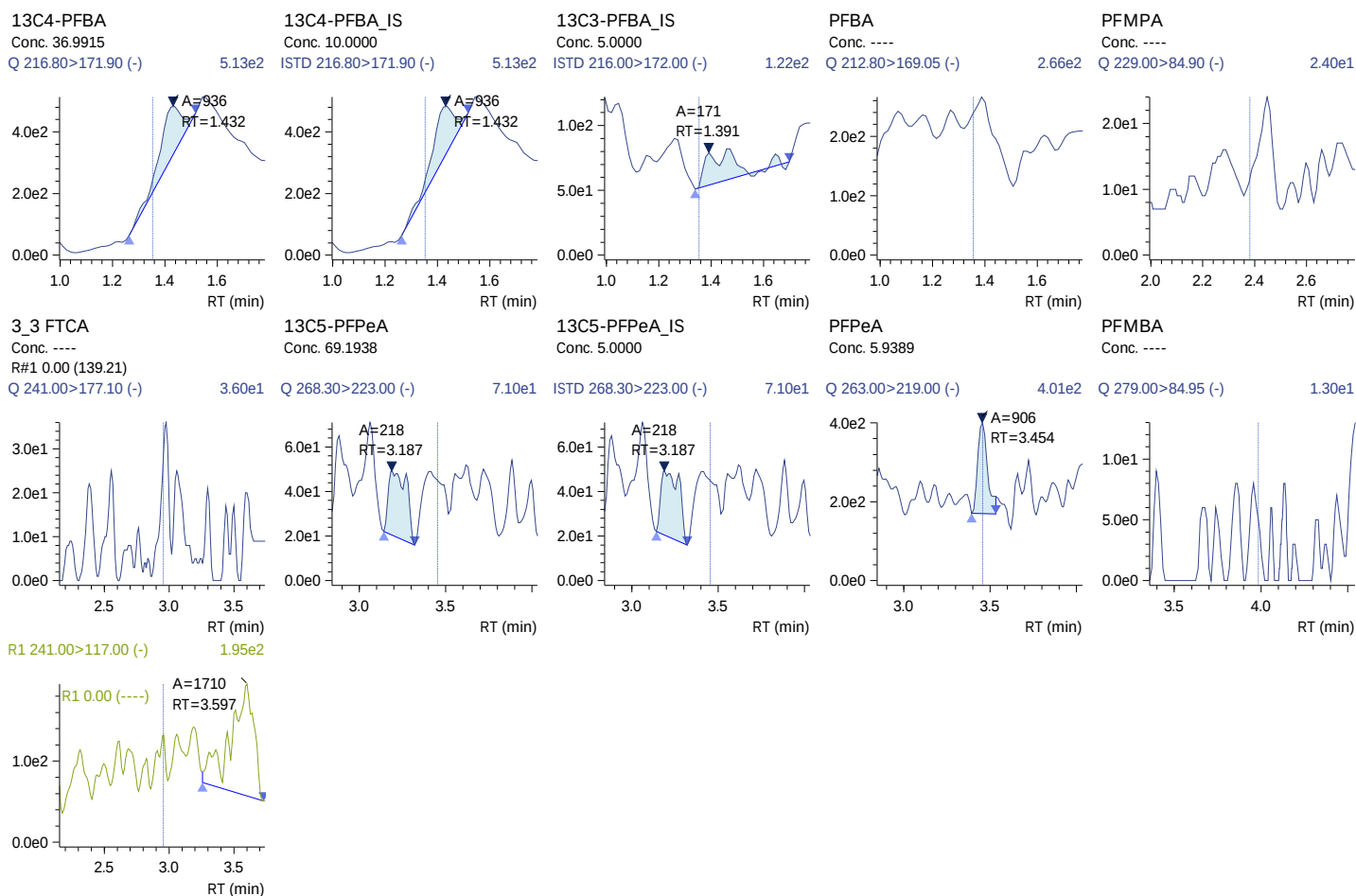
J:\LCMS08\Data\240201_1633_RA\240201_1633_RA.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240201_011

Sample ID: TDCA CHECK
Date Acquired: 2/1/2024 2:14:58 PM
Acquired by: System Administrator
Data File: 240201_011
Vial: 12 | Inj. Volume: 10.0000uL | Tray: 1





240201_011 (continued)

13C2-4_2 FTS
 Conc. ISTD Error

13C2-4_2 FTS_IS
 Conc. 5.0000

4_2 FTS
 Conc. ----
 R#1 0.00 (32.10)
 R#2 0.00 (32.79)

13C3-PFBS_IS
 Conc. 2.5000

PFBS
 Conc. ----
 R#1 0.00 (44.81)
 R#2 0.00 (46.72)

Q 329.10>80.90 (-)

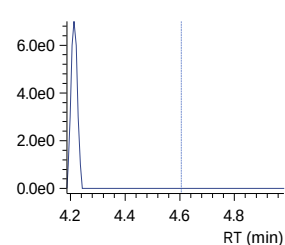
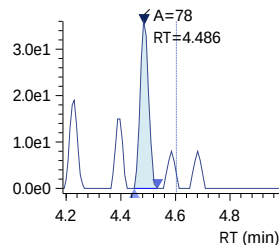
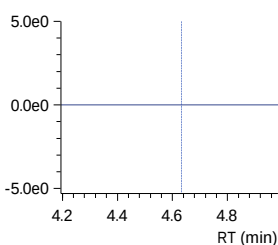
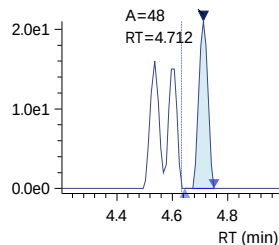
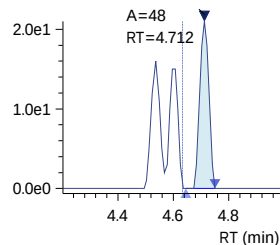
2.10e1 ISTD 329.10>80.90 (-)

2.10e1 Q 327.10>307.00 (-)

0.00e0 ISTD 302.10>79.90 (-)

3.60e1 Q 298.70>79.90 (-)

7.00e0

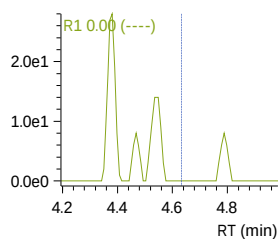


R1 327.10>80.90 (-)

2.80e1

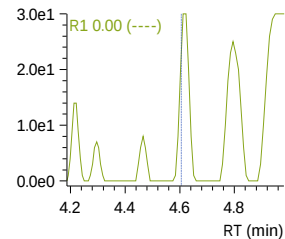
R1 298.70>98.80 (-)

3.00e1



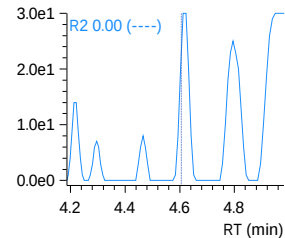
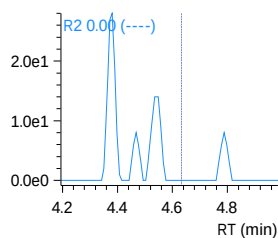
R2 327.10>80.90 (-)

2.80e1



R2 298.70>98.80 (-)

3.00e1





240201_011 (continued)

13C3-PFBS
Conc. ISTD Error

NFDHA
Conc. ----
R#1 0.00 (35.54)
R#2 0.00 (37.91)

13C5-PFHxA
Conc. 13.1565

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

Q 302.10>79.90 (-)

3.60e1

Q 295.00>201.00 (-)

0.00e0

Q 318.00>273.00 (-)

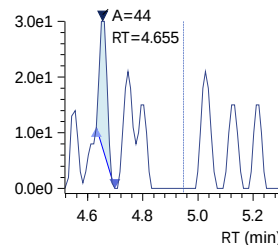
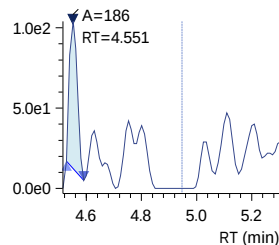
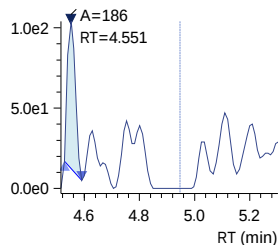
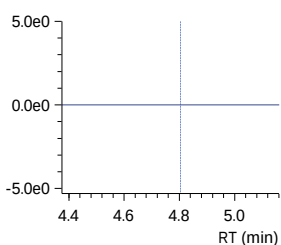
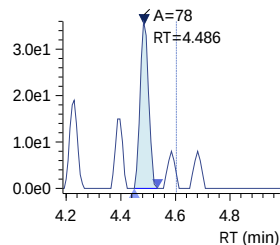
1.04e2

ISTD 318.00>273.00 (-)

1.04e2

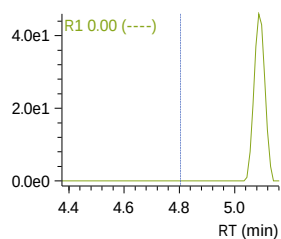
ISTD 315.10>270.00 (-)

3.00e1



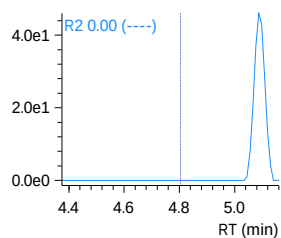
R1 295.00>84.90 (-)

4.60e1



R2 295.00>84.90 (-)

4.60e1





240201_011 (continued)

PFHxA
Conc. 39.7815

PFEESA
Conc. ----

13C3-HFPO-DA
Conc. 13.6069

13C3-HFPO-DA_IS
Conc. 10.0000

HFPO-DA
Conc. ----

Q 313.00>269.00 (-)

1.17e3

Q 314.80>135.00 (-)

2.60e1

Q 286.90>168.90 (-)

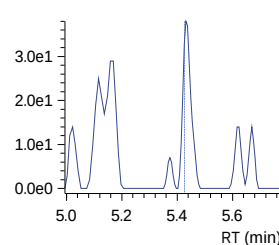
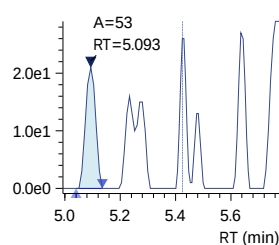
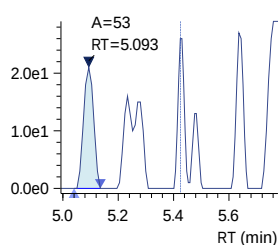
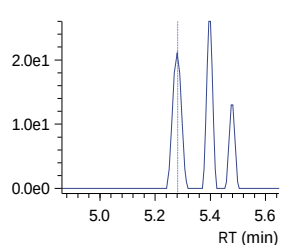
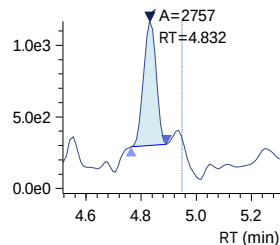
2.90e1

ISTD 286.90>168.90 (-)

2.90e1

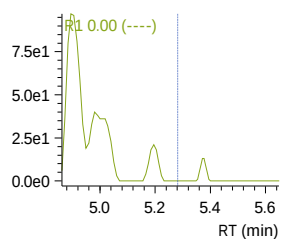
Q 284.90>168.90 (-)

3.80e1



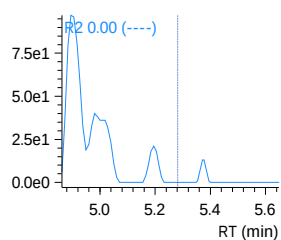
R1 314.80>82.90 (-)

9.70e1



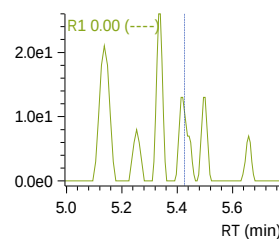
R2 314.80>82.90 (-)

9.70e1



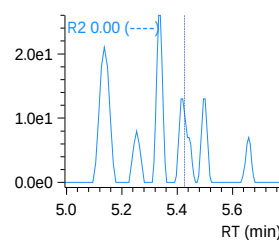
R1 284.90>184.90 (-)

2.60e1



R2 284.90>184.90 (-)

2.60e1





240201_011 (continued)

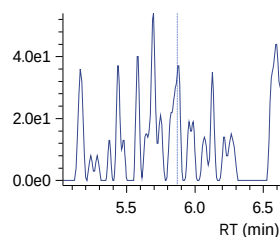
5_3 FTCA

Conc. ----

R#1 0.00 (157.08)

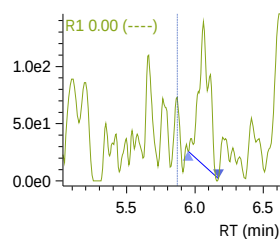
R#2 0.00 (155.87)

Q 341.00>237.05 (-)



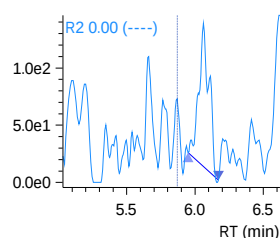
R1 341.00>217.00 (-)

1.46e2



R2 341.00>217.00 (-)

1.46e2



R2 0.00 (----)

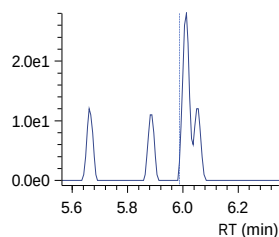
PFPeS

Conc. ISTD Error

R#1 0.00 (55.12)

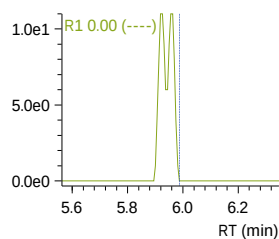
R#2 0.00 (54.87)

Q 349.10>79.90 (-)



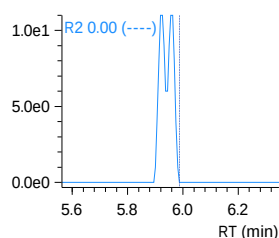
R1 349.10>98.80 (-)

1.10e1



R2 349.10>98.80 (-)

1.10e1

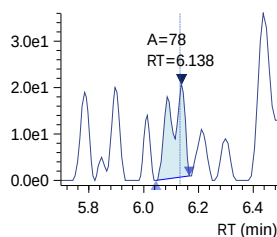


R2 0.00 (----)

13C4-PFHpa

Conc. 4.3607

Q 367.10>322.00 (-)



3.60e1



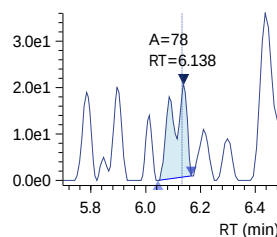
3.60e1



13C4-PFHpa_IS

Conc. 2.5000

ISTD 367.10>322.00 (-)



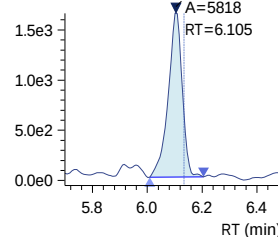
PFHpA

Conc. 221.2788

R#1 18.64 (23.02)

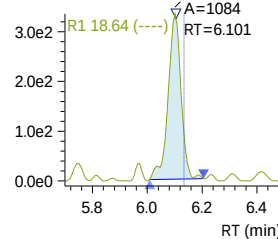
R#2 18.64 (20.91)

Q 363.10>319.00 (-)



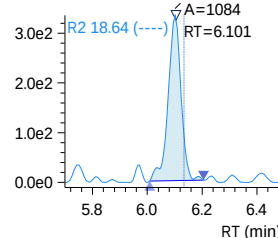
R1 363.10>169.00 (-)

1.67e3



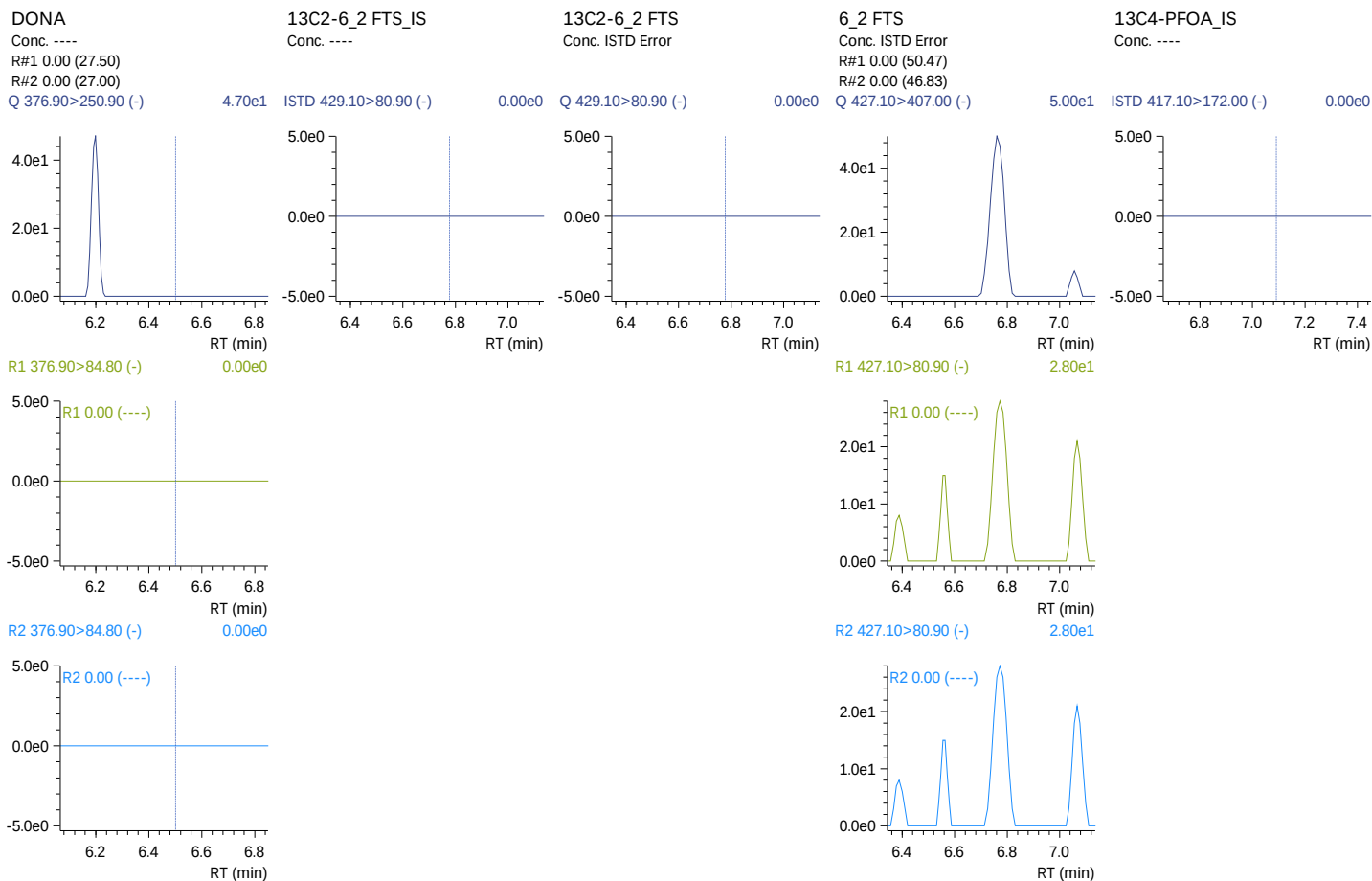
R2 363.10>169.00 (-)

3.36e2





240201_011 (continued)





240201_011 (continued)

13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. ISTD Error

PFOA
Conc. 357.9003
R#1 21.07 (28.77)
R#2 21.07 (28.12)

13C3-PFHxS
Conc. ISTD Error

13C3-PFHxS_IS
Conc. ----

ISTD 421.10>376.00 (-)

1.80e1

Q 421.10>376.00 (-)

1.80e1

Q 413.00>369.00 (-)

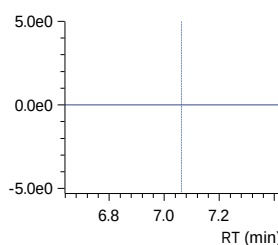
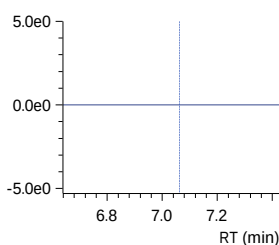
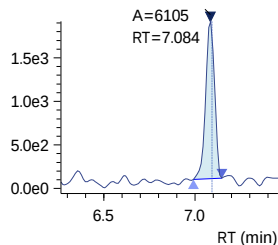
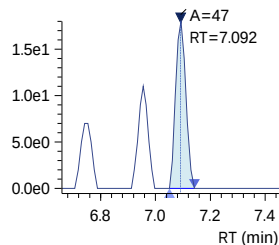
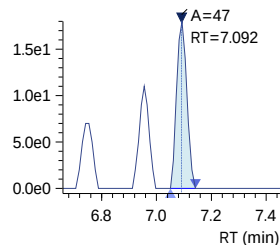
1.92e3

Q 402.10>79.90 (-)

0.00e0

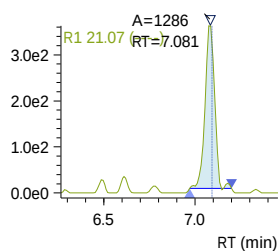
ISTD 402.10>79.90 (-)

0.00e0



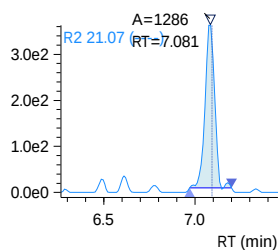
R1 413.00>169.00 (-)

3.63e2



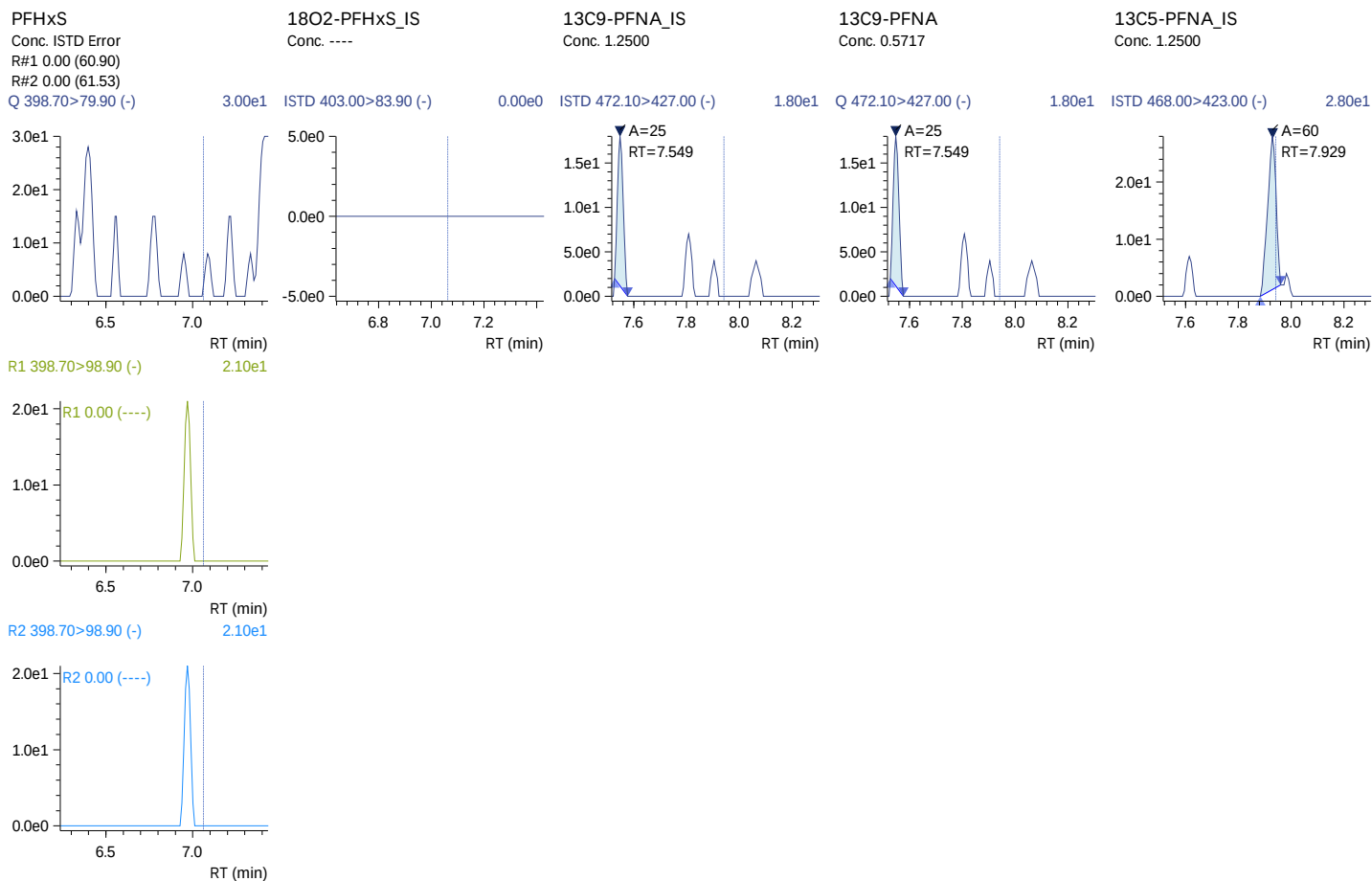
R2 413.00>169.00 (-)

3.63e2



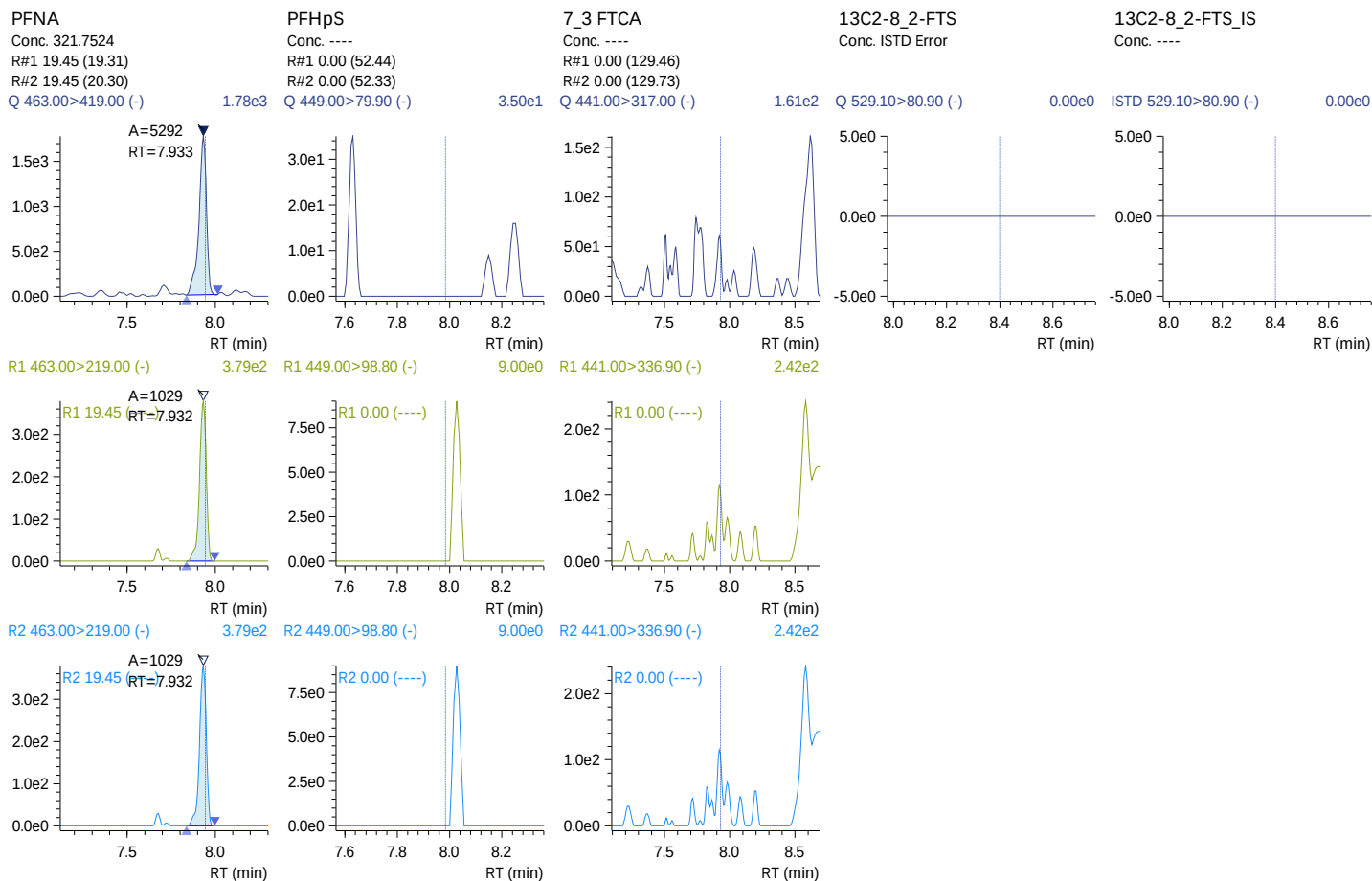


240201_011 (continued)



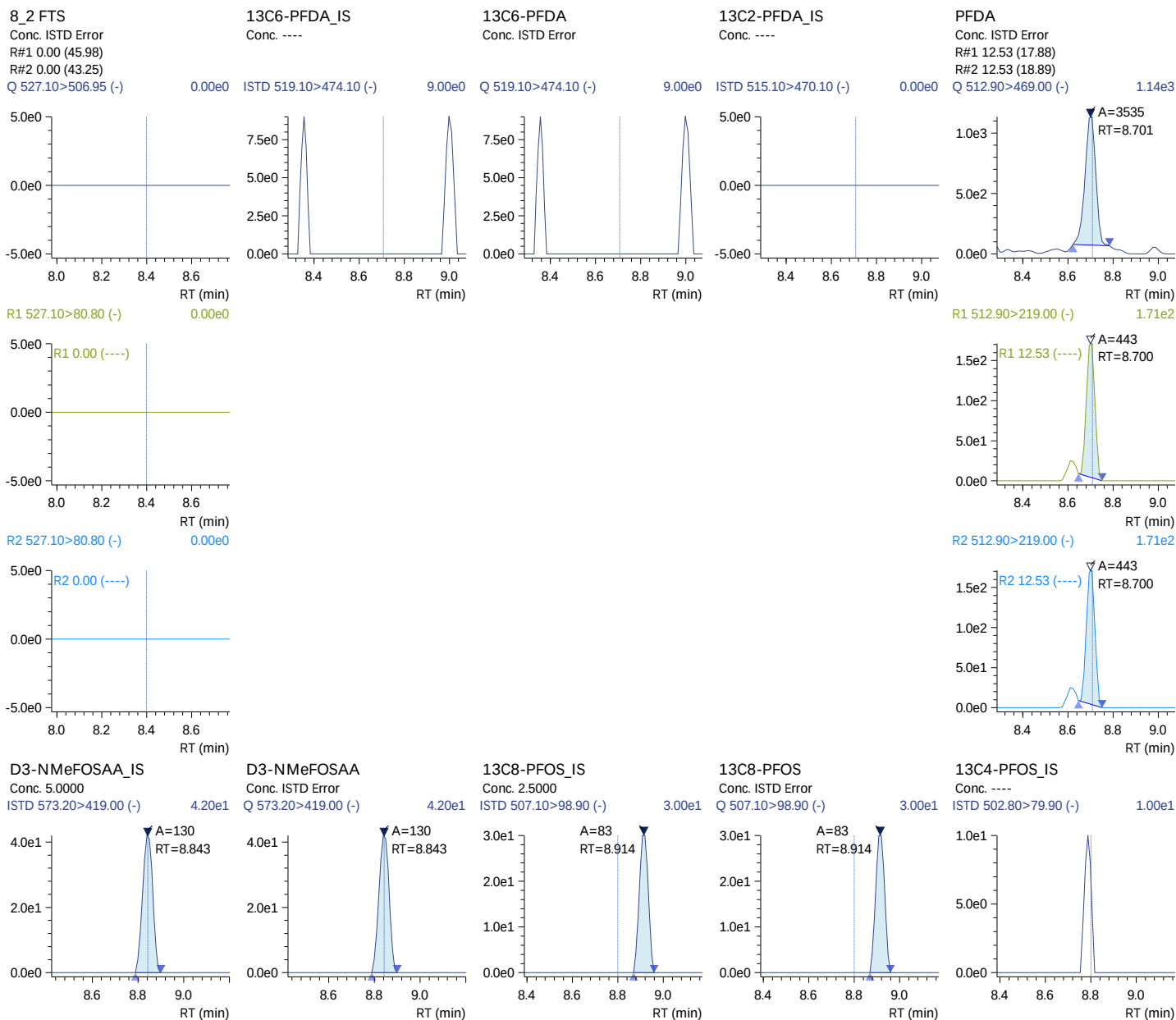


240201_011 (continued)



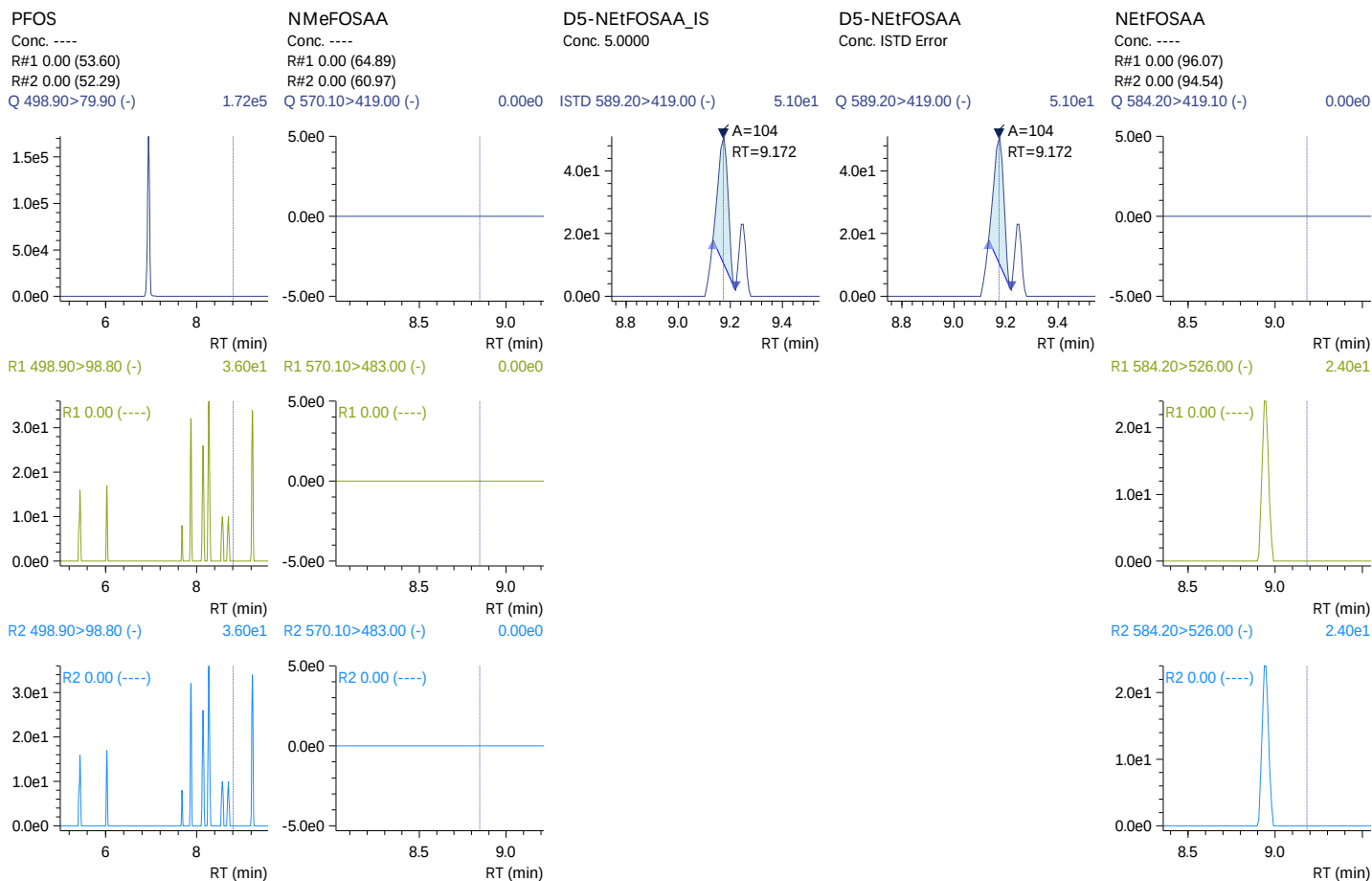


240201_011 (continued)





240201_011 (continued)





240201_011 (continued)

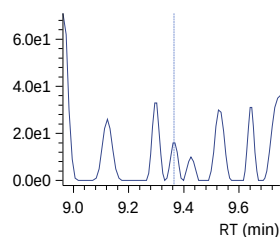
9-Cl-PF3ONS

Conc. ----

R#1 0.00 (30.95)

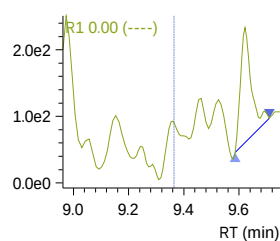
R#2 0.00 (30.61)

Q 530.80>351.00 (-)



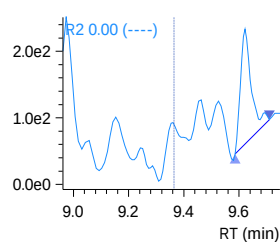
R1 532.80>353.00 (-)

2.51e2



R2 532.80>353.00 (-)

2.51e2



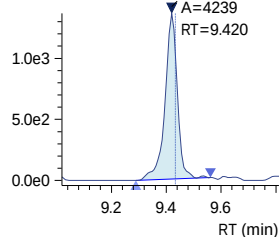
PFUnDA

Conc. 112.6195

R#1 0.00 (11.01)

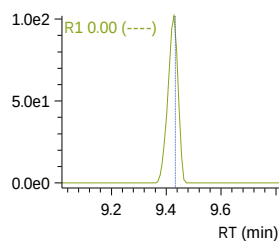
R#2 0.00 (12.02)

Q 563.10>519.00 (-)



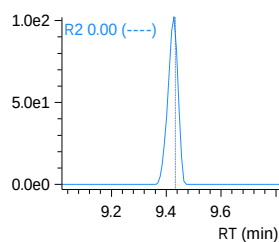
R1 563.10>269.10 (-)

1.02e2



R2 563.10>269.10 (-)

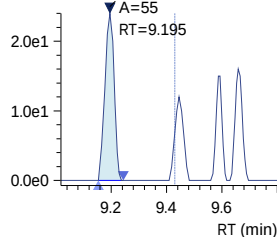
1.02e2



13C7-PFUnDA_IS

Conc. 1.2500

ISTD 570.00>525.10 (-)



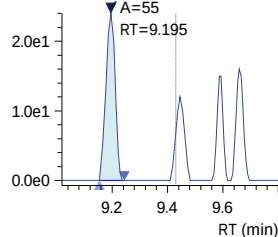
A=55



13C7-PFUnDA

Conc. ISTD Error

Q 570.00>525.10 (-)



A=55



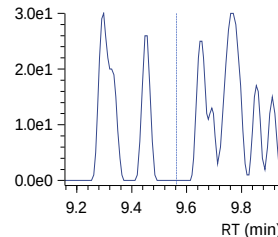
PFNS

Conc. ----

R#1 0.00 (60.44)

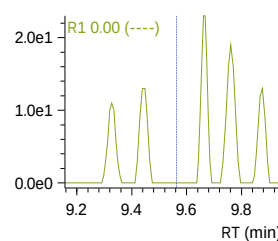
R#2 0.00 (58.51)

Q 548.80>79.90 (-)



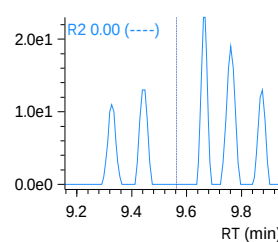
R1 548.80>98.80 (-)

2.30e1



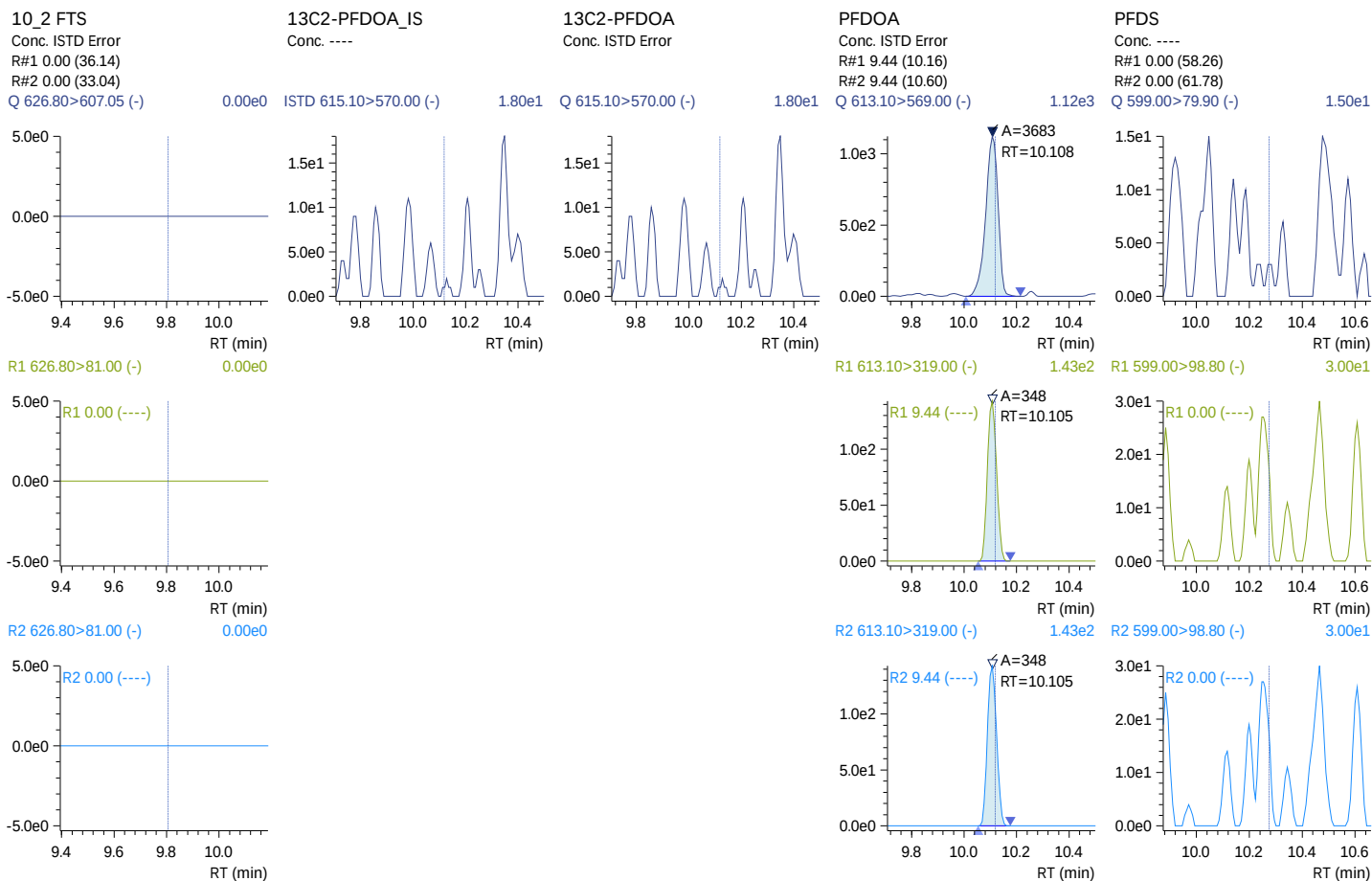
R2 548.80>98.80 (-)

2.30e1



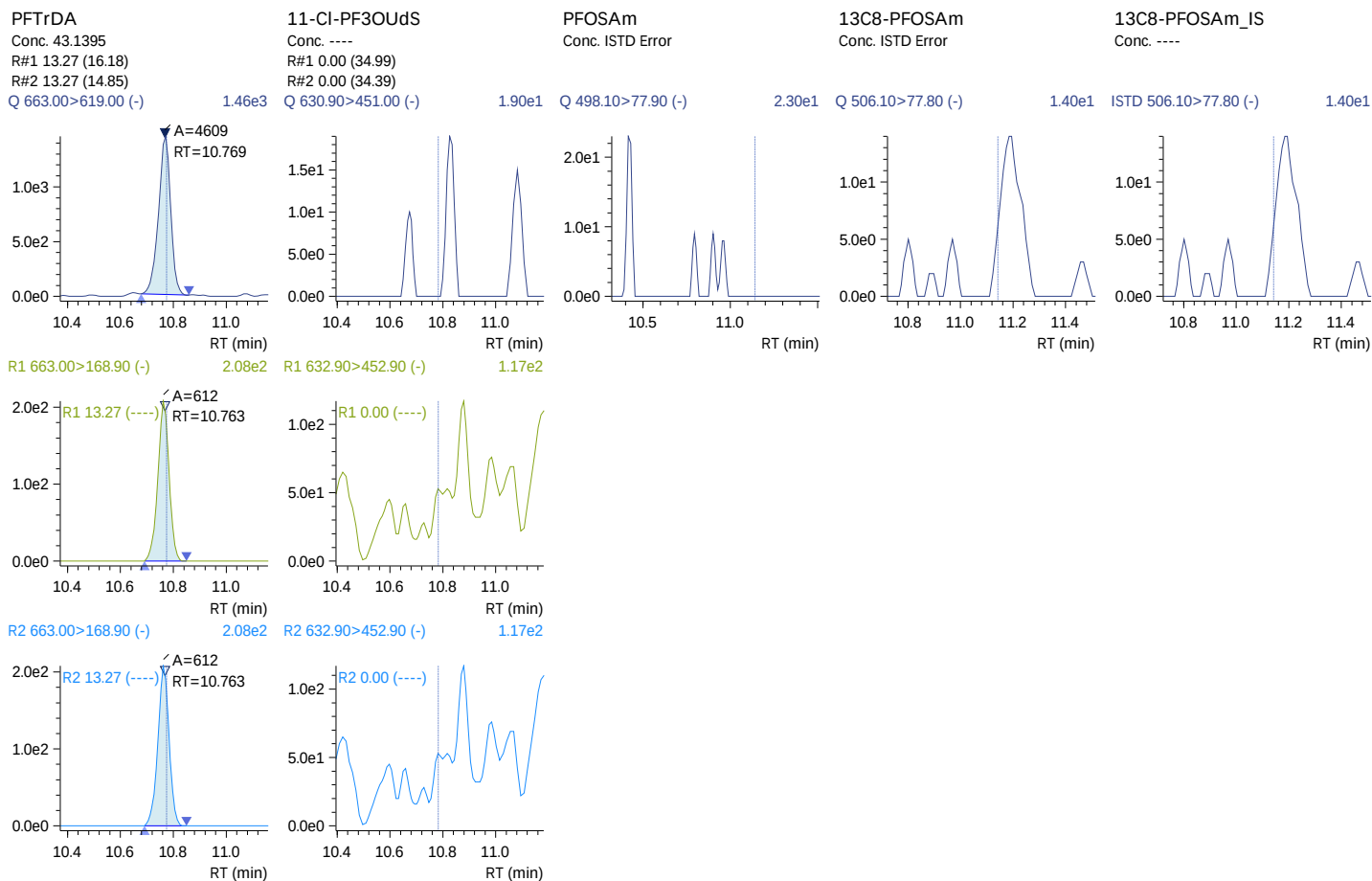


240201_011 (continued)



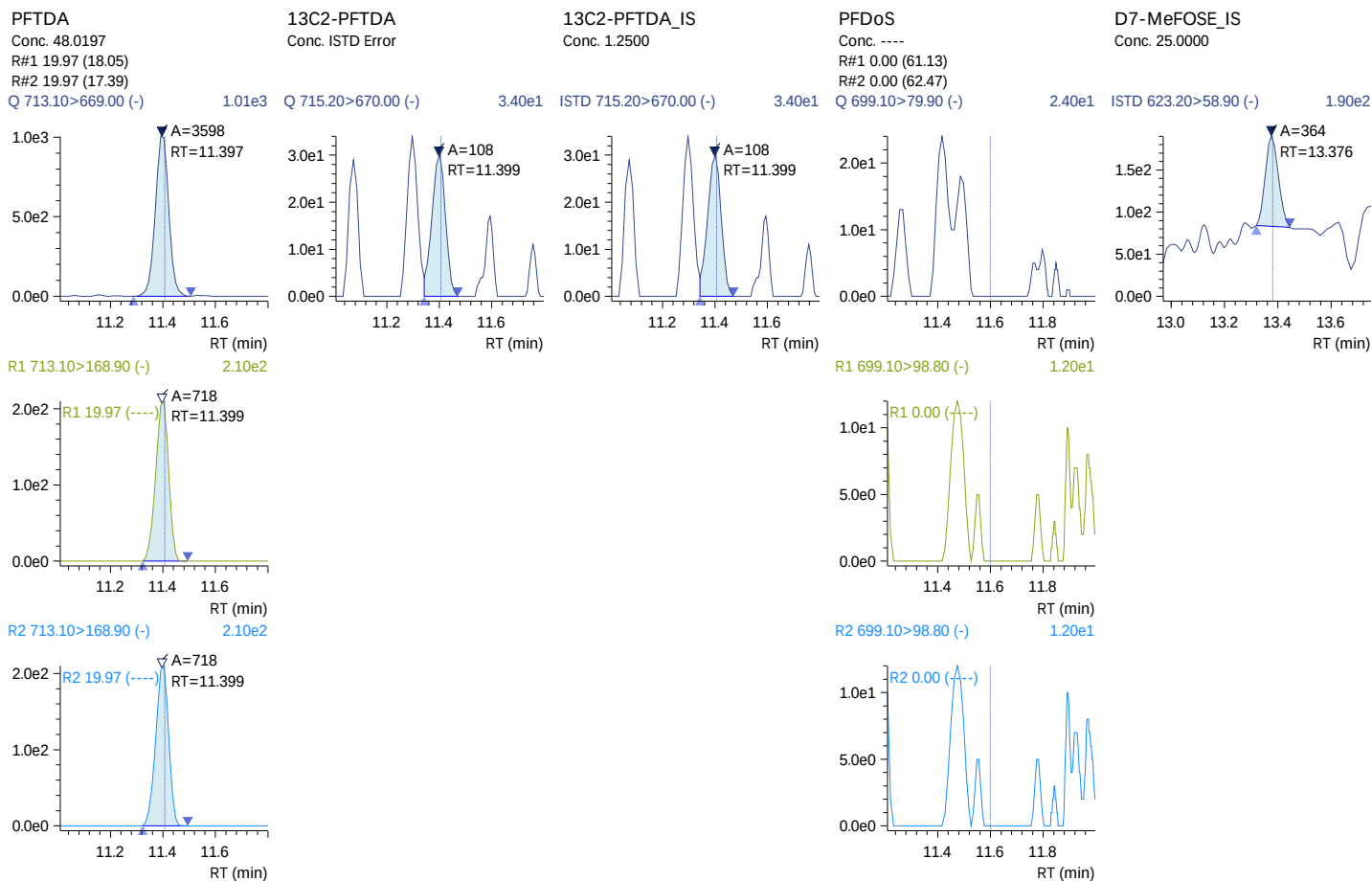


240201_011 (continued)





240201_011 (continued)





240201_011 (continued)

D7-MeFOSE
Conc. ISTD Error

MeFOSE
Conc. ----

13C2-PFHDA_IS
Conc. 2.5000

13C2-PFHDA
Conc. ISTD Error

PFHXDA

Conc. 21.8654
R#1 10.70 (11.66)
R#2 10.70 (10.99)

Q 623.20>58.90 (-)

1.90e2

Q 616.10>59.00 (-)

8.30e1

ISTD 815.00>770.05 (-)

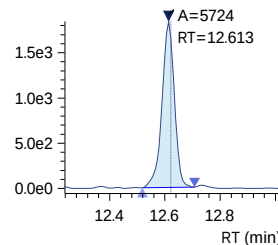
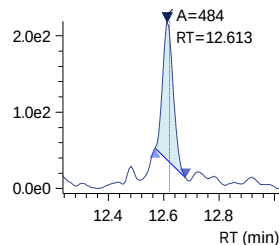
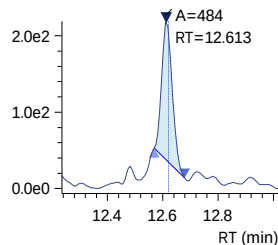
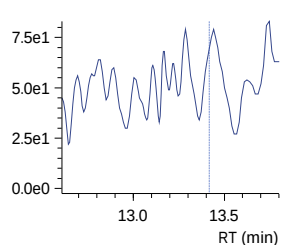
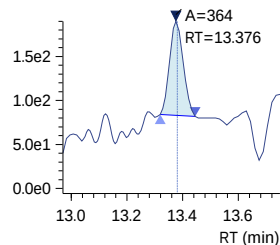
2.19e2

Q 815.00>770.05 (-)

2.19e2

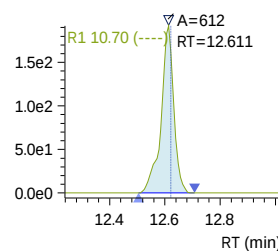
Q 813.00>768.95 (-)

1.85e3



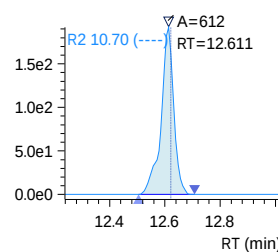
R1 813.00>218.95 (-)

1.92e2



R2 813.00>218.95 (-)

1.92e2





240201_011 (continued)

D3-MeFOSA
 Conc. ISTD Error

D3-MeFOSA_IS
 Conc. 2.5000

MeFOSA
 Conc. ----
 R#1 0.00 (160.44)
 R#2 0.00 (161.92)

D9-EtFOSE_IS
 Conc. ----

D9-EtFOSE
 Conc. ISTD Error

Q 515.00>219.00 (-)

1.20e1

ISTD 515.00>219.00 (-)

1.20e1

Q 511.90>219.00 (-)

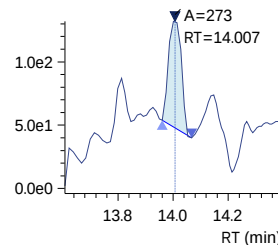
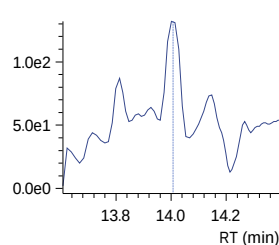
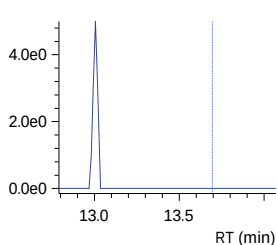
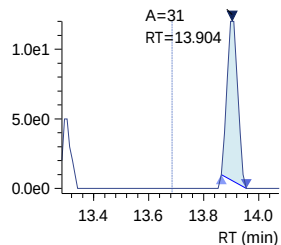
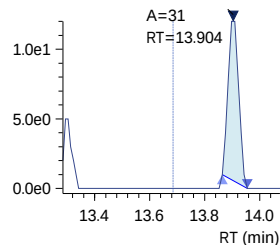
5.00e0

ISTD 639.20>58.90 (-)

1.32e2

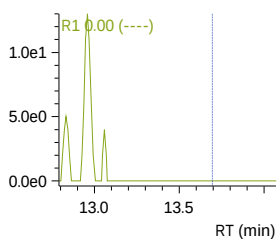
Q 639.20>58.90 (-)

1.32e2



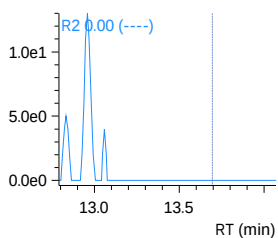
R1 511.90>169.00 (-)

1.30e1



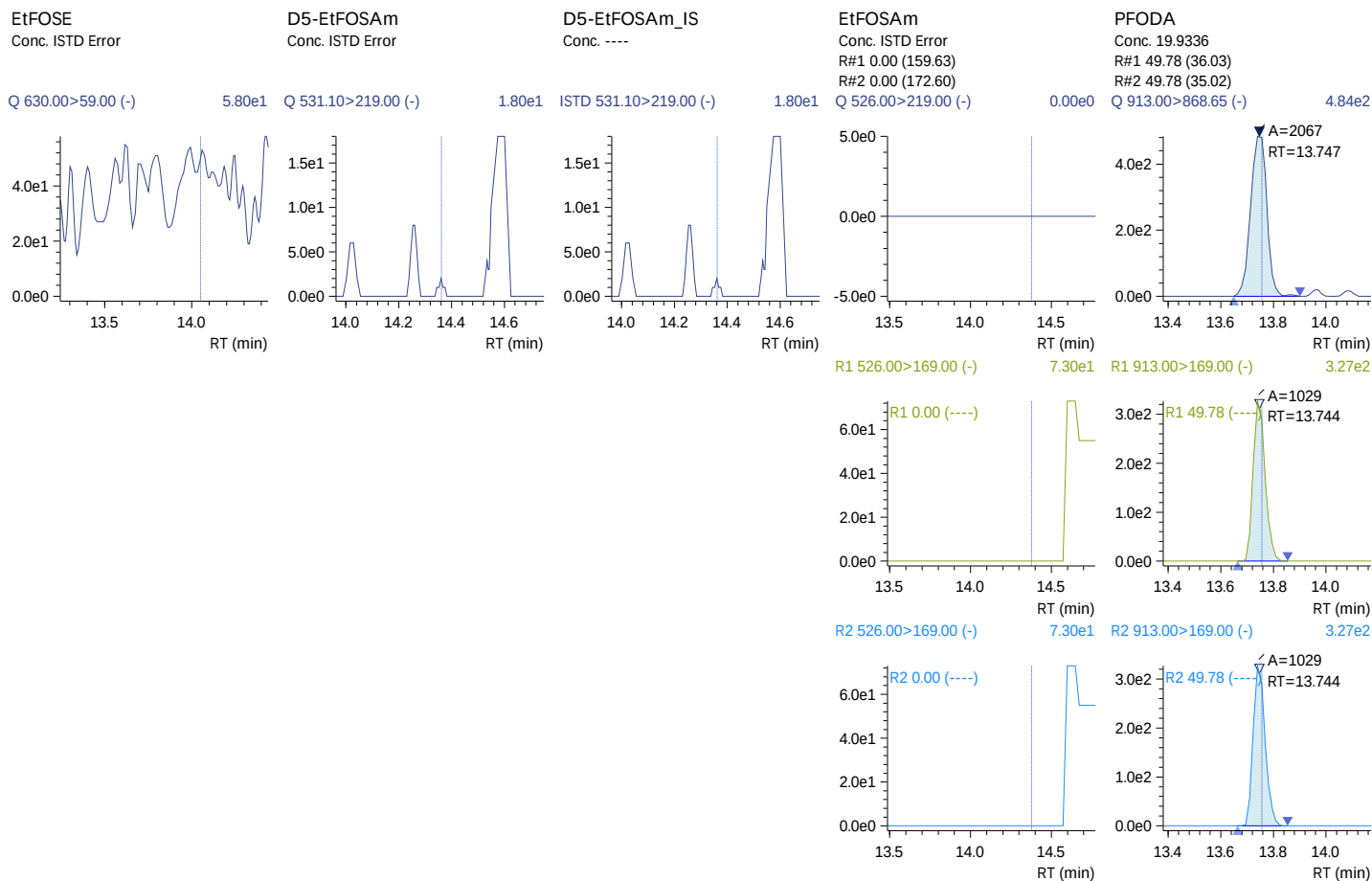
R2 511.90>169.00 (-)

1.30e1





240201_011 (continued)



240118_1633_Curve



Environmental
Injection Log
LCMS08 - Shimadzu 8060

ICAL Date: 1/18/2024

Std. xp: 2/2/2024

ICAL ID: KC2400027

LIMS ID: NA

1st Review:

P. Salyards

2nd Review:

M. Sessions 1-23-24

Column:

Phenomenex EVO-C18 100X3.0 mm S/N: H23-138925

Mobile Phases

A: 2mM Ammonium Acetate in H2O:ACN 95%:5% 23-OLC-04-07D

B: ACN Lot #62120

	Sample Name	File Name	Acquisition Method	Dilution	R	
1	1633 CCB	23-OLC-04-06K	240118_005	1633_240111.lcm	1x	Widened the PFBA window due to a rerun that kept leaving the window. The new window now shows a large interference to the left of the PFBA peak that shrinks the peaks close to the baseline. These peaks can be hard to see without being zoomed in due to being scaled down
2	1633 ICAL 0.05PPB	23-OLC-04-06A	240118_006	1633_240111.lcm	1x	Dropped PFBA, 6:2 FTS, 7_3 FTCA, NMeFOSAA, MeFOSE, and EtFOSE. NMeFOSAA had ion ratio failure
3	1633 ICAL 0.1PPB	23-OLC-04-06B	240118_007	1633_240111.lcm	1x	
4	1633 ICAL 0.25PPB	23-OLC-04-06C	240118_008	1633_240111.lcm	1x	
5	1633 ICAL 0.50PPB	23-OLC-04-06D	240118_009	1633_240111.lcm	1x	
6	1633 ICAL 1.0PPB	23-OLC-04-06E	240118_010	1633_240111.lcm	1x	
7	1633 ICAL 5.0PPB	23-OLC-04-06F	240118_011	1633_240111.lcm	1x	
8	1633 ICAL 10.0PPB	23-OLC-04-06G	240118_012	1633_240111.lcm	1x	
9	1633 ICAL 15.0PPB	23-OLC-04-06H	240118_013	1633_240111.lcm	1x	
10	1633 ICAL 20.0PPB	23-OLC-04-06I	240118_014	1633_240111.lcm	1x	
11	1633 CCB	23-OLC-04-06K	240118_015	1633_240111.lcm	1x	
12	1633 ICV 1.0PPB	23-OLC-04-06L	240118_016	1633_240111.lcm	1x	
13	1633 FTCA ICV 1.0PPB	23-OLC-04-03D	240118_017	1633_240111.lcm	1x	Report FTCAs
14	TDCA CHECK	23-OLC-04-03E	240118_018	1633_240111.lcm	1x	Showed adequate separation from PFOS
15	1633 CCB	23-OLC-04-06K	240118_019	1633_240111.lcm	1x	
16	1633 QIS	23-OLC-04-06J	240118_020	1633_240111.lcm	1x	Showed isomers of both PFOA and PFNA

LC/MS/MS Tuning

Sample Information

Sample Type: PEG+PPG+Raffinose

Tuning Condition

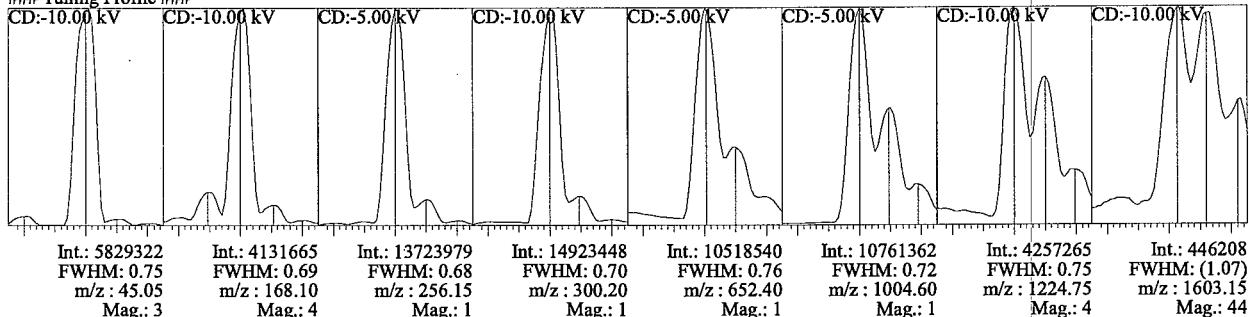
Detector Adjustment: On
 Resolution Adjustment: On
 FWHM of Spectrum: 0.70
 Sensitivity Adjustment: On
 Mass Calibration: On

Tuning Result

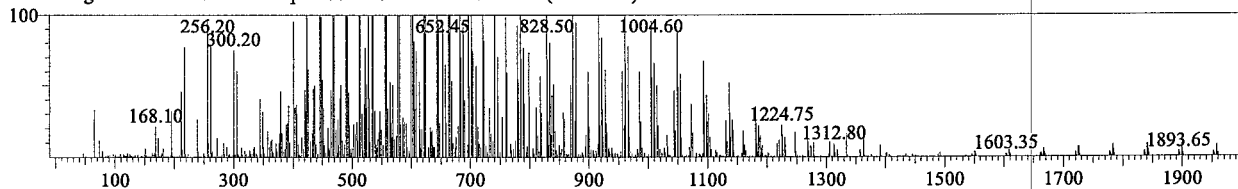
Model: LCMS-8060
 Serial Number: O11106070177US
 Interface: ESI
 Polarity: Positive
 Tuning Mode: Auto Tuning
 Tuning Date: 1/18/2024 11:19:10 AM
 Acquisition Mode: Q1 Scan(Use CID Gas)
 Nebulizing Gas Flow: 1.50(settings : 1.50) L/min

Drying Gas Flow: 0.00(settings : 10.00) L/min
 CID Gas Flow: 270(settings : 270) kPa
 Heating Gas Flow: 5.00(settings : 5.00) L/Min
 Interface Bias: +4.00 kV
 Interface Current: 2.44 uA
 Interface Temp.: 100(settings : 100) C
 DL Temp.: 249(settings : 250) C
 Heat Block Temp.: 399(settings : 400) C
 Q1 RF Gain: 4996
 Q1 RF Offset: 4990
 Q3 RF Gain: ---
 Q3 RF Offset: ---
 Q1 Post-rod Bias: -5.0 V
 CID CELL Exit Lens: -4.0 V
 Conversion Dynode: -10.00 kV
 Detector: -1.94(-1.94) kV
 Vacuum Pressure(QA): 1.6e+02 Pa
 Vacuum Pressure(QP): 2.3e-03 Pa

Tuning Profile



Scan Range: 2.00 - 2000.00 Scan Speed: 30 u/s Base Peak: 423.30 (20000000)



m/z(Target)	m/z(Actual)	Difference	Width	Intensity
45.05	45.05	0.00	0.75	5829322
168.10	168.10	0.00	0.69	4131665
256.15	256.20	0.05	0.68	13723979
300.20	300.20	0.00	0.70	14923448
652.40	652.45	0.05	0.76	10518540
1004.60	1004.60	0.00	0.72	10761362
1224.75	1224.75	0.00	0.75	4257265
1603.15	1603.35	0.20	(1.07)	446208

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Sample Information

Sample Type: PEG+PPG+Raffinose

Tuning Condition

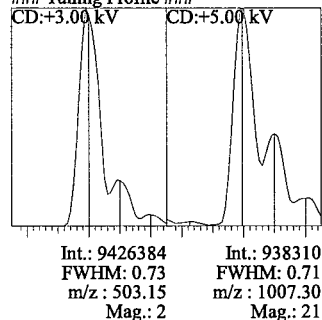
Detector Adjustment: On
 Resolution Adjustment: On
 FWHM of Spectrum: 0.70
 Sensitivity Adjustment: On
 Mass Calibration: On

Tuning Result

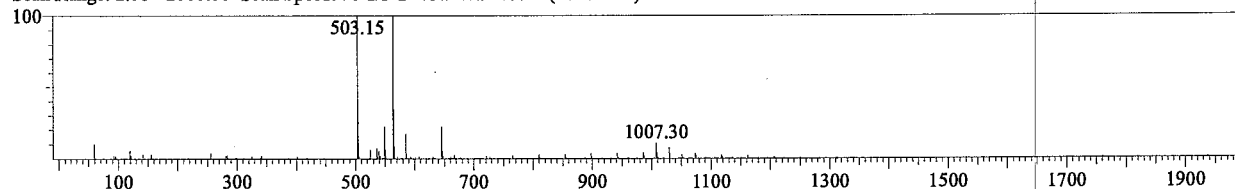
Model: LCMS-8060
 Serial Number: O11106070177US
 Interface: ESI
 Polarity: Negative
 Tuning Mode: Auto Tuning
 Tuning Date: 1/18/2024 11:24:23 AM
 Acquisition Mode: Q1 Scan(Use CID Gas)
 Nebulizing Gas Flow: 1.50(settings : 1.50) L/min

Drying Gas Flow: 0.00(settings : 10.00) L/min
 CID Gas Flow: 270(settings : 270) kPa
 Heating Gas Flow: 5.00(settings : 5.00) L/Min
 Interface Bias: -3.00 kV
 Interface Current: 1.39 uA
 Interface Temp.: 100(settings : 100) C
 DL Temp.: 250(settings : 250) C
 Heat Block Temp.: 399(settings : 400) C
 Q1 RF Gain: 5000
 Q1 RF Offset: 5000
 Q3 RF Gain: ---
 Q3 RF Offset: ---
 Q1 Post-rod Bias: 5.0 V
 CID CELL Exit Lens: 3.5 V
 Conversion Dynode: +10.00 kV
 Detector: -1.94(-1.94) kV
 Vacuum Pressure(QA): 1.6e+02 Pa
 Vacuum Pressure(QP): 2.3e-03 Pa

Tuning Profile



Scan Range: 2.00 - 2000.00 Scan Speed: 30 u/s Base Peak: 503.15 (20000000)



m/z(Target)	m/z(Actual)	Difference	Width	Intensity
503.15	503.15	0.00	0.73	9426384
1007.30	1007.30	0.00	0.71	938310

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Sample Information

Sample Type: PEG+PPG+Raffinose

Tuning Condition

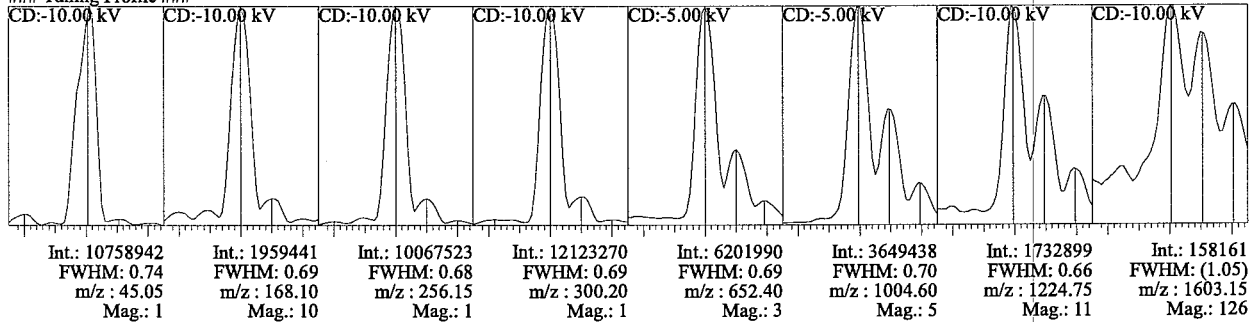
Detector Adjustment: On
 Resolution Adjustment: On
 FWHM of Spectrum: 0.70
 Sensitivity Adjustment: On
 Mass Calibration: On

Tuning Result

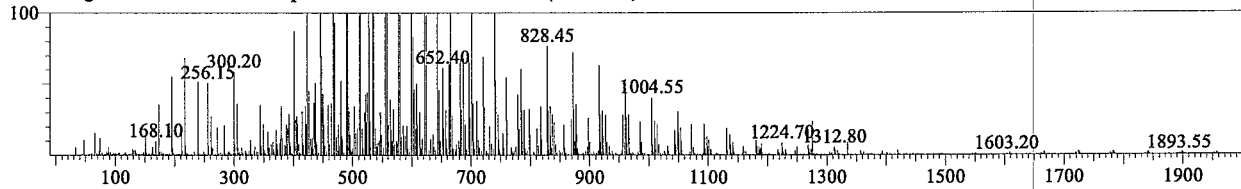
Model: LCMS-8060
 Serial Number: O11106070177US
 Interface: ESI
 Polarity: Positive
 Tuning Mode: Auto Tuning
 Tuning Date: 1/18/2024 11:27:46 AM
 Acquisition Mode: Q3 Scan(Use CID Gas)
 Nebulizing Gas Flow: 1.50(settings : 1.50) L/min

Drying Gas Flow: 0.00(settings : 10.00) L/min
 CID Gas Flow: 269(settings : 270) kPa
 Heating Gas Flow: 5.00(settings : 5.00) L/Min
 Interface Bias: +4.00 kV
 Interface Current: 2.78 uA
 Interface Temp.: 100(settings : 100) C
 DL Temp.: 250(settings : 250) C
 Heat Block Temp.: 399(settings : 400) C
 Q1 RF Gain: ---
 Q1 RF Offset: ---
 Q3 RF Gain: 4997
 Q3 RF Offset: 4990
 Q1 Post-rod Bias: -5.0 V
 CID CELL Exit Lens: -4.0 V
 Conversion Dynode: -10.00 kV
 Detector: -1.94(-1.94) kV
 Vacuum Pressure(QA): 1.6e+02 Pa
 Vacuum Pressure(QP): 2.3e-03 Pa

Tuning Profile



Scan Range: 2.00 - 2000.00 Scan Speed: 30 u/s Base Peak: 423.35 (20000000)



m/z(Target)	m/z(Actual)	Difference	Width	Intensity
45.05	45.10	0.05	0.74	10758942
168.10	168.10	0.00	0.69	1959441
256.15	256.15	0.00	0.68	10067523
300.20	300.20	0.00	0.69	12123270
652.40	652.40	0.00	0.69	6201990
1004.60	1004.55	-0.05	0.70	3649438
1224.75	1224.70	-0.05	0.66	1732899
1603.15	1603.20	0.05	(1.05)	158161

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Sample Information

Sample Type: PEG+PPG+Raffinose

Tuning Condition

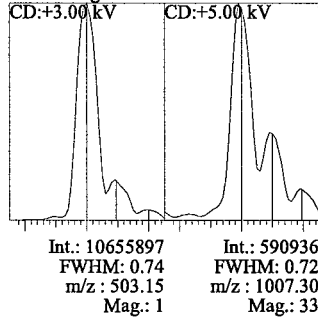
Detector Adjustment: On
 Resolution Adjustment: On
 FWHM of Spectrum: 0.70
 Sensitivity Adjustment: On
 Mass Calibration: On

Tuning Result

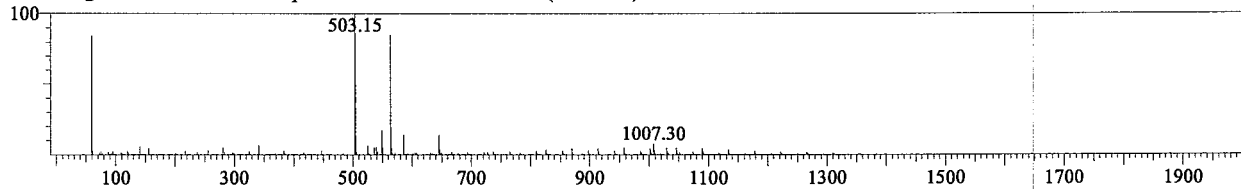
Model: LCMS-8060
 Serial Number: O11106070177US
 Interface: ESI
 Polarity: Negative
 Tuning Mode: Auto Tuning
 Tuning Date: 1/18/2024 11:31:05 AM
 Acquisition Mode: Q3 Scan(Use CID Gas)
 Nebulizing Gas Flow: 1.50(settings : 1.50) L/min

Drying Gas Flow: 0.00(settings : 10.00) L/min
 CID Gas Flow: 270(settings : 270) kPa
 Heating Gas Flow: 5.01(settings : 5.00) L/Min
 Interface Bias: -3.00 kV
 Interface Current: 1.56 uA
 Interface Temp.: 100(settings : 100) C
 DL Temp.: 250(settings : 250) C
 Heat Block Temp.: 400(settings : 400) C
 Q1 RF Gain: ---
 Q1 RF Offset: ---
 Q3 RF Gain: 5000
 Q3 RF Offset: 5000
 Q1 Post-rod Bias: 5.0 V
 CID CELL Exit Lens: 3.5 V
 Conversion Dynode: +10.00 kV
 Detector: -1.94(-1.94) kV
 Vacuum Pressure(QA): 1.6e+02 Pa
 Vacuum Pressure(QP): 2.3e-03 Pa

Tuning Profile



Scan Range: 2.00 - 2000.00 Scan Speed: 30 u/s Base Peak: 503.15 (20000000)



m/z(Target)	m/z(Actual)	Difference	Width	Intensity
503.15	503.15	0.00	0.74	10655897
1007.30	1007.30	0.00	0.72	590936

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Sample Information

Sample Type: PEG+PPG+Raffinose

Tuning Condition

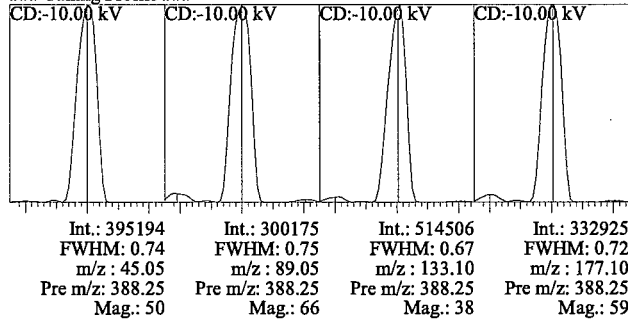
Detector Adjustment: On
 Resolution Adjustment: On
 FWHM of Spectrum: 0.70
 Sensitivity Adjustment: On
 Mass Calibration: On

Tuning Result

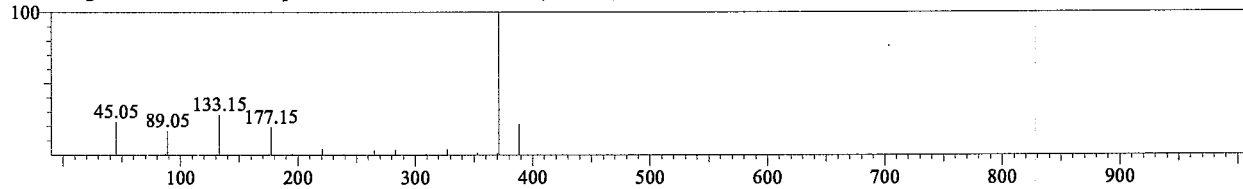
Model: LCMS-8060
 Serial Number: O11106070177US
 Interface: ESI
 Polarity: Positive
 Tuning Mode: Auto Tuning
 Tuning Date: 1/18/2024 11:34:57 AM
 Acquisition Mode: Product Ion Scan
 Nebulizing Gas Flow: 1.50(settings : 1.50) L/min

Drying Gas Flow: 0.00(settings : 10.00) L/min
 CID Gas Flow: 269(settings : 270) kPa
 Heating Gas Flow: 5.00(settings : 5.00) L/Min
 Interface Bias: +4.00 kV
 Interface Current: 3.38 uA
 Interface Temp.: 100(settings : 100) C
 DL Temp.: 250(settings : 250) C
 Heat Block Temp.: 399(settings : 400) C
 Q1 RF Gain: 4996
 Q1 RF Offset: 4990
 Q3 RF Gain: 4997
 Q3 RF Offset: 4991
 Q1 Post-rod Bias: -5.0 V
 CID CELL Exit Lens: -1.1 V
 Conversion Dynode: -10.00 kV
 Detector: -1.94(-1.94) kV
 Vacuum Pressure(QA): 1.6e+02 Pa
 Vacuum Pressure(QP): 2.3e-03 Pa

Tuning Profile



Scan Range: 2.00 - 438.25 Scan Speed: 30 u/s Base Peak: 371.30 (1805386) Pre m/z: 388.25



m/z(Target)	m/z(Actual)	Difference	Width	Intensity
388.25 > 45.05	45.05	0.00	0.74	395194
388.25 > 89.05	89.05	0.00	0.75	300175
388.25 > 133.10	133.15	0.05	0.67	514506
388.25 > 177.10	177.15	0.05	0.72	332925

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Sample Information

Sample Type: PEG+PPG+Raffinose

Tuning Condition

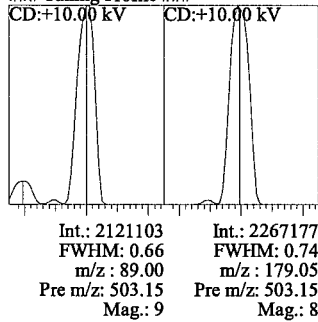
Detector Adjustment: On
 Resolution Adjustment: On
 FWHM of Spectrum: 0.70
 Sensitivity Adjustment: On
 Mass Calibration: On

Tuning Result

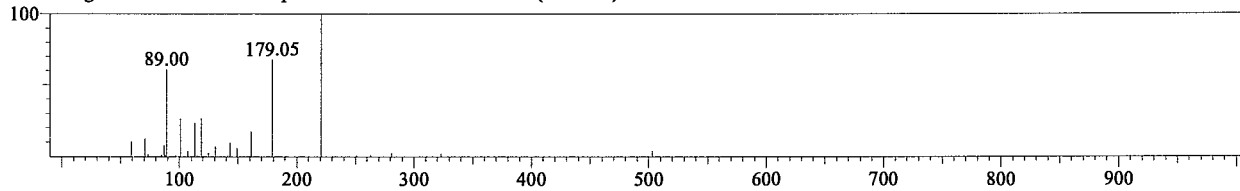
Model: LCMS-8060
 Serial Number: O11106070177US
 Interface: ESI
 Polarity: Negative
 Tuning Mode: Auto Tuning
 Tuning Date: 1/18/2024 11:34:57 AM
 Acquisition Mode: Product Ion Scan
 Nebulizing Gas Flow: 1.50(settings : 1.50) L/min

Drying Gas Flow: 0.00(settings : 10.00) L/min
 CID Gas Flow: 270(settings : 270) kPa
 Heating Gas Flow: 5.00(settings : 5.00) L/Min
 Interface Bias: -3.00 kV
 Interface Current: 19.01 uA
 Interface Temp.: 100(settings : 100) C
 DL Temp.: 249(settings : 250) C
 Heat Block Temp.: 399(settings : 400) C
 Q1 RF Gain: 5000
 Q1 RF Offset: 5000
 Q3 RF Gain: 5000
 Q3 RF Offset: 5007
 Q1 Post-rod Bias: 5.0 V
 CID CELL Exit Lens: 0.9 V
 Conversion Dynode: +10.00 kV
 Detector: -1.94(-1.94) kV
 Vacuum Pressure(QA): 1.6e+02 Pa
 Vacuum Pressure(QP): 2.3e-03 Pa

Tuning Profile



Scan Range: 2.00 - 553.15 Scan Speed: 30 u/s Base Peak: 221.05 (3263695) Pre m/z: 503.15



m/z(Target)	m/z(Actual)	Difference	Width	Intensity
503.15 > 89.00	89.00	0.00	0.66	2121103
503.15 > 179.05	179.05	0.00	0.74	2267177

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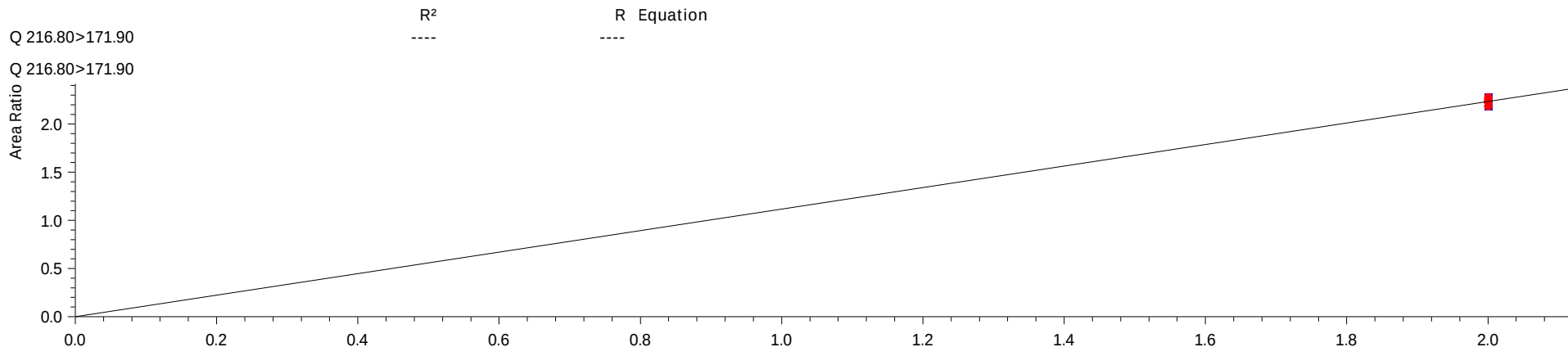
Compound: 13C4-PFBA

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☒	Auto	1308470	598299	10.0000	5.0000	1.093492	9.7844	-2.16	1.117591	1.455853	1.455853
240118_007	1633 ICAL 0.1PPB	☒	Auto	1323938	588848	10.0000	5.0000	1.124176	10.0589	0.59	1.117591	1.455853	1.455853
240118_008	1633 ICAL 0.25PPB	☒	Auto	1289139	579289	10.0000	5.0000	1.112692	9.9562	-0.44	1.117591	1.455853	1.455853
240118_009	1633 ICAL 0.50PPB	☒	Auto	1388027	617199	10.0000	5.0000	1.124456	10.0614	0.61	1.117591	1.455853	1.455853
240118_010	1633 ICAL 1.0PPB	☒	Auto	1369234	602847	10.0000	5.0000	1.135639	10.1615	1.61	1.117591	1.455853	1.455853
240118_011	1633 ICAL 5.0PPB	☒	Auto	1324886	590832	10.0000	5.0000	1.121204	10.0323	0.32	1.117591	1.455853	1.455853
240118_012	1633 ICAL 10.0PPB	☒	Auto	1260062	566334	10.0000	5.0000	1.112472	9.9542	-0.46	1.117591	1.455853	1.455853
240118_013	1633 ICAL 15.0PPB	☒	Auto	1223381	559080	10.0000	5.0000	1.094102	9.7898	-2.10	1.117591	1.455853	1.455853
240118_014	1633 ICAL 20.0PPB	☒	Auto	1258641	551996	10.0000	5.0000	1.140082	10.2013	2.01	1.117591	1.455853	1.455853
240118_016	1633 ICV 1.0PPB		Auto	1258661	566546	10.0000	5.0000	----	9.9394	-0.61	1.117591	1.455853	1.455853
240118_017	1633 FTCA ICV 1.0PPB		Auto	1330303	598500	10.0000	5.0000	----	9.9443	-0.56	1.117591	1.455853	1.455853



Compound: 13C4-PFBA_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

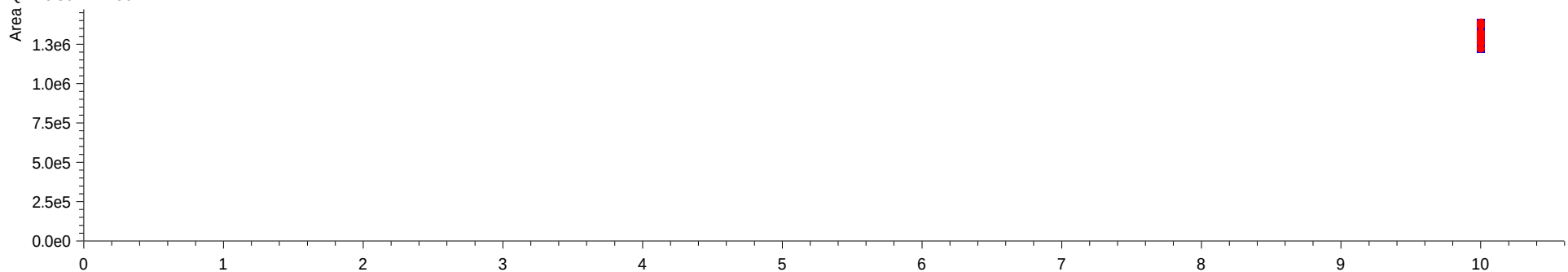
Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 0

Q 216.80>171.90 R² ---- R Equation ---- ----

Q 216.80>171.90

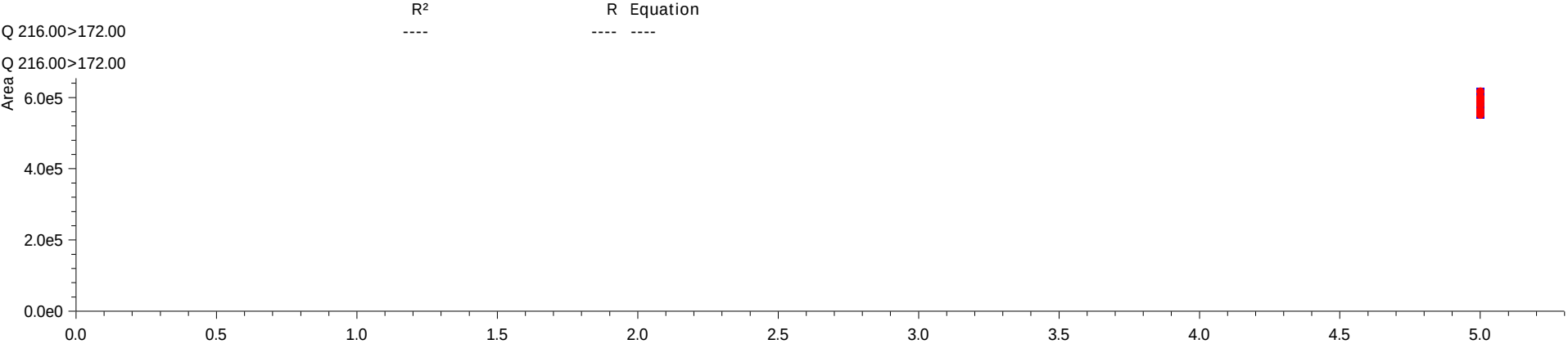


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☐	Auto	1308470	1308470	10.0000	10.0000	1.000000	10.0000	0.00	----	----	----
240118_007	1633 ICAL 0.1PPB	☐	Auto	1323938	1323938	10.0000	10.0000	1.000000	10.0000	0.00	----	----	----
240118_008	1633 ICAL 0.25PPB	☐	Auto	1289139	1289139	10.0000	10.0000	1.000000	10.0000	0.00	----	----	----
240118_009	1633 ICAL 0.50PPB	☐	Auto	1388027	1388027	10.0000	10.0000	1.000000	10.0000	0.00	----	----	----
240118_010	1633 ICAL 1.0PPB	☐	Auto	1369234	1369234	10.0000	10.0000	1.000000	10.0000	0.00	----	----	----
240118_011	1633 ICAL 5.0PPB	☐	Auto	1324886	1324886	10.0000	10.0000	1.000000	10.0000	0.00	----	----	----
240118_012	1633 ICAL 10.0PPB	☐	Auto	1260062	1260062	10.0000	10.0000	1.000000	10.0000	0.00	----	----	----
240118_013	1633 ICAL 15.0PPB	☐	Auto	1223381	1223381	10.0000	10.0000	1.000000	10.0000	0.00	----	----	----
240118_014	1633 ICAL 20.0PPB	☐	Auto	1258641	1258641	10.0000	10.0000	1.000000	10.0000	0.00	----	----	----
240118_016	1633 ICV 1.0PPB		Auto	1258661	1258661	10.0000	10.0000	----	10.0000	0.00	----	----	----
240118_017	1633 FTCA ICV 1.0PPB		Auto	1330303	1330303	10.0000	10.0000	----	10.0000	0.00	----	----	----



Compound: 13C3-PFBA_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 0

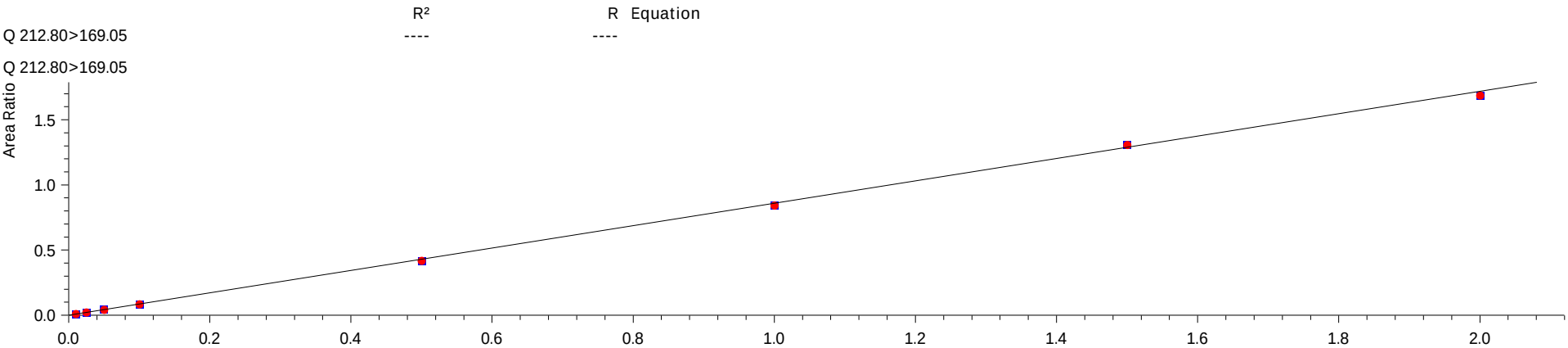


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☐	Auto	598299	598299	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_007	1633 ICAL 0.1PPB	☐	Auto	588848	588848	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_008	1633 ICAL 0.25PPB	☐	Auto	579289	579289	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_009	1633 ICAL 0.50PPB	☐	Auto	617199	617199	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_010	1633 ICAL 1.0PPB	☐	Auto	602847	602847	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_011	1633 ICAL 5.0PPB	☐	Auto	590832	590832	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_012	1633 ICAL 10.0PPB	☐	Auto	566334	566334	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_013	1633 ICAL 15.0PPB	☐	Auto	559080	559080	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_014	1633 ICAL 20.0PPB	☐	Auto	551996	551996	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_016	1633 ICV 1.0PPB		Auto	566546	566546	5.0000	5.0000	----	5.0000	0.00	----	----	----
240118_017	1633 FTCA ICV 1.0PPB		Auto	598500	598500	5.0000	5.0000	----	5.0000	0.00	----	----	----



Compound: PFBA

Curve Fit: Mean RF | Weighting: 1/C | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 8
No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_007	1633 ICAL 0.1PPB	☒	Auto	12114	1323938	0.1000	10.0000	0.915001	0.1065	6.49	0.859199	3.558331	3.558330
240118_008	1633 ICAL 0.25PPB	☒	Auto	28706	1289139	0.2500	10.0000	0.890717	0.2592	3.67	0.859199	3.558331	3.558330
240118_009	1633 ICAL 0.50PPB	☒	Auto	57419	1388027	0.5000	10.0000	0.827346	0.4815	-3.71	0.859199	3.558331	3.558330
240118_010	1633 ICAL 1.0PPB	☒	Auto	116117	1369234	1.0000	10.0000	0.848044	0.9870	-1.30	0.859199	3.558331	3.558330
240118_011	1633 ICAL 5.0PPB	☒	Auto	553236	1324886	5.0000	10.0000	0.835145	4.8600	-2.80	0.859199	3.558331	3.558330
240118_012	1633 ICAL 10.0PPB	☒	Auto	1060864	1260062	10.0000	10.0000	0.841914	9.7988	-2.01	0.859199	3.558331	3.558330
240118_013	1633 ICAL 15.0PPB	☒	Auto	1600400	1223381	15.0000	10.0000	0.872119	15.2256	1.50	0.859199	3.558331	3.558330
240118_014	1633 ICAL 20.0PPB	☒	Auto	2122848	1258641	20.0000	10.0000	0.843310	19.6301	-1.85	0.859199	3.558331	3.558330
240118_016	1633 ICV 1.0PPB		Auto	107094	1258661	1.0000	10.0000	----	0.9903	-0.97	0.859199	3.558331	3.558330
240118_017	1633 FTCA ICV 1.0PPB		ND(W/B)	----	1330303	1.0000	10.0000	----	----	----	0.859199	3.558331	3.558330



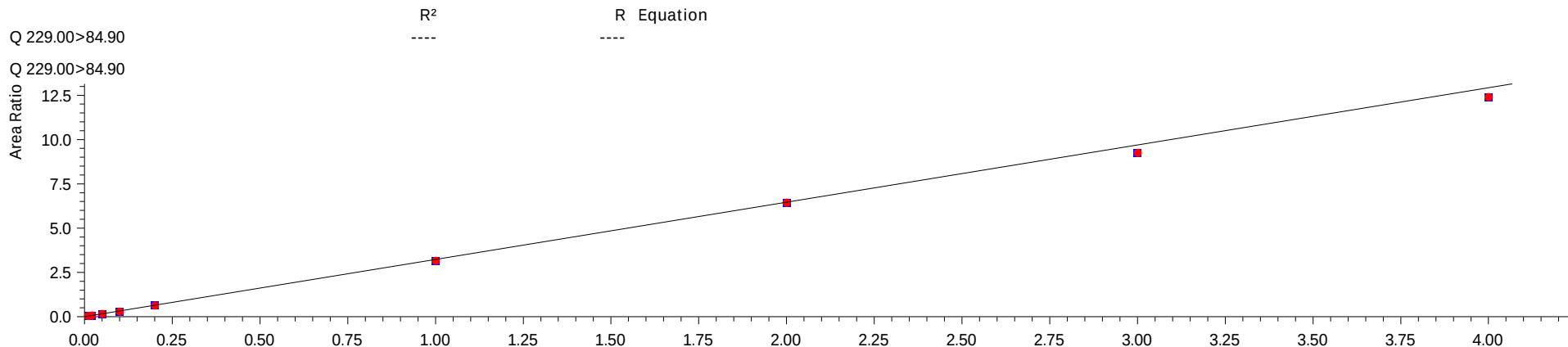
Compound: PFMPA

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☒	Auto	5804	152450	0.0500	5.0000	3.807423	0.0589	17.83	3.231349	7.461067	7.461066
240118_007	1633 ICAL 0.1PPB	☒	Auto	9475	141960	0.1000	5.0000	3.337278	0.1033	3.28	3.231349	7.461067	7.461066
240118_008	1633 ICAL 0.25PPB	☒	Auto	23024	141383	0.2500	5.0000	3.256983	0.2520	0.79	3.231349	7.461067	7.461066
240118_009	1633 ICAL 0.50PPB	☒	Auto	45603	153759	0.5000	5.0000	2.965853	0.4589	-8.22	3.231349	7.461067	7.461066
240118_010	1633 ICAL 1.0PPB	☒	Auto	92865	147694	1.0000	5.0000	3.143824	0.9729	-2.71	3.231349	7.461067	7.461066
240118_011	1633 ICAL 5.0PPB	☒	Auto	437210	138295	5.0000	5.0000	3.161418	4.8918	-2.16	3.231349	7.461067	7.461066
240118_012	1633 ICAL 10.0PPB	☒	Auto	827555	128399	10.0000	5.0000	3.222590	9.9729	-0.27	3.231349	7.461067	7.461066
240118_013	1633 ICAL 15.0PPB	☒	Auto	1224225	132195	15.0000	5.0000	3.086919	14.3296	-4.47	3.231349	7.461067	7.461066
240118_014	1633 ICAL 20.0PPB	☒	Auto	1617890	130481	20.0000	5.0000	3.099851	19.1861	-4.07	3.231349	7.461067	7.461066
240118_016	1633 ICV 1.0PPB		Auto	85041	131451	1.0000	5.0000	----	1.0010	0.10	3.231349	7.461067	7.461066
240118_017	1633 FTCA ICV 1.0PPB		ND(W/B)	----	145319	1.0000	5.0000	----	----	----	3.231349	7.461067	7.461066



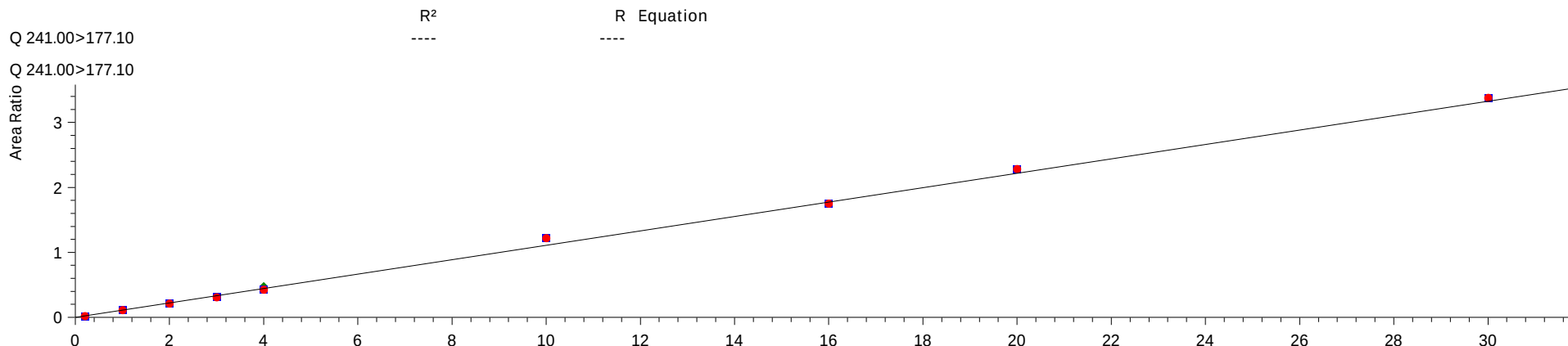
Compound: 3_3 FTCA

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc.Ratio
240118_006	1633 ICAL 0.05PPB	☒	Auto	3313	152450	1.0000	5.0000	0.108675	0.9802	-1.98	0.110874	4.948042	4.948042
240118_007	1633 ICAL 0.1PPB	☒	Auto	16133	141960	5.0000	5.0000	0.113641	5.1248	2.50	0.110874	4.948042	4.948042
240118_008	1633 ICAL 0.25PPB	☒	Auto	30420	141383	10.0000	5.0000	0.107579	9.7028	-2.97	0.110874	4.948042	4.948042
240118_009	1633 ICAL 0.50PPB	☒	Auto	47512	153759	15.0000	5.0000	0.103001	13.9348	-7.10	0.110874	4.948042	4.948042
240118_010	1633 ICAL 1.0PPB	☒	Auto	62978	147694	20.0000	5.0000	0.106602	19.2293	-3.85	0.110874	4.948042	4.948042
240118_011	1633 ICAL 5.0PPB	☒	Auto	168591	138295	50.0000	5.0000	0.121907	54.9751	9.95	0.110874	4.948042	4.948042
240118_012	1633 ICAL 10.0PPB	☒	Auto	225272	128399	80.0000	5.0000	0.109654	79.1196	-1.10	0.110874	4.948042	4.948042
240118_013	1633 ICAL 15.0PPB	☒	Auto	301852	132195	100.0000	5.0000	0.114169	102.9716	2.97	0.110874	4.948042	4.948042
240118_014	1633 ICAL 20.0PPB	☒	Auto	440929	130481	150.0000	5.0000	0.112642	152.3911	1.59	0.110874	4.948042	4.948042
240118_016	1633 ICV 1.0PPB		ND(W/B)	----	131451	20.0000	5.0000	----	----	----	0.110874	4.948042	4.948042
240118_017	1633 FTCA ICV 1.0PPB		M	70176	145319	20.0000	5.0000	----	21.7775	8.89	0.110874	4.948042	4.948042



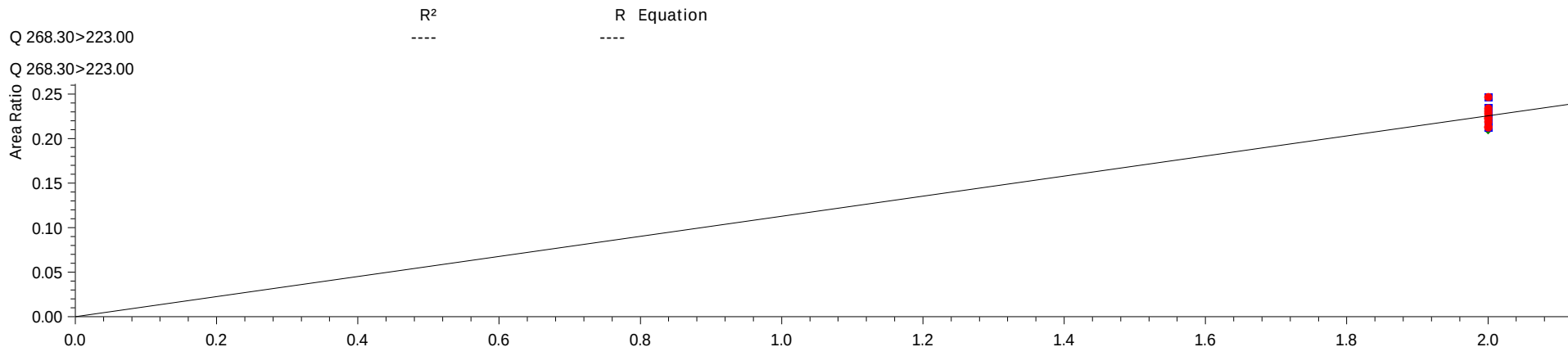
Compound: 13C5-PFPeA

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc.Ratio
240118_006	1633 ICAL 0.05PPB	☒	Auto	152450	618072	5.0000	2.5000	0.123327	5.4644	9.29	0.112846	4.770772	4.770772
240118_007	1633 ICAL 0.1PPB	☒	Auto	141960	664999	5.0000	2.5000	0.106737	4.7293	-5.41	0.112846	4.770772	4.770772
240118_008	1633 ICAL 0.25PPB	☒	Auto	141383	645671	5.0000	2.5000	0.109485	4.8511	-2.98	0.112846	4.770772	4.770772
240118_009	1633 ICAL 0.50PPB	☒	Auto	153759	656444	5.0000	2.5000	0.117115	5.1891	3.78	0.112846	4.770772	4.770772
240118_010	1633 ICAL 1.0PPB	☒	Auto	147694	663775	5.0000	2.5000	0.111253	4.9294	-1.41	0.112846	4.770772	4.770772
240118_011	1633 ICAL 5.0PPB	☒	Auto	138295	618889	5.0000	2.5000	0.111729	4.9505	-0.99	0.112846	4.770772	4.770772
240118_012	1633 ICAL 10.0PPB	☒	Auto	128399	603861	5.0000	2.5000	0.106315	4.7106	-5.79	0.112846	4.770772	4.770772
240118_013	1633 ICAL 15.0PPB	☒	Auto	132195	578981	5.0000	2.5000	0.114162	5.0583	1.17	0.112846	4.770772	4.770772
240118_014	1633 ICAL 20.0PPB	☒	Auto	130481	564879	5.0000	2.5000	0.115495	5.1173	2.35	0.112846	4.770772	4.770772
240118_016	1633 ICV 1.0PPB		Auto	131451	628403	5.0000	2.5000	----	4.6342	-7.32	0.112846	4.770772	4.770772
240118_017	1633 FTCA ICV 1.0PPB		Auto	145319	626058	5.0000	2.5000	----	5.1423	2.85	0.112846	4.770772	4.770772



Calibration
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Compound: 13C5-PFPeA_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

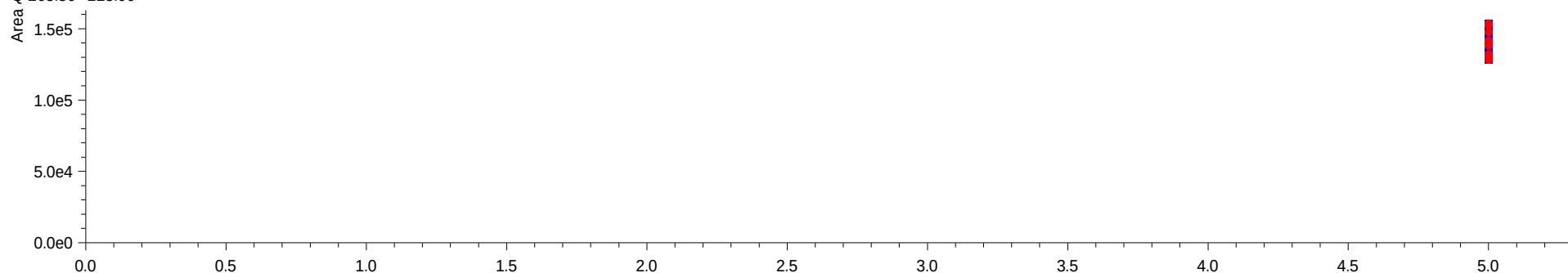
No. of Calibration Points: 9

No. of Control Points: 0

	R ²	R	Equation
Q 268.30>223.00	----	----	----

Q 268.30>223.00

Q 268.30>223.00



												Conc. (ng/mL)		
Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)	
240118_006	1633 ICAL 0.05PPB		Auto	152450	152450	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----	
240118_007	1633 ICAL 0.1PPB		Auto	141960	141960	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----	
240118_008	1633 ICAL 0.25PPB		Auto	141383	141383	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----	
240118_009	1633 ICAL 0.50PPB		Auto	153759	153759	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----	
240118_010	1633 ICAL 1.0PPB		Auto	147694	147694	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----	
240118_011	1633 ICAL 5.0PPB		Auto	138295	138295	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----	
240118_012	1633 ICAL 10.0PPB		Auto	128399	128399	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----	
240118_013	1633 ICAL 15.0PPB		Auto	132195	132195	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----	
240118_014	1633 ICAL 20.0PPB		Auto	130481	130481	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----	
240118_016	1633 ICV 1.0PPB		Auto	131451	131451	5.0000	5.0000	----	5.0000	0.00	----	----	----	
240118_017	1633 FTCA ICV 1.0PPB		Auto	145319	145319	5.0000	5.0000	----	5.0000	0.00	----	----	----	



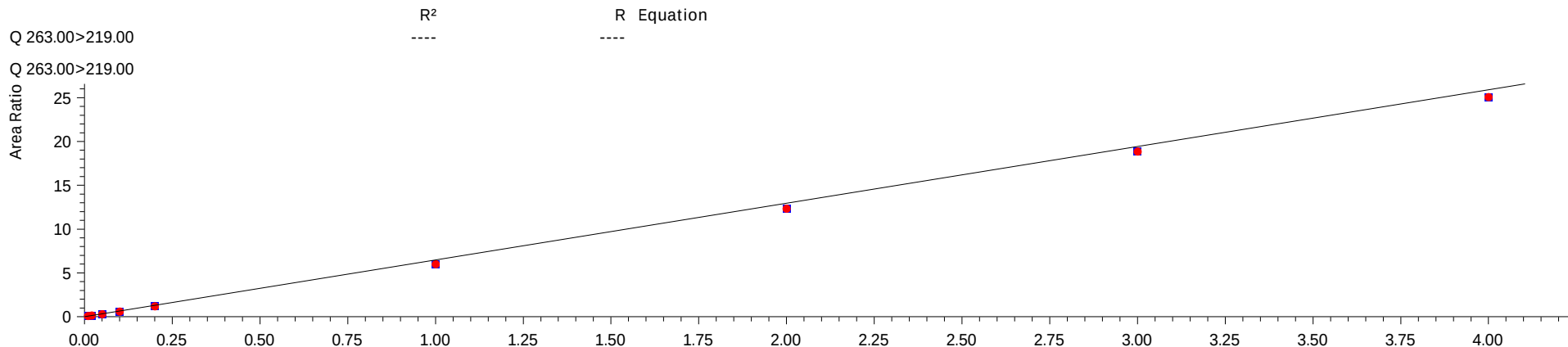
Compound: PFPeA

Curve Fit: Mean RF | Weighting: 1/C | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☒	M	12644	152450	0.0500	5.0000	8.293917	0.0640	28.07	6.476134	11.644891	11.644890
240118_007	1633 ICAL 0.1PPB	☒	Auto	20016	141960	0.1000	5.0000	7.049858	0.1089	8.86	6.476134	11.644891	11.644890
240118_008	1633 ICAL 0.25PPB	☒	Auto	43873	141383	0.2500	5.0000	6.206226	0.2396	-4.17	6.476134	11.644891	11.644890
240118_009	1633 ICAL 0.50PPB	☒	Auto	92188	153759	0.5000	5.0000	5.995604	0.4629	-7.42	6.476134	11.644891	11.644890
240118_010	1633 ICAL 1.0PPB	☒	Auto	177078	147694	1.0000	5.0000	5.994754	0.9257	-7.43	6.476134	11.644891	11.644890
240118_011	1633 ICAL 5.0PPB	☒	Auto	832768	138295	5.0000	5.0000	6.021655	4.6491	-7.02	6.476134	11.644891	11.644890
240118_012	1633 ICAL 10.0PPB	☒	Auto	1583589	128399	10.0000	5.0000	6.166669	9.5221	-4.78	6.476134	11.644891	11.644890
240118_013	1633 ICAL 15.0PPB	☒	Auto	2493787	132195	15.0000	5.0000	6.288158	14.5646	-2.90	6.476134	11.644891	11.644890
240118_014	1633 ICAL 20.0PPB	☒	Auto	3271617	130481	20.0000	5.0000	6.268367	19.3584	-3.21	6.476134	11.644891	11.644890
240118_016	1633 ICV 1.0PPB		Auto	164731	131451	1.0000	5.0000	----	0.9675	-3.25	6.476134	11.644891	11.644890
240118_017	1633 FTCA ICV 1.0PPB		ND(W/B)	----	145319	1.0000	5.0000	----	----	----	6.476134	11.644891	11.644890



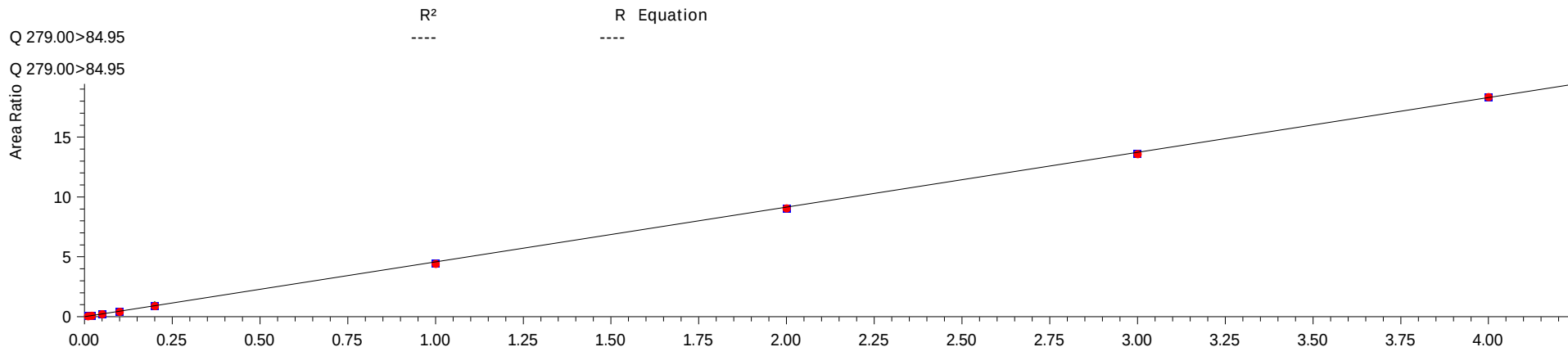
Compound: PFMBA

Curve Fit: Mean RF | Weighting: 1/C | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☒	Auto	7994	152450	0.0500	5.0000	5.243912	0.0573	14.55	4.577828	6.076337	6.076336
240118_007	1633 ICAL 0.1PPB	☒	Auto	13370	141960	0.1000	5.0000	4.708974	0.1029	2.86	4.577828	6.076337	6.076336
240118_008	1633 ICAL 0.25PPB	☒	Auto	31409	141383	0.2500	5.0000	4.443159	0.2426	-2.94	4.577828	6.076337	6.076336
240118_009	1633 ICAL 0.50PPB	☒	Auto	65533	153759	0.5000	5.0000	4.262043	0.4655	-6.90	4.577828	6.076337	6.076336
240118_010	1633 ICAL 1.0PPB	☒	Auto	132663	147694	1.0000	5.0000	4.491135	0.9811	-1.89	4.577828	6.076337	6.076336
240118_011	1633 ICAL 5.0PPB	☒	Auto	610219	138295	5.0000	5.0000	4.412430	4.8193	-3.61	4.577828	6.076337	6.076336
240118_012	1633 ICAL 10.0PPB	☒	Auto	1162269	128399	10.0000	5.0000	4.526004	9.8868	-1.13	4.577828	6.076337	6.076336
240118_013	1633 ICAL 15.0PPB	☒	Auto	1795086	132195	15.0000	5.0000	4.526364	14.8314	-1.12	4.577828	6.076337	6.076336
240118_014	1633 ICAL 20.0PPB	☒	Auto	2393773	130481	20.0000	5.0000	4.586431	20.0376	0.19	4.577828	6.076337	6.076336
240118_016	1633 ICV 1.0PPB		Auto	130341	131451	1.0000	5.0000	----	1.0830	8.30	4.577828	6.076337	6.076336
240118_017	1633 FTCA ICV 1.0PPB		ND(W/B)	----	145319	1.0000	5.0000	----	----	----	4.577828	6.076337	6.076336



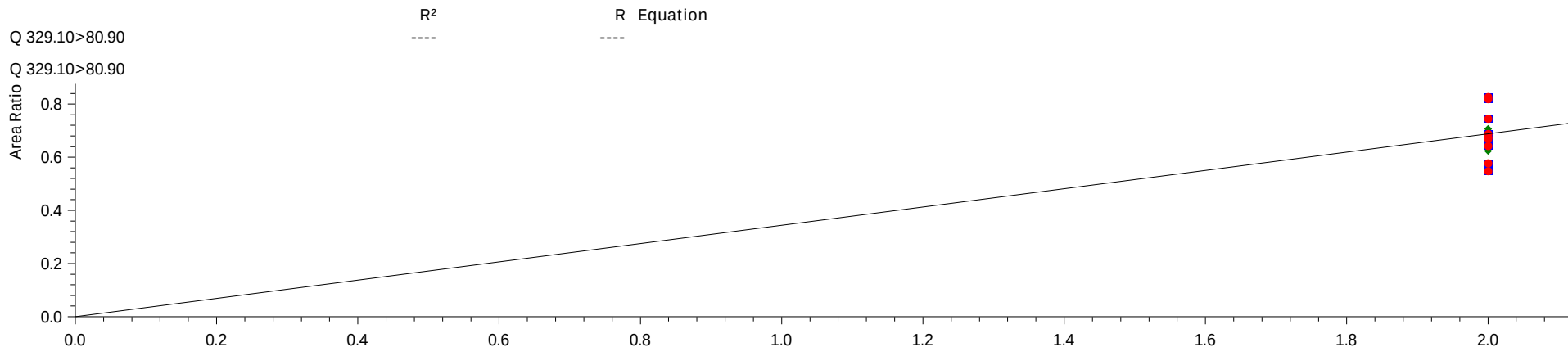
Compound: 13C2-4_2 FTS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2

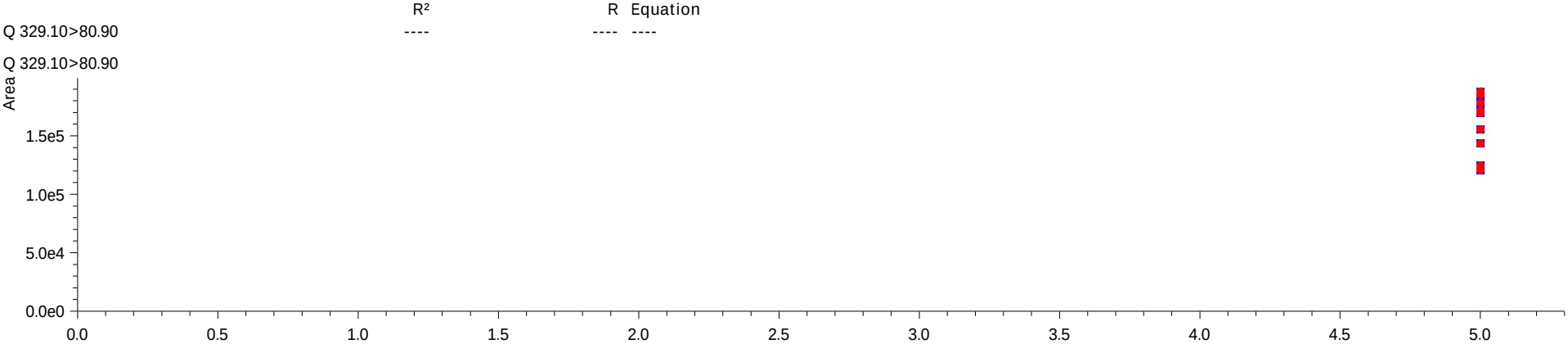


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☒	Auto	188057	229705	5.0000	2.5000	0.409345	5.9492	18.98	0.344033	13.968932	13.968932
240118_007	1633 ICAL 0.1PPB	☒	Auto	185513	224476	5.0000	2.5000	0.413215	6.0055	20.11	0.344033	13.968932	13.968932
240118_008	1633 ICAL 0.25PPB	☒	Auto	178483	239451	5.0000	2.5000	0.372692	5.4165	8.33	0.344033	13.968932	13.968932
240118_009	1633 ICAL 0.50PPB	☒	Auto	169678	251143	5.0000	2.5000	0.337813	4.9096	-1.81	0.344033	13.968932	13.968932
240118_010	1633 ICAL 1.0PPB	☒	Auto	171979	249998	5.0000	2.5000	0.343960	4.9989	-0.02	0.344033	13.968932	13.968932
240118_011	1633 ICAL 5.0PPB	☒	Auto	155760	232307	5.0000	2.5000	0.335247	4.8723	-2.55	0.344033	13.968932	13.968932
240118_012	1633 ICAL 10.0PPB	☒	Auto	143510	223258	5.0000	2.5000	0.321399	4.6710	-6.58	0.344033	13.968932	13.968932
240118_013	1633 ICAL 15.0PPB	☒	Auto	120797	220445	5.0000	2.5000	0.273984	3.9819	-20.36	0.344033	13.968932	13.968932
240118_014	1633 ICAL 20.0PPB	☒	Auto	124744	216087	5.0000	2.5000	0.288642	4.1950	-16.10	0.344033	13.968932	13.968932
240118_016	1633 ICV 1.0PPB		Auto	142829	202223	5.0000	2.5000	----	5.1325	2.65	0.344033	13.968932	13.968932
240118_017	1633 FTCA ICV 1.0PPB		Auto	145969	234067	5.0000	2.5000	----	4.5317	-9.37	0.344033	13.968932	13.968932



Compound: 13C2-4_2 FTS_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 0



												Conc. (ng/mL)	
Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☐	Auto	188057	188057	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_007	1633 ICAL 0.1PPB	☐	Auto	185513	185513	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_008	1633 ICAL 0.25PPB	☐	Auto	178483	178483	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_009	1633 ICAL 0.50PPB	☐	Auto	169678	169678	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_010	1633 ICAL 1.0PPB	☐	Auto	171979	171979	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_011	1633 ICAL 5.0PPB	☐	Auto	155760	155760	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_012	1633 ICAL 10.0PPB	☐	Auto	143510	143510	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_013	1633 ICAL 15.0PPB	☐	Auto	120797	120797	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_014	1633 ICAL 20.0PPB	☐	Auto	124744	124744	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_016	1633 ICV 1.0PPB		Auto	142829	142829	5.0000	5.0000	----	5.0000	0.00	----	----	----
240118_017	1633 FTCA ICV 1.0PPB		Auto	145969	145969	5.0000	5.0000	----	5.0000	0.00	----	----	----



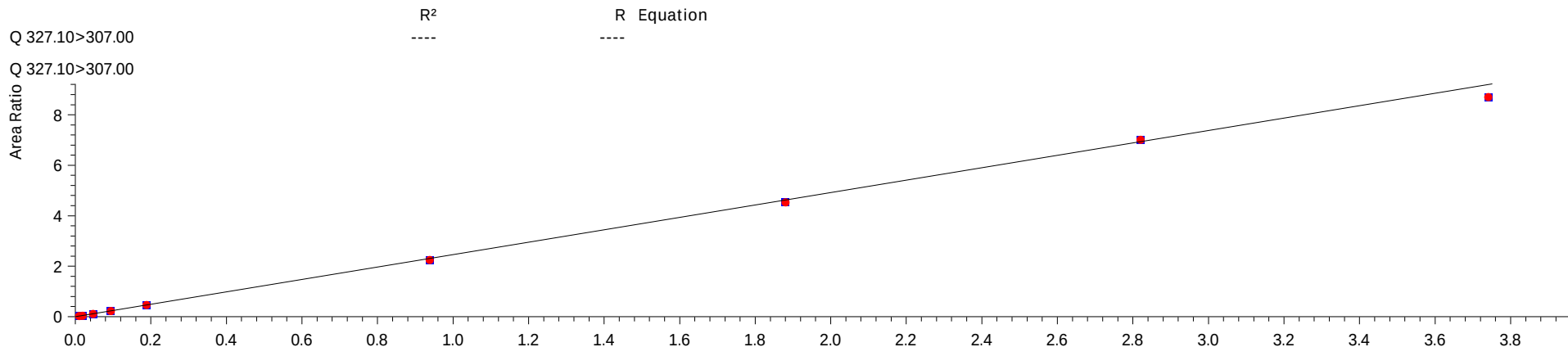
Compound: 4_2 FTS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☒	MI R1 R2	4993	188057	0.0469	5.0000	2.830402	0.0540	15.09	2.459263	6.086419	6.086418
240118_007	1633 ICAL 0.1PPB	☒	Auto	8314	185513	0.0940	5.0000	2.383833	0.0911	-3.07	2.459263	6.086419	6.086418
240118_008	1633 ICAL 0.25PPB	☒	Auto	19625	178483	0.2340	5.0000	2.349511	0.2236	-4.46	2.459263	6.086419	6.086418
240118_009	1633 ICAL 0.50PPB	☒	Auto	39193	169678	0.4690	5.0000	2.462506	0.4696	0.13	2.459263	6.086419	6.086418
240118_010	1633 ICAL 1.0PPB	☒	Auto	79974	171979	0.9400	5.0000	2.473536	0.9455	0.58	2.459263	6.086419	6.086418
240118_011	1633 ICAL 5.0PPB	☒	Auto	351191	155760	4.6900	5.0000	2.403720	4.5841	-2.26	2.459263	6.086419	6.086418
240118_012	1633 ICAL 10.0PPB	☒	Auto	651111	143510	9.4000	5.0000	2.413330	9.2244	-1.87	2.459263	6.086419	6.086418
240118_013	1633 ICAL 15.0PPB	☒	Auto	847984	120797	14.1000	5.0000	2.489336	14.2724	1.22	2.459263	6.086419	6.086418
240118_014	1633 ICAL 20.0PPB	☒	Auto	1085733	124744	18.7000	5.0000	2.327194	17.6958	-5.37	2.459263	6.086419	6.086418
240118_016	1633 ICV 1.0PPB		Auto	63477	142829	0.9400	5.0000	----	0.9036	-3.88	2.459263	6.086419	6.086418
240118_017	1633 FTCA ICV 1.0PPB		ND(W/B)	----	145969	0.9400	5.0000	----	----	----	2.459263	6.086419	6.086418



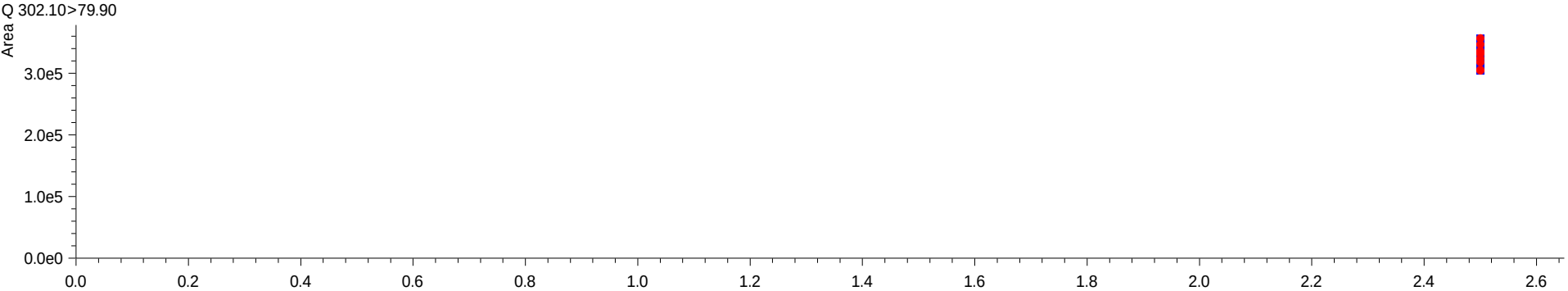
Compound: 13C3-PFBS_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 0

Q 302.10>79.90
Q 302.10>79.90

R²

R Equation



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc. (ng/mL)
													RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☐	Auto	336745	336745	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_007	1633 ICAL 0.1PPB	☐	Auto	333703	333703	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_008	1633 ICAL 0.25PPB	☐	Auto	324049	324049	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_009	1633 ICAL 0.50PPB	☐	Auto	356850	356850	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_010	1633 ICAL 1.0PPB	☐	Auto	347150	347150	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_011	1633 ICAL 5.0PPB	☐	Auto	331653	331653	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_012	1633 ICAL 10.0PPB	☐	Auto	305947	305947	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_013	1633 ICAL 15.0PPB	☐	Auto	304776	304776	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_014	1633 ICAL 20.0PPB	☐	Auto	318216	318216	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_016	1633 ICV 1.0PPB		Auto	312426	312426	2.5000	2.5000	----	2.5000	0.00	----	----	----
240118_017	1633 FTCA ICV 1.0PPB		Auto	344240	344240	2.5000	2.5000	----	2.5000	0.00	----	----	----



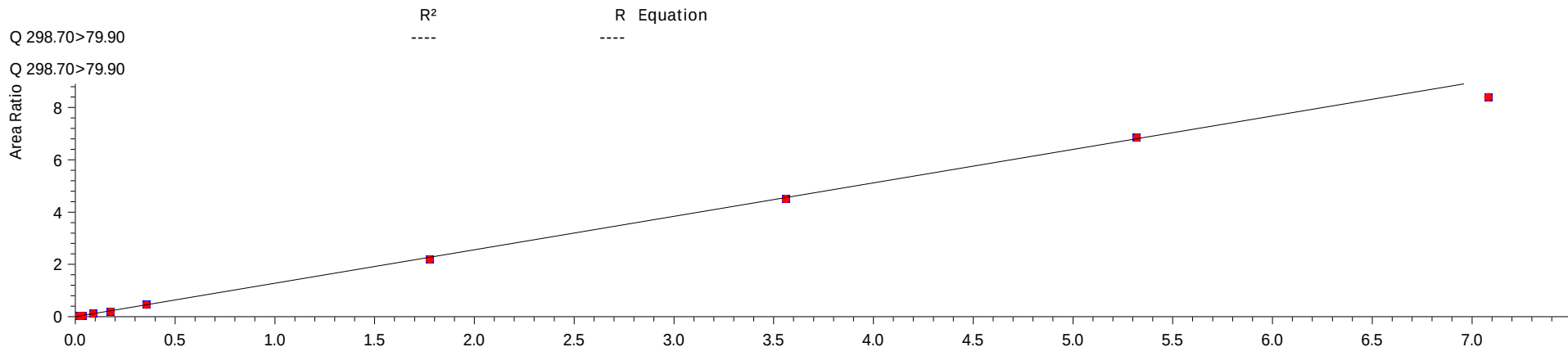
Compound: PFBS

Curve Fit: Mean RF | Weighting: 1/C | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc.Ratio
240118_006	1633 ICAL 0.05PPB	☒	Auto	8756	336745	0.0444	2.5000	1.463989	0.0508	14.40	1.279675	7.473316	7.473314
240118_007	1633 ICAL 0.1PPB	☒	Auto	14873	333703	0.0890	2.5000	1.251985	0.0871	-2.16	1.279675	7.473316	7.473314
240118_008	1633 ICAL 0.25PPB	☒	Auto	39554	324049	0.2210	2.5000	1.380795	0.2385	7.90	1.279675	7.473316	7.473314
240118_009	1633 ICAL 0.50PPB	☒	Auto	72727	356850	0.4440	2.5000	1.147537	0.3982	-10.33	1.279675	7.473316	7.473314
240118_010	1633 ICAL 1.0PPB	☒	Auto	159927	347150	0.8900	2.5000	1.294056	0.9000	1.12	1.279675	7.473316	7.473314
240118_011	1633 ICAL 5.0PPB	☒	Auto	730019	331653	4.4400	2.5000	1.239387	4.3002	-3.15	1.279675	7.473316	7.473314
240118_012	1633 ICAL 10.0PPB	☒	Auto	1378071	305947	8.9000	2.5000	1.265248	8.7997	-1.13	1.279675	7.473316	7.473314
240118_013	1633 ICAL 15.0PPB	☒	Auto	2087380	304776	13.3000	2.5000	1.287386	13.3801	0.60	1.279675	7.473316	7.473314
240118_014	1633 ICAL 20.0PPB	☒	Auto	2673582	318216	17.7000	2.5000	1.186693	16.4139	-7.27	1.279675	7.473316	7.473314
240118_016	1633 ICV 1.0PPB		Auto	138227	312426	0.8900	2.5000	----	0.8643	-2.88	1.279675	7.473316	7.473314
240118_017	1633 FTCA ICV 1.0PPB		ND(W/B)	----	344240	0.8900	2.5000	----	----	----	1.279675	7.473316	7.473314



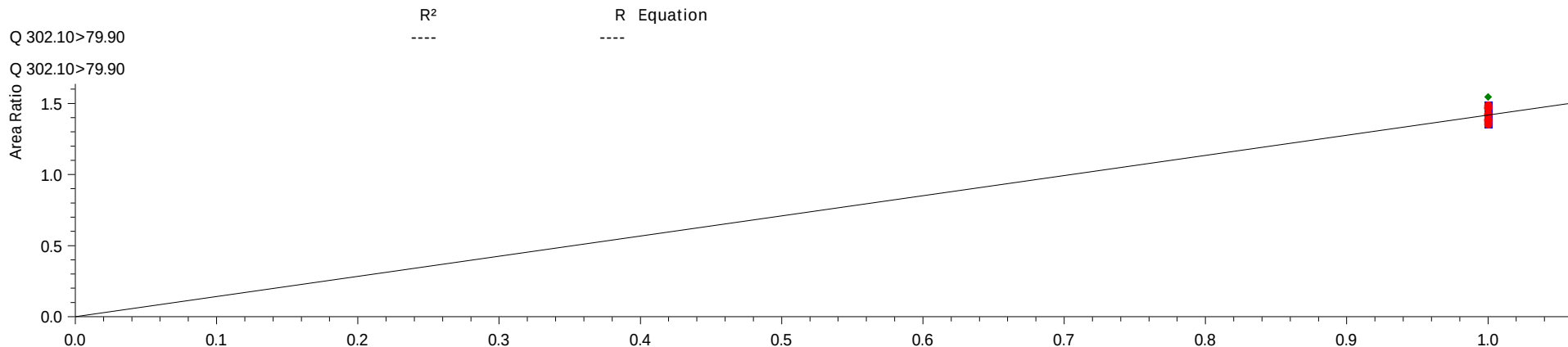
Compound: 13C3-PFBS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☒	Auto	336745	229705	2.5000	2.5000	1.465984	2.5833	3.33	1.418732	3.404430	3.404430
240118_007	1633 ICAL 0.1PPB	☒	Auto	333703	224476	2.5000	2.5000	1.486590	2.6196	4.78	1.418732	3.404430	3.404430
240118_008	1633 ICAL 0.25PPB	☒	Auto	324049	239451	2.5000	2.5000	1.353297	2.3847	-4.61	1.418732	3.404430	3.404430
240118_009	1633 ICAL 0.50PPB	☒	Auto	356850	251143	2.5000	2.5000	1.420906	2.5038	0.15	1.418732	3.404430	3.404430
240118_010	1633 ICAL 1.0PPB	☒	Auto	347150	249998	2.5000	2.5000	1.388612	2.4469	-2.12	1.418732	3.404430	3.404430
240118_011	1633 ICAL 5.0PPB	☒	Auto	331653	232307	2.5000	2.5000	1.427654	2.5157	0.63	1.418732	3.404430	3.404430
240118_012	1633 ICAL 10.0PPB	☒	Auto	305947	223258	2.5000	2.5000	1.370376	2.4148	-3.41	1.418732	3.404430	3.404430
240118_013	1633 ICAL 15.0PPB	☒	Auto	304776	220445	2.5000	2.5000	1.382549	2.4362	-2.55	1.418732	3.404430	3.404430
240118_014	1633 ICAL 20.0PPB	☒	Auto	318216	216087	2.5000	2.5000	1.472627	2.5950	3.80	1.418732	3.404430	3.404430
240118_016	1633 ICV 1.0PPB		Auto	312426	202223	2.5000	2.5000	----	2.7224	8.90	1.418732	3.404430	3.404430
240118_017	1633 FTCA ICV 1.0PPB		Auto	344240	234067	2.5000	2.5000	----	2.5916	3.66	1.418732	3.404430	3.404430



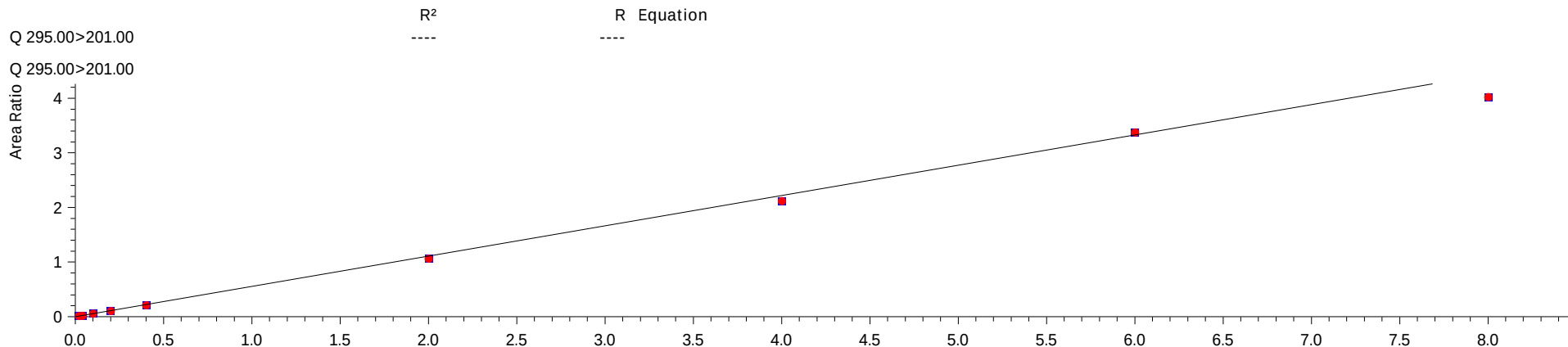
Compound: NFDHA

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc.Ratio
240118_006	1633 ICAL 0.05PPB	☑	Auto	9711	677503	0.0500	2.5000	0.716641	0.0646	29.20	0.554667	11.483686	11.483685
240118_007	1633 ICAL 0.1PPB	☑	Auto	14637	701158	0.1000	2.5000	0.521871	0.0941	-5.91	0.554667	11.483686	11.483685
240118_008	1633 ICAL 0.25PPB	☑	Auto	36786	651214	0.2500	2.5000	0.564880	0.2546	1.84	0.554667	11.483686	11.483685
240118_009	1633 ICAL 0.50PPB	☑	Auto	73337	687616	0.5000	2.5000	0.533269	0.4807	-3.86	0.554667	11.483686	11.483685
240118_010	1633 ICAL 1.0PPB	☑	Auto	146253	693968	1.0000	2.5000	0.526872	0.9499	-5.01	0.554667	11.483686	11.483685
240118_011	1633 ICAL 5.0PPB	☑	Auto	707390	663242	5.0000	2.5000	0.533282	4.8072	-3.86	0.554667	11.483686	11.483685
240118_012	1633 ICAL 10.0PPB	☑	Auto	1353187	638007	10.0000	2.5000	0.530240	9.5596	-4.40	0.554667	11.483686	11.483685
240118_013	1633 ICAL 15.0PPB	☑	Auto	1969096	583700	15.0000	2.5000	0.562246	15.2050	1.37	0.554667	11.483686	11.483685
240118_014	1633 ICAL 20.0PPB	☑	Auto	2485749	618096	20.0000	2.5000	0.502703	18.1263	-9.37	0.554667	11.483686	11.483685
240118_016	1633 ICV 1.0PPB		Auto	139473	659266	1.0000	2.5000	----	0.9535	-4.65	0.554667	11.483686	11.483685
240118_017	1633 FTCA ICV 1.0PPB		ND(W/B)	----	661898	1.0000	2.5000	----	----	----	0.554667	11.483686	11.483685



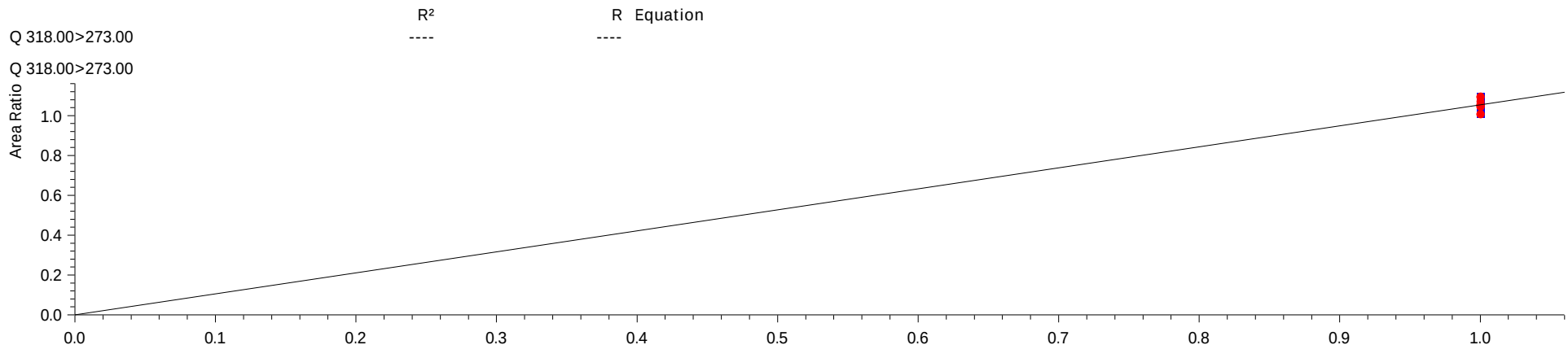
Compound: 13C5-PFHxA

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☒	Auto	677503	618072	2.5000	2.5000	1.096156	2.6009	4.04	1.053629	2.999631	2.999631
240118_007	1633 ICAL 0.1PPB	☒	Auto	701158	664999	2.5000	2.5000	1.054376	2.5018	0.07	1.053629	2.999631	2.999631
240118_008	1633 ICAL 0.25PPB	☒	Auto	651214	645671	2.5000	2.5000	1.008585	2.3931	-4.28	1.053629	2.999631	2.999631
240118_009	1633 ICAL 0.50PPB	☒	Auto	687616	656444	2.5000	2.5000	1.047486	2.4854	-0.58	1.053629	2.999631	2.999631
240118_010	1633 ICAL 1.0PPB	☒	Auto	693968	663775	2.5000	2.5000	1.045487	2.4807	-0.77	1.053629	2.999631	2.999631
240118_011	1633 ICAL 5.0PPB	☒	Auto	663242	618889	2.5000	2.5000	1.071665	2.5428	1.71	1.053629	2.999631	2.999631
240118_012	1633 ICAL 10.0PPB	☒	Auto	638007	603861	2.5000	2.5000	1.056546	2.5069	0.28	1.053629	2.999631	2.999631
240118_013	1633 ICAL 15.0PPB	☒	Auto	583700	578981	2.5000	2.5000	1.008150	2.3921	-4.32	1.053629	2.999631	2.999631
240118_014	1633 ICAL 20.0PPB	☒	Auto	618096	564879	2.5000	2.5000	1.094209	2.5963	3.85	1.053629	2.999631	2.999631
240118_016	1633 ICV 1.0PPB		Auto	659266	628403	2.5000	2.5000	----	2.4893	-0.43	1.053629	2.999631	2.999631
240118_017	1633 FTCA ICV 1.0PPB		Auto	661898	626058	2.5000	2.5000	----	2.5086	0.34	1.053629	2.999631	2.999631



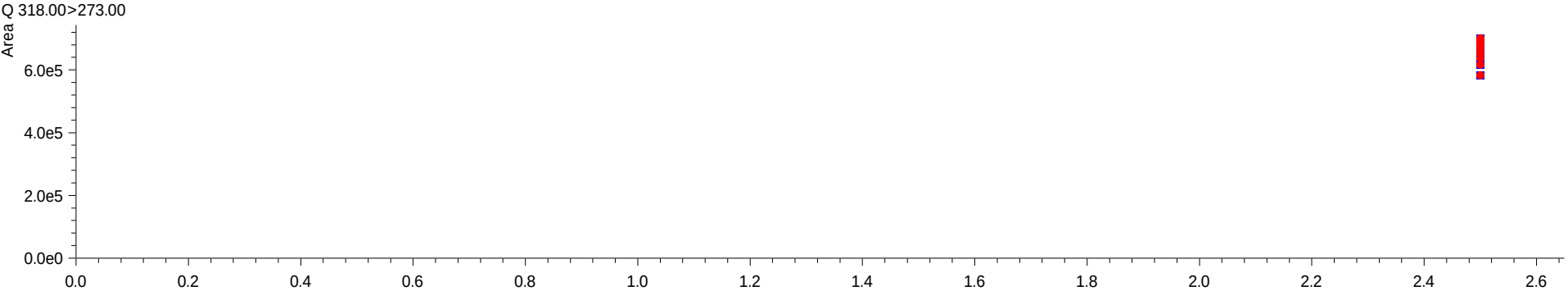
Compound: 13C5-PFHxA_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 0

Q 318.00>273.00

R²

R Equation

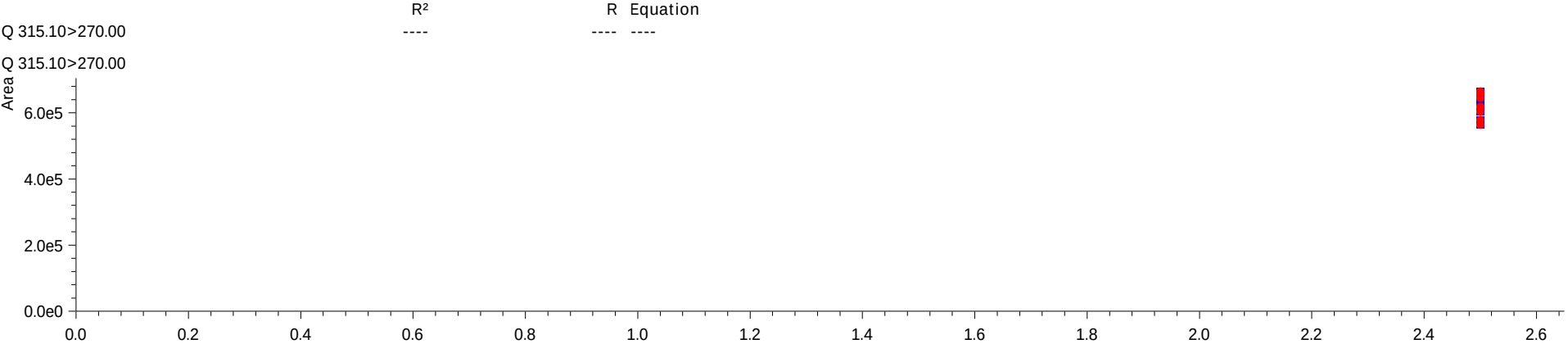


												Conc. (ng/mL)	
Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☐	Auto	677503	677503	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_007	1633 ICAL 0.1PPB	☐	Auto	701158	701158	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_008	1633 ICAL 0.25PPB	☐	Auto	651214	651214	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_009	1633 ICAL 0.50PPB	☐	Auto	687616	687616	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_010	1633 ICAL 1.0PPB	☐	Auto	693968	693968	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_011	1633 ICAL 5.0PPB	☐	Auto	663242	663242	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_012	1633 ICAL 10.0PPB	☐	Auto	638007	638007	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_013	1633 ICAL 15.0PPB	☐	Auto	583700	583700	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_014	1633 ICAL 20.0PPB	☐	Auto	618096	618096	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_016	1633 ICV 1.0PPB		Auto	659266	659266	2.5000	2.5000	----	2.5000	0.00	----	----	----
240118_017	1633 FTCA ICV 1.0PPB		Auto	661898	661898	2.5000	2.5000	----	2.5000	0.00	----	----	----



Compound: 13C2-PFHxA_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 0



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☐	Auto	618072	618072	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_007	1633 ICAL 0.1PPB	☐	Auto	664999	664999	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_008	1633 ICAL 0.25PPB	☐	Auto	645671	645671	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_009	1633 ICAL 0.50PPB	☐	Auto	656444	656444	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_010	1633 ICAL 1.0PPB	☐	Auto	663775	663775	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_011	1633 ICAL 5.0PPB	☐	Auto	618889	618889	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_012	1633 ICAL 10.0PPB	☐	Auto	603861	603861	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_013	1633 ICAL 15.0PPB	☐	Auto	578981	578981	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_014	1633 ICAL 20.0PPB	☐	Auto	564879	564879	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_016	1633 ICV 1.0PPB		Auto	628403	628403	2.5000	2.5000	----	2.5000	0.00	----	----	----
240118_017	1633 FTCA ICV 1.0PPB		Auto	626058	626058	2.5000	2.5000	----	2.5000	0.00	----	----	----



Compound: PFHxA

Curve Fit: Linear | Weighting: 1/C | Zero: Not Forced

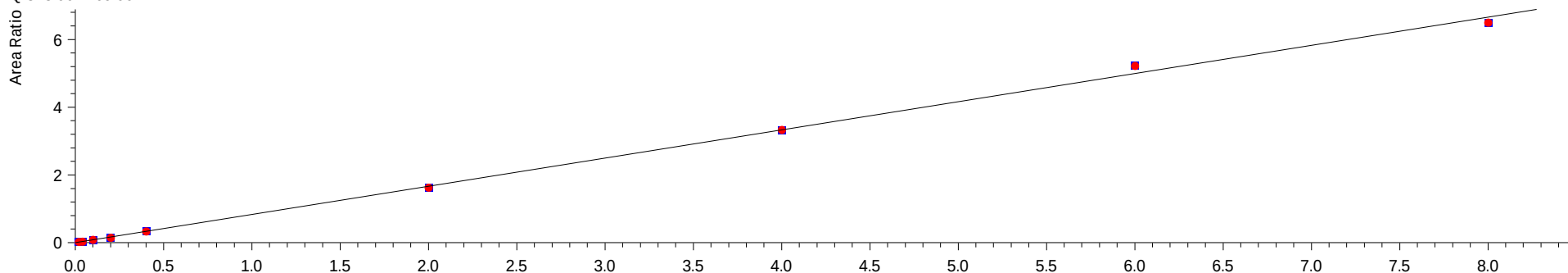
Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2

Q 313.00>269.00
R² 0.9987608
R Equation 0.9993802 $y = 0.8321249x + 0.002790879$

Q 313.00>269.00



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc.Ratio
240118_006	1633 ICAL 0.05PPB	☒	M	16225	677503	0.0500	2.5000	1.197417	0.0636	27.13	0.861132	15.351302	12.326799
240118_007	1633 ICAL 0.1PPB	☒	M	23282	701158	0.1000	2.5000	0.830110	0.0914	-8.63	0.861132	15.351302	12.326799
240118_008	1633 ICAL 0.25PPB	☒	M	54817	651214	0.2500	2.5000	0.841761	0.2445	-2.20	0.861132	15.351302	12.326799
240118_009	1633 ICAL 0.50PPB	☒	M	99630	687616	0.5000	2.5000	0.724456	0.4269	-14.62	0.861132	15.351302	12.326799
240118_010	1633 ICAL 1.0PPB	☒	Auto	229361	693968	1.0000	2.5000	0.826267	0.9846	-1.54	0.861132	15.351302	12.326799
240118_011	1633 ICAL 5.0PPB	☒	Auto	1080271	663242	5.0000	2.5000	0.814387	4.8850	-2.30	0.861132	15.351302	12.326799
240118_012	1633 ICAL 10.0PPB	☒	Auto	2124466	638007	10.0000	2.5000	0.832463	9.9957	-0.04	0.861132	15.351302	12.326799
240118_013	1633 ICAL 15.0PPB	☒	Auto	3050311	583700	15.0000	2.5000	0.870971	15.6919	4.61	0.861132	15.351302	12.326799
240118_014	1633 ICAL 20.0PPB	☒	Auto	4016916	618096	20.0000	2.5000	0.812357	19.5165	-2.42	0.861132	15.351302	12.326799
240118_016	1633 ICV 1.0PPB		Auto	220020	659266	1.0000	2.5000	----	0.9943	-0.57	0.861132	15.351302	12.326799
240118_017	1633 FTCA ICV 1.0PPB		ND(W/B)	----	661898	1.0000	2.5000	----	----	----	0.861132	15.351302	12.326799



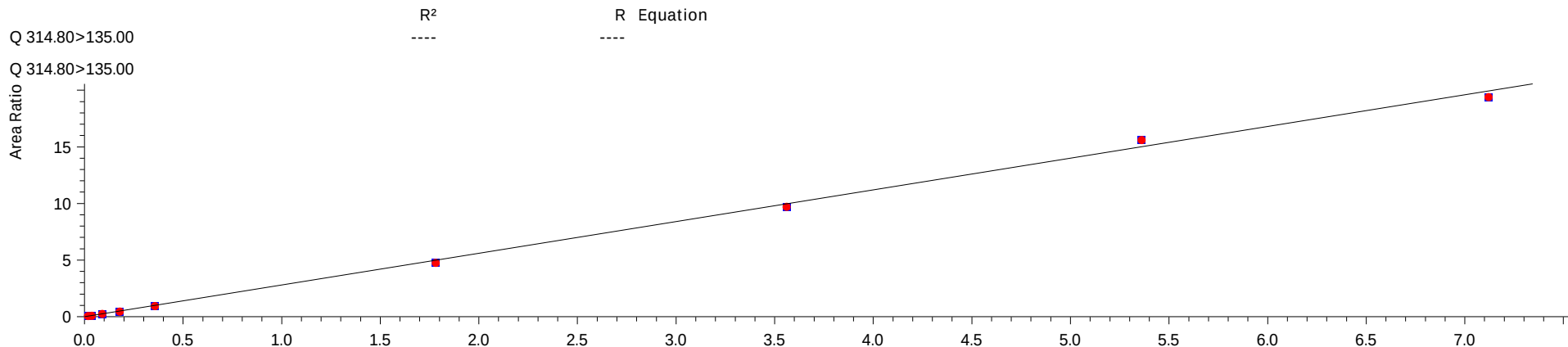
Compound: PFEESA

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc.Ratio
240118_006	1633 ICAL 0.05PPB	☒	MI R1 R2	41229	677503	0.0445	2.5000	3.418807	0.0543	22.09	2.800176	8.866358	8.866356
240118_007	1633 ICAL 0.1PPB	☒	Auto	66265	701158	0.0890	2.5000	2.654712	0.0844	-5.19	2.800176	8.866358	8.866356
240118_008	1633 ICAL 0.25PPB	☒	Auto	162206	651214	0.2230	2.5000	2.792404	0.2224	-0.28	2.800176	8.866358	8.866356
240118_009	1633 ICAL 0.50PPB	☒	Auto	318712	687616	0.4450	2.5000	2.603946	0.4138	-7.01	2.800176	8.866358	8.866356
240118_010	1633 ICAL 1.0PPB	☒	Auto	664025	693968	0.8900	2.5000	2.687789	0.8543	-4.01	2.800176	8.866358	8.866356
240118_011	1633 ICAL 5.0PPB	☒	Auto	3161183	663242	4.4500	2.5000	2.677673	4.2553	-4.37	2.800176	8.866358	8.866356
240118_012	1633 ICAL 10.0PPB	☒	Auto	6200515	638007	8.9000	2.5000	2.729937	8.6768	-2.51	2.800176	8.866358	8.866356
240118_013	1633 ICAL 15.0PPB	☒	Auto	9109371	583700	13.4000	2.5000	2.911617	13.9333	3.98	2.800176	8.866358	8.866356
240118_014	1633 ICAL 20.0PPB	☒	Auto	11990970	618096	17.8000	2.5000	2.724699	17.3202	-2.70	2.800176	8.866358	8.866356
240118_016	1633 ICV 1.0PPB		Auto	613751	659266	0.8900	2.5000	----	0.8312	-6.61	2.800176	8.866358	8.866356
240118_017	1633 FTCA ICV 1.0PPB		ND(W/B)	----	661898	0.8900	2.5000	----	----	----	2.800176	8.866358	8.866356



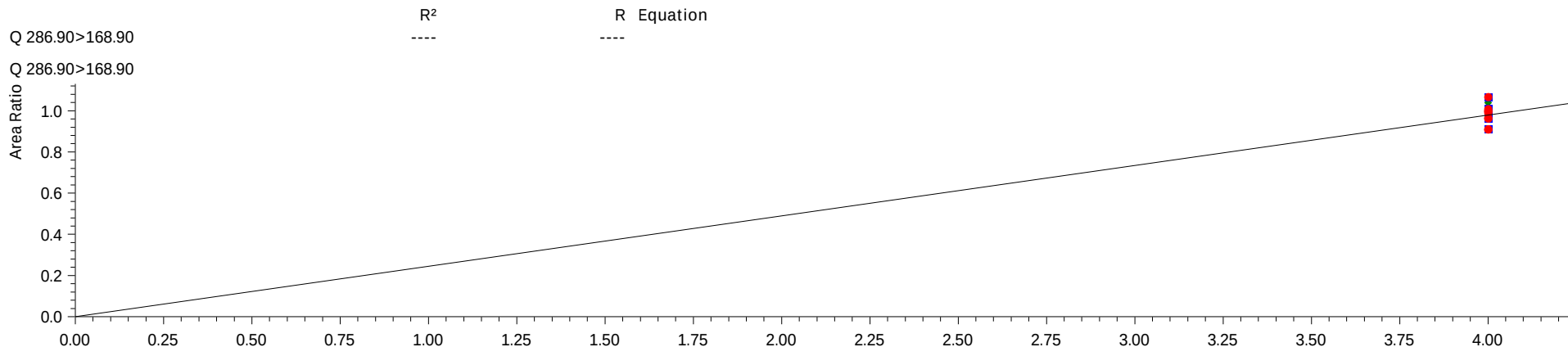
Compound: 13C3-HFPO-DA

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc.Ratio
240118_006	1633 ICAL 0.05PPB	☒	Auto	595312	618072	10.0000	2.5000	0.240794	9.8392	-1.61	0.244728	5.021949	5.021949
240118_007	1633 ICAL 0.1PPB	☒	Auto	604622	664999	10.0000	2.5000	0.227302	9.2879	-7.12	0.244728	5.021949	5.021949
240118_008	1633 ICAL 0.25PPB	☒	Auto	588188	645671	10.0000	2.5000	0.227743	9.3059	-6.94	0.244728	5.021949	5.021949
240118_009	1633 ICAL 0.50PPB	☒	Auto	654919	656444	10.0000	2.5000	0.249419	10.1917	1.92	0.244728	5.021949	5.021949
240118_010	1633 ICAL 1.0PPB	☒	Auto	640534	663775	10.0000	2.5000	0.241247	9.8577	-1.42	0.244728	5.021949	5.021949
240118_011	1633 ICAL 5.0PPB	☒	Auto	618248	618889	10.0000	2.5000	0.249741	10.2048	2.05	0.244728	5.021949	5.021949
240118_012	1633 ICAL 10.0PPB	☒	Auto	598128	603861	10.0000	2.5000	0.247627	10.1184	1.18	0.244728	5.021949	5.021949
240118_013	1633 ICAL 15.0PPB	☒	Auto	583755	578981	10.0000	2.5000	0.252061	10.2996	3.00	0.244728	5.021949	5.021949
240118_014	1633 ICAL 20.0PPB	☒	Auto	602434	564879	10.0000	2.5000	0.266621	10.8946	8.95	0.244728	5.021949	5.021949
240118_016	1633 ICV 1.0PPB		Auto	617025	628403	10.0000	2.5000	----	10.0304	0.30	0.244728	5.021949	5.021949
240118_017	1633 FTCA ICV 1.0PPB		Auto	650567	626058	10.0000	2.5000	----	10.6153	6.15	0.244728	5.021949	5.021949



Compound: 13C3-HFPO-DA_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

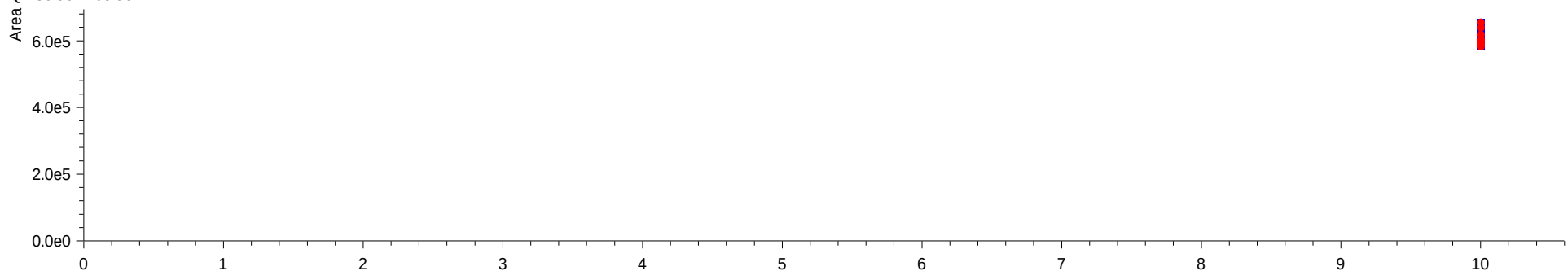
Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 0

Q 286.90>168.90 R² ---- R Equation ---- ----

Q 286.90>168.90



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)	Conc. (ng/mL)
240118_006	1633 ICAL 0.05PPB	☐	Auto	595312	595312	10.0000	10.0000	1.000000	10.0000	0.00	----	----	----	
240118_007	1633 ICAL 0.1PPB	☐	Auto	604622	604622	10.0000	10.0000	1.000000	10.0000	0.00	----	----	----	
240118_008	1633 ICAL 0.25PPB	☐	Auto	588188	588188	10.0000	10.0000	1.000000	10.0000	0.00	----	----	----	
240118_009	1633 ICAL 0.50PPB	☐	Auto	654919	654919	10.0000	10.0000	1.000000	10.0000	0.00	----	----	----	
240118_010	1633 ICAL 1.0PPB	☐	Auto	640534	640534	10.0000	10.0000	1.000000	10.0000	0.00	----	----	----	
240118_011	1633 ICAL 5.0PPB	☐	Auto	618248	618248	10.0000	10.0000	1.000000	10.0000	0.00	----	----	----	
240118_012	1633 ICAL 10.0PPB	☐	Auto	598128	598128	10.0000	10.0000	1.000000	10.0000	0.00	----	----	----	
240118_013	1633 ICAL 15.0PPB	☐	Auto	583755	583755	10.0000	10.0000	1.000000	10.0000	0.00	----	----	----	
240118_014	1633 ICAL 20.0PPB	☐	Auto	602434	602434	10.0000	10.0000	1.000000	10.0000	0.00	----	----	----	
240118_016	1633 ICV 1.0PPB		Auto	617025	617025	10.0000	10.0000	----	10.0000	0.00	----	----	----	
240118_017	1633 FTCA ICV 1.0PPB		Auto	650567	650567	10.0000	10.0000	----	10.0000	0.00	----	----	----	



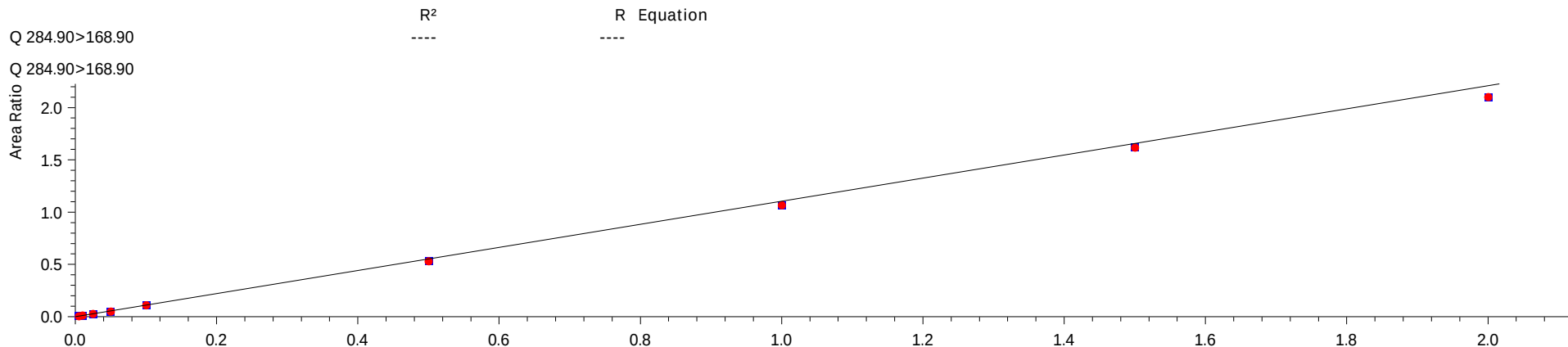
Compound: HFPO-DA

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

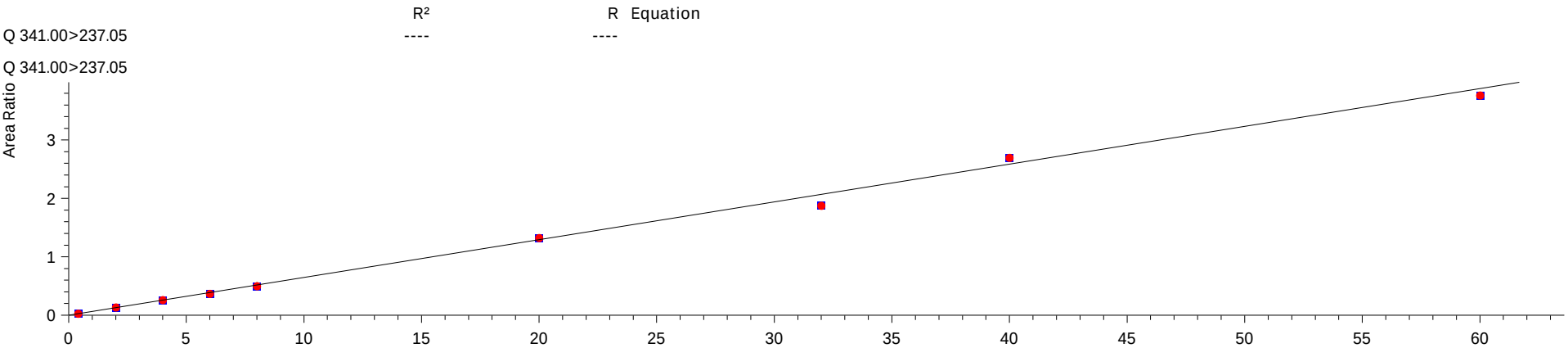
No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☒	M	3643	595312	0.0500	10.0000	1.223791	0.0554	10.81	1.104438	6.722516	6.722515
240118_007	1633 ICAL 0.1PPB	☒	Auto	7258	604622	0.1000	10.0000	1.200355	0.1087	8.68	1.104438	6.722516	6.722515
240118_008	1633 ICAL 0.25PPB	☒	Auto	16861	588188	0.2500	10.0000	1.146621	0.2595	3.82	1.104438	6.722516	6.722515
240118_009	1633 ICAL 0.50PPB	☒	Auto	32544	654919	0.5000	10.0000	0.993843	0.4499	-10.01	1.104438	6.722516	6.722515
240118_010	1633 ICAL 1.0PPB	☒	Auto	71358	640534	1.0000	10.0000	1.114035	1.0087	0.87	1.104438	6.722516	6.722515
240118_011	1633 ICAL 5.0PPB	☒	Auto	328917	618248	5.0000	10.0000	1.064030	4.8171	-3.66	1.104438	6.722516	6.722515
240118_012	1633 ICAL 10.0PPB	☒	Auto	638442	598128	10.0000	10.0000	1.067400	9.6646	-3.35	1.104438	6.722516	6.722515
240118_013	1633 ICAL 15.0PPB	☒	Auto	945275	583755	15.0000	10.0000	1.079534	14.6618	-2.25	1.104438	6.722516	6.722515
240118_014	1633 ICAL 20.0PPB	☒	Auto	1265517	602434	20.0000	10.0000	1.050336	19.0203	-4.90	1.104438	6.722516	6.722515
240118_016	1633 ICV 1.0PPB		Auto	65078	617025	1.0000	10.0000	----	0.9550	-4.50	1.104438	6.722516	6.722515
240118_017	1633 FTCA ICV 1.0PPB		ND(W/B)	----	650567	1.0000	10.0000	----	----	----	1.104438	6.722516	6.722515



Compound: 5_3 FTCA
Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc.Ratio
240118_006	1633 ICAL 0.05PPB	☒	Auto	19665	677503	1.0000	2.5000	0.072566	1.1222	12.22	0.064665	6.240477	6.240477
240118_007	1633 ICAL 0.1PPB	☒	Auto	92840	701158	5.0000	2.5000	0.066205	5.1190	2.38	0.064665	6.240477	6.240477
240118_008	1633 ICAL 0.25PPB	☒	Auto	168370	651214	10.0000	2.5000	0.064637	9.9956	-0.04	0.064665	6.240477	6.240477
240118_009	1633 ICAL 0.50PPB	☒	Auto	254250	687616	15.0000	2.5000	0.061626	14.2950	-4.70	0.064665	6.240477	6.240477
240118_010	1633 ICAL 1.0PPB	☒	Auto	345149	693968	20.0000	2.5000	0.062170	19.2281	-3.86	0.064665	6.240477	6.240477
240118_011	1633 ICAL 5.0PPB	☒	Auto	876794	663242	50.0000	2.5000	0.066099	51.1086	2.22	0.064665	6.240477	6.240477
240118_012	1633 ICAL 10.0PPB	☒	Auto	1196348	638007	80.0000	2.5000	0.058598	72.4939	-9.38	0.064665	6.240477	6.240477
240118_013	1633 ICAL 15.0PPB	☒	Auto	1573075	583700	100.0000	2.5000	0.067375	104.1907	4.19	0.064665	6.240477	6.240477
240118_014	1633 ICAL 20.0PPB	☒	Auto	2325743	618096	150.0000	2.5000	0.062713	145.4705	-3.02	0.064665	6.240477	6.240477
240118_016	1633 ICV 1.0PPB		ND(W/B)	----	659266	20.0000	2.5000	----	----	----	0.064665	6.240477	6.240477
240118_017	1633 FTCA ICV 1.0PPB		Auto	331687	661898	20.0000	2.5000	----	19.3734	-3.13	0.064665	6.240477	6.240477



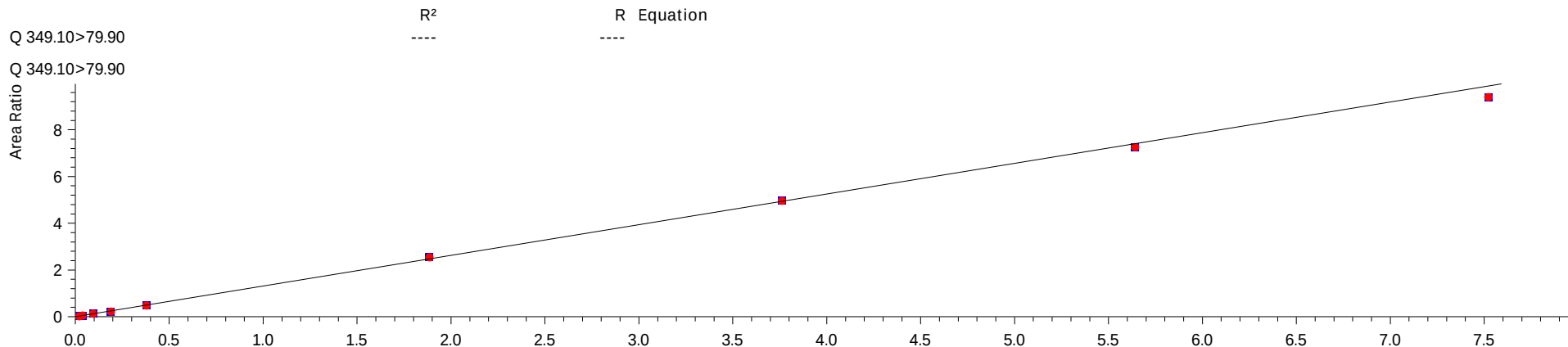
Compound: PFPeS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☒	Auto	7075	270206	0.0471	2.5000	1.389786	0.0499	5.86	1.312851	4.795379	4.795379
240118_007	1633 ICAL 0.1PPB	☒	Auto	12097	235487	0.0940	2.5000	1.366205	0.0978	4.06	1.312851	4.795379	4.795379
240118_008	1633 ICAL 0.25PPB	☒	Auto	32440	251448	0.2350	2.5000	1.372462	0.2457	4.54	1.312851	4.795379	4.795379
240118_009	1633 ICAL 0.50PPB	☒	Auto	61708	272575	0.4710	2.5000	1.201633	0.4311	-8.47	1.312851	4.795379	4.795379
240118_010	1633 ICAL 1.0PPB	☒	Auto	129068	268590	0.9400	2.5000	1.278032	0.9151	-2.65	1.312851	4.795379	4.795379
240118_011	1633 ICAL 5.0PPB	☒	Auto	602720	237331	4.7100	2.5000	1.347968	4.8360	2.67	1.312851	4.795379	4.795379
240118_012	1633 ICAL 10.0PPB	☒	Auto	1144724	230489	9.4000	2.5000	1.320877	9.4575	0.61	1.312851	4.795379	4.795379
240118_013	1633 ICAL 15.0PPB	☒	Auto	1721243	236876	14.1000	2.5000	1.288377	13.8371	-1.86	1.312851	4.795379	4.795379
240118_014	1633 ICAL 20.0PPB	☒	Auto	2222493	236375	18.8000	2.5000	1.250318	17.9045	-4.76	1.312851	4.795379	4.795379
240118_016	1633 ICV 1.0PPB		Auto	119422	231655	0.9400	2.5000	----	0.9817	4.43	1.312851	4.795379	4.795379
240118_017	1633 FTCA ICV 1.0PPB		ND(W/B)	----	260385	0.9400	2.5000	----	----	----	1.312851	4.795379	4.795379



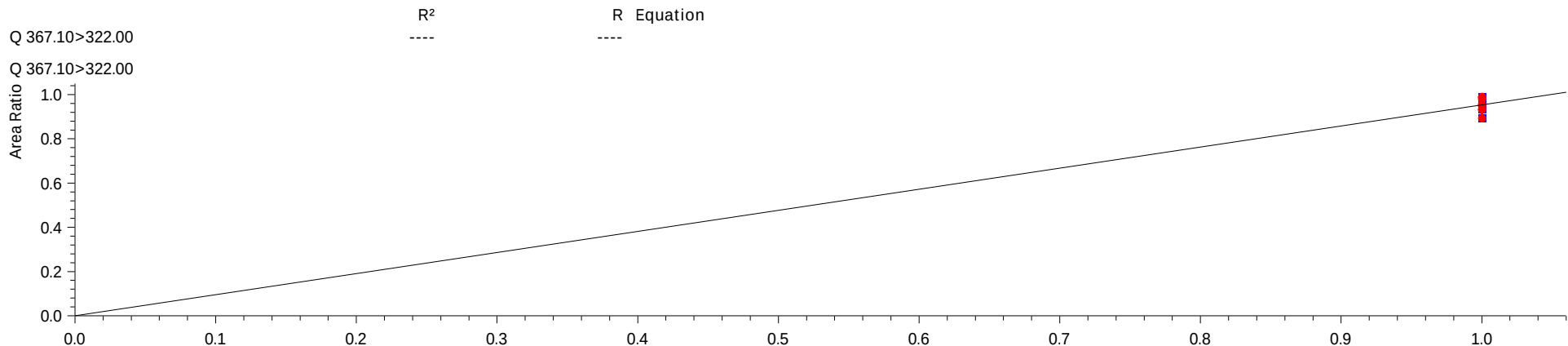
Compound: 13C4-PFHpA

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2

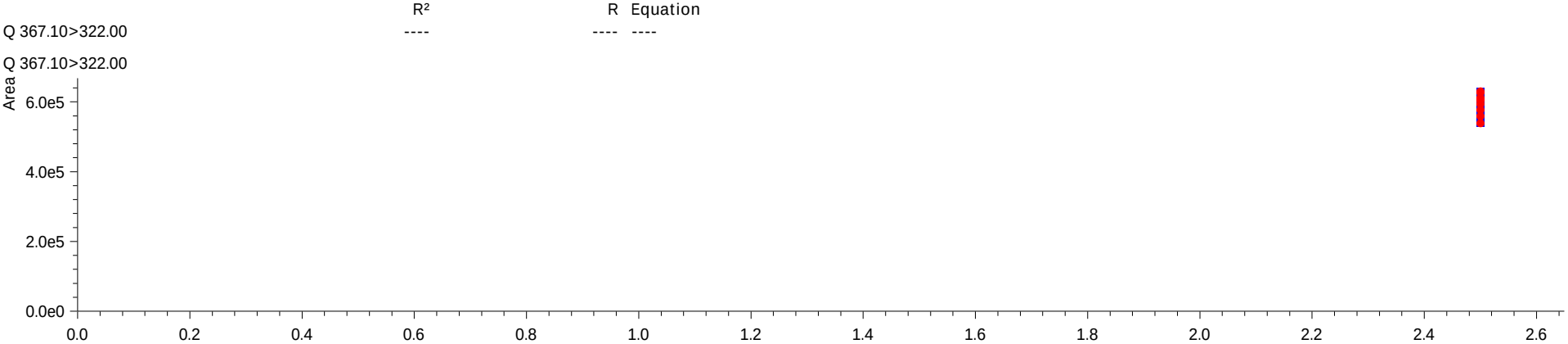


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc.Ratio
240118_006	1633 ICAL 0.05PPB	☒	Auto	607483	618072	2.5000	2.5000	0.982868	2.5762	3.05	0.953799	3.280931	3.280931
240118_007	1633 ICAL 0.1PPB	☒	Auto	594464	664999	2.5000	2.5000	0.893933	2.3431	-6.28	0.953799	3.280931	3.280931
240118_008	1633 ICAL 0.25PPB	☒	Auto	603695	645671	2.5000	2.5000	0.934987	2.4507	-1.97	0.953799	3.280931	3.280931
240118_009	1633 ICAL 0.50PPB	☒	Auto	626586	656444	2.5000	2.5000	0.954516	2.5019	0.08	0.953799	3.280931	3.280931
240118_010	1633 ICAL 1.0PPB	☒	Auto	630102	663775	2.5000	2.5000	0.949271	2.4881	-0.47	0.953799	3.280931	3.280931
240118_011	1633 ICAL 5.0PPB	☒	Auto	612010	618889	2.5000	2.5000	0.988884	2.5920	3.68	0.953799	3.280931	3.280931
240118_012	1633 ICAL 10.0PPB	☒	Auto	578001	603861	2.5000	2.5000	0.957177	2.5089	0.35	0.953799	3.280931	3.280931
240118_013	1633 ICAL 15.0PPB	☒	Auto	539799	578981	2.5000	2.5000	0.932326	2.4437	-2.25	0.953799	3.280931	3.280931
240118_014	1633 ICAL 20.0PPB	☒	Auto	559359	564879	2.5000	2.5000	0.990227	2.5955	3.82	0.953799	3.280931	3.280931
240118_016	1633 ICV 1.0PPB		Auto	580798	628403	2.5000	2.5000	----	2.4225	-3.10	0.953799	3.280931	3.280931
240118_017	1633 FTCA ICV 1.0PPB		Auto	611403	626058	2.5000	2.5000	----	2.5597	2.39	0.953799	3.280931	3.280931



Compound: 13C4-PFHpA_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 0



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☐	Auto	607483	607483	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_007	1633 ICAL 0.1PPB	☐	Auto	594464	594464	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_008	1633 ICAL 0.25PPB	☐	Auto	603695	603695	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_009	1633 ICAL 0.50PPB	☐	Auto	626586	626586	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_010	1633 ICAL 1.0PPB	☐	Auto	630102	630102	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_011	1633 ICAL 5.0PPB	☐	Auto	612010	612010	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_012	1633 ICAL 10.0PPB	☐	Auto	578001	578001	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_013	1633 ICAL 15.0PPB	☐	Auto	539799	539799	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_014	1633 ICAL 20.0PPB	☐	Auto	559359	559359	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_016	1633 ICV 1.0PPB		Auto	580798	580798	2.5000	2.5000	----	2.5000	0.00	----	----	----
240118_017	1633 FTCA ICV 1.0PPB		Auto	611403	611403	2.5000	2.5000	----	2.5000	0.00	----	----	----



Compound: PFHpA

Curve Fit: Linear | Weighting: 1/C | Zero: Not Forced

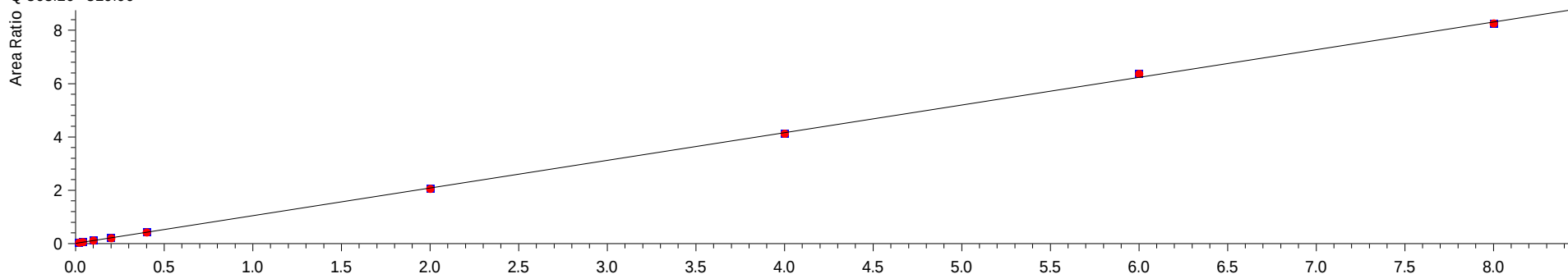
Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2

Q 363.10>319.00 R^2 0.9997418 R Equation 0.9998709 $y = 1.036815x + 0.01441567$

Q 363.10>319.00



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc.Ratio
240118_006	1633 ICAL 0.05PPB	☒	Auto	22449	607483	0.0500	2.5000	1.847681	0.0543	8.69	1.186644	23.344835	4.572759
240118_007	1633 ICAL 0.1PPB	☒	M	33505	594464	0.1000	2.5000	1.409028	0.1011	1.14	1.186644	23.344835	4.572759
240118_008	1633 ICAL 0.25PPB	☒	Auto	70720	603695	0.2500	2.5000	1.171449	0.2477	-0.92	1.186644	23.344835	4.572759
240118_009	1633 ICAL 0.50PPB	☒	Auto	128808	626586	0.5000	2.5000	1.027858	0.4609	-7.82	1.186644	23.344835	4.572759
240118_010	1633 ICAL 1.0PPB	☒	Auto	269319	630102	1.0000	2.5000	1.068553	0.9959	-0.41	1.186644	23.344835	4.572759
240118_011	1633 ICAL 5.0PPB	☒	Auto	1261564	612010	5.0000	2.5000	1.030673	4.9356	-1.29	1.186644	23.344835	4.572759
240118_012	1633 ICAL 10.0PPB	☒	Auto	2383855	578001	10.0000	2.5000	1.031076	9.9099	-0.90	1.186644	23.344835	4.572759
240118_013	1633 ICAL 15.0PPB	☒	Auto	3437882	539799	15.0000	2.5000	1.061469	15.3219	2.15	1.186644	23.344835	4.572759
240118_014	1633 ICAL 20.0PPB	☒	Auto	4618120	559359	20.0000	2.5000	1.032012	19.8726	-0.64	1.186644	23.344835	4.572759
240118_016	1633 ICV 1.0PPB		Auto	243549	580798	1.0000	2.5000	----	0.9764	-2.36	1.186644	23.344835	4.572759
240118_017	1633 FTCA ICV 1.0PPB		ND(W/B)	----	611403	1.0000	2.5000	----	----	----	1.186644	23.344835	4.572759



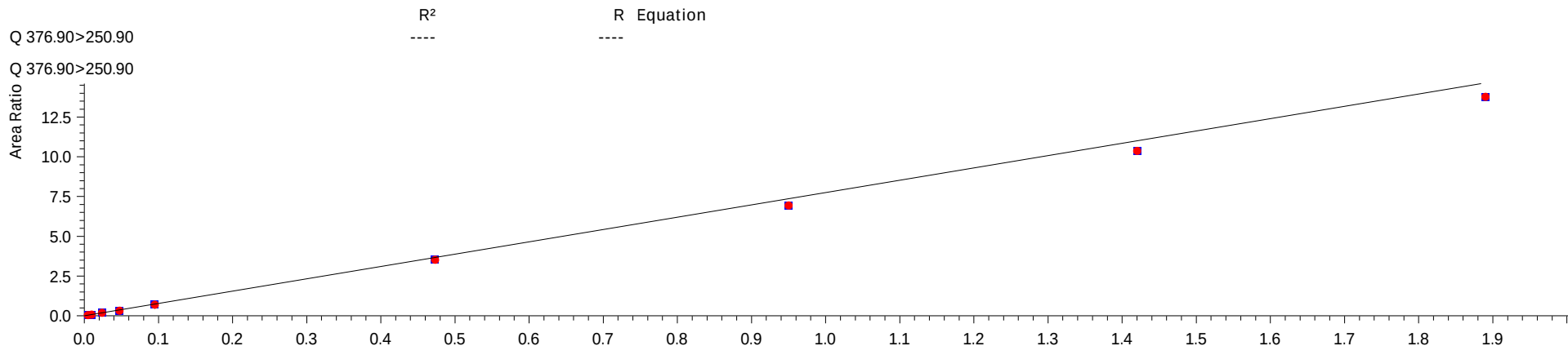
Compound: DONA

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2

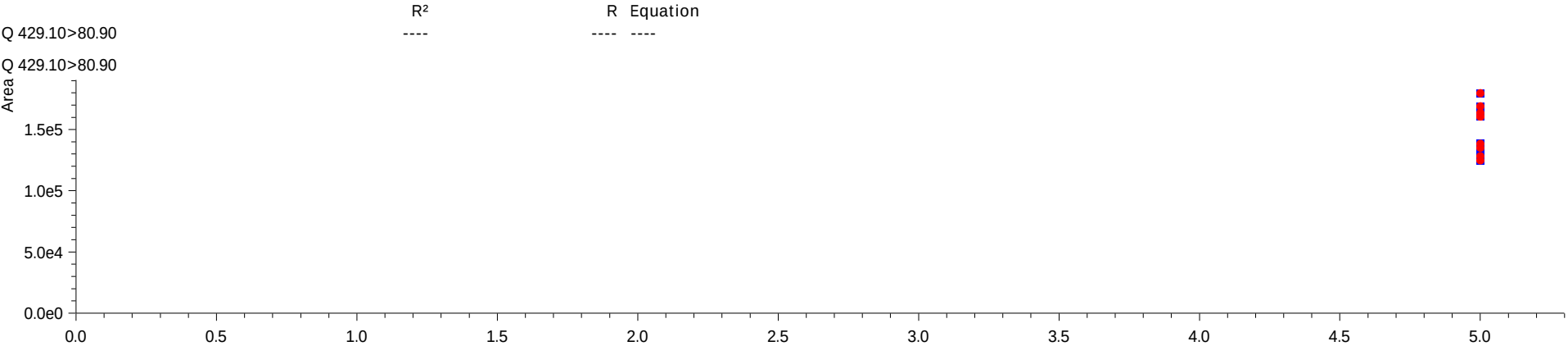


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☒	Auto	27814	595312	0.0473	10.0000	9.877849	0.0603	27.44	7.750688	11.317894	11.317896
240118_007	1633 ICAL 0.1PPB	☒	Auto	45741	604622	0.0950	10.0000	7.963371	0.0976	2.74	7.750688	11.317894	11.317896
240118_008	1633 ICAL 0.25PPB	☒	Auto	113323	588188	0.2360	10.0000	8.163736	0.2486	5.33	7.750688	11.317894	11.317896
240118_009	1633 ICAL 0.50PPB	☒	Auto	215774	654919	0.4730	10.0000	6.965449	0.4251	-10.13	7.750688	11.317894	11.317896
240118_010	1633 ICAL 1.0PPB	☒	Auto	450923	640534	0.9500	10.0000	7.410318	0.9083	-4.39	7.750688	11.317894	11.317896
240118_011	1633 ICAL 5.0PPB	☒	Auto	2183982	618248	4.7300	10.0000	7.468361	4.5577	-3.64	7.750688	11.317894	11.317896
240118_012	1633 ICAL 10.0PPB	☒	Auto	4152849	598128	9.5000	10.0000	7.308504	8.9580	-5.71	7.750688	11.317894	11.317896
240118_013	1633 ICAL 15.0PPB	☒	Auto	6058875	583755	14.2000	10.0000	7.309256	13.3913	-5.70	7.750688	11.317894	11.317896
240118_014	1633 ICAL 20.0PPB	☒	Auto	8299655	602434	18.9000	10.0000	7.289344	17.7750	-5.95	7.750688	11.317894	11.317896
240118_016	1633 ICV 1.0PPB		Auto	411896	617025	0.9500	10.0000	----	0.8613	-9.34	7.750688	11.317894	11.317896
240118_017	1633 FTCA ICV 1.0PPB		ND(W/B)	----	650567	0.9500	10.0000	----	----	----	7.750688	11.317894	11.317896



Compound: 13C2-6_2 FTS_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 0

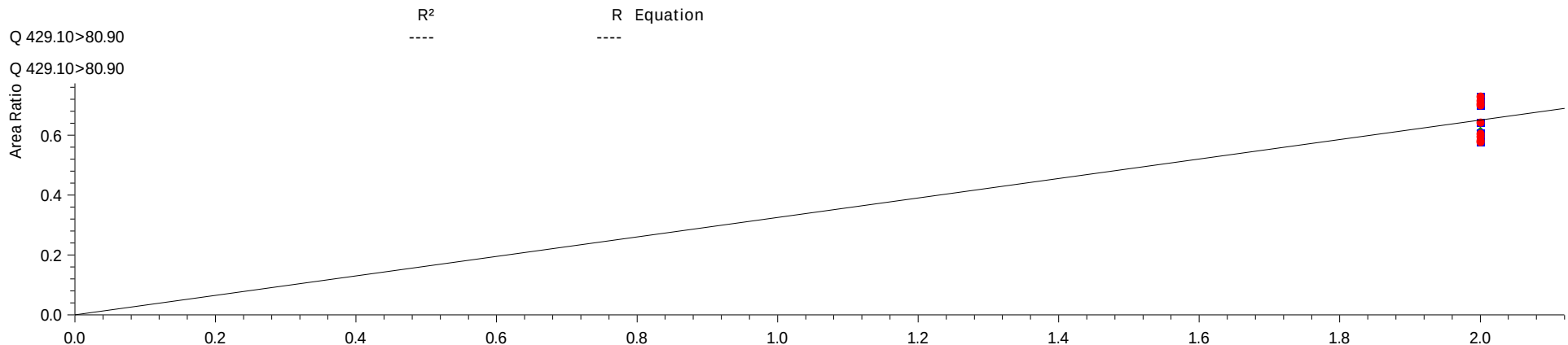


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☐	Auto	160811	160811	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_007	1633 ICAL 0.1PPB	☐	Auto	163769	163769	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_008	1633 ICAL 0.25PPB	☐	Auto	169139	169139	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_009	1633 ICAL 0.50PPB	☐	Auto	179759	179759	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_010	1633 ICAL 1.0PPB	☐	Auto	160736	160736	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_011	1633 ICAL 5.0PPB	☐	Auto	138496	138496	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_012	1633 ICAL 10.0PPB	☐	Auto	135213	135213	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_013	1633 ICAL 15.0PPB	☐	Auto	128419	128419	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_014	1633 ICAL 20.0PPB	☐	Auto	124875	124875	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_016	1633 ICV 1.0PPB		Auto	124466	124466	5.0000	5.0000	----	5.0000	0.00	----	----	----
240118_017	1633 FTCA ICV 1.0PPB		Auto	135491	135491	5.0000	5.0000	----	5.0000	0.00	----	----	----



Compound: 13C2-6_2 FTS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
 Quantitative Method: Internal Standard
 No. of Calibration Points: 9
 No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☒	Auto	160811	229705	5.0000	2.5000	0.350038	5.3788	7.58	0.325387	9.565151	9.565151
240118_007	1633 ICAL 0.1PPB	☒	Auto	163769	224476	5.0000	2.5000	0.364780	5.6053	12.11	0.325387	9.565151	9.565151
240118_008	1633 ICAL 0.25PPB	☒	Auto	169139	239451	5.0000	2.5000	0.353181	5.4271	8.54	0.325387	9.565151	9.565151
240118_009	1633 ICAL 0.50PPB	☒	Auto	179759	251143	5.0000	2.5000	0.357883	5.4993	9.99	0.325387	9.565151	9.565151
240118_010	1633 ICAL 1.0PPB	☒	Auto	160736	249998	5.0000	2.5000	0.321474	4.9399	-1.20	0.325387	9.565151	9.565151
240118_011	1633 ICAL 5.0PPB	☒	Auto	138496	232307	5.0000	2.5000	0.298090	4.5805	-8.39	0.325387	9.565151	9.565151
240118_012	1633 ICAL 10.0PPB	☒	Auto	135213	223258	5.0000	2.5000	0.302819	4.6532	-6.94	0.325387	9.565151	9.565151
240118_013	1633 ICAL 15.0PPB	☒	Auto	128419	220445	5.0000	2.5000	0.291273	4.4758	-10.48	0.325387	9.565151	9.565151
240118_014	1633 ICAL 20.0PPB	☒	Auto	124875	216087	5.0000	2.5000	0.288945	4.4400	-11.20	0.325387	9.565151	9.565151
240118_016	1633 ICV 1.0PPB		Auto	124466	202223	5.0000	2.5000	----	4.7289	-5.42	0.325387	9.565151	9.565151
240118_017	1633 FTCA ICV 1.0PPB		Auto	135491	234067	5.0000	2.5000	----	4.4474	-11.05	0.325387	9.565151	9.565151



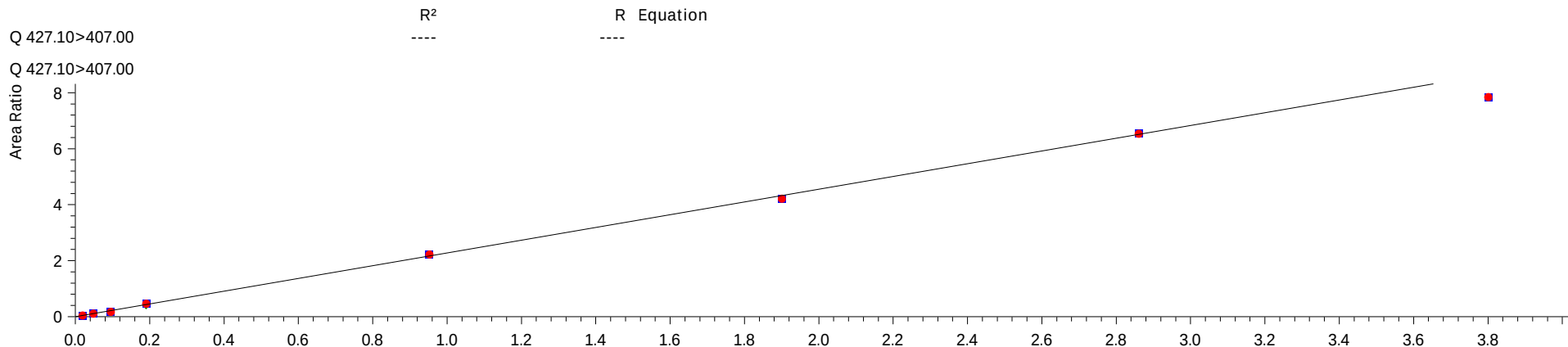
Compound: 6_2 FTS

Curve Fit: Mean RF | Weighting: 1/C | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 8

No. of Control Points: 2

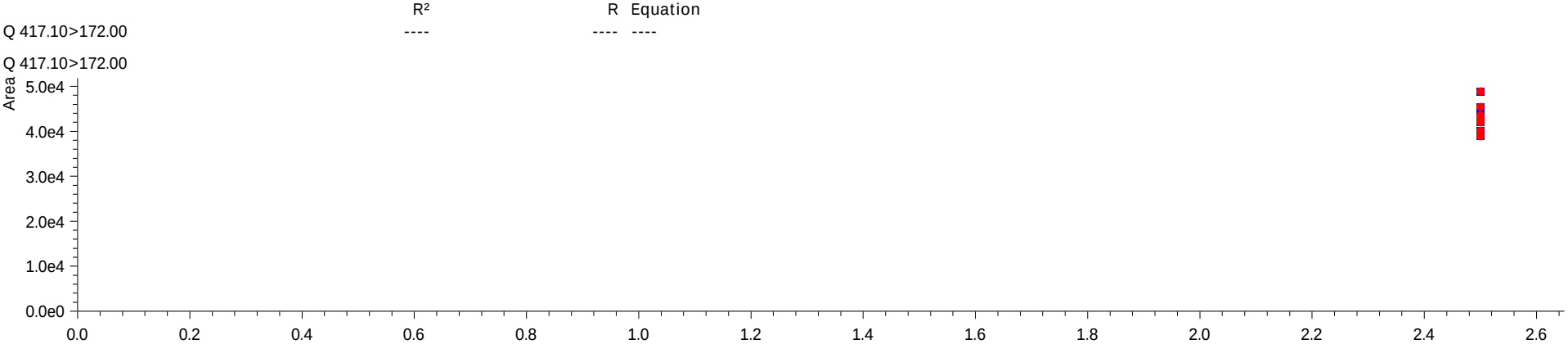


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_007	1633 ICAL 0.1PPB	☒	Auto	8104	163769	0.0950	5.0000	2.604381	0.1087	14.39	2.276802	10.571631	10.571630
240118_008	1633 ICAL 0.25PPB	☒	Auto	19395	169139	0.2380	5.0000	2.409044	0.2518	5.81	2.276802	10.571631	10.571630
240118_009	1633 ICAL 0.50PPB	☒	Auto	31384	179759	0.4760	5.0000	1.833935	0.3834	-19.45	2.276802	10.571631	10.571630
240118_010	1633 ICAL 1.0PPB	☒	Auto	75066	160736	0.9500	5.0000	2.457983	1.0256	7.96	2.276802	10.571631	10.571630
240118_011	1633 ICAL 5.0PPB	☒	Auto	308099	138496	4.7600	5.0000	2.336764	4.8854	2.63	2.276802	10.571631	10.571630
240118_012	1633 ICAL 10.0PPB	☒	Auto	570370	135213	9.5000	5.0000	2.220155	9.2636	-2.49	2.276802	10.571631	10.571630
240118_013	1633 ICAL 15.0PPB	☒	Auto	840038	128419	14.3000	5.0000	2.287188	14.3652	0.46	2.276802	10.571631	10.571630
240118_014	1633 ICAL 20.0PPB	☒	Auto	979879	124875	19.0000	5.0000	2.064970	17.2322	-9.30	2.276802	10.571631	10.571630
240118_016	1633 ICV 1.0PPB		Auto	50269	124466	0.9500	5.0000	----	0.8869	-6.64	2.276802	10.571631	10.571630
240118_017	1633 FTCA ICV 1.0PPB		ND(W/B)	----	135491	0.9500	5.0000	----	----	----	2.276802	10.571631	10.571630



Compound: 13C4-PFOA_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 0

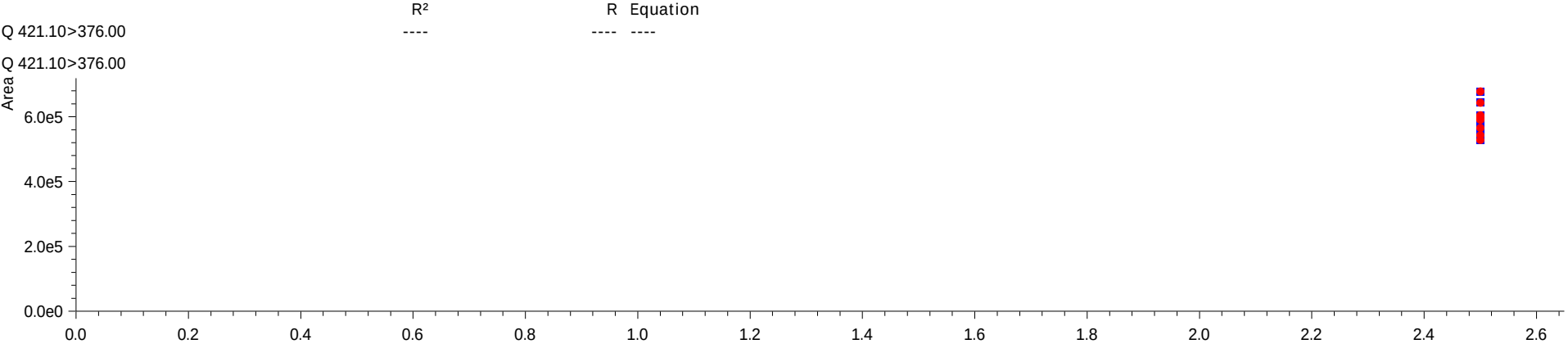


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☐	Auto	48882	48882	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_007	1633 ICAL 0.1PPB	☐	Auto	45445	45445	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_008	1633 ICAL 0.25PPB	☐	Auto	42281	42281	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_009	1633 ICAL 0.50PPB	☐	Auto	43612	43612	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_010	1633 ICAL 1.0PPB	☐	Auto	42030	42030	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_011	1633 ICAL 5.0PPB	☐	Auto	42891	42891	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_012	1633 ICAL 10.0PPB	☐	Auto	40079	40079	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_013	1633 ICAL 15.0PPB	☐	Auto	38960	38960	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_014	1633 ICAL 20.0PPB	☐	Auto	39074	39074	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_016	1633 ICV 1.0PPB		Auto	45925	45925	2.5000	2.5000	----	2.5000	0.00	----	----	----
240118_017	1633 FTCA ICV 1.0PPB		Auto	45240	45240	2.5000	2.5000	----	2.5000	0.00	----	----	----



Compound: 13C8-PFOA_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 0



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☐	Auto	678231	678231	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_007	1633 ICAL 0.1PPB	☐	Auto	601542	601542	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_008	1633 ICAL 0.25PPB	☐	Auto	592639	592639	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_009	1633 ICAL 0.50PPB	☐	Auto	643488	643488	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_010	1633 ICAL 1.0PPB	☐	Auto	604919	604919	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_011	1633 ICAL 5.0PPB	☐	Auto	566184	566184	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_012	1633 ICAL 10.0PPB	☐	Auto	529017	529017	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_013	1633 ICAL 15.0PPB	☐	Auto	543532	543532	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_014	1633 ICAL 20.0PPB	☐	Auto	591270	591270	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_016	1633 ICV 1.0PPB		Auto	607205	607205	2.5000	2.5000	----	2.5000	0.00	----	----	----
240118_017	1633 FTCA ICV 1.0PPB		Auto	640225	640225	2.5000	2.5000	----	2.5000	0.00	----	----	----



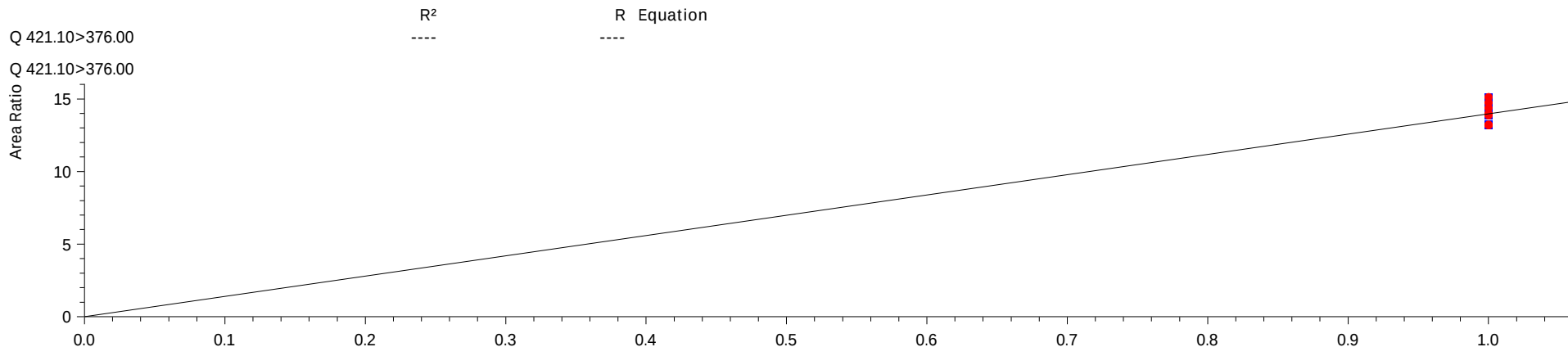
Compound: 13C8-PFOA

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☒	Auto	678231	48882	2.5000	2.5000	13.874821	2.4824	-0.70	13.973203	4.983840	4.983840
240118_007	1633 ICAL 0.1PPB	☒	Auto	601542	45445	2.5000	2.5000	13.236760	2.3682	-5.27	13.973203	4.983840	4.983840
240118_008	1633 ICAL 0.25PPB	☒	Auto	592639	42281	2.5000	2.5000	14.016728	2.5078	0.31	13.973203	4.983840	4.983840
240118_009	1633 ICAL 0.50PPB	☒	Auto	643488	43612	2.5000	2.5000	14.754836	2.6398	5.59	13.973203	4.983840	4.983840
240118_010	1633 ICAL 1.0PPB	☒	Auto	604919	42030	2.5000	2.5000	14.392710	2.5751	3.00	13.973203	4.983840	4.983840
240118_011	1633 ICAL 5.0PPB	☒	Auto	566184	42891	2.5000	2.5000	13.200492	2.3618	-5.53	13.973203	4.983840	4.983840
240118_012	1633 ICAL 10.0PPB	☒	Auto	529017	40079	2.5000	2.5000	13.199490	2.3616	-5.54	13.973203	4.983840	4.983840
240118_013	1633 ICAL 15.0PPB	☒	Auto	543532	38960	2.5000	2.5000	13.951017	2.4960	-0.16	13.973203	4.983840	4.983840
240118_014	1633 ICAL 20.0PPB	☒	Auto	591270	39074	2.5000	2.5000	15.131971	2.7073	8.29	13.973203	4.983840	4.983840
240118_016	1633 ICV 1.0PPB		Auto	607205	45925	2.5000	2.5000	----	2.3656	-5.38	13.973203	4.983840	4.983840
240118_017	1633 FTCA ICV 1.0PPB		Auto	640225	45240	2.5000	2.5000	----	2.5320	1.28	13.973203	4.983840	4.983840



Compound: PFOA

Curve Fit: Linear | Weighting: 1/C | Zero: Not Forced

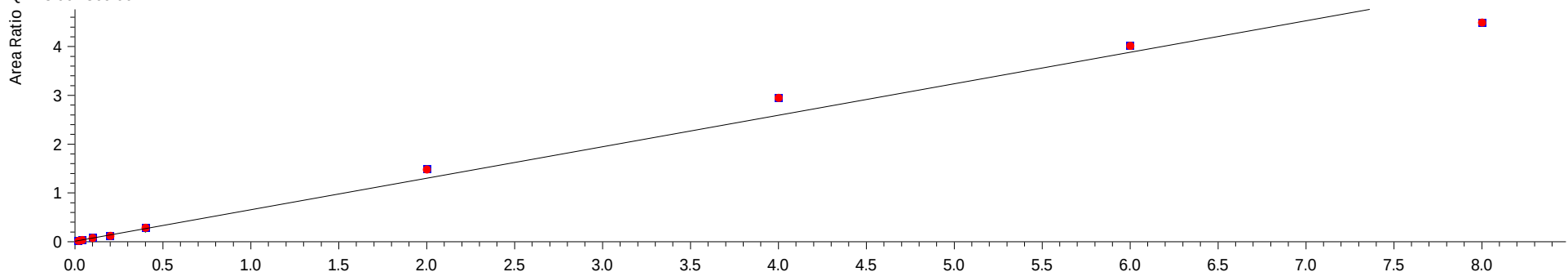
Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2

Q 413.00>369.00
R² 0.9865353
R Equation 0.9932448 $y = 0.6452173x + 0.01128976$

Q 413.00>369.00



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc.Ratio
240118_006	1633 ICAL 0.05PPB	☒	Auto	14351	678231	0.0500	2.5000	1.057974	0.0382	-23.52	0.762558	20.496195	14.251962
240118_007	1633 ICAL 0.1PPB	☒	Auto	22726	601542	0.1000	2.5000	0.944508	0.1026	2.64	0.762558	20.496195	14.251962
240118_008	1633 ICAL 0.25PPB	☒	Auto	48118	592639	0.2500	2.5000	0.811930	0.2709	8.34	0.762558	20.496195	14.251962
240118_009	1633 ICAL 0.50PPB	☒	Auto	79730	643488	0.5000	2.5000	0.619514	0.4363	-12.73	0.762558	20.496195	14.251962
240118_010	1633 ICAL 1.0PPB	☒	Auto	173590	604919	1.0000	2.5000	0.717409	1.0681	6.81	0.762558	20.496195	14.251962
240118_011	1633 ICAL 5.0PPB	☒	Auto	841329	566184	5.0000	2.5000	0.742982	5.7139	14.28	0.762558	20.496195	14.251962
240118_012	1633 ICAL 10.0PPB	☒	Auto	1561625	529017	10.0000	2.5000	0.737984	11.3940	13.94	0.762558	20.496195	14.251962
240118_013	1633 ICAL 15.0PPB	☒	Auto	2182267	543532	15.0000	2.5000	0.669162	15.5129	3.42	0.762558	20.496195	14.251962
240118_014	1633 ICAL 20.0PPB	☒	Auto	2656249	591270	20.0000	2.5000	0.561556	17.3630	-13.19	0.762558	20.496195	14.251962
240118_016	1633 ICV 1.0PPB		Auto	158761	607205	1.0000	2.5000	----	0.9693	-3.07	0.762558	20.496195	14.251962
240118_017	1633 FTCA ICV 1.0PPB		ND(W/B)	----	640225	1.0000	2.5000	----	----	----	0.762558	20.496195	14.251962



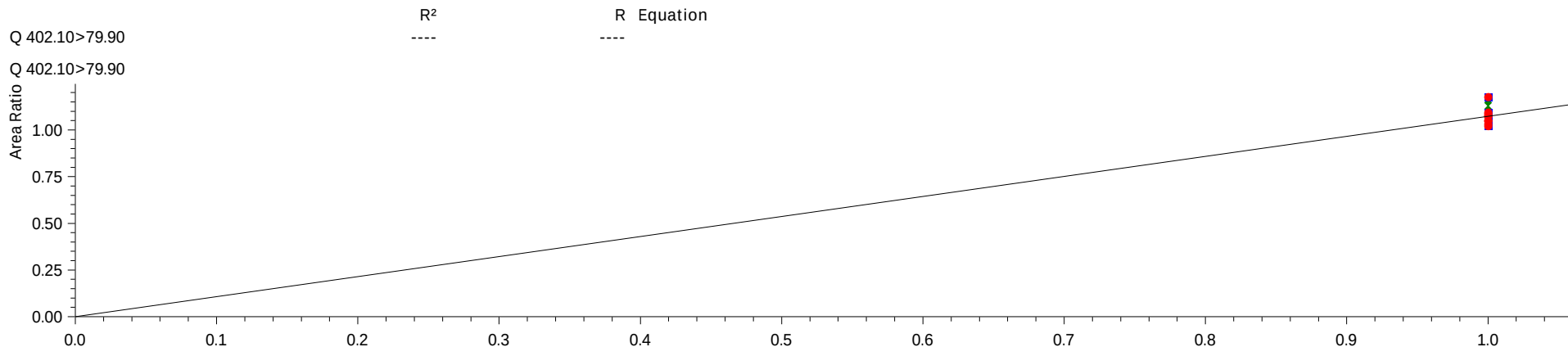
Compound: 13C3-PFHxS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2

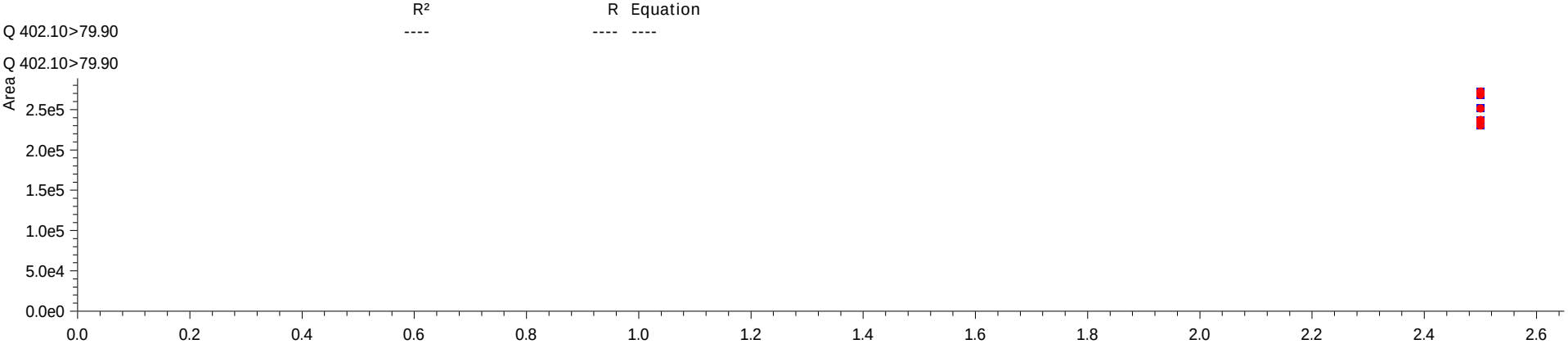


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☒	Auto	270206	229705	2.5000	2.5000	1.176316	2.7405	9.62	1.073069	4.251782	4.251782
240118_007	1633 ICAL 0.1PPB	☒	Auto	235487	224476	2.5000	2.5000	1.049056	2.4441	-2.24	1.073069	4.251782	4.251782
240118_008	1633 ICAL 0.25PPB	☒	Auto	251448	239451	2.5000	2.5000	1.050099	2.4465	-2.14	1.073069	4.251782	4.251782
240118_009	1633 ICAL 0.50PPB	☒	Auto	272575	251143	2.5000	2.5000	1.085341	2.5286	1.14	1.073069	4.251782	4.251782
240118_010	1633 ICAL 1.0PPB	☒	Auto	268590	249998	2.5000	2.5000	1.074367	2.5030	0.12	1.073069	4.251782	4.251782
240118_011	1633 ICAL 5.0PPB	☒	Auto	237331	232307	2.5000	2.5000	1.021629	2.3802	-4.79	1.073069	4.251782	4.251782
240118_012	1633 ICAL 10.0PPB	☒	Auto	230489	223258	2.5000	2.5000	1.032390	2.4052	-3.79	1.073069	4.251782	4.251782
240118_013	1633 ICAL 15.0PPB	☒	Auto	236876	220445	2.5000	2.5000	1.074533	2.5034	0.14	1.073069	4.251782	4.251782
240118_014	1633 ICAL 20.0PPB	☒	Auto	236375	216087	2.5000	2.5000	1.093888	2.5485	1.94	1.073069	4.251782	4.251782
240118_016	1633 ICV 1.0PPB		Auto	231655	202223	2.5000	2.5000	----	2.6688	6.75	1.073069	4.251782	4.251782
240118_017	1633 FTCA ICV 1.0PPB		Auto	260385	234067	2.5000	2.5000	----	2.5917	3.67	1.073069	4.251782	4.251782



Compound: 13C3-PFHxS_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 0



												Conc. (ng/mL)	
Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☐	Auto	270206	270206	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_007	1633 ICAL 0.1PPB	☐	Auto	235487	235487	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_008	1633 ICAL 0.25PPB	☐	Auto	251448	251448	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_009	1633 ICAL 0.50PPB	☐	Auto	272575	272575	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_010	1633 ICAL 1.0PPB	☐	Auto	268590	268590	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_011	1633 ICAL 5.0PPB	☐	Auto	237331	237331	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_012	1633 ICAL 10.0PPB	☐	Auto	230489	230489	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_013	1633 ICAL 15.0PPB	☐	Auto	236876	236876	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_014	1633 ICAL 20.0PPB	☐	Auto	236375	236375	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_016	1633 ICV 1.0PPB		Auto	231655	231655	2.5000	2.5000	----	2.5000	0.00	----	----	----
240118_017	1633 FTCA ICV 1.0PPB		Auto	260385	260385	2.5000	2.5000	----	2.5000	0.00	----	----	----



Compound: PFHxS

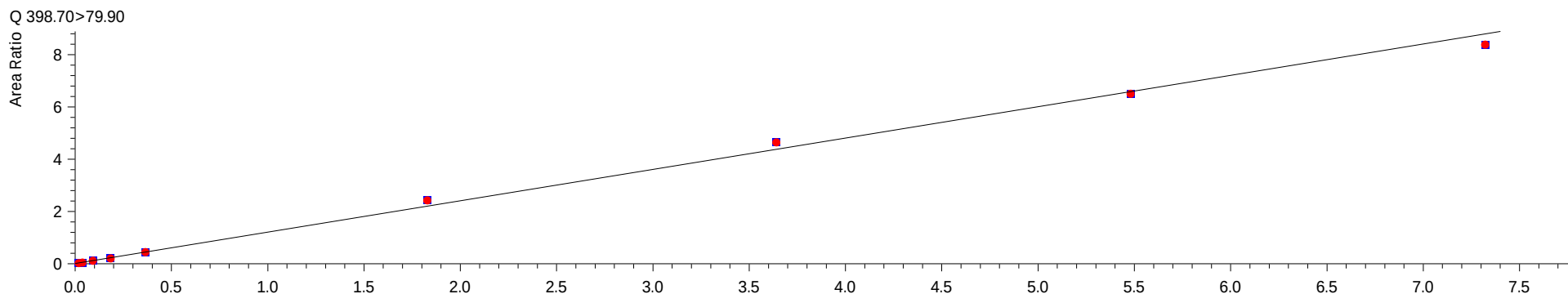
Curve Fit: Linear | Weighting: 1/C | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2

Q 398.70>79.90
R² 0.9971211 R Equation 0.9985595 $y = 1.199935x + 0.009189795$

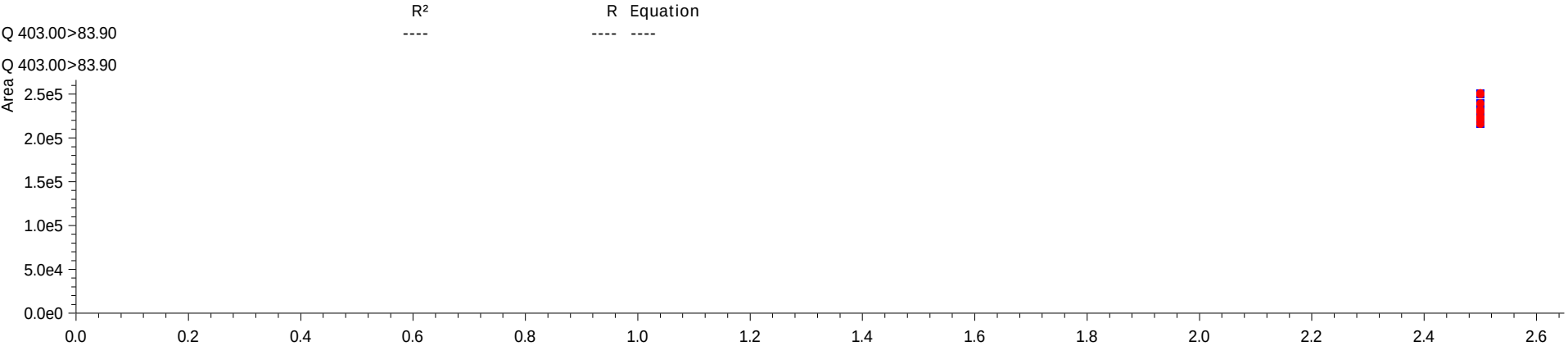


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc.Ratio
240118_006	1633 ICAL 0.05PPB	☑	M	8655	270206	0.0457	2.5000	1.752299	0.0476	4.14	1.304548	14.604888	6.624538
240118_007	1633 ICAL 0.1PPB	☑	M	12132	235487	0.0910	2.5000	1.415332	0.0882	-3.09	1.304548	14.604888	6.624538
240118_008	1633 ICAL 0.25PPB	☑	M	29288	251448	0.2290	2.5000	1.271577	0.2235	-2.39	1.304548	14.604888	6.624538
240118_009	1633 ICAL 0.50PPB	☑	M	56162	272575	0.4570	2.5000	1.127155	0.4101	-10.25	1.304548	14.604888	6.624538
240118_010	1633 ICAL 1.0PPB	☑	M	120607	268590	0.9100	2.5000	1.233615	0.9164	0.70	1.304548	14.604888	6.624538
240118_011	1633 ICAL 5.0PPB	☑	M	576452	237331	4.5700	2.5000	1.328716	5.0413	10.31	1.304548	14.604888	6.624538
240118_012	1633 ICAL 10.0PPB	☑	M	1072624	230489	9.1000	2.5000	1.278485	9.6766	6.34	1.304548	14.604888	6.624538
240118_013	1633 ICAL 15.0PPB	☑	M	1542165	236876	13.7000	2.5000	1.188037	13.5450	-1.13	1.304548	14.604888	6.624538
240118_014	1633 ICAL 20.0PPB	☑	M	1982393	236375	18.3000	2.5000	1.145715	17.4540	-4.62	1.304548	14.604888	6.624538
240118_016	1633 ICV 1.0PPB		M	104885	231655	0.9100	2.5000	----	0.9242	1.56	1.304548	14.604888	6.624538
240118_017	1633 FTCA ICV 1.0PPB		ND(W/B)	----	260385	0.9100	2.5000	----	----	----	1.304548	14.604888	6.624538



Compound: 18O2-PFHxS_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 0

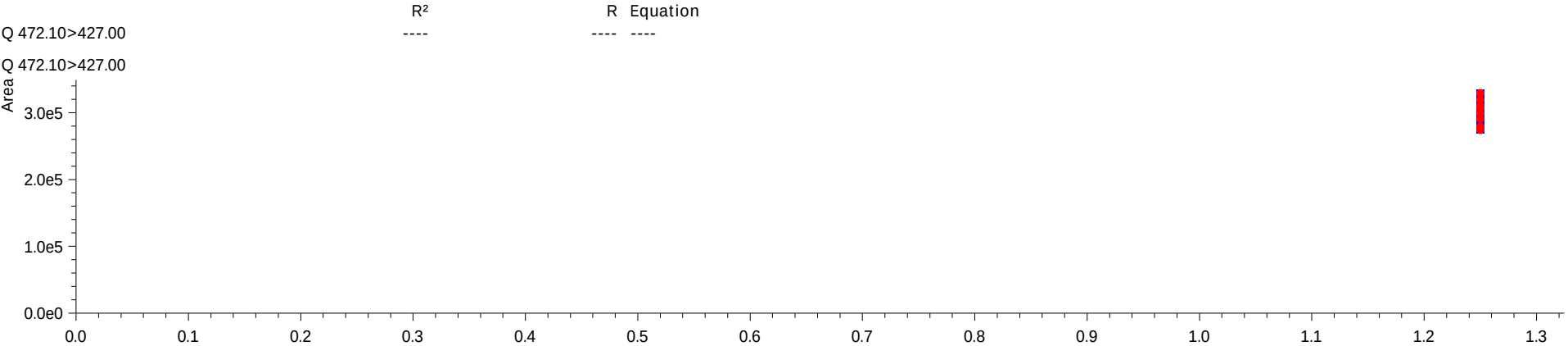


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc. (ng/mL)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☐	Auto	229705	229705	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----	----
240118_007	1633 ICAL 0.1PPB	☐	Auto	224476	224476	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----	----
240118_008	1633 ICAL 0.25PPB	☐	Auto	239451	239451	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----	----
240118_009	1633 ICAL 0.50PPB	☐	Auto	251143	251143	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----	----
240118_010	1633 ICAL 1.0PPB	☐	Auto	249998	249998	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----	----
240118_011	1633 ICAL 5.0PPB	☐	Auto	232307	232307	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----	----
240118_012	1633 ICAL 10.0PPB	☐	Auto	223258	223258	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----	----
240118_013	1633 ICAL 15.0PPB	☐	Auto	220445	220445	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----	----
240118_014	1633 ICAL 20.0PPB	☐	Auto	216087	216087	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----	----
240118_016	1633 ICV 1.0PPB		Auto	202223	202223	2.5000	2.5000	----	2.5000	0.00	----	----	----	----
240118_017	1633 FTCA ICV 1.0PPB		Auto	234067	234067	2.5000	2.5000	----	2.5000	0.00	----	----	----	----



Compound: 13C9-PFNA_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 0



												Conc. (ng/mL)		
Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)	
240118_006	1633 ICAL 0.05PPB	☐	Auto	310687	310687	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----	
240118_007	1633 ICAL 0.1PPB	☐	Auto	299675	299675	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----	
240118_008	1633 ICAL 0.25PPB	☐	Auto	306696	306696	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----	
240118_009	1633 ICAL 0.50PPB	☐	Auto	319396	319396	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----	
240118_010	1633 ICAL 1.0PPB	☐	Auto	329225	329225	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----	
240118_011	1633 ICAL 5.0PPB	☐	Auto	308940	308940	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----	
240118_012	1633 ICAL 10.0PPB	☐	Auto	290785	290785	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----	
240118_013	1633 ICAL 15.0PPB	☐	Auto	274221	274221	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----	
240118_014	1633 ICAL 20.0PPB	☐	Auto	279137	279137	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----	
240118_016	1633 ICV 1.0PPB		Auto	288107	288107	1.2500	1.2500	----	1.2500	0.00	----	----	----	
240118_017	1633 FTCA ICV 1.0PPB		Auto	307312	307312	1.2500	1.2500	----	1.2500	0.00	----	----	----	



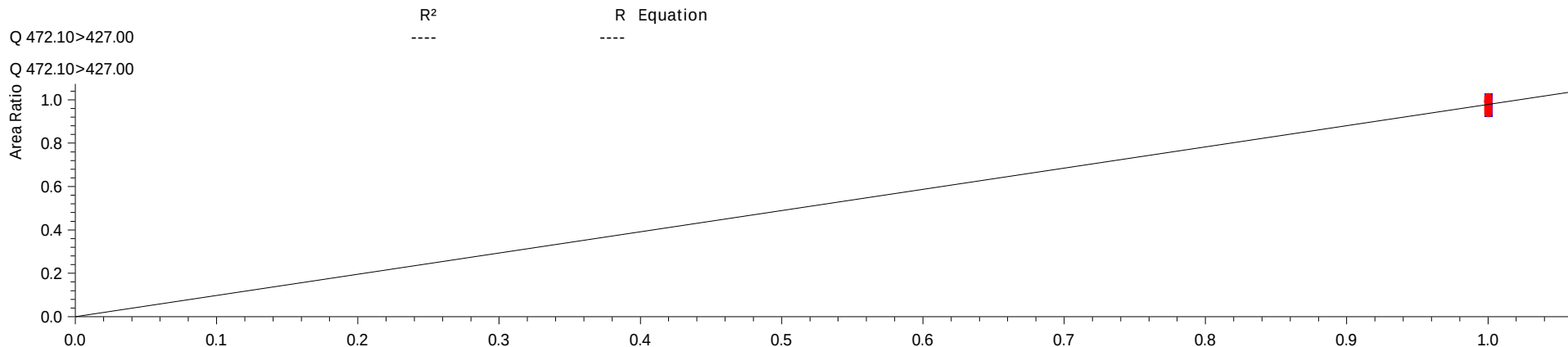
Compound: 13C9-PFNA

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2

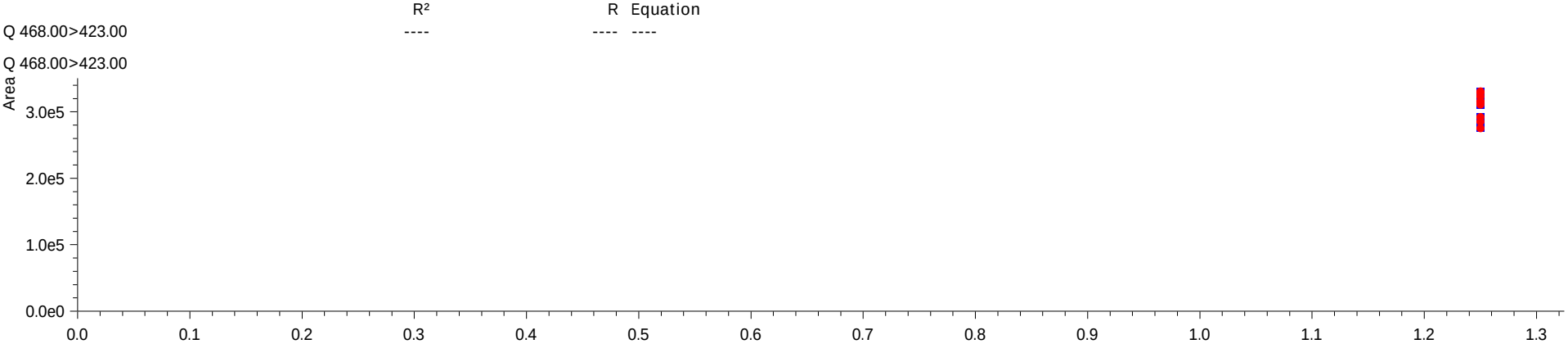


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☒	Auto	310687	330771	1.2500	1.2500	0.939282	1.1996	-4.03	0.978731	2.559267	2.559267
240118_007	1633 ICAL 0.1PPB	☒	Auto	299675	315542	1.2500	1.2500	0.949716	1.2129	-2.96	0.978731	2.559267	2.559267
240118_008	1633 ICAL 0.25PPB	☒	Auto	306696	316331	1.2500	1.2500	0.969541	1.2383	-0.94	0.978731	2.559267	2.559267
240118_009	1633 ICAL 0.50PPB	☒	Auto	319396	323300	1.2500	1.2500	0.987923	1.2617	0.94	0.978731	2.559267	2.559267
240118_010	1633 ICAL 1.0PPB	☒	Auto	329225	328955	1.2500	1.2500	1.000822	1.2782	2.26	0.978731	2.559267	2.559267
240118_011	1633 ICAL 5.0PPB	☒	Auto	308940	311099	1.2500	1.2500	0.993062	1.2683	1.46	0.978731	2.559267	2.559267
240118_012	1633 ICAL 10.0PPB	☒	Auto	290785	292150	1.2500	1.2500	0.995326	1.2712	1.70	0.978731	2.559267	2.559267
240118_013	1633 ICAL 15.0PPB	☒	Auto	274221	285546	1.2500	1.2500	0.960336	1.2265	-1.88	0.978731	2.559267	2.559267
240118_014	1633 ICAL 20.0PPB	☒	Auto	279137	275672	1.2500	1.2500	1.012570	1.2932	3.46	0.978731	2.559267	2.559267
240118_016	1633 ICV 1.0PPB		Auto	288107	288016	1.2500	1.2500	----	1.2776	2.21	0.978731	2.559267	2.559267
240118_017	1633 FTCA ICV 1.0PPB		Auto	307312	316255	1.2500	1.2500	----	1.2411	-0.72	0.978731	2.559267	2.559267



Compound: 13C5-PFNA_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 0



													Conc. (ng/mL)
Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☐	Auto	330771	330771	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240118_007	1633 ICAL 0.1PPB	☐	Auto	315542	315542	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240118_008	1633 ICAL 0.25PPB	☐	Auto	316331	316331	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240118_009	1633 ICAL 0.50PPB	☐	Auto	323300	323300	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240118_010	1633 ICAL 1.0PPB	☐	Auto	328955	328955	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240118_011	1633 ICAL 5.0PPB	☐	Auto	311099	311099	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240118_012	1633 ICAL 10.0PPB	☐	Auto	292150	292150	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240118_013	1633 ICAL 15.0PPB	☐	Auto	285546	285546	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240118_014	1633 ICAL 20.0PPB	☐	Auto	275672	275672	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240118_016	1633 ICV 1.0PPB		Auto	288016	288016	1.2500	1.2500	----	1.2500	0.00	----	----	----
240118_017	1633 FTCA ICV 1.0PPB		Auto	316255	316255	1.2500	1.2500	----	1.2500	0.00	----	----	----



Compound: PFNA

Curve Fit: Linear | Weighting: 1/C | Zero: Not Forced

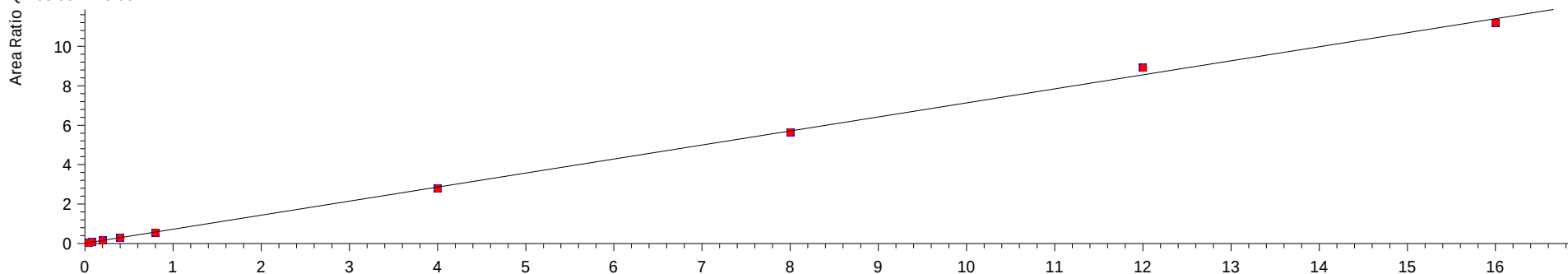
Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2

Q 463.00>419.00
R² 0.9991685
R Equation 0.9995842 $y = 0.7114112x + 0.01755533$

Q 463.00>419.00



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc.Ratio
240118_006	1633 ICAL 0.05PPB	☒	Auto	14376	310687	0.0500	1.2500	1.156762	0.0505	0.91	0.802642	19.784006	3.647905
240118_007	1633 ICAL 0.1PPB	☒	Auto	23138	299675	0.1000	1.2500	0.965118	0.1048	4.82	0.802642	19.784006	3.647905
240118_008	1633 ICAL 0.25PPB	☒	Auto	50390	306696	0.2500	1.2500	0.821493	0.2578	3.14	0.802642	19.784006	3.647905
240118_009	1633 ICAL 0.50PPB	☒	Auto	93339	319396	0.5000	1.2500	0.730590	0.4826	-3.47	0.802642	19.784006	3.647905
240118_010	1633 ICAL 1.0PPB	☒	Auto	185195	329225	1.0000	1.2500	0.703148	0.9575	-4.25	0.802642	19.784006	3.647905
240118_011	1633 ICAL 5.0PPB	☒	Auto	862607	308940	5.0000	1.2500	0.698037	4.8752	-2.50	0.802642	19.784006	3.647905
240118_012	1633 ICAL 10.0PPB	☒	Auto	1640974	290785	10.0000	1.2500	0.705408	9.8848	-1.15	0.802642	19.784006	3.647905
240118_013	1633 ICAL 15.0PPB	☒	Auto	2446359	274221	15.0000	1.2500	0.743428	15.6442	4.29	0.802642	19.784006	3.647905
240118_014	1633 ICAL 20.0PPB	☒	Auto	3125421	279137	20.0000	1.2500	0.699795	19.6426	-1.79	0.802642	19.784006	3.647905
240118_016	1633 ICV 1.0PPB		Auto	161182	288107	1.0000	1.2500	----	0.9521	-4.79	0.802642	19.784006	3.647905
240118_017	1633 FTCA ICV 1.0PPB		ND(W/B)	----	307312	1.0000	1.2500	----	----	----	0.802642	19.784006	3.647905



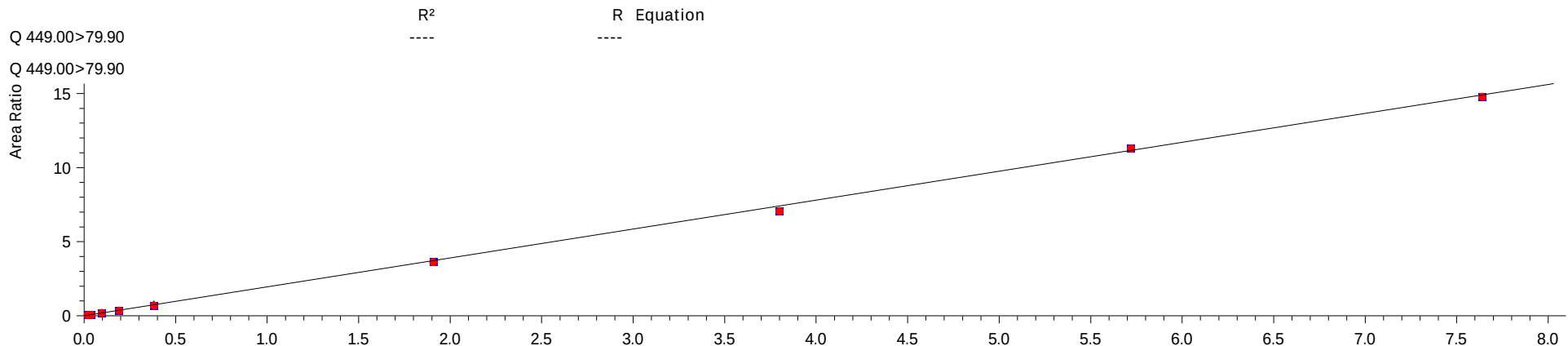
Compound: PFHpS

Curve Fit: Mean RF | Weighting: 1/C | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

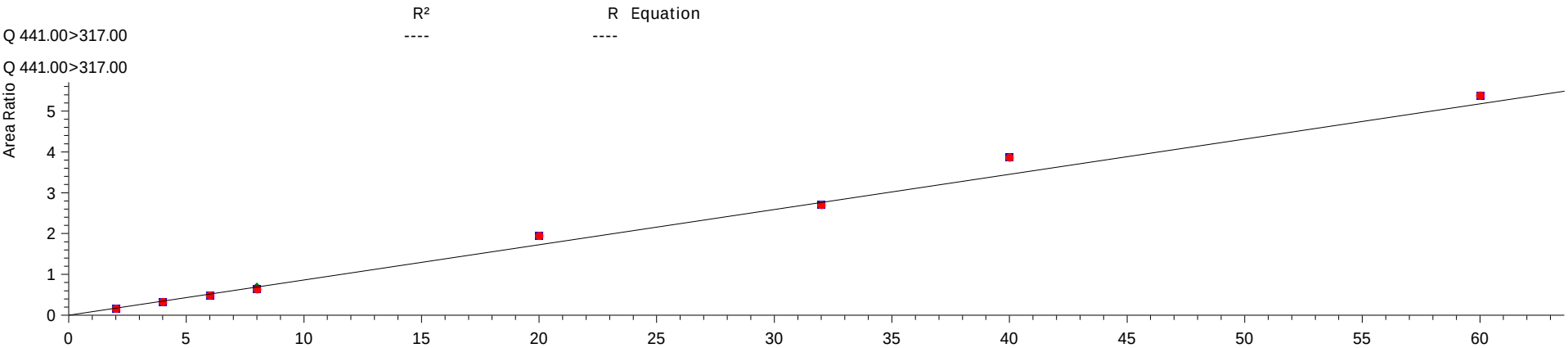
No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☒	Auto	5220	117833	0.0477	2.5000	2.322005	0.0568	19.00	1.951324	7.750383	7.750384
240118_007	1633 ICAL 0.1PPB	☒	Auto	8515	118069	0.0950	2.5000	1.897786	0.0924	-2.74	1.951324	7.750383	7.750384
240118_008	1633 ICAL 0.25PPB	☒	Auto	21835	114171	0.2390	2.5000	2.000480	0.2450	2.52	1.951324	7.750383	7.750384
240118_009	1633 ICAL 0.50PPB	☒	Auto	43044	121099	0.4770	2.5000	1.862932	0.4554	-4.53	1.951324	7.750383	7.750384
240118_010	1633 ICAL 1.0PPB	☒	Auto	85513	124480	0.9500	2.5000	1.807790	0.8801	-7.36	1.951324	7.750383	7.750384
240118_011	1633 ICAL 5.0PPB	☒	Auto	420346	116018	4.7700	2.5000	1.898913	4.6419	-2.69	1.951324	7.750383	7.750384
240118_012	1633 ICAL 10.0PPB	☒	Auto	795008	112442	9.5000	2.5000	1.860621	9.0584	-4.65	1.951324	7.750383	7.750384
240118_013	1633 ICAL 15.0PPB	☒	Auto	1176371	104055	14.3000	2.5000	1.976457	14.4842	1.29	1.951324	7.750383	7.750384
240118_014	1633 ICAL 20.0PPB	☒	Auto	1572876	106399	19.1000	2.5000	1.934928	18.9395	-0.84	1.951324	7.750383	7.750384
240118_016	1633 ICV 1.0PPB		Auto	82761	105678	0.9500	2.5000	----	1.0034	5.62	1.951324	7.750383	7.750384
240118_017	1633 FTCA ICV 1.0PPB		ND(W/B)	----	114722	0.9500	2.5000	----	----	----	1.951324	7.750383	7.750384



Compound: 7_3 FTCA
Curve Fit: Mean RF | Weighting: 1/C | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 8
No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc.Ratio
240118_007	1633 ICAL 0.1PPB	☒	Auto	113753	701158	5.0000	2.5000	0.081118	4.6983	-6.03	0.086327	8.375004	8.375004
240118_008	1633 ICAL 0.25PPB	☒	Auto	213059	651214	10.0000	2.5000	0.081793	9.4748	-5.25	0.086327	8.375004	8.375004
240118_009	1633 ICAL 0.50PPB	☒	Auto	333337	687616	15.0000	2.5000	0.080795	14.0388	-6.41	0.086327	8.375004	8.375004
240118_010	1633 ICAL 1.0PPB	☒	Auto	439237	693968	20.0000	2.5000	0.079117	18.3296	-8.35	0.086327	8.375004	8.375004
240118_011	1633 ICAL 5.0PPB	☒	Auto	1288455	663242	50.0000	2.5000	0.097133	56.2589	12.52	0.086327	8.375004	8.375004
240118_012	1633 ICAL 10.0PPB	☒	Auto	1723816	638007	80.0000	2.5000	0.084434	78.2456	-2.19	0.086327	8.375004	8.375004
240118_013	1633 ICAL 15.0PPB	☒	Auto	2253481	583700	100.0000	2.5000	0.096517	111.8043	11.80	0.086327	8.375004	8.375004
240118_014	1633 ICAL 20.0PPB	☒	Auto	3326875	618096	150.0000	2.5000	0.089708	155.8744	3.92	0.086327	8.375004	8.375004
240118_016	1633 ICV 1.0PPB		ND(W/B)	----	659266	20.0000	2.5000	----	----	----	0.086327	8.375004	8.375004
240118_017	1633 FTCA ICV 1.0PPB		Auto	466748	661898	20.0000	2.5000	----	20.4214	2.11	0.086327	8.375004	8.375004



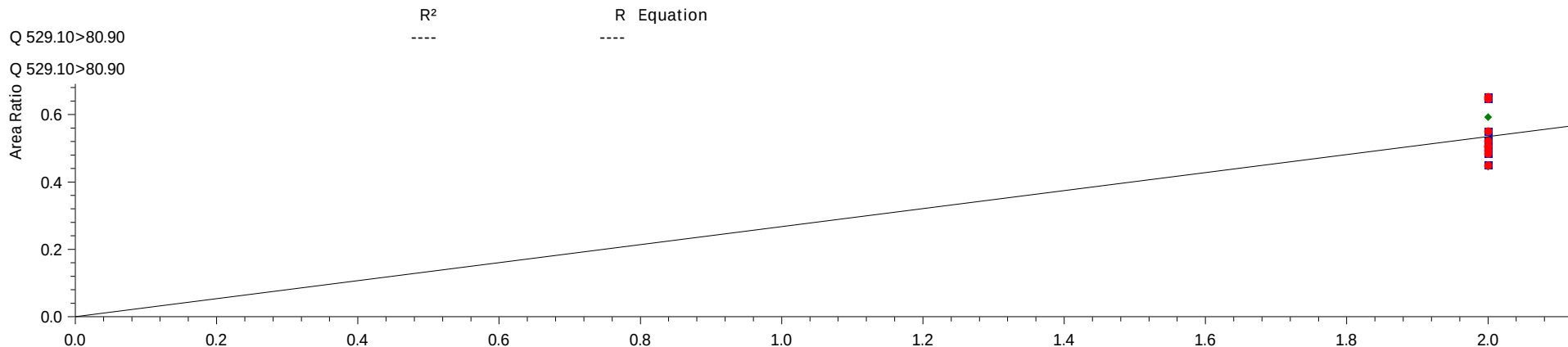
Compound: 13C2-8_2-FTS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2

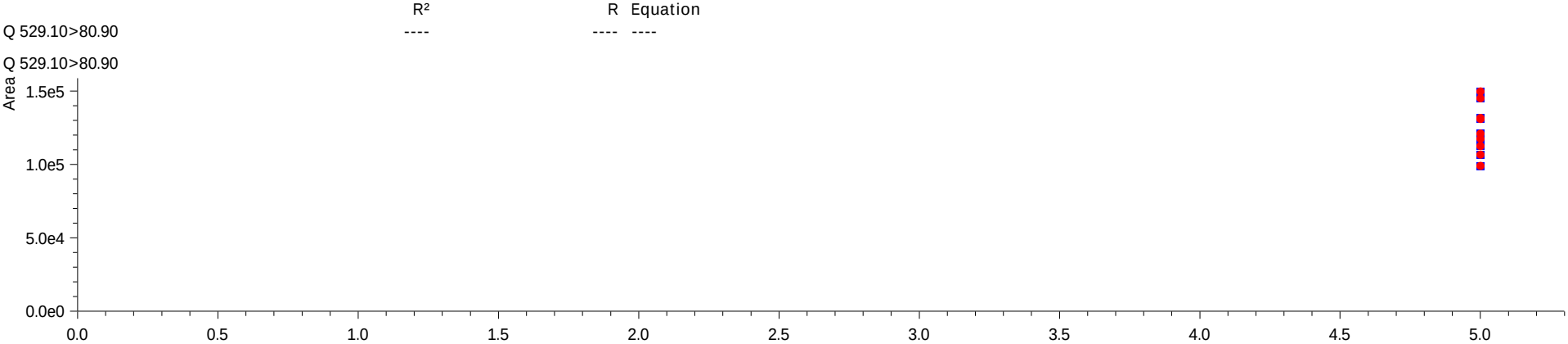


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☒	Auto	149793	229705	5.0000	2.5000	0.326055	6.0993	21.99	0.267288	13.218868	13.218868
240118_007	1633 ICAL 0.1PPB	☒	Auto	145227	224476	5.0000	2.5000	0.323480	6.0512	21.02	0.267288	13.218868	13.218868
240118_008	1633 ICAL 0.25PPB	☒	Auto	131843	239451	5.0000	2.5000	0.275303	5.1499	3.00	0.267288	13.218868	13.218868
240118_009	1633 ICAL 0.50PPB	☒	Auto	131115	251143	5.0000	2.5000	0.261038	4.8831	-2.34	0.267288	13.218868	13.218868
240118_010	1633 ICAL 1.0PPB	☒	Auto	121050	249998	5.0000	2.5000	0.242102	4.5289	-9.42	0.267288	13.218868	13.218868
240118_011	1633 ICAL 5.0PPB	☒	Auto	117777	232307	5.0000	2.5000	0.253494	4.7420	-5.16	0.267288	13.218868	13.218868
240118_012	1633 ICAL 10.0PPB	☒	Auto	112708	223258	5.0000	2.5000	0.252417	4.7218	-5.56	0.267288	13.218868	13.218868
240118_013	1633 ICAL 15.0PPB	☒	Auto	99053	220445	5.0000	2.5000	0.224666	4.2027	-15.95	0.267288	13.218868	13.218868
240118_014	1633 ICAL 20.0PPB	☒	Auto	106762	216087	5.0000	2.5000	0.247035	4.6211	-7.58	0.267288	13.218868	13.218868
240118_016	1633 ICV 1.0PPB		Auto	119746	202223	5.0000	2.5000	----	5.5385	10.77	0.267288	13.218868	13.218868
240118_017	1633 FTCA ICV 1.0PPB		Auto	104364	234067	5.0000	2.5000	----	4.1703	-16.59	0.267288	13.218868	13.218868



Compound: 13C2-8_2-FTS_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 0



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☐	Auto	149793	149793	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_007	1633 ICAL 0.1PPB	☐	Auto	145227	145227	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_008	1633 ICAL 0.25PPB	☐	Auto	131843	131843	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_009	1633 ICAL 0.50PPB	☐	Auto	131115	131115	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_010	1633 ICAL 1.0PPB	☐	Auto	121050	121050	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_011	1633 ICAL 5.0PPB	☐	Auto	117777	117777	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_012	1633 ICAL 10.0PPB	☐	Auto	112708	112708	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_013	1633 ICAL 15.0PPB	☐	Auto	99053	99053	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_014	1633 ICAL 20.0PPB	☐	Auto	106762	106762	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_016	1633 ICV 1.0PPB		Auto	119746	119746	5.0000	5.0000	----	5.0000	0.00	----	----	----
240118_017	1633 FTCA ICV 1.0PPB		Auto	104364	104364	5.0000	5.0000	----	5.0000	0.00	----	----	----



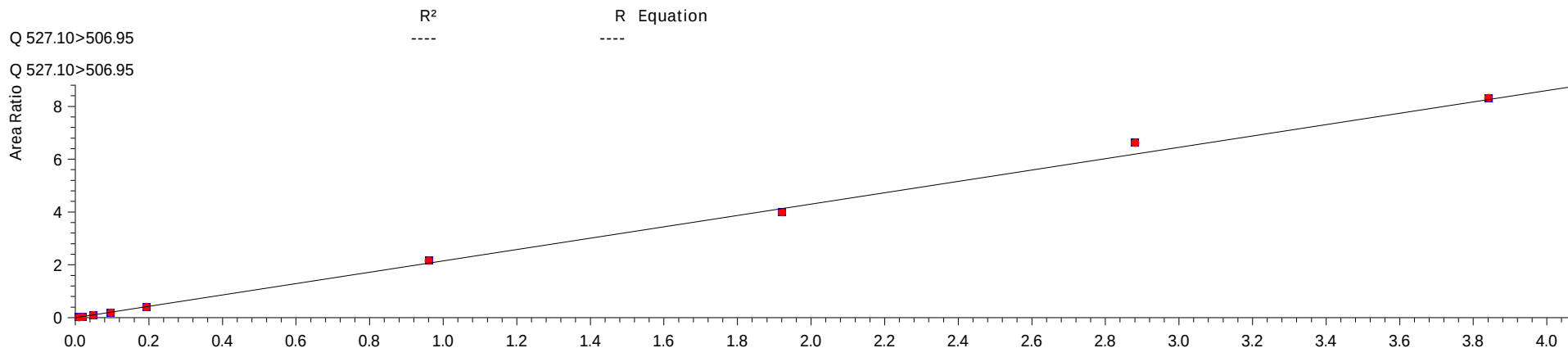
Compound: 8_2 FTS

Curve Fit: Mean RF | Weighting: 1/C | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2



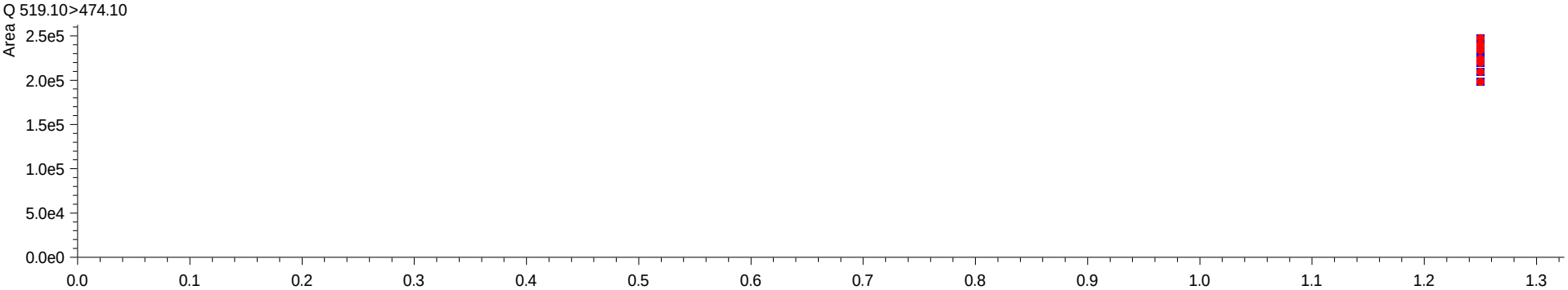
Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☒	Auto	3653	149793	0.0480	5.0000	2.540267	0.0568	18.23	2.148527	11.052846	11.052846
240118_007	1633 ICAL 0.1PPB	☒	Auto	4600	145227	0.0960	5.0000	1.649590	0.0737	-23.22	2.148527	11.052846	11.052846
240118_008	1633 ICAL 0.25PPB	☒	Auto	13634	131843	0.2400	5.0000	2.154335	0.2406	0.27	2.148527	11.052846	11.052846
240118_009	1633 ICAL 0.50PPB	☒	Auto	25869	131115	0.4800	5.0000	2.055201	0.4592	-4.34	2.148527	11.052846	11.052846
240118_010	1633 ICAL 1.0PPB	☒	Auto	49479	121050	0.9600	5.0000	2.128898	0.9512	-0.91	2.148527	11.052846	11.052846
240118_011	1633 ICAL 5.0PPB	☒	Auto	255045	117777	4.8000	5.0000	2.255719	5.0395	4.99	2.148527	11.052846	11.052846
240118_012	1633 ICAL 10.0PPB	☒	Auto	450949	112708	9.6000	5.0000	2.083874	9.3111	-3.01	2.148527	11.052846	11.052846
240118_013	1633 ICAL 15.0PPB	☒	Auto	656762	99053	14.4000	5.0000	2.302225	15.4301	7.15	2.148527	11.052846	11.052846
240118_014	1633 ICAL 20.0PPB	☒	Auto	888247	106762	19.2000	5.0000	2.166629	19.3618	0.84	2.148527	11.052846	11.052846
240118_016	1633 ICV 1.0PPB		Auto	50915	119746	0.9600	5.0000	----	0.9895	3.07	2.148527	11.052846	11.052846
240118_017	1633 FTCA ICV 1.0PPB		ND(W/B)	----	104364	0.9600	5.0000	----	----	----	2.148527	11.052846	11.052846



Compound: 13C6-PFDA_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 0

Q 519.10>474.10 R² R Equation

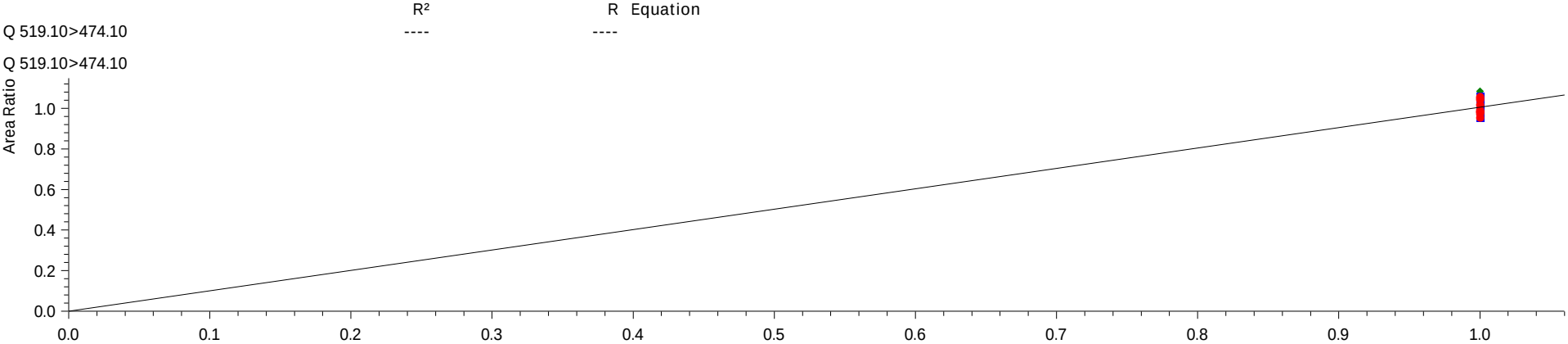


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☐	Auto	238849	238849	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240118_007	1633 ICAL 0.1PPB	☐	Auto	240568	240568	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240118_008	1633 ICAL 0.25PPB	☐	Auto	224311	224311	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240118_009	1633 ICAL 0.50PPB	☐	Auto	238617	238617	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240118_010	1633 ICAL 1.0PPB	☐	Auto	247598	247598	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240118_011	1633 ICAL 5.0PPB	☐	Auto	233845	233845	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240118_012	1633 ICAL 10.0PPB	☐	Auto	219938	219938	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240118_013	1633 ICAL 15.0PPB	☐	Auto	209485	209485	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240118_014	1633 ICAL 20.0PPB	☐	Auto	198408	198408	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240118_016	1633 ICV 1.0PPB		Auto	232114	232114	1.2500	1.2500	----	1.2500	0.00	----	----	----
240118_017	1633 FTCA ICV 1.0PPB		Auto	221808	221808	1.2500	1.2500	----	1.2500	0.00	----	----	----



Compound: 13C6-PFDA

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 2



Conc.Ratio													
Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☒	Auto	238849	227340	1.2500	1.2500	1.050624	1.3059	4.47	1.005662	3.692328	3.692328
240118_007	1633 ICAL 0.1PPB	☒	Auto	240568	242916	1.2500	1.2500	0.990337	1.2310	-1.52	1.005662	3.692328	3.692328
240118_008	1633 ICAL 0.25PPB	☒	Auto	224311	235058	1.2500	1.2500	0.954279	1.1861	-5.11	1.005662	3.692328	3.692328
240118_009	1633 ICAL 0.50PPB	☒	Auto	238617	225855	1.2500	1.2500	1.056506	1.3132	5.06	1.005662	3.692328	3.692328
240118_010	1633 ICAL 1.0PPB	☒	Auto	247598	243243	1.2500	1.2500	1.017906	1.2652	1.22	1.005662	3.692328	3.692328
240118_011	1633 ICAL 5.0PPB	☒	Auto	233845	237831	1.2500	1.2500	0.983240	1.2221	-2.23	1.005662	3.692328	3.692328
240118_012	1633 ICAL 10.0PPB	☒	Auto	219938	226144	1.2500	1.2500	0.972556	1.2089	-3.29	1.005662	3.692328	3.692328
240118_013	1633 ICAL 15.0PPB	☒	Auto	209485	201059	1.2500	1.2500	1.041905	1.2950	3.60	1.005662	3.692328	3.692328
240118_014	1633 ICAL 20.0PPB	☒	Auto	198408	201715	1.2500	1.2500	0.983604	1.2226	-2.19	1.005662	3.692328	3.692328
240118_016	1633 ICV 1.0PPB		Auto	232114	214237	1.2500	1.2500	----	1.3467	7.73	1.005662	3.692328	3.692328
240118_017	1633 FTCA ICV 1.0PPB		Auto	221808	222912	1.2500	1.2500	----	1.2368	-1.06	1.005662	3.692328	3.692328

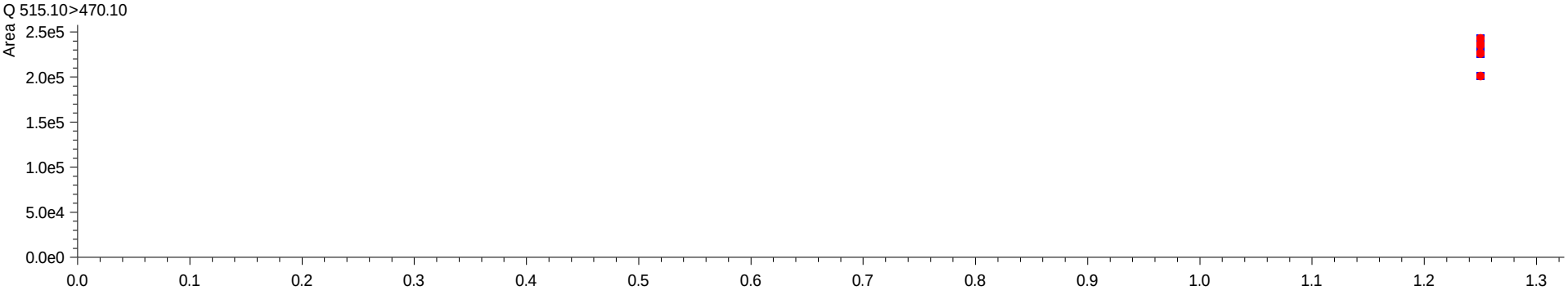


Compound: 13C2-PFDA_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 0

Q 515.10>470.10

R²-----R Equation-----



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc. (ng/mL)
													RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☐	Auto	227340	227340	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240118_007	1633 ICAL 0.1PPB	☐	Auto	242916	242916	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240118_008	1633 ICAL 0.25PPB	☐	Auto	235058	235058	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240118_009	1633 ICAL 0.50PPB	☐	Auto	225855	225855	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240118_010	1633 ICAL 1.0PPB	☐	Auto	243243	243243	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240118_011	1633 ICAL 5.0PPB	☐	Auto	237831	237831	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240118_012	1633 ICAL 10.0PPB	☐	Auto	226144	226144	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240118_013	1633 ICAL 15.0PPB	☐	Auto	201059	201059	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240118_014	1633 ICAL 20.0PPB	☐	Auto	201715	201715	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240118_016	1633 ICV 1.0PPB		Auto	214237	214237	1.2500	1.2500	----	1.2500	0.00	----	----	----
240118_017	1633 FTCA ICV 1.0PPB		Auto	222912	222912	1.2500	1.2500	----	1.2500	0.00	----	----	----



Compound: PFDA

Curve Fit: Linear | Weighting: 1/C | Zero: Not Forced

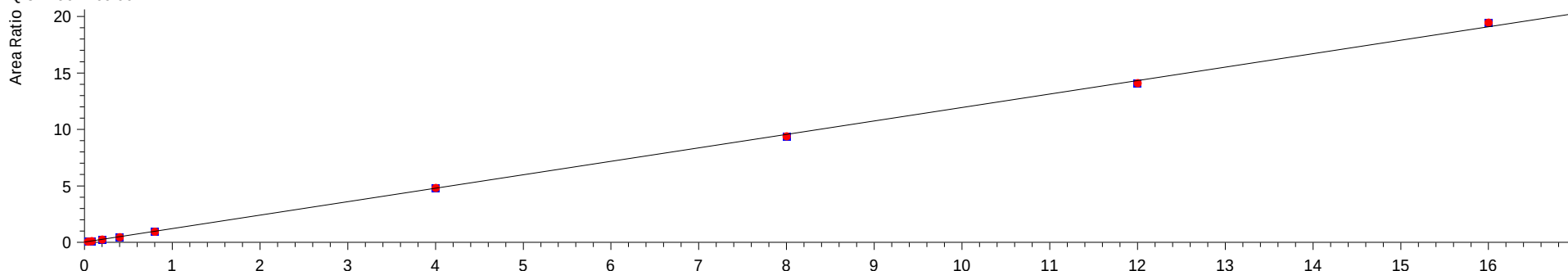
Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2

Q 512.90>469.00
 R² 0.9996490
 R Equation 0.9998245 $y = 1.191461x + 0.02427254$

Q 512.90>469.00

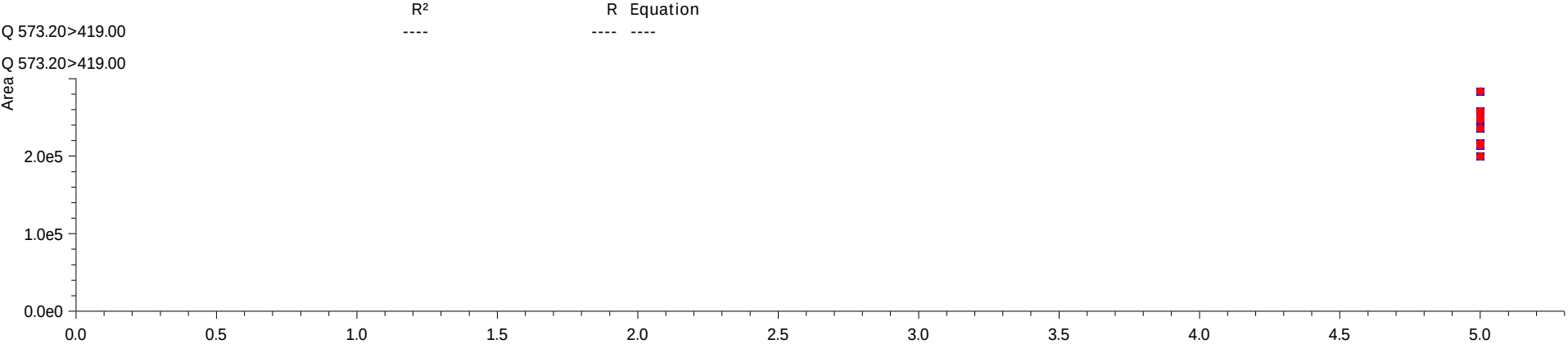


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc.Ratio
240118_006	1633 ICAL 0.05PPB	☒	Auto	18416	238849	0.0500	1.2500	1.927555	0.0554	10.85	1.317599	19.050671	5.099668
240118_007	1633 ICAL 0.1PPB	☒	Auto	28917	240568	0.1000	1.2500	1.502527	0.1006	0.64	1.317599	19.050671	5.099668
240118_008	1633 ICAL 0.25PPB	☒	Auto	57165	224311	0.2500	1.2500	1.274241	0.2419	-3.24	1.317599	19.050671	5.099668
240118_009	1633 ICAL 0.50PPB	☒	Auto	112231	238617	0.5000	1.2500	1.175849	0.4680	-6.40	1.317599	19.050671	5.099668
240118_010	1633 ICAL 1.0PPB	☒	Auto	238103	247598	1.0000	1.2500	1.202064	0.9834	-1.66	1.317599	19.050671	5.099668
240118_011	1633 ICAL 5.0PPB	☒	Auto	1130874	233845	5.0000	1.2500	1.209002	5.0481	0.96	1.317599	19.050671	5.099668
240118_012	1633 ICAL 10.0PPB	☒	Auto	2069023	219938	10.0000	1.2500	1.175914	9.8440	-1.56	1.317599	19.050671	5.099668
240118_013	1633 ICAL 15.0PPB	☒	Auto	2953361	209485	15.0000	1.2500	1.174852	14.7654	-1.56	1.317599	19.050671	5.099668
240118_014	1633 ICAL 20.0PPB	☒	Auto	3861460	198408	20.0000	1.2500	1.216388	20.3930	1.96	1.317599	19.050671	5.099668
240118_016	1633 ICV 1.0PPB		Auto	222841	232114	1.0000	1.2500	----	0.9818	-1.82	1.317599	19.050671	5.099668
240118_017	1633 FTCA ICV 1.0PPB		ND(W/B)	----	221808	1.0000	1.2500	----	----	----	1.317599	19.050671	5.099668



Compound: D3-NMeFOSAA_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 0



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☐	Auto	283573	283573	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_007	1633 ICAL 0.1PPB	☐	Auto	258147	258147	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_008	1633 ICAL 0.25PPB	☐	Auto	246883	246883	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_009	1633 ICAL 0.50PPB	☐	Auto	249589	249589	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_010	1633 ICAL 1.0PPB	☐	Auto	251536	251536	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_011	1633 ICAL 5.0PPB	☐	Auto	235854	235854	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_012	1633 ICAL 10.0PPB	☐	Auto	216872	216872	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_013	1633 ICAL 15.0PPB	☐	Auto	199875	199875	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_014	1633 ICAL 20.0PPB	☐	Auto	214118	214118	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_016	1633 ICV 1.0PPB		Auto	227223	227223	5.0000	5.0000	----	5.0000	0.00	----	----	----
240118_017	1633 FTCA ICV 1.0PPB		Auto	217334	217334	5.0000	5.0000	----	5.0000	0.00	----	----	----



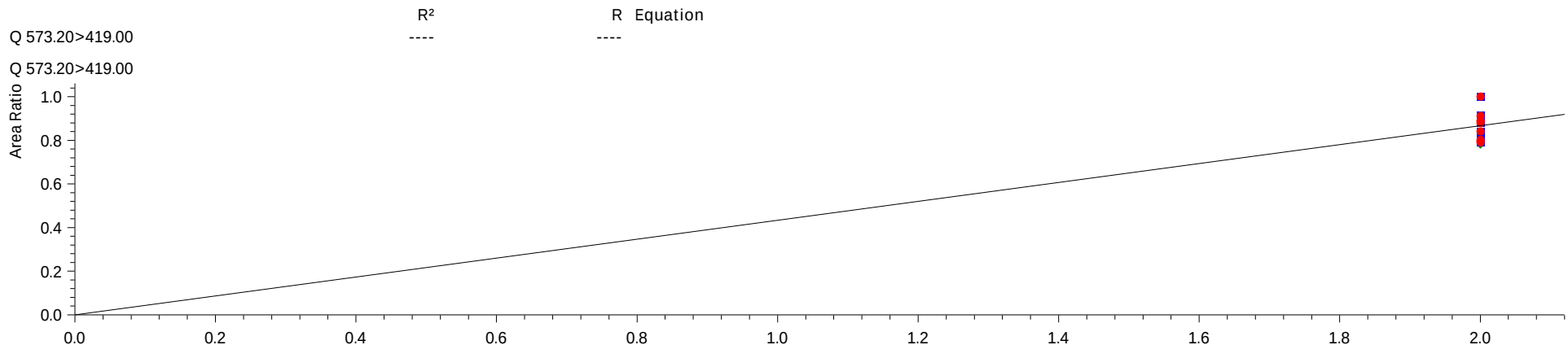
Compound: D3-NMeFOSAA

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☒	Auto	283573	283185	5.0000	2.5000	0.500685	5.7696	15.39	0.433897	7.812151	7.812151
240118_007	1633 ICAL 0.1PPB	☒	Auto	258147	282518	5.0000	2.5000	0.456869	5.2647	5.29	0.433897	7.812151	7.812151
240118_008	1633 ICAL 0.25PPB	☒	Auto	246883	277483	5.0000	2.5000	0.444862	5.1264	2.53	0.433897	7.812151	7.812151
240118_009	1633 ICAL 0.50PPB	☒	Auto	249589	279876	5.0000	2.5000	0.445892	5.1382	2.76	0.433897	7.812151	7.812151
240118_010	1633 ICAL 1.0PPB	☒	Auto	251536	298833	5.0000	2.5000	0.420864	4.8498	-3.00	0.433897	7.812151	7.812151
240118_011	1633 ICAL 5.0PPB	☒	Auto	235854	293425	5.0000	2.5000	0.401898	4.6313	-7.37	0.433897	7.812151	7.812151
240118_012	1633 ICAL 10.0PPB	☒	Auto	216872	272314	5.0000	2.5000	0.398204	4.5887	-8.23	0.433897	7.812151	7.812151
240118_013	1633 ICAL 15.0PPB	☒	Auto	199875	252372	5.0000	2.5000	0.395993	4.5632	-8.74	0.433897	7.812151	7.812151
240118_014	1633 ICAL 20.0PPB	☒	Auto	214118	243425	5.0000	2.5000	0.439802	5.0681	1.36	0.433897	7.812151	7.812151
240118_016	1633 ICV 1.0PPB		Auto	227223	271163	5.0000	2.5000	----	4.8281	-3.44	0.433897	7.812151	7.812151
240118_017	1633 FTCA ICV 1.0PPB		Auto	217334	278941	5.0000	2.5000	----	4.4892	-10.22	0.433897	7.812151	7.812151

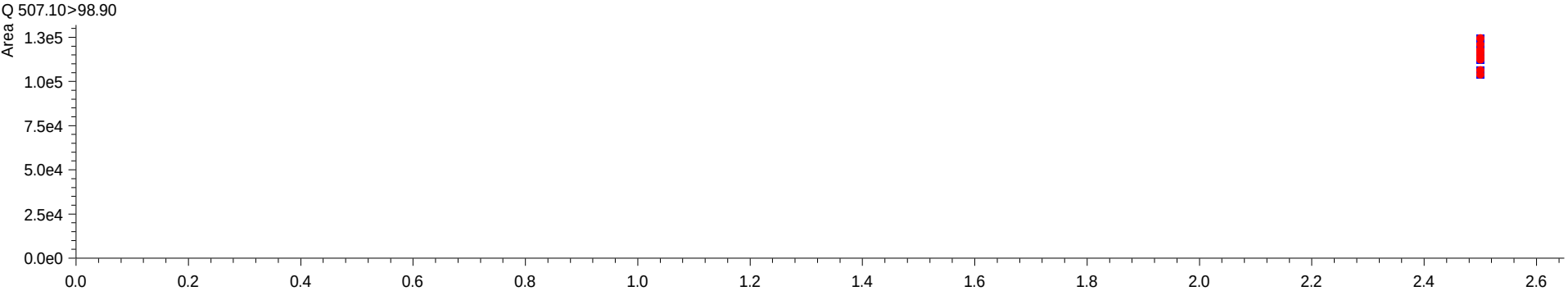


Compound: 13C8-PFOS_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 0

Q 507.10>98.90

R²-----R Equation-----



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☐	Auto	117833	117833	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_007	1633 ICAL 0.1PPB	☐	Auto	118069	118069	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_008	1633 ICAL 0.25PPB	☐	Auto	114171	114171	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_009	1633 ICAL 0.50PPB	☐	Auto	121099	121099	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_010	1633 ICAL 1.0PPB	☐	Auto	124480	124480	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_011	1633 ICAL 5.0PPB	☐	Auto	116018	116018	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_012	1633 ICAL 10.0PPB	☐	Auto	112442	112442	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_013	1633 ICAL 15.0PPB	☐	Auto	104055	104055	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_014	1633 ICAL 20.0PPB	☐	Auto	106399	106399	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_016	1633 ICV 1.0PPB		Auto	105678	105678	2.5000	2.5000	----	2.5000	0.00	----	----	----
240118_017	1633 FTCA ICV 1.0PPB		Auto	114722	114722	2.5000	2.5000	----	2.5000	0.00	----	----	----



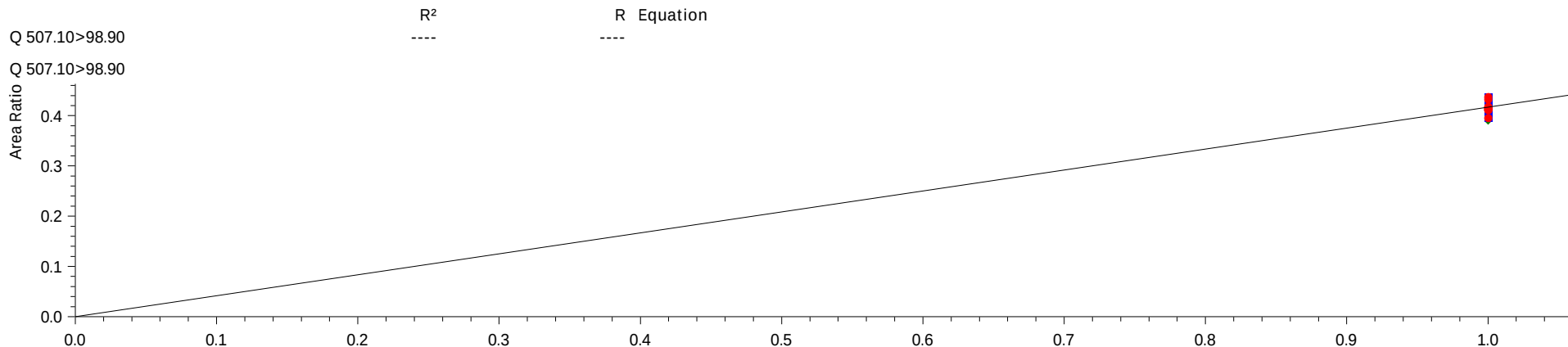
Compound: 13C8-PFOS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc.Ratio
240118_006	1633 ICAL 0.05PPB	☒	Auto	117833	283185	2.5000	2.5000	0.416099	2.4950	-0.20	0.416935	2.922731	2.922731
240118_007	1633 ICAL 0.1PPB	☒	Auto	118069	282518	2.5000	2.5000	0.417919	2.5059	0.24	0.416935	2.922731	2.922731
240118_008	1633 ICAL 0.25PPB	☒	Auto	114171	277483	2.5000	2.5000	0.411453	2.4671	-1.31	0.416935	2.922731	2.922731
240118_009	1633 ICAL 0.50PPB	☒	Auto	121099	279876	2.5000	2.5000	0.432687	2.5945	3.78	0.416935	2.922731	2.922731
240118_010	1633 ICAL 1.0PPB	☒	Auto	124480	298833	2.5000	2.5000	0.416553	2.4977	-0.09	0.416935	2.922731	2.922731
240118_011	1633 ICAL 5.0PPB	☒	Auto	116018	293425	2.5000	2.5000	0.395390	2.3708	-5.17	0.416935	2.922731	2.922731
240118_012	1633 ICAL 10.0PPB	☒	Auto	112442	272314	2.5000	2.5000	0.412915	2.4759	-0.96	0.416935	2.922731	2.922731
240118_013	1633 ICAL 15.0PPB	☒	Auto	104055	252372	2.5000	2.5000	0.412306	2.4722	-1.11	0.416935	2.922731	2.922731
240118_014	1633 ICAL 20.0PPB	☒	Auto	106399	243425	2.5000	2.5000	0.437089	2.6209	4.83	0.416935	2.922731	2.922731
240118_016	1633 ICV 1.0PPB		Auto	105678	271163	2.5000	2.5000	----	2.3368	-6.53	0.416935	2.922731	2.922731
240118_017	1633 FTCA ICV 1.0PPB		Auto	114722	278941	2.5000	2.5000	----	2.4661	-1.36	0.416935	2.922731	2.922731



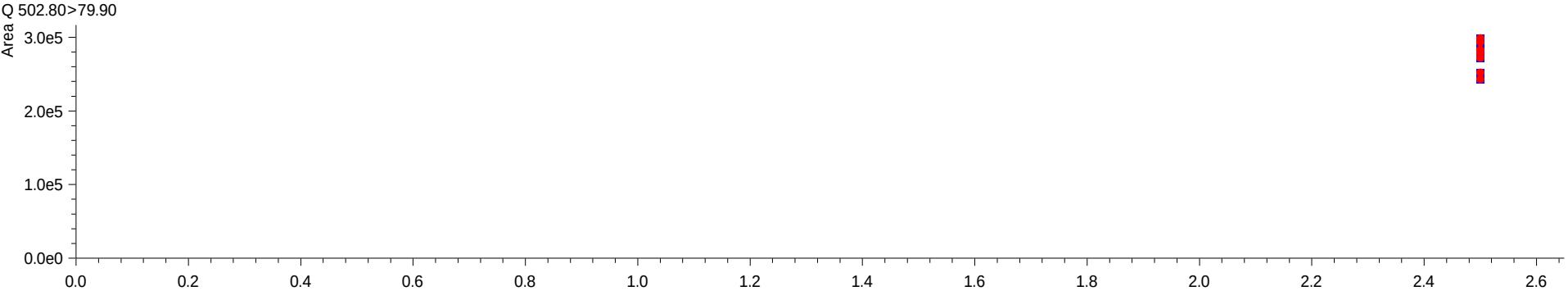
Compound: 13C4-PFOS_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 0

Q 502.80>79.90

R²

R Equation



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc. (ng/mL)
													RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☐	Auto	283185	283185	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_007	1633 ICAL 0.1PPB	☐	Auto	282518	282518	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_008	1633 ICAL 0.25PPB	☐	Auto	277483	277483	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_009	1633 ICAL 0.50PPB	☐	Auto	279876	279876	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_010	1633 ICAL 1.0PPB	☐	Auto	298833	298833	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_011	1633 ICAL 5.0PPB	☐	Auto	293425	293425	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_012	1633 ICAL 10.0PPB	☐	Auto	272314	272314	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_013	1633 ICAL 15.0PPB	☐	Auto	252372	252372	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_014	1633 ICAL 20.0PPB	☐	Auto	243425	243425	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_016	1633 ICV 1.0PPB		Auto	271163	271163	2.5000	2.5000	----	2.5000	0.00	----	----	----
240118_017	1633 FTCA ICV 1.0PPB		Auto	278941	278941	2.5000	2.5000	----	2.5000	0.00	----	----	----



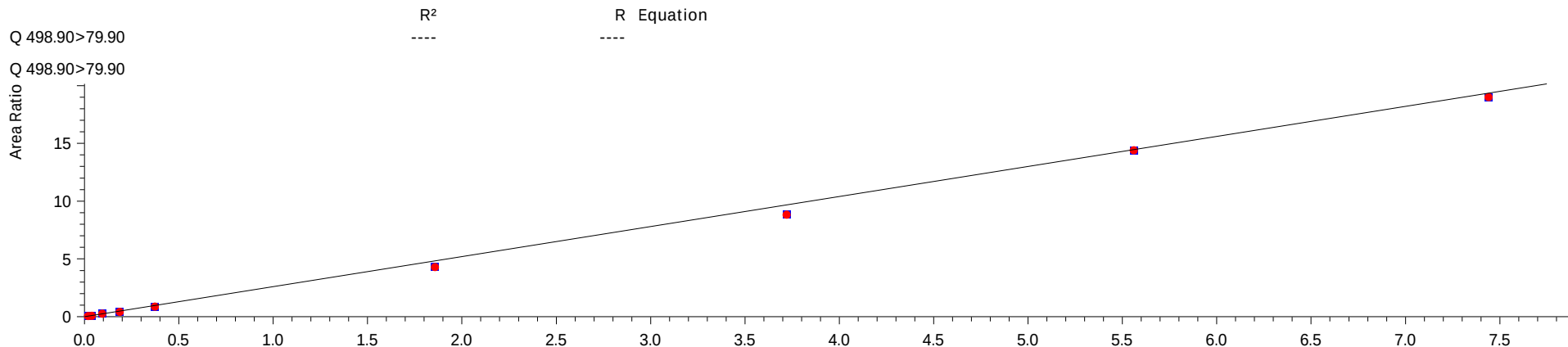
Compound: PFOS

Curve Fit: Mean RF | Weighting: 1/C | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☑	M	7169	117833	0.0464	2.5000	3.278029	0.0585	26.07	2.600246	12.466691	12.466691
240118_007	1633 ICAL 0.1PPB	☑	M	11920	118069	0.0930	2.5000	2.713837	0.0971	4.37	2.600246	12.466691	12.466691
240118_008	1633 ICAL 0.25PPB	☑	M	30901	114171	0.2330	2.5000	2.904035	0.2602	11.68	2.600246	12.466691	12.466691
240118_009	1633 ICAL 0.50PPB	☑	M	51913	121099	0.4640	2.5000	2.309715	0.4122	-11.17	2.600246	12.466691	12.466691
240118_010	1633 ICAL 1.0PPB	☑	M	108900	124480	0.9300	2.5000	2.351715	0.8411	-9.56	2.600246	12.466691	12.466691
240118_011	1633 ICAL 5.0PPB	☑	M	499726	116018	4.6400	2.5000	2.320759	4.1413	-10.75	2.600246	12.466691	12.466691
240118_012	1633 ICAL 10.0PPB	☑	M	994421	112442	9.3000	2.5000	2.377375	8.5029	-8.57	2.600246	12.466691	12.466691
240118_013	1633 ICAL 15.0PPB	☑	M	1499453	104055	13.9000	2.5000	2.591773	13.8547	-0.33	2.600246	12.466691	12.466691
240118_014	1633 ICAL 20.0PPB	☑	M	2022532	106399	18.6000	2.5000	2.554972	18.2762	-1.74	2.600246	12.466691	12.466691
240118_016	1633 ICV 1.0PPB		M	93974	105678	0.9300	2.5000	----	0.8550	-8.07	2.600246	12.466691	12.466691
240118_017	1633 FTCA ICV 1.0PPB		ND(W/B)	----	114722	0.9300	2.5000	----	----	----	2.600246	12.466691	12.466691



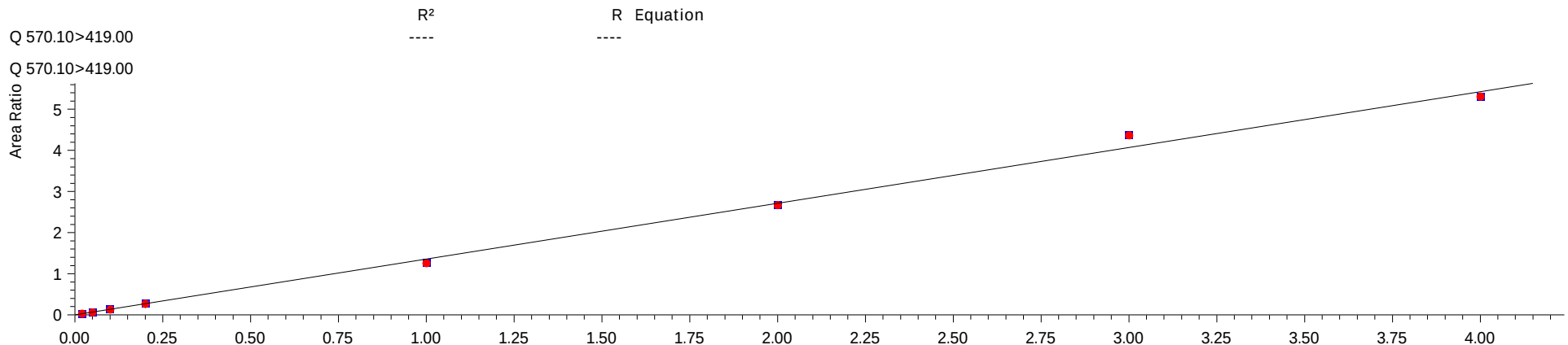
Compound: NMeFOSAA

Curve Fit: Mean RF | Weighting: 1/C | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 8

No. of Control Points: 2

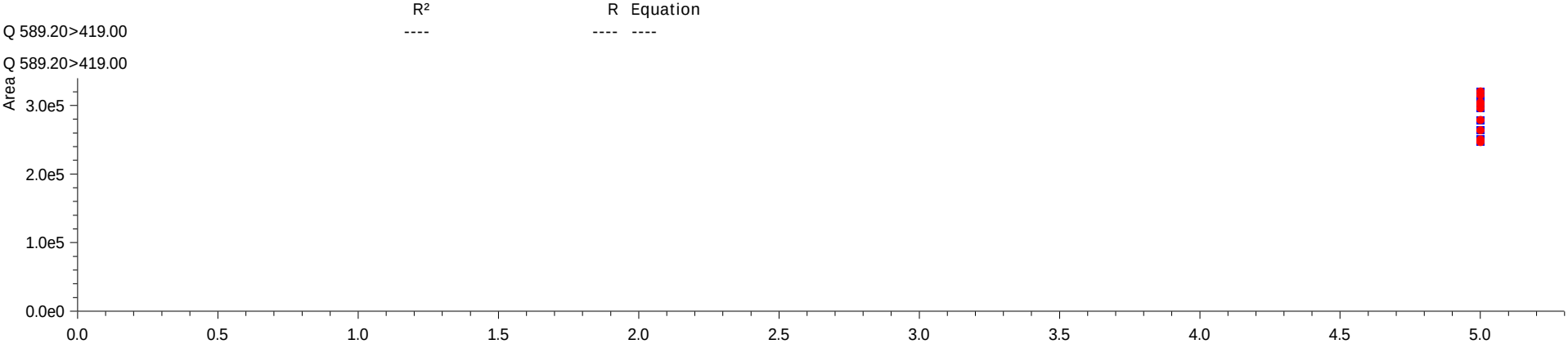


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc.Ratio
240118_007	1633 ICAL 0.1PPB	☒	M	7957	258147	0.1000	5.0000	1.541119	0.1136	13.60	1.356672	7.287886	7.287885
240118_008	1633 ICAL 0.25PPB	☒	M	15374	246883	0.2500	5.0000	1.245412	0.2295	-8.20	1.356672	7.287886	7.287885
240118_009	1633 ICAL 0.50PPB	☒	M	33145	249589	0.5000	5.0000	1.327995	0.4894	-2.11	1.356672	7.287886	7.287885
240118_010	1633 ICAL 1.0PPB	☒	M	68385	251536	1.0000	5.0000	1.359346	1.0020	0.20	1.356672	7.287886	7.287885
240118_011	1633 ICAL 5.0PPB	☒	M	296556	235854	5.0000	5.0000	1.257372	4.6340	-7.32	1.356672	7.287886	7.287885
240118_012	1633 ICAL 10.0PPB	☒	M	579948	216872	10.0000	5.0000	1.337073	9.8555	-1.44	1.356672	7.287886	7.287885
240118_013	1633 ICAL 15.0PPB	☒	M	873824	199875	15.0000	5.0000	1.457281	16.1124	7.42	1.356672	7.287886	7.287885
240118_014	1633 ICAL 20.0PPB	☒	M	1137204	214118	20.0000	5.0000	1.327777	19.5740	-2.13	1.356672	7.287886	7.287885
240118_016	1633 ICV 1.0PPB		M	57190	227223	1.0000	5.0000	----	0.9276	-7.24	1.356672	7.287886	7.287885
240118_017	1633 FTCA ICV 1.0PPB		ND(W/B)	----	217334	1.0000	5.0000	----	----	----	1.356672	7.287886	7.287885



Compound: D5-NEtFOSAA_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 0

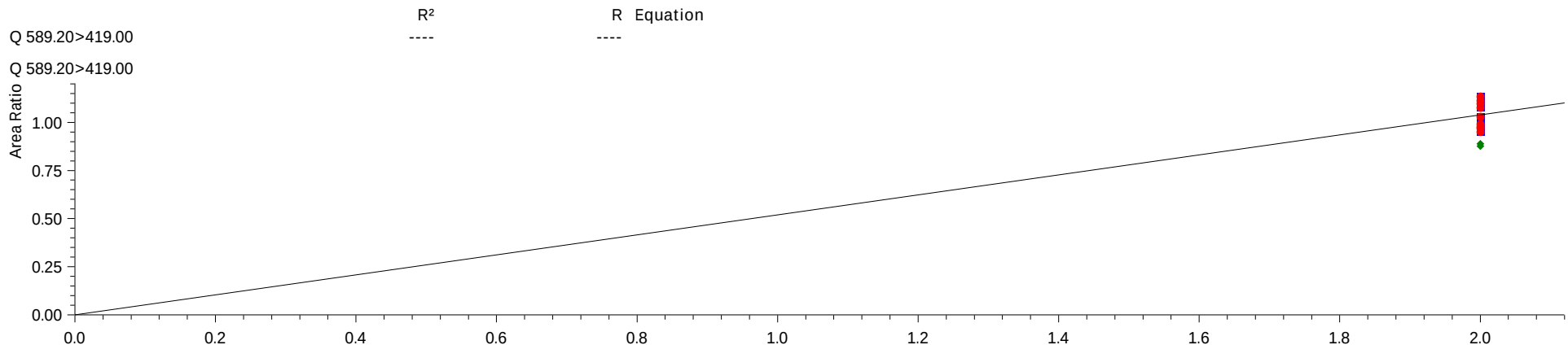


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☐	Auto	315390	315390	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_007	1633 ICAL 0.1PPB	☐	Auto	320494	320494	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_008	1633 ICAL 0.25PPB	☐	Auto	304822	304822	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_009	1633 ICAL 0.50PPB	☐	Auto	301439	301439	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_010	1633 ICAL 1.0PPB	☐	Auto	296281	296281	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_011	1633 ICAL 5.0PPB	☐	Auto	279078	279078	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_012	1633 ICAL 10.0PPB	☐	Auto	264164	264164	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_013	1633 ICAL 15.0PPB	☐	Auto	246903	246903	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_014	1633 ICAL 20.0PPB	☐	Auto	250513	250513	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_016	1633 ICV 1.0PPB		Auto	241074	241074	5.0000	5.0000	----	5.0000	0.00	----	----	----
240118_017	1633 FTCA ICV 1.0PPB		Auto	244437	244437	5.0000	5.0000	----	5.0000	0.00	----	----	----



Compound: D5-NEtFOSAA

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
 Quantitative Method: Internal Standard
 No. of Calibration Points: 9
 No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☒	Auto	315390	283185	5.0000	2.5000	0.556861	5.3637	7.27	0.519100	6.654894	6.654894
240118_007	1633 ICAL 0.1PPB	☒	Auto	320494	282518	5.0000	2.5000	0.567210	5.4634	9.27	0.519100	6.654894	6.654894
240118_008	1633 ICAL 0.25PPB	☒	Auto	304822	277483	5.0000	2.5000	0.549263	5.2905	5.81	0.519100	6.654894	6.654894
240118_009	1633 ICAL 0.50PPB	☒	Auto	301439	279876	5.0000	2.5000	0.538522	5.1871	3.74	0.519100	6.654894	6.654894
240118_010	1633 ICAL 1.0PPB	☒	Auto	296281	298833	5.0000	2.5000	0.495731	4.7749	-4.50	0.519100	6.654894	6.654894
240118_011	1633 ICAL 5.0PPB	☒	Auto	279078	293425	5.0000	2.5000	0.475552	4.5805	-8.39	0.519100	6.654894	6.654894
240118_012	1633 ICAL 10.0PPB	☒	Auto	264164	272314	5.0000	2.5000	0.485036	4.6719	-6.56	0.519100	6.654894	6.654894
240118_013	1633 ICAL 15.0PPB	☒	Auto	246903	252372	5.0000	2.5000	0.489164	4.7117	-5.77	0.519100	6.654894	6.654894
240118_014	1633 ICAL 20.0PPB	☒	Auto	250513	243425	5.0000	2.5000	0.514558	4.9563	-0.87	0.519100	6.654894	6.654894
240118_016	1633 ICV 1.0PPB		Auto	241074	271163	5.0000	2.5000	----	4.2816	-14.37	0.519100	6.654894	6.654894
240118_017	1633 FTCA ICV 1.0PPB		Auto	244437	278941	5.0000	2.5000	----	4.2203	-15.59	0.519100	6.654894	6.654894



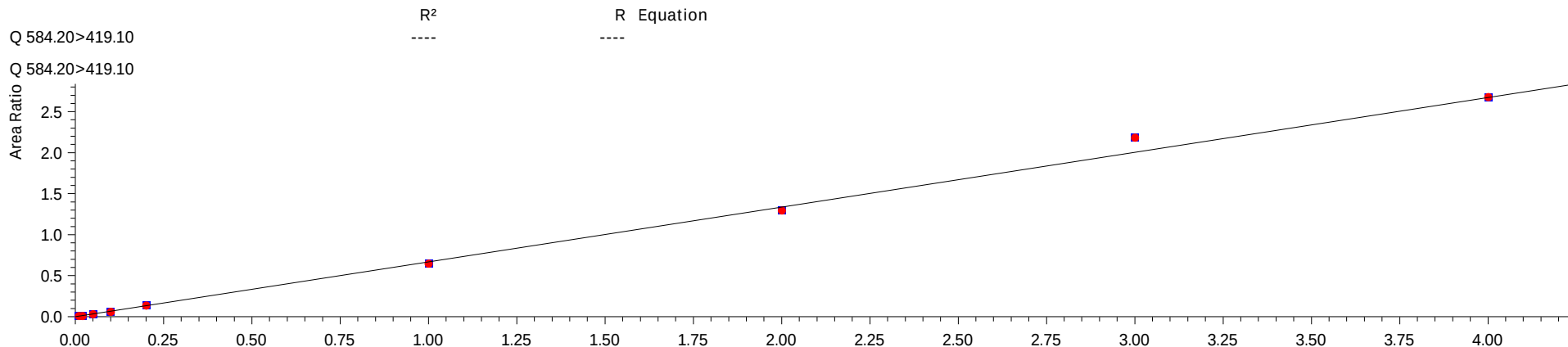
Compound: NEtFOSAA

Curve Fit: Mean RF | Weighting: 1/C | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc.Ratio
240118_006	1633 ICAL 0.05PPB	☒	M	2717	315390	0.0500	5.0000	0.861581	0.0645	29.02	0.667778	14.431317	14.431316
240118_007	1633 ICAL 0.1PPB	☒	M	3243	320494	0.1000	5.0000	0.505981	0.0758	-24.23	0.667778	14.431317	14.431316
240118_008	1633 ICAL 0.25PPB	☒	M	10212	304822	0.2500	5.0000	0.670046	0.2508	0.34	0.667778	14.431317	14.431316
240118_009	1633 ICAL 0.50PPB	☒	M	17841	301439	0.5000	5.0000	0.591848	0.4431	-11.37	0.667778	14.431317	14.431316
240118_010	1633 ICAL 1.0PPB	☒	M	40635	296281	1.0000	5.0000	0.685750	1.0269	2.69	0.667778	14.431317	14.431316
240118_011	1633 ICAL 5.0PPB	☒	M	180916	279078	5.0000	5.0000	0.648264	4.8539	-2.92	0.667778	14.431317	14.431316
240118_012	1633 ICAL 10.0PPB	☒	M	342529	264164	10.0000	5.0000	0.648327	9.7087	-2.91	0.667778	14.431317	14.431316
240118_013	1633 ICAL 15.0PPB	☒	M	539699	246903	15.0000	5.0000	0.728626	16.3668	9.11	0.667778	14.431317	14.431316
240118_014	1633 ICAL 20.0PPB	☒	M	670953	250513	20.0000	5.0000	0.669579	20.0539	0.27	0.667778	14.431317	14.431316
240118_016	1633 ICV 1.0PPB		M	32459	241074	1.0000	5.0000	----	1.0081	0.81	0.667778	14.431317	14.431316
240118_017	1633 FTCA ICV 1.0PPB		ND(W/B)	----	244437	1.0000	5.0000	----	----	----	0.667778	14.431317	14.431316



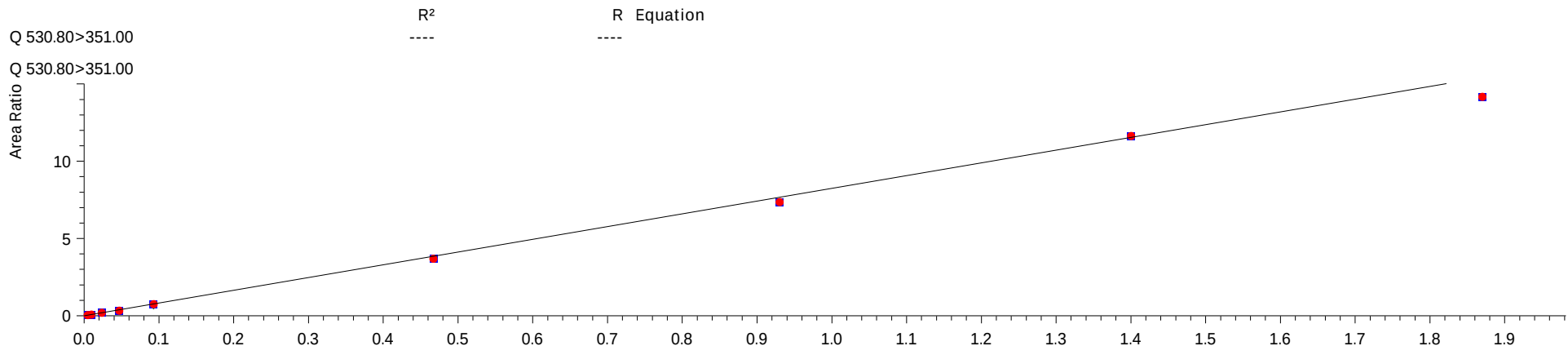
Compound: 9-Cl-PF3ONS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☒	Auto	28101	595312	0.0467	10.0000	10.107900	0.0573	22.61	8.244264	9.496481	9.496481
240118_007	1633 ICAL 0.1PPB	☒	Auto	46416	604622	0.0930	10.0000	8.254759	0.0931	0.13	8.244264	9.496481	9.496481
240118_008	1633 ICAL 0.25PPB	☒	Auto	116926	588188	0.2340	10.0000	8.495298	0.2411	3.04	8.244264	9.496481	9.496481
240118_009	1633 ICAL 0.50PPB	☒	Auto	226384	654919	0.4670	10.0000	7.401864	0.4193	-10.22	8.244264	9.496481	9.496481
240118_010	1633 ICAL 1.0PPB	☒	Auto	488722	640534	0.9300	10.0000	8.204216	0.9255	-0.49	8.244264	9.496481	9.496481
240118_011	1633 ICAL 5.0PPB	☒	Auto	2287642	618248	4.6700	10.0000	7.923344	4.4882	-3.89	8.244264	9.496481	9.496481
240118_012	1633 ICAL 10.0PPB	☒	Auto	4405373	598128	9.3000	10.0000	7.919643	8.9338	-3.94	8.244264	9.496481	9.496481
240118_013	1633 ICAL 15.0PPB	☒	Auto	6793632	583755	14.0000	10.0000	8.312727	14.1163	0.83	8.244264	9.496481	9.496481
240118_014	1633 ICAL 20.0PPB	☒	Auto	8537715	602434	18.7000	10.0000	7.578621	17.1902	-8.07	8.244264	9.496481	9.496481
240118_016	1633 ICV 1.0PPB		Auto	410044	617025	0.9300	10.0000	----	0.8061	-13.33	8.244264	9.496481	9.496481
240118_017	1633 FTCA ICV 1.0PPB		ND(W/B)	----	650567	0.9300	10.0000	----	----	----	8.244264	9.496481	9.496481



Compound: PFUnDA

Curve Fit: Linear | Weighting: 1/C | Zero: Not Forced

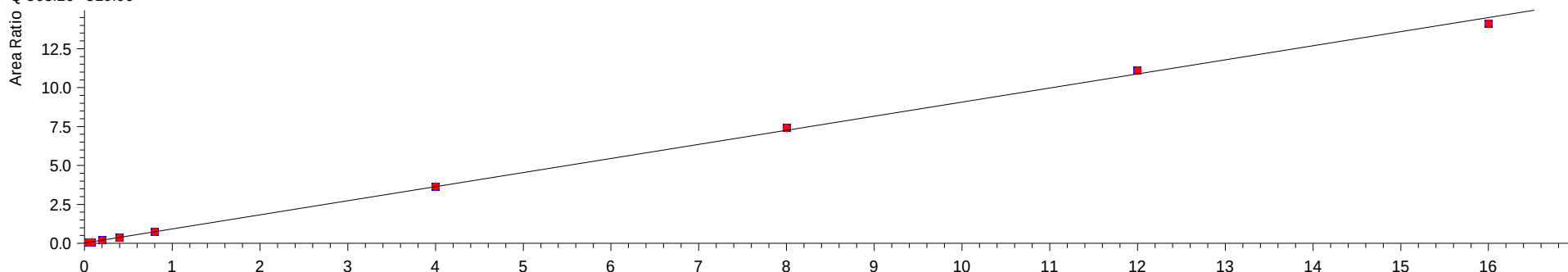
Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2

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Q 563.10>519.00

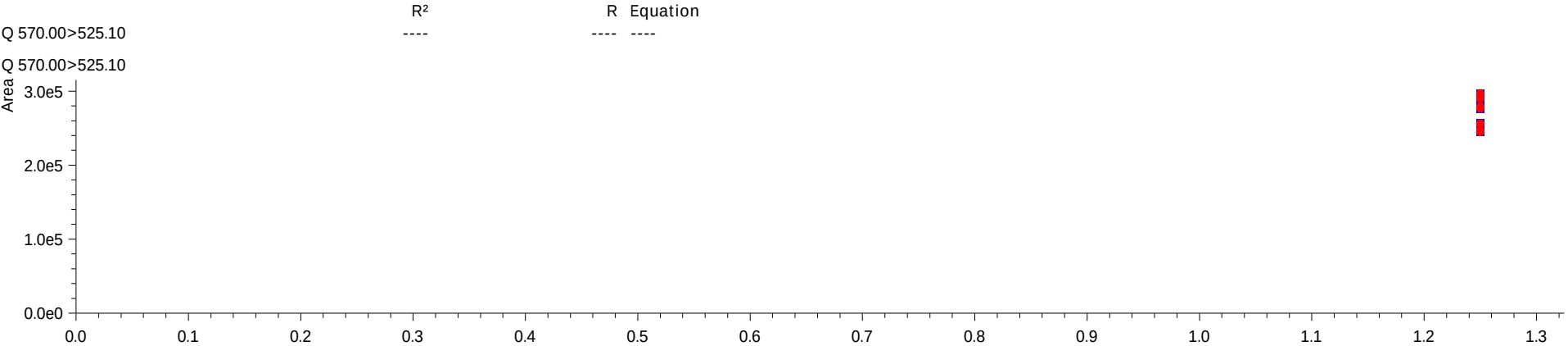


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☒	Auto	18285	295082	0.0500	1.2500	1.549137	0.0559	11.74	1.016871	20.695156	6.350896
240118_007	1633 ICAL 0.1PPB	☒	Auto	25490	290019	0.1000	1.2500	1.098635	0.0917	-8.32	1.016871	20.695156	6.350896
240118_008	1633 ICAL 0.25PPB	☒	Auto	56306	279544	0.2500	1.2500	1.007098	0.2485	-0.61	1.016871	20.695156	6.350896
240118_009	1633 ICAL 0.50PPB	☒	Auto	106205	297301	0.5000	1.2500	0.893073	0.4637	-7.27	1.016871	20.695156	6.350896
240118_010	1633 ICAL 1.0PPB	☒	Auto	211279	276567	1.0000	1.2500	0.954916	1.0253	2.53	1.016871	20.695156	6.350896
240118_011	1633 ICAL 5.0PPB	☒	Auto	933949	255491	5.0000	1.2500	0.913875	5.0189	0.38	1.016871	20.695156	6.350896
240118_012	1633 ICAL 10.0PPB	☒	Auto	1839221	248001	10.0000	1.2500	0.927021	10.2127	2.13	1.016871	20.695156	6.350896
240118_013	1633 ICAL 15.0PPB	☒	Auto	2720435	245029	15.0000	1.2500	0.925209	15.3038	2.03	1.016871	20.695156	6.350896
240118_014	1633 ICAL 20.0PPB	☒	Auto	3625574	256659	20.0000	1.2500	0.882877	19.4796	-2.60	1.016871	20.695156	6.350896
240118_016	1633 ICV 1.0PPB		Auto	194333	255936	1.0000	1.2500	----	1.0190	1.90	1.016871	20.695156	6.350896
240118_017	1633 FTCA ICV 1.0PPB		ND(W/B)	----	272818	1.0000	1.2500	----	----	----	1.016871	20.695156	6.350896



Compound: 13C7-PFUnDA_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 0



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc. (ng/mL)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☐	Auto	295082	295082	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----	----
240118_007	1633 ICAL 0.1PPB	☐	Auto	290019	290019	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----	----
240118_008	1633 ICAL 0.25PPB	☐	Auto	279544	279544	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----	----
240118_009	1633 ICAL 0.50PPB	☐	Auto	297301	297301	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----	----
240118_010	1633 ICAL 1.0PPB	☐	Auto	276567	276567	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----	----
240118_011	1633 ICAL 5.0PPB	☐	Auto	255491	255491	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----	----
240118_012	1633 ICAL 10.0PPB	☐	Auto	248001	248001	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----	----
240118_013	1633 ICAL 15.0PPB	☐	Auto	245029	245029	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----	----
240118_014	1633 ICAL 20.0PPB	☐	Auto	256659	256659	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----	----
240118_016	1633 ICV 1.0PPB		Auto	255936	255936	1.2500	1.2500	----	1.2500	0.00	----	----	----	----
240118_017	1633 FTCA ICV 1.0PPB		Auto	272818	272818	1.2500	1.2500	----	1.2500	0.00	----	----	----	----



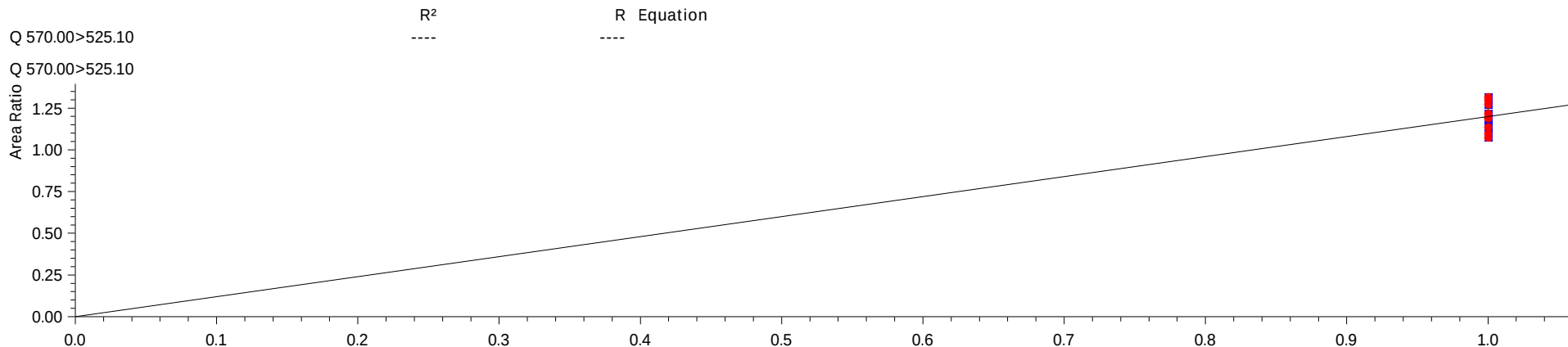
Compound: 13C7-PFUnDA

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc.Ratio
240118_006	1633 ICAL 0.05PPB	☒	Auto	295082	227340	1.2500	1.2500	1.297974	1.3525	8.20	1.199606	7.178995	7.178995
240118_007	1633 ICAL 0.1PPB	☒	Auto	290019	242916	1.2500	1.2500	1.193909	1.2441	-0.47	1.199606	7.178995	7.178995
240118_008	1633 ICAL 0.25PPB	☒	Auto	279544	235058	1.2500	1.2500	1.189260	1.2392	-0.86	1.199606	7.178995	7.178995
240118_009	1633 ICAL 0.50PPB	☒	Auto	297301	225855	1.2500	1.2500	1.316334	1.3716	9.73	1.199606	7.178995	7.178995
240118_010	1633 ICAL 1.0PPB	☒	Auto	276567	243243	1.2500	1.2500	1.137000	1.1848	-5.22	1.199606	7.178995	7.178995
240118_011	1633 ICAL 5.0PPB	☒	Auto	255491	237831	1.2500	1.2500	1.074258	1.1194	-10.45	1.199606	7.178995	7.178995
240118_012	1633 ICAL 10.0PPB	☒	Auto	248001	226144	1.2500	1.2500	1.096652	1.1427	-8.58	1.199606	7.178995	7.178995
240118_013	1633 ICAL 15.0PPB	☒	Auto	245029	201059	1.2500	1.2500	1.218690	1.2699	1.59	1.199606	7.178995	7.178995
240118_014	1633 ICAL 20.0PPB	☒	Auto	256659	201715	1.2500	1.2500	1.272382	1.3258	6.07	1.199606	7.178995	7.178995
240118_016	1633 ICV 1.0PPB		Auto	255936	214237	1.2500	1.2500	----	1.2448	-0.41	1.199606	7.178995	7.178995
240118_017	1633 FTCA ICV 1.0PPB		Auto	272818	222912	1.2500	1.2500	----	1.2753	2.02	1.199606	7.178995	7.178995



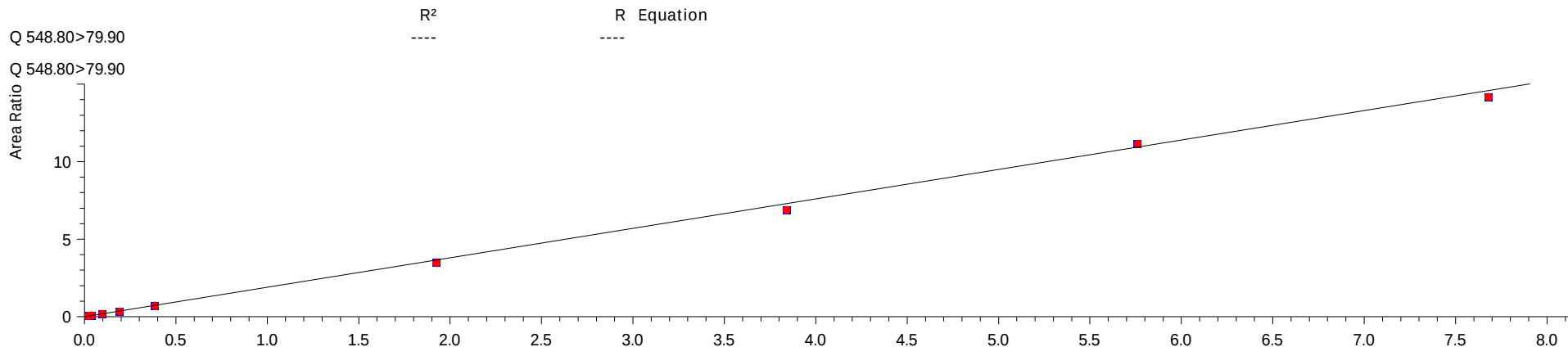
Compound: PFNS

Curve Fit: Mean RF | Weighting: 1/C | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☒	Auto	5101	117833	0.0481	2.5000	2.250142	0.0570	18.46	1.899500	7.778652	7.778650
240118_007	1633 ICAL 0.1PPB	☒	Auto	8984	118069	0.0960	2.5000	1.981589	0.1001	4.32	1.899500	7.778652	7.778650
240118_008	1633 ICAL 0.25PPB	☒	Auto	20655	114171	0.2400	2.5000	1.884534	0.2381	-0.79	1.899500	7.778652	7.778650
240118_009	1633 ICAL 0.50PPB	☒	Auto	41760	121099	0.4810	2.5000	1.792329	0.4539	-5.64	1.899500	7.778652	7.778650
240118_010	1633 ICAL 1.0PPB	☒	Auto	85942	124480	0.9600	2.5000	1.797948	0.9087	-5.35	1.899500	7.778652	7.778650
240118_011	1633 ICAL 5.0PPB	☒	Auto	404394	116018	4.8100	2.5000	1.811655	4.5876	-4.62	1.899500	7.778652	7.778650
240118_012	1633 ICAL 10.0PPB	☒	Auto	775210	112442	9.6000	2.5000	1.795389	9.0738	-5.48	1.899500	7.778652	7.778650
240118_013	1633 ICAL 15.0PPB	☒	Auto	1160949	104055	14.4000	2.5000	1.937001	14.6843	1.97	1.899500	7.778652	7.778650
240118_014	1633 ICAL 20.0PPB	☒	Auto	1507553	106399	19.2000	2.5000	1.844909	18.6482	-2.87	1.899500	7.778652	7.778650
240118_016	1633 ICV 1.0PPB		Auto	78210	105678	0.9600	2.5000	----	0.9740	1.46	1.899500	7.778652	7.778650
240118_017	1633 FTCA ICV 1.0PPB		ND(W/B)	----	114722	0.9600	2.5000	----	----	----	1.899500	7.778652	7.778650



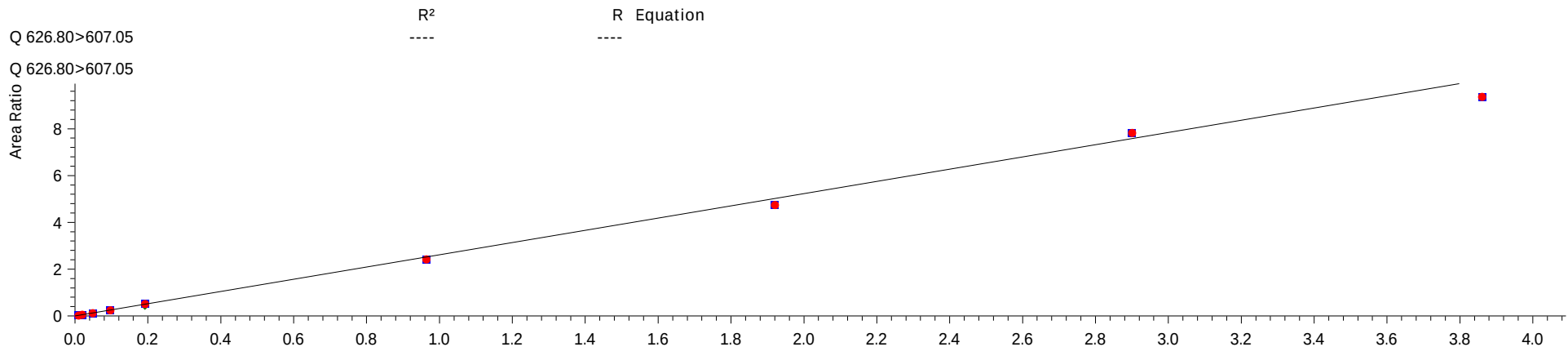
Compound: 10_2 FTS

Curve Fit: Mean RF | Weighting: 1/C | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2

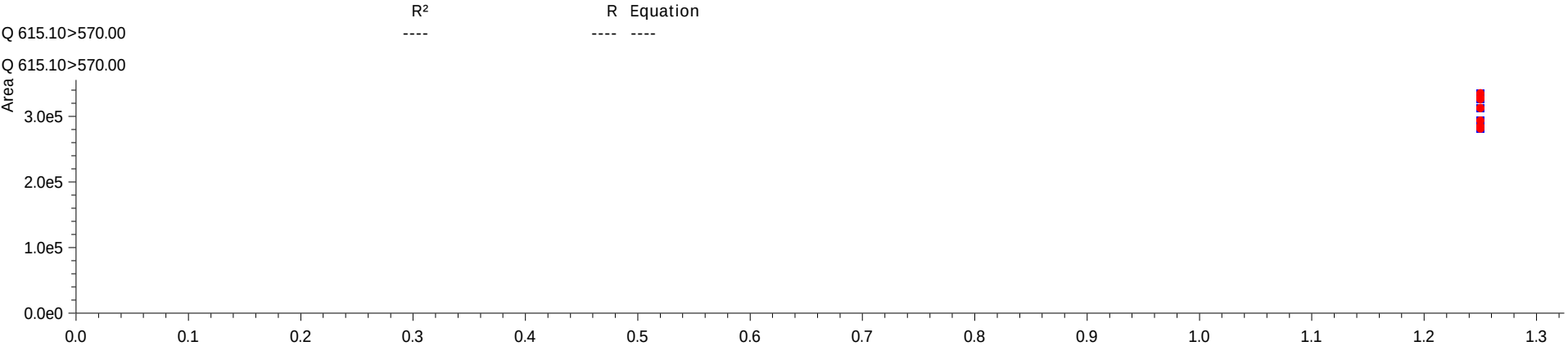


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc.Ratio
240118_006	1633 ICAL 0.05PPB	☒	Auto	4057	149793	0.0482	5.0000	2.809740	0.0518	7.48	2.614100	5.693540	5.693541
240118_007	1633 ICAL 0.1PPB	☒	Auto	7907	145227	0.0960	5.0000	2.835849	0.1041	8.48	2.614100	5.693540	5.693541
240118_008	1633 ICAL 0.25PPB	☒	Auto	16489	131843	0.2410	5.0000	2.594712	0.2392	-0.74	2.614100	5.693540	5.693541
240118_009	1633 ICAL 0.50PPB	☒	Auto	31611	131115	0.4820	5.0000	2.500927	0.4611	-4.33	2.614100	5.693540	5.693541
240118_010	1633 ICAL 1.0PPB	☒	Auto	62123	121050	0.9600	5.0000	2.672924	0.9816	2.25	2.614100	5.693540	5.693541
240118_011	1633 ICAL 5.0PPB	☒	Auto	285490	117777	4.8200	5.0000	2.514514	4.6364	-3.81	2.614100	5.693540	5.693541
240118_012	1633 ICAL 10.0PPB	☒	Auto	534728	112708	9.6000	5.0000	2.471027	9.0746	-5.47	2.614100	5.693540	5.693541
240118_013	1633 ICAL 15.0PPB	☒	Auto	775809	99053	14.5000	5.0000	2.700780	14.9808	3.32	2.614100	5.693540	5.693541
240118_014	1633 ICAL 20.0PPB	☒	Auto	999936	106762	19.3000	5.0000	2.426425	17.9144	-7.18	2.614100	5.693540	5.693541
240118_016	1633 ICV 1.0PPB		Auto	51049	119746	0.9600	5.0000	----	0.8154	-15.06	2.614100	5.693540	5.693541
240118_017	1633 FTCA ICV 1.0PPB		ND(W/B)	----	104364	0.9600	5.0000	----	----	----	2.614100	5.693540	5.693541



Compound: 13C2-PFDOA_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 0



											Conc. (ng/mL)		
Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☐	Auto	335621	335621	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240118_007	1633 ICAL 0.1PPB	☐	Auto	330237	330237	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240118_008	1633 ICAL 0.25PPB	☐	Auto	313428	313428	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240118_009	1633 ICAL 0.50PPB	☐	Auto	326480	326480	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240118_010	1633 ICAL 1.0PPB	☐	Auto	328895	328895	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240118_011	1633 ICAL 5.0PPB	☐	Auto	312907	312907	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240118_012	1633 ICAL 10.0PPB	☐	Auto	294038	294038	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240118_013	1633 ICAL 15.0PPB	☐	Auto	281877	281877	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240118_014	1633 ICAL 20.0PPB	☐	Auto	286167	286167	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240118_016	1633 ICV 1.0PPB		Auto	285641	285641	1.2500	1.2500	----	1.2500	0.00	----	----	----
240118_017	1633 FTCA ICV 1.0PPB		Auto	304097	304097	1.2500	1.2500	----	1.2500	0.00	----	----	----



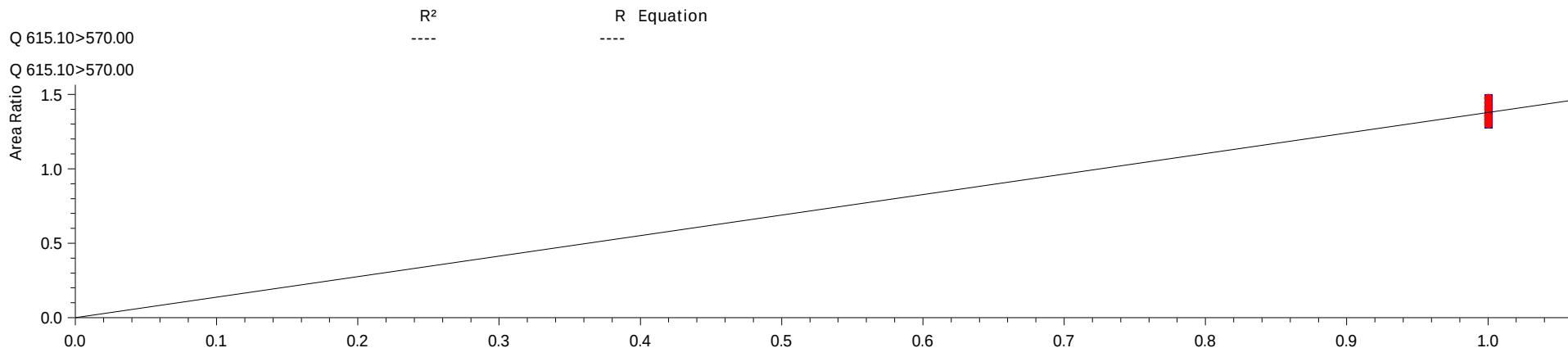
Compound: 13C2-PFDOA

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☒	Auto	335621	227340	1.2500	1.2500	1.476296	1.3390	7.12	1.378151	4.397641	4.397641
240118_007	1633 ICAL 0.1PPB	☒	Auto	330237	242916	1.2500	1.2500	1.359472	1.2331	-1.36	1.378151	4.397641	4.397641
240118_008	1633 ICAL 0.25PPB	☒	Auto	313428	235058	1.2500	1.2500	1.333409	1.2094	-3.25	1.378151	4.397641	4.397641
240118_009	1633 ICAL 0.50PPB	☒	Auto	326480	225855	1.2500	1.2500	1.445528	1.3111	4.89	1.378151	4.397641	4.397641
240118_010	1633 ICAL 1.0PPB	☒	Auto	328895	243243	1.2500	1.2500	1.352128	1.2264	-1.89	1.378151	4.397641	4.397641
240118_011	1633 ICAL 5.0PPB	☒	Auto	312907	237831	1.2500	1.2500	1.315673	1.1933	-4.53	1.378151	4.397641	4.397641
240118_012	1633 ICAL 10.0PPB	☒	Auto	294038	226144	1.2500	1.2500	1.300223	1.1793	-5.65	1.378151	4.397641	4.397641
240118_013	1633 ICAL 15.0PPB	☒	Auto	281877	201059	1.2500	1.2500	1.401959	1.2716	1.73	1.378151	4.397641	4.397641
240118_014	1633 ICAL 20.0PPB	☒	Auto	286167	201715	1.2500	1.2500	1.418669	1.2868	2.94	1.378151	4.397641	4.397641
240118_016	1633 ICV 1.0PPB		Auto	285641	214237	1.2500	1.2500	----	1.2093	-3.25	1.378151	4.397641	4.397641
240118_017	1633 FTCA ICV 1.0PPB		Auto	304097	222912	1.2500	1.2500	----	1.2373	-1.01	1.378151	4.397641	4.397641



Compound: PFDOA

Curve Fit: Linear | Weighting: 1/C | Zero: Not Forced

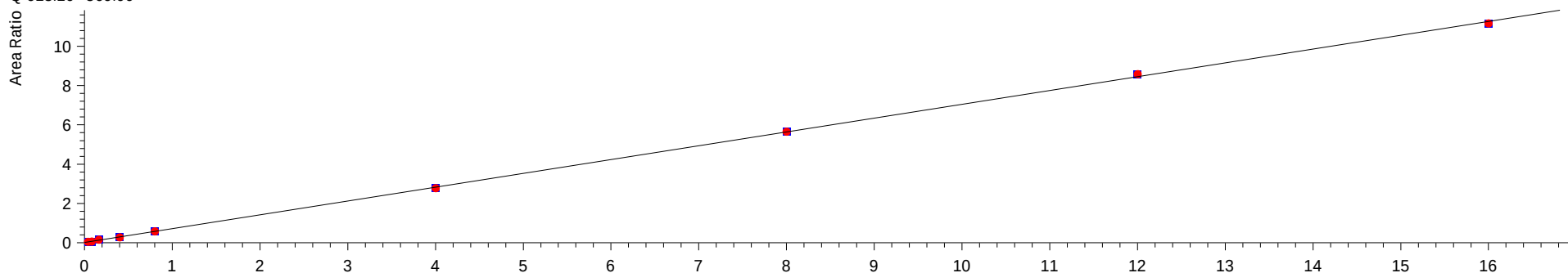
Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2

Q 613.10>569.00 R^2 0.9995045 R Equation 0.9997522 $y = 0.7030456x + 0.01847295$

Q 613.10>569.00



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc.Ratio
240118_006	1633 ICAL 0.05PPB	☒	Auto	15951	335621	0.0500	1.2500	1.188199	0.0517	3.32	0.801611	21.540539	12.051783
240118_007	1633 ICAL 0.1PPB	☒	Auto	21109	330237	0.1000	1.2500	0.799000	0.0808	-19.20	0.801611	21.540539	12.051783
240118_008	1633 ICAL 0.25PPB	☒	Auto	49481	313428	0.2000	1.2500	0.986700	0.2478	23.92	0.801611	21.540539	12.051783
240118_009	1633 ICAL 0.50PPB	☒	Auto	90780	326480	0.5000	1.2500	0.695144	0.4615	-7.69	0.801611	21.540539	12.051783
240118_010	1633 ICAL 1.0PPB	☒	Auto	191533	328895	1.0000	1.2500	0.727939	1.0026	0.26	0.801611	21.540539	12.051783
240118_011	1633 ICAL 5.0PPB	☒	Auto	872492	312907	5.0000	1.2500	0.697085	4.9248	-1.50	0.801611	21.540539	12.051783
240118_012	1633 ICAL 10.0PPB	☒	Auto	1662292	294038	10.0000	1.2500	0.706666	10.0186	0.19	0.801611	21.540539	12.051783
240118_013	1633 ICAL 15.0PPB	☒	Auto	2421057	281877	15.0000	1.2500	0.715755	15.2383	1.59	0.801611	21.540539	12.051783
240118_014	1633 ICAL 20.0PPB	☒	Auto	3195955	286167	20.0000	1.2500	0.698008	19.8239	-0.88	0.801611	21.540539	12.051783
240118_016	1633 ICV 1.0PPB		Auto	160458	285641	1.0000	1.2500	----	0.9659	-3.41	0.801611	21.540539	12.051783
240118_017	1633 FTCA ICV 1.0PPB		ND(W/B)	----	304097	1.0000	1.2500	----	----	----	0.801611	21.540539	12.051783



Compound: PFDS

Curve Fit: Linear | Weighting: 1/C | Zero: Not Forced

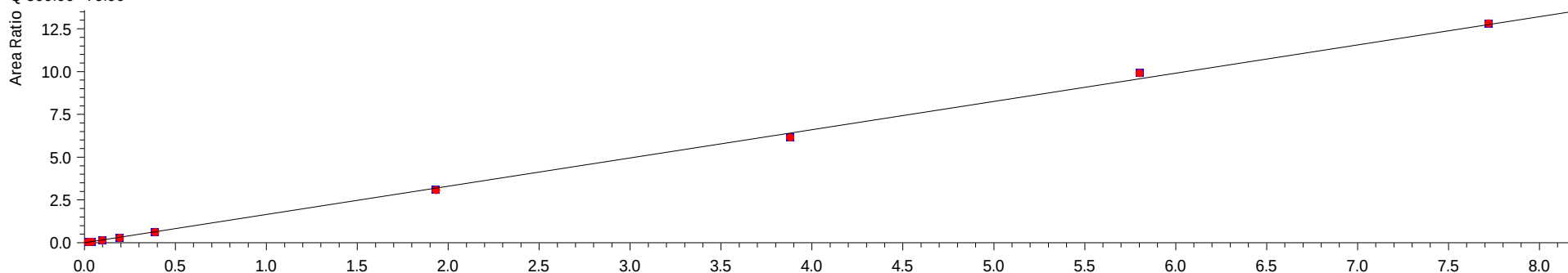
Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2

Q 599.00>79.90
R² 0.9990392
R Equation 0.9995195 y = 1.650955x + 0.004118254

Q 599.00>79.90



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc.Ratio
240118_006	1633 ICAL 0.05PPB	☒	Auto	5065	117833	0.0483	2.5000	2.224960	0.0589	21.86	1.695221	12.179576	9.458813
240118_007	1633 ICAL 0.1PPB	☒	Auto	7754	118069	0.0970	2.5000	1.692570	0.0932	-3.91	1.695221	12.179576	9.458813
240118_008	1633 ICAL 0.25PPB	☒	Auto	18165	114171	0.2410	2.5000	1.650462	0.2347	-2.62	1.695221	12.179576	9.458813
240118_009	1633 ICAL 0.50PPB	☒	Auto	35775	121099	0.4830	2.5000	1.529096	0.4411	-8.67	1.695221	12.179576	9.458813
240118_010	1633 ICAL 1.0PPB	☒	Auto	77566	124480	0.9700	2.5000	1.605993	0.9373	-3.37	1.695221	12.179576	9.458813
240118_011	1633 ICAL 5.0PPB	☒	Auto	357453	116018	4.8300	2.5000	1.594733	4.6593	-3.53	1.695221	12.179576	9.458813
240118_012	1633 ICAL 10.0PPB	☒	Auto	693164	112442	9.7000	2.5000	1.588819	9.3287	-3.83	1.695221	12.179576	9.458813
240118_013	1633 ICAL 15.0PPB	☒	Auto	1031983	104055	14.5000	2.5000	1.709951	15.0119	3.53	1.695221	12.179576	9.458813
240118_014	1633 ICAL 20.0PPB	☒	Auto	1363851	106399	19.3000	2.5000	1.660403	19.4042	0.54	1.695221	12.179576	9.458813
240118_016	1633 ICV 1.0PPB		Auto	69073	105678	0.9700	2.5000	----	0.9835	1.39	1.695221	12.179576	9.458813
240118_017	1633 FTCA ICV 1.0PPB		ND(W/B)	----	114722	0.9700	2.5000	----	----	----	1.695221	12.179576	9.458813



Compound: PFTTrDA

Curve Fit: Linear | Weighting: 1/C | Zero: Not Forced

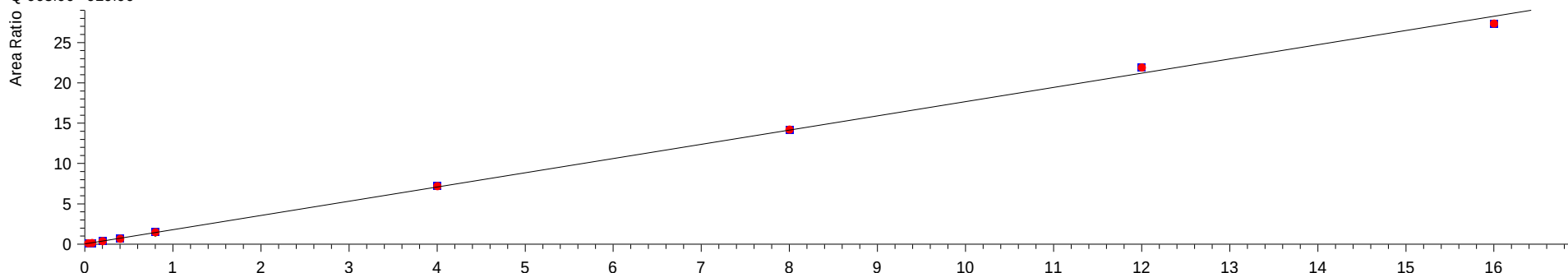
Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2

Q 663.00>619.00
R² 0.9991398
R Equation 0.9995698 $y = 1.763432x + 0.04368874$

Q 663.00>619.00



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc.Ratio
240118_006	1633 ICAL 0.05PPB	☒	Auto	16904	144376	0.0500	1.2500	2.926994	0.0520	4.05	1.990471	19.434343	4.217908
240118_007	1633 ICAL 0.1PPB	☒	Auto	25207	141033	0.1000	1.2500	2.234178	0.0957	-4.27	1.990471	19.434343	4.217908
240118_008	1633 ICAL 0.25PPB	☒	Auto	54014	133833	0.2500	1.2500	2.017977	0.2551	2.05	1.990471	19.434343	4.217908
240118_009	1633 ICAL 0.50PPB	☒	Auto	102058	146161	0.5000	1.2500	1.745642	0.4640	-7.20	1.990471	19.434343	4.217908
240118_010	1633 ICAL 1.0PPB	☒	Auto	209818	140054	1.0000	1.2500	1.872648	1.0310	3.10	1.990471	19.434343	4.217908
240118_011	1633 ICAL 5.0PPB	☒	Auto	938247	130195	5.0000	1.2500	1.801618	5.0773	1.55	1.990471	19.434343	4.217908
240118_012	1633 ICAL 10.0PPB	☒	Auto	1805435	126897	10.0000	1.2500	1.778445	10.0542	0.54	1.990471	19.434343	4.217908
240118_013	1633 ICAL 15.0PPB	☒	Auto	2690758	122751	15.0000	1.2500	1.826703	15.5072	3.38	1.990471	19.434343	4.217908
240118_014	1633 ICAL 20.0PPB	☒	Auto	3467914	126748	20.0000	1.2500	1.710039	19.3635	-3.18	1.990471	19.434343	4.217908
240118_016	1633 ICV 1.0PPB		Auto	176723	130145	1.0000	1.2500	----	0.9316	-6.84	1.990471	19.434343	4.217908
240118_017	1633 FTCA ICV 1.0PPB		ND(W/B)	----	125092	1.0000	1.2500	----	----	----	1.990471	19.434343	4.217908



Compound: 11-CI-PF3OUdS

Curve Fit: Linear | Weighting: 1/C | Zero: Not Forced

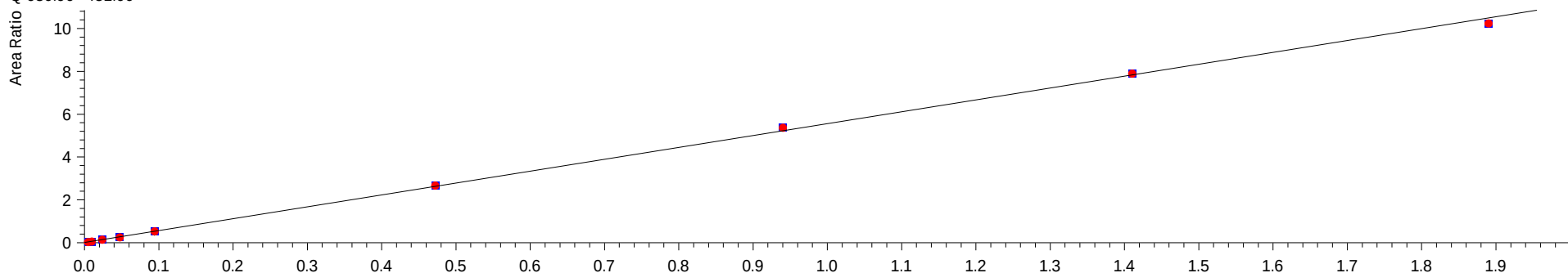
Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2

Q 630.90>451.00
R² 0.9994801 R Equation 0.9997400 $y = 5.546383x + 0.009454939$

Q 630.90>451.00



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc.Ratio
240118_006	1633 ICAL 0.05PPB	☒	Auto	22926	595312	0.0472	10.0000	8.158992	0.0524	10.99	5.963310	14.227572	6.506780
240118_007	1633 ICAL 0.1PPB	☒	Auto	33734	604622	0.0940	10.0000	5.935450	0.0835	-11.12	5.963310	14.227572	6.506780
240118_008	1633 ICAL 0.25PPB	☒	Auto	83986	588188	0.2360	10.0000	6.050316	0.2404	1.86	5.963310	14.227572	6.506780
240118_009	1633 ICAL 0.50PPB	☒	Auto	168194	654919	0.4720	10.0000	5.441016	0.4460	-5.51	5.963310	14.227572	6.506780
240118_010	1633 ICAL 1.0PPB	☒	Auto	342495	640534	0.9400	10.0000	5.688318	0.9470	0.75	5.963310	14.227572	6.506780
240118_011	1633 ICAL 5.0PPB	☒	Auto	1651817	618248	4.7200	10.0000	5.660533	4.8001	1.70	5.963310	14.227572	6.506780
240118_012	1633 ICAL 10.0PPB	☒	Auto	3212472	598128	9.4000	10.0000	5.713700	9.6665	2.84	5.963310	14.227572	6.506780
240118_013	1633 ICAL 15.0PPB	☒	Auto	4612445	583755	14.1000	10.0000	5.603786	14.2289	0.91	5.963310	14.227572	6.506780
240118_014	1633 ICAL 20.0PPB	☒	Auto	6168575	602434	18.9000	10.0000	5.417679	18.4444	-2.41	5.963310	14.227572	6.506780
240118_016	1633 ICV 1.0PPB		Auto	310994	617025	0.9400	10.0000	----	0.8917	-5.14	5.963310	14.227572	6.506780
240118_017	1633 FTCA ICV 1.0PPB		ND(W/B)	----	650567	0.9400	10.0000	----	----	----	5.963310	14.227572	6.506780



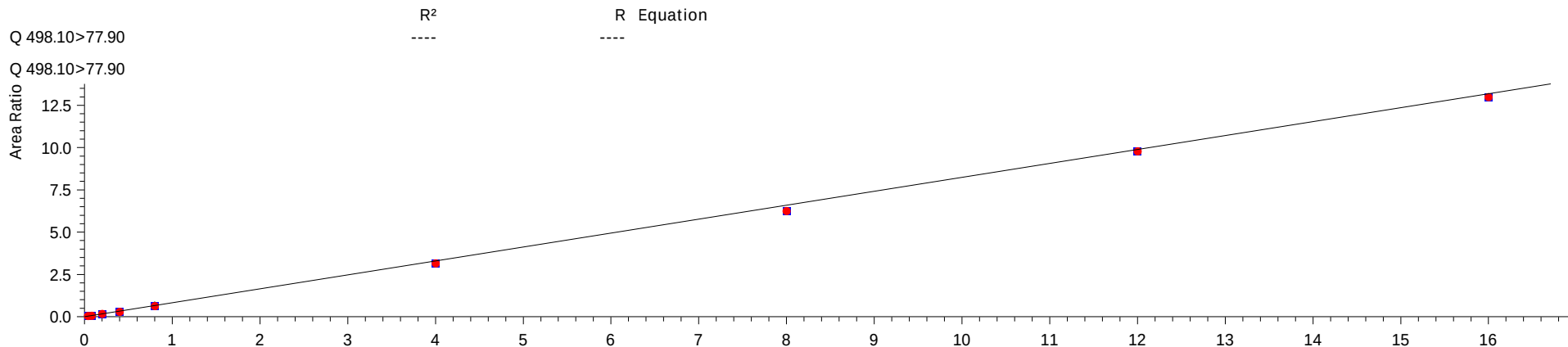
Compound: PFOSAm

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☑	M	12073	308563	0.1000	2.5000	0.978204	0.1187	18.71	0.824015	8.026985	8.026984
240118_007	1633 ICAL 0.1PPB	☑	M	20717	304301	0.2000	2.5000	0.850998	0.2065	3.27	0.824015	8.026985	8.026984
240118_008	1633 ICAL 0.25PPB	☑	M	48743	288124	0.5000	2.5000	0.845869	0.5133	2.65	0.824015	8.026985	8.026984
240118_009	1633 ICAL 0.50PPB	☑	M	93404	313170	1.0000	2.5000	0.745630	0.9049	-9.51	0.824015	8.026985	8.026984
240118_010	1633 ICAL 1.0PPB	☑	M	197052	309952	2.0000	2.5000	0.794687	1.9288	-3.56	0.824015	8.026985	8.026984
240118_011	1633 ICAL 5.0PPB	☑	M	919814	290803	10.0000	2.5000	0.790753	9.5963	-4.04	0.824015	8.026985	8.026984
240118_012	1633 ICAL 10.0PPB	☑	M	1754149	280036	20.0000	2.5000	0.783002	19.0046	-4.98	0.824015	8.026985	8.026984
240118_013	1633 ICAL 15.0PPB	☑	M	2599880	265772	30.0000	2.5000	0.815198	29.6790	-1.07	0.824015	8.026985	8.026984
240118_014	1633 ICAL 20.0PPB	☑	M	3534545	272125	40.0000	2.5000	0.811793	39.4067	-1.48	0.824015	8.026985	8.026984
240118_016	1633 ICV 1.0PPB		M	179763	263852	2.0000	2.5000	----	2.0670	3.35	0.824015	8.026985	8.026984
240118_017	1633 FTCA ICV 1.0PPB		ND(W/B)	----	280695	2.0000	2.5000	----	----	----	0.824015	8.026985	8.026984



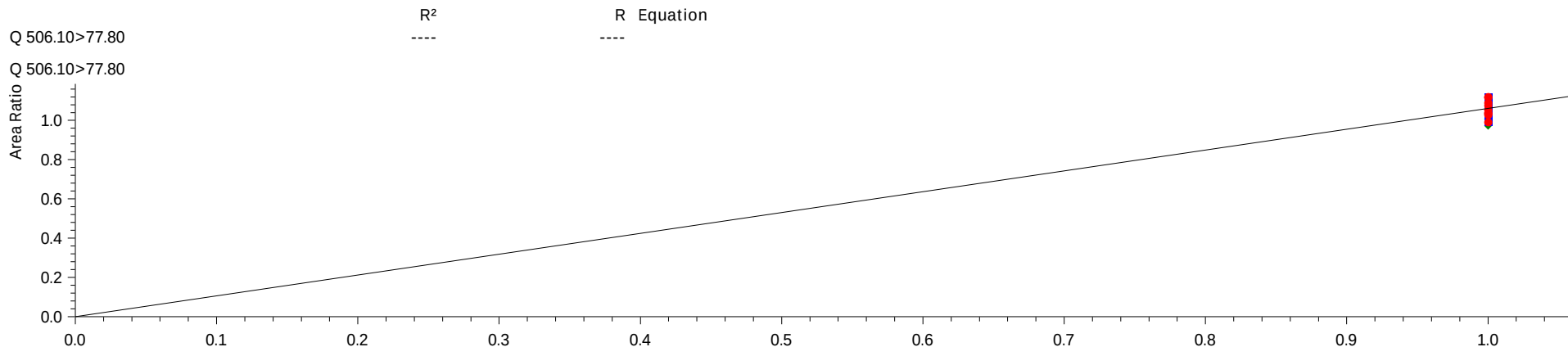
Compound: 13C8-PFOSAm

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2

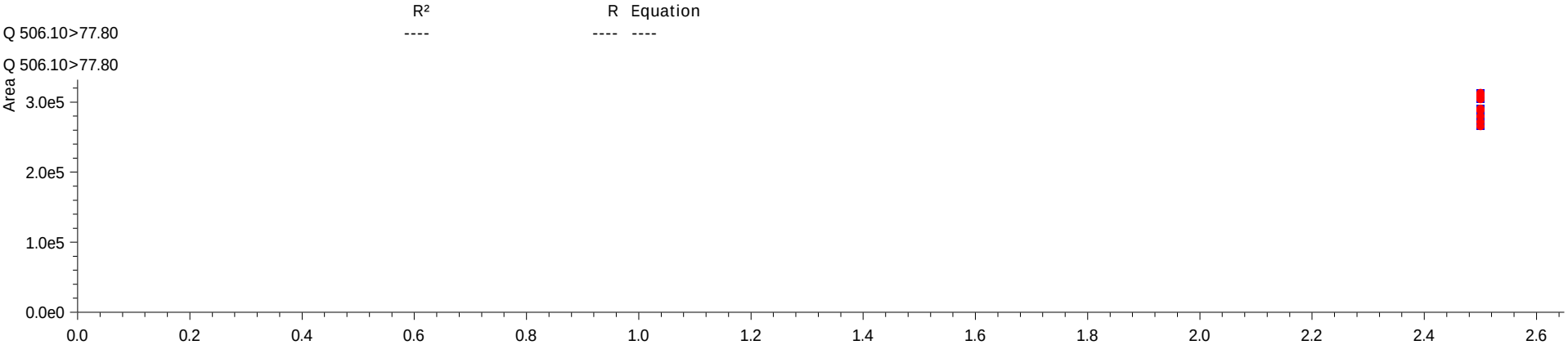


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc.Ratio
240118_006	1633 ICAL 0.05PPB	☒	Auto	308563	283185	2.5000	2.5000	1.089616	2.5667	2.67	1.061295	4.048974	4.048974
240118_007	1633 ICAL 0.1PPB	☒	Auto	304301	282518	2.5000	2.5000	1.077102	2.5372	1.49	1.061295	4.048974	4.048974
240118_008	1633 ICAL 0.25PPB	☒	Auto	288124	277483	2.5000	2.5000	1.038348	2.4459	-2.16	1.061295	4.048974	4.048974
240118_009	1633 ICAL 0.50PPB	☒	Auto	313170	279876	2.5000	2.5000	1.118961	2.6358	5.43	1.061295	4.048974	4.048974
240118_010	1633 ICAL 1.0PPB	☒	Auto	309952	298833	2.5000	2.5000	1.037211	2.4433	-2.27	1.061295	4.048974	4.048974
240118_011	1633 ICAL 5.0PPB	☒	Auto	290803	293425	2.5000	2.5000	0.991063	2.3346	-6.62	1.061295	4.048974	4.048974
240118_012	1633 ICAL 10.0PPB	☒	Auto	280036	272314	2.5000	2.5000	1.028358	2.4224	-3.10	1.061295	4.048974	4.048974
240118_013	1633 ICAL 15.0PPB	☒	Auto	265772	252372	2.5000	2.5000	1.053095	2.4807	-0.77	1.061295	4.048974	4.048974
240118_014	1633 ICAL 20.0PPB	☒	Auto	272125	243425	2.5000	2.5000	1.117898	2.6333	5.33	1.061295	4.048974	4.048974
240118_016	1633 ICV 1.0PPB		Auto	263852	271163	2.5000	2.5000	----	2.2921	-8.32	1.061295	4.048974	4.048974
240118_017	1633 FTCA ICV 1.0PPB		Auto	280695	278941	2.5000	2.5000	----	2.3704	-5.18	1.061295	4.048974	4.048974



Compound: 13C8-PFOSAm_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 0



												Conc. (ng/mL)	
Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☐	Auto	308563	308563	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_007	1633 ICAL 0.1PPB	☐	Auto	304301	304301	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_008	1633 ICAL 0.25PPB	☐	Auto	288124	288124	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_009	1633 ICAL 0.50PPB	☐	Auto	313170	313170	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_010	1633 ICAL 1.0PPB	☐	Auto	309952	309952	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_011	1633 ICAL 5.0PPB	☐	Auto	290803	290803	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_012	1633 ICAL 10.0PPB	☐	Auto	280036	280036	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_013	1633 ICAL 15.0PPB	☐	Auto	265772	265772	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_014	1633 ICAL 20.0PPB	☐	Auto	272125	272125	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_016	1633 ICV 1.0PPB		Auto	263852	263852	2.5000	2.5000	----	2.5000	0.00	----	----	----
240118_017	1633 FTCA ICV 1.0PPB		Auto	280695	280695	2.5000	2.5000	----	2.5000	0.00	----	----	----



Compound: PFTDA

Curve Fit: Linear | Weighting: 1/C | Zero: Not Forced

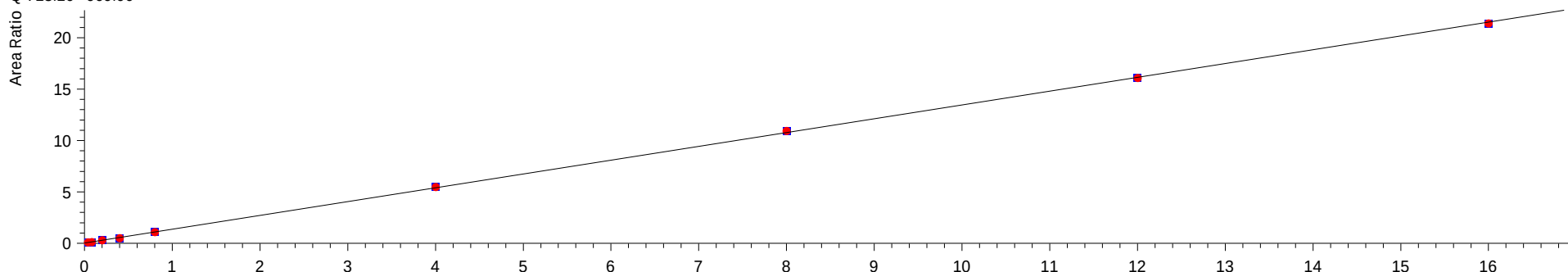
Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2

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R² 0.9998059 R Equation 0.9999030 $y = 1.343181x + 0.02987298$

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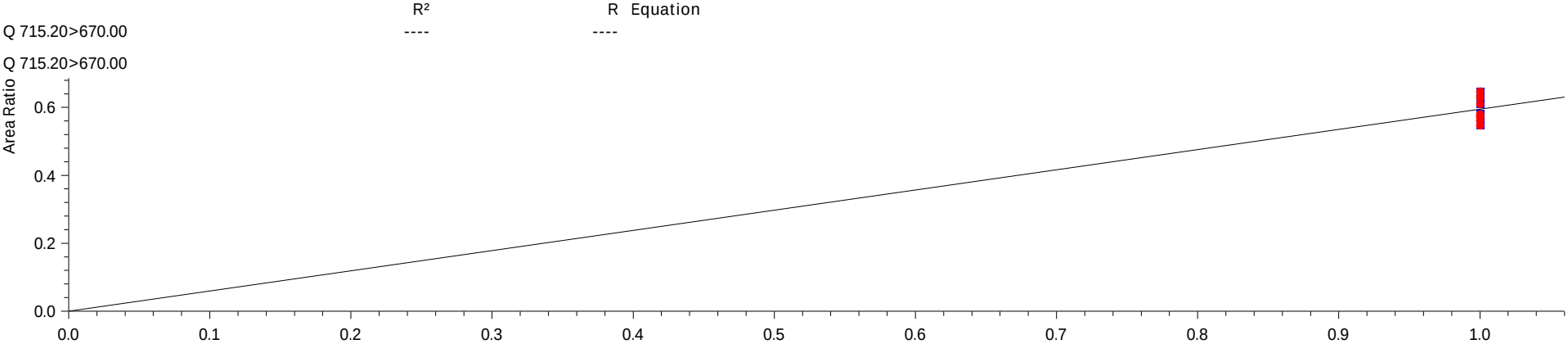


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☒	M	12918	144376	0.0500	1.2500	2.236897	0.0555	10.94	1.498423	19.896105	5.982474
240118_007	1633 ICAL 0.1PPB	☒	Auto	18542	141033	0.1000	1.2500	1.643397	0.0946	-5.45	1.498423	19.896105	5.982474
240118_008	1633 ICAL 0.25PPB	☒	Auto	40907	133833	0.2500	1.2500	1.528289	0.2567	2.66	1.498423	19.896105	5.982474
240118_009	1633 ICAL 0.50PPB	☒	Auto	75486	146161	0.5000	1.2500	1.291153	0.4528	-9.43	1.498423	19.896105	5.982474
240118_010	1633 ICAL 1.0PPB	☒	Auto	153669	140054	1.0000	1.2500	1.371511	0.9933	-0.67	1.498423	19.896105	5.982474
240118_011	1633 ICAL 5.0PPB	☒	Auto	713428	130195	5.0000	1.2500	1.369922	5.0717	1.43	1.498423	19.896105	5.982474
240118_012	1633 ICAL 10.0PPB	☒	Auto	1387467	126897	10.0000	1.2500	1.366726	10.1475	1.47	1.498423	19.896105	5.982474
240118_013	1633 ICAL 15.0PPB	☒	Auto	1974838	122751	15.0000	1.2500	1.340679	14.9443	-0.37	1.498423	19.896105	5.982474
240118_014	1633 ICAL 20.0PPB	☒	Auto	2711883	126748	20.0000	1.2500	1.337238	19.8837	-0.58	1.498423	19.896105	5.982474
240118_016	1633 ICV 1.0PPB		Auto	147427	130145	1.0000	1.2500	----	1.0264	2.64	1.498423	19.896105	5.982474
240118_017	1633 FTCA ICV 1.0PPB		ND(W/B)	----	125092	1.0000	1.2500	----	----	----	1.498423	19.896105	5.982474



Compound: 13C2-PFTDA

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 2

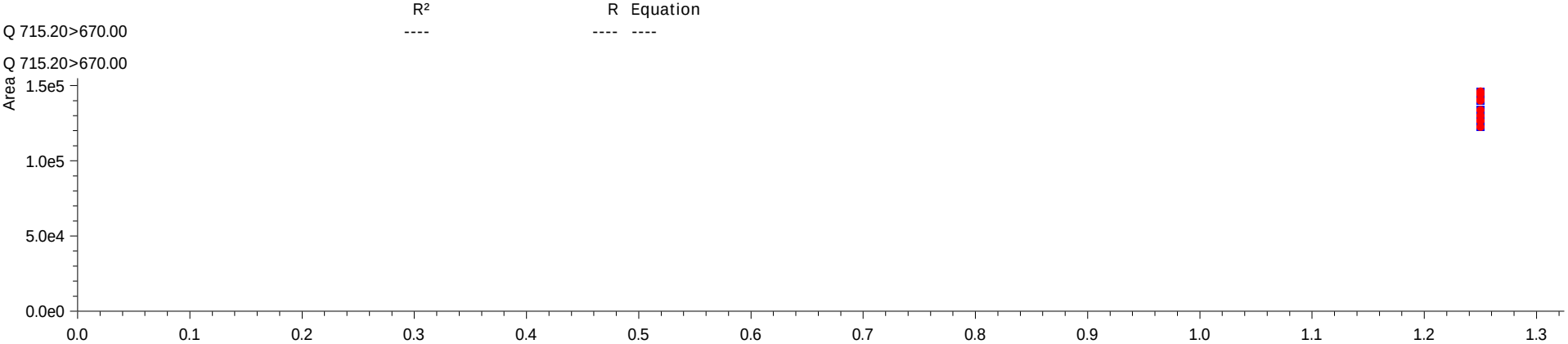


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc.Ratio
240118_006	1633 ICAL 0.05PPB	☒	Auto	144376	227340	1.2500	1.2500	0.635066	1.3341	6.73	0.595041	6.036633	6.036633
240118_007	1633 ICAL 0.1PPB	☒	Auto	141033	242916	1.2500	1.2500	0.580583	1.2196	-2.43	0.595041	6.036633	6.036633
240118_008	1633 ICAL 0.25PPB	☒	Auto	133833	235058	1.2500	1.2500	0.569363	1.1961	-4.32	0.595041	6.036633	6.036633
240118_009	1633 ICAL 0.50PPB	☒	Auto	146161	225855	1.2500	1.2500	0.647144	1.3595	8.76	0.595041	6.036633	6.036633
240118_010	1633 ICAL 1.0PPB	☒	Auto	140054	243243	1.2500	1.2500	0.575779	1.2095	-3.24	0.595041	6.036633	6.036633
240118_011	1633 ICAL 5.0PPB	☒	Auto	130195	237831	1.2500	1.2500	0.547428	1.1500	-8.00	0.595041	6.036633	6.036633
240118_012	1633 ICAL 10.0PPB	☒	Auto	126897	226144	1.2500	1.2500	0.561133	1.1788	-5.70	0.595041	6.036633	6.036633
240118_013	1633 ICAL 15.0PPB	☒	Auto	122751	201059	1.2500	1.2500	0.610522	1.2825	2.60	0.595041	6.036633	6.036633
240118_014	1633 ICAL 20.0PPB	☒	Auto	126748	201715	1.2500	1.2500	0.628352	1.3200	5.60	0.595041	6.036633	6.036633
240118_016	1633 ICV 1.0PPB		Auto	130145	214237	1.2500	1.2500	----	1.2761	2.09	0.595041	6.036633	6.036633
240118_017	1633 FTCA ICV 1.0PPB		Auto	125092	222912	1.2500	1.2500	----	1.1789	-5.69	0.595041	6.036633	6.036633



Compound: 13C2-PFTDA_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 0



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc. (ng/mL)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☐	Auto	144376	144376	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----	----
240118_007	1633 ICAL 0.1PPB	☐	Auto	141033	141033	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----	----
240118_008	1633 ICAL 0.25PPB	☐	Auto	133833	133833	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----	----
240118_009	1633 ICAL 0.50PPB	☐	Auto	146161	146161	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----	----
240118_010	1633 ICAL 1.0PPB	☐	Auto	140054	140054	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----	----
240118_011	1633 ICAL 5.0PPB	☐	Auto	130195	130195	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----	----
240118_012	1633 ICAL 10.0PPB	☐	Auto	126897	126897	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----	----
240118_013	1633 ICAL 15.0PPB	☐	Auto	122751	122751	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----	----
240118_014	1633 ICAL 20.0PPB	☐	Auto	126748	126748	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----	----
240118_016	1633 ICV 1.0PPB		Auto	130145	130145	1.2500	1.2500	----	1.2500	0.00	----	----	----	----
240118_017	1633 FTCA ICV 1.0PPB		Auto	125092	125092	1.2500	1.2500	----	1.2500	0.00	----	----	----	----



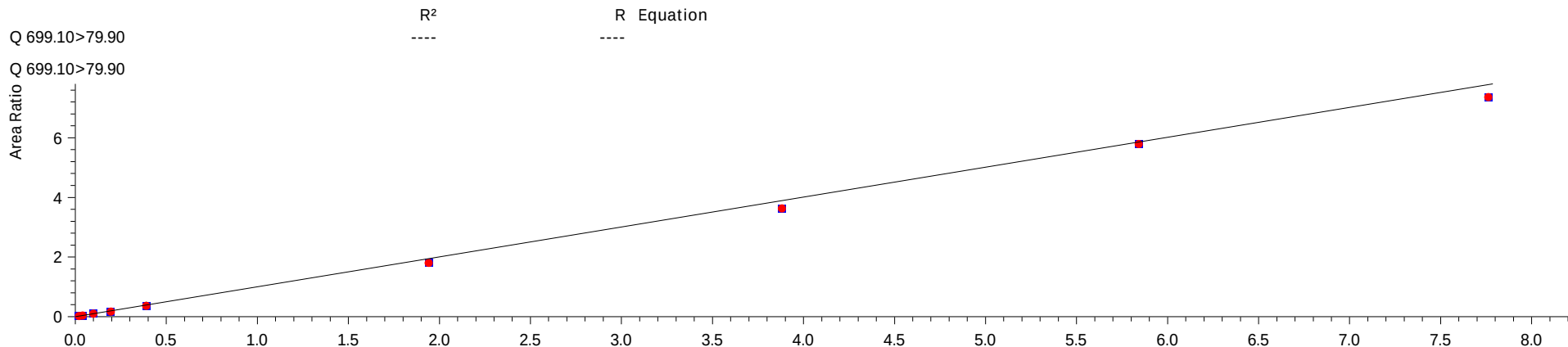
Compound: PFDoS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2

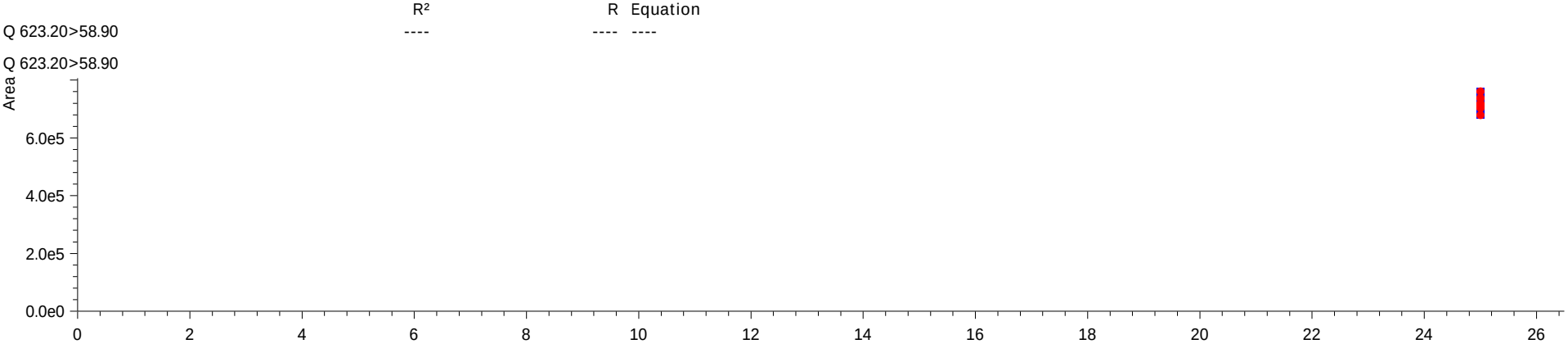


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☒	M	2919	117833	0.0485	2.5000	1.277066	0.0618	27.38	1.002596	11.431600	11.431602
240118_007	1633 ICAL 0.1PPB	☒	MI R1 R2	4787	118069	0.0970	2.5000	1.044897	0.1011	4.22	1.002596	11.431600	11.431602
240118_008	1633 ICAL 0.25PPB	☒	Auto	11601	114171	0.2430	2.5000	1.045357	0.2534	4.26	1.002596	11.431600	11.431602
240118_009	1633 ICAL 0.50PPB	☒	Auto	21129	121099	0.4850	2.5000	0.899355	0.4351	-10.30	1.002596	11.431600	11.431602
240118_010	1633 ICAL 1.0PPB	☒	Auto	45685	124480	0.9700	2.5000	0.945889	0.9151	-5.66	1.002596	11.431600	11.431602
240118_011	1633 ICAL 5.0PPB	☒	Auto	209550	116018	4.8500	2.5000	0.931025	4.5038	-7.14	1.002596	11.431600	11.431602
240118_012	1633 ICAL 10.0PPB	☒	Auto	409175	112442	9.7000	2.5000	0.937880	9.0739	-6.45	1.002596	11.431600	11.431602
240118_013	1633 ICAL 15.0PPB	☒	Auto	603262	104055	14.6000	2.5000	0.992732	14.4564	-0.98	1.002596	11.431600	11.431602
240118_014	1633 ICAL 20.0PPB	☒	Auto	783680	106399	19.4000	2.5000	0.949162	18.3661	-5.33	1.002596	11.431600	11.431602
240118_016	1633 ICV 1.0PPB		Auto	39640	105678	0.9700	2.5000	----	0.9353	-3.58	1.002596	11.431600	11.431602
240118_017	1633 FTCA ICV 1.0PPB		ND(W/B)	----	114722	0.9700	2.5000	----	----	----	1.002596	11.431600	11.431602



Compound: D7-MeFOSE_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 0



												Conc. (ng/mL)		
Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)	
240118_006	1633 ICAL 0.05PPB	☐	Auto	739936	739936	25.0000	25.0000	1.000000	25.0000	0.00	----	----	----	
240118_007	1633 ICAL 0.1PPB	☐	Auto	720120	720120	25.0000	25.0000	1.000000	25.0000	0.00	----	----	----	
240118_008	1633 ICAL 0.25PPB	☐	Auto	713433	713433	25.0000	25.0000	1.000000	25.0000	0.00	----	----	----	
240118_009	1633 ICAL 0.50PPB	☐	Auto	761016	761016	25.0000	25.0000	1.000000	25.0000	0.00	----	----	----	
240118_010	1633 ICAL 1.0PPB	☐	Auto	736922	736922	25.0000	25.0000	1.000000	25.0000	0.00	----	----	----	
240118_011	1633 ICAL 5.0PPB	☐	Auto	704676	704676	25.0000	25.0000	1.000000	25.0000	0.00	----	----	----	
240118_012	1633 ICAL 10.0PPB	☐	Auto	704481	704481	25.0000	25.0000	1.000000	25.0000	0.00	----	----	----	
240118_013	1633 ICAL 15.0PPB	☐	Auto	679962	679962	25.0000	25.0000	1.000000	25.0000	0.00	----	----	----	
240118_014	1633 ICAL 20.0PPB	☐	Auto	717715	717715	25.0000	25.0000	1.000000	25.0000	0.00	----	----	----	
240118_016	1633 ICV 1.0PPB		Auto	664189	664189	25.0000	25.0000	----	25.0000	0.00	----	----	----	
240118_017	1633 FTCA ICV 1.0PPB		Auto	702577	702577	25.0000	25.0000	----	25.0000	0.00	----	----	----	



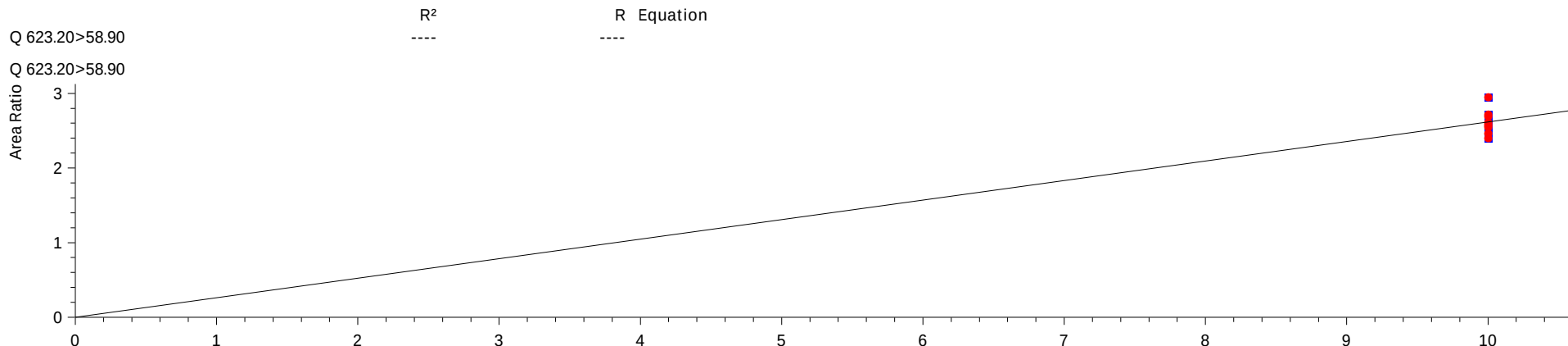
Compound: D7-MeFOSE

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc.Ratio
240118_006	1633 ICAL 0.05PPB	☒	Auto	739936	283185	25.0000	2.5000	0.261291	24.9648	-0.14	0.261659	6.089380	6.089380
240118_007	1633 ICAL 0.1PPB	☒	Auto	720120	282518	25.0000	2.5000	0.254894	24.3536	-2.59	0.261659	6.089380	6.089380
240118_008	1633 ICAL 0.25PPB	☒	Auto	713433	277483	25.0000	2.5000	0.257109	24.5653	-1.74	0.261659	6.089380	6.089380
240118_009	1633 ICAL 0.50PPB	☒	Auto	761016	279876	25.0000	2.5000	0.271912	25.9796	3.92	0.261659	6.089380	6.089380
240118_010	1633 ICAL 1.0PPB	☒	Auto	736922	298833	25.0000	2.5000	0.246600	23.5612	-5.76	0.261659	6.089380	6.089380
240118_011	1633 ICAL 5.0PPB	☒	Auto	704676	293425	25.0000	2.5000	0.240155	22.9454	-8.22	0.261659	6.089380	6.089380
240118_012	1633 ICAL 10.0PPB	☒	Auto	704481	272314	25.0000	2.5000	0.258702	24.7175	-1.13	0.261659	6.089380	6.089380
240118_013	1633 ICAL 15.0PPB	☒	Auto	679962	252372	25.0000	2.5000	0.269428	25.7423	2.97	0.261659	6.089380	6.089380
240118_014	1633 ICAL 20.0PPB	☒	Auto	717715	243425	25.0000	2.5000	0.294840	28.1702	12.68	0.261659	6.089380	6.089380
240118_016	1633 ICV 1.0PPB		Auto	664189	271163	25.0000	2.5000	----	23.4027	-6.39	0.261659	6.089380	6.089380
240118_017	1633 FTCA ICV 1.0PPB		Auto	702577	278941	25.0000	2.5000	----	24.0650	-3.74	0.261659	6.089380	6.089380



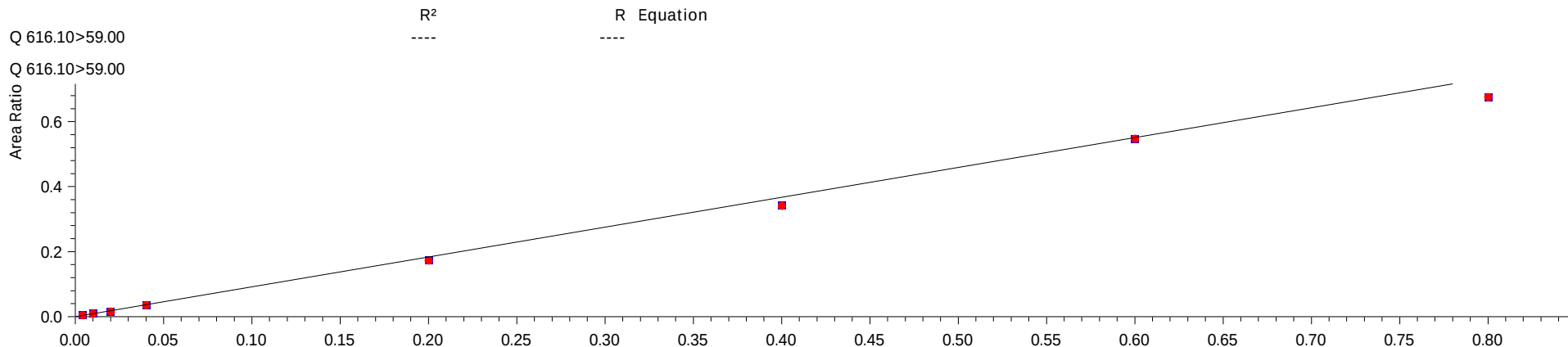
Compound: MeFOSE

Curve Fit: Mean RF | Weighting: 1/C | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 8

No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)	Conc.Ratio
240118_007	1633 ICAL 0.1PPB	☒	M	3379	720120	0.1000	25.0000	1.173168	0.1278	27.78	0.918123	12.475473	12.475475	
240118_008	1633 ICAL 0.25PPB	☒	M	6979	713433	0.2500	25.0000	0.978259	0.2664	6.55	0.918123	12.475473	12.475475	
240118_009	1633 ICAL 0.50PPB	☒	M	12425	761016	0.5000	25.0000	0.816361	0.4446	-11.08	0.918123	12.475473	12.475475	
240118_010	1633 ICAL 1.0PPB	☒	M	26578	736922	1.0000	25.0000	0.901660	0.9821	-1.79	0.918123	12.475473	12.475475	
240118_011	1633 ICAL 5.0PPB	☒	M	121820	704676	5.0000	25.0000	0.864369	4.7073	-5.85	0.918123	12.475473	12.475475	
240118_012	1633 ICAL 10.0PPB	☒	M	240406	704481	10.0000	25.0000	0.853133	9.2921	-7.08	0.918123	12.475473	12.475475	
240118_013	1633 ICAL 15.0PPB	☒	M	372675	679962	15.0000	25.0000	0.913470	14.9240	-0.51	0.918123	12.475473	12.475475	
240118_014	1633 ICAL 20.0PPB	☒	M	484926	717715	20.0000	25.0000	0.844566	18.3977	-8.01	0.918123	12.475473	12.475475	
240118_016	1633 ICV 1.0PPB		M	23461	664189	1.0000	25.0000	----	0.9618	-3.82	0.918123	12.475473	12.475475	
240118_017	1633 FTCA ICV 1.0PPB		ND(W/B)	----	702577	1.0000	25.0000	----	----	----	0.918123	12.475473	12.475475	



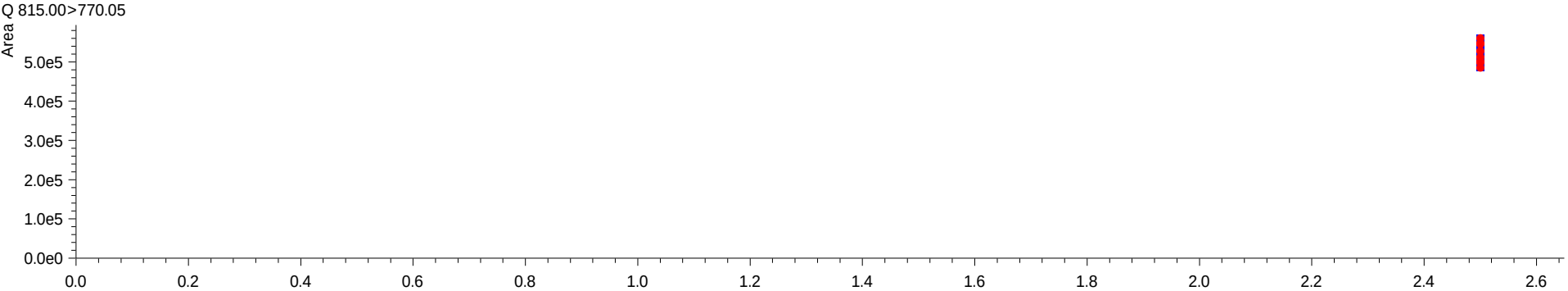
Compound: 13C2-PFHxDA_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 0

Q 815.00>770.05

R²-----

R Equation-----



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc. (ng/mL)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☐	Auto	560359	560359	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----	----
240118_007	1633 ICAL 0.1PPB	☐	Auto	546960	546960	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----	----
240118_008	1633 ICAL 0.25PPB	☐	Auto	527703	527703	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----	----
240118_009	1633 ICAL 0.50PPB	☐	Auto	546187	546187	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----	----
240118_010	1633 ICAL 1.0PPB	☐	Auto	548879	548879	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----	----
240118_011	1633 ICAL 5.0PPB	☐	Auto	512196	512196	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----	----
240118_012	1633 ICAL 10.0PPB	☐	Auto	498313	498313	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----	----
240118_013	1633 ICAL 15.0PPB	☐	Auto	485630	485630	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----	----
240118_014	1633 ICAL 20.0PPB	☐	Auto	502493	502493	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----	----
240118_016	1633 ICV 1.0PPB		Auto	474606	474606	2.5000	2.5000	----	2.5000	0.00	----	----	----	----
240118_017	1633 FTCA ICV 1.0PPB		Auto	503559	503559	2.5000	2.5000	----	2.5000	0.00	----	----	----	----



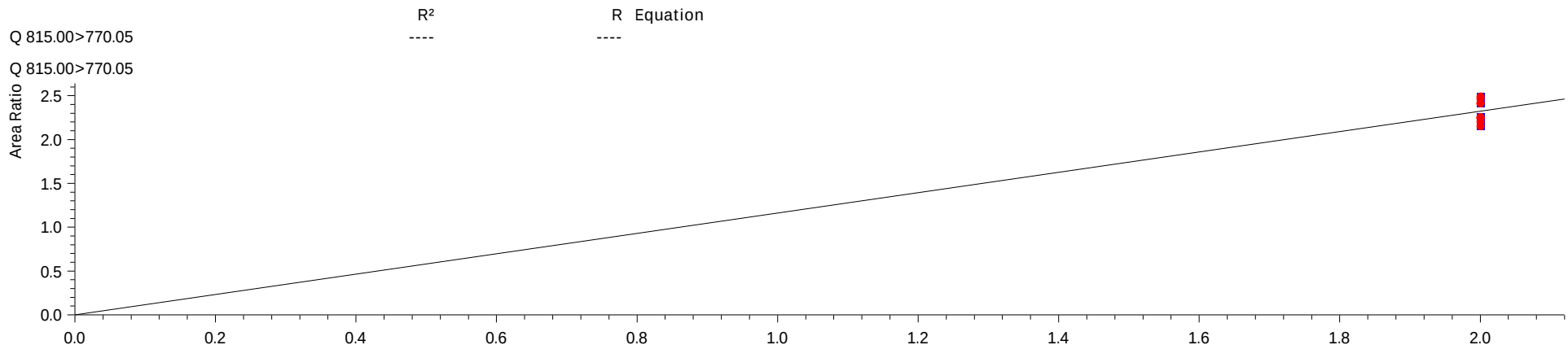
Compound: 13C2-PFHXDA

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☒	Auto	560359	227340	2.5000	1.2500	1.232423	2.6536	6.14	1.161105	5.373085	5.373085
240118_007	1633 ICAL 0.1PPB	☒	Auto	546960	242916	2.5000	1.2500	1.125823	2.4240	-3.04	1.161105	5.373085	5.373085
240118_008	1633 ICAL 0.25PPB	☒	Auto	527703	235058	2.5000	1.2500	1.122497	2.4169	-3.33	1.161105	5.373085	5.373085
240118_009	1633 ICAL 0.50PPB	☒	Auto	546187	225855	2.5000	1.2500	1.209152	2.6034	4.14	1.161105	5.373085	5.373085
240118_010	1633 ICAL 1.0PPB	☒	Auto	548879	243243	2.5000	1.2500	1.128253	2.4293	-2.83	1.161105	5.373085	5.373085
240118_011	1633 ICAL 5.0PPB	☒	Auto	512196	237831	2.5000	1.2500	1.076808	2.3185	-7.26	1.161105	5.373085	5.373085
240118_012	1633 ICAL 10.0PPB	☒	Auto	498313	226144	2.5000	1.2500	1.101761	2.3722	-5.11	1.161105	5.373085	5.373085
240118_013	1633 ICAL 15.0PPB	☒	Auto	485630	201059	2.5000	1.2500	1.207679	2.6003	4.01	1.161105	5.373085	5.373085
240118_014	1633 ICAL 20.0PPB	☒	Auto	502493	201715	2.5000	1.2500	1.245550	2.6818	7.27	1.161105	5.373085	5.373085
240118_016	1633 ICV 1.0PPB		Auto	474606	214237	2.5000	1.2500	----	2.3849	-4.60	1.161105	5.373085	5.373085
240118_017	1633 FTCA ICV 1.0PPB		Auto	503559	222912	2.5000	1.2500	----	2.4320	-2.72	1.161105	5.373085	5.373085



Compound: PFHXDA

Curve Fit: Linear | Weighting: 1/C | Zero: Not Forced

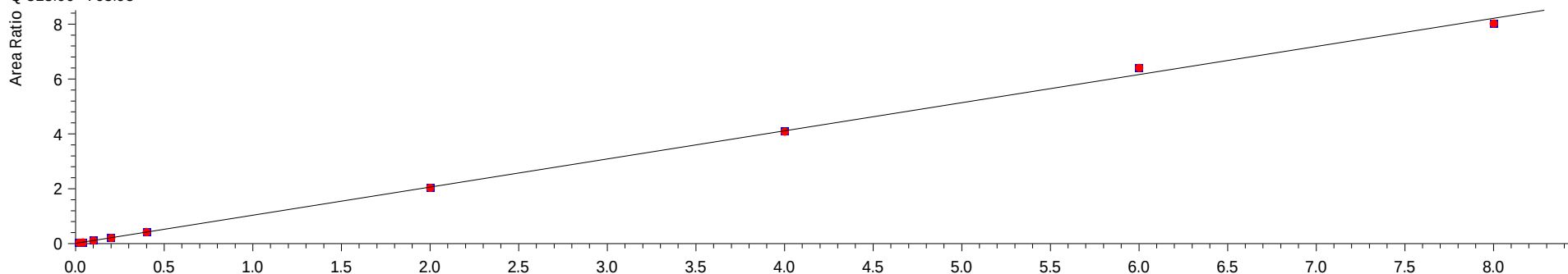
Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2

Q 813.00>768.95
R² 0.9992410
R Equation 0.9996204 $y = 1.025030x + 0.01143400$

Q 813.00>768.95



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc.Ratio
240118_006	1633 ICAL 0.05PPB	☒	Auto	19294	560359	0.0500	2.5000	1.721587	0.0561	12.18	1.143869	19.796866	6.377702
240118_007	1633 ICAL 0.1PPB	☒	Auto	26427	546960	0.1000	2.5000	1.207905	0.0900	-10.05	1.143869	19.796866	6.377702
240118_008	1633 ICAL 0.25PPB	☒	Auto	60426	527703	0.2500	2.5000	1.145084	0.2514	0.56	1.143869	19.796866	6.377702
240118_009	1633 ICAL 0.50PPB	☒	Auto	114442	546187	0.5000	2.5000	1.047649	0.4831	-3.37	1.143869	19.796866	6.377702
240118_010	1633 ICAL 1.0PPB	☒	Auto	233309	548879	1.0000	2.5000	1.062663	1.0088	0.88	1.143869	19.796866	6.377702
240118_011	1633 ICAL 5.0PPB	☒	Auto	1043205	512196	5.0000	2.5000	1.018365	4.9396	-1.21	1.143869	19.796866	6.377702
240118_012	1633 ICAL 10.0PPB	☒	Auto	2034708	498313	10.0000	2.5000	1.020798	9.9308	-0.69	1.143869	19.796866	6.377702
240118_013	1633 ICAL 15.0PPB	☒	Auto	3111088	485630	15.0000	2.5000	1.067715	15.5968	3.98	1.143869	19.796866	6.377702
240118_014	1633 ICAL 20.0PPB	☒	Auto	4032238	502493	20.0000	2.5000	1.003058	19.5434	-2.28	1.143869	19.796866	6.377702
240118_016	1633 ICV 1.0PPB		Auto	206805	474606	1.0000	2.5000	----	1.0349	3.49	1.143869	19.796866	6.377702
240118_017	1633 FTCA ICV 1.0PPB		ND(W/B)	----	503559	1.0000	2.5000	----	----	----	1.143869	19.796866	6.377702



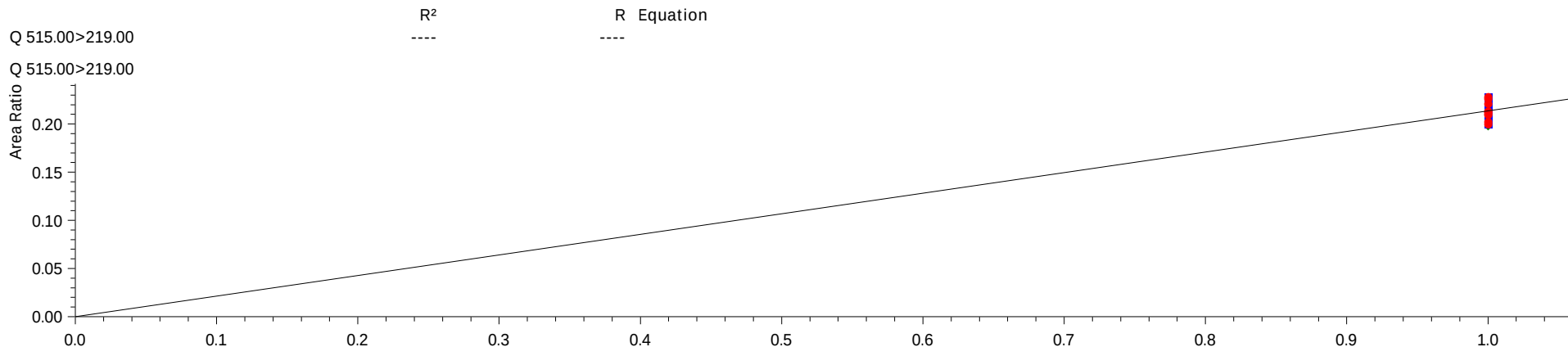
Compound: D3-MeFOSA

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2

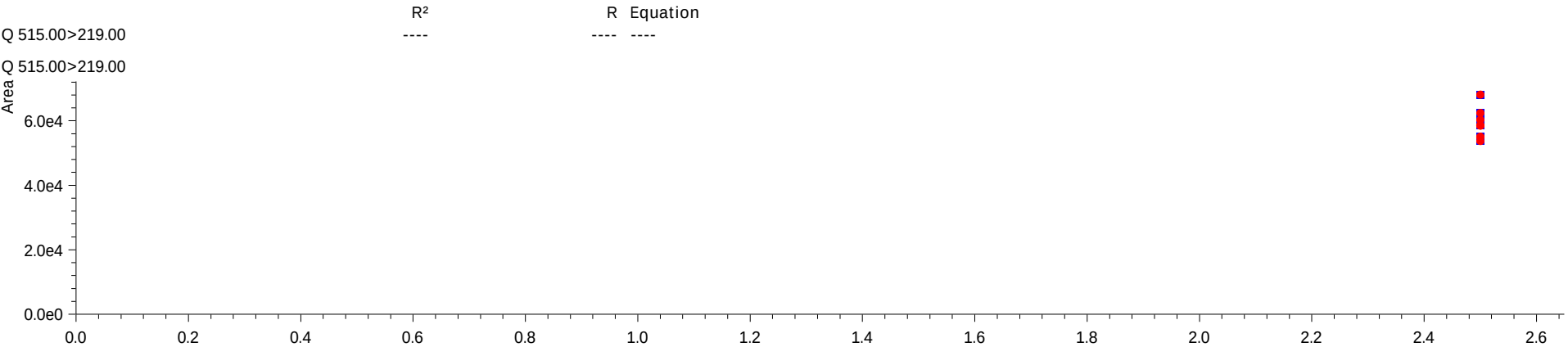


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☒	Auto	60326	283185	2.5000	2.5000	0.213026	2.4918	-0.33	0.213725	4.591228	4.591228
240118_007	1633 ICAL 0.1PPB	☒	Auto	62455	282518	2.5000	2.5000	0.221064	2.5858	3.43	0.213725	4.591228	4.591228
240118_008	1633 ICAL 0.25PPB	☒	Auto	58544	277483	2.5000	2.5000	0.210982	2.4679	-1.28	0.213725	4.591228	4.591228
240118_009	1633 ICAL 0.50PPB	☒	Auto	58649	279876	2.5000	2.5000	0.209554	2.4512	-1.95	0.213725	4.591228	4.591228
240118_010	1633 ICAL 1.0PPB	☒	Auto	68121	298833	2.5000	2.5000	0.227957	2.6665	6.66	0.213725	4.591228	4.591228
240118_011	1633 ICAL 5.0PPB	☒	Auto	58592	293425	2.5000	2.5000	0.199682	2.3357	-6.57	0.213725	4.591228	4.591228
240118_012	1633 ICAL 10.0PPB	☒	Auto	55039	272314	2.5000	2.5000	0.202115	2.3642	-5.43	0.213725	4.591228	4.591228
240118_013	1633 ICAL 15.0PPB	☒	Auto	53740	252372	2.5000	2.5000	0.212940	2.4908	-0.37	0.213725	4.591228	4.591228
240118_014	1633 ICAL 20.0PPB	☒	Auto	55065	243425	2.5000	2.5000	0.226209	2.6460	5.84	0.213725	4.591228	4.591228
240118_016	1633 ICV 1.0PPB		Auto	53519	271163	2.5000	2.5000	----	2.3087	-7.65	0.213725	4.591228	4.591228
240118_017	1633 FTCA ICV 1.0PPB		Auto	58296	278941	2.5000	2.5000	----	2.4446	-2.22	0.213725	4.591228	4.591228



Compound: D3-MeFOSA_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 0



												Conc. (ng/mL)	
Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☐	Auto	60326	60326	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_007	1633 ICAL 0.1PPB	☐	Auto	62455	62455	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_008	1633 ICAL 0.25PPB	☐	Auto	58544	58544	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_009	1633 ICAL 0.50PPB	☐	Auto	58649	58649	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_010	1633 ICAL 1.0PPB	☐	Auto	68121	68121	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_011	1633 ICAL 5.0PPB	☐	Auto	58592	58592	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_012	1633 ICAL 10.0PPB	☐	Auto	55039	55039	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_013	1633 ICAL 15.0PPB	☐	Auto	53740	53740	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_014	1633 ICAL 20.0PPB	☐	Auto	55065	55065	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_016	1633 ICV 1.0PPB		Auto	53519	53519	2.5000	2.5000	----	2.5000	0.00	----	----	----
240118_017	1633 FTCA ICV 1.0PPB		Auto	58296	58296	2.5000	2.5000	----	2.5000	0.00	----	----	----



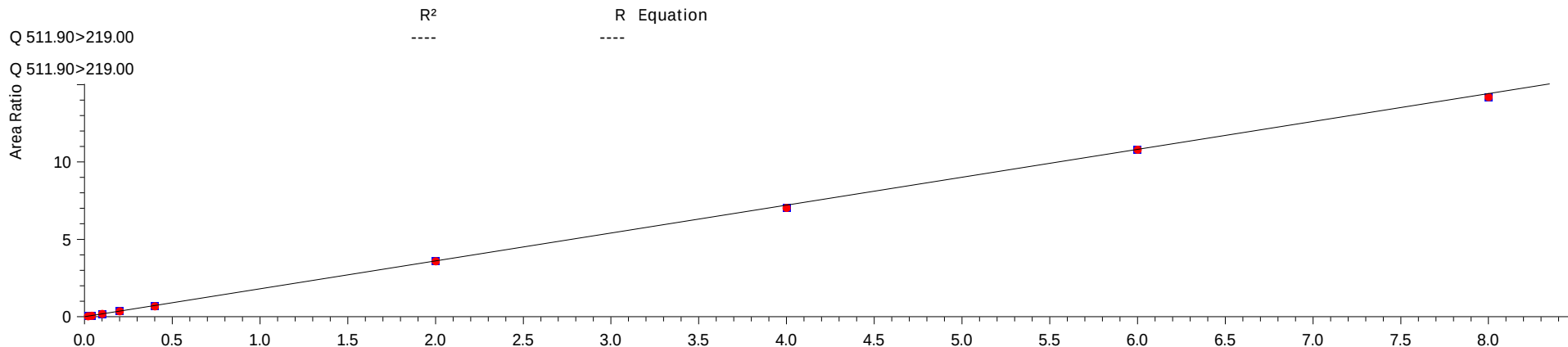
Compound: MeFOSA

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc.Ratio
240118_006	1633 ICAL 0.05PPB	☒	M	2491	60326	0.0500	2.5000	2.064446	0.0573	14.55	1.802158	6.239343	6.239342
240118_007	1633 ICAL 0.1PPB	☒	M	4164	62455	0.1000	2.5000	1.666954	0.0925	-7.50	1.802158	6.239343	6.239342
240118_008	1633 ICAL 0.25PPB	☒	M	10796	58544	0.2500	2.5000	1.844140	0.2558	2.33	1.802158	6.239343	6.239342
240118_009	1633 ICAL 0.50PPB	☒	M	21243	58649	0.5000	2.5000	1.811056	0.5025	0.49	1.802158	6.239343	6.239342
240118_010	1633 ICAL 1.0PPB	☒	M	46422	68121	1.0000	2.5000	1.703658	0.9453	-5.47	1.802158	6.239343	6.239342
240118_011	1633 ICAL 5.0PPB	☒	M	210164	58592	5.0000	2.5000	1.793464	4.9759	-0.48	1.802158	6.239343	6.239342
240118_012	1633 ICAL 10.0PPB	☒	M	387762	55039	10.0000	2.5000	1.761320	9.7734	-2.27	1.802158	6.239343	6.239342
240118_013	1633 ICAL 15.0PPB	☒	M	580448	53740	15.0000	2.5000	1.800171	14.9835	-0.11	1.802158	6.239343	6.239342
240118_014	1633 ICAL 20.0PPB	☒	M	781577	55065	20.0000	2.5000	1.774213	19.6899	-1.55	1.802158	6.239343	6.239342
240118_016	1633 ICV 1.0PPB		M	36906	53519	1.0000	2.5000	----	0.9566	-4.34	1.802158	6.239343	6.239342
240118_017	1633 FTCA ICV 1.0PPB		ND(W/B)	----	58296	1.0000	2.5000	----	----	----	1.802158	6.239343	6.239342



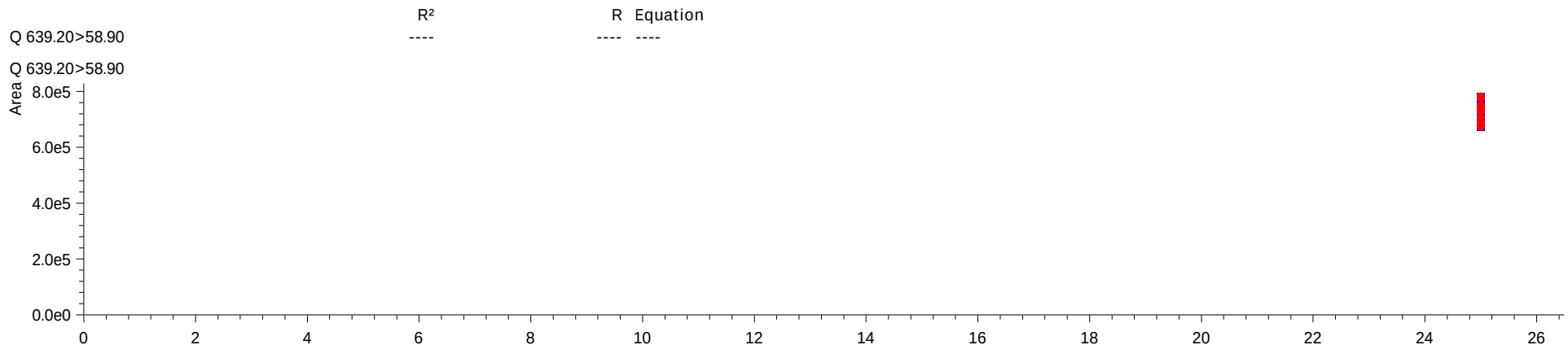
Compound: D9-EtFOSE_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 0

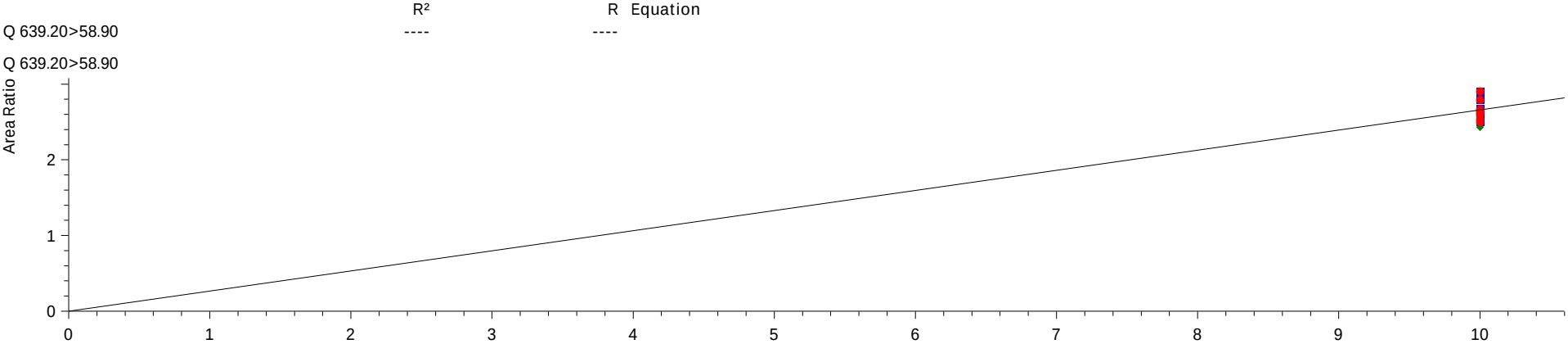


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☐	Auto	750458	750458	25.0000	25.0000	1.000000	25.0000	0.00	----	----	----
240118_007	1633 ICAL 0.1PPB	☐	Auto	749002	749002	25.0000	25.0000	1.000000	25.0000	0.00	----	----	----
240118_008	1633 ICAL 0.25PPB	☐	Auto	727751	727751	25.0000	25.0000	1.000000	25.0000	0.00	----	----	----
240118_009	1633 ICAL 0.50PPB	☐	Auto	781729	781729	25.0000	25.0000	1.000000	25.0000	0.00	----	----	----
240118_010	1633 ICAL 1.0PPB	☐	Auto	776012	776012	25.0000	25.0000	1.000000	25.0000	0.00	----	----	----
240118_011	1633 ICAL 5.0PPB	☐	Auto	732770	732770	25.0000	25.0000	1.000000	25.0000	0.00	----	----	----
240118_012	1633 ICAL 10.0PPB	☐	Auto	689895	689895	25.0000	25.0000	1.000000	25.0000	0.00	----	----	----
240118_013	1633 ICAL 15.0PPB	☐	Auto	673693	673693	25.0000	25.0000	1.000000	25.0000	0.00	----	----	----
240118_014	1633 ICAL 20.0PPB	☐	Auto	706883	706883	25.0000	25.0000	1.000000	25.0000	0.00	----	----	----
240118_016	1633 ICV 1.0PPB		Auto	658737	658737	25.0000	25.0000	----	25.0000	0.00	----	----	----
240118_017	1633 FTCA ICV 1.0PPB		Auto	699259	699259	25.0000	25.0000	----	25.0000	0.00	----	----	----



Compound: D9-EtFOSE

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 2

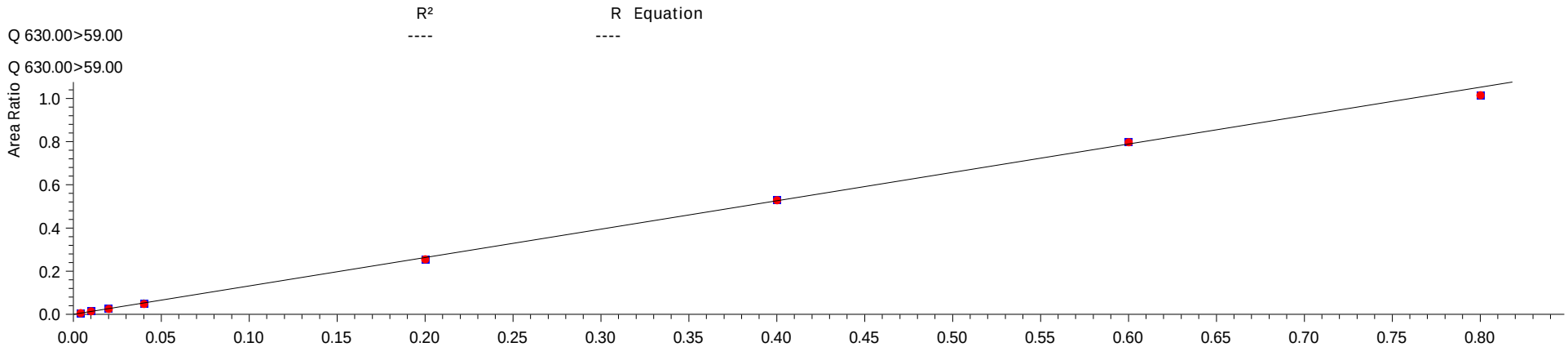


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc.Ratio
240118_006	1633 ICAL 0.05PPB	☒	Auto	750458	283185	25.0000	2.5000	0.265006	24.9296	-0.28	0.265755	4.709062	4.709062
240118_007	1633 ICAL 0.1PPB	☒	Auto	749002	282518	25.0000	2.5000	0.265117	24.9399	-0.24	0.265755	4.709062	4.709062
240118_008	1633 ICAL 0.25PPB	☒	Auto	727751	277483	25.0000	2.5000	0.262269	24.6721	-1.31	0.265755	4.709062	4.709062
240118_009	1633 ICAL 0.50PPB	☒	Auto	781729	279876	25.0000	2.5000	0.279313	26.2754	5.10	0.265755	4.709062	4.709062
240118_010	1633 ICAL 1.0PPB	☒	Auto	776012	298833	25.0000	2.5000	0.259681	24.4286	-2.29	0.265755	4.709062	4.709062
240118_011	1633 ICAL 5.0PPB	☒	Auto	732770	293425	25.0000	2.5000	0.249730	23.4925	-6.03	0.265755	4.709062	4.709062
240118_012	1633 ICAL 10.0PPB	☒	Auto	689895	272314	25.0000	2.5000	0.253346	23.8326	-4.67	0.265755	4.709062	4.709062
240118_013	1633 ICAL 15.0PPB	☒	Auto	673693	252372	25.0000	2.5000	0.266944	25.1119	0.45	0.265755	4.709062	4.709062
240118_014	1633 ICAL 20.0PPB	☒	Auto	706883	243425	25.0000	2.5000	0.290390	27.3174	9.27	0.265755	4.709062	4.709062
240118_016	1633 ICV 1.0PPB		Auto	658737	271163	25.0000	2.5000	----	22.8528	-8.59	0.265755	4.709062	4.709062
240118_017	1633 FTCA ICV 1.0PPB		Auto	699259	278941	25.0000	2.5000	----	23.5822	-5.67	0.265755	4.709062	4.709062



Compound: EtFOSE

Curve Fit: Mean RF | Weighting: 1/C | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 8
No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_007	1633 ICAL 0.1PPB	☒	M	4233	749002	0.1000	25.0000	1.412878	0.1074	7.41	1.315363	5.864919	5.864919
240118_008	1633 ICAL 0.25PPB	☒	M	10471	727751	0.2500	25.0000	1.438857	0.2735	9.39	1.315363	5.864919	5.864919
240118_009	1633 ICAL 0.50PPB	☒	M	19620	781729	0.5000	25.0000	1.254891	0.4770	-4.60	1.315363	5.864919	5.864919
240118_010	1633 ICAL 1.0PPB	☒	M	37832	776012	1.0000	25.0000	1.218806	0.9266	-7.34	1.315363	5.864919	5.864919
240118_011	1633 ICAL 5.0PPB	☒	M	187022	732770	5.0000	25.0000	1.276126	4.8509	-2.98	1.315363	5.864919	5.864919
240118_012	1633 ICAL 10.0PPB	☒	M	365015	689895	10.0000	25.0000	1.322719	10.0559	0.56	1.315363	5.864919	5.864919
240118_013	1633 ICAL 15.0PPB	☒	M	537366	673693	15.0000	25.0000	1.329403	15.1601	1.07	1.315363	5.864919	5.864919
240118_014	1633 ICAL 20.0PPB	☒	M	717754	706883	20.0000	25.0000	1.269224	19.2985	-3.51	1.315363	5.864919	5.864919
240118_016	1633 ICV 1.0PPB		M	34456	658737	1.0000	25.0000	----	0.9941	-0.59	1.315363	5.864919	5.864919
240118_017	1633 FTCA ICV 1.0PPB		ND(W/B)	----	699259	1.0000	25.0000	----	----	----	1.315363	5.864919	5.864919



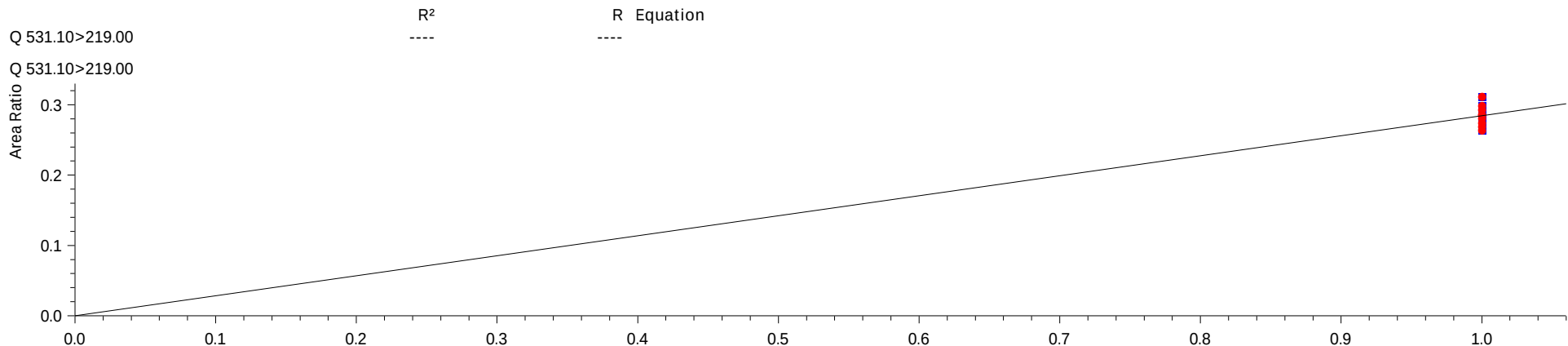
Compound: D5-EtFOSAm

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2

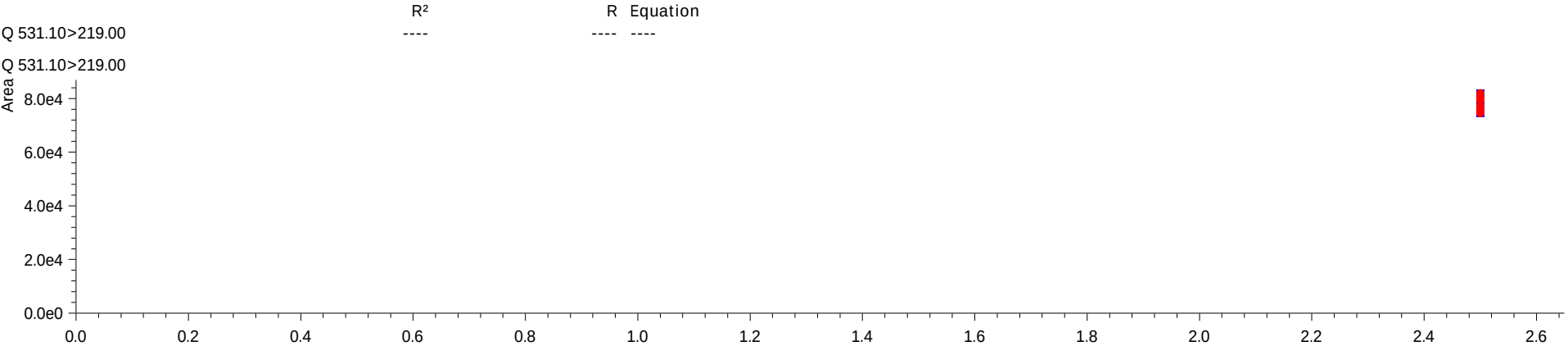


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc.Ratio
240118_006	1633 ICAL 0.05PPB	☒	Auto	79483	283185	2.5000	2.5000	0.280675	2.4659	-1.36	0.284555	5.268710	5.268710
240118_007	1633 ICAL 0.1PPB	☒	Auto	80456	282518	2.5000	2.5000	0.284781	2.5020	0.08	0.284555	5.268710	5.268710
240118_008	1633 ICAL 0.25PPB	☒	Auto	79387	277483	2.5000	2.5000	0.286097	2.5135	0.54	0.284555	5.268710	5.268710
240118_009	1633 ICAL 0.50PPB	☒	Auto	82004	279876	2.5000	2.5000	0.293000	2.5742	2.97	0.284555	5.268710	5.268710
240118_010	1633 ICAL 1.0PPB	☒	Auto	80394	298833	2.5000	2.5000	0.269026	2.3636	-5.46	0.284555	5.268710	5.268710
240118_011	1633 ICAL 5.0PPB	☒	Auto	77332	293425	2.5000	2.5000	0.263548	2.3154	-7.38	0.284555	5.268710	5.268710
240118_012	1633 ICAL 10.0PPB	☒	Auto	74601	272314	2.5000	2.5000	0.273951	2.4068	-3.73	0.284555	5.268710	5.268710
240118_013	1633 ICAL 15.0PPB	☒	Auto	75346	252372	2.5000	2.5000	0.298551	2.6230	4.92	0.284555	5.268710	5.268710
240118_014	1633 ICAL 20.0PPB	☒	Auto	75793	243425	2.5000	2.5000	0.311362	2.7355	9.42	0.284555	5.268710	5.268710
240118_016	1633 ICV 1.0PPB		Auto	72597	271163	2.5000	2.5000	----	2.3521	-5.91	0.284555	5.268710	5.268710
240118_017	1633 FTCA ICV 1.0PPB		Auto	73976	278941	2.5000	2.5000	----	2.3300	-6.80	0.284555	5.268710	5.268710



Compound: D5-EtFOSAm_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 0



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☐	Auto	79483	79483	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_007	1633 ICAL 0.1PPB	☐	Auto	80456	80456	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_008	1633 ICAL 0.25PPB	☐	Auto	79387	79387	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_009	1633 ICAL 0.50PPB	☐	Auto	82004	82004	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_010	1633 ICAL 1.0PPB	☐	Auto	80394	80394	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_011	1633 ICAL 5.0PPB	☐	Auto	77332	77332	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_012	1633 ICAL 10.0PPB	☐	Auto	74601	74601	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_013	1633 ICAL 15.0PPB	☐	Auto	75346	75346	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_014	1633 ICAL 20.0PPB	☐	Auto	75793	75793	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_016	1633 ICV 1.0PPB		Auto	72597	72597	2.5000	2.5000	----	2.5000	0.00	----	----	----
240118_017	1633 FTCA ICV 1.0PPB		Auto	73976	73976	2.5000	2.5000	----	2.5000	0.00	----	----	----



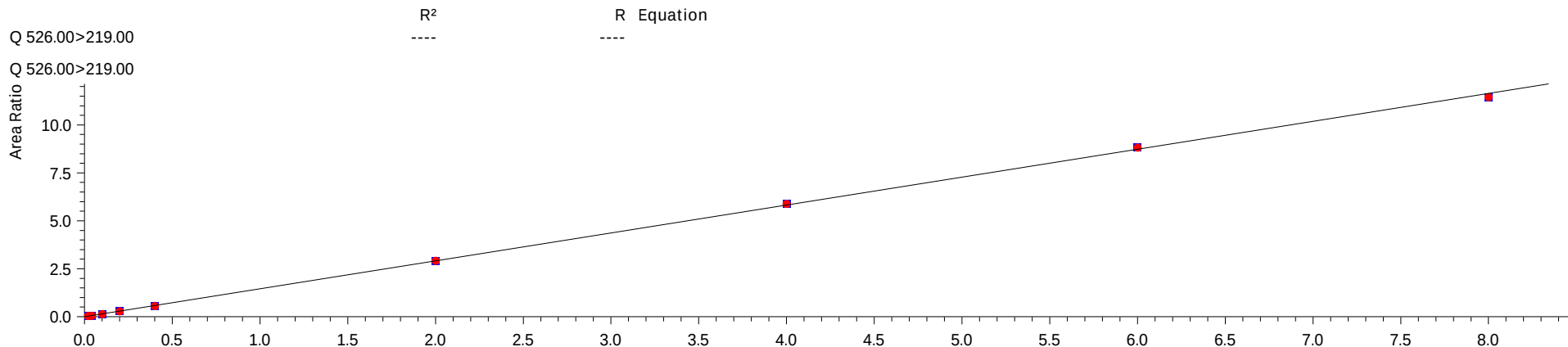
Compound: EtFOSAm

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☒	M	2813	79483	0.0500	2.5000	1.769312	0.0608	21.57	1.455430	8.870478	8.870477
240118_007	1633 ICAL 0.1PPB	☒	M	4199	80456	0.1000	2.5000	1.304690	0.0896	-10.36	1.455430	8.870478	8.870477
240118_008	1633 ICAL 0.25PPB	☒	M	10878	79387	0.2500	2.5000	1.370228	0.2354	-5.85	1.455430	8.870478	8.870477
240118_009	1633 ICAL 0.50PPB	☒	M	23101	82004	0.5000	2.5000	1.408565	0.4839	-3.22	1.455430	8.870478	8.870477
240118_010	1633 ICAL 1.0PPB	☒	M	45505	80394	1.0000	2.5000	1.415079	0.9723	-2.77	1.455430	8.870478	8.870477
240118_011	1633 ICAL 5.0PPB	☒	M	225568	77332	5.0000	2.5000	1.458449	5.0104	0.21	1.455430	8.870478	8.870477
240118_012	1633 ICAL 10.0PPB	☒	M	439049	74601	10.0000	2.5000	1.471334	10.1093	1.09	1.455430	8.870478	8.870477
240118_013	1633 ICAL 15.0PPB	☒	M	664270	75346	15.0000	2.5000	1.469376	15.1437	0.96	1.455430	8.870478	8.870477
240118_014	1633 ICAL 20.0PPB	☒	M	868189	75793	20.0000	2.5000	1.431836	19.6758	-1.62	1.455430	8.870478	8.870477
240118_016	1633 ICV 1.0PPB		M	43052	72597	1.0000	2.5000	----	1.0187	1.87	1.455430	8.870478	8.870477
240118_017	1633 FTCA ICV 1.0PPB		ND(W/B)	----	73976	1.0000	2.5000	----	----	----	1.455430	8.870478	8.870477



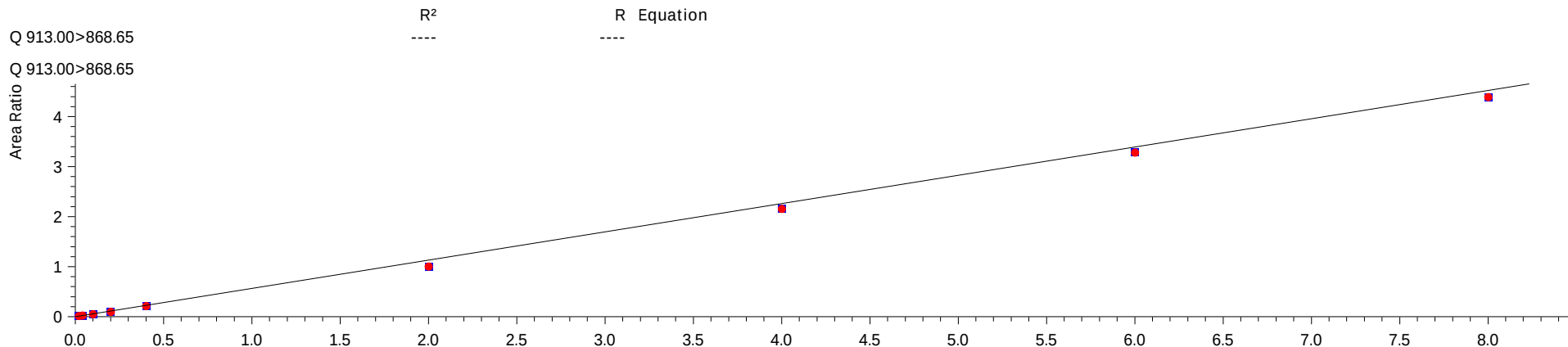
Compound: PFODA

Curve Fit: Mean RF | Weighting: 1/C | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)	Conc.Ratio
240118_006	1633 ICAL 0.05PPB	☒	Auto	8140	560359	0.0500	2.5000	0.726336	0.0642	28.48	0.565331	12.545918	12.545916	
240118_007	1633 ICAL 0.1PPB	☒	Auto	13821	546960	0.1000	2.5000	0.631741	0.1117	11.75	0.565331	12.545918	12.545916	
240118_008	1633 ICAL 0.25PPB	☒	Auto	28924	527703	0.2500	2.5000	0.548110	0.2424	-3.05	0.565331	12.545918	12.545916	
240118_009	1633 ICAL 0.50PPB	☒	Auto	55160	546187	0.5000	2.5000	0.504953	0.4466	-10.68	0.565331	12.545918	12.545916	
240118_010	1633 ICAL 1.0PPB	☒	Auto	118686	548879	1.0000	2.5000	0.540585	0.9562	-4.38	0.565331	12.545918	12.545916	
240118_011	1633 ICAL 5.0PPB	☒	Auto	513994	512196	5.0000	2.5000	0.501756	4.4377	-11.25	0.565331	12.545918	12.545916	
240118_012	1633 ICAL 10.0PPB	☒	Auto	1074240	498313	10.0000	2.5000	0.538938	9.5331	-4.67	0.565331	12.545918	12.545916	
240118_013	1633 ICAL 15.0PPB	☒	Auto	1592958	485630	15.0000	2.5000	0.546698	14.5056	-3.30	0.565331	12.545918	12.545916	
240118_014	1633 ICAL 20.0PPB	☒	Auto	2206399	502493	20.0000	2.5000	0.548863	19.4174	-2.91	0.565331	12.545918	12.545916	
240118_016	1633 ICV 1.0PPB		Auto	100861	474606	1.0000	2.5000	----	0.9398	-6.02	0.565331	12.545918	12.545916	
240118_017	1633 FTCA ICV 1.0PPB		ND(W/B)	----	503559	1.0000	2.5000	----	----	----	0.565331	12.545918	12.545916	



240118_005

Sample ID: 1633 CCB
Date Acquired: 1/18/2024 1:41:18 PM
Acquired by: System Administrator
Data File: 240118_005
Vial: 54 | Inj. Volume: 10.0000uL | Tray: 1

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	1051928	----	----	----	----	----	----	
13C4-PFBA_IS	216.80>171.90	----	1051928	----	----	----	----	----	----	
13C3-PFBA_IS	216.00>172.00	----	467833	----	----	----	----	----	----	
PFBA	212.80>169.05	----	1131	----	----	----	----	----	----	
PFMPA	229.00>84.90	----	72	----	----	----	----	----	----	
3_3 FTCA	241.00>177.10	241.00>117.00	----	0	0.00	141.17	0	0.00	141.17	
13C5-PFPeA	268.30>223.00	----	121927	----	----	----	----	----	----	
13C5-PFPeA_IS	268.30>223.00	----	121927	----	----	----	----	----	----	
PFPeA	263.00>219.00	----	1648	----	----	----	----	----	----	
PFMBA	279.00>84.95	----	81	----	----	----	----	----	----	
13C2-4_2 FTS	329.10>80.90	----	152561	----	----	----	----	----	----	
13C2-4_2 FTS_IS	329.10>80.90	----	152561	----	----	----	----	----	----	
4_2 FTS	327.10>307.00	327.10>80.90	82	48	58.04	29.06	48	58.04	29.06	IRr
13C3-PFBS_IS	302.10>79.90	----	278307	----	----	----	----	----	----	
PFBS	298.70>79.90	298.70>98.80	----	0	0.00	46.72	0	0.00	46.72	
13C3-PFBS	302.10>79.90	----	278307	----	----	----	----	----	----	
NFDHA	295.00>201.00	295.00>84.90	769	298	38.74	40.25	298	38.74	40.25	
13C5-PFHxA	318.00>273.00	----	544048	----	----	----	----	----	----	
13C5-PFHxA_IS	318.00>273.00	----	544048	----	----	----	----	----	----	
13C2-PFHxA_IS	315.10>270.00	----	512027	----	----	----	----	----	----	
PFHxA	313.00>269.00	----	1518	----	----	----	----	----	----	
PFEESA	314.80>135.00	314.80>82.90	----	0	0.00	6.11	0	0.00	6.11	
13C3-HFPO-DA	286.90>168.90	----	474826	----	----	----	----	----	----	
13C3-HFPO-DA_IS	286.90>168.90	----	474826	----	----	----	----	----	----	
HFPO-DA	284.90>168.90	284.90>184.90	----	0	0.00	65.61	0	0.00	65.61	
5_3 FTCA	341.00>237.05	341.00>217.00	----	0	0.00	158.86	0	0.00	158.86	
PFPeS	349.10>79.90	349.10>98.80	33	39	119.82	55.80	39	119.82	55.80	IRr
13C4-PFHpA	367.10>322.00	----	475428	----	----	----	----	----	----	
13C4-PFHpA_IS	367.10>322.00	----	475428	----	----	----	----	----	----	
PFHpA	363.10>319.00	363.10>169.00	6237	1332	21.35	21.50	1332	21.35	21.50	
DONA	376.90>250.90	376.90>84.80	----	0	0.00	29.66	0	0.00	29.66	
13C2-6_2 FTS_IS	429.10>80.90	----	153320	----	----	----	----	----	----	
13C2-6_2 FTS	429.10>80.90	----	153320	----	----	----	----	----	----	
6_2 FTS	427.10>407.00	427.10>80.90	1654	690	41.75	41.15	690	41.75	41.15	
13C4-PFOA_IS	417.10>172.00	----	38868	----	----	----	----	----	----	
13C8-PFOA_IS	421.10>376.00	----	519681	----	----	----	----	----	----	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240118_005 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	519681	----	----	----	----	----	----	----
PFOA	413.00>369.00	413.00>169.00	5298	1248	23.55	31.89	1248	23.55	31.89	
13C3-PFHxS	402.10>79.90	----	217732	----	----	----	----	----	----	----
13C3-PFHxS_IS	402.10>79.90	----	217732	----	----	----	----	----	----	----
PFHxS	398.70>79.90	398.70>98.90	1358	803	59.09	56.62	803	59.09	56.62	
18O2-PFHxS_IS	403.00>83.90	----	184084	----	----	----	----	----	----	----
13C9-PFNA_IS	472.10>427.00	----	234653	----	----	----	----	----	----	----
13C9-PFNA	472.10>427.00	----	234653	----	----	----	----	----	----	----
13C5-PFNA_IS	468.00>423.00	----	238020	----	----	----	----	----	----	----
PFNA	463.00>419.00	463.00>219.00	4427	1101	24.86	23.17	1101	24.86	23.17	
PFHpS	449.00>79.90	449.00>98.80	----	0	0.00	56.96	0	0.00	56.96	
7_3 FTCA	441.00>317.00	441.00>336.90	621	941	151.46	117.47	941	151.46	117.47	
13C2-8_2-FTS	529.10>80.90	----	124234	----	----	----	----	----	----	----
13C2-8_2-FTS_IS	529.10>80.90	----	124234	----	----	----	----	----	----	----
8_2 FTS	527.10>506.95	527.10>80.80	----	0	0.00	49.59	0	0.00	49.59	
13C6-PFDA_IS	519.10>474.10	----	175870	----	----	----	----	----	----	----
13C6-PFDA	519.10>474.10	----	175870	----	----	----	----	----	----	----
13C2-PFDA_IS	515.10>470.10	----	179410	----	----	----	----	----	----	----
PFDA	512.90>469.00	512.90>219.00	6331	742	11.72	19.00	742	11.72	19.00	
D3-NMeFOSAA_IS	573.20>419.00	----	221304	----	----	----	----	----	----	----
D3-NMeFOSAA	573.20>419.00	----	221304	----	----	----	----	----	----	----
13C8-PFOS_IS	507.10>98.90	----	88158	----	----	----	----	----	----	----
13C8-PFOS	507.10>98.90	----	88158	----	----	----	----	----	----	----
13C4-PFOS_IS	502.80>79.90	----	217788	----	----	----	----	----	----	----
PFOS	498.90>79.90	498.90>98.80	484	536	110.70	52.47	536	110.70	52.47	IRr
NMeFOSAA	570.10>419.00	570.10>483.00	----	0	0.00	55.15	0	0.00	55.15	
D5-NetFOSAA_IS	589.20>419.00	----	279170	----	----	----	----	----	----	----
D5-NetFOSAA	589.20>419.00	----	279170	----	----	----	----	----	----	----
NetFOSAA	584.20>419.10	584.20>526.00	----	0	0.00	81.95	0	0.00	81.95	
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	----	0	0.00	32.76	0	0.00	32.76	
PFUnDA	563.10>519.00	563.10>269.10	4502	480	10.67	13.12	480	10.67	13.12	
13C7-PFUnDA_IS	570.00>525.10	----	232552	----	----	----	----	----	----	----
13C7-PFUnDA	570.00>525.10	----	232552	----	----	----	----	----	----	----
PFNS	548.80>79.90	548.80>98.80	----	0	0.00	65.22	0	0.00	65.22	
10_2 FTS	626.80>607.05	626.80>81.00	----	0	0.00	37.13	0	0.00	37.13	
13C2-PFDOA_IS	615.10>570.00	----	264426	----	----	----	----	----	----	----
13C2-PFDOA	615.10>570.00	----	264426	----	----	----	----	----	----	----
PFDOA	613.10>569.00	613.10>319.00	4360	419	9.61	11.29	419	9.61	11.29	
PFDS	599.00>79.90	599.00>98.80	----	0	0.00	60.18	0	0.00	60.18	
PFTrDA	663.00>619.00	663.00>168.90	4573	873	19.09	17.64	873	19.09	17.64	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240118_005 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	----	0	0.00	36.44	0	0.00	36.44	
PFOSAm	498.10>77.90	----	279	----	----	----	----	----	----	
13C8-PFOSAm	506.10>77.80	----	246289	----	----	----	----	----	----	
13C8-PFOSAm_IS	506.10>77.80	----	246289	----	----	----	----	----	----	
PFTDA	713.10>669.00	713.10>168.90	3716	721	19.40	22.96	721	19.40	22.96	
13C2-PFTDA	715.20>670.00	----	113989	----	----	----	----	----	----	
13C2-PFTDA_IS	715.20>670.00	----	113989	----	----	----	----	----	----	
PFDoS	699.10>79.90	699.10>98.80	----	0	0.00	67.40	0	0.00	67.40	
D7-MeFOSE_IS	623.20>58.90	----	566102	----	----	----	----	----	----	
D7-MeFOSE	623.20>58.90	----	566102	----	----	----	----	----	----	
MeFOSE	616.10>59.00	----	----	----	----	----	----	----	----	
13C2-PFHxDA_IS	815.00>770.05	----	446720	----	----	----	----	----	----	
13C2-PFHxDA	815.00>770.05	----	446720	----	----	----	----	----	----	
PFHxDA	813.00>768.95	813.00>218.95	4242	426	10.05	13.90	426	10.05	13.90	
D3-MeFOSA	515.00>219.00	----	45343	----	----	----	----	----	----	
D3-MeFOSA_IS	515.00>219.00	----	45343	----	----	----	----	----	----	
MeFOSA	511.90>219.00	511.90>169.00	----	0	0.00	140.79	0	0.00	140.79	
D9-EtFOSE_IS	639.20>58.90	----	555054	----	----	----	----	----	----	
D9-EtFOSE	639.20>58.90	----	555054	----	----	----	----	----	----	
EtFOSE	630.00>59.00	----	----	----	----	----	----	----	----	
D5-EtFOSAm	531.10>219.00	----	63166	----	----	----	----	----	----	
D5-EtFOSAm_IS	531.10>219.00	----	63166	----	----	----	----	----	----	
EtFOSAm	526.00>219.00	526.00>169.00	----	0	0.00	163.90	0	0.00	163.90	
PFODA	913.00>868.65	913.00>169.00	1452	360	24.81	27.03	360	24.81	27.03	

Flag ID key: IRr: Ion Ratio (Relative)



240118_005

Sample ID: 1633 CCB
Date Acquired: 1/18/2024 1:41:18 PM
Acquired by: System Administrator
Data File: 240118_005
Vial: 54 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Std. Conc.	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.447	0.033	-0.001	1051928	467833	13C3-PFBA_IS	----	10.0596	ng/mL	
13C4-PFBA_IS	Auto	1.447	0.033	----	1051928	1051928	----	----	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.448	0.033	----	467833	467833	----	----	5.0000	ng/mL	
PFBA	M	1.430	0.014	-0.017	1131	1051928	13C4-PFBA_IS	----	0.0125	ng/mL	
PFMPA	M	2.468	0.036	-1.054	72	121927	13C5-PFPeA_IS	----	0.0009	ng/mL	
3_3 FTCA	ND(W/B)	----	----	----	----	121927	13C5-PFPeA_IS	----	----	ng/mL	
13C5-PFPeA	Auto	3.523	0.030	-1.485	121927	512027	13C2-PFHxA_IS	----	5.2754	ng/mL	
13C5-PFPeA_IS	Auto	3.523	0.030	----	121927	121927	----	----	5.0000	ng/mL	
PFPeA	M	3.526	0.031	0.004	1648	121927	13C5-PFPeA_IS	----	0.0104	ng/mL	
PFMBA	M	4.064	0.039	0.542	81	121927	13C5-PFPeA_IS	----	0.0007	ng/mL	
13C2-4_2 FTS	Auto	4.688	0.027	-2.423	152561	184084	18O2-PFHxS_IS	----	6.0223	ng/mL	
13C2-4_2 FTS_IS	Auto	4.688	0.027	----	152561	152561	----	----	5.0000	ng/mL	
4_2 FTS	M	4.709	0.047	0.021	82	152561	13C2-4_2 FTS_IS	----	0.0011	ng/mL	IRr
13C3-PFBS_IS	Auto	4.680	0.033	----	278307	278307	----	----	2.5000	ng/mL	
PFBS	ND(W/B)	----	----	----	----	278307	13C3-PFBS_IS	----	----	ng/mL	
13C3-PFBS	Auto	4.680	0.033	-2.431	278307	184084	18O2-PFHxS_IS	----	2.6641	ng/mL	
NFDHA	M	4.870	0.035	-0.135	769	544048	13C5-PFHxA_IS	----	0.0064	ng/mL	
13C5-PFHxA	Auto	5.005	0.027	-0.002	544048	512027	13C2-PFHxA_IS	----	2.5211	ng/mL	
13C5-PFHxA_IS	Auto	5.005	0.027	----	544048	544048	----	----	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	5.007	0.028	----	512027	512027	----	----	2.5000	ng/mL	
PFHxA	M	5.012	0.032	0.007	1518	544048	13C5-PFHxA_IS	----	0.0000	ng/mL	
PFEESA	ND(W/B)	----	----	----	----	544048	13C5-PFHxA_IS	----	----	ng/mL	
13C3-HFPO-DA	Auto	5.479	0.027	0.472	474826	512027	13C2-PFHxA_IS	----	9.4732	ng/mL	
13C3-HFPO-DA_IS	Auto	5.479	0.027	----	474826	474826	----	----	10.0000	ng/mL	
HFPO-DA	ND(W/B)	----	----	----	----	474826	13C3-HFPO-DA_IS	----	----	ng/mL	
5_3 FTCA	ND(W/B)	----	----	----	----	544048	13C5-PFHxA_IS	----	----	ng/mL	
PFPeS	M	6.029	0.011	-1.082	33	217732	13C3-PFHxS_IS	----	0.0003	ng/mL	IRr
13C4-PFHpA	Auto	6.180	0.026	1.173	475428	512027	13C2-PFHxA_IS	----	2.4337	ng/mL	
13C4-PFHpA_IS	Auto	6.180	0.026	----	475428	475428	----	----	2.5000	ng/mL	
PFHpA	M	6.162	0.007	-0.018	6237	475428	13C4-PFHpA_IS	----	-0.0031	ng/mL	
DONA	ND(W/B)	----	----	----	----	474826	13C3-HFPO-DA_IS	----	----	ng/mL	
13C2-6_2 FTS_IS	Auto	6.816	0.023	----	153320	153320	----	----	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.816	0.023	-0.295	153320	184084	18O2-PFHxS_IS	----	6.3991	ng/mL	
6_2 FTS	M	6.813	0.020	-0.004	1654	153320	13C2-6_2 FTS_IS	----	0.0237	ng/mL	
13C4-PFOA_IS	Auto	7.132	0.025	----	38868	38868	----	----	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.132	0.025	----	519681	519681	----	----	2.5000	ng/mL	
13C8-PFOA	Auto	7.132	0.025	0.000	519681	38868	13C4-PFOA_IS	----	2.3921	ng/mL	
PFOA	M	7.130	0.020	-0.002	5298	519681	13C8-PFOA_IS	----	-0.0042	ng/mL	
13C3-PFHxS	Auto	7.111	0.025	0.000	217732	184084	18O2-PFHxS_IS	----	2.7556	ng/mL	
13C3-PFHxS_IS	Auto	7.111	0.025	----	217732	217732	----	----	2.5000	ng/mL	
PFHxS	M	7.110	0.026	-0.001	1358	217732	13C3-PFHxS_IS	----	-0.0061	ng/mL	
18O2-PFHxS_IS	Auto	7.111	0.025	----	184084	184084	----	----	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.979	0.023	----	234653	234653	----	----	1.2500	ng/mL	
13C9-PFNA	Auto	7.979	0.023	0.000	234653	238020	13C5-PFNA_IS	----	1.2591	ng/mL	
13C5-PFNA_IS	Auto	7.979	0.023	----	238020	238020	----	----	1.2500	ng/mL	
PFNA	M	7.980	0.023	0.001	4427	234653	13C9-PFNA_IS	----	0.0023	ng/mL	
PFHpS	ND(W/B)	----	----	----	----	88158	13C8-PFOS_IS	----	----	ng/mL	
7_3 FTCA	M	7.975	0.021	2.970	621	544048	13C5-PFHxA_IS	----	0.0331	ng/mL	
13C2-8_2-FTS	Auto	8.431	0.022	1.320	124234	184084	18O2-PFHxS_IS	----	6.3122	ng/mL	
13C2-8_2-FTS_IS	Auto	8.431	0.022	----	124234	124234	----	----	5.0000	ng/mL	
8_2 FTS	ND(W/B)	----	----	----	----	124234	13C2-8_2-FTS_IS	----	----	ng/mL	
13C6-PFDA_IS	Auto	8.743	0.023	----	175870	175870	----	----	1.2500	ng/mL	
13C6-PFDA	Auto	8.743	0.023	0.000	175870	179410	13C2-PFDA_IS	----	1.2184	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_005 (continued)

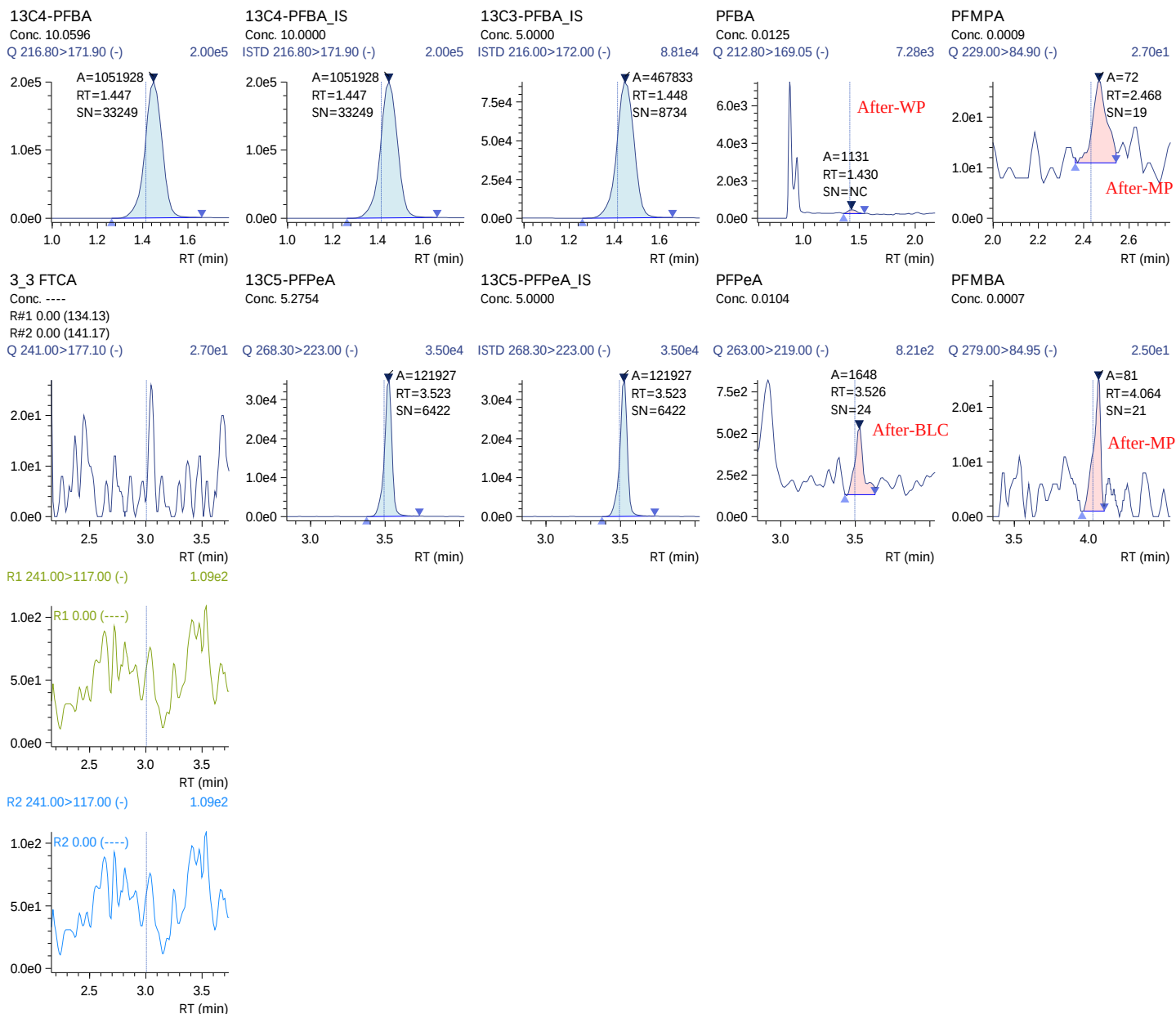
(Table continued from previous page)

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Std. Conc.	Conc.	Unit	Flag ID
13C2-PFDA_IS	Auto	8.743	0.022	----	179410	179410	----	----	1.2500	ng/mL	
PFDA	M	8.745	0.024	0.002	6331	175870	13C6-PFDA_IS	----	0.0123	ng/mL	
D3-NMeFOSAA_IS	Auto	8.875	0.020	----	221304	221304	----	----	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.875	0.020	0.030	221304	217788	13C4-PFOS_IS	----	5.8548	ng/mL	
13C8-PFOS_IS	Auto	8.845	0.025	----	88158	88158	----	----	2.5000	ng/mL	
13C8-PFOS	Auto	8.845	0.025	0.000	88158	217788	13C4-PFOS_IS	----	2.4272	ng/mL	
13C4-PFOS_IS	Auto	8.845	0.025	----	217788	217788	----	----	2.5000	ng/mL	
PFOS	M	8.848	0.026	0.003	484	88158	13C8-PFOS_IS	----	0.0053	ng/mL	IRr
NMeFOSAA	ND(W/B)	----	----	----	----	221304	D3-NMeFOSAA_IS	----	----	ng/mL	
D5-NetFOSAA_IS	Auto	9.208	0.022	----	279170	279170	----	----	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.208	0.022	0.363	279170	217788	13C4-PFOS_IS	----	6.1734	ng/mL	
NetFOSAA	ND(W/B)	----	----	----	----	279170	D5-NetFOSAA_IS	----	----	ng/mL	
9-CI-PF3ONS	ND(W/B)	----	----	----	----	474826	13C3-HFPO-DA_IS	----	----	ng/mL	
PFUnDA	M	9.468	0.021	0.000	4502	232552	13C7-PFUnDA_IS	----	-0.0030	ng/mL	
13C7-PFUnDA_IS	Auto	9.468	0.023	----	232552	232552	----	----	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.468	0.023	0.725	232552	179410	13C2-PFDA_IS	----	1.3507	ng/mL	
PFNS	ND(W/B)	----	----	----	----	88158	13C8-PFOS_IS	----	----	ng/mL	
10_2_FTS	ND(W/B)	----	----	----	----	124234	13C2-8_2-FTS_IS	----	----	ng/mL	
13C2-PFDOA_IS	Auto	10.156	0.023	----	264426	264426	----	----	1.2500	ng/mL	
13C2-PFDOA	Auto	10.156	0.023	1.413	264426	179410	13C2-PFDA_IS	----	1.3368	ng/mL	
PFDOA	M	10.155	0.021	-0.001	4360	264426	13C2-PFDOA_IS	----	-0.0035	ng/mL	
PFDS	ND(W/B)	----	----	----	----	88158	13C8-PFOS_IS	----	----	ng/mL	
PFTrDA	Auto	10.816	0.024	-0.630	4573	113989	13C2-PFTDA_IS	----	-0.0025	ng/mL	
11-CI-PF3OUdS	ND(W/B)	----	----	----	----	474826	13C3-HFPO-DA_IS	----	----	ng/mL	
PFOSAm	M	11.167	0.003	-0.008	279	246289	13C8-PFOSAm_IS	----	0.0034	ng/mL	
13C8-PFOSAm	Auto	11.175	0.010	2.330	246289	217788	13C4-PFOS_IS	----	2.6639	ng/mL	
13C8-PFOSAm_IS	Auto	11.175	0.010	----	246289	246289	----	----	2.5000	ng/mL	
PFTDA	M	11.446	0.021	0.000	3716	113989	13C2-PFTDA_IS	----	0.0025	ng/mL	
13C2-PFTDA	Auto	11.446	0.022	2.703	113989	179410	13C2-PFDA_IS	----	1.3347	ng/mL	
13C2-PFTDA_IS	Auto	11.446	0.022	----	113989	113989	----	----	1.2500	ng/mL	
PFDoS	ND(W/B)	----	----	----	----	88158	13C8-PFOS_IS	----	----	ng/mL	
D7-MeFOSE_IS	Auto	13.384	0.007	----	566102	566102	----	----	25.0000	ng/mL	
D7-MeFOSE	Auto	13.384	0.007	4.539	566102	217788	13C4-PFOS_IS	----	24.8351	ng/mL	
MeFOSE	ND(W/B)	----	----	----	----	566102	D7-MeFOSE_IS	----	----	ng/mL	
13C2-PFHxDA_IS	Auto	12.663	0.022	----	446720	446720	----	----	2.5000	ng/mL	
13C2-PFHxDA	Auto	12.663	0.022	3.920	446720	179410	13C2-PFDA_IS	----	2.6806	ng/mL	
PFHxDA	M	12.664	0.022	0.001	4242	446720	13C2-PFHxDA_IS	----	-0.0047	ng/mL	
D3-MeFOSA	Auto	13.692	0.007	4.847	45343	217788	13C4-PFOS_IS	----	2.4353	ng/mL	
D3-MeFOSA_IS	Auto	13.692	0.007	----	45343	45343	----	----	2.5000	ng/mL	
MeFOSA	ND(W/B)	----	----	----	----	45343	D3-MeFOSA_IS	----	----	ng/mL	
D9-EtFOSE_IS	Auto	14.013	0.007	----	555054	555054	----	----	25.0000	ng/mL	
D9-EtFOSE	Auto	14.013	0.007	5.168	555054	217788	13C4-PFOS_IS	----	23.9751	ng/mL	
EtFOSE	ND(W/B)	----	----	----	----	555054	D9-EtFOSE_IS	----	----	ng/mL	
D5-EtFOSAm	Auto	14.370	0.008	5.525	63166	217788	13C4-PFOS_IS	----	2.5482	ng/mL	
D5-EtFOSAm_IS	Auto	14.370	0.008	----	63166	63166	----	----	2.5000	ng/mL	
EtFOSAm	ND(W/B)	----	----	----	----	63166	D5-EtFOSAm_IS	----	----	ng/mL	
PFODA	M	13.806	0.031	1.143	1452	446720	13C2-PFHxDA_IS	----	0.0144	ng/mL	

Flag ID key: IRr: Ion Ratio (Relative)



240118_005 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_005 (continued)

13C2-4_2 FTS
Conc. 6.0223

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. 0.0011
R#1 58.04 (34.14)
R#2 58.04 (29.06)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. ----
R#1 0.00 (47.53)
R#2 0.00 (46.72)

Q 329.10>80.90 (-)

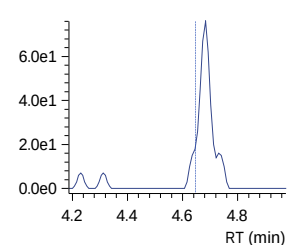
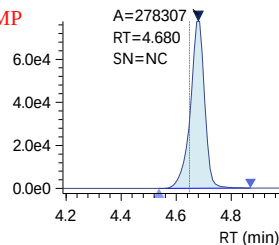
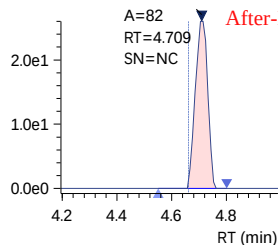
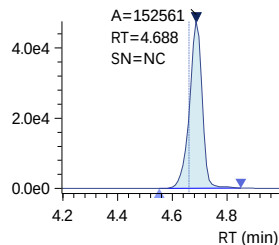
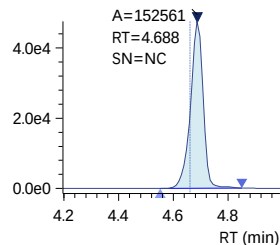
4.76e4 ISTD 329.10>80.90 (-)

4.76e4 Q 327.10>307.00 (-)

2.60e1 ISTD 302.10>79.90 (-)

7.76e4 Q 298.70>79.90 (-)

7.60e1

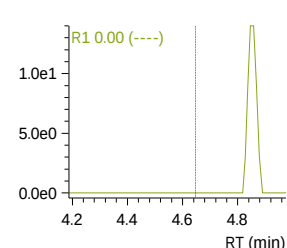
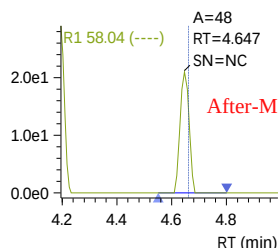


R1 327.10>80.90 (-)

2.90e1

R1 298.70>98.80 (-)

1.40e1

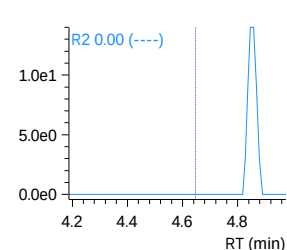
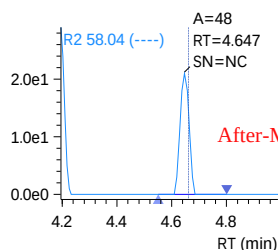


R2 327.10>80.90 (-)

2.90e1

R2 298.70>98.80 (-)

1.40e1





240118_005 (continued)

13C3-PFBS
Conc. 2.6641

NFDHA
Conc. 0.0064
R#1 38.74 (37.88)
R#2 38.74 (40.25)

13C5-PFHxA
Conc. 2.5211

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

Q 302.10>79.90 (-)

7.76e4

Q 295.00>201.00 (-)

2.14e2

Q 318.00>273.00 (-)

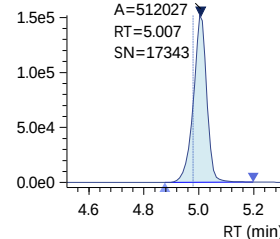
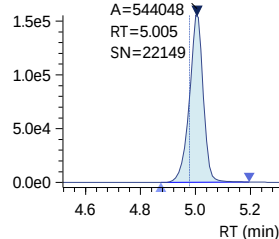
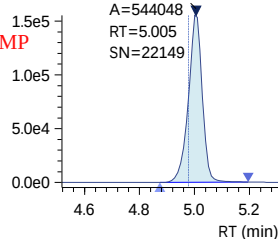
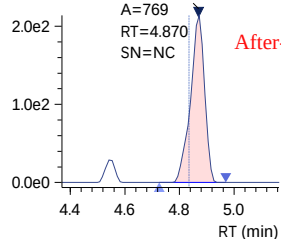
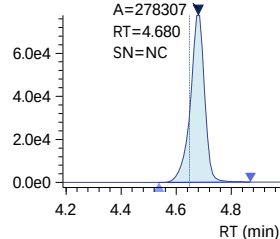
1.55e5

ISTD 318.00>273.00 (-)

1.55e5

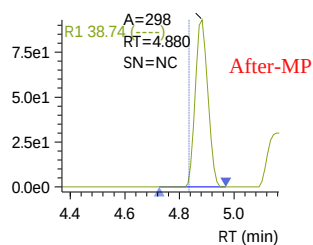
ISTD 315.10>270.00 (-)

1.52e5



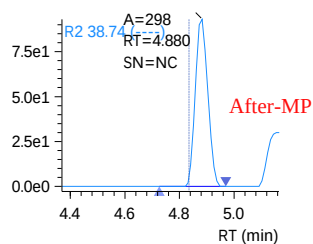
R1 295.00>84.90 (-)

9.30e1



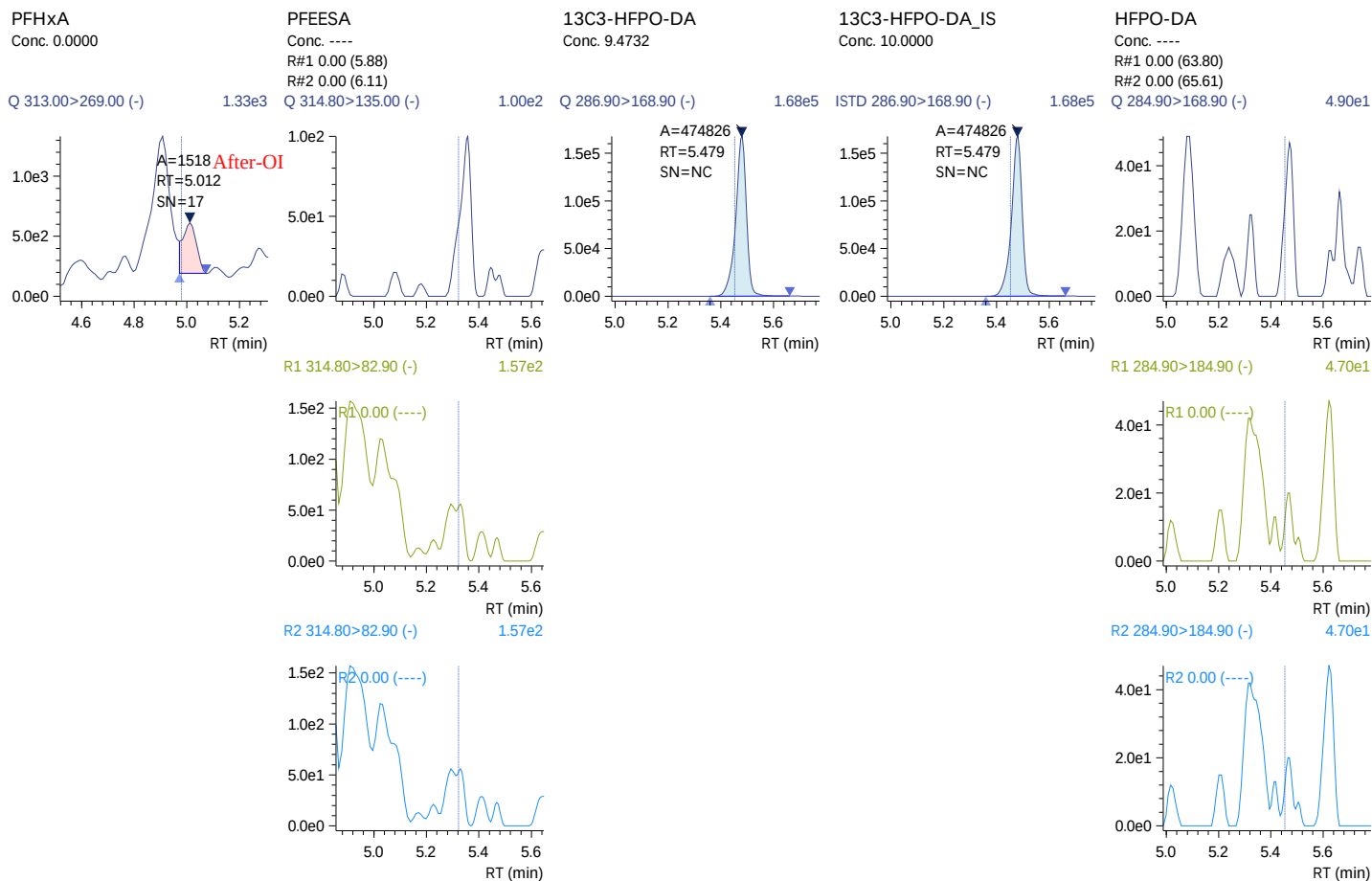
R2 295.00>84.90 (-)

9.30e1





240118_005 (continued)

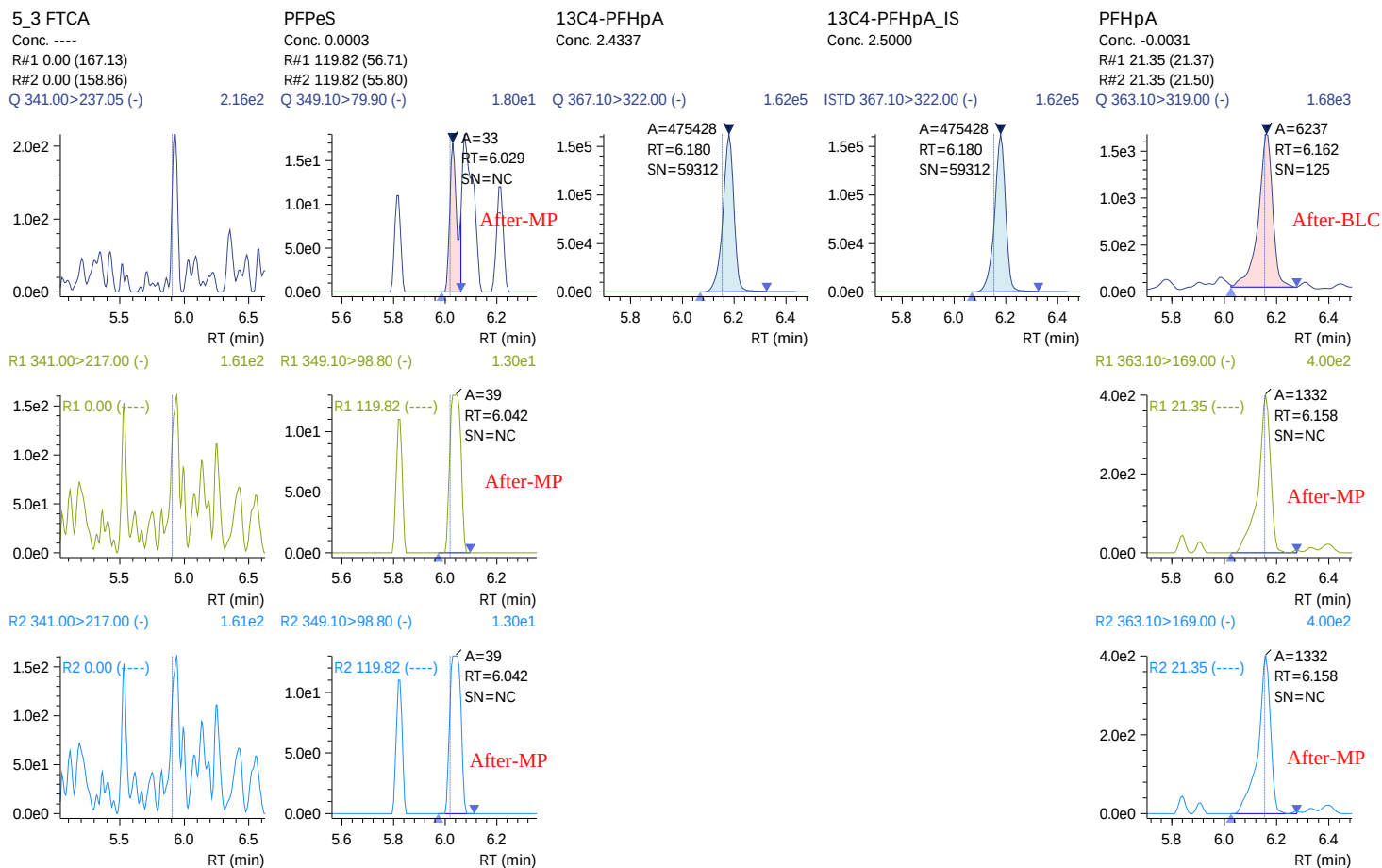


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_005 (continued)

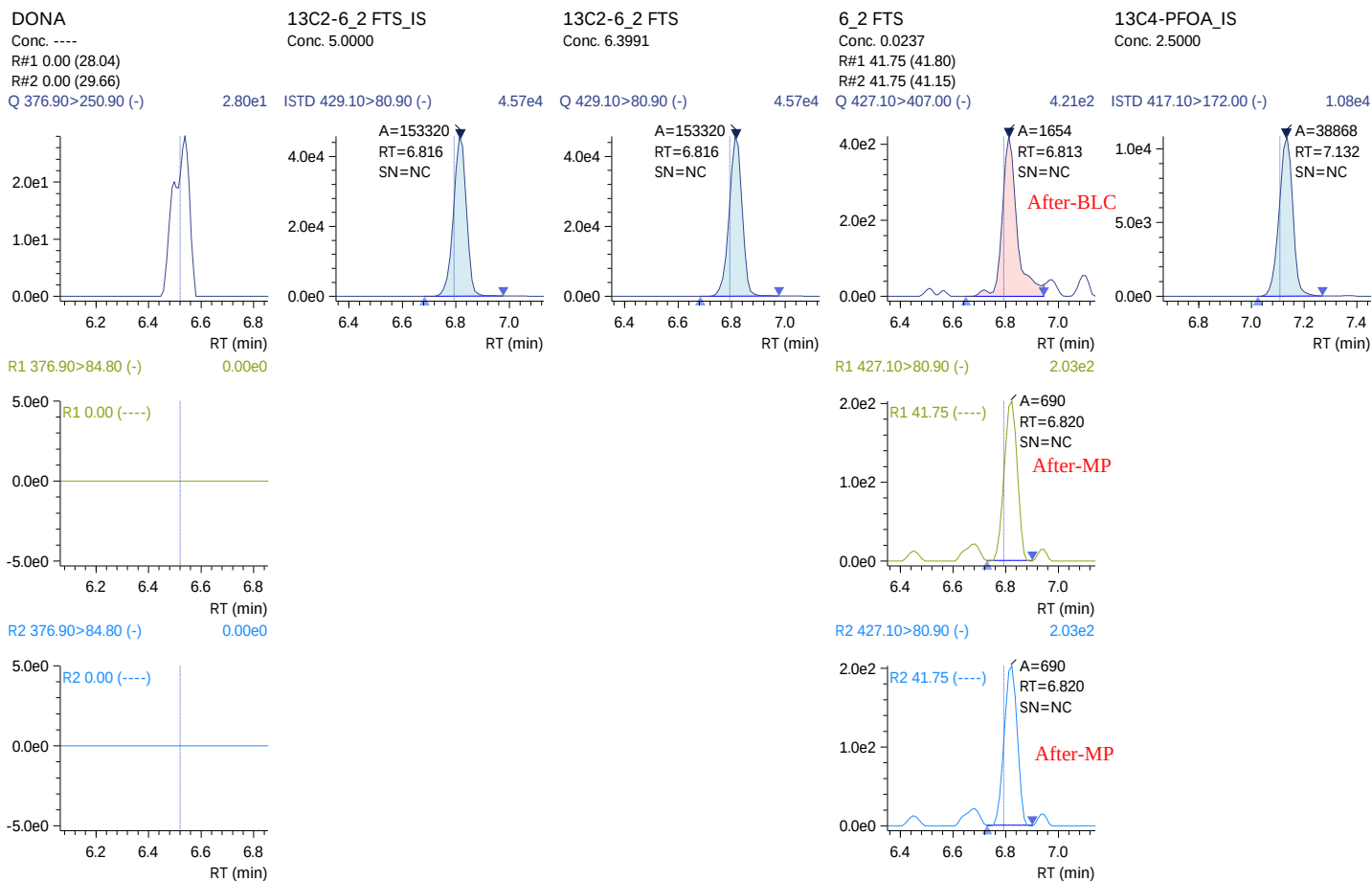


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
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240118_005 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_005 (continued)

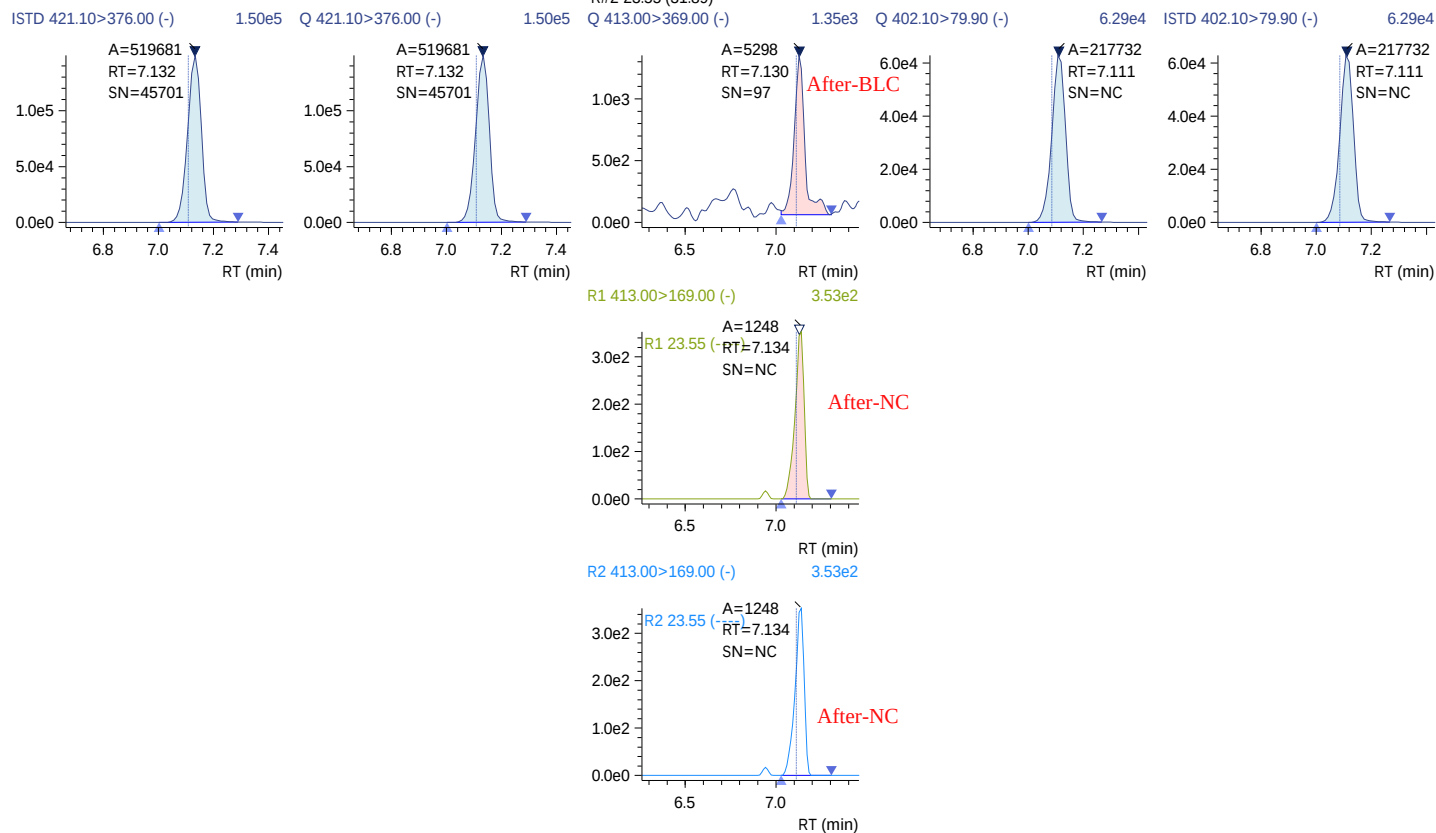
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.3921

PFOA
Conc. -0.0042
R#1 23.55 (29.05)
R#2 23.55 (31.89)

13C3-PFHxS
Conc. 2.7556

13C3-PFHxS_IS
Conc. 2.5000

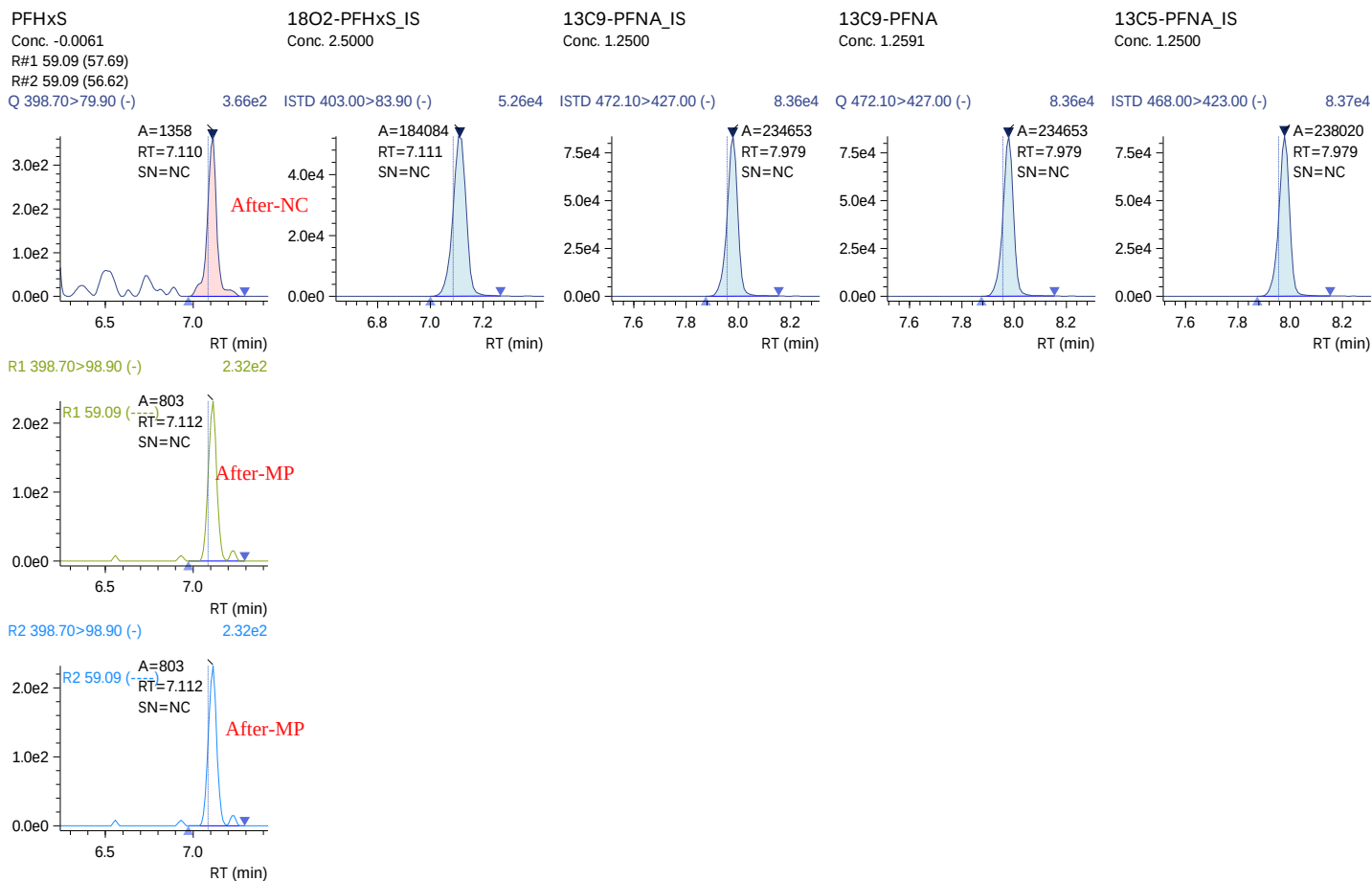


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_005 (continued)

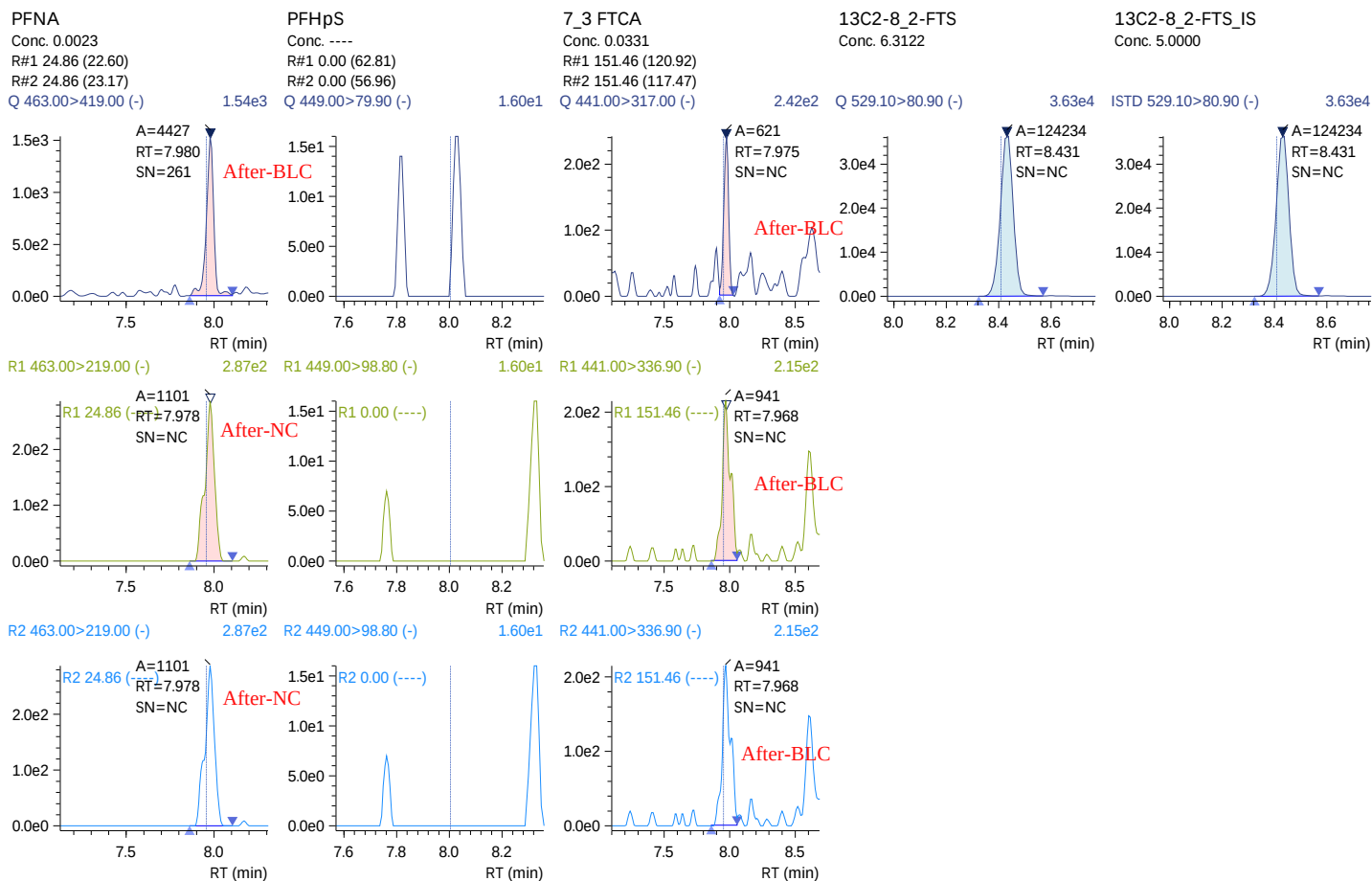


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_005 (continued)

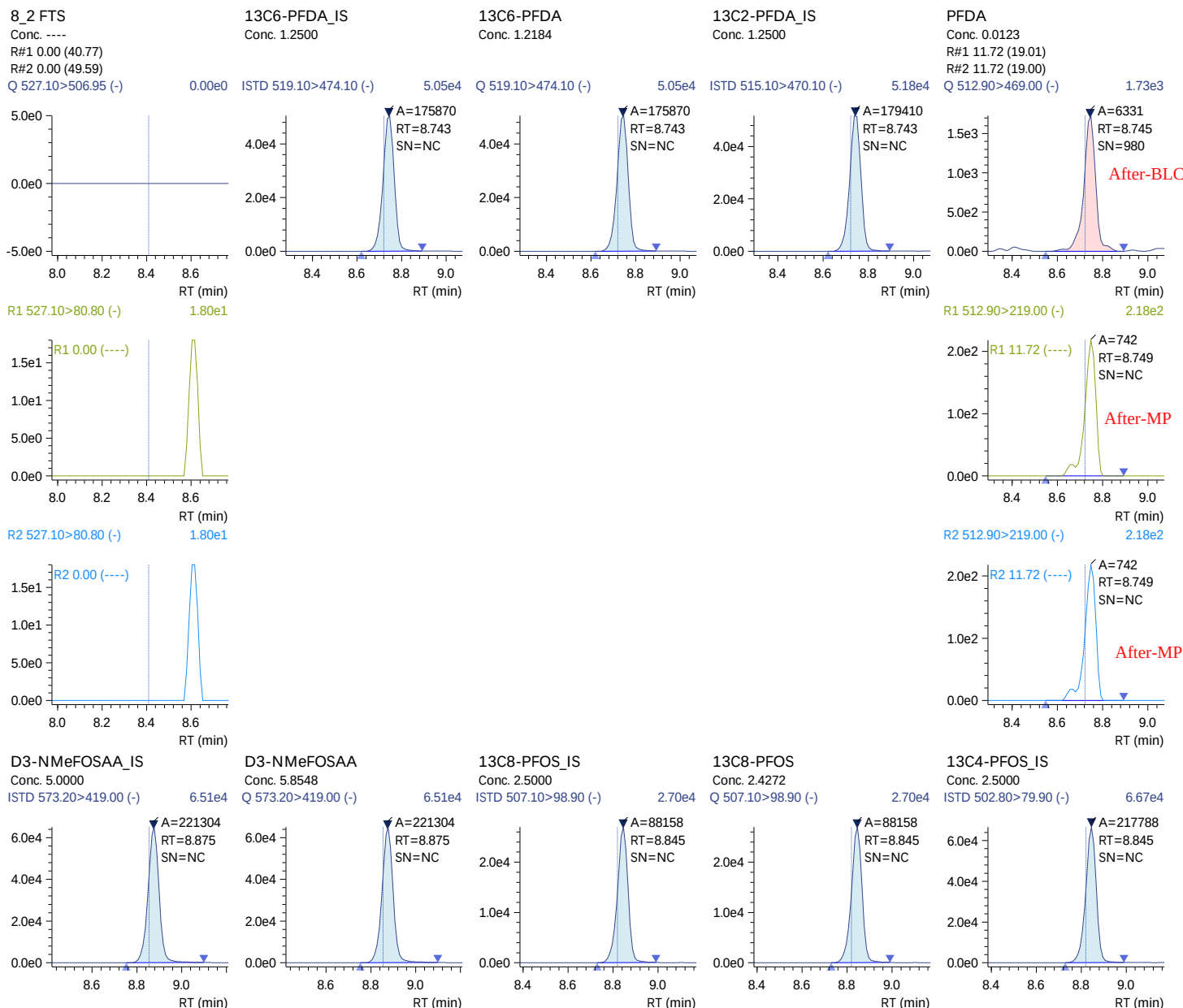


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_005 (continued)

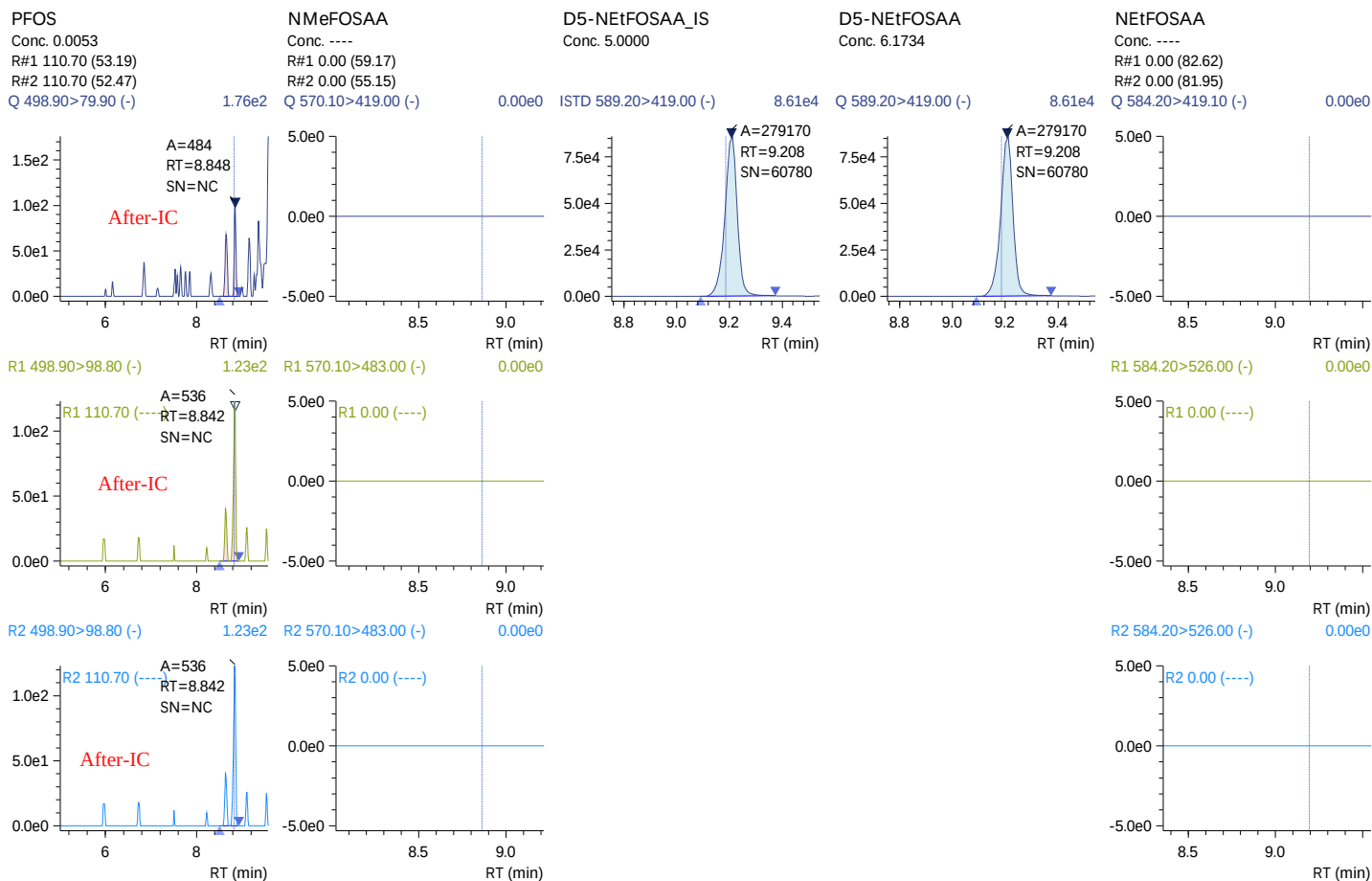


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_005 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_005 (continued)

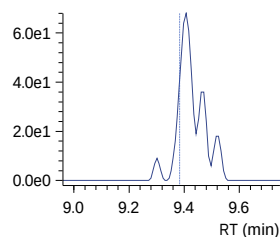
9-Cl-PF3ONS

Conc. ----

R#1 0.00 (31.76)

R#2 0.00 (32.76)

Q 530.80>351.00 (-)



R1 532.80>353.00 (-)

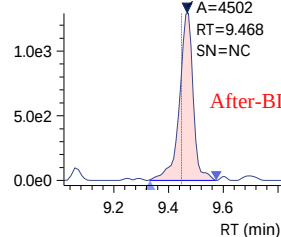
PFUnDA

Conc. -0.0030

R#1 10.67 (12.31)

R#2 10.67 (13.12)

Q 563.10>519.00 (-)

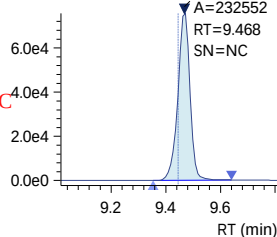


R1 563.10>269.10 (-)

13C7-PFUnDA_IS

Conc. 1.2500

ISTD 570.00>525.10 (-)

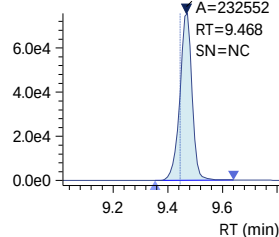


R1 563.10>269.10 (-)

13C7-PFUnDA

Conc. 1.3507

Q 570.00>525.10 (-)



R1 563.10>269.10 (-)

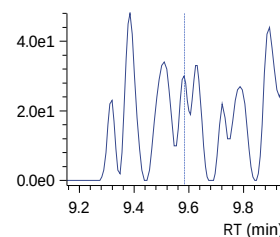
PFNS

Conc. ----

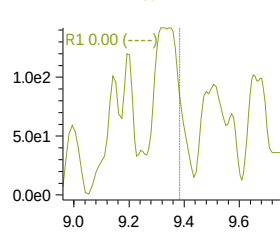
R#1 0.00 (63.31)

R#2 0.00 (65.22)

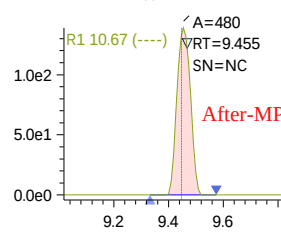
Q 548.80>79.90 (-)



R1 548.80>98.80 (-)



R2 532.80>353.00 (-)



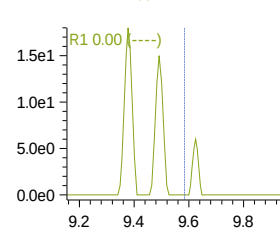
R2 563.10>269.10 (-)



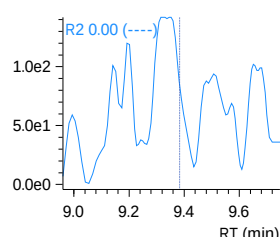
R1 563.10>269.10 (-)



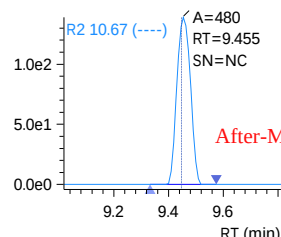
R1 563.10>269.10 (-)



R2 548.80>98.80 (-)



R2 532.80>353.00 (-)



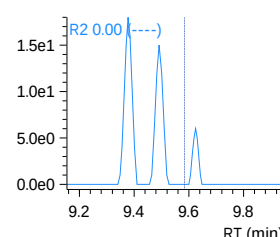
R2 563.10>269.10 (-)



R1 563.10>269.10 (-)



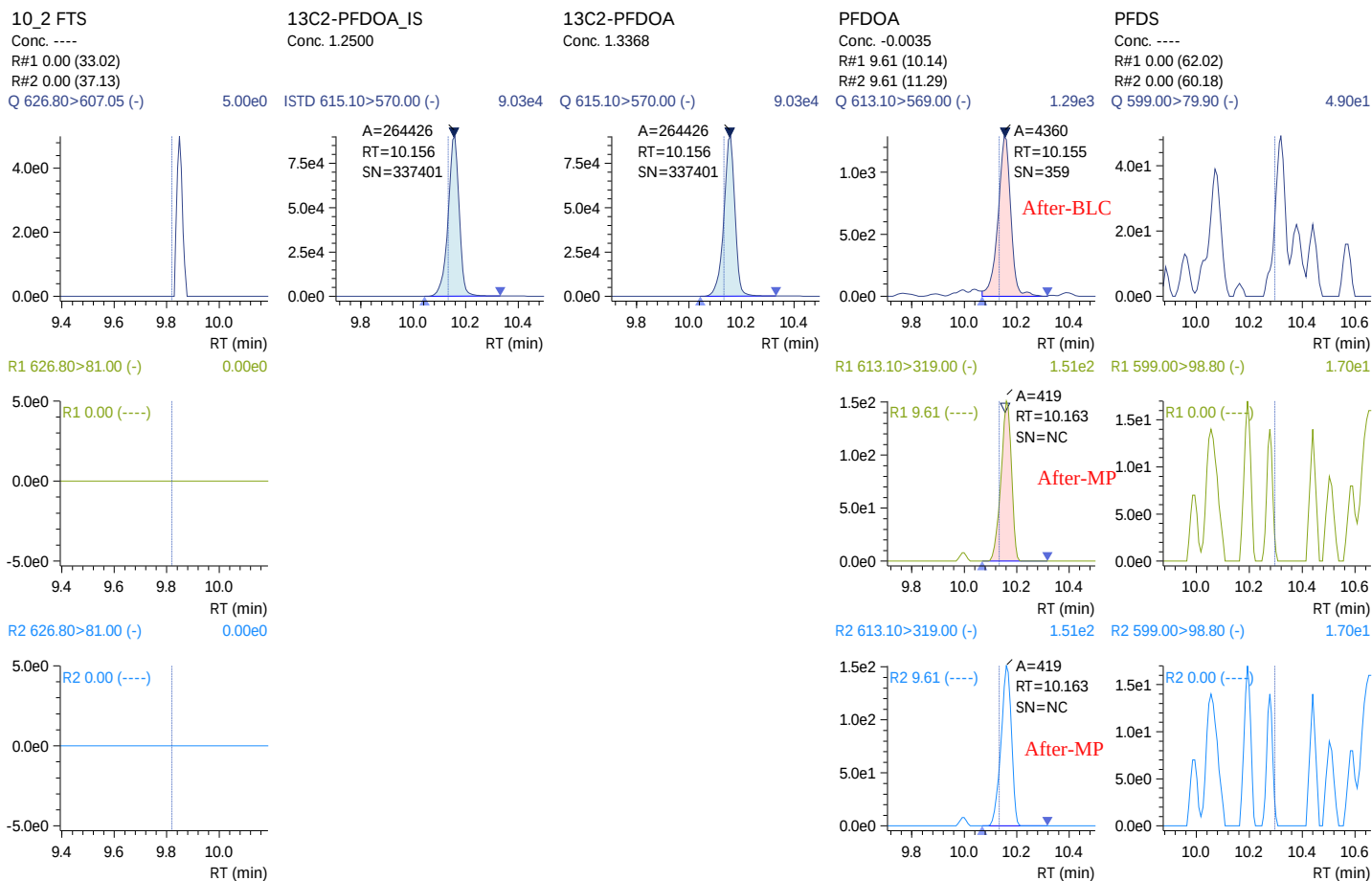
R1 563.10>269.10 (-)



R2 548.80>98.80 (-)



240118_005 (continued)

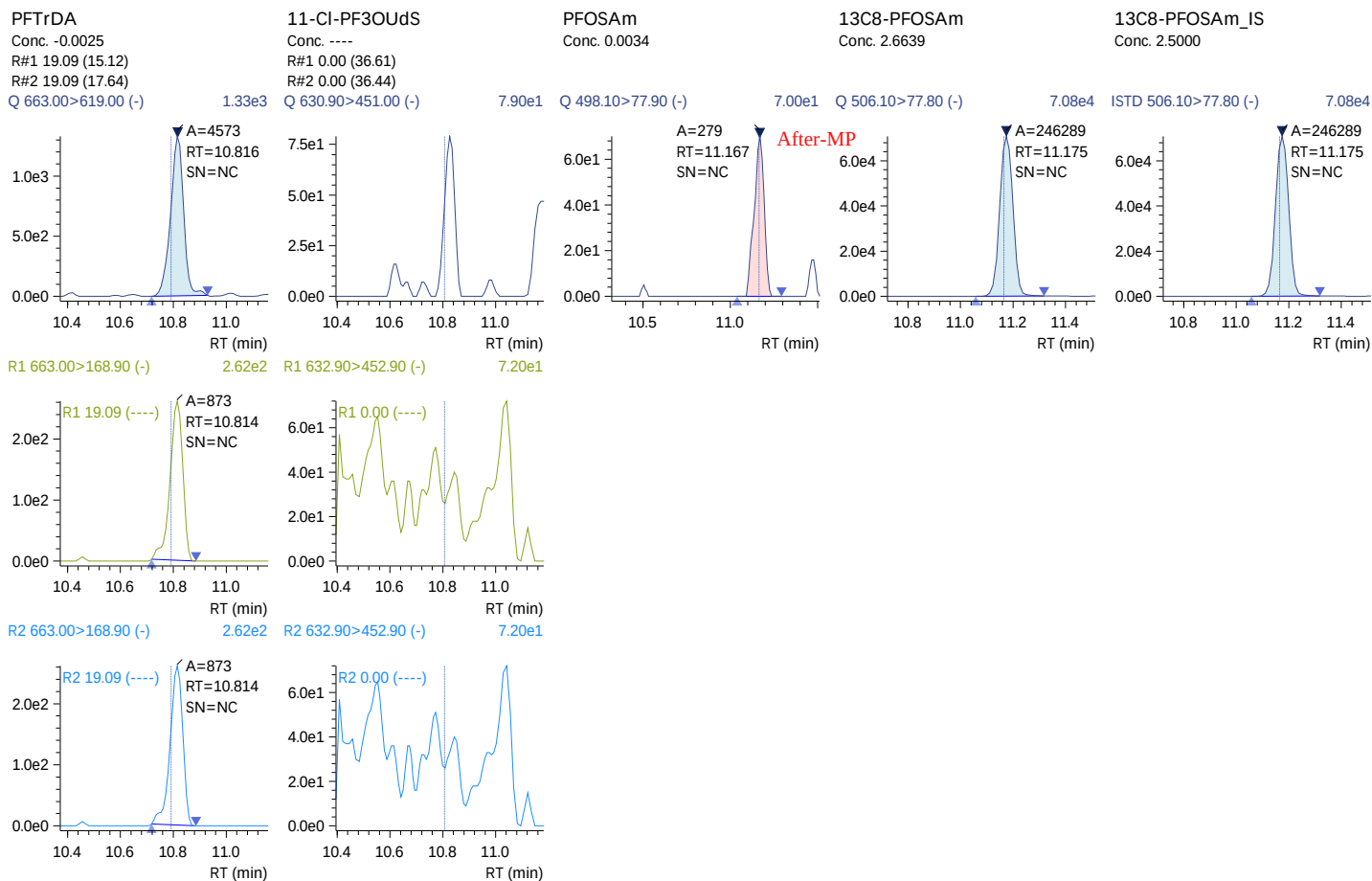


J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_005 (continued)

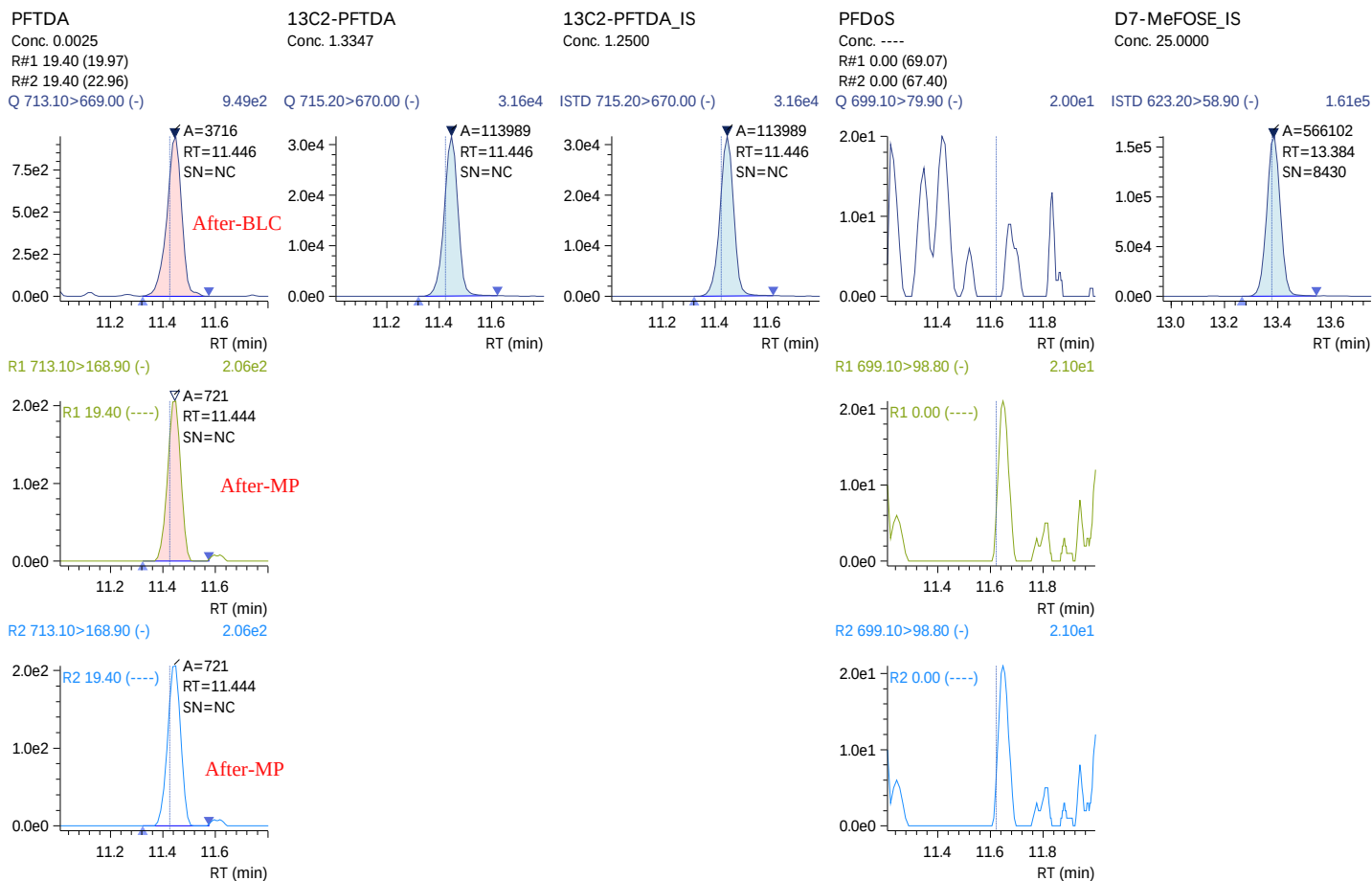


J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_005 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_005 (continued)

D7-MeFOSE
Conc. 24.8351

MeFOSE
Conc. ----

13C2-PFHXA_IS
Conc. 2.5000

13C2-PFHXA
Conc. 2.6806

PFHXA
Conc. -0.0047
R#1 10.05 (11.64)
R#2 10.05 (13.90)

Q 623.20>58.90 (-)

1.61e5

Q 616.10>59.00 (-)

7.10e1

ISTD 815.00>770.05 (-)

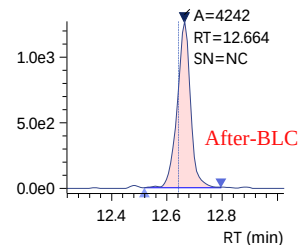
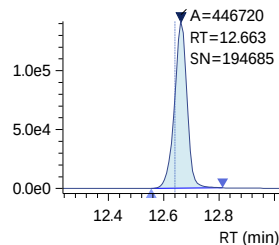
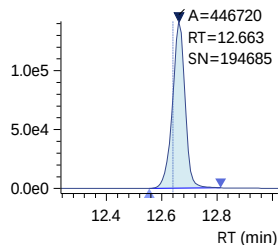
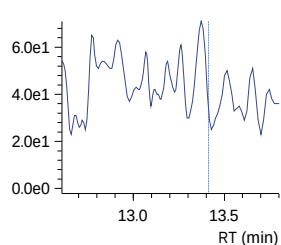
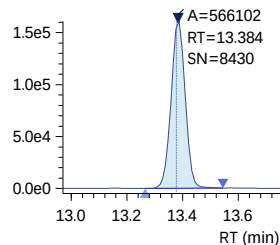
1.42e5

Q 815.00>770.05 (-)

1.42e5

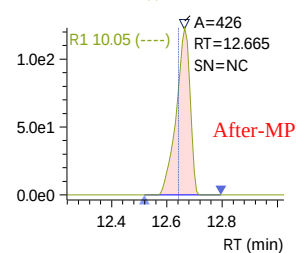
Q 813.00>768.95 (-)

1.27e3



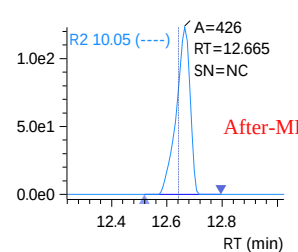
R1 813.00>218.95 (-)

1.23e2



R2 813.00>218.95 (-)

1.23e2





240118_005 (continued)

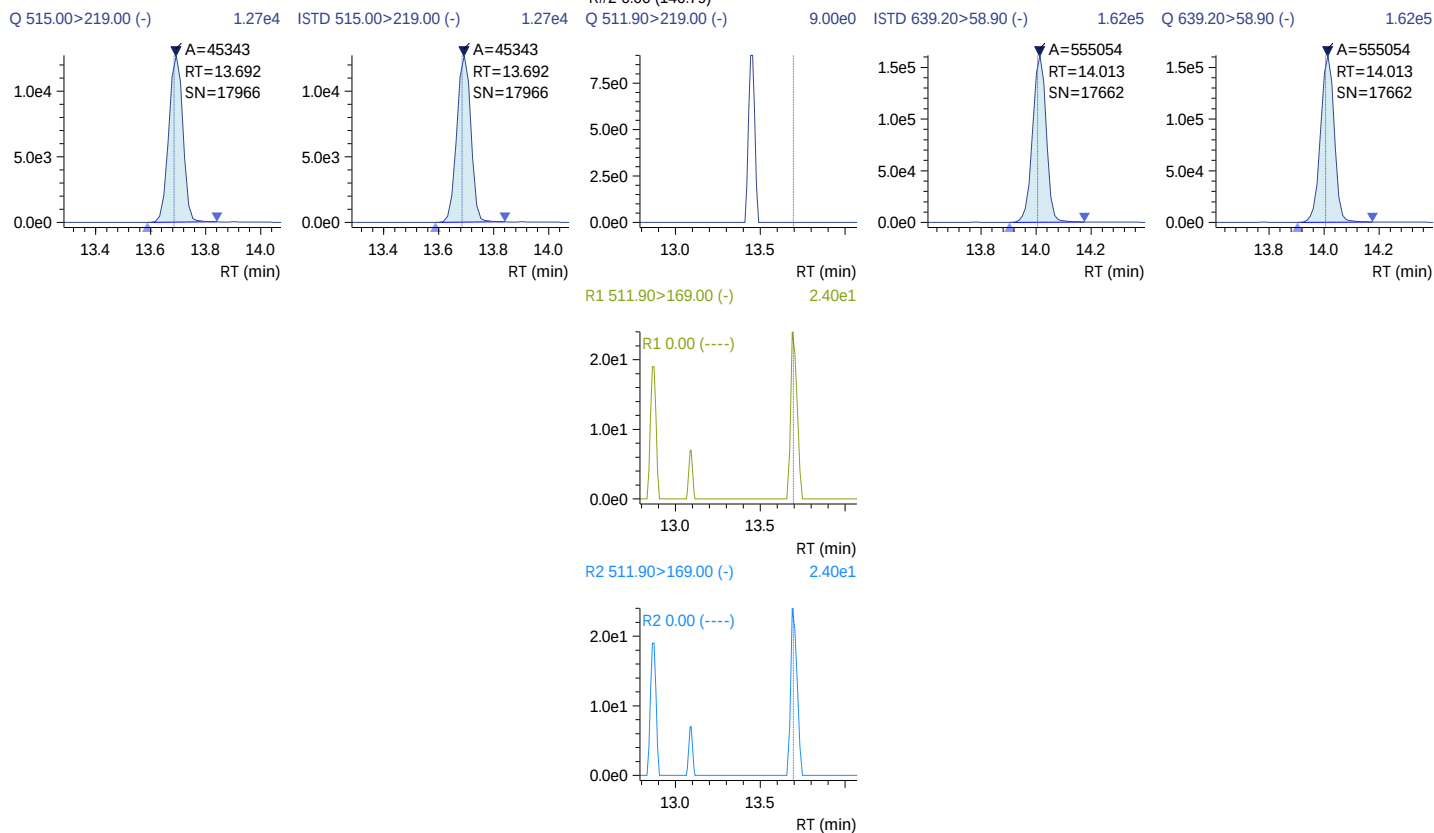
D3-MeFOSA
Conc. 2.4353

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. ----
R#1 0.00 (149.05)
R#2 0.00 (140.79)

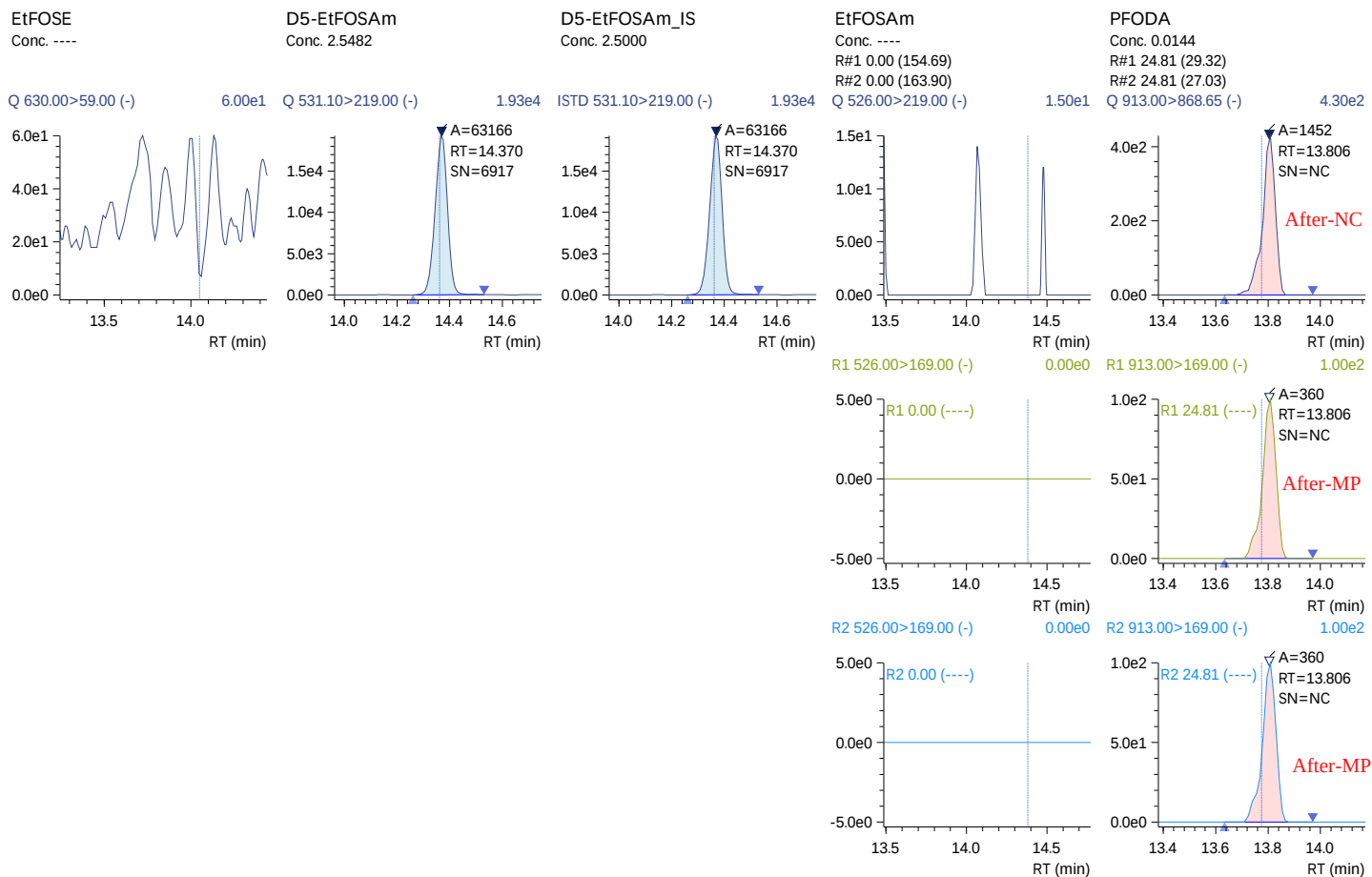
D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 23.9751





240118_005 (continued)



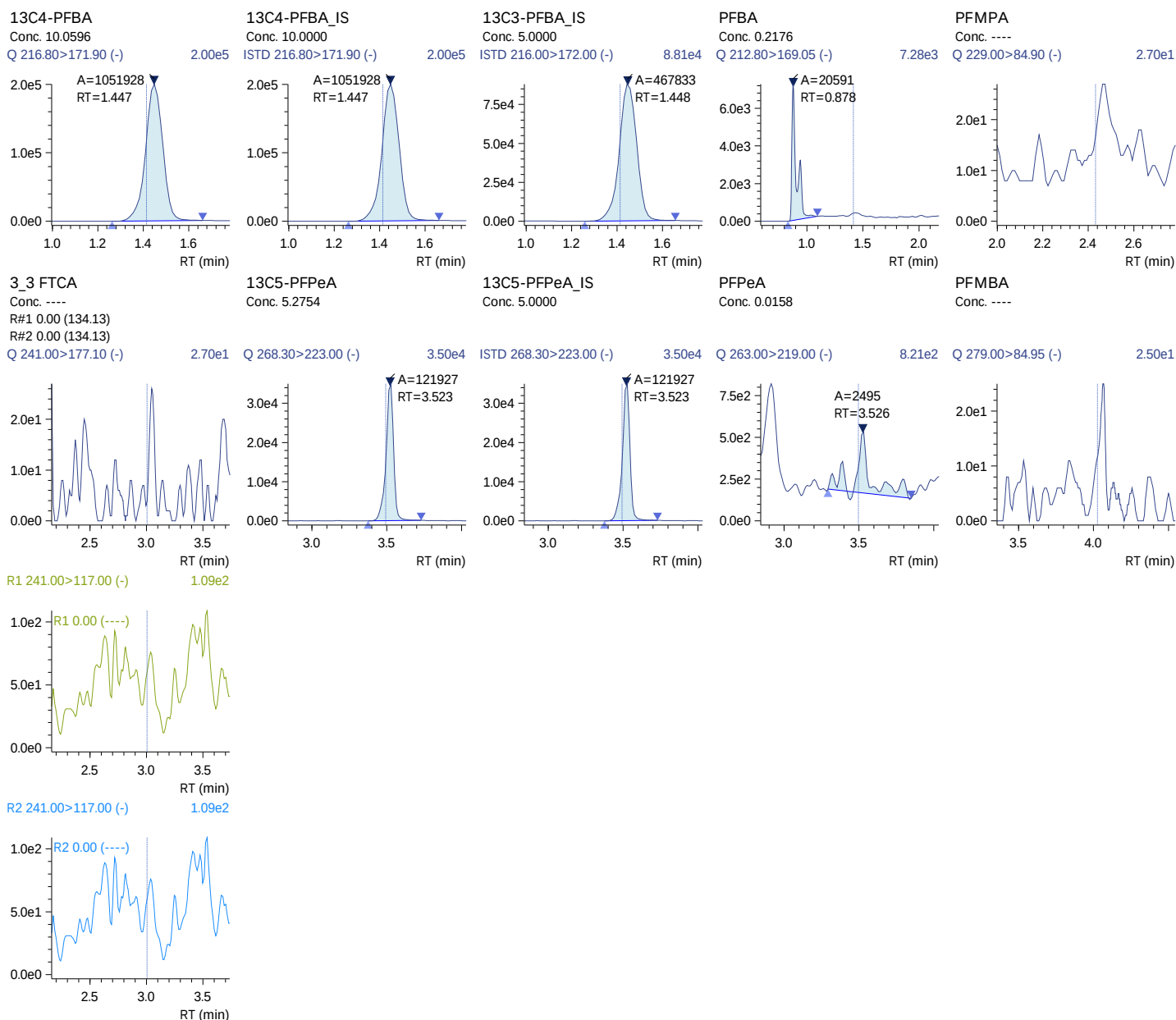
J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_005

Sample ID: 1633 CCB
Date Acquired: 1/18/2024 1:41:18 PM
Acquired by: System Administrator
Data File: 240118_005
Vial: 54 | Inj. Volume: 10.0000uL | Tray: 1





240118_005 (continued)

13C2-4_2 FTS
 Conc. 6.0223

13C2-4_2 FTS_IS
 Conc. 5.0000

4_2 FTS
 Conc. ----
 R#1 0.00 (34.14)
 R#2 0.00 (34.14)

13C3-PFBS_IS
 Conc. 2.5000

PFBS
 Conc. ----
 R#1 0.00 (47.53)
 R#2 0.00 (47.53)

Q 329.10>80.90 (-)

4.76e4

ISTD 329.10>80.90 (-)

4.76e4

Q 327.10>307.00 (-)

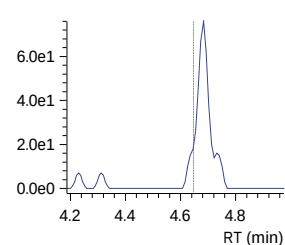
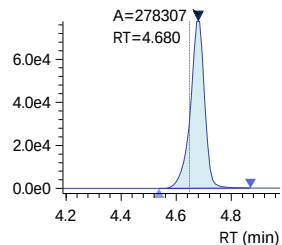
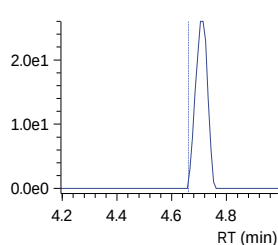
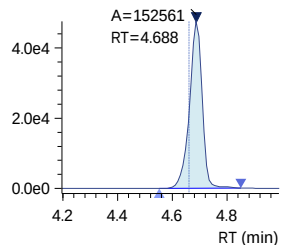
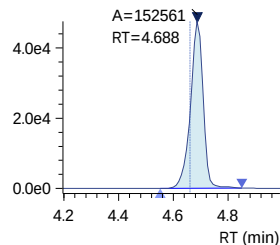
2.60e1

ISTD 302.10>79.90 (-)

7.76e4

Q 298.70>79.90 (-)

7.60e1

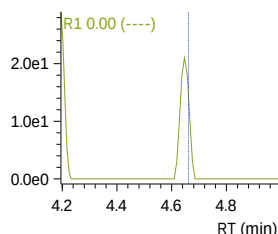


R1 327.10>80.90 (-)

2.90e1

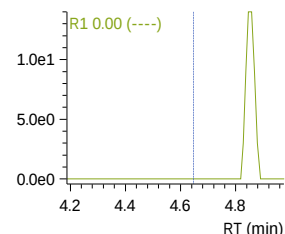
R1 298.70>98.80 (-)

1.40e1



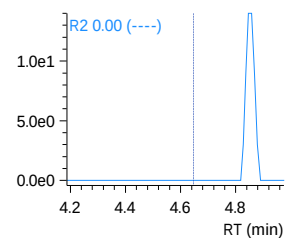
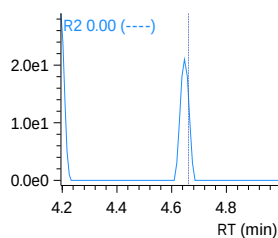
R2 327.10>80.90 (-)

2.90e1



R2 298.70>98.80 (-)

1.40e1





240118_005 (continued)

13C3-PFBS
 Conc. 2.6641

NFDHA
 Conc. ----
 R#1 0.00 (37.88)
 R#2 0.00 (37.88)

13C5-PFHxA
 Conc. 2.5211

13C5-PFHxA_IS
 Conc. 2.5000

13C2-PFHxA_IS
 Conc. 2.5000

Q 302.10>79.90 (-)

7.76e4

Q 295.00>201.00 (-)

2.14e2

Q 318.00>273.00 (-)

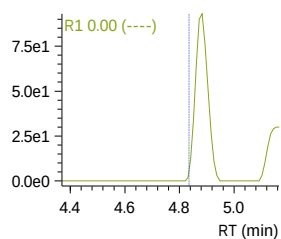
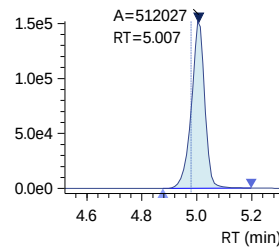
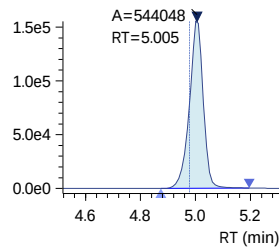
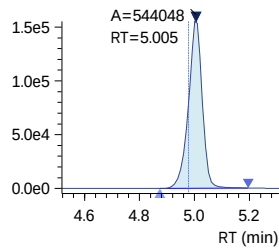
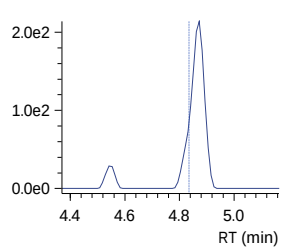
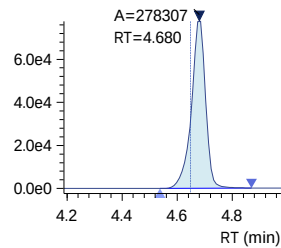
1.55e5

ISTD 318.00>273.00 (-)

1.55e5

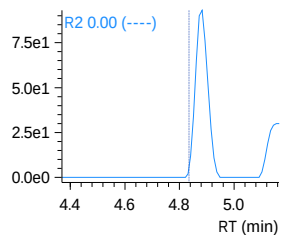
ISTD 315.10>270.00 (-)

1.52e5



R2 295.00>84.90 (-)

9.30e1





240118_005 (continued)

PFHxA
Conc. 0.0428

PFEESA
Conc. ----

13C3-HFPO-DA
Conc. 9.4732

13C3-HFPO-DA_IS
Conc. 10.0000

HFPO-DA
Conc. ----

Q 313.00>269.00 (-)

1.33e3

Q 314.80>135.00 (-)

1.00e2

Q 286.90>168.90 (-)

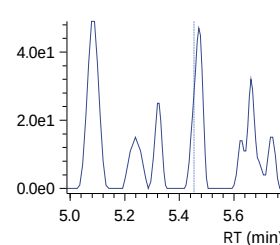
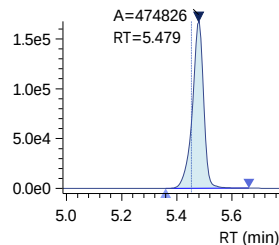
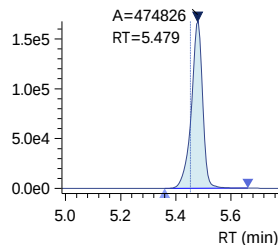
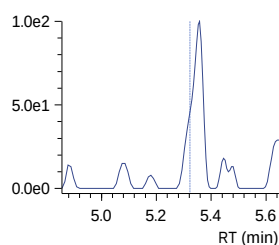
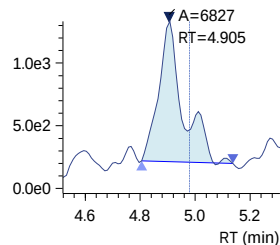
1.68e5

ISTD 286.90>168.90 (-)

1.68e5

Q 284.90>168.90 (-)

4.90e1

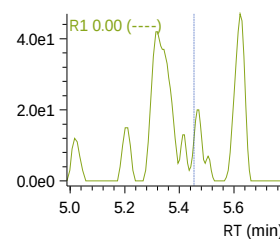
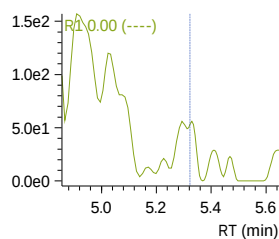


R1 314.80>82.90 (-)

1.57e2

R1 284.90>184.90 (-)

4.70e1

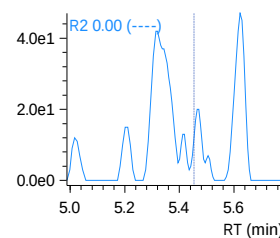
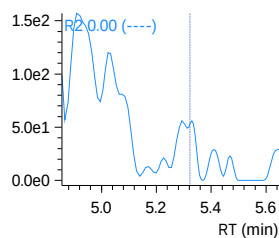


R2 314.80>82.90 (-)

1.57e2

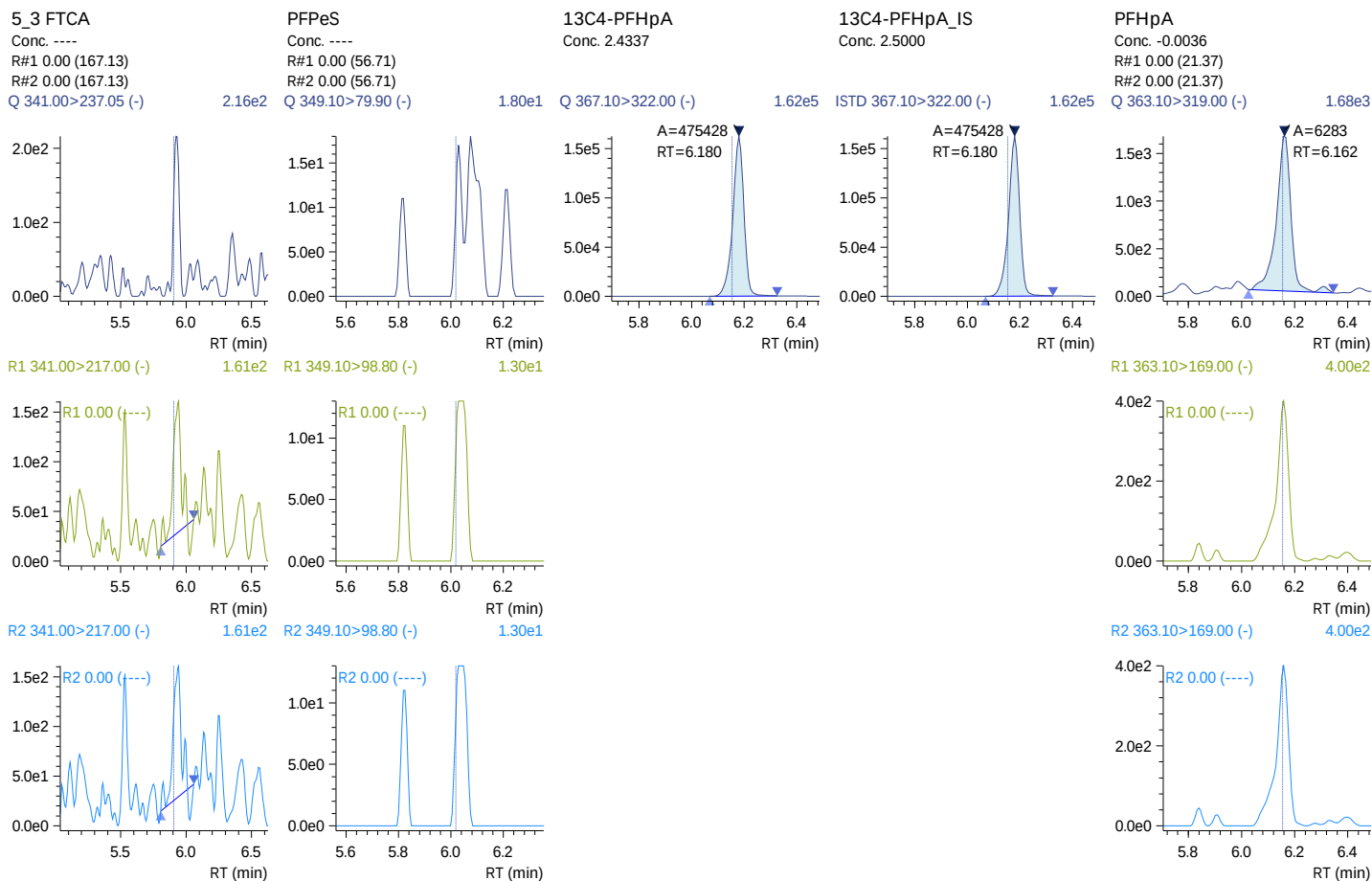
R2 284.90>184.90 (-)

4.70e1



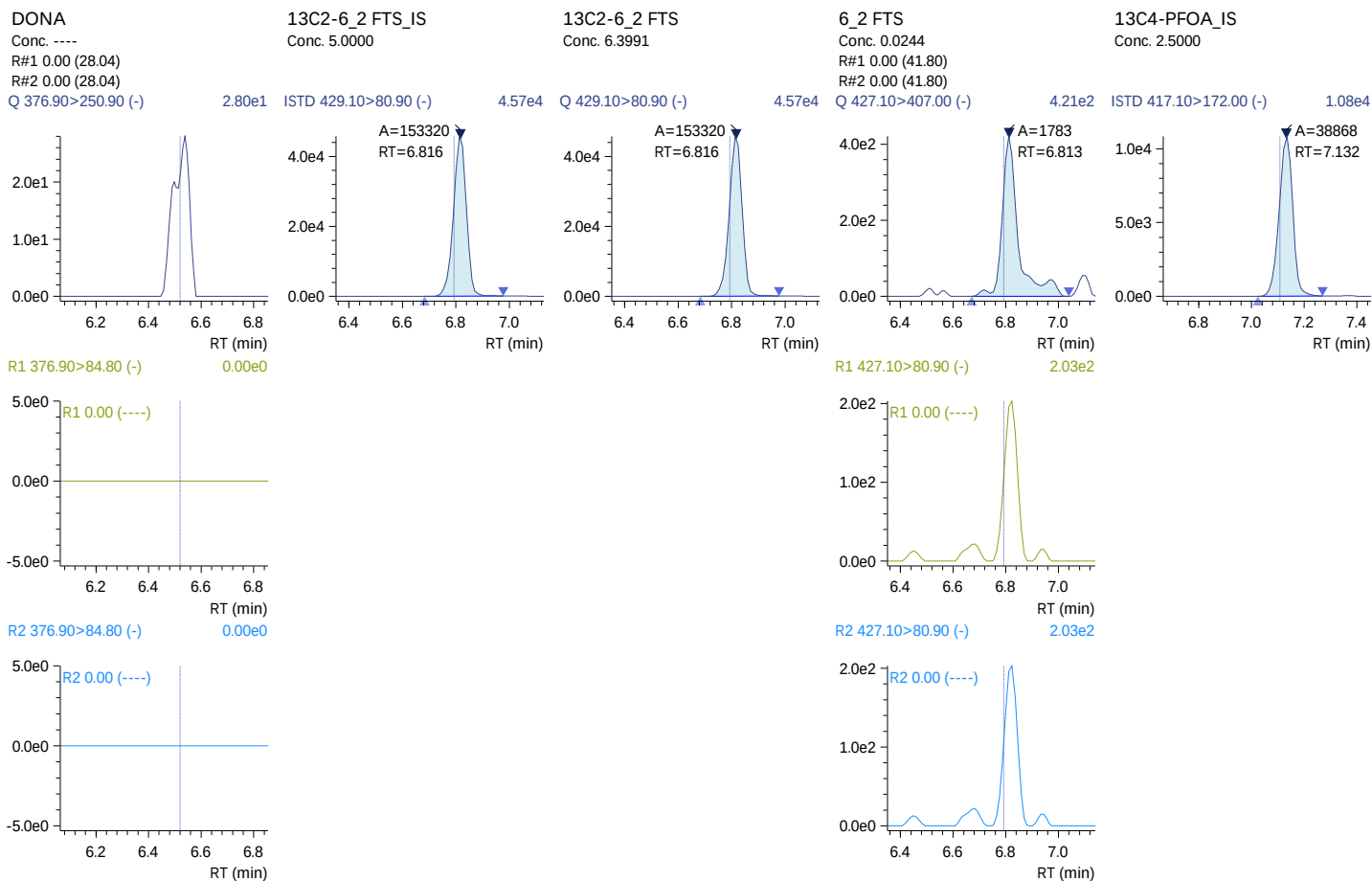


240118_005 (continued)





240118_005 (continued)





240118_005 (continued)

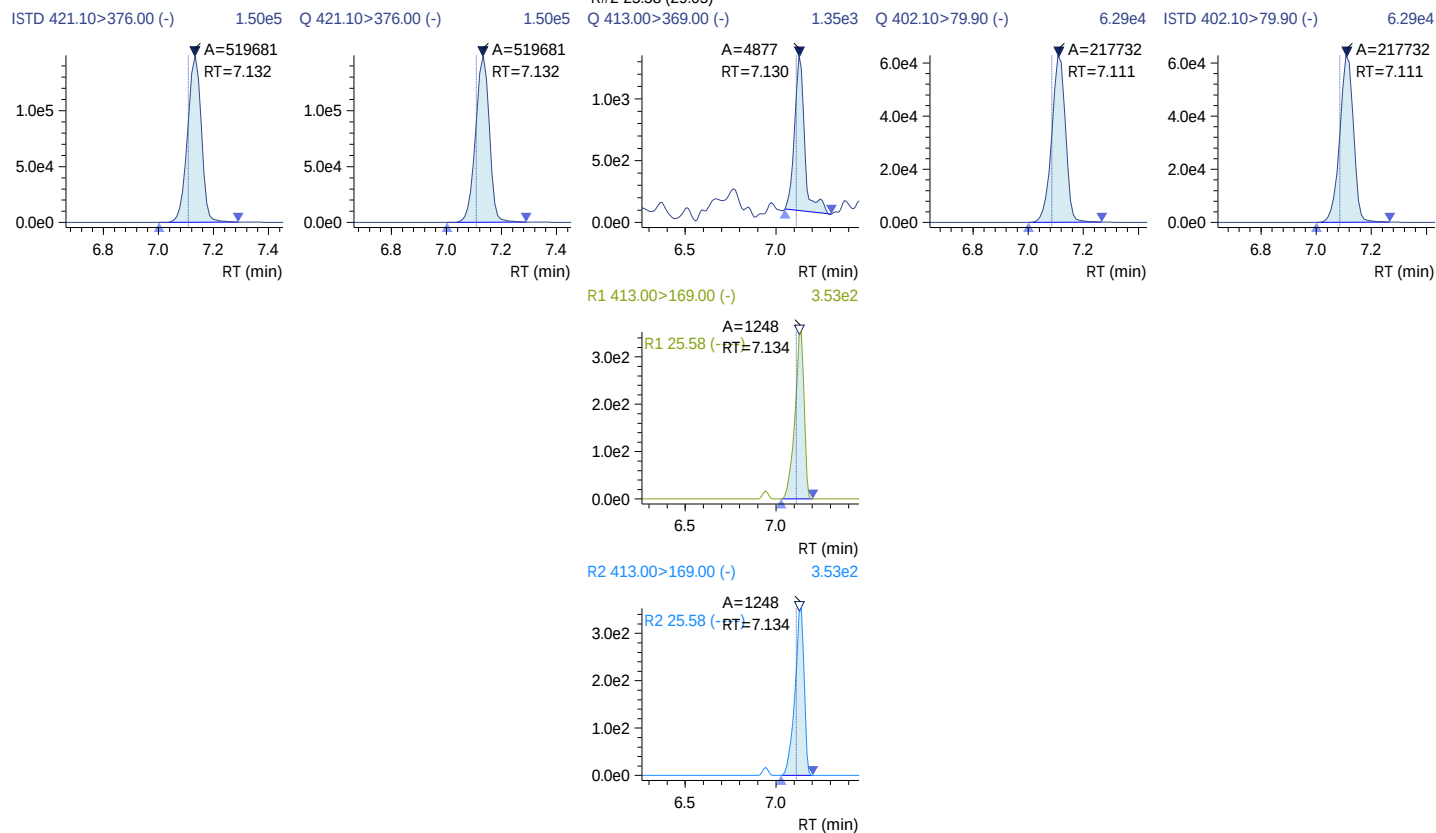
13C8-PFOA_IS
 Conc. 2.5000

13C8-PFOA
 Conc. 2.3921

PFOA
 Conc. -0.0074
 R#1 25.58 (29.05)
 R#2 25.58 (29.05)

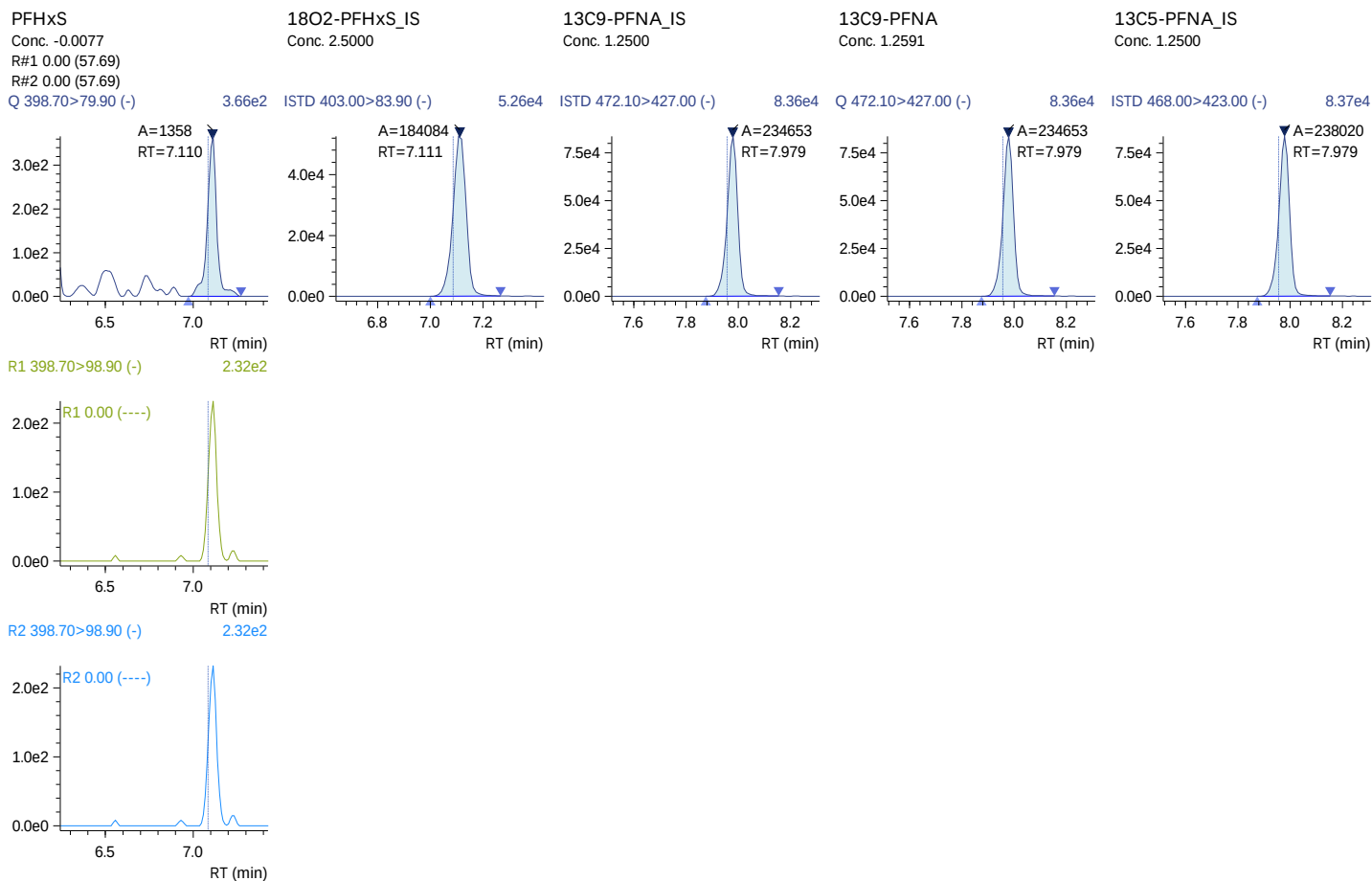
13C3-PFHxS
 Conc. 2.7556

13C3-PFHxS_IS
 Conc. 2.5000



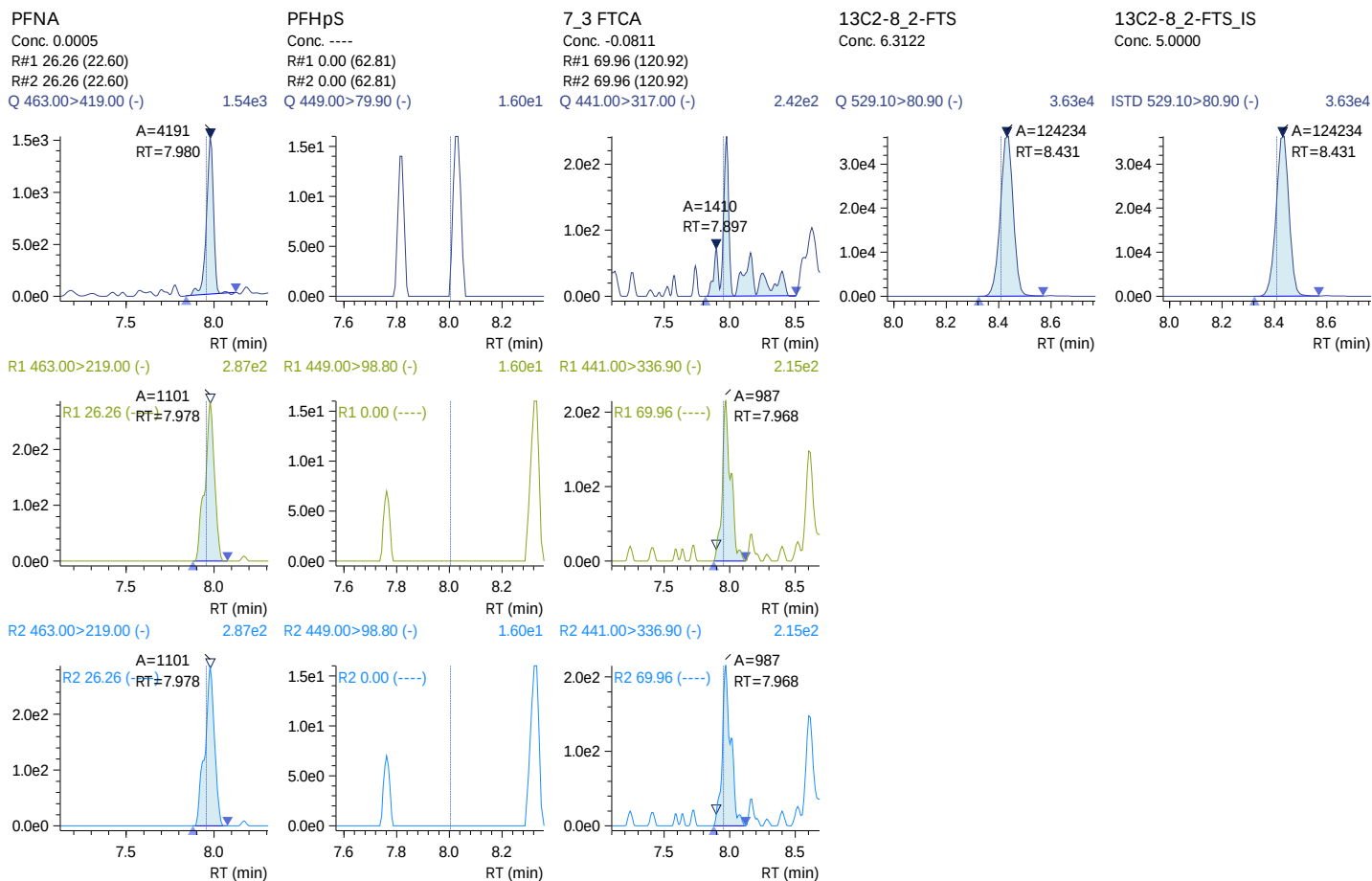


240118_005 (continued)



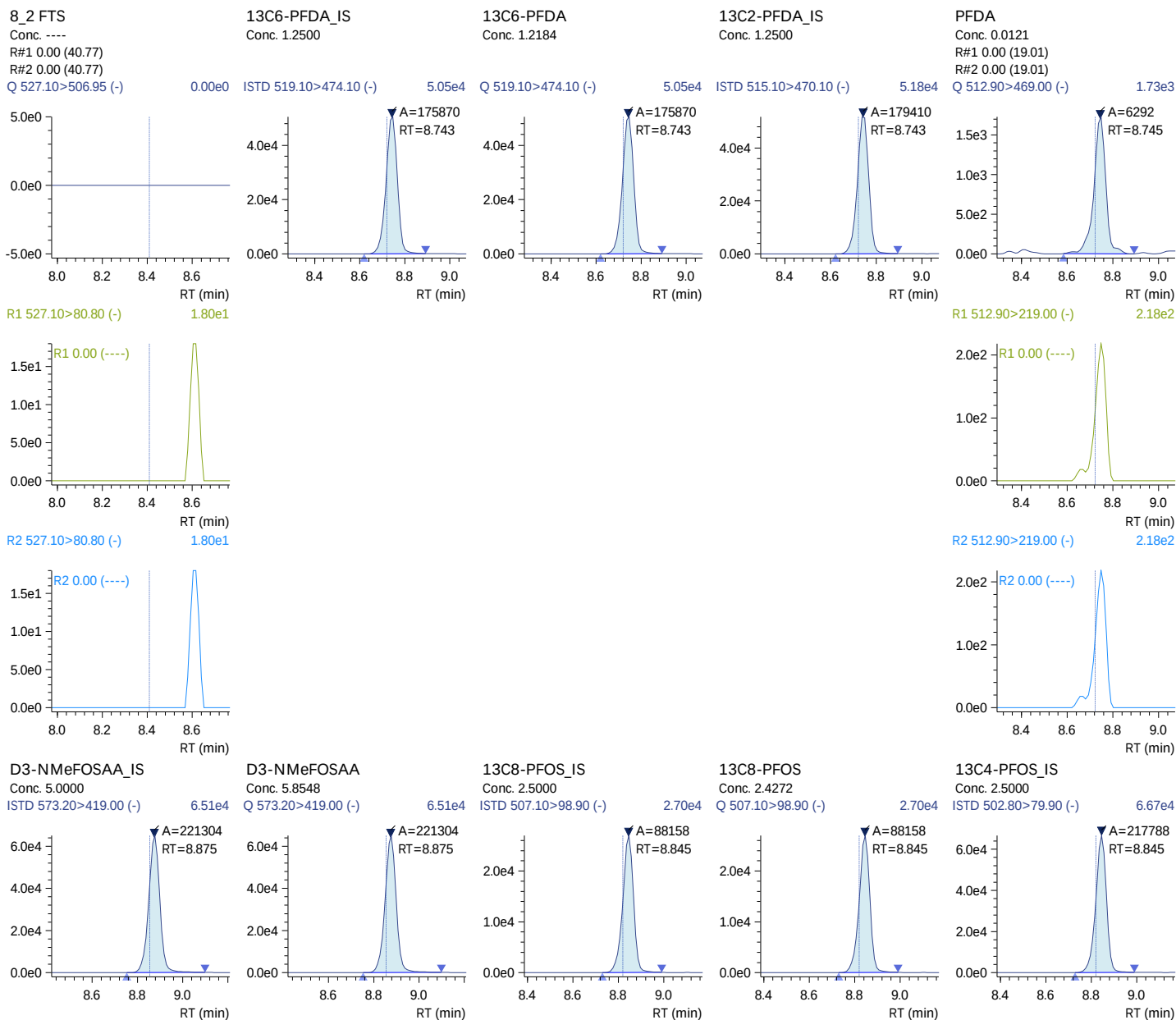


240118_005 (continued)



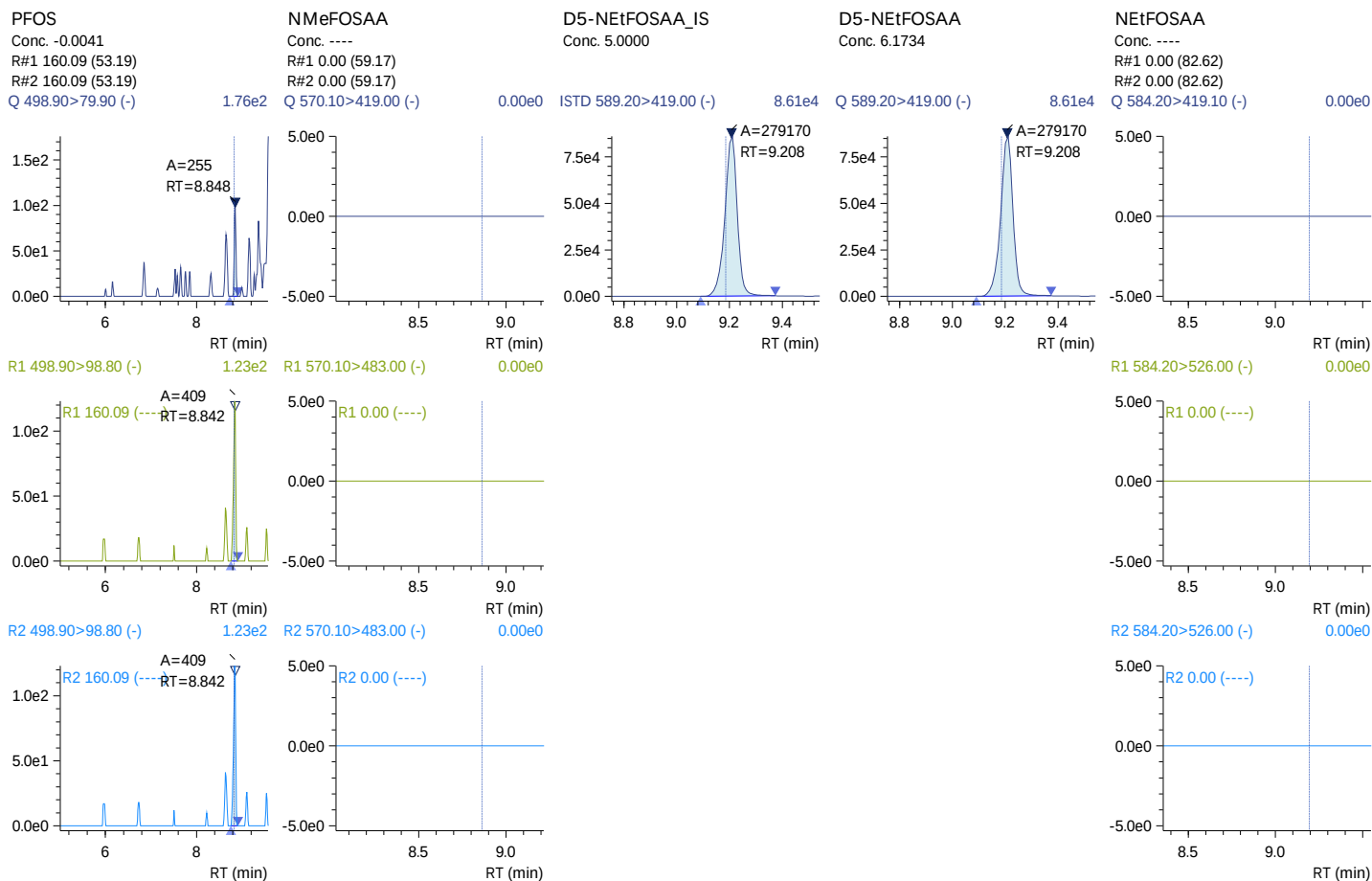


240118_005 (continued)





240118_005 (continued)





240118_005 (continued)

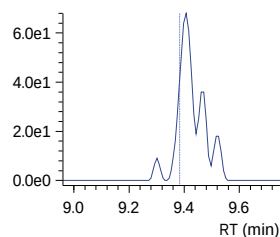
9-Cl-PF3ONS

Conc. ----

R#1 0.00 (31.76)

R#2 0.00 (31.76)

Q 530.80>351.00 (-)



R1 532.80>353.00 (-)

1.42e2

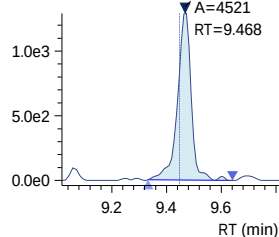
PFUnDA

Conc. -0.0029

R#1 0.00 (12.31)

R#2 0.00 (12.31)

Q 563.10>519.00 (-)



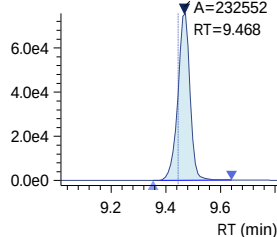
R1 563.10>269.10 (-)

1.39e2

13C7-PFUnDA_IS

Conc. 1.2500

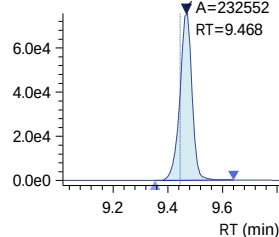
ISTD 570.00>525.10 (-)



13C7-PFUnDA

Conc. 1.3507

Q 570.00>525.10 (-)



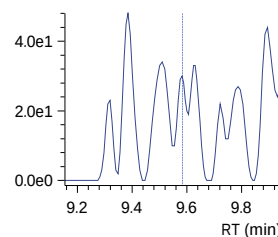
PFNS

Conc. ----

R#1 0.00 (63.31)

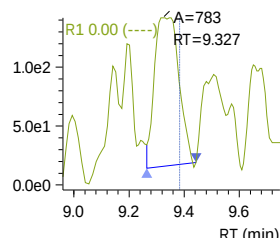
R#2 0.00 (63.31)

Q 548.80>79.90 (-)



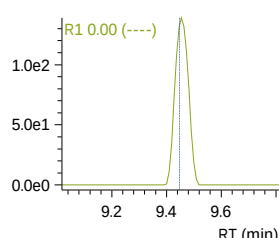
R1 548.80>98.80 (-)

1.80e1



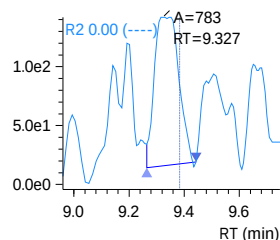
R2 532.80>353.00 (-)

1.42e2



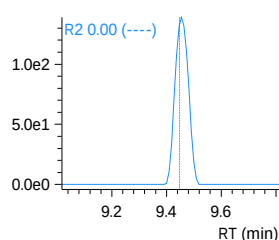
R2 563.10>269.10 (-)

1.39e2



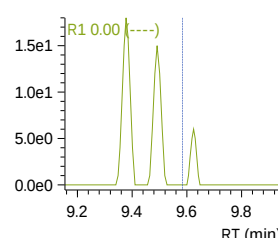
R2 532.80>353.00 (-)

1.42e2



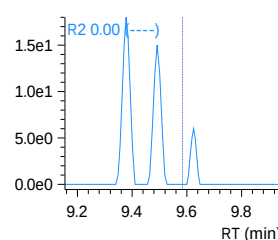
R2 563.10>269.10 (-)

1.39e2



R2 548.80>98.80 (-)

1.80e1

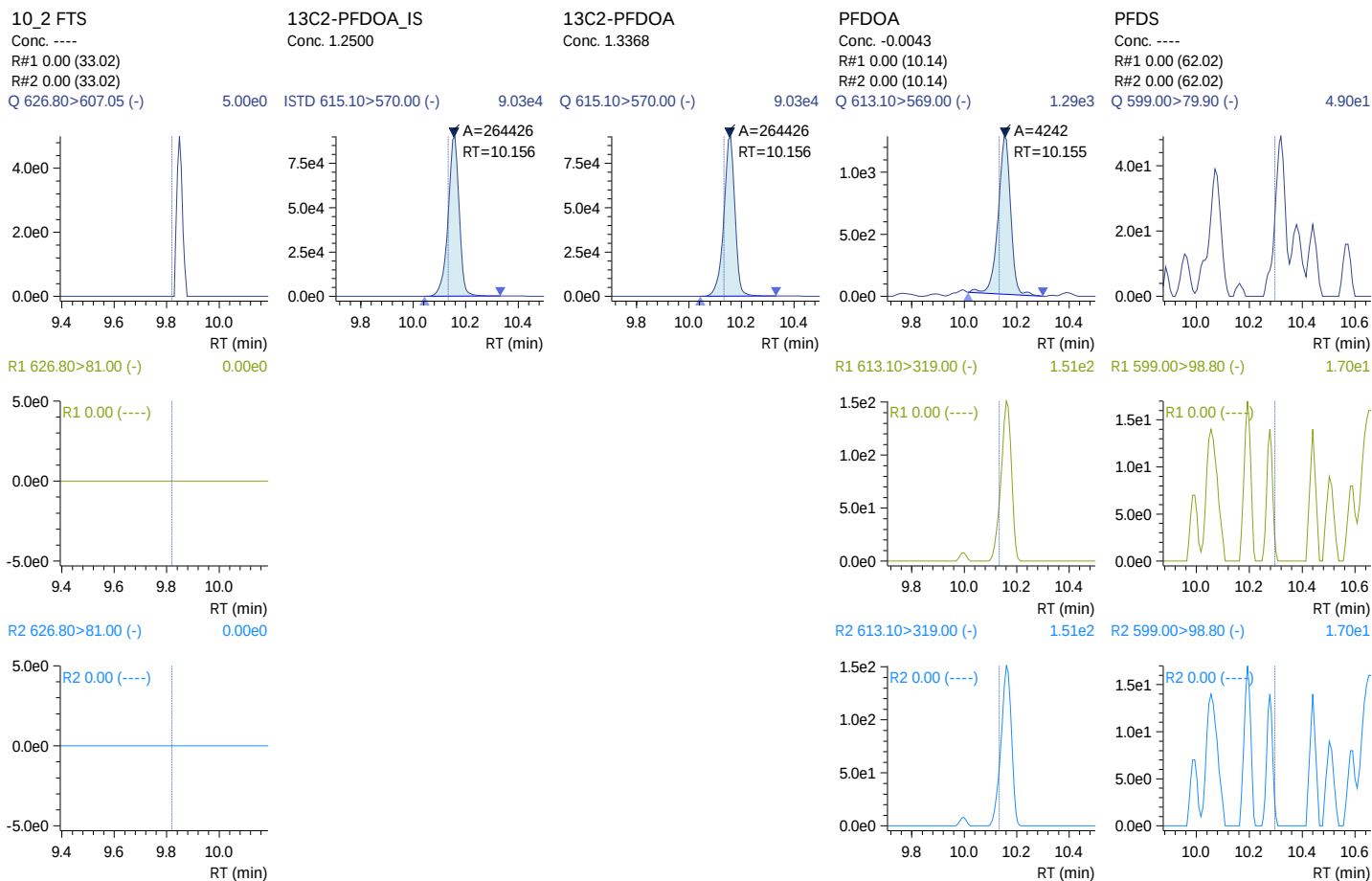


R2 548.80>98.80 (-)

1.80e1

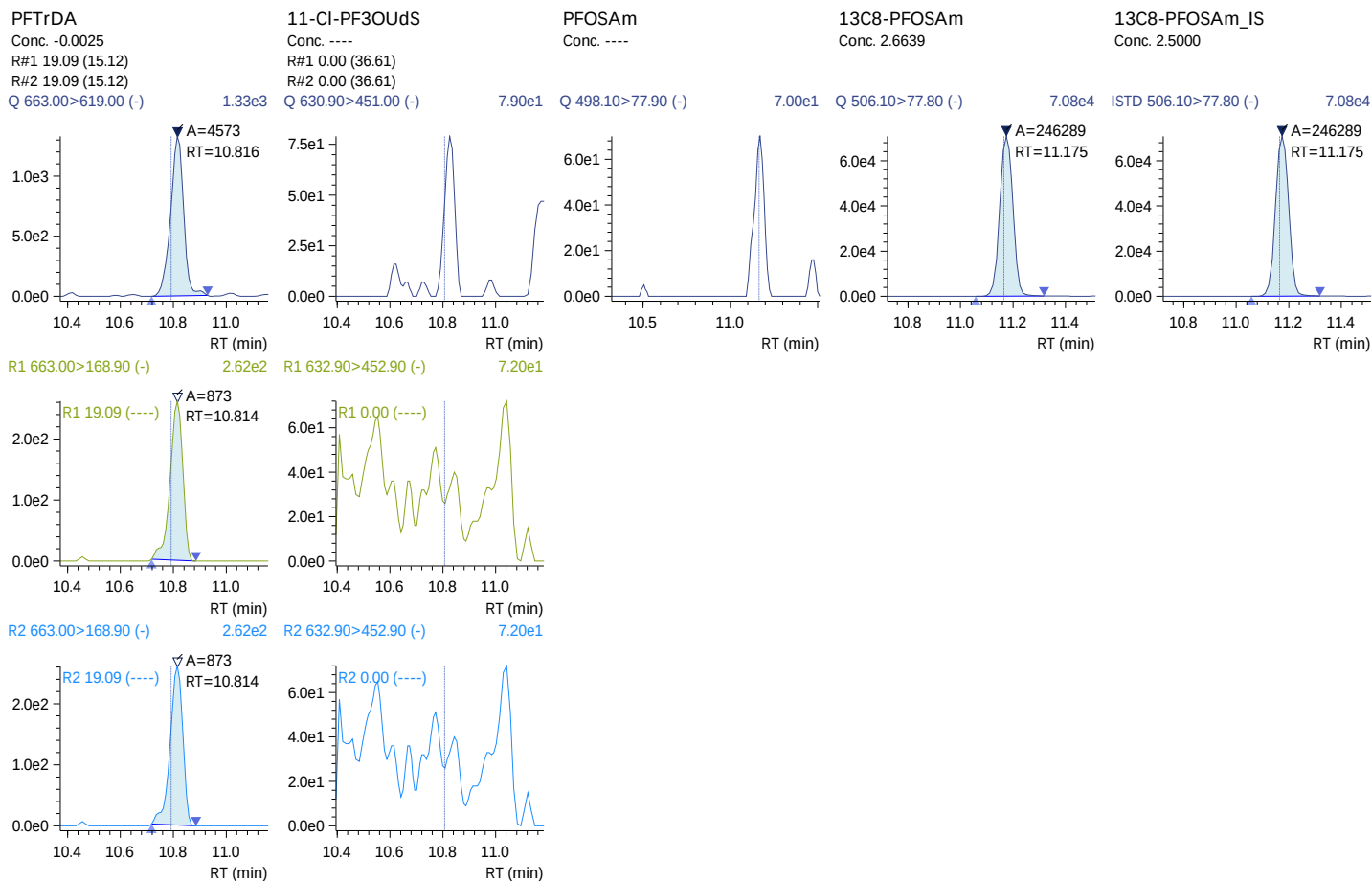


240118_005 (continued)



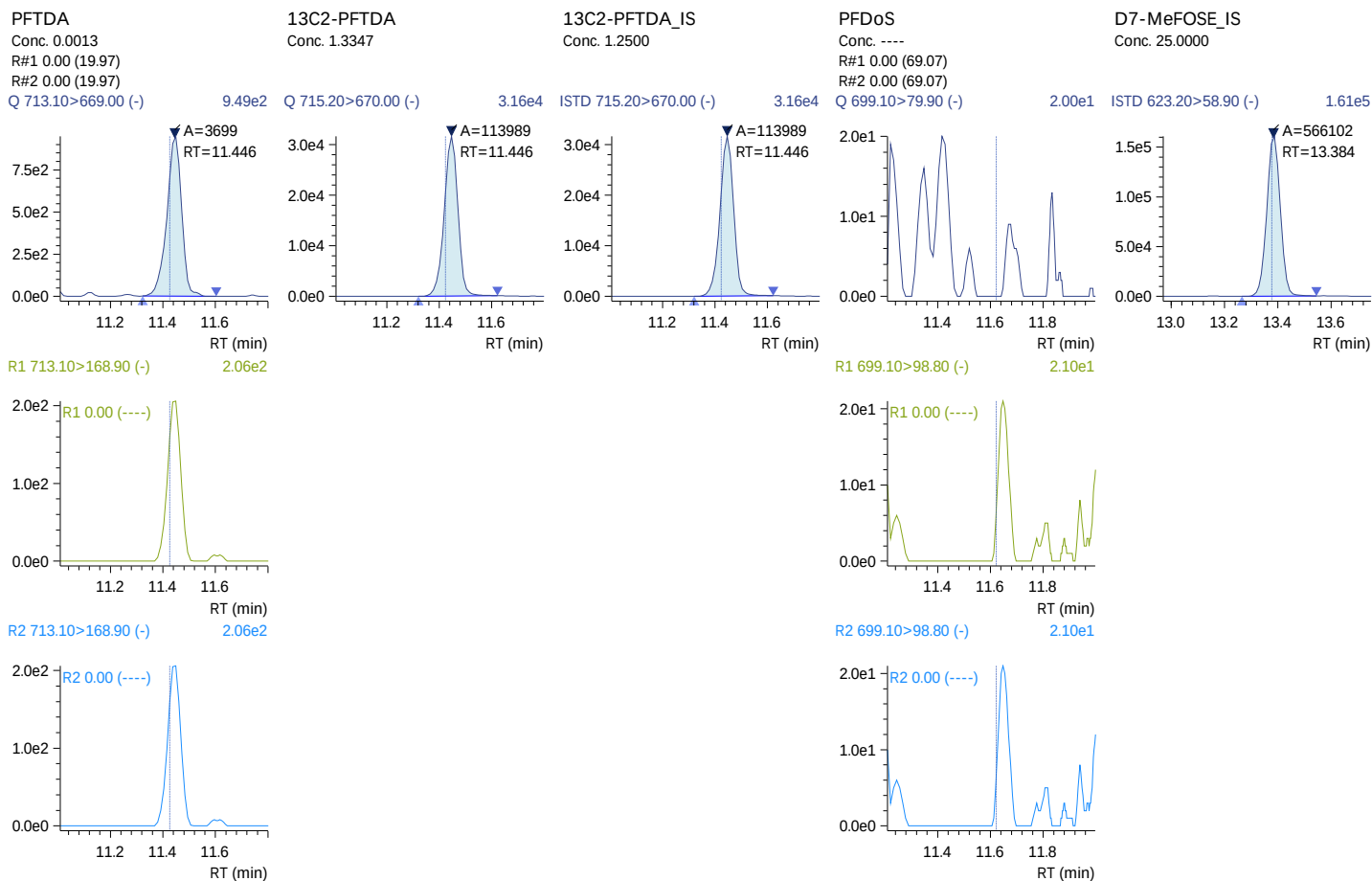


240118_005 (continued)





240118_005 (continued)





240118_005 (continued)

D7-MeFOSE
 Conc. 24.8351

MeFOSE
 Conc. ----

13C2-PFHDA_IS
 Conc. 2.5000

13C2-PFHDA
 Conc. 2.6806

PFHXDA
 Conc. -0.0049
 R#1 0.00 (11.64)
 R#2 0.00 (11.64)

Q 623.20>58.90 (-)

1.61e5

Q 616.10>59.00 (-)

7.10e1

ISTD 815.00>770.05 (-)

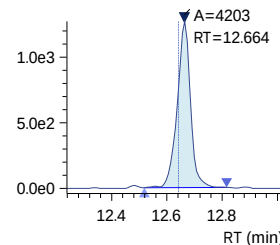
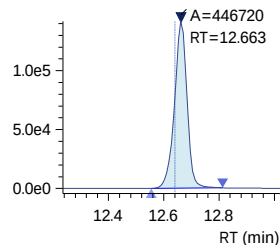
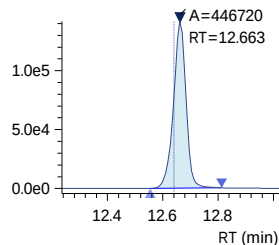
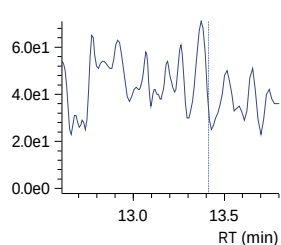
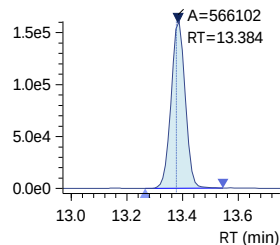
1.42e5

Q 815.00>770.05 (-)

1.42e5

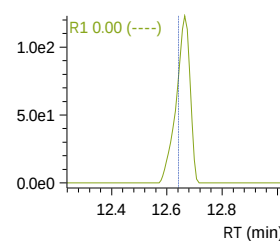
Q 813.00>768.95 (-)

1.27e3



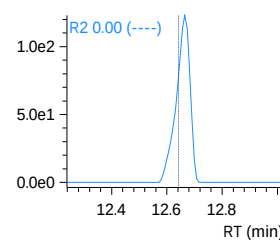
R1 813.00>218.95 (-)

1.23e2



R2 813.00>218.95 (-)

1.23e2





240118_005 (continued)

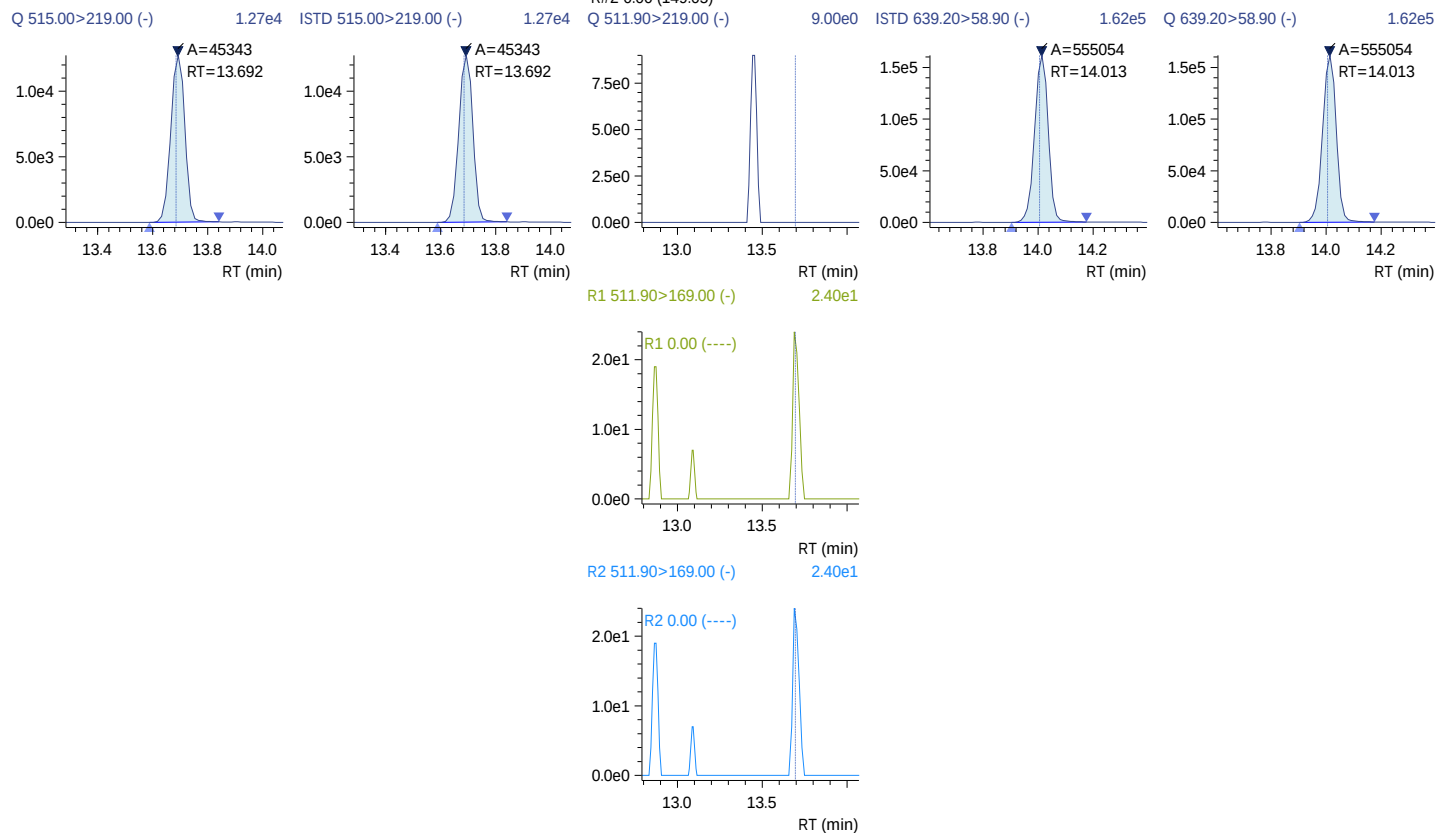
D3-MeFOSA
 Conc. 2.4353

D3-MeFOSA_IS
 Conc. 2.5000

MeFOSA
 Conc. ----
 R#1 0.00 (149.05)
 R#2 0.00 (149.05)

D9-EtFOSE_IS
 Conc. 25.0000

D9-EtFOSE
 Conc. 23.9751





240118_005 (continued)

EtFOSE
Conc. ----

D5-EtFOSAm
Conc. 2.5482

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. ----

PFODA
Conc. 0.0040

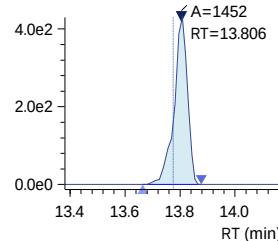
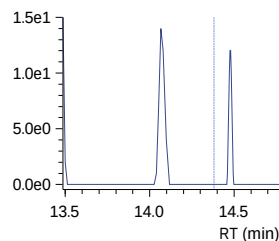
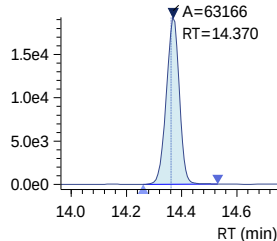
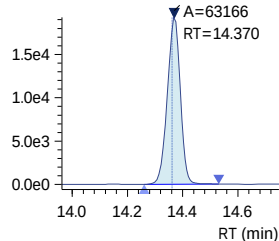
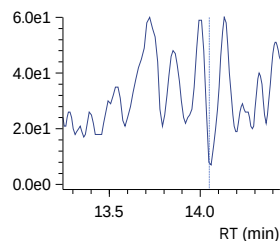
Q 630.00>59.00 (-)

Q 531.10>219.00 (-)

ISTD 531.10>219.00 (-)

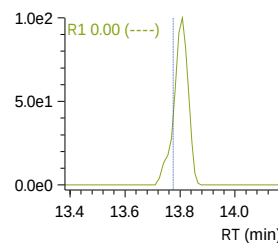
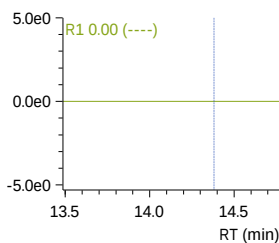
Q 526.00>219.00 (-)

Q 913.00>868.65 (-)



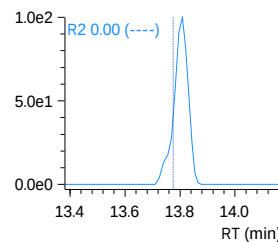
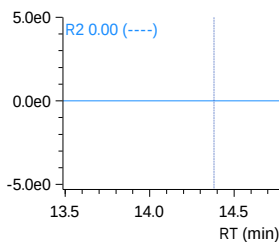
R1 526.00>169.00 (-)

R1 913.00>169.00 (-)



R2 526.00>169.00 (-)

R2 913.00>169.00 (-)





240118_006

Sample ID: 1633 ICAL 0.05PPB
Date Acquired: 1/18/2024 2:04:34 PM
Acquired by: System Administrator
Data File: 240118_006
Vial: 1 | Inj. Volume: 10.0000uL | Tray: 1

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	1308470	----	----	----	----	----	----	
13C4-PFBA_IS	216.80>171.90	----	1308470	----	----	----	----	----	----	
13C3-PFBA_IS	216.00>172.00	----	598299	----	----	----	----	----	----	
PFBA	212.80>169.05	----	7715	----	----	----	----	----	----	AC
PFMPA	229.00>84.90	----	5804	----	----	----	----	----	----	
3_3 FTCA	241.00>177.10	241.00>117.00	3313	5296	159.84	141.17	5296	159.84	141.17	
13C5-PFPeA	268.30>223.00	----	152450	----	----	----	----	----	----	
13C5-PFPeA_IS	268.30>223.00	----	152450	----	----	----	----	----	----	
PFPeA	263.00>219.00	----	12644	----	----	----	----	----	----	
PFMBA	279.00>84.95	----	7994	----	----	----	----	----	----	
13C2-4_2 FTS	329.10>80.90	----	188057	----	----	----	----	----	----	
13C2-4_2 FTS_IS	329.10>80.90	----	188057	----	----	----	----	----	----	
4_2 FTS	327.10>307.00	327.10>80.90	4993	1515	30.35	29.06	1515	30.35	29.06	
13C3-PFBS_IS	302.10>79.90	----	336745	----	----	----	----	----	----	
PFBS	298.70>79.90	298.70>98.80	8756	4540	51.86	46.72	4540	51.86	46.72	
13C3-PFBS	302.10>79.90	----	336745	----	----	----	----	----	----	
NFDHA	295.00>201.00	295.00>84.90	9711	3287	33.85	40.25	3287	33.85	40.25	
13C5-PFHxA	318.00>273.00	----	677503	----	----	----	----	----	----	
13C5-PFHxA_IS	318.00>273.00	----	677503	----	----	----	----	----	----	
13C2-PFHxA_IS	315.10>270.00	----	618072	----	----	----	----	----	----	
PFHxA	313.00>269.00	----	16225	----	----	----	----	----	----	
PFEESA	314.80>135.00	314.80>82.90	41229	2394	5.81	6.11	2394	5.81	6.11	
13C3-HFPO-DA	286.90>168.90	----	595312	----	----	----	----	----	----	
13C3-HFPO-DA_IS	286.90>168.90	----	595312	----	----	----	----	----	----	
HFPO-DA	284.90>168.90	284.90>184.90	3643	2602	71.42	65.61	2602	71.42	65.61	
5_3 FTCA	341.00>237.05	341.00>217.00	19665	32730	166.44	158.86	32730	166.44	158.86	
PFPeS	349.10>79.90	349.10>98.80	7075	4403	62.24	55.80	4403	62.24	55.80	
13C4-PFHpA	367.10>322.00	----	607483	----	----	----	----	----	----	
13C4-PFHpA_IS	367.10>322.00	----	607483	----	----	----	----	----	----	
PFHpA	363.10>319.00	363.10>169.00	22449	4895	21.81	21.50	4895	21.81	21.50	
DONA	376.90>250.90	376.90>84.80	27814	8020	28.83	29.66	8020	28.83	29.66	
13C2-6_2 FTS_IS	429.10>80.90	----	160811	----	----	----	----	----	----	
13C2-6_2 FTS	429.10>80.90	----	160811	----	----	----	----	----	----	
6_2 FTS	427.10>407.00	427.10>80.90	4980	1802	36.19	41.15	1802	36.19	41.15	AC
13C4-PFOA_IS	417.10>172.00	----	48882	----	----	----	----	----	----	
13C8-PFOA_IS	421.10>376.00	----	678231	----	----	----	----	----	----	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240118_006 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	678231	----	----	----	----	----	----	----
PFOA	413.00>369.00	413.00>169.00	14351	5657	39.42	31.89	5657	39.42	31.89	
13C3-PFHxS	402.10>79.90	----	270206	----	----	----	----	----	----	----
13C3-PFHxS_IS	402.10>79.90	----	270206	----	----	----	----	----	----	----
PFHxS	398.70>79.90	398.70>98.90	8655	4607	53.23	56.62	4607	53.23	56.62	
18O2-PFHxS_IS	403.00>83.90	----	229705	----	----	----	----	----	----	----
13C9-PFNA_IS	472.10>427.00	----	310687	----	----	----	----	----	----	----
13C9-PFNA	472.10>427.00	----	310687	----	----	----	----	----	----	----
13C5-PFNA_IS	468.00>423.00	----	330771	----	----	----	----	----	----	----
PFNA	463.00>419.00	463.00>219.00	14376	3416	23.76	23.17	3416	23.76	23.17	
PFHpS	449.00>79.90	449.00>98.80	5220	3245	62.17	56.96	3245	62.17	56.96	
7_3 FTCA	441.00>317.00	441.00>336.90	37608	39478	104.97	117.47	39478	104.97	117.47	AC
13C2-8_2-FTS	529.10>80.90	----	149793	----	----	----	----	----	----	----
13C2-8_2-FTS_IS	529.10>80.90	----	149793	----	----	----	----	----	----	----
8_2 FTS	527.10>506.95	527.10>80.80	3653	1812	49.59	49.59	1812	49.59	49.59	
13C6-PFDA_IS	519.10>474.10	----	238849	----	----	----	----	----	----	----
13C6-PFDA	519.10>474.10	----	238849	----	----	----	----	----	----	----
13C2-PFDA_IS	515.10>470.10	----	227340	----	----	----	----	----	----	----
PFDA	512.90>469.00	512.90>219.00	18416	3329	18.08	19.00	3329	18.08	19.00	
D3-NMeFOSAA_IS	573.20>419.00	----	283573	----	----	----	----	----	----	----
D3-NMeFOSAA	573.20>419.00	----	283573	----	----	----	----	----	----	----
13C8-PFOS_IS	507.10>98.90	----	117833	----	----	----	----	----	----	----
13C8-PFOS	507.10>98.90	----	117833	----	----	----	----	----	----	----
13C4-PFOS_IS	502.80>79.90	----	283185	----	----	----	----	----	----	----
PFOS	498.90>79.90	498.90>98.80	7169	3994	55.71	52.47	3994	55.71	52.47	
NMeFOSAA	570.10>419.00	570.10>483.00	5295	1526	28.82	55.15	1526	28.82	55.15	AC
D5-NetFOSAA_IS	589.20>419.00	----	315390	----	----	----	----	----	----	----
D5-NetFOSAA	589.20>419.00	----	315390	----	----	----	----	----	----	----
NetFOSAA	584.20>419.10	584.20>526.00	2717	2154	79.27	81.95	2154	79.27	81.95	
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	28101	8238	29.32	32.76	8238	29.32	32.76	
PFUnDA	563.10>519.00	563.10>269.10	18285	2858	15.63	13.12	2858	15.63	13.12	
13C7-PFUnDA_IS	570.00>525.10	----	295082	----	----	----	----	----	----	----
13C7-PFUnDA	570.00>525.10	----	295082	----	----	----	----	----	----	----
PFNS	548.80>79.90	548.80>98.80	5101	3145	61.64	65.22	3145	61.64	65.22	
10_2 FTS	626.80>607.05	626.80>81.00	4057	1130	27.86	37.13	1130	27.86	37.13	
13C2-PFDOA_IS	615.10>570.00	----	335621	----	----	----	----	----	----	----
13C2-PFDOA	615.10>570.00	----	335621	----	----	----	----	----	----	----
PFDOA	613.10>569.00	613.10>319.00	15951	1904	11.94	11.29	1904	11.94	11.29	
PFDS	599.00>79.90	599.00>98.80	5065	2842	56.12	60.18	2842	56.12	60.18	
PFTrDA	663.00>619.00	663.00>168.90	16904	3165	18.72	17.64	3165	18.72	17.64	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240118_006 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	22926	6854	29.90	36.44	6854	29.90	36.44	
PFOSAm	498.10>77.90	----	12073	----	----	----	----	----	----	
13C8-PFOSAm	506.10>77.80	----	308563	----	----	----	----	----	----	
13C8-PFOSAm_IS	506.10>77.80	----	308563	----	----	----	----	----	----	
PFTDA	713.10>669.00	713.10>168.90	12918	3353	25.95	22.96	3353	25.95	22.96	
13C2-PFTDA	715.20>670.00	----	144376	----	----	----	----	----	----	
13C2-PFTDA_IS	715.20>670.00	----	144376	----	----	----	----	----	----	
PFDoS	699.10>79.90	699.10>98.80	2919	1706	58.44	67.40	1706	58.44	67.40	
D7-MeFOSE_IS	623.20>58.90	----	739936	----	----	----	----	----	----	
D7-MeFOSE	623.20>58.90	----	739936	----	----	----	----	----	----	
MeFOSE	616.10>59.00	----	2019	----	----	----	----	----	----	AC
13C2-PFHxDA_IS	815.00>770.05	----	560359	----	----	----	----	----	----	
13C2-PFHxDA	815.00>770.05	----	560359	----	----	----	----	----	----	
PFHxDA	813.00>768.95	813.00>218.95	19294	2661	13.79	13.90	2661	13.79	13.90	
D3-MeFOSA	515.00>219.00	----	60326	----	----	----	----	----	----	
D3-MeFOSA_IS	515.00>219.00	----	60326	----	----	----	----	----	----	
MeFOSA	511.90>219.00	511.90>169.00	2491	0	0.00	140.79	0	0.00	140.79	IRr
D9-EtFOSE_IS	639.20>58.90	----	750458	----	----	----	----	----	----	
D9-EtFOSE	639.20>58.90	----	750458	----	----	----	----	----	----	
EtFOSE	630.00>59.00	----	2935	----	----	----	----	----	----	AC
D5-EtFOSAm	531.10>219.00	----	79483	----	----	----	----	----	----	
D5-EtFOSAm_IS	531.10>219.00	----	79483	----	----	----	----	----	----	
EtFOSAm	526.00>219.00	526.00>169.00	2813	4908	174.51	163.90	4908	174.51	163.90	
PFODA	913.00>868.65	913.00>169.00	8140	2208	27.13	27.03	2208	27.13	27.03	

Flag ID key: AC: Accuracy%, IRr: Ion Ratio (Relative)



240118_006

Sample ID: 1633 ICAL 0.05PPB
Date Acquired: 1/18/2024 2:04:34 PM
Acquired by: System Administrator
Data File: 240118_006
Vial: 1 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Std. Conc.	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.416	0.002	-0.002	1308470	598299	13C3-PFBA_IS	10.0000	9.7844	ng/mL	
13C4-PFBA_IS	Auto	1.416	0.002	----	1308470	1308470	----	10.0000	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.418	0.003	----	598299	598299	----	5.0000	5.0000	ng/mL	
PFBA	Auto	1.422	0.006	0.006	7715	1308470	13C4-PFBA_IS	----	0.0686	ng/mL	AC
PFMPA	Auto	2.432	0.000	-1.063	5804	152450	13C5-PFPeA_IS	0.0500	0.0589	ng/mL	
3_3 FTCA	Auto	3.005	0.001	-0.490	3313	152450	13C5-PFPeA_IS	1.0000	0.9802	ng/mL	
13C5-PFPeA	Auto	3.495	0.003	-1.487	152450	618072	13C2-PFHxA_IS	5.0000	5.4644	ng/mL	
13C5-PFPeA_IS	Auto	3.495	0.003	----	152450	152450	----	5.0000	5.0000	ng/mL	
PFPeA	M	3.496	0.001	0.001	12644	152450	13C5-PFPeA_IS	0.0500	0.0640	ng/mL	
PFMBA	Auto	4.030	0.005	0.535	7994	152450	13C5-PFPeA_IS	0.0500	0.0573	ng/mL	
13C2-4_2 FTS	Auto	4.664	0.003	-2.426	188057	229705	18O2-PFHxS_IS	5.0000	5.9492	ng/mL	
13C2-4_2 FTS_IS	Auto	4.664	0.003	----	188057	188057	----	5.0000	5.0000	ng/mL	
4_2 FTS	MI R1 R2	4.666	0.004	0.002	4993	188057	13C2-4_2 FTS_IS	0.0469	0.0540	ng/mL	
13C3-PFBS_IS	Auto	4.650	0.003	----	336745	336745	----	2.5000	2.5000	ng/mL	
PFBS	Auto	4.651	0.003	0.001	8756	336745	13C3-PFBS_IS	0.0444	0.0508	ng/mL	
13C3-PFBS	Auto	4.650	0.003	-2.440	336745	229705	18O2-PFHxS_IS	2.5000	2.5833	ng/mL	
NFDHA	Auto	4.840	0.005	-0.142	9711	677503	13C5-PFHxA_IS	0.0500	0.0646	ng/mL	
13C5-PFHxA	Auto	4.982	0.004	0.000	677503	618072	13C2-PFHxA_IS	2.5000	2.6009	ng/mL	
13C5-PFHxA_IS	Auto	4.982	0.004	----	677503	677503	----	2.5000	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	4.982	0.003	----	618072	618072	----	2.5000	2.5000	ng/mL	
PFHxA	M	4.982	0.002	0.000	16225	677503	13C5-PFHxA_IS	0.0500	0.0636	ng/mL	
PFEESA	MI R1 R2	5.327	0.005	0.345	41229	677503	13C5-PFHxA_IS	0.0445	0.0543	ng/mL	
13C3-HFPO-DA	Auto	5.456	0.004	0.474	595312	618072	13C2-PFHxA_IS	10.0000	9.8392	ng/mL	
13C3-HFPO-DA_IS	Auto	5.456	0.004	----	595312	595312	----	10.0000	10.0000	ng/mL	
HFPO-DA	M	5.455	0.002	-0.001	3643	595312	13C3-HFPO-DA_IS	0.0500	0.0554	ng/mL	
5_3 FTCA	Auto	5.910	0.004	0.928	19665	677503	13C5-PFHxA_IS	1.0000	1.1222	ng/mL	
PFPeS	Auto	6.021	0.003	-1.069	7075	270206	13C3-PFHxS_IS	0.0471	0.0499	ng/mL	
13C4-PFHpA	Auto	6.159	0.005	1.177	607483	618072	13C2-PFHxA_IS	2.5000	2.5762	ng/mL	
13C4-PFHpA_IS	Auto	6.159	0.005	----	607483	607483	----	2.5000	2.5000	ng/mL	
PFHpA	Auto	6.157	0.002	-0.002	22449	607483	13C4-PFHpA_IS	0.0500	0.0543	ng/mL	
DONA	Auto	6.524	0.004	1.068	27814	595312	13C3-HFPO-DA_IS	0.0473	0.0603	ng/mL	
13C2-6_2 FTS_IS	Auto	6.796	0.003	----	160811	160811	----	5.0000	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.796	0.003	-0.294	160811	229705	18O2-PFHxS_IS	5.0000	5.3788	ng/mL	
6_2 FTS	Auto	6.796	0.004	0.000	4980	160811	13C2-6_2 FTS_IS	----	0.0680	ng/mL	AC
13C4-PFOA_IS	Auto	7.113	0.006	----	48882	48882	----	2.5000	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.113	0.006	----	678231	678231	----	2.5000	2.5000	ng/mL	
13C8-PFOA	Auto	7.113	0.006	0.000	678231	48882	13C4-PFOA_IS	2.5000	2.4824	ng/mL	
PFOA	Auto	7.112	0.002	-0.001	14351	678231	13C8-PFOA_IS	0.0500	0.0382	ng/mL	
13C3-PFHxS	Auto	7.090	0.004	0.000	270206	229705	18O2-PFHxS_IS	2.5000	2.7405	ng/mL	
13C3-PFHxS_IS	Auto	7.090	0.004	----	270206	270206	----	2.5000	2.5000	ng/mL	
PFHxS	M	7.091	0.007	0.001	8655	270206	13C3-PFHxS_IS	0.0457	0.0476	ng/mL	
18O2-PFHxS_IS	Auto	7.090	0.004	----	229705	229705	----	2.5000	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.961	0.005	----	310687	310687	----	1.2500	1.2500	ng/mL	
13C9-PFNA	Auto	7.961	0.005	0.000	310687	330771	13C5-PFNA_IS	1.2500	1.1996	ng/mL	
13C5-PFNA_IS	Auto	7.961	0.005	----	330771	330771	----	1.2500	1.2500	ng/mL	
PFNA	Auto	7.960	0.003	-0.001	14376	310687	13C9-PFNA_IS	0.0500	0.0505	ng/mL	
PFHpS	Auto	8.009	0.005	-0.817	5220	117833	13C8-PFOS_IS	0.0477	0.0568	ng/mL	
7_3 FTCA	Auto	7.957	0.003	2.975	37608	677503	13C5-PFHxA_IS	----	1.6075	ng/mL	AC
13C2-8_2-FTS	Auto	8.415	0.006	1.325	149793	229705	18O2-PFHxS_IS	5.0000	6.0993	ng/mL	
13C2-8_2-FTS_IS	Auto	8.415	0.006	----	149793	149793	----	5.0000	5.0000	ng/mL	
8_2 FTS	Auto	8.415	0.005	0.000	3653	149793	13C2-8_2-FTS_IS	0.0480	0.0568	ng/mL	
13C6-PFDA_IS	Auto	8.726	0.006	----	238849	238849	----	1.2500	1.2500	ng/mL	
13C6-PFDA	Auto	8.726	0.006	0.000	238849	227340	13C2-PFDA_IS	1.2500	1.3059	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_006 (continued)

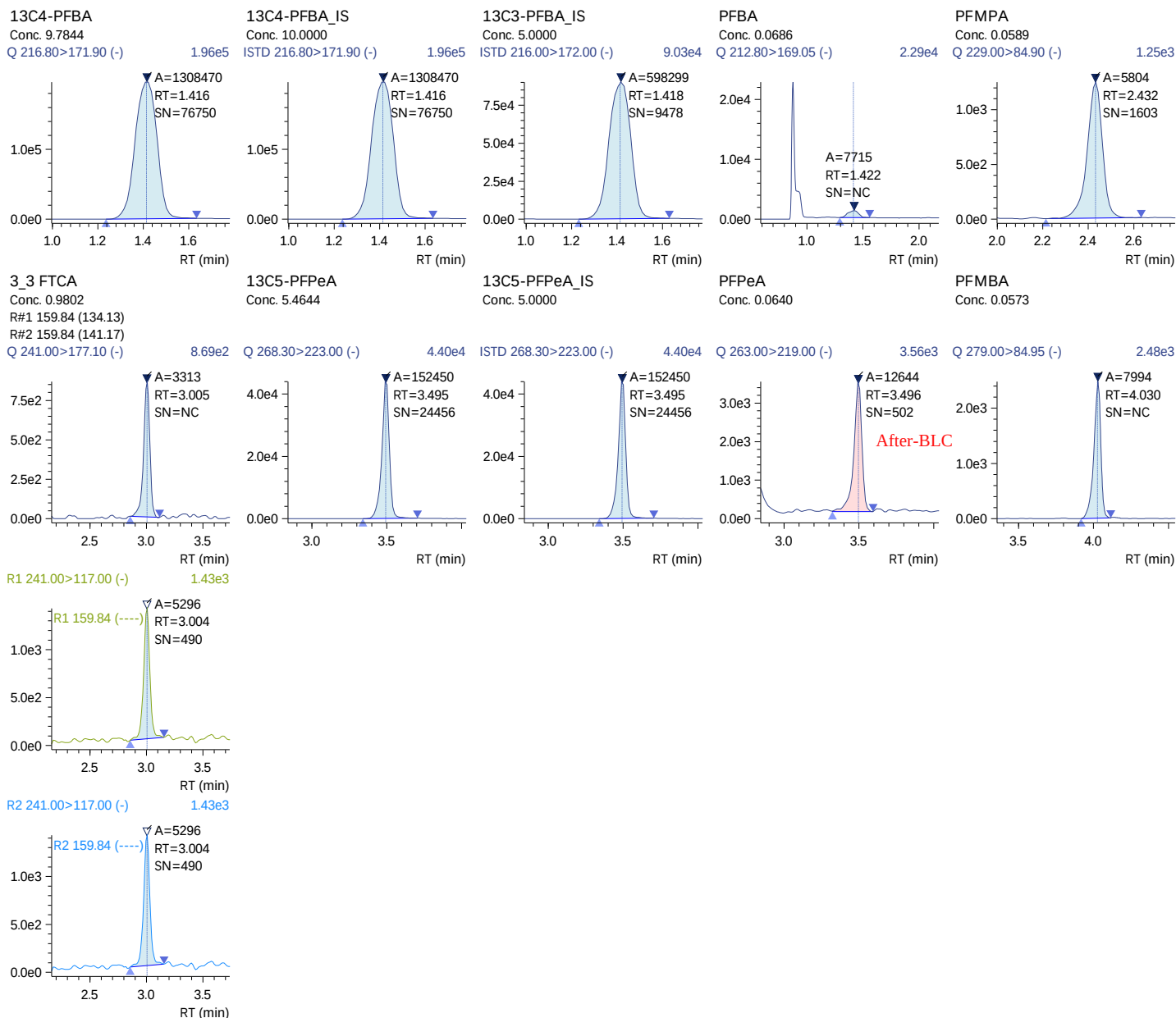
(Table continued from previous page)

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Std. Conc.	Conc.	Unit	Flag ID
13C2-PFDA_IS	Auto	8.726	0.005	----	227340	227340	----	1.2500	1.2500	ng/mL	
PFDA	Auto	8.728	0.007	0.002	18416	238849	13C6-PFDA_IS	0.0500	0.0554	ng/mL	
D3-NMeFOSAA_IS	Auto	8.860	0.005	----	283573	283573	----	5.0000	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.860	0.005	0.034	283573	283185	13C4-PFOS_IS	5.0000	5.7696	ng/mL	
13C8-PFOS_IS	Auto	8.826	0.006	----	117833	117833	----	2.5000	2.5000	ng/mL	
13C8-PFOS	Auto	8.826	0.006	0.000	117833	283185	13C4-PFOS_IS	2.5000	2.4950	ng/mL	
13C4-PFOS_IS	Auto	8.826	0.006	----	283185	283185	----	2.5000	2.5000	ng/mL	
PFOS	M	8.827	0.005	0.001	7169	117833	13C8-PFOS_IS	0.0464	0.0585	ng/mL	
NMeFOSAA	M	8.864	0.003	0.004	5295	283573	D3-NMeFOSAA_IS	----	0.0688	ng/mL	AC, IRr
D5-NetFOSAA_IS	Auto	9.191	0.005	----	315390	315390	----	5.0000	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.191	0.005	0.365	315390	283185	13C4-PFOS_IS	5.0000	5.3637	ng/mL	
NetFOSAA	M	9.203	0.008	0.012	2717	315390	D5-NetFOSAA_IS	0.0500	0.0645	ng/mL	
9-CI-PF3ONS	Auto	9.390	0.006	3.934	28101	595312	13C3-HFPO-DA_IS	0.0467	0.0573	ng/mL	
PFUnDA	Auto	9.450	0.003	0.000	18285	295082	13C7-PFUnDA_IS	0.0500	0.0559	ng/mL	
13C7-PFUnDA_IS	Auto	9.450	0.005	----	295082	295082	----	1.2500	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.450	0.005	0.724	295082	227340	13C2-PFDA_IS	1.2500	1.3525	ng/mL	
PFNS	Auto	9.590	0.006	0.764	5101	117833	13C8-PFOS_IS	0.0481	0.0570	ng/mL	
10_2_FTS	Auto	9.826	0.007	1.411	4057	149793	13C2-8_2-FTS_IS	0.0482	0.0518	ng/mL	
13C2-PFDOA_IS	Auto	10.138	0.005	----	335621	335621	----	1.2500	1.2500	ng/mL	
13C2-PFDOA	Auto	10.138	0.005	1.412	335621	227340	13C2-PFDA_IS	1.2500	1.3390	ng/mL	
PFDOA	Auto	10.141	0.007	0.003	15951	335621	13C2-PFDOA_IS	0.0500	0.0517	ng/mL	
PFDS	Auto	10.301	0.005	1.475	5065	117833	13C8-PFOS_IS	0.0483	0.0589	ng/mL	
PFTDA	Auto	10.798	0.006	-0.633	16904	144376	13C2-PFTDA_IS	0.0500	0.0520	ng/mL	
11-CI-PF3OUdS	Auto	10.813	0.007	5.357	22926	595312	13C3-HFPO-DA_IS	0.0472	0.0524	ng/mL	
PFOSAm	M	11.166	0.002	0.000	12073	308563	13C8-PFOSAm_IS	0.1000	0.1187	ng/mL	
13C8-PFOSAm	Auto	11.166	0.001	2.340	308563	283185	13C4-PFOS_IS	2.5000	2.5667	ng/mL	
13C8-PFOSAm_IS	Auto	11.166	0.001	----	308563	308563	----	2.5000	2.5000	ng/mL	
PFTDA	M	11.433	0.008	0.002	12918	144376	13C2-PFTDA_IS	0.0500	0.0555	ng/mL	
13C2-PFTDA	Auto	11.431	0.007	2.705	144376	227340	13C2-PFDA_IS	1.2500	1.3341	ng/mL	
13C2-PFTDA_IS	Auto	11.431	0.007	----	144376	144376	----	1.2500	1.2500	ng/mL	
PFDoS	M	11.629	0.007	2.803	2919	117833	13C8-PFOS_IS	0.0485	0.0618	ng/mL	
D7-MeFOSE_IS	Auto	13.379	0.002	----	739936	739936	----	25.0000	25.0000	ng/mL	
D7-MeFOSE	Auto	13.379	0.002	4.553	739936	283185	13C4-PFOS_IS	25.0000	24.9648	ng/mL	
MeFOSE	M	13.420	0.007	0.041	2019	739936	D7-MeFOSE_IS	----	0.0743	ng/mL	AC
13C2-PFHXA_IS	Auto	12.647	0.006	----	560359	560359	----	2.5000	2.5000	ng/mL	
13C2-PFHXA	Auto	12.647	0.006	3.921	560359	227340	13C2-PFDA_IS	2.5000	2.6536	ng/mL	
PFHXA	Auto	12.648	0.006	0.001	19294	560359	13C2-PFHXA_IS	0.0500	0.0561	ng/mL	
D3-MeFOSA	Auto	13.687	0.002	4.861	60326	283185	13C4-PFOS_IS	2.5000	2.4918	ng/mL	
D3-MeFOSA_IS	Auto	13.687	0.002	----	60326	60326	----	2.5000	2.5000	ng/mL	
MeFOSA	M	13.694	0.000	0.007	2491	60326	D3-MeFOSA_IS	0.0500	0.0573	ng/mL	
D9-EtFOSE_IS	Auto	14.008	0.002	----	750458	750458	----	25.0000	25.0000	ng/mL	
D9-EtFOSE	Auto	14.008	0.002	5.182	750458	283185	13C4-PFOS_IS	25.0000	24.9296	ng/mL	
EtFOSE	M	14.053	0.005	0.045	2935	750458	D9-EtFOSE_IS	----	0.0743	ng/mL	AC
D5-EtFOSAm	Auto	14.365	0.003	5.539	79483	283185	13C4-PFOS_IS	2.5000	2.4659	ng/mL	
D5-EtFOSAm_IS	Auto	14.365	0.003	----	79483	79483	----	2.5000	2.5000	ng/mL	
EtFOSAm	M	14.384	0.004	0.019	2813	79483	D5-EtFOSAm_IS	0.0500	0.0608	ng/mL	
PFODA	Auto	13.786	0.011	1.139	8140	560359	13C2-PFHXA_IS	0.0500	0.0642	ng/mL	

Flag ID key: AC: Accuracy%, IRr: Ion Ratio (Relative)



240118_006 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_006 (continued)

13C2-4_2 FTS
Conc. 5.9492

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. 0.0540
R#1 30.35 (34.14)
R#2 30.35 (29.06)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 0.0508
R#1 51.86 (47.53)
R#2 51.86 (46.72)

Q 329.10>80.90 (-)

5.79e4

ISTD 329.10>80.90 (-)

5.79e4

Q 327.10>307.00 (-)

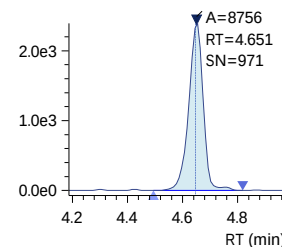
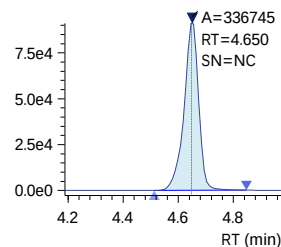
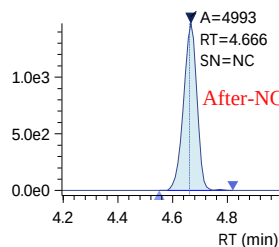
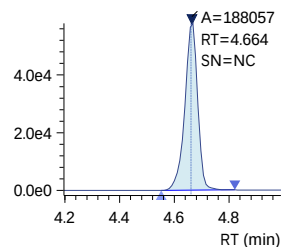
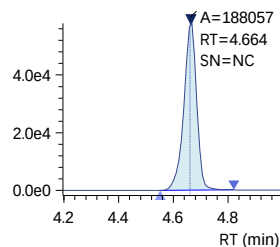
1.48e3

ISTD 302.10>79.90 (-)

9.11e4

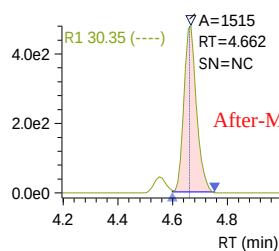
Q 298.70>79.90 (-)

2.39e3



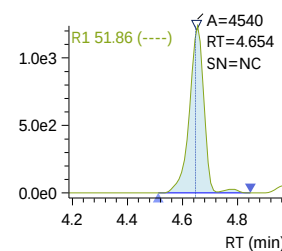
R1 327.10>80.90 (-)

4.81e2



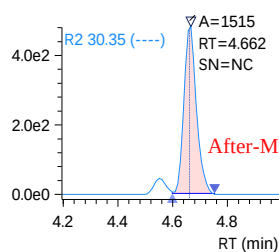
R1 298.70>98.80 (-)

1.24e3



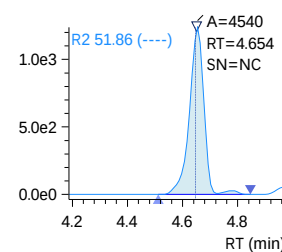
R2 327.10>80.90 (-)

4.81e2



R2 298.70>98.80 (-)

1.24e3





240118_006 (continued)

13C3-PFBS
Conc. 2.5833

NFDHA
Conc. 0.0646
R#1 33.85 (37.88)
R#2 33.85 (40.25)

13C5-PFHxA
Conc. 2.6009

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

Q 302.10>79.90 (-)

9.11e4

Q 295.00>201.00 (-)

2.89e3

Q 318.00>273.00 (-)

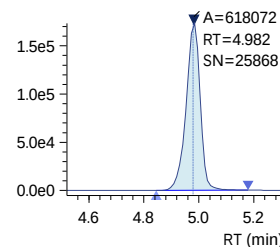
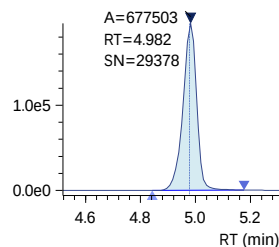
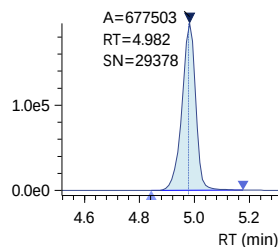
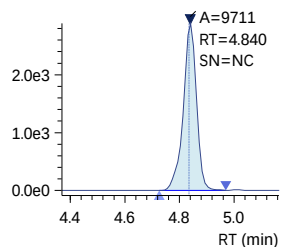
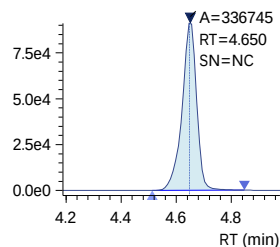
1.96e5

ISTD 318.00>273.00 (-)

1.96e5

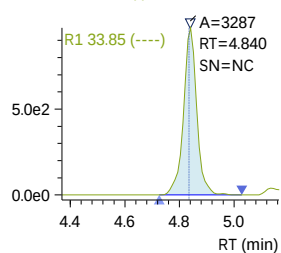
ISTD 315.10>270.00 (-)

1.73e5



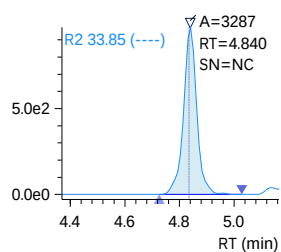
R1 295.00>84.90 (-)

9.73e2



R2 295.00>84.90 (-)

9.73e2





240118_006 (continued)

PFHxA
Conc. 0.0636

PFEESA
Conc. 0.0543
R#1 5.81 (5.88)
R#2 5.81 (6.11)

13C3-HFPO-DA
Conc. 9.8392

13C3-HFPO-DA_IS
Conc. 10.0000

HFPO-DA
Conc. 0.0554
R#1 71.42 (63.80)
R#2 71.42 (65.61)

Q 313.00>269.00 (-)

4.46e3

Q 314.80>135.00 (-)

1.24e4

Q 286.90>168.90 (-)

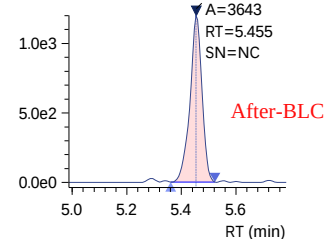
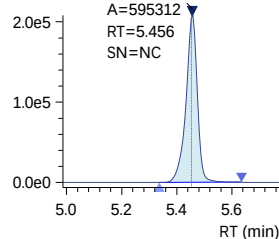
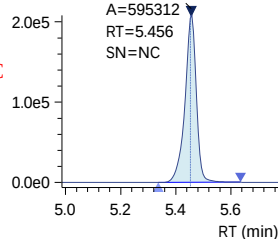
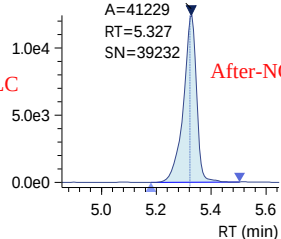
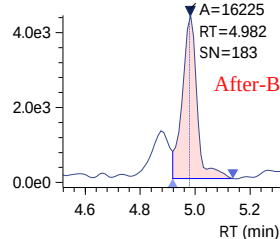
2.08e5

ISTD 286.90>168.90 (-)

2.08e5

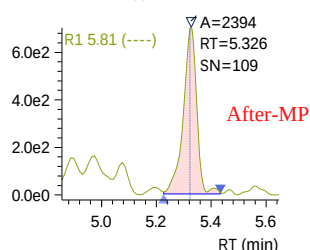
Q 284.90>168.90 (-)

1.20e3



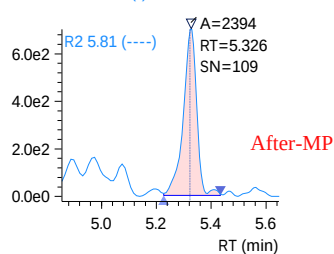
R1 314.80>82.90 (-)

7.03e2



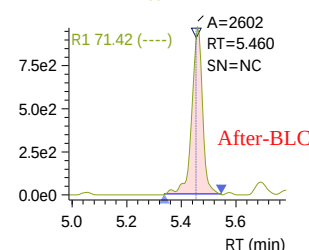
R2 314.80>82.90 (-)

7.03e2



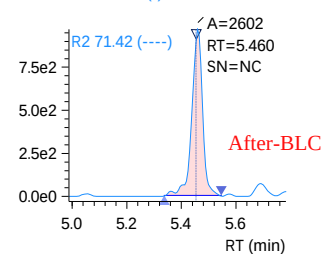
R1 284.90>184.90 (-)

9.70e2



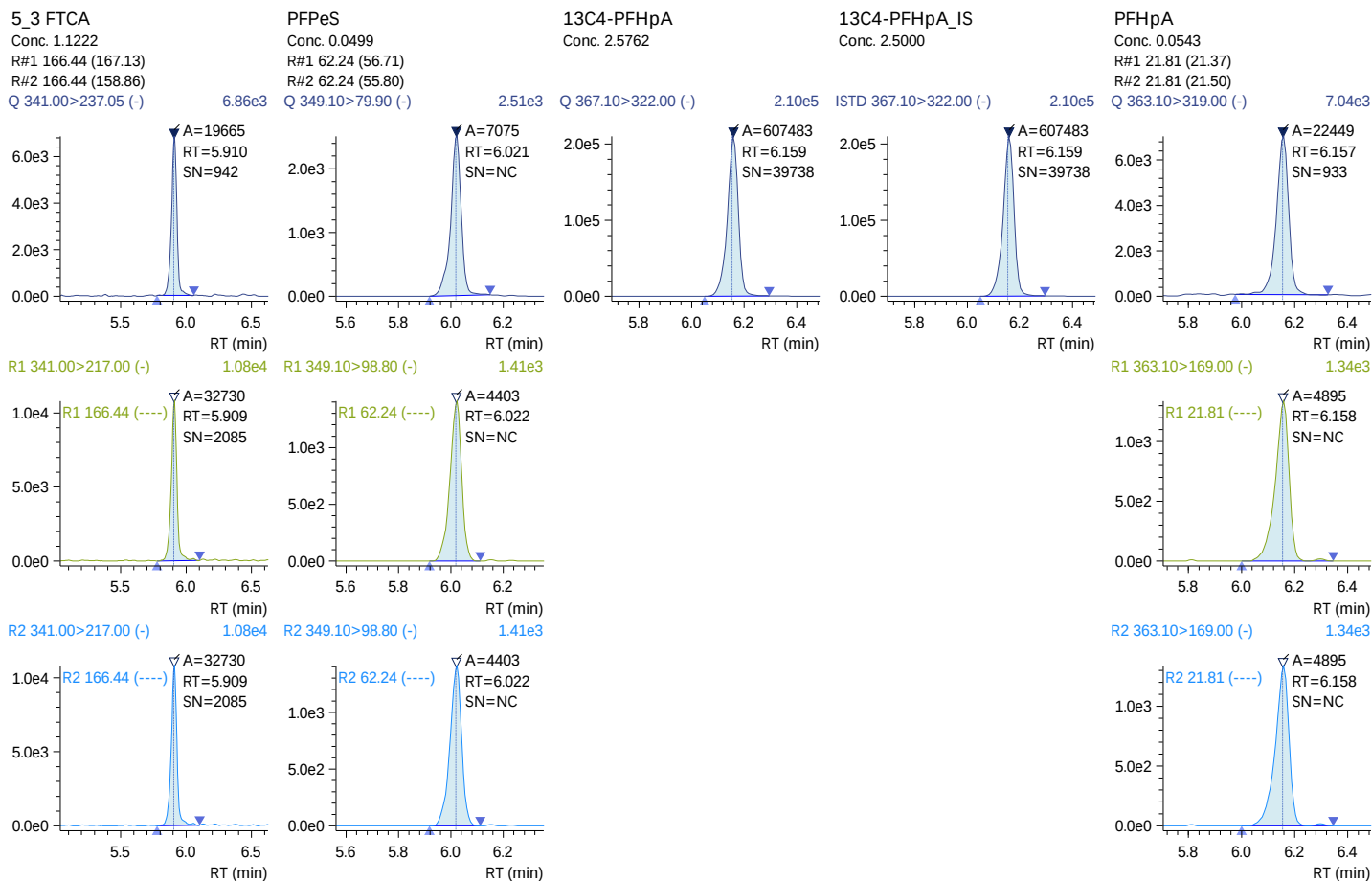
R2 284.90>184.90 (-)

9.70e2





240118_006 (continued)

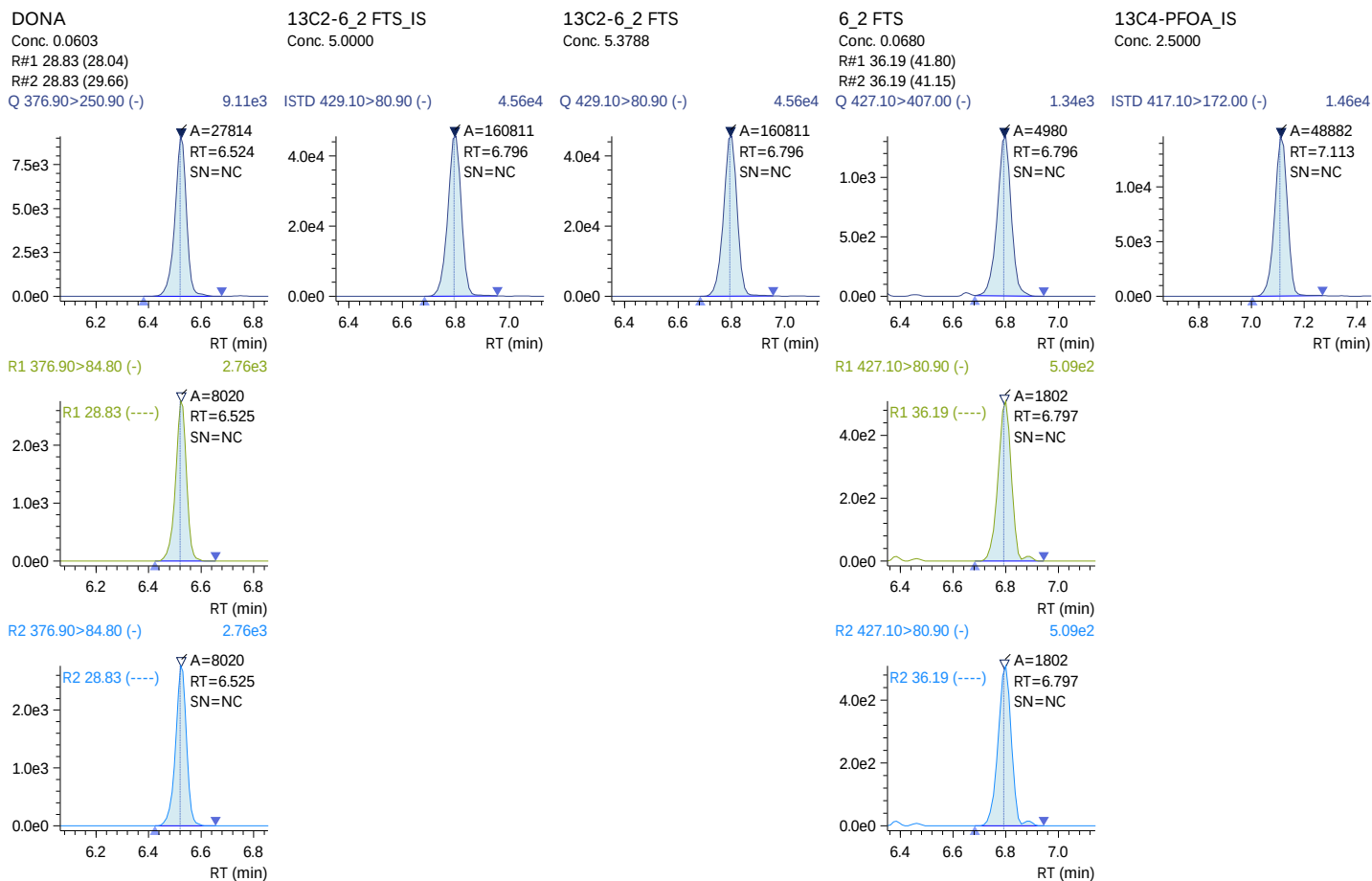


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_006 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_006 (continued)

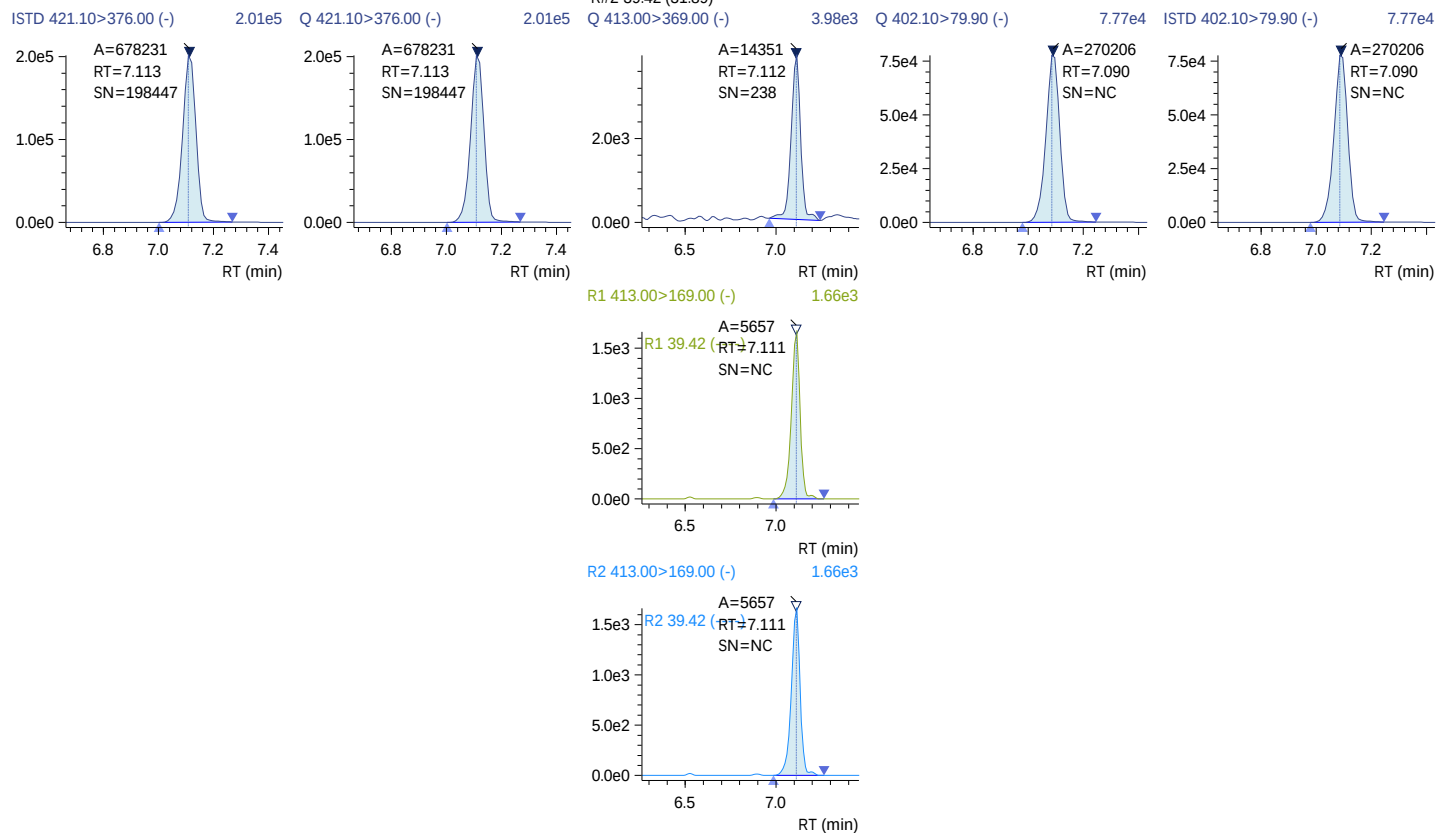
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.4824

PFOA
Conc. 0.0382
R#1 39.42 (29.05)
R#2 39.42 (31.89)

13C3-PFHxS
Conc. 2.7405

13C3-PFHxS_IS
Conc. 2.5000

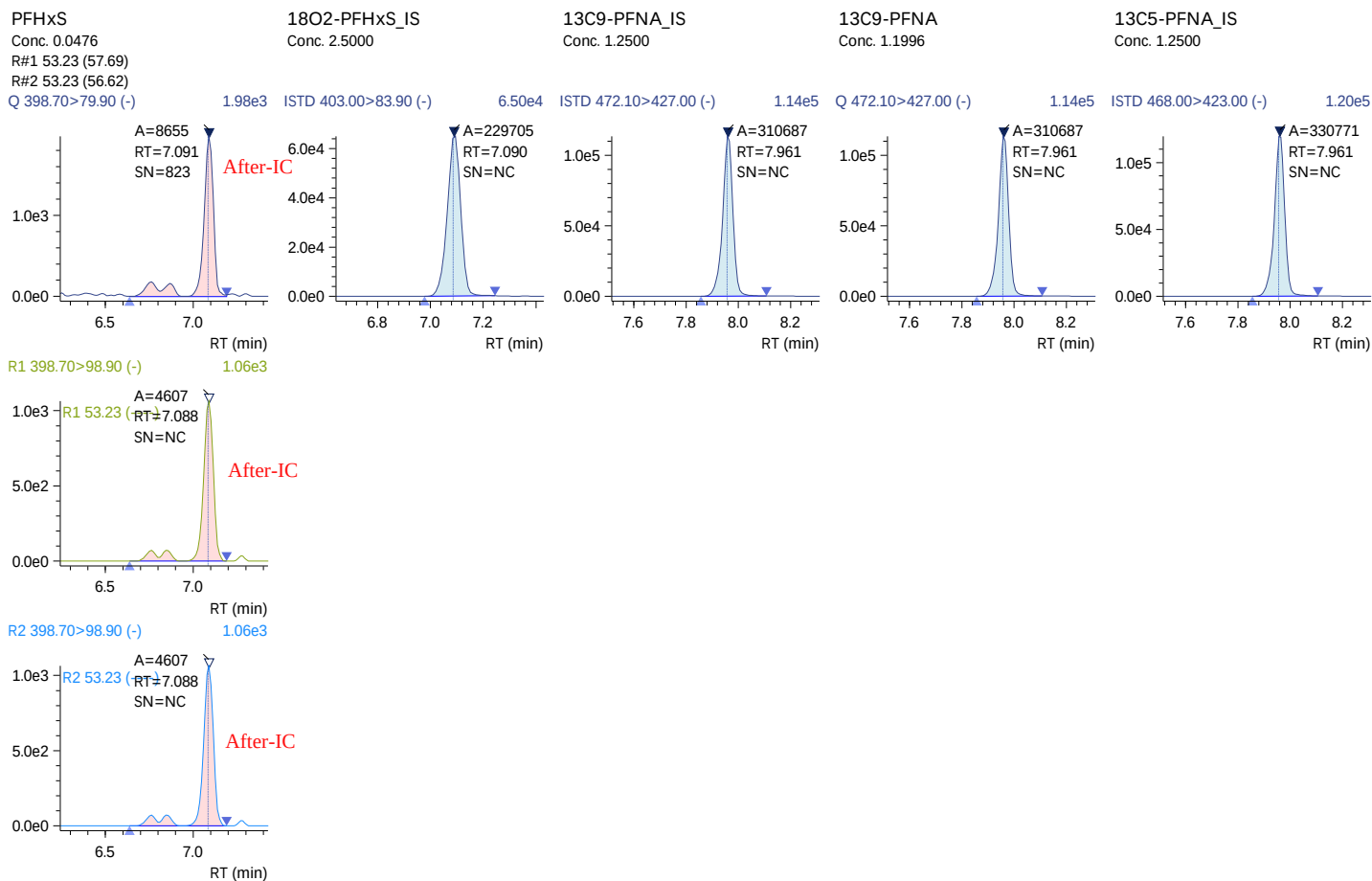


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_006 (continued)

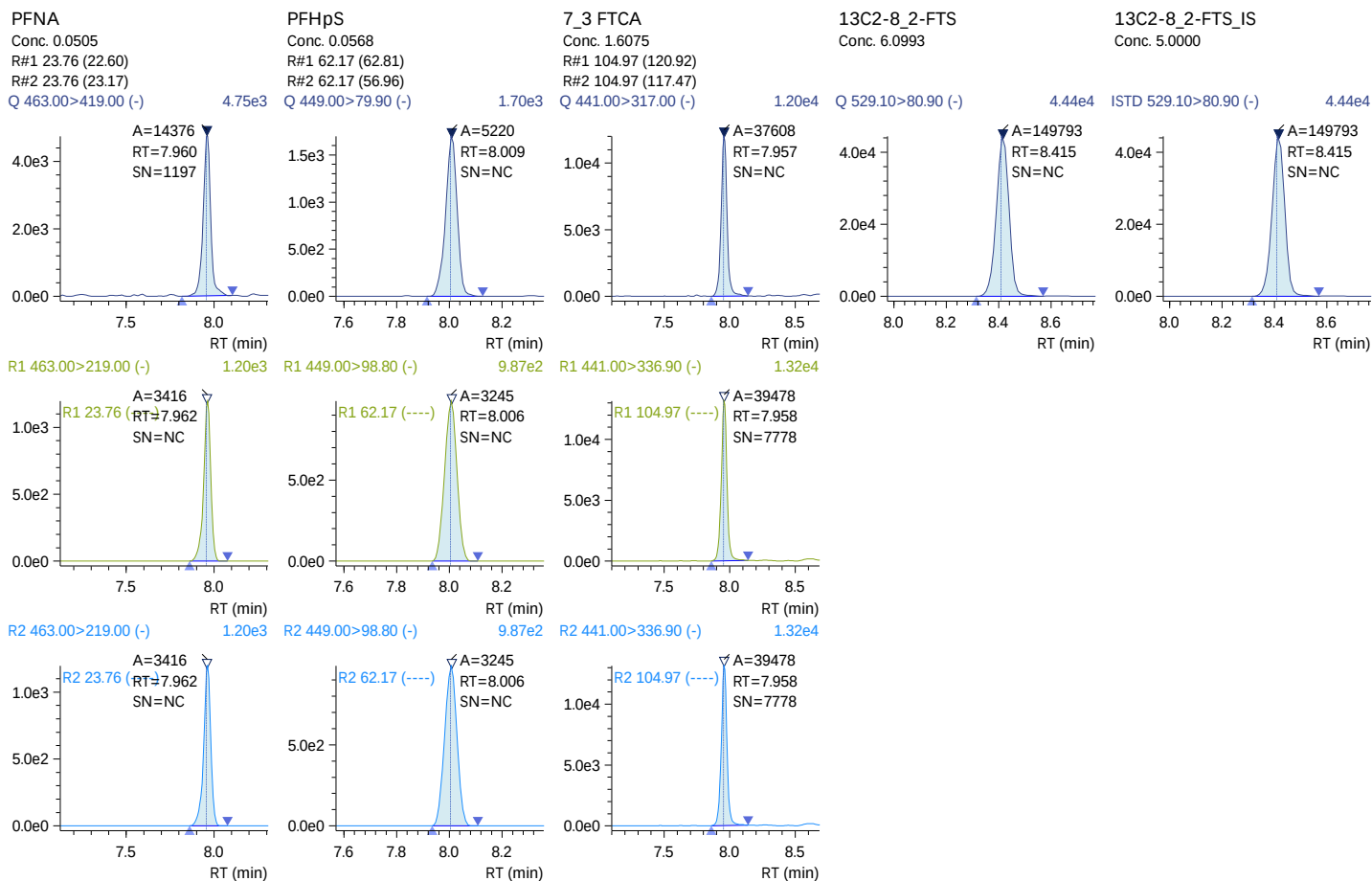


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_006 (continued)

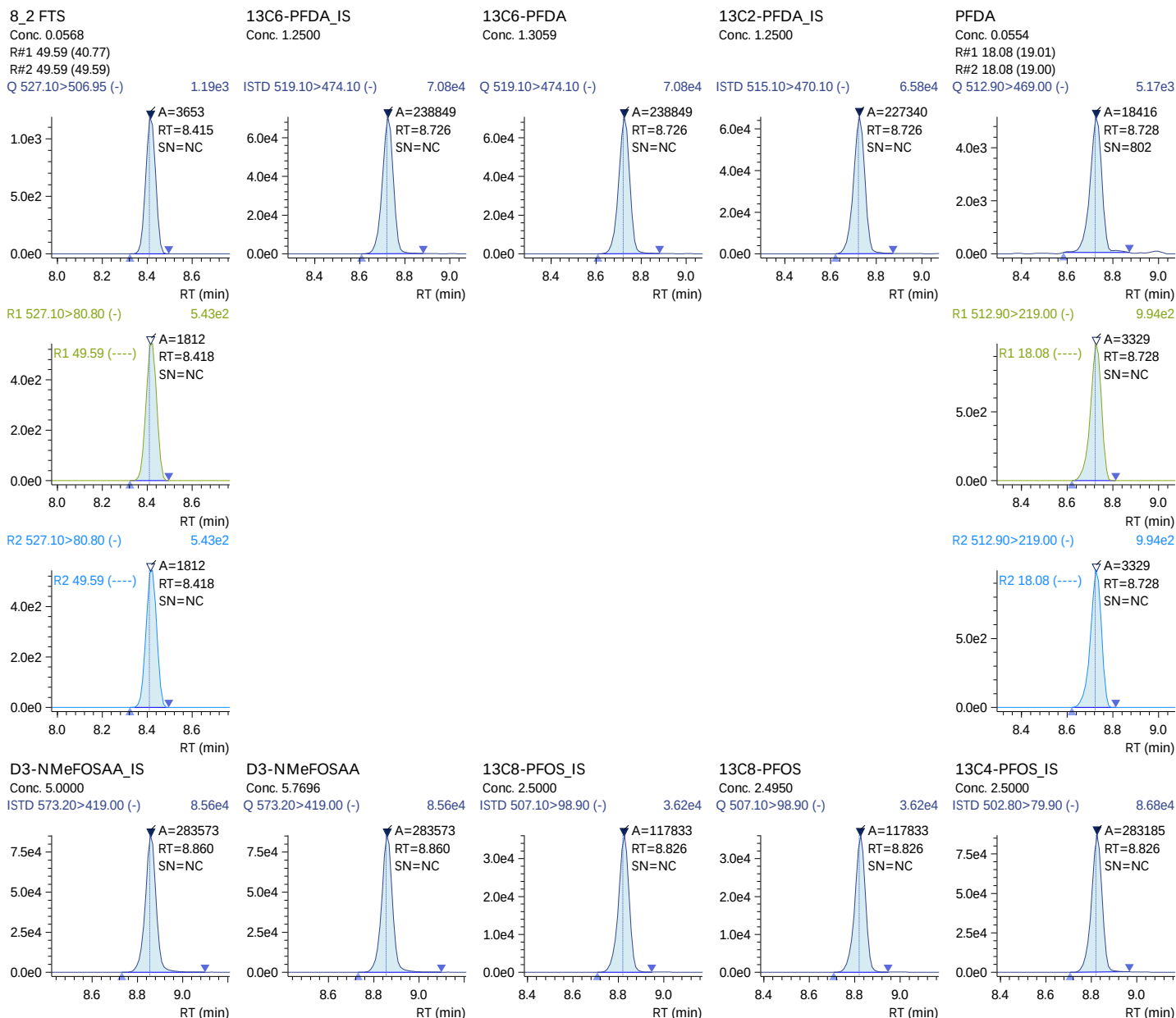


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_006 (continued)

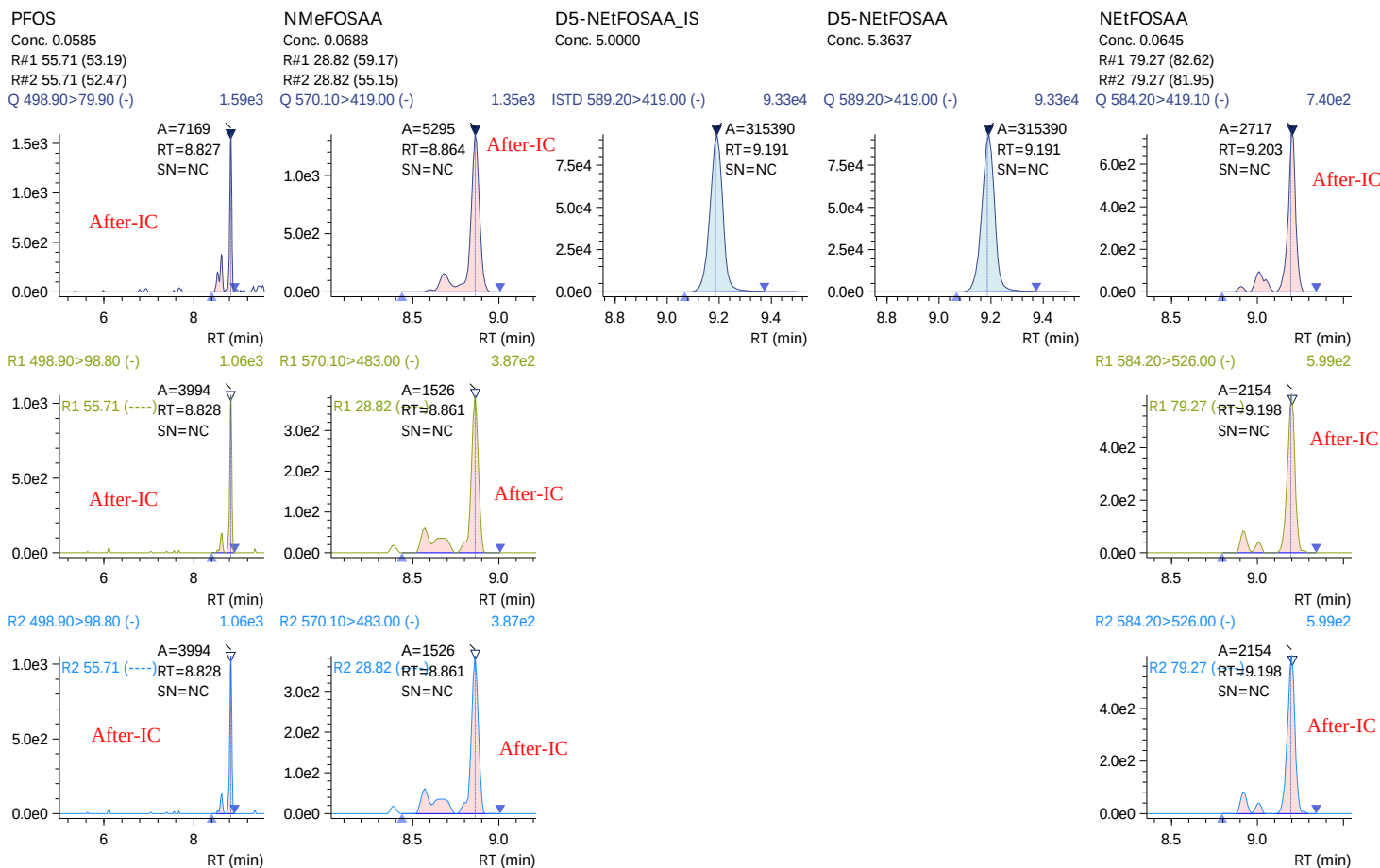


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_006 (continued)



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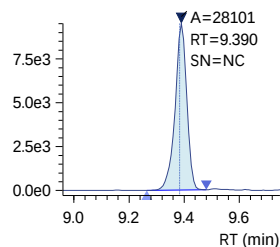
SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



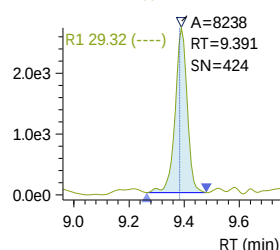
240118_006 (continued)

9-Cl-PF3ONS

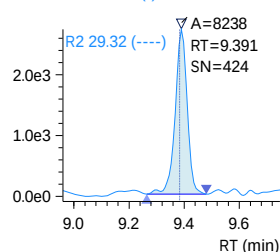
Conc. 0.0573
R#1 29.32 (31.76)
R#2 29.32 (32.76)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-) 2.75e3

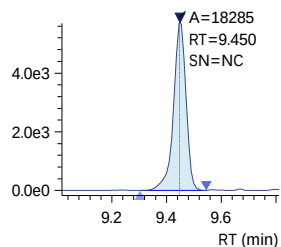


R2 532.80>353.00 (-) 2.75e3

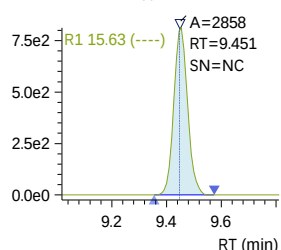


PFUnDA

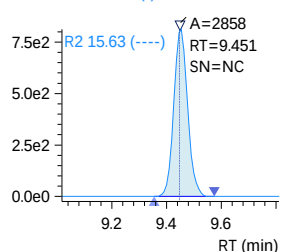
Conc. 0.0559
R#1 15.63 (12.31)
R#2 15.63 (13.12)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-) 8.12e2

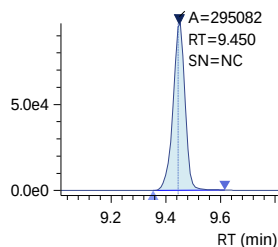


R2 563.10>269.10 (-) 8.12e2



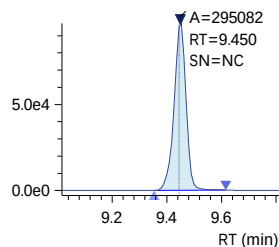
13C7-PFUnDA_IS

Conc. 1.2500
ISTD 570.00>525.10 (-)



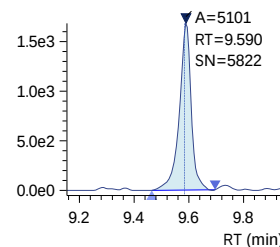
13C7-PFUnDA

Conc. 1.3525
Q 570.00>525.10 (-)

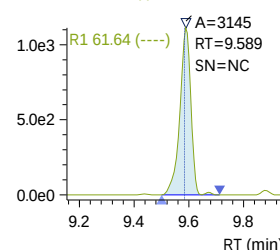


PFNS

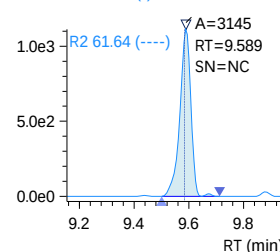
Conc. 0.0570
R#1 61.64 (63.31)
R#2 61.64 (65.22)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-) 1.11e3

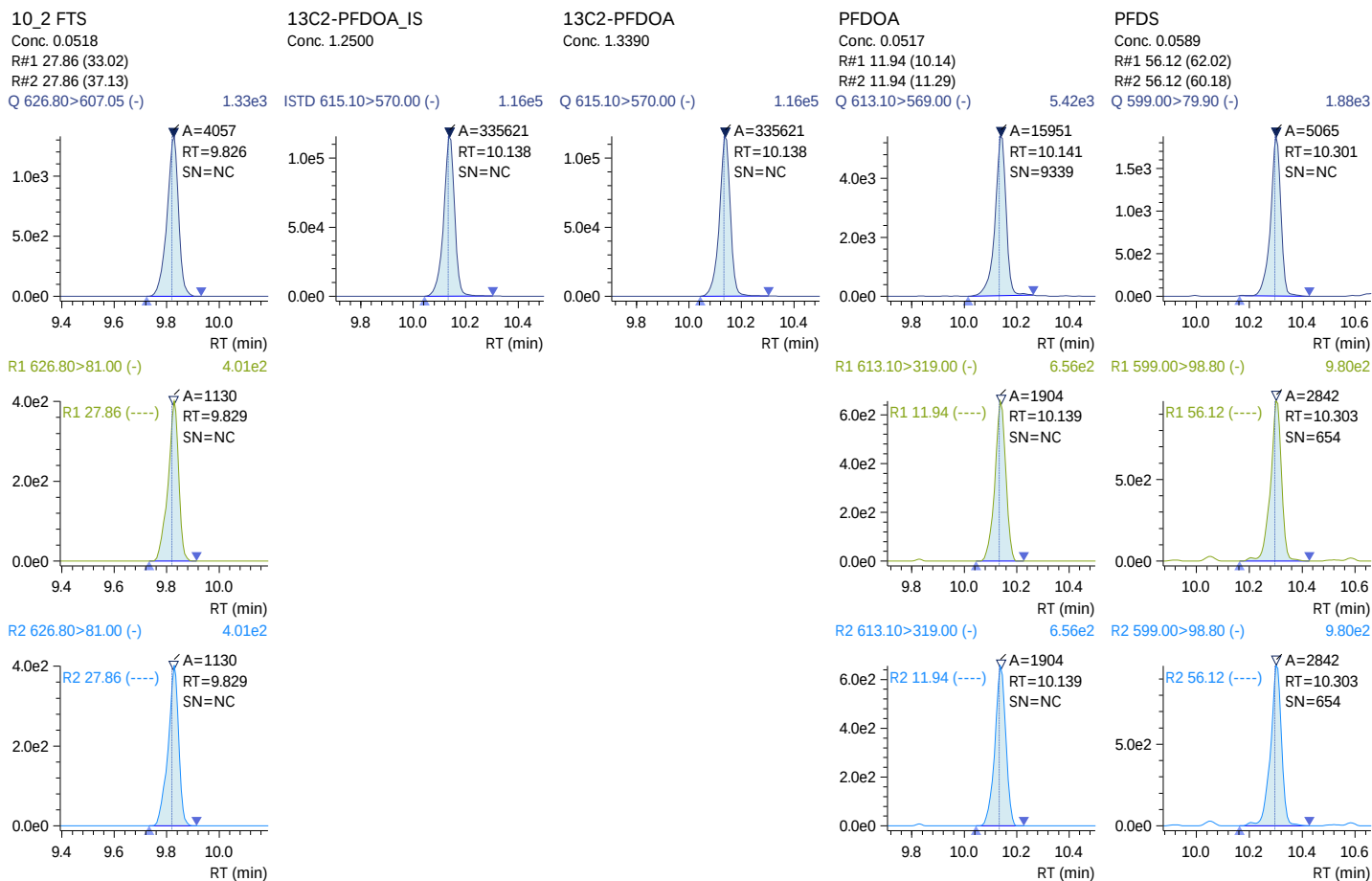


R2 548.80>98.80 (-) 1.11e3





240118_006 (continued)

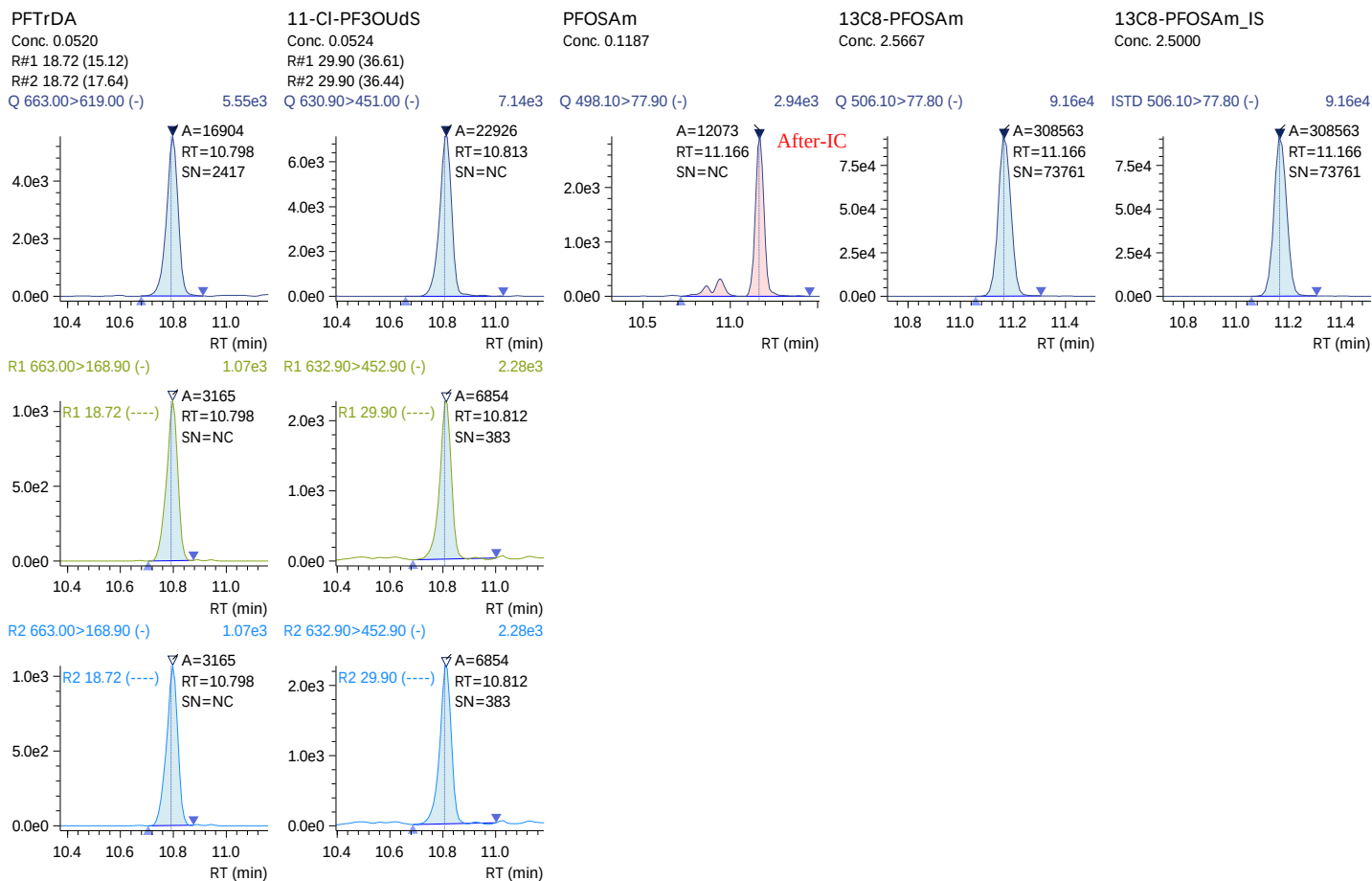


J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_006 (continued)

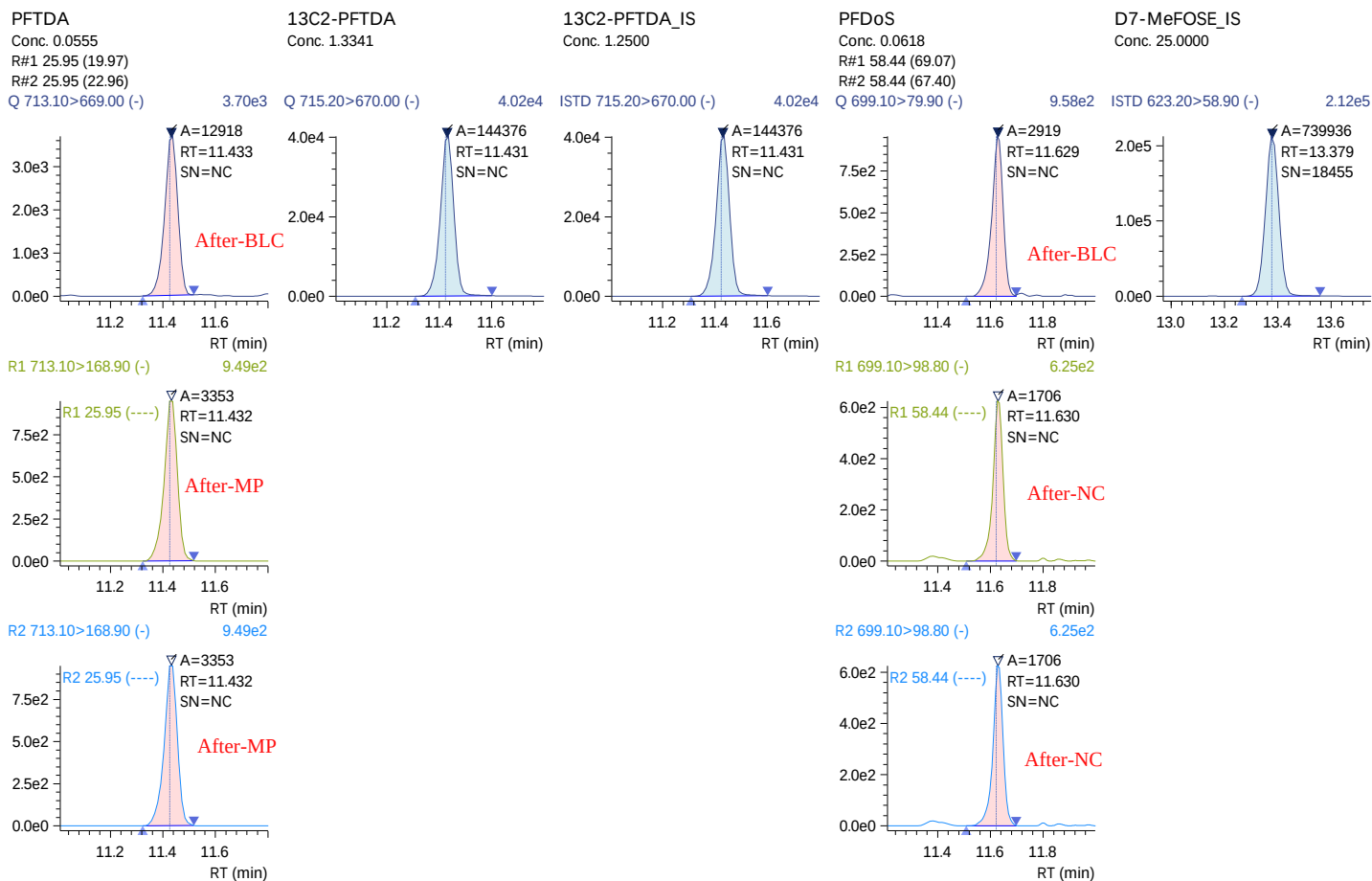


J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_006 (continued)



J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.damlp

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_006 (continued)

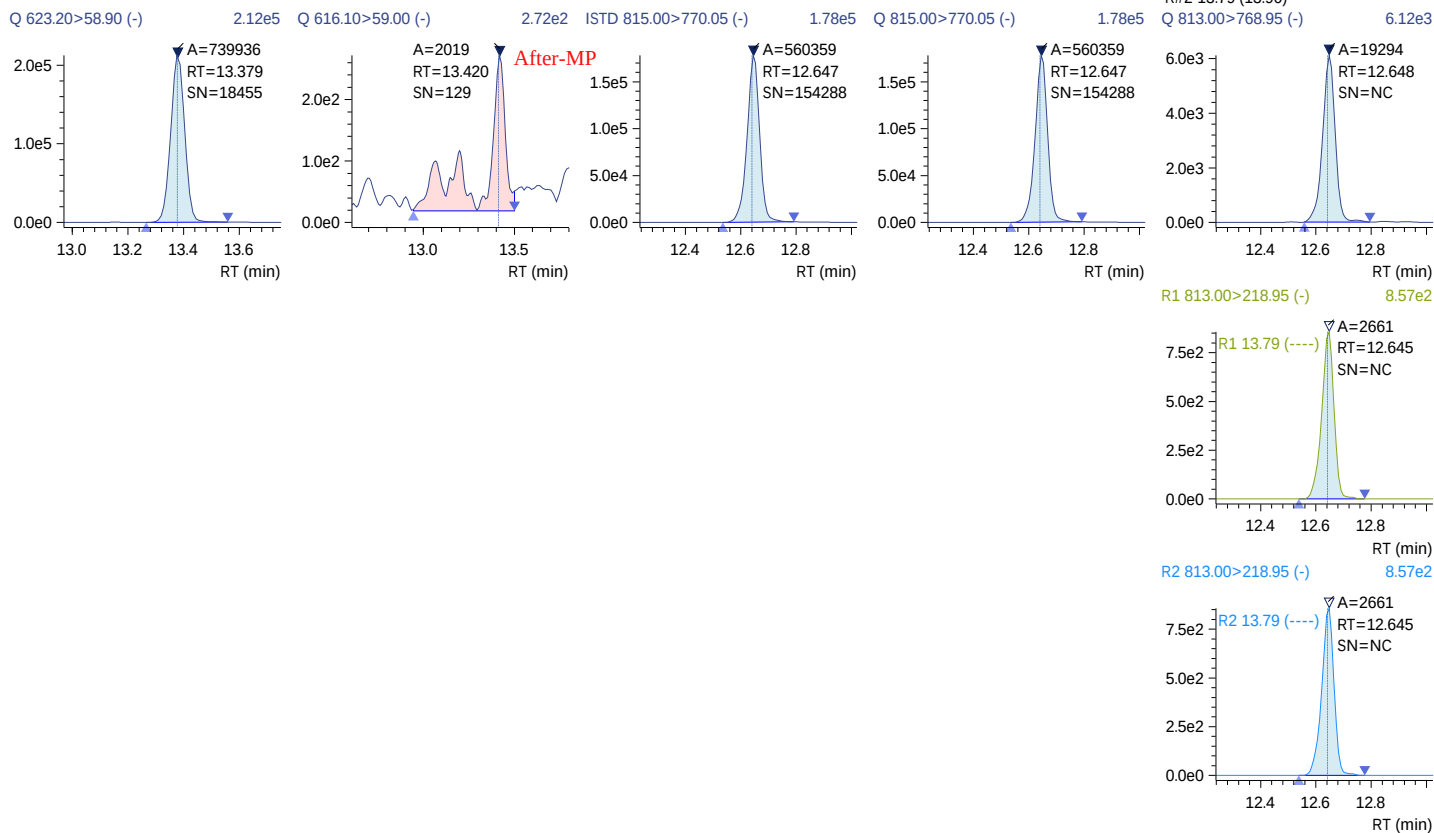
D7-MeFOSE
Conc. 24.9648

MeFOSE
Conc. 0.0743

13C2-PFHXA_IS
Conc. 2.5000

13C2-PFHXA
Conc. 2.6536

PFHXA
Conc. 0.0561
R#1 13.79 (11.64)
R#2 13.79 (13.90)





240118_006 (continued)

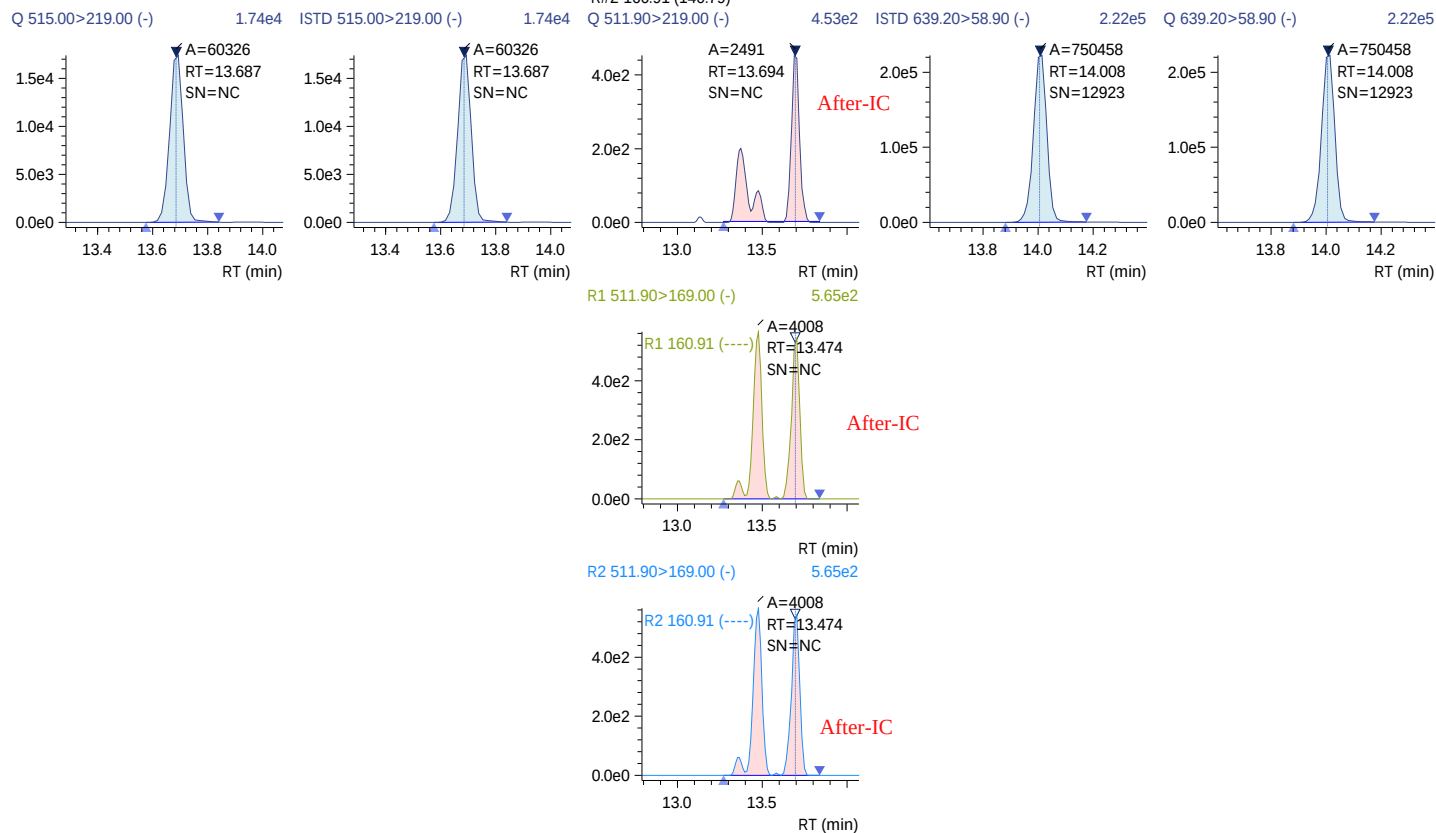
D3-MeFOSA
Conc. 2.4918

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. 0.0573
R#1 160.91 (149.05)
R#2 160.91 (140.79)

D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 24.9296





240118_006 (continued)

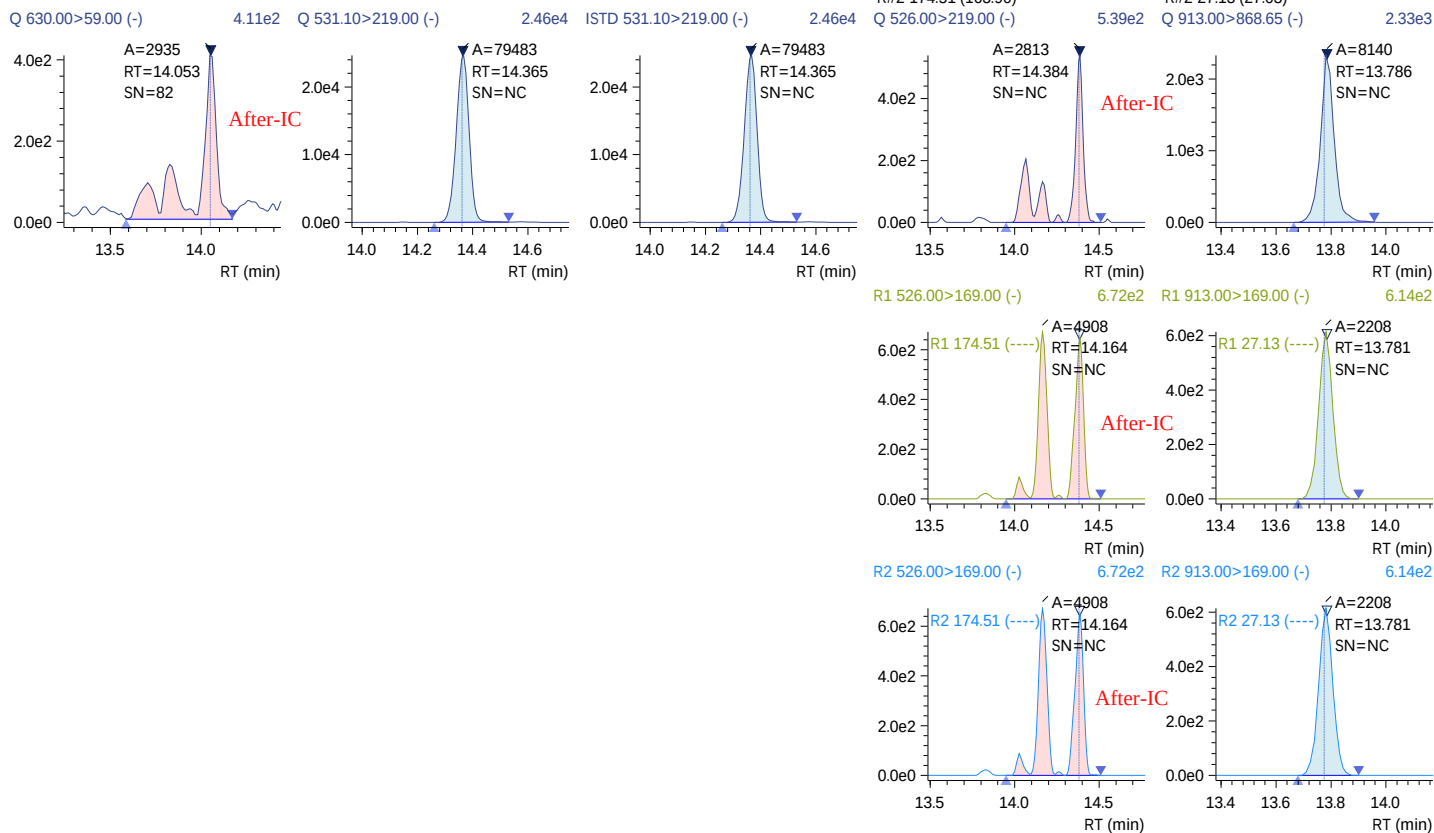
EtFOSE
Conc. 0.0743

D5-EtFOSAm
Conc. 2.4659

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. 0.0608
R#1 174.51 (154.69)
R#2 174.51 (163.90)

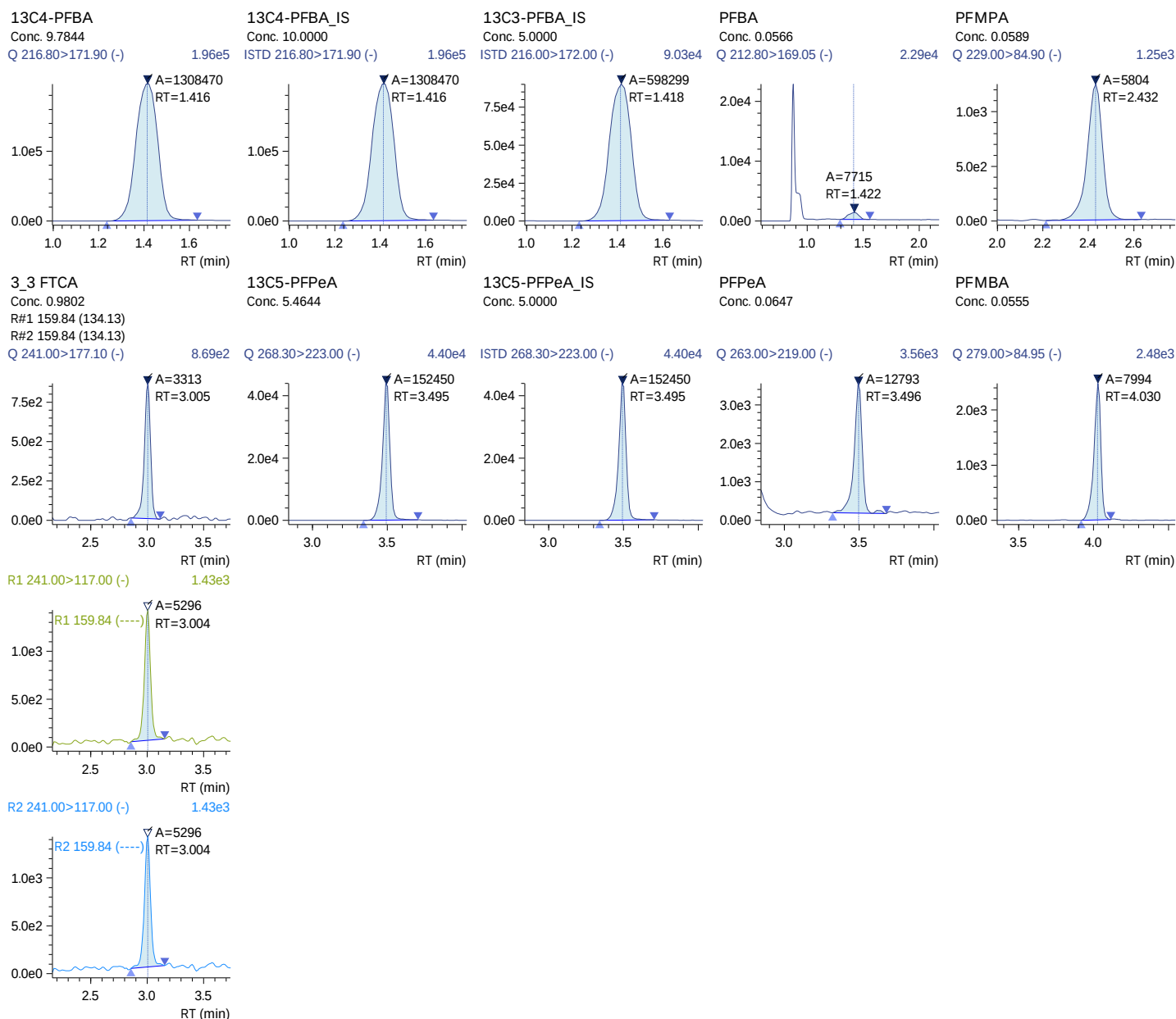
PFODA
Conc. 0.0642
R#1 27.13 (29.32)
R#2 27.13 (27.03)





240118_006

Sample ID: 1633 ICAL 0.05PPB
Date Acquired: 1/18/2024 2:04:34 PM
Acquired by: System Administrator
Data File: 240118_006
Vial: 1 | Inj. Volume: 10.0000uL | Tray: 1





240118_006 (continued)

13C2-4_2 FTS
Conc. 5.9492

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. 0.0540
R#1 0.00 (34.14)
R#2 0.00 (34.14)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 0.0508
R#1 51.86 (47.53)
R#2 51.86 (47.53)

Q 329.10>80.90 (-)

5.79e4

ISTD 329.10>80.90 (-)

5.79e4

Q 327.10>307.00 (-)

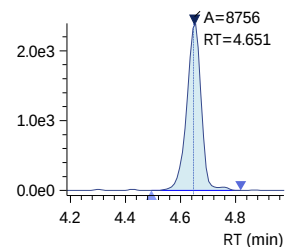
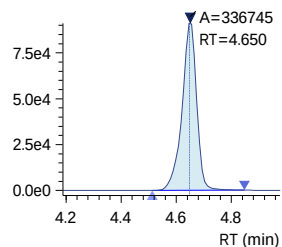
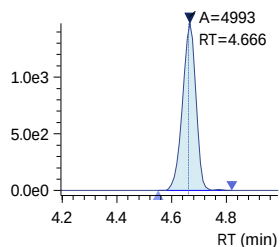
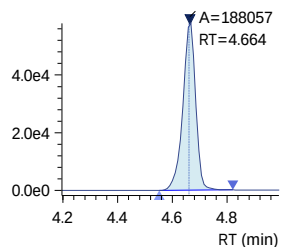
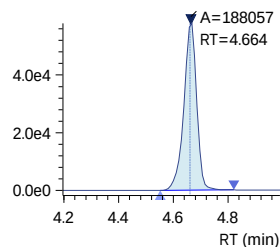
1.48e3

ISTD 302.10>79.90 (-)

9.11e4

Q 298.70>79.90 (-)

2.39e3

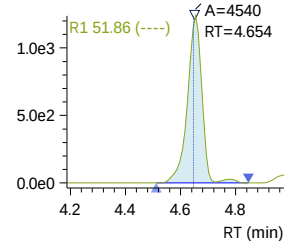
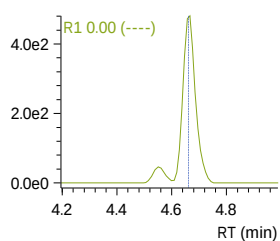


R1 327.10>80.90 (-)

4.81e2

R1 298.70>98.80 (-)

1.24e3

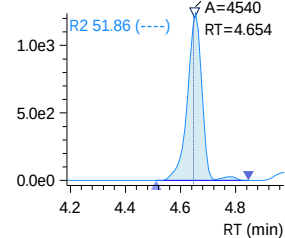
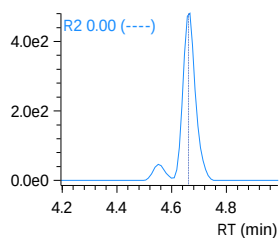


R2 327.10>80.90 (-)

4.81e2

R2 298.70>98.80 (-)

1.24e3





240118_006 (continued)

13C3-PFBS
Conc. 2.5833

NFDHA
Conc. 0.0646
R#1 33.85 (37.88)
R#2 33.85 (37.88)

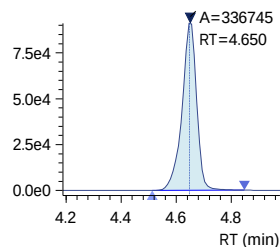
13C5-PFHxA
Conc. 2.6009

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

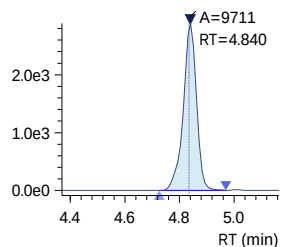
Q 302.10>79.90 (-)

9.11e4



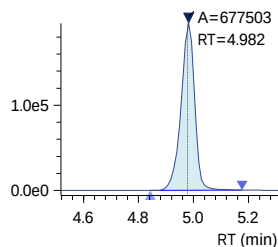
Q 295.00>201.00 (-)

2.89e3



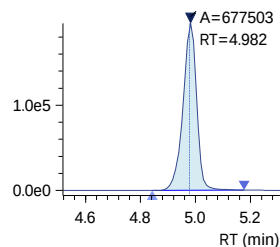
Q 318.00>273.00 (-)

1.96e5



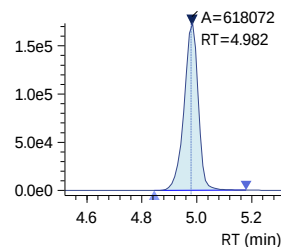
ISTD 318.00>273.00 (-)

1.96e5



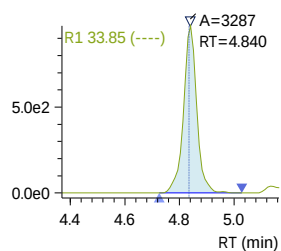
ISTD 315.10>270.00 (-)

1.73e5



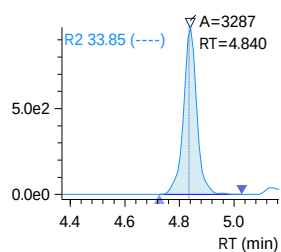
R1 295.00>84.90 (-)

9.73e2



R2 295.00>84.90 (-)

9.73e2





240118_006 (continued)

PFHxA
 Conc. 0.0555

PFEESA
 Conc. 0.0543
 R#1 0.00 (5.88)
 R#2 0.00 (5.88)

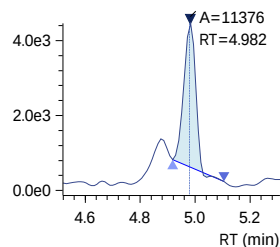
13C3-HFPO-DA
 Conc. 9.8392

13C3-HFPO-DA_IS
 Conc. 10.0000

HFPO-DA
 Conc. 0.0547
 R#1 75.24 (63.80)
 R#2 75.24 (63.80)

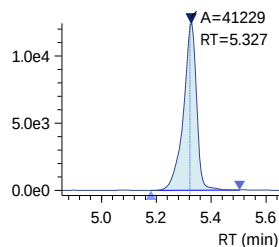
Q 313.00>269.00 (-)

4.46e3



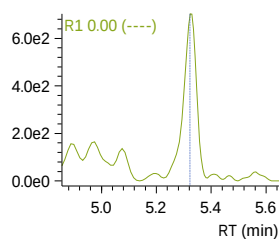
Q 314.80>135.00 (-)

1.24e4



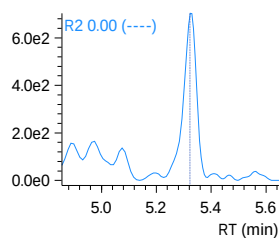
R1 314.80>82.90 (-)

7.03e2



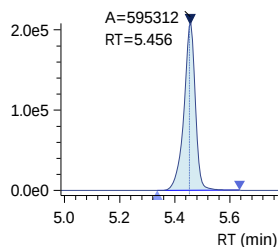
R2 314.80>82.90 (-)

7.03e2



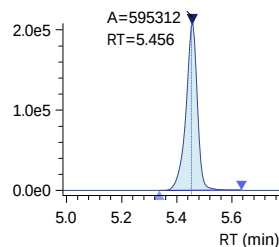
Q 286.90>168.90 (-)

2.08e5



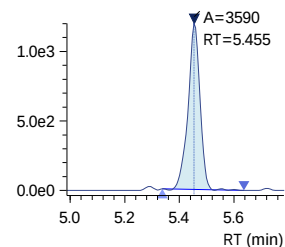
ISTD 286.90>168.90 (-)

2.08e5



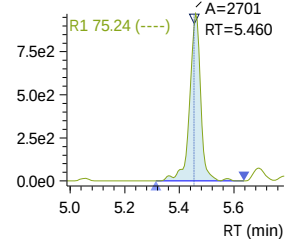
Q 284.90>168.90 (-)

1.20e3



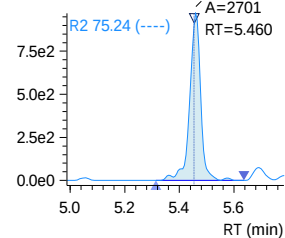
R1 284.90>184.90 (-)

9.70e2



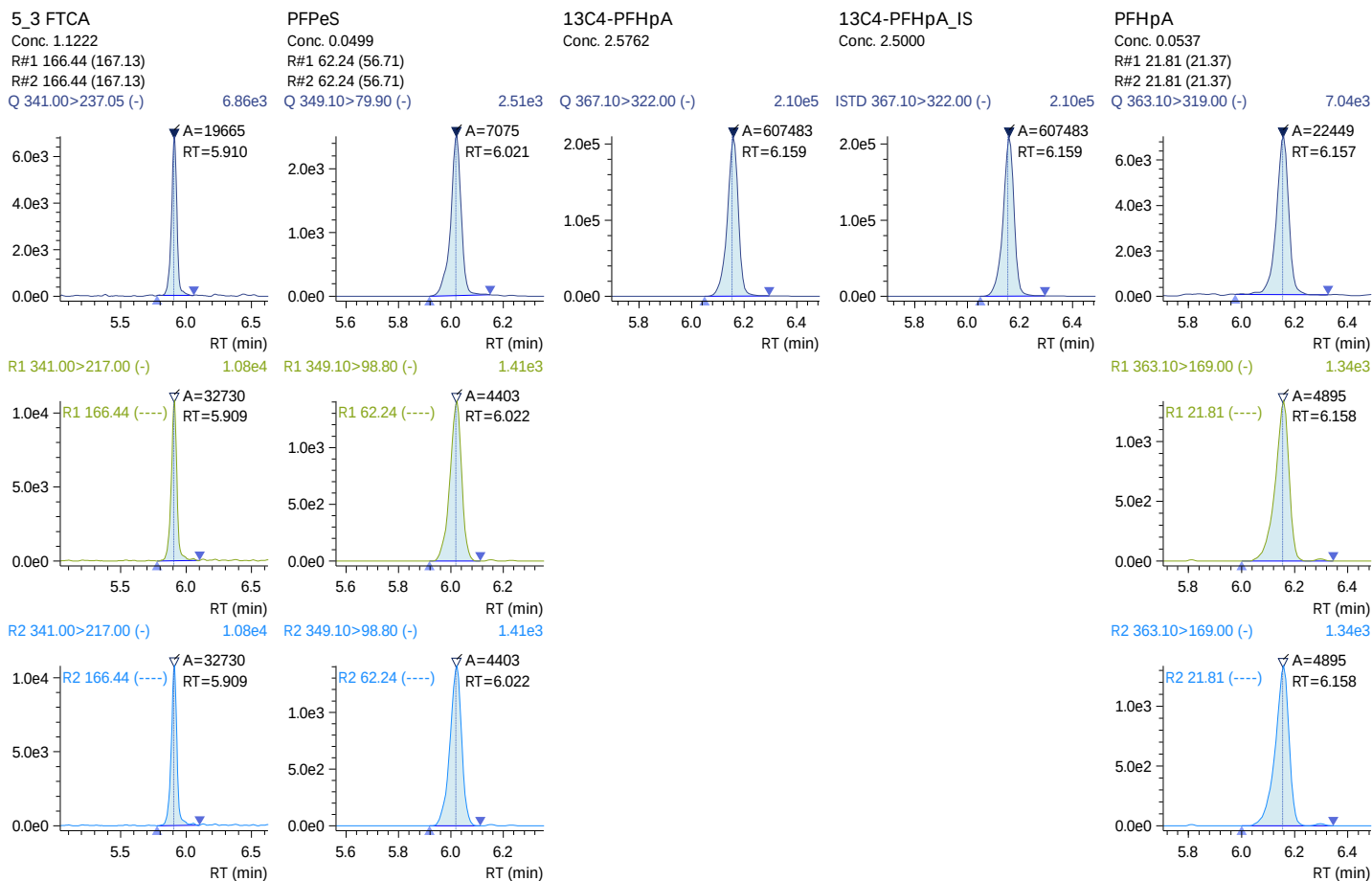
R2 284.90>184.90 (-)

9.70e2



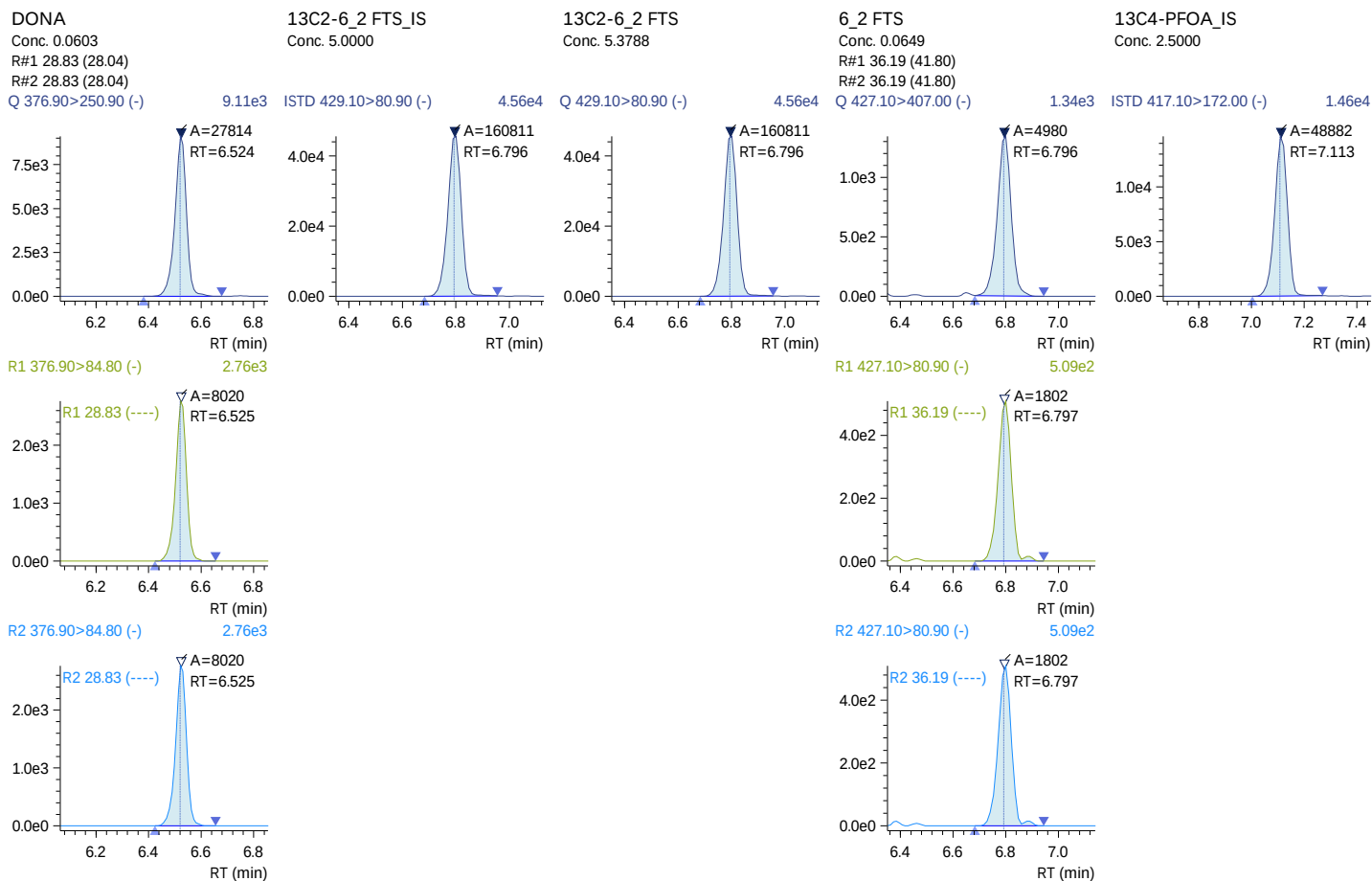


240118_006 (continued)





240118_006 (continued)





240118_006 (continued)

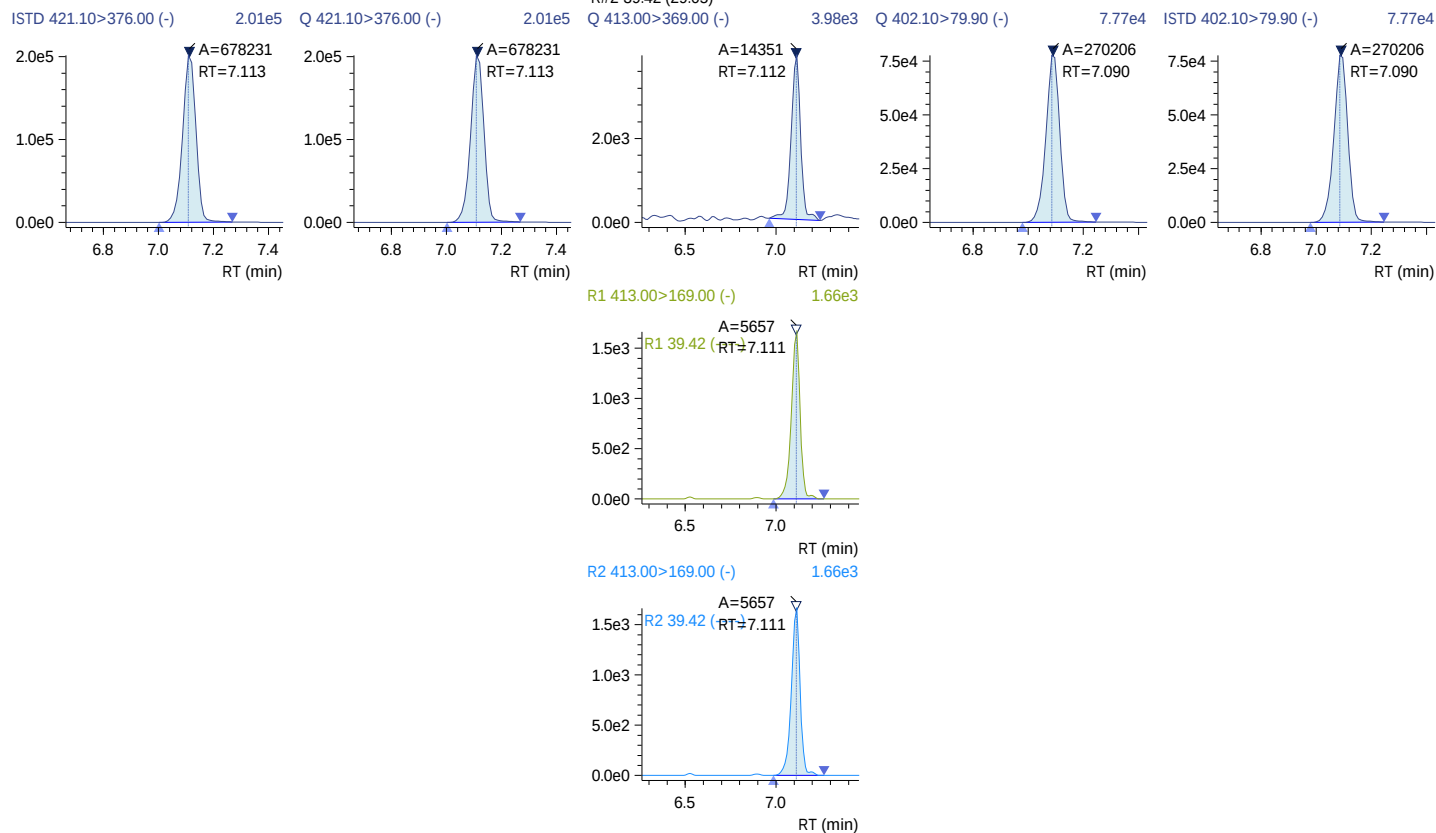
13C8-PFOA_IS
 Conc. 2.5000

13C8-PFOA
 Conc. 2.4824

PFOA
 Conc. 0.0382
 R#1 39.42 (29.05)
 R#2 39.42 (29.05)

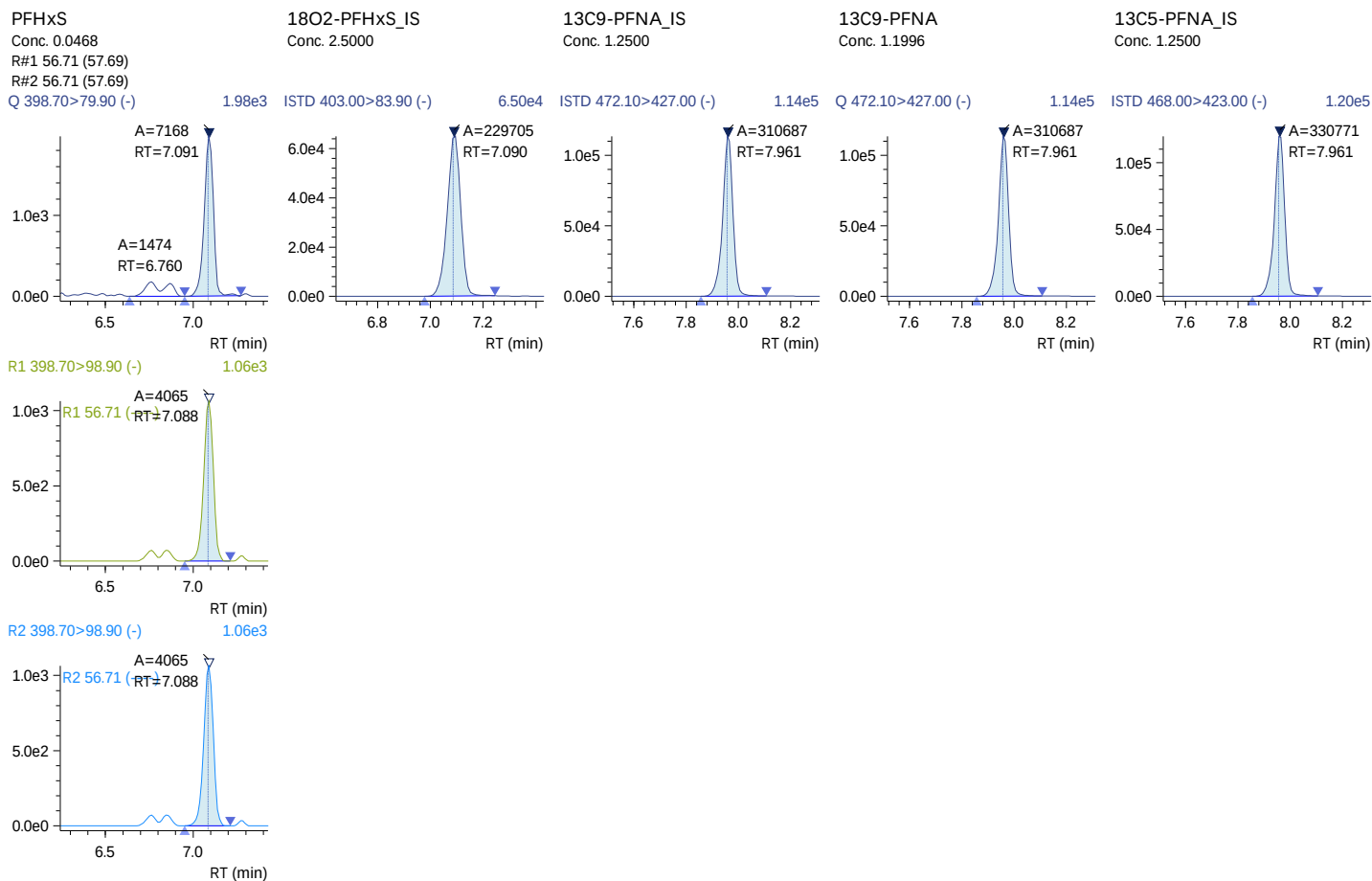
13C3-PFHxS
 Conc. 2.7405

13C3-PFHxS_IS
 Conc. 2.5000



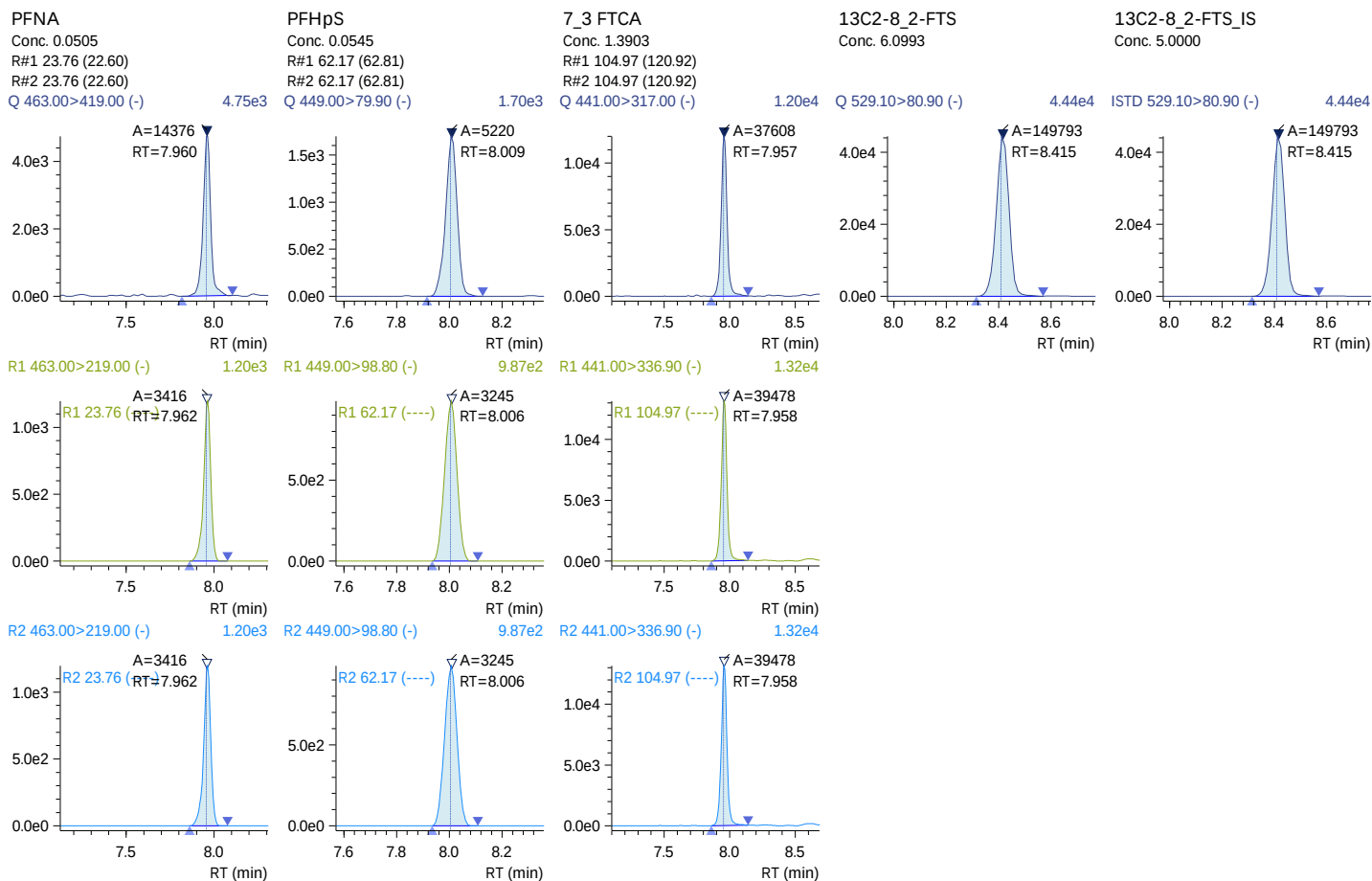


240118_006 (continued)



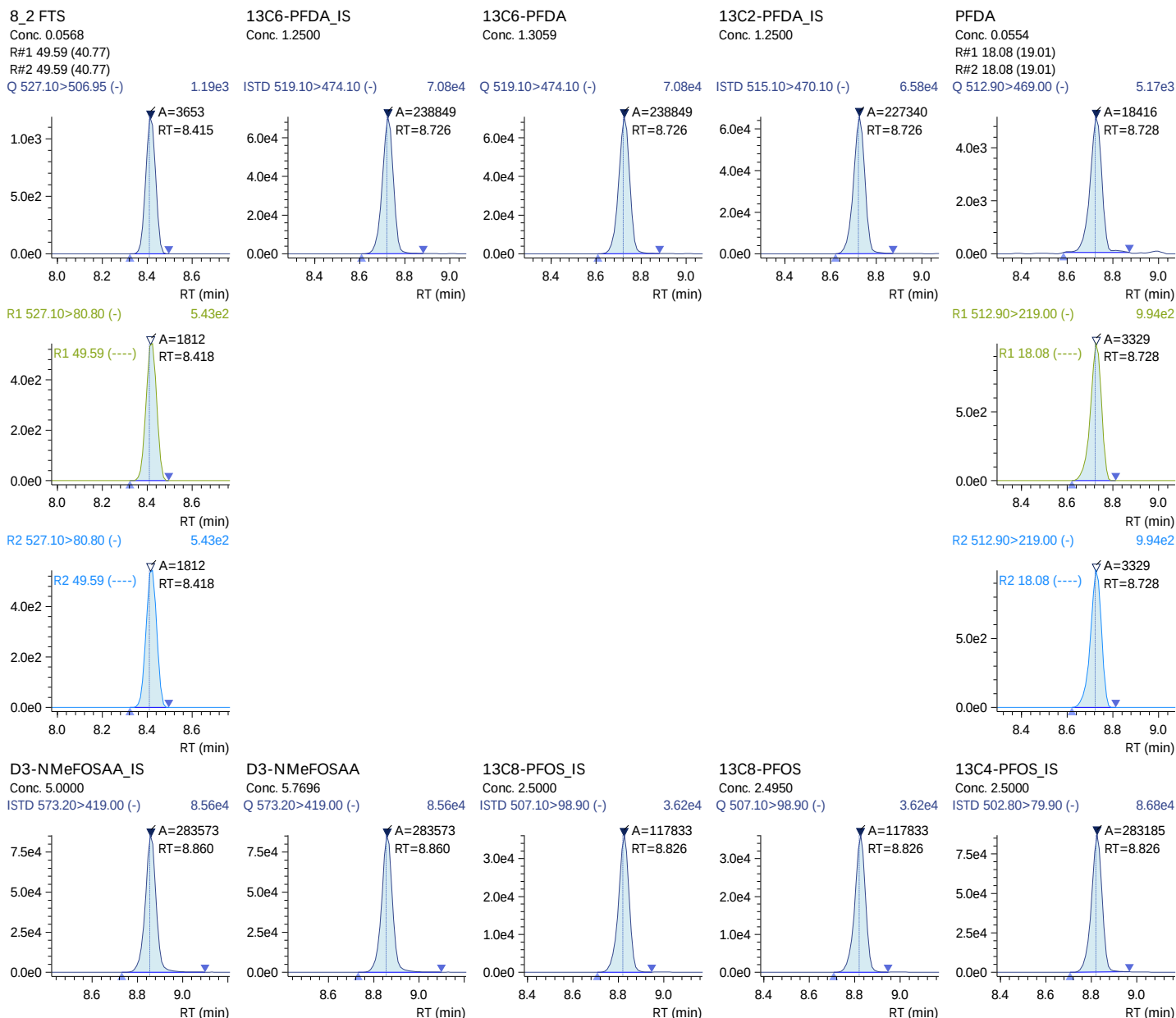


240118_006 (continued)



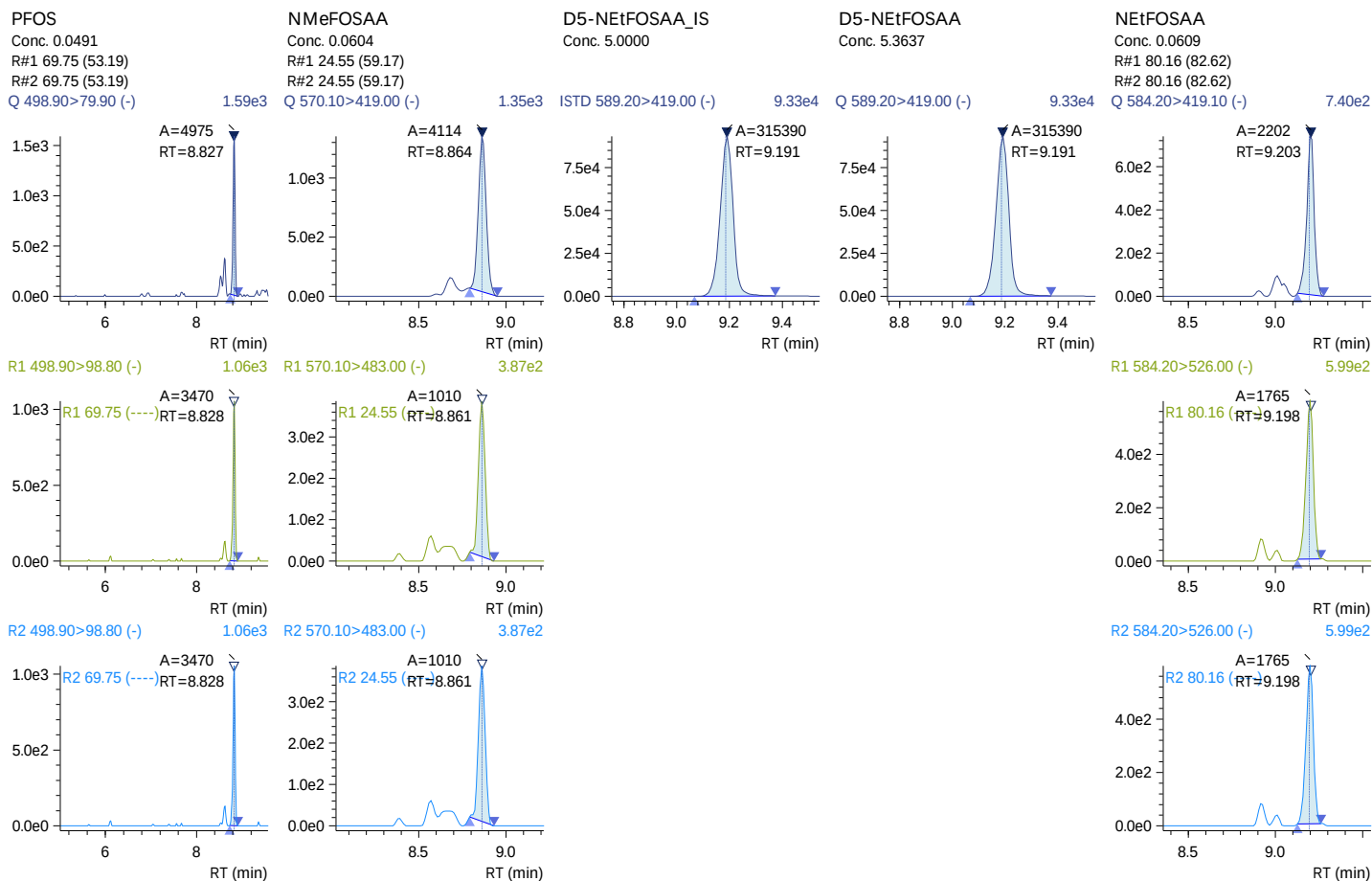


240118_006 (continued)





240118_006 (continued)

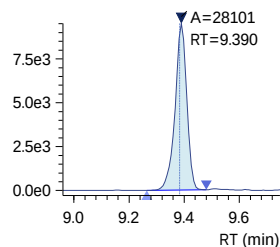




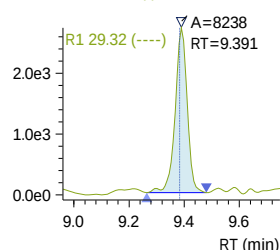
240118_006 (continued)

9-Cl-PF3ONS

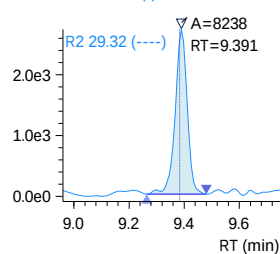
Conc. 0.0573
R#1 29.32 (31.76)
R#2 29.32 (31.76)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-) 2.75e3

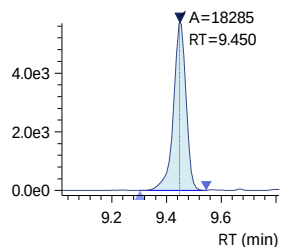


R2 532.80>353.00 (-) 2.75e3

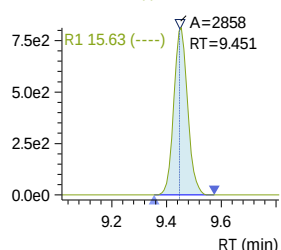


PFUnDA

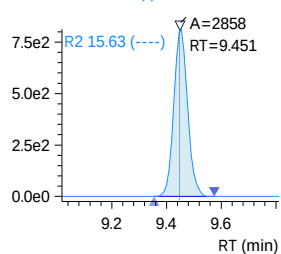
Conc. 0.0559
R#1 15.63 (12.31)
R#2 15.63 (12.31)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-) 8.12e2

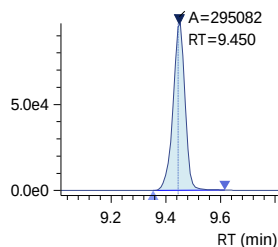


R2 563.10>269.10 (-) 8.12e2



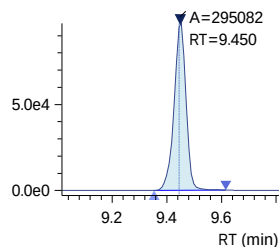
13C7-PFUnDA_IS

Conc. 1.2500
ISTD 570.00>525.10 (-)



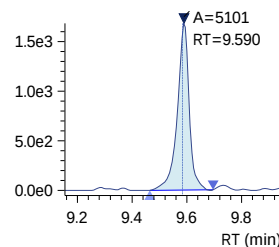
13C7-PFUnDA

Conc. 1.3525
Q 570.00>525.10 (-)

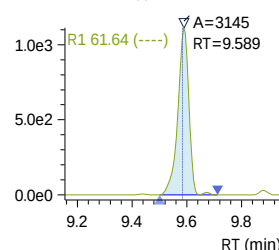


PFNS

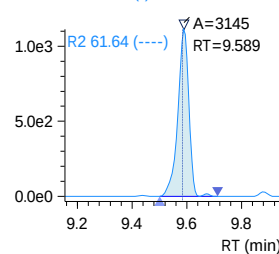
Conc. 0.0570
R#1 61.64 (63.31)
R#2 61.64 (63.31)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-) 1.11e3

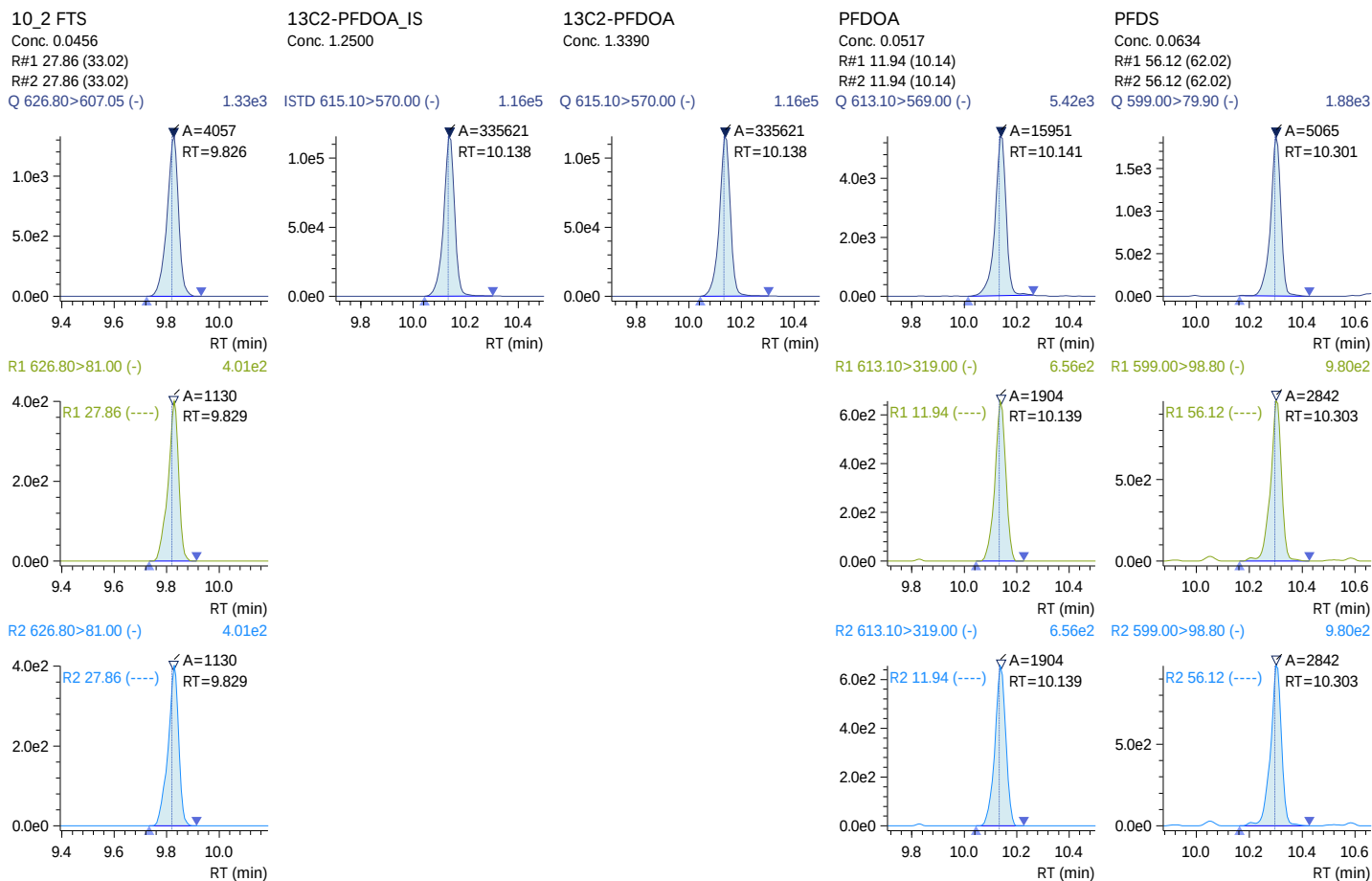


R2 548.80>98.80 (-) 1.11e3



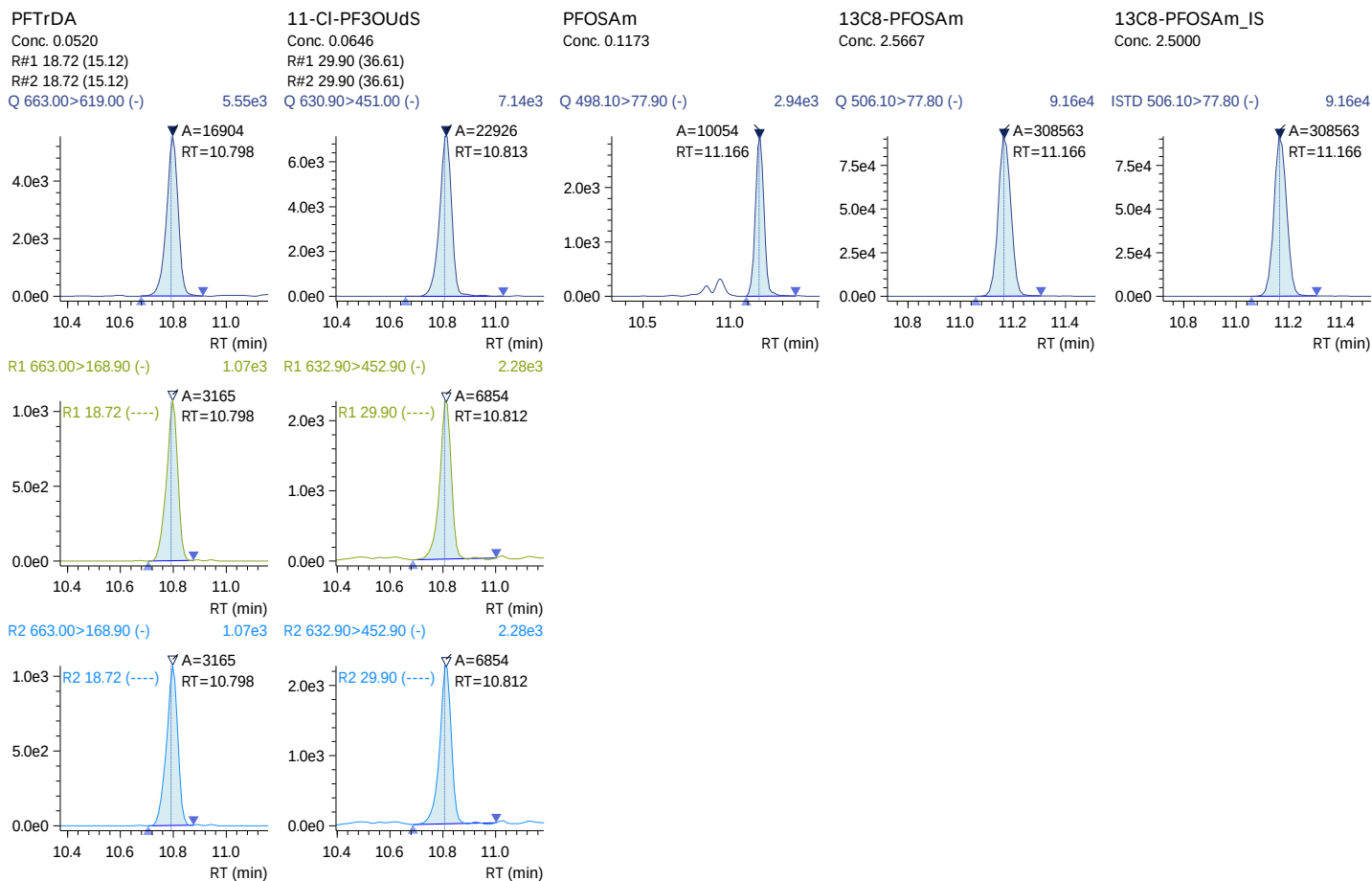


240118_006 (continued)



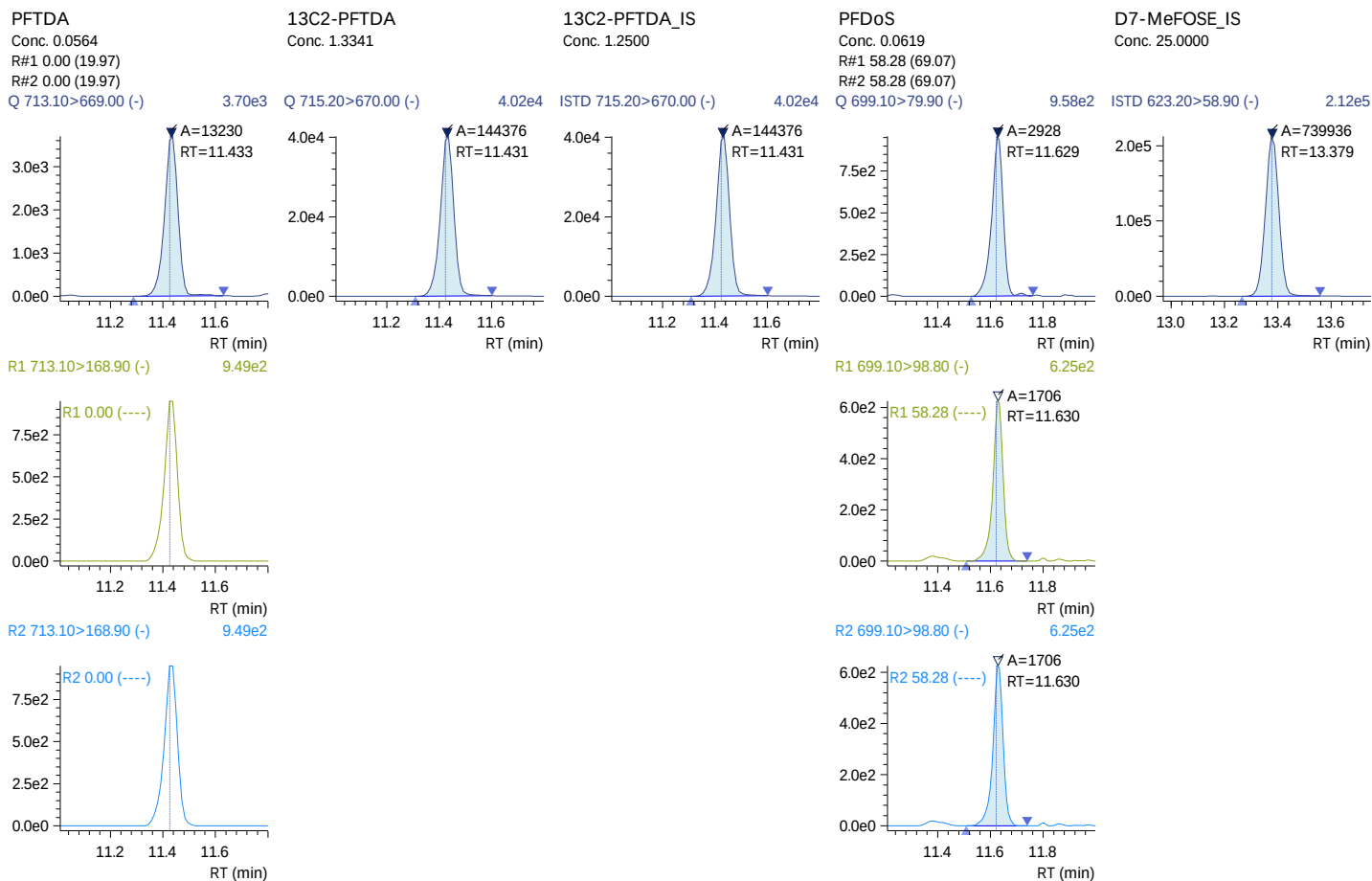


240118_006 (continued)





240118_006 (continued)





240118_006 (continued)

D7-MeFOSE
 Conc. 24.9648

MeFOSE
 Conc. ----

¹³C2-PFHxDA_IS
 Conc. 2.5000

¹³C2-PFHxDA
 Conc. 2.6536

PFHxDA
 Conc. 0.0561
 R#1 13.79 (11.64)
 R#2 13.79 (11.64)

Q 623.20>58.90 (-)

2.12e5

Q 616.10>59.00 (-)

2.72e2

ISTD 815.00>770.05 (-)

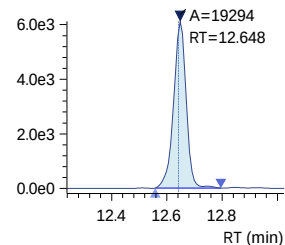
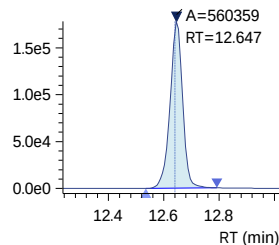
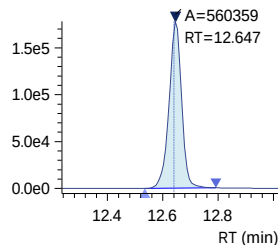
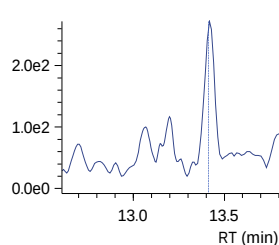
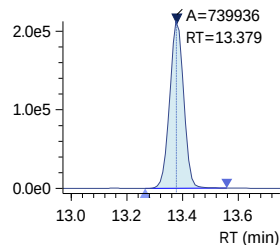
1.78e5

Q 815.00>770.05 (-)

1.78e5

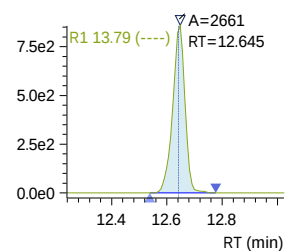
Q 813.00>768.95 (-)

6.12e3



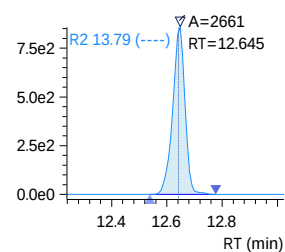
R1 813.00>218.95 (-)

8.57e2



R2 813.00>218.95 (-)

8.57e2





240118_006 (continued)

D3-MeFOSA
 Conc. 2.4918

D3-MeFOSA_IS
 Conc. 2.5000

MeFOSA
 Conc. 0.0560
 R#1 0.00 (149.05)
 R#2 0.00 (149.05)

D9-EtFOSE_IS
 Conc. 25.0000

D9-EtFOSE
 Conc. 24.9296

Q 515.00>219.00 (-)

1.74e4

ISTD 515.00>219.00 (-)

1.74e4

Q 511.90>219.00 (-)

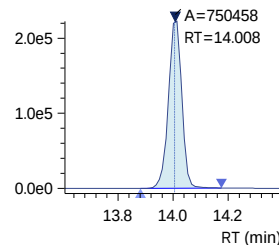
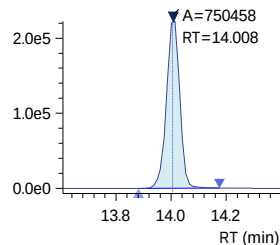
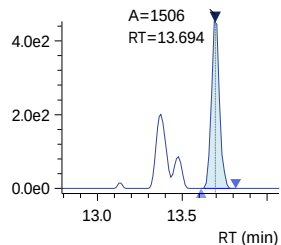
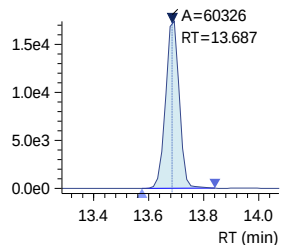
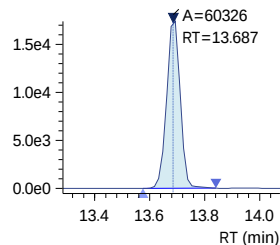
4.53e2

ISTD 639.20>58.90 (-)

2.22e5

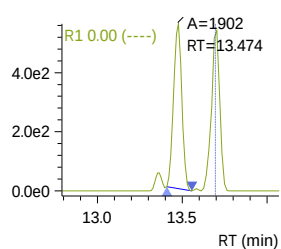
Q 639.20>58.90 (-)

2.22e5



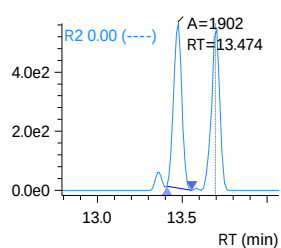
R1 511.90>169.00 (-)

5.65e2



R2 511.90>169.00 (-)

5.65e2





240118_006 (continued)

EtFOSE
 Conc. 0.0588

D5-EtFOSAm
 Conc. 2.4659

D5-EtFOSAm_IS
 Conc. 2.5000

EtFOSAm
 Conc. 0.0621

PFODA
 Conc. 0.0561

Q 630.00>59.00 (-)

4.11e2

Q 531.10>219.00 (-)

2.46e4

ISTD 531.10>219.00 (-)

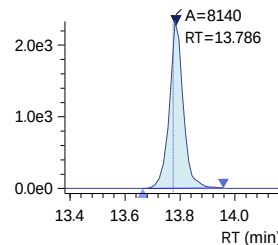
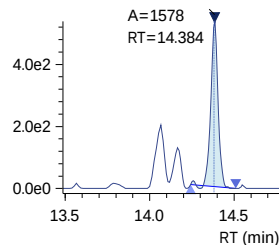
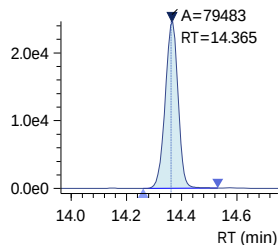
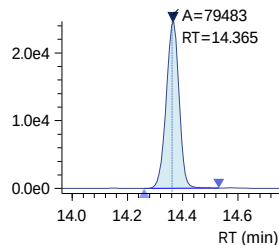
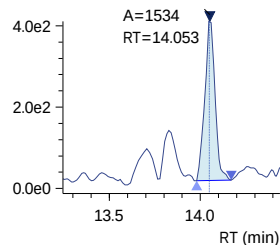
2.46e4

Q 526.00>219.00 (-)

5.39e2

Q 913.00>868.65 (-)

2.33e3

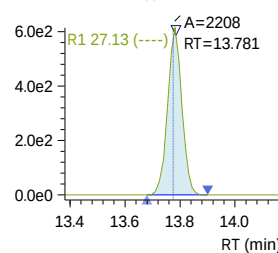
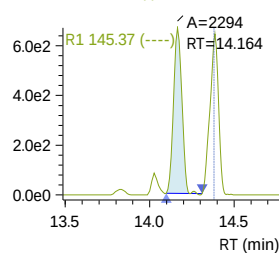


R1 526.00>169.00 (-)

6.72e2

R1 913.00>169.00 (-)

6.14e2

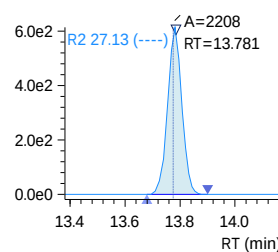
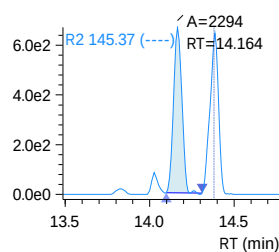


R2 526.00>169.00 (-)

6.72e2

R2 913.00>169.00 (-)

6.14e2





240118_007

Sample ID: 1633 ICAL 0.1PPB
Date Acquired: 1/18/2024 2:27:50 PM
Acquired by: System Administrator
Data File: 240118_007
Vial: 2 | Inj. Volume: 10.0000uL | Tray: 1

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	1323938	----	----	----	----	----	----	
13C4-PFBA_IS	216.80>171.90	----	1323938	----	----	----	----	----	----	
13C3-PFBA_IS	216.00>172.00	----	588848	----	----	----	----	----	----	
PFBA	212.80>169.05	----	12114	----	----	----	----	----	----	
PFMPA	229.00>84.90	----	9475	----	----	----	----	----	----	
3_3 FTCA	241.00>177.10	241.00>117.00	16133	24839	153.97	141.17	24839	153.97	141.17	
13C5-PFPeA	268.30>223.00	----	141960	----	----	----	----	----	----	
13C5-PFPeA_IS	268.30>223.00	----	141960	----	----	----	----	----	----	
PFPeA	263.00>219.00	----	20016	----	----	----	----	----	----	
PFMBA	279.00>84.95	----	13370	----	----	----	----	----	----	
13C2-4_2 FTS	329.10>80.90	----	185513	----	----	----	----	----	----	
13C2-4_2 FTS_IS	329.10>80.90	----	185513	----	----	----	----	----	----	
4_2 FTS	327.10>307.00	327.10>80.90	8314	2331	28.04	29.06	2331	28.04	29.06	
13C3-PFBS_IS	302.10>79.90	----	333703	----	----	----	----	----	----	
PFBS	298.70>79.90	298.70>98.80	14873	7654	51.46	46.72	7654	51.46	46.72	
13C3-PFBS	302.10>79.90	----	333703	----	----	----	----	----	----	
NFDHA	295.00>201.00	295.00>84.90	14637	6019	41.12	40.25	6019	41.12	40.25	
13C5-PFHxA	318.00>273.00	----	701158	----	----	----	----	----	----	
13C5-PFHxA_IS	318.00>273.00	----	701158	----	----	----	----	----	----	
13C2-PFHxA_IS	315.10>270.00	----	664999	----	----	----	----	----	----	
PFHxA	313.00>269.00	----	23282	----	----	----	----	----	----	
PFEESA	314.80>135.00	314.80>82.90	66265	4209	6.35	6.11	4209	6.35	6.11	
13C3-HFPO-DA	286.90>168.90	----	604622	----	----	----	----	----	----	
13C3-HFPO-DA_IS	286.90>168.90	----	604622	----	----	----	----	----	----	
HFPO-DA	284.90>168.90	284.90>184.90	7258	4042	55.70	65.61	4042	55.70	65.61	
5_3 FTCA	341.00>237.05	341.00>217.00	92840	140561	151.40	158.86	140561	151.40	158.86	
PFPeS	349.10>79.90	349.10>98.80	12097	6937	57.34	55.80	6937	57.34	55.80	
13C4-PFHpA	367.10>322.00	----	594464	----	----	----	----	----	----	
13C4-PFHpA_IS	367.10>322.00	----	594464	----	----	----	----	----	----	
PFHpA	363.10>319.00	363.10>169.00	33505	6132	18.30	21.50	6132	18.30	21.50	
DONA	376.90>250.90	376.90>84.80	45741	13575	29.68	29.66	13575	29.68	29.66	
13C2-6_2 FTS_IS	429.10>80.90	----	163769	----	----	----	----	----	----	
13C2-6_2 FTS	429.10>80.90	----	163769	----	----	----	----	----	----	
6_2 FTS	427.10>407.00	427.10>80.90	8104	2955	36.46	41.15	2955	36.46	41.15	
13C4-PFOA_IS	417.10>172.00	----	45445	----	----	----	----	----	----	
13C8-PFOA_IS	421.10>376.00	----	601542	----	----	----	----	----	----	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240118_007 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	601542	----	----	----	----	----	----	----
PFOA	413.00>369.00	413.00>169.00	22726	7700	33.88	31.89	7700	33.88	31.89	
13C3-PFHxS	402.10>79.90	----	235487	----	----	----	----	----	----	----
13C3-PFHxS_IS	402.10>79.90	----	235487	----	----	----	----	----	----	----
PFHxS	398.70>79.90	398.70>98.90	12132	7187	59.24	56.62	7187	59.24	56.62	
18O2-PFHxS_IS	403.00>83.90	----	224476	----	----	----	----	----	----	----
13C9-PFNA_IS	472.10>427.00	----	299675	----	----	----	----	----	----	----
13C9-PFNA	472.10>427.00	----	299675	----	----	----	----	----	----	----
13C5-PFNA_IS	468.00>423.00	----	315542	----	----	----	----	----	----	----
PFNA	463.00>419.00	463.00>219.00	23138	5021	21.70	23.17	5021	21.70	23.17	
PFHpS	449.00>79.90	449.00>98.80	8515	5054	59.36	56.96	5054	59.36	56.96	
7_3 FTCA	441.00>317.00	441.00>336.90	113753	131554	115.65	117.47	131554	115.65	117.47	
13C2-8_2-FTS	529.10>80.90	----	145227	----	----	----	----	----	----	----
13C2-8_2-FTS_IS	529.10>80.90	----	145227	----	----	----	----	----	----	----
8_2 FTS	527.10>506.95	527.10>80.80	4600	2143	46.59	49.59	2143	46.59	49.59	
13C6-PFDA_IS	519.10>474.10	----	240568	----	----	----	----	----	----	----
13C6-PFDA	519.10>474.10	----	240568	----	----	----	----	----	----	----
13C2-PFDA_IS	515.10>470.10	----	242916	----	----	----	----	----	----	----
PFDA	512.90>469.00	512.90>219.00	28917	3872	13.39	19.00	3872	13.39	19.00	
D3-NMeFOSAA_IS	573.20>419.00	----	258147	----	----	----	----	----	----	----
D3-NMeFOSAA	573.20>419.00	----	258147	----	----	----	----	----	----	----
13C8-PFOS_IS	507.10>98.90	----	118069	----	----	----	----	----	----	----
13C8-PFOS	507.10>98.90	----	118069	----	----	----	----	----	----	----
13C4-PFOS_IS	502.80>79.90	----	282518	----	----	----	----	----	----	----
PFOS	498.90>79.90	498.90>98.80	11920	5378	45.12	52.47	5378	45.12	52.47	
NMeFOSAA	570.10>419.00	570.10>483.00	7957	3246	40.80	55.15	3246	40.80	55.15	
D5-NeFOSAA_IS	589.20>419.00	----	320494	----	----	----	----	----	----	----
D5-NeFOSAA	589.20>419.00	----	320494	----	----	----	----	----	----	----
NeFOSAA	584.20>419.10	584.20>526.00	3243	2715	83.71	81.95	2715	83.71	81.95	
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	46416	15084	32.50	32.76	15084	32.50	32.76	
PFUnDA	563.10>519.00	563.10>269.10	25490	3628	14.23	13.12	3628	14.23	13.12	
13C7-PFUnDA_IS	570.00>525.10	----	290019	----	----	----	----	----	----	----
13C7-PFUnDA	570.00>525.10	----	290019	----	----	----	----	----	----	----
PFNS	548.80>79.90	548.80>98.80	8984	5781	64.35	65.22	5781	64.35	65.22	
10_2 FTS	626.80>607.05	626.80>81.00	7907	2717	34.37	37.13	2717	34.37	37.13	
13C2-PFDOA_IS	615.10>570.00	----	330237	----	----	----	----	----	----	----
13C2-PFDOA	615.10>570.00	----	330237	----	----	----	----	----	----	----
PFDOA	613.10>569.00	613.10>319.00	21109	2348	11.12	11.29	2348	11.12	11.29	
PFDS	599.00>79.90	599.00>98.80	7754	4190	54.03	60.18	4190	54.03	60.18	
PFTDA	663.00>619.00	663.00>168.90	25207	4162	16.51	17.64	4162	16.51	17.64	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240118_007 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	33734	12828	38.03	36.44	12828	38.03	36.44	
PFOSAm	498.10>77.90	----	20717	----	----	----	----	----	----	
13C8-PFOSAm	506.10>77.80	----	304301	----	----	----	----	----	----	
13C8-PFOSAm_IS	506.10>77.80	----	304301	----	----	----	----	----	----	
PFTDA	713.10>669.00	713.10>168.90	18542	4556	24.57	22.96	4556	24.57	22.96	
13C2-PFTDA	715.20>670.00	----	141033	----	----	----	----	----	----	
13C2-PFTDA_IS	715.20>670.00	----	141033	----	----	----	----	----	----	
PFDoS	699.10>79.90	699.10>98.80	4787	2975	62.15	67.40	2975	62.15	67.40	
D7-MeFOSE_IS	623.20>58.90	----	720120	----	----	----	----	----	----	
D7-MeFOSE	623.20>58.90	----	720120	----	----	----	----	----	----	
MeFOSE	616.10>59.00	----	3379	----	----	----	----	----	----	
13C2-PFHxDA_IS	815.00>770.05	----	546960	----	----	----	----	----	----	
13C2-PFHxDA	815.00>770.05	----	546960	----	----	----	----	----	----	
PFHxDA	813.00>768.95	813.00>218.95	26427	3392	12.84	13.90	3392	12.84	13.90	
D3-MeFOSA	515.00>219.00	----	62455	----	----	----	----	----	----	
D3-MeFOSA_IS	515.00>219.00	----	62455	----	----	----	----	----	----	
MeFOSA	511.90>219.00	511.90>169.00	4164	7086	170.15	140.79	7086	170.15	140.79	
D9-EtFOSE_IS	639.20>58.90	----	749002	----	----	----	----	----	----	
D9-EtFOSE	639.20>58.90	----	749002	----	----	----	----	----	----	
EtFOSE	630.00>59.00	----	4233	----	----	----	----	----	----	
D5-EtFOSAm	531.10>219.00	----	80456	----	----	----	----	----	----	
D5-EtFOSAm_IS	531.10>219.00	----	80456	----	----	----	----	----	----	
EtFOSAm	526.00>219.00	526.00>169.00	4199	8217	195.70	163.90	8217	195.70	163.90	
PFODA	913.00>868.65	913.00>169.00	13821	3635	26.30	27.03	3635	26.30	27.03	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
 IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240118_007

Sample ID: 1633 ICAL 0.1PPB
Date Acquired: 1/18/2024 2:27:50 PM
Acquired by: System Administrator
Data File: 240118_007
Vial: 2 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Std. Conc.	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.414	0.000	-0.001	1323938	588848	13C3-PFBA_IS	10.0000	10.0589	ng/mL	
13C4-PFBA_IS	Auto	1.414	0.000	----	1323938	1323938	----	10.0000	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.415	0.000	----	588848	588848	----	5.0000	5.0000	ng/mL	
PFBA	Auto	1.420	0.004	0.006	12114	1323938	13C4-PFBA_IS	0.1000	0.1065	ng/mL	
PFMPA	Auto	2.436	0.004	-1.062	9475	141960	13C5-PFPeA_IS	0.1000	0.1033	ng/mL	
3_3 FTCA	Auto	3.010	0.006	-0.488	16133	141960	13C5-PFPeA_IS	5.0000	5.1248	ng/mL	
13C5-PFPeA	Auto	3.498	0.006	-1.490	141960	664999	13C2-PFHxA_IS	5.0000	4.7293	ng/mL	
13C5-PFPeA_IS	Auto	3.498	0.006	----	141960	141960	----	5.0000	5.0000	ng/mL	
PFPeA	Auto	3.501	0.006	0.003	20016	141960	13C5-PFPeA_IS	0.1000	0.1089	ng/mL	
PFMBA	Auto	4.034	0.009	0.536	13370	141960	13C5-PFPeA_IS	0.1000	0.1029	ng/mL	
13C2-4_2 FTS	Auto	4.670	0.009	-2.426	185513	224476	18O2-PFHxS_IS	5.0000	6.0055	ng/mL	
13C2-4_2 FTS_IS	Auto	4.670	0.009	----	185513	185513	----	5.0000	5.0000	ng/mL	
4_2 FTS	Auto	4.670	0.008	0.000	8314	185513	13C2-4_2 FTS_IS	0.0940	0.0911	ng/mL	
13C3-PFBS_IS	Auto	4.656	0.009	----	333703	333703	----	2.5000	2.5000	ng/mL	
PFBS	Auto	4.655	0.007	-0.001	14873	333703	13C3-PFBS_IS	0.0890	0.0871	ng/mL	
13C3-PFBS	Auto	4.656	0.009	-2.440	333703	224476	18O2-PFHxS_IS	2.5000	2.6196	ng/mL	
NFDHA	Auto	4.844	0.009	-0.144	14637	701158	13C5-PFHxA_IS	0.1000	0.0941	ng/mL	
13C5-PFHxA	Auto	4.988	0.010	0.000	701158	664999	13C2-PFHxA_IS	2.5000	2.5018	ng/mL	
13C5-PFHxA_IS	Auto	4.988	0.010	----	701158	701158	----	2.5000	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	4.988	0.009	----	664999	664999	----	2.5000	2.5000	ng/mL	
PFHxA	M	4.989	0.009	0.001	23282	701158	13C5-PFHxA_IS	0.1000	0.0914	ng/mL	
PFEESA	Auto	5.332	0.010	0.344	66265	701158	13C5-PFHxA_IS	0.0890	0.0844	ng/mL	
13C3-HFPO-DA	Auto	5.462	0.010	0.474	604622	664999	13C2-PFHxA_IS	10.0000	9.2879	ng/mL	
13C3-HFPO-DA_IS	Auto	5.462	0.010	----	604622	604622	----	10.0000	10.0000	ng/mL	
HFPO-DA	Auto	5.464	0.011	0.002	7258	604622	13C3-HFPO-DA_IS	0.1000	0.1087	ng/mL	
5_3 FTCA	Auto	5.916	0.010	0.928	92840	701158	13C5-PFHxA_IS	5.0000	5.1190	ng/mL	
PFPeS	Auto	6.029	0.011	-1.067	12097	235487	13C3-PFHxS_IS	0.0940	0.0978	ng/mL	
13C4-PFHpA	Auto	6.165	0.011	1.177	594464	664999	13C2-PFHxA_IS	2.5000	2.3431	ng/mL	
13C4-PFHpA_IS	Auto	6.165	0.011	----	594464	594464	----	2.5000	2.5000	ng/mL	
PFHpA	M	6.164	0.009	-0.001	33505	594464	13C4-PFHpA_IS	0.1000	0.1011	ng/mL	
DONA	Auto	6.531	0.011	1.069	45741	604622	13C3-HFPO-DA_IS	0.0950	0.0976	ng/mL	
13C2-6_2 FTS_IS	Auto	6.803	0.010	----	163769	163769	----	5.0000	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.803	0.010	-0.293	163769	224476	18O2-PFHxS_IS	5.0000	5.6053	ng/mL	
6_2 FTS	Auto	6.803	0.011	0.000	8104	163769	13C2-6_2 FTS_IS	0.0950	0.1087	ng/mL	
13C4-PFOA_IS	Auto	7.118	0.011	----	45445	45445	----	2.5000	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.118	0.011	----	601542	601542	----	2.5000	2.5000	ng/mL	
13C8-PFOA	Auto	7.118	0.011	0.000	601542	45445	13C4-PFOA_IS	2.5000	2.3682	ng/mL	
PFOA	Auto	7.119	0.009	0.001	22726	601542	13C8-PFOA_IS	0.1000	0.1026	ng/mL	
13C3-PFHxS	Auto	7.096	0.010	0.000	235487	224476	18O2-PFHxS_IS	2.5000	2.4441	ng/mL	
13C3-PFHxS_IS	Auto	7.096	0.010	----	235487	235487	----	2.5000	2.5000	ng/mL	
PFHxS	M	7.098	0.014	0.002	12132	235487	13C3-PFHxS_IS	0.0910	0.0882	ng/mL	
18O2-PFHxS_IS	Auto	7.096	0.010	----	224476	224476	----	2.5000	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.966	0.010	----	299675	299675	----	1.2500	1.2500	ng/mL	
13C9-PFNA	Auto	7.966	0.010	-0.001	299675	315542	13C5-PFNA_IS	1.2500	1.2129	ng/mL	
13C5-PFNA_IS	Auto	7.967	0.011	----	315542	315542	----	1.2500	1.2500	ng/mL	
PFNA	Auto	7.968	0.011	0.002	23138	299675	13C9-PFNA_IS	0.1000	0.1048	ng/mL	
PFHpS	Auto	8.015	0.011	-0.815	8515	118069	13C8-PFOS_IS	0.0950	0.0924	ng/mL	
7_3 FTCA	Auto	7.964	0.010	2.976	113753	701158	13C5-PFHxA_IS	5.0000	4.6983	ng/mL	
13C2-8_2-FTS	Auto	8.419	0.010	1.323	145227	224476	18O2-PFHxS_IS	5.0000	6.0512	ng/mL	
13C2-8_2-FTS_IS	Auto	8.419	0.010	----	145227	145227	----	5.0000	5.0000	ng/mL	
8_2 FTS	Auto	8.418	0.008	-0.001	4600	145227	13C2-8_2-FTS_IS	0.0960	0.0737	ng/mL	
13C6-PFDA_IS	Auto	8.730	0.010	----	240568	240568	----	1.2500	1.2500	ng/mL	
13C6-PFDA	Auto	8.730	0.010	-0.001	240568	242916	13C2-PFDA_IS	1.2500	1.2310	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_007 (continued)

(Table continued from previous page)

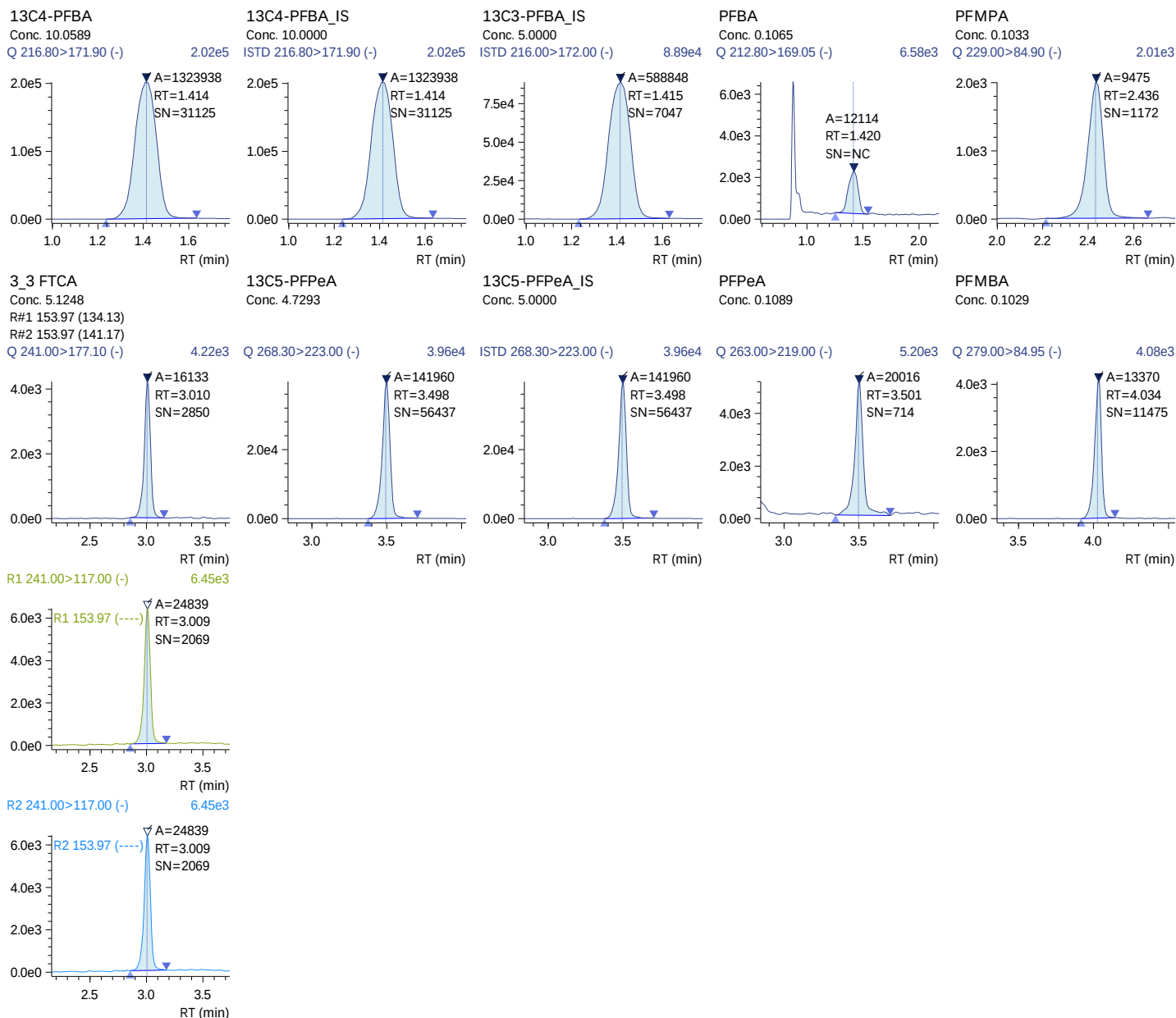
Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Std. Conc.	Conc.	Unit	Flag ID
13C2-PFDA_IS	Auto	8.731	0.010	----	242916	242916	----	1.2500	1.2500	ng/mL	
PFDA	Auto	8.732	0.011	0.002	28917	240568	13C6-PFDA_IS	0.1000	0.1006	ng/mL	
D3-NMeFOSAA_IS	Auto	8.865	0.010	----	258147	258147	----	5.0000	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.865	0.010	0.034	258147	282518	13C4-PFOS_IS	5.0000	5.2647	ng/mL	
13C8-PFOS_IS	Auto	8.830	0.010	----	118069	118069	----	2.5000	2.5000	ng/mL	
13C8-PFOS	Auto	8.830	0.010	-0.001	118069	282518	13C4-PFOS_IS	2.5000	2.5059	ng/mL	
13C4-PFOS_IS	Auto	8.831	0.011	----	282518	282518	----	2.5000	2.5000	ng/mL	
PFOS	M	8.833	0.011	0.003	11920	118069	13C8-PFOS_IS	0.0930	0.0971	ng/mL	
NMeFOSAA	M	8.873	0.012	0.008	7957	258147	D3-NMeFOSAA_IS	0.1000	0.1136	ng/mL	
D5-NetFOSAA_IS	Auto	9.197	0.011	----	320494	320494	----	5.0000	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.197	0.011	0.366	320494	282518	13C4-PFOS_IS	5.0000	5.4634	ng/mL	
NetFOSAA	M	9.208	0.013	0.011	3243	320494	D5-NetFOSAA_IS	0.1000	0.0758	ng/mL	
9-CI-PF3ONS	Auto	9.396	0.012	3.934	46416	604622	13C3-HFPO-DA_IS	0.0930	0.0931	ng/mL	
PFUnDA	Auto	9.457	0.010	0.001	25490	290019	13C7-PFUnDA_IS	0.1000	0.0917	ng/mL	
13C7-PFUnDA_IS	Auto	9.456	0.011	----	290019	290019	----	1.2500	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.456	0.011	0.725	290019	242916	13C2-PFDA_IS	1.2500	1.2441	ng/mL	
PFNS	Auto	9.594	0.010	0.764	8984	118069	13C8-PFOS_IS	0.0960	0.1001	ng/mL	
10_2_FTS	Auto	9.832	0.013	1.413	7907	145227	13C2-8_2-FTS_IS	0.0960	0.1041	ng/mL	
13C2-PFDOA_IS	Auto	10.144	0.011	----	330237	330237	----	1.2500	1.2500	ng/mL	
13C2-PFDOA	Auto	10.144	0.011	1.413	330237	242916	13C2-PFDA_IS	1.2500	1.2331	ng/mL	
PFDOA	Auto	10.145	0.011	0.001	21109	330237	13C2-PFDOA_IS	0.1000	0.0808	ng/mL	
PFDS	Auto	10.307	0.011	1.477	7754	118069	13C8-PFOS_IS	0.0970	0.0932	ng/mL	
PFTDA	Auto	10.802	0.010	-0.633	25207	141033	13C2-PFTDA_IS	0.1000	0.0957	ng/mL	
11-CI-PF3OUdS	Auto	10.817	0.011	5.355	33734	604622	13C3-HFPO-DA_IS	0.0940	0.0835	ng/mL	
PFOSAm	M	11.171	0.007	-0.004	20717	304301	13C8-PFOSAm_IS	0.2000	0.2065	ng/mL	
13C8-PFOSAm	Auto	11.175	0.010	2.344	304301	282518	13C4-PFOS_IS	2.5000	2.5372	ng/mL	
13C8-PFOSAm_IS	Auto	11.175	0.010	----	304301	304301	----	2.5000	2.5000	ng/mL	
PFTDA	Auto	11.437	0.012	0.002	18542	141033	13C2-PFTDA_IS	0.1000	0.0946	ng/mL	
13C2-PFTDA	Auto	11.435	0.011	2.704	141033	242916	13C2-PFDA_IS	1.2500	1.2196	ng/mL	
13C2-PFTDA_IS	Auto	11.435	0.011	----	141033	141033	----	1.2500	1.2500	ng/mL	
PFDoS	MI R1 R2	11.634	0.012	2.804	4787	118069	13C8-PFOS_IS	0.0970	0.1011	ng/mL	
D7-MeFOSE_IS	Auto	13.388	0.011	----	720120	720120	----	25.0000	25.0000	ng/mL	
D7-MeFOSE	Auto	13.388	0.011	4.557	720120	282518	13C4-PFOS_IS	25.0000	24.3536	ng/mL	
MeFOSE	M	13.428	0.015	0.040	3379	720120	D7-MeFOSE_IS	0.1000	0.1278	ng/mL	
13C2-PFHXA_IS	Auto	12.654	0.013	----	546960	546960	----	2.5000	2.5000	ng/mL	
13C2-PFHXA	Auto	12.654	0.013	3.923	546960	242916	13C2-PFDA_IS	2.5000	2.4240	ng/mL	
PFHXA	Auto	12.655	0.013	0.001	26427	546960	13C2-PFHXA_IS	0.1000	0.0900	ng/mL	
D3-MeFOSA	Auto	13.697	0.012	4.866	62455	282518	13C4-PFOS_IS	2.5000	2.5858	ng/mL	
D3-MeFOSA_IS	Auto	13.697	0.012	----	62455	62455	----	2.5000	2.5000	ng/mL	
MeFOSA	M	13.707	0.013	0.010	4164	62455	D3-MeFOSA_IS	0.1000	0.0925	ng/mL	
D9-EtFOSE_IS	Auto	14.017	0.011	----	749002	749002	----	25.0000	25.0000	ng/mL	
D9-EtFOSE	Auto	14.017	0.011	5.186	749002	282518	13C4-PFOS_IS	25.0000	24.9399	ng/mL	
EtFOSE	M	14.061	0.013	0.044	4233	749002	D9-EtFOSE_IS	0.1000	0.1074	ng/mL	
D5-EtFOSAm	Auto	14.373	0.011	5.542	80456	282518	13C4-PFOS_IS	2.5000	2.5020	ng/mL	
D5-EtFOSAm_IS	Auto	14.373	0.011	----	80456	80456	----	2.5000	2.5000	ng/mL	
EtFOSAm	M	14.389	0.009	0.016	4199	80456	D5-EtFOSAm_IS	0.1000	0.0896	ng/mL	
PFODA	Auto	13.787	0.012	1.133	13821	546960	13C2-PFHXA_IS	0.1000	0.1117	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_007 (continued)





240118_007 (continued)

13C2-4_2_FTS
Conc. 6.0055

13C2-4_2_FTS_IS
Conc. 5.0000

4_2_FTS
Conc. 0.0911
R#1 28.04 (34.14)
R#2 28.04 (29.06)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 0.0871
R#1 51.46 (47.53)
R#2 51.46 (46.72)

Q 329.10>80.90 (-)

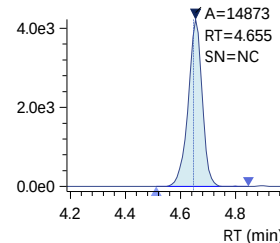
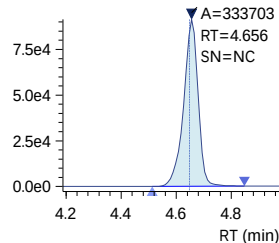
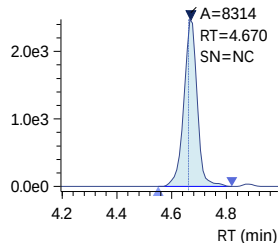
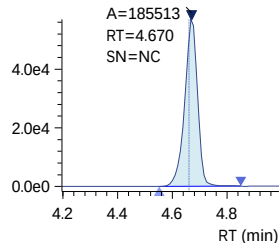
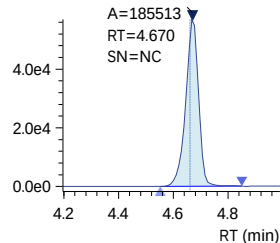
5.70e4 ISTD 329.10>80.90 (-)

5.70e4 Q 327.10>307.00 (-)

2.47e3 ISTD 302.10>79.90 (-)

9.15e4 Q 298.70>79.90 (-)

4.23e3

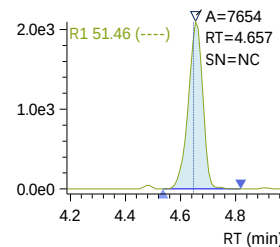
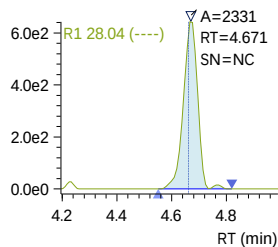


R1 327.10>80.90 (-)

6.43e2

R1 298.70>98.80 (-)

2.10e3

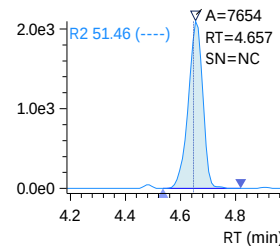
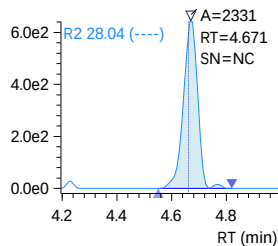


R2 327.10>80.90 (-)

6.43e2

R2 298.70>98.80 (-)

2.10e3





240118_007 (continued)

13C3-PFBS
Conc. 2.6196

NFDHA
Conc. 0.0941
R#1 41.12 (37.88)
R#2 41.12 (40.25)

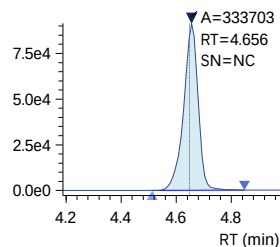
13C5-PFHxA
Conc. 2.5018

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

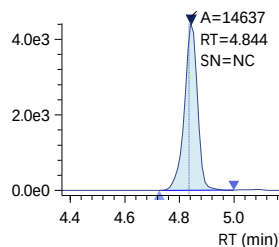
Q 302.10>79.90 (-)

9.15e4



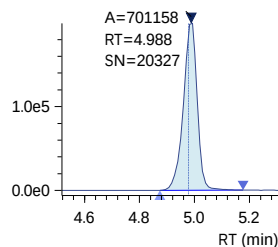
Q 295.00>201.00 (-)

4.42e3



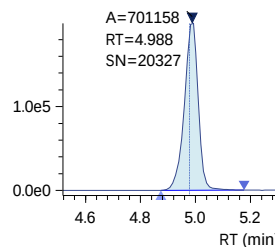
Q 318.00>273.00 (-)

1.99e5



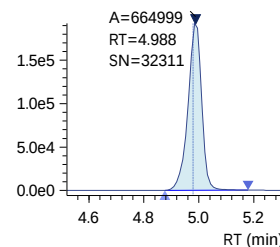
ISTD 318.00>273.00 (-)

1.99e5



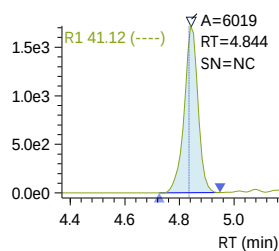
ISTD 315.10>270.00 (-)

1.92e5



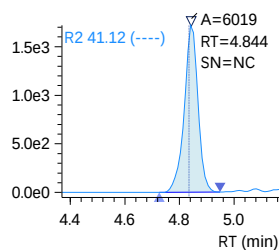
R1 295.00>84.90 (-)

1.72e3



R2 295.00>84.90 (-)

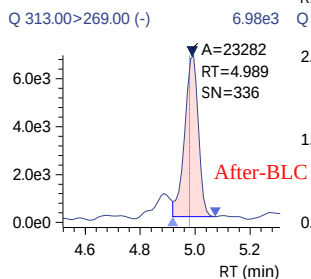
1.72e3





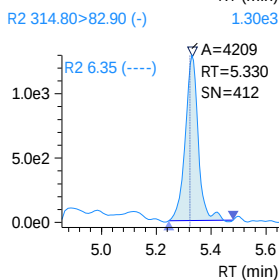
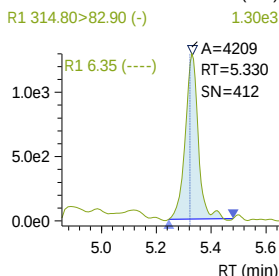
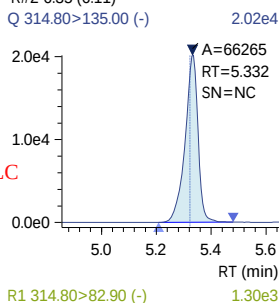
240118_007 (continued)

PFHxA
Conc. 0.0914

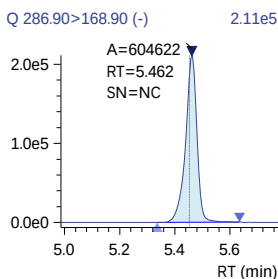


PFEESA
Conc. 0.0844

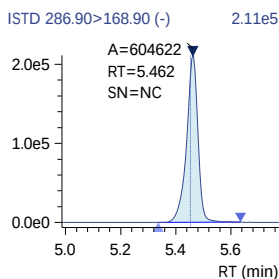
R#1 6.35 (5.88)
R#2 6.35 (6.11)



13C3-HFPO-DA
Conc. 9.2879

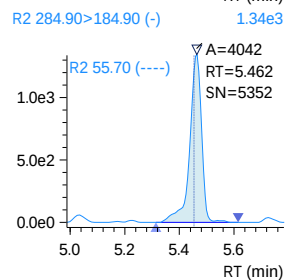
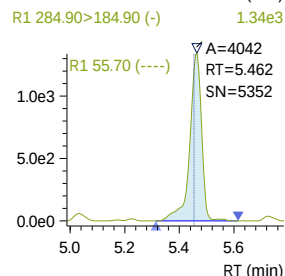
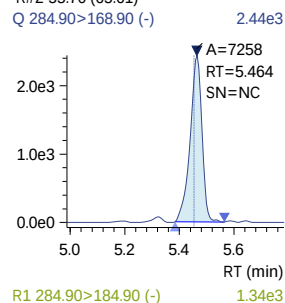


13C3-HFPO-DA_IS
Conc. 10.0000



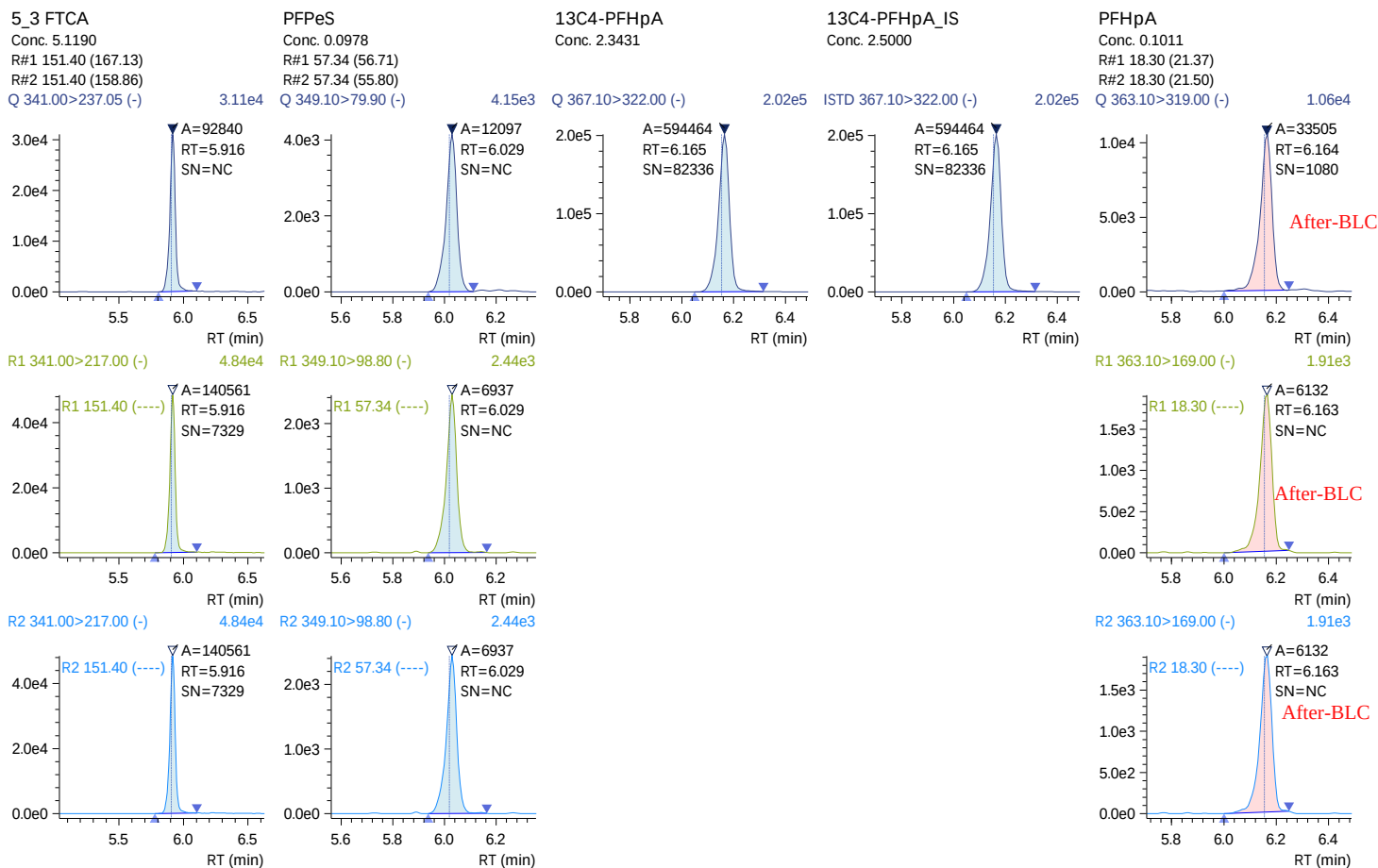
HFPO-DA
Conc. 0.1087

R#1 55.70 (63.80)
R#2 55.70 (65.61)





240118_007 (continued)

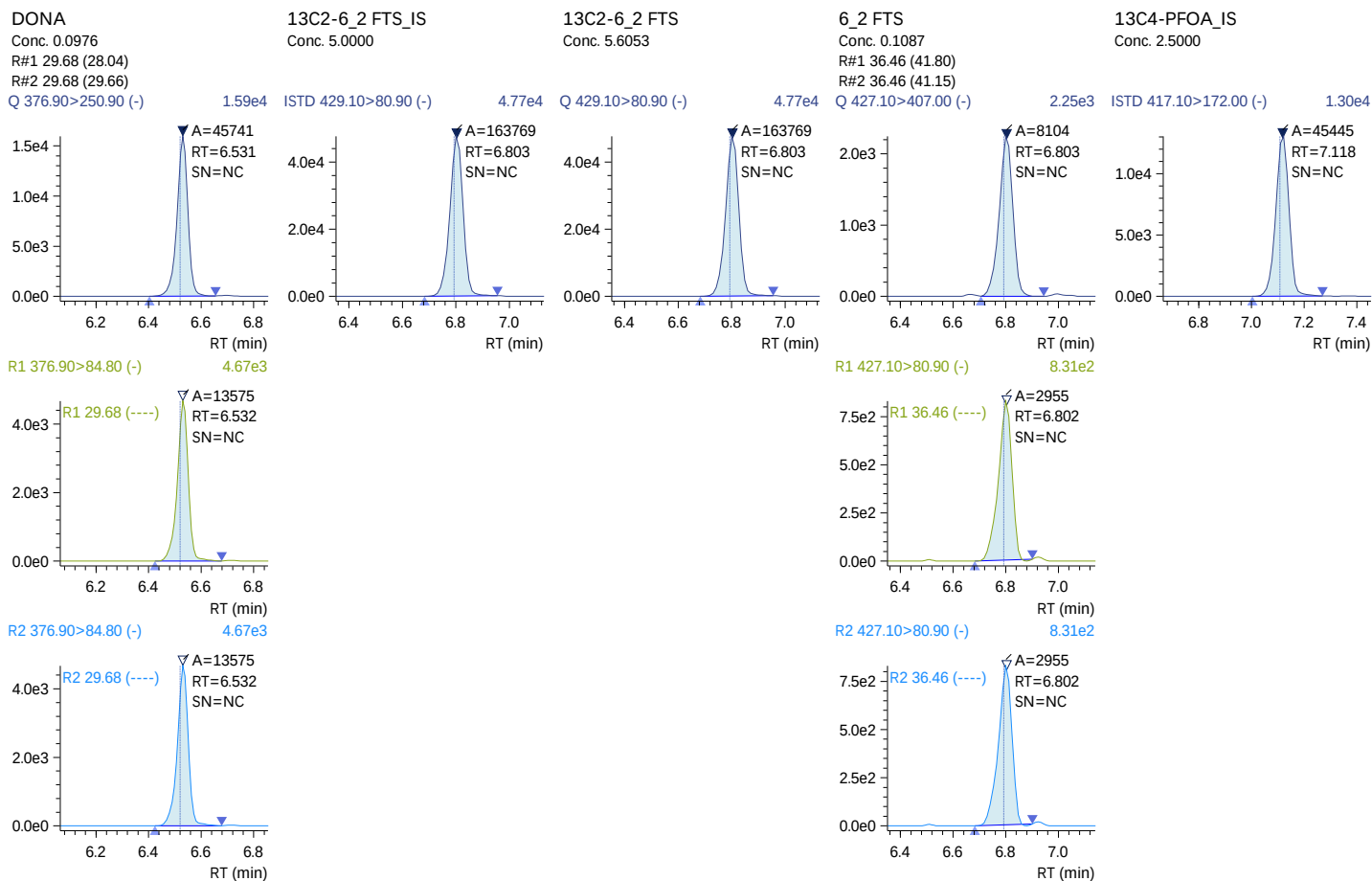


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_007 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_007 (continued)

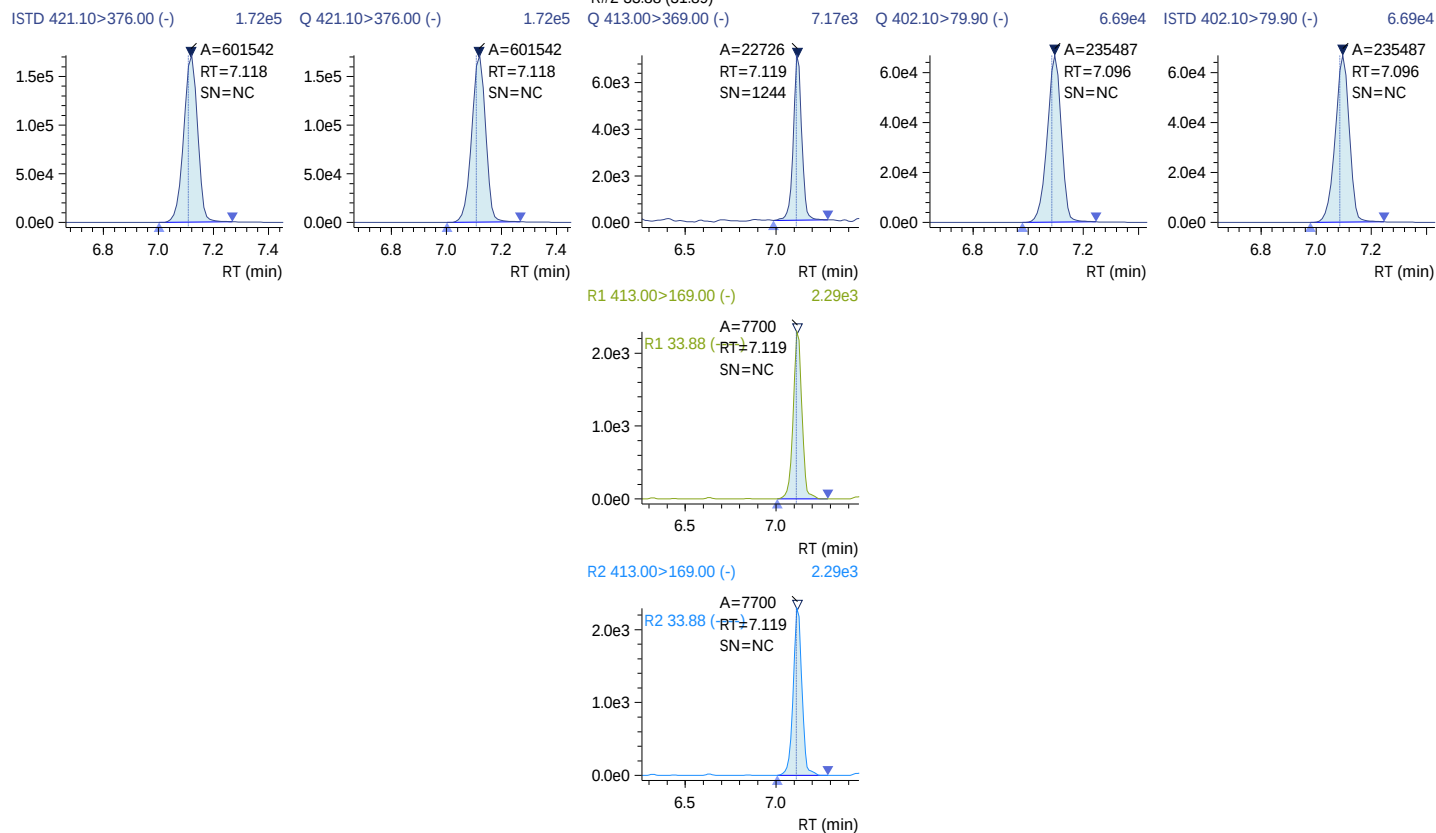
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.3682

PFOA
Conc. 0.1026
R#1 33.88 (29.05)
R#2 33.88 (31.89)

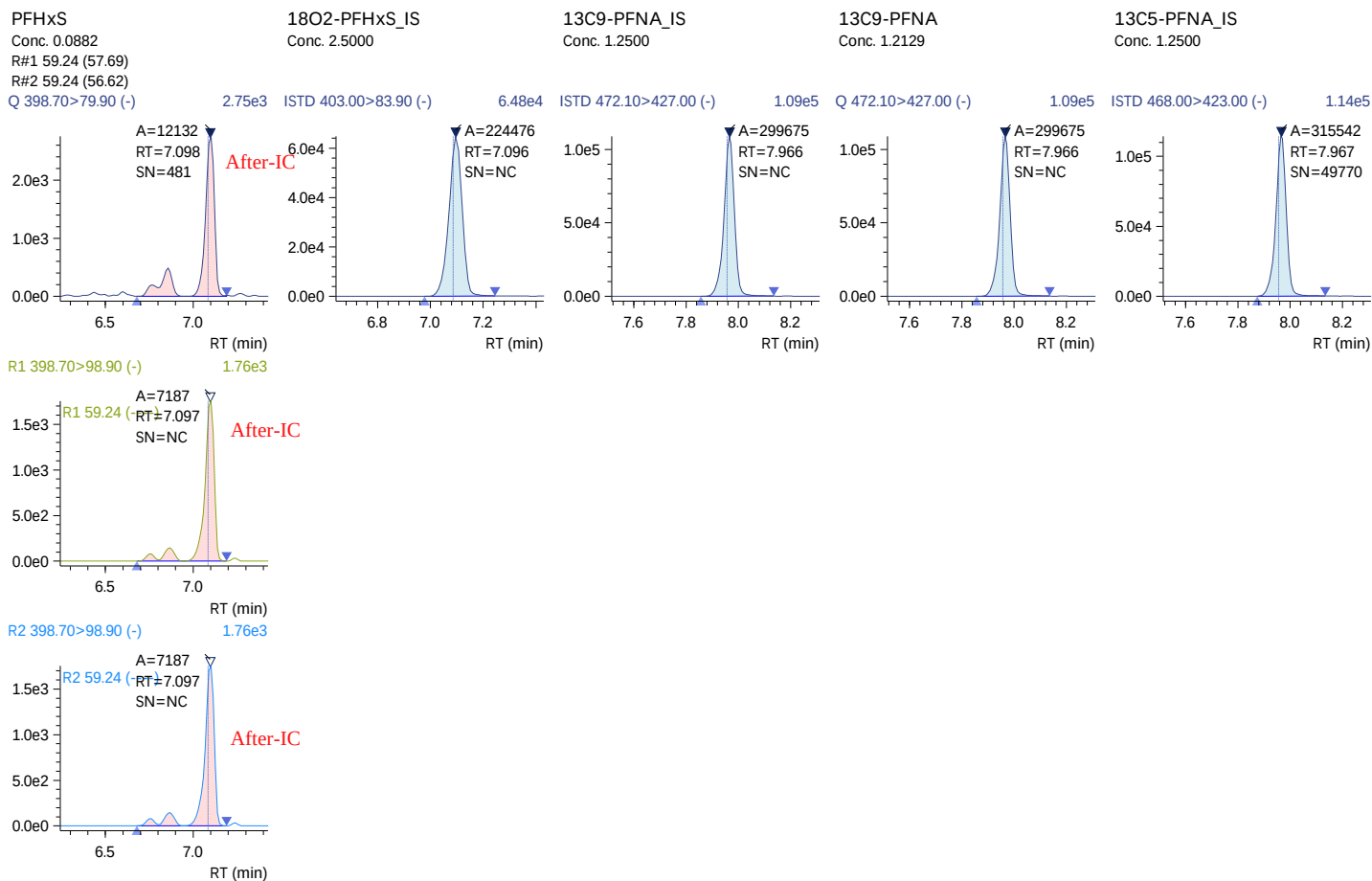
13C3-PFHxS
Conc. 2.4441

13C3-PFHxS_IS
Conc. 2.5000





240118_007 (continued)

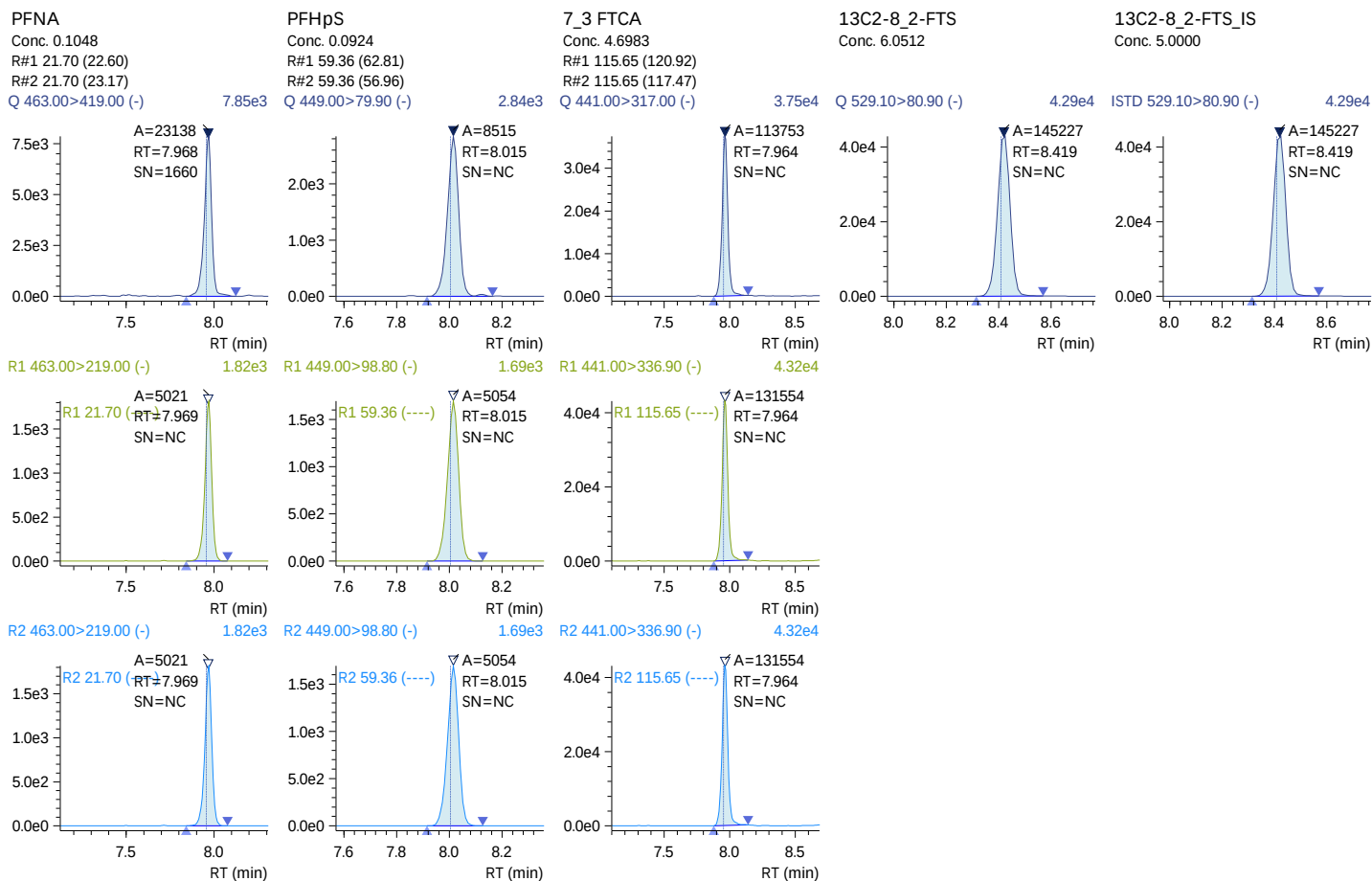


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_007 (continued)

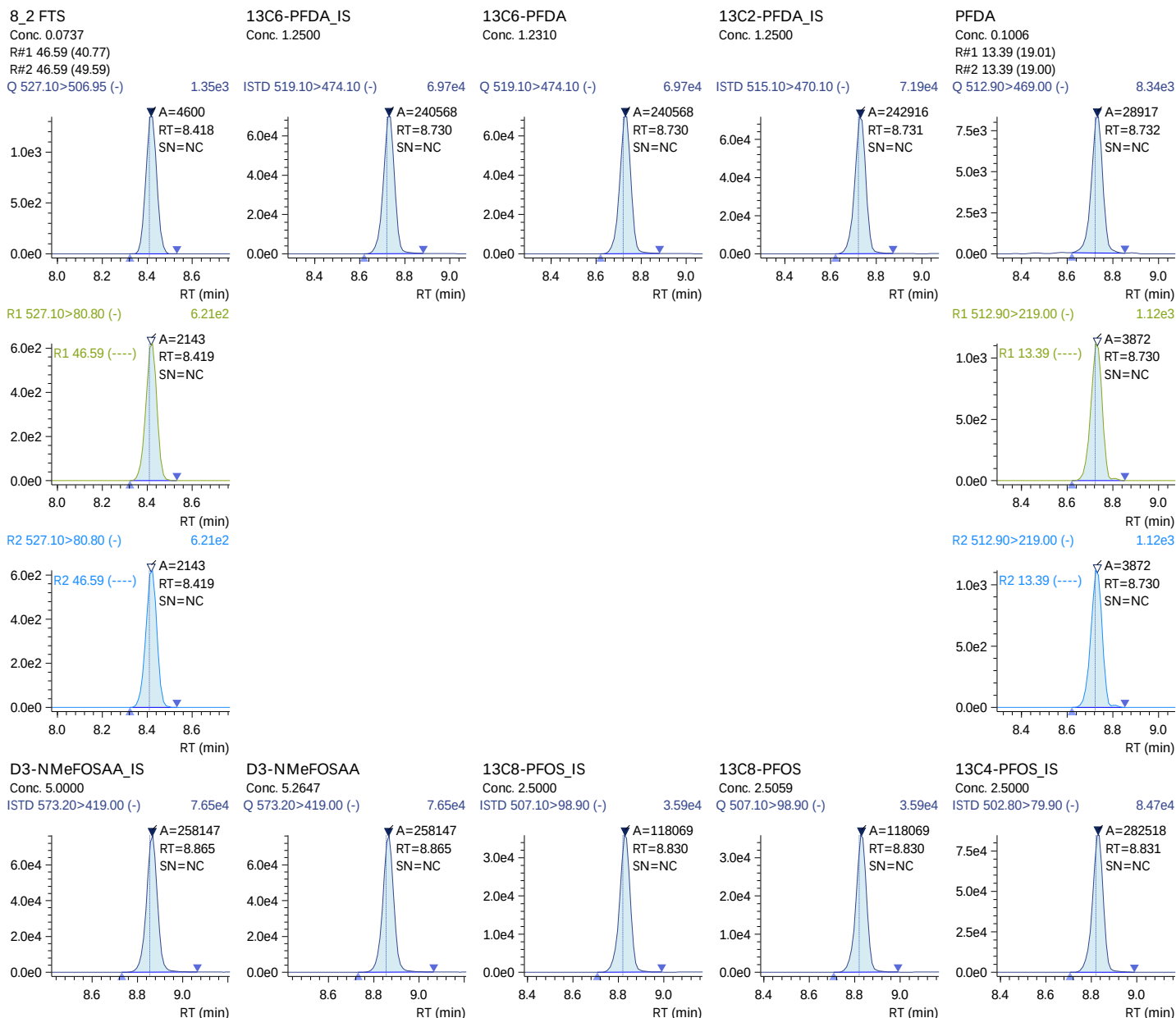


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_007 (continued)

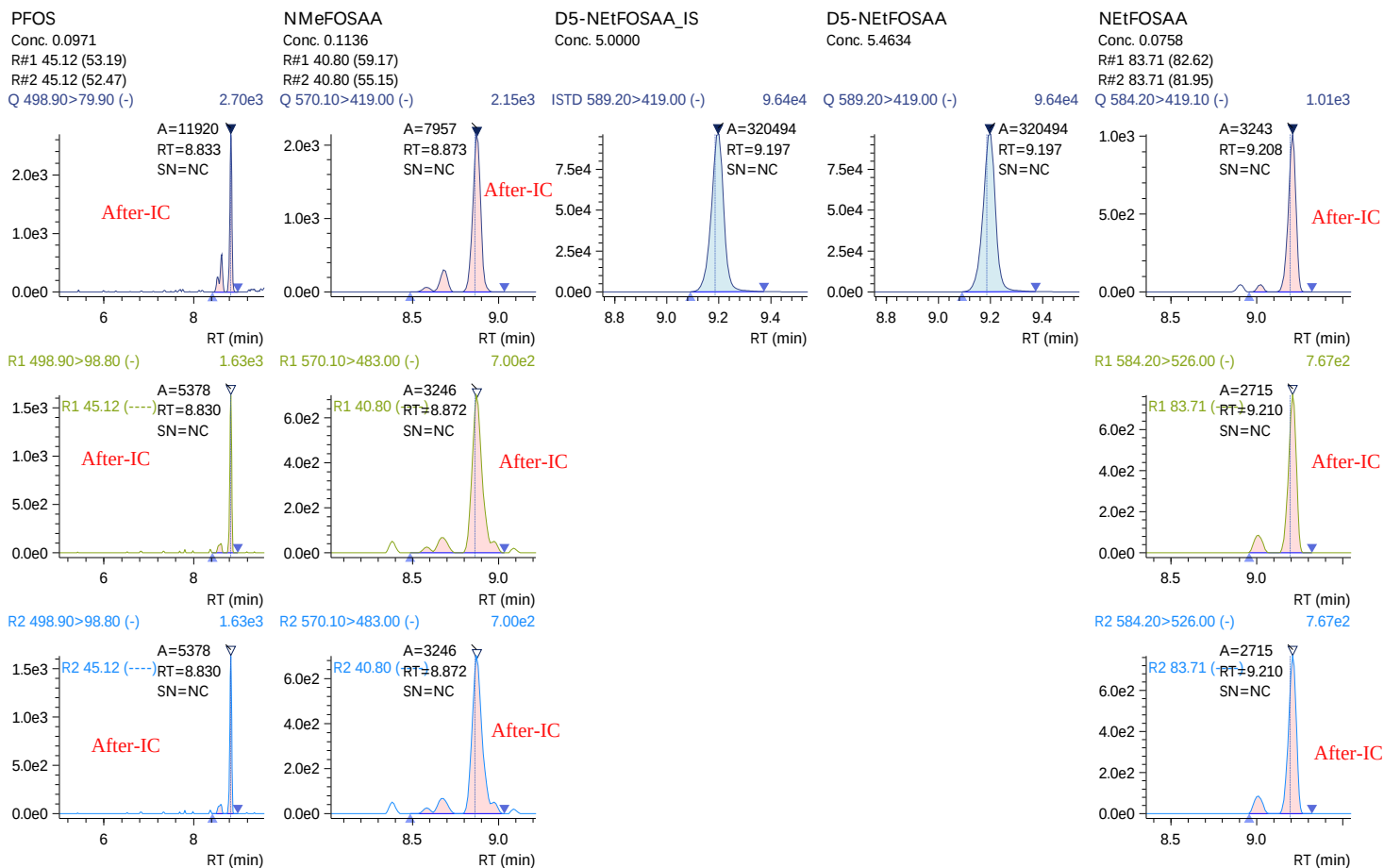


J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_007 (continued)

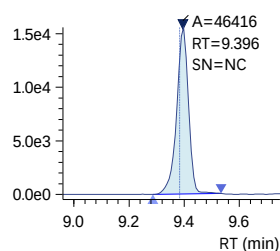




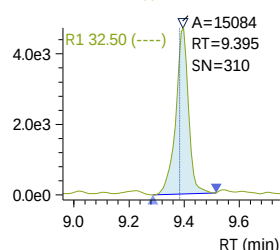
240118_007 (continued)

9-Cl-PF3ONS

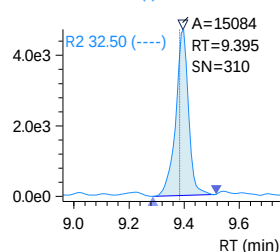
Conc. 0.0931
R#1 32.50 (31.76)
R#2 32.50 (32.76)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-)

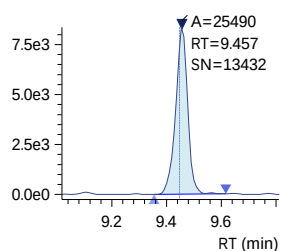


R2 532.80>353.00 (-)

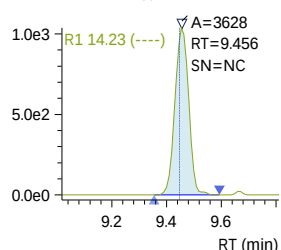


PFUnDA

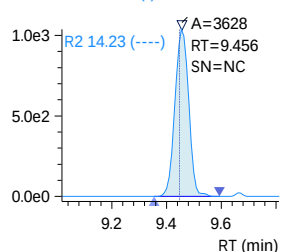
Conc. 0.0917
R#1 14.23 (12.31)
R#2 14.23 (13.12)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-)

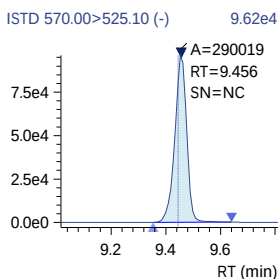


R2 563.10>269.10 (-)



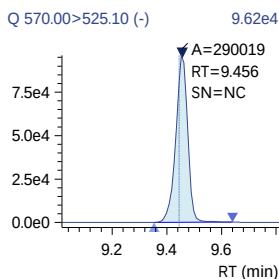
13C7-PFUnDA_IS

Conc. 1.2500



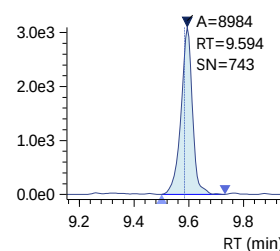
13C7-PFUnDA

Conc. 1.2441

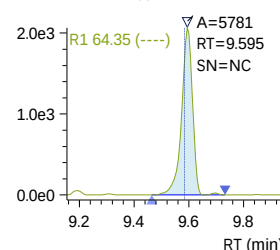


PFNS

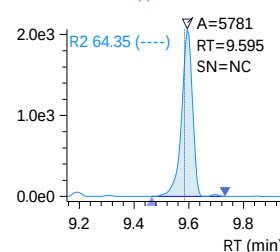
Conc. 0.1001
R#1 64.35 (63.31)
R#2 64.35 (65.22)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-)

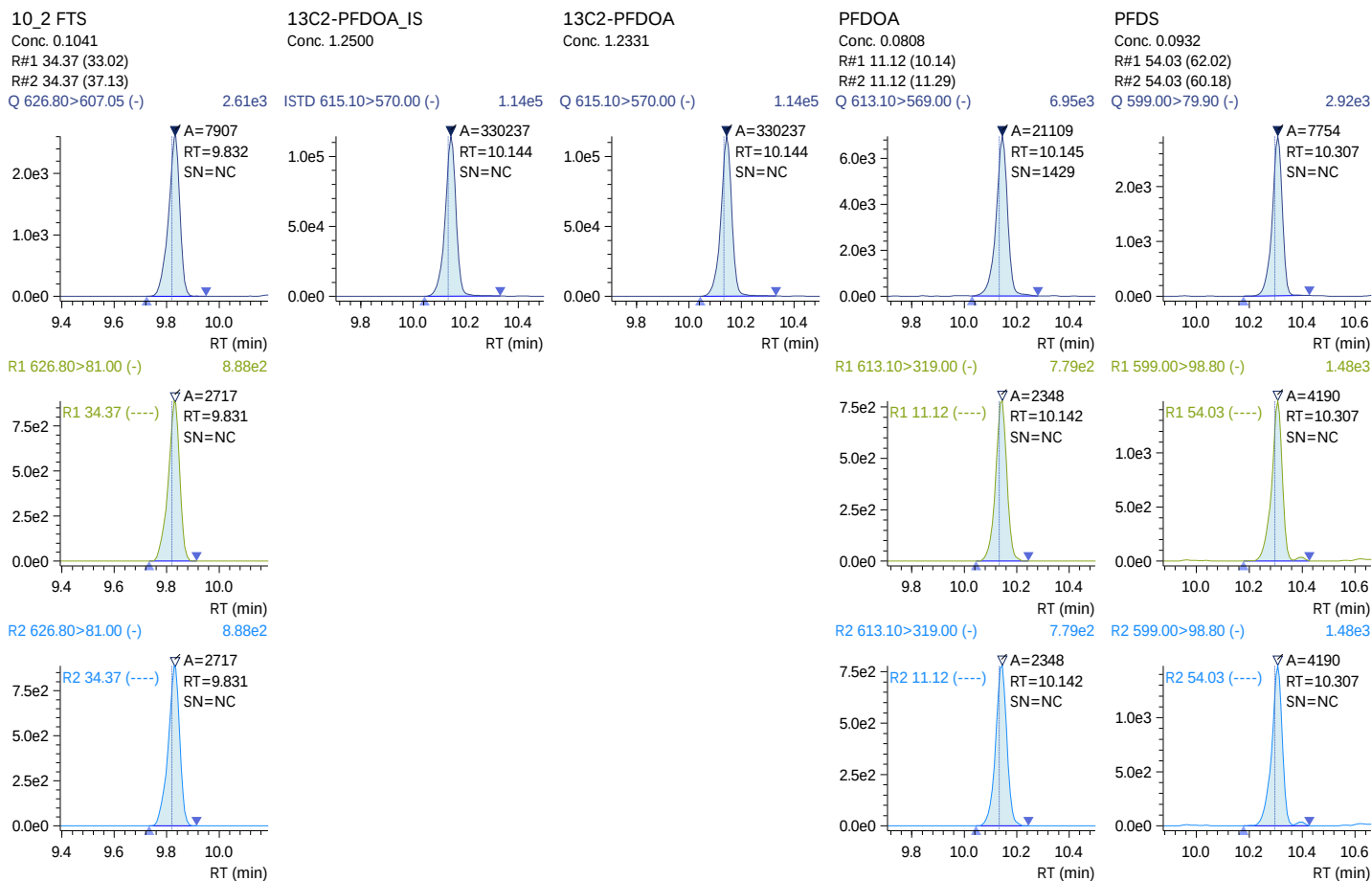


R2 548.80>98.80 (-)





240118_007 (continued)

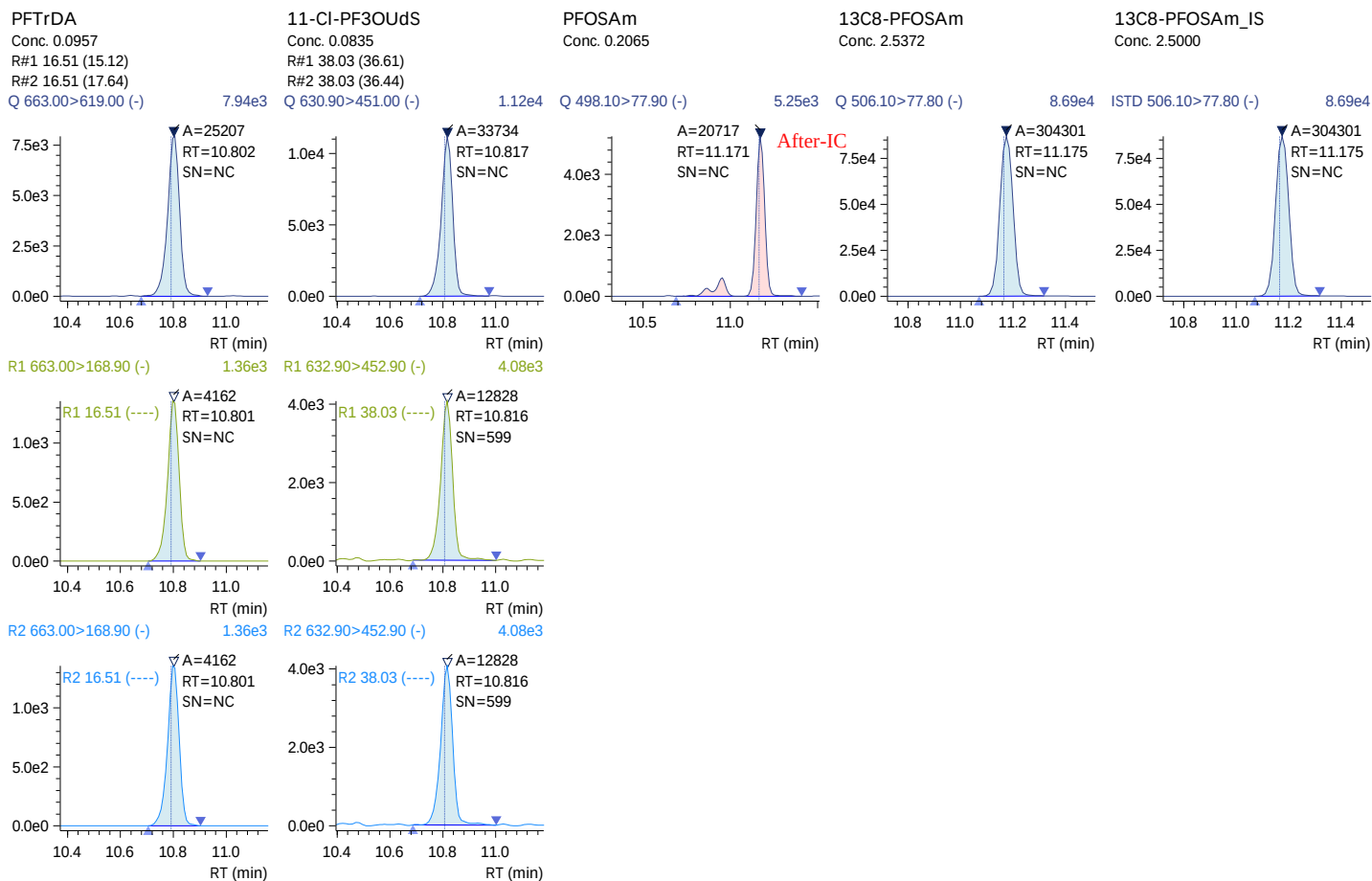


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_007 (continued)

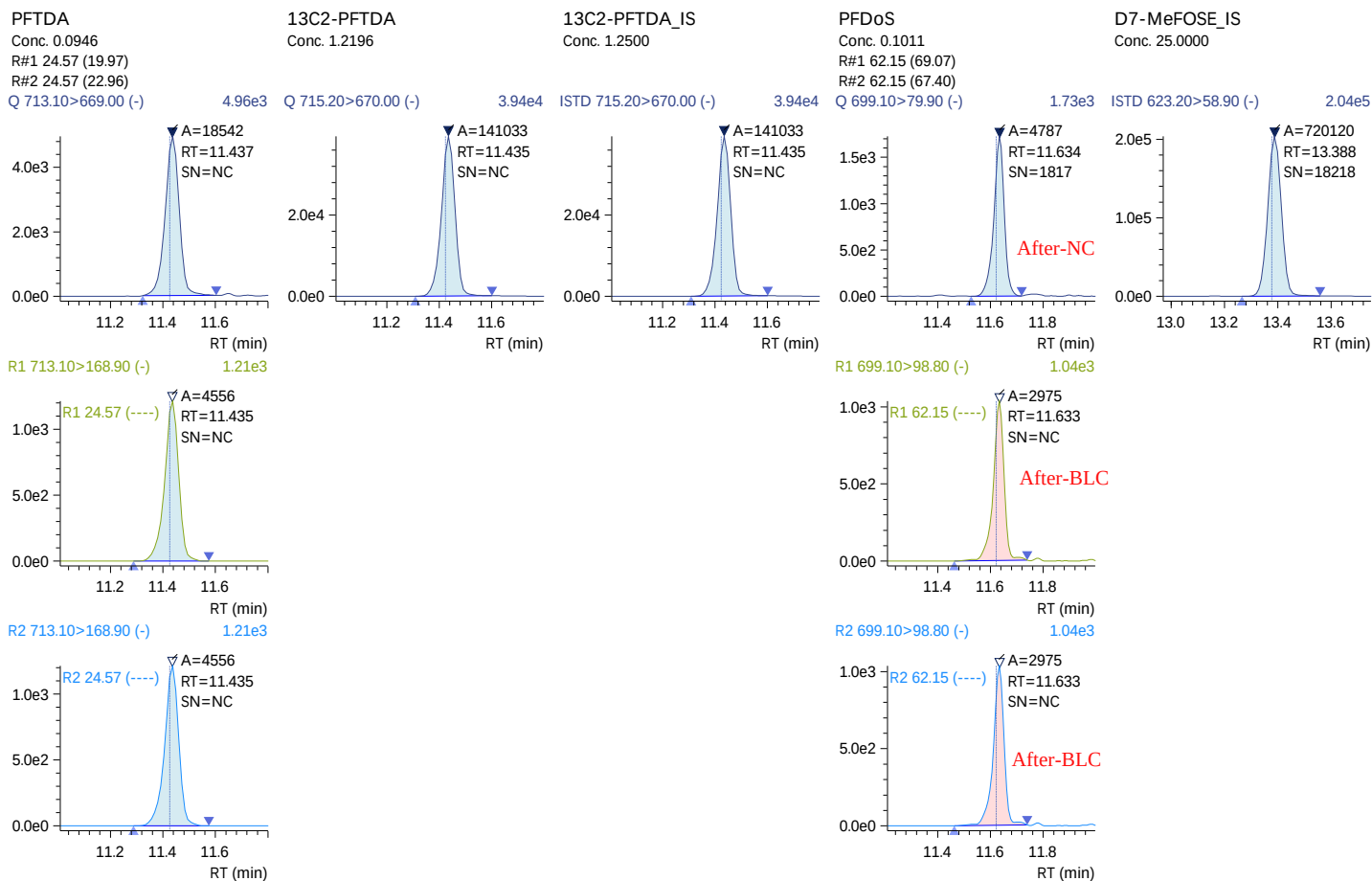


J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_007 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_007 (continued)

D7-MeFOSE
Conc. 24.3536

MeFOSE
Conc. 0.1278

13C2-PFHXA_IS
Conc. 2.5000

13C2-PFHXA
Conc. 2.4240

PFHXA
Conc. 0.0900

Q 623.20>58.90 (-)

2.04e5

Q 616.10>59.00 (-)

6.14e2

ISTD 815.00>770.05 (-)

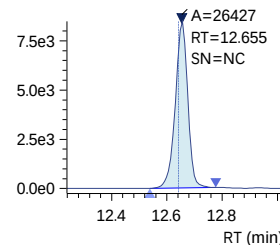
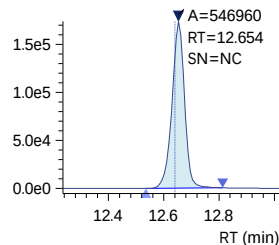
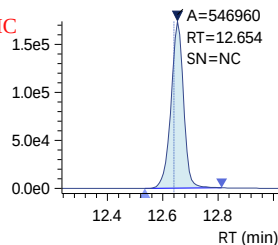
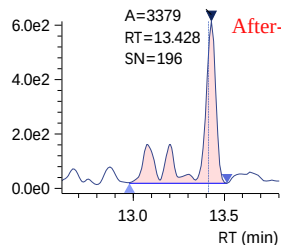
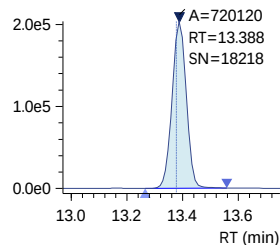
1.74e5

Q 815.00>770.05 (-)

1.74e5

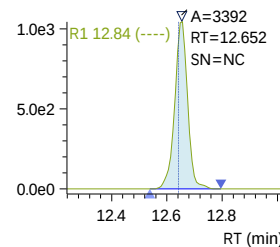
Q 813.00>768.95 (-)

8.49e3



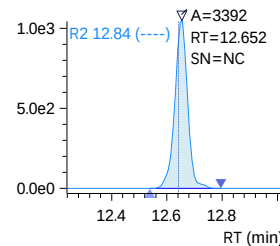
R1 813.00>218.95 (-)

1.04e3



R2 813.00>218.95 (-)

1.04e3





240118_007 (continued)

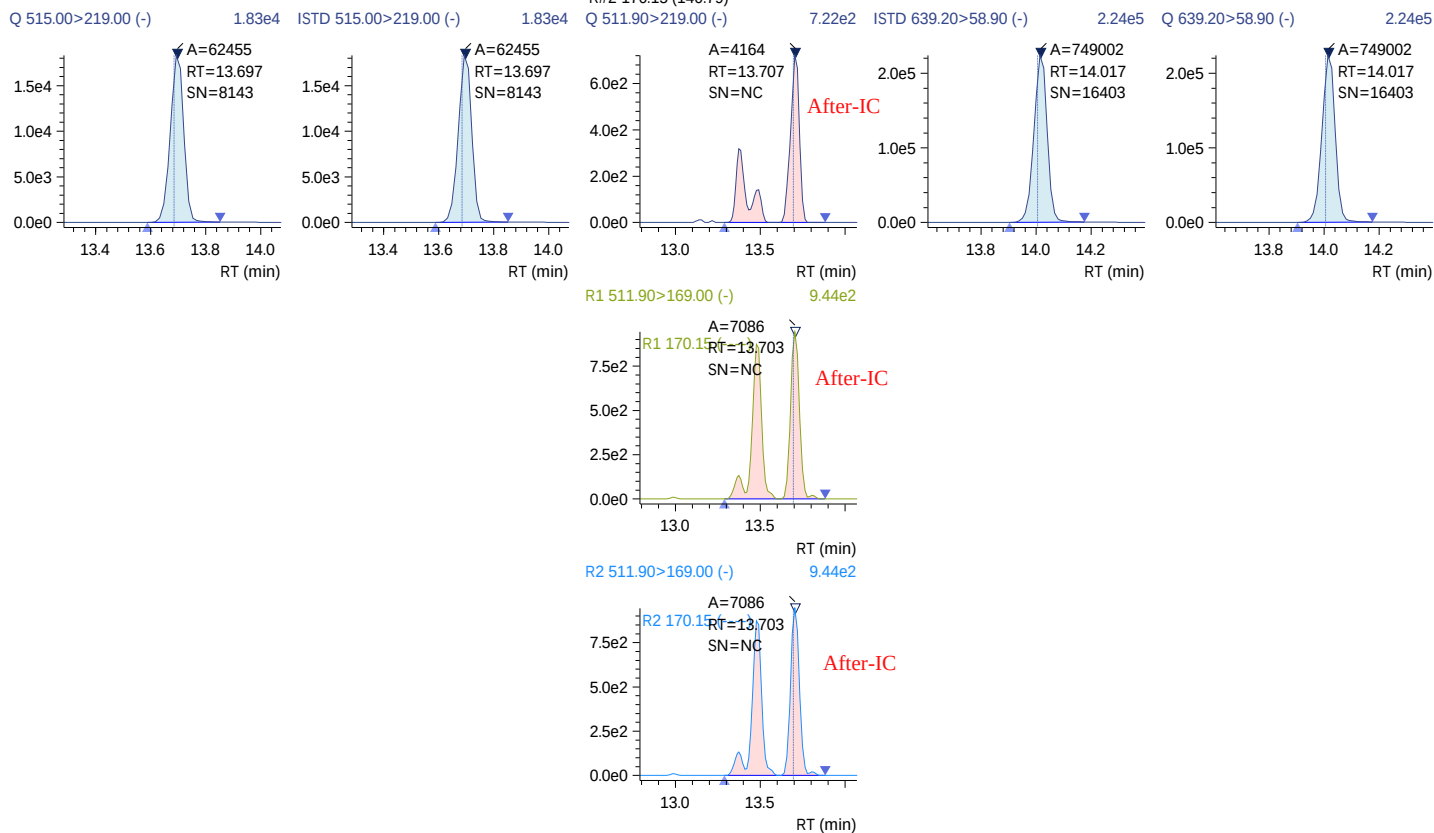
D3-MeFOSA
Conc. 2.5858

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. 0.0925
R#1 170.15 (149.05)
R#2 170.15 (140.79)

D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 24.9399

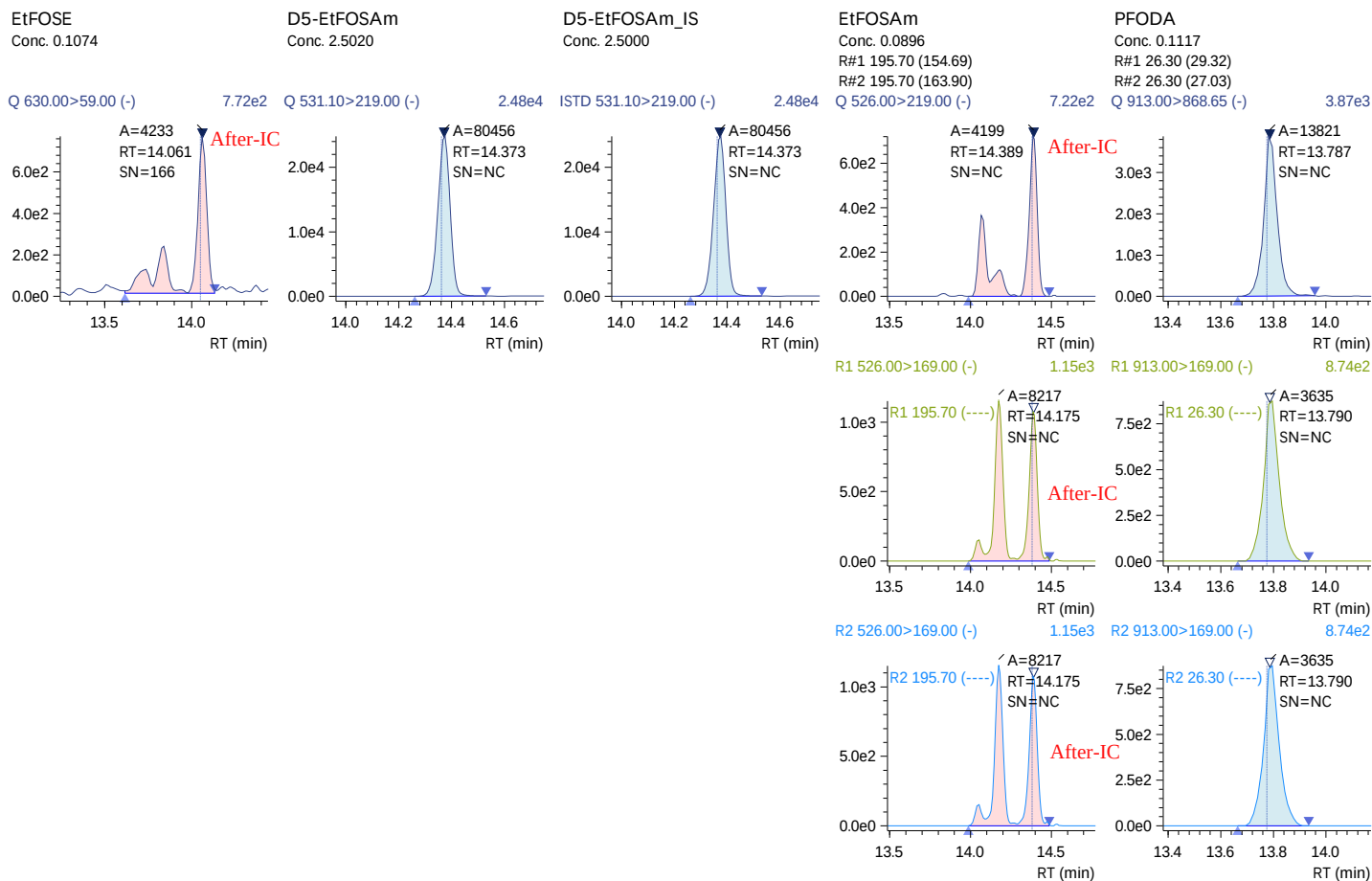


J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_007 (continued)



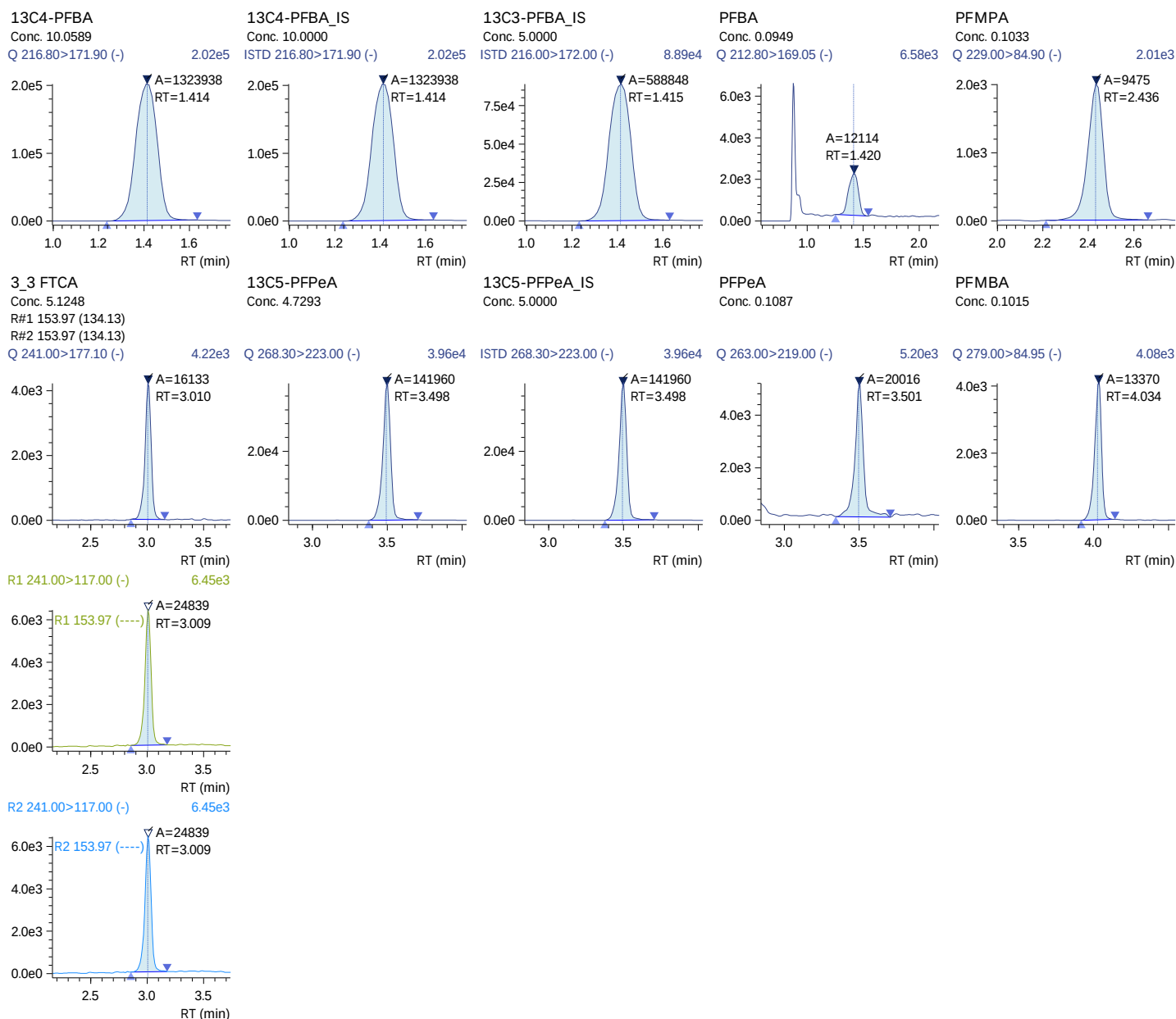
J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_007

Sample ID: 1633 ICAL 0.1PPB
Date Acquired: 1/18/2024 2:27:50 PM
Acquired by: System Administrator
Data File: 240118_007
Vial: 2 | Inj. Volume: 10.0000uL | Tray: 1





240118_007 (continued)

13C2-4_2 FTS
Conc. 6.0055

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. 0.0911
R#1 28.04 (34.14)
R#2 28.04 (34.14)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 0.0871
R#1 51.46 (47.53)
R#2 51.46 (47.53)

Q 329.10>80.90 (-)

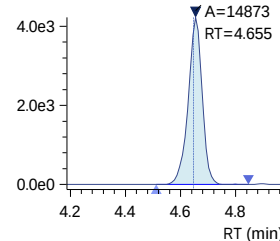
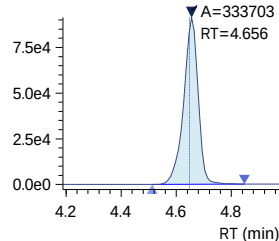
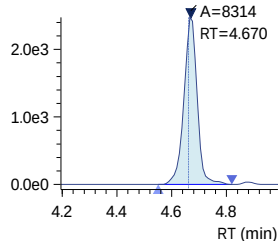
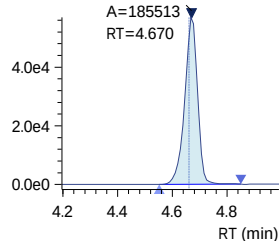
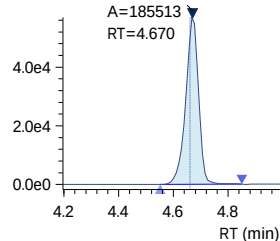
5.70e4 ISTD 329.10>80.90 (-)

5.70e4 Q 327.10>307.00 (-)

2.47e3 ISTD 302.10>79.90 (-)

9.15e4 Q 298.70>79.90 (-)

4.23e3

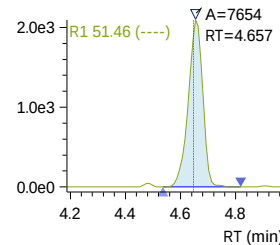
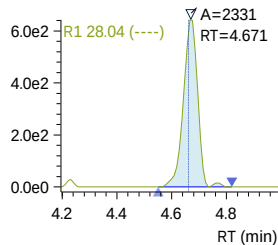


R1 327.10>80.90 (-)

6.43e2

R1 298.70>98.80 (-)

2.10e3

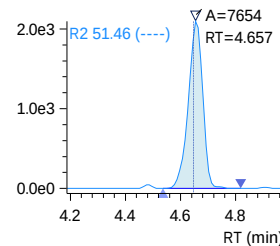
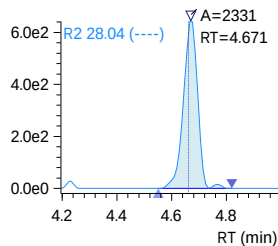


R2 327.10>80.90 (-)

6.43e2

R2 298.70>98.80 (-)

2.10e3





240118_007 (continued)

13C3-PFBS
Conc. 2.6196

NFDHA
Conc. 0.0941
R#1 41.12 (37.88)
R#2 41.12 (37.88)

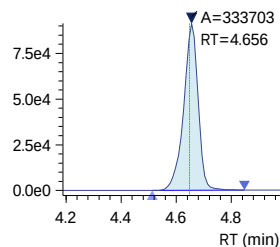
13C5-PFHxA
Conc. 2.5018

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

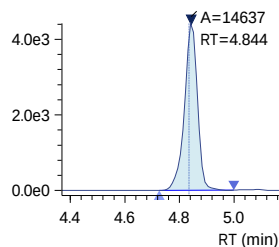
Q 302.10>79.90 (-)

9.15e4



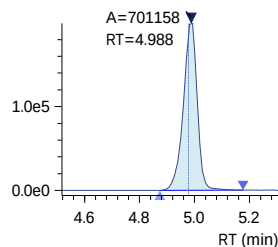
Q 295.00>201.00 (-)

4.42e3



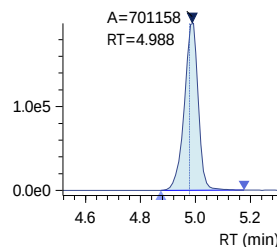
Q 318.00>273.00 (-)

1.99e5



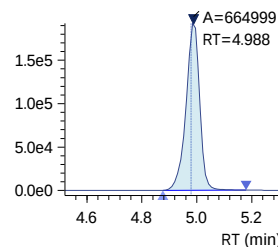
ISTD 318.00>273.00 (-)

1.99e5



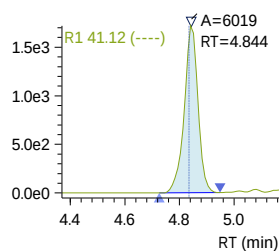
ISTD 315.10>270.00 (-)

1.92e5



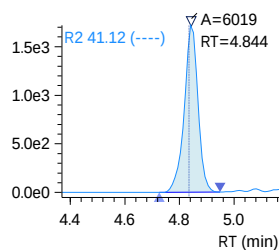
R1 295.00>84.90 (-)

1.72e3



R2 295.00>84.90 (-)

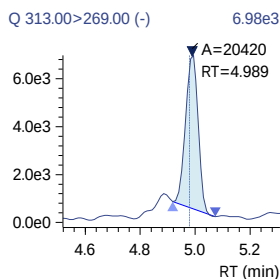
1.72e3





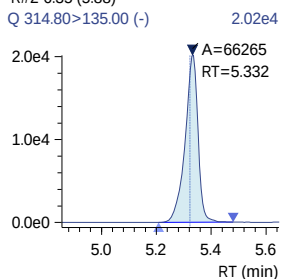
240118_007 (continued)

PFHxA
Conc. 0.0925

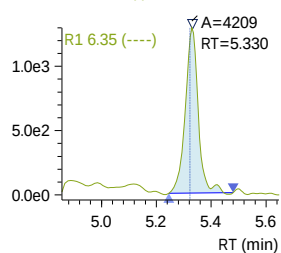


PFEESA
Conc. 0.0844

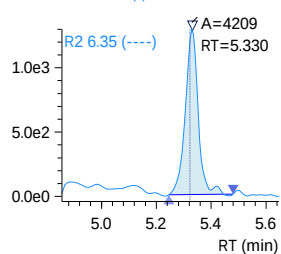
R#1 6.35 (5.88)
R#2 6.35 (5.88)



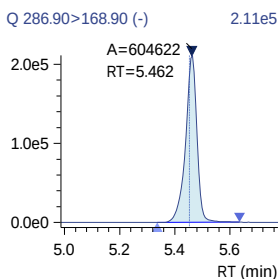
R1 314.80>82.90 (-) 1.30e3



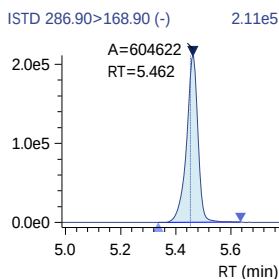
R2 314.80>82.90 (-) 1.30e3



13C3-HFPO-DA
Conc. 9.2879

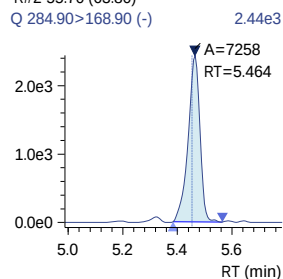


13C3-HFPO-DA_IS
Conc. 10.0000

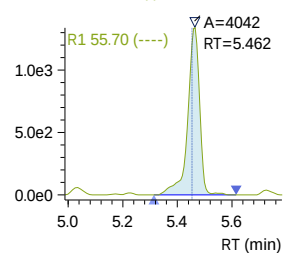


HFPO-DA
Conc. 0.1089

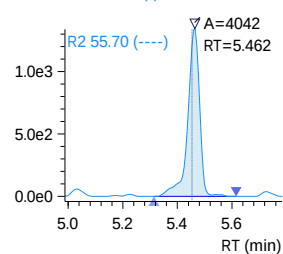
R#1 55.70 (63.80)
R#2 55.70 (63.80)



R1 284.90>184.90 (-) 1.34e3

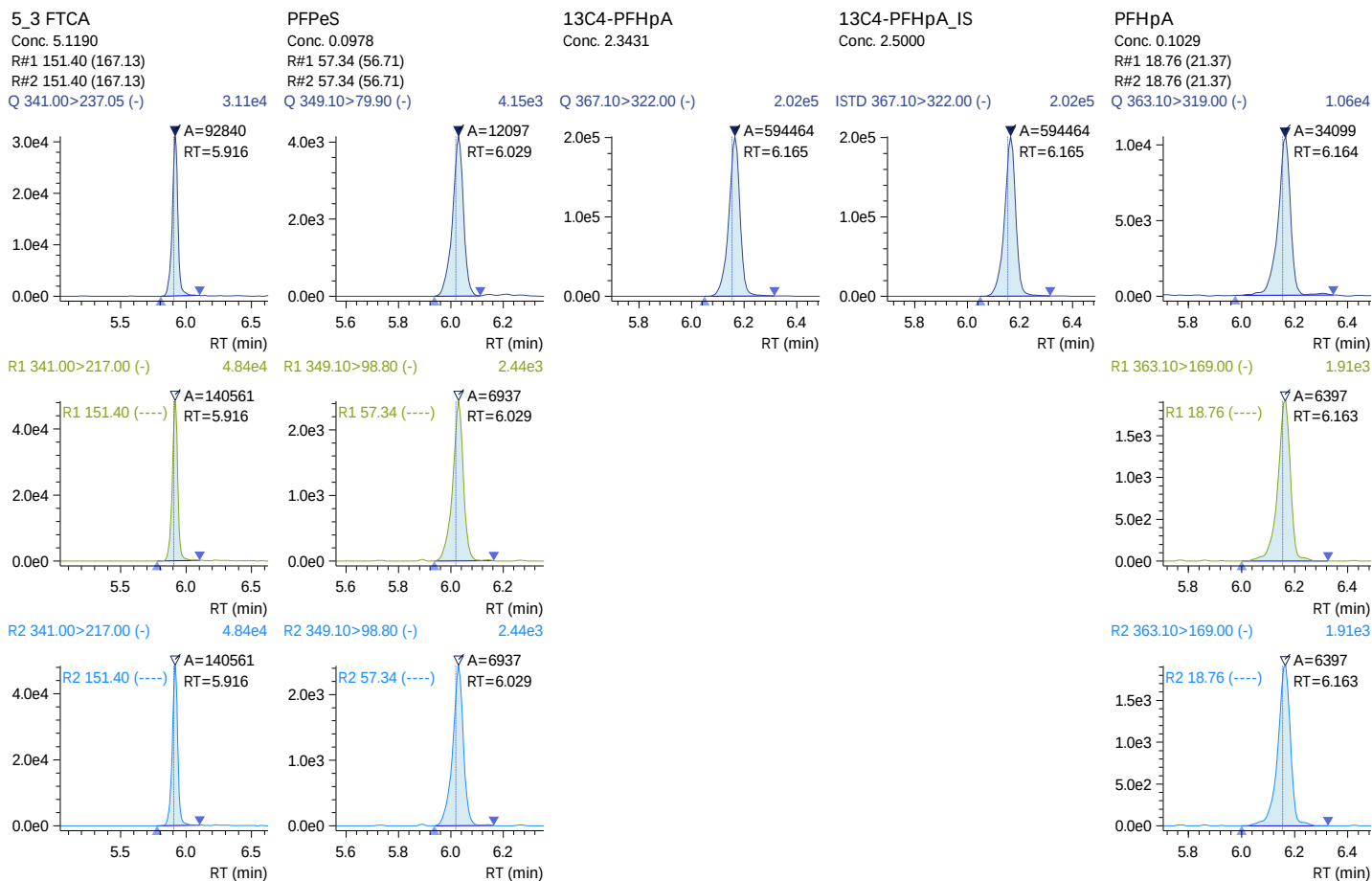


R2 284.90>184.90 (-) 1.34e3



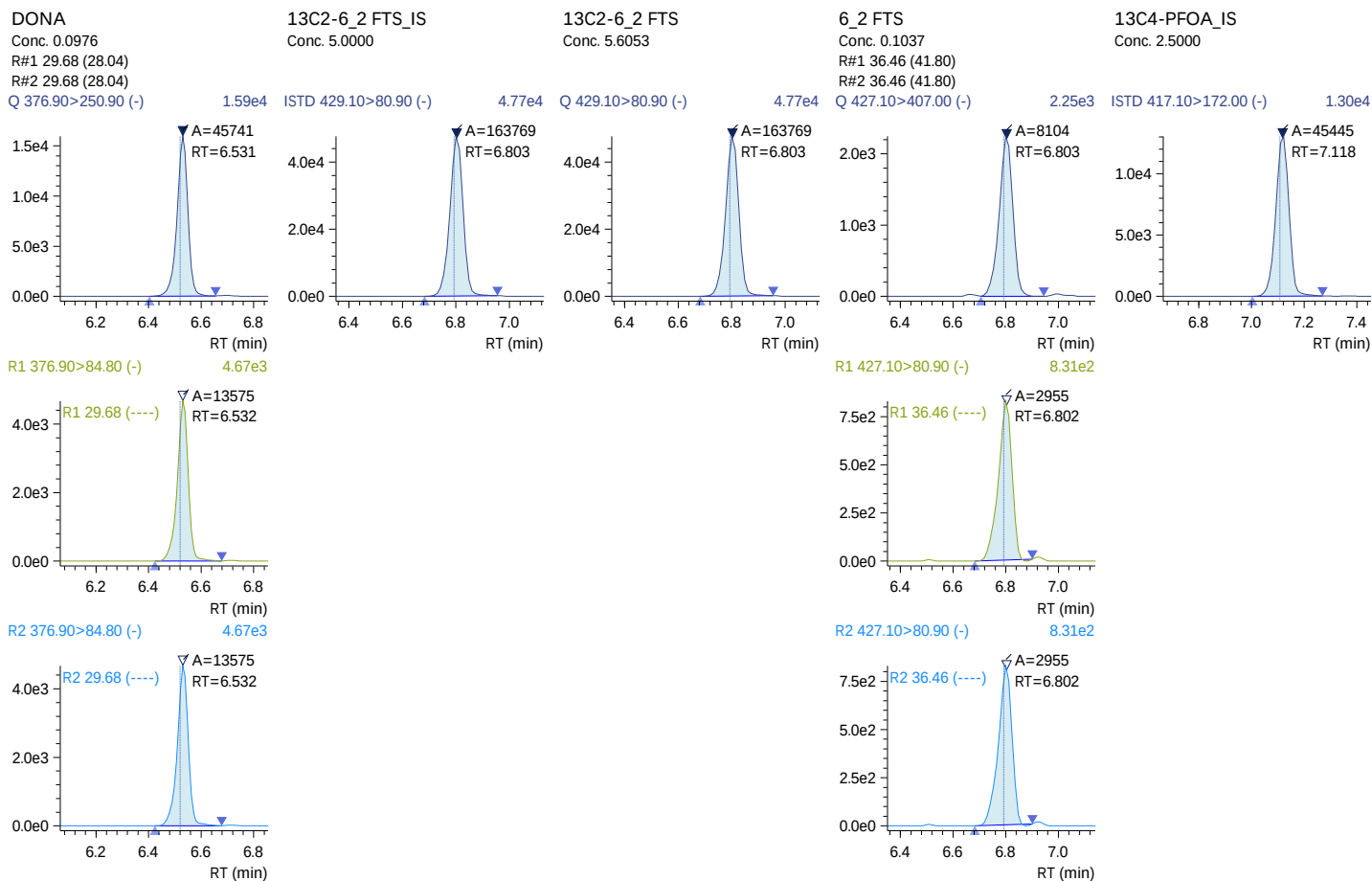


240118_007 (continued)





240118_007 (continued)





240118_007 (continued)

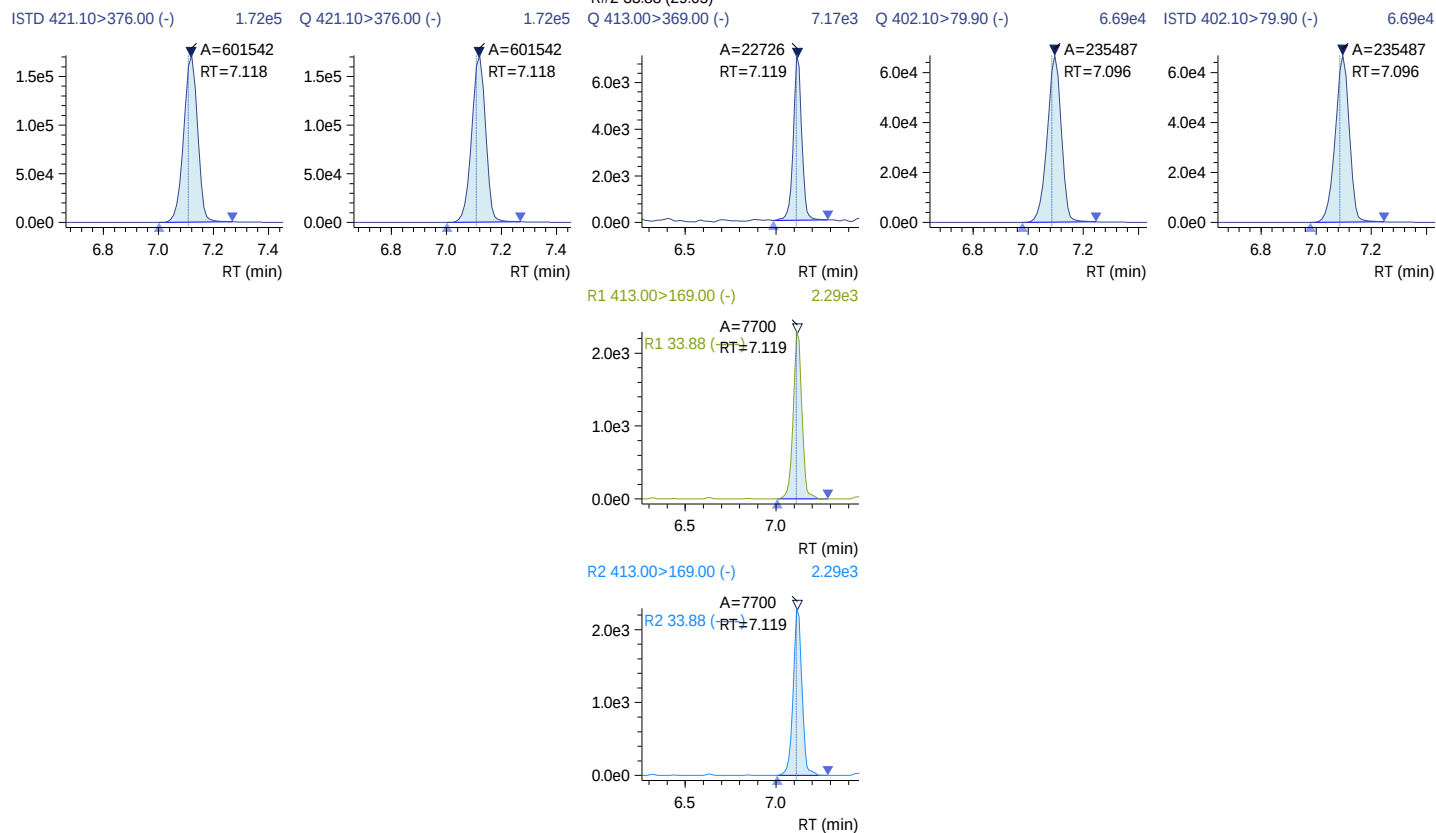
13C8-PFOA_IS
 Conc. 2.5000

13C8-PFOA
 Conc. 2.3682

PFOA
 Conc. 0.1026
 R#1 33.88 (29.05)
 R#2 33.88 (29.05)

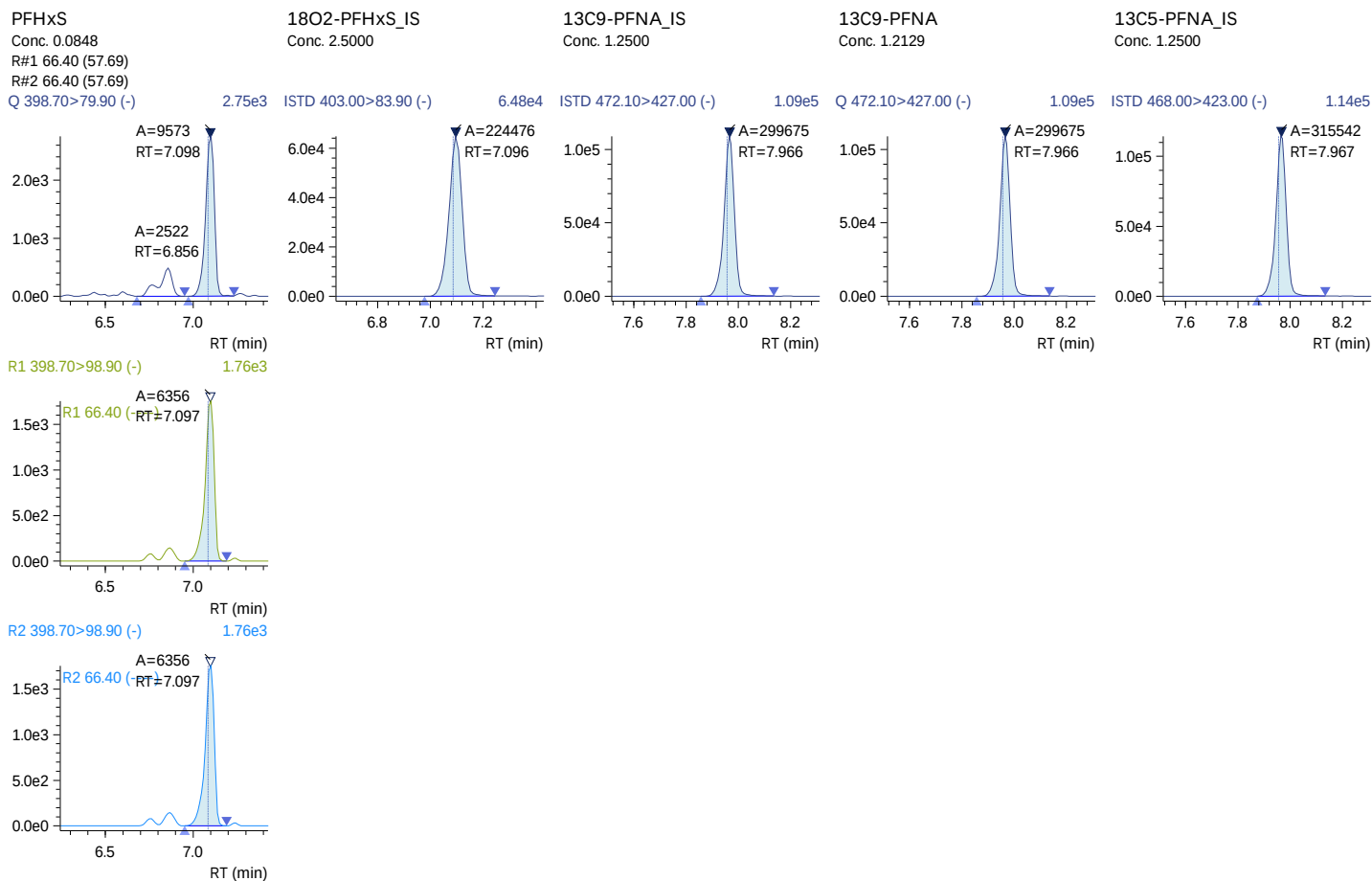
13C3-PFHxS
 Conc. 2.4441

13C3-PFHxS_IS
 Conc. 2.5000



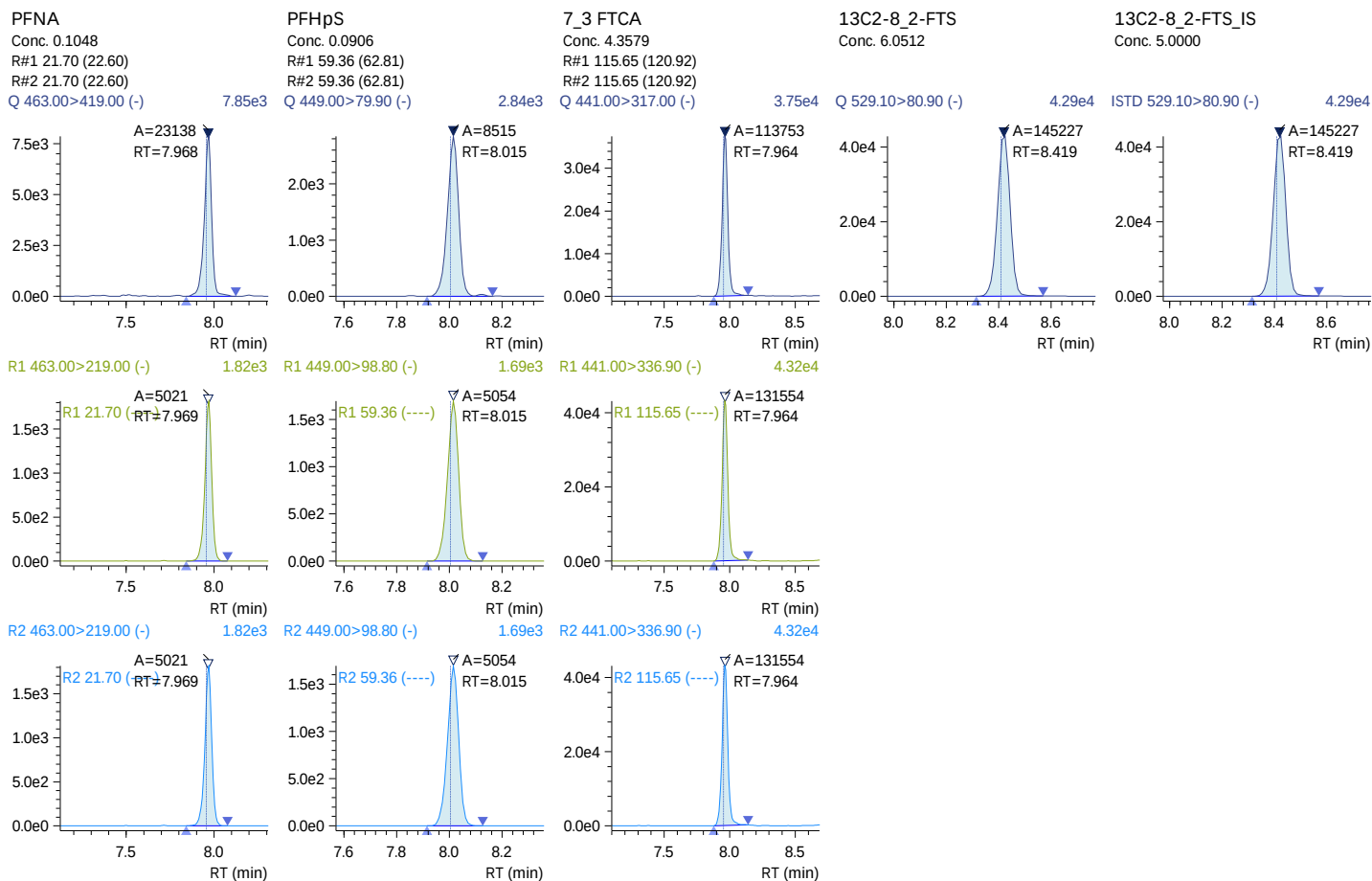


240118_007 (continued)



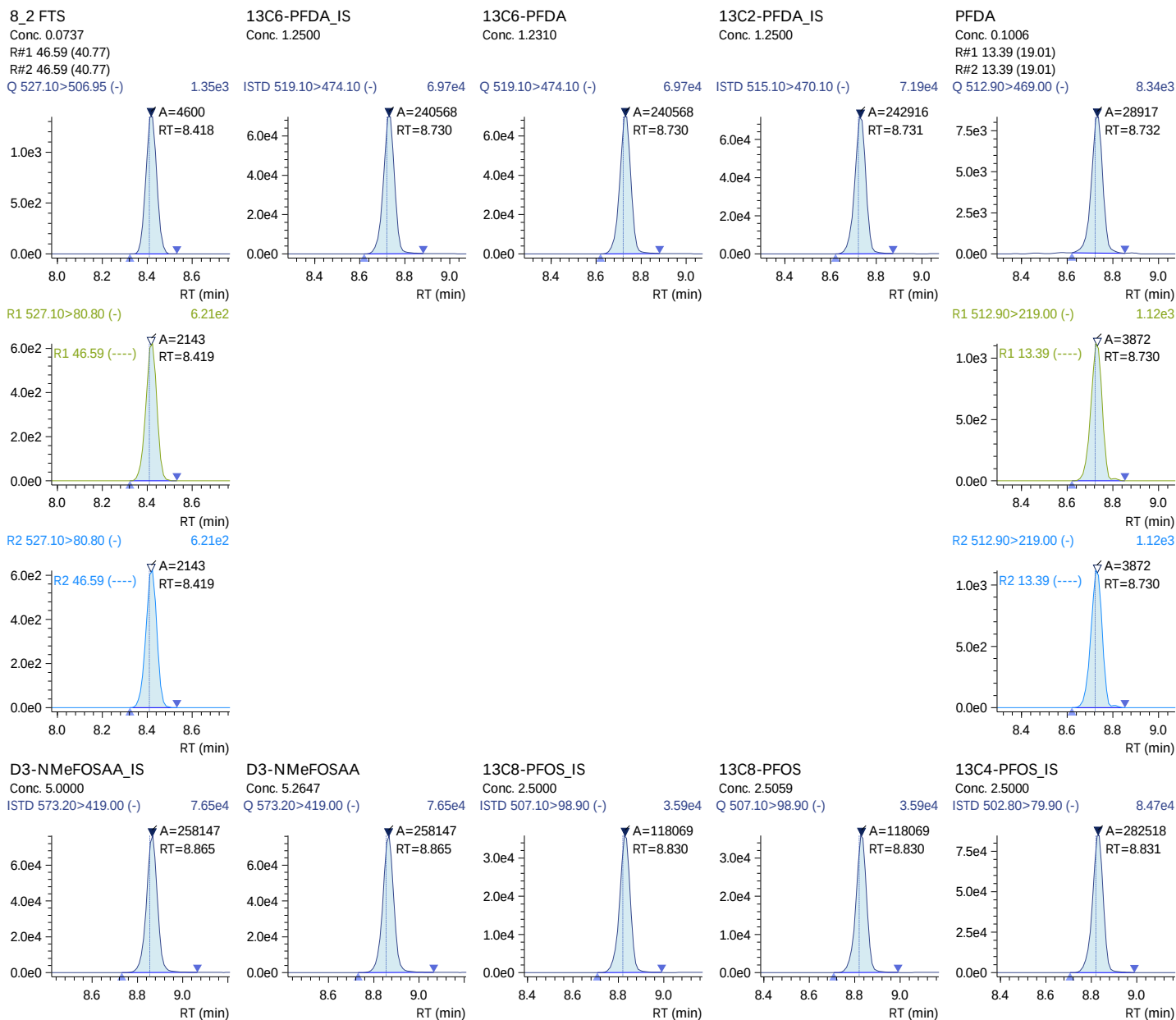


240118_007 (continued)



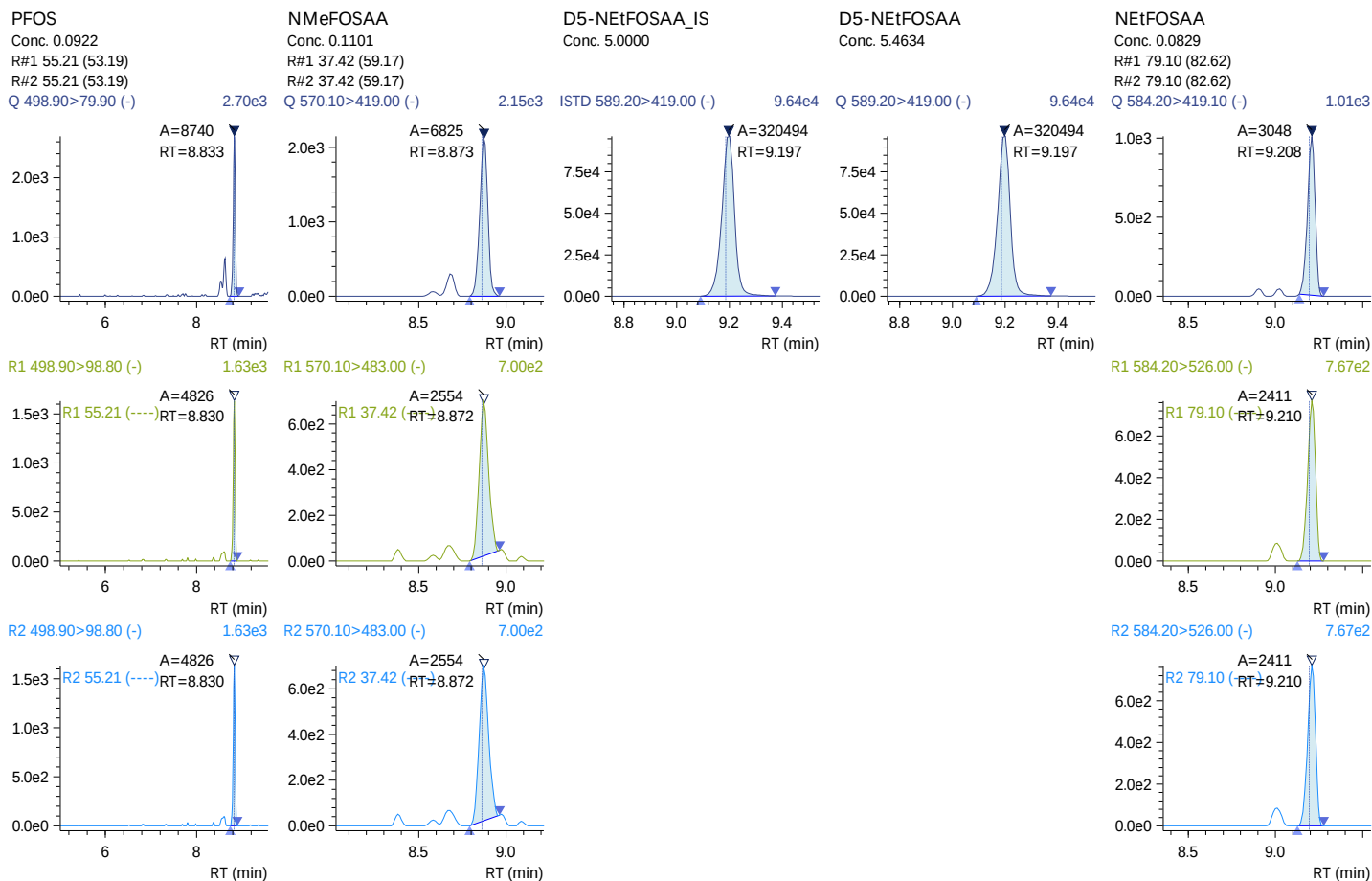


240118_007 (continued)





240118_007 (continued)

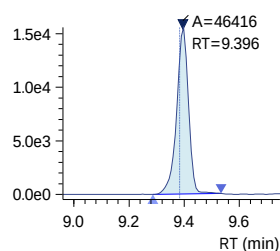




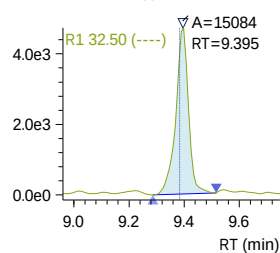
240118_007 (continued)

9-CI-PF3ONS

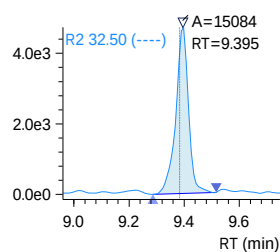
Conc. 0.0931
R#1 32.50 (31.76)
R#2 32.50 (31.76)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-) 4.74e3

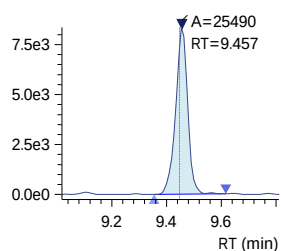


R2 532.80>353.00 (-) 4.74e3

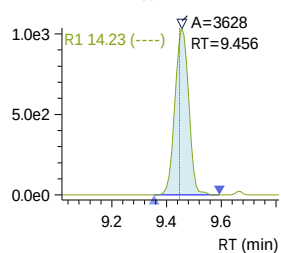


PFUnDA

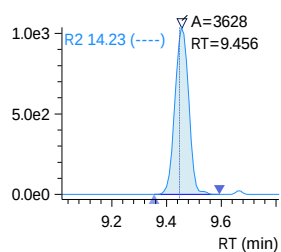
Conc. 0.0917
R#1 14.23 (12.31)
R#2 14.23 (12.31)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-) 1.04e3

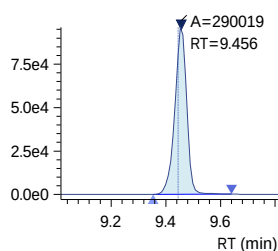


R2 563.10>269.10 (-) 1.04e3



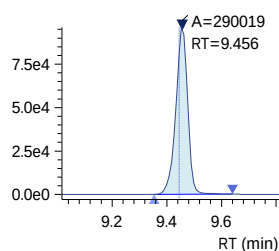
13C7-PFUnDA_IS

Conc. 1.2500
ISTD 570.00>525.10 (-)



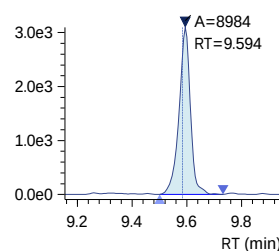
13C7-PFUnDA

Conc. 1.2441
Q 570.00>525.10 (-)

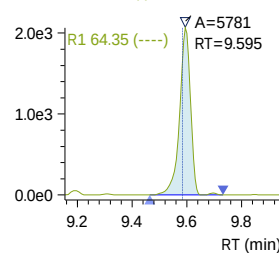


PFNS

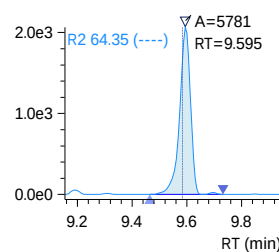
Conc. 0.1001
R#1 64.35 (63.31)
R#2 64.35 (63.31)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-) 2.07e3



R2 548.80>98.80 (-) 2.07e3





240118_007 (continued)

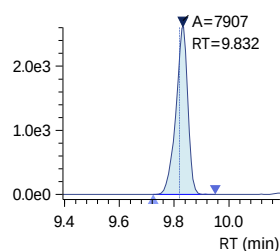
10_2_FTS

Conc. 0.0997

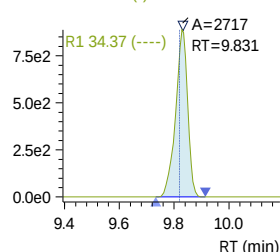
R#1 34.37 (33.02)

R#2 34.37 (33.02)

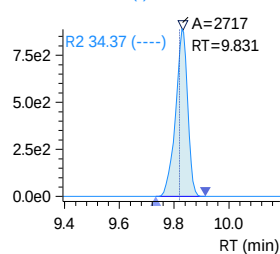
Q 626.80>607.05 (-)



R1 626.80>81.00 (-)



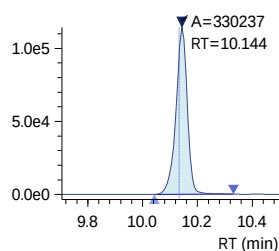
R2 626.80>81.00 (-)



13C2-PFDOA_IS

Conc. 1.2500

ISTD 615.10>570.00 (-)



Q 615.10>570.00 (-)



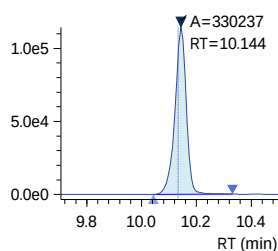
Q 615.10>570.00 (-)



13C2-PFDOA

Conc. 1.2331

Q 615.10>570.00 (-)



Q 615.10>570.00 (-)



Q 615.10>570.00 (-)



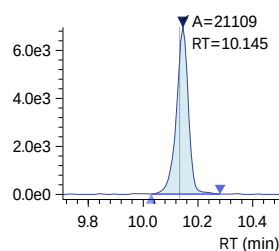
PFDOA

Conc. 0.0808

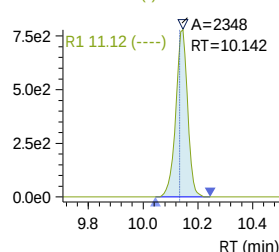
R#1 11.12 (10.14)

R#2 11.12 (10.14)

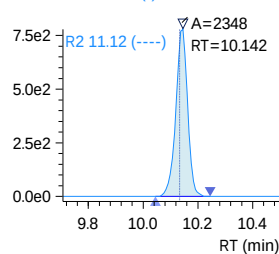
Q 613.10>569.00 (-)



R1 613.10>319.00 (-)



R2 613.10>319.00 (-)



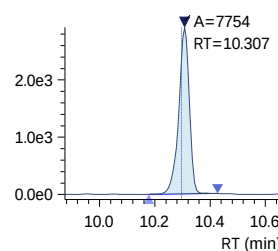
PFDS

Conc. 0.0968

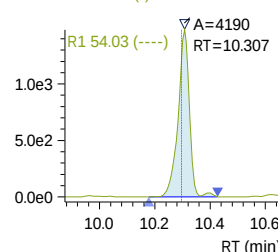
R#1 54.03 (62.02)

R#2 54.03 (62.02)

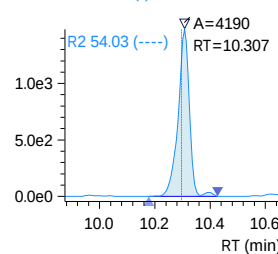
Q 599.00>79.90 (-)



R1 599.00>98.80 (-)

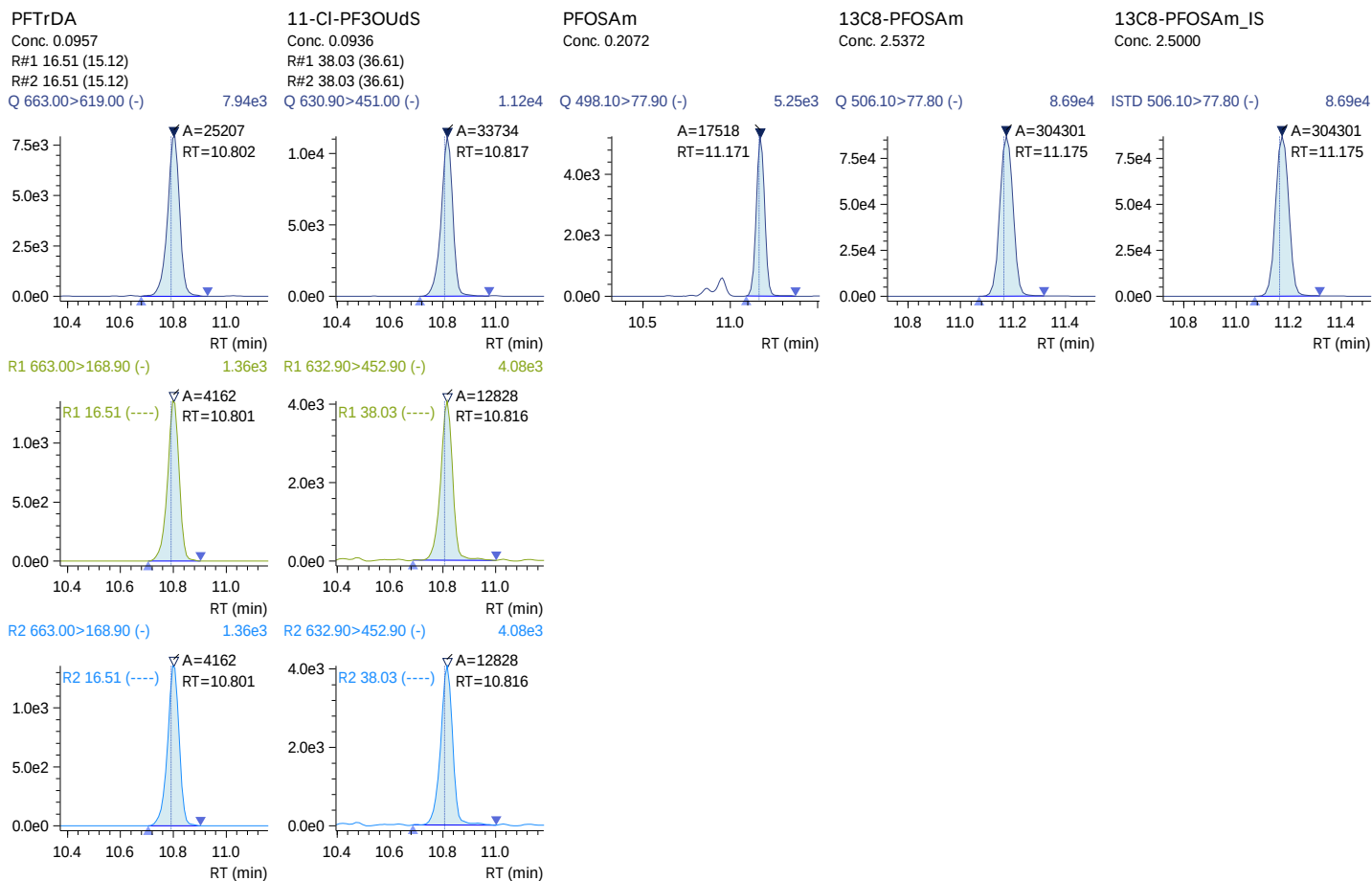


R2 599.00>98.80 (-)



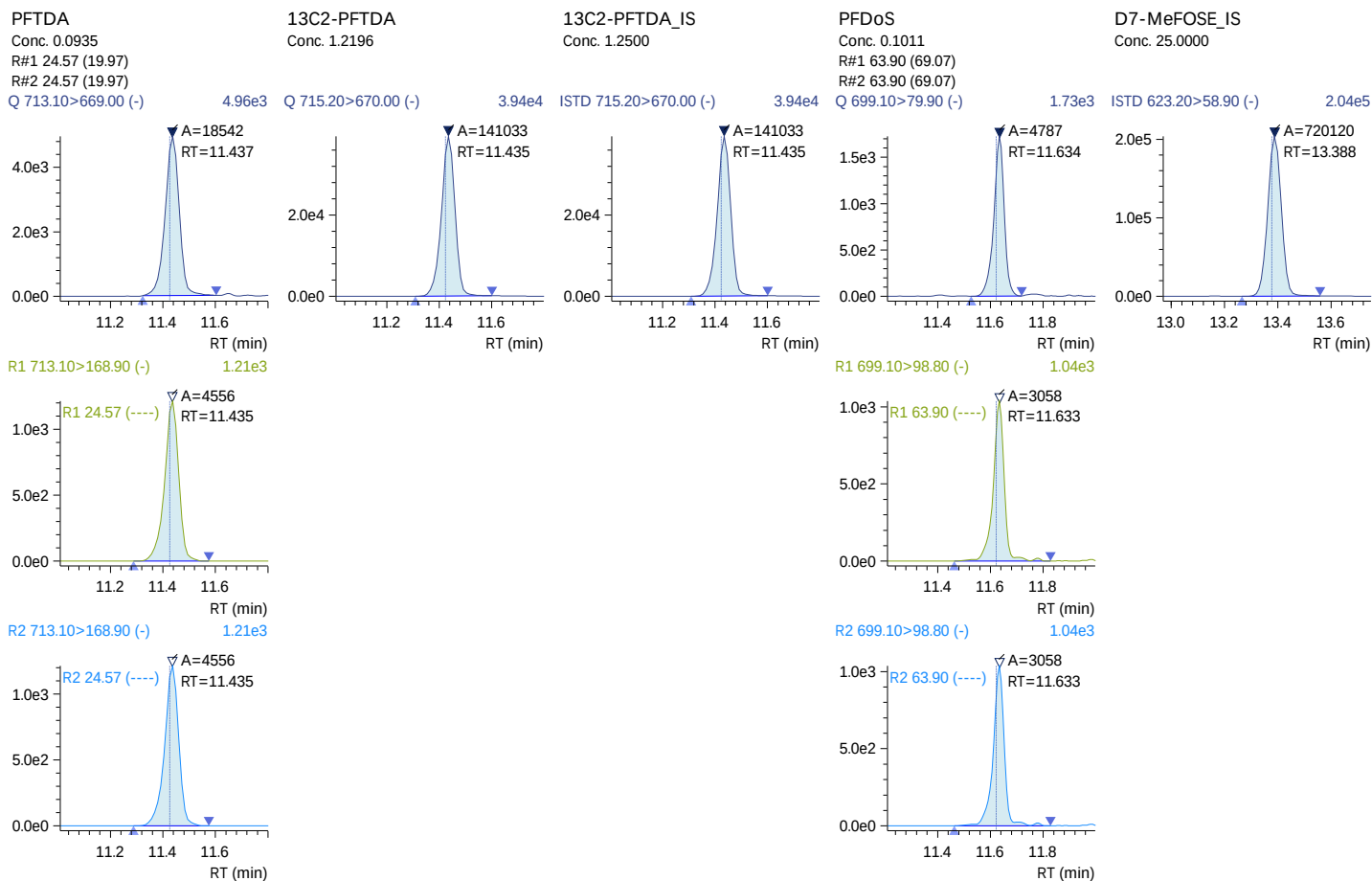


240118_007 (continued)





240118_007 (continued)





240118_007 (continued)

D7-MeFOSE
Conc. 24.3536

MeFOSE
Conc. 0.1135

13C2-PFHxDA_IS
Conc. 2.5000

13C2-PFHxDA
Conc. 2.4240

PFHxDA
Conc. 0.0900
R#1 12.84 (11.64)
R#2 12.84 (11.64)

Q 623.20>58.90 (-)

2.04e5

Q 616.10>59.00 (-)

6.14e2

ISTD 815.00>770.05 (-)

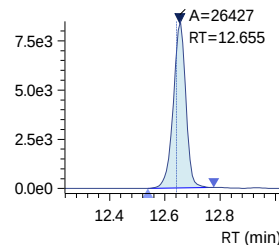
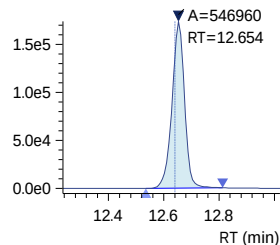
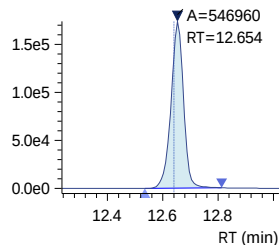
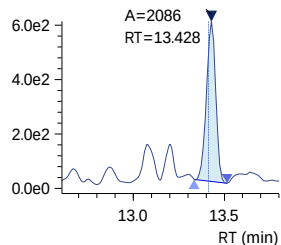
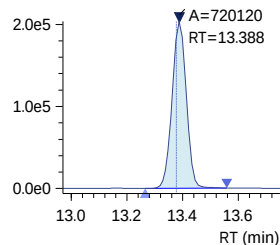
1.74e5

Q 815.00>770.05 (-)

1.74e5

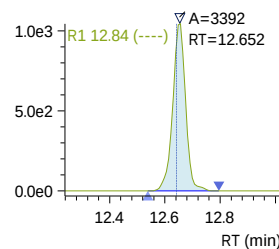
Q 813.00>768.95 (-)

8.49e3



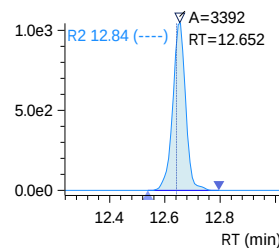
R1 813.00>218.95 (-)

1.04e3



R2 813.00>218.95 (-)

1.04e3





240118_007 (continued)

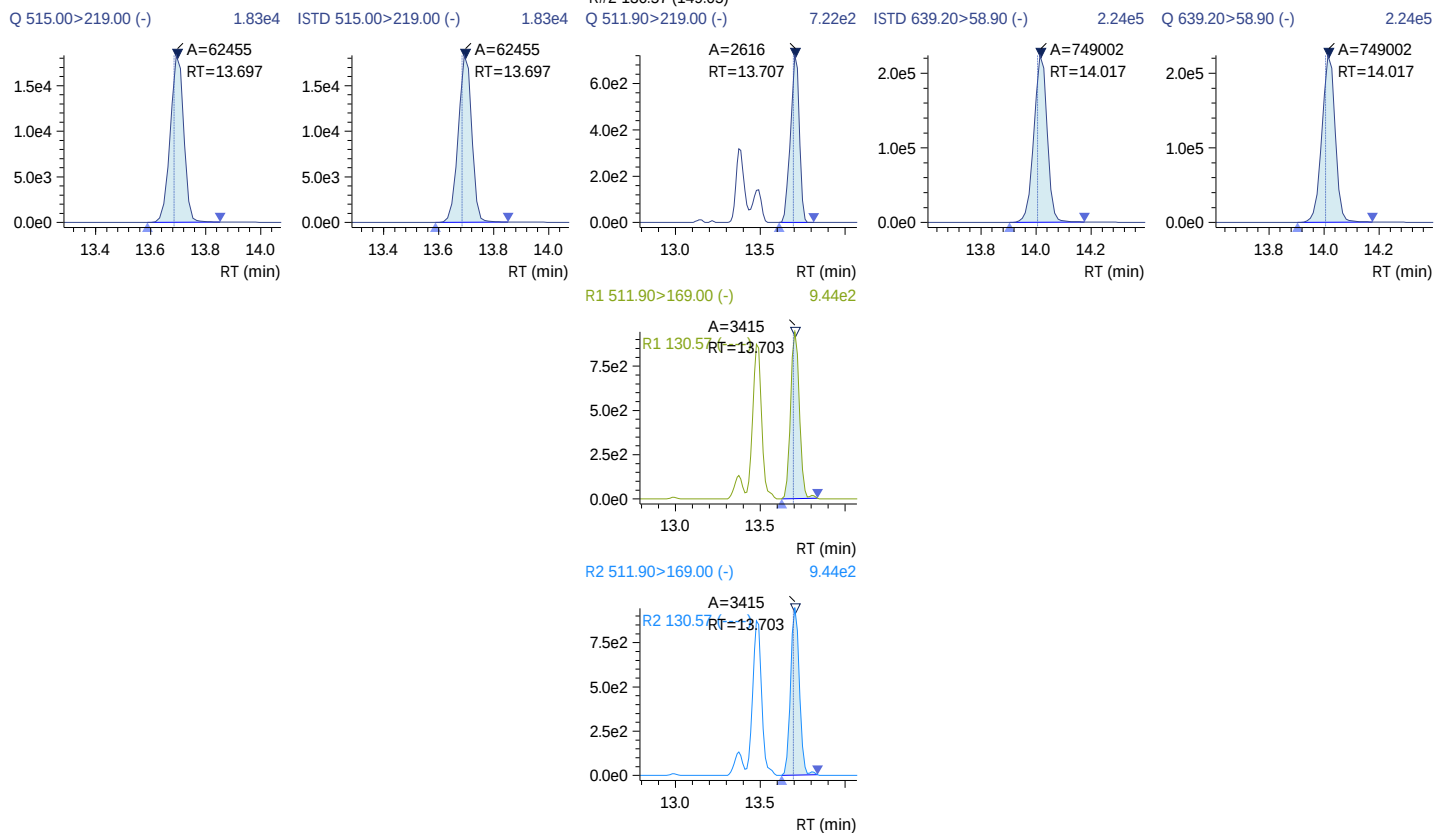
D3-MeFOSA
 Conc. 2.5858

D3-MeFOSA_IS
 Conc. 2.5000

MeFOSA
 Conc. 0.0940
 R#1 130.57 (149.05)
 R#2 130.57 (149.05)

D9-EtFOSE_IS
 Conc. 25.0000

D9-EtFOSE
 Conc. 24.9399





240118_007 (continued)

EtFOSE
Conc. 0.0996

D5-EtFOSAm
Conc. 2.5020

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. 0.0955
R#1 149.47 (154.69)
R#2 149.47 (154.69)

PFODA
Conc. 0.1058
R#1 26.30 (29.32)
R#2 26.30 (29.32)

Q 630.00>59.00 (-)

7.72e2

Q 531.10>219.00 (-)

2.48e4

ISTD 531.10>219.00 (-)

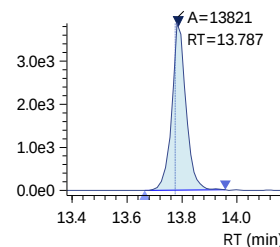
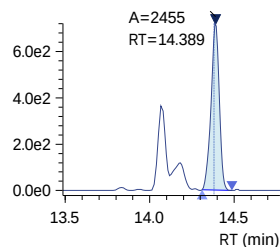
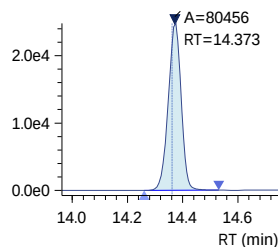
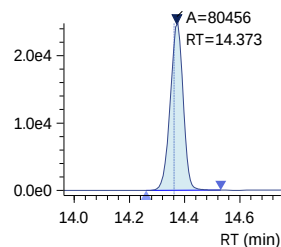
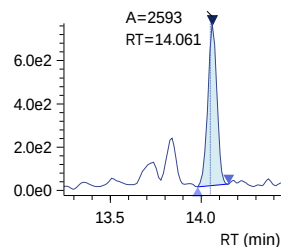
2.48e4

Q 526.00>219.00 (-)

7.22e2

Q 913.00>868.65 (-)

3.87e3

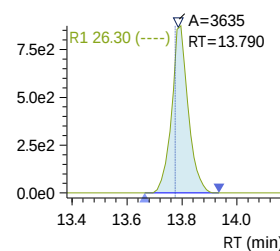
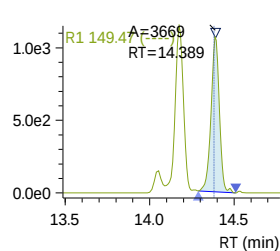


R1 526.00>169.00 (-)

1.15e3

R1 913.00>169.00 (-)

8.74e2

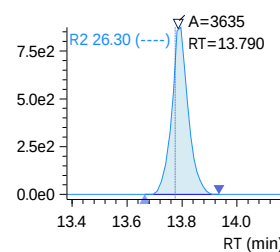
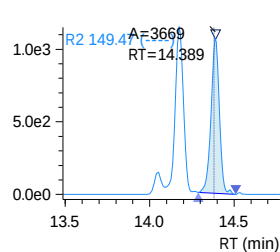


R2 526.00>169.00 (-)

1.15e3

R2 913.00>169.00 (-)

8.74e2





240118_008

Sample ID: 1633 ICAL 0.25PPB
Date Acquired: 1/18/2024 2:51:05 PM
Acquired by: System Administrator
Data File: 240118_008
Vial: 3 | Inj. Volume: 10.0000uL | Tray: 1

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	1289139	----	----	----	----	----	----	
13C4-PFBA_IS	216.80>171.90	----	1289139	----	----	----	----	----	----	
13C3-PFBA_IS	216.00>172.00	----	579289	----	----	----	----	----	----	
PFBA	212.80>169.05	----	28706	----	----	----	----	----	----	
PFMPA	229.00>84.90	----	23024	----	----	----	----	----	----	
3_3 FTCA	241.00>177.10	241.00>117.00	30420	42185	138.68	141.17	42185	138.68	141.17	
13C5-PFPeA	268.30>223.00	----	141383	----	----	----	----	----	----	
13C5-PFPeA_IS	268.30>223.00	----	141383	----	----	----	----	----	----	
PFPeA	263.00>219.00	----	43873	----	----	----	----	----	----	
PFMBA	279.00>84.95	----	31409	----	----	----	----	----	----	
13C2-4_2 FTS	329.10>80.90	----	178483	----	----	----	----	----	----	
13C2-4_2 FTS_IS	329.10>80.90	----	178483	----	----	----	----	----	----	
4_2 FTS	327.10>307.00	327.10>80.90	19625	5602	28.55	29.06	5602	28.55	29.06	
13C3-PFBS_IS	302.10>79.90	----	324049	----	----	----	----	----	----	
PFBS	298.70>79.90	298.70>98.80	39554	17890	45.23	46.72	17890	45.23	46.72	
13C3-PFBS	302.10>79.90	----	324049	----	----	----	----	----	----	
NFDHA	295.00>201.00	295.00>84.90	36786	13906	37.80	40.25	13906	37.80	40.25	
13C5-PFHxA	318.00>273.00	----	651214	----	----	----	----	----	----	
13C5-PFHxA_IS	318.00>273.00	----	651214	----	----	----	----	----	----	
13C2-PFHxA_IS	315.10>270.00	----	645671	----	----	----	----	----	----	
PFHxA	313.00>269.00	----	54817	----	----	----	----	----	----	
PFEESA	314.80>135.00	314.80>82.90	162206	9361	5.77	6.11	9361	5.77	6.11	
13C3-HFPO-DA	286.90>168.90	----	588188	----	----	----	----	----	----	
13C3-HFPO-DA_IS	286.90>168.90	----	588188	----	----	----	----	----	----	
HFPO-DA	284.90>168.90	284.90>184.90	16861	11270	66.84	65.61	11270	66.84	65.61	
5_3 FTCA	341.00>237.05	341.00>217.00	168370	267161	158.68	158.86	267161	158.68	158.86	
PFPeS	349.10>79.90	349.10>98.80	32440	17967	55.39	55.80	17967	55.39	55.80	
13C4-PFHpA	367.10>322.00	----	603695	----	----	----	----	----	----	
13C4-PFHpA_IS	367.10>322.00	----	603695	----	----	----	----	----	----	
PFHpA	363.10>319.00	363.10>169.00	70720	16338	23.10	21.50	16338	23.10	21.50	
DONA	376.90>250.90	376.90>84.80	113323	34353	30.31	29.66	34353	30.31	29.66	
13C2-6_2 FTS_IS	429.10>80.90	----	169139	----	----	----	----	----	----	
13C2-6_2 FTS	429.10>80.90	----	169139	----	----	----	----	----	----	
6_2 FTS	427.10>407.00	427.10>80.90	19395	7772	40.07	41.15	7772	40.07	41.15	
13C4-PFOA_IS	417.10>172.00	----	42281	----	----	----	----	----	----	
13C8-PFOA_IS	421.10>376.00	----	592639	----	----	----	----	----	----	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240118_008 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	592639	----	----	----	----	----	----	----
PFOA	413.00>369.00	413.00>169.00	48118	15681	32.59	31.89	15681	32.59	31.89	
13C3-PFHxS	402.10>79.90	----	251448	----	----	----	----	----	----	----
13C3-PFHxS_IS	402.10>79.90	----	251448	----	----	----	----	----	----	----
PFHxS	398.70>79.90	398.70>98.90	29288	14959	51.08	56.62	14959	51.08	56.62	
18O2-PFHxS_IS	403.00>83.90	----	239451	----	----	----	----	----	----	----
13C9-PFNA_IS	472.10>427.00	----	306696	----	----	----	----	----	----	----
13C9-PFNA	472.10>427.00	----	306696	----	----	----	----	----	----	----
13C5-PFNA_IS	468.00>423.00	----	316331	----	----	----	----	----	----	----
PFNA	463.00>419.00	463.00>219.00	50390	10468	20.77	23.17	10468	20.77	23.17	
PFHpS	449.00>79.90	449.00>98.80	21835	12752	58.40	56.96	12752	58.40	56.96	
7_3 FTCA	441.00>317.00	441.00>336.90	213059	242358	113.75	117.47	242358	113.75	117.47	
13C2-8_2-FTS	529.10>80.90	----	131843	----	----	----	----	----	----	----
13C2-8_2-FTS_IS	529.10>80.90	----	131843	----	----	----	----	----	----	----
8_2 FTS	527.10>506.95	527.10>80.80	13634	6755	49.54	49.59	6755	49.54	49.59	
13C6-PFDA_IS	519.10>474.10	----	224311	----	----	----	----	----	----	----
13C6-PFDA	519.10>474.10	----	224311	----	----	----	----	----	----	----
13C2-PFDA_IS	515.10>470.10	----	235058	----	----	----	----	----	----	----
PFDA	512.90>469.00	512.90>219.00	57165	11842	20.72	19.00	11842	20.72	19.00	
D3-NMeFOSAA_IS	573.20>419.00	----	246883	----	----	----	----	----	----	----
D3-NMeFOSAA	573.20>419.00	----	246883	----	----	----	----	----	----	----
13C8-PFOS_IS	507.10>98.90	----	114171	----	----	----	----	----	----	----
13C8-PFOS	507.10>98.90	----	114171	----	----	----	----	----	----	----
13C4-PFOS_IS	502.80>79.90	----	277483	----	----	----	----	----	----	----
PFOS	498.90>79.90	498.90>98.80	30901	14209	45.98	52.47	14209	45.98	52.47	
NMeFOSAA	570.10>419.00	570.10>483.00	15374	9298	60.48	55.15	9298	60.48	55.15	
D5-NetFOSAA_IS	589.20>419.00	----	304822	----	----	----	----	----	----	----
D5-NetFOSAA	589.20>419.00	----	304822	----	----	----	----	----	----	----
NetFOSAA	584.20>419.10	584.20>526.00	10212	7149	70.01	81.95	7149	70.01	81.95	
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	116926	37370	31.96	32.76	37370	31.96	32.76	
PFUnDA	563.10>519.00	563.10>269.10	56306	8900	15.81	13.12	8900	15.81	13.12	
13C7-PFUnDA_IS	570.00>525.10	----	279544	----	----	----	----	----	----	----
13C7-PFUnDA	570.00>525.10	----	279544	----	----	----	----	----	----	----
PFNS	548.80>79.90	548.80>98.80	20655	12792	61.93	65.22	12792	61.93	65.22	
10_2 FTS	626.80>607.05	626.80>81.00	16489	6079	36.87	37.13	6079	36.87	37.13	
13C2-PFDOA_IS	615.10>570.00	----	313428	----	----	----	----	----	----	----
13C2-PFDOA	615.10>570.00	----	313428	----	----	----	----	----	----	----
PFDOA	613.10>569.00	613.10>319.00	49481	5212	10.53	11.29	5212	10.53	11.29	
PFDS	599.00>79.90	599.00>98.80	18165	11442	62.99	60.18	11442	62.99	60.18	
PFTDA	663.00>619.00	663.00>168.90	54014	9652	17.87	17.64	9652	17.87	17.64	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240118_008 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	83986	29813	35.50	36.44	29813	35.50	36.44	
PFOSAm	498.10>77.90	----	48743	----	----	----	----	----	----	
13C8-PFOSAm	506.10>77.80	----	288124	----	----	----	----	----	----	
13C8-PFOSAm_IS	506.10>77.80	----	288124	----	----	----	----	----	----	
PFTDA	713.10>669.00	713.10>168.90	40907	8797	21.51	22.96	8797	21.51	22.96	
13C2-PFTDA	715.20>670.00	----	133833	----	----	----	----	----	----	
13C2-PFTDA_IS	715.20>670.00	----	133833	----	----	----	----	----	----	
PFDoS	699.10>79.90	699.10>98.80	11601	7331	63.19	67.40	7331	63.19	67.40	
D7-MeFOSE_IS	623.20>58.90	----	713433	----	----	----	----	----	----	
D7-MeFOSE	623.20>58.90	----	713433	----	----	----	----	----	----	
MeFOSE	616.10>59.00	----	6979	----	----	----	----	----	----	
13C2-PFHxDA_IS	815.00>770.05	----	527703	----	----	----	----	----	----	
13C2-PFHxDA	815.00>770.05	----	527703	----	----	----	----	----	----	
PFHxDA	813.00>768.95	813.00>218.95	60426	8420	13.93	13.90	8420	13.93	13.90	
D3-MeFOSA	515.00>219.00	----	58544	----	----	----	----	----	----	
D3-MeFOSA_IS	515.00>219.00	----	58544	----	----	----	----	----	----	
MeFOSA	511.90>219.00	511.90>169.00	10796	15742	145.81	140.79	15742	145.81	140.79	
D9-EtFOSE_IS	639.20>58.90	----	727751	----	----	----	----	----	----	
D9-EtFOSE	639.20>58.90	----	727751	----	----	----	----	----	----	
EtFOSE	630.00>59.00	----	10471	----	----	----	----	----	----	
D5-EtFOSAm	531.10>219.00	----	79387	----	----	----	----	----	----	
D5-EtFOSAm_IS	531.10>219.00	----	79387	----	----	----	----	----	----	
EtFOSAm	526.00>219.00	526.00>169.00	10878	17714	162.85	163.90	17714	162.85	163.90	
PFODA	913.00>868.65	913.00>169.00	28924	6967	24.09	27.03	6967	24.09	27.03	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
 IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240118_008

Sample ID: 1633 ICAL 0.25PPB
Date Acquired: 1/18/2024 2:51:05 PM
Acquired by: System Administrator
Data File: 240118_008
Vial: 3 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Std. Conc.	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.414	0.000	0.000	1289139	579289	13C3-PFBA_IS	10.0000	9.9562	ng/mL	
13C4-PFBA_IS	Auto	1.414	0.000	----	1289139	1289139	----	10.0000	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.414	-0.001	----	579289	579289	----	5.0000	5.0000	ng/mL	
PFBA	Auto	1.419	0.003	0.005	28706	1289139	13C4-PFBA_IS	0.2500	0.2592	ng/mL	
PFMPA	Auto	2.429	-0.003	-1.062	23024	141383	13C5-PFPeA_IS	0.2500	0.2520	ng/mL	
3_3 FTCA	Auto	3.003	-0.001	-0.488	30420	141383	13C5-PFPeA_IS	10.0000	9.7028	ng/mL	
13C5-PFPeA	Auto	3.491	-0.001	-1.486	141383	645671	13C2-PFHxA_IS	5.0000	4.8511	ng/mL	
13C5-PFPeA_IS	Auto	3.491	-0.001	----	141383	141383	----	5.0000	5.0000	ng/mL	
PFPeA	Auto	3.494	-0.001	0.003	43873	141383	13C5-PFPeA_IS	0.2500	0.2396	ng/mL	
PFMBA	Auto	4.024	-0.001	0.533	31409	141383	13C5-PFPeA_IS	0.2500	0.2426	ng/mL	
13C2-4_2 FTS	Auto	4.660	-0.001	-2.427	178483	239451	18O2-PFHxS_IS	5.0000	5.4165	ng/mL	
13C2-4_2 FTS_IS	Auto	4.660	-0.001	----	178483	178483	----	5.0000	5.0000	ng/mL	
4_2 FTS	Auto	4.659	-0.003	-0.001	19625	178483	13C2-4_2 FTS_IS	0.2340	0.2236	ng/mL	
13C3-PFBS_IS	Auto	4.645	-0.002	----	324049	324049	----	2.5000	2.5000	ng/mL	
PFBS	Auto	4.648	0.000	0.003	39554	324049	13C3-PFBS_IS	0.2210	0.2385	ng/mL	
13C3-PFBS	Auto	4.645	-0.002	-2.442	324049	239451	18O2-PFHxS_IS	2.5000	2.3847	ng/mL	
NFDHA	Auto	4.836	0.001	-0.141	36786	651214	13C5-PFHxA_IS	0.2500	0.2546	ng/mL	
13C5-PFHxA	Auto	4.977	-0.001	0.000	651214	645671	13C2-PFHxA_IS	2.5000	2.3931	ng/mL	
13C5-PFHxA_IS	Auto	4.977	-0.001	----	651214	651214	----	2.5000	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	4.977	-0.002	----	645671	645671	----	2.5000	2.5000	ng/mL	
PFHxA	M	4.979	-0.001	0.002	54817	651214	13C5-PFHxA_IS	0.2500	0.2445	ng/mL	
PFEESA	Auto	5.321	-0.001	0.344	162206	651214	13C5-PFHxA_IS	0.2230	0.2224	ng/mL	
13C3-HFPO-DA	Auto	5.451	-0.001	0.474	588188	645671	13C2-PFHxA_IS	10.0000	9.3059	ng/mL	
13C3-HFPO-DA_IS	Auto	5.451	-0.001	----	588188	588188	----	10.0000	10.0000	ng/mL	
HFPO-DA	Auto	5.453	0.000	0.002	16861	588188	13C3-HFPO-DA_IS	0.2500	0.2595	ng/mL	
5_3 FTCA	Auto	5.906	0.000	0.929	168370	651214	13C5-PFHxA_IS	10.0000	9.9956	ng/mL	
PFPeS	Auto	6.018	0.000	-1.068	32440	251448	13C3-PFHxS_IS	0.2350	0.2457	ng/mL	
13C4-PFHpA	Auto	6.154	0.000	1.177	603695	645671	13C2-PFHxA_IS	2.5000	2.4507	ng/mL	
13C4-PFHpA_IS	Auto	6.154	0.000	----	603695	603695	----	2.5000	2.5000	ng/mL	
PFHpA	Auto	6.154	-0.001	0.000	70720	603695	13C4-PFHpA_IS	0.2500	0.2477	ng/mL	
DONA	Auto	6.520	0.000	1.069	113323	588188	13C3-HFPO-DA_IS	0.2360	0.2486	ng/mL	
13C2-6_2 FTS_IS	Auto	6.793	0.000	----	169139	169139	----	5.0000	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.793	0.000	-0.294	169139	239451	18O2-PFHxS_IS	5.0000	5.4271	ng/mL	
6_2 FTS	Auto	6.793	0.001	0.000	19395	169139	13C2-6_2 FTS_IS	0.2380	0.2518	ng/mL	
13C4-PFOA_IS	Auto	7.109	0.002	----	42281	42281	----	2.5000	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.108	0.001	----	592639	592639	----	2.5000	2.5000	ng/mL	
13C8-PFOA	Auto	7.108	0.001	-0.001	592639	42281	13C4-PFOA_IS	2.5000	2.5078	ng/mL	
PFOA	Auto	7.111	0.001	0.003	48118	592639	13C8-PFOA_IS	0.2500	0.2709	ng/mL	
13C3-PFHxS	Auto	7.086	0.000	-0.001	251448	239451	18O2-PFHxS_IS	2.5000	2.4465	ng/mL	
13C3-PFHxS_IS	Auto	7.086	0.000	----	251448	251448	----	2.5000	2.5000	ng/mL	
PFHxS	M	7.085	0.001	-0.001	29288	251448	13C3-PFHxS_IS	0.2290	0.2235	ng/mL	
18O2-PFHxS_IS	Auto	7.087	0.001	----	239451	239451	----	2.5000	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.956	0.000	----	306696	306696	----	1.2500	1.2500	ng/mL	
13C9-PFNA	Auto	7.956	0.000	-0.001	306696	316331	13C5-PFNA_IS	1.2500	1.2383	ng/mL	
13C5-PFNA_IS	Auto	7.957	0.001	----	316331	316331	----	1.2500	1.2500	ng/mL	
PFNA	Auto	7.958	0.001	0.002	50390	306696	13C9-PFNA_IS	0.2500	0.2578	ng/mL	
PFHpS	Auto	8.006	0.002	-0.814	21835	114171	13C8-PFOS_IS	0.2390	0.2450	ng/mL	
7_3 FTCA	Auto	7.955	0.001	2.978	213059	651214	13C5-PFHxA_IS	10.0000	9.4748	ng/mL	
13C2-8_2-FTS	Auto	8.410	0.001	1.323	131843	239451	18O2-PFHxS_IS	5.0000	5.1499	ng/mL	
13C2-8_2-FTS_IS	Auto	8.410	0.001	----	131843	131843	----	5.0000	5.0000	ng/mL	
8_2 FTS	Auto	8.409	-0.001	-0.001	13634	131843	13C2-8_2-FTS_IS	0.2400	0.2406	ng/mL	
13C6-PFDA_IS	Auto	8.721	0.001	----	224311	224311	----	1.2500	1.2500	ng/mL	
13C6-PFDA	Auto	8.721	0.001	-0.001	224311	235058	13C2-PFDA_IS	1.2500	1.1861	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_008 (continued)

(Table continued from previous page)

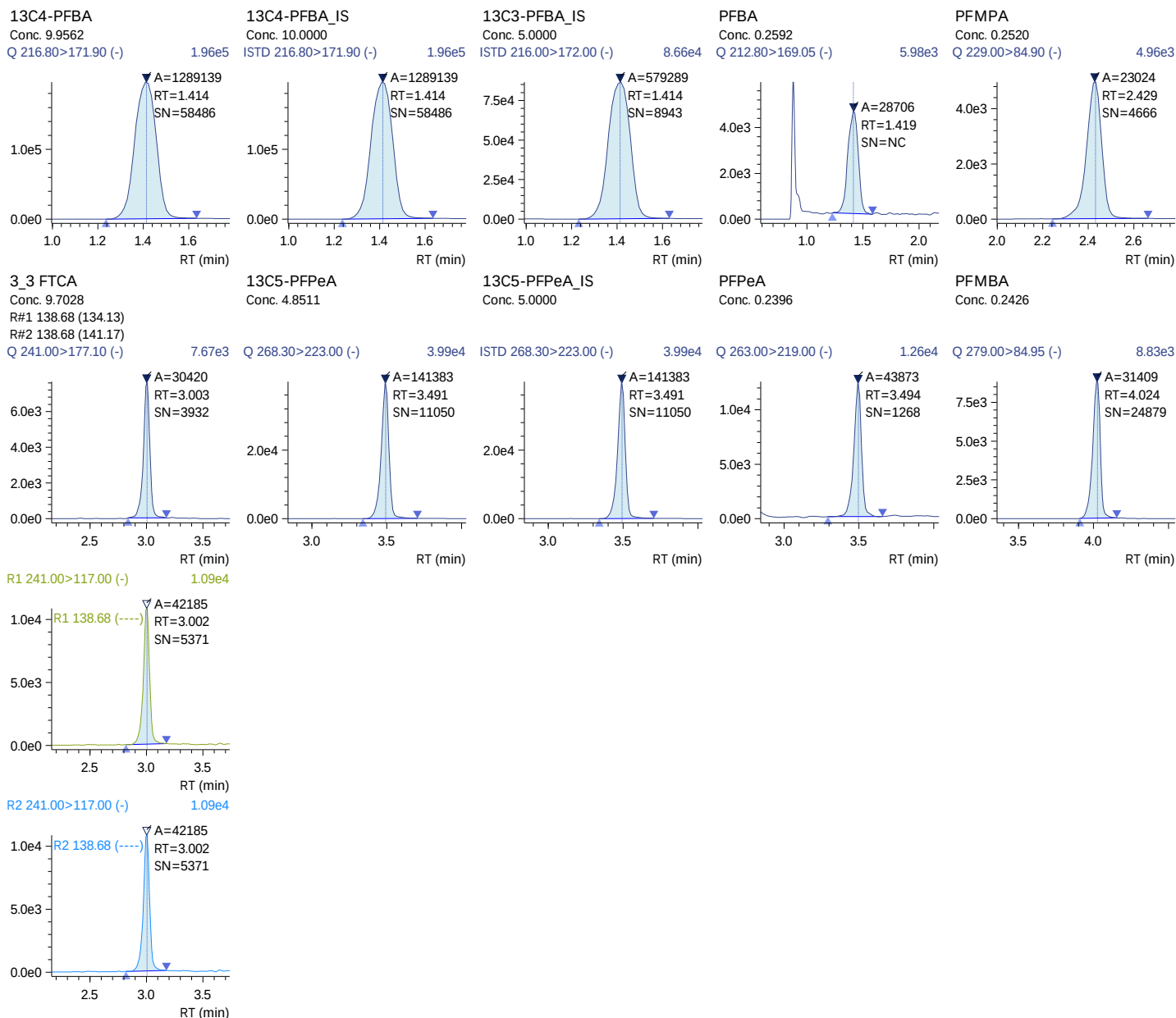
Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Std. Conc.	Conc.	Unit	Flag ID
13C2-PFDA_IS	Auto	8.722	0.001	----	235058	235058	----	1.2500	1.2500	ng/mL	
PFDA	Auto	8.723	0.002	0.002	57165	224311	13C6-PFDA_IS	0.2500	0.2419	ng/mL	
D3-NMeFOSAA_IS	Auto	8.855	0.000	----	246883	246883	----	5.0000	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.855	0.000	0.035	246883	277483	13C4-PFOS_IS	5.0000	5.1264	ng/mL	
13C8-PFOS_IS	Auto	8.820	0.000	----	114171	114171	----	2.5000	2.5000	ng/mL	
13C8-PFOS	Auto	8.820	0.000	0.000	114171	277483	13C4-PFOS_IS	2.5000	2.4671	ng/mL	
13C4-PFOS_IS	Auto	8.820	0.000	----	277483	277483	----	2.5000	2.5000	ng/mL	
PFOS	M	8.821	-0.001	0.001	30901	114171	13C8-PFOS_IS	0.2330	0.2602	ng/mL	
NMeFOSAA	M	8.861	0.000	0.006	15374	246883	D3-NMeFOSAA_IS	0.2500	0.2295	ng/mL	
D5-NetFOSAA_IS	Auto	9.187	0.001	----	304822	304822	----	5.0000	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.187	0.001	0.367	304822	277483	13C4-PFOS_IS	5.0000	5.2905	ng/mL	
NetFOSAA	M	9.196	0.001	0.009	10212	304822	D5-NetFOSAA_IS	0.2500	0.2508	ng/mL	
9-CI-PF3ONS	Auto	9.385	0.001	3.934	116926	588188	13C3-HFPO-DA_IS	0.2340	0.2411	ng/mL	
PFUnDA	Auto	9.447	0.000	0.001	56306	279544	13C7-PFUnDA_IS	0.2500	0.2485	ng/mL	
13C7-PFUnDA_IS	Auto	9.446	0.001	----	279544	279544	----	1.2500	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.446	0.001	0.724	279544	235058	13C2-PFDA_IS	1.2500	1.2392	ng/mL	
PFNS	Auto	9.585	0.001	0.765	20655	114171	13C8-PFOS_IS	0.2400	0.2381	ng/mL	
10_2_FTS	Auto	9.818	-0.001	1.408	16489	131843	13C2-8_2-FTS_IS	0.2410	0.2392	ng/mL	
13C2-PFDOA_IS	Auto	10.133	0.000	----	313428	313428	----	1.2500	1.2500	ng/mL	
13C2-PFDOA	Auto	10.133	0.000	1.411	313428	235058	13C2-PFDA_IS	1.2500	1.2094	ng/mL	
PFDOA	Auto	10.134	0.000	0.001	49481	313428	13C2-PFDOA_IS	0.2000	0.2478	ng/mL	
PFDS	Auto	10.297	0.000	1.476	18165	114171	13C8-PFOS_IS	0.2410	0.2347	ng/mL	
PFTDA	Auto	10.792	0.000	-0.632	54014	133833	13C2-PFTDA_IS	0.2500	0.2551	ng/mL	
11-CI-PF3OUdS	Auto	10.807	0.001	5.356	83986	588188	13C3-HFPO-DA_IS	0.2360	0.2404	ng/mL	
PFOSAm	M	11.163	-0.001	-0.001	48743	288124	13C8-PFOSAm_IS	0.5000	0.5133	ng/mL	
13C8-PFOSAm	Auto	11.164	-0.001	2.344	288124	277483	13C4-PFOS_IS	2.5000	2.4459	ng/mL	
13C8-PFOSAm_IS	Auto	11.164	-0.001	----	288124	288124	----	2.5000	2.5000	ng/mL	
PFTDA	Auto	11.427	0.002	0.003	40907	133833	13C2-PFTDA_IS	0.2500	0.2567	ng/mL	
13C2-PFTDA	Auto	11.424	0.000	2.702	133833	235058	13C2-PFDA_IS	1.2500	1.1961	ng/mL	
13C2-PFTDA_IS	Auto	11.424	0.000	----	133833	133833	----	1.2500	1.2500	ng/mL	
PFDoS	Auto	11.623	0.001	2.803	11601	114171	13C8-PFOS_IS	0.2430	0.2534	ng/mL	
D7-MeFOSE_IS	Auto	13.379	0.002	----	713433	713433	----	25.0000	25.0000	ng/mL	
D7-MeFOSE	Auto	13.379	0.002	4.559	713433	277483	13C4-PFOS_IS	25.0000	24.5653	ng/mL	
MeFOSE	M	13.415	0.002	0.036	6979	713433	D7-MeFOSE_IS	0.2500	0.2664	ng/mL	
13C2-PFHxDA_IS	Auto	12.642	0.001	----	527703	527703	----	2.5000	2.5000	ng/mL	
13C2-PFHxDA	Auto	12.642	0.001	3.920	527703	235058	13C2-PFDA_IS	2.5000	2.4169	ng/mL	
PFHxDA	Auto	12.643	0.001	0.001	60426	527703	13C2-PFHxDA_IS	0.2500	0.2514	ng/mL	
D3-MeFOSA	Auto	13.686	0.001	4.866	58544	277483	13C4-PFOS_IS	2.5000	2.4679	ng/mL	
D3-MeFOSA_IS	Auto	13.686	0.001	----	58544	58544	----	2.5000	2.5000	ng/mL	
MeFOSA	M	13.695	0.001	0.009	10796	58544	D3-MeFOSA_IS	0.2500	0.2558	ng/mL	
D9-EtFOSE_IS	Auto	14.008	0.002	----	727751	727751	----	25.0000	25.0000	ng/mL	
D9-EtFOSE	Auto	14.008	0.002	5.188	727751	277483	13C4-PFOS_IS	25.0000	24.6721	ng/mL	
EtFOSE	M	14.052	0.004	0.044	10471	727751	D9-EtFOSE_IS	0.2500	0.2735	ng/mL	
D5-EtFOSAm	Auto	14.364	0.002	5.544	79387	277483	13C4-PFOS_IS	2.5000	2.5135	ng/mL	
D5-EtFOSAm_IS	Auto	14.364	0.002	----	79387	79387	----	2.5000	2.5000	ng/mL	
EtFOSAm	M	14.380	0.000	0.016	10878	79387	D5-EtFOSAm_IS	0.2500	0.2354	ng/mL	
PFODA	Auto	13.779	0.004	1.137	28924	527703	13C2-PFHxDA_IS	0.2500	0.2424	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_008 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_008 (continued)

13C2-4_2 FTS
Conc. 5.4165

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. 0.2236
R#1 28.55 (34.14)
R#2 28.55 (29.06)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 0.2385
R#1 45.23 (47.53)
R#2 45.23 (46.72)

Q 329.10>80.90 (-)

5.55e4

ISTD 329.10>80.90 (-)

5.55e4

Q 327.10>307.00 (-)

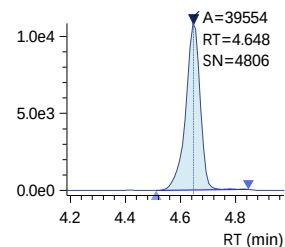
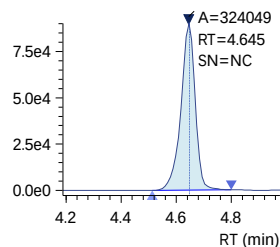
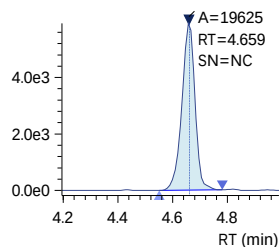
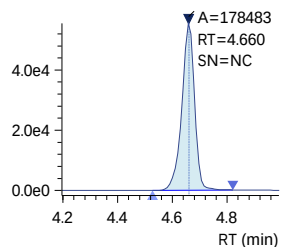
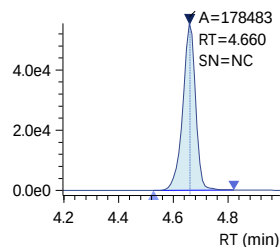
5.92e3

ISTD 302.10>79.90 (-)

9.01e4

Q 298.70>79.90 (-)

1.08e4

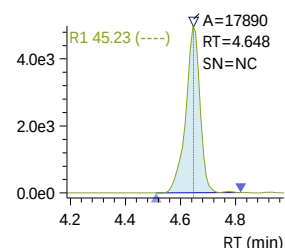
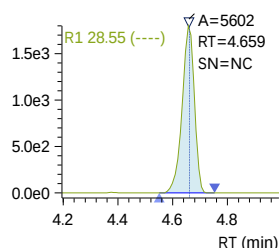


R1 327.10>80.90 (-)

1.80e3

R1 298.70>98.80 (-)

4.99e3

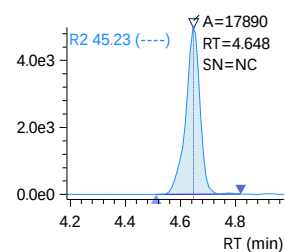
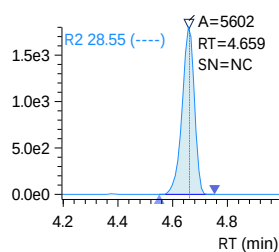


R2 327.10>80.90 (-)

1.80e3

R2 298.70>98.80 (-)

4.99e3





240118_008 (continued)

13C3-PFBS
Conc. 2.3847

NFDHA
Conc. 0.2546
R#1 37.80 (37.88)
R#2 37.80 (40.25)

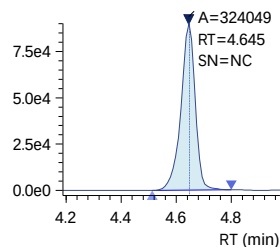
13C5-PFHxA
Conc. 2.3931

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

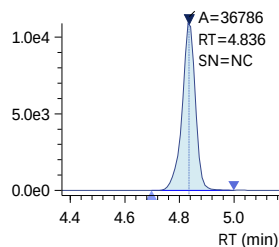
Q 302.10>79.90 (-)

9.01e4



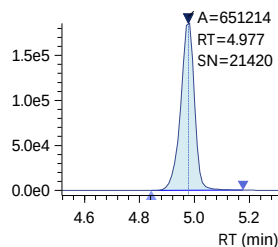
Q 295.00>201.00 (-)

1.09e4



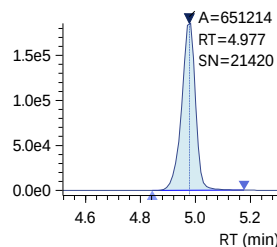
Q 318.00>273.00 (-)

1.86e5



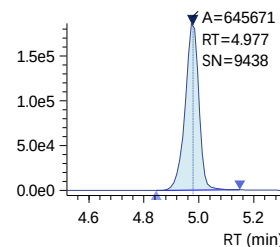
ISTD 318.00>273.00 (-)

1.86e5



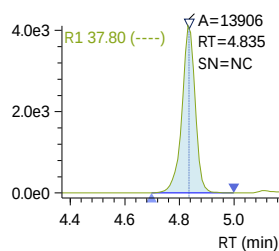
ISTD 315.10>270.00 (-)

1.86e5



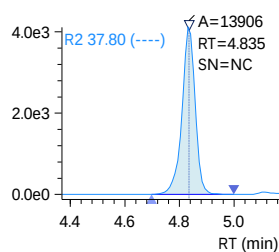
R1 295.00>84.90 (-)

4.11e3



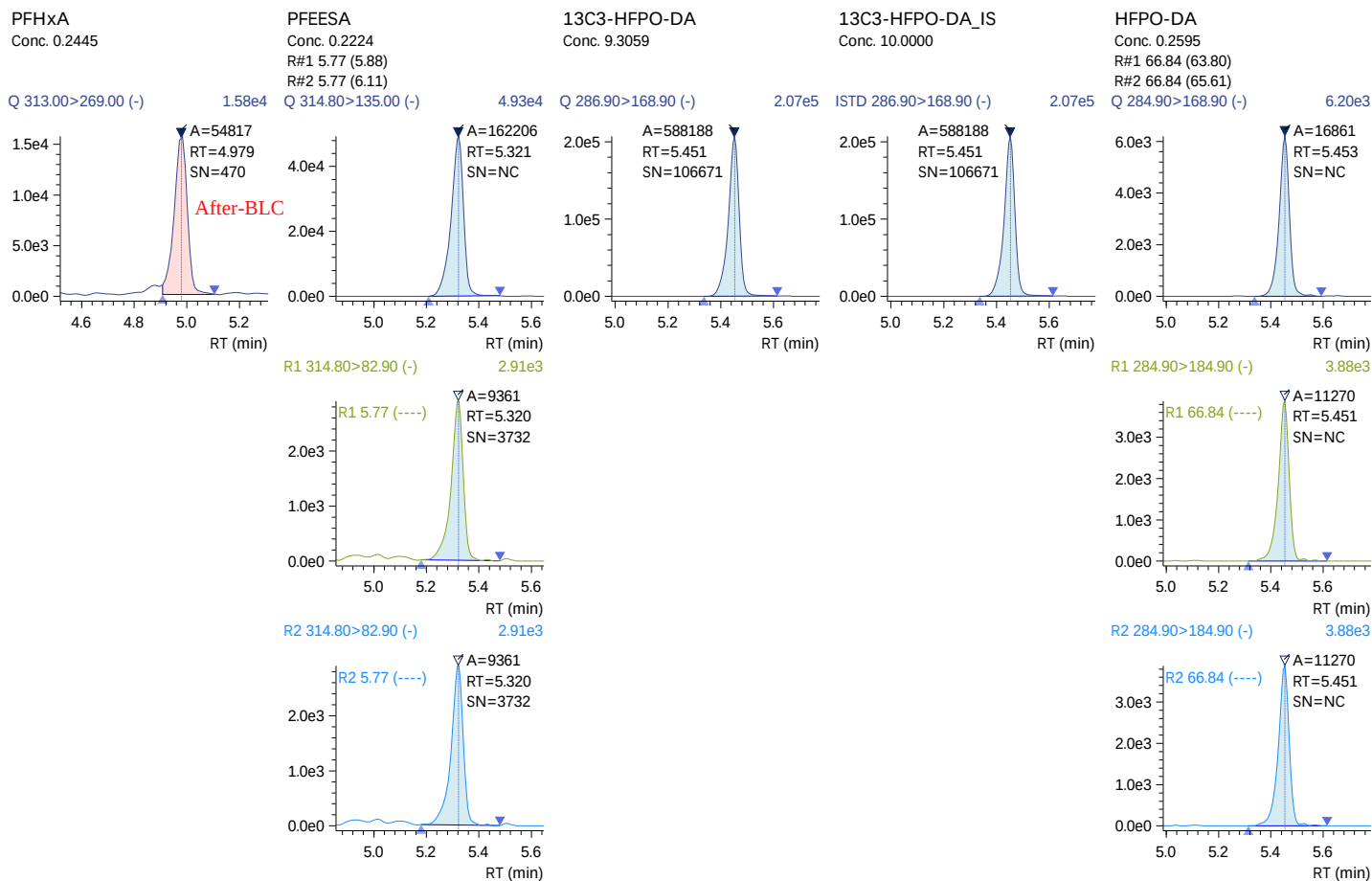
R2 295.00>84.90 (-)

4.11e3





240118_008 (continued)

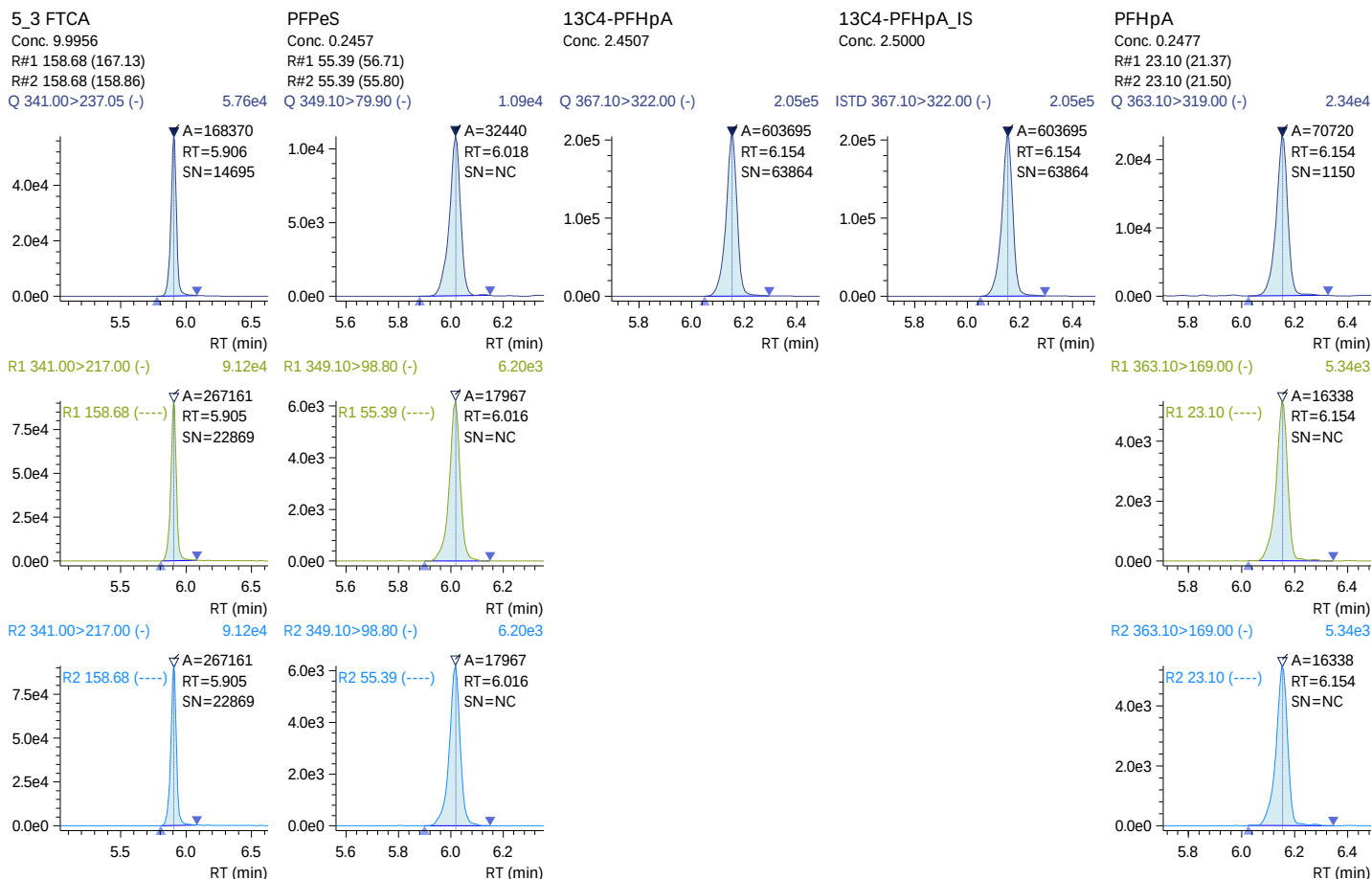


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_008 (continued)

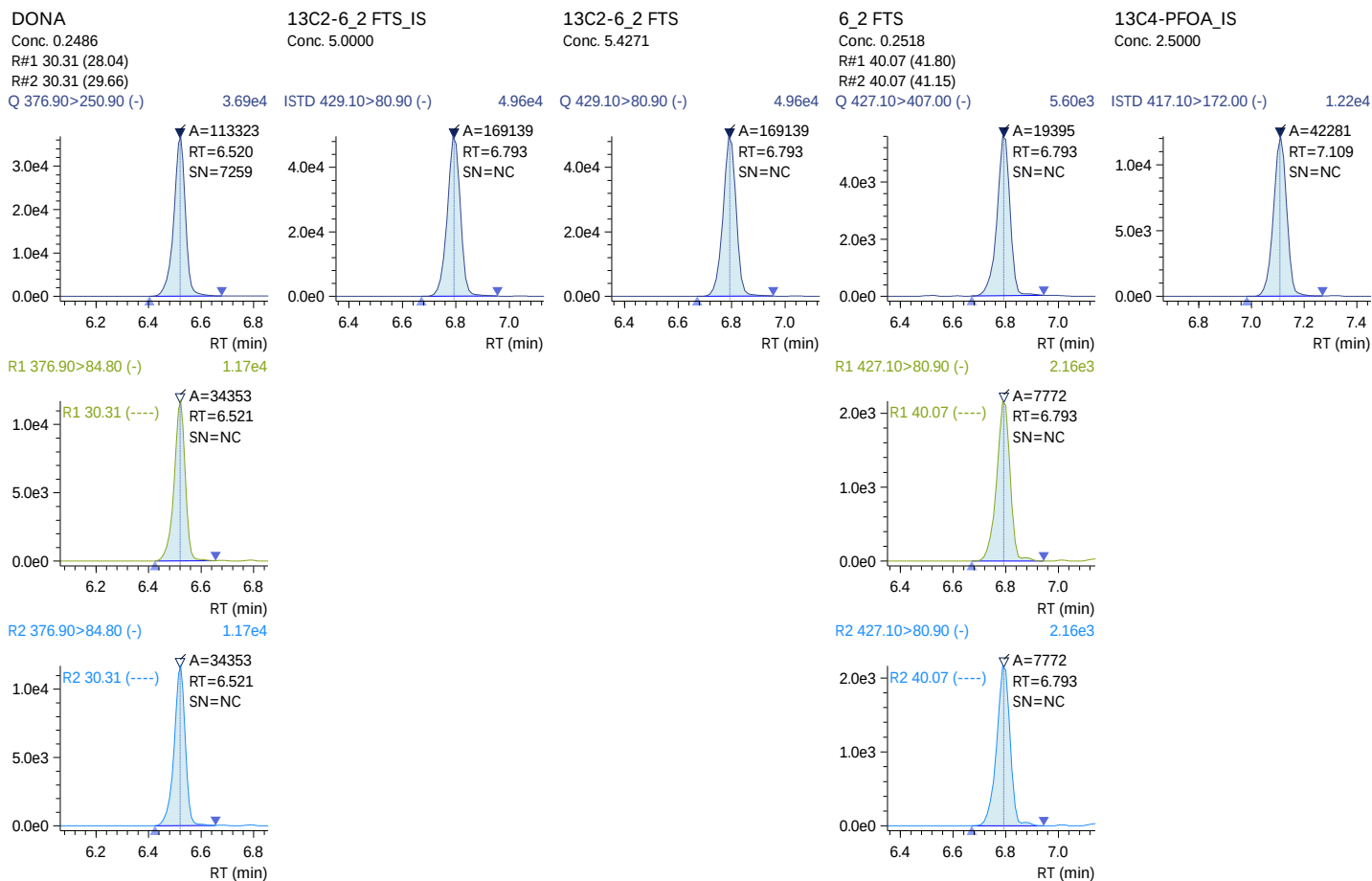


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_008 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_008 (continued)

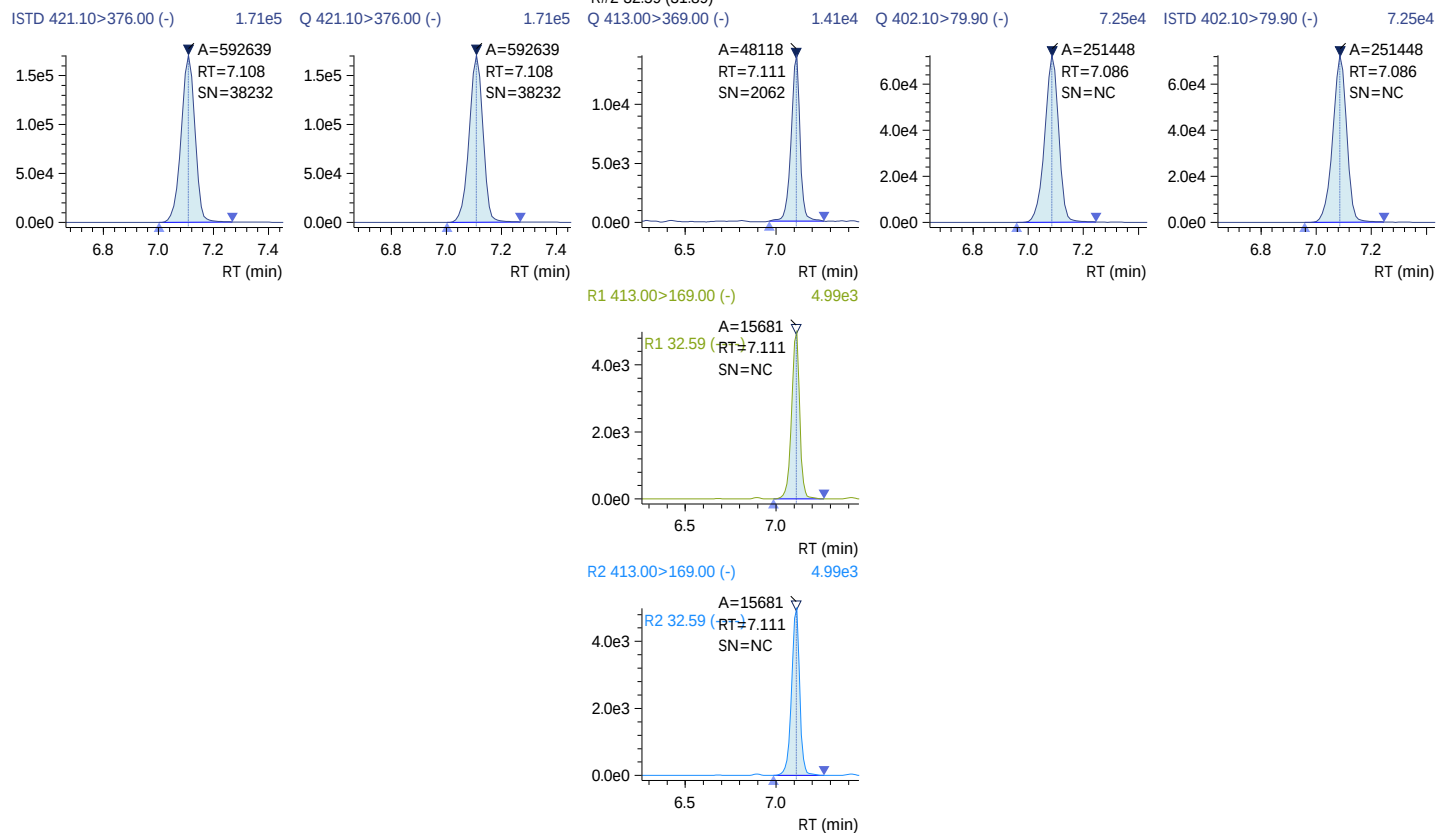
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.5078

PFOA
Conc. 0.2709
R#1 32.59 (29.05)
R#2 32.59 (31.89)

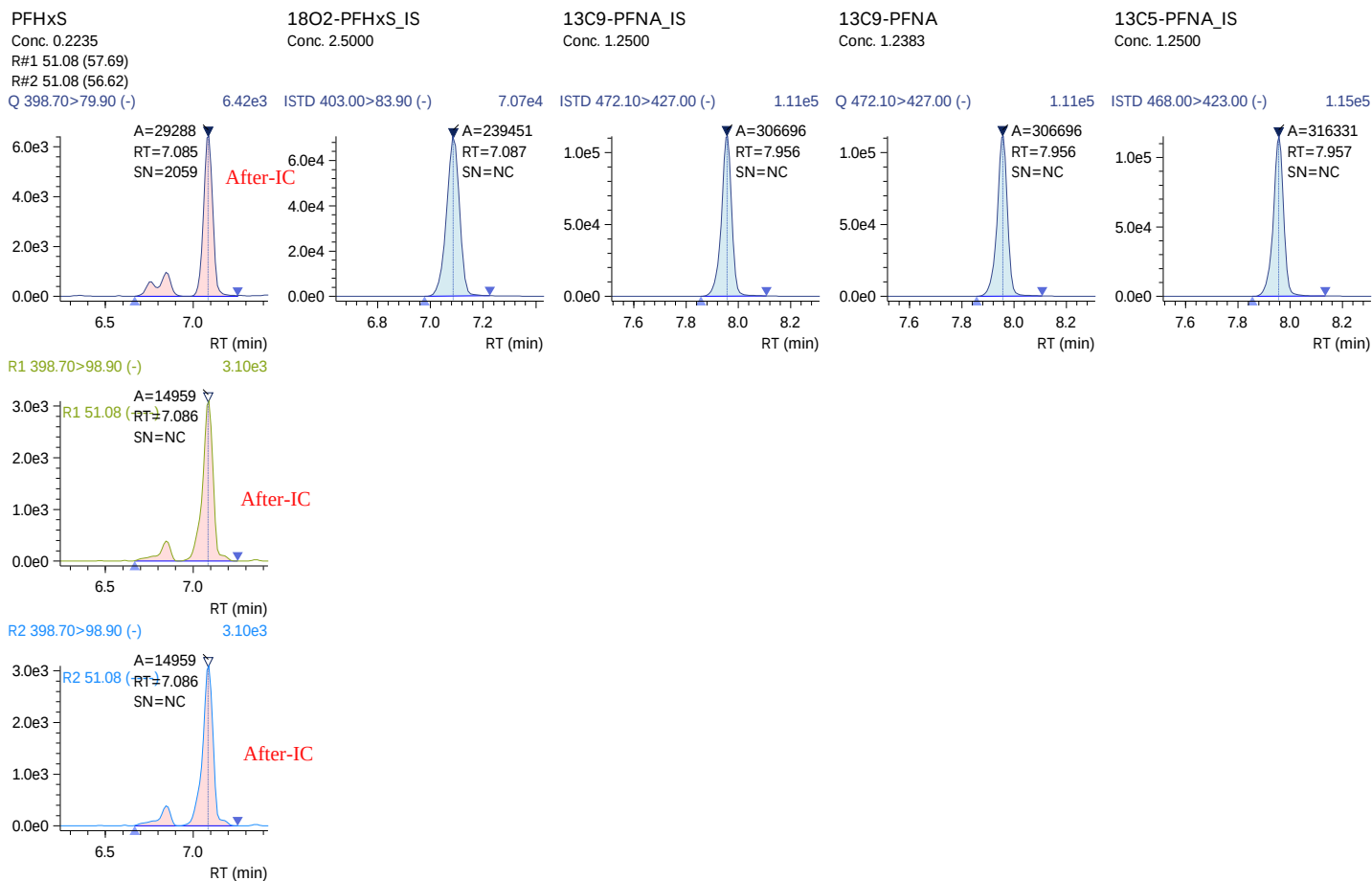
13C3-PFHxS
Conc. 2.4465

13C3-PFHxS_IS
Conc. 2.5000





240118_008 (continued)

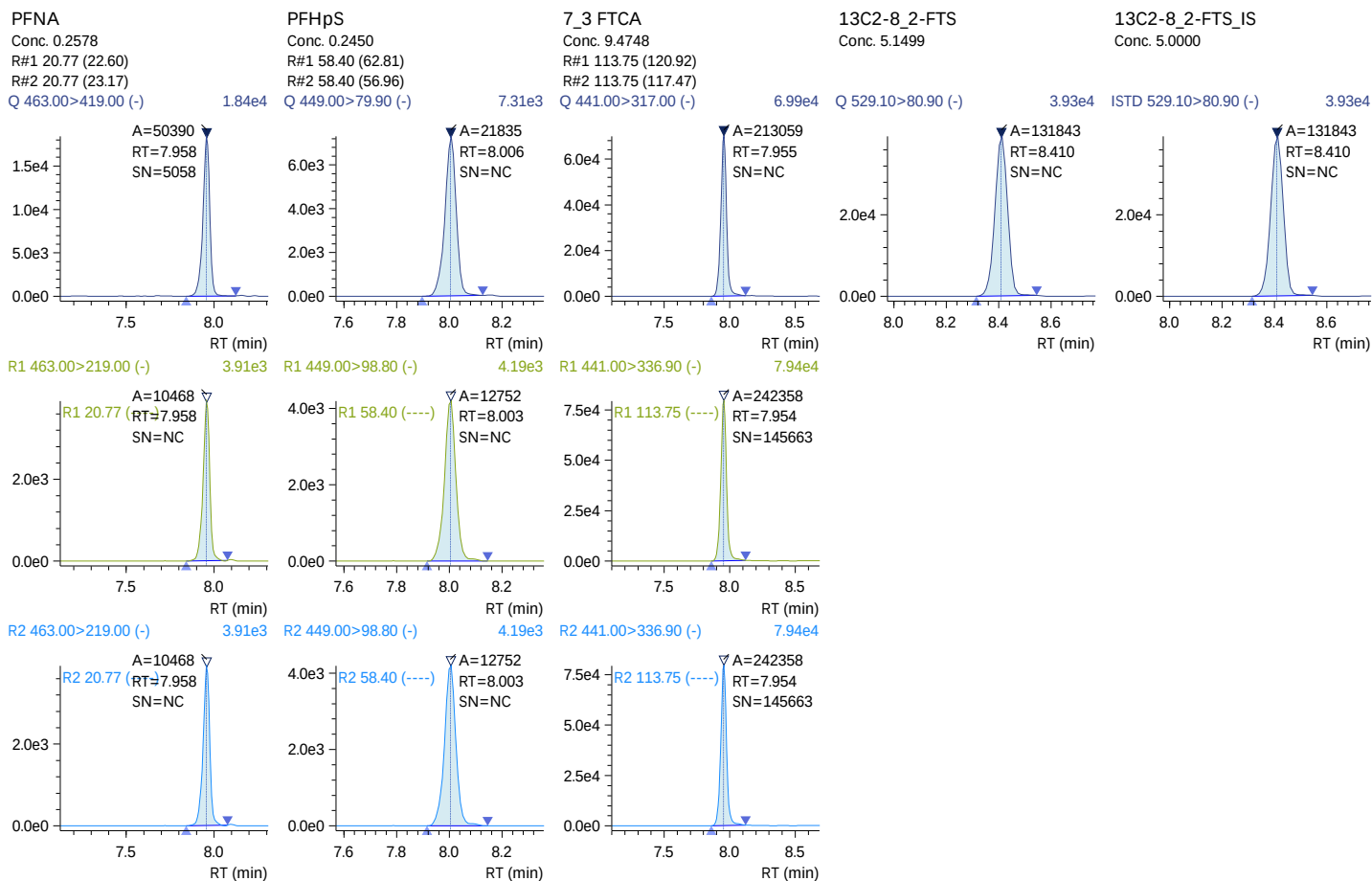


J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_008 (continued)

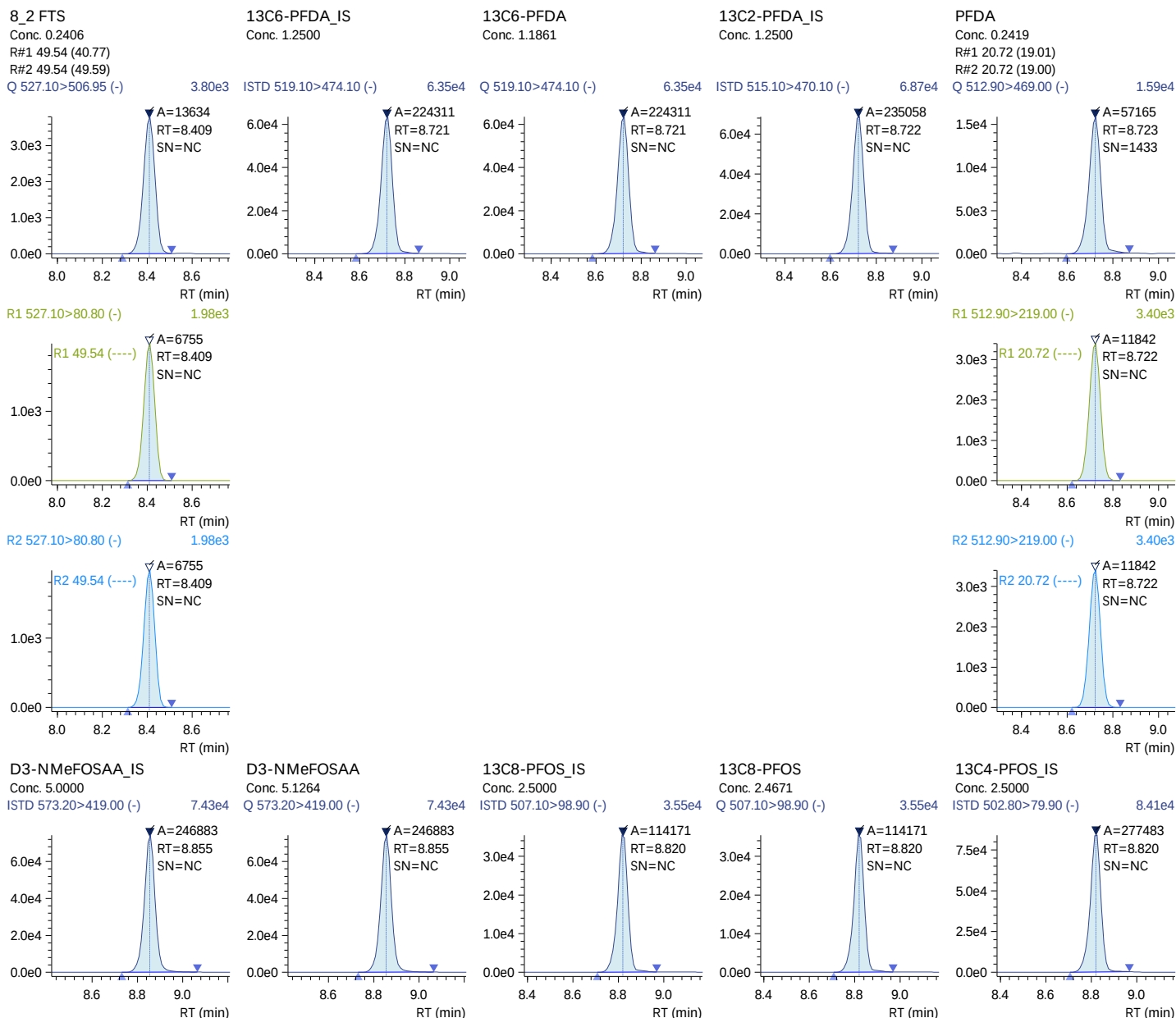


J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_008 (continued)

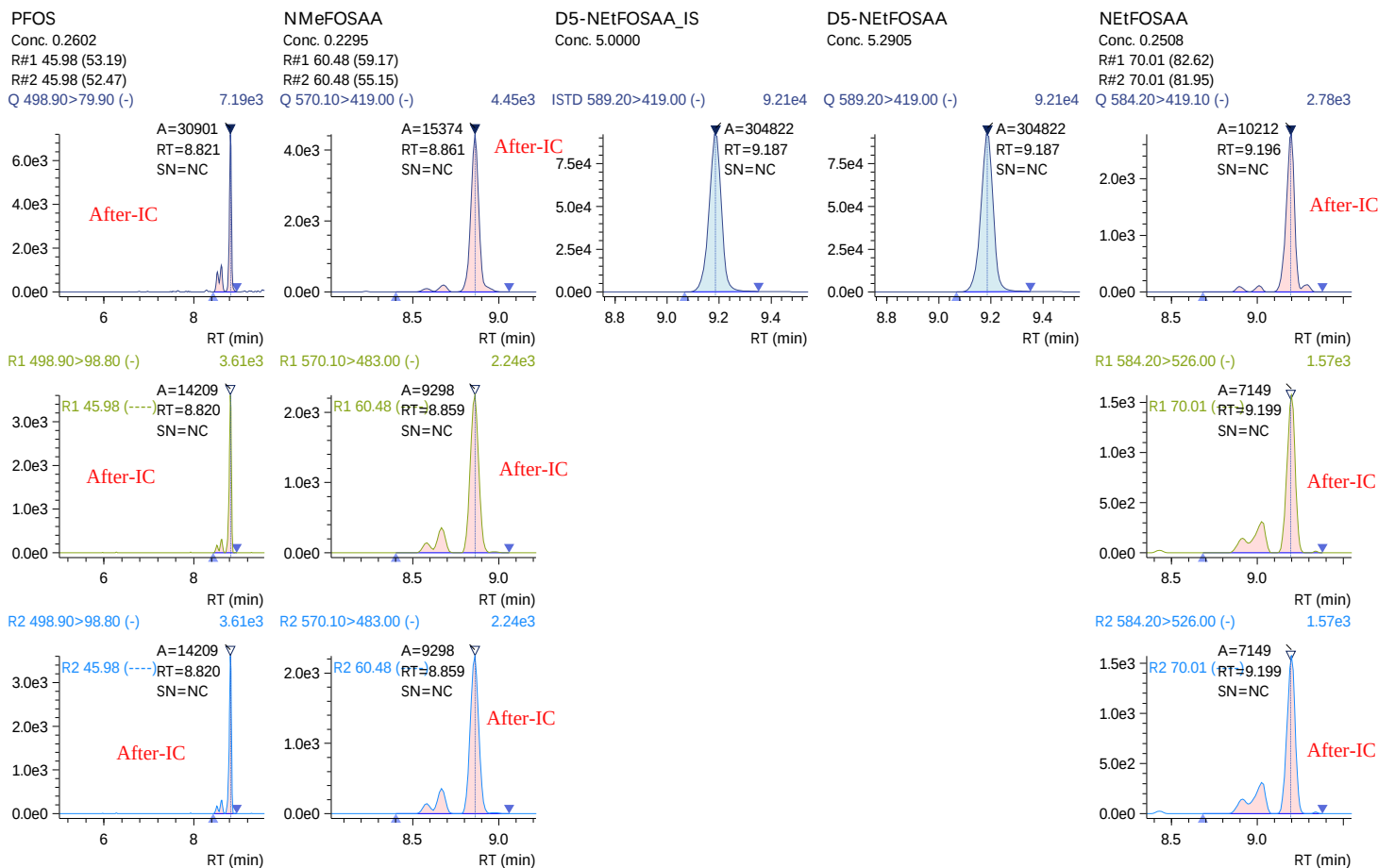


J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_008 (continued)

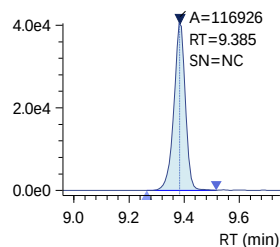




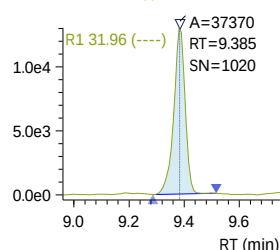
240118_008 (continued)

9-Cl-PF3ONS

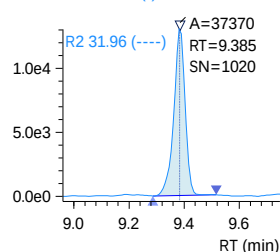
Conc. 0.2411
R#1 31.96 (31.76)
R#2 31.96 (32.76)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-) 1.31e4

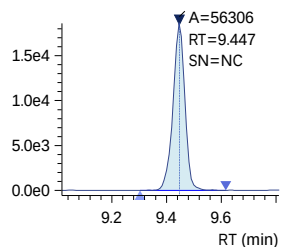


R2 532.80>353.00 (-) 1.31e4

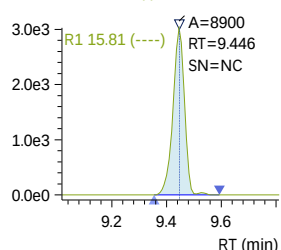


PFUnDA

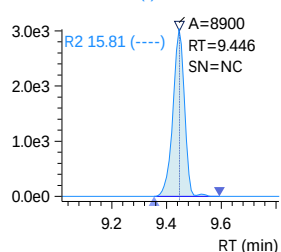
Conc. 0.2485
R#1 15.81 (12.31)
R#2 15.81 (13.12)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-) 3.03e3

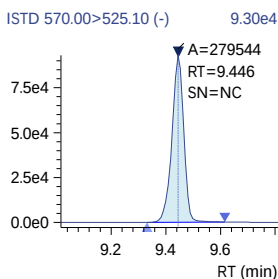


R2 563.10>269.10 (-) 3.03e3



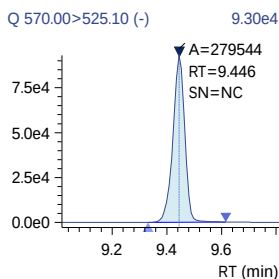
13C7-PFUnDA_IS

Conc. 1.2500



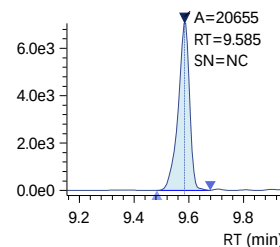
13C7-PFUnDA

Conc. 1.2392

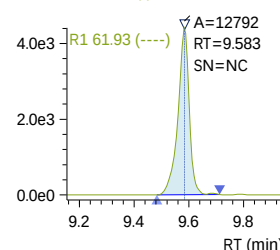


PFNS

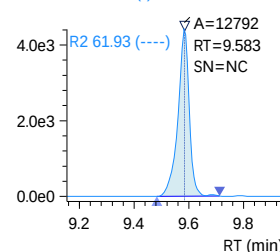
Conc. 0.2381
R#1 61.93 (63.31)
R#2 61.93 (65.22)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-) 4.41e3

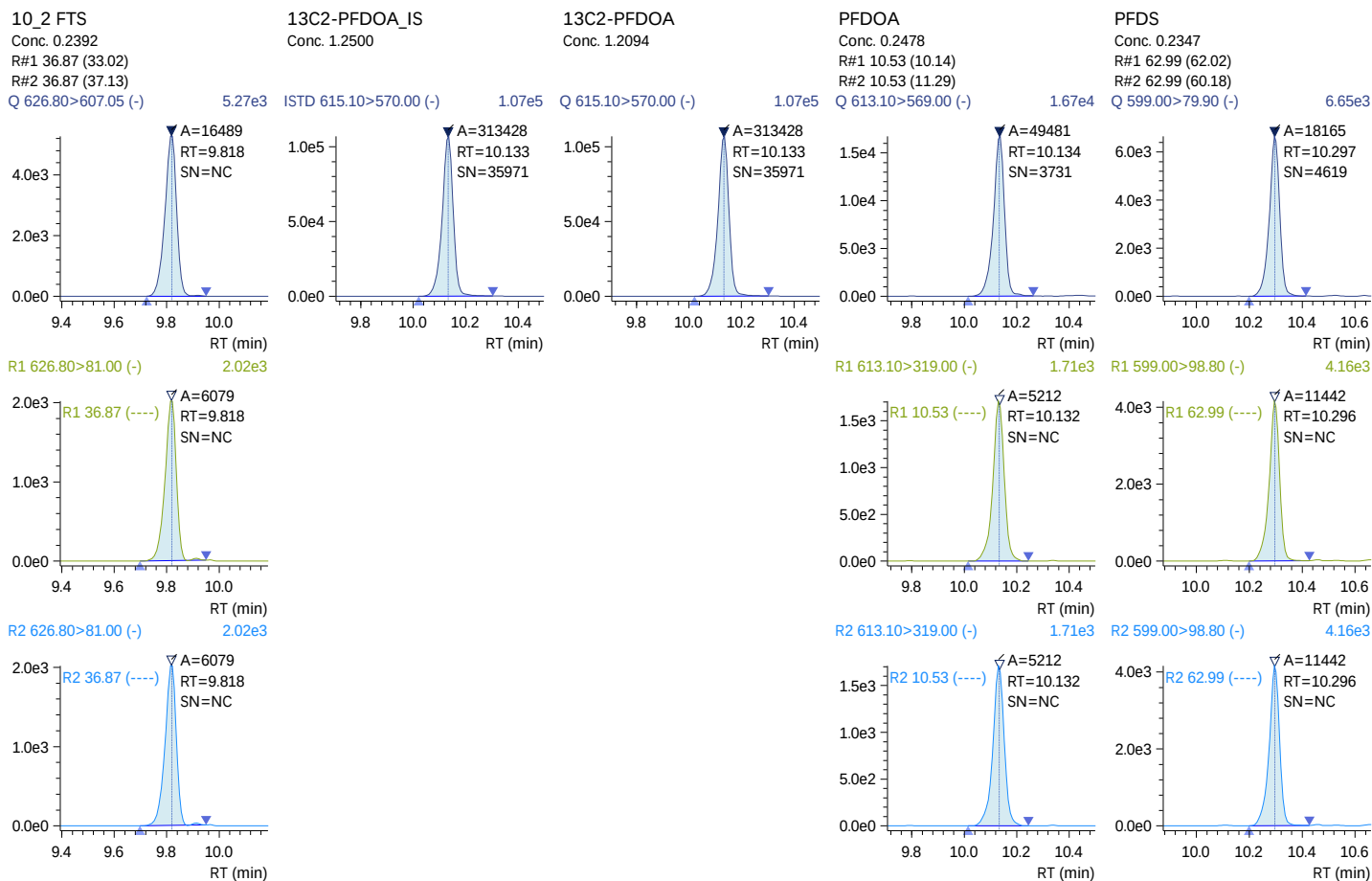


R2 548.80>98.80 (-) 4.41e3





240118_008 (continued)

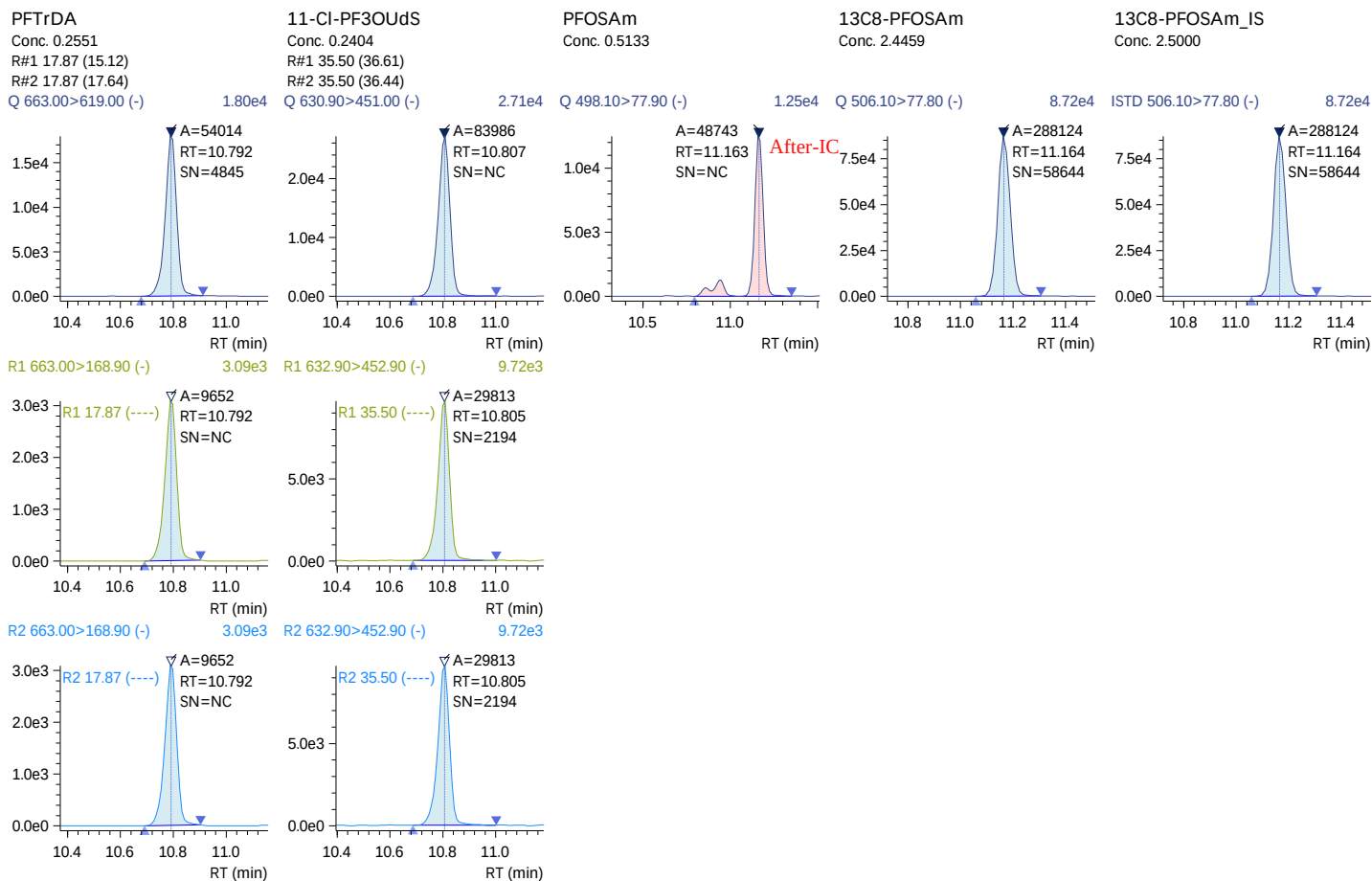


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.

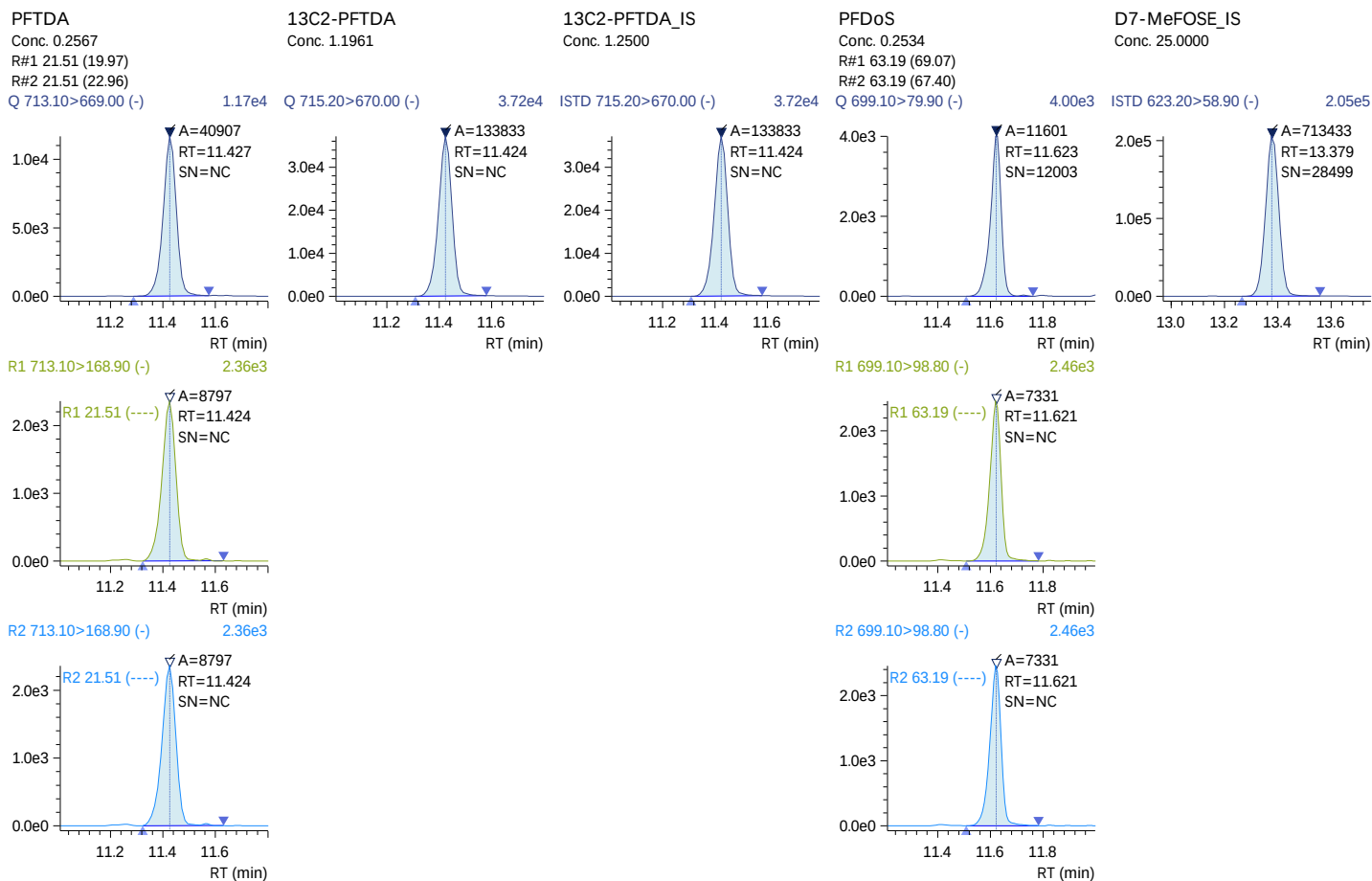


240118_008 (continued)





240118_008 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_008 (continued)

D7-MeFOSE
Conc. 24.5653

MeFOSE
Conc. 0.2664

13C2-PFHXA_IS
Conc. 2.5000

13C2-PFHXA
Conc. 2.4169

PFHXA
Conc. 0.2514
R#1 13.93 (11.64)
R#2 13.93 (13.90)

Q 623.20>58.90 (-)

2.05e5

Q 616.10>59.00 (-)

1.22e3

ISTD 815.00>770.05 (-)

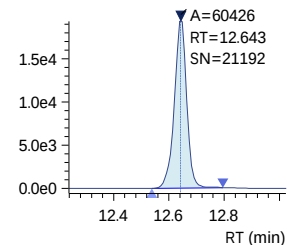
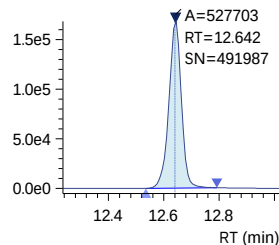
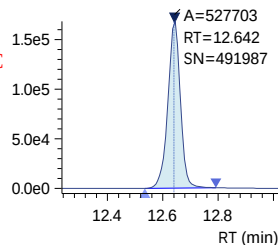
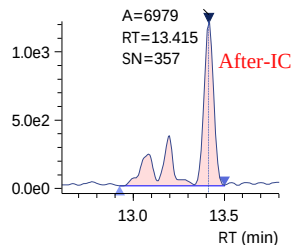
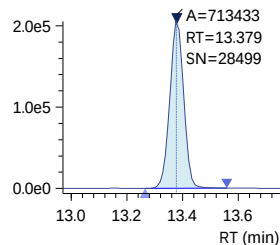
1.68e5

Q 815.00>770.05 (-)

1.68e5

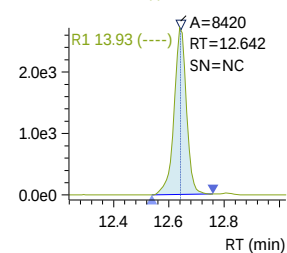
Q 813.00>768.95 (-)

1.93e4



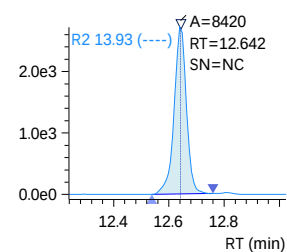
R1 813.00>218.95 (-)

2.72e3



R2 813.00>218.95 (-)

2.72e3





240118_008 (continued)

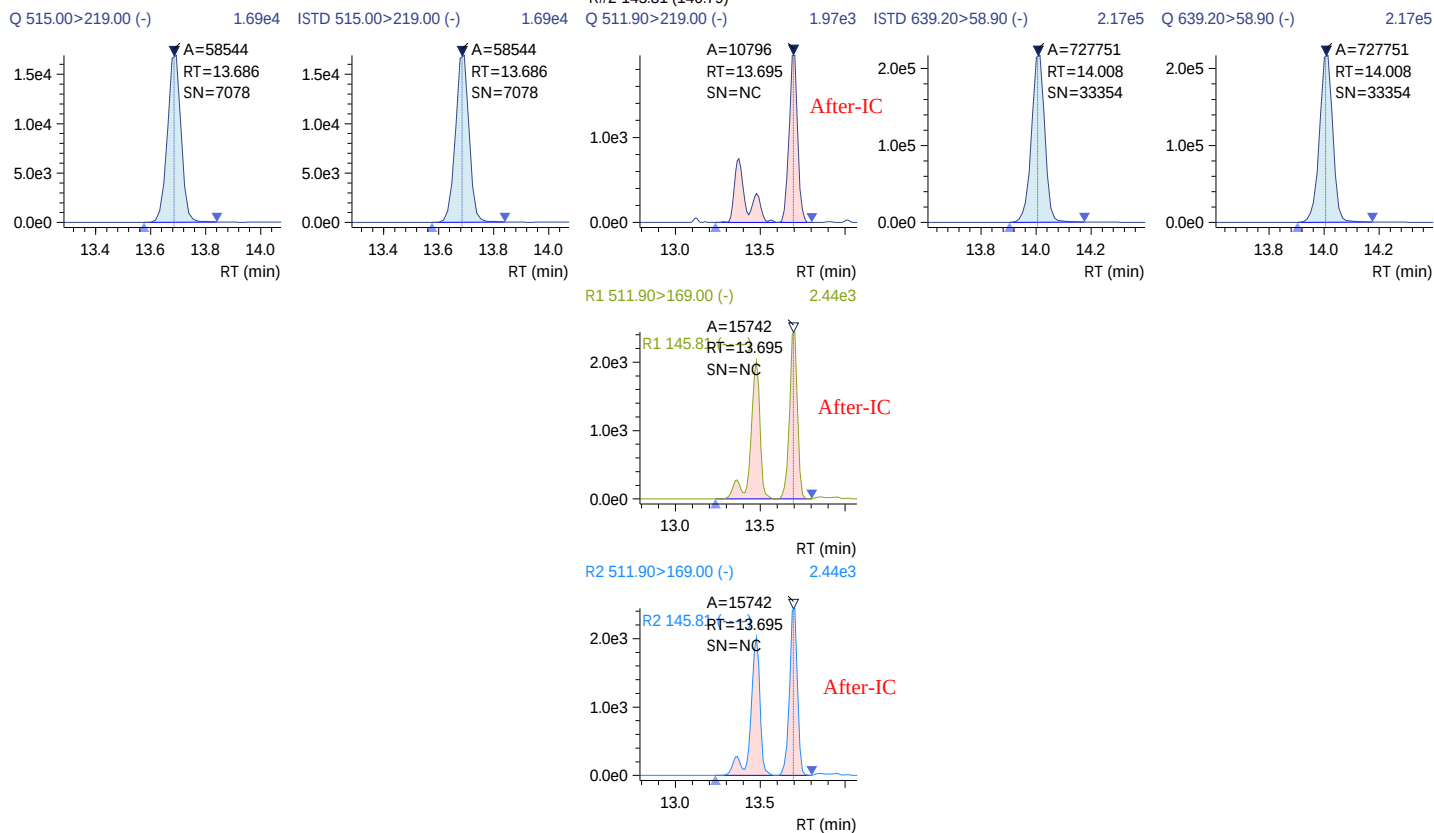
D3-MeFOSA
Conc. 2.4679

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. 0.2558
R#1 145.81 (149.05)
R#2 145.81 (140.79)

D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 24.6721



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
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240118_008 (continued)

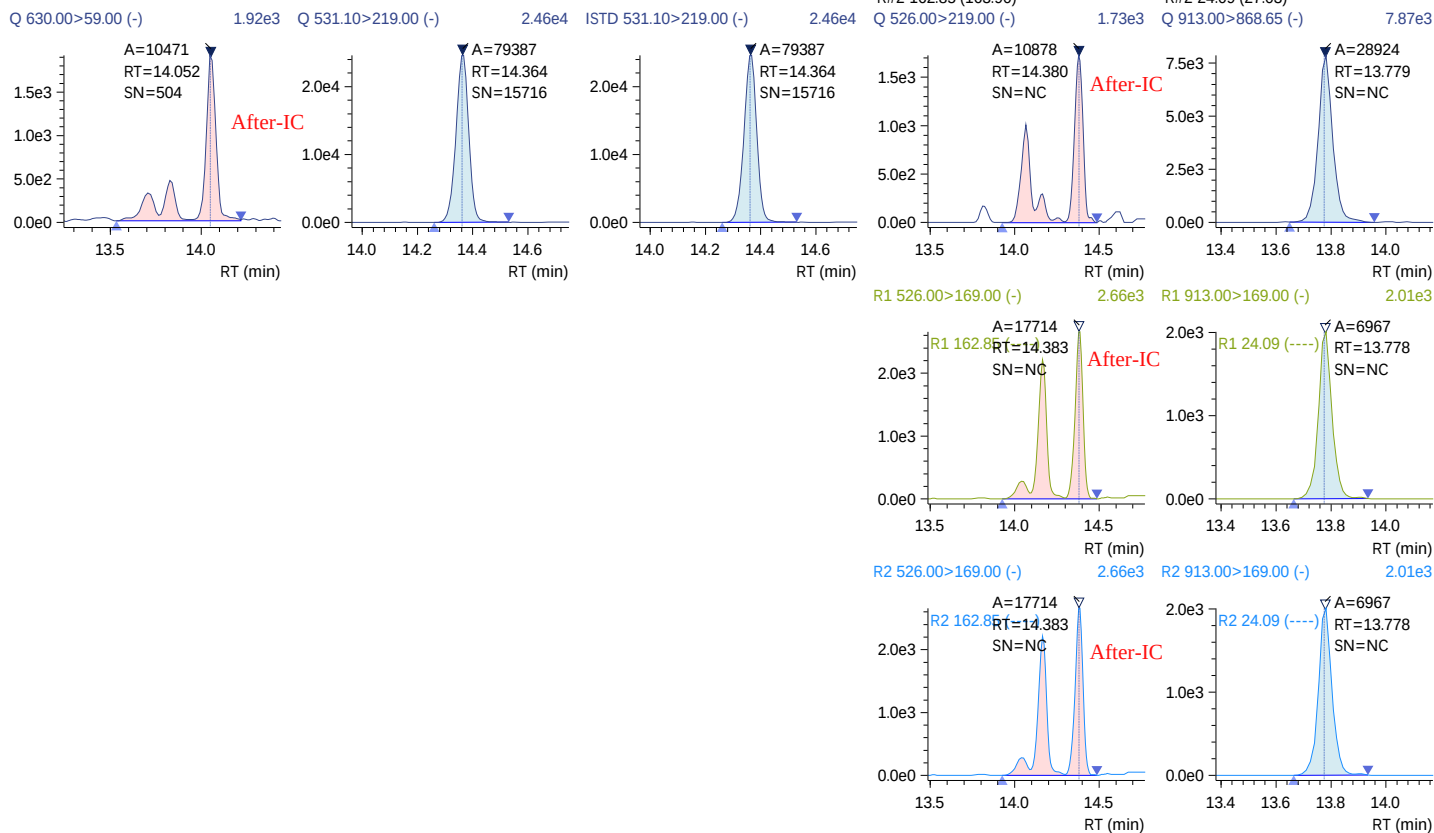
EtFOSE
Conc. 0.2735

D5-EtFOSAm
Conc. 2.5135

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. 0.2354
R#1 162.85 (154.69)
R#2 162.85 (163.90)

PFODA
Conc. 0.2424
R#1 24.09 (29.32)
R#2 24.09 (27.03)



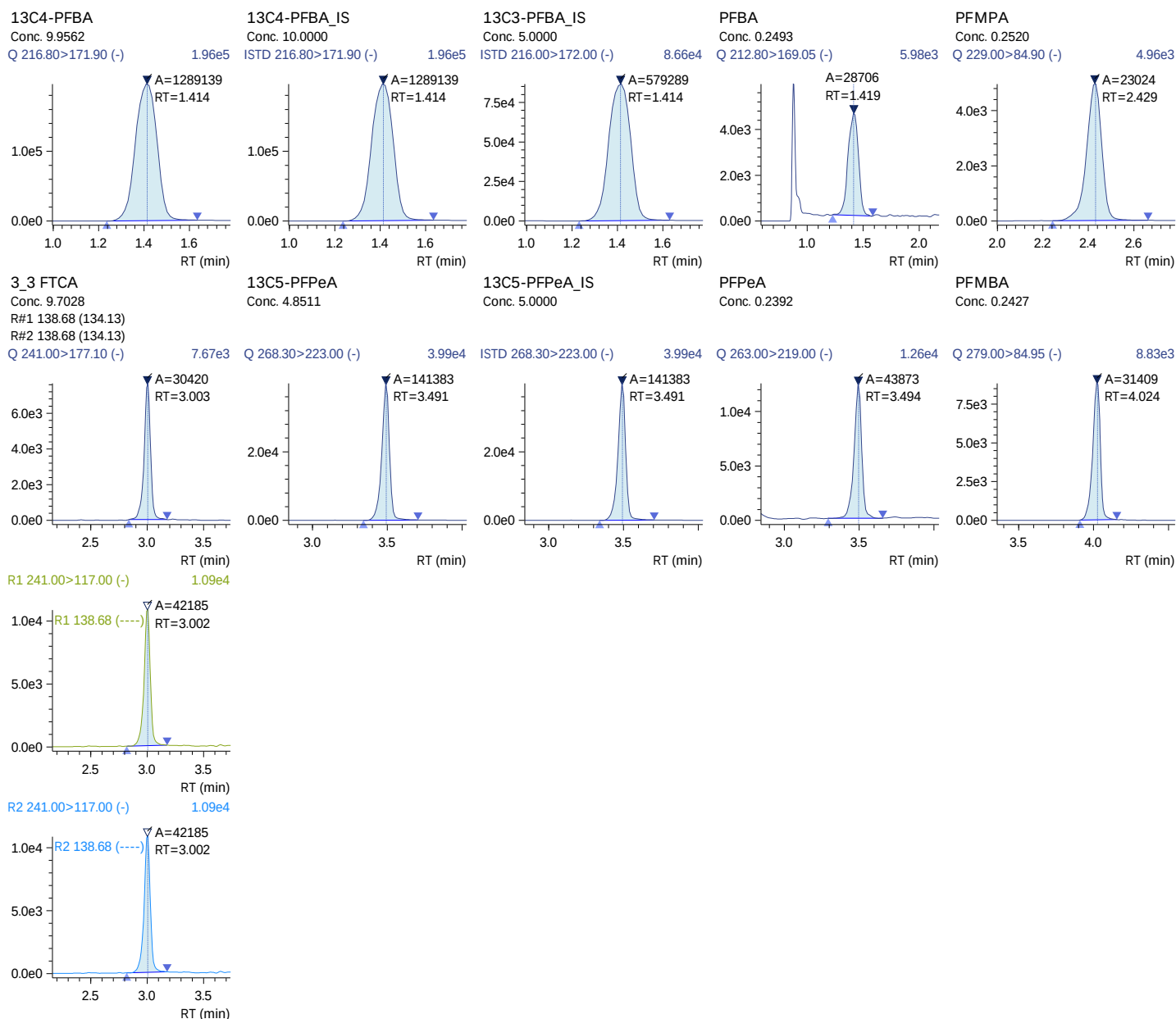
J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_008

Sample ID: 1633 ICAL 0.25PPB
Date Acquired: 1/18/2024 2:51:05 PM
Acquired by: System Administrator
Data File: 240118_008
Vial: 3 | Inj. Volume: 10.0000uL | Tray: 1





240118_008 (continued)

13C2-4_2 FTS
Conc. 5.4165

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. 0.2236
R#1 28.55 (34.14)
R#2 28.55 (34.14)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 0.2385
R#1 45.23 (47.53)
R#2 45.23 (47.53)

Q 329.10>80.90 (-)

5.55e4

ISTD 329.10>80.90 (-)

5.55e4

Q 327.10>307.00 (-)

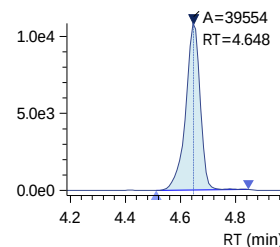
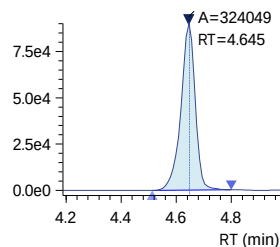
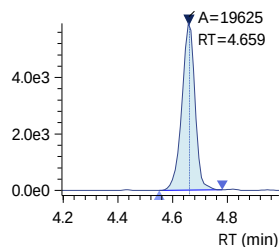
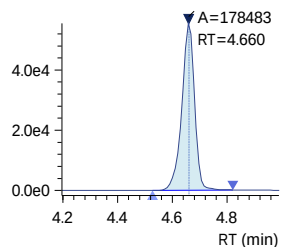
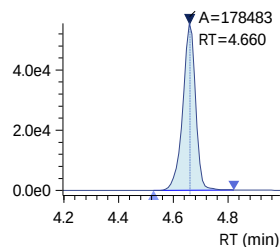
5.92e3

ISTD 302.10>79.90 (-)

9.01e4

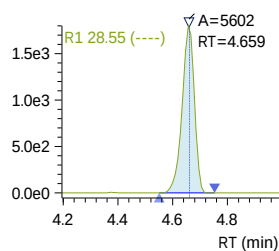
Q 298.70>79.90 (-)

1.08e4



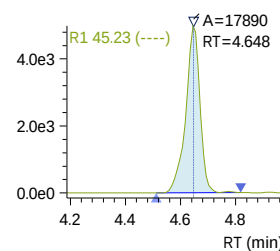
R1 327.10>80.90 (-)

1.80e3



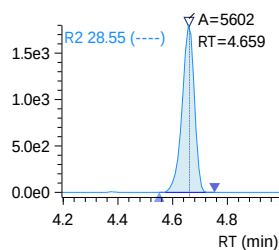
R1 298.70>98.80 (-)

4.99e3



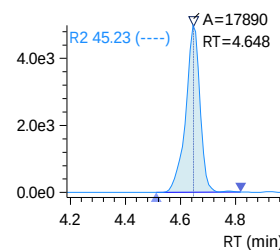
R2 327.10>80.90 (-)

1.80e3



R2 298.70>98.80 (-)

4.99e3





240118_008 (continued)

13C3-PFBS
 Conc. 2.3847

NFDHA
 Conc. 0.2546
 R#1 37.80 (37.88)
 R#2 37.80 (37.88)

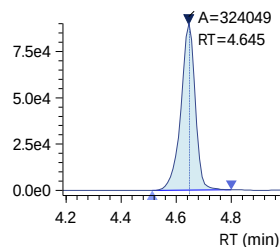
13C5-PFHxA
 Conc. 2.3931

13C5-PFHxA_IS
 Conc. 2.5000

13C2-PFHxA_IS
 Conc. 2.5000

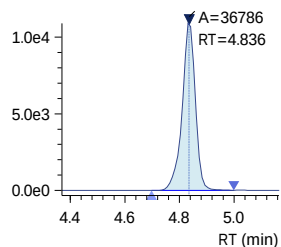
Q 302.10>79.90 (-)

9.01e4



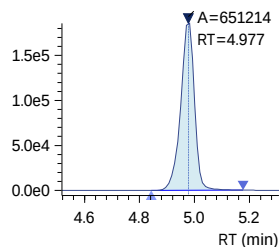
Q 295.00>201.00 (-)

1.09e4



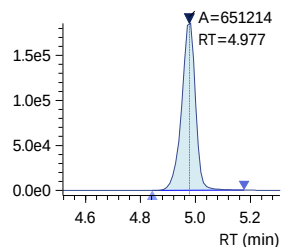
Q 318.00>273.00 (-)

1.86e5



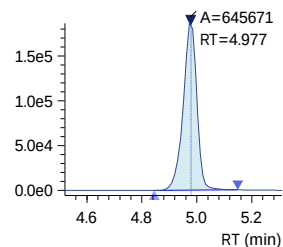
ISTD 318.00>273.00 (-)

1.86e5



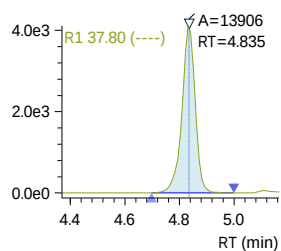
ISTD 315.10>270.00 (-)

1.86e5



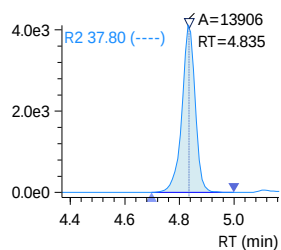
R1 295.00>84.90 (-)

4.11e3



R2 295.00>84.90 (-)

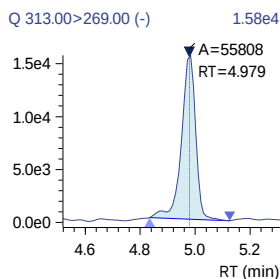
4.11e3





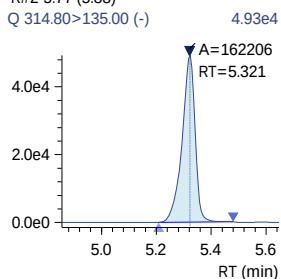
240118_008 (continued)

PFHxA
Conc. 0.2620

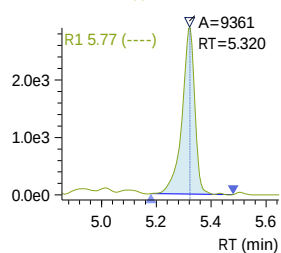


PFEESA
Conc. 0.2224

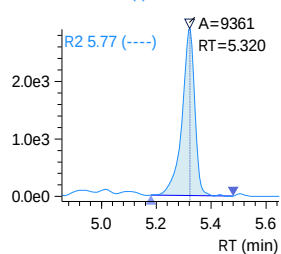
R#1 5.77 (5.88)
R#2 5.77 (5.88)



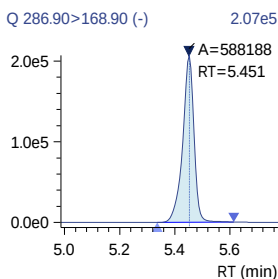
R1 314.80>82.90 (-) 2.91e3



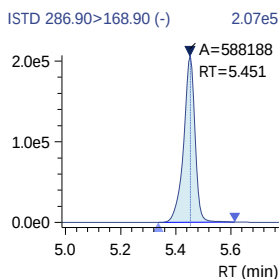
R2 314.80>82.90 (-) 2.91e3



13C3-HFPO-DA
Conc. 9.3059

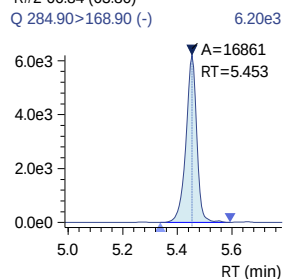


13C3-HFPO-DA_IS
Conc. 10.0000

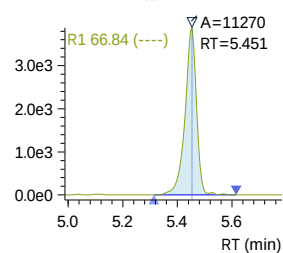


HFPO-DA
Conc. 0.2600

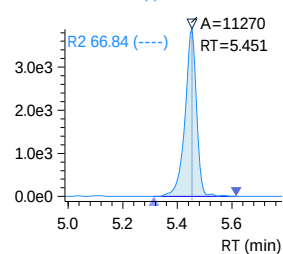
R#1 66.84 (63.80)
R#2 66.84 (63.80)



R1 284.90>184.90 (-) 3.88e3



R2 284.90>184.90 (-) 3.88e3





240118_008 (continued)

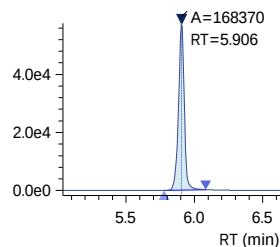
5_3 FTCA

Conc. 9.9956

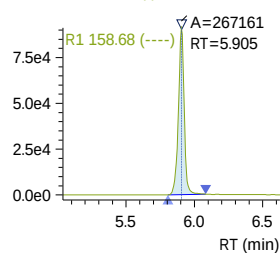
R#1 158.68 (167.13)

R#2 158.68 (167.13)

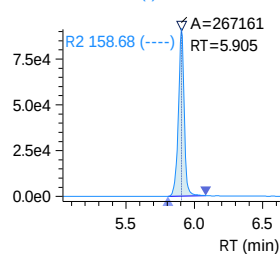
Q 341.00>237.05 (-)



R1 341.00>217.00 (-)



R2 341.00>217.00 (-)



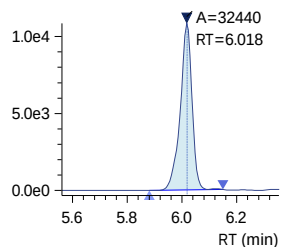
PFPeS

Conc. 0.2457

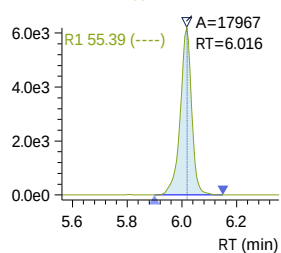
R#1 55.39 (56.71)

R#2 55.39 (56.71)

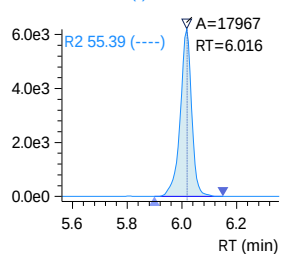
Q 349.10>79.90 (-)



R1 349.10>98.80 (-)



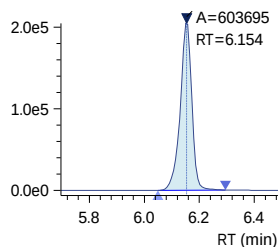
R2 349.10>98.80 (-)



13C4-PFHpa

Conc. 2.4507

Q 367.10>322.00 (-)



R1 367.10>322.00 (-)



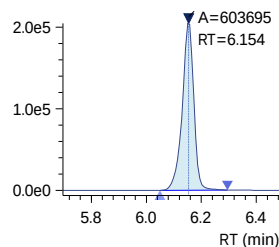
R2 367.10>322.00 (-)



13C4-PFHpa_IS

Conc. 2.5000

ISTD 367.10>322.00 (-)



R1 367.10>322.00 (-)



R2 367.10>322.00 (-)



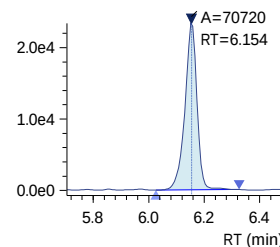
PFHpA

Conc. 0.2471

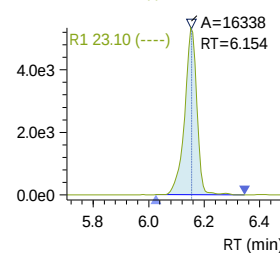
R#1 23.10 (21.37)

R#2 23.10 (21.37)

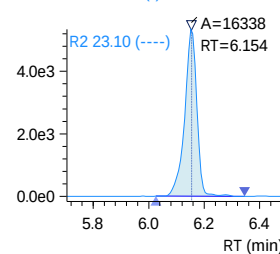
Q 363.10>319.00 (-)



R1 363.10>169.00 (-)

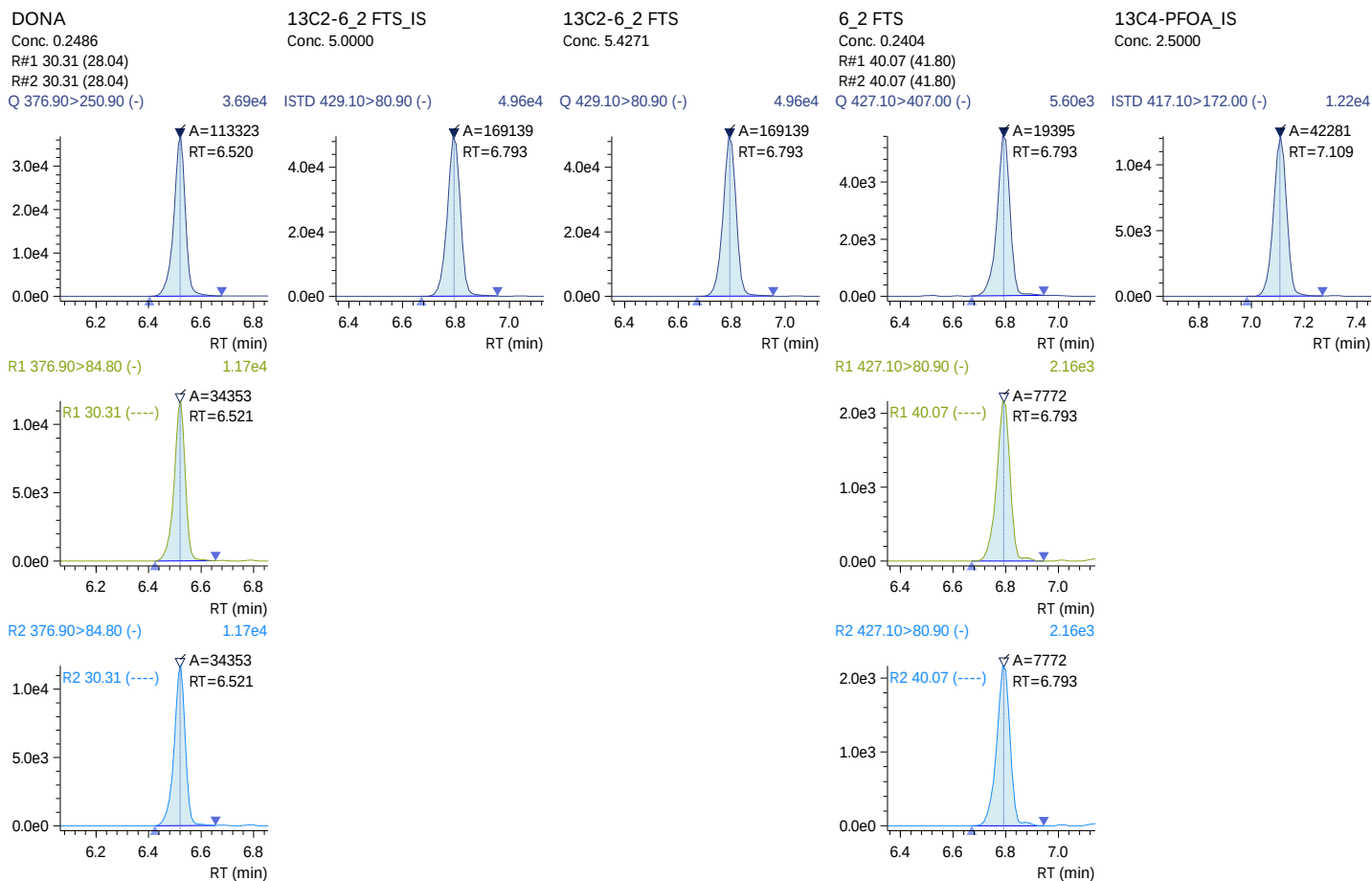


R2 363.10>169.00 (-)





240118_008 (continued)





240118_008 (continued)

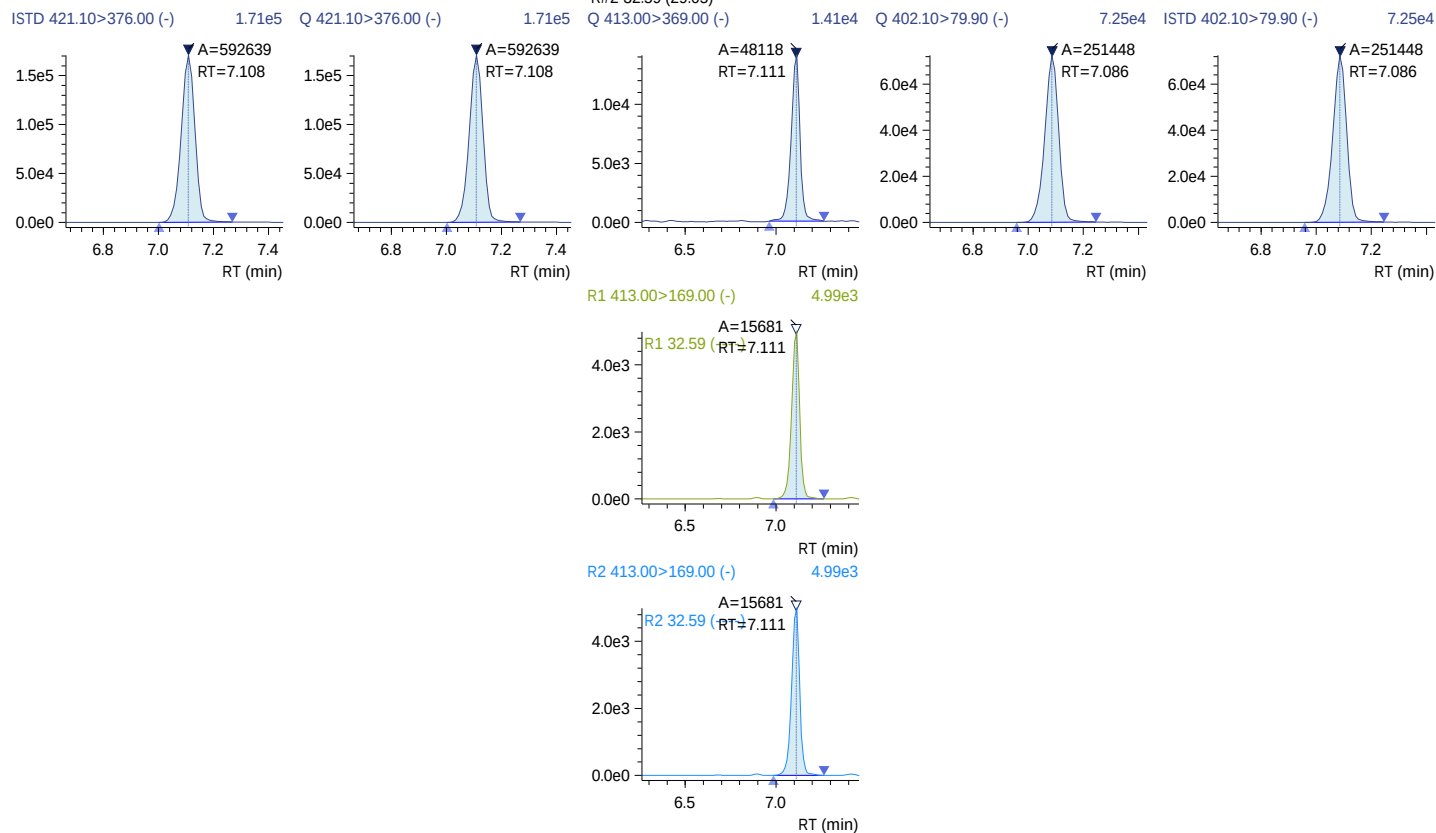
13C8-PFOA_IS
 Conc. 2.5000

13C8-PFOA
 Conc. 2.5078

PFOA
 Conc. 0.2709
 R#1 32.59 (29.05)
 R#2 32.59 (29.05)

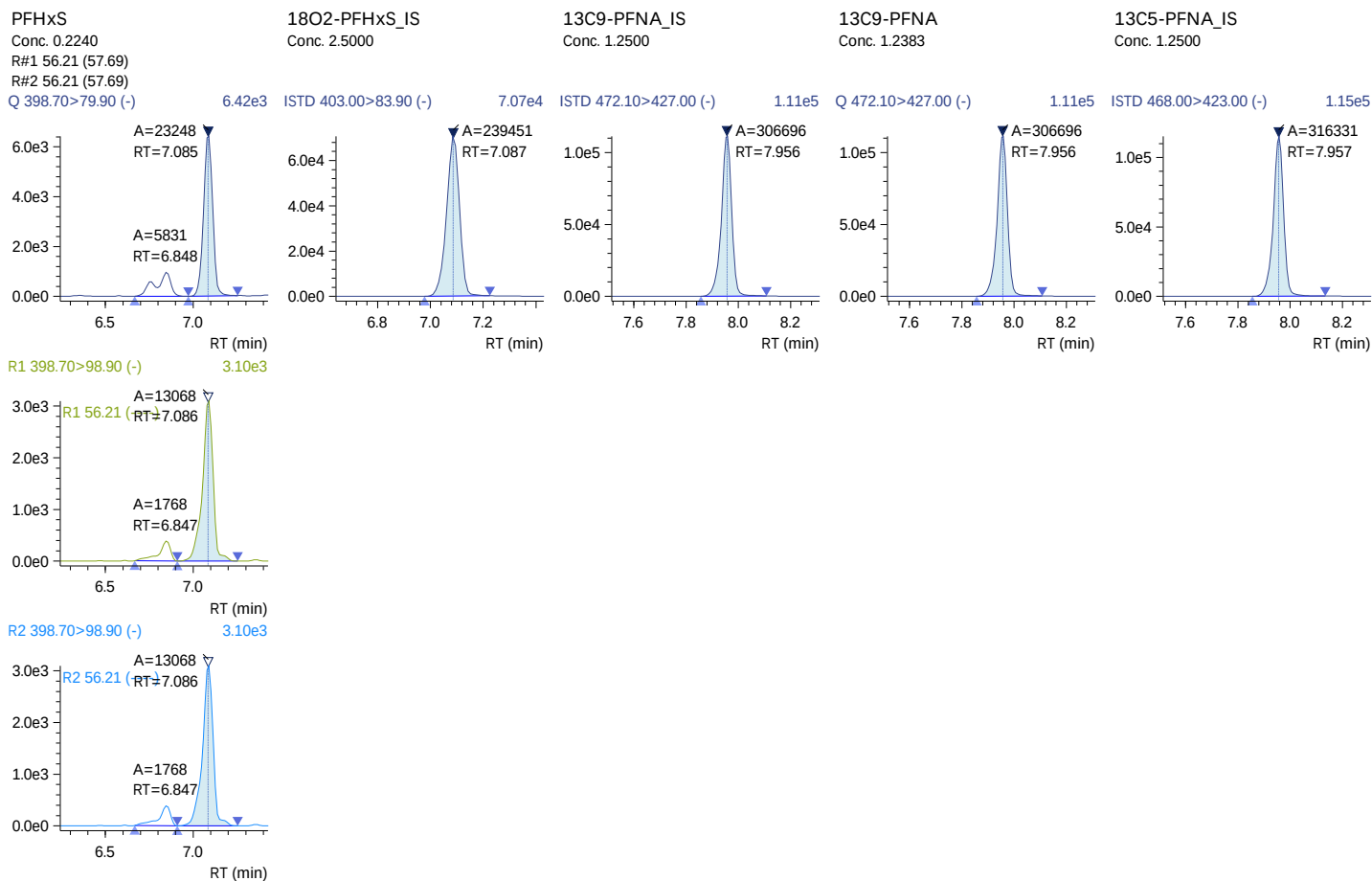
13C3-PFHxS
 Conc. 2.4465

13C3-PFHxS_IS
 Conc. 2.5000



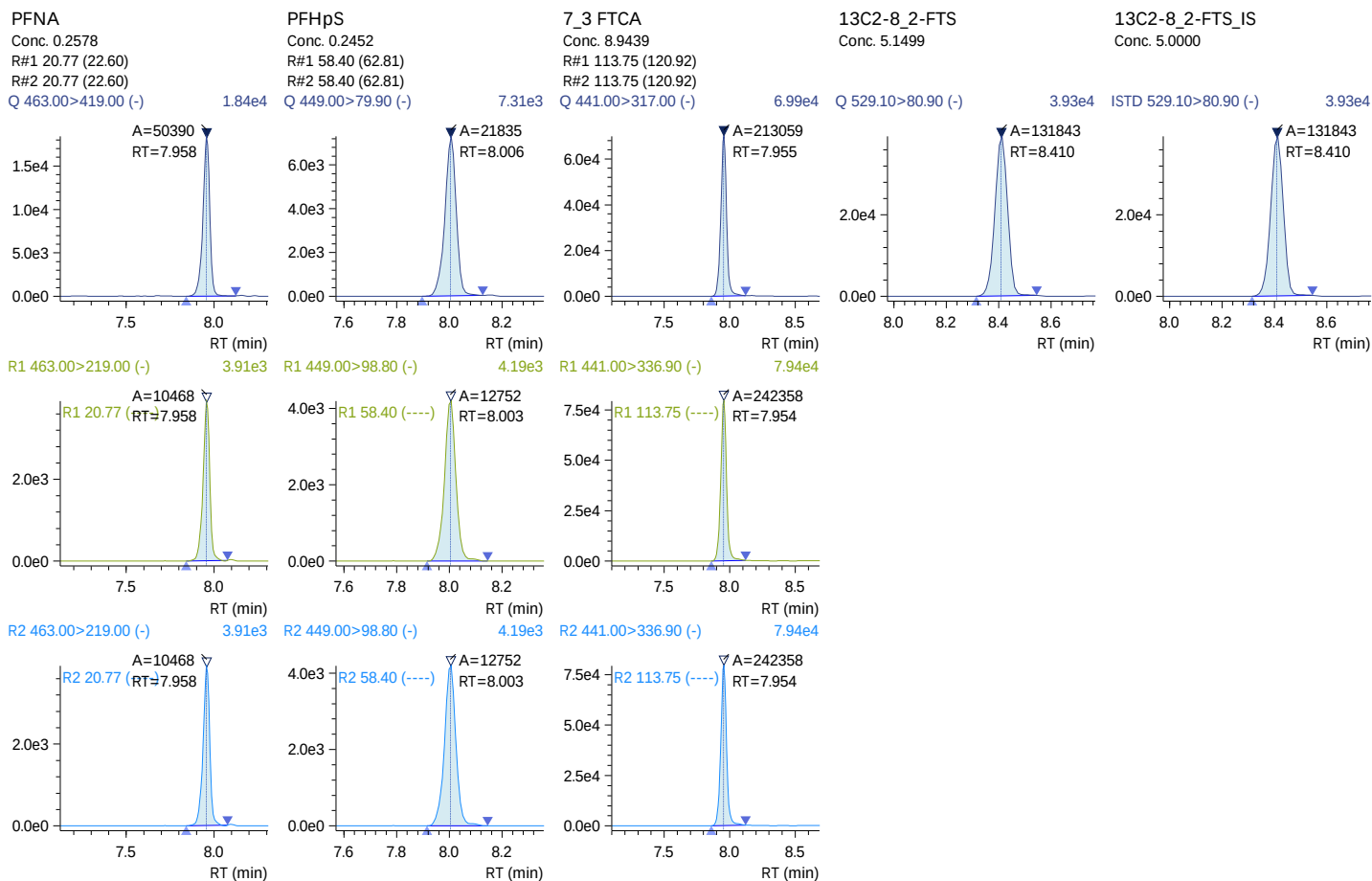


240118_008 (continued)



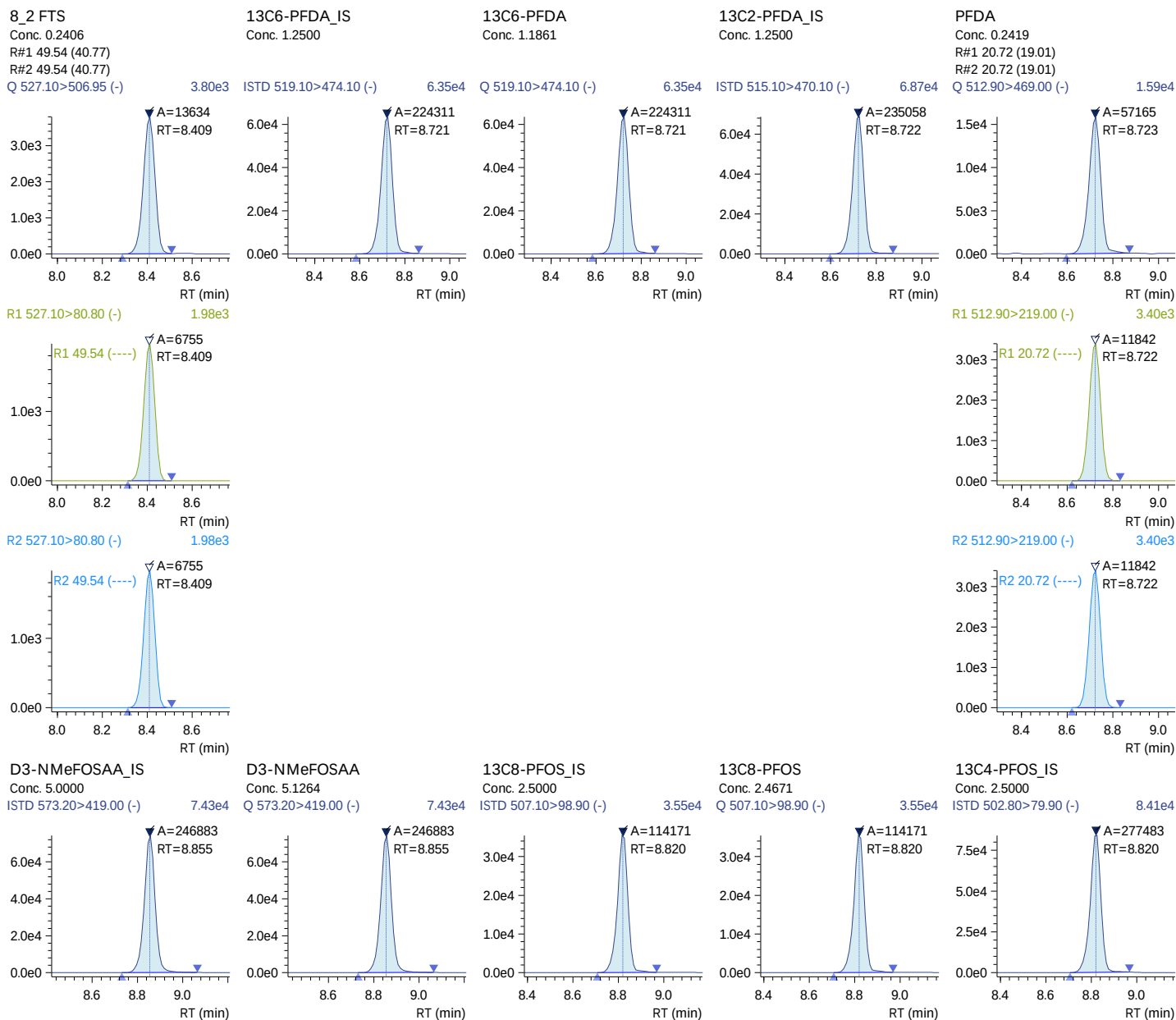


240118_008 (continued)



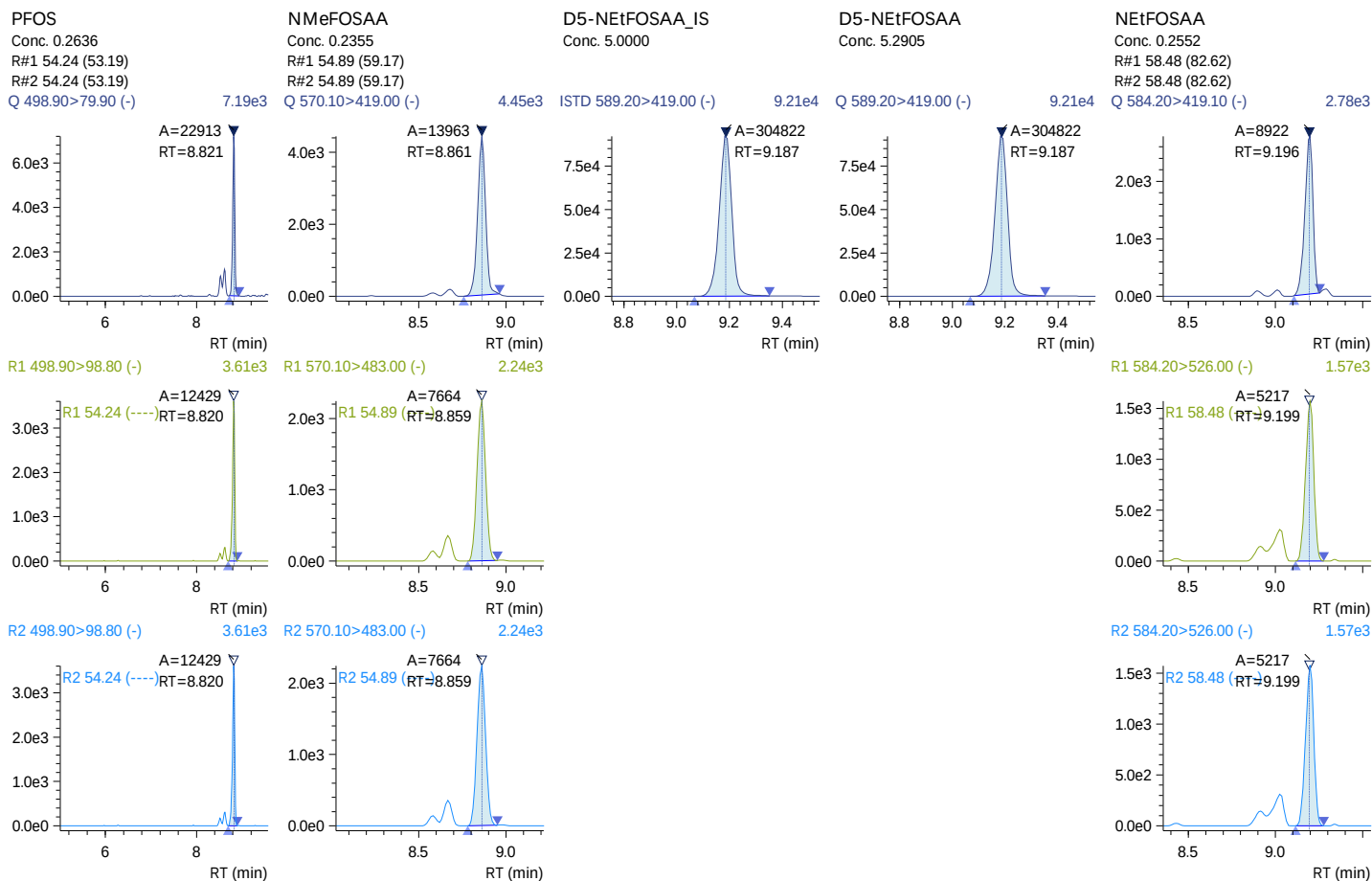


240118_008 (continued)





240118_008 (continued)

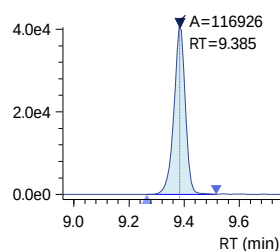




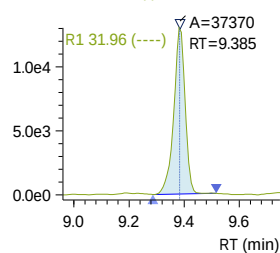
240118_008 (continued)

9-Cl-PF3ONS

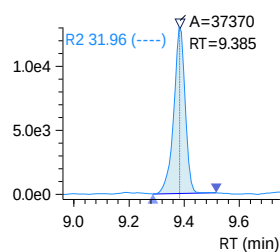
Conc. 0.2411
 R#1 31.96 (31.76)
 R#2 31.96 (31.76)
 Q 530.80>351.00 (-)



R1 532.80>353.00 (-) 1.31e4

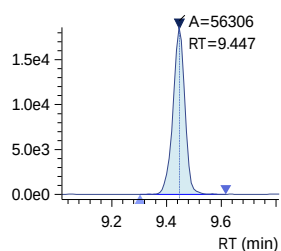


R2 532.80>353.00 (-) 1.31e4

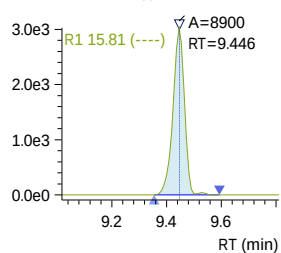


PFUnDA

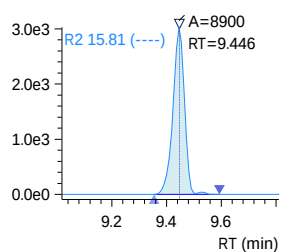
Conc. 0.2485
 R#1 15.81 (12.31)
 R#2 15.81 (12.31)
 Q 563.10>519.00 (-)



R1 563.10>269.10 (-) 3.03e3

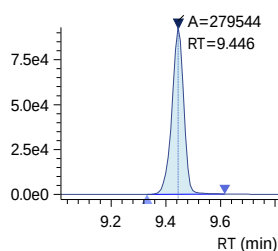


R2 563.10>269.10 (-) 3.03e3



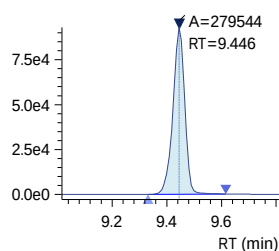
13C7-PFUnDA_IS

Conc. 1.2500
 ISTD 570.00>525.10 (-)



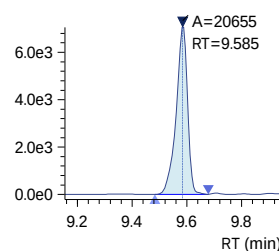
13C7-PFUnDA

Conc. 1.2392
 Q 570.00>525.10 (-)

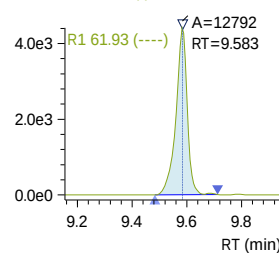


PFNS

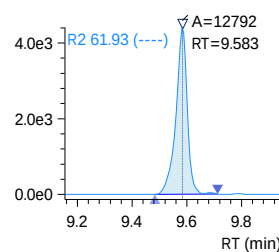
Conc. 0.2381
 R#1 61.93 (63.31)
 R#2 61.93 (63.31)
 Q 548.80>79.90 (-)



R1 548.80>98.80 (-) 4.41e3

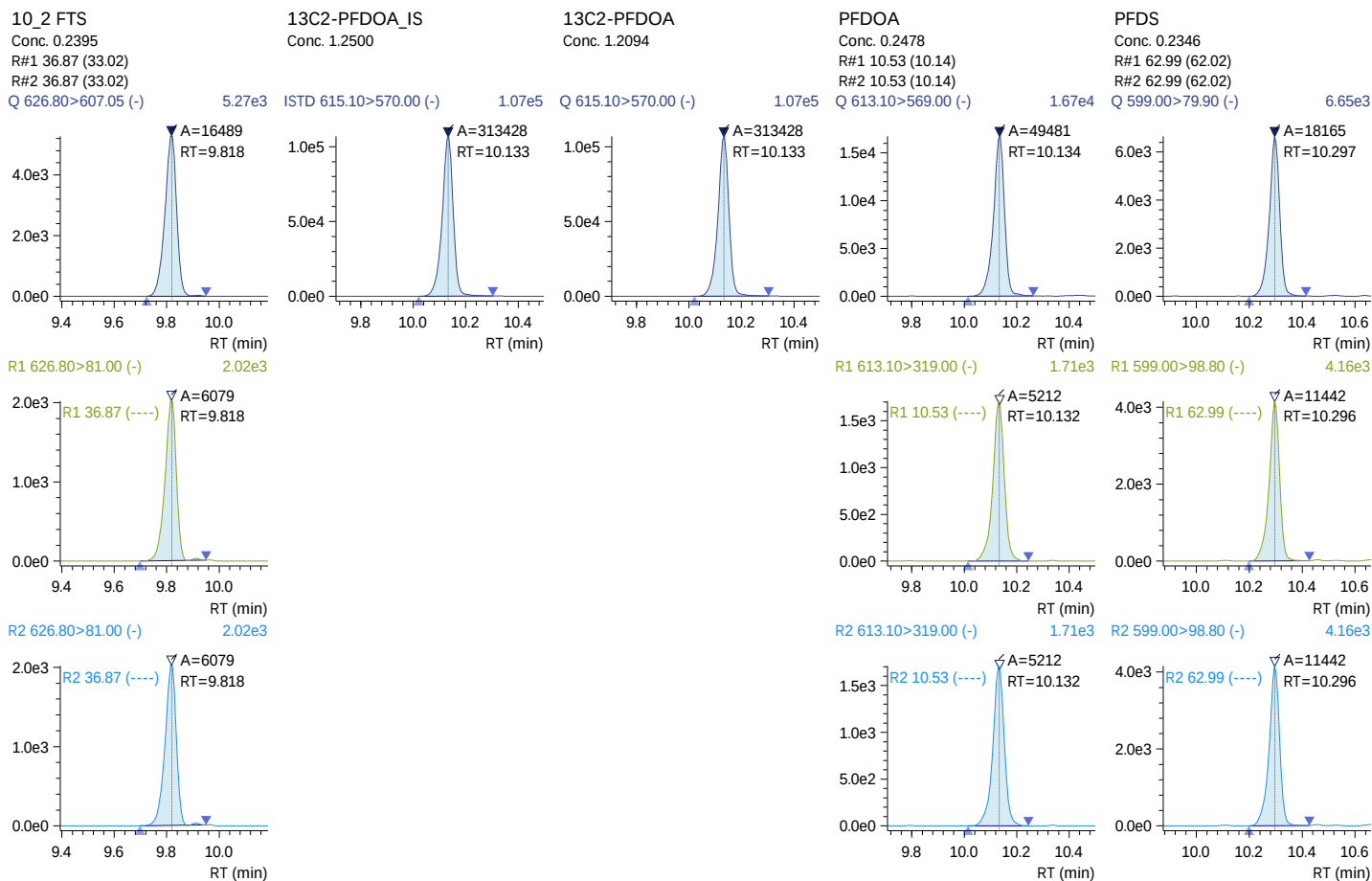


R2 548.80>98.80 (-) 4.41e3



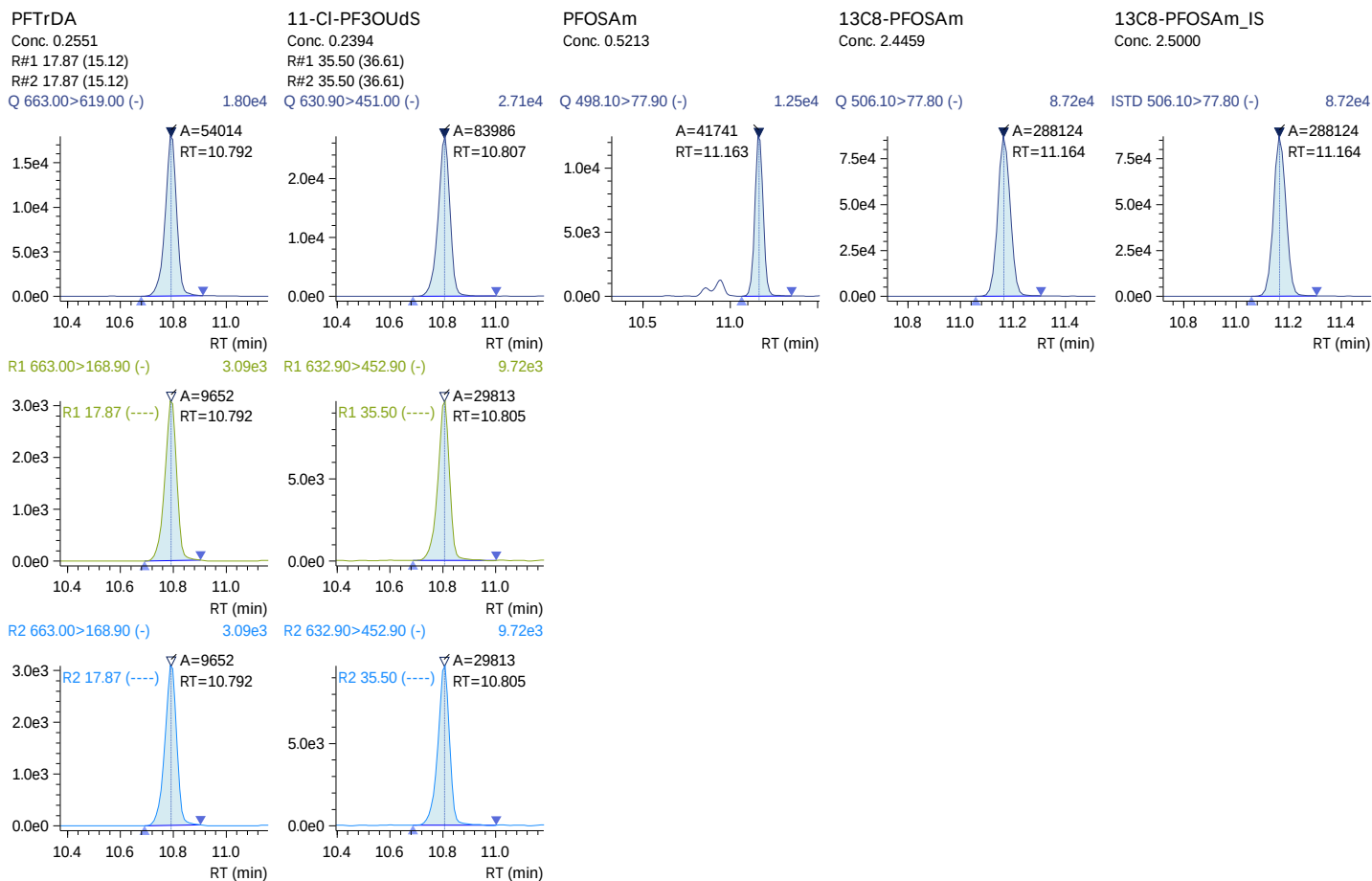


240118_008 (continued)



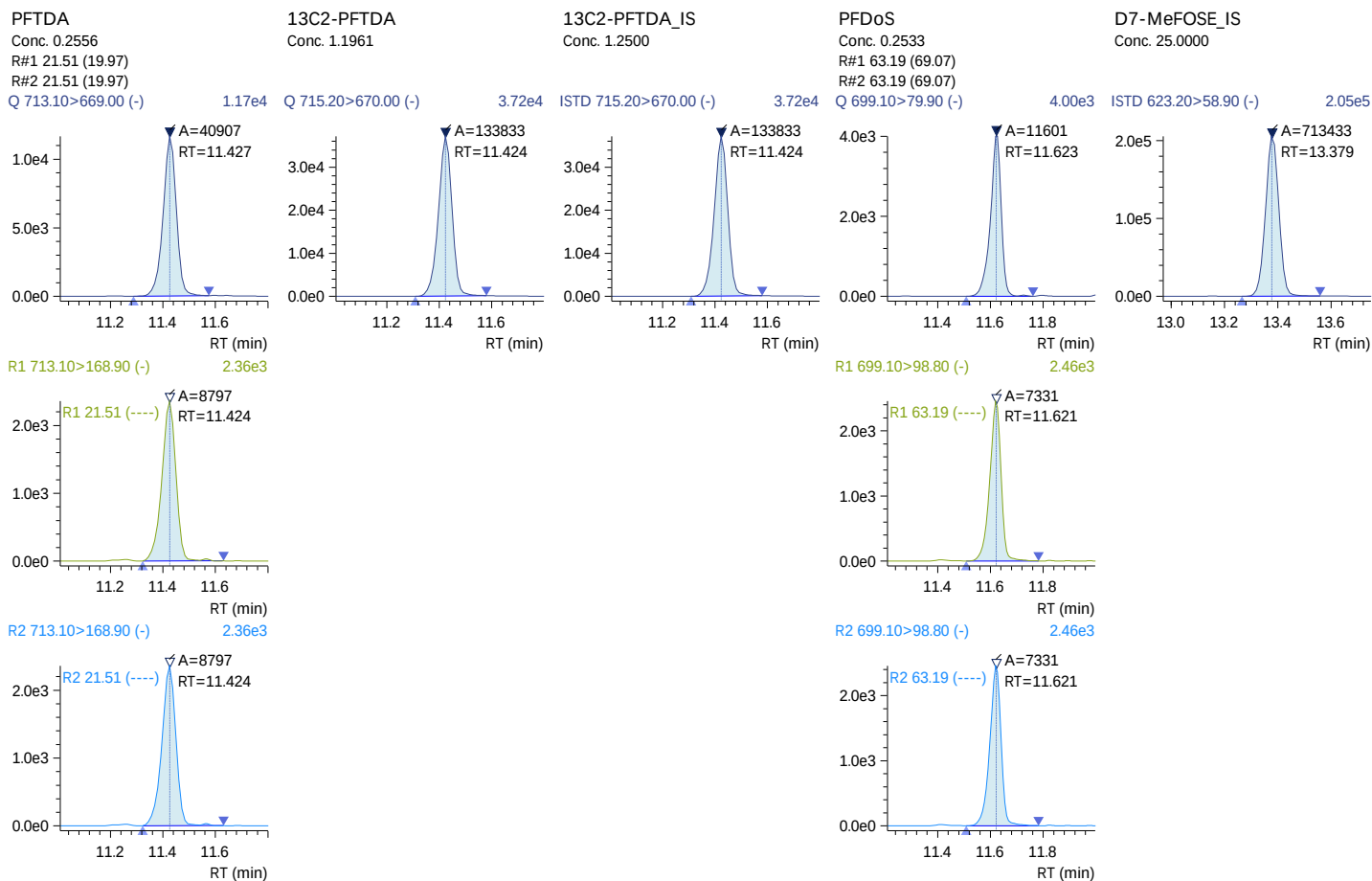


240118_008 (continued)





240118_008 (continued)





240118_008 (continued)

D7-MeFOSE
Conc. 24.5653

MeFOSE
Conc. 0.2507

¹³C2-PFHXA_IS
Conc. 2.5000

¹³C2-PFHXA
Conc. 2.4169

PFHXA
Conc. 0.2514
R#1 13.93 (11.64)
R#2 13.93 (11.64)

Q 623.20>58.90 (-)

2.05e5

Q 616.10>59.00 (-)

1.22e3

ISTD 815.00>770.05 (-)

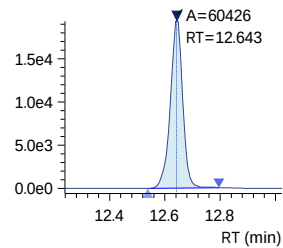
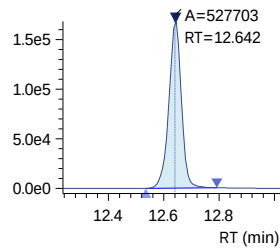
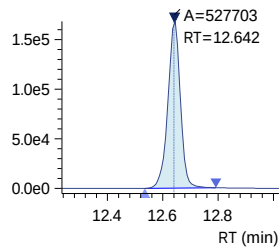
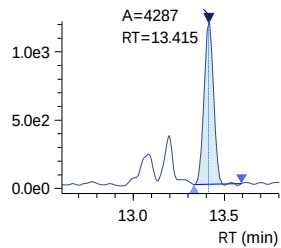
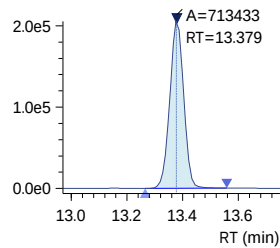
1.68e5

Q 815.00>770.05 (-)

1.68e5

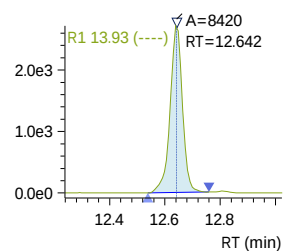
Q 813.00>768.95 (-)

1.93e4



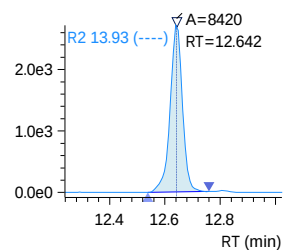
R1 813.00>218.95 (-)

2.72e3



R2 813.00>218.95 (-)

2.72e3





240118_008 (continued)

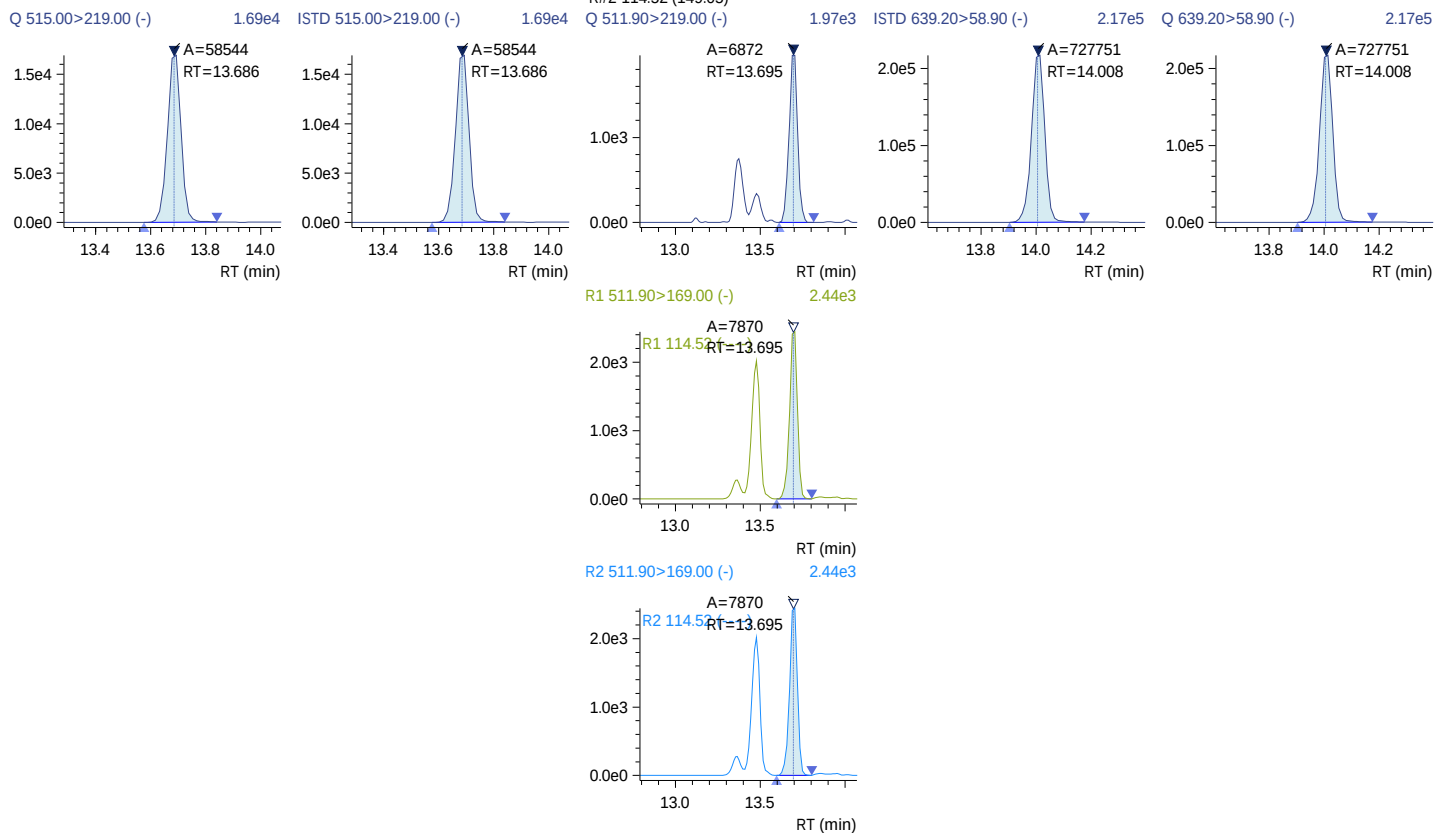
D3-MeFOSA
 Conc. 2.4679

D3-MeFOSA_IS
 Conc. 2.5000

MeFOSA
 Conc. 0.2633
 R#1 114.52 (149.05)
 R#2 114.52 (149.05)

D9-EtFOSE_IS
 Conc. 25.0000

D9-EtFOSE
 Conc. 24.6721





240118_008 (continued)

EtFOSE
Conc. 0.2612

D5-EtFOSAm
Conc. 2.5135

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. 0.1772
R#1 0.00 (154.69)
R#2 0.00 (154.69)

PFODA
Conc. 0.2425
R#1 24.09 (29.32)
R#2 24.09 (29.32)

Q 630.00>59.00 (-)

1.92e3

Q 531.10>219.00 (-)

2.46e4

ISTD 531.10>219.00 (-)

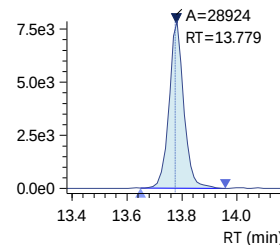
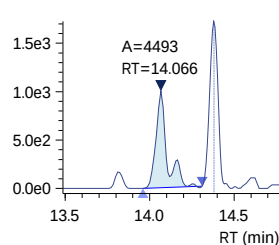
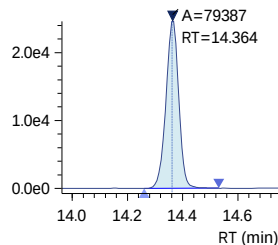
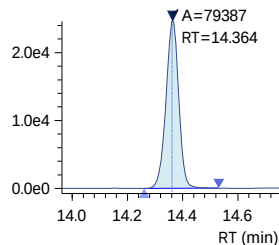
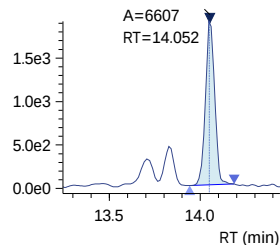
2.46e4

Q 526.00>219.00 (-)

1.73e3

Q 913.00>868.65 (-)

7.87e3

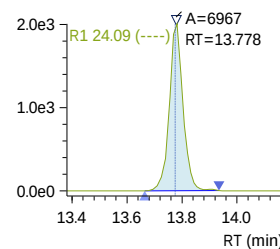
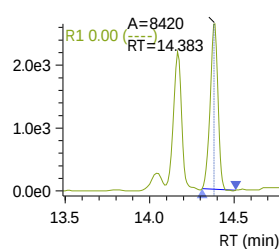


R1 526.00>169.00 (-)

2.66e3

R1 913.00>169.00 (-)

2.01e3

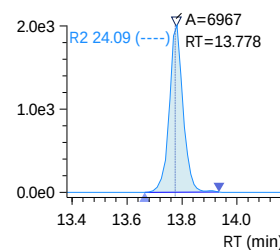
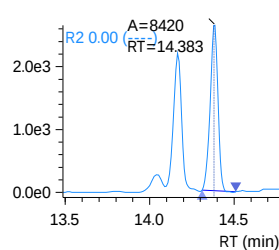


R2 526.00>169.00 (-)

2.66e3

R2 913.00>169.00 (-)

2.01e3





240118_009

Sample ID: 1633 ICAL 0.50PPB
Date Acquired: 1/18/2024 3:14:20 PM
Acquired by: System Administrator
Data File: 240118_009
Vial: 4 | Inj. Volume: 10.0000uL | Tray: 1

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	1388027	----	----	----	----	----	----	
13C4-PFBA_IS	216.80>171.90	----	1388027	----	----	----	----	----	----	
13C3-PFBA_IS	216.00>172.00	----	617199	----	----	----	----	----	----	
PFBA	212.80>169.05	----	57419	----	----	----	----	----	----	
PFMPA	229.00>84.90	----	45603	----	----	----	----	----	----	
3_3 FTCA	241.00>177.10	241.00>117.00	47512	65317	137.48	141.17	65317	137.48	141.17	
13C5-PFPeA	268.30>223.00	----	153759	----	----	----	----	----	----	
13C5-PFPeA_IS	268.30>223.00	----	153759	----	----	----	----	----	----	
PFPeA	263.00>219.00	----	92188	----	----	----	----	----	----	
PFMBA	279.00>84.95	----	65533	----	----	----	----	----	----	
13C2-4_2 FTS	329.10>80.90	----	169678	----	----	----	----	----	----	
13C2-4_2 FTS_IS	329.10>80.90	----	169678	----	----	----	----	----	----	
4_2 FTS	327.10>307.00	327.10>80.90	39193	10856	27.70	29.06	10856	27.70	29.06	
13C3-PFBS_IS	302.10>79.90	----	356850	----	----	----	----	----	----	
PFBS	298.70>79.90	298.70>98.80	72727	35074	48.23	46.72	35074	48.23	46.72	
13C3-PFBS	302.10>79.90	----	356850	----	----	----	----	----	----	
NFDHA	295.00>201.00	295.00>84.90	73337	26904	36.69	40.25	26904	36.69	40.25	
13C5-PFHxA	318.00>273.00	----	687616	----	----	----	----	----	----	
13C5-PFHxA_IS	318.00>273.00	----	687616	----	----	----	----	----	----	
13C2-PFHxA_IS	315.10>270.00	----	656444	----	----	----	----	----	----	
PFHxA	313.00>269.00	----	99630	----	----	----	----	----	----	
PFEESA	314.80>135.00	314.80>82.90	318712	18736	5.88	6.11	18736	5.88	6.11	
13C3-HFPO-DA	286.90>168.90	----	654919	----	----	----	----	----	----	
13C3-HFPO-DA_IS	286.90>168.90	----	654919	----	----	----	----	----	----	
HFPO-DA	284.90>168.90	284.90>184.90	32544	21937	67.41	65.61	21937	67.41	65.61	
5_3 FTCA	341.00>237.05	341.00>217.00	254250	414925	163.20	158.86	414925	163.20	158.86	
PFPeS	349.10>79.90	349.10>98.80	61708	33981	55.07	55.80	33981	55.07	55.80	
13C4-PFHpA	367.10>322.00	----	626586	----	----	----	----	----	----	
13C4-PFHpA_IS	367.10>322.00	----	626586	----	----	----	----	----	----	
PFHpA	363.10>319.00	363.10>169.00	128808	31060	24.11	21.50	31060	24.11	21.50	
DONA	376.90>250.90	376.90>84.80	215774	65410	30.31	29.66	65410	30.31	29.66	
13C2-6_2 FTS_IS	429.10>80.90	----	179759	----	----	----	----	----	----	
13C2-6_2 FTS	429.10>80.90	----	179759	----	----	----	----	----	----	
6_2 FTS	427.10>407.00	427.10>80.90	31384	14521	46.27	41.15	14521	46.27	41.15	
13C4-PFOA_IS	417.10>172.00	----	43612	----	----	----	----	----	----	
13C8-PFOA_IS	421.10>376.00	----	643488	----	----	----	----	----	----	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240118_009 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	643488	----	----	----	----	----	----	----
PFOA	413.00>369.00	413.00>169.00	79730	24432	30.64	31.89	24432	30.64	31.89	
13C3-PFHxS	402.10>79.90	----	272575	----	----	----	----	----	----	----
13C3-PFHxS_IS	402.10>79.90	----	272575	----	----	----	----	----	----	----
PFHxS	398.70>79.90	398.70>98.90	56162	32107	57.17	56.62	32107	57.17	56.62	
18O2-PFHxS_IS	403.00>83.90	----	251143	----	----	----	----	----	----	----
13C9-PFNA_IS	472.10>427.00	----	319396	----	----	----	----	----	----	----
13C9-PFNA	472.10>427.00	----	319396	----	----	----	----	----	----	----
13C5-PFNA_IS	468.00>423.00	----	323300	----	----	----	----	----	----	----
PFNA	463.00>419.00	463.00>219.00	93339	21228	22.74	23.17	21228	22.74	23.17	
PFHpS	449.00>79.90	449.00>98.80	43044	23013	53.47	56.96	23013	53.47	56.96	
7_3 FTCA	441.00>317.00	441.00>336.90	333337	380232	114.07	117.47	380232	114.07	117.47	
13C2-8_2-FTS	529.10>80.90	----	131115	----	----	----	----	----	----	----
13C2-8_2-FTS_IS	529.10>80.90	----	131115	----	----	----	----	----	----	----
8_2 FTS	527.10>506.95	527.10>80.80	25869	10893	42.11	49.59	10893	42.11	49.59	
13C6-PFDA_IS	519.10>474.10	----	238617	----	----	----	----	----	----	----
13C6-PFDA	519.10>474.10	----	238617	----	----	----	----	----	----	----
13C2-PFDA_IS	515.10>470.10	----	225855	----	----	----	----	----	----	----
PFDA	512.90>469.00	512.90>219.00	112231	18746	16.70	19.00	18746	16.70	19.00	
D3-NMeFOSAA_IS	573.20>419.00	----	249589	----	----	----	----	----	----	----
D3-NMeFOSAA	573.20>419.00	----	249589	----	----	----	----	----	----	----
13C8-PFOS_IS	507.10>98.90	----	121099	----	----	----	----	----	----	----
13C8-PFOS	507.10>98.90	----	121099	----	----	----	----	----	----	----
13C4-PFOS_IS	502.80>79.90	----	279876	----	----	----	----	----	----	----
PFOS	498.90>79.90	498.90>98.80	51913	27615	53.19	52.47	27615	53.19	52.47	
NMeFOSAA	570.10>419.00	570.10>483.00	33145	20374	61.47	55.15	20374	61.47	55.15	
D5-NEtFOSAA_IS	589.20>419.00	----	301439	----	----	----	----	----	----	----
D5-NEtFOSAA	589.20>419.00	----	301439	----	----	----	----	----	----	----
NEtFOSAA	584.20>419.10	584.20>526.00	17841	16091	90.20	81.95	16091	90.20	81.95	
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	226384	69268	30.60	32.76	69268	30.60	32.76	
PFUnDA	563.10>519.00	563.10>269.10	106205	13806	13.00	13.12	13806	13.00	13.12	
13C7-PFUnDA_IS	570.00>525.10	----	297301	----	----	----	----	----	----	----
13C7-PFUnDA	570.00>525.10	----	297301	----	----	----	----	----	----	----
PFNS	548.80>79.90	548.80>98.80	41760	26227	62.80	65.22	26227	62.80	65.22	
10_2 FTS	626.80>607.05	626.80>81.00	31611	10832	34.27	37.13	10832	34.27	37.13	
13C2-PFDOA_IS	615.10>570.00	----	326480	----	----	----	----	----	----	----
13C2-PFDOA	615.10>570.00	----	326480	----	----	----	----	----	----	----
PFDOA	613.10>569.00	613.10>319.00	90780	10093	11.12	11.29	10093	11.12	11.29	
PFDS	599.00>79.90	599.00>98.80	35775	21508	60.12	60.18	21508	60.12	60.18	
PFTrDA	663.00>619.00	663.00>168.90	102058	17501	17.15	17.64	17501	17.15	17.64	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240118_009 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	168194	59554	35.41	36.44	59554	35.41	36.44	
PFOSAm	498.10>77.90	----	93404	----	----	----	----	----	----	
13C8-PFOSAm	506.10>77.80	----	313170	----	----	----	----	----	----	
13C8-PFOSAm_IS	506.10>77.80	----	313170	----	----	----	----	----	----	
PFTDA	713.10>669.00	713.10>168.90	75486	17744	23.51	22.96	17744	23.51	22.96	
13C2-PFTDA	715.20>670.00	----	146161	----	----	----	----	----	----	
13C2-PFTDA_IS	715.20>670.00	----	146161	----	----	----	----	----	----	
PFDoS	699.10>79.90	699.10>98.80	21129	14265	67.51	67.40	14265	67.51	67.40	
D7-MeFOSE_IS	623.20>58.90	----	761016	----	----	----	----	----	----	
D7-MeFOSE	623.20>58.90	----	761016	----	----	----	----	----	----	
MeFOSE	616.10>59.00	----	12425	----	----	----	----	----	----	
13C2-PFHxDA_IS	815.00>770.05	----	546187	----	----	----	----	----	----	
13C2-PFHxDA	815.00>770.05	----	546187	----	----	----	----	----	----	
PFHxDA	813.00>768.95	813.00>218.95	114442	15063	13.16	13.90	15063	13.16	13.90	
D3-MeFOSA	515.00>219.00	----	58649	----	----	----	----	----	----	
D3-MeFOSA_IS	515.00>219.00	----	58649	----	----	----	----	----	----	
MeFOSA	511.90>219.00	511.90>169.00	21243	31360	147.62	140.79	31360	147.62	140.79	
D9-EtFOSE_IS	639.20>58.90	----	781729	----	----	----	----	----	----	
D9-EtFOSE	639.20>58.90	----	781729	----	----	----	----	----	----	
EtFOSE	630.00>59.00	----	19620	----	----	----	----	----	----	
D5-EtFOSAm	531.10>219.00	----	82004	----	----	----	----	----	----	
D5-EtFOSAm_IS	531.10>219.00	----	82004	----	----	----	----	----	----	
EtFOSAm	526.00>219.00	526.00>169.00	23101	31853	137.88	163.90	31853	137.88	163.90	
PFODA	913.00>868.65	913.00>169.00	55160	13222	23.97	27.03	13222	23.97	27.03	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
 IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240118_009

Sample ID: 1633 ICAL 0.50PPB
Date Acquired: 1/18/2024 3:14:20 PM
Acquired by: System Administrator
Data File: 240118_009
Vial: 4 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Std. Conc.	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.416	0.002	0.000	1388027	617199	13C3-PFBA_IS	10.0000	10.0614	ng/mL	
13C4-PFBA_IS	Auto	1.416	0.002	----	1388027	1388027	----	10.0000	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.416	0.001	----	617199	617199	----	5.0000	5.0000	ng/mL	
PFBA	Auto	1.423	0.007	0.007	57419	1388027	13C4-PFBA_IS	0.5000	0.4815	ng/mL	
PFMPA	Auto	2.434	0.002	-1.060	45603	153759	13C5-PFPeA_IS	0.5000	0.4589	ng/mL	
3_3 FTCA	Auto	3.007	0.003	-0.487	47512	153759	13C5-PFPeA_IS	15.0000	13.9348	ng/mL	
13C5-PFPeA	Auto	3.494	0.002	-1.486	153759	656444	13C2-PFHxA_IS	5.0000	5.1891	ng/mL	
13C5-PFPeA_IS	Auto	3.494	0.002	----	153759	153759	----	5.0000	5.0000	ng/mL	
PFPeA	Auto	3.497	0.002	0.003	92188	153759	13C5-PFPeA_IS	0.5000	0.4629	ng/mL	
PFMBA	Auto	4.027	0.002	0.533	65533	153759	13C5-PFPeA_IS	0.5000	0.4655	ng/mL	
13C2-4_2 FTS	Auto	4.662	0.001	-2.426	169678	251143	18O2-PFHxS_IS	5.0000	4.9096	ng/mL	
13C2-4_2 FTS_IS	Auto	4.662	0.001	----	169678	169678	----	5.0000	5.0000	ng/mL	
4_2 FTS	Auto	4.662	0.000	0.000	39193	169678	13C2-4_2 FTS_IS	0.4690	0.4696	ng/mL	
13C3-PFBS_IS	Auto	4.649	0.002	----	356850	356850	----	2.5000	2.5000	ng/mL	
PFBS	Auto	4.649	0.001	0.000	72727	356850	13C3-PFBS_IS	0.4440	0.3982	ng/mL	
13C3-PFBS	Auto	4.649	0.002	-2.439	356850	251143	18O2-PFHxS_IS	2.5000	2.5038	ng/mL	
NFDHA	Auto	4.837	0.002	-0.143	73337	687616	13C5-PFHxA_IS	0.5000	0.4807	ng/mL	
13C5-PFHxA	Auto	4.980	0.002	0.000	687616	656444	13C2-PFHxA_IS	2.5000	2.4854	ng/mL	
13C5-PFHxA_IS	Auto	4.980	0.002	----	687616	687616	----	2.5000	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	4.980	0.001	----	656444	656444	----	2.5000	2.5000	ng/mL	
PFHxA	M	4.982	0.002	0.002	99630	687616	13C5-PFHxA_IS	0.5000	0.4269	ng/mL	
PFEESA	Auto	5.324	0.002	0.344	318712	687616	13C5-PFHxA_IS	0.4450	0.4138	ng/mL	
13C3-HFPO-DA	Auto	5.454	0.002	0.474	654919	656444	13C2-PFHxA_IS	10.0000	10.1917	ng/mL	
13C3-HFPO-DA_IS	Auto	5.454	0.002	----	654919	654919	----	10.0000	10.0000	ng/mL	
HFPO-DA	Auto	5.456	0.003	0.002	32544	654919	13C3-HFPO-DA_IS	0.5000	0.4499	ng/mL	
5_3 FTCA	Auto	5.908	0.002	0.928	254250	687616	13C5-PFHxA_IS	15.0000	14.2950	ng/mL	
PFPeS	Auto	6.020	0.002	-1.068	61708	272575	13C3-PFHxS_IS	0.4710	0.4311	ng/mL	
13C4-PFHpA	Auto	6.156	0.002	1.176	626586	656444	13C2-PFHxA_IS	2.5000	2.5019	ng/mL	
13C4-PFHpA_IS	Auto	6.156	0.002	----	626586	626586	----	2.5000	2.5000	ng/mL	
PFHpA	Auto	6.157	0.002	0.001	128808	626586	13C4-PFHpA_IS	0.5000	0.4609	ng/mL	
DONA	Auto	6.522	0.002	1.068	215774	654919	13C3-HFPO-DA_IS	0.4730	0.4251	ng/mL	
13C2-6_2 FTS_IS	Auto	6.794	0.001	----	179759	179759	----	5.0000	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.794	0.001	-0.294	179759	251143	18O2-PFHxS_IS	5.0000	5.4993	ng/mL	
6_2 FTS	Auto	6.794	0.002	0.000	31384	179759	13C2-6_2 FTS_IS	0.4760	0.3834	ng/mL	
13C4-PFOA_IS	Auto	7.111	0.004	----	43612	43612	----	2.5000	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.110	0.003	----	643488	643488	----	2.5000	2.5000	ng/mL	
13C8-PFOA	Auto	7.110	0.003	-0.001	643488	43612	13C4-PFOA_IS	2.5000	2.6398	ng/mL	
PFOA	Auto	7.112	0.002	0.002	79730	643488	13C8-PFOA_IS	0.5000	0.4363	ng/mL	
13C3-PFHxS	Auto	7.088	0.002	0.000	272575	251143	18O2-PFHxS_IS	2.5000	2.5286	ng/mL	
13C3-PFHxS_IS	Auto	7.088	0.002	----	272575	272575	----	2.5000	2.5000	ng/mL	
PFHxS	M	7.088	0.004	0.000	56162	272575	13C3-PFHxS_IS	0.4570	0.4101	ng/mL	
18O2-PFHxS_IS	Auto	7.088	0.002	----	251143	251143	----	2.5000	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.958	0.002	----	319396	319396	----	1.2500	1.2500	ng/mL	
13C9-PFNA	Auto	7.958	0.002	0.000	319396	323300	13C5-PFNA_IS	1.2500	1.2617	ng/mL	
13C5-PFNA_IS	Auto	7.959	0.002	----	323300	323300	----	1.2500	1.2500	ng/mL	
PFNA	Auto	7.959	0.002	0.001	93339	319396	13C9-PFNA_IS	0.5000	0.4826	ng/mL	
PFHpS	Auto	8.008	0.004	-0.814	43044	121099	13C8-PFOS_IS	0.4770	0.4554	ng/mL	
7_3 FTCA	Auto	7.957	0.003	2.977	333337	687616	13C5-PFHxA_IS	15.0000	14.0388	ng/mL	
13C2-8_2-FTS	Auto	8.412	0.003	1.324	131115	251143	18O2-PFHxS_IS	5.0000	4.8831	ng/mL	
13C2-8_2-FTS_IS	Auto	8.412	0.003	----	131115	131115	----	5.0000	5.0000	ng/mL	
8_2 FTS	Auto	8.413	0.003	0.001	25869	131115	13C2-8_2-FTS_IS	0.4800	0.4592	ng/mL	
13C6-PFDA_IS	Auto	8.723	0.003	----	238617	238617	----	1.2500	1.2500	ng/mL	
13C6-PFDA	Auto	8.723	0.003	-0.001	238617	225855	13C2-PFDA_IS	1.2500	1.3132	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_009 (continued)

(Table continued from previous page)

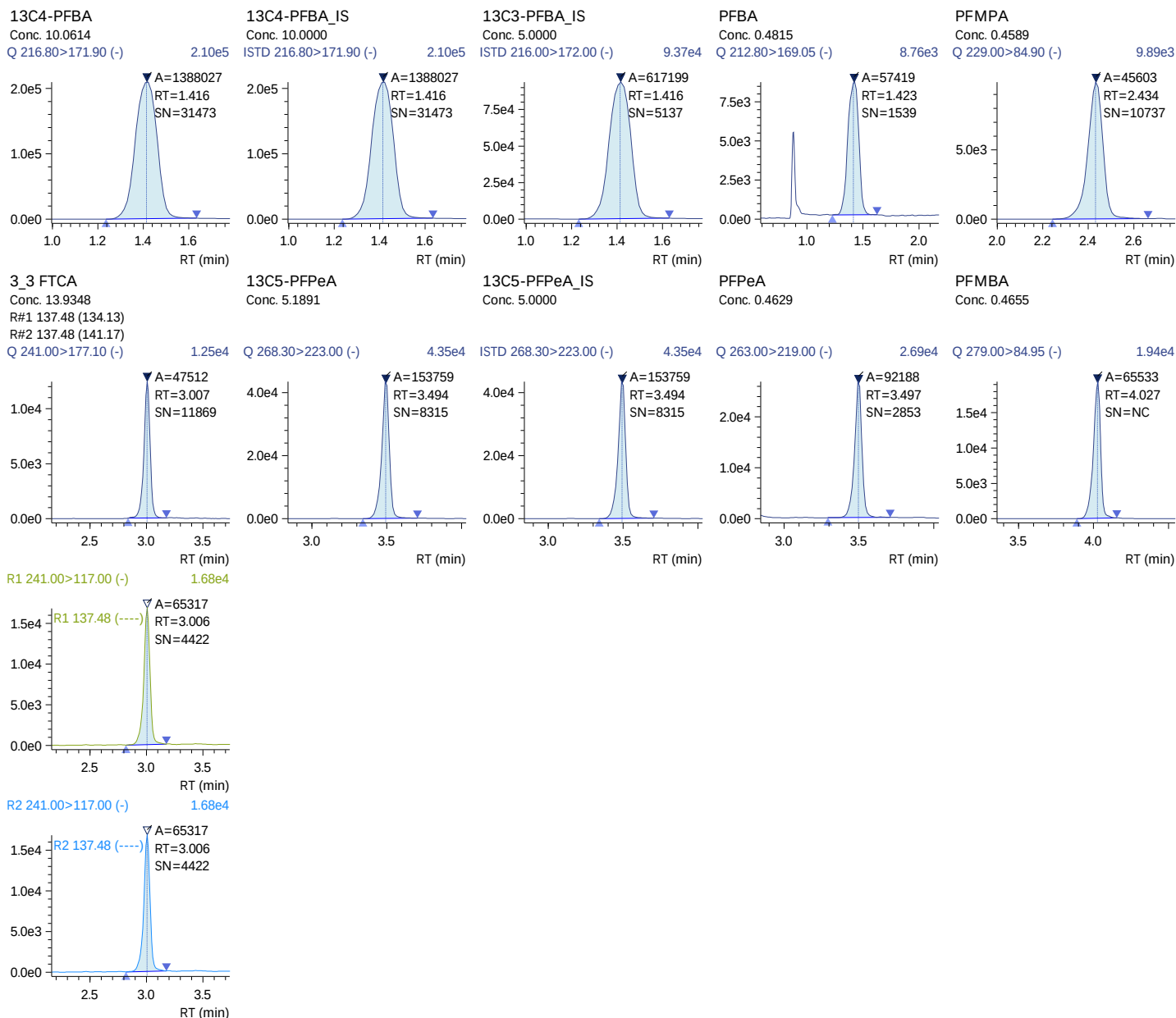
Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Std. Conc.	Conc.	Unit	Flag ID
13C2-PFDA_IS	Auto	8.724	0.003	----	225855	225855	----	1.2500	1.2500	ng/mL	
PFDA	Auto	8.725	0.004	0.002	112231	238617	13C6-PFDA_IS	0.5000	0.4680	ng/mL	
D3-NMeFOSAA_IS	Auto	8.858	0.003	----	249589	249589	----	5.0000	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.858	0.003	0.035	249589	279876	13C4-PFOS_IS	5.0000	5.1382	ng/mL	
13C8-PFOS_IS	Auto	8.822	0.002	----	121099	121099	----	2.5000	2.5000	ng/mL	
13C8-PFOS	Auto	8.822	0.002	-0.001	121099	279876	13C4-PFOS_IS	2.5000	2.5945	ng/mL	
13C4-PFOS_IS	Auto	8.823	0.003	----	279876	279876	----	2.5000	2.5000	ng/mL	
PFOS	M	8.824	0.002	0.002	51913	121099	13C8-PFOS_IS	0.4640	0.4122	ng/mL	
NMeFOSAA	M	8.863	0.002	0.005	33145	249589	D3-NMeFOSAA_IS	0.5000	0.4894	ng/mL	
D5-NetFOSAA_IS	Auto	9.188	0.002	----	301439	301439	----	5.0000	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.188	0.002	0.365	301439	279876	13C4-PFOS_IS	5.0000	5.1871	ng/mL	
NetFOSAA	M	9.202	0.007	0.014	17841	301439	D5-NetFOSAA_IS	0.5000	0.4431	ng/mL	
9-CI-PF3ONS	Auto	9.387	0.003	3.933	226384	654919	13C3-HFPO-DA_IS	0.4670	0.4193	ng/mL	
PFUnDA	Auto	9.448	0.001	0.001	106205	297301	13C7-PFUnDA_IS	0.5000	0.4637	ng/mL	
13C7-PFUnDA_IS	Auto	9.447	0.002	----	297301	297301	----	1.2500	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.447	0.002	0.723	297301	225855	13C2-PFDA_IS	1.2500	1.3716	ng/mL	
PFNS	Auto	9.586	0.002	0.764	41760	121099	13C8-PFOS_IS	0.4810	0.4539	ng/mL	
10_2_FTS	Auto	9.821	0.002	1.409	31611	131115	13C2-8_2-FTS_IS	0.4820	0.4611	ng/mL	
13C2-PFDOA_IS	Auto	10.136	0.003	----	326480	326480	----	1.2500	1.2500	ng/mL	
13C2-PFDOA	Auto	10.136	0.003	1.412	326480	225855	13C2-PFDA_IS	1.2500	1.3111	ng/mL	
PFDOA	Auto	10.137	0.003	0.001	90780	326480	13C2-PFDOA_IS	0.5000	0.4615	ng/mL	
PFDS	Auto	10.299	0.003	1.477	35775	121099	13C8-PFOS_IS	0.4830	0.4411	ng/mL	
PFTDA	Auto	10.794	0.002	-0.633	102058	146161	13C2-PFTDA_IS	0.5000	0.4640	ng/mL	
11-CI-PF3OUdS	Auto	10.809	0.003	5.355	168194	654919	13C3-HFPO-DA_IS	0.4720	0.4460	ng/mL	
PFOSAm	M	11.165	0.001	-0.001	93404	313170	13C8-PFOSAm_IS	1.0000	0.9049	ng/mL	
13C8-PFOSAm	Auto	11.166	0.001	2.343	313170	279876	13C4-PFOS_IS	2.5000	2.6358	ng/mL	
13C8-PFOSAm_IS	Auto	11.166	0.001	----	313170	313170	----	2.5000	2.5000	ng/mL	
PFTDA	Auto	11.429	0.004	0.002	75486	146161	13C2-PFTDA_IS	0.5000	0.4528	ng/mL	
13C2-PFTDA	Auto	11.427	0.003	2.703	146161	225855	13C2-PFDA_IS	1.2500	1.3595	ng/mL	
13C2-PFTDA_IS	Auto	11.427	0.003	----	146161	146161	----	1.2500	1.2500	ng/mL	
PFDoS	Auto	11.625	0.003	2.803	21129	121099	13C8-PFOS_IS	0.4850	0.4351	ng/mL	
D7-MeFOSE_IS	Auto	13.380	0.003	----	761016	761016	----	25.0000	25.0000	ng/mL	
D7-MeFOSE	Auto	13.380	0.003	4.557	761016	279876	13C4-PFOS_IS	25.0000	25.9796	ng/mL	
MeFOSE	M	13.418	0.005	0.038	12425	761016	D7-MeFOSE_IS	0.5000	0.4446	ng/mL	
13C2-PFHXA_IS	Auto	12.642	0.001	----	546187	546187	----	2.5000	2.5000	ng/mL	
13C2-PFHXA	Auto	12.642	0.001	3.918	546187	225855	13C2-PFDA_IS	2.5000	2.6034	ng/mL	
PFHXDA	Auto	12.643	0.001	0.001	114442	546187	13C2-PFHXA_IS	0.5000	0.4831	ng/mL	
D3-MeFOSA	Auto	13.687	0.002	4.864	58649	279876	13C4-PFOS_IS	2.5000	2.4512	ng/mL	
D3-MeFOSA_IS	Auto	13.687	0.002	----	58649	58649	----	2.5000	2.5000	ng/mL	
MeFOSA	M	13.696	0.002	0.009	21243	58649	D3-MeFOSA_IS	0.5000	0.5025	ng/mL	
D9-EtFOSE_IS	Auto	14.008	0.002	----	781729	781729	----	25.0000	25.0000	ng/mL	
D9-EtFOSE	Auto	14.008	0.002	5.185	781729	279876	13C4-PFOS_IS	25.0000	26.2754	ng/mL	
EtFOSE	M	14.051	0.003	0.043	19620	781729	D9-EtFOSE_IS	0.5000	0.4770	ng/mL	
D5-EtFOSAm	Auto	14.364	0.002	5.541	82004	279876	13C4-PFOS_IS	2.5000	2.5742	ng/mL	
D5-EtFOSAm_IS	Auto	14.364	0.002	----	82004	82004	----	2.5000	2.5000	ng/mL	
EtFOSAm	M	14.383	0.003	0.019	23101	82004	D5-EtFOSAm_IS	0.5000	0.4839	ng/mL	
PFODA	Auto	13.780	0.005	1.138	55160	546187	13C2-PFHXA_IS	0.5000	0.4466	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_009 (continued)





240118_009 (continued)

13C2-4_2 FTS
Conc. 4.9096

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. 0.4696
R#1 27.70 (34.14)
R#2 27.70 (29.06)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 0.3982
R#1 48.23 (47.53)
R#2 48.23 (46.72)

Q 329.10>80.90 (-)

5.19e4

ISTD 329.10>80.90 (-)

5.19e4

Q 327.10>307.00 (-)

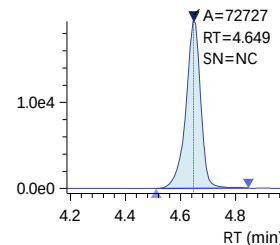
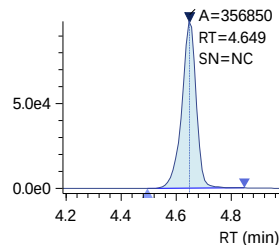
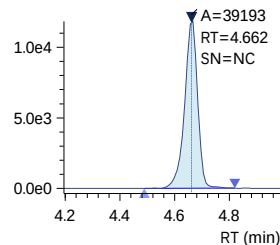
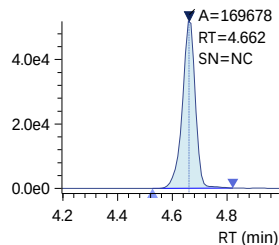
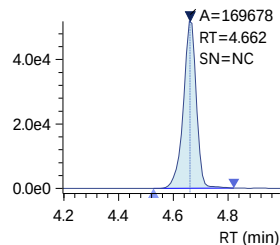
1.18e4

ISTD 302.10>79.90 (-)

9.86e4

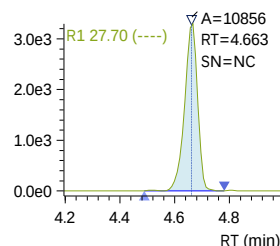
Q 298.70>79.90 (-)

1.94e4



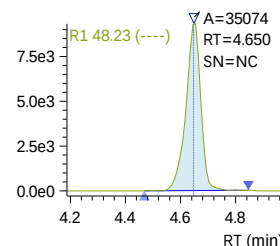
R1 327.10>80.90 (-)

3.30e3



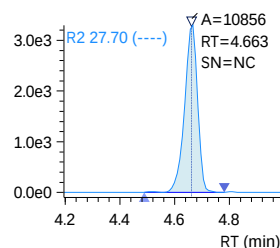
R1 298.70>98.80 (-)

9.32e3



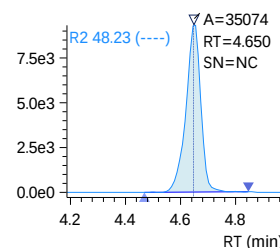
R2 327.10>80.90 (-)

3.30e3



R2 298.70>98.80 (-)

9.32e3

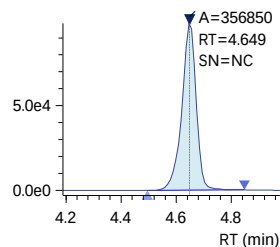




240118_009 (continued)

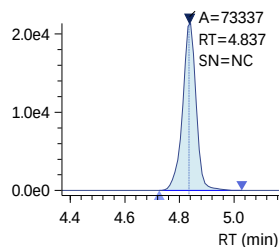
13C3-PFBS
Conc. 2.5038

Q 302.10>79.90 (-)



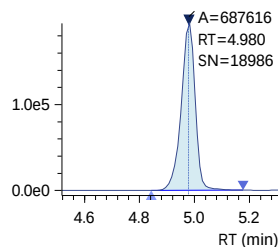
NFDHA
Conc. 0.4807
R#1 36.69 (37.88)
R#2 36.69 (40.25)

Q 295.00>201.00 (-)



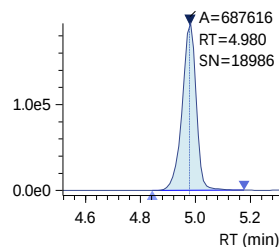
13C5-PFHxA
Conc. 2.4854

Q 318.00>273.00 (-)



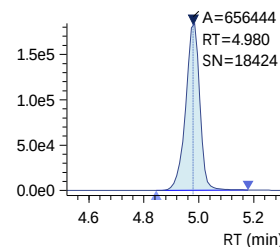
13C5-PFHxA_IS
Conc. 2.5000

ISTD 318.00>273.00 (-)

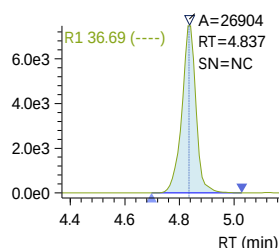


13C2-PFHxA_IS
Conc. 2.5000

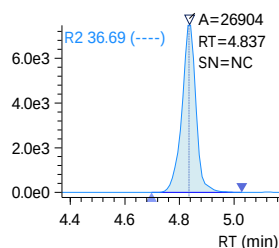
ISTD 315.10>270.00 (-)



R1 295.00>84.90 (-)

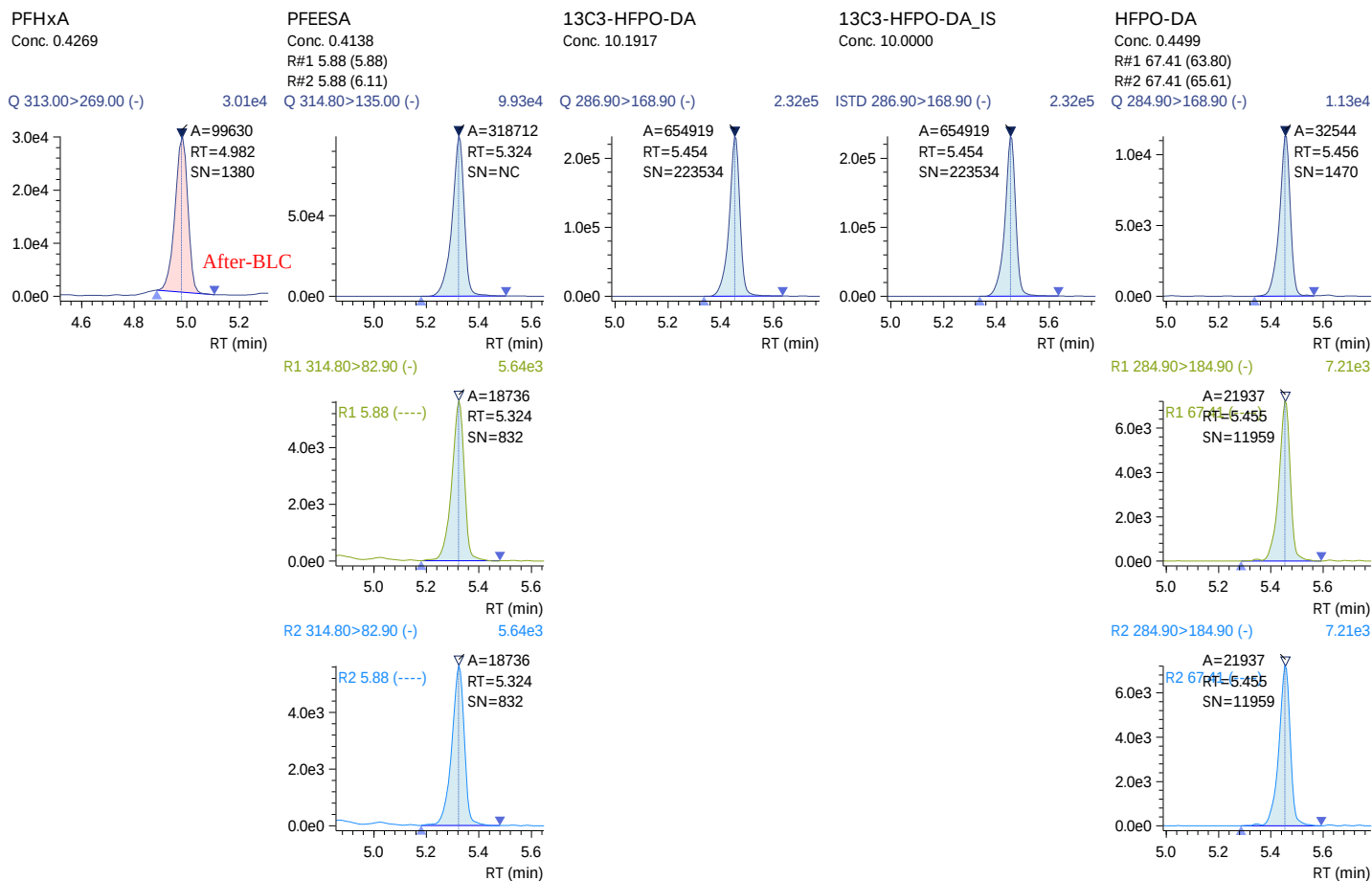


R2 295.00>84.90 (-)





240118_009 (continued)

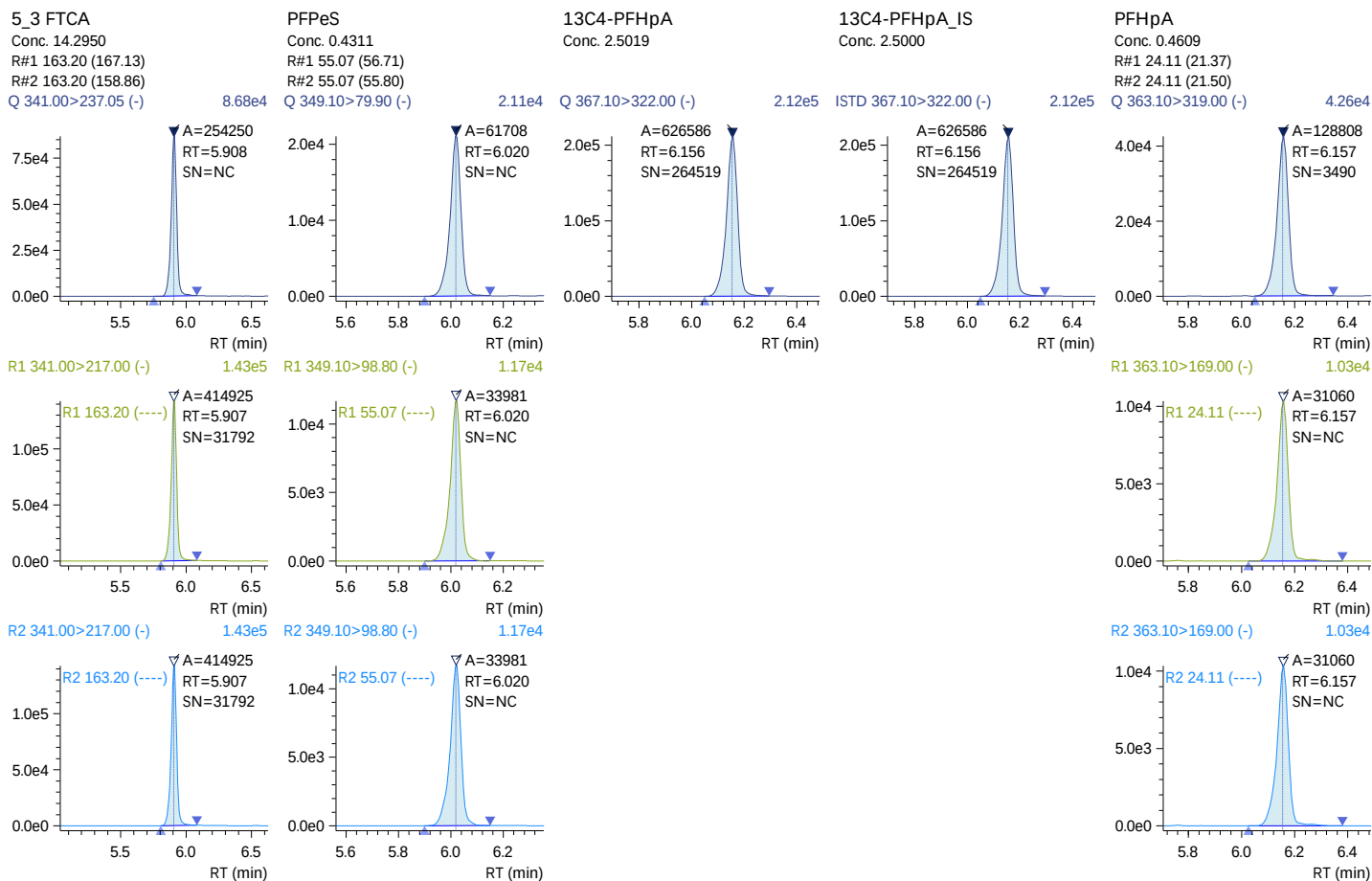


J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_009 (continued)

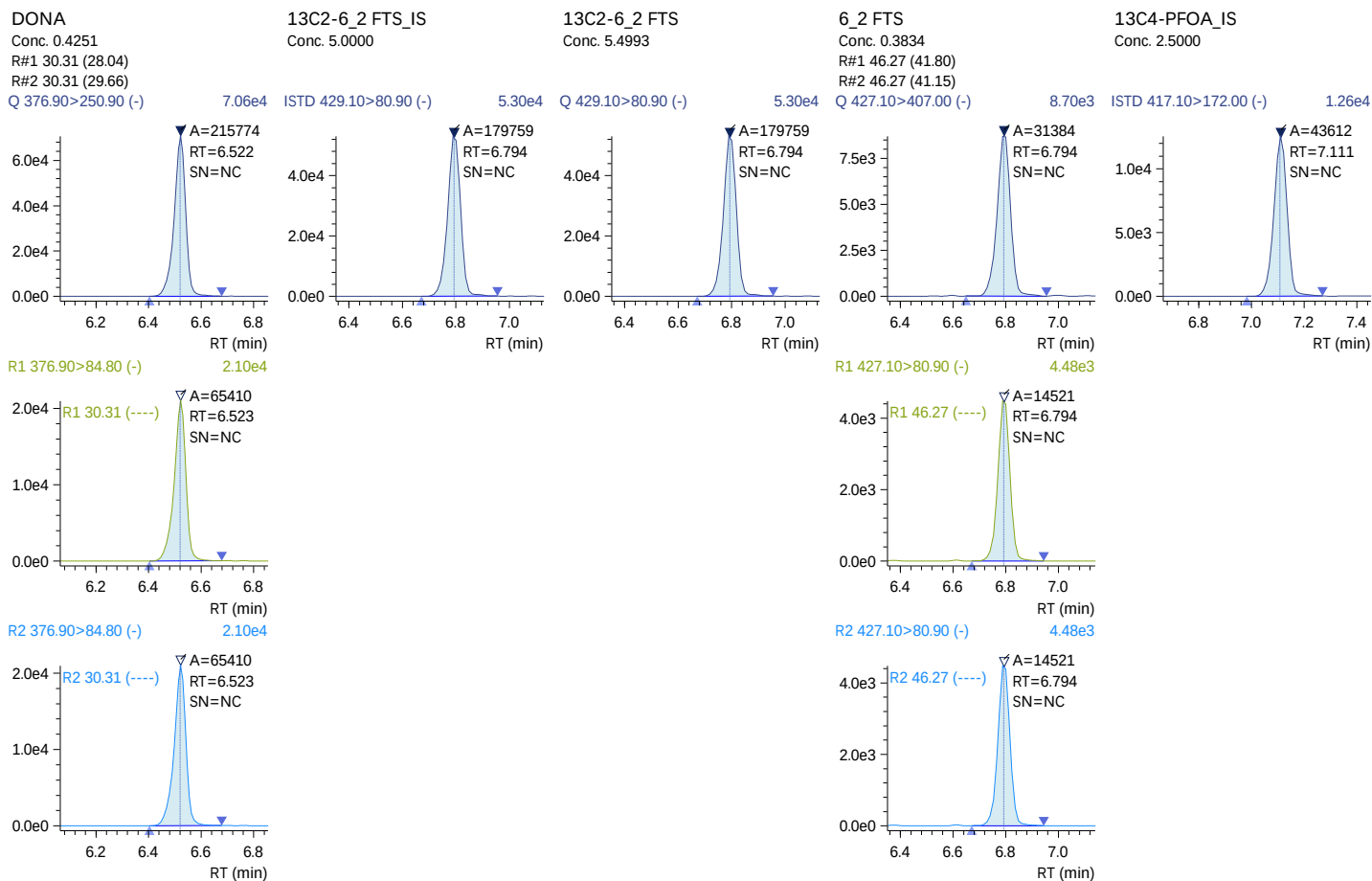


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_009 (continued)



J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_009 (continued)

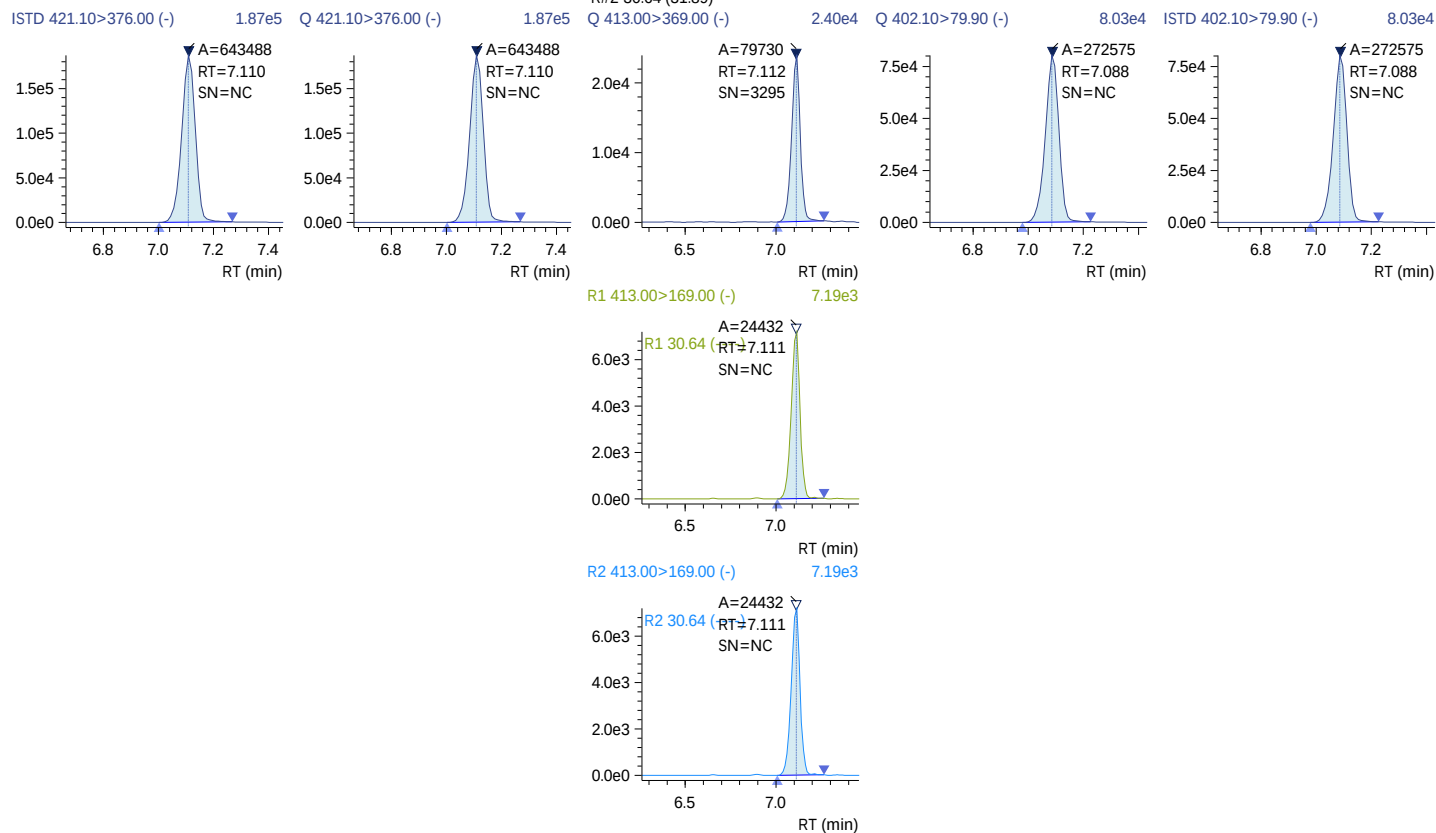
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.6398

PFOA
Conc. 0.4363
R#1 30.64 (29.05)
R#2 30.64 (31.89)

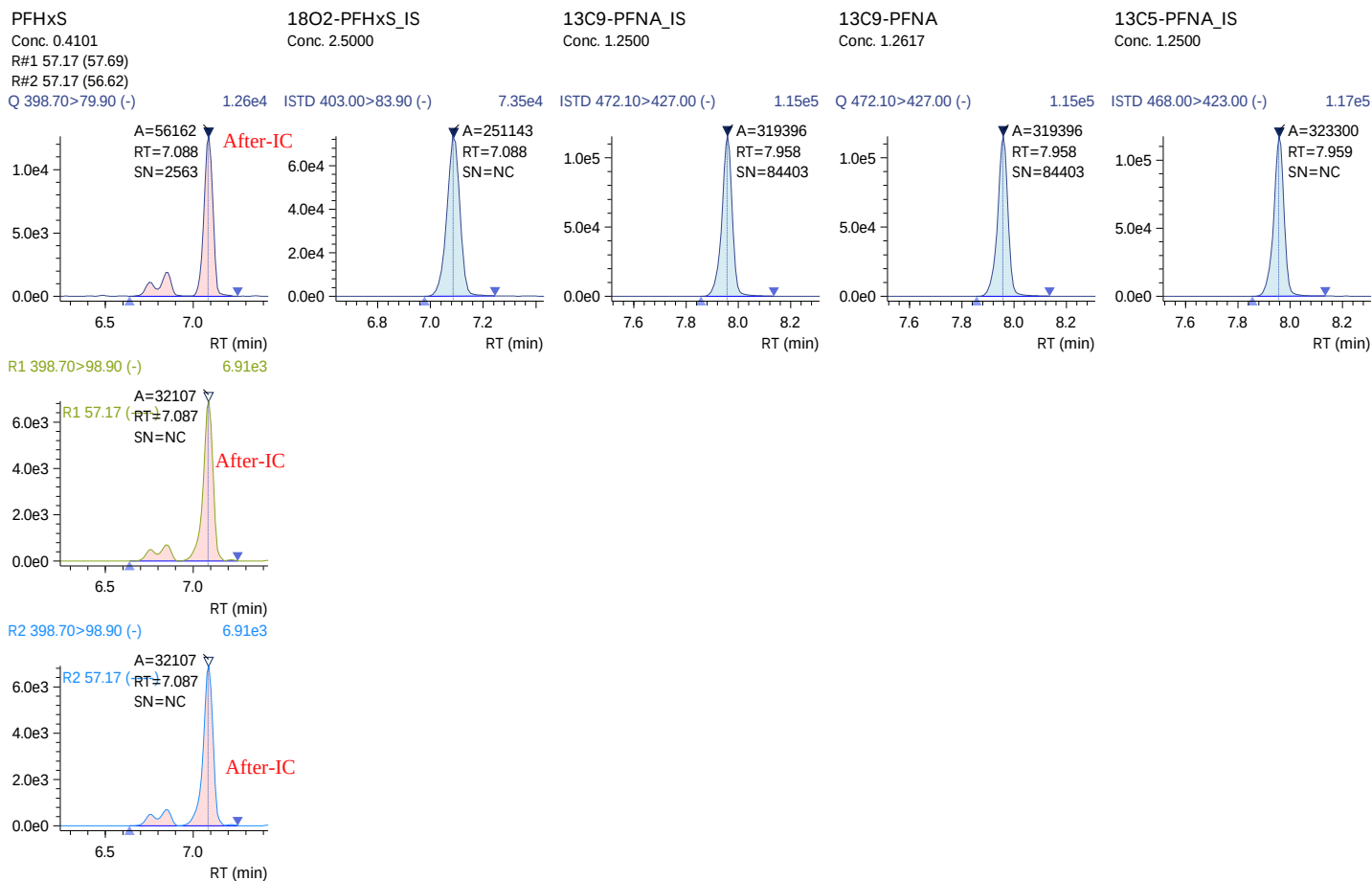
13C3-PFHxS
Conc. 2.5286

13C3-PFHxS_IS
Conc. 2.5000





240118_009 (continued)

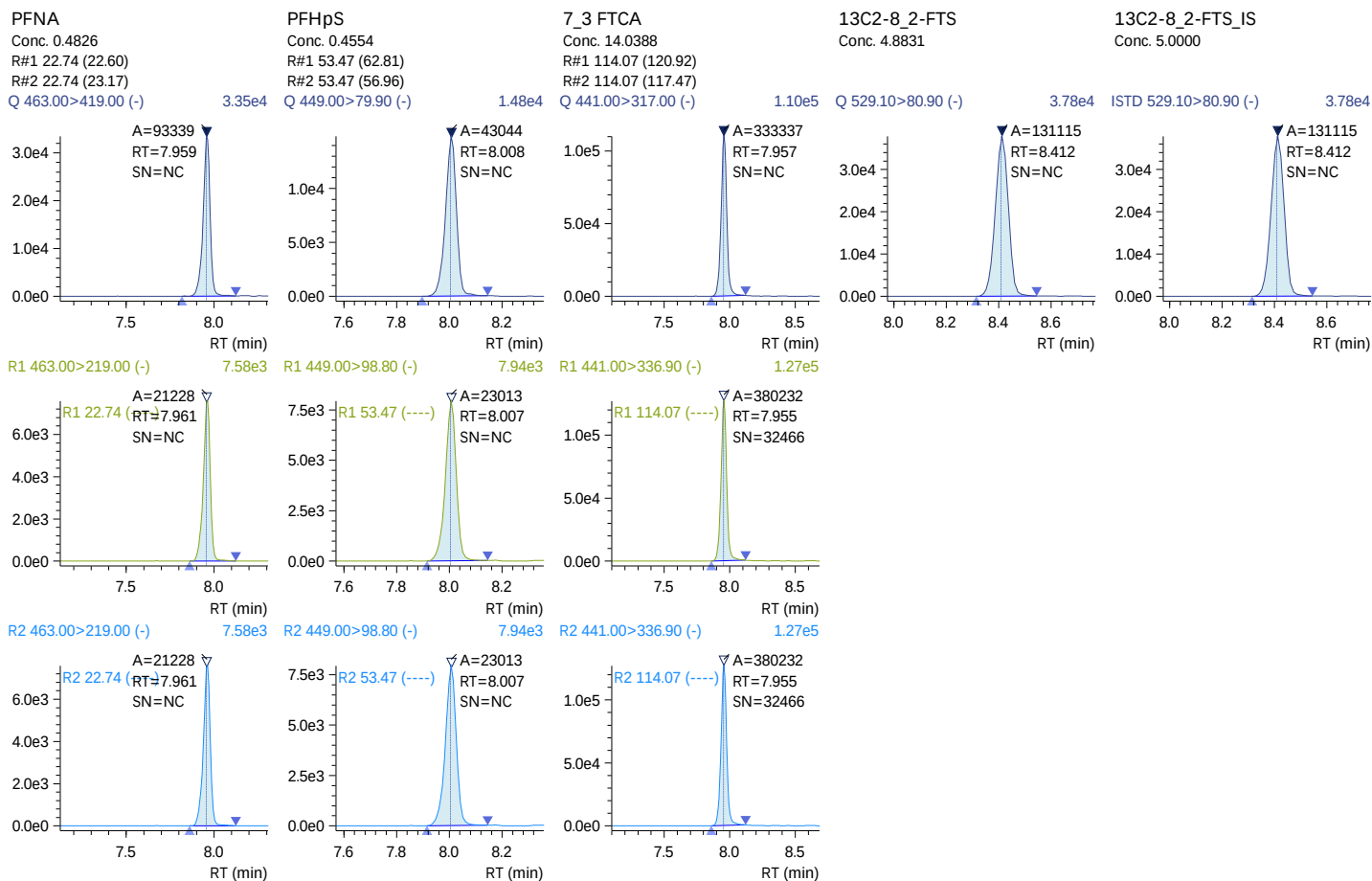


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_009 (continued)

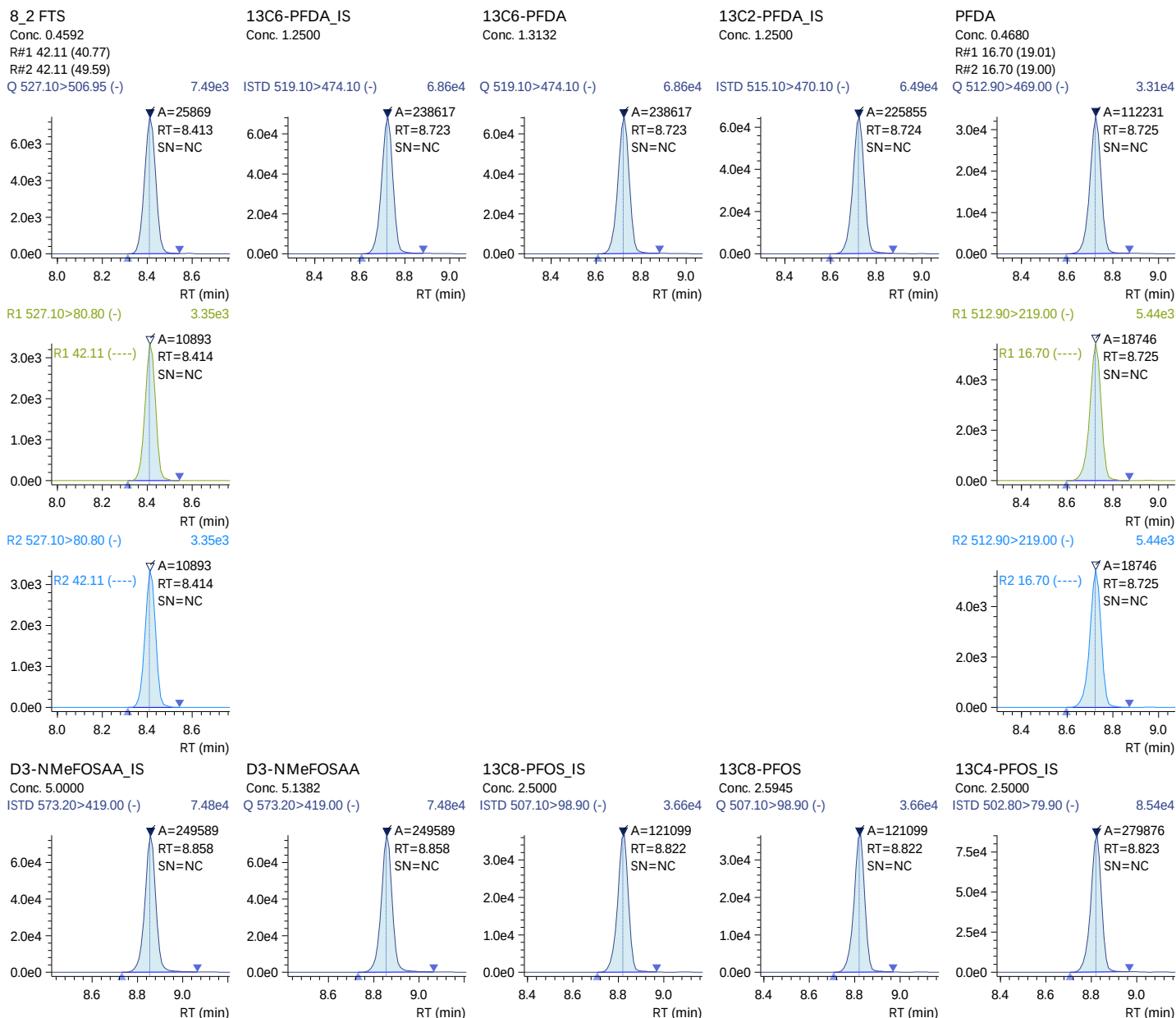


J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.damlp

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_009 (continued)

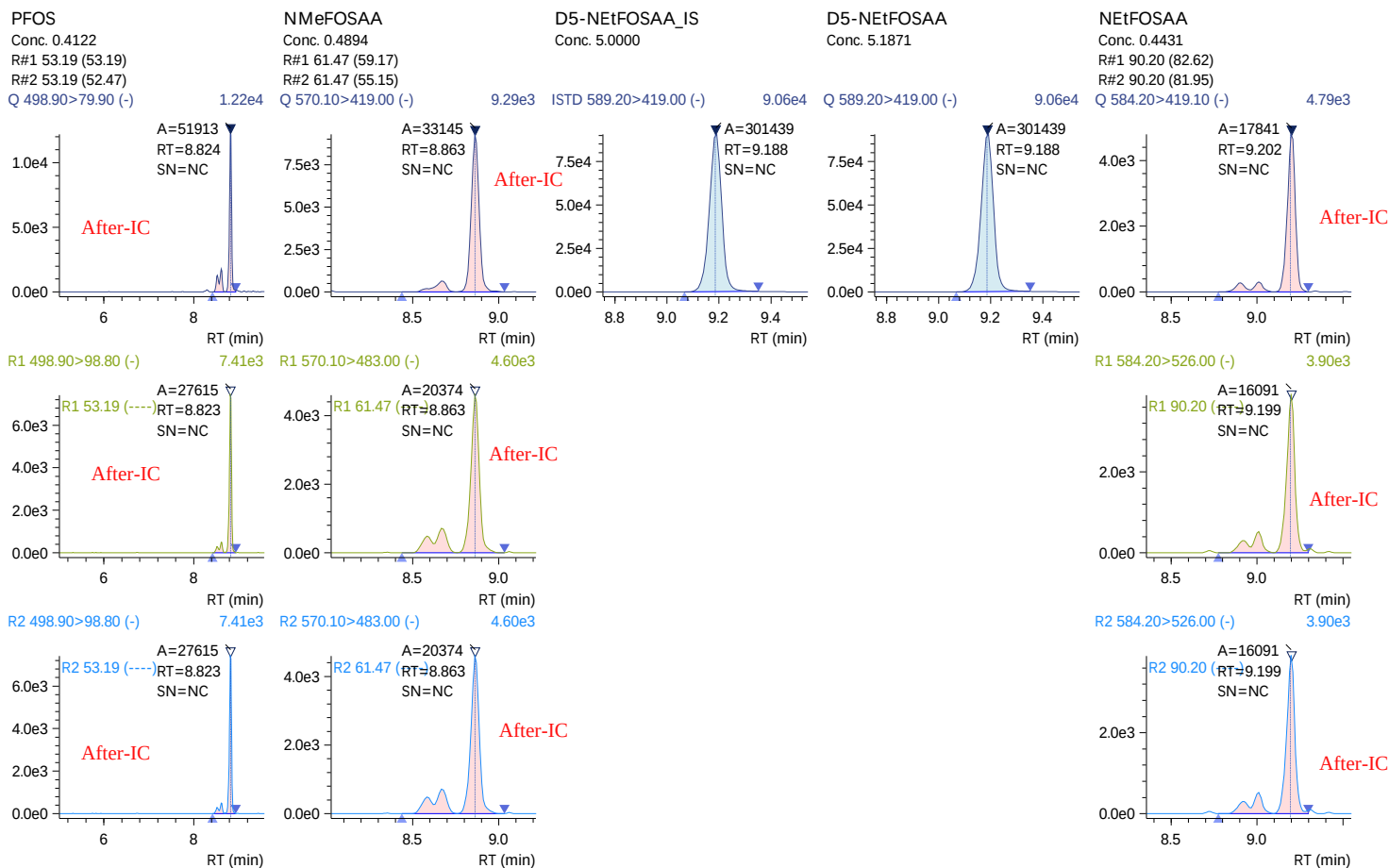


J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_009 (continued)



J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

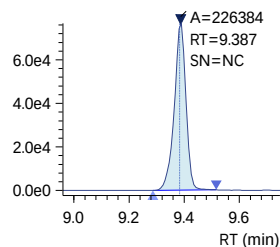
SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



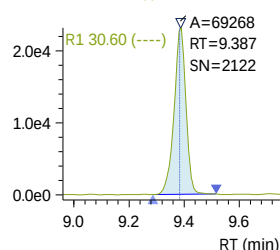
240118_009 (continued)

9-Cl-PF3ONS

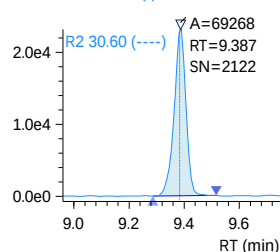
Conc. 0.4193
R#1 30.60 (31.76)
R#2 30.60 (32.76)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-) 2.32e4

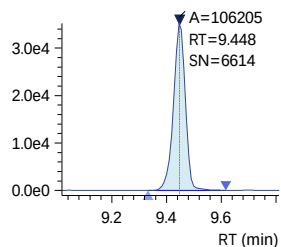


R2 532.80>353.00 (-) 2.32e4

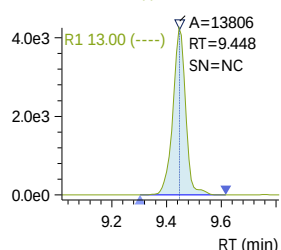


PFUnDA

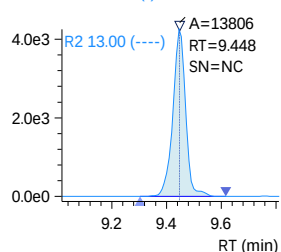
Conc. 0.4637
R#1 13.00 (12.31)
R#2 13.00 (13.12)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-) 4.25e3

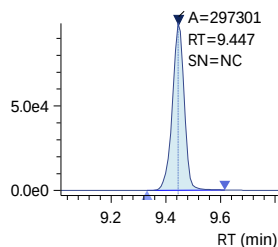


R2 563.10>269.10 (-) 4.25e3



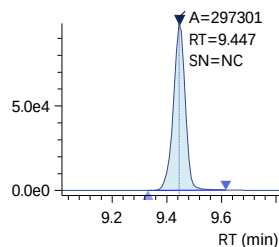
13C7-PFUnDA_IS

Conc. 1.2500
ISTD 570.00>525.10 (-)



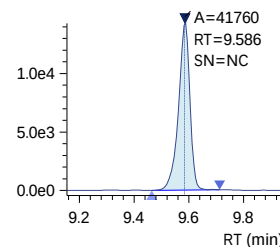
13C7-PFUnDA

Conc. 1.3716
Q 570.00>525.10 (-)

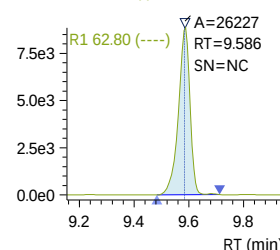


PFNS

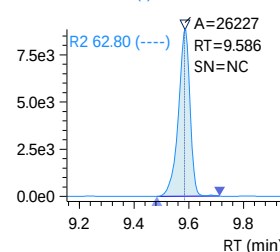
Conc. 0.4539
R#1 62.80 (63.31)
R#2 62.80 (65.22)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-) 8.85e3

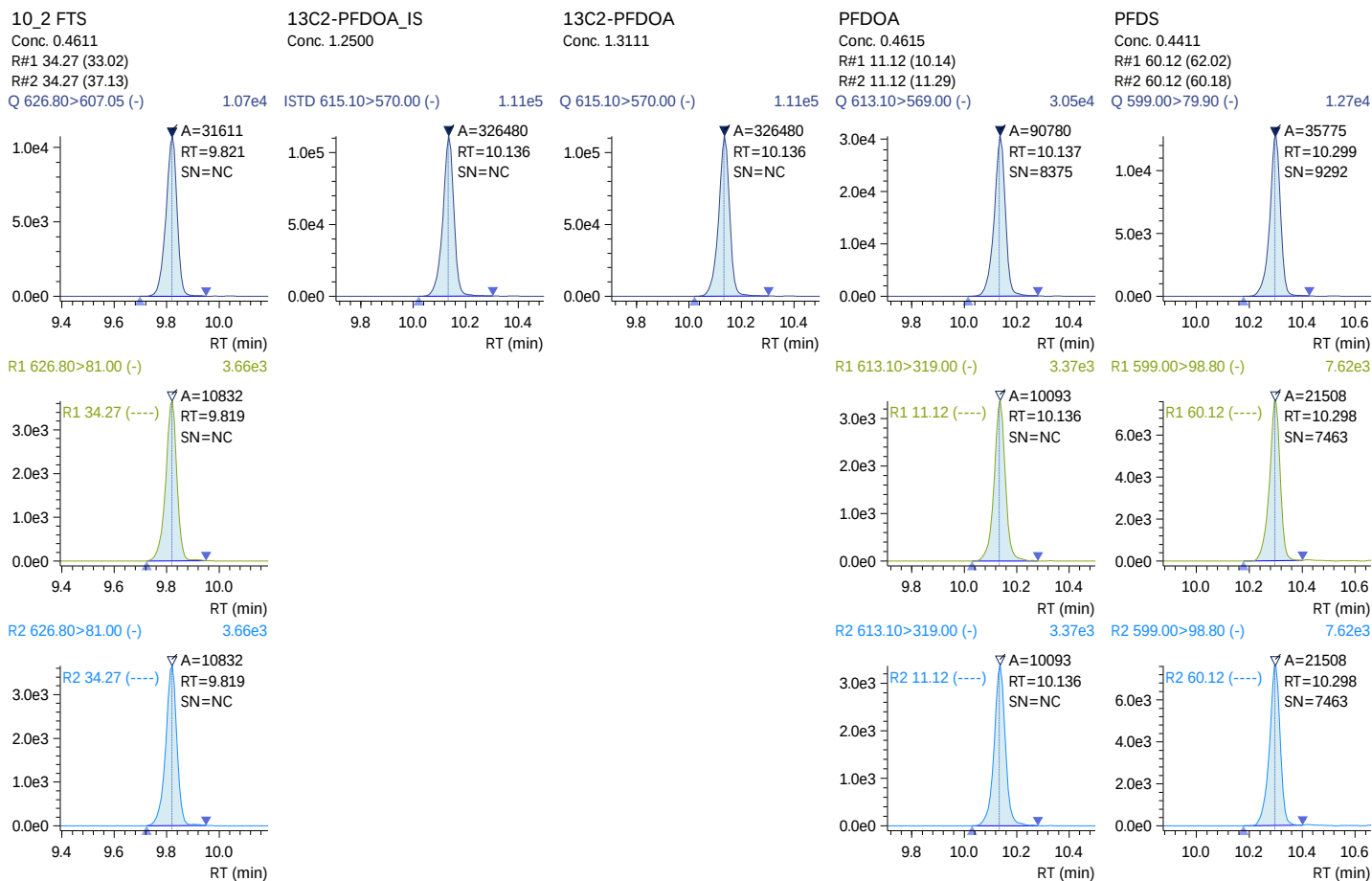


R2 548.80>98.80 (-) 8.85e3





240118_009 (continued)

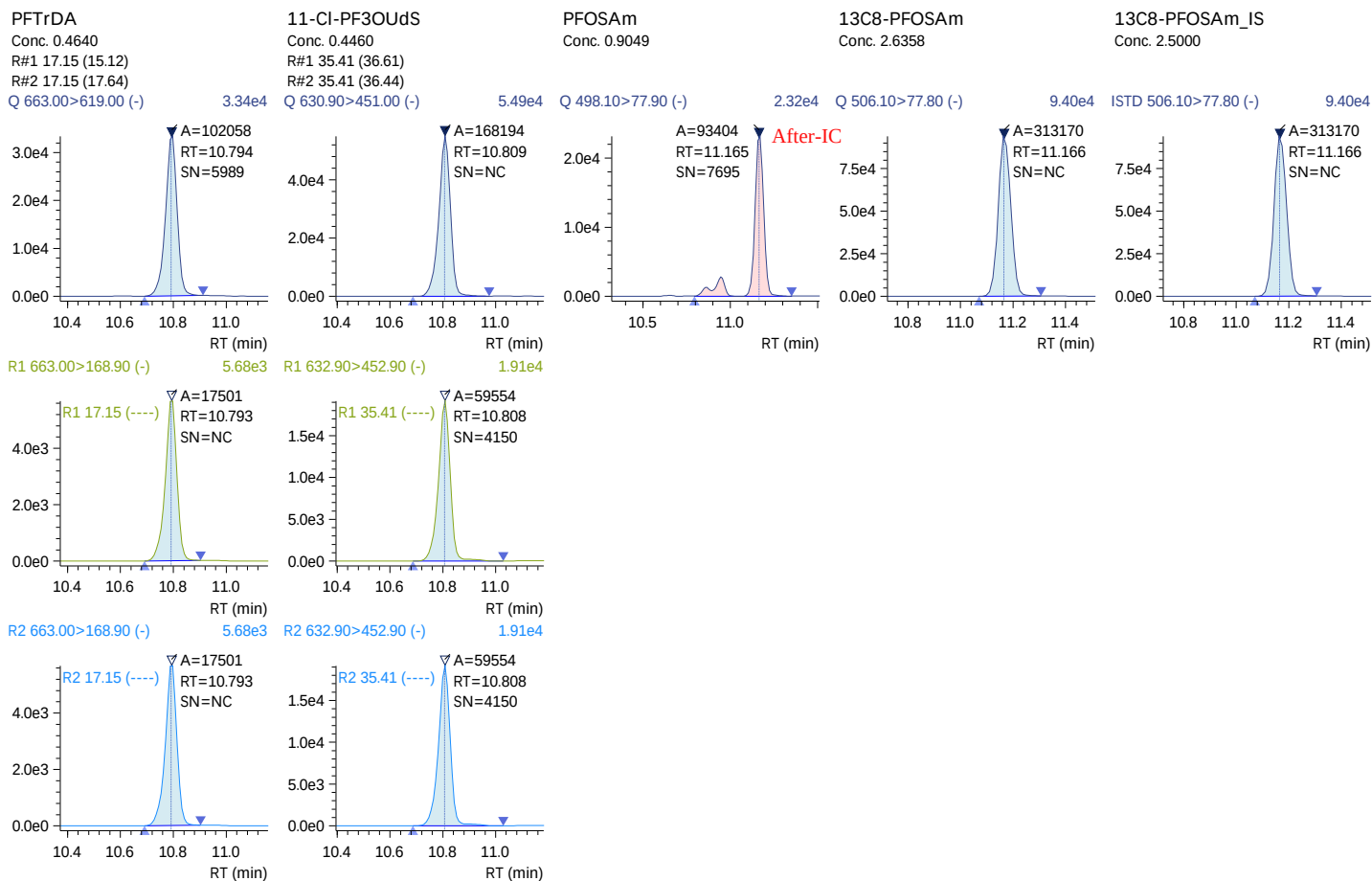


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_009 (continued)

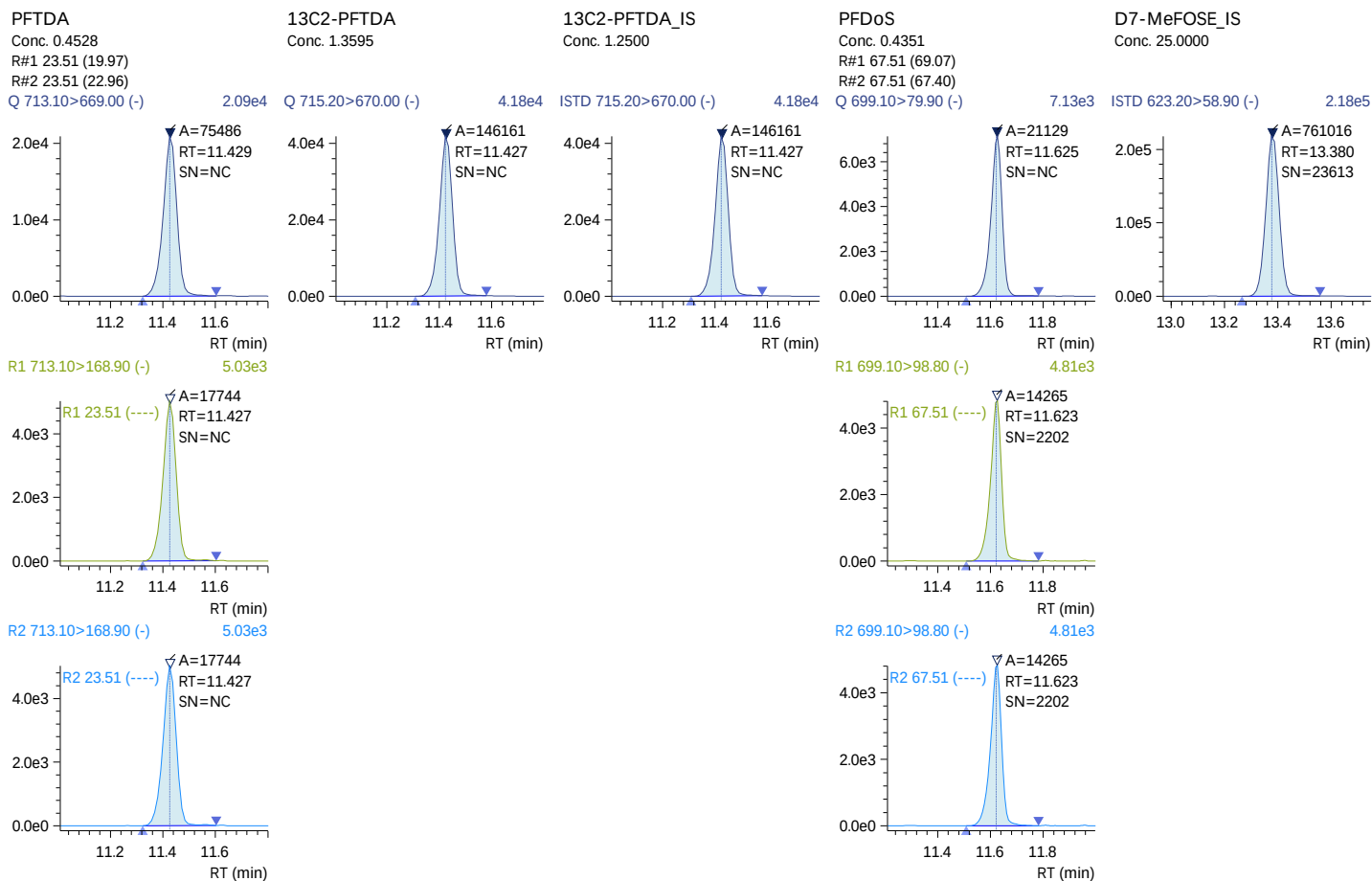


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_009 (continued)



J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.damlp

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_009 (continued)

D7-MeFOSE
Conc. 25.9796

MeFOSE
Conc. 0.4446

13C2-PFHXA_IS
Conc. 2.5000

13C2-PFHXA
Conc. 2.6034

PFHXA
Conc. 0.4831

Q 623.20>58.90 (-)

2.18e5

Q 616.10>59.00 (-)

2.11e3

ISTD 815.00>770.05 (-)

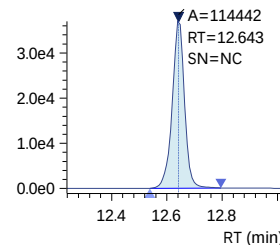
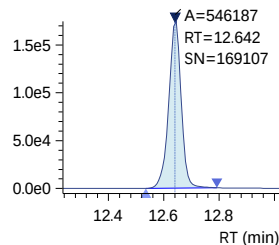
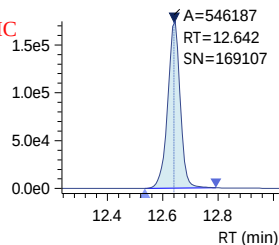
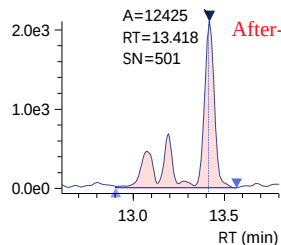
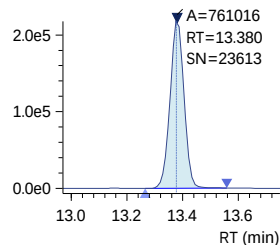
1.75e5

Q 815.00>770.05 (-)

1.75e5

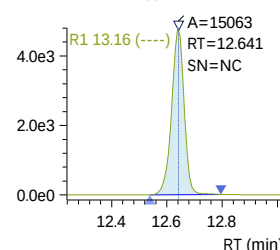
Q 813.00>768.95 (-)

3.70e4



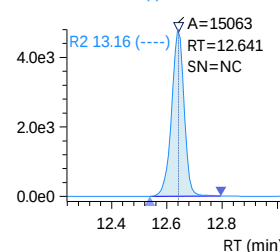
R1 813.00>218.95 (-)

4.81e3



R2 813.00>218.95 (-)

4.81e3





240118_009 (continued)

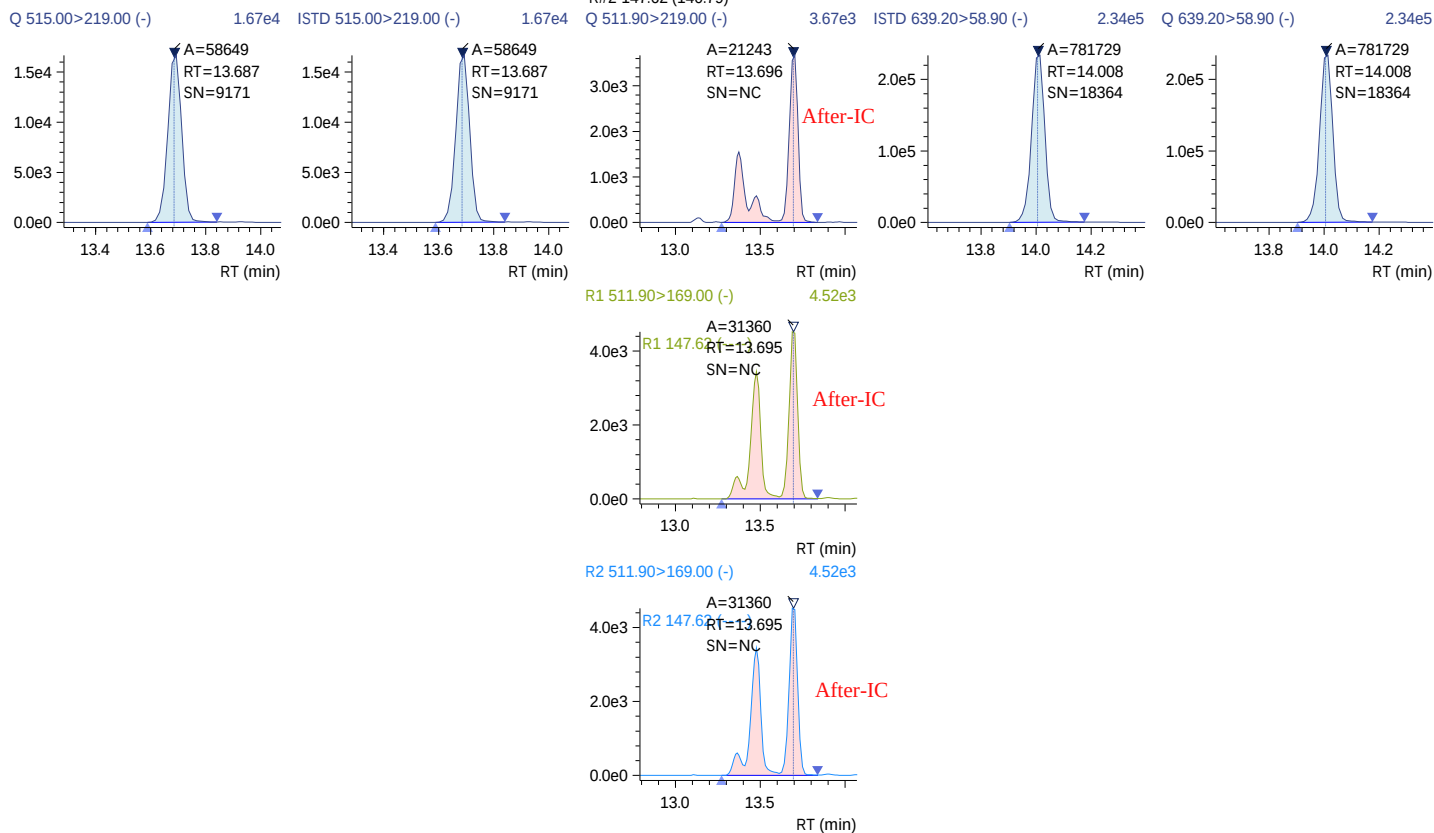
D3-MeFOSA
Conc. 2.4512

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. 0.5025
R#1 147.62 (149.05)
R#2 147.62 (140.79)

D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 26.2754





240118_009 (continued)

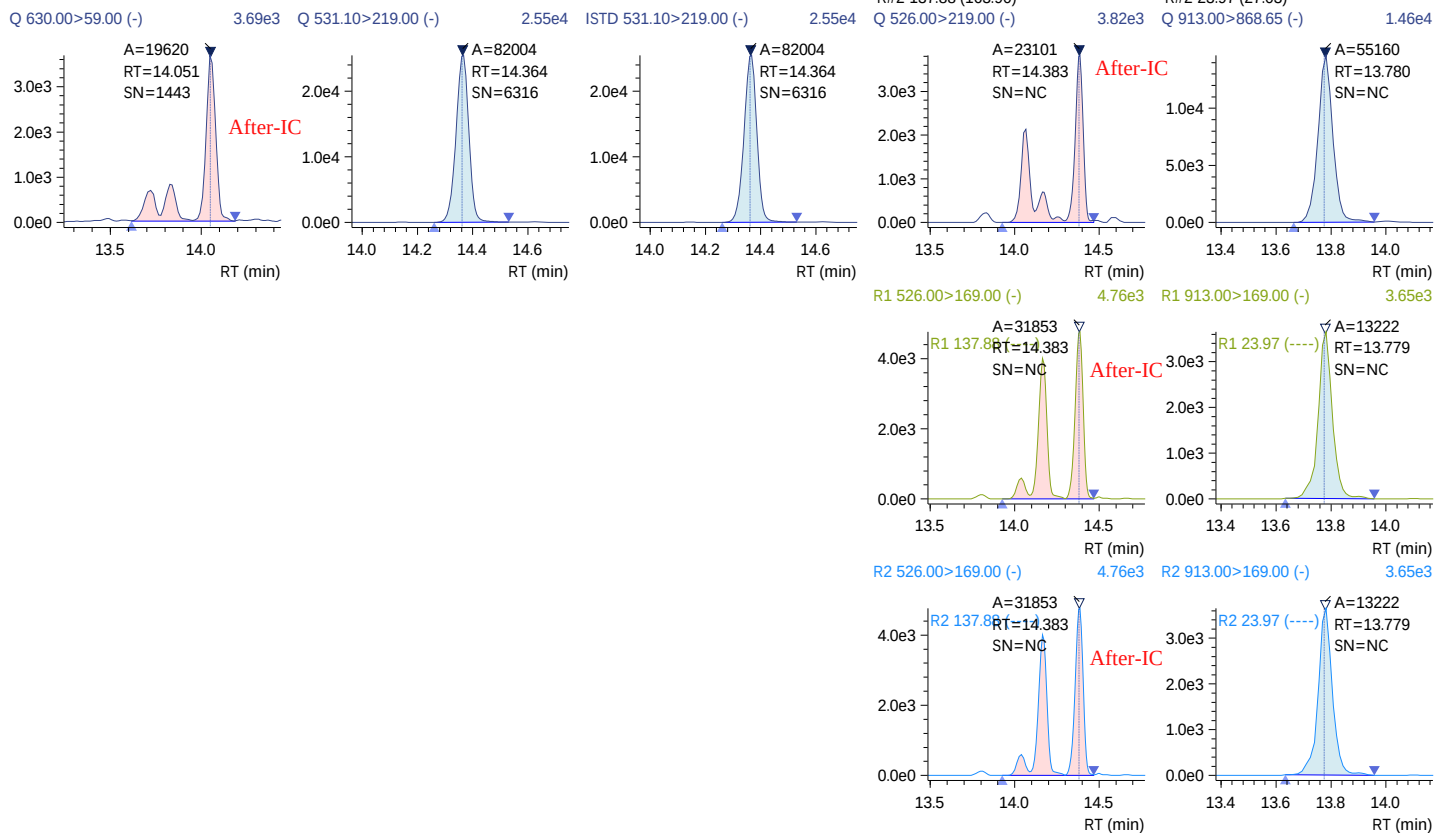
EtFOSE
Conc. 0.4770

D5-EtFOSAm
Conc. 2.5742

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. 0.4839
R#1 137.88 (154.69)
R#2 137.88 (163.90)

PFODA
Conc. 0.4466
R#1 23.97 (29.32)
R#2 23.97 (27.03)



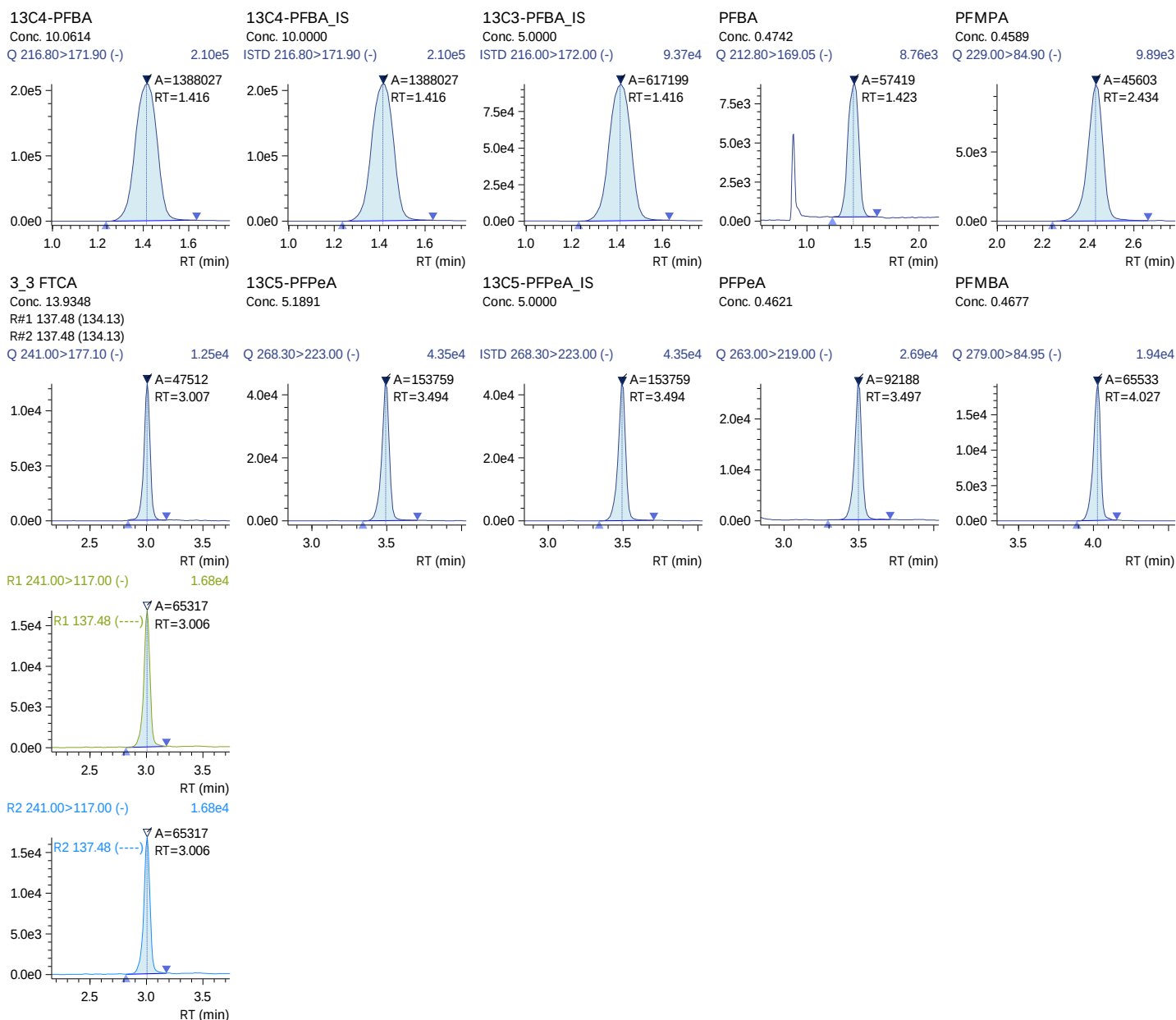
J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_009

Sample ID: 1633 ICAL 0.50PPB
Date Acquired: 1/18/2024 3:14:20 PM
Acquired by: System Administrator
Data File: 240118_009
Vial: 4 | Inj. Volume: 10.0000uL | Tray: 1





240118_009 (continued)

13C2-4_2 FTS
Conc. 4.9096

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. 0.4696
R#1 27.70 (34.14)
R#2 27.70 (34.14)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 0.3982
R#1 48.23 (47.53)
R#2 48.23 (47.53)

Q 329.10>80.90 (-)

5.19e4

ISTD 329.10>80.90 (-)

5.19e4

Q 327.10>307.00 (-)

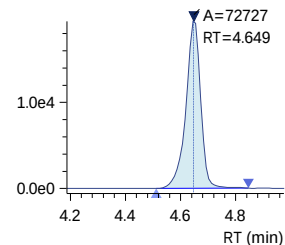
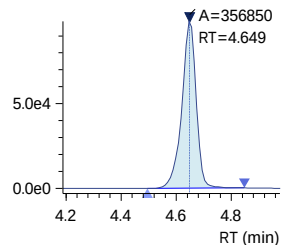
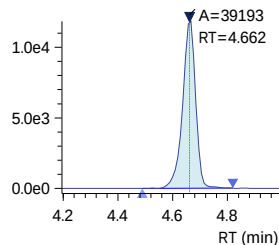
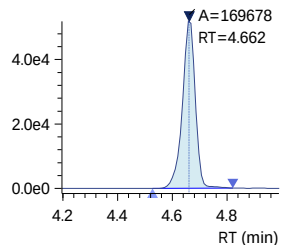
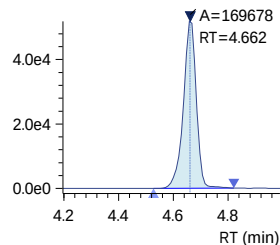
1.18e4

ISTD 302.10>79.90 (-)

9.86e4

Q 298.70>79.90 (-)

1.94e4

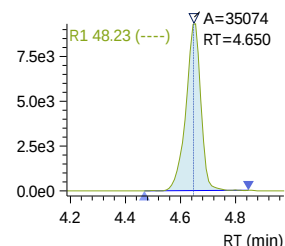
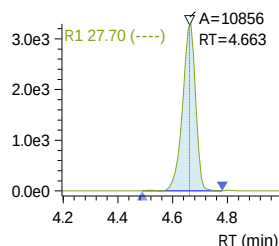


R1 327.10>80.90 (-)

3.30e3

R1 298.70>98.80 (-)

9.32e3

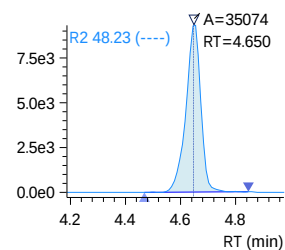
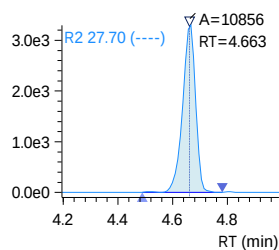


R2 327.10>80.90 (-)

3.30e3

R2 298.70>98.80 (-)

9.32e3

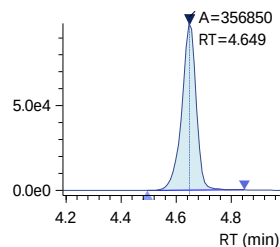




240118_009 (continued)

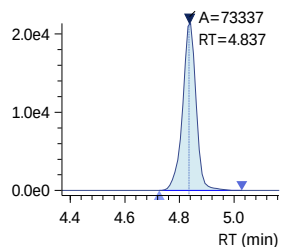
13C3-PFBS
 Conc. 2.5038

Q 302.10>79.90 (-)

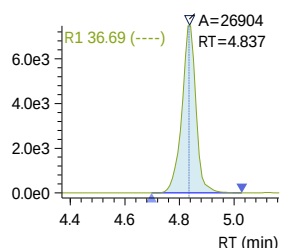


NFDHA
 Conc. 0.4807
 R#1 36.69 (37.88)
 R#2 36.69 (37.88)

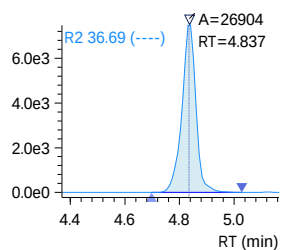
Q 295.00>201.00 (-)



R1 295.00>84.90 (-)

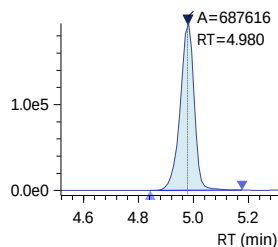


R2 295.00>84.90 (-)



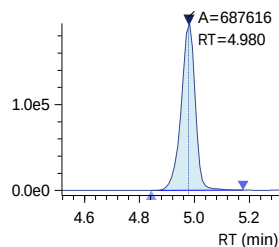
13C5-PFHxA
 Conc. 2.4854

Q 318.00>273.00 (-)



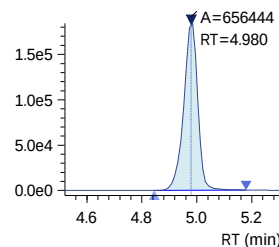
13C5-PFHxA_IS
 Conc. 2.5000

ISTD 318.00>273.00 (-)



13C2-PFHxA_IS
 Conc. 2.5000

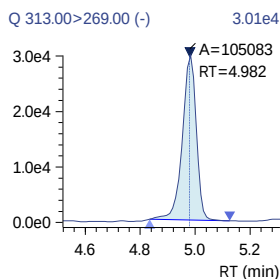
ISTD 315.10>270.00 (-)





240118_009 (continued)

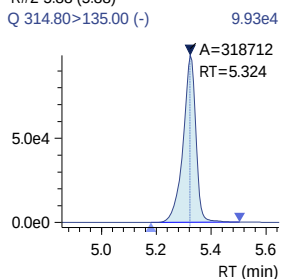
PFHxA
Conc. 0.4633



PFEESA
Conc. 0.4138

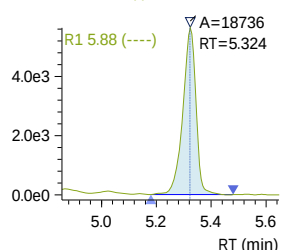
R#1 5.88 (5.88)

R#2 5.88 (5.88)



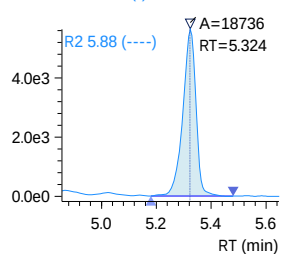
R1 314.80>82.90 (-)

5.64e3

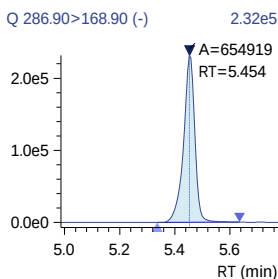


R2 314.80>82.90 (-)

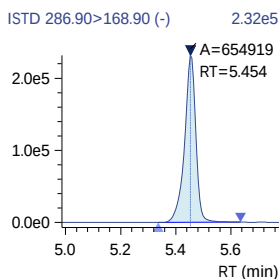
5.64e3



13C3-HFPO-DA
Conc. 10.1917



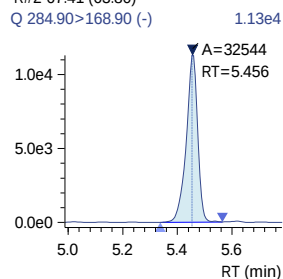
13C3-HFPO-DA_IS
Conc. 10.0000



HFPO-DA
Conc. 0.4507

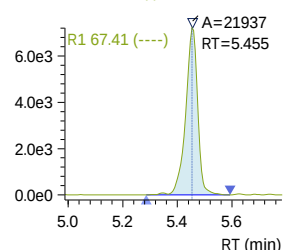
R#1 67.41 (63.80)

R#2 67.41 (63.80)



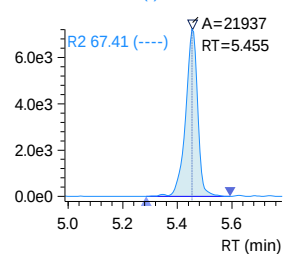
R1 284.90>184.90 (-)

7.21e3



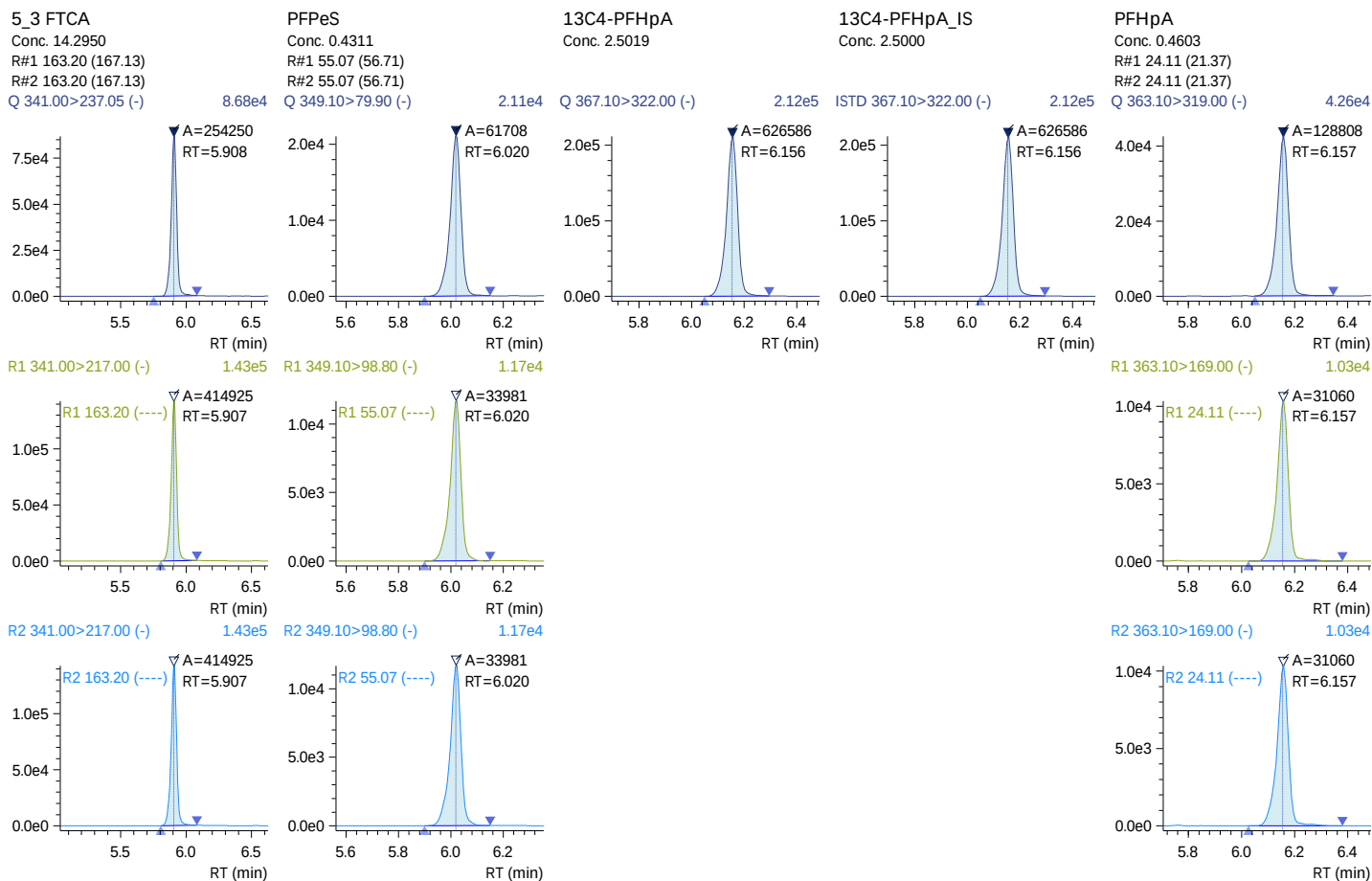
R2 284.90>184.90 (-)

7.21e3



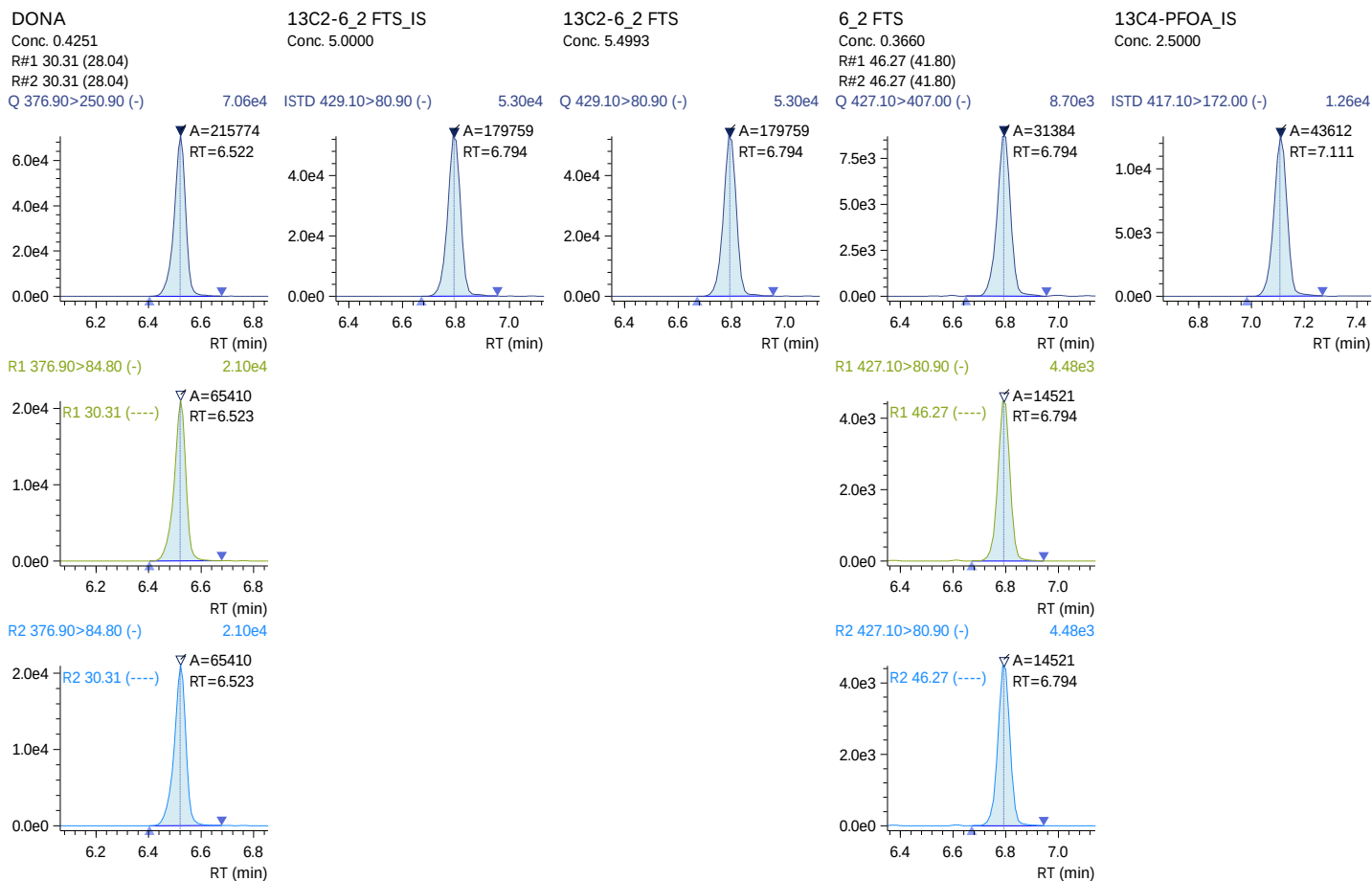


240118_009 (continued)





240118_009 (continued)





240118_009 (continued)

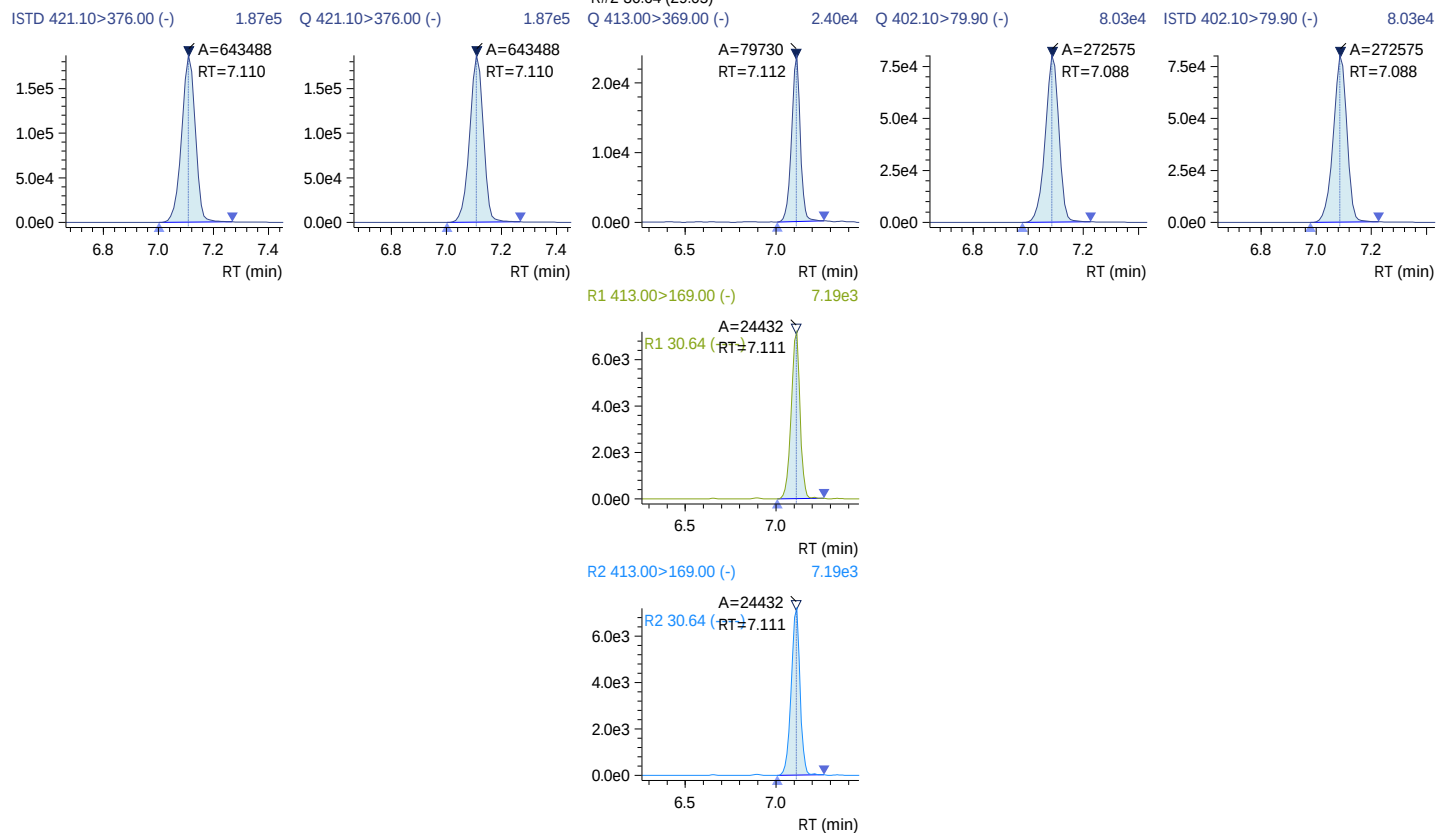
13C8-PFOA_IS
 Conc. 2.5000

13C8-PFOA
 Conc. 2.6398

PFOA
 Conc. 0.4363
 R#1 30.64 (29.05)
 R#2 30.64 (29.05)

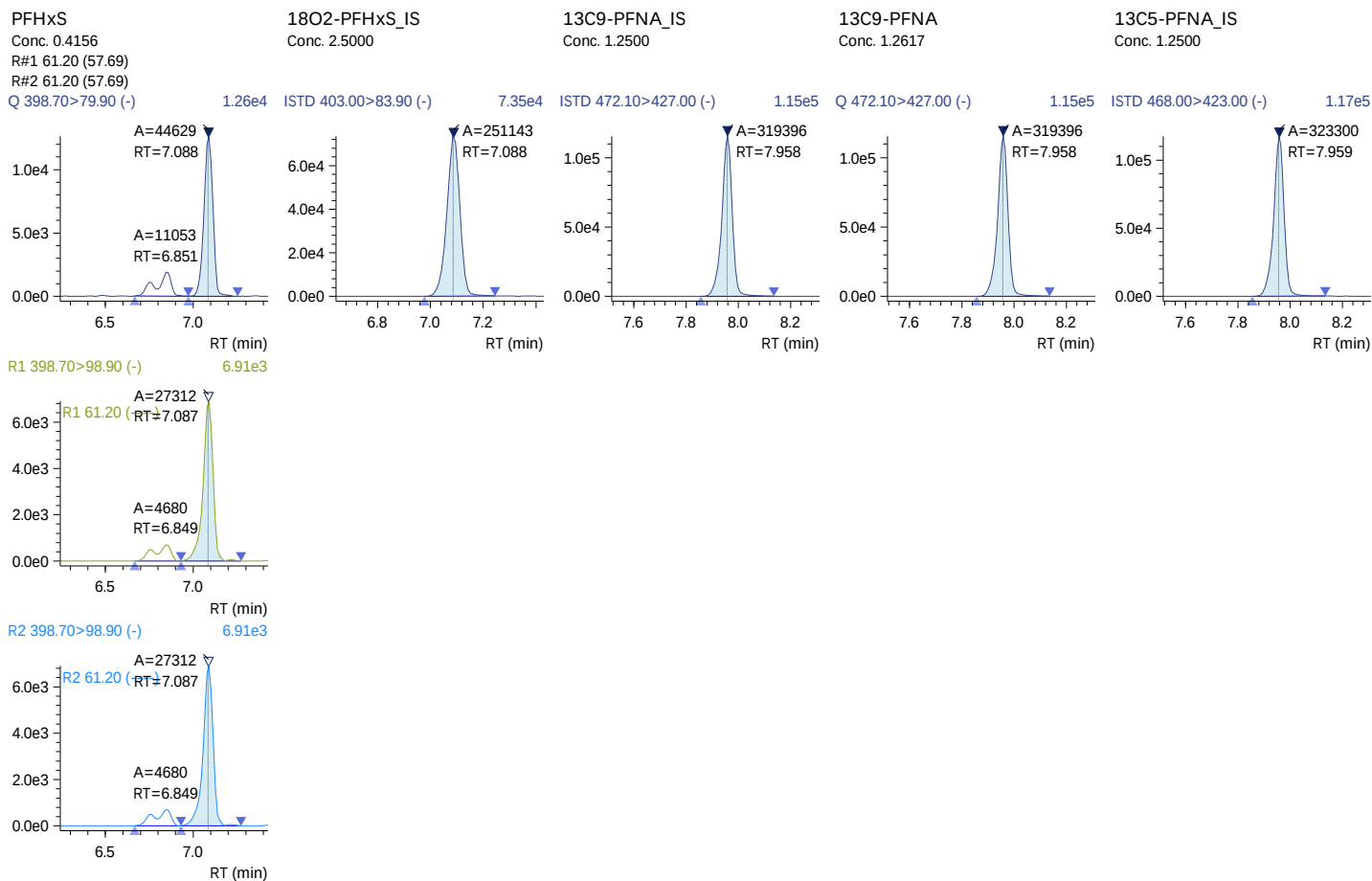
13C3-PFHxS
 Conc. 2.5286

13C3-PFHxS_IS
 Conc. 2.5000



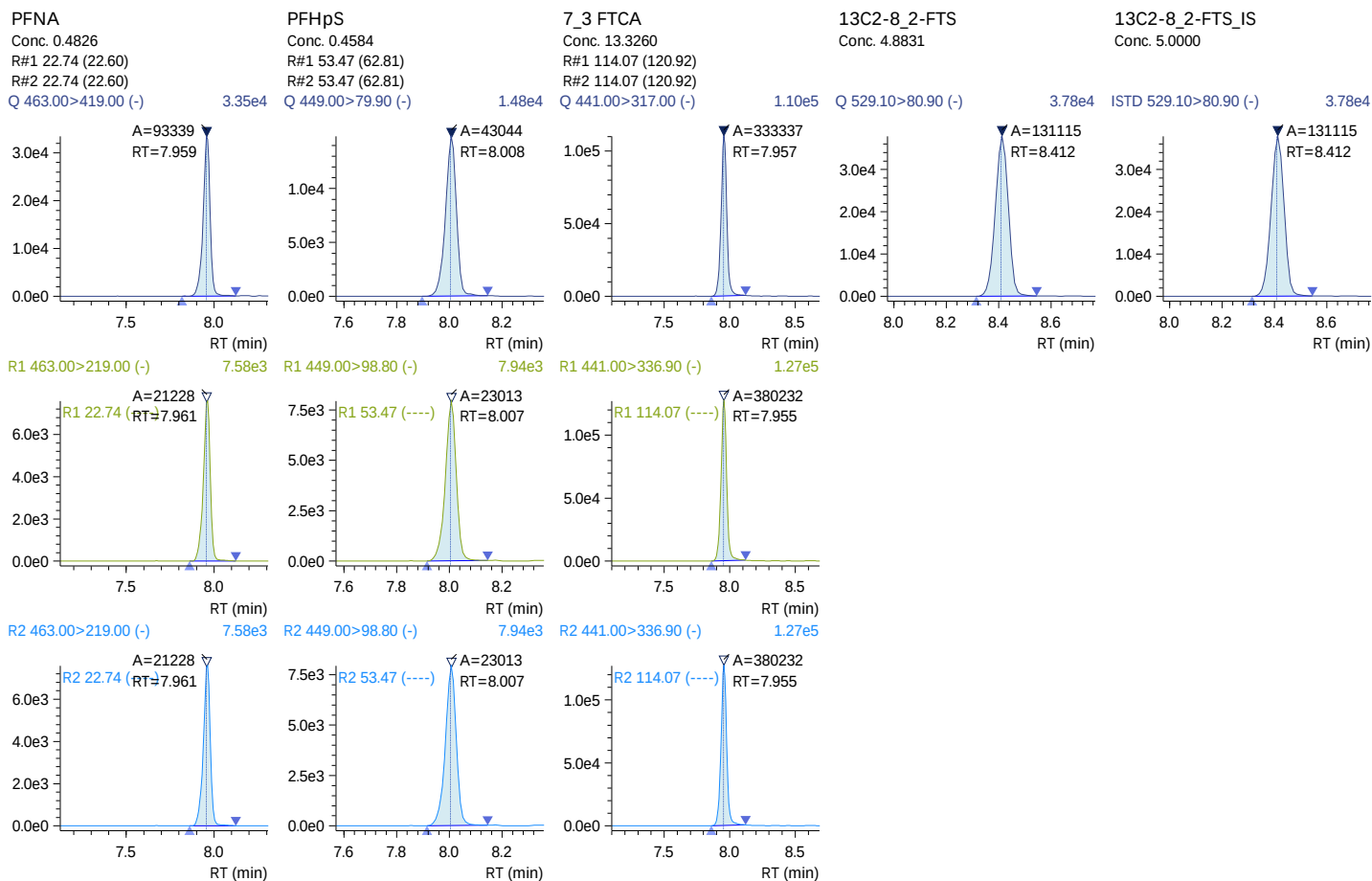


240118_009 (continued)



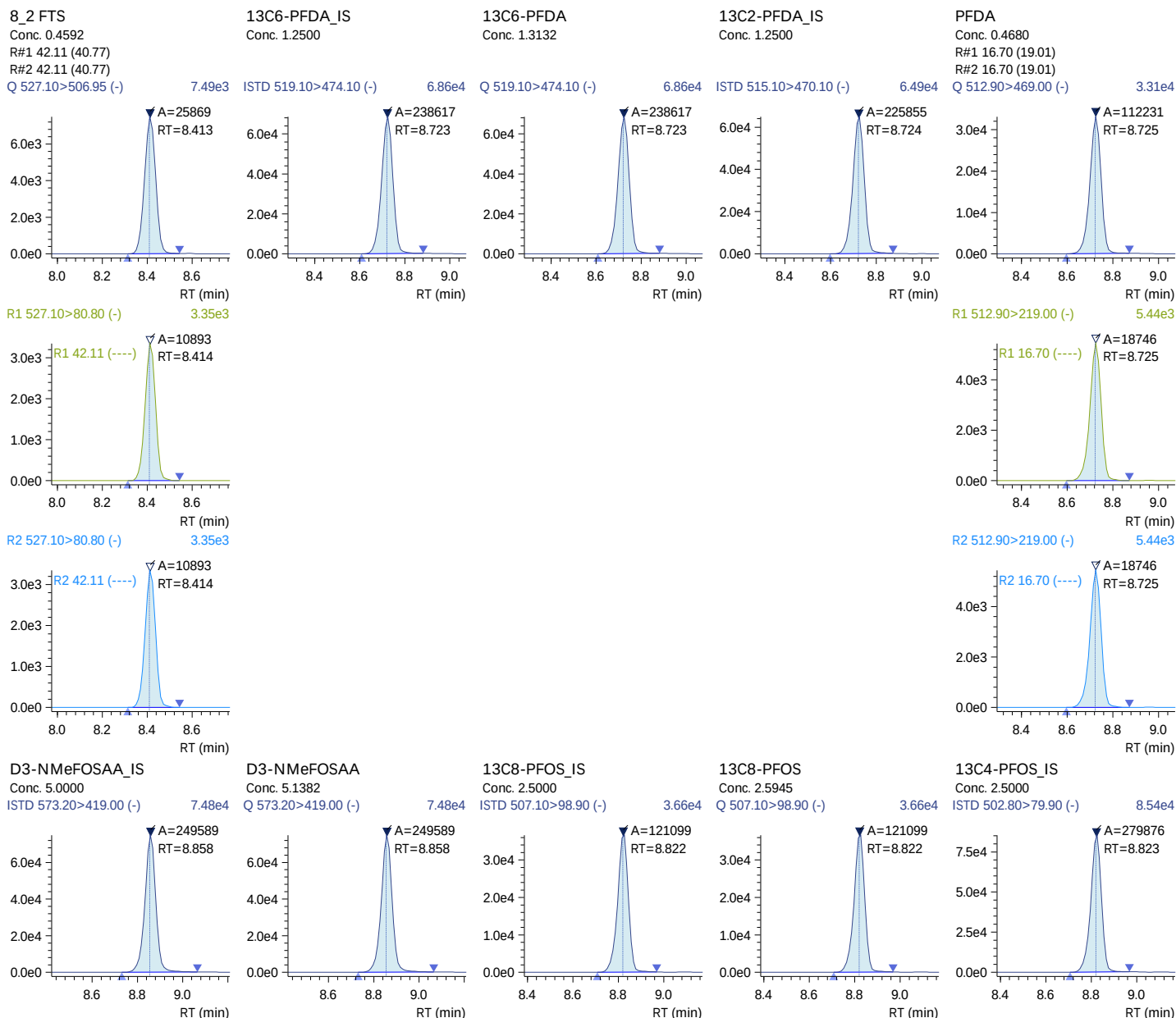


240118_009 (continued)



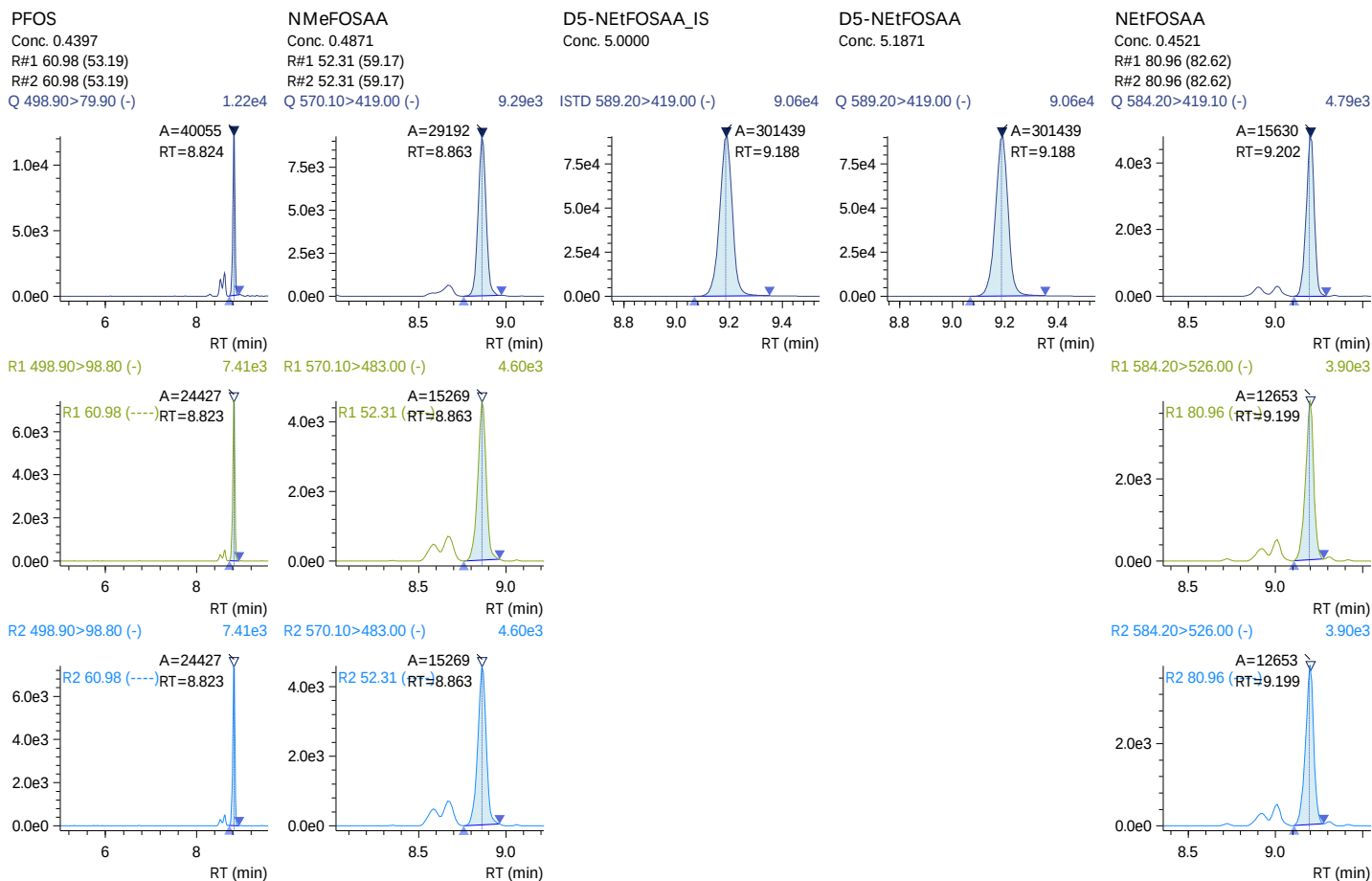


240118_009 (continued)





240118_009 (continued)

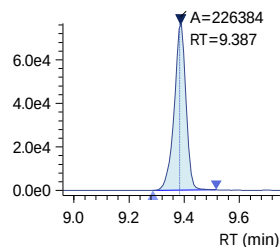




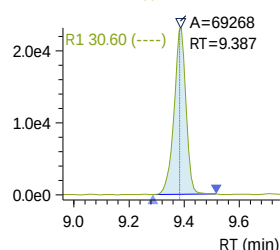
240118_009 (continued)

9-Cl-PF3ONS

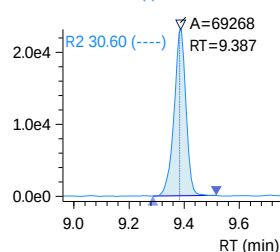
Conc. 0.4193
R#1 30.60 (31.76)
R#2 30.60 (31.76)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-) 2.32e4

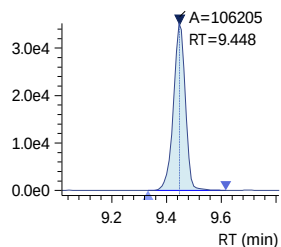


R2 532.80>353.00 (-) 2.32e4

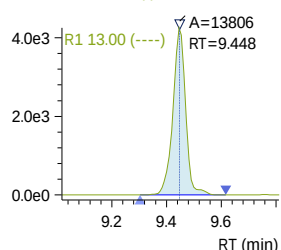


PFUnDA

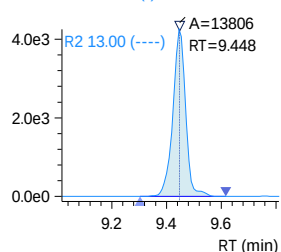
Conc. 0.4637
R#1 13.00 (12.31)
R#2 13.00 (12.31)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-) 4.25e3

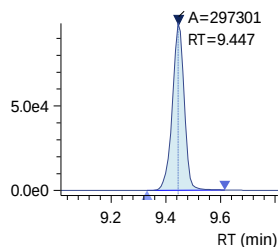


R2 563.10>269.10 (-) 4.25e3



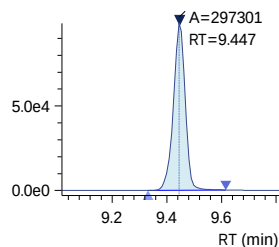
13C7-PFUnDA_IS

Conc. 1.2500
ISTD 570.00>525.10 (-)



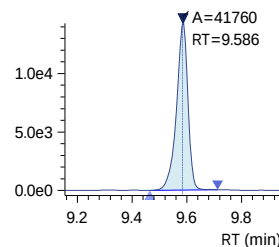
13C7-PFUnDA

Conc. 1.3716
Q 570.00>525.10 (-)

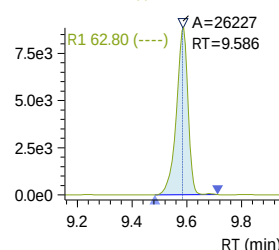


PFNS

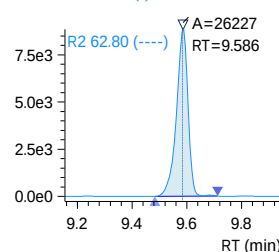
Conc. 0.4539
R#1 62.80 (63.31)
R#2 62.80 (63.31)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-) 8.85e3



R2 548.80>98.80 (-) 8.85e3





240118_009 (continued)

10_2 FTS

Conc. 0.4691

R#1 34.27 (33.02)

R#2 34.27 (33.02)

Q 626.80>607.05 (-)

13C2-PFDOA_IS

Conc. 1.2500

ISTD 615.10>570.00 (-)

13C2-PFDOA

Conc. 1.3111

Q 615.10>570.00 (-)

PFDOA

Conc. 0.4615

R#1 11.12 (10.14)

R#2 11.12 (10.14)

Q 613.10>569.00 (-)

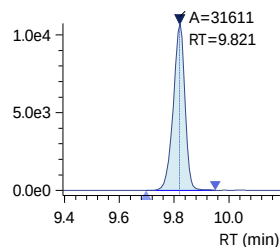
PFDS

Conc. 0.4357

R#1 60.12 (62.02)

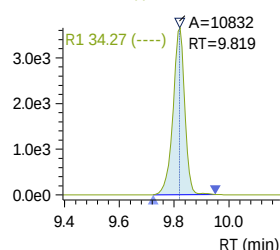
R#2 60.12 (62.02)

Q 599.00>79.90 (-)



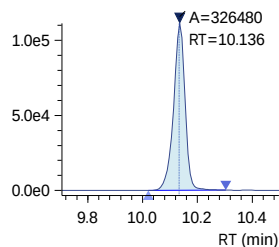
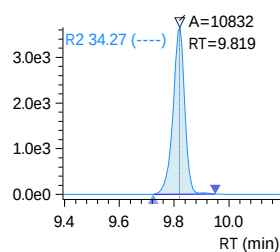
R1 626.80>81.00 (-)

3.66e3



R2 626.80>81.00 (-)

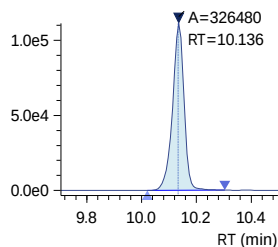
3.66e3



ISTD 615.10>570.00 (-)



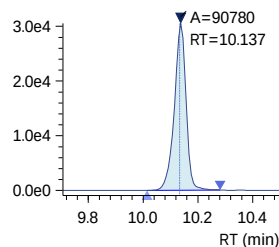
ISTD 615.10>570.00 (-)



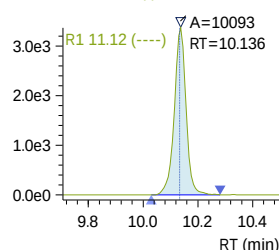
Q 615.10>570.00 (-)



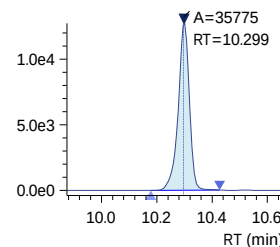
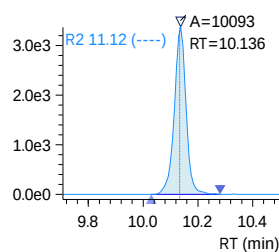
Q 615.10>570.00 (-)



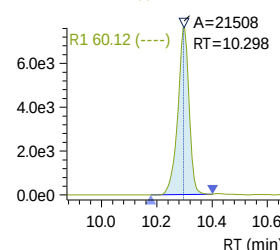
Q 613.10>569.00 (-)



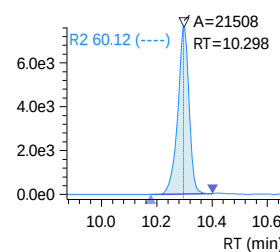
Q 613.10>569.00 (-)



Q 599.00>79.90 (-)

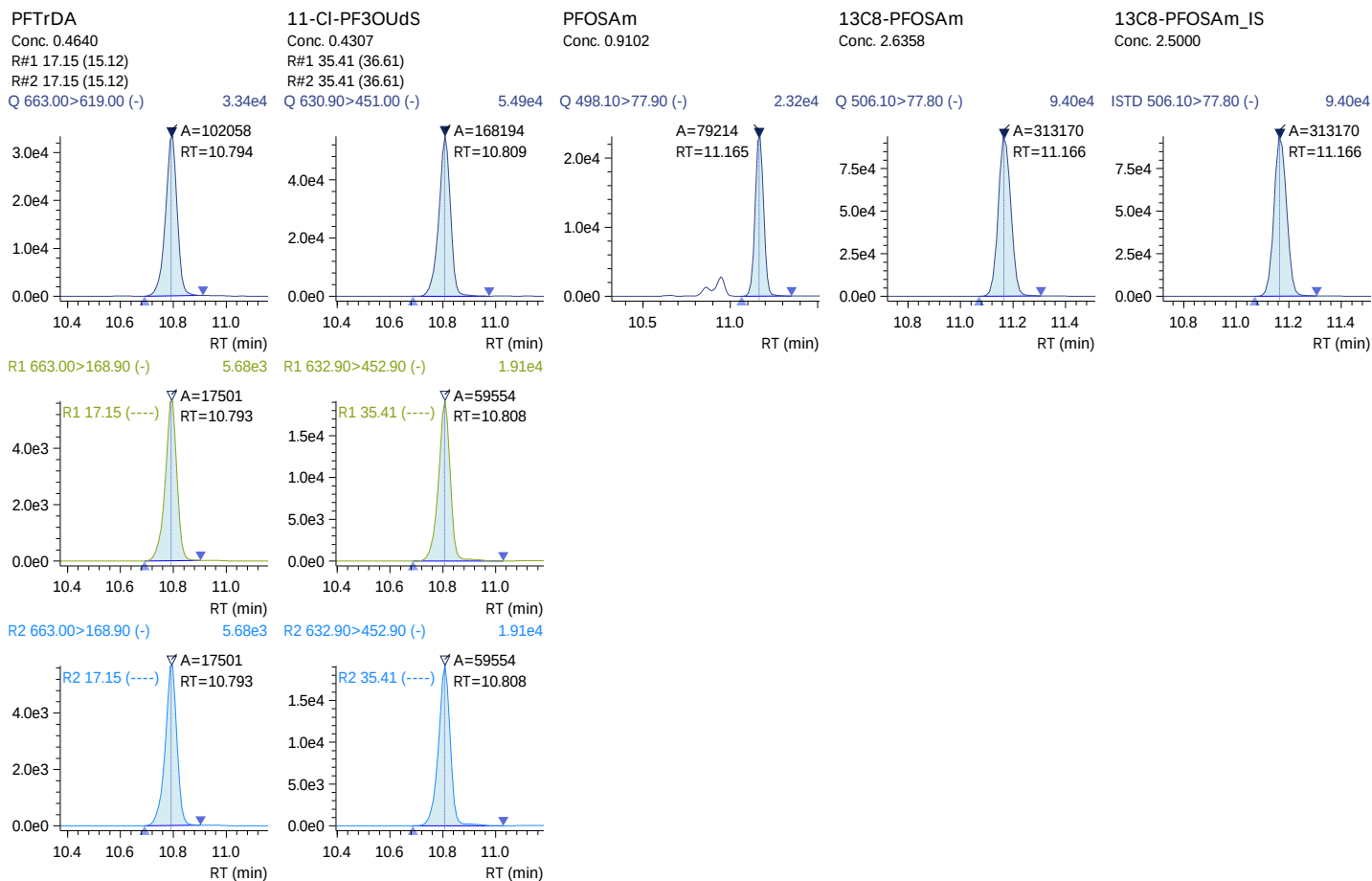


Q 599.00>79.90 (-)



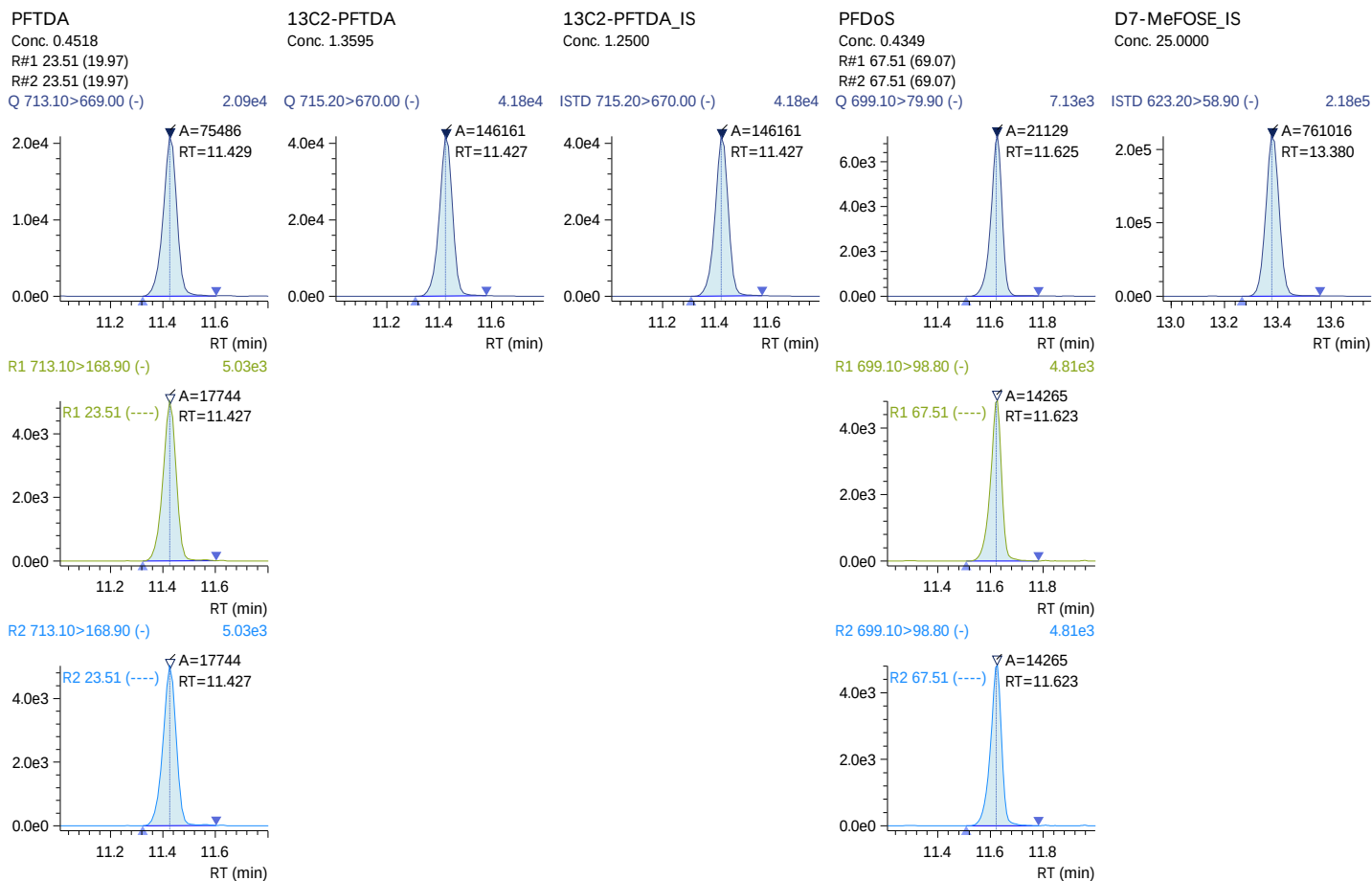


240118_009 (continued)





240118_009 (continued)





240118_009 (continued)

D7-MeFOSE
Conc. 25.9796

MeFOSE
Conc. 0.4343

13C2-PFHXA_IS
Conc. 2.5000

13C2-PFHXA
Conc. 2.6034

PFHXA
Conc. 0.4831

R#1 13.16 (11.64)

R#2 13.16 (11.64)

Q 623.20>58.90 (-)

2.18e5

Q 616.10>59.00 (-)

2.11e3

ISTD 815.00>770.05 (-)

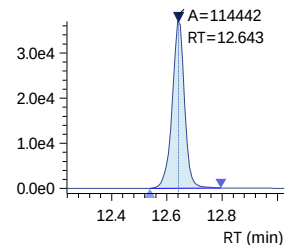
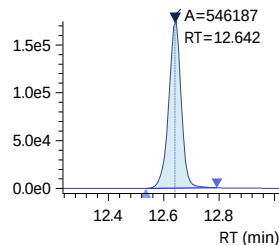
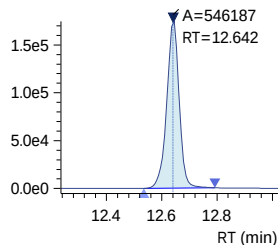
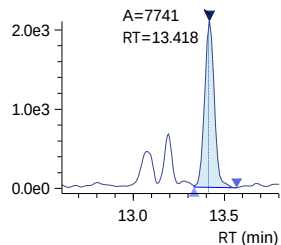
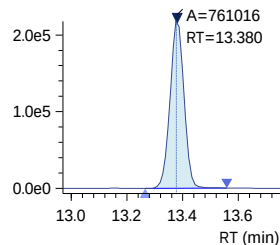
1.75e5

Q 815.00>770.05 (-)

1.75e5

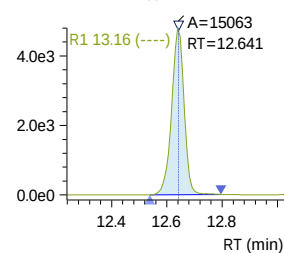
Q 813.00>768.95 (-)

3.70e4



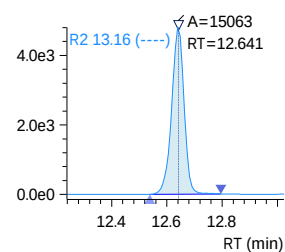
R1 813.00>218.95 (-)

4.81e3



R2 813.00>218.95 (-)

4.81e3





240118_009 (continued)

D3-MeFOSA
Conc. 2.4512

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. 0.4906
R#1 119.92 (149.05)
R#2 119.92 (149.05)

D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 26.2754

Q 515.00>219.00 (-)

1.67e4

ISTD 515.00>219.00 (-)

1.67e4

Q 511.90>219.00 (-)

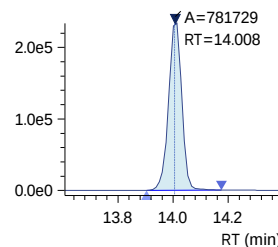
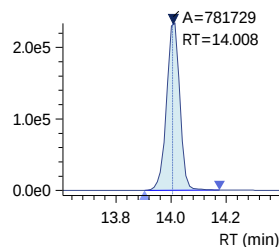
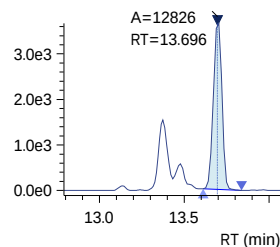
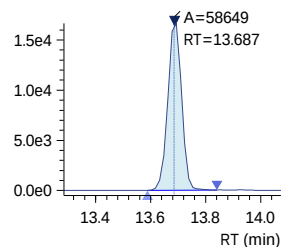
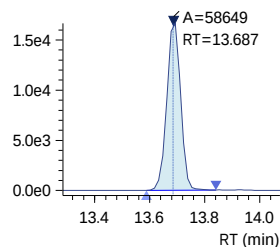
3.67e3

ISTD 639.20>58.90 (-)

2.34e5

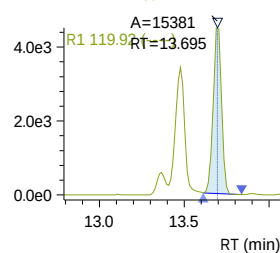
Q 639.20>58.90 (-)

2.34e5



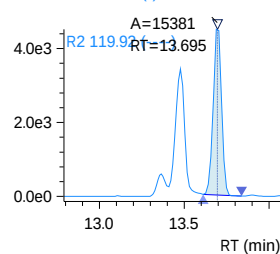
R1 511.90>169.00 (-)

4.52e3



R2 511.90>169.00 (-)

4.52e3





240118_009 (continued)

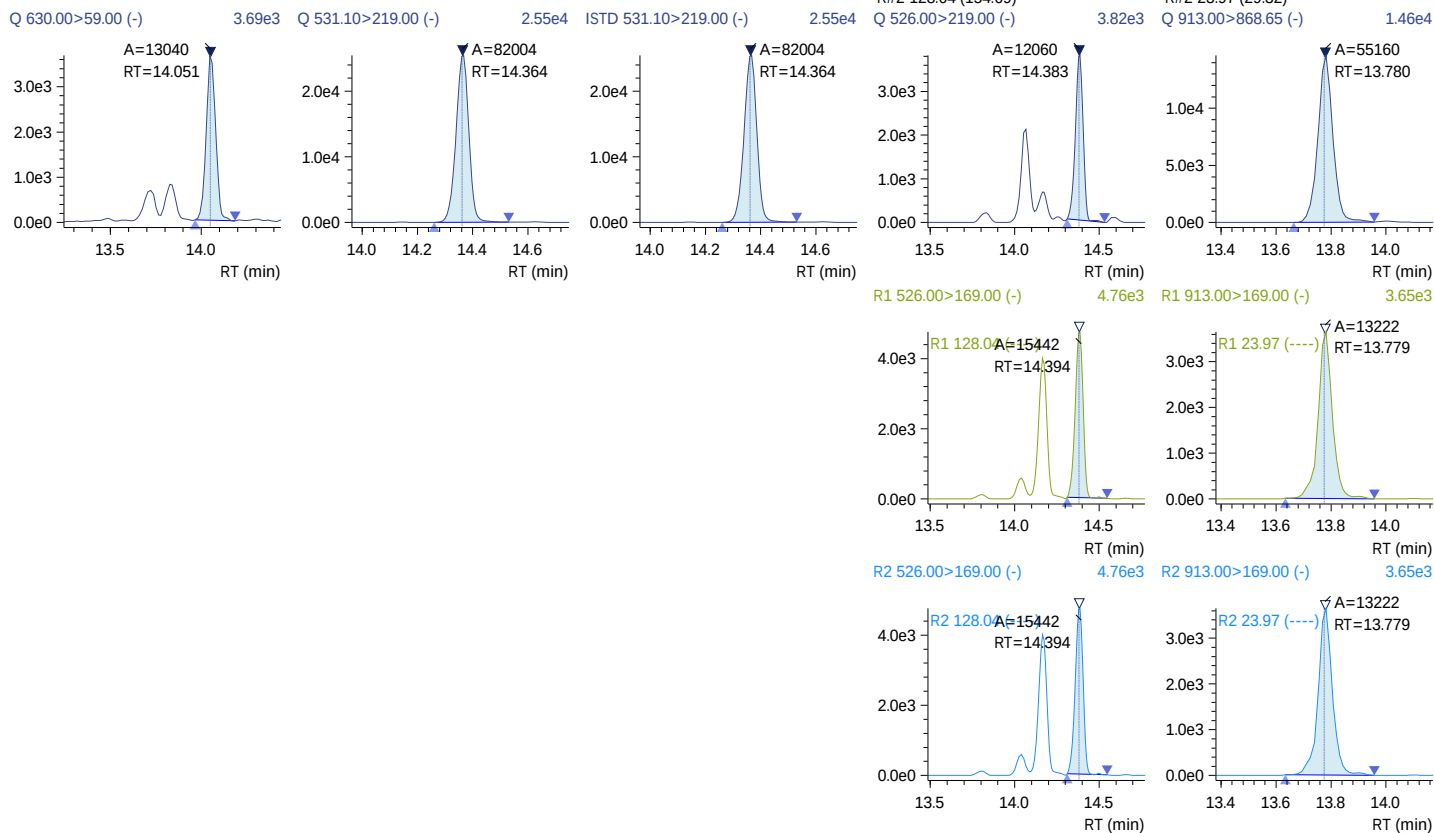
EtFOSE
Conc. 0.4800

D5-EtFOSAm
Conc. 2.5742

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. 0.4604
R#1 128.04 (154.69)
R#2 128.04 (154.69)

PFODA
Conc. 0.4561
R#1 23.97 (29.32)
R#2 23.97 (29.32)





240118_010

Sample ID: 1633 ICAL 1.0PPB
Date Acquired: 1/18/2024 3:37:35 PM
Acquired by: System Administrator
Data File: 240118_010
Vial: 5 | Inj. Volume: 10.0000uL | Tray: 1

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	1369234	----	----	----	----	----	----	----
13C4-PFBA_IS	216.80>171.90	----	1369234	----	----	----	----	----	----	----
13C3-PFBA_IS	216.00>172.00	----	602847	----	----	----	----	----	----	----
PFBA	212.80>169.05	----	116117	----	----	----	----	----	----	----
PFMPA	229.00>84.90	----	92865	----	----	----	----	----	----	----
3_3 FTCA	241.00>177.10	241.00>117.00	62978	88902	141.17	141.17	88902	141.17	141.17	
13C5-PFPeA	268.30>223.00	----	147694	----	----	----	----	----	----	----
13C5-PFPeA_IS	268.30>223.00	----	147694	----	----	----	----	----	----	----
PFPeA	263.00>219.00	----	177078	----	----	----	----	----	----	----
PFMBA	279.00>84.95	----	132663	----	----	----	----	----	----	----
13C2-4_2 FTS	329.10>80.90	----	171979	----	----	----	----	----	----	----
13C2-4_2 FTS_IS	329.10>80.90	----	171979	----	----	----	----	----	----	----
4_2 FTS	327.10>307.00	327.10>80.90	79974	23242	29.06	29.06	23242	29.06	29.06	
13C3-PFBS_IS	302.10>79.90	----	347150	----	----	----	----	----	----	----
PFBS	298.70>79.90	298.70>98.80	159927	74712	46.72	46.72	74712	46.72	46.72	
13C3-PFBS	302.10>79.90	----	347150	----	----	----	----	----	----	----
NFDHA	295.00>201.00	295.00>84.90	146253	58868	40.25	40.25	58868	40.25	40.25	
13C5-PFHxA	318.00>273.00	----	693968	----	----	----	----	----	----	----
13C5-PFHxA_IS	318.00>273.00	----	693968	----	----	----	----	----	----	----
13C2-PFHxA_IS	315.10>270.00	----	663775	----	----	----	----	----	----	----
PFHxA	313.00>269.00	----	229361	----	----	----	----	----	----	----
PFEESA	314.80>135.00	314.80>82.90	664025	40601	6.11	6.11	40601	6.11	6.11	
13C3-HFPO-DA	286.90>168.90	----	640534	----	----	----	----	----	----	----
13C3-HFPO-DA_IS	286.90>168.90	----	640534	----	----	----	----	----	----	----
HFPO-DA	284.90>168.90	284.90>184.90	71358	46818	65.61	65.61	46818	65.61	65.61	
5_3 FTCA	341.00>237.05	341.00>217.00	345149	548316	158.86	158.86	548316	158.86	158.86	
PFPeS	349.10>79.90	349.10>98.80	129068	72025	55.80	55.80	72025	55.80	55.80	
13C4-PFHpA	367.10>322.00	----	630102	----	----	----	----	----	----	----
13C4-PFHpA_IS	367.10>322.00	----	630102	----	----	----	----	----	----	----
PFHpA	363.10>319.00	363.10>169.00	269319	57893	21.50	21.50	57893	21.50	21.50	
DONA	376.90>250.90	376.90>84.80	450923	133727	29.66	29.66	133727	29.66	29.66	
13C2-6_2 FTS_IS	429.10>80.90	----	160736	----	----	----	----	----	----	----
13C2-6_2 FTS	429.10>80.90	----	160736	----	----	----	----	----	----	----
6_2 FTS	427.10>407.00	427.10>80.90	75066	30892	41.15	41.15	30892	41.15	41.15	
13C4-PFOA_IS	417.10>172.00	----	42030	----	----	----	----	----	----	----
13C8-PFOA_IS	421.10>376.00	----	604919	----	----	----	----	----	----	----

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240118_010 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	604919	----	----	----	----	----	----	----
PFOA	413.00>369.00	413.00>169.00	173590	55357	31.89	31.89	55357	31.89	31.89	
13C3-PFHxS	402.10>79.90	----	268590	----	----	----	----	----	----	----
13C3-PFHxS_IS	402.10>79.90	----	268590	----	----	----	----	----	----	----
PFHxS	398.70>79.90	398.70>98.90	120607	68283	56.62	56.62	68283	56.62	56.62	
18O2-PFHxS_IS	403.00>83.90	----	249998	----	----	----	----	----	----	----
13C9-PFNA_IS	472.10>427.00	----	329225	----	----	----	----	----	----	----
13C9-PFNA	472.10>427.00	----	329225	----	----	----	----	----	----	----
13C5-PFNA_IS	468.00>423.00	----	328955	----	----	----	----	----	----	----
PFNA	463.00>419.00	463.00>219.00	185195	42912	23.17	23.17	42912	23.17	23.17	
PFHpS	449.00>79.90	449.00>98.80	85513	48708	56.96	56.96	48708	56.96	56.96	
7_3 FTCA	441.00>317.00	441.00>336.90	439237	515991	117.47	117.47	515991	117.47	117.47	
13C2-8_2-FTS	529.10>80.90	----	121050	----	----	----	----	----	----	----
13C2-8_2-FTS_IS	529.10>80.90	----	121050	----	----	----	----	----	----	----
8_2 FTS	527.10>506.95	527.10>80.80	49479	24538	49.59	49.59	24538	49.59	49.59	
13C6-PFDA_IS	519.10>474.10	----	247598	----	----	----	----	----	----	----
13C6-PFDA	519.10>474.10	----	247598	----	----	----	----	----	----	----
13C2-PFDA_IS	515.10>470.10	----	243243	----	----	----	----	----	----	----
PFDA	512.90>469.00	512.90>219.00	238103	45229	19.00	19.00	45229	19.00	19.00	
D3-NMeFOSAA_IS	573.20>419.00	----	251536	----	----	----	----	----	----	----
D3-NMeFOSAA	573.20>419.00	----	251536	----	----	----	----	----	----	----
13C8-PFOS_IS	507.10>98.90	----	124480	----	----	----	----	----	----	----
13C8-PFOS	507.10>98.90	----	124480	----	----	----	----	----	----	----
13C4-PFOS_IS	502.80>79.90	----	298833	----	----	----	----	----	----	----
PFOS	498.90>79.90	498.90>98.80	108900	57134	52.47	52.47	57134	52.47	52.47	
NMeFOSAA	570.10>419.00	570.10>483.00	68385	37711	55.15	55.15	37711	55.15	55.15	
D5-NetFOSAA_IS	589.20>419.00	----	296281	----	----	----	----	----	----	----
D5-NetFOSAA	589.20>419.00	----	296281	----	----	----	----	----	----	----
NetFOSAA	584.20>419.10	584.20>526.00	40635	33302	81.95	81.95	33302	81.95	81.95	
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	488722	160081	32.76	32.76	160081	32.76	32.76	
PFUnDA	563.10>519.00	563.10>269.10	211279	27724	13.12	13.12	27724	13.12	13.12	
13C7-PFUnDA_IS	570.00>525.10	----	276567	----	----	----	----	----	----	----
13C7-PFUnDA	570.00>525.10	----	276567	----	----	----	----	----	----	----
PFNS	548.80>79.90	548.80>98.80	85942	56052	65.22	65.22	56052	65.22	65.22	
10_2 FTS	626.80>607.05	626.80>81.00	62123	23064	37.13	37.13	23064	37.13	37.13	
13C2-PFDOA_IS	615.10>570.00	----	328895	----	----	----	----	----	----	----
13C2-PFDOA	615.10>570.00	----	328895	----	----	----	----	----	----	----
PFDOA	613.10>569.00	613.10>319.00	191533	21617	11.29	11.29	21617	11.29	11.29	
PFDS	599.00>79.90	599.00>98.80	77566	46681	60.18	60.18	46681	60.18	60.18	
PFTDA	663.00>619.00	663.00>168.90	209818	37007	17.64	17.64	37007	17.64	17.64	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240118_010 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	342495	124792	36.44	36.44	124792	36.44	36.44	
PFOSAm	498.10>77.90	----	197052	----	----	----	----	----	----	
13C8-PFOSAm	506.10>77.80	----	309952	----	----	----	----	----	----	
13C8-PFOSAm_IS	506.10>77.80	----	309952	----	----	----	----	----	----	
PFTDA	713.10>669.00	713.10>168.90	153669	35281	22.96	22.96	35281	22.96	22.96	
13C2-PFTDA	715.20>670.00	----	140054	----	----	----	----	----	----	
13C2-PFTDA_IS	715.20>670.00	----	140054	----	----	----	----	----	----	
PFDoS	699.10>79.90	699.10>98.80	45685	30789	67.40	67.40	30789	67.40	67.40	
D7-MeFOSE_IS	623.20>58.90	----	736922	----	----	----	----	----	----	
D7-MeFOSE	623.20>58.90	----	736922	----	----	----	----	----	----	
MeFOSE	616.10>59.00	----	26578	----	----	----	----	----	----	
13C2-PFHxDA_IS	815.00>770.05	----	548879	----	----	----	----	----	----	
13C2-PFHxDA	815.00>770.05	----	548879	----	----	----	----	----	----	
PFHxDA	813.00>768.95	813.00>218.95	233309	32433	13.90	13.90	32433	13.90	13.90	
D3-MeFOSA	515.00>219.00	----	68121	----	----	----	----	----	----	
D3-MeFOSA_IS	515.00>219.00	----	68121	----	----	----	----	----	----	
MeFOSA	511.90>219.00	511.90>169.00	46422	65358	140.79	140.79	65358	140.79	140.79	
D9-EtFOSE_IS	639.20>58.90	----	776012	----	----	----	----	----	----	
D9-EtFOSE	639.20>58.90	----	776012	----	----	----	----	----	----	
EtFOSE	630.00>59.00	----	37832	----	----	----	----	----	----	
D5-EtFOSAm	531.10>219.00	----	80394	----	----	----	----	----	----	
D5-EtFOSAm_IS	531.10>219.00	----	80394	----	----	----	----	----	----	
EtFOSAm	526.00>219.00	526.00>169.00	45505	74584	163.90	163.90	74584	163.90	163.90	
PFODA	913.00>868.65	913.00>169.00	118686	32075	27.03	27.03	32075	27.03	27.03	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240118_010

Sample ID: 1633 ICAL 1.0PPB
Date Acquired: 1/18/2024 3:37:35 PM
Acquired by: System Administrator
Data File: 240118_010
Vial: 5 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Std. Conc.	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.414	0.000	-0.001	1369234	602847	13C3-PFBA_IS	10.0000	10.1615	ng/mL	
13C4-PFBA_IS	Auto	1.414	0.000	----	1369234	1369234	----	10.0000	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.415	0.000	----	602847	602847	----	5.0000	5.0000	ng/mL	
PFBA	Auto	1.416	0.000	0.002	116117	1369234	13C4-PFBA_IS	1.0000	0.9870	ng/mL	
PFMPA	Auto	2.432	0.000	-1.060	92865	147694	13C5-PFPeA_IS	1.0000	0.9729	ng/mL	
3_3 FTCA	Auto	3.004	0.000	-0.488	62978	147694	13C5-PFPeA_IS	20.0000	19.2293	ng/mL	
13C5-PFPeA	Auto	3.493	0.000	-1.487	147694	663775	13C2-PFHxA_IS	5.0000	4.9294	ng/mL	
13C5-PFPeA_IS	Auto	3.493	0.000	----	147694	147694	----	5.0000	5.0000	ng/mL	
PFPeA	Auto	3.495	0.000	0.003	177078	147694	13C5-PFPeA_IS	1.0000	0.9257	ng/mL	
PFMBA	Auto	4.025	0.000	0.533	132663	147694	13C5-PFPeA_IS	1.0000	0.9811	ng/mL	
13C2-4_2 FTS	Auto	4.661	0.000	-2.425	171979	249998	18O2-PFHxS_IS	5.0000	4.9989	ng/mL	
13C2-4_2 FTS_IS	Auto	4.661	0.000	----	171979	171979	----	5.0000	5.0000	ng/mL	
4_2 FTS	Auto	4.662	0.000	0.001	79974	171979	13C2-4_2 FTS_IS	0.9400	0.9455	ng/mL	
13C3-PFBS_IS	Auto	4.647	0.000	----	347150	347150	----	2.5000	2.5000	ng/mL	
PFBS	Auto	4.648	0.000	0.001	159927	347150	13C3-PFBS_IS	0.8900	0.9000	ng/mL	
13C3-PFBS	Auto	4.647	0.000	-2.439	347150	249998	18O2-PFHxS_IS	2.5000	2.4469	ng/mL	
NFDHA	Auto	4.835	0.000	-0.143	146253	693968	13C5-PFHxA_IS	1.0000	0.9499	ng/mL	
13C5-PFHxA	Auto	4.978	0.000	-0.001	693968	663775	13C2-PFHxA_IS	2.5000	2.4807	ng/mL	
13C5-PFHxA_IS	Auto	4.978	0.000	----	693968	693968	----	2.5000	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	4.979	0.000	----	663775	663775	----	2.5000	2.5000	ng/mL	
PFHxA	Auto	4.980	0.000	0.002	229361	693968	13C5-PFHxA_IS	1.0000	0.9846	ng/mL	
PFEESA	Auto	5.322	0.000	0.344	664025	693968	13C5-PFHxA_IS	0.8900	0.8543	ng/mL	
13C3-HFPO-DA	Auto	5.452	0.000	0.473	640534	663775	13C2-PFHxA_IS	10.0000	9.8577	ng/mL	
13C3-HFPO-DA_IS	Auto	5.452	0.000	----	640534	640534	----	10.0000	10.0000	ng/mL	
HFPO-DA	Auto	5.453	0.000	0.001	71358	640534	13C3-HFPO-DA_IS	1.0000	1.0087	ng/mL	
5_3 FTCA	Auto	5.906	0.000	0.928	345149	693968	13C5-PFHxA_IS	20.0000	19.2281	ng/mL	
PFPeS	Auto	6.018	0.000	-1.068	129068	268590	13C3-PFHxS_IS	0.9400	0.9151	ng/mL	
13C4-PFHpA	Auto	6.154	0.000	1.175	630102	663775	13C2-PFHxA_IS	2.5000	2.4881	ng/mL	
13C4-PFHpA_IS	Auto	6.154	0.000	----	630102	630102	----	2.5000	2.5000	ng/mL	
PFHpA	Auto	6.155	0.000	0.001	269319	630102	13C4-PFHpA_IS	1.0000	0.9959	ng/mL	
DONA	Auto	6.520	0.000	1.068	450923	640534	13C3-HFPO-DA_IS	0.9500	0.9083	ng/mL	
13C2-6_2 FTS_IS	Auto	6.793	0.000	----	160736	160736	----	5.0000	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.793	0.000	-0.293	160736	249998	18O2-PFHxS_IS	5.0000	4.9399	ng/mL	
6_2 FTS	Auto	6.792	0.000	-0.001	75066	160736	13C2-6_2 FTS_IS	0.9500	1.0256	ng/mL	
13C4-PFOA_IS	Auto	7.107	0.000	----	42030	42030	----	2.5000	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.107	0.000	----	604919	604919	----	2.5000	2.5000	ng/mL	
13C8-PFOA	Auto	7.107	0.000	0.000	604919	42030	13C4-PFOA_IS	2.5000	2.5751	ng/mL	
PFOA	Auto	7.110	0.000	0.003	173590	604919	13C8-PFOA_IS	1.0000	1.0681	ng/mL	
13C3-PFHxS	Auto	7.086	0.000	0.000	268590	249998	18O2-PFHxS_IS	2.5000	2.5030	ng/mL	
13C3-PFHxS_IS	Auto	7.086	0.000	----	268590	268590	----	2.5000	2.5000	ng/mL	
PFHxS	M	7.084	0.000	-0.002	120607	268590	13C3-PFHxS_IS	0.9100	0.9164	ng/mL	
18O2-PFHxS_IS	Auto	7.086	0.000	----	249998	249998	----	2.5000	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.956	0.000	----	329225	329225	----	1.2500	1.2500	ng/mL	
13C9-PFNA	Auto	7.956	0.000	0.000	329225	328955	13C5-PFNA_IS	1.2500	1.2782	ng/mL	
13C5-PFNA_IS	Auto	7.956	0.000	----	328955	328955	----	1.2500	1.2500	ng/mL	
PFNA	Auto	7.957	0.000	0.001	185195	329225	13C9-PFNA_IS	1.0000	0.9575	ng/mL	
PFHpS	Auto	8.004	0.000	-0.816	85513	124480	13C8-PFOS_IS	0.9500	0.8801	ng/mL	
7_3 FTCA	Auto	7.954	0.000	2.976	439237	693968	13C5-PFHxA_IS	20.0000	18.3296	ng/mL	
13C2-8_2-FTS	Auto	8.409	0.000	1.323	121050	249998	18O2-PFHxS_IS	5.0000	4.5289	ng/mL	
13C2-8_2-FTS_IS	Auto	8.409	0.000	----	121050	121050	----	5.0000	5.0000	ng/mL	
8_2 FTS	Auto	8.410	0.000	0.001	49479	121050	13C2-8_2-FTS_IS	0.9600	0.9512	ng/mL	
13C6-PFDA_IS	Auto	8.720	0.000	----	247598	247598	----	1.2500	1.2500	ng/mL	
13C6-PFDA	Auto	8.720	0.000	-0.001	247598	243243	13C2-PFDA_IS	1.2500	1.2652	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_010 (continued)

(Table continued from previous page)

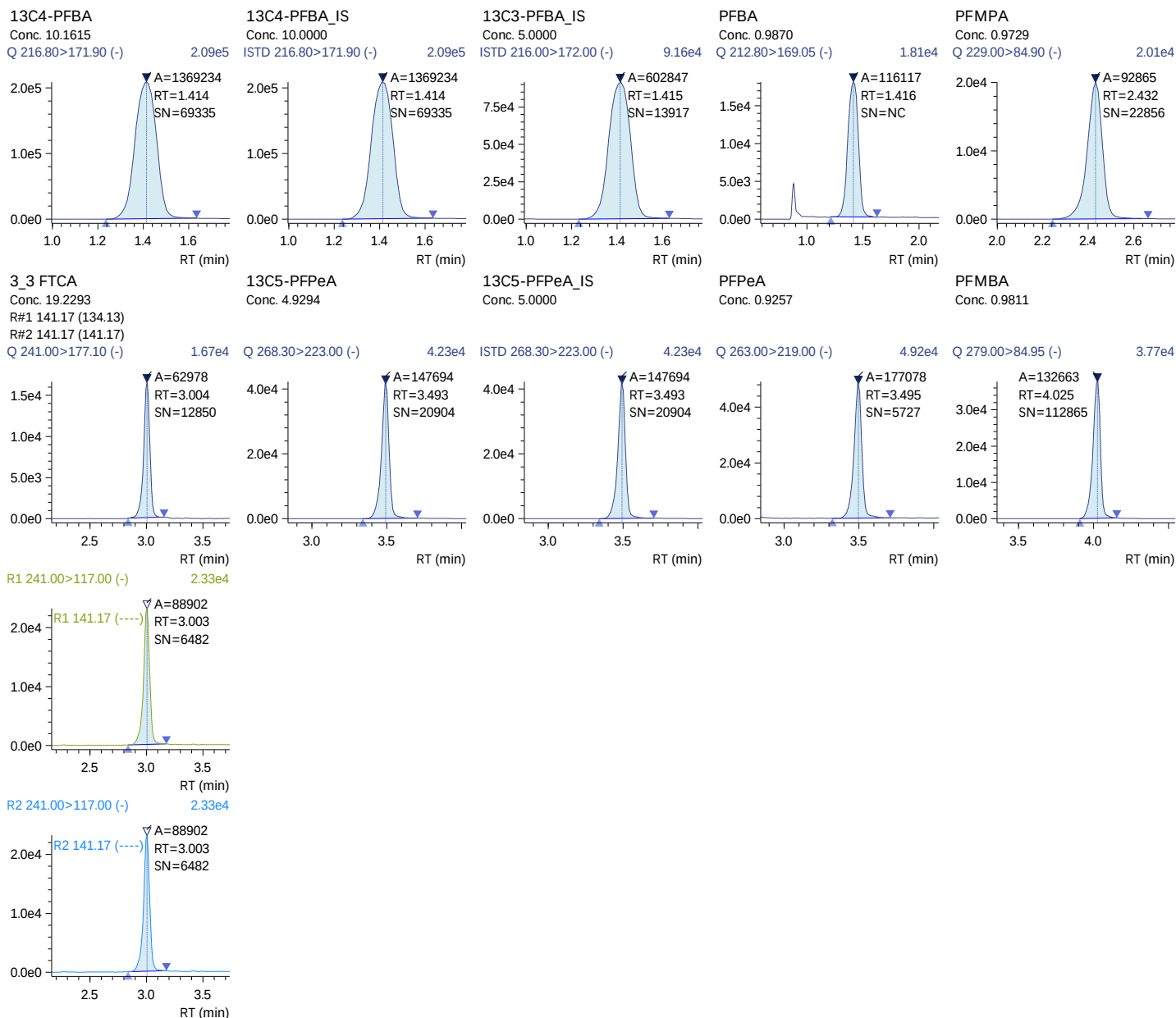
Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Std. Conc.	Conc.	Unit	Flag ID
13C2-PFDA_IS	Auto	8.721	0.000	----	243243	243243	----	1.2500	1.2500	ng/mL	
PFDA	Auto	8.721	0.000	0.001	238103	247598	13C6-PFDA_IS	1.0000	0.9834	ng/mL	
D3-NMeFOSAA_IS	Auto	8.855	0.000	----	251536	251536	----	5.0000	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.855	0.000	0.035	251536	298833	13C4-PFOS_IS	5.0000	4.8498	ng/mL	
13C8-PFOS_IS	Auto	8.820	0.000	----	124480	124480	----	2.5000	2.5000	ng/mL	
13C8-PFOS	Auto	8.820	0.000	0.000	124480	298833	13C4-PFOS_IS	2.5000	2.4977	ng/mL	
13C4-PFOS_IS	Auto	8.820	0.000	----	298833	298833	----	2.5000	2.5000	ng/mL	
PFOS	M	8.822	0.000	0.002	108900	124480	13C8-PFOS_IS	0.9300	0.8411	ng/mL	
NMeFOSAA	M	8.861	0.000	0.006	68365	251536	D3-NMeFOSAA_IS	1.0000	1.0020	ng/mL	
D5-NetFOSAA_IS	Auto	9.186	0.000	----	296281	296281	----	5.0000	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.186	0.000	0.366	296281	298833	13C4-PFOS_IS	5.0000	4.7749	ng/mL	
NetFOSAA	M	9.195	0.000	0.009	40635	296281	D5-NetFOSAA_IS	1.0000	1.0269	ng/mL	
9-CI-PF3ONS	Auto	9.384	0.000	3.932	488722	640534	13C3-HFPO-DA_IS	0.9300	0.9255	ng/mL	
PFUnDA	Auto	9.447	0.000	0.002	211279	276567	13C7-PFUnDA_IS	1.0000	1.0253	ng/mL	
13C7-PFUnDA_IS	Auto	9.445	0.000	----	276567	276567	----	1.2500	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.445	0.000	0.724	276567	243243	13C2-PFDA_IS	1.2500	1.1848	ng/mL	
PFNS	Auto	9.584	0.000	0.764	85942	124480	13C8-PFOS_IS	0.9600	0.9087	ng/mL	
10_2_FTS	Auto	9.819	0.000	1.410	62123	121050	13C2-8_2-FTS_IS	0.9600	0.9816	ng/mL	
13C2-PFDOA_IS	Auto	10.133	0.000	----	328895	328895	----	1.2500	1.2500	ng/mL	
13C2-PFDOA	Auto	10.133	0.000	1.412	328895	243243	13C2-PFDA_IS	1.2500	1.2264	ng/mL	
PFDOA	Auto	10.134	0.000	0.001	191533	328895	13C2-PFDOA_IS	1.0000	1.0026	ng/mL	
PFDS	Auto	10.296	0.000	1.476	77566	124480	13C8-PFOS_IS	0.9700	0.9373	ng/mL	
PFTDA	Auto	10.792	0.000	-0.632	209818	140054	13C2-PFTDA_IS	1.0000	1.0310	ng/mL	
11-CI-PF3OUdS	Auto	10.806	0.000	5.354	342495	640534	13C3-HFPO-DA_IS	0.9400	0.9470	ng/mL	
PFOSAm	M	11.164	0.000	-0.001	197052	309952	13C8-PFOSAm_IS	2.0000	1.9288	ng/mL	
13C8-PFOSAm	Auto	11.165	0.000	2.345	309952	298833	13C4-PFOS_IS	2.5000	2.4433	ng/mL	
13C8-PFOSAm_IS	Auto	11.165	0.000	----	309952	309952	----	2.5000	2.5000	ng/mL	
PFTDA	Auto	11.425	0.000	0.001	153669	140054	13C2-PFTDA_IS	1.0000	0.9933	ng/mL	
13C2-PFTDA	Auto	11.424	0.000	2.703	140054	243243	13C2-PFDA_IS	1.2500	1.2095	ng/mL	
13C2-PFTDA_IS	Auto	11.424	0.000	----	140054	140054	----	1.2500	1.2500	ng/mL	
PFDoS	Auto	11.622	0.000	2.802	45685	124480	13C8-PFOS_IS	0.9700	0.9151	ng/mL	
D7-MeFOSE_IS	Auto	13.377	0.000	----	736922	736922	----	25.0000	25.0000	ng/mL	
D7-MeFOSE	Auto	13.377	0.000	4.557	736922	298833	13C4-PFOS_IS	25.0000	23.5612	ng/mL	
MeFOSE	M	13.413	0.000	0.036	26578	736922	D7-MeFOSE_IS	1.0000	0.9821	ng/mL	
13C2-PFHXA_IS	Auto	12.641	0.000	----	548879	548879	----	2.5000	2.5000	ng/mL	
13C2-PFHXA	Auto	12.641	0.000	3.920	548879	243243	13C2-PFDA_IS	2.5000	2.4293	ng/mL	
PFHXDA	Auto	12.642	0.000	0.001	233309	548879	13C2-PFHXA_IS	1.0000	1.0088	ng/mL	
D3-MeFOSA	Auto	13.685	0.000	4.865	68121	298833	13C4-PFOS_IS	2.5000	2.6665	ng/mL	
D3-MeFOSA_IS	Auto	13.685	0.000	----	68121	68121	----	2.5000	2.5000	ng/mL	
MeFOSA	M	13.694	0.000	0.009	46422	68121	D3-MeFOSA_IS	1.0000	0.9453	ng/mL	
D9-EtFOSE_IS	Auto	14.006	0.000	----	776012	776012	----	25.0000	25.0000	ng/mL	
D9-EtFOSE	Auto	14.006	0.000	5.186	776012	298833	13C4-PFOS_IS	25.0000	24.4286	ng/mL	
EtFOSE	M	14.049	0.000	0.042	37832	776012	D9-EtFOSE_IS	1.0000	0.9266	ng/mL	
D5-EtFOSAm	Auto	14.362	0.000	5.542	80394	298833	13C4-PFOS_IS	2.5000	2.3636	ng/mL	
D5-EtFOSAm_IS	Auto	14.362	0.000	----	80394	80394	----	2.5000	2.5000	ng/mL	
EtFOSAm	M	14.380	0.000	0.018	45505	80394	D5-EtFOSAm_IS	1.0000	0.9723	ng/mL	
PFODA	Auto	13.775	0.000	1.134	118686	548879	13C2-PFHXA_IS	1.0000	0.9562	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_010 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_010 (continued)

13C2-4_2 FTS
Conc. 4.9989

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. 0.9455
R#1 29.06 (34.14)
R#2 29.06 (29.06)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 0.9000
R#1 46.72 (47.53)
R#2 46.72 (46.72)

Q 329.10>80.90 (-)

5.42e4

ISTD 329.10>80.90 (-)

5.42e4

Q 327.10>307.00 (-)

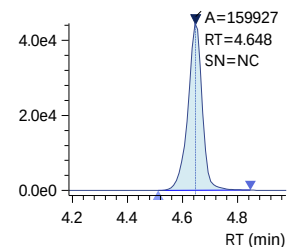
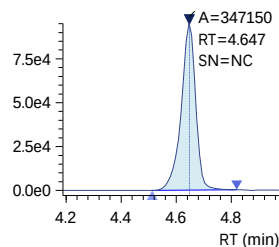
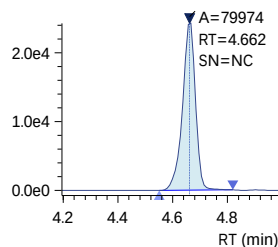
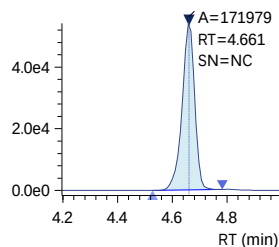
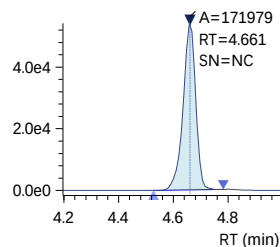
2.43e4

ISTD 302.10>79.90 (-)

9.52e4

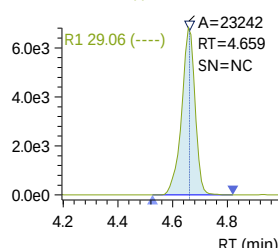
Q 298.70>79.90 (-)

4.45e4



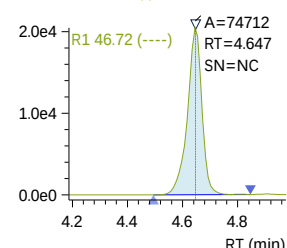
R1 327.10>80.90 (-)

6.82e3



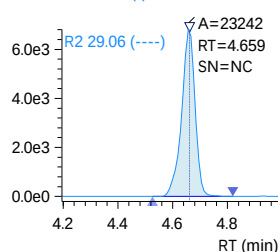
R1 298.70>98.80 (-)

2.05e4



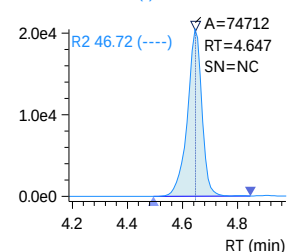
R2 327.10>80.90 (-)

6.82e3



R2 298.70>98.80 (-)

2.05e4





240118_010 (continued)

13C3-PFBS
Conc. 2.4469

NFDHA
Conc. 0.9499
R#1 40.25 (37.88)
R#2 40.25 (40.25)

13C5-PFHxA
Conc. 2.4807

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

Q 302.10>79.90 (-)

9.52e4

Q 295.00>201.00 (-)

4.25e4

Q 318.00>273.00 (-)

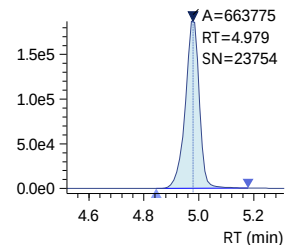
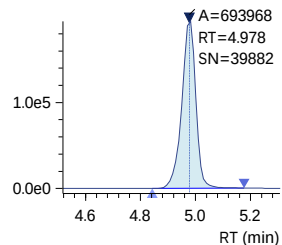
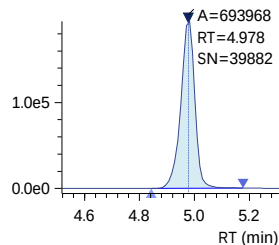
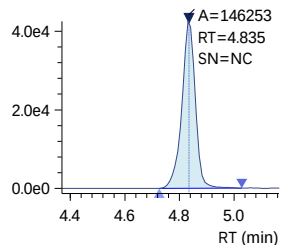
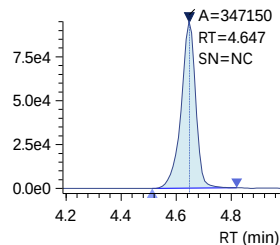
1.95e5

ISTD 318.00>273.00 (-)

1.95e5

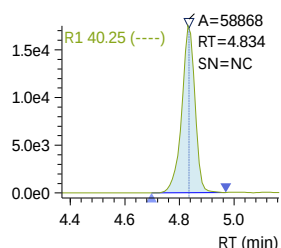
ISTD 315.10>270.00 (-)

1.87e5



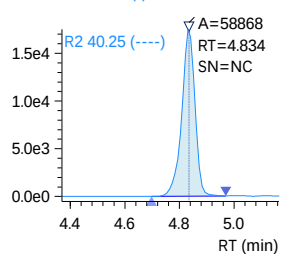
R1 295.00>84.90 (-)

1.75e4



R2 295.00>84.90 (-)

1.75e4

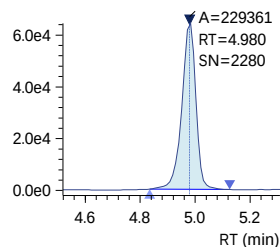




240118_010 (continued)

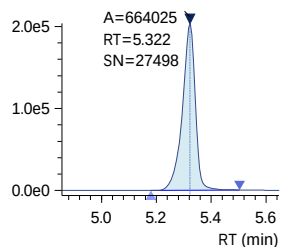
PFHxA
Conc. 0.9846

Q 313.00>269.00 (-)

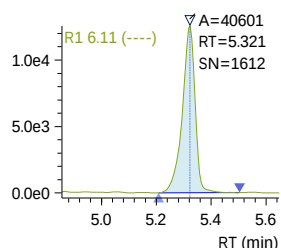


PFEESA
Conc. 0.8543
R#1 6.11 (5.88)
R#2 6.11 (6.11)

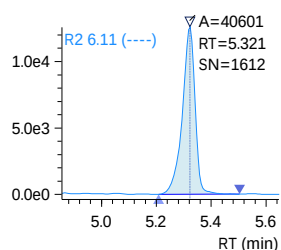
Q 314.80>135.00 (-)



R1 314.80>82.90 (-)

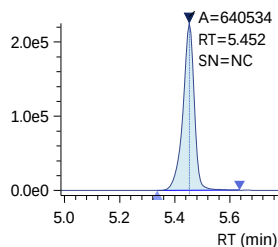


R2 314.80>82.90 (-)



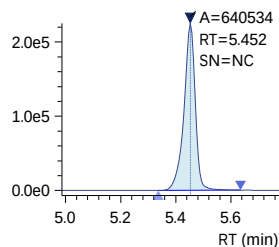
13C3-HFPO-DA
Conc. 9.8577

Q 286.90>168.90 (-)



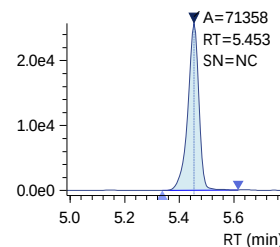
13C3-HFPO-DA_IS
Conc. 10.0000

ISTD 286.90>168.90 (-)

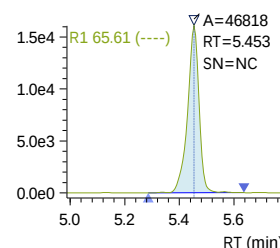


HFPO-DA
Conc. 1.0087
R#1 65.61 (63.80)
R#2 65.61 (65.61)

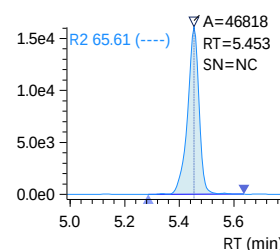
Q 284.90>168.90 (-)



R1 284.90>184.90 (-)

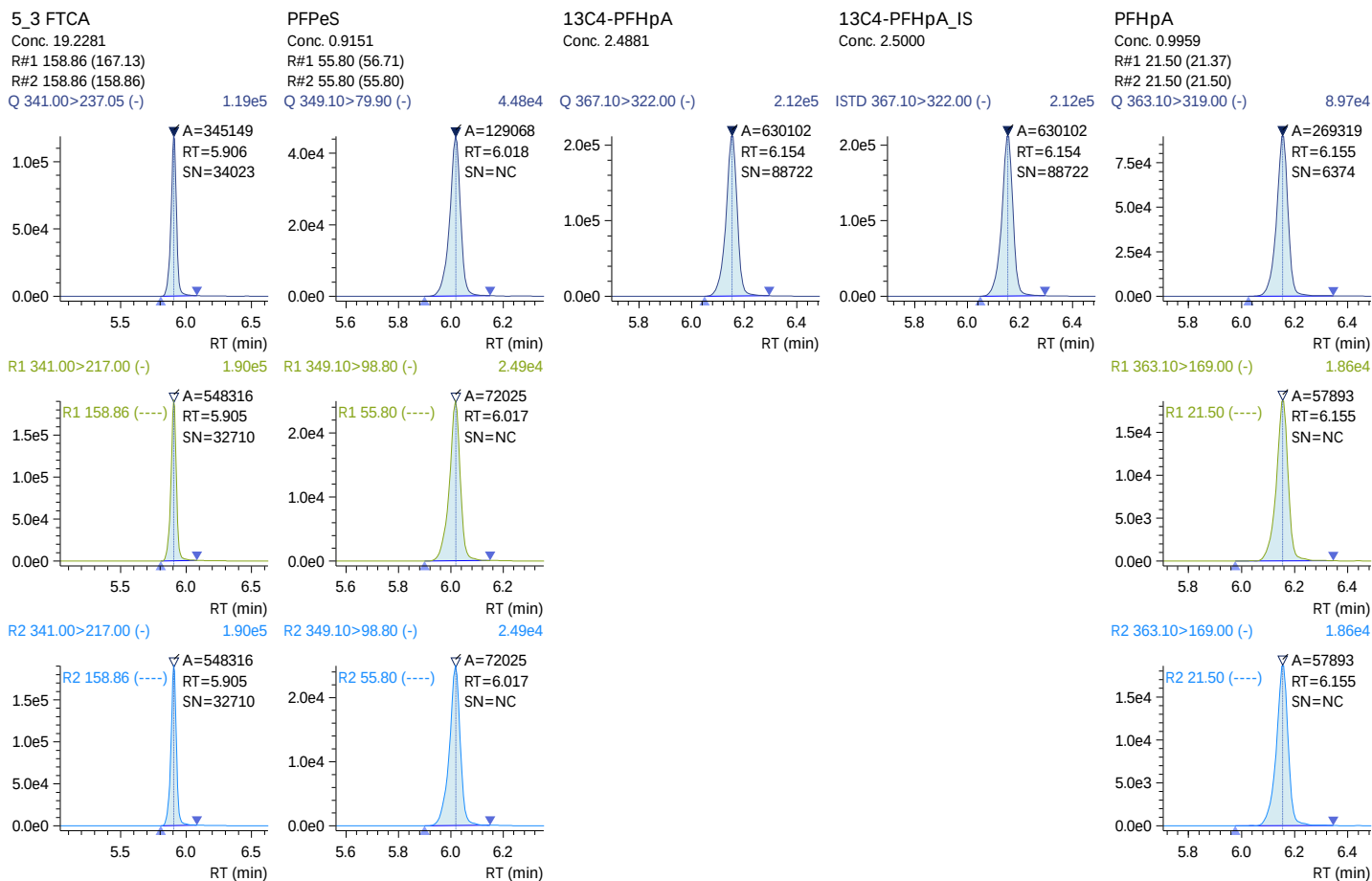


R2 284.90>184.90 (-)





240118_010 (continued)

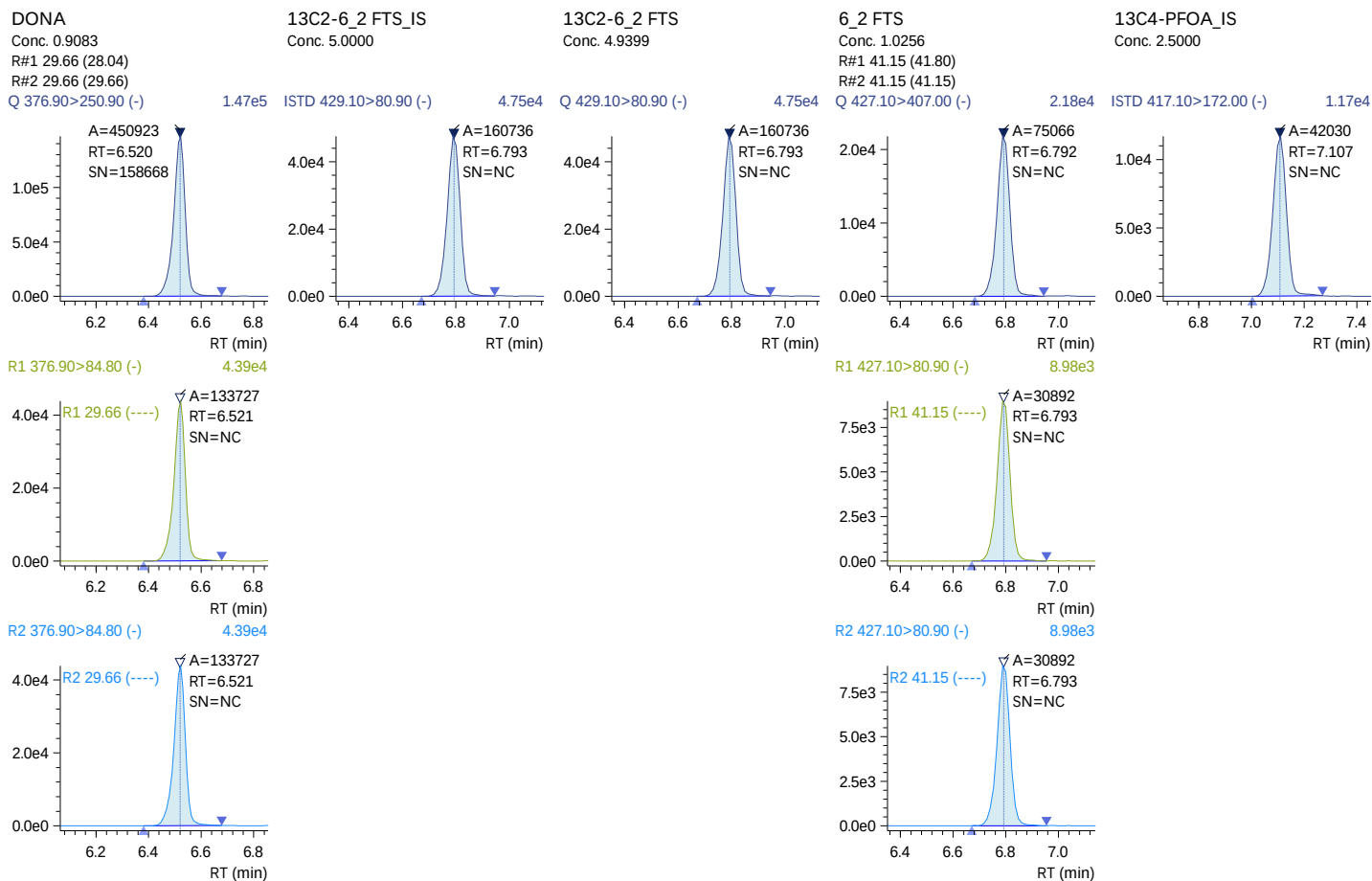


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_010 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_010 (continued)

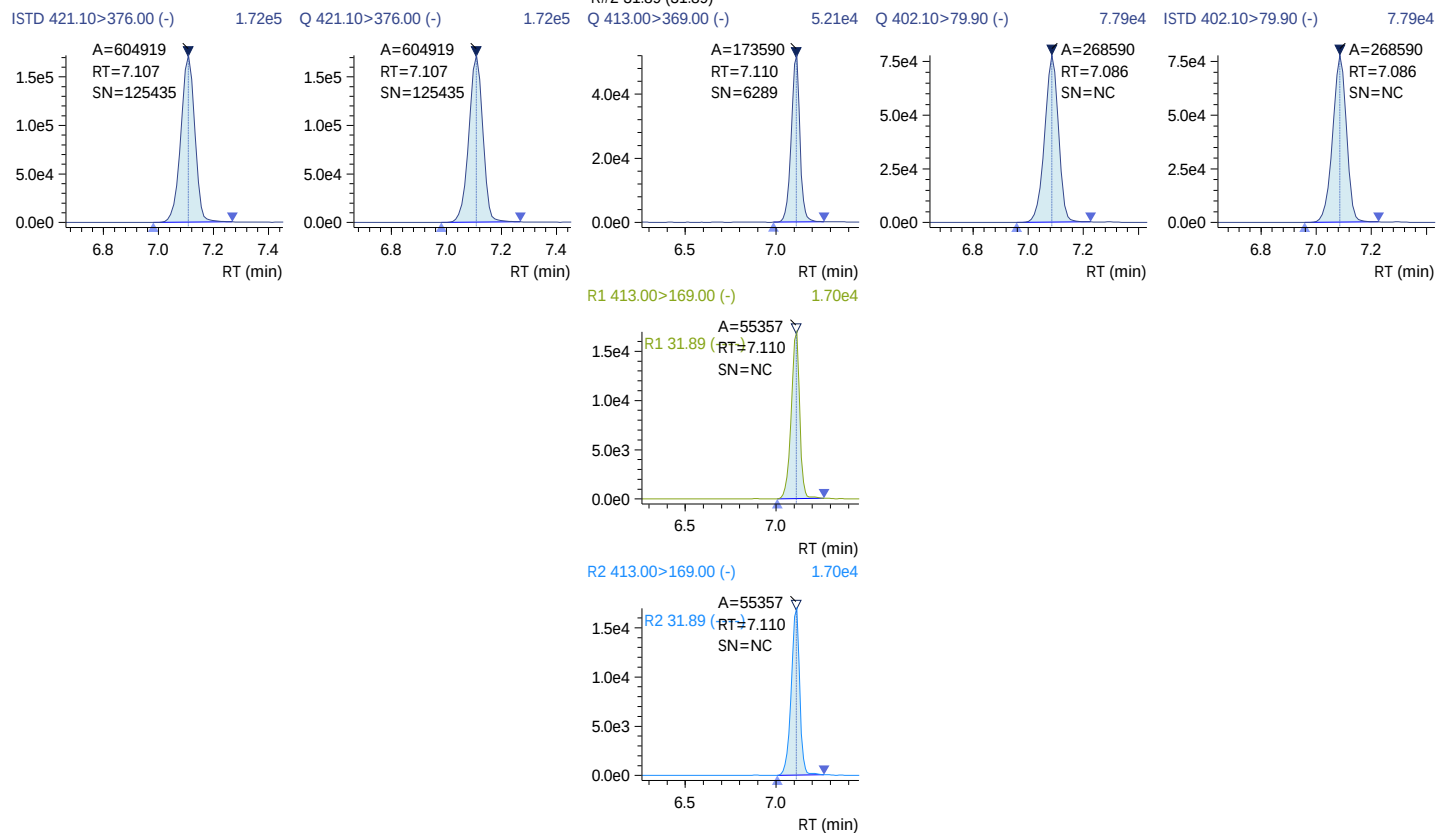
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.5751

PFOA
Conc. 1.0681
R#1 31.89 (29.05)
R#2 31.89 (31.89)

13C3-PFHxS
Conc. 2.5030

13C3-PFHxS_IS
Conc. 2.5000

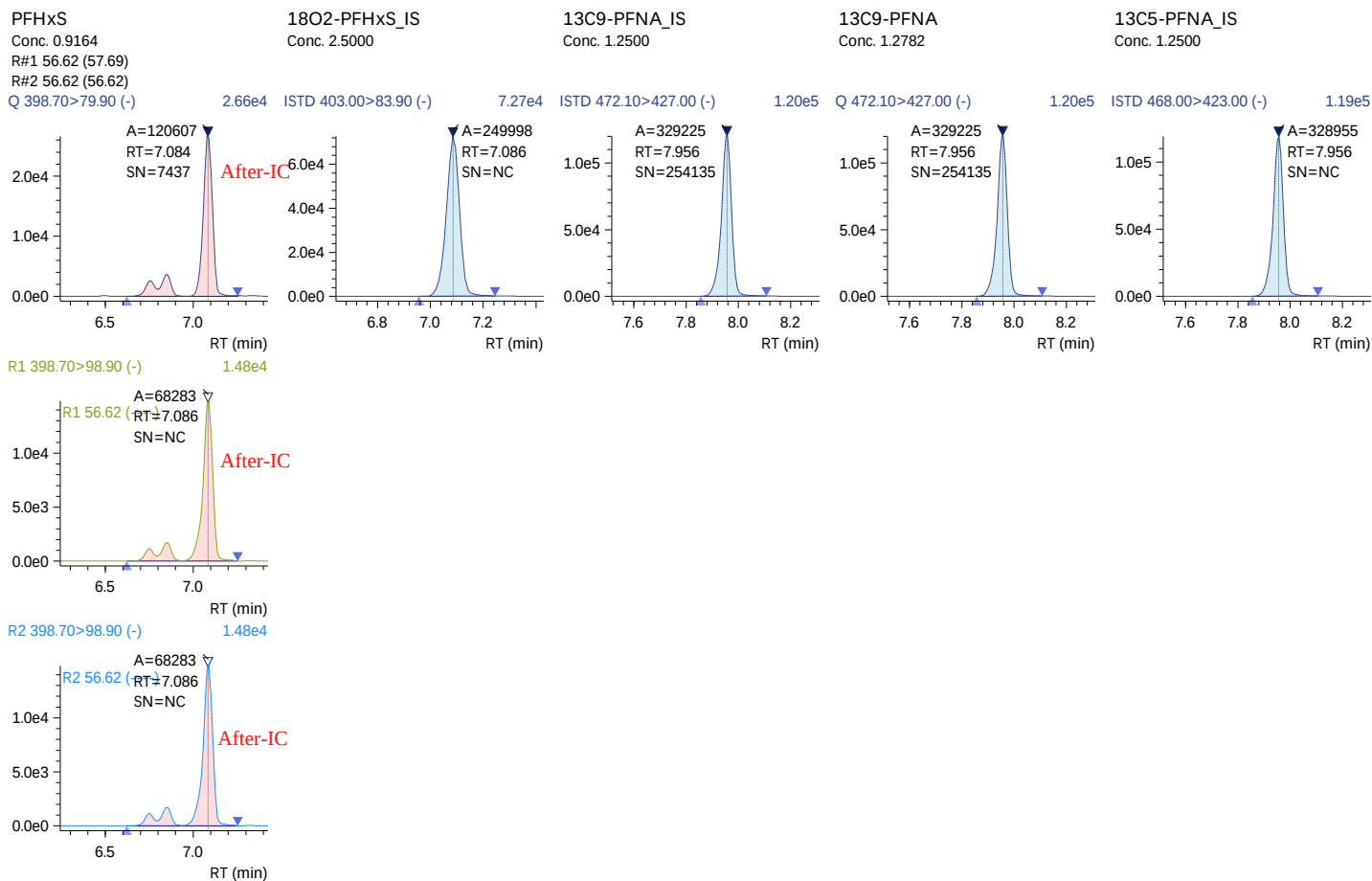


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_010 (continued)

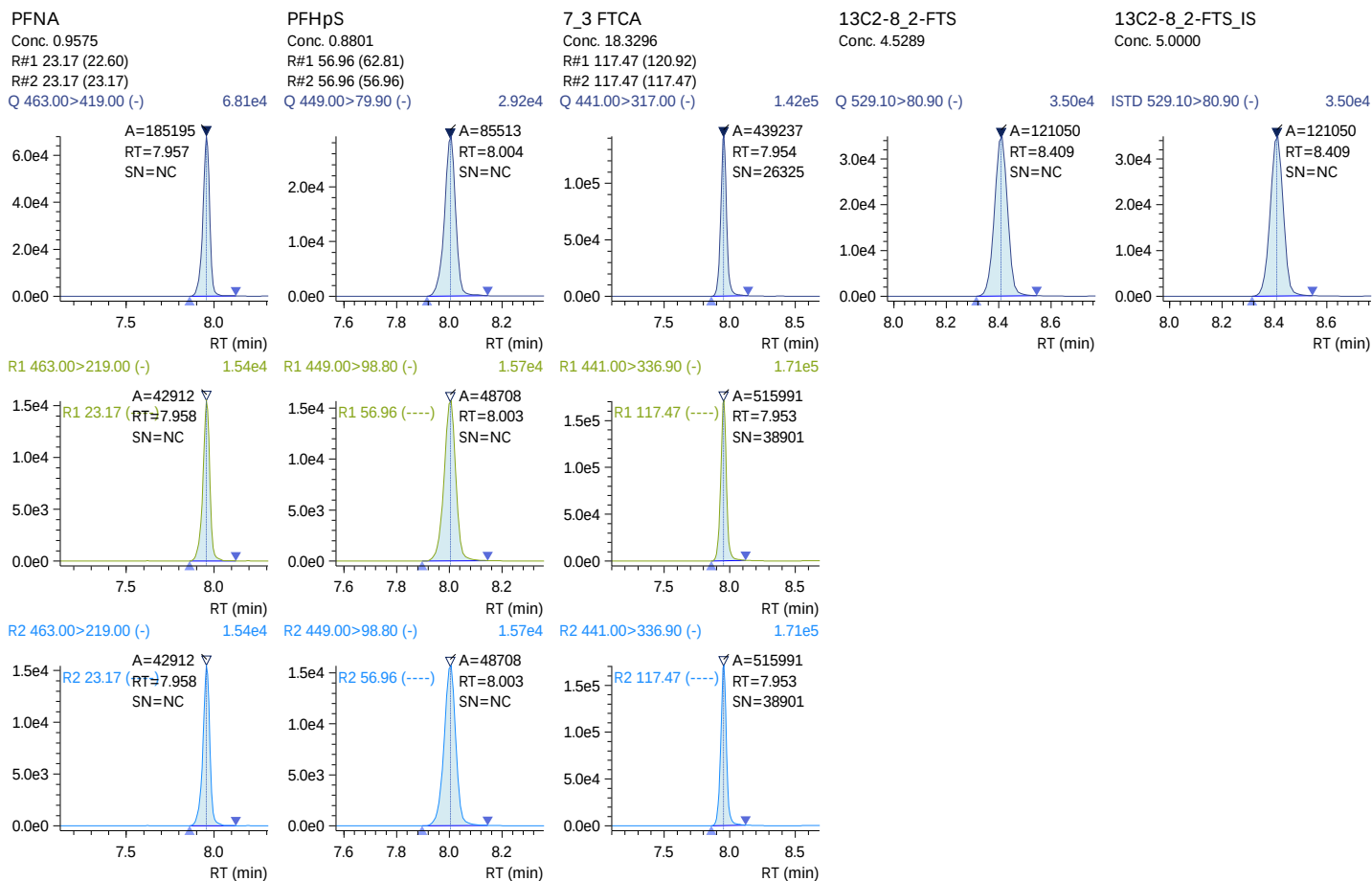


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_010 (continued)

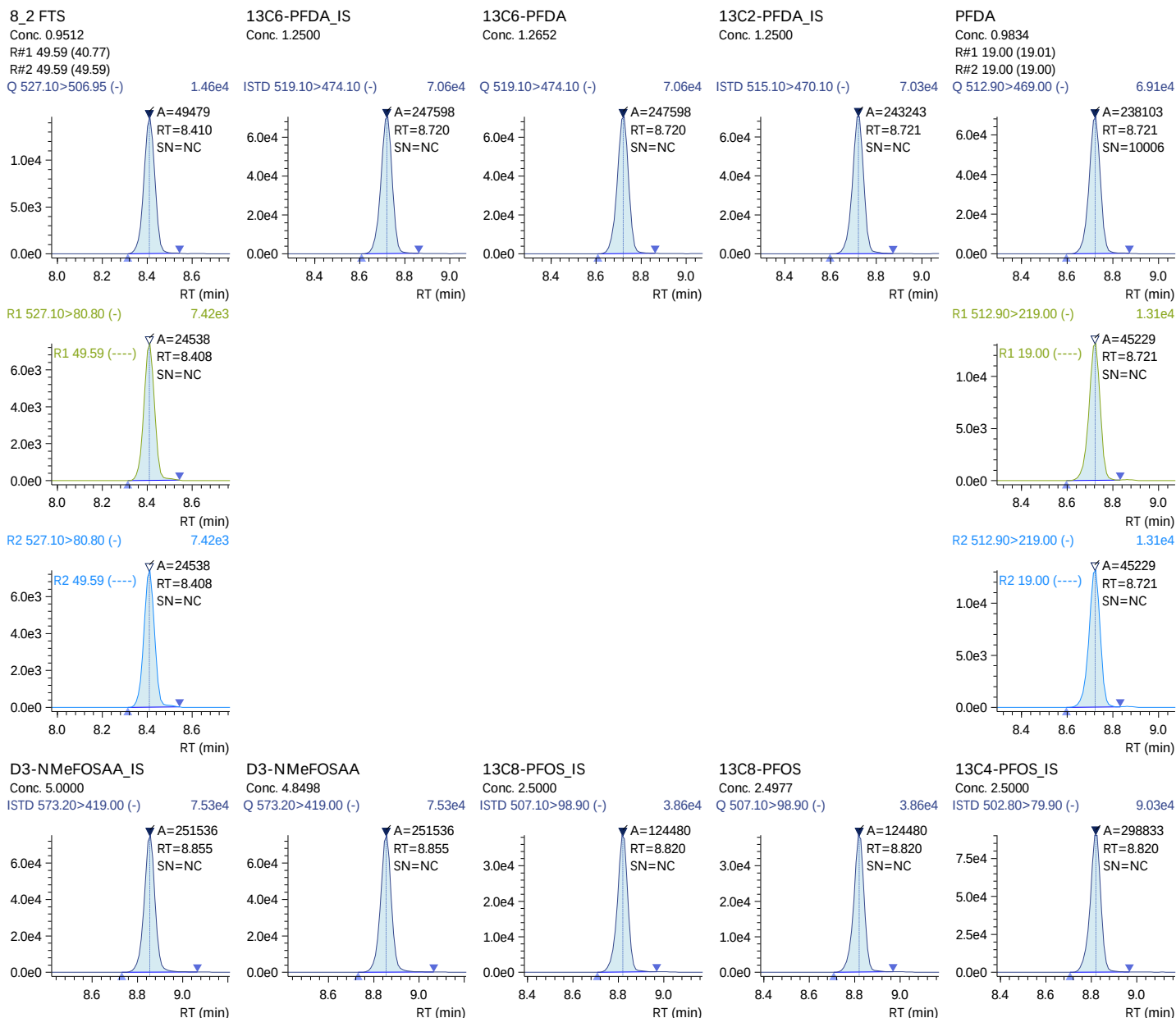


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_010 (continued)

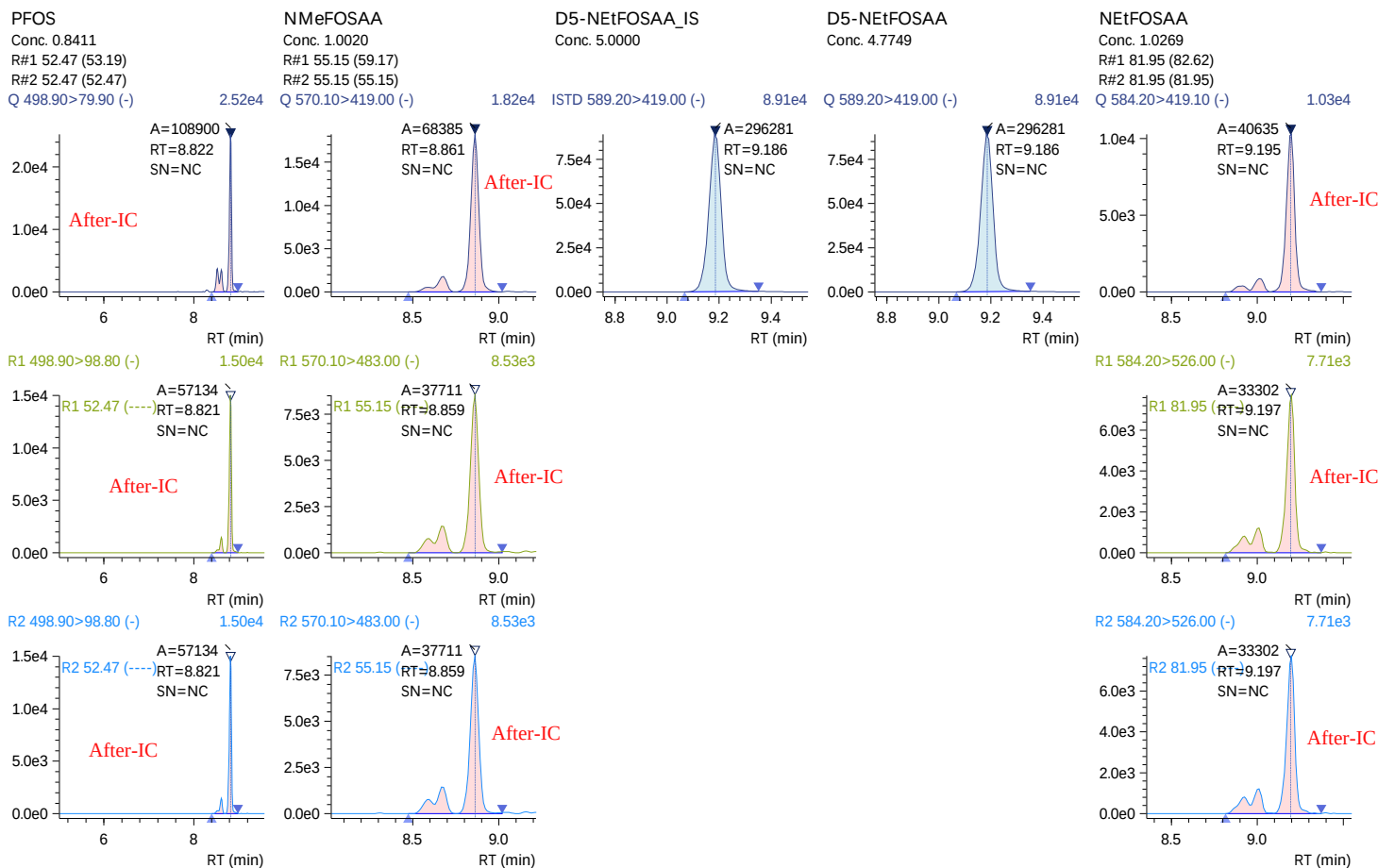


J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_010 (continued)

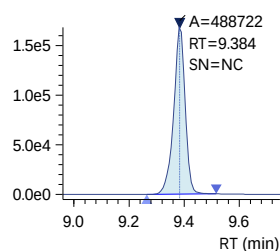




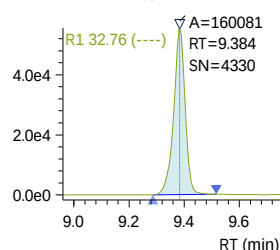
240118_010 (continued)

9-Cl-PF3ONS

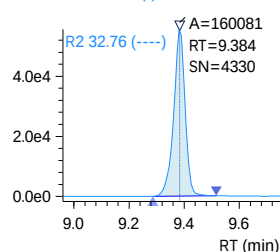
Conc. 0.9255
R#1 32.76 (31.76)
R#2 32.76 (32.76)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-)

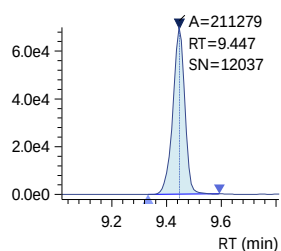


R2 532.80>353.00 (-)

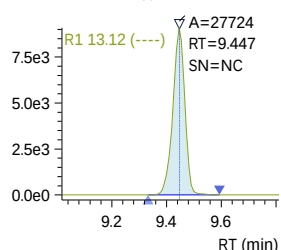


PFUnDA

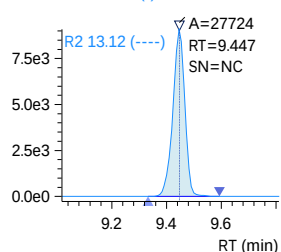
Conc. 1.0253
R#1 13.12 (12.31)
R#2 13.12 (13.12)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-)

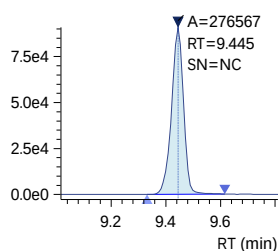


R2 563.10>269.10 (-)



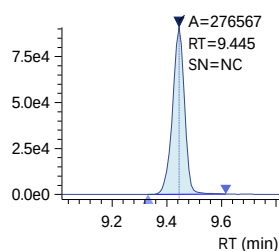
13C7-PFUnDA_IS

Conc. 1.2500
ISTD 570.00>525.10 (-)



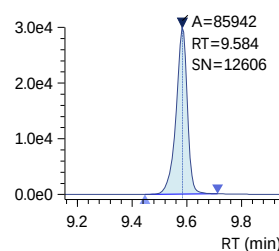
13C7-PFUnDA

Conc. 1.1848
Q 570.00>525.10 (-)

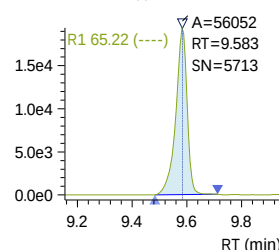


PFNS

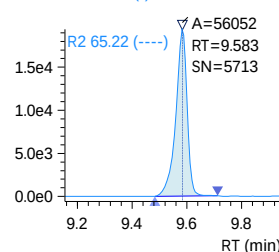
Conc. 0.9087
R#1 65.22 (63.31)
R#2 65.22 (65.22)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-)

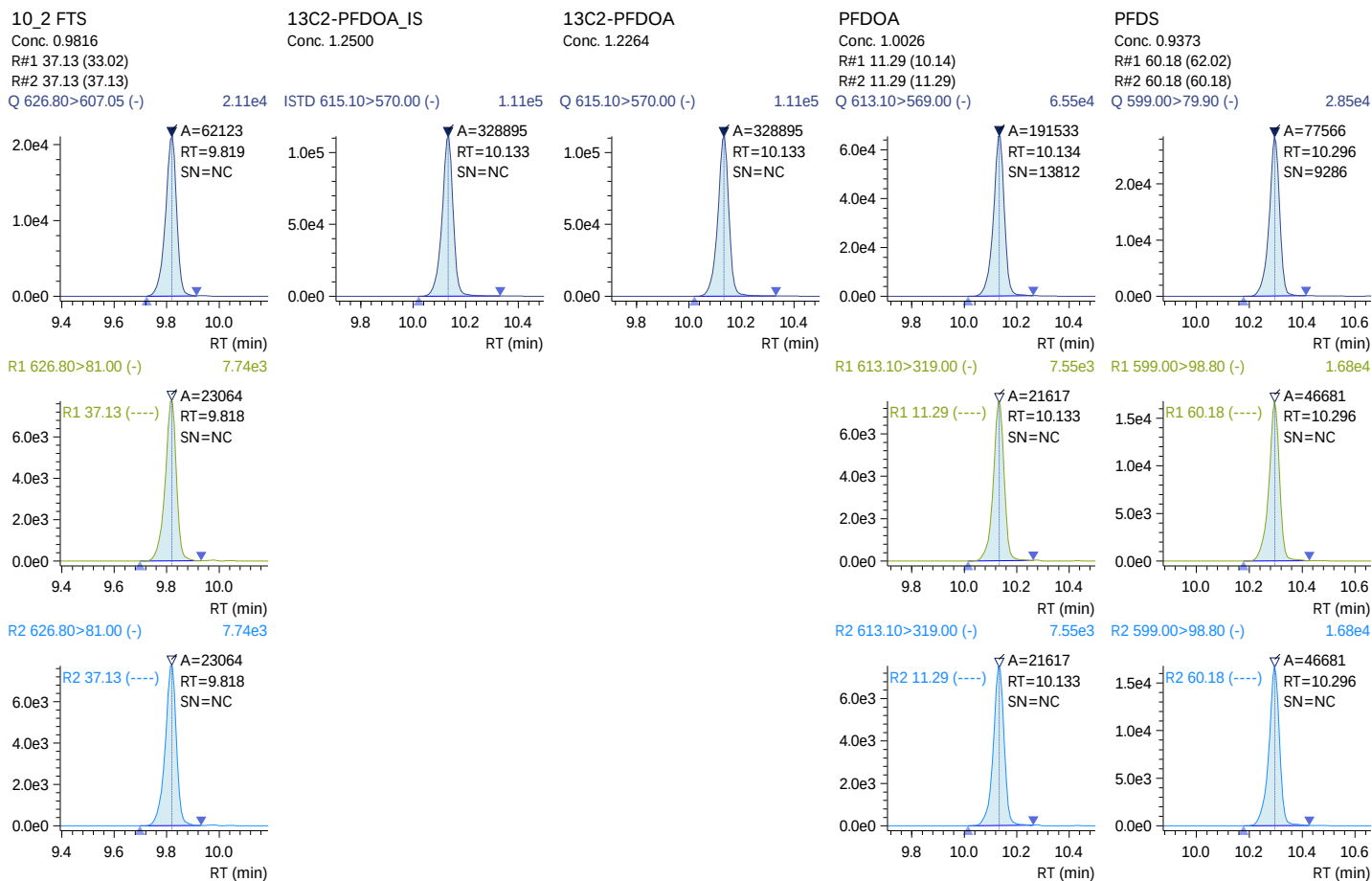


R2 548.80>98.80 (-)





240118_010 (continued)

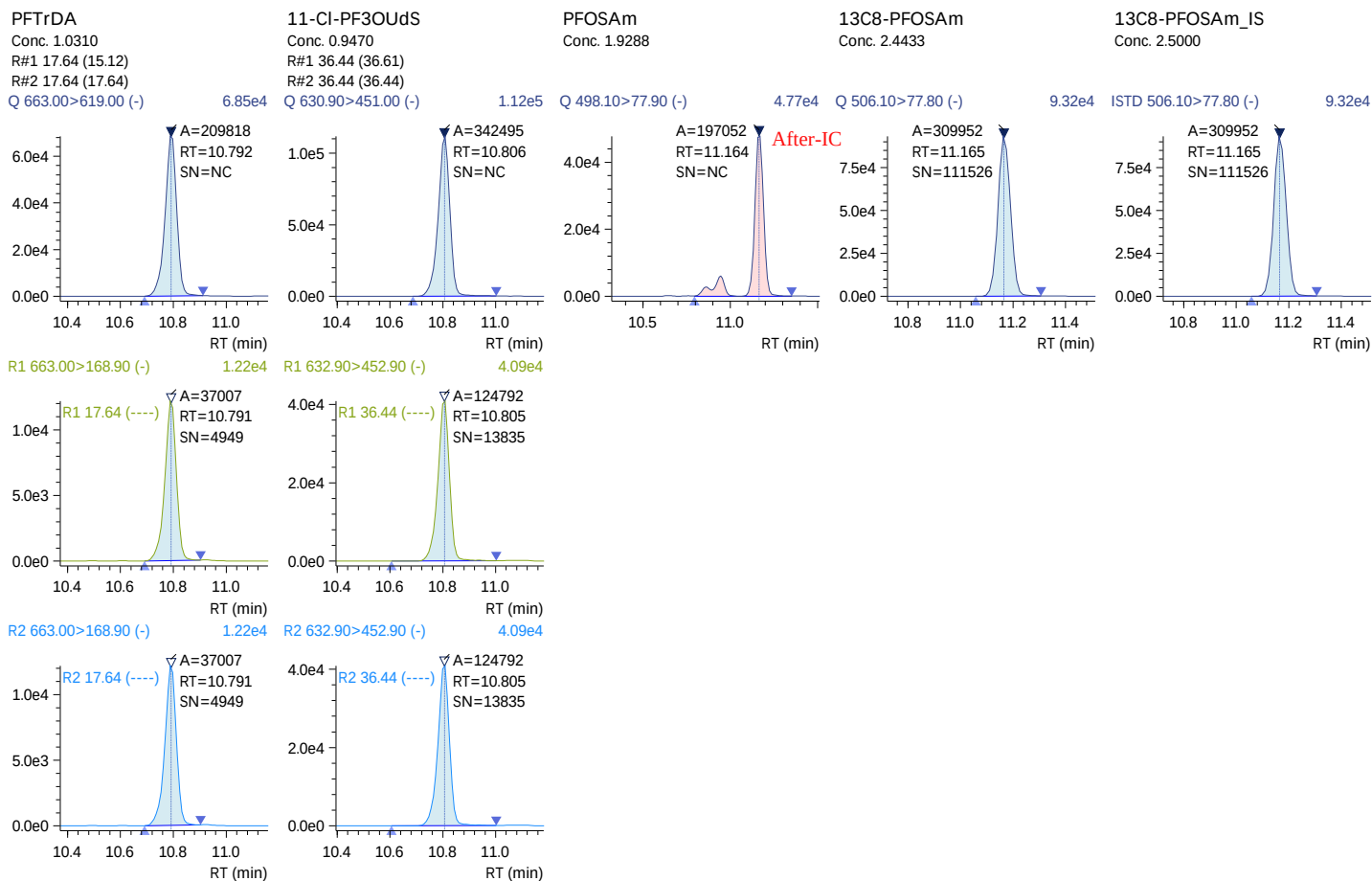


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_010 (continued)

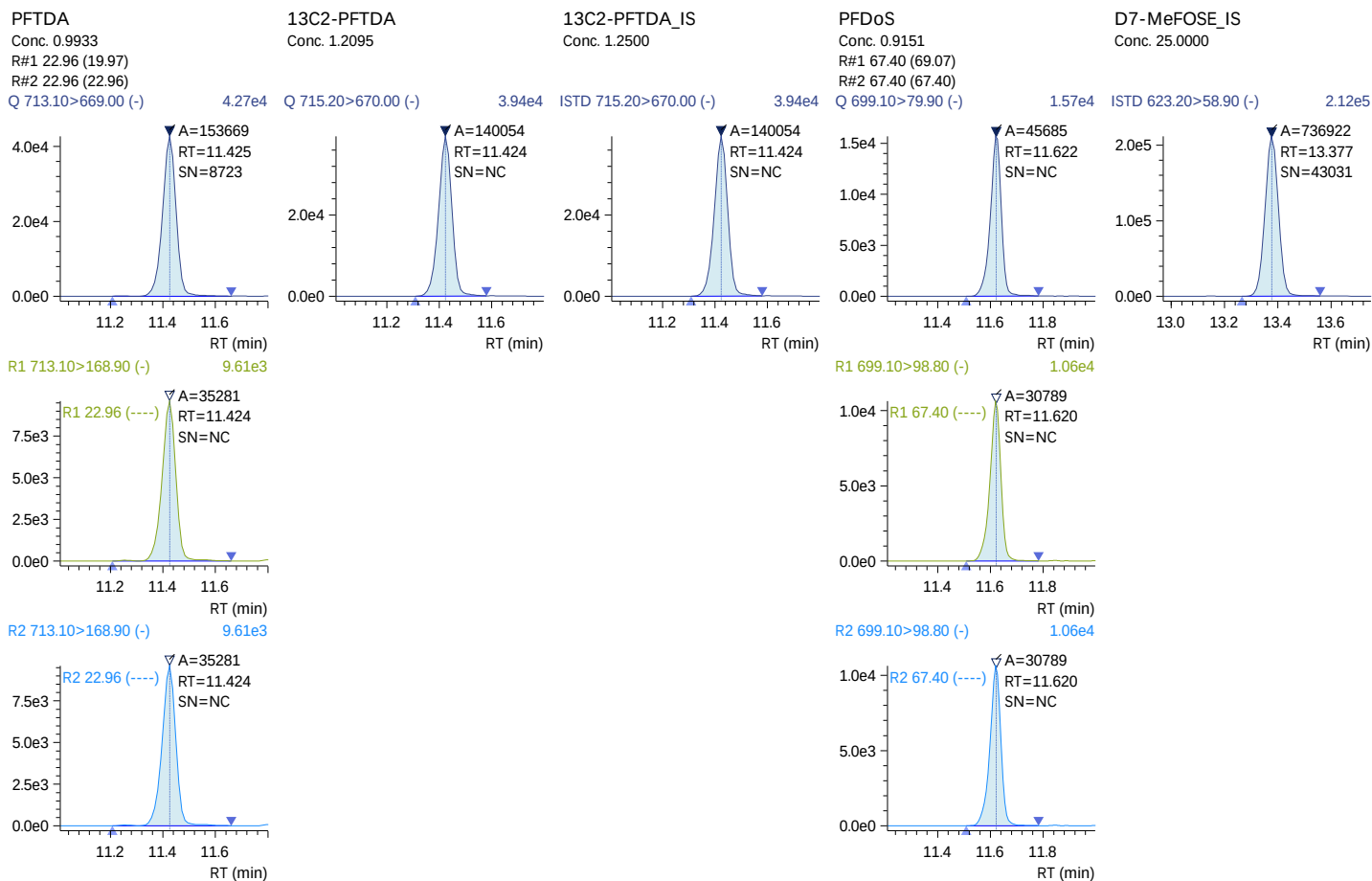


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_010 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_010 (continued)

D7-MeFOSE
Conc. 23.5612

MeFOSE
Conc. 0.9821

13C2-PFHXA_IS
Conc. 2.5000

13C2-PFHXA
Conc. 2.4293

PFHXA

Conc. 1.0088
R#1 13.90 (11.64)
R#2 13.90 (13.90)

Q 623.20>58.90 (-)

2.12e5

Q 616.10>59.00 (-)

4.72e3

ISTD 815.00>770.05 (-)

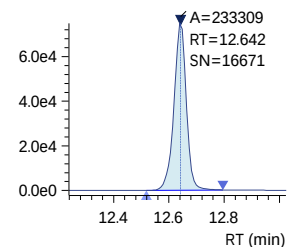
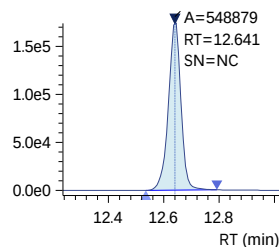
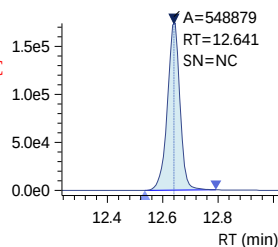
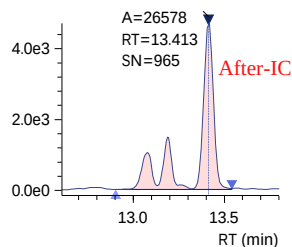
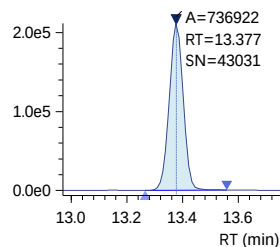
1.74e5

Q 815.00>770.05 (-)

1.74e5

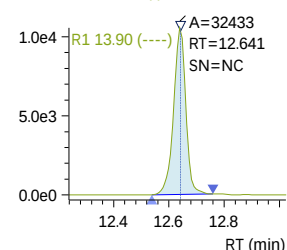
Q 813.00>768.95 (-)

7.49e4



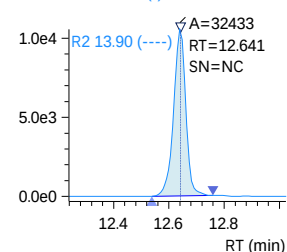
R1 813.00>218.95 (-)

1.06e4



R2 813.00>218.95 (-)

1.06e4





240118_010 (continued)

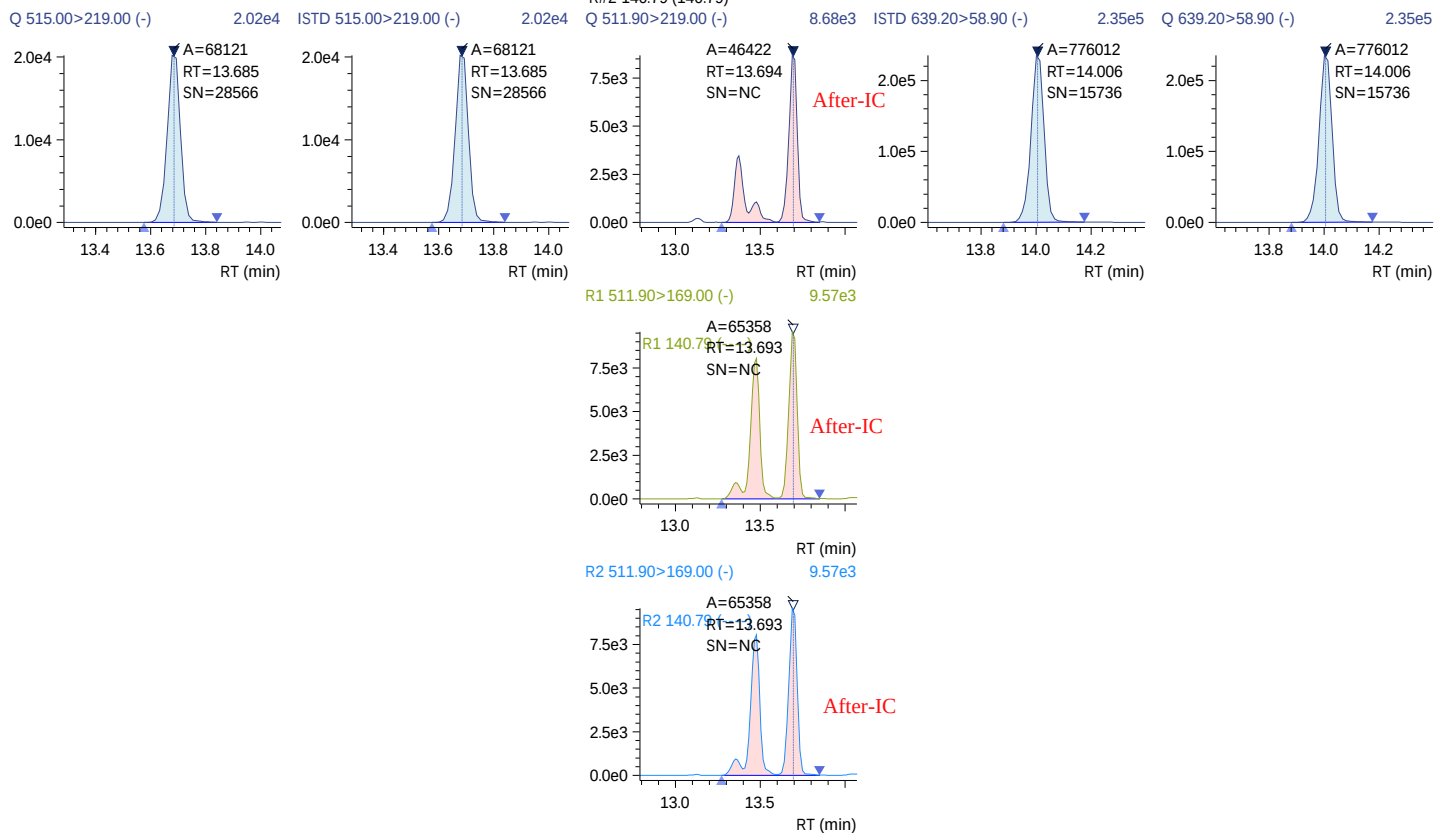
D3-MeFOSA
Conc. 2.6665

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. 0.9453
R#1 140.79 (149.05)
R#2 140.79 (140.79)

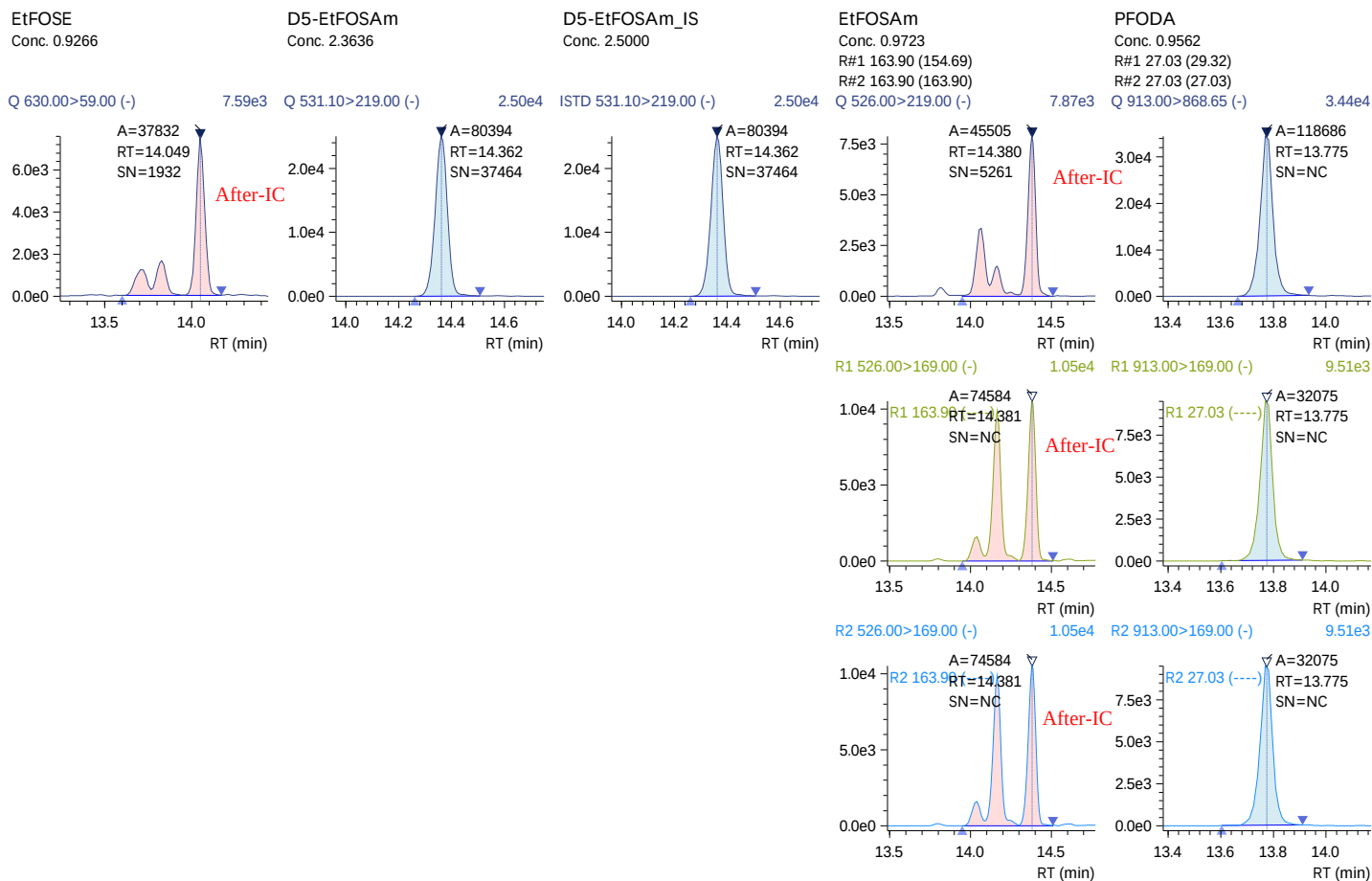
D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 24.4286





240118_010 (continued)



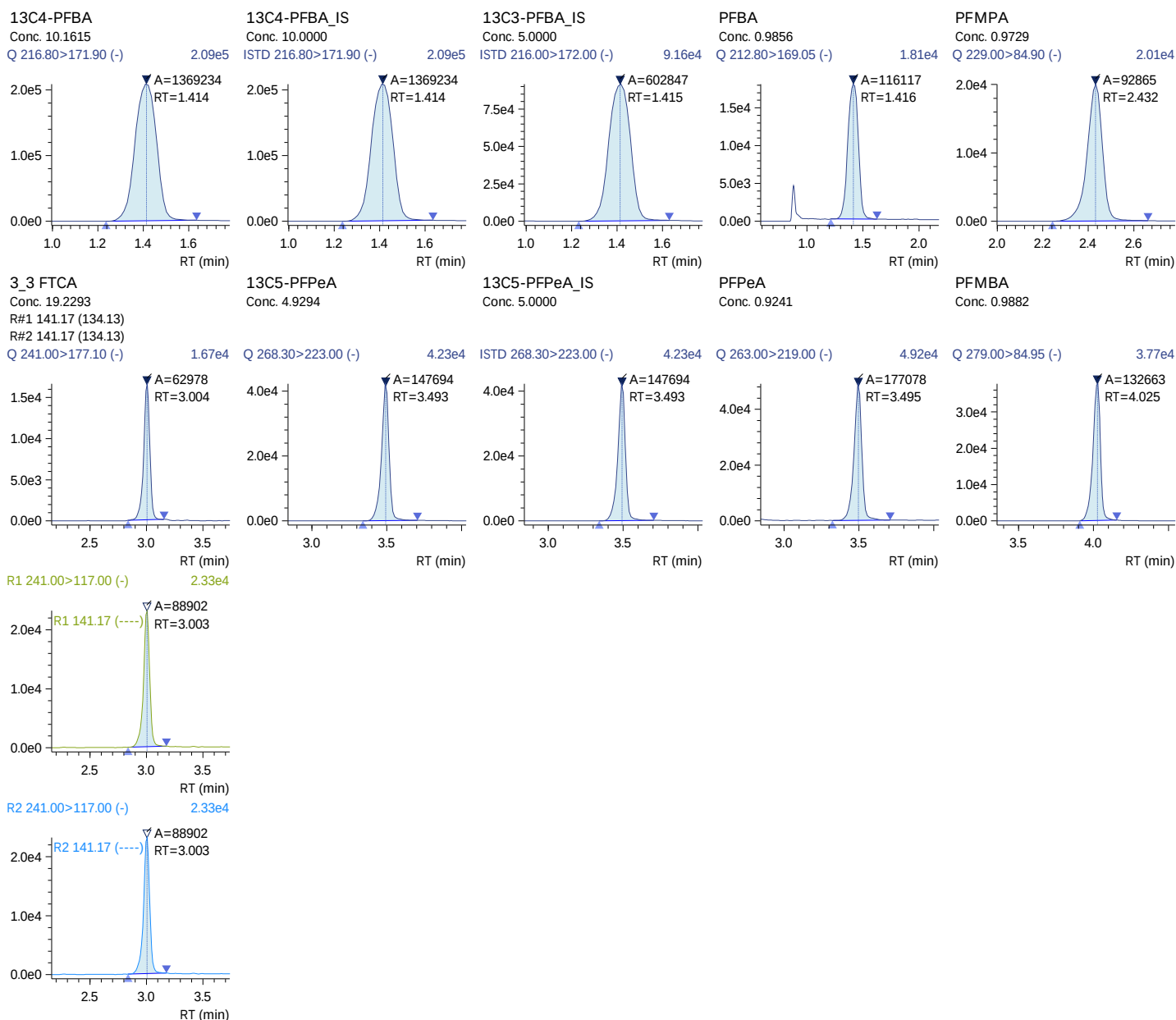
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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_010

Sample ID: 1633 ICAL 1.0PPB
Date Acquired: 1/18/2024 3:37:35 PM
Acquired by: System Administrator
Data File: 240118_010
Vial: 5 | Inj. Volume: 10.0000uL | Tray: 1





240118_010 (continued)

13C2-4_2 FTS
Conc. 4.9989

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. 0.9455
R#1 29.06 (34.14)
R#2 29.06 (34.14)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 0.9000
R#1 46.72 (47.53)
R#2 46.72 (47.53)

Q 329.10>80.90 (-)

5.42e4

ISTD 329.10>80.90 (-)

5.42e4

Q 327.10>307.00 (-)

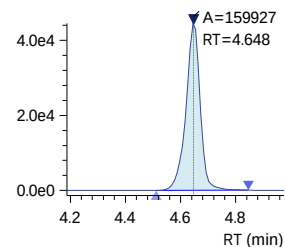
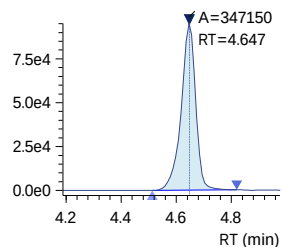
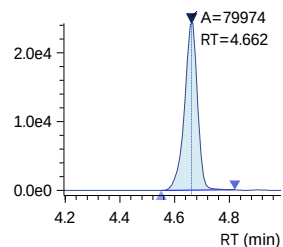
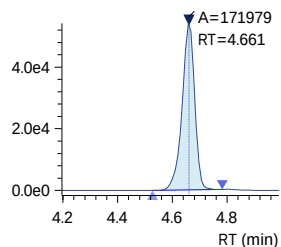
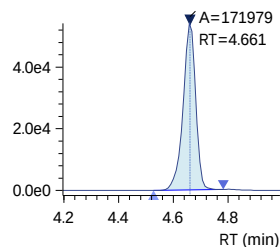
2.43e4

ISTD 302.10>79.90 (-)

9.52e4

Q 298.70>79.90 (-)

4.45e4

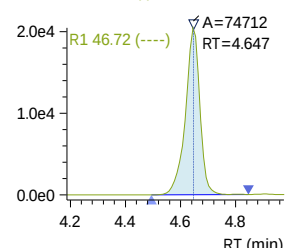
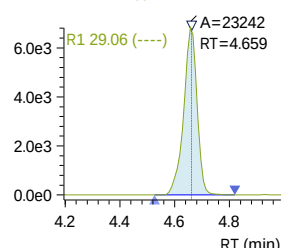


R1 327.10>80.90 (-)

6.82e3

R1 298.70>98.80 (-)

2.05e4

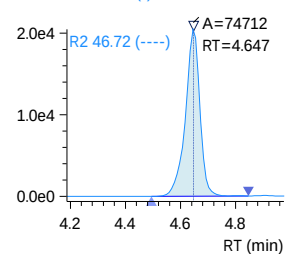
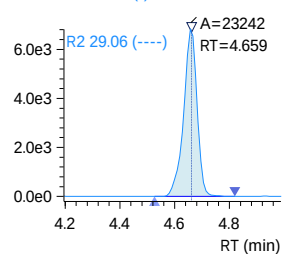


R2 327.10>80.90 (-)

6.82e3

R2 298.70>98.80 (-)

2.05e4





240118_010 (continued)

13C3-PFBS
Conc. 2.4469

NFDHA
Conc. 0.9499
R#1 40.25 (37.88)
R#2 40.25 (37.88)

13C5-PFHxA
Conc. 2.4807

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

Q 302.10>79.90 (-)

9.52e4

Q 295.00>201.00 (-)

4.25e4

Q 318.00>273.00 (-)

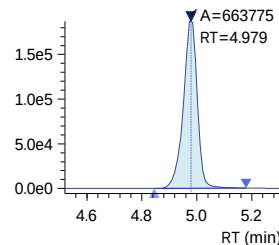
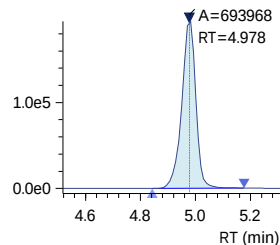
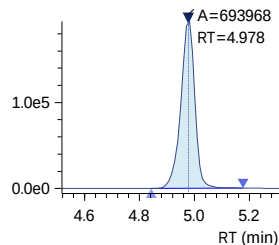
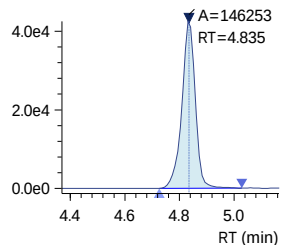
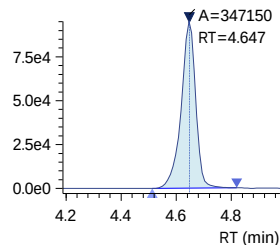
1.95e5

ISTD 318.00>273.00 (-)

1.95e5

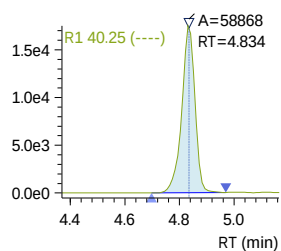
ISTD 315.10>270.00 (-)

1.87e5



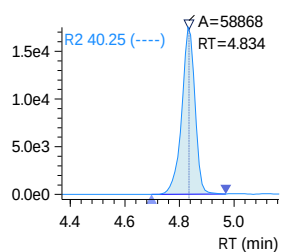
R1 295.00>84.90 (-)

1.75e4



R2 295.00>84.90 (-)

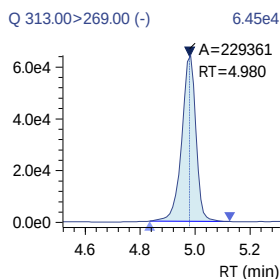
1.75e4



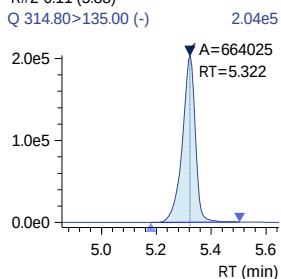


240118_010 (continued)

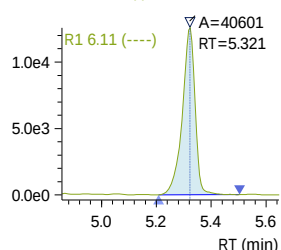
PFHxA
Conc. 0.9959



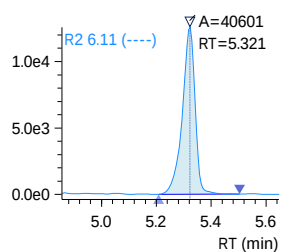
PFEESA
Conc. 0.8543
R#1 6.11 (5.88)
R#2 6.11 (5.88)



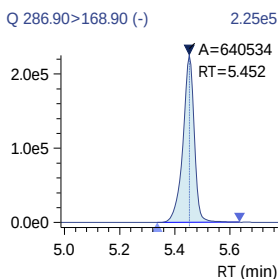
R1 314.80>82.90 (-) 1.26e4



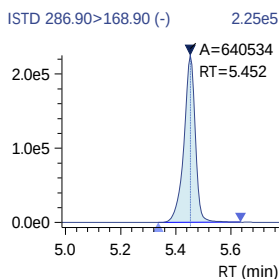
R2 314.80>82.90 (-) 1.26e4



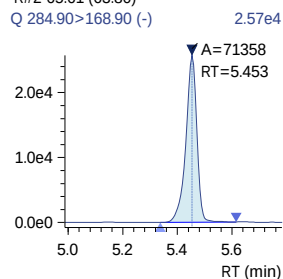
13C3-HFPO-DA
Conc. 9.8577



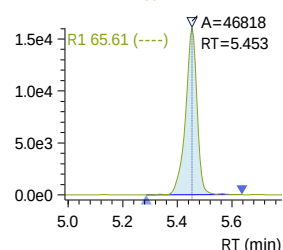
13C3-HFPO-DA_IS
Conc. 10.0000



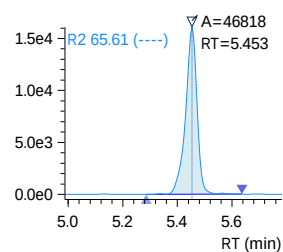
HFPO-DA
Conc. 1.0105
R#1 65.61 (63.80)
R#2 65.61 (63.80)



R1 284.90>184.90 (-) 1.61e4

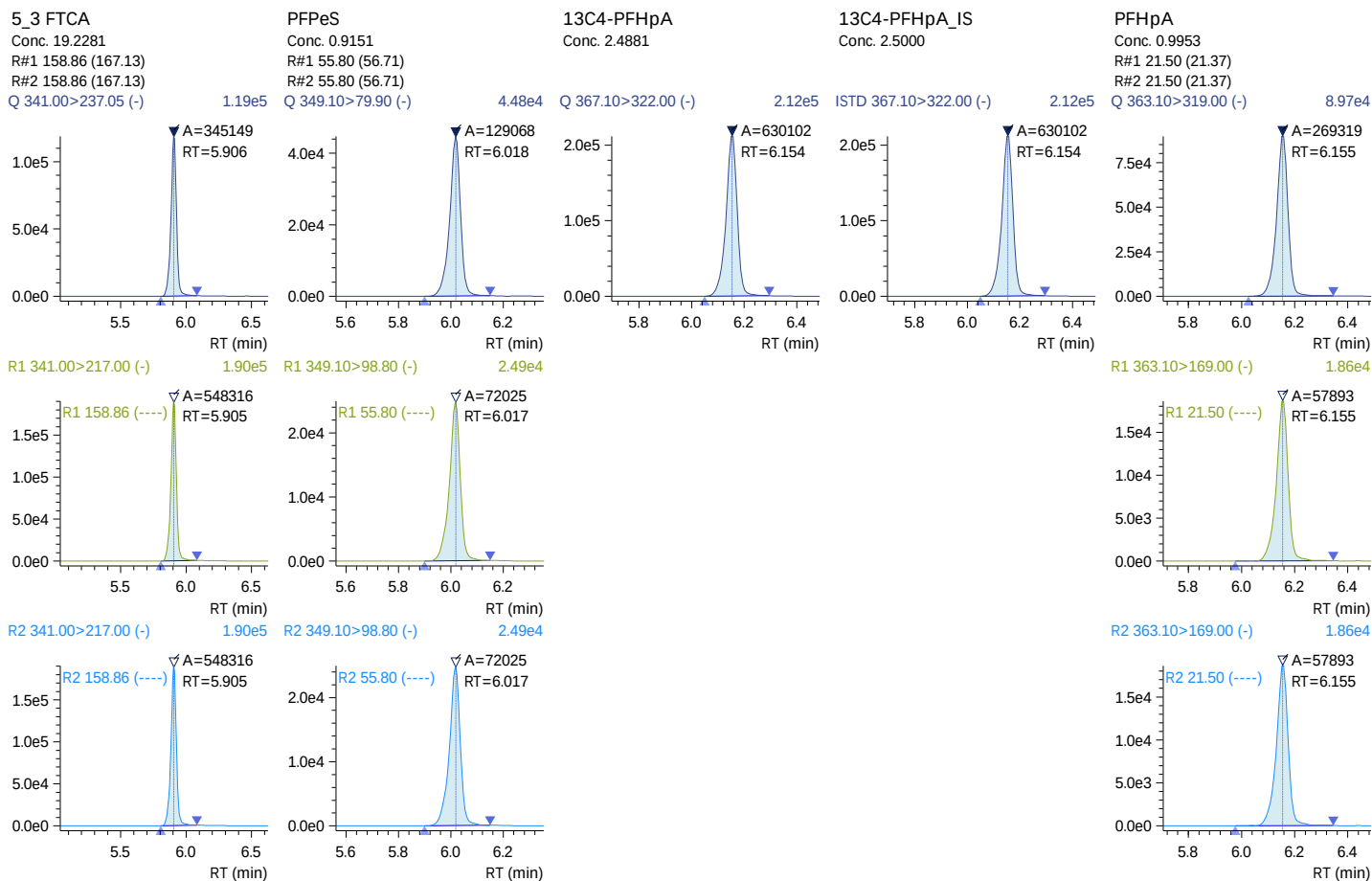


R2 284.90>184.90 (-) 1.61e4



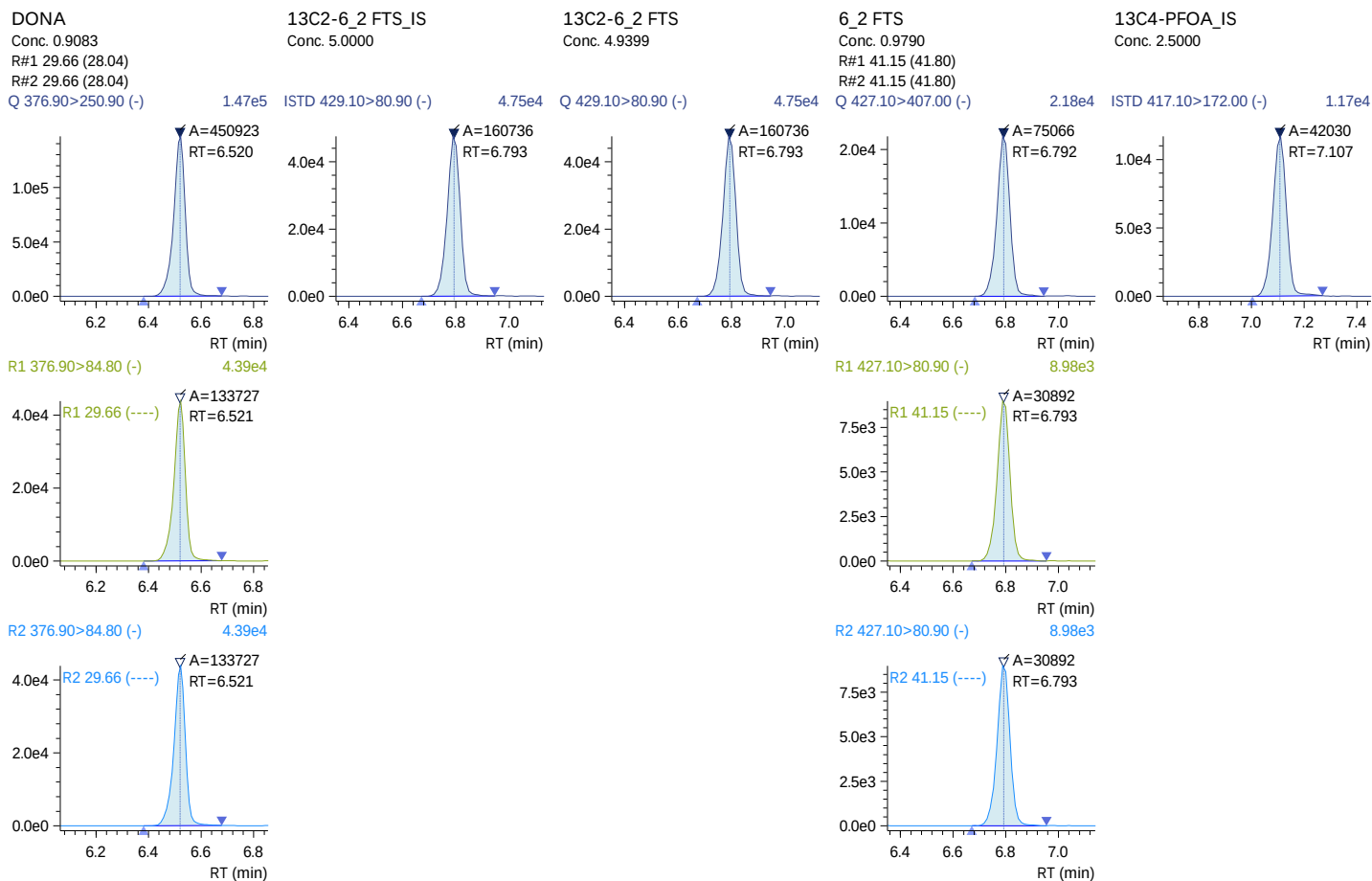


240118_010 (continued)





240118_010 (continued)





240118_010 (continued)

13C8-PFOA_IS
 Conc. 2.5000

13C8-PFOA
 Conc. 2.5751

PFOA
 Conc. 1.0681
 R#1 31.89 (29.05)
 R#2 31.89 (29.05)

13C3-PFHxS
 Conc. 2.5030

13C3-PFHxS_IS
 Conc. 2.5000

ISTD 421.10>376.00 (-)

1.72e5

Q 421.10>376.00 (-)

1.72e5

Q 413.00>369.00 (-)

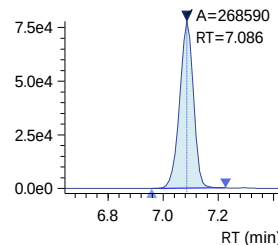
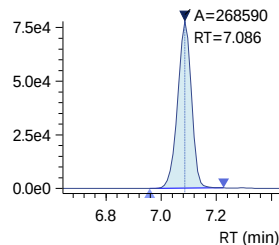
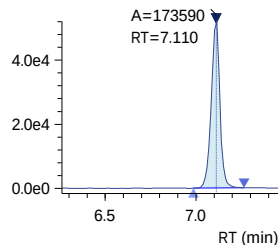
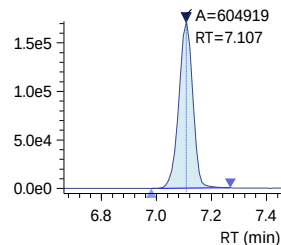
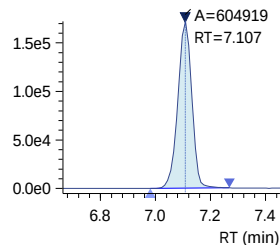
5.21e4

Q 402.10>79.90 (-)

7.79e4

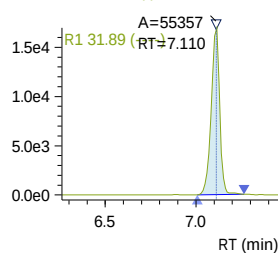
ISTD 402.10>79.90 (-)

7.79e4



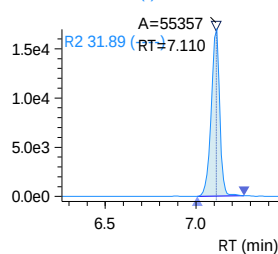
R1 413.00>169.00 (-)

1.70e4



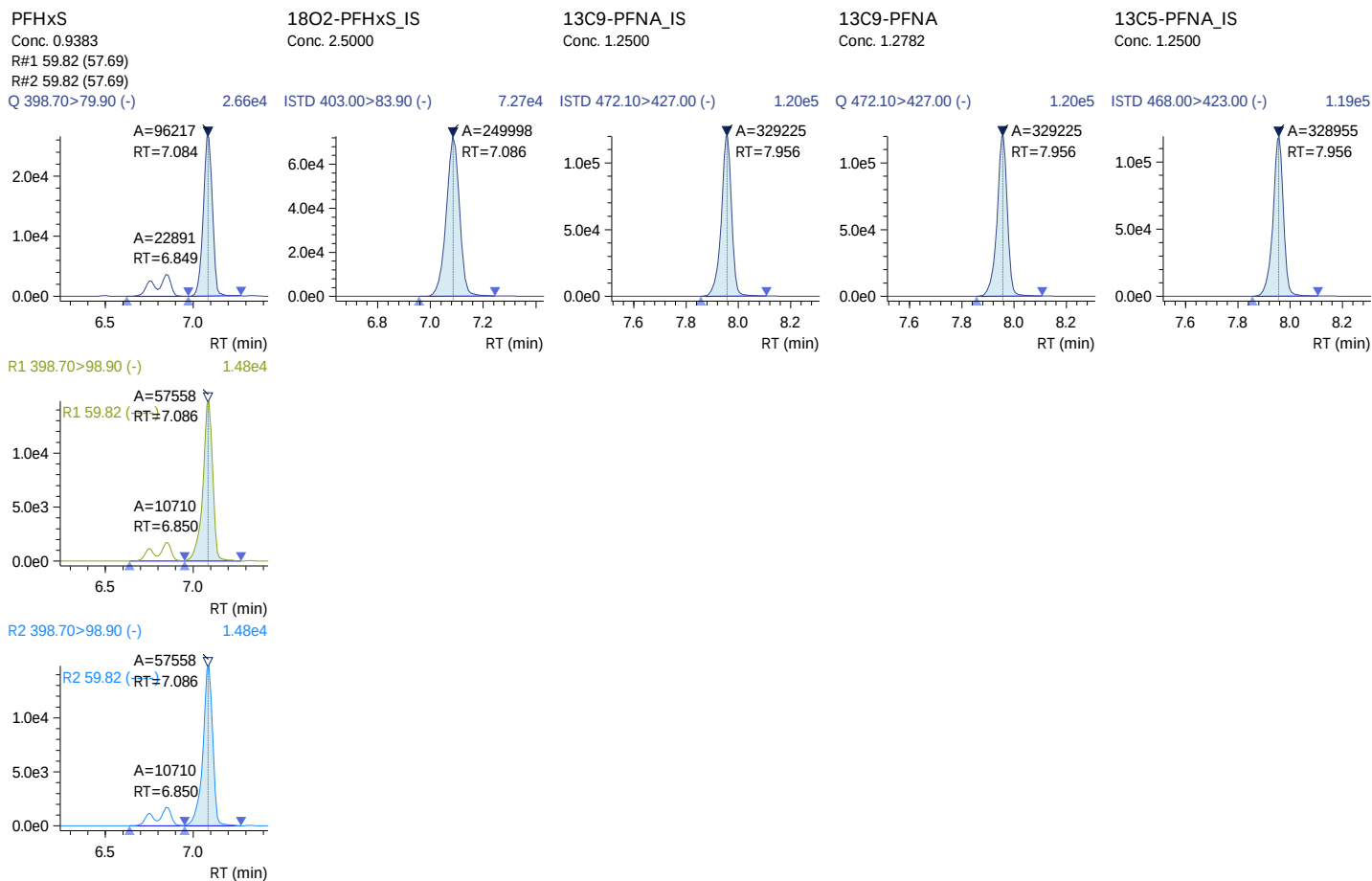
R2 413.00>169.00 (-)

1.70e4



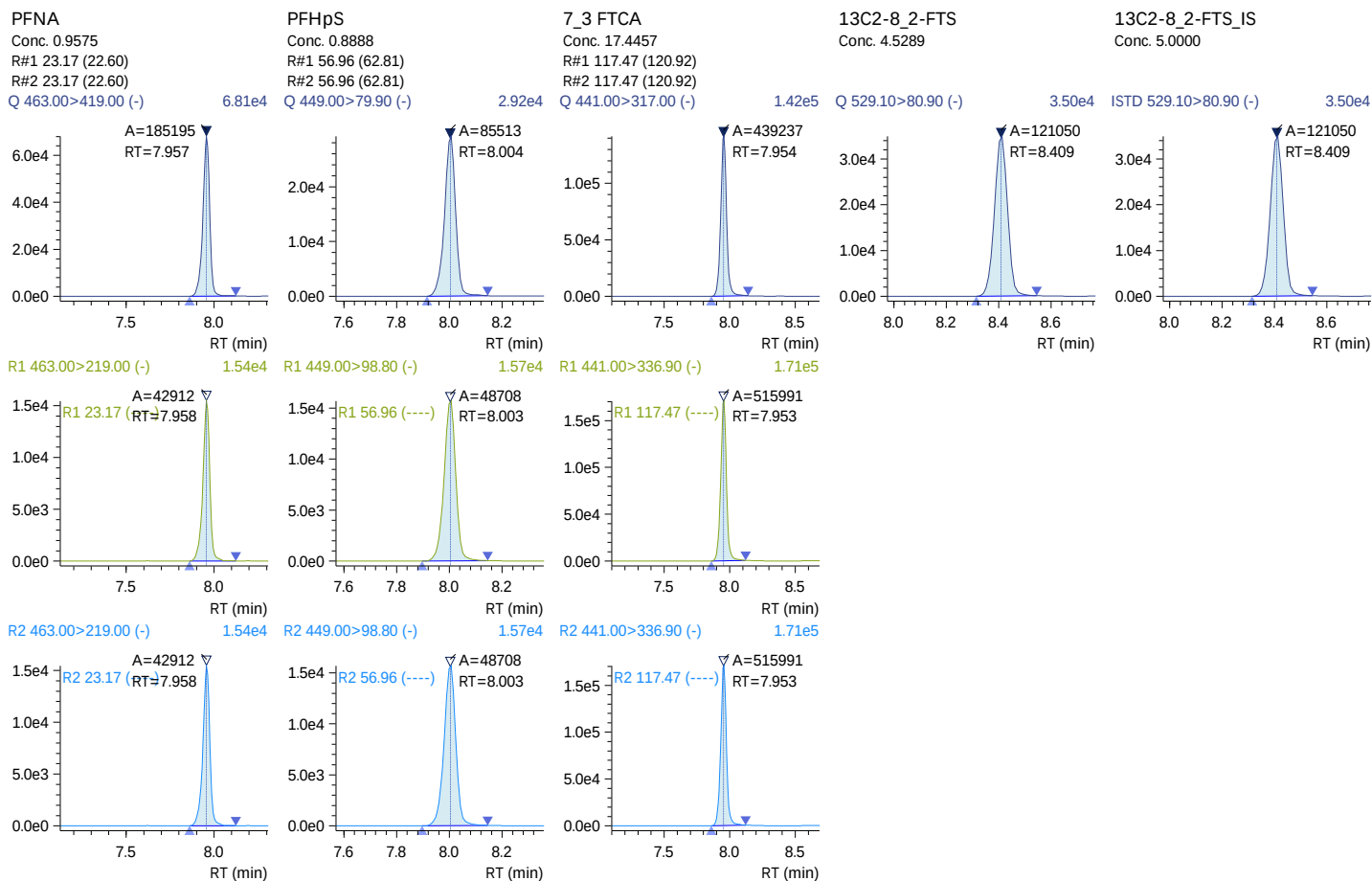


240118_010 (continued)



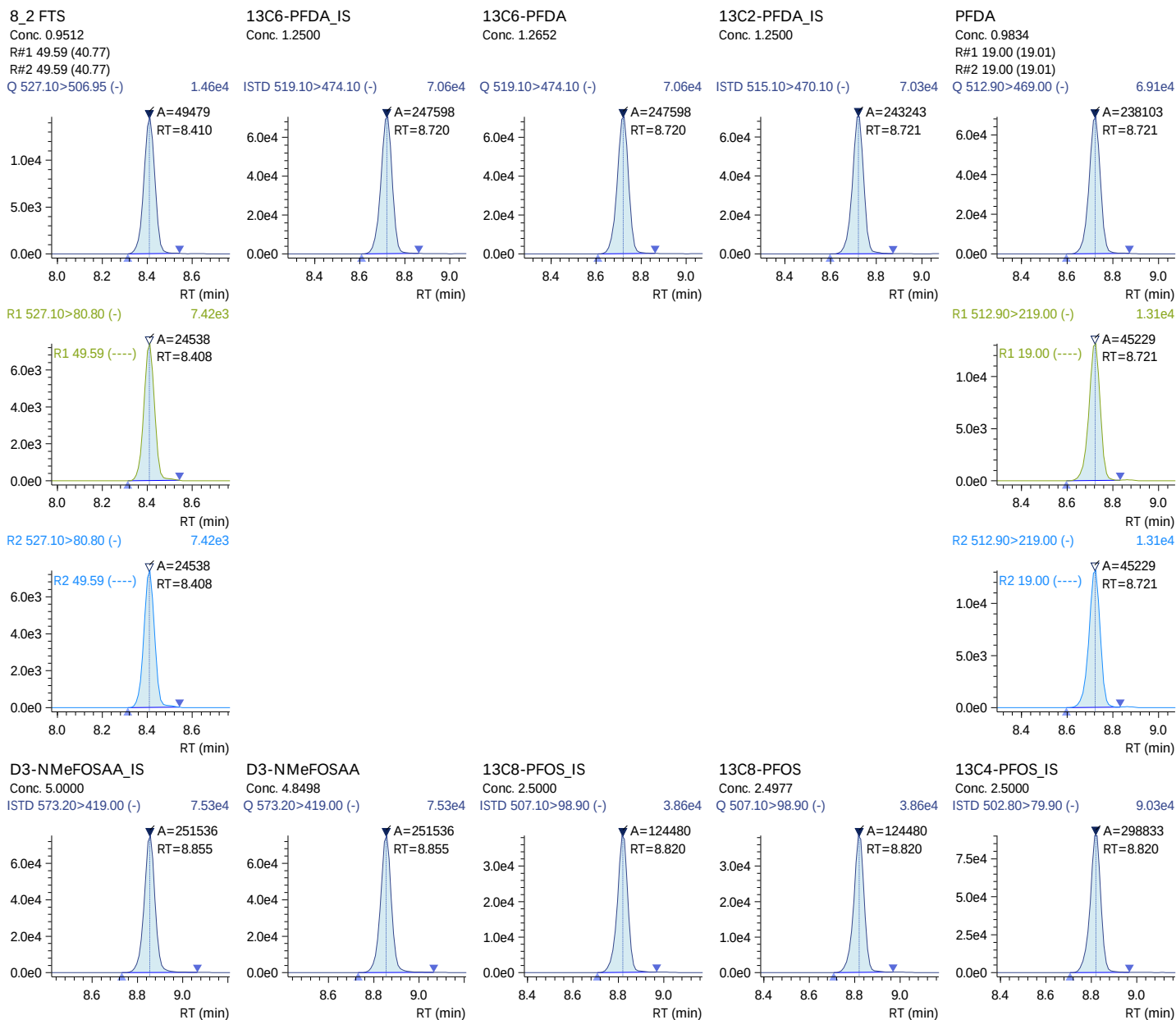


240118_010 (continued)



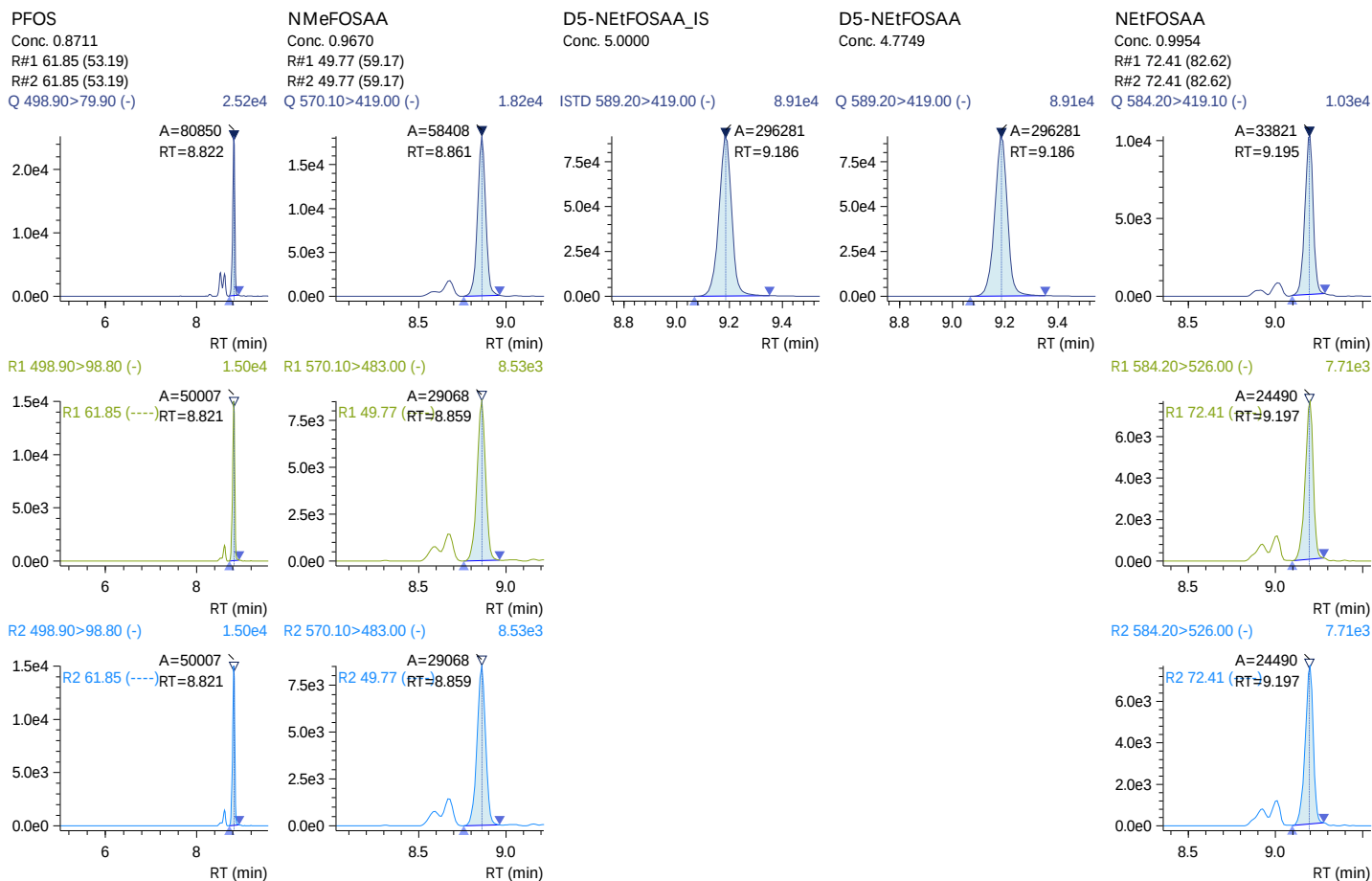


240118_010 (continued)





240118_010 (continued)

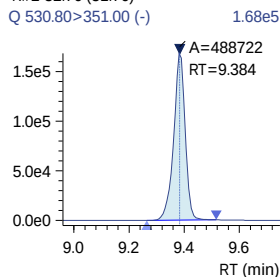




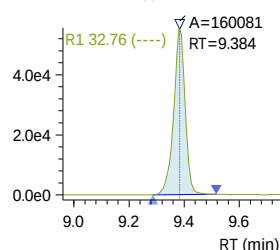
240118_010 (continued)

9-CI-PF3ONS

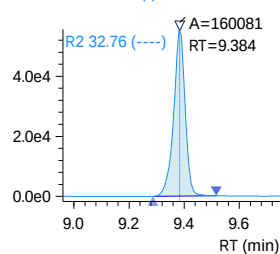
Conc. 0.9255
R#1 32.76 (31.76)
R#2 32.76 (31.76)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-) 5.56e4

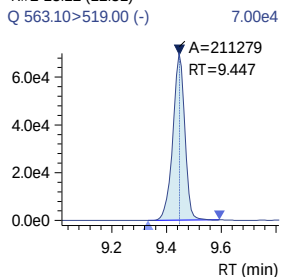


R2 532.80>353.00 (-) 5.56e4

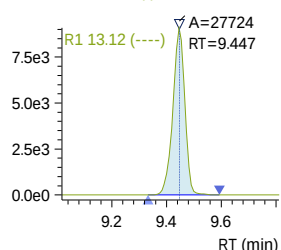


PFUnDA

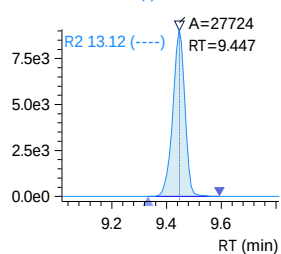
Conc. 1.0253
R#1 13.12 (12.31)
R#2 13.12 (12.31)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-) 9.09e3

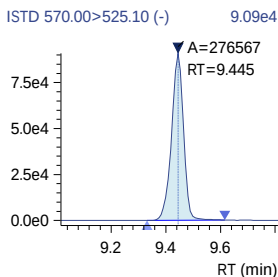


R2 563.10>269.10 (-) 9.09e3



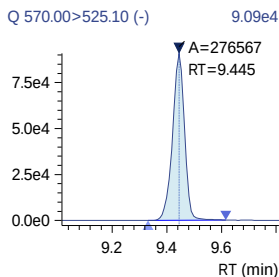
13C7-PFUnDA_IS

Conc. 1.2500



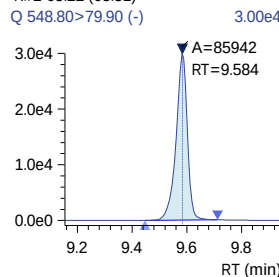
13C7-PFUnDA

Conc. 1.1848

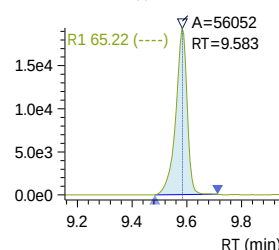


PFNS

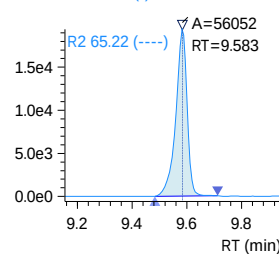
Conc. 0.9087
R#1 65.22 (63.31)
R#2 65.22 (63.31)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-) 1.94e4

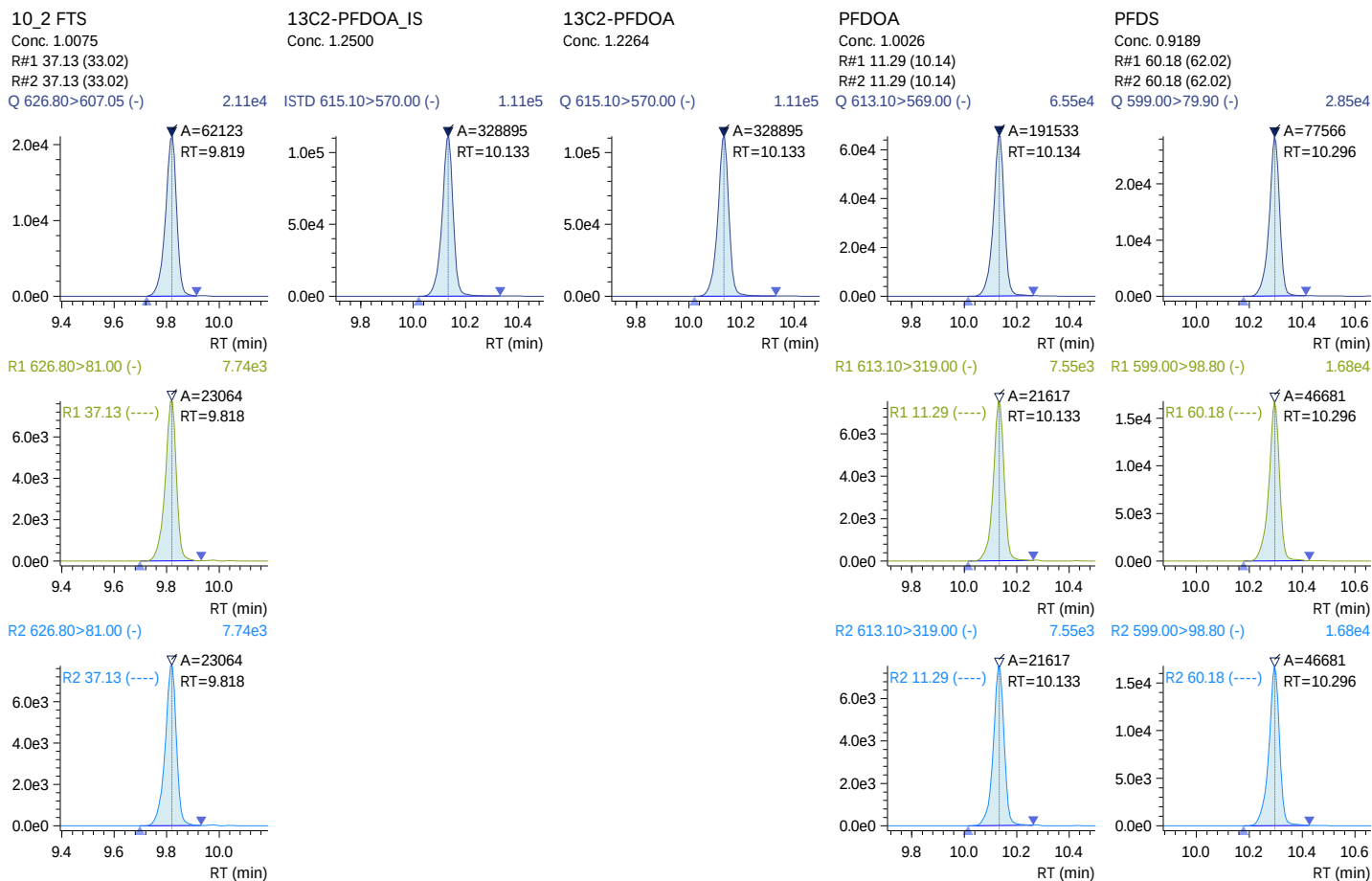


R2 548.80>98.80 (-) 1.94e4



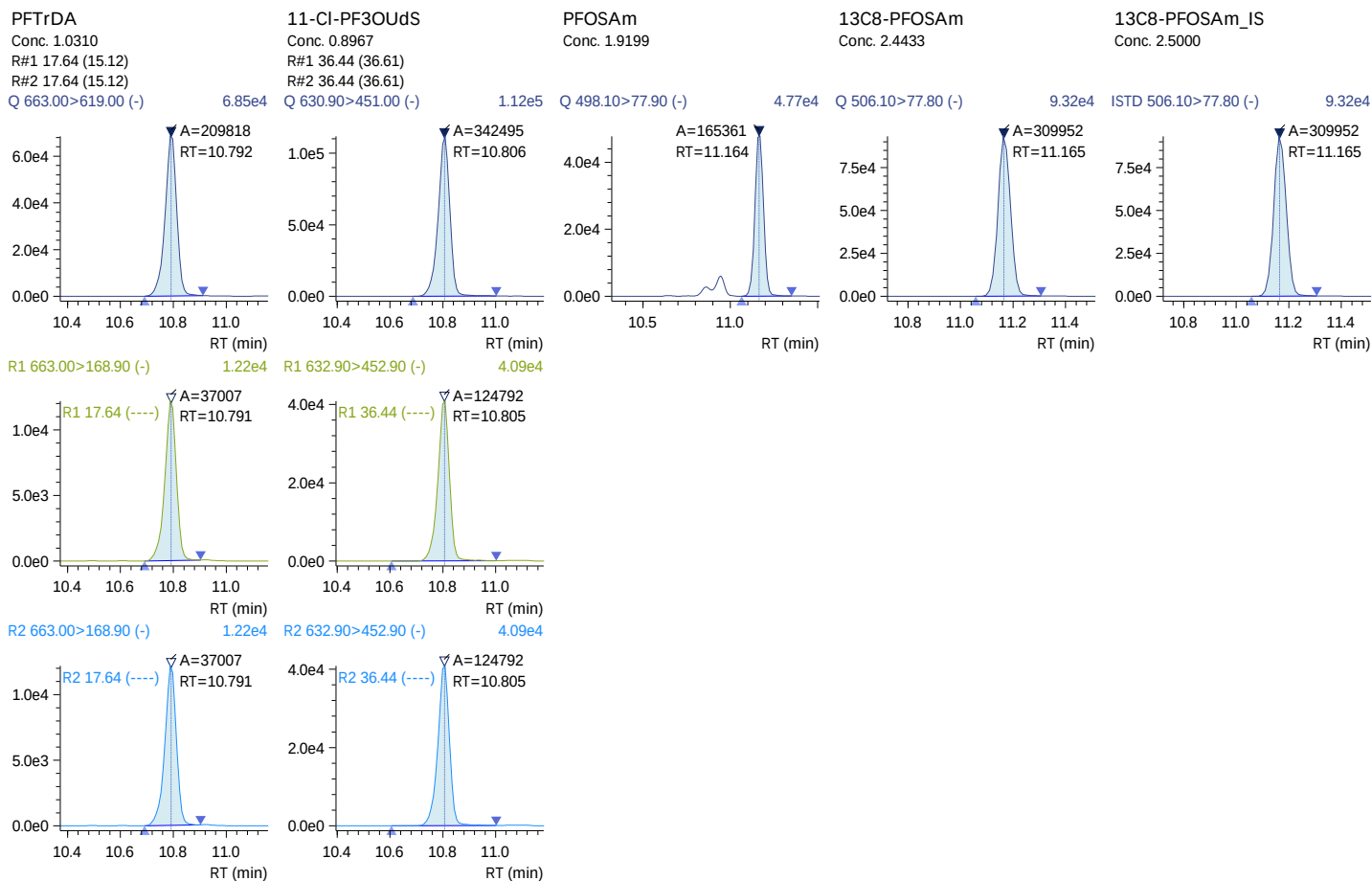


240118_010 (continued)



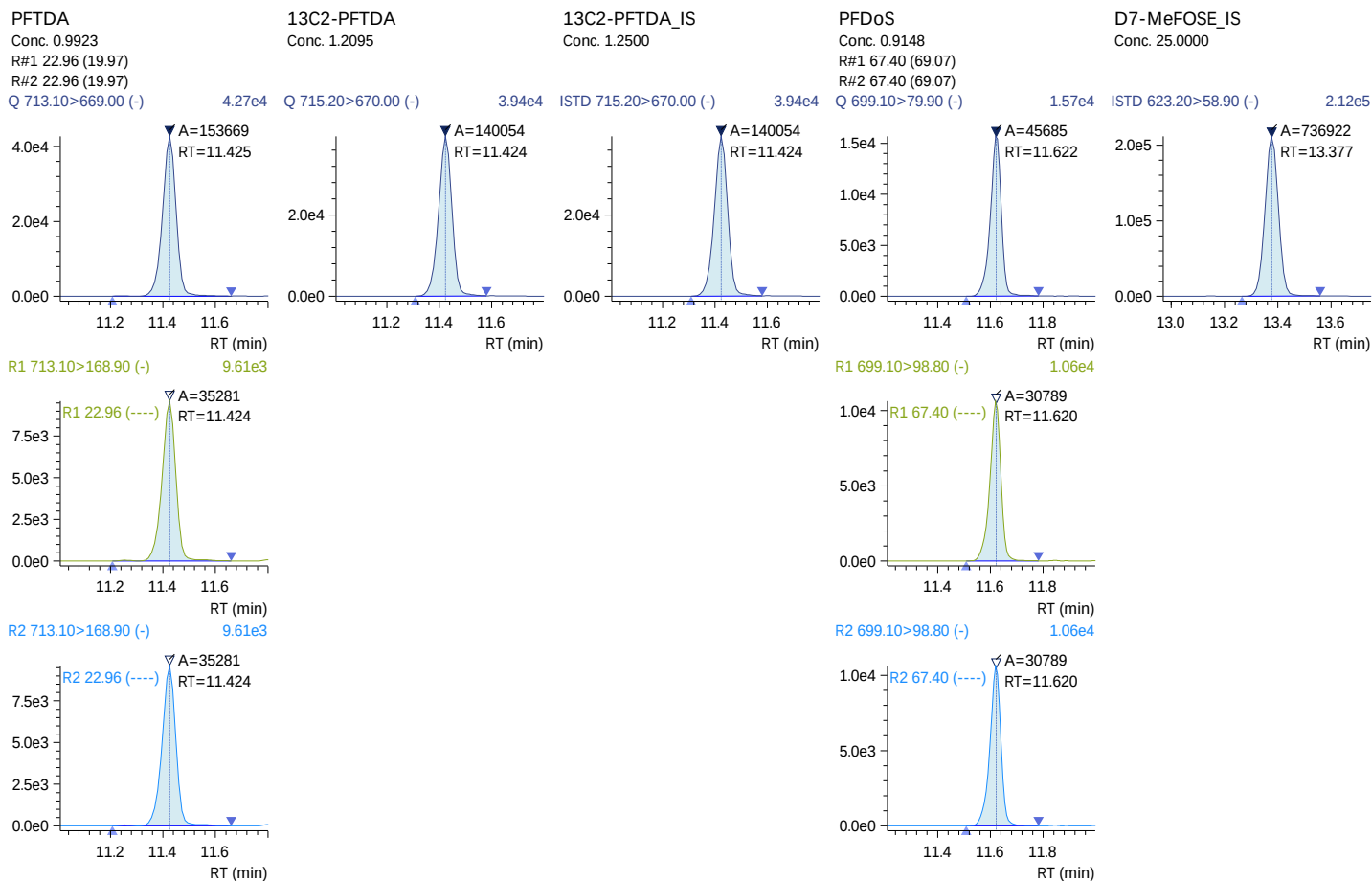


240118_010 (continued)





240118_010 (continued)





240118_010 (continued)

D7-MeFOSE
 Conc. 23.5612

MeFOSE
 Conc. 1.0087

13C2-PFHDA_IS
 Conc. 2.5000

13C2-PFHDA
 Conc. 2.4293

PFHXDA
 Conc. 1.0088
 R#1 13.90 (11.64)
 R#2 13.90 (11.64)

Q 623.20>58.90 (-)

2.12e5

Q 616.10>59.00 (-)

4.72e3

ISTD 815.00>770.05 (-)

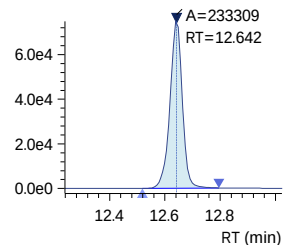
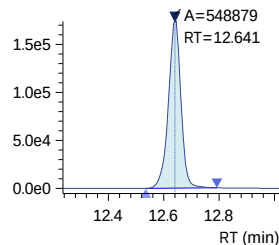
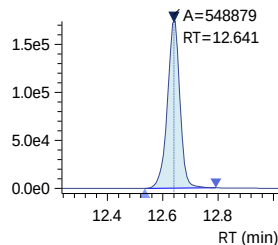
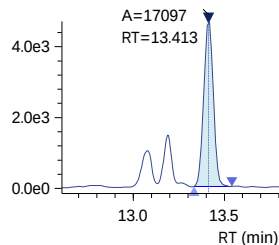
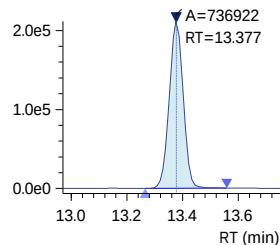
1.74e5

Q 815.00>770.05 (-)

1.74e5

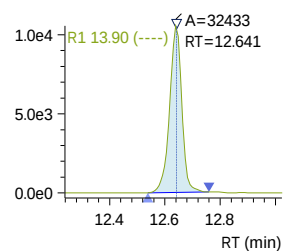
Q 813.00>768.95 (-)

7.49e4



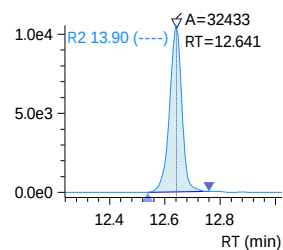
R1 813.00>218.95 (-)

1.06e4



R2 813.00>218.95 (-)

1.06e4





240118_010 (continued)

D3-MeFOSA
 Conc. 2.6665

D3-MeFOSA_IS
 Conc. 2.5000

MeFOSA
 Conc. 0.9725
 R#1 109.16 (149.05)
 R#2 109.16 (149.05)

D9-EtFOSE_IS
 Conc. 25.0000

D9-EtFOSE
 Conc. 24.4286

Q 515.00>219.00 (-)

2.02e4

ISTD 515.00>219.00 (-)

2.02e4

Q 511.90>219.00 (-)

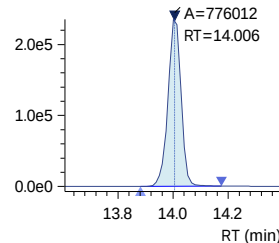
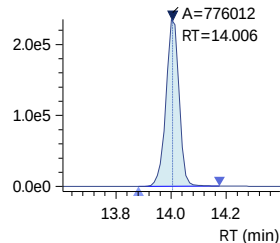
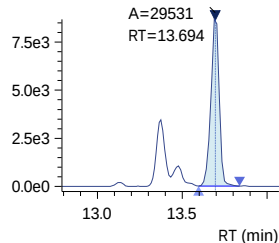
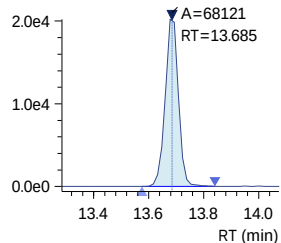
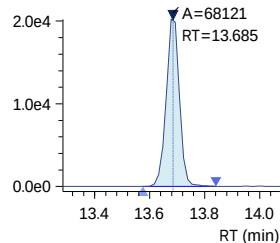
8.68e3

ISTD 639.20>58.90 (-)

2.35e5

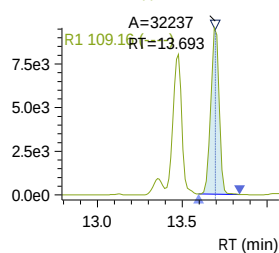
Q 639.20>58.90 (-)

2.35e5



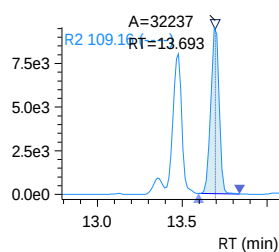
R1 511.90>169.00 (-)

9.57e3



R2 511.90>169.00 (-)

9.57e3





240118_010 (continued)

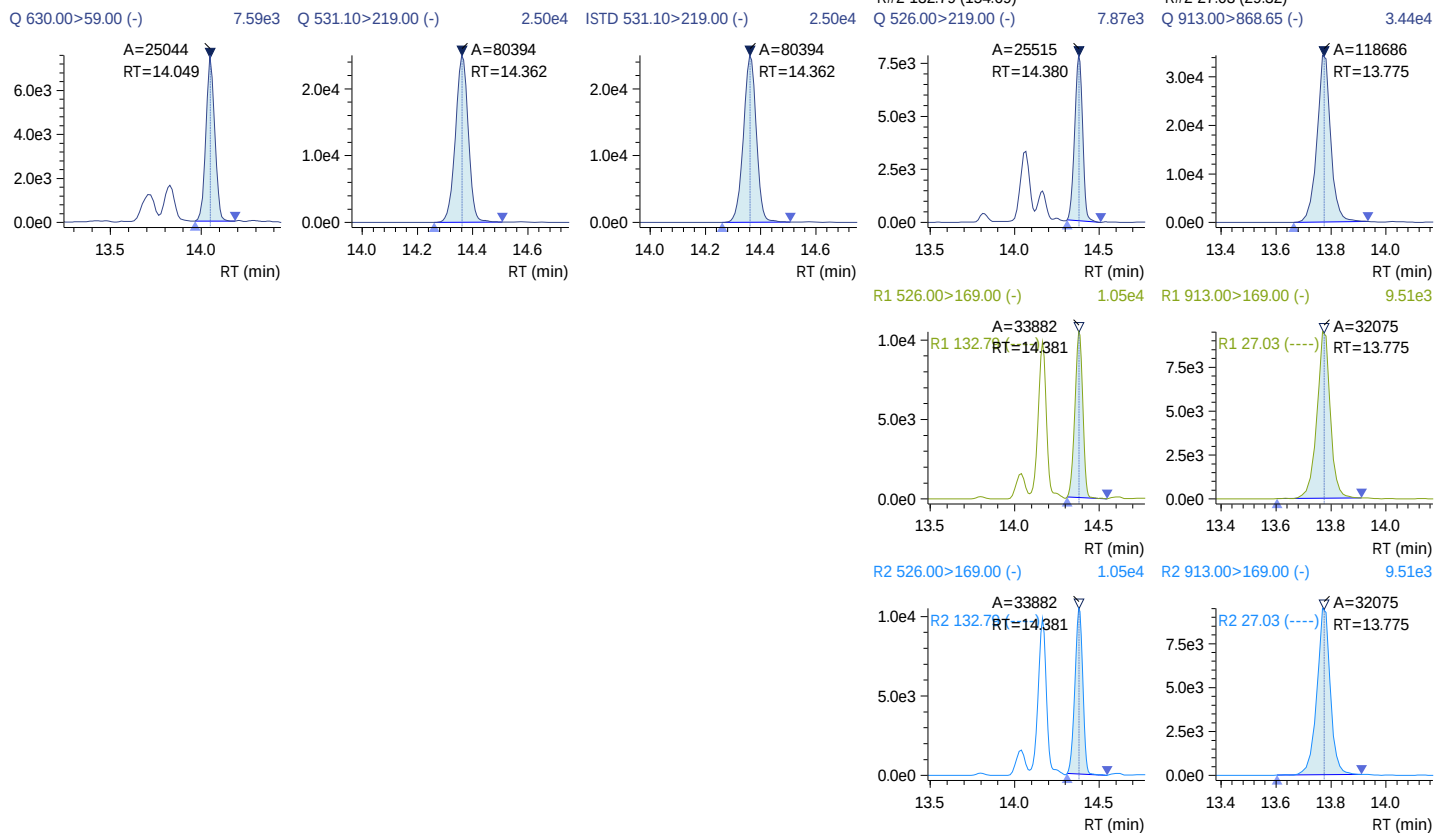
EtFOSE
Conc. 0.9287

D5-EtFOSAm
Conc. 2.3636

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. 0.9934
R#1 132.79 (154.69)
R#2 132.79 (154.69)

PFODA
Conc. 0.9891
R#1 27.03 (29.32)
R#2 27.03 (29.32)





240118_011

Sample ID: 1633 ICAL 5.0PPB
Date Acquired: 1/18/2024 4:00:49 PM
Acquired by: System Administrator
Data File: 240118_011
Vial: 6 | Inj. Volume: 10.0000uL | Tray: 1

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	1324886	----	----	----	----	----	----	
13C4-PFBA_IS	216.80>171.90	----	1324886	----	----	----	----	----	----	
13C3-PFBA_IS	216.00>172.00	----	590832	----	----	----	----	----	----	
PFBA	212.80>169.05	----	553236	----	----	----	----	----	----	
PFMPA	229.00>84.90	----	437210	----	----	----	----	----	----	
3_3 FTCA	241.00>177.10	241.00>117.00	168591	238810	141.65	141.17	238810	141.65	141.17	
13C5-PFPeA	268.30>223.00	----	138295	----	----	----	----	----	----	
13C5-PFPeA_IS	268.30>223.00	----	138295	----	----	----	----	----	----	
PFPeA	263.00>219.00	----	832768	----	----	----	----	----	----	
PFMBA	279.00>84.95	----	610219	----	----	----	----	----	----	
13C2-4_2 FTS	329.10>80.90	----	155760	----	----	----	----	----	----	
13C2-4_2 FTS_IS	329.10>80.90	----	155760	----	----	----	----	----	----	
4_2 FTS	327.10>307.00	327.10>80.90	351191	107991	30.75	29.06	107991	30.75	29.06	
13C3-PFBS_IS	302.10>79.90	----	331653	----	----	----	----	----	----	
PFBS	298.70>79.90	298.70>98.80	730019	337190	46.19	46.72	337190	46.19	46.72	
13C3-PFBS	302.10>79.90	----	331653	----	----	----	----	----	----	
NFDHA	295.00>201.00	295.00>84.90	707390	259381	36.67	40.25	259381	36.67	40.25	
13C5-PFHxA	318.00>273.00	----	663242	----	----	----	----	----	----	
13C5-PFHxA_IS	318.00>273.00	----	663242	----	----	----	----	----	----	
13C2-PFHxA_IS	315.10>270.00	----	618889	----	----	----	----	----	----	
PFHxA	313.00>269.00	----	1080271	----	----	----	----	----	----	
PFEESA	314.80>135.00	314.80>82.90	3161183	182008	5.76	6.11	182008	5.76	6.11	
13C3-HFPO-DA	286.90>168.90	----	618248	----	----	----	----	----	----	
13C3-HFPO-DA_IS	286.90>168.90	----	618248	----	----	----	----	----	----	
HFPO-DA	284.90>168.90	284.90>184.90	328917	209408	63.67	65.61	209408	63.67	65.61	
5_3 FTCA	341.00>237.05	341.00>217.00	876794	1419531	161.90	158.86	1419531	161.90	158.86	
PFPeS	349.10>79.90	349.10>98.80	602720	330887	54.90	55.80	330887	54.90	55.80	
13C4-PFHpA	367.10>322.00	----	612010	----	----	----	----	----	----	
13C4-PFHpA_IS	367.10>322.00	----	612010	----	----	----	----	----	----	
PFHpA	363.10>319.00	363.10>169.00	1261564	283669	22.49	21.50	283669	22.49	21.50	
DONA	376.90>250.90	376.90>84.80	2183982	645638	29.56	29.66	645638	29.56	29.66	
13C2-6_2 FTS_IS	429.10>80.90	----	138496	----	----	----	----	----	----	
13C2-6_2 FTS	429.10>80.90	----	138496	----	----	----	----	----	----	
6_2 FTS	427.10>407.00	427.10>80.90	308099	128023	41.55	41.15	128023	41.55	41.15	
13C4-PFOA_IS	417.10>172.00	----	42891	----	----	----	----	----	----	
13C8-PFOA_IS	421.10>376.00	----	566184	----	----	----	----	----	----	

J:\LCMS08\Data\240118_1633_Curve\240118_1633_Curve.damIp

Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240118_011 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	566184	----	----	----	----	----	----	----
PFOA	413.00>369.00	413.00>169.00	841329	266398	31.66	31.89	266398	31.66	31.89	
13C3-PFHxS	402.10>79.90	----	237331	----	----	----	----	----	----	----
13C3-PFHxS_IS	402.10>79.90	----	237331	----	----	----	----	----	----	----
PFHxS	398.70>79.90	398.70>98.90	576452	315516	54.73	56.62	315516	54.73	56.62	
18O2-PFHxS_IS	403.00>83.90	----	232307	----	----	----	----	----	----	----
13C9-PFNA_IS	472.10>427.00	----	308940	----	----	----	----	----	----	----
13C9-PFNA	472.10>427.00	----	308940	----	----	----	----	----	----	----
13C5-PFNA_IS	468.00>423.00	----	311099	----	----	----	----	----	----	----
PFNA	463.00>419.00	463.00>219.00	862607	204209	23.67	23.17	204209	23.67	23.17	
PFHpS	449.00>79.90	449.00>98.80	420346	245566	58.42	56.96	245566	58.42	56.96	
7_3 FTCA	441.00>317.00	441.00>336.90	1288455	1489073	115.57	117.47	1489073	115.57	117.47	
13C2-8_2-FTS	529.10>80.90	----	117777	----	----	----	----	----	----	----
13C2-8_2-FTS_IS	529.10>80.90	----	117777	----	----	----	----	----	----	----
8_2 FTS	527.10>506.95	527.10>80.80	255045	111581	43.75	49.59	111581	43.75	49.59	
13C6-PFDA_IS	519.10>474.10	----	233845	----	----	----	----	----	----	----
13C6-PFDA	519.10>474.10	----	233845	----	----	----	----	----	----	----
13C2-PFDA_IS	515.10>470.10	----	237831	----	----	----	----	----	----	----
PFDA	512.90>469.00	512.90>219.00	1130874	213510	18.88	19.00	213510	18.88	19.00	
D3-NMeFOSAA_IS	573.20>419.00	----	235854	----	----	----	----	----	----	----
D3-NMeFOSAA	573.20>419.00	----	235854	----	----	----	----	----	----	----
13C8-PFOS_IS	507.10>98.90	----	116018	----	----	----	----	----	----	----
13C8-PFOS	507.10>98.90	----	116018	----	----	----	----	----	----	----
13C4-PFOS_IS	502.80>79.90	----	293425	----	----	----	----	----	----	----
PFOS	498.90>79.90	498.90>98.80	499726	258791	51.79	52.47	258791	51.79	52.47	
NMeFOSAA	570.10>419.00	570.10>483.00	296556	176925	59.66	55.15	176925	59.66	55.15	
D5-NetFOSAA_IS	589.20>419.00	----	279078	----	----	----	----	----	----	----
D5-NetFOSAA	589.20>419.00	----	279078	----	----	----	----	----	----	----
NetFOSAA	584.20>419.10	584.20>526.00	180916	145890	80.64	81.95	145890	80.64	81.95	
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	2287642	723748	31.64	32.76	723748	31.64	32.76	
PFUnDA	563.10>519.00	563.10>269.10	933949	126809	13.58	13.12	126809	13.58	13.12	
13C7-PFUnDA_IS	570.00>525.10	----	255491	----	----	----	----	----	----	----
13C7-PFUnDA	570.00>525.10	----	255491	----	----	----	----	----	----	----
PFNS	548.80>79.90	548.80>98.80	404394	252578	62.46	65.22	252578	62.46	65.22	
10_2 FTS	626.80>607.05	626.80>81.00	285490	105628	37.00	37.13	105628	37.00	37.13	
13C2-PFDOA_IS	615.10>570.00	----	312907	----	----	----	----	----	----	----
13C2-PFDOA	615.10>570.00	----	312907	----	----	----	----	----	----	----
PFDOA	613.10>569.00	613.10>319.00	872492	95557	10.95	11.29	95557	10.95	11.29	
PFDS	599.00>79.90	599.00>98.80	357453	217025	60.71	60.18	217025	60.71	60.18	
PFTDA	663.00>619.00	663.00>168.90	938247	170109	18.13	17.64	170109	18.13	17.64	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240118_011 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	1651817	594103	35.97	36.44	594103	35.97	36.44	
PFOSAm	498.10>77.90	----	919814	----	----	----	----	----	----	
13C8-PFOSAm	506.10>77.80	----	290803	----	----	----	----	----	----	
13C8-PFOSAm_IS	506.10>77.80	----	290803	----	----	----	----	----	----	
PFTDA	713.10>669.00	713.10>168.90	713428	160588	22.51	22.96	160588	22.51	22.96	
13C2-PFTDA	715.20>670.00	----	130195	----	----	----	----	----	----	
13C2-PFTDA_IS	715.20>670.00	----	130195	----	----	----	----	----	----	
PFDoS	699.10>79.90	699.10>98.80	209550	140972	67.27	67.40	140972	67.27	67.40	
D7-MeFOSE_IS	623.20>58.90	----	704676	----	----	----	----	----	----	
D7-MeFOSE	623.20>58.90	----	704676	----	----	----	----	----	----	
MeFOSE	616.10>59.00	----	121820	----	----	----	----	----	----	
13C2-PFHxDA_IS	815.00>770.05	----	512196	----	----	----	----	----	----	
13C2-PFHxDA	815.00>770.05	----	512196	----	----	----	----	----	----	
PFHxDA	813.00>768.95	813.00>218.95	1043205	146068	14.00	13.90	146068	14.00	13.90	
D3-MeFOSA	515.00>219.00	----	58592	----	----	----	----	----	----	
D3-MeFOSA_IS	515.00>219.00	----	58592	----	----	----	----	----	----	
MeFOSA	511.90>219.00	511.90>169.00	210164	326643	155.42	140.79	326643	155.42	140.79	
D9-EtFOSE_IS	639.20>58.90	----	732770	----	----	----	----	----	----	
D9-EtFOSE	639.20>58.90	----	732770	----	----	----	----	----	----	
EtFOSE	630.00>59.00	----	187022	----	----	----	----	----	----	
D5-EtFOSAm	531.10>219.00	----	77332	----	----	----	----	----	----	
D5-EtFOSAm_IS	531.10>219.00	----	77332	----	----	----	----	----	----	
EtFOSAm	526.00>219.00	526.00>169.00	225568	343289	152.19	163.90	343289	152.19	163.90	
PFODA	913.00>868.65	913.00>169.00	513994	128651	25.03	27.03	128651	25.03	27.03	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
 IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240118_011

Sample ID: 1633 ICAL 5.0PPB
Date Acquired: 1/18/2024 4:00:49 PM
Acquired by: System Administrator
Data File: 240118_011
Vial: 6 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Std. Conc.	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.413	-0.001	0.000	1324886	590832	13C3-PFBA_IS	10.0000	10.0323	ng/mL	
13C4-PFBA_IS	Auto	1.413	-0.001	----	1324886	1324886	----	10.0000	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.413	-0.002	----	590832	590832	----	5.0000	5.0000	ng/mL	
PFBA	Auto	1.416	0.000	0.003	553236	1324886	13C4-PFBA_IS	5.0000	4.8600	ng/mL	
PFMPA	Auto	2.432	0.000	-1.060	437210	138295	13C5-PFPeA_IS	5.0000	4.8918	ng/mL	
3_3 FTCA	Auto	3.005	0.001	-0.487	168591	138295	13C5-PFPeA_IS	50.0000	54.9751	ng/mL	
13C5-PFPeA	Auto	3.492	0.000	-1.485	138295	618889	13C2-PFHxA_IS	5.0000	4.9505	ng/mL	
13C5-PFPeA_IS	Auto	3.492	0.000	----	138295	138295	----	5.0000	5.0000	ng/mL	
PFPeA	Auto	3.495	0.000	0.003	832768	138295	13C5-PFPeA_IS	5.0000	4.6491	ng/mL	
PFMBA	Auto	4.024	-0.001	0.532	610219	138295	13C5-PFPeA_IS	5.0000	4.8193	ng/mL	
13C2-4_2 FTS	Auto	4.659	-0.002	-2.426	155760	232307	18O2-PFHxS_IS	5.0000	4.8723	ng/mL	
13C2-4_2 FTS_IS	Auto	4.659	-0.002	----	155760	155760	----	5.0000	5.0000	ng/mL	
4_2 FTS	Auto	4.659	-0.003	0.000	351191	155760	13C2-4_2 FTS_IS	4.6900	4.5841	ng/mL	
13C3-PFBS_IS	Auto	4.646	-0.001	----	331653	331653	----	2.5000	2.5000	ng/mL	
PFBS	Auto	4.646	-0.002	0.000	730019	331653	13C3-PFBS_IS	4.4400	4.3002	ng/mL	
13C3-PFBS	Auto	4.646	-0.001	-2.439	331653	232307	18O2-PFHxS_IS	2.5000	2.5157	ng/mL	
NFDHA	Auto	4.834	-0.001	-0.142	707390	663242	13C5-PFHxA_IS	5.0000	4.8072	ng/mL	
13C5-PFHxA	Auto	4.976	-0.002	-0.001	663242	618889	13C2-PFHxA_IS	2.5000	2.5428	ng/mL	
13C5-PFHxA_IS	Auto	4.976	-0.002	----	663242	663242	----	2.5000	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	4.977	-0.002	----	618889	618889	----	2.5000	2.5000	ng/mL	
PFHxA	Auto	4.977	-0.003	0.001	1080271	663242	13C5-PFHxA_IS	5.0000	4.8850	ng/mL	
PFEESA	Auto	5.321	-0.001	0.345	3161183	663242	13C5-PFHxA_IS	4.4500	4.2553	ng/mL	
13C3-HFPO-DA	Auto	5.451	-0.001	0.474	618248	618889	13C2-PFHxA_IS	10.0000	10.2048	ng/mL	
13C3-HFPO-DA_IS	Auto	5.451	-0.001	----	618248	618248	----	10.0000	10.0000	ng/mL	
HFPO-DA	Auto	5.452	-0.001	0.001	328917	618248	13C3-HFPO-DA_IS	5.0000	4.8171	ng/mL	
5_3 FTCA	Auto	5.905	-0.001	0.929	876794	663242	13C5-PFHxA_IS	50.0000	51.1086	ng/mL	
PFPeS	Auto	6.017	-0.001	-1.067	602720	237331	13C3-PFHxS_IS	4.7100	4.8360	ng/mL	
13C4-PFHpA	Auto	6.153	-0.001	1.176	612010	618889	13C2-PFHxA_IS	2.5000	2.5920	ng/mL	
13C4-PFHpA_IS	Auto	6.153	-0.001	----	612010	612010	----	2.5000	2.5000	ng/mL	
PFHpA	Auto	6.155	0.000	0.002	1261564	612010	13C4-PFHpA_IS	5.0000	4.9356	ng/mL	
DONA	Auto	6.519	-0.001	1.068	2183982	618248	13C3-HFPO-DA_IS	4.7300	4.5577	ng/mL	
13C2-6_2 FTS_IS	Auto	6.791	-0.002	----	138496	138496	----	5.0000	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.791	-0.002	-0.294	138496	232307	18O2-PFHxS_IS	5.0000	4.5805	ng/mL	
6_2 FTS	Auto	6.792	0.000	0.001	308099	138496	13C2-6_2 FTS_IS	4.7600	4.8854	ng/mL	
13C4-PFOA_IS	Auto	7.106	-0.001	----	42891	42891	----	2.5000	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.106	-0.001	----	566184	566184	----	2.5000	2.5000	ng/mL	
13C8-PFOA	Auto	7.106	-0.001	0.000	566184	42891	13C4-PFOA_IS	2.5000	2.3618	ng/mL	
PFOA	Auto	7.110	0.000	0.004	841329	566184	13C8-PFOA_IS	5.0000	5.7139	ng/mL	
13C3-PFHxS	Auto	7.084	-0.002	-0.001	237331	232307	18O2-PFHxS_IS	2.5000	2.3802	ng/mL	
13C3-PFHxS_IS	Auto	7.084	-0.002	----	237331	237331	----	2.5000	2.5000	ng/mL	
PFHxS	M	7.084	0.000	0.000	576452	237331	13C3-PFHxS_IS	4.5700	5.0413	ng/mL	
18O2-PFHxS_IS	Auto	7.085	-0.001	----	232307	232307	----	2.5000	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.955	-0.001	----	308940	308940	----	1.2500	1.2500	ng/mL	
13C9-PFNA	Auto	7.955	-0.001	0.000	308940	311099	13C5-PFNA_IS	1.2500	1.2683	ng/mL	
13C5-PFNA_IS	Auto	7.955	-0.001	----	311099	311099	----	1.2500	1.2500	ng/mL	
PFNA	Auto	7.956	-0.001	0.001	862607	308940	13C9-PFNA_IS	5.0000	4.8752	ng/mL	
PFHpS	Auto	8.003	-0.001	-0.815	420346	116018	13C8-PFOS_IS	4.7700	4.6419	ng/mL	
7_3 FTCA	Auto	7.952	-0.002	2.976	1288455	663242	13C5-PFHxA_IS	50.0000	56.2589	ng/mL	
13C2-8_2-FTS	Auto	8.408	-0.001	1.323	117777	232307	18O2-PFHxS_IS	5.0000	4.7420	ng/mL	
13C2-8_2-FTS_IS	Auto	8.408	-0.001	----	117777	117777	----	5.0000	5.0000	ng/mL	
8_2 FTS	Auto	8.407	-0.003	-0.001	255045	117777	13C2-8_2-FTS_IS	4.8000	5.0395	ng/mL	
13C6-PFDA_IS	Auto	8.718	-0.002	----	233845	233845	----	1.2500	1.2500	ng/mL	
13C6-PFDA	Auto	8.718	-0.002	-0.001	233845	237831	13C2-PFDA_IS	1.2500	1.2221	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_011 (continued)

(Table continued from previous page)

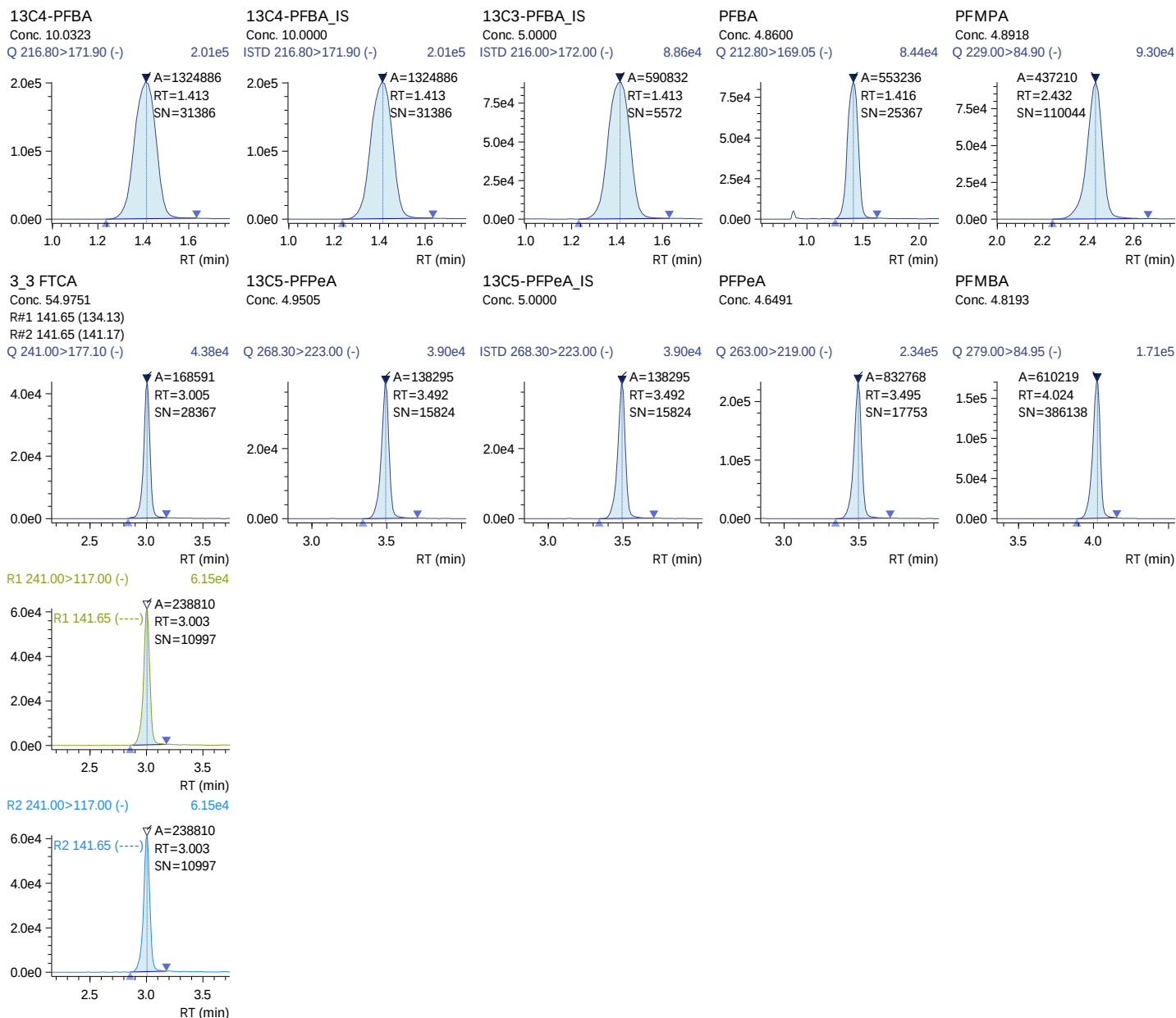
Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Std. Conc.	Conc.	Unit	Flag ID
13C2-PFDA_IS	Auto	8.719	-0.002	----	237831	237831	----	1.2500	1.2500	ng/mL	
PFDA	Auto	8.720	-0.001	0.002	1130874	233845	13C6-PFDA_IS	5.0000	5.0481	ng/mL	
D3-NMeFOSAA_IS	Auto	8.853	-0.002	----	235854	235854	----	5.0000	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.853	-0.002	0.035	235854	293425	13C4-PFOS_IS	5.0000	4.6313	ng/mL	
13C8-PFOS_IS	Auto	8.818	-0.002	----	116018	116018	----	2.5000	2.5000	ng/mL	
13C8-PFOS	Auto	8.818	-0.002	0.000	116018	293425	13C4-PFOS_IS	2.5000	2.3708	ng/mL	
13C4-PFOS_IS	Auto	8.818	-0.002	----	293425	293425	----	2.5000	2.5000	ng/mL	
PFOS	M	8.819	-0.003	0.001	499726	116018	13C8-PFOS_IS	4.6400	4.1413	ng/mL	
NMeFOSAA	M	8.859	-0.002	0.006	296556	235854	D3-NMeFOSAA_IS	5.0000	4.6340	ng/mL	
D5-NetFOSAA_IS	Auto	9.185	-0.001	----	279078	279078	----	5.0000	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.185	-0.001	0.367	279078	293425	13C4-PFOS_IS	5.0000	4.5805	ng/mL	
NetFOSAA	M	9.194	-0.001	0.009	180916	279078	D5-NetFOSAA_IS	5.0000	4.8539	ng/mL	
9-CI-PF3ONS	Auto	9.383	-0.001	3.932	2287642	618248	13C3-HFPO-DA_IS	4.6700	4.4882	ng/mL	
PFUnDA	Auto	9.445	-0.002	0.002	933949	255491	13C7-PFUnDA_IS	5.0000	5.0189	ng/mL	
13C7-PFUnDA_IS	Auto	9.443	-0.002	----	255491	255491	----	1.2500	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.443	-0.002	0.724	255491	237831	13C2-PFDA_IS	1.2500	1.1194	ng/mL	
PFNS	Auto	9.582	-0.002	0.764	404394	116018	13C8-PFOS_IS	4.8100	4.5876	ng/mL	
10_2_FTS	Auto	9.817	-0.002	1.409	285490	117777	13C2-8_2-FTS_IS	4.8200	4.6364	ng/mL	
13C2-PFDOA_IS	Auto	10.131	-0.002	----	312907	312907	----	1.2500	1.2500	ng/mL	
13C2-PFDOA	Auto	10.131	-0.002	1.412	312907	237831	13C2-PFDA_IS	1.2500	1.1933	ng/mL	
PFDOA	Auto	10.133	-0.001	0.002	872492	312907	13C2-PFDOA_IS	5.0000	4.9248	ng/mL	
PFDS	Auto	10.295	-0.001	1.477	357453	116018	13C8-PFOS_IS	4.8300	4.6593	ng/mL	
PFTDA	Auto	10.791	-0.001	-0.632	938247	130195	13C2-PFTDA_IS	5.0000	5.0773	ng/mL	
11-CI-PF3OUdS	Auto	10.805	-0.001	5.354	1651817	618248	13C3-HFPO-DA_IS	4.7200	4.8001	ng/mL	
PFOSAm	M	11.163	-0.001	-0.002	919814	290803	13C8-PFOSAm_IS	10.0000	9.5963	ng/mL	
13C8-PFOSAm	Auto	11.165	0.000	2.347	290803	293425	13C4-PFOS_IS	2.5000	2.3346	ng/mL	
13C8-PFOSAm_IS	Auto	11.165	0.000	----	290803	290803	----	2.5000	2.5000	ng/mL	
PFTDA	Auto	11.424	-0.001	0.001	713428	130195	13C2-PFTDA_IS	5.0000	5.0717	ng/mL	
13C2-PFTDA	Auto	11.423	-0.001	2.704	130195	237831	13C2-PFDA_IS	1.2500	1.1500	ng/mL	
13C2-PFTDA_IS	Auto	11.423	-0.001	----	130195	130195	----	1.2500	1.2500	ng/mL	
PFDoS	Auto	11.621	-0.001	2.803	209550	116018	13C8-PFOS_IS	4.8500	4.5038	ng/mL	
D7-MeFOSE_IS	Auto	13.378	0.001	----	704676	704676	----	25.0000	25.0000	ng/mL	
D7-MeFOSE	Auto	13.378	0.001	4.560	704676	293425	13C4-PFOS_IS	25.0000	22.9454	ng/mL	
MeFOSE	M	13.415	0.002	0.037	121820	704676	D7-MeFOSE_IS	5.0000	4.7073	ng/mL	
13C2-PFHXA_IS	Auto	12.638	-0.003	----	512196	512196	----	2.5000	2.5000	ng/mL	
13C2-PFHXA	Auto	12.638	-0.003	3.919	512196	237831	13C2-PFDA_IS	2.5000	2.3185	ng/mL	
PFHXDA	Auto	12.639	-0.003	0.001	1043205	512196	13C2-PFHXA_IS	5.0000	4.9396	ng/mL	
D3-MeFOSA	Auto	13.686	0.001	4.868	58592	293425	13C4-PFOS_IS	2.5000	2.3357	ng/mL	
D3-MeFOSA_IS	Auto	13.686	0.001	----	58592	58592	----	2.5000	2.5000	ng/mL	
MeFOSA	M	13.695	0.001	0.009	210164	58592	D3-MeFOSA_IS	5.0000	4.9759	ng/mL	
D9-EtFOSE_IS	Auto	14.008	0.002	----	732770	732770	----	25.0000	25.0000	ng/mL	
D9-EtFOSE	Auto	14.008	0.002	5.190	732770	293425	13C4-PFOS_IS	25.0000	23.4925	ng/mL	
EtFOSE	M	14.051	0.003	0.043	187022	732770	D9-EtFOSE_IS	5.0000	4.8509	ng/mL	
D5-EtFOSAm	Auto	14.363	0.001	5.545	77332	293425	13C4-PFOS_IS	2.5000	2.3154	ng/mL	
D5-EtFOSAm_IS	Auto	14.363	0.001	----	77332	77332	----	2.5000	2.5000	ng/mL	
EtFOSAm	M	14.382	0.002	0.019	225568	77332	D5-EtFOSAm_IS	5.0000	5.0104	ng/mL	
PFODA	Auto	13.777	0.002	1.139	513994	512196	13C2-PFHXA_IS	5.0000	4.4377	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_011 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_011 (continued)

13C2-4_2 FTS
Conc. 4.8723

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. 4.5841
R#1 30.75 (34.14)
R#2 30.75 (29.06)

13C3-PFBS_IS
Conc. 2.5000

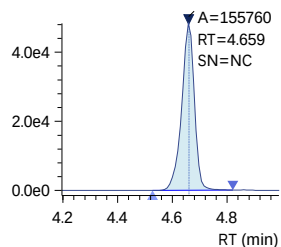
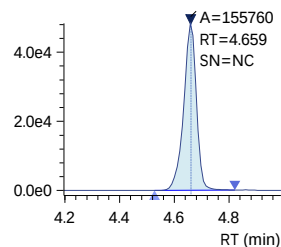
PFBS
Conc. 4.3002
R#1 46.19 (47.53)
R#2 46.19 (46.72)

Q 329.10>80.90 (-)

4.84e4

ISTD 329.10>80.90 (-)

4.84e4

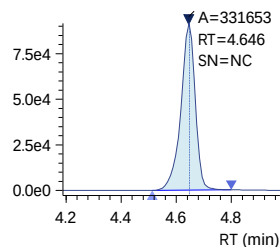
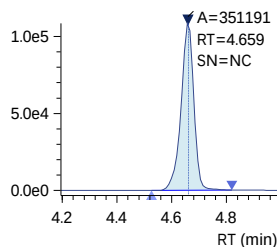


Q 327.10>307.00 (-)

1.09e5

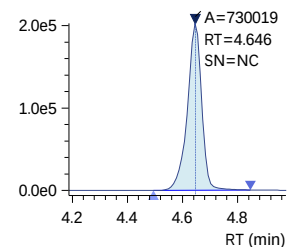
ISTD 302.10>79.90 (-)

9.16e4



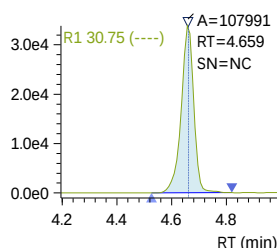
Q 298.70>79.90 (-)

2.03e5



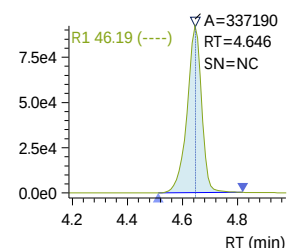
R1 327.10>80.90 (-)

3.39e4



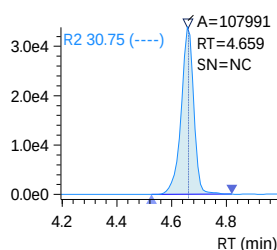
R1 298.70>98.80 (-)

9.24e4



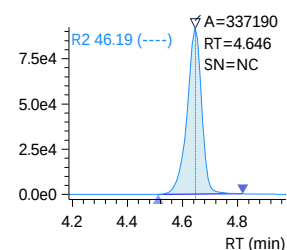
R2 327.10>80.90 (-)

3.39e4



R2 298.70>98.80 (-)

9.24e4





240118_011 (continued)

13C3-PFBS
Conc. 2.5157

NFDHA
Conc. 4.8072
R#1 36.67 (37.88)
R#2 36.67 (40.25)

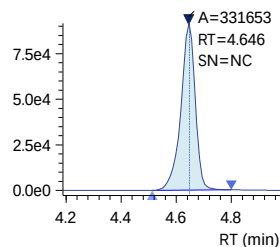
13C5-PFHxA
Conc. 2.5428

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

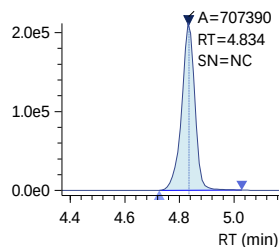
Q 302.10>79.90 (-)

9.16e4



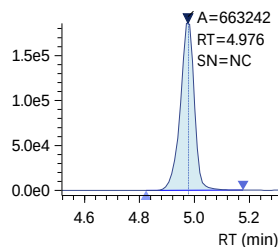
Q 295.00>201.00 (-)

2.12e5



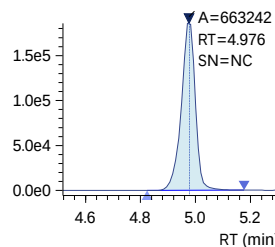
Q 318.00>273.00 (-)

1.86e5



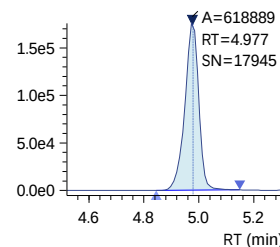
ISTD 318.00>273.00 (-)

1.86e5



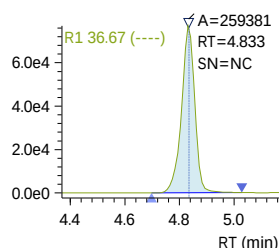
ISTD 315.10>270.00 (-)

1.76e5



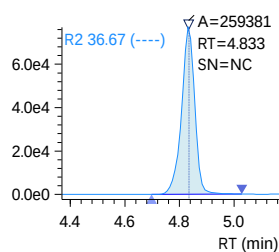
R1 295.00>84.90 (-)

7.70e4



R2 295.00>84.90 (-)

7.70e4





240118_011 (continued)

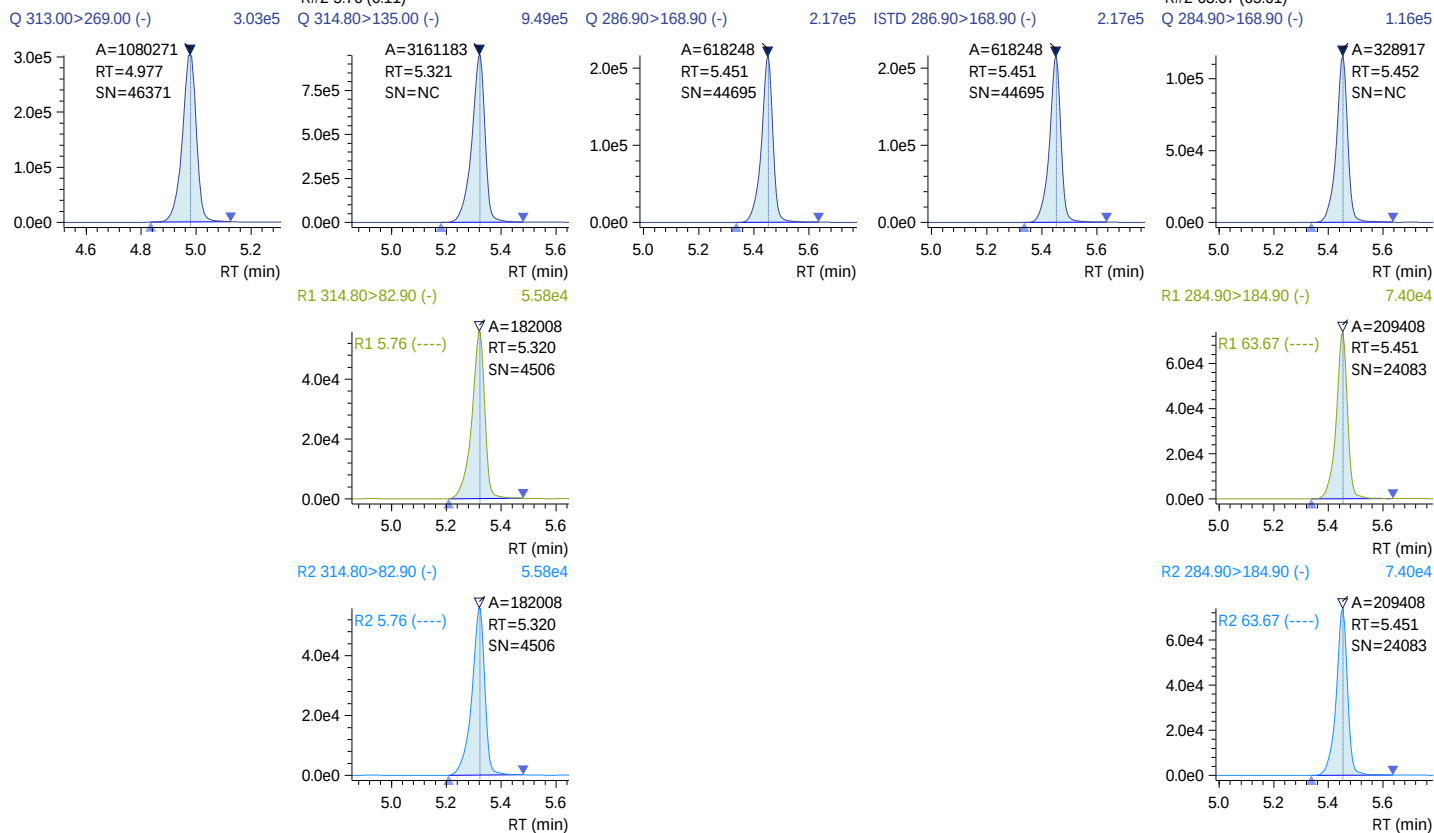
PFHxA
Conc. 4.8850

PFEESA
Conc. 4.2553
R#1 5.76 (5.88)
R#2 5.76 (6.11)

13C3-HFPO-DA
Conc. 10.2048

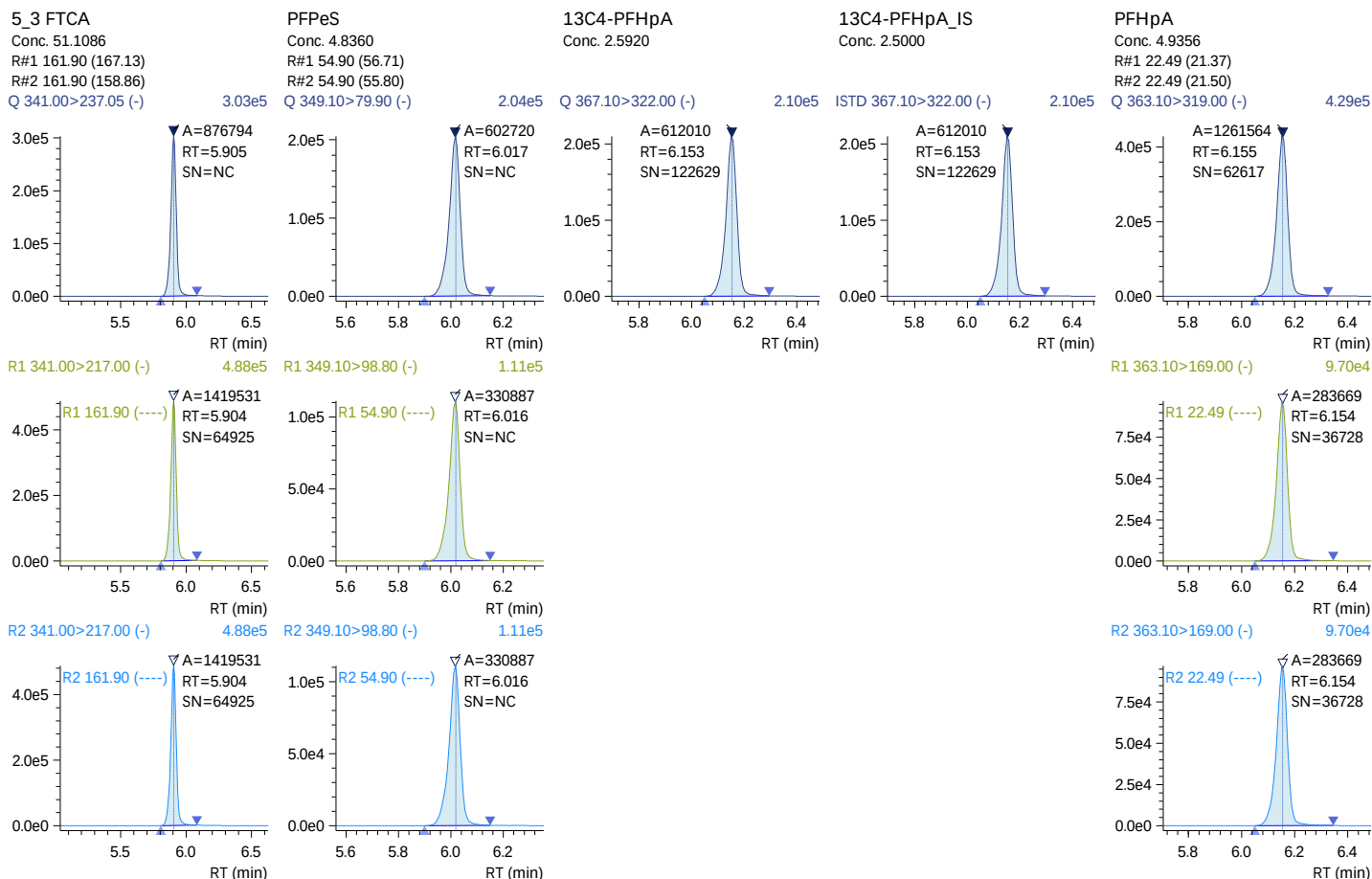
13C3-HFPO-DA_IS
Conc. 10.0000

HFPO-DA
Conc. 4.8171
R#1 63.67 (63.80)
R#2 63.67 (65.61)





240118_011 (continued)

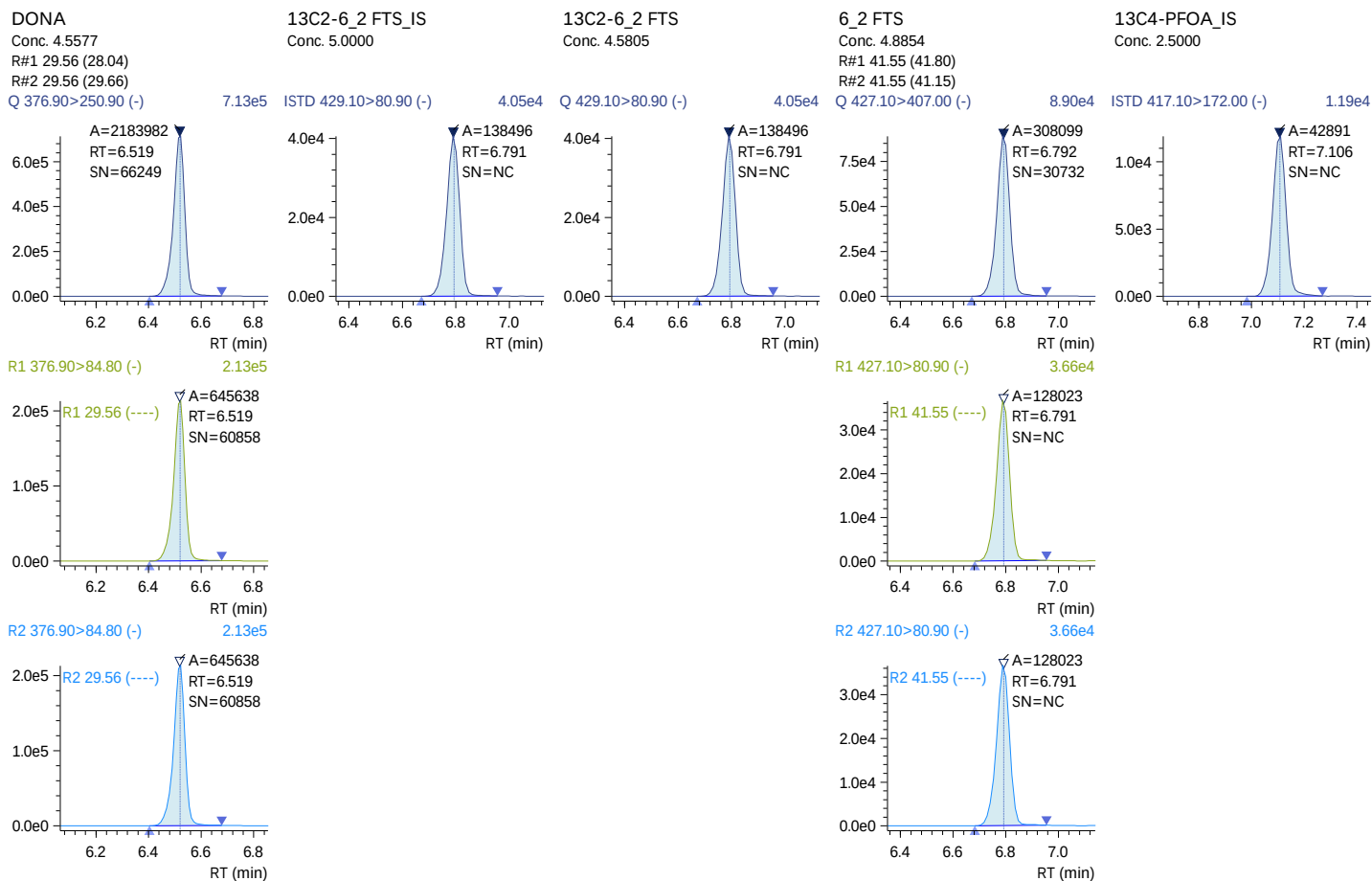


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_011 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_011 (continued)

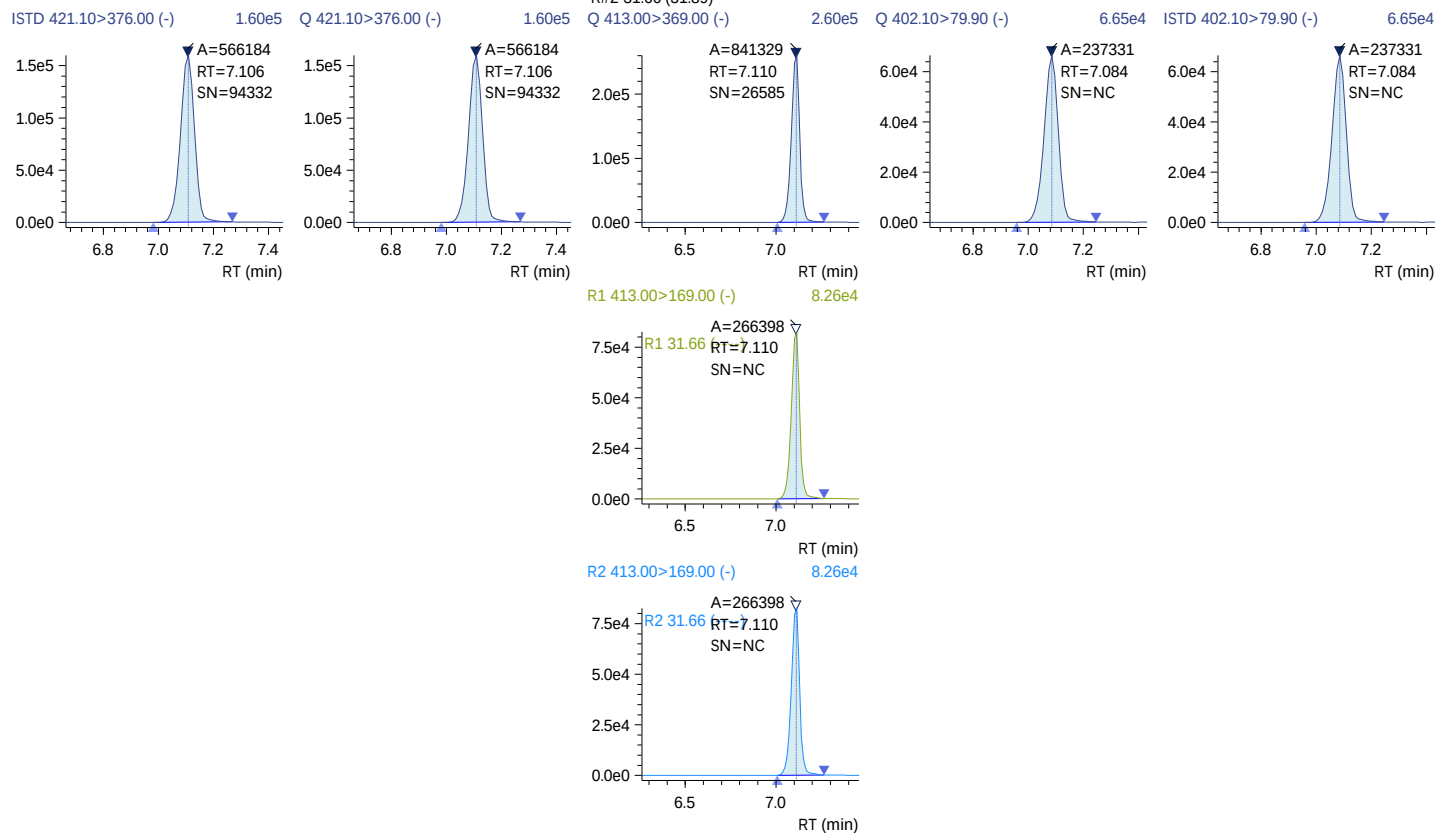
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.3618

PFOA
Conc. 5.7139
R#1 31.66 (29.05)
R#2 31.66 (31.89)

13C3-PFHxS
Conc. 2.3802

13C3-PFHxS_IS
Conc. 2.5000

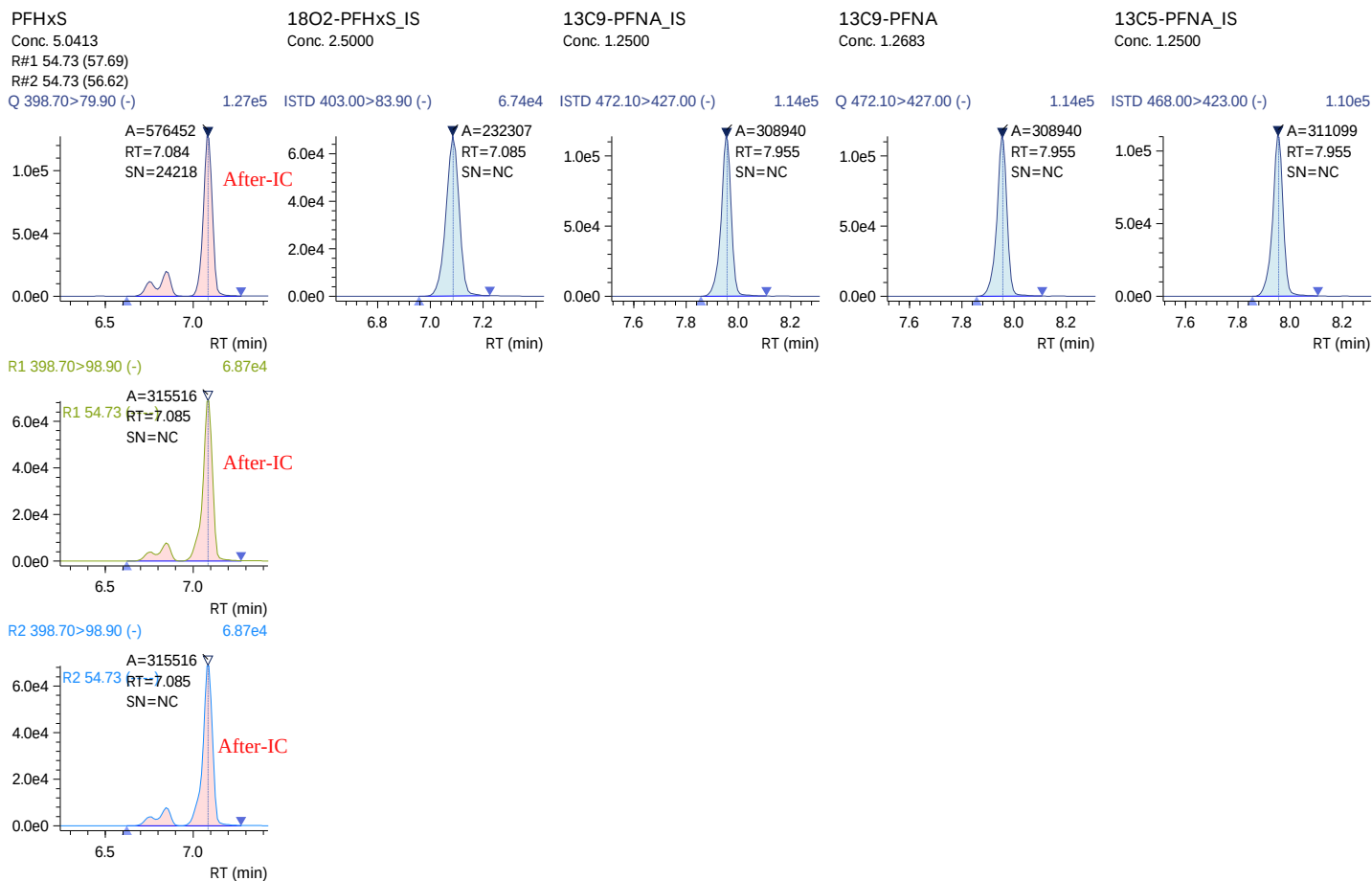


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_011 (continued)

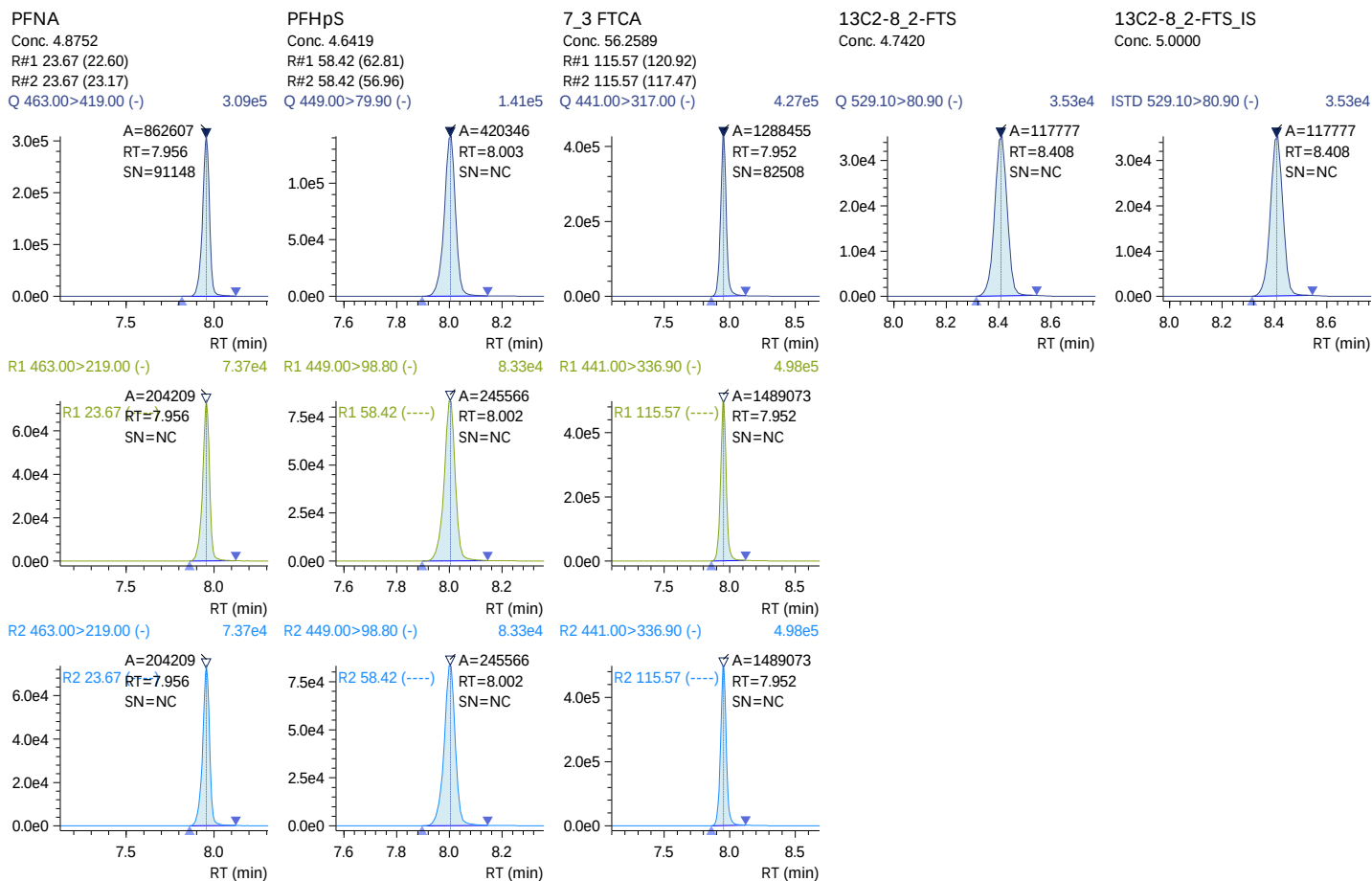


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_011 (continued)

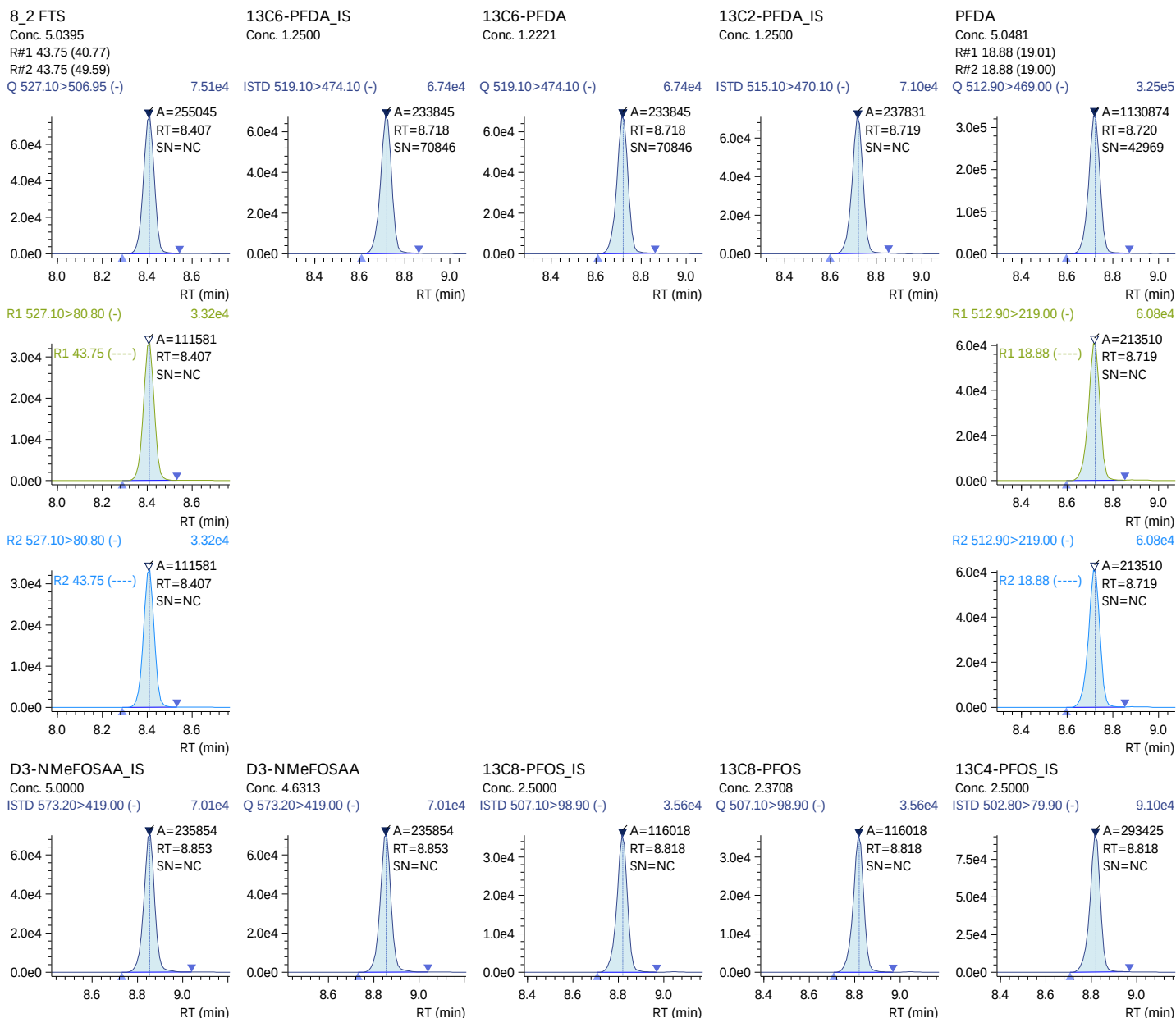


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_011 (continued)

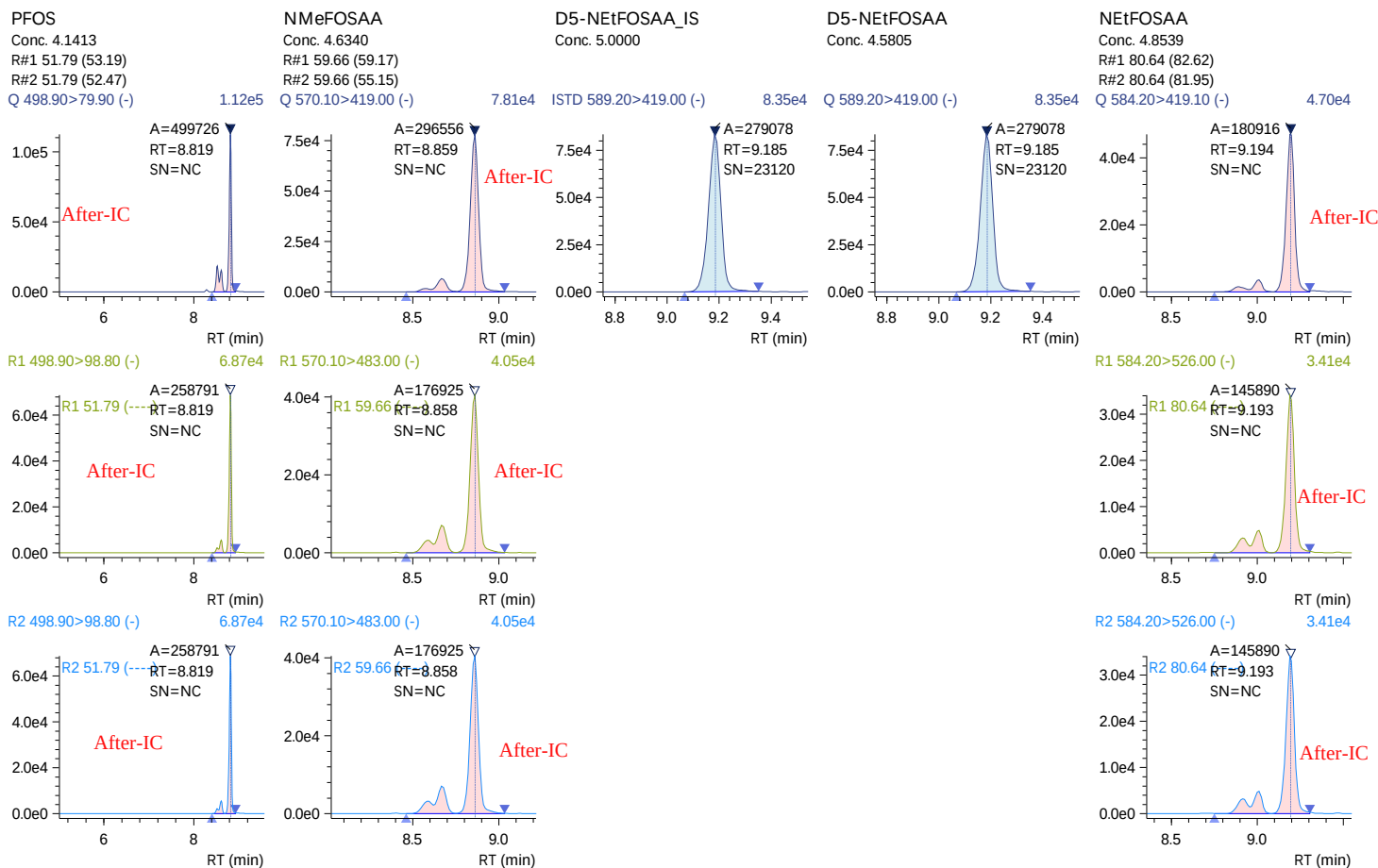


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_011 (continued)



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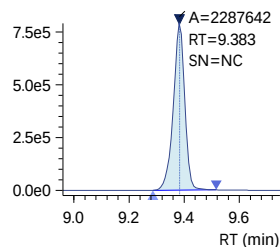
SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



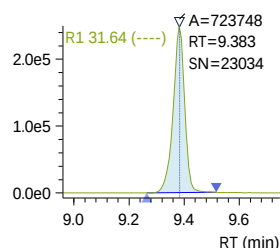
240118_011 (continued)

9-CI-PF3ONS

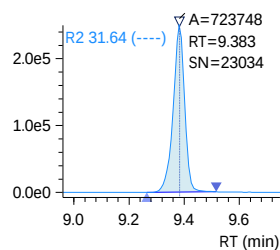
Conc. 4.4882
R#1 31.64 (31.76)
R#2 31.64 (32.76)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-) 2.50e5

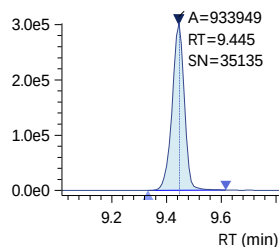


R2 532.80>353.00 (-) 2.50e5

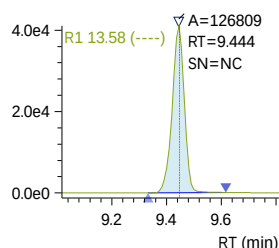


PFUnDA

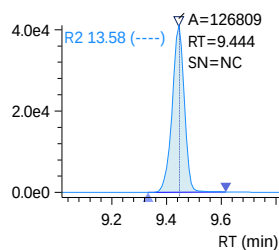
Conc. 5.0189
R#1 13.58 (12.31)
R#2 13.58 (13.12)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-) 4.11e4



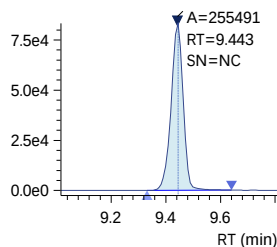
R2 563.10>269.10 (-) 4.11e4



13C7-PFUnDA_IS

Conc. 1.2500

ISTD 570.00>525.10 (-)

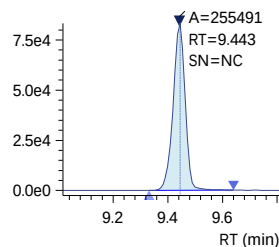


8.33e4

13C7-PFUnDA

Conc. 1.1194

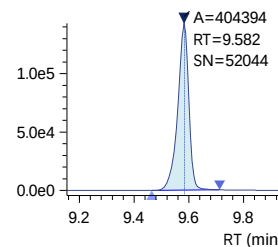
Q 570.00>525.10 (-)



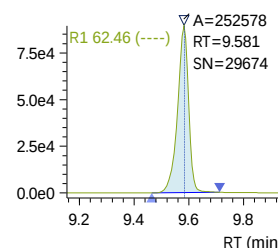
8.33e4

PFNS

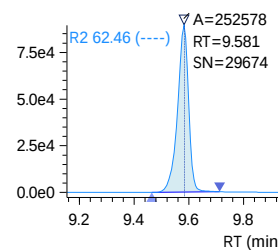
Conc. 4.5876
R#1 62.46 (63.31)
R#2 62.46 (65.22)
Q 548.80>79.90 (-)



1.43e5

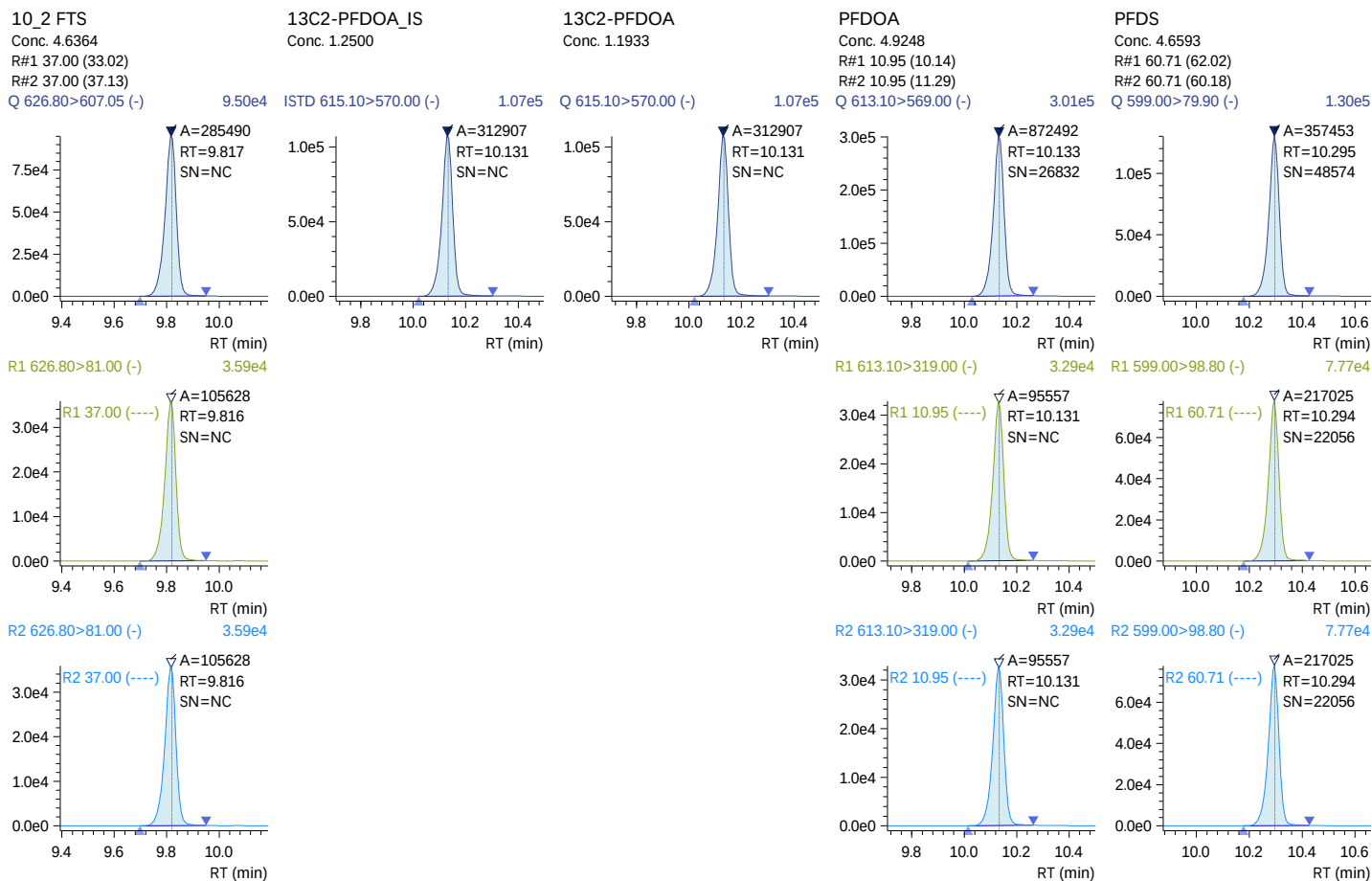


8.95e4





240118_011 (continued)

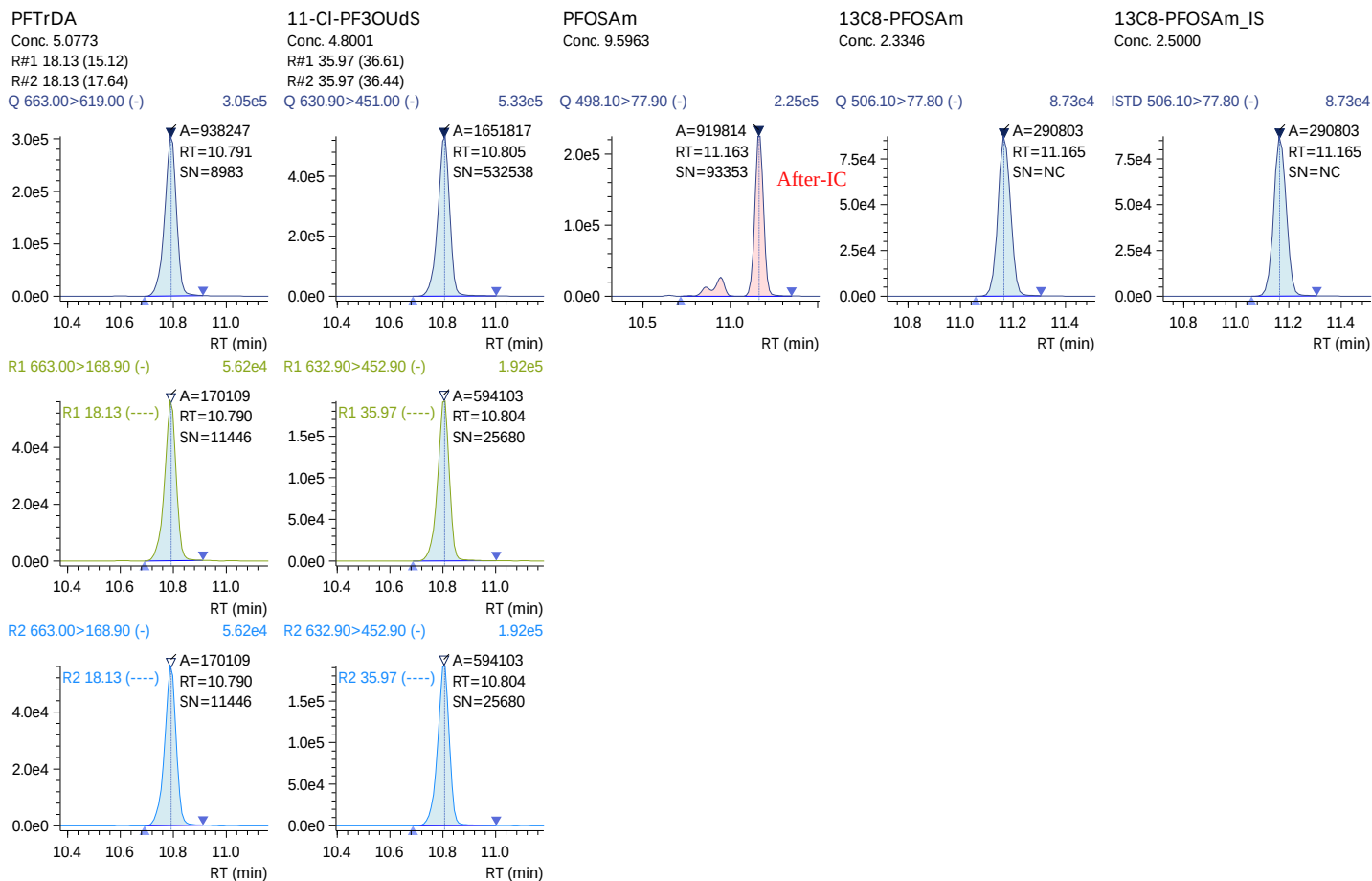


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_011 (continued)

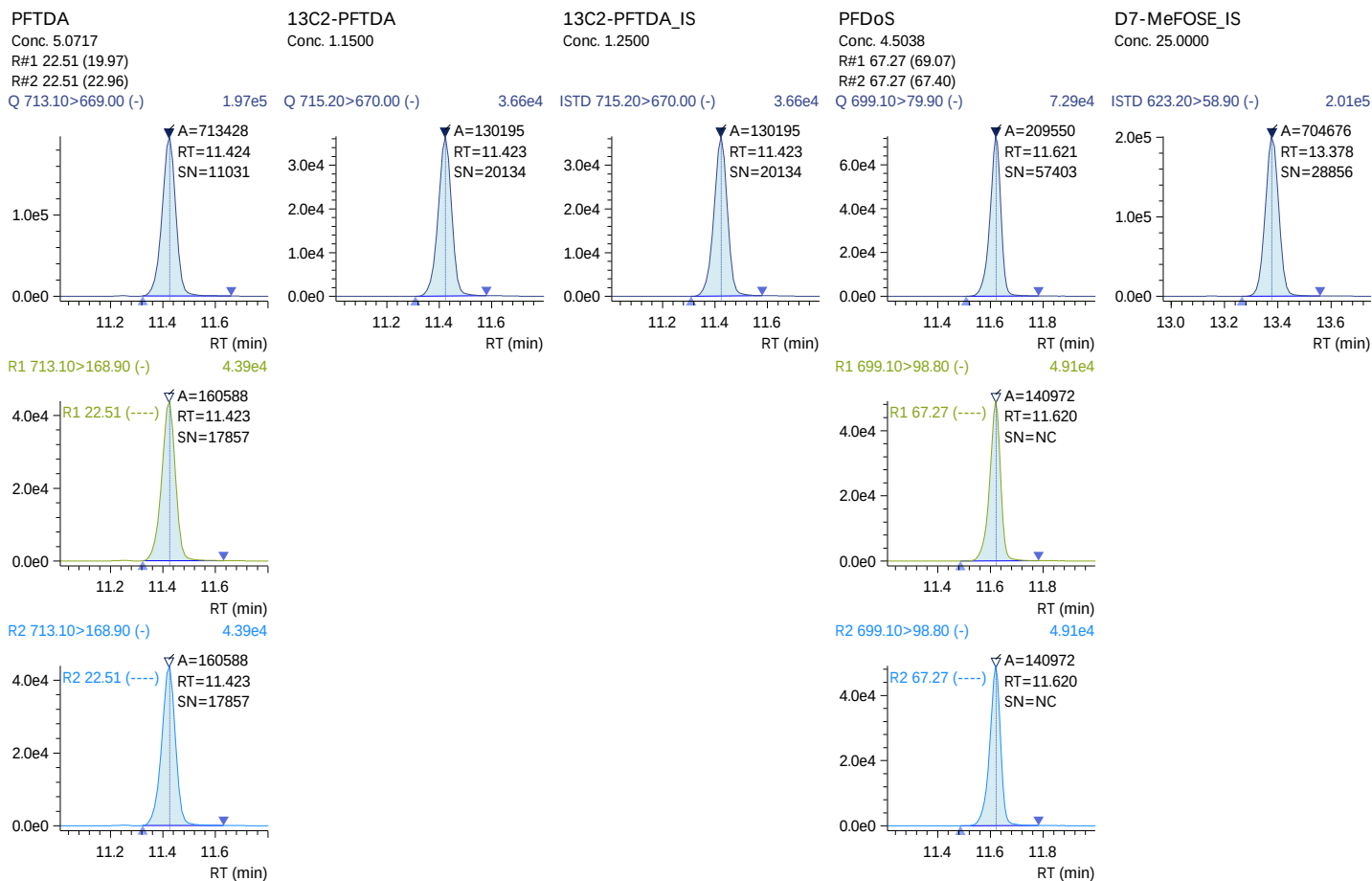


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_011 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_011 (continued)

D7-MeFOSE
Conc. 22.9454

MeFOSE
Conc. 4.7073

13C2-PFHXA_IS
Conc. 2.5000

13C2-PFHXA
Conc. 2.3185

PFHXA
Conc. 4.9396
R#1 14.00 (11.64)
R#2 14.00 (13.90)

Q 623.20>58.90 (-)

2.01e5

Q 616.10>59.00 (-)

2.15e4

ISTD 815.00>770.05 (-)

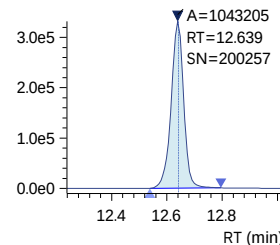
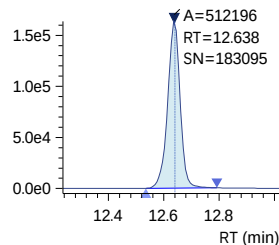
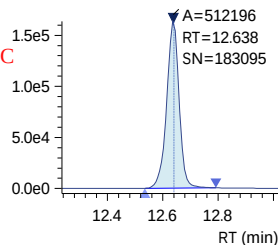
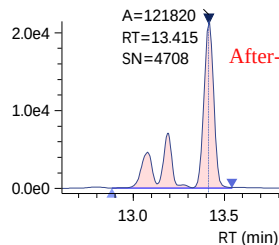
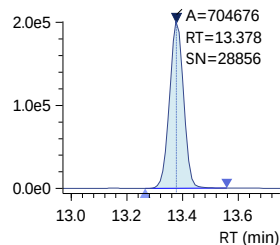
1.64e5

Q 815.00>770.05 (-)

1.64e5

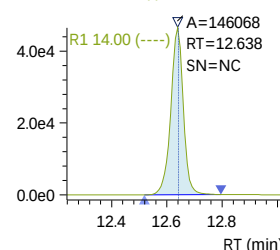
Q 813.00>768.95 (-)

3.32e5



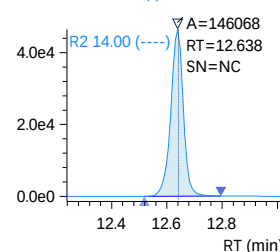
R1 813.00>218.95 (-)

4.65e4



R2 813.00>218.95 (-)

4.65e4





240118_011 (continued)

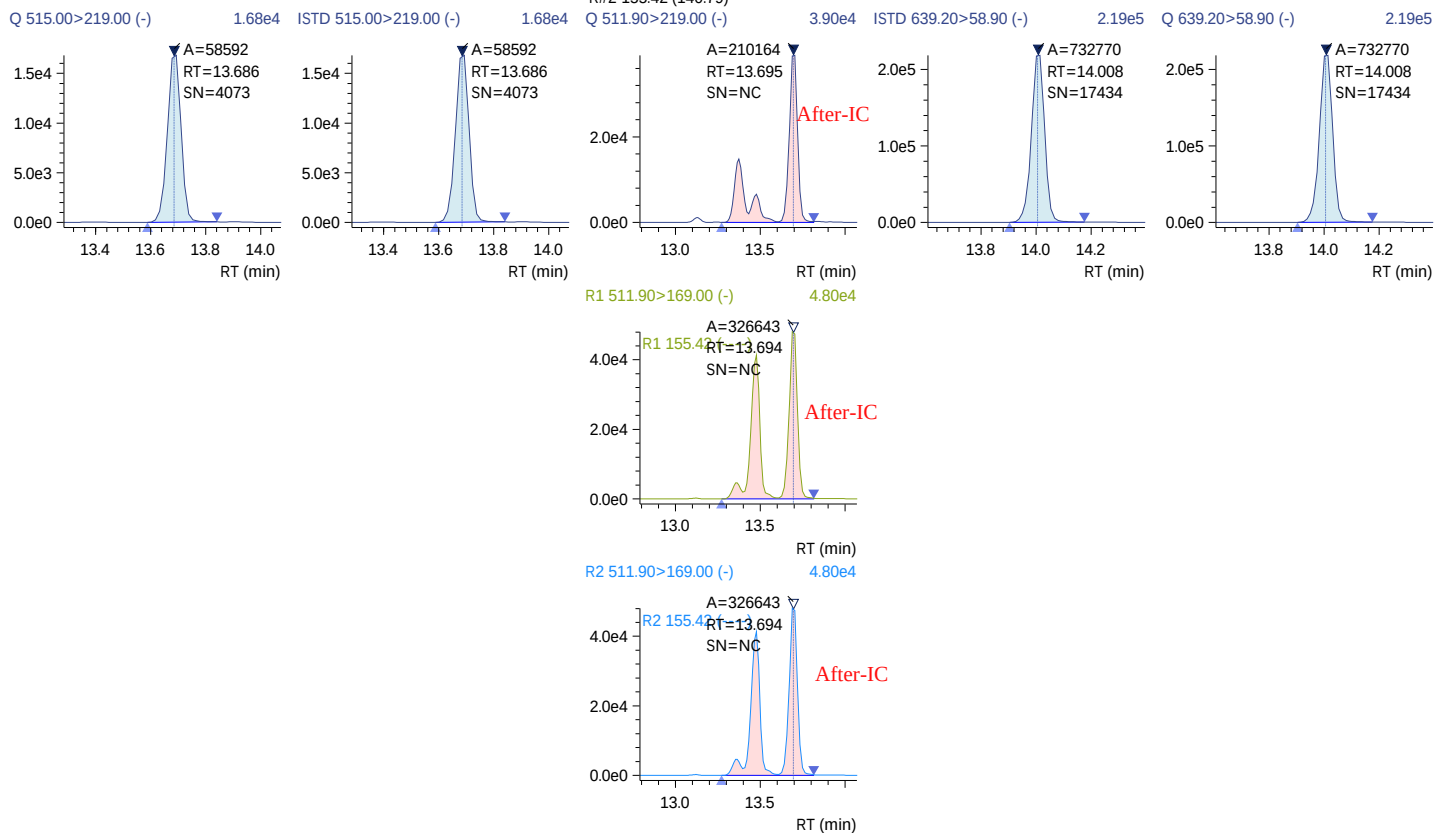
D3-MeFOSA
Conc. 2.3357

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. 4.9759
R#1 155.42 (149.05)
R#2 155.42 (140.79)

D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 23.4925





240118_011 (continued)

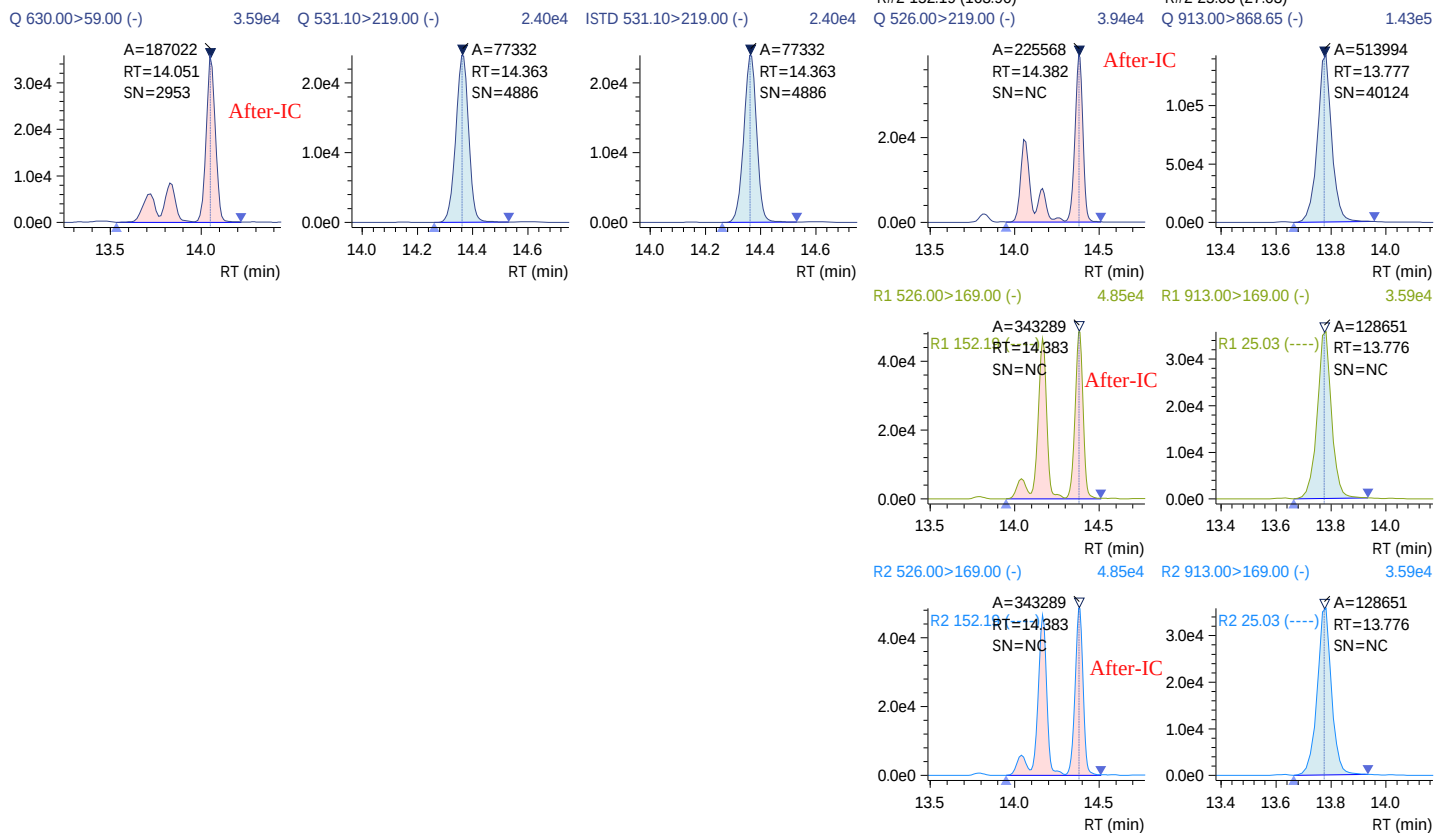
EtFOSE
Conc. 4.8509

D5-EtFOSAm
Conc. 2.3154

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. 5.0104
R#1 152.19 (154.69)
R#2 152.19 (163.90)

PFODA
Conc. 4.4377
R#1 25.03 (29.32)
R#2 25.03 (27.03)



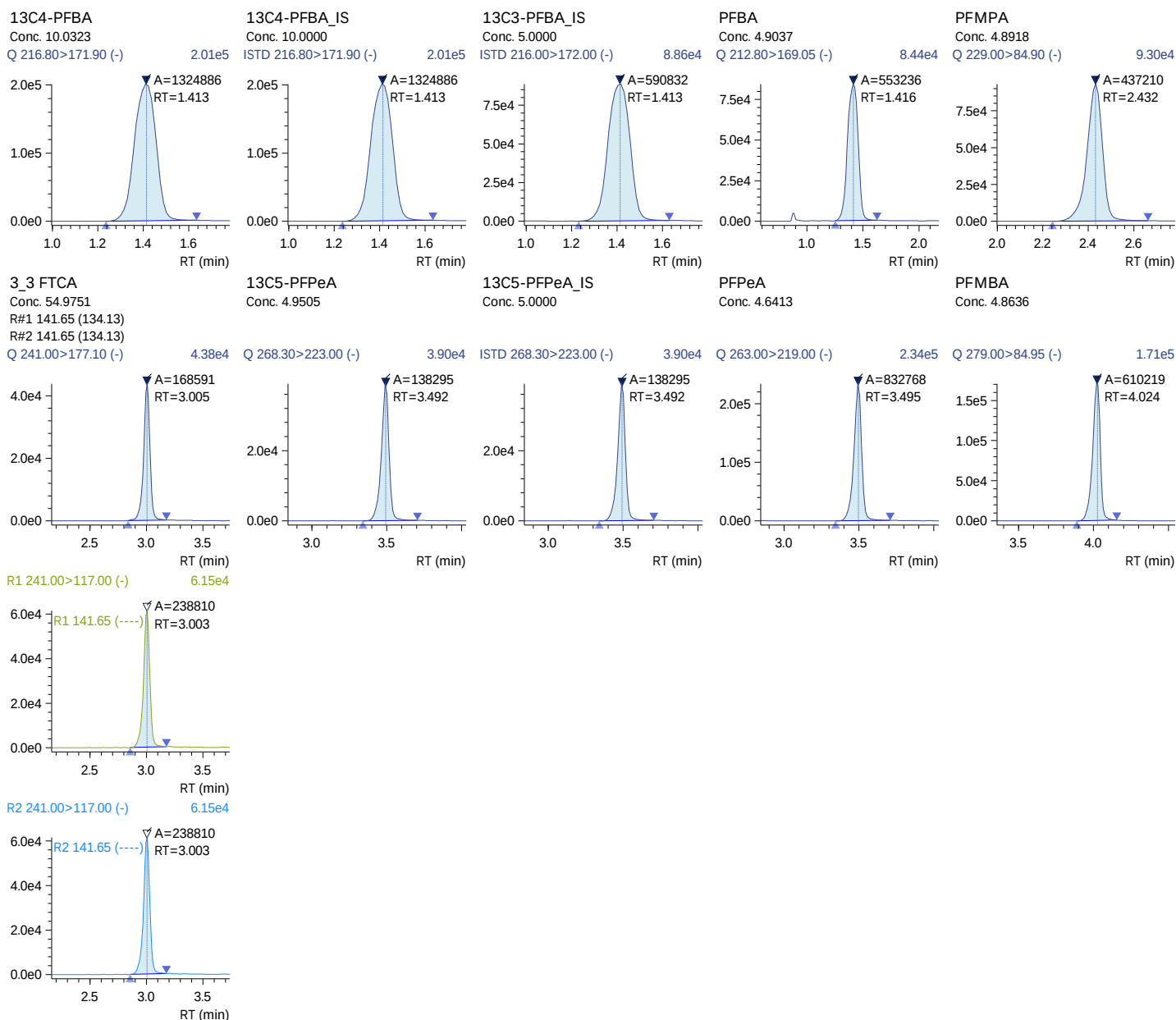
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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_011

Sample ID: 1633 ICAL 5.0PPB
Date Acquired: 1/18/2024 4:00:49 PM
Acquired by: System Administrator
Data File: 240118_011
Vial: 6 | Inj. Volume: 10.0000uL | Tray: 1





240118_011 (continued)

13C2-4_2 FTS
Conc. 4.8723

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. 4.5841
R#1 30.75 (34.14)
R#2 30.75 (34.14)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 4.3002
R#1 46.19 (47.53)
R#2 46.19 (47.53)

Q 329.10>80.90 (-)

4.84e4

ISTD 329.10>80.90 (-)

4.84e4

Q 327.10>307.00 (-)

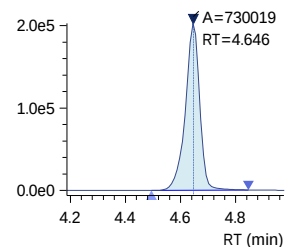
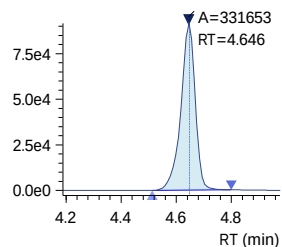
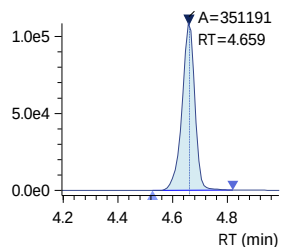
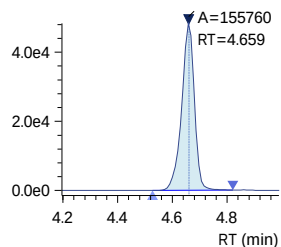
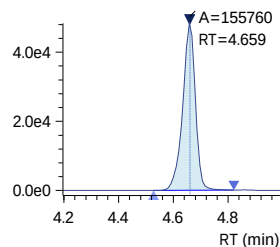
1.09e5

ISTD 302.10>79.90 (-)

9.16e4

Q 298.70>79.90 (-)

2.03e5

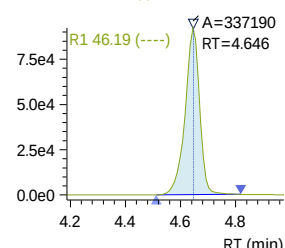
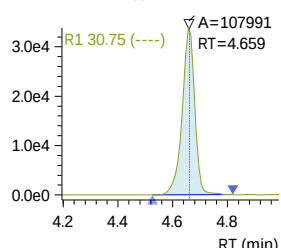


R1 327.10>80.90 (-)

3.39e4

R1 298.70>98.80 (-)

9.24e4

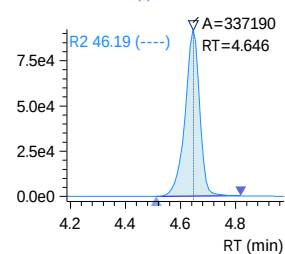
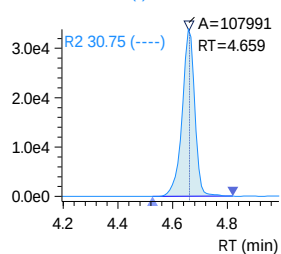


R2 327.10>80.90 (-)

3.39e4

R2 298.70>98.80 (-)

9.24e4





240118_011 (continued)

13C3-PFBS
 Conc. 2.5157

NFDHA
 Conc. 4.8072
 R#1 36.67 (37.88)
 R#2 36.67 (37.88)

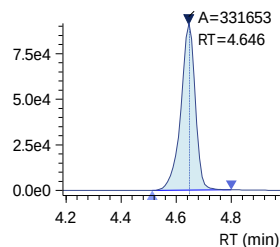
13C5-PFHxA
 Conc. 2.5428

13C5-PFHxA_IS
 Conc. 2.5000

13C2-PFHxA_IS
 Conc. 2.5000

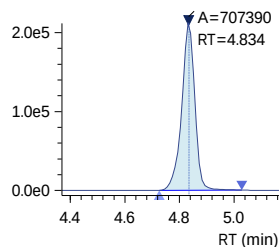
Q 302.10>79.90 (-)

9.16e4



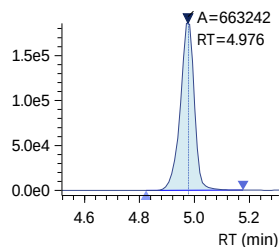
Q 295.00>201.00 (-)

2.12e5



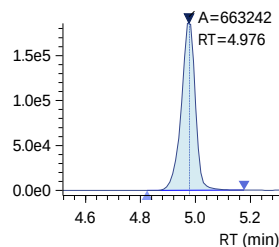
Q 318.00>273.00 (-)

1.86e5



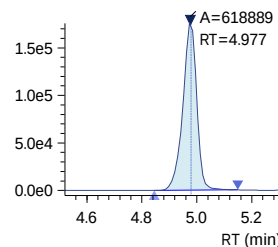
ISTD 318.00>273.00 (-)

1.86e5



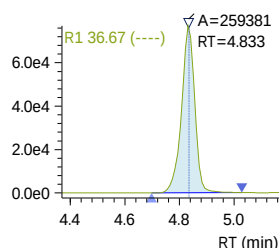
ISTD 315.10>270.00 (-)

1.76e5



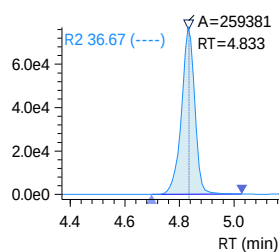
R1 295.00>84.90 (-)

7.70e4



R2 295.00>84.90 (-)

7.70e4





240118_011 (continued)

PFHxA
Conc. 4.8876

PFEESA
Conc. 4.2553
R#1 5.76 (5.88)
R#2 5.76 (5.88)

13C3-HFPO-DA
Conc. 10.2048

13C3-HFPO-DA_IS
Conc. 10.0000

HFPO-DA
Conc. 4.8257
R#1 63.67 (63.80)
R#2 63.67 (63.80)

Q 313.00>269.00 (-)

3.03e5

Q 314.80>135.00 (-)

9.49e5

Q 286.90>168.90 (-)

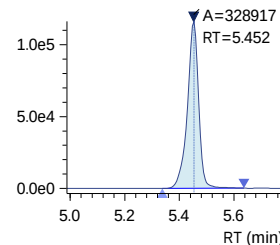
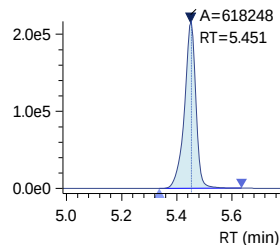
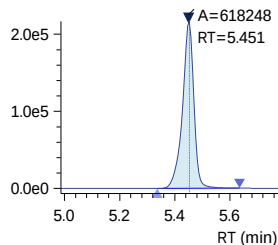
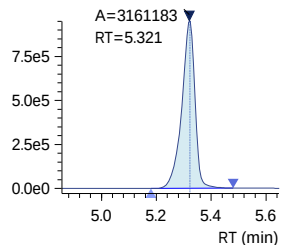
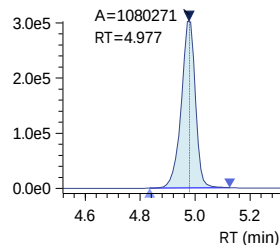
2.17e5

ISTD 286.90>168.90 (-)

2.17e5

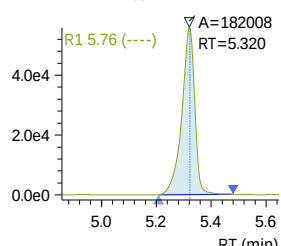
Q 284.90>168.90 (-)

1.16e5



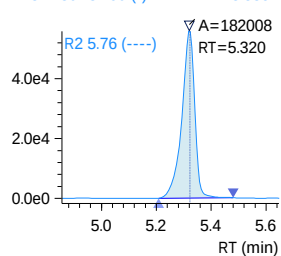
R1 314.80>82.90 (-)

5.58e4



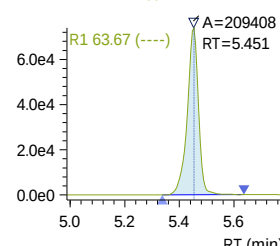
R2 314.80>82.90 (-)

5.58e4



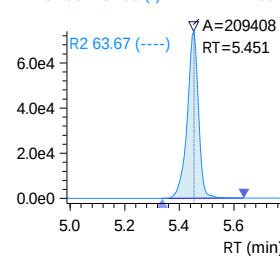
R1 284.90>184.90 (-)

7.40e4



R2 284.90>184.90 (-)

7.40e4

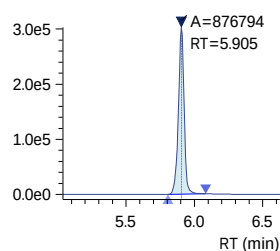




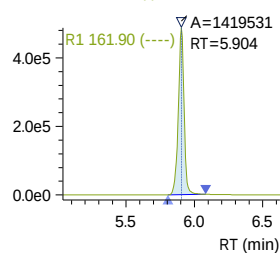
240118_011 (continued)

5_3 FTCA

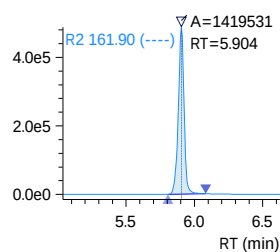
Conc. 51.1086
R#1 161.90 (167.13)
R#2 161.90 (167.13)
Q 341.00>237.05 (-)



R1 341.00>217.00 (-) 4.88e5

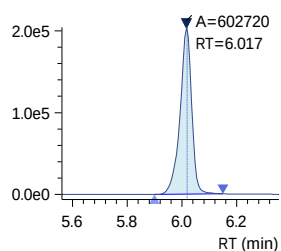


R2 341.00>217.00 (-) 4.88e5

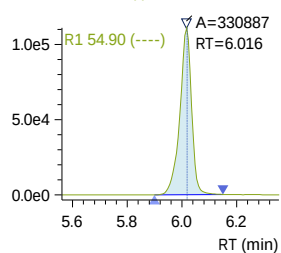


PFPeS

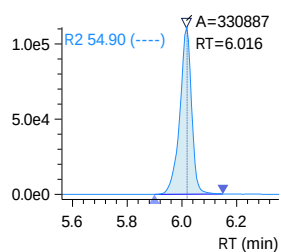
Conc. 4.8360
R#1 54.90 (56.71)
R#2 54.90 (56.71)
Q 349.10>79.90 (-)



R1 349.10>98.80 (-) 1.11e5

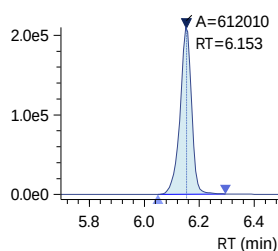


R2 349.10>98.80 (-) 1.11e5



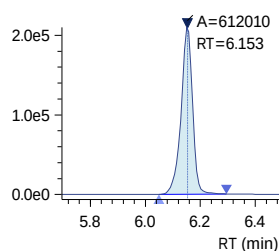
13C4-PFHpA

Conc. 2.5920
Q 367.10>322.00 (-)



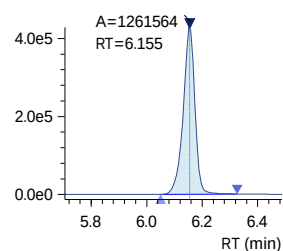
13C4-PFHpA_IS

Conc. 2.5000
ISTD 367.10>322.00 (-)

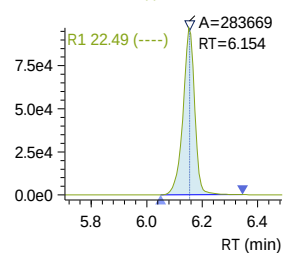


PFHpA

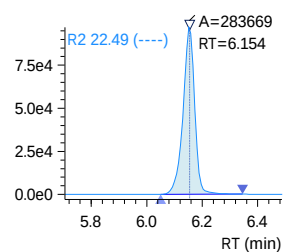
Conc. 4.9353
R#1 22.49 (21.37)
R#2 22.49 (21.37)
Q 363.10>319.00 (-)



R1 363.10>169.00 (-) 9.70e4

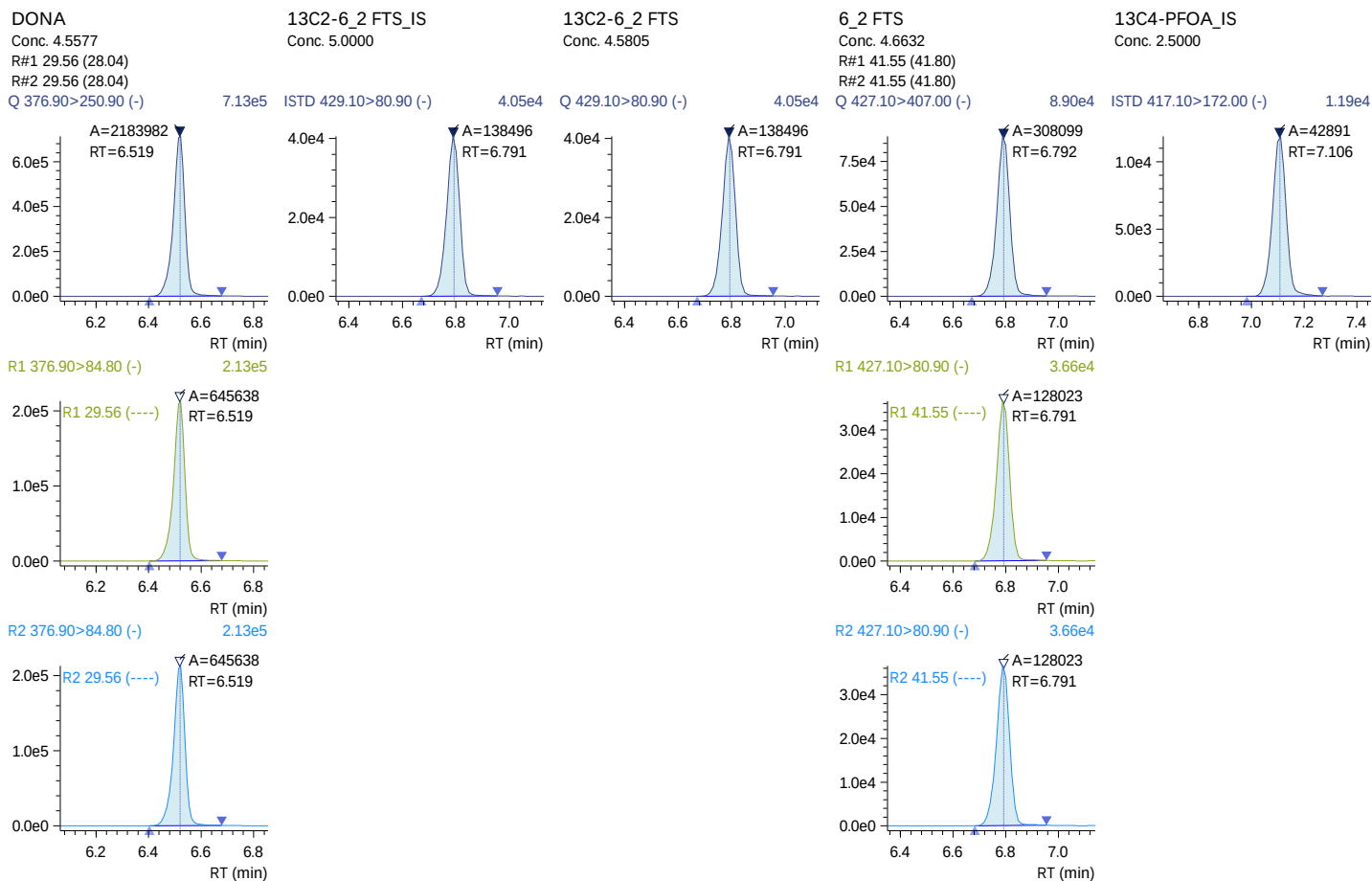


R2 363.10>169.00 (-) 9.70e4





240118_011 (continued)





240118_011 (continued)

13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.3618

PFOA
Conc. 5.7139
R#1 31.66 (29.05)
R#2 31.66 (29.05)

13C3-PFHxS
Conc. 2.3802

13C3-PFHxS_IS
Conc. 2.5000

ISTD 421.10>376.00 (-)

1.60e5

Q 421.10>376.00 (-)

1.60e5

Q 413.00>369.00 (-)

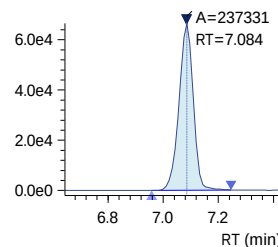
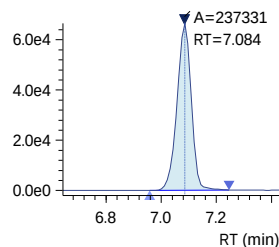
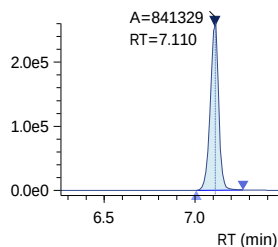
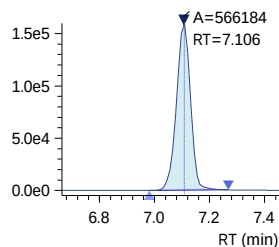
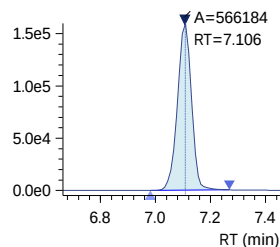
2.60e5

Q 402.10>79.90 (-)

6.65e4

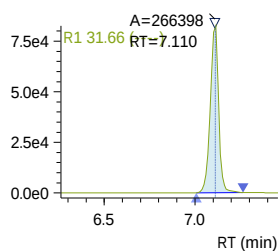
ISTD 402.10>79.90 (-)

6.65e4



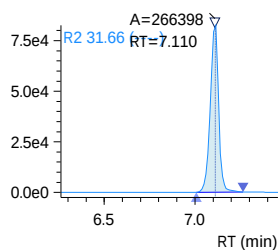
R1 413.00>169.00 (-)

8.26e4



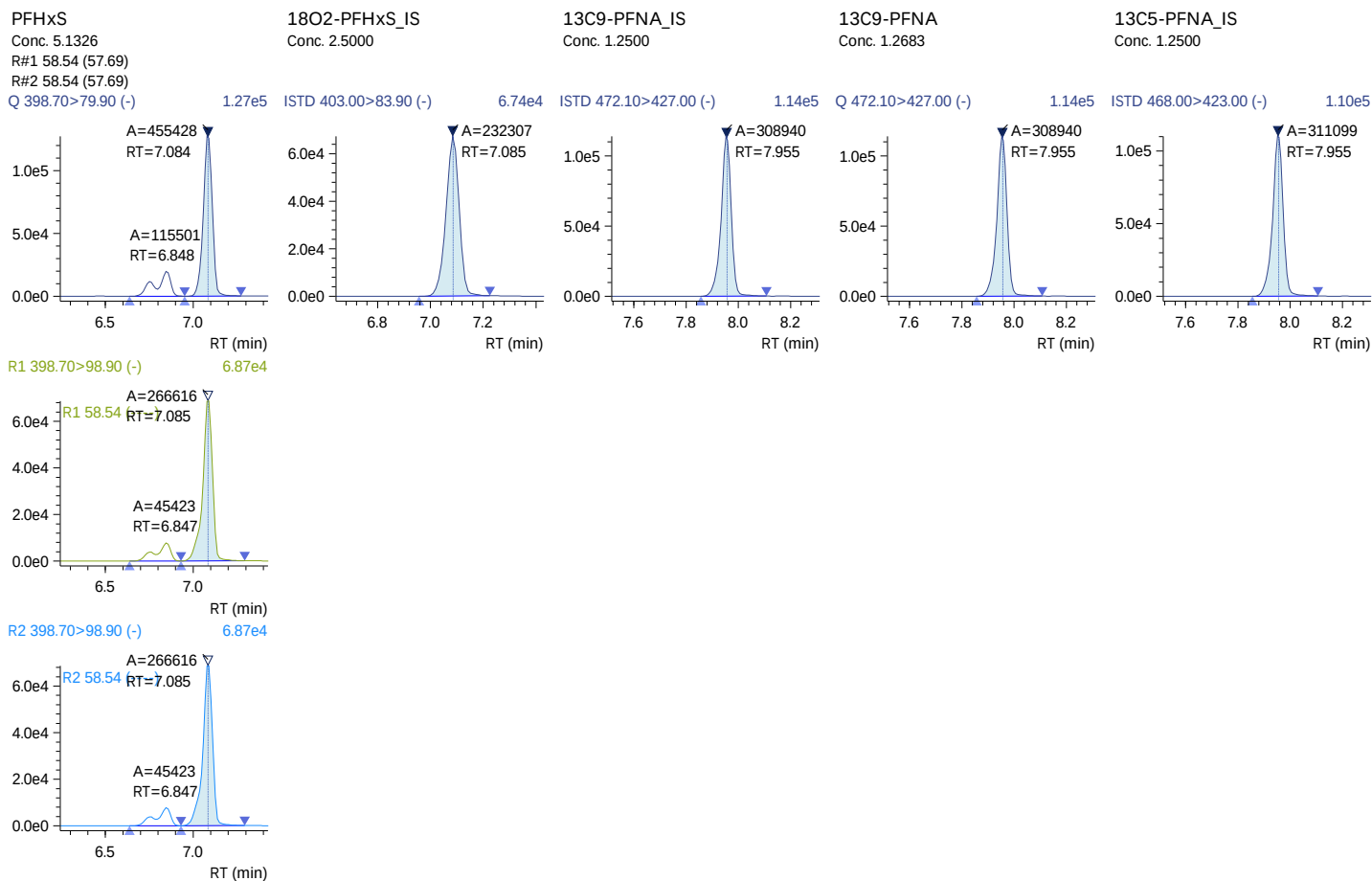
R2 413.00>169.00 (-)

8.26e4



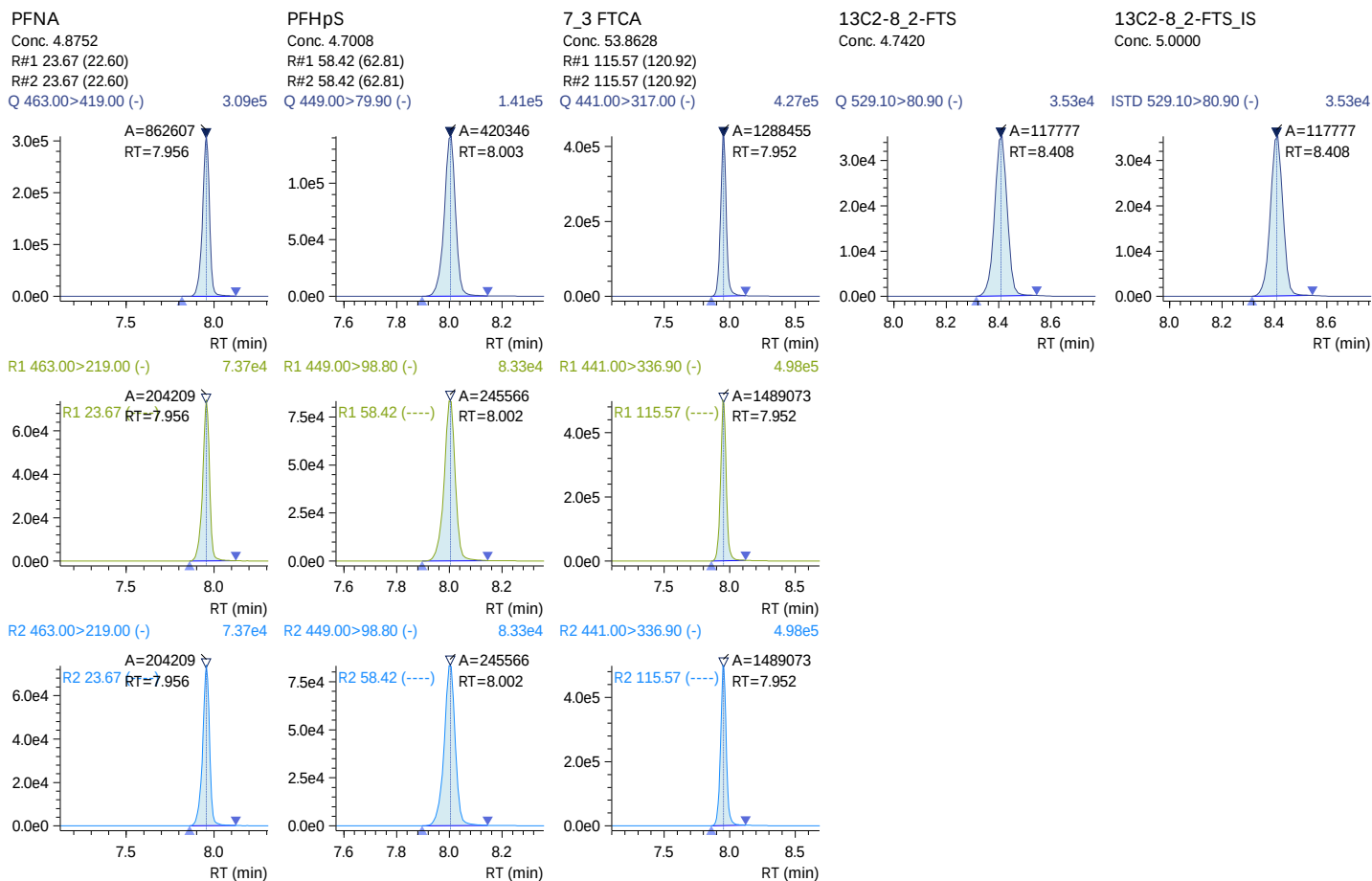


240118_011 (continued)



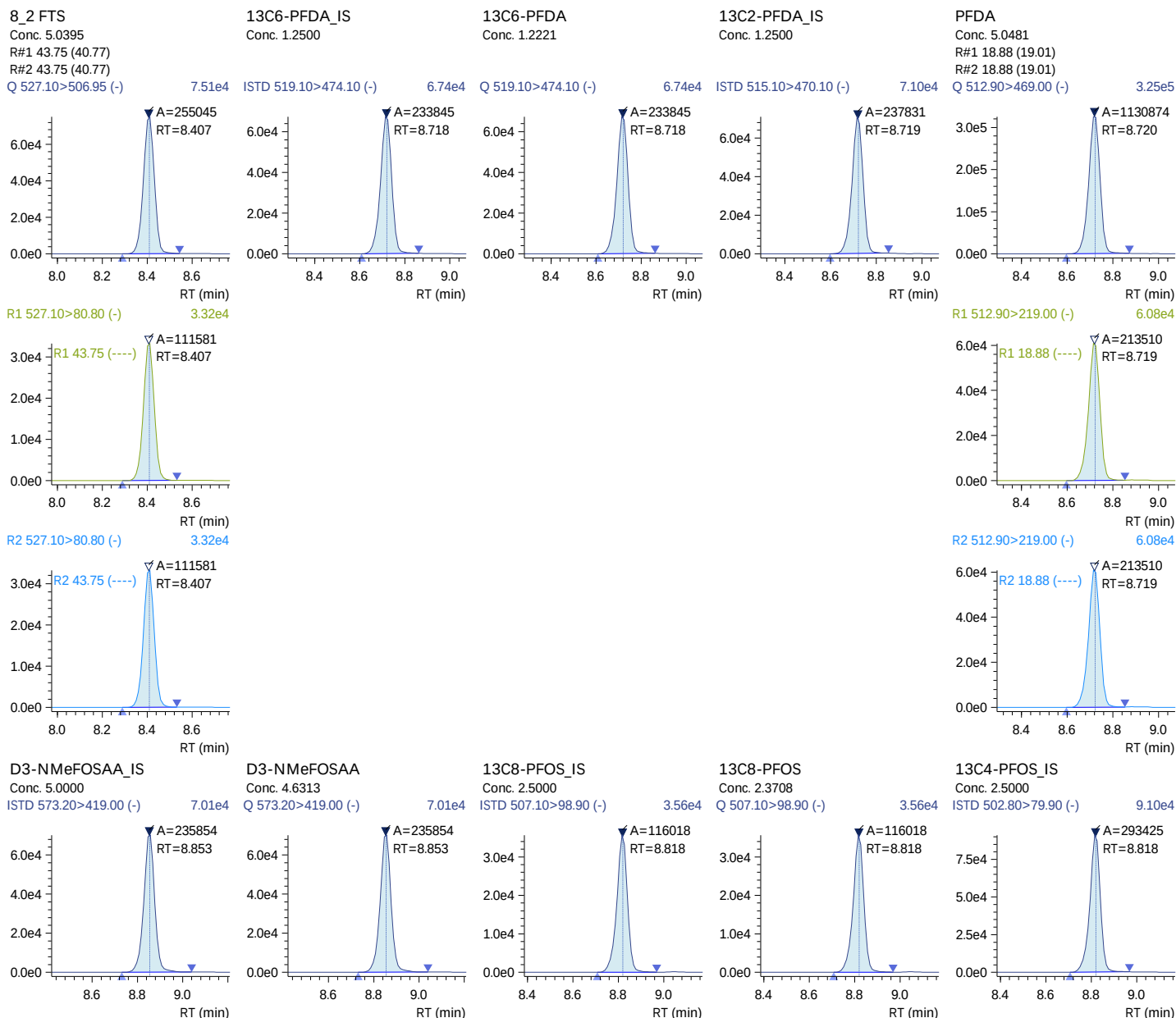


240118_011 (continued)



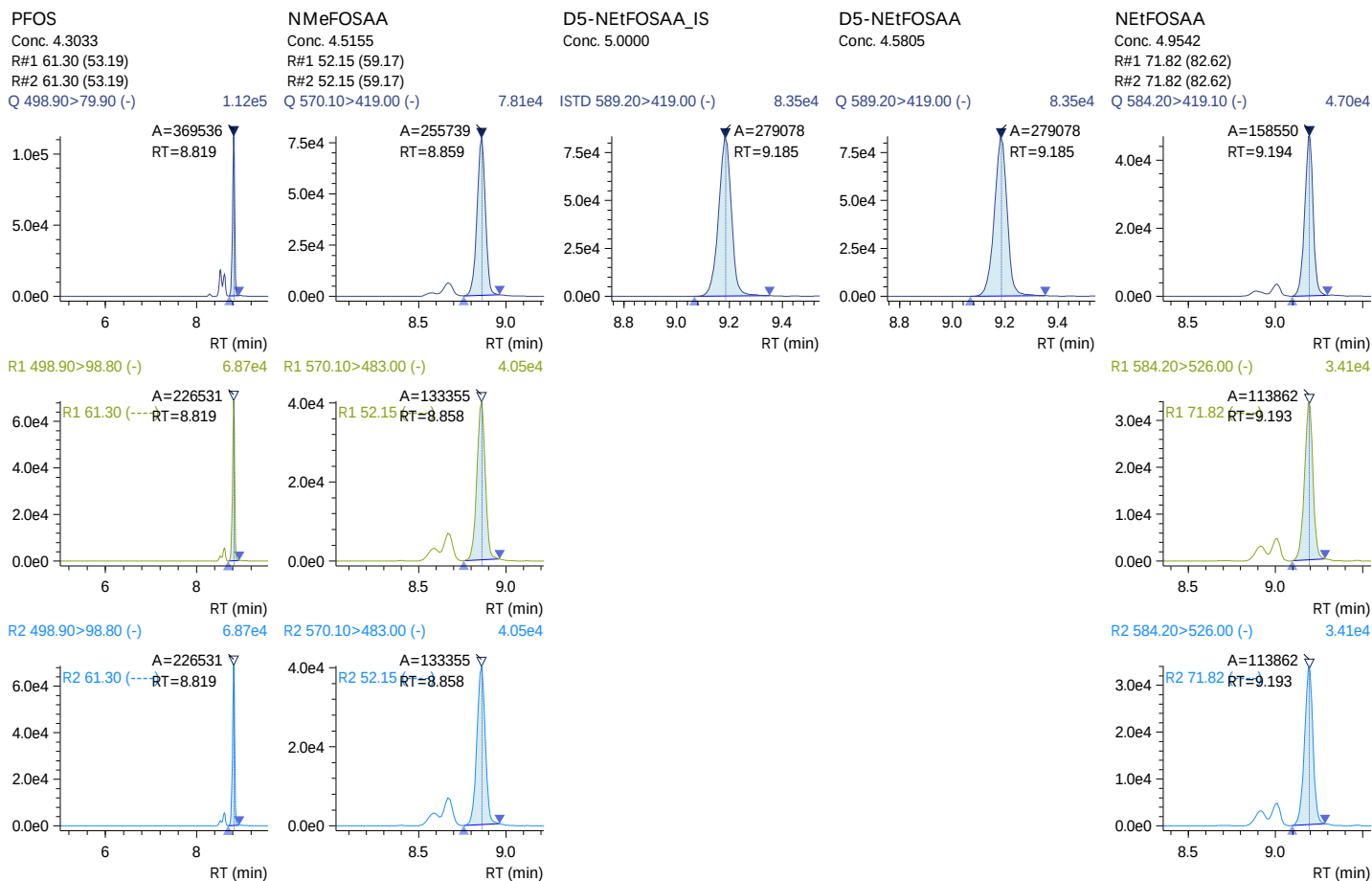


240118_011 (continued)





240118_011 (continued)

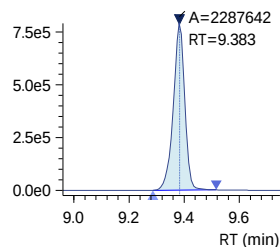




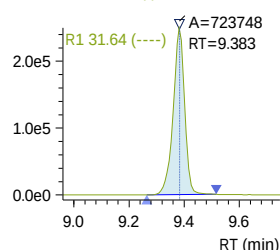
240118_011 (continued)

9-Cl-PF3ONS

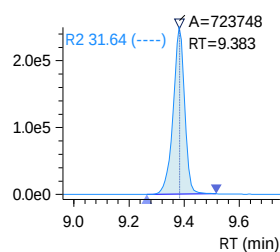
Conc. 4.4882
R#1 31.64 (31.76)
R#2 31.64 (31.76)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-) 2.50e5

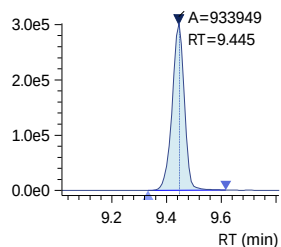


R2 532.80>353.00 (-) 2.50e5

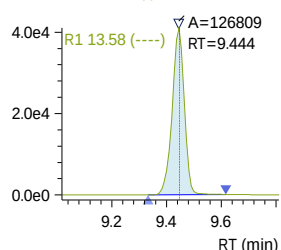


PFUnDA

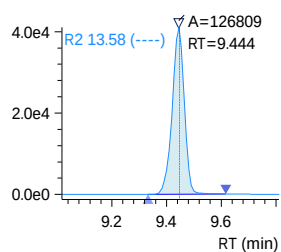
Conc. 5.0189
R#1 13.58 (12.31)
R#2 13.58 (12.31)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-) 4.11e4



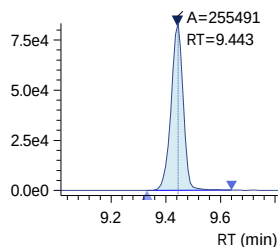
R2 563.10>269.10 (-) 4.11e4



13C7-PFUnDA_IS

Conc. 1.2500

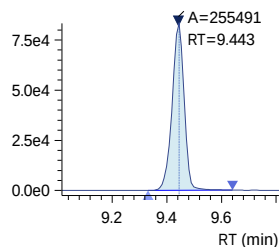
ISTD 570.00>525.10 (-) 8.33e4



13C7-PFUnDA

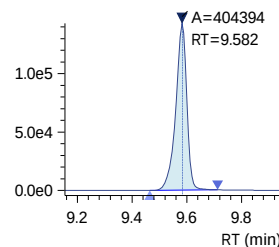
Conc. 1.1194

Q 570.00>525.10 (-) 8.33e4

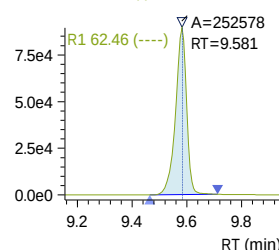


PFNS

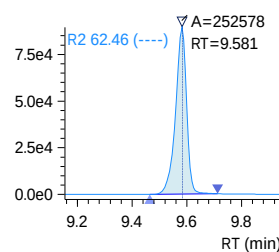
Conc. 4.5876
R#1 62.46 (63.31)
R#2 62.46 (63.31)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-) 8.95e4



R2 548.80>98.80 (-) 8.95e4





240118_011 (continued)

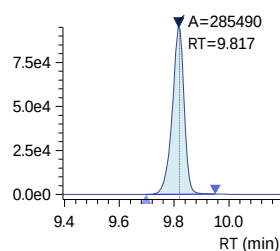
10_2_FTS

Conc. 4.7887

R#1 37.00 (33.02)

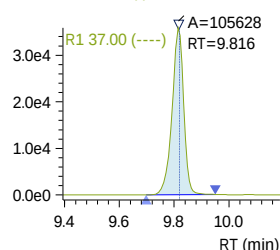
R#2 37.00 (33.02)

Q 626.80>607.05 (-)



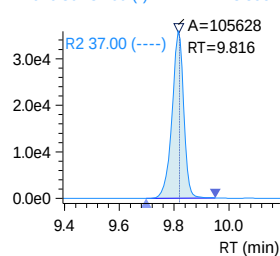
R1 626.80>81.00 (-)

3.59e4



R2 626.80>81.00 (-)

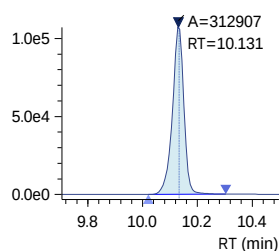
3.59e4



13C2-PFDOA_IS

Conc. 1.2500

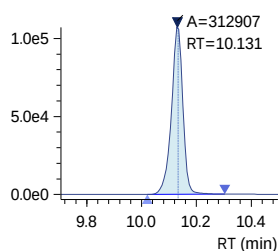
ISTD 615.10>570.00 (-)



13C2-PFDOA

Conc. 1.1933

Q 615.10>570.00 (-)



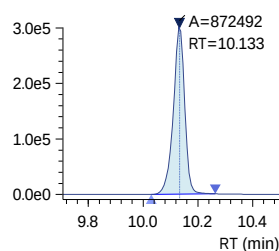
PFDOA

Conc. 4.9248

R#1 10.95 (10.14)

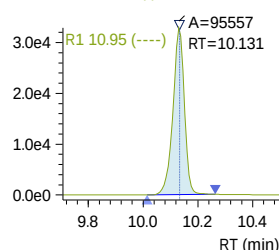
R#2 10.95 (10.14)

Q 613.10>569.00 (-)



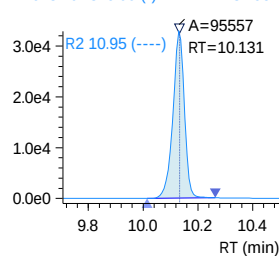
R1 613.10>319.00 (-)

3.29e4



R2 613.10>319.00 (-)

3.29e4



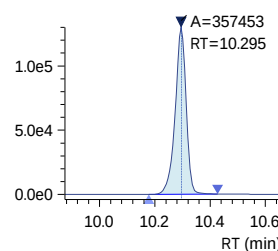
PFDS

Conc. 4.5437

R#1 60.71 (62.02)

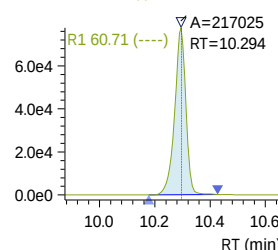
R#2 60.71 (62.02)

Q 599.00>79.90 (-)



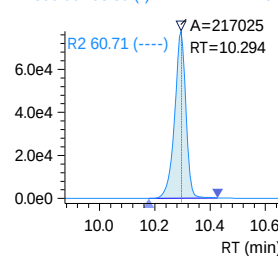
R1 599.00>98.80 (-)

7.77e4



R2 599.00>98.80 (-)

7.77e4





240118_011 (continued)

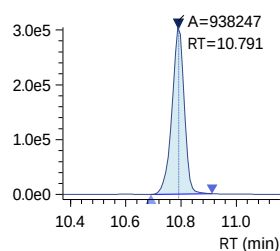
PFTTrDA

Conc. 5.0773

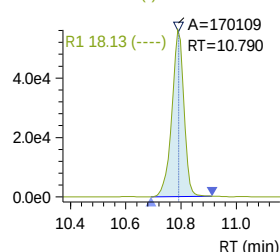
R#1 18.13 (15.12)

R#2 18.13 (15.12)

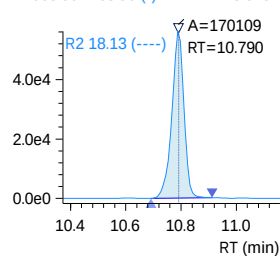
Q 663.00>619.00 (-)



R1 663.00>168.90 (-)



R2 663.00>168.90 (-)



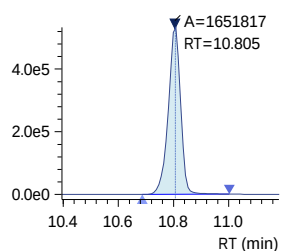
11-CI-PF3OUdS

Conc. 4.4804

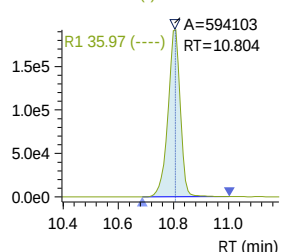
R#1 35.97 (36.61)

R#2 35.97 (36.61)

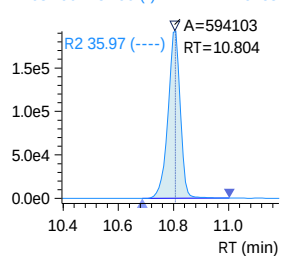
Q 630.90>451.00 (-)



R1 632.90>452.90 (-)



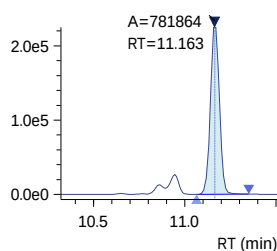
R2 632.90>452.90 (-)



PFOSAm

Conc. 9.6754

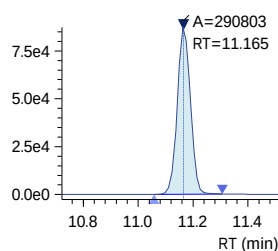
Q 498.10>77.90 (-)



13C8-PFOSAm

Conc. 2.3346

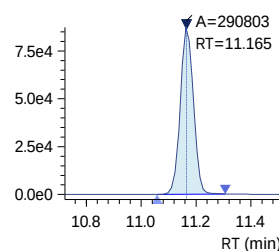
Q 506.10>77.80 (-)



13C8-PFOSAm_IS

Conc. 2.5000

ISTD 506.10>77.80 (-)

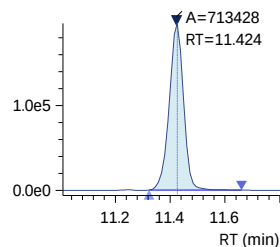




240118_011 (continued)

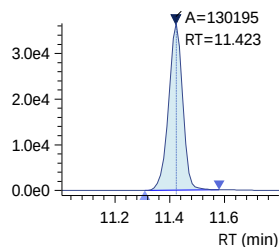
PFTDA

Conc. 5.0714
R#1 22.51 (19.97)
R#2 22.51 (19.97)
Q 713.10>669.00 (-)



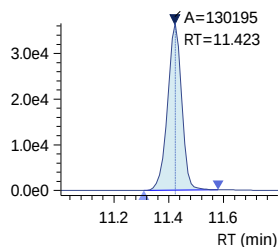
13C2-PFTDA

Conc. 1.1500
Q 715.20>670.00 (-)



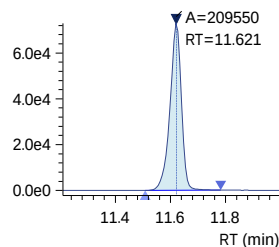
13C2-PFTDA_IS

Conc. 1.2500
ISTD 715.20>670.00 (-)



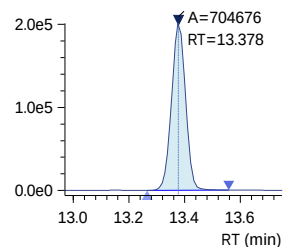
PFDoS

Conc. 4.5019
R#1 67.27 (69.07)
R#2 67.27 (69.07)
Q 699.10>79.90 (-)

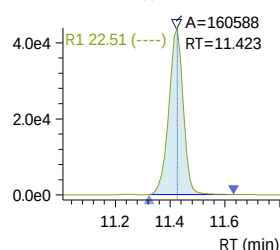


D7-MeFOSE_IS

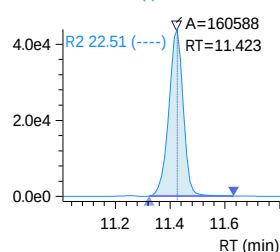
Conc. 25.0000
ISTD 623.20>58.90 (-)



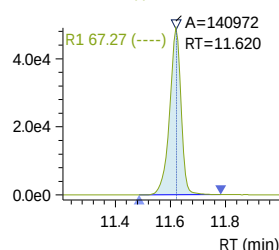
R1 713.10>168.90 (-) 4.39e4



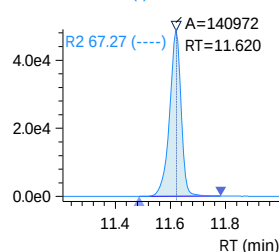
R2 713.10>168.90 (-) 4.39e4



R1 699.10>98.80 (-) 4.91e4



R2 699.10>98.80 (-) 4.91e4





240118_011 (continued)

D7-MeFOSE
 Conc. 22.9454

MeFOSE
 Conc. 4.8682

¹³C2-PFHxDA_IS
 Conc. 2.5000

¹³C2-PFHxDA
 Conc. 2.3185

PFHxDA
 Conc. 4.9396
 R#1 14.00 (11.64)
 R#2 14.00 (11.64)

Q 623.20>58.90 (-)

2.01e5

Q 616.10>59.00 (-)

2.15e4

ISTD 815.00>770.05 (-)

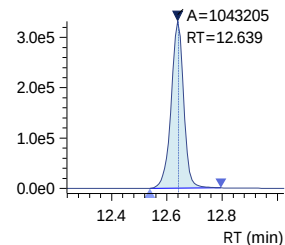
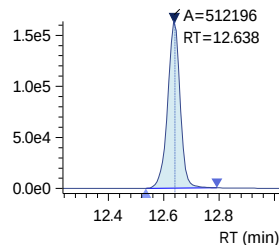
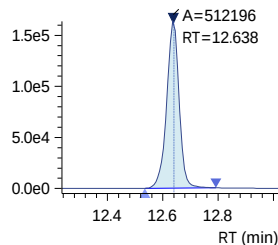
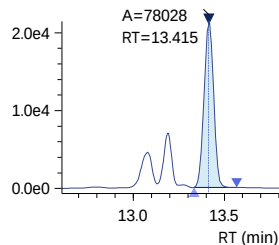
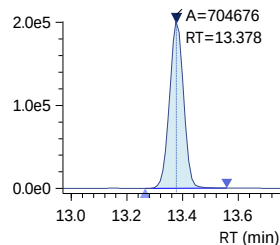
1.64e5

Q 815.00>770.05 (-)

1.64e5

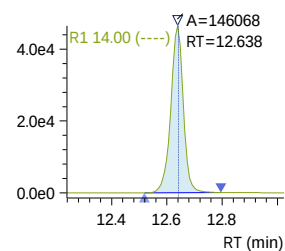
Q 813.00>768.95 (-)

3.32e5



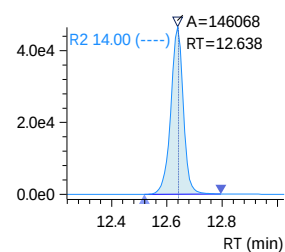
R1 813.00>218.95 (-)

4.65e4



R2 813.00>218.95 (-)

4.65e4





240118_011 (continued)

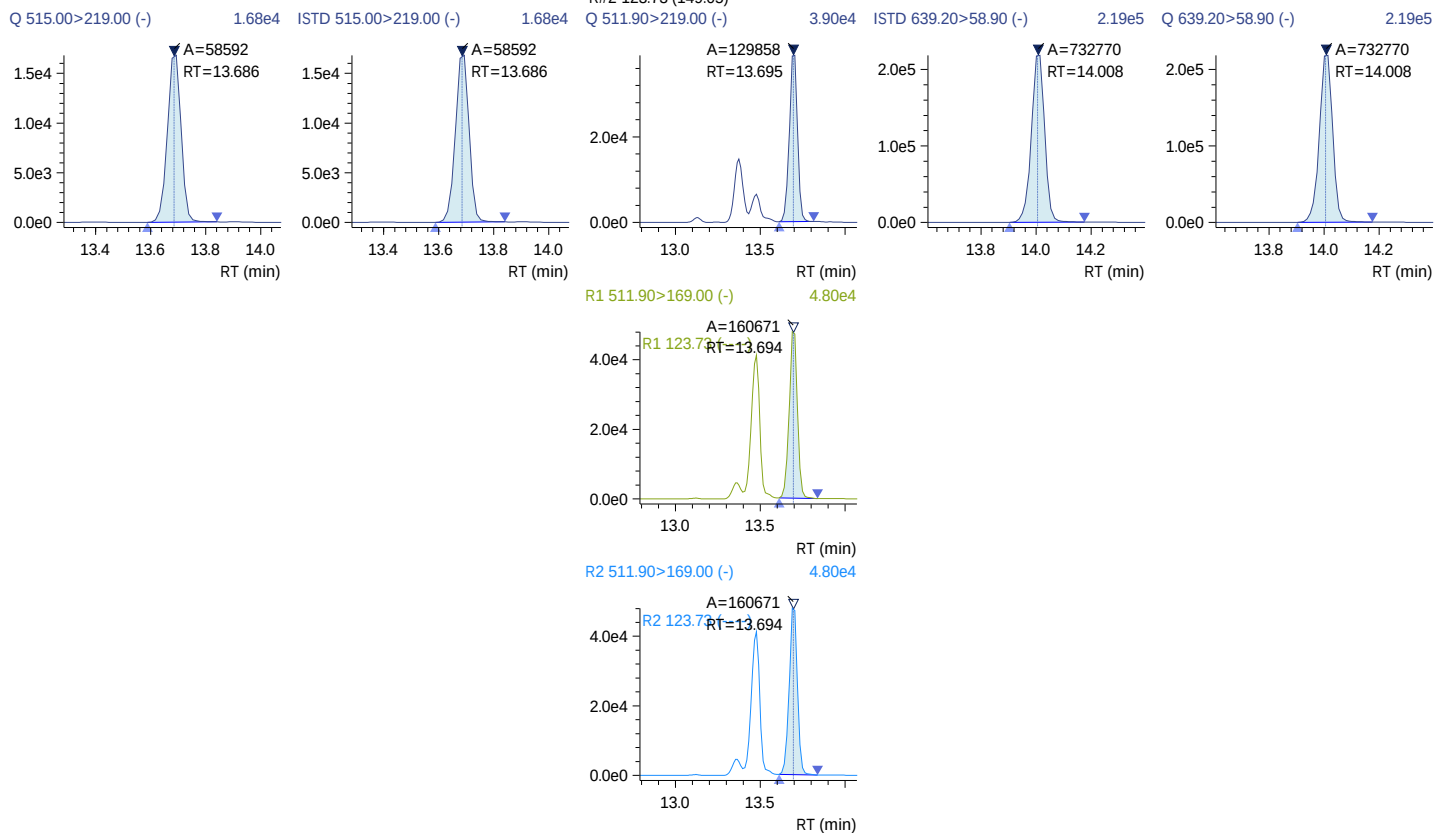
D3-MeFOSA
 Conc. 2.3357

D3-MeFOSA_IS
 Conc. 2.5000

MeFOSA
 Conc. 4.9719
 R#1 123.73 (149.05)
 R#2 123.73 (149.05)

D9-EtFOSE_IS
 Conc. 25.0000

D9-EtFOSE
 Conc. 23.4925





240118_011 (continued)

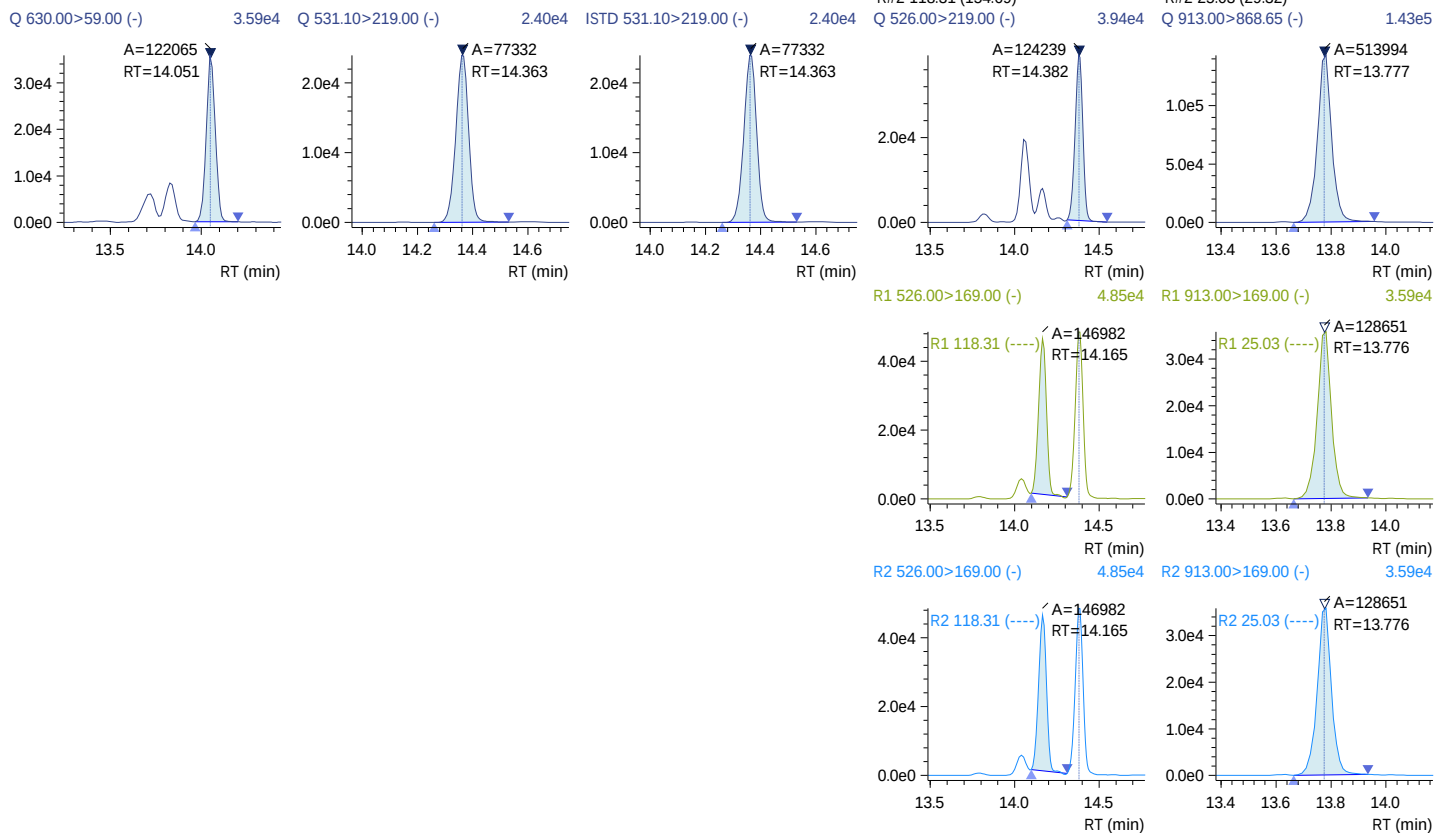
EtFOSE
Conc. 4.7938

D5-EtFOSAm
Conc. 2.3154

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. 5.0290
R#1 118.31 (154.69)
R#2 118.31 (154.69)

PFODA
Conc. 4.6306
R#1 25.03 (29.32)
R#2 25.03 (29.32)





240118_012

Sample ID: 1633 ICAL 10.0PPB
Date Acquired: 1/18/2024 4:24:05 PM
Acquired by: System Administrator
Data File: 240118_012
Vial: 7 | Inj. Volume: 10.0000uL | Tray: 1

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	1260062	----	----	----	----	----	----	
13C4-PFBA_IS	216.80>171.90	----	1260062	----	----	----	----	----	----	
13C3-PFBA_IS	216.00>172.00	----	566334	----	----	----	----	----	----	
PFBA	212.80>169.05	----	1060864	----	----	----	----	----	----	
PFMPA	229.00>84.90	----	827555	----	----	----	----	----	----	
3_3 FTCA	241.00>177.10	241.00>117.00	225272	315598	140.10	141.17	315598	140.10	141.17	
13C5-PFPeA	268.30>223.00	----	128399	----	----	----	----	----	----	
13C5-PFPeA_IS	268.30>223.00	----	128399	----	----	----	----	----	----	
PFPeA	263.00>219.00	----	1583589	----	----	----	----	----	----	
PFMBA	279.00>84.95	----	1162269	----	----	----	----	----	----	
13C2-4_2 FTS	329.10>80.90	----	143510	----	----	----	----	----	----	
13C2-4_2 FTS_IS	329.10>80.90	----	143510	----	----	----	----	----	----	
4_2 FTS	327.10>307.00	327.10>80.90	651111	191574	29.42	29.06	191574	29.42	29.06	
13C3-PFBS_IS	302.10>79.90	----	305947	----	----	----	----	----	----	
PFBS	298.70>79.90	298.70>98.80	1378071	651278	47.26	46.72	651278	47.26	46.72	
13C3-PFBS	302.10>79.90	----	305947	----	----	----	----	----	----	
NFDHA	295.00>201.00	295.00>84.90	1353187	499404	36.91	40.25	499404	36.91	40.25	
13C5-PFHxA	318.00>273.00	----	638007	----	----	----	----	----	----	
13C5-PFHxA_IS	318.00>273.00	----	638007	----	----	----	----	----	----	
13C2-PFHxA_IS	315.10>270.00	----	603861	----	----	----	----	----	----	
PFHxA	313.00>269.00	----	2124466	----	----	----	----	----	----	
PFEESA	314.80>135.00	314.80>82.90	6200515	361928	5.84	6.11	361928	5.84	6.11	
13C3-HFPO-DA	286.90>168.90	----	598128	----	----	----	----	----	----	
13C3-HFPO-DA_IS	286.90>168.90	----	598128	----	----	----	----	----	----	
HFPO-DA	284.90>168.90	284.90>184.90	638442	418062	65.48	65.61	418062	65.48	65.61	
5_3 FTCA	341.00>237.05	341.00>217.00	1196348	1883717	157.46	158.86	1883717	157.46	158.86	
PFPeS	349.10>79.90	349.10>98.80	1144724	628074	54.87	55.80	628074	54.87	55.80	
13C4-PFHpA	367.10>322.00	----	578001	----	----	----	----	----	----	
13C4-PFHpA_IS	367.10>322.00	----	578001	----	----	----	----	----	----	
PFHpA	363.10>319.00	363.10>169.00	2383855	541068	22.70	21.50	541068	22.70	21.50	
DONA	376.90>250.90	376.90>84.80	4152849	1217322	29.31	29.66	1217322	29.31	29.66	
13C2-6_2 FTS_IS	429.10>80.90	----	135213	----	----	----	----	----	----	
13C2-6_2 FTS	429.10>80.90	----	135213	----	----	----	----	----	----	
6_2 FTS	427.10>407.00	427.10>80.90	570370	248132	43.50	41.15	248132	43.50	41.15	
13C4-PFOA_IS	417.10>172.00	----	40079	----	----	----	----	----	----	
13C8-PFOA_IS	421.10>376.00	----	529017	----	----	----	----	----	----	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240118_012 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	529017	----	----	----	----	----	----	----
PFOA	413.00>369.00	413.00>169.00	1561625	495517	31.73	31.89	495517	31.73	31.89	
13C3-PFHxS	402.10>79.90	----	230489	----	----	----	----	----	----	----
13C3-PFHxS_IS	402.10>79.90	----	230489	----	----	----	----	----	----	----
PFHxS	398.70>79.90	398.70>98.90	1072624	612506	57.10	56.62	612506	57.10	56.62	
18O2-PFHxS_IS	403.00>83.90	----	223258	----	----	----	----	----	----	----
13C9-PFNA_IS	472.10>427.00	----	290785	----	----	----	----	----	----	----
13C9-PFNA	472.10>427.00	----	290785	----	----	----	----	----	----	----
13C5-PFNA_IS	468.00>423.00	----	292150	----	----	----	----	----	----	----
PFNA	463.00>419.00	463.00>219.00	1640974	383766	23.39	23.17	383766	23.39	23.17	
PFHpS	449.00>79.90	449.00>98.80	795008	448512	56.42	56.96	448512	56.42	56.96	
7_3 FTCA	441.00>317.00	441.00>336.90	1723816	1994631	115.71	117.47	1994631	115.71	117.47	
13C2-8_2-FTS	529.10>80.90	----	112708	----	----	----	----	----	----	----
13C2-8_2-FTS_IS	529.10>80.90	----	112708	----	----	----	----	----	----	----
8_2 FTS	527.10>506.95	527.10>80.80	450949	200114	44.38	49.59	200114	44.38	49.59	
13C6-PFDA_IS	519.10>474.10	----	219938	----	----	----	----	----	----	----
13C6-PFDA	519.10>474.10	----	219938	----	----	----	----	----	----	----
13C2-PFDA_IS	515.10>470.10	----	226144	----	----	----	----	----	----	----
PFDA	512.90>469.00	512.90>219.00	2069023	393109	19.00	19.00	393109	19.00	19.00	
D3-NMeFOSAA_IS	573.20>419.00	----	216872	----	----	----	----	----	----	----
D3-NMeFOSAA	573.20>419.00	----	216872	----	----	----	----	----	----	----
13C8-PFOS_IS	507.10>98.90	----	112442	----	----	----	----	----	----	----
13C8-PFOS	507.10>98.90	----	112442	----	----	----	----	----	----	----
13C4-PFOS_IS	502.80>79.90	----	272314	----	----	----	----	----	----	----
PFOS	498.90>79.90	498.90>98.80	994421	495339	49.81	52.47	495339	49.81	52.47	
NMeFOSAA	570.10>419.00	570.10>483.00	579948	349441	60.25	55.15	349441	60.25	55.15	
D5-NetFOSAA_IS	589.20>419.00	----	264164	----	----	----	----	----	----	----
D5-NetFOSAA	589.20>419.00	----	264164	----	----	----	----	----	----	----
NetFOSAA	584.20>419.10	584.20>526.00	342529	298204	87.06	81.95	298204	87.06	81.95	
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	4405373	1435305	32.58	32.76	1435305	32.58	32.76	
PFUnDA	563.10>519.00	563.10>269.10	1839221	251448	13.67	13.12	251448	13.67	13.12	
13C7-PFUnDA_IS	570.00>525.10	----	248001	----	----	----	----	----	----	----
13C7-PFUnDA	570.00>525.10	----	248001	----	----	----	----	----	----	----
PFNS	548.80>79.90	548.80>98.80	775210	500267	64.53	65.22	500267	64.53	65.22	
10_2 FTS	626.80>607.05	626.80>81.00	534728	202779	37.92	37.13	202779	37.92	37.13	
13C2-PFDOA_IS	615.10>570.00	----	294038	----	----	----	----	----	----	----
13C2-PFDOA	615.10>570.00	----	294038	----	----	----	----	----	----	----
PFDOA	613.10>569.00	613.10>319.00	1662292	184694	11.11	11.29	184694	11.11	11.29	
PFDS	599.00>79.90	599.00>98.80	693164	415893	60.00	60.18	415893	60.00	60.18	
PFTDA	663.00>619.00	663.00>168.90	1805435	318118	17.62	17.64	318118	17.62	17.64	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240118_012 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	3212472	1145584	35.66	36.44	1145584	35.66	36.44	
PFOSAm	498.10>77.90	----	1754149	----	----	----	----	----	----	
13C8-PFOSAm	506.10>77.80	----	280036	----	----	----	----	----	----	
13C8-PFOSAm_IS	506.10>77.80	----	280036	----	----	----	----	----	----	
PFTDA	713.10>669.00	713.10>168.90	1387467	300213	21.64	22.96	300213	21.64	22.96	
13C2-PFTDA	715.20>670.00	----	126897	----	----	----	----	----	----	
13C2-PFTDA_IS	715.20>670.00	----	126897	----	----	----	----	----	----	
PFDoS	699.10>79.90	699.10>98.80	409175	274704	67.14	67.40	274704	67.14	67.40	
D7-MeFOSE_IS	623.20>58.90	----	704481	----	----	----	----	----	----	
D7-MeFOSE	623.20>58.90	----	704481	----	----	----	----	----	----	
MeFOSE	616.10>59.00	----	240406	----	----	----	----	----	----	
13C2-PFHxDA_IS	815.00>770.05	----	498313	----	----	----	----	----	----	
13C2-PFHxDA	815.00>770.05	----	498313	----	----	----	----	----	----	
PFHxDA	813.00>768.95	813.00>218.95	2034708	282722	13.90	13.90	282722	13.90	13.90	
D3-MeFOSA	515.00>219.00	----	55039	----	----	----	----	----	----	
D3-MeFOSA_IS	515.00>219.00	----	55039	----	----	----	----	----	----	
MeFOSA	511.90>219.00	511.90>169.00	387762	590412	152.26	140.79	590412	152.26	140.79	
D9-EtFOSE_IS	639.20>58.90	----	689895	----	----	----	----	----	----	
D9-EtFOSE	639.20>58.90	----	689895	----	----	----	----	----	----	
EtFOSE	630.00>59.00	----	365015	----	----	----	----	----	----	
D5-EtFOSAm	531.10>219.00	----	74601	----	----	----	----	----	----	
D5-EtFOSAm_IS	531.10>219.00	----	74601	----	----	----	----	----	----	
EtFOSAm	526.00>219.00	526.00>169.00	439049	674511	153.63	163.90	674511	153.63	163.90	
PFODA	913.00>868.65	913.00>169.00	1074240	270313	25.16	27.03	270313	25.16	27.03	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240118_012

Sample ID: 1633 ICAL 10.0PPB
Date Acquired: 1/18/2024 4:24:05 PM
Acquired by: System Administrator
Data File: 240118_012
Vial: 7 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Std. Conc.	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.410	-0.004	0.000	1260062	566334	13C3-PFBA_IS	10.0000	9.9542	ng/mL	
13C4-PFBA_IS	Auto	1.410	-0.004	----	1260062	1260062	----	10.0000	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.410	-0.005	----	566334	566334	----	5.0000	5.0000	ng/mL	
PFBA	Auto	1.411	-0.005	0.001	1060864	1260062	13C4-PFBA_IS	10.0000	9.7988	ng/mL	
PFMPA	Auto	2.429	-0.003	-1.061	827555	128399	13C5-PFPeA_IS	10.0000	9.9729	ng/mL	
3_3 FTCA	Auto	3.003	-0.001	-0.487	225272	128399	13C5-PFPeA_IS	80.0000	79.1196	ng/mL	
13C5-PFPeA	Auto	3.490	-0.002	-1.486	128399	603861	13C2-PFHxA_IS	5.0000	4.7106	ng/mL	
13C5-PFPeA_IS	Auto	3.490	-0.002	----	128399	128399	----	5.0000	5.0000	ng/mL	
PFPeA	Auto	3.493	-0.002	0.003	1583589	128399	13C5-PFPeA_IS	10.0000	9.5221	ng/mL	
PFMBA	Auto	4.022	-0.003	0.532	1162269	128399	13C5-PFPeA_IS	10.0000	9.8868	ng/mL	
13C2-4_2 FTS	Auto	4.659	-0.002	-2.426	143510	223258	18O2-PFHxS_IS	5.0000	4.6710	ng/mL	
13C2-4_2 FTS_IS	Auto	4.659	-0.002	----	143510	143510	----	5.0000	5.0000	ng/mL	
4_2 FTS	Auto	4.659	-0.003	0.000	651111	143510	13C2-4_2 FTS_IS	9.4000	9.2244	ng/mL	
13C3-PFBS_IS	Auto	4.644	-0.003	----	305947	305947	----	2.5000	2.5000	ng/mL	
PFBS	Auto	4.644	-0.004	0.000	1378071	305947	13C3-PFBS_IS	8.9000	8.7997	ng/mL	
13C3-PFBS	Auto	4.644	-0.003	-2.441	305947	223258	18O2-PFHxS_IS	2.5000	2.4148	ng/mL	
NFDHA	Auto	4.833	-0.002	-0.142	1353187	638007	13C5-PFHxA_IS	10.0000	9.5596	ng/mL	
13C5-PFHxA	Auto	4.975	-0.003	-0.001	638007	603861	13C2-PFHxA_IS	2.5000	2.5069	ng/mL	
13C5-PFHxA_IS	Auto	4.975	-0.003	----	638007	638007	----	2.5000	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	4.976	-0.003	----	603861	603861	----	2.5000	2.5000	ng/mL	
PFHxA	Auto	4.977	-0.003	0.002	2124466	638007	13C5-PFHxA_IS	10.0000	9.9957	ng/mL	
PFEESA	Auto	5.319	-0.003	0.344	6200515	638007	13C5-PFHxA_IS	8.9000	8.6768	ng/mL	
13C3-HFPO-DA	Auto	5.450	-0.002	0.474	598128	603861	13C2-PFHxA_IS	10.0000	10.1184	ng/mL	
13C3-HFPO-DA_IS	Auto	5.450	-0.002	----	598128	598128	----	10.0000	10.0000	ng/mL	
HFPO-DA	Auto	5.451	-0.002	0.001	638442	598128	13C3-HFPO-DA_IS	10.0000	9.6646	ng/mL	
5_3 FTCA	Auto	5.904	-0.002	0.929	1196348	638007	13C5-PFHxA_IS	80.0000	72.4939	ng/mL	
PFPeS	Auto	6.016	-0.002	-1.069	1144724	230489	13C3-PFHxS_IS	9.4000	9.4575	ng/mL	
13C4-PFHpA	Auto	6.153	-0.001	1.177	578001	603861	13C2-PFHxA_IS	2.5000	2.5089	ng/mL	
13C4-PFHpA_IS	Auto	6.153	-0.001	----	578001	578001	----	2.5000	2.5000	ng/mL	
PFHpA	Auto	6.155	0.000	0.002	2383855	578001	13C4-PFHpA_IS	10.0000	9.9099	ng/mL	
DONA	Auto	6.519	-0.001	1.069	4152849	598128	13C3-HFPO-DA_IS	9.5000	8.9580	ng/mL	
13C2-6_2 FTS_IS	Auto	6.793	0.000	----	135213	135213	----	5.0000	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.793	0.000	-0.292	135213	223258	18O2-PFHxS_IS	5.0000	4.6532	ng/mL	
6_2 FTS	Auto	6.792	0.000	-0.001	570370	135213	13C2-6_2 FTS_IS	9.5000	9.2636	ng/mL	
13C4-PFOA_IS	Auto	7.107	0.000	----	40079	40079	----	2.5000	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.107	0.000	----	529017	529017	----	2.5000	2.5000	ng/mL	
13C8-PFOA	Auto	7.107	0.000	0.000	529017	40079	13C4-PFOA_IS	2.5000	2.3616	ng/mL	
PFOA	Auto	7.111	0.001	0.004	1561625	529017	13C8-PFOA_IS	10.0000	11.3940	ng/mL	
13C3-PFHxS	Auto	7.085	-0.001	0.000	230489	223258	18O2-PFHxS_IS	2.5000	2.4052	ng/mL	
13C3-PFHxS_IS	Auto	7.085	-0.001	----	230489	230489	----	2.5000	2.5000	ng/mL	
PFHxS	M	7.084	0.000	-0.001	1072624	230489	13C3-PFHxS_IS	9.1000	9.6766	ng/mL	
18O2-PFHxS_IS	Auto	7.085	-0.001	----	223258	223258	----	2.5000	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.955	-0.001	----	290785	290785	----	1.2500	1.2500	ng/mL	
13C9-PFNA	Auto	7.955	-0.001	0.000	290785	292150	13C5-PFNA_IS	1.2500	1.2712	ng/mL	
13C5-PFNA_IS	Auto	7.955	-0.001	----	292150	292150	----	1.2500	1.2500	ng/mL	
PFNA	Auto	7.957	0.000	0.002	1640974	290785	13C9-PFNA_IS	10.0000	9.8848	ng/mL	
PFHpS	Auto	8.004	0.000	-0.816	795008	112442	13C8-PFOS_IS	9.5000	9.0584	ng/mL	
7_3 FTCA	Auto	7.953	-0.001	2.978	1723816	638007	13C5-PFHxA_IS	80.0000	78.2456	ng/mL	
13C2-8_2-FTS	Auto	8.409	0.000	1.324	112708	223258	18O2-PFHxS_IS	5.0000	4.7218	ng/mL	
13C2-8_2-FTS_IS	Auto	8.409	0.000	----	112708	112708	----	5.0000	5.0000	ng/mL	
8_2 FTS	Auto	8.410	0.000	0.001	450949	112708	13C2-8_2-FTS_IS	9.6000	9.3111	ng/mL	
13C6-PFDA_IS	Auto	8.720	0.000	----	219938	219938	----	1.2500	1.2500	ng/mL	
13C6-PFDA	Auto	8.720	0.000	-0.001	219938	226144	13C2-PFDA_IS	1.2500	1.2089	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_012 (continued)

(Table continued from previous page)

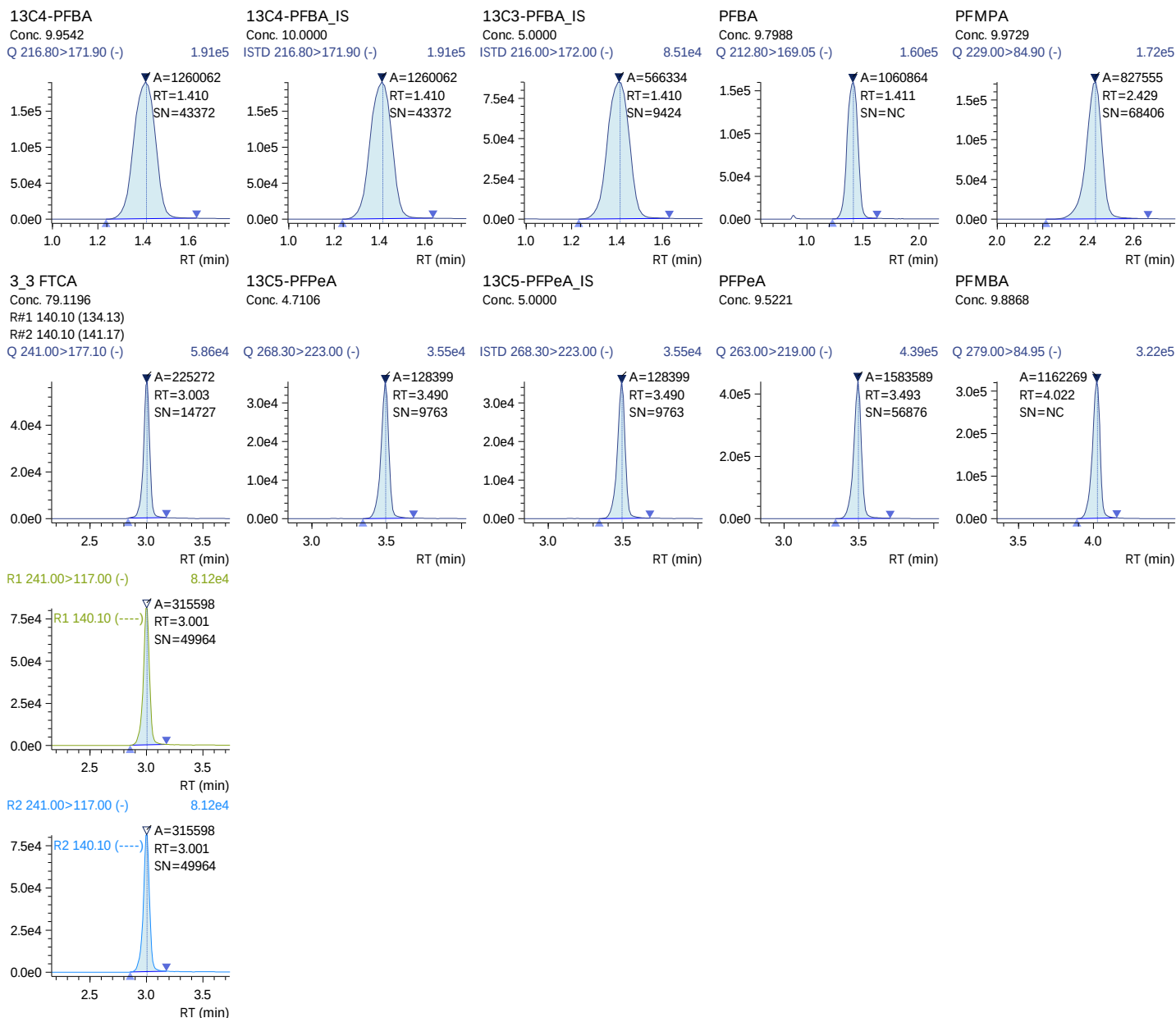
Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Std. Conc.	Conc.	Unit	Flag ID
13C2-PFDA_IS	Auto	8.721	0.000	----	226144	226144	----	1.2500	1.2500	ng/mL	
PFDA	Auto	8.722	0.001	0.002	2069023	219938	13C6-PFDA_IS	10.0000	9.8440	ng/mL	
D3-NMeFOSAA_IS	Auto	8.855	0.000	----	216872	216872	----	5.0000	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.855	0.000	0.035	216872	272314	13C4-PFOS_IS	5.0000	4.5887	ng/mL	
13C8-PFOS_IS	Auto	8.820	0.000	----	112442	112442	----	2.5000	2.5000	ng/mL	
13C8-PFOS	Auto	8.820	0.000	0.000	112442	272314	13C4-PFOS_IS	2.5000	2.4759	ng/mL	
13C4-PFOS_IS	Auto	8.820	0.000	----	272314	272314	----	2.5000	2.5000	ng/mL	
PFOS	M	8.821	-0.001	0.001	994421	112442	13C8-PFOS_IS	9.3000	8.5029	ng/mL	
NMeFOSAA	M	8.861	0.000	0.006	579948	216872	D3-NMeFOSAA_IS	10.0000	9.8555	ng/mL	
D5-NetFOSAA_IS	Auto	9.186	0.000	----	264164	264164	----	5.0000	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.186	0.000	0.366	264164	272314	13C4-PFOS_IS	5.0000	4.6719	ng/mL	
NetFOSAA	M	9.196	0.001	0.010	342529	264164	D5-NetFOSAA_IS	10.0000	9.7087	ng/mL	
9-CI-PF3ONS	Auto	9.385	0.001	3.935	4405373	598128	13C3-HFPO-DA_IS	9.3000	8.9338	ng/mL	
PFUnDA	Auto	9.446	-0.001	0.001	1839221	248001	13C7-PFUnDA_IS	10.0000	10.2127	ng/mL	
13C7-PFUnDA_IS	Auto	9.445	0.000	----	248001	248001	----	1.2500	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.445	0.000	0.724	248001	226144	13C2-PFDA_IS	1.2500	1.1427	ng/mL	
PFNS	Auto	9.584	0.000	0.764	775210	112442	13C8-PFOS_IS	9.6000	9.0738	ng/mL	
10_2_FTS	Auto	9.818	-0.001	1.409	534728	112708	13C2-8_2-FTS_IS	9.6000	9.0746	ng/mL	
13C2-PFDOA_IS	Auto	10.133	0.000	----	294038	294038	----	1.2500	1.2500	ng/mL	
13C2-PFDOA	Auto	10.133	0.000	1.412	294038	226144	13C2-PFDA_IS	1.2500	1.1793	ng/mL	
PFDOA	Auto	10.134	0.000	0.001	1662292	294038	13C2-PFDOA_IS	10.0000	10.0186	ng/mL	
PFDS	Auto	10.296	0.000	1.476	693164	112442	13C8-PFOS_IS	9.7000	9.3287	ng/mL	
PFTDA	Auto	10.791	-0.001	-0.633	1805435	126897	13C2-PFTDA_IS	10.0000	10.0542	ng/mL	
11-CI-PF3OUdS	Auto	10.806	0.000	5.356	3212472	598128	13C3-HFPO-DA_IS	9.4000	9.6665	ng/mL	
PFOSAm	M	11.165	0.001	-0.002	1754149	280036	13C8-PFOSAm_IS	20.0000	19.0046	ng/mL	
13C8-PFOSAm	Auto	11.167	0.002	2.347	280036	272314	13C4-PFOS_IS	2.5000	2.4224	ng/mL	
13C8-PFOSAm_IS	Auto	11.167	0.002	----	280036	280036	----	2.5000	2.5000	ng/mL	
PFTDA	Auto	11.426	0.001	0.002	1387467	126897	13C2-PFTDA_IS	10.0000	10.1475	ng/mL	
13C2-PFTDA	Auto	11.424	0.000	2.703	126897	226144	13C2-PFDA_IS	1.2500	1.1788	ng/mL	
13C2-PFTDA_IS	Auto	11.424	0.000	----	126897	126897	----	1.2500	1.2500	ng/mL	
PFDoS	Auto	11.622	0.000	2.802	409175	112442	13C8-PFOS_IS	9.7000	9.0739	ng/mL	
D7-MeFOSE_IS	Auto	13.381	0.004	----	704481	704481	----	25.0000	25.0000	ng/mL	
D7-MeFOSE	Auto	13.381	0.004	4.561	704481	272314	13C4-PFOS_IS	25.0000	24.7175	ng/mL	
MeFOSE	M	13.419	0.006	0.038	240406	704481	D7-MeFOSE_IS	10.0000	9.2921	ng/mL	
13C2-PFHXA_IS	Auto	12.641	0.000	----	498313	498313	----	2.5000	2.5000	ng/mL	
13C2-PFHXA	Auto	12.641	0.000	3.920	498313	226144	13C2-PFDA_IS	2.5000	2.3722	ng/mL	
PFHXDA	Auto	12.643	0.001	0.002	2034708	498313	13C2-PFHXA_IS	10.0000	9.9308	ng/mL	
D3-MeFOSA	Auto	13.689	0.004	4.869	55039	272314	13C4-PFOS_IS	2.5000	2.3642	ng/mL	
D3-MeFOSA_IS	Auto	13.689	0.004	----	55039	55039	----	2.5000	2.5000	ng/mL	
MeFOSA	M	13.697	0.003	0.008	387762	55039	D3-MeFOSA_IS	10.0000	9.7734	ng/mL	
D9-EtFOSE_IS	Auto	14.011	0.004	----	689895	689895	----	25.0000	25.0000	ng/mL	
D9-EtFOSE	Auto	14.011	0.004	5.190	689895	272314	13C4-PFOS_IS	25.0000	23.8326	ng/mL	
EtFOSE	M	14.054	0.006	0.044	365015	689895	D9-EtFOSE_IS	10.0000	10.0559	ng/mL	
D5-EtFOSAm	Auto	14.368	0.006	5.548	74601	272314	13C4-PFOS_IS	2.5000	2.4068	ng/mL	
D5-EtFOSAm_IS	Auto	14.368	0.006	----	74601	74601	----	2.5000	2.5000	ng/mL	
EtFOSAm	M	14.386	0.006	0.018	439049	74601	D5-EtFOSAm_IS	10.0000	10.1093	ng/mL	
PFODA	Auto	13.778	0.003	1.137	1074240	498313	13C2-PFHXA_IS	10.0000	9.5331	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_012 (continued)





240118_012 (continued)

13C2-4_2 FTS
Conc. 4.6710

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. 9.2244
R#1 29.42 (34.14)
R#2 29.42 (29.06)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 8.7997
R#1 47.26 (47.53)
R#2 47.26 (46.72)

Q 329.10>80.90 (-)

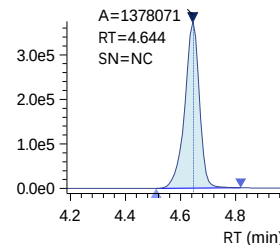
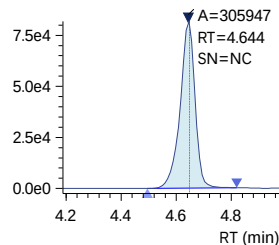
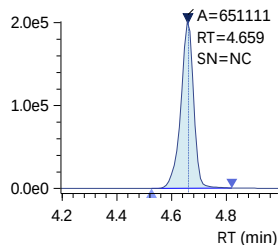
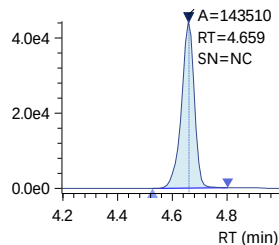
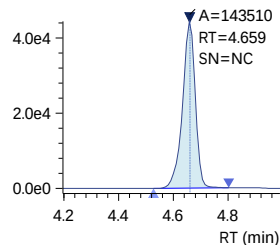
4.45e4 ISTD 329.10>80.90 (-)

4.45e4 Q 327.10>307.00 (-)

2.02e5 ISTD 302.10>79.90 (-)

8.18e4 Q 298.70>79.90 (-)

3.75e5

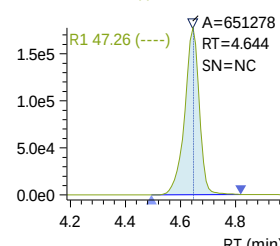
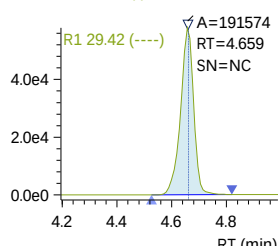


R1 327.10>80.90 (-)

5.79e4

R1 298.70>98.80 (-)

1.78e5

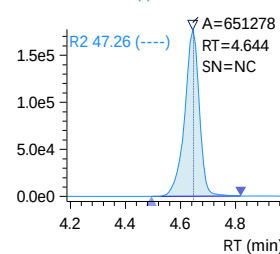
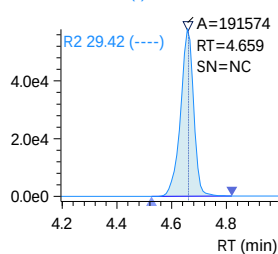


R2 327.10>80.90 (-)

5.79e4

R2 298.70>98.80 (-)

1.78e5





240118_012 (continued)

13C3-PFBS
Conc. 2.4148

NFDHA
Conc. 9.5596
R#1 36.91 (37.88)
R#2 36.91 (40.25)

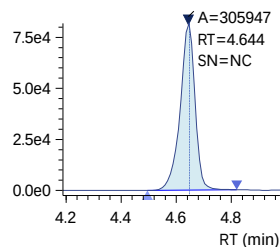
13C5-PFHxA
Conc. 2.5069

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

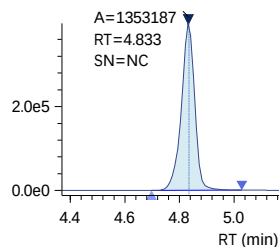
Q 302.10>79.90 (-)

8.18e4



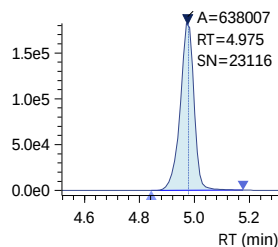
Q 295.00>201.00 (-)

3.98e5



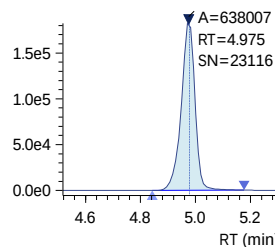
Q 318.00>273.00 (-)

1.82e5



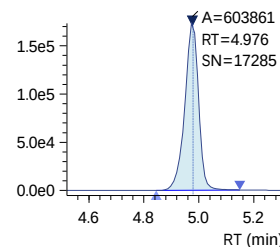
ISTD 318.00>273.00 (-)

1.82e5



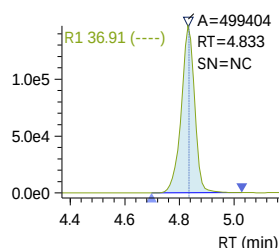
ISTD 315.10>270.00 (-)

1.73e5



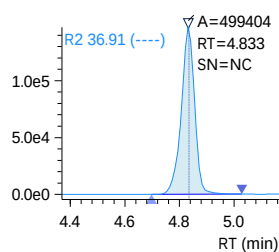
R1 295.00>84.90 (-)

1.47e5



R2 295.00>84.90 (-)

1.47e5





240118_012 (continued)

PFHxA
Conc. 9.9957

PFEESA
Conc. 8.6768
R#1 5.84 (5.88)
R#2 5.84 (6.11)

13C3-HFPO-DA
Conc. 10.1184

13C3-HFPO-DA_IS
Conc. 10.0000

HFPO-DA
Conc. 9.6646
R#1 65.48 (63.80)
R#2 65.48 (65.61)

Q 313.00>269.00 (-)

6.07e5

Q 314.80>135.00 (-)

1.89e6

Q 286.90>168.90 (-)

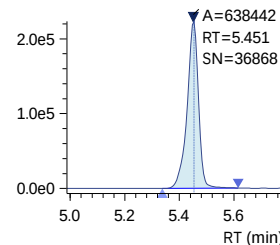
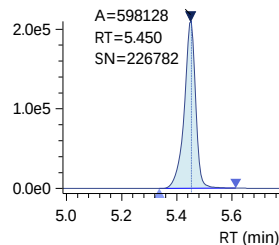
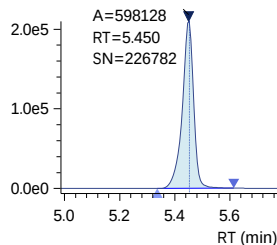
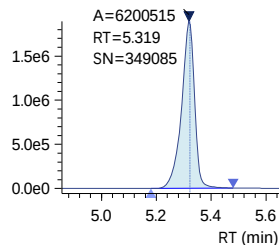
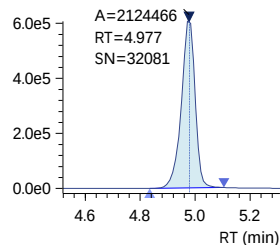
2.10e5

ISTD 286.90>168.90 (-)

2.10e5

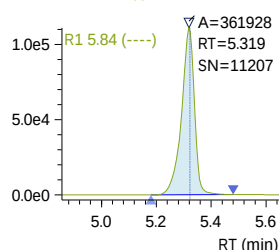
Q 284.90>168.90 (-)

2.23e5



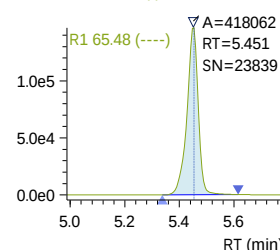
R1 314.80>82.90 (-)

1.11e5



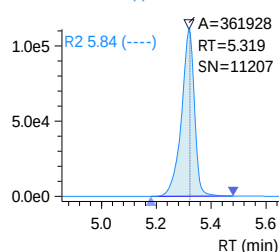
R1 284.90>184.90 (-)

1.46e5



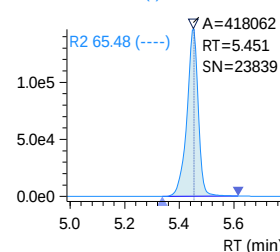
R2 314.80>82.90 (-)

1.11e5



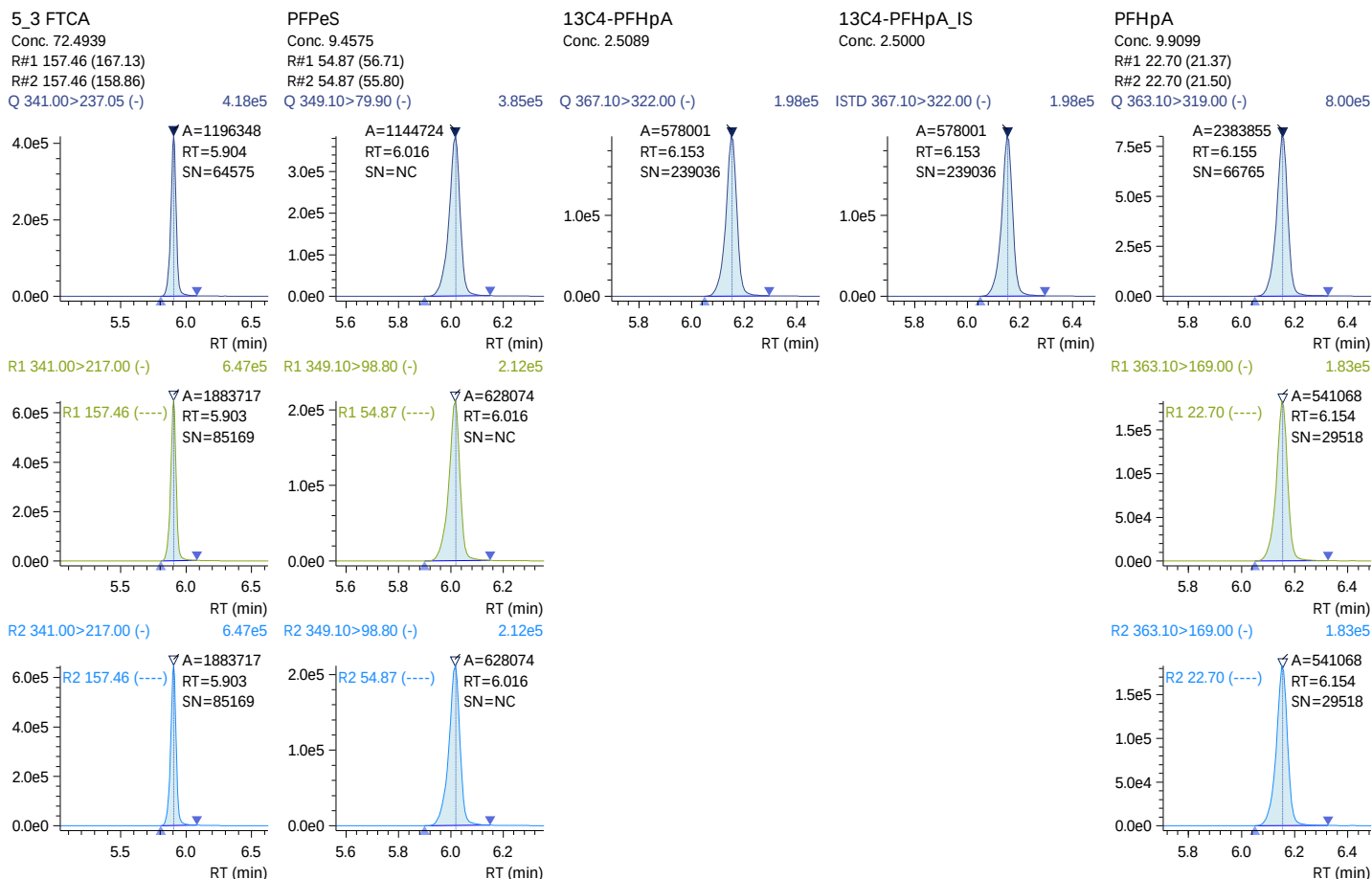
R2 284.90>184.90 (-)

1.46e5





240118_012 (continued)

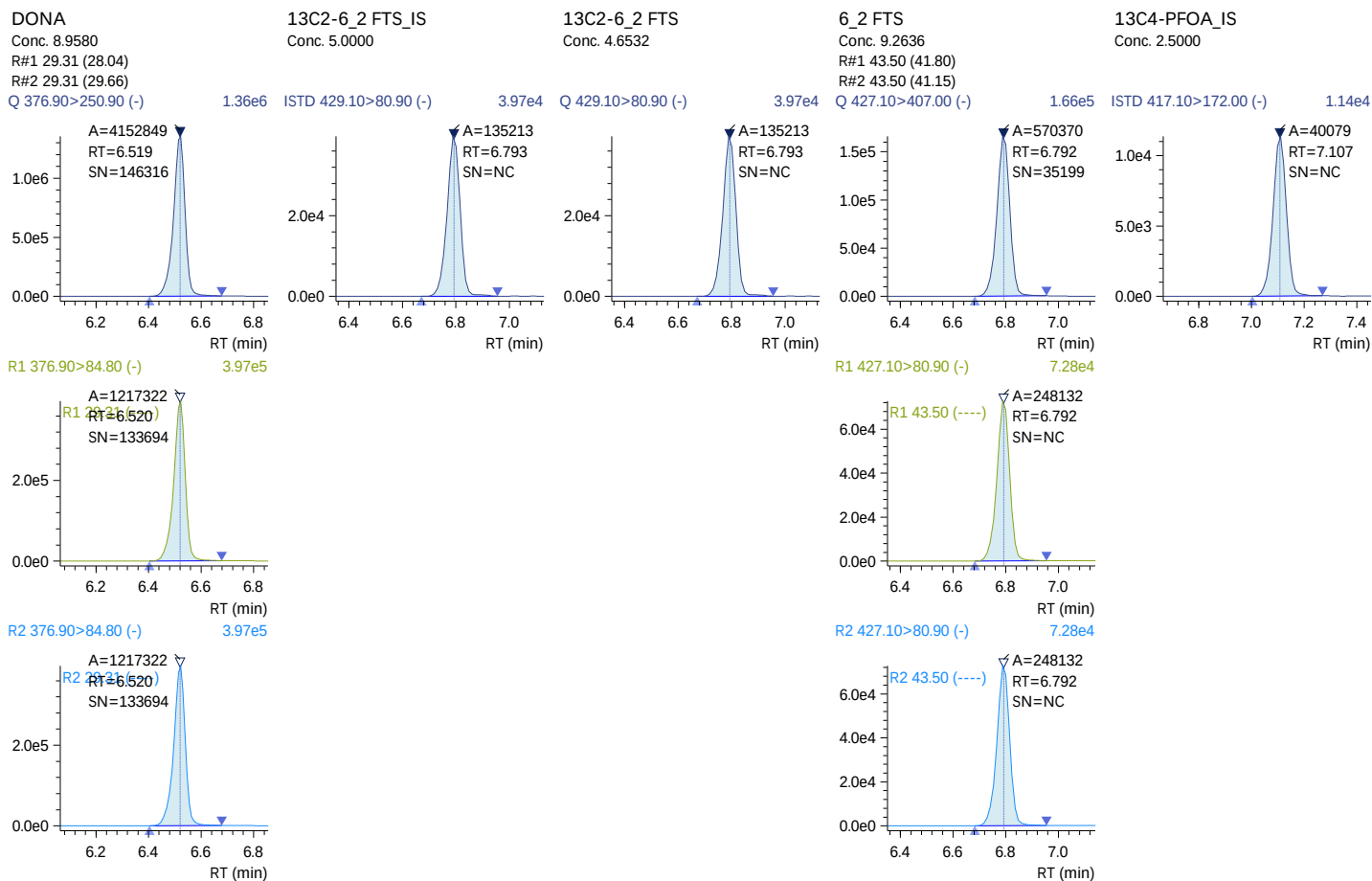


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_012 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_012 (continued)

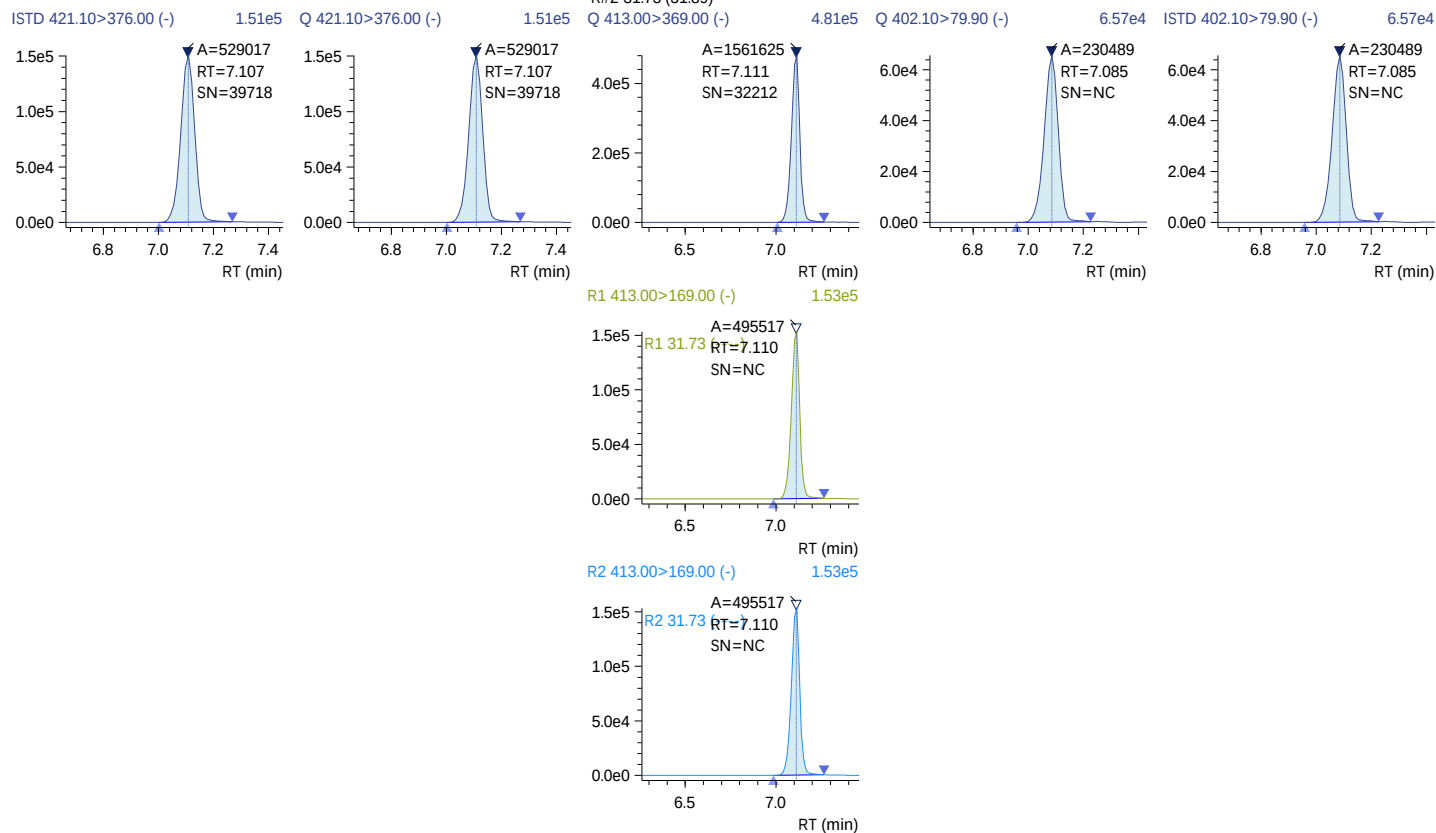
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.3616

PFOA
Conc. 11.3940
R#1 31.73 (29.05)
R#2 31.73 (31.89)

13C3-PFHxS
Conc. 2.4052

13C3-PFHxS_IS
Conc. 2.5000

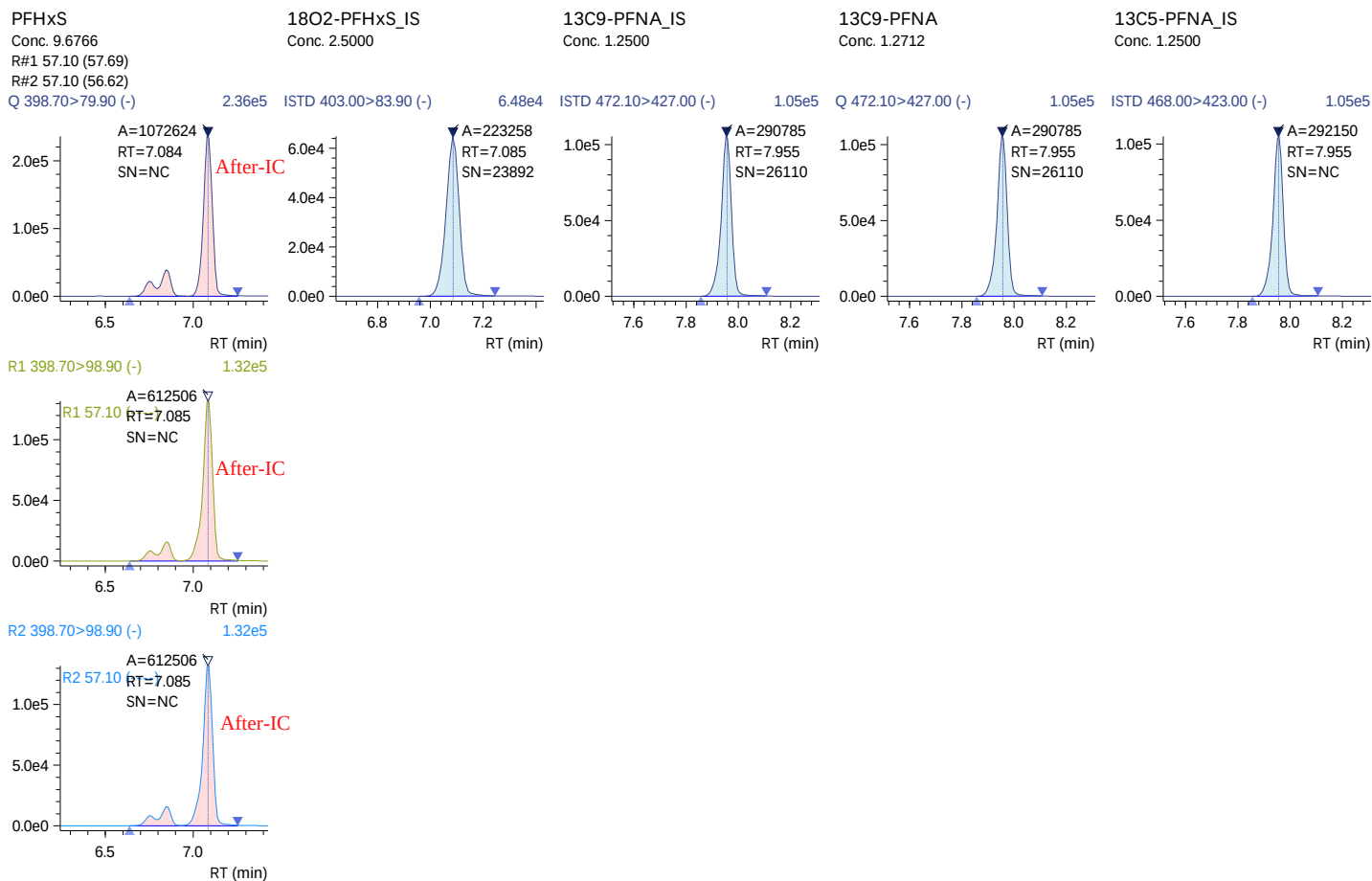


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_012 (continued)

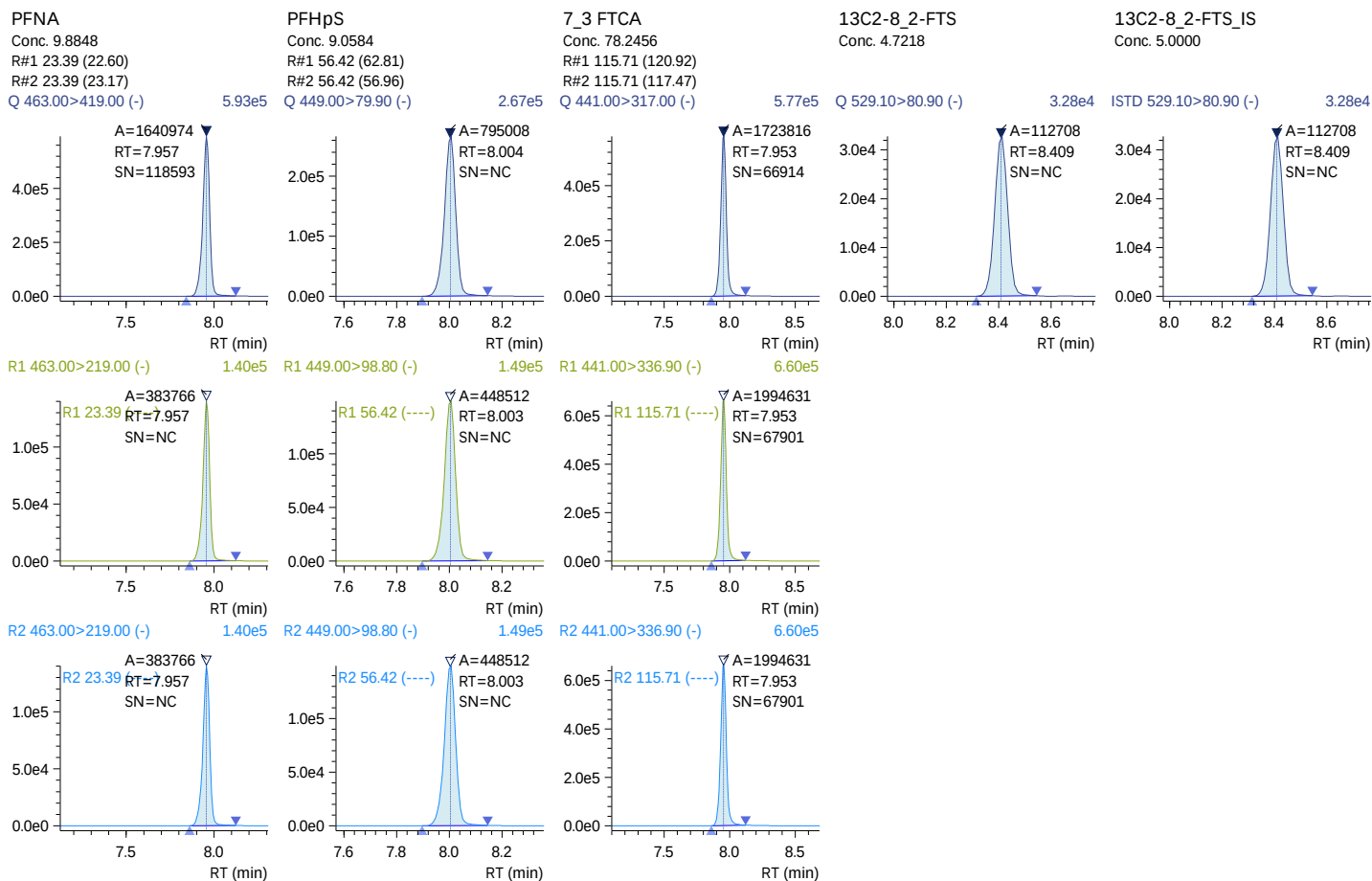


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_012 (continued)

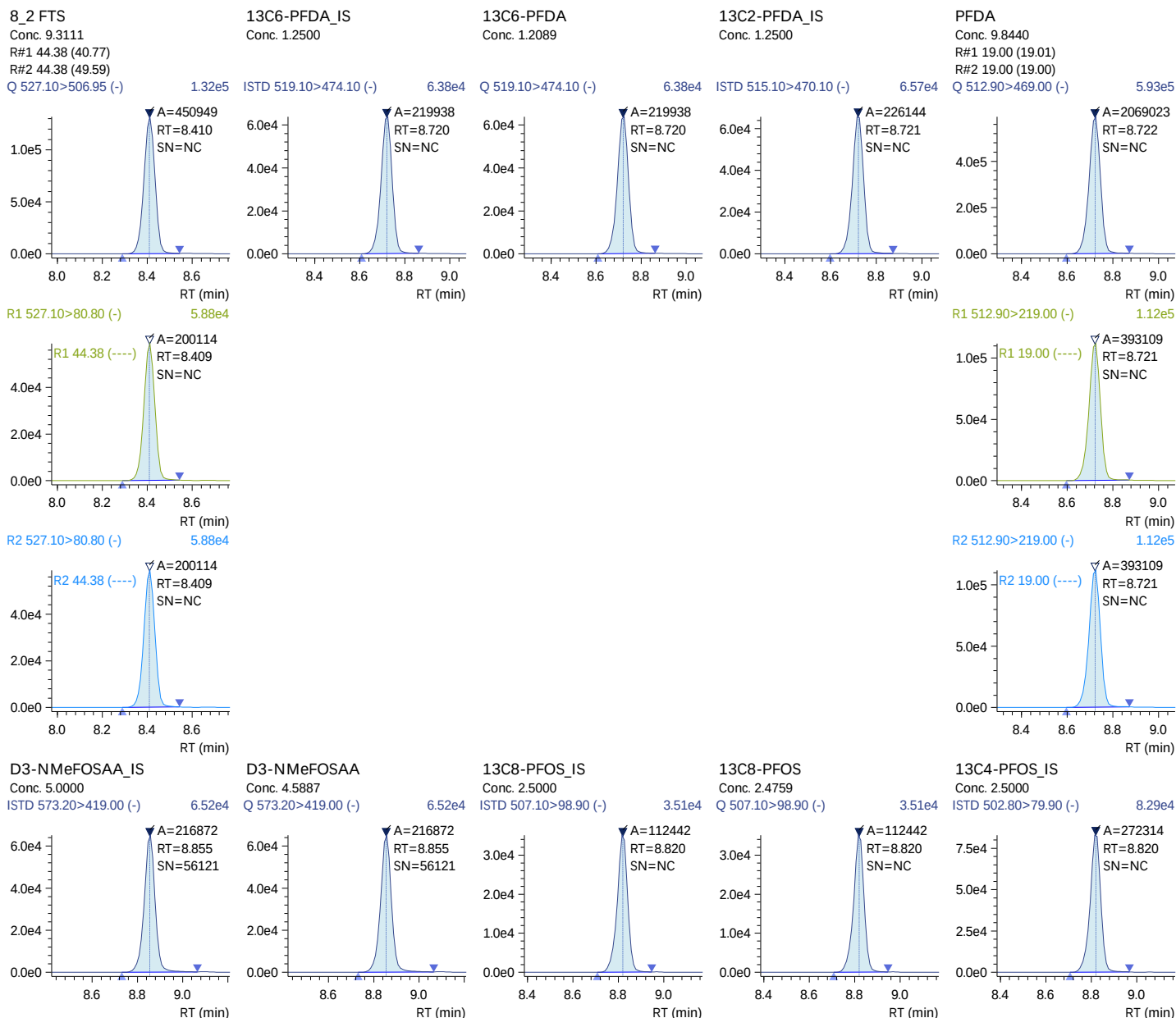


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_012 (continued)

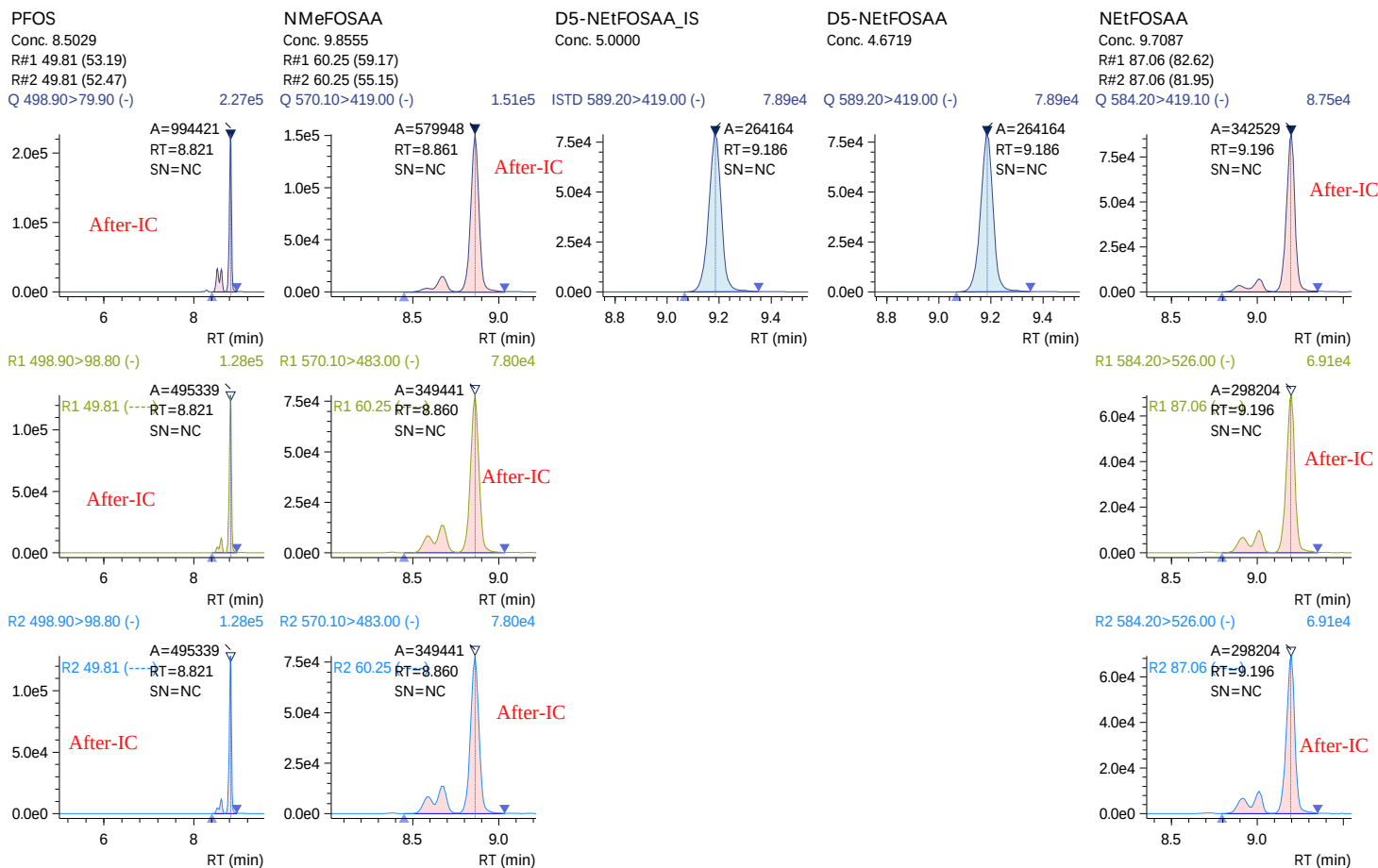


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_012 (continued)



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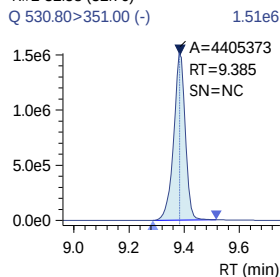
SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



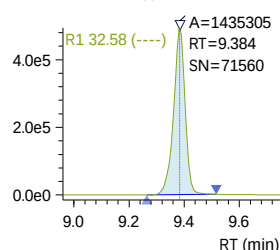
240118_012 (continued)

9-Cl-PF3ONS

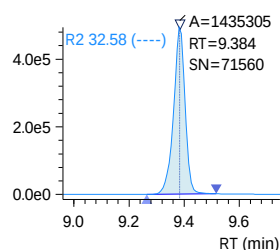
Conc. 8.9338
R#1 32.58 (31.76)
R#2 32.58 (32.76)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-) 4.94e5

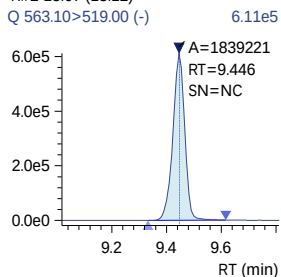


R2 532.80>353.00 (-) 4.94e5

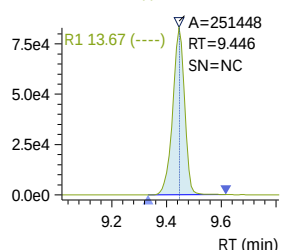


PFUnDA

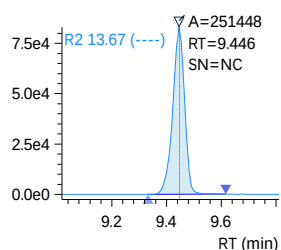
Conc. 10.2127
R#1 13.67 (12.31)
R#2 13.67 (13.12)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-) 8.30e4

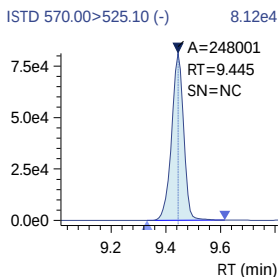


R2 563.10>269.10 (-) 8.30e4



13C7-PFUnDA_IS

Conc. 1.2500



ISTD 570.00>525.10 (-) 8.12e4

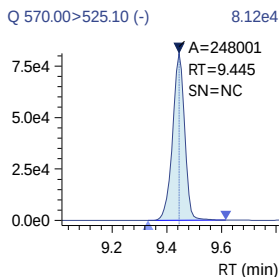


Q 570.00>525.10 (-) 8.12e4



13C7-PFUnDA

Conc. 1.1427



Q 570.00>525.10 (-) 8.12e4

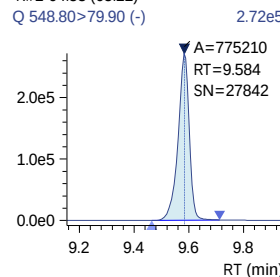


Q 570.00>525.10 (-) 8.12e4

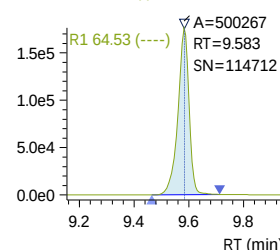


PFNS

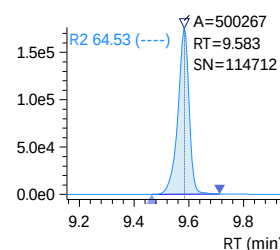
Conc. 9.0738
R#1 64.53 (63.31)
R#2 64.53 (65.22)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-) 1.76e5

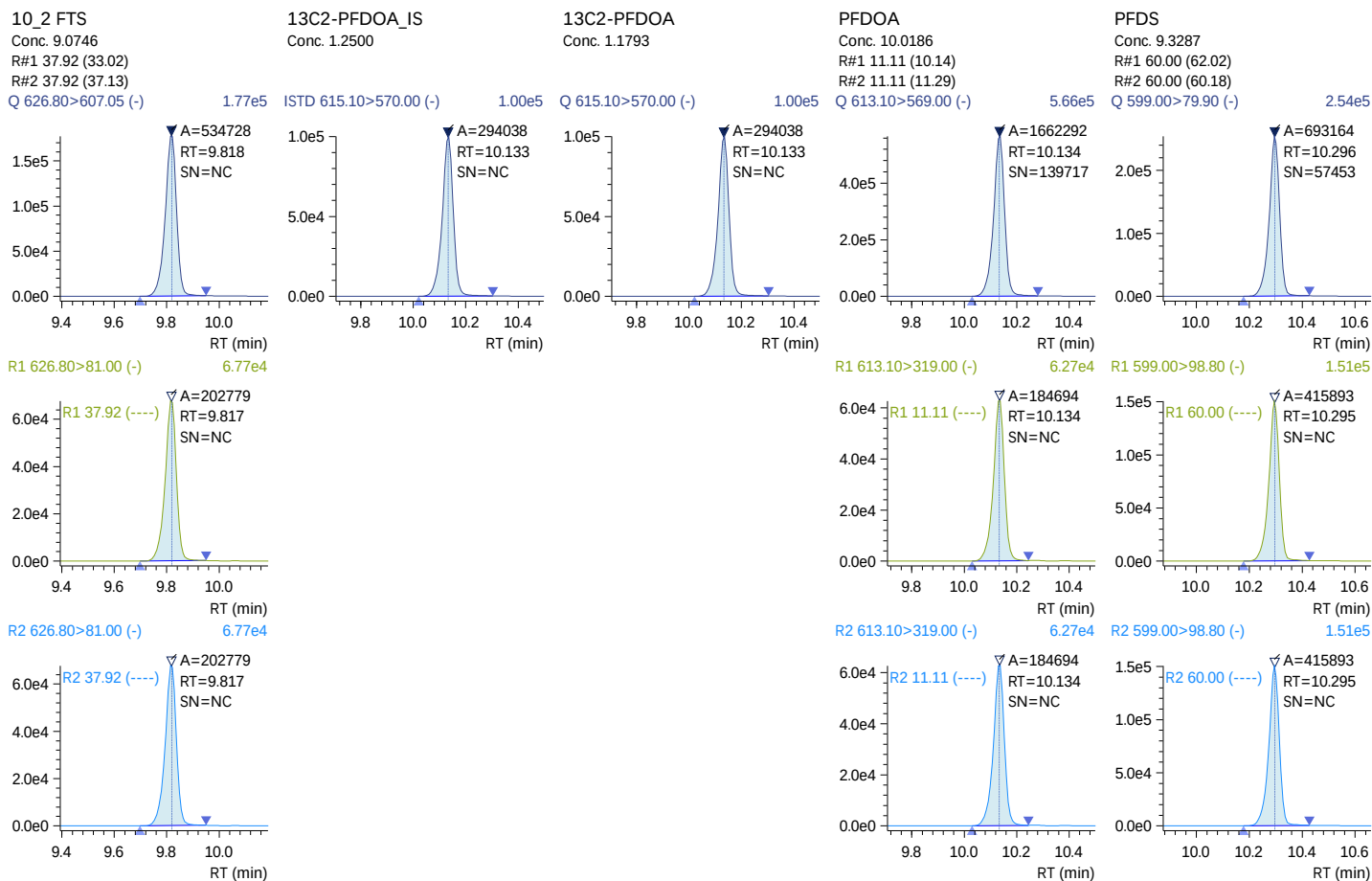


R2 548.80>98.80 (-) 1.76e5





240118_012 (continued)

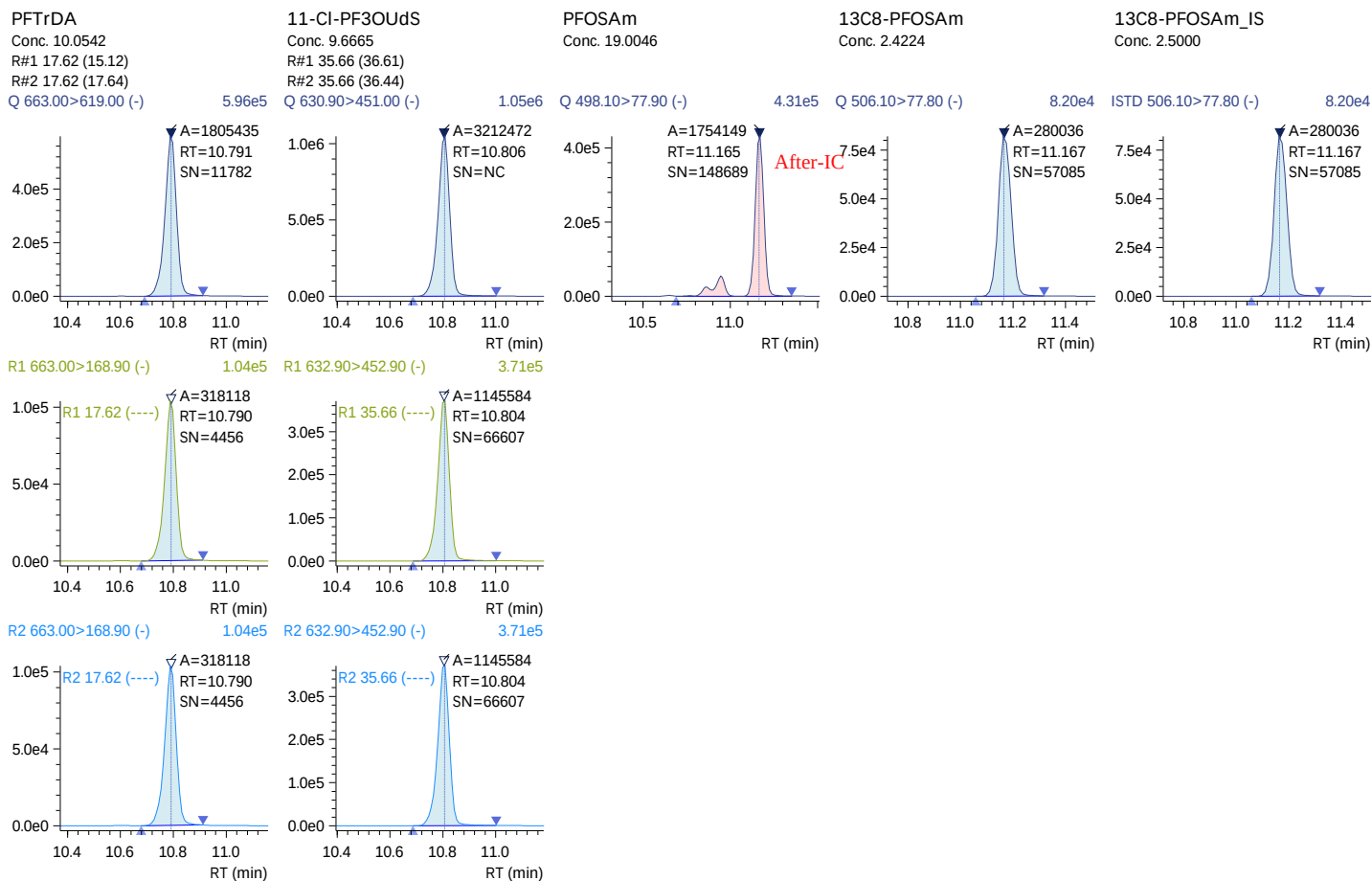


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_012 (continued)

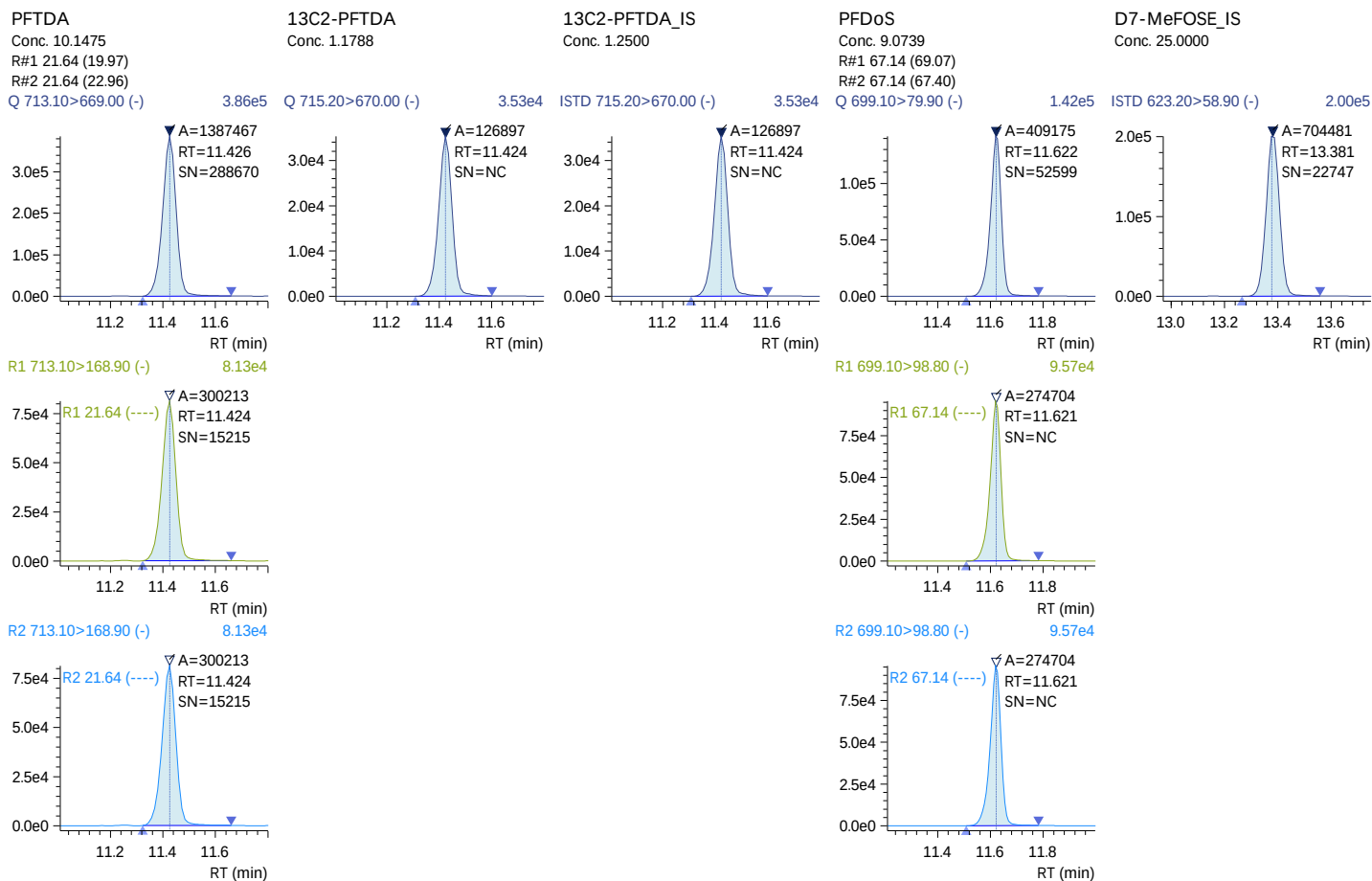


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_012 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_012 (continued)

D7-MeFOSE
Conc. 24.7175

MeFOSE
Conc. 9.2921

13C2-PFHXA_IS
Conc. 2.5000

13C2-PFHXA
Conc. 2.3722

PFHXA
Conc. 9.9308
R#1 13.90 (11.64)
R#2 13.90 (13.90)

Q 623.20>58.90 (-)

2.00e5

Q 616.10>59.00 (-)

4.39e4

ISTD 815.00>770.05 (-)

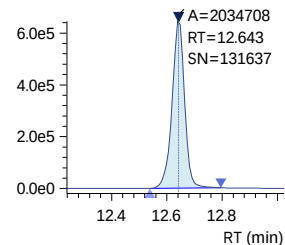
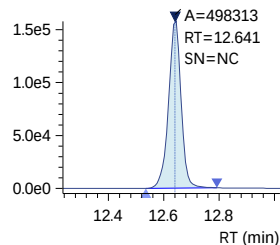
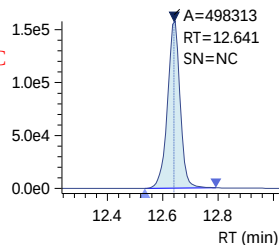
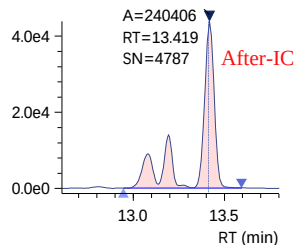
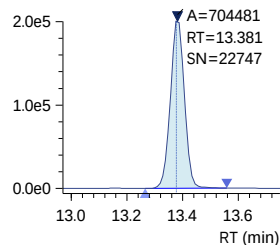
1.58e5

Q 815.00>770.05 (-)

1.58e5

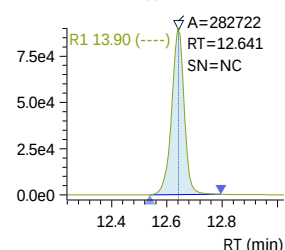
Q 813.00>768.95 (-)

6.45e5



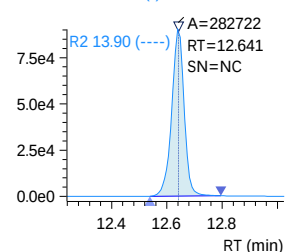
R1 813.00>218.95 (-)

9.03e4



R2 813.00>218.95 (-)

9.03e4





240118_012 (continued)

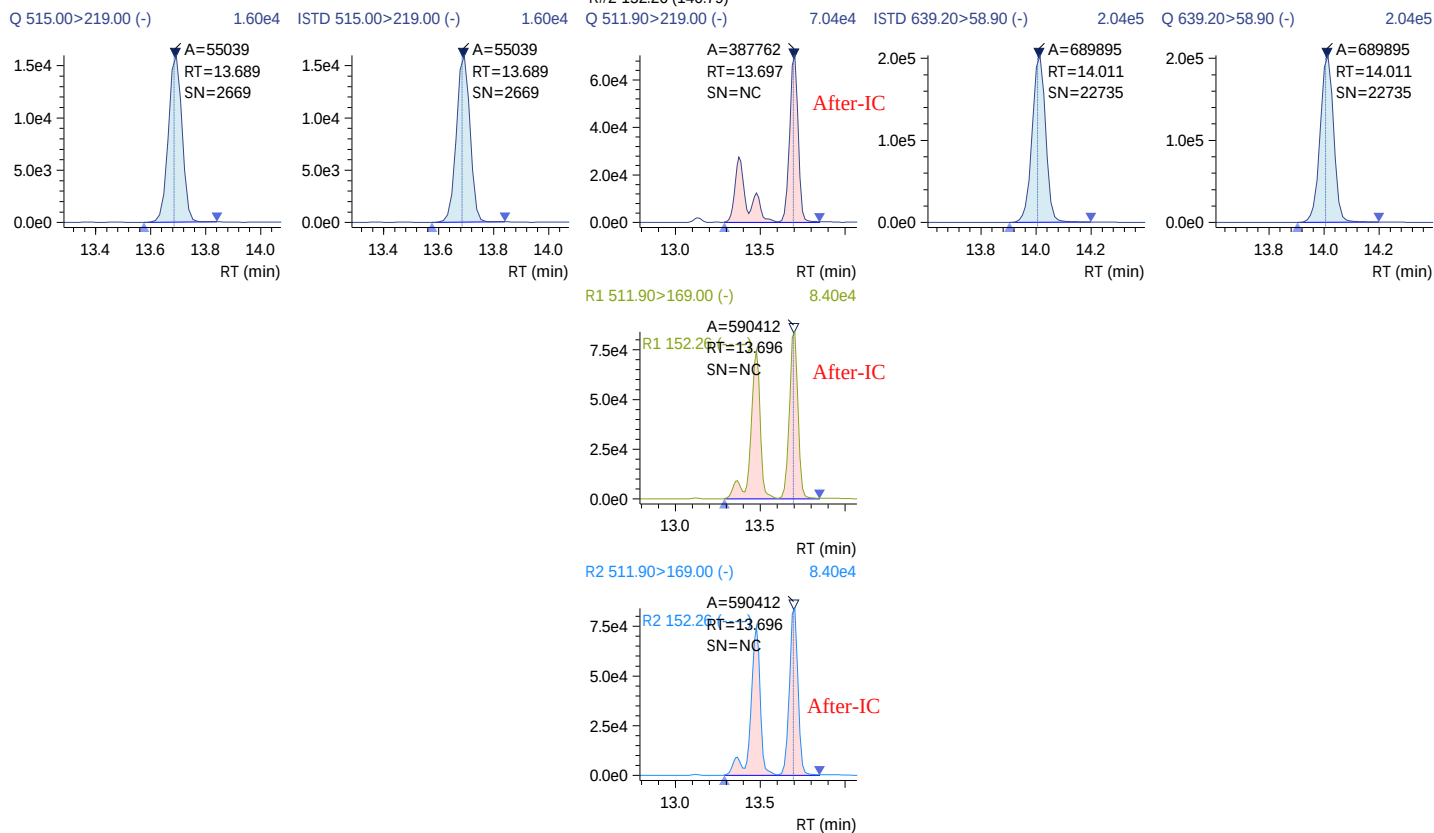
D3-MeFOSA
Conc. 2.3642

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. 9.7734
R#1 152.26 (149.05)
R#2 152.26 (140.79)

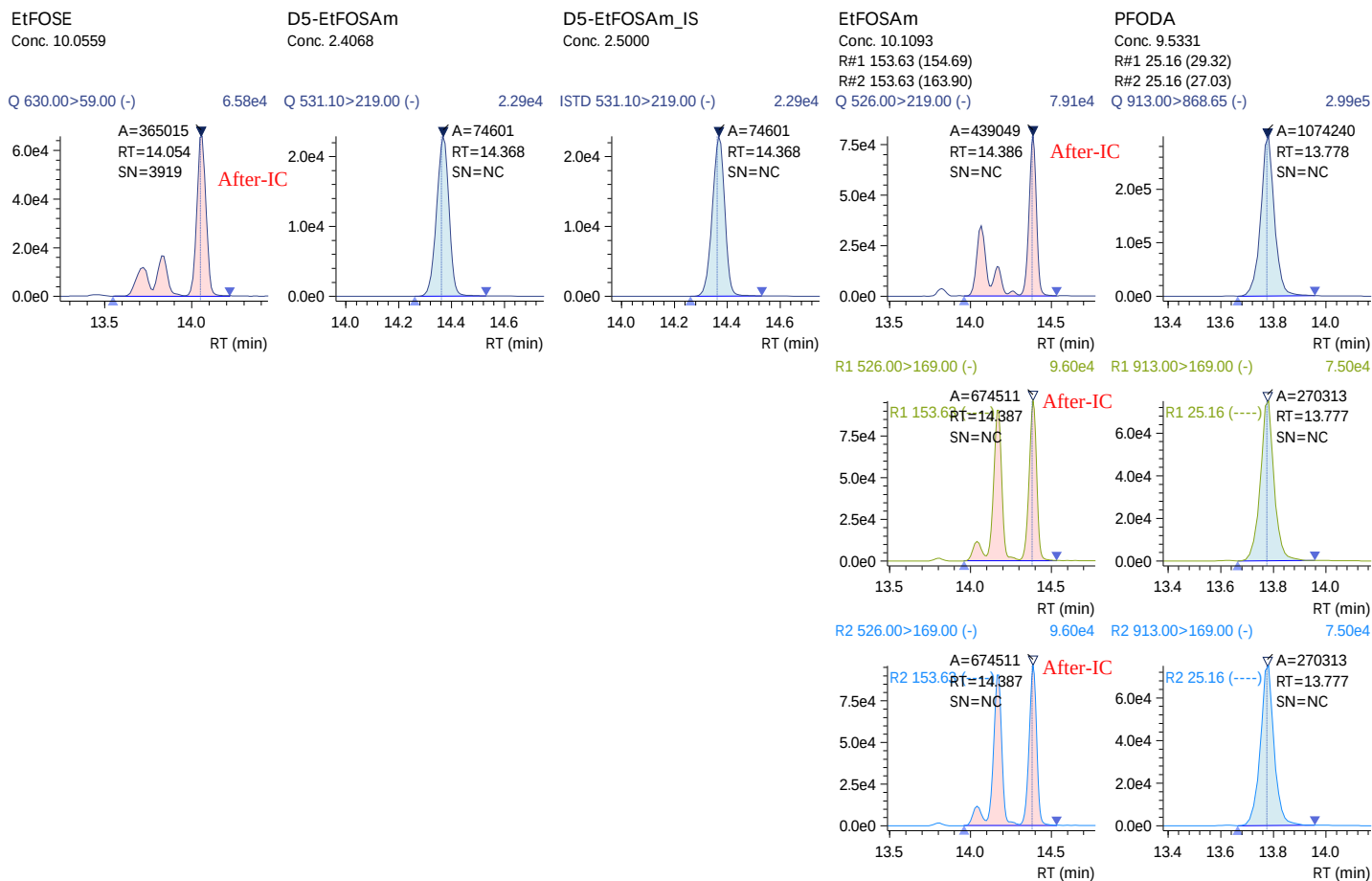
D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 23.8326





240118_012 (continued)



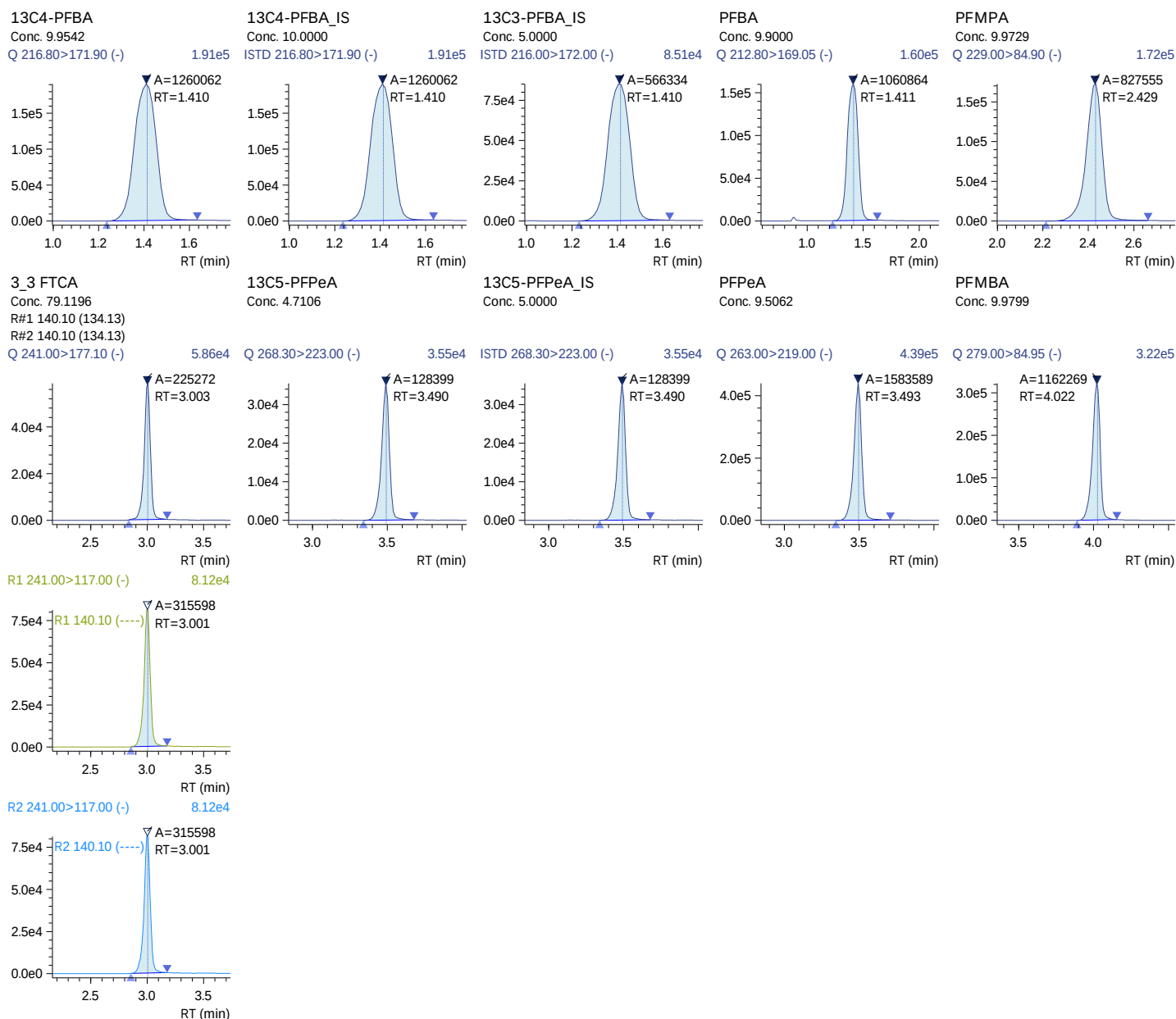
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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_012

Sample ID: 1633 ICAL 10.0PPB
Date Acquired: 1/18/2024 4:24:05 PM
Acquired by: System Administrator
Data File: 240118_012
Vial: 7 | Inj. Volume: 10.0000uL | Tray: 1





240118_012 (continued)

13C2-4_2 FTS
Conc. 4.6710

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. 9.2244
R#1 29.42 (34.14)
R#2 29.42 (34.14)

13C3-PFBS_IS
Conc. 2.5000

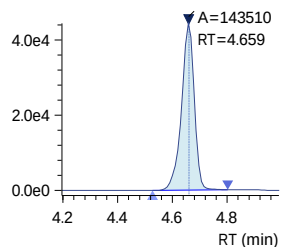
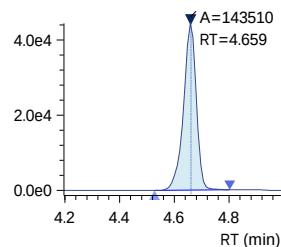
PFBS
Conc. 8.7997
R#1 47.26 (47.53)
R#2 47.26 (47.53)

Q 329.10>80.90 (-)

4.45e4

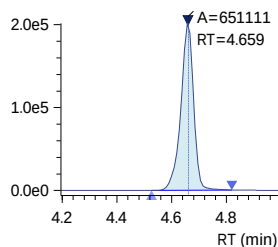
ISTD 329.10>80.90 (-)

4.45e4



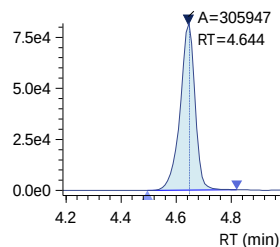
Q 327.10>307.00 (-)

2.02e5



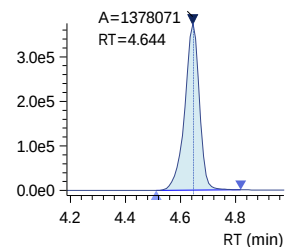
ISTD 302.10>79.90 (-)

8.18e4



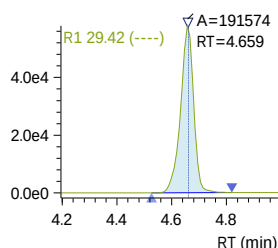
Q 298.70>79.90 (-)

3.75e5



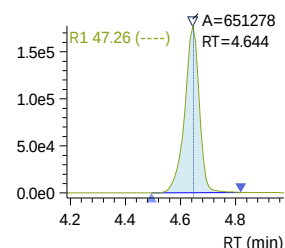
R1 327.10>80.90 (-)

5.79e4



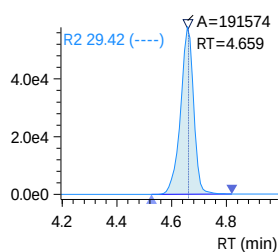
R1 298.70>98.80 (-)

1.78e5



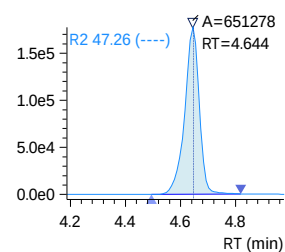
R2 327.10>80.90 (-)

5.79e4



R2 298.70>98.80 (-)

1.78e5





240118_012 (continued)

13C3-PFBS
 Conc. 2.4148

NFDHA
 Conc. 9.5596
 R#1 36.91 (37.88)
 R#2 36.91 (37.88)

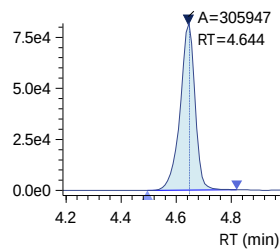
13C5-PFHxA
 Conc. 2.5069

13C5-PFHxA_IS
 Conc. 2.5000

13C2-PFHxA_IS
 Conc. 2.5000

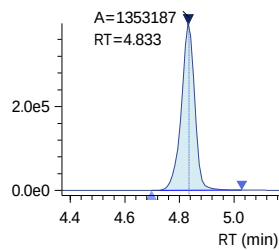
Q 302.10>79.90 (-)

8.18e4



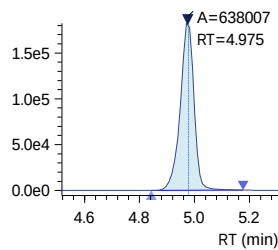
Q 295.00>201.00 (-)

3.98e5



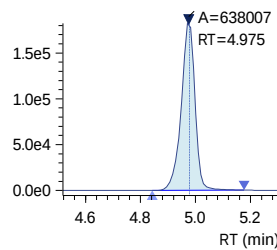
Q 318.00>273.00 (-)

1.82e5



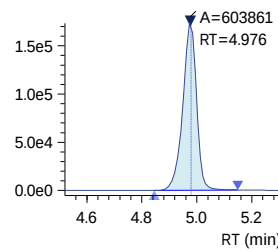
ISTD 318.00>273.00 (-)

1.82e5



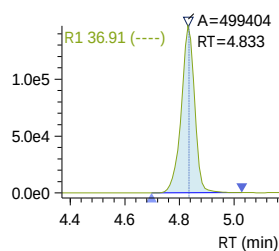
ISTD 315.10>270.00 (-)

1.73e5



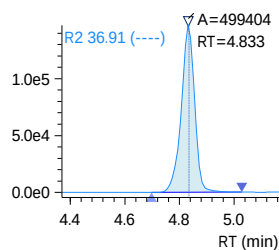
R1 295.00>84.90 (-)

1.47e5



R2 295.00>84.90 (-)

1.47e5





240118_012 (continued)

PFHxA
Conc. 9.9868

PFEESA
Conc. 8.6768
R#1 5.84 (5.88)
R#2 5.84 (5.88)

13C3-HFPO-DA
Conc. 10.1184

13C3-HFPO-DA_IS
Conc. 10.0000

HFPO-DA
Conc. 9.6819
R#1 65.48 (63.80)
R#2 65.48 (63.80)

Q 313.00>269.00 (-)

6.07e5

Q 314.80>135.00 (-)

1.89e6

Q 286.90>168.90 (-)

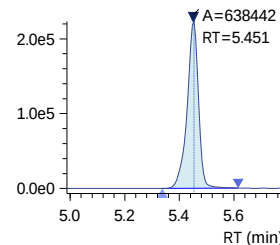
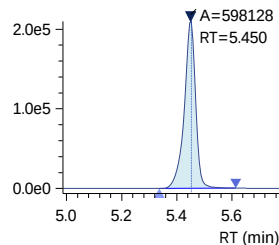
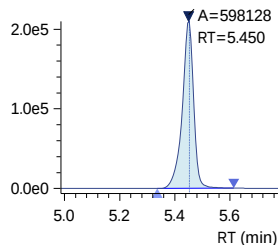
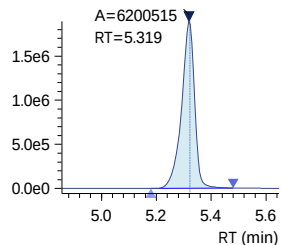
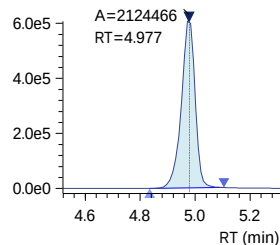
2.10e5

ISTD 286.90>168.90 (-)

2.10e5

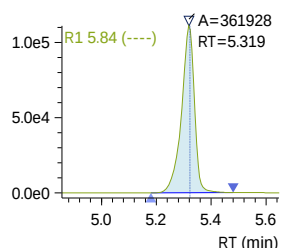
Q 284.90>168.90 (-)

2.23e5



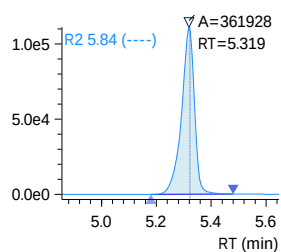
R1 314.80>82.90 (-)

1.11e5



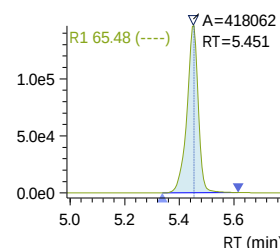
R2 314.80>82.90 (-)

1.11e5



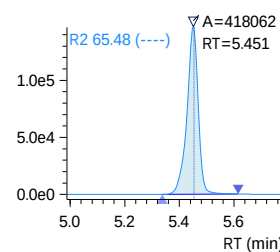
R1 284.90>184.90 (-)

1.46e5



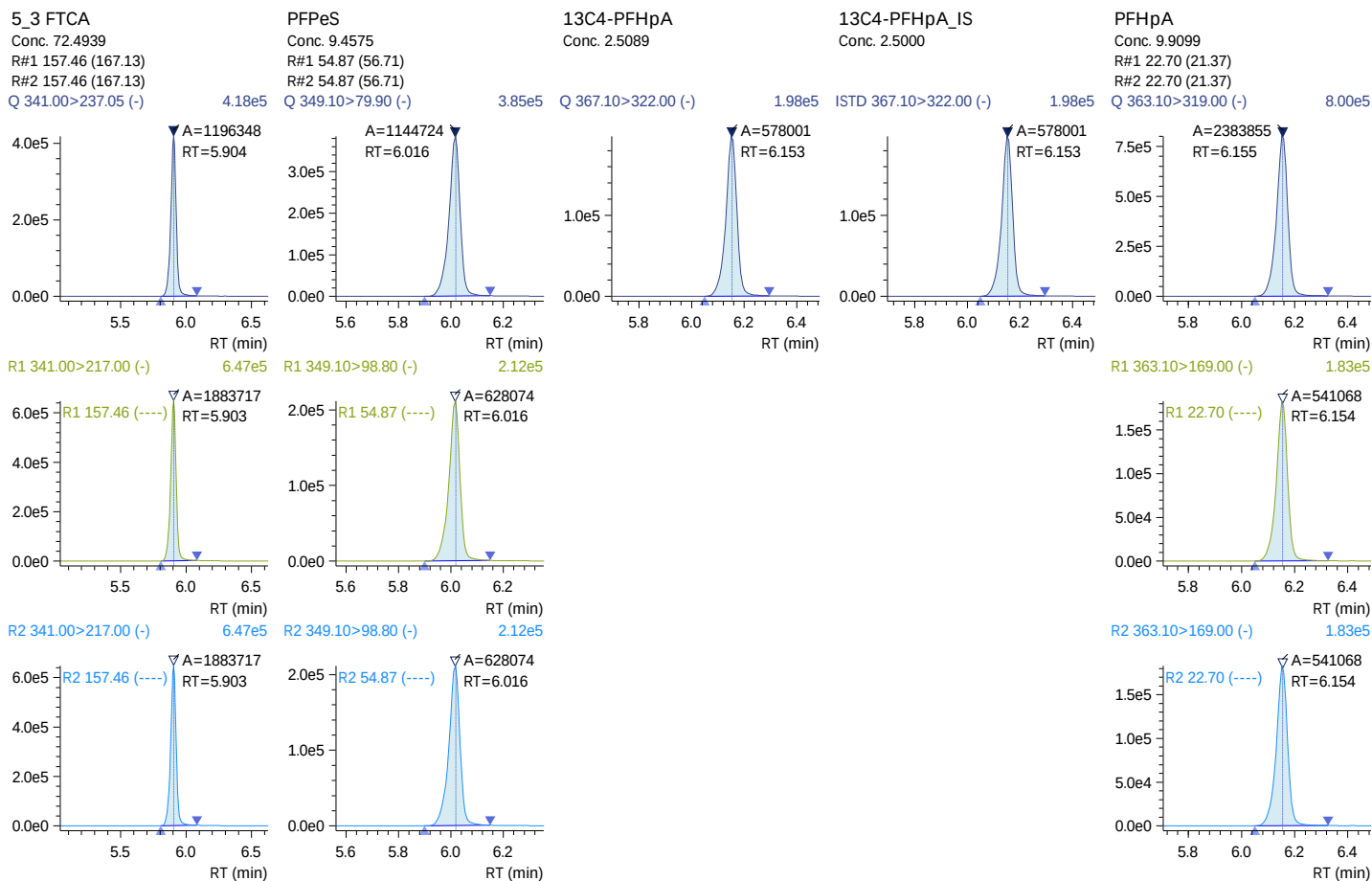
R2 284.90>184.90 (-)

1.46e5



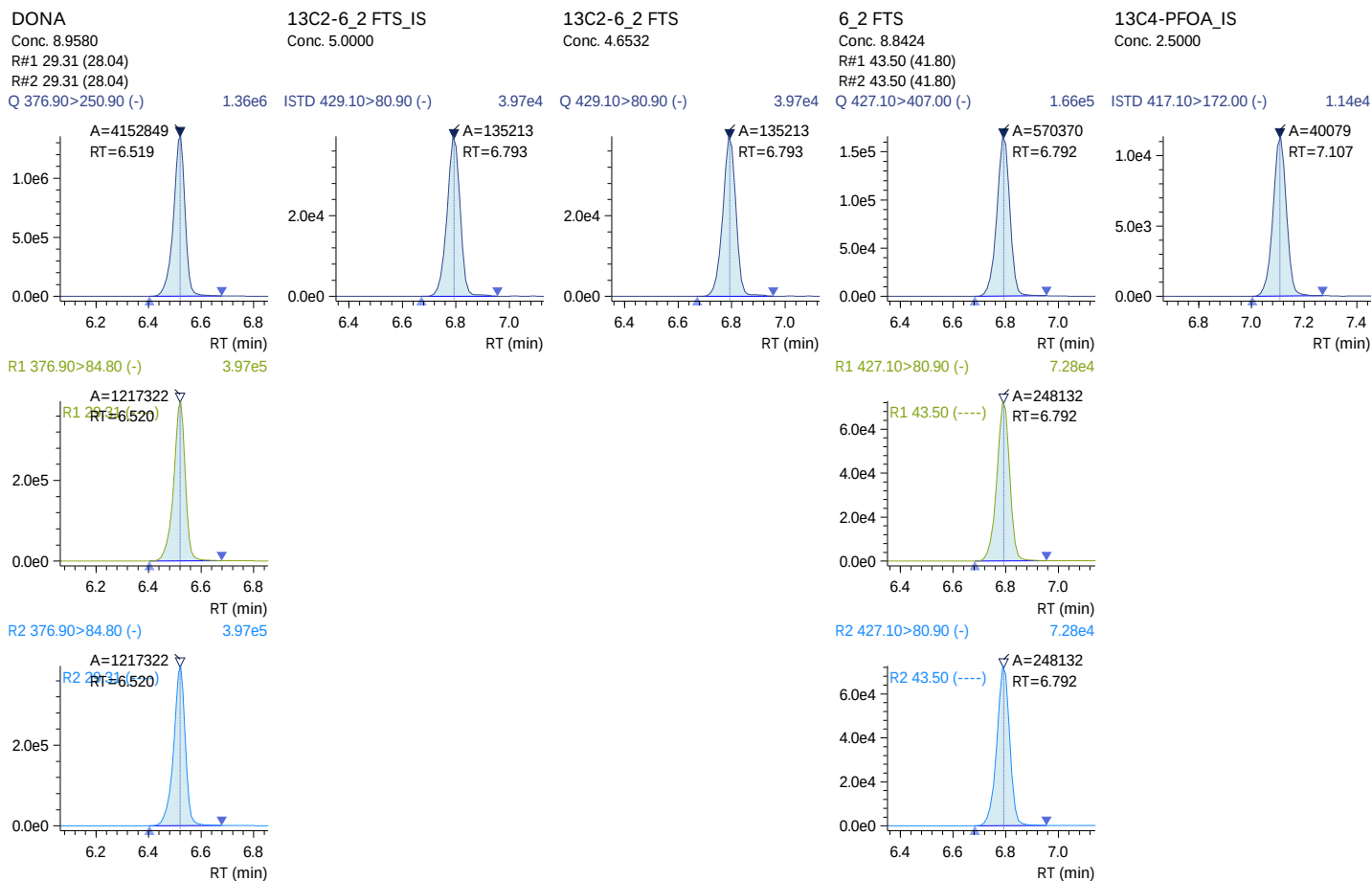


240118_012 (continued)





240118_012 (continued)





240118_012 (continued)

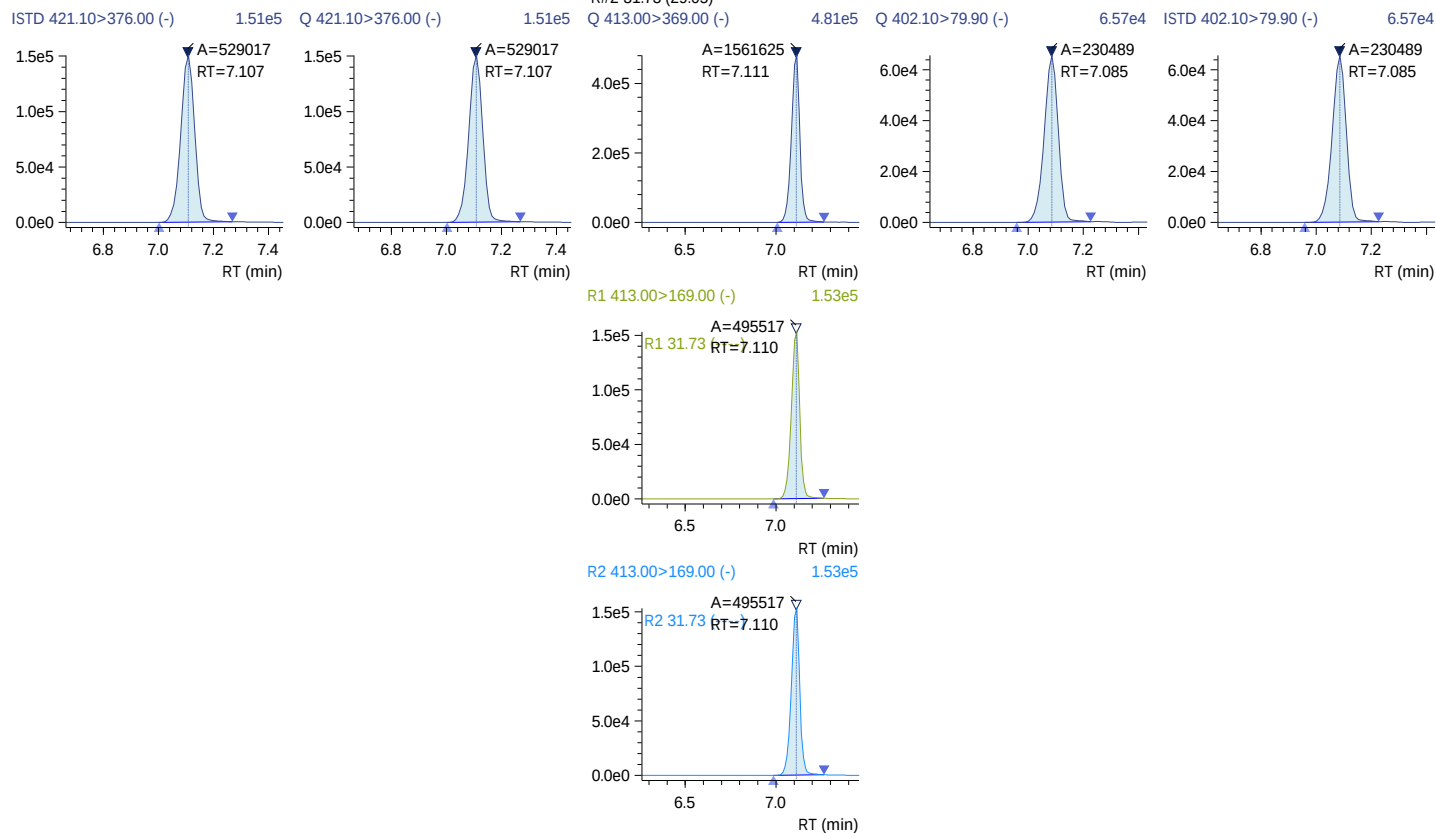
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.3616

PFOA
Conc. 11.3940
R#1 31.73 (29.05)
R#2 31.73 (29.05)

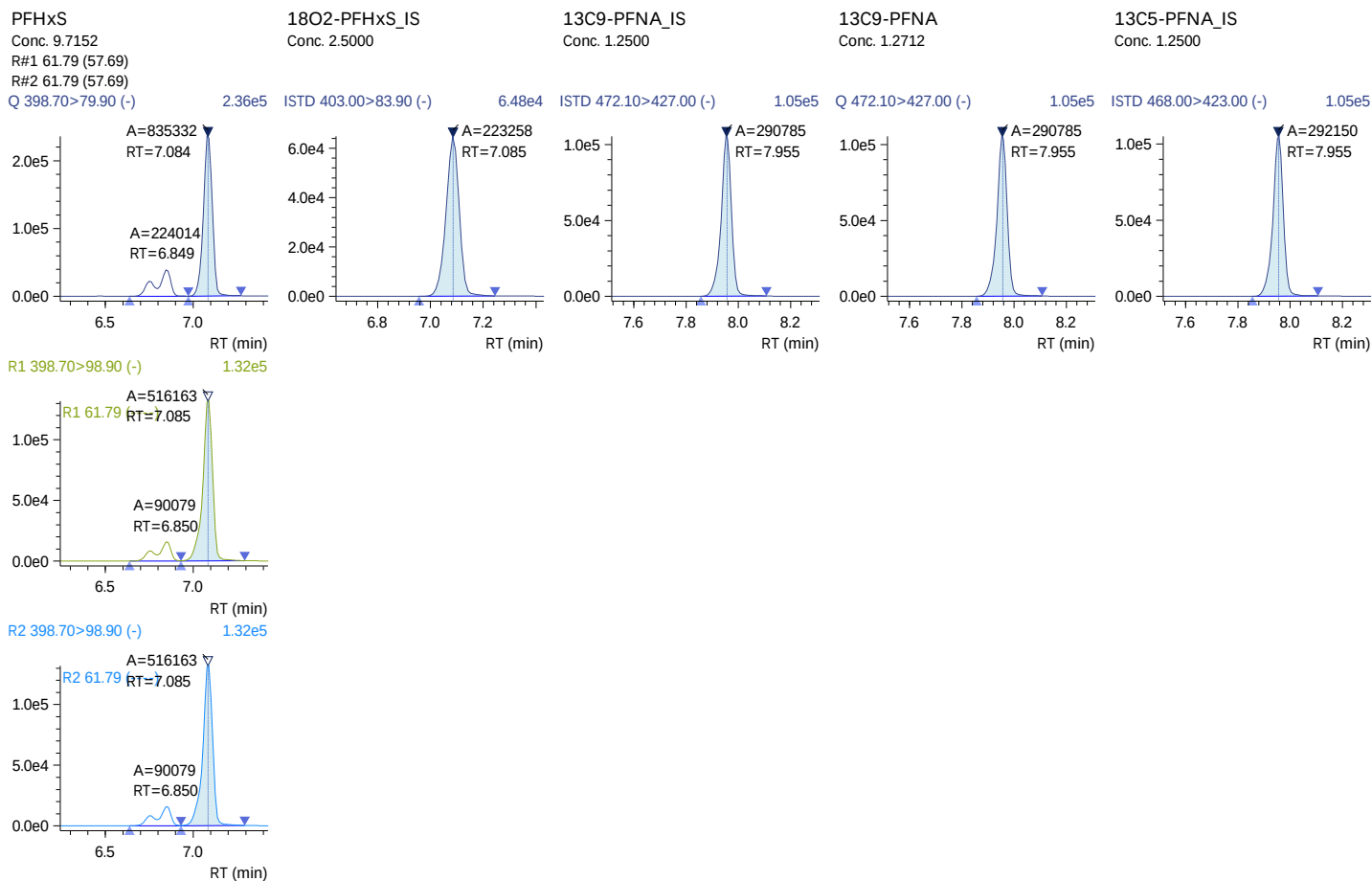
13C3-PFHxS
Conc. 2.4052

13C3-PFHxS_IS
Conc. 2.5000



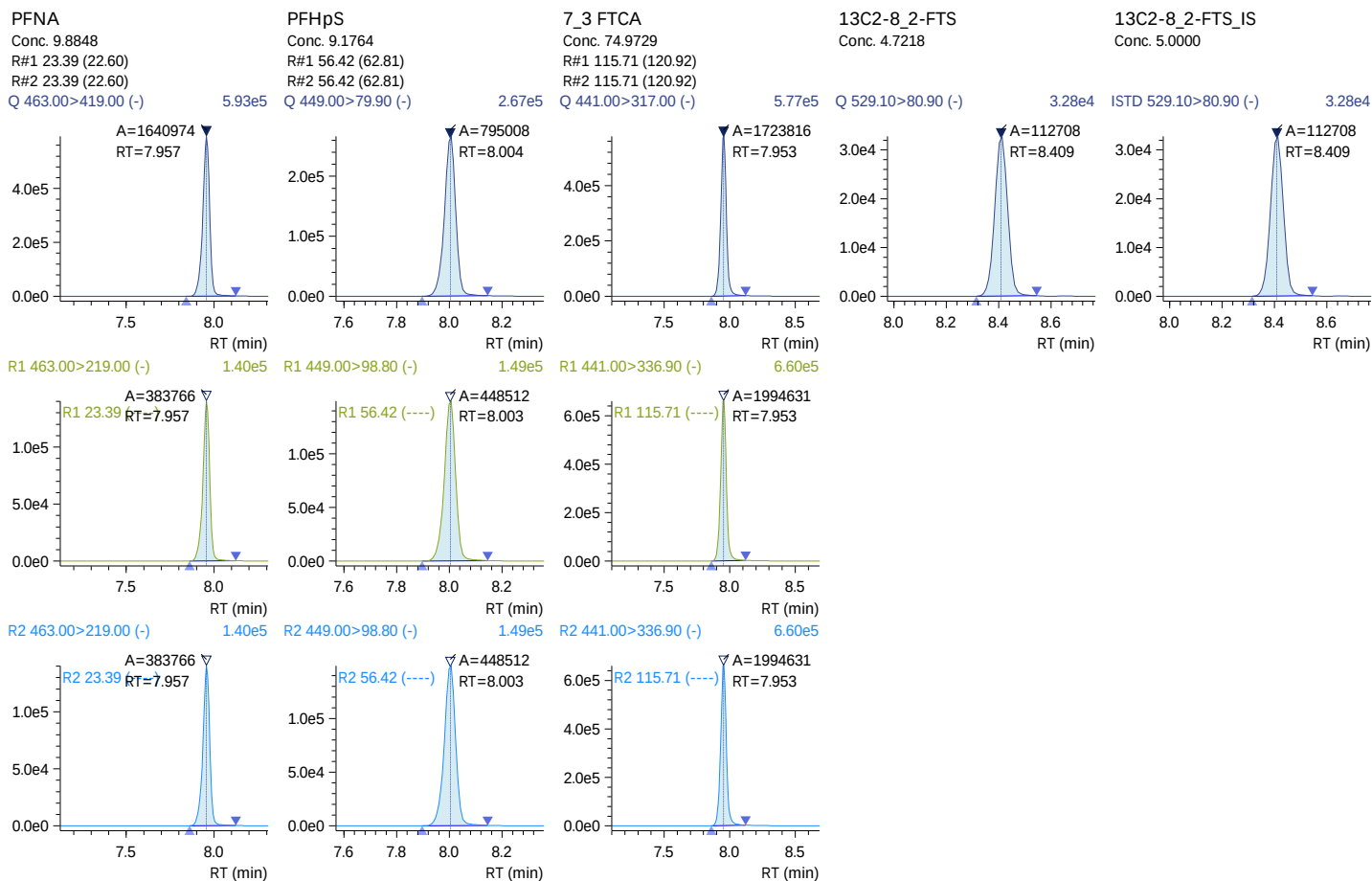


240118_012 (continued)



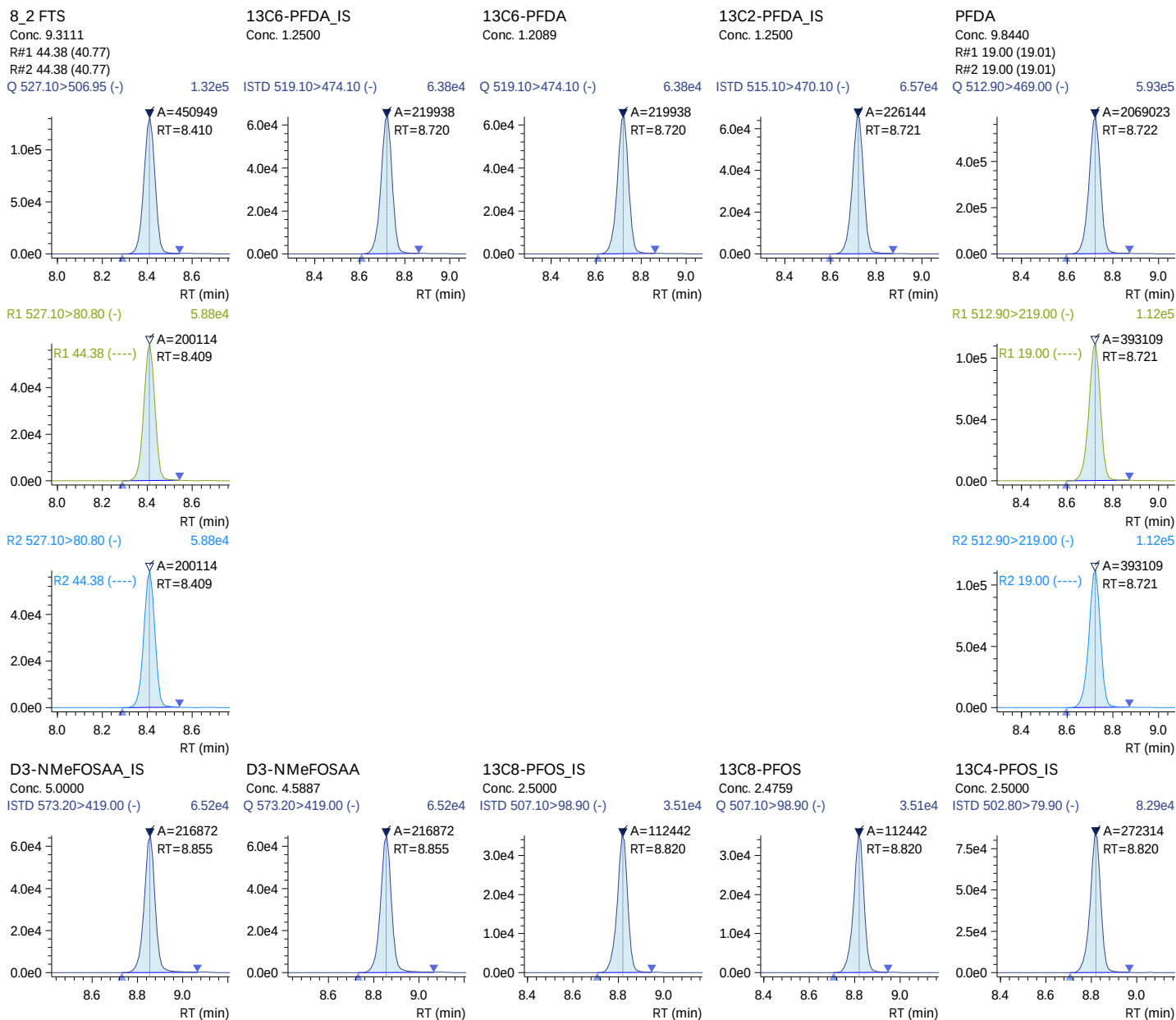


240118_012 (continued)



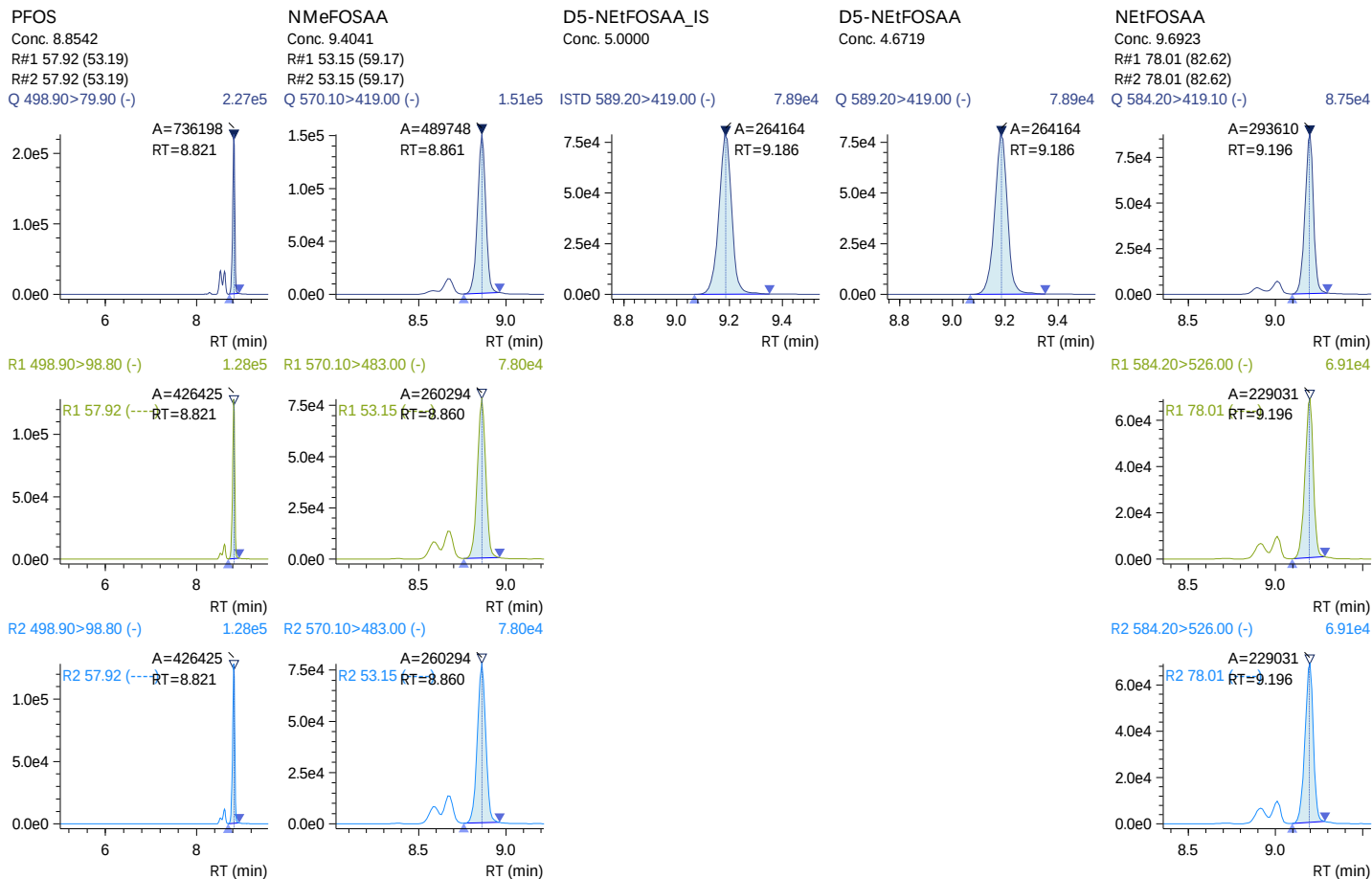


240118_012 (continued)





240118_012 (continued)

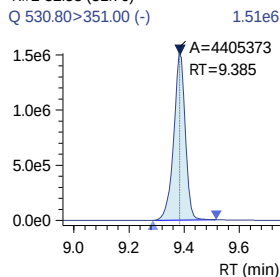




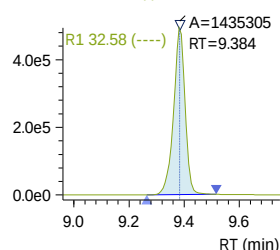
240118_012 (continued)

9-CI-PF3ONS

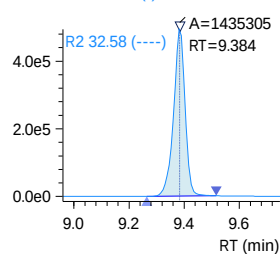
Conc. 8.9338
R#1 32.58 (31.76)
R#2 32.58 (31.76)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-) 4.94e5

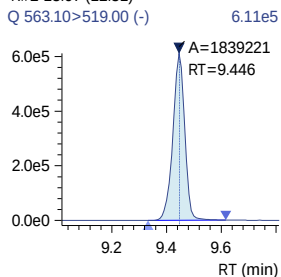


R2 532.80>353.00 (-) 4.94e5

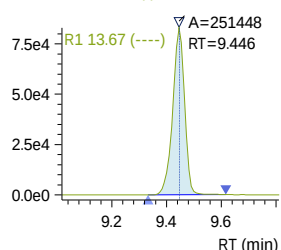


PFUnDA

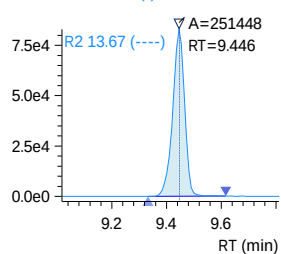
Conc. 10.2127
R#1 13.67 (12.31)
R#2 13.67 (12.31)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-) 8.30e4

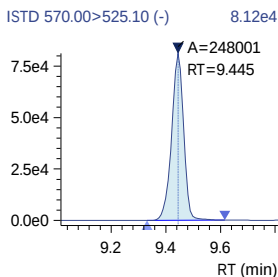


R2 563.10>269.10 (-) 8.30e4



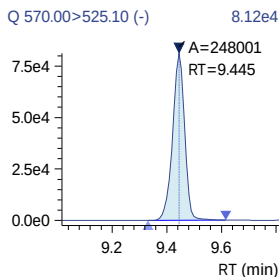
13C7-PFUnDA_IS

Conc. 1.2500



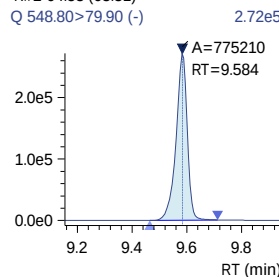
13C7-PFUnDA

Conc. 1.1427

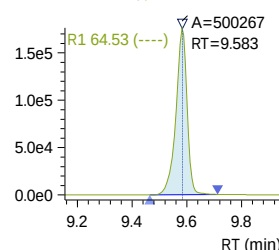


PFNS

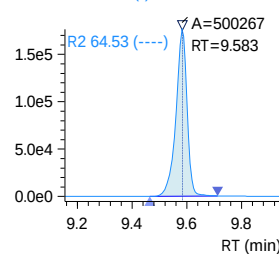
Conc. 9.0738
R#1 64.53 (63.31)
R#2 64.53 (63.31)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-) 1.76e5



R2 548.80>98.80 (-) 1.76e5





240118_012 (continued)

10_2_FTS

Conc. 9.3804

R#1 37.92 (33.02)

R#2 37.92 (33.02)

Q 626.80>607.05 (-)

1.77e5

13C2-PFDOA_IS

Conc. 1.2500

ISTD 615.10>570.00 (-)

1.00e5

13C2-PFDOA

Conc. 1.1793

Q 615.10>570.00 (-)

1.00e5

PFDOA

Conc. 10.0186

R#1 11.11 (10.14)

R#2 11.11 (10.14)

Q 613.10>569.00 (-)

5.66e5

PFDS

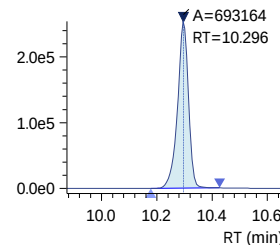
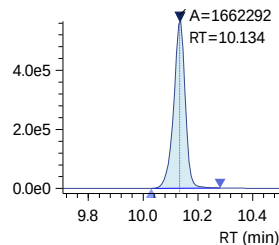
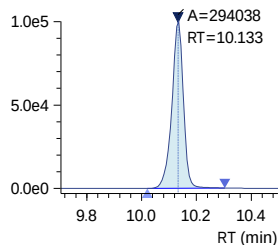
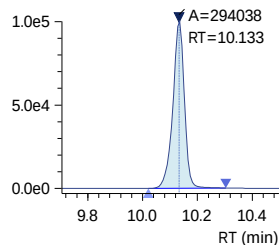
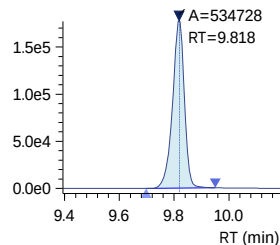
Conc. 9.0912

R#1 60.00 (62.02)

R#2 60.00 (62.02)

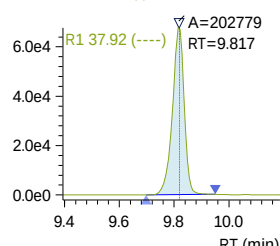
Q 599.00>79.90 (-)

2.54e5



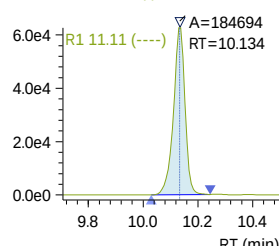
R1 626.80>81.00 (-)

6.77e4



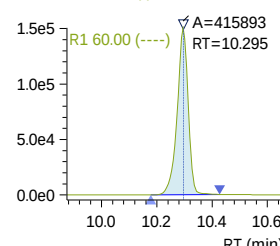
R1 613.10>319.00 (-)

6.27e4



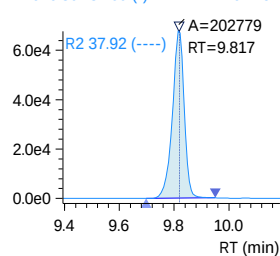
R1 599.00>98.80 (-)

1.51e5



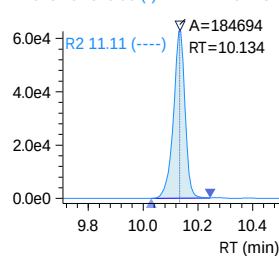
R2 626.80>81.00 (-)

6.77e4



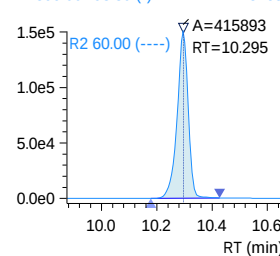
R2 613.10>319.00 (-)

6.27e4



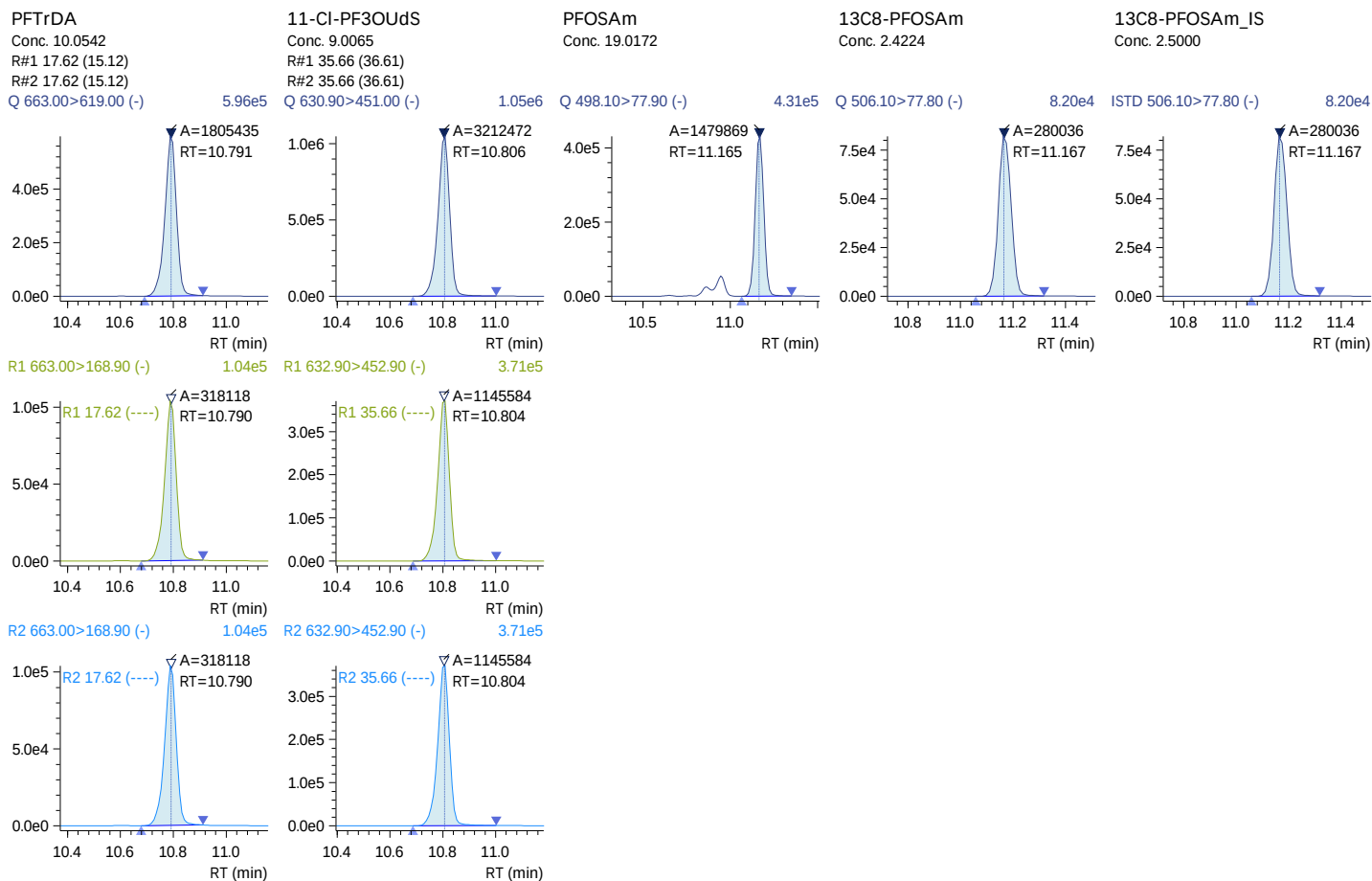
R2 599.00>98.80 (-)

1.51e5



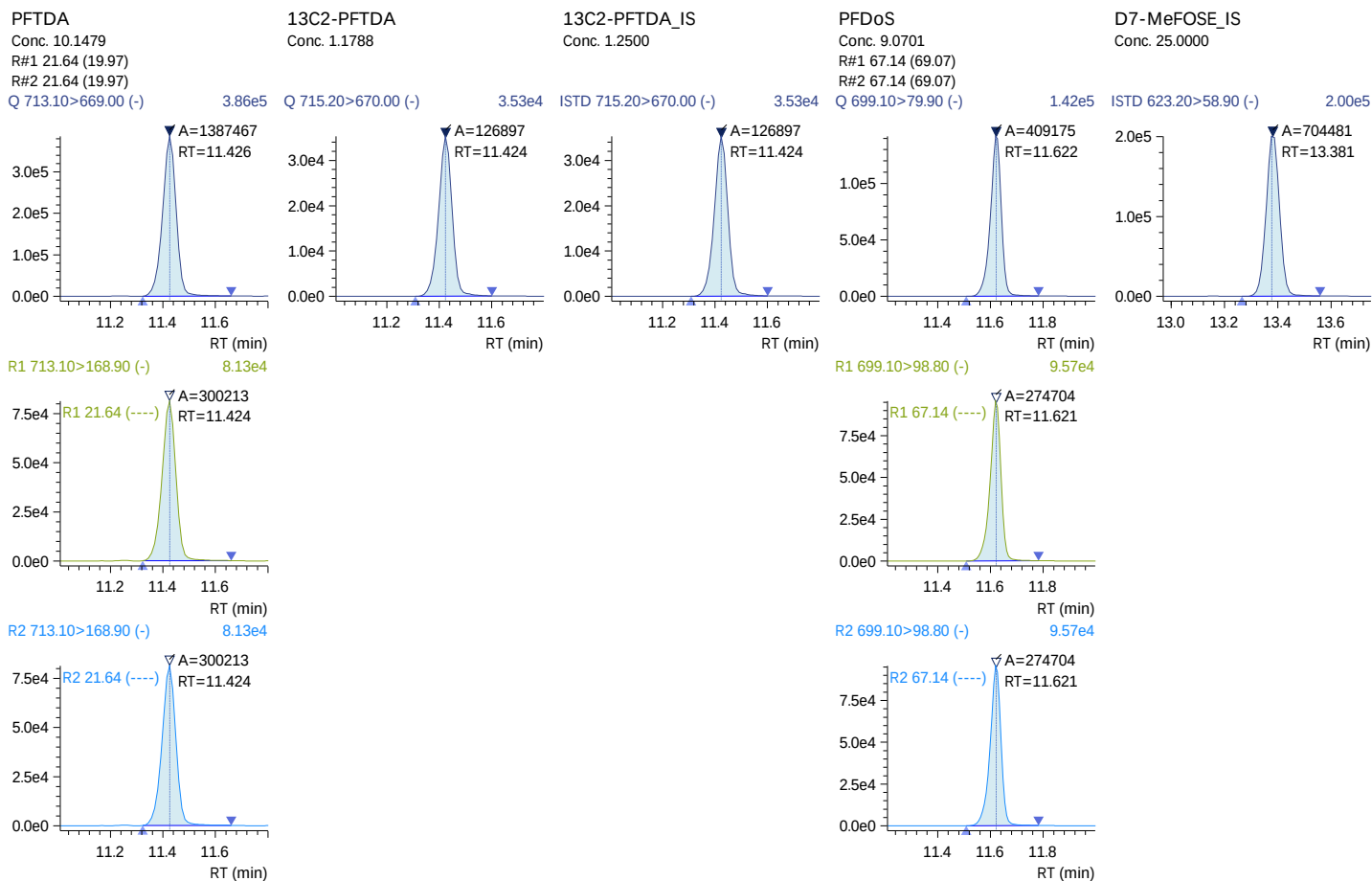


240118_012 (continued)





240118_012 (continued)





240118_012 (continued)

D7-MeFOSE
Conc. 24.7175

MeFOSE
Conc. 9.8056

13C2-PFHXA_IS
Conc. 2.5000

13C2-PFHXA
Conc. 2.3722

PFHXA
Conc. 9.9308
R#1 13.90 (11.64)
R#2 13.90 (11.64)

Q 623.20>58.90 (-)

2.00e5

Q 616.10>59.00 (-)

4.39e4

ISTD 815.00>770.05 (-)

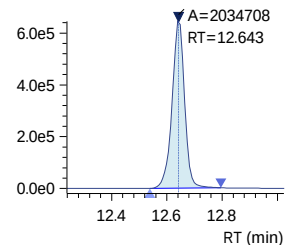
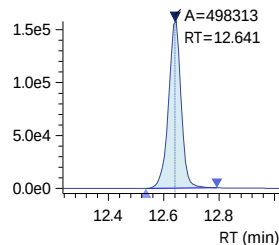
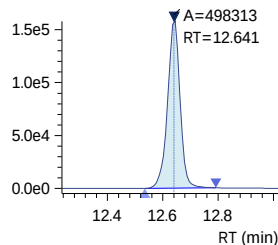
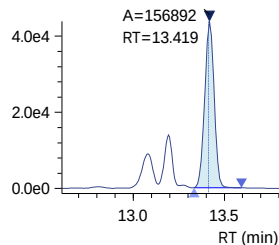
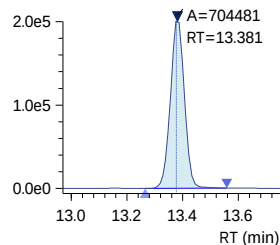
1.58e5

Q 815.00>770.05 (-)

1.58e5

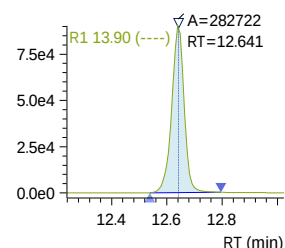
Q 813.00>768.95 (-)

6.45e5



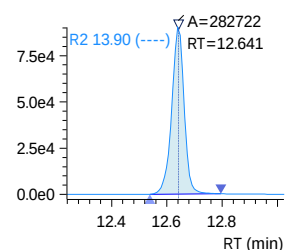
R1 813.00>218.95 (-)

9.03e4



R2 813.00>218.95 (-)

9.03e4





240118_012 (continued)

D3-MeFOSA
 Conc. 2.3642

D3-MeFOSA_IS
 Conc. 2.5000

MeFOSA
 Conc. 9.8159
 R#1 119.89 (149.05)
 R#2 119.89 (149.05)

D9-EtFOSE_IS
 Conc. 25.0000

D9-EtFOSE
 Conc. 23.8326

Q 515.00>219.00 (-)

1.60e4

ISTD 515.00>219.00 (-)

1.60e4

Q 511.90>219.00 (-)

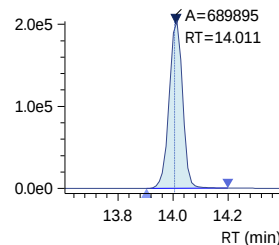
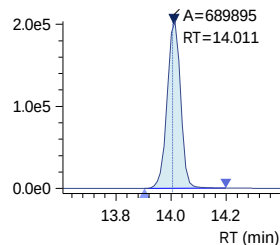
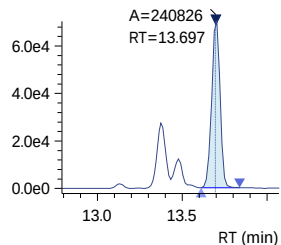
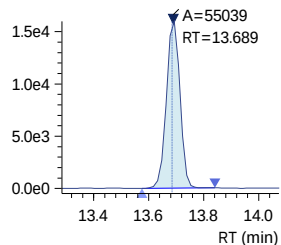
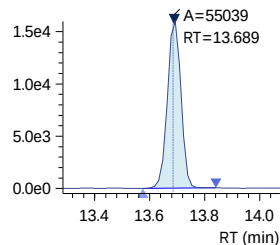
7.04e4

ISTD 639.20>58.90 (-)

2.04e5

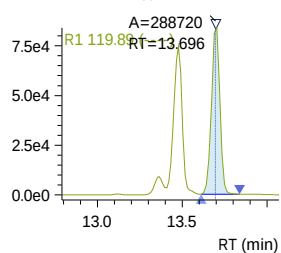
Q 639.20>58.90 (-)

2.04e5



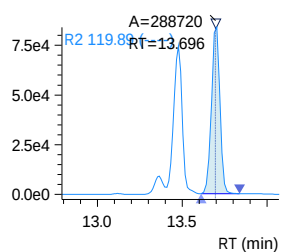
R1 511.90>169.00 (-)

8.40e4



R2 511.90>169.00 (-)

8.40e4





240118_012 (continued)

EtFOSE
Conc. 9.9350

D5-EtFOSAm
Conc. 2.4068

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. 10.7645

PFODA
Conc. 9.9601

Q 630.00>59.00 (-)

6.58e4

Q 531.10>219.00 (-)

2.29e4

ISTD 531.10>219.00 (-)

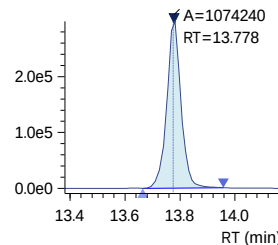
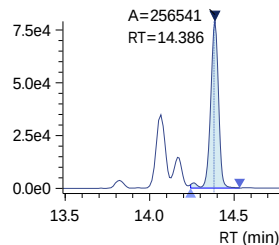
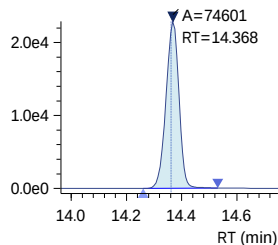
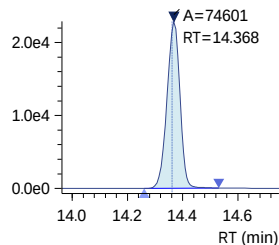
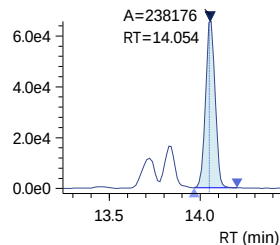
2.29e4

Q 526.00>219.00 (-)

7.91e4

Q 913.00>868.65 (-)

2.99e5

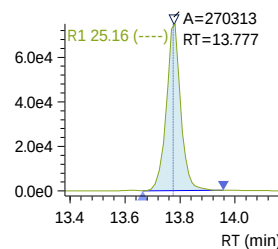
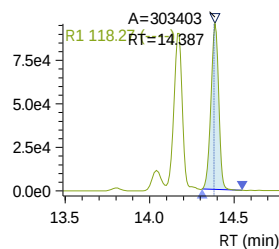


R1 526.00>169.00 (-)

9.60e4

R1 913.00>169.00 (-)

7.50e4

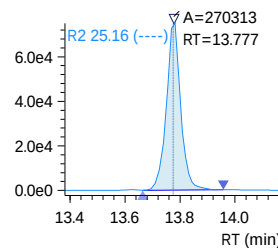
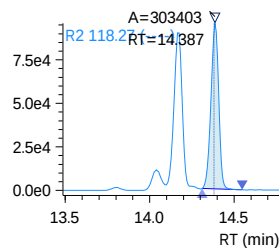


R2 526.00>169.00 (-)

9.60e4

R2 913.00>169.00 (-)

7.50e4





240118_013

Sample ID: 1633 ICAL 15.0PPB
Date Acquired: 1/18/2024 4:47:18 PM
Acquired by: System Administrator
Data File: 240118_013
Vial: 8 | Inj. Volume: 10.0000uL | Tray: 1

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	1223381	----	----	----	----	----	----	
13C4-PFBA_IS	216.80>171.90	----	1223381	----	----	----	----	----	----	
13C3-PFBA_IS	216.00>172.00	----	559080	----	----	----	----	----	----	
PFBA	212.80>169.05	----	1600400	----	----	----	----	----	----	
PFMPA	229.00>84.90	----	1224225	----	----	----	----	----	----	
3_3 FTCA	241.00>177.10	241.00>117.00	301852	415736	137.73	141.17	415736	137.73	141.17	
13C5-PFPeA	268.30>223.00	----	132195	----	----	----	----	----	----	
13C5-PFPeA_IS	268.30>223.00	----	132195	----	----	----	----	----	----	
PFPeA	263.00>219.00	----	2493787	----	----	----	----	----	----	
PFMBA	279.00>84.95	----	1795086	----	----	----	----	----	----	
13C2-4_2 FTS	329.10>80.90	----	120797	----	----	----	----	----	----	
13C2-4_2 FTS_IS	329.10>80.90	----	120797	----	----	----	----	----	----	
4_2 FTS	327.10>307.00	327.10>80.90	847984	254953	30.07	29.06	254953	30.07	29.06	
13C3-PFBS_IS	302.10>79.90	----	304776	----	----	----	----	----	----	
PFBS	298.70>79.90	298.70>98.80	2087380	982788	47.08	46.72	982788	47.08	46.72	
13C3-PFBS	302.10>79.90	----	304776	----	----	----	----	----	----	
NFDHA	295.00>201.00	295.00>84.90	1969096	743937	37.78	40.25	743937	37.78	40.25	
13C5-PFHxA	318.00>273.00	----	583700	----	----	----	----	----	----	
13C5-PFHxA_IS	318.00>273.00	----	583700	----	----	----	----	----	----	
13C2-PFHxA_IS	315.10>270.00	----	578981	----	----	----	----	----	----	
PFHxA	313.00>269.00	----	3050311	----	----	----	----	----	----	
PFEESA	314.80>135.00	314.80>82.90	9109371	517873	5.69	6.11	517873	5.69	6.11	
13C3-HFPO-DA	286.90>168.90	----	583755	----	----	----	----	----	----	
13C3-HFPO-DA_IS	286.90>168.90	----	583755	----	----	----	----	----	----	
HFPO-DA	284.90>168.90	284.90>184.90	945275	614294	64.99	65.61	614294	64.99	65.61	
5_3 FTCA	341.00>237.05	341.00>217.00	1573075	2542954	161.66	158.86	2542954	161.66	158.86	
PFPeS	349.10>79.90	349.10>98.80	1721243	958937	55.71	55.80	958937	55.71	55.80	
13C4-PFHpA	367.10>322.00	----	539799	----	----	----	----	----	----	
13C4-PFHpA_IS	367.10>322.00	----	539799	----	----	----	----	----	----	
PFHpA	363.10>319.00	363.10>169.00	3437882	782930	22.77	21.50	782930	22.77	21.50	
DONA	376.90>250.90	376.90>84.80	6058875	1808417	29.85	29.66	1808417	29.85	29.66	
13C2-6_2 FTS_IS	429.10>80.90	----	128419	----	----	----	----	----	----	
13C2-6_2 FTS	429.10>80.90	----	128419	----	----	----	----	----	----	
6_2 FTS	427.10>407.00	427.10>80.90	840038	363546	43.28	41.15	363546	43.28	41.15	
13C4-PFOA_IS	417.10>172.00	----	38960	----	----	----	----	----	----	
13C8-PFOA_IS	421.10>376.00	----	543532	----	----	----	----	----	----	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240118_013 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	543532	----	----	----	----	----	----	----
PFOA	413.00>369.00	413.00>169.00	2182267	688919	31.57	31.89	688919	31.57	31.89	
13C3-PFHxS	402.10>79.90	----	236876	----	----	----	----	----	----	----
13C3-PFHxS_IS	402.10>79.90	----	236876	----	----	----	----	----	----	----
PFHxS	398.70>79.90	398.70>98.90	1542165	875164	56.75	56.62	875164	56.75	56.62	
18O2-PFHxS_IS	403.00>83.90	----	220445	----	----	----	----	----	----	----
13C9-PFNA_IS	472.10>427.00	----	274221	----	----	----	----	----	----	----
13C9-PFNA	472.10>427.00	----	274221	----	----	----	----	----	----	----
13C5-PFNA_IS	468.00>423.00	----	285546	----	----	----	----	----	----	----
PFNA	463.00>419.00	463.00>219.00	2446359	562861	23.01	23.17	562861	23.01	23.17	
PFHpS	449.00>79.90	449.00>98.80	1176371	654880	55.67	56.96	654880	55.67	56.96	
7_3 FTCA	441.00>317.00	441.00>336.90	2253481	2631203	116.76	117.47	2631203	116.76	117.47	
13C2-8_2-FTS	529.10>80.90	----	99053	----	----	----	----	----	----	----
13C2-8_2-FTS_IS	529.10>80.90	----	99053	----	----	----	----	----	----	----
8_2 FTS	527.10>506.95	527.10>80.80	656762	298412	45.44	49.59	298412	45.44	49.59	
13C6-PFDA_IS	519.10>474.10	----	209485	----	----	----	----	----	----	----
13C6-PFDA	519.10>474.10	----	209485	----	----	----	----	----	----	----
13C2-PFDA_IS	515.10>470.10	----	201059	----	----	----	----	----	----	----
PFDA	512.90>469.00	512.90>219.00	2953361	567967	19.23	19.00	567967	19.23	19.00	
D3-NMeFOSAA_IS	573.20>419.00	----	199875	----	----	----	----	----	----	----
D3-NMeFOSAA	573.20>419.00	----	199875	----	----	----	----	----	----	----
13C8-PFOS_IS	507.10>98.90	----	104055	----	----	----	----	----	----	----
13C8-PFOS	507.10>98.90	----	104055	----	----	----	----	----	----	----
13C4-PFOS_IS	502.80>79.90	----	252372	----	----	----	----	----	----	----
PFOS	498.90>79.90	498.90>98.80	1499453	774053	51.62	52.47	774053	51.62	52.47	
NMeFOSAA	570.10>419.00	570.10>483.00	873824	518112	59.29	55.15	518112	59.29	55.15	
D5-NeFOSAA_IS	589.20>419.00	----	246903	----	----	----	----	----	----	----
D5-NeFOSAA	589.20>419.00	----	246903	----	----	----	----	----	----	----
NeFOSAA	584.20>419.10	584.20>526.00	539699	442612	82.01	81.95	442612	82.01	81.95	
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	6793632	2134994	31.43	32.76	2134994	31.43	32.76	
PFUnDA	563.10>519.00	563.10>269.10	2720435	378942	13.93	13.12	378942	13.93	13.12	
13C7-PFUnDA_IS	570.00>525.10	----	245029	----	----	----	----	----	----	----
13C7-PFUnDA	570.00>525.10	----	245029	----	----	----	----	----	----	----
PFNS	548.80>79.90	548.80>98.80	1160949	741598	63.88	65.22	741598	63.88	65.22	
10_2 FTS	626.80>607.05	626.80>81.00	775809	281670	36.31	37.13	281670	36.31	37.13	
13C2-PFDOA_IS	615.10>570.00	----	281877	----	----	----	----	----	----	----
13C2-PFDOA	615.10>570.00	----	281877	----	----	----	----	----	----	----
PFDOA	613.10>569.00	613.10>319.00	2421057	267961	11.07	11.29	267961	11.07	11.29	
PFDS	599.00>79.90	599.00>98.80	1031983	618586	59.94	60.18	618586	59.94	60.18	
PFTrDA	663.00>619.00	663.00>168.90	2690758	471439	17.52	17.64	471439	17.52	17.64	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240118_013 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	4612445	1689824	36.64	36.44	1689824	36.64	36.44	
PFOSAm	498.10>77.90	----	2599880	----	----	----	----	----	----	
13C8-PFOSAm	506.10>77.80	----	265772	----	----	----	----	----	----	
13C8-PFOSAm_IS	506.10>77.80	----	265772	----	----	----	----	----	----	
PFTDA	713.10>669.00	713.10>168.90	1974838	457842	23.18	22.96	457842	23.18	22.96	
13C2-PFTDA	715.20>670.00	----	122751	----	----	----	----	----	----	
13C2-PFTDA_IS	715.20>670.00	----	122751	----	----	----	----	----	----	
PFDoS	699.10>79.90	699.10>98.80	603262	396678	65.76	67.40	396678	65.76	67.40	
D7-MeFOSE_IS	623.20>58.90	----	679962	----	----	----	----	----	----	
D7-MeFOSE	623.20>58.90	----	679962	----	----	----	----	----	----	
MeFOSE	616.10>59.00	----	372675	----	----	----	----	----	----	
13C2-PFHxDA_IS	815.00>770.05	----	485630	----	----	----	----	----	----	
13C2-PFHxDA	815.00>770.05	----	485630	----	----	----	----	----	----	
PFHxDA	813.00>768.95	813.00>218.95	3111088	428611	13.78	13.90	428611	13.78	13.90	
D3-MeFOSA	515.00>219.00	----	53740	----	----	----	----	----	----	
D3-MeFOSA_IS	515.00>219.00	----	53740	----	----	----	----	----	----	
MeFOSA	511.90>219.00	511.90>169.00	580448	871016	150.06	140.79	871016	150.06	140.79	
D9-EtFOSE_IS	639.20>58.90	----	673693	----	----	----	----	----	----	
D9-EtFOSE	639.20>58.90	----	673693	----	----	----	----	----	----	
EtFOSE	630.00>59.00	----	537366	----	----	----	----	----	----	
D5-EtFOSAm	531.10>219.00	----	75346	----	----	----	----	----	----	
D5-EtFOSAm_IS	531.10>219.00	----	75346	----	----	----	----	----	----	
EtFOSAm	526.00>219.00	526.00>169.00	664270	1025114	154.32	163.90	1025114	154.32	163.90	
PFODA	913.00>868.65	913.00>169.00	1592958	398997	25.05	27.03	398997	25.05	27.03	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240118_013

Sample ID: 1633 ICAL 15.0PPB
Date Acquired: 1/18/2024 4:47:18 PM
Acquired by: System Administrator
Data File: 240118_013
Vial: 8 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Std. Conc.	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.408	-0.006	-0.001	1223381	559080	13C3-PFBA_IS	10.0000	9.7898	ng/mL	
13C4-PFBA_IS	Auto	1.408	-0.006	----	1223381	1223381	----	10.0000	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.409	-0.006	----	559080	559080	----	5.0000	5.0000	ng/mL	
PFBA	Auto	1.410	-0.006	0.002	1600400	1223381	13C4-PFBA_IS	15.0000	15.2256	ng/mL	
PFMPA	Auto	2.434	0.002	-1.060	1224225	132195	13C5-PFPeA_IS	15.0000	14.3296	ng/mL	
3_3 FTCA	Auto	3.008	0.004	-0.486	301852	132195	13C5-PFPeA_IS	100.0000	102.9716	ng/mL	
13C5-PFPeA	Auto	3.494	0.002	-1.486	132195	578981	13C2-PFHxA_IS	5.0000	5.0583	ng/mL	
13C5-PFPeA_IS	Auto	3.494	0.002	----	132195	132195	----	5.0000	5.0000	ng/mL	
PFPeA	Auto	3.497	0.002	0.003	2493787	132195	13C5-PFPeA_IS	15.0000	14.5646	ng/mL	
PFMBA	Auto	4.027	0.002	0.533	1795086	132195	13C5-PFPeA_IS	15.0000	14.8314	ng/mL	
13C2-4_2 FTS	Auto	4.663	0.002	-2.424	120797	220445	18O2-PFHxS_IS	5.0000	3.9819	ng/mL	
13C2-4_2 FTS_IS	Auto	4.663	0.002	----	120797	120797	----	5.0000	5.0000	ng/mL	
4_2 FTS	Auto	4.663	0.001	0.000	847984	120797	13C2-4_2 FTS_IS	14.1000	14.2724	ng/mL	
13C3-PFBS_IS	Auto	4.648	0.001	----	304776	304776	----	2.5000	2.5000	ng/mL	
PFBS	Auto	4.648	0.000	0.000	2087380	304776	13C3-PFBS_IS	13.3000	13.3801	ng/mL	
13C3-PFBS	Auto	4.648	0.001	-2.439	304776	220445	18O2-PFHxS_IS	2.5000	2.4362	ng/mL	
NFDHA	Auto	4.837	0.002	-0.142	1969096	583700	13C5-PFHxA_IS	15.0000	15.2050	ng/mL	
13C5-PFHxA	Auto	4.979	0.001	-0.001	583700	578981	13C2-PFHxA_IS	2.5000	2.3921	ng/mL	
13C5-PFHxA_IS	Auto	4.979	0.001	----	583700	583700	----	2.5000	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	4.980	0.001	----	578981	578981	----	2.5000	2.5000	ng/mL	
PFHxA	Auto	4.982	0.002	0.003	3050311	583700	13C5-PFHxA_IS	15.0000	15.6919	ng/mL	
PFEESA	Auto	5.323	0.001	0.344	9109371	583700	13C5-PFHxA_IS	13.4000	13.9333	ng/mL	
13C3-HFPO-DA	Auto	5.454	0.002	0.474	583755	578981	13C2-PFHxA_IS	10.0000	10.2996	ng/mL	
13C3-HFPO-DA_IS	Auto	5.454	0.002	----	583755	583755	----	10.0000	10.0000	ng/mL	
HFPO-DA	Auto	5.456	0.003	0.002	945275	583755	13C3-HFPO-DA_IS	15.0000	14.6618	ng/mL	
5_3 FTCA	Auto	5.909	0.002	0.929	1573075	583700	13C5-PFHxA_IS	100.0000	104.1907	ng/mL	
PFPeS	Auto	6.020	0.002	-1.067	1721243	236876	13C3-PFHxS_IS	14.1000	13.8371	ng/mL	
13C4-PFHpA	Auto	6.156	0.002	1.176	539799	578981	13C2-PFHxA_IS	2.5000	2.4437	ng/mL	
13C4-PFHpA_IS	Auto	6.156	0.002	----	539799	539799	----	2.5000	2.5000	ng/mL	
PFHpA	Auto	6.158	0.003	0.002	3437882	539799	13C4-PFHpA_IS	15.0000	15.3219	ng/mL	
DONA	Auto	6.522	0.002	1.068	6058875	583755	13C3-HFPO-DA_IS	14.2000	13.3913	ng/mL	
13C2-6_2 FTS_IS	Auto	6.794	0.001	----	128419	128419	----	5.0000	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.794	0.001	-0.293	128419	220445	18O2-PFHxS_IS	5.0000	4.4758	ng/mL	
6_2 FTS	Auto	6.794	0.002	0.000	840038	128419	13C2-6_2 FTS_IS	14.3000	14.3652	ng/mL	
13C4-PFOA_IS	Auto	7.110	0.003	----	38960	38960	----	2.5000	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.110	0.003	----	543532	543532	----	2.5000	2.5000	ng/mL	
13C8-PFOA	Auto	7.110	0.003	0.000	543532	38960	13C4-PFOA_IS	2.5000	2.4960	ng/mL	
PFOA	Auto	7.112	0.002	0.002	2182267	543532	13C8-PFOA_IS	15.0000	15.5129	ng/mL	
13C3-PFHxS	Auto	7.087	0.001	0.000	236876	220445	18O2-PFHxS_IS	2.5000	2.5034	ng/mL	
13C3-PFHxS_IS	Auto	7.087	0.001	----	236876	236876	----	2.5000	2.5000	ng/mL	
PFHxS	M	7.087	0.003	0.000	1542165	236876	13C3-PFHxS_IS	13.7000	13.5450	ng/mL	
18O2-PFHxS_IS	Auto	7.087	0.001	----	220445	220445	----	2.5000	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.957	0.001	----	274221	274221	----	1.2500	1.2500	ng/mL	
13C9-PFNA	Auto	7.957	0.001	-0.001	274221	285546	13C5-PFNA_IS	1.2500	1.2265	ng/mL	
13C5-PFNA_IS	Auto	7.958	0.002	----	285546	285546	----	1.2500	1.2500	ng/mL	
PFNA	Auto	7.958	0.001	0.001	2446359	274221	13C9-PFNA_IS	15.0000	15.6442	ng/mL	
PFHpS	Auto	8.006	0.002	-0.814	1176371	104055	13C8-PFOS_IS	14.3000	14.4842	ng/mL	
7_3 FTCA	Auto	7.955	0.001	2.976	2253481	583700	13C5-PFHxA_IS	100.0000	111.8043	ng/mL	
13C2-8_2-FTS	Auto	8.411	0.002	1.324	99053	220445	18O2-PFHxS_IS	5.0000	4.2027	ng/mL	
13C2-8_2-FTS_IS	Auto	8.411	0.002	----	99053	99053	----	5.0000	5.0000	ng/mL	
8_2 FTS	Auto	8.412	0.002	0.001	656762	99053	13C2-8_2-FTS_IS	14.4000	15.4301	ng/mL	
13C6-PFDA_IS	Auto	8.722	0.002	----	209485	209485	----	1.2500	1.2500	ng/mL	
13C6-PFDA	Auto	8.722	0.002	0.000	209485	201059	13C2-PFDA_IS	1.2500	1.2950	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_013 (continued)

(Table continued from previous page)

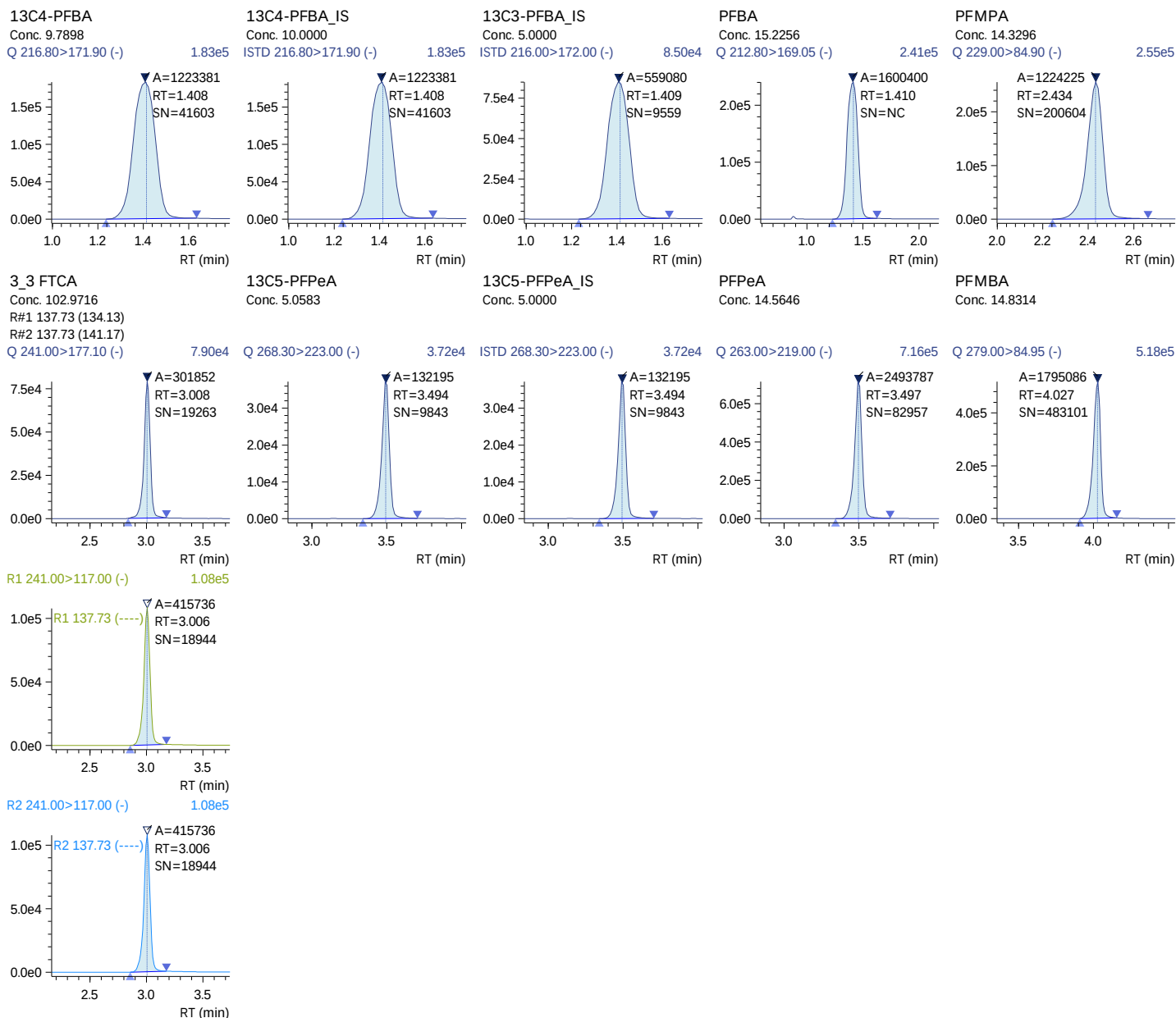
Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Std. Conc.	Conc.	Unit	Flag ID
13C2-PFDA_IS	Auto	8.722	0.001	----	201059	201059	----	1.2500	1.2500	ng/mL	
PFDA	Auto	8.724	0.003	0.002	2953361	209485	13C6-PFDA_IS	15.0000	14.7654	ng/mL	
D3-NMeFOSAA_IS	Auto	8.857	0.002	----	199875	199875	----	5.0000	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.857	0.002	0.036	199875	252372	13C4-PFOS_IS	5.0000	4.5632	ng/mL	
13C8-PFOS_IS	Auto	8.820	0.000	----	104055	104055	----	2.5000	2.5000	ng/mL	
13C8-PFOS	Auto	8.820	0.000	-0.001	104055	252372	13C4-PFOS_IS	2.5000	2.4722	ng/mL	
13C4-PFOS_IS	Auto	8.821	0.001	----	252372	252372	----	2.5000	2.5000	ng/mL	
PFOS	M	8.823	0.001	0.003	1499453	104055	13C8-PFOS_IS	13.9000	13.8547	ng/mL	
NMeFOSAA	M	8.863	0.002	0.006	873824	199875	D3-NMeFOSAA_IS	15.0000	16.1124	ng/mL	
D5-NetFOSAA_IS	Auto	9.186	0.000	----	246903	246903	----	5.0000	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.186	0.000	0.365	246903	252372	13C4-PFOS_IS	5.0000	4.7117	ng/mL	
NetFOSAA	M	9.196	0.001	0.010	539699	246903	D5-NetFOSAA_IS	15.0000	16.3668	ng/mL	
9-CI-PF3ONS	Auto	9.385	0.001	3.931	6793632	583755	13C3-HFPO-DA_IS	14.0000	14.1163	ng/mL	
PFUnDA	Auto	9.446	-0.001	0.001	2720435	245029	13C7-PFUnDA_IS	15.0000	15.3038	ng/mL	
13C7-PFUnDA_IS	Auto	9.445	0.000	----	245029	245029	----	1.2500	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.445	0.000	0.723	245029	201059	13C2-PFDA_IS	1.2500	1.2699	ng/mL	
PFNS	Auto	9.584	0.000	0.764	1160949	104055	13C8-PFOS_IS	14.4000	14.6843	ng/mL	
10_2_FTS	Auto	9.820	0.001	1.409	775809	99053	13C2-8_2-FTS_IS	14.5000	14.9808	ng/mL	
13C2-PFDOA_IS	Auto	10.134	0.001	----	281877	281877	----	1.2500	1.2500	ng/mL	
13C2-PFDOA	Auto	10.134	0.001	1.412	281877	201059	13C2-PFDA_IS	1.2500	1.2716	ng/mL	
PFDOA	Auto	10.135	0.001	0.001	2421057	281877	13C2-PFDOA_IS	15.0000	15.2383	ng/mL	
PFDS	Auto	10.297	0.001	1.477	1031983	104055	13C8-PFOS_IS	14.5000	15.0119	ng/mL	
PFTDA	Auto	10.792	0.000	-0.632	2690758	122751	13C2-PFTDA_IS	15.0000	15.5072	ng/mL	
11-CI-PF3OUdS	Auto	10.807	0.001	5.353	4612445	583755	13C3-HFPO-DA_IS	14.1000	14.2289	ng/mL	
PFOSAm	M	11.167	0.003	-0.002	2599880	265772	13C8-PFOSAm_IS	30.0000	29.6790	ng/mL	
13C8-PFOSAm	Auto	11.169	0.004	2.348	265772	252372	13C4-PFOS_IS	2.5000	2.4807	ng/mL	
13C8-PFOSAm_IS	Auto	11.169	0.004	----	265772	265772	----	2.5000	2.5000	ng/mL	
PFTDA	Auto	11.424	-0.001	0.000	1974838	122751	13C2-PFTDA_IS	15.0000	14.9443	ng/mL	
13C2-PFTDA	Auto	11.424	0.000	2.702	122751	201059	13C2-PFDA_IS	1.2500	1.2825	ng/mL	
13C2-PFTDA_IS	Auto	11.424	0.000	----	122751	122751	----	1.2500	1.2500	ng/mL	
PFDoS	Auto	11.622	0.000	2.802	603262	104055	13C8-PFOS_IS	14.6000	14.4564	ng/mL	
D7-MeFOSE_IS	Auto	13.382	0.005	----	679962	679962	----	25.0000	25.0000	ng/mL	
D7-MeFOSE	Auto	13.382	0.005	4.561	679962	252372	13C4-PFOS_IS	25.0000	25.7423	ng/mL	
MeFOSE	M	13.420	0.007	0.038	372675	679962	D7-MeFOSE_IS	15.0000	14.9240	ng/mL	
13C2-PFHXA_IS	Auto	12.641	0.000	----	485630	485630	----	2.5000	2.5000	ng/mL	
13C2-PFHXA	Auto	12.641	0.000	3.919	485630	201059	13C2-PFDA_IS	2.5000	2.6003	ng/mL	
PFHXA	Auto	12.642	0.000	0.001	3111088	485630	13C2-PFHXA_IS	15.0000	15.5968	ng/mL	
D3-MeFOSA	Auto	13.691	0.006	4.870	53740	252372	13C4-PFOS_IS	2.5000	2.4908	ng/mL	
D3-MeFOSA_IS	Auto	13.691	0.006	----	53740	53740	----	2.5000	2.5000	ng/mL	
MeFOSA	M	13.698	0.004	0.007	580448	53740	D3-MeFOSA_IS	15.0000	14.9835	ng/mL	
D9-EtFOSE_IS	Auto	14.011	0.005	----	673693	673693	----	25.0000	25.0000	ng/mL	
D9-EtFOSE	Auto	14.011	0.005	5.190	673693	252372	13C4-PFOS_IS	25.0000	25.1119	ng/mL	
EtFOSE	M	14.055	0.007	0.044	537366	673693	D9-EtFOSE_IS	15.0000	15.1601	ng/mL	
D5-EtFOSAm	Auto	14.369	0.007	5.548	75346	252372	13C4-PFOS_IS	2.5000	2.6230	ng/mL	
D5-EtFOSAm_IS	Auto	14.369	0.007	----	75346	75346	----	2.5000	2.5000	ng/mL	
EtFOSAm	M	14.386	0.006	0.017	664270	75346	D5-EtFOSAm_IS	15.0000	15.1437	ng/mL	
PFODA	Auto	13.777	0.002	1.136	1592958	485630	13C2-PFHXA_IS	15.0000	14.5056	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_013 (continued)





240118_013 (continued)

13C2-4_2_FTS
Conc. 3.9819

13C2-4_2_FTS_IS
Conc. 5.0000

4_2_FTS
Conc. 14.2724
R#1 30.07 (34.14)
R#2 30.07 (29.06)

13C3-PFBS_IS
Conc. 2.5000

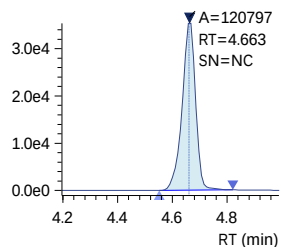
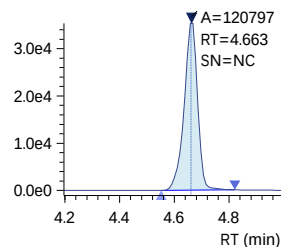
PFBS
Conc. 13.3801
R#1 47.08 (47.53)
R#2 47.08 (46.72)

Q 329.10>80.90 (-)

3.54e4

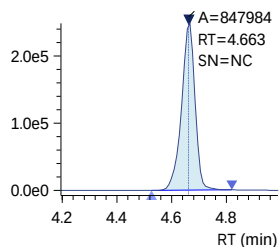
ISTD 329.10>80.90 (-)

3.54e4



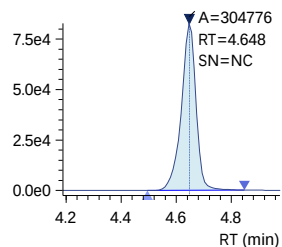
Q 327.10>307.00 (-)

2.49e5



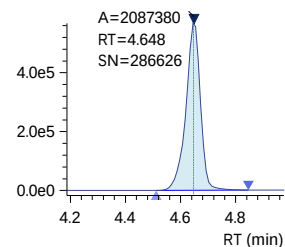
ISTD 302.10>79.90 (-)

8.28e4



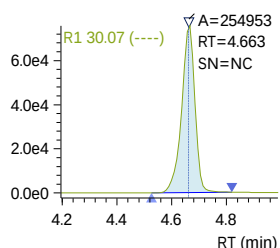
Q 298.70>79.90 (-)

5.68e5



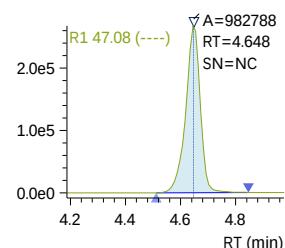
R1 327.10>80.90 (-)

7.58e4



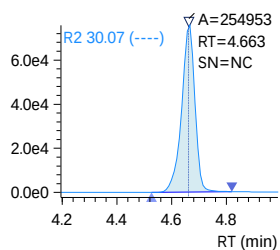
R1 298.70>98.80 (-)

2.67e5



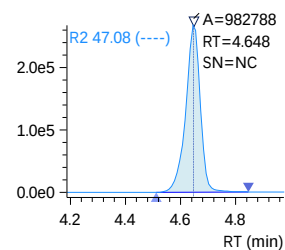
R2 327.10>80.90 (-)

7.58e4



R2 298.70>98.80 (-)

2.67e5





240118_013 (continued)

13C3-PFBS
Conc. 2.4362

NFDHA
Conc. 15.2050
R#1 37.78 (37.88)
R#2 37.78 (40.25)

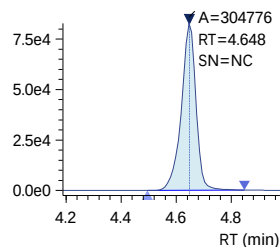
13C5-PFHxA
Conc. 2.3921

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

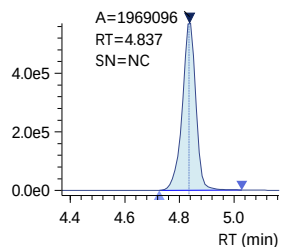
Q 302.10>79.90 (-)

8.28e4



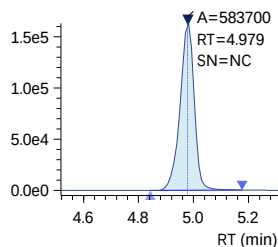
Q 295.00>201.00 (-)

5.70e5



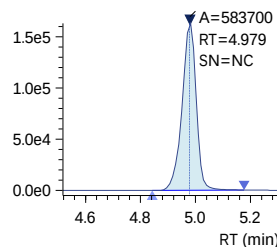
Q 318.00>273.00 (-)

1.63e5



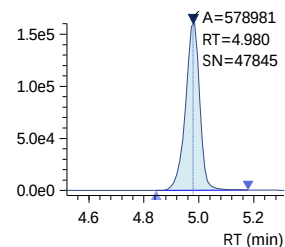
ISTD 318.00>273.00 (-)

1.63e5



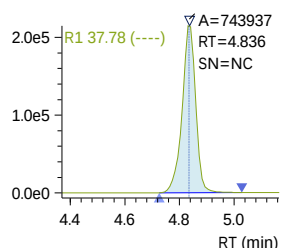
ISTD 315.10>270.00 (-)

1.60e5



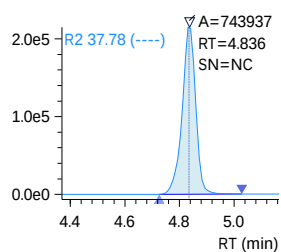
R1 295.00>84.90 (-)

2.15e5



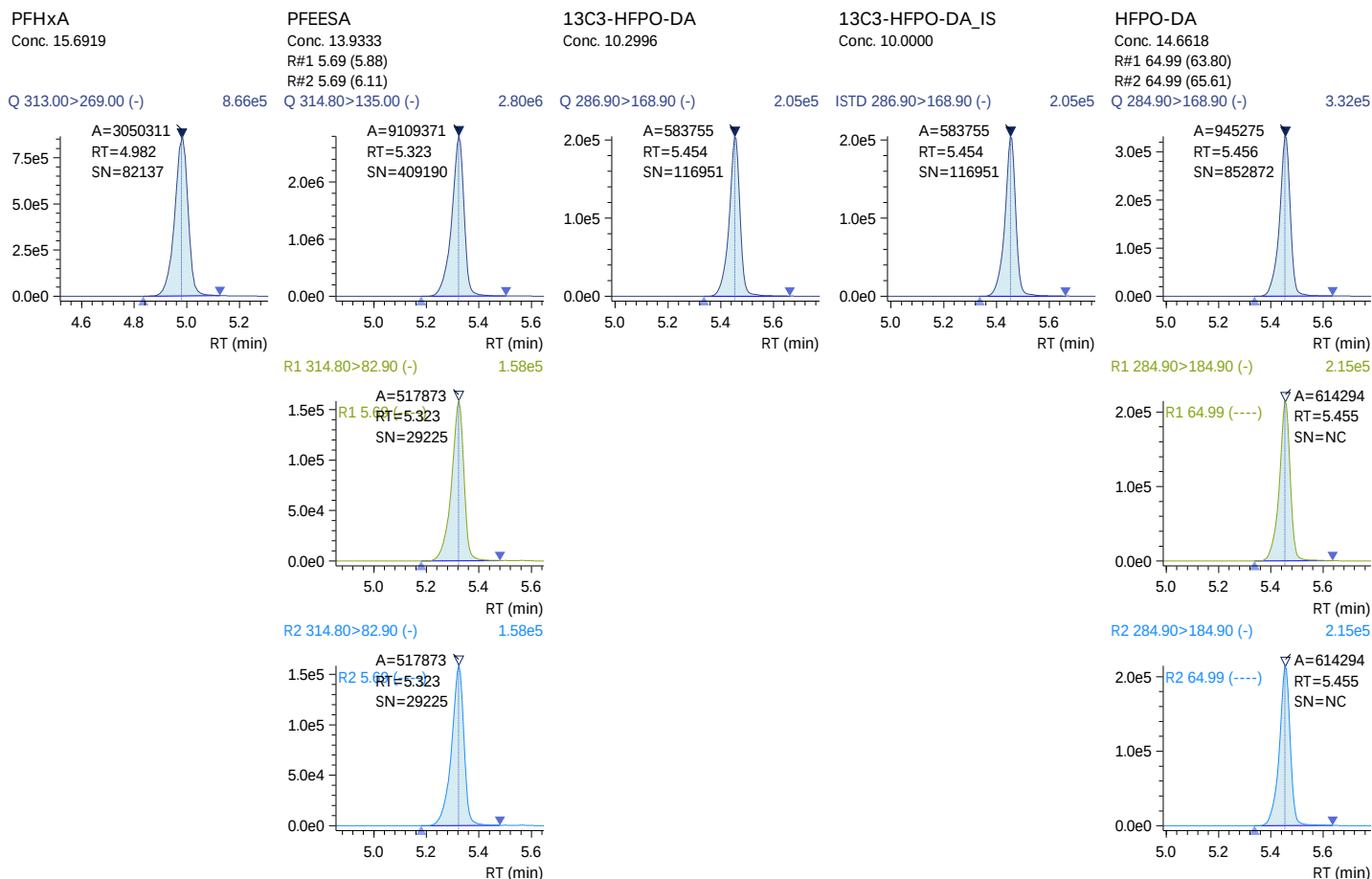
R2 295.00>84.90 (-)

2.15e5





240118_013 (continued)

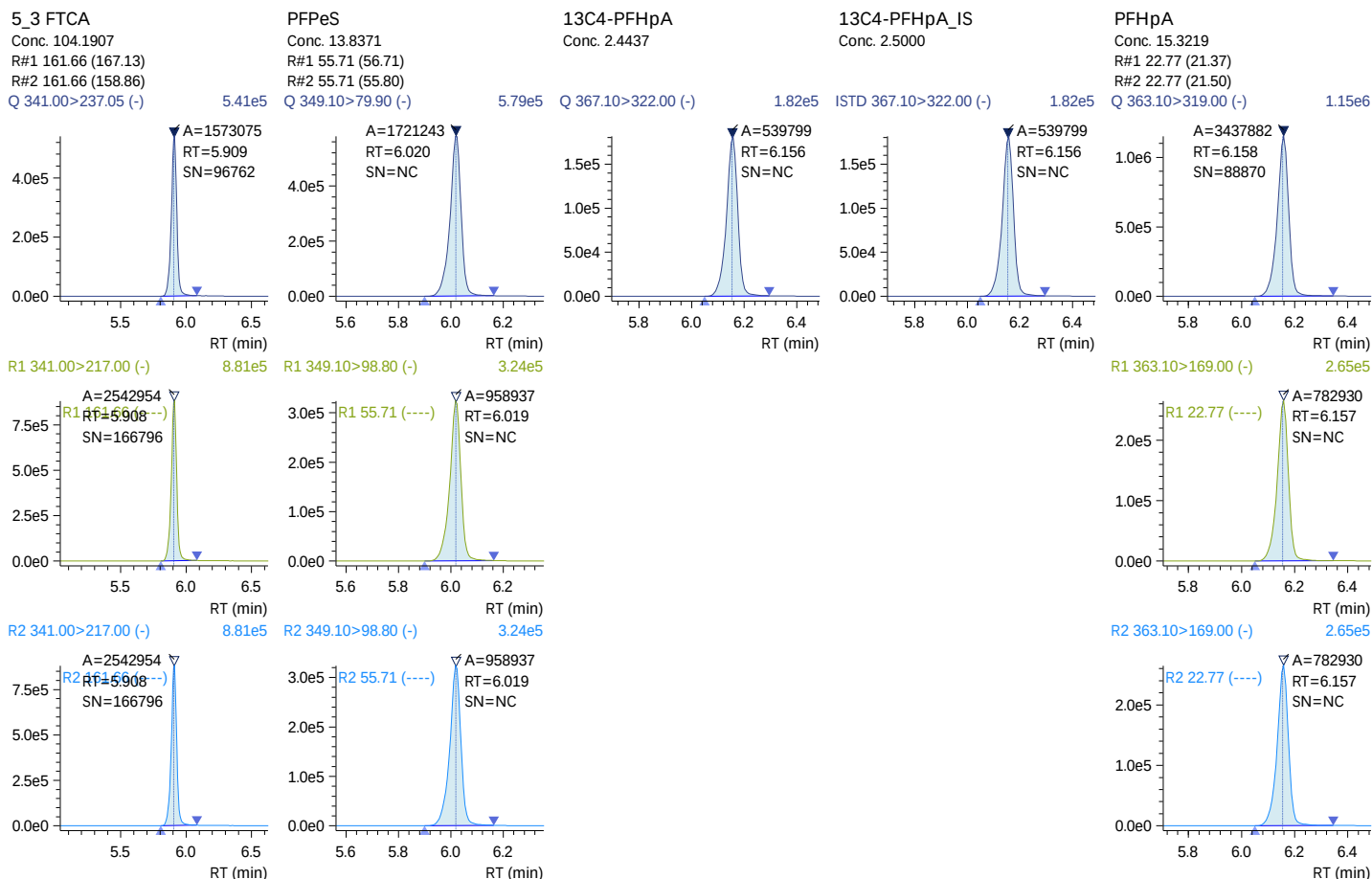


J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_013 (continued)

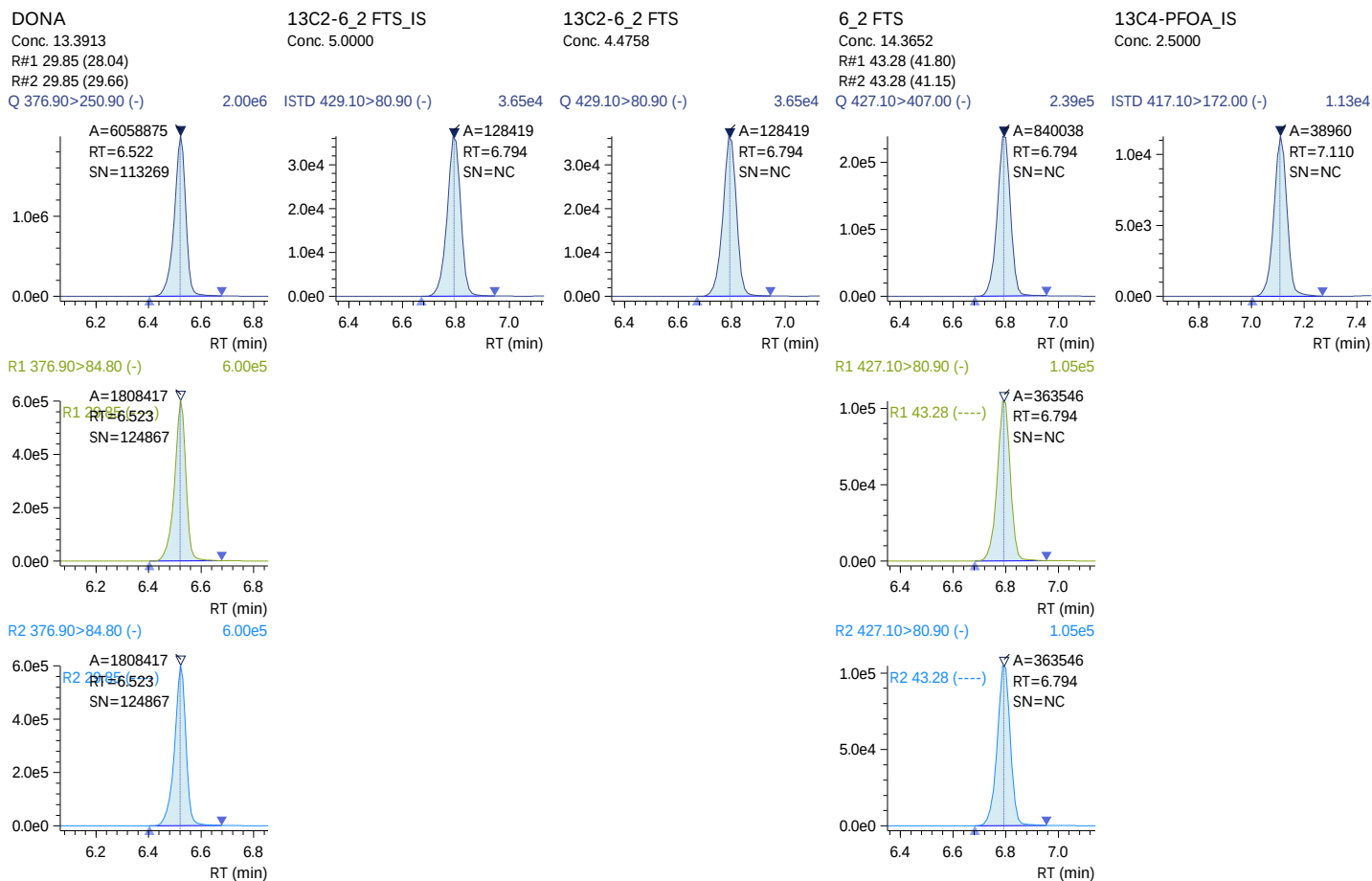


J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_013 (continued)



J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_013 (continued)

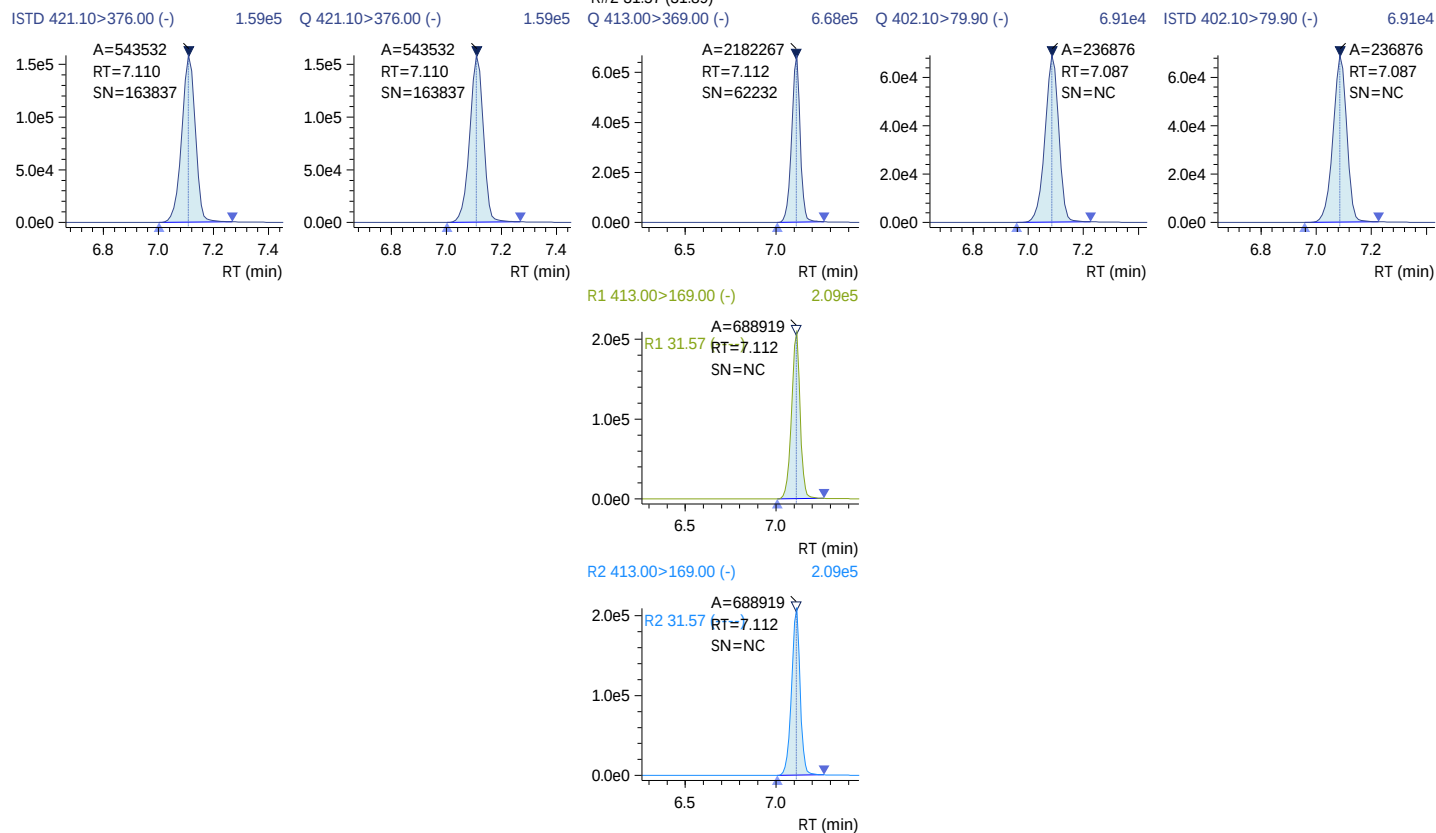
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.4960

PFOA
Conc. 15.5129
R#1 31.57 (29.05)
R#2 31.57 (31.89)

13C3-PFHxS
Conc. 2.5034

13C3-PFHxS_IS
Conc. 2.5000

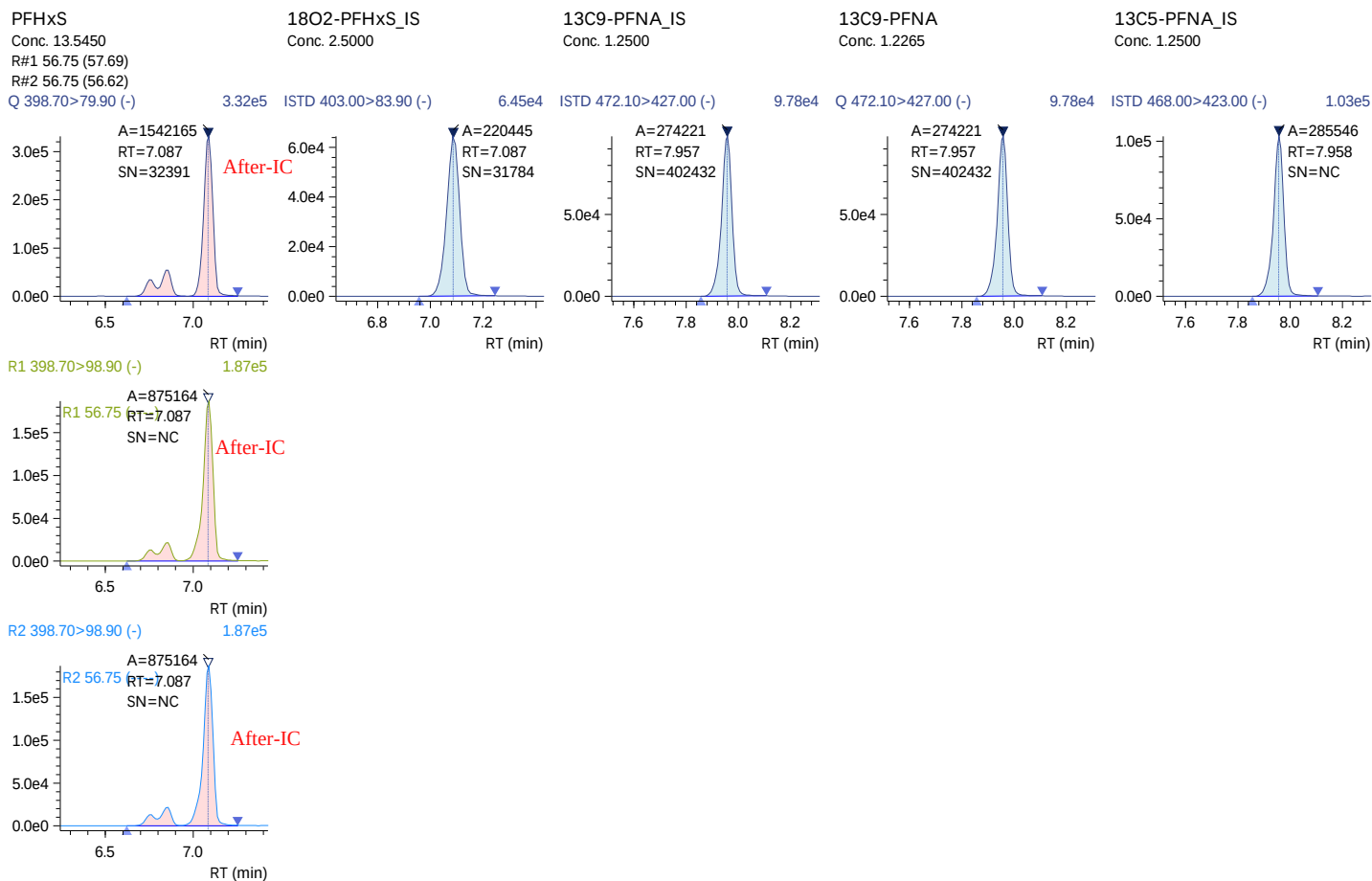


J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_013 (continued)

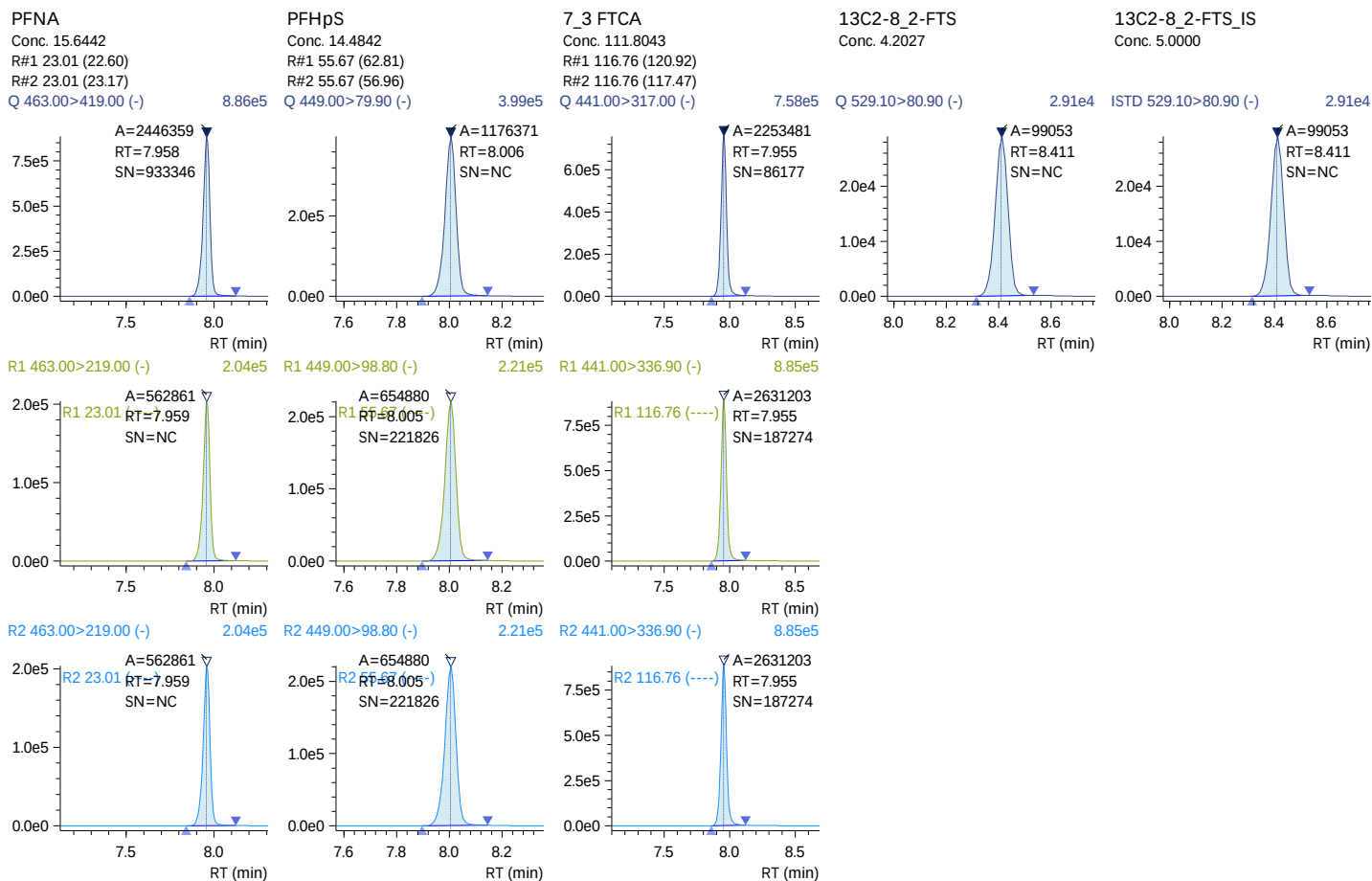


J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_013 (continued)

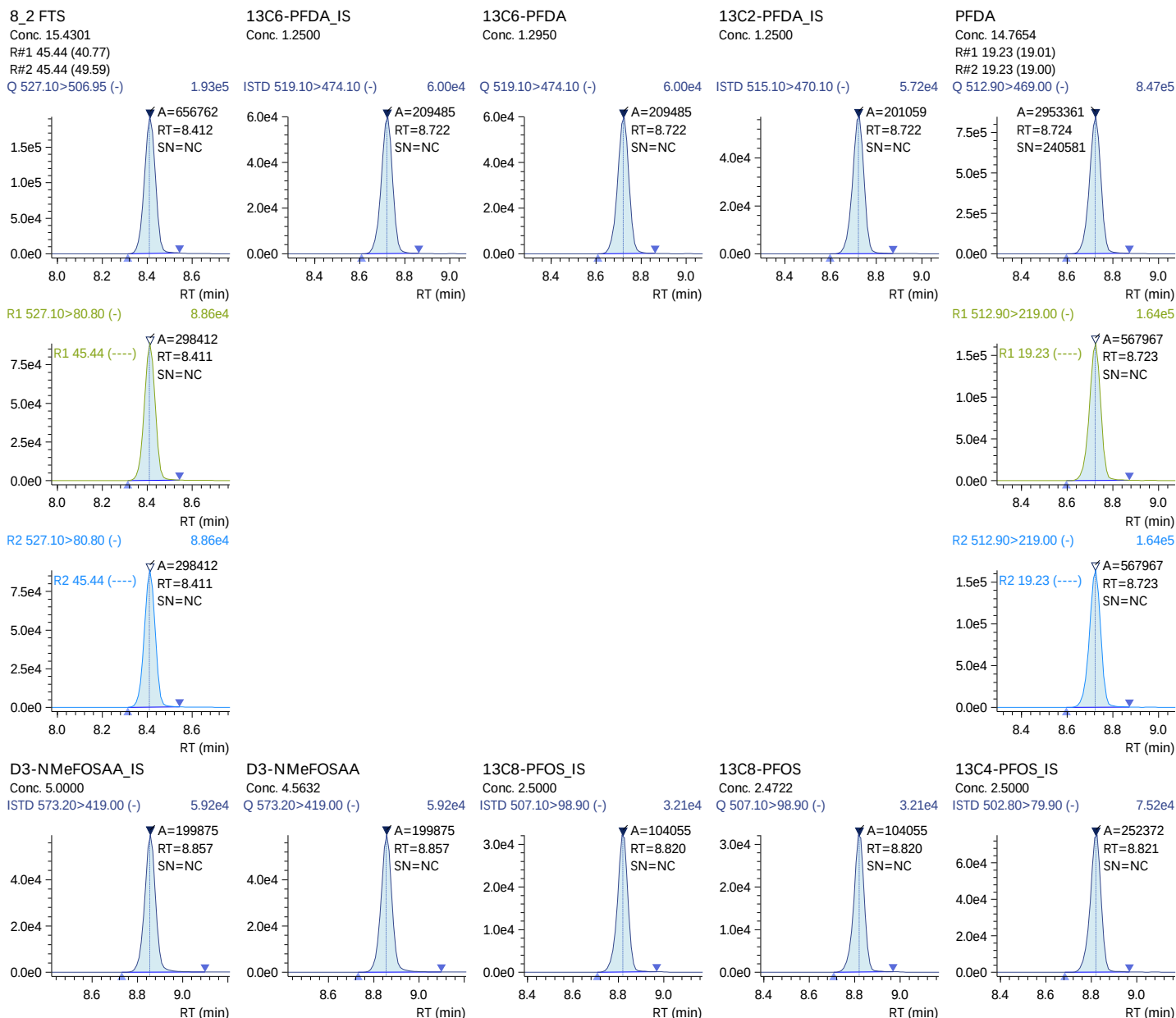


J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.damlp

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_013 (continued)

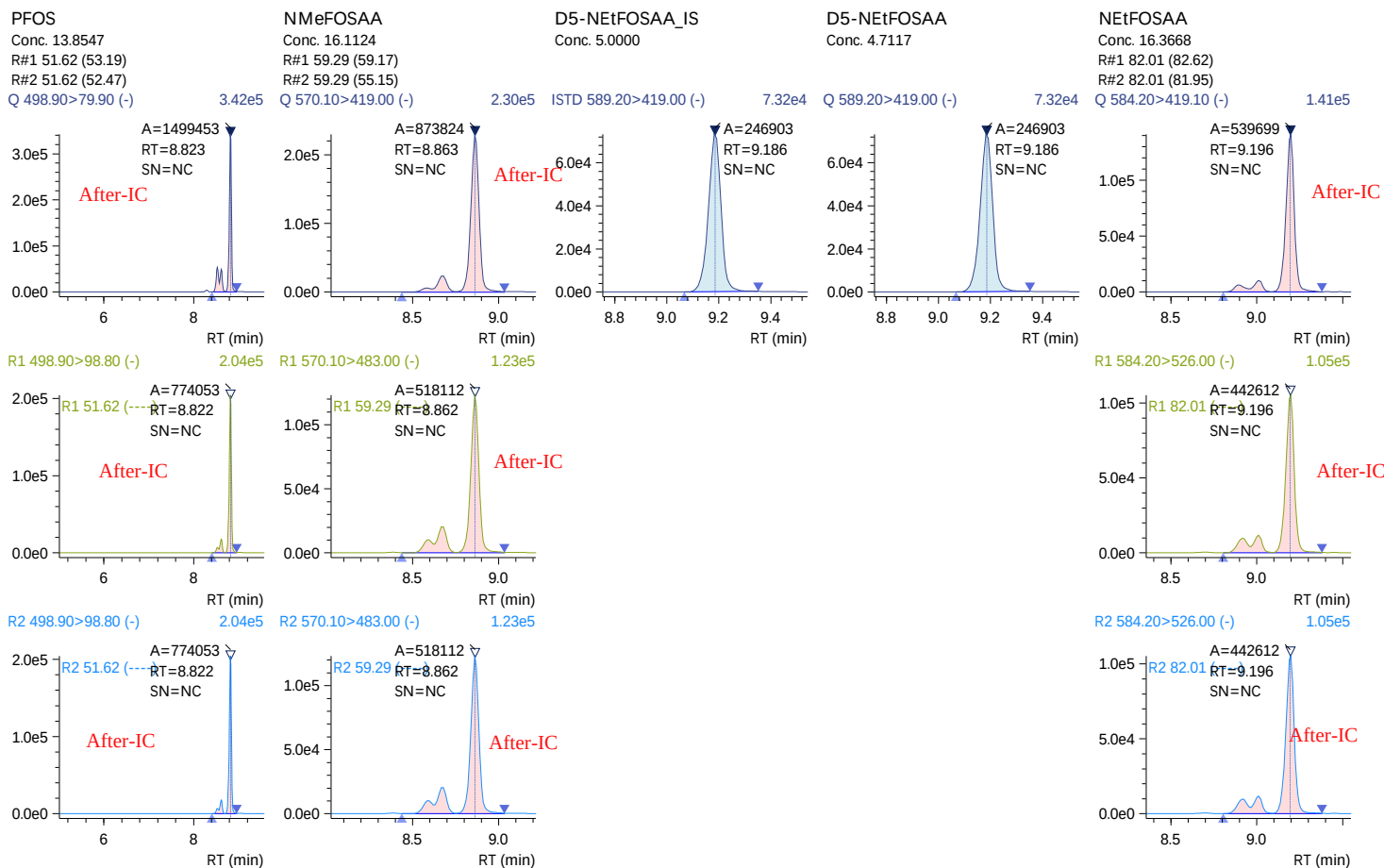


J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_013 (continued)



J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.

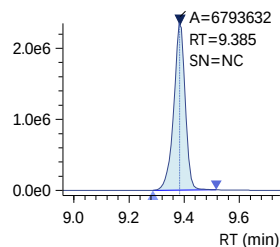


240118_013 (continued)

9-Cl-PF3ONS

Conc. 14.1163
R#1 31.43 (31.76)
R#2 31.43 (32.76)
Q 530.80>351.00 (-)

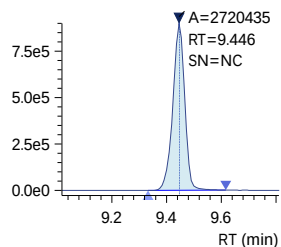
2.35e6



PFUnDA

Conc. 15.3038
R#1 13.93 (12.31)
R#2 13.93 (13.12)
Q 563.10>519.00 (-)

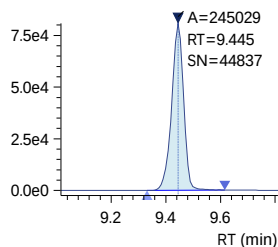
8.99e5



13C7-PFUnDA_IS

Conc. 1.2500

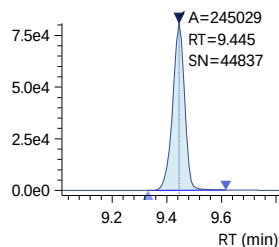
8.08e4



13C7-PFUnDA

Conc. 1.2699

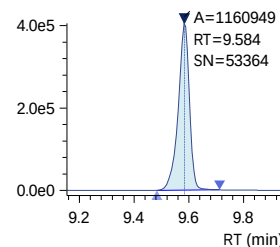
8.08e4



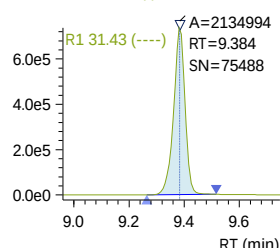
PFNS

Conc. 14.6843
R#1 63.88 (63.31)
R#2 63.88 (65.22)
Q 548.80>79.90 (-)

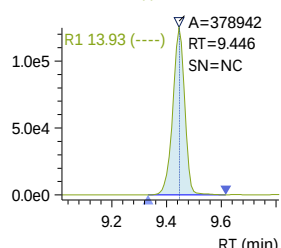
4.06e5



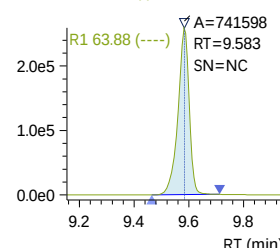
R1 532.80>353.00 (-)



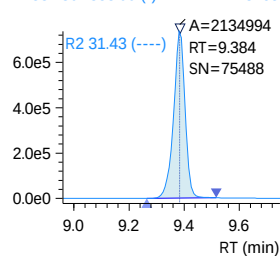
R1 563.10>269.10 (-)



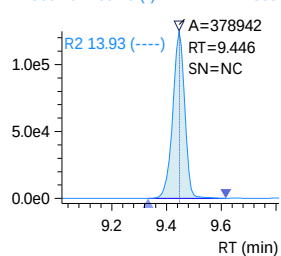
R1 548.80>98.80 (-)



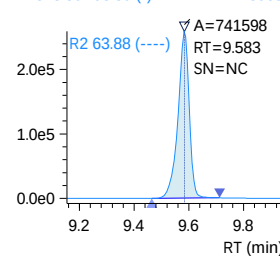
R2 532.80>353.00 (-)



R2 563.10>269.10 (-)

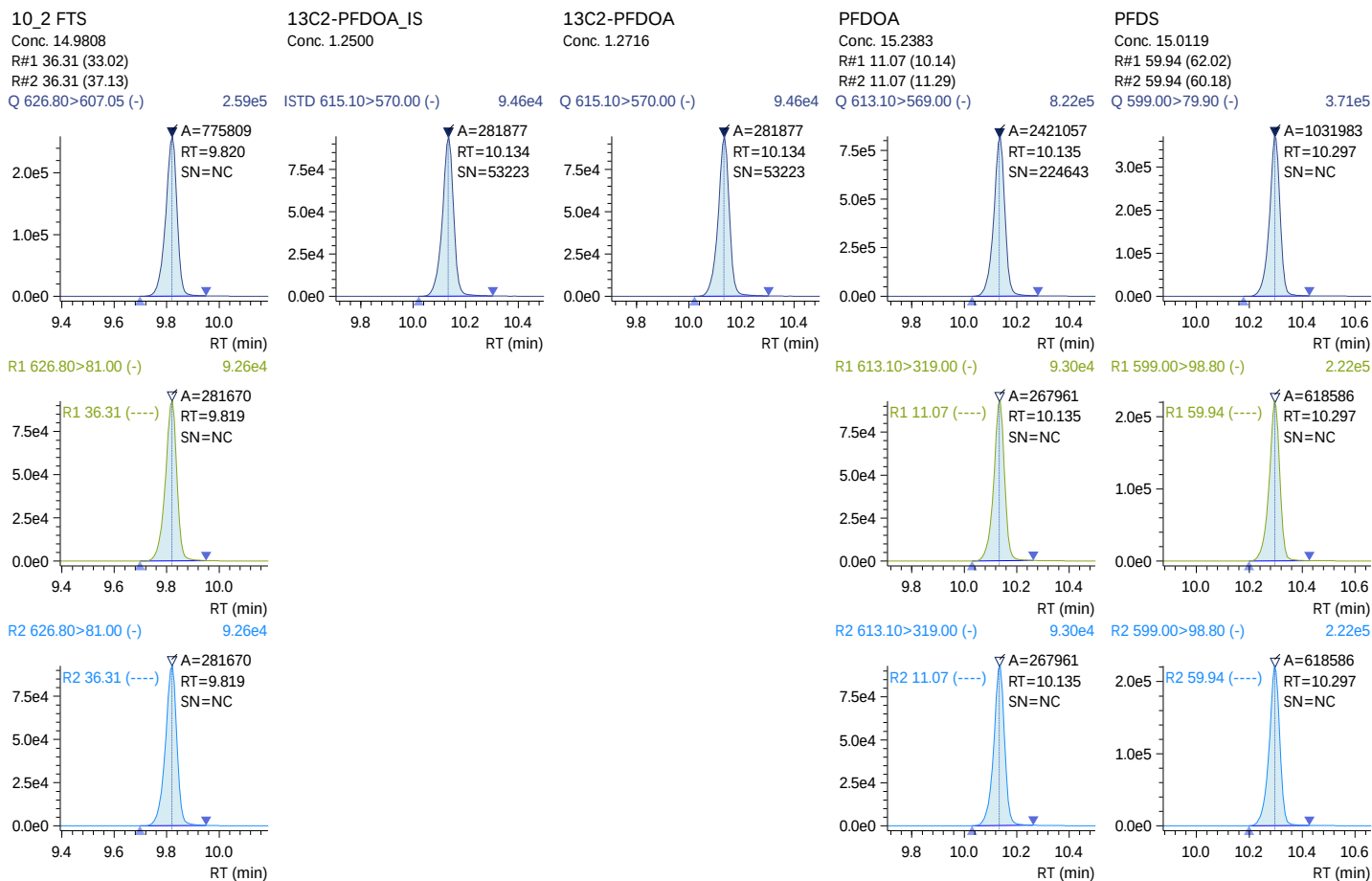


R2 548.80>98.80 (-)





240118_013 (continued)



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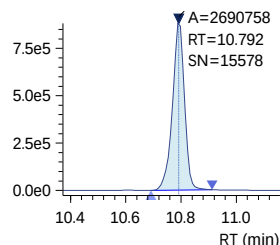
SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_013 (continued)

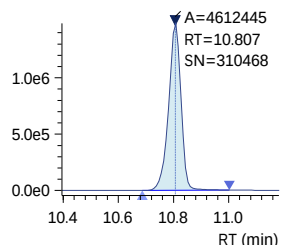
PFTTrDA

Conc. 15.5072
R#1 17.52 (15.12)
R#2 17.52 (17.64)
Q 663.00>619.00 (-)



11-Cl-PF3OUdS

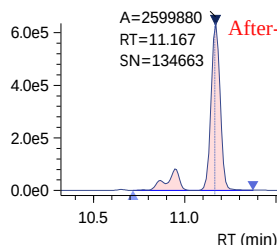
Conc. 14.2289
R#1 36.64 (36.61)
R#2 36.64 (36.44)
Q 630.90>451.00 (-)



PFOSAm

Conc. 29.6790

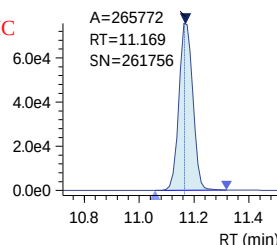
Q 498.10>77.90 (-)



13C8-PFOSAm

Conc. 2.4807

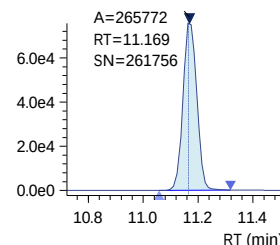
Q 506.10>77.80 (-)



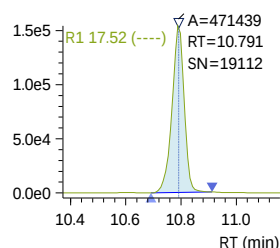
13C8-PFOSAm_IS

Conc. 2.5000

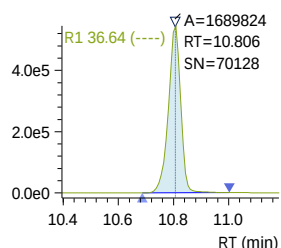
ISTD 506.10>77.80 (-)



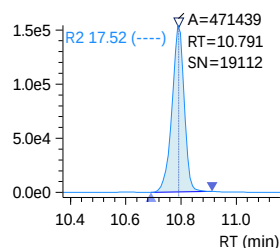
R1 663.00>168.90 (-)



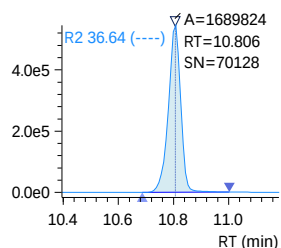
R1 632.90>452.90 (-)



R2 663.00>168.90 (-)

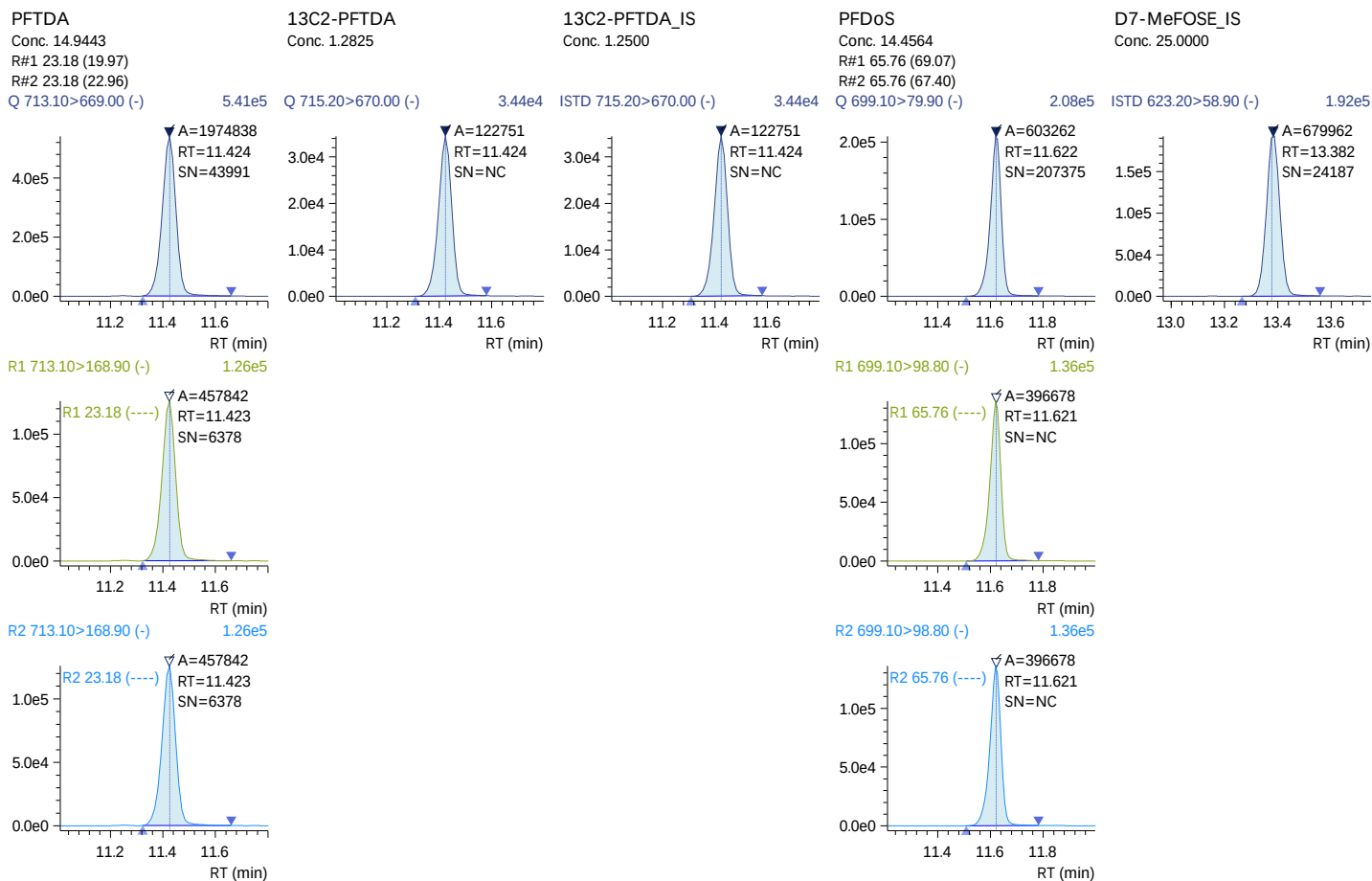


R2 632.90>452.90 (-)





240118_013 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_013 (continued)

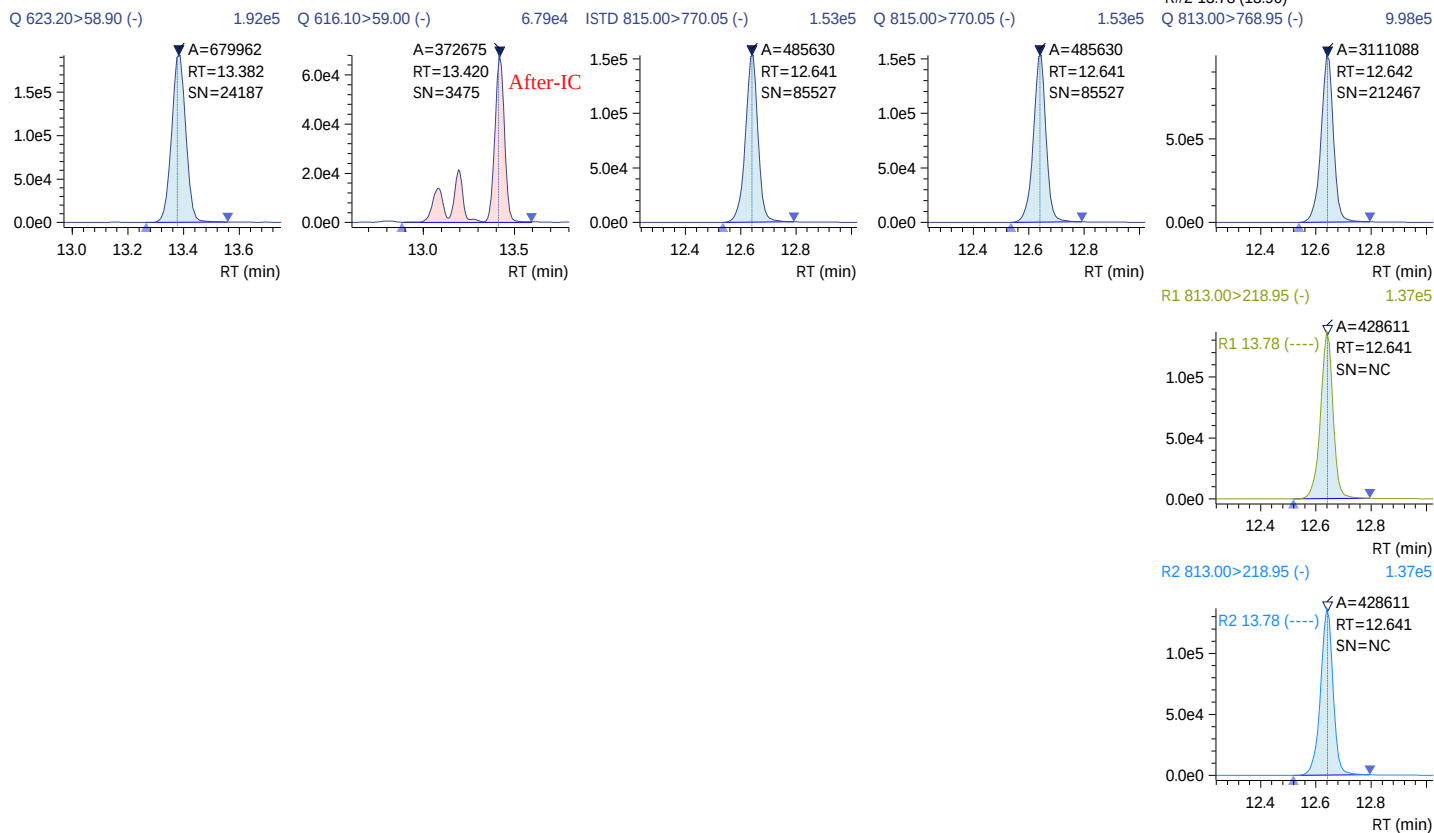
D7-MeFOSE
Conc. 25.7423

MeFOSE
Conc. 14.9240

13C2-PFHXA_IS
Conc. 2.5000

13C2-PFHXA
Conc. 2.6003

PFHXA
Conc. 15.5968
R#1 13.78 (11.64)
R#2 13.78 (13.90)





240118_013 (continued)

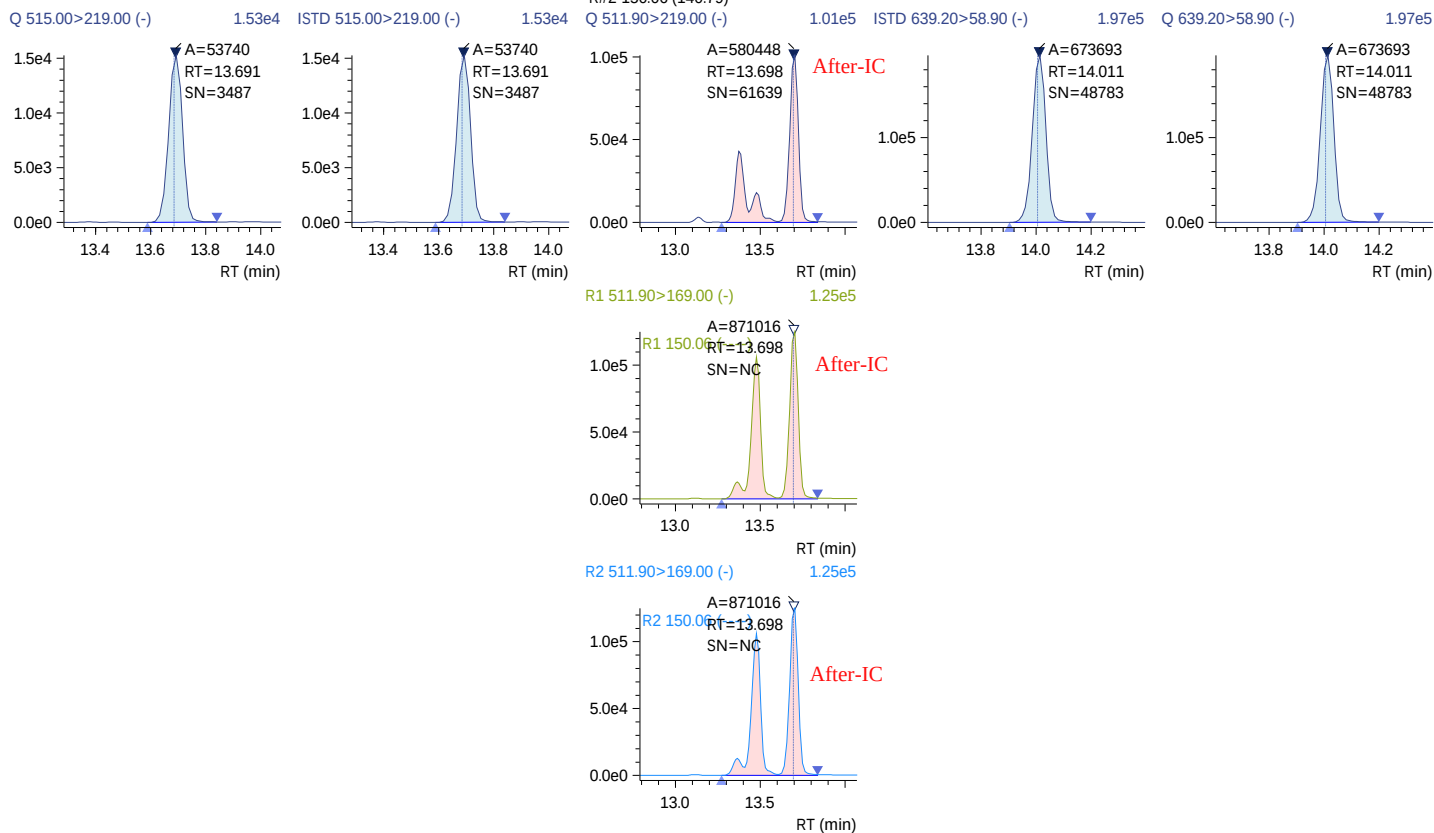
D3-MeFOSA
Conc. 2.4908

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. 14.9835
R#1 150.06 (149.05)
R#2 150.06 (140.79)

D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 25.1119

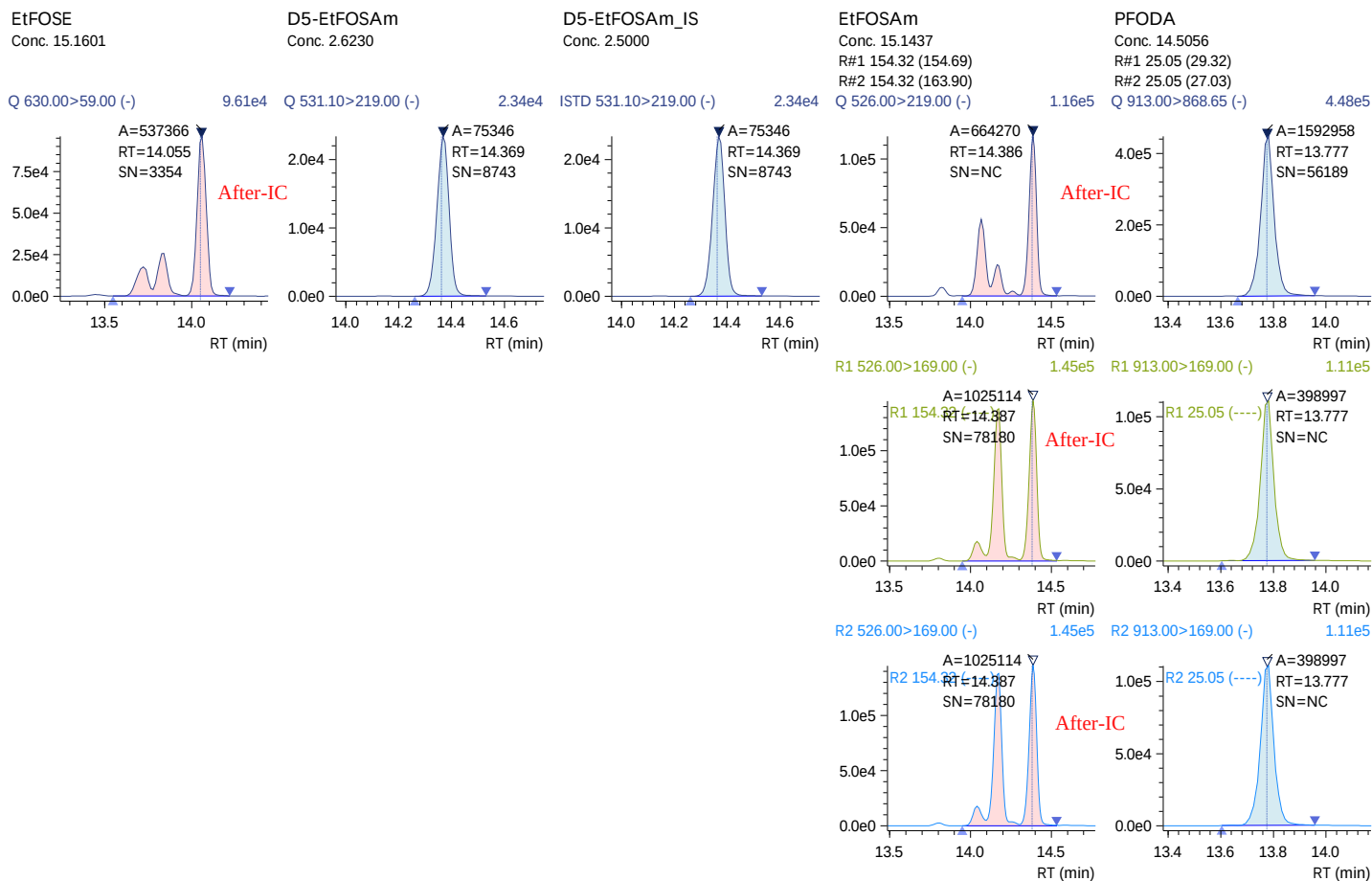


J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_013 (continued)



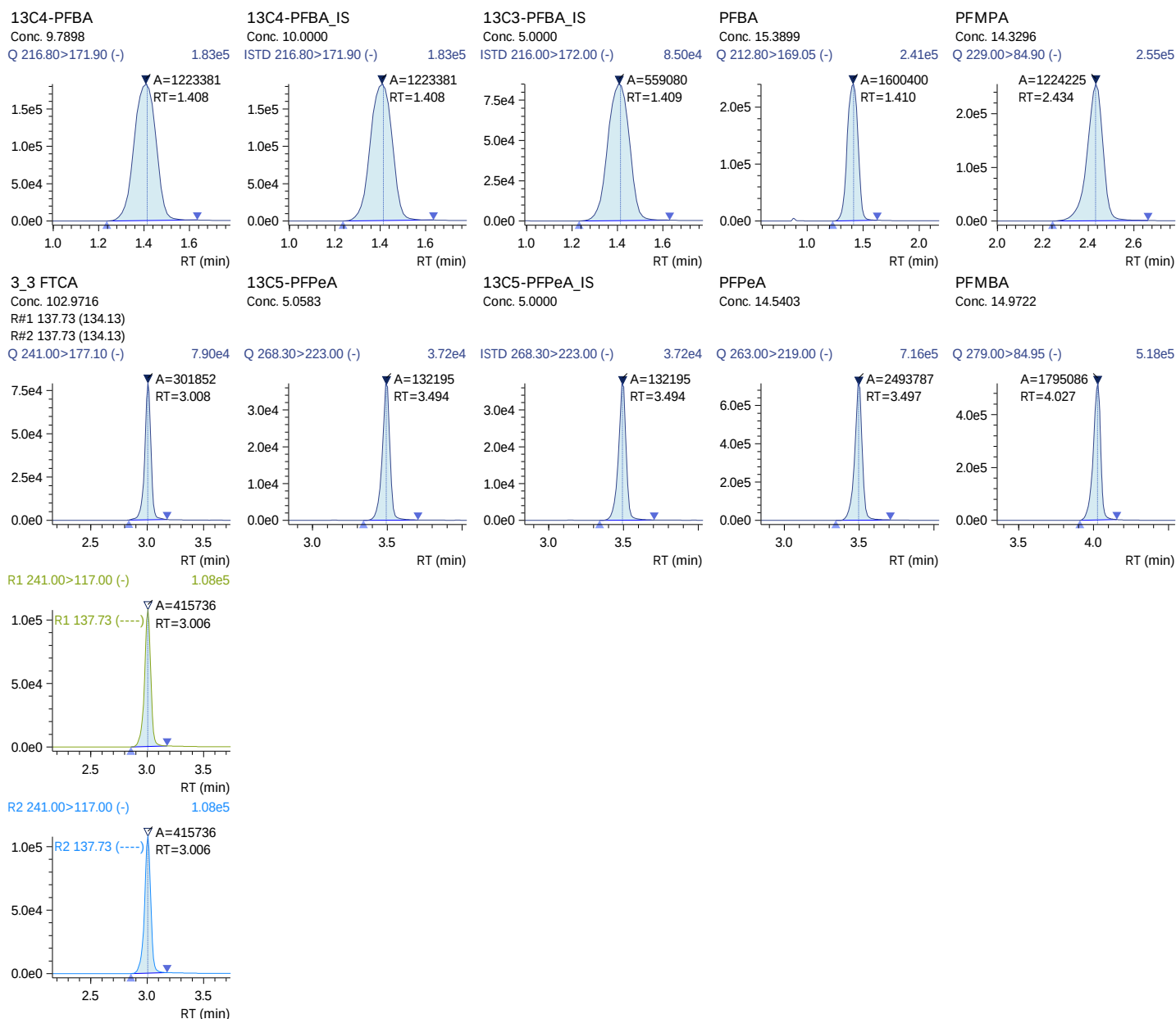
J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\lp

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_013

Sample ID: 1633 ICAL 15.0PPB
Date Acquired: 1/18/2024 4:47:18 PM
Acquired by: System Administrator
Data File: 240118_013
Vial: 8 | Inj. Volume: 10.0000uL | Tray: 1





240118_013 (continued)

13C2-4_2 FTS
Conc. 3.9819

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. 14.2724
R#1 30.07 (34.14)
R#2 30.07 (34.14)

13C3-PFBS_IS
Conc. 2.5000

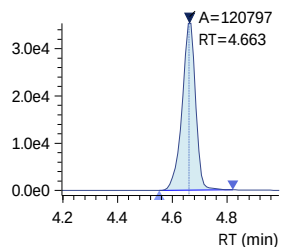
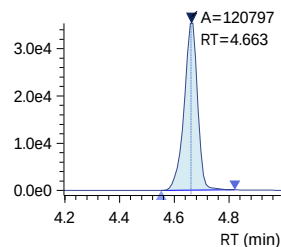
PFBS
Conc. 13.3801
R#1 47.08 (47.53)
R#2 47.08 (47.53)

Q 329.10>80.90 (-)

3.54e4

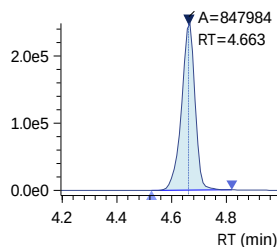
ISTD 329.10>80.90 (-)

3.54e4



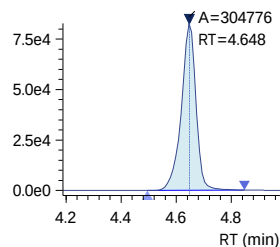
Q 327.10>307.00 (-)

2.49e5



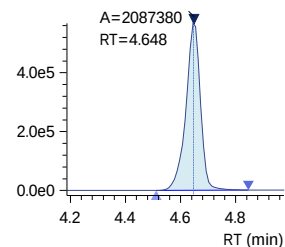
ISTD 302.10>79.90 (-)

8.28e4



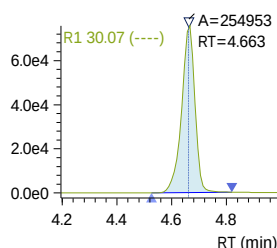
Q 298.70>79.90 (-)

5.68e5



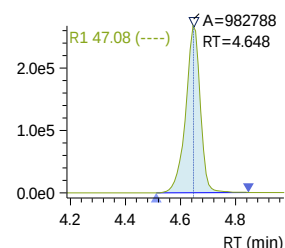
R1 327.10>80.90 (-)

7.58e4



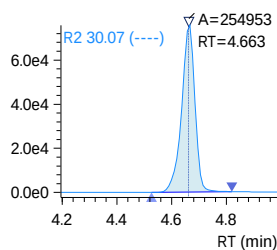
R1 298.70>98.80 (-)

2.67e5



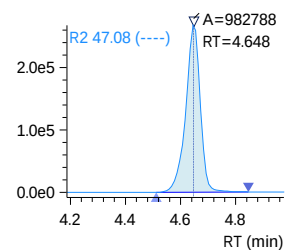
R2 327.10>80.90 (-)

7.58e4



R2 298.70>98.80 (-)

2.67e5





240118_013 (continued)

13C3-PFBS
 Conc. 2.4362

NFDHA
 Conc. 15.2050
 R#1 37.78 (37.88)
 R#2 37.78 (37.88)

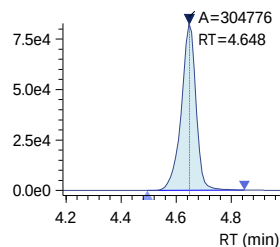
13C5-PFHxA
 Conc. 2.3921

13C5-PFHxA_IS
 Conc. 2.5000

13C2-PFHxA_IS
 Conc. 2.5000

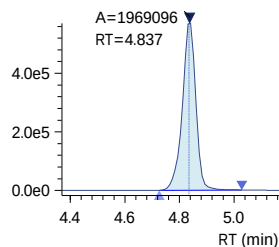
Q 302.10>79.90 (-)

8.28e4



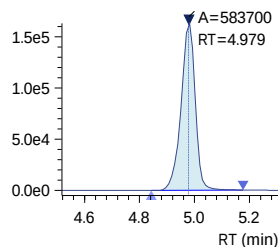
Q 295.00>201.00 (-)

5.70e5



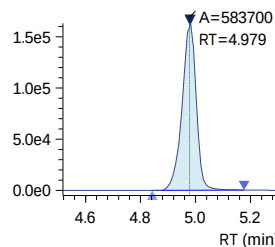
Q 318.00>273.00 (-)

1.63e5



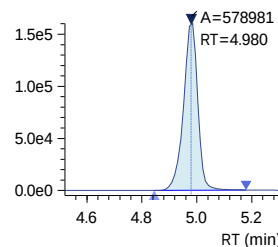
ISTD 318.00>273.00 (-)

1.63e5



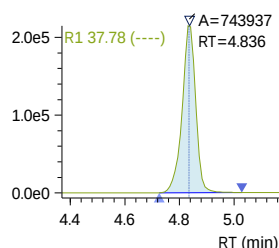
ISTD 315.10>270.00 (-)

1.60e5



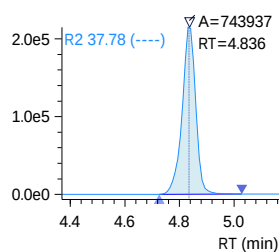
R1 295.00>84.90 (-)

2.15e5



R2 295.00>84.90 (-)

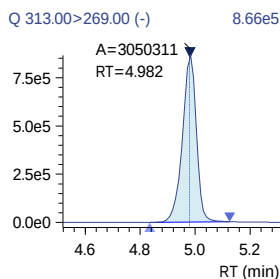
2.15e5



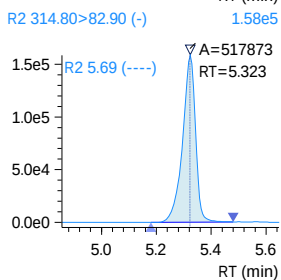
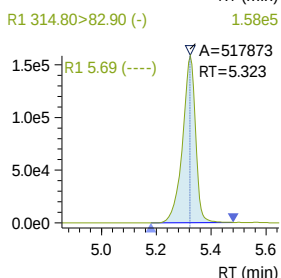
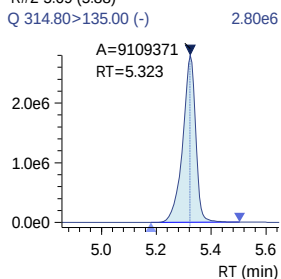


240118_013 (continued)

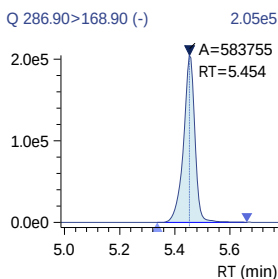
PFHxA
Conc. 15.6702



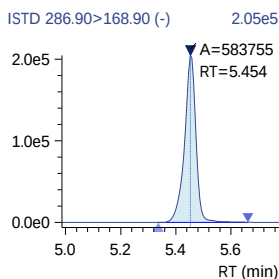
PFEESA
Conc. 13.9333
R#1 5.69 (5.88)
R#2 5.69 (5.88)



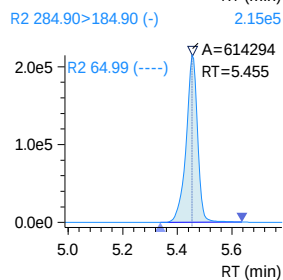
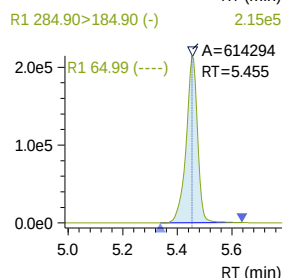
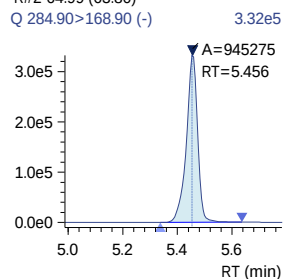
13C3-HFPO-DA
Conc. 10.2996



13C3-HFPO-DA_IS
Conc. 10.0000

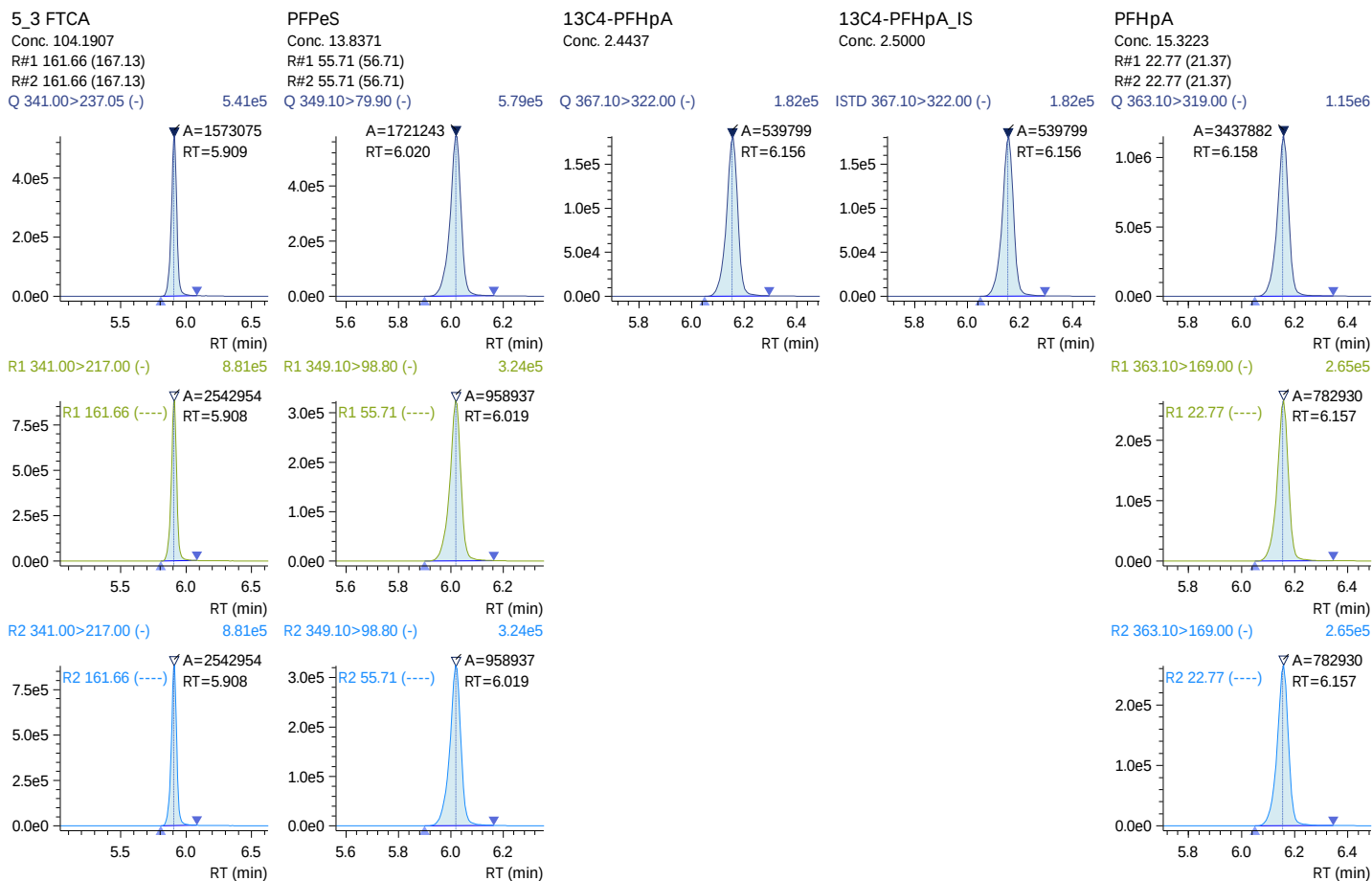


HFPO-DA
Conc. 14.6879
R#1 64.99 (63.80)
R#2 64.99 (63.80)



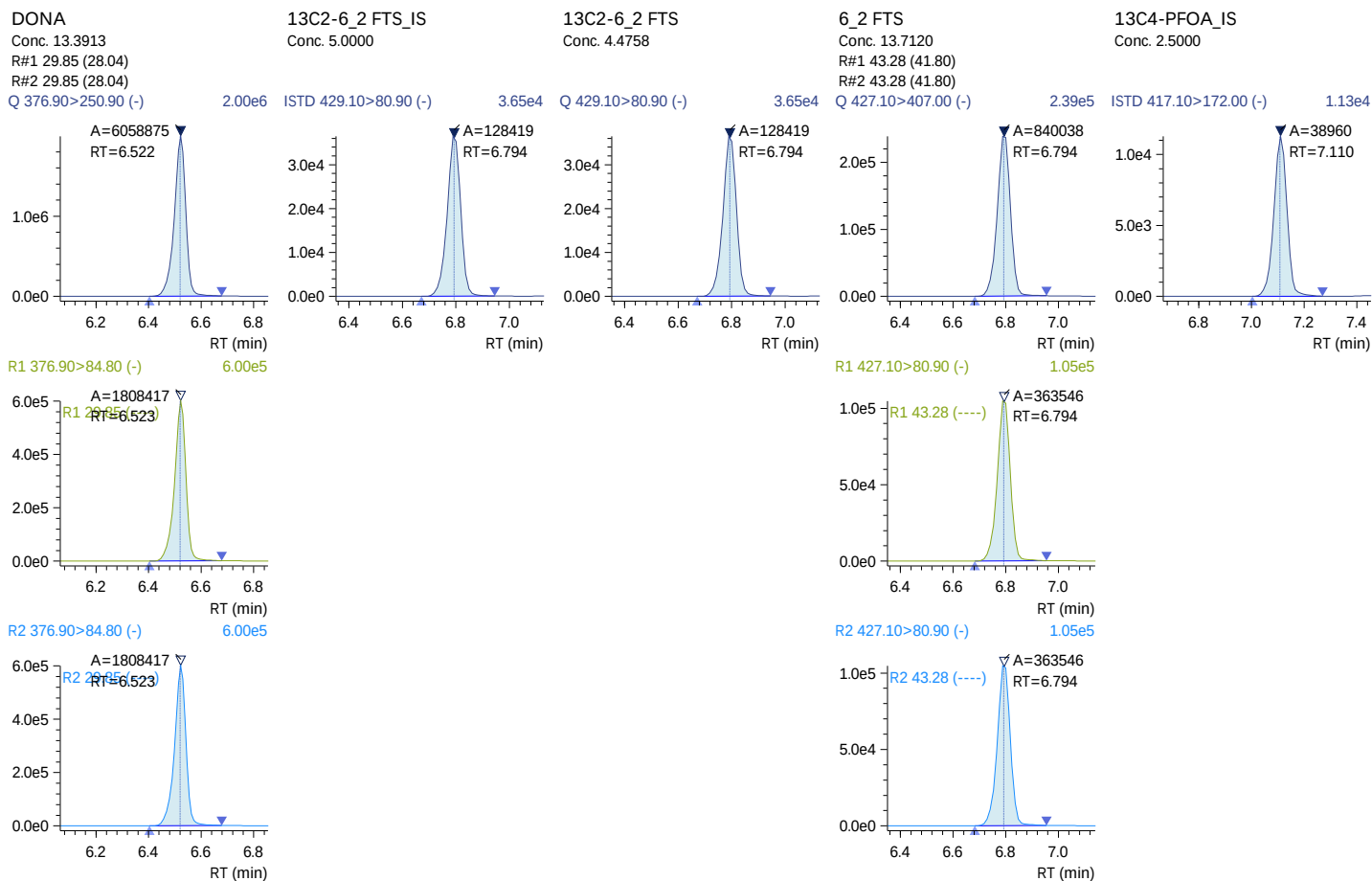


240118_013 (continued)





240118_013 (continued)





240118_013 (continued)

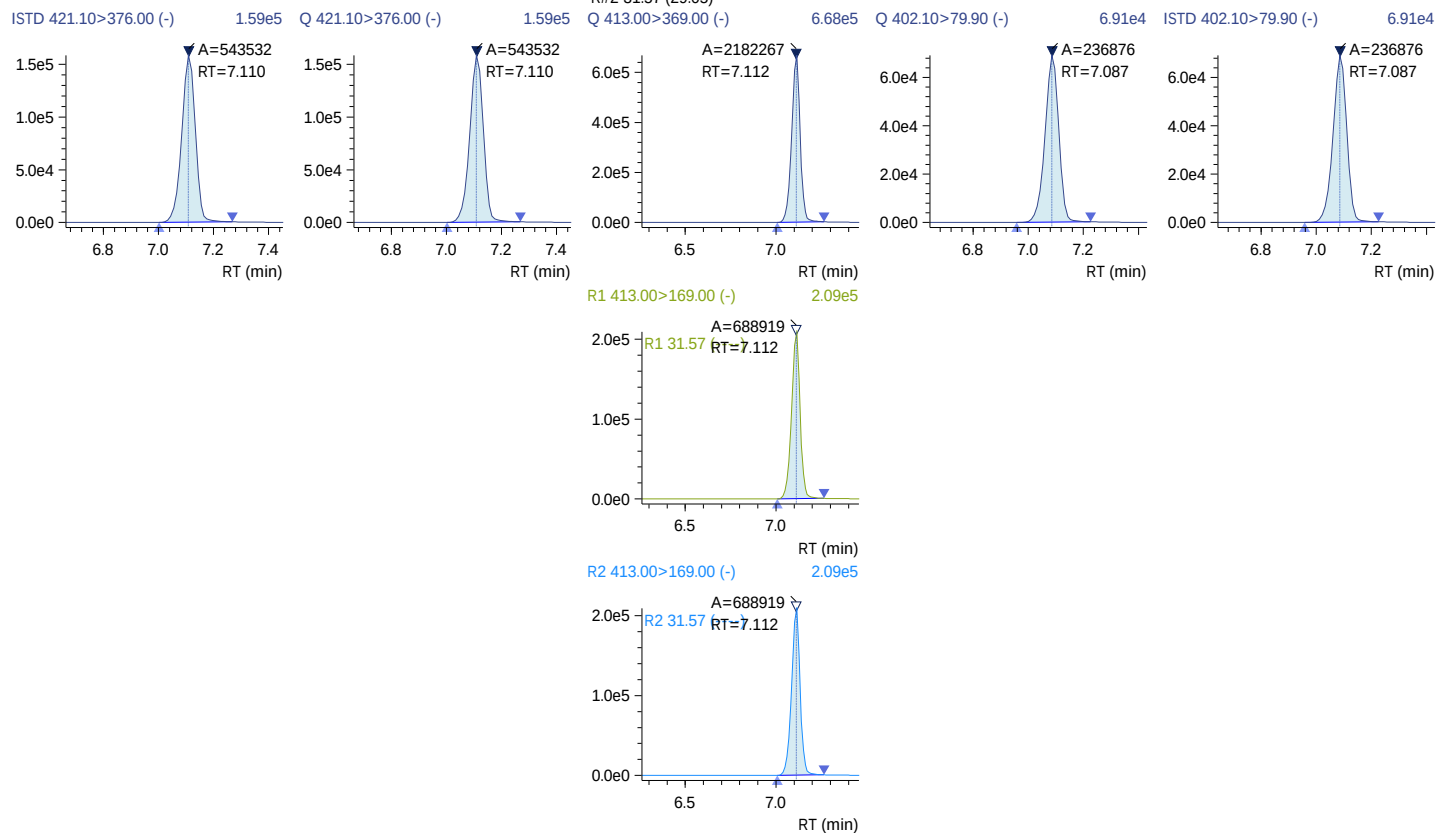
13C8-PFOA_IS
 Conc. 2.5000

13C8-PFOA
 Conc. 2.4960

PFOA
 Conc. 15.5129
 R#1 31.57 (29.05)
 R#2 31.57 (29.05)

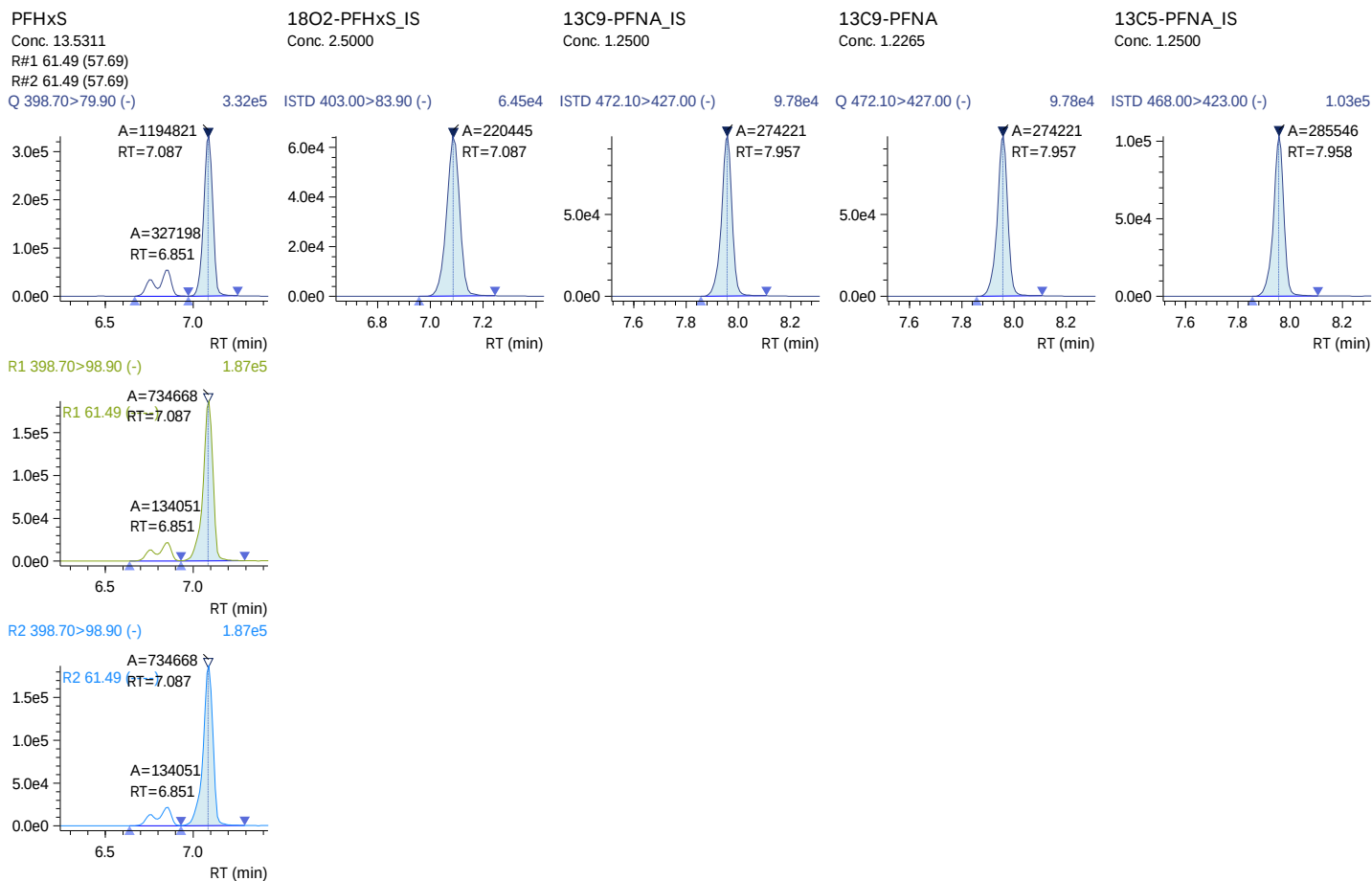
13C3-PFHxS
 Conc. 2.5034

13C3-PFHxS_IS
 Conc. 2.5000



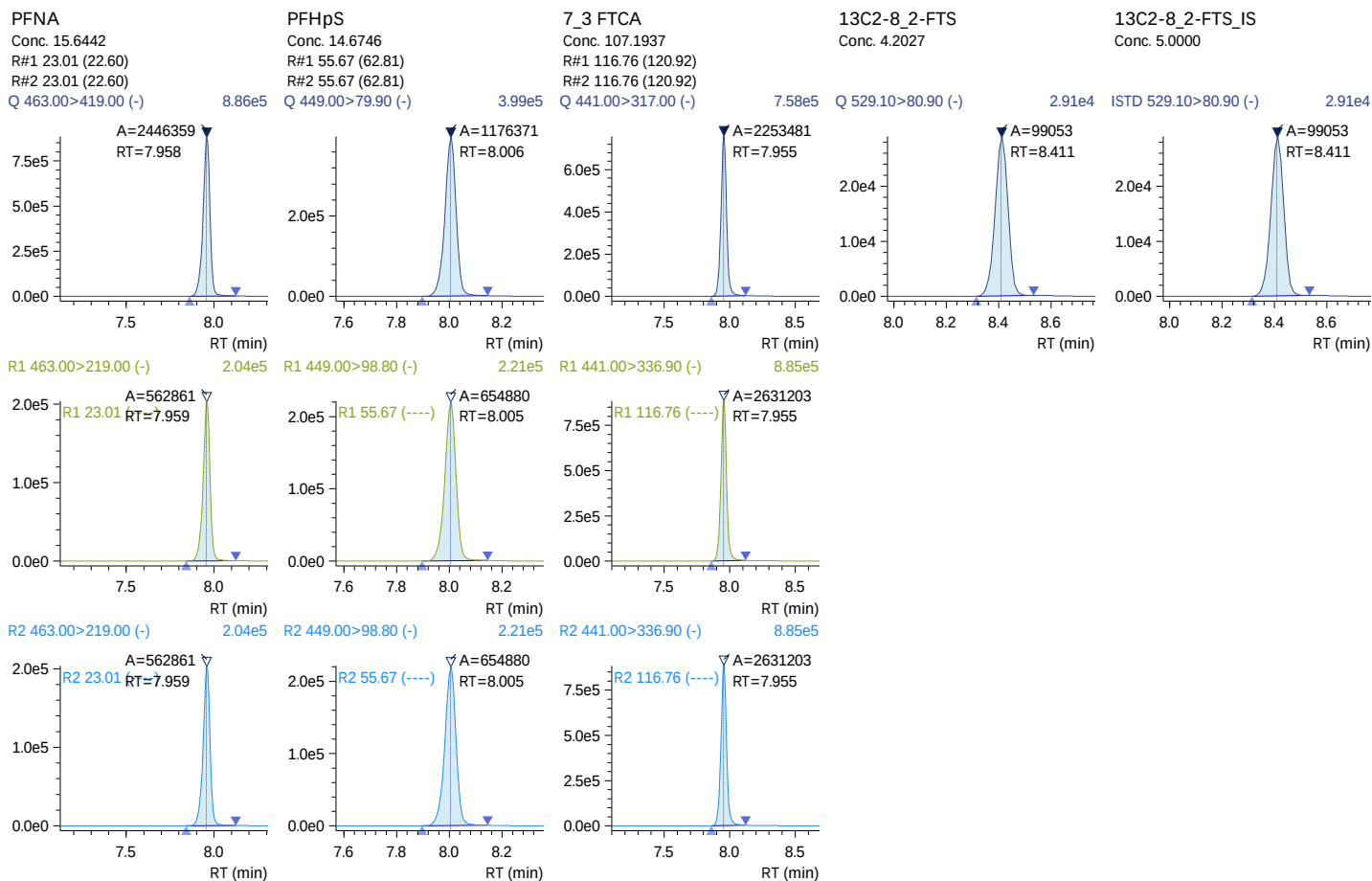


240118_013 (continued)



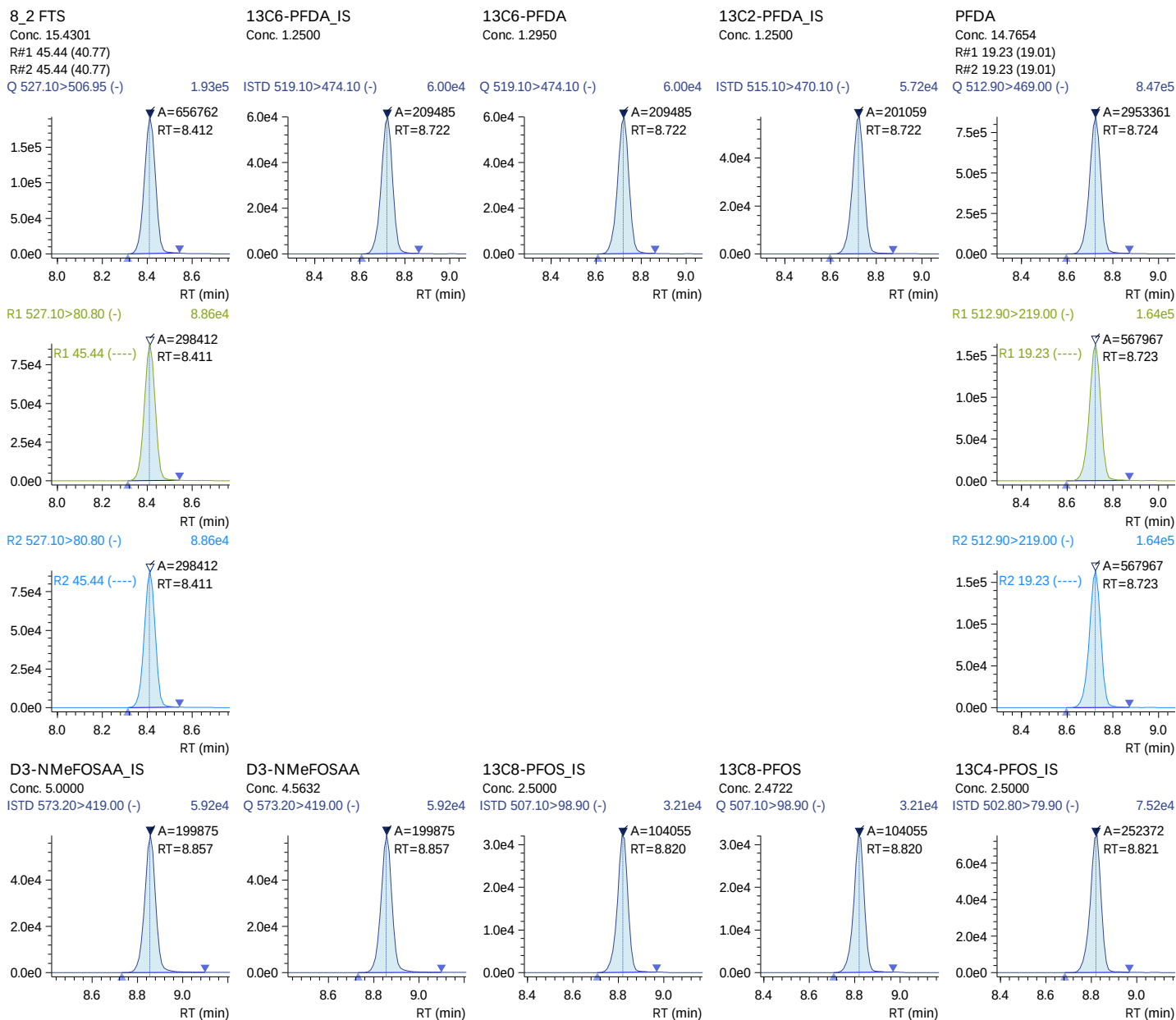


240118_013 (continued)



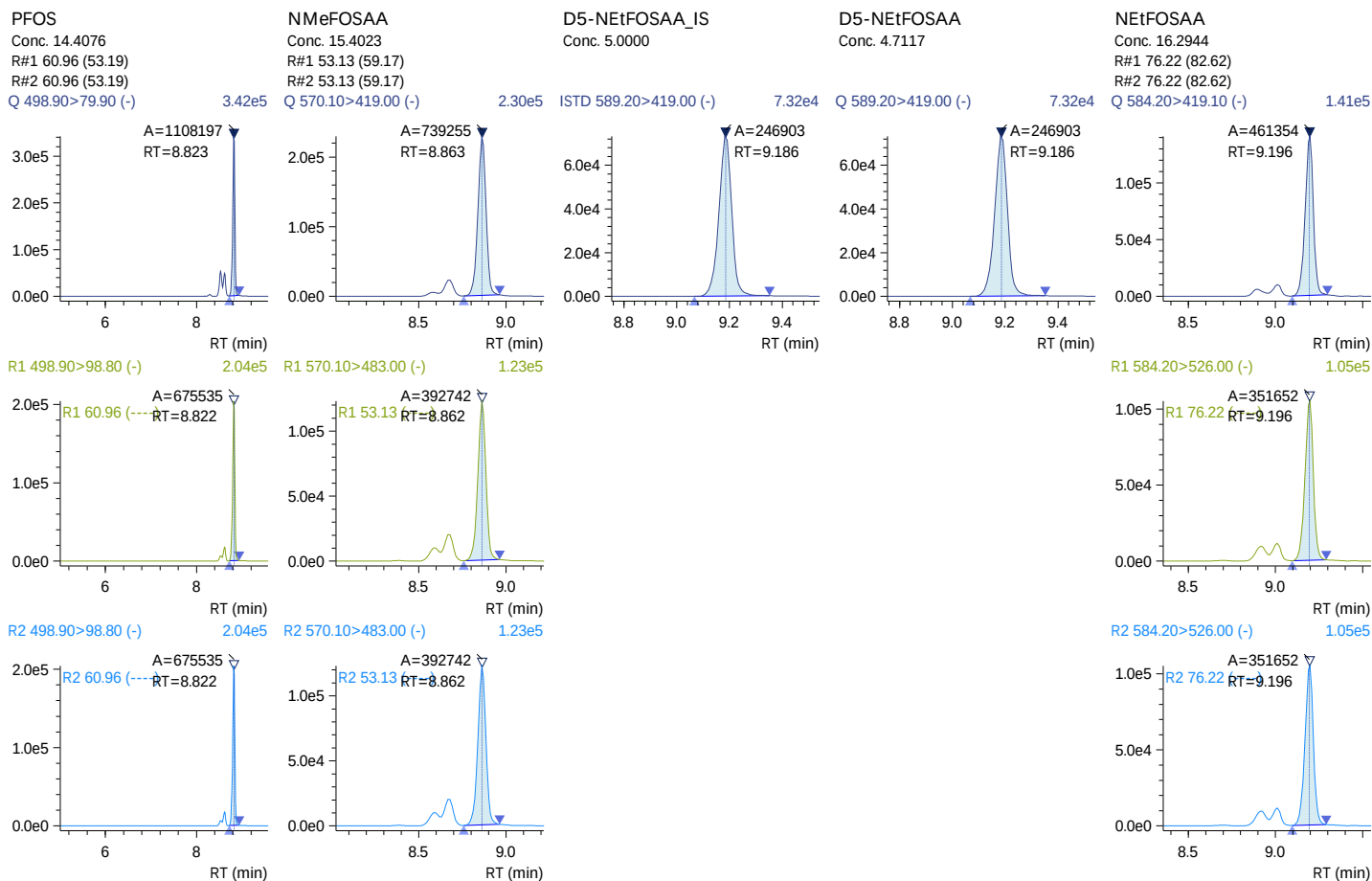


240118_013 (continued)





240118_013 (continued)

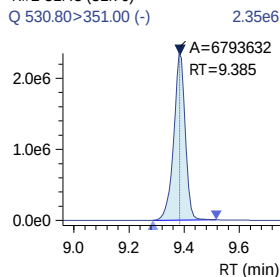




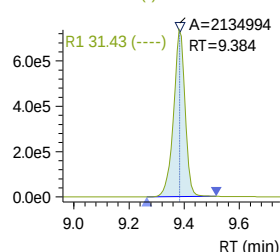
240118_013 (continued)

9-Cl-PF3ONS

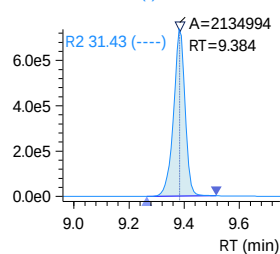
Conc. 14.1163
R#1 31.43 (31.76)
R#2 31.43 (31.76)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-) 7.37e5

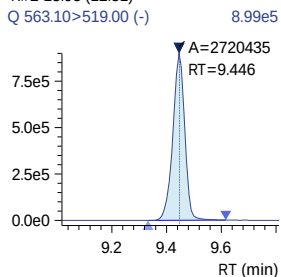


R2 532.80>353.00 (-) 7.37e5

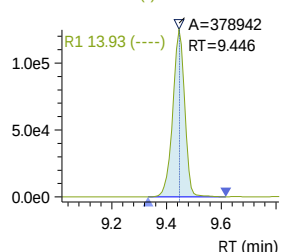


PFUnDA

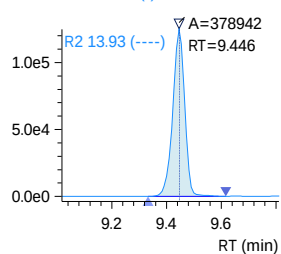
Conc. 15.3038
R#1 13.93 (12.31)
R#2 13.93 (12.31)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-) 1.25e5

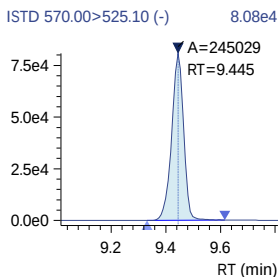


R2 563.10>269.10 (-) 1.25e5



13C7-PFUnDA_IS

Conc. 1.2500



ISTD 570.00>525.10 (-) 8.08e4

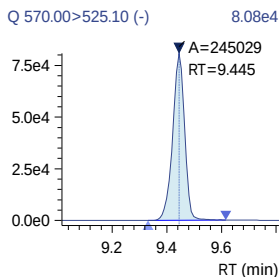


Q 570.00>525.10 (-) 8.08e4



13C7-PFUnDA

Conc. 1.2699



Q 570.00>525.10 (-) 8.08e4

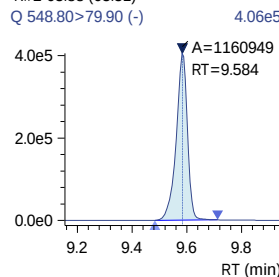


Q 570.00>525.10 (-) 8.08e4

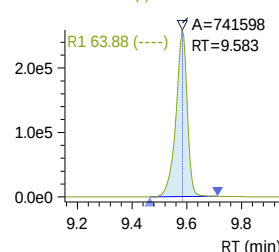


PFNS

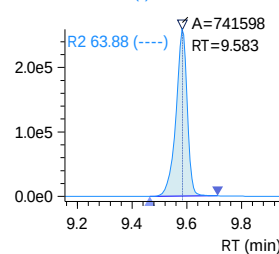
Conc. 14.6843
R#1 63.88 (63.31)
R#2 63.88 (63.31)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-) 2.59e5



R2 548.80>98.80 (-) 2.59e5





240118_013 (continued)

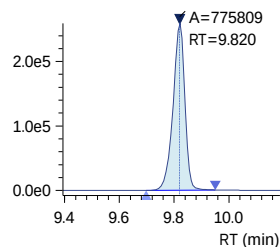
10_2_FTS

Conc. 15.4908

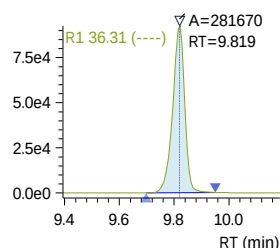
R#1 36.31 (33.02)

R#2 36.31 (33.02)

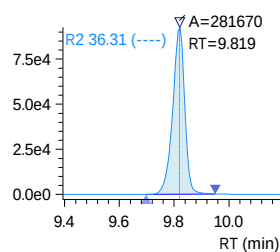
Q 626.80>607.05 (-)



R1 626.80>81.00 (-) 9.26e4



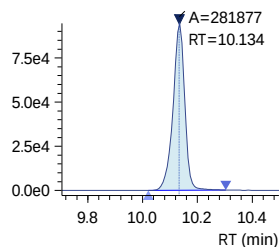
R2 626.80>81.00 (-) 9.26e4



13C2-PFDOA_IS

Conc. 1.2500

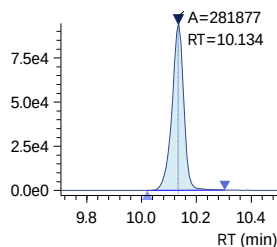
ISTD 615.10>570.00 (-)



13C2-PFDOA

Conc. 1.2716

Q 615.10>570.00 (-)



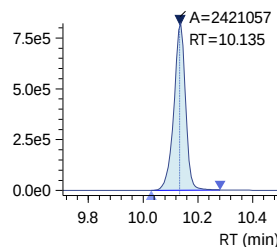
PFDOA

Conc. 15.2383

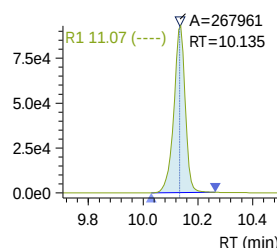
R#1 11.07 (10.14)

R#2 11.07 (10.14)

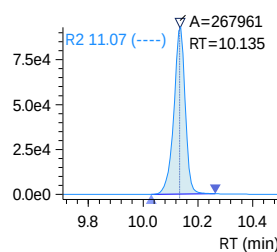
Q 613.10>569.00 (-)



R1 613.10>319.00 (-) 9.30e4



R2 613.10>319.00 (-) 9.30e4



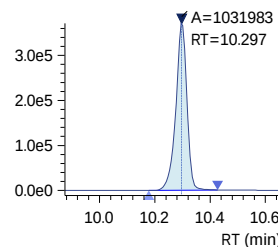
PFDS

Conc. 14.6260

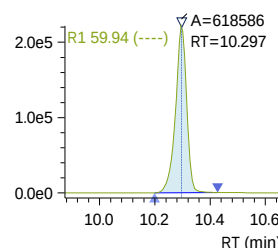
R#1 59.94 (62.02)

R#2 59.94 (62.02)

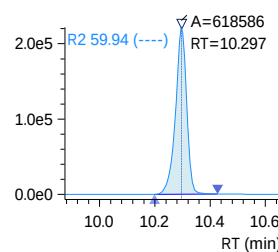
Q 599.00>79.90 (-)



R1 599.00>98.80 (-) 2.22e5



R2 599.00>98.80 (-) 2.22e5

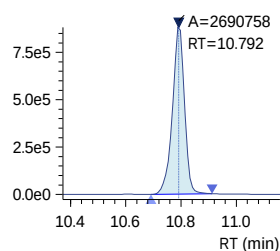




240118_013 (continued)

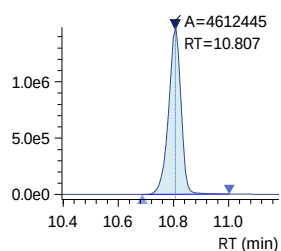
PFTTrDA

Conc. 15.5072
R#1 17.52 (15.12)
R#2 17.52 (15.12)
Q 663.00>619.00 (-)



11-Cl-PF3OUds

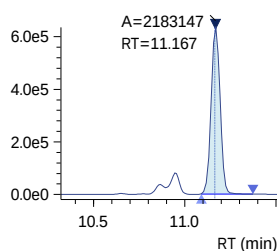
Conc. 13.2499
R#1 36.64 (36.61)
R#2 36.64 (36.61)
Q 630.90>451.00 (-)



PFOSAm

Conc. 29.5605

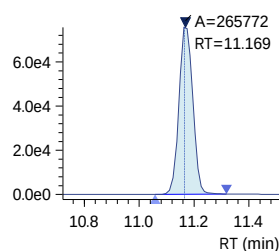
Q 498.10>77.90 (-)



13C8-PFOSAm

Conc. 2.4807

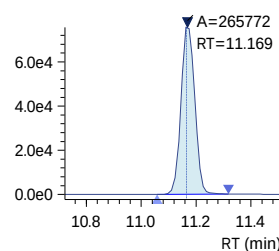
Q 506.10>77.80 (-)



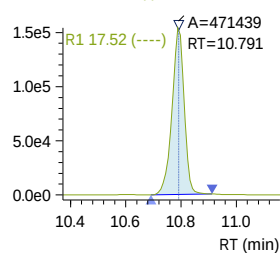
13C8-PFOSAm_IS

Conc. 2.5000

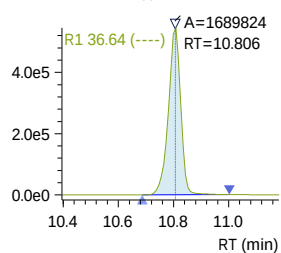
ISTD 506.10>77.80 (-)



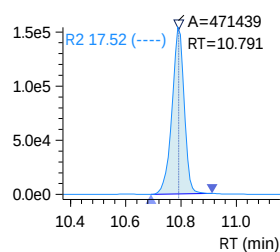
R1 663.00>168.90 (-)



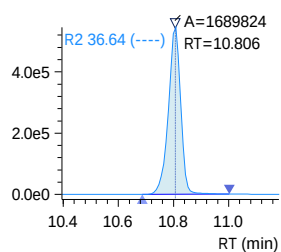
R1 632.90>452.90 (-)



R2 663.00>168.90 (-)

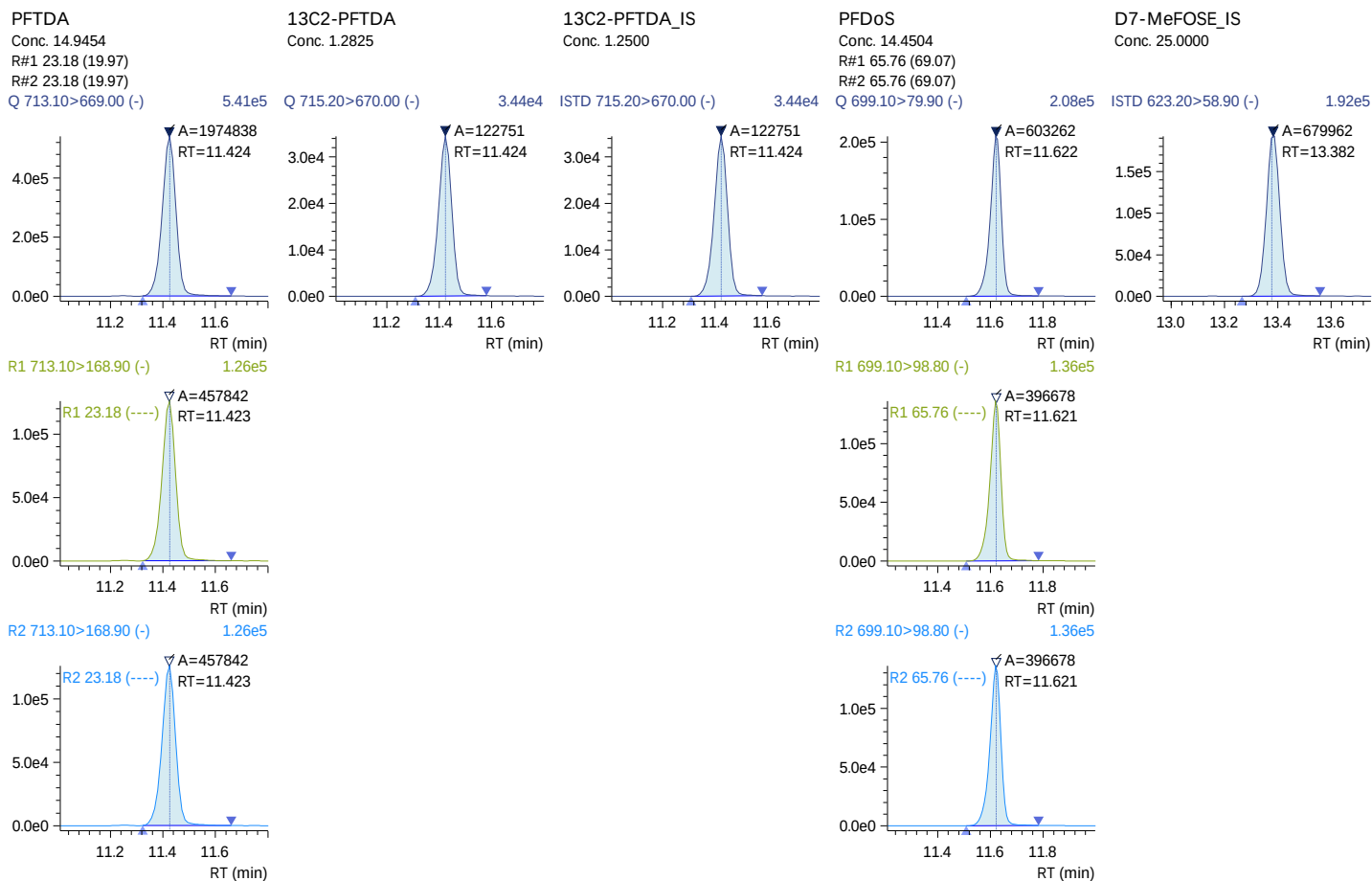


R2 632.90>452.90 (-)





240118_013 (continued)





240118_013 (continued)

D7-MeFOSE
Conc. 25.7423

MeFOSE
Conc. 15.7330

13C2-PFHXA_IS
Conc. 2.5000

13C2-PFHXA
Conc. 2.6003

PFHXA
Conc. 15.5968
R#1 13.78 (11.64)
R#2 13.78 (11.64)

Q 623.20>58.90 (-)

1.92e5

Q 616.10>59.00 (-)

6.79e4

ISTD 815.00>770.05 (-)

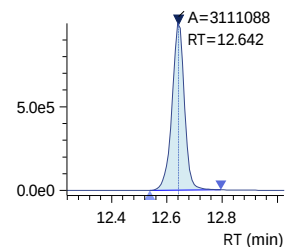
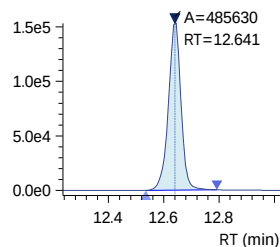
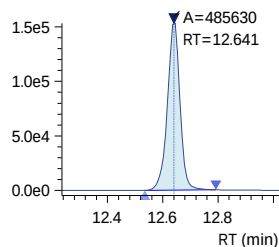
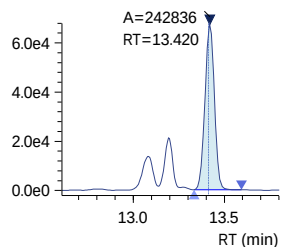
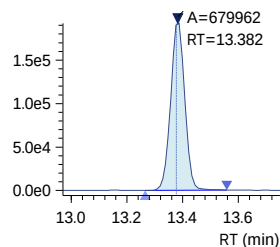
1.53e5

Q 815.00>770.05 (-)

1.53e5

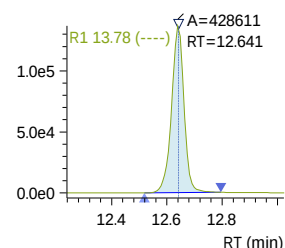
Q 813.00>768.95 (-)

9.98e5



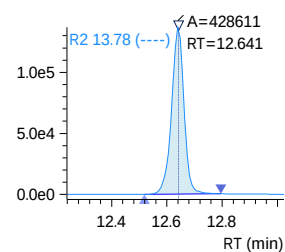
R1 813.00>218.95 (-)

1.37e5



R2 813.00>218.95 (-)

1.37e5





240118_013 (continued)

D3-MeFOSA
 Conc. 2.4908

D3-MeFOSA_IS
 Conc. 2.5000

MeFOSA
 Conc. 14.7072
 R#1 122.24 (149.05)
 R#2 122.24 (149.05)

D9-EtFOSE_IS
 Conc. 25.0000

D9-EtFOSE
 Conc. 25.1119

Q 515.00>219.00 (-)

1.53e4

ISTD 515.00>219.00 (-)

1.53e4

Q 511.90>219.00 (-)

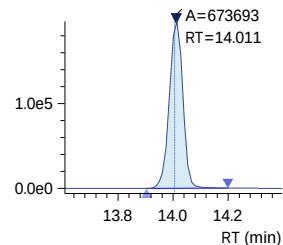
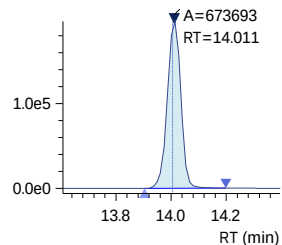
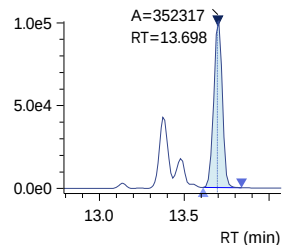
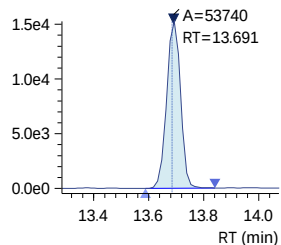
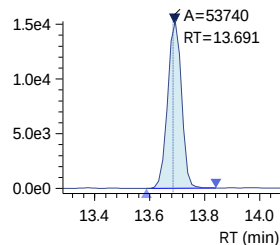
1.01e5

ISTD 639.20>58.90 (-)

1.97e5

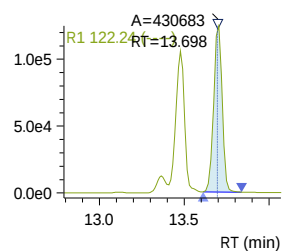
Q 639.20>58.90 (-)

1.97e5



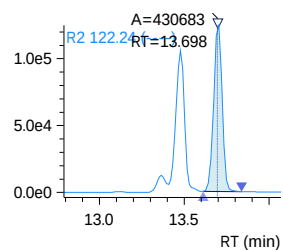
R1 511.90>169.00 (-)

1.25e5



R2 511.90>169.00 (-)

1.25e5





240118_013 (continued)

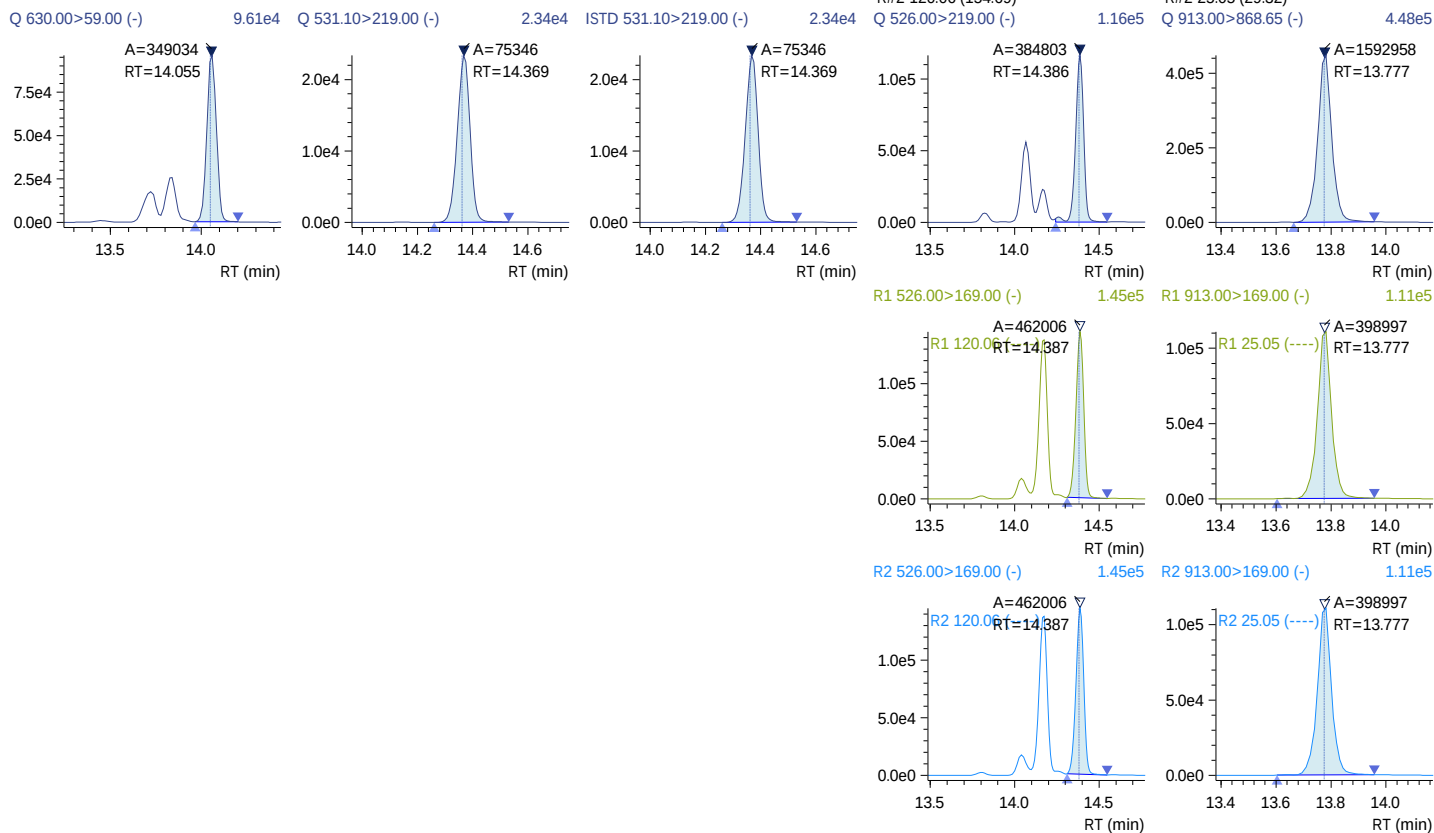
EtFOSE
Conc. 14.9094

D5-EtFOSAm
Conc. 2.6230

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. 15.9866
R#1 120.06 (154.69)
R#2 120.06 (154.69)

PFODA
Conc. 15.1611
R#1 25.05 (29.32)
R#2 25.05 (29.32)





240118_014

Sample ID: 1633 ICAL 20.OPPB
Date Acquired: 1/18/2024 5:10:33 PM
Acquired by: System Administrator
Data File: 240118_014
Vial: 9 | Inj. Volume: 10.0000uL | Tray: 1

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	1258641	----	----	----	----	----	----	
13C4-PFBA_IS	216.80>171.90	----	1258641	----	----	----	----	----	----	
13C3-PFBA_IS	216.00>172.00	----	551996	----	----	----	----	----	----	
PFBA	212.80>169.05	----	2122848	----	----	----	----	----	----	
PFMPA	229.00>84.90	----	1617890	----	----	----	----	----	----	
3_3 FTCA	241.00>177.10	241.00>117.00	440929	628516	142.54	141.17	628516	142.54	141.17	
13C5-PFPeA	268.30>223.00	----	130481	----	----	----	----	----	----	
13C5-PFPeA_IS	268.30>223.00	----	130481	----	----	----	----	----	----	
PFPeA	263.00>219.00	----	3271617	----	----	----	----	----	----	
PFMBA	279.00>84.95	----	2393773	----	----	----	----	----	----	
13C2-4_2 FTS	329.10>80.90	----	124744	----	----	----	----	----	----	
13C2-4_2 FTS_IS	329.10>80.90	----	124744	----	----	----	----	----	----	
4_2 FTS	327.10>307.00	327.10>80.90	1085733	327700	30.18	29.06	327700	30.18	29.06	
13C3-PFBS_IS	302.10>79.90	----	318216	----	----	----	----	----	----	
PFBS	298.70>79.90	298.70>98.80	2673582	1300821	48.66	46.72	1300821	48.66	46.72	
13C3-PFBS	302.10>79.90	----	318216	----	----	----	----	----	----	
NFDHA	295.00>201.00	295.00>84.90	2485749	933183	37.54	40.25	933183	37.54	40.25	
13C5-PFHxA	318.00>273.00	----	618096	----	----	----	----	----	----	
13C5-PFHxA_IS	318.00>273.00	----	618096	----	----	----	----	----	----	
13C2-PFHxA_IS	315.10>270.00	----	564879	----	----	----	----	----	----	
PFHxA	313.00>269.00	----	4016916	----	----	----	----	----	----	
PFEESA	314.80>135.00	314.80>82.90	11990970	689852	5.75	6.11	689852	5.75	6.11	
13C3-HFPO-DA	286.90>168.90	----	602434	----	----	----	----	----	----	
13C3-HFPO-DA_IS	286.90>168.90	----	602434	----	----	----	----	----	----	
HFPO-DA	284.90>168.90	284.90>184.90	1265517	805620	63.66	65.61	805620	63.66	65.61	
5_3 FTCA	341.00>237.05	341.00>217.00	2325743	3802537	163.50	158.86	3802537	163.50	158.86	
PFPeS	349.10>79.90	349.10>98.80	2222493	1237229	55.67	55.80	1237229	55.67	55.80	
13C4-PFHpA	367.10>322.00	----	559359	----	----	----	----	----	----	
13C4-PFHpA_IS	367.10>322.00	----	559359	----	----	----	----	----	----	
PFHpA	363.10>319.00	363.10>169.00	4618120	1017034	22.02	21.50	1017034	22.02	21.50	
DONA	376.90>250.90	376.90>84.80	8299655	2422304	29.19	29.66	2422304	29.19	29.66	
13C2-6_2 FTS_IS	429.10>80.90	----	124875	----	----	----	----	----	----	
13C2-6_2 FTS	429.10>80.90	----	124875	----	----	----	----	----	----	
6_2 FTS	427.10>407.00	427.10>80.90	979879	450130	45.94	41.15	450130	45.94	41.15	
13C4-PFOA_IS	417.10>172.00	----	39074	----	----	----	----	----	----	
13C8-PFOA_IS	421.10>376.00	----	591270	----	----	----	----	----	----	

J:\LCMS08\Data\240118_1633_Curve\240118_1633_Curve.damIp

Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240118_014 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	591270	----	----	----	----	----	----	----
PFOA	413.00>369.00	413.00>169.00	2656249	851160	32.04	31.89	851160	32.04	31.89	
13C3-PFHxS	402.10>79.90	----	236375	----	----	----	----	----	----	----
13C3-PFHxS_IS	402.10>79.90	----	236375	----	----	----	----	----	----	----
PFHxS	398.70>79.90	398.70>98.90	1982393	1155317	58.28	56.62	1155317	58.28	56.62	
18O2-PFHxS_IS	403.00>83.90	----	216087	----	----	----	----	----	----	----
13C9-PFNA_IS	472.10>427.00	----	279137	----	----	----	----	----	----	----
13C9-PFNA	472.10>427.00	----	279137	----	----	----	----	----	----	----
13C5-PFNA_IS	468.00>423.00	----	275672	----	----	----	----	----	----	----
PFNA	463.00>419.00	463.00>219.00	3125421	722662	23.12	23.17	722662	23.12	23.17	
PFHpS	449.00>79.90	449.00>98.80	1572876	887537	56.43	56.96	887537	56.43	56.96	
7_3 FTCA	441.00>317.00	441.00>336.90	3326875	3826882	115.03	117.47	3826882	115.03	117.47	
13C2-8_2-FTS	529.10>80.90	----	106762	----	----	----	----	----	----	----
13C2-8_2-FTS_IS	529.10>80.90	----	106762	----	----	----	----	----	----	----
8_2 FTS	527.10>506.95	527.10>80.80	888247	383078	43.13	49.59	383078	43.13	49.59	
13C6-PFDA_IS	519.10>474.10	----	198408	----	----	----	----	----	----	----
13C6-PFDA	519.10>474.10	----	198408	----	----	----	----	----	----	----
13C2-PFDA_IS	515.10>470.10	----	201715	----	----	----	----	----	----	----
PFDA	512.90>469.00	512.90>219.00	3861460	749008	19.40	19.00	749008	19.40	19.00	
D3-NMeFOSAA_IS	573.20>419.00	----	214118	----	----	----	----	----	----	----
D3-NMeFOSAA	573.20>419.00	----	214118	----	----	----	----	----	----	----
13C8-PFOS_IS	507.10>98.90	----	106399	----	----	----	----	----	----	----
13C8-PFOS	507.10>98.90	----	106399	----	----	----	----	----	----	----
13C4-PFOS_IS	502.80>79.90	----	243425	----	----	----	----	----	----	----
PFOS	498.90>79.90	498.90>98.80	2022532	1029473	50.90	52.47	1029473	50.90	52.47	
NMeFOSAA	570.10>419.00	570.10>483.00	1137204	697090	61.30	55.15	697090	61.30	55.15	
D5-NeFOSAA_IS	589.20>419.00	----	250513	----	----	----	----	----	----	----
D5-NeFOSAA	589.20>419.00	----	250513	----	----	----	----	----	----	----
NeFOSAA	584.20>419.10	584.20>526.00	670953	582594	86.83	81.95	582594	86.83	81.95	
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	8537715	2737615	32.07	32.76	2737615	32.07	32.76	
PFUnDA	563.10>519.00	563.10>269.10	3625574	487849	13.46	13.12	487849	13.46	13.12	
13C7-PFUnDA_IS	570.00>525.10	----	256659	----	----	----	----	----	----	----
13C7-PFUnDA	570.00>525.10	----	256659	----	----	----	----	----	----	----
PFNS	548.80>79.90	548.80>98.80	1507553	962384	63.84	65.22	962384	63.84	65.22	
10_2 FTS	626.80>607.05	626.80>81.00	999936	372298	37.23	37.13	372298	37.23	37.13	
13C2-PFDOA_IS	615.10>570.00	----	286167	----	----	----	----	----	----	----
13C2-PFDOA	615.10>570.00	----	286167	----	----	----	----	----	----	----
PFDOA	613.10>569.00	613.10>319.00	3195955	346187	10.83	11.29	346187	10.83	11.29	
PFDS	599.00>79.90	599.00>98.80	1363851	817322	59.93	60.18	817322	59.93	60.18	
PFTDA	663.00>619.00	663.00>168.90	3467914	604465	17.43	17.64	604465	17.43	17.64	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240118_014 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	6168575	2220177	35.99	36.44	2220177	35.99	36.44	
PFOSAm	498.10>77.90	----	3534545	----	----	----	----	----	----	
13C8-PFOSAm	506.10>77.80	----	272125	----	----	----	----	----	----	
13C8-PFOSAm_IS	506.10>77.80	----	272125	----	----	----	----	----	----	
PFTDA	713.10>669.00	713.10>168.90	2711883	606088	22.35	22.96	606088	22.35	22.96	
13C2-PFTDA	715.20>670.00	----	126748	----	----	----	----	----	----	
13C2-PFTDA_IS	715.20>670.00	----	126748	----	----	----	----	----	----	
PFDoS	699.10>79.90	699.10>98.80	783680	529055	67.51	67.40	529055	67.51	67.40	
D7-MeFOSE_IS	623.20>58.90	----	717715	----	----	----	----	----	----	
D7-MeFOSE	623.20>58.90	----	717715	----	----	----	----	----	----	
MeFOSE	616.10>59.00	----	484926	----	----	----	----	----	----	
13C2-PFHxDA_IS	815.00>770.05	----	502493	----	----	----	----	----	----	
13C2-PFHxDA	815.00>770.05	----	502493	----	----	----	----	----	----	
PFHxDA	813.00>768.95	813.00>218.95	4032238	545489	13.53	13.90	545489	13.53	13.90	
D3-MeFOSA	515.00>219.00	----	55065	----	----	----	----	----	----	
D3-MeFOSA_IS	515.00>219.00	----	55065	----	----	----	----	----	----	
MeFOSA	511.90>219.00	511.90>169.00	781577	1162158	148.69	140.79	1162158	148.69	140.79	
D9-EtFOSE_IS	639.20>58.90	----	706883	----	----	----	----	----	----	
D9-EtFOSE	639.20>58.90	----	706883	----	----	----	----	----	----	
EtFOSE	630.00>59.00	----	717754	----	----	----	----	----	----	
D5-EtFOSAm	531.10>219.00	----	75793	----	----	----	----	----	----	
D5-EtFOSAm_IS	531.10>219.00	----	75793	----	----	----	----	----	----	
EtFOSAm	526.00>219.00	526.00>169.00	868189	1333537	153.60	163.90	1333537	153.60	163.90	
PFODA	913.00>868.65	913.00>169.00	2206399	569228	25.80	27.03	569228	25.80	27.03	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
 IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240118_014

Sample ID: 1633 ICAL 20.OPPB
Date Acquired: 1/18/2024 5:10:33 PM
Acquired by: System Administrator
Data File: 240118_014
Vial: 9 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Std. Conc.	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.410	-0.004	-0.001	1258641	551996	13C3-PFBA_IS	10.0000	10.2013	ng/mL	
13C4-PFBA_IS	Auto	1.410	-0.004	----	1258641	1258641	----	10.0000	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.411	-0.004	----	551996	551996	----	5.0000	5.0000	ng/mL	
PFBA	Auto	1.412	-0.004	0.002	2122848	1258641	13C4-PFBA_IS	20.0000	19.6301	ng/mL	
PFMPA	Auto	2.432	0.000	-1.062	1617890	130481	13C5-PFPeA_IS	20.0000	19.1861	ng/mL	
3_3 FTCA	Auto	3.006	0.002	-0.488	440929	130481	13C5-PFPeA_IS	150.0000	152.3911	ng/mL	
13C5-PFPeA	Auto	3.494	0.002	-1.488	130481	564879	13C2-PFHxA_IS	5.0000	5.1173	ng/mL	
13C5-PFPeA_IS	Auto	3.494	0.002	----	130481	130481	----	5.0000	5.0000	ng/mL	
PFPeA	Auto	3.497	0.002	0.003	3271617	130481	13C5-PFPeA_IS	20.0000	19.3584	ng/mL	
PFMBA	Auto	4.028	0.003	0.534	2393773	130481	13C5-PFPeA_IS	20.0000	20.0376	ng/mL	
13C2-4_2 FTS	Auto	4.666	0.005	-2.423	124744	216087	18O2-PFHxS_IS	5.0000	4.1950	ng/mL	
13C2-4_2 FTS_IS	Auto	4.666	0.005	----	124744	124744	----	5.0000	5.0000	ng/mL	
4_2 FTS	Auto	4.666	0.004	0.000	1085733	124744	13C2-4_2 FTS_IS	18.7000	17.6958	ng/mL	
13C3-PFBS_IS	Auto	4.650	0.003	----	318216	318216	----	2.5000	2.5000	ng/mL	
PFBS	Auto	4.651	0.003	0.001	2673582	318216	13C3-PFBS_IS	17.7000	16.4139	ng/mL	
13C3-PFBS	Auto	4.650	0.003	-2.439	318216	216087	18O2-PFHxS_IS	2.5000	2.5950	ng/mL	
NFDHA	Auto	4.839	0.004	-0.143	2485749	618096	13C5-PFHxA_IS	20.0000	18.1263	ng/mL	
13C5-PFHxA	Auto	4.982	0.004	0.000	618096	564879	13C2-PFHxA_IS	2.5000	2.5963	ng/mL	
13C5-PFHxA_IS	Auto	4.982	0.004	----	618096	618096	----	2.5000	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	4.982	0.003	----	564879	564879	----	2.5000	2.5000	ng/mL	
PFHxA	Auto	4.984	0.004	0.002	4016916	618096	13C5-PFHxA_IS	20.0000	19.5165	ng/mL	
PFEESA	Auto	5.326	0.004	0.344	11990970	618096	13C5-PFHxA_IS	17.8000	17.3202	ng/mL	
13C3-HFPO-DA	Auto	5.456	0.004	0.474	602434	564879	13C2-PFHxA_IS	10.0000	10.8946	ng/mL	
13C3-HFPO-DA_IS	Auto	5.456	0.004	----	602434	602434	----	10.0000	10.0000	ng/mL	
HFPO-DA	Auto	5.458	0.005	0.002	1265517	602434	13C3-HFPO-DA_IS	20.0000	19.0203	ng/mL	
5_3 FTCA	Auto	5.910	0.004	0.928	2325743	618096	13C5-PFHxA_IS	150.0000	145.4705	ng/mL	
PFPeS	Auto	6.022	0.004	-1.066	2222493	236375	13C3-PFHxS_IS	18.8000	17.9045	ng/mL	
13C4-PFHpA	Auto	6.158	0.004	1.176	559359	564879	13C2-PFHxA_IS	2.5000	2.5955	ng/mL	
13C4-PFHpA_IS	Auto	6.158	0.004	----	559359	559359	----	2.5000	2.5000	ng/mL	
PFHpA	Auto	6.160	0.005	0.002	4618120	559359	13C4-PFHpA_IS	20.0000	19.8726	ng/mL	
DONA	Auto	6.525	0.005	1.069	8299655	602434	13C3-HFPO-DA_IS	18.9000	17.7750	ng/mL	
13C2-6_2 FTS_IS	Auto	6.796	0.003	----	124875	124875	----	5.0000	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.796	0.003	-0.293	124875	216087	18O2-PFHxS_IS	5.0000	4.4400	ng/mL	
6_2 FTS	Auto	6.797	0.005	0.001	979879	124875	13C2-6_2 FTS_IS	19.0000	17.2322	ng/mL	
13C4-PFOA_IS	Auto	7.113	0.006	----	39074	39074	----	2.5000	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.112	0.005	----	591270	591270	----	2.5000	2.5000	ng/mL	
13C8-PFOA	Auto	7.112	0.005	-0.001	591270	39074	13C4-PFOA_IS	2.5000	2.7073	ng/mL	
PFOA	Auto	7.113	0.003	0.001	2656249	591270	13C8-PFOA_IS	20.0000	17.3630	ng/mL	
13C3-PFHxS	Auto	7.088	0.002	-0.001	236375	216087	18O2-PFHxS_IS	2.5000	2.5485	ng/mL	
13C3-PFHxS_IS	Auto	7.088	0.002	----	236375	236375	----	2.5000	2.5000	ng/mL	
PFHxS	M	7.089	0.005	0.001	1982393	236375	13C3-PFHxS_IS	18.3000	17.4540	ng/mL	
18O2-PFHxS_IS	Auto	7.089	0.003	----	216087	216087	----	2.5000	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.959	0.003	----	279137	279137	----	1.2500	1.2500	ng/mL	
13C9-PFNA	Auto	7.959	0.003	0.000	279137	275672	13C5-PFNA_IS	1.2500	1.2932	ng/mL	
13C5-PFNA_IS	Auto	7.959	0.003	----	275672	275672	----	1.2500	1.2500	ng/mL	
PFNA	Auto	7.960	0.003	0.001	3125421	279137	13C9-PFNA_IS	20.0000	19.6426	ng/mL	
PFHpS	Auto	8.007	0.003	-0.815	1572876	106399	13C8-PFOS_IS	19.1000	18.9395	ng/mL	
7_3 FTCA	Auto	7.956	0.002	2.974	3326875	618096	13C5-PFHxA_IS	150.0000	155.8744	ng/mL	
13C2-8_2-FTS	Auto	8.412	0.003	1.323	106762	216087	18O2-PFHxS_IS	5.0000	4.6211	ng/mL	
13C2-8_2-FTS_IS	Auto	8.412	0.003	----	106762	106762	----	5.0000	5.0000	ng/mL	
8_2 FTS	Auto	8.413	0.003	0.001	888247	106762	13C2-8_2-FTS_IS	19.2000	19.3618	ng/mL	
13C6-PFDA_IS	Auto	8.723	0.002	----	198408	198408	----	1.2500	1.2500	ng/mL	
13C6-PFDA	Auto	8.723	0.002	-0.001	198408	201715	13C2-PFDA_IS	1.2500	1.2226	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_014 (continued)

(Table continued from previous page)

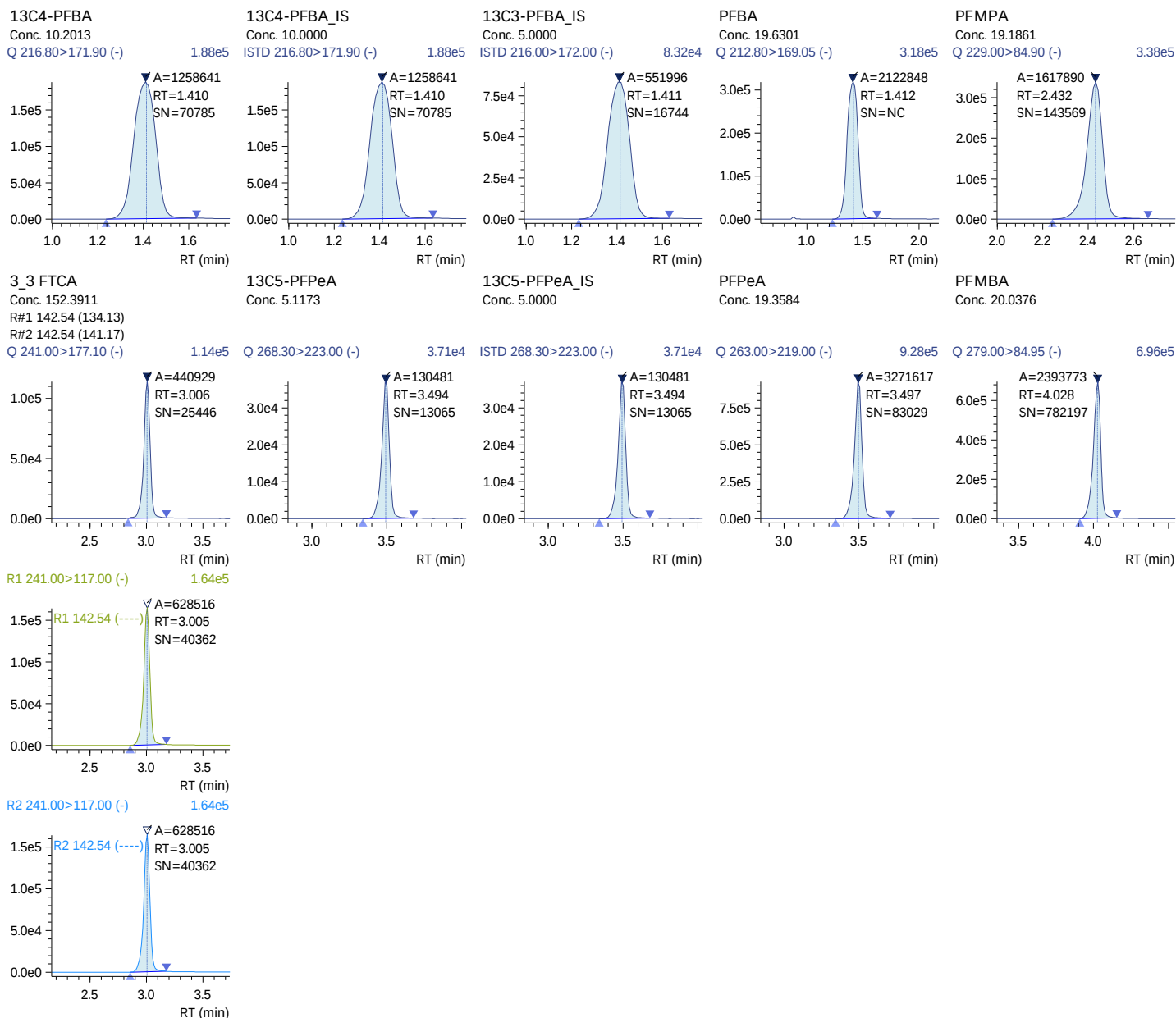
Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Std. Conc.	Conc.	Unit	Flag ID
13C2-PFDA_IS	Auto	8.723	0.002	----	201715	201715	----	1.2500	1.2500	ng/mL	
PFDA	Auto	8.724	0.003	0.002	3861460	198408	13C6-PFDA_IS	20.0000	20.3930	ng/mL	
D3-NMeFOSAA_IS	Auto	8.858	0.003	----	214118	214118	----	5.0000	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.858	0.003	0.036	214118	243425	13C4-PFOS_IS	5.0000	5.0681	ng/mL	
13C8-PFOS_IS	Auto	8.822	0.002	----	106399	106399	----	2.5000	2.5000	ng/mL	
13C8-PFOS	Auto	8.822	0.002	0.000	106399	243425	13C4-PFOS_IS	2.5000	2.6209	ng/mL	
13C4-PFOS_IS	Auto	8.822	0.002	----	243425	243425	----	2.5000	2.5000	ng/mL	
PFOS	M	8.823	0.001	0.001	2022532	106399	13C8-PFOS_IS	18.6000	18.2762	ng/mL	
NMeFOSAA	M	8.864	0.003	0.006	1137204	214118	D3-NMeFOSAA_IS	20.0000	19.5740	ng/mL	
D5-NetFOSAA_IS	Auto	9.187	0.001	----	250513	250513	----	5.0000	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.187	0.001	0.365	250513	243425	13C4-PFOS_IS	5.0000	4.9563	ng/mL	
NetFOSAA	M	9.198	0.003	0.011	670953	250513	D5-NetFOSAA_IS	20.0000	20.0539	ng/mL	
9-CI-PF3ONS	Auto	9.386	0.002	3.930	8537715	602434	13C3-HFPO-DA_IS	18.7000	17.1902	ng/mL	
PFUnDA	Auto	9.448	0.001	0.002	3625574	256659	13C7-PFUnDA_IS	20.0000	19.4796	ng/mL	
13C7-PFUnDA_IS	Auto	9.446	0.001	----	256659	256659	----	1.2500	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.446	0.001	0.723	256659	201715	13C2-PFDA_IS	1.2500	1.3258	ng/mL	
PFNS	Auto	9.585	0.001	0.763	1507553	106399	13C8-PFOS_IS	19.2000	18.6482	ng/mL	
10_2_FTS	Auto	9.820	0.001	1.408	999936	106762	13C2-8_2-FTS_IS	19.3000	17.9144	ng/mL	
13C2-PFDOA_IS	Auto	10.134	0.001	----	286167	286167	----	1.2500	1.2500	ng/mL	
13C2-PFDOA	Auto	10.134	0.001	1.411	286167	201715	13C2-PFDA_IS	1.2500	1.2868	ng/mL	
PFDOA	Auto	10.135	0.001	0.001	3195955	286167	13C2-PFDOA_IS	20.0000	19.8239	ng/mL	
PFDS	Auto	10.297	0.001	1.475	1363851	106399	13C8-PFOS_IS	19.3000	19.4042	ng/mL	
PFTDA	Auto	10.792	0.000	-0.633	3467914	126748	13C2-PFTDA_IS	20.0000	19.3635	ng/mL	
11-CI-PF3OUdS	Auto	10.807	0.001	5.351	6168575	602434	13C3-HFPO-DA_IS	18.9000	18.4444	ng/mL	
PFOSAm	M	11.168	0.004	-0.002	3534545	272125	13C8-PFOSAm_IS	40.0000	39.4067	ng/mL	
13C8-PFOSAm	Auto	11.170	0.005	2.348	272125	243425	13C4-PFOS_IS	2.5000	2.6333	ng/mL	
13C8-PFOSAm_IS	Auto	11.170	0.005	----	272125	272125	----	2.5000	2.5000	ng/mL	
PFTDA	Auto	11.426	0.001	0.001	2711883	126748	13C2-PFTDA_IS	20.0000	19.8837	ng/mL	
13C2-PFTDA	Auto	11.425	0.001	2.702	126748	201715	13C2-PFDA_IS	1.2500	1.3200	ng/mL	
13C2-PFTDA_IS	Auto	11.425	0.001	----	126748	126748	----	1.2500	1.2500	ng/mL	
PFDoS	Auto	11.623	0.001	2.801	783680	106399	13C8-PFOS_IS	19.4000	18.3661	ng/mL	
D7-MeFOSE_IS	Auto	13.382	0.005	----	717715	717715	----	25.0000	25.0000	ng/mL	
D7-MeFOSE	Auto	13.382	0.005	4.560	717715	243425	13C4-PFOS_IS	25.0000	28.1702	ng/mL	
MeFOSE	M	13.419	0.006	0.037	484926	717715	D7-MeFOSE_IS	20.0000	18.3977	ng/mL	
13C2-PFHXA_IS	Auto	12.640	-0.001	----	502493	502493	----	2.5000	2.5000	ng/mL	
13C2-PFHXA	Auto	12.640	-0.001	3.917	502493	201715	13C2-PFDA_IS	2.5000	2.6818	ng/mL	
PFHXDA	Auto	12.642	0.000	0.002	4032238	502493	13C2-PFHXA_IS	20.0000	19.5434	ng/mL	
D3-MeFOSA	Auto	13.690	0.005	4.868	55065	243425	13C4-PFOS_IS	2.5000	2.6460	ng/mL	
D3-MeFOSA_IS	Auto	13.690	0.005	----	55065	55065	----	2.5000	2.5000	ng/mL	
MeFOSA	M	13.698	0.004	0.008	781577	55065	D3-MeFOSA_IS	20.0000	19.6899	ng/mL	
D9-EtFOSE_IS	Auto	14.011	0.005	----	706883	706883	----	25.0000	25.0000	ng/mL	
D9-EtFOSE	Auto	14.011	0.005	5.189	706883	243425	13C4-PFOS_IS	25.0000	27.3174	ng/mL	
EtFOSE	M	14.054	0.006	0.043	717754	706883	D9-EtFOSE_IS	20.0000	19.2985	ng/mL	
D5-EtFOSAm	Auto	14.368	0.006	5.546	75793	243425	13C4-PFOS_IS	2.5000	2.7355	ng/mL	
D5-EtFOSAm_IS	Auto	14.368	0.006	----	75793	75793	----	2.5000	2.5000	ng/mL	
EtFOSAm	M	14.386	0.006	0.018	868189	75793	D5-EtFOSAm_IS	20.0000	19.6758	ng/mL	
PFODA	Auto	13.776	0.001	1.136	2206399	502493	13C2-PFHXA_IS	20.0000	19.4174	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_014 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_014 (continued)

13C2-4_2_FTS
Conc. 4.1950

13C2-4_2_FTS_IS
Conc. 5.0000

4_2_FTS
Conc. 17.6958
R#1 30.18 (34.14)
R#2 30.18 (29.06)

13C3-PFBS_IS
Conc. 2.5000

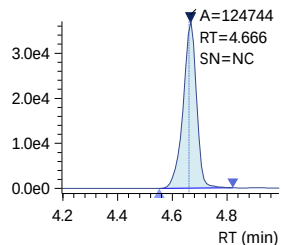
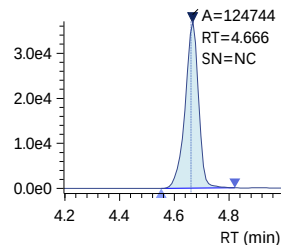
PFBS
Conc. 16.4139
R#1 48.66 (47.53)
R#2 48.66 (46.72)

Q 329.10>80.90 (-)

3.71e4

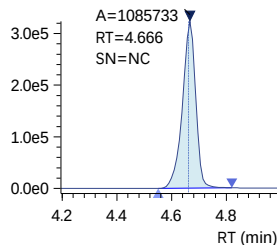
ISTD 329.10>80.90 (-)

3.71e4



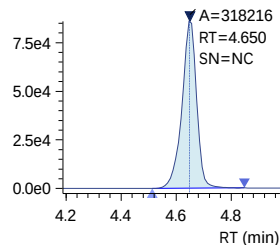
Q 327.10>307.00 (-)

3.24e5



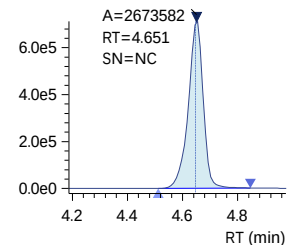
ISTD 302.10>79.90 (-)

8.60e4



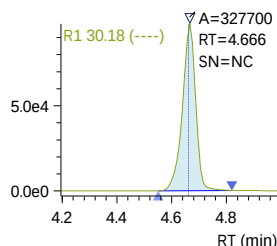
Q 298.70>79.90 (-)

7.12e5



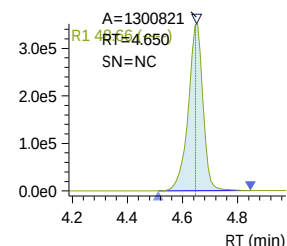
R1 327.10>80.90 (-)

9.81e4



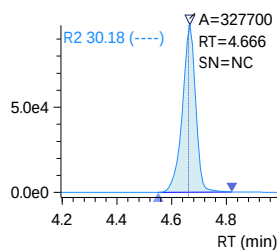
R1 298.70>98.80 (-)

3.52e5



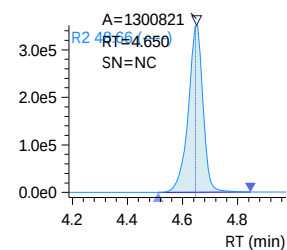
R2 327.10>80.90 (-)

9.81e4



R2 298.70>98.80 (-)

3.52e5





240118_014 (continued)

13C3-PFBS
Conc. 2.5950

NFDHA
Conc. 18.1263
R#1 37.54 (37.88)
R#2 37.54 (40.25)

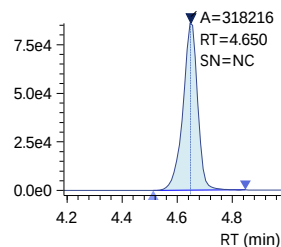
13C5-PFHxA
Conc. 2.5963

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

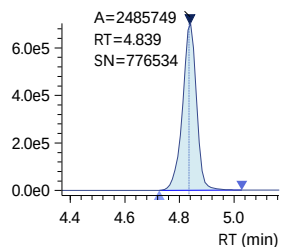
Q 302.10>79.90 (-)

8.60e4



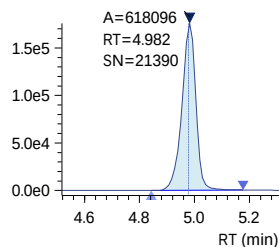
Q 295.00>201.00 (-)

7.03e5



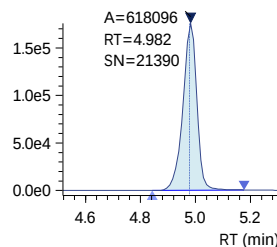
Q 318.00>273.00 (-)

1.76e5



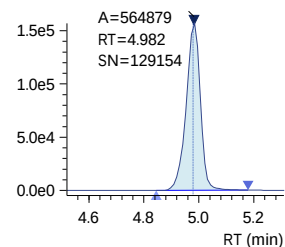
ISTD 318.00>273.00 (-)

1.76e5



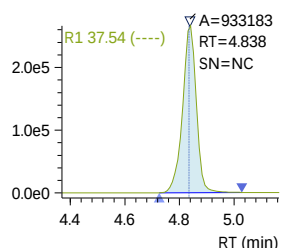
ISTD 315.10>270.00 (-)

1.57e5



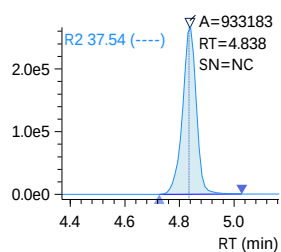
R1 295.00>84.90 (-)

2.66e5



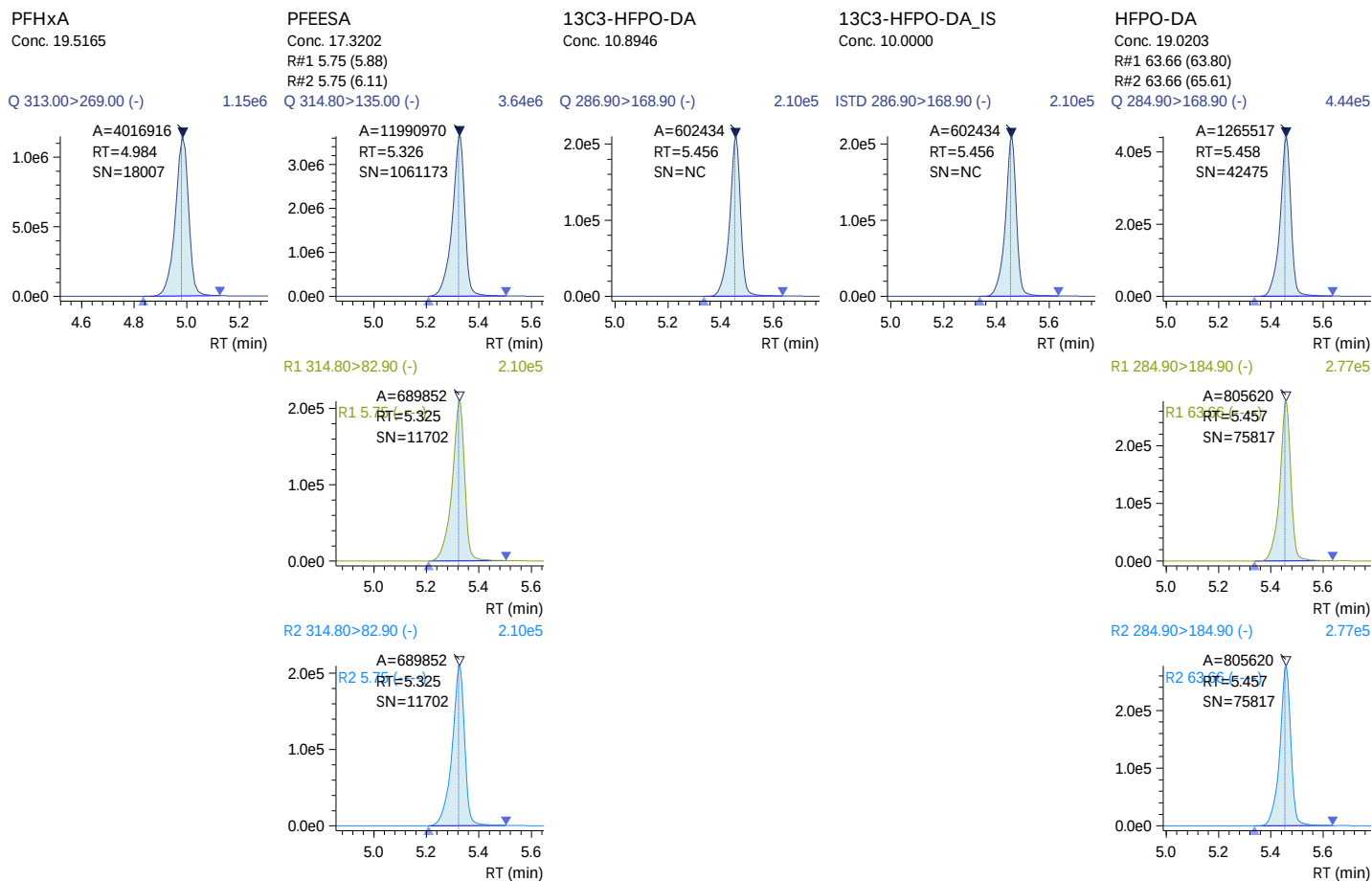
R2 295.00>84.90 (-)

2.66e5





240118_014 (continued)

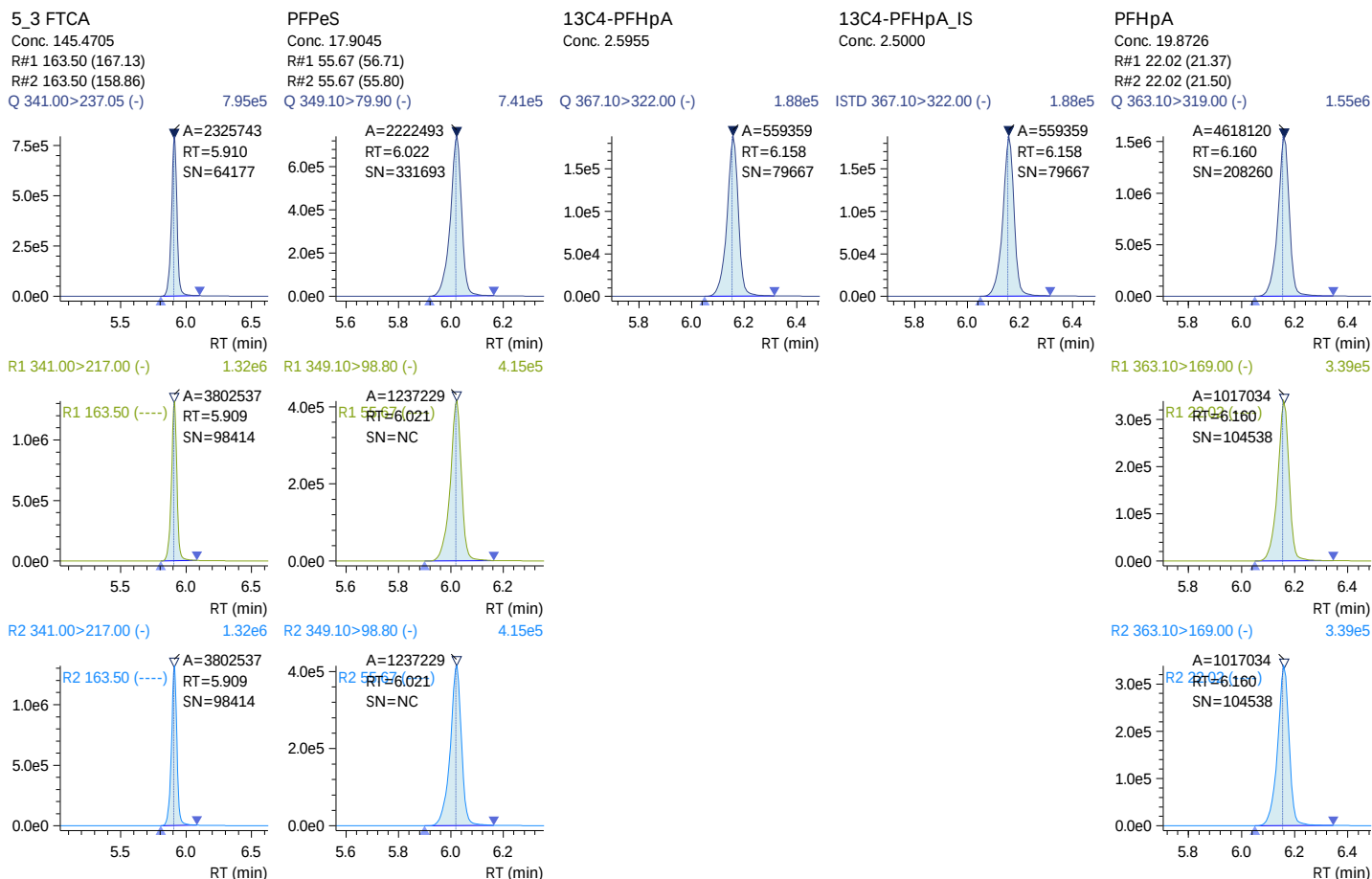


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_014 (continued)

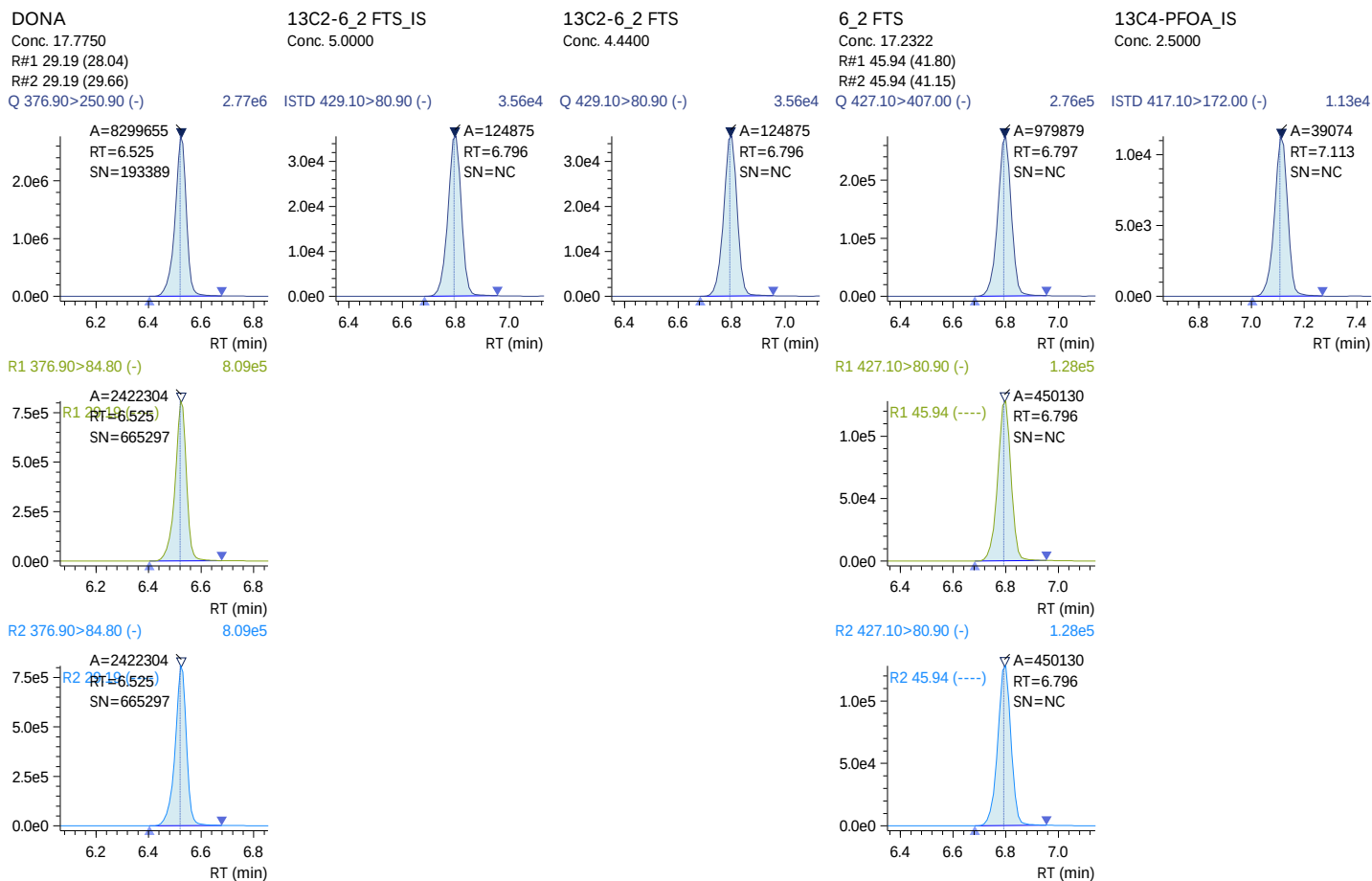


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_014 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_014 (continued)

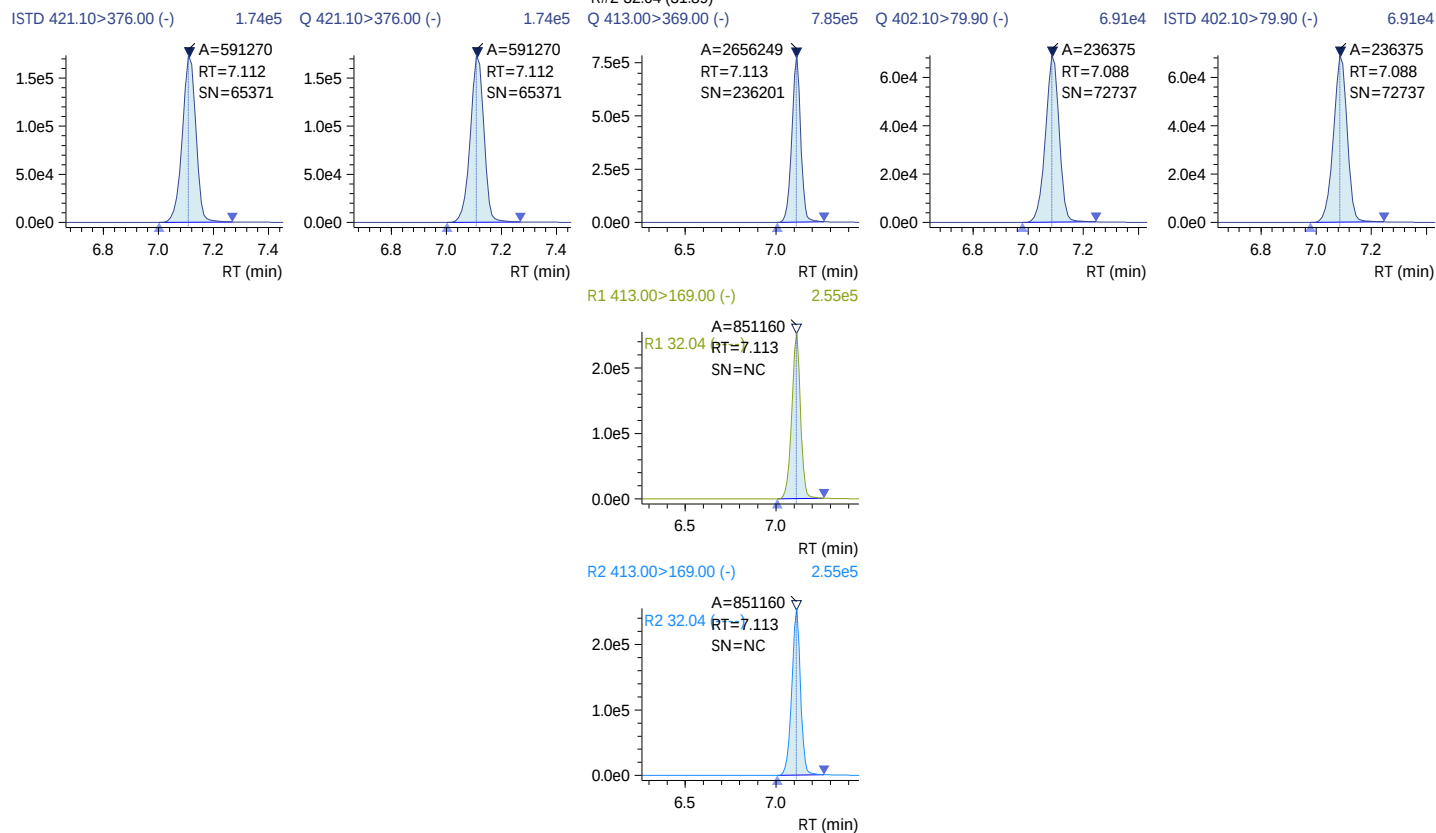
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.7073

PFOA
Conc. 17.3630
R#1 32.04 (29.05)
R#2 32.04 (31.89)

13C3-PFHxS
Conc. 2.5485

13C3-PFHxS_IS
Conc. 2.5000

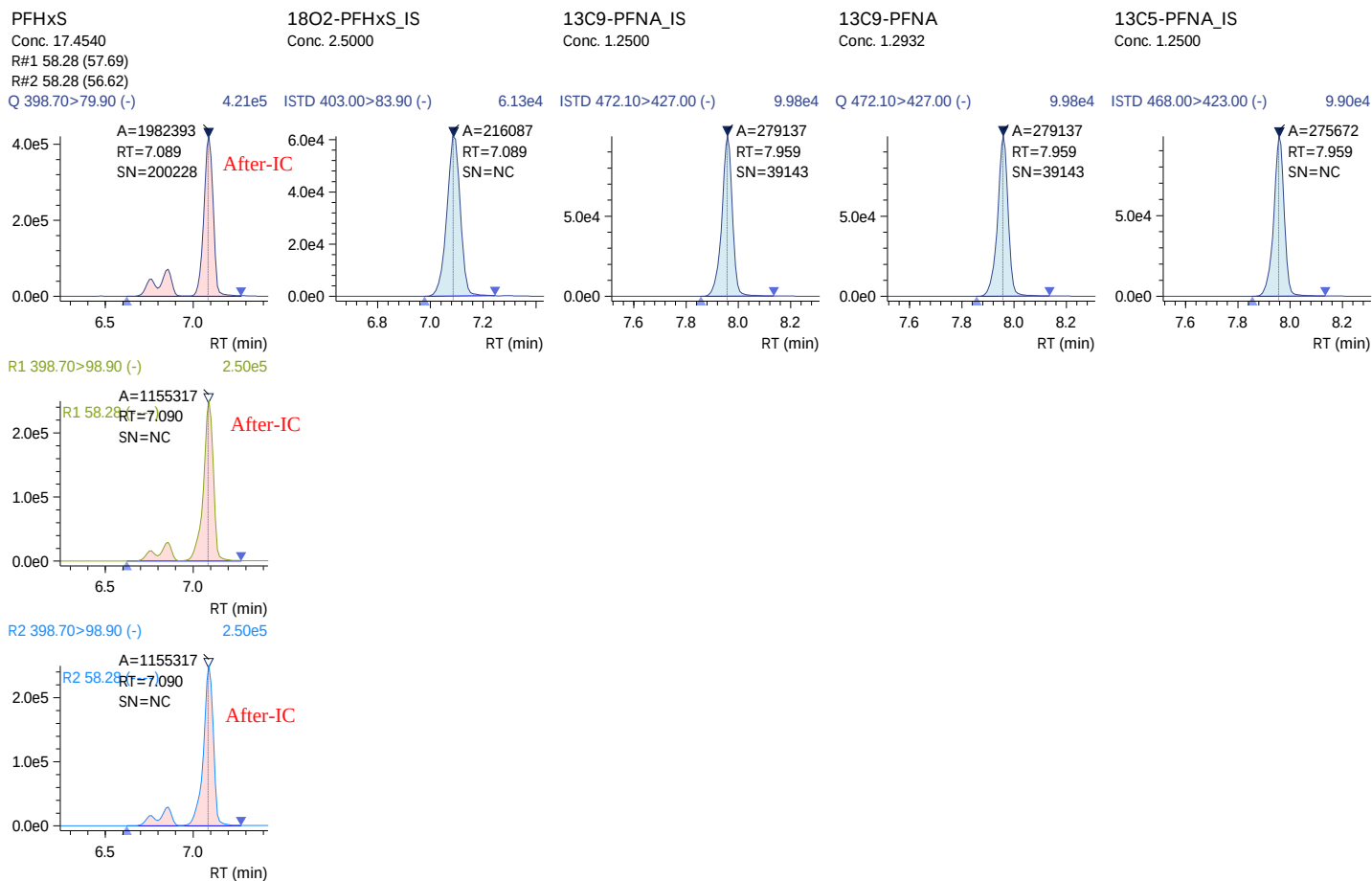


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_014 (continued)

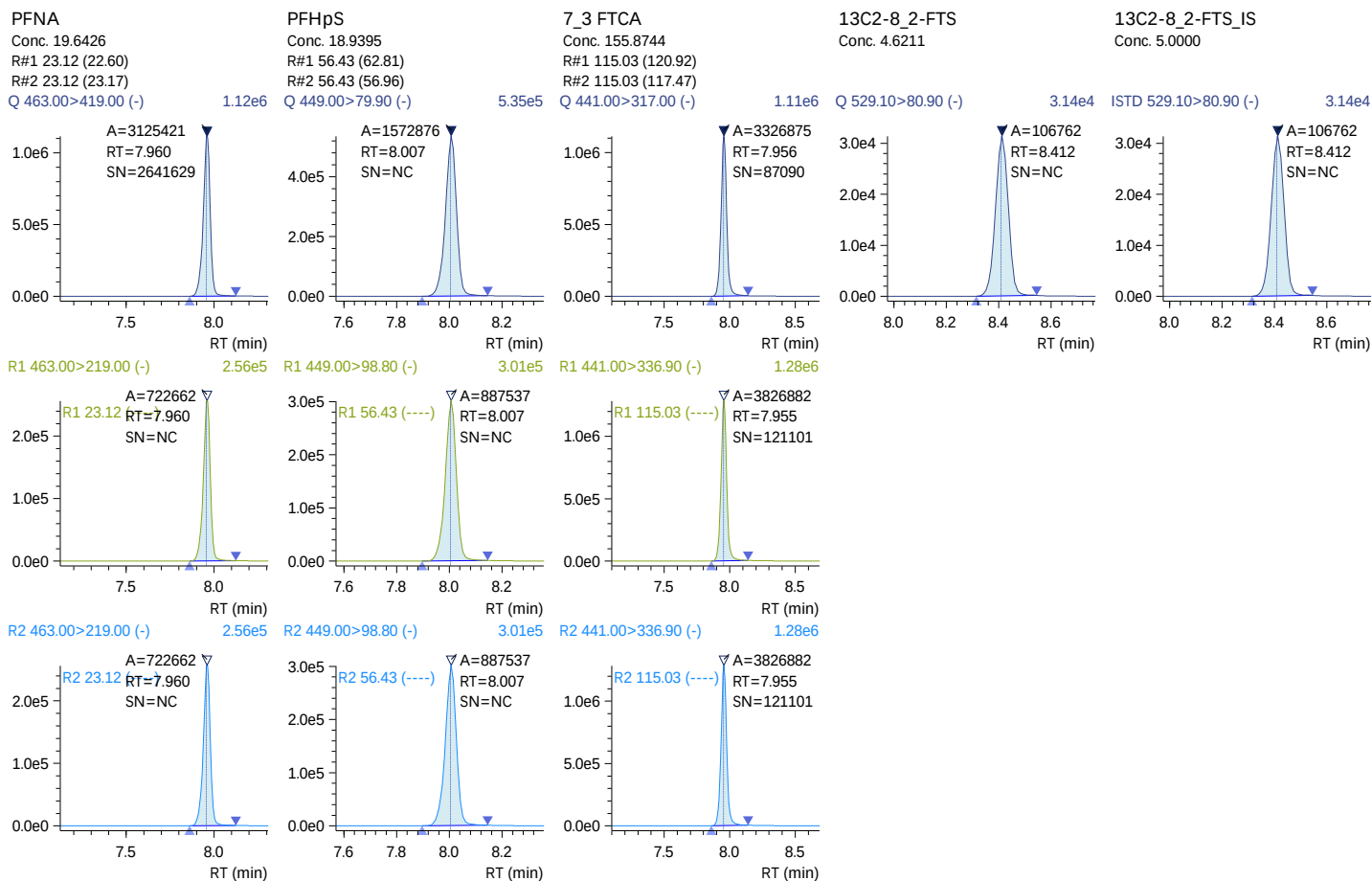


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_014 (continued)

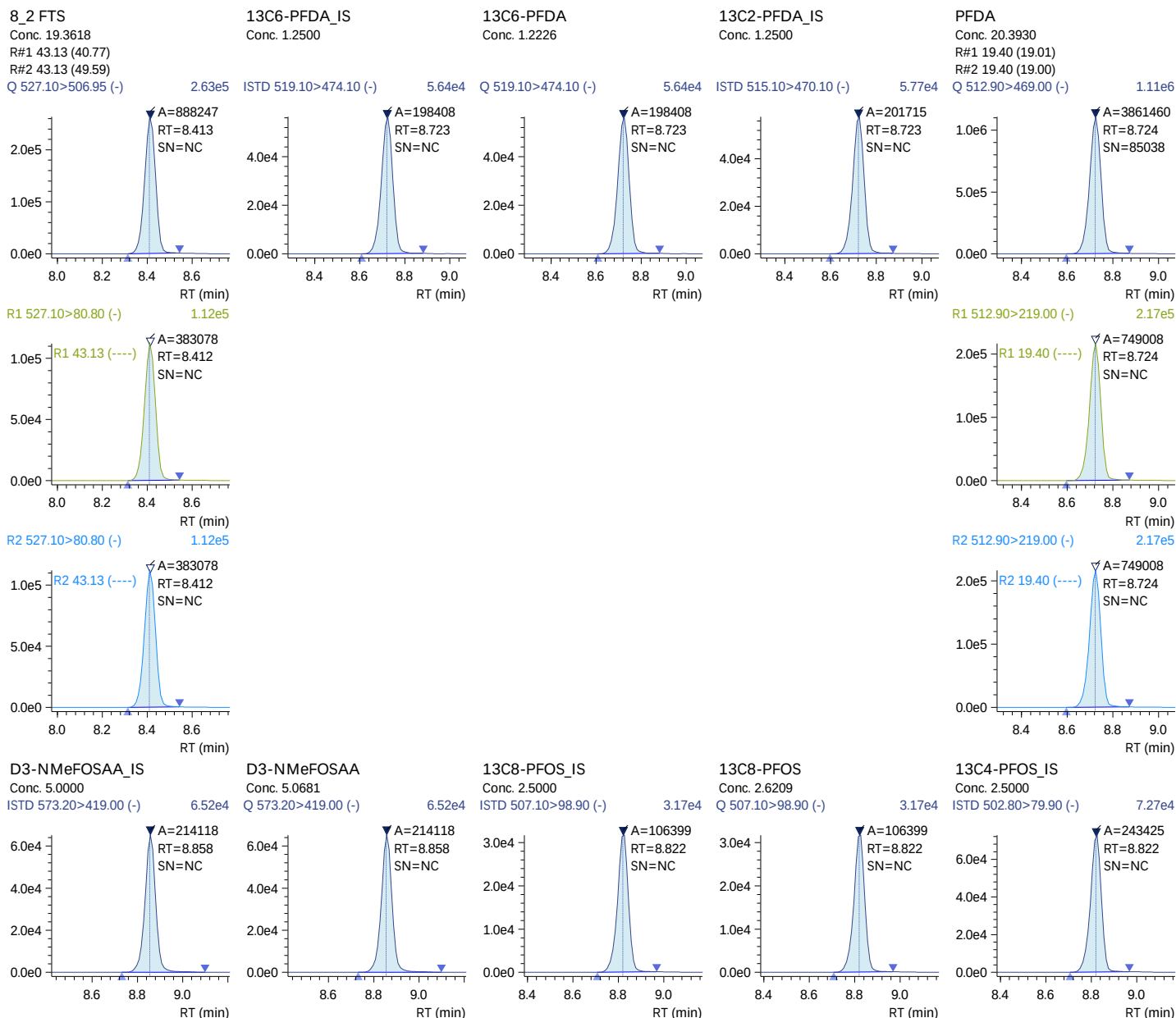


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_014 (continued)

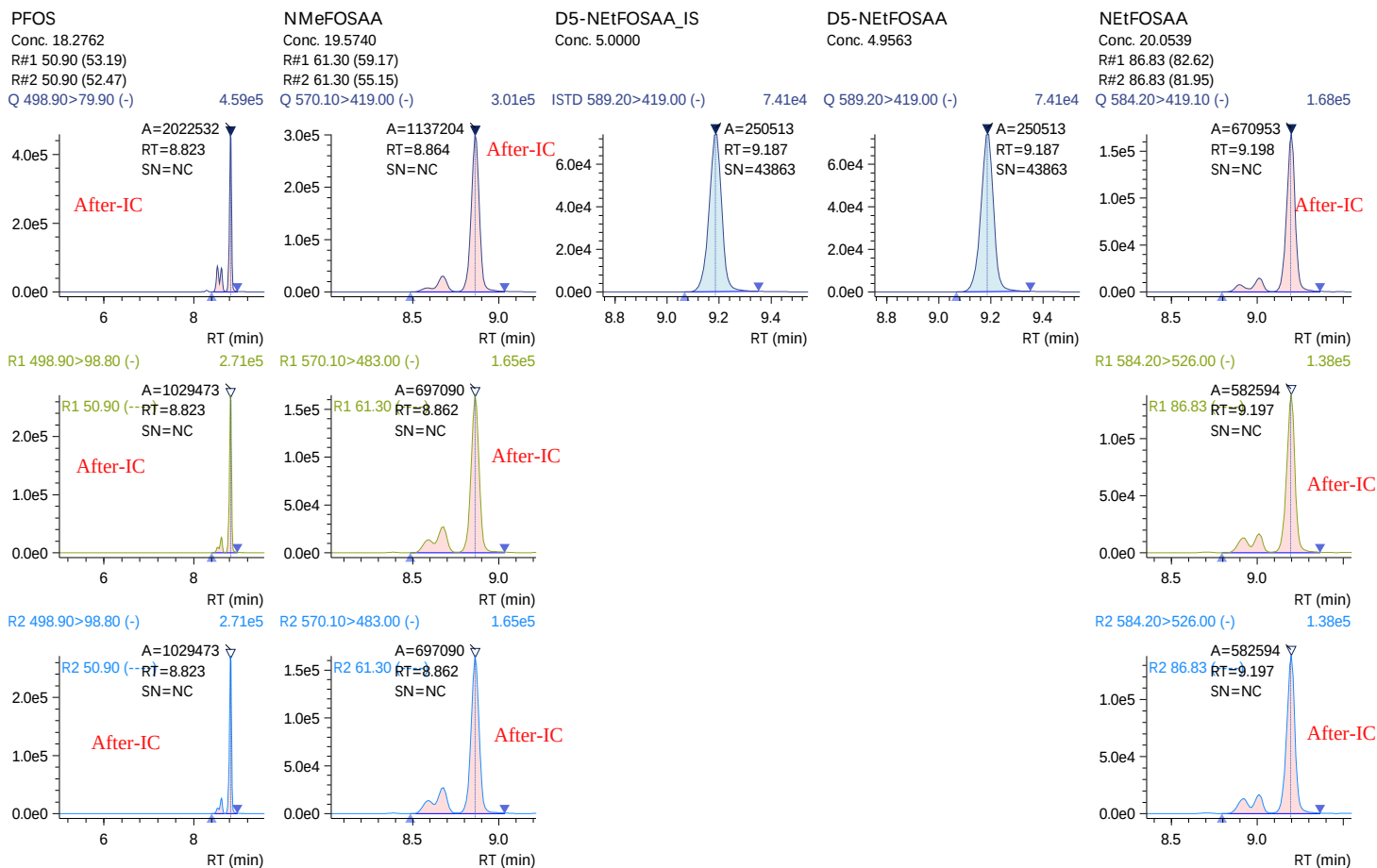


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_014 (continued)



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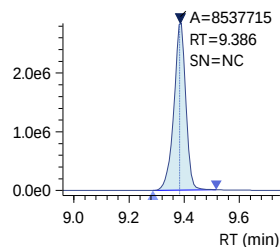
SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



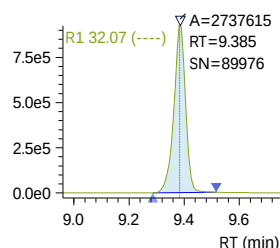
240118_014 (continued)

9-Cl-PF3ONS

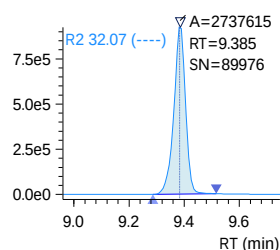
Conc. 17.1902
R#1 32.07 (31.76)
R#2 32.07 (32.76)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-)

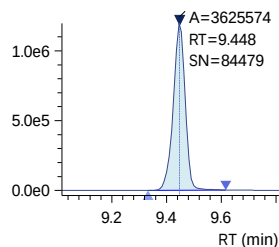


R2 532.80>353.00 (-)

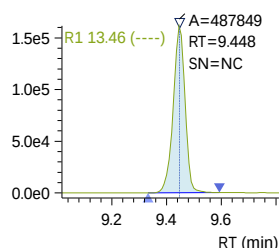


PFUnDA

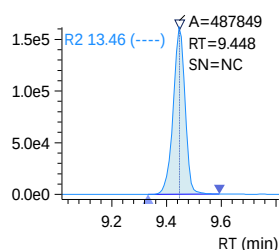
Conc. 19.4796
R#1 13.46 (12.31)
R#2 13.46 (13.12)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-)



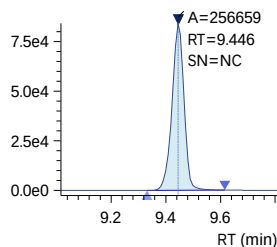
R2 563.10>269.10 (-)



13C7-PFUnDA_IS

Conc. 1.2500

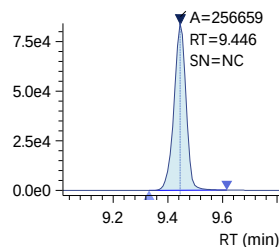
ISTD 570.00>525.10 (-)



13C7-PFUnDA

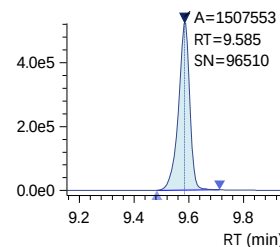
Conc. 1.3258

Q 570.00>525.10 (-)

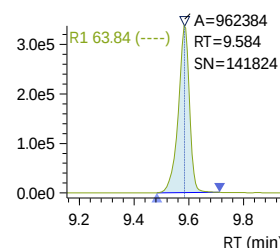


PFNS

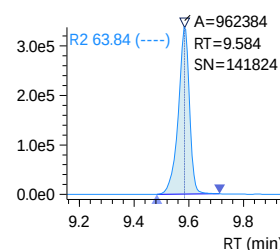
Conc. 18.6482
R#1 63.84 (63.31)
R#2 63.84 (65.22)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-)

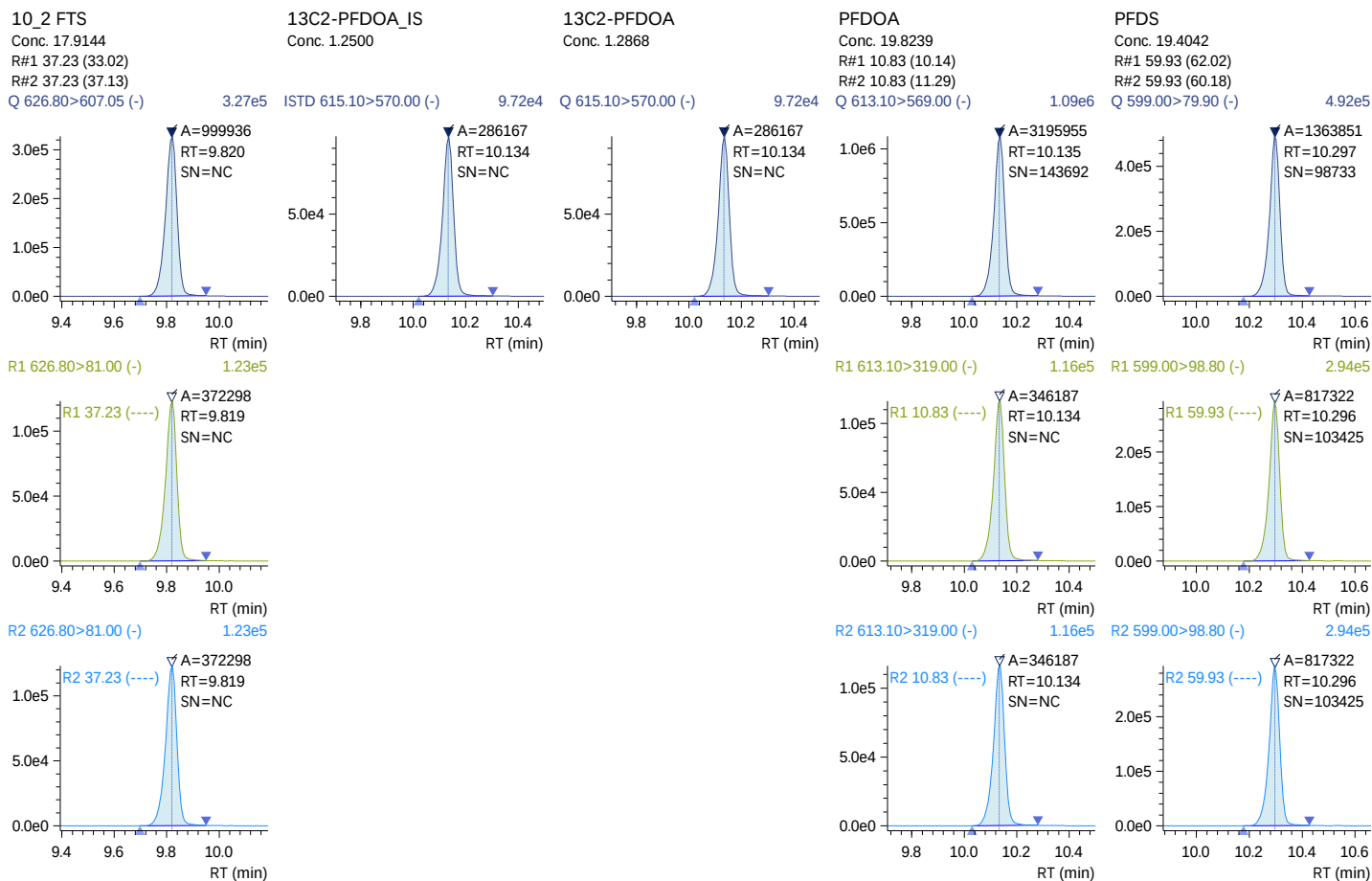


R2 548.80>98.80 (-)





240118_014 (continued)

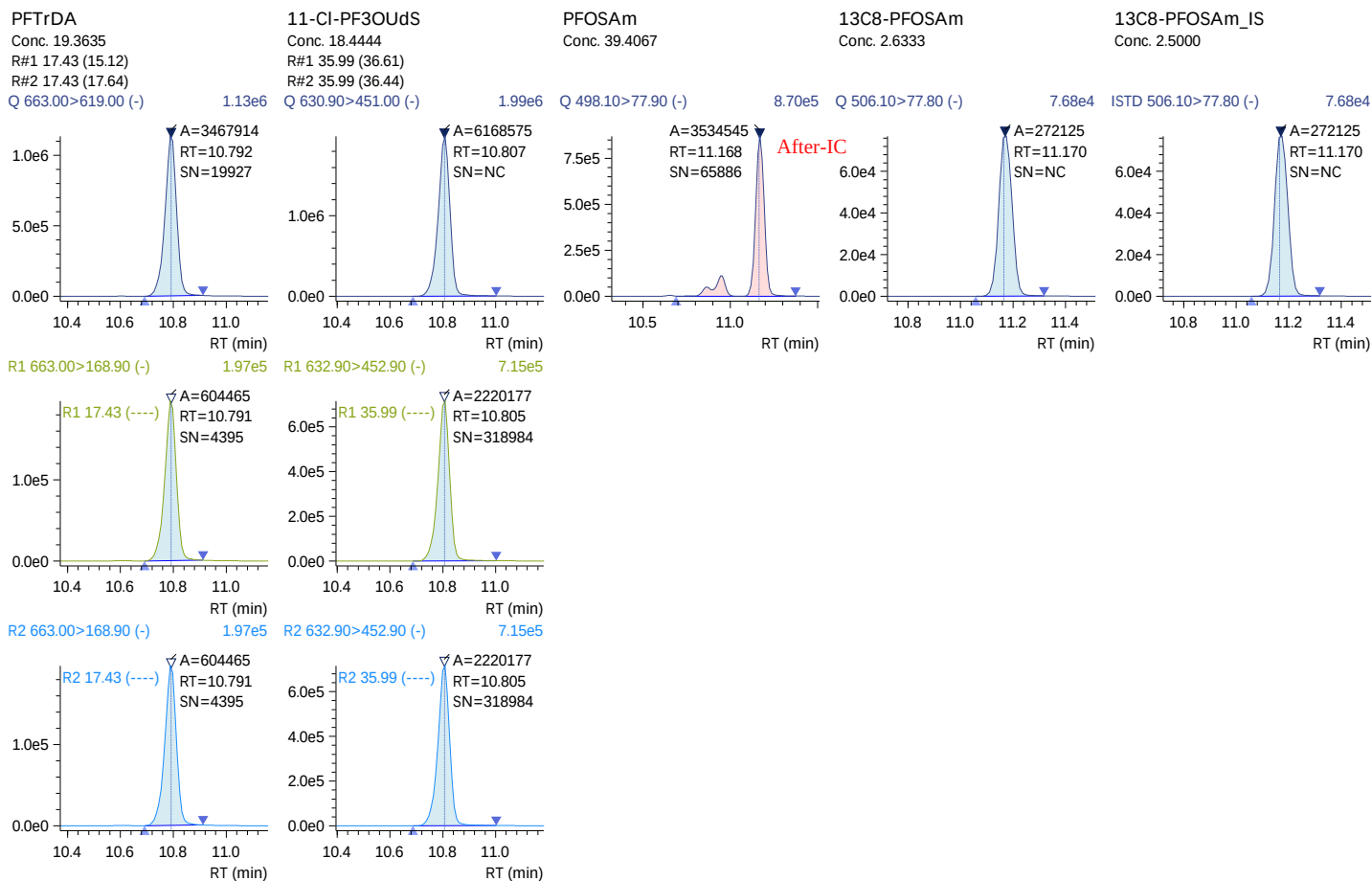


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_014 (continued)

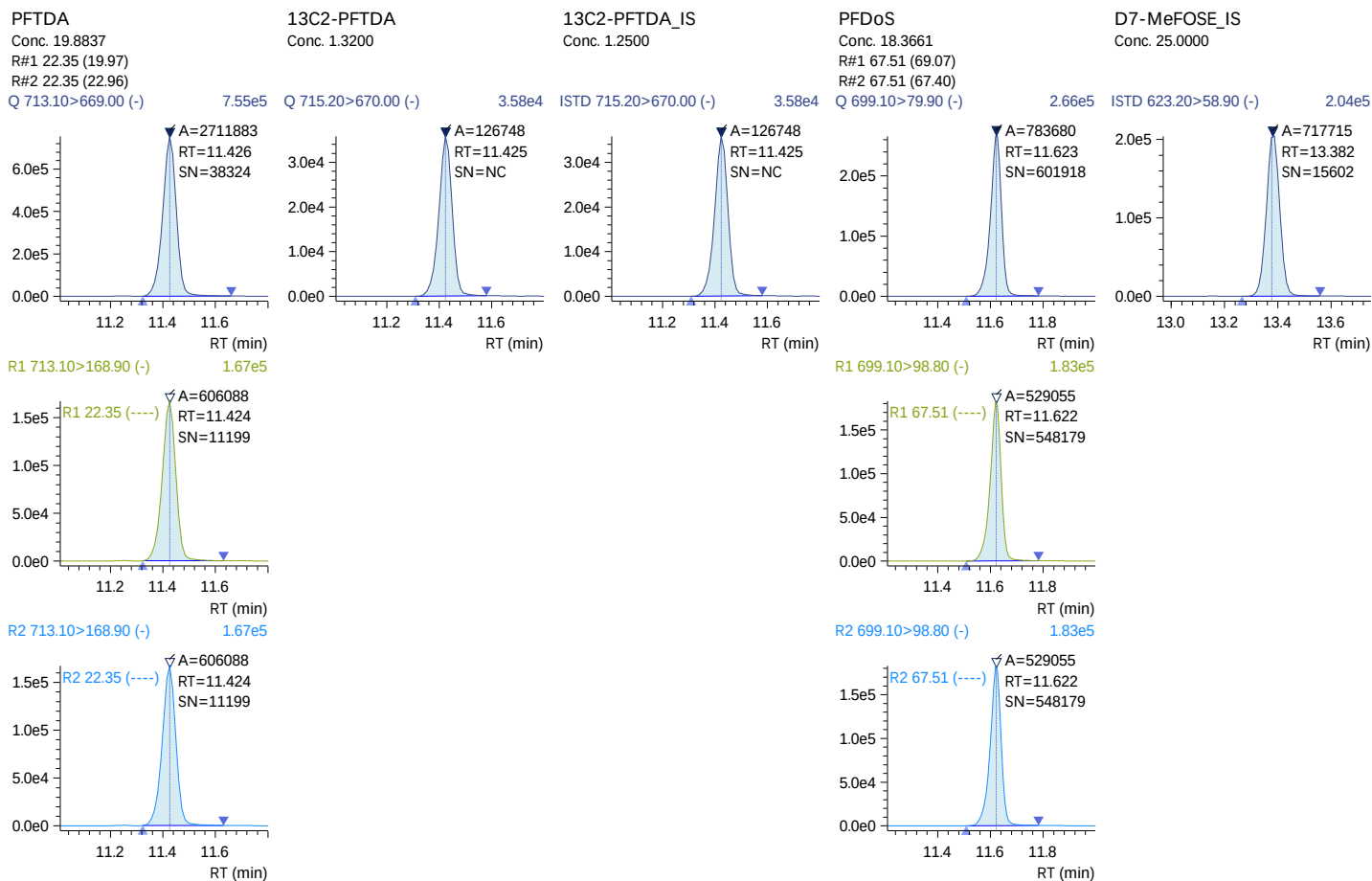


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_014 (continued)



J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_014 (continued)

D7-MeFOSE
Conc. 28.1702

MeFOSE
Conc. 18.3977

13C2-PFHXA_IS
Conc. 2.5000

13C2-PFHXA
Conc. 2.6818

PFHXA
Conc. 19.5434
R#1 13.53 (11.64)
R#2 13.53 (13.90)

Q 623.20>58.90 (-)

2.04e5

Q 616.10>59.00 (-)

8.91e4

ISTD 815.00>770.05 (-)

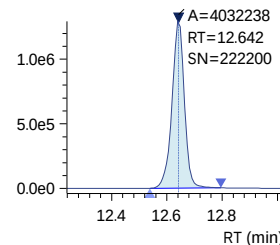
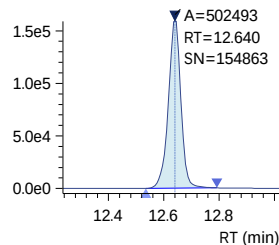
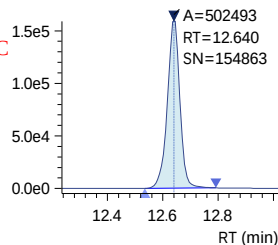
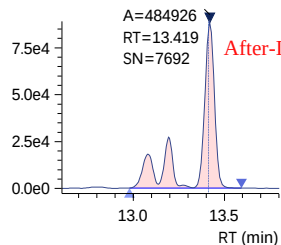
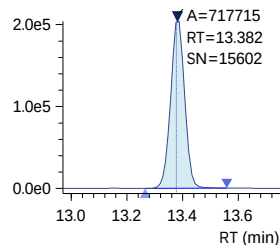
1.59e5

Q 815.00>770.05 (-)

1.59e5

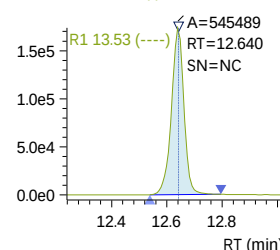
Q 813.00>768.95 (-)

1.29e6



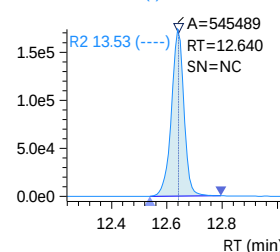
R1 813.00>218.95 (-)

1.74e5



R2 813.00>218.95 (-)

1.74e5





240118_014 (continued)

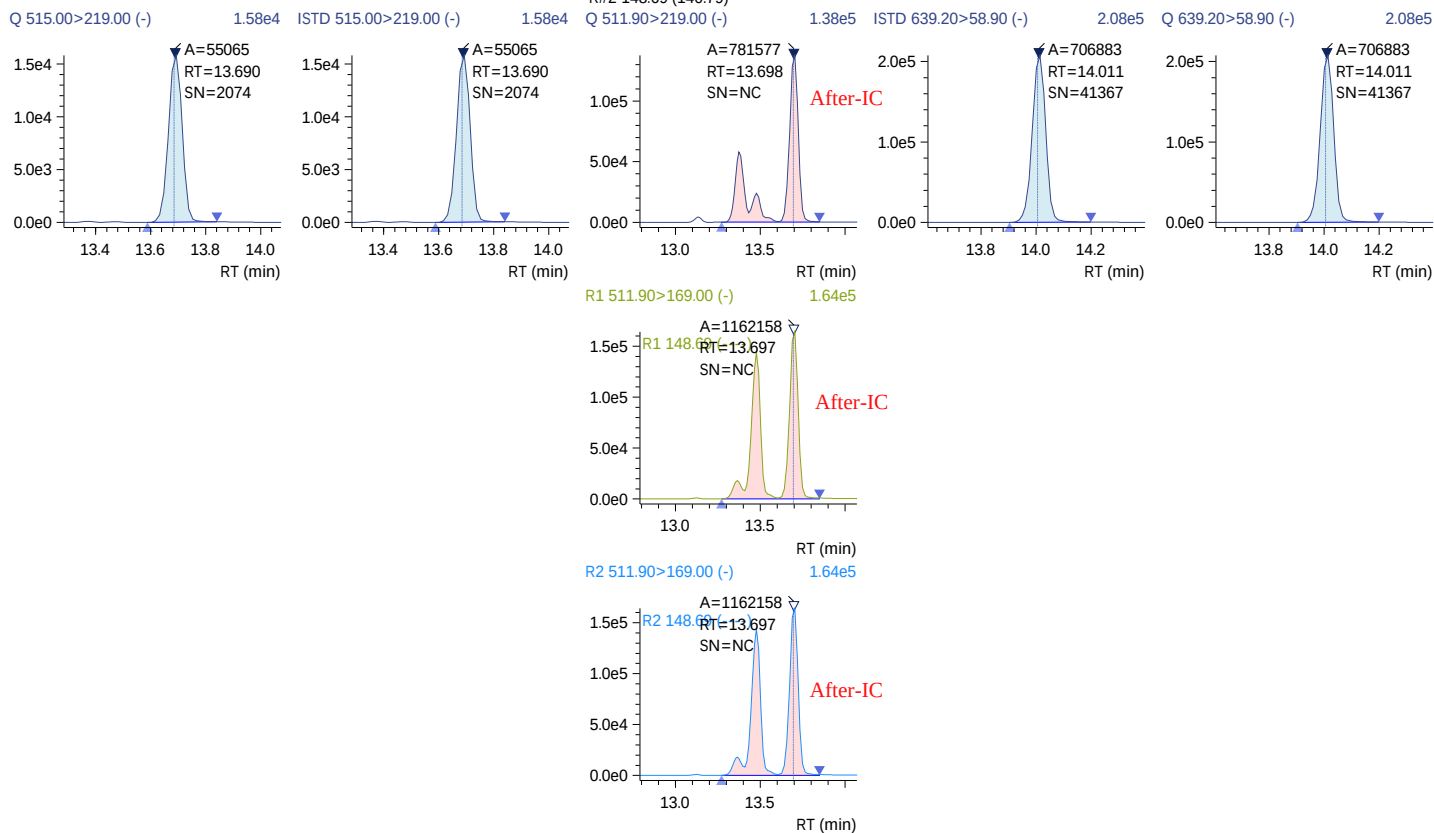
D3-MeFOSA
Conc. 2.6460

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. 19.6899
R#1 148.69 (149.05)
R#2 148.69 (140.79)

D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 27.3174



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_014 (continued)

EtFOSE
Conc. 19.2985

D5-EtFOSAm
Conc. 2.7355

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. 19.6758

PFODA
Conc. 19.4174

Q 630.00>59.00 (-)

1.27e5

Q 531.10>219.00 (-)

2.37e4

ISTD 531.10>219.00 (-)

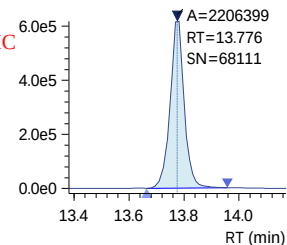
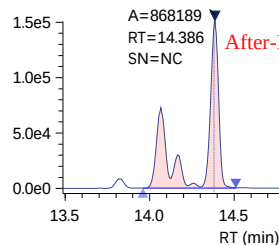
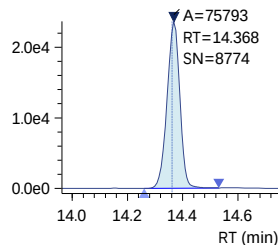
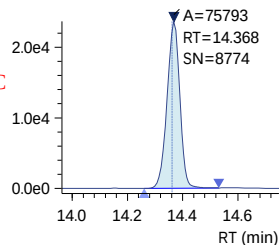
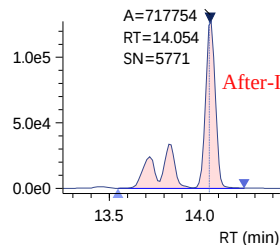
2.37e4

Q 526.00>219.00 (-)

1.51e5

Q 913.00>868.65 (-)

6.18e5

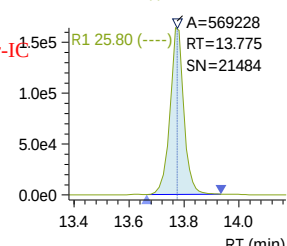
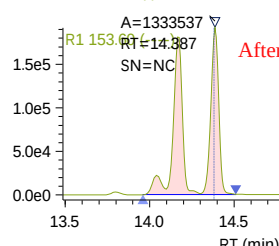


R1 526.00>169.00 (-)

1.92e5

R1 913.00>169.00 (-)

1.64e5

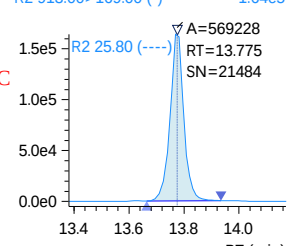
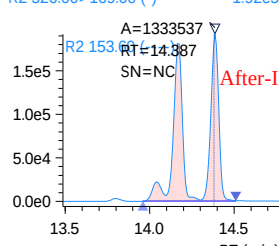


R2 526.00>169.00 (-)

1.92e5

R2 913.00>169.00 (-)

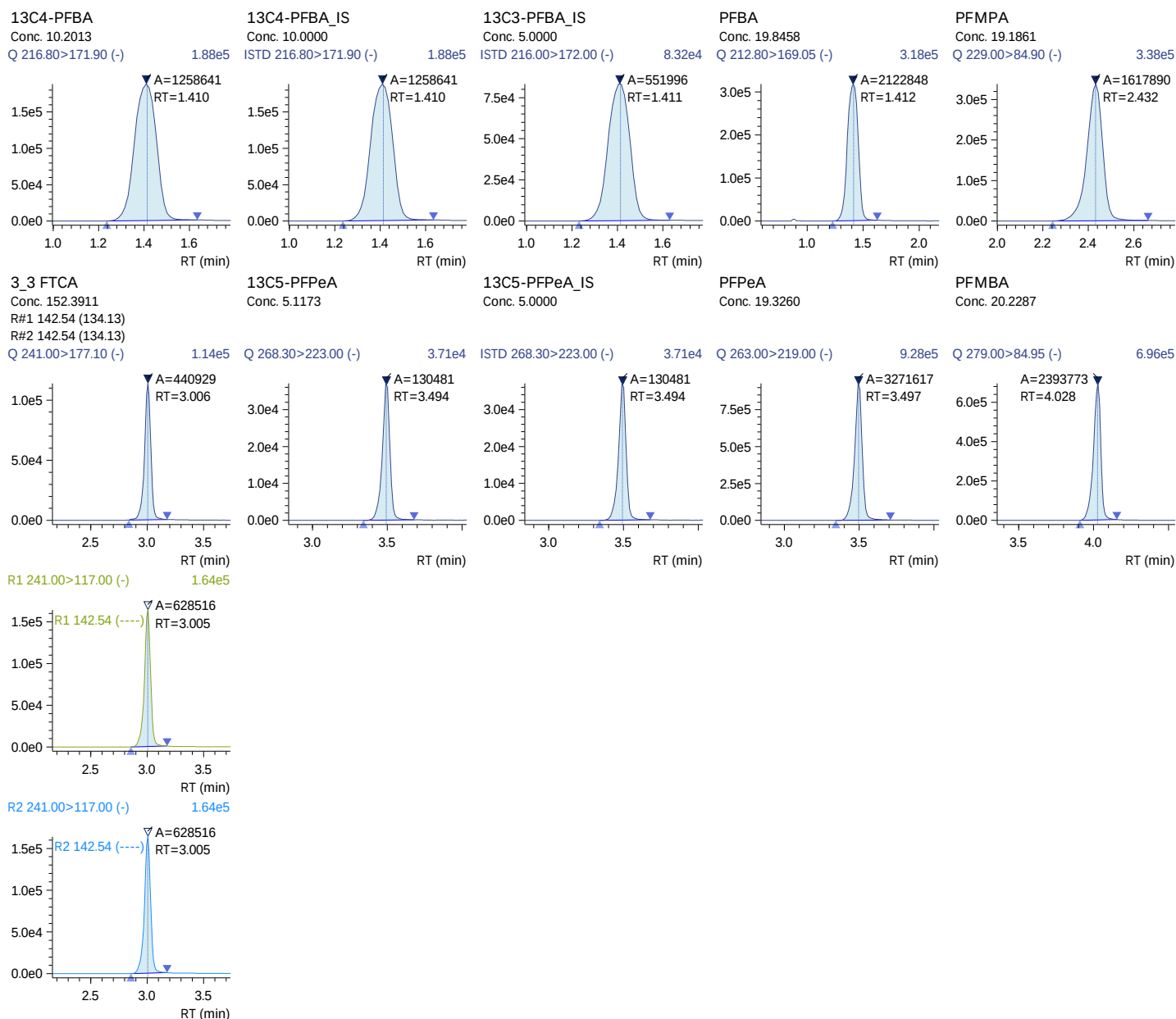
1.64e5





240118_014

Sample ID: 1633 ICAL 20.0PPB
Date Acquired: 1/18/2024 5:10:33 PM
Acquired by: System Administrator
Data File: 240118_014
Vial: 9 | Inj. Volume: 10.0000uL | Tray: 1





240118_014 (continued)

13C2-4_2 FTS
Conc. 4.1950

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. 17.6958
R#1 30.18 (34.14)
R#2 30.18 (34.14)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 16.4139
R#1 48.66 (47.53)
R#2 48.66 (47.53)

Q 329.10>80.90 (-)

3.71e4

ISTD 329.10>80.90 (-)

3.71e4

Q 327.10>307.00 (-)

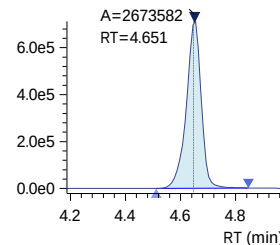
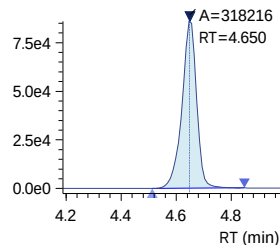
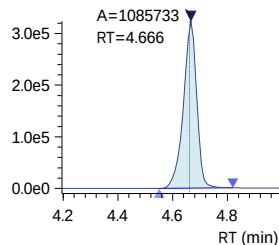
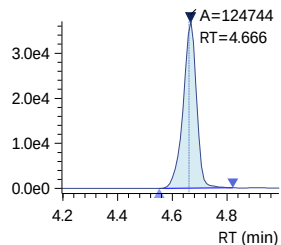
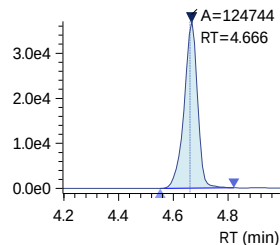
3.24e5

ISTD 302.10>79.90 (-)

8.60e4

Q 298.70>79.90 (-)

7.12e5

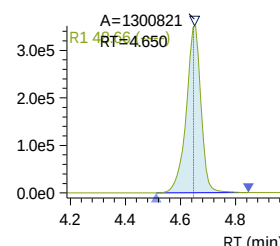
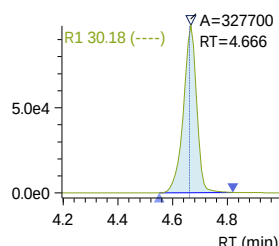


R1 327.10>80.90 (-)

9.81e4

R1 298.70>98.80 (-)

3.52e5

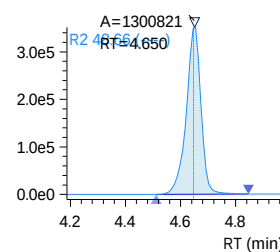
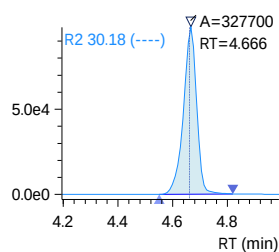


R2 327.10>80.90 (-)

9.81e4

R2 298.70>98.80 (-)

3.52e5





240118_014 (continued)

13C3-PFBS
 Conc. 2.5950

NFDHA
 Conc. 18.1263
 R#1 37.54 (37.88)
 R#2 37.54 (37.88)

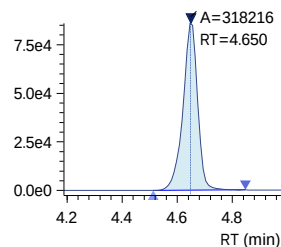
13C5-PFHxA
 Conc. 2.5963

13C5-PFHxA_IS
 Conc. 2.5000

13C2-PFHxA_IS
 Conc. 2.5000

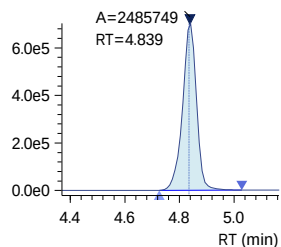
Q 302.10>79.90 (-)

8.60e4



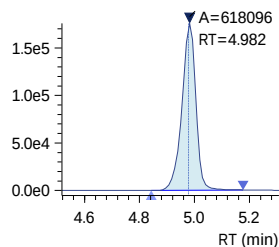
Q 295.00>201.00 (-)

7.03e5



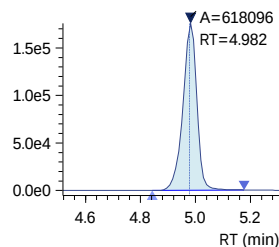
Q 318.00>273.00 (-)

1.76e5



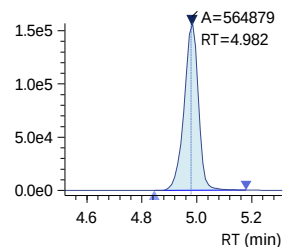
ISTD 318.00>273.00 (-)

1.76e5



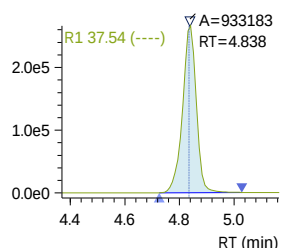
ISTD 315.10>270.00 (-)

1.57e5



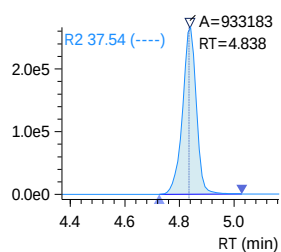
R1 295.00>84.90 (-)

2.66e5



R2 295.00>84.90 (-)

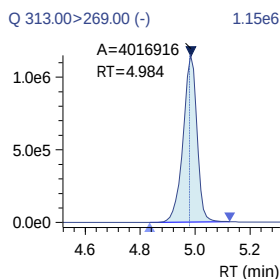
2.66e5



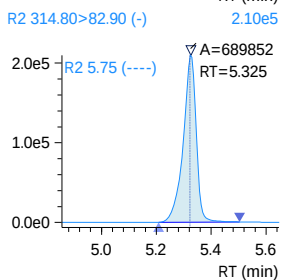
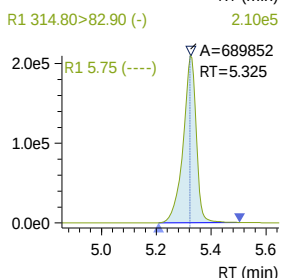
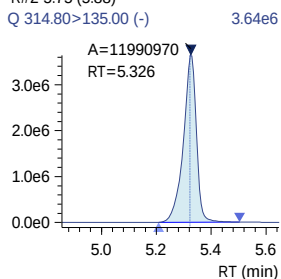


240118_014 (continued)

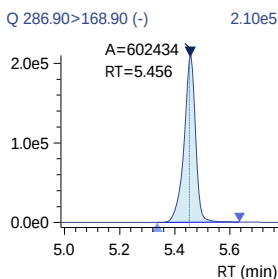
PFHxA
 Conc. 19.4863



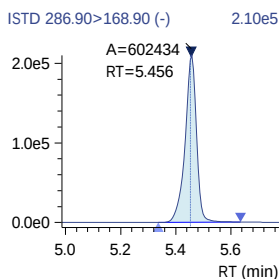
PFEESA
 Conc. 17.3202
 R#1 5.75 (5.88)
 R#2 5.75 (5.88)



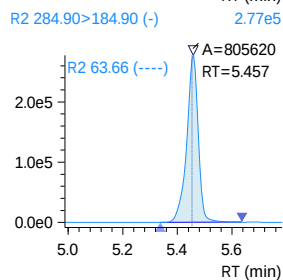
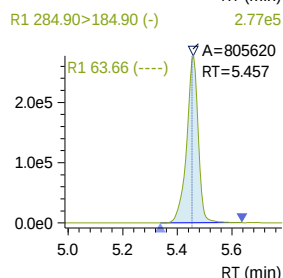
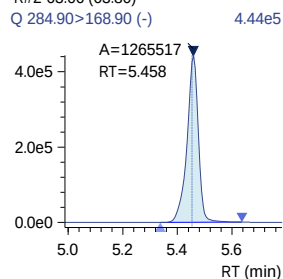
13C3-HFPO-DA
 Conc. 10.8946



13C3-HFPO-DA_IS
 Conc. 10.0000



HFPO-DA
 Conc. 19.0542
 R#1 63.66 (63.80)
 R#2 63.66 (63.80)

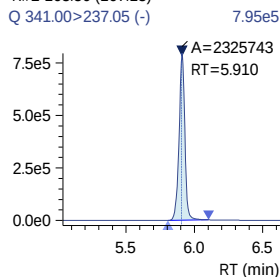




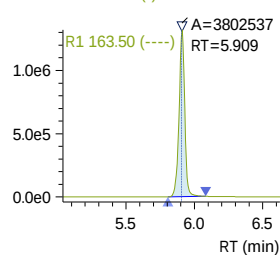
240118_014 (continued)

5_3 FTCA

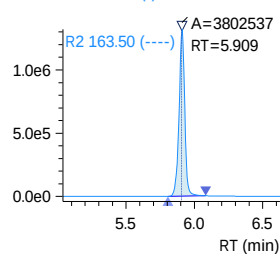
Conc. 145.4705
R#1 163.50 (167.13)
R#2 163.50 (167.13)
Q 341.00>237.05 (-)



R1 341.00>217.00 (-) 1.32e6

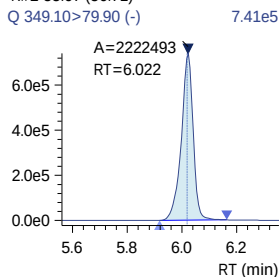


R2 341.00>217.00 (-) 1.32e6

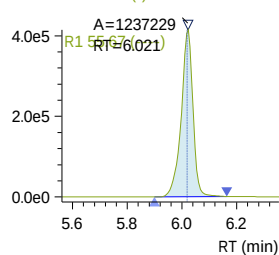


PFPeS

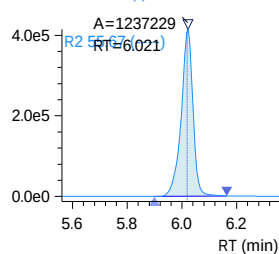
Conc. 17.9045
R#1 55.67 (56.71)
R#2 55.67 (56.71)
Q 349.10>79.90 (-)



R1 349.10>98.80 (-) 4.15e5

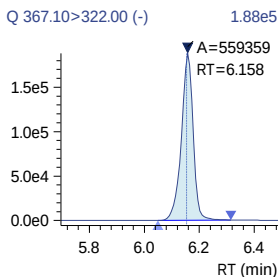


R2 349.10>98.80 (-) 4.15e5



13C4-PFHpA

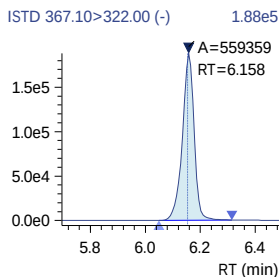
Conc. 2.5955



Q 367.10>322.00 (-)

13C4-PFHpA_IS

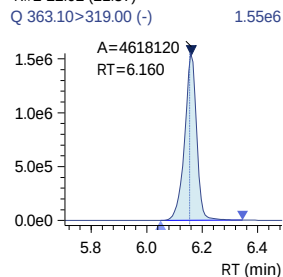
Conc. 2.5000



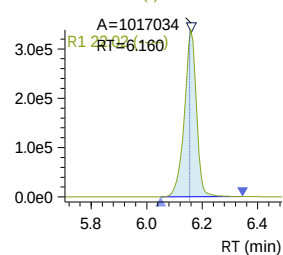
ISTD 367.10>322.00 (-)

PFHpA

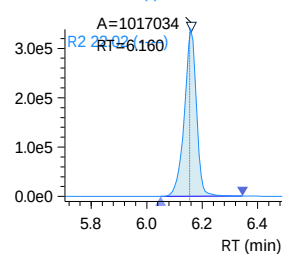
Conc. 19.8733
R#1 22.02 (21.37)
R#2 22.02 (21.37)
Q 363.10>319.00 (-)



R1 363.10>169.00 (-) 3.39e5

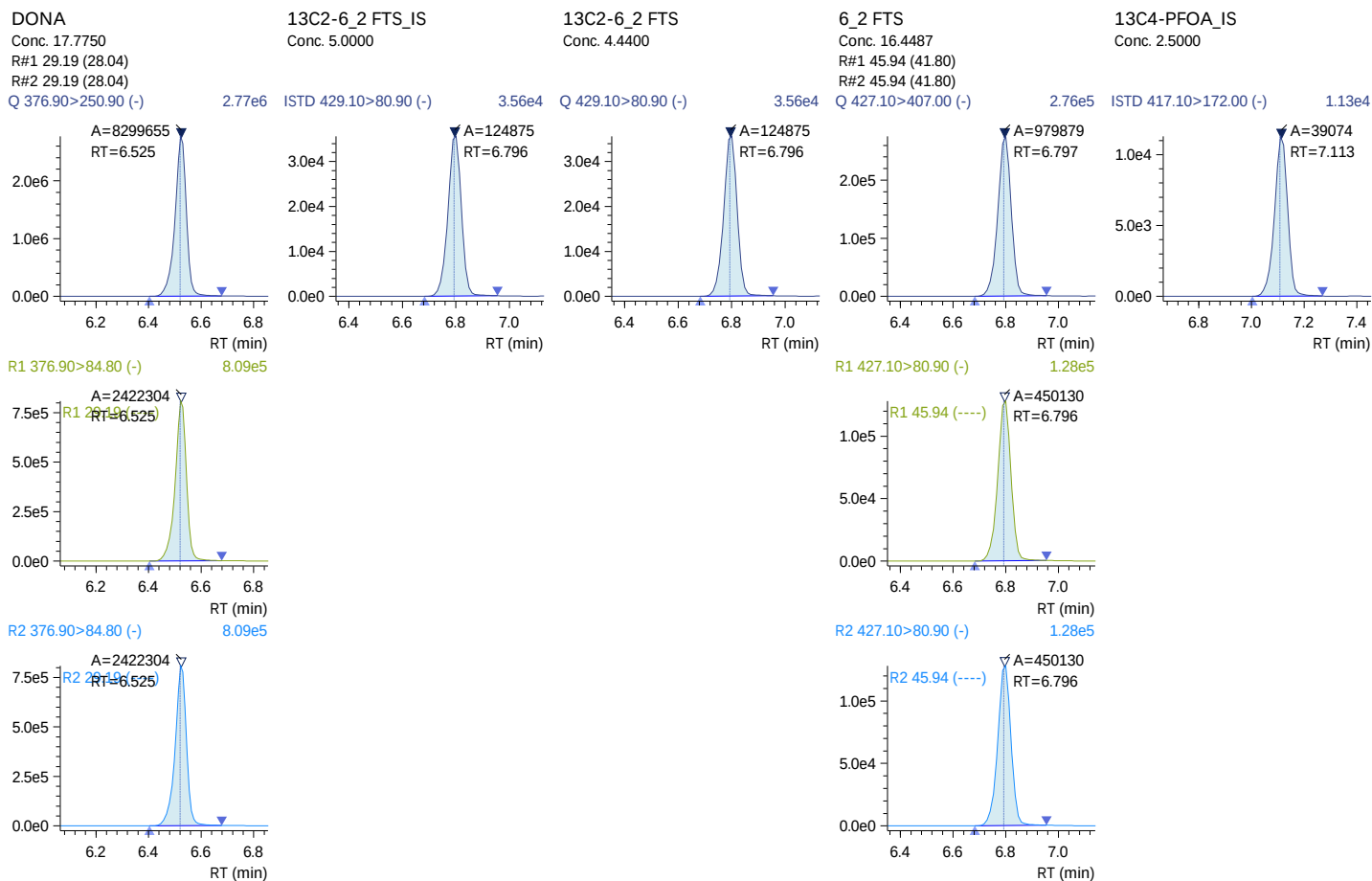


R2 363.10>169.00 (-) 3.39e5





240118_014 (continued)





240118_014 (continued)

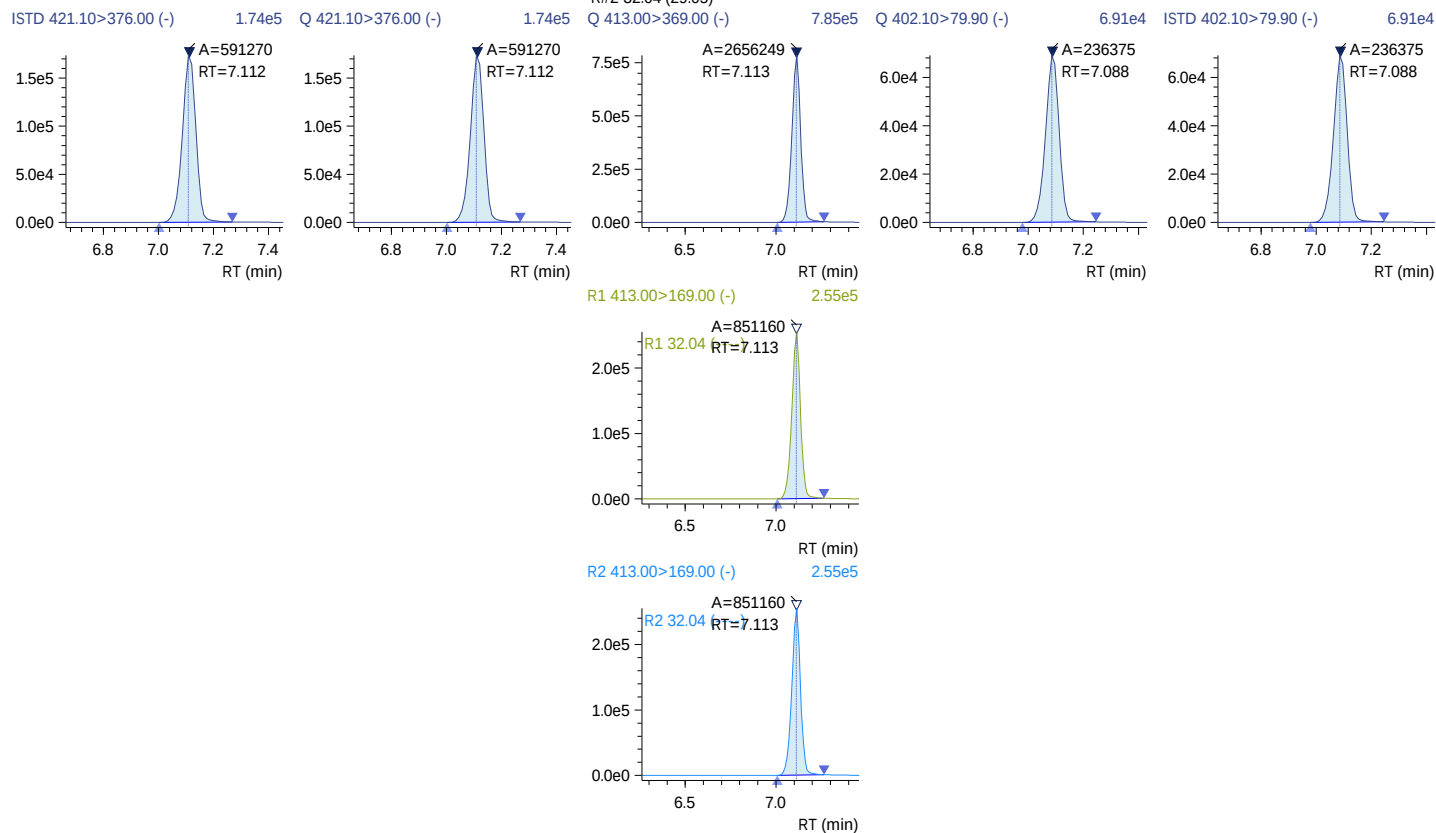
13C8-PFOA_IS
 Conc. 2.5000

13C8-PFOA
 Conc. 2.7073

PFOA
 Conc. 17.3630
 R#1 32.04 (29.05)
 R#2 32.04 (29.05)

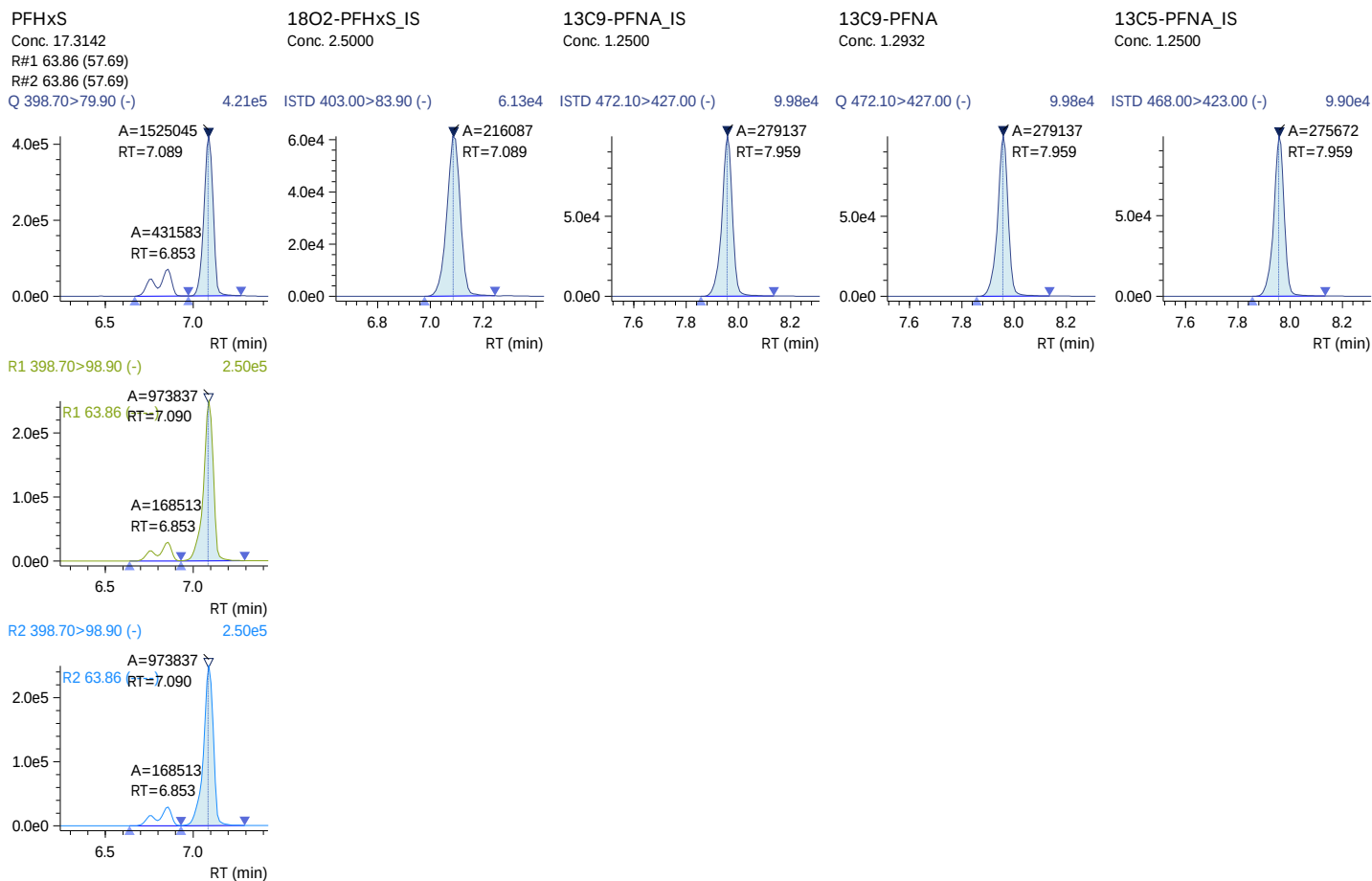
13C3-PFHxS
 Conc. 2.5485

13C3-PFHxS_IS
 Conc. 2.5000



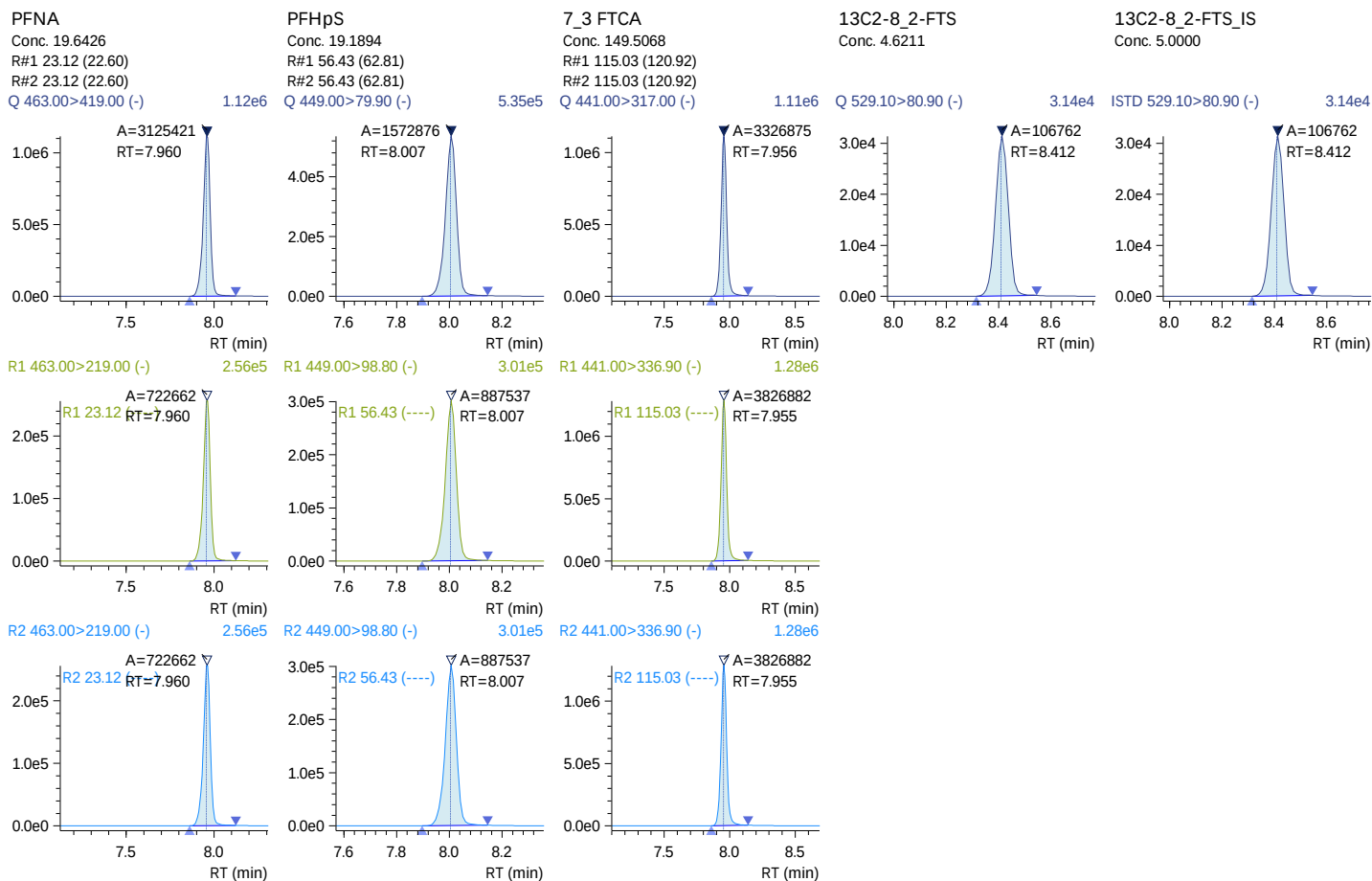


240118_014 (continued)



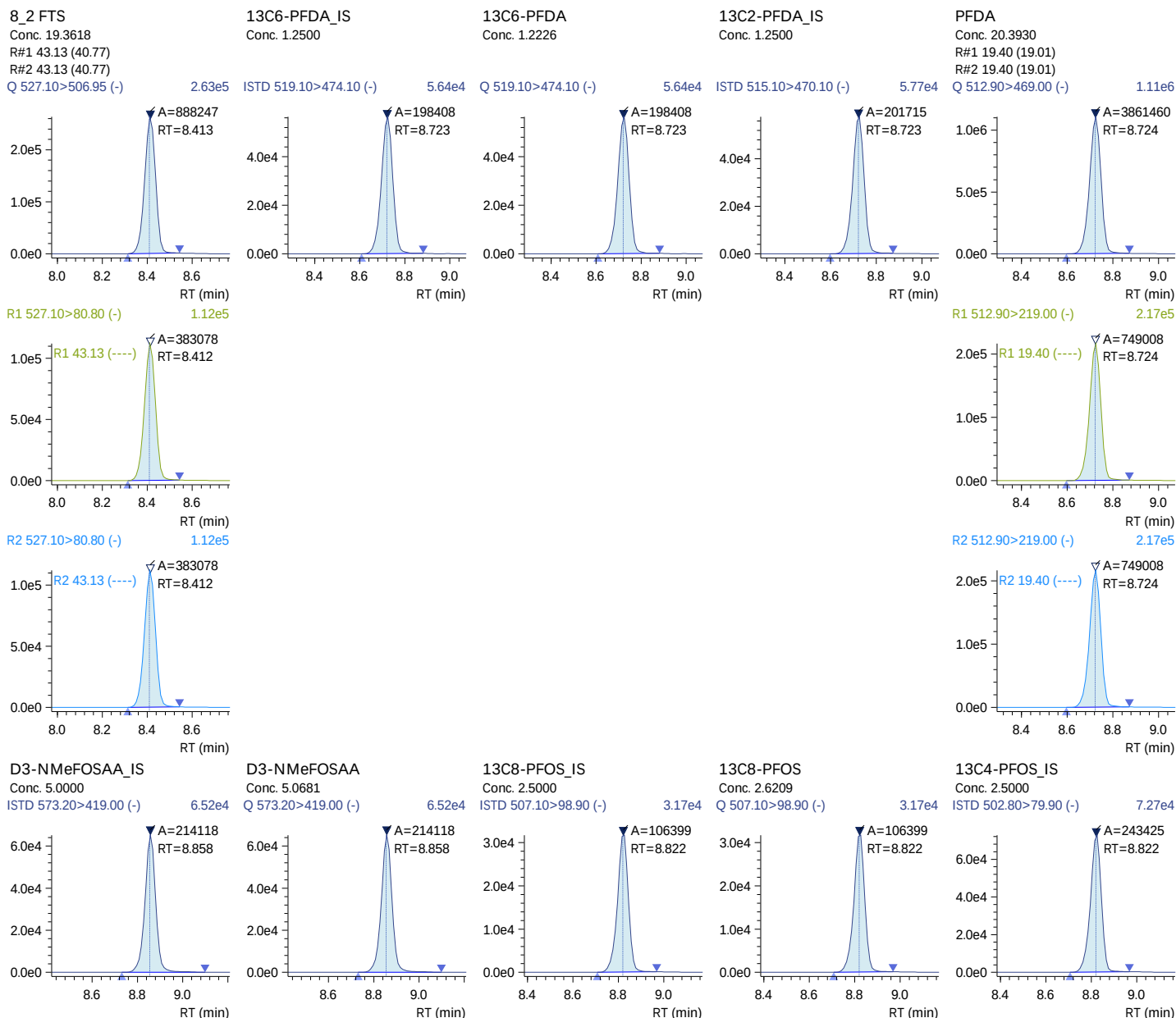


240118_014 (continued)



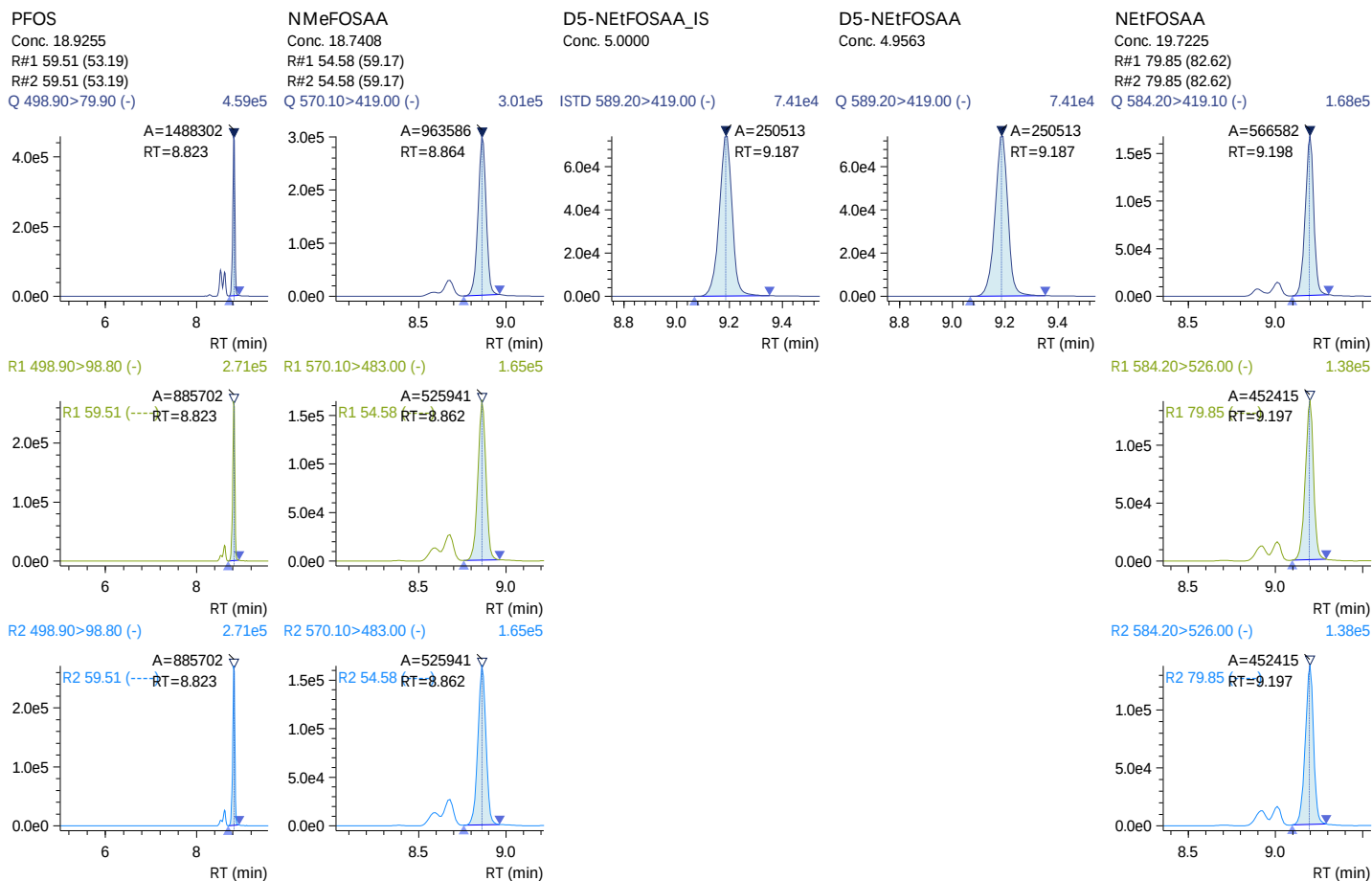


240118_014 (continued)





240118_014 (continued)

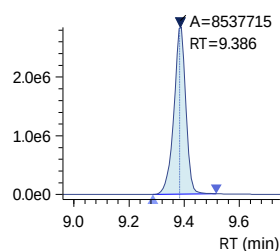




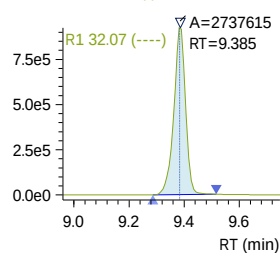
240118_014 (continued)

9-Cl-PF3ONS

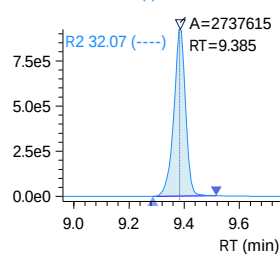
Conc. 17.1902
 R#1 32.07 (31.76)
 R#2 32.07 (31.76)
 Q 530.80>351.00 (-)



R1 532.80>353.00 (-) 9.25e5

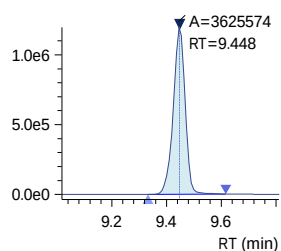


R2 532.80>353.00 (-) 9.25e5

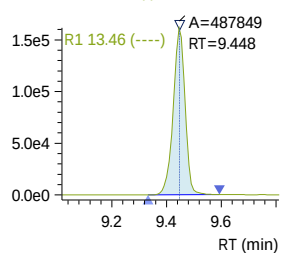


PFUnDA

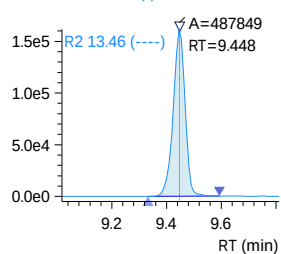
Conc. 19.4796
 R#1 13.46 (12.31)
 R#2 13.46 (12.31)
 Q 563.10>519.00 (-)



R1 563.10>269.10 (-) 1.62e5

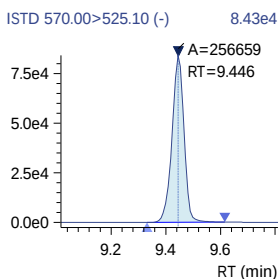


R2 563.10>269.10 (-) 1.62e5



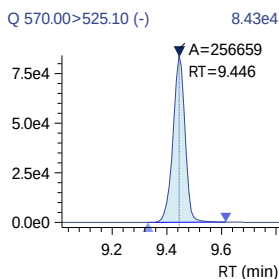
13C7-PFUnDA_IS

Conc. 1.2500



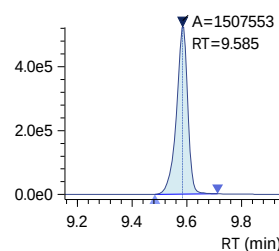
13C7-PFUnDA

Conc. 1.3258

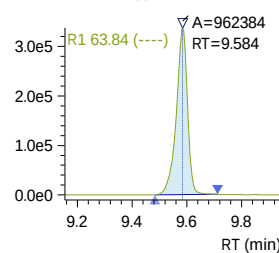


PFNS

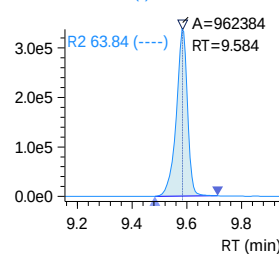
Conc. 18.6482
 R#1 63.84 (63.31)
 R#2 63.84 (63.31)
 Q 548.80>79.90 (-)



R1 548.80>98.80 (-) 3.38e5

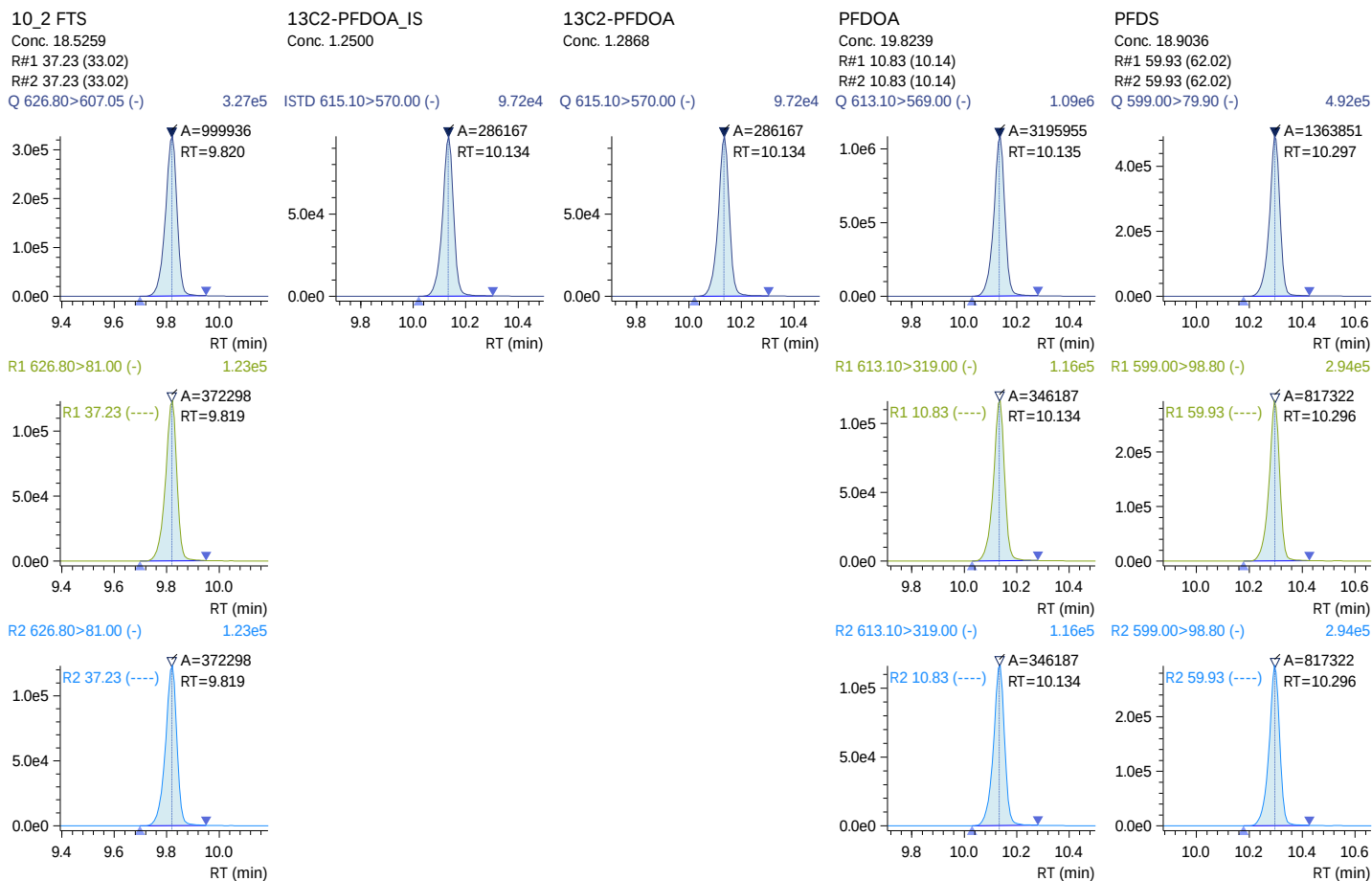


R2 548.80>98.80 (-) 3.38e5





240118_014 (continued)

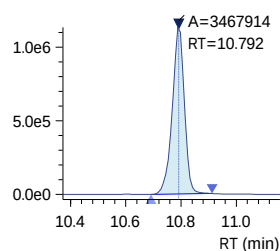




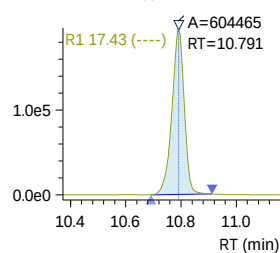
240118_014 (continued)

PFTTrDA

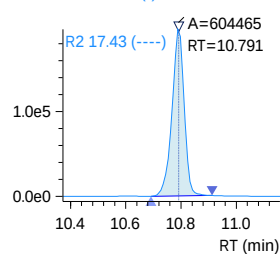
Conc. 19.3635
R#1 17.43 (15.12)
R#2 17.43 (15.12)
Q 663.00>619.00 (-)



R1 663.00>168.90 (-) 1.97e5

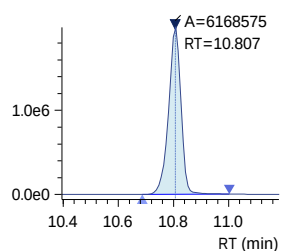


R2 663.00>168.90 (-) 1.97e5

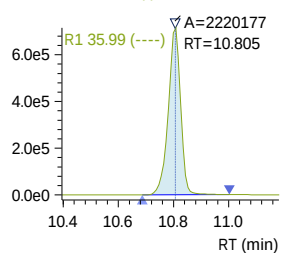


11-Cl-PF3OUdS

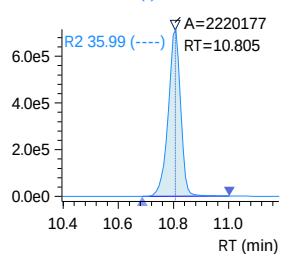
Conc. 17.1707
R#1 35.99 (36.61)
R#2 35.99 (36.61)
Q 630.90>451.00 (-)



R1 632.90>452.90 (-) 7.15e5

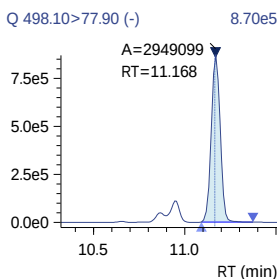


R2 632.90>452.90 (-) 7.15e5



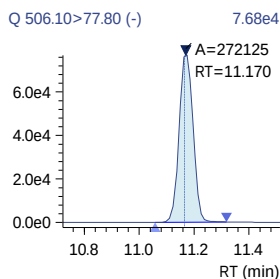
PFOSAm

Conc. 38.9995



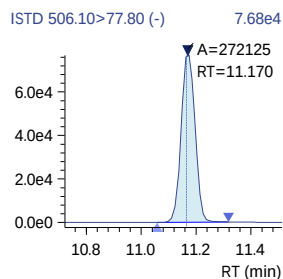
13C8-PFOSAm

Conc. 2.6333



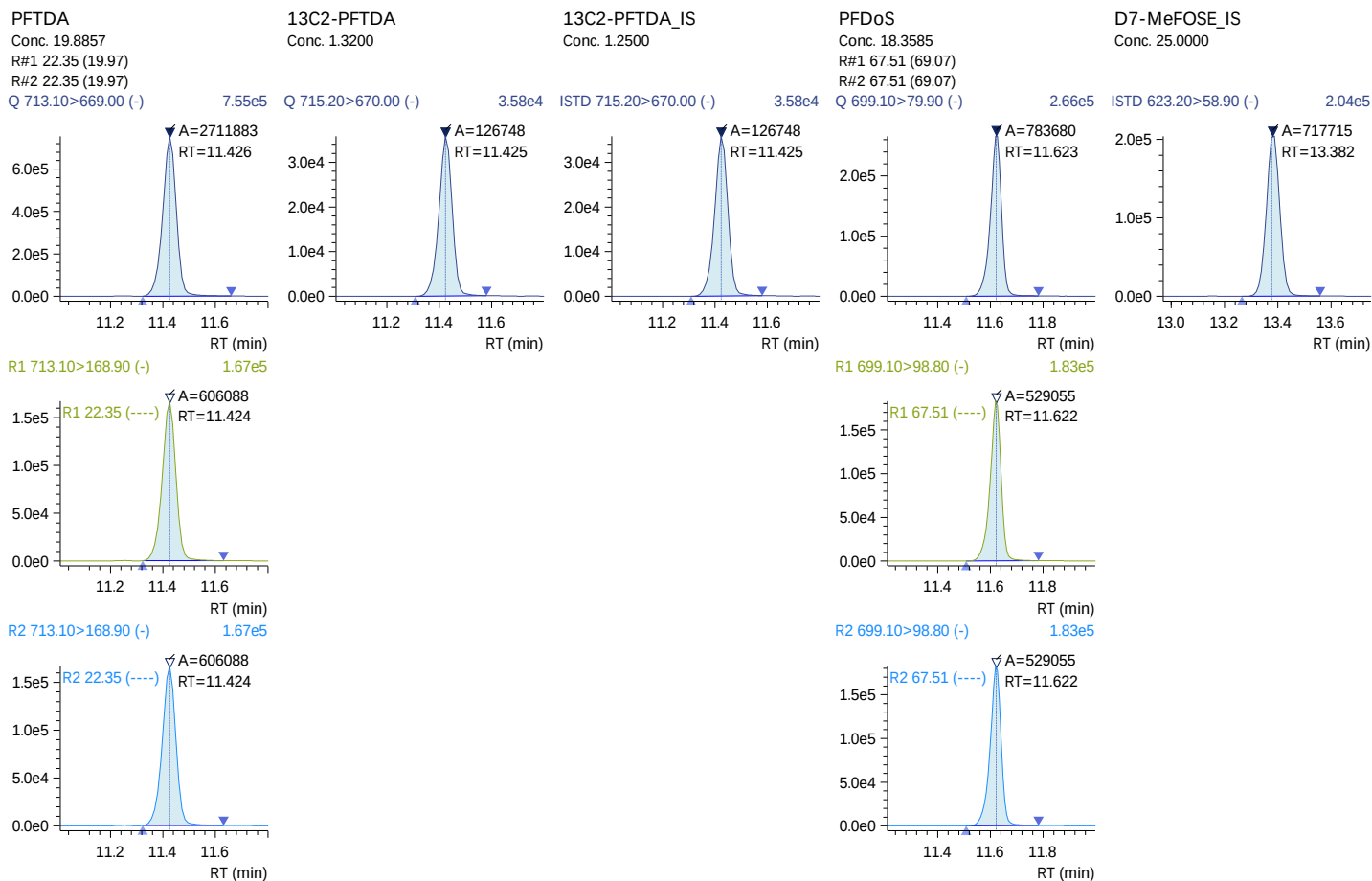
13C8-PFOSAm_IS

Conc. 2.5000





240118_014 (continued)





240118_014 (continued)

D7-MeFOSE
 Conc. 28.1702

MeFOSE
 Conc. 19.6360

13C2-PFHXA_IS
 Conc. 2.5000

13C2-PFHXA
 Conc. 2.6818

PFHXA
 Conc. 19.5434
 R#1 13.53 (11.64)
 R#2 13.53 (11.64)

Q 623.20>58.90 (-)

2.04e5

Q 616.10>59.00 (-)

8.91e4

ISTD 815.00>770.05 (-)

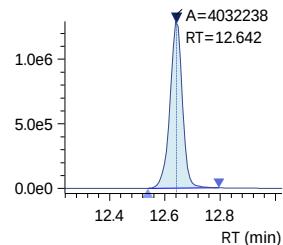
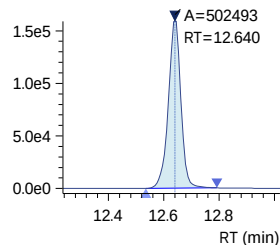
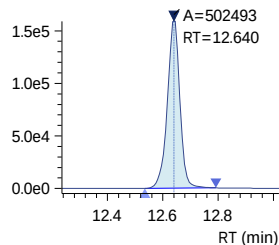
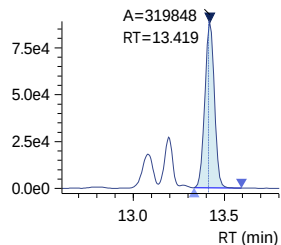
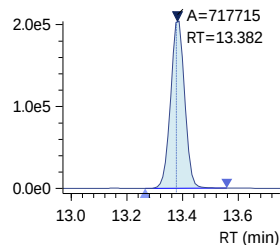
1.59e5

Q 815.00>770.05 (-)

1.59e5

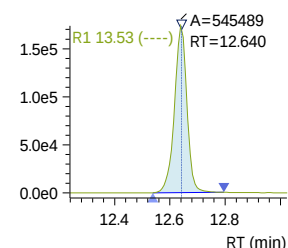
Q 813.00>768.95 (-)

1.29e6



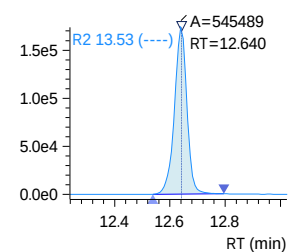
R1 813.00>218.95 (-)

1.74e5



R2 813.00>218.95 (-)

1.74e5





240118_014 (continued)

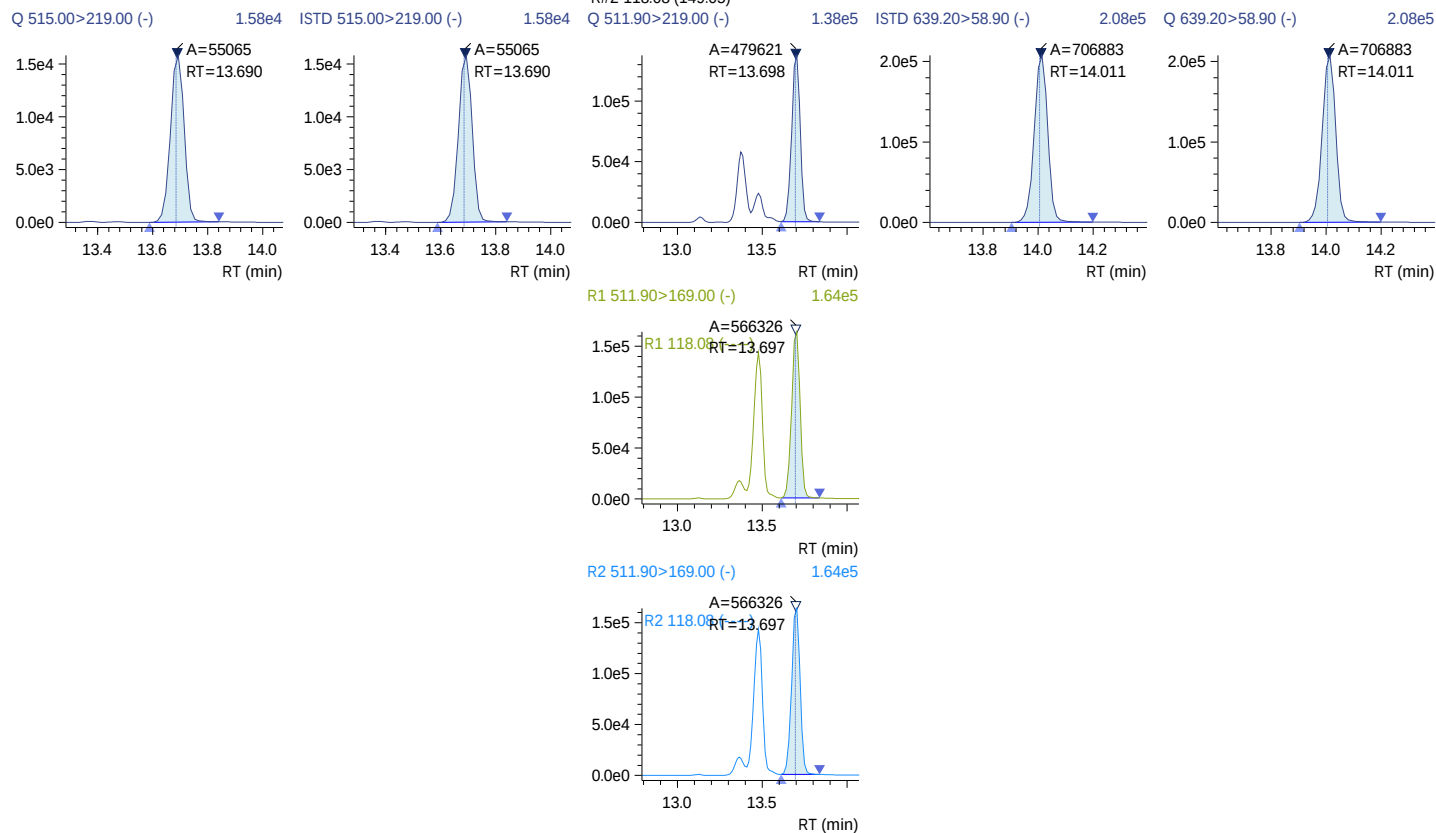
D3-MeFOSA
 Conc. 2.6460

D3-MeFOSA_IS
 Conc. 2.5000

MeFOSA
 Conc. 19.5396
 R#1 118.08 (149.05)
 R#2 118.08 (149.05)

D9-EtFOSE_IS
 Conc. 25.0000

D9-EtFOSE
 Conc. 27.3174





240118_014 (continued)

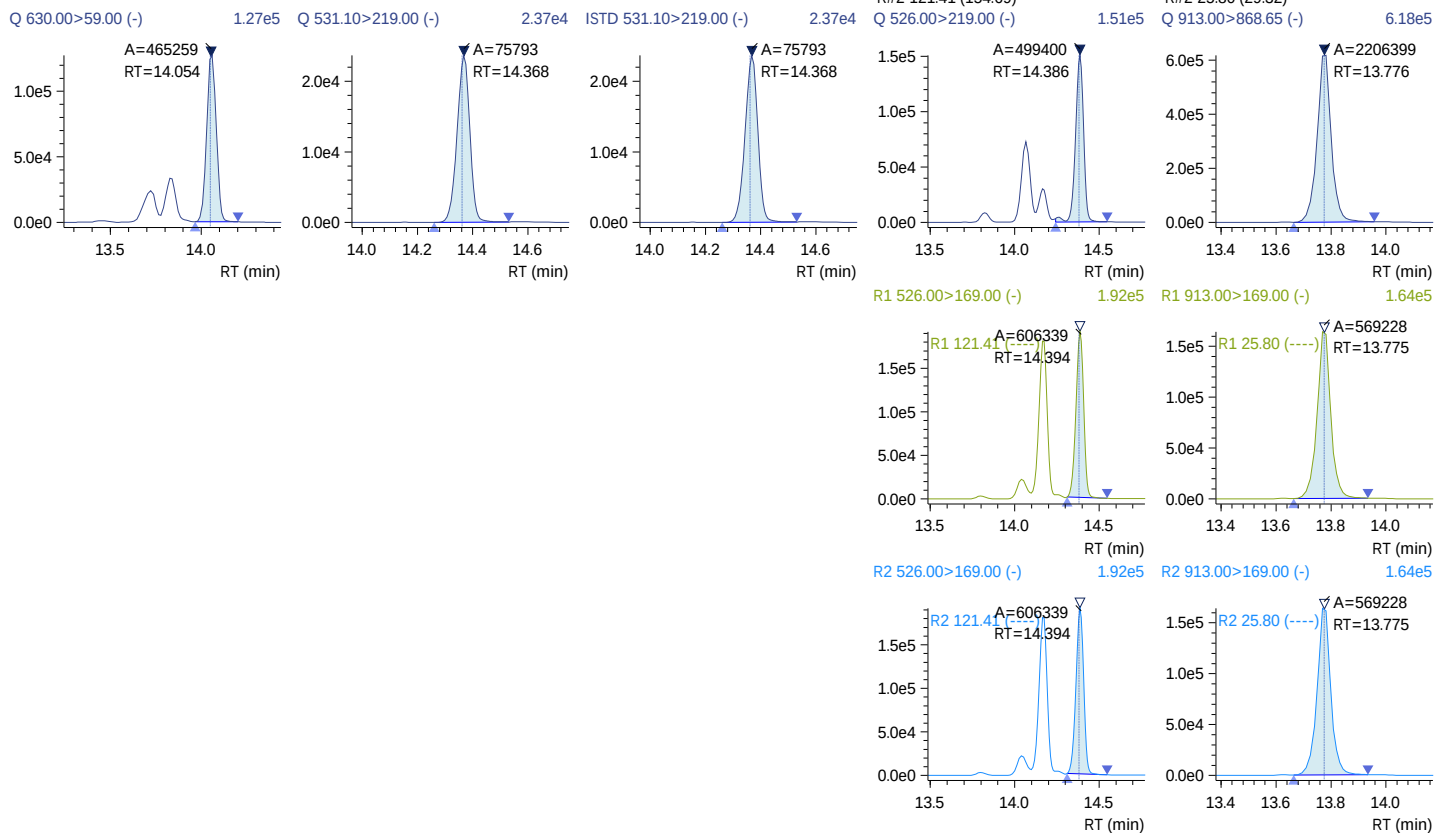
EtFOSE
Conc. 18.9410

D5-EtFOSAm
Conc. 2.7355

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. 20.6251
R#1 121.41 (154.69)
R#2 121.41 (154.69)

PFODA
Conc. 20.2986
R#1 25.80 (29.32)
R#2 25.80 (29.32)





240118_015

Sample ID: 1633 CCB
Date Acquired: 1/18/2024 5:33:48 PM
Acquired by: System Administrator
Data File: 240118_015
Vial: 54 | Inj. Volume: 10.0000uL | Tray: 1

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	985859	----	----	----	----	----	----	
13C4-PFBA_IS	216.80>171.90	----	985859	----	----	----	----	----	----	
13C3-PFBA_IS	216.00>172.00	----	443009	----	----	----	----	----	----	
PFBA	212.80>169.05	----	994	----	----	----	----	----	----	
PFMPA	229.00>84.90	----	----	----	----	----	----	----	----	
3_3 FTCA	241.00>177.10	241.00>117.00	----	0	0.00	141.17	0	0.00	141.17	
13C5-PFPeA	268.30>223.00	----	109708	----	----	----	----	----	----	
13C5-PFPeA_IS	268.30>223.00	----	109708	----	----	----	----	----	----	
PFPeA	263.00>219.00	----	1828	----	----	----	----	----	----	
PFMBA	279.00>84.95	----	199	----	----	----	----	----	----	
13C2-4_2 FTS	329.10>80.90	----	117886	----	----	----	----	----	----	
13C2-4_2 FTS_IS	329.10>80.90	----	117886	----	----	----	----	----	----	
4_2 FTS	327.10>307.00	327.10>80.90	----	0	0.00	29.06	0	0.00	29.06	
13C3-PFBS_IS	302.10>79.90	----	261866	----	----	----	----	----	----	
PFBS	298.70>79.90	298.70>98.80	----	0	0.00	46.72	0	0.00	46.72	
13C3-PFBS	302.10>79.90	----	261866	----	----	----	----	----	----	
NFDHA	295.00>201.00	295.00>84.90	880	401	45.63	40.25	401	45.63	40.25	
13C5-PFHxA	318.00>273.00	----	524950	----	----	----	----	----	----	
13C5-PFHxA_IS	318.00>273.00	----	524950	----	----	----	----	----	----	
13C2-PFHxA_IS	315.10>270.00	----	496509	----	----	----	----	----	----	
PFHxA	313.00>269.00	----	1879	----	----	----	----	----	----	
PFEESA	314.80>135.00	314.80>82.90	----	0	0.00	6.11	0	0.00	6.11	
13C3-HFPO-DA	286.90>168.90	----	490564	----	----	----	----	----	----	
13C3-HFPO-DA_IS	286.90>168.90	----	490564	----	----	----	----	----	----	
HFPO-DA	284.90>168.90	284.90>184.90	----	0	0.00	65.61	0	0.00	65.61	
5_3 FTCA	341.00>237.05	341.00>217.00	----	0	0.00	158.86	0	0.00	158.86	
PFPeS	349.10>79.90	349.10>98.80	212	142	67.20	55.80	142	67.20	55.80	
13C4-PFHpA	367.10>322.00	----	465059	----	----	----	----	----	----	
13C4-PFHpA_IS	367.10>322.00	----	465059	----	----	----	----	----	----	
PFHpA	363.10>319.00	363.10>169.00	6250	1250	20.00	21.50	1250	20.00	21.50	
DONA	376.90>250.90	376.90>84.80	289	42	14.49	29.66	42	14.49	29.66	IRr
13C2-6_2 FTS_IS	429.10>80.90	----	103523	----	----	----	----	----	----	
13C2-6_2 FTS	429.10>80.90	----	103523	----	----	----	----	----	----	
6_2 FTS	427.10>407.00	427.10>80.90	869	509	58.51	41.15	509	58.51	41.15	
13C4-PFOA_IS	417.10>172.00	----	34963	----	----	----	----	----	----	
13C8-PFOA_IS	421.10>376.00	----	486369	----	----	----	----	----	----	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240118_015 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	486369	----	----	----	----	----	----	----
PFOA	413.00>369.00	413.00>169.00	4635	1402	30.26	31.89	1402	30.26	31.89	
13C3-PFHxS	402.10>79.90	----	199596	----	----	----	----	----	----	----
13C3-PFHxS_IS	402.10>79.90	----	199596	----	----	----	----	----	----	----
PFHxS	398.70>79.90	398.70>98.90	871	536	61.53	56.62	536	61.53	56.62	
18O2-PFHxS_IS	403.00>83.90	----	169573	----	----	----	----	----	----	----
13C9-PFNA_IS	472.10>427.00	----	230581	----	----	----	----	----	----	----
13C9-PFNA	472.10>427.00	----	230581	----	----	----	----	----	----	----
13C5-PFNA_IS	468.00>423.00	----	237143	----	----	----	----	----	----	----
PFNA	463.00>419.00	463.00>219.00	3177	782	24.63	23.17	782	24.63	23.17	
PFHpS	449.00>79.90	449.00>98.80	----	0	0.00	56.96	0	0.00	56.96	
7_3 FTCA	441.00>317.00	441.00>336.90	1672	1939	115.94	117.47	1939	115.94	117.47	
13C2-8_2-FTS	529.10>80.90	----	82310	----	----	----	----	----	----	----
13C2-8_2-FTS_IS	529.10>80.90	----	82310	----	----	----	----	----	----	----
8_2 FTS	527.10>506.95	527.10>80.80	----	0	0.00	49.59	0	0.00	49.59	
13C6-PFDA_IS	519.10>474.10	----	168168	----	----	----	----	----	----	----
13C6-PFDA	519.10>474.10	----	168168	----	----	----	----	----	----	----
13C2-PFDA_IS	515.10>470.10	----	161918	----	----	----	----	----	----	----
PFDA	512.90>469.00	512.90>219.00	4820	581	12.05	19.00	581	12.05	19.00	
D3-NMeFOSAA_IS	573.20>419.00	----	166245	----	----	----	----	----	----	----
D3-NMeFOSAA	573.20>419.00	----	166245	----	----	----	----	----	----	----
13C8-PFOS_IS	507.10>98.90	----	84233	----	----	----	----	----	----	----
13C8-PFOS	507.10>98.90	----	84233	----	----	----	----	----	----	----
13C4-PFOS_IS	502.80>79.90	----	203319	----	----	----	----	----	----	----
PFOS	498.90>79.90	498.90>98.80	----	0	0.00	52.47	0	0.00	52.47	
NMeFOSAA	570.10>419.00	570.10>483.00	127	41	32.38	55.15	41	32.38	55.15	
D5-NEtFOSAA_IS	589.20>419.00	----	194960	----	----	----	----	----	----	----
D5-NEtFOSAA	589.20>419.00	----	194960	----	----	----	----	----	----	----
NEtFOSAA	584.20>419.10	584.20>526.00	----	0	0.00	81.95	0	0.00	81.95	
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	----	0	0.00	32.76	0	0.00	32.76	
PFUnDA	563.10>519.00	563.10>269.10	3835	423	11.02	13.12	423	11.02	13.12	
13C7-PFUnDA_IS	570.00>525.10	----	200384	----	----	----	----	----	----	----
13C7-PFUnDA	570.00>525.10	----	200384	----	----	----	----	----	----	----
PFNS	548.80>79.90	548.80>98.80	----	0	0.00	65.22	0	0.00	65.22	
10_2 FTS	626.80>607.05	626.80>81.00	----	0	0.00	37.13	0	0.00	37.13	
13C2-PFDOA_IS	615.10>570.00	----	229376	----	----	----	----	----	----	----
13C2-PFDOA	615.10>570.00	----	229376	----	----	----	----	----	----	----
PFDOA	613.10>569.00	613.10>319.00	3092	239	7.74	11.29	239	7.74	11.29	
PFDS	599.00>79.90	599.00>98.80	----	0	0.00	60.18	0	0.00	60.18	
PFTrDA	663.00>619.00	663.00>168.90	3587	624	17.40	17.64	624	17.40	17.64	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240118_015 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	----	0	0.00	36.44	0	0.00	36.44	
PFOSAm	498.10>77.90	----	1052	----	----	----	----	----	----	
13C8-PFOSAm	506.10>77.80	----	204049	----	----	----	----	----	----	
13C8-PFOSAm_IS	506.10>77.80	----	204049	----	----	----	----	----	----	
PFTDA	713.10>669.00	713.10>168.90	3191	708	22.19	22.96	708	22.19	22.96	
13C2-PFTDA	715.20>670.00	----	94706	----	----	----	----	----	----	
13C2-PFTDA_IS	715.20>670.00	----	94706	----	----	----	----	----	----	
PFDoS	699.10>79.90	699.10>98.80	----	0	0.00	67.40	0	0.00	67.40	
D7-MeFOSE_IS	623.20>58.90	----	501038	----	----	----	----	----	----	
D7-MeFOSE	623.20>58.90	----	501038	----	----	----	----	----	----	
MeFOSE	616.10>59.00	----	----	----	----	----	----	----	----	
13C2-PFHxDA_IS	815.00>770.05	----	374925	----	----	----	----	----	----	
13C2-PFHxDA	815.00>770.05	----	374925	----	----	----	----	----	----	
PFHxDA	813.00>768.95	813.00>218.95	4743	698	14.73	13.90	698	14.73	13.90	
D3-MeFOSA	515.00>219.00	----	45843	----	----	----	----	----	----	
D3-MeFOSA_IS	515.00>219.00	----	45843	----	----	----	----	----	----	
MeFOSA	511.90>219.00	511.90>169.00	114	129	112.80	140.79	129	112.80	140.79	
D9-EtFOSE_IS	639.20>58.90	----	529622	----	----	----	----	----	----	
D9-EtFOSE	639.20>58.90	----	529622	----	----	----	----	----	----	
EtFOSE	630.00>59.00	----	----	----	----	----	----	----	----	
D5-EtFOSAm	531.10>219.00	----	53669	----	----	----	----	----	----	
D5-EtFOSAm_IS	531.10>219.00	----	53669	----	----	----	----	----	----	
EtFOSAm	526.00>219.00	526.00>169.00	----	0	0.00	163.90	0	0.00	163.90	
PFODA	913.00>868.65	913.00>169.00	3338	1126	33.73	27.03	1126	33.73	27.03	

Flag ID key: IRr: Ion Ratio (Relative)



240118_015

Sample ID: 1633 CCB
Date Acquired: 1/18/2024 5:33:48 PM
Acquired by: System Administrator
Data File: 240118_015
Vial: 54 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Std. Conc.	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.441	0.027	0.000	985859	443009	13C3-PFBA_IS	----	9.9561	ng/mL	
13C4-PFBA_IS	Auto	1.441	0.027	----	985859	985859	----	----	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.441	0.026	----	443009	443009	----	----	5.0000	ng/mL	
PFBA	M	1.435	0.019	-0.006	994	985859	13C4-PFBA_IS	----	0.0117	ng/mL	
PFMPA	ND(W/B)	----	----	----	----	109708	13C5-PFPeA_IS	----	----	ng/mL	
3_3 FTCA	ND(W/B)	----	----	----	----	109708	13C5-PFPeA_IS	----	----	ng/mL	
13C5-PFPeA	Auto	3.507	0.015	-1.481	109708	496509	13C2-PFHxA_IS	----	4.8951	ng/mL	
13C5-PFPeA_IS	Auto	3.507	0.015	----	109708	109708	----	----	5.0000	ng/mL	
PFPeA	M	3.504	0.009	-0.003	1828	109708	13C5-PFPeA_IS	----	0.0129	ng/mL	
PFMBA	M	4.040	0.015	0.533	199	109708	13C5-PFPeA_IS	----	0.0020	ng/mL	
13C2-4_2 FTS	Auto	4.670	0.009	-2.421	117886	169573	18O2-PFHxS_IS	----	5.0518	ng/mL	
13C2-4_2 FTS_IS	Auto	4.670	0.009	----	117886	117886	----	----	5.0000	ng/mL	
4_2 FTS	ND(W/B)	----	----	----	----	117886	13C2-4_2 FTS_IS	----	----	ng/mL	
13C3-PFBS_IS	Auto	4.660	0.013	----	261866	261866	----	----	2.5000	ng/mL	
PFBS	ND(W/B)	----	----	----	----	261866	13C3-PFBS_IS	----	----	ng/mL	
13C3-PFBS	Auto	4.660	0.013	-2.431	261866	169573	18O2-PFHxS_IS	----	2.7212	ng/mL	
NFDHA	M	4.844	0.009	-0.143	880	524950	13C5-PFHxA_IS	----	0.0076	ng/mL	
13C5-PFHxA	Auto	4.987	0.009	-0.001	524950	496509	13C2-PFHxA_IS	----	2.5087	ng/mL	
13C5-PFHxA_IS	Auto	4.987	0.009	----	524950	524950	----	----	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	4.988	0.009	----	496509	496509	----	----	2.5000	ng/mL	
PFHxA	M	4.988	0.008	0.001	1879	524950	13C5-PFHxA_IS	----	0.0024	ng/mL	
PFEESA	ND(W/B)	----	----	----	----	524950	13C5-PFHxA_IS	----	----	ng/mL	
13C3-HFPO-DA	Auto	5.459	0.007	0.471	490564	496509	13C2-PFHxA_IS	----	10.0931	ng/mL	
13C3-HFPO-DA_IS	Auto	5.459	0.007	----	490564	490564	----	----	10.0000	ng/mL	
HFPO-DA	ND(W/B)	----	----	----	----	490564	13C3-HFPO-DA_IS	----	----	ng/mL	
5_3 FTCA	ND(W/B)	----	----	----	----	524950	13C5-PFHxA_IS	----	----	ng/mL	
PFPeS	M	6.041	0.023	-1.049	212	199596	13C3-PFHxS_IS	----	0.0020	ng/mL	
13C4-PFHpA	Auto	6.160	0.006	1.172	465059	496509	13C2-PFHxA_IS	----	2.4551	ng/mL	
13C4-PFHpA_IS	Auto	6.160	0.006	----	465059	465059	----	----	2.5000	ng/mL	
PFHpA	M	6.144	-0.011	-0.016	6250	465059	13C4-PFHpA_IS	----	-0.0024	ng/mL	
DONA	M	6.539	0.019	1.080	289	490564	13C3-HFPO-DA_IS	----	0.0008	ng/mL	IRr
13C2-6_2 FTS_IS	Auto	6.796	0.003	----	103523	103523	----	----	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.796	0.003	-0.295	103523	169573	18O2-PFHxS_IS	----	4.6905	ng/mL	
6_2 FTS	M	6.795	0.003	-0.001	869	103523	13C2-6_2 FTS_IS	----	0.0184	ng/mL	
13C4-PFOA_IS	Auto	7.112	0.005	----	34963	34963	----	----	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.112	0.005	----	486369	486369	----	----	2.5000	ng/mL	
13C8-PFOA	Auto	7.112	0.005	0.000	486369	34963	13C4-PFOA_IS	----	2.4889	ng/mL	
PFOA	M	7.112	0.002	0.000	4635	486369	13C8-PFOA_IS	----	-0.0068	ng/mL	
13C3-PFHxS	Auto	7.090	0.004	-0.001	199596	169573	18O2-PFHxS_IS	----	2.7423	ng/mL	
13C3-PFHxS_IS	Auto	7.090	0.004	----	199596	199596	----	----	2.5000	ng/mL	
PFHxS	M	7.094	0.010	0.004	871	199596	13C3-PFHxS_IS	----	-0.0100	ng/mL	
18O2-PFHxS_IS	Auto	7.091	0.005	----	169573	169573	----	----	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.959	0.003	----	230581	230581	----	----	1.2500	ng/mL	
13C9-PFNA	Auto	7.959	0.003	0.000	230581	237143	13C5-PFNA_IS	----	1.2418	ng/mL	
13C5-PFNA_IS	Auto	7.959	0.003	----	237143	237143	----	----	1.2500	ng/mL	
PFNA	M	7.958	0.001	-0.001	3177	230581	13C9-PFNA_IS	----	-0.0066	ng/mL	
PFHpS	ND(W/B)	----	----	----	----	84233	13C8-PFOS_IS	----	----	ng/mL	
7_3 FTCA	M	7.959	0.005	2.972	1672	524950	13C5-PFHxA_IS	----	0.0923	ng/mL	
13C2-8_2-FTS	Auto	8.411	0.002	1.320	82310	169573	18O2-PFHxS_IS	----	4.5400	ng/mL	
13C2-8_2-FTS_IS	Auto	8.411	0.002	----	82310	82310	----	----	5.0000	ng/mL	
8_2 FTS	ND(W/B)	----	----	----	----	82310	13C2-8_2-FTS_IS	----	----	ng/mL	
13C6-PFDA_IS	Auto	8.722	0.002	----	168168	168168	----	----	1.2500	ng/mL	
13C6-PFDA	Auto	8.722	0.002	0.000	168168	161918	13C2-PFDA_IS	----	1.2909	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_015 (continued)

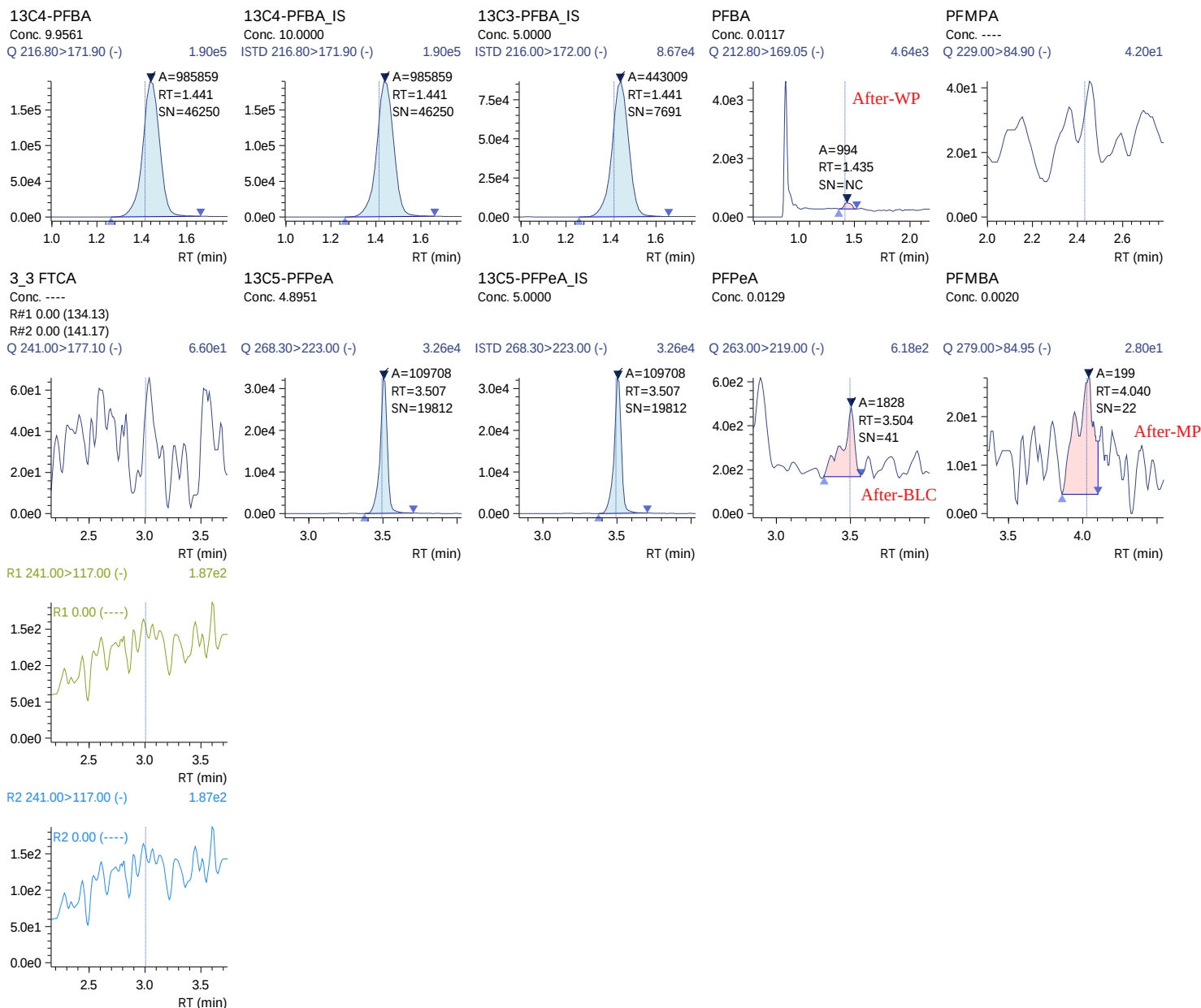
(Table continued from previous page)

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Std. Conc.	Conc.	Unit	Flag ID
13C2-PFDA_IS	Auto	8.723	0.001	----	161918	161918	----	----	1.2500	ng/mL	
PFDA	M	8.720	-0.001	-0.002	4820	168168	13C6-PFDA_IS	----	0.0046	ng/mL	
D3-NMeFOSAA_IS	Auto	8.856	0.001	----	166245	166245	----	----	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.856	0.001	0.033	166245	203319	13C4-PFOS_IS	----	4.7111	ng/mL	
13C8-PFOS_IS	Auto	8.822	0.002	----	84233	84233	----	----	2.5000	ng/mL	
13C8-PFOS	Auto	8.822	0.002	-0.001	84233	203319	13C4-PFOS_IS	----	2.4841	ng/mL	
13C4-PFOS_IS	Auto	8.823	0.003	----	203319	203319	----	----	2.5000	ng/mL	
PFOS	ND(W/B)	----	----	----	----	84233	13C8-PFOS_IS	----	----	ng/mL	
NMeFOSAA	M	8.861	0.000	0.005	127	166245	D3-NMeFOSAA_IS	----	0.0028	ng/mL	
D5-NetFOSAA_IS	Auto	9.186	0.000	----	194960	194960	----	----	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.186	0.000	0.363	194960	203319	13C4-PFOS_IS	----	4.6180	ng/mL	
NetFOSAA	ND(W/B)	----	----	----	----	194960	D5-NetFOSAA_IS	----	----	ng/mL	
9-CI-PF3ONS	ND(W/B)	----	----	----	----	490564	13C3-HFPO-DA_IS	----	----	ng/mL	
PFUnDA	M	9.446	-0.001	0.000	3835	200384	13C7-PFUnDA_IS	----	-0.0033	ng/mL	
13C7-PFUnDA_IS	Auto	9.446	0.001	----	200384	200384	----	----	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.446	0.001	0.724	200384	161918	13C2-PFDA_IS	----	1.2896	ng/mL	
PFNS	ND(W/B)	----	----	----	----	84233	13C8-PFOS_IS	----	----	ng/mL	
10_2_FTS	ND(W/B)	----	----	----	----	82310	13C2-8_2-FTS_IS	----	----	ng/mL	
13C2-PFDOA_IS	Auto	10.133	0.000	----	229376	229376	----	----	1.2500	ng/mL	
13C2-PFDOA	Auto	10.133	0.000	1.411	229376	161918	13C2-PFDA_IS	----	1.2849	ng/mL	
PFDOA	M	10.134	0.000	0.001	3092	229376	13C2-PFDOA_IS	----	-0.0089	ng/mL	
PFDS	ND(W/B)	----	----	----	----	84233	13C8-PFOS_IS	----	----	ng/mL	
PFTDA	Auto	10.788	-0.004	-0.636	3587	94706	13C2-PFTDA_IS	----	-0.0041	ng/mL	
11-CI-PF3OUdS	ND(W/B)	----	----	----	----	490564	13C3-HFPO-DA_IS	----	----	ng/mL	
PFOSAm	M	11.156	-0.008	-0.007	1052	204049	13C8-PFOSAm_IS	----	0.0156	ng/mL	
13C8-PFOSAm	Auto	11.163	-0.002	2.340	204049	203319	13C4-PFOS_IS	----	2.3641	ng/mL	
13C8-PFOSAm_IS	Auto	11.163	-0.002	----	204049	204049	----	----	2.5000	ng/mL	
PFTDA	M	11.427	0.002	0.003	3191	94706	13C2-PFTDA_IS	----	0.0036	ng/mL	
13C2-PFTDA	Auto	11.424	0.000	2.702	94706	161918	13C2-PFDA_IS	----	1.2287	ng/mL	
13C2-PFTDA_IS	Auto	11.424	0.000	----	94706	94706	----	----	1.2500	ng/mL	
PFDoS	ND(W/B)	----	----	----	----	84233	13C8-PFOS_IS	----	----	ng/mL	
D7-MeFOSE_IS	Auto	13.374	-0.003	----	501038	501038	----	----	25.0000	ng/mL	
D7-MeFOSE	Auto	13.374	-0.003	4.551	501038	203319	13C4-PFOS_IS	----	23.5450	ng/mL	
MeFOSE	ND(W/B)	----	----	----	----	501038	D7-MeFOSE_IS	----	----	ng/mL	
13C2-PFHXA_IS	Auto	12.639	-0.002	----	374925	374925	----	----	2.5000	ng/mL	
13C2-PFHXA	Auto	12.639	-0.002	3.917	374925	161918	13C2-PFDA_IS	----	2.4928	ng/mL	
PFHXA	M	12.641	-0.001	0.002	4743	374925	13C2-PFHXA_IS	----	0.0030	ng/mL	
D3-MeFOSA	Auto	13.685	0.000	4.862	45843	203319	13C4-PFOS_IS	----	2.6374	ng/mL	
D3-MeFOSA_IS	Auto	13.685	0.000	----	45843	45843	----	----	2.5000	ng/mL	
MeFOSA	M	13.682	-0.012	-0.003	114	45843	D3-MeFOSA_IS	----	0.0034	ng/mL	
D9-EtFOSE_IS	Auto	14.005	-0.001	----	529622	529622	----	----	25.0000	ng/mL	
D9-EtFOSE	Auto	14.005	-0.001	5.182	529622	203319	13C4-PFOS_IS	----	24.5046	ng/mL	
EtFOSE	ND(W/B)	----	----	----	----	529622	D9-EtFOSE_IS	----	----	ng/mL	
D5-EtFOSAm	Auto	14.360	-0.002	5.537	53669	203319	13C4-PFOS_IS	----	2.3191	ng/mL	
D5-EtFOSAm_IS	Auto	14.360	-0.002	----	53669	53669	----	----	2.5000	ng/mL	
EtFOSAm	ND(W/B)	----	----	----	----	53669	D5-EtFOSAm_IS	----	----	ng/mL	
PFODA	Auto	13.777	0.002	1.138	3338	374925	13C2-PFHXA_IS	----	0.0394	ng/mL	

Flag ID key: IRr: Ion Ratio (Relative)



240118_015 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_015 (continued)

13C2-4_2 FTS
Conc. 5.0518

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. ----
R#1 0.00 (34.14)
R#2 0.00 (29.06)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. ----
R#1 0.00 (47.53)
R#2 0.00 (46.72)

Q 329.10>80.90 (-)

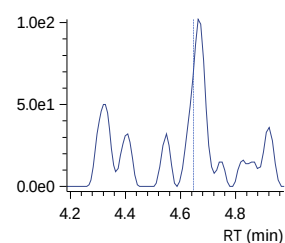
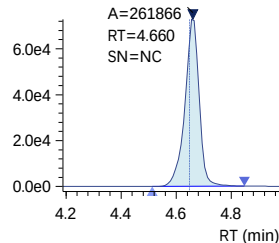
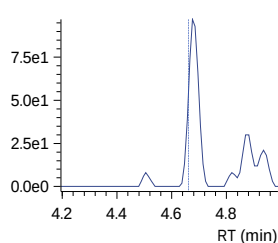
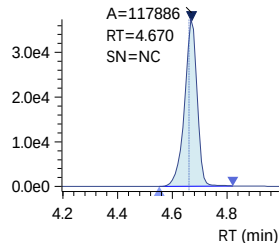
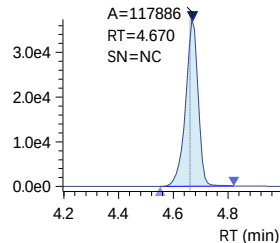
3.74e4 ISTD 329.10>80.90 (-)

3.74e4 Q 327.10>307.00 (-)

9.70e1 ISTD 302.10>79.90 (-)

7.29e4 Q 298.70>79.90 (-)

1.02e2

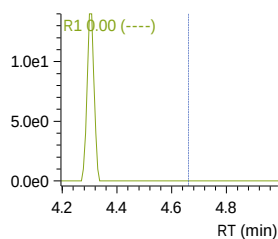


R1 327.10>80.90 (-)

1.40e1

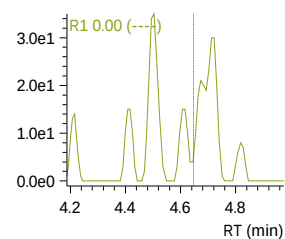
R1 298.70>98.80 (-)

3.50e1



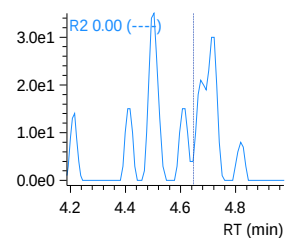
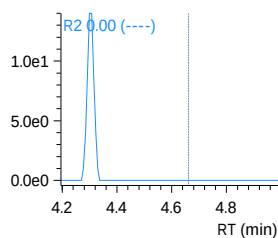
R2 327.10>80.90 (-)

1.40e1



R2 298.70>98.80 (-)

3.50e1





240118_015 (continued)

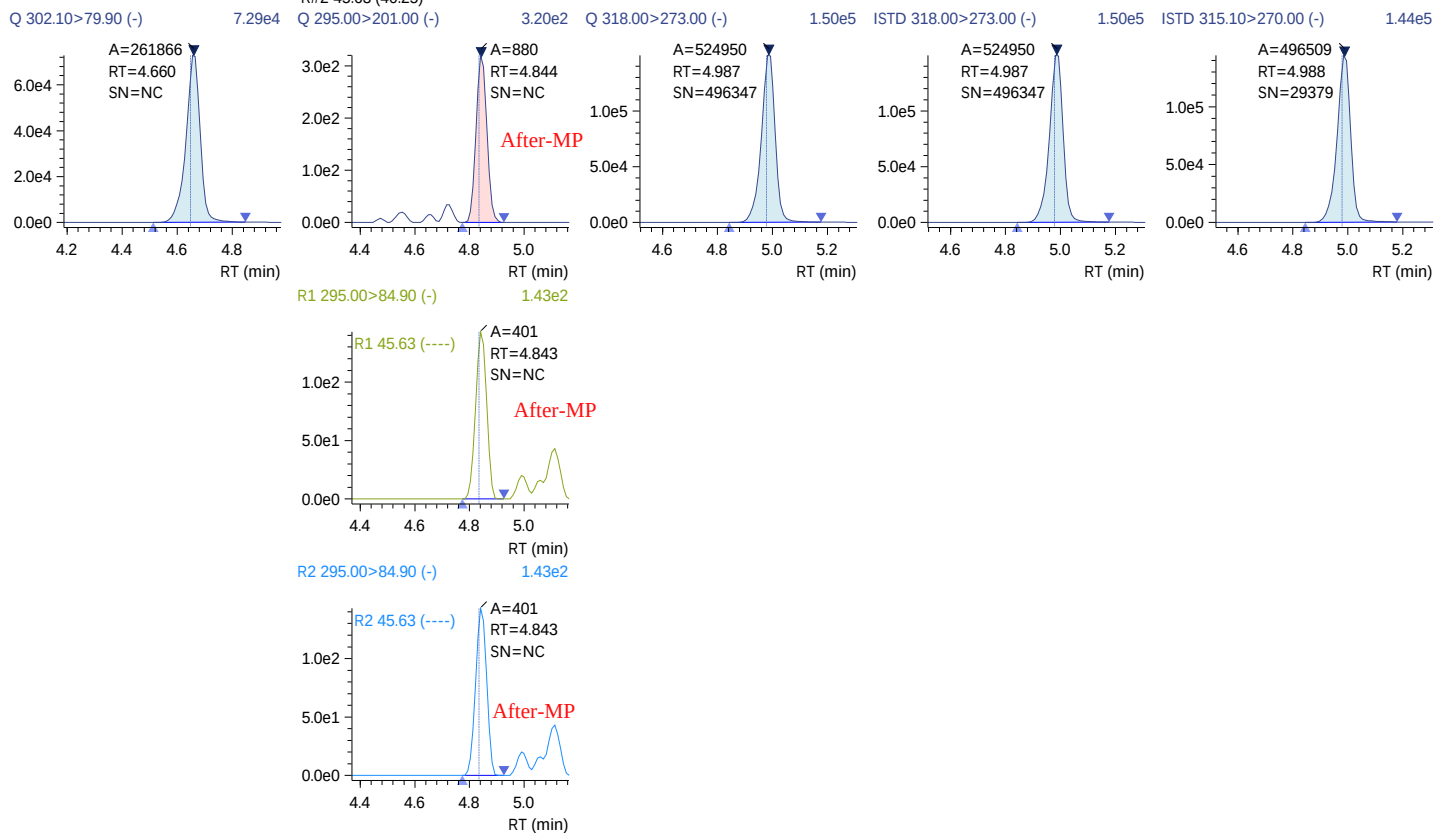
13C3-PFBS
Conc. 2.7212

NFDHA
Conc. 0.0076
R#1 45.63 (37.88)
R#2 45.63 (40.25)

13C5-PFHxA
Conc. 2.5087

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_015 (continued)

PFHxA
Conc. 0.0024

PFEESA
Conc. ----
R#1 0.00 (5.88)
R#2 0.00 (6.11)

13C3-HFPO-DA
Conc. 10.0931

13C3-HFPO-DA_IS
Conc. 10.0000

HFPO-DA
Conc. ----
R#1 0.00 (63.80)
R#2 0.00 (65.61)

Q 313.00>269.00 (-)

1.08e3

Q 314.80>135.00 (-)

1.48e2

Q 286.90>168.90 (-)

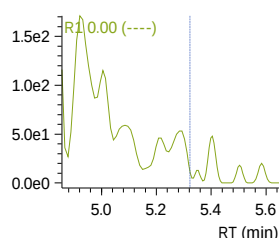
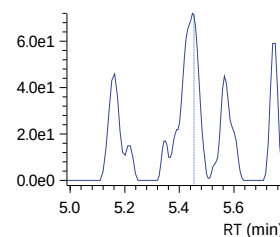
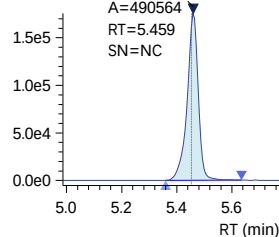
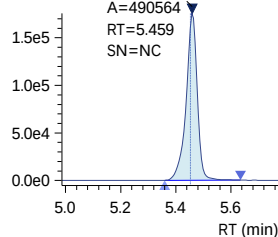
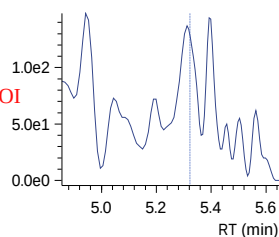
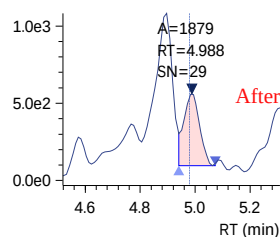
1.76e5

ISTD 286.90>168.90 (-)

1.76e5

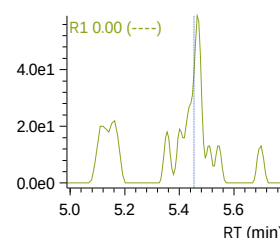
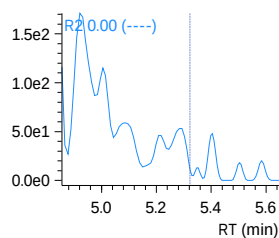
Q 284.90>168.90 (-)

7.20e1



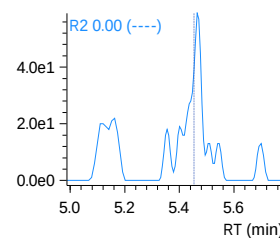
R2 314.80>82.90 (-)

1.71e2



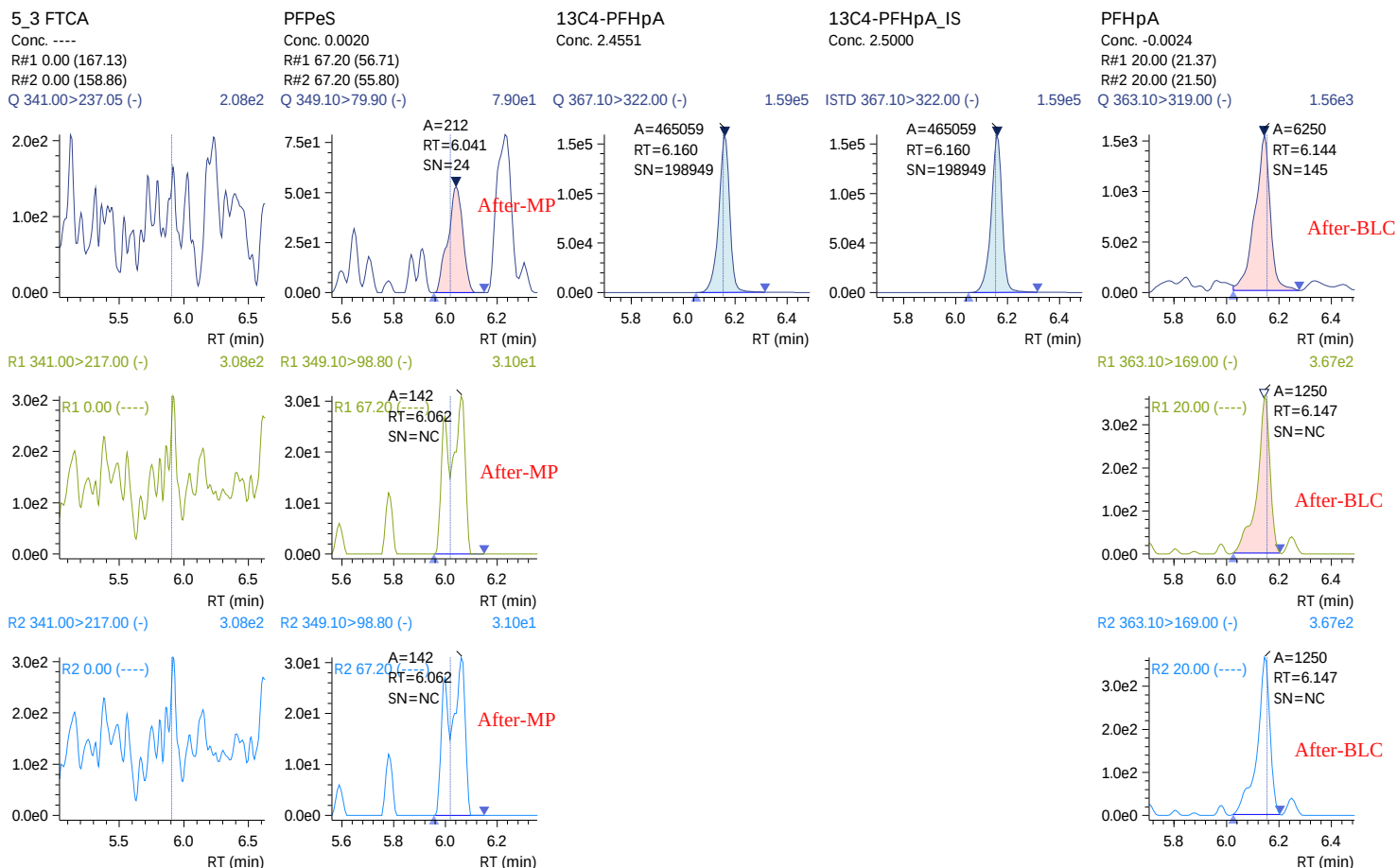
R2 284.90>184.90 (-)

5.90e1





240118_015 (continued)

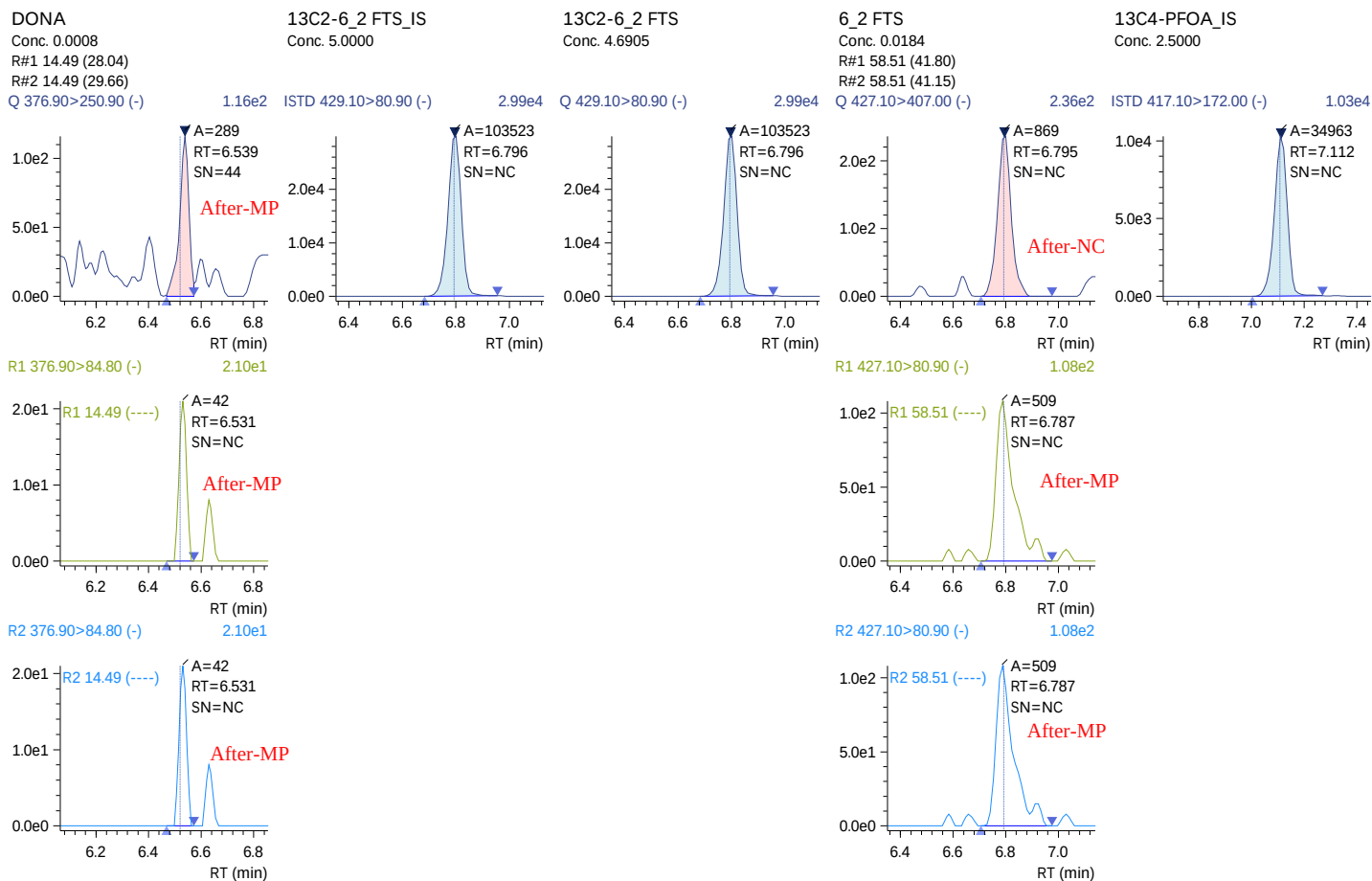


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_015 (continued)



J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_015 (continued)

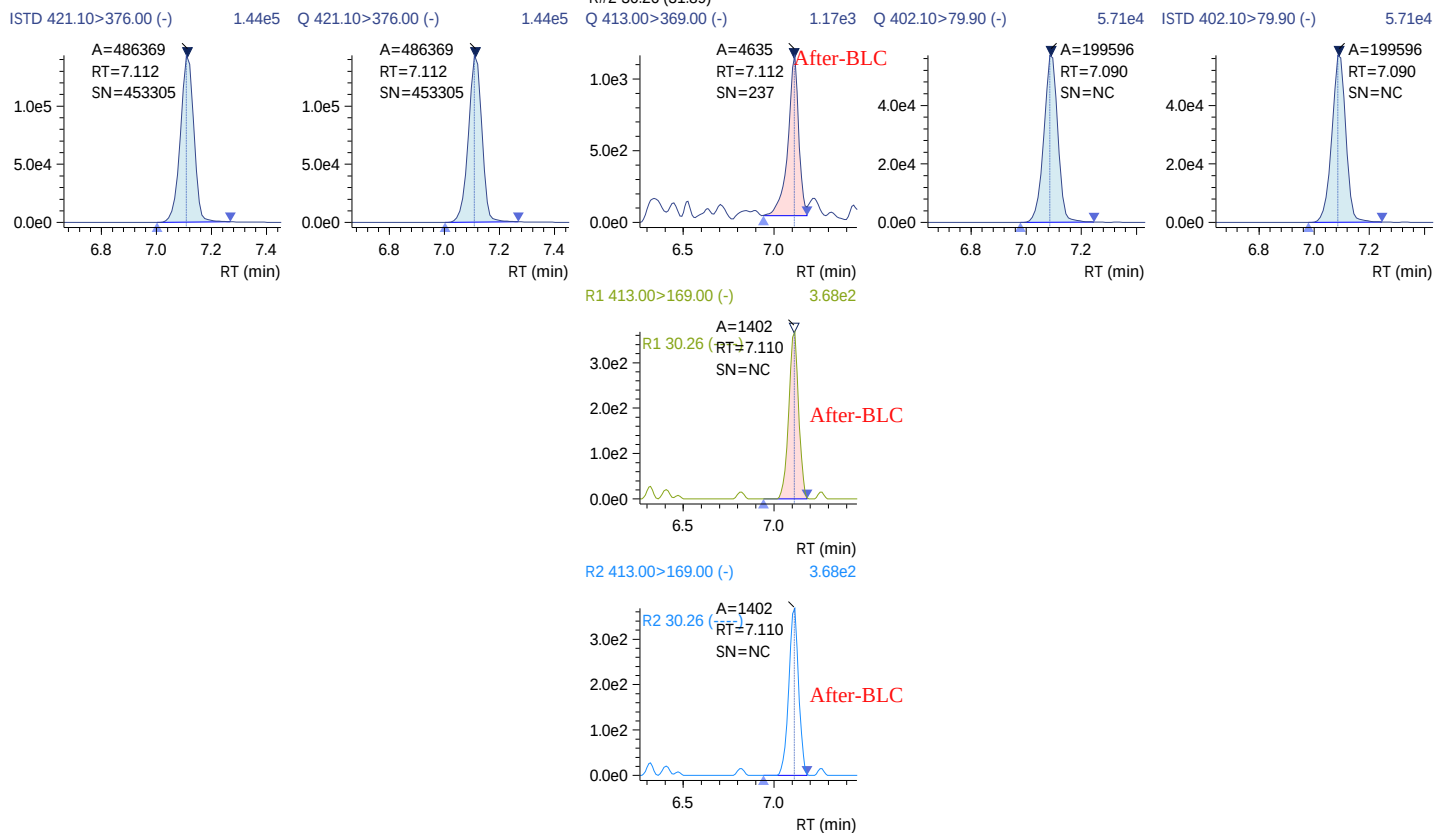
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.4889

PFOA
Conc. -0.0068
R#1 30.26 (29.05)
R#2 30.26 (31.89)

13C3-PFHxS
Conc. 2.7423

13C3-PFHxS_IS
Conc. 2.5000

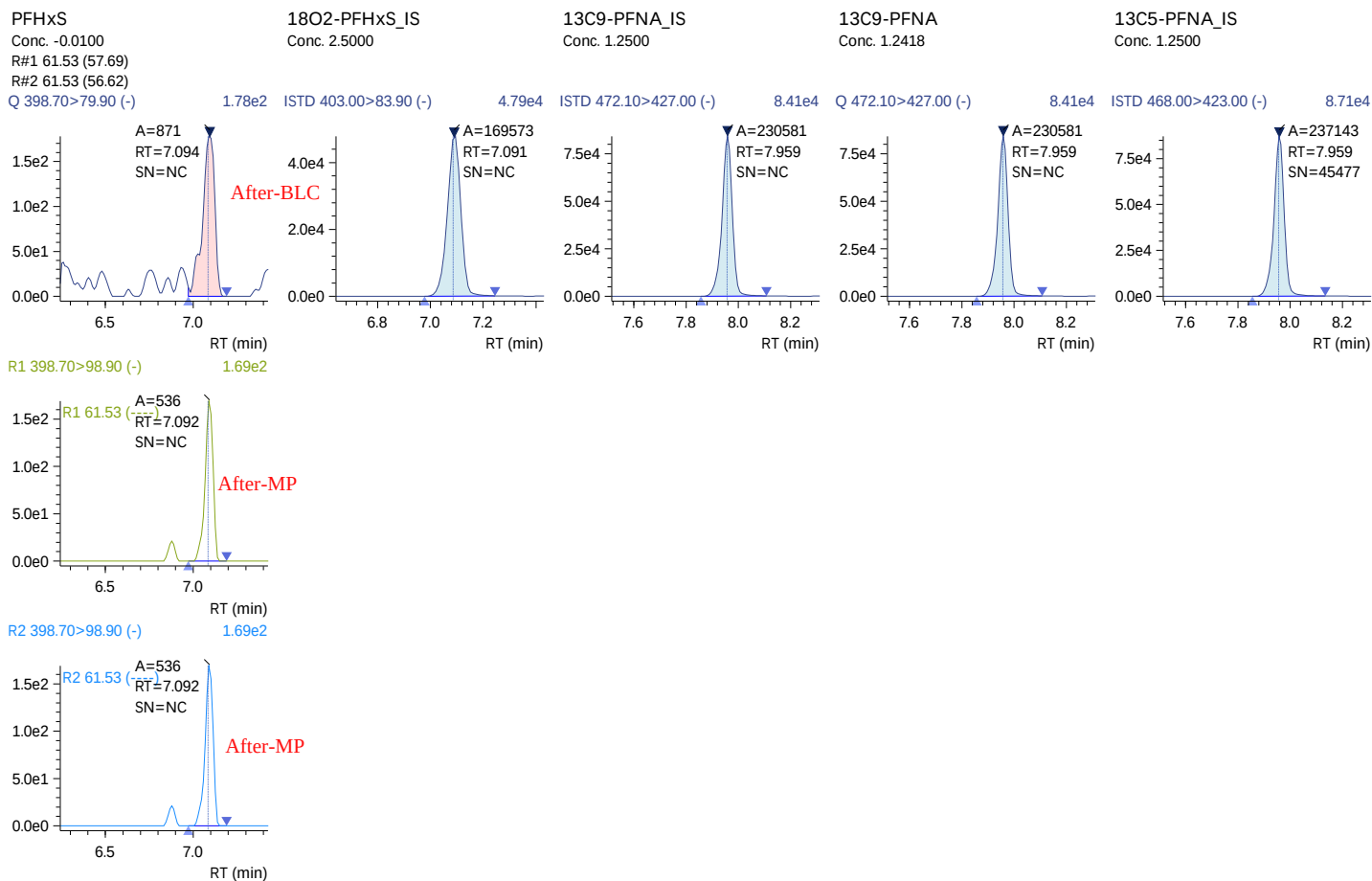


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.

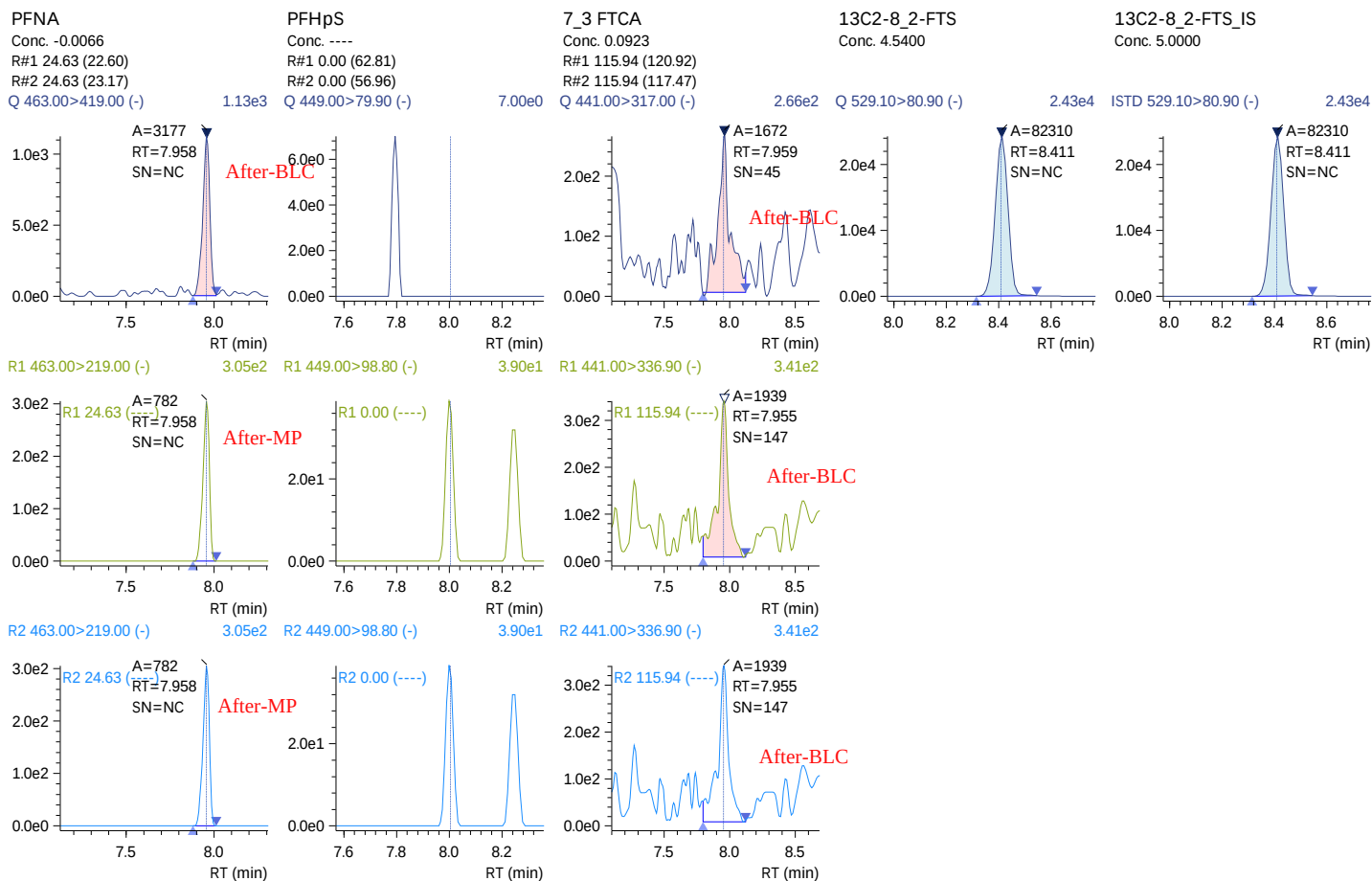


240118_015 (continued)





240118_015 (continued)

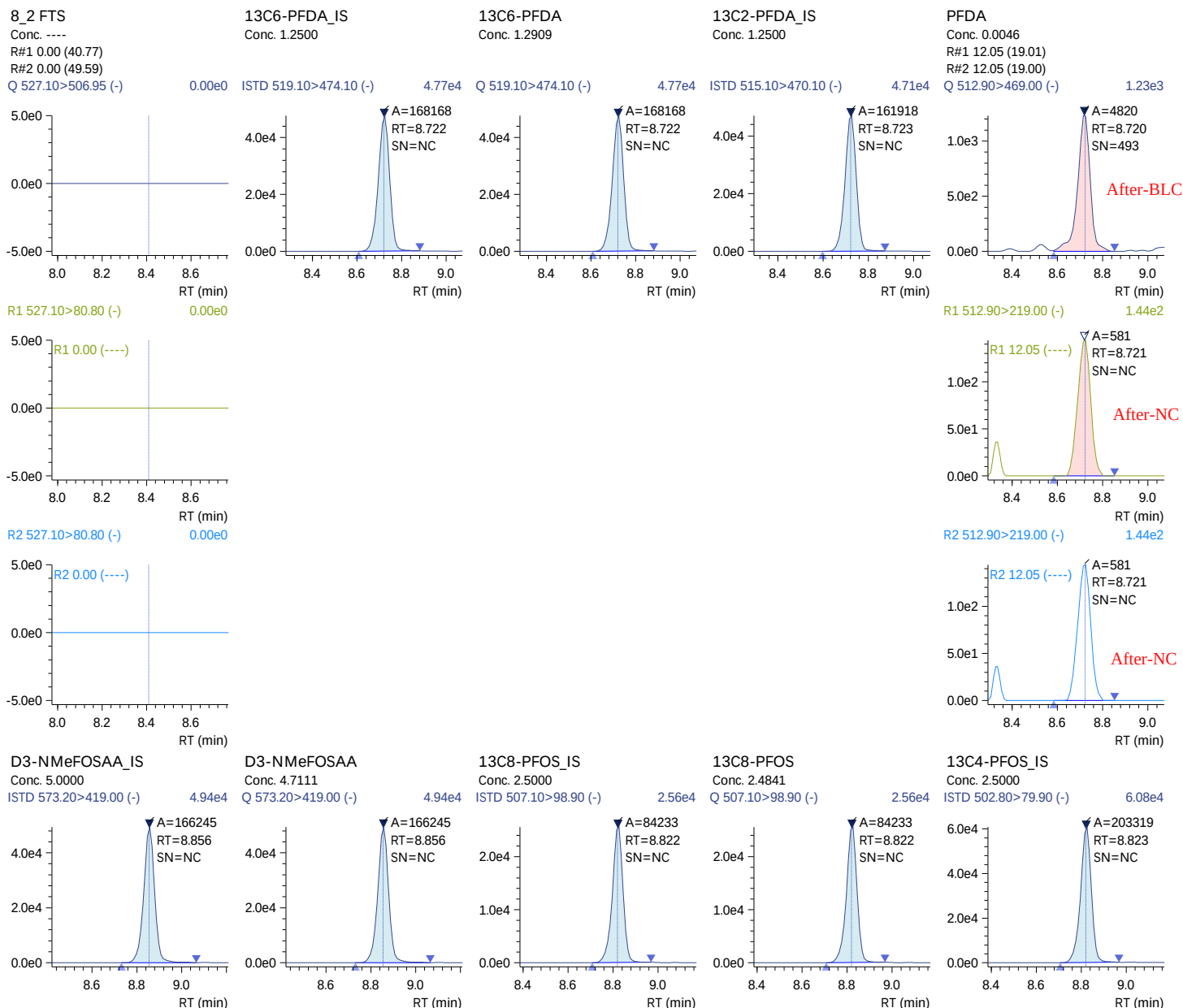


J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_015 (continued)

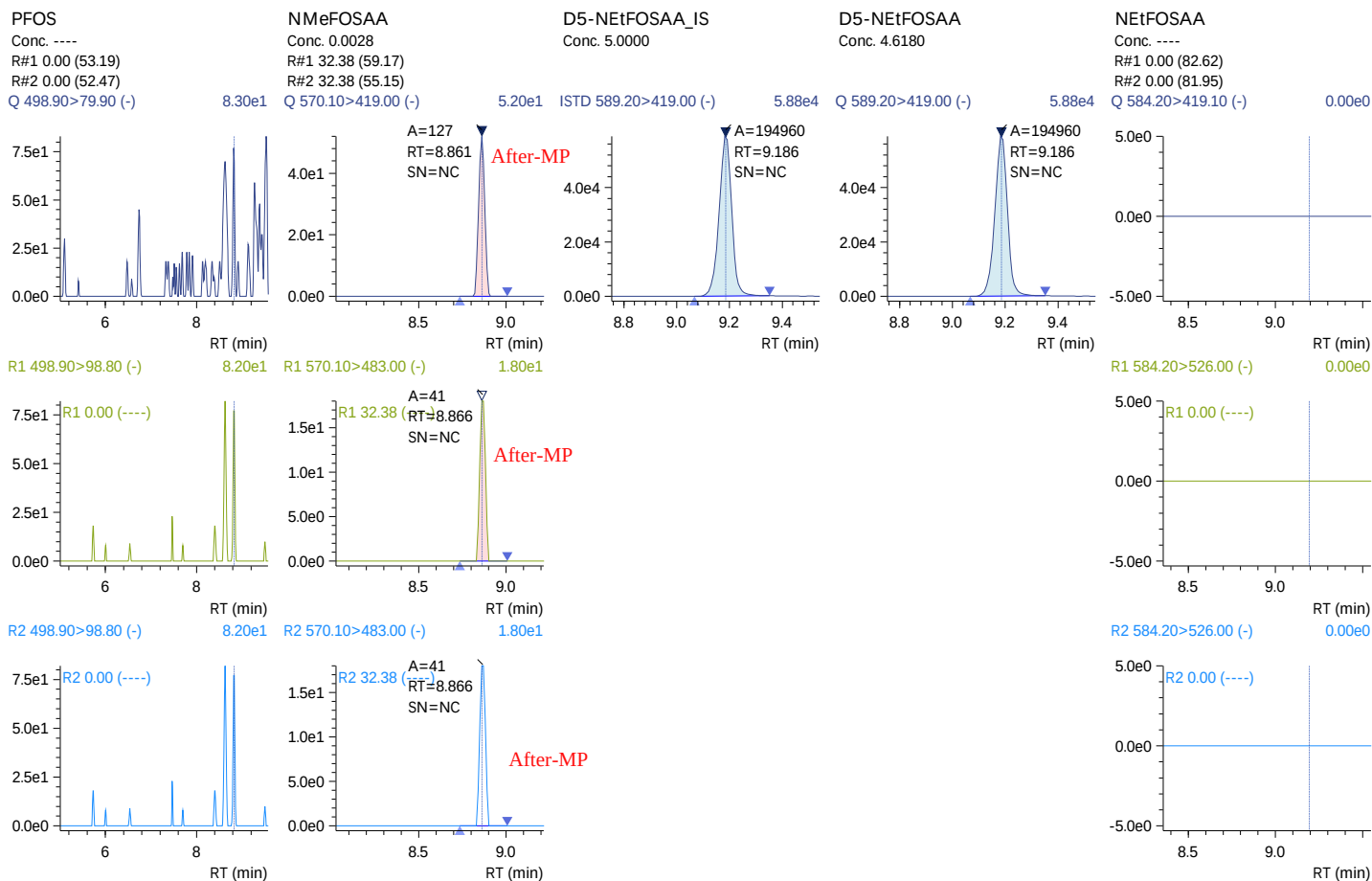


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_015 (continued)



J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_015 (continued)

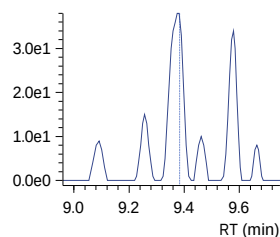
9-Cl-PF3ONS

Conc. ----

R#1 0.00 (31.76)

R#2 0.00 (32.76)

Q 530.80>351.00 (-)



R1 532.80>353.00 (-)

1.82e2

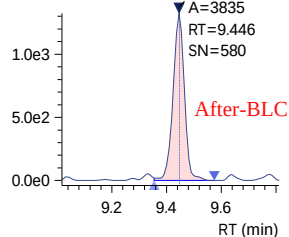
PFUnDA

Conc. -0.0033

R#1 11.02 (12.31)

R#2 11.02 (13.12)

Q 563.10>519.00 (-)



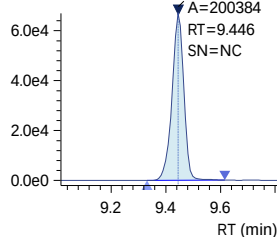
R1 563.10>269.10 (-)

1.44e2

13C7-PFUnDA_IS

Conc. 1.2500

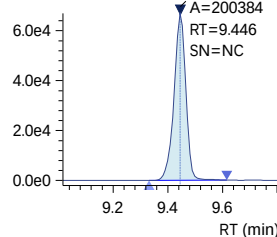
ISTD 570.00>525.10 (-)



13C7-PFUnDA

Conc. 1.2896

Q 570.00>525.10 (-)



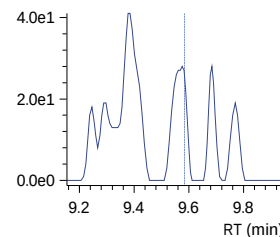
PFNS

Conc. ----

R#1 0.00 (63.31)

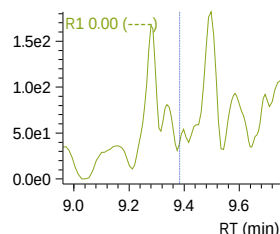
R#2 0.00 (65.22)

Q 548.80>79.90 (-)



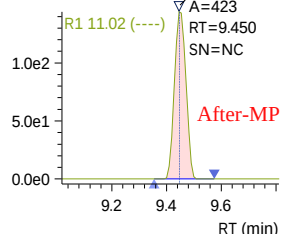
R1 548.80>98.80 (-)

1.70e1



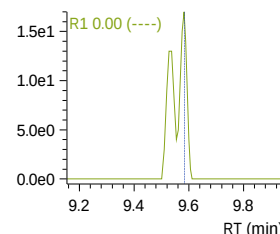
R2 532.80>353.00 (-)

1.82e2



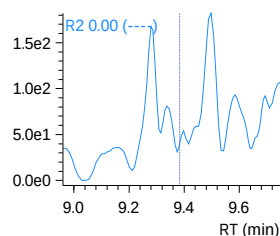
R2 563.10>269.10 (-)

1.44e2



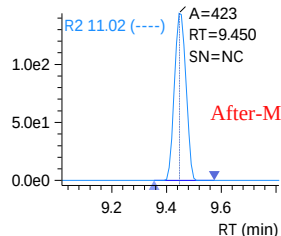
R2 548.80>98.80 (-)

1.70e1



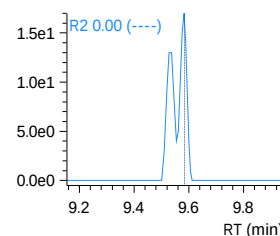
R2 532.80>353.00 (-)

1.82e2



R2 563.10>269.10 (-)

1.44e2

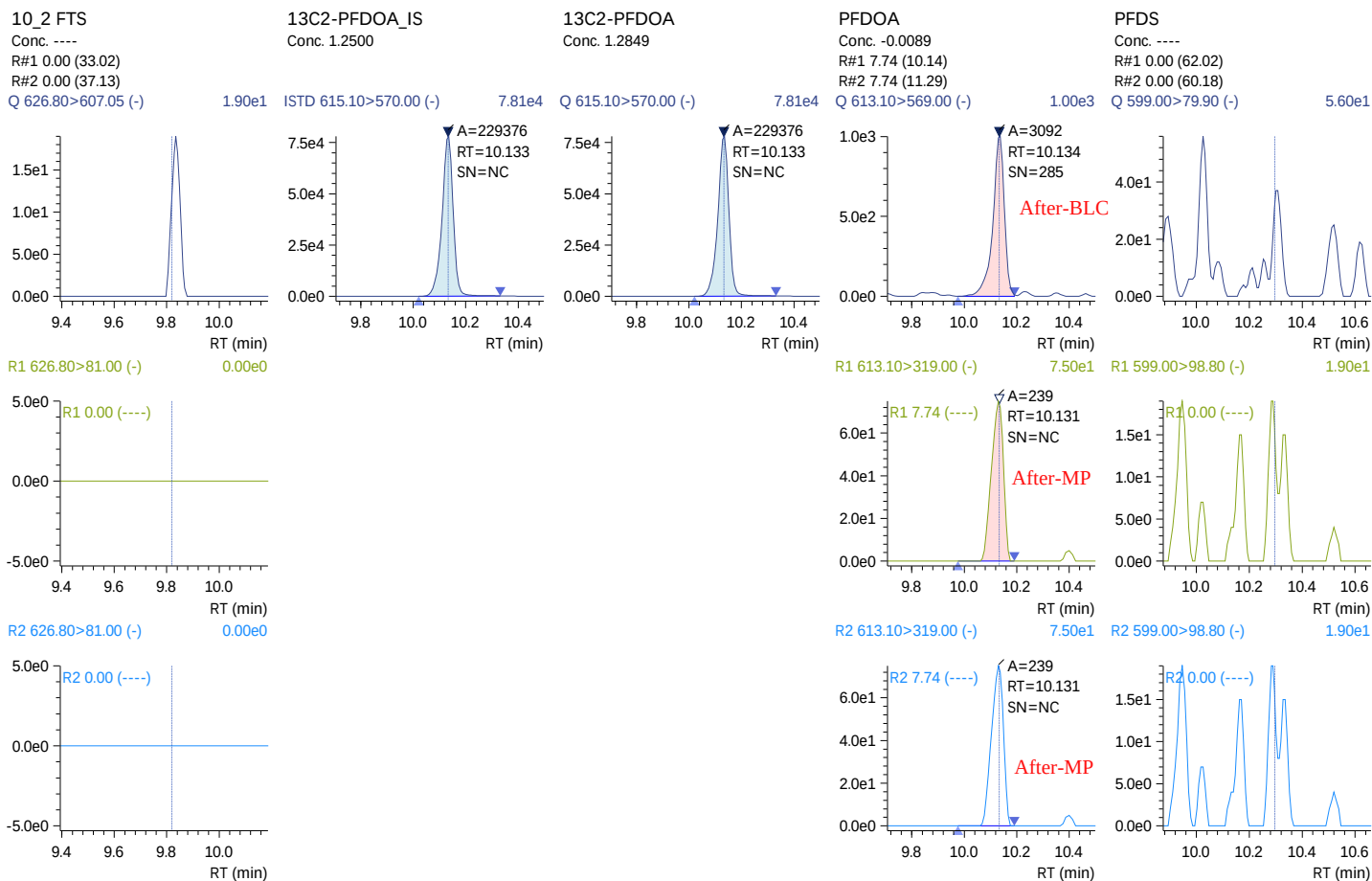


R2 548.80>98.80 (-)

1.70e1



240118_015 (continued)

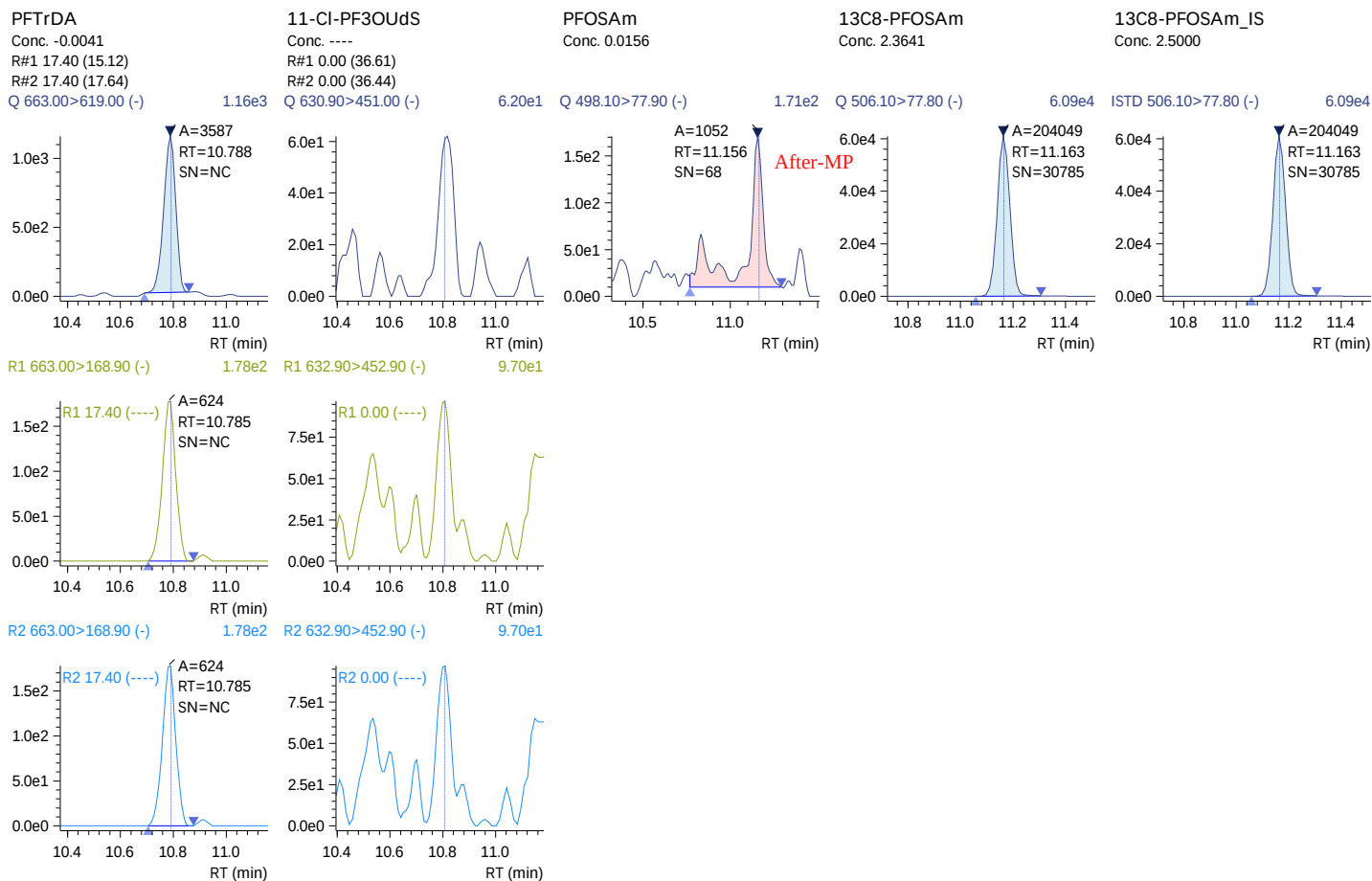


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_015 (continued)

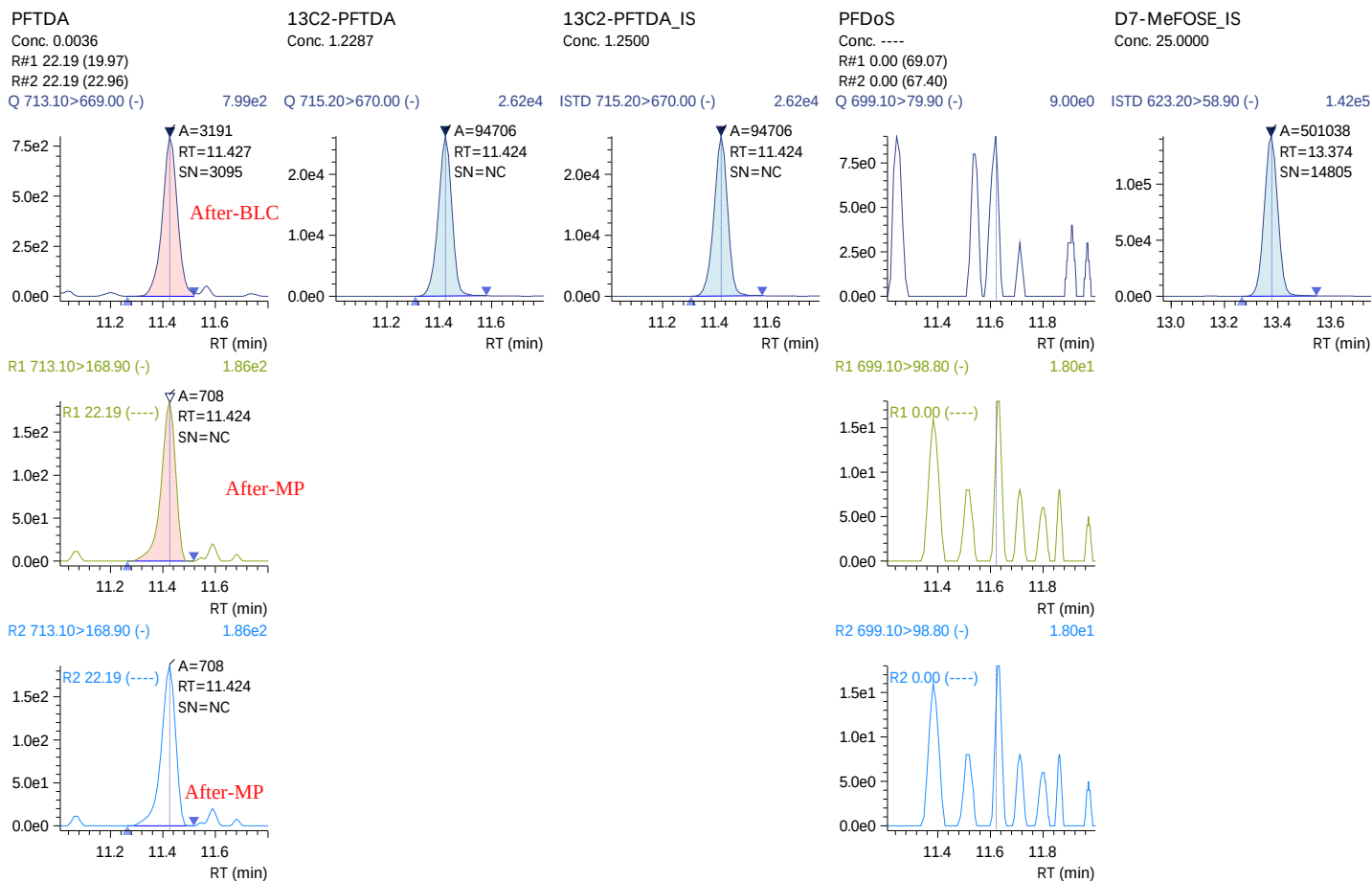


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
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240118_015 (continued)



J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.damlp

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_015 (continued)

D7-MeFOSE
Conc. 23.5450

MeFOSE
Conc. ----

13C2-PFHXA_IS
Conc. 2.5000

13C2-PFHXA
Conc. 2.4928

PFHXA
Conc. 0.0030

R#1 14.73 (11.64)

R#2 14.73 (13.90)

Q 623.20>58.90 (-)

1.42e5

Q 616.10>59.00 (-)

5.40e1

ISTD 815.00>770.05 (-)

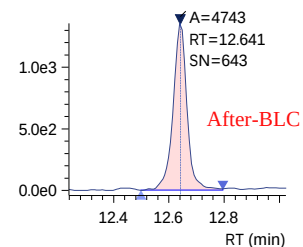
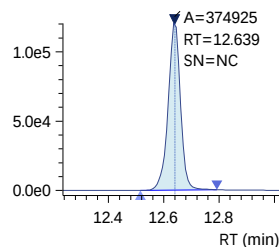
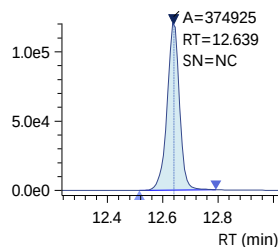
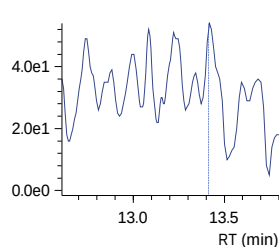
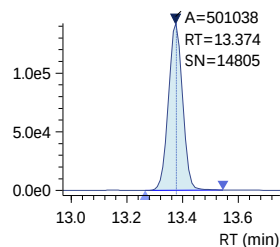
1.21e5

Q 815.00>770.05 (-)

1.21e5

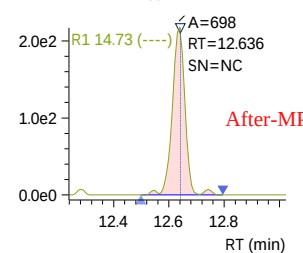
Q 813.00>768.95 (-)

1.36e3



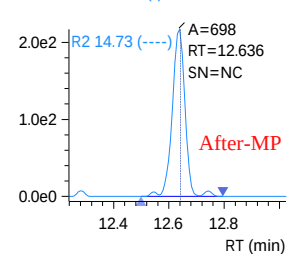
R1 813.00>218.95 (-)

2.17e2



R2 813.00>218.95 (-)

2.17e2





240118_015 (continued)

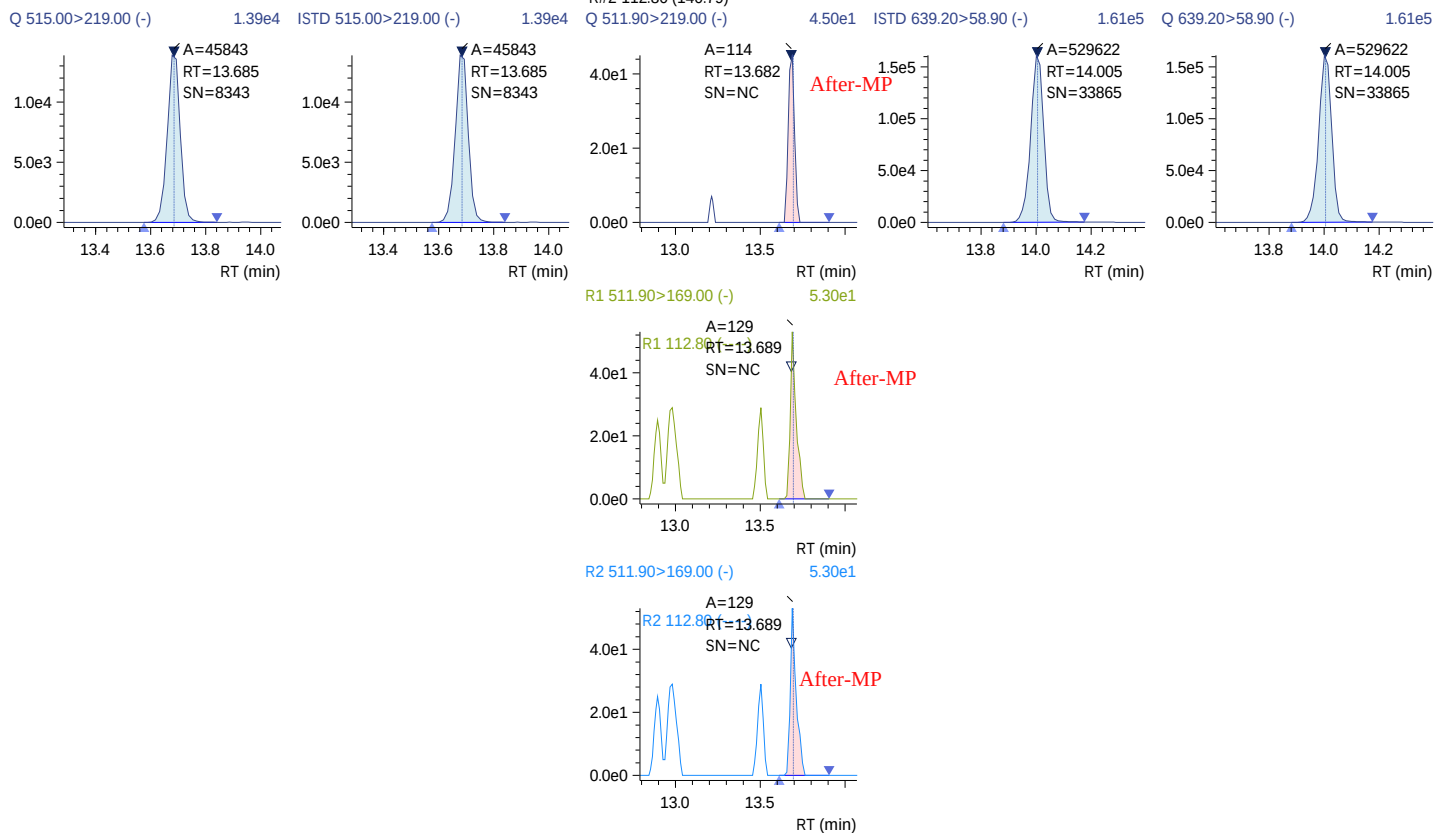
D3-MeFOSA
Conc. 2.6374

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. 0.0034
R#1 112.80 (149.05)
R#2 112.80 (140.79)

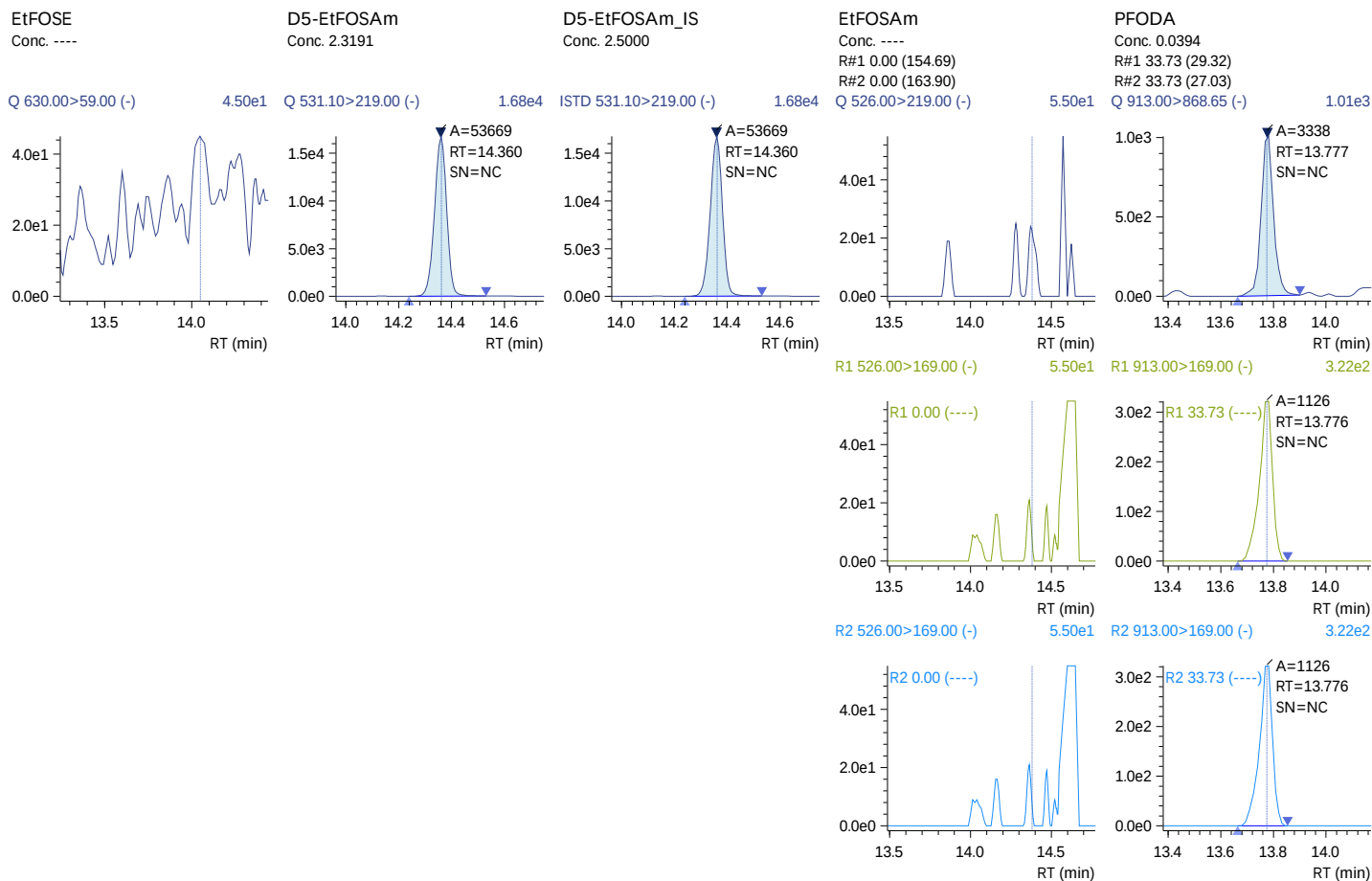
D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 24.5046





240118_015 (continued)



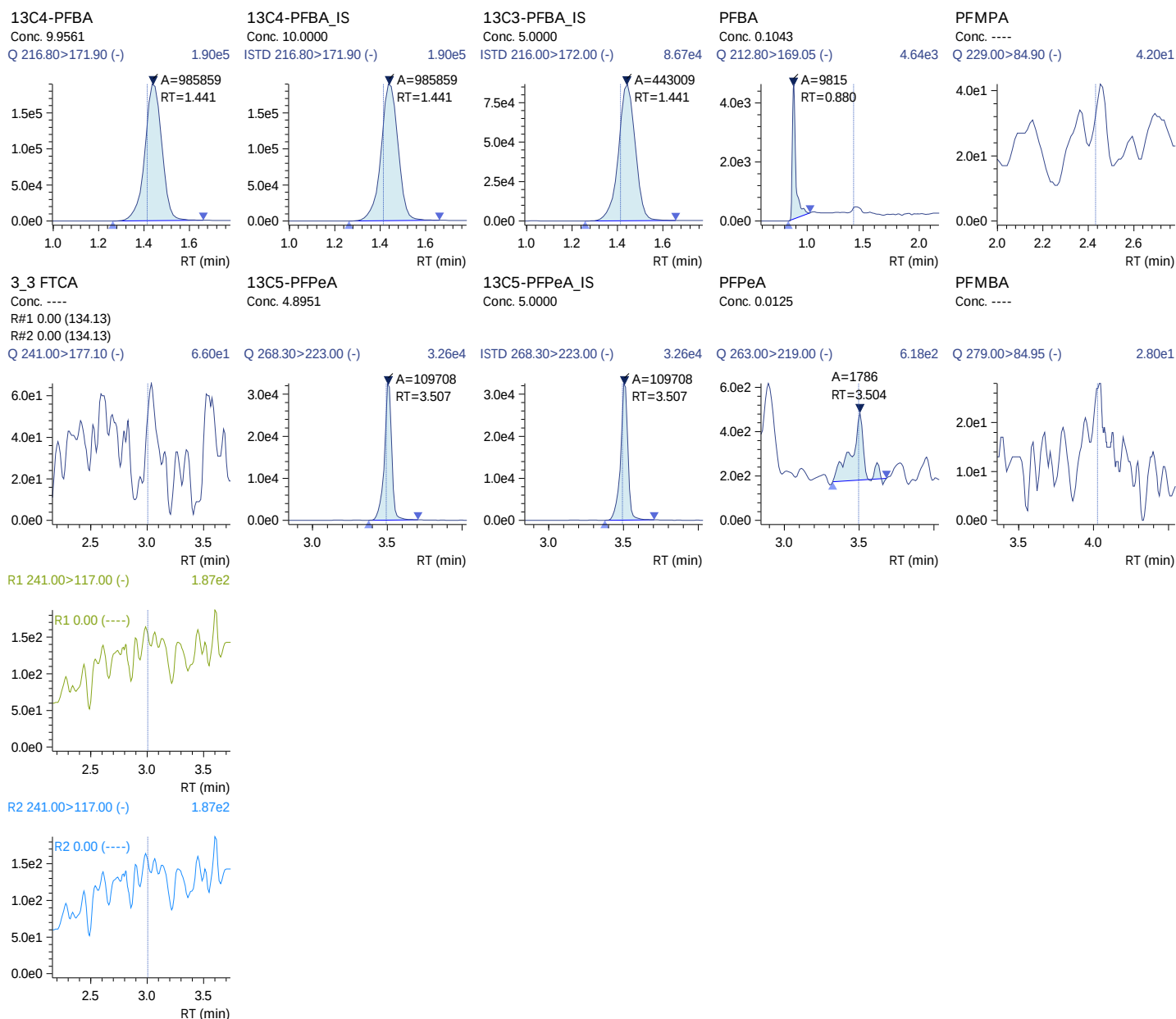
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240118_015

Sample ID: 1633 CCB
Date Acquired: 1/18/2024 5:33:48 PM
Acquired by: System Administrator
Data File: 240118_015
Vial: 54 | Inj. Volume: 10.0000uL | Tray: 1





240118_015 (continued)

13C2-4_2 FTS
Conc. 5.0518

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. ----
R#1 0.00 (34.14)
R#2 0.00 (34.14)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. ----
R#1 0.00 (47.53)
R#2 0.00 (47.53)

Q 329.10>80.90 (-)

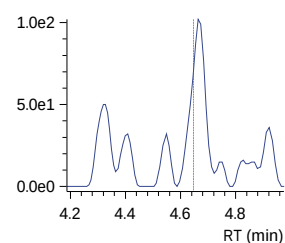
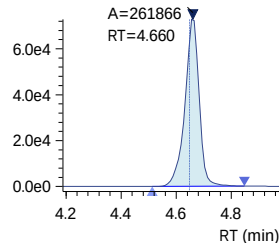
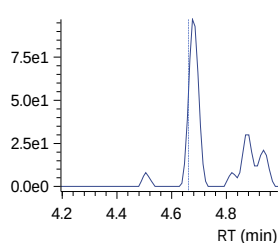
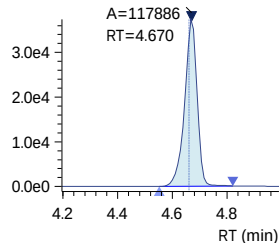
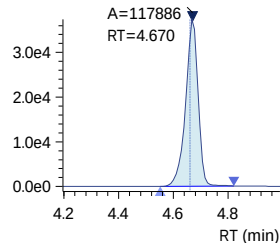
3.74e4 ISTD 329.10>80.90 (-)

3.74e4 Q 327.10>307.00 (-)

9.70e1 ISTD 302.10>79.90 (-)

7.29e4 Q 298.70>79.90 (-)

1.02e2

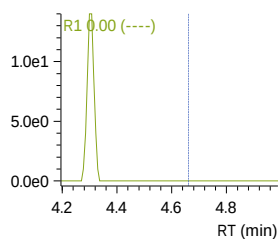


R1 327.10>80.90 (-)

1.40e1

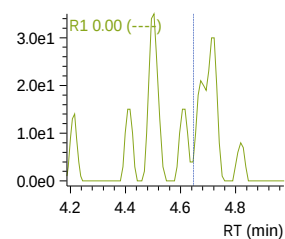
R1 298.70>98.80 (-)

3.50e1



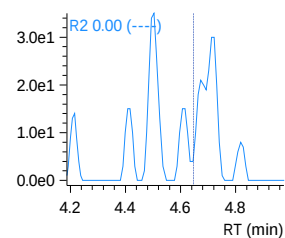
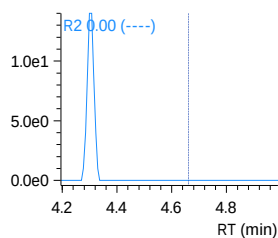
R2 327.10>80.90 (-)

1.40e1



R2 298.70>98.80 (-)

3.50e1





240118_015 (continued)

13C3-PFBS
 Conc. 2.7212

NFDHA
 Conc. ----
 R#1 0.00 (37.88)
 R#2 0.00 (37.88)

13C5-PFHxA
 Conc. 2.5087

13C5-PFHxA_IS
 Conc. 2.5000

13C2-PFHxA_IS
 Conc. 2.5000

Q 302.10>79.90 (-)

7.29e4

Q 295.00>201.00 (-)

3.20e2

Q 318.00>273.00 (-)

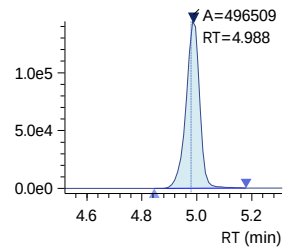
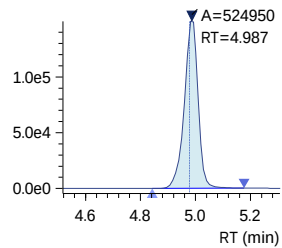
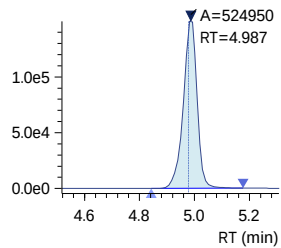
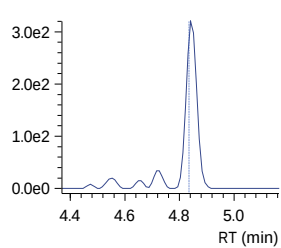
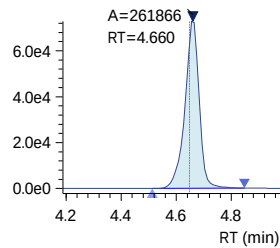
1.50e5

ISTD 318.00>273.00 (-)

1.50e5

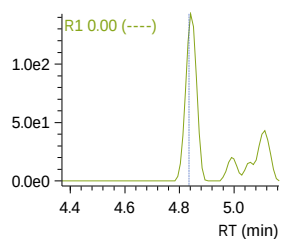
ISTD 315.10>270.00 (-)

1.44e5



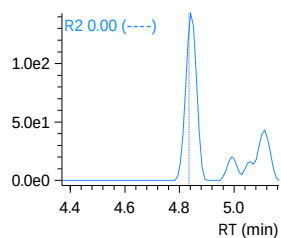
R1 295.00>84.90 (-)

1.43e2



R2 295.00>84.90 (-)

1.43e2





240118_015 (continued)

PFHxA
Conc. 0.0281

PFEESA
Conc. ----
R#1 0.00 (5.88)
R#2 0.00 (5.88)

13C3-HFPO-DA
Conc. 10.0931

13C3-HFPO-DA_IS
Conc. 10.0000

HFPO-DA
Conc. ----
R#1 0.00 (63.80)
R#2 0.00 (63.80)

Q 313.00>269.00 (-)

1.08e3

Q 314.80>135.00 (-)

1.48e2

Q 286.90>168.90 (-)

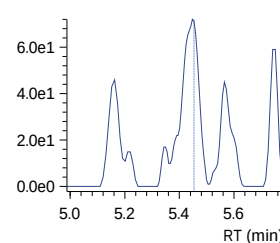
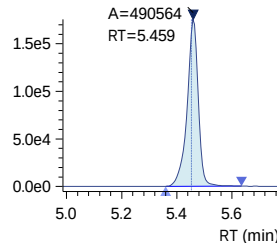
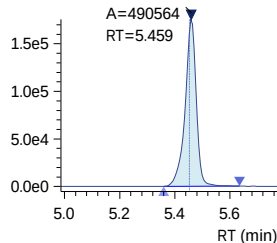
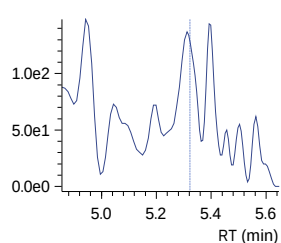
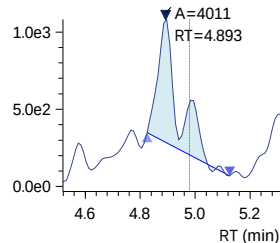
1.76e5

ISTD 286.90>168.90 (-)

1.76e5

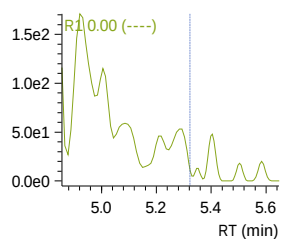
Q 284.90>168.90 (-)

7.20e1



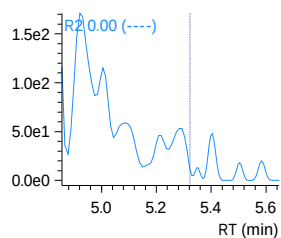
R1 314.80>82.90 (-)

1.71e2



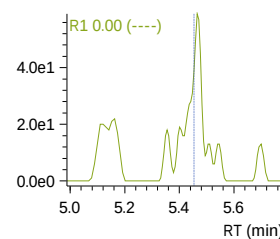
R2 314.80>82.90 (-)

1.71e2



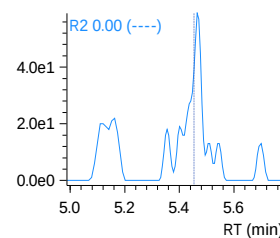
R1 284.90>184.90 (-)

5.90e1



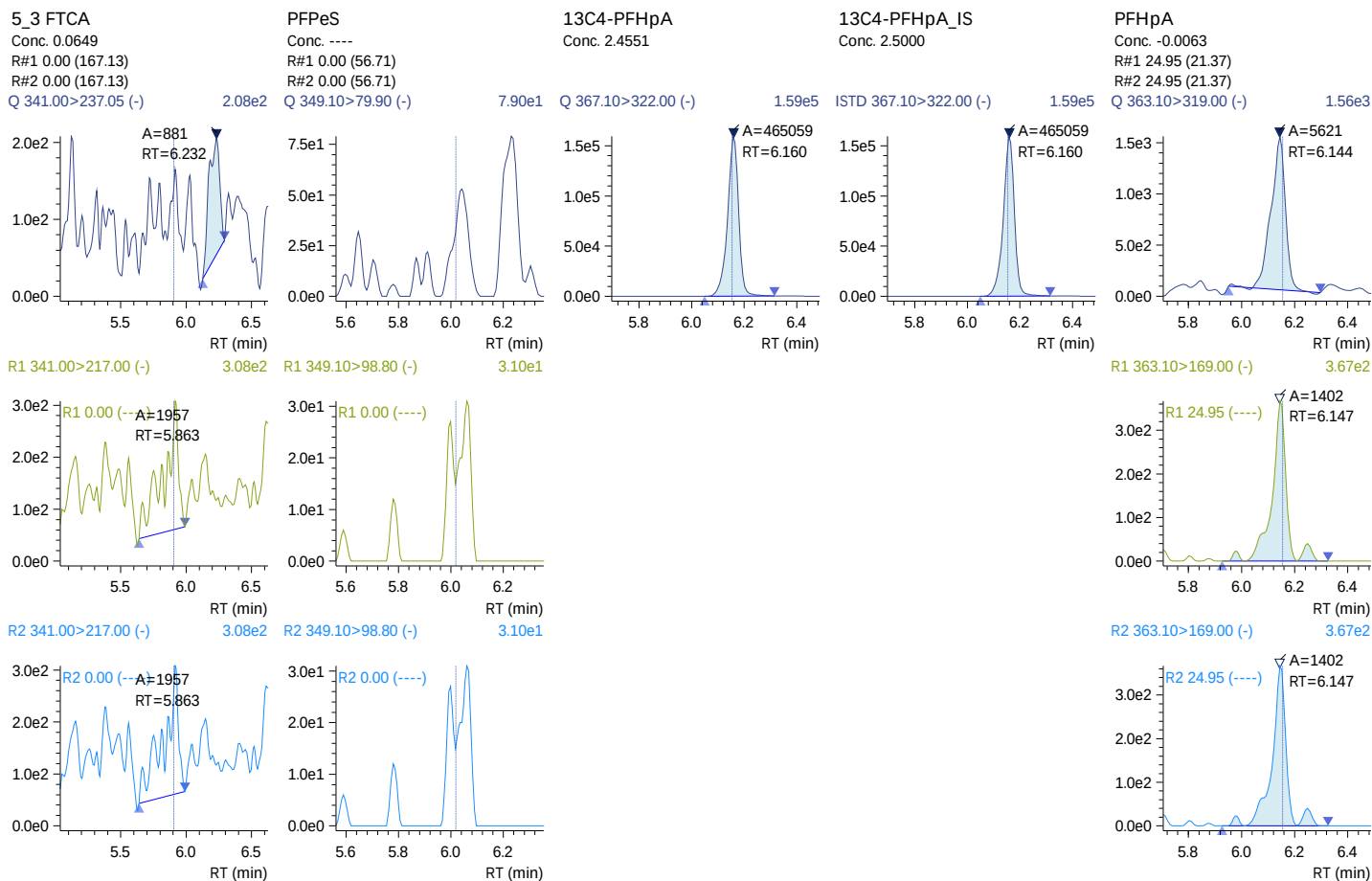
R2 284.90>184.90 (-)

5.90e1



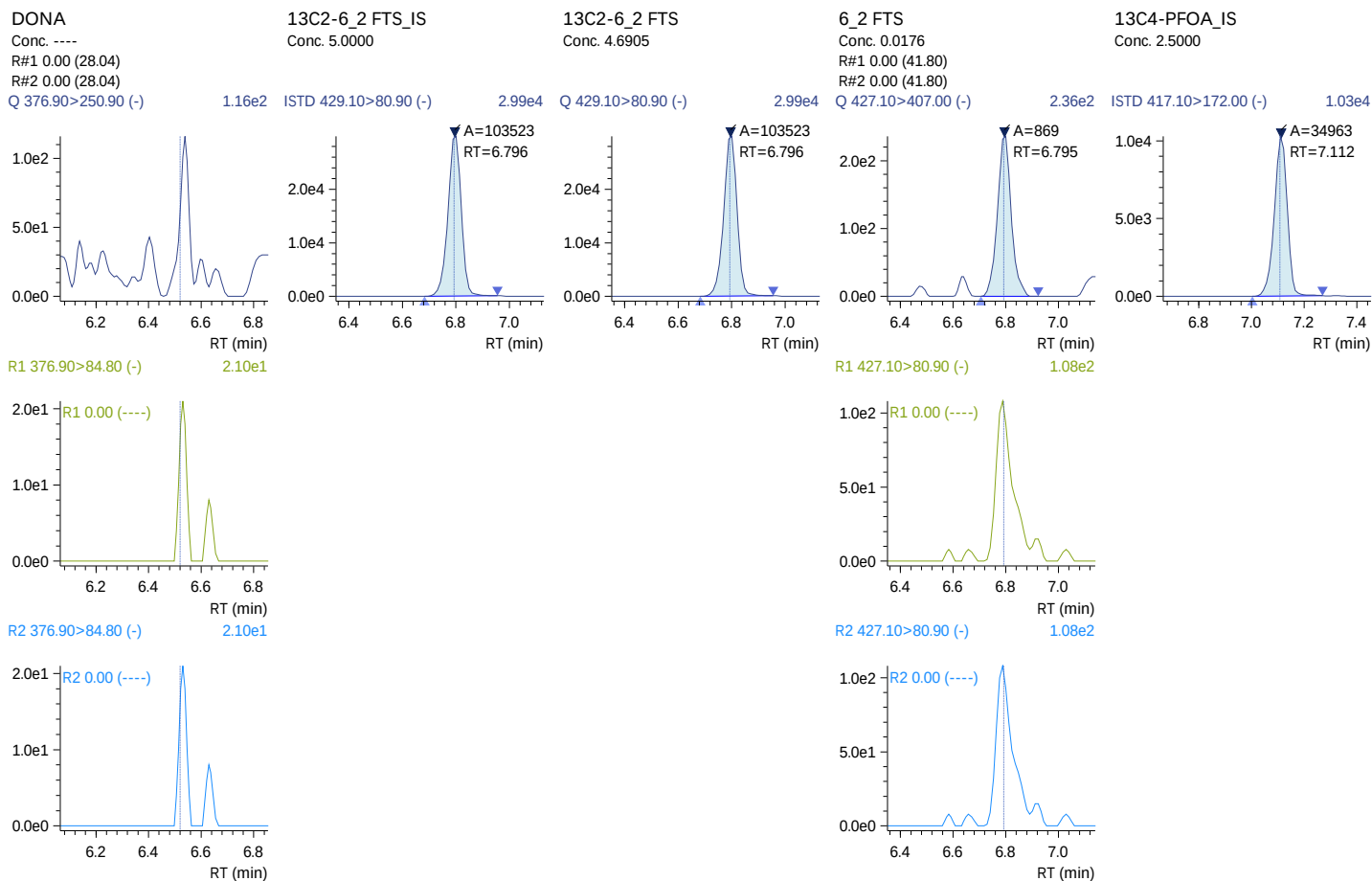


240118_015 (continued)





240118_015 (continued)





240118_015 (continued)

13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.4889

PFOA
Conc. -0.0057
R#1 29.34 (29.05)
R#2 29.34 (29.05)

13C3-PFHxS
Conc. 2.7423

13C3-PFHxS_IS
Conc. 2.5000

ISTD 421.10>376.00 (-)

1.44e5

Q 421.10>376.00 (-)

1.44e5

Q 413.00>369.00 (-)

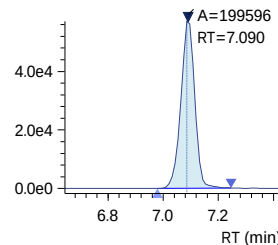
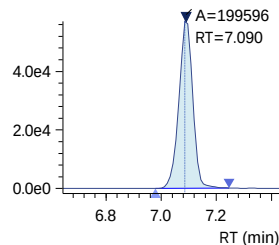
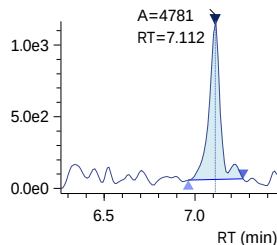
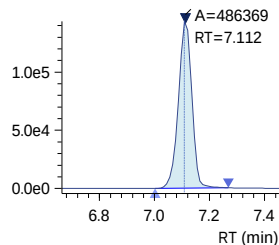
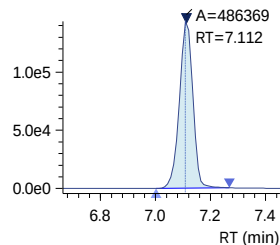
1.17e3

Q 402.10>79.90 (-)

5.71e4

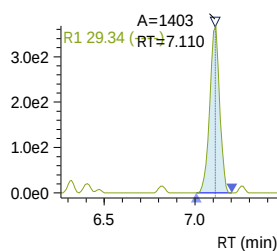
ISTD 402.10>79.90 (-)

5.71e4



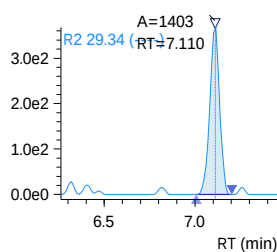
R1 413.00>169.00 (-)

3.68e2



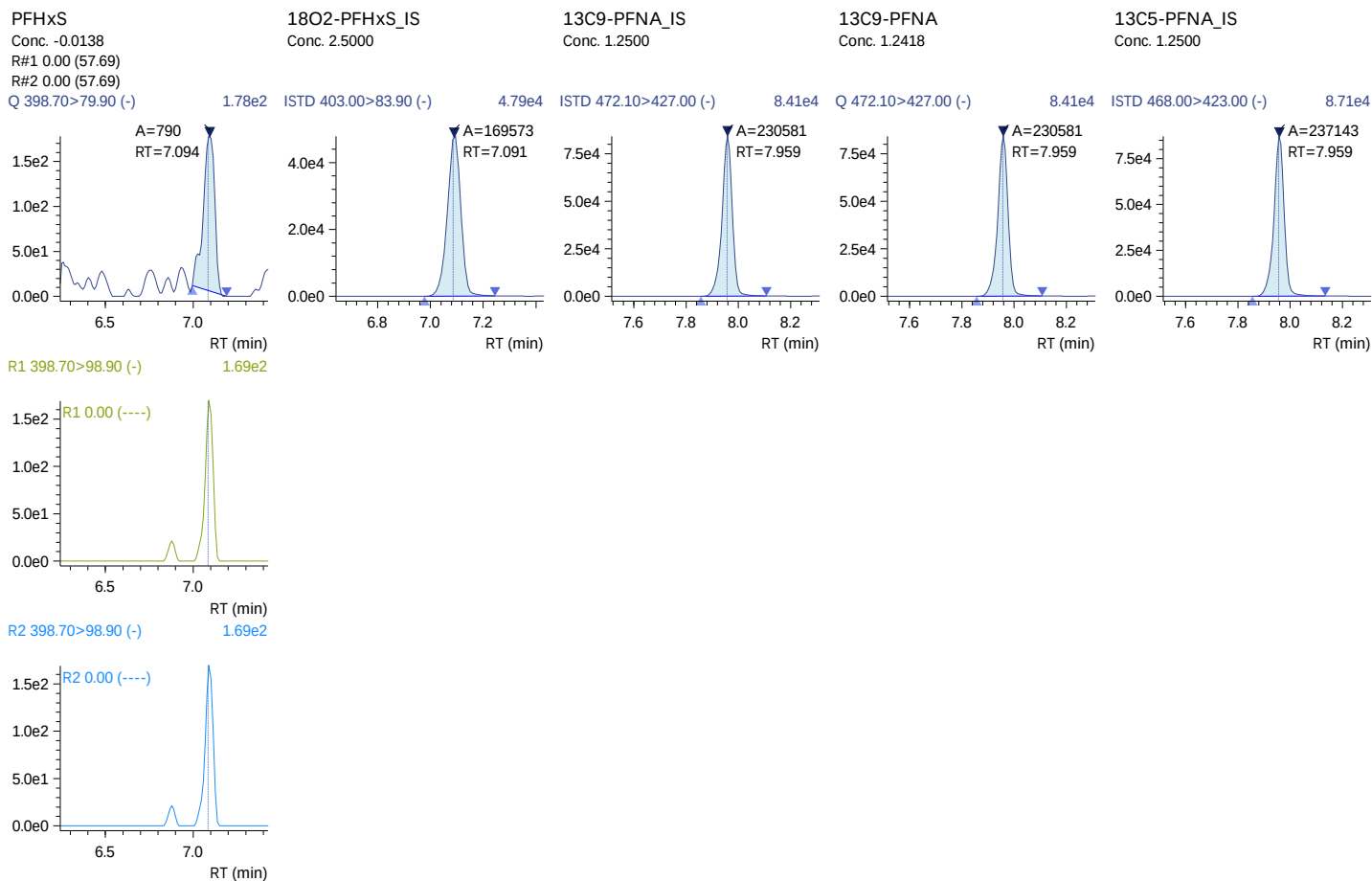
R2 413.00>169.00 (-)

3.68e2



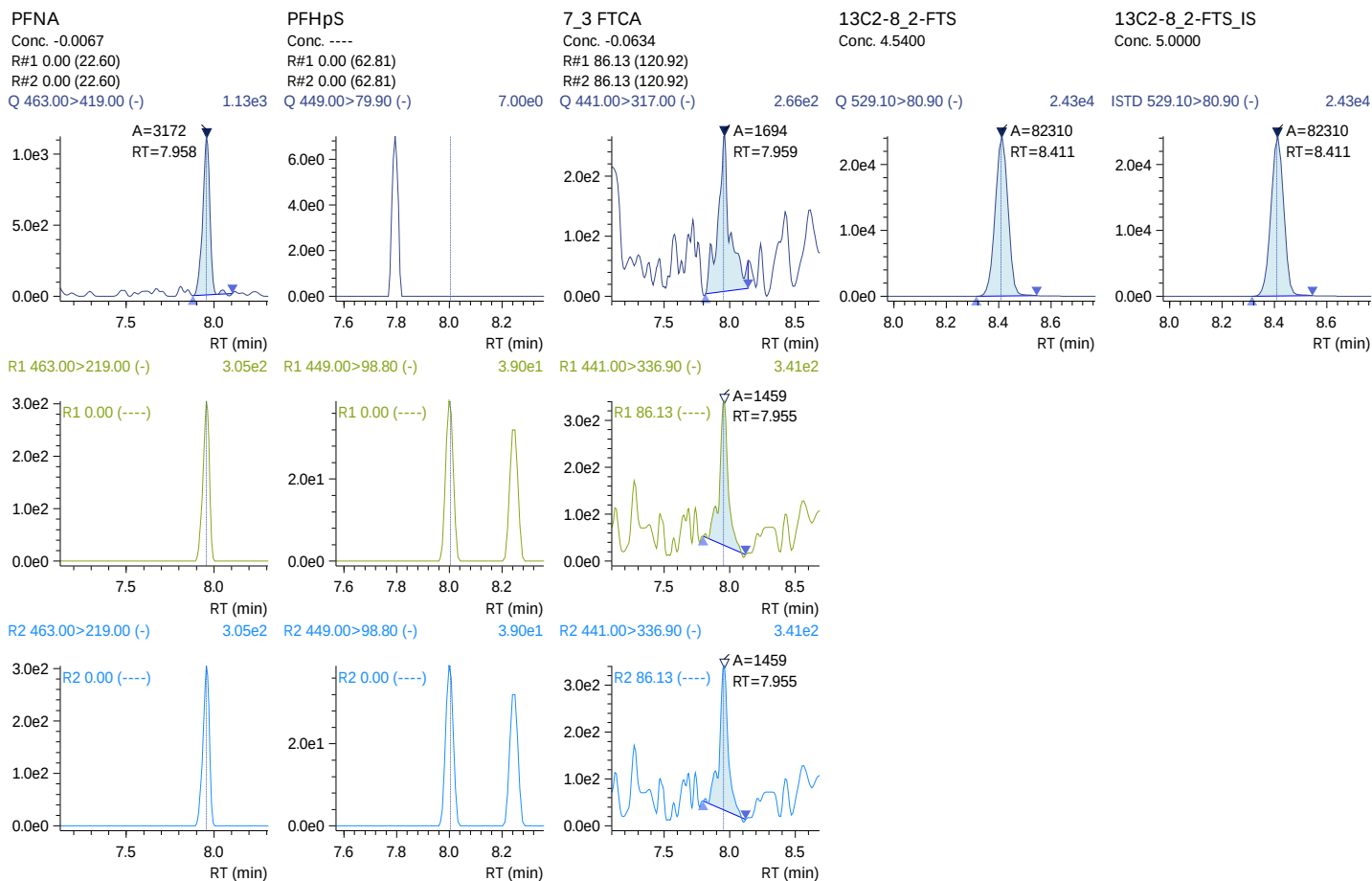


240118_015 (continued)



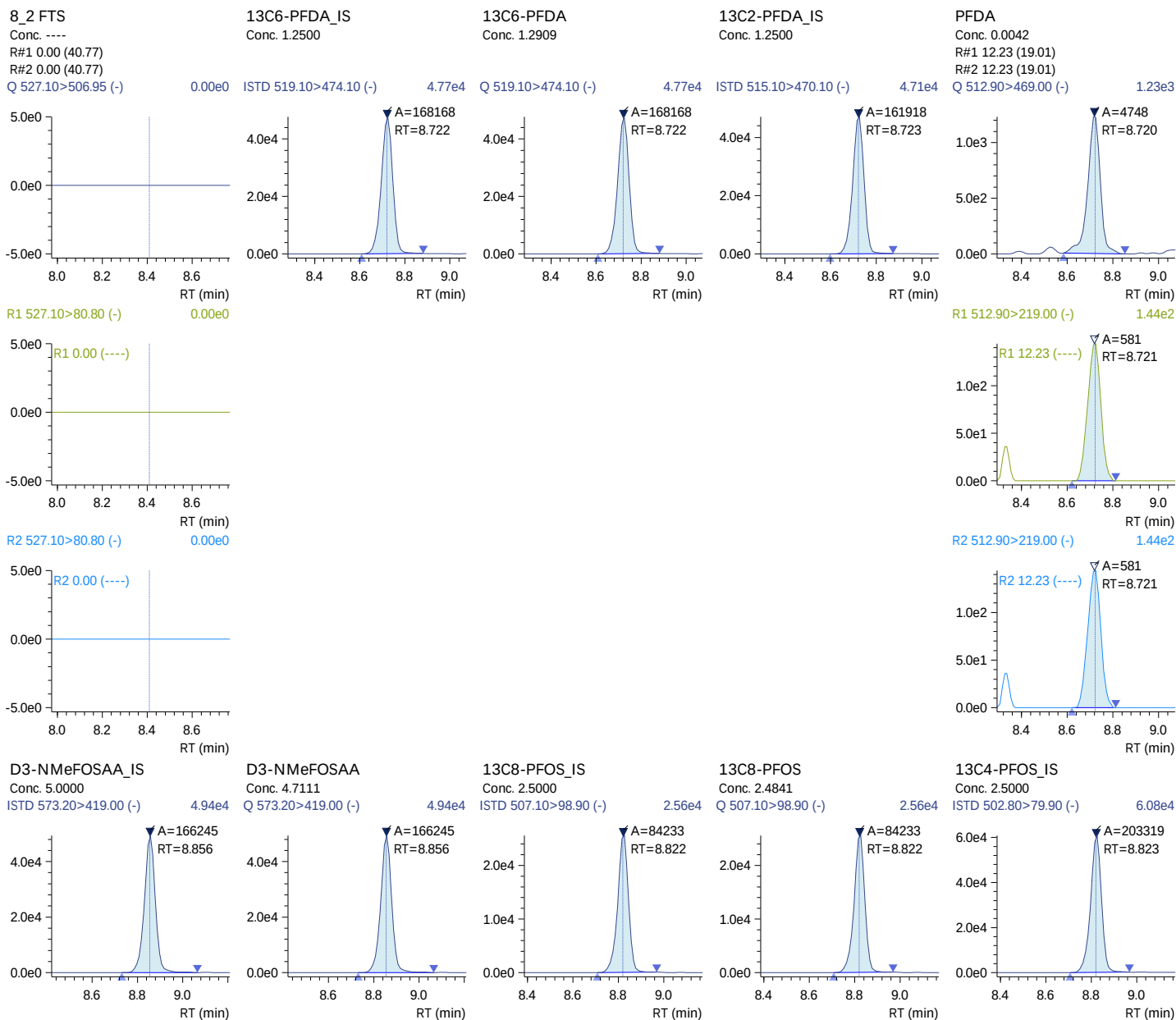


240118_015 (continued)



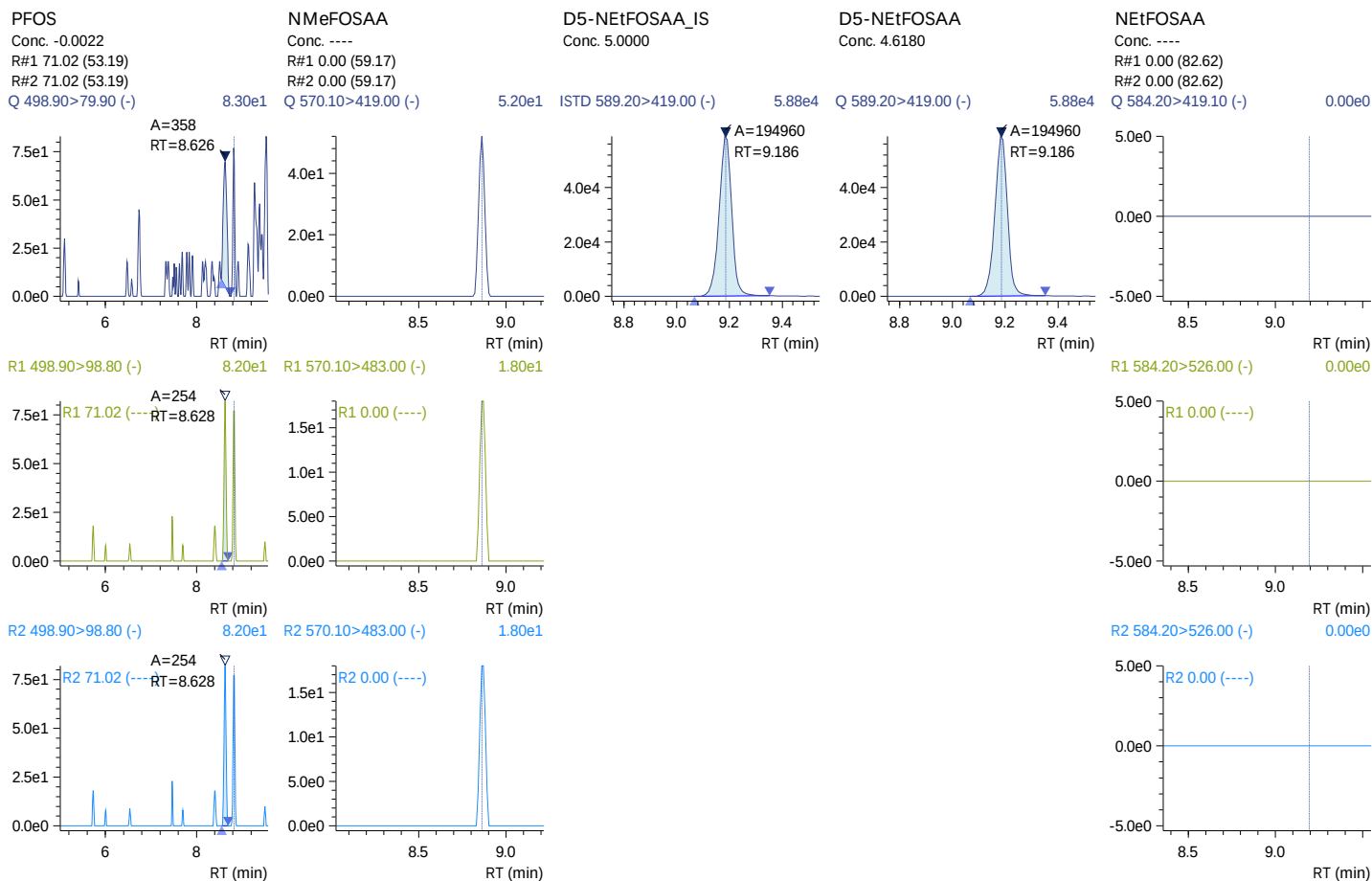


240118_015 (continued)





240118_015 (continued)





240118_015 (continued)

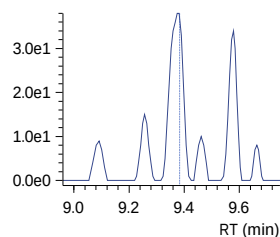
9-Cl-PF3ONS

Conc. ----

R#1 0.00 (31.76)

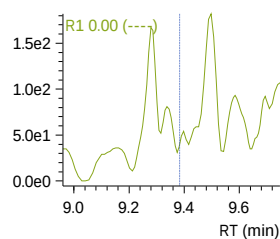
R#2 0.00 (31.76)

Q 530.80>351.00 (-)



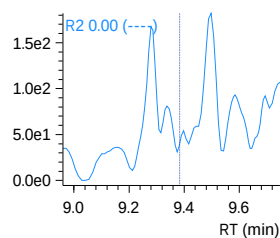
R1 532.80>353.00 (-)

1.82e2



R2 532.80>353.00 (-)

1.82e2



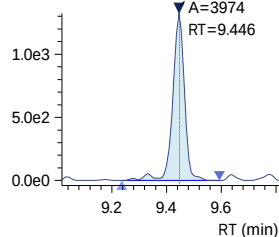
PFUnDA

Conc. -0.0023

R#1 0.00 (12.31)

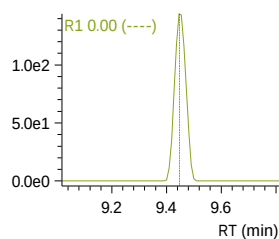
R#2 0.00 (12.31)

Q 563.10>519.00 (-)



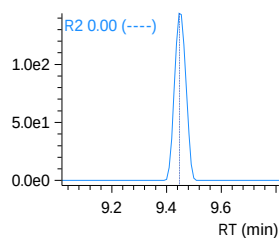
R1 563.10>269.10 (-)

1.44e2



R2 563.10>269.10 (-)

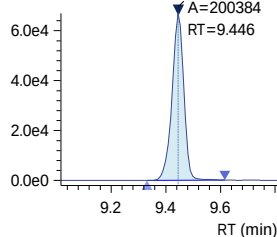
1.44e2



13C7-PFUnDA_IS

Conc. 1.2500

ISTD 570.00>525.10 (-)



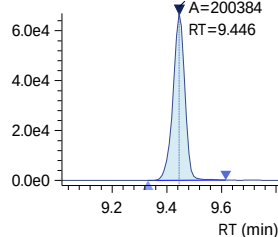
6.70e4



13C7-PFUnDA

Conc. 1.2896

Q 570.00>525.10 (-)



6.70e4



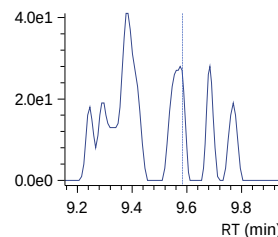
PFNS

Conc. ----

R#1 0.00 (63.31)

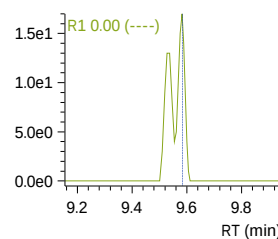
R#2 0.00 (63.31)

Q 548.80>79.90 (-)



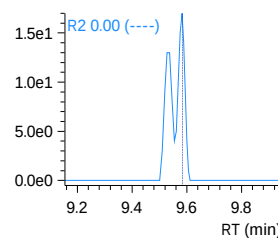
R1 548.80>98.80 (-)

1.70e1



R2 548.80>98.80 (-)

1.70e1





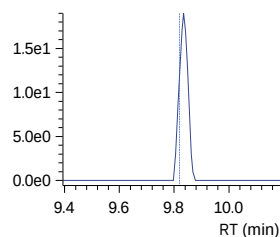
240118_015 (continued)

10_2 FTS
 Conc. ----

R#1 0.00 (33.02)

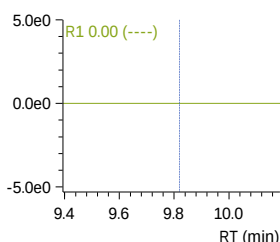
R#2 0.00 (33.02)

Q 626.80>607.05 (-)



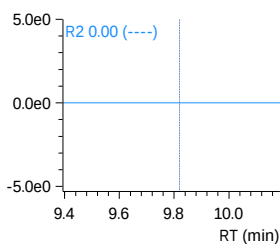
R1 626.80>81.00 (-)

0.00e0



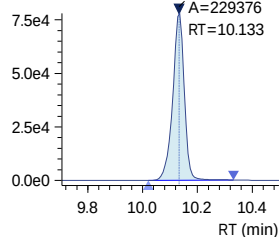
R2 626.80>81.00 (-)

0.00e0



13C2-PFDOA_IS
 Conc. 1.2500

ISTD 615.10>570.00 (-)



R1 615.10>570.00 (-)

7.81e4



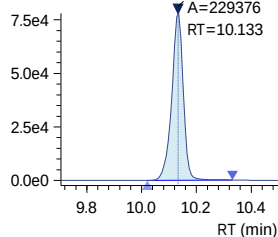
R2 615.10>570.00 (-)

7.81e4



13C2-PFDOA
 Conc. 1.2849

Q 615.10>570.00 (-)



R1 615.10>570.00 (-)

7.81e4



R2 615.10>570.00 (-)

7.81e4

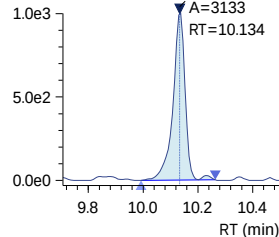


PFDOA
 Conc. -0.0086

R#1 0.00 (10.14)

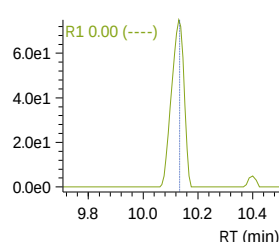
R#2 0.00 (10.14)

Q 613.10>569.00 (-)



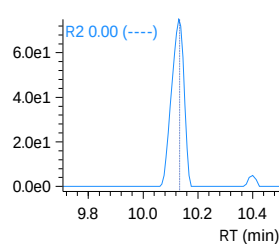
R1 613.10>319.00 (-)

7.50e1



R2 613.10>319.00 (-)

7.50e1

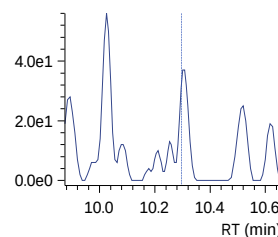


PFDS
 Conc. ----

R#1 0.00 (62.02)

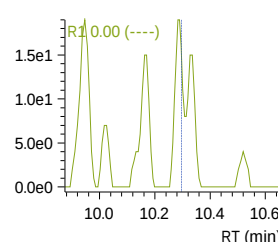
R#2 0.00 (62.02)

Q 599.00>79.90 (-)



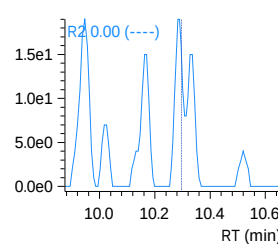
R1 599.00>98.80 (-)

5.60e1



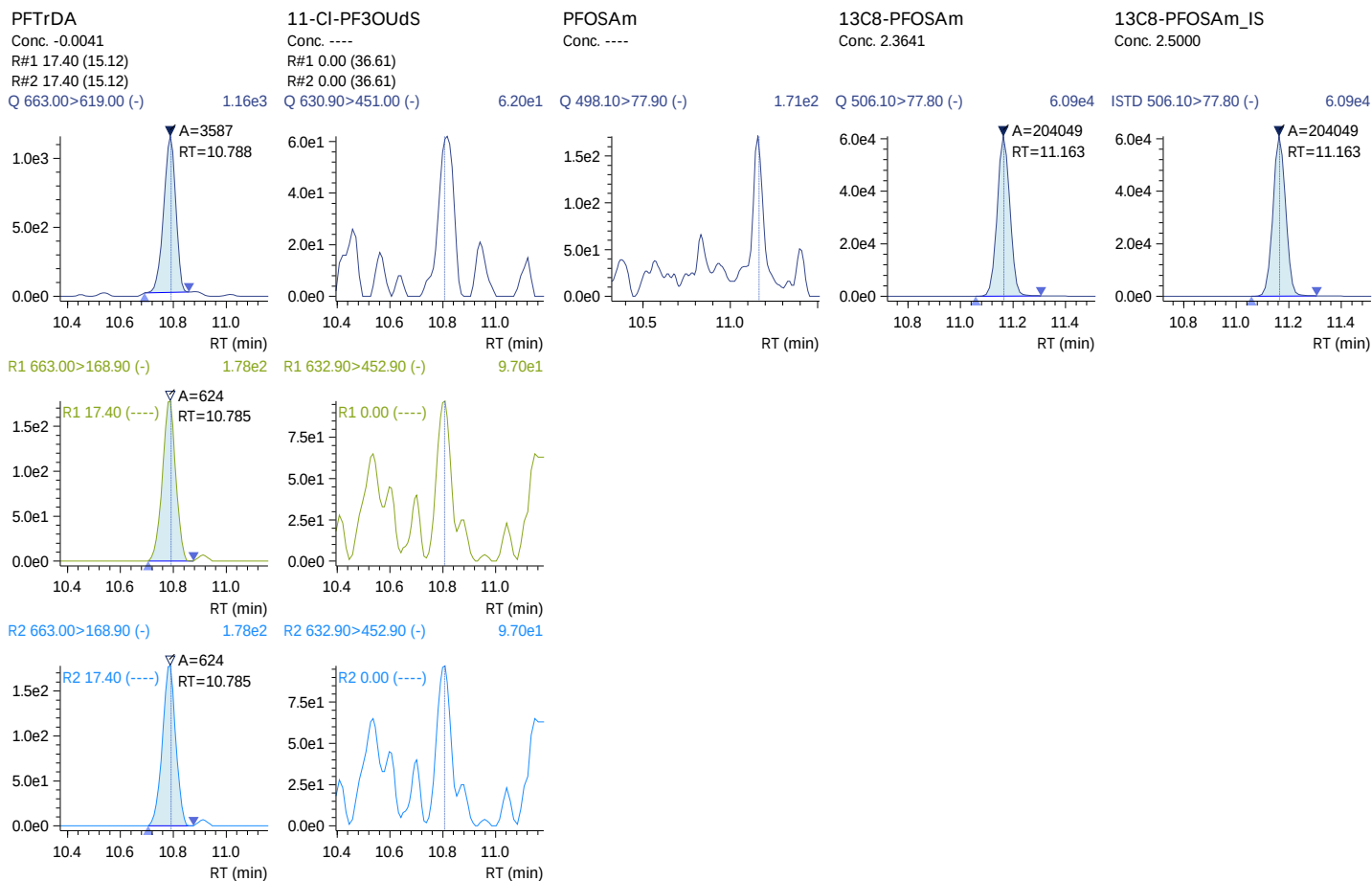
R2 599.00>98.80 (-)

1.90e1



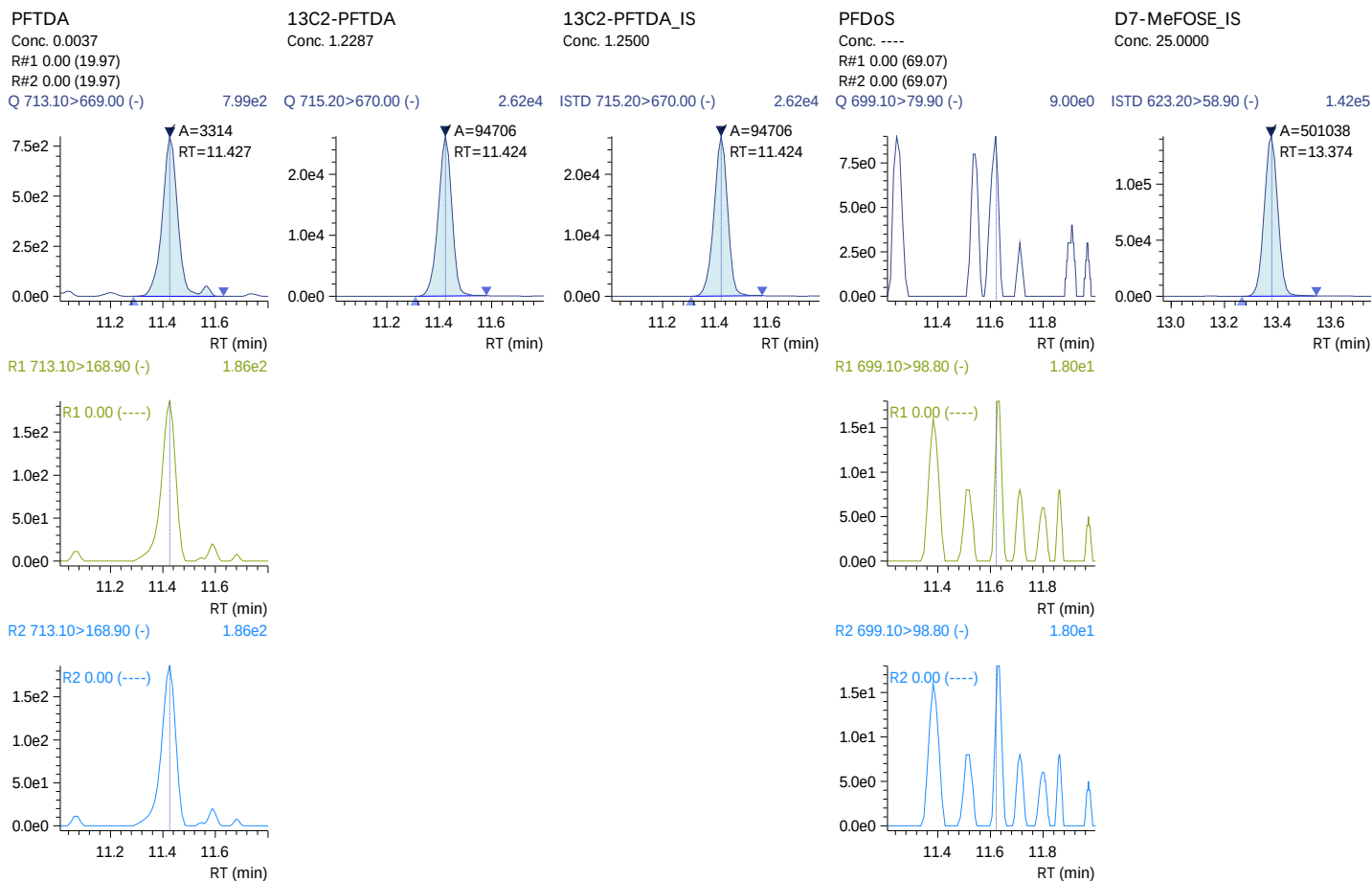


240118_015 (continued)





240118_015 (continued)





240118_015 (continued)

D7-MeFOSE
 Conc. 23.5450

MeFOSE
 Conc. ----

13C2-PFHDA_IS
 Conc. 2.5000

13C2-PFHDA
 Conc. 2.4928

PFHXDA
 Conc. 0.0024
 R#1 0.00 (11.64)
 R#2 0.00 (11.64)

Q 623.20>58.90 (-)

1.42e5

Q 616.10>59.00 (-)

5.40e1

ISTD 815.00>770.05 (-)

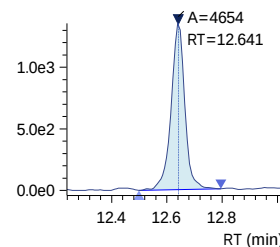
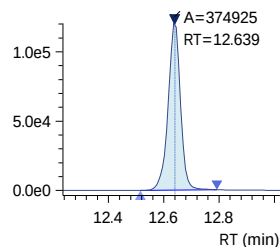
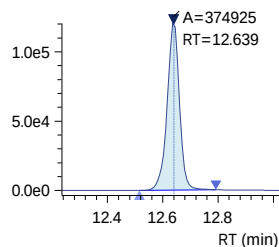
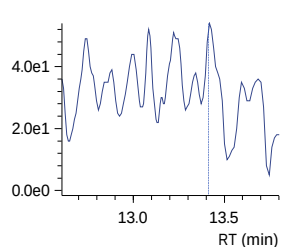
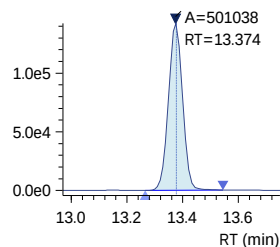
1.21e5

Q 815.00>770.05 (-)

1.21e5

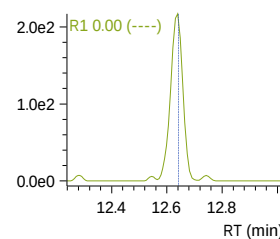
Q 813.00>768.95 (-)

1.36e3



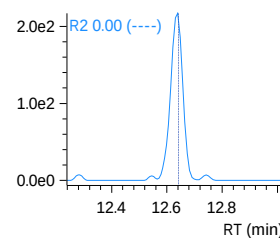
R1 813.00>218.95 (-)

2.17e2



R2 813.00>218.95 (-)

2.17e2





240118_015 (continued)

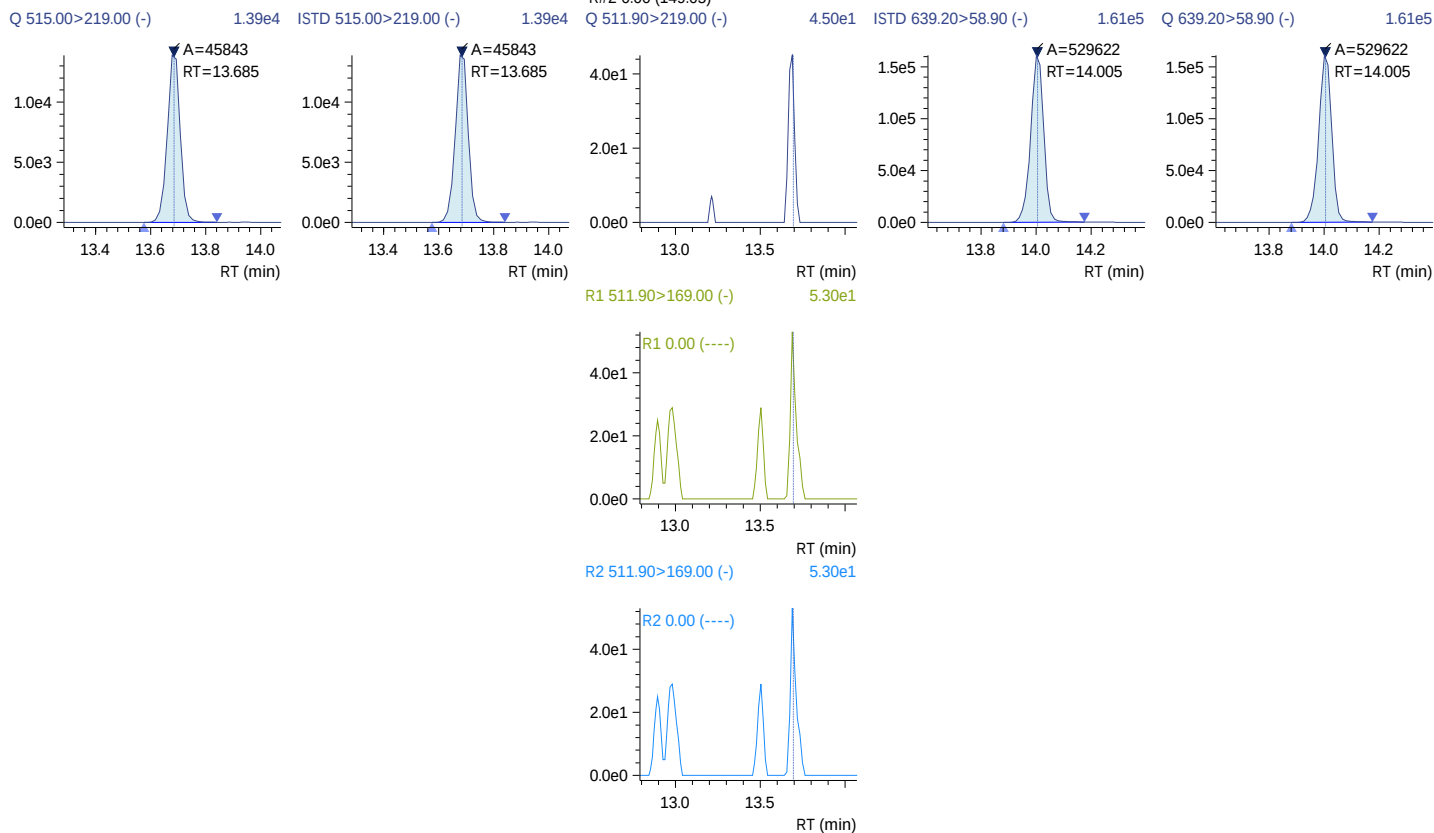
D3-MeFOSA
 Conc. 2.6374

D3-MeFOSA_IS
 Conc. 2.5000

MeFOSA
 Conc. ----
 R#1 0.00 (149.05)
 R#2 0.00 (149.05)

D9-EtFOSE_IS
 Conc. 25.0000

D9-EtFOSE
 Conc. 24.5046





240118_015 (continued)

EtFOSE
Conc. ----

D5-EtFOSAm
Conc. 2.3191

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. ----

PFODA
Conc. 0.0301

Q 630.00>59.00 (-)

4.50e1

Q 531.10>219.00 (-)

1.68e4

ISTD 531.10>219.00 (-)

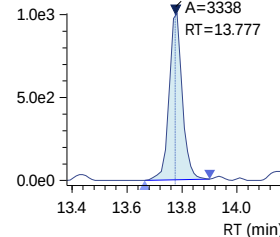
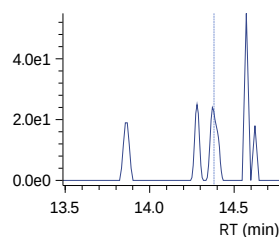
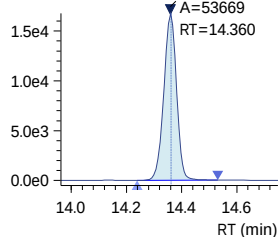
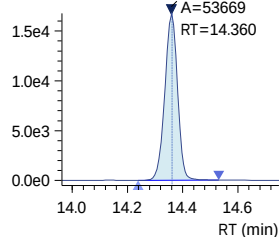
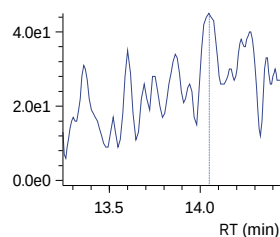
1.68e4

Q 526.00>219.00 (-)

5.50e1

Q 913.00>868.65 (-)

1.01e3

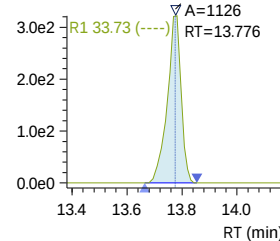
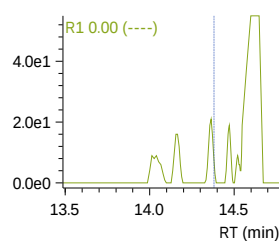


R1 526.00>169.00 (-)

5.50e1

R1 913.00>169.00 (-)

3.22e2

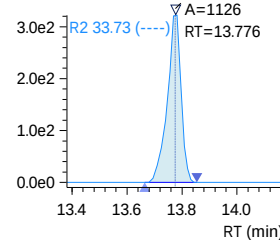
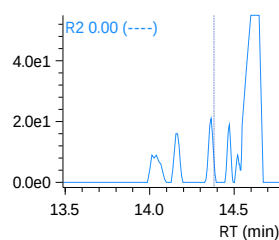


R2 526.00>169.00 (-)

5.50e1

R2 913.00>169.00 (-)

3.22e2





240118_016

Sample ID: 1633 ICV 1.0PPB
Date Acquired: 1/18/2024 5:57:03 PM
Acquired by: System Administrator
Data File: 240118_016
Vial: 10 | Inj. Volume: 10.0000uL | Tray: 1

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	1258661	----	----	----	----	----	----	
13C4-PFBA_IS	216.80>171.90	----	1258661	----	----	----	----	----	----	
13C3-PFBA_IS	216.00>172.00	----	566546	----	----	----	----	----	----	
PFBA	212.80>169.05	----	107094	----	----	----	----	----	----	
PFMPA	229.00>84.90	----	85041	----	----	----	----	----	----	
3_3 FTCA	241.00>177.10	241.00>117.00	----	0	0.00	141.17	0	0.00	141.17	
13C5-PFPeA	268.30>223.00	----	131451	----	----	----	----	----	----	
13C5-PFPeA_IS	268.30>223.00	----	131451	----	----	----	----	----	----	
PFPeA	263.00>219.00	----	164731	----	----	----	----	----	----	
PFMBA	279.00>84.95	----	130341	----	----	----	----	----	----	
13C2-4_2 FTS	329.10>80.90	----	142829	----	----	----	----	----	----	
13C2-4_2 FTS_IS	329.10>80.90	----	142829	----	----	----	----	----	----	
4_2 FTS	327.10>307.00	327.10>80.90	63477	18535	29.20	29.06	18535	29.20	29.06	
13C3-PFBS_IS	302.10>79.90	----	312426	----	----	----	----	----	----	
PFBS	298.70>79.90	298.70>98.80	138227	67088	48.54	46.72	67088	48.54	46.72	
13C3-PFBS	302.10>79.90	----	312426	----	----	----	----	----	----	
NFDHA	295.00>201.00	295.00>84.90	139473	49455	35.46	40.25	49455	35.46	40.25	
13C5-PFHxA	318.00>273.00	----	659266	----	----	----	----	----	----	
13C5-PFHxA_IS	318.00>273.00	----	659266	----	----	----	----	----	----	
13C2-PFHxA_IS	315.10>270.00	----	628403	----	----	----	----	----	----	
PFHxA	313.00>269.00	----	220020	----	----	----	----	----	----	
PFEESA	314.80>135.00	314.80>82.90	613751	36157	5.89	6.11	36157	5.89	6.11	
13C3-HFPO-DA	286.90>168.90	----	617025	----	----	----	----	----	----	
13C3-HFPO-DA_IS	286.90>168.90	----	617025	----	----	----	----	----	----	
HFPO-DA	284.90>168.90	284.90>184.90	65078	44523	68.42	65.61	44523	68.42	65.61	
5_3 FTCA	341.00>237.05	341.00>217.00	----	0	0.00	158.86	0	0.00	158.86	
PFPeS	349.10>79.90	349.10>98.80	119422	64872	54.32	55.80	64872	54.32	55.80	
13C4-PFHpA	367.10>322.00	----	580798	----	----	----	----	----	----	
13C4-PFHpA_IS	367.10>322.00	----	580798	----	----	----	----	----	----	
PFHpA	363.10>319.00	363.10>169.00	243549	55782	22.90	21.50	55782	22.90	21.50	
DONA	376.90>250.90	376.90>84.80	411896	123264	29.93	29.66	123264	29.93	29.66	
13C2-6_2 FTS_IS	429.10>80.90	----	124466	----	----	----	----	----	----	
13C2-6_2 FTS	429.10>80.90	----	124466	----	----	----	----	----	----	
6_2 FTS	427.10>407.00	427.10>80.90	50269	23712	47.17	41.15	23712	47.17	41.15	
13C4-PFOA_IS	417.10>172.00	----	45925	----	----	----	----	----	----	
13C8-PFOA_IS	421.10>376.00	----	607205	----	----	----	----	----	----	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240118_016 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	607205	----	----	----	----	----	----	----
PFOA	413.00>369.00	413.00>169.00	158761	51377	32.36	31.89	51377	32.36	31.89	
13C3-PFHxS	402.10>79.90	----	231655	----	----	----	----	----	----	----
13C3-PFHxS_IS	402.10>79.90	----	231655	----	----	----	----	----	----	----
PFHxS	398.70>79.90	398.70>98.90	104885	65488	62.44	56.62	65488	62.44	56.62	
18O2-PFHxS_IS	403.00>83.90	----	202223	----	----	----	----	----	----	----
13C9-PFNA_IS	472.10>427.00	----	288107	----	----	----	----	----	----	----
13C9-PFNA	472.10>427.00	----	288107	----	----	----	----	----	----	----
13C5-PFNA_IS	468.00>423.00	----	288016	----	----	----	----	----	----	----
PFNA	463.00>419.00	463.00>219.00	161182	40940	25.40	23.17	40940	25.40	23.17	
PFHpS	449.00>79.90	449.00>98.80	82761	48767	58.92	56.96	48767	58.92	56.96	
7_3 FTCA	441.00>317.00	441.00>336.90	----	0	0.00	117.47	0	0.00	117.47	
13C2-8_2-FTS	529.10>80.90	----	119746	----	----	----	----	----	----	----
13C2-8_2-FTS_IS	529.10>80.90	----	119746	----	----	----	----	----	----	----
8_2 FTS	527.10>506.95	527.10>80.80	50915	22943	45.06	49.59	22943	45.06	49.59	
13C6-PFDA_IS	519.10>474.10	----	232114	----	----	----	----	----	----	----
13C6-PFDA	519.10>474.10	----	232114	----	----	----	----	----	----	----
13C2-PFDA_IS	515.10>470.10	----	214237	----	----	----	----	----	----	----
PFDA	512.90>469.00	512.90>219.00	222841	42245	18.96	19.00	42245	18.96	19.00	
D3-NMeFOSAA_IS	573.20>419.00	----	227223	----	----	----	----	----	----	----
D3-NMeFOSAA	573.20>419.00	----	227223	----	----	----	----	----	----	----
13C8-PFOS_IS	507.10>98.90	----	105678	----	----	----	----	----	----	----
13C8-PFOS	507.10>98.90	----	105678	----	----	----	----	----	----	----
13C4-PFOS_IS	502.80>79.90	----	271163	----	----	----	----	----	----	----
PFOS	498.90>79.90	498.90>98.80	93974	47694	50.75	52.47	47694	50.75	52.47	
NMeFOSAA	570.10>419.00	570.10>483.00	57190	34723	60.72	55.15	34723	60.72	55.15	
D5-NeFOSAA_IS	589.20>419.00	----	241074	----	----	----	----	----	----	----
D5-NeFOSAA	589.20>419.00	----	241074	----	----	----	----	----	----	----
NeFOSAA	584.20>419.10	584.20>526.00	32459	29529	90.97	81.95	29529	90.97	81.95	
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	410044	133923	32.66	32.76	133923	32.66	32.76	
PFUnDA	563.10>519.00	563.10>269.10	194333	25492	13.12	13.12	25492	13.12	13.12	
13C7-PFUnDA_IS	570.00>525.10	----	255936	----	----	----	----	----	----	----
13C7-PFUnDA	570.00>525.10	----	255936	----	----	----	----	----	----	----
PFNS	548.80>79.90	548.80>98.80	78210	48986	62.64	65.22	48986	62.64	65.22	
10_2 FTS	626.80>607.05	626.80>81.00	51049	18857	36.94	37.13	18857	36.94	37.13	
13C2-PFDOA_IS	615.10>570.00	----	285641	----	----	----	----	----	----	----
13C2-PFDOA	615.10>570.00	----	285641	----	----	----	----	----	----	----
PFDOA	613.10>569.00	613.10>319.00	160458	19096	11.90	11.29	19096	11.90	11.29	
PFDS	599.00>79.90	599.00>98.80	69073	42256	61.18	60.18	42256	61.18	60.18	
PFTrDA	663.00>619.00	663.00>168.90	176723	32536	18.41	17.64	32536	18.41	17.64	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240118_016 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	310994	111620	35.89	36.44	111620	35.89	36.44	
PFOSAm	498.10>77.90	----	179763	----	----	----	----	----	----	
13C8-PFOSAm	506.10>77.80	----	263852	----	----	----	----	----	----	
13C8-PFOSAm_IS	506.10>77.80	----	263852	----	----	----	----	----	----	
PFTDA	713.10>669.00	713.10>168.90	147427	31626	21.45	22.96	31626	21.45	22.96	
13C2-PFTDA	715.20>670.00	----	130145	----	----	----	----	----	----	
13C2-PFTDA_IS	715.20>670.00	----	130145	----	----	----	----	----	----	
PFDoS	699.10>79.90	699.10>98.80	39640	25278	63.77	67.40	25278	63.77	67.40	
D7-MeFOSE_IS	623.20>58.90	----	664189	----	----	----	----	----	----	
D7-MeFOSE	623.20>58.90	----	664189	----	----	----	----	----	----	
MeFOSE	616.10>59.00	----	23461	----	----	----	----	----	----	
13C2-PFHxDA_IS	815.00>770.05	----	474606	----	----	----	----	----	----	
13C2-PFHxDA	815.00>770.05	----	474606	----	----	----	----	----	----	
PFHxDA	813.00>768.95	813.00>218.95	206805	30083	14.55	13.90	30083	14.55	13.90	
D3-MeFOSA	515.00>219.00	----	53519	----	----	----	----	----	----	
D3-MeFOSA_IS	515.00>219.00	----	53519	----	----	----	----	----	----	
MeFOSA	511.90>219.00	511.90>169.00	36906	55790	151.17	140.79	55790	151.17	140.79	
D9-EtFOSE_IS	639.20>58.90	----	658737	----	----	----	----	----	----	
D9-EtFOSE	639.20>58.90	----	658737	----	----	----	----	----	----	
EtFOSE	630.00>59.00	----	34456	----	----	----	----	----	----	
D5-EtFOSAm	531.10>219.00	----	72597	----	----	----	----	----	----	
D5-EtFOSAm_IS	531.10>219.00	----	72597	----	----	----	----	----	----	
EtFOSAm	526.00>219.00	526.00>169.00	43052	65742	152.70	163.90	65742	152.70	163.90	
PFODA	913.00>868.65	913.00>169.00	100861	24393	24.18	27.03	24393	24.18	27.03	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240118_016

Sample ID: 1633 ICV 1.0PPB
Date Acquired: 1/18/2024 5:57:03 PM
Acquired by: System Administrator
Data File: 240118_016
Vial: 10 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Std. Conc.	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.414	0.000	0.001	1258661	566546	13C3-PFBA_IS	10.0000	9.9394	ng/mL	
13C4-PFBA_IS	Auto	1.414	0.000	----	1258661	1258661	----	10.0000	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.413	-0.002	----	566546	566546	----	5.0000	5.0000	ng/mL	
PFBA	Auto	1.416	0.000	0.002	107094	1258661	13C4-PFBA_IS	1.0000	0.9903	ng/mL	
PFMPA	Auto	2.436	0.004	-1.062	85041	131451	13C5-PFPeA_IS	1.0000	1.0010	ng/mL	
3_3 FTCA	ND(W/B)	----	----	----	----	131451	13C5-PFPeA_IS	20.0000	----	ng/mL	
13C5-PFPeA	Auto	3.498	0.006	-1.489	131451	628403	13C2-PFHxA_IS	5.0000	4.6342	ng/mL	
13C5-PFPeA_IS	Auto	3.498	0.006	----	131451	131451	----	5.0000	5.0000	ng/mL	
PFPeA	Auto	3.500	0.005	0.002	164731	131451	13C5-PFPeA_IS	1.0000	0.9675	ng/mL	
PFMBA	Auto	4.032	0.007	0.534	130341	131451	13C5-PFPeA_IS	1.0000	1.0830	ng/mL	
13C2-4_2 FTS	Auto	4.669	0.008	-2.424	142829	202223	18O2-PFHxS_IS	5.0000	5.1325	ng/mL	
13C2-4_2 FTS_IS	Auto	4.669	0.008	----	142829	142829	----	5.0000	5.0000	ng/mL	
4_2 FTS	Auto	4.668	0.006	-0.001	63477	142829	13C2-4_2 FTS_IS	0.9400	0.9036	ng/mL	
13C3-PFBS_IS	Auto	4.654	0.007	----	312426	312426	----	2.5000	2.5000	ng/mL	
PFBS	Auto	4.655	0.007	0.001	138227	312426	13C3-PFBS_IS	0.8900	0.8643	ng/mL	
13C3-PFBS	Auto	4.654	0.007	-2.439	312426	202223	18O2-PFHxS_IS	2.5000	2.7224	ng/mL	
NFDHA	Auto	4.844	0.009	-0.142	139473	659266	13C5-PFHxA_IS	1.0000	0.9535	ng/mL	
13C5-PFHxA	Auto	4.986	0.008	-0.001	659266	628403	13C2-PFHxA_IS	2.5000	2.4893	ng/mL	
13C5-PFHxA_IS	Auto	4.986	0.008	----	659266	659266	----	2.5000	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	4.987	0.008	----	628403	628403	----	2.5000	2.5000	ng/mL	
PFHxA	Auto	4.988	0.008	0.002	220020	659266	13C5-PFHxA_IS	1.0000	0.9943	ng/mL	
PFEESA	Auto	5.330	0.008	0.344	613751	659266	13C5-PFHxA_IS	0.8900	0.8312	ng/mL	
13C3-HFPO-DA	Auto	5.460	0.008	0.473	617025	628403	13C2-PFHxA_IS	10.0000	10.0304	ng/mL	
13C3-HFPO-DA_IS	Auto	5.460	0.008	----	617025	617025	----	10.0000	10.0000	ng/mL	
HFPO-DA	Auto	5.461	0.008	0.001	65078	617025	13C3-HFPO-DA_IS	1.0000	0.9550	ng/mL	
5_3 FTCA	ND(W/B)	----	----	----	----	659266	13C5-PFHxA_IS	20.0000	----	ng/mL	
PFPeS	Auto	6.026	0.008	-1.066	119422	231655	13C3-PFHxS_IS	0.9400	0.9817	ng/mL	
13C4-PFHpA	Auto	6.162	0.008	1.175	580798	628403	13C2-PFHxA_IS	2.5000	2.4225	ng/mL	
13C4-PFHpA_IS	Auto	6.162	0.008	----	580798	580798	----	2.5000	2.5000	ng/mL	
PFHpA	Auto	6.163	0.008	0.001	243549	580798	13C4-PFHpA_IS	1.0000	0.9764	ng/mL	
DONA	Auto	6.528	0.008	1.068	411896	617025	13C3-HFPO-DA_IS	0.9500	0.8613	ng/mL	
13C2-6_2 FTS_IS	Auto	6.799	0.006	----	124466	124466	----	5.0000	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.799	0.006	-0.294	124466	202223	18O2-PFHxS_IS	5.0000	4.7289	ng/mL	
6_2 FTS	Auto	6.800	0.008	0.001	50269	124466	13C2-6_2 FTS_IS	0.9500	0.8869	ng/mL	
13C4-PFOA_IS	Auto	7.115	0.008	----	45925	45925	----	2.5000	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.115	0.008	----	607205	607205	----	2.5000	2.5000	ng/mL	
13C8-PFOA	Auto	7.115	0.008	0.000	607205	45925	13C4-PFOA_IS	2.5000	2.3656	ng/mL	
PFOA	Auto	7.116	0.006	0.001	158761	607205	13C8-PFOA_IS	1.0000	0.9693	ng/mL	
13C3-PFHxS	Auto	7.092	0.006	-0.001	231655	202223	18O2-PFHxS_IS	2.5000	2.6688	ng/mL	
13C3-PFHxS_IS	Auto	7.092	0.006	----	231655	231655	----	2.5000	2.5000	ng/mL	
PFHxS	M	7.093	0.009	0.001	104885	231655	13C3-PFHxS_IS	0.9100	0.9242	ng/mL	
18O2-PFHxS_IS	Auto	7.093	0.007	----	202223	202223	----	2.5000	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.962	0.006	----	288107	288107	----	1.2500	1.2500	ng/mL	
13C9-PFNA	Auto	7.962	0.006	-0.001	288107	288016	13C5-PFNA_IS	1.2500	1.2776	ng/mL	
13C5-PFNA_IS	Auto	7.963	0.007	----	288016	288016	----	1.2500	1.2500	ng/mL	
PFNA	Auto	7.964	0.007	0.002	161182	288107	13C9-PFNA_IS	1.0000	0.9521	ng/mL	
PFHpS	Auto	8.012	0.008	-0.815	82761	105678	13C8-PFOS_IS	0.9500	1.0034	ng/mL	
7_3 FTCA	ND(W/B)	----	----	----	----	659266	13C5-PFHxA_IS	20.0000	----	ng/mL	
13C2-8_2-FTS	Auto	8.418	0.009	1.325	119746	202223	18O2-PFHxS_IS	5.0000	5.5385	ng/mL	
13C2-8_2-FTS_IS	Auto	8.418	0.009	----	119746	119746	----	5.0000	5.0000	ng/mL	
8_2 FTS	Auto	8.416	0.006	-0.002	50915	119746	13C2-8_2-FTS_IS	0.9600	0.9895	ng/mL	
13C6-PFDA_IS	Auto	8.728	0.008	----	232114	232114	----	1.2500	1.2500	ng/mL	
13C6-PFDA	Auto	8.728	0.008	-0.001	232114	214237	13C2-PFDA_IS	1.2500	1.3467	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_016 (continued)

(Table continued from previous page)

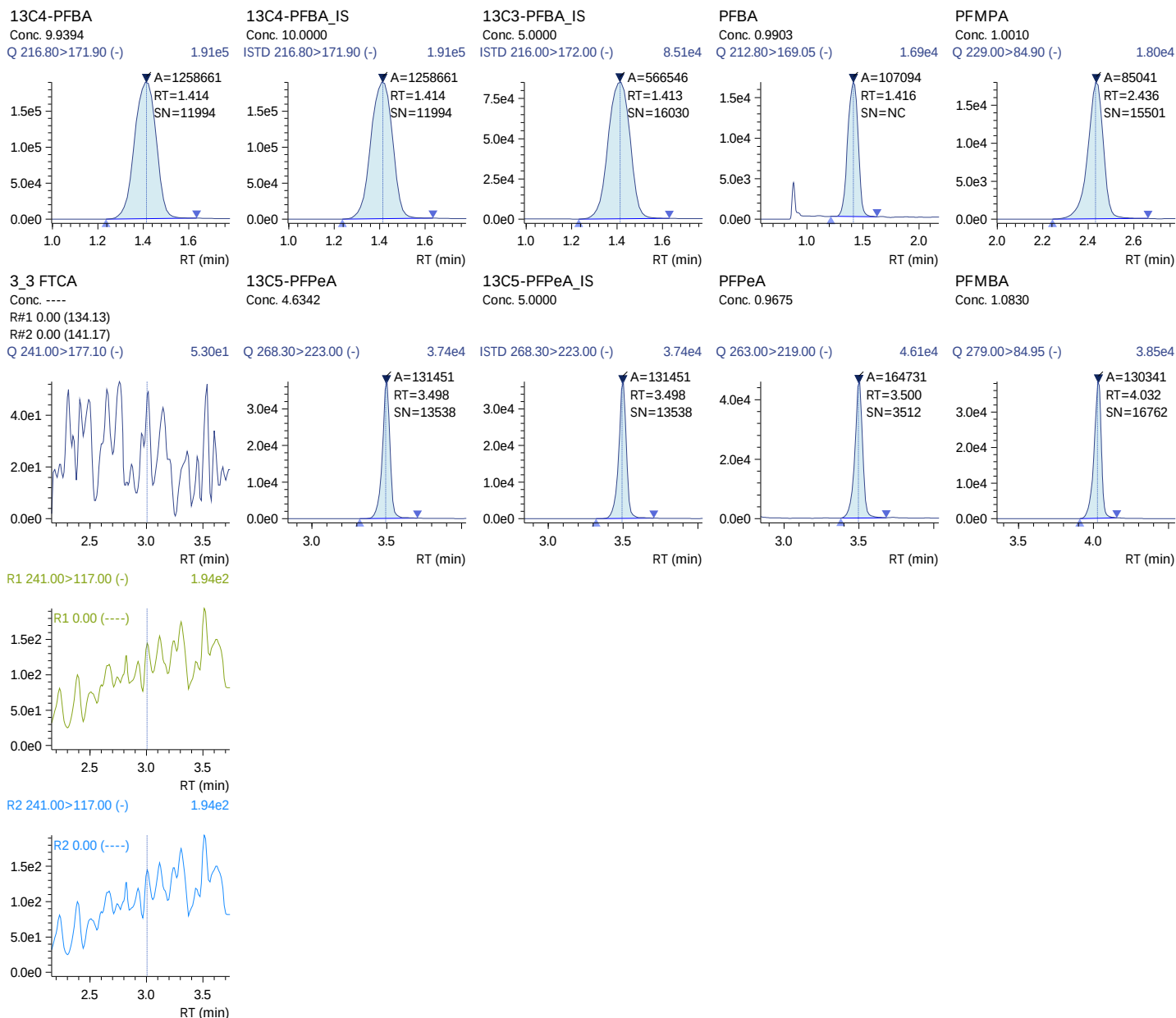
Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Std. Conc.	Conc.	Unit	Flag ID
13C2-PFDA_IS	Auto	8.729	0.008	----	214237	214237	----	1.2500	1.2500	ng/mL	
PFDA	Auto	8.729	0.008	0.001	222841	232114	13C6-PFDA_IS	1.0000	0.9818	ng/mL	
D3-NMeFOSAA_IS	Auto	8.862	0.007	----	227223	227223	----	5.0000	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.862	0.007	0.035	227223	271163	13C4-PFOS_IS	5.0000	4.8281	ng/mL	
13C8-PFOS_IS	Auto	8.827	0.007	----	105678	105678	----	2.5000	2.5000	ng/mL	
13C8-PFOS	Auto	8.827	0.007	0.000	105678	271163	13C4-PFOS_IS	2.5000	2.3368	ng/mL	
13C4-PFOS_IS	Auto	8.827	0.007	----	271163	271163	----	2.5000	2.5000	ng/mL	
PFOS	M	8.828	0.006	0.001	93974	105678	13C8-PFOS_IS	0.9300	0.8550	ng/mL	
NMeFOSAA	M	8.869	0.008	0.007	57190	227223	D3-NMeFOSAA_IS	1.0000	0.9276	ng/mL	
D5-NetFOSAA_IS	Auto	9.192	0.006	----	241074	241074	----	5.0000	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.192	0.006	0.365	241074	271163	13C4-PFOS_IS	5.0000	4.2816	ng/mL	
NetFOSAA	M	9.202	0.007	0.010	32459	241074	D5-NetFOSAA_IS	1.0000	1.0081	ng/mL	
9-CI-PF3ONS	Auto	9.389	0.005	3.929	410044	617025	13C3-HFPO-DA_IS	0.9300	0.8061	ng/mL	
PFUnDA	Auto	9.450	0.003	0.001	194333	255936	13C7-PFUnDA_IS	1.0000	1.0190	ng/mL	
13C7-PFUnDA_IS	Auto	9.449	0.004	----	255936	255936	----	1.2500	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.449	0.004	0.720	255936	214237	13C2-PFDA_IS	1.2500	1.2448	ng/mL	
PFNS	Auto	9.588	0.004	0.761	78210	105678	13C8-PFOS_IS	0.9600	0.9740	ng/mL	
10_2_FTS	Auto	9.822	0.003	1.404	51049	119746	13C2-8_2-FTS_IS	0.9600	0.8154	ng/mL	
13C2-PFDOA_IS	Auto	10.136	0.003	----	285641	285641	----	1.2500	1.2500	ng/mL	
13C2-PFDOA	Auto	10.136	0.003	1.407	285641	214237	13C2-PFDA_IS	1.2500	1.2093	ng/mL	
PFDOA	Auto	10.137	0.003	0.001	160458	285641	13C2-PFDOA_IS	1.0000	0.9659	ng/mL	
PFDS	Auto	10.298	0.002	1.471	69073	105678	13C8-PFOS_IS	0.9700	0.9835	ng/mL	
PFTDA	Auto	10.794	0.002	-0.633	176723	130145	13C2-PFTDA_IS	1.0000	0.9316	ng/mL	
11-CI-PF3OUdS	Auto	10.809	0.003	5.349	310994	617025	13C3-HFPO-DA_IS	0.9400	0.8917	ng/mL	
PFOSAm	M	11.169	0.005	-0.003	179763	263852	13C8-PFOSAm_IS	2.0000	2.0670	ng/mL	
13C8-PFOSAm	Auto	11.172	0.007	2.345	263852	271163	13C4-PFOS_IS	2.5000	2.2921	ng/mL	
13C8-PFOSAm_IS	Auto	11.172	0.007	----	263852	263852	----	2.5000	2.5000	ng/mL	
PFTDA	Auto	11.429	0.004	0.002	147427	130145	13C2-PFTDA_IS	1.0000	1.0264	ng/mL	
13C2-PFTDA	Auto	11.427	0.003	2.698	130145	214237	13C2-PFDA_IS	1.2500	1.2761	ng/mL	
13C2-PFTDA_IS	Auto	11.427	0.003	----	130145	130145	----	1.2500	1.2500	ng/mL	
PFDoS	Auto	11.626	0.004	2.799	39640	105678	13C8-PFOS_IS	0.9700	0.9353	ng/mL	
D7-MeFOSE_IS	Auto	13.383	0.006	----	664189	664189	----	25.0000	25.0000	ng/mL	
D7-MeFOSE	Auto	13.383	0.006	4.556	664189	271163	13C4-PFOS_IS	25.0000	23.4027	ng/mL	
MeFOSE	M	13.421	0.008	0.038	23461	664189	D7-MeFOSE_IS	1.0000	0.9618	ng/mL	
13C2-PFHXA_IS	Auto	12.643	0.002	----	474606	474606	----	2.5000	2.5000	ng/mL	
13C2-PFHXA	Auto	12.643	0.002	3.914	474606	214237	13C2-PFDA_IS	2.5000	2.3849	ng/mL	
PFHXA	Auto	12.644	0.002	0.001	206805	474606	13C2-PFHXA_IS	1.0000	1.0349	ng/mL	
D3-MeFOSA	Auto	13.693	0.008	4.866	53519	271163	13C4-PFOS_IS	2.5000	2.3087	ng/mL	
D3-MeFOSA_IS	Auto	13.693	0.008	----	53519	53519	----	2.5000	2.5000	ng/mL	
MeFOSA	M	13.700	0.006	0.007	36906	53519	D3-MeFOSA_IS	1.0000	0.9566	ng/mL	
D9-EtFOSE_IS	Auto	14.012	0.006	----	658737	658737	----	25.0000	25.0000	ng/mL	
D9-EtFOSE	Auto	14.012	0.006	5.185	658737	271163	13C4-PFOS_IS	25.0000	22.8528	ng/mL	
EtFOSE	M	14.057	0.009	0.045	34456	658737	D9-EtFOSE_IS	1.0000	0.9941	ng/mL	
D5-EtFOSAm	Auto	14.369	0.007	5.542	72597	271163	13C4-PFOS_IS	2.5000	2.3521	ng/mL	
D5-EtFOSAm_IS	Auto	14.369	0.007	----	72597	72597	----	2.5000	2.5000	ng/mL	
EtFOSAm	M	14.388	0.008	0.019	43052	72597	D5-EtFOSAm_IS	1.0000	1.0187	ng/mL	
PFODA	Auto	13.781	0.006	1.138	100861	474606	13C2-PFHXA_IS	1.0000	0.9398	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_016 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_016 (continued)

13C2-4_2 FTS
Conc. 5.1325

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. 0.9036
R#1 29.20 (34.14)
R#2 29.20 (29.06)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 0.8643
R#1 48.54 (47.53)
R#2 48.54 (46.72)

Q 329.10>80.90 (-)

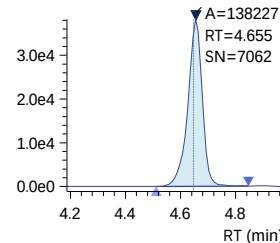
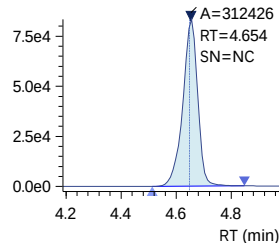
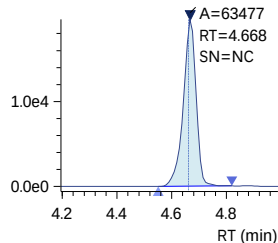
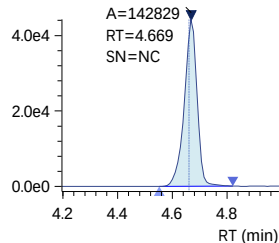
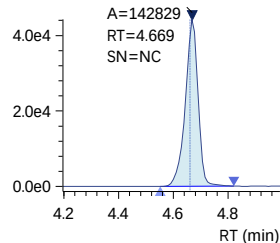
4.43e4 ISTD 329.10>80.90 (-)

4.43e4 Q 327.10>307.00 (-)

1.97e4 ISTD 302.10>79.90 (-)

8.34e4 Q 298.70>79.90 (-)

3.82e4

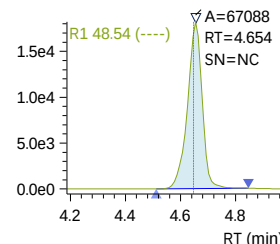
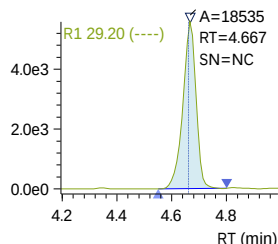


R1 327.10>80.90 (-)

5.58e3

R1 298.70>98.80 (-)

1.82e4

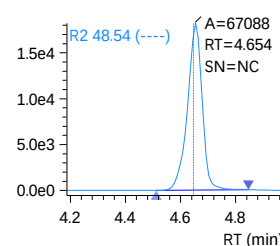
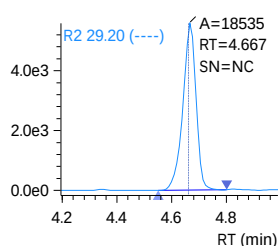


R2 327.10>80.90 (-)

5.58e3

R2 298.70>98.80 (-)

1.82e4





240118_016 (continued)

13C3-PFBS
Conc. 2.7224

NFDHA
Conc. 0.9535
R#1 35.46 (37.88)
R#2 35.46 (40.25)

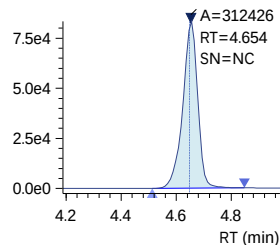
13C5-PFHxA
Conc. 2.4893

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

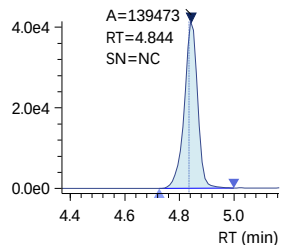
Q 302.10>79.90 (-)

8.34e4



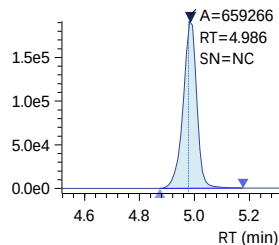
Q 295.00>201.00 (-)

4.15e4



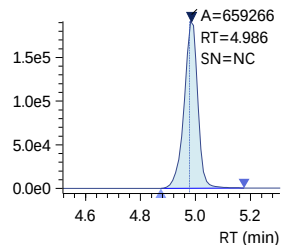
Q 318.00>273.00 (-)

1.91e5



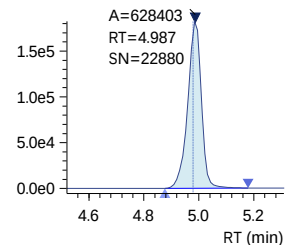
ISTD 318.00>273.00 (-)

1.91e5



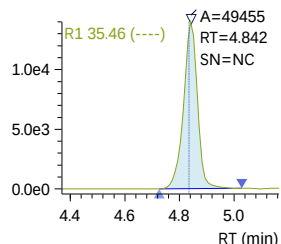
ISTD 315.10>270.00 (-)

1.82e5



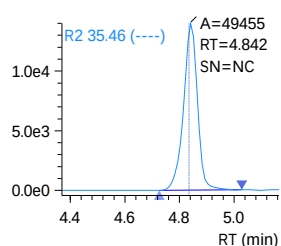
R1 295.00>84.90 (-)

1.40e4



R2 295.00>84.90 (-)

1.40e4





240118_016 (continued)

PFHxA
Conc. 0.9943

PFEESA
Conc. 0.8312
R#1 5.89 (5.88)
R#2 5.89 (6.11)

13C3-HFPO-DA
Conc. 10.0304

13C3-HFPO-DA_IS
Conc. 10.0000

HFPO-DA
Conc. 0.9550
R#1 68.42 (63.80)
R#2 68.42 (65.61)

Q 313.00>269.00 (-)

6.27e4

Q 314.80>135.00 (-)

1.90e5

Q 286.90>168.90 (-)

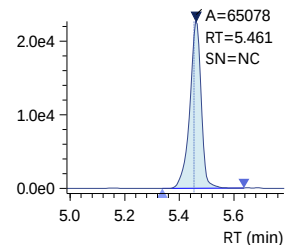
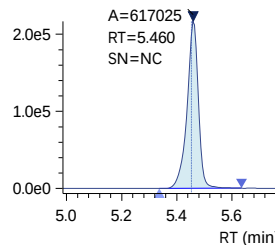
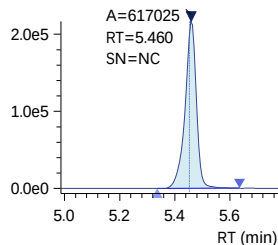
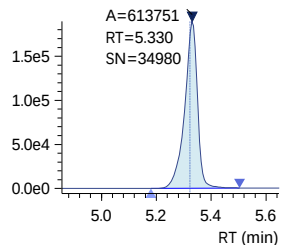
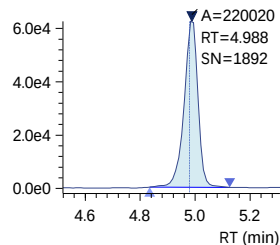
2.17e5

ISTD 286.90>168.90 (-)

2.17e5

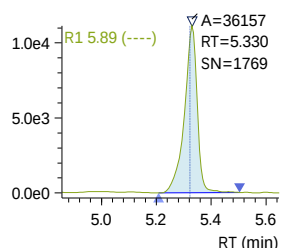
Q 284.90>168.90 (-)

2.27e4



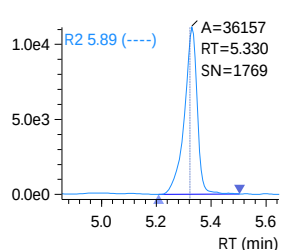
R1 314.80>82.90 (-)

1.11e4



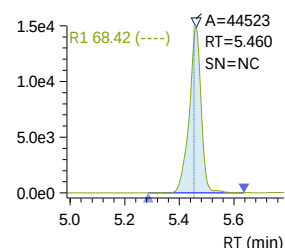
R2 314.80>82.90 (-)

1.11e4



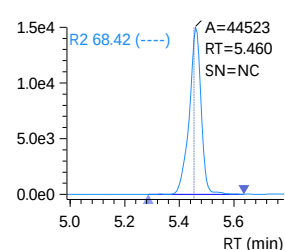
R1 284.90>184.90 (-)

1.50e4



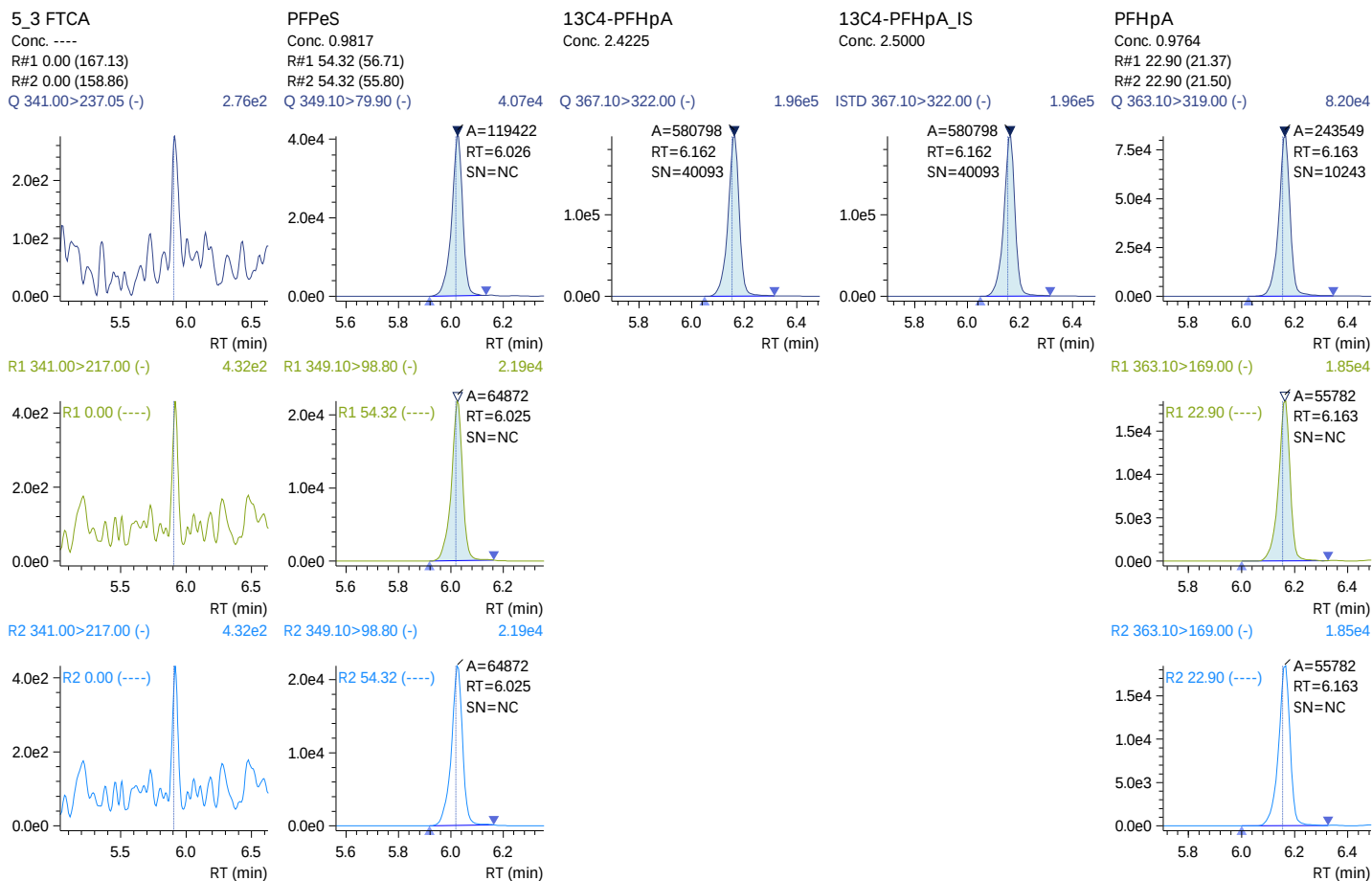
R2 284.90>184.90 (-)

1.50e4





240118_016 (continued)

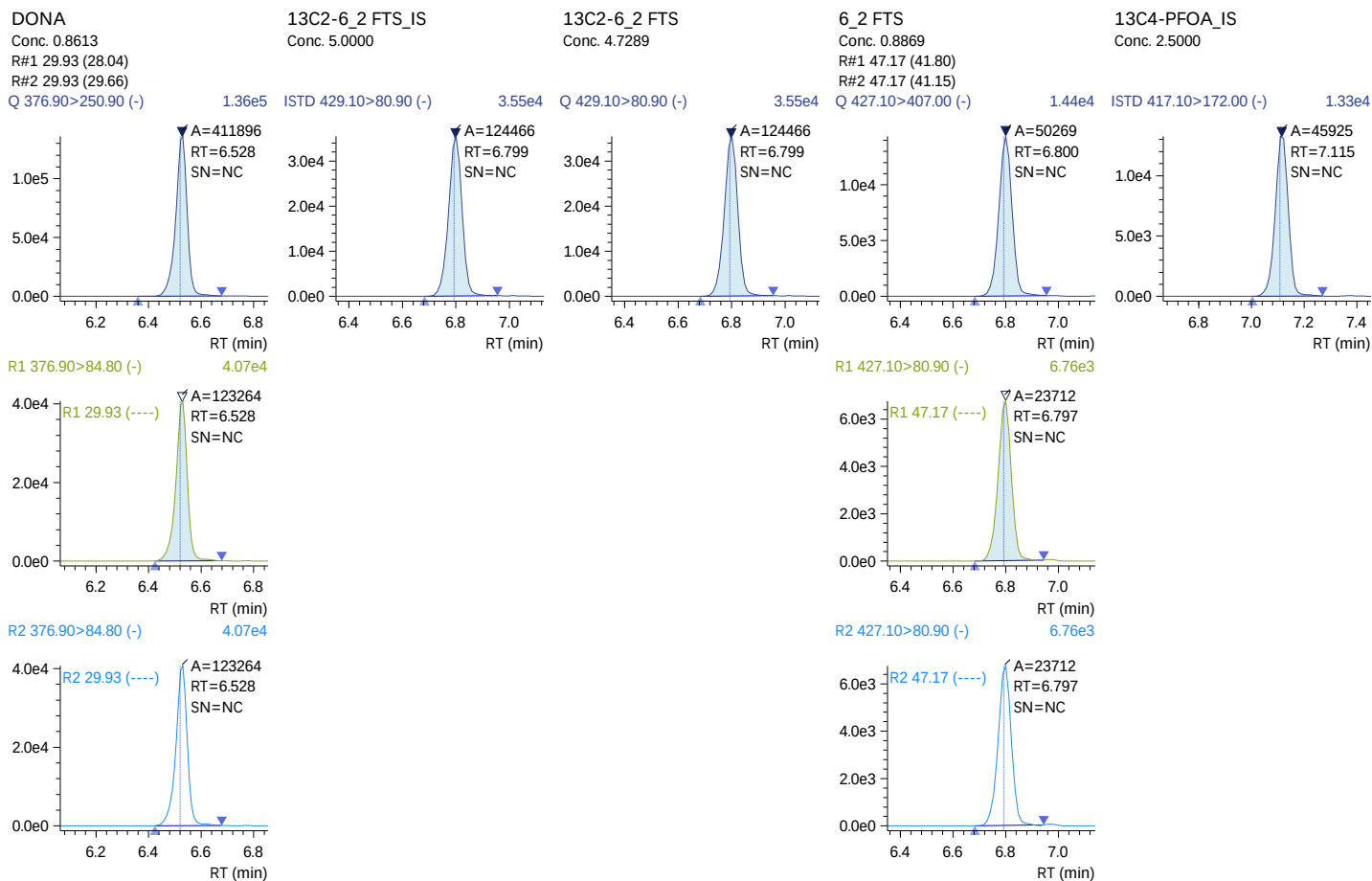


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_016 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_016 (continued)

13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.3656

PFOA
Conc. 0.9693
R#1 32.36 (29.05)
R#2 32.36 (31.89)

13C3-PFHxS
Conc. 2.6688

13C3-PFHxS_IS
Conc. 2.5000

ISTD 421.10>376.00 (-)

1.76e5

Q 421.10>376.00 (-)

1.76e5

Q 413.00>369.00 (-)

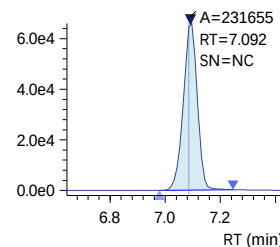
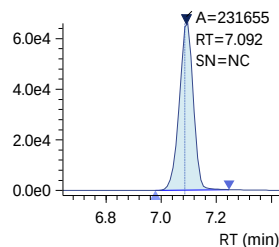
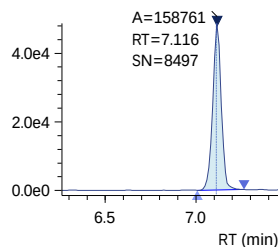
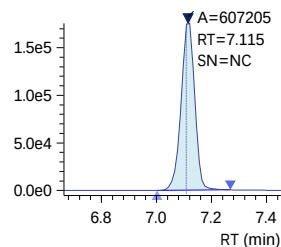
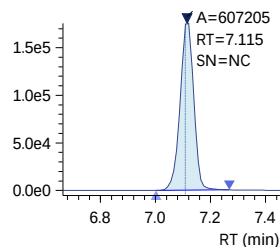
4.87e4

Q 402.10>79.90 (-)

6.60e4

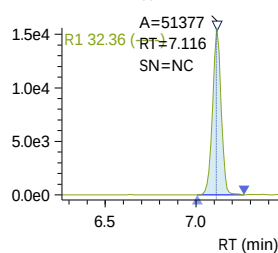
ISTD 402.10>79.90 (-)

6.60e4



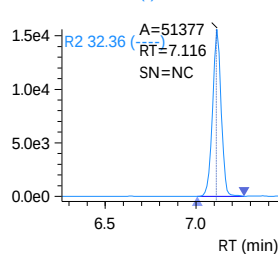
R1 413.00>169.00 (-)

1.56e4



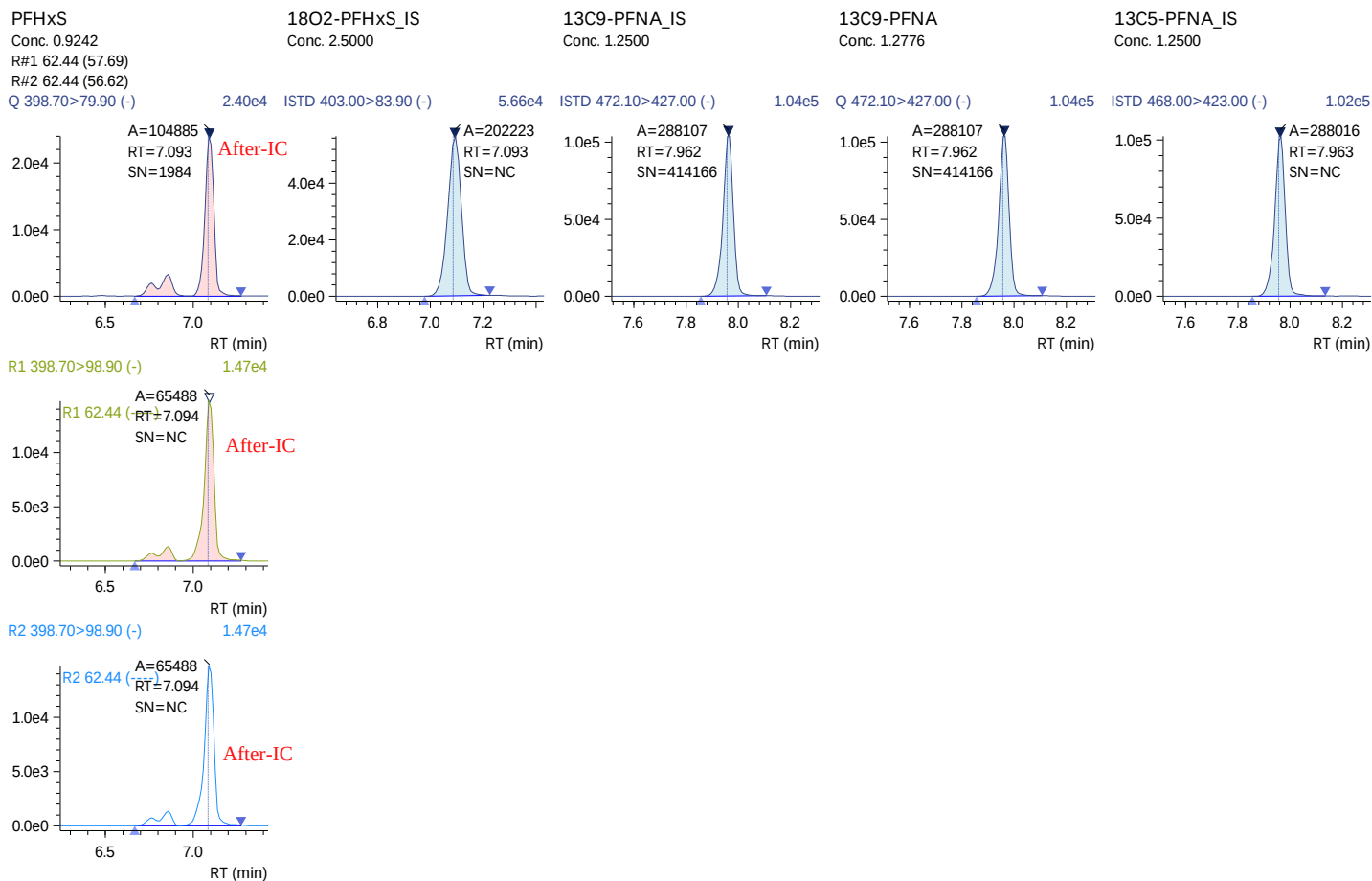
R2 413.00>169.00 (-)

1.56e4





240118_016 (continued)

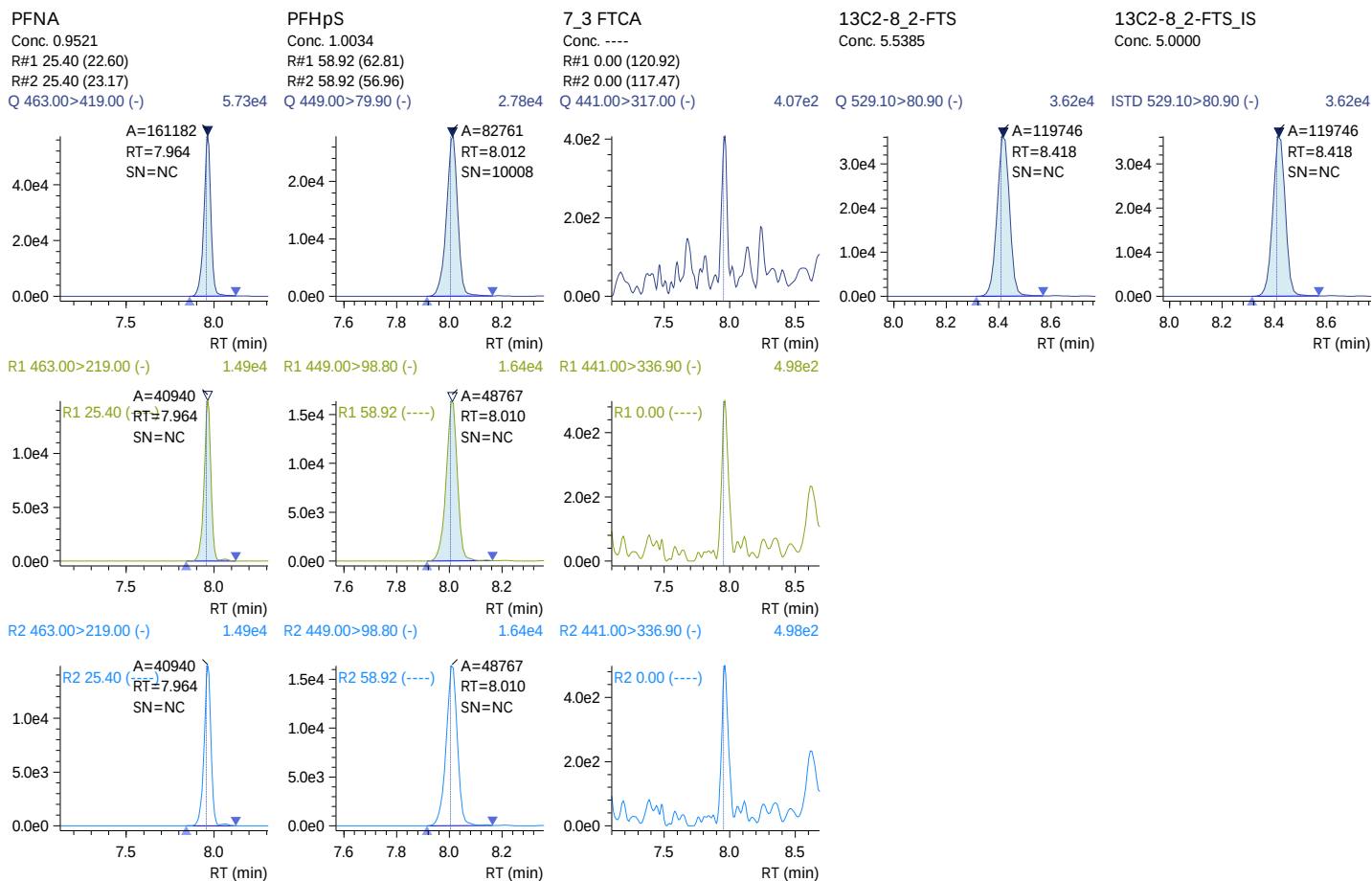


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_016 (continued)

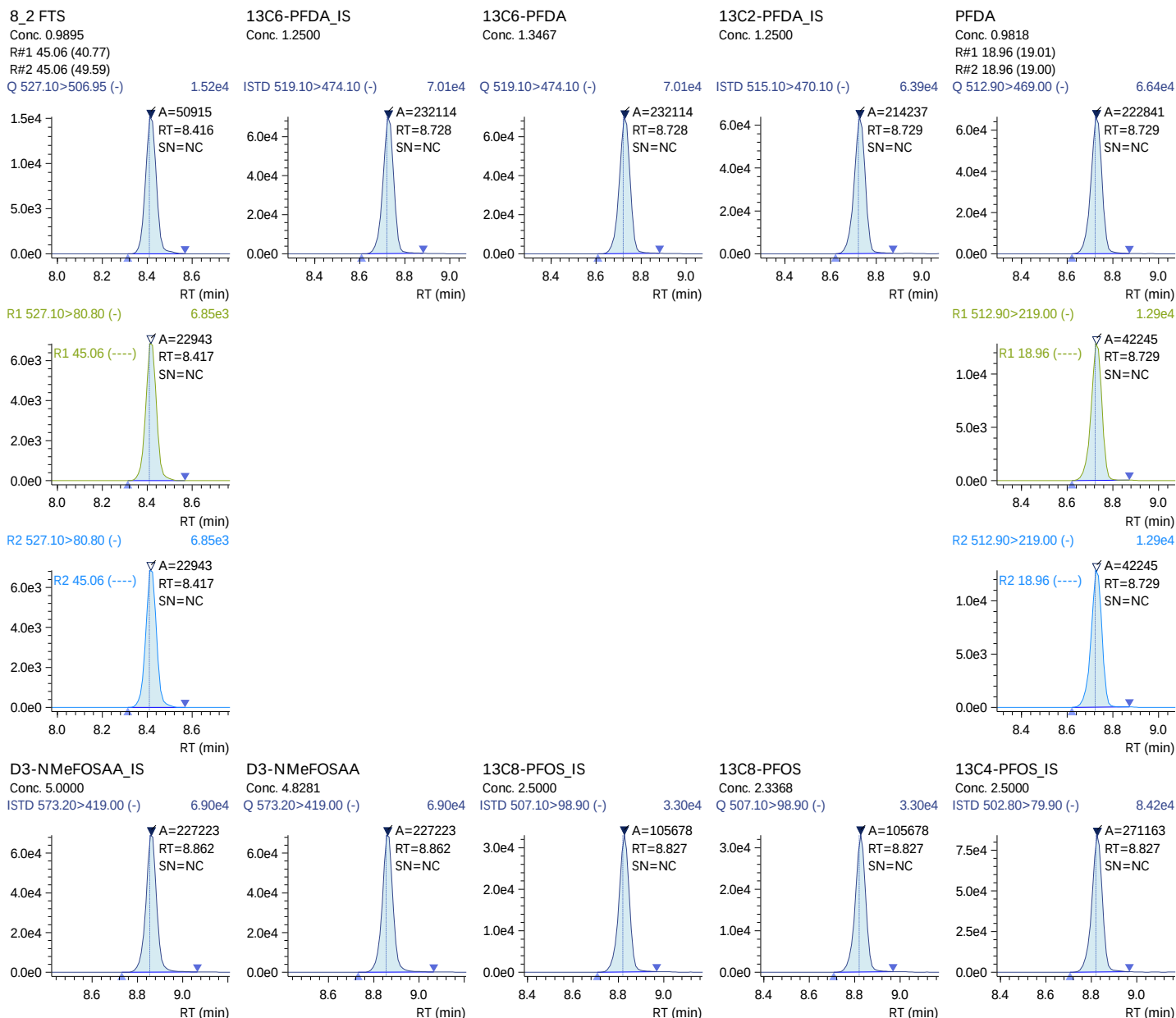


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_016 (continued)

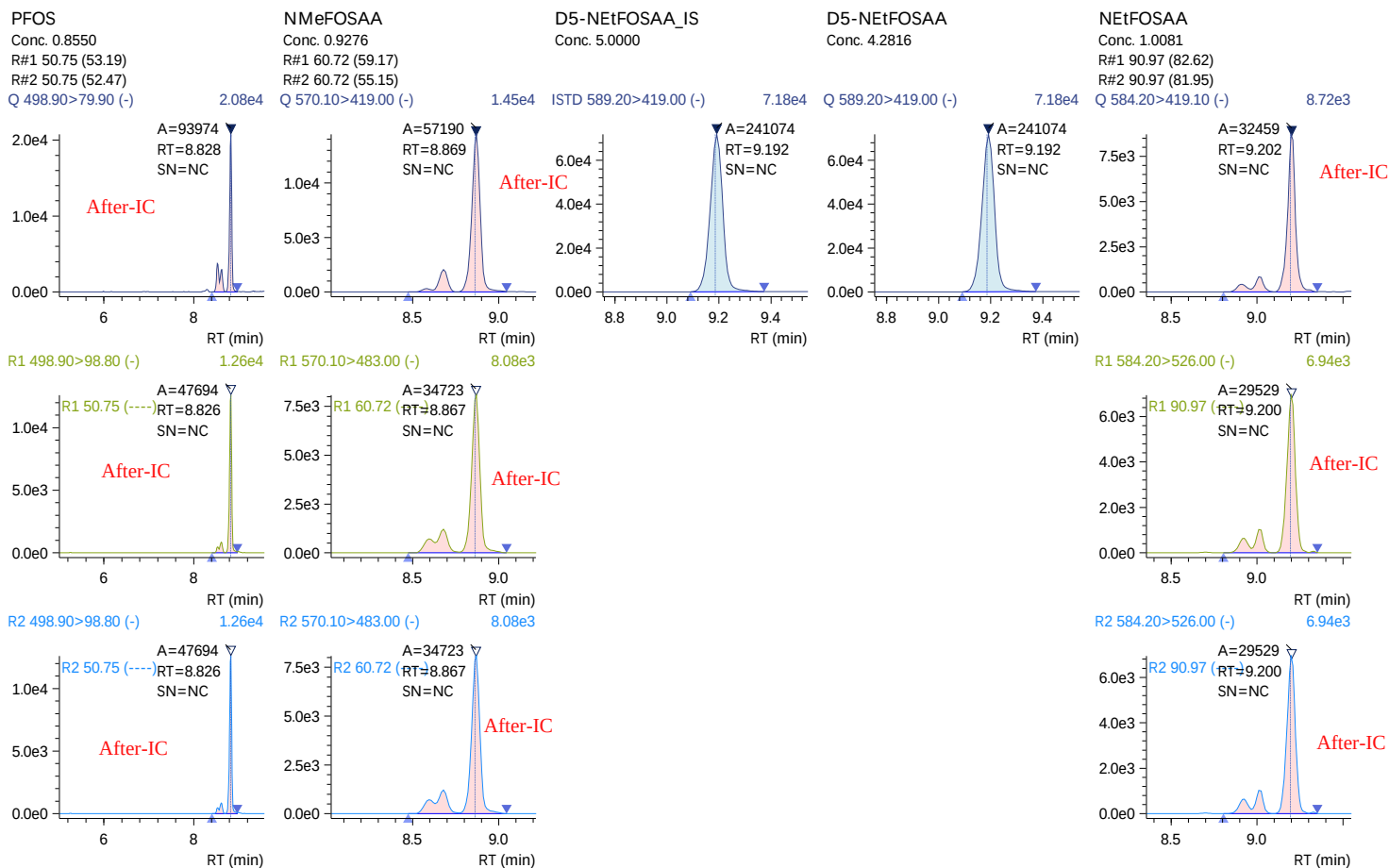


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_016 (continued)



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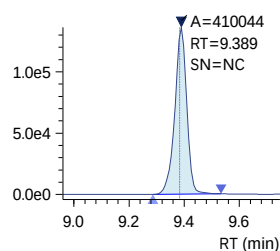
SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_016 (continued)

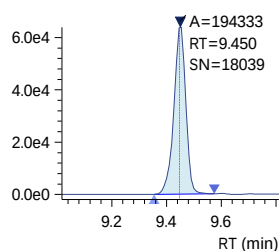
9-Cl-PF3ONS

Conc. 0.8061
R#1 32.66 (31.76)
R#2 32.66 (32.76)
Q 530.80>351.00 (-)



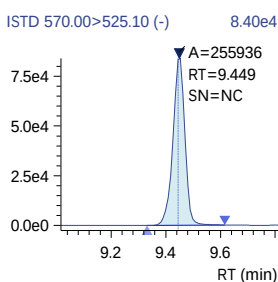
PFUnDA

Conc. 1.0190
R#1 13.12 (12.31)
R#2 13.12 (13.12)
Q 563.10>519.00 (-)



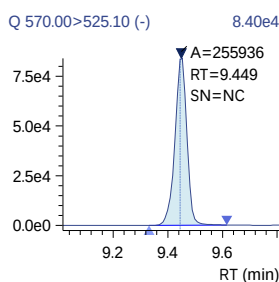
13C7-PFUnDA_IS

Conc. 1.2500



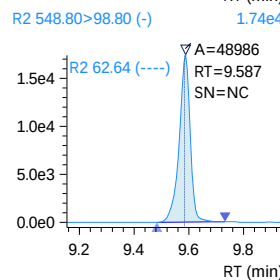
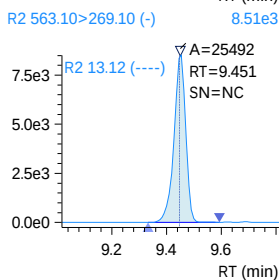
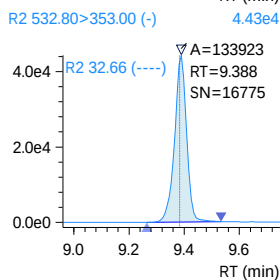
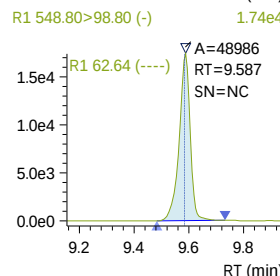
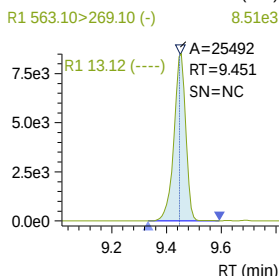
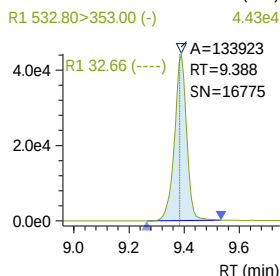
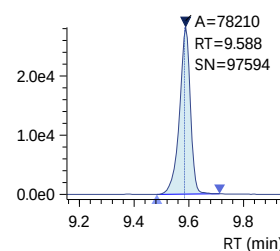
13C7-PFUnDA

Conc. 1.2448



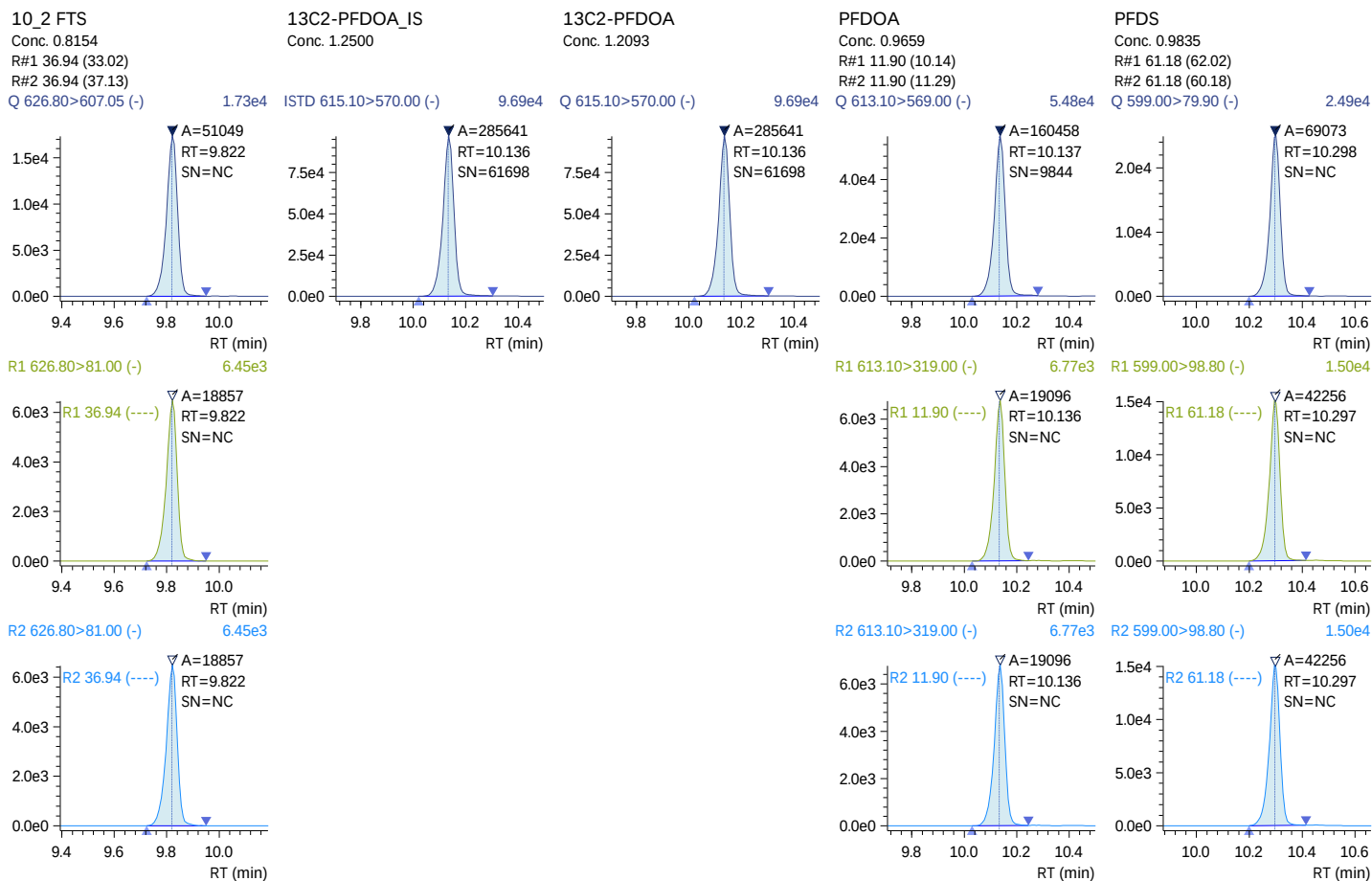
PFNS

Conc. 0.9740
R#1 62.64 (63.31)
R#2 62.64 (65.22)
Q 548.80>79.90 (-)





240118_016 (continued)

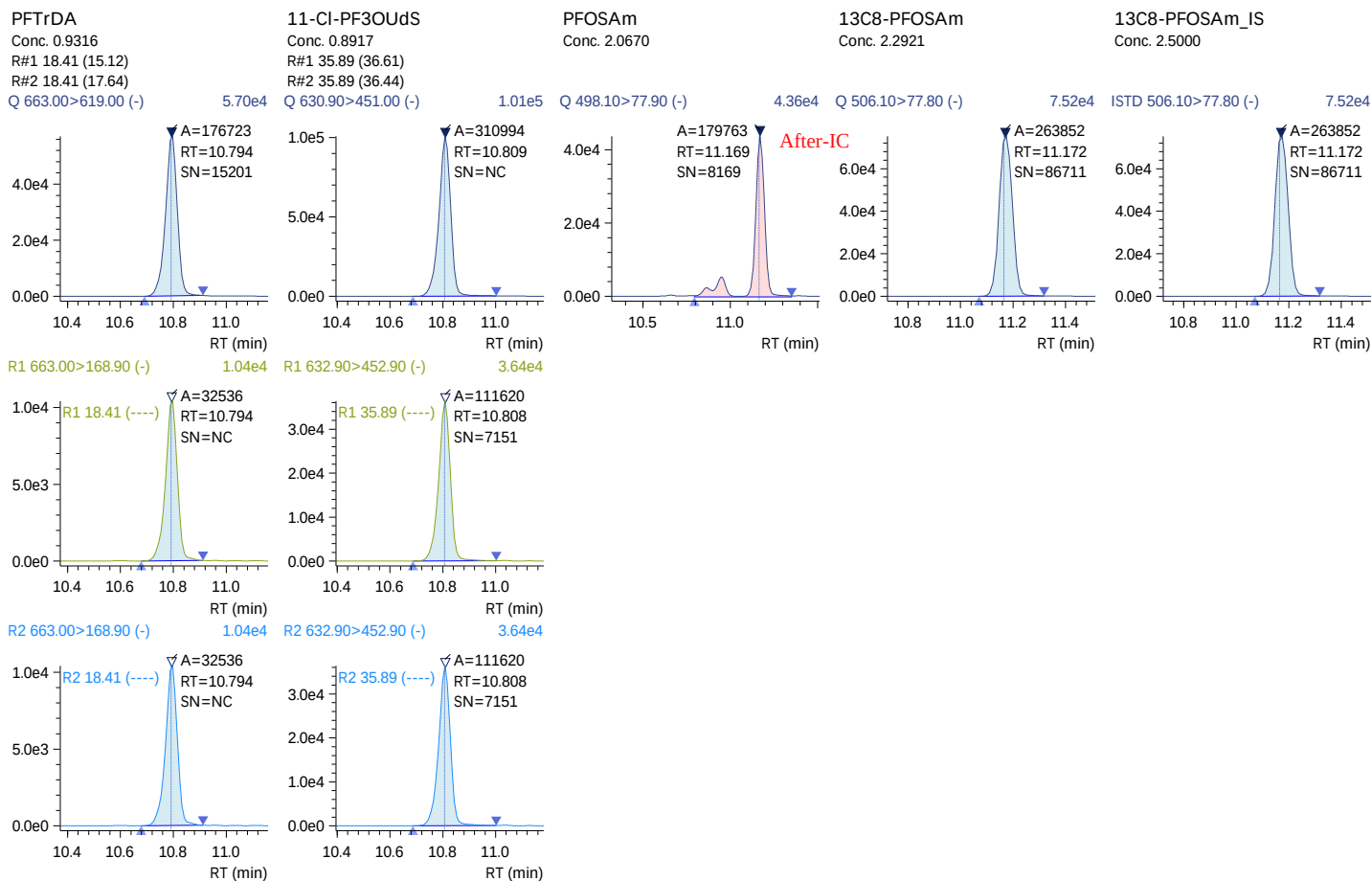


J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.damlp

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_016 (continued)

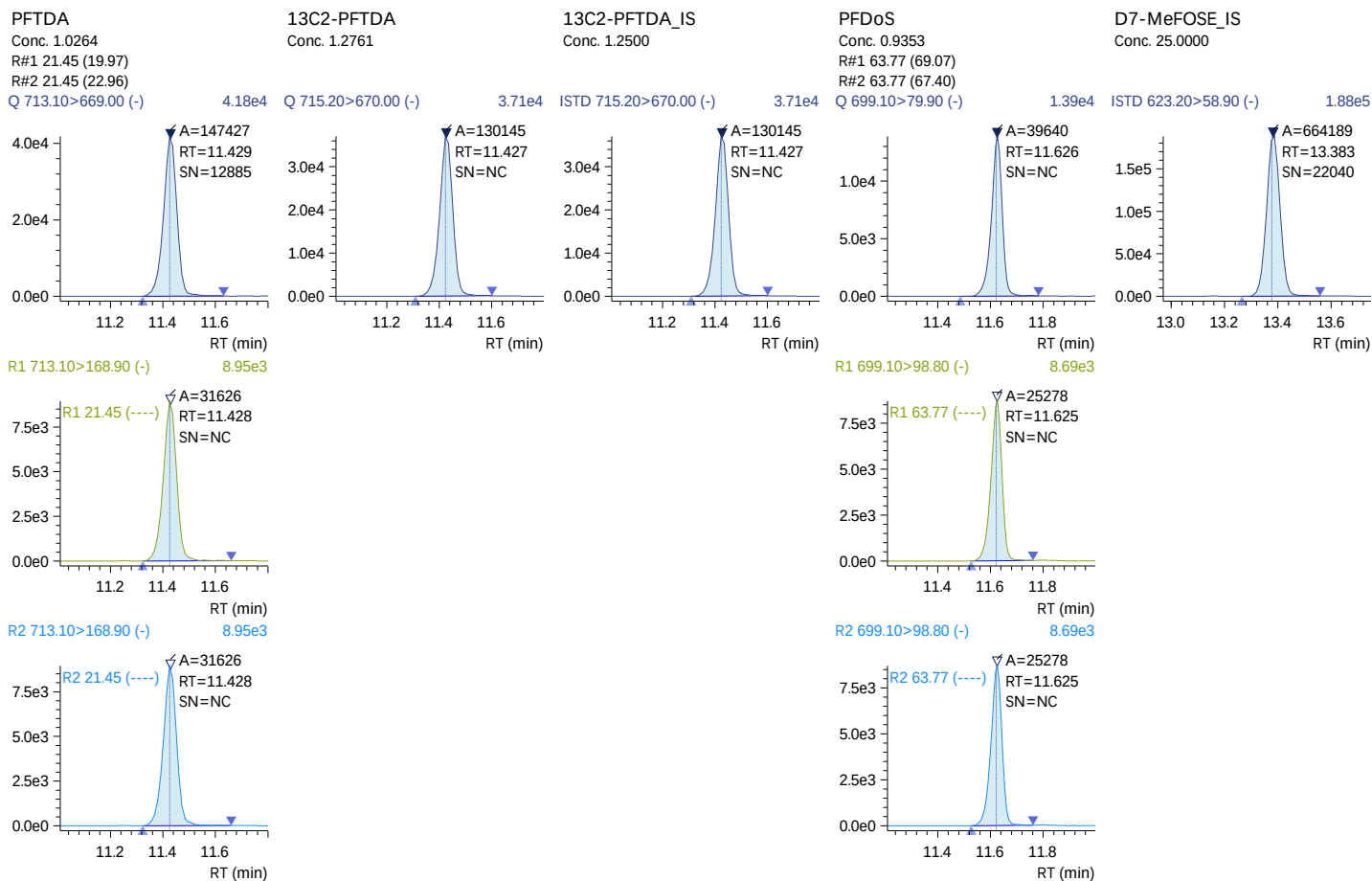


J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_016 (continued)



J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.damlp

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.

D7-MeFOSE
Conc. 23.4027

MeFOSE
Conc. 0.9618

13C2-PFH_XDA_IS
Conc. 2.5000

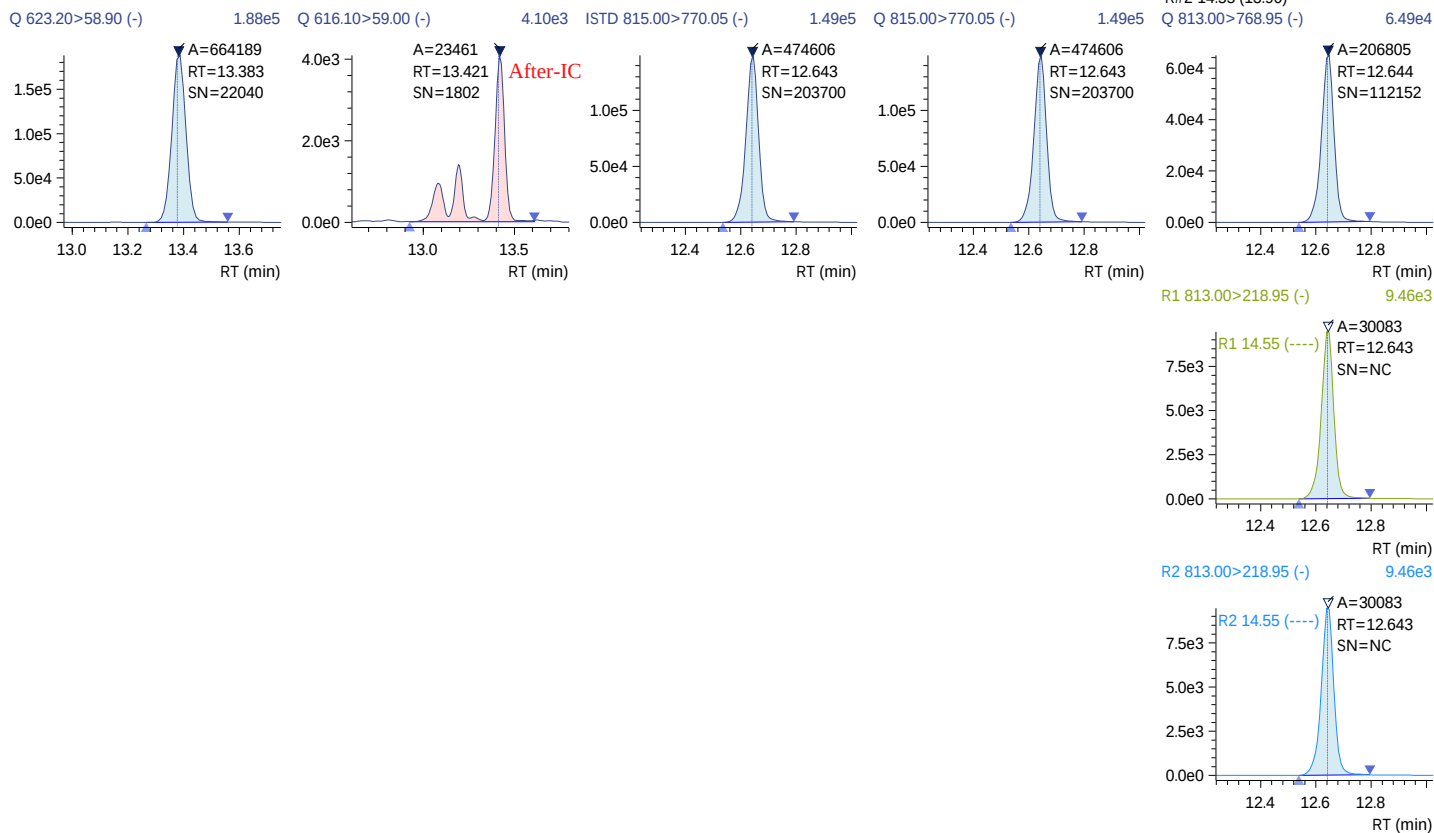
13C2-PFHDA
Conc. 2.3849

PFHXDA

Conc. 1.0349

R#1 14.55 (11.64)

R#2 14.55 (13.90)





240118_016 (continued)

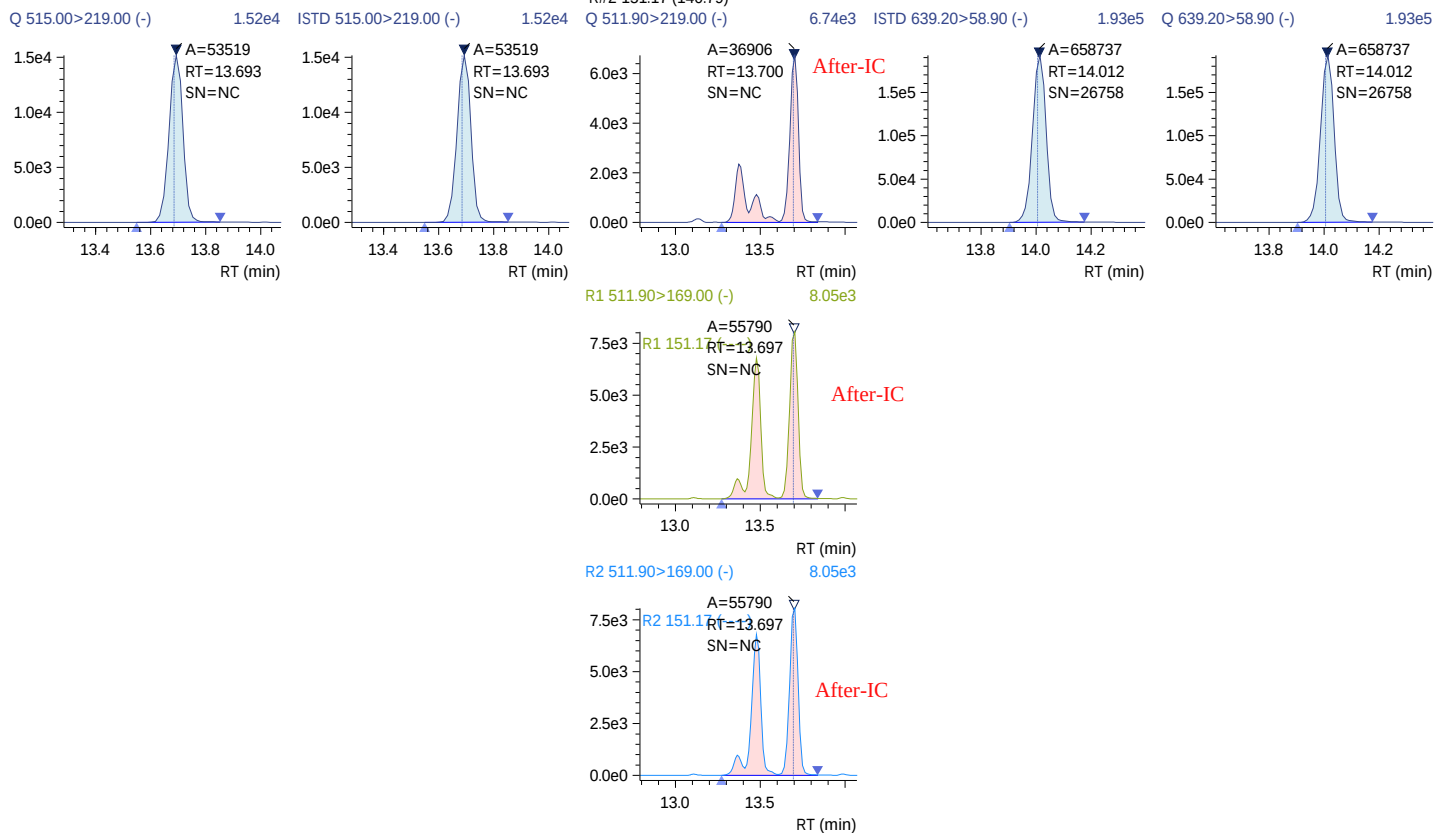
D3-MeFOSA
Conc. 2.3087

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. 0.9566
R#1 151.17 (149.05)
R#2 151.17 (140.79)

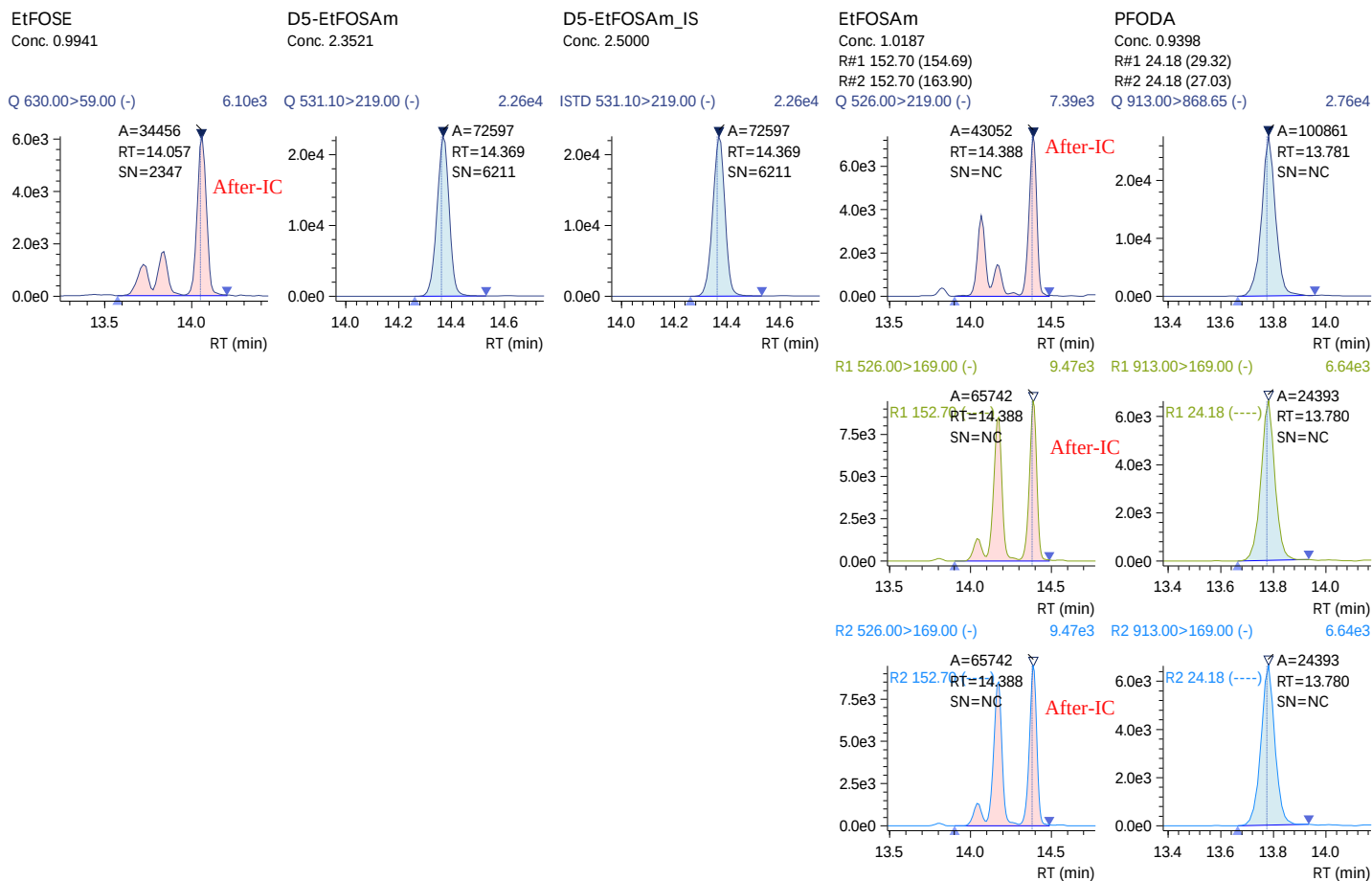
D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 22.8528





240118_016 (continued)



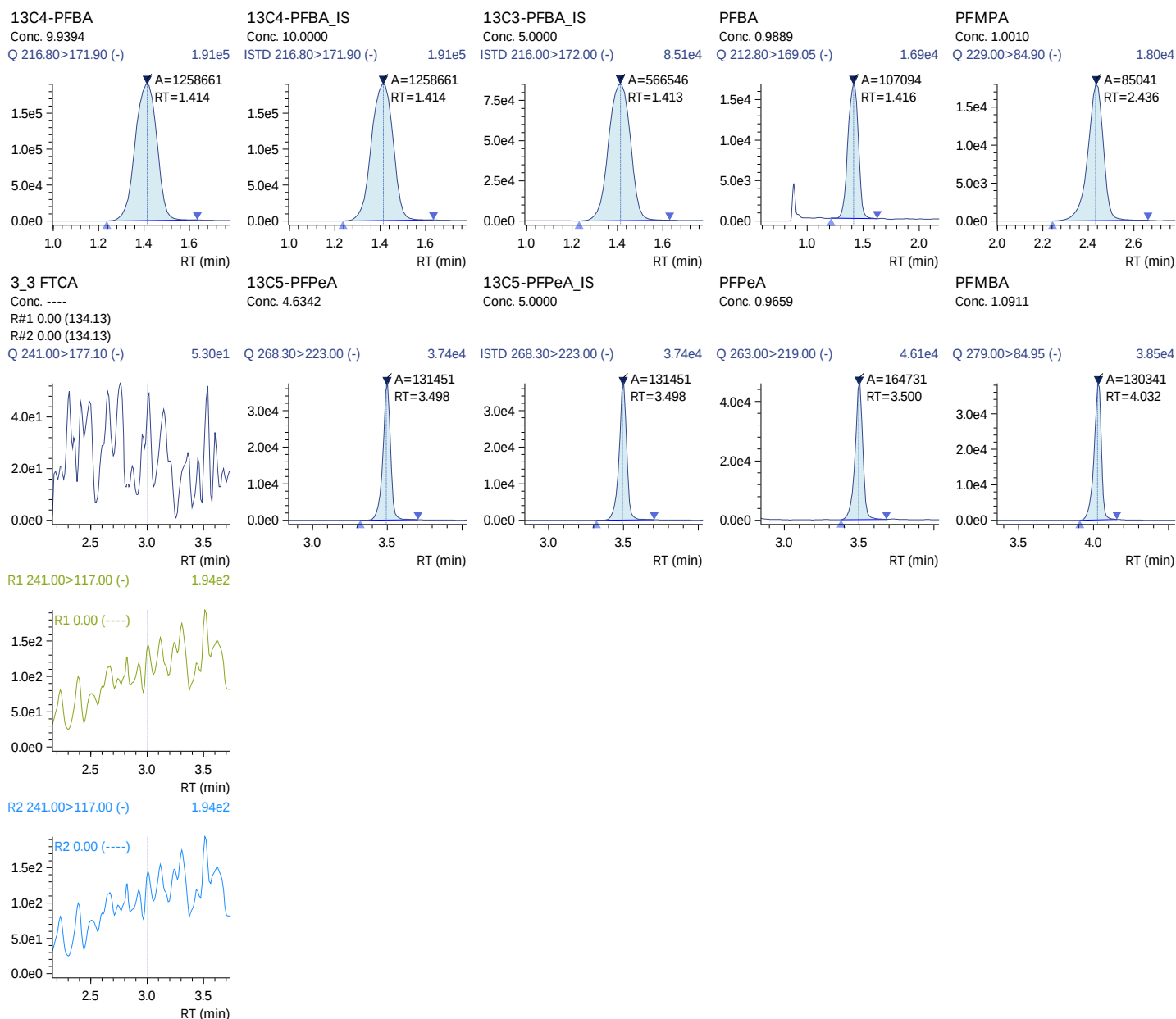
J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_016

Sample ID: 1633 ICV 1.0PPB
Date Acquired: 1/18/2024 5:57:03 PM
Acquired by: System Administrator
Data File: 240118_016
Vial: 10 | Inj. Volume: 10.0000uL | Tray: 1





240118_016 (continued)

13C2-4_2 FTS
Conc. 5.1325

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. 0.9036
R#1 29.20 (34.14)
R#2 29.20 (34.14)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 0.8643
R#1 48.54 (47.53)
R#2 48.54 (47.53)

Q 329.10>80.90 (-)

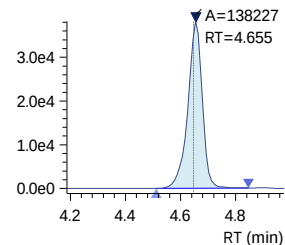
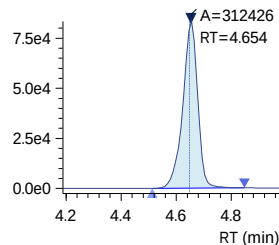
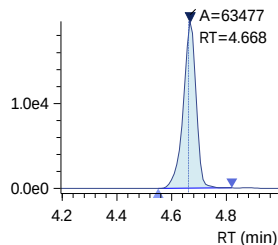
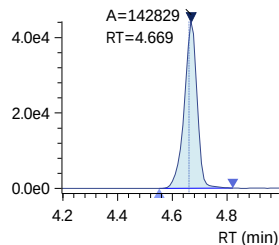
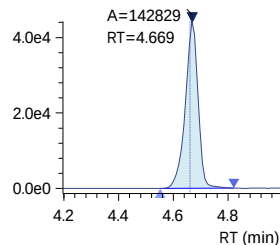
4.43e4 ISTD 329.10>80.90 (-)

4.43e4 Q 327.10>307.00 (-)

1.97e4 ISTD 302.10>79.90 (-)

8.34e4 Q 298.70>79.90 (-)

3.82e4

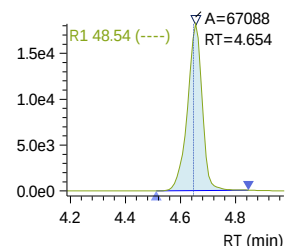
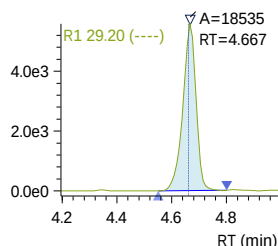


R1 327.10>80.90 (-)

5.58e3

R1 298.70>98.80 (-)

1.82e4

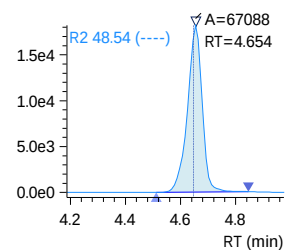
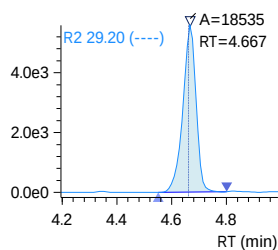


R2 327.10>80.90 (-)

5.58e3

R2 298.70>98.80 (-)

1.82e4





240118_016 (continued)

13C3-PFBS
 Conc. 2.7224

NFDHA
 Conc. 0.9535
 R#1 35.46 (37.88)
 R#2 35.46 (37.88)

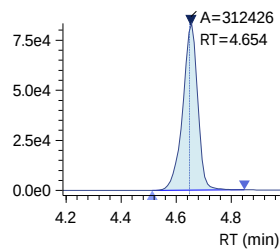
13C5-PFHxA
 Conc. 2.4893

13C5-PFHxA_IS
 Conc. 2.5000

13C2-PFHxA_IS
 Conc. 2.5000

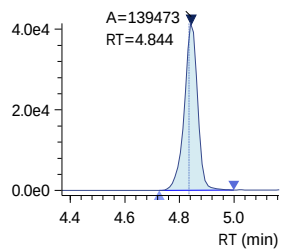
Q 302.10>79.90 (-)

8.34e4



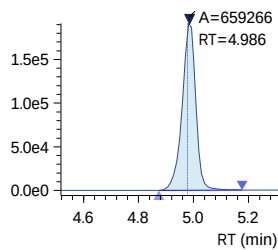
Q 295.00>201.00 (-)

4.15e4



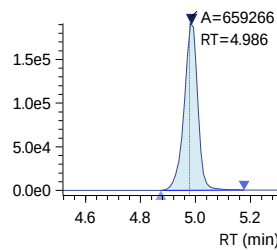
Q 318.00>273.00 (-)

1.91e5



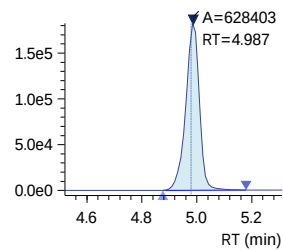
ISTD 318.00>273.00 (-)

1.91e5



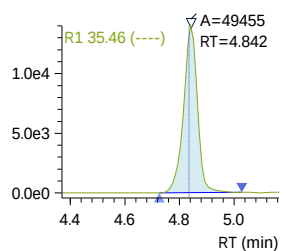
ISTD 315.10>270.00 (-)

1.82e5



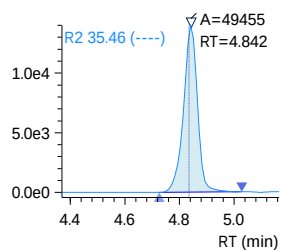
R1 295.00>84.90 (-)

1.40e4



R2 295.00>84.90 (-)

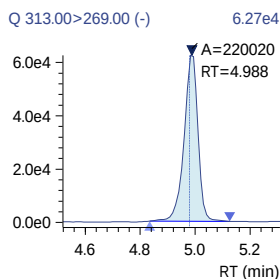
1.40e4



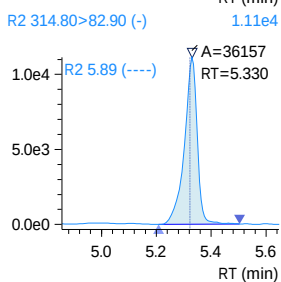
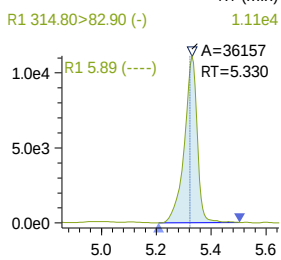
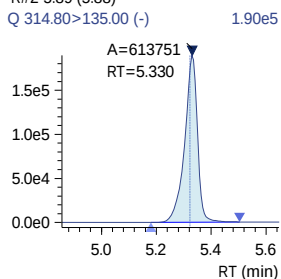


240118_016 (continued)

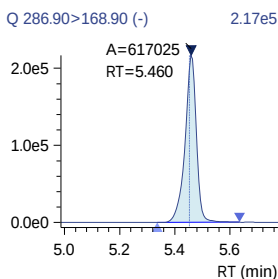
PFHxA
Conc. 1.0056



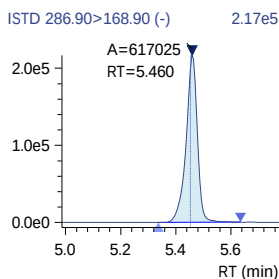
PFEESA
Conc. 0.8312
R#1 5.89 (5.88)
R#2 5.89 (5.88)



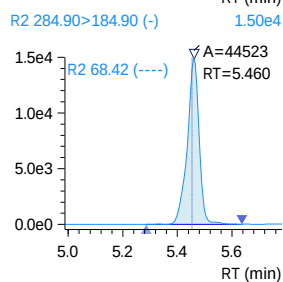
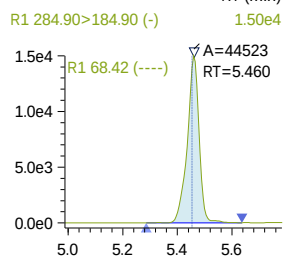
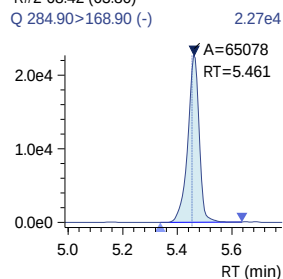
13C3-HFPO-DA
Conc. 10.0304



13C3-HFPO-DA_IS
Conc. 10.0000

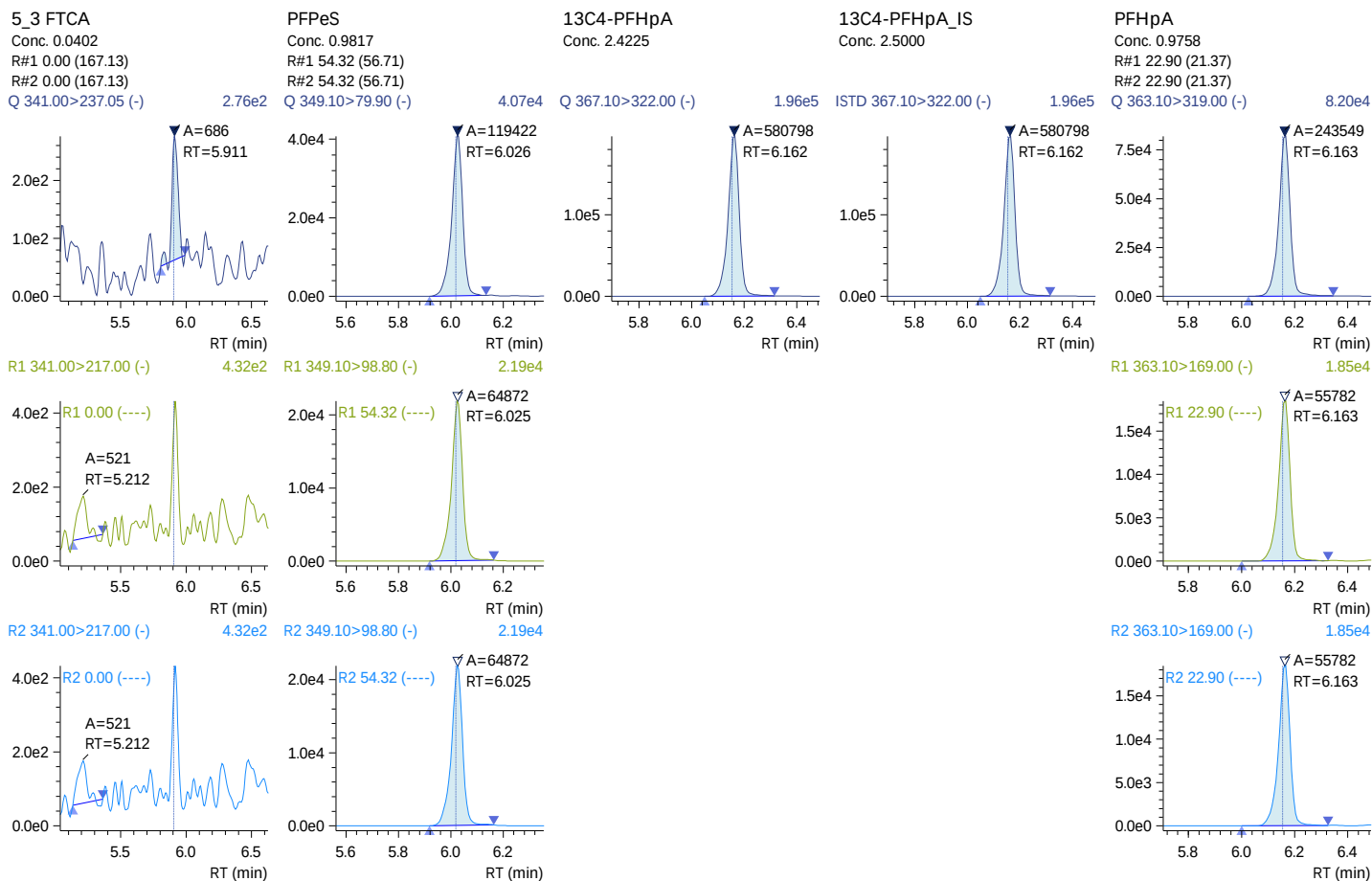


HFPO-DA
Conc. 0.9567
R#1 68.42 (63.80)
R#2 68.42 (63.80)



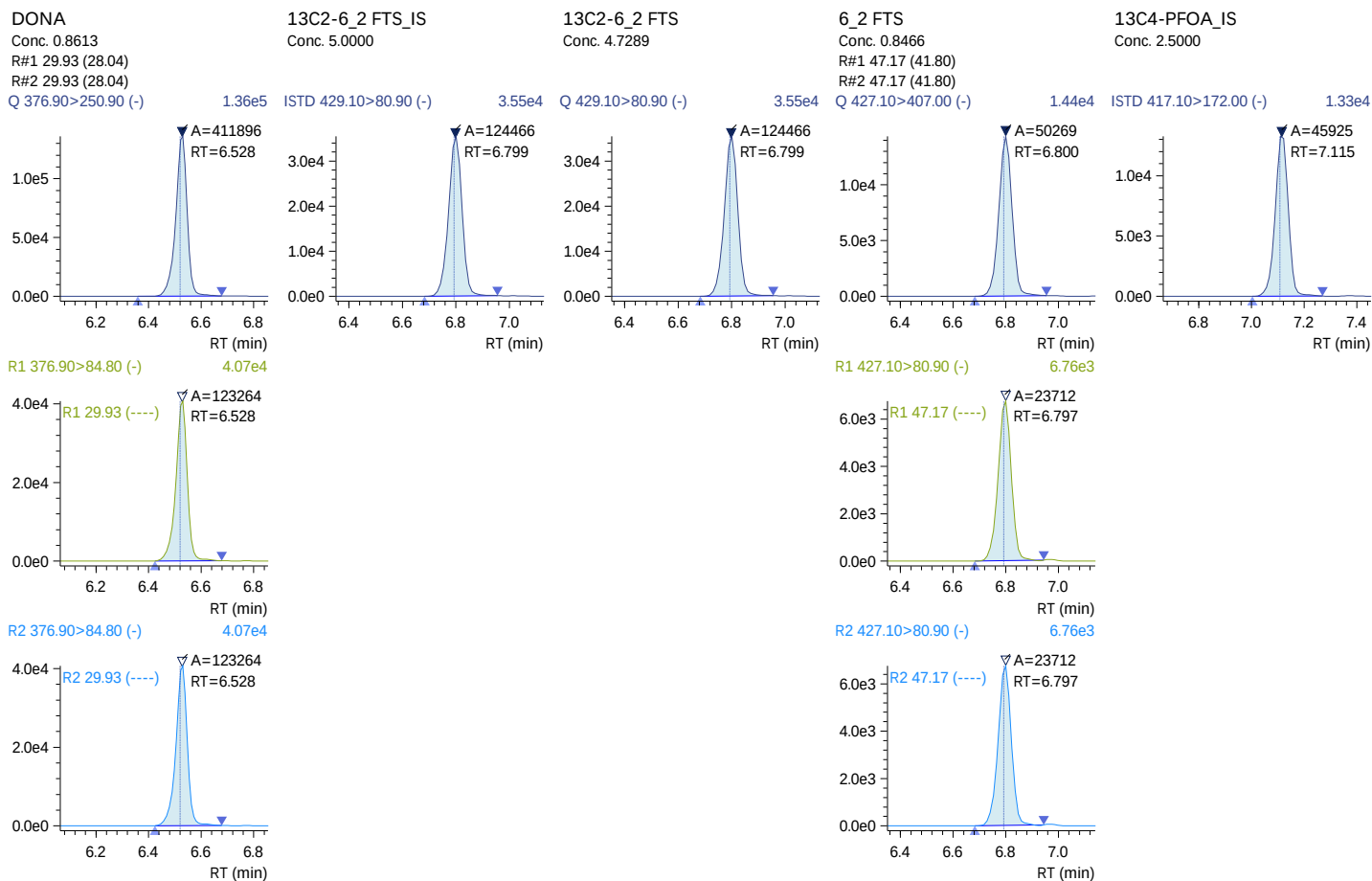


240118_016 (continued)





240118_016 (continued)





240118_016 (continued)

13C8-PFOA_IS
 Conc. 2.5000

13C8-PFOA
 Conc. 2.3656

PFOA
 Conc. 0.9693
 R#1 32.36 (29.05)
 R#2 32.36 (29.05)

13C3-PFHxS
 Conc. 2.6688

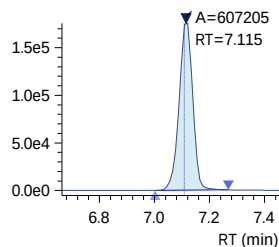
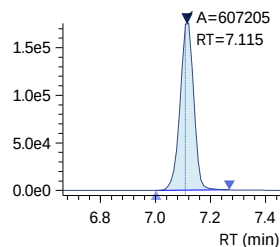
13C3-PFHxS_IS
 Conc. 2.5000

ISTD 421.10>376.00 (-)

1.76e5

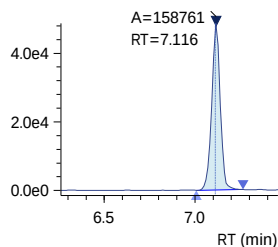
Q 421.10>376.00 (-)

1.76e5



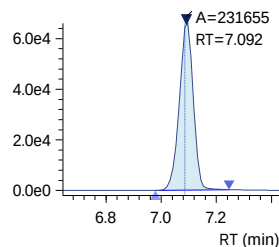
Q 413.00>369.00 (-)

4.87e4



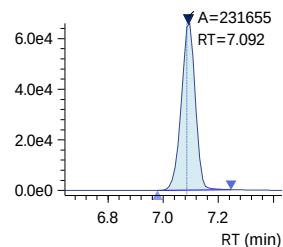
Q 402.10>79.90 (-)

6.60e4



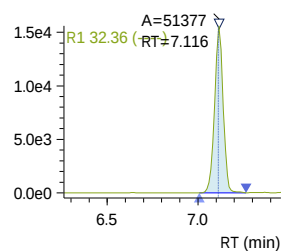
ISTD 402.10>79.90 (-)

6.60e4



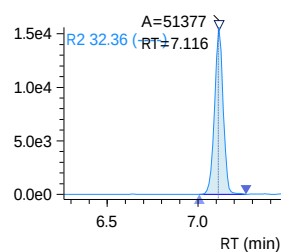
R1 413.00>169.00 (-)

1.56e4



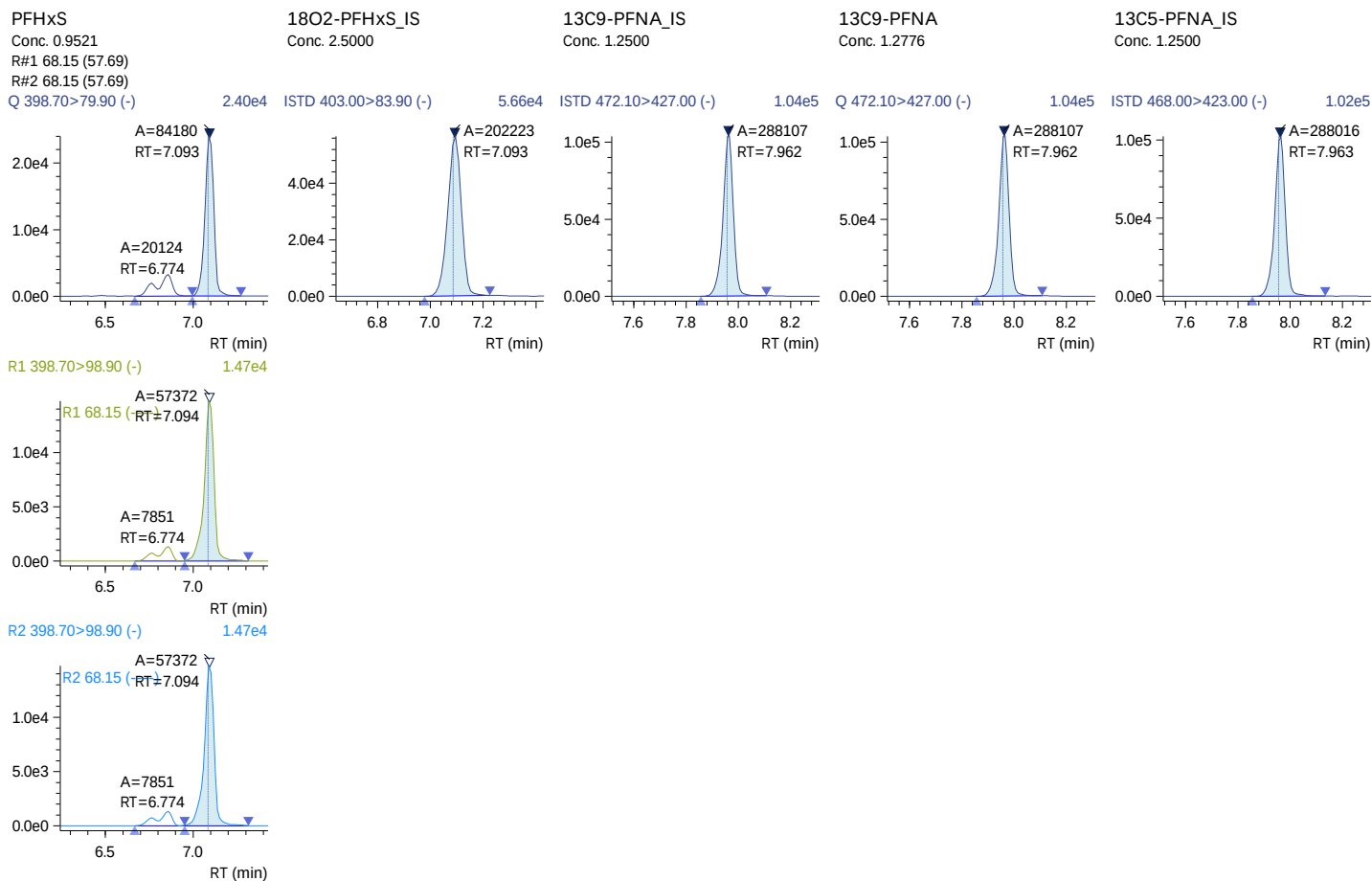
R2 413.00>169.00 (-)

1.56e4



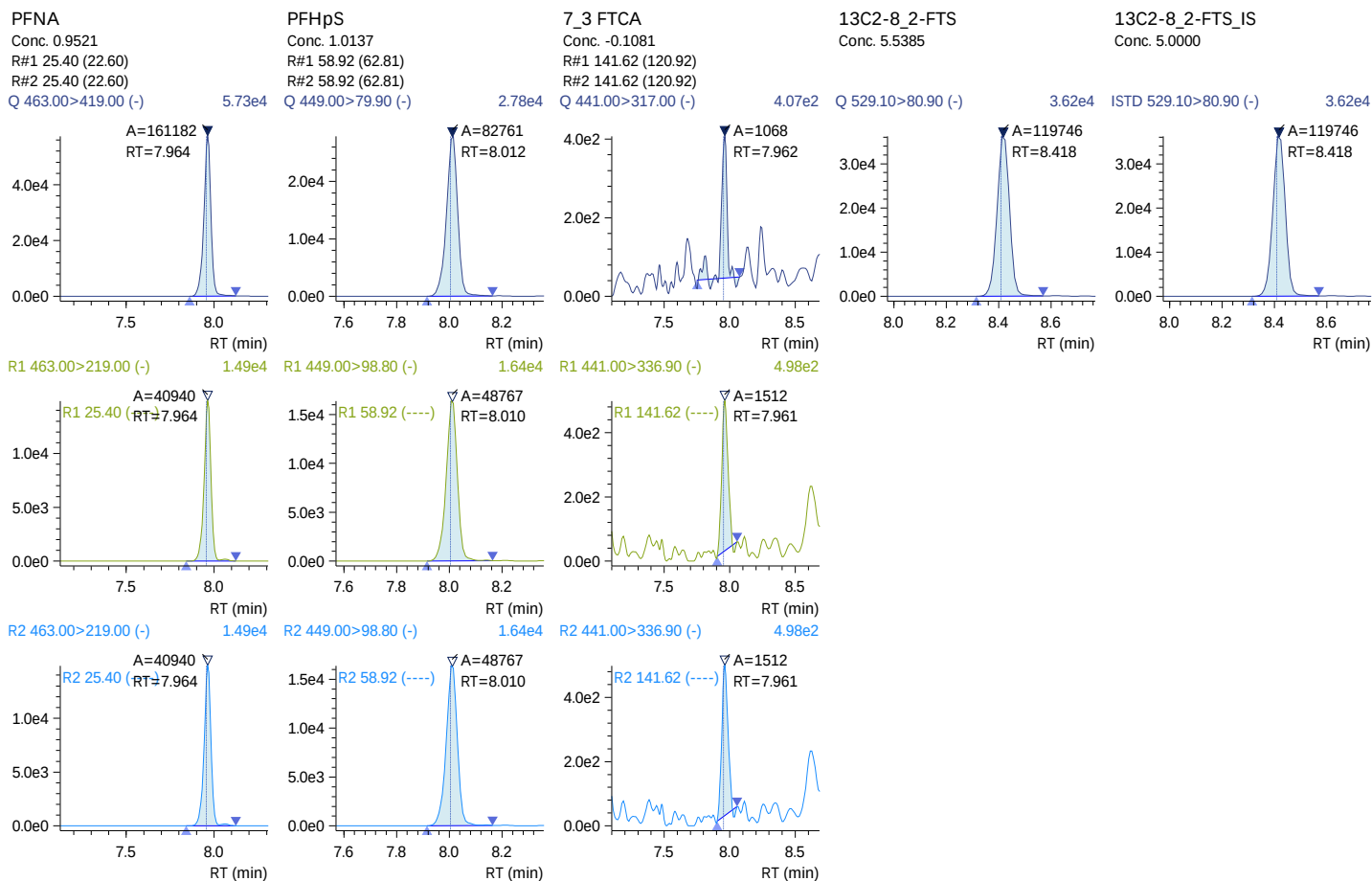


240118_016 (continued)



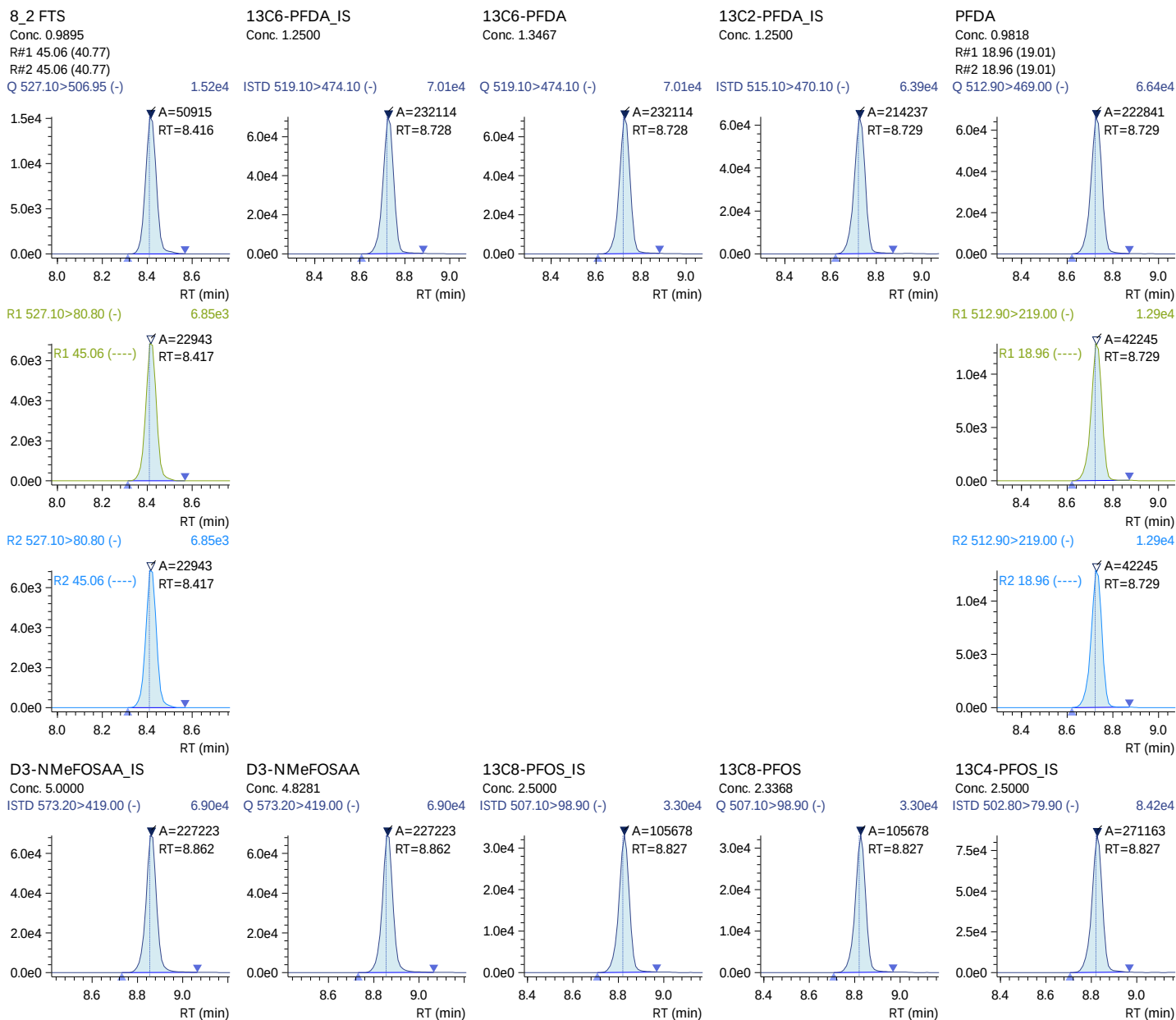


240118_016 (continued)



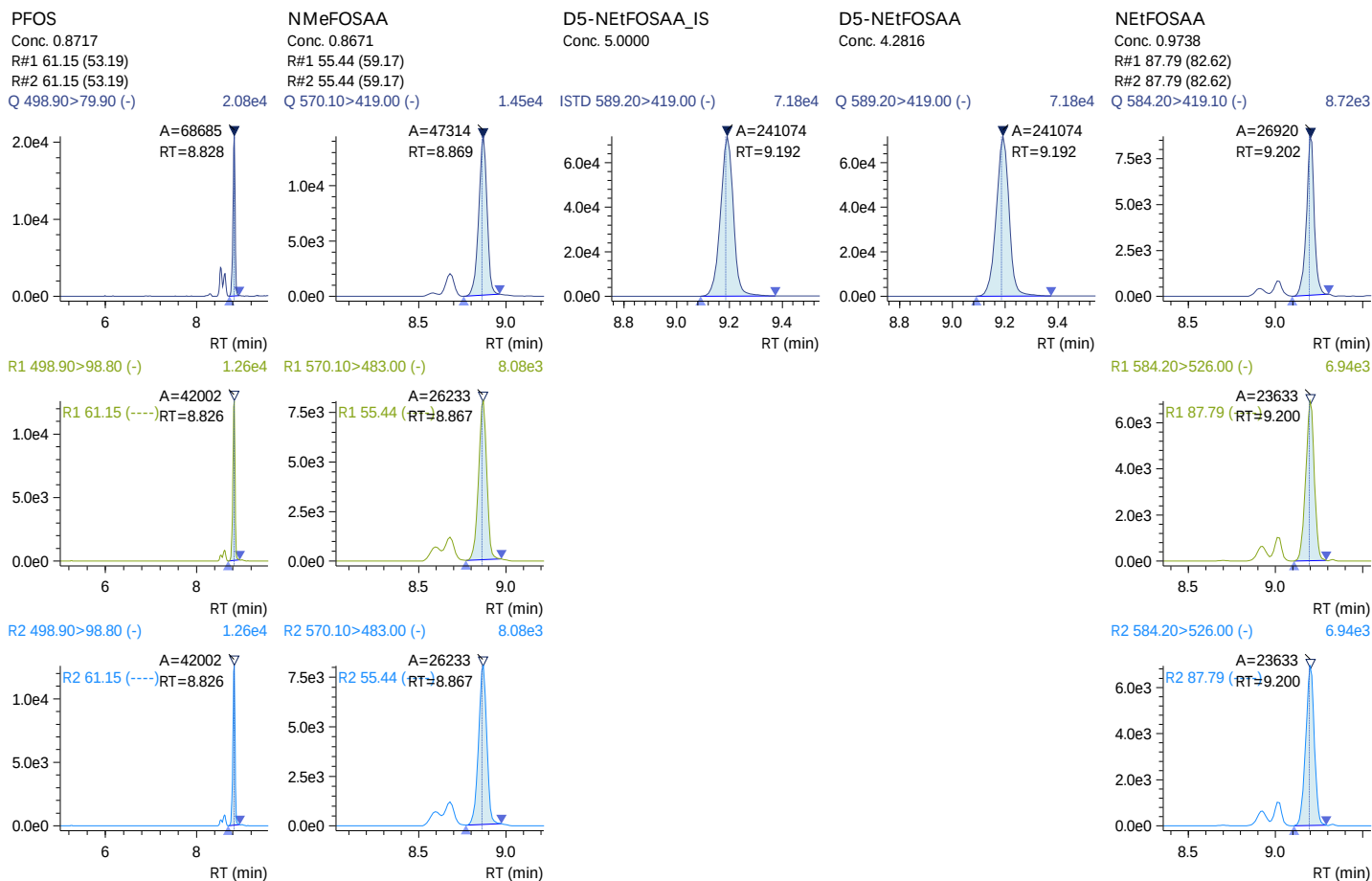


240118_016 (continued)





240118_016 (continued)

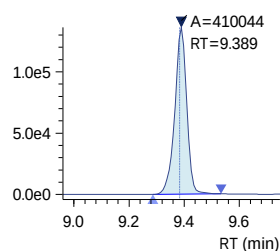




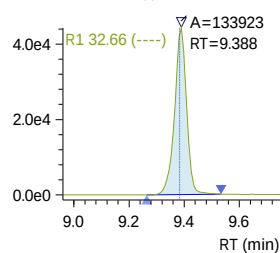
240118_016 (continued)

9-Cl-PF3ONS

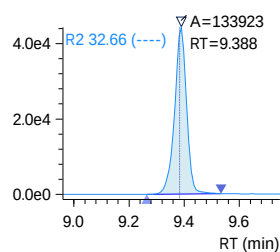
Conc. 0.8061
R#1 32.66 (31.76)
R#2 32.66 (31.76)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-) 4.43e4

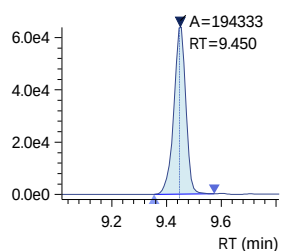


R2 532.80>353.00 (-) 4.43e4

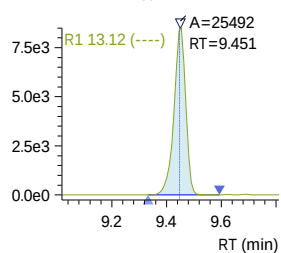


PFUnDA

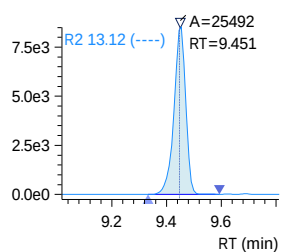
Conc. 1.0190
R#1 13.12 (12.31)
R#2 13.12 (12.31)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-) 8.51e3

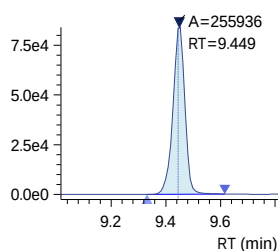


R2 563.10>269.10 (-) 8.51e3



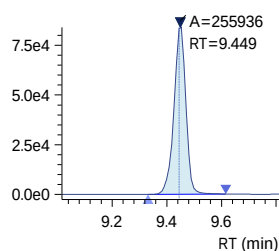
13C7-PFUnDA_IS

Conc. 1.2500
ISTD 570.00>525.10 (-)



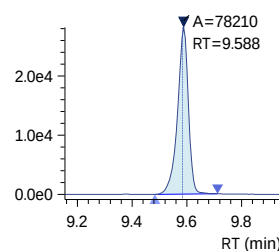
13C7-PFUnDA

Conc. 1.2448
Q 570.00>525.10 (-)

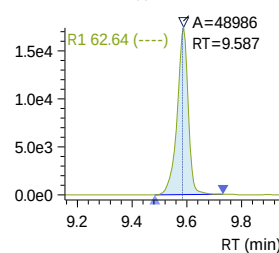


PFNS

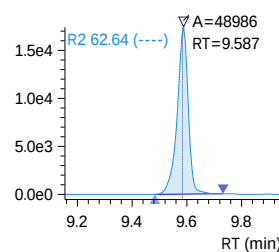
Conc. 0.9740
R#1 62.64 (63.31)
R#2 62.64 (63.31)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-) 1.74e4



R2 548.80>98.80 (-) 1.74e4





240118_016 (continued)

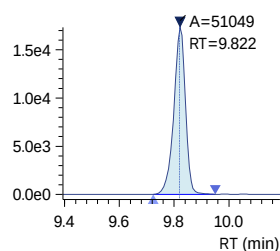
10_2_FTS

Conc. 0.8356

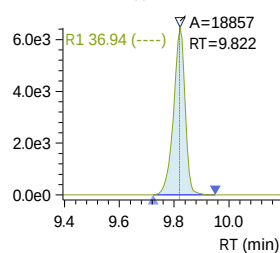
R#1 36.94 (33.02)

R#2 36.94 (33.02)

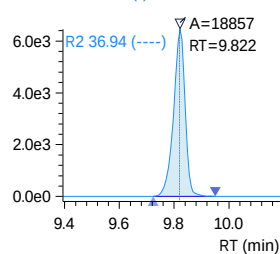
Q 626.80>607.05 (-)



R1 626.80>81.00 (-) 6.45e3



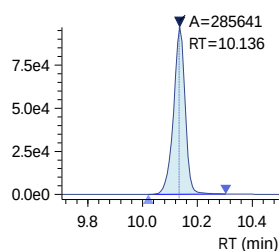
R2 626.80>81.00 (-) 6.45e3



13C2-PFDOA_IS

Conc. 1.2500

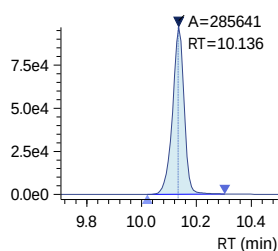
ISTD 615.10>570.00 (-)



13C2-PFDOA

Conc. 1.2093

Q 615.10>570.00 (-)



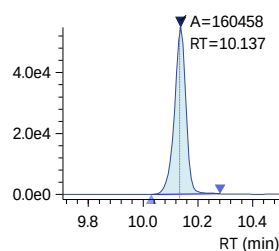
PFDOA

Conc. 0.9659

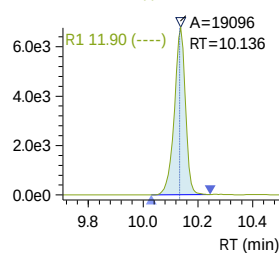
R#1 11.90 (10.14)

R#2 11.90 (10.14)

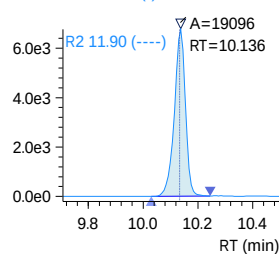
Q 613.10>569.00 (-)



R1 613.10>319.00 (-) 6.77e3



R2 613.10>319.00 (-) 6.77e3



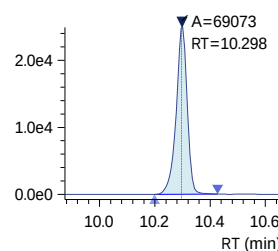
PFDS

Conc. 0.9639

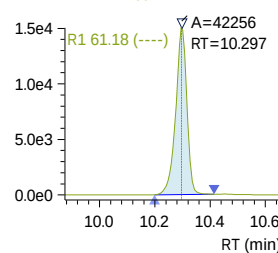
R#1 61.18 (62.02)

R#2 61.18 (62.02)

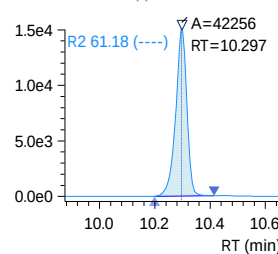
Q 599.00>79.90 (-)



R1 599.00>98.80 (-) 1.50e4



R2 599.00>98.80 (-) 1.50e4

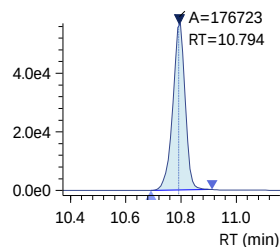




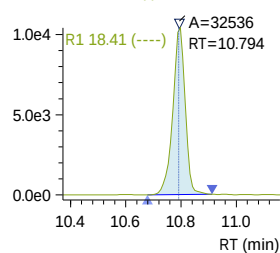
240118_016 (continued)

PFTTrDA

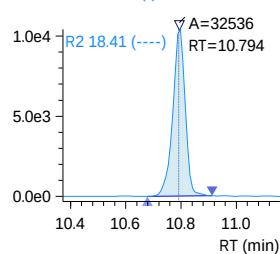
Conc. 0.9316
 R#1 18.41 (15.12)
 R#2 18.41 (15.12)
 Q 663.00>619.00 (-)



R1 663.00>168.90 (-) 1.04e4

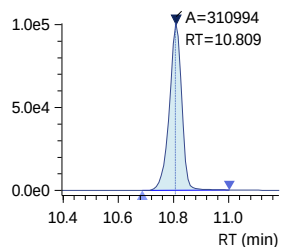


R2 663.00>168.90 (-) 1.04e4

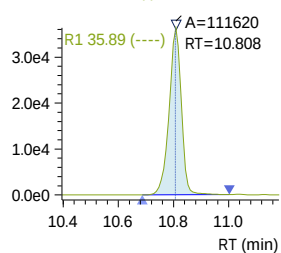


11-CI-PF3OUdS

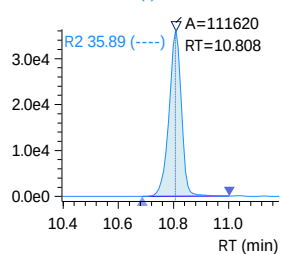
Conc. 0.8452
 R#1 35.89 (36.61)
 R#2 35.89 (36.61)
 Q 630.90>451.00 (-)



R1 632.90>452.90 (-) 3.64e4

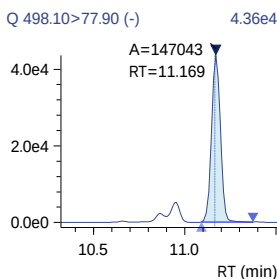


R2 632.90>452.90 (-) 3.64e4



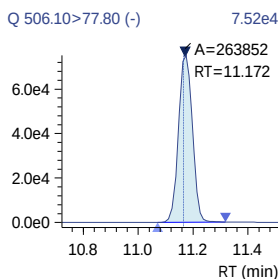
PFOSAm

Conc. 2.0055



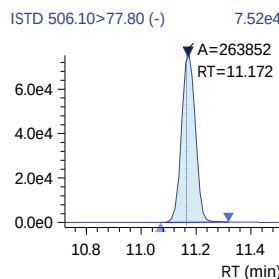
13C8-PFOSAm

Conc. 2.2921



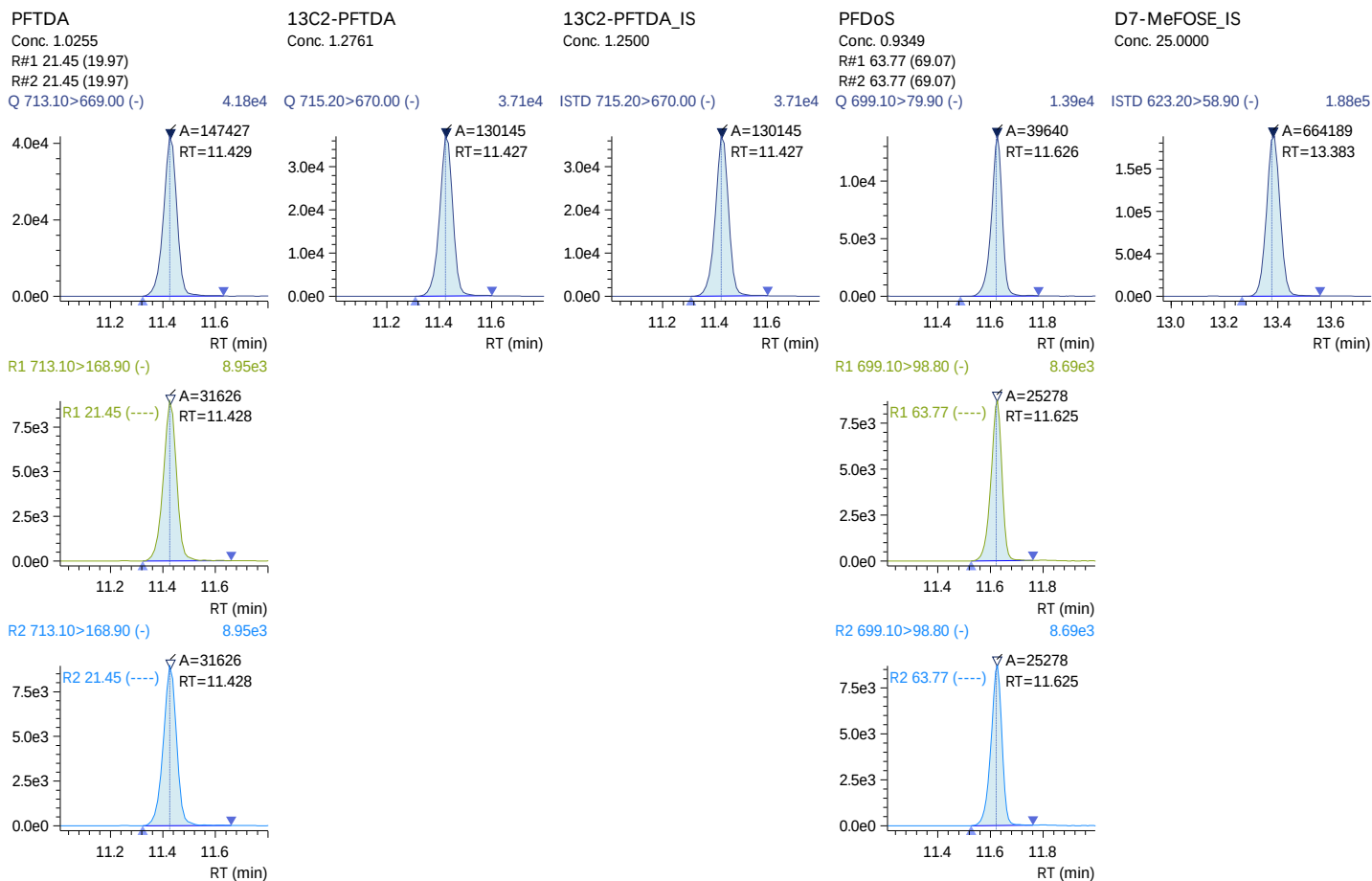
13C8-PFOSAm_IS

Conc. 2.5000





240118_016 (continued)





240118_016 (continued)

D7-MeFOSE
Conc. 23.4027

MeFOSE
Conc. 0.9457

13C2-PFHXA_IS
Conc. 2.5000

13C2-PFHXA
Conc. 2.3849

PFHXA
Conc. 1.0349
R#1 14.55 (11.64)
R#2 14.55 (11.64)

Q 623.20>58.90 (-)

1.88e5

Q 616.10>59.00 (-)

4.10e3

ISTD 815.00>770.05 (-)

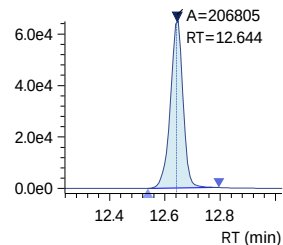
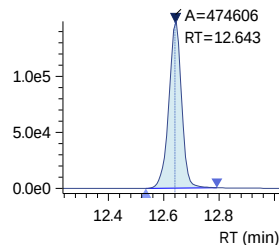
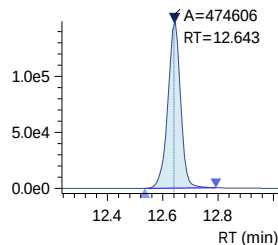
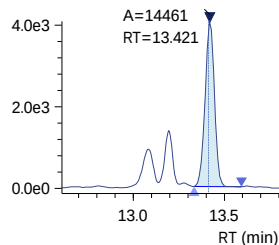
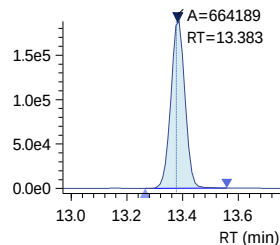
1.49e5

Q 815.00>770.05 (-)

1.49e5

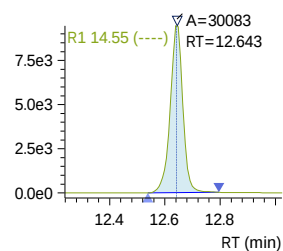
Q 813.00>768.95 (-)

6.49e4



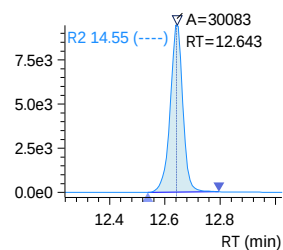
R1 813.00>218.95 (-)

9.46e3



R2 813.00>218.95 (-)

9.46e3





240118_016 (continued)

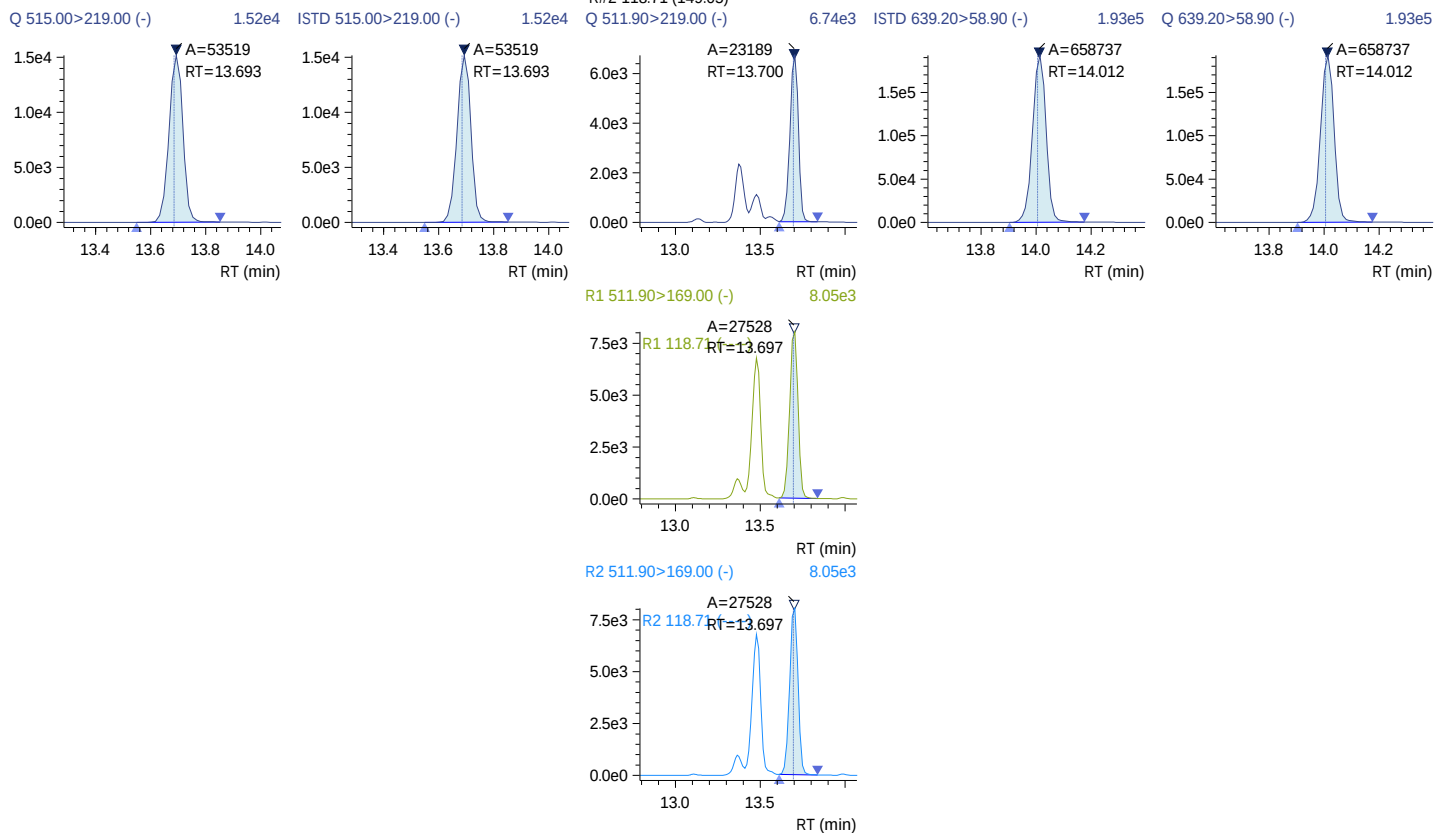
D3-MeFOSA
 Conc. 2.3087

D3-MeFOSA_IS
 Conc. 2.5000

MeFOSA
 Conc. 0.9720
 R#1 118.71 (149.05)
 R#2 118.71 (149.05)

D9-EtFOSE_IS
 Conc. 25.0000

D9-EtFOSE
 Conc. 22.8528





240118_016 (continued)

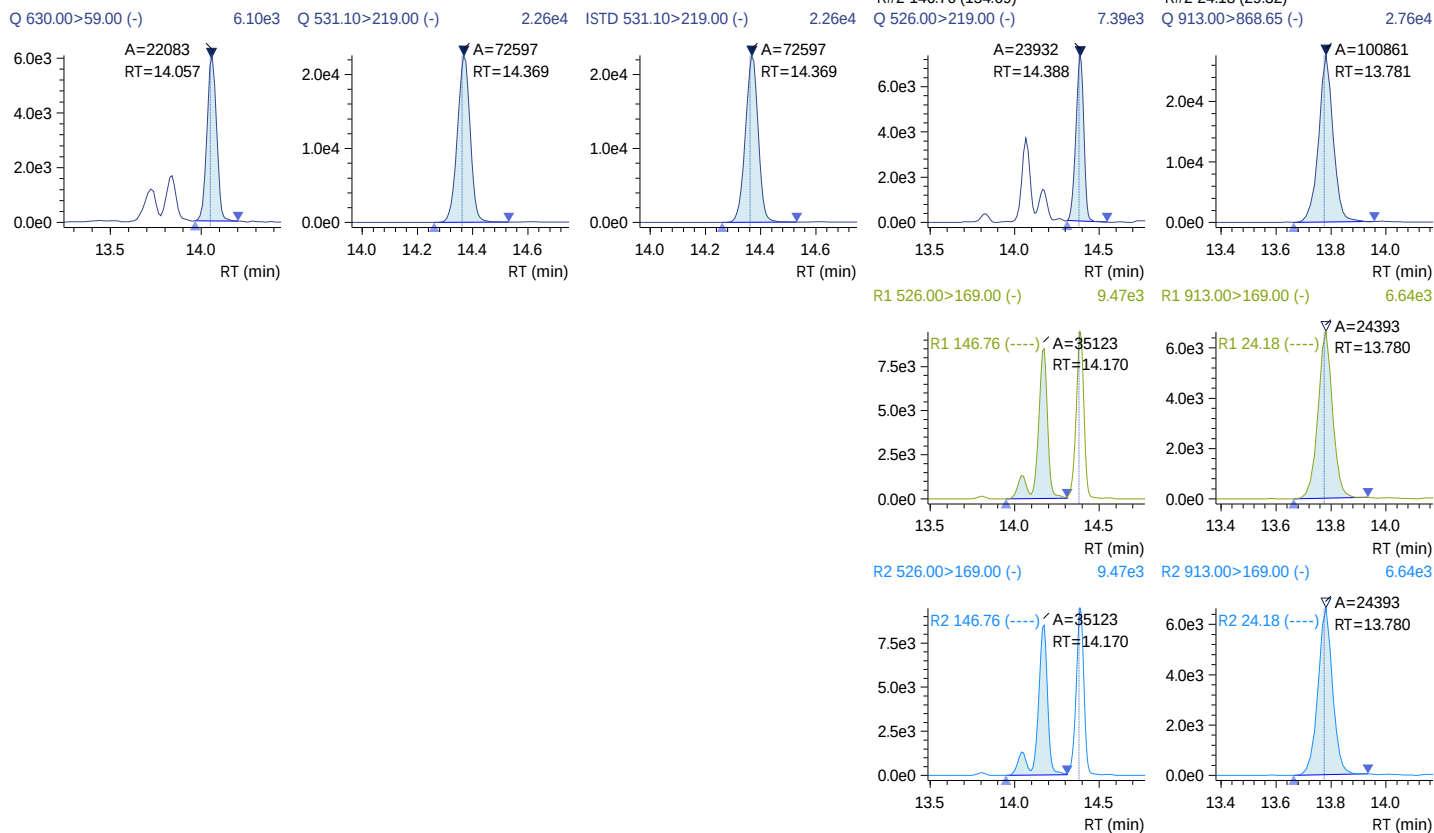
EtFOSE
Conc. 0.9647

D5-EtFOSAm
Conc. 2.3521

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. 1.0319
R#1 146.76 (154.69)
R#2 146.76 (154.69)

PFODA
Conc. 0.9719
R#1 24.18 (29.32)
R#2 24.18 (29.32)





240118_017

Sample ID: 1633 FTCA ICV 1.0PPB
Date Acquired: 1/18/2024 6:20:19 PM
Acquired by: System Administrator
Data File: 240118_017
Vial: 11 | Inj. Volume: 10.0000uL | Tray: 1

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	1330303	----	----	----	----	----	----	----
13C4-PFBA_IS	216.80>171.90	----	1330303	----	----	----	----	----	----	----
13C3-PFBA_IS	216.00>172.00	----	598500	----	----	----	----	----	----	----
PFBA	212.80>169.05	----	----	----	----	----	----	----	----	----
PFMPA	229.00>84.90	----	----	----	----	----	----	----	----	----
3_3 FTCA	241.00>177.10	241.00>117.00	70176	96213	137.10	141.17	96213	137.10	141.17	
13C5-PFPeA	268.30>223.00	----	145319	----	----	----	----	----	----	----
13C5-PFPeA_IS	268.30>223.00	----	145319	----	----	----	----	----	----	----
PFPeA	263.00>219.00	----	----	----	----	----	----	----	----	----
PFMBA	279.00>84.95	----	----	----	----	----	----	----	----	----
13C2-4_2 FTS	329.10>80.90	----	145969	----	----	----	----	----	----	----
13C2-4_2 FTS_IS	329.10>80.90	----	145969	----	----	----	----	----	----	----
4_2 FTS	327.10>307.00	327.10>80.90	----	0	0.00	29.06	0	0.00	29.06	
13C3-PFBS_IS	302.10>79.90	----	344240	----	----	----	----	----	----	----
PFBS	298.70>79.90	298.70>98.80	----	0	0.00	46.72	0	0.00	46.72	
13C3-PFBS	302.10>79.90	----	344240	----	----	----	----	----	----	----
NFDHA	295.00>201.00	295.00>84.90	----	0	0.00	40.25	0	0.00	40.25	
13C5-PFHxA	318.00>273.00	----	661898	----	----	----	----	----	----	----
13C5-PFHxA_IS	318.00>273.00	----	661898	----	----	----	----	----	----	----
13C2-PFHxA_IS	315.10>270.00	----	626058	----	----	----	----	----	----	----
PFHxA	313.00>269.00	----	----	----	----	----	----	----	----	----
PFEESA	314.80>135.00	314.80>82.90	----	0	0.00	6.11	0	0.00	6.11	
13C3-HFPO-DA	286.90>168.90	----	650567	----	----	----	----	----	----	----
13C3-HFPO-DA_IS	286.90>168.90	----	650567	----	----	----	----	----	----	----
HFPO-DA	284.90>168.90	284.90>184.90	----	0	0.00	65.61	0	0.00	65.61	
5_3 FTCA	341.00>237.05	341.00>217.00	331687	530323	159.89	158.86	530323	159.89	158.86	
PFPeS	349.10>79.90	349.10>98.80	----	0	0.00	55.80	0	0.00	55.80	
13C4-PFHpA	367.10>322.00	----	611403	----	----	----	----	----	----	----
13C4-PFHpA_IS	367.10>322.00	----	611403	----	----	----	----	----	----	----
PFHpA	363.10>319.00	363.10>169.00	----	0	0.00	21.50	0	0.00	21.50	
DONA	376.90>250.90	376.90>84.80	----	0	0.00	29.66	0	0.00	29.66	
13C2-6_2 FTS_IS	429.10>80.90	----	135491	----	----	----	----	----	----	----
13C2-6_2 FTS	429.10>80.90	----	135491	----	----	----	----	----	----	----
6_2 FTS	427.10>407.00	427.10>80.90	----	0	0.00	41.15	0	0.00	41.15	
13C4-PFOA_IS	417.10>172.00	----	45240	----	----	----	----	----	----	----
13C8-PFOA_IS	421.10>376.00	----	640225	----	----	----	----	----	----	----

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240118_017 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	640225	----	----	----	----	----	----	----
PFOA	413.00>369.00	413.00>169.00	----	0	0.00	31.89	0	0.00	31.89	
13C3-PFHxS	402.10>79.90	----	260385	----	----	----	----	----	----	----
13C3-PFHxS_IS	402.10>79.90	----	260385	----	----	----	----	----	----	----
PFHxS	398.70>79.90	398.70>98.90	----	0	0.00	56.62	0	0.00	56.62	
18O2-PFHxS_IS	403.00>83.90	----	234067	----	----	----	----	----	----	----
13C9-PFNA_IS	472.10>427.00	----	307312	----	----	----	----	----	----	----
13C9-PFNA	472.10>427.00	----	307312	----	----	----	----	----	----	----
13C5-PFNA_IS	468.00>423.00	----	316255	----	----	----	----	----	----	----
PFNA	463.00>419.00	463.00>219.00	----	0	0.00	23.17	0	0.00	23.17	
PFHpS	449.00>79.90	449.00>98.80	----	0	0.00	56.96	0	0.00	56.96	
7_3 FTCA	441.00>317.00	441.00>336.90	466748	535231	114.67	117.47	535231	114.67	117.47	
13C2-8_2-FTS	529.10>80.90	----	104364	----	----	----	----	----	----	----
13C2-8_2-FTS_IS	529.10>80.90	----	104364	----	----	----	----	----	----	----
8_2 FTS	527.10>506.95	527.10>80.80	----	0	0.00	49.59	0	0.00	49.59	
13C6-PFDA_IS	519.10>474.10	----	221808	----	----	----	----	----	----	----
13C6-PFDA	519.10>474.10	----	221808	----	----	----	----	----	----	----
13C2-PFDA_IS	515.10>470.10	----	222912	----	----	----	----	----	----	----
PFDA	512.90>469.00	512.90>219.00	----	0	0.00	19.00	0	0.00	19.00	
D3-NMeFOSAA_IS	573.20>419.00	----	217334	----	----	----	----	----	----	----
D3-NMeFOSAA	573.20>419.00	----	217334	----	----	----	----	----	----	----
13C8-PFOS_IS	507.10>98.90	----	114722	----	----	----	----	----	----	----
13C8-PFOS	507.10>98.90	----	114722	----	----	----	----	----	----	----
13C4-PFOS_IS	502.80>79.90	----	278941	----	----	----	----	----	----	----
PFOS	498.90>79.90	498.90>98.80	----	0	0.00	52.47	0	0.00	52.47	
NMeFOSAA	570.10>419.00	570.10>483.00	----	0	0.00	55.15	0	0.00	55.15	
D5-NEtFOSAA_IS	589.20>419.00	----	244437	----	----	----	----	----	----	----
D5-NEtFOSAA	589.20>419.00	----	244437	----	----	----	----	----	----	----
NEtFOSAA	584.20>419.10	584.20>526.00	----	0	0.00	81.95	0	0.00	81.95	
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	----	0	0.00	32.76	0	0.00	32.76	
PFUnDA	563.10>519.00	563.10>269.10	----	0	0.00	13.12	0	0.00	13.12	
13C7-PFUnDA_IS	570.00>525.10	----	272818	----	----	----	----	----	----	----
13C7-PFUnDA	570.00>525.10	----	272818	----	----	----	----	----	----	----
PFNS	548.80>79.90	548.80>98.80	----	0	0.00	65.22	0	0.00	65.22	
10_2 FTS	626.80>607.05	626.80>81.00	----	0	0.00	37.13	0	0.00	37.13	
13C2-PFDOA_IS	615.10>570.00	----	304097	----	----	----	----	----	----	----
13C2-PFDOA	615.10>570.00	----	304097	----	----	----	----	----	----	----
PFDOA	613.10>569.00	613.10>319.00	----	0	0.00	11.29	0	0.00	11.29	
PFDS	599.00>79.90	599.00>98.80	----	0	0.00	60.18	0	0.00	60.18	
PFTTrDA	663.00>619.00	663.00>168.90	----	0	0.00	17.64	0	0.00	17.64	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240118_017 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	----	0	0.00	36.44	0	0.00	36.44	
PFOSAm	498.10>77.90	----	----	----	----	----	----	----	----	
13C8-PFOSAm	506.10>77.80	----	280695	----	----	----	----	----	----	
13C8-PFOSAm_IS	506.10>77.80	----	280695	----	----	----	----	----	----	
PFTDA	713.10>669.00	713.10>168.90	----	0	0.00	22.96	0	0.00	22.96	
13C2-PFTDA	715.20>670.00	----	125092	----	----	----	----	----	----	
13C2-PFTDA_IS	715.20>670.00	----	125092	----	----	----	----	----	----	
PFDoS	699.10>79.90	699.10>98.80	----	0	0.00	67.40	0	0.00	67.40	
D7-MeFOSE_IS	623.20>58.90	----	702577	----	----	----	----	----	----	
D7-MeFOSE	623.20>58.90	----	702577	----	----	----	----	----	----	
MeFOSE	616.10>59.00	----	----	----	----	----	----	----	----	
13C2-PFHxDA_IS	815.00>770.05	----	503559	----	----	----	----	----	----	
13C2-PFHxDA	815.00>770.05	----	503559	----	----	----	----	----	----	
PFHxDA	813.00>768.95	813.00>218.95	----	0	0.00	13.90	0	0.00	13.90	
D3-MeFOSA	515.00>219.00	----	58296	----	----	----	----	----	----	
D3-MeFOSA_IS	515.00>219.00	----	58296	----	----	----	----	----	----	
MeFOSA	511.90>219.00	511.90>169.00	----	0	0.00	140.79	0	0.00	140.79	
D9-EtFOSE_IS	639.20>58.90	----	699259	----	----	----	----	----	----	
D9-EtFOSE	639.20>58.90	----	699259	----	----	----	----	----	----	
EtFOSE	630.00>59.00	----	----	----	----	----	----	----	----	
D5-EtFOSAm	531.10>219.00	----	73976	----	----	----	----	----	----	
D5-EtFOSAm_IS	531.10>219.00	----	73976	----	----	----	----	----	----	
EtFOSAm	526.00>219.00	526.00>169.00	----	0	0.00	163.90	0	0.00	163.90	
PFODA	913.00>868.65	913.00>169.00	----	0	0.00	27.03	0	0.00	27.03	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
 IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240118_017

Sample ID: 1633 FTCA ICV 1.0PPB
Date Acquired: 1/18/2024 6:20:19 PM
Acquired by: System Administrator
Data File: 240118_017
Vial: 11 | Inj. Volume: 10.0000uL | Tray: 1

Check FTCAs

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Std. Conc.	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.406	-0.008	-0.001	1330303	598500	13C3-PFBA_IS	10.0000	9.9443	ng/mL	
13C4-PFBA_IS	Auto	1.406	-0.008	----	1330303	1330303	----	10.0000	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.407	-0.008	----	598500	598500	----	5.0000	5.0000	ng/mL	
PFBA	ND(W/B)	----	----	----	----	1330303	13C4-PFBA_IS	1.0000	----	ng/mL	
PFMPA	ND(W/B)	----	----	----	----	145319	13C5-PFPeA_IS	1.0000	----	ng/mL	
3_3 FTCA	M	3.006	0.002	-0.488	70176	145319	13C5-PFPeA_IS	20.0000	21.7775	ng/mL	
13C5-PFPeA	Auto	3.494	0.002	-1.488	145319	626058	13C2-PFHxA_IS	5.0000	5.1423	ng/mL	
13C5-PFPeA_IS	Auto	3.494	0.002	----	145319	145319	----	5.0000	5.0000	ng/mL	
PFPeA	ND(W/B)	----	----	----	----	145319	13C5-PFPeA_IS	1.0000	----	ng/mL	
PFMBA	ND(W/B)	----	----	----	----	145319	13C5-PFPeA_IS	1.0000	----	ng/mL	
13C2-4_2 FTS	Auto	4.665	0.004	-2.424	145969	234067	18O2-PFHxS_IS	5.0000	4.5317	ng/mL	
13C2-4_2 FTS_IS	Auto	4.665	0.004	----	145969	145969	----	5.0000	5.0000	ng/mL	
4_2 FTS	ND(W/B)	----	----	----	----	145969	13C2-4_2 FTS_IS	0.9400	----	ng/mL	
13C3-PFBS_IS	Auto	4.649	0.002	----	344240	344240	----	2.5000	2.5000	ng/mL	
PFBS	ND(W/B)	----	----	----	----	344240	13C3-PFBS_IS	0.8900	----	ng/mL	
13C3-PFBS	Auto	4.649	0.002	-2.440	344240	234067	18O2-PFHxS_IS	2.5000	2.5916	ng/mL	
NFDHA	ND(W/B)	----	----	----	----	661898	13C5-PFHxA_IS	1.0000	----	ng/mL	
13C5-PFHxA	Auto	4.981	0.003	-0.001	661898	626058	13C2-PFHxA_IS	2.5000	2.5086	ng/mL	
13C5-PFHxA_IS	Auto	4.981	0.003	----	661898	661898	----	2.5000	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	4.982	0.003	----	626058	626058	----	2.5000	2.5000	ng/mL	
PFHxA	ND(W/B)	----	----	----	----	661898	13C5-PFHxA_IS	1.0000	----	ng/mL	
PFEESA	ND(W/B)	----	----	----	----	661898	13C5-PFHxA_IS	0.8900	----	ng/mL	
13C3-HFPO-DA	Auto	5.456	0.004	0.474	650567	626058	13C2-PFHxA_IS	10.0000	10.6153	ng/mL	
13C3-HFPO-DA_IS	Auto	5.456	0.004	----	650567	650567	----	10.0000	10.0000	ng/mL	
HFPO-DA	ND(W/B)	----	----	----	----	650567	13C3-HFPO-DA_IS	1.0000	----	ng/mL	
5_3 FTCA	Auto	5.911	0.005	0.930	331687	661898	13C5-PFHxA_IS	20.0000	19.3734	ng/mL	
PFPeS	ND(W/B)	----	----	----	----	260385	13C3-PFHxS_IS	0.9400	----	ng/mL	
13C4-PFHpA	Auto	6.158	0.004	1.176	611403	626058	13C2-PFHxA_IS	2.5000	2.5597	ng/mL	
13C4-PFHpA_IS	Auto	6.158	0.004	----	611403	611403	----	2.5000	2.5000	ng/mL	
PFHpA	ND(W/B)	----	----	----	----	611403	13C4-PFHpA_IS	1.0000	----	ng/mL	
DONA	ND(W/B)	----	----	----	----	650567	13C3-HFPO-DA_IS	0.9500	----	ng/mL	
13C2-6_2 FTS_IS	Auto	6.796	0.003	----	135491	135491	----	5.0000	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.796	0.003	-0.293	135491	234067	18O2-PFHxS_IS	5.0000	4.4474	ng/mL	
6_2 FTS	ND(W/B)	----	----	----	----	135491	13C2-6_2 FTS_IS	0.9500	----	ng/mL	
13C4-PFOA_IS	Auto	7.112	0.005	----	45240	45240	----	2.5000	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.112	0.005	----	640225	640225	----	2.5000	2.5000	ng/mL	
13C8-PFOA	Auto	7.112	0.005	0.000	640225	45240	13C4-PFOA_IS	2.5000	2.5320	ng/mL	
PFOA	ND(W/B)	----	----	----	----	640225	13C8-PFOA_IS	1.0000	----	ng/mL	
13C3-PFHxS	Auto	7.089	0.003	0.000	260385	234067	18O2-PFHxS_IS	2.5000	2.5917	ng/mL	
13C3-PFHxS_IS	Auto	7.089	0.003	----	260385	260385	----	2.5000	2.5000	ng/mL	
PFHxS	ND(W/B)	----	----	----	----	260385	13C3-PFHxS_IS	0.9100	----	ng/mL	
18O2-PFHxS_IS	Auto	7.089	0.003	----	234067	234067	----	2.5000	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.959	0.003	----	307312	307312	----	1.2500	1.2500	ng/mL	
13C9-PFNA	Auto	7.959	0.003	0.000	307312	316255	13C5-PFNA_IS	1.2500	1.2411	ng/mL	
13C5-PFNA_IS	Auto	7.959	0.003	----	316255	316255	----	1.2500	1.2500	ng/mL	
PFNA	ND(W/B)	----	----	----	----	307312	13C9-PFNA_IS	1.0000	----	ng/mL	
PFHpS	ND(W/B)	----	----	----	----	114722	13C8-PFOS_IS	0.9500	----	ng/mL	
7_3 FTCA	Auto	7.959	0.005	2.978	466748	661898	13C5-PFHxA_IS	20.0000	20.4214	ng/mL	
13C2-8_2-FTS	Auto	8.413	0.004	1.324	104364	234067	18O2-PFHxS_IS	5.0000	4.1703	ng/mL	
13C2-8_2-FTS_IS	Auto	8.413	0.004	----	104364	104364	----	5.0000	5.0000	ng/mL	
8_2 FTS	ND(W/B)	----	----	----	----	104364	13C2-8_2-FTS_IS	0.9600	----	ng/mL	
13C6-PFDA_IS	Auto	8.722	0.002	----	221808	221808	----	1.2500	1.2500	ng/mL	
13C6-PFDA	Auto	8.722	0.002	0.000	221808	222912	13C2-PFDA_IS	1.2500	1.2368	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_017 (continued)

(Table continued from previous page)

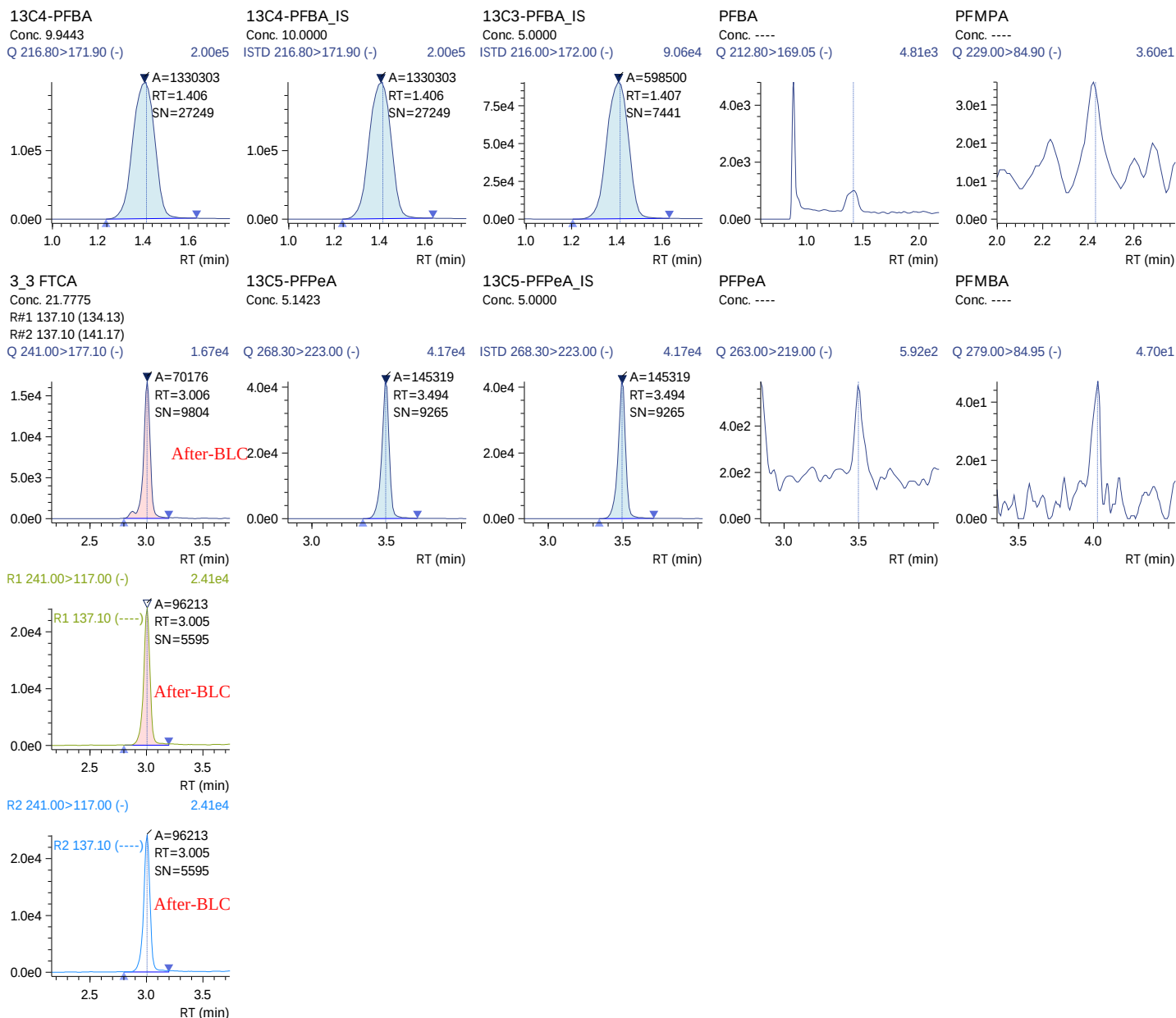
Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Std. Conc.	Conc.	Unit	Flag ID
13C2-PFDA_IS	Auto	8.722	0.001	----	222912	222912	----	1.2500	1.2500	ng/mL	
PFDA	ND(W/B)	----	----	----	----	221808	13C6-PFDA_IS	1.0000	----	ng/mL	
D3-NMeFOSAA_IS	Auto	8.857	0.002	----	217334	217334	----	5.0000	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.857	0.002	0.035	217334	278941	13C4-PFOS_IS	5.0000	4.4892	ng/mL	
13C8-PFOS_IS	Auto	8.821	0.001	----	114722	114722	----	2.5000	2.5000	ng/mL	
13C8-PFOS	Auto	8.821	0.001	-0.001	114722	278941	13C4-PFOS_IS	2.5000	2.4661	ng/mL	
13C4-PFOS_IS	Auto	8.822	0.002	----	278941	278941	----	2.5000	2.5000	ng/mL	
PFOS	ND(W/B)	----	----	----	----	114722	13C8-PFOS_IS	0.9300	----	ng/mL	
NMeFOSAA	ND(W/B)	----	----	----	----	217334	D3-NMeFOSAA_IS	1.0000	----	ng/mL	
D5-NetFOSAA_IS	Auto	9.188	0.002	----	244437	244437	----	5.0000	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.188	0.002	0.366	244437	278941	13C4-PFOS_IS	5.0000	4.2203	ng/mL	
NetFOSAA	ND(W/B)	----	----	----	----	244437	D5-NetFOSAA_IS	1.0000	----	ng/mL	
9-CI-PF3ONS	ND(W/B)	----	----	----	----	650567	13C3-HFPO-DA_IS	0.9300	----	ng/mL	
PFUnDA	ND(W/B)	----	----	----	----	272818	13C7-PFUnDA_IS	1.0000	----	ng/mL	
13C7-PFUnDA_IS	Auto	9.446	0.001	----	272818	272818	----	1.2500	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.446	0.001	0.724	272818	222912	13C2-PFDA_IS	1.2500	1.2753	ng/mL	
PFNS	ND(W/B)	----	----	----	----	114722	13C8-PFOS_IS	0.9600	----	ng/mL	
10_2_FTS	ND(W/B)	----	----	----	----	104364	13C2-8_2-FTS_IS	0.9600	----	ng/mL	
13C2-PFDOA_IS	Auto	10.133	0.000	----	304097	304097	----	1.2500	1.2500	ng/mL	
13C2-PFDOA	Auto	10.133	0.000	1.411	304097	222912	13C2-PFDA_IS	1.2500	1.2373	ng/mL	
PFDOA	ND(W/B)	----	----	----	----	304097	13C2-PFDOA_IS	1.0000	----	ng/mL	
PFDS	ND(W/B)	----	----	----	----	114722	13C8-PFOS_IS	0.9700	----	ng/mL	
PFTDA	ND(W/B)	----	----	----	----	125092	13C2-PFTDA_IS	1.0000	----	ng/mL	
11-CI-PF3OUds	ND(W/B)	----	----	----	----	650567	13C3-HFPO-DA_IS	0.9400	----	ng/mL	
PFOSAm	ND(W/B)	----	----	----	----	280695	13C8-PFOSAm_IS	2.0000	----	ng/mL	
13C8-PFOSAm	Auto	11.170	0.005	2.348	280695	278941	13C4-PFOS_IS	2.5000	2.3704	ng/mL	
13C8-PFOSAm_IS	Auto	11.170	0.005	----	280695	280695	----	2.5000	2.5000	ng/mL	
PFTDA	ND(W/B)	----	----	----	----	125092	13C2-PFTDA_IS	1.0000	----	ng/mL	
13C2-PFTDA	Auto	11.423	-0.001	2.701	125092	222912	13C2-PFDA_IS	1.2500	1.1789	ng/mL	
13C2-PFTDA_IS	Auto	11.423	-0.001	----	125092	125092	----	1.2500	1.2500	ng/mL	
PFDoS	ND(W/B)	----	----	----	----	114722	13C8-PFOS_IS	0.9700	----	ng/mL	
D7-MeFOSE_IS	Auto	13.382	0.005	----	702577	702577	----	25.0000	25.0000	ng/mL	
D7-MeFOSE	Auto	13.382	0.005	4.560	702577	278941	13C4-PFOS_IS	25.0000	24.0650	ng/mL	
MeFOSE	ND(W/B)	----	----	----	----	702577	D7-MeFOSE_IS	1.0000	----	ng/mL	
13C2-PFHXA_IS	Auto	12.639	-0.002	----	503559	503559	----	2.5000	2.5000	ng/mL	
13C2-PFHXA	Auto	12.639	-0.002	3.917	503559	222912	13C2-PFDA_IS	2.5000	2.4320	ng/mL	
PFHXA	ND(W/B)	----	----	----	----	503559	13C2-PFHXA_IS	1.0000	----	ng/mL	
D3-MeFOSA	Auto	13.690	0.005	4.868	58296	278941	13C4-PFOS_IS	2.5000	2.4446	ng/mL	
D3-MeFOSA_IS	Auto	13.690	0.005	----	58296	58296	----	2.5000	2.5000	ng/mL	
MeFOSA	ND(W/B)	----	----	----	----	58296	D3-MeFOSA_IS	1.0000	----	ng/mL	
D9-EtFOSE_IS	Auto	14.011	0.005	----	699259	699259	----	25.0000	25.0000	ng/mL	
D9-EtFOSE	Auto	14.011	0.005	5.189	699259	278941	13C4-PFOS_IS	25.0000	23.5822	ng/mL	
EtFOSE	ND(W/B)	----	----	----	----	699259	D9-EtFOSE_IS	1.0000	----	ng/mL	
D5-EtFOSAm	Auto	14.367	0.005	5.545	73976	278941	13C4-PFOS_IS	2.5000	2.3300	ng/mL	
D5-EtFOSAm_IS	Auto	14.367	0.005	----	73976	73976	----	2.5000	2.5000	ng/mL	
EtFOSAm	ND(W/B)	----	----	----	----	73976	D5-EtFOSAm_IS	1.0000	----	ng/mL	
PFODA	ND(W/B)	----	----	----	----	503559	13C2-PFHXA_IS	1.0000	----	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_017 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_017 (continued)

13C2-4_2 FTS
Conc. 4.5317

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. ----
R#1 0.00 (34.14)
R#2 0.00 (29.06)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. ----
R#1 0.00 (47.53)
R#2 0.00 (46.72)

Q 329.10>80.90 (-)

4.46e4

ISTD 329.10>80.90 (-)

4.46e4

Q 327.10>307.00 (-)

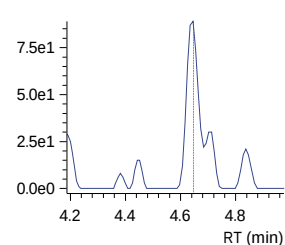
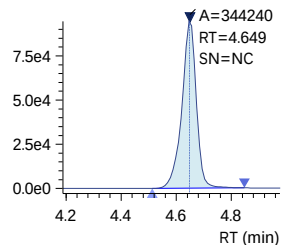
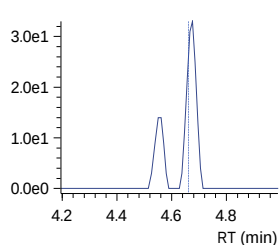
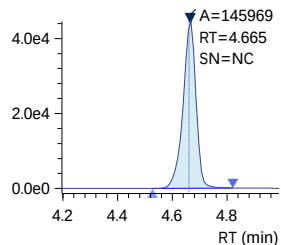
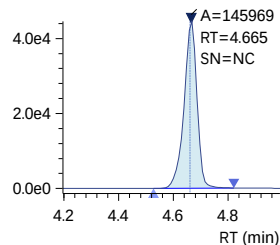
3.30e1

ISTD 302.10>79.90 (-)

9.45e4

Q 298.70>79.90 (-)

8.90e1

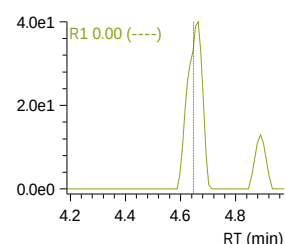
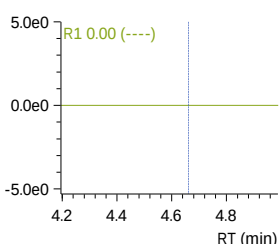


R1 327.10>80.90 (-)

0.00e0

R1 298.70>98.80 (-)

4.00e1

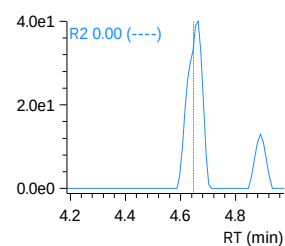
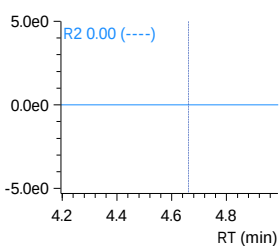


R2 327.10>80.90 (-)

0.00e0

R2 298.70>98.80 (-)

4.00e1





240118_017 (continued)

13C3-PFBS
Conc. 2.5916

NFDHA
Conc. ----
R#1 0.00 (37.88)
R#2 0.00 (40.25)

13C5-PFHxA
Conc. 2.5086

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

Q 302.10>79.90 (-)

9.45e4

Q 295.00>201.00 (-)

2.60e2

Q 318.00>273.00 (-)

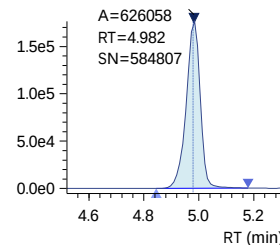
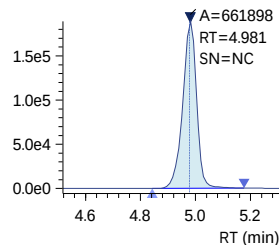
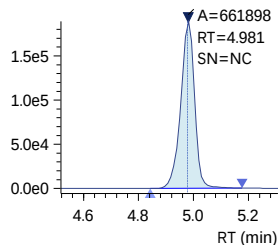
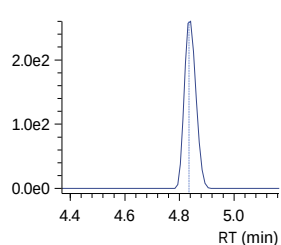
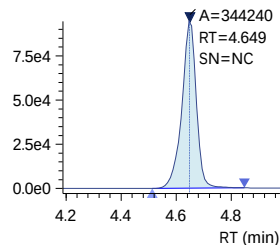
1.89e5

ISTD 318.00>273.00 (-)

1.89e5

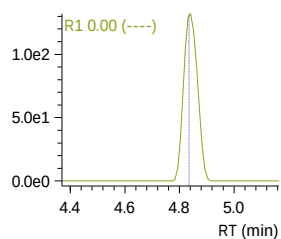
ISTD 315.10>270.00 (-)

1.77e5



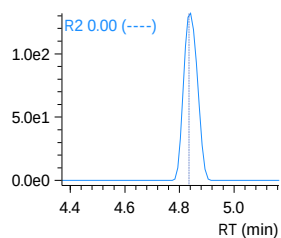
R1 295.00>84.90 (-)

1.32e2



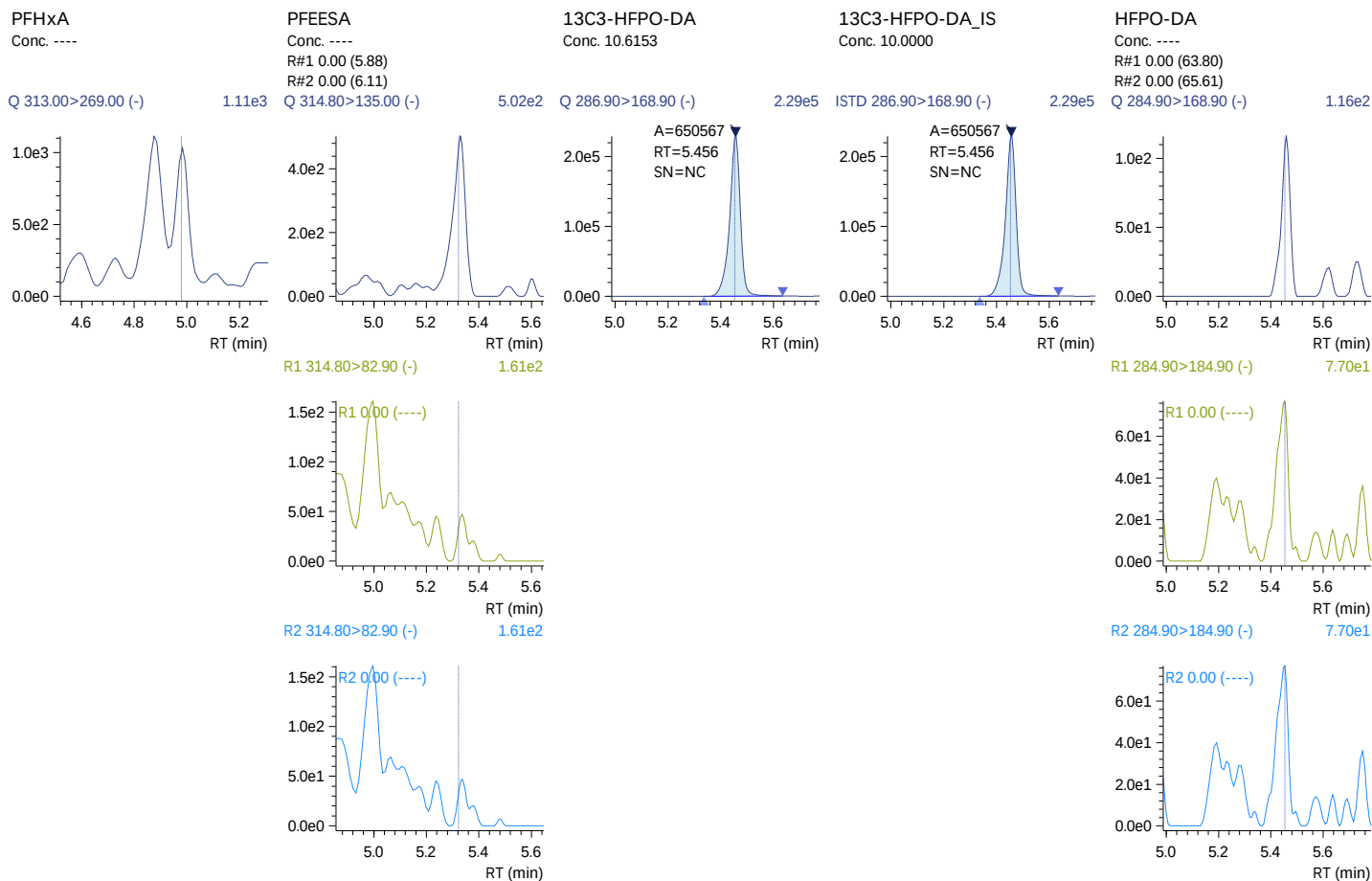
R2 295.00>84.90 (-)

1.32e2





240118_017 (continued)

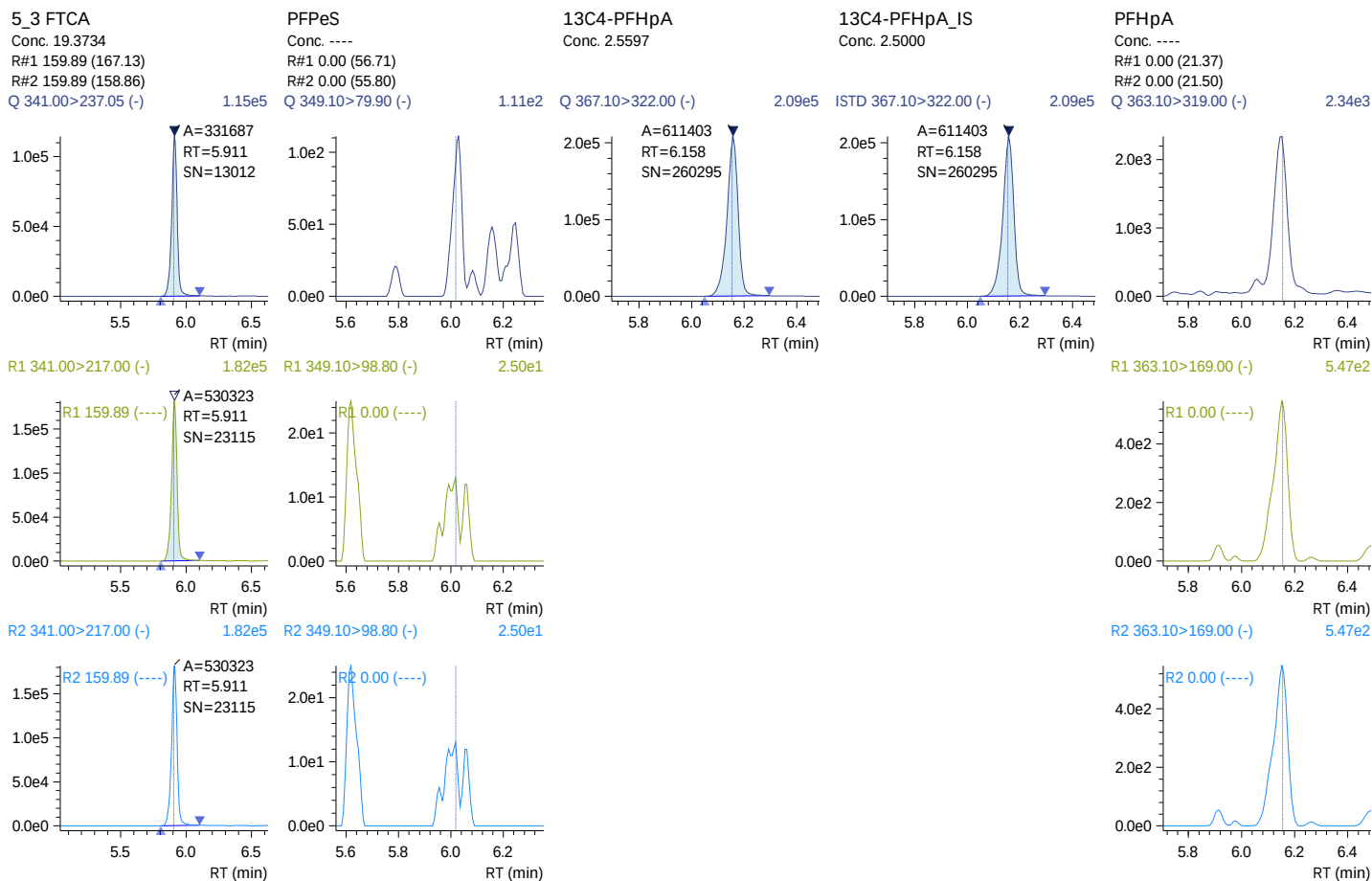


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.

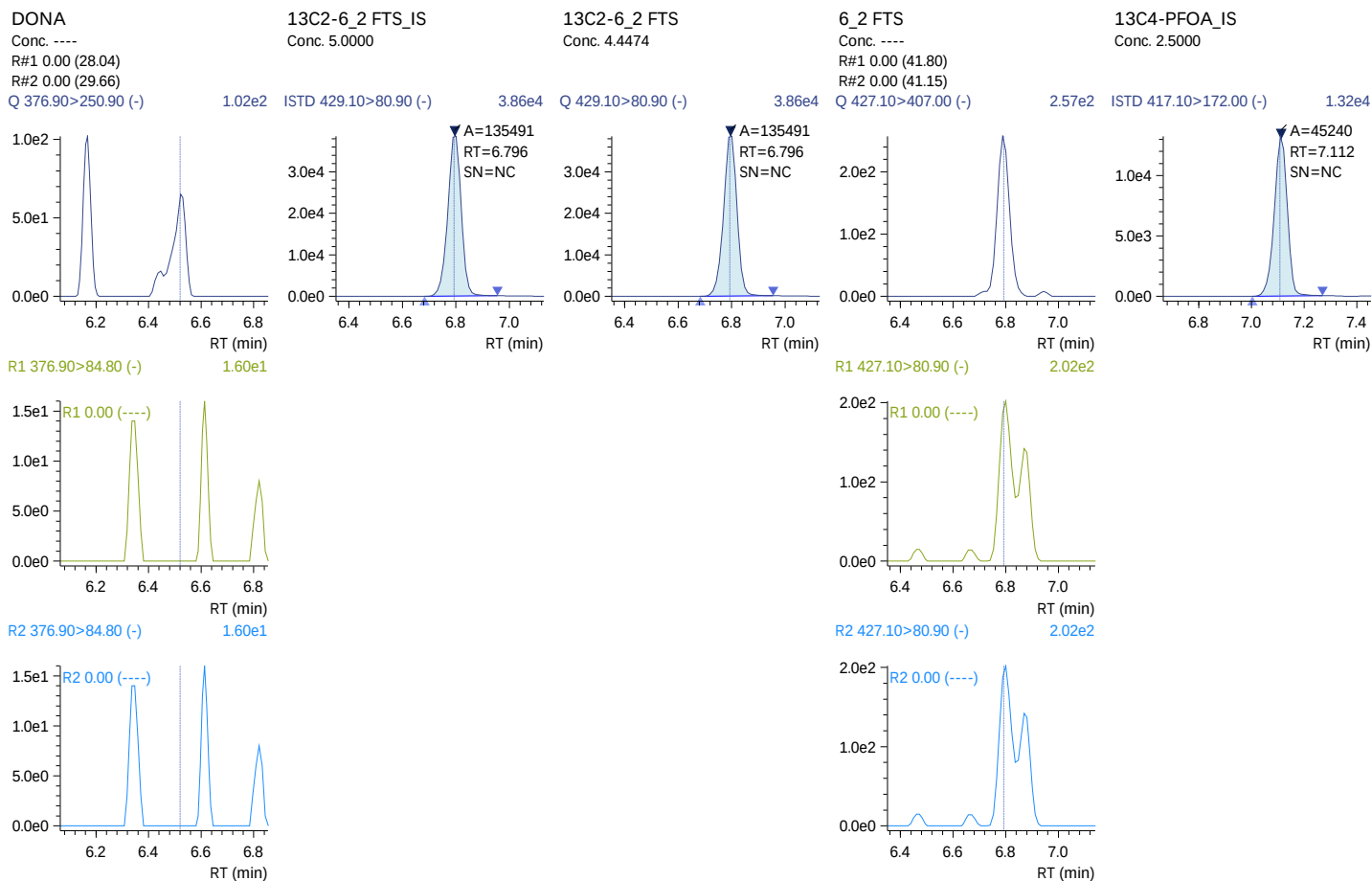


240118_017 (continued)





240118_017 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
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240118_017 (continued)

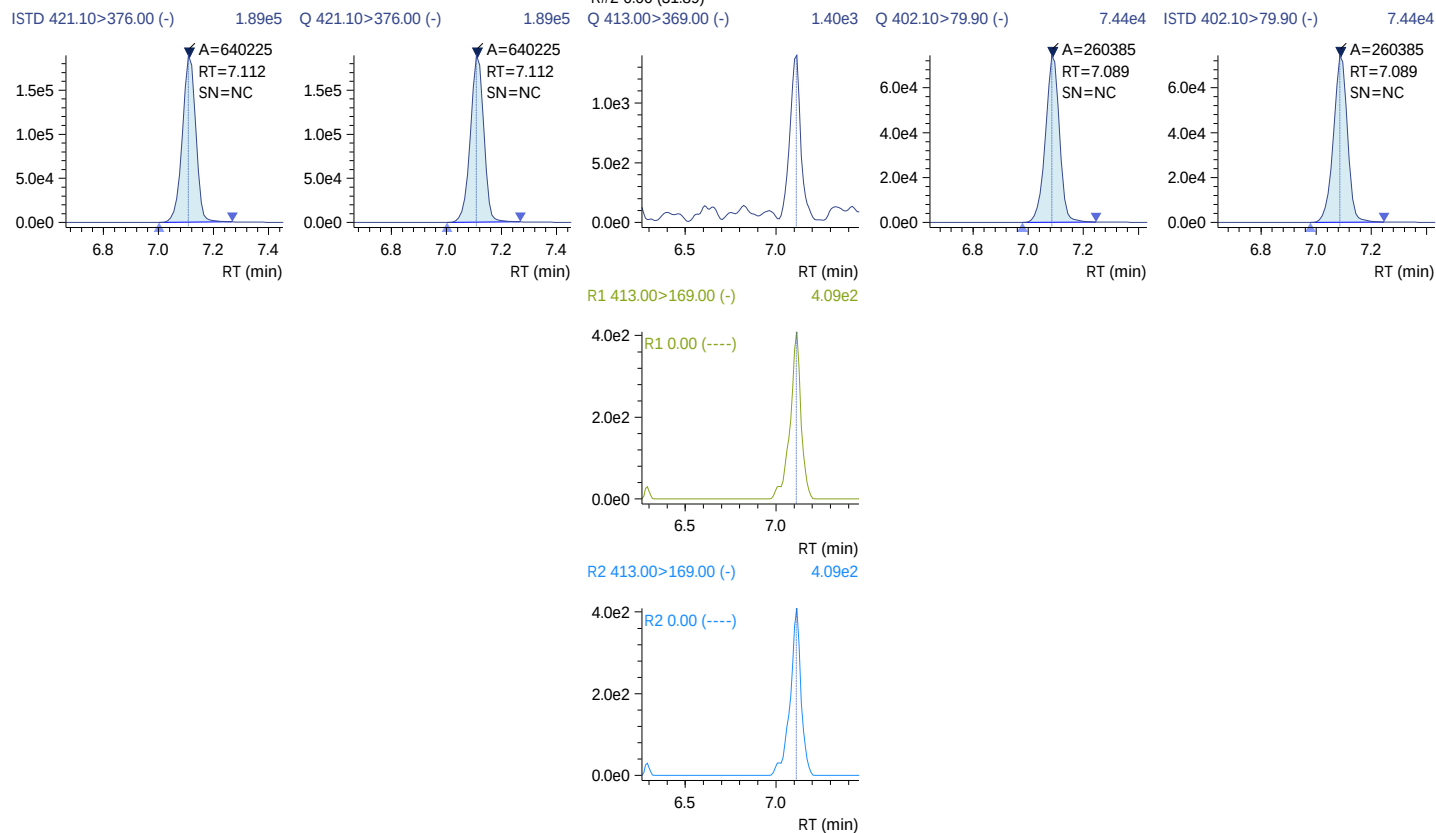
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.5320

PFOA
Conc. ----
R#1 0.00 (29.05)
R#2 0.00 (31.89)

13C3-PFHxS
Conc. 2.5917

13C3-PFHxS_IS
Conc. 2.5000

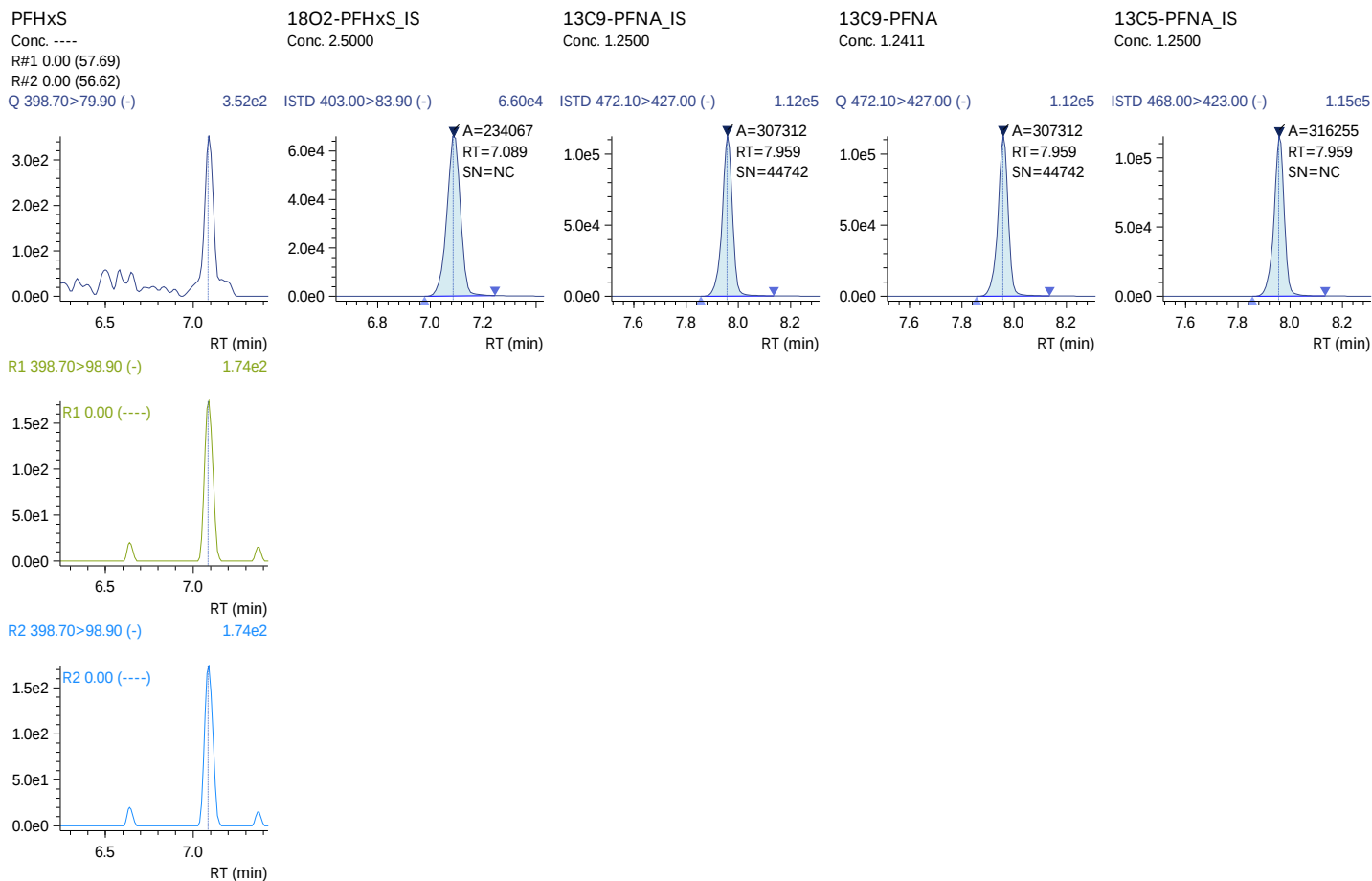


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
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240118_017 (continued)

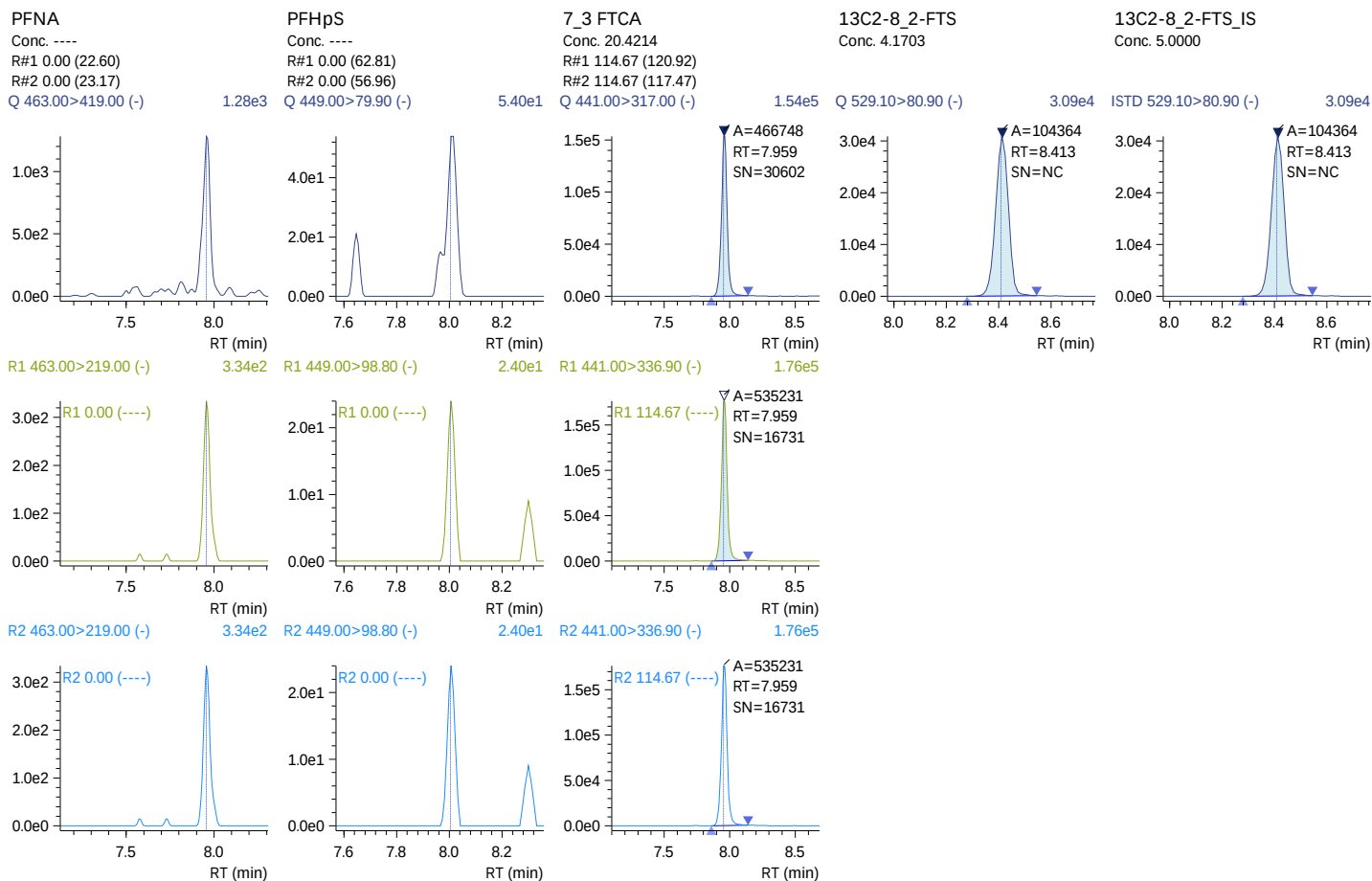


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_017 (continued)

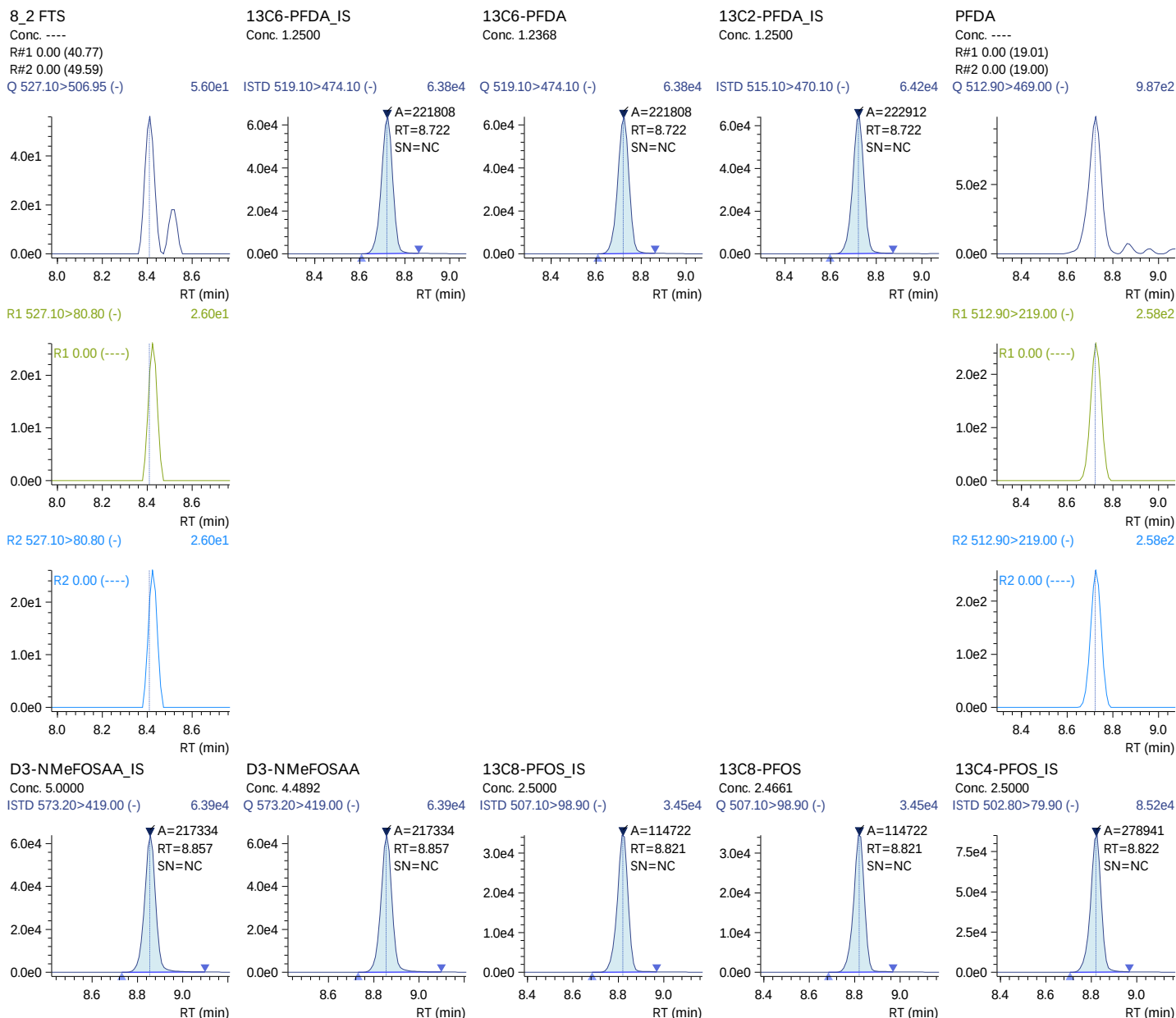


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_017 (continued)

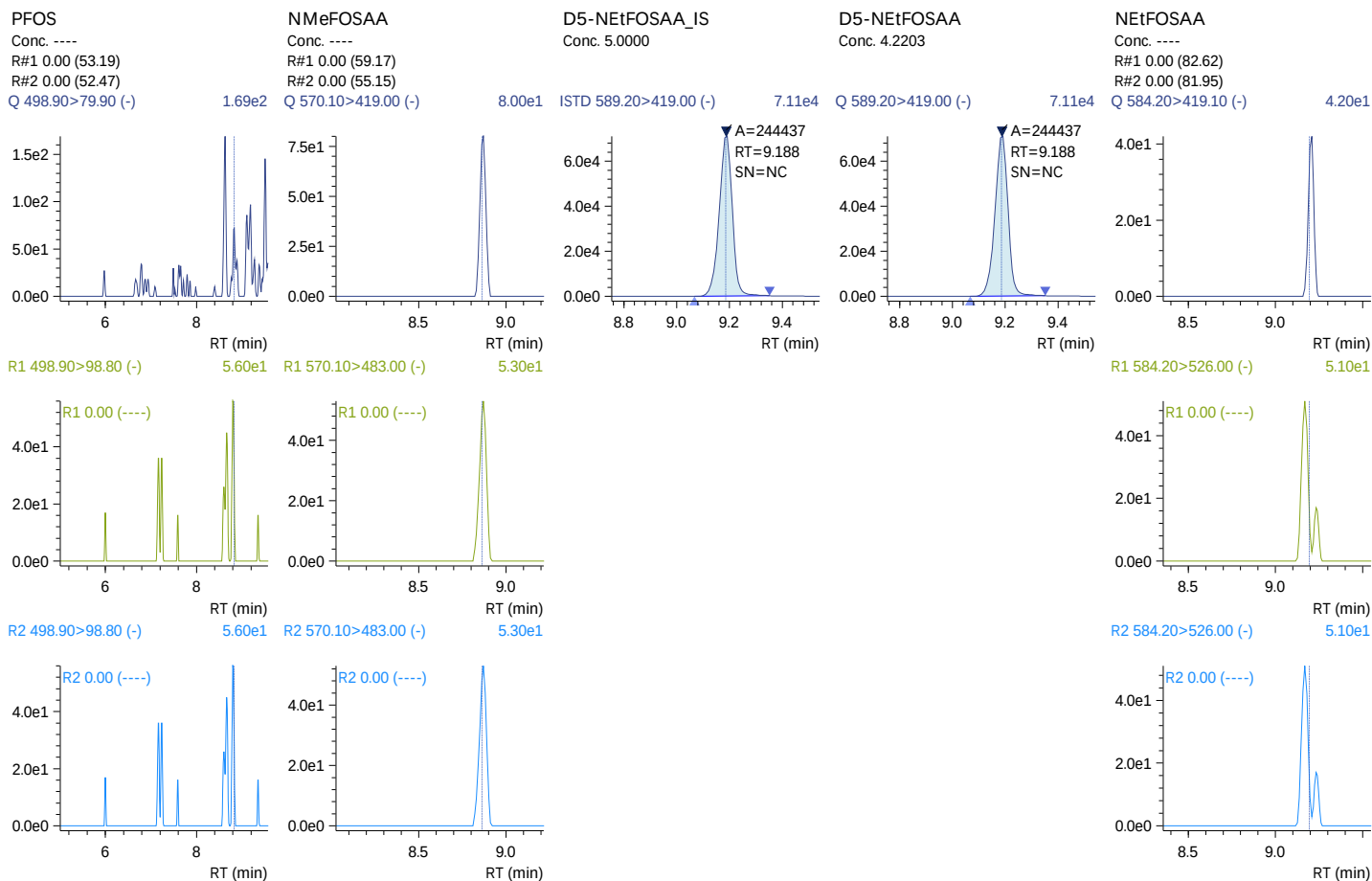


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
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240118_017 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_017 (continued)

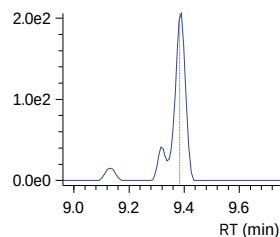
9-Cl-PF3ONS

Conc. ----

R#1 0.00 (31.76)

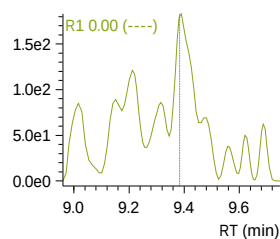
R#2 0.00 (32.76)

Q 530.80>351.00 (-)



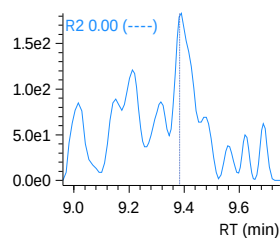
R1 532.80>353.00 (-)

1.83e2



R2 532.80>353.00 (-)

1.83e2



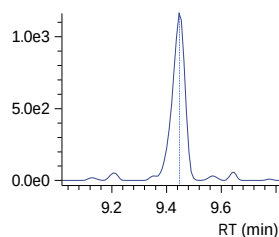
PFUnDA

Conc. ----

R#1 0.00 (12.31)

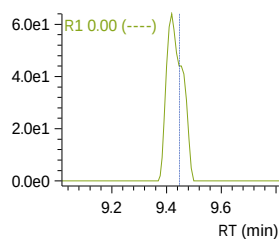
R#2 0.00 (13.12)

Q 563.10>519.00 (-)



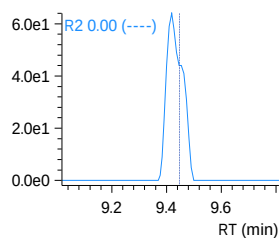
R1 563.10>269.10 (-)

6.40e1



R2 563.10>269.10 (-)

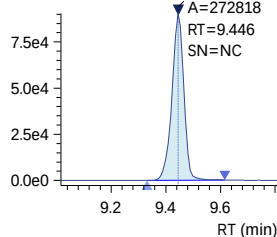
6.40e1



13C7-PFUnDA_IS

Conc. 1.2500

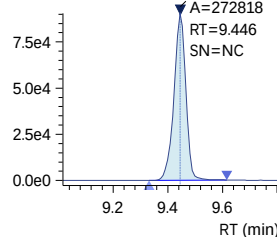
ISTD 570.00>525.10 (-)



13C7-PFUnDA

Conc. 1.2753

Q 570.00>525.10 (-)



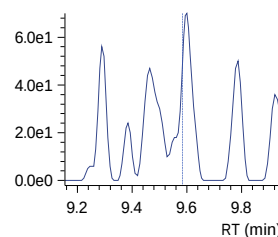
PFNS

Conc. ----

R#1 0.00 (63.31)

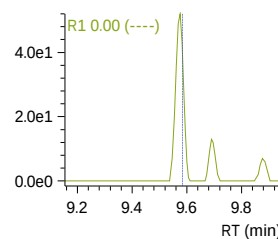
R#2 0.00 (65.22)

Q 548.80>79.90 (-)



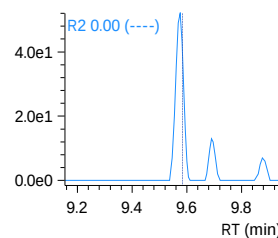
R1 548.80>98.80 (-)

5.20e1



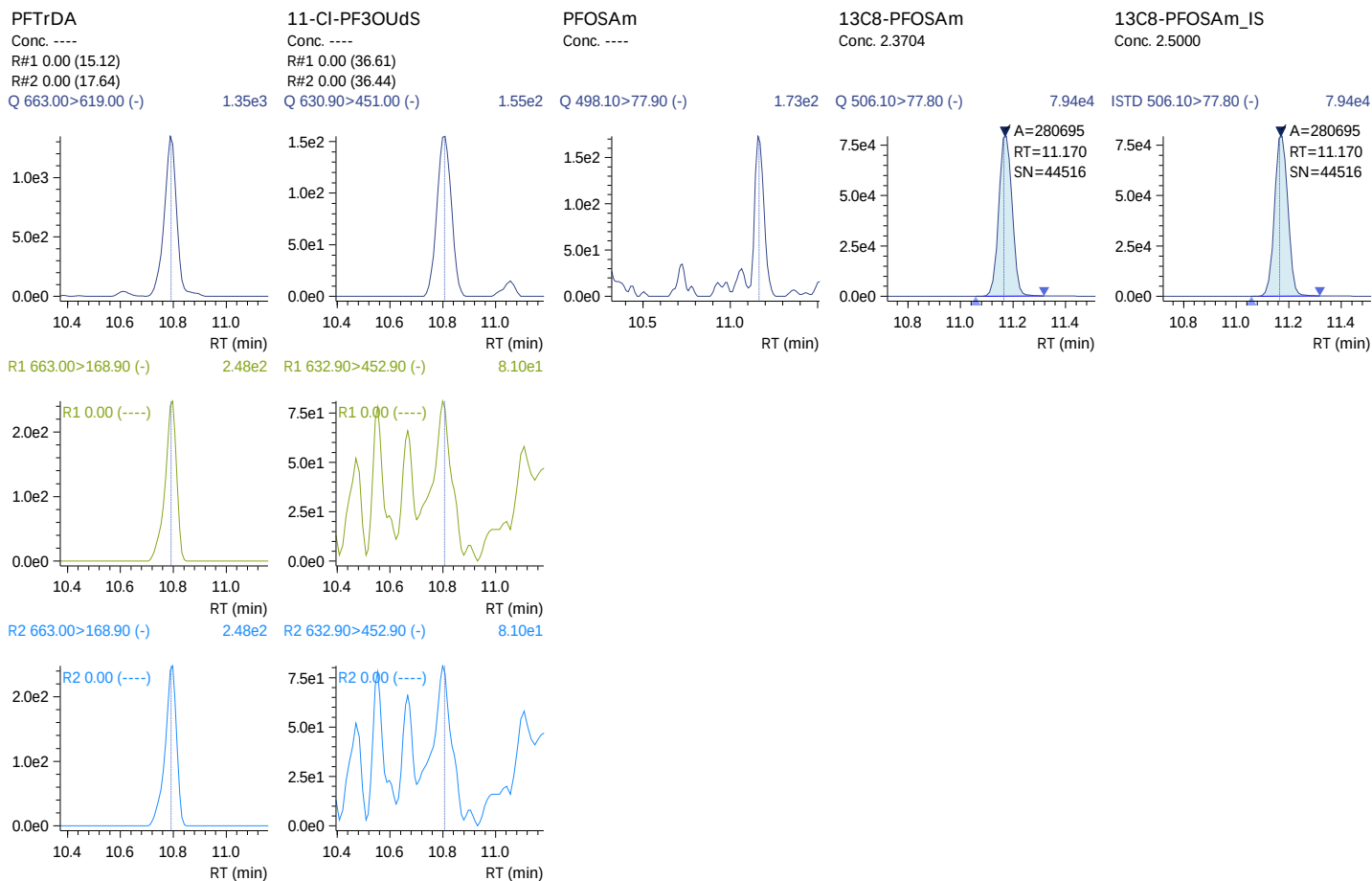
R2 548.80>98.80 (-)

5.20e1





240118_017 (continued)

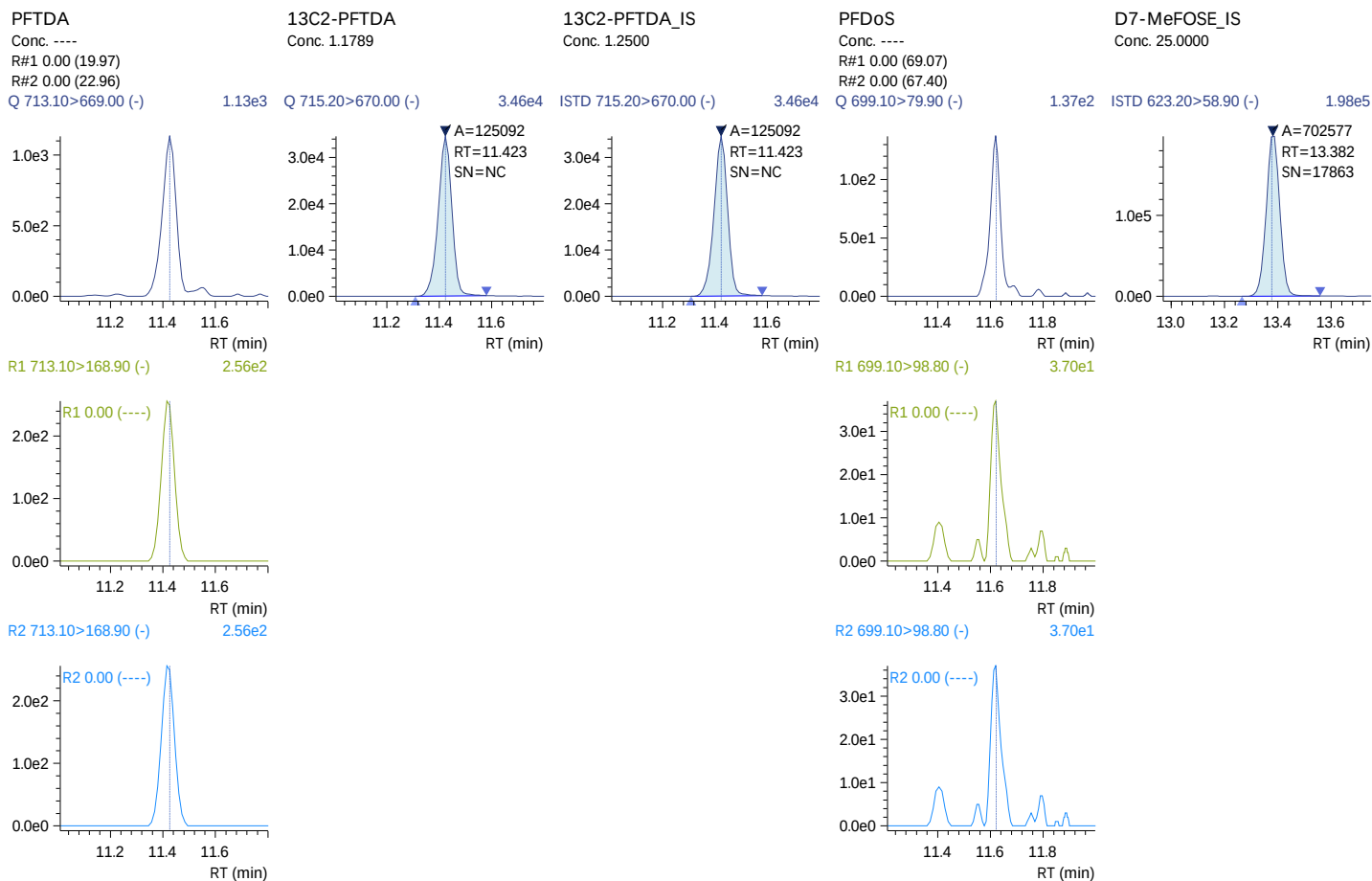


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_017 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_017 (continued)

D7-MeFOSE
Conc. 24.0650

MeFOSE
Conc. ----

13C2-PFHXA_IS
Conc. 2.5000

13C2-PFHXA
Conc. 2.4320

PFHXA
Conc. ----

R#1 0.00 (11.64)

R#2 0.00 (13.90)

Q 623.20>58.90 (-)

1.98e5

Q 616.10>59.00 (-)

4.70e1

ISTD 815.00>770.05 (-)

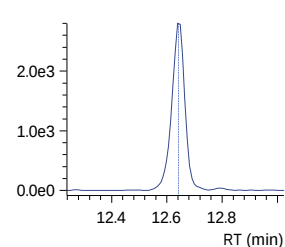
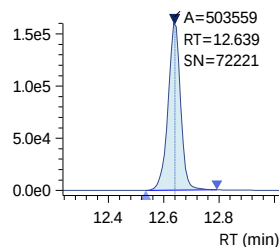
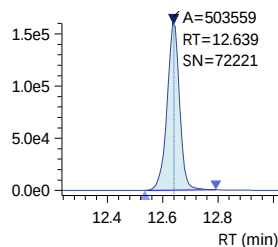
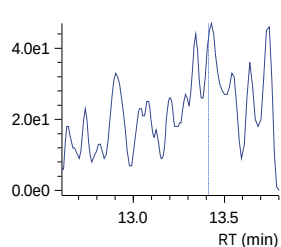
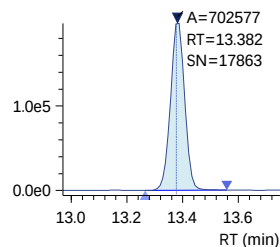
1.60e5

Q 815.00>770.05 (-)

1.60e5

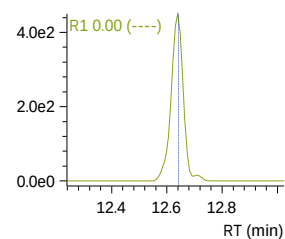
Q 813.00>768.95 (-)

2.80e3



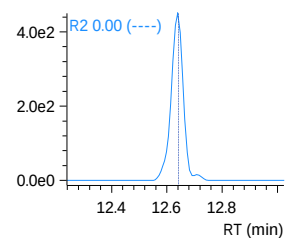
R1 813.00>218.95 (-)

4.50e2



R2 813.00>218.95 (-)

4.50e2





240118_017 (continued)

D3-MeFOSA
Conc. 2.4446

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. ----
R#1 0.00 (149.05)
R#2 0.00 (140.79)

D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 23.5822

Q 515.00>219.00 (-)

1.65e4

ISTD 515.00>219.00 (-)

1.65e4

Q 511.90>219.00 (-)

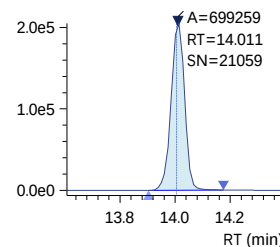
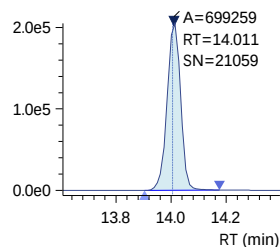
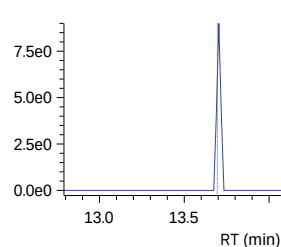
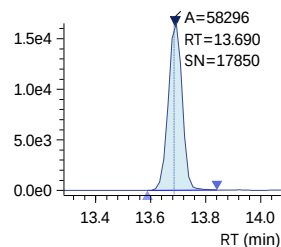
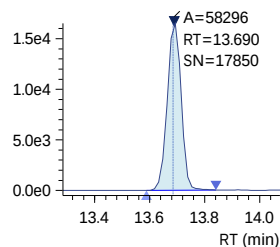
9.00e0

ISTD 639.20>58.90 (-)

2.05e5

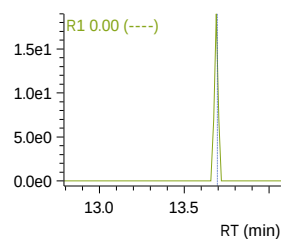
Q 639.20>58.90 (-)

2.05e5



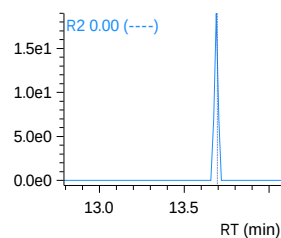
R1 511.90>169.00 (-)

1.90e1



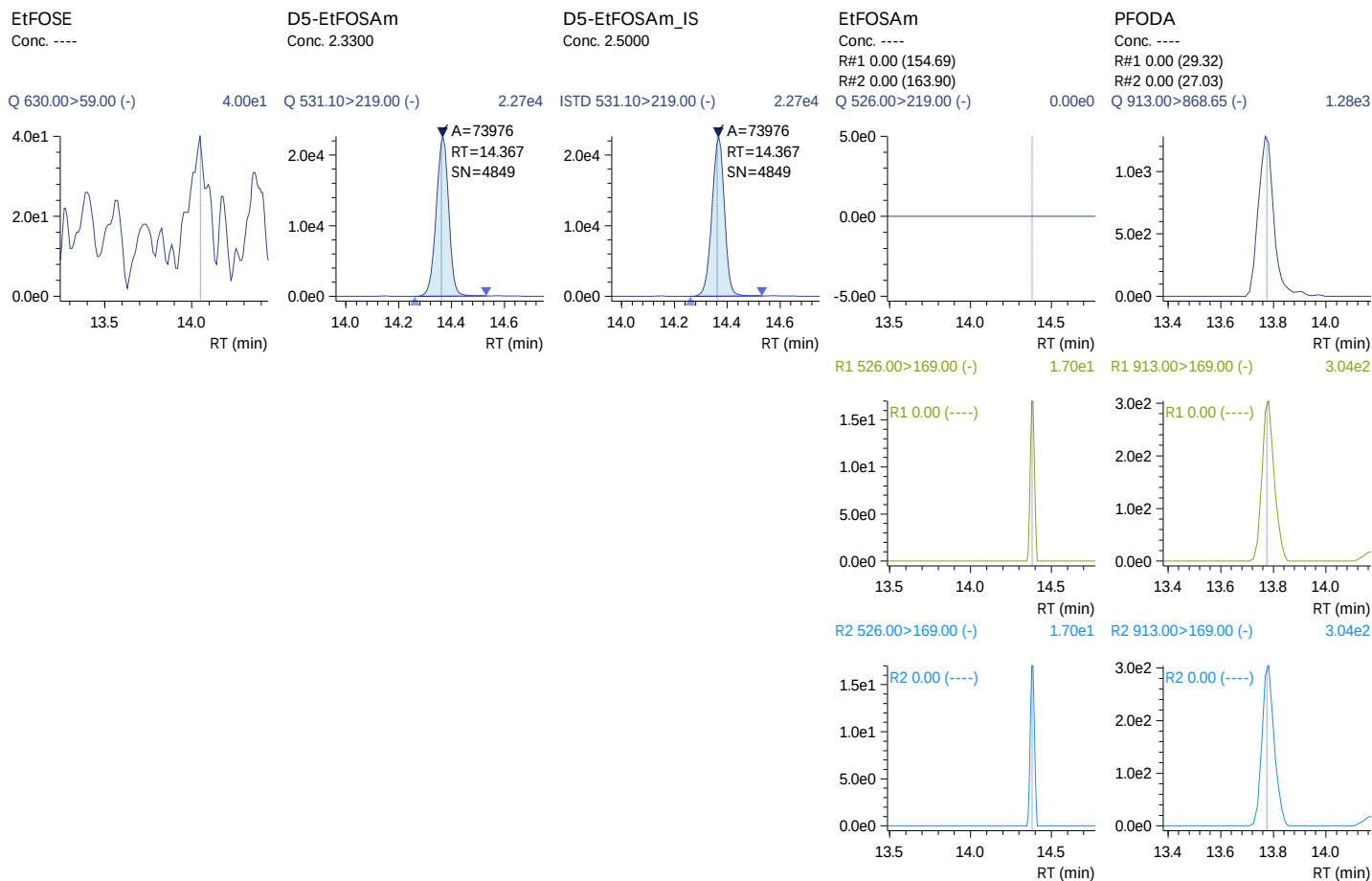
R2 511.90>169.00 (-)

1.90e1





240118_017 (continued)



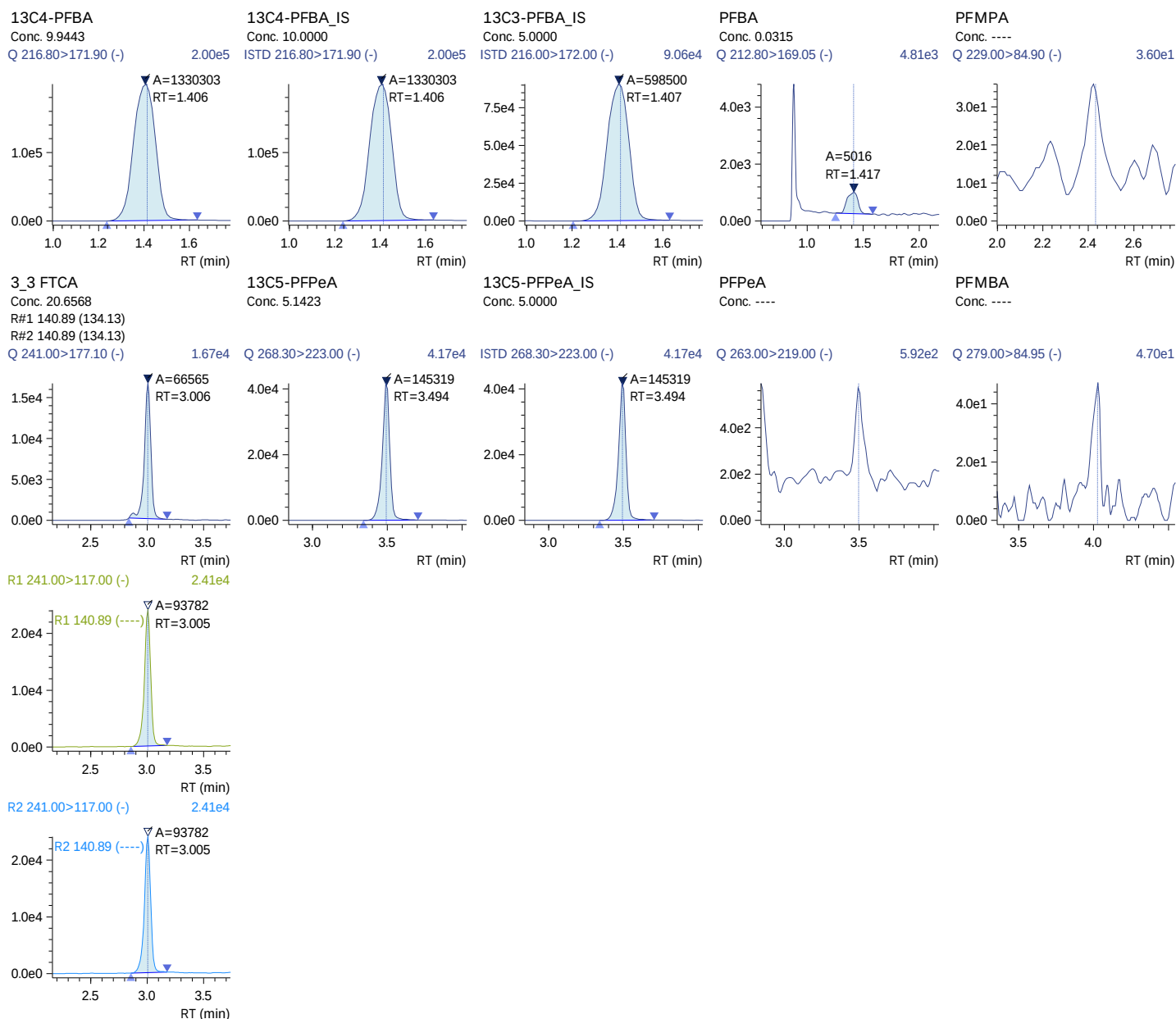
J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_017

Sample ID: 1633 FTCA ICV 1.0PPB
Date Acquired: 1/18/2024 6:20:19 PM
Acquired by: System Administrator
Data File: 240118_017
Vial: 11 | Inj. Volume: 10.0000uL | Tray: 1





240118_017 (continued)

13C2-4_2 FTS
Conc. 4.5317

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. ----
R#1 0.00 (34.14)
R#2 0.00 (34.14)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. ----
R#1 0.00 (47.53)
R#2 0.00 (47.53)

Q 329.10>80.90 (-)

4.46e4

ISTD 329.10>80.90 (-)

4.46e4

Q 327.10>307.00 (-)

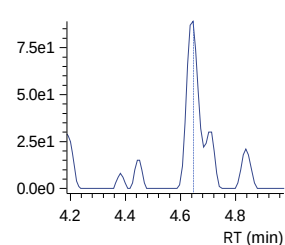
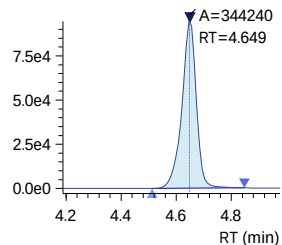
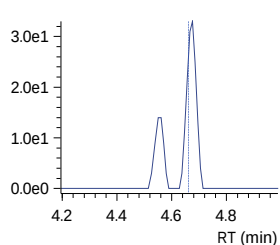
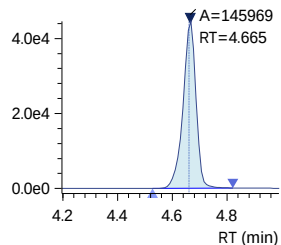
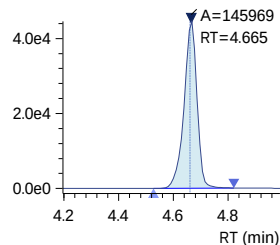
3.30e1

ISTD 302.10>79.90 (-)

9.45e4

Q 298.70>79.90 (-)

8.90e1

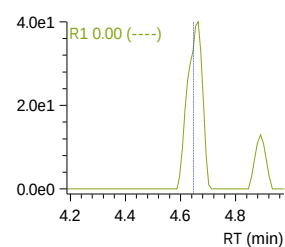
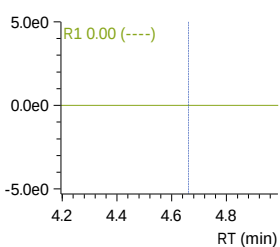


R1 327.10>80.90 (-)

0.00e0

R1 298.70>98.80 (-)

4.00e1

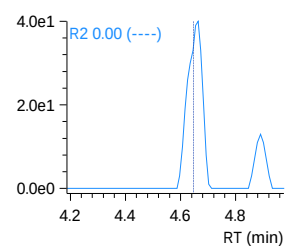
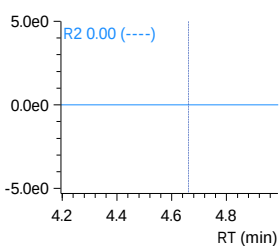


R2 327.10>80.90 (-)

0.00e0

R2 298.70>98.80 (-)

4.00e1





240118_017 (continued)

13C3-PFBS
 Conc. 2.5916

NFDHA
 Conc. ----
 R#1 0.00 (37.88)
 R#2 0.00 (37.88)

13C5-PFHxA
 Conc. 2.5086

13C5-PFHxA_IS
 Conc. 2.5000

13C2-PFHxA_IS
 Conc. 2.5000

Q 302.10>79.90 (-)

9.45e4

Q 295.00>201.00 (-)

2.60e2

Q 318.00>273.00 (-)

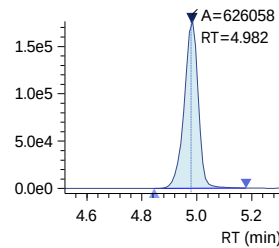
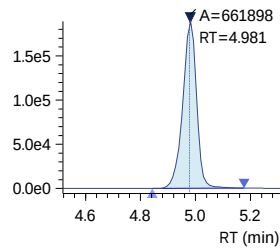
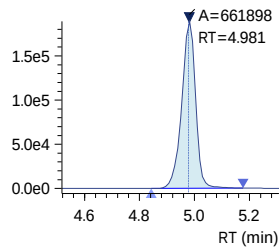
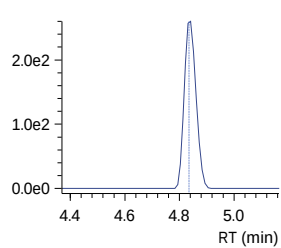
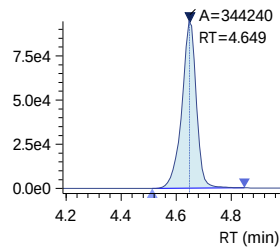
1.89e5

ISTD 318.00>273.00 (-)

1.89e5

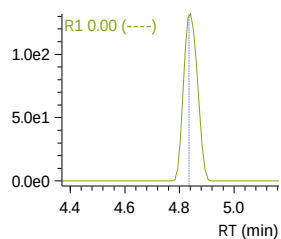
ISTD 315.10>270.00 (-)

1.77e5



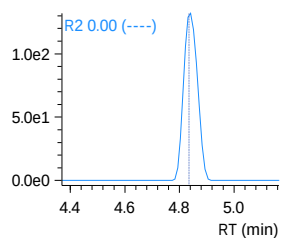
R1 295.00>84.90 (-)

1.32e2



R2 295.00>84.90 (-)

1.32e2





240118_017 (continued)

PFHxA
Conc. 0.0379

PFEESA
Conc. ----
R#1 0.00 (5.88)
R#2 0.00 (5.88)

13C3-HFPO-DA
Conc. 10.6153

13C3-HFPO-DA_IS
Conc. 10.0000

HFPO-DA
Conc. ----
R#1 0.00 (63.80)
R#2 0.00 (63.80)

Q 313.00>269.00 (-)

1.11e3

Q 314.80>135.00 (-)

5.02e2

Q 286.90>168.90 (-)

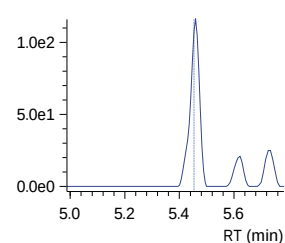
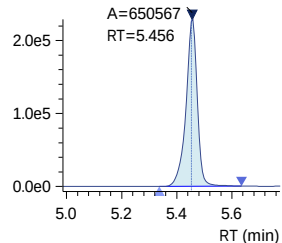
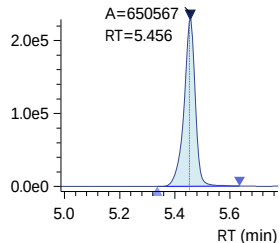
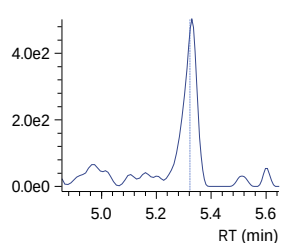
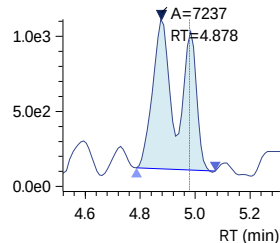
2.29e5

ISTD 286.90>168.90 (-)

2.29e5

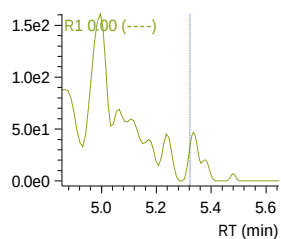
Q 284.90>168.90 (-)

1.16e2



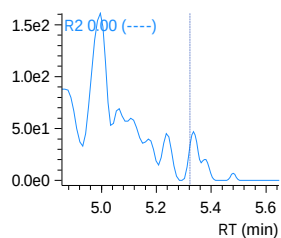
R1 314.80>82.90 (-)

1.61e2



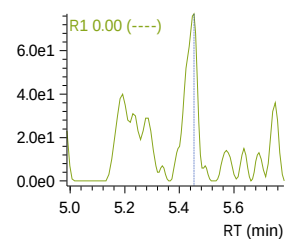
R2 314.80>82.90 (-)

1.61e2



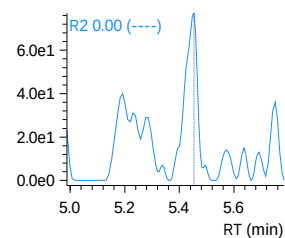
R1 284.90>184.90 (-)

7.70e1



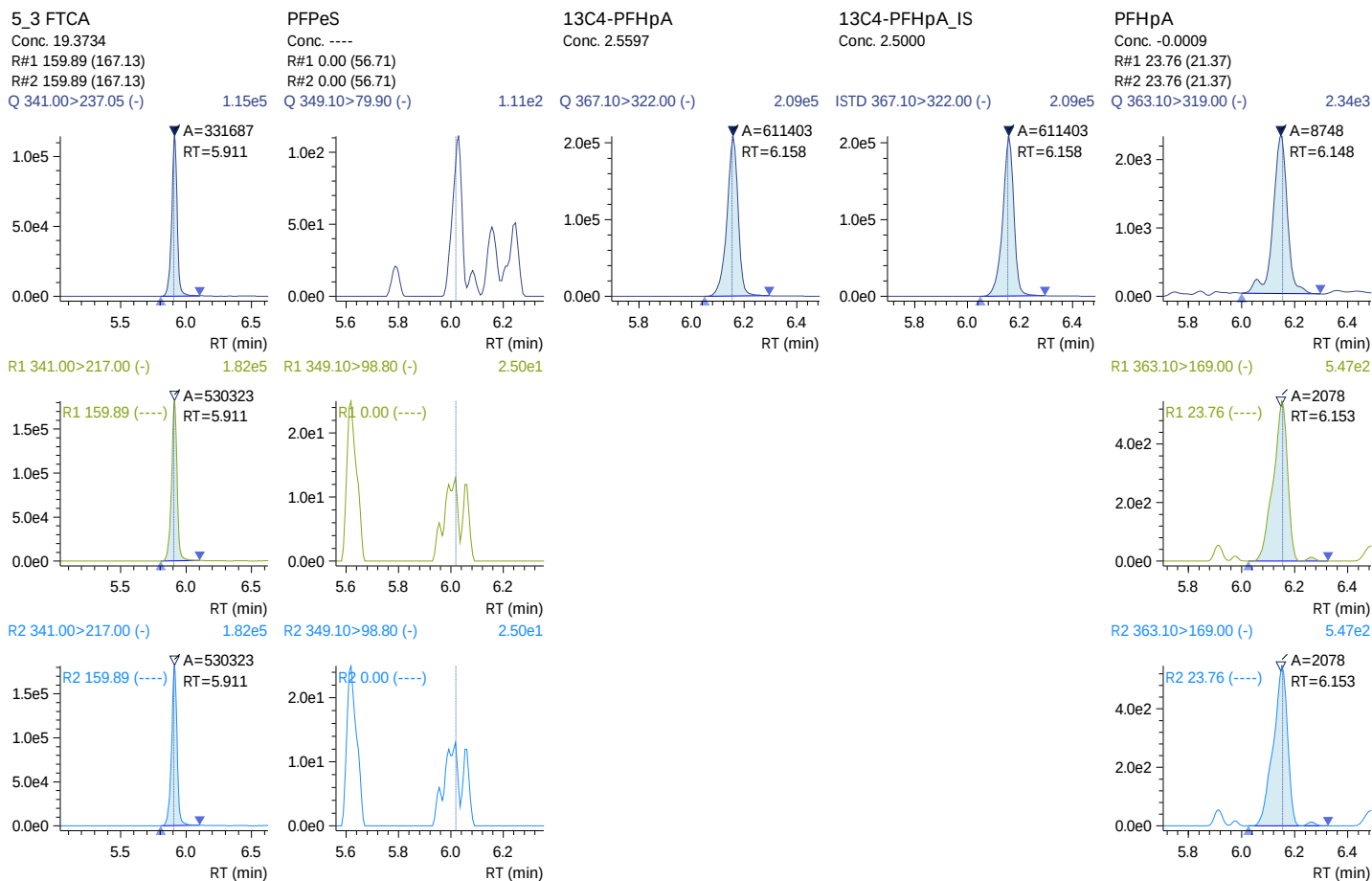
R2 284.90>184.90 (-)

7.70e1



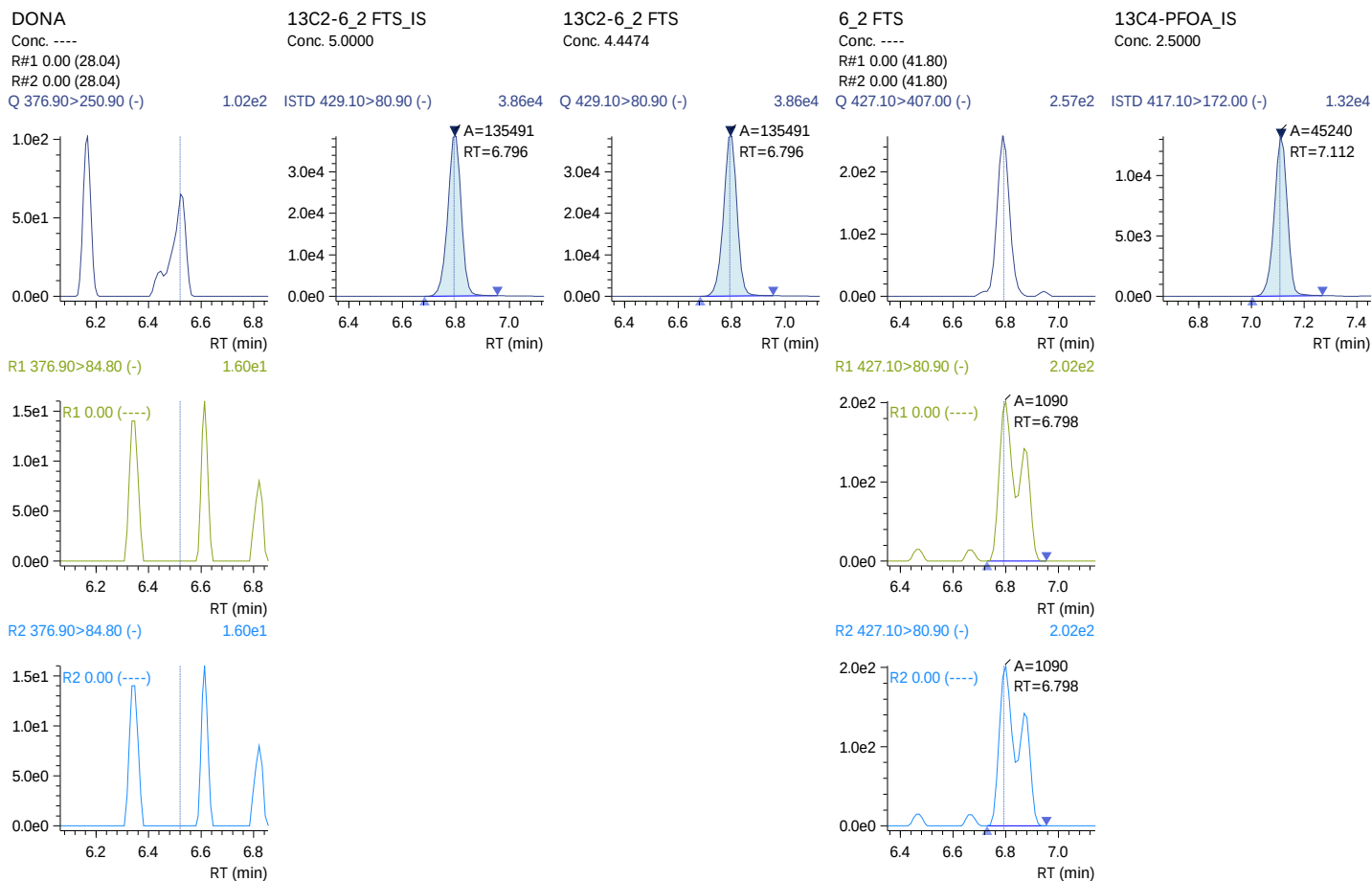


240118_017 (continued)





240118_017 (continued)





240118_017 (continued)

13C8-PFOA_IS
 Conc. 2.5000

13C8-PFOA
 Conc. 2.5320

PFOA
 Conc. -0.0105
 R#1 31.10 (29.05)
 R#2 31.10 (29.05)

13C3-PFHxS
 Conc. 2.5917

13C3-PFHxS_IS
 Conc. 2.5000

ISTD 421.10>376.00 (-)

1.89e5

Q 421.10>376.00 (-)

1.89e5

Q 413.00>369.00 (-)

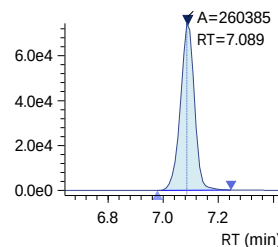
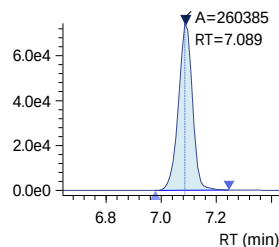
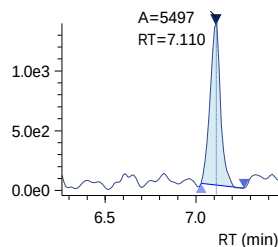
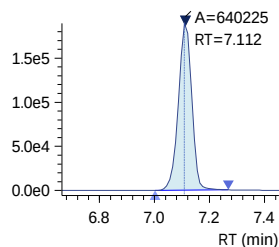
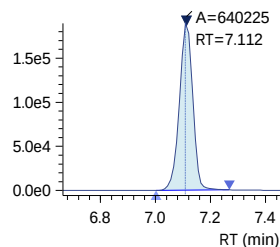
1.40e3

Q 402.10>79.90 (-)

7.44e4

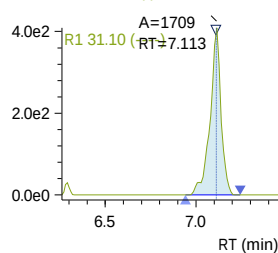
ISTD 402.10>79.90 (-)

7.44e4



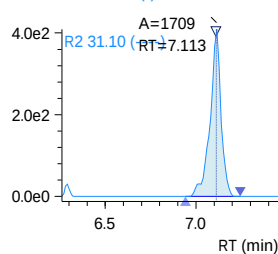
R1 413.00>169.00 (-)

4.09e2



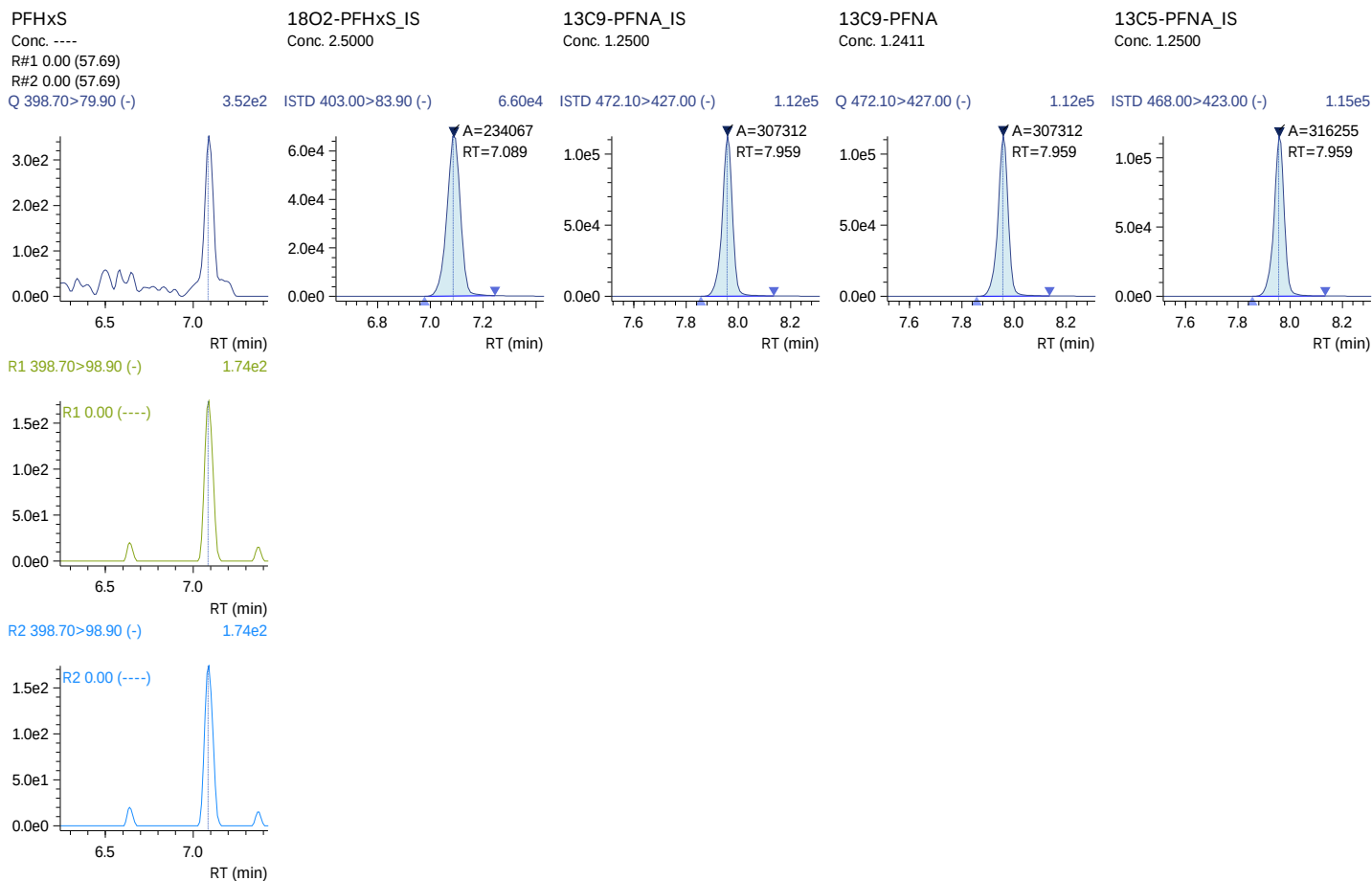
R2 413.00>169.00 (-)

4.09e2



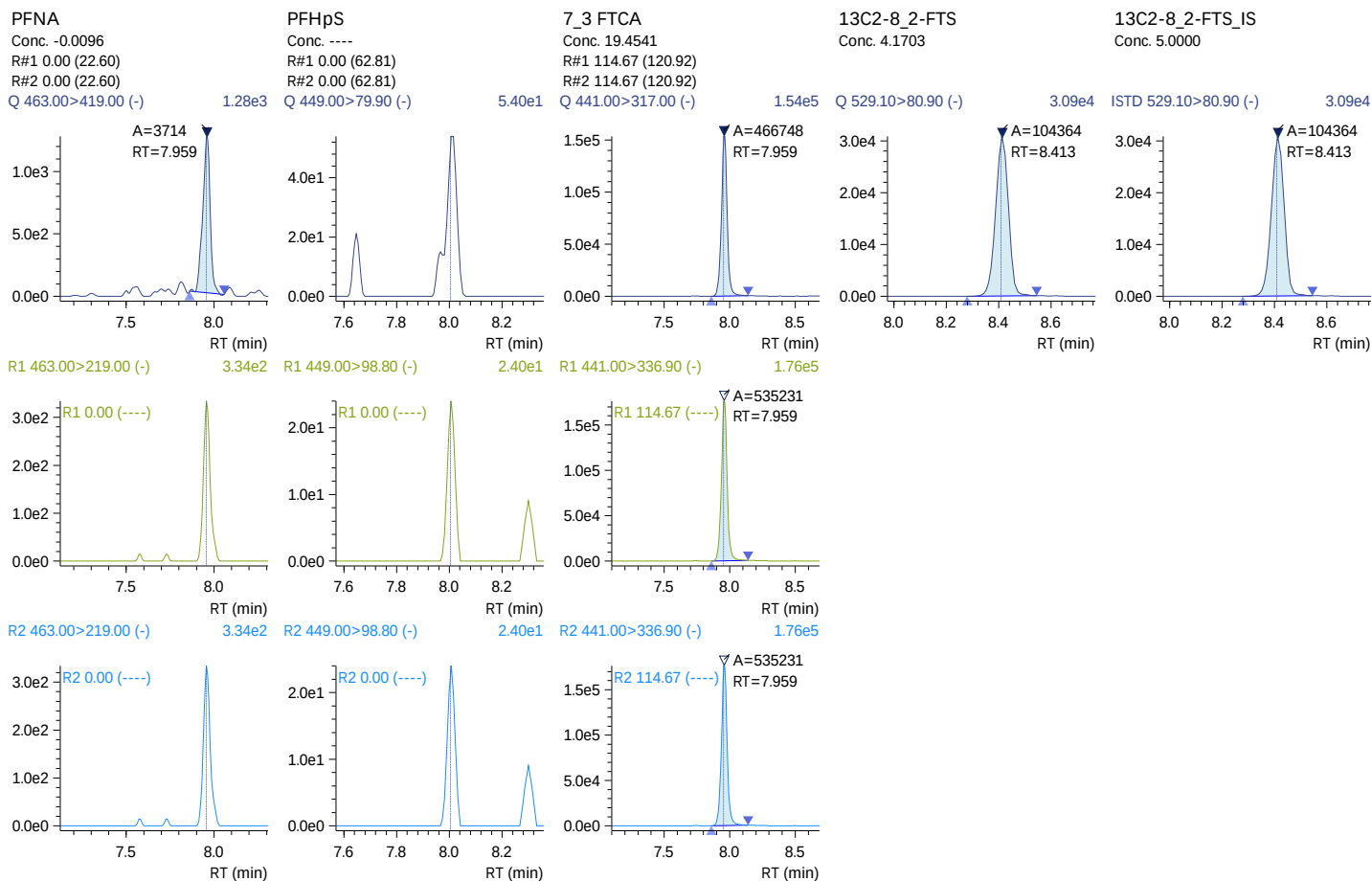


240118_017 (continued)



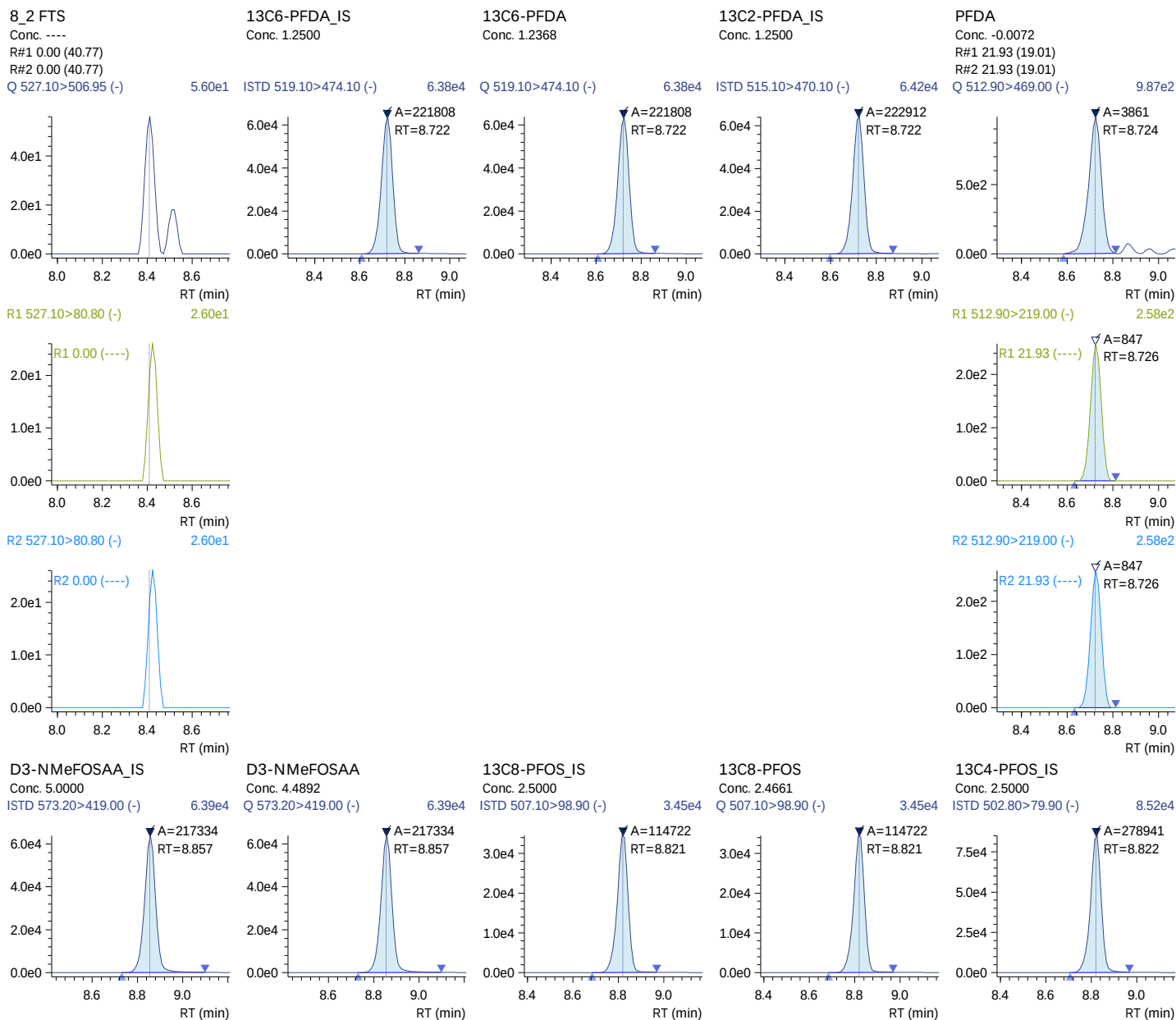


240118_017 (continued)



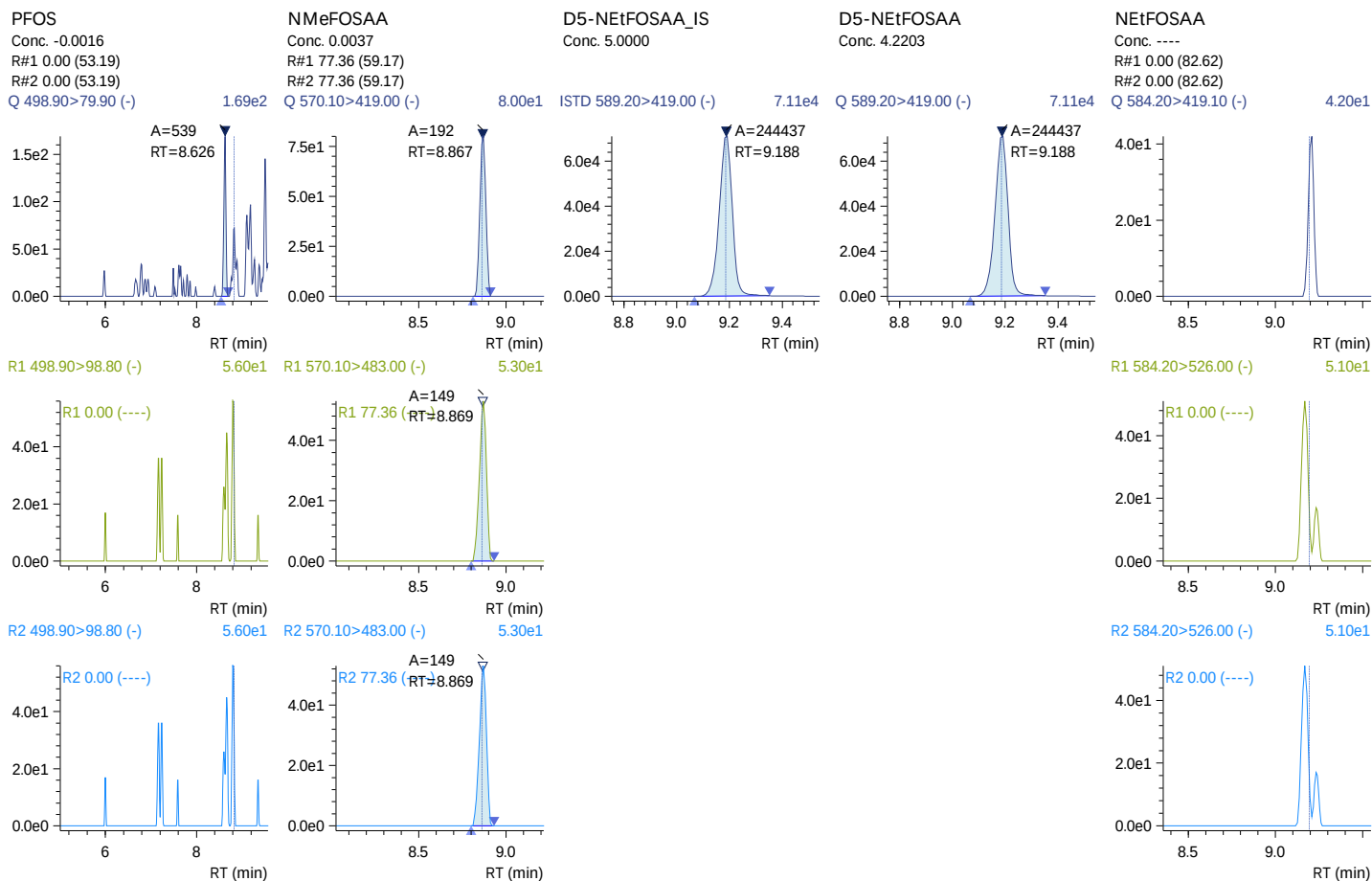


240118_017 (continued)





240118_017 (continued)

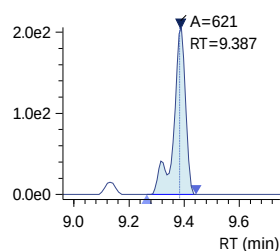




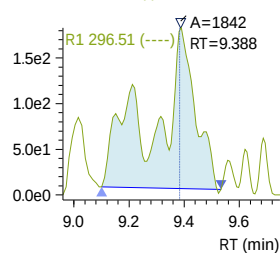
240118_017 (continued)

9-Cl-PF3ONS

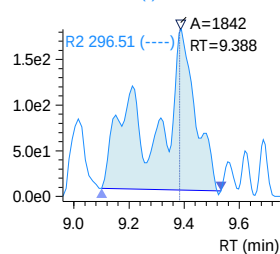
Conc. 0.0012
R#1 296.51 (31.76)
R#2 296.51 (31.76)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-) 1.83e2

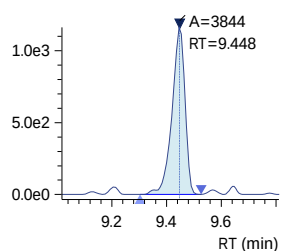


R2 532.80>353.00 (-) 1.83e2

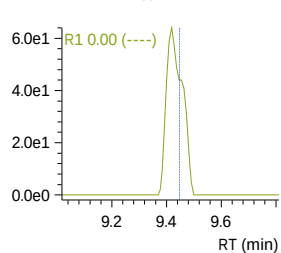


PFUnDA

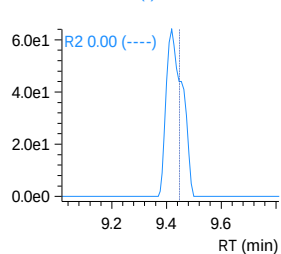
Conc. -0.0102
R#1 0.00 (12.31)
R#2 0.00 (12.31)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-) 6.40e1

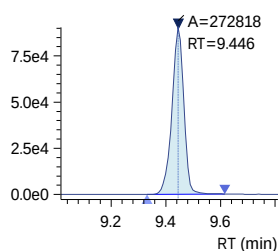


R2 563.10>269.10 (-) 6.40e1



13C7-PFUnDA_IS

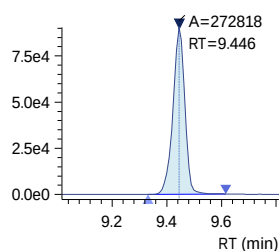
Conc. 1.2500
ISTD 570.00>525.10 (-)



9.05e4

13C7-PFUnDA

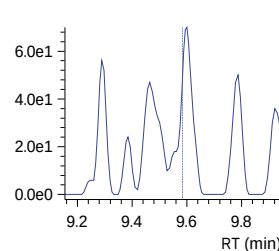
Conc. 1.2753
Q 570.00>525.10 (-)



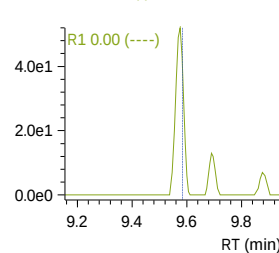
9.05e4

PFNS

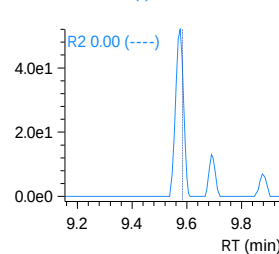
Conc. ----
R#1 0.00 (63.31)
R#2 0.00 (63.31)
Q 548.80>79.90 (-)



5.20e1

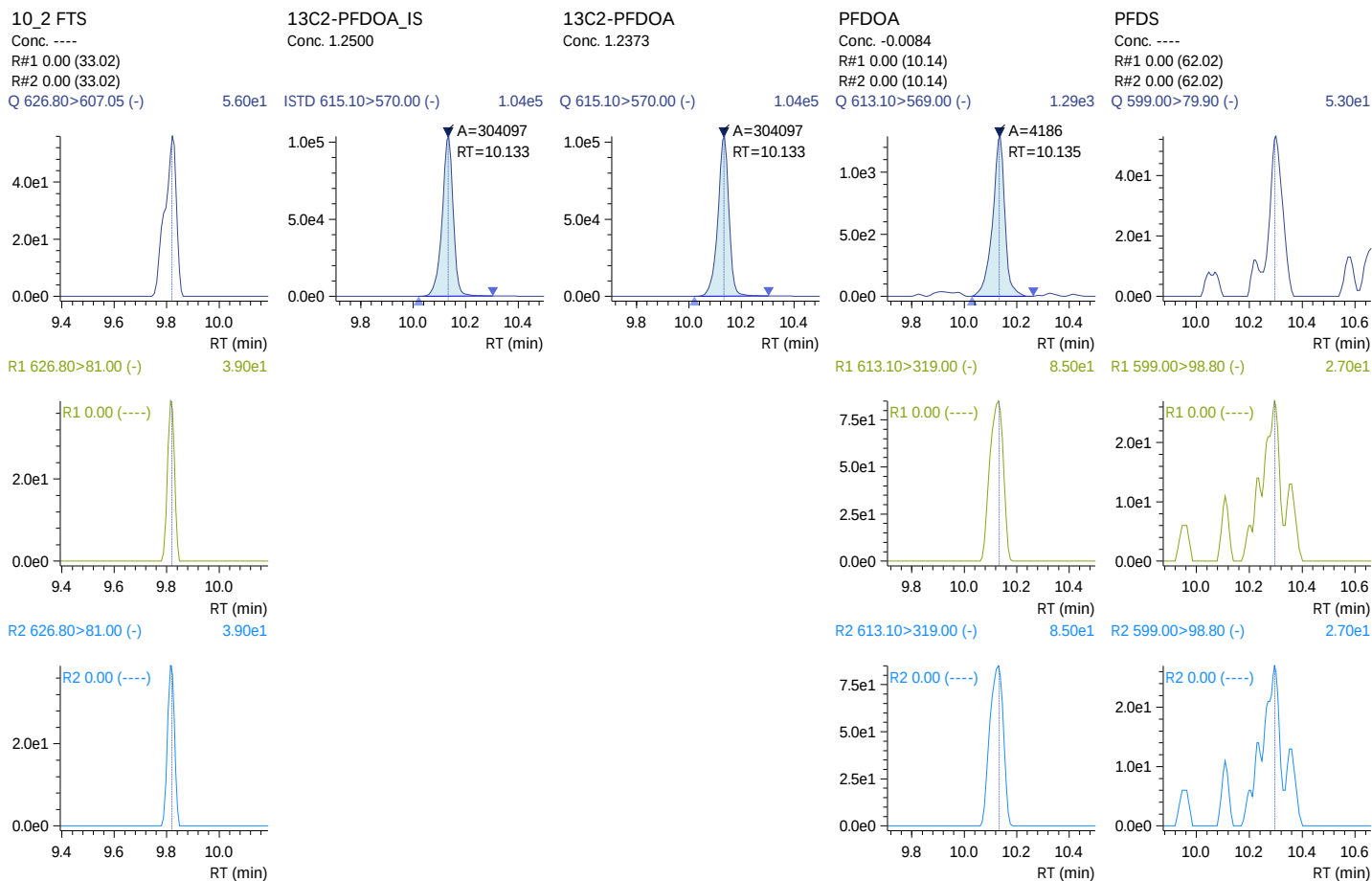


R2 548.80>79.90 (-) 5.20e1



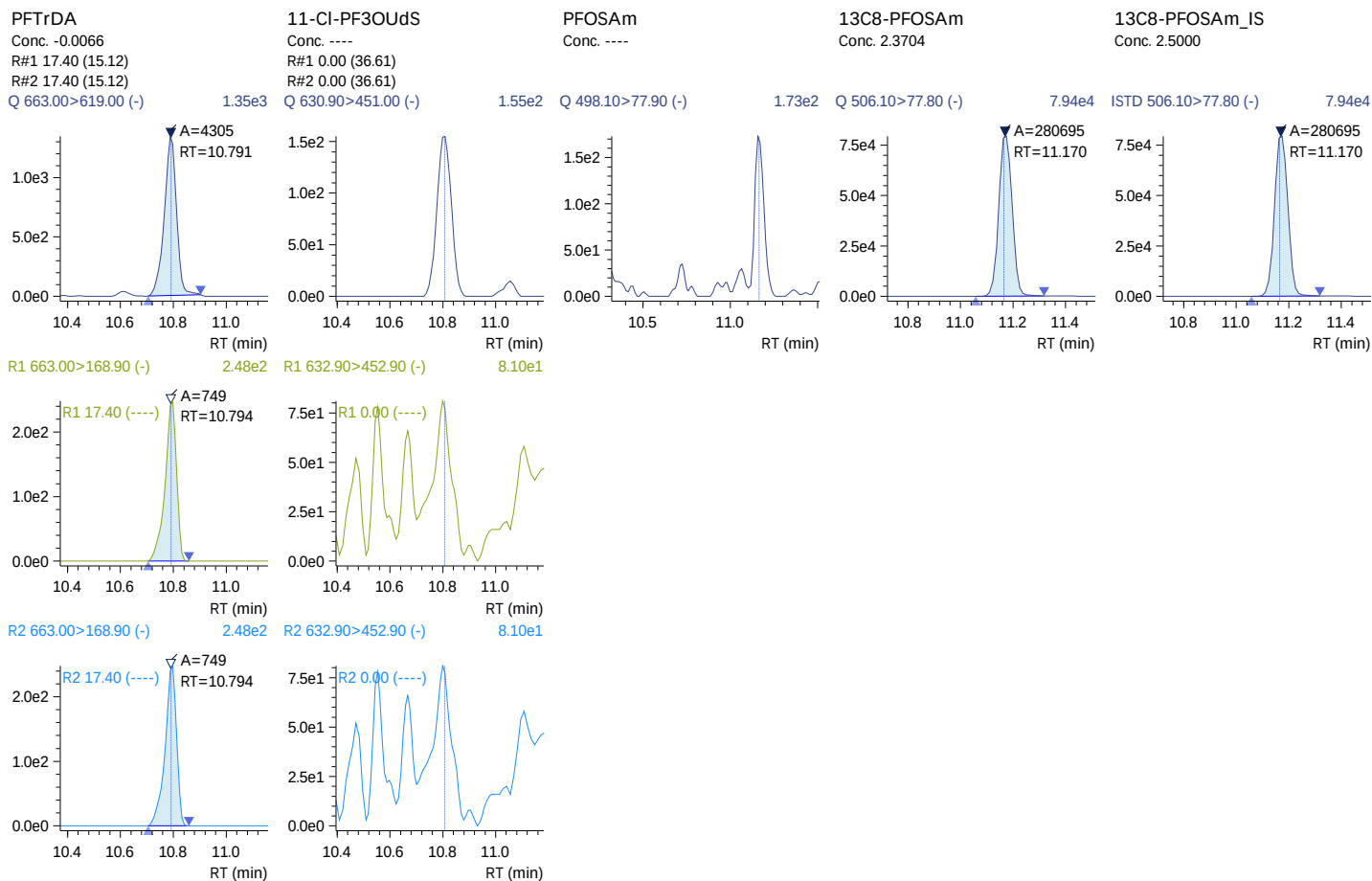


240118_017 (continued)



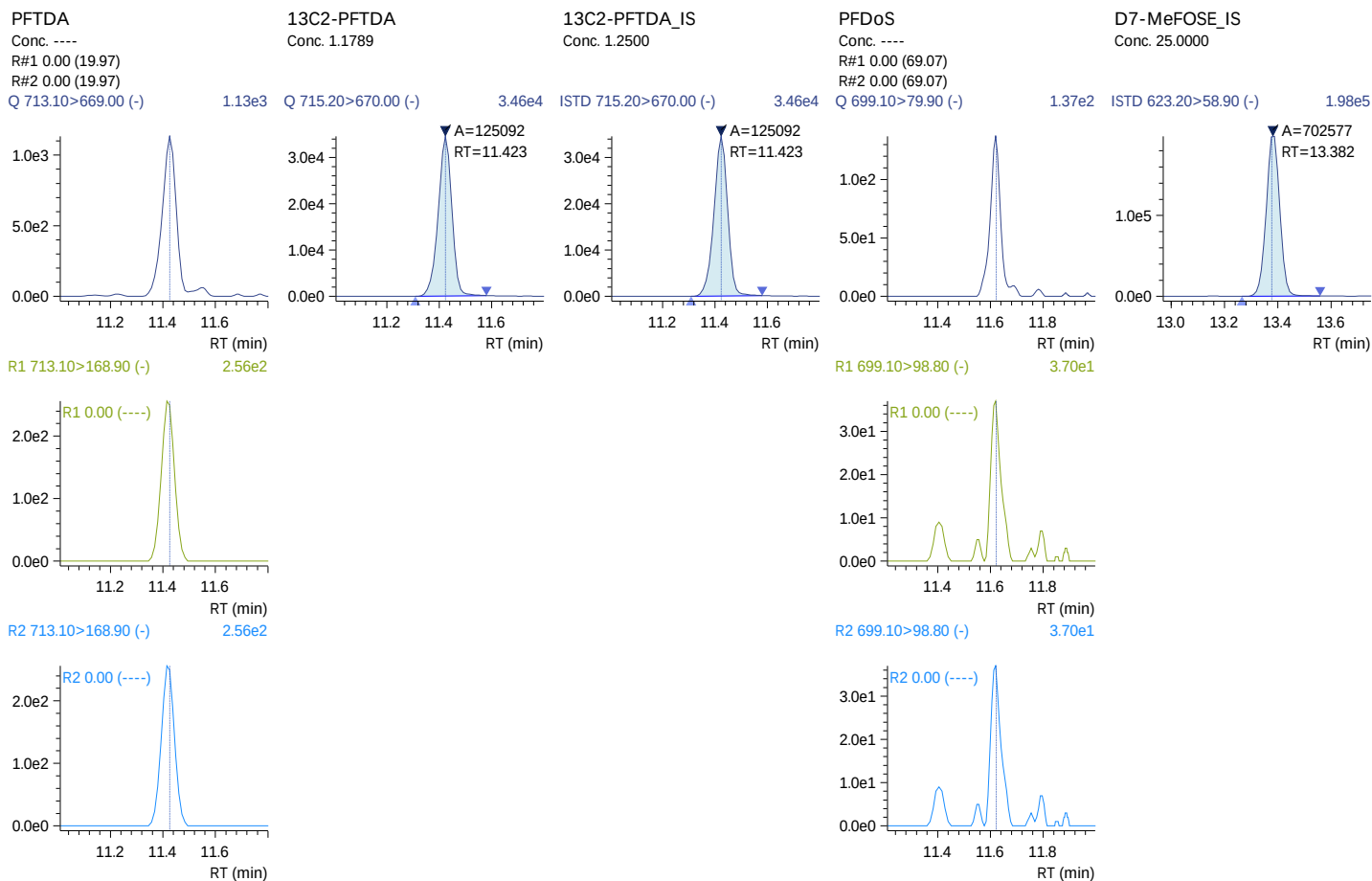


240118_017 (continued)





240118_017 (continued)





240118_017 (continued)

D7-MeFOSE
 Conc. 24.0650

MeFOSE
 Conc. ----

¹³C2-PFHxDA_IS
 Conc. 2.5000

¹³C2-PFHxDA
 Conc. 2.4320

PFHxDA
 Conc. 0.0172
 R#1 14.86 (11.64)
 R#2 14.86 (11.64)

Q 623.20>58.90 (-)

1.98e5

Q 616.10>59.00 (-)

4.70e1

ISTD 815.00>770.05 (-)

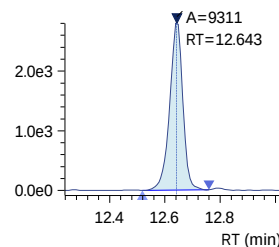
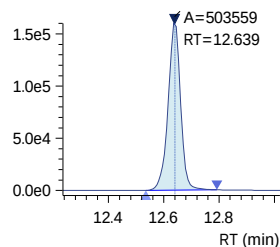
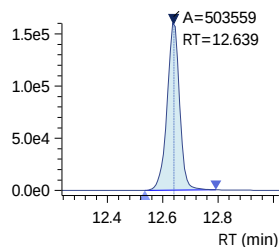
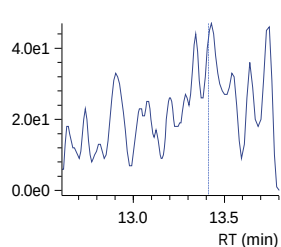
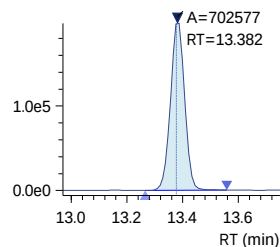
1.60e5

Q 815.00>770.05 (-)

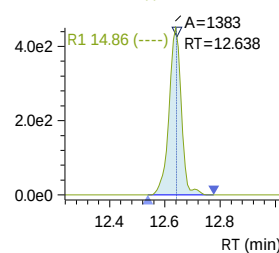
1.60e5

Q 813.00>768.95 (-)

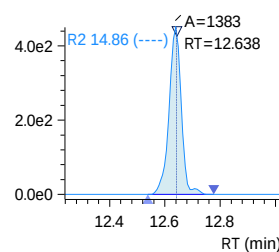
2.80e3



R1 813.00>218.95 (-) 4.50e2



R2 813.00>218.95 (-) 4.50e2





240118_017 (continued)

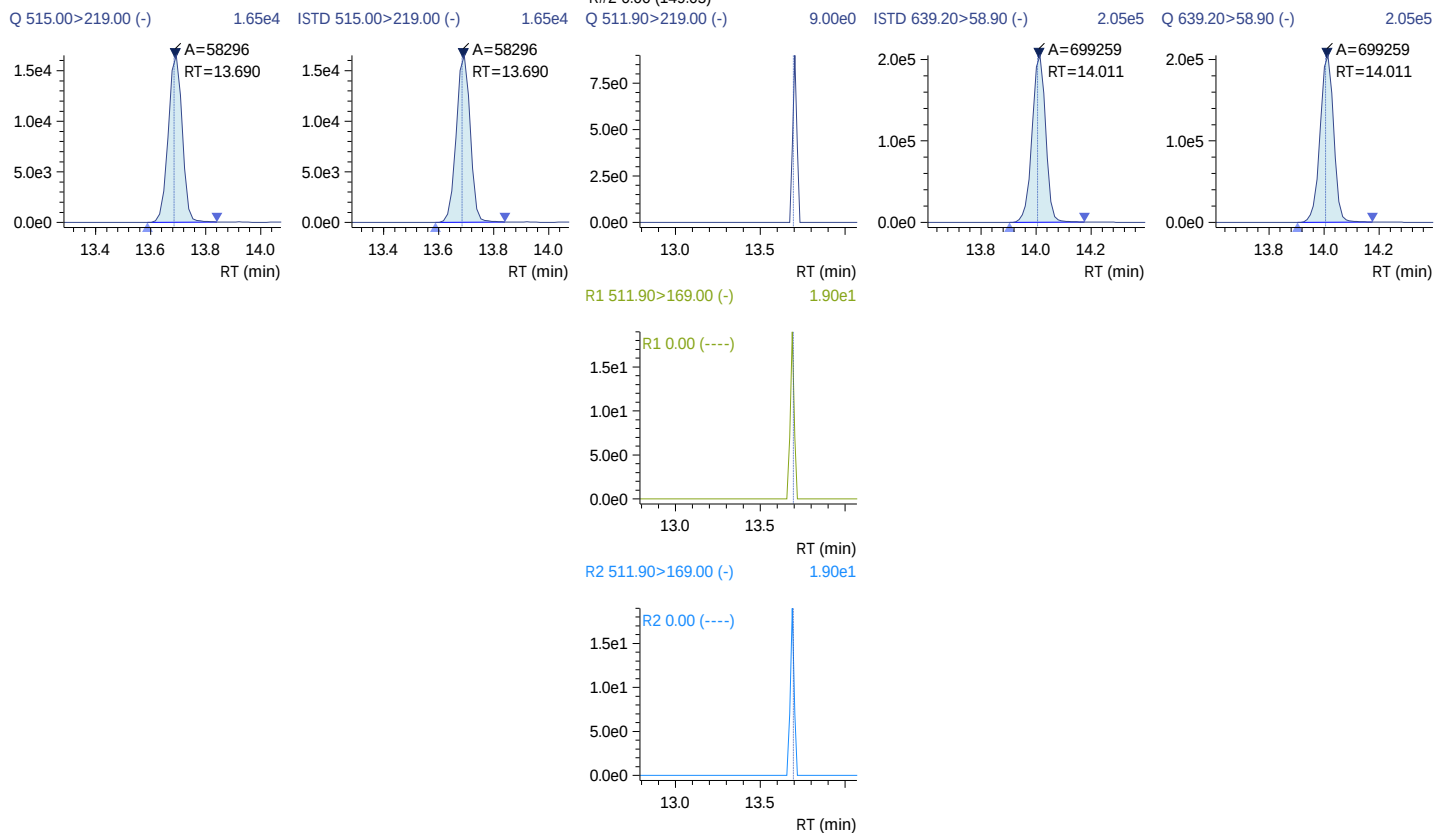
D3-MeFOSA
 Conc. 2.4446

D3-MeFOSA_IS
 Conc. 2.5000

MeFOSA
 Conc. ----
 R#1 0.00 (149.05)
 R#2 0.00 (149.05)

D9-EtFOSE_IS
 Conc. 25.0000

D9-EtFOSE
 Conc. 23.5822





240118_017 (continued)

EtFOSE
Conc. ----

D5-EtFOSAm
Conc. 2.3300

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. ----

PFODA
Conc. 0.0365

Q 630.00>59.00 (-)

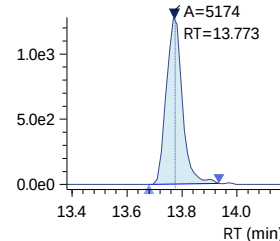
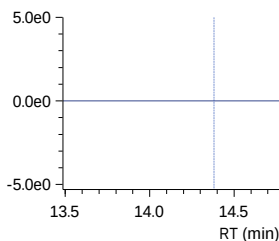
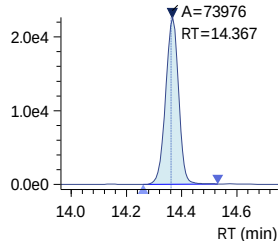
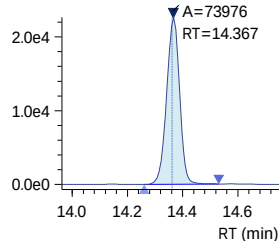
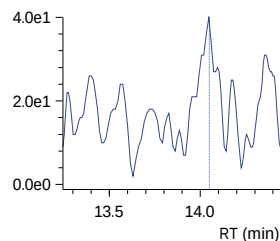
4.00e1 Q 531.10>219.00 (-)

2.27e4 ISTD 531.10>219.00 (-)

2.27e4 Q 526.00>219.00 (-)

0.00e0 Q 913.00>868.65 (-)

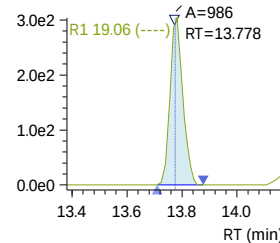
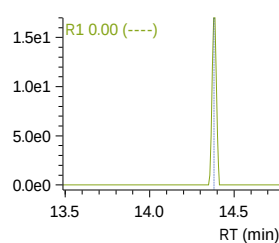
1.28e3



R1 526.00>169.00 (-)

1.70e1 R1 913.00>169.00 (-)

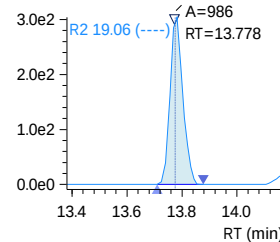
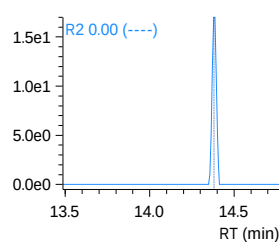
3.04e2



R2 526.00>169.00 (-)

1.70e1 R2 913.00>169.00 (-)

3.04e2





240118_018

Sample ID: TDCA CHECK
Date Acquired: 1/18/2024 6:43:34 PM
Acquired by: System Administrator
Data File: 240118_018
Vial: 12 | Inj. Volume: 10.0000uL | Tray: 1

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	----	----	----	----	----	----	----	----
13C4-PFBA_IS	216.80>171.90	----	----	----	----	----	----	----	----	----
13C3-PFBA_IS	216.00>172.00	----	----	----	----	----	----	----	----	----
PFBA	212.80>169.05	----	----	----	----	----	----	----	----	----
PFMPA	229.00>84.90	----	----	----	----	----	----	----	----	----
3_3 FTCA	241.00>177.10	241.00>117.00	----	0	0.00	141.17	0	0.00	141.17	----
13C5-PFPeA	268.30>223.00	----	----	----	----	----	----	----	----	----
13C5-PFPeA_IS	268.30>223.00	----	----	----	----	----	----	----	----	----
PFPeA	263.00>219.00	----	----	----	----	----	----	----	----	----
PFMBA	279.00>84.95	----	----	----	----	----	----	----	----	----
13C2-4_2 FTS	329.10>80.90	----	----	----	----	----	----	----	----	----
13C2-4_2 FTS_IS	329.10>80.90	----	----	----	----	----	----	----	----	----
4_2 FTS	327.10>307.00	327.10>80.90	----	0	0.00	29.06	0	0.00	29.06	----
13C3-PFBS_IS	302.10>79.90	----	----	----	----	----	----	----	----	----
PFBS	298.70>79.90	298.70>98.80	----	0	0.00	46.72	0	0.00	46.72	----
13C3-PFBS	302.10>79.90	----	----	----	----	----	----	----	----	----
NFDHA	295.00>201.00	295.00>84.90	----	0	0.00	40.25	0	0.00	40.25	----
13C5-PFHxA	318.00>273.00	----	----	----	----	----	----	----	----	----
13C5-PFHxA_IS	318.00>273.00	----	----	----	----	----	----	----	----	----
13C2-PFHxA_IS	315.10>270.00	----	----	----	----	----	----	----	----	----
PFHxA	313.00>269.00	----	----	----	----	----	----	----	----	----
PFEESA	314.80>135.00	314.80>82.90	----	0	0.00	6.11	0	0.00	6.11	----
13C3-HFPO-DA	286.90>168.90	----	----	----	----	----	----	----	----	----
13C3-HFPO-DA_IS	286.90>168.90	----	----	----	----	----	----	----	----	----
HFPO-DA	284.90>168.90	284.90>184.90	----	0	0.00	65.61	0	0.00	65.61	----
5_3 FTCA	341.00>237.05	341.00>217.00	----	0	0.00	158.86	0	0.00	158.86	----
PFPeS	349.10>79.90	349.10>98.80	----	0	0.00	55.80	0	0.00	55.80	----
13C4-PFHpA	367.10>322.00	----	----	----	----	----	----	----	----	----
13C4-PFHpA_IS	367.10>322.00	----	----	----	----	----	----	----	----	----
PFHpA	363.10>319.00	363.10>169.00	----	0	0.00	21.50	0	0.00	21.50	----
DONA	376.90>250.90	376.90>84.80	----	0	0.00	29.66	0	0.00	29.66	----
13C2-6_2 FTS_IS	429.10>80.90	----	----	----	----	----	----	----	----	----
13C2-6_2 FTS	429.10>80.90	----	----	----	----	----	----	----	----	----
6_2 FTS	427.10>407.00	427.10>80.90	----	0	0.00	41.15	0	0.00	41.15	----
13C4-PFOA_IS	417.10>172.00	----	----	----	----	----	----	----	----	----
13C8-PFOA_IS	421.10>376.00	----	----	----	----	----	----	----	----	----

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240118_018 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	----	----	----	----	----	----	----	----
PFOA	413.00>369.00	413.00>169.00	----	0	0.00	31.89	0	0.00	31.89	
13C3-PFHxS	402.10>79.90	----	----	----	----	----	----	----	----	----
13C3-PFHxS_IS	402.10>79.90	----	----	----	----	----	----	----	----	----
PFHxS	398.70>79.90	398.70>98.90	----	0	0.00	56.62	0	0.00	56.62	
18O2-PFHxS_IS	403.00>83.90	----	----	----	----	----	----	----	----	----
13C9-PFNA_IS	472.10>427.00	----	----	----	----	----	----	----	----	----
13C9-PFNA	472.10>427.00	----	----	----	----	----	----	----	----	----
13C5-PFNA_IS	468.00>423.00	----	----	----	----	----	----	----	----	----
PFNA	463.00>419.00	463.00>219.00	----	0	0.00	23.17	0	0.00	23.17	
PFHpS	449.00>79.90	449.00>98.80	----	0	0.00	56.96	0	0.00	56.96	
7_3 FTCA	441.00>317.00	441.00>336.90	----	0	0.00	117.47	0	0.00	117.47	
13C2-8_2-FTS	529.10>80.90	----	----	----	----	----	----	----	----	----
13C2-8_2-FTS_IS	529.10>80.90	----	----	----	----	----	----	----	----	----
8_2 FTS	527.10>506.95	527.10>80.80	----	0	0.00	49.59	0	0.00	49.59	
13C6-PFDA_IS	519.10>474.10	----	----	----	----	----	----	----	----	----
13C6-PFDA	519.10>474.10	----	----	----	----	----	----	----	----	----
13C2-PFDA_IS	515.10>470.10	----	----	----	----	----	----	----	----	----
PFDA	512.90>469.00	512.90>219.00	----	0	0.00	19.00	0	0.00	19.00	
D3-NMeFOSAA_IS	573.20>419.00	----	----	----	----	----	----	----	----	----
D3-NMeFOSAA	573.20>419.00	----	----	----	----	----	----	----	----	----
13C8-PFOS_IS	507.10>98.90	----	----	----	----	----	----	----	----	----
13C8-PFOS	507.10>98.90	----	----	----	----	----	----	----	----	----
13C4-PFOS_IS	502.80>79.90	----	2380	----	----	----	----	----	----	----
PFOS	498.90>79.90	498.90>98.80	----	0	0.00	52.47	0	0.00	52.47	
NMeFOSAA	570.10>419.00	570.10>483.00	----	0	0.00	55.15	0	0.00	55.15	
D5-NetFOSAA_IS	589.20>419.00	----	----	----	----	----	----	----	----	----
D5-NetFOSAA	589.20>419.00	----	----	----	----	----	----	----	----	----
NetFOSAA	584.20>419.10	584.20>526.00	----	0	0.00	81.95	0	0.00	81.95	
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	----	0	0.00	32.76	0	0.00	32.76	
PFUnDA	563.10>519.00	563.10>269.10	----	0	0.00	13.12	0	0.00	13.12	
13C7-PFUnDA_IS	570.00>525.10	----	----	----	----	----	----	----	----	----
13C7-PFUnDA	570.00>525.10	----	----	----	----	----	----	----	----	----
PFNS	548.80>79.90	548.80>98.80	----	0	0.00	65.22	0	0.00	65.22	
10_2 FTS	626.80>607.05	626.80>81.00	----	0	0.00	37.13	0	0.00	37.13	
13C2-PFDOA_IS	615.10>570.00	----	----	----	----	----	----	----	----	----
13C2-PFDOA	615.10>570.00	----	----	----	----	----	----	----	----	----
PFDOA	613.10>569.00	613.10>319.00	----	0	0.00	11.29	0	0.00	11.29	
PFDS	599.00>79.90	599.00>98.80	----	0	0.00	60.18	0	0.00	60.18	
PFTDA	663.00>619.00	663.00>168.90	----	0	0.00	17.64	0	0.00	17.64	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240118_018 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	----	0	0.00	36.44	0	0.00	36.44	
PFOSAm	498.10>77.90	----	----	----	----	----	----	----	----	
13C8-PFOSAm	506.10>77.80	----	----	----	----	----	----	----	----	
13C8-PFOSAm_IS	506.10>77.80	----	----	----	----	----	----	----	----	
PFTDA	713.10>669.00	713.10>168.90	----	0	0.00	22.96	0	0.00	22.96	
13C2-PFTDA	715.20>670.00	----	----	----	----	----	----	----	----	
13C2-PFTDA_IS	715.20>670.00	----	----	----	----	----	----	----	----	
PFDoS	699.10>79.90	699.10>98.80	----	0	0.00	67.40	0	0.00	67.40	
D7-MeFOSE_IS	623.20>58.90	----	----	----	----	----	----	----	----	
D7-MeFOSE	623.20>58.90	----	----	----	----	----	----	----	----	
MeFOSE	616.10>59.00	----	----	----	----	----	----	----	----	
13C2-PFHxDA_IS	815.00>770.05	----	2100	----	----	----	----	----	----	
13C2-PFHxDA	815.00>770.05	----	2100	----	----	----	----	----	----	
PFHxDA	813.00>768.95	813.00>218.95	----	0	0.00	13.90	0	0.00	13.90	
D3-MeFOSA	515.00>219.00	----	----	----	----	----	----	----	----	
D3-MeFOSA_IS	515.00>219.00	----	----	----	----	----	----	----	----	
MeFOSA	511.90>219.00	511.90>169.00	----	0	0.00	140.79	0	0.00	140.79	
D9-EtFOSE_IS	639.20>58.90	----	----	----	----	----	----	----	----	
D9-EtFOSE	639.20>58.90	----	----	----	----	----	----	----	----	
EtFOSE	630.00>59.00	----	----	----	----	----	----	----	----	
D5-EtFOSAm	531.10>219.00	----	----	----	----	----	----	----	----	
D5-EtFOSAm_IS	531.10>219.00	----	----	----	----	----	----	----	----	
EtFOSAm	526.00>219.00	526.00>169.00	----	0	0.00	163.90	0	0.00	163.90	
PFODA	913.00>868.65	913.00>169.00	----	0	0.00	27.03	0	0.00	27.03	



240118_018

Sample ID: TDCA CHECK
Date Acquired: 1/18/2024 6:43:34 PM
Acquired by: System Administrator
Data File: 240118_018
Vial: 12 | Inj. Volume: 10.0000uL | Tray: 1

Check PFOS

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Std. Conc.	Conc.	Unit	Flag ID
13C4-PFBA	ND(W/B)	----	----	----	----	----	13C3-PFBA_IS	----	ISTD Error	ng/mL	
13C4-PFBA_IS	ND(W/B)	----	----	----	----	----	----	----	----	ng/mL	
13C3-PFBA_IS	ND(W/B)	----	----	----	----	----	----	----	----	ng/mL	
PFBA	ND(W/B)	----	----	----	----	----	13C4-PFBA_IS	----	ISTD Error	ng/mL	
PFMPA	ND(W/B)	----	----	----	----	----	13C5-PFPeA_IS	----	ISTD Error	ng/mL	
3_3 FTCA	ND(W/B)	----	----	----	----	----	13C5-PFPeA_IS	----	ISTD Error	ng/mL	
13C5-PFPeA	ND(W/B)	----	----	----	----	----	13C2-PFHxA_IS	----	ISTD Error	ng/mL	
13C5-PFPeA_IS	ND(W/B)	----	----	----	----	----	----	----	----	ng/mL	
PFPeA	ND(W/B)	----	----	----	----	----	13C5-PFPeA_IS	----	ISTD Error	ng/mL	
PFMBA	ND(W/B)	----	----	----	----	----	13C5-PFPeA_IS	----	ISTD Error	ng/mL	
13C2-4_2 FTS	ND(W/B)	----	----	----	----	----	18O2-PFHxS_IS	----	ISTD Error	ng/mL	
13C2-4_2 FTS_IS	ND(W/B)	----	----	----	----	----	----	----	----	ng/mL	
4_2 FTS	ND(W/B)	----	----	----	----	----	13C2-4_2 FTS_IS	----	ISTD Error	ng/mL	
13C3-PFBS_IS	ND(W/B)	----	----	----	----	----	----	----	----	ng/mL	
PFBS	ND(W/B)	----	----	----	----	----	13C3-PFBS_IS	----	ISTD Error	ng/mL	
13C3-PFBS	ND(W/B)	----	----	----	----	----	18O2-PFHxS_IS	----	ISTD Error	ng/mL	
NFDHA	ND(W/B)	----	----	----	----	----	13C5-PFHxA_IS	----	ISTD Error	ng/mL	
13C5-PFHxA	ND(W/B)	----	----	----	----	----	13C2-PFHxA_IS	----	ISTD Error	ng/mL	
13C5-PFHxA_IS	ND(W/B)	----	----	----	----	----	----	----	----	ng/mL	
13C2-PFHxA_IS	ND(W/B)	----	----	----	----	----	----	----	----	ng/mL	
PFHxA	ND(W/B)	----	----	----	----	----	13C5-PFHxA_IS	----	ISTD Error	ng/mL	
PFEESA	ND(W/B)	----	----	----	----	----	13C5-PFHxA_IS	----	ISTD Error	ng/mL	
13C3-HFPO-DA	ND(W/B)	----	----	----	----	----	13C2-PFHxA_IS	----	ISTD Error	ng/mL	
13C3-HFPO-DA_IS	ND(W/B)	----	----	----	----	----	----	----	----	ng/mL	
HFPO-DA	ND(W/B)	----	----	----	----	----	13C3-HFPO-DA_IS	----	ISTD Error	ng/mL	
5_3 FTCA	ND(W/B)	----	----	----	----	----	13C5-PFHxA_IS	----	ISTD Error	ng/mL	
PFPeS	ND(W/B)	----	----	----	----	----	13C3-PFHxS_IS	----	ISTD Error	ng/mL	
13C4-PFHpA	ND(W/B)	----	----	----	----	----	13C2-PFHxA_IS	----	ISTD Error	ng/mL	
13C4-PFHpA_IS	ND(W/B)	----	----	----	----	----	----	----	----	ng/mL	
PFHpA	ND(W/B)	----	----	----	----	----	13C4-PFHpA_IS	----	ISTD Error	ng/mL	
DONA	ND(W/B)	----	----	----	----	----	13C3-HFPO-DA_IS	----	ISTD Error	ng/mL	
13C2-6_2 FTS_IS	ND(W/B)	----	----	----	----	----	----	----	----	ng/mL	
13C2-6_2 FTS	ND(W/B)	----	----	----	----	----	18O2-PFHxS_IS	----	ISTD Error	ng/mL	
6_2 FTS	ND(W/B)	----	----	----	----	----	13C2-6_2 FTS_IS	----	ISTD Error	ng/mL	
13C4-PFOA_IS	ND(W/B)	----	----	----	----	----	----	----	----	ng/mL	
13C8-PFOA_IS	ND(W/B)	----	----	----	----	----	----	----	----	ng/mL	
13C8-PFOA	ND(W/B)	----	----	----	----	----	13C4-PFOA_IS	----	ISTD Error	ng/mL	
PFOA	ND(W/B)	----	----	----	----	----	13C8-PFOA_IS	----	ISTD Error	ng/mL	
13C3-PFHxS	ND(W/B)	----	----	----	----	----	18O2-PFHxS_IS	----	ISTD Error	ng/mL	
13C3-PFHxS_IS	ND(W/B)	----	----	----	----	----	----	----	----	ng/mL	
PFHxS	ND(W/B)	----	----	----	----	----	13C3-PFHxS_IS	----	ISTD Error	ng/mL	
18O2-PFHxS_IS	ND(W/B)	----	----	----	----	----	----	----	----	ng/mL	
13C9-PFNA_IS	ND(W/B)	----	----	----	----	----	----	----	----	ng/mL	
13C9-PFNA	ND(W/B)	----	----	----	----	----	13C5-PFNA_IS	----	ISTD Error	ng/mL	
13C5-PFNA_IS	ND(W/B)	----	----	----	----	----	----	----	----	ng/mL	
PFNA	ND(W/B)	----	----	----	----	----	13C9-PFNA_IS	----	ISTD Error	ng/mL	
PFHpS	ND(W/B)	----	----	----	----	----	13C8-PFOS_IS	----	ISTD Error	ng/mL	
7_3 FTCA	ND(W/B)	----	----	----	----	----	13C5-PFHxA_IS	----	ISTD Error	ng/mL	
13C2-8_2-FTS	ND(W/B)	----	----	----	----	----	18O2-PFHxS_IS	----	ISTD Error	ng/mL	
13C2-8_2-FTS_IS	ND(W/B)	----	----	----	----	----	----	----	----	ng/mL	
8_2 FTS	ND(W/B)	----	----	----	----	----	13C2-8_2-FTS_IS	----	ISTD Error	ng/mL	
13C6-PFDA_IS	ND(W/B)	----	----	----	----	----	----	----	----	ng/mL	
13C6-PFDA	ND(W/B)	----	----	----	----	----	13C2-PFDA_IS	----	ISTD Error	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



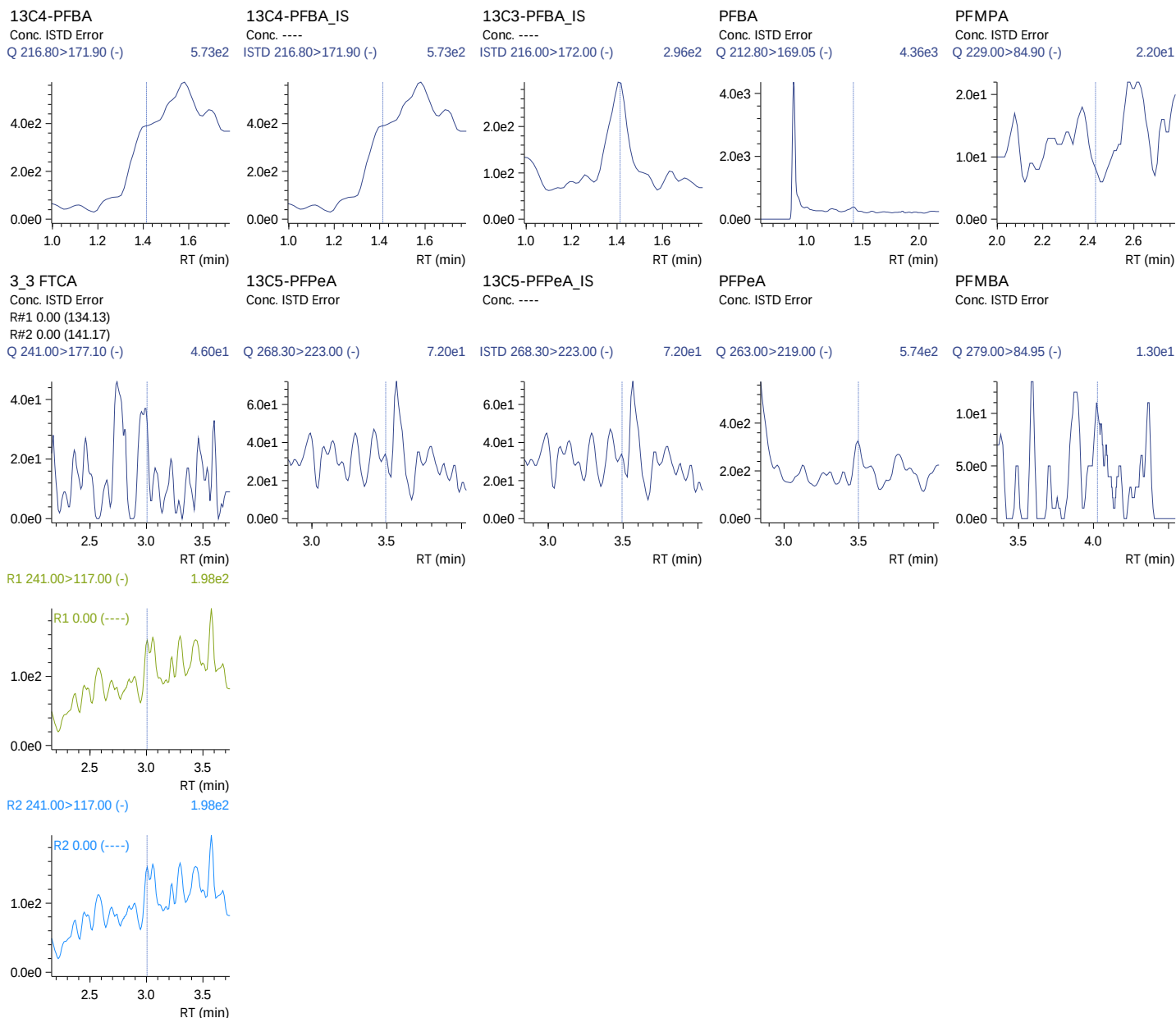
240118_018 (continued)

(Table continued from previous page)

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Std. Conc.	Conc.	Unit	Flag ID
13C2-PFDA_IS	ND(W/B)	----	----	----	----	----	----	----	----	ng/mL	
PFDA	ND(W/B)	----	----	----	----	----	13C6-PFDA_IS	----	ISTD Error	ng/mL	
D3-NMeFOSAA_IS	ND(W/B)	----	----	----	----	----	----	----	----	ng/mL	
D3-NMeFOSAA	ND(W/B)	----	----	----	----	2380	13C4-PFOS_IS	----	----	ng/mL	
13C8-PFOS_IS	ND(W/B)	----	----	----	----	----	----	----	----	ng/mL	
13C8-PFOS	ND(W/B)	----	----	----	----	2380	13C4-PFOS_IS	----	----	ng/mL	
13C4-PFOS_IS	Auto	8.816	-0.004	----	2380	2380	----	----	2.5000	ng/mL	
PFOS	ND(W/B)	----	----	----	----	----	13C8-PFOS_IS	----	ISTD Error	ng/mL	
NMeFOSAA	ND(W/B)	----	----	----	----	----	D3-NMeFOSAA_IS	----	ISTD Error	ng/mL	
D5-NetFOSAA_IS	ND(W/B)	----	----	----	----	----	----	----	----	ng/mL	
D5-NetFOSAA	ND(W/B)	----	----	----	----	2380	13C4-PFOS_IS	----	----	ng/mL	
NetFOSAA	ND(W/B)	----	----	----	----	----	D5-NetFOSAA_IS	----	ISTD Error	ng/mL	
9-CI-PF3ONS	ND(W/B)	----	----	----	----	----	13C3-HFPO-DA_IS	----	ISTD Error	ng/mL	
PFUnDA	ND(W/B)	----	----	----	----	----	13C7-PFUnDA_IS	----	ISTD Error	ng/mL	
13C7-PFUnDA_IS	ND(W/B)	----	----	----	----	----	----	----	----	ng/mL	
13C7-PFUnDA	ND(W/B)	----	----	----	----	----	13C2-PFDA_IS	----	ISTD Error	ng/mL	
PFNS	ND(W/B)	----	----	----	----	----	13C8-PFOS_IS	----	ISTD Error	ng/mL	
10_2_FTS	ND(W/B)	----	----	----	----	----	13C2-8_2_FTS_IS	----	ISTD Error	ng/mL	
13C2-PFDOA_IS	ND(W/B)	----	----	----	----	----	----	----	----	ng/mL	
13C2-PFDOA	ND(W/B)	----	----	----	----	----	13C2-PFDA_IS	----	ISTD Error	ng/mL	
PFDOA	ND(W/B)	----	----	----	----	----	13C2-PFDOA_IS	----	ISTD Error	ng/mL	
PFDS	ND(W/B)	----	----	----	----	----	13C8-PFOS_IS	----	ISTD Error	ng/mL	
PFTDA	ND(W/B)	----	----	----	----	----	13C2-PFTDA_IS	----	ISTD Error	ng/mL	
11-CI-PF3OUdS	ND(W/B)	----	----	----	----	----	13C3-HFPO-DA_IS	----	ISTD Error	ng/mL	
PFOSAm	ND(W/B)	----	----	----	----	----	13C8-PFOSAm_IS	----	ISTD Error	ng/mL	
13C8-PFOSAm	ND(W/B)	----	----	----	----	2380	13C4-PFOS_IS	----	----	ng/mL	
13C8-PFOSAm_IS	ND(W/B)	----	----	----	----	----	----	----	----	ng/mL	
PFTDA	ND(W/B)	----	----	----	----	----	13C2-PFTDA_IS	----	ISTD Error	ng/mL	
13C2-PFTDA	ND(W/B)	----	----	----	----	----	13C2-PFDA_IS	----	ISTD Error	ng/mL	
13C2-PFTDA_IS	ND(W/B)	----	----	----	----	----	----	----	----	ng/mL	
PFDoS	ND(W/B)	----	----	----	----	----	13C8-PFOS_IS	----	ISTD Error	ng/mL	
D7-MeFOSE_IS	ND(W/B)	----	----	----	----	----	----	----	----	ng/mL	
D7-MeFOSE	ND(W/B)	----	----	----	----	2380	13C4-PFOS_IS	----	----	ng/mL	
MeFOSE	ND(W/B)	----	----	----	----	----	D7-MeFOSE_IS	----	ISTD Error	ng/mL	
13C2-PFHXA_IS	Auto	12.635	-0.006	----	2100	2100	----	----	2.5000	ng/mL	
13C2-PFHXA	Auto	12.635	-0.006	----	2100	----	13C2-PFDA_IS	----	ISTD Error	ng/mL	
PFHXDA	ND(W/B)	----	----	----	----	2100	13C2-PFHXA_IS	----	----	ng/mL	
D3-MeFOSA	ND(W/B)	----	----	----	----	2380	13C4-PFOS_IS	----	----	ng/mL	
D3-MeFOSA_IS	ND(W/B)	----	----	----	----	----	----	----	----	ng/mL	
MeFOSA	ND(W/B)	----	----	----	----	----	D3-MeFOSA_IS	----	ISTD Error	ng/mL	
D9-EtFOSE_IS	ND(W/B)	----	----	----	----	----	----	----	----	ng/mL	
D9-EtFOSE	ND(W/B)	----	----	----	----	2380	13C4-PFOS_IS	----	----	ng/mL	
EtFOSE	ND(W/B)	----	----	----	----	----	D9-EtFOSE_IS	----	ISTD Error	ng/mL	
D5-EtFOSAm	ND(W/B)	----	----	----	----	2380	13C4-PFOS_IS	----	----	ng/mL	
D5-EtFOSAm_IS	ND(W/B)	----	----	----	----	----	----	----	----	ng/mL	
EtFOSAm	ND(W/B)	----	----	----	----	----	D5-EtFOSAm_IS	----	ISTD Error	ng/mL	
PFODA	ND(W/B)	----	----	----	----	2100	13C2-PFHXA_IS	----	----	ng/mL	



240118_018 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_018 (continued)

13C2-4_2 FTS
Conc. ISTD Error

13C2-4_2 FTS_IS
Conc. ----

4_2 FTS
Conc. ISTD Error
R#1 0.00 (34.14)
R#2 0.00 (29.06)

13C3-PFBS_IS
Conc. ----

PFBS
Conc. ISTD Error
R#1 0.00 (47.53)
R#2 0.00 (46.72)

Q 329.10>80.90 (-)

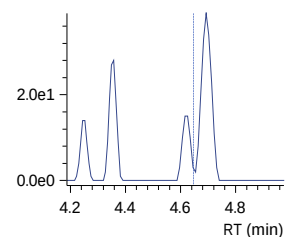
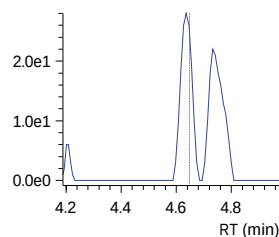
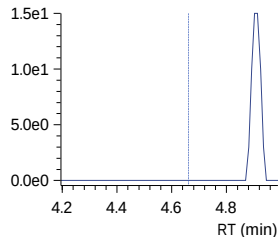
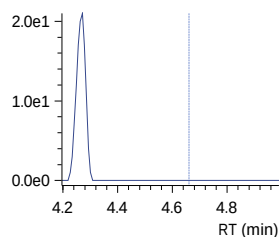
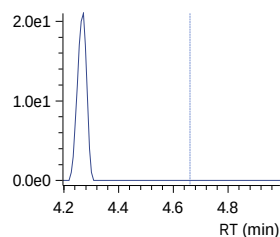
2.10e1 ISTD 329.10>80.90 (-)

2.10e1 Q 327.10>307.00 (-)

1.50e1 ISTD 302.10>79.90 (-)

2.80e1 Q 298.70>79.90 (-)

3.90e1

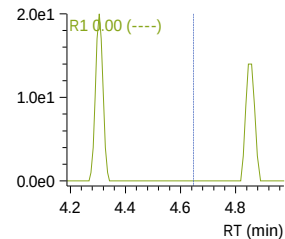
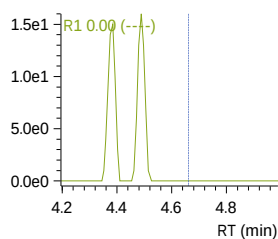


R1 327.10>80.90 (-)

1.60e1

R1 298.70>98.80 (-)

2.00e1

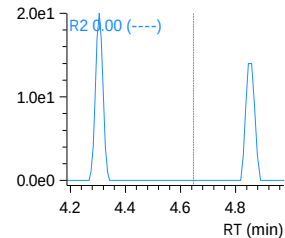
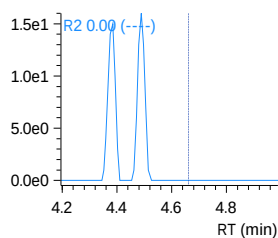


R2 327.10>80.90 (-)

1.60e1

R2 298.70>98.80 (-)

2.00e1





240118_018 (continued)

13C3-PFBS
Conc. ISTD Error

NFDHA
Conc. ISTD Error
R#1 0.00 (37.88)
R#2 0.00 (40.25)

13C5-PFHxA
Conc. ISTD Error

13C5-PFHxA_IS
Conc. ----

13C2-PFHxA_IS
Conc. ----

Q 302.10>79.90 (-)

2.80e1

Q 295.00>201.00 (-)

2.20e1

Q 318.00>273.00 (-)

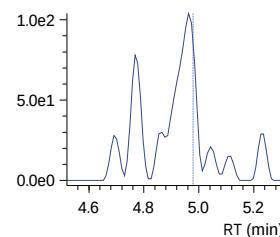
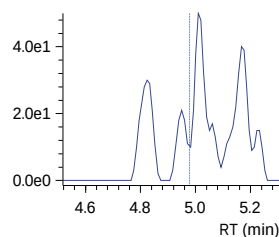
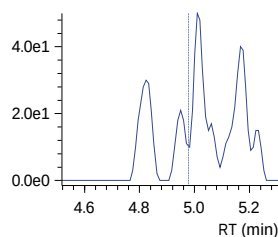
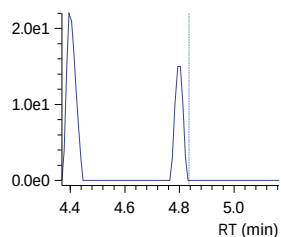
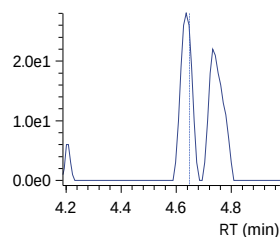
5.00e1

ISTD 318.00>273.00 (-)

5.00e1

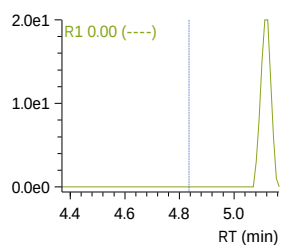
ISTD 315.10>270.00 (-)

1.04e2



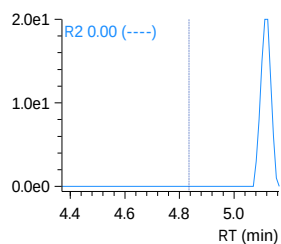
R1 295.00>84.90 (-)

2.00e1



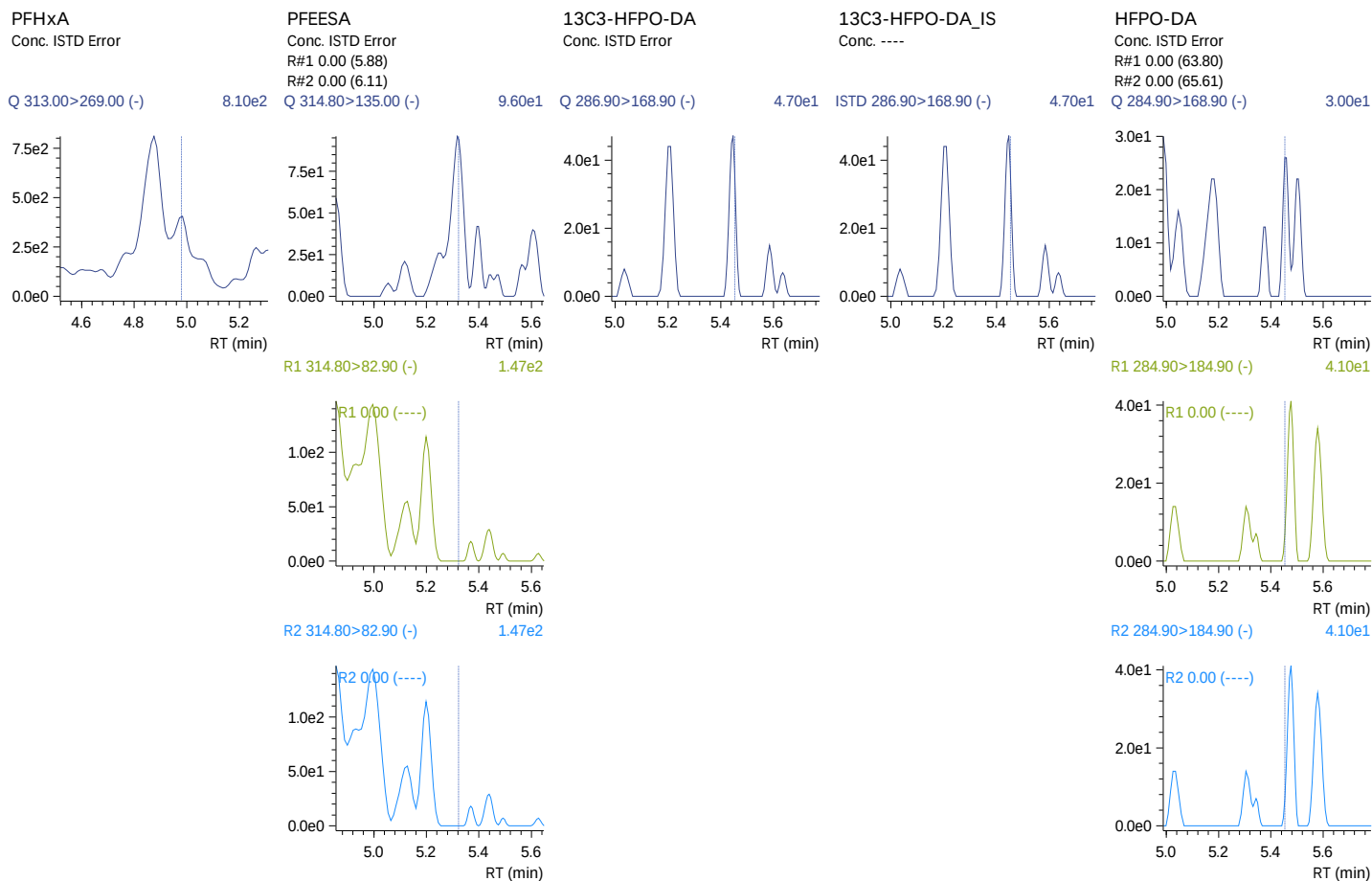
R2 295.00>84.90 (-)

2.00e1





240118_018 (continued)

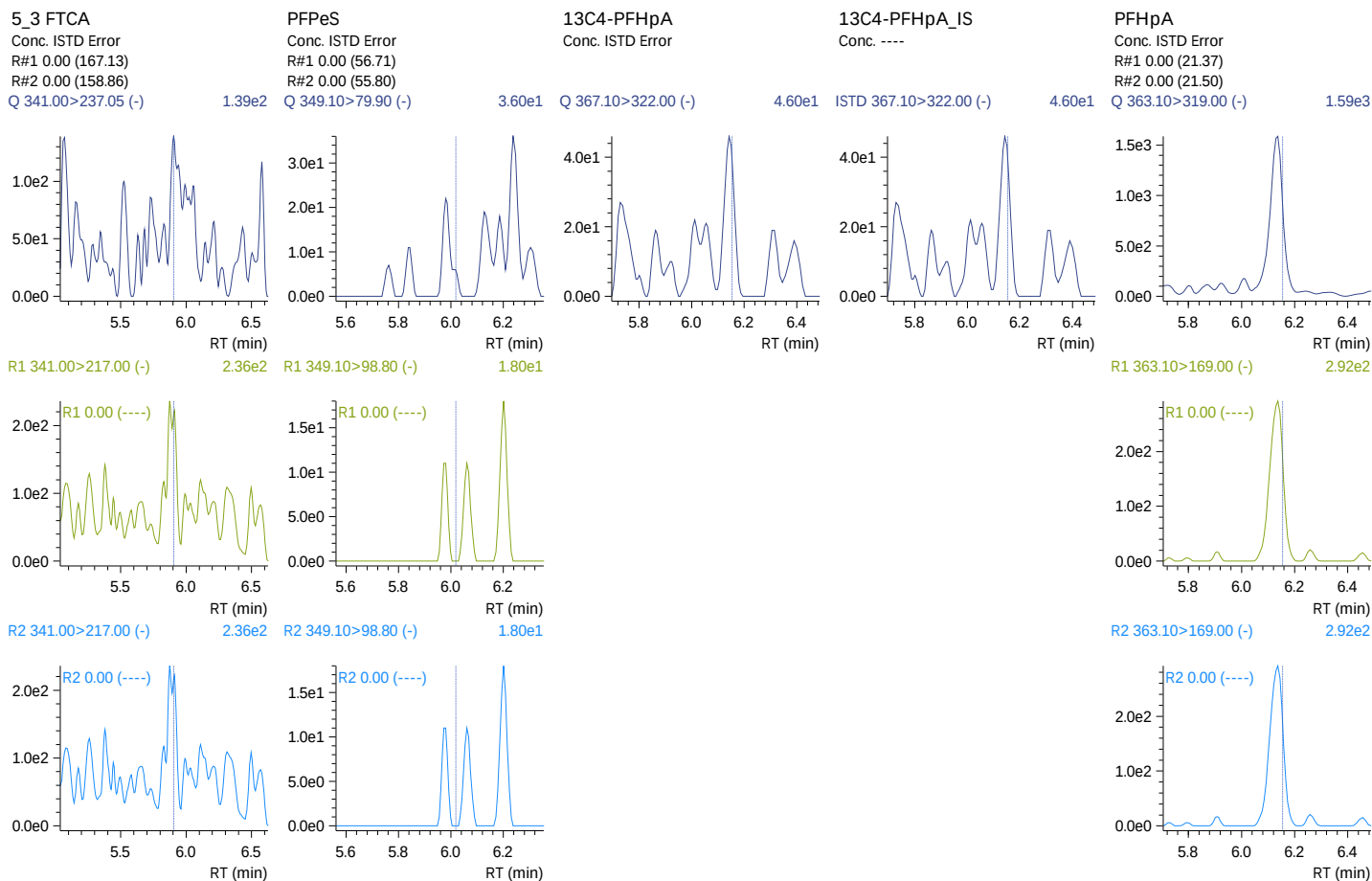


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_018 (continued)

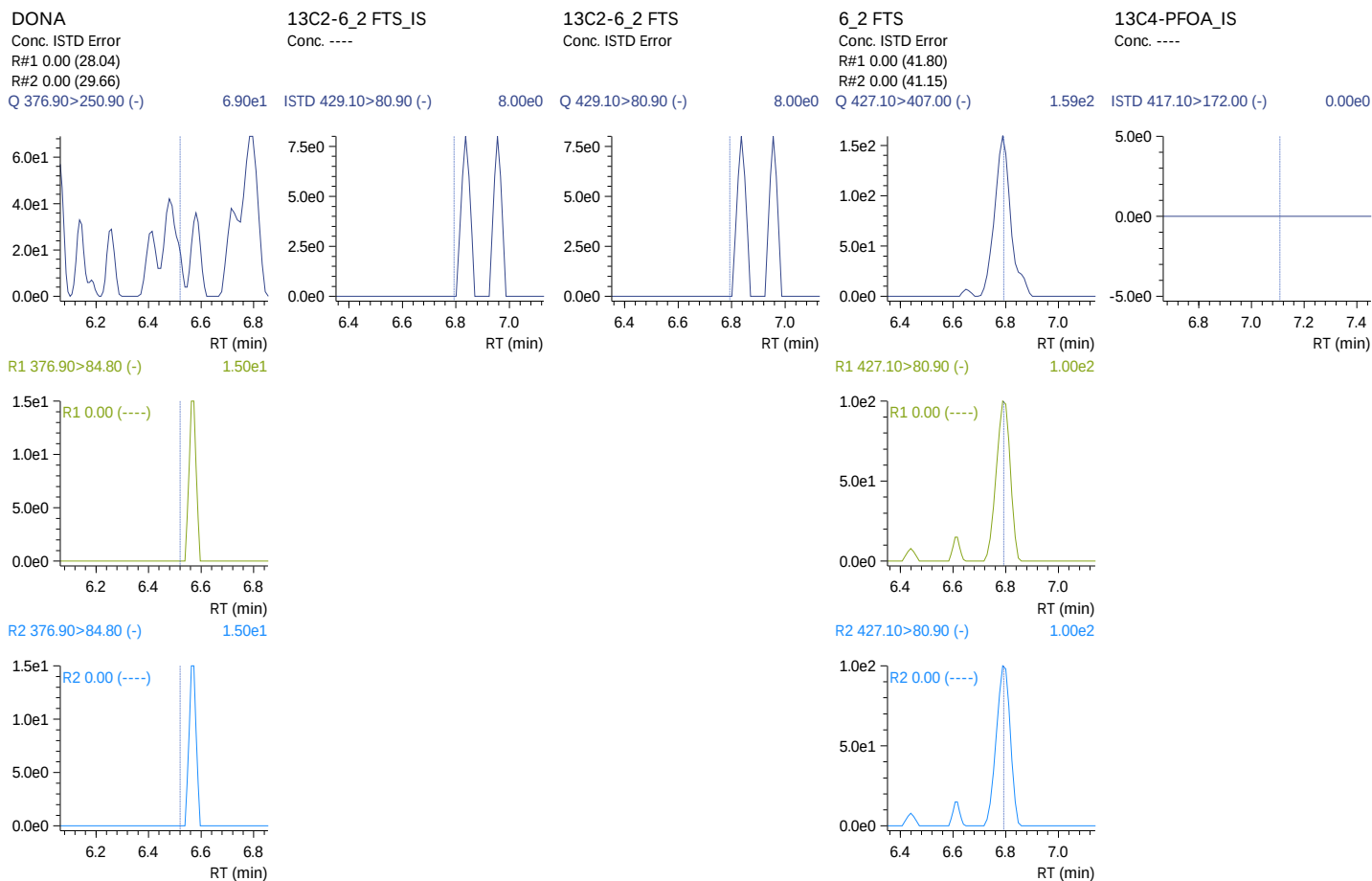


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
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240118_018 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
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240118_018 (continued)

13C8-PFOA_IS
Conc. ----

13C8-PFOA
Conc. ISTD Error

PFOA
Conc. ISTD Error
R#1 0.00 (29.05)
R#2 0.00 (31.89)

13C3-PFHxS
Conc. ISTD Error

13C3-PFHxS_IS
Conc. ----

ISTD 421.10>376.00 (-)

5.90e1

Q 421.10>376.00 (-)

5.90e1

Q 413.00>369.00 (-)

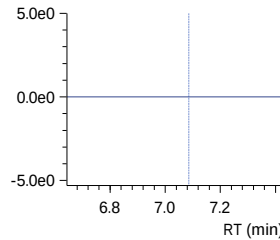
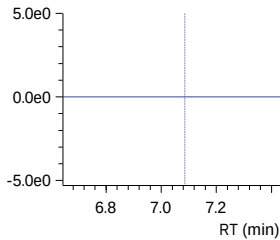
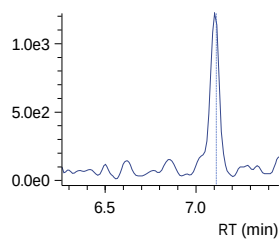
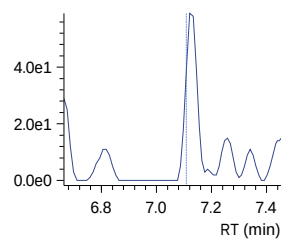
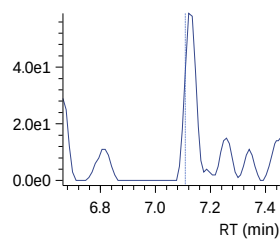
1.22e3

Q 402.10>79.90 (-)

0.00e0

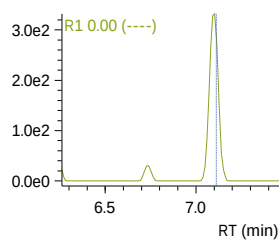
ISTD 402.10>79.90 (-)

0.00e0



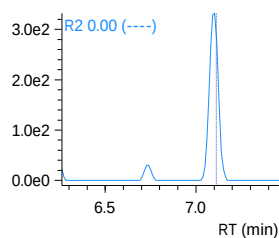
R1 413.00>169.00 (-)

3.32e2



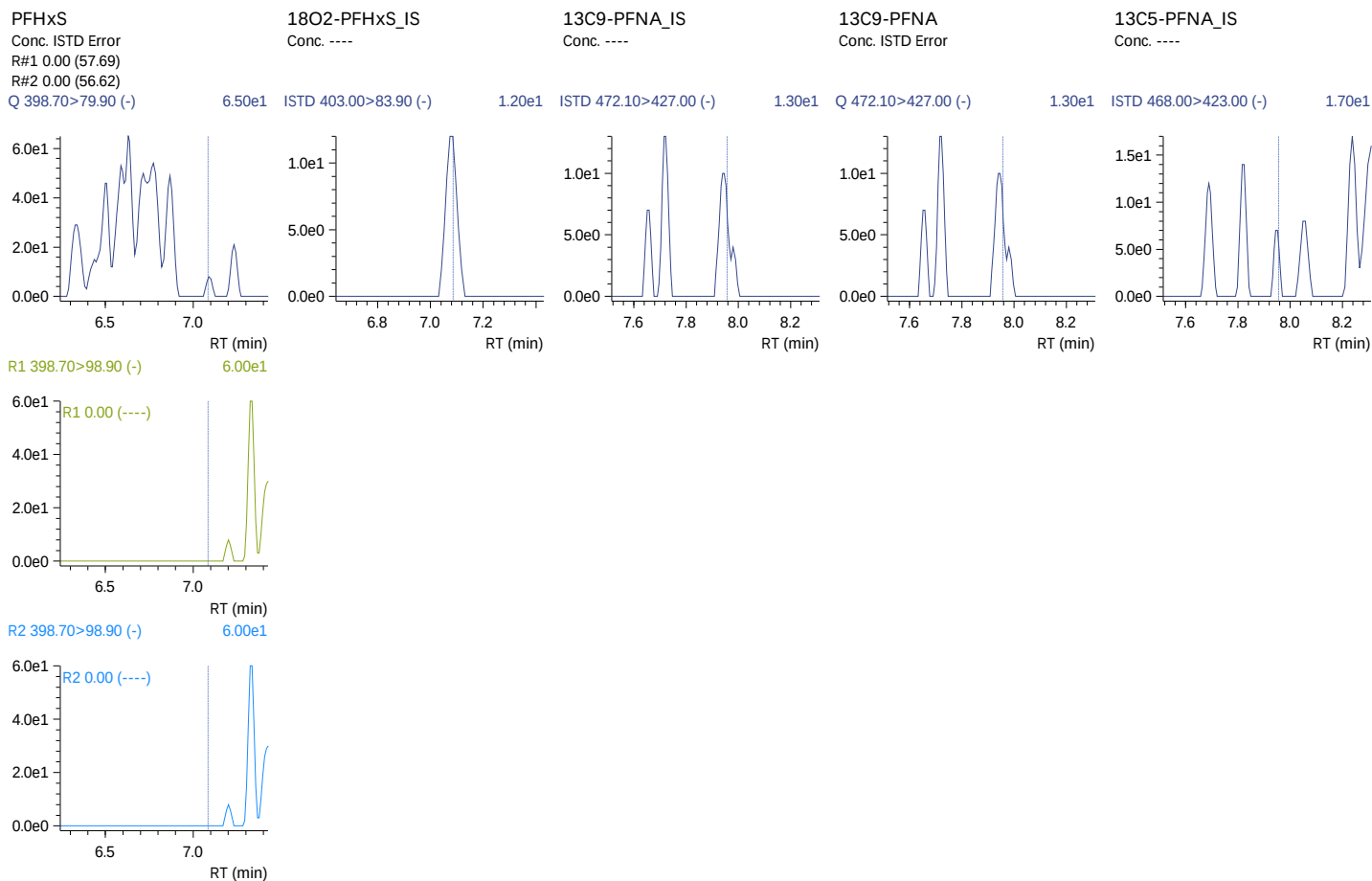
R2 413.00>169.00 (-)

3.32e2





240118_018 (continued)

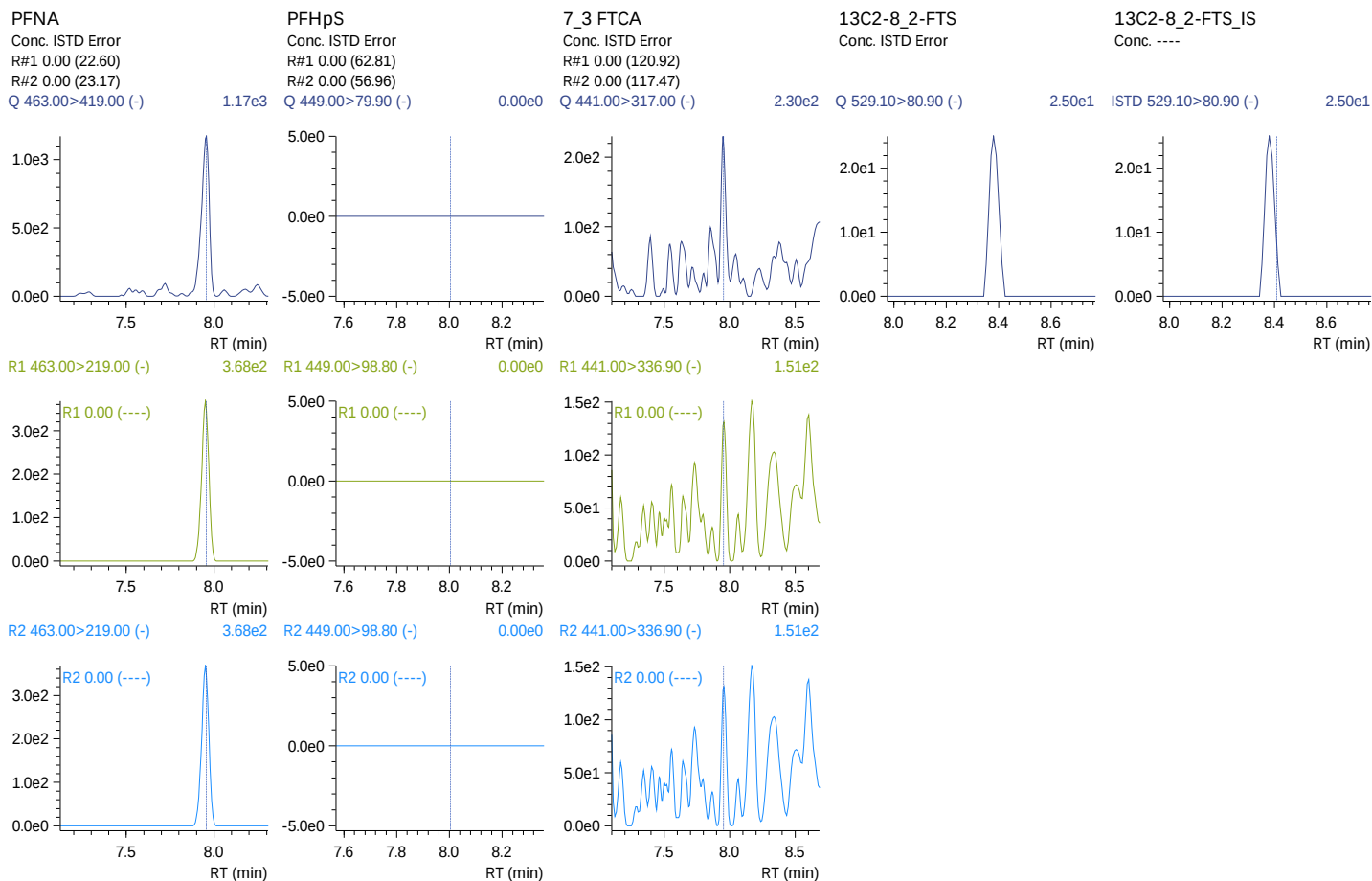


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_018 (continued)

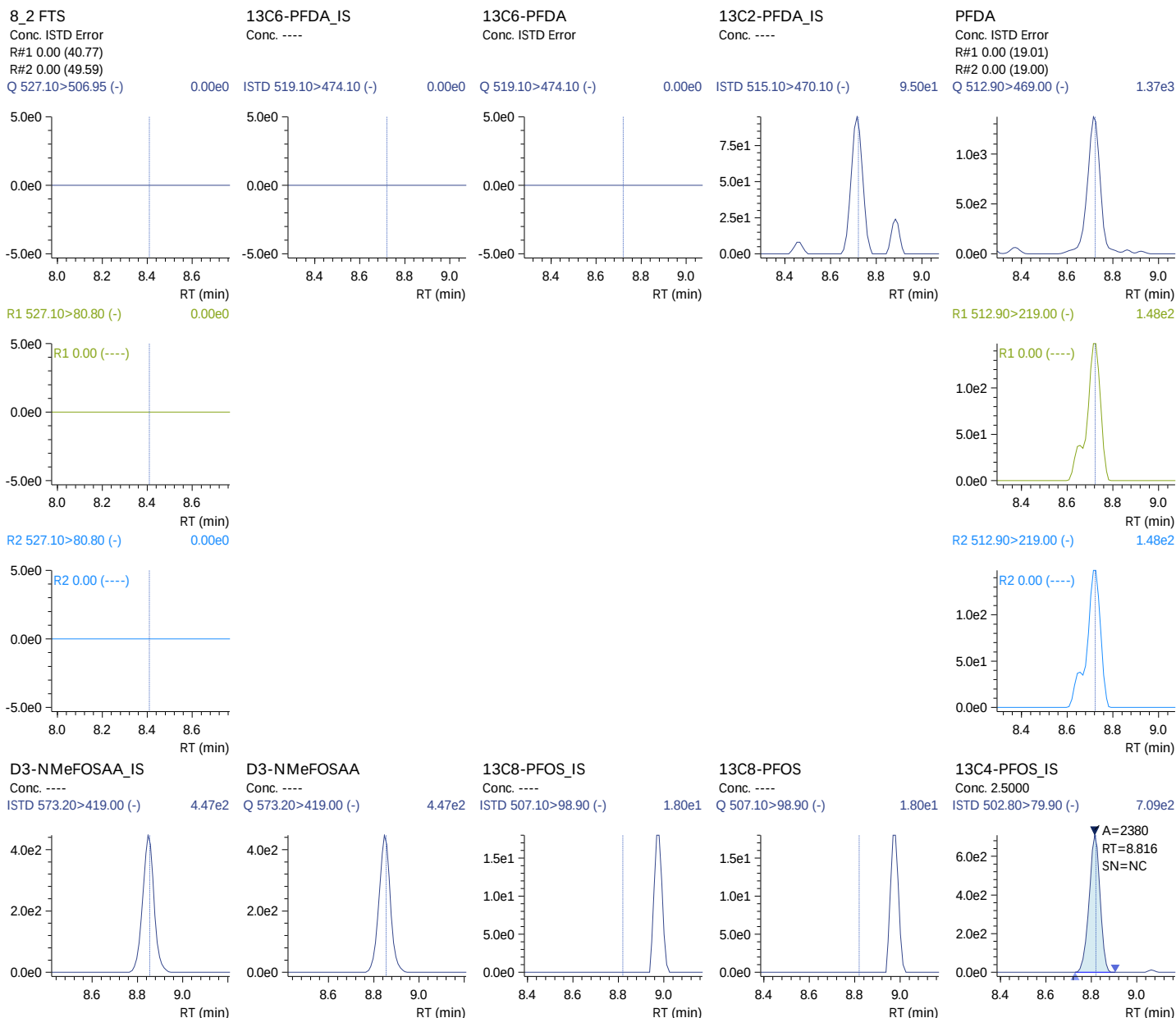


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_018 (continued)

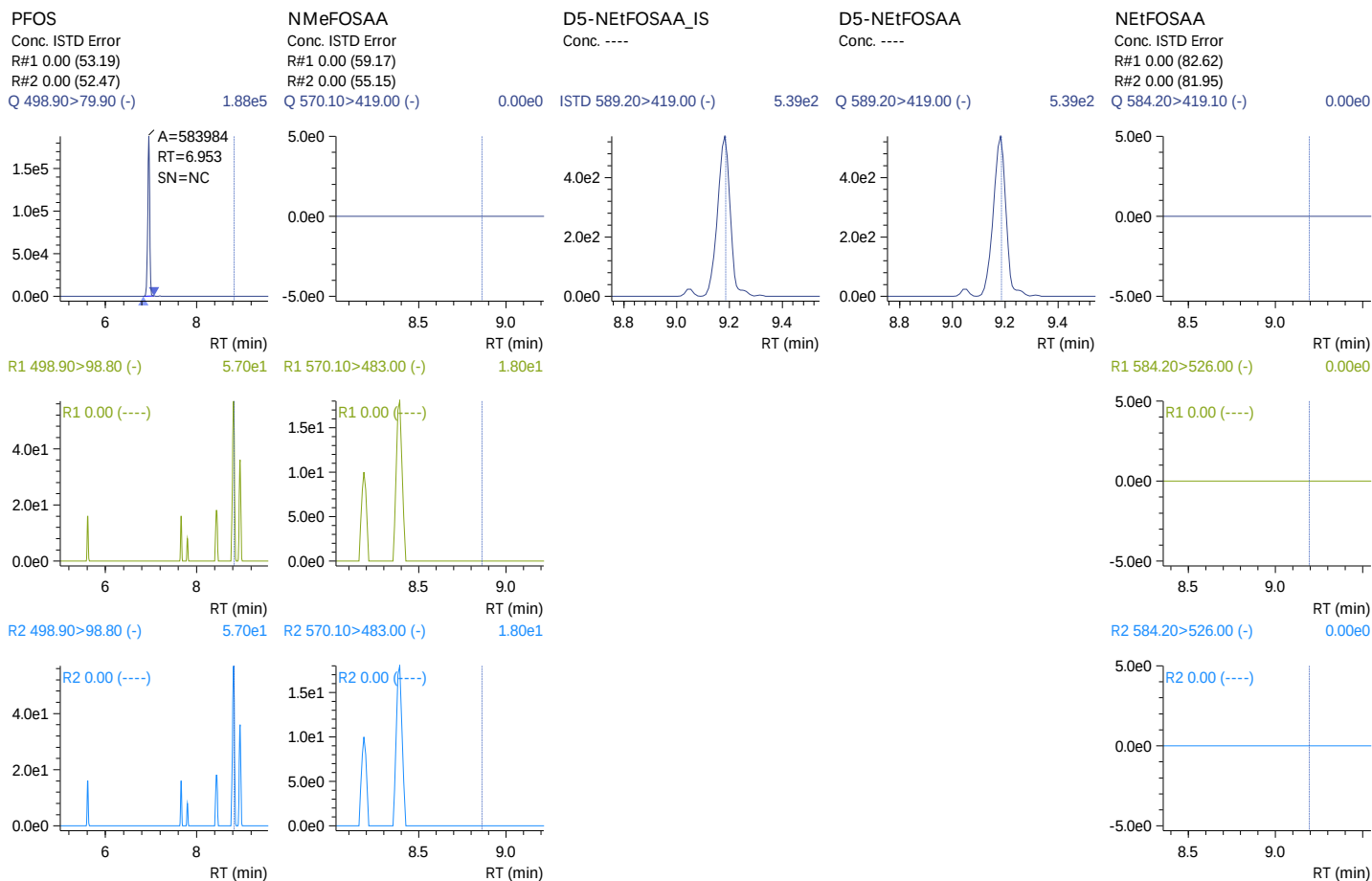


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_018 (continued)



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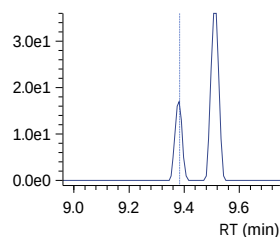
SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



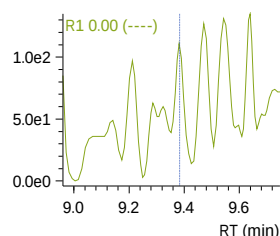
240118_018 (continued)

9-Cl-PF3ONS

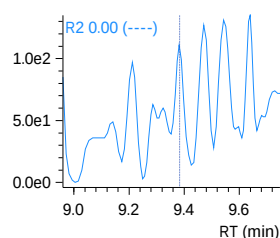
Conc. ISTD Error
R#1 0.00 (31.76)
R#2 0.00 (32.76)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-) 1.35e2

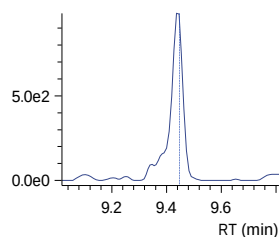


R2 532.80>353.00 (-) 1.35e2

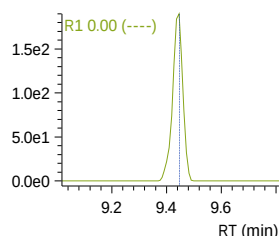


PFUnDA

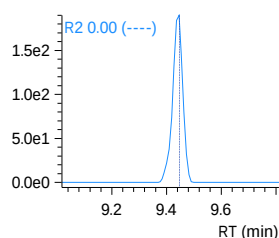
Conc. ISTD Error
R#1 0.00 (12.31)
R#2 0.00 (13.12)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-) 1.90e2



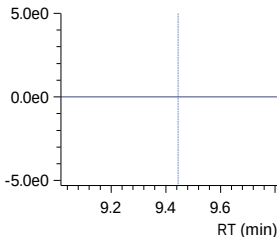
R2 563.10>269.10 (-) 1.90e2



13C7-PFUnDA_IS

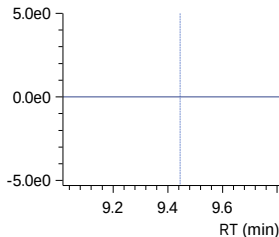
Conc. ----

ISTD 570.00>525.10 (-)



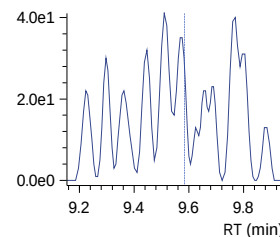
13C7-PFUnDA

Conc. ISTD Error
Q 570.00>525.10 (-)

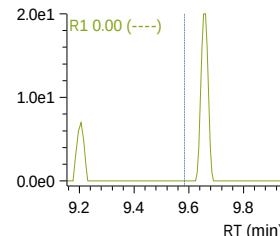


PFNS

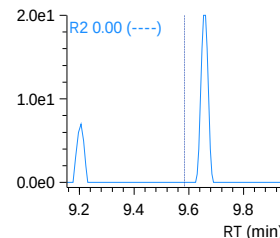
Conc. ISTD Error
R#1 0.00 (63.31)
R#2 0.00 (65.22)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-) 2.00e1

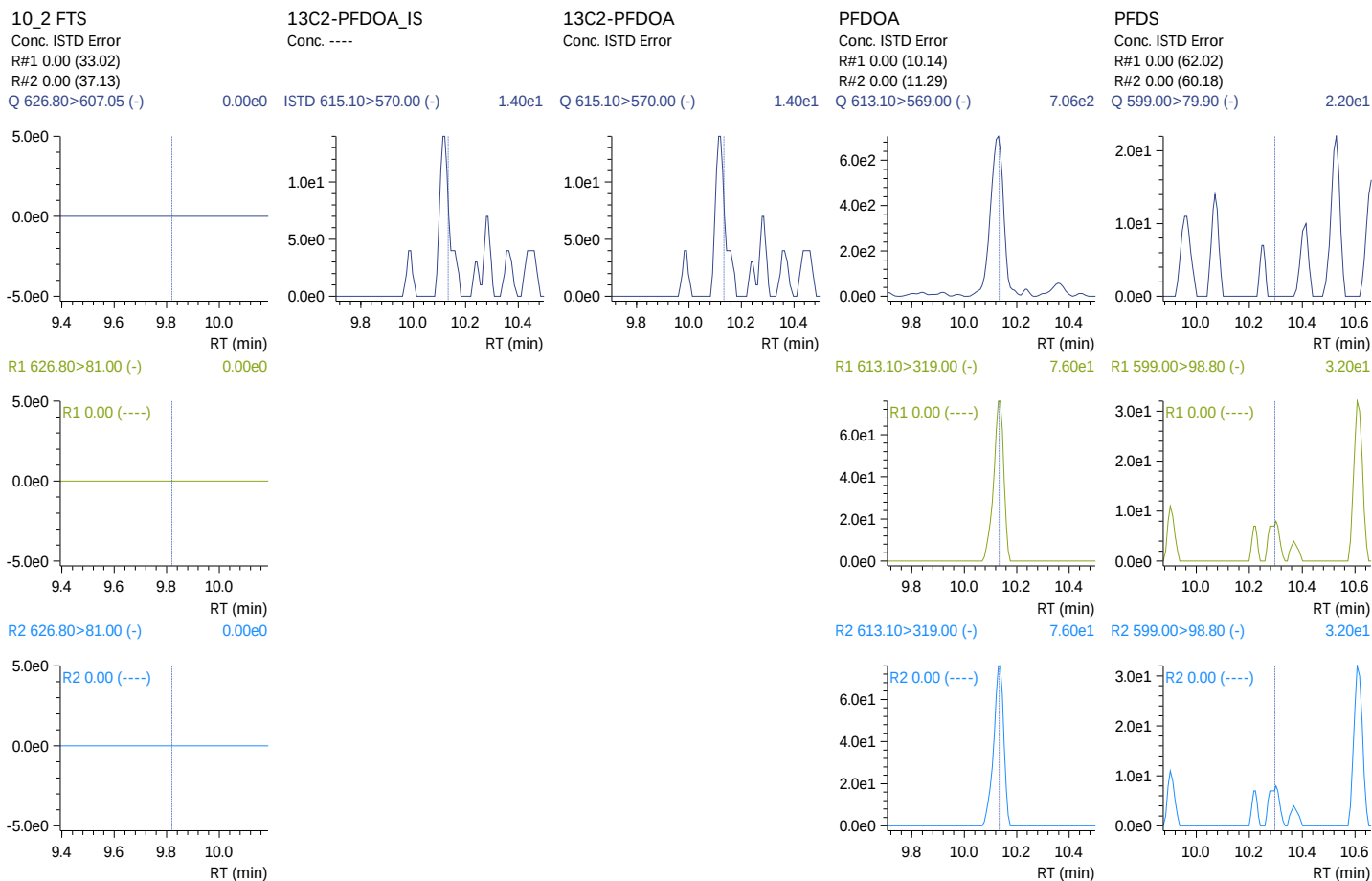


R2 548.80>98.80 (-) 2.00e1





240118_018 (continued)



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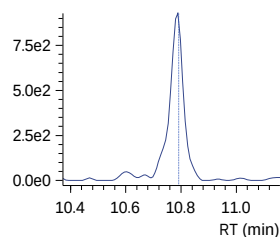
SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



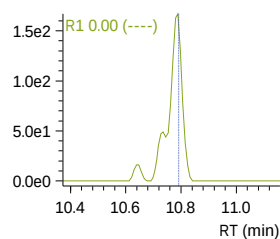
240118_018 (continued)

PFTrDA

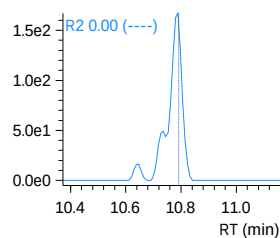
Conc. ISTD Error
R#1 0.00 (15.12)
R#2 0.00 (17.64)
Q 663.00>619.00 (-)



R1 663.00>168.90 (-)

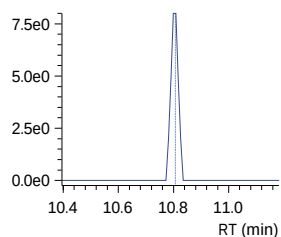


R2 663.00>168.90 (-)

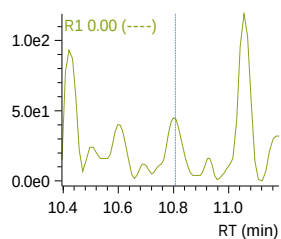


11-CI-PF3OUdS

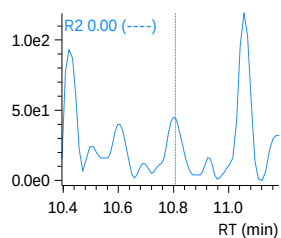
Conc. ISTD Error
R#1 0.00 (36.61)
R#2 0.00 (36.44)
Q 630.90>451.00 (-)



R1 632.90>452.90 (-)



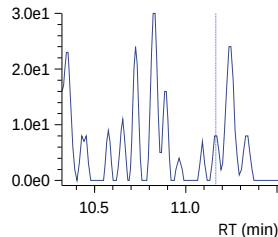
R2 632.90>452.90 (-)



PFOSAm

Conc. ISTD Error

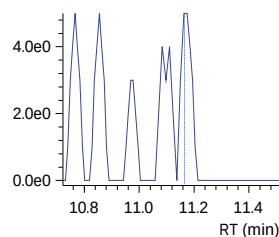
Q 498.10>77.90 (-)



13C8-PFOSAm

Conc. ----

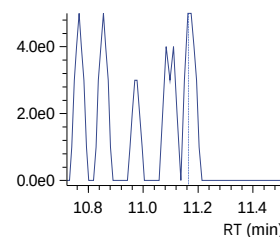
Q 506.10>77.80 (-)



13C8-PFOSAm_IS

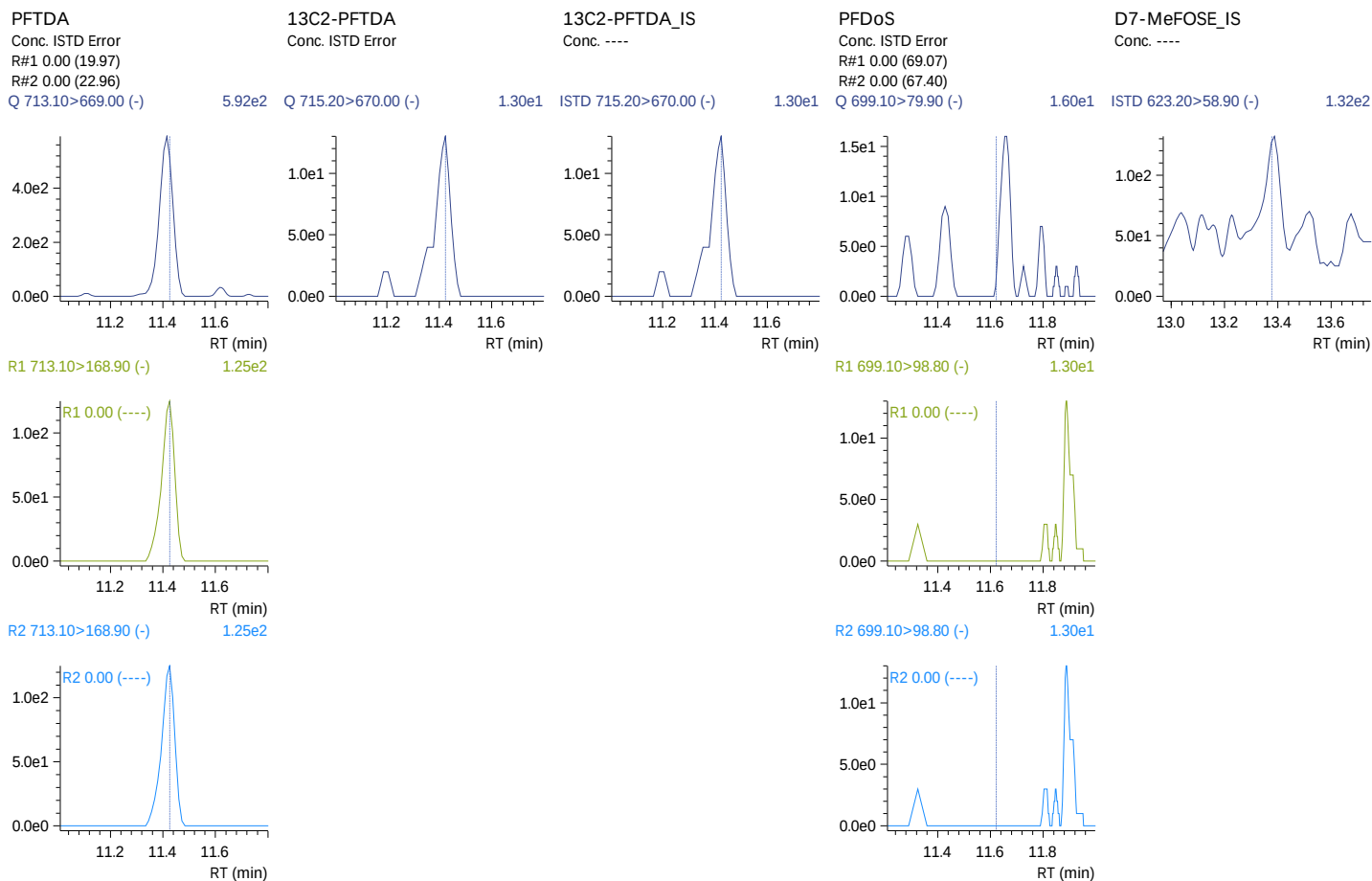
Conc. ----

ISTD 506.10>77.80 (-)





240118_018 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_018 (continued)

D7-MeFOSE
Conc. ----

MeFOSE
Conc. ISTD Error

13C2-PFHDA_IS
Conc. 2.5000

13C2-PFHDA
Conc. ISTD Error

PFHXDA
Conc. ----

R#1 0.00 (11.64)

R#2 0.00 (13.90)

Q 623.20>58.90 (-)

1.32e2

Q 616.10>59.00 (-)

5.30e1

ISTD 815.00>770.05 (-)

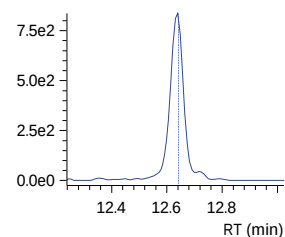
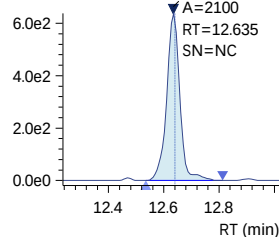
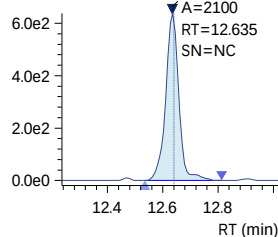
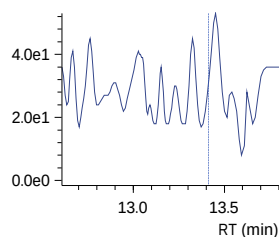
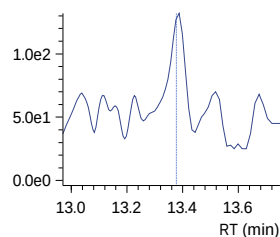
6.38e2

Q 815.00>770.05 (-)

6.38e2

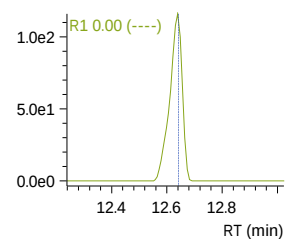
Q 813.00>768.95 (-)

8.37e2



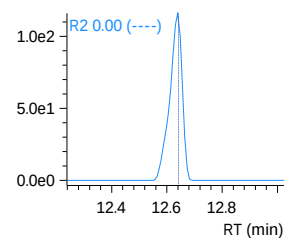
R1 813.00>218.95 (-)

1.16e2



R2 813.00>218.95 (-)

1.16e2

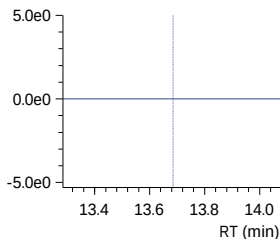




240118_018 (continued)

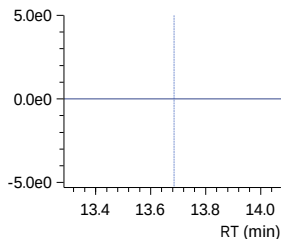
D3-MeFOSA
Conc. ----

Q 515.00>219.00 (-)



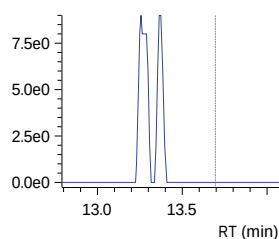
D3-MeFOSA_IS
Conc. ----

ISTD 515.00>219.00 (-)

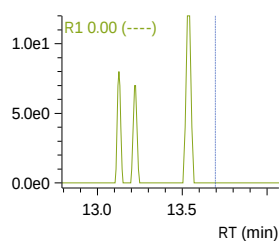


MeFOSA
Conc. ISTD Error
R#1 0.00 (149.05)
R#2 0.00 (140.79)

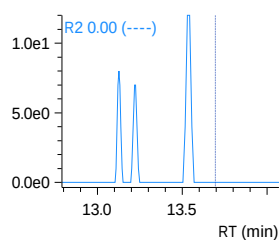
Q 511.90>219.00 (-)



R1 511.90>169.00 (-) 1.20e1

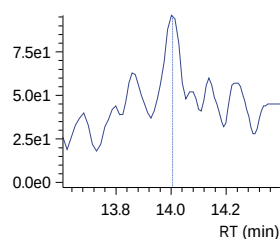


R2 511.90>169.00 (-) 1.20e1



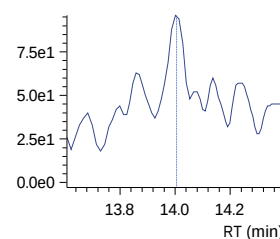
D9-EtFOSE_IS
Conc. ----

ISTD 639.20>58.90 (-)



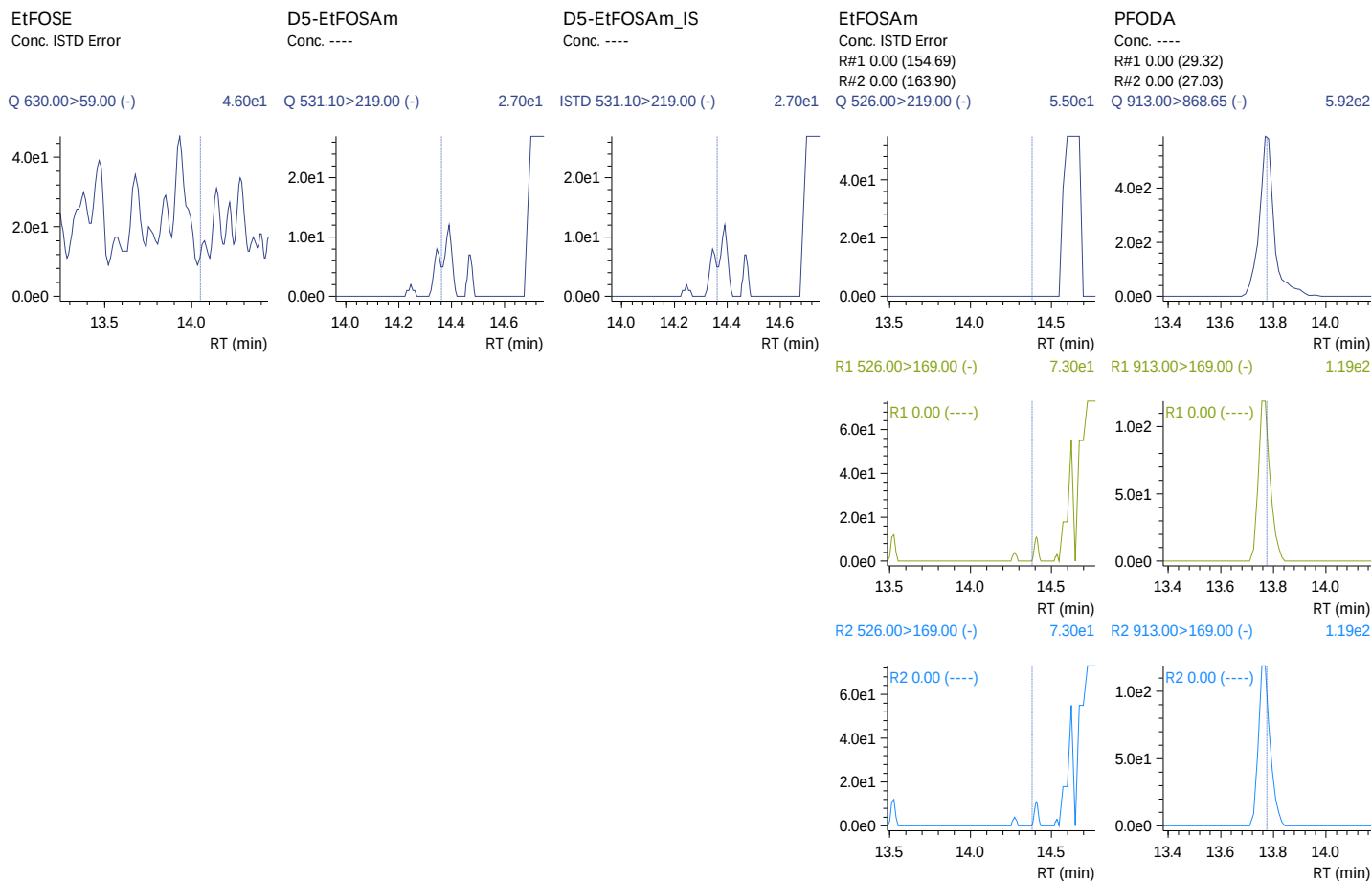
D9-EtFOSE
Conc. ----

Q 639.20>58.90 (-)





240118_018 (continued)



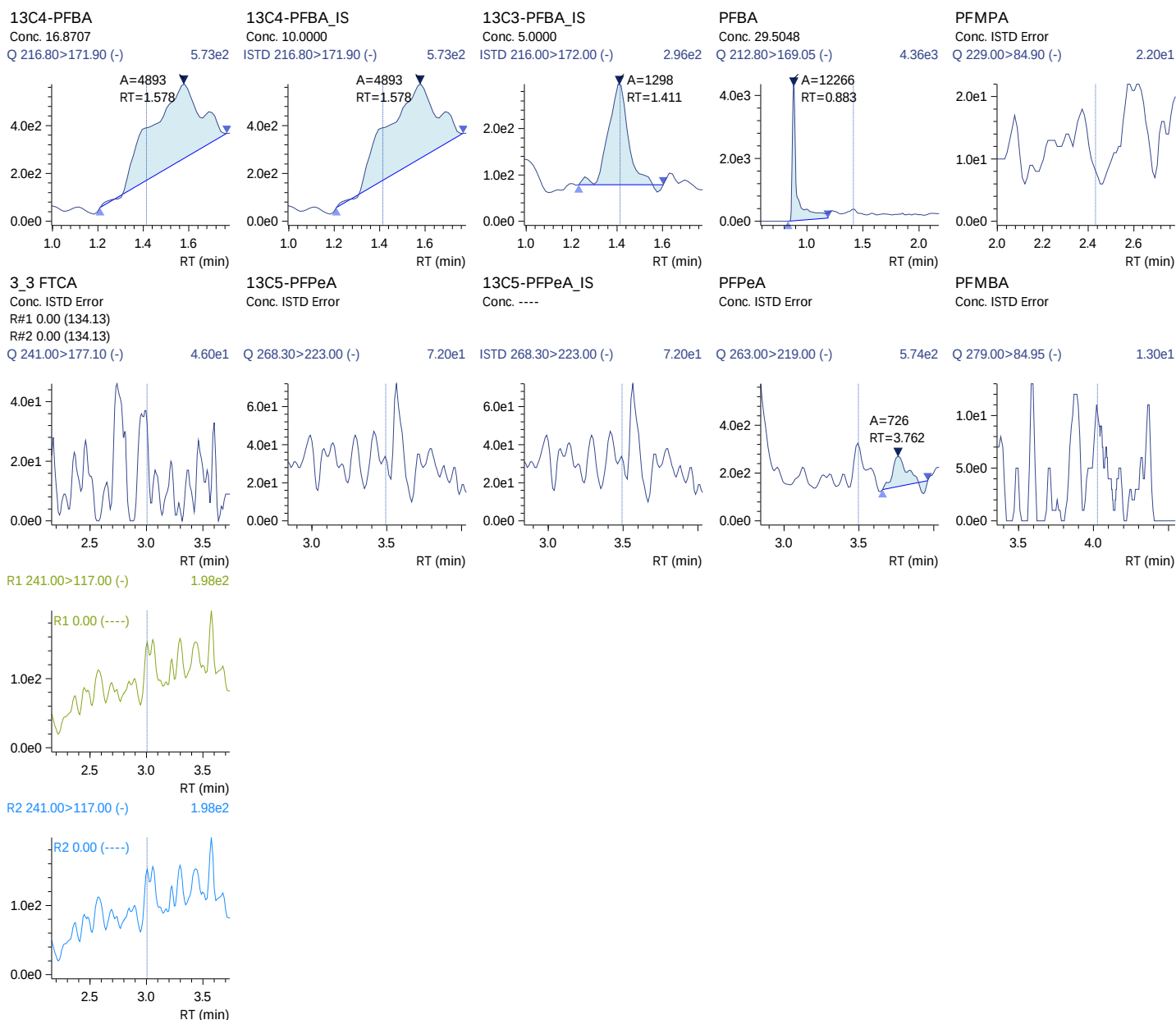
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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_018

Sample ID: TDCA CHECK
Date Acquired: 1/18/2024 6:43:34 PM
Acquired by: System Administrator
Data File: 240118_018
Vial: 12 | Inj. Volume: 10.0000uL | Tray: 1





240118_018 (continued)

13C2-4_2 FTS
 Conc. ISTD Error

13C2-4_2 FTS_IS
 Conc. ----

4_2 FTS
 Conc. ISTD Error
 R#1 0.00 (34.14)
 R#2 0.00 (34.14)

13C3-PFBS_IS
 Conc. ----

PFBS
 Conc. ISTD Error
 R#1 0.00 (47.53)
 R#2 0.00 (47.53)

Q 329.10>80.90 (-)

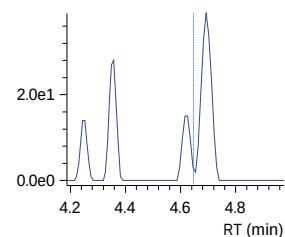
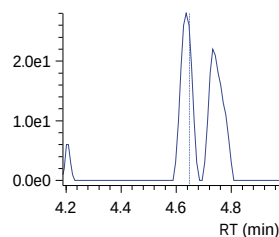
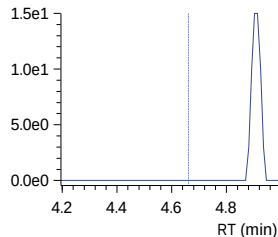
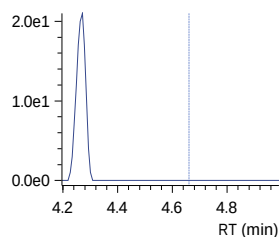
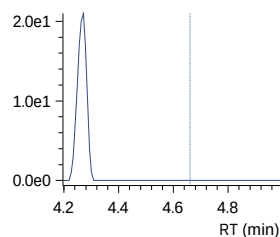
2.10e1 ISTD 329.10>80.90 (-)

2.10e1 Q 327.10>307.00 (-)

1.50e1 ISTD 302.10>79.90 (-)

2.80e1 Q 298.70>79.90 (-)

3.90e1

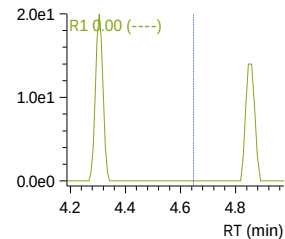
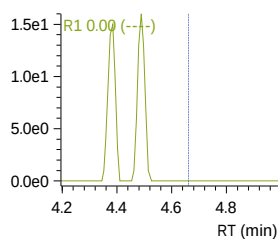


R1 327.10>80.90 (-)

1.60e1

R1 298.70>98.80 (-)

2.00e1

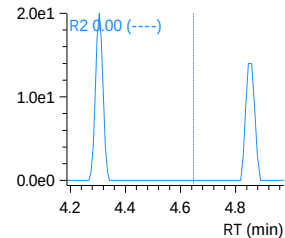
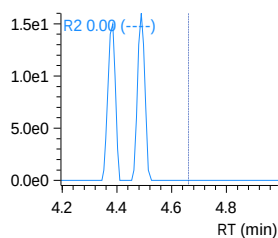


R2 327.10>80.90 (-)

1.60e1

R2 298.70>98.80 (-)

2.00e1

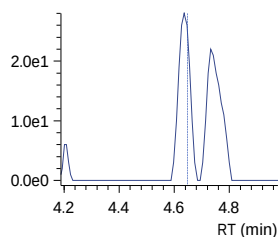




240118_018 (continued)

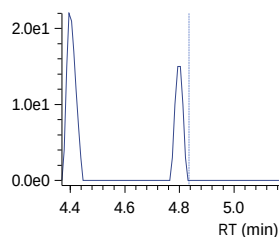
13C3-PFBS
 Conc. ISTD Error

Q 302.10>79.90 (-)



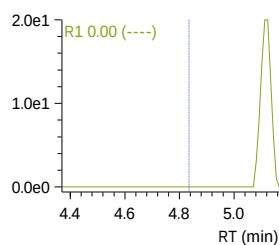
NFDHA
 Conc. ISTD Error
 R#1 0.00 (37.88)
 R#2 0.00 (37.88)

Q 295.00>201.00 (-)



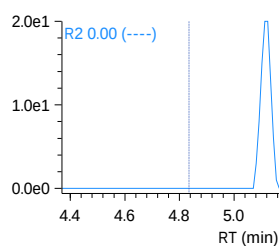
R1 295.00>84.90 (-)

2.00e1



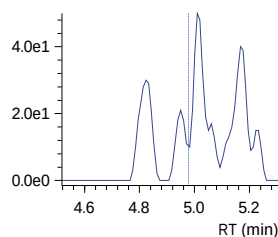
R2 295.00>84.90 (-)

2.00e1



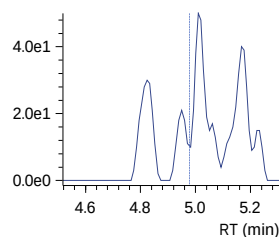
13C5-PFHxA
 Conc. ISTD Error

Q 318.00>273.00 (-)



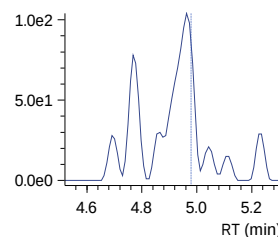
13C5-PFHxA_IS
 Conc. ----

ISTD 318.00>273.00 (-)



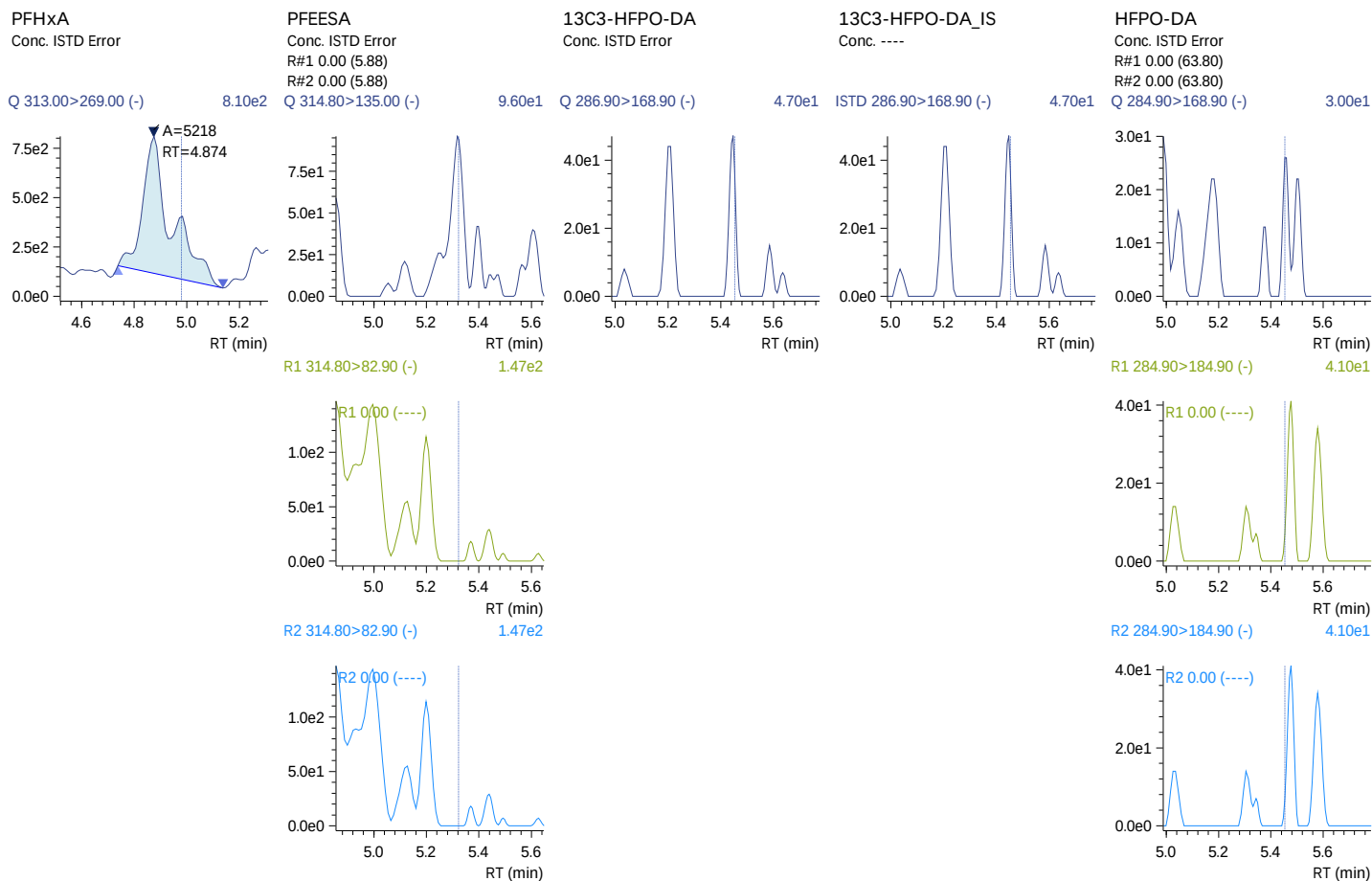
13C2-PFHxA_IS
 Conc. ----

ISTD 315.10>270.00 (-)





240118_018 (continued)

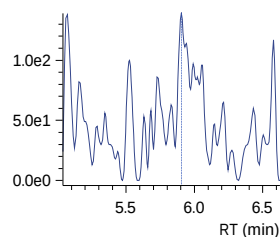




240118_018 (continued)

5_3 FTCA

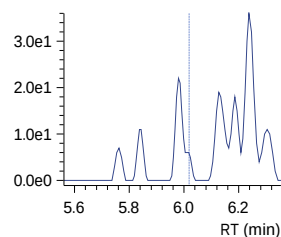
Conc. ISTD Error
R#1 0.00 (167.13)
R#2 0.00 (167.13)
Q 341.00>237.05 (-)



R1 341.00>217.00 (-)

PFPeS

Conc. ISTD Error
R#1 0.00 (56.71)
R#2 0.00 (56.71)
Q 349.10>79.90 (-)

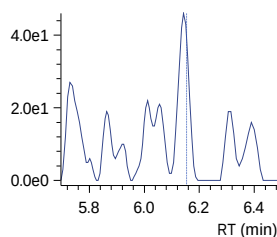


R1 349.10>98.80 (-)

13C4-PFHpa

Conc. ISTD Error

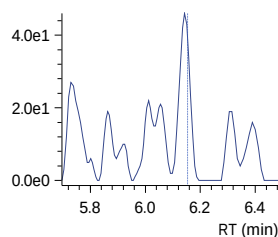
Q 367.10>322.00 (-)



13C4-PFHpa_IS

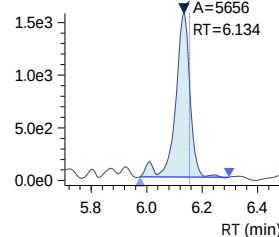
Conc. ----

ISTD 367.10>322.00 (-)

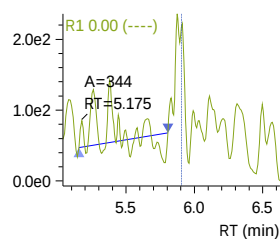


PFHpA

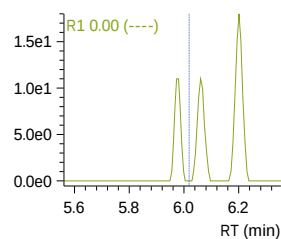
Conc. ISTD Error
R#1 0.00 (21.37)
R#2 0.00 (21.37)
Q 363.10>319.00 (-)



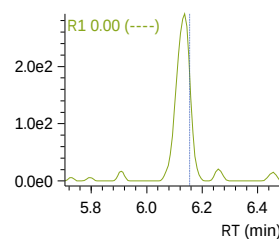
R1 363.10>169.00 (-)



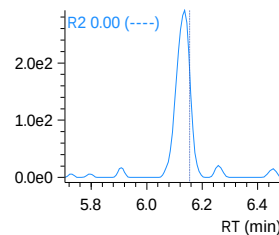
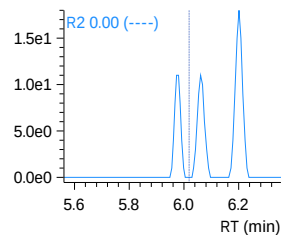
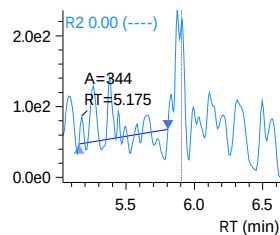
R2 341.00>217.00 (-)



R2 349.10>98.80 (-)

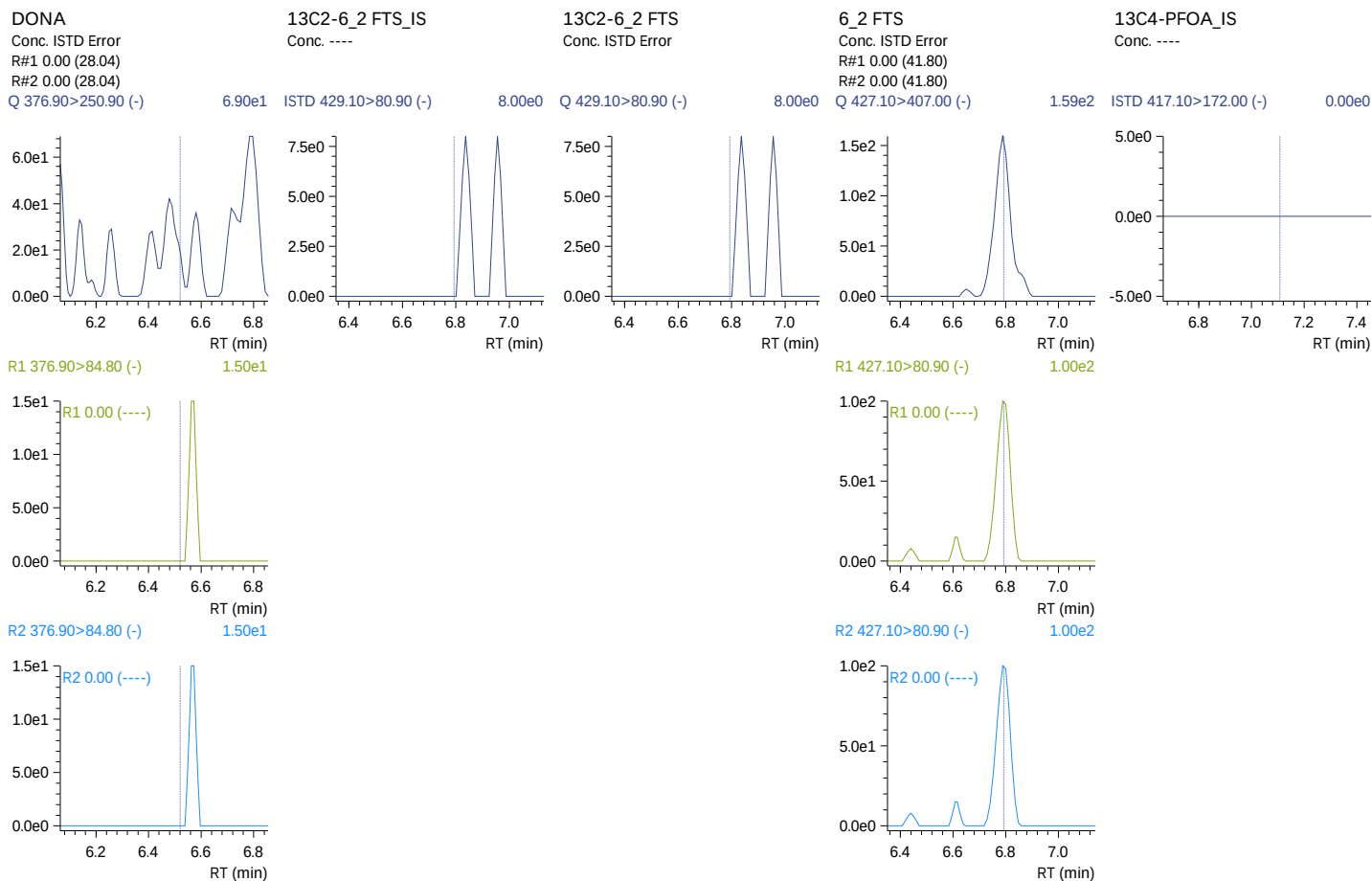


R2 363.10>169.00 (-)





240118_018 (continued)





240118_018 (continued)

13C8-PFOA_IS
Conc. ----

13C8-PFOA
Conc. ISTD Error

PFOA
Conc. ISTD Error
R#1 0.00 (29.05)
R#2 0.00 (29.05)

13C3-PFHxS
Conc. ISTD Error

13C3-PFHxS_IS
Conc. ----

ISTD 421.10>376.00 (-)

5.90e1

Q 421.10>376.00 (-)

5.90e1

Q 413.00>369.00 (-)

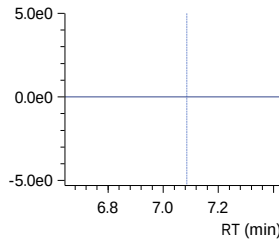
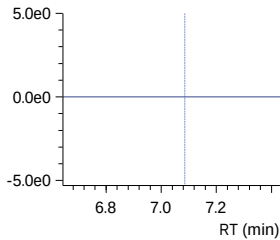
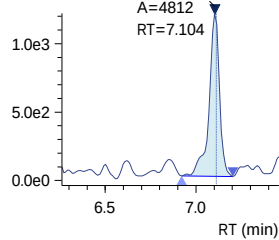
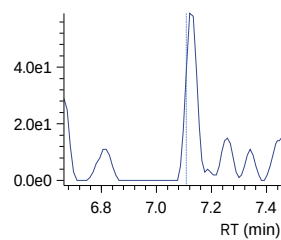
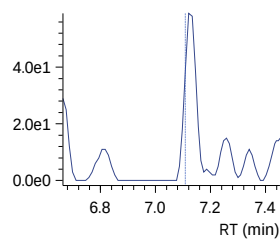
1.22e3

Q 402.10>79.90 (-)

0.00e0

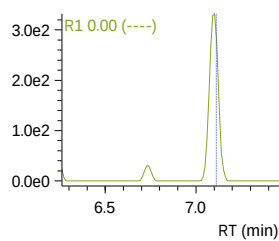
ISTD 402.10>79.90 (-)

0.00e0



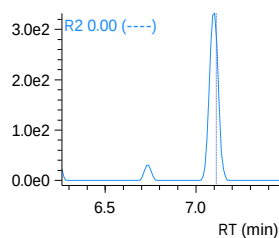
R1 413.00>169.00 (-)

3.32e2



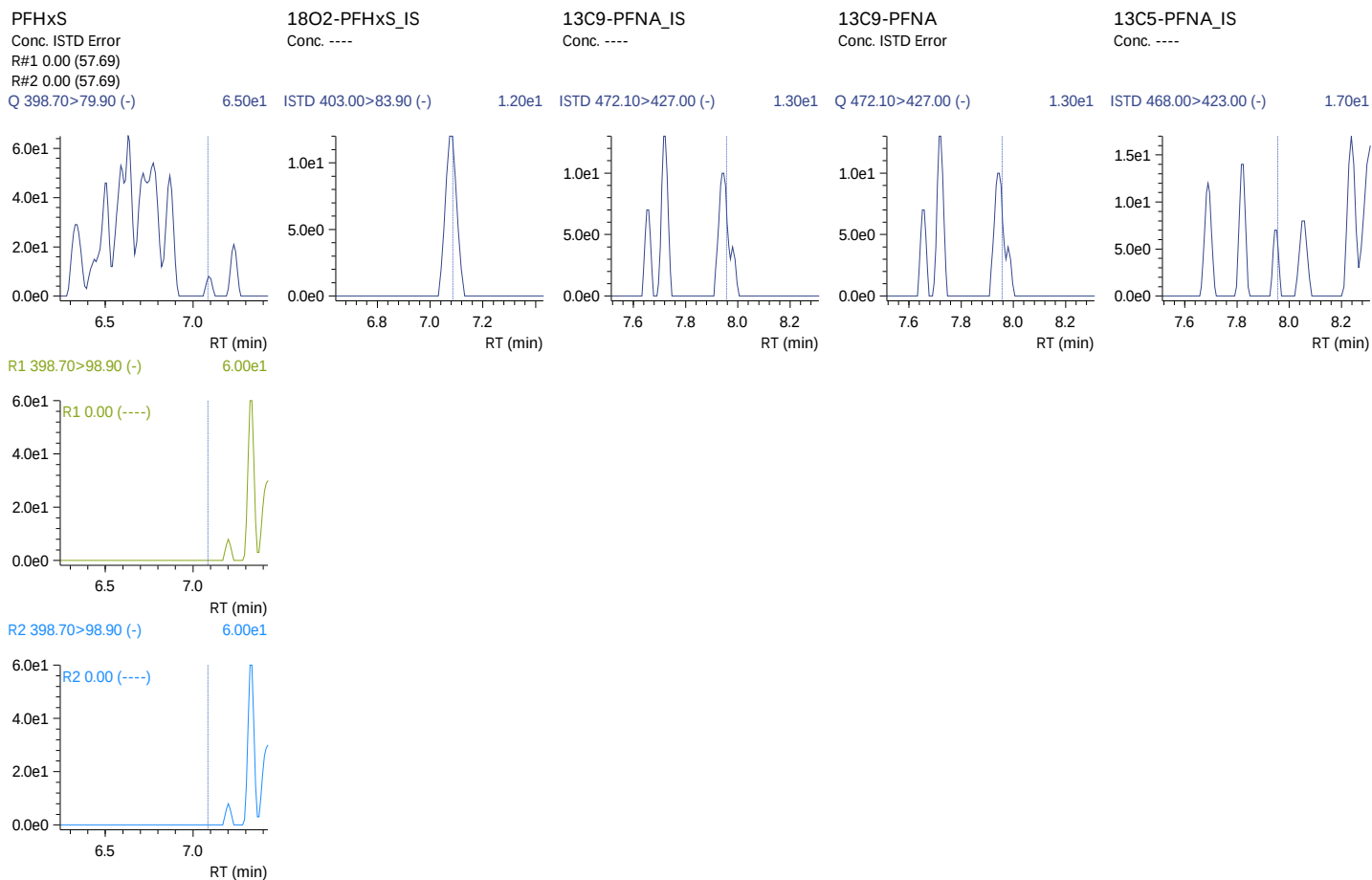
R2 413.00>169.00 (-)

3.32e2



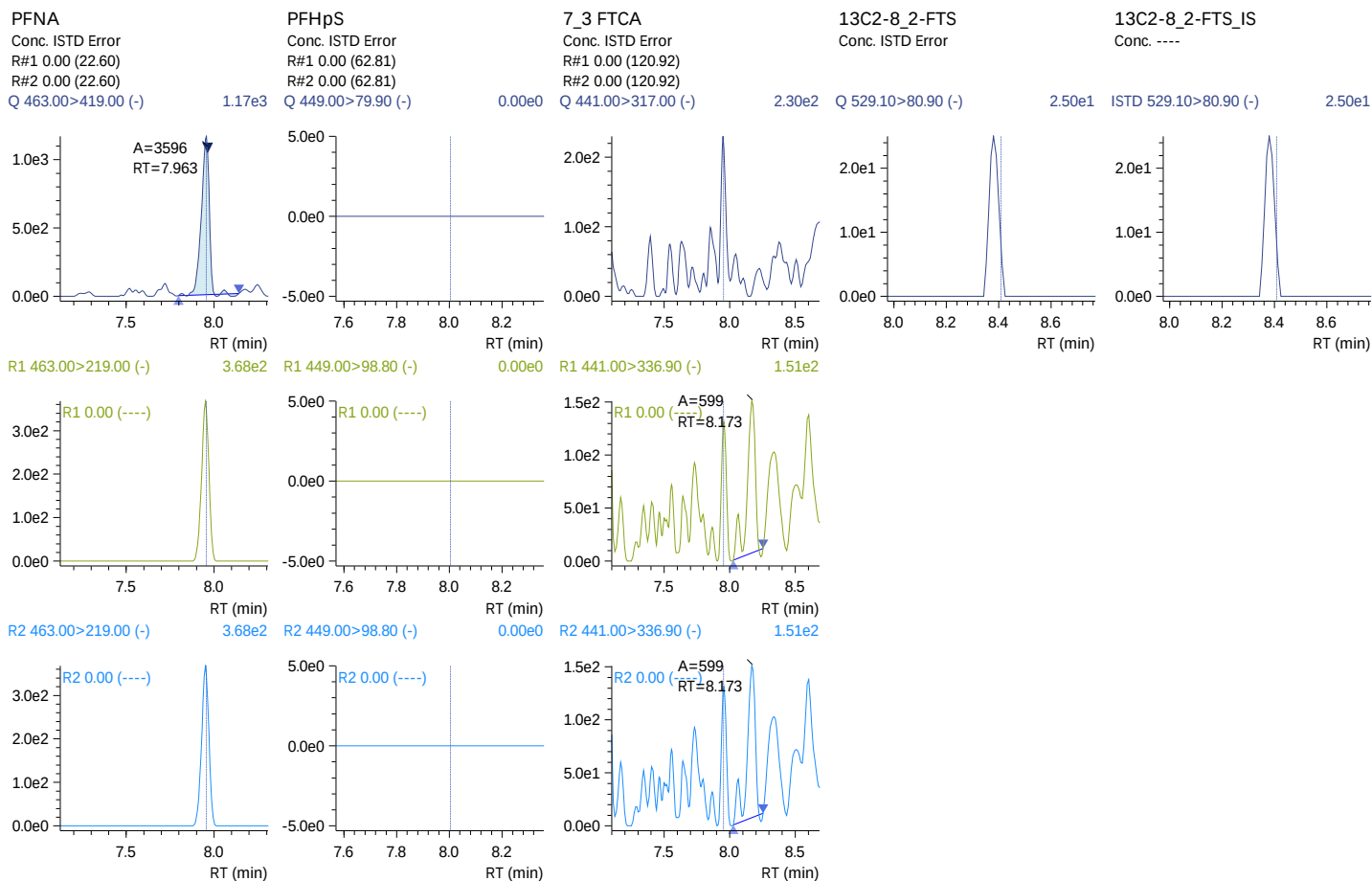


240118_018 (continued)



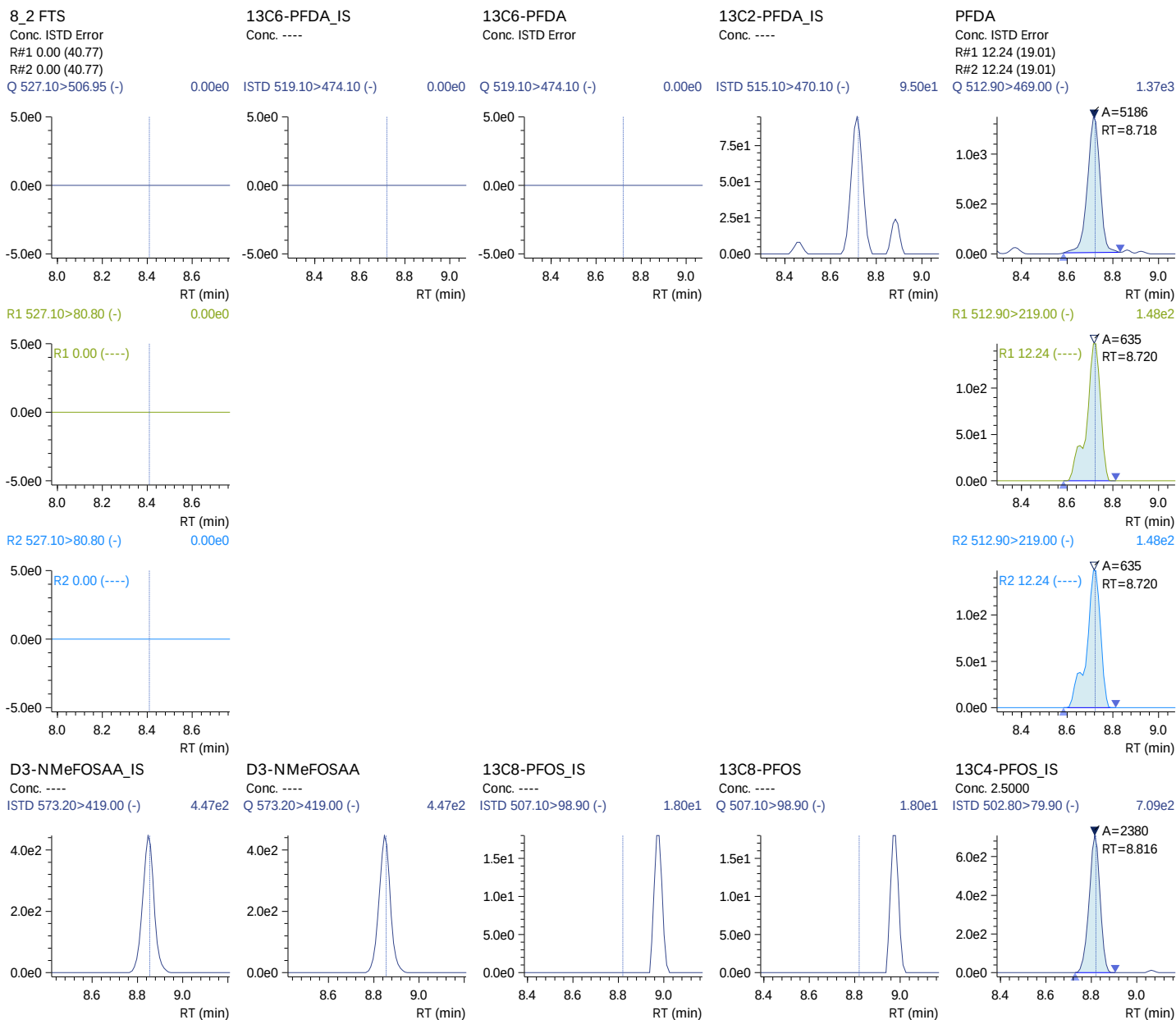


240118_018 (continued)



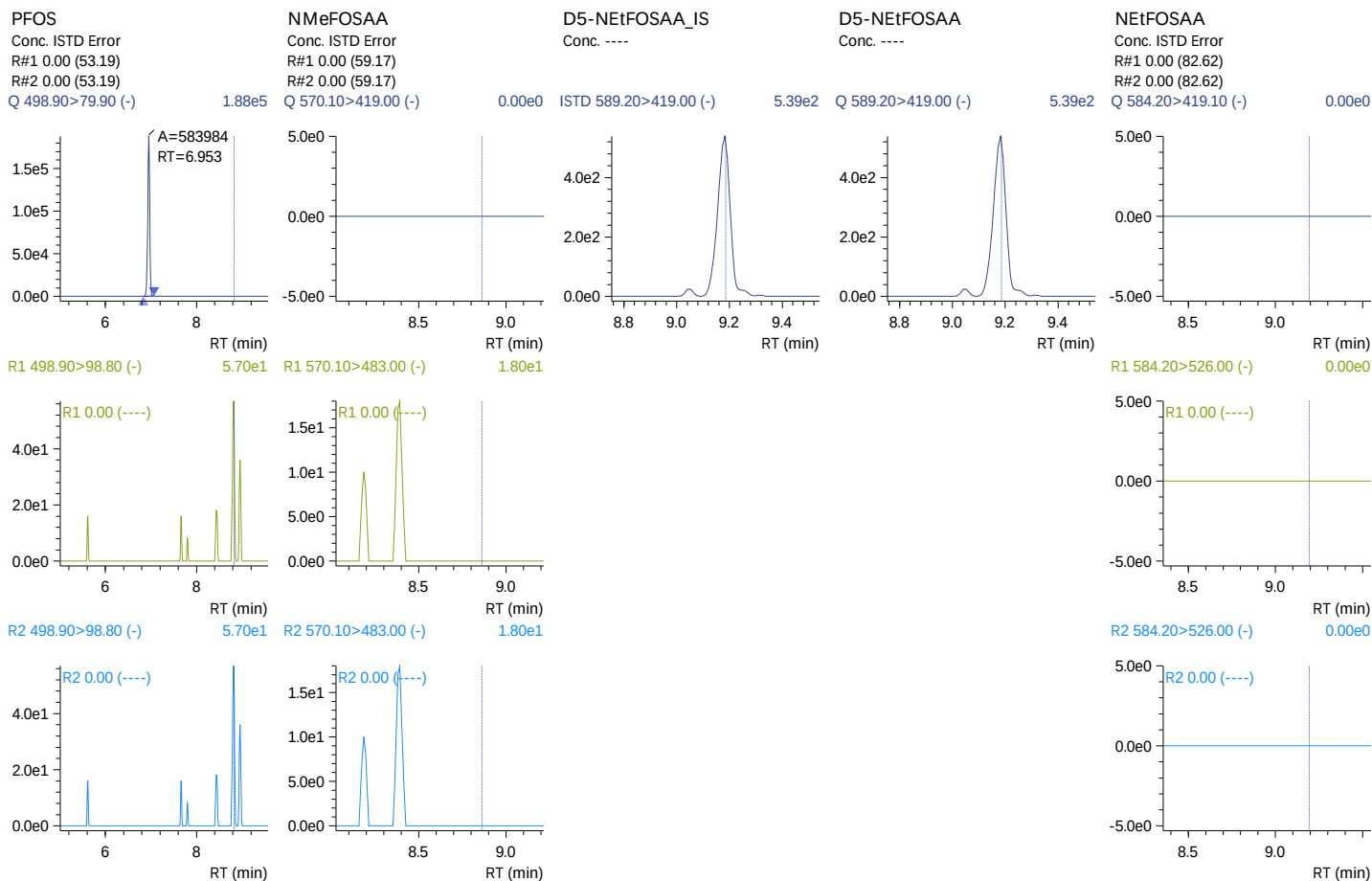


240118_018 (continued)





240118_018 (continued)

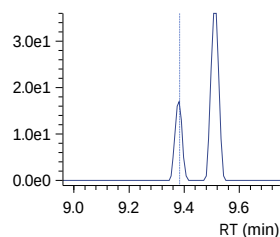




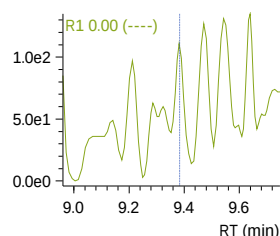
240118_018 (continued)

9-Cl-PF3ONS

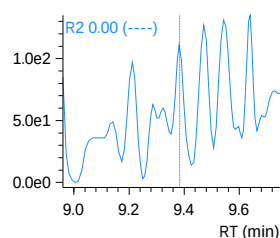
Conc. ISTD Error
R#1 0.00 (31.76)
R#2 0.00 (31.76)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-) 1.35e2

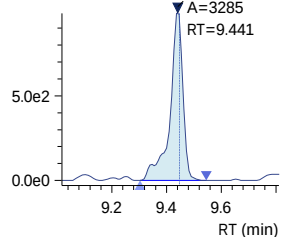


R2 532.80>353.00 (-) 1.35e2

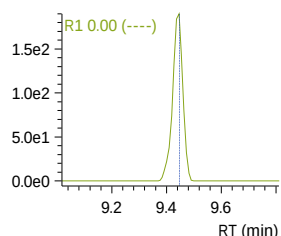


PFUnDA

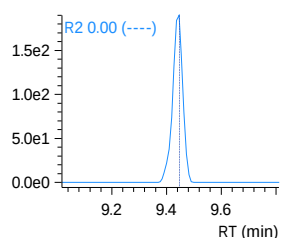
Conc. ISTD Error
R#1 0.00 (12.31)
R#2 0.00 (12.31)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-) 1.90e2



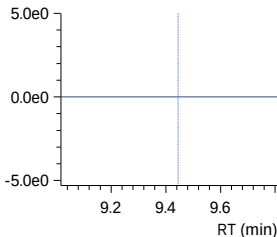
R2 563.10>269.10 (-) 1.90e2



13C7-PFUnDA_IS

Conc. ----

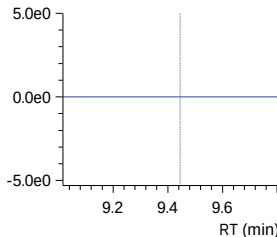
ISTD 570.00>525.10 (-)



13C7-PFUnDA

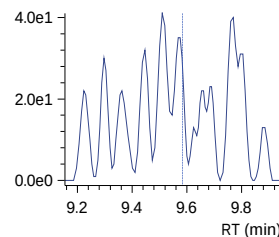
Conc. ISTD Error

Q 570.00>525.10 (-)

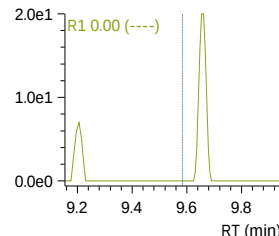


PFNS

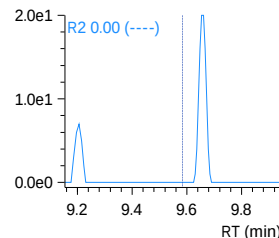
Conc. ISTD Error
R#1 0.00 (63.31)
R#2 0.00 (63.31)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-) 2.00e1



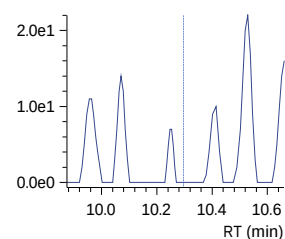
R2 548.80>98.80 (-) 2.00e1



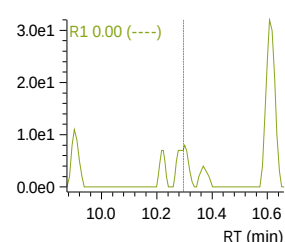
10 2 FTS

PFDS
Conc. ISTD Error
R#1 0.00 (62.02)

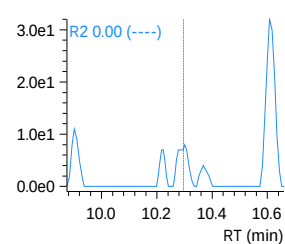
2.20e1



3.20e1



3.20e1

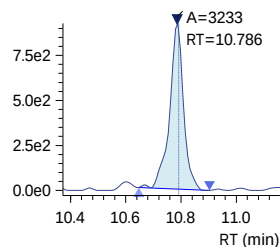




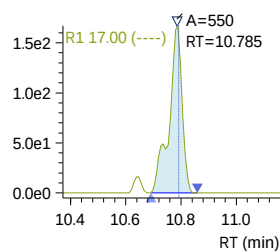
240118_018 (continued)

PFTrDA

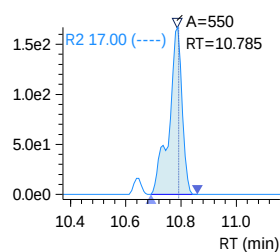
Conc. ISTD Error
 R#1 17.00 (15.12)
 R#2 17.00 (15.12)
 Q 663.00>619.00 (-)



R1 663.00>168.90 (-) 1.67e2

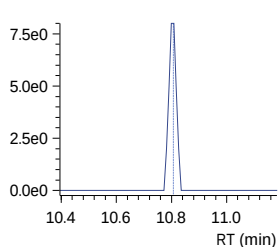


R2 663.00>168.90 (-) 1.67e2

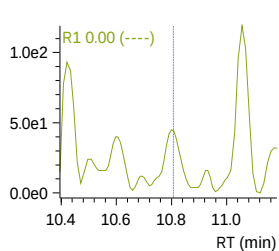


11-CI-PF3OUdS

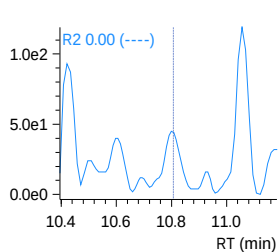
Conc. ISTD Error
 R#1 0.00 (36.61)
 R#2 0.00 (36.61)
 Q 630.90>451.00 (-)



R1 632.90>452.90 (-) 1.19e2



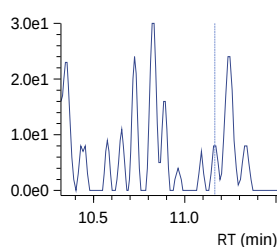
R2 632.90>452.90 (-) 1.19e2



PFOSAm

Conc. ISTD Error

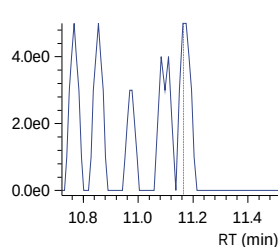
Q 498.10>77.90 (-)



13C8-PFOSAm

Conc. ----

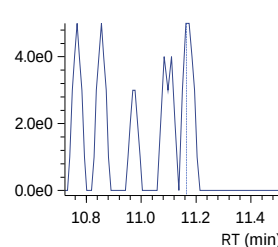
Q 506.10>77.80 (-)



13C8-PFOSAm_IS

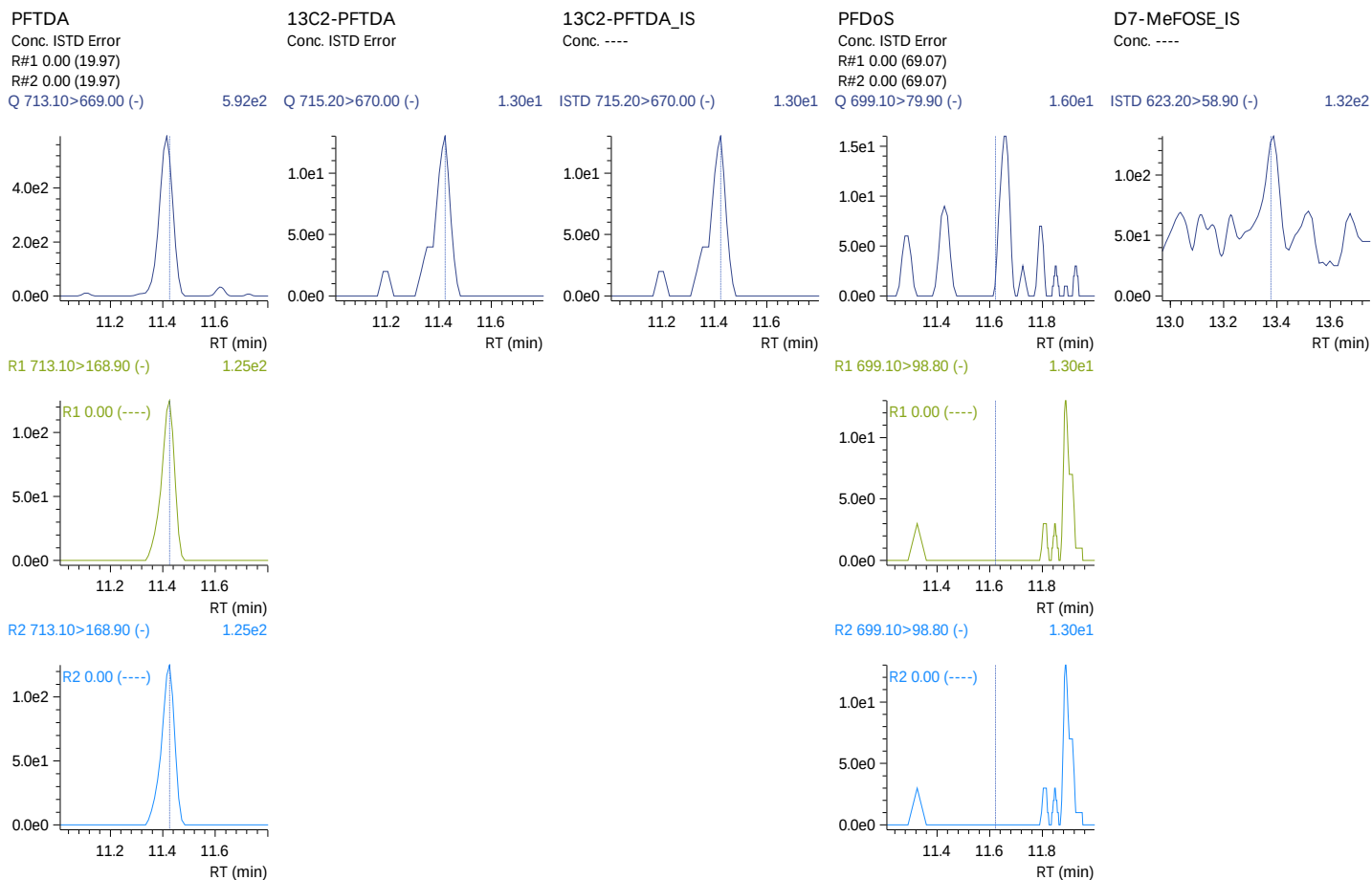
Conc. ----

ISTD 506.10>77.80 (-)





240118_018 (continued)





240118_018 (continued)

D7-MeFOSE
 Conc. ----

MeFOSE
 Conc. ISTD Error

13C2-PFHDA_IS
 Conc. 2.5000

13C2-PFHDA
 Conc. ISTD Error

PFHXDA
 Conc. 3.3130
 R#1 0.00 (11.64)
 R#2 0.00 (11.64)

Q 623.20>58.90 (-)

1.32e2

Q 616.10>59.00 (-)

5.30e1

ISTD 815.00>770.05 (-)

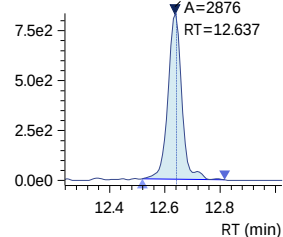
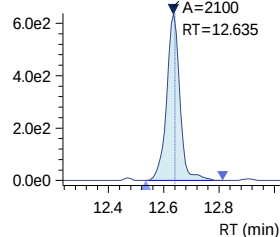
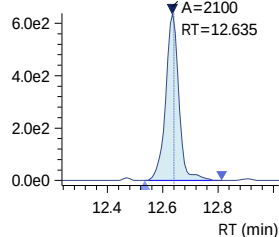
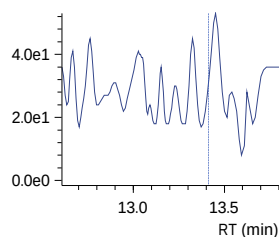
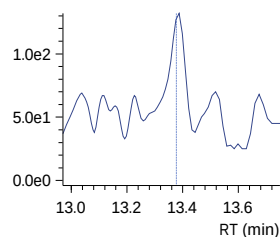
6.38e2

Q 815.00>770.05 (-)

6.38e2

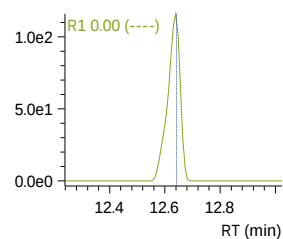
Q 813.00>768.95 (-)

8.37e2



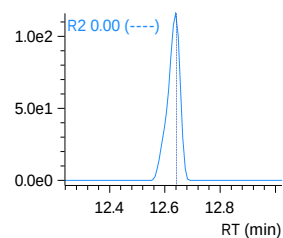
R1 813.00>218.95 (-)

1.16e2



R2 813.00>218.95 (-)

1.16e2

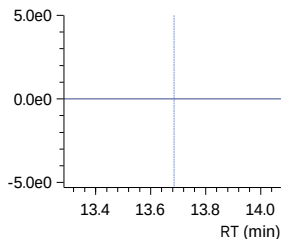




240118_018 (continued)

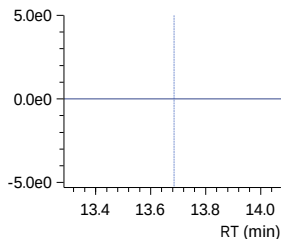
D3-MeFOSA
 Conc. ----

Q 515.00>219.00 (-)



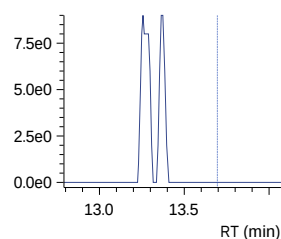
D3-MeFOSA_IS
 Conc. ----

ISTD 515.00>219.00 (-)

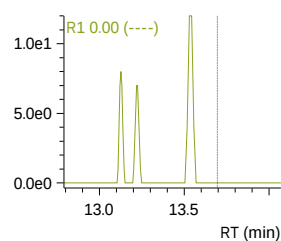


MeFOSA
 Conc. ISTD Error
 R#1 0.00 (149.05)
 R#2 0.00 (149.05)

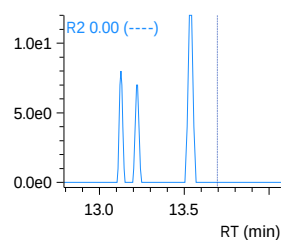
Q 511.90>219.00 (-)



R1 511.90>169.00 (-) 1.20e1

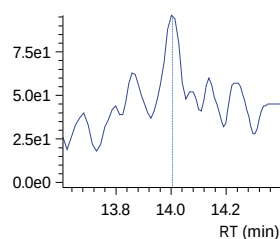


R2 511.90>169.00 (-) 1.20e1



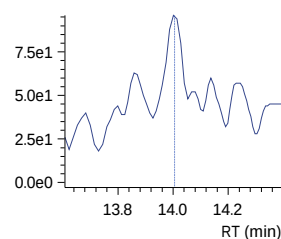
D9-EtFOSE_IS
 Conc. ----

ISTD 639.20>58.90 (-)



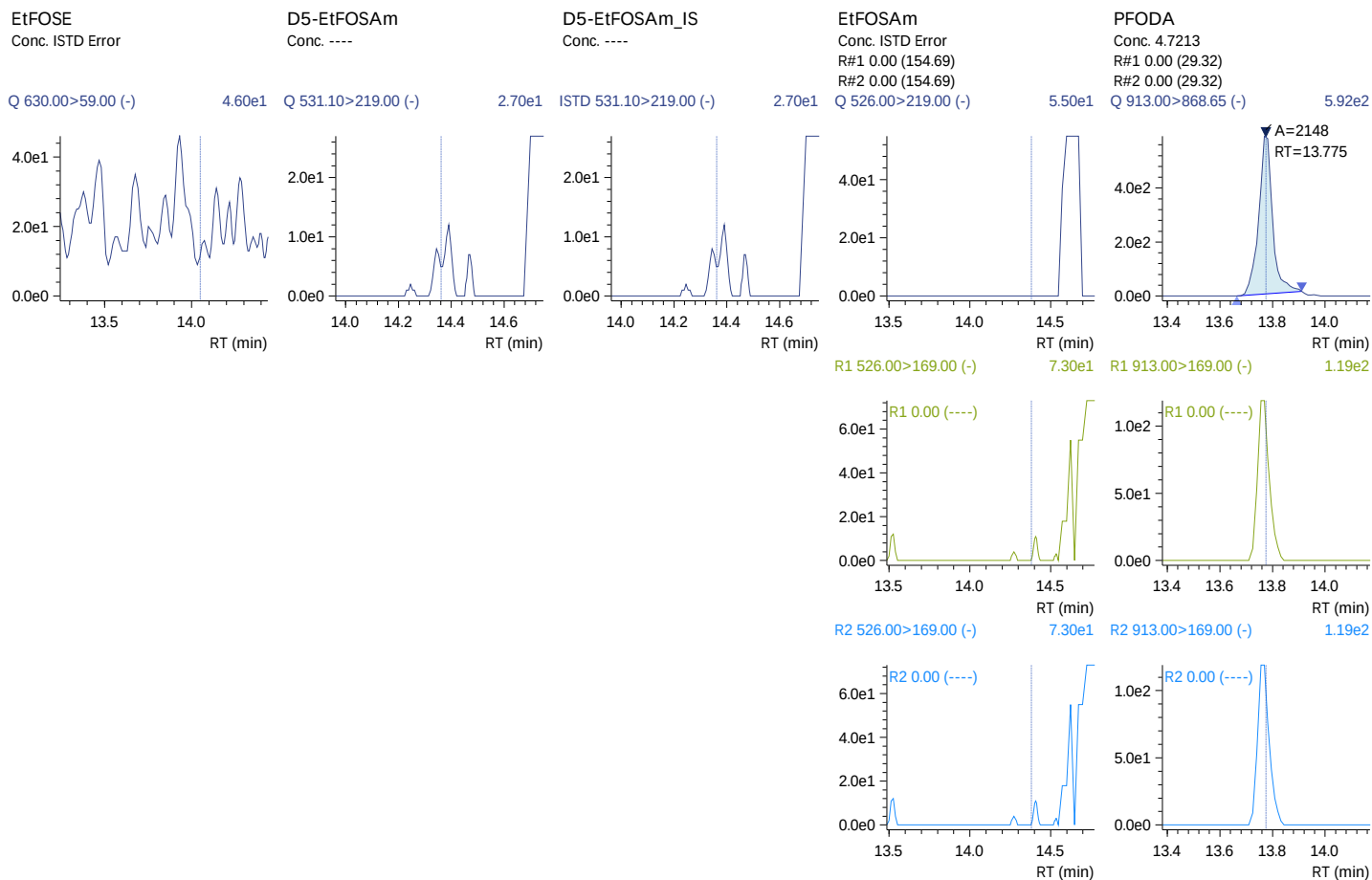
D9-EtFOSE
 Conc. ----

Q 639.20>58.90 (-)





240118_018 (continued)





240118_019

Sample ID: 1633 CCB
Date Acquired: 1/18/2024 7:06:49 PM
Acquired by: System Administrator
Data File: 240118_019
Vial: 54 | Inj. Volume: 10.0000uL | Tray: 1

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	928998	----	----	----	----	----	----	
13C4-PFBA_IS	216.80>171.90	----	928998	----	----	----	----	----	----	
13C3-PFBA_IS	216.00>172.00	----	407833	----	----	----	----	----	----	
PFBA	212.80>169.05	----	1217	----	----	----	----	----	----	
PFMPA	229.00>84.90	----	----	----	----	----	----	----	----	
3_3 FTCA	241.00>177.10	241.00>117.00	----	0	0.00	141.17	0	0.00	141.17	
13C5-PFPeA	268.30>223.00	----	95214	----	----	----	----	----	----	
13C5-PFPeA_IS	268.30>223.00	----	95214	----	----	----	----	----	----	
PFPeA	263.00>219.00	----	1615	----	----	----	----	----	----	
PFMBA	279.00>84.95	----	50	----	----	----	----	----	----	
13C2-4_2 FTS	329.10>80.90	----	106131	----	----	----	----	----	----	
13C2-4_2 FTS_IS	329.10>80.90	----	106131	----	----	----	----	----	----	
4_2 FTS	327.10>307.00	327.10>80.90	----	0	0.00	29.06	0	0.00	29.06	
13C3-PFBS_IS	302.10>79.90	----	229580	----	----	----	----	----	----	
PFBS	298.70>79.90	298.70>98.80	222	150	67.36	46.72	150	67.36	46.72	
13C3-PFBS	302.10>79.90	----	229580	----	----	----	----	----	----	
NFDHA	295.00>201.00	295.00>84.90	938	298	31.79	40.25	298	31.79	40.25	
13C5-PFHxA	318.00>273.00	----	471271	----	----	----	----	----	----	
13C5-PFHxA_IS	318.00>273.00	----	471271	----	----	----	----	----	----	
13C2-PFHxA_IS	315.10>270.00	----	459053	----	----	----	----	----	----	
PFHxA	313.00>269.00	----	1105	----	----	----	----	----	----	
PFEESA	314.80>135.00	314.80>82.90	----	0	0.00	6.11	0	0.00	6.11	
13C3-HFPO-DA	286.90>168.90	----	447905	----	----	----	----	----	----	
13C3-HFPO-DA_IS	286.90>168.90	----	447905	----	----	----	----	----	----	
HFPO-DA	284.90>168.90	284.90>184.90	----	0	0.00	65.61	0	0.00	65.61	
5_3 FTCA	341.00>237.05	341.00>217.00	----	0	0.00	158.86	0	0.00	158.86	
PFPeS	349.10>79.90	349.10>98.80	28	57	202.63	55.80	57	202.63	55.80	IRr
13C4-PFHpA	367.10>322.00	----	448949	----	----	----	----	----	----	
13C4-PFHpA_IS	367.10>322.00	----	448949	----	----	----	----	----	----	
PFHpA	363.10>319.00	363.10>169.00	4713	1386	29.41	21.50	1386	29.41	21.50	
DONA	376.90>250.90	376.90>84.80	217	44	20.33	29.66	44	20.33	29.66	
13C2-6_2 FTS_IS	429.10>80.90	----	102974	----	----	----	----	----	----	
13C2-6_2 FTS	429.10>80.90	----	102974	----	----	----	----	----	----	
6_2 FTS	427.10>407.00	427.10>80.90	1065	497	46.68	41.15	497	46.68	41.15	
13C4-PFOA_IS	417.10>172.00	----	30337	----	----	----	----	----	----	
13C8-PFOA_IS	421.10>376.00	----	453661	----	----	----	----	----	----	

J:\LCMS08\Data\240118_1633_Curve\240118_1633_Curve.damIp

Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240118_019 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	453661	----	----	----	----	----	----	----
PFOA	413.00>369.00	413.00>169.00	4801	917	19.10	31.89	917	19.10	31.89	
13C3-PFHxS	402.10>79.90	----	170454	----	----	----	----	----	----	----
13C3-PFHxS_IS	402.10>79.90	----	170454	----	----	----	----	----	----	----
PFHxS	398.70>79.90	398.70>98.90	749	353	47.15	56.62	353	47.15	56.62	
18O2-PFHxS_IS	403.00>83.90	----	157111	----	----	----	----	----	----	----
13C9-PFNA_IS	472.10>427.00	----	214927	----	----	----	----	----	----	----
13C9-PFNA	472.10>427.00	----	214927	----	----	----	----	----	----	----
13C5-PFNA_IS	468.00>423.00	----	220522	----	----	----	----	----	----	----
PFNA	463.00>419.00	463.00>219.00	3845	785	20.42	23.17	785	20.42	23.17	
PFHpS	449.00>79.90	449.00>98.80	----	0	0.00	56.96	0	0.00	56.96	
7_3 FTCA	441.00>317.00	441.00>336.90	----	0	0.00	117.47	0	0.00	117.47	
13C2-8_2-FTS	529.10>80.90	----	72781	----	----	----	----	----	----	----
13C2-8_2-FTS_IS	529.10>80.90	----	72781	----	----	----	----	----	----	----
8_2 FTS	527.10>506.95	527.10>80.80	----	0	0.00	49.59	0	0.00	49.59	
13C6-PFDA_IS	519.10>474.10	----	165561	----	----	----	----	----	----	----
13C6-PFDA	519.10>474.10	----	165561	----	----	----	----	----	----	----
13C2-PFDA_IS	515.10>470.10	----	155234	----	----	----	----	----	----	----
PFDA	512.90>469.00	512.90>219.00	4206	726	17.26	19.00	726	17.26	19.00	
D3-NMeFOSAA_IS	573.20>419.00	----	161516	----	----	----	----	----	----	----
D3-NMeFOSAA	573.20>419.00	----	161516	----	----	----	----	----	----	----
13C8-PFOS_IS	507.10>98.90	----	78161	----	----	----	----	----	----	----
13C8-PFOS	507.10>98.90	----	78161	----	----	----	----	----	----	----
13C4-PFOS_IS	502.80>79.90	----	196518	----	----	----	----	----	----	----
PFOS	498.90>79.90	498.90>98.80	516	126	24.33	52.47	126	24.33	52.47	IRr
NMeFOSAA	570.10>419.00	570.10>483.00	----	0	0.00	55.15	0	0.00	55.15	
D5-NEtFOSAA_IS	589.20>419.00	----	191221	----	----	----	----	----	----	----
D5-NEtFOSAA	589.20>419.00	----	191221	----	----	----	----	----	----	----
NEtFOSAA	584.20>419.10	584.20>526.00	----	0	0.00	81.95	0	0.00	81.95	
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	----	0	0.00	32.76	0	0.00	32.76	
PFUnDA	563.10>519.00	563.10>269.10	4277	152	3.56	13.12	152	3.56	13.12	IRr
13C7-PFUnDA_IS	570.00>525.10	----	192787	----	----	----	----	----	----	----
13C7-PFUnDA	570.00>525.10	----	192787	----	----	----	----	----	----	----
PFNS	548.80>79.90	548.80>98.80	----	0	0.00	65.22	0	0.00	65.22	
10_2 FTS	626.80>607.05	626.80>81.00	----	0	0.00	37.13	0	0.00	37.13	
13C2-PFDOA_IS	615.10>570.00	----	219158	----	----	----	----	----	----	----
13C2-PFDOA	615.10>570.00	----	219158	----	----	----	----	----	----	----
PFDOA	613.10>569.00	613.10>319.00	2695	264	9.80	11.29	264	9.80	11.29	
PFDS	599.00>79.90	599.00>98.80	----	0	0.00	60.18	0	0.00	60.18	
PFTrDA	663.00>619.00	663.00>168.90	3005	677	22.52	17.64	677	22.52	17.64	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240118_019 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	----	0	0.00	36.44	0	0.00	36.44	
PFOSAm	498.10>77.90	----	205	----	----	----	----	----	----	
13C8-PFOSAm	506.10>77.80	----	185274	----	----	----	----	----	----	
13C8-PFOSAm_IS	506.10>77.80	----	185274	----	----	----	----	----	----	
PFTDA	713.10>669.00	713.10>168.90	2979	547	18.36	22.96	547	18.36	22.96	
13C2-PFTDA	715.20>670.00	----	89966	----	----	----	----	----	----	
13C2-PFTDA_IS	715.20>670.00	----	89966	----	----	----	----	----	----	
PFDoS	699.10>79.90	699.10>98.80	----	0	0.00	67.40	0	0.00	67.40	
D7-MeFOSE_IS	623.20>58.90	----	504642	----	----	----	----	----	----	
D7-MeFOSE	623.20>58.90	----	504642	----	----	----	----	----	----	
MeFOSE	616.10>59.00	----	----	----	----	----	----	----	----	
13C2-PFHxDA_IS	815.00>770.05	----	348976	----	----	----	----	----	----	
13C2-PFHxDA	815.00>770.05	----	348976	----	----	----	----	----	----	
PFHxDA	813.00>768.95	813.00>218.95	3387	458	13.53	13.90	458	13.53	13.90	
D3-MeFOSA	515.00>219.00	----	41279	----	----	----	----	----	----	
D3-MeFOSA_IS	515.00>219.00	----	41279	----	----	----	----	----	----	
MeFOSA	511.90>219.00	511.90>169.00	----	0	0.00	140.79	0	0.00	140.79	
D9-EtFOSE_IS	639.20>58.90	----	496690	----	----	----	----	----	----	
D9-EtFOSE	639.20>58.90	----	496690	----	----	----	----	----	----	
EtFOSE	630.00>59.00	----	----	----	----	----	----	----	----	
D5-EtFOSAm	531.10>219.00	----	54096	----	----	----	----	----	----	
D5-EtFOSAm_IS	531.10>219.00	----	54096	----	----	----	----	----	----	
EtFOSAm	526.00>219.00	526.00>169.00	----	0	0.00	163.90	0	0.00	163.90	
PFODA	913.00>868.65	913.00>169.00	1588	576	36.26	27.03	576	36.26	27.03	

Flag ID key: IRr: Ion Ratio (Relative)



240118_019

Sample ID: 1633 CCB
Date Acquired: 1/18/2024 7:06:49 PM
Acquired by: System Administrator
Data File: 240118_019
Vial: 54 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Std. Conc.	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.445	0.031	0.000	928998	407833	13C3-PFBA_IS	----	10.1911	ng/mL	
13C4-PFBA_IS	Auto	1.445	0.031	----	928998	928998	----	----	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.445	0.030	----	407833	407833	----	----	5.0000	ng/mL	
PFBA	M	1.439	0.023	-0.006	1217	928998	13C4-PFBA_IS	----	0.0153	ng/mL	
PFMPA	ND(W/B)	----	----	----	----	95214	13C5-PFPeA_IS	----	----	ng/mL	
3_3 FTCA	ND(W/B)	----	----	----	----	95214	13C5-PFPeA_IS	----	----	ng/mL	
13C5-PFPeA	Auto	3.510	0.018	-1.480	95214	459053	13C2-PFHxA_IS	----	4.5951	ng/mL	
13C5-PFPeA_IS	Auto	3.510	0.018	----	95214	95214	----	----	5.0000	ng/mL	
PFPeA	M	3.512	0.017	0.002	1615	95214	13C5-PFPeA_IS	----	0.0131	ng/mL	
PFMBA	M	4.045	0.020	0.535	50	95214	13C5-PFPeA_IS	----	0.0006	ng/mL	
13C2-4_2 FTS	Auto	4.672	0.011	-2.418	106131	157111	18O2-PFHxS_IS	----	4.9088	ng/mL	
13C2-4_2 FTS_IS	Auto	4.672	0.011	----	106131	106131	----	----	5.0000	ng/mL	
4_2 FTS	ND(W/B)	----	----	----	----	106131	13C2-4_2 FTS_IS	----	----	ng/mL	
13C3-PFBS_IS	Auto	4.663	0.016	----	229580	229580	----	----	2.5000	ng/mL	
PFBS	M	4.661	0.013	-0.002	222	229580	13C3-PFBS_IS	----	0.0019	ng/mL	
13C3-PFBS	Auto	4.663	0.016	-2.427	229580	157111	18O2-PFHxS_IS	----	2.5749	ng/mL	
NFDHA	M	4.850	0.015	-0.139	938	471271	13C5-PFHxA_IS	----	0.0090	ng/mL	
13C5-PFHxA	Auto	4.989	0.011	-0.001	471271	459053	13C2-PFHxA_IS	----	2.4359	ng/mL	
13C5-PFHxA_IS	Auto	4.989	0.011	----	471271	471271	----	----	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	4.990	0.011	----	459053	459053	----	----	2.5000	ng/mL	
PFHxA	M	4.990	0.010	0.001	1105	471271	13C5-PFHxA_IS	----	-0.0013	ng/mL	
PFEESA	ND(W/B)	----	----	----	----	471271	13C5-PFHxA_IS	----	----	ng/mL	
13C3-HFPO-DA	Auto	5.461	0.009	0.471	447905	459053	13C2-PFHxA_IS	----	9.9673	ng/mL	
13C3-HFPO-DA_IS	Auto	5.461	0.009	----	447905	447905	----	----	10.0000	ng/mL	
HFPO-DA	ND(W/B)	----	----	----	----	447905	13C3-HFPO-DA_IS	----	----	ng/mL	
5_3 FTCA	ND(W/B)	----	----	----	----	471271	13C5-PFHxA_IS	----	----	ng/mL	
PFPeS	M	6.008	-0.010	-1.082	28	170454	13C3-PFHxS_IS	----	0.0003	ng/mL	IRr
13C4-PFHpA	Auto	6.161	0.007	1.171	448949	459053	13C2-PFHxA_IS	----	2.5634	ng/mL	
13C4-PFHpA_IS	Auto	6.161	0.007	----	448949	448949	----	----	2.5000	ng/mL	
PFHpA	M	6.145	-0.010	-0.016	4713	448949	13C4-PFHpA_IS	----	-0.0094	ng/mL	
DONA	M	6.529	0.009	1.068	217	447905	13C3-HFPO-DA_IS	----	0.0006	ng/mL	
13C2-6_2 FTS_IS	Auto	6.796	0.003	----	102974	102974	----	----	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.796	0.003	-0.294	102974	157111	18O2-PFHxS_IS	----	5.0357	ng/mL	
6_2 FTS	M	6.795	0.003	-0.001	1065	102974	13C2-6_2 FTS_IS	----	0.0227	ng/mL	
13C4-PFOA_IS	Auto	7.112	0.005	----	30337	30337	----	----	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.112	0.005	----	453661	453661	----	----	2.5000	ng/mL	
13C8-PFOA	Auto	7.112	0.005	0.000	453661	30337	13C4-PFOA_IS	----	2.6754	ng/mL	
PFOA	M	7.111	0.001	-0.001	4801	453661	13C8-PFOA_IS	----	-0.0027	ng/mL	
13C3-PFHxS	Auto	7.090	0.004	0.000	170454	157111	18O2-PFHxS_IS	----	2.5276	ng/mL	
13C3-PFHxS_IS	Auto	7.090	0.004	----	170454	170454	----	----	2.5000	ng/mL	
PFHxS	M	7.088	0.004	-0.002	749	170454	13C3-PFHxS_IS	----	-0.0100	ng/mL	
18O2-PFHxS_IS	Auto	7.090	0.004	----	157111	157111	----	----	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.957	0.001	----	214927	214927	----	----	1.2500	ng/mL	
13C9-PFNA	Auto	7.957	0.001	-0.001	214927	220522	13C5-PFNA_IS	----	1.2448	ng/mL	
13C5-PFNA_IS	Auto	7.958	0.002	----	220522	220522	----	----	1.2500	ng/mL	
PFNA	M	7.957	0.000	0.000	3845	214927	13C9-PFNA_IS	----	0.0006	ng/mL	
PFHpS	ND(W/B)	----	----	----	----	78161	13C8-PFOS_IS	----	----	ng/mL	
7_3 FTCA	ND(W/B)	----	----	----	----	471271	13C5-PFHxA_IS	----	----	ng/mL	
13C2-8_2-FTS	Auto	8.410	0.001	1.320	72781	157111	18O2-PFHxS_IS	----	4.3328	ng/mL	
13C2-8_2-FTS_IS	Auto	8.410	0.001	----	72781	72781	----	----	5.0000	ng/mL	
8_2 FTS	ND(W/B)	----	----	----	----	72781	13C2-8_2-FTS_IS	----	----	ng/mL	
13C6-PFDA_IS	Auto	8.720	0.000	----	165561	165561	----	----	1.2500	ng/mL	
13C6-PFDA	Auto	8.720	0.000	-0.001	165561	155234	13C2-PFDA_IS	----	1.3256	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_019 (continued)

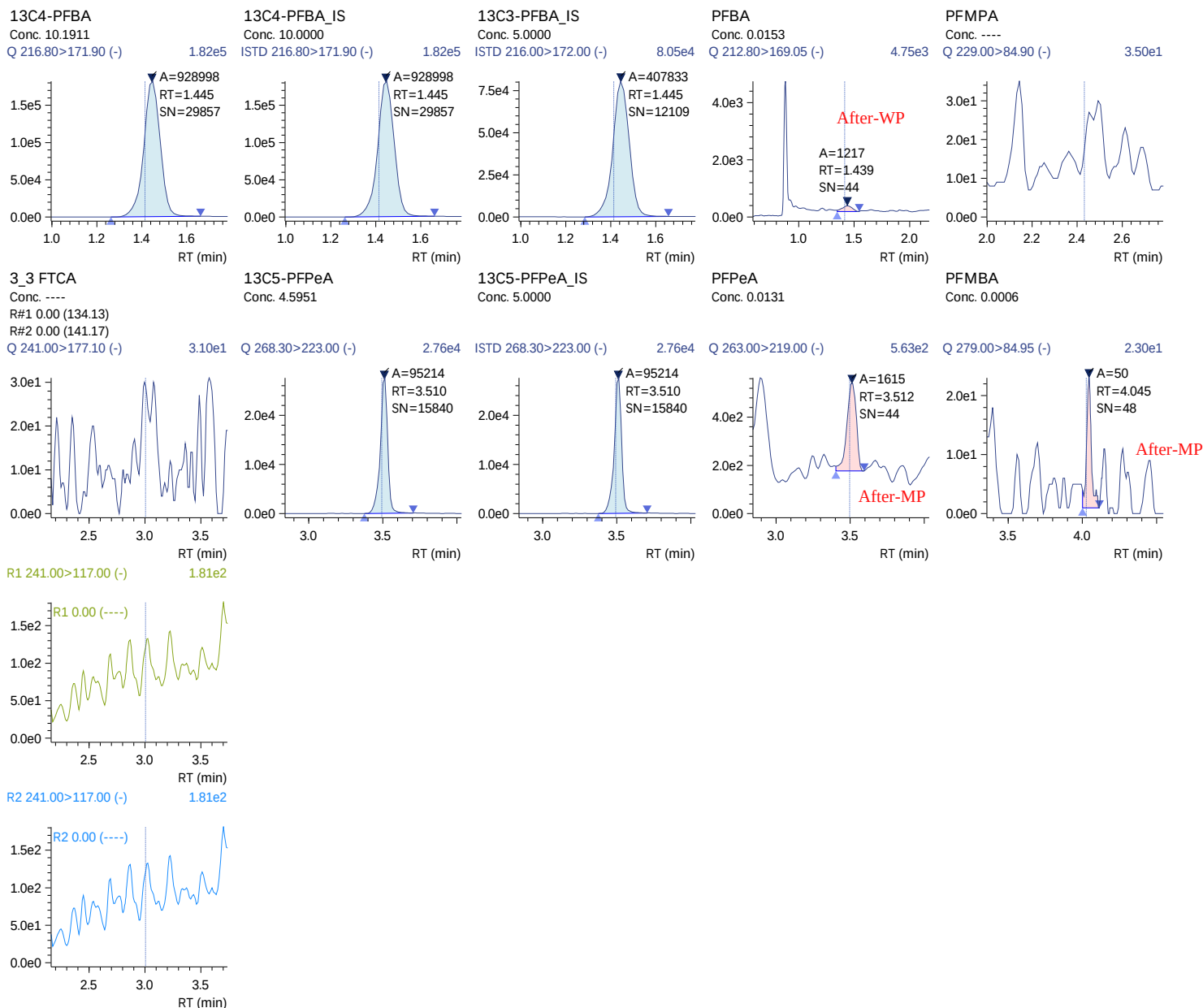
(Table continued from previous page)

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Std. Conc.	Conc.	Unit	Flag ID
13C2-PFDA_IS	Auto	8.721	0.000	----	155234	155234	----	----	1.2500	ng/mL	
PFDA	Auto	8.718	-0.003	-0.002	4206	165561	13C6-PFDA_IS	----	0.0012	ng/mL	
D3-NMeFOSAA_IS	Auto	8.854	-0.001	----	161516	161516	----	----	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.854	-0.001	0.032	161516	196518	13C4-PFOS_IS	----	4.7355	ng/mL	
13C8-PFOS_IS	Auto	8.821	0.001	----	78161	78161	----	----	2.5000	ng/mL	
13C8-PFOS	Auto	8.821	0.001	-0.001	78161	196518	13C4-PFOS_IS	----	2.3849	ng/mL	
13C4-PFOS_IS	Auto	8.822	0.002	----	196518	196518	----	----	2.5000	ng/mL	
PFOS	M	8.831	0.009	0.010	516	78161	13C8-PFOS_IS	----	0.0064	ng/mL	IRr
NMeFOSAA	ND(W/B)	----	----	----	----	161516	D3-NMeFOSAA_IS	----	----	ng/mL	
D5-NetFOSAA_IS	Auto	9.186	0.000	----	191221	191221	----	----	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.186	0.000	0.364	191221	196518	13C4-PFOS_IS	----	4.6862	ng/mL	
NetFOSAA	ND(W/B)	----	----	----	----	191221	D5-NetFOSAA_IS	----	----	ng/mL	
9-CI-PF3ONS	ND(W/B)	----	----	----	----	447905	13C3-HFPO-DA_IS	----	----	ng/mL	
PFUnDA	M	9.442	-0.005	-0.002	4277	192787	13C7-PFUnDA_IS	----	0.0009	ng/mL	IRr
13C7-PFUnDA_IS	Auto	9.444	-0.001	----	192787	192787	----	----	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.444	-0.001	0.723	192787	155234	13C2-PFDA_IS	----	1.2941	ng/mL	
PFNS	ND(W/B)	----	----	----	----	78161	13C8-PFOS_IS	----	----	ng/mL	
10_2_FTS	ND(W/B)	----	----	----	----	72781	13C2-8_2-FTS_IS	----	----	ng/mL	
13C2-PFDOA_IS	Auto	10.130	-0.003	----	219158	219158	----	----	1.2500	ng/mL	
13C2-PFDOA	Auto	10.130	-0.003	1.409	219158	155234	13C2-PFDA_IS	----	1.2805	ng/mL	
PFDOA	M	10.131	-0.003	0.001	2695	219158	13C2-PFDOA_IS	----	-0.0110	ng/mL	
PFDS	ND(W/B)	----	----	----	----	78161	13C8-PFOS_IS	----	----	ng/mL	
PFTDA	M	10.784	-0.008	-0.636	3005	89966	13C2-PFTDA_IS	----	-0.0073	ng/mL	
11-CI-PF3OUdS	ND(W/B)	----	----	----	----	447905	13C3-HFPO-DA_IS	----	----	ng/mL	
PFOSAm	M	11.165	0.001	0.004	205	185274	13C8-PFOSAm_IS	----	0.0034	ng/mL	
13C8-PFOSAm	Auto	11.161	-0.004	2.339	185274	196518	13C4-PFOS_IS	----	2.2208	ng/mL	
13C8-PFOSAm_IS	Auto	11.161	-0.004	----	185274	185274	----	----	2.5000	ng/mL	
PFTDA	M	11.421	-0.004	0.001	2979	89966	13C2-PFTDA_IS	----	0.0030	ng/mL	
13C2-PFTDA	Auto	11.420	-0.004	2.699	89966	155234	13C2-PFDA_IS	----	1.2175	ng/mL	
13C2-PFTDA_IS	Auto	11.420	-0.004	----	89966	89966	----	----	1.2500	ng/mL	
PFDoS	ND(W/B)	----	----	----	----	78161	13C8-PFOS_IS	----	----	ng/mL	
D7-MeFOSE_IS	Auto	13.371	-0.006	----	504642	504642	----	----	25.0000	ng/mL	
D7-MeFOSE	Auto	13.371	-0.006	4.549	504642	196518	13C4-PFOS_IS	----	24.5350	ng/mL	
MeFOSE	ND(W/B)	----	----	----	----	504642	D7-MeFOSE_IS	----	----	ng/mL	
13C2-PFHXA_IS	Auto	12.637	-0.004	----	348976	348976	----	----	2.5000	ng/mL	
13C2-PFHXA	Auto	12.637	-0.004	3.916	348976	155234	13C2-PFDA_IS	----	2.4202	ng/mL	
PFHXA	M	12.636	-0.006	-0.001	3387	348976	13C2-PFHXA_IS	----	-0.0042	ng/mL	
D3-MeFOSA	Auto	13.681	-0.004	4.859	41279	196518	13C4-PFOS_IS	----	2.4570	ng/mL	
D3-MeFOSA_IS	Auto	13.681	-0.004	----	41279	41279	----	----	2.5000	ng/mL	
MeFOSA	ND(W/B)	----	----	----	----	41279	D3-MeFOSA_IS	----	----	ng/mL	
D9-EtFOSE_IS	Auto	14.003	-0.003	----	496690	496690	----	----	25.0000	ng/mL	
D9-EtFOSE	Auto	14.003	-0.003	5.181	496690	196518	13C4-PFOS_IS	----	23.7762	ng/mL	
EtFOSE	ND(W/B)	----	----	----	----	496690	D9-EtFOSE_IS	----	----	ng/mL	
D5-EtFOSAm	Auto	14.358	-0.004	5.536	54096	196518	13C4-PFOS_IS	----	2.4184	ng/mL	
D5-EtFOSAm_IS	Auto	14.358	-0.004	----	54096	54096	----	----	2.5000	ng/mL	
EtFOSAm	ND(W/B)	----	----	----	----	54096	D5-EtFOSAm_IS	----	----	ng/mL	
PFODA	M	13.773	-0.002	1.136	1588	348976	13C2-PFHXA_IS	----	0.0201	ng/mL	

Flag ID key: IRr: Ion Ratio (Relative)



240118_019 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_019 (continued)

13C2-4_2 FTS
Conc. 4.9088

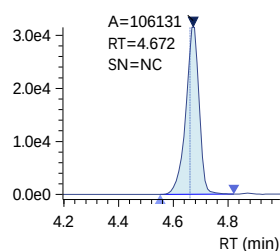
13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. ----
R#1 0.00 (34.14)
R#2 0.00 (29.06)

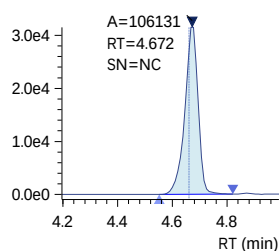
13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 0.0019
R#1 67.36 (47.53)
R#2 67.36 (46.72)

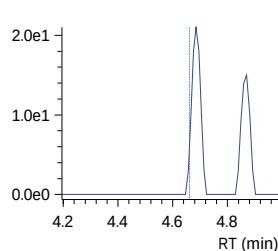
Q 329.10>80.90 (-)



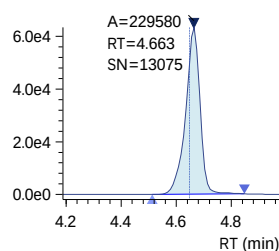
ISTD 329.10>80.90 (-)



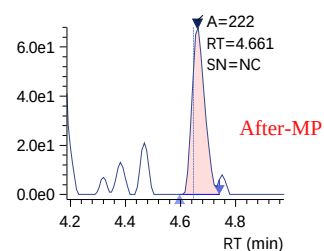
Q 327.10>307.00 (-)



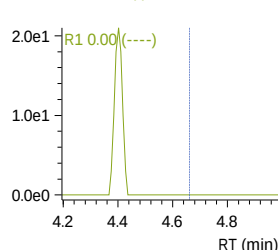
ISTD 302.10>79.90 (-)



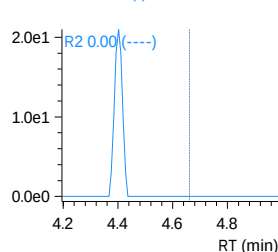
Q 298.70>79.90 (-)



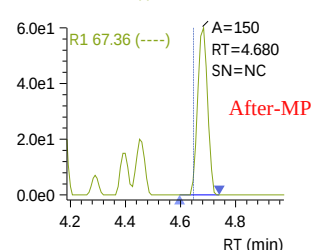
R1 327.10>80.90 (-)



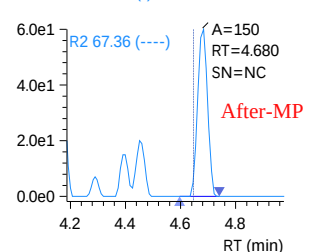
R2 327.10>80.90 (-)



R1 298.70>98.80 (-)



R2 298.70>98.80 (-)





240118_019 (continued)

13C3-PFBS
Conc. 2.5749

NFDHA
Conc. 0.0090
R#1 31.79 (37.88)
R#2 31.79 (40.25)

13C5-PFHxA
Conc. 2.4359

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

Q 302.10>79.90 (-)

6.34e4

Q 295.00>201.00 (-)

2.88e2

Q 318.00>273.00 (-)

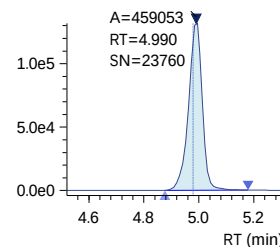
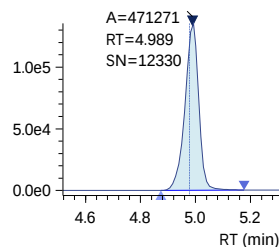
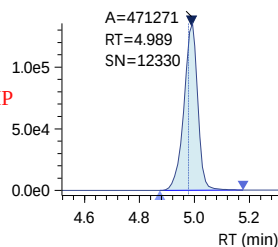
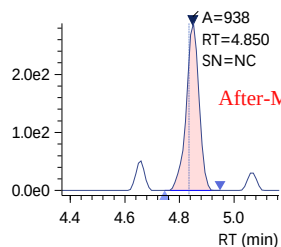
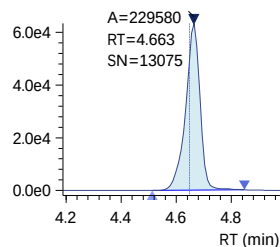
1.35e5

ISTD 318.00>273.00 (-)

1.35e5

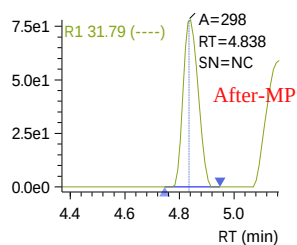
ISTD 315.10>270.00 (-)

1.32e5



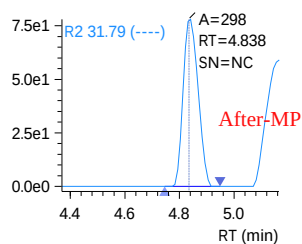
R1 295.00>84.90 (-)

7.80e1



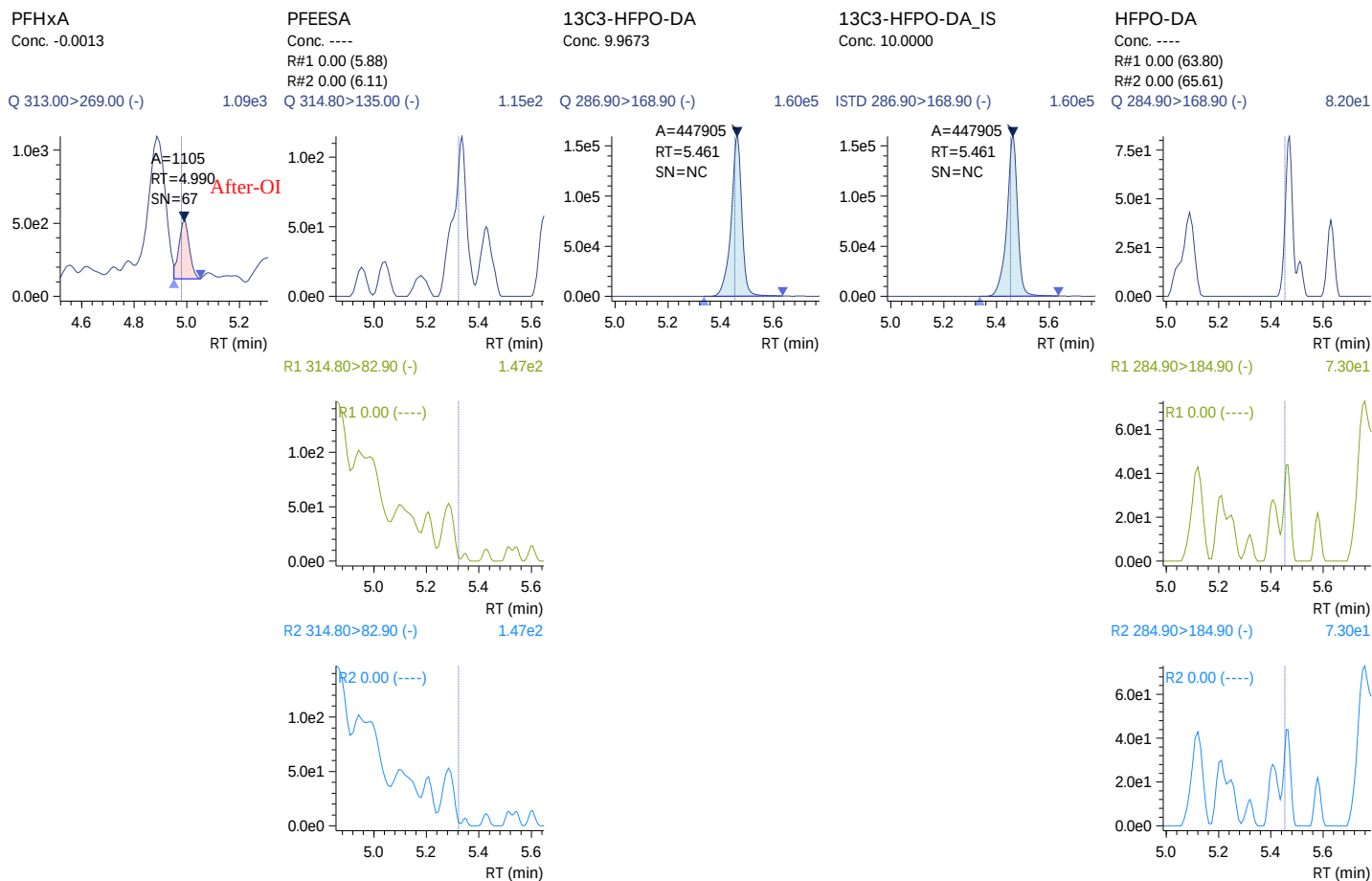
R2 295.00>84.90 (-)

7.80e1





240118_019 (continued)

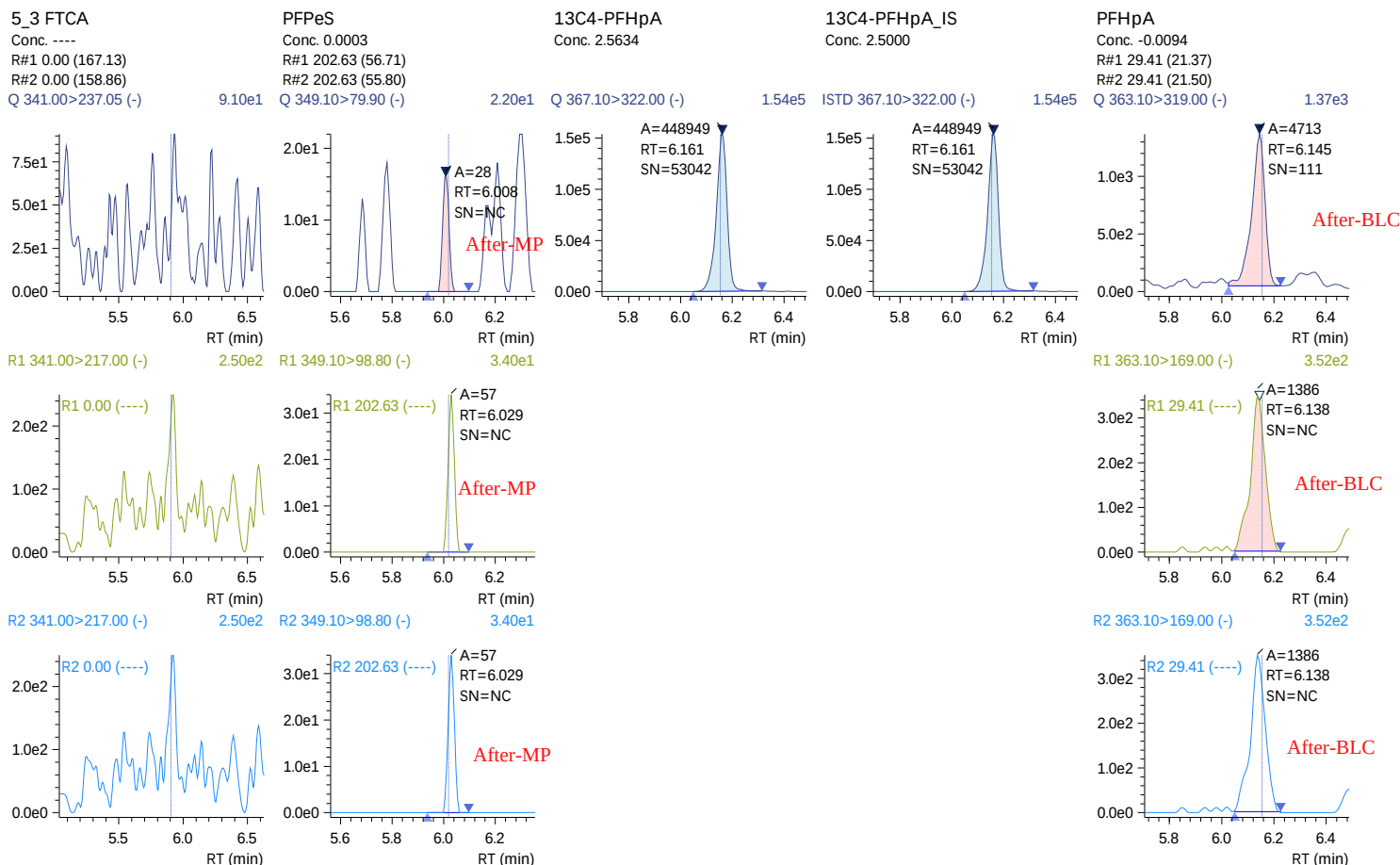


J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.damlp

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_019 (continued)

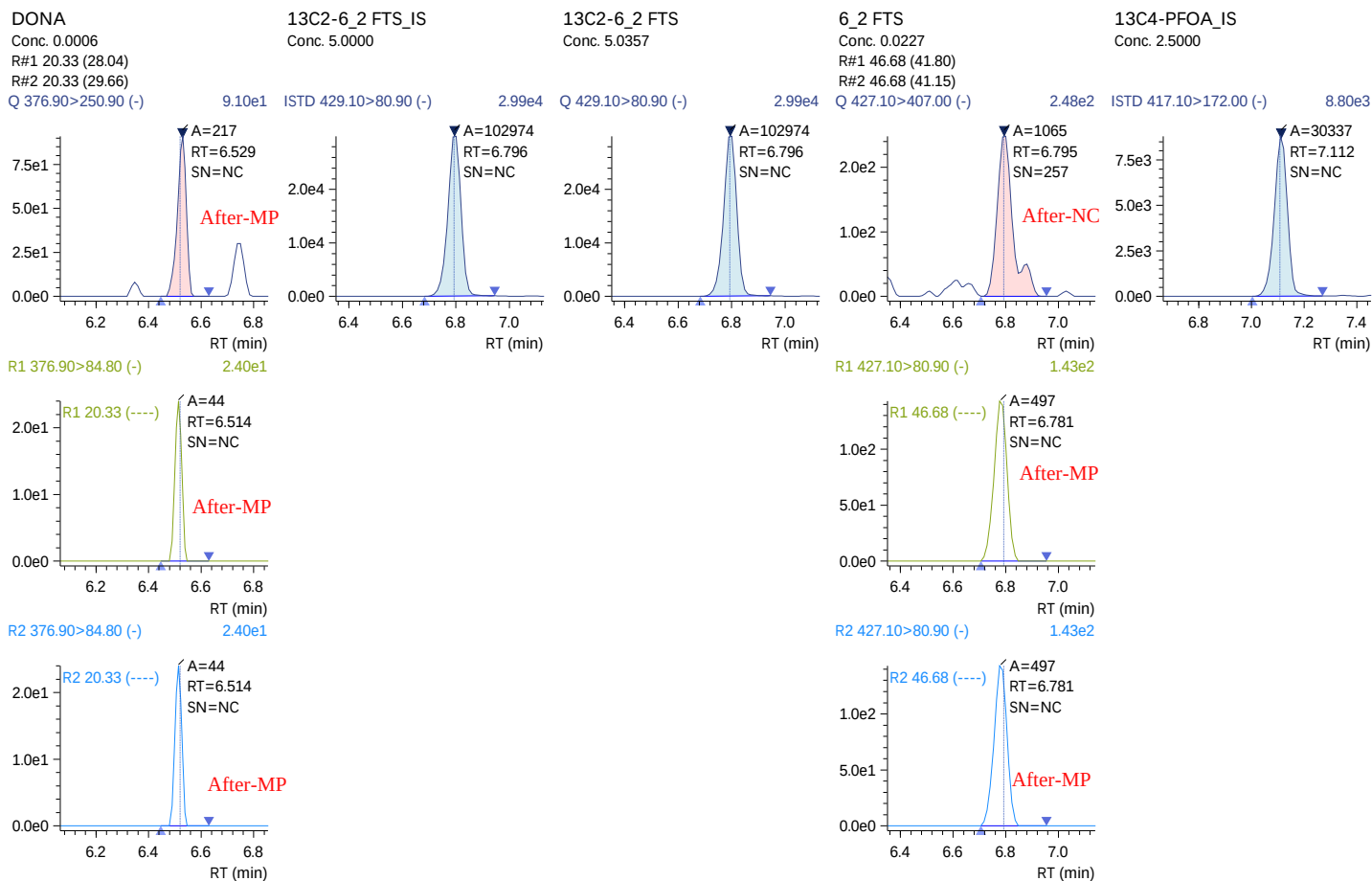


J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_019 (continued)



J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.damlp

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_019 (continued)

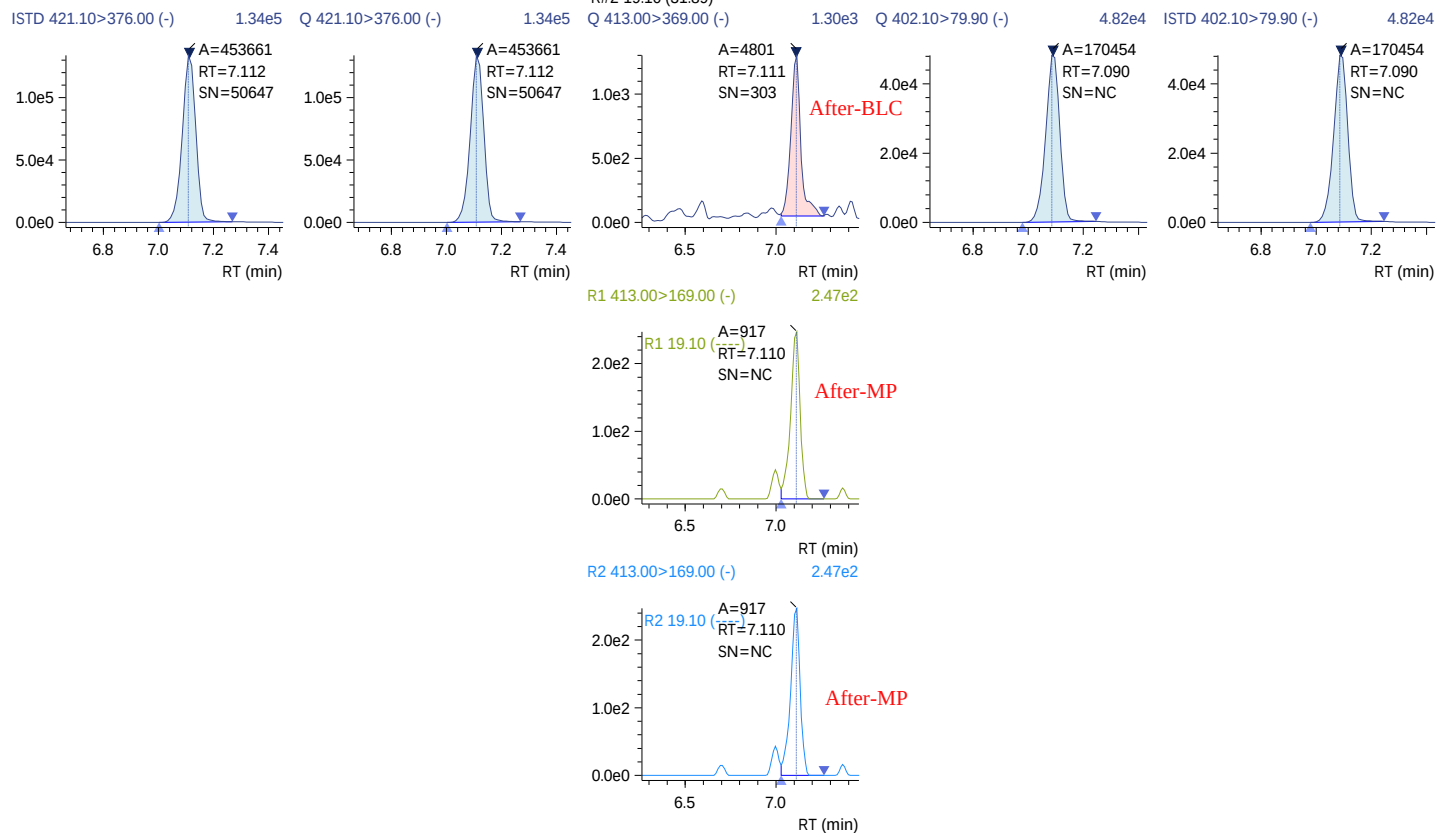
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.6754

PFOA
Conc. -0.0027
R#1 19.10 (29.05)
R#2 19.10 (31.89)

13C3-PFHxS
Conc. 2.5276

13C3-PFHxS_IS
Conc. 2.5000

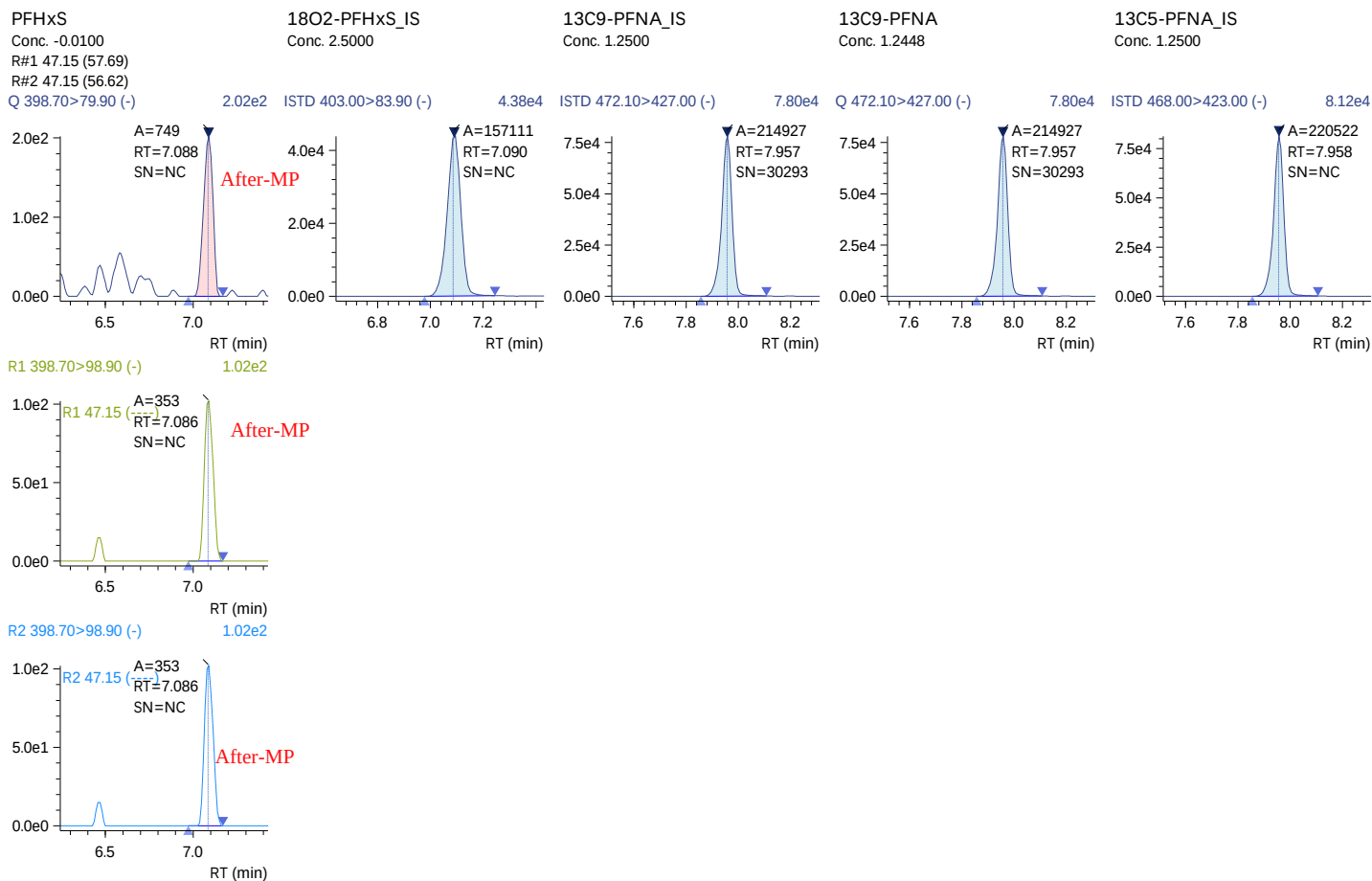


J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_019 (continued)

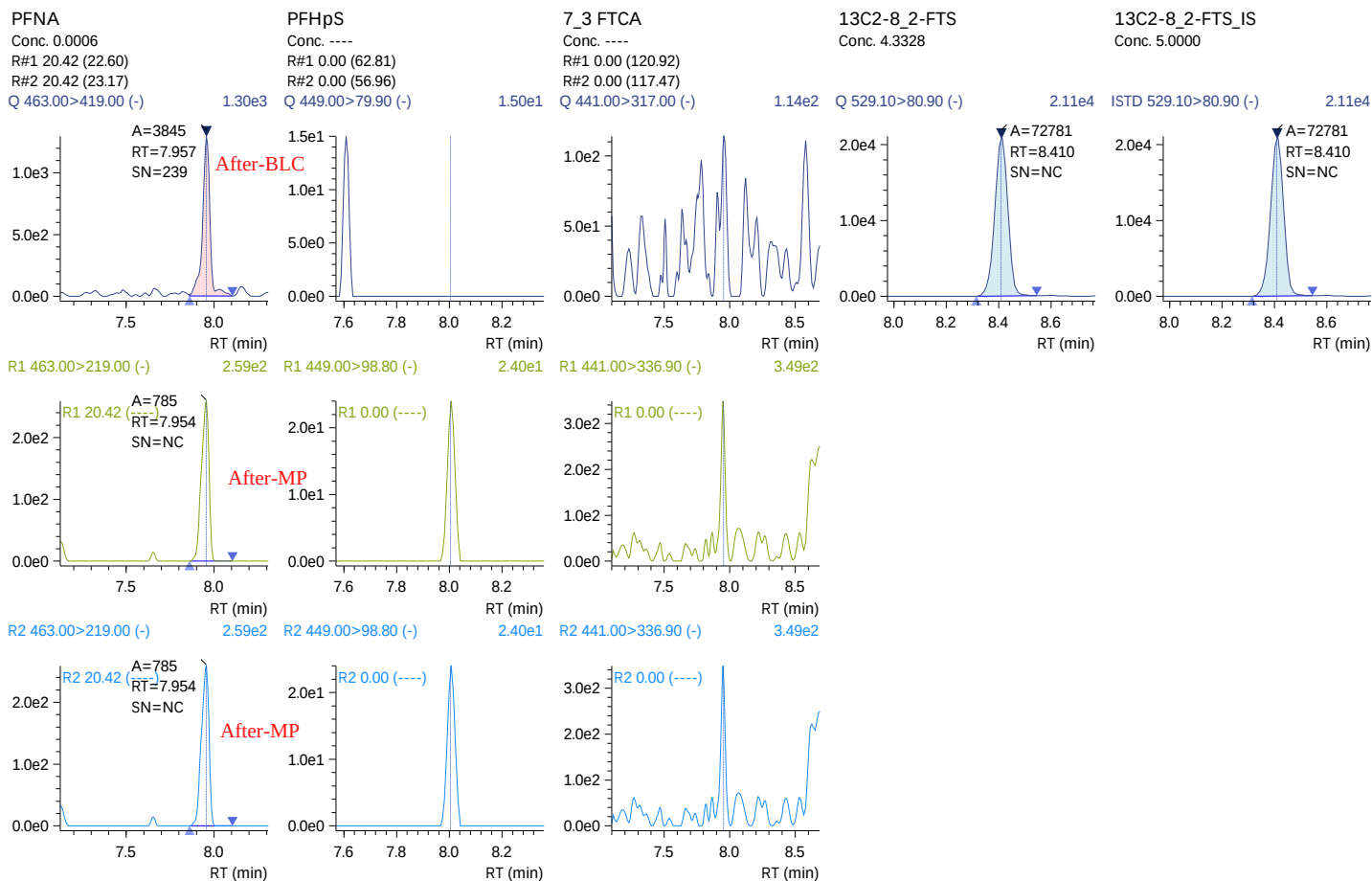


J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.damlp

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_019 (continued)

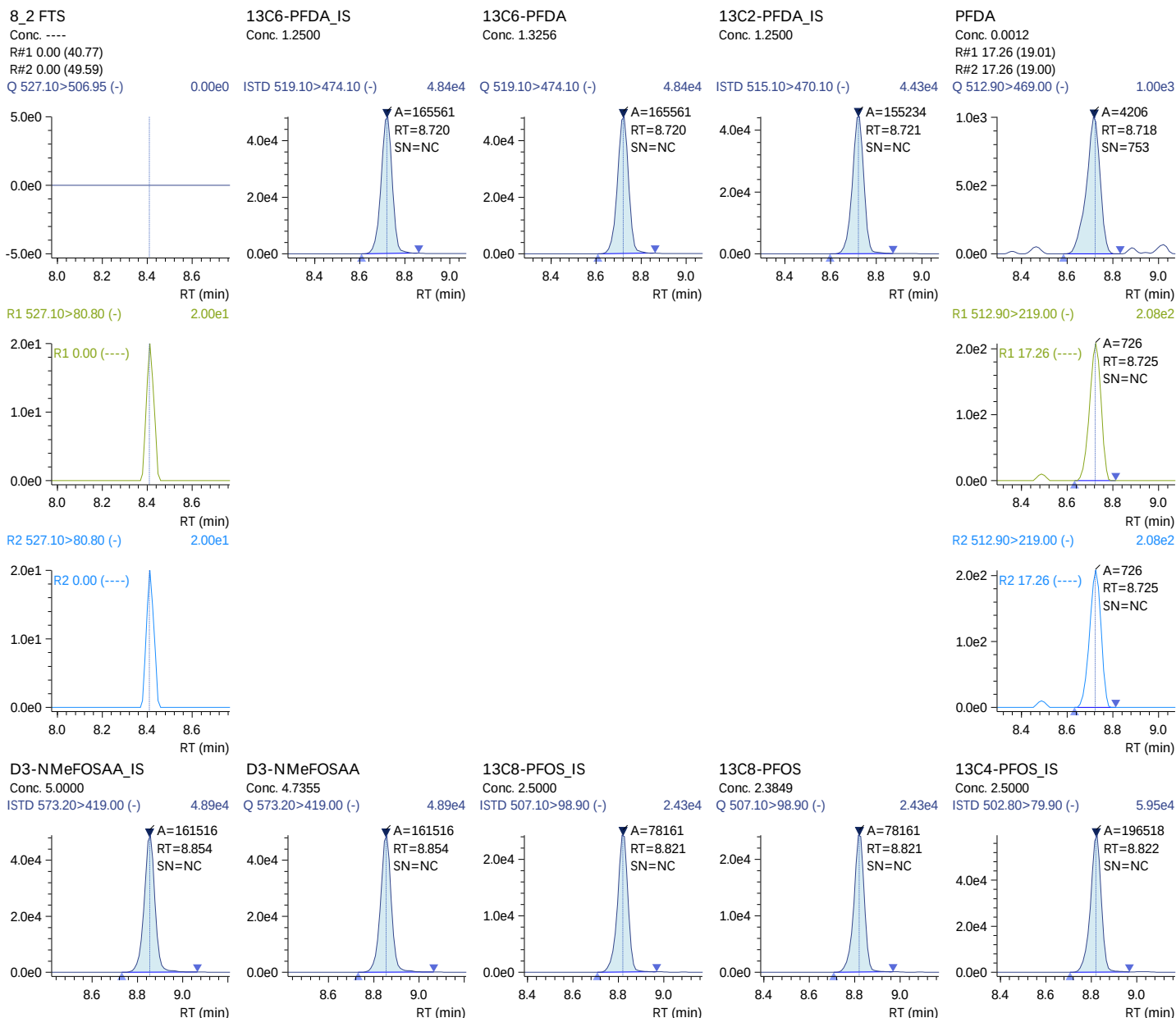


J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_019 (continued)

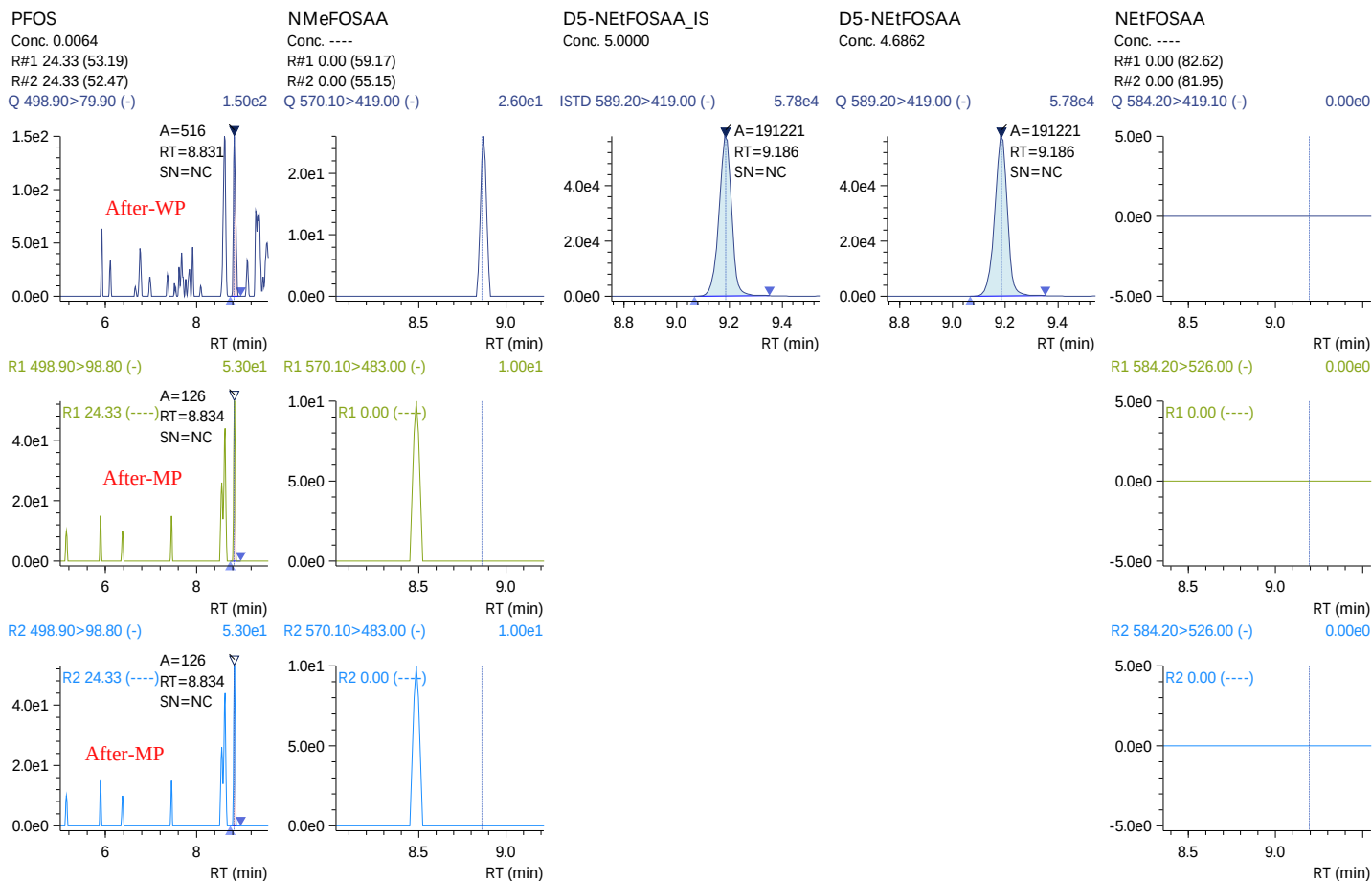


J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_019 (continued)



J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_019 (continued)

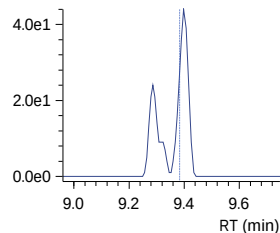
9-Cl-PF3ONS

Conc. ----

R#1 0.00 (31.76)

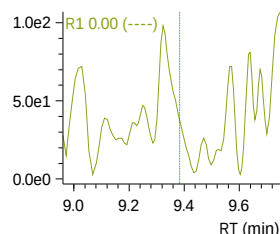
R#2 0.00 (32.76)

Q 530.80>351.00 (-)



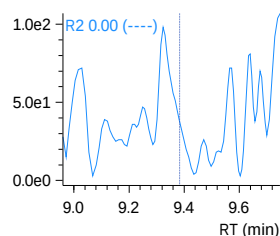
R1 532.80>353.00 (-)

1.07e2



R2 532.80>353.00 (-)

1.07e2



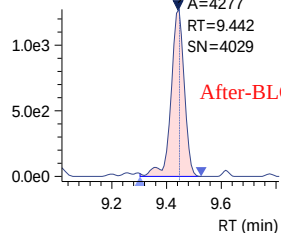
PFUnDA

Conc. 0.0009

R#1 3.56 (12.31)

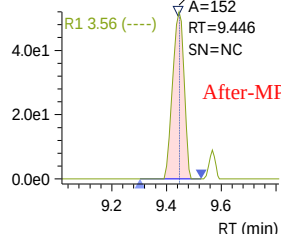
R#2 3.56 (13.12)

Q 563.10>519.00 (-)



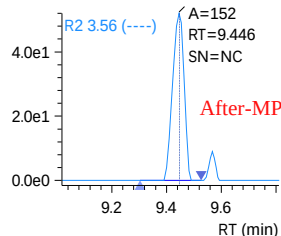
R1 563.10>269.10 (-)

5.20e1



R2 563.10>269.10 (-)

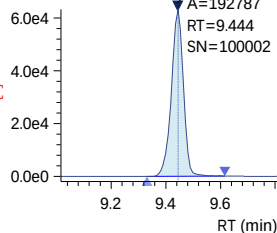
5.20e1



13C7-PFUnDA_IS

Conc. 1.2500

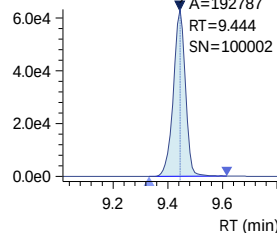
ISTD 570.00>525.10 (-)



13C7-PFUnDA

Conc. 1.2941

Q 570.00>525.10 (-)



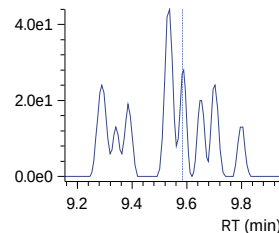
PFNS

Conc. ----

R#1 0.00 (63.31)

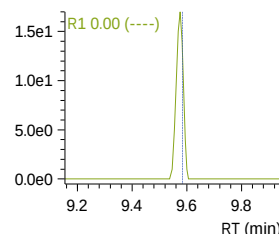
R#2 0.00 (65.22)

Q 548.80>79.90 (-)



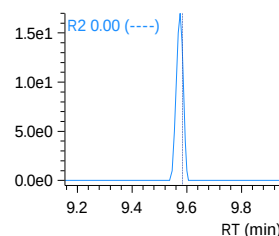
R1 548.80>98.80 (-)

1.70e1



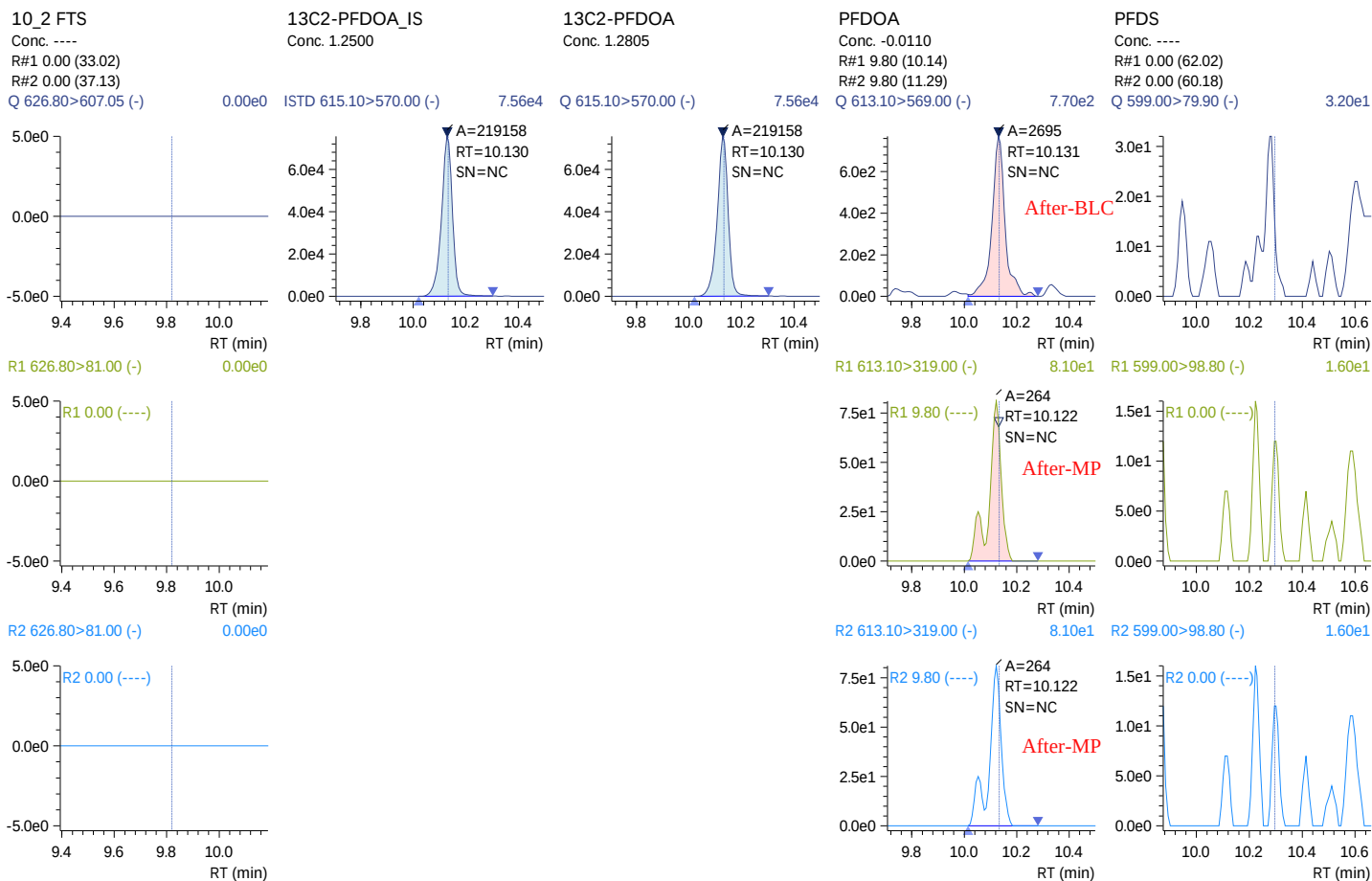
R2 548.80>98.80 (-)

1.70e1





240118_019 (continued)

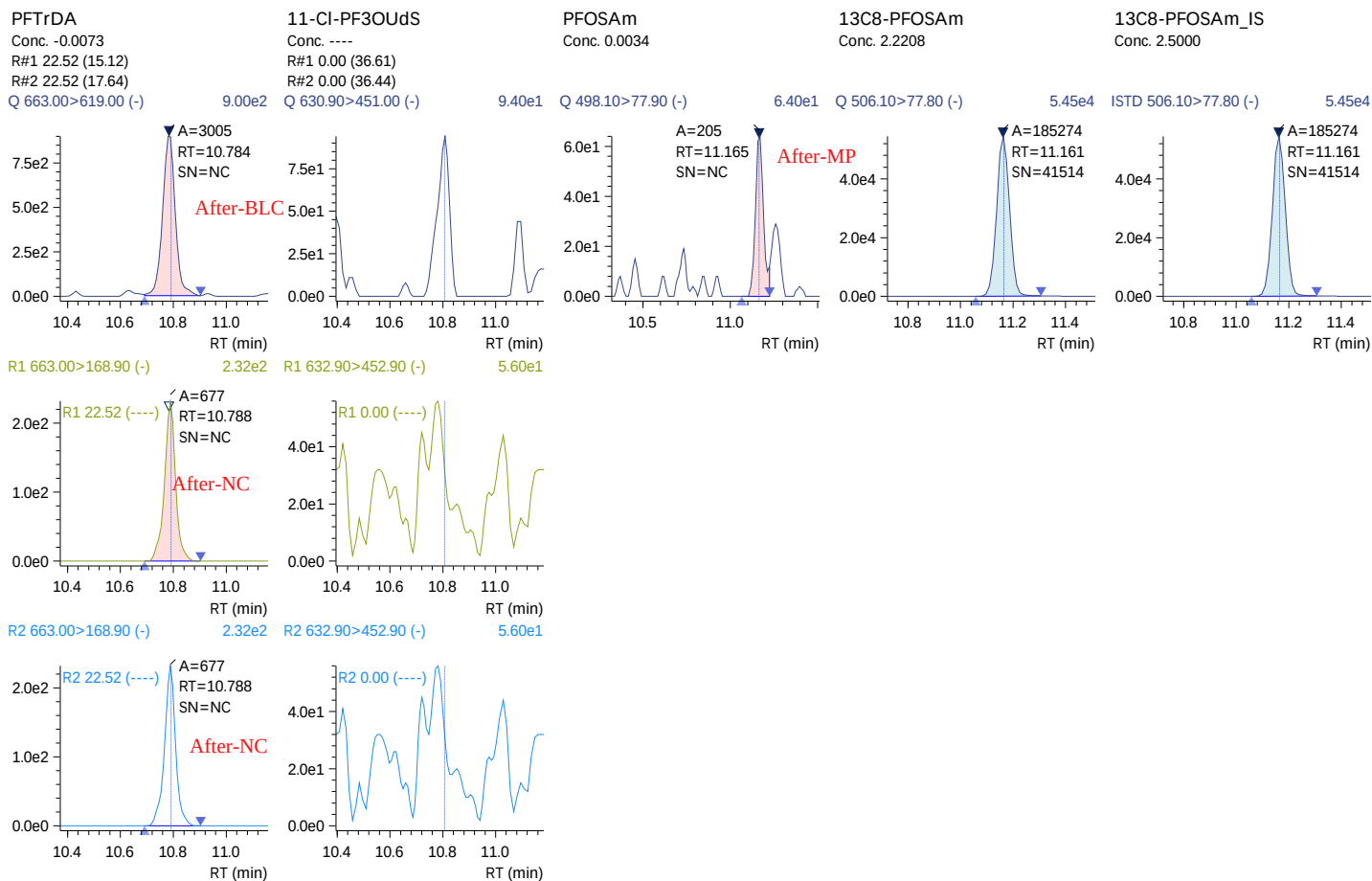


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_019 (continued)

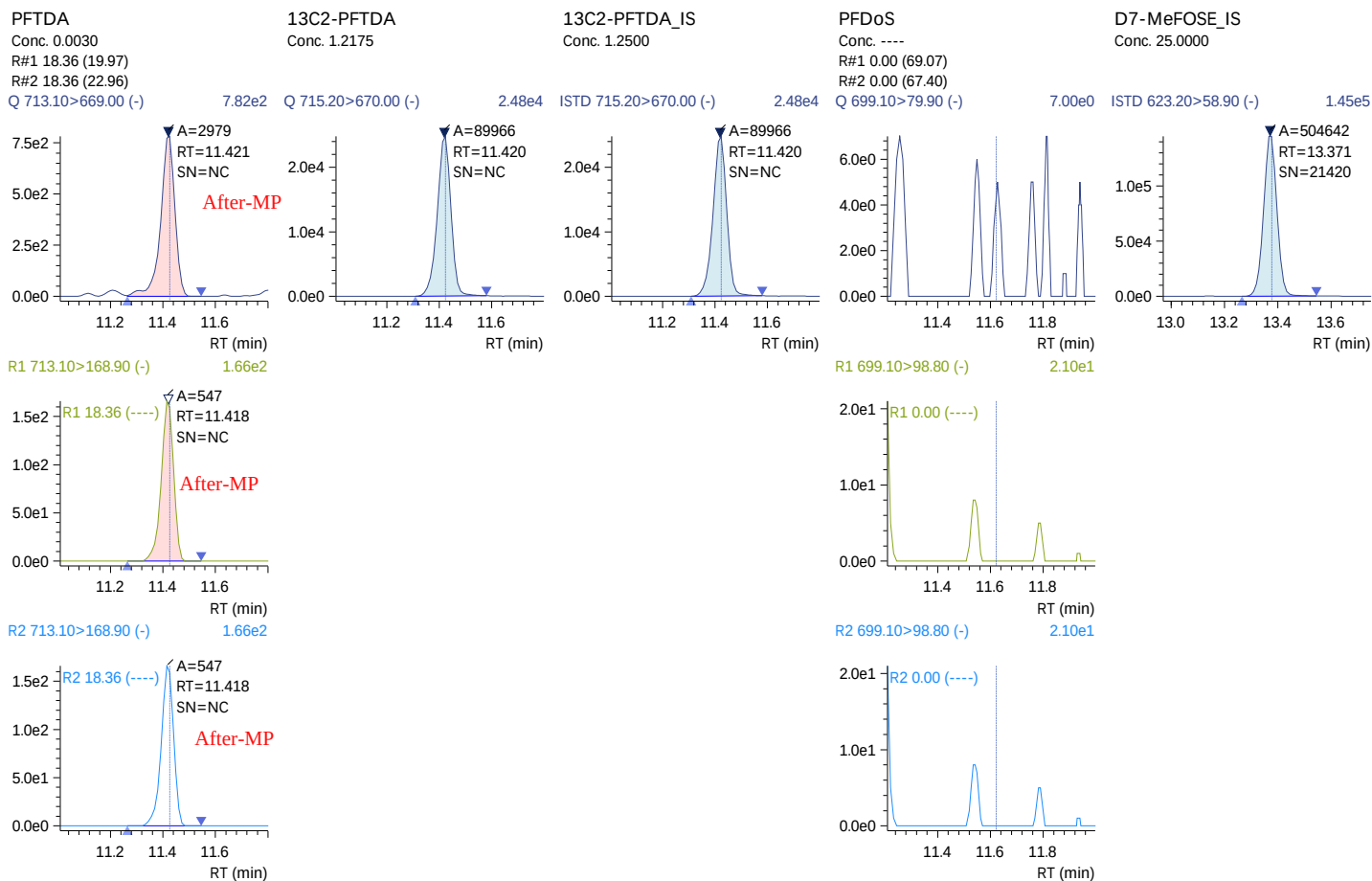


J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_019 (continued)



J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_019 (continued)

D7-MeFOSE
Conc. 24.5350

MeFOSE
Conc. ----

13C2-PFHXA_IS
Conc. 2.5000

13C2-PFHXA
Conc. 2.4202

PFHXA

Conc. -0.0042
R#1 13.53 (11.64)
R#2 13.53 (13.90)

Q 623.20>58.90 (-)

1.45e5

Q 616.10>59.00 (-)

4.10e1

ISTD 815.00>770.05 (-)

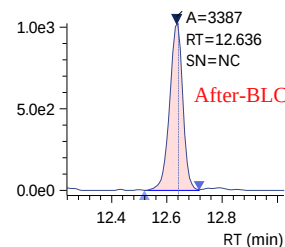
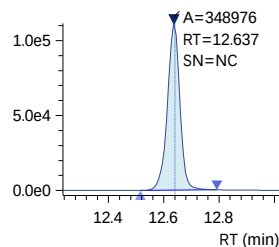
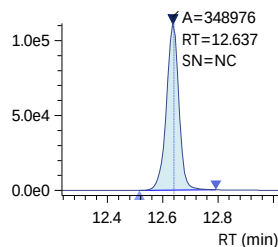
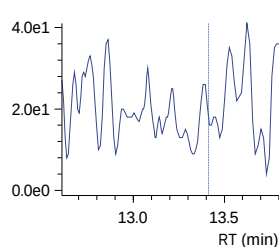
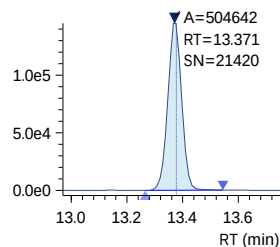
1.11e5

Q 815.00>770.05 (-)

1.11e5

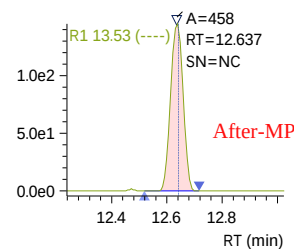
Q 813.00>768.95 (-)

1.02e3



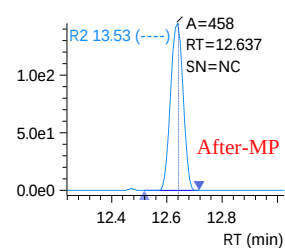
R1 813.00>218.95 (-)

1.45e2



R2 813.00>218.95 (-)

1.45e2





240118_019 (continued)

D3-MeFOSA
Conc. 2.4570

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. ----
R#1 0.00 (149.05)
R#2 0.00 (140.79)

D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 23.7762

Q 515.00>219.00 (-)

1.22e4

ISTD 515.00>219.00 (-)

1.22e4

Q 511.90>219.00 (-)

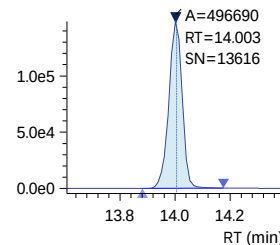
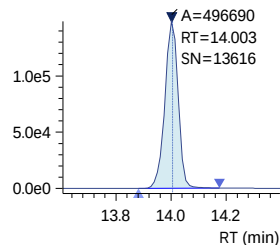
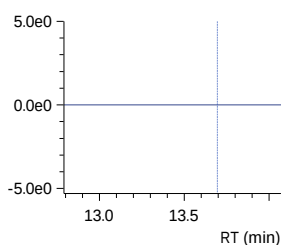
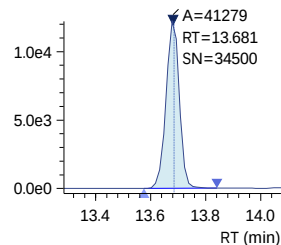
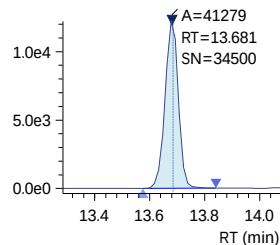
0.00e0

ISTD 639.20>58.90 (-)

1.49e5

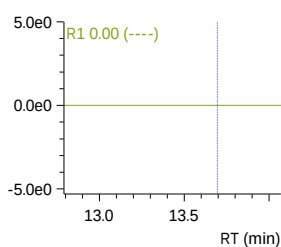
Q 639.20>58.90 (-)

1.49e5



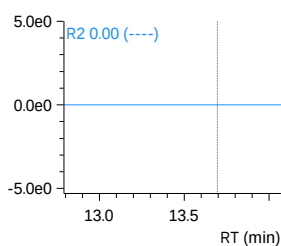
R1 511.90>169.00 (-)

0.00e0



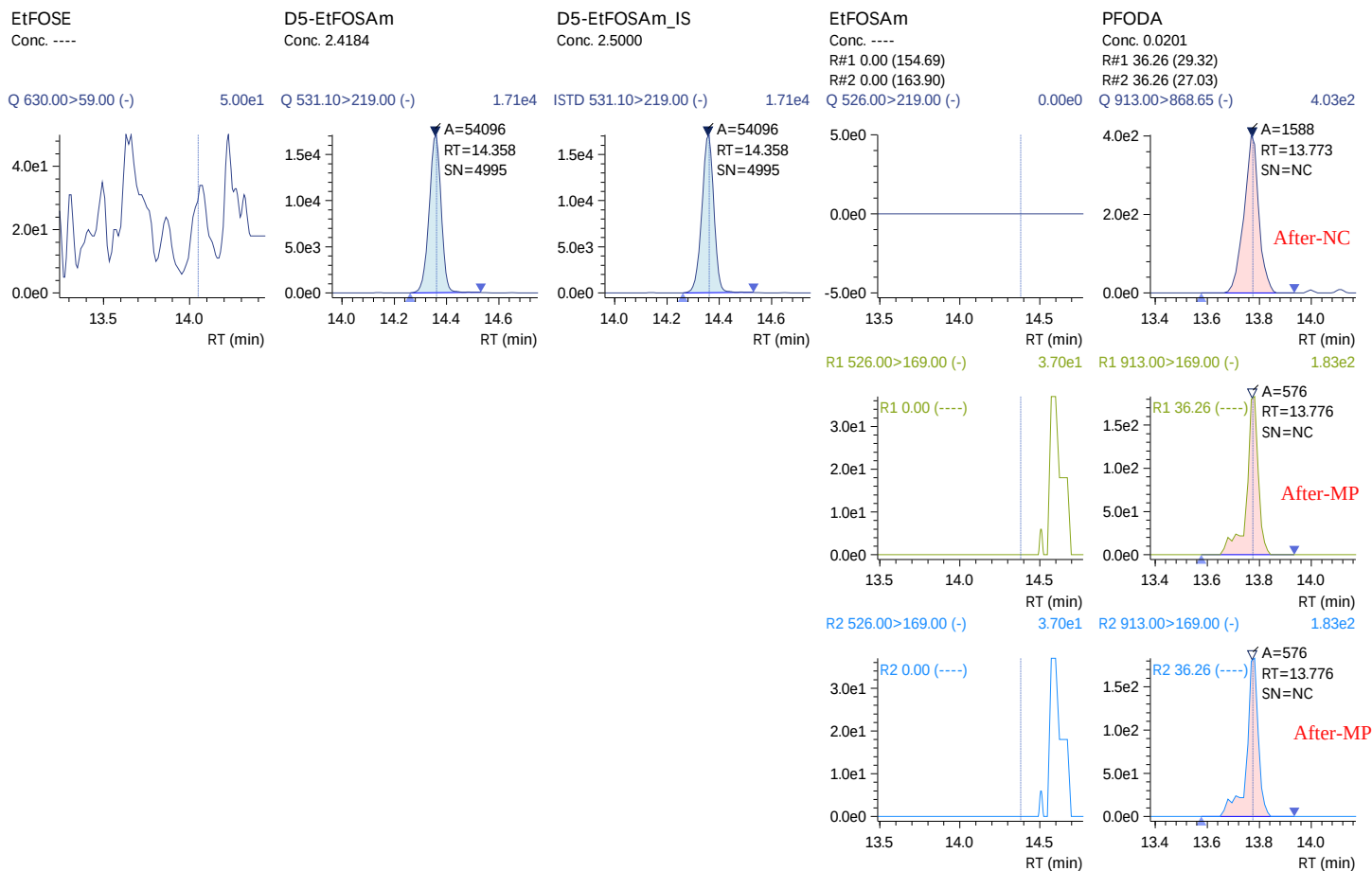
R2 511.90>169.00 (-)

0.00e0





240118_019 (continued)



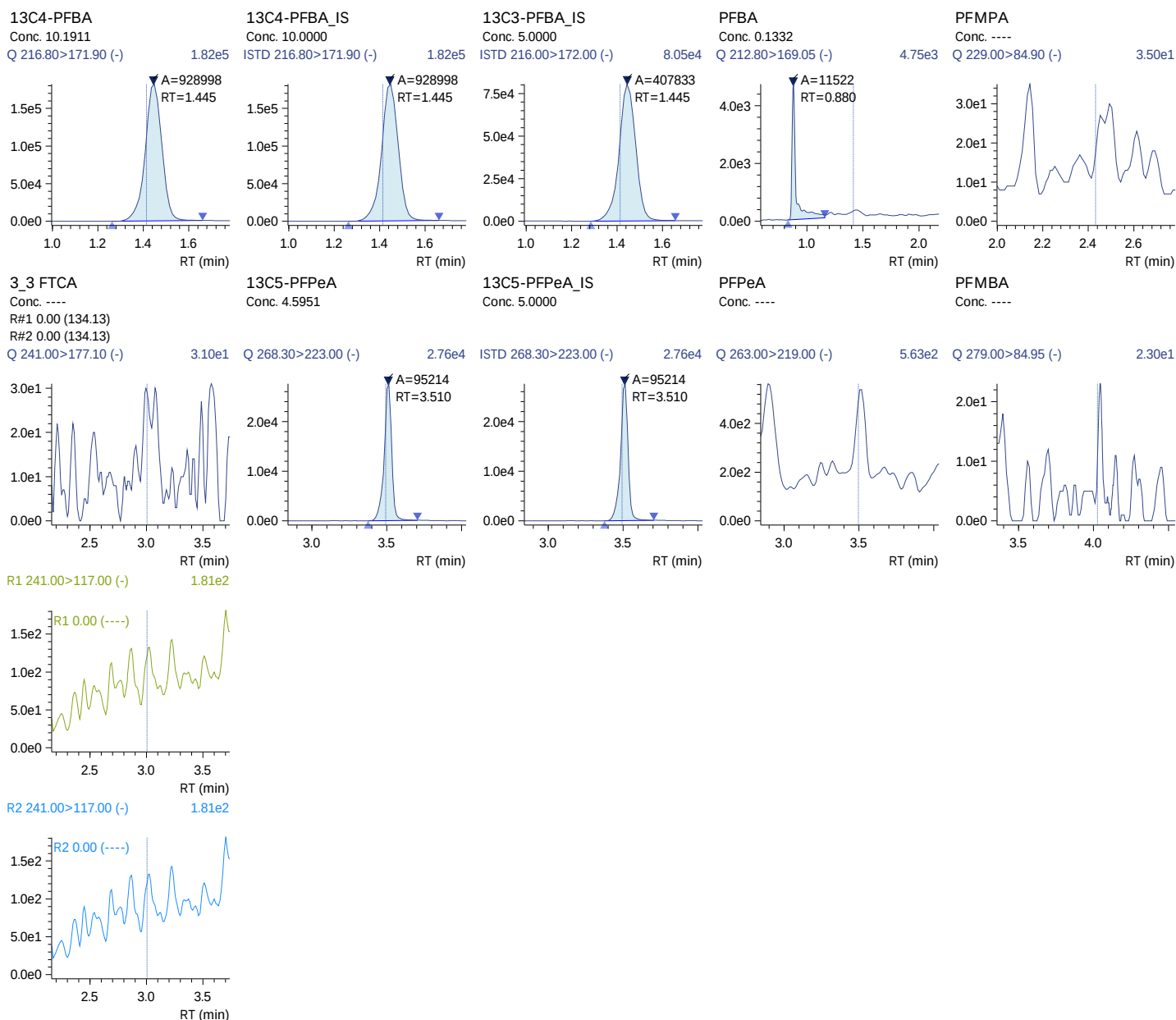
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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_019

Sample ID: 1633 CCB
Date Acquired: 1/18/2024 7:06:49 PM
Acquired by: System Administrator
Data File: 240118_019
Vial: 54 | Inj. Volume: 10.0000uL | Tray: 1





240118_019 (continued)

13C2-4_2 FTS
 Conc. 4.9088

13C2-4_2 FTS_IS
 Conc. 5.0000

4_2 FTS
 Conc. ----
 R#1 0.00 (34.14)
 R#2 0.00 (34.14)

13C3-PFBS_IS
 Conc. 2.5000

PFBS
 Conc. ----
 R#1 0.00 (47.53)
 R#2 0.00 (47.53)

Q 329.10>80.90 (-)

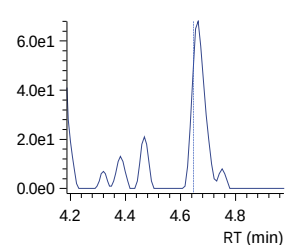
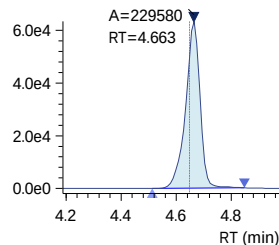
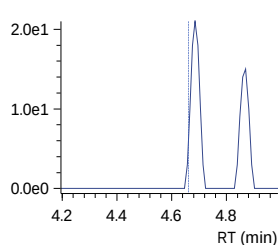
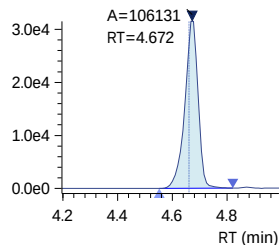
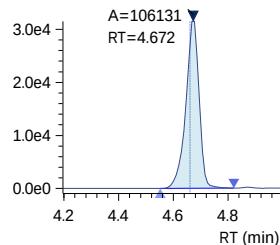
3.15e4 ISTD 329.10>80.90 (-)

3.15e4 Q 327.10>307.00 (-)

2.10e1 ISTD 302.10>79.90 (-)

6.34e4 Q 298.70>79.90 (-)

6.80e1

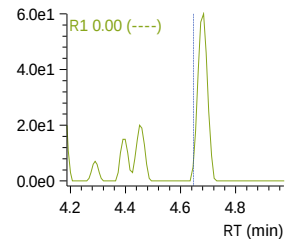
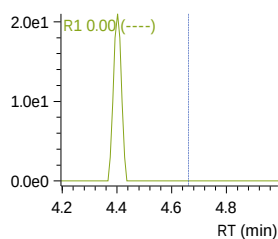


R1 327.10>80.90 (-)

2.10e1

R1 298.70>98.80 (-)

6.00e1

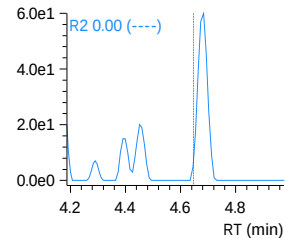
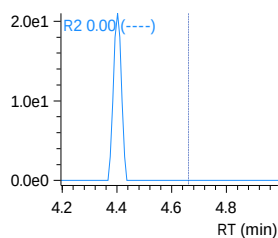


R2 327.10>80.90 (-)

2.10e1

R2 298.70>98.80 (-)

6.00e1





240118_019 (continued)

13C3-PFBS
 Conc. 2.5749

NFDHA
 Conc. ----
 R#1 0.00 (37.88)
 R#2 0.00 (37.88)

13C5-PFHxA
 Conc. 2.4359

13C5-PFHxA_IS
 Conc. 2.5000

13C2-PFHxA_IS
 Conc. 2.5000

Q 302.10>79.90 (-)

6.34e4

Q 295.00>201.00 (-)

2.88e2

Q 318.00>273.00 (-)

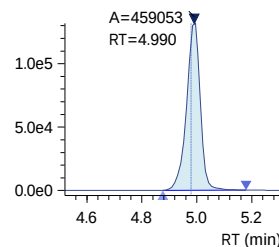
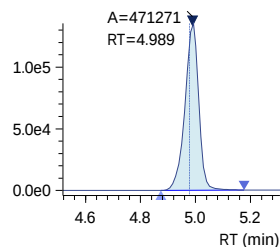
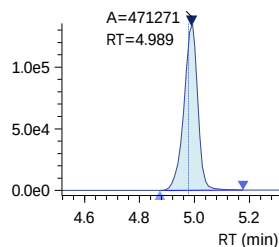
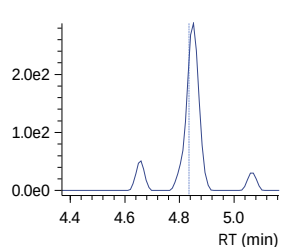
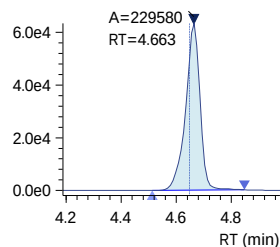
1.35e5

ISTD 318.00>273.00 (-)

1.35e5

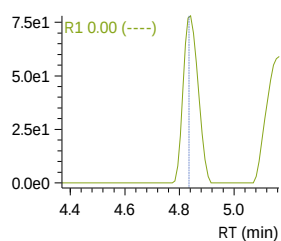
ISTD 315.10>270.00 (-)

1.32e5



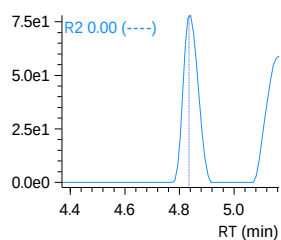
R1 295.00>84.90 (-)

7.80e1



R2 295.00>84.90 (-)

7.80e1





240118_019 (continued)

PFHxA
 Conc. 0.0374

PFEESA
 Conc. ----
 R#1 0.00 (5.88)
 R#2 0.00 (5.88)

13C3-HFPO-DA
 Conc. 9.9673

13C3-HFPO-DA_IS
 Conc. 10.0000

HFPO-DA
 Conc. ----
 R#1 0.00 (63.80)
 R#2 0.00 (63.80)

Q 313.00>269.00 (-)

1.09e3

Q 314.80>135.00 (-)

1.15e2

Q 286.90>168.90 (-)

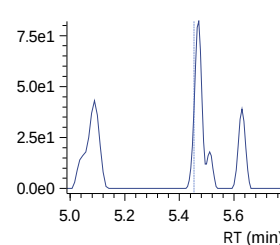
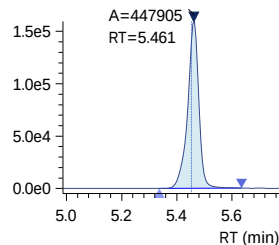
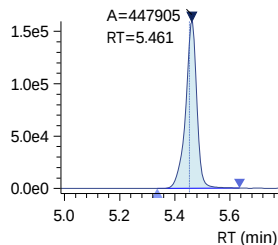
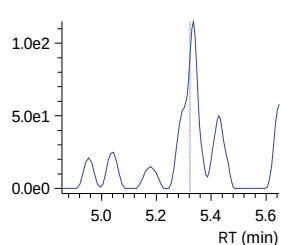
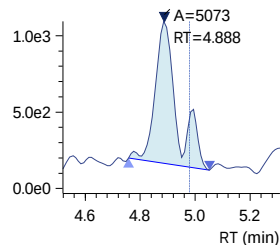
1.60e5

ISTD 286.90>168.90 (-)

1.60e5

Q 284.90>168.90 (-)

8.20e1

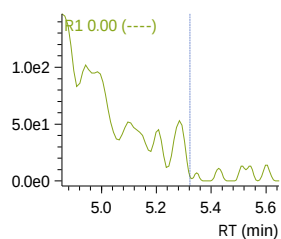


R1 314.80>82.90 (-)

1.47e2

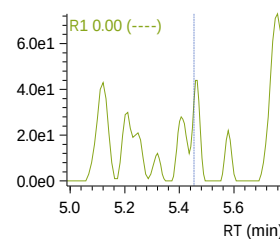
R1 284.90>184.90 (-)

7.30e1



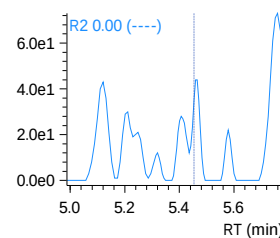
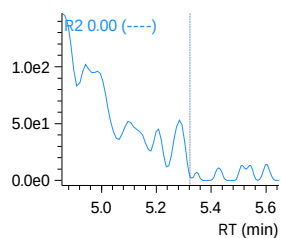
R2 314.80>82.90 (-)

1.47e2



R2 284.90>184.90 (-)

7.30e1





240118_019 (continued)

5_3 FTCA

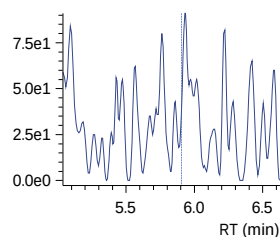
Conc. ----

R#1 0.00 (167.13)

R#2 0.00 (167.13)

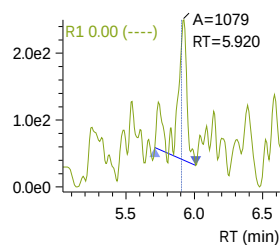
Q 341.00>237.05 (-)

9.10e1



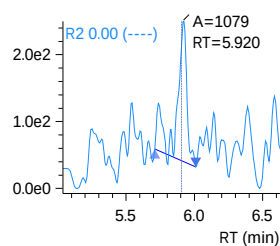
R1 341.00>217.00 (-)

2.50e2



R2 341.00>217.00 (-)

2.50e2



PFPeS

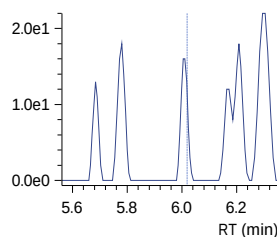
Conc. ----

R#1 0.00 (56.71)

R#2 0.00 (56.71)

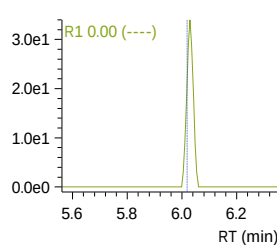
Q 349.10>79.90 (-)

2.20e1



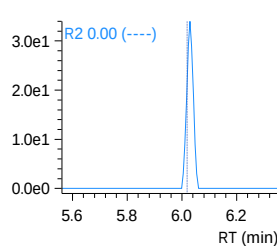
R1 349.10>98.80 (-)

3.40e1



R2 349.10>98.80 (-)

3.40e1

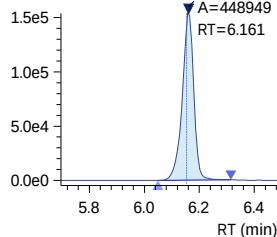


13C4-PFHpa

Conc. 2.5634

Q 367.10>322.00 (-)

1.54e5

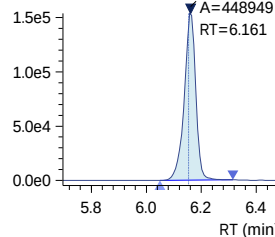


13C4-PFHpa_IS

Conc. 2.5000

ISTD 367.10>322.00 (-)

1.54e5



PFHpA

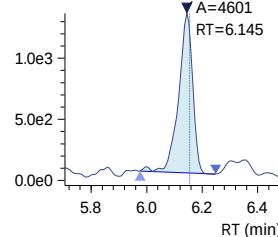
Conc. -0.0107

R#1 29.94 (21.37)

R#2 29.94 (21.37)

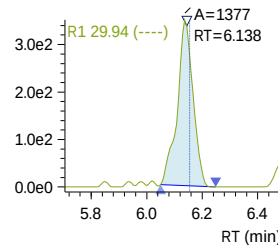
Q 363.10>319.00 (-)

1.37e3



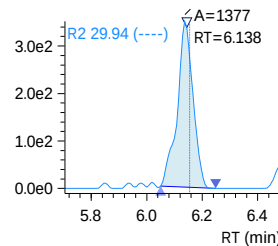
R1 363.10>169.00 (-)

3.52e2



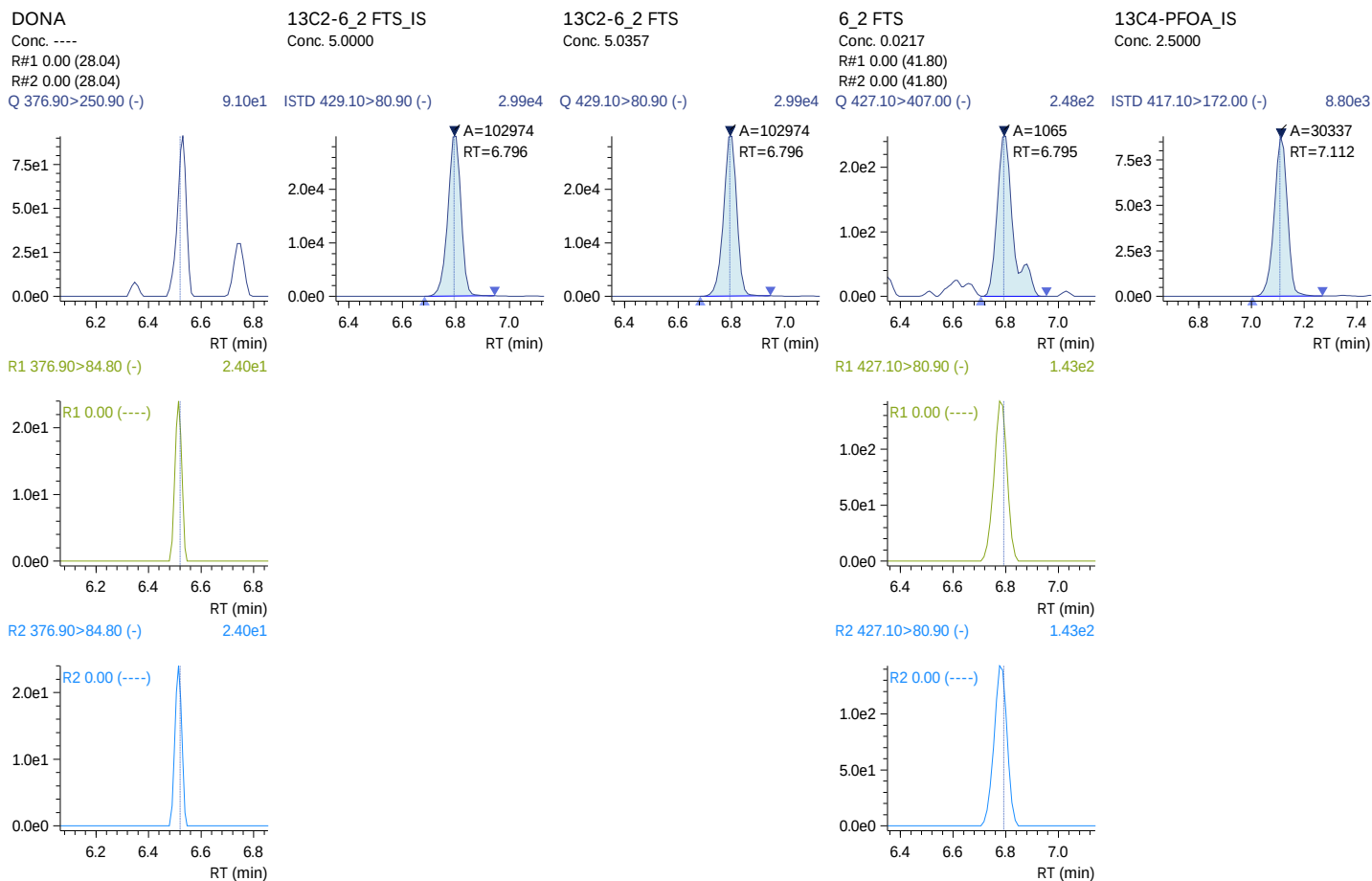
R2 363.10>169.00 (-)

3.52e2





240118_019 (continued)





240118_019 (continued)

13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.6754

PFOA
Conc. -0.0034
R#1 0.00 (29.05)
R#2 0.00 (29.05)

13C3-PFHxS
Conc. 2.5276

13C3-PFHxS_IS
Conc. 2.5000

ISTD 421.10>376.00 (-)

1.34e5

Q 421.10>376.00 (-)

1.34e5

Q 413.00>369.00 (-)

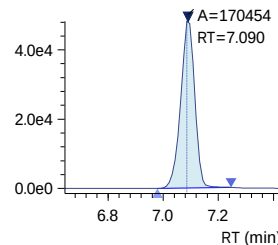
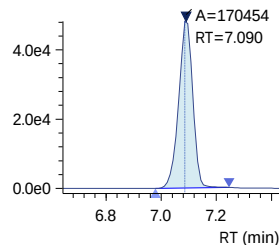
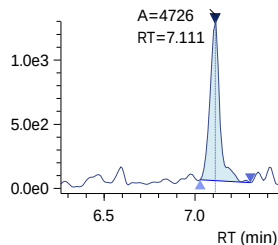
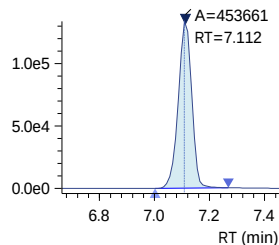
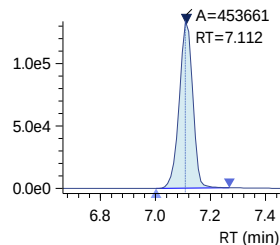
1.30e3

Q 402.10>79.90 (-)

4.82e4

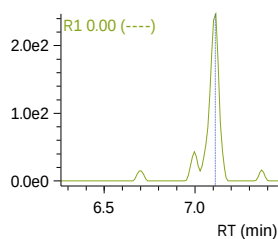
ISTD 402.10>79.90 (-)

4.82e4



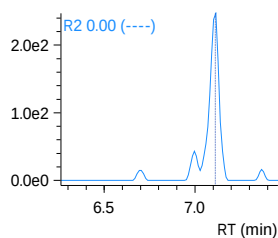
R1 413.00>169.00 (-)

2.47e2



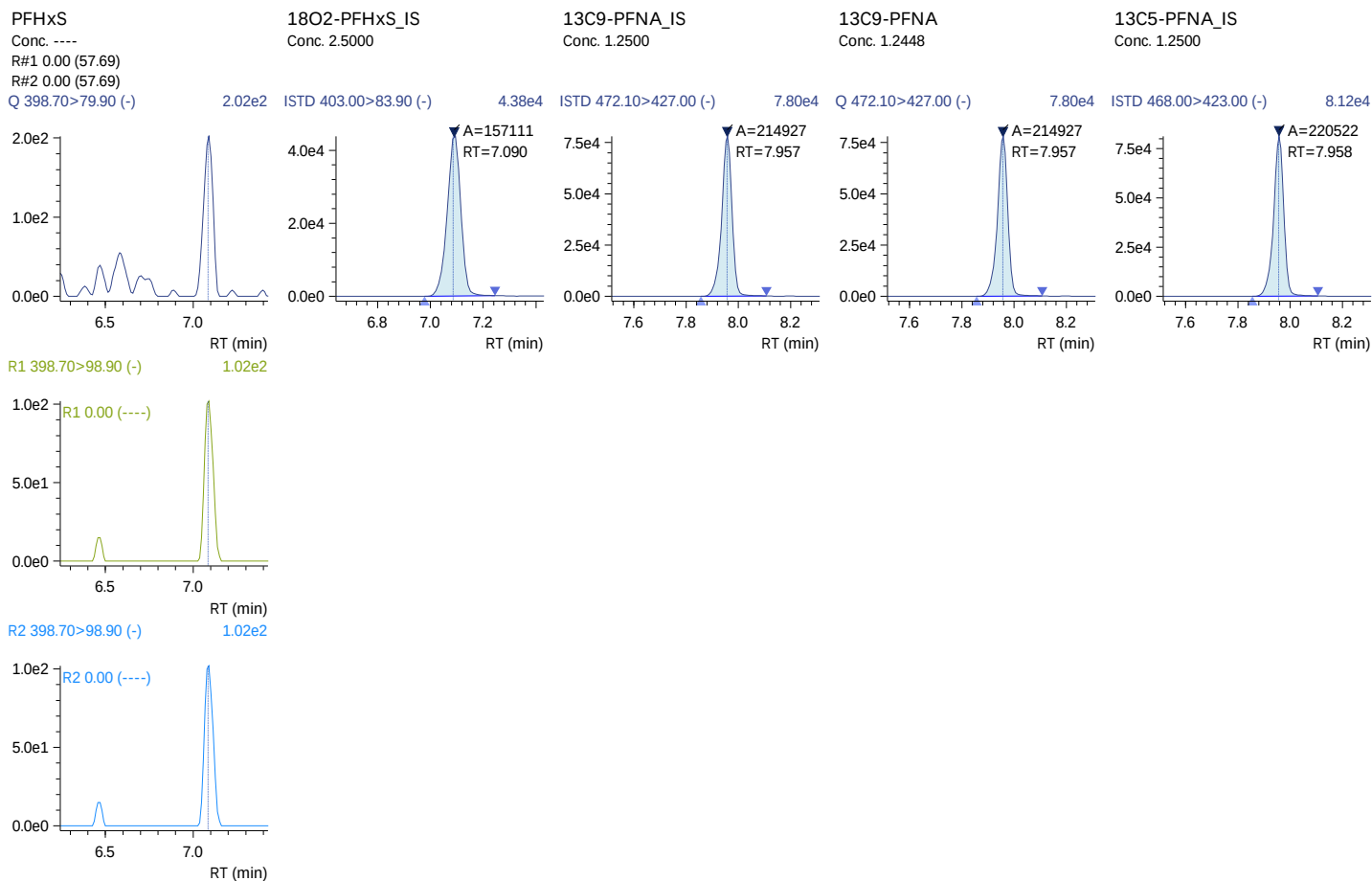
R2 413.00>169.00 (-)

2.47e2



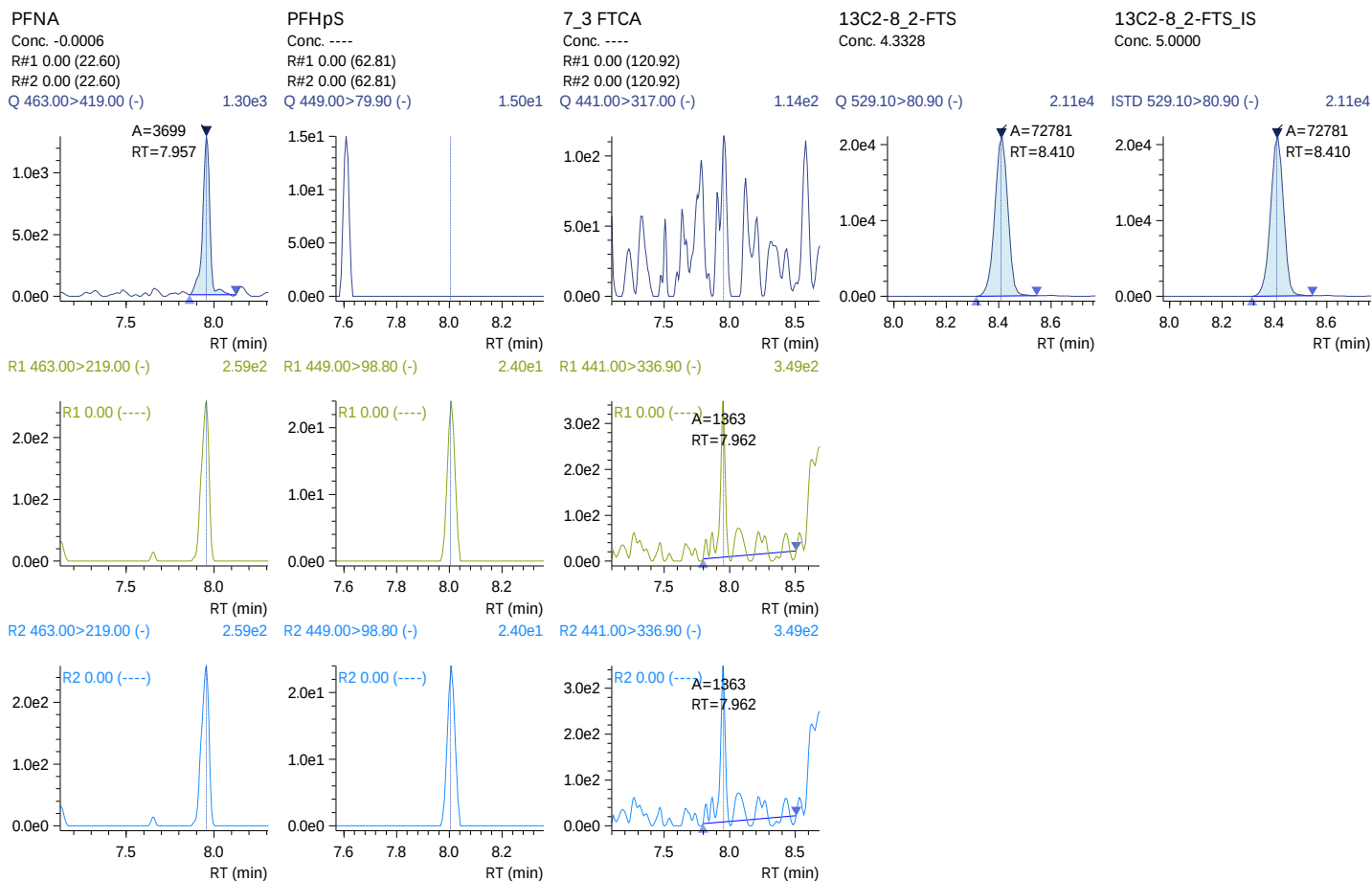


240118_019 (continued)



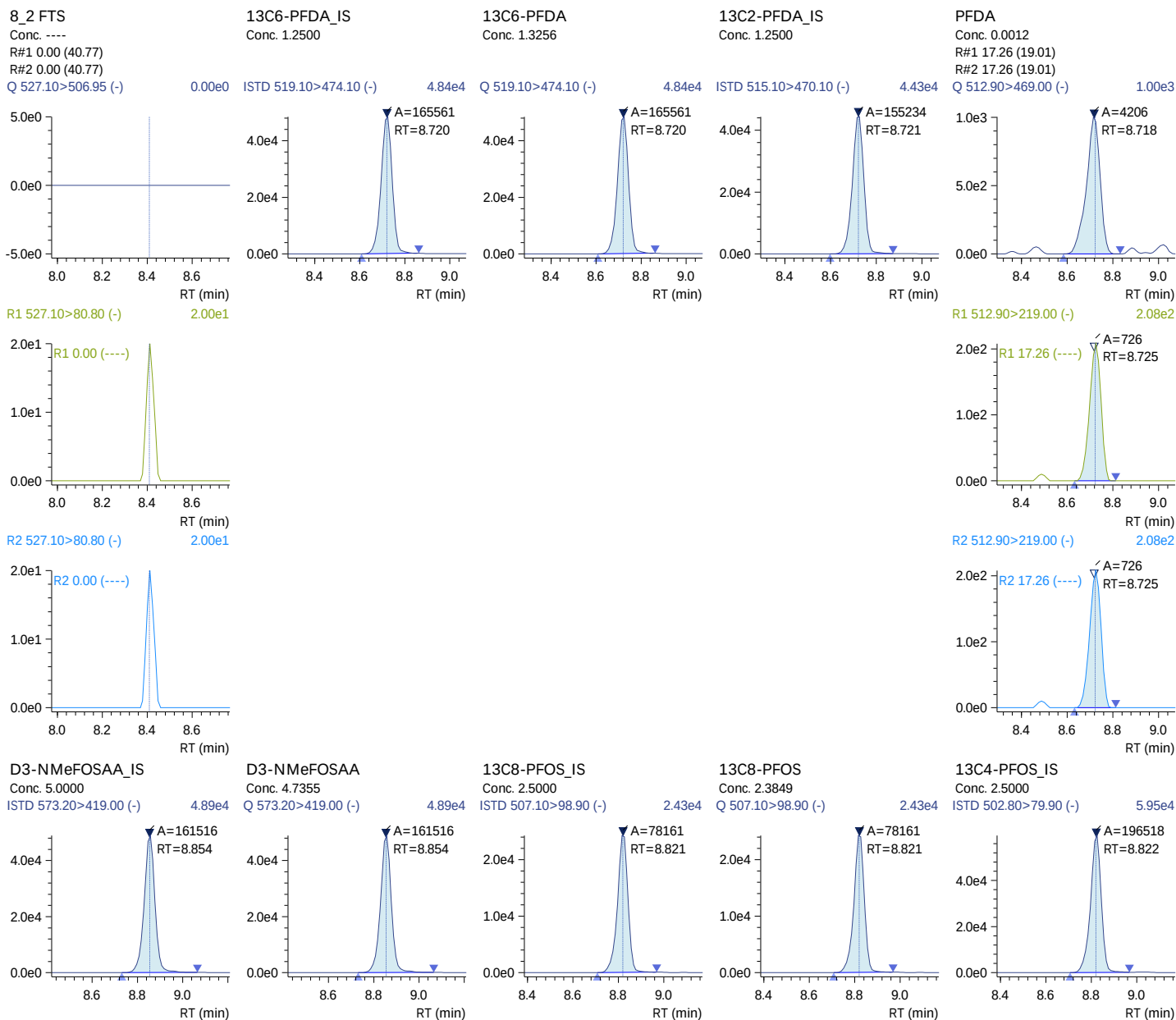


240118_019 (continued)



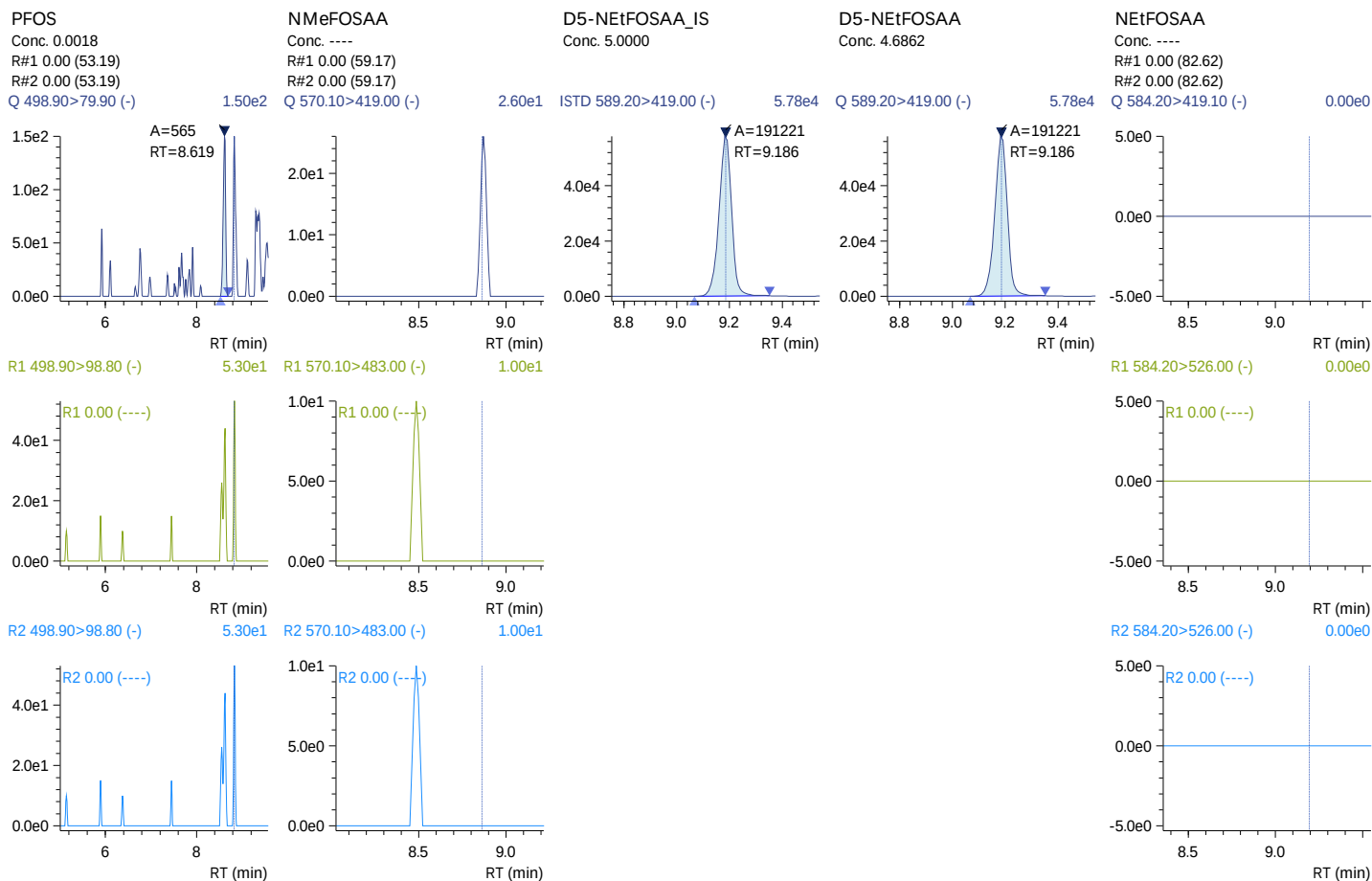


240118_019 (continued)





240118_019 (continued)





240118_019 (continued)

9-Cl-PF3ONS

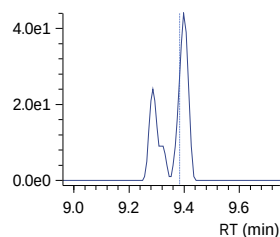
Conc. ----

R#1 0.00 (31.76)

R#2 0.00 (31.76)

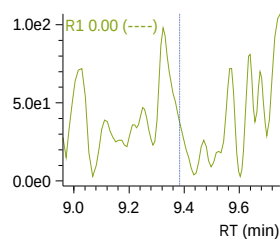
Q 530.80>351.00 (-)

4.40e1



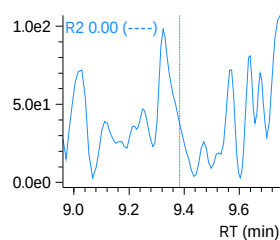
R1 532.80>353.00 (-)

1.07e2



R2 532.80>353.00 (-)

1.07e2



PFUnDA

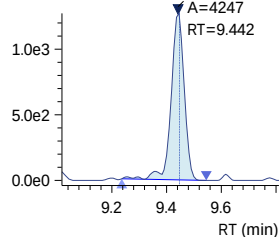
Conc. 0.0007

R#1 0.00 (12.31)

R#2 0.00 (12.31)

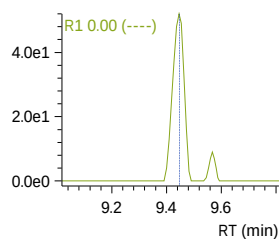
Q 563.10>519.00 (-)

1.27e3



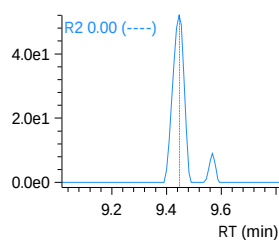
R1 563.10>269.10 (-)

5.20e1



R2 563.10>269.10 (-)

5.20e1

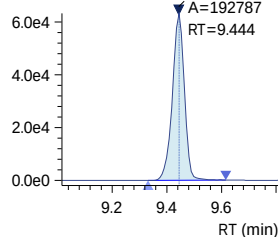


13C7-PFUnDA_IS

Conc. 1.2500

ISTD 570.00>525.10 (-)

6.33e4



R1 570.00>525.10 (-)

6.33e4



R2 570.00>525.10 (-)

6.33e4

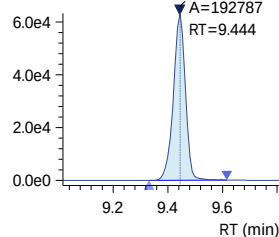


13C7-PFUnDA

Conc. 1.2941

Q 570.00>525.10 (-)

6.33e4



R1 570.00>525.10 (-)

6.33e4



R2 570.00>525.10 (-)

6.33e4



PFNS

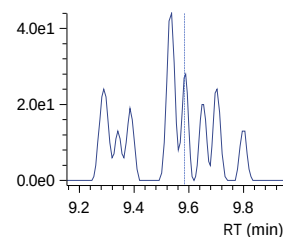
Conc. ----

R#1 0.00 (63.31)

R#2 0.00 (63.31)

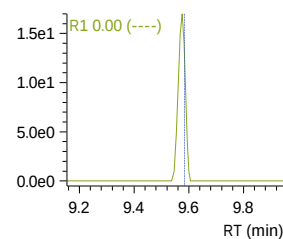
Q 548.80>79.90 (-)

4.40e1



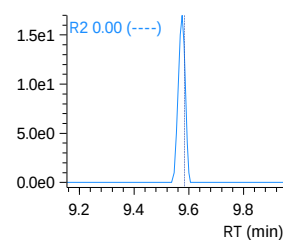
R1 548.80>98.80 (-)

1.70e1



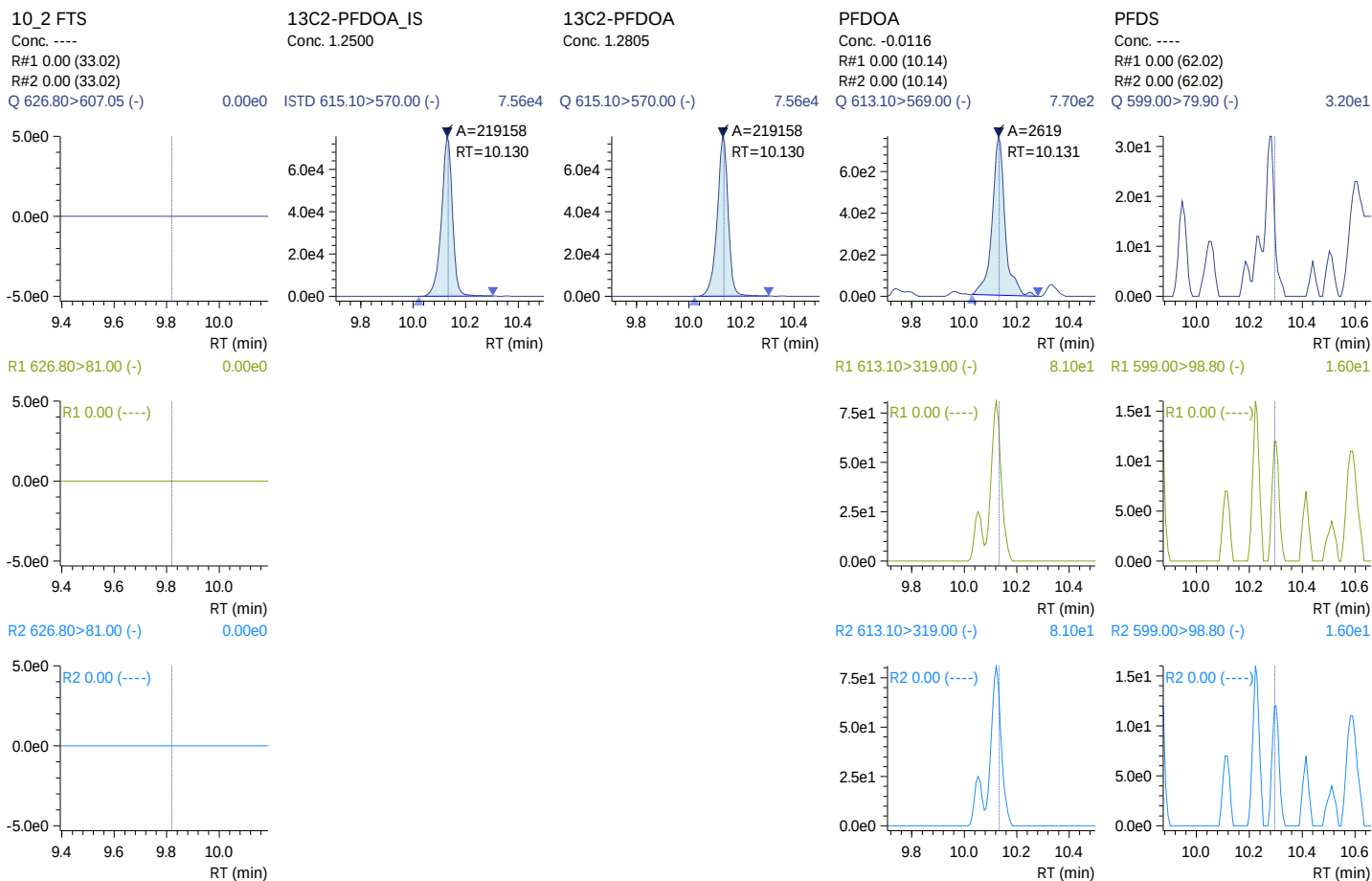
R2 548.80>98.80 (-)

1.70e1



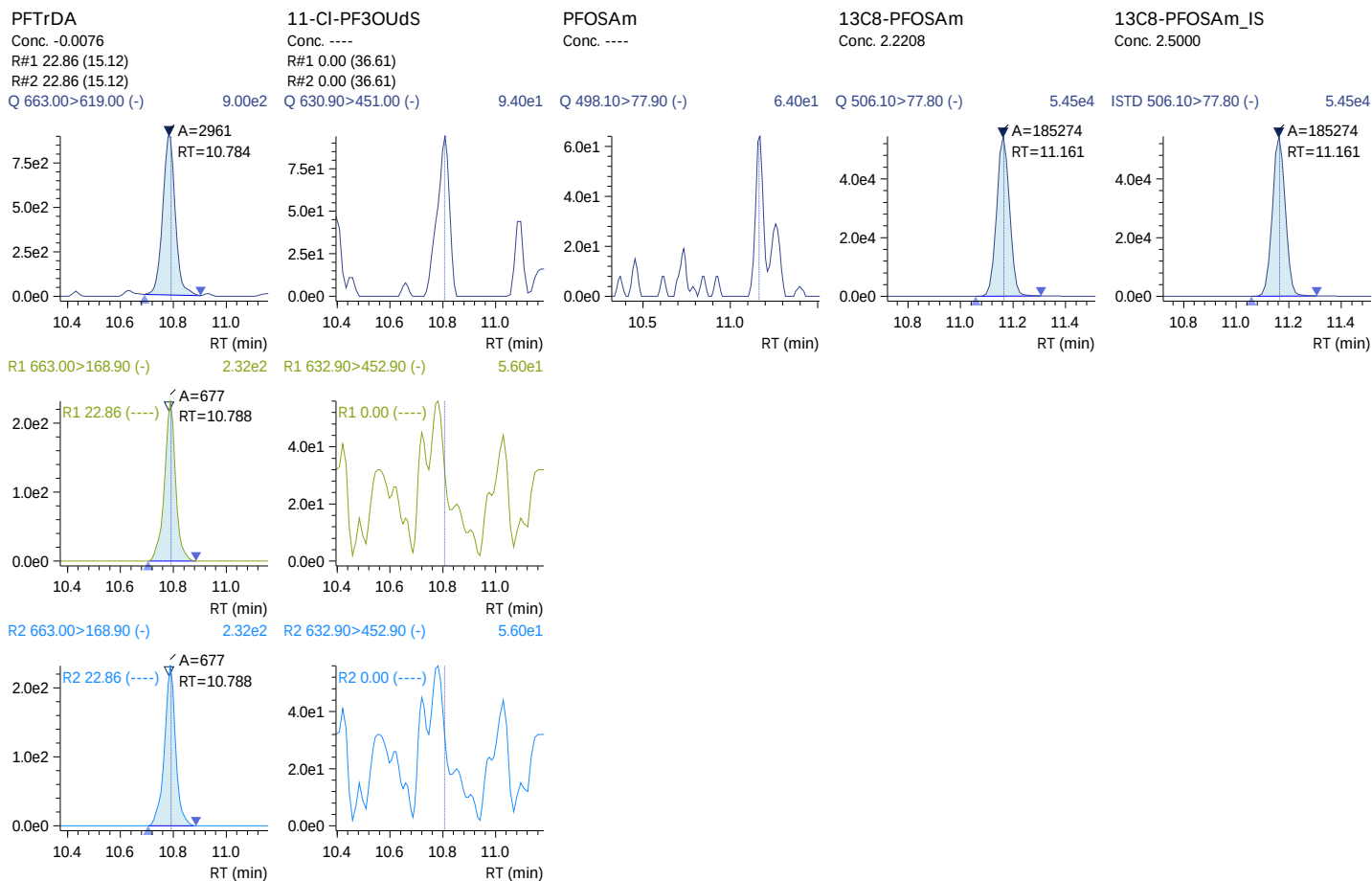


240118_019 (continued)



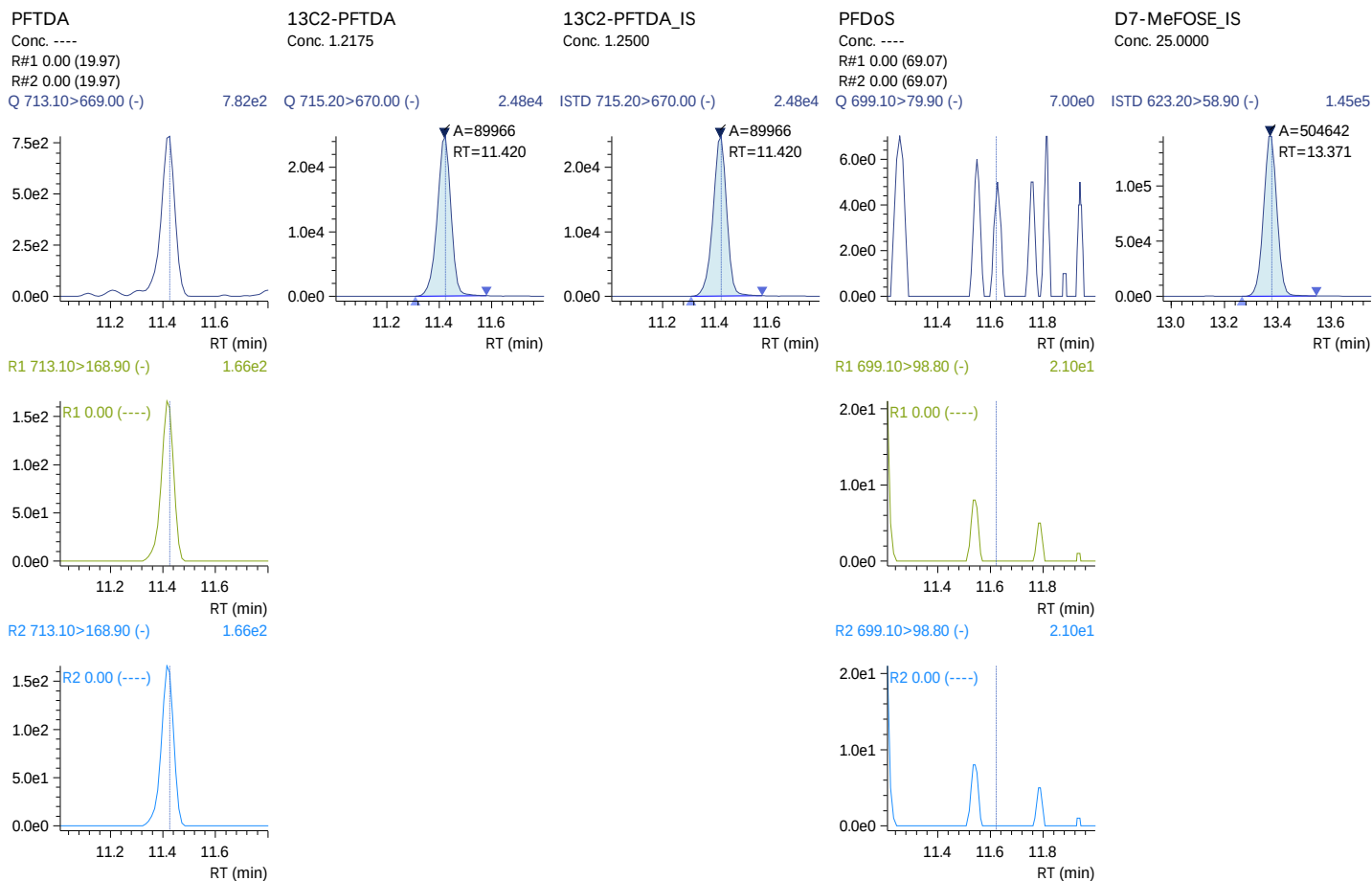


240118_019 (continued)





240118_019 (continued)





240118_019 (continued)

D7-MeFOSE
 Conc. 24.5350

MeFOSE
 Conc. ----

13C2-PFHxDA_IS
 Conc. 2.5000

13C2-PFHxDA
 Conc. 2.4202

PFHxDA

Conc. -0.0043
 R#1 0.00 (11.64)
 R#2 0.00 (11.64)

Q 623.20>58.90 (-)

1.45e5

Q 616.10>59.00 (-)

4.10e1

ISTD 815.00>770.05 (-)

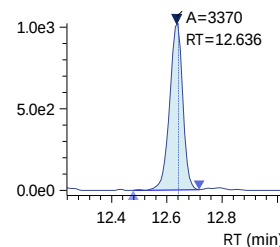
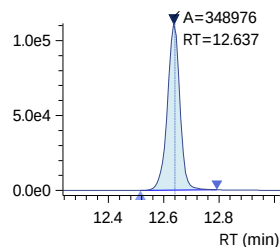
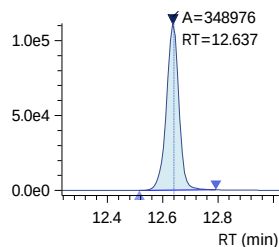
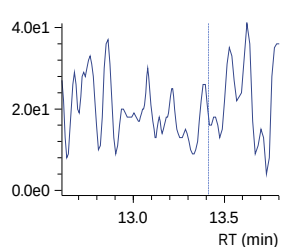
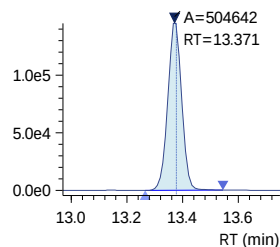
1.11e5

Q 815.00>770.05 (-)

1.11e5

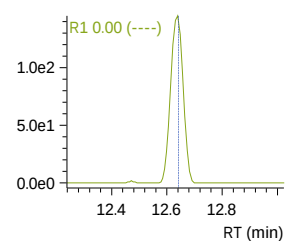
Q 813.00>768.95 (-)

1.02e3



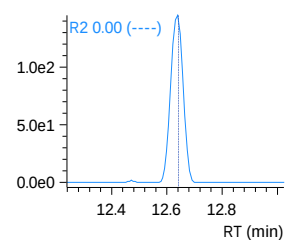
R1 813.00>218.95 (-)

1.45e2



R2 813.00>218.95 (-)

1.45e2





240118_019 (continued)

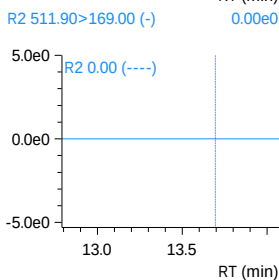
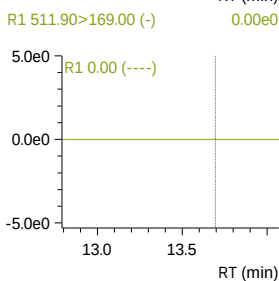
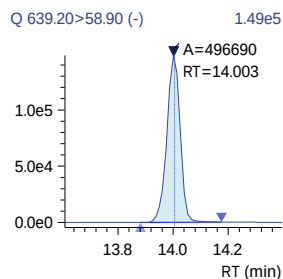
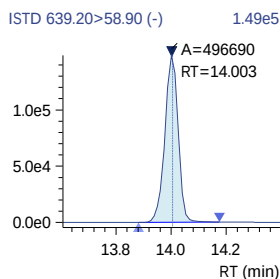
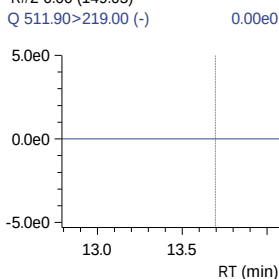
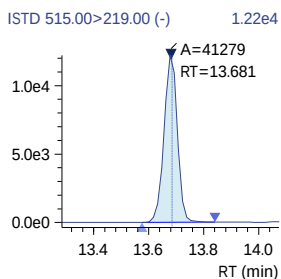
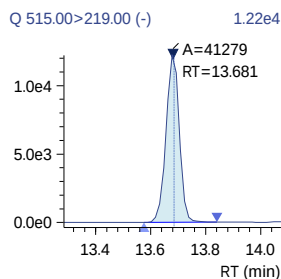
D3-MeFOSA
 Conc. 2.4570

D3-MeFOSA_IS
 Conc. 2.5000

MeFOSA
 Conc. ----
 R#1 0.00 (149.05)
 R#2 0.00 (149.05)
 Q 511.90>219.00 (-)

D9-EtFOSE_IS
 Conc. 25.0000

D9-EtFOSE
 Conc. 23.7762





240118_019 (continued)

EtFOSE
Conc. ----

D5-EtFOSAm
Conc. 2.4184

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. ----

PFODA
Conc. 0.0100

Q 630.00>59.00 (-)

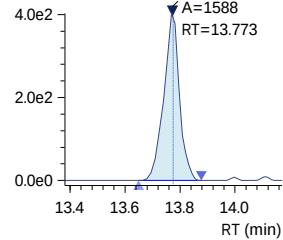
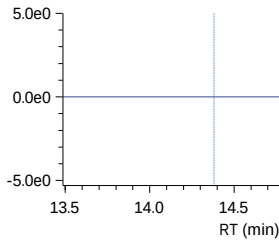
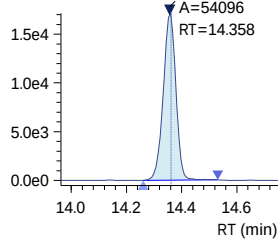
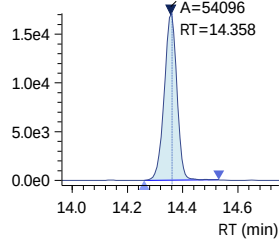
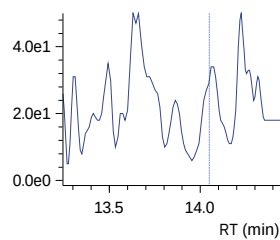
5.00e1 Q 531.10>219.00 (-)

1.71e4 ISTD 531.10>219.00 (-)

1.71e4 Q 526.00>219.00 (-)

0.00e0 Q 913.00>868.65 (-)

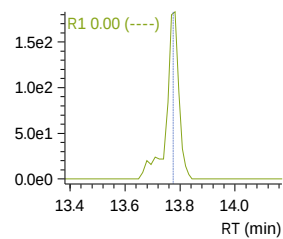
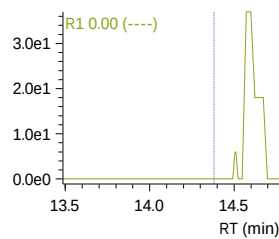
4.03e2



R1 526.00>169.00 (-)

3.70e1 R1 913.00>169.00 (-)

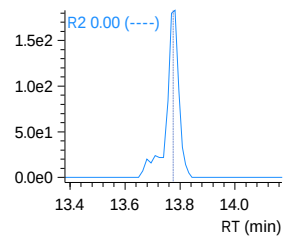
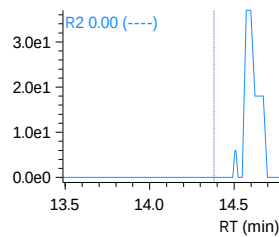
1.83e2



R2 526.00>169.00 (-)

3.70e1 R2 913.00>169.00 (-)

1.83e2





240118_020

Sample ID: 1633 QIS
Date Acquired: 1/18/2024 7:30:05 PM
Acquired by: System Administrator
Data File: 240118_020
Vial: 13 | Inj. Volume: 10.0000uL | Tray: 1

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	1259422	----	----	----	----	----	----	----
13C4-PFBA_IS	216.80>171.90	----	1259422	----	----	----	----	----	----	----
13C3-PFBA_IS	216.00>172.00	----	550128	----	----	----	----	----	----	----
PFBA	212.80>169.05	----	----	----	----	----	----	----	----	----
PFMPA	229.00>84.90	----	----	----	----	----	----	----	----	----
3_3 FTCA	241.00>177.10	241.00>117.00	----	0	0.00	141.17	0	0.00	141.17	----
13C5-PFPeA	268.30>223.00	----	130508	----	----	----	----	----	----	----
13C5-PFPeA_IS	268.30>223.00	----	130508	----	----	----	----	----	----	----
PFPeA	263.00>219.00	----	----	----	----	----	----	----	----	----
PFMBA	279.00>84.95	----	----	----	----	----	----	----	----	----
13C2-4_2 FTS	329.10>80.90	----	141099	----	----	----	----	----	----	----
13C2-4_2 FTS_IS	329.10>80.90	----	141099	----	----	----	----	----	----	----
4_2 FTS	327.10>307.00	327.10>80.90	----	0	0.00	29.06	0	0.00	29.06	----
13C3-PFBS_IS	302.10>79.90	----	323419	----	----	----	----	----	----	----
PFBS	298.70>79.90	298.70>98.80	----	0	0.00	46.72	0	0.00	46.72	----
13C3-PFBS	302.10>79.90	----	323419	----	----	----	----	----	----	----
NFDHA	295.00>201.00	295.00>84.90	----	0	0.00	40.25	0	0.00	40.25	----
13C5-PFHxA	318.00>273.00	----	645073	----	----	----	----	----	----	----
13C5-PFHxA_IS	318.00>273.00	----	645073	----	----	----	----	----	----	----
13C2-PFHxA_IS	315.10>270.00	----	602297	----	----	----	----	----	----	----
PFHxA	313.00>269.00	----	----	----	----	----	----	----	----	----
PFEESA	314.80>135.00	314.80>82.90	----	0	0.00	6.11	0	0.00	6.11	----
13C3-HFPO-DA	286.90>168.90	----	596587	----	----	----	----	----	----	----
13C3-HFPO-DA_IS	286.90>168.90	----	596587	----	----	----	----	----	----	----
HFPO-DA	284.90>168.90	284.90>184.90	----	0	0.00	65.61	0	0.00	65.61	----
5_3 FTCA	341.00>237.05	341.00>217.00	----	0	0.00	158.86	0	0.00	158.86	----
PFPeS	349.10>79.90	349.10>98.80	----	0	0.00	55.80	0	0.00	55.80	----
13C4-PFHpA	367.10>322.00	----	608359	----	----	----	----	----	----	----
13C4-PFHpA_IS	367.10>322.00	----	608359	----	----	----	----	----	----	----
PFHpA	363.10>319.00	363.10>169.00	----	0	0.00	21.50	0	0.00	21.50	----
DONA	376.90>250.90	376.90>84.80	----	0	0.00	29.66	0	0.00	29.66	----
13C2-6_2 FTS_IS	429.10>80.90	----	125326	----	----	----	----	----	----	----
13C2-6_2 FTS	429.10>80.90	----	125326	----	----	----	----	----	----	----
6_2 FTS	427.10>407.00	427.10>80.90	----	0	0.00	41.15	0	0.00	41.15	----
13C4-PFOA_IS	417.10>172.00	----	44626	----	----	----	----	----	----	----
13C8-PFOA_IS	421.10>376.00	----	630860	----	----	----	----	----	----	----

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240118_020 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	630860	----	----	----	----	----	----	----
PFOA	413.00>369.00	413.00>169.00	146186	46817	32.03	31.89	46817	32.03	31.89	
13C3-PFHxS	402.10>79.90	----	225446	----	----	----	----	----	----	----
13C3-PFHxS_IS	402.10>79.90	----	225446	----	----	----	----	----	----	----
PFHxS	398.70>79.90	398.70>98.90	----	0	0.00	56.62	0	0.00	56.62	
18O2-PFHxS_IS	403.00>83.90	----	206354	----	----	----	----	----	----	----
13C9-PFNA_IS	472.10>427.00	----	298537	----	----	----	----	----	----	----
13C9-PFNA	472.10>427.00	----	298537	----	----	----	----	----	----	----
13C5-PFNA_IS	468.00>423.00	----	303873	----	----	----	----	----	----	----
PFNA	463.00>419.00	463.00>219.00	476922	0	0.00	23.17	0	0.00	23.17	IRr, RTi
PFHpS	449.00>79.90	449.00>98.80	----	0	0.00	56.96	0	0.00	56.96	
7_3 FTCA	441.00>317.00	441.00>336.90	----	0	0.00	117.47	0	0.00	117.47	
13C2-8_2-FTS	529.10>80.90	----	121489	----	----	----	----	----	----	----
13C2-8_2-FTS_IS	529.10>80.90	----	121489	----	----	----	----	----	----	----
8_2 FTS	527.10>506.95	527.10>80.80	----	0	0.00	49.59	0	0.00	49.59	
13C6-PFDA_IS	519.10>474.10	----	224603	----	----	----	----	----	----	----
13C6-PFDA	519.10>474.10	----	224603	----	----	----	----	----	----	----
13C2-PFDA_IS	515.10>470.10	----	195574	----	----	----	----	----	----	----
PFDA	512.90>469.00	512.90>219.00	----	0	0.00	19.00	0	0.00	19.00	
D3-NMeFOSAA_IS	573.20>419.00	----	230003	----	----	----	----	----	----	----
D3-NMeFOSAA	573.20>419.00	----	230003	----	----	----	----	----	----	----
13C8-PFOS_IS	507.10>98.90	----	102125	----	----	----	----	----	----	----
13C8-PFOS	507.10>98.90	----	102125	----	----	----	----	----	----	----
13C4-PFOS_IS	502.80>79.90	----	247964	----	----	----	----	----	----	----
PFOS	498.90>79.90	498.90>98.80	----	0	0.00	52.47	0	0.00	52.47	
NMeFOSAA	570.10>419.00	570.10>483.00	----	0	0.00	55.15	0	0.00	55.15	
D5-NEtFOSAA_IS	589.20>419.00	----	252595	----	----	----	----	----	----	----
D5-NEtFOSAA	589.20>419.00	----	252595	----	----	----	----	----	----	----
NEtFOSAA	584.20>419.10	584.20>526.00	----	0	0.00	81.95	0	0.00	81.95	
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	----	0	0.00	32.76	0	0.00	32.76	
PFUnDA	563.10>519.00	563.10>269.10	----	0	0.00	13.12	0	0.00	13.12	
13C7-PFUnDA_IS	570.00>525.10	----	268499	----	----	----	----	----	----	----
13C7-PFUnDA	570.00>525.10	----	268499	----	----	----	----	----	----	----
PFNS	548.80>79.90	548.80>98.80	----	0	0.00	65.22	0	0.00	65.22	
10_2 FTS	626.80>607.05	626.80>81.00	----	0	0.00	37.13	0	0.00	37.13	
13C2-PFDOA_IS	615.10>570.00	----	294881	----	----	----	----	----	----	----
13C2-PFDOA	615.10>570.00	----	294881	----	----	----	----	----	----	----
PFDOA	613.10>569.00	613.10>319.00	----	0	0.00	11.29	0	0.00	11.29	
PFDS	599.00>79.90	599.00>98.80	----	0	0.00	60.18	0	0.00	60.18	
PFTDA	663.00>619.00	663.00>168.90	----	0	0.00	17.64	0	0.00	17.64	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240118_020 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	----	0	0.00	36.44	0	0.00	36.44	
PFOSAm	498.10>77.90	----	----	----	----	----	----	----	----	
13C8-PFOSAm	506.10>77.80	----	271787	----	----	----	----	----	----	
13C8-PFOSAm_IS	506.10>77.80	----	271787	----	----	----	----	----	----	
PFTDA	713.10>669.00	713.10>168.90	----	0	0.00	22.96	0	0.00	22.96	
13C2-PFTDA	715.20>670.00	----	127902	----	----	----	----	----	----	
13C2-PFTDA_IS	715.20>670.00	----	127902	----	----	----	----	----	----	
PFDoS	699.10>79.90	699.10>98.80	----	0	0.00	67.40	0	0.00	67.40	
D7-MeFOSE_IS	623.20>58.90	----	717755	----	----	----	----	----	----	
D7-MeFOSE	623.20>58.90	----	717755	----	----	----	----	----	----	
MeFOSE	616.10>59.00	----	----	----	----	----	----	----	----	
13C2-PFHxDA_IS	815.00>770.05	----	508875	----	----	----	----	----	----	
13C2-PFHxDA	815.00>770.05	----	508875	----	----	----	----	----	----	
PFHxDA	813.00>768.95	813.00>218.95	----	0	0.00	13.90	0	0.00	13.90	
D3-MeFOSA	515.00>219.00	----	54281	----	----	----	----	----	----	
D3-MeFOSA_IS	515.00>219.00	----	54281	----	----	----	----	----	----	
MeFOSA	511.90>219.00	511.90>169.00	----	0	0.00	140.79	0	0.00	140.79	
D9-EtFOSE_IS	639.20>58.90	----	709094	----	----	----	----	----	----	
D9-EtFOSE	639.20>58.90	----	709094	----	----	----	----	----	----	
EtFOSE	630.00>59.00	----	----	----	----	----	----	----	----	
D5-EtFOSAm	531.10>219.00	----	74458	----	----	----	----	----	----	
D5-EtFOSAm_IS	531.10>219.00	----	74458	----	----	----	----	----	----	
EtFOSAm	526.00>219.00	526.00>169.00	----	0	0.00	163.90	0	0.00	163.90	
PFODA	913.00>868.65	913.00>169.00	----	0	0.00	27.03	0	0.00	27.03	

Flag ID key: IRr: Ion Ratio (Relative), RTi: RT Diff (Absolute ISTD)



Check PFOA and PFNA

Insight Report
Quantitation/Integration
Printed 1/19/2024 15:46:58

240118_020

Sample ID: 1633 QIS
Date Acquired: 1/18/2024 7:30:05 PM
Acquired by: System Administrator
Data File: 240118_020
Vial: 13 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Std. Conc.	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.418	0.004	-0.001	1259422	550128	13C3-PFBA_IS	----	10.2422	ng/mL	
13C4-PFBA_IS	Auto	1.418	0.004	----	1259422	1259422	----	----	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.419	0.004	----	550128	550128	----	----	5.0000	ng/mL	
PFBA	ND(W/B)	----	----	----	----	1259422	13C4-PFBA_IS	----	----	ng/mL	
PFMPA	ND(W/B)	----	----	----	----	130508	13C5-PFPeA_IS	----	----	ng/mL	
3_3 FTCA	ND(W/B)	----	----	----	----	130508	13C5-PFPeA_IS	----	----	ng/mL	
13C5-PFPeA	Auto	3.496	0.004	-1.489	130508	602297	13C2-PFHxA_IS	----	4.8004	ng/mL	
13C5-PFPeA_IS	Auto	3.496	0.004	----	130508	130508	----	----	5.0000	ng/mL	
PFPeA	ND(W/B)	----	----	----	----	130508	13C5-PFPeA_IS	----	----	ng/mL	
PFMBA	ND(W/B)	----	----	----	----	130508	13C5-PFPeA_IS	----	----	ng/mL	
13C2-4_2 FTS	Auto	4.667	0.006	-2.425	141099	206354	18O2-PFHxS_IS	----	4.9688	ng/mL	
13C2-4_2 FTS_IS	Auto	4.667	0.006	----	141099	141099	----	----	5.0000	ng/mL	
4_2 FTS	ND(W/B)	----	----	----	----	141099	13C2-4_2 FTS_IS	----	----	ng/mL	
13C3-PFBS_IS	Auto	4.652	0.005	----	323419	323419	----	----	2.5000	ng/mL	
PFBS	ND(W/B)	----	----	----	----	323419	13C3-PFBS_IS	----	----	ng/mL	
13C3-PFBS	Auto	4.652	0.005	-2.440	323419	206354	18O2-PFHxS_IS	----	2.7618	ng/mL	
NFDHA	ND(W/B)	----	----	----	----	645073	13C5-PFHxA_IS	----	----	ng/mL	
13C5-PFHxA	Auto	4.985	0.007	0.000	645073	602297	13C2-PFHxA_IS	----	2.5413	ng/mL	
13C5-PFHxA_IS	Auto	4.985	0.007	----	645073	645073	----	----	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	4.985	0.006	----	602297	602297	----	----	2.5000	ng/mL	
PFHxA	ND(W/B)	----	----	----	----	645073	13C5-PFHxA_IS	----	----	ng/mL	
PFEESA	ND(W/B)	----	----	----	----	645073	13C5-PFHxA_IS	----	----	ng/mL	
13C3-HFPO-DA	Auto	5.458	0.006	0.473	596587	602297	13C2-PFHxA_IS	----	10.1186	ng/mL	
13C3-HFPO-DA_IS	Auto	5.458	0.006	----	596587	596587	----	----	10.0000	ng/mL	
HFPO-DA	ND(W/B)	----	----	----	----	596587	13C3-HFPO-DA_IS	----	----	ng/mL	
5_3 FTCA	ND(W/B)	----	----	----	----	645073	13C5-PFHxA_IS	----	----	ng/mL	
PFPeS	ND(W/B)	----	----	----	----	225446	13C3-PFHxS_IS	----	----	ng/mL	
13C4-PFHpA	Auto	6.160	0.006	1.175	608359	602297	13C2-PFHxA_IS	----	2.6475	ng/mL	
13C4-PFHpA_IS	Auto	6.160	0.006	----	608359	608359	----	----	2.5000	ng/mL	
PFHpA	ND(W/B)	----	----	----	----	608359	13C4-PFHpA_IS	----	----	ng/mL	
DONA	ND(W/B)	----	----	----	----	596587	13C3-HFPO-DA_IS	----	----	ng/mL	
13C2-6_2 FTS_IS	Auto	6.798	0.005	----	125326	125326	----	----	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.798	0.005	-0.294	125326	206354	18O2-PFHxS_IS	----	4.6663	ng/mL	
6_2 FTS	ND(W/B)	----	----	----	----	125326	13C2-6_2 FTS_IS	----	----	ng/mL	
13C4-PFOA_IS	Auto	7.115	0.008	----	44626	44626	----	----	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.114	0.007	----	630860	630860	----	----	2.5000	ng/mL	
13C8-PFOA	Auto	7.114	0.007	-0.001	630860	44626	13C4-PFOA_IS	----	2.5292	ng/mL	
PFOA	M	7.116	0.006	0.002	146186	630860	13C8-PFOA_IS	----	0.8541	ng/mL	
13C3-PFHxS	Auto	7.092	0.006	0.000	225446	206354	18O2-PFHxS_IS	----	2.5453	ng/mL	
13C3-PFHxS_IS	Auto	7.092	0.006	----	225446	225446	----	----	2.5000	ng/mL	
PFHxS	ND(W/B)	----	----	----	----	225446	13C3-PFHxS_IS	----	----	ng/mL	
18O2-PFHxS_IS	Auto	7.092	0.006	----	206354	206354	----	----	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.961	0.005	----	298537	298537	----	----	1.2500	ng/mL	
13C9-PFNA	Auto	7.961	0.005	0.000	298537	303873	13C5-PFNA_IS	----	1.2547	ng/mL	
13C5-PFNA_IS	Auto	7.961	0.005	----	303873	303873	----	----	1.2500	ng/mL	
PFNA	M	7.700	-0.257	-0.261	476922	298537	13C9-PFNA_IS	----	2.7761	ng/mL	RTi
PFHpS	ND(W/B)	----	----	----	----	102125	13C8-PFOS_IS	----	----	ng/mL	
7_3 FTCA	ND(W/B)	----	----	----	----	645073	13C5-PFHxA_IS	----	----	ng/mL	
13C2-8_2-FTS	Auto	8.416	0.007	1.324	121489	206354	18O2-PFHxS_IS	----	5.5066	ng/mL	
13C2-8_2-FTS_IS	Auto	8.416	0.007	----	121489	121489	----	----	5.0000	ng/mL	
8_2 FTS	ND(W/B)	----	----	----	----	121489	13C2-8_2-FTS_IS	----	----	ng/mL	
13C6-PFDA_IS	Auto	8.726	0.006	----	224603	224603	----	----	1.2500	ng/mL	
13C6-PFDA	Auto	8.726	0.006	0.000	224603	195574	13C2-PFDA_IS	----	1.4275	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_020 (continued)

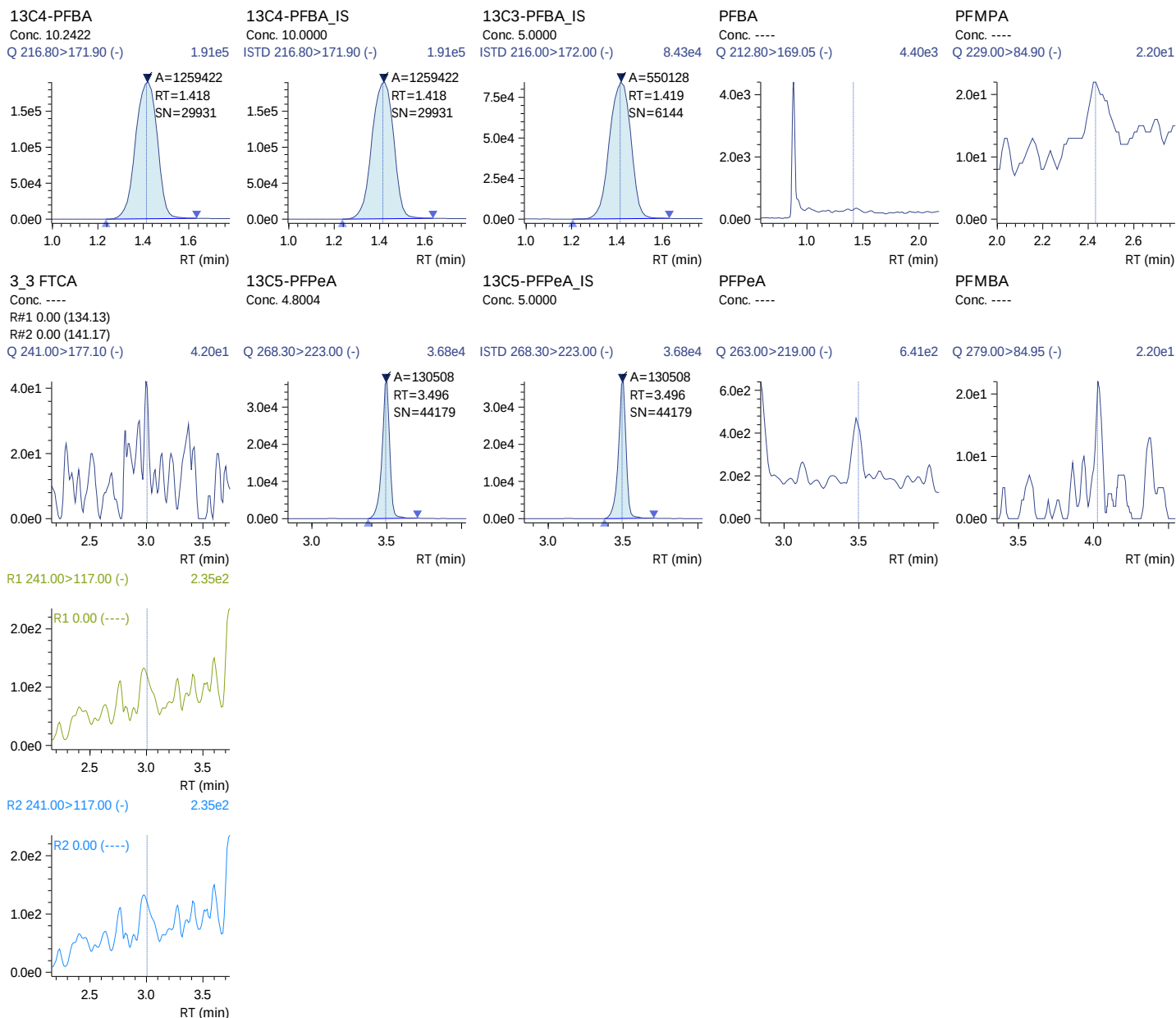
(Table continued from previous page)

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Std. Conc.	Conc.	Unit	Flag ID
13C2-PFDA_IS	Auto	8.726	0.005	----	195574	195574	----	----	1.2500	ng/mL	
PFDA	ND(W/B)	----	----	----	----	224603	13C6-PFDA_IS	----	----	ng/mL	
D3-NMeFOSAA_IS	Auto	8.859	0.004	----	230003	230003	----	----	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.859	0.004	0.034	230003	247964	13C4-PFOS_IS	----	5.3444	ng/mL	
13C8-PFOS_IS	Auto	8.825	0.005	----	102125	102125	----	----	2.5000	ng/mL	
13C8-PFOS	Auto	8.825	0.005	0.000	102125	247964	13C4-PFOS_IS	----	2.4695	ng/mL	
13C4-PFOS_IS	Auto	8.825	0.005	----	247964	247964	----	----	2.5000	ng/mL	
PFOS	ND(W/B)	----	----	----	----	102125	13C8-PFOS_IS	----	----	ng/mL	
NMeFOSAA	ND(W/B)	----	----	----	----	230003	D3-NMeFOSAA_IS	----	----	ng/mL	
D5-NetFOSAA_IS	Auto	9.189	0.003	----	252595	252595	----	----	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.189	0.003	0.364	252595	247964	13C4-PFOS_IS	----	4.9060	ng/mL	
NetFOSAA	ND(W/B)	----	----	----	----	252595	D5-NetFOSAA_IS	----	----	ng/mL	
9-CI-PF3ONS	ND(W/B)	----	----	----	----	596587	13C3-HFPO-DA_IS	----	----	ng/mL	
PFUnDA	ND(W/B)	----	----	----	----	268499	13C7-PFUnDA_IS	----	----	ng/mL	
13C7-PFUnDA_IS	Auto	9.448	0.003	----	268499	268499	----	----	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.448	0.003	0.722	268499	195574	13C2-PFDA_IS	----	1.4306	ng/mL	
PFNS	ND(W/B)	----	----	----	----	102125	13C8-PFOS_IS	----	----	ng/mL	
10_2_FTS	ND(W/B)	----	----	----	----	121489	13C2-8_2-FTS_IS	----	----	ng/mL	
13C2-PFDOA_IS	Auto	10.134	0.001	----	294881	294881	----	----	1.2500	ng/mL	
13C2-PFDOA	Auto	10.134	0.001	1.408	294881	195574	13C2-PFDA_IS	----	1.3676	ng/mL	
PFDOA	ND(W/B)	----	----	----	----	294881	13C2-PFDOA_IS	----	----	ng/mL	
PFDS	ND(W/B)	----	----	----	----	102125	13C8-PFOS_IS	----	----	ng/mL	
PFTDA	ND(W/B)	----	----	----	----	127902	13C2-PFTDA_IS	----	----	ng/mL	
11-CI-PF3OUdS	ND(W/B)	----	----	----	----	596587	13C3-HFPO-DA_IS	----	----	ng/mL	
PFOSAm	ND(W/B)	----	----	----	----	271787	13C8-PFOSAm_IS	----	----	ng/mL	
13C8-PFOSAm	Auto	11.168	0.003	2.343	271787	247964	13C4-PFOS_IS	----	2.5819	ng/mL	
13C8-PFOSAm_IS	Auto	11.168	0.003	----	271787	271787	----	----	2.5000	ng/mL	
PFTDA	ND(W/B)	----	----	----	----	127902	13C2-PFTDA_IS	----	----	ng/mL	
13C2-PFTDA	Auto	11.425	0.001	2.699	127902	195574	13C2-PFDA_IS	----	1.3738	ng/mL	
13C2-PFTDA_IS	Auto	11.425	0.001	----	127902	127902	----	----	1.2500	ng/mL	
PFDoS	ND(W/B)	----	----	----	----	102125	13C8-PFOS_IS	----	----	ng/mL	
D7-MeFOSE_IS	Auto	13.380	0.003	----	717755	717755	----	----	25.0000	ng/mL	
D7-MeFOSE	Auto	13.380	0.003	4.555	717755	247964	13C4-PFOS_IS	----	27.6562	ng/mL	
MeFOSE	ND(W/B)	----	----	----	----	717755	D7-MeFOSE_IS	----	----	ng/mL	
13C2-PFHXDA_IS	Auto	12.640	-0.001	----	508875	508875	----	----	2.5000	ng/mL	
13C2-PFHXDA	Auto	12.640	-0.001	3.914	508875	195574	13C2-PFDA_IS	----	2.8012	ng/mL	
PFHXDA	ND(W/B)	----	----	----	----	508875	13C2-PFHXDA_IS	----	----	ng/mL	
D3-MeFOSA	Auto	13.687	0.002	4.862	54281	247964	13C4-PFOS_IS	----	2.5606	ng/mL	
D3-MeFOSA_IS	Auto	13.687	0.002	----	54281	54281	----	----	2.5000	ng/mL	
MeFOSA	ND(W/B)	----	----	----	----	54281	D3-MeFOSA_IS	----	----	ng/mL	
D9-EtFOSE_IS	Auto	14.009	0.003	----	709094	709094	----	----	25.0000	ng/mL	
D9-EtFOSE	Auto	14.009	0.003	5.184	709094	247964	13C4-PFOS_IS	----	26.9013	ng/mL	
EtFOSE	ND(W/B)	----	----	----	----	709094	D9-EtFOSE_IS	----	----	ng/mL	
D5-EtFOSAm	Auto	14.365	0.003	5.540	74458	247964	13C4-PFOS_IS	----	2.6381	ng/mL	
D5-EtFOSAm_IS	Auto	14.365	0.003	----	74458	74458	----	----	2.5000	ng/mL	
EtFOSAm	ND(W/B)	----	----	----	----	74458	D5-EtFOSAm_IS	----	----	ng/mL	
PFODA	ND(W/B)	----	----	----	----	508875	13C2-PFHXDA_IS	----	----	ng/mL	

Flag ID key: RT: RT Diff (Absolute ISTD)



240118_020 (continued)



J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_020 (continued)

13C2-4_2 FTS
Conc. 4.9688

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. ----
R#1 0.00 (34.14)
R#2 0.00 (29.06)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. ----
R#1 0.00 (47.53)
R#2 0.00 (46.72)

Q 329.10>80.90 (-)

4.36e4

ISTD 329.10>80.90 (-)

4.36e4

Q 327.10>307.00 (-)

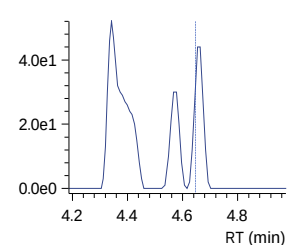
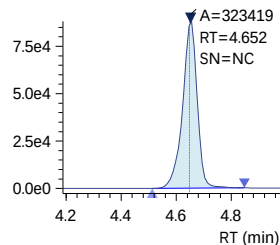
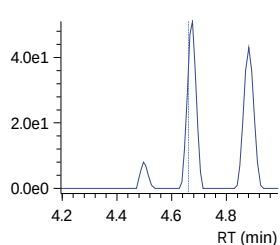
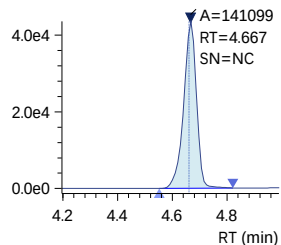
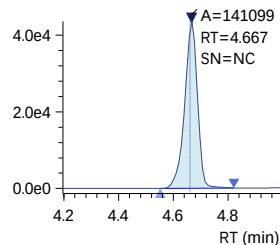
5.10e1

ISTD 302.10>79.90 (-)

8.81e4

Q 298.70>79.90 (-)

5.20e1

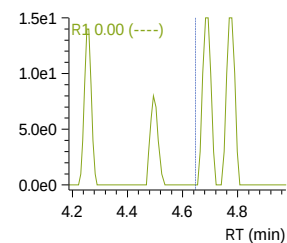
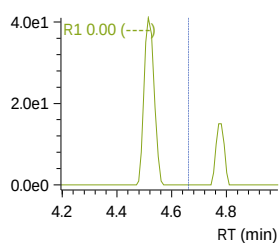


R1 327.10>80.90 (-)

4.10e1

R1 298.70>98.80 (-)

1.50e1

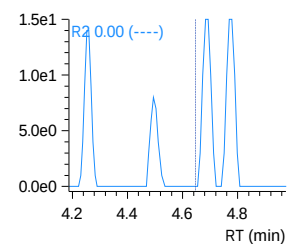
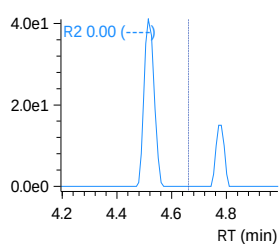


R2 327.10>80.90 (-)

4.10e1

R2 298.70>98.80 (-)

1.50e1





240118_020 (continued)

13C3-PFBS
Conc. 2.7618

NFDHA
Conc. ----
R#1 0.00 (37.88)
R#2 0.00 (40.25)

13C5-PFHxA
Conc. 2.5413

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

Q 302.10>79.90 (-)

8.81e4

Q 295.00>201.00 (-)

2.56e2

Q 318.00>273.00 (-)

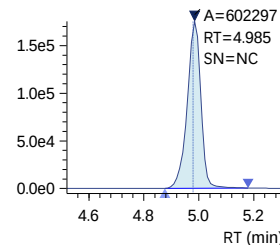
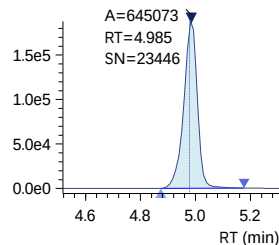
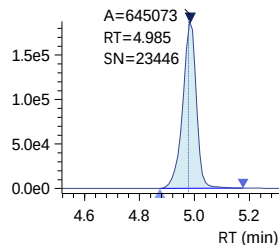
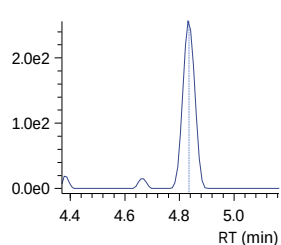
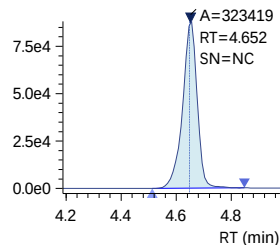
1.88e5

ISTD 318.00>273.00 (-)

1.88e5

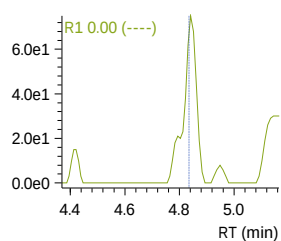
ISTD 315.10>270.00 (-)

1.75e5



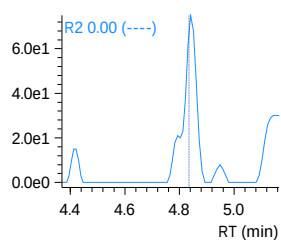
R1 295.00>84.90 (-)

7.50e1



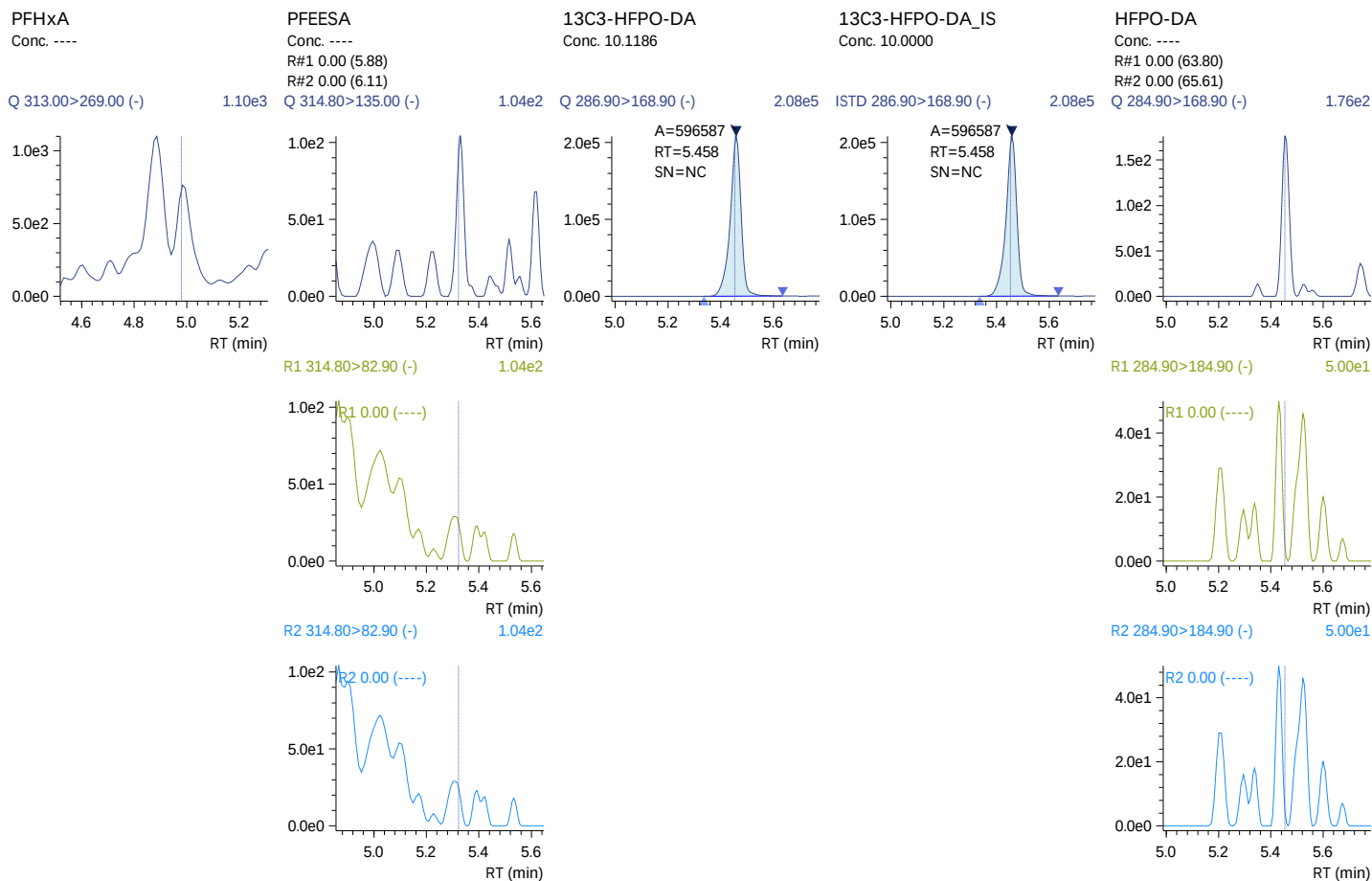
R2 295.00>84.90 (-)

7.50e1





240118_020 (continued)

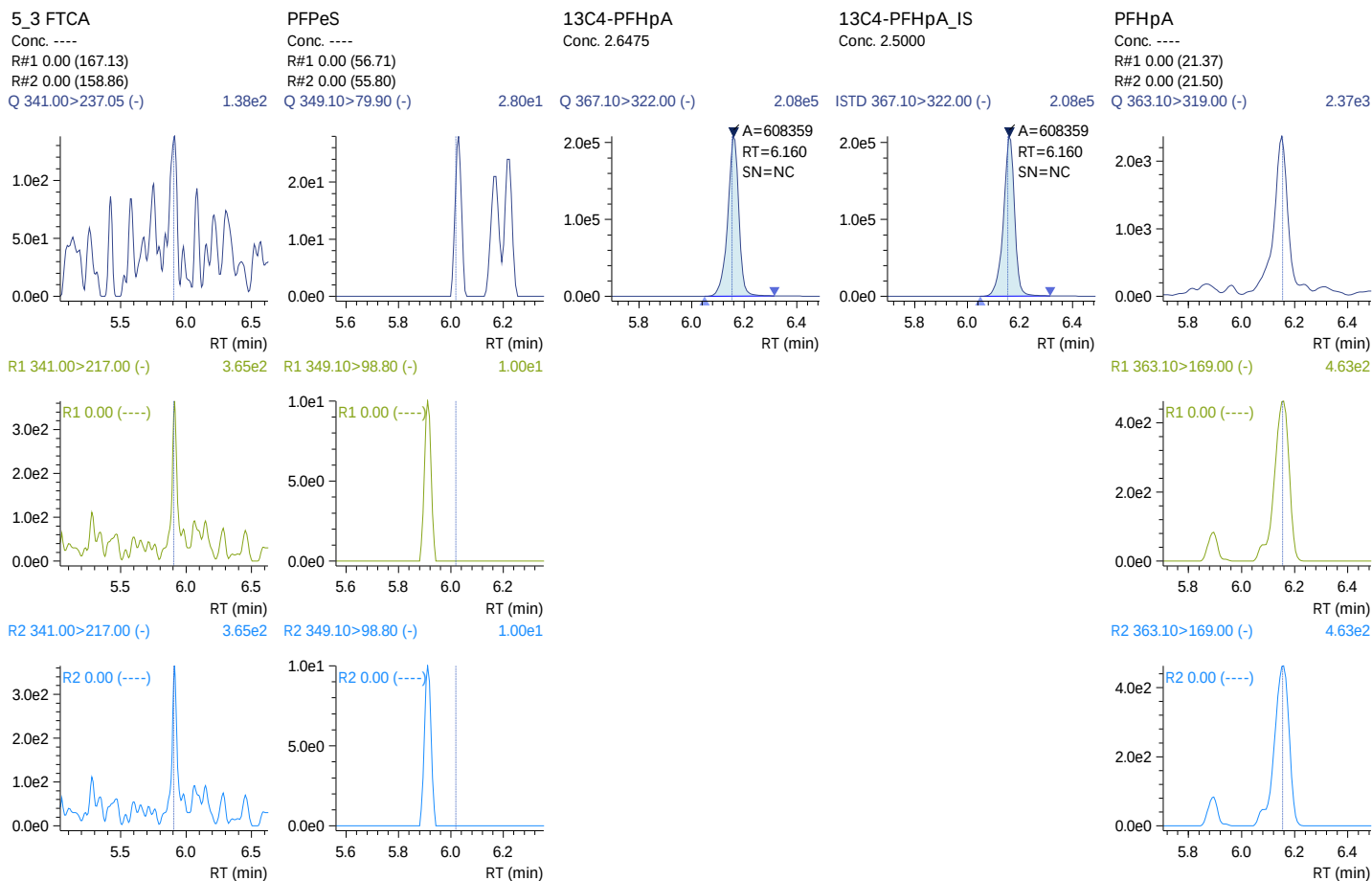


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.

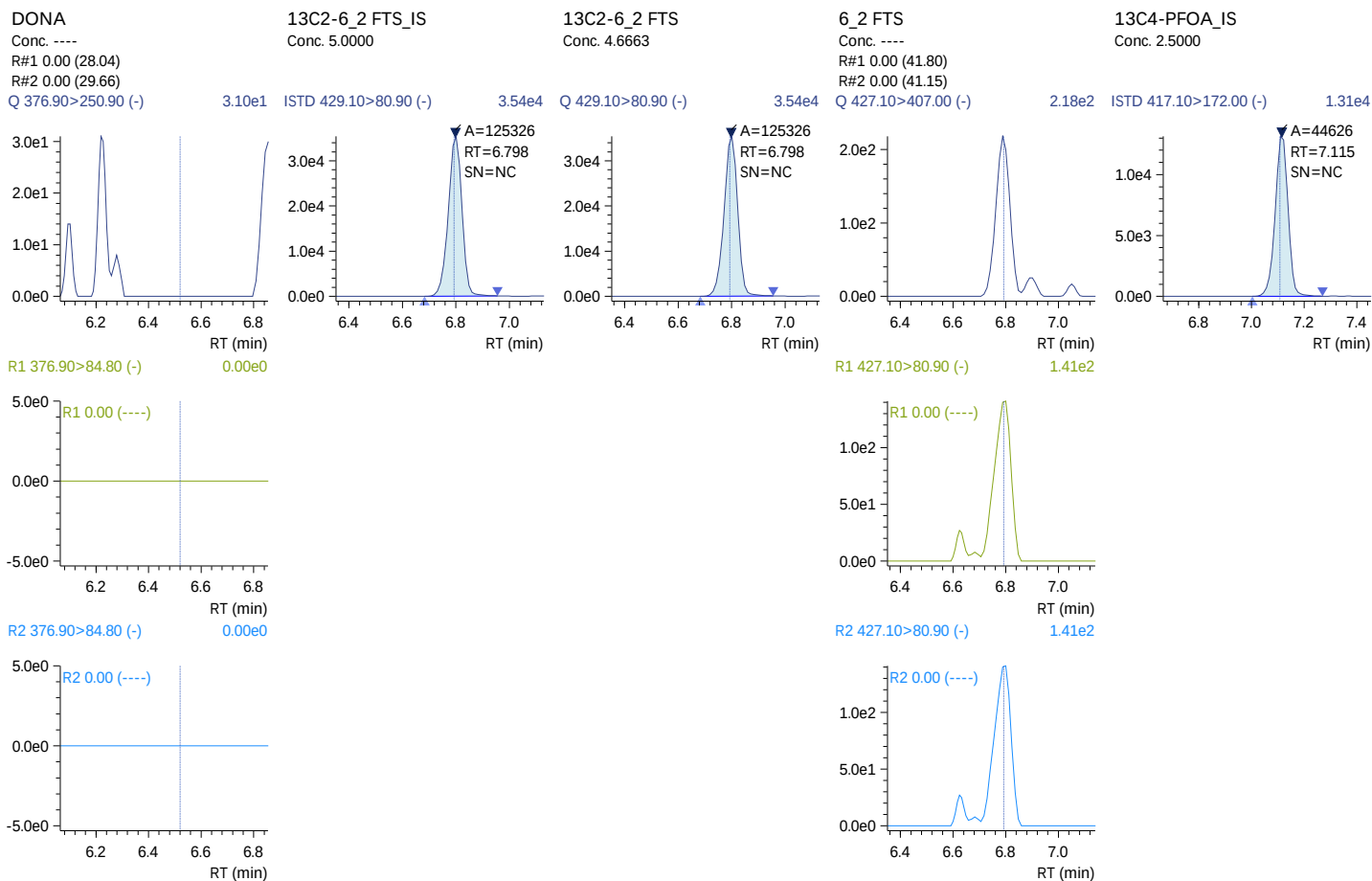


240118_020 (continued)





240118_020 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_020 (continued)

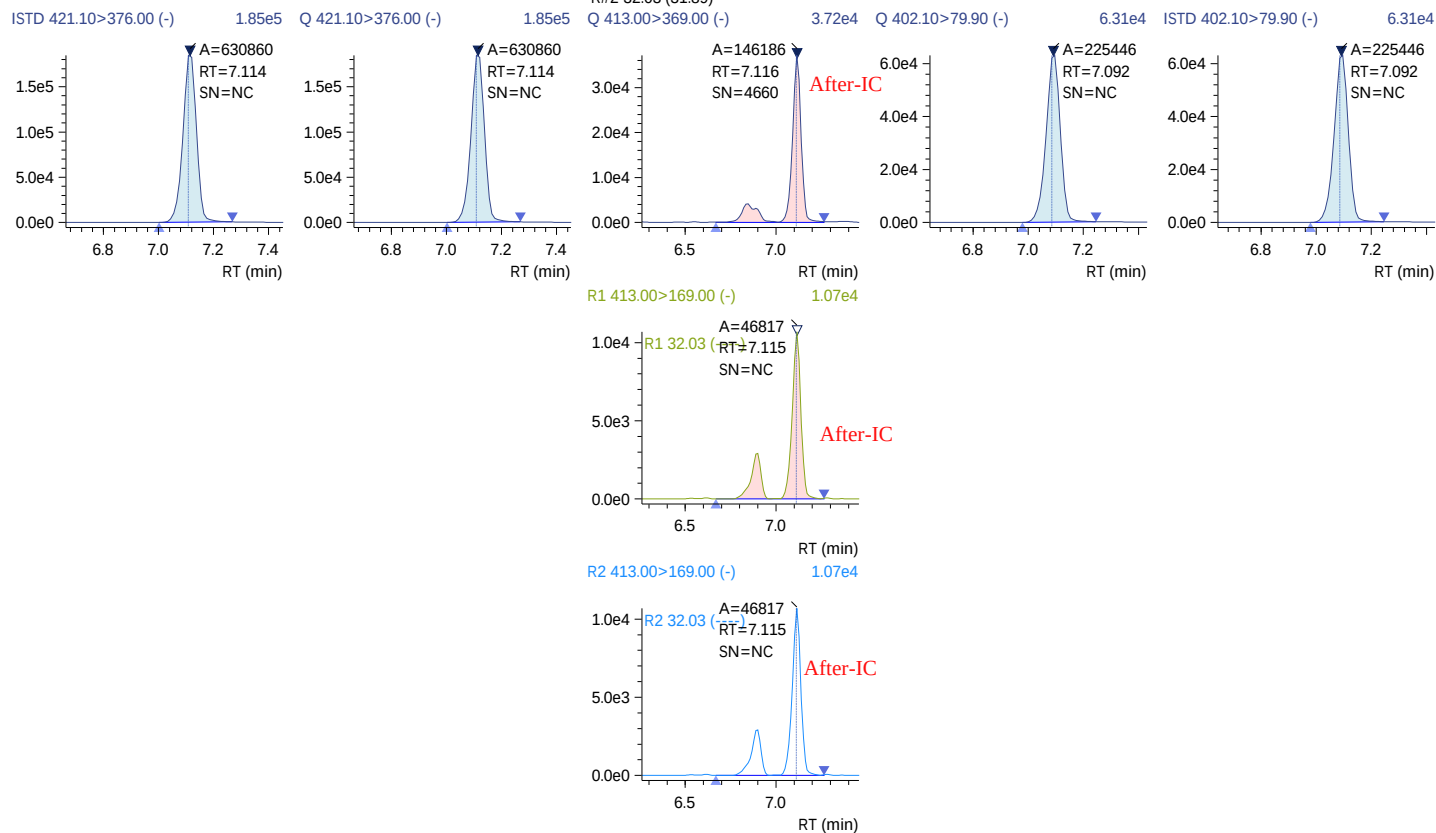
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.5292

PFOA
Conc. 0.8541
R#1 32.03 (29.05)
R#2 32.03 (31.89)

13C3-PFHxS
Conc. 2.5453

13C3-PFHxS_IS
Conc. 2.5000

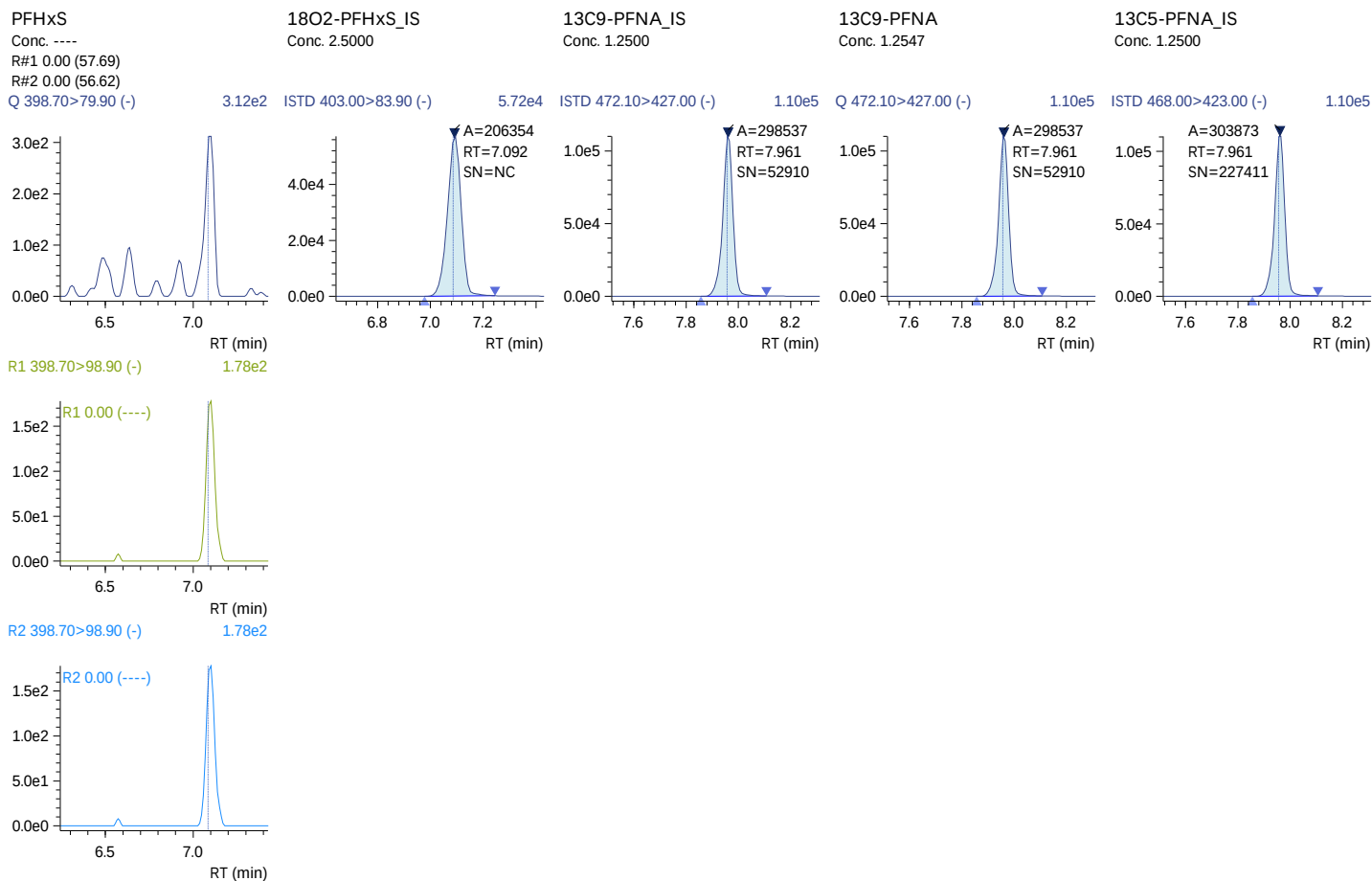


J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_020 (continued)

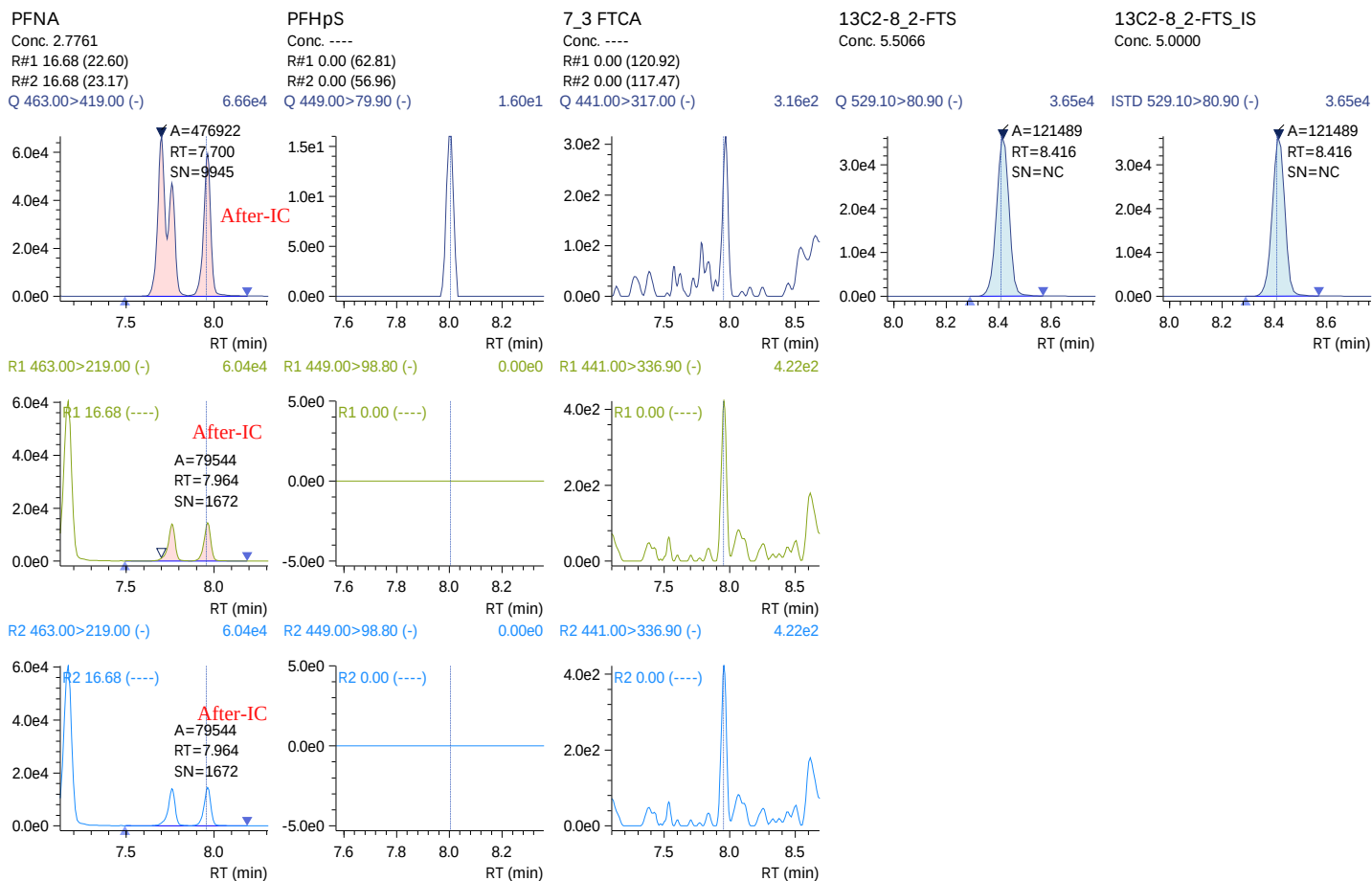


J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_020 (continued)

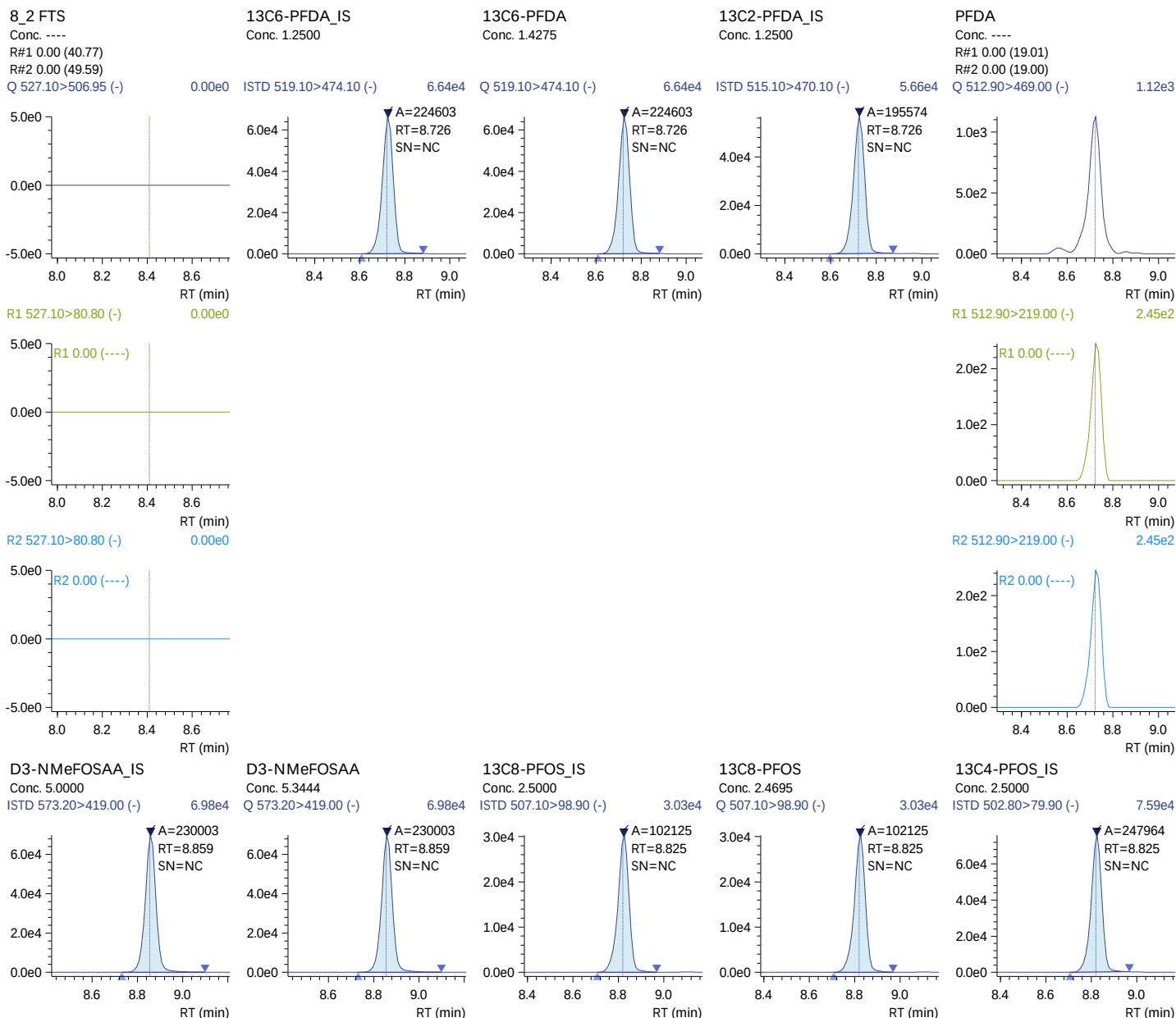


J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_020 (continued)

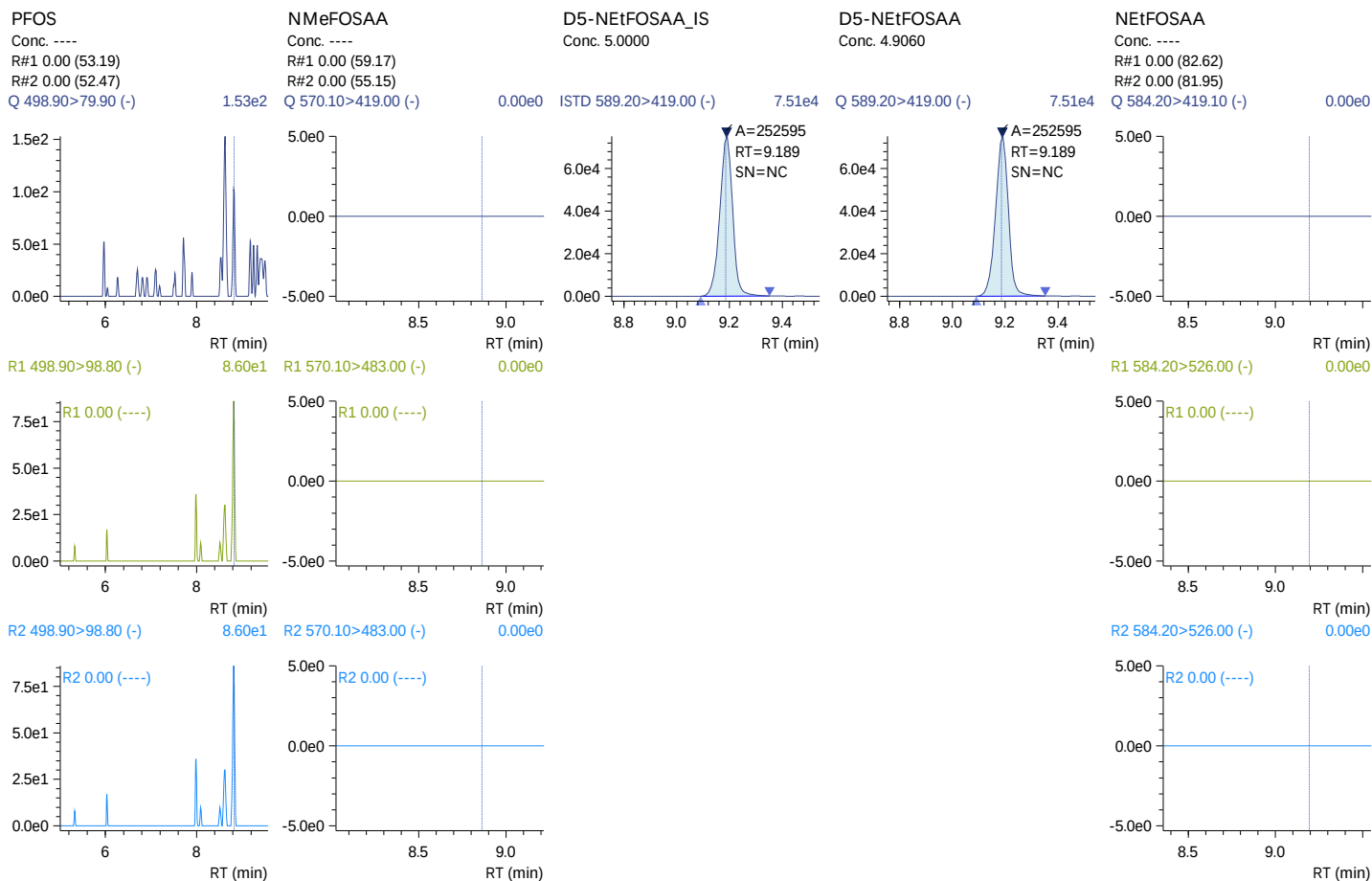


J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_020 (continued)



J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_020 (continued)

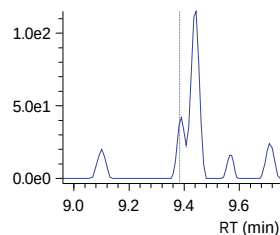
9-Cl-PF3ONS

Conc. ----

R#1 0.00 (31.76)

R#2 0.00 (32.76)

Q 530.80>351.00 (-)



R1 532.80>353.00 (-)

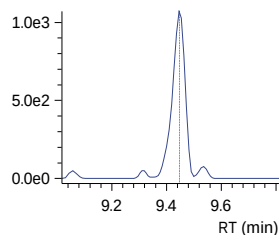
PFUnDA

Conc. ----

R#1 0.00 (12.31)

R#2 0.00 (13.12)

Q 563.10>519.00 (-)

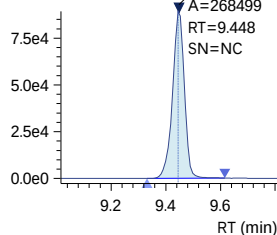


R1 563.10>269.10 (-)

13C7-PFUnDA_IS

Conc. 1.2500

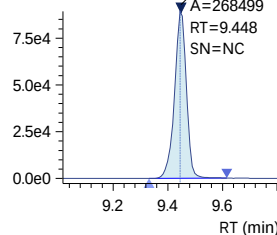
ISTD 570.00>525.10 (-)



13C7-PFUnDA

Conc. 1.4306

Q 570.00>525.10 (-)



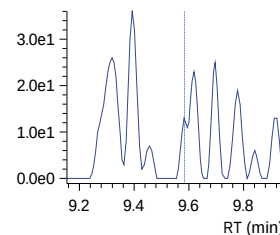
PFNS

Conc. ----

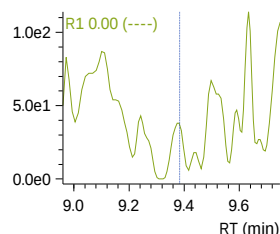
R#1 0.00 (63.31)

R#2 0.00 (65.22)

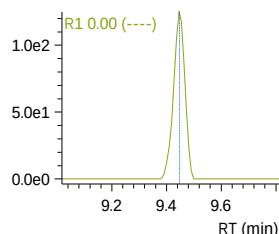
Q 548.80>79.90 (-)



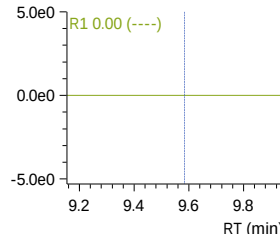
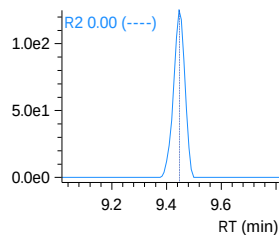
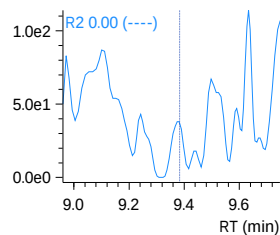
R1 548.80>98.80 (-)



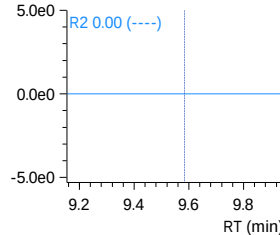
R2 532.80>353.00 (-)



R2 563.10>269.10 (-)

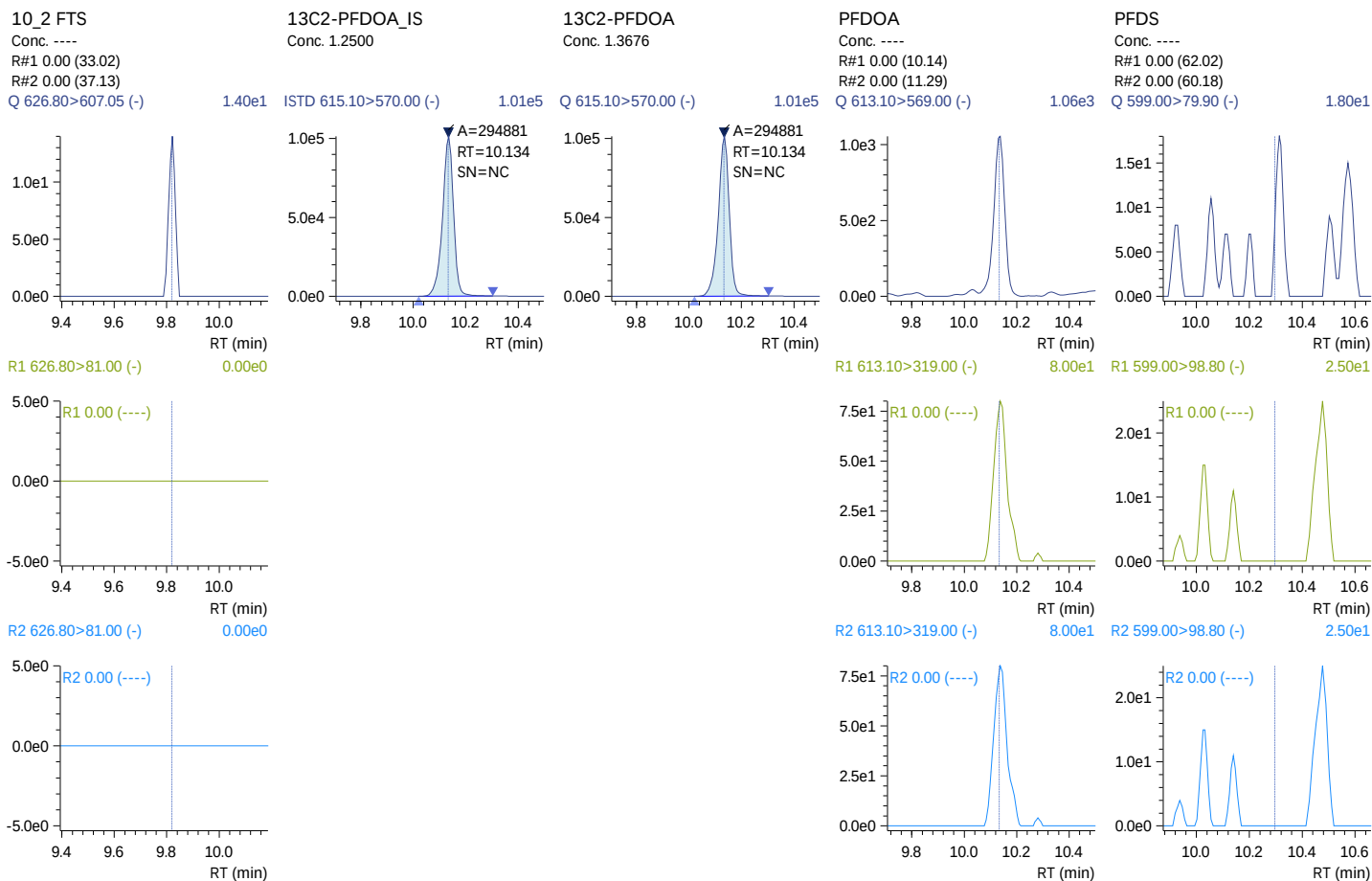


R2 548.80>98.80 (-)





240118_020 (continued)

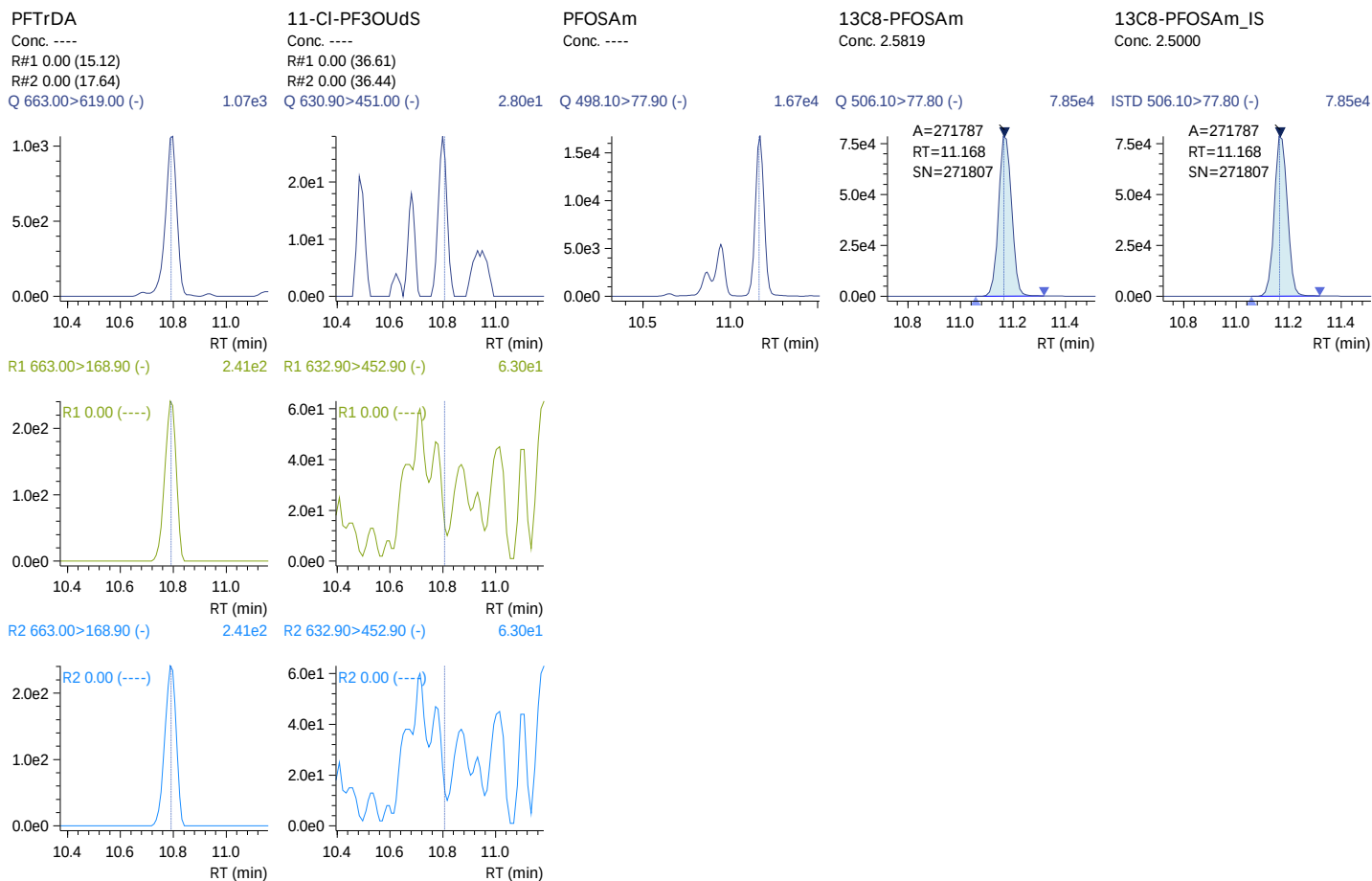


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_020 (continued)

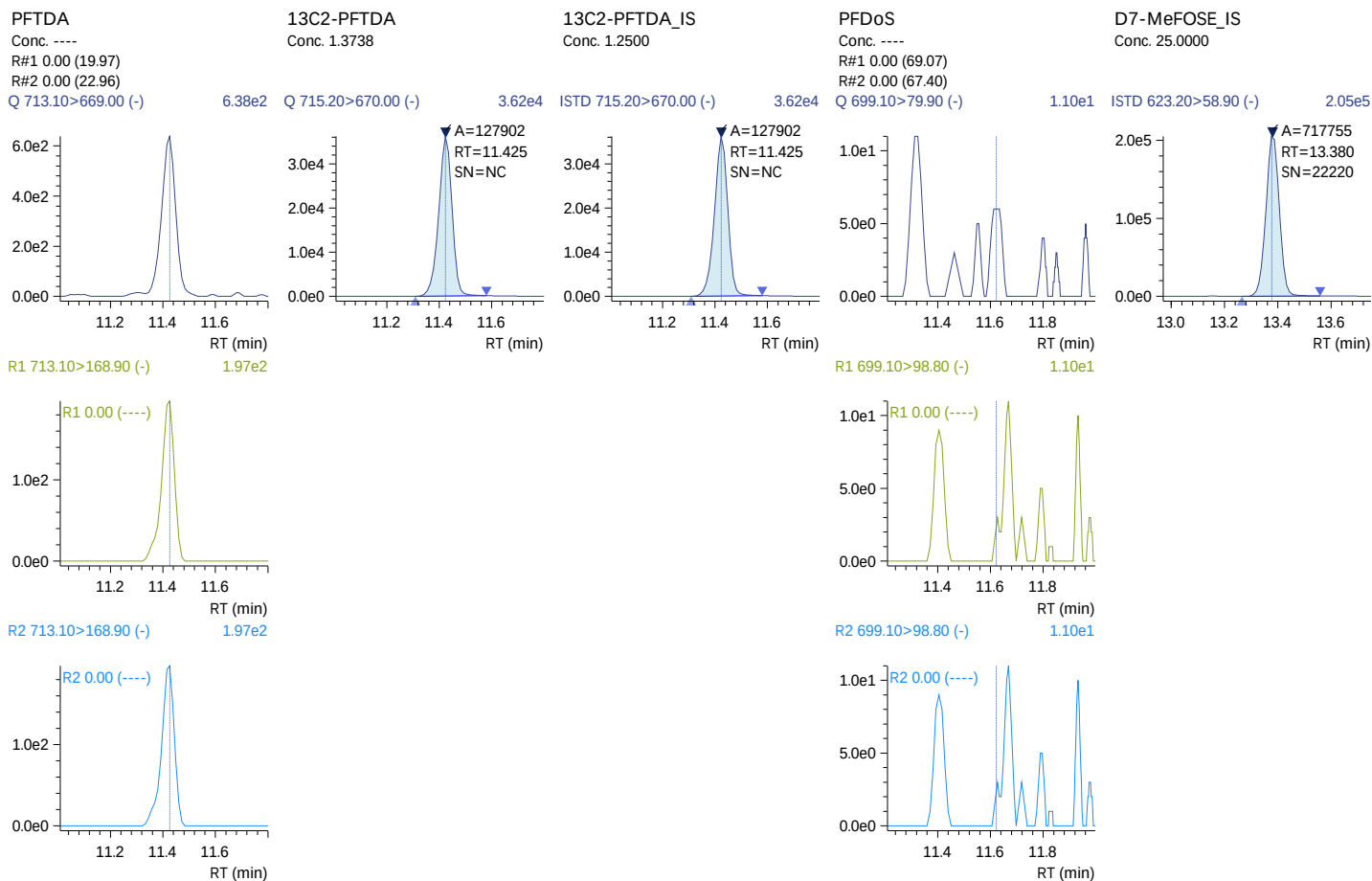


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_020 (continued)



J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_020 (continued)

D7-MeFOSE
Conc. 27.6562

MeFOSE
Conc. ----

13C2-PFHXA_IS
Conc. 2.5000

13C2-PFHXA
Conc. 2.8012

PFHXA
Conc. ----

R#1 0.00 (11.64)

R#2 0.00 (13.90)

Q 623.20>58.90 (-)

2.05e5

Q 616.10>59.00 (-)

4.75e3

ISTD 815.00>770.05 (-)

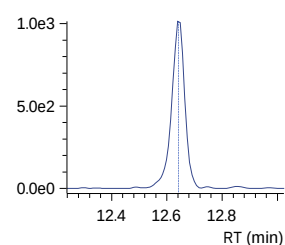
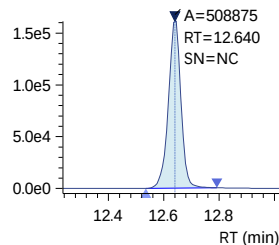
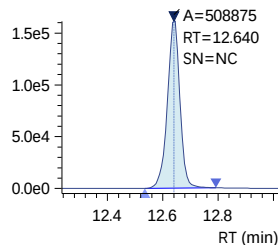
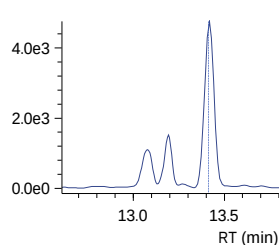
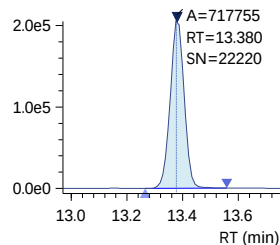
1.61e5

Q 815.00>770.05 (-)

1.61e5

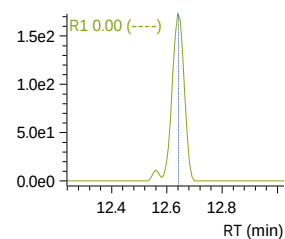
Q 813.00>768.95 (-)

1.01e3



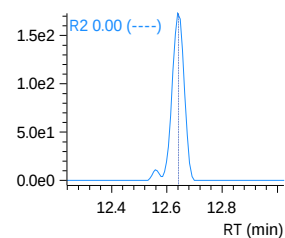
R1 813.00>218.95 (-)

1.73e2



R2 813.00>218.95 (-)

1.73e2





240118_020 (continued)

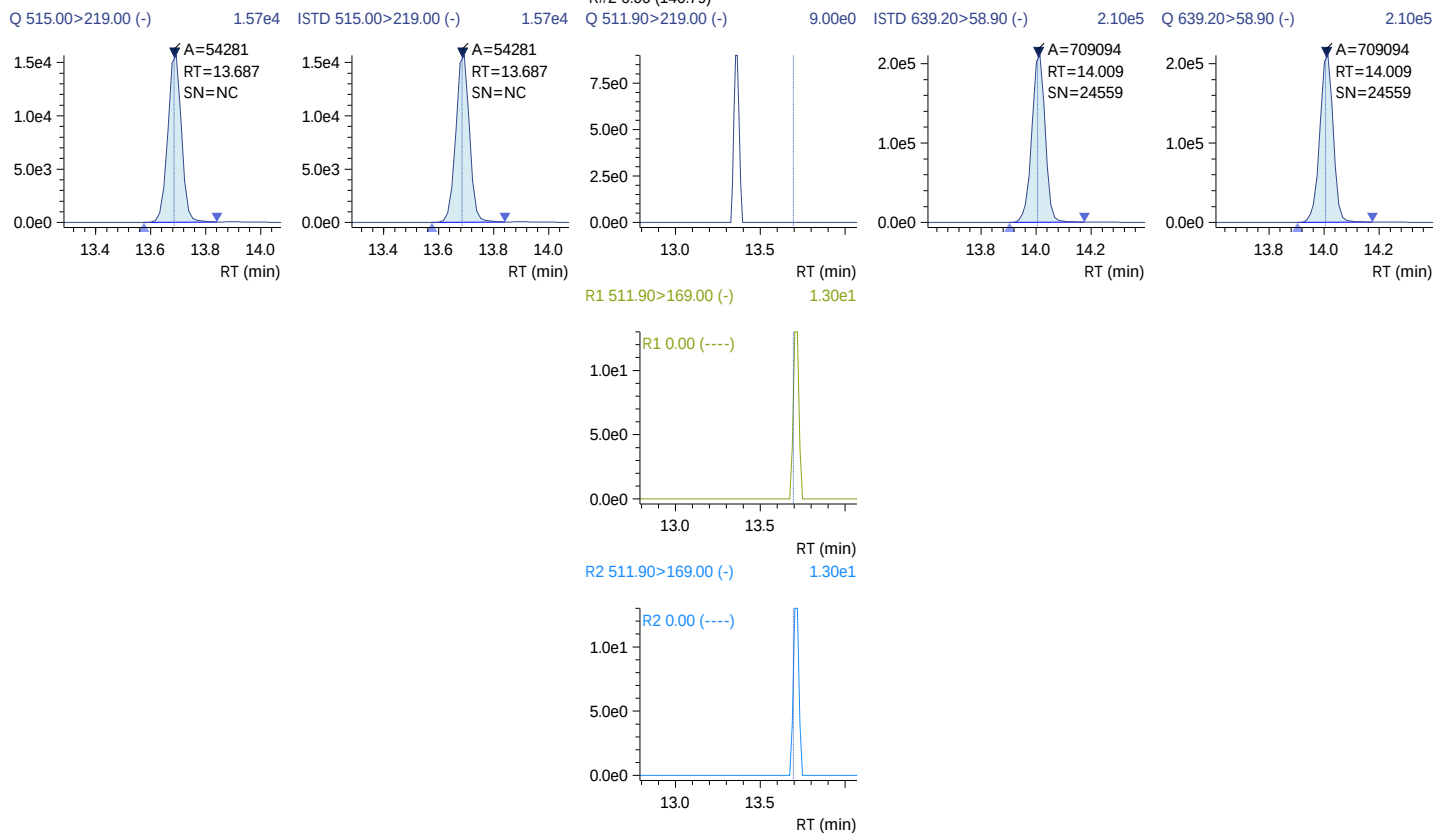
D3-MeFOSA
Conc. 2.5606

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. ----
R#1 0.00 (149.05)
R#2 0.00 (140.79)

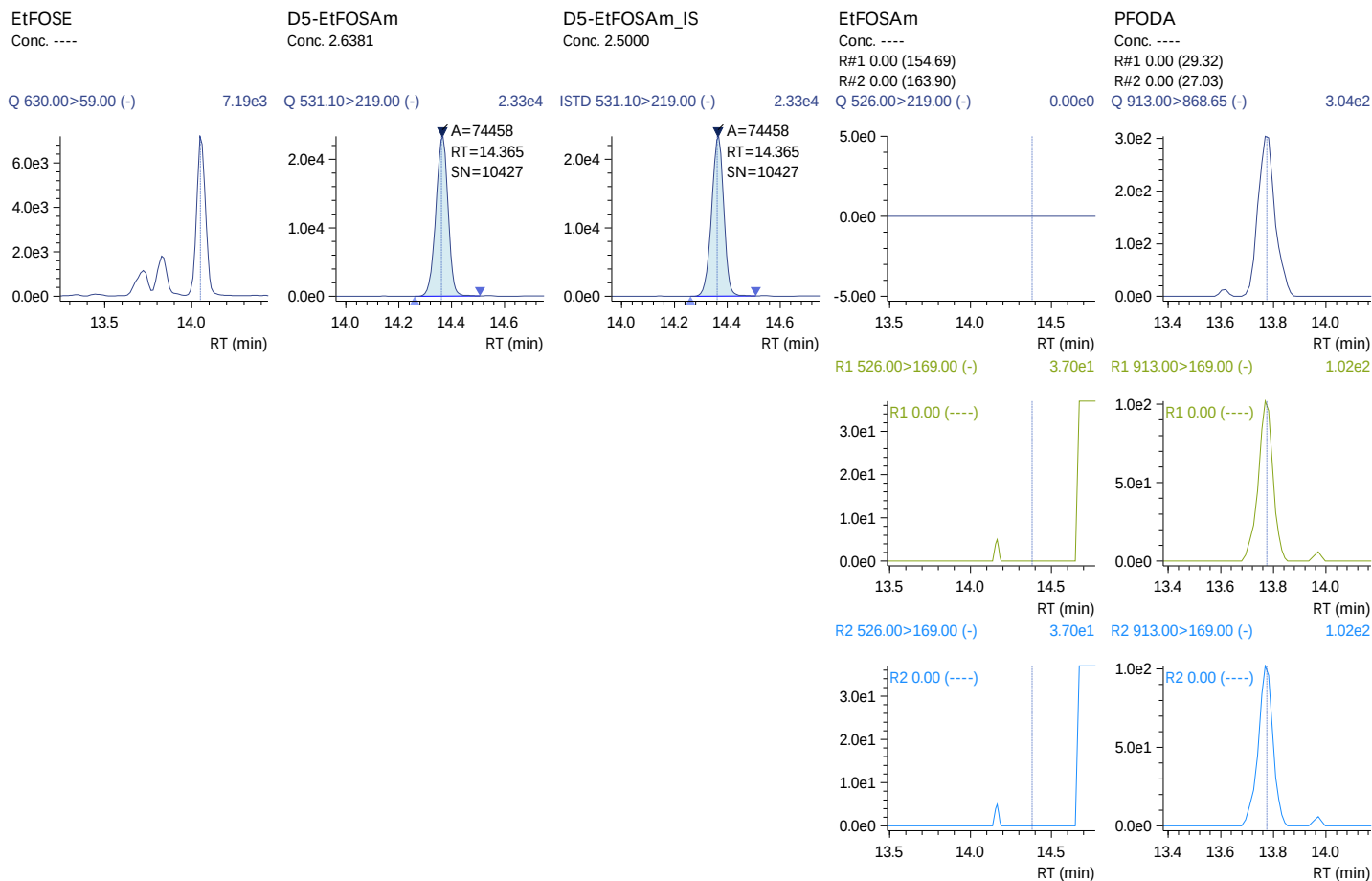
D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 26.9013





240118_020 (continued)



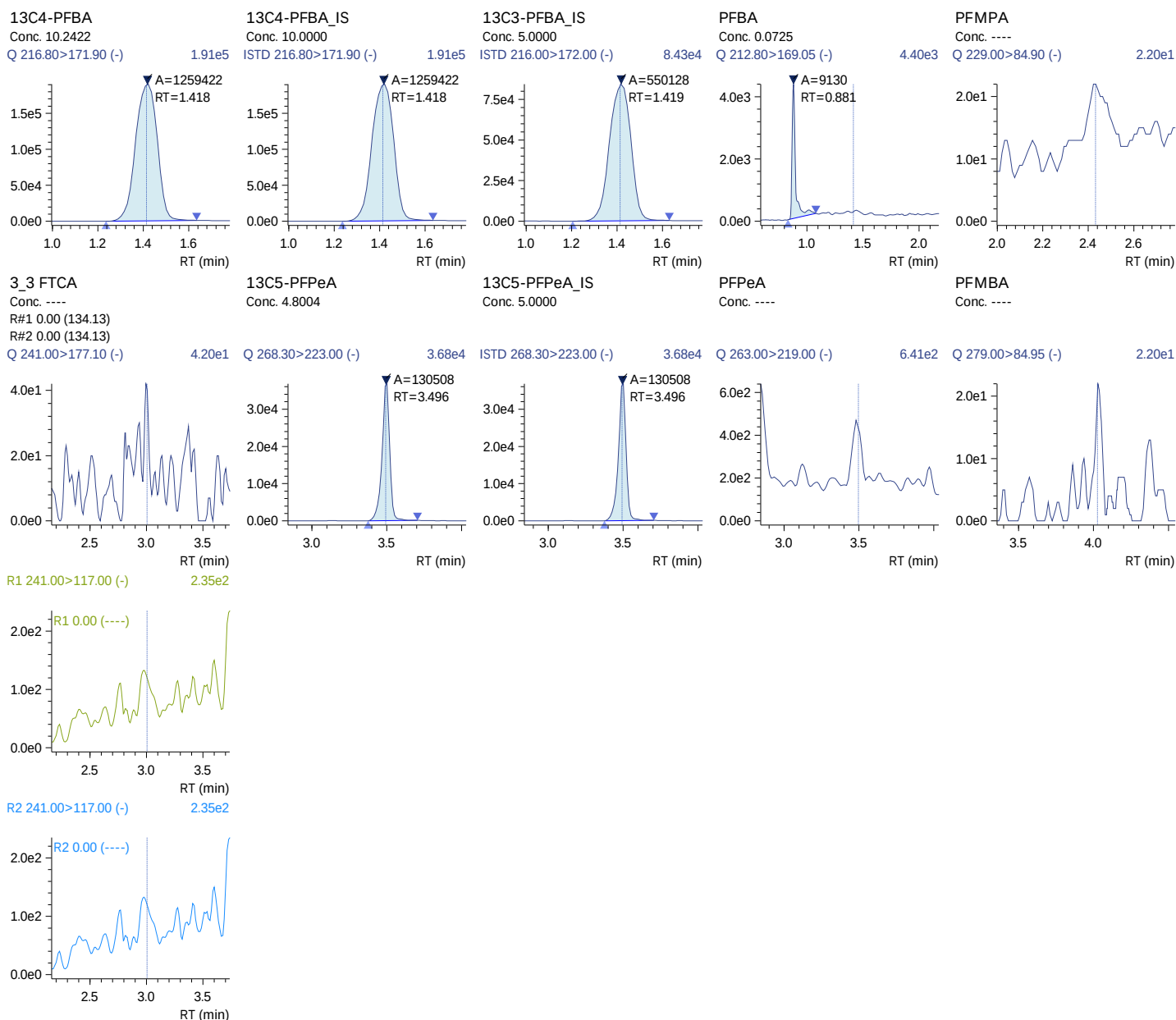
J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

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Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_020

Sample ID: 1633 QIS
Date Acquired: 1/18/2024 7:30:05 PM
Acquired by: System Administrator
Data File: 240118_020
Vial: 13 | Inj. Volume: 10.0000uL | Tray: 1





240118_020 (continued)

13C2-4_2 FTS
Conc. 4.9688

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. ----
R#1 0.00 (34.14)
R#2 0.00 (34.14)

13C3-PFBS_IS
Conc. 2.5000

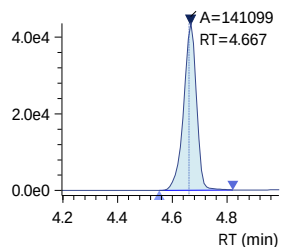
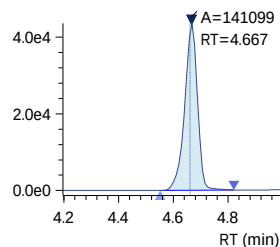
PFBS
Conc. ----
R#1 0.00 (47.53)
R#2 0.00 (47.53)

Q 329.10>80.90 (-)

4.36e4

ISTD 329.10>80.90 (-)

4.36e4

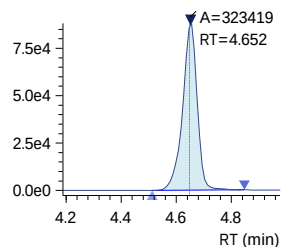
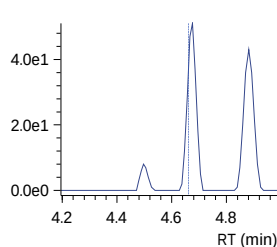


Q 327.10>307.00 (-)

5.10e1

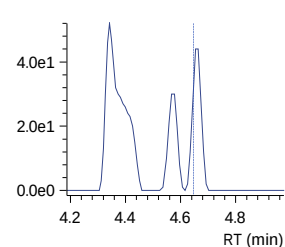
ISTD 302.10>79.90 (-)

8.81e4



Q 298.70>79.90 (-)

5.20e1

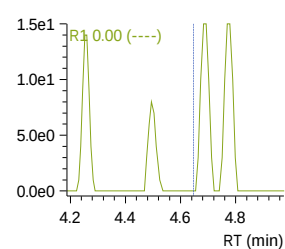
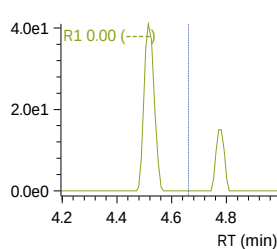


R1 327.10>80.90 (-)

4.10e1

R1 298.70>98.80 (-)

1.50e1

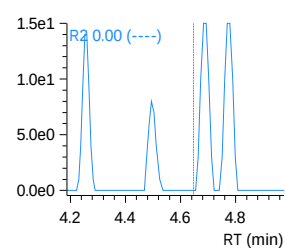
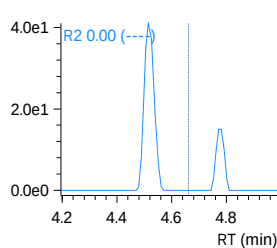


R2 327.10>80.90 (-)

4.10e1

R2 298.70>98.80 (-)

1.50e1





240118_020 (continued)

13C3-PFBS
 Conc. 2.7618

NFDHA
 Conc. ----
 R#1 0.00 (37.88)
 R#2 0.00 (37.88)

13C5-PFHxA
 Conc. 2.5413

13C5-PFHxA_IS
 Conc. 2.5000

13C2-PFHxA_IS
 Conc. 2.5000

Q 302.10>79.90 (-)

8.81e4

Q 295.00>201.00 (-)

2.56e2

Q 318.00>273.00 (-)

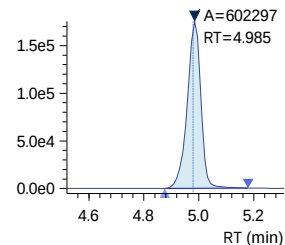
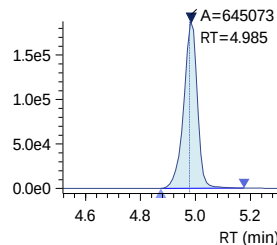
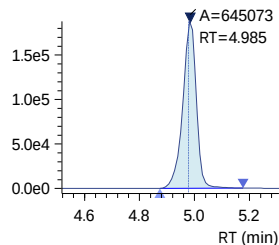
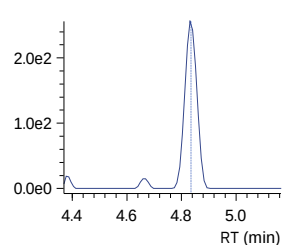
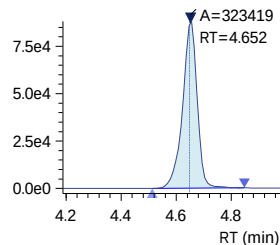
1.88e5

ISTD 318.00>273.00 (-)

1.88e5

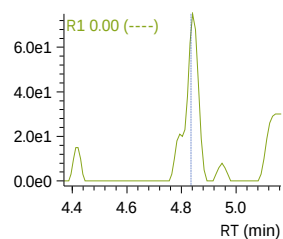
ISTD 315.10>270.00 (-)

1.75e5



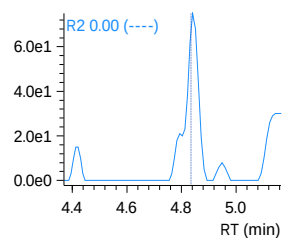
R1 295.00>84.90 (-)

7.50e1



R2 295.00>84.90 (-)

7.50e1





240118_020 (continued)

PFHxA
 Conc. 0.0247

PFEESA
 Conc. ----

13C3-HFPO-DA
 Conc. 10.1186

13C3-HFPO-DA_IS
 Conc. 10.0000

HFPO-DA
 Conc. ----

Q 313.00>269.00 (-)

1.10e3

Q 314.80>135.00 (-)

1.04e2

Q 286.90>168.90 (-)

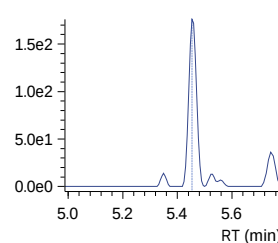
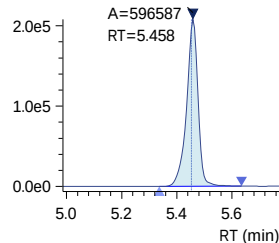
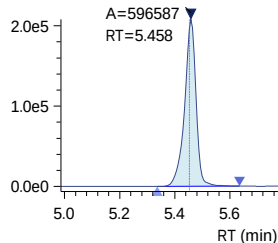
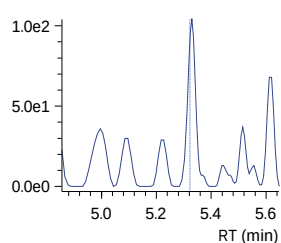
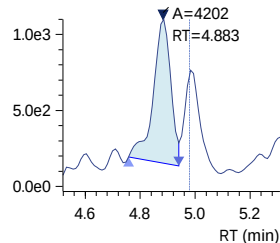
2.08e5

ISTD 286.90>168.90 (-)

2.08e5

Q 284.90>168.90 (-)

1.76e2

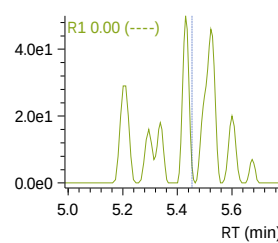
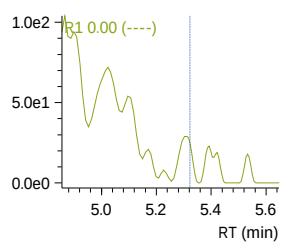


R1 314.80>82.90 (-)

1.04e2

R1 284.90>184.90 (-)

5.00e1

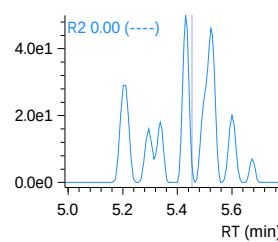
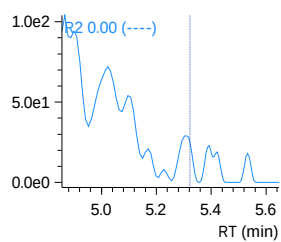


R2 314.80>82.90 (-)

1.04e2

R2 284.90>184.90 (-)

5.00e1





240118_020 (continued)

5_3 FTCA

Conc. ----

R#1 0.00 (167.13)

R#2 0.00 (167.13)

Q 341.00>237.05 (-)

1.38e2

PFPeS

Conc. ----

R#1 0.00 (56.71)

R#2 0.00 (56.71)

Q 349.10>79.90 (-)

2.80e1

13C4-PFHpA

Conc. 2.6475

Q 367.10>322.00 (-)

2.08e5

13C4-PFHpA_IS

Conc. 2.5000

ISTD 367.10>322.00 (-)

2.08e5

PFHpA

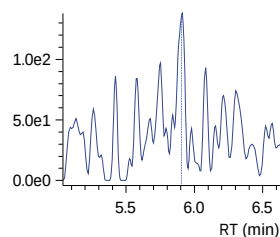
Conc. -0.0016

R#1 0.00 (21.37)

R#2 0.00 (21.37)

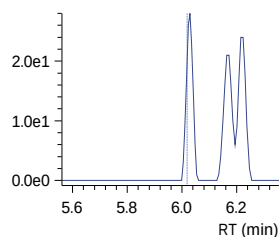
Q 363.10>319.00 (-)

2.37e3



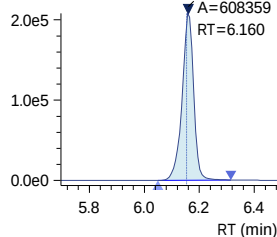
R1 341.00>217.00 (-)

3.65e2



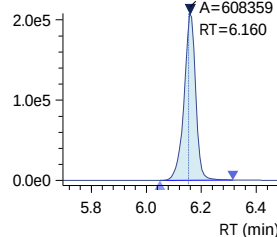
R1 349.10>98.80 (-)

1.00e1



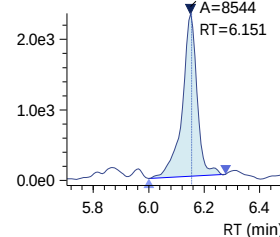
Q 367.10>322.00 (-)

2.08e5



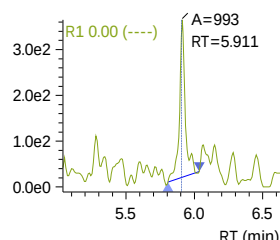
ISTD 367.10>322.00 (-)

2.08e5



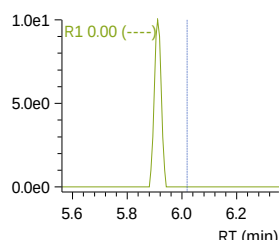
R1 363.10>169.00 (-)

4.63e2



R2 341.00>217.00 (-)

3.65e2



R2 349.10>98.80 (-)

1.00e1



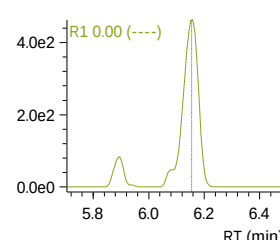
Q 367.10>322.00 (-)

2.08e5



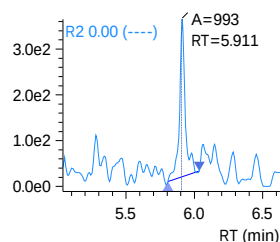
ISTD 367.10>322.00 (-)

2.08e5



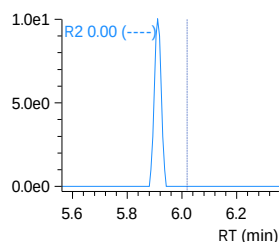
R2 363.10>169.00 (-)

4.63e2



R2 341.00>217.00 (-)

3.65e2



R2 349.10>98.80 (-)

1.00e1



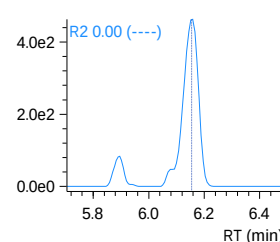
Q 367.10>322.00 (-)

2.08e5



ISTD 367.10>322.00 (-)

2.08e5

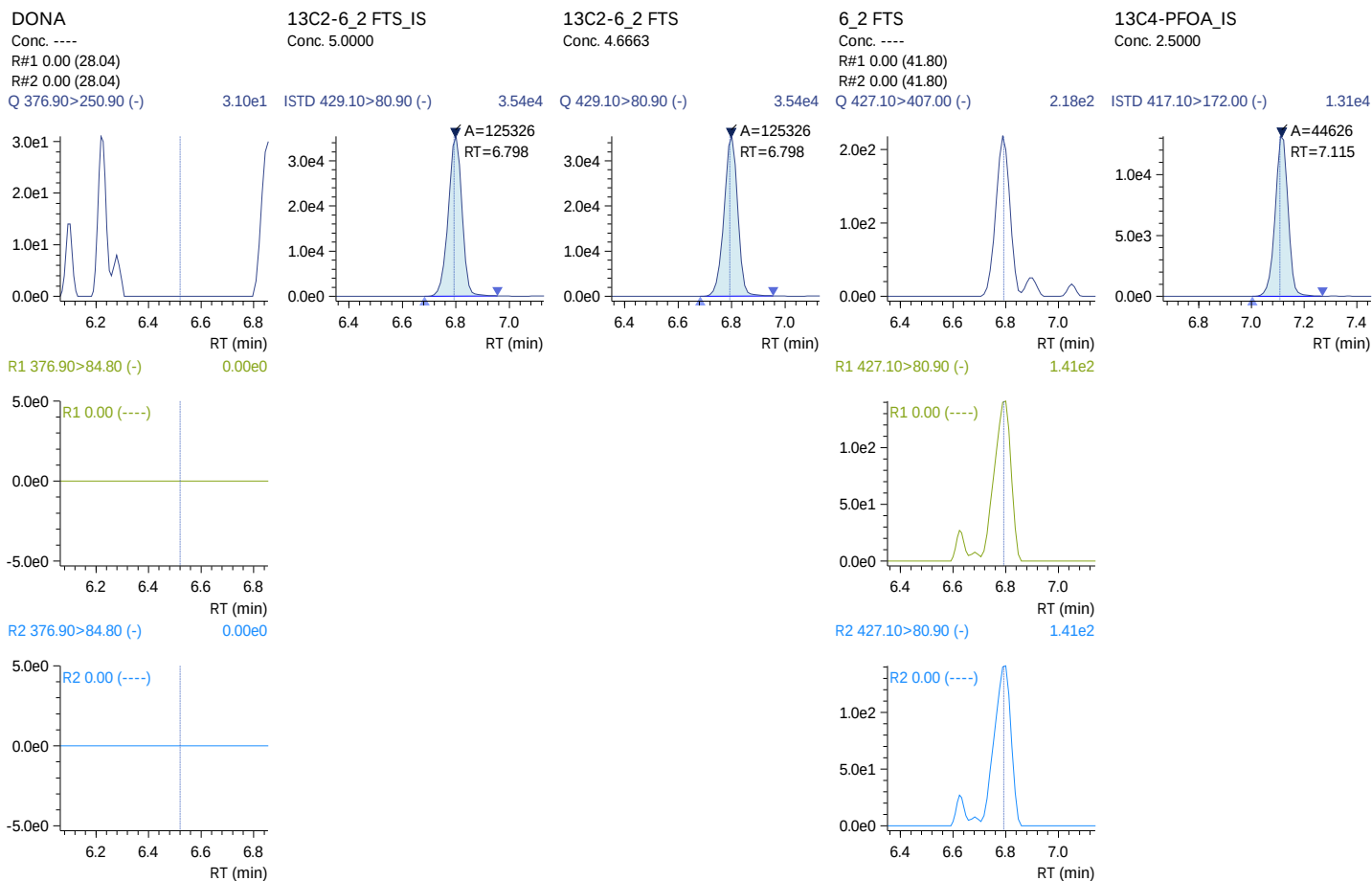


R2 363.10>169.00 (-)

4.63e2



240118_020 (continued)





240118_020 (continued)

13C8-PFOA_IS
 Conc. 2.5000

13C8-PFOA
 Conc. 2.5292

PFOA
 Conc. 0.6881
 R#1 29.76 (29.05)
 R#2 29.76 (29.05)

13C3-PFHxS
 Conc. 2.5453

13C3-PFHxS_IS
 Conc. 2.5000

ISTD 421.10>376.00 (-)

1.85e5

Q 421.10>376.00 (-)

1.85e5

Q 413.00>369.00 (-)

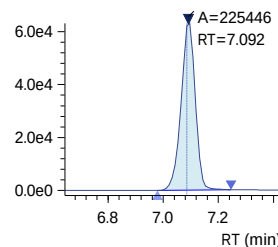
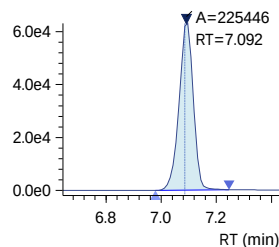
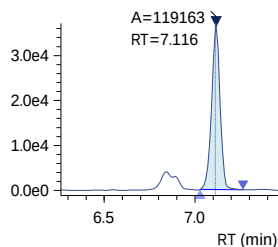
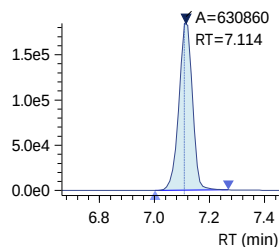
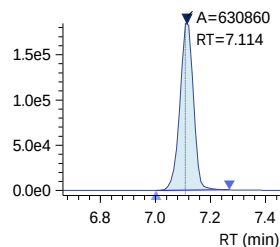
3.72e4

Q 402.10>79.90 (-)

6.31e4

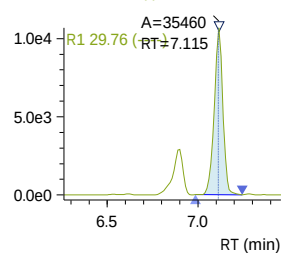
ISTD 402.10>79.90 (-)

6.31e4



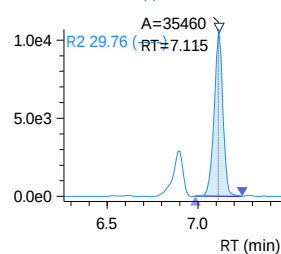
R1 413.00>169.00 (-)

1.07e4



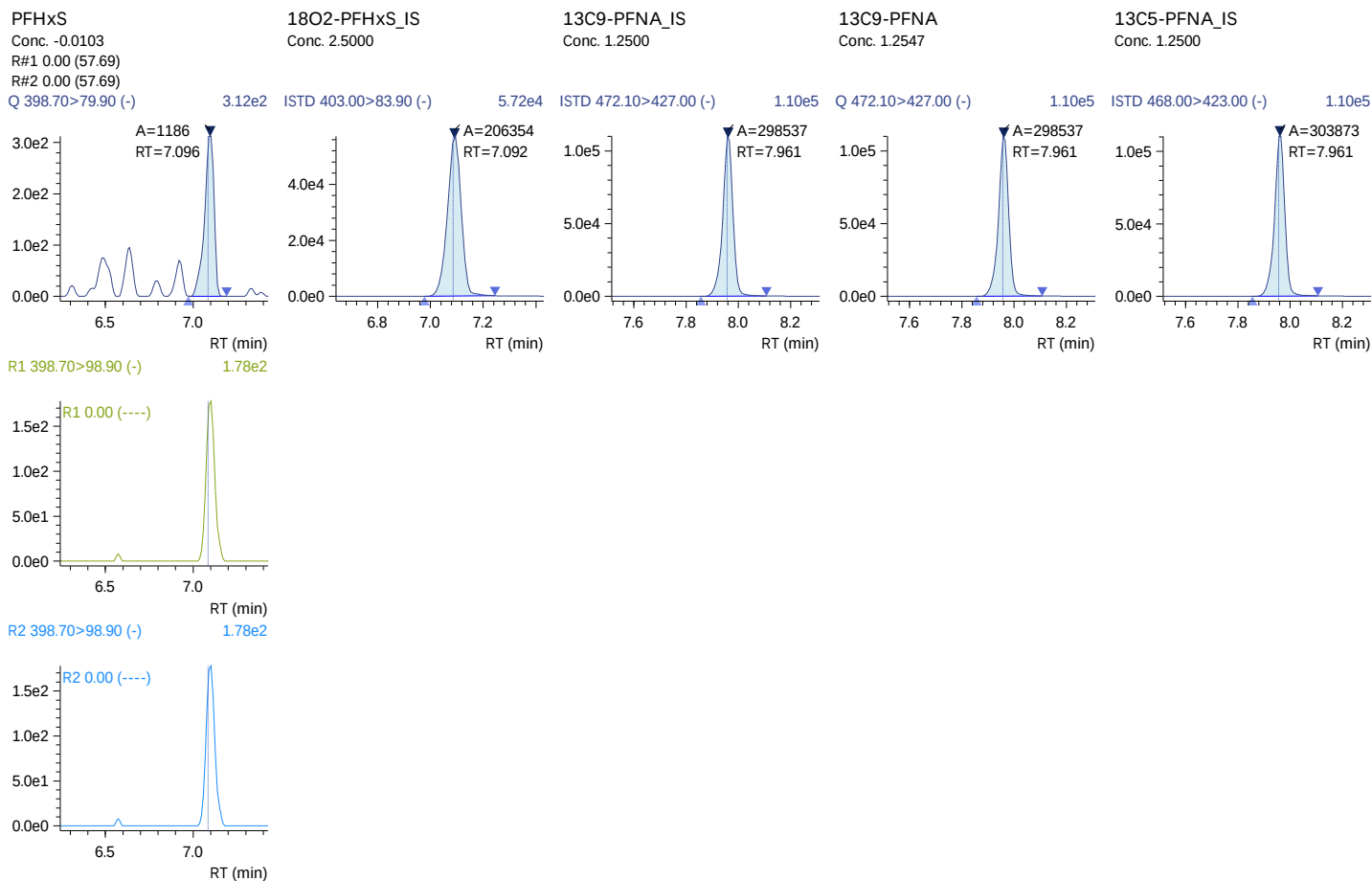
R2 413.00>169.00 (-)

1.07e4



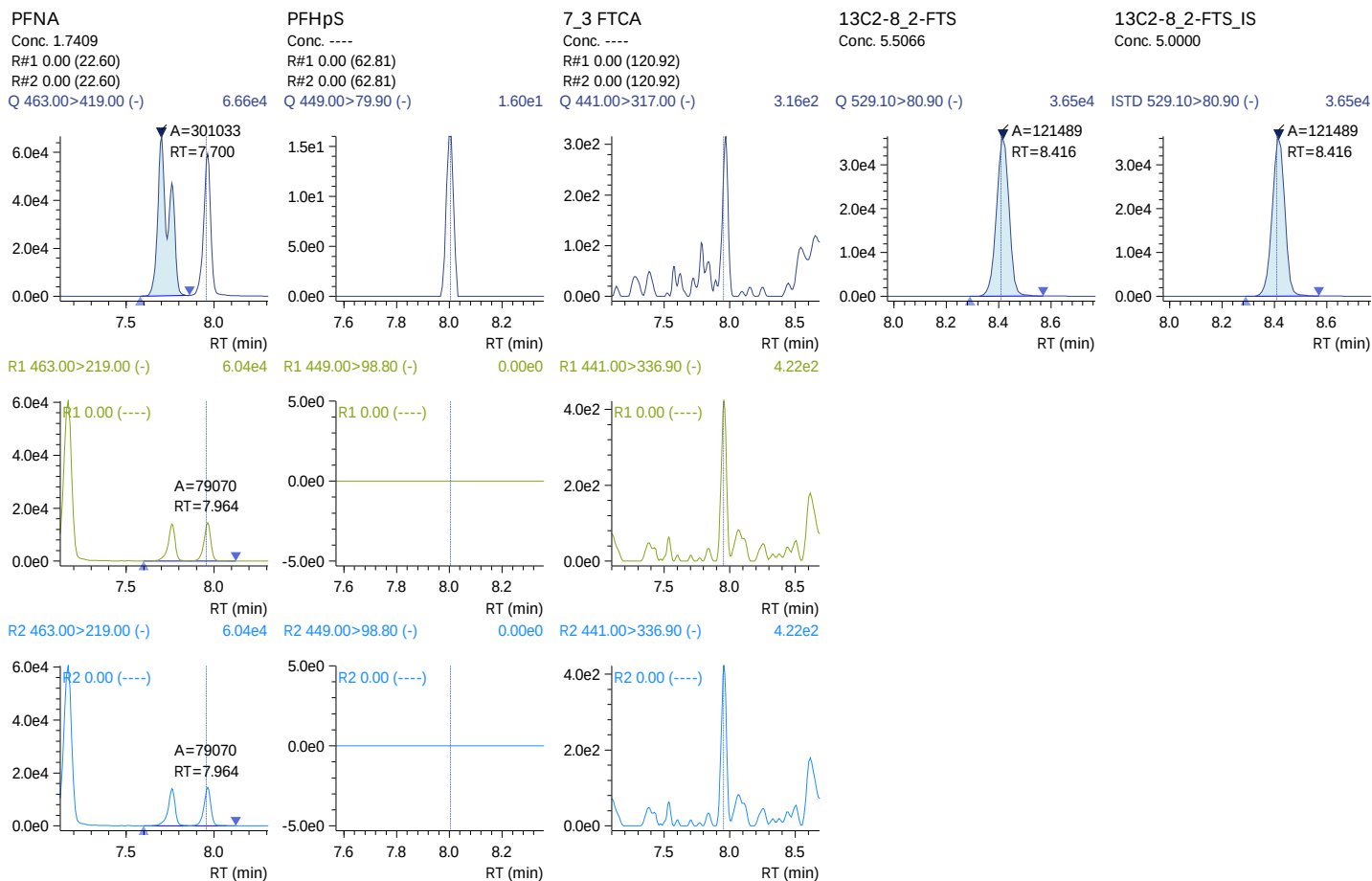


240118_020 (continued)



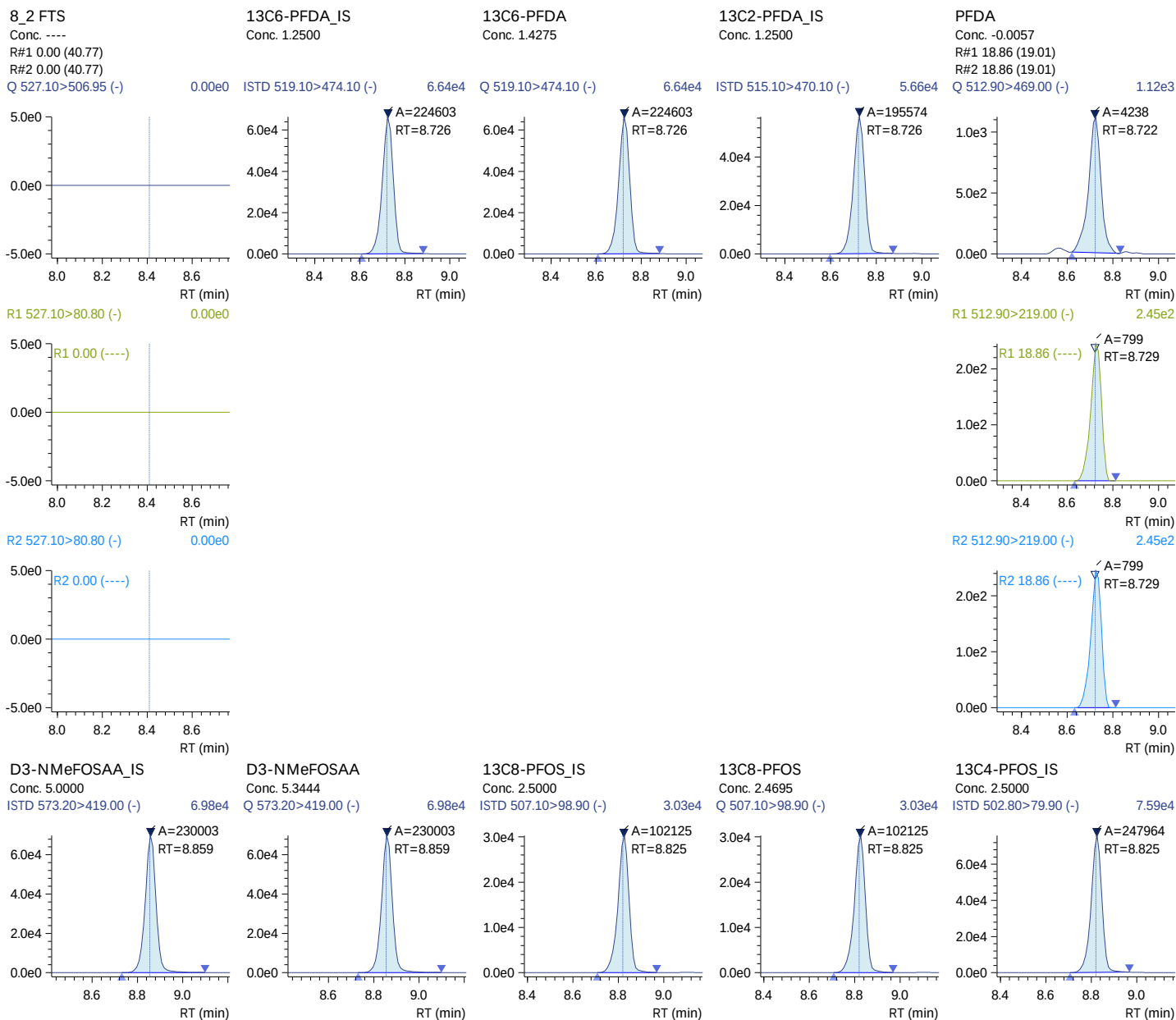


240118_020 (continued)



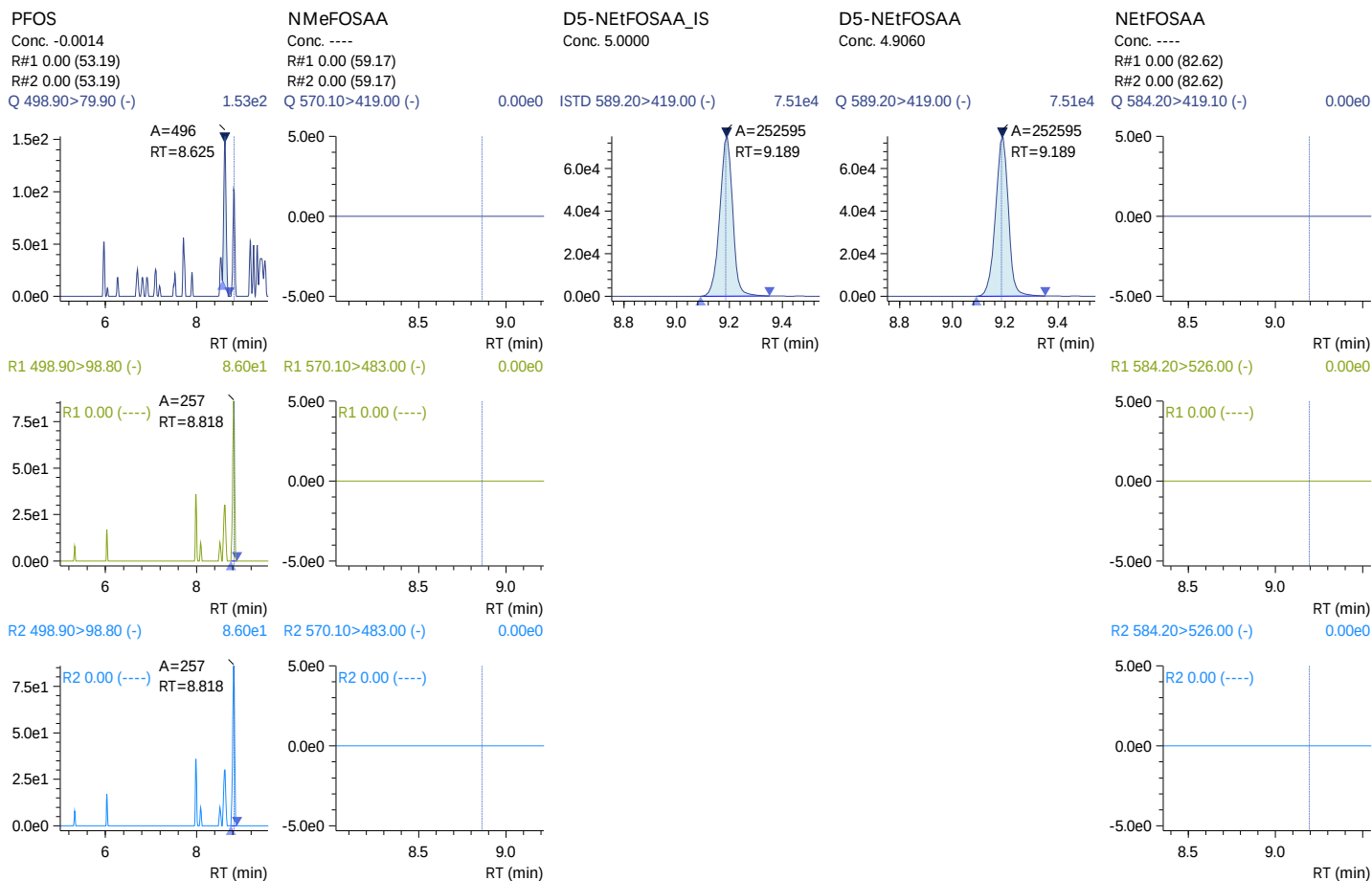


240118_020 (continued)





240118_020 (continued)





240118_020 (continued)

9-Cl-PF3ONS

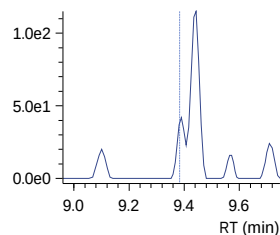
Conc. ----

R#1 0.00 (31.76)

R#2 0.00 (31.76)

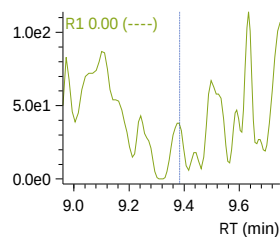
Q 530.80>351.00 (-)

1.15e2



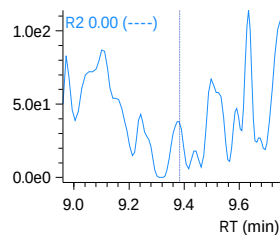
R1 532.80>353.00 (-)

1.14e2



R2 532.80>353.00 (-)

1.14e2



PFUnDA

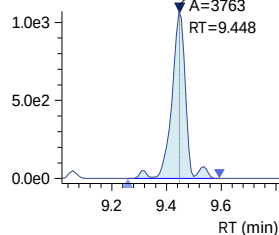
Conc. -0.0104

R#1 0.00 (12.31)

R#2 0.00 (12.31)

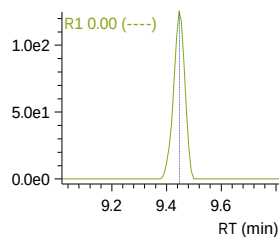
Q 563.10>519.00 (-)

1.07e3



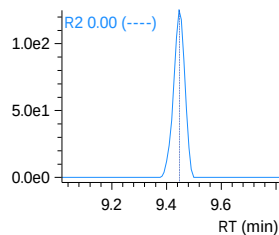
R1 563.10>269.10 (-)

1.25e2



R2 563.10>269.10 (-)

1.25e2

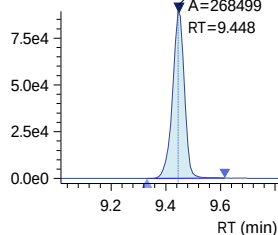


13C7-PFUnDA_IS

Conc. 1.2500

ISTD 570.00>525.10 (-)

8.93e4

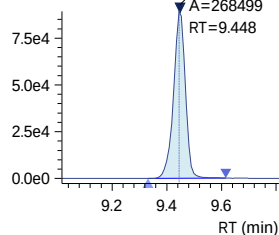


13C7-PFUnDA

Conc. 1.4306

Q 570.00>525.10 (-)

8.93e4



PFNS

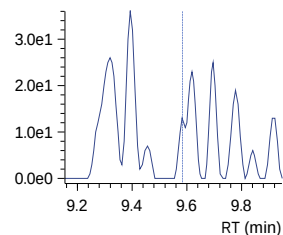
Conc. ----

R#1 0.00 (63.31)

R#2 0.00 (63.31)

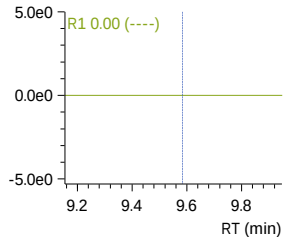
Q 548.80>79.90 (-)

3.60e1



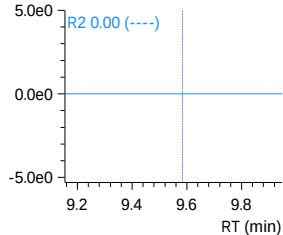
R1 548.80>98.80 (-)

0.00e0



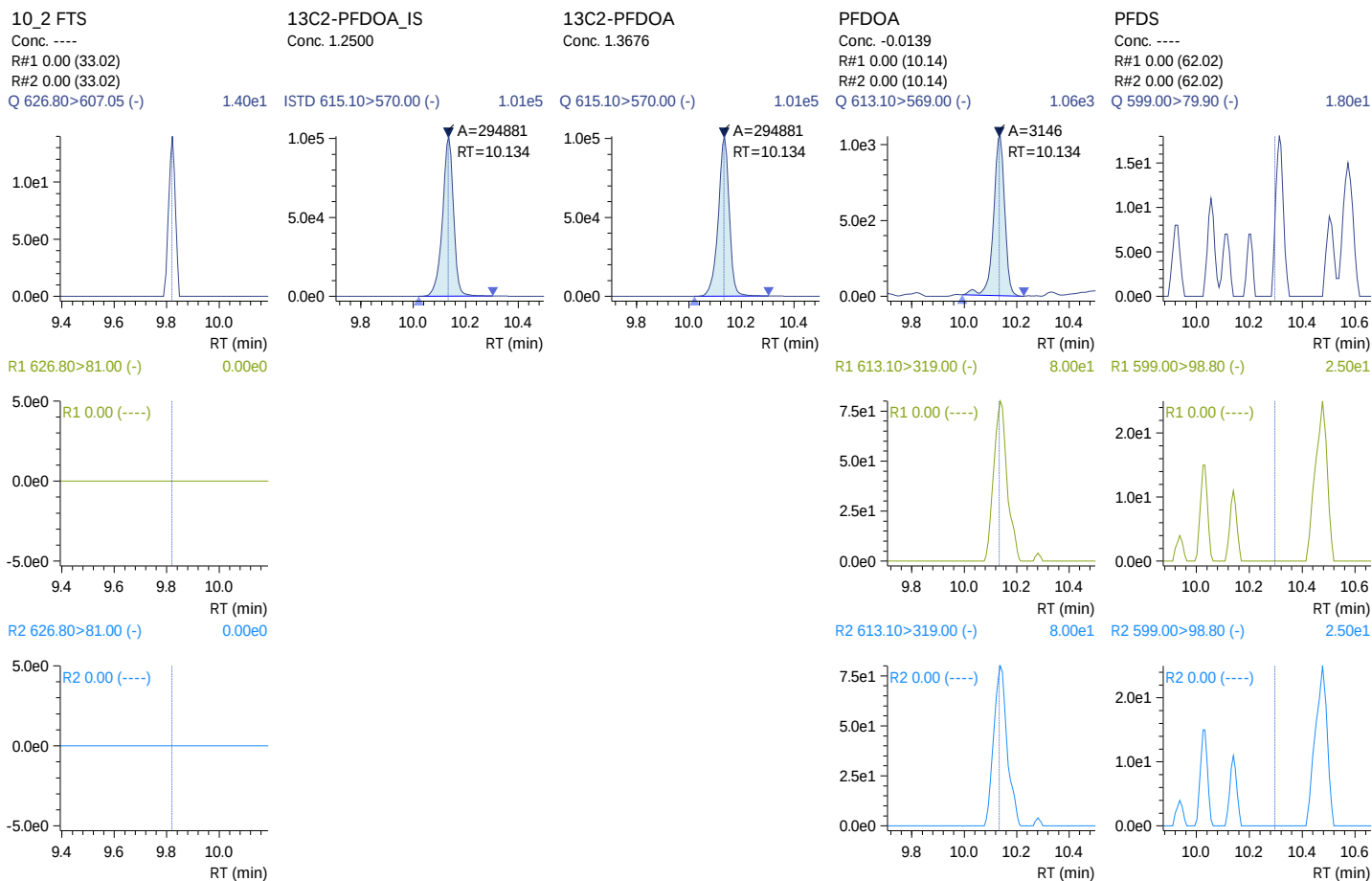
R2 548.80>98.80 (-)

0.00e0



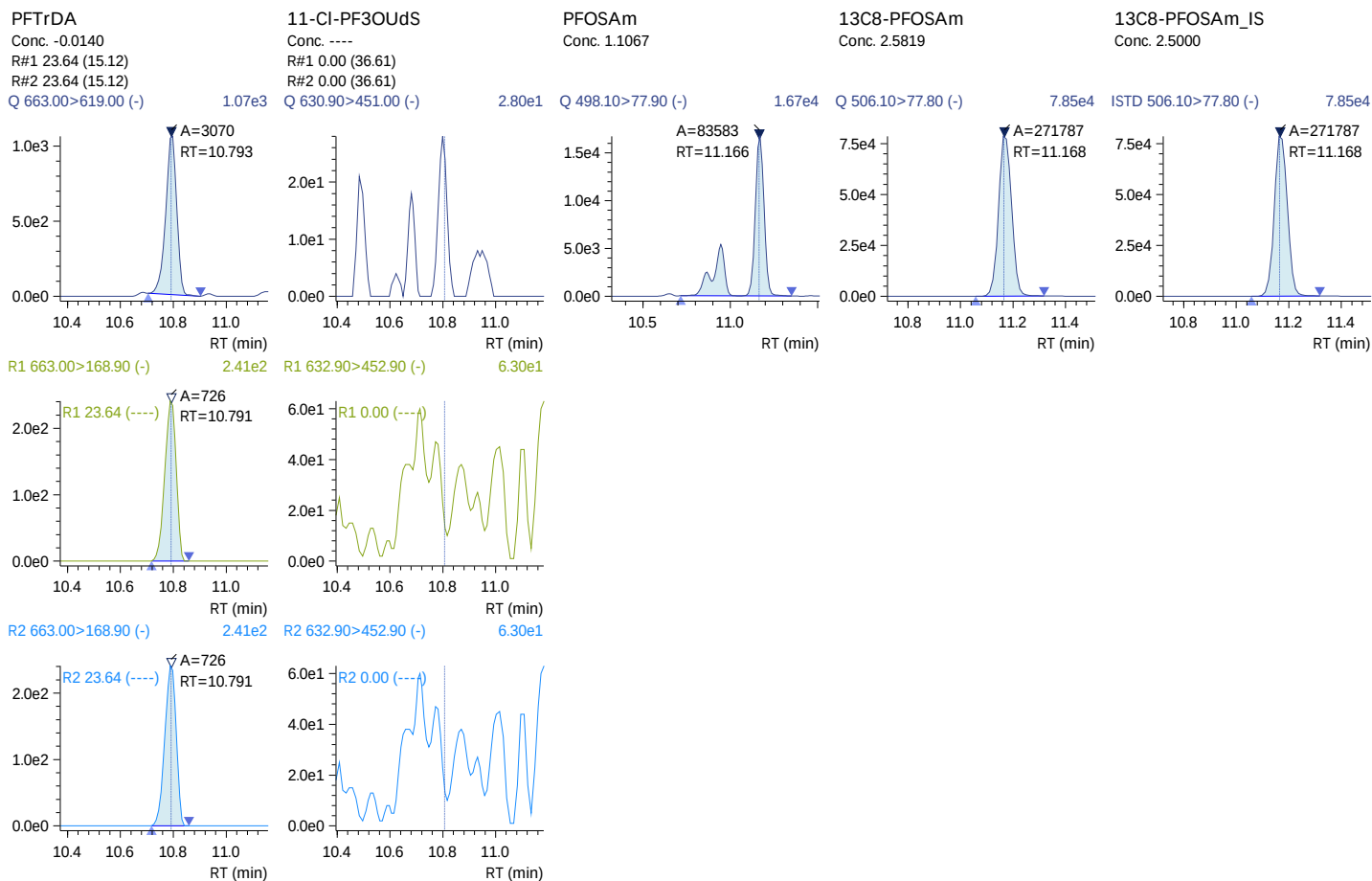


240118_020 (continued)



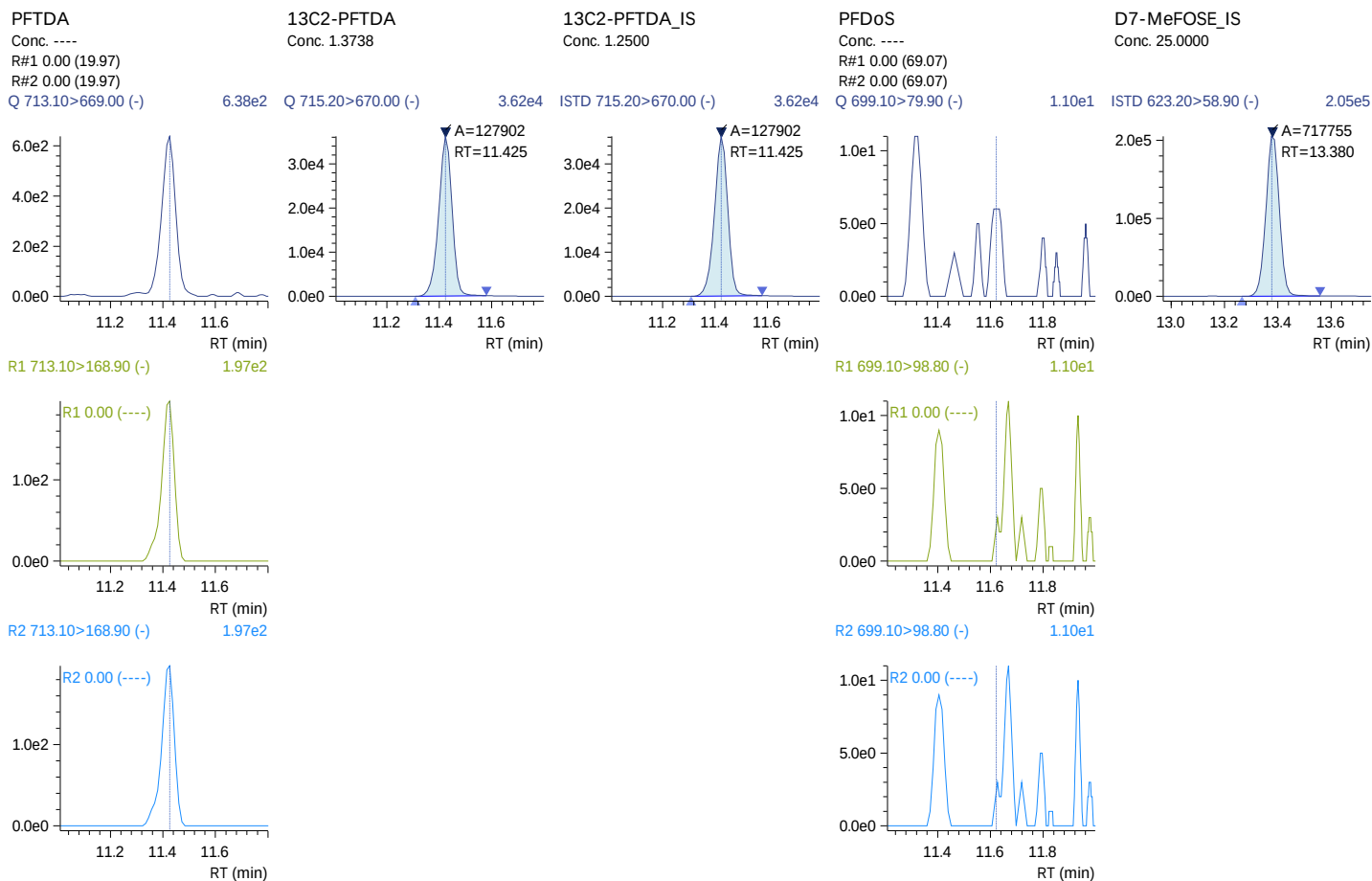


240118_020 (continued)





240118_020 (continued)





240118_020 (continued)

D7-MeFOSE
 Conc. 27.6562

MeFOSE
 Conc. 1.0427

13C2-PFHXA_IS
 Conc. 2.5000

13C2-PFHXA
 Conc. 2.8012

PFHXA
 Conc. -0.0116
 R#1 0.00 (11.64)
 R#2 0.00 (11.64)

Q 623.20>58.90 (-)

2.05e5

Q 616.10>59.00 (-)

4.75e3

ISTD 815.00>770.05 (-)

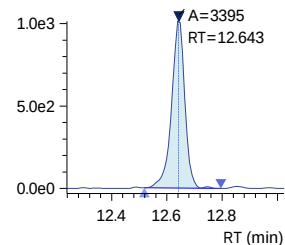
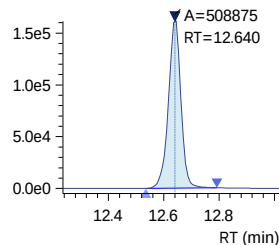
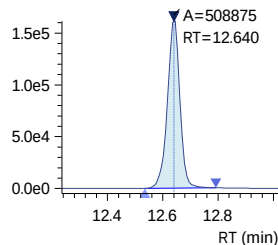
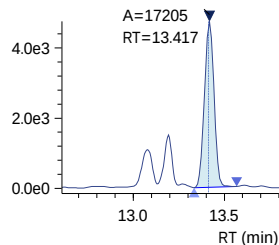
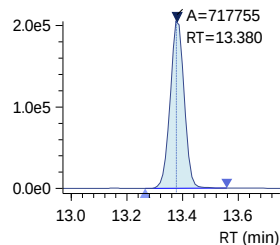
1.61e5

Q 815.00>770.05 (-)

1.61e5

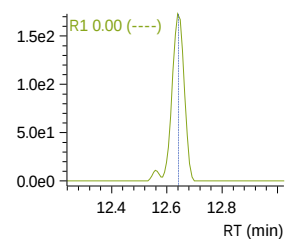
Q 813.00>768.95 (-)

1.01e3



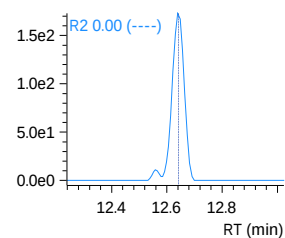
R1 813.00>218.95 (-)

1.73e2



R2 813.00>218.95 (-)

1.73e2





240118_020 (continued)

D3-MeFOSA
 Conc. 2.5606

D3-MeFOSA_IS
 Conc. 2.5000

MeFOSA
 Conc. ----
 R#1 0.00 (149.05)
 R#2 0.00 (149.05)

D9-EtFOSE_IS
 Conc. 25.0000

D9-EtFOSE
 Conc. 26.9013

Q 515.00>219.00 (-)

1.57e4

ISTD 515.00>219.00 (-)

1.57e4

Q 511.90>219.00 (-)

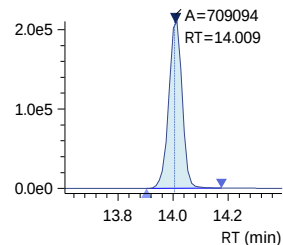
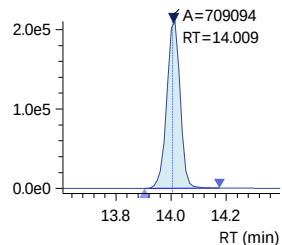
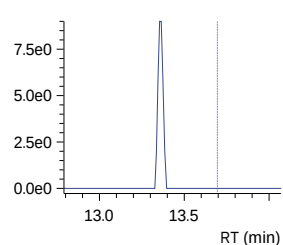
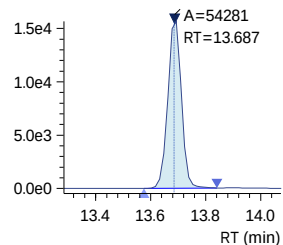
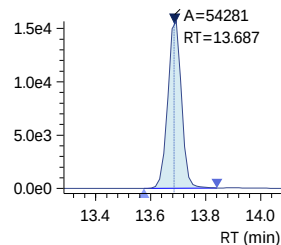
9.00e0

ISTD 639.20>58.90 (-)

2.10e5

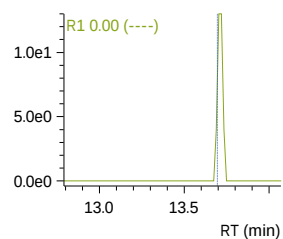
Q 639.20>58.90 (-)

2.10e5



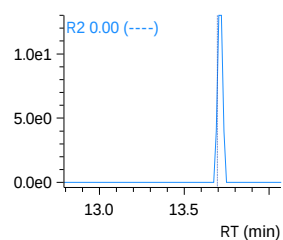
R1 511.90>169.00 (-)

1.30e1



R2 511.90>169.00 (-)

1.30e1





240118_020 (continued)

EtFOSE
 Conc. 1.0182

D5-EtFOSAm
 Conc. 2.6381

D5-EtFOSAm_IS
 Conc. 2.5000

EtFOSAm
 Conc. ----

PFODA
 Conc. 0.0014

Q 630.00>59.00 (-)

7.19e3

Q 531.10>219.00 (-)

2.33e4

ISTD 531.10>219.00 (-)

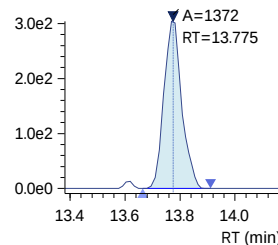
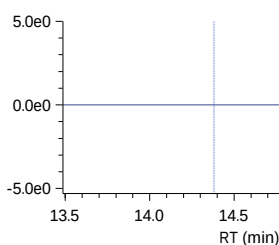
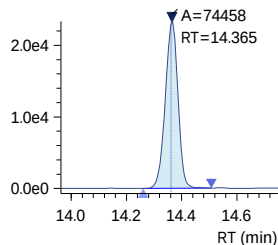
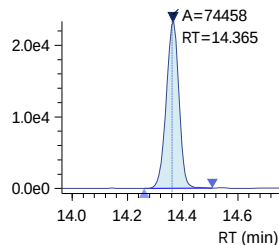
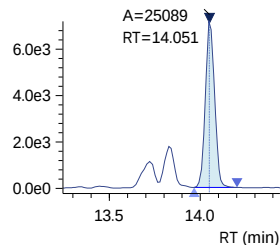
2.33e4

Q 526.00>219.00 (-)

0.00e0

Q 913.00>868.65 (-)

3.04e2

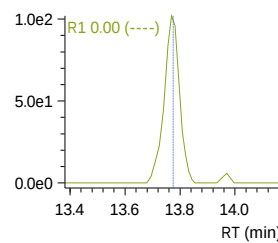
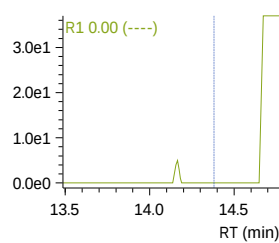


R1 526.00>169.00 (-)

3.70e1

R1 913.00>169.00 (-)

1.02e2

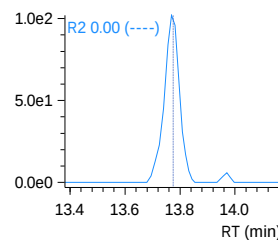
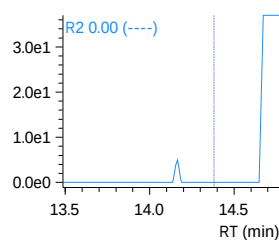


R2 526.00>169.00 (-)

3.70e1

R2 913.00>169.00 (-)

1.02e2



240130_1633_Curve

Injection Log
LCMS08 - Shimadzu 8060

ICAL Date: 1/30/2024

Std. xp: 2/28/2024 (ICV 2/3/28)

ICAL ID: KC2400048

LIMS ID: NA

1st Review:

Lillian Smith

2nd Review:

P. Salyards

Column:

Phenomenex EVO-C18 100X3.0 mm S/N: H23-138925

Mobile Phases

A: 2mM Ammonium Acetate in H2O:ACN 95%:5% 23-OLC-04-17E

B: ACN Lot #62120

	Sample Name	File Name	Acquisition Method	Dilution	R		
1	1633 CCB	23-OLC-04-06K	240130_017	1633_240130.lcm	1x	☒	
2	1633 ICAL 0.05PPB	23-OLC-04-20A	240130_018	1633_240130.lcm	1x	☒	Dropped cal point for HFPO-DA, PFOA, PFNA, PFDA, PFUnDA, PFDOA, PFTrDA, PFTeDA, PFHxDA, ETFOSE, and PFODA.
3	1633 ICAL 0.1PPB	23-OLC-04-20B	240130_019	1633_240130.lcm	1x	☒	Dropped cal point for PFODA. MeFOSA ion ratio failure.
4	1633 ICAL 0.25PPB	23-OLC-04-20C	240130_020	1633_240130.lcm	1x	☒	
5	1633 ICAL 0.5PPB	23-OLC-04-20D	240130_021	1633_240130.lcm	1x	☒	
6	1633 ICAL 1.0PPB	23-OLC-04-20E	240130_022	1633_240130.lcm	1x	☒	
7	1633 ICAL 5.0PPB	23-OLC-04-20F	240130_023	1633_240130.lcm	1x	☒	
8	1633 ICAL 10.0PPB	23-OLC-04-20G	240130_024	1633_240130.lcm	1x	☒	
9	1633 ICAL 15.0PPB	23-OLC-04-20H	240130_025	1633_240130.lcm	1x	☒	
10	1633 ICAL 20.0PPB	23-OLC-04-20I	240130_026	1633_240130.lcm	1x	☒	
11	1633 CCB	23-OLC-04-06K	240130_027	1633_240130.lcm	1x	☒	
12	1633 ICV 1.0PPB	23-OLC-04-06L	240130_028	1633_240130.lcm	1x	☒	
13	1633 FTCA ICV 1.0PPB	23-OLC-04-03D	240130_029	1633_240130.lcm	1x	☒	
14	TDCA CHECK	23-OLC-04-19J	240130_030	1633_240130.lcm	1x	☒	Shows sufficient separation from PFOS
15	1633 CCB	23-OLC-04-06K	240130_031	1633_240130.lcm	1x	☒	
16	1633 QIS	23-OLC-04-06J	240130_032	1633_240130.lcm	1x	☒	Shows PFOA and PFNA isomers

Sample Information

Sample Type: PEG+PPG+Raffinose

Tuning Condition

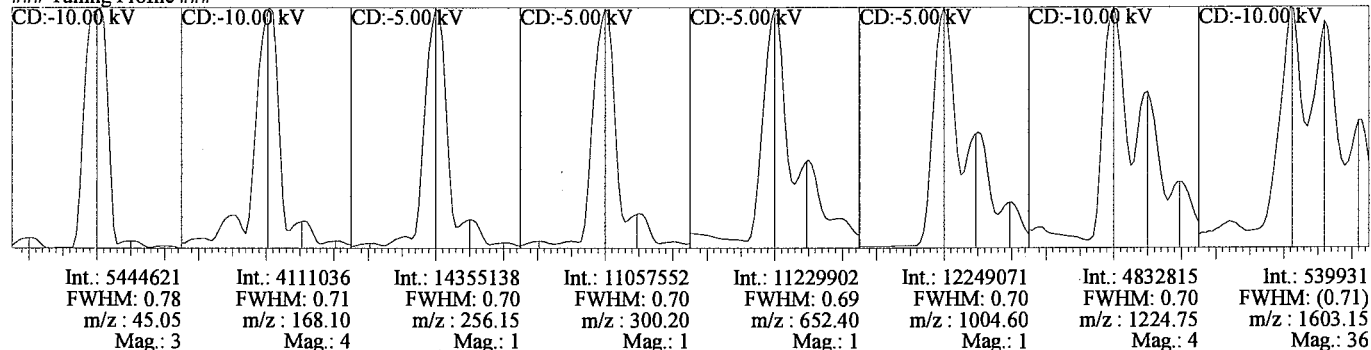
Detector Adjustment: On
Resolution Adjustment: On
FWHM of Spectrum: 0.70
Sensitivity Adjustment: On
Mass Calibration: On

Tuning Result

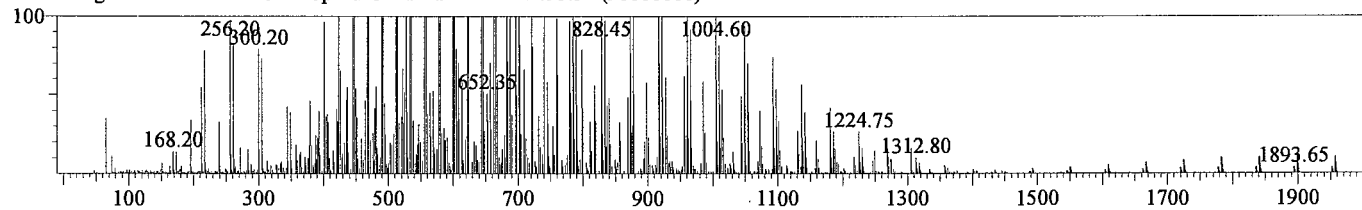
Model: LCMS-8060
Serial Number: O11106070177US
Interface: ESI
Polarity: Positive
Tuning Mode: Auto Tuning
Tuning Date: 1/30/2024 5:00:52 PM
Acquisition Mode: Q1 Scan(Use CID Gas)
Nebulizing Gas Flow: 1.50(settings : 1.50) L/min

Drying Gas Flow: 0.00(settings : 10.00) L/min
CID Gas Flow: 270(settings : 270) kPa
Heating Gas Flow: 5.00(settings : 5.00) L/Min
Interface Bias: +4.00 kV
Interface Current: 1.64 uA
Interface Temp.: 100(settings : 100) C
DL Temp.: 250(settings : 250) C
Heat Block Temp.: 399(settings : 400) C
Q1 RF Gain: 4996
Q1 RF Offset: 4990
Q3 RF Gain: ---
Q3 RF Offset: ---
Q1 Post-rod Bias: -5.0 V
CID CELL Exit Lens: -4.0 V
Conversion Dynode: -10.00 kV
Detector: -1.96(-1.96) kV
Vacuum Pressure(QA): 1.5e+02 Pa
Vacuum Pressure(QP): 2.3e-03 Pa

Tuning Profile



Scan Range: 2.00 - 2000.00 Scan Speed: 30 u/s Base Peak: 423.35 (20000000)



m/z(Target)	m/z(Actual)	Difference	Width	Intensity
45.05	45.05	0.00	0.78	5444621
168.10	168.20	0.10	0.71	4111036
256.15	256.20	0.05	0.70	14355138
300.20	300.20	0.00	0.70	11057552
652.40	652.35	-0.05	0.69	11229902
1004.60	1004.60	0.00	0.70	12249071
1224.75	1224.75	0.00	0.70	4832815
1603.15	---	---	(0.71)	539931

65 2-1-24

Tuning Condition

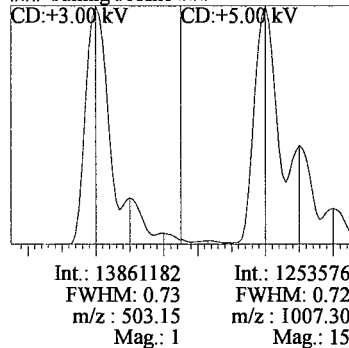
Detector Adjustment: On
Resolution Adjustment: On
FWHM of Spectrum: 0.70
Sensitivity Adjustment: On
Mass Calibration: On

Tuning Result

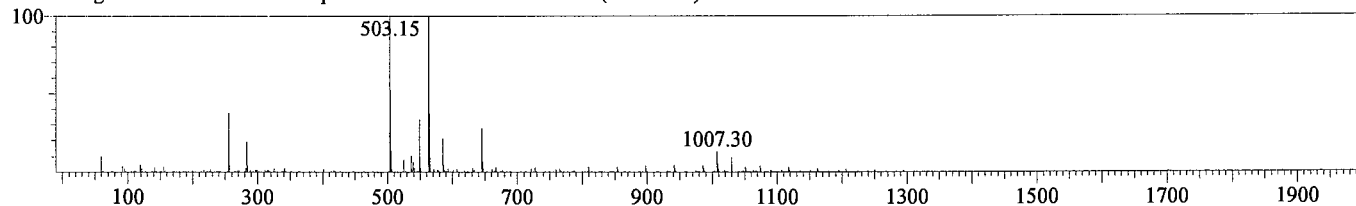
Model :LCMS-8060
Serial Number :O11106070177US
Interface :ESI
Polarity :Negative
Tuning Mode :Auto Tuning
Tuning Date :1/30/2024 5:05:42 PM
Acquisition Mode :Q1 Scan(Use CID Gas)
Nebulizing Gas Flow :1.50(settings : 1.50) L/min

Heating Gas Flow :3.00(settings : 3.00) L/min
Interface Bias :-3.00 kV
Interface Current :1.86 uA
Interface Temp. :100(settings : 100) C
DL Temp. :250(settings : 250) C
Heat Block Temp. :400(settings : 400) C
Q1 RF Gain :5000
Q1 RF Offset :5000
Q3 RF Gain :---
Q3 RF Offset :---
Q1 Post-rod Bias :5.0 V
CID CELL Exit Lens :3.5 V
Conversion Dynode :+10.00 kV
Detector :-1.96(-1.96) kV
Vacuum Pressure(QA) :1.5e+02 Pa
Vacuum Pressure(QP) :2.3e-03 Pa

Tuning Profile



Scan Range: 2.00 - 2000.00 Scan Speed: 30 u/s Base Peak: 503.15 (20000000)



m/z(Target)	m/z(Actual)	Difference	Width	Intensity
503.15	503.15	0.00	0.73	13861182
1007.30	1007.30	0.00	0.72	1253576

CS Z-1-Z4

Tuning Condition

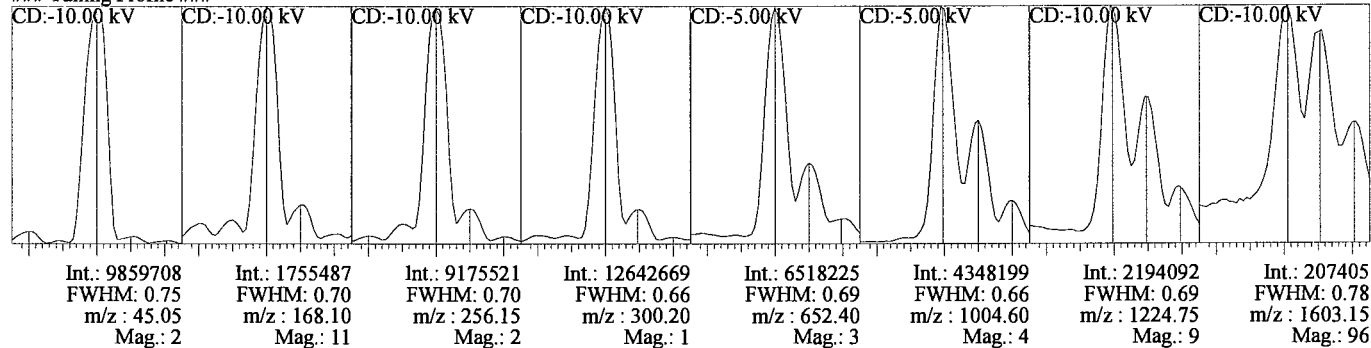
Detector Adjustment: On
Resolution Adjustment: On
FWHM of Spectrum: 0.70
Sensitivity Adjustment: On
Mass Calibration: On

Tuning Result

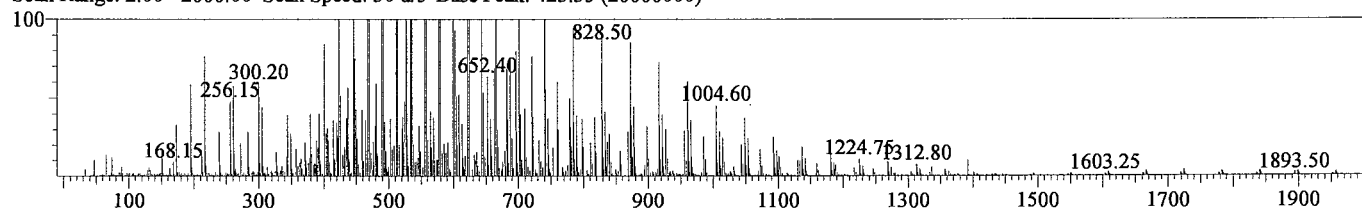
Model :LCMS-8060
Serial Number :O11106070177US
Interface :ESI
Polarity :Positive
Tuning Mode :Auto Tuning
Tuning Date :1/30/2024 5:09:02 PM
Acquisition Mode :Q3 Scan(Use CID Gas)
Nebulizing Gas Flow :1.50(settings : 1.50) L/min

Interface Bias :1.76 uA
Interface Temp. :100(settings : 100) C
DL Temp. :250(settings : 250) C
Heat Block Temp. :400(settings : 400) C
Q1 RF Gain :---
Q1 RF Offset :---
Q3 RF Gain :4997
Q3 RF Offset :4990
Q1 Post-rod Bias :5.0 V
CID CELL Exit Lens :4.0 V
Conversion Dynode :10.00 kV
Detector :1.96(-1.96) kV
Vacuum Pressure(QA) :1.5e+02 Pa
Vacuum Pressure(QP) :2.3e-03 Pa

Tuning Profile



Scan Range: 2.00 - 2000.00 Scan Speed: 30 u/s Base Peak: 423.35 (20000000)



m/z(Target)	m/z(Actual)	Difference	Width	Intensity
45.05	45.05	0.00	0.75	9859708
168.10	168.15	0.05	0.70	1755487
256.15	256.15	0.00	0.70	9175521
300.20	300.20	0.00	0.66	12642669
652.40	652.40	0.00	0.69	6518225
1004.60	1004.60	0.00	0.66	4348199
1224.75	1224.75	0.00	0.69	2194092
1603.15	1603.25	0.10	0.78	207405

CS 2-1-24

Tuning Condition

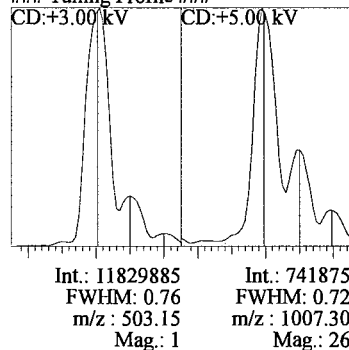
Detector Adjustment: On
Resolution Adjustment: On
FWHM of Spectrum: 0.70
Sensitivity Adjustment: On
Mass Calibration: On

Tuning Result

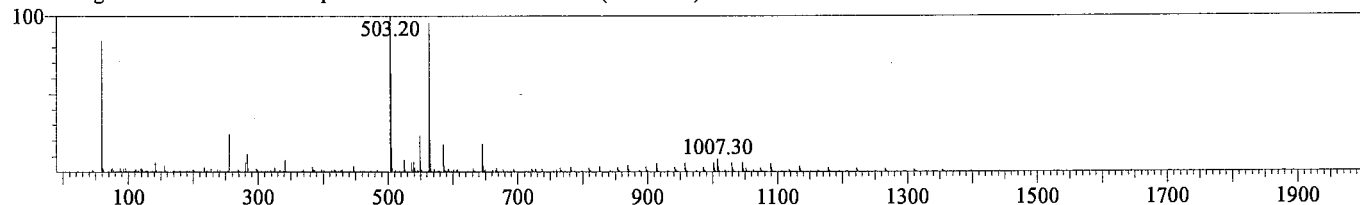
Model :LCMS-8060
Serial Number :O11106070177US
Interface :ESI
Polarity :Negative
Tuning Mode :Auto Tuning
Tuning Date :1/30/2024 5:12:21 PM
Acquisition Mode :Q3 Scan(Use CID Gas)
Nebulizing Gas Flow :1.50(settings : 1.50) L/min

Heating Gas Flow :3.00(settings : 3.00) L/min
Interface Bias :-3.00 kV
Interface Current :1.89 uA
Interface Temp. :100(settings : 100) C
DL Temp. :250(settings : 250) C
Heat Block Temp. :400(settings : 400) C
Q1 RF Gain :---
Q1 RF Offset :---
Q3 RF Gain :5000
Q3 RF Offset :5000
Q1 Post-rod Bias :5.0 V
CID CELL Exit Lens :3.5 V
Conversion Dynode :+10.00 kV
Detector :-1.96(-1.96) kV
Vacuum Pressure(QA) :1.5e+02 Pa
Vacuum Pressure(QP) :2.3e-03 Pa

Tuning Profile



Scan Range: 2.00 - 2000.00 Scan Speed: 30 u/s Base Peak: 503.20 (20000000)



m/z(Target)	m/z(Actual)	Difference	Width	Intensity
503.15	503.20	0.05	0.76	11829885
1007.30	1007.30	0.00	0.72	741875

CS 2-1-24

Tuning Condition

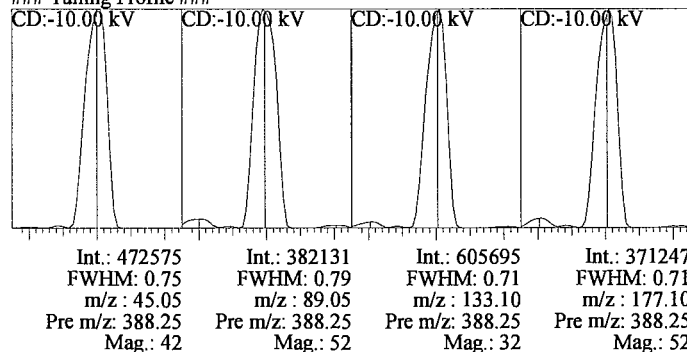
Detector Adjustment: On
Resolution Adjustment: On
FWHM of Spectrum: 0.70
Sensitivity Adjustment: On
Mass Calibration: On

Tuning Result

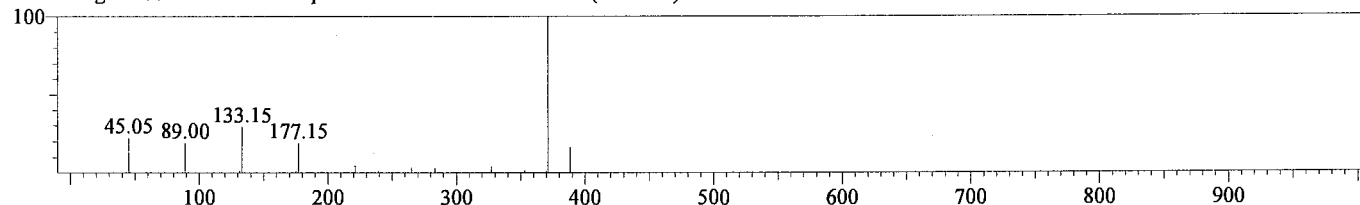
Model :LCMS-8060
Serial Number :O11106070177US
Interface :ESI
Polarity :Positive
Tuning Mode :Auto Tuning
Tuning Date :1/30/2024 5:16:02 PM
Acquisition Mode :Product Ion Scan
Nebulizing Gas Flow :1.50(settings : 1.50) L/min

Heating Gas Flow :5.00(settings : 5.00) L/min
Interface Bias :+4.00 kV
Interface Current :2.25 uA
Interface Temp. :100(settings : 100) C
DL Temp. :249(settings : 250) C
Heat Block Temp. :399(settings : 400) C
Q1 RF Gain :4996
Q1 RF Offset :4990
Q3 RF Gain :4997
Q3 RF Offset :4988
Q1 Post-rod Bias :-5.0 V
CID CELL Exit Lens :-0.7 V
Conversion Dynode :-10.00 kV
Detector :-1.96(-1.96) kV
Vacuum Pressure(QA) :1.5e+02 Pa
Vacuum Pressure(QP) :2.3e-03 Pa

Tuning Profile



Scan Range: 2.00 - 438.25 Scan Speed: 30 u/s Base Peak: 371.25 (2043772) Pre m/z: 388.25



m/z(Target)	m/z(Actual)	Difference	Width	Intensity
388.25 > 45.05	45.05	0.00	0.75	472575
388.25 > 89.05	89.00	-0.05	0.79	382131
388.25 > 133.10	133.15	0.05	0.71	605695
388.25 > 177.10	177.15	0.05	0.71	371247

CS 2-1-24

Tuning Condition

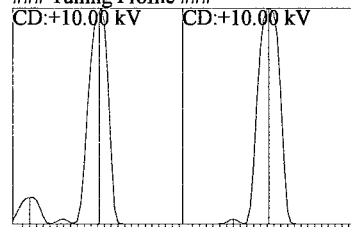
Detector Adjustment: On
Resolution Adjustment: On
FWHM of Spectrum: 0.70
Sensitivity Adjustment: On
Mass Calibration: On

Tuning Result

Model: LCMS-8060
Serial Number: O11106070177US
Interface: ESI
Polarity: Negative
Tuning Mode: Auto Tuning
Tuning Date: 1/30/2024 5:16:02 PM
Acquisition Mode: Product Ion Scan
Nebulizing Gas Flow: 1.50(settings : 1.50) L/min

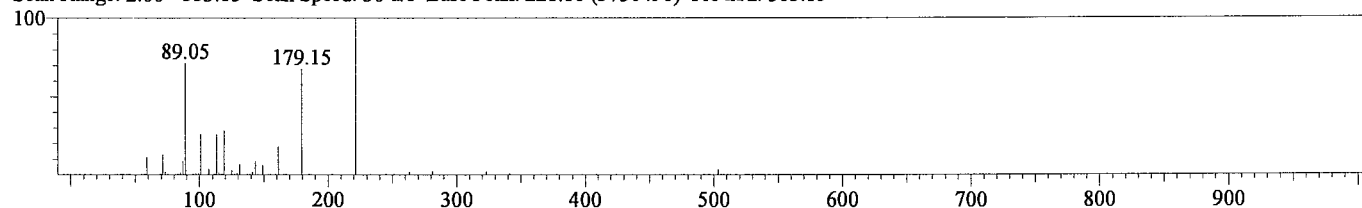
Heating Gas Flow: 3.00(settings : 3.00) L/min
Interface Bias: -3.00 kV
Interface Current: 2.39 uA
Interface Temp.: 100(settings : 100) C
DL Temp.: 249(settings : 250) C
Heat Block Temp.: 399(settings : 400) C
Q1 RF Gain: 5000
Q1 RF Offset: 5000
Q3 RF Gain: 5000
Q3 RF Offset: 5005
Q1 Post-rod Bias: 5.0 V
CID CELL Exit Lens: 0.7 V
Conversion Dynode: +10.00 kV
Detector: -1.96(-1.96) kV
Vacuum Pressure(QA): 1.5e+02 Pa
Vacuum Pressure(QP): 2.3e-03 Pa

Tuning Profile



Int.: 2546765 Int.: 2528983
FWHM: 0.67 FWHM: 0.76
m/z: 89.00 m/z: 179.05
Pre m/z: 503.15 Pre m/z: 503.15
Mag.: 7 Mag.: 7

Scan Range: 2.00 - 553.15 Scan Speed: 30 u/s Base Peak: 221.10 (3750490) Pre m/z: 503.15



m/z(Target)	m/z(Actual)	Difference	Width	Intensity
503.15 > 89.00	89.05	0.05	0.67	2546765
503.15 > 179.05	179.15	0.10	0.76	2528983

15 7.1.24



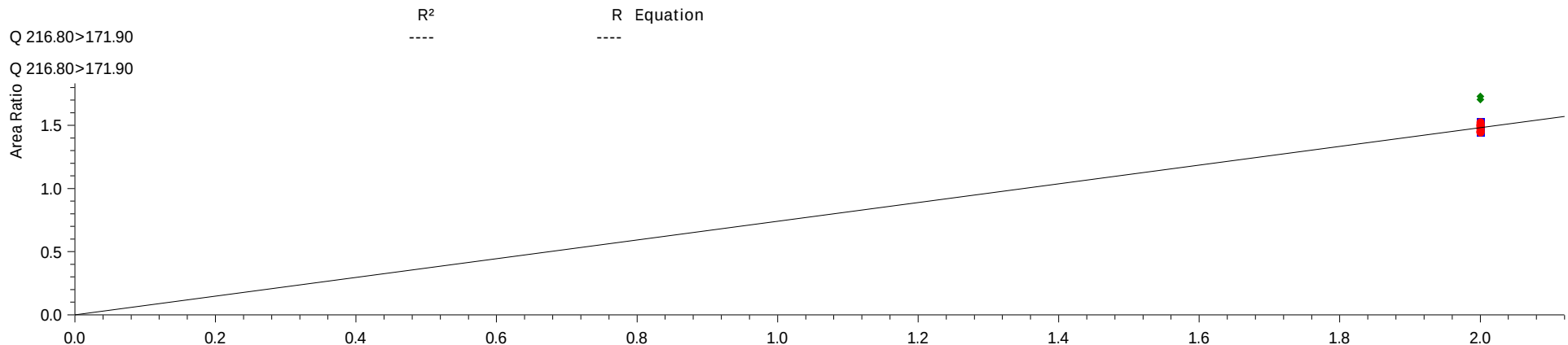
Compound: 13C4-PFBA

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240130_018	1633 ICAL 0.05PPB	☒	Auto	913822	629363	10.0000	5.0000	0.725989	9.7989	-2.01	0.740888	1.896534	1.896534
240130_019	1633 ICAL 0.1PPB	☒	Auto	887749	611487	10.0000	5.0000	0.725894	9.7976	-2.02	0.740888	1.896534	1.896534
240130_020	1633 ICAL 0.25PPB	☒	Auto	914999	621552	10.0000	5.0000	0.736060	9.9348	-0.65	0.740888	1.896534	1.896534
240130_021	1633 ICAL 0.5PPB	☒	Auto	922570	638153	10.0000	5.0000	0.722843	9.7564	-2.44	0.740888	1.896534	1.896534
240130_022	1633 ICAL 1.0PPB	☒	Auto	916994	617879	10.0000	5.0000	0.742049	10.0157	0.16	0.740888	1.896534	1.896534
240130_023	1633 ICAL 5.0PPB	☒	Auto	944228	628680	10.0000	5.0000	0.750962	10.1360	1.36	0.740888	1.896534	1.896534
240130_024	1633 ICAL 10.0PPB	☒	Auto	929844	621636	10.0000	5.0000	0.747900	10.0946	0.95	0.740888	1.896534	1.896534
240130_025	1633 ICAL 15.0PPB	☒	Auto	924727	613287	10.0000	5.0000	0.753910	10.1758	1.76	0.740888	1.896534	1.896534
240130_026	1633 ICAL 20.0PPB	☒	Auto	929320	609480	10.0000	5.0000	0.762387	10.2902	2.90	0.740888	1.896534	1.896534
240130_028	1633 ICV 1.0PPB		Auto	893163	516731	10.0000	5.0000	----	11.6650	16.65	0.740888	1.896534	1.896534
240130_029	1633 FTCA ICV 1.0PPB		Auto	923003	541225	10.0000	5.0000	----	11.5091	15.09	0.740888	1.896534	1.896534



Compound: 13C4-PFBA_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

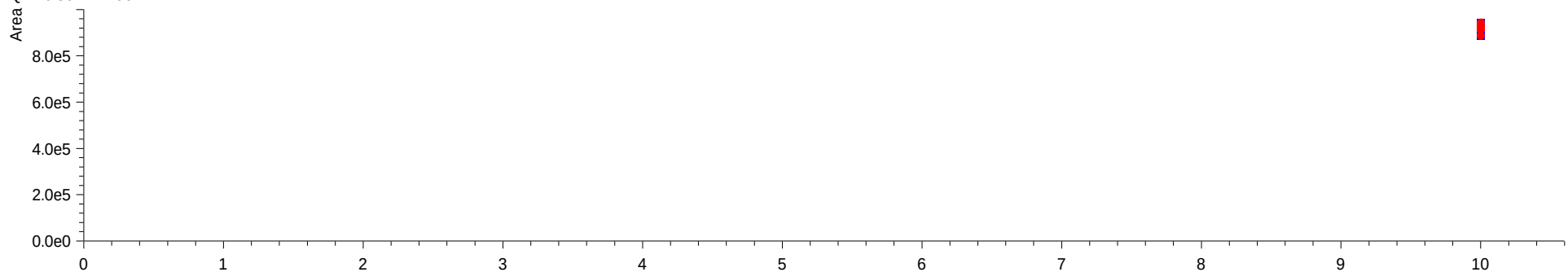
Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 0

Q 216.80>171.90 R² ---- R Equation ----

Q 216.80>171.90



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240130_018	1633 ICAL 0.05PPB	☐	Auto	913822	913822	10.0000	10.0000	1.000000	10.0000	0.00	----	----	----
240130_019	1633 ICAL 0.1PPB	☐	Auto	887749	887749	10.0000	10.0000	1.000000	10.0000	0.00	----	----	----
240130_020	1633 ICAL 0.25PPB	☐	Auto	914999	914999	10.0000	10.0000	1.000000	10.0000	0.00	----	----	----
240130_021	1633 ICAL 0.5PPB	☐	Auto	922570	922570	10.0000	10.0000	1.000000	10.0000	0.00	----	----	----
240130_022	1633 ICAL 1.0PPB	☐	Auto	916994	916994	10.0000	10.0000	1.000000	10.0000	0.00	----	----	----
240130_023	1633 ICAL 5.0PPB	☐	Auto	944228	944228	10.0000	10.0000	1.000000	10.0000	0.00	----	----	----
240130_024	1633 ICAL 10.0PPB	☐	Auto	929844	929844	10.0000	10.0000	1.000000	10.0000	0.00	----	----	----
240130_025	1633 ICAL 15.0PPB	☐	Auto	924727	924727	10.0000	10.0000	1.000000	10.0000	0.00	----	----	----
240130_026	1633 ICAL 20.0PPB	☐	Auto	929320	929320	10.0000	10.0000	1.000000	10.0000	0.00	----	----	----
240130_028	1633 ICV 1.0PPB		Auto	893163	893163	10.0000	10.0000	----	10.0000	0.00	----	----	----
240130_029	1633 FTCA ICV 1.0PPB		Auto	923003	923003	10.0000	10.0000	----	10.0000	0.00	----	----	----



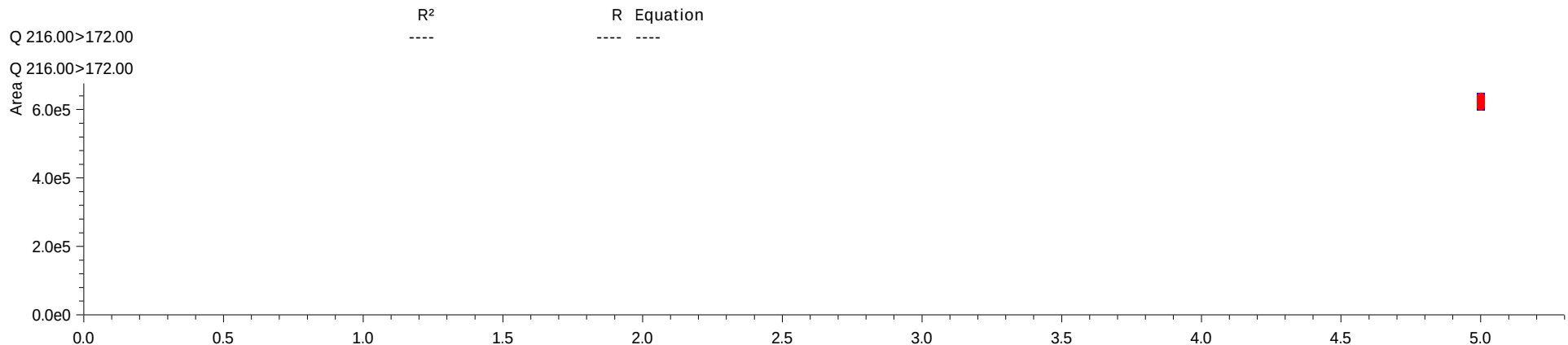
Compound: 13C3-PFBA_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 0



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)	Conc. (ng/mL)
240130_018	1633 ICAL 0.05PPB	☐	Auto	629363	629363	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----	
240130_019	1633 ICAL 0.1PPB	☐	Auto	611487	611487	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----	
240130_020	1633 ICAL 0.25PPB	☐	Auto	621552	621552	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----	
240130_021	1633 ICAL 0.5PPB	☐	Auto	638153	638153	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----	
240130_022	1633 ICAL 1.0PPB	☐	Auto	617879	617879	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----	
240130_023	1633 ICAL 5.0PPB	☐	Auto	628680	628680	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----	
240130_024	1633 ICAL 10.0PPB	☐	Auto	621636	621636	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----	
240130_025	1633 ICAL 15.0PPB	☐	Auto	613287	613287	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----	
240130_026	1633 ICAL 20.0PPB	☐	Auto	609480	609480	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----	
240130_028	1633 ICV 1.0PPB		Auto	516731	516731	5.0000	5.0000	----	5.0000	0.00	----	----	----	
240130_029	1633 FTCA ICV 1.0PPB		Auto	541225	541225	5.0000	5.0000	----	5.0000	0.00	----	----	----	



Compound: PFBA

Curve Fit: Linear | Weighting: 1/C | Zero: Not Forced

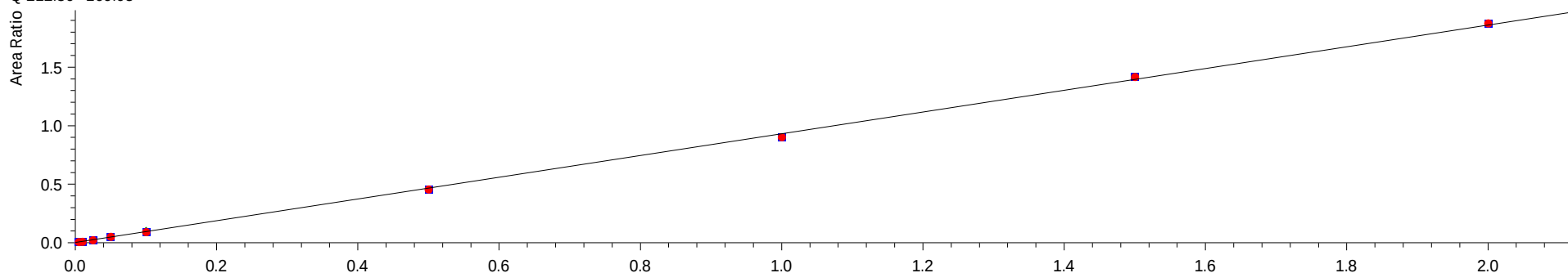
Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2

Q 212.80>169.05
R² 0.9995877
R Equation 0.9997938 $y = 0.9291728x + 0.001190965$

Q 212.80>169.05



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240130_018	1633 ICAL 0.05PPB	☒	M	5918	913822	0.0500	10.0000	1.295213	0.0569	13.76	0.978686	12.642214	7.262870
240130_019	1633 ICAL 0.1PPB	☒	Auto	8652	887749	0.1000	10.0000	0.974590	0.0921	-7.93	0.978686	12.642214	7.262870
240130_020	1633 ICAL 0.25PPB	☒	Auto	20701	914999	0.2500	10.0000	0.904959	0.2307	-7.73	0.978686	12.642214	7.262870
240130_021	1633 ICAL 0.5PPB	☒	Auto	46626	922570	0.5000	10.0000	1.010784	0.5311	6.22	0.978686	12.642214	7.262870
240130_022	1633 ICAL 1.0PPB	☒	Auto	84780	916994	1.0000	10.0000	0.924546	0.9822	-1.78	0.978686	12.642214	7.262870
240130_023	1633 ICAL 5.0PPB	☒	Auto	430874	944228	5.0000	10.0000	0.912647	4.8983	-2.03	0.978686	12.642214	7.262870
240130_024	1633 ICAL 10.0PPB	☒	Auto	840345	929844	10.0000	10.0000	0.903748	9.7136	-2.86	0.978686	12.642214	7.262870
240130_025	1633 ICAL 15.0PPB	☒	Auto	1309857	924727	15.0000	10.0000	0.944319	15.2317	1.54	0.978686	12.642214	7.262870
240130_026	1633 ICAL 20.0PPB	☒	Auto	1742228	929320	20.0000	10.0000	0.937367	20.1636	0.82	0.978686	12.642214	7.262870
240130_028	1633 ICV 1.0PPB		Auto	91427	893163	1.0000	10.0000	----	1.0888	8.88	0.978686	12.642214	7.262870
240130_029	1633 FTCA ICV 1.0PPB		ND(W/B)	----	923003	1.0000	10.0000	----	----	----	0.978686	12.642214	7.262870



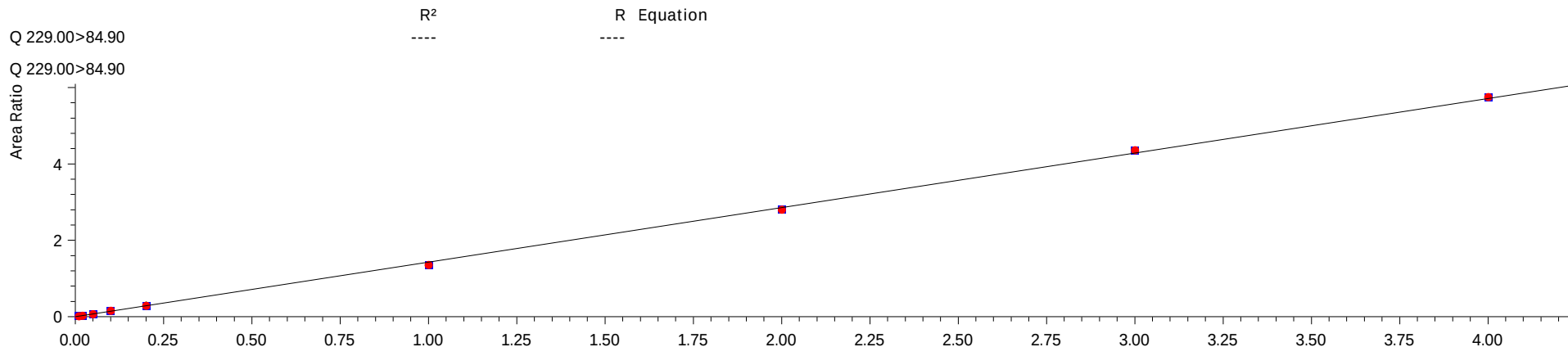
Compound: PFMPA

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240130_018	1633 ICAL 0.05PPB	☒	Auto	3787	263505	0.0500	5.0000	1.437015	0.0503	0.65	1.427708	4.735760	4.735761
240130_019	1633 ICAL 0.1PPB	☒	Auto	6924	262559	0.1000	5.0000	1.318562	0.0924	-7.64	1.427708	4.735760	4.735761
240130_020	1633 ICAL 0.25PPB	☒	Auto	18292	255996	0.2500	5.0000	1.429102	0.2502	0.10	1.427708	4.735760	4.735761
240130_021	1633 ICAL 0.5PPB	☒	Auto	38777	248773	0.5000	5.0000	1.558744	0.5459	9.18	1.427708	4.735760	4.735761
240130_022	1633 ICAL 1.0PPB	☒	Auto	71938	246969	1.0000	5.0000	1.456426	1.0201	2.01	1.427708	4.735760	4.735761
240130_023	1633 ICAL 5.0PPB	☒	Auto	362239	267071	5.0000	5.0000	1.356340	4.7501	-5.00	1.427708	4.735760	4.735761
240130_024	1633 ICAL 10.0PPB	☒	Auto	707726	252493	10.0000	5.0000	1.401474	9.8162	-1.84	1.427708	4.735760	4.735761
240130_025	1633 ICAL 15.0PPB	☒	Auto	1082097	248061	15.0000	5.0000	1.454075	15.2770	1.85	1.427708	4.735760	4.735761
240130_026	1633 ICAL 20.0PPB	☒	Auto	1456610	253299	20.0000	5.0000	1.437639	20.1391	0.70	1.427708	4.735760	4.735761
240130_028	1633 ICV 1.0PPB		Auto	74730	247523	1.0000	5.0000	----	1.0573	5.73	1.427708	4.735760	4.735761
240130_029	1633 FTCA ICV 1.0PPB		ND(W/B)	----	251435	1.0000	5.0000	----	----	----	1.427708	4.735760	4.735761



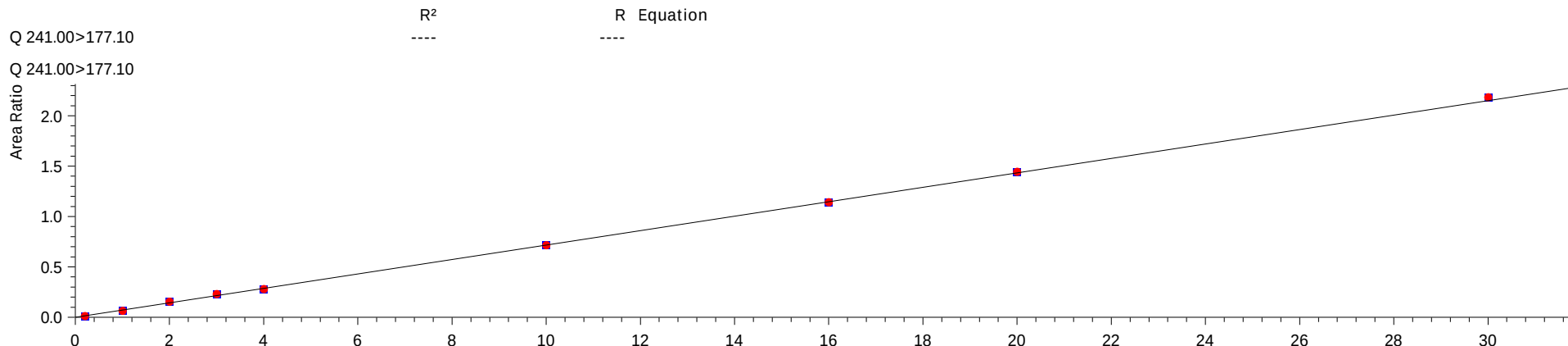
Compound: 3_3 FTCA

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc.Ratio
240130_018	1633 ICAL 0.05PPB	☒	Auto	3415	263505	1.0000	5.0000	0.064798	0.9047	-9.53	0.071621	6.109317	6.109317
240130_019	1633 ICAL 0.1PPB	☒	Auto	17348	262559	5.0000	5.0000	0.066075	4.6128	-7.74	0.071621	6.109317	6.109317
240130_020	1633 ICAL 0.25PPB	☒	Auto	39811	255996	10.0000	5.0000	0.077758	10.8568	8.57	0.071621	6.109317	6.109317
240130_021	1633 ICAL 0.5PPB	☒	Auto	57832	248773	15.0000	5.0000	0.077490	16.2292	8.19	0.071621	6.109317	6.109317
240130_022	1633 ICAL 1.0PPB	☒	Auto	69413	246969	20.0000	5.0000	0.070265	19.6213	-1.89	0.071621	6.109317	6.109317
240130_023	1633 ICAL 5.0PPB	☒	Auto	191337	267071	50.0000	5.0000	0.071643	50.0154	0.03	0.071621	6.109317	6.109317
240130_024	1633 ICAL 10.0PPB	☒	Auto	288635	252493	80.0000	5.0000	0.071446	79.8048	-0.24	0.071621	6.109317	6.109317
240130_025	1633 ICAL 15.0PPB	☒	Auto	358745	248061	100.0000	5.0000	0.072310	100.9621	0.96	0.071621	6.109317	6.109317
240130_026	1633 ICAL 20.0PPB	☒	Auto	553235	253299	150.0000	5.0000	0.072804	152.4779	1.65	0.071621	6.109317	6.109317
240130_028	1633 ICV 1.0PPB		ND(W/B)	----	247523	20.0000	5.0000	----	----	----	0.071621	6.109317	6.109317
240130_029	1633 FTCA ICV 1.0PPB		Auto	69173	251435	20.0000	5.0000	----	19.2063	-3.97	0.071621	6.109317	6.109317



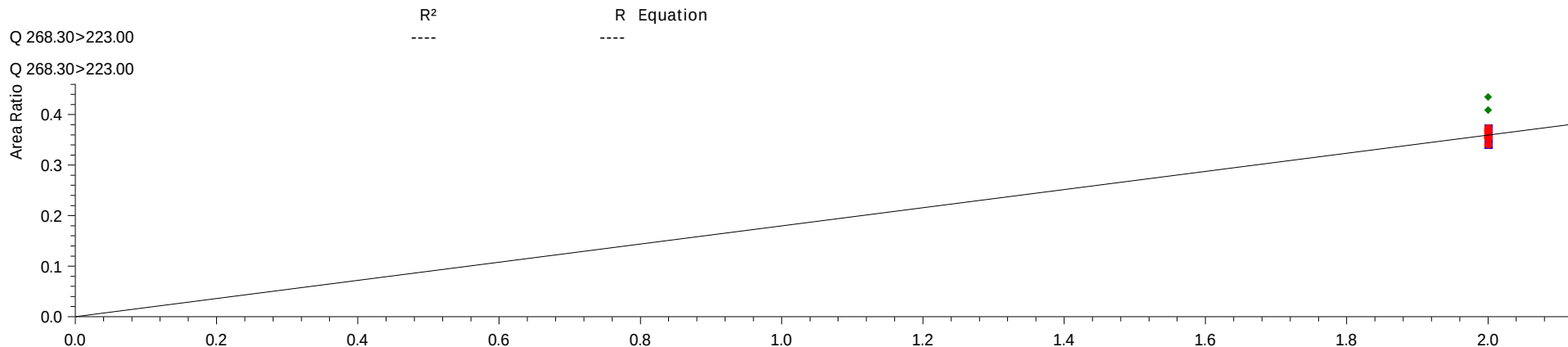
Compound: 13C5-PFPeA

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc.Ratio
240130_018	1633 ICAL 0.05PPB	☒	Auto	263505	713147	5.0000	2.5000	0.184748	5.1387	2.77	0.179761	2.747480	2.747480
240130_019	1633 ICAL 0.1PPB	☒	Auto	262559	743357	5.0000	2.5000	0.176603	4.9122	-1.76	0.179761	2.747480	2.747480
240130_020	1633 ICAL 0.25PPB	☒	Auto	255996	718007	5.0000	2.5000	0.178268	4.9585	-0.83	0.179761	2.747480	2.747480
240130_021	1633 ICAL 0.5PPB	☒	Auto	248773	729140	5.0000	2.5000	0.170594	4.7450	-5.10	0.179761	2.747480	2.747480
240130_022	1633 ICAL 1.0PPB	☒	Auto	246969	690527	5.0000	2.5000	0.178827	4.9740	-0.52	0.179761	2.747480	2.747480
240130_023	1633 ICAL 5.0PPB	☒	Auto	267071	715943	5.0000	2.5000	0.186517	5.1879	3.76	0.179761	2.747480	2.747480
240130_024	1633 ICAL 10.0PPB	☒	Auto	252493	686662	5.0000	2.5000	0.183856	5.1139	2.28	0.179761	2.747480	2.747480
240130_025	1633 ICAL 15.0PPB	☒	Auto	248061	683472	5.0000	2.5000	0.181471	5.0476	0.95	0.179761	2.747480	2.747480
240130_026	1633 ICAL 20.0PPB	☒	Auto	253299	715684	5.0000	2.5000	0.176963	4.9222	-1.56	0.179761	2.747480	2.747480
240130_028	1633 ICV 1.0PPB		Auto	247523	604927	5.0000	2.5000	----	5.6906	13.81	0.179761	2.747480	2.747480
240130_029	1633 FTCA ICV 1.0PPB		Auto	251435	578360	5.0000	2.5000	----	6.0461	20.92	0.179761	2.747480	2.747480



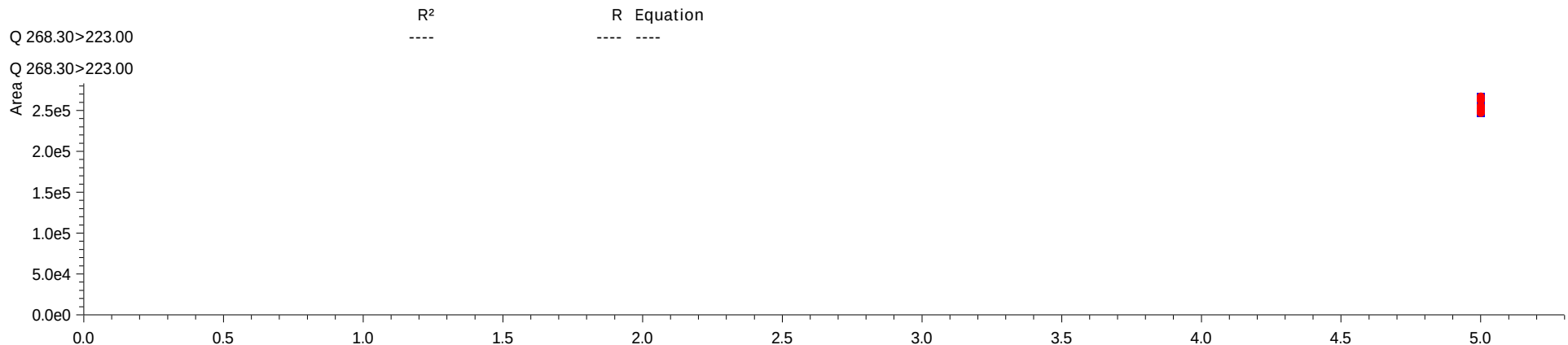
Compound: 13C5-PFPeA_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 0



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc. (ng/mL)
240130_018	1633 ICAL 0.05PPB	☐	Auto	263505	263505	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240130_019	1633 ICAL 0.1PPB	☐	Auto	262559	262559	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240130_020	1633 ICAL 0.25PPB	☐	Auto	255996	255996	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240130_021	1633 ICAL 0.5PPB	☐	Auto	248773	248773	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240130_022	1633 ICAL 1.0PPB	☐	Auto	246969	246969	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240130_023	1633 ICAL 5.0PPB	☐	Auto	267071	267071	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240130_024	1633 ICAL 10.0PPB	☐	Auto	252493	252493	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240130_025	1633 ICAL 15.0PPB	☐	Auto	248061	248061	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240130_026	1633 ICAL 20.0PPB	☐	Auto	253299	253299	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240130_028	1633 ICV 1.0PPB		Auto	247523	247523	5.0000	5.0000	----	5.0000	0.00	----	----	----
240130_029	1633 FTCA ICV 1.0PPB		Auto	251435	251435	5.0000	5.0000	----	5.0000	0.00	----	----	----



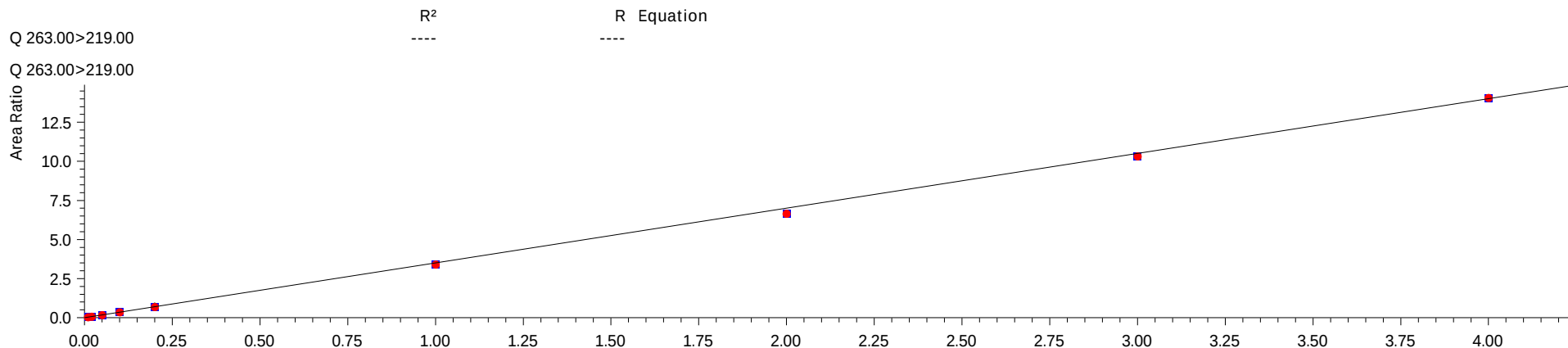
Compound: PFPeA

Curve Fit: Mean RF | Weighting: 1/C | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc.Ratio
240130_018	1633 ICAL 0.05PPB	☒	Auto	9620	263505	0.0500	5.0000	3.650609	0.0521	4.27	3.501003	3.712541	3.712540
240130_019	1633 ICAL 0.1PPB	☒	Auto	19548	262559	0.1000	5.0000	3.722505	0.1063	6.33	3.501003	3.712541	3.712540
240130_020	1633 ICAL 0.25PPB	☒	Auto	43892	255996	0.2500	5.0000	3.429144	0.2449	-2.05	3.501003	3.712541	3.712540
240130_021	1633 ICAL 0.5PPB	☒	Auto	89456	248773	0.5000	5.0000	3.595870	0.5135	2.71	3.501003	3.712541	3.712540
240130_022	1633 ICAL 1.0PPB	☒	Auto	168921	246969	1.0000	5.0000	3.419889	0.9768	-2.32	3.501003	3.712541	3.712540
240130_023	1633 ICAL 5.0PPB	☒	Auto	910458	267071	5.0000	5.0000	3.409050	4.8687	-2.63	3.501003	3.712541	3.712540
240130_024	1633 ICAL 10.0PPB	☒	Auto	1679329	252493	10.0000	5.0000	3.325491	9.4987	-5.01	3.501003	3.712541	3.712540
240130_025	1633 ICAL 15.0PPB	☒	Auto	2561274	248061	15.0000	5.0000	3.441727	14.7460	-1.69	3.501003	3.712541	3.712540
240130_026	1633 ICAL 20.0PPB	☒	Auto	3561117	253299	20.0000	5.0000	3.514738	20.0785	0.39	3.501003	3.712541	3.712540
240130_028	1633 ICV 1.0PPB		Auto	182569	247523	1.0000	5.0000	----	1.0534	5.34	3.501003	3.712541	3.712540
240130_029	1633 FTCA ICV 1.0PPB		ND(W/B)	----	251435	1.0000	5.0000	----	----	----	3.501003	3.712541	3.712540



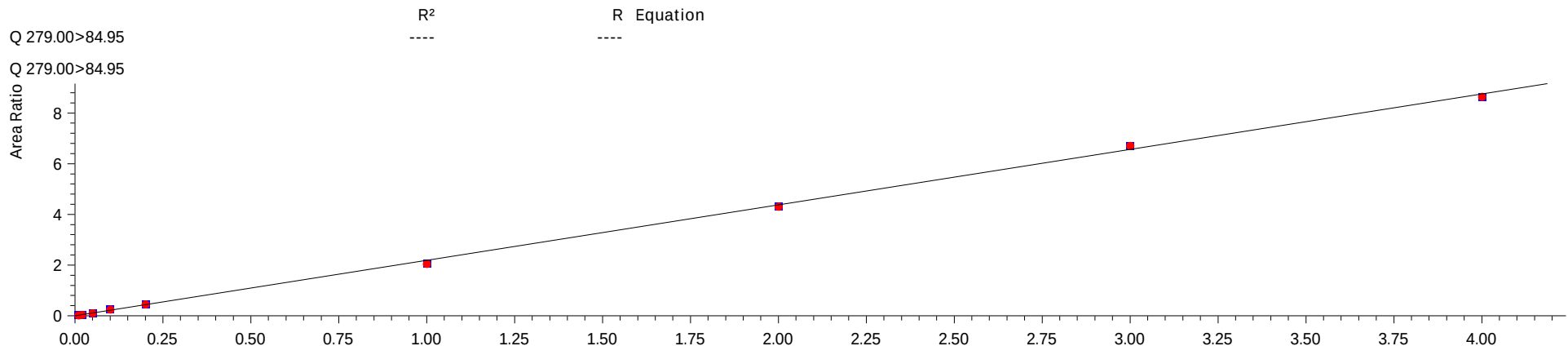
Compound: PFMBA

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240130_018	1633 ICAL 0.05PPB	☒	Auto	5904	263505	0.0500	5.0000	2.240478	0.0512	2.39	2.188095	6.039542	6.039542
240130_019	1633 ICAL 0.1PPB	☒	Auto	10445	262559	0.1000	5.0000	1.989071	0.0909	-9.10	2.188095	6.039542	6.039542
240130_020	1633 ICAL 0.25PPB	☒	Auto	27604	255996	0.2500	5.0000	2.156626	0.2464	-1.44	2.188095	6.039542	6.039542
240130_021	1633 ICAL 0.5PPB	☒	Auto	60862	248773	0.5000	5.0000	2.446496	0.5590	11.81	2.188095	6.039542	6.039542
240130_022	1633 ICAL 1.0PPB	☒	Auto	111827	246969	1.0000	5.0000	2.263991	1.0347	3.47	2.188095	6.039542	6.039542
240130_023	1633 ICAL 5.0PPB	☒	Auto	546893	267071	5.0000	5.0000	2.047746	4.6793	-6.41	2.188095	6.039542	6.039542
240130_024	1633 ICAL 10.0PPB	☒	Auto	1087423	252493	10.0000	5.0000	2.153368	9.8413	-1.59	2.188095	6.039542	6.039542
240130_025	1633 ICAL 15.0PPB	☒	Auto	1662978	248061	15.0000	5.0000	2.234637	15.3191	2.13	2.188095	6.039542	6.039542
240130_026	1633 ICAL 20.0PPB	☒	Auto	2188949	253299	20.0000	5.0000	2.160441	19.7472	-1.26	2.188095	6.039542	6.039542
240130_028	1633 ICV 1.0PPB		Auto	112916	247523	1.0000	5.0000	----	1.0424	4.24	2.188095	6.039542	6.039542
240130_029	1633 FTCA ICV 1.0PPB		ND(W/B)	----	251435	1.0000	5.0000	----	----	----	2.188095	6.039542	6.039542



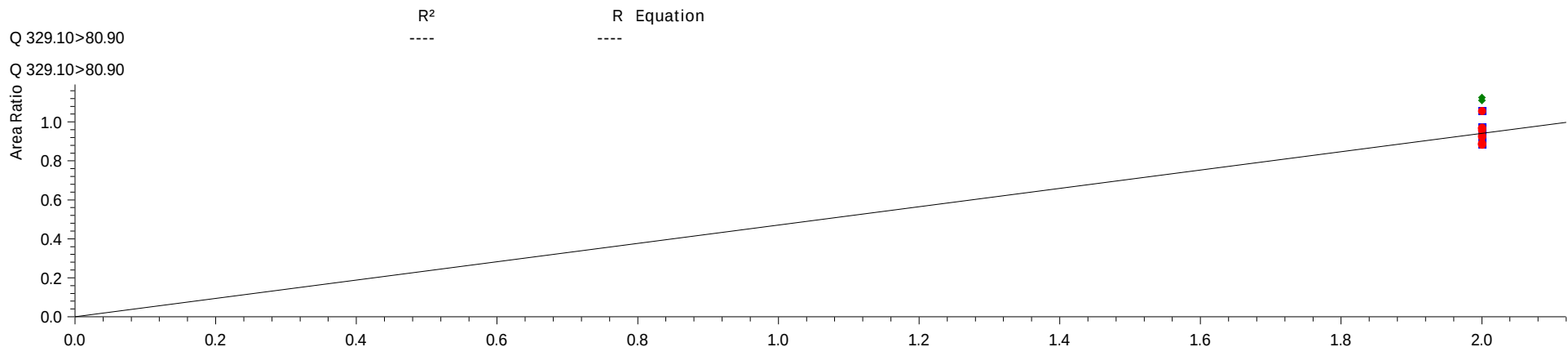
Compound: 13C2-4_2 FTS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240130_018	1633 ICAL 0.05PPB	☒	Auto	323150	333625	5.0000	2.5000	0.484302	5.1456	2.91	0.470593	5.849824	5.849824
240130_019	1633 ICAL 0.1PPB	☒	Auto	294077	329849	5.0000	2.5000	0.445775	4.7363	-5.27	0.470593	5.849824	5.849824
240130_020	1633 ICAL 0.25PPB	☒	Auto	311686	335043	5.0000	2.5000	0.465143	4.9421	-1.16	0.470593	5.849824	5.849824
240130_021	1633 ICAL 0.5PPB	☒	Auto	311498	325212	5.0000	2.5000	0.478915	5.0884	1.77	0.470593	5.849824	5.849824
240130_022	1633 ICAL 1.0PPB	☒	Auto	324631	307264	5.0000	2.5000	0.528261	5.6127	12.25	0.470593	5.849824	5.849824
240130_023	1633 ICAL 5.0PPB	☒	Auto	291306	328304	5.0000	2.5000	0.443654	4.7138	-5.72	0.470593	5.849824	5.849824
240130_024	1633 ICAL 10.0PPB	☒	Auto	290705	314839	5.0000	2.5000	0.461673	4.9052	-1.90	0.470593	5.849824	5.849824
240130_025	1633 ICAL 15.0PPB	☒	Auto	289298	297967	5.0000	2.5000	0.485453	5.1579	3.16	0.470593	5.849824	5.849824
240130_026	1633 ICAL 20.0PPB	☒	Auto	265598	300339	5.0000	2.5000	0.442164	4.6979	-6.04	0.470593	5.849824	5.849824
240130_028	1633 ICV 1.0PPB		Auto	283828	255604	5.0000	2.5000	----	5.8991	17.98	0.470593	5.849824	5.849824
240130_029	1633 FTCA ICV 1.0PPB		Auto	298243	265191	5.0000	2.5000	----	5.9746	19.49	0.470593	5.849824	5.849824



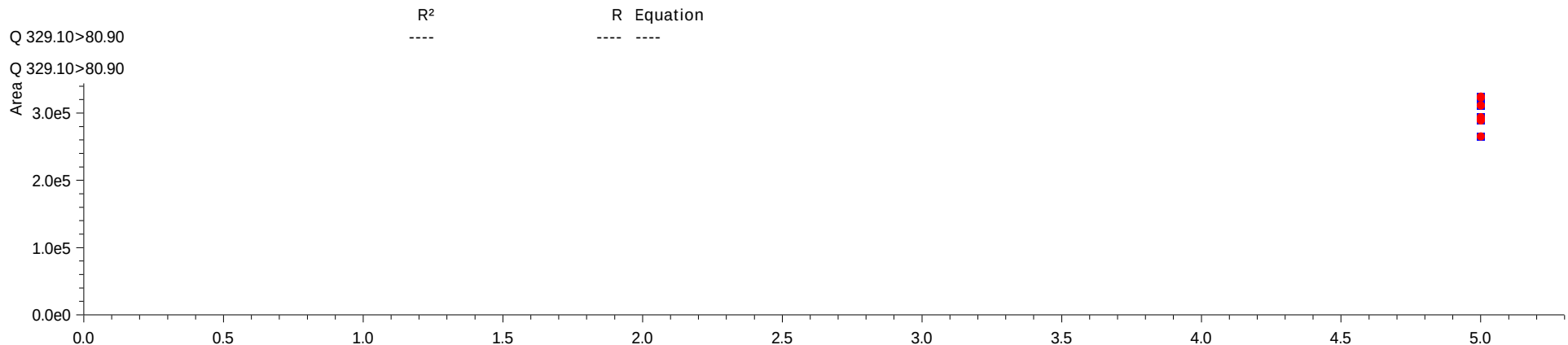
Compound: 13C2-4_2 FTS_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 0



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240130_018	1633 ICAL 0.05PPB	☐	Auto	323150	323150	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240130_019	1633 ICAL 0.1PPB	☐	Auto	294077	294077	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240130_020	1633 ICAL 0.25PPB	☐	Auto	311686	311686	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240130_021	1633 ICAL 0.5PPB	☐	Auto	311498	311498	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240130_022	1633 ICAL 1.0PPB	☐	Auto	324631	324631	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240130_023	1633 ICAL 5.0PPB	☐	Auto	291306	291306	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240130_024	1633 ICAL 10.0PPB	☐	Auto	290705	290705	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240130_025	1633 ICAL 15.0PPB	☐	Auto	289298	289298	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240130_026	1633 ICAL 20.0PPB	☐	Auto	265598	265598	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240130_028	1633 ICV 1.0PPB		Auto	283828	283828	5.0000	5.0000	----	5.0000	0.00	----	----	----
240130_029	1633 FTCA ICV 1.0PPB		Auto	298243	298243	5.0000	5.0000	----	5.0000	0.00	----	----	----



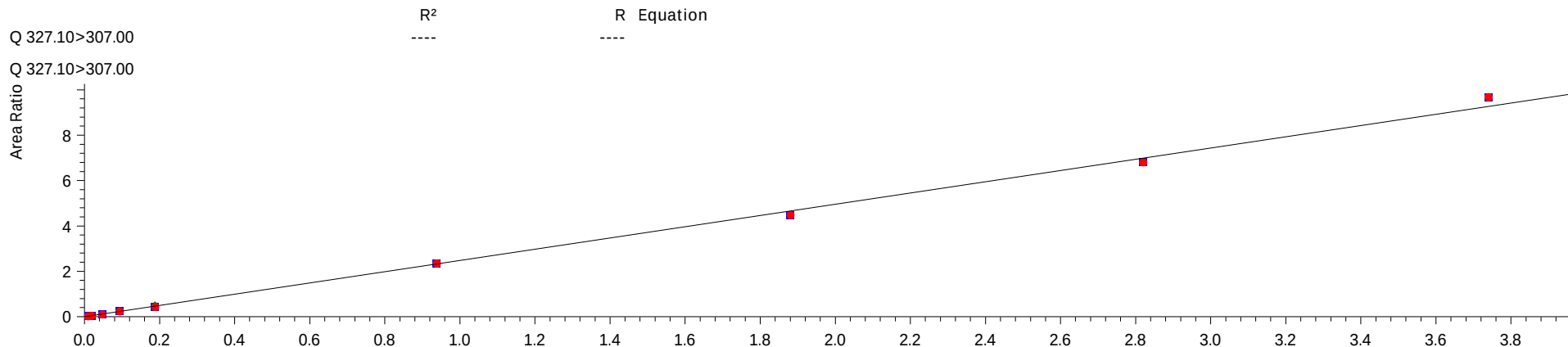
Compound: 4_2_FTS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240130_018	1633 ICAL 0.05PPB	☒	Auto	8770	323150	0.0469	5.0000	2.893429	0.0548	16.74	2.478486	7.839301	7.839301
240130_019	1633 ICAL 0.1PPB	☒	Auto	12877	294077	0.0940	5.0000	2.329154	0.0883	-6.03	2.478486	7.839301	7.839301
240130_020	1633 ICAL 0.25PPB	☒	Auto	33254	311686	0.2340	5.0000	2.279703	0.2152	-8.02	2.478486	7.839301	7.839301
240130_021	1633 ICAL 0.5PPB	☒	Auto	75741	311498	0.4690	5.0000	2.592234	0.4905	4.59	2.478486	7.839301	7.839301
240130_022	1633 ICAL 1.0PPB	☒	Auto	140903	324631	0.9400	5.0000	2.308734	0.8756	-6.85	2.478486	7.839301	7.839301
240130_023	1633 ICAL 5.0PPB	☒	Auto	687124	291306	4.6900	5.0000	2.514678	4.7585	1.46	2.478486	7.839301	7.839301
240130_024	1633 ICAL 10.0PPB	☒	Auto	1303991	290705	9.4000	5.0000	2.385965	9.0491	-3.73	2.478486	7.839301	7.839301
240130_025	1633 ICAL 15.0PPB	☒	Auto	1969077	289298	14.1000	5.0000	2.413614	13.7309	-2.62	2.478486	7.839301	7.839301
240130_026	1633 ICAL 20.0PPB	☒	Auto	2571607	265598	18.7000	5.0000	2.588860	19.5328	4.45	2.478486	7.839301	7.839301
240130_028	1633 ICV 1.0PPB		Auto	143940	283828	0.9400	5.0000	----	1.0231	8.84	2.478486	7.839301	7.839301
240130_029	1633 FTCA ICV 1.0PPB		ND(W/B)	----	298243	0.9400	5.0000	----	----	----	2.478486	7.839301	7.839301



Compound: 13C3-PFBS_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

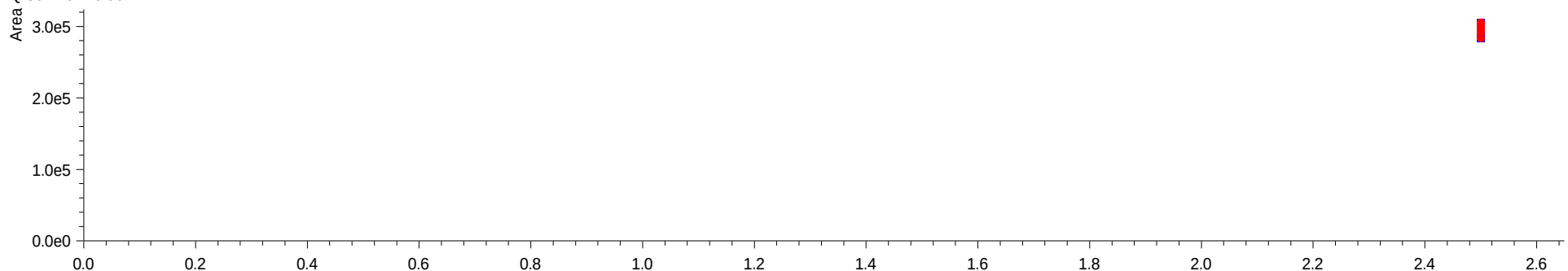
Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 0

Q 302.10>79.90 R² R Equation

Q 302.10>79.90



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc. (ng/mL)	RF RSE (curve)
240130_018	1633 ICAL 0.05PPB	☐	Auto	302133	302133	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----	----
240130_019	1633 ICAL 0.1PPB	☐	Auto	283868	283868	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----	----
240130_020	1633 ICAL 0.25PPB	☐	Auto	295824	295824	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----	----
240130_021	1633 ICAL 0.5PPB	☐	Auto	305406	305406	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----	----
240130_022	1633 ICAL 1.0PPB	☐	Auto	299211	299211	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----	----
240130_023	1633 ICAL 5.0PPB	☐	Auto	305560	305560	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----	----
240130_024	1633 ICAL 10.0PPB	☐	Auto	298172	298172	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----	----
240130_025	1633 ICAL 15.0PPB	☐	Auto	294610	294610	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----	----
240130_026	1633 ICAL 20.0PPB	☐	Auto	290279	290279	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----	----
240130_028	1633 ICV 1.0PPB		Auto	286206	286206	2.5000	2.5000	----	2.5000	0.00	----	----	----	----
240130_029	1633 FTCA ICV 1.0PPB		Auto	289628	289628	2.5000	2.5000	----	2.5000	0.00	----	----	----	----



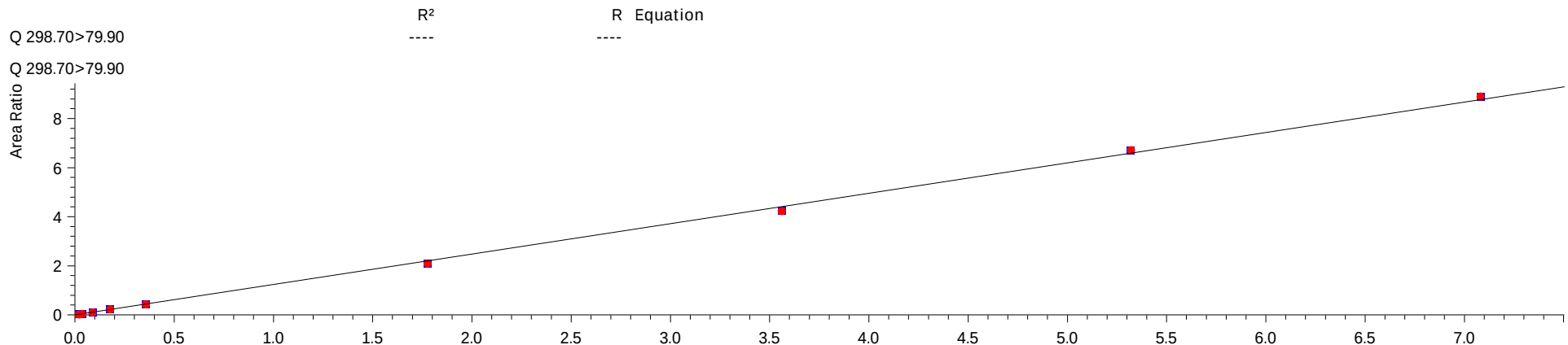
Compound: PFBS

Curve Fit: Mean RF | Weighting: 1/C | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc.Ratio
240130_018	1633 ICAL 0.05PPB	☒	Auto	6555	302133	0.0444	2.5000	1.221565	0.0438	-1.40	1.238876	2.976418	2.976418
240130_019	1633 ICAL 0.1PPB	☒	Auto	12849	283868	0.0890	2.5000	1.271436	0.0913	2.63	1.238876	2.976418	2.976418
240130_020	1633 ICAL 0.25PPB	☒	Auto	32640	295824	0.2210	2.5000	1.248139	0.2227	0.75	1.238876	2.976418	2.976418
240130_021	1633 ICAL 0.5PPB	☒	Auto	70091	305406	0.4440	2.5000	1.292232	0.4631	4.31	1.238876	2.976418	2.976418
240130_022	1633 ICAL 1.0PPB	☒	Auto	130330	299211	0.8900	2.5000	1.223535	0.8790	-1.24	1.238876	2.976418	2.976418
240130_023	1633 ICAL 5.0PPB	☒	Auto	642368	305560	4.4400	2.5000	1.183709	4.2423	-4.45	1.238876	2.976418	2.976418
240130_024	1633 ICAL 10.0PPB	☒	Auto	1262864	298172	8.9000	2.5000	1.189706	8.5468	-3.97	1.238876	2.976418	2.976418
240130_025	1633 ICAL 15.0PPB	☒	Auto	1978735	294610	13.3000	2.5000	1.262491	13.5535	1.91	1.238876	2.976418	2.976418
240130_026	1633 ICAL 20.0PPB	☒	Auto	2583503	290279	17.7000	2.5000	1.257070	17.9599	1.47	1.238876	2.976418	2.976418
240130_028	1633 ICV 1.0PPB		Auto	130070	286206	0.8900	2.5000	----	0.9171	3.04	1.238876	2.976418	2.976418
240130_029	1633 FTCA ICV 1.0PPB		ND(W/B)	----	289628	0.8900	2.5000	----	----	----	1.238876	2.976418	2.976418



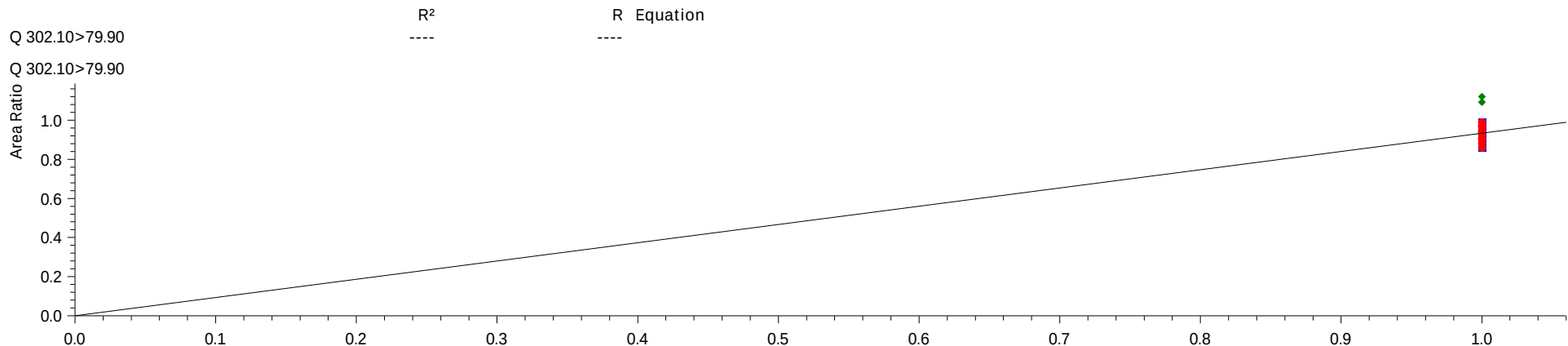
Compound: 13C3-PFBS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2

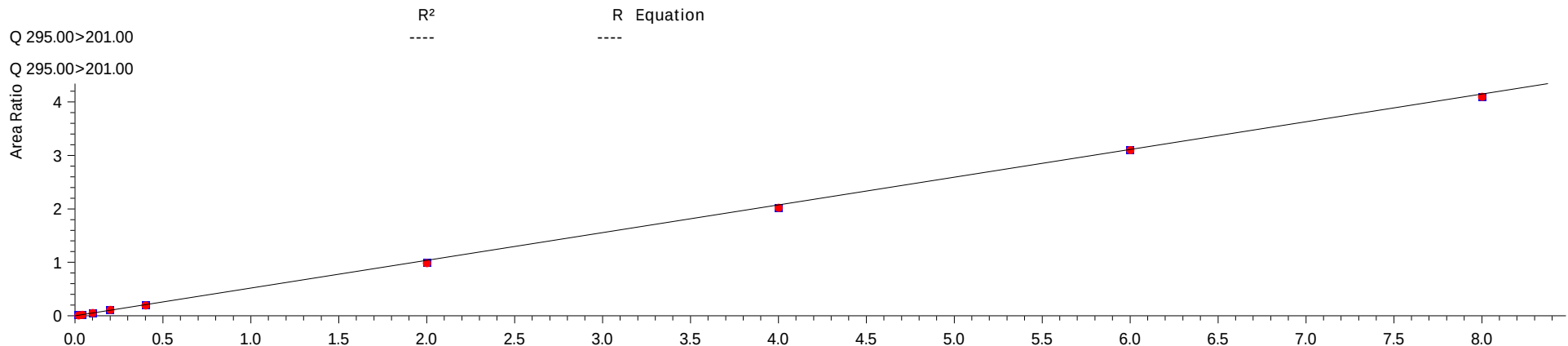


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc.Ratio
240130_018	1633 ICAL 0.05PPB	☒	Auto	302133	333625	2.5000	2.5000	0.905605	2.4272	-2.91	0.932784	4.584640	4.584640
240130_019	1633 ICAL 0.1PPB	☒	Auto	283868	329849	2.5000	2.5000	0.860600	2.3065	-7.74	0.932784	4.584640	4.584640
240130_020	1633 ICAL 0.25PPB	☒	Auto	295824	335043	2.5000	2.5000	0.882942	2.3664	-5.34	0.932784	4.584640	4.584640
240130_021	1633 ICAL 0.5PPB	☒	Auto	305406	325212	2.5000	2.5000	0.939098	2.5169	0.68	0.932784	4.584640	4.584640
240130_022	1633 ICAL 1.0PPB	☒	Auto	299211	307264	2.5000	2.5000	0.973792	2.6099	4.40	0.932784	4.584640	4.584640
240130_023	1633 ICAL 5.0PPB	☒	Auto	305560	328304	2.5000	2.5000	0.930723	2.4945	-0.22	0.932784	4.584640	4.584640
240130_024	1633 ICAL 10.0PPB	☒	Auto	298172	314839	2.5000	2.5000	0.947061	2.5383	1.53	0.932784	4.584640	4.584640
240130_025	1633 ICAL 15.0PPB	☒	Auto	294610	297967	2.5000	2.5000	0.988733	2.6500	6.00	0.932784	4.584640	4.584640
240130_026	1633 ICAL 20.0PPB	☒	Auto	290279	300339	2.5000	2.5000	0.966507	2.5904	3.62	0.932784	4.584640	4.584640
240130_028	1633 ICV 1.0PPB		Auto	286206	255604	2.5000	2.5000	----	3.0010	20.04	0.932784	4.584640	4.584640
240130_029	1633 FTCA ICV 1.0PPB		Auto	289628	265191	2.5000	2.5000	----	2.9271	17.08	0.932784	4.584640	4.584640



Compound: NFDHA

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
 Quantitative Method: Internal Standard
 No. of Calibration Points: 9
 No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240130_018	1633 ICAL 0.05PPB	☒	Auto	6688	562116	0.0500	2.5000	0.594860	0.0574	14.71	0.518560	8.415515	8.415515
240130_019	1633 ICAL 0.1PPB	☒	Auto	10897	605014	0.1000	2.5000	0.450281	0.0868	-13.17	0.518560	8.415515	8.415515
240130_020	1633 ICAL 0.25PPB	☒	Auto	31737	599260	0.2500	2.5000	0.529609	0.2553	2.13	0.518560	8.415515	8.415515
240130_021	1633 ICAL 0.5PPB	☒	Auto	64420	561692	0.5000	2.5000	0.573446	0.5529	10.58	0.518560	8.415515	8.415515
240130_022	1633 ICAL 1.0PPB	☒	Auto	110402	561283	1.0000	2.5000	0.491741	0.9483	-5.17	0.518560	8.415515	8.415515
240130_023	1633 ICAL 5.0PPB	☒	Auto	594345	603366	5.0000	2.5000	0.492525	4.7490	-5.02	0.518560	8.415515	8.415515
240130_024	1633 ICAL 10.0PPB	☒	Auto	1138520	563352	10.0000	2.5000	0.505243	9.7432	-2.57	0.518560	8.415515	8.415515
240130_025	1633 ICAL 15.0PPB	☒	Auto	1687286	543788	15.0000	2.5000	0.517139	14.9589	-0.27	0.518560	8.415515	8.415515
240130_026	1633 ICAL 20.0PPB	☒	Auto	2298982	561062	20.0000	2.5000	0.512194	19.7545	-1.23	0.518560	8.415515	8.415515
240130_028	1633 ICV 1.0PPB		Auto	113729	567720	1.0000	2.5000	----	0.9658	-3.42	0.518560	8.415515	8.415515
240130_029	1633 FTCA ICV 1.0PPB		ND(W/B)	----	558745	1.0000	2.5000	----	----	----	0.518560	8.415515	8.415515



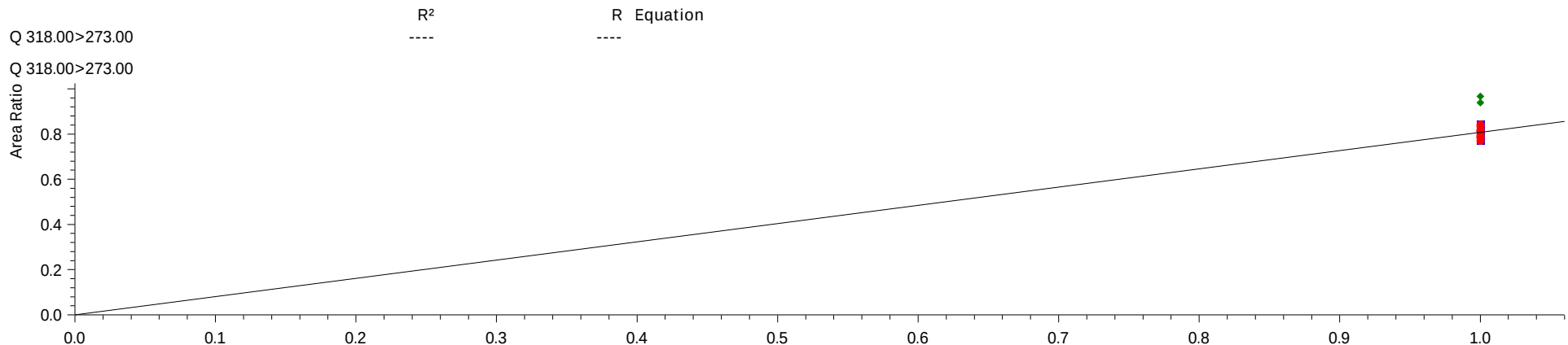
Compound: 13C5-PFHxA

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240130_018	1633 ICAL 0.05PPB	☒	Auto	562116	713147	2.5000	2.5000	0.788219	2.4419	-2.32	0.806963	2.990689	2.990689
240130_019	1633 ICAL 0.1PPB	☒	Auto	605014	743357	2.5000	2.5000	0.813895	2.5215	0.86	0.806963	2.990689	2.990689
240130_020	1633 ICAL 0.25PPB	☒	Auto	599260	718007	2.5000	2.5000	0.834615	2.5857	3.43	0.806963	2.990689	2.990689
240130_021	1633 ICAL 0.5PPB	☒	Auto	561692	729140	2.5000	2.5000	0.770348	2.3866	-4.54	0.806963	2.990689	2.990689
240130_022	1633 ICAL 1.0PPB	☒	Auto	561283	690527	2.5000	2.5000	0.812833	2.5182	0.73	0.806963	2.990689	2.990689
240130_023	1633 ICAL 5.0PPB	☒	Auto	603366	715943	2.5000	2.5000	0.842758	2.6109	4.44	0.806963	2.990689	2.990689
240130_024	1633 ICAL 10.0PPB	☒	Auto	563352	686662	2.5000	2.5000	0.820421	2.5417	1.67	0.806963	2.990689	2.990689
240130_025	1633 ICAL 15.0PPB	☒	Auto	543788	683472	2.5000	2.5000	0.795626	2.4649	-1.40	0.806963	2.990689	2.990689
240130_026	1633 ICAL 20.0PPB	☒	Auto	561062	715684	2.5000	2.5000	0.783953	2.4287	-2.85	0.806963	2.990689	2.990689
240130_028	1633 ICV 1.0PPB		Auto	567720	604927	2.5000	2.5000	----	2.9075	16.30	0.806963	2.990689	2.990689
240130_029	1633 FTCA ICV 1.0PPB		Auto	558745	578360	2.5000	2.5000	----	2.9930	19.72	0.806963	2.990689	2.990689



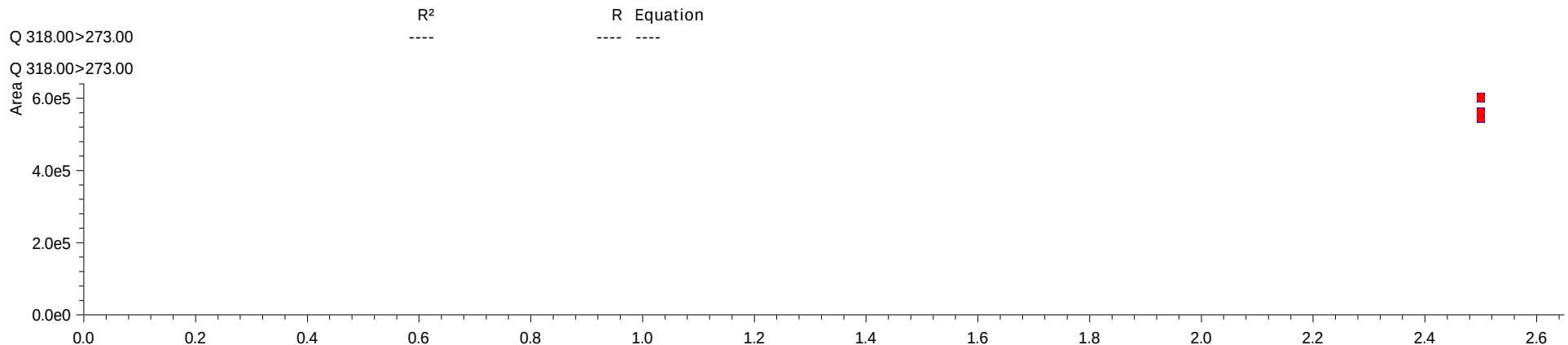
Compound: 13C5-PFHxA_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 0



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)	Conc. (ng/mL)
240130_018	1633 ICAL 0.05PPB	☐	Auto	562116	562116	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----	
240130_019	1633 ICAL 0.1PPB	☐	Auto	605014	605014	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----	
240130_020	1633 ICAL 0.25PPB	☐	Auto	599260	599260	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----	
240130_021	1633 ICAL 0.5PPB	☐	Auto	561692	561692	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----	
240130_022	1633 ICAL 1.0PPB	☐	Auto	561283	561283	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----	
240130_023	1633 ICAL 5.0PPB	☐	Auto	603366	603366	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----	
240130_024	1633 ICAL 10.0PPB	☐	Auto	563352	563352	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----	
240130_025	1633 ICAL 15.0PPB	☐	Auto	543788	543788	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----	
240130_026	1633 ICAL 20.0PPB	☐	Auto	561062	561062	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----	
240130_028	1633 ICV 1.0PPB		Auto	567720	567720	2.5000	2.5000	----	2.5000	0.00	----	----	----	
240130_029	1633 FTCA ICV 1.0PPB		Auto	558745	558745	2.5000	2.5000	----	2.5000	0.00	----	----	----	



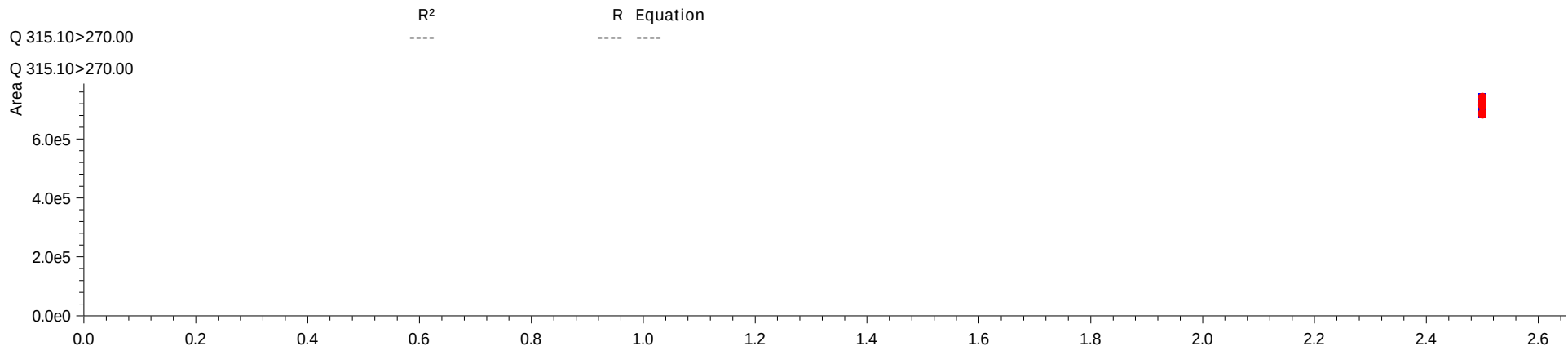
Compound: 13C2-PFHxA_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 0



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240130_018	1633 ICAL 0.05PPB	☐	Auto	713147	713147	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_019	1633 ICAL 0.1PPB	☐	Auto	743357	743357	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_020	1633 ICAL 0.25PPB	☐	Auto	718007	718007	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_021	1633 ICAL 0.5PPB	☐	Auto	729140	729140	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_022	1633 ICAL 1.0PPB	☐	Auto	690527	690527	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_023	1633 ICAL 5.0PPB	☐	Auto	715943	715943	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_024	1633 ICAL 10.0PPB	☐	Auto	686662	686662	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_025	1633 ICAL 15.0PPB	☐	Auto	683472	683472	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_026	1633 ICAL 20.0PPB	☐	Auto	715684	715684	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_028	1633 ICV 1.0PPB		Auto	604927	604927	2.5000	2.5000	----	2.5000	0.00	----	----	----
240130_029	1633 FTCA ICV 1.0PPB		Auto	578360	578360	2.5000	2.5000	----	2.5000	0.00	----	----	----



Compound: PFHxA

Curve Fit: Linear | Weighting: 1/C | Zero: Not Forced

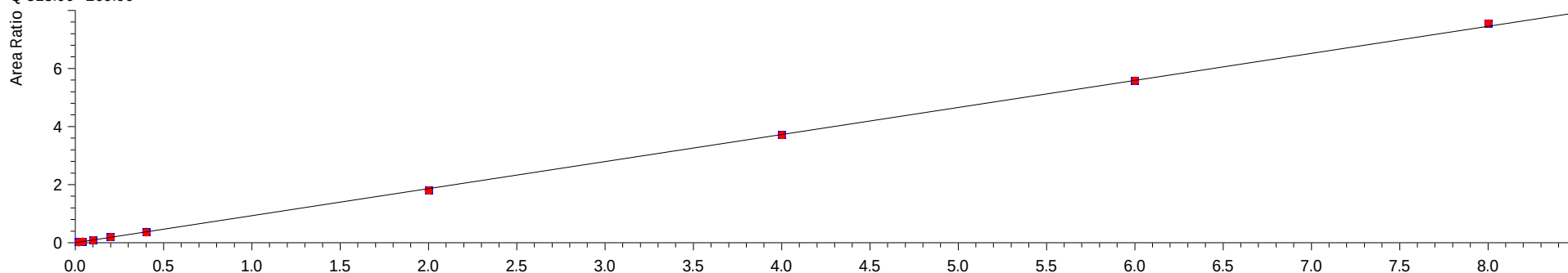
Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2

Q 313.00>269.00 R^2 0.9997208 R Equation 0.9998604 $y = 0.9309975x + 0.002240634$

Q 313.00>269.00



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc.Ratio
240130_018	1633 ICAL 0.05PPB	☒	M	12266	562116	0.0500	2.5000	1.091080	0.0526	5.16	0.954286	7.407797	4.864805
240130_019	1633 ICAL 0.1PPB	☒	M	25272	605014	0.1000	2.5000	1.044267	0.1061	6.15	0.954286	7.407797	4.864805
240130_020	1633 ICAL 0.25PPB	☒	Auto	52869	599260	0.2500	2.5000	0.882236	0.2309	-7.64	0.954286	7.407797	4.864805
240130_021	1633 ICAL 0.5PPB	☒	Auto	109272	561692	0.5000	2.5000	0.972703	0.5164	3.28	0.954286	7.407797	4.864805
240130_022	1633 ICAL 1.0PPB	☒	Auto	201128	561283	1.0000	2.5000	0.895839	0.9562	-4.38	0.954286	7.407797	4.864805
240130_023	1633 ICAL 5.0PPB	☒	Auto	1088160	603366	5.0000	2.5000	0.901740	4.8369	-3.26	0.954286	7.407797	4.864805
240130_024	1633 ICAL 10.0PPB	☒	Auto	2087792	563352	10.0000	2.5000	0.926504	9.9457	-0.54	0.954286	7.407797	4.864805
240130_025	1633 ICAL 15.0PPB	☒	Auto	3034528	543788	15.0000	2.5000	0.930058	14.9789	-0.14	0.954286	7.407797	4.864805
240130_026	1633 ICAL 20.0PPB	☒	Auto	4237779	561062	20.0000	2.5000	0.944142	20.2764	1.38	0.954286	7.407797	4.864805
240130_028	1633 ICV 1.0PPB		Auto	223179	567720	1.0000	2.5000	----	1.0496	4.96	0.954286	7.407797	4.864805
240130_029	1633 FTCA ICV 1.0PPB		ND(W/B)	----	558745	1.0000	2.5000	----	----	----	0.954286	7.407797	4.864805



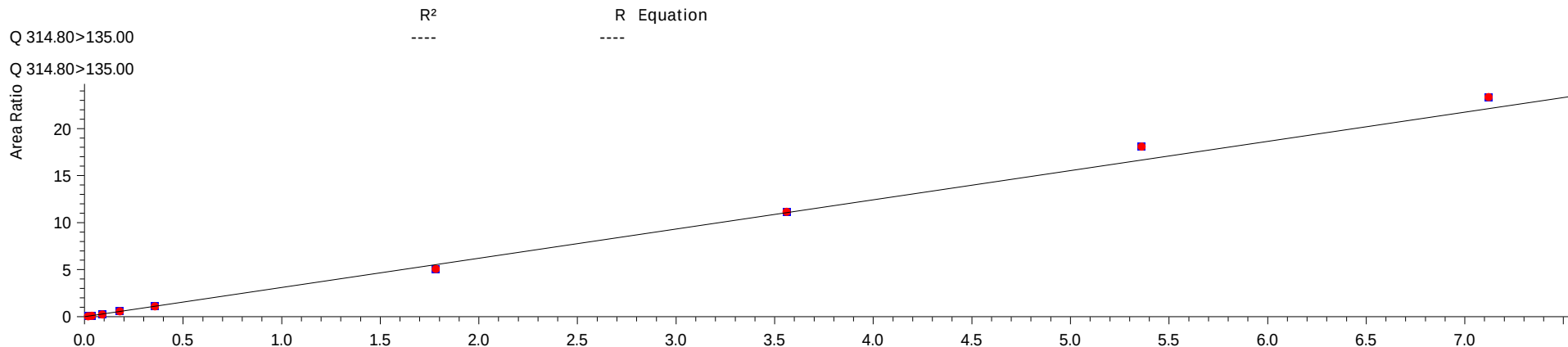
Compound: PFEESA

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc.Ratio
240130_018	1633 ICAL 0.05PPB	☒	Auto	31692	562116	0.0445	2.5000	3.167415	0.0454	1.98	3.106014	6.480358	6.480356
240130_019	1633 ICAL 0.1PPB	☒	Auto	61080	605014	0.0890	2.5000	2.835837	0.0813	-8.70	3.106014	6.480358	6.480356
240130_020	1633 ICAL 0.25PPB	☒	Auto	153967	599260	0.2230	2.5000	2.880372	0.2068	-7.26	3.106014	6.480358	6.480356
240130_021	1633 ICAL 0.5PPB	☒	Auto	329194	561692	0.4450	2.5000	3.292560	0.4717	6.01	3.106014	6.480358	6.480356
240130_022	1633 ICAL 1.0PPB	☒	Auto	623565	561283	0.8900	2.5000	3.120684	0.8942	0.47	3.106014	6.480358	6.480356
240130_023	1633 ICAL 5.0PPB	☒	Auto	3079790	603366	4.4500	2.5000	2.867610	4.1084	-7.68	3.106014	6.480358	6.480356
240130_024	1633 ICAL 10.0PPB	☒	Auto	6282325	563352	8.9000	2.5000	3.132497	8.9759	0.85	3.106014	6.480358	6.480356
240130_025	1633 ICAL 15.0PPB	☒	Auto	9844782	543788	13.4000	2.5000	3.377626	14.5718	8.74	3.106014	6.480358	6.480356
240130_026	1633 ICAL 20.0PPB	☒	Auto	13100930	561062	17.8000	2.5000	3.279526	18.7944	5.59	3.106014	6.480358	6.480356
240130_028	1633 ICV 1.0PPB		Auto	670876	567720	0.8900	2.5000	----	0.9511	6.87	3.106014	6.480358	6.480356
240130_029	1633 FTCA ICV 1.0PPB		ND(W/B)	----	558745	0.8900	2.5000	----	----	----	3.106014	6.480358	6.480356



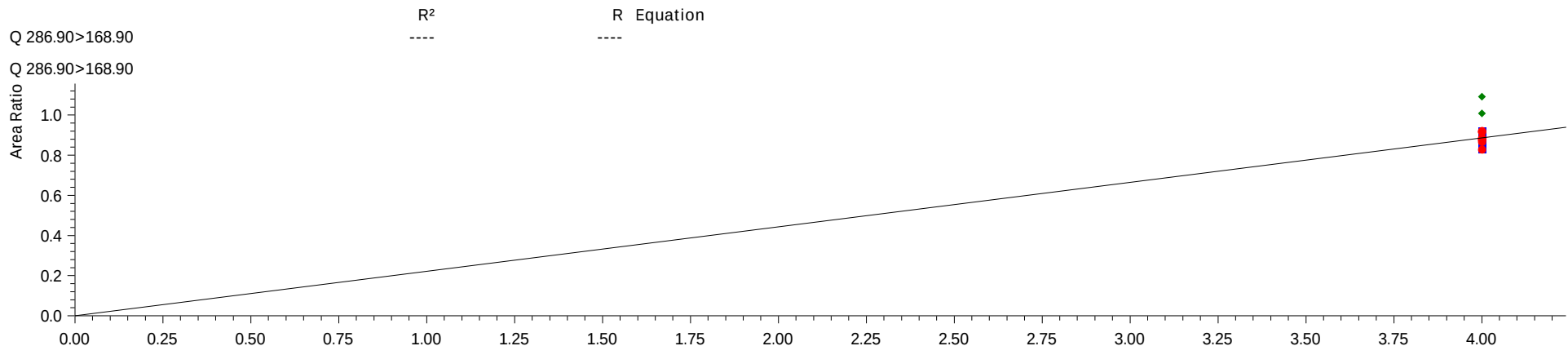
Compound: 13C3-HFPO-DA

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2

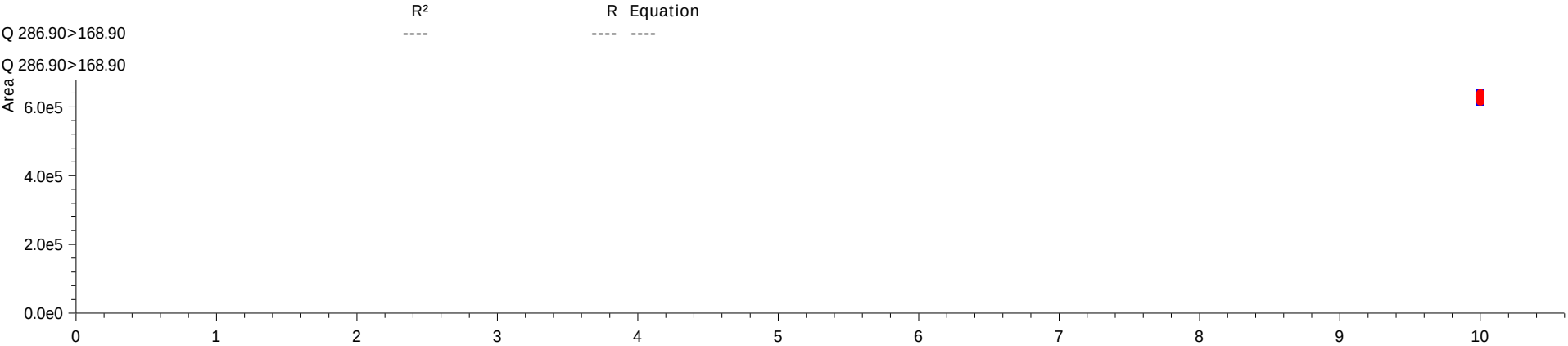


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240130_018	1633 ICAL 0.05PPB	☒	Auto	630310	713147	10.0000	2.5000	0.220961	9.9733	-0.27	0.221553	3.359181	3.359181
240130_019	1633 ICAL 0.1PPB	☒	Auto	616061	743357	10.0000	2.5000	0.207189	9.3516	-6.48	0.221553	3.359181	3.359181
240130_020	1633 ICAL 0.25PPB	☒	Auto	622288	718007	10.0000	2.5000	0.216672	9.7797	-2.20	0.221553	3.359181	3.359181
240130_021	1633 ICAL 0.5PPB	☒	Auto	639891	729140	10.0000	2.5000	0.219399	9.9028	-0.97	0.221553	3.359181	3.359181
240130_022	1633 ICAL 1.0PPB	☒	Auto	636421	690527	10.0000	2.5000	0.230411	10.3998	4.00	0.221553	3.359181	3.359181
240130_023	1633 ICAL 5.0PPB	☒	Auto	626931	715943	10.0000	2.5000	0.218918	9.8810	-1.19	0.221553	3.359181	3.359181
240130_024	1633 ICAL 10.0PPB	☒	Auto	631094	686662	10.0000	2.5000	0.229769	10.3708	3.71	0.221553	3.359181	3.359181
240130_025	1633 ICAL 15.0PPB	☒	Auto	625983	683472	10.0000	2.5000	0.228972	10.3348	3.35	0.221553	3.359181	3.359181
240130_026	1633 ICAL 20.0PPB	☒	Auto	634641	715684	10.0000	2.5000	0.221690	10.0062	0.06	0.221553	3.359181	3.359181
240130_028	1633 ICV 1.0PPB		Auto	610140	604927	10.0000	2.5000	----	11.3812	13.81	0.221553	3.359181	3.359181
240130_029	1633 FTCA ICV 1.0PPB		Auto	631071	578360	10.0000	2.5000	----	12.3123	23.12	0.221553	3.359181	3.359181



Compound: 13C3-HFPO-DA_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 0



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240130_018	1633 ICAL 0.05PPB	☐	Auto	630310	630310	10.0000	10.0000	1.000000	10.0000	0.00	----	----	----
240130_019	1633 ICAL 0.1PPB	☐	Auto	616061	616061	10.0000	10.0000	1.000000	10.0000	0.00	----	----	----
240130_020	1633 ICAL 0.25PPB	☐	Auto	622288	622288	10.0000	10.0000	1.000000	10.0000	0.00	----	----	----
240130_021	1633 ICAL 0.5PPB	☐	Auto	639891	639891	10.0000	10.0000	1.000000	10.0000	0.00	----	----	----
240130_022	1633 ICAL 1.0PPB	☐	Auto	636421	636421	10.0000	10.0000	1.000000	10.0000	0.00	----	----	----
240130_023	1633 ICAL 5.0PPB	☐	Auto	626931	626931	10.0000	10.0000	1.000000	10.0000	0.00	----	----	----
240130_024	1633 ICAL 10.0PPB	☐	Auto	631094	631094	10.0000	10.0000	1.000000	10.0000	0.00	----	----	----
240130_025	1633 ICAL 15.0PPB	☐	Auto	625983	625983	10.0000	10.0000	1.000000	10.0000	0.00	----	----	----
240130_026	1633 ICAL 20.0PPB	☐	Auto	634641	634641	10.0000	10.0000	1.000000	10.0000	0.00	----	----	----
240130_028	1633 ICV 1.0PPB		Auto	610140	610140	10.0000	10.0000	----	10.0000	0.00	----	----	----
240130_029	1633 FTCA ICV 1.0PPB		Auto	631071	631071	10.0000	10.0000	----	10.0000	0.00	----	----	----



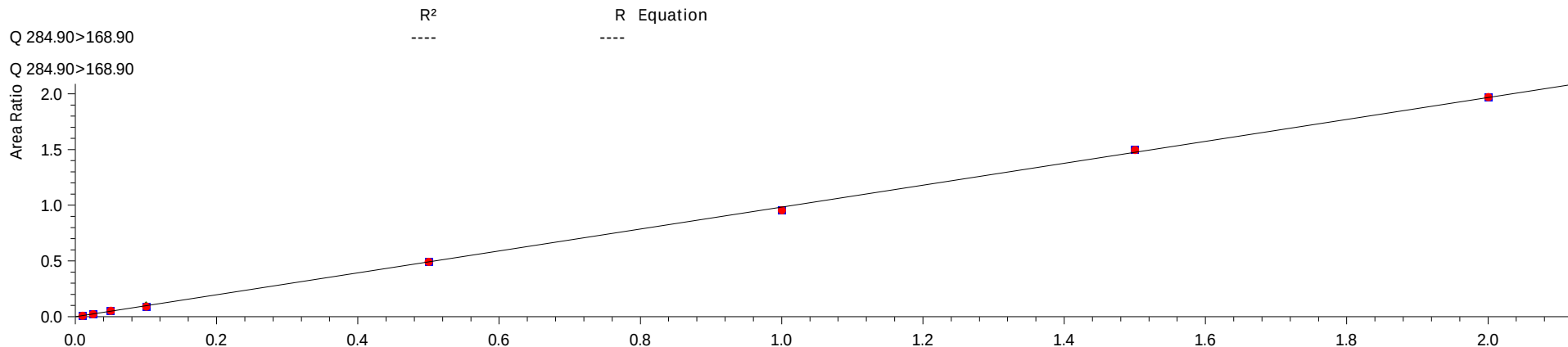
Compound: HFPO-DA

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 8

No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240130_019	1633 ICAL 0.1PPB	☒	Auto	5890	616061	0.1000	10.0000	0.956059	0.0972	-2.77	0.983334	4.660787	4.660787
240130_020	1633 ICAL 0.25PPB	☒	Auto	15149	622288	0.2500	10.0000	0.973739	0.2476	-0.98	0.983334	4.660787	4.660787
240130_021	1633 ICAL 0.5PPB	☒	Auto	34633	639891	0.5000	10.0000	1.082465	0.5504	10.08	0.983334	4.660787	4.660787
240130_022	1633 ICAL 1.0PPB	☒	Auto	59069	636421	1.0000	10.0000	0.928139	0.9439	-5.61	0.983334	4.660787	4.660787
240130_023	1633 ICAL 5.0PPB	☒	Auto	309657	626931	5.0000	10.0000	0.987850	5.0230	0.46	0.983334	4.660787	4.660787
240130_024	1633 ICAL 10.0PPB	☒	Auto	603039	631094	10.0000	10.0000	0.955545	9.7174	-2.83	0.983334	4.660787	4.660787
240130_025	1633 ICAL 15.0PPB	☒	Auto	936488	625983	15.0000	10.0000	0.997352	15.2138	1.43	0.983334	4.660787	4.660787
240130_026	1633 ICAL 20.0PPB	☒	Auto	1250903	634641	20.0000	10.0000	0.985520	20.0445	0.22	0.983334	4.660787	4.660787
240130_028	1633 ICV 1.0PPB		Auto	63761	610140	1.0000	10.0000	----	1.0627	6.27	0.983334	4.660787	4.660787
240130_029	1633 FTCA ICV 1.0PPB		ND(W/B)	----	631071	1.0000	10.0000	----	----	----	0.983334	4.660787	4.660787



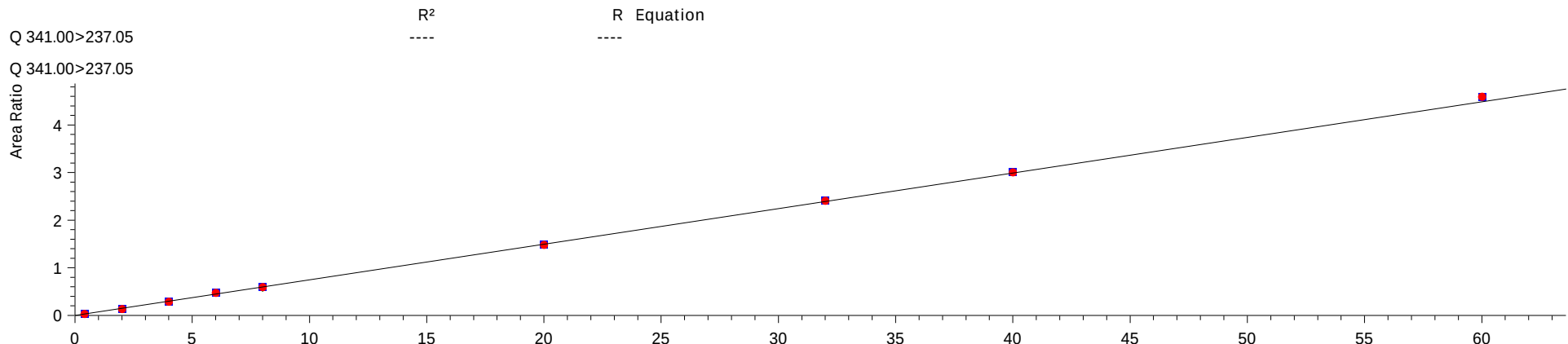
Compound: 5_3 FTCA

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2

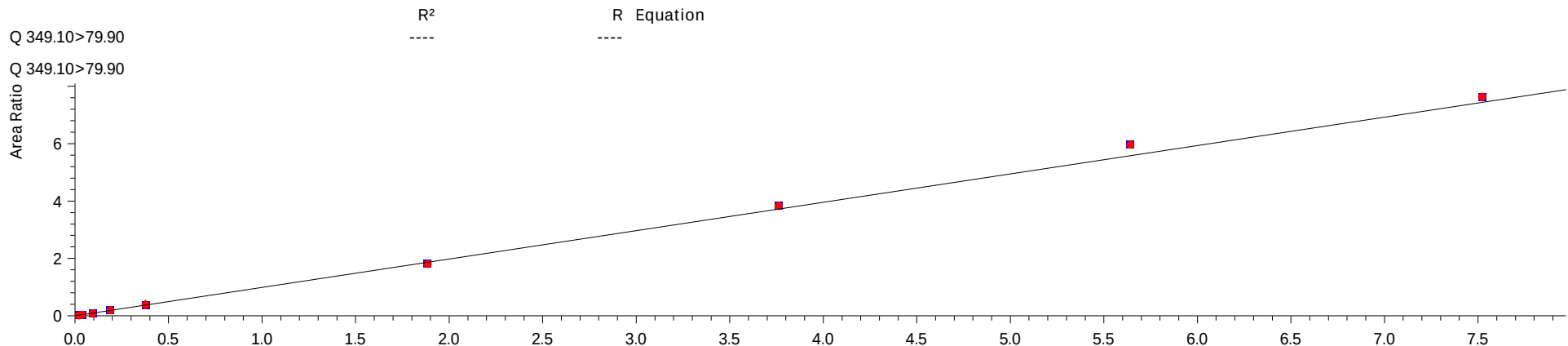


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc.Ratio
240130_018	1633 ICAL 0.05PPB	☒	Auto	17206	562116	1.0000	2.5000	0.076522	1.0240	2.40	0.074731	4.145721	4.145721
240130_019	1633 ICAL 0.1PPB	☒	Auto	82405	605014	5.0000	2.5000	0.068102	4.5565	-8.87	0.074731	4.145721	4.145721
240130_020	1633 ICAL 0.25PPB	☒	Auto	174469	599260	10.0000	2.5000	0.072785	9.7396	-2.60	0.074731	4.145721	4.145721
240130_021	1633 ICAL 0.5PPB	☒	Auto	267539	561692	15.0000	2.5000	0.079385	15.9341	6.23	0.074731	4.145721	4.145721
240130_022	1633 ICAL 1.0PPB	☒	Auto	334092	561283	20.0000	2.5000	0.074404	19.9123	-0.44	0.074731	4.145721	4.145721
240130_023	1633 ICAL 5.0PPB	☒	Auto	897007	603366	50.0000	2.5000	0.074334	49.7338	-0.53	0.074731	4.145721	4.145721
240130_024	1633 ICAL 10.0PPB	☒	Auto	1356537	563352	80.0000	2.5000	0.075249	80.5544	0.69	0.074731	4.145721	4.145721
240130_025	1633 ICAL 15.0PPB	☒	Auto	1636192	543788	100.0000	2.5000	0.075222	100.6565	0.66	0.074731	4.145721	4.145721
240130_026	1633 ICAL 20.0PPB	☒	Auto	2577967	561062	150.0000	2.5000	0.076580	153.7104	2.47	0.074731	4.145721	4.145721
240130_028	1633 ICV 1.0PPB		ND(W/B)	----	567720	20.0000	2.5000	----	----	----	0.074731	4.145721	4.145721
240130_029	1633 FTCA ICV 1.0PPB		Auto	321466	558745	20.0000	2.5000	----	19.2468	-3.77	0.074731	4.145721	4.145721



Compound: PFPeS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
 Quantitative Method: Internal Standard
 No. of Calibration Points: 9
 No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc.Ratio
240130_018	1633 ICAL 0.05PPB	☒	Auto	5061	290234	0.0471	2.5000	0.925623	0.0441	-6.45	0.989482	6.372965	6.372966
240130_019	1633 ICAL 0.1PPB	☒	Auto	10194	289359	0.0940	2.5000	0.936967	0.0890	-5.31	0.989482	6.372965	6.372966
240130_020	1633 ICAL 0.25PPB	☒	Auto	24807	295390	0.2350	2.5000	0.893413	0.2122	-9.71	0.989482	6.372965	6.372966
240130_021	1633 ICAL 0.5PPB	☒	Auto	54905	269787	0.4710	2.5000	1.080213	0.5142	9.17	0.989482	6.372965	6.372966
240130_022	1633 ICAL 1.0PPB	☒	Auto	100411	263901	0.9400	2.5000	1.011933	0.9613	2.27	0.989482	6.372965	6.372966
240130_023	1633 ICAL 5.0PPB	☒	Auto	529875	291766	4.7100	2.5000	0.963957	4.5885	-2.58	0.989482	6.372965	6.372966
240130_024	1633 ICAL 10.0PPB	☒	Auto	1037439	270780	9.4000	2.5000	1.018963	9.6801	2.98	0.989482	6.372965	6.372966
240130_025	1633 ICAL 15.0PPB	☒	Auto	1595317	267121	14.1000	2.5000	1.058910	15.0893	7.02	0.989482	6.372965	6.372966
240130_026	1633 ICAL 20.0PPB	☒	Auto	2117883	277373	18.8000	2.5000	1.015358	19.2916	2.62	0.989482	6.372965	6.372966
240130_028	1633 ICV 1.0PPB		Auto	111057	260431	0.9400	2.5000	----	1.0774	14.62	0.989482	6.372965	6.372966
240130_029	1633 FTCA ICV 1.0PPB		ND(W/B)	----	272746	0.9400	2.5000	----	----	----	0.989482	6.372965	6.372966



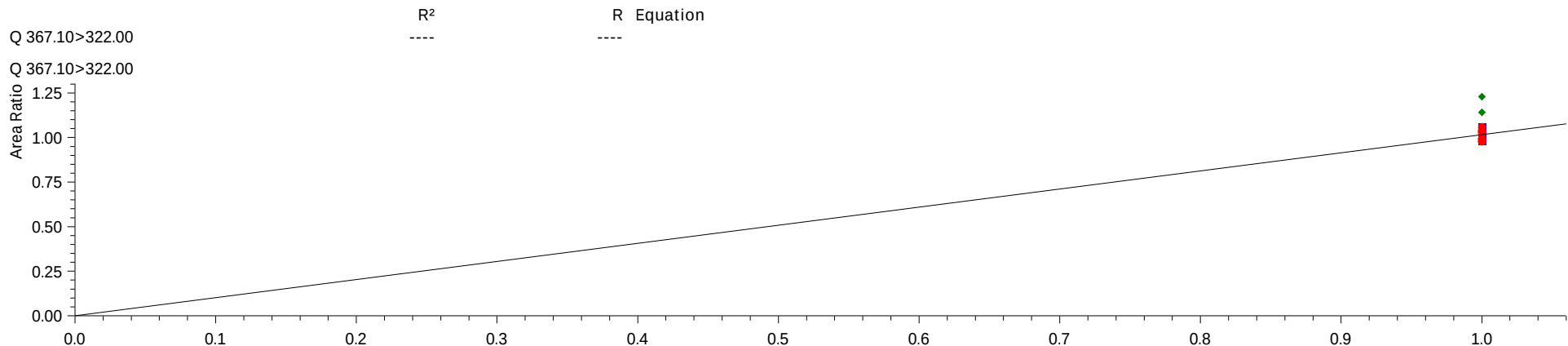
Compound: 13C4-PFHpA

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240130_018	1633 ICAL 0.05PPB	☒	Auto	736187	713147	2.5000	2.5000	1.032308	2.5421	1.68	1.015215	2.887527	2.887527
240130_019	1633 ICAL 0.1PPB	☒	Auto	727457	743357	2.5000	2.5000	0.978611	2.4099	-3.61	1.015215	2.887527	2.887527
240130_020	1633 ICAL 0.25PPB	☒	Auto	734262	718007	2.5000	2.5000	1.022639	2.5183	0.73	1.015215	2.887527	2.887527
240130_021	1633 ICAL 0.5PPB	☒	Auto	714440	729140	2.5000	2.5000	0.979839	2.4129	-3.48	1.015215	2.887527	2.887527
240130_022	1633 ICAL 1.0PPB	☒	Auto	731415	690527	2.5000	2.5000	1.059213	2.6083	4.33	1.015215	2.887527	2.887527
240130_023	1633 ICAL 5.0PPB	☒	Auto	711946	715943	2.5000	2.5000	0.994418	2.4488	-2.05	1.015215	2.887527	2.887527
240130_024	1633 ICAL 10.0PPB	☒	Auto	715028	686662	2.5000	2.5000	1.041309	2.5643	2.57	1.015215	2.887527	2.887527
240130_025	1633 ICAL 15.0PPB	☒	Auto	707625	683472	2.5000	2.5000	1.035338	2.5496	1.98	1.015215	2.887527	2.887527
240130_026	1633 ICAL 20.0PPB	☒	Auto	710861	715684	2.5000	2.5000	0.993261	2.4459	-2.16	1.015215	2.887527	2.887527
240130_028	1633 ICV 1.0PPB		Auto	690468	604927	2.5000	2.5000	----	2.8108	12.43	1.015215	2.887527	2.887527
240130_029	1633 FTCA ICV 1.0PPB		Auto	710612	578360	2.5000	2.5000	----	3.0256	21.03	1.015215	2.887527	2.887527



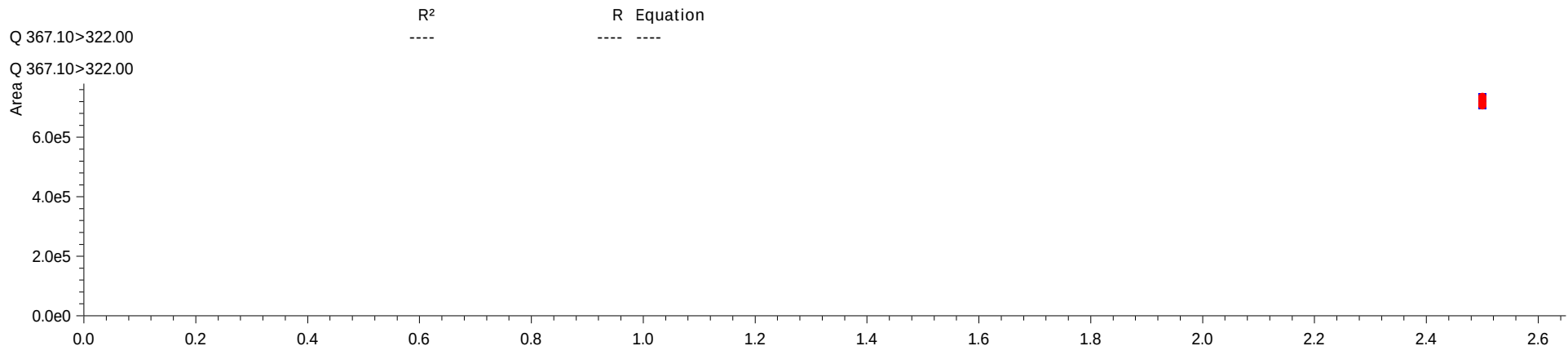
Compound: 13C4-PFHpA_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 0



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc. (ng/mL)	RF RSE (curve)
240130_018	1633 ICAL 0.05PPB	☐	Auto	736187	736187	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----	----
240130_019	1633 ICAL 0.1PPB	☐	Auto	727457	727457	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----	----
240130_020	1633 ICAL 0.25PPB	☐	Auto	734262	734262	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----	----
240130_021	1633 ICAL 0.5PPB	☐	Auto	714440	714440	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----	----
240130_022	1633 ICAL 1.0PPB	☐	Auto	731415	731415	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----	----
240130_023	1633 ICAL 5.0PPB	☐	Auto	711946	711946	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----	----
240130_024	1633 ICAL 10.0PPB	☐	Auto	715028	715028	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----	----
240130_025	1633 ICAL 15.0PPB	☐	Auto	707625	707625	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----	----
240130_026	1633 ICAL 20.0PPB	☐	Auto	710861	710861	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----	----
240130_028	1633 ICV 1.0PPB		Auto	690468	690468	2.5000	2.5000	----	2.5000	0.00	----	----	----	----
240130_029	1633 FTCA ICV 1.0PPB		Auto	710612	710612	2.5000	2.5000	----	2.5000	0.00	----	----	----	----



Compound: PFHpA

Curve Fit: Linear | Weighting: 1/C | Zero: Not Forced

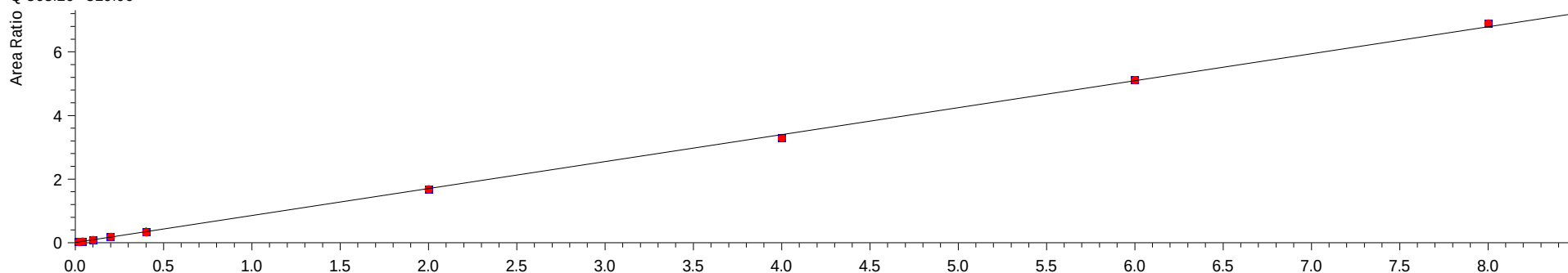
Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2

Q 363.10>319.00 R^2 0.9995623 R Equation 0.9997811 $y = 0.8478649x + 0.005950536$

Q 363.10>319.00

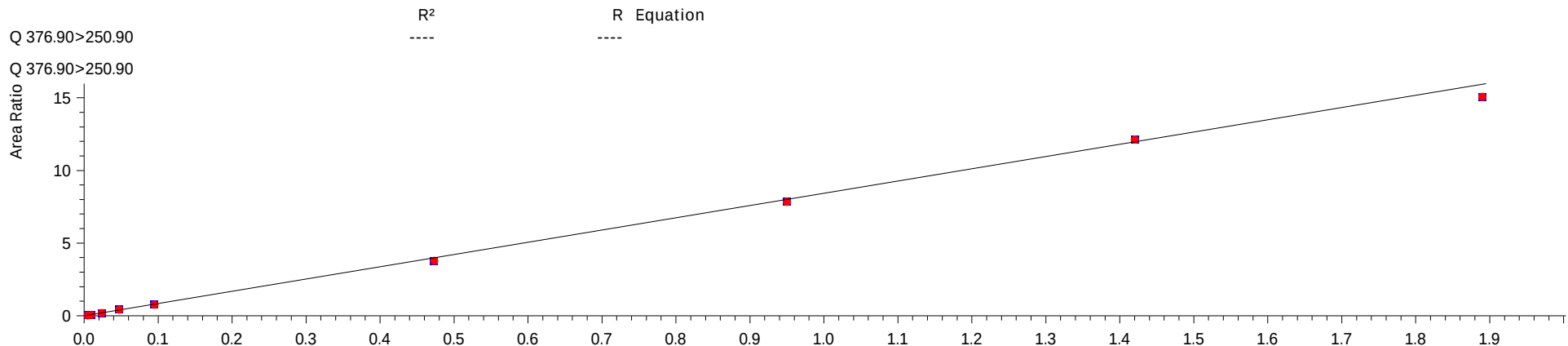


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc.Ratio
240130_018	1633 ICAL 0.05PPB	☒	Auto	17379	736187	0.0500	2.5000	1.180320	0.0521	4.12	0.909712	12.829755	4.516161
240130_019	1633 ICAL 0.1PPB	☒	Auto	28848	727457	0.1000	2.5000	0.991384	0.0994	-0.62	0.909712	12.829755	4.516161
240130_020	1633 ICAL 0.25PPB	☒	Auto	64185	734262	0.2500	2.5000	0.874138	0.2402	-3.92	0.909712	12.829755	4.516161
240130_021	1633 ICAL 0.5PPB	☒	Auto	135200	714440	0.5000	2.5000	0.946193	0.5404	8.09	0.909712	12.829755	4.516161
240130_022	1633 ICAL 1.0PPB	☒	Auto	238403	731415	1.0000	2.5000	0.814870	0.9435	-5.65	0.909712	12.829755	4.516161
240130_023	1633 ICAL 5.0PPB	☒	Auto	1199703	711946	5.0000	2.5000	0.842552	4.9511	-0.98	0.909712	12.829755	4.516161
240130_024	1633 ICAL 10.0PPB	☒	Auto	2355874	715028	10.0000	2.5000	0.823700	9.6974	-3.03	0.909712	12.829755	4.516161
240130_025	1633 ICAL 15.0PPB	☒	Auto	3618529	707625	15.0000	2.5000	0.852271	15.0604	0.40	0.909712	12.829755	4.516161
240130_026	1633 ICAL 20.0PPB	☒	Auto	4901983	710861	20.0000	2.5000	0.861980	20.3154	1.58	0.909712	12.829755	4.516161
240130_028	1633 ICV 1.0PPB		Auto	255013	690468	1.0000	2.5000	----	1.0715	7.15	0.909712	12.829755	4.516161
240130_029	1633 FTCA ICV 1.0PPB		ND(W/B)	----	710612	1.0000	2.5000	----	----	----	0.909712	12.829755	4.516161



Compound: DONA

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
 Quantitative Method: Internal Standard
 No. of Calibration Points: 9
 No. of Control Points: 2

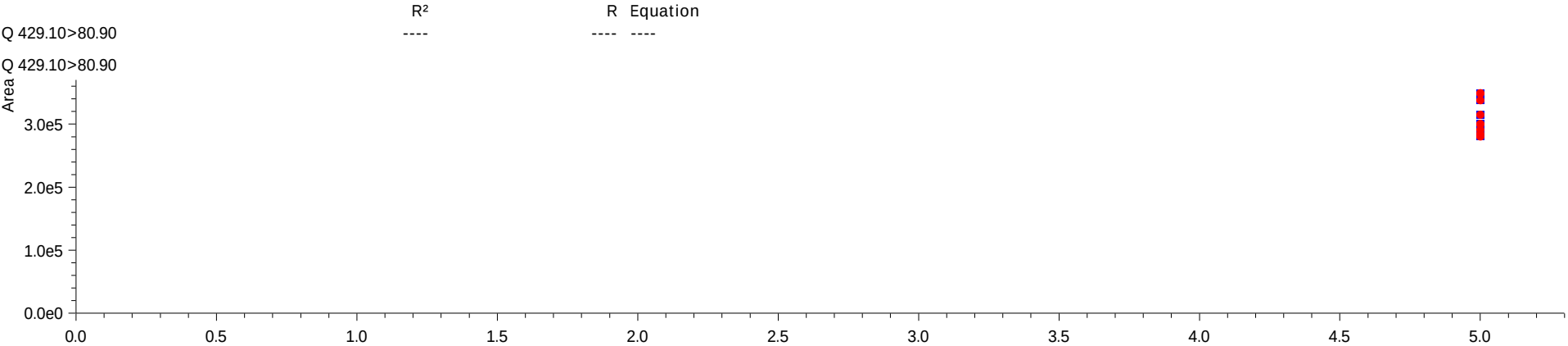


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc.Ratio
240130_018	1633 ICAL 0.05PPB	☒	Auto	27688	630310	0.0473	10.0000	9.287018	0.0521	10.17	8.429723	5.109971	5.109972
240130_019	1633 ICAL 0.1PPB	☒	Auto	48642	616061	0.0950	10.0000	8.311130	0.0937	-1.41	8.429723	5.109971	5.109972
240130_020	1633 ICAL 0.25PPB	☒	Auto	122150	622288	0.2360	10.0000	8.317438	0.2329	-1.33	8.429723	5.109971	5.109972
240130_021	1633 ICAL 0.5PPB	☒	Auto	270568	639891	0.4730	10.0000	8.939417	0.5016	6.05	8.429723	5.109971	5.109972
240130_022	1633 ICAL 1.0PPB	☒	Auto	496775	636421	0.9500	10.0000	8.216599	0.9260	-2.53	8.429723	5.109971	5.109972
240130_023	1633 ICAL 5.0PPB	☒	Auto	2377729	626931	4.7300	10.0000	8.018288	4.4991	-4.88	8.429723	5.109971	5.109972
240130_024	1633 ICAL 10.0PPB	☒	Auto	4952725	631094	9.5000	10.0000	8.260885	9.3097	-2.00	8.429723	5.109971	5.109972
240130_025	1633 ICAL 15.0PPB	☒	Auto	7593080	625983	14.2000	10.0000	8.542147	14.3894	1.33	8.429723	5.109971	5.109972
240130_026	1633 ICAL 20.0PPB	☒	Auto	9565286	634641	18.9000	10.0000	7.974589	17.8796	-5.40	8.429723	5.109971	5.109972
240130_028	1633 ICV 1.0PPB		Auto	484746	610140	0.9500	10.0000	----	0.9425	-0.79	8.429723	5.109971	5.109972
240130_029	1633 FTCA ICV 1.0PPB		ND(W/B)	----	631071	0.9500	10.0000	----	----	----	8.429723	5.109971	5.109972



Compound: 13C2-6_2 FTS_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 0

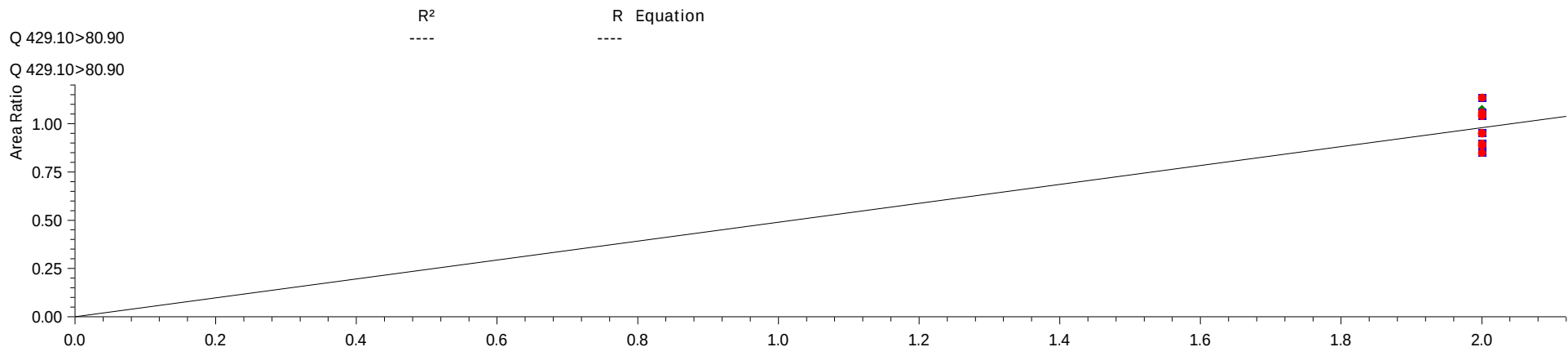


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)	Conc. (ng/mL)
240130_018	1633 ICAL 0.05PPB	☐	Auto	349197	349197	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----	
240130_019	1633 ICAL 0.1PPB	☐	Auto	280505	280505	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----	
240130_020	1633 ICAL 0.25PPB	☐	Auto	300584	300584	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----	
240130_021	1633 ICAL 0.5PPB	☐	Auto	338251	338251	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----	
240130_022	1633 ICAL 1.0PPB	☐	Auto	348751	348751	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----	
240130_023	1633 ICAL 5.0PPB	☐	Auto	291557	291557	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----	
240130_024	1633 ICAL 10.0PPB	☐	Auto	299993	299993	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----	
240130_025	1633 ICAL 15.0PPB	☐	Auto	315257	315257	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----	
240130_026	1633 ICAL 20.0PPB	☐	Auto	285248	285248	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----	
240130_028	1633 ICV 1.0PPB		Auto	275450	275450	5.0000	5.0000	----	5.0000	0.00	----	----	----	
240130_029	1633 FTCA ICV 1.0PPB		Auto	285279	285279	5.0000	5.0000	----	5.0000	0.00	----	----	----	



Compound: 13C2-6_2 FTS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
 Quantitative Method: Internal Standard
 No. of Calibration Points: 9
 No. of Control Points: 2

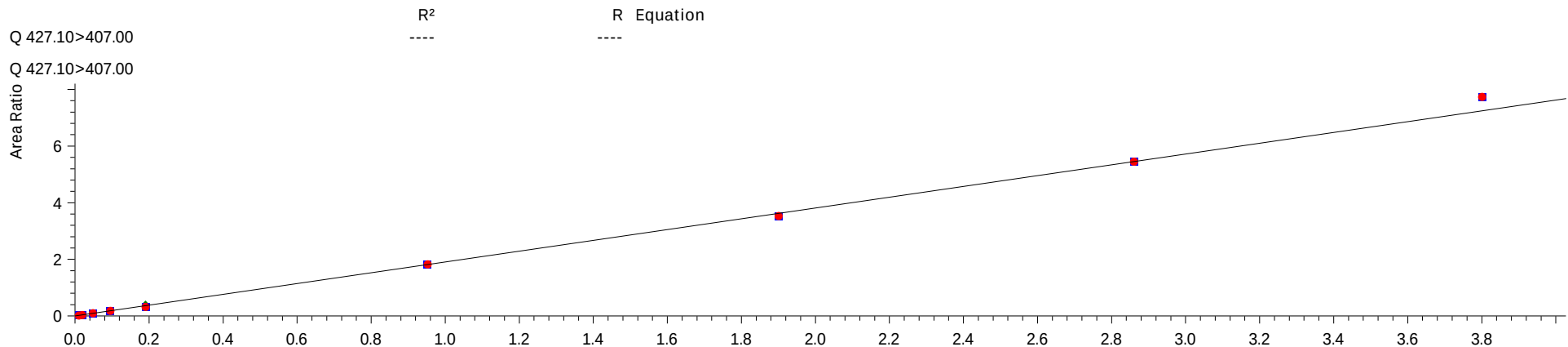


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240130_018	1633 ICAL 0.05PPB	☒	Auto	349197	333625	5.0000	2.5000	0.523337	5.3414	6.83	0.489891	9.678429	9.678429
240130_019	1633 ICAL 0.1PPB	☒	Auto	280505	329849	5.0000	2.5000	0.425203	4.3398	-13.20	0.489891	9.678429	9.678429
240130_020	1633 ICAL 0.25PPB	☒	Auto	300584	335043	5.0000	2.5000	0.448575	4.5783	-8.43	0.489891	9.678429	9.678429
240130_021	1633 ICAL 0.5PPB	☒	Auto	338251	325212	5.0000	2.5000	0.520047	5.3078	6.16	0.489891	9.678429	9.678429
240130_022	1633 ICAL 1.0PPB	☒	Auto	348751	307264	5.0000	2.5000	0.567511	5.7922	15.84	0.489891	9.678429	9.678429
240130_023	1633 ICAL 5.0PPB	☒	Auto	291557	328304	5.0000	2.5000	0.444035	4.5320	-9.36	0.489891	9.678429	9.678429
240130_024	1633 ICAL 10.0PPB	☒	Auto	299993	314839	5.0000	2.5000	0.476423	4.8625	-2.75	0.489891	9.678429	9.678429
240130_025	1633 ICAL 15.0PPB	☒	Auto	315257	297967	5.0000	2.5000	0.529013	5.3993	7.99	0.489891	9.678429	9.678429
240130_026	1633 ICAL 20.0PPB	☒	Auto	285248	300339	5.0000	2.5000	0.474877	4.8468	-3.06	0.489891	9.678429	9.678429
240130_028	1633 ICV 1.0PPB		Auto	275450	255604	5.0000	2.5000	----	5.4994	9.99	0.489891	9.678429	9.678429
240130_029	1633 FTCA ICV 1.0PPB		Auto	285279	265191	5.0000	2.5000	----	5.4897	9.79	0.489891	9.678429	9.678429



Compound: 6_2 FTS

Curve Fit: Mean RF | Weighting: 1/C | Zero: Not Forced
 Quantitative Method: Internal Standard
 No. of Calibration Points: 9
 No. of Control Points: 2

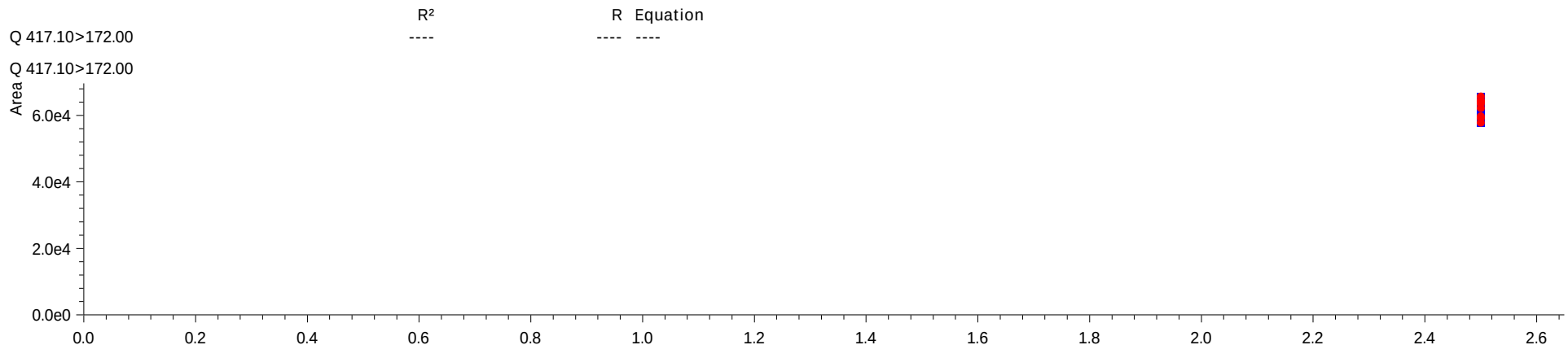


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc.Ratio
240130_018	1633 ICAL 0.05PPB	☒	Auto	6189	349197	0.0476	5.0000	1.861817	0.0465	-2.35	1.906713	6.064569	6.064570
240130_019	1633 ICAL 0.1PPB	☒	Auto	9655	280505	0.0950	5.0000	1.811630	0.0903	-4.99	1.906713	6.064569	6.064570
240130_020	1633 ICAL 0.25PPB	☒	Auto	30030	300584	0.2380	5.0000	2.098825	0.2620	10.08	1.906713	6.064569	6.064570
240130_021	1633 ICAL 0.5PPB	☒	Auto	62903	338251	0.4760	5.0000	1.953404	0.4877	2.45	1.906713	6.064569	6.064570
240130_022	1633 ICAL 1.0PPB	☒	Auto	113485	348751	0.9500	5.0000	1.712654	0.8533	-10.18	1.906713	6.064569	6.064570
240130_023	1633 ICAL 5.0PPB	☒	Auto	532370	291557	4.7600	5.0000	1.918023	4.7882	0.59	1.906713	6.064569	6.064570
240130_024	1633 ICAL 10.0PPB	☒	Auto	1060397	299993	9.5000	5.0000	1.860386	9.2692	-2.43	1.906713	6.064569	6.064570
240130_025	1633 ICAL 15.0PPB	☒	Auto	1719406	315257	14.3000	5.0000	1.906988	14.3021	0.01	1.906713	6.064569	6.064570
240130_026	1633 ICAL 20.0PPB	☒	Auto	2207651	285248	19.0000	5.0000	2.036686	20.2952	6.82	1.906713	6.064569	6.064570
240130_028	1633 ICV 1.0PPB		Auto	112892	275450	0.9500	5.0000	----	1.0747	13.13	1.906713	6.064569	6.064570
240130_029	1633 FTCA ICV 1.0PPB		ND(W/B)	----	285279	0.9500	5.0000	----	----	----	1.906713	6.064569	6.064570



Compound: 13C4-PFOA_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
 Quantitative Method: Internal Standard
 No. of Calibration Points: 9
 No. of Control Points: 0



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240130_018	1633 ICAL 0.05PPB	☐	Auto	59200	59200	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_019	1633 ICAL 0.1PPB	☐	Auto	64328	64328	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_020	1633 ICAL 0.25PPB	☐	Auto	64630	64630	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_021	1633 ICAL 0.5PPB	☐	Auto	64174	64174	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_022	1633 ICAL 1.0PPB	☐	Auto	62281	62281	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_023	1633 ICAL 5.0PPB	☐	Auto	65694	65694	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_024	1633 ICAL 10.0PPB	☐	Auto	59745	59745	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_025	1633 ICAL 15.0PPB	☐	Auto	57896	57896	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_026	1633 ICAL 20.0PPB	☐	Auto	63520	63520	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_028	1633 ICV 1.0PPB		Auto	49113	49113	2.5000	2.5000	----	2.5000	0.00	----	----	----
240130_029	1633 FTCA ICV 1.0PPB		Auto	55103	55103	2.5000	2.5000	----	2.5000	0.00	----	----	----



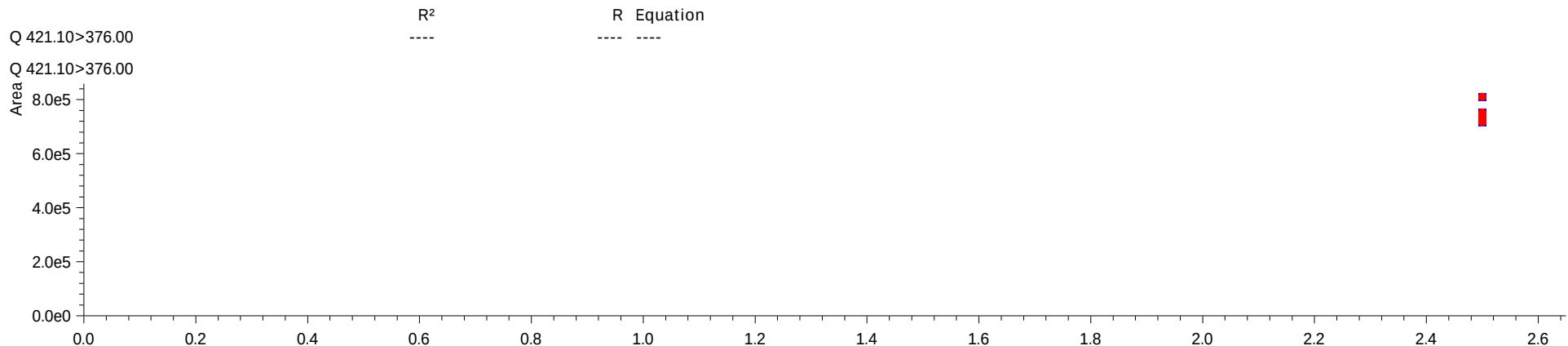
Compound: 13C8-PFOA_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 0



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240130_018	1633 ICAL 0.05PPB	☐	Auto	718555	718555	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_019	1633 ICAL 0.1PPB	☐	Auto	749190	749190	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_020	1633 ICAL 0.25PPB	☐	Auto	752814	752814	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_021	1633 ICAL 0.5PPB	☐	Auto	738796	738796	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_022	1633 ICAL 1.0PPB	☐	Auto	729345	729345	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_023	1633 ICAL 5.0PPB	☐	Auto	810735	810735	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_024	1633 ICAL 10.0PPB	☐	Auto	722027	722027	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_025	1633 ICAL 15.0PPB	☐	Auto	717087	717087	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_026	1633 ICAL 20.0PPB	☐	Auto	751954	751954	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_028	1633 ICV 1.0PPB		Auto	717880	717880	2.5000	2.5000	----	2.5000	0.00	----	----	----
240130_029	1633 FTCA ICV 1.0PPB		Auto	728388	728388	2.5000	2.5000	----	2.5000	0.00	----	----	----



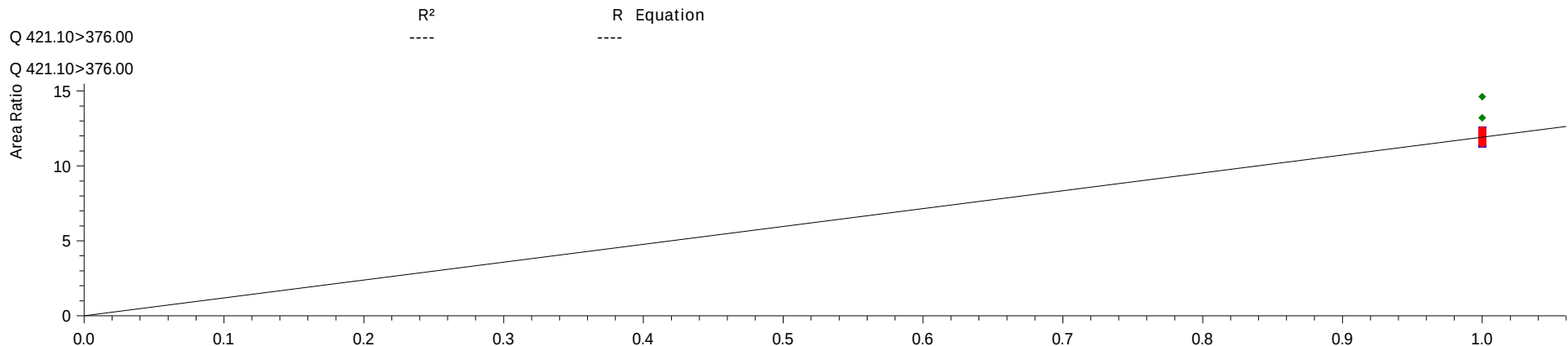
Compound: 13C8-PFOA

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240130_018	1633 ICAL 0.05PPB	☒	Auto	718555	59200	2.5000	2.5000	12.137710	2.5451	1.80	11.922819	2.708817	2.708817
240130_019	1633 ICAL 0.1PPB	☒	Auto	749190	64328	2.5000	2.5000	11.646337	2.4420	-2.32	11.922819	2.708817	2.708817
240130_020	1633 ICAL 0.25PPB	☒	Auto	752814	64630	2.5000	2.5000	11.648053	2.4424	-2.30	11.922819	2.708817	2.708817
240130_021	1633 ICAL 0.5PPB	☒	Auto	738796	64174	2.5000	2.5000	11.512360	2.4139	-3.44	11.922819	2.708817	2.708817
240130_022	1633 ICAL 1.0PPB	☒	Auto	729345	62281	2.5000	2.5000	11.710636	2.4555	-1.78	11.922819	2.708817	2.708817
240130_023	1633 ICAL 5.0PPB	☒	Auto	810735	65694	2.5000	2.5000	12.341106	2.5877	3.51	11.922819	2.708817	2.708817
240130_024	1633 ICAL 10.0PPB	☒	Auto	722027	59745	2.5000	2.5000	12.085236	2.5341	1.36	11.922819	2.708817	2.708817
240130_025	1633 ICAL 15.0PPB	☒	Auto	717087	57896	2.5000	2.5000	12.385784	2.5971	3.88	11.922819	2.708817	2.708817
240130_026	1633 ICAL 20.0PPB	☒	Auto	751954	63520	2.5000	2.5000	11.838152	2.4822	-0.71	11.922819	2.708817	2.708817
240130_028	1633 ICV 1.0PPB		Auto	717880	49113	2.5000	2.5000	----	3.0649	22.60	11.922819	2.708817	2.708817
240130_029	1633 FTCA ICV 1.0PPB		Auto	728388	55103	2.5000	2.5000	----	2.7717	10.87	11.922819	2.708817	2.708817



Compound: PFOA

Curve Fit: Linear | Weighting: 1/C | Zero: Not Forced

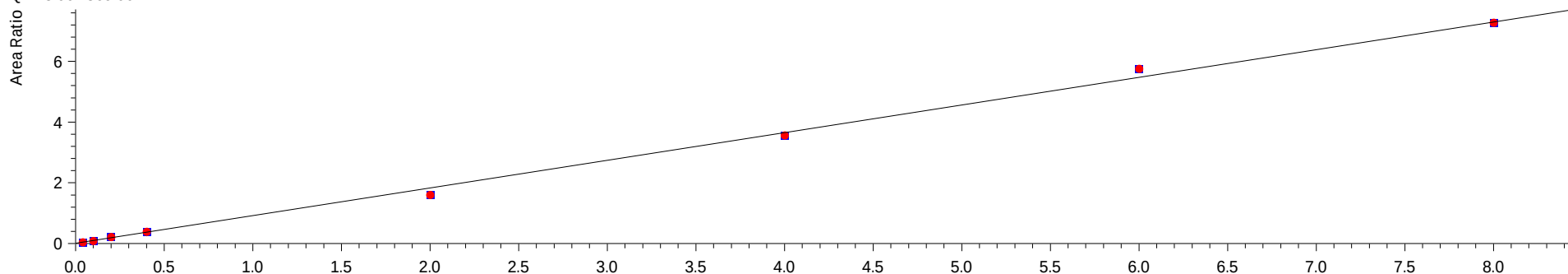
Quantitative Method: Internal Standard

No. of Calibration Points: 8

No. of Control Points: 2

Q 413.00>369.00
 R^2 0.9971468
 R Equation 0.9985724 $y = 0.9110429x + 0.006104518$

Q 413.00>369.00



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)	Conc.Ratio
240130_019	1633 ICAL 0.1PPB	☒	Auto	31168	749190	0.1000	2.5000	1.040051	0.0974	-2.59	0.944268	9.618294	9.629570	
240130_020	1633 ICAL 0.25PPB	☒	Auto	66817	752814	0.2500	2.5000	0.887559	0.2268	-9.28	0.944268	9.618294	9.629570	
240130_021	1633 ICAL 0.5PPB	☒	Auto	160587	738796	0.5000	2.5000	1.086816	0.5797	15.94	0.944268	9.618294	9.629570	
240130_022	1633 ICAL 1.0PPB	☒	Auto	284600	729345	1.0000	2.5000	0.975533	1.0540	5.40	0.944268	9.618294	9.629570	
240130_023	1633 ICAL 5.0PPB	☒	Auto	1302596	810735	5.0000	2.5000	0.803342	4.3922	-12.16	0.944268	9.618294	9.629570	
240130_024	1633 ICAL 10.0PPB	☒	Auto	2576379	722027	10.0000	2.5000	0.892064	9.7749	-2.25	0.944268	9.618294	9.629570	
240130_025	1633 ICAL 15.0PPB	☒	Auto	4128771	717087	15.0000	2.5000	0.959616	15.7830	5.22	0.944268	9.618294	9.629570	
240130_026	1633 ICAL 20.0PPB	☒	Auto	5469180	751954	20.0000	2.5000	0.909162	19.9420	-0.29	0.944268	9.618294	9.629570	
240130_028	1633 ICV 1.0PPB		Auto	259925	717880	1.0000	2.5000	----	0.9768	-2.32	0.944268	9.618294	9.629570	
240130_029	1633 FTCA ICV 1.0PPB		ND(W/B)	----	728388	1.0000	2.5000	----	----	----	0.944268	9.618294	9.629570	



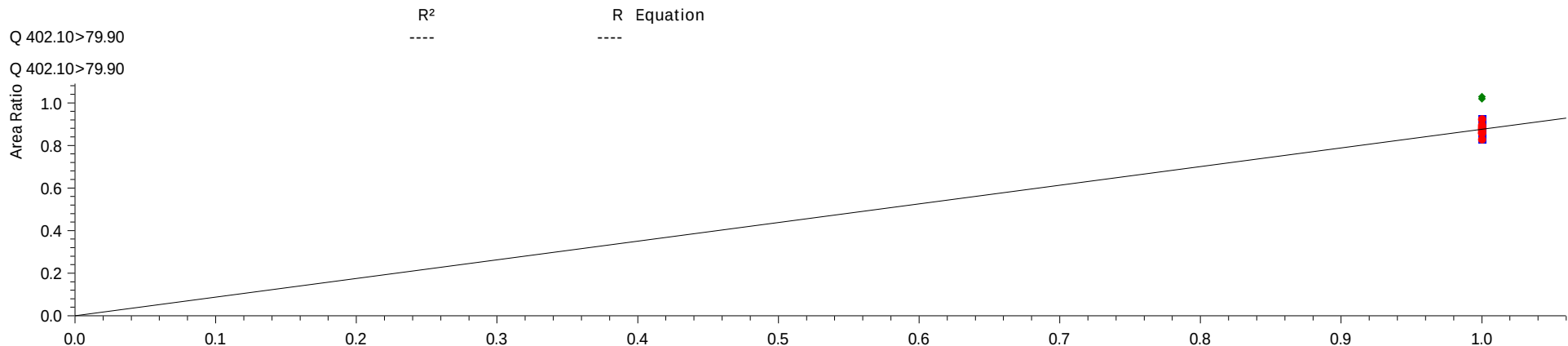
Compound: 13C3-PFHxS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240130_018	1633 ICAL 0.05PPB	☒	Auto	290234	333625	2.5000	2.5000	0.869939	2.4821	-0.72	0.876229	3.023003	3.023003
240130_019	1633 ICAL 0.1PPB	☒	Auto	289359	329849	2.5000	2.5000	0.877249	2.5029	0.12	0.876229	3.023003	3.023003
240130_020	1633 ICAL 0.25PPB	☒	Auto	295390	335043	2.5000	2.5000	0.881647	2.5155	0.62	0.876229	3.023003	3.023003
240130_021	1633 ICAL 0.5PPB	☒	Auto	269787	325212	2.5000	2.5000	0.829573	2.3669	-5.32	0.876229	3.023003	3.023003
240130_022	1633 ICAL 1.0PPB	☒	Auto	263901	307264	2.5000	2.5000	0.858875	2.4505	-1.98	0.876229	3.023003	3.023003
240130_023	1633 ICAL 5.0PPB	☒	Auto	291766	328304	2.5000	2.5000	0.888709	2.5356	1.42	0.876229	3.023003	3.023003
240130_024	1633 ICAL 10.0PPB	☒	Auto	270780	314839	2.5000	2.5000	0.860057	2.4539	-1.85	0.876229	3.023003	3.023003
240130_025	1633 ICAL 15.0PPB	☒	Auto	267121	297967	2.5000	2.5000	0.896479	2.5578	2.31	0.876229	3.023003	3.023003
240130_026	1633 ICAL 20.0PPB	☒	Auto	277373	300339	2.5000	2.5000	0.923535	2.6350	5.40	0.876229	3.023003	3.023003
240130_028	1633 ICV 1.0PPB		Auto	260431	255604	2.5000	2.5000	----	2.9070	16.28	0.876229	3.023003	3.023003
240130_029	1633 FTCA ICV 1.0PPB		Auto	272746	265191	2.5000	2.5000	----	2.9344	17.38	0.876229	3.023003	3.023003



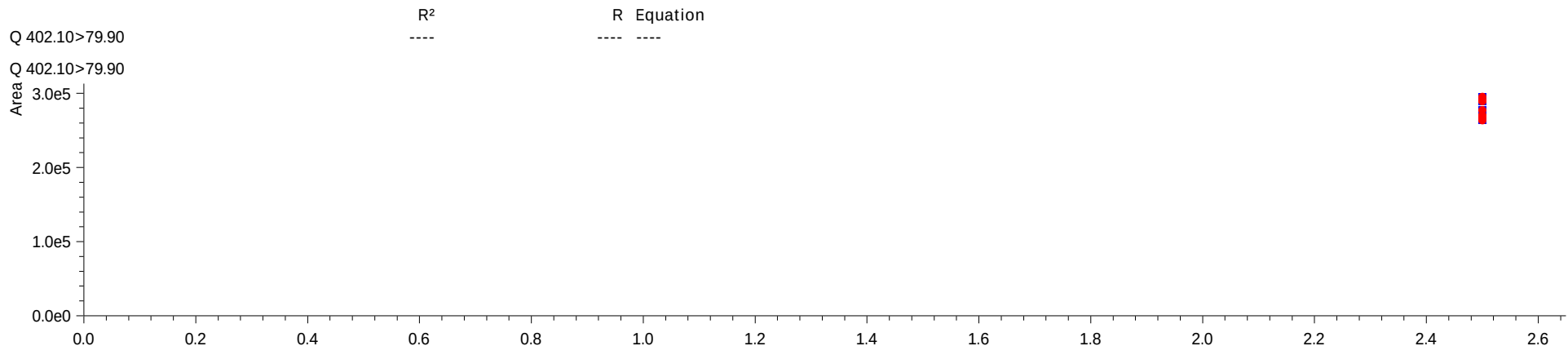
Compound: 13C3-PFHxS_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 0



											Conc. (ng/mL)		
Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240130_018	1633 ICAL 0.05PPB	☐	Auto	290234	290234	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_019	1633 ICAL 0.1PPB	☐	Auto	289359	289359	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_020	1633 ICAL 0.25PPB	☐	Auto	295390	295390	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_021	1633 ICAL 0.5PPB	☐	Auto	269787	269787	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_022	1633 ICAL 1.0PPB	☐	Auto	263901	263901	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_023	1633 ICAL 5.0PPB	☐	Auto	291766	291766	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_024	1633 ICAL 10.0PPB	☐	Auto	270780	270780	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_025	1633 ICAL 15.0PPB	☐	Auto	267121	267121	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_026	1633 ICAL 20.0PPB	☐	Auto	277373	277373	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_028	1633 ICV 1.0PPB		Auto	260431	260431	2.5000	2.5000	----	2.5000	0.00	----	----	----
240130_029	1633 FTCA ICV 1.0PPB		Auto	272746	272746	2.5000	2.5000	----	2.5000	0.00	----	----	----



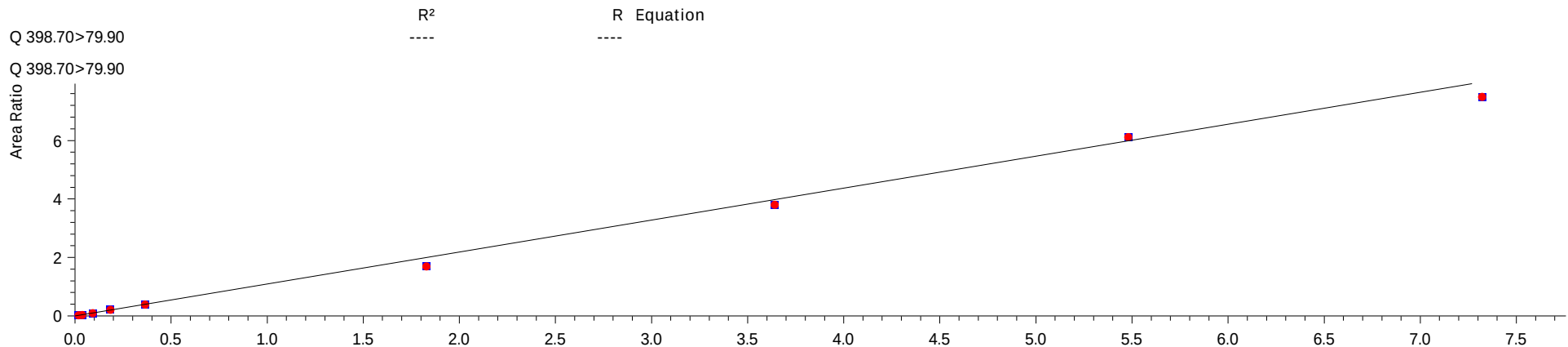
Compound: PFHxS

Curve Fit: Mean RF | Weighting: 1/C | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2

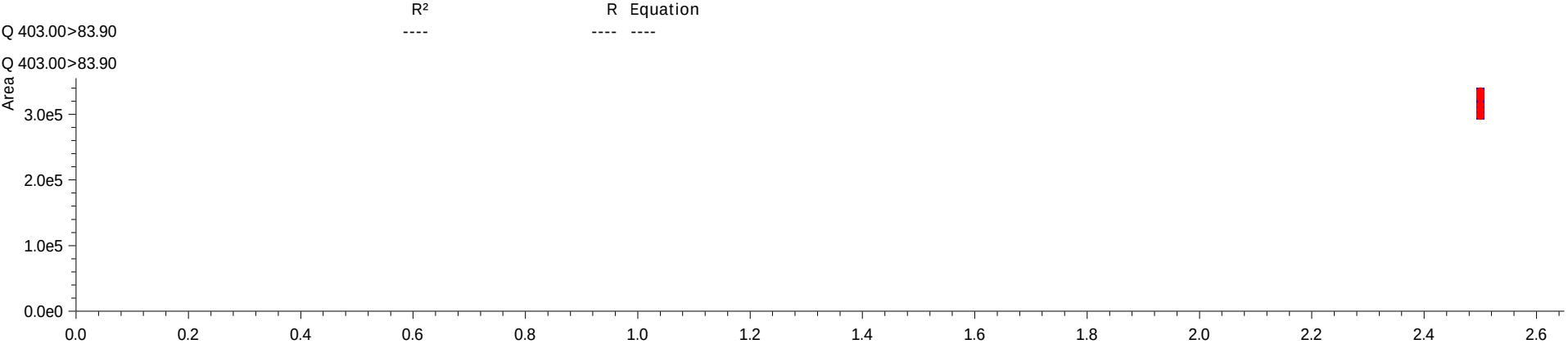


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240130_018	1633 ICAL 0.05PPB	☒	M	6997	290234	0.0457	2.5000	1.318856	0.0552	20.70	1.092714	10.207468	10.207466
240130_019	1633 ICAL 0.1PPB	☒	Auto	11471	289359	0.0910	2.5000	1.089095	0.0907	-0.33	1.092714	10.207468	10.207466
240130_020	1633 ICAL 0.25PPB	☒	M	28029	295390	0.2290	2.5000	1.035889	0.2171	-5.20	1.092714	10.207468	10.207466
240130_021	1633 ICAL 0.5PPB	☒	Auto	58995	269787	0.4570	2.5000	1.196242	0.5003	9.47	1.092714	10.207468	10.207466
240130_022	1633 ICAL 1.0PPB	☒	Auto	103527	263901	0.9100	2.5000	1.077736	0.8975	-1.37	1.092714	10.207468	10.207466
240130_023	1633 ICAL 5.0PPB	☒	Auto	495607	291766	4.5700	2.5000	0.929236	3.8863	-14.96	1.092714	10.207468	10.207466
240130_024	1633 ICAL 10.0PPB	☒	Auto	1031530	270780	9.1000	2.5000	1.046560	8.7156	-4.22	1.092714	10.207468	10.207466
240130_025	1633 ICAL 15.0PPB	☒	Auto	1635166	267121	13.7000	2.5000	1.117050	14.0051	2.23	1.092714	10.207468	10.207466
240130_026	1633 ICAL 20.0PPB	☒	Auto	2078623	277373	18.3000	2.5000	1.023764	17.1453	-6.31	1.092714	10.207468	10.207466
240130_028	1633 ICV 1.0PPB		Auto	103997	260431	0.9100	2.5000	----	0.9136	0.40	1.092714	10.207468	10.207466
240130_029	1633 FTCA ICV 1.0PPB		ND(W/B)	----	272746	0.9100	2.5000	----	----	----	1.092714	10.207468	10.207466



Compound: 18O2-PFHxS_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 0

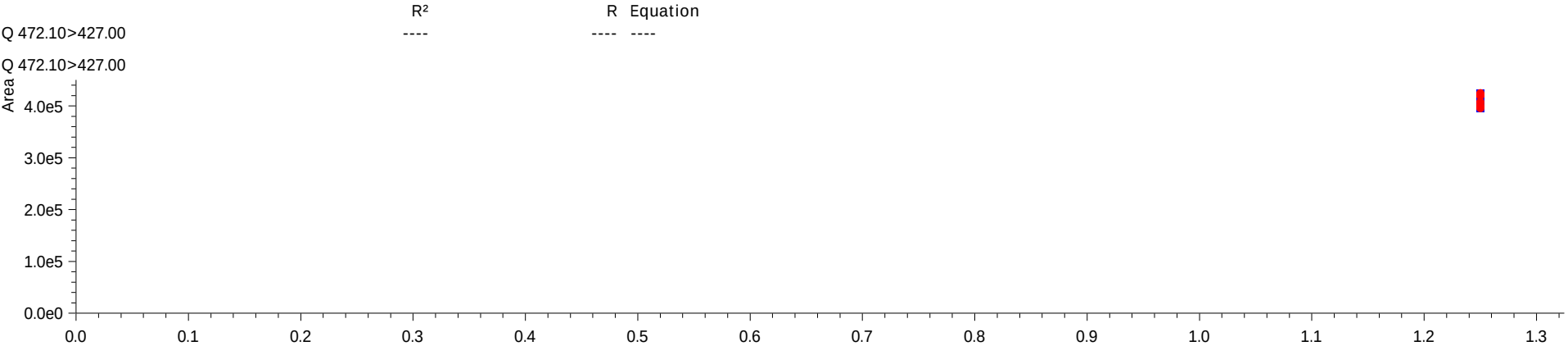


												Conc. (ng/mL)	
Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240130_018	1633 ICAL 0.05PPB	☐	Auto	333625	333625	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_019	1633 ICAL 0.1PPB	☐	Auto	329849	329849	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_020	1633 ICAL 0.25PPB	☐	Auto	335043	335043	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_021	1633 ICAL 0.5PPB	☐	Auto	325212	325212	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_022	1633 ICAL 1.0PPB	☐	Auto	307264	307264	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_023	1633 ICAL 5.0PPB	☐	Auto	328304	328304	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_024	1633 ICAL 10.0PPB	☐	Auto	314839	314839	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_025	1633 ICAL 15.0PPB	☐	Auto	297967	297967	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_026	1633 ICAL 20.0PPB	☐	Auto	300339	300339	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_028	1633 ICV 1.0PPB		Auto	255604	255604	2.5000	2.5000	----	2.5000	0.00	----	----	----
240130_029	1633 FTCA ICV 1.0PPB		Auto	265191	265191	2.5000	2.5000	----	2.5000	0.00	----	----	----



Compound: 13C9-PFNA_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 0



												Conc. (ng/mL)	
Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240130_018	1633 ICAL 0.05PPB	☐	Auto	421477	421477	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240130_019	1633 ICAL 0.1PPB	☐	Auto	402203	402203	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240130_020	1633 ICAL 0.25PPB	☐	Auto	420142	420142	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240130_021	1633 ICAL 0.5PPB	☐	Auto	422603	422603	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240130_022	1633 ICAL 1.0PPB	☐	Auto	421202	421202	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240130_023	1633 ICAL 5.0PPB	☐	Auto	424831	424831	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240130_024	1633 ICAL 10.0PPB	☐	Auto	408350	408350	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240130_025	1633 ICAL 15.0PPB	☐	Auto	395967	395967	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240130_026	1633 ICAL 20.0PPB	☐	Auto	398790	398790	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240130_028	1633 ICV 1.0PPB		Auto	387694	387694	1.2500	1.2500	----	1.2500	0.00	----	----	----
240130_029	1633 FTCA ICV 1.0PPB		Auto	410598	410598	1.2500	1.2500	----	1.2500	0.00	----	----	----



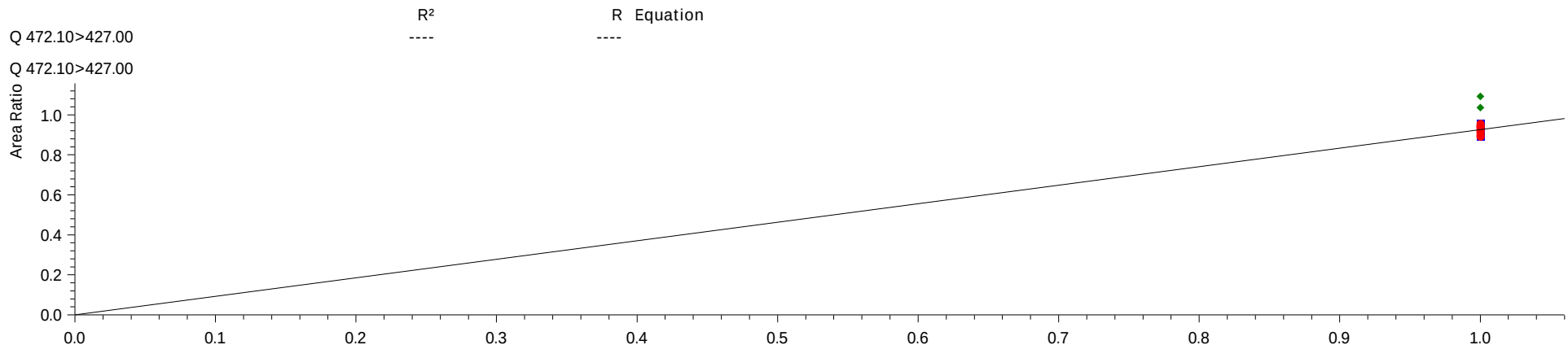
Compound: 13C9-PFNA

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2

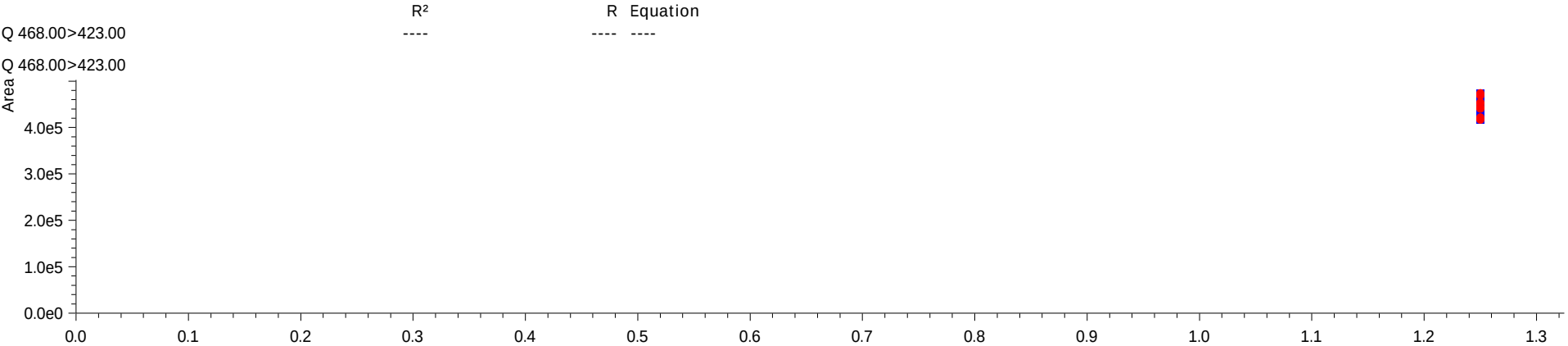


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc.Ratio
240130_018	1633 ICAL 0.05PPB	☒	Auto	421477	469041	1.2500	1.2500	0.898594	1.2139	-2.89	0.925306	2.352317	2.352317
240130_019	1633 ICAL 0.1PPB	☒	Auto	402203	441205	1.2500	1.2500	0.911601	1.2315	-1.48	0.925306	2.352317	2.352317
240130_020	1633 ICAL 0.25PPB	☒	Auto	420142	444312	1.2500	1.2500	0.945602	1.2774	2.19	0.925306	2.352317	2.352317
240130_021	1633 ICAL 0.5PPB	☒	Auto	422603	474124	1.2500	1.2500	0.891335	1.2041	-3.67	0.925306	2.352317	2.352317
240130_022	1633 ICAL 1.0PPB	☒	Auto	421202	454453	1.2500	1.2500	0.926834	1.2521	0.17	0.925306	2.352317	2.352317
240130_023	1633 ICAL 5.0PPB	☒	Auto	424831	451675	1.2500	1.2500	0.940569	1.2706	1.65	0.925306	2.352317	2.352317
240130_024	1633 ICAL 10.0PPB	☒	Auto	408350	443658	1.2500	1.2500	0.920417	1.2434	-0.53	0.925306	2.352317	2.352317
240130_025	1633 ICAL 15.0PPB	☒	Auto	395967	422553	1.2500	1.2500	0.937081	1.2659	1.27	0.925306	2.352317	2.352317
240130_026	1633 ICAL 20.0PPB	☒	Auto	398790	417267	1.2500	1.2500	0.955718	1.2911	3.29	0.925306	2.352317	2.352317
240130_028	1633 ICV 1.0PPB		Auto	387694	374354	1.2500	1.2500	----	1.3990	11.92	0.925306	2.352317	2.352317
240130_029	1633 FTCA ICV 1.0PPB		Auto	410598	376140	1.2500	1.2500	----	1.4747	17.97	0.925306	2.352317	2.352317



Compound: 13C5-PFNA_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 0



												Conc. (ng/mL)	
Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240130_018	1633 ICAL 0.05PPB	☐	Auto	469041	469041	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240130_019	1633 ICAL 0.1PPB	☐	Auto	441205	441205	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240130_020	1633 ICAL 0.25PPB	☐	Auto	444312	444312	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240130_021	1633 ICAL 0.5PPB	☐	Auto	474124	474124	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240130_022	1633 ICAL 1.0PPB	☐	Auto	454453	454453	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240130_023	1633 ICAL 5.0PPB	☐	Auto	451675	451675	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240130_024	1633 ICAL 10.0PPB	☐	Auto	443658	443658	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240130_025	1633 ICAL 15.0PPB	☐	Auto	422553	422553	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240130_026	1633 ICAL 20.0PPB	☐	Auto	417267	417267	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240130_028	1633 ICV 1.0PPB		Auto	374354	374354	1.2500	1.2500	----	1.2500	0.00	----	----	----
240130_029	1633 FTCA ICV 1.0PPB		Auto	376140	376140	1.2500	1.2500	----	1.2500	0.00	----	----	----



Compound: PFNA

Curve Fit: Linear | Weighting: 1/C | Zero: Not Forced

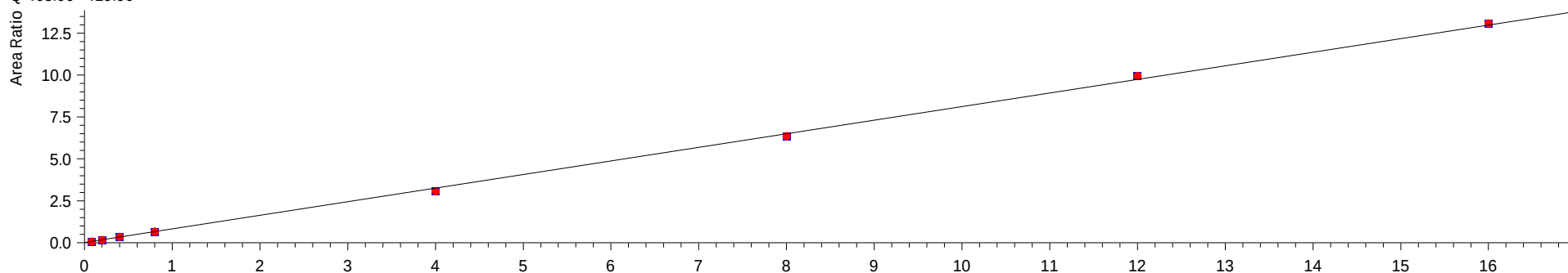
Quantitative Method: Internal Standard

No. of Calibration Points: 8

No. of Control Points: 2

Q 463.00>419.00
 R^2 0.9993706
 R Equation 0.9996852 $y = 0.8108769x + 0.01288316$

Q 463.00>419.00

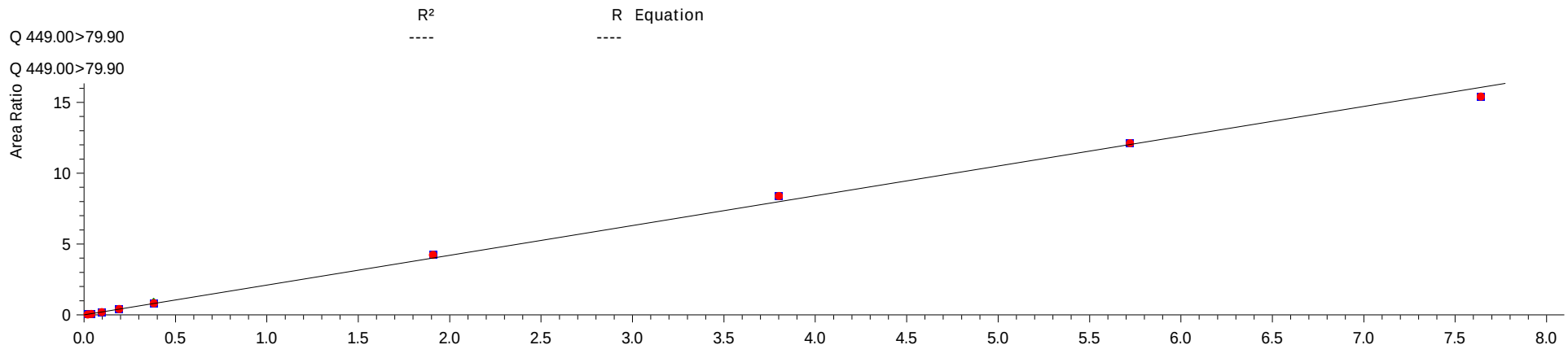


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240130_019	1633 ICAL 0.1PPB	☒	Auto	31897	402203	0.1000	1.2500	0.991314	0.1024	2.39	0.845937	8.277905	3.812733
240130_020	1633 ICAL 0.25PPB	☒	Auto	72640	420142	0.2500	1.2500	0.864468	0.2467	-1.33	0.845937	8.277905	3.812733
240130_021	1633 ICAL 0.5PPB	☒	Auto	150496	422603	0.5000	1.2500	0.890290	0.5291	5.82	0.845937	8.277905	3.812733
240130_022	1633 ICAL 1.0PPB	☒	Auto	272748	421202	1.0000	1.2500	0.809433	0.9784	-2.16	0.845937	8.277905	3.812733
240130_023	1633 ICAL 5.0PPB	☒	Auto	1305517	424831	5.0000	1.2500	0.768256	4.7173	-5.65	0.845937	8.277905	3.812733
240130_024	1633 ICAL 10.0PPB	☒	Auto	2601947	408350	10.0000	1.2500	0.796481	9.8026	-1.97	0.845937	8.277905	3.812733
240130_025	1633 ICAL 15.0PPB	☒	Auto	3942045	395967	15.0000	1.2500	0.829624	15.3269	2.18	0.845937	8.277905	3.812733
240130_026	1633 ICAL 20.0PPB	☒	Auto	5216970	398790	20.0000	1.2500	0.817625	20.1466	0.73	0.845937	8.277905	3.812733
240130_028	1633 ICV 1.0PPB		Auto	273895	387694	1.0000	1.2500	----	1.0692	6.92	0.845937	8.277905	3.812733
240130_029	1633 FTCA ICV 1.0PPB		ND(W/B)	----	410598	1.0000	1.2500	----	----	----	0.845937	8.277905	3.812733



Compound: PFHpS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
 Quantitative Method: Internal Standard
 No. of Calibration Points: 9
 No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240130_018	1633 ICAL 0.05PPB	☒	Auto	5357	135576	0.0477	2.5000	2.071054	0.0470	-1.47	2.101948	6.817336	6.817336
240130_019	1633 ICAL 0.1PPB	☒	Auto	8317	122302	0.0950	2.5000	1.789531	0.0809	-14.86	2.101948	6.817336	6.817336
240130_020	1633 ICAL 0.25PPB	☒	Auto	24473	124996	0.2390	2.5000	2.048002	0.2329	-2.57	2.101948	6.817336	6.817336
240130_021	1633 ICAL 0.5PPB	☒	Auto	51601	120579	0.4770	2.5000	2.242897	0.5090	6.71	2.101948	6.817336	6.817336
240130_022	1633 ICAL 1.0PPB	☒	Auto	97444	117278	0.9500	2.5000	2.186541	0.9882	4.02	2.101948	6.817336	6.817336
240130_023	1633 ICAL 5.0PPB	☒	Auto	513354	120645	4.7700	2.5000	2.230120	5.0609	6.10	2.101948	6.817336	6.817336
240130_024	1633 ICAL 10.0PPB	☒	Auto	1003805	119449	9.5000	2.5000	2.211479	9.9950	5.21	2.101948	6.817336	6.817336
240130_025	1633 ICAL 15.0PPB	☒	Auto	1510486	124571	14.3000	2.5000	2.119839	14.4217	0.85	2.101948	6.817336	6.817336
240130_026	1633 ICAL 20.0PPB	☒	Auto	1996021	129460	19.1000	2.5000	2.018072	18.3378	-3.99	2.101948	6.817336	6.817336
240130_028	1633 ICV 1.0PPB		Auto	105405	112926	0.9500	2.5000	----	1.1102	16.86	2.101948	6.817336	6.817336
240130_029	1633 FTCA ICV 1.0PPB		ND(W/B)	----	123010	0.9500	2.5000	----	----	----	2.101948	6.817336	6.817336



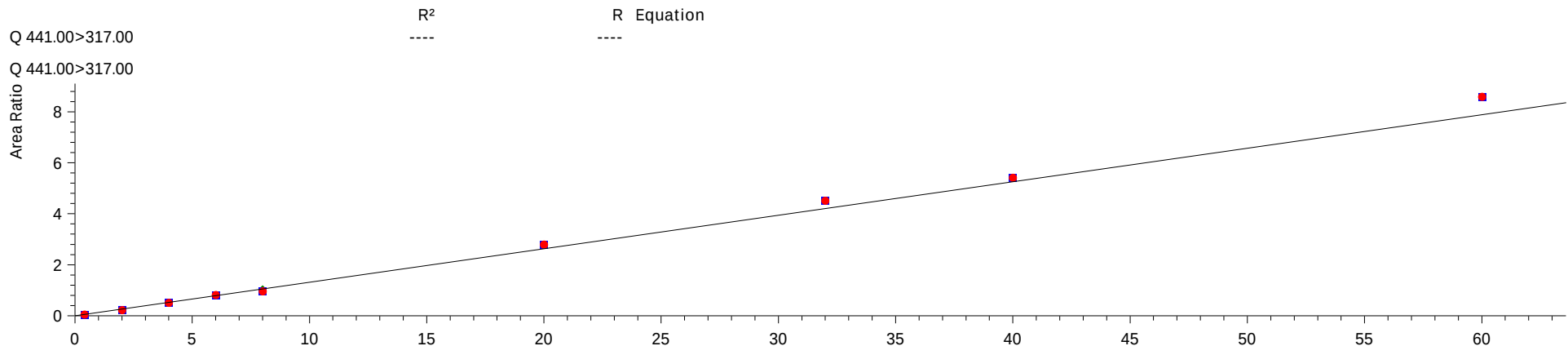
Compound: 7_3 FTCA

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc.Ratio
240130_018	1633 ICAL 0.05PPB	☒	Auto	28167	562116	1.0000	2.5000	0.125273	0.9540	-4.60	0.131317	8.095296	8.095296
240130_019	1633 ICAL 0.1PPB	☒	Auto	135116	605014	5.0000	2.5000	0.111663	4.2517	-14.97	0.131317	8.095296	8.095296
240130_020	1633 ICAL 0.25PPB	☒	Auto	307088	599260	10.0000	2.5000	0.128111	9.7559	-2.44	0.131317	8.095296	8.095296
240130_021	1633 ICAL 0.5PPB	☒	Auto	461756	561692	15.0000	2.5000	0.137013	15.6506	4.34	0.131317	8.095296	8.095296
240130_022	1633 ICAL 1.0PPB	☒	Auto	541017	561283	20.0000	2.5000	0.120487	18.3505	-8.25	0.131317	8.095296	8.095296
240130_023	1633 ICAL 5.0PPB	☒	Auto	1687020	603366	50.0000	2.5000	0.139801	53.2301	6.46	0.131317	8.095296	8.095296
240130_024	1633 ICAL 10.0PPB	☒	Auto	2541101	563352	80.0000	2.5000	0.140959	85.8737	7.34	0.131317	8.095296	8.095296
240130_025	1633 ICAL 15.0PPB	☒	Auto	2945658	543788	100.0000	2.5000	0.135423	103.1266	3.13	0.131317	8.095296	8.095296
240130_026	1633 ICAL 20.0PPB	☒	Auto	4818146	561062	150.0000	2.5000	0.143126	163.4884	8.99	0.131317	8.095296	8.095296
240130_028	1633 ICV 1.0PPB		ND(W/B)	----	567720	20.0000	2.5000	----	----	----	0.131317	8.095296	8.095296
240130_029	1633 FTCA ICV 1.0PPB		Auto	586057	558745	20.0000	2.5000	----	19.9685	-0.16	0.131317	8.095296	8.095296



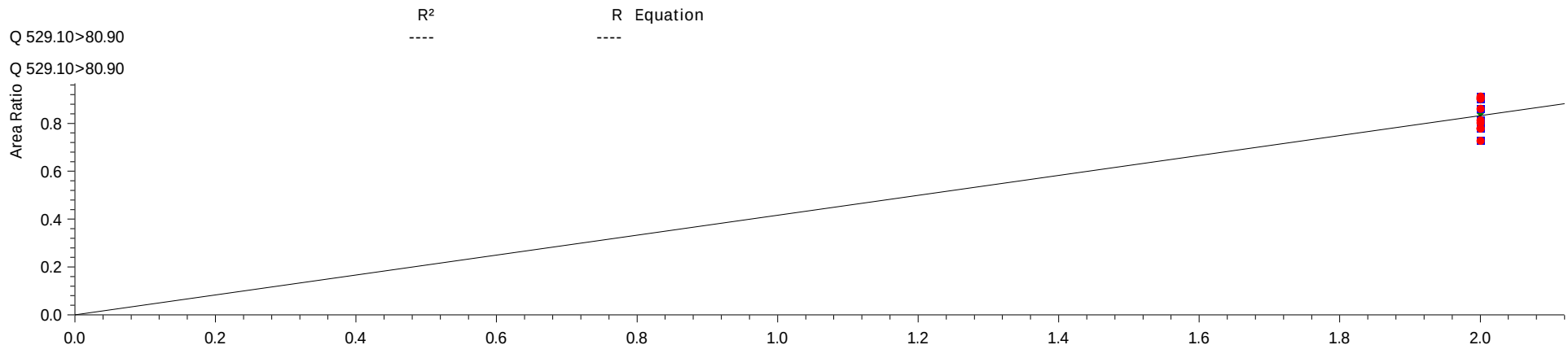
Compound: 13C2-8_2-FTS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2

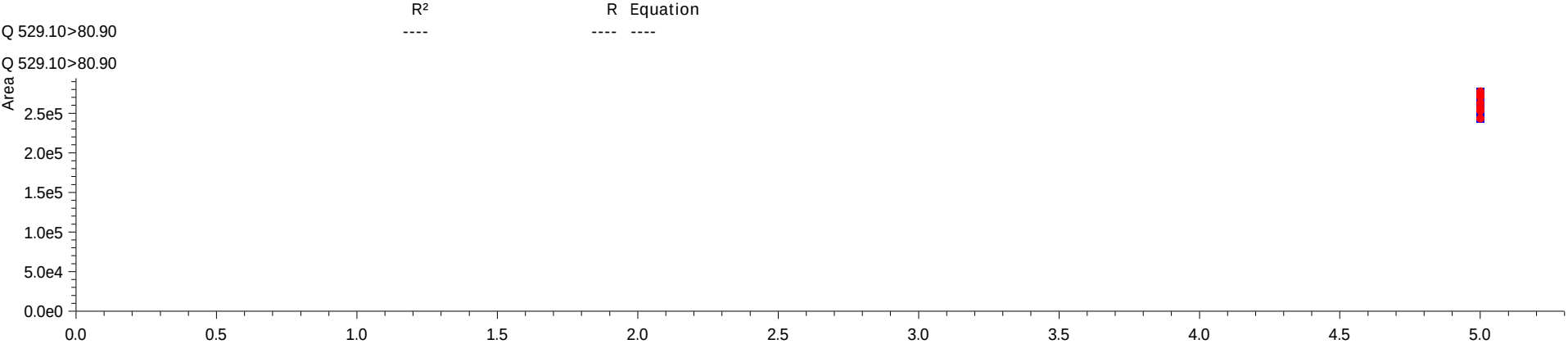


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc.Ratio
240130_018	1633 ICAL 0.05PPB	☒	Auto	271540	333625	5.0000	2.5000	0.406953	4.8921	-2.16	0.415927	8.016247	8.016247
240130_019	1633 ICAL 0.1PPB	☒	Auto	257380	329849	5.0000	2.5000	0.390148	4.6901	-6.20	0.415927	8.016247	8.016247
240130_020	1633 ICAL 0.25PPB	☒	Auto	243742	335043	5.0000	2.5000	0.363747	4.3727	-12.55	0.415927	8.016247	8.016247
240130_021	1633 ICAL 0.5PPB	☒	Auto	253127	325212	5.0000	2.5000	0.389172	4.6784	-6.43	0.415927	8.016247	8.016247
240130_022	1633 ICAL 1.0PPB	☒	Auto	277566	307264	5.0000	2.5000	0.451674	5.4297	8.59	0.415927	8.016247	8.016247
240130_023	1633 ICAL 5.0PPB	☒	Auto	263601	328304	5.0000	2.5000	0.401459	4.8261	-3.48	0.415927	8.016247	8.016247
240130_024	1633 ICAL 10.0PPB	☒	Auto	271386	314839	5.0000	2.5000	0.430991	5.1811	3.62	0.415927	8.016247	8.016247
240130_025	1633 ICAL 15.0PPB	☒	Auto	271840	297967	5.0000	2.5000	0.456158	5.4836	9.67	0.415927	8.016247	8.016247
240130_026	1633 ICAL 20.0PPB	☒	Auto	272129	300339	5.0000	2.5000	0.453036	5.4461	8.92	0.415927	8.016247	8.016247
240130_028	1633 ICV 1.0PPB		Auto	229575	255604	5.0000	2.5000	----	5.3986	7.97	0.415927	8.016247	8.016247
240130_029	1633 FTCA ICV 1.0PPB		Auto	223671	265191	5.0000	2.5000	----	5.0696	1.39	0.415927	8.016247	8.016247



Compound: 13C2-8_2-FTS_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 0

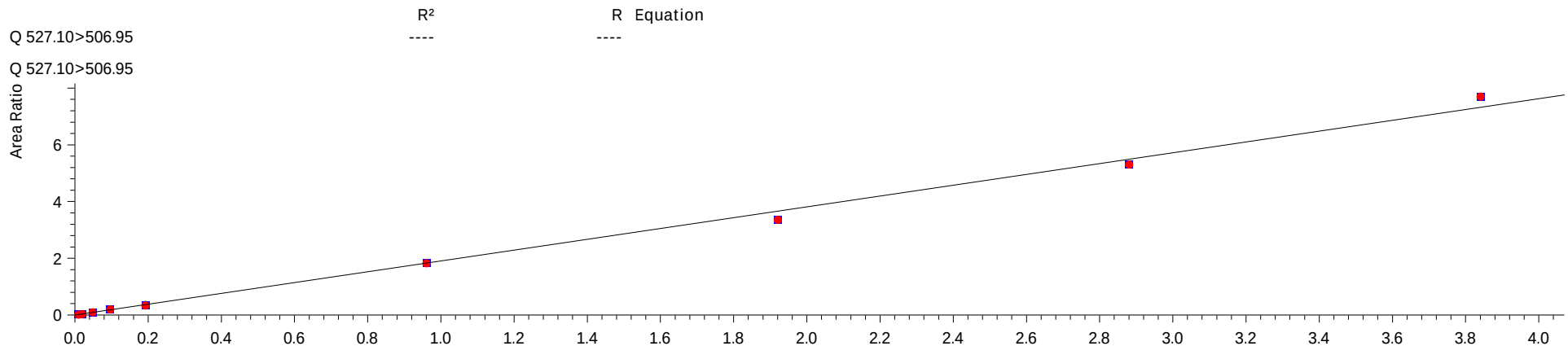


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240130_018	1633 ICAL 0.05PPB	☐	Auto	271540	271540	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240130_019	1633 ICAL 0.1PPB	☐	Auto	257380	257380	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240130_020	1633 ICAL 0.25PPB	☐	Auto	243742	243742	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240130_021	1633 ICAL 0.5PPB	☐	Auto	253127	253127	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240130_022	1633 ICAL 1.0PPB	☐	Auto	277566	277566	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240130_023	1633 ICAL 5.0PPB	☐	Auto	263601	263601	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240130_024	1633 ICAL 10.0PPB	☐	Auto	271386	271386	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240130_025	1633 ICAL 15.0PPB	☐	Auto	271840	271840	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240130_026	1633 ICAL 20.0PPB	☐	Auto	272129	272129	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240130_028	1633 ICV 1.0PPB		Auto	229575	229575	5.0000	5.0000	----	5.0000	0.00	----	----	----
240130_029	1633 FTCA ICV 1.0PPB		Auto	223671	223671	5.0000	5.0000	----	5.0000	0.00	----	----	----



Compound: 8_2 FTS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
 Quantitative Method: Internal Standard
 No. of Calibration Points: 9
 No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240130_018	1633 ICAL 0.05PPB	☒	Auto	4946	271540	0.0480	5.0000	1.897512	0.0478	-0.44	1.905955	6.460530	6.460530
240130_019	1633 ICAL 0.1PPB	☒	Auto	8986	257380	0.0960	5.0000	1.818451	0.0916	-4.59	1.905955	6.460530	6.460530
240130_020	1633 ICAL 0.25PPB	☒	Auto	24388	243742	0.2400	5.0000	2.084545	0.2625	9.37	1.905955	6.460530	6.460530
240130_021	1633 ICAL 0.5PPB	☒	Auto	50315	253127	0.4800	5.0000	2.070550	0.5215	8.64	1.905955	6.460530	6.460530
240130_022	1633 ICAL 1.0PPB	☒	Auto	94760	277566	0.9600	5.0000	1.778100	0.8956	-6.71	1.905955	6.460530	6.460530
240130_023	1633 ICAL 5.0PPB	☒	Auto	482104	263601	4.8000	5.0000	1.905121	4.7979	-0.04	1.905955	6.460530	6.460530
240130_024	1633 ICAL 10.0PPB	☒	Auto	911590	271386	9.6000	5.0000	1.749489	8.8119	-8.21	1.905955	6.460530	6.460530
240130_025	1633 ICAL 15.0PPB	☒	Auto	1443808	271840	14.4000	5.0000	1.844179	13.9333	-3.24	1.905955	6.460530	6.460530
240130_026	1633 ICAL 20.0PPB	☒	Auto	2095846	272129	19.2000	5.0000	2.005644	20.2042	5.23	1.905955	6.460530	6.460530
240130_028	1633 ICV 1.0PPB		Auto	85585	229575	0.9600	5.0000	----	0.9780	1.87	1.905955	6.460530	6.460530
240130_029	1633 FTCA ICV 1.0PPB		ND(W/B)	----	223671	0.9600	5.0000	----	----	----	1.905955	6.460530	6.460530



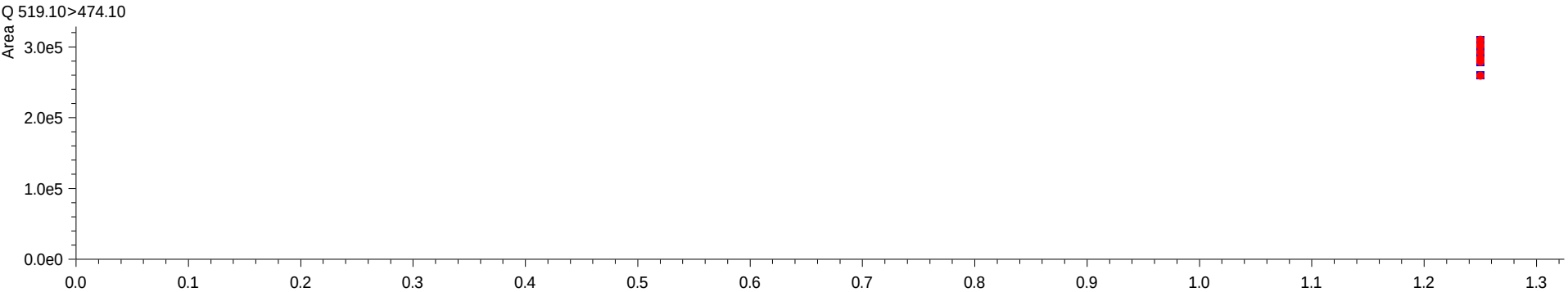
Compound: 13C6-PFDA_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 0

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R²

R Equation



											Conc. (ng/mL)		
Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240130_018	1633 ICAL 0.05PPB	☐	Auto	310064	310064	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240130_019	1633 ICAL 0.1PPB	☐	Auto	284199	284199	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240130_020	1633 ICAL 0.25PPB	☐	Auto	283149	283149	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240130_021	1633 ICAL 0.5PPB	☐	Auto	292654	292654	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240130_022	1633 ICAL 1.0PPB	☐	Auto	280455	280455	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240130_023	1633 ICAL 5.0PPB	☐	Auto	301296	301296	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240130_024	1633 ICAL 10.0PPB	☐	Auto	303254	303254	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240130_025	1633 ICAL 15.0PPB	☐	Auto	279280	279280	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240130_026	1633 ICAL 20.0PPB	☐	Auto	259549	259549	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240130_028	1633 ICV 1.0PPB		Auto	247123	247123	1.2500	1.2500	----	1.2500	0.00	----	----	----
240130_029	1633 FTCA ICV 1.0PPB		Auto	274884	274884	1.2500	1.2500	----	1.2500	0.00	----	----	----



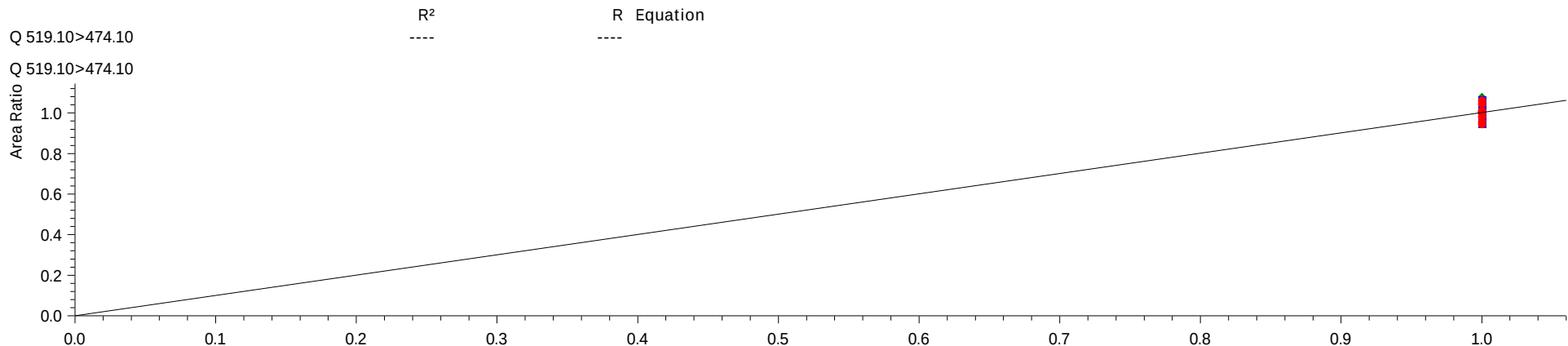
Compound: 13C6-PFDA

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2

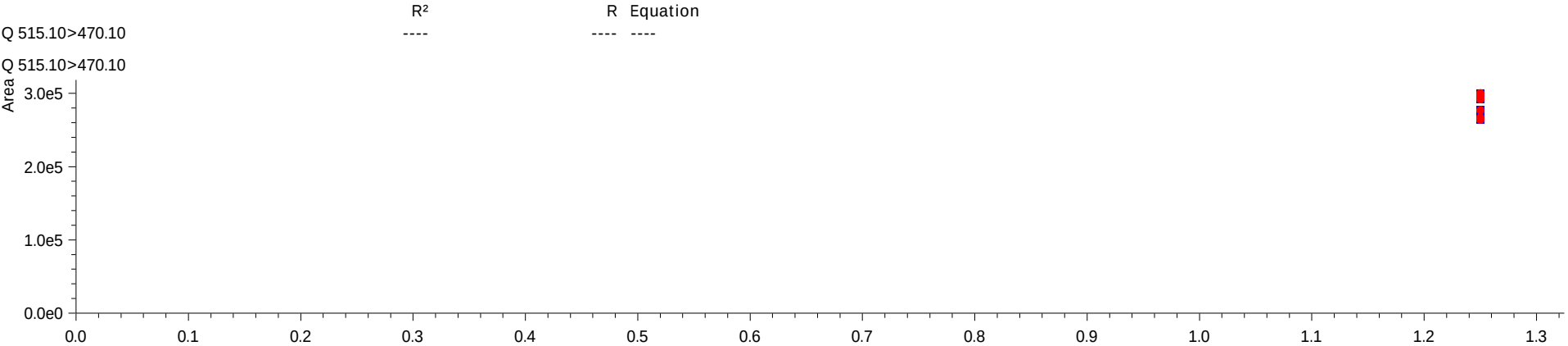


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240130_018	1633 ICAL 0.05PPB	☒	Auto	310064	292207	1.2500	1.2500	1.061110	1.3241	5.93	1.001701	3.722611	3.722611
240130_019	1633 ICAL 0.1PPB	☒	Auto	284199	296813	1.2500	1.2500	0.957504	1.1948	-4.41	1.001701	3.722611	3.722611
240130_020	1633 ICAL 0.25PPB	☒	Auto	283149	299603	1.2500	1.2500	0.945080	1.1793	-5.65	1.001701	3.722611	3.722611
240130_021	1633 ICAL 0.5PPB	☒	Auto	292654	293151	1.2500	1.2500	0.998305	1.2458	-0.34	1.001701	3.722611	3.722611
240130_022	1633 ICAL 1.0PPB	☒	Auto	280455	277320	1.2500	1.2500	1.011307	1.2620	0.96	1.001701	3.722611	3.722611
240130_023	1633 ICAL 5.0PPB	☒	Auto	301296	299894	1.2500	1.2500	1.004677	1.2537	0.30	1.001701	3.722611	3.722611
240130_024	1633 ICAL 10.0PPB	☒	Auto	303254	300386	1.2500	1.2500	1.009546	1.2598	0.78	1.001701	3.722611	3.722611
240130_025	1633 ICAL 15.0PPB	☒	Auto	279280	267196	1.2500	1.2500	1.045227	1.3043	4.35	1.001701	3.722611	3.722611
240130_026	1633 ICAL 20.0PPB	☒	Auto	259549	264157	1.2500	1.2500	0.982556	1.2261	-1.91	1.001701	3.722611	3.722611
240130_028	1633 ICV 1.0PPB		Auto	247123	228831	1.2500	1.2500	----	1.3476	7.81	1.001701	3.722611	3.722611
240130_029	1633 FTCA ICV 1.0PPB		Auto	274884	257284	1.2500	1.2500	----	1.3332	6.66	1.001701	3.722611	3.722611



Compound: 13C2-PFDA_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 0



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc. (ng/mL)	RF RSE (curve)
240130_018	1633 ICAL 0.05PPB	☐	Auto	292207	292207	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----	----
240130_019	1633 ICAL 0.1PPB	☐	Auto	296813	296813	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----	----
240130_020	1633 ICAL 0.25PPB	☐	Auto	299603	299603	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----	----
240130_021	1633 ICAL 0.5PPB	☐	Auto	293151	293151	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----	----
240130_022	1633 ICAL 1.0PPB	☐	Auto	277320	277320	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----	----
240130_023	1633 ICAL 5.0PPB	☐	Auto	299894	299894	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----	----
240130_024	1633 ICAL 10.0PPB	☐	Auto	300386	300386	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----	----
240130_025	1633 ICAL 15.0PPB	☐	Auto	267196	267196	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----	----
240130_026	1633 ICAL 20.0PPB	☐	Auto	264157	264157	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----	----
240130_028	1633 ICV 1.0PPB		Auto	228831	228831	1.2500	1.2500	----	1.2500	0.00	----	----	----	----
240130_029	1633 FTCA ICV 1.0PPB		Auto	257284	257284	1.2500	1.2500	----	1.2500	0.00	----	----	----	----



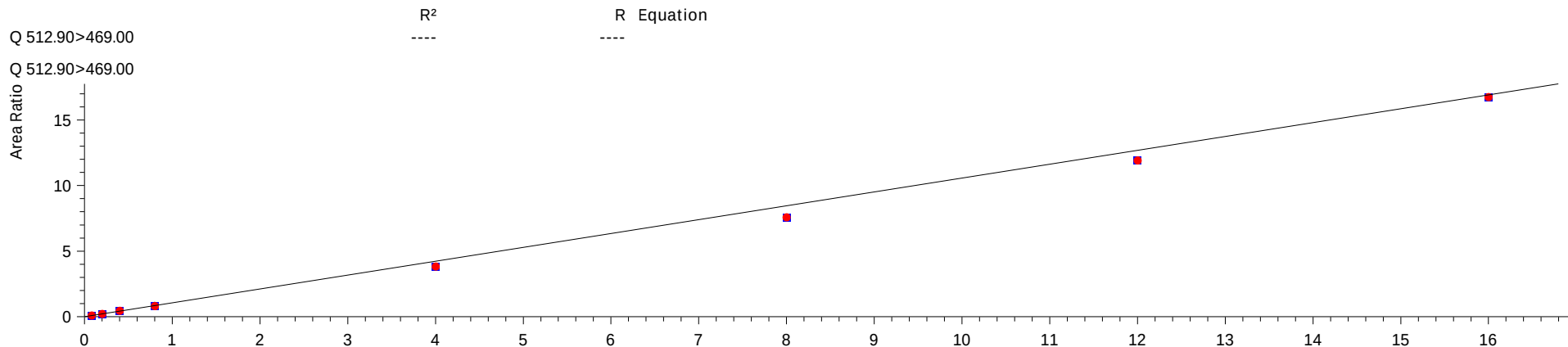
Compound: PFDA

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 8

No. of Control Points: 2

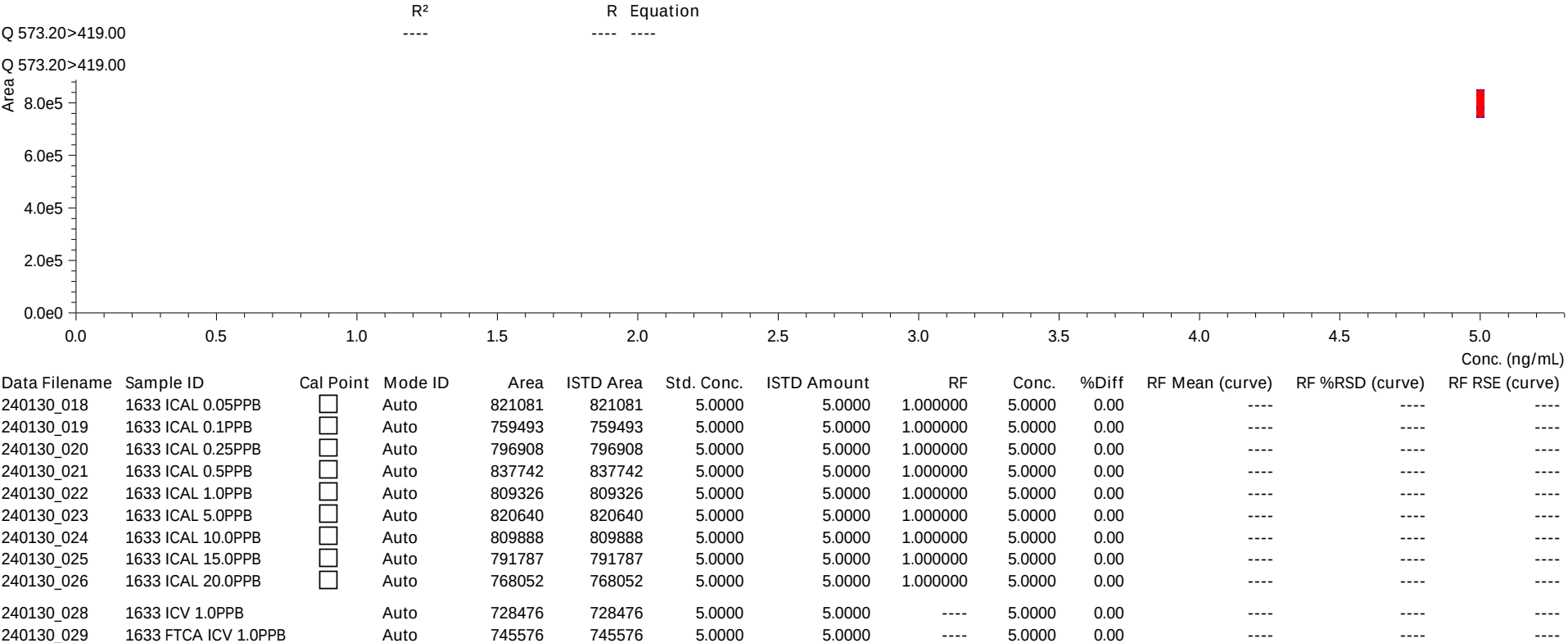


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240130_019	1633 ICAL 0.1PPB	☒	Auto	26834	284199	0.1000	1.2500	1.180233	0.1116	11.64	1.057172	8.646797	8.646797
240130_020	1633 ICAL 0.25PPB	☒	Auto	63813	283149	0.2500	1.2500	1.126843	0.2665	6.59	1.057172	8.646797	8.646797
240130_021	1633 ICAL 0.5PPB	☒	Auto	136710	292654	0.5000	1.2500	1.167852	0.5523	10.47	1.057172	8.646797	8.646797
240130_022	1633 ICAL 1.0PPB	☒	Auto	232262	280455	1.0000	1.2500	1.035201	0.9792	-2.08	1.057172	8.646797	8.646797
240130_023	1633 ICAL 5.0PPB	☒	Auto	1152515	301296	5.0000	1.2500	0.956298	4.5229	-9.54	1.057172	8.646797	8.646797
240130_024	1633 ICAL 10.0PPB	☒	Auto	2304753	303254	10.0000	1.2500	0.950011	8.9863	-10.14	1.057172	8.646797	8.646797
240130_025	1633 ICAL 15.0PPB	☒	Auto	3331029	279280	15.0000	1.2500	0.993932	14.1027	-5.98	1.057172	8.646797	8.646797
240130_026	1633 ICAL 20.0PPB	☒	Auto	4348016	259549	20.0000	1.2500	1.047011	19.8078	-0.96	1.057172	8.646797	8.646797
240130_028	1633 ICV 1.0PPB		Auto	209835	247123	1.0000	1.2500	----	1.0040	0.40	1.057172	8.646797	8.646797
240130_029	1633 FTCA ICV 1.0PPB		ND(W/B)	----	274884	1.0000	1.2500	----	----	----	1.057172	8.646797	8.646797



Compound: D3-NMeFOSAA_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 0





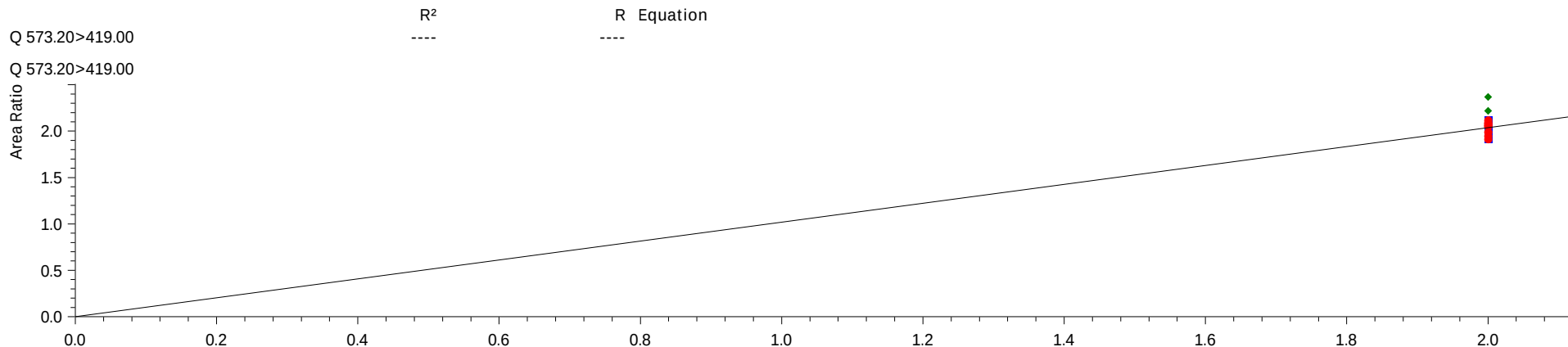
Compound: D3-NMeFOSAA

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2

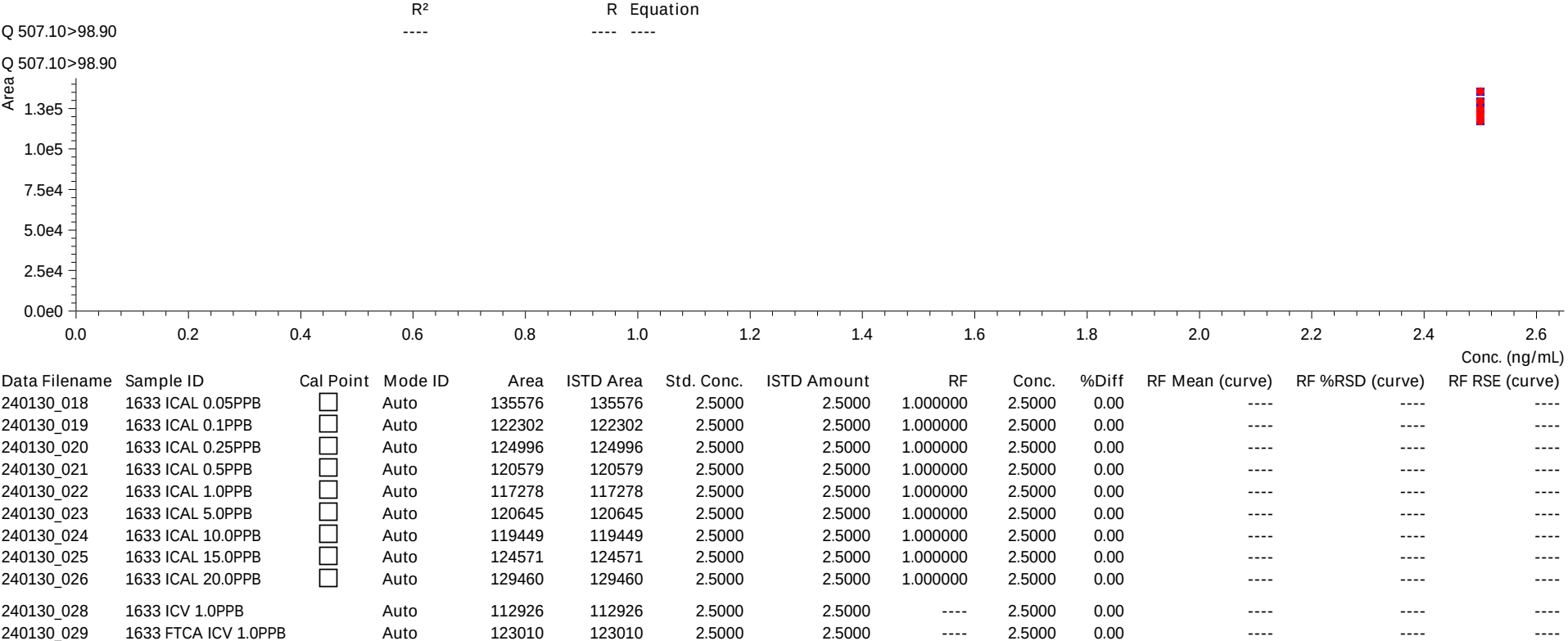


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240130_018	1633 ICAL 0.05PPB	☒	Auto	821081	399487	5.0000	2.5000	1.027669	5.0481	0.96	1.017885	3.422015	3.422015
240130_019	1633 ICAL 0.1PPB	☒	Auto	759493	396921	5.0000	2.5000	0.956731	4.6996	-6.01	1.017885	3.422015	3.422015
240130_020	1633 ICAL 0.25PPB	☒	Auto	796908	409128	5.0000	2.5000	0.973910	4.7840	-4.32	1.017885	3.422015	3.422015
240130_021	1633 ICAL 0.5PPB	☒	Auto	837742	405193	5.0000	2.5000	1.033757	5.0780	1.56	1.017885	3.422015	3.422015
240130_022	1633 ICAL 1.0PPB	☒	Auto	809326	386731	5.0000	2.5000	1.046368	5.1399	2.80	1.017885	3.422015	3.422015
240130_023	1633 ICAL 5.0PPB	☒	Auto	820640	399184	5.0000	2.5000	1.027897	5.0492	0.98	1.017885	3.422015	3.422015
240130_024	1633 ICAL 10.0PPB	☒	Auto	809888	388576	5.0000	2.5000	1.042124	5.1191	2.38	1.017885	3.422015	3.422015
240130_025	1633 ICAL 15.0PPB	☒	Auto	791787	374106	5.0000	2.5000	1.058239	5.1982	3.96	1.017885	3.422015	3.422015
240130_026	1633 ICAL 20.0PPB	☒	Auto	768052	386238	5.0000	2.5000	0.994272	4.8840	-2.32	1.017885	3.422015	3.422015
240130_028	1633 ICV 1.0PPB		Auto	728476	307744	5.0000	2.5000	----	5.8139	16.28	1.017885	3.422015	3.422015
240130_029	1633 FTCA ICV 1.0PPB		Auto	745576	336033	5.0000	2.5000	----	5.4494	8.99	1.017885	3.422015	3.422015



Compound: 13C8-PFOS_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 0





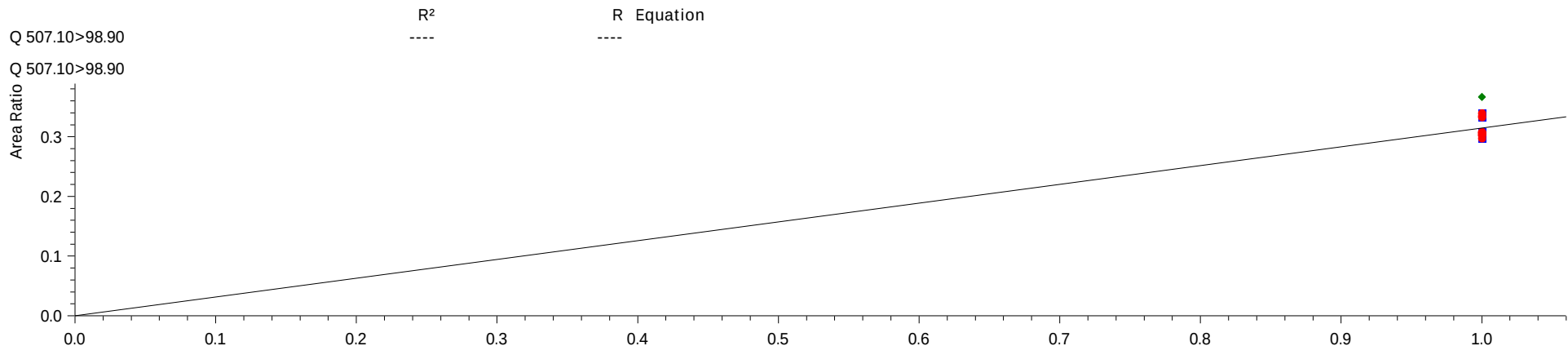
Compound: 13C8-PFOS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240130_018	1633 ICAL 0.05PPB	☒	Auto	135576	399487	2.5000	2.5000	0.339374	2.6966	7.87	0.314628	5.177394	5.177394
240130_019	1633 ICAL 0.1PPB	☒	Auto	122302	396921	2.5000	2.5000	0.308126	2.4483	-2.07	0.314628	5.177394	5.177394
240130_020	1633 ICAL 0.25PPB	☒	Auto	124996	409128	2.5000	2.5000	0.305518	2.4276	-2.90	0.314628	5.177394	5.177394
240130_021	1633 ICAL 0.5PPB	☒	Auto	120579	405193	2.5000	2.5000	0.297585	2.3646	-5.42	0.314628	5.177394	5.177394
240130_022	1633 ICAL 1.0PPB	☒	Auto	117278	386731	2.5000	2.5000	0.303254	2.4096	-3.62	0.314628	5.177394	5.177394
240130_023	1633 ICAL 5.0PPB	☒	Auto	120645	399184	2.5000	2.5000	0.302230	2.4015	-3.94	0.314628	5.177394	5.177394
240130_024	1633 ICAL 10.0PPB	☒	Auto	119449	388576	2.5000	2.5000	0.307403	2.4426	-2.30	0.314628	5.177394	5.177394
240130_025	1633 ICAL 15.0PPB	☒	Auto	124571	374106	2.5000	2.5000	0.332984	2.6459	5.83	0.314628	5.177394	5.177394
240130_026	1633 ICAL 20.0PPB	☒	Auto	129460	386238	2.5000	2.5000	0.335181	2.6633	6.53	0.314628	5.177394	5.177394
240130_028	1633 ICV 1.0PPB		Auto	112926	307744	2.5000	2.5000	----	2.9157	16.63	0.314628	5.177394	5.177394
240130_029	1633 FTCA ICV 1.0PPB		Auto	123010	336033	2.5000	2.5000	----	2.9087	16.35	0.314628	5.177394	5.177394



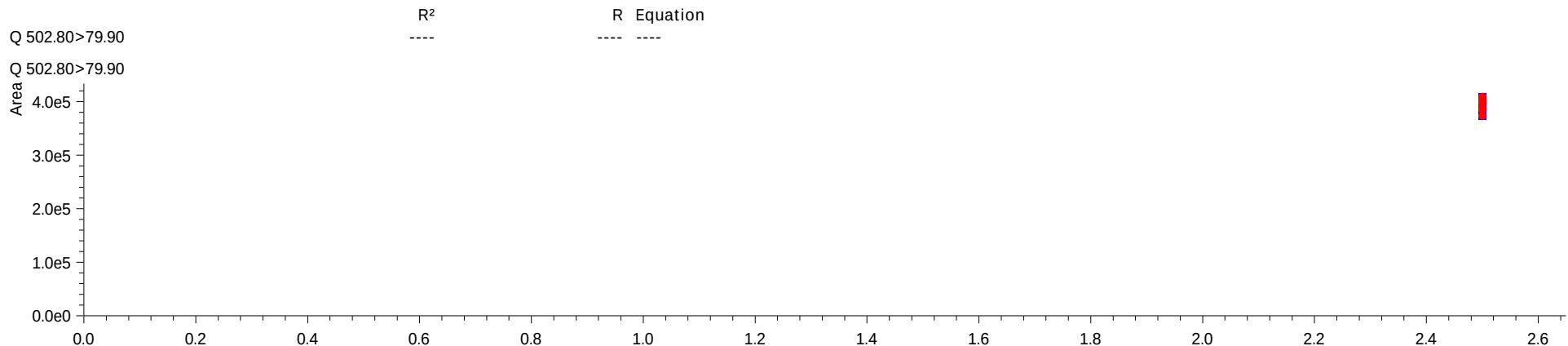
Compound: 13C4-PFOS_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 0



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc. (ng/mL)
240130_018	1633 ICAL 0.05PPB	☐	Auto	399487	399487	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_019	1633 ICAL 0.1PPB	☐	Auto	396921	396921	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_020	1633 ICAL 0.25PPB	☐	Auto	409128	409128	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_021	1633 ICAL 0.5PPB	☐	Auto	405193	405193	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_022	1633 ICAL 1.0PPB	☐	Auto	386731	386731	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_023	1633 ICAL 5.0PPB	☐	Auto	399184	399184	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_024	1633 ICAL 10.0PPB	☐	Auto	388576	388576	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_025	1633 ICAL 15.0PPB	☐	Auto	374106	374106	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_026	1633 ICAL 20.0PPB	☐	Auto	386238	386238	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_028	1633 ICV 1.0PPB		Auto	307744	307744	2.5000	2.5000	----	2.5000	0.00	----	----	----
240130_029	1633 FTCA ICV 1.0PPB		Auto	336033	336033	2.5000	2.5000	----	2.5000	0.00	----	----	----



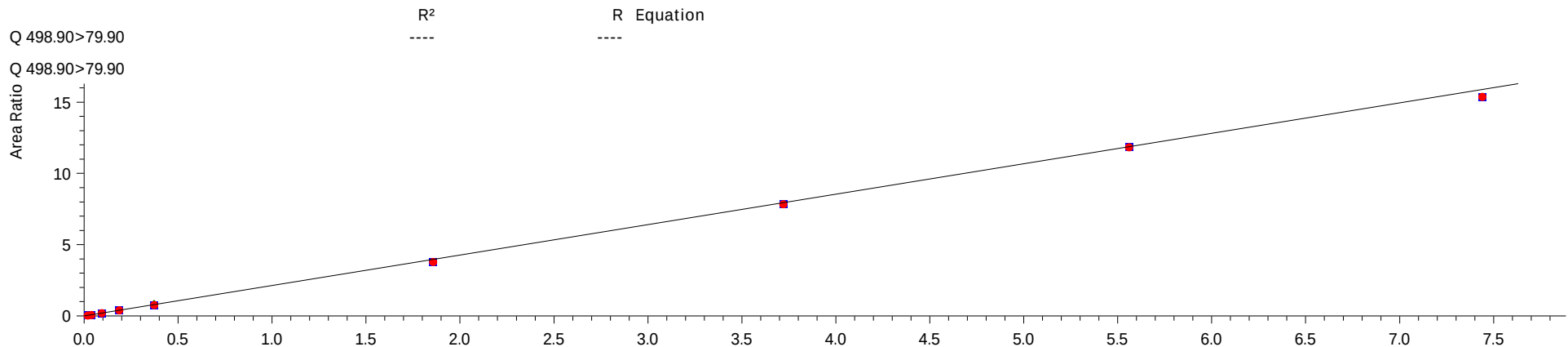
Compound: PFOS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240130_018	1633 ICAL 0.05PPB	☒	M	5923	135576	0.0464	2.5000	2.353792	0.0511	10.23	2.135399	4.645592	4.645591
240130_019	1633 ICAL 0.1PPB	☒	M	9521	122302	0.0930	2.5000	2.092635	0.0911	-2.00	2.135399	4.645592	4.645591
240130_020	1633 ICAL 0.25PPB	☒	M	25115	124996	0.2330	2.5000	2.155897	0.2352	0.96	2.135399	4.645592	4.645591
240130_021	1633 ICAL 0.5PPB	☒	M	49664	120579	0.4640	2.5000	2.219180	0.4822	3.92	2.135399	4.645592	4.645591
240130_022	1633 ICAL 1.0PPB	☒	M	89280	117278	0.9300	2.5000	2.046416	0.8912	-4.17	2.135399	4.645592	4.645591
240130_023	1633 ICAL 5.0PPB	☒	M	457620	120645	4.6400	2.5000	2.043698	4.4407	-4.29	2.135399	4.645592	4.645591
240130_024	1633 ICAL 10.0PPB	☒	M	937956	119449	9.3000	2.5000	2.110846	9.1931	-1.15	2.135399	4.645592	4.645591
240130_025	1633 ICAL 15.0PPB	☒	M	1475314	124571	13.9000	2.5000	2.130059	13.8652	-0.25	2.135399	4.645592	4.645591
240130_026	1633 ICAL 20.0PPB	☒	M	1990001	129460	18.6000	2.5000	2.066072	17.9961	-3.25	2.135399	4.645592	4.645591
240130_028	1633 ICV 1.0PPB		MI R1 R2	96766	112926	0.9300	2.5000	----	1.0032	7.87	2.135399	4.645592	4.645591
240130_029	1633 FTCA ICV 1.0PPB		ND(W/B)	----	123010	0.9300	2.5000	----	----	----	2.135399	4.645592	4.645591



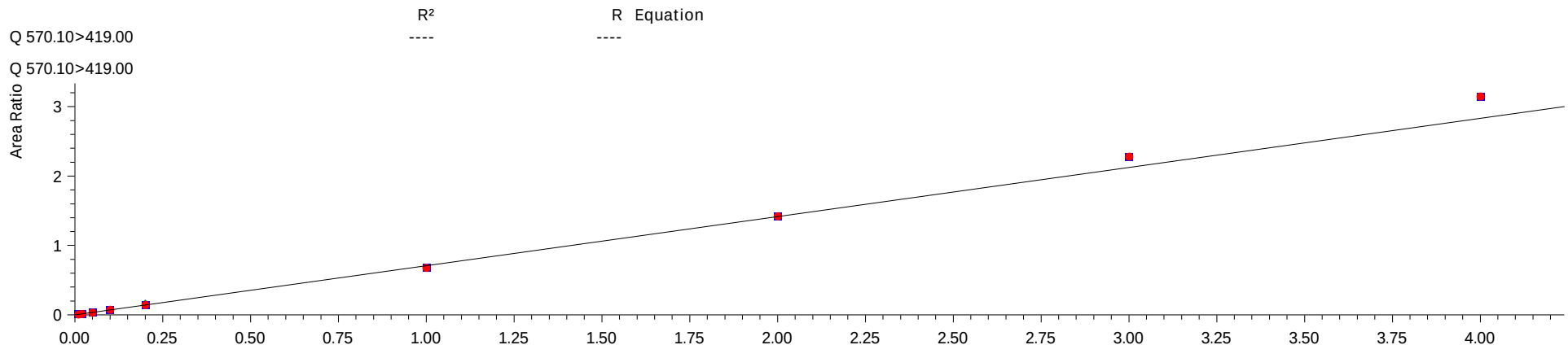
Compound: NMeFOSAA

Curve Fit: Mean RF | Weighting: 1/A | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc.Ratio
240130_018	1633 ICAL 0.05PPB	☒	M	4702	821081	0.0500	5.0000	0.572664	0.0404	-19.11	0.707985	8.700627	8.700628
240130_019	1633 ICAL 0.1PPB	☒	M	10440	759493	0.1000	5.0000	0.687312	0.0971	-2.92	0.707985	8.700627	8.700628
240130_020	1633 ICAL 0.25PPB	☒	M	28140	796908	0.2500	5.0000	0.706218	0.2494	-0.25	0.707985	8.700627	8.700628
240130_021	1633 ICAL 0.5PPB	☒	M	62764	837742	0.5000	5.0000	0.749204	0.5291	5.82	0.707985	8.700627	8.700628
240130_022	1633 ICAL 1.0PPB	☒	M	116253	809326	1.0000	5.0000	0.718212	1.0144	1.44	0.707985	8.700627	8.700628
240130_023	1633 ICAL 5.0PPB	☒	M	558068	820640	5.0000	5.0000	0.680040	4.8026	-3.95	0.707985	8.700627	8.700628
240130_024	1633 ICAL 10.0PPB	☒	M	1150659	809888	10.0000	5.0000	0.710382	10.0339	0.34	0.707985	8.700627	8.700628
240130_025	1633 ICAL 15.0PPB	☒	M	1807851	791787	15.0000	5.0000	0.761085	16.1250	7.50	0.707985	8.700627	8.700628
240130_026	1633 ICAL 20.0PPB	☒	M	2417048	768052	20.0000	5.0000	0.786747	22.2250	11.12	0.707985	8.700627	8.700628
240130_028	1633 ICV 1.0PPB		M	119943	728476	1.0000	5.0000	----	1.1628	16.28	0.707985	8.700627	8.700628
240130_029	1633 FTCA ICV 1.0PPB		ND(W/B)	----	745576	1.0000	5.0000	----	----	----	0.707985	8.700627	8.700628



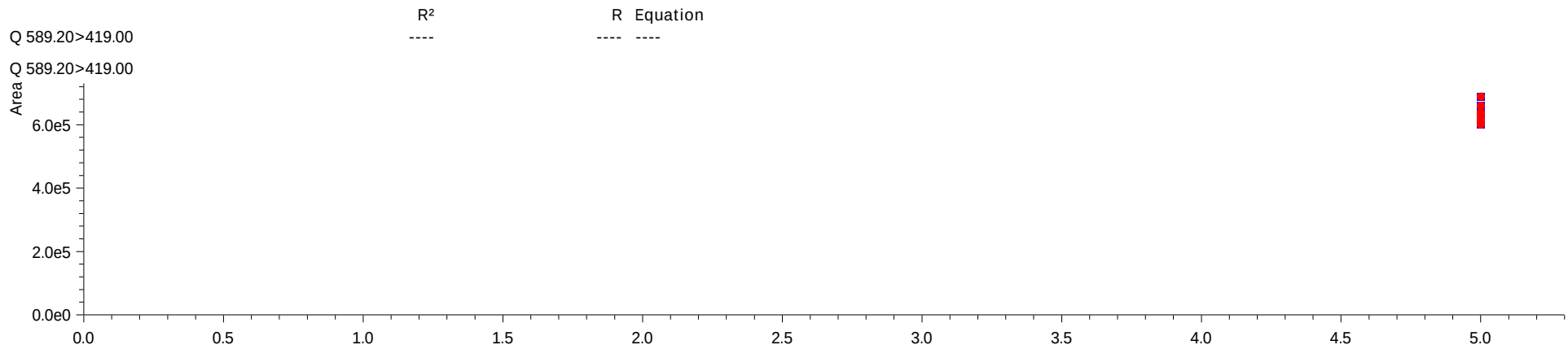
Compound: D5-NEtFOSAA_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 0

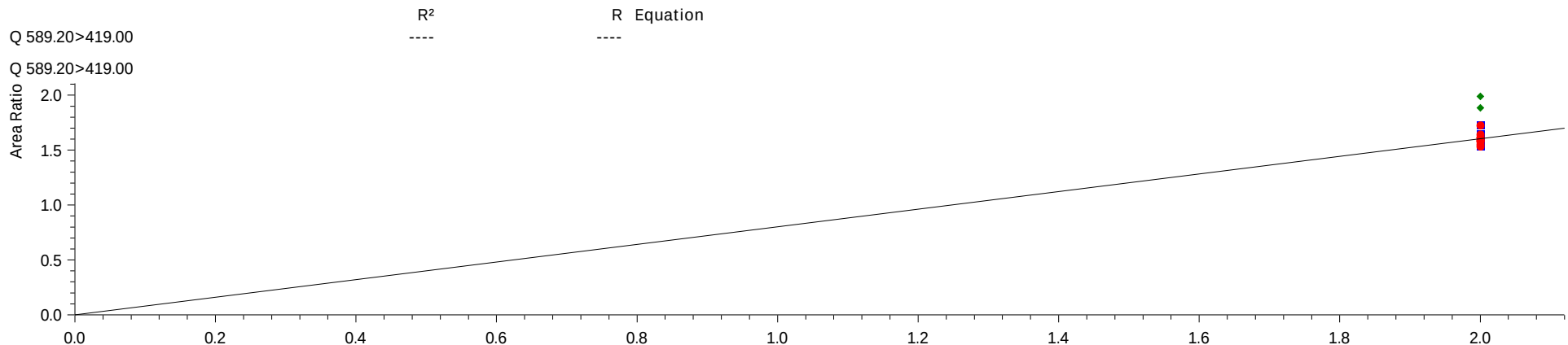


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240130_018	1633 ICAL 0.05PPB	☐	Auto	689126	689126	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240130_019	1633 ICAL 0.1PPB	☐	Auto	640602	640602	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240130_020	1633 ICAL 0.25PPB	☐	Auto	660800	660800	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240130_021	1633 ICAL 0.5PPB	☐	Auto	621418	621418	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240130_022	1633 ICAL 1.0PPB	☐	Auto	600459	600459	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240130_023	1633 ICAL 5.0PPB	☐	Auto	633420	633420	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240130_024	1633 ICAL 10.0PPB	☐	Auto	613220	613220	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240130_025	1633 ICAL 15.0PPB	☐	Auto	614565	614565	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240130_026	1633 ICAL 20.0PPB	☐	Auto	614615	614615	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240130_028	1633 ICV 1.0PPB		Auto	611890	611890	5.0000	5.0000	----	5.0000	0.00	----	----	----
240130_029	1633 FTCA ICV 1.0PPB		Auto	633609	633609	5.0000	5.0000	----	5.0000	0.00	----	----	----



Compound: D5-NEtFOSAA

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
 Quantitative Method: Internal Standard
 No. of Calibration Points: 9
 No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240130_018	1633 ICAL 0.05PPB	☒	Auto	689126	399487	5.0000	2.5000	0.862514	5.3760	7.52	0.802186	3.490365	3.490365
240130_019	1633 ICAL 0.1PPB	☒	Auto	640602	396921	5.0000	2.5000	0.806965	5.0298	0.60	0.802186	3.490365	3.490365
240130_020	1633 ICAL 0.25PPB	☒	Auto	660800	409128	5.0000	2.5000	0.807571	5.0336	0.67	0.802186	3.490365	3.490365
240130_021	1633 ICAL 0.5PPB	☒	Auto	621418	405193	5.0000	2.5000	0.766817	4.7796	-4.41	0.802186	3.490365	3.490365
240130_022	1633 ICAL 1.0PPB	☒	Auto	600459	386731	5.0000	2.5000	0.776326	4.8388	-3.22	0.802186	3.490365	3.490365
240130_023	1633 ICAL 5.0PPB	☒	Auto	633420	399184	5.0000	2.5000	0.793393	4.9452	-1.10	0.802186	3.490365	3.490365
240130_024	1633 ICAL 10.0PPB	☒	Auto	613220	388576	5.0000	2.5000	0.789062	4.9182	-1.64	0.802186	3.490365	3.490365
240130_025	1633 ICAL 15.0PPB	☒	Auto	614565	374106	5.0000	2.5000	0.821379	5.1196	2.39	0.802186	3.490365	3.490365
240130_026	1633 ICAL 20.0PPB	☒	Auto	614615	386238	5.0000	2.5000	0.795642	4.9592	-0.82	0.802186	3.490365	3.490365
240130_028	1633 ICV 1.0PPB		Auto	611890	307744	5.0000	2.5000	----	6.1965	23.93	0.802186	3.490365	3.490365
240130_029	1633 FTCA ICV 1.0PPB		Auto	633609	336033	5.0000	2.5000	----	5.8763	17.53	0.802186	3.490365	3.490365



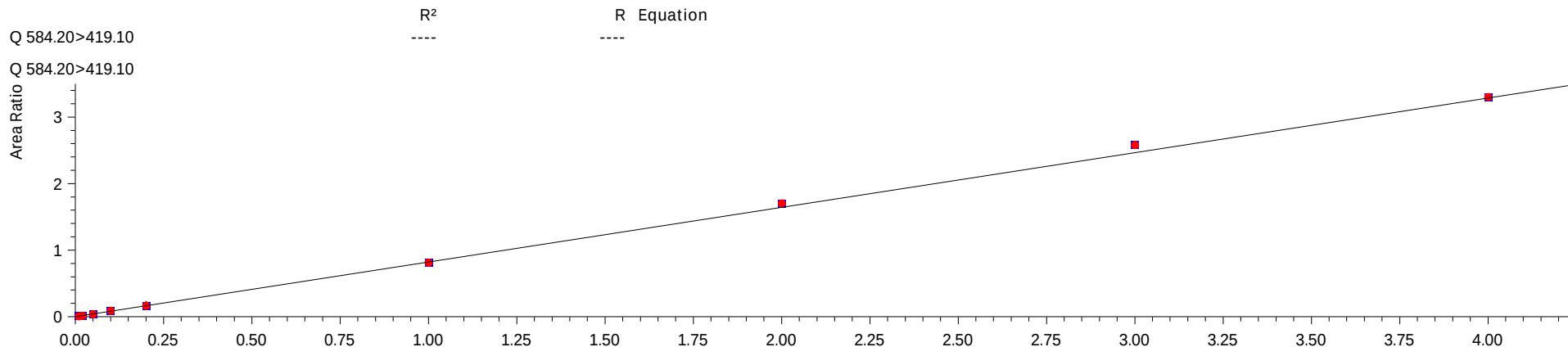
Compound: NEtFOSAA

Curve Fit: Mean RF | Weighting: 1/C | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2

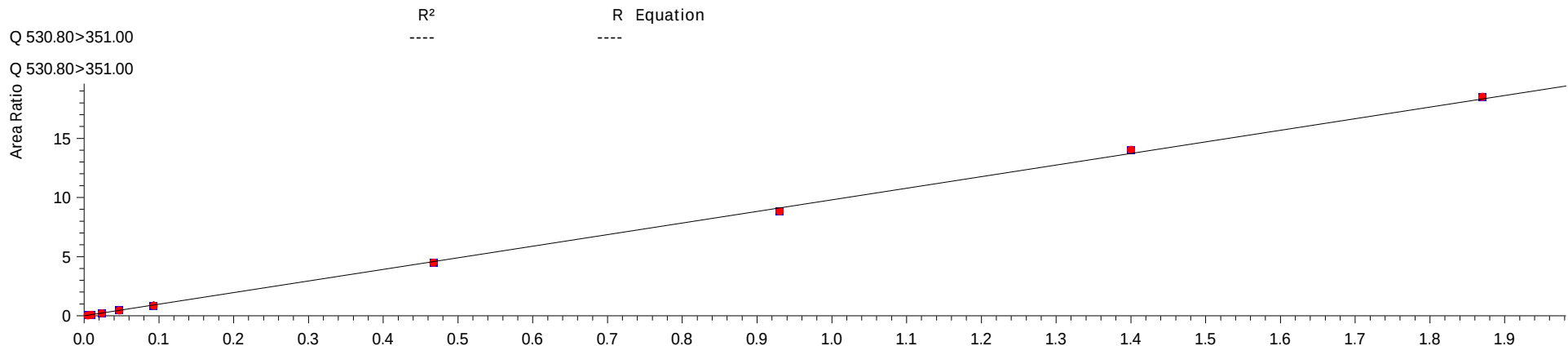


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240130_018	1633 ICAL 0.05PPB	☒	M	5386	689126	0.0500	5.0000	0.781516	0.0476	-4.82	0.821069	5.905313	5.905314
240130_019	1633 ICAL 0.1PPB	☒	M	9663	640602	0.1000	5.0000	0.754247	0.0919	-8.14	0.821069	5.905313	5.905314
240130_020	1633 ICAL 0.25PPB	☒	M	25255	660800	0.2500	5.0000	0.764382	0.2327	-6.90	0.821069	5.905313	5.905314
240130_021	1633 ICAL 0.5PPB	☒	M	56161	621418	0.5000	5.0000	0.903749	0.5503	10.07	0.821069	5.905313	5.905314
240130_022	1633 ICAL 1.0PPB	☒	M	99882	600459	1.0000	5.0000	0.831718	1.0130	1.30	0.821069	5.905313	5.905314
240130_023	1633 ICAL 5.0PPB	☒	M	516515	633420	5.0000	5.0000	0.815438	4.9657	-0.69	0.821069	5.905313	5.905314
240130_024	1633 ICAL 10.0PPB	☒	M	1045864	613220	10.0000	5.0000	0.852763	10.3860	3.86	0.821069	5.905313	5.905314
240130_025	1633 ICAL 15.0PPB	☒	M	1586663	614565	15.0000	5.0000	0.860588	15.7220	4.81	0.821069	5.905313	5.905314
240130_026	1633 ICAL 20.0PPB	☒	M	2028765	614615	20.0000	5.0000	0.825218	20.1011	0.51	0.821069	5.905313	5.905314
240130_028	1633 ICV 1.0PPB		M	111382	611890	1.0000	5.0000	----	1.1085	10.85	0.821069	5.905313	5.905314
240130_029	1633 FTCA ICV 1.0PPB		ND(W/B)	----	633609	1.0000	5.0000	----	----	----	0.821069	5.905313	5.905314



Compound: 9-Cl-PF3ONS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
 Quantitative Method: Internal Standard
 No. of Calibration Points: 9
 No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240130_018	1633 ICAL 0.05PPB	☒	Auto	30706	630310	0.0467	10.0000	10.431468	0.0497	6.38	9.805796	3.221120	3.221121
240130_019	1633 ICAL 0.1PPB	☒	Auto	56147	616061	0.0930	10.0000	9.799816	0.0929	-0.06	9.805796	3.221120	3.221121
240130_020	1633 ICAL 0.25PPB	☒	Auto	141143	622288	0.2340	10.0000	9.692830	0.2313	-1.15	9.805796	3.221120	3.221121
240130_021	1633 ICAL 0.5PPB	☒	Auto	295376	639891	0.4670	10.0000	9.884457	0.4707	0.80	9.805796	3.221120	3.221121
240130_022	1633 ICAL 1.0PPB	☒	Auto	552546	636421	0.9300	10.0000	9.335583	0.8854	-4.80	9.805796	3.221120	3.221121
240130_023	1633 ICAL 5.0PPB	☒	Auto	2828313	626931	4.6700	10.0000	9.660311	4.6007	-1.48	9.805796	3.221120	3.221121
240130_024	1633 ICAL 10.0PPB	☒	Auto	5584038	631094	9.3000	10.0000	9.514179	9.0234	-2.97	9.805796	3.221120	3.221121
240130_025	1633 ICAL 15.0PPB	☒	Auto	8791924	625983	14.0000	10.0000	10.032133	14.3231	2.31	9.805796	3.221120	3.221121
240130_026	1633 ICAL 20.0PPB	☒	Auto	11750748	634641	18.7000	10.0000	9.901386	18.8823	0.97	9.805796	3.221120	3.221121
240130_028	1633 ICV 1.0PPB		Auto	563253	610140	0.9300	10.0000	----	0.9414	1.23	9.805796	3.221120	3.221121
240130_029	1633 FTCA ICV 1.0PPB		ND(W/B)	----	631071	0.9300	10.0000	----	----	----	9.805796	3.221120	3.221121



Compound: PFUnDA

Curve Fit: Linear | Weighting: 1/C | Zero: Not Forced

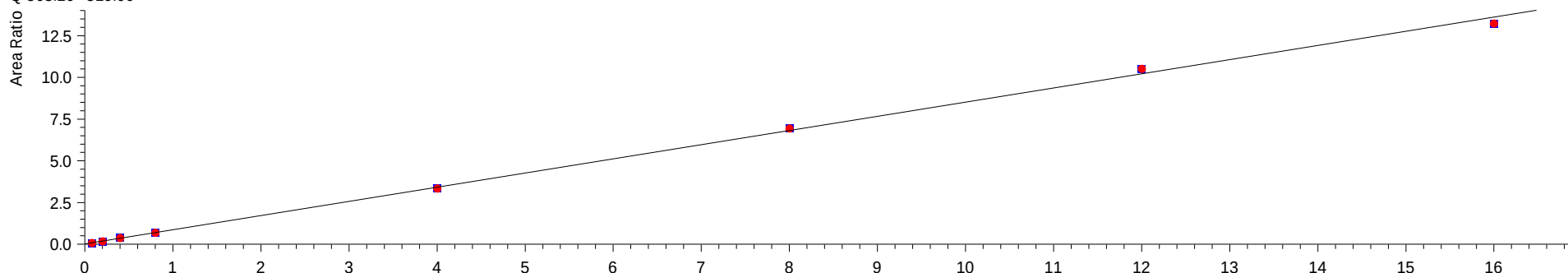
Quantitative Method: Internal Standard

No. of Calibration Points: 8

No. of Control Points: 2

Q 563.10>519.00 R^2 0.9991932 R Equation $y = 0.8498600x + 0.01510184$

Q 563.10>519.00

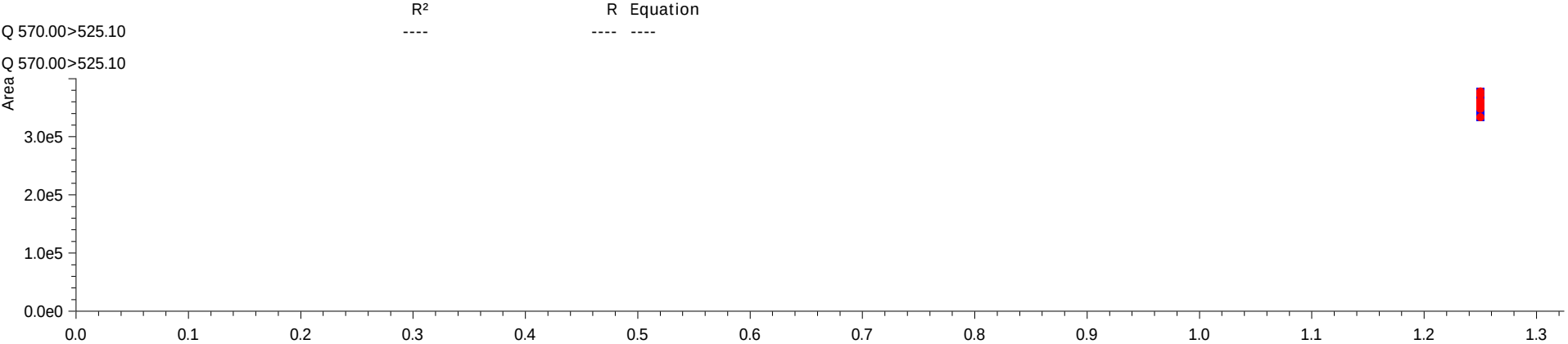


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240130_019	1633 ICAL 0.1PPB	☒	Auto	30069	372169	0.1000	1.2500	1.009933	0.0966	-3.38	0.890957	6.891647	4.533552
240130_020	1633 ICAL 0.25PPB	☒	Auto	63273	358490	0.2500	1.2500	0.882492	0.2374	-5.05	0.890957	6.891647	4.533552
240130_021	1633 ICAL 0.5PPB	☒	Auto	138165	361872	0.5000	1.2500	0.954513	0.5394	7.87	0.890957	6.891647	4.533552
240130_022	1633 ICAL 1.0PPB	☒	Auto	244961	350696	1.0000	1.2500	0.873123	1.0052	0.52	0.890957	6.891647	4.533552
240130_023	1633 ICAL 5.0PPB	☒	Auto	1214283	362656	5.0000	1.2500	0.837076	4.9026	-1.95	0.890957	6.891647	4.533552
240130_024	1633 ICAL 10.0PPB	☒	Auto	2457698	354515	10.0000	1.2500	0.866569	10.1744	1.74	0.890957	6.891647	4.533552
240130_025	1633 ICAL 15.0PPB	☒	Auto	3516215	334047	15.0000	1.2500	0.877175	15.4599	3.07	0.890957	6.891647	4.533552
240130_026	1633 ICAL 20.0PPB	☒	Auto	4610220	348508	20.0000	1.2500	0.826778	19.4346	-2.83	0.890957	6.891647	4.533552
240130_028	1633 ICV 1.0PPB		Auto	234990	336078	1.0000	1.2500	----	1.0062	0.62	0.890957	6.891647	4.533552
240130_029	1633 FTCA ICV 1.0PPB		ND(W/B)	----	339555	1.0000	1.2500	----	----	----	0.890957	6.891647	4.533552



Compound: 13C7-PFUnDA_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 0



												Conc. (ng/mL)	
Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240130_018	1633 ICAL 0.05PPB	☐	Auto	378044	378044	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240130_019	1633 ICAL 0.1PPB	☐	Auto	372169	372169	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240130_020	1633 ICAL 0.25PPB	☐	Auto	358490	358490	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240130_021	1633 ICAL 0.5PPB	☐	Auto	361872	361872	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240130_022	1633 ICAL 1.0PPB	☐	Auto	350696	350696	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240130_023	1633 ICAL 5.0PPB	☐	Auto	362656	362656	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240130_024	1633 ICAL 10.0PPB	☐	Auto	354515	354515	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240130_025	1633 ICAL 15.0PPB	☐	Auto	334047	334047	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240130_026	1633 ICAL 20.0PPB	☐	Auto	348508	348508	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240130_028	1633 ICV 1.0PPB		Auto	336078	336078	1.2500	1.2500	----	1.2500	0.00	----	----	----
240130_029	1633 FTCA ICV 1.0PPB		Auto	339555	339555	1.2500	1.2500	----	1.2500	0.00	----	----	----



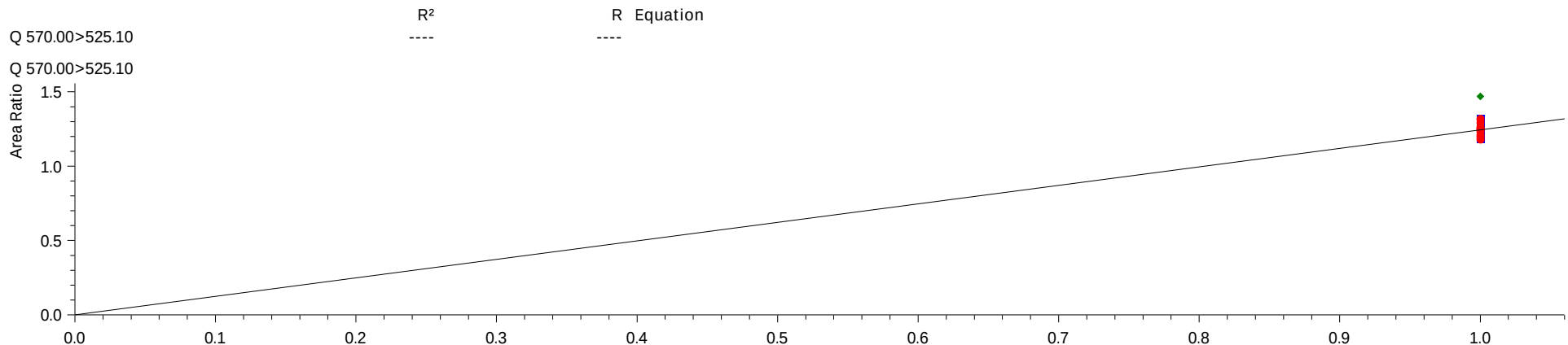
Compound: 13C7-PFUnDA

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240130_018	1633 ICAL 0.05PPB	☒	Auto	378044	292207	1.2500	1.2500	1.293754	1.2993	3.94	1.244689	3.629152	3.629152
240130_019	1633 ICAL 0.1PPB	☒	Auto	372169	296813	1.2500	1.2500	1.253885	1.2592	0.74	1.244689	3.629152	3.629152
240130_020	1633 ICAL 0.25PPB	☒	Auto	358490	299603	1.2500	1.2500	1.196548	1.2017	-3.87	1.244689	3.629152	3.629152
240130_021	1633 ICAL 0.5PPB	☒	Auto	361872	293151	1.2500	1.2500	1.234424	1.2397	-0.82	1.244689	3.629152	3.629152
240130_022	1633 ICAL 1.0PPB	☒	Auto	350696	277320	1.2500	1.2500	1.264593	1.2700	1.60	1.244689	3.629152	3.629152
240130_023	1633 ICAL 5.0PPB	☒	Auto	362656	299894	1.2500	1.2500	1.209283	1.2144	-2.84	1.244689	3.629152	3.629152
240130_024	1633 ICAL 10.0PPB	☒	Auto	354515	300386	1.2500	1.2500	1.180199	1.1852	-5.18	1.244689	3.629152	3.629152
240130_025	1633 ICAL 15.0PPB	☒	Auto	334047	267196	1.2500	1.2500	1.250196	1.2555	0.44	1.244689	3.629152	3.629152
240130_026	1633 ICAL 20.0PPB	☒	Auto	348508	264157	1.2500	1.2500	1.319321	1.3250	6.00	1.244689	3.629152	3.629152
240130_028	1633 ICV 1.0PPB		Auto	336078	228831	1.2500	1.2500	----	1.4749	18.00	1.244689	3.629152	3.629152
240130_029	1633 FTCA ICV 1.0PPB		Auto	339555	257284	1.2500	1.2500	----	1.3254	6.03	1.244689	3.629152	3.629152



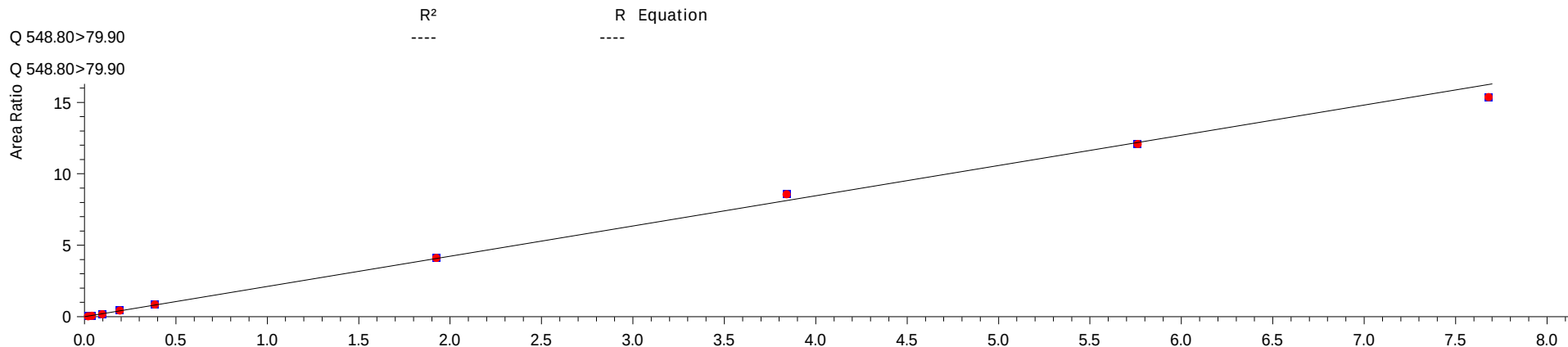
Compound: PFNS

Curve Fit: Mean RF | Weighting: 1/C | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240130_018	1633 ICAL 0.05PPB	☒	Auto	5169	135576	0.0481	2.5000	1.981570	0.0450	-6.35	2.115878	6.009559	6.009560
240130_019	1633 ICAL 0.1PPB	☒	Auto	9695	122302	0.0960	2.5000	2.064370	0.0937	-2.43	2.115878	6.009559	6.009560
240130_020	1633 ICAL 0.25PPB	☒	Auto	23506	124996	0.2400	2.5000	1.958924	0.2222	-7.42	2.115878	6.009559	6.009560
240130_021	1633 ICAL 0.5PPB	☒	Auto	53655	120579	0.4810	2.5000	2.312778	0.5258	9.31	2.115878	6.009559	6.009560
240130_022	1633 ICAL 1.0PPB	☒	Auto	101117	117278	0.9600	2.5000	2.245310	1.0187	6.12	2.115878	6.009559	6.009560
240130_023	1633 ICAL 5.0PPB	☒	Auto	497433	120645	4.8100	2.5000	2.142985	4.8716	1.28	2.115878	6.009559	6.009560
240130_024	1633 ICAL 10.0PPB	☒	Auto	1025594	119449	9.6000	2.5000	2.235946	10.1448	5.67	2.115878	6.009559	6.009560
240130_025	1633 ICAL 15.0PPB	☒	Auto	1506457	124571	14.4000	2.5000	2.099502	14.2886	-0.77	2.115878	6.009559	6.009560
240130_026	1633 ICAL 20.0PPB	☒	Auto	1990009	129460	19.2000	2.5000	2.001514	18.1622	-5.41	2.115878	6.009559	6.009560
240130_028	1633 ICV 1.0PPB		Auto	99039	112926	0.9600	2.5000	----	1.0362	7.94	2.115878	6.009559	6.009560
240130_029	1633 FTCA ICV 1.0PPB		ND(W/B)	----	123010	0.9600	2.5000	----	----	----	2.115878	6.009559	6.009560



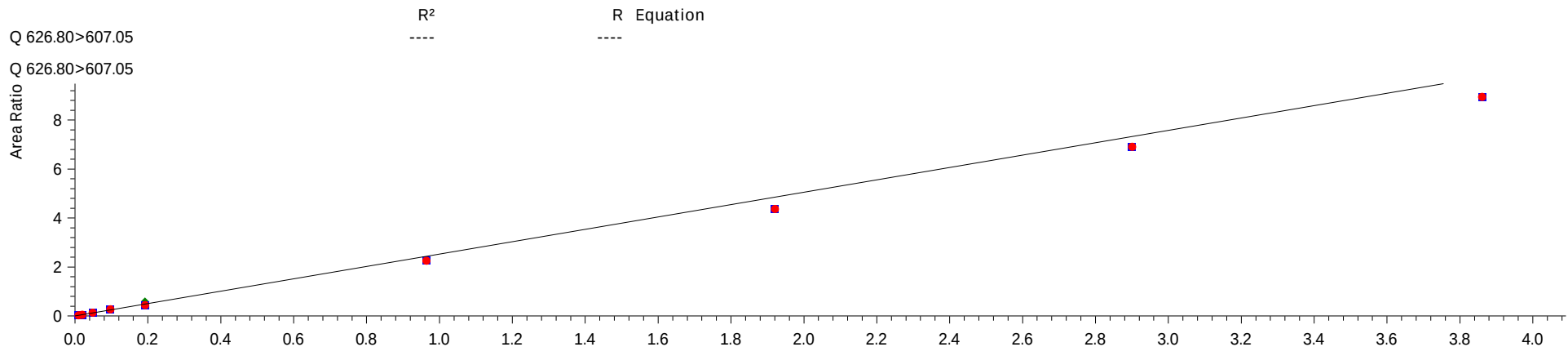
Compound: 10_2 FTS

Curve Fit: Mean RF | Weighting: 1/C | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2

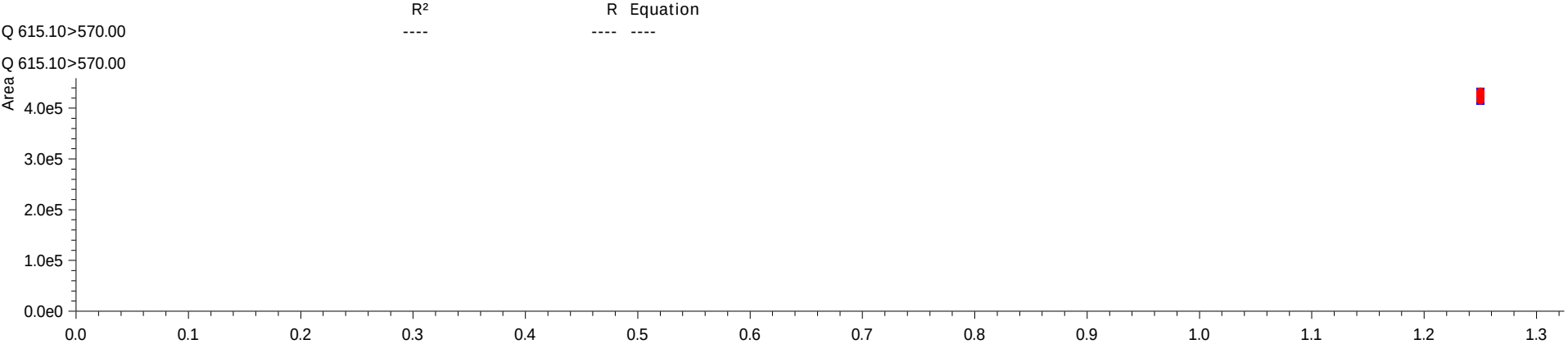


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240130_018	1633 ICAL 0.05PPB	☒	Auto	7426	271540	0.0482	5.0000	2.836839	0.0541	12.33	2.525489	10.339131	10.339130
240130_019	1633 ICAL 0.1PPB	☒	Auto	12412	257380	0.0960	5.0000	2.511698	0.0955	-0.55	2.525489	10.339131	10.339130
240130_020	1633 ICAL 0.25PPB	☒	Auto	33043	243742	0.2410	5.0000	2.812530	0.2684	11.37	2.525489	10.339131	10.339130
240130_021	1633 ICAL 0.5PPB	☒	Auto	71509	253127	0.4820	5.0000	2.930512	0.5593	16.04	2.525489	10.339131	10.339130
240130_022	1633 ICAL 1.0PPB	☒	Auto	123239	277566	0.9600	5.0000	2.312503	0.8790	-8.43	2.525489	10.339131	10.339130
240130_023	1633 ICAL 5.0PPB	☒	Auto	595603	263601	4.8200	5.0000	2.343871	4.4734	-7.19	2.525489	10.339131	10.339130
240130_024	1633 ICAL 10.0PPB	☒	Auto	1187943	271386	9.6000	5.0000	2.279857	8.6663	-9.73	2.525489	10.339131	10.339130
240130_025	1633 ICAL 15.0PPB	☒	Auto	1879129	271840	14.5000	5.0000	2.383662	13.6857	-5.62	2.525489	10.339131	10.339130
240130_026	1633 ICAL 20.0PPB	☒	Auto	2434795	272129	19.3000	5.0000	2.317933	17.7138	-8.22	2.525489	10.339131	10.339130
240130_028	1633 ICV 1.0PPB		Auto	137208	229575	0.9600	5.0000	----	1.1833	23.26	2.525489	10.339131	10.339130
240130_029	1633 FTCA ICV 1.0PPB		ND(W/B)	----	223671	0.9600	5.0000	----	----	----	2.525489	10.339131	10.339130



Compound: 13C2-PFDOA_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 0



													Conc. (ng/mL)
Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240130_018	1633 ICAL 0.05PPB		Auto	431785	431785	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240130_019	1633 ICAL 0.1PPB		Auto	423800	423800	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240130_020	1633 ICAL 0.25PPB		Auto	426378	426378	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240130_021	1633 ICAL 0.5PPB		Auto	433141	433141	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240130_022	1633 ICAL 1.0PPB		Auto	424303	424303	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240130_023	1633 ICAL 5.0PPB		Auto	430032	430032	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240130_024	1633 ICAL 10.0PPB		Auto	426372	426372	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240130_025	1633 ICAL 15.0PPB		Auto	415685	415685	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240130_026	1633 ICAL 20.0PPB		Auto	429899	429899	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240130_028	1633 ICV 1.0PPB		Auto	400786	400786	1.2500	1.2500	----	1.2500	0.00	----	----	----
240130_029	1633 FTCA ICV 1.0PPB		Auto	390326	390326	1.2500	1.2500	----	1.2500	0.00	----	----	----



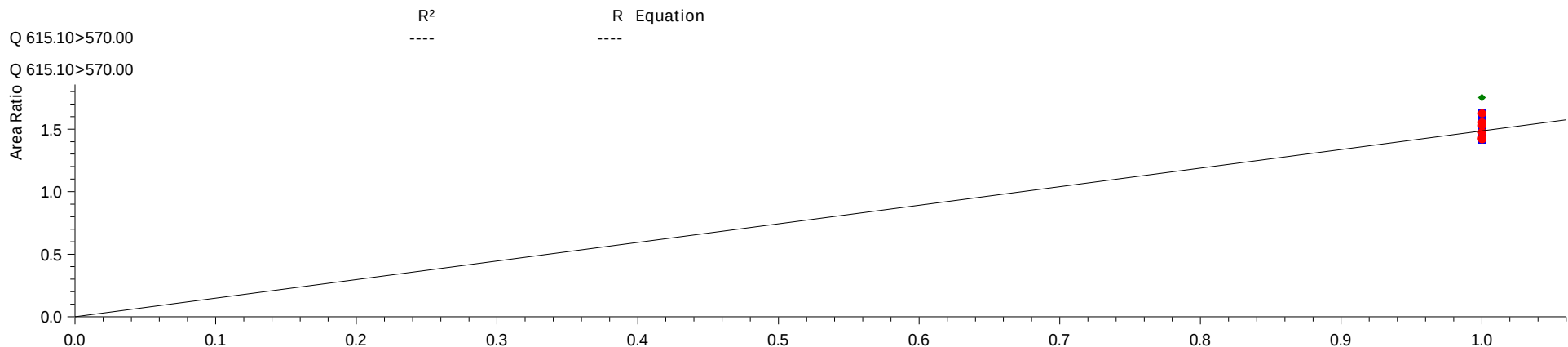
Compound: 13C2-PFDOA

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240130_018	1633 ICAL 0.05PPB	☒	Auto	431785	292207	1.2500	1.2500	1.477670	1.2431	-0.55	1.485859	4.842719	4.842719
240130_019	1633 ICAL 0.1PPB	☒	Auto	423800	296813	1.2500	1.2500	1.427839	1.2012	-3.90	1.485859	4.842719	4.842719
240130_020	1633 ICAL 0.25PPB	☒	Auto	426378	299603	1.2500	1.2500	1.423143	1.1972	-4.22	1.485859	4.842719	4.842719
240130_021	1633 ICAL 0.5PPB	☒	Auto	433141	293151	1.2500	1.2500	1.477537	1.2430	-0.56	1.485859	4.842719	4.842719
240130_022	1633 ICAL 1.0PPB	☒	Auto	424303	277320	1.2500	1.2500	1.530014	1.2871	2.97	1.485859	4.842719	4.842719
240130_023	1633 ICAL 5.0PPB	☒	Auto	430032	299894	1.2500	1.2500	1.433949	1.2063	-3.49	1.485859	4.842719	4.842719
240130_024	1633 ICAL 10.0PPB	☒	Auto	426372	300386	1.2500	1.2500	1.419413	1.1941	-4.47	1.485859	4.842719	4.842719
240130_025	1633 ICAL 15.0PPB	☒	Auto	415685	267196	1.2500	1.2500	1.555731	1.3088	4.70	1.485859	4.842719	4.842719
240130_026	1633 ICAL 20.0PPB	☒	Auto	429899	264157	1.2500	1.2500	1.627435	1.3691	9.53	1.485859	4.842719	4.842719
240130_028	1633 ICV 1.0PPB		Auto	400786	228831	1.2500	1.2500	----	1.4734	17.87	1.485859	4.842719	4.842719
240130_029	1633 FTCA ICV 1.0PPB		Auto	390326	257284	1.2500	1.2500	----	1.2763	2.10	1.485859	4.842719	4.842719



Compound: PFDOA

Curve Fit: Linear | Weighting: 1/C | Zero: Not Forced

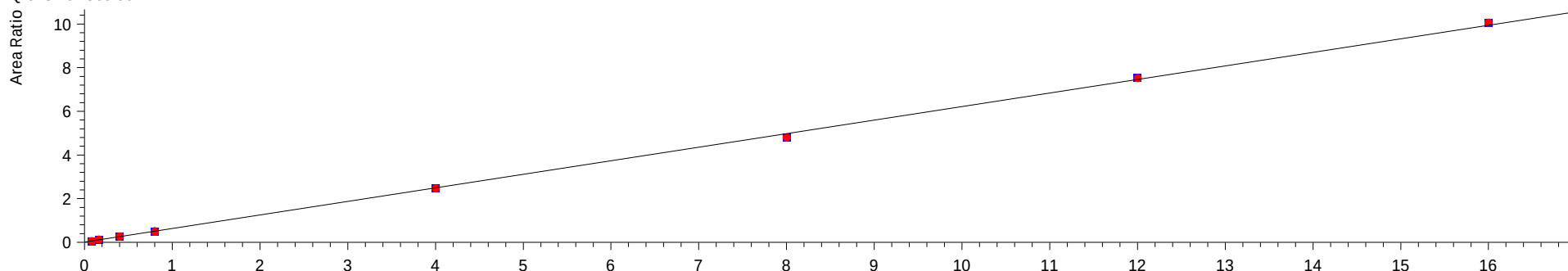
Quantitative Method: Internal Standard

No. of Calibration Points: 8

No. of Control Points: 2

Q 613.10>569.00 R^2 0.9994803 R Equation 0.9997401 $y = 0.6200505x + 0.01647297$

Q 613.10>569.00



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240130_019	1633 ICAL 0.1PPB	☒	Auto	25344	423800	0.1000	1.2500	0.747524	0.0873	-12.65	0.667453	11.563597	8.522931
240130_020	1633 ICAL 0.25PPB	☒	Auto	55697	426378	0.2000	1.2500	0.816425	0.2301	15.07	0.667453	11.563597	8.522931
240130_021	1633 ICAL 0.5PPB	☒	Auto	118840	433141	0.5000	1.2500	0.685918	0.5199	3.98	0.667453	11.563597	8.522931
240130_022	1633 ICAL 1.0PPB	☒	Auto	208478	424303	1.0000	1.2500	0.614178	0.9573	-4.27	0.667453	11.563597	8.522931
240130_023	1633 ICAL 5.0PPB	☒	Auto	1063934	430032	5.0000	1.2500	0.618520	4.9545	-0.91	0.667453	11.563597	8.522931
240130_024	1633 ICAL 10.0PPB	☒	Auto	2050315	426372	10.0000	1.2500	0.601094	9.6611	-3.39	0.667453	11.563597	8.522931
240130_025	1633 ICAL 15.0PPB	☒	Auto	3127318	415685	15.0000	1.2500	0.626941	15.1335	0.89	0.667453	11.563597	8.522931
240130_026	1633 ICAL 20.0PPB	☒	Auto	4326680	429899	20.0000	1.2500	0.629026	20.2563	1.28	0.667453	11.563597	8.522931
240130_028	1633 ICV 1.0PPB		Auto	215968	400786	1.0000	1.2500	----	1.0531	5.31	0.667453	11.563597	8.522931
240130_029	1633 FTCA ICV 1.0PPB		ND(W/B)	----	390326	1.0000	1.2500	----	----	----	0.667453	11.563597	8.522931



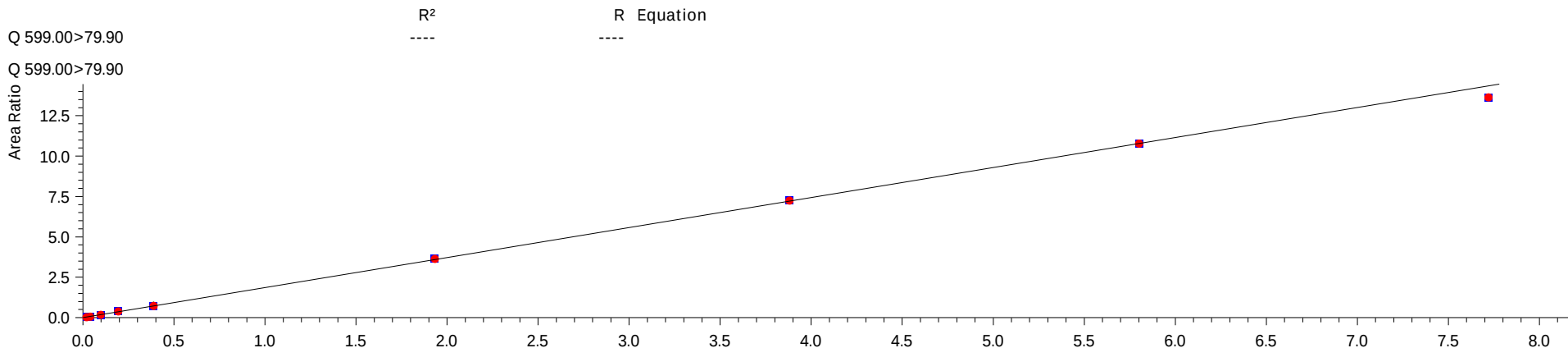
Compound: PFDS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)	Conc.Ratio
240130_018	1633 ICAL 0.05PPB	☒	Auto	4449	135576	0.0483	2.5000	1.698615	0.0442	-8.58	1.857995	4.997905	4.997906	
240130_019	1633 ICAL 0.1PPB	☒	Auto	8808	122302	0.0970	2.5000	1.856230	0.0969	-0.09	1.857995	4.997905	4.997906	
240130_020	1633 ICAL 0.25PPB	☒	Auto	22388	124996	0.2410	2.5000	1.858013	0.2410	0.00	1.857995	4.997905	4.997906	
240130_021	1633 ICAL 0.5PPB	☒	Auto	47532	120579	0.4830	2.5000	2.040375	0.5304	9.82	1.857995	4.997905	4.997906	
240130_022	1633 ICAL 1.0PPB	☒	Auto	85943	117278	0.9700	2.5000	1.888709	0.9860	1.65	1.857995	4.997905	4.997906	
240130_023	1633 ICAL 5.0PPB	☒	Auto	440049	120645	4.8300	2.5000	1.887920	4.9078	1.61	1.857995	4.997905	4.997906	
240130_024	1633 ICAL 10.0PPB	☒	Auto	865838	119449	9.7000	2.5000	1.868195	9.7533	0.55	1.857995	4.997905	4.997906	
240130_025	1633 ICAL 15.0PPB	☒	Auto	1342005	124571	14.5000	2.5000	1.857412	14.4955	-0.03	1.857995	4.997905	4.997906	
240130_026	1633 ICAL 20.0PPB	☒	Auto	1765477	129460	19.3000	2.5000	1.766484	18.3494	-4.93	1.857995	4.997905	4.997906	
240130_028	1633 ICV 1.0PPB		Auto	86414	112926	0.9700	2.5000	----	1.0296	6.15	1.857995	4.997905	4.997906	
240130_029	1633 FTCA ICV 1.0PPB		ND(W/B)	----	123010	0.9700	2.5000	----	----	----	1.857995	4.997905	4.997906	



Compound: PFTTrDA

Curve Fit: Linear | Weighting: 1/C | Zero: Not Forced

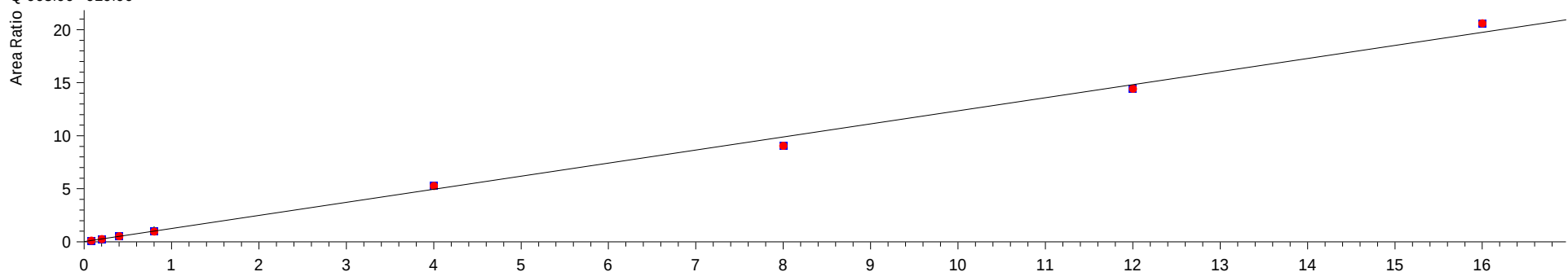
Quantitative Method: Internal Standard

No. of Calibration Points: 8

No. of Control Points: 2

Q 663.00>619.00 R^2 0.9971283 R Equation 0.9985631 $y = 1.232239x + 0.02121540$

Q 663.00>619.00

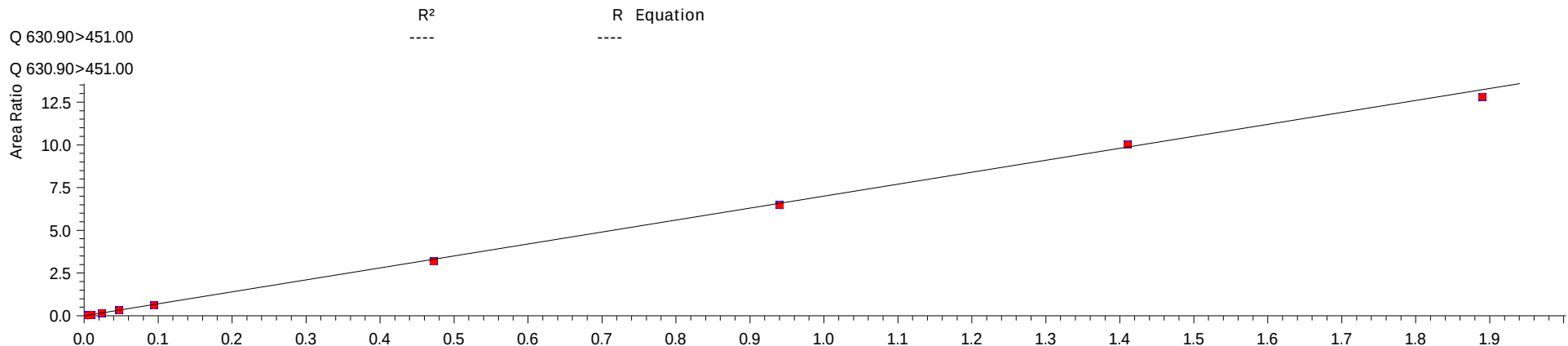


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc.Ratio
240130_019	1633 ICAL 0.1PPB	☒	Auto	35252	292721	0.1000	1.2500	1.505377	0.1006	0.64	1.289973	8.453699	5.209519
240130_020	1633 ICAL 0.25PPB	☒	Auto	80746	311002	0.2500	1.2500	1.298161	0.2419	-3.26	1.289973	8.453699	5.209519
240130_021	1633 ICAL 0.5PPB	☒	Auto	164939	309876	0.5000	1.2500	1.330687	0.5184	3.69	1.289973	8.453699	5.209519
240130_022	1633 ICAL 1.0PPB	☒	Auto	303017	304626	1.0000	1.2500	1.243396	0.9875	-1.25	1.289973	8.453699	5.209519
240130_023	1633 ICAL 5.0PPB	☒	Auto	1513030	286905	5.0000	1.2500	1.318407	5.3281	6.56	1.289973	8.453699	5.209519
240130_024	1633 ICAL 10.0PPB	☒	Auto	2861649	315612	10.0000	1.2500	1.133375	9.1762	-8.24	1.289973	8.453699	5.209519
240130_025	1633 ICAL 15.0PPB	☒	Auto	4362299	302254	15.0000	1.2500	1.202713	14.6191	-2.54	1.289973	8.453699	5.209519
240130_026	1633 ICAL 20.0PPB	☒	Auto	5798907	281463	20.0000	1.2500	1.287672	20.8782	4.39	1.289973	8.453699	5.209519
240130_028	1633 ICV 1.0PPB		Auto	299578	270487	1.0000	1.2500	----	1.1020	10.20	1.289973	8.453699	5.209519
240130_029	1633 FTCA ICV 1.0PPB		ND(W/B)	----	285248	1.0000	1.2500	----	----	----	1.289973	8.453699	5.209519



Compound: 11-CI-PF3OUdS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
 Quantitative Method: Internal Standard
 No. of Calibration Points: 9
 No. of Control Points: 2

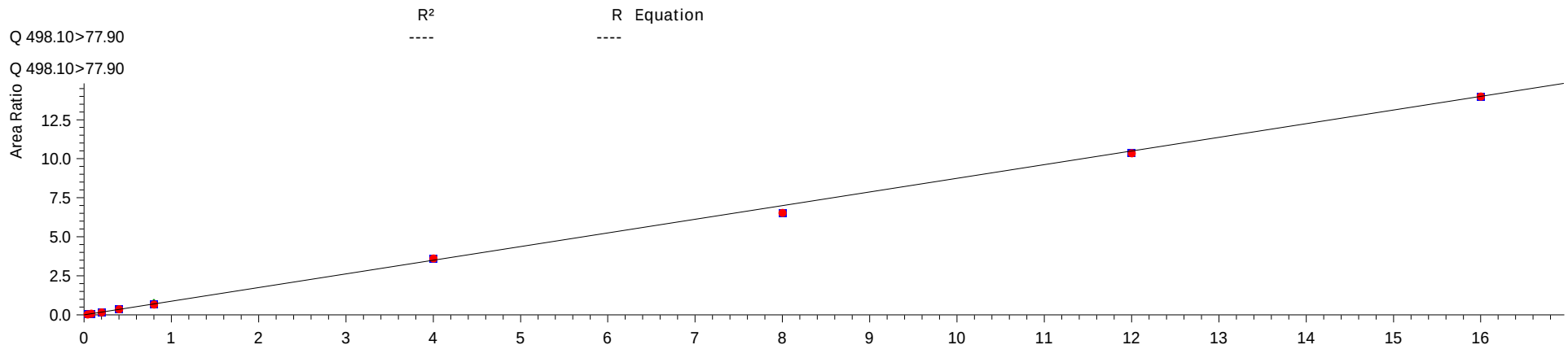


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc.Ratio
240130_018	1633 ICAL 0.05PPB	☒	Auto	23506	630310	0.0472	10.0000	7.901168	0.0533	12.88	6.999591	5.263762	5.263764
240130_019	1633 ICAL 0.1PPB	☒	Auto	39893	616061	0.0940	10.0000	6.888834	0.0925	-1.58	6.999591	5.263762	5.263764
240130_020	1633 ICAL 0.25PPB	☒	Auto	101646	622288	0.2360	10.0000	6.921265	0.2334	-1.12	6.999591	5.263762	5.263764
240130_021	1633 ICAL 0.5PPB	☒	Auto	213963	639891	0.4720	10.0000	7.084196	0.4777	1.21	6.999591	5.263762	5.263764
240130_022	1633 ICAL 1.0PPB	☒	Auto	398078	636421	0.9400	10.0000	6.654205	0.8936	-4.93	6.999591	5.263762	5.263764
240130_023	1633 ICAL 5.0PPB	☒	Auto	2000729	626931	4.7200	10.0000	6.761247	4.5593	-3.41	6.999591	5.263762	5.263764
240130_024	1633 ICAL 10.0PPB	☒	Auto	4090303	631094	9.4000	10.0000	6.894989	9.2595	-1.49	6.999591	5.263762	5.263764
240130_025	1633 ICAL 15.0PPB	☒	Auto	6275977	625983	14.1000	10.0000	7.110491	14.3234	1.58	6.999591	5.263762	5.263764
240130_026	1633 ICAL 20.0PPB	☒	Auto	8132320	634641	18.9000	10.0000	6.779923	18.3069	-3.14	6.999591	5.263762	5.263764
240130_028	1633 ICV 1.0PPB		Auto	395479	610140	0.9400	10.0000	----	0.9260	-1.49	6.999591	5.263762	5.263764
240130_029	1633 FTCA ICV 1.0PPB		ND(W/B)	----	631071	0.9400	10.0000	----	----	----	6.999591	5.263762	5.263764



Compound: PFOSAm

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
 Quantitative Method: Internal Standard
 No. of Calibration Points: 9
 No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240130_018	1633 ICAL 0.05PPB	☒	M	11468	324673	0.1000	2.5000	0.883037	0.1010	0.95	0.874724	6.235434	6.235433
240130_019	1633 ICAL 0.1PPB	☒	M	23027	298785	0.2000	2.5000	0.963358	0.2203	10.13	0.874724	6.235434	6.235433
240130_020	1633 ICAL 0.25PPB	☒	M	51453	322102	0.5000	2.5000	0.798709	0.4565	-8.69	0.874724	6.235434	6.235433
240130_021	1633 ICAL 0.5PPB	☒	M	117577	314231	1.0000	2.5000	0.935438	1.0694	6.94	0.874724	6.235434	6.235433
240130_022	1633 ICAL 1.0PPB	☒	M	211550	318648	2.0000	2.5000	0.829873	1.8975	-5.13	0.874724	6.235434	6.235433
240130_023	1633 ICAL 5.0PPB	☒	M	1048311	289059	10.0000	2.5000	0.906659	10.3651	3.65	0.874724	6.235434	6.235433
240130_024	1633 ICAL 10.0PPB	☒	M	2097023	320571	20.0000	2.5000	0.817690	18.6960	-6.52	0.874724	6.235434	6.235433
240130_025	1633 ICAL 15.0PPB	☒	M	3230526	311755	30.0000	2.5000	0.863532	29.6161	-1.28	0.874724	6.235434	6.235433
240130_026	1633 ICAL 20.0PPB	☒	M	4390505	313888	40.0000	2.5000	0.874217	39.9768	-0.06	0.874724	6.235434	6.235433
240130_028	1633 ICV 1.0PPB		M	227521	291002	2.0000	2.5000	----	2.2346	11.73	0.874724	6.235434	6.235433
240130_029	1633 FTCA ICV 1.0PPB		ND(W/B)	----	285177	2.0000	2.5000	----	----	----	0.874724	6.235434	6.235433



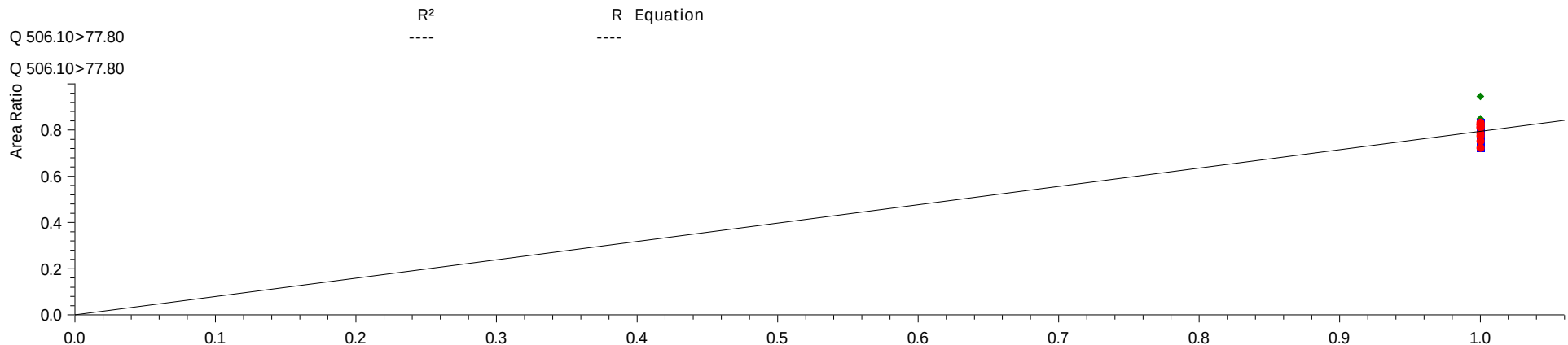
Compound: 13C8-PFOSAm

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2

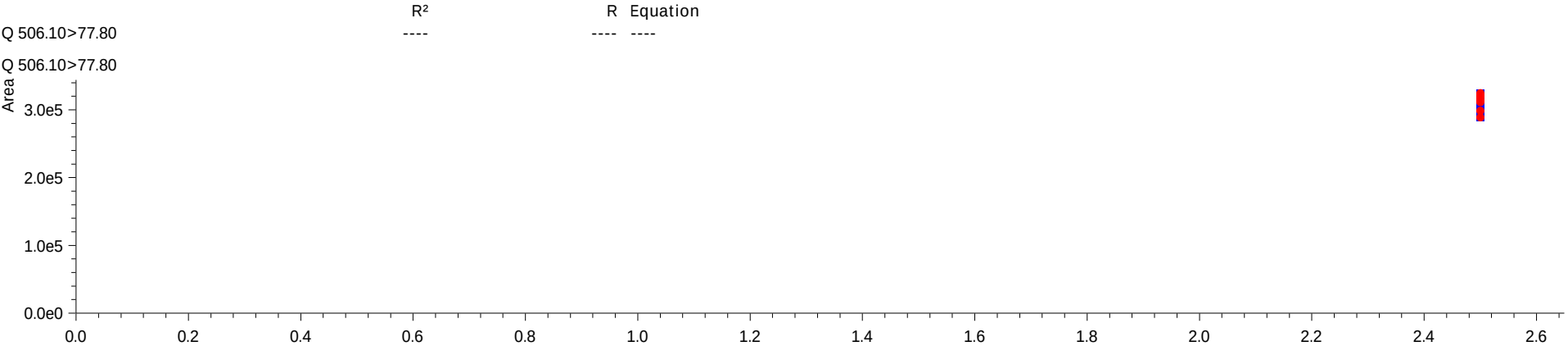


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240130_018	1633 ICAL 0.05PPB	☒	Auto	324673	399487	2.5000	2.5000	0.812724	2.5585	2.34	0.794151	4.685079	4.685079
240130_019	1633 ICAL 0.1PPB	☒	Auto	298785	396921	2.5000	2.5000	0.752757	2.3697	-5.21	0.794151	4.685079	4.685079
240130_020	1633 ICAL 0.25PPB	☒	Auto	322102	409128	2.5000	2.5000	0.787289	2.4784	-0.86	0.794151	4.685079	4.685079
240130_021	1633 ICAL 0.5PPB	☒	Auto	314231	405193	2.5000	2.5000	0.775509	2.4413	-2.35	0.794151	4.685079	4.685079
240130_022	1633 ICAL 1.0PPB	☒	Auto	318648	386731	2.5000	2.5000	0.823952	2.5938	3.75	0.794151	4.685079	4.685079
240130_023	1633 ICAL 5.0PPB	☒	Auto	289059	399184	2.5000	2.5000	0.724124	2.2796	-8.82	0.794151	4.685079	4.685079
240130_024	1633 ICAL 10.0PPB	☒	Auto	320571	388576	2.5000	2.5000	0.824990	2.5971	3.88	0.794151	4.685079	4.685079
240130_025	1633 ICAL 15.0PPB	☒	Auto	311755	374106	2.5000	2.5000	0.833334	2.6233	4.93	0.794151	4.685079	4.685079
240130_026	1633 ICAL 20.0PPB	☒	Auto	313888	386238	2.5000	2.5000	0.812681	2.5583	2.33	0.794151	4.685079	4.685079
240130_028	1633 ICV 1.0PPB		Auto	291002	307744	2.5000	2.5000	----	2.9768	19.07	0.794151	4.685079	4.685079
240130_029	1633 FTCA ICV 1.0PPB		Auto	285177	336033	2.5000	2.5000	----	2.6716	6.86	0.794151	4.685079	4.685079



Compound: 13C8-PFOSAm_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 0



												Conc. (ng/mL)	
Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240130_018	1633 ICAL 0.05PPB	☐	Auto	324673	324673	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_019	1633 ICAL 0.1PPB	☐	Auto	298785	298785	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_020	1633 ICAL 0.25PPB	☐	Auto	322102	322102	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_021	1633 ICAL 0.5PPB	☐	Auto	314231	314231	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_022	1633 ICAL 1.0PPB	☐	Auto	318648	318648	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_023	1633 ICAL 5.0PPB	☐	Auto	289059	289059	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_024	1633 ICAL 10.0PPB	☐	Auto	320571	320571	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_025	1633 ICAL 15.0PPB	☐	Auto	311755	311755	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_026	1633 ICAL 20.0PPB	☐	Auto	313888	313888	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_028	1633 ICV 1.0PPB		Auto	291002	291002	2.5000	2.5000	----	2.5000	0.00	----	----	----
240130_029	1633 FTCA ICV 1.0PPB		Auto	285177	285177	2.5000	2.5000	----	2.5000	0.00	----	----	----



Compound: PFTDA

Curve Fit: Linear | Weighting: 1/C | Zero: Not Forced

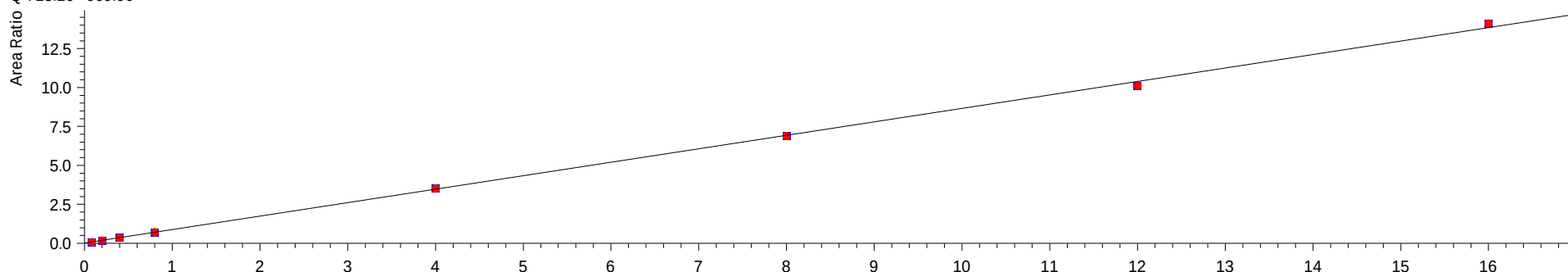
Quantitative Method: Internal Standard

No. of Calibration Points: 8

No. of Control Points: 2

Q 713.10>669.00 R^2 0.9995875 R Equation 0.9997937 $y = 0.8640845x + 0.01574421$

Q 713.10>669.00



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc.Ratio
240130_019	1633 ICAL 0.1PPB	☒	Auto	25508	292721	0.1000	1.2500	1.089275	0.1033	3.29	0.906930	8.614608	2.160482
240130_020	1633 ICAL 0.25PPB	☒	Auto	58063	311002	0.2500	1.2500	0.933480	0.2473	-1.08	0.906930	8.614608	2.160482
240130_021	1633 ICAL 0.5PPB	☒	Auto	110388	309876	0.5000	1.2500	0.890585	0.4926	-1.49	0.906930	8.614608	2.160482
240130_022	1633 ICAL 1.0PPB	☒	Auto	213487	304626	1.0000	1.2500	0.876021	0.9910	-0.90	0.906930	8.614608	2.160482
240130_023	1633 ICAL 5.0PPB	☒	Auto	1009560	286905	5.0000	1.2500	0.879698	5.0676	1.35	0.906930	8.614608	2.160482
240130_024	1633 ICAL 10.0PPB	☒	Auto	2175720	315612	10.0000	1.2500	0.861708	9.9497	-0.50	0.906930	8.614608	2.160482
240130_025	1633 ICAL 15.0PPB	☒	Auto	3055755	302254	15.0000	1.2500	0.842491	14.6024	-2.65	0.906930	8.614608	2.160482
240130_026	1633 ICAL 20.0PPB	☒	Auto	3972831	281463	20.0000	1.2500	0.882184	20.3962	1.98	0.906930	8.614608	2.160482
240130_028	1633 ICV 1.0PPB		Auto	204528	270487	1.0000	1.2500	----	1.0711	7.11	0.906930	8.614608	2.160482
240130_029	1633 FTCA ICV 1.0PPB		ND(W/B)	----	285248	1.0000	1.2500	----	----	----	0.906930	8.614608	2.160482



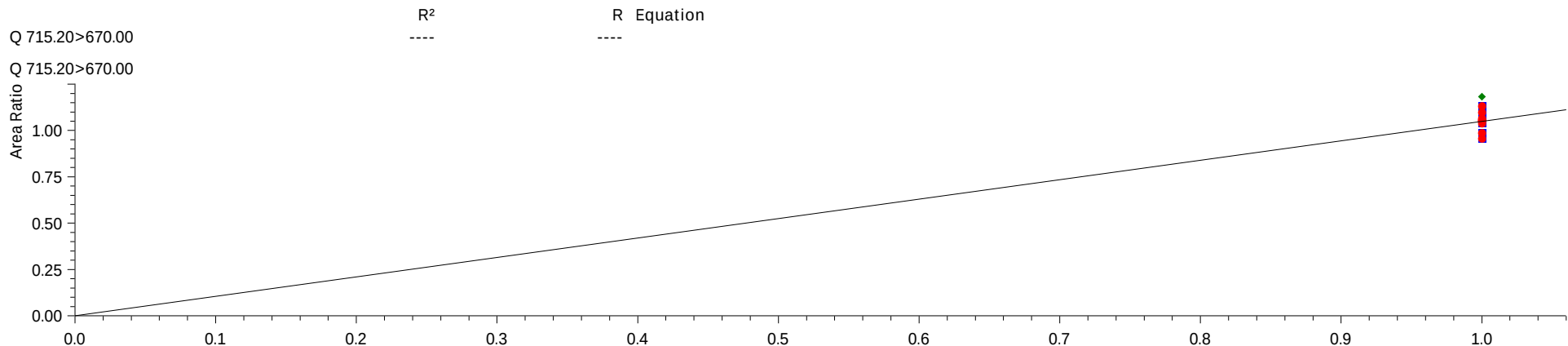
Compound: 13C2-PFTDA

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc.Ratio
240130_018	1633 ICAL 0.05PPB	☒	Auto	308075	292207	1.2500	1.2500	1.054304	1.2567	0.54	1.048687	5.018256	5.018256
240130_019	1633 ICAL 0.1PPB	☒	Auto	292721	296813	1.2500	1.2500	0.986214	1.1755	-5.96	1.048687	5.018256	5.018256
240130_020	1633 ICAL 0.25PPB	☒	Auto	311002	299603	1.2500	1.2500	1.038046	1.2373	-1.01	1.048687	5.018256	5.018256
240130_021	1633 ICAL 0.5PPB	☒	Auto	309876	293151	1.2500	1.2500	1.057054	1.2600	0.80	1.048687	5.018256	5.018256
240130_022	1633 ICAL 1.0PPB	☒	Auto	304626	277320	1.2500	1.2500	1.098465	1.3093	4.75	1.048687	5.018256	5.018256
240130_023	1633 ICAL 5.0PPB	☒	Auto	286905	299894	1.2500	1.2500	0.956690	1.1403	-8.77	1.048687	5.018256	5.018256
240130_024	1633 ICAL 10.0PPB	☒	Auto	315612	300386	1.2500	1.2500	1.050686	1.2524	0.19	1.048687	5.018256	5.018256
240130_025	1633 ICAL 15.0PPB	☒	Auto	302254	267196	1.2500	1.2500	1.131208	1.3484	7.87	1.048687	5.018256	5.018256
240130_026	1633 ICAL 20.0PPB	☒	Auto	281463	264157	1.2500	1.2500	1.065513	1.2701	1.60	1.048687	5.018256	5.018256
240130_028	1633 ICV 1.0PPB		Auto	270487	228831	1.2500	1.2500	----	1.4089	12.72	1.048687	5.018256	5.018256
240130_029	1633 FTCA ICV 1.0PPB		Auto	285248	257284	1.2500	1.2500	----	1.3215	5.72	1.048687	5.018256	5.018256



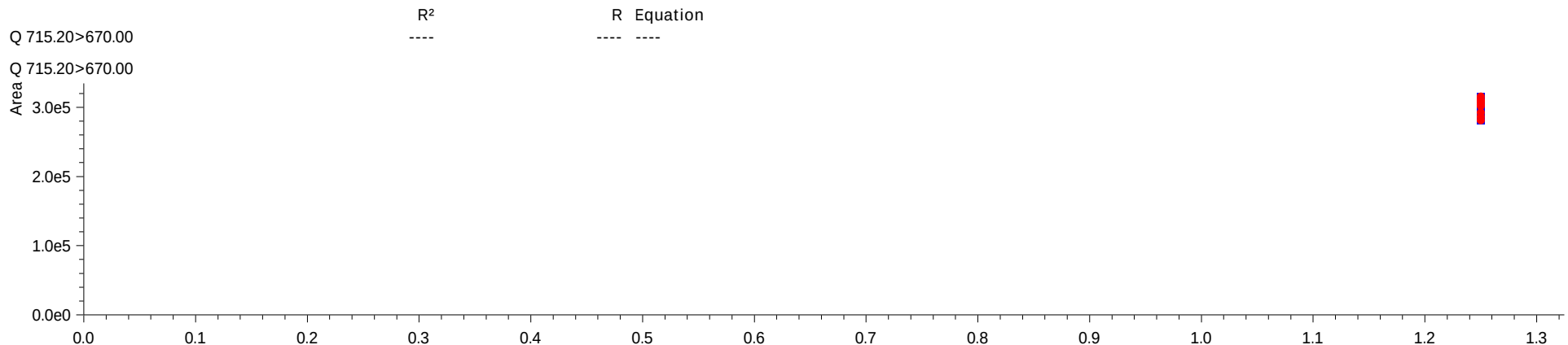
Compound: 13C2-PFTDA_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 0



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240130_018	1633 ICAL 0.05PPB	☐	Auto	308075	308075	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240130_019	1633 ICAL 0.1PPB	☐	Auto	292721	292721	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240130_020	1633 ICAL 0.25PPB	☐	Auto	311002	311002	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240130_021	1633 ICAL 0.5PPB	☐	Auto	309876	309876	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240130_022	1633 ICAL 1.0PPB	☐	Auto	304626	304626	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240130_023	1633 ICAL 5.0PPB	☐	Auto	286905	286905	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240130_024	1633 ICAL 10.0PPB	☐	Auto	315612	315612	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240130_025	1633 ICAL 15.0PPB	☐	Auto	302254	302254	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240130_026	1633 ICAL 20.0PPB	☐	Auto	281463	281463	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240130_028	1633 ICV 1.0PPB		Auto	270487	270487	1.2500	1.2500	----	1.2500	0.00	----	----	----
240130_029	1633 FTCA ICV 1.0PPB		Auto	285248	285248	1.2500	1.2500	----	1.2500	0.00	----	----	----



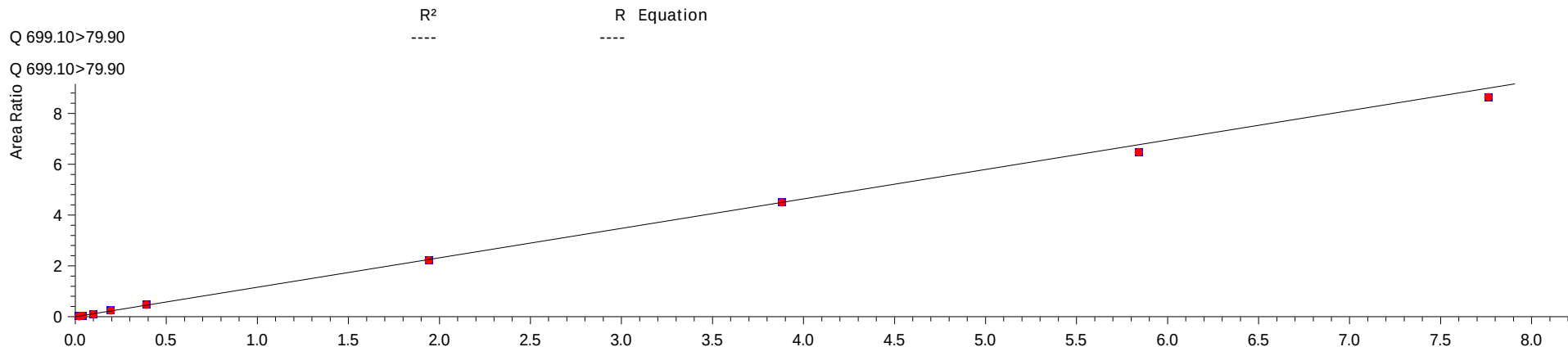
Compound: PFDoS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240130_018	1633 ICAL 0.05PPB	☒	Auto	3060	135576	0.0485	2.5000	1.163604	0.0487	0.42	1.158737	4.149342	4.149344
240130_019	1633 ICAL 0.1PPB	☒	Auto	5511	122302	0.0970	2.5000	1.161286	0.0972	0.22	1.158737	4.149342	4.149344
240130_020	1633 ICAL 0.25PPB	☒	Auto	13497	124996	0.2430	2.5000	1.110862	0.2330	-4.13	1.158737	4.149342	4.149344
240130_021	1633 ICAL 0.5PPB	☒	Auto	29307	120579	0.4850	2.5000	1.252825	0.5244	8.12	1.158737	4.149342	4.149344
240130_022	1633 ICAL 1.0PPB	☒	Auto	55077	117278	0.9700	2.5000	1.210380	1.0132	4.46	1.158737	4.149342	4.149344
240130_023	1633 ICAL 5.0PPB	☒	Auto	268074	120645	4.8500	2.5000	1.145363	4.7940	-1.15	1.158737	4.149342	4.149344
240130_024	1633 ICAL 10.0PPB	☒	Auto	538190	119449	9.7000	2.5000	1.161237	9.7209	0.22	1.158737	4.149342	4.149344
240130_025	1633 ICAL 15.0PPB	☒	Auto	806944	124571	14.6000	2.5000	1.109207	13.9759	-4.27	1.158737	4.149342	4.149344
240130_026	1633 ICAL 20.0PPB	☒	Auto	1119000	129460	19.4000	2.5000	1.113867	18.6488	-3.87	1.158737	4.149342	4.149344
240130_028	1633 ICV 1.0PPB		Auto	54785	112926	0.9700	2.5000	----	1.0467	7.91	1.158737	4.149342	4.149344
240130_029	1633 FTCA ICV 1.0PPB		ND(W/B)	----	123010	0.9700	2.5000	----	----	----	1.158737	4.149342	4.149344



Compound: D7-MeFOSE_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

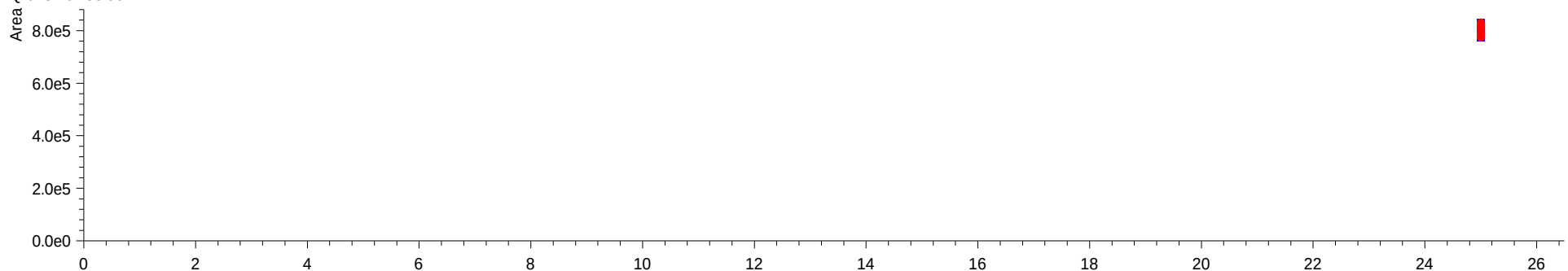
Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 0

Q 623.20>58.90 R² ---- R Equation ----

Q 623.20>58.90



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc. (ng/mL)	RF RSE (curve)
240130_018	1633 ICAL 0.05PPB	☐	Auto	831185	831185	25.0000	25.0000	1.000000	25.0000	0.00	----	----	----	----
240130_019	1633 ICAL 0.1PPB	☐	Auto	782630	782630	25.0000	25.0000	1.000000	25.0000	0.00	----	----	----	----
240130_020	1633 ICAL 0.25PPB	☐	Auto	792340	792340	25.0000	25.0000	1.000000	25.0000	0.00	----	----	----	----
240130_021	1633 ICAL 0.5PPB	☐	Auto	807881	807881	25.0000	25.0000	1.000000	25.0000	0.00	----	----	----	----
240130_022	1633 ICAL 1.0PPB	☐	Auto	775055	775055	25.0000	25.0000	1.000000	25.0000	0.00	----	----	----	----
240130_023	1633 ICAL 5.0PPB	☐	Auto	823811	823811	25.0000	25.0000	1.000000	25.0000	0.00	----	----	----	----
240130_024	1633 ICAL 10.0PPB	☐	Auto	814768	814768	25.0000	25.0000	1.000000	25.0000	0.00	----	----	----	----
240130_025	1633 ICAL 15.0PPB	☐	Auto	784952	784952	25.0000	25.0000	1.000000	25.0000	0.00	----	----	----	----
240130_026	1633 ICAL 20.0PPB	☐	Auto	812046	812046	25.0000	25.0000	1.000000	25.0000	0.00	----	----	----	----
240130_028	1633 ICV 1.0PPB		Auto	723019	723019	25.0000	25.0000	----	25.0000	0.00	----	----	----	----
240130_029	1633 FTCA ICV 1.0PPB		Auto	719244	719244	25.0000	25.0000	----	25.0000	0.00	----	----	----	----



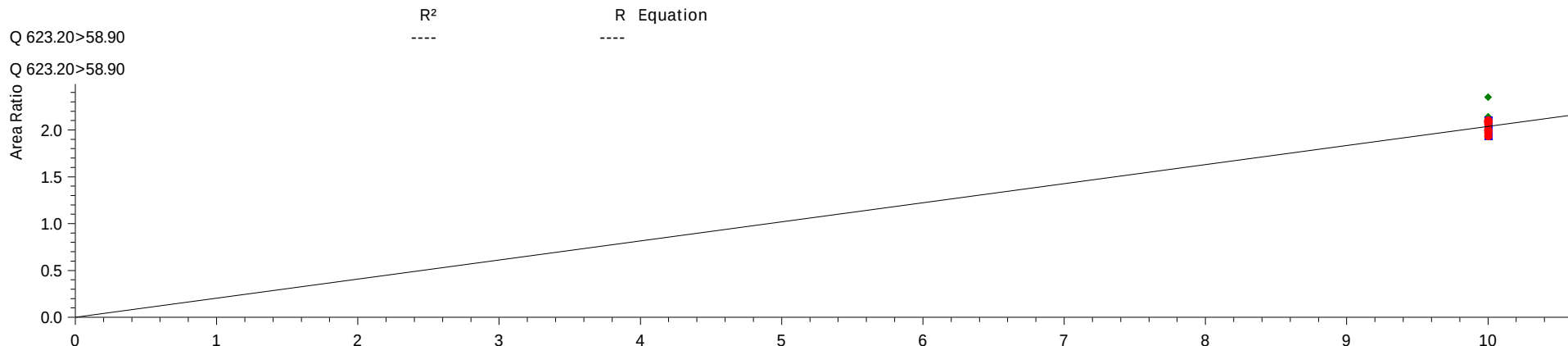
Compound: D7-MeFOSE

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc.Ratio
240130_018	1633 ICAL 0.05PPB	☒	Auto	831185	399487	25.0000	2.5000	0.208063	25.5143	2.06	0.203869	3.076549	3.076549
240130_019	1633 ICAL 0.1PPB	☒	Auto	782630	396921	25.0000	2.5000	0.197175	24.1792	-3.28	0.203869	3.076549	3.076549
240130_020	1633 ICAL 0.25PPB	☒	Auto	792340	409128	25.0000	2.5000	0.193666	23.7488	-5.00	0.203869	3.076549	3.076549
240130_021	1633 ICAL 0.5PPB	☒	Auto	807881	405193	25.0000	2.5000	0.199382	24.4498	-2.20	0.203869	3.076549	3.076549
240130_022	1633 ICAL 1.0PPB	☒	Auto	775055	386731	25.0000	2.5000	0.200412	24.5761	-1.70	0.203869	3.076549	3.076549
240130_023	1633 ICAL 5.0PPB	☒	Auto	823811	399184	25.0000	2.5000	0.206374	25.3072	1.23	0.203869	3.076549	3.076549
240130_024	1633 ICAL 10.0PPB	☒	Auto	814768	388576	25.0000	2.5000	0.209681	25.7127	2.85	0.203869	3.076549	3.076549
240130_025	1633 ICAL 15.0PPB	☒	Auto	784952	374106	25.0000	2.5000	0.209821	25.7299	2.92	0.203869	3.076549	3.076549
240130_026	1633 ICAL 20.0PPB	☒	Auto	812046	386238	25.0000	2.5000	0.210245	25.7819	3.13	0.203869	3.076549	3.076549
240130_028	1633 ICV 1.0PPB		Auto	723019	307744	25.0000	2.5000	----	28.8104	15.24	0.203869	3.076549	3.076549
240130_029	1633 FTCA ICV 1.0PPB		Auto	719244	336033	25.0000	2.5000	----	26.2472	4.99	0.203869	3.076549	3.076549



Compound: MeFOSE

Curve Fit: Linear | Weighting: 1/C | Zero: Not Forced

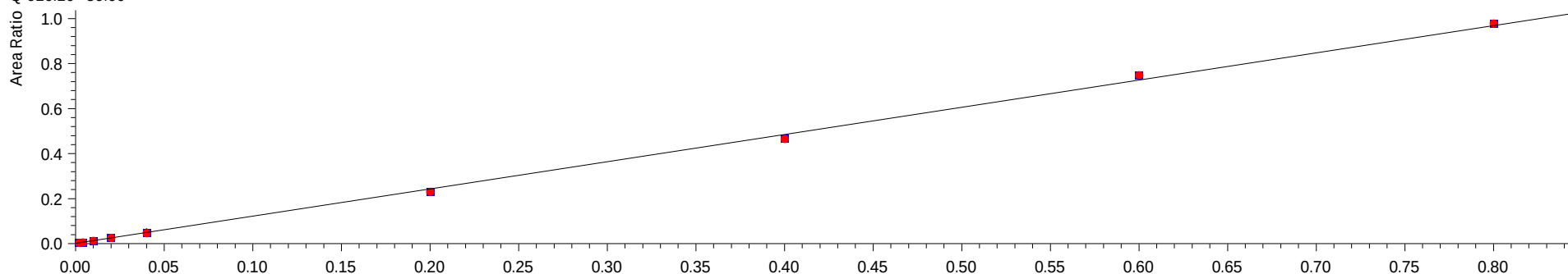
Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2

Q 616.10>59.00
R² 0.9990203 R Equation 0.9995100 $y = 1.208800x + 0.0008818352$

Q 616.10>59.00



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc.Ratio
240130_018	1633 ICAL 0.05PPB	☒	M	2959	831185	0.0500	25.0000	1.779817	0.0554	10.76	1.300454	15.389921	5.437608
240130_019	1633 ICAL 0.1PPB	☒	M	4530	782630	0.1000	25.0000	1.447159	0.1015	1.48	1.300454	15.389921	5.437608
240130_020	1633 ICAL 0.25PPB	☒	M	9922	792340	0.2500	25.0000	1.252270	0.2408	-3.70	1.300454	15.389921	5.437608
240130_021	1633 ICAL 0.5PPB	☒	M	20423	807881	0.5000	25.0000	1.263991	0.5046	0.92	1.300454	15.389921	5.437608
240130_022	1633 ICAL 1.0PPB	☒	M	36363	775055	1.0000	25.0000	1.172922	0.9521	-4.79	1.300454	15.389921	5.437608
240130_023	1633 ICAL 5.0PPB	☒	M	190071	823811	5.0000	25.0000	1.153609	4.7535	-4.93	1.300454	15.389921	5.437608
240130_024	1633 ICAL 10.0PPB	☒	M	378958	814768	10.0000	25.0000	1.162779	9.6010	-3.99	1.300454	15.389921	5.437608
240130_025	1633 ICAL 15.0PPB	☒	M	588070	784952	15.0000	25.0000	1.248632	15.4760	3.17	1.300454	15.389921	5.437608
240130_026	1633 ICAL 20.0PPB	☒	M	794445	812046	20.0000	25.0000	1.222907	20.2152	1.08	1.300454	15.389921	5.437608
240130_028	1633 ICV 1.0PPB		M	38243	723019	1.0000	25.0000	----	1.0757	7.57	1.300454	15.389921	5.437608
240130_029	1633 FTCA ICV 1.0PPB		ND(W/B)	----	719244	1.0000	25.0000	----	----	----	1.300454	15.389921	5.437608



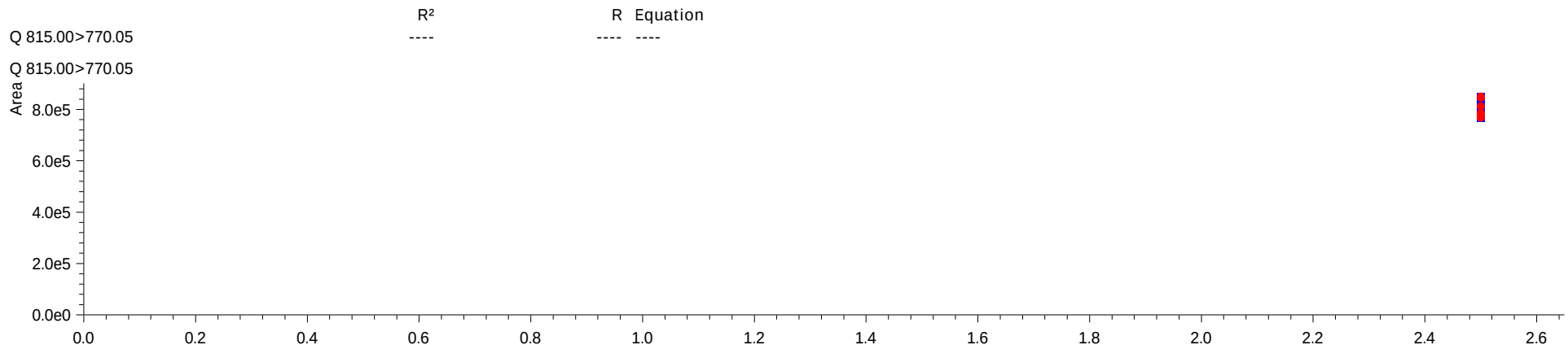
Compound: 13C2-PFHxDA_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 0



												Conc. (ng/mL)	
Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240130_018	1633 ICAL 0.05PPB	☐	Auto	846915	846915	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_019	1633 ICAL 0.1PPB	☐	Auto	782725	782725	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_020	1633 ICAL 0.25PPB	☐	Auto	847894	847894	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_021	1633 ICAL 0.5PPB	☐	Auto	813555	813555	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_022	1633 ICAL 1.0PPB	☐	Auto	783988	783988	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_023	1633 ICAL 5.0PPB	☐	Auto	850412	850412	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_024	1633 ICAL 10.0PPB	☐	Auto	787072	787072	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_025	1633 ICAL 15.0PPB	☐	Auto	783105	783105	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_026	1633 ICAL 20.0PPB	☐	Auto	768193	768193	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_028	1633 ICV 1.0PPB		Auto	712937	712937	2.5000	2.5000	----	2.5000	0.00	----	----	----
240130_029	1633 FTCA ICV 1.0PPB		Auto	701448	701448	2.5000	2.5000	----	2.5000	0.00	----	----	----



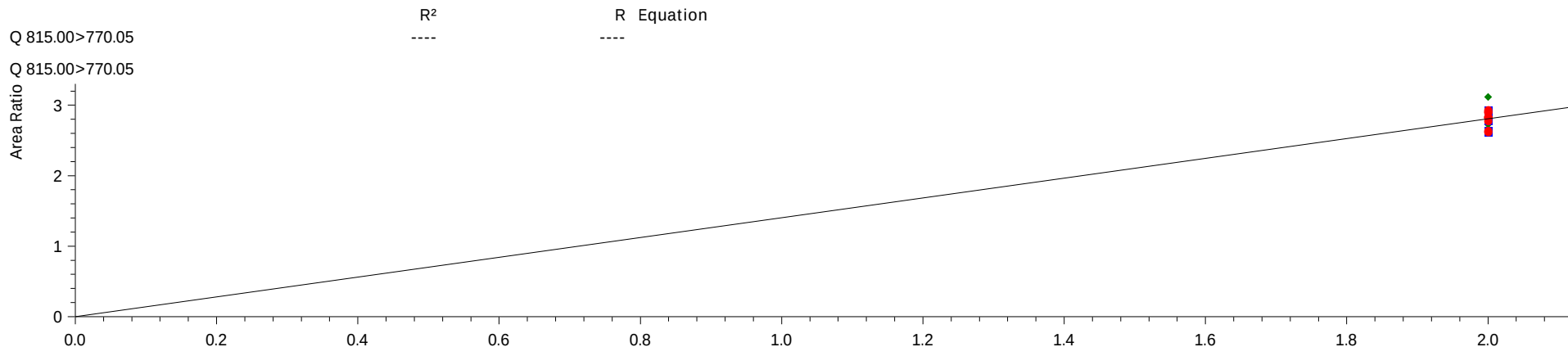
Compound: 13C2-PFHxDA

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240130_018	1633 ICAL 0.05PPB	☒	Auto	846915	292207	2.5000	1.2500	1.449170	2.5814	3.26	1.403476	3.991465	3.991465
240130_019	1633 ICAL 0.1PPB	☒	Auto	782725	296813	2.5000	1.2500	1.318551	2.3487	-6.05	1.403476	3.991465	3.991465
240130_020	1633 ICAL 0.25PPB	☒	Auto	847894	299603	2.5000	1.2500	1.415027	2.5206	0.82	1.403476	3.991465	3.991465
240130_021	1633 ICAL 0.5PPB	☒	Auto	813555	293151	2.5000	1.2500	1.387605	2.4717	-1.13	1.403476	3.991465	3.991465
240130_022	1633 ICAL 1.0PPB	☒	Auto	783988	277320	2.5000	1.2500	1.413510	2.5179	0.71	1.403476	3.991465	3.991465
240130_023	1633 ICAL 5.0PPB	☒	Auto	850412	299894	2.5000	1.2500	1.417857	2.5256	1.02	1.403476	3.991465	3.991465
240130_024	1633 ICAL 10.0PPB	☒	Auto	787072	300386	2.5000	1.2500	1.310101	2.3337	-6.65	1.403476	3.991465	3.991465
240130_025	1633 ICAL 15.0PPB	☒	Auto	783105	267196	2.5000	1.2500	1.465413	2.6103	4.41	1.403476	3.991465	3.991465
240130_026	1633 ICAL 20.0PPB	☒	Auto	768193	264157	2.5000	1.2500	1.454045	2.5901	3.60	1.403476	3.991465	3.991465
240130_028	1633 ICV 1.0PPB		Auto	712937	228831	2.5000	1.2500	----	2.7749	10.99	1.403476	3.991465	3.991465
240130_029	1633 FTCA ICV 1.0PPB		Auto	701448	257284	2.5000	1.2500	----	2.4282	-2.87	1.403476	3.991465	3.991465



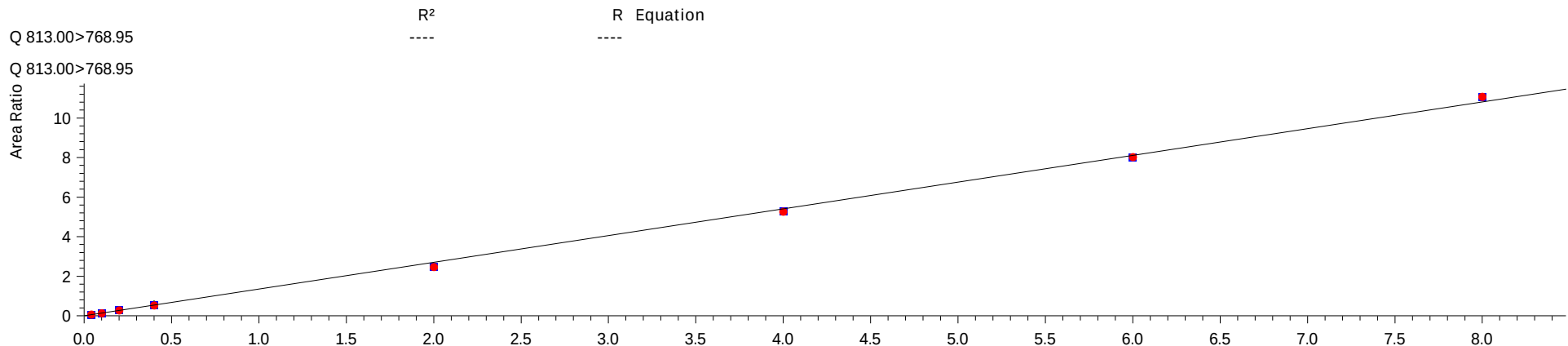
Compound: PFHXDA

Curve Fit: Mean RF | Weighting: 1/C | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 8

No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240130_019	1633 ICAL 0.1PPB	☒	Auto	46779	782725	0.1000	2.5000	1.494121	0.1106	10.60	1.350973	5.576136	5.576136
240130_020	1633 ICAL 0.25PPB	☒	Auto	112500	847894	0.2500	2.5000	1.326813	0.2455	-1.79	1.350973	5.576136	5.576136
240130_021	1633 ICAL 0.5PPB	☒	Auto	226920	813555	0.5000	2.5000	1.394623	0.5162	3.23	1.350973	5.576136	5.576136
240130_022	1633 ICAL 1.0PPB	☒	Auto	413181	783988	1.0000	2.5000	1.317562	0.9753	-2.47	1.350973	5.576136	5.576136
240130_023	1633 ICAL 5.0PPB	☒	Auto	2102430	850412	5.0000	2.5000	1.236124	4.5749	-8.50	1.350973	5.576136	5.576136
240130_024	1633 ICAL 10.0PPB	☒	Auto	4146497	787072	10.0000	2.5000	1.317064	9.7490	-2.51	1.350973	5.576136	5.576136
240130_025	1633 ICAL 15.0PPB	☒	Auto	6283564	783105	15.0000	2.5000	1.337318	14.8484	-1.01	1.350973	5.576136	5.576136
240130_026	1633 ICAL 20.0PPB	☒	Auto	8506394	768193	20.0000	2.5000	1.384157	20.4913	2.46	1.350973	5.576136	5.576136
240130_028	1633 ICV 1.0PPB		Auto	419412	712937	1.0000	2.5000	----	1.0886	8.86	1.350973	5.576136	5.576136
240130_029	1633 FTCA ICV 1.0PPB		ND(W/B)	----	701448	1.0000	2.5000	----	----	----	1.350973	5.576136	5.576136



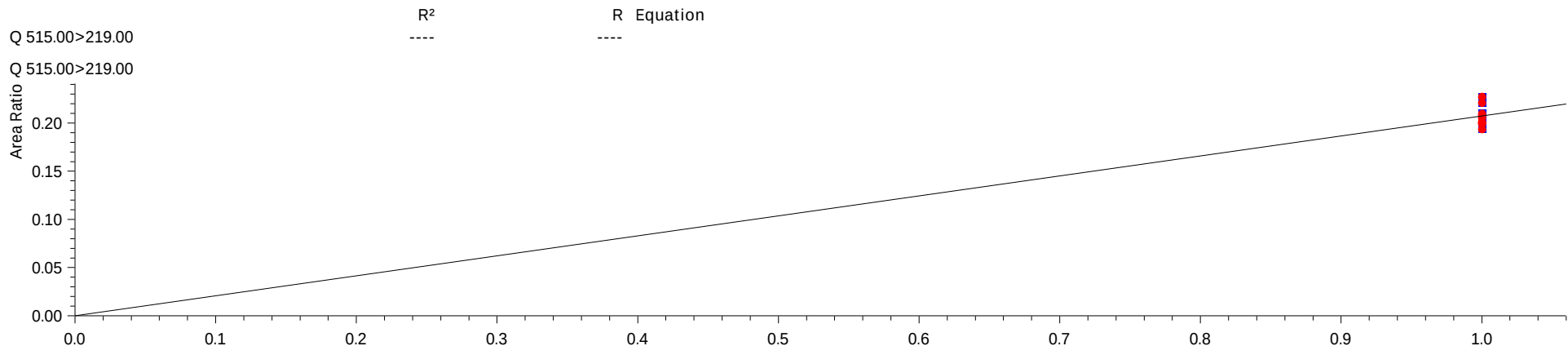
Compound: D3-MeFOSA

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2

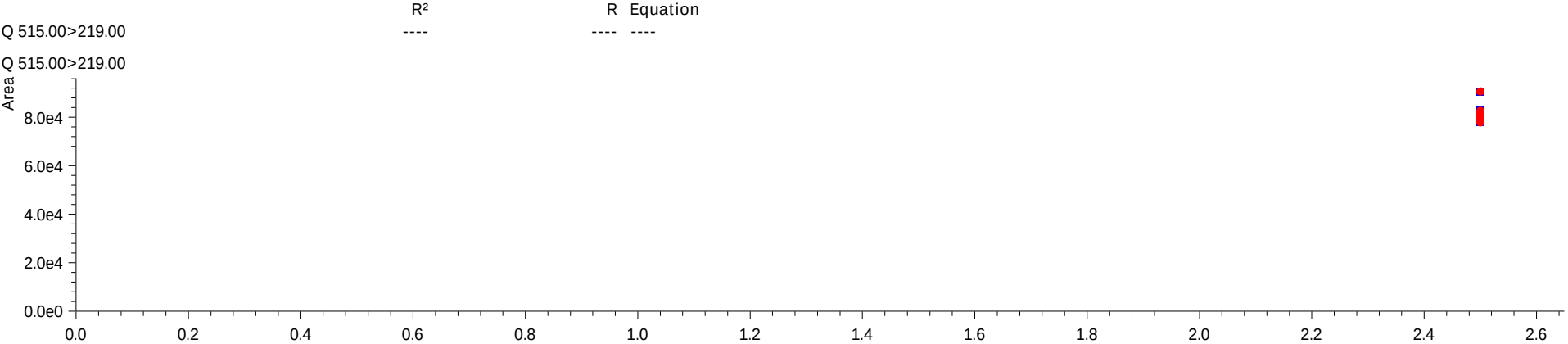


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc.Ratio
240130_018	1633 ICAL 0.05PPB	☒	Auto	82077	399487	2.5000	2.5000	0.205456	2.4774	-0.90	0.207332	5.216589	5.216589
240130_019	1633 ICAL 0.1PPB	☒	Auto	79361	396921	2.5000	2.5000	0.199941	2.4109	-3.56	0.207332	5.216589	5.216589
240130_020	1633 ICAL 0.25PPB	☒	Auto	79245	409128	2.5000	2.5000	0.193692	2.3355	-6.58	0.207332	5.216589	5.216589
240130_021	1633 ICAL 0.5PPB	☒	Auto	80777	405193	2.5000	2.5000	0.199354	2.4038	-3.85	0.207332	5.216589	5.216589
240130_022	1633 ICAL 1.0PPB	☒	Auto	78012	386731	2.5000	2.5000	0.201722	2.4324	-2.71	0.207332	5.216589	5.216589
240130_023	1633 ICAL 5.0PPB	☒	Auto	90721	399184	2.5000	2.5000	0.227266	2.7404	9.61	0.207332	5.216589	5.216589
240130_024	1633 ICAL 10.0PPB	☒	Auto	80639	388576	2.5000	2.5000	0.207524	2.5023	0.09	0.207332	5.216589	5.216589
240130_025	1633 ICAL 15.0PPB	☒	Auto	82761	374106	2.5000	2.5000	0.221222	2.6675	6.70	0.207332	5.216589	5.216589
240130_026	1633 ICAL 20.0PPB	☒	Auto	81037	386238	2.5000	2.5000	0.209812	2.5299	1.20	0.207332	5.216589	5.216589
240130_028	1633 ICV 1.0PPB		Auto	69595	307744	2.5000	2.5000	----	2.7268	9.07	0.207332	5.216589	5.216589
240130_029	1633 FTCA ICV 1.0PPB		Auto	74719	336033	2.5000	2.5000	----	2.6812	7.25	0.207332	5.216589	5.216589



Compound: D3-MeFOSA_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 0



											Conc. (ng/mL)		
Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240130_018	1633 ICAL 0.05PPB	☐	Auto	82077	82077	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_019	1633 ICAL 0.1PPB	☐	Auto	79361	79361	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_020	1633 ICAL 0.25PPB	☐	Auto	79245	79245	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_021	1633 ICAL 0.5PPB	☐	Auto	80777	80777	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_022	1633 ICAL 1.0PPB	☐	Auto	78012	78012	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_023	1633 ICAL 5.0PPB	☐	Auto	90721	90721	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_024	1633 ICAL 10.0PPB	☐	Auto	80639	80639	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_025	1633 ICAL 15.0PPB	☐	Auto	82761	82761	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_026	1633 ICAL 20.0PPB	☐	Auto	81037	81037	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_028	1633 ICV 1.0PPB		Auto	69595	69595	2.5000	2.5000	----	2.5000	0.00	----	----	----
240130_029	1633 FTCA ICV 1.0PPB		Auto	74719	74719	2.5000	2.5000	----	2.5000	0.00	----	----	----



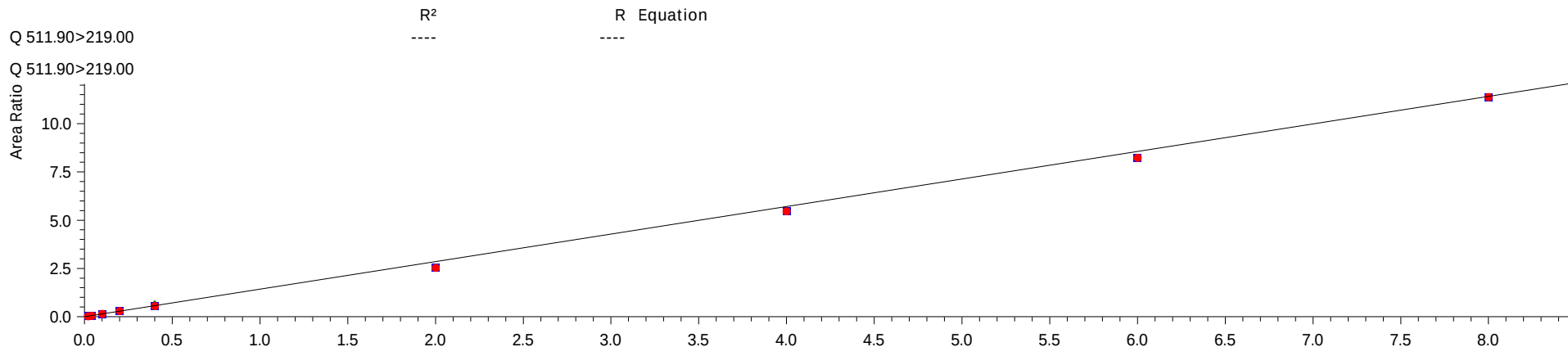
Compound: MeFOSA

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240130_018	1633 ICAL 0.05PPB	☒	M	2557	82077	0.0500	2.5000	1.557835	0.0546	9.20	1.426644	6.440317	6.440317
240130_019	1633 ICAL 0.1PPB	☒	M	4506	79361	0.1000	2.5000	1.419381	0.0995	-0.51	1.426644	6.440317	6.440317
240130_020	1633 ICAL 0.25PPB	☒	M	12330	79245	0.2500	2.5000	1.555992	0.2727	9.07	1.426644	6.440317	6.440317
240130_021	1633 ICAL 0.5PPB	☒	M	23779	80777	0.5000	2.5000	1.471883	0.5159	3.17	1.426644	6.440317	6.440317
240130_022	1633 ICAL 1.0PPB	☒	M	43726	78012	1.0000	2.5000	1.401256	0.9822	-1.78	1.426644	6.440317	6.440317
240130_023	1633 ICAL 5.0PPB	☒	M	230463	90721	5.0000	2.5000	1.270176	4.4516	-10.97	1.426644	6.440317	6.440317
240130_024	1633 ICAL 10.0PPB	☒	M	440931	80639	10.0000	2.5000	1.366995	9.5819	-4.18	1.426644	6.440317	6.440317
240130_025	1633 ICAL 15.0PPB	☒	M	682177	82761	15.0000	2.5000	1.373798	14.4444	-3.70	1.426644	6.440317	6.440317
240130_026	1633 ICAL 20.0PPB	☒	M	922196	81037	20.0000	2.5000	1.422483	19.9417	-0.29	1.426644	6.440317	6.440317
240130_028	1633 ICV 1.0PPB		M	45150	69595	1.0000	2.5000	----	1.1369	13.69	1.426644	6.440317	6.440317
240130_029	1633 FTCA ICV 1.0PPB		ND(W/B)	----	74719	1.0000	2.5000	----	----	----	1.426644	6.440317	6.440317



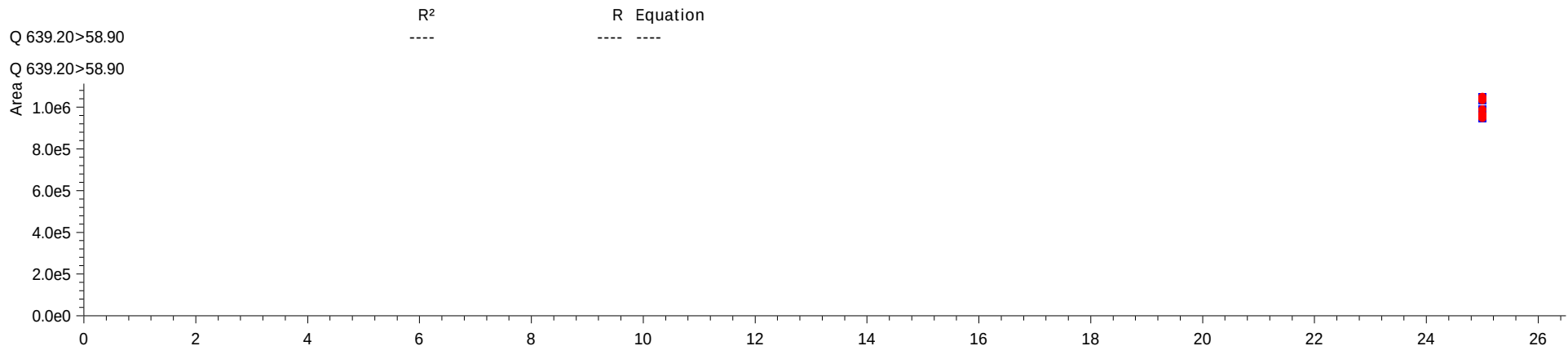
Compound: D9-EtFOSE_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 0



										Conc. (ng/mL)			
Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240130_018	1633 ICAL 0.05PPB	☐	Auto	1050039	1050039	25.0000	25.0000	1.000000	25.0000	0.00	----	----	----
240130_019	1633 ICAL 0.1PPB	☐	Auto	964894	964894	25.0000	25.0000	1.000000	25.0000	0.00	----	----	----
240130_020	1633 ICAL 0.25PPB	☐	Auto	964697	964697	25.0000	25.0000	1.000000	25.0000	0.00	----	----	----
240130_021	1633 ICAL 0.5PPB	☐	Auto	990523	990523	25.0000	25.0000	1.000000	25.0000	0.00	----	----	----
240130_022	1633 ICAL 1.0PPB	☐	Auto	948753	948753	25.0000	25.0000	1.000000	25.0000	0.00	----	----	----
240130_023	1633 ICAL 5.0PPB	☐	Auto	1034041	1034041	25.0000	25.0000	1.000000	25.0000	0.00	----	----	----
240130_024	1633 ICAL 10.0PPB	☐	Auto	1041507	1041507	25.0000	25.0000	1.000000	25.0000	0.00	----	----	----
240130_025	1633 ICAL 15.0PPB	☐	Auto	951614	951614	25.0000	25.0000	1.000000	25.0000	0.00	----	----	----
240130_026	1633 ICAL 20.0PPB	☐	Auto	970668	970668	25.0000	25.0000	1.000000	25.0000	0.00	----	----	----
240130_028	1633 ICV 1.0PPB		Auto	882940	882940	25.0000	25.0000	----	25.0000	0.00	----	----	----
240130_029	1633 FTCA ICV 1.0PPB		Auto	884294	884294	25.0000	25.0000	----	25.0000	0.00	----	----	----



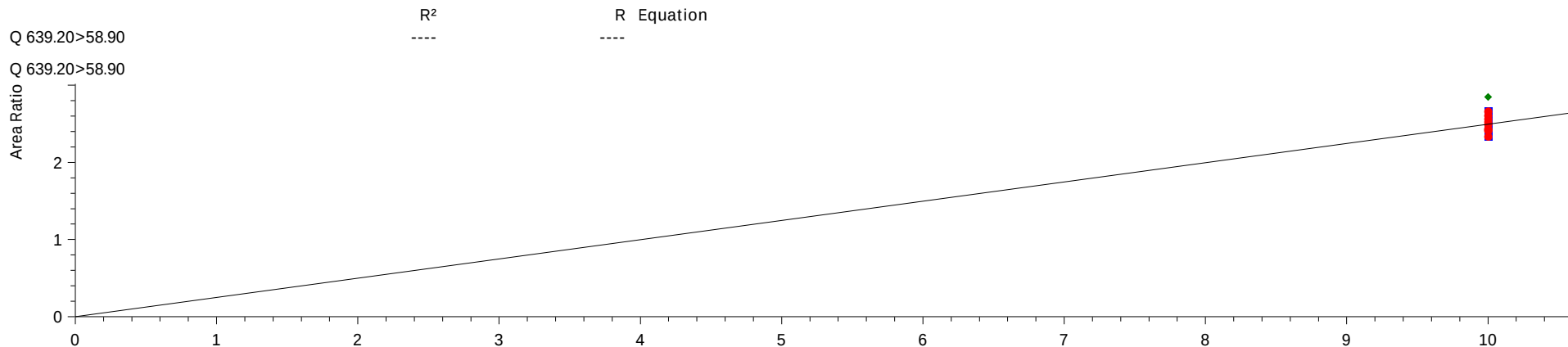
Compound: D9-EtFOSE

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc.Ratio
240130_018	1633 ICAL 0.05PPB	☒	Auto	1041752	399487	25.0000	2.5000	0.260772	26.1318	4.53	0.249478	4.169076	4.169076
240130_019	1633 ICAL 0.1PPB	☒	Auto	956739	396921	25.0000	2.5000	0.241040	24.1545	-3.38	0.249478	4.169076	4.169076
240130_020	1633 ICAL 0.25PPB	☒	Auto	955662	409128	25.0000	2.5000	0.233585	23.4074	-6.37	0.249478	4.169076	4.169076
240130_021	1633 ICAL 0.5PPB	☒	Auto	981852	405193	25.0000	2.5000	0.242317	24.2824	-2.87	0.249478	4.169076	4.169076
240130_022	1633 ICAL 1.0PPB	☒	Auto	941850	386731	25.0000	2.5000	0.243541	24.4051	-2.38	0.249478	4.169076	4.169076
240130_023	1633 ICAL 5.0PPB	☒	Auto	1022551	399184	25.0000	2.5000	0.256160	25.6696	2.68	0.249478	4.169076	4.169076
240130_024	1633 ICAL 10.0PPB	☒	Auto	1033595	388576	25.0000	2.5000	0.265996	26.6552	6.62	0.249478	4.169076	4.169076
240130_025	1633 ICAL 15.0PPB	☒	Auto	945157	374106	25.0000	2.5000	0.252644	25.3173	1.27	0.249478	4.169076	4.169076
240130_026	1633 ICAL 20.0PPB	☒	Auto	962680	386238	25.0000	2.5000	0.249245	24.9767	-0.09	0.249478	4.169076	4.169076
240130_028	1633 ICV 1.0PPB		Auto	876049	307744	25.0000	2.5000	----	28.5264	14.11	0.249478	4.169076	4.169076
240130_029	1633 FTCA ICV 1.0PPB		Auto	874963	336033	25.0000	2.5000	----	26.0925	4.37	0.249478	4.169076	4.169076



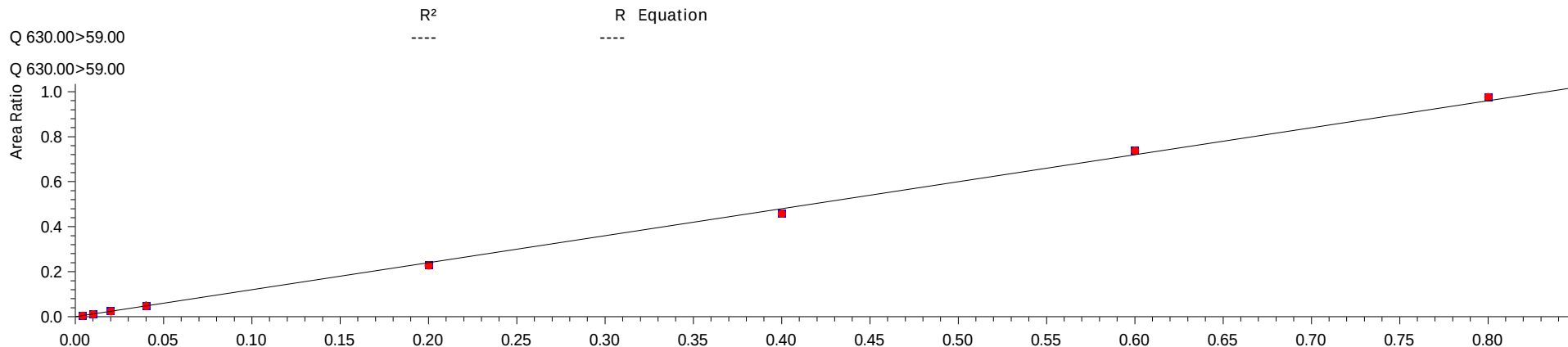
Compound: EtFOSE

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 8

No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240130_019	1633 ICAL 0.1PPB	☒	M	4792	964894	0.1000	25.0000	1.241658	0.1036	3.56	1.198979	3.100575	3.100576
240130_020	1633 ICAL 0.25PPB	☒	M	11664	964697	0.2500	25.0000	1.209123	0.2521	0.85	1.198979	3.100575	3.100576
240130_021	1633 ICAL 0.5PPB	☒	M	24016	990523	0.5000	25.0000	1.212297	0.5056	1.11	1.198979	3.100575	3.100576
240130_022	1633 ICAL 1.0PPB	☒	M	45241	948753	1.0000	25.0000	1.192106	0.9943	-0.57	1.198979	3.100575	3.100576
240130_023	1633 ICAL 5.0PPB	☒	M	236056	1034041	5.0000	25.0000	1.141425	4.7600	-4.80	1.198979	3.100575	3.100576
240130_024	1633 ICAL 10.0PPB	☒	M	477297	1041507	10.0000	25.0000	1.145688	9.5555	-4.44	1.198979	3.100575	3.100576
240130_025	1633 ICAL 15.0PPB	☒	M	701930	951614	15.0000	25.0000	1.229368	15.3802	2.53	1.198979	3.100575	3.100576
240130_026	1633 ICAL 20.0PPB	☒	M	947504	970668	20.0000	25.0000	1.220170	20.3535	1.77	1.198979	3.100575	3.100576
240130_028	1633 ICV 1.0PPB		M	46118	882940	1.0000	25.0000	----	1.0891	8.91	1.198979	3.100575	3.100576
240130_029	1633 FTCA ICV 1.0PPB		ND(W/B)	----	884294	1.0000	25.0000	----	----	----	1.198979	3.100575	3.100576



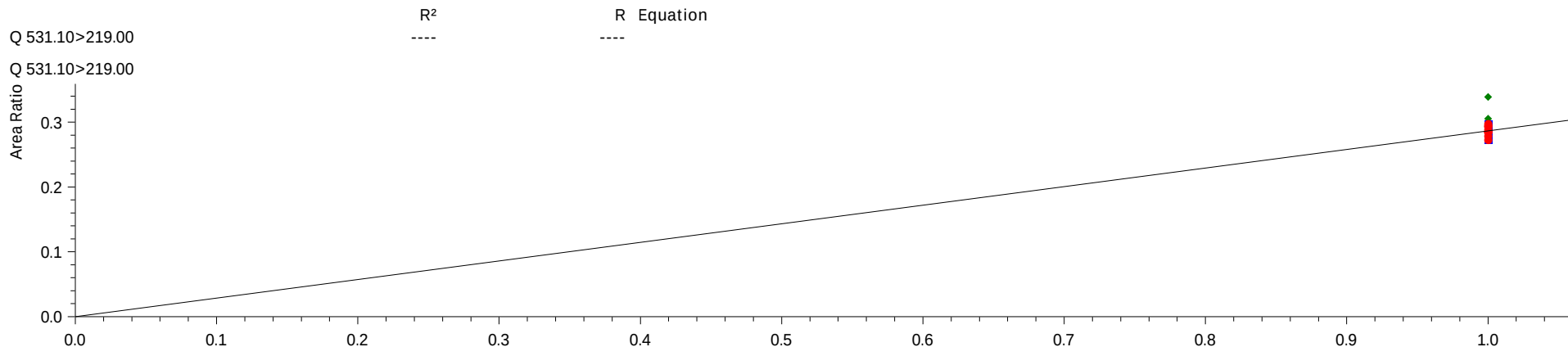
Compound: D5-EtFOSAm

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2

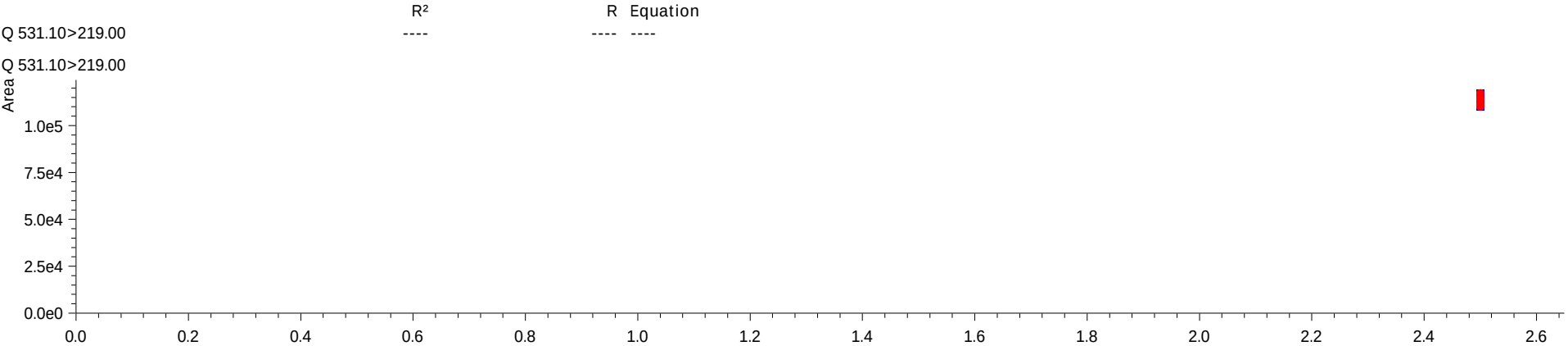


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240130_018	1633 ICAL 0.05PPB	☒	Auto	117263	399487	2.5000	2.5000	0.293534	2.5599	2.40	0.286668	2.702624	2.702624
240130_019	1633 ICAL 0.1PPB	☒	Auto	110665	396921	2.5000	2.5000	0.278809	2.4315	-2.74	0.286668	2.702624	2.702624
240130_020	1633 ICAL 0.25PPB	☒	Auto	111622	409128	2.5000	2.5000	0.272829	2.3793	-4.83	0.286668	2.702624	2.702624
240130_021	1633 ICAL 0.5PPB	☒	Auto	115251	405193	2.5000	2.5000	0.284435	2.4805	-0.78	0.286668	2.702624	2.702624
240130_022	1633 ICAL 1.0PPB	☒	Auto	110231	386731	2.5000	2.5000	0.285033	2.4857	-0.57	0.286668	2.702624	2.702624
240130_023	1633 ICAL 5.0PPB	☒	Auto	113863	399184	2.5000	2.5000	0.285240	2.4876	-0.50	0.286668	2.702624	2.702624
240130_024	1633 ICAL 10.0PPB	☒	Auto	114262	388576	2.5000	2.5000	0.294053	2.5644	2.58	0.286668	2.702624	2.702624
240130_025	1633 ICAL 15.0PPB	☒	Auto	111178	374106	2.5000	2.5000	0.297184	2.5917	3.67	0.286668	2.702624	2.702624
240130_026	1633 ICAL 20.0PPB	☒	Auto	111581	386238	2.5000	2.5000	0.288891	2.5194	0.78	0.286668	2.702624	2.702624
240130_028	1633 ICV 1.0PPB		Auto	104251	307744	2.5000	2.5000	----	2.9543	18.17	0.286668	2.702624	2.702624
240130_029	1633 FTCA ICV 1.0PPB		Auto	102635	336033	2.5000	2.5000	----	2.6636	6.55	0.286668	2.702624	2.702624



Compound: D5-EtFOSAm_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 0



											Conc. (ng/mL)		
Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240130_018	1633 ICAL 0.05PPB	☐	Auto	117263	117263	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_019	1633 ICAL 0.1PPB	☐	Auto	110665	110665	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_020	1633 ICAL 0.25PPB	☐	Auto	111622	111622	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_021	1633 ICAL 0.5PPB	☐	Auto	115251	115251	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_022	1633 ICAL 1.0PPB	☐	Auto	110231	110231	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_023	1633 ICAL 5.0PPB	☐	Auto	113863	113863	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_024	1633 ICAL 10.0PPB	☐	Auto	114262	114262	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_025	1633 ICAL 15.0PPB	☐	Auto	111178	111178	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_026	1633 ICAL 20.0PPB	☐	Auto	111581	111581	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240130_028	1633 ICV 1.0PPB		Auto	104251	104251	2.5000	2.5000	----	2.5000	0.00	----	----	----
240130_029	1633 FTCA ICV 1.0PPB		Auto	102635	102635	2.5000	2.5000	----	2.5000	0.00	----	----	----



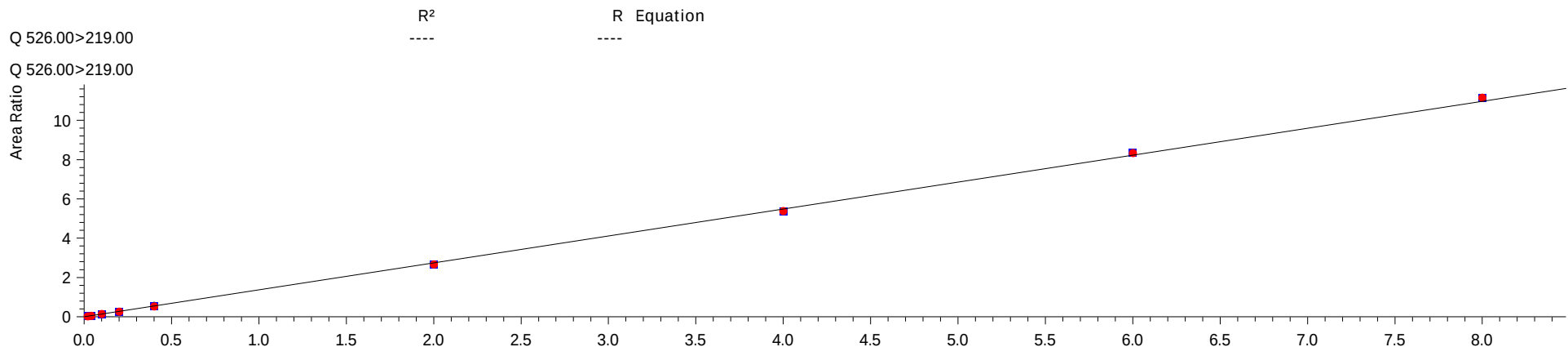
Compound: EtFOSAm

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240130_018	1633 ICAL 0.05PPB	☒	M	3279	117263	0.0500	2.5000	1.398274	0.0510	1.95	1.371469	2.267483	2.267483
240130_019	1633 ICAL 0.1PPB	☒	M	5947	110665	0.1000	2.5000	1.343579	0.0980	-2.03	1.371469	2.267483	2.267483
240130_020	1633 ICAL 0.25PPB	☒	M	15909	111622	0.2500	2.5000	1.425267	0.2598	3.92	1.371469	2.267483	2.267483
240130_021	1633 ICAL 0.5PPB	☒	M	31405	115251	0.5000	2.5000	1.362442	0.4967	-0.66	1.371469	2.267483	2.267483
240130_022	1633 ICAL 1.0PPB	☒	M	59297	110231	1.0000	2.5000	1.344845	0.9806	-1.94	1.371469	2.267483	2.267483
240130_023	1633 ICAL 5.0PPB	☒	M	304718	113863	5.0000	2.5000	1.338089	4.8783	-2.43	1.371469	2.267483	2.267483
240130_024	1633 ICAL 10.0PPB	☒	M	615655	114262	10.0000	2.5000	1.347029	9.8218	-1.78	1.371469	2.267483	2.267483
240130_025	1633 ICAL 15.0PPB	☒	M	926730	111178	15.0000	2.5000	1.389254	15.1945	1.30	1.371469	2.267483	2.267483
240130_026	1633 ICAL 20.0PPB	☒	M	1244742	111581	20.0000	2.5000	1.394443	20.3350	1.68	1.371469	2.267483	2.267483
240130_028	1633 ICV 1.0PPB		M	60604	104251	1.0000	2.5000	----	1.0597	5.97	1.371469	2.267483	2.267483
240130_029	1633 FTCA ICV 1.0PPB		ND(W/B)	----	102635	1.0000	2.5000	----	----	----	1.371469	2.267483	2.267483



Compound: PFODA

Curve Fit: Linear | Weighting: 1/C | Zero: Not Forced

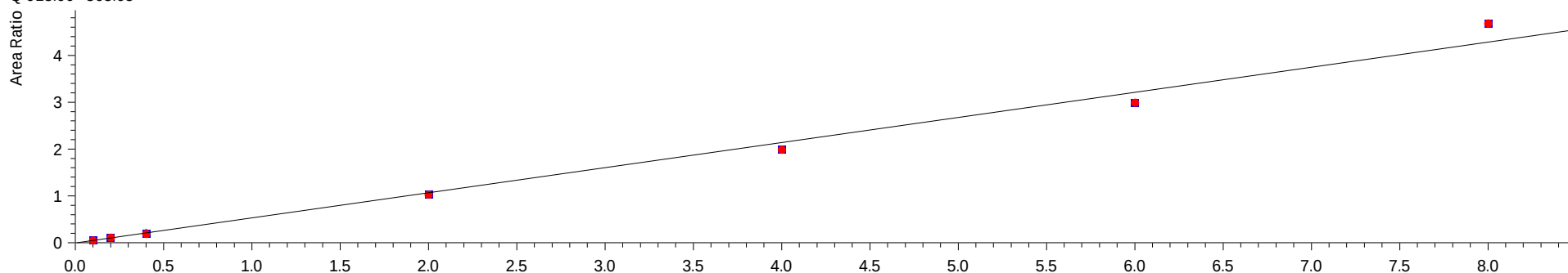
Quantitative Method: Internal Standard

No. of Calibration Points: 7

No. of Control Points: 2

Q 913.00>868.65 R^2 0.9931710 R Equation 0.9965797 $y = 0.5357908x - 0.005264420$

Q 913.00>868.65



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc.Ratio
240130_020	1633 ICAL 0.25PPB	☒	Auto	43522	847894	0.2500	2.5000	0.513299	0.2641	5.63	0.521846	7.602691	9.116597
240130_021	1633 ICAL 0.5PPB	☒	Auto	92248	813555	0.5000	2.5000	0.566945	0.5536	10.73	0.521846	7.602691	9.116597
240130_022	1633 ICAL 1.0PPB	☒	Auto	149131	783988	1.0000	2.5000	0.475552	0.9121	-8.79	0.521846	7.602691	9.116597
240130_023	1633 ICAL 5.0PPB	☒	Auto	875688	850412	5.0000	2.5000	0.514861	4.8292	-3.42	0.521846	7.602691	9.116597
240130_024	1633 ICAL 10.0PPB	☒	Auto	1566507	787072	10.0000	2.5000	0.497574	9.3113	-6.89	0.521846	7.602691	9.116597
240130_025	1633 ICAL 15.0PPB	☒	Auto	2345760	783105	15.0000	2.5000	0.499244	14.0014	-6.66	0.521846	7.602691	9.116597
240130_026	1633 ICAL 20.0PPB	☒	Auto	3597907	768193	20.0000	2.5000	0.585450	21.8782	9.39	0.521846	7.602691	9.116597
240130_028	1633 ICV 1.0PPB		Auto	154251	712937	1.0000	2.5000	----	1.0341	3.41	0.521846	7.602691	9.116597
240130_029	1633 FTCA ICV 1.0PPB		ND(W/B)	----	701448	1.0000	2.5000	----	----	----	0.521846	7.602691	9.116597



240130_017

Sample ID: 1633 CCB
Date Acquired: 1/30/2024 8:55:40 PM
Acquired by: System Administrator
Data File: 240130_017
Vial: 54 | Inj. Volume: 10.0000uL | Tray: 1

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	485375	----	----	----	----	----	----	
13C4-PFBA_IS	216.80>171.90	----	485375	----	----	----	----	----	----	
13C3-PFBA_IS	216.00>172.00	----	284991	----	----	----	----	----	----	
PFBA	212.80>169.05	----	899	----	----	----	----	----	----	
PFMPA	229.00>84.90	----	----	----	----	----	----	----	----	
3_3 FTCA	241.00>177.10	241.00>117.00	----	0	0.00	139.21	----	----	----	
13C5-PFPeA	268.30>223.00	----	144523	----	----	----	----	----	----	
13C5-PFPeA_IS	268.30>223.00	----	144523	----	----	----	----	----	----	
PFPeA	263.00>219.00	----	1056	----	----	----	----	----	----	
PFMBA	279.00>84.95	----	----	----	----	----	----	----	----	
13C2-4_2 FTS	329.10>80.90	----	173013	----	----	----	----	----	----	
13C2-4_2 FTS_IS	329.10>80.90	----	173013	----	----	----	----	----	----	
4_2 FTS	327.10>307.00	327.10>80.90	----	0	0.00	32.10	0	0.00	32.10	
13C3-PFBS_IS	302.10>79.90	----	159515	----	----	----	----	----	----	
PFBS	298.70>79.90	298.70>98.80	----	0	0.00	44.81	0	0.00	44.81	
13C3-PFBS	302.10>79.90	----	159515	----	----	----	----	----	----	
NFDHA	295.00>201.00	295.00>84.90	----	0	0.00	35.54	0	0.00	35.54	
13C5-PFHxA	318.00>273.00	----	345035	----	----	----	----	----	----	
13C5-PFHxA_IS	318.00>273.00	----	345035	----	----	----	----	----	----	
13C2-PFHxA_IS	315.10>270.00	----	359551	----	----	----	----	----	----	
PFHxA	313.00>269.00	----	929	----	----	----	----	----	----	
PFEESA	314.80>135.00	314.80>82.90	----	0	0.00	5.22	0	0.00	5.22	
13C3-HFPO-DA	286.90>168.90	----	333324	----	----	----	----	----	----	
13C3-HFPO-DA_IS	286.90>168.90	----	333324	----	----	----	----	----	----	
HFPO-DA	284.90>168.90	284.90>184.90	162	190	117.26	59.79	190	117.26	59.79	IRr
5_3 FTCA	341.00>237.05	341.00>217.00	----	0	0.00	157.08	0	0.00	157.08	
PFPeS	349.10>79.90	349.10>98.80	----	0	0.00	55.12	0	0.00	55.12	
13C4-PFHpA	367.10>322.00	----	394663	----	----	----	----	----	----	
13C4-PFHpA_IS	367.10>322.00	----	394663	----	----	----	----	----	----	
PFHpA	363.10>319.00	363.10>169.00	6620	1103	16.66	23.02	1103	16.66	23.02	
DONA	376.90>250.90	376.90>84.80	----	0	0.00	27.50	0	0.00	27.50	
13C2-6_2 FTS_IS	429.10>80.90	----	176243	----	----	----	----	----	----	
13C2-6_2 FTS	429.10>80.90	----	176243	----	----	----	----	----	----	
6_2 FTS	427.10>407.00	427.10>80.90	455	204	44.82	50.47	204	44.82	50.47	
13C4-PFOA_IS	417.10>172.00	----	31311	----	----	----	----	----	----	
13C8-PFOA_IS	421.10>376.00	----	406580	----	----	----	----	----	----	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240130_017 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	406580	----	----	----	----	----	----	----
PFOA	413.00>369.00	413.00>169.00	5294	1991	37.62	28.77	1991	37.62	28.77	
13C3-PFHxS	402.10>79.90	----	140188	----	----	----	----	----	----	----
13C3-PFHxS_IS	402.10>79.90	----	140188	----	----	----	----	----	----	----
PFHxS	398.70>79.90	398.70>98.90	1157	343	29.61	60.90	343	29.61	60.90	IRr
18O2-PFHxS_IS	403.00>83.90	----	135149	----	----	----	----	----	----	----
13C9-PFNA_IS	472.10>427.00	----	212524	----	----	----	----	----	----	----
13C9-PFNA	472.10>427.00	----	212524	----	----	----	----	----	----	----
13C5-PFNA_IS	468.00>423.00	----	187872	----	----	----	----	----	----	----
PFNA	463.00>419.00	463.00>219.00	5900	1475	25.00	19.31	1475	25.00	19.31	
PFHps	449.00>79.90	449.00>98.80	----	0	0.00	52.44	0	0.00	52.44	
7_3 FTCA	441.00>317.00	441.00>336.90	692	1076	155.38	129.46	1076	155.38	129.46	
13C2-8_2-FTS	529.10>80.90	----	141661	----	----	----	----	----	----	----
13C2-8_2-FTS_IS	529.10>80.90	----	141661	----	----	----	----	----	----	----
8_2 FTS	527.10>506.95	527.10>80.80	----	0	0.00	45.98	0	0.00	45.98	
13C6-PFDA_IS	519.10>474.10	----	136630	----	----	----	----	----	----	----
13C6-PFDA	519.10>474.10	----	136630	----	----	----	----	----	----	----
13C2-PFDA_IS	515.10>470.10	----	116900	----	----	----	----	----	----	----
PFDA	512.90>469.00	512.90>219.00	4955	506	10.21	17.88	506	10.21	17.88	
D3-NMeFOSAA_IS	573.20>419.00	----	443164	----	----	----	----	----	----	----
D3-NMeFOSAA	573.20>419.00	----	443164	----	----	----	----	----	----	----
13C8-PFOS_IS	507.10>98.90	----	65072	----	----	----	----	----	----	----
13C8-PFOS	507.10>98.90	----	65072	----	----	----	----	----	----	----
13C4-PFOS_IS	502.80>79.90	----	177652	----	----	----	----	----	----	----
PFOS	498.90>79.90	498.90>98.80	----	0	0.00	53.60	0	0.00	53.60	
NMeFOSAA	570.10>419.00	570.10>483.00	----	0	0.00	64.89	0	0.00	64.89	
D5-NEtFOSAA_IS	589.20>419.00	----	375077	----	----	----	----	----	----	----
D5-NEtFOSAA	589.20>419.00	----	375077	----	----	----	----	----	----	----
NEtFOSAA	584.20>419.10	584.20>526.00	----	0	0.00	96.07	0	0.00	96.07	
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	----	0	0.00	30.95	0	0.00	30.95	
PFUnDA	563.10>519.00	563.10>269.10	5343	558	10.44	11.01	558	10.44	11.01	
13C7-PFUnDA_IS	570.00>525.10	----	196939	----	----	----	----	----	----	----
13C7-PFUnDA	570.00>525.10	----	196939	----	----	----	----	----	----	----
PFNS	548.80>79.90	548.80>98.80	----	0	0.00	60.44	0	0.00	60.44	
10_2 FTS	626.80>607.05	626.80>81.00	86	41	47.87	36.14	41	47.87	36.14	
13C2-PFDOA_IS	615.10>570.00	----	234742	----	----	----	----	----	----	----
13C2-PFDOA	615.10>570.00	----	234742	----	----	----	----	----	----	----
PFDOA	613.10>569.00	613.10>319.00	4922	273	5.55	10.16	273	5.55	10.16	
PFDS	599.00>79.90	599.00>98.80	----	0	0.00	58.26	0	0.00	58.26	
PFTrDA	663.00>619.00	663.00>168.90	6351	843	13.27	16.18	843	13.27	16.18	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240130_017 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	495	221	44.71	34.99	221	44.71	34.99	
PFOSAm	498.10>77.90	----	151	----	----	----	----	----	----	
13C8-PFOSAm	506.10>77.80	----	168365	----	----	----	----	----	----	
13C8-PFOSAm_IS	506.10>77.80	----	168365	----	----	----	----	----	----	
PFTDA	713.10>669.00	713.10>168.90	4285	707	16.50	18.05	707	16.50	18.05	
13C2-PFTDA	715.20>670.00	----	160598	----	----	----	----	----	----	
13C2-PFTDA_IS	715.20>670.00	----	160598	----	----	----	----	----	----	
PFDoS	699.10>79.90	699.10>98.80	----	0	0.00	61.13	0	0.00	61.13	
D7-MeFOSE_IS	623.20>58.90	----	413046	----	----	----	----	----	----	
D7-MeFOSE	623.20>58.90	----	413046	----	----	----	----	----	----	
MeFOSE	616.10>59.00	----	----	----	----	----	----	----	----	
13C2-PFHxDA_IS	815.00>770.05	----	441114	----	----	----	----	----	----	
13C2-PFHxDA	815.00>770.05	----	441114	----	----	----	----	----	----	
PFHxDA	813.00>768.95	813.00>218.95	7026	864	12.30	11.66	864	12.30	11.66	
D3-MeFOSA	515.00>219.00	----	42273	----	----	----	----	----	----	
D3-MeFOSA_IS	515.00>219.00	----	42273	----	----	----	----	----	----	
MeFOSA	511.90>219.00	511.90>169.00	----	0	0.00	160.44	0	0.00	160.44	
D9-EtFOSE_IS	639.20>58.90	----	501660	----	----	----	----	----	----	
D9-EtFOSE	639.20>58.90	----	496826	----	----	----	----	----	----	
EtFOSE	630.00>59.00	----	----	----	----	----	----	----	----	
D5-EtFOSAm	531.10>219.00	----	59129	----	----	----	----	----	----	
D5-EtFOSAm_IS	531.10>219.00	----	59129	----	----	----	----	----	----	
EtFOSAm	526.00>219.00	526.00>169.00	----	0	0.00	159.63	0	0.00	159.63	
PFODA	913.00>868.65	913.00>169.00	2339	630	26.95	36.03	630	26.95	36.03	

Flag ID key: IRr: Ion Ratio (Relative)



240130_017

Sample ID: 1633 CCB
Date Acquired: 1/30/2024 8:55:40 PM
Acquired by: System Administrator
Data File: 240130_017
Vial: 54 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.435	0.097	-0.001	485375	284991	13C3-PFBA_IS	11.4938	ng/mL	
13C4-PFBA_IS	Auto	1.435	0.097	----	485375	485375	----	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.436	0.099	----	284991	284991	----	5.0000	ng/mL	
PFBA	M	1.432	0.091	-0.003	899	485375	13C4-PFBA_IS	0.0071	ng/mL	
PFMPA	ND(W/B)	----	----	----	----	144523	13C5-PFPeA_IS	----	ng/mL	
3_3 FTCA	ND(W/B)	----	----	----	----	144523	13C5-PFPeA_IS	----	ng/mL	
13C5-PFPeA	Auto	3.511	0.072	-1.482	144523	359551	13C2-PFHxA_IS	5.5901	ng/mL	
13C5-PFPeA_IS	Auto	3.511	0.072	----	144523	144523	----	5.0000	ng/mL	
PFPeA	Auto	3.514	0.072	0.003	1056	144523	13C5-PFPeA_IS	0.0104	ng/mL	
PFMBA	ND(W/B)	----	----	----	----	144523	13C5-PFPeA_IS	----	ng/mL	
13C2-4_2 FTS	Auto	4.675	0.055	-2.424	173013	135149	18O2-PFHxS_IS	6.8008	ng/mL	
13C2-4_2 FTS_IS	Auto	4.675	0.055	----	173013	173013	----	5.0000	ng/mL	
4_2 FTS	ND(W/B)	----	----	----	----	173013	13C2-4_2 FTS_IS	----	ng/mL	
13C3-PFBS_IS	Auto	4.659	0.072	----	159515	159515	----	2.5000	ng/mL	
PFBS	ND(W/B)	----	----	----	----	159515	13C3-PFBS_IS	----	ng/mL	
13C3-PFBS	Auto	4.659	0.072	-2.440	159515	135149	18O2-PFHxS_IS	3.1634	ng/mL	
NFDHA	ND(W/B)	----	----	----	----	345035	13C5-PFHxA_IS	----	ng/mL	
13C5-PFHxA	Auto	4.992	0.060	-0.001	345035	359551	13C2-PFHxA_IS	2.9730	ng/mL	
13C5-PFHxA_IS	Auto	4.992	0.060	----	345035	345035	----	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	4.993	0.060	----	359551	359551	----	2.5000	ng/mL	
PFHxA	M	4.996	0.062	0.004	929	345035	13C5-PFHxA_IS	0.0012	ng/mL	
PFEESA	ND(W/B)	----	----	----	----	345035	13C5-PFHxA_IS	----	ng/mL	
13C3-HFPO-DA	Auto	5.467	0.055	0.474	333324	359551	13C2-PFHxA_IS	10.4609	ng/mL	
13C3-HFPO-DA_IS	Auto	5.467	0.055	----	333324	333324	----	10.0000	ng/mL	
HFPO-DA	M	5.471	0.058	0.004	162	333324	13C3-HFPO-DA_IS	0.0050	ng/mL	IRr
5_3 FTCA	ND(W/B)	----	----	----	----	345035	13C5-PFHxA_IS	----	ng/mL	
PFPeS	ND(W/B)	----	----	----	----	140188	13C3-PFHxS_IS	----	ng/mL	
13C4-PFHpA	Auto	6.170	0.050	1.177	394663	359551	13C2-PFHxA_IS	2.7030	ng/mL	
13C4-PFHpA_IS	Auto	6.170	0.050	----	394663	394663	----	2.5000	ng/mL	
PFHpA	Auto	6.152	0.030	-0.018	6620	394663	13C4-PFHpA_IS	0.0319	ng/mL	
DONA	ND(W/B)	----	----	----	----	333324	13C3-HFPO-DA_IS	----	ng/mL	
13C2-6_2 FTS_IS	Auto	6.810	0.044	----	176243	176243	----	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.810	0.044	-0.289	176243	135149	18O2-PFHxS_IS	6.6549	ng/mL	
6_2 FTS	MI R1 R2	6.807	0.042	-0.003	455	176243	13C2-6_2 FTS_IS	0.0068	ng/mL	
13C4-PFOA_IS	Auto	7.123	0.043	----	31311	31311	----	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.122	0.044	----	406580	406580	----	2.5000	ng/mL	
13C8-PFOA	Auto	7.122	0.044	0.000	406580	31311	13C4-PFOA_IS	2.7227	ng/mL	
PFOA	Auto	7.121	0.040	-0.001	5294	406580	13C8-PFOA_IS	0.0190	ng/mL	
13C3-PFHxS	Auto	7.098	0.050	-0.001	140188	135149	18O2-PFHxS_IS	2.9595	ng/mL	
13C3-PFHxS_IS	Auto	7.098	0.050	----	140188	140188	----	2.5000	ng/mL	
PFHxS	M	7.104	0.056	0.006	1157	140188	13C3-PFHxS_IS	0.0189	ng/mL	IRr
18O2-PFHxS_IS	Auto	7.099	0.051	----	135149	135149	----	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.972	0.043	----	212524	212524	----	1.2500	ng/mL	
13C9-PFNA	Auto	7.972	0.043	0.000	212524	187872	13C5-PFNA_IS	1.5282	ng/mL	
13C5-PFNA_IS	Auto	7.972	0.042	----	187872	187872	----	1.2500	ng/mL	
PFNA	Auto	7.973	0.043	0.001	5900	212524	13C9-PFNA_IS	0.0229	ng/mL	
PFHpS	ND(W/B)	----	----	----	----	65072	13C8-PFOS_IS	----	ng/mL	
7_3 FTCA	M	7.950	0.021	2.958	692	345035	13C5-PFHxA_IS	0.0382	ng/mL	
13C2-8_2-FTS	Auto	8.426	0.038	1.327	141661	135149	18O2-PFHxS_IS	6.3003	ng/mL	
13C2-8_2-FTS_IS	Auto	8.426	0.038	----	141661	141661	----	5.0000	ng/mL	
8_2 FTS	ND(W/B)	----	----	----	----	141661	13C2-8_2-FTS_IS	----	ng/mL	
13C6-PFDA_IS	Auto	8.737	0.042	----	136630	136630	----	1.2500	ng/mL	
13C6-PFDA	Auto	8.737	0.042	0.000	136630	116900	13C2-PFDA_IS	1.4585	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_017 (continued)

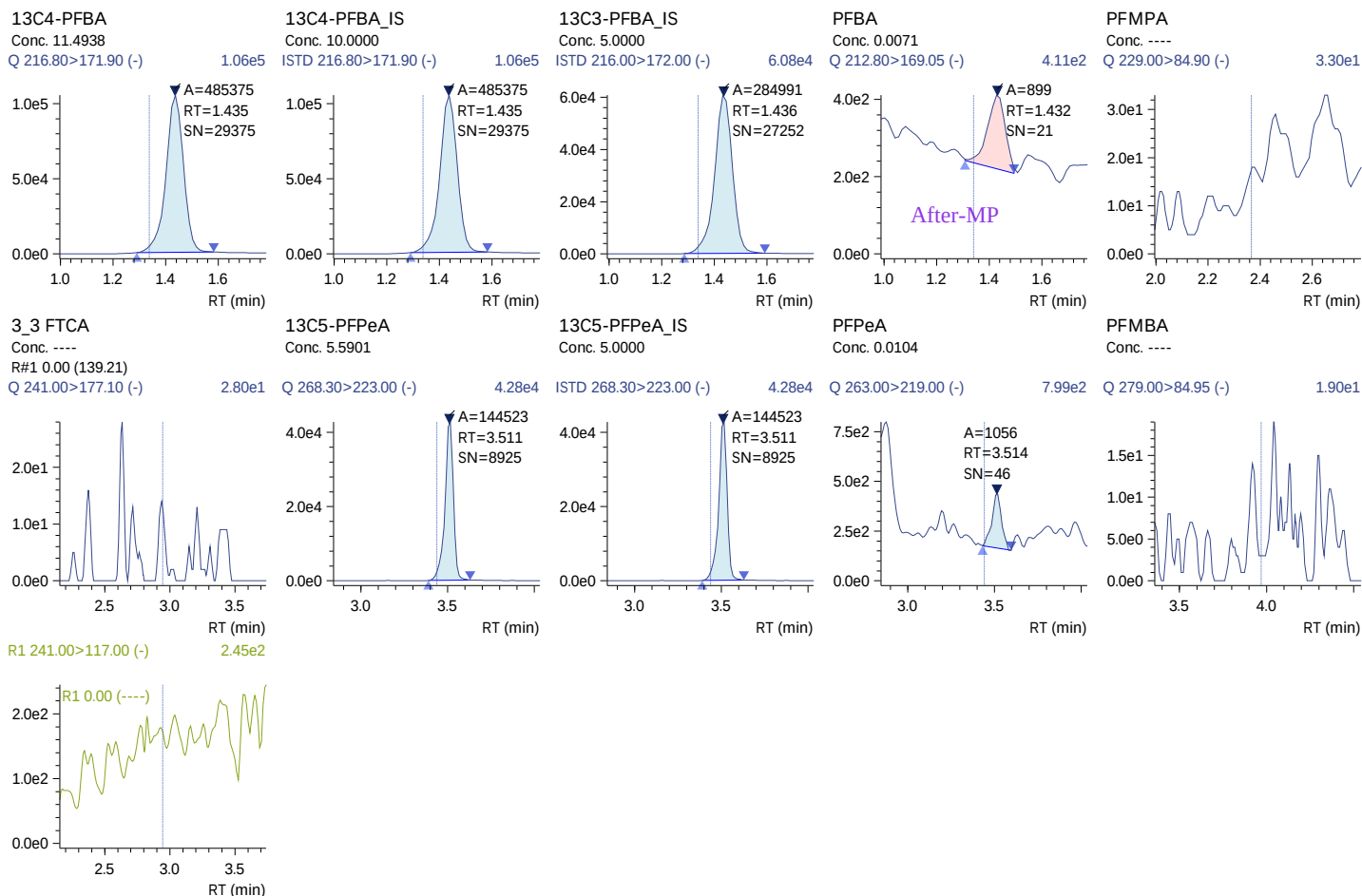
(Table continued from previous page)

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C2-PFDA_IS	Auto	8.737	0.041	----	116900	116900	----	1.2500	ng/mL	
PFDA	M	8.741	0.044	0.004	4955	136630	13C6-PFDA_IS	0.0429	ng/mL	
D3-NMeFOSAA_IS	Auto	8.872	0.038	----	443164	443164	----	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.872	0.038	0.038	443164	177652	13C4-PFOS_IS	6.1268	ng/mL	
13C8-PFOS_IS	Auto	8.835	0.049	----	65072	65072	----	2.5000	ng/mL	
13C8-PFOS	Auto	8.835	0.049	0.001	65072	177652	13C4-PFOS_IS	2.9105	ng/mL	
13C4-PFOS_IS	Auto	8.834	0.047	----	177652	177652	----	2.5000	ng/mL	
PFOS	ND(W/B)	----	----	----	----	65072	13C8-PFOS_IS	----	ng/mL	
NMeFOSAA	ND(W/B)	----	----	----	----	443164	D3-NMeFOSAA_IS	----	ng/mL	
D5-NetFOSAA_IS	Auto	9.204	0.040	----	375077	375077	----	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.204	0.040	0.370	375077	177652	13C4-PFOS_IS	6.5798	ng/mL	
NetFOSAA	ND(W/B)	----	----	----	----	375077	D5-NetFOSAA_IS	----	ng/mL	
9-CI-PF3ONS	ND(W/B)	----	----	----	----	333324	13C3-HFPO-DA_IS	----	ng/mL	
PFUnDA	MI R1 R2	9.458	0.037	-0.003	5343	196939	13C7-PFUnDA_IS	0.0177	ng/mL	
13C7-PFUnDA_IS	Auto	9.461	0.042	----	196939	196939	----	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.461	0.042	0.724	196939	116900	13C2-PFDA_IS	1.6919	ng/mL	
PFNS	ND(W/B)	----	----	----	----	65072	13C8-PFOS_IS	----	ng/mL	
10_2_FTS	M	9.835	0.040	1.409	86	141661	13C2-8_2-FTS_IS	0.0012	ng/mL	
13C2-PFDOA_IS	Auto	10.147	0.040	----	234742	234742	----	1.2500	ng/mL	
13C2-PFDOA	Auto	10.147	0.040	1.410	234742	116900	13C2-PFDA_IS	1.6893	ng/mL	
PFDOA	Auto	10.146	0.038	-0.001	4922	234742	13C2-PFDOA_IS	0.0091	ng/mL	
PFDS	ND(W/B)	----	----	----	----	65072	13C8-PFOS_IS	----	ng/mL	
PFTDA	Auto	10.802	0.038	-0.634	6351	160598	13C2-PFTDA_IS	0.0186	ng/mL	
11-CI-PF3OUdS	M	10.807	0.036	5.340	495	333324	13C3-HFPO-DA_IS	0.0021	ng/mL	
PFOSAm	M	11.185	0.035	0.026	151	168365	13C8-PFOSAm_IS	0.0026	ng/mL	
13C8-PFOSAm	Auto	11.159	0.004	2.325	168365	177652	13C4-PFOS_IS	2.9835	ng/mL	
13C8-PFOSAm_IS	Auto	11.159	0.004	----	168365	168365	----	2.5000	ng/mL	
PFTDA	Auto	11.436	0.040	0.000	4285	160598	13C2-PFTDA_IS	0.0158	ng/mL	
13C2-PFTDA	Auto	11.436	0.041	2.699	160598	116900	13C2-PFDA_IS	1.6375	ng/mL	
13C2-PFTDA_IS	Auto	11.436	0.041	----	160598	160598	----	1.2500	ng/mL	
PFDoS	ND(W/B)	----	----	----	----	65072	13C8-PFOS_IS	----	ng/mL	
D7-MeFOSE_IS	Auto	13.384	-0.002	----	413046	413046	----	25.0000	ng/mL	
D7-MeFOSE	Auto	13.384	-0.002	4.550	413046	177652	13C4-PFOS_IS	28.5113	ng/mL	
MeFOSE	ND(W/B)	----	----	----	----	413046	D7-MeFOSE_IS	----	ng/mL	
13C2-PFHxDA_IS	Auto	12.647	0.038	----	441114	441114	----	2.5000	ng/mL	
13C2-PFHxDA	Auto	12.647	0.038	3.910	441114	116900	13C2-PFDA_IS	3.3608	ng/mL	
PFHXDA	Auto	12.648	0.038	0.001	7026	441114	13C2-PFHxDA_IS	0.0295	ng/mL	
D3-MeFOSA	Auto	13.688	-0.002	4.854	42273	177652	13C4-PFOS_IS	2.8692	ng/mL	
D3-MeFOSA_IS	Auto	13.688	-0.002	----	42273	42273	----	2.5000	ng/mL	
MeFOSA	ND(W/B)	----	----	----	----	42273	D3-MeFOSA_IS	----	ng/mL	
D9-EtFOSE_IS	Auto	14.012	-0.001	----	501660	501660	----	25.0000	ng/mL	
D9-EtFOSE	Auto	14.012	-0.001	5.178	496826	177652	13C4-PFOS_IS	28.0247	ng/mL	
EtFOSE	ND(W/B)	----	----	----	----	501660	D9-EtFOSE_IS	----	ng/mL	
D5-EtFOSAm	Auto	14.366	0.000	5.532	59129	177652	13C4-PFOS_IS	2.9026	ng/mL	
D5-EtFOSAm_IS	Auto	14.366	0.000	----	59129	59129	----	2.5000	ng/mL	
EtFOSAm	ND(W/B)	----	----	----	----	59129	D5-EtFOSAm_IS	----	ng/mL	
PFODA	M	13.778	0.038	1.131	2339	441114	13C2-PFHxDA_IS	0.0493	ng/mL	

Flag ID key: IRr: Ion Ratio (Relative)



240130_017 (continued)



J:\LCMS08\Data\240130_1633_Curve\240130_1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_017 (continued)

13C2-4_2 FTS
Conc. 6.8008

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. ----
R#1 0.00 (32.10)
R#2 0.00 (32.10)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. ----
R#1 0.00 (44.81)
R#2 0.00 (44.81)

Q 329.10>80.90 (-)

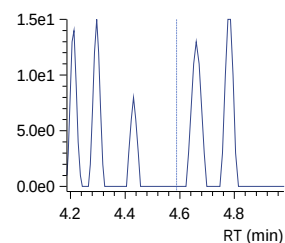
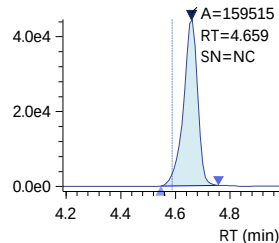
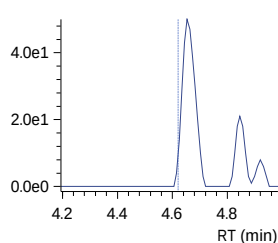
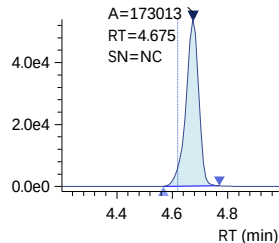
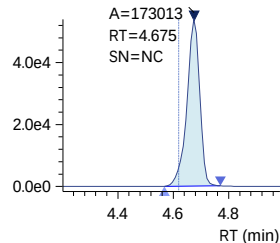
5.40e4 ISTD 329.10>80.90 (-)

5.40e4 Q 327.10>307.00 (-)

5.00e1 ISTD 302.10>79.90 (-)

4.47e4 Q 298.70>79.90 (-)

1.50e1

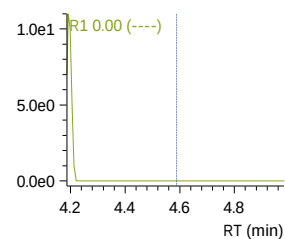
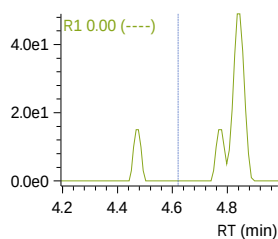


R1 327.10>80.90 (-)

4.90e1

R1 298.70>98.80 (-)

1.10e1

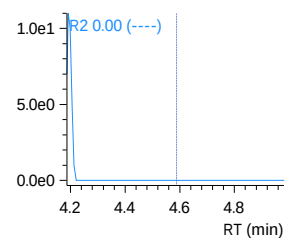
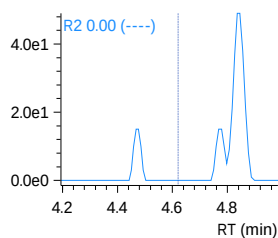


R2 327.10>80.90 (-)

4.90e1

R2 298.70>98.80 (-)

1.10e1





240130_017 (continued)

13C3-PFBS
Conc. 3.1634

NFDHA
Conc. ----
R#1 0.00 (35.54)
R#2 0.00 (35.54)

13C5-PFHxA
Conc. 2.9730

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

Q 302.10>79.90 (-)

4.47e4

Q 295.00>201.00 (-)

1.52e2

Q 318.00>273.00 (-)

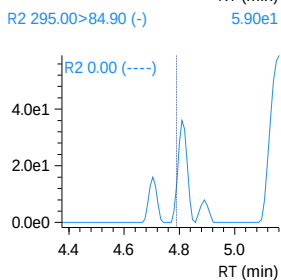
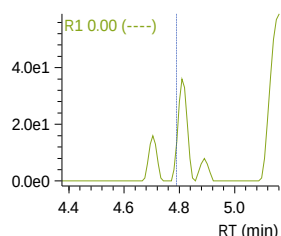
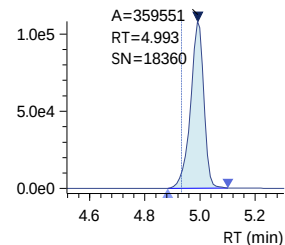
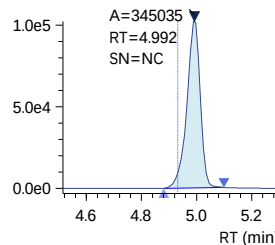
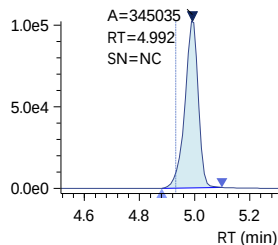
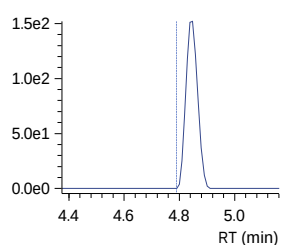
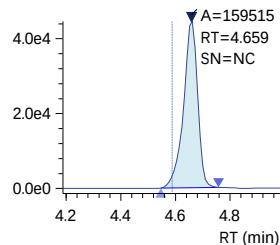
1.02e5

ISTD 318.00>273.00 (-)

1.02e5

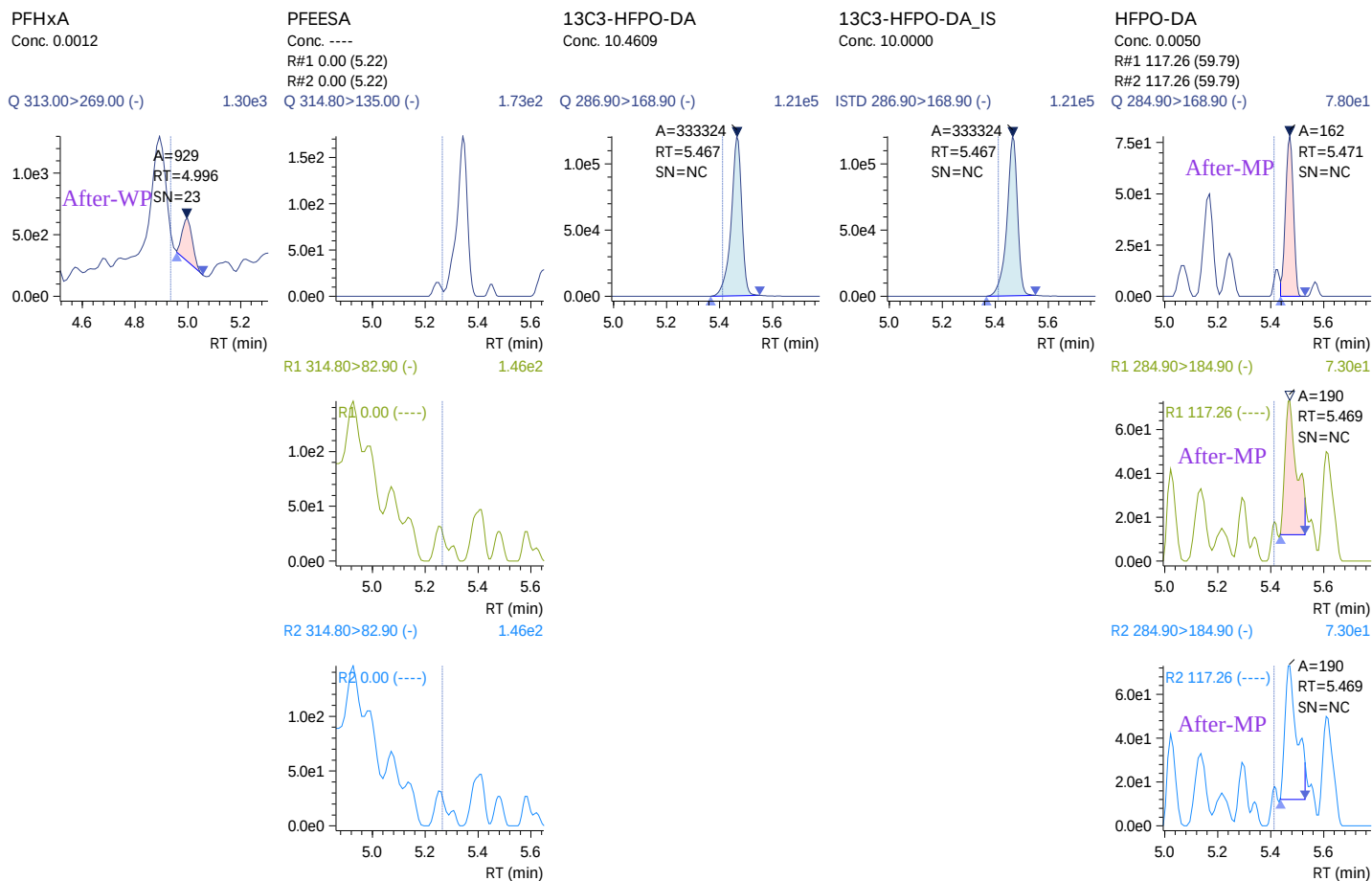
ISTD 315.10>270.00 (-)

1.08e5





240130_017 (continued)

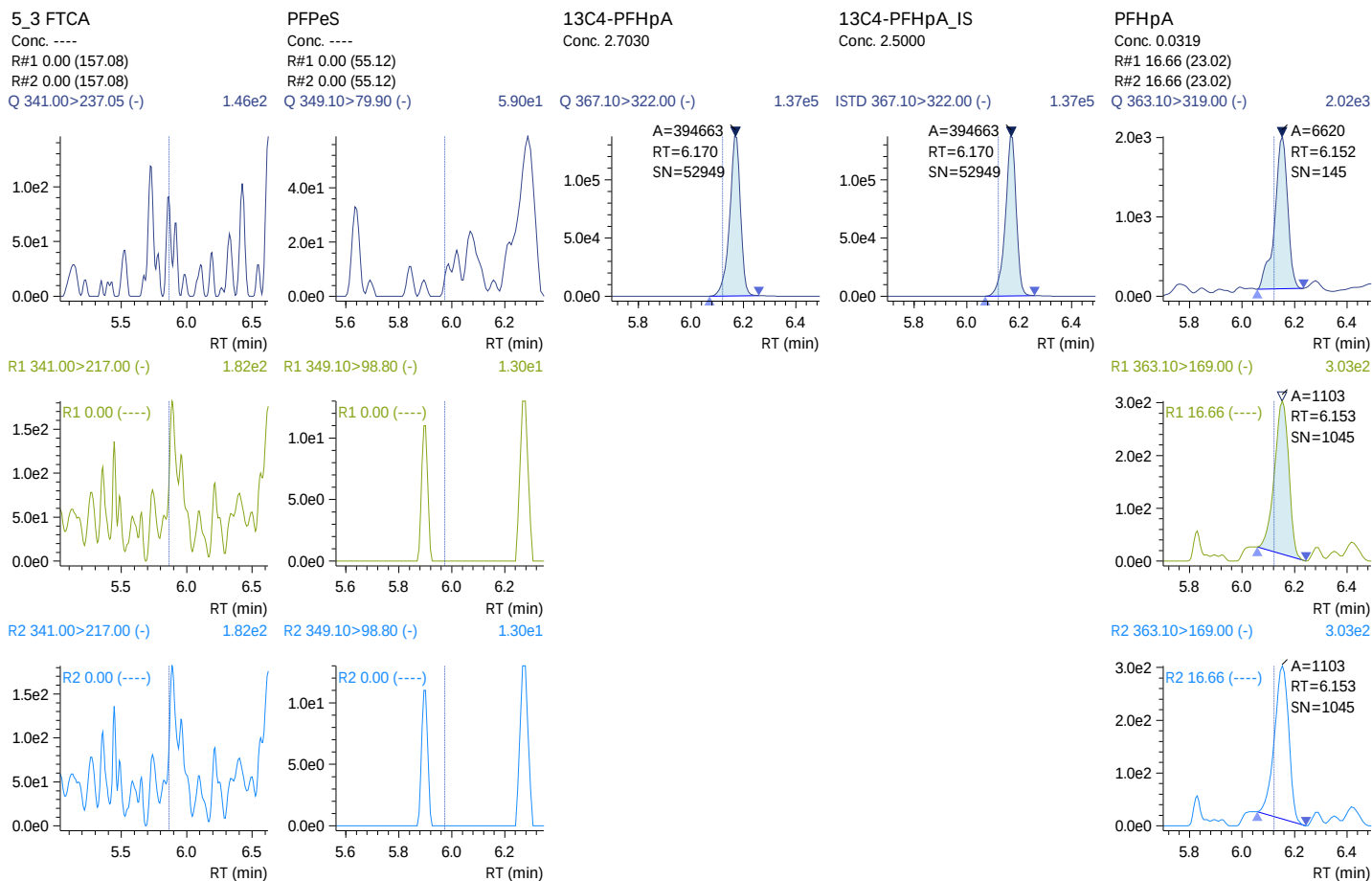


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_017 (continued)

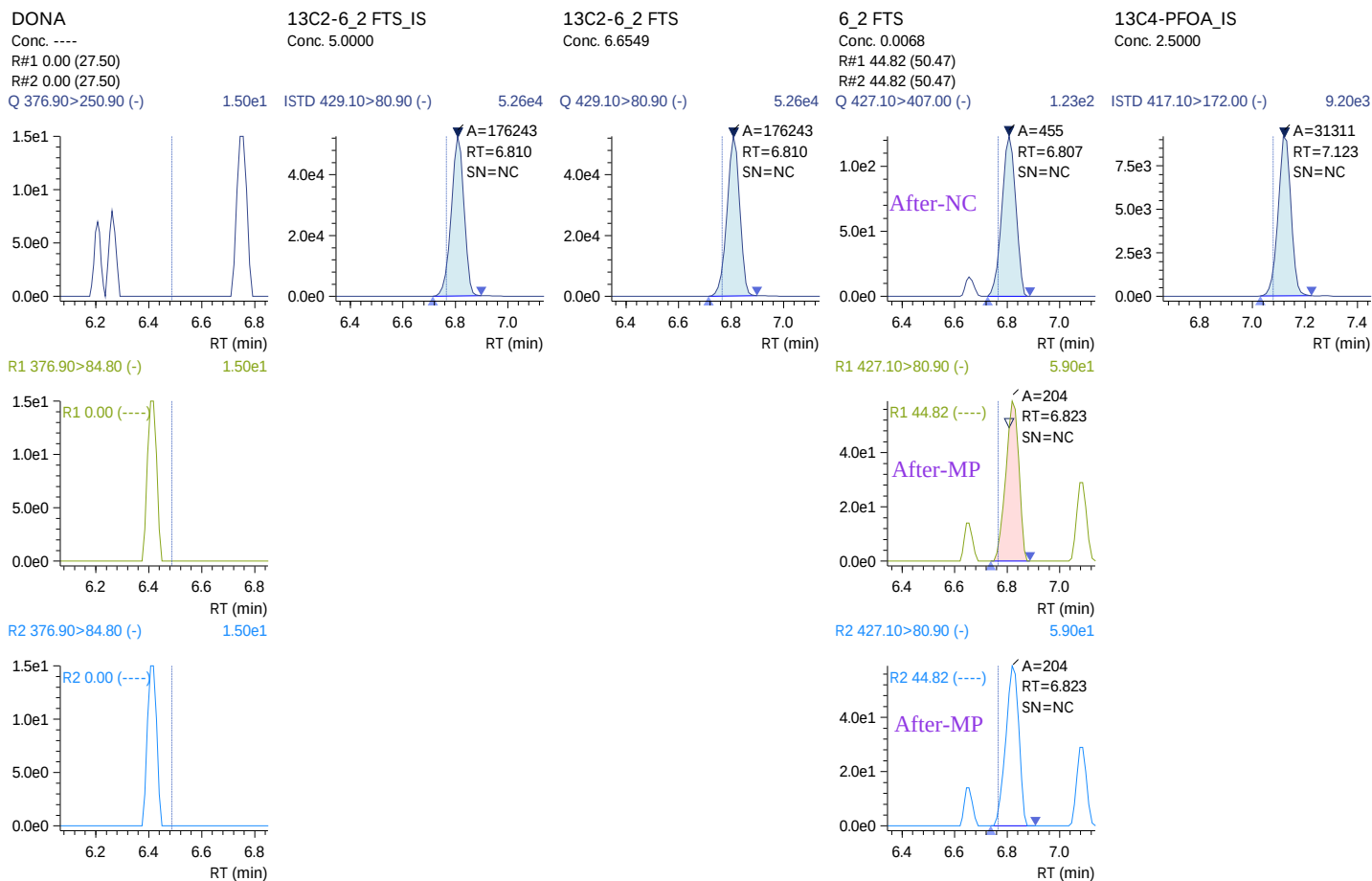


J:\LCMS08\Data\240130_1633_Curve\240130_1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_017 (continued)



J:\LCMS08\Data\240130_1633_Curve\240130_1633_Curve.damIp

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_017 (continued)

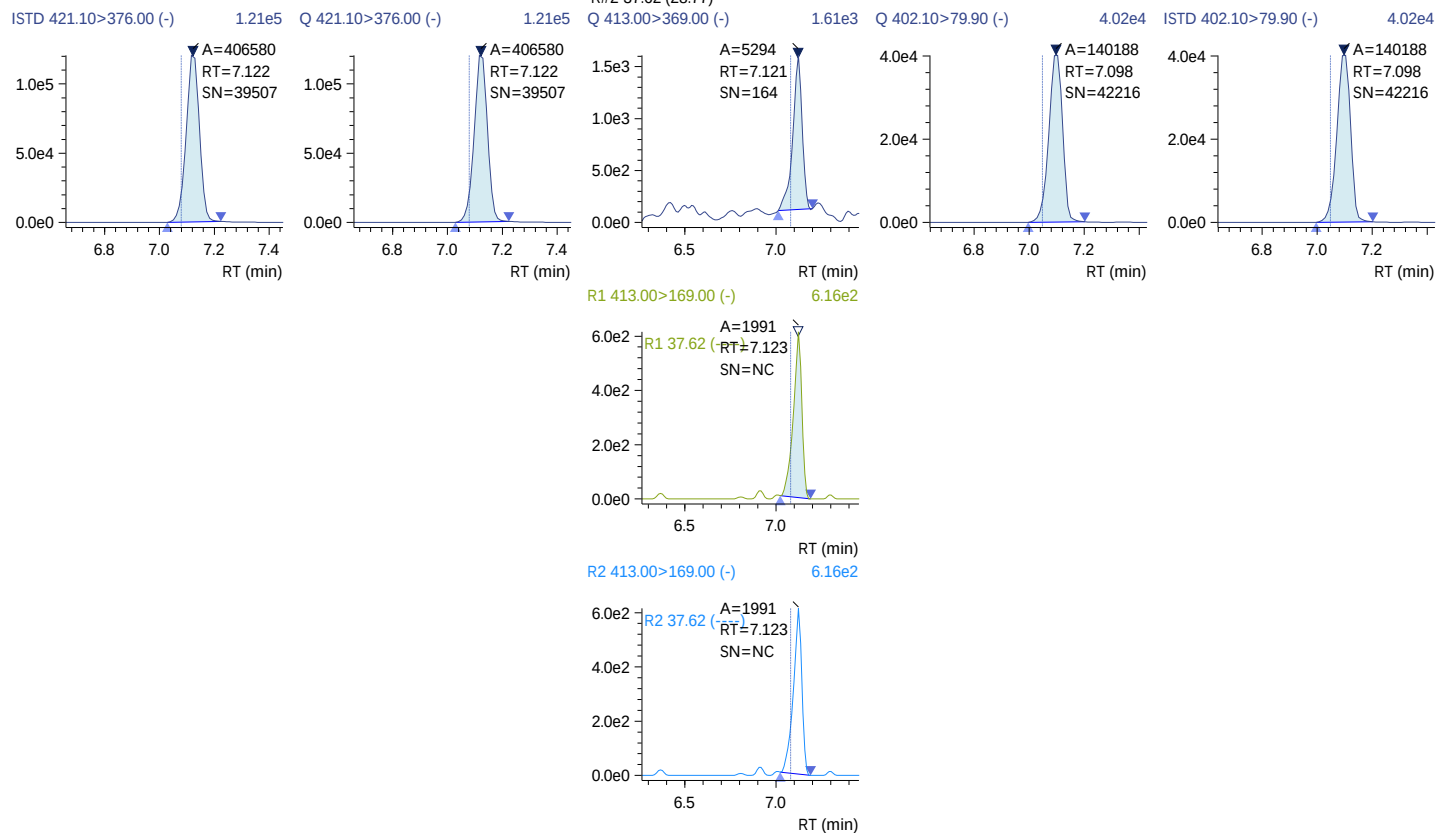
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.7227

PFOA
Conc. 0.0190
R#1 37.62 (28.77)
R#2 37.62 (28.77)

13C3-PFHxS
Conc. 2.9595

13C3-PFHxS_IS
Conc. 2.5000

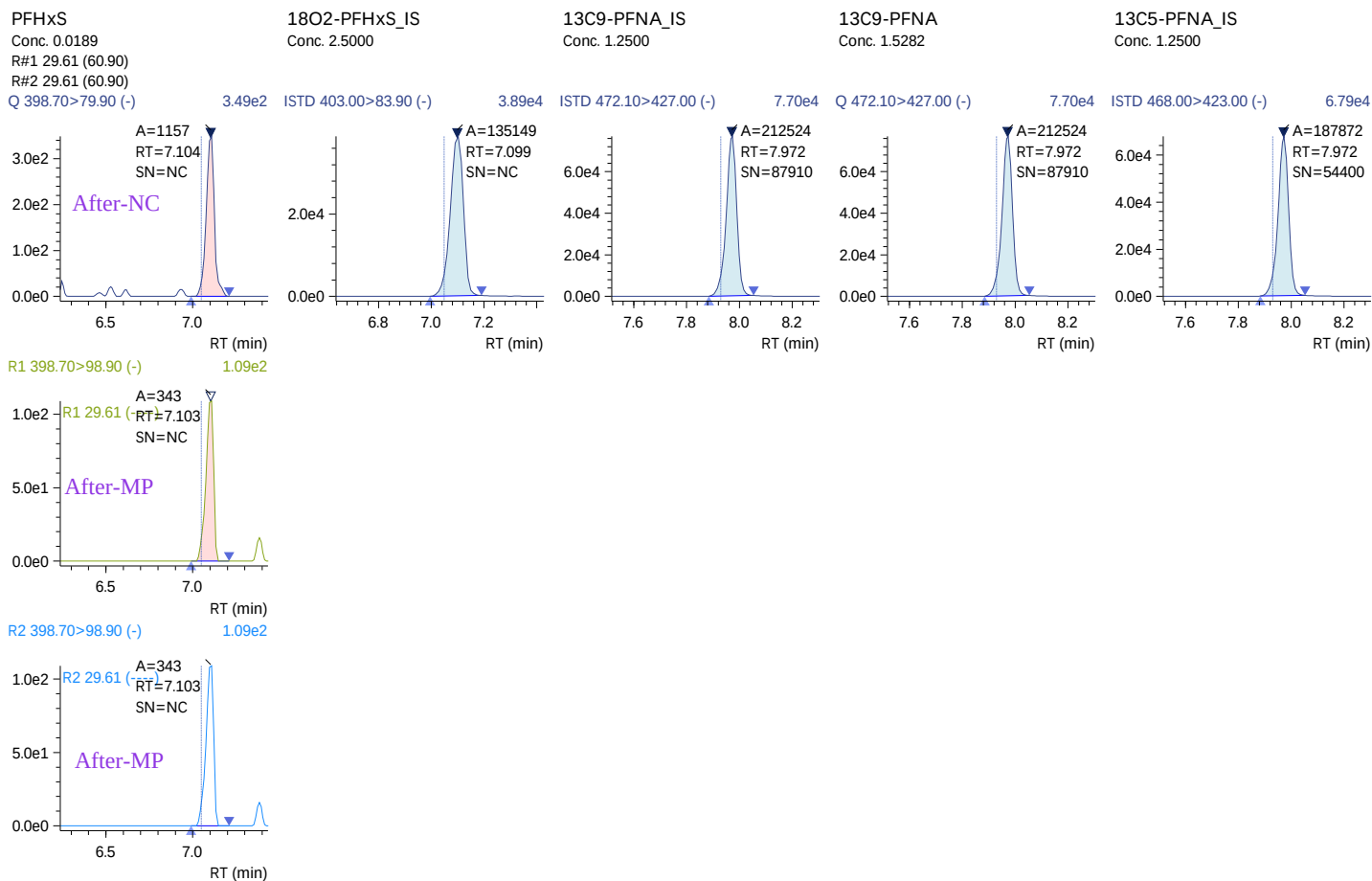


J:\LCMS08\Data\240130_1633_Curve\240130_1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_017 (continued)

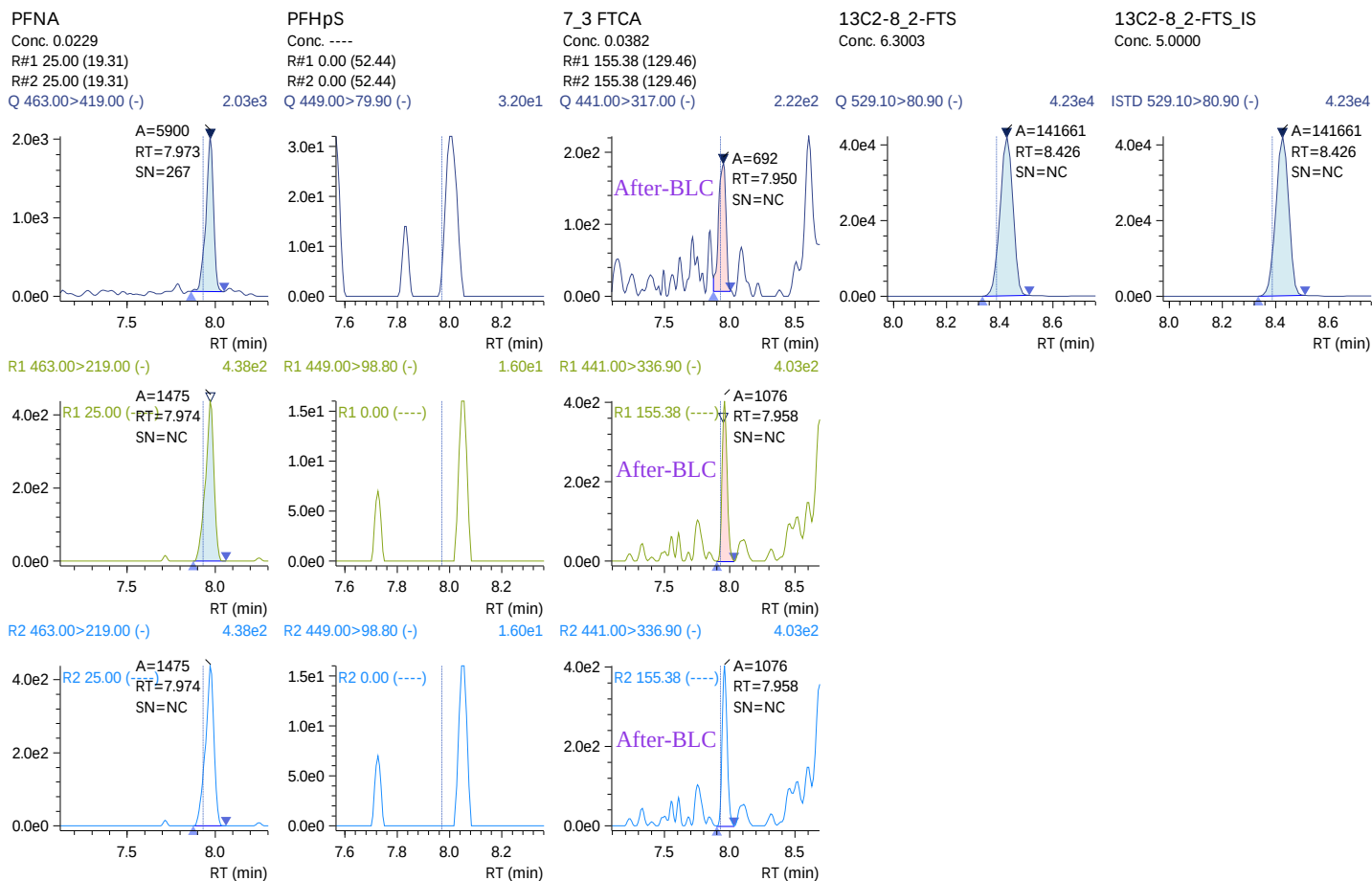


J:\LCMS08\Data\240130_1633_Curve\240130_1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_017 (continued)

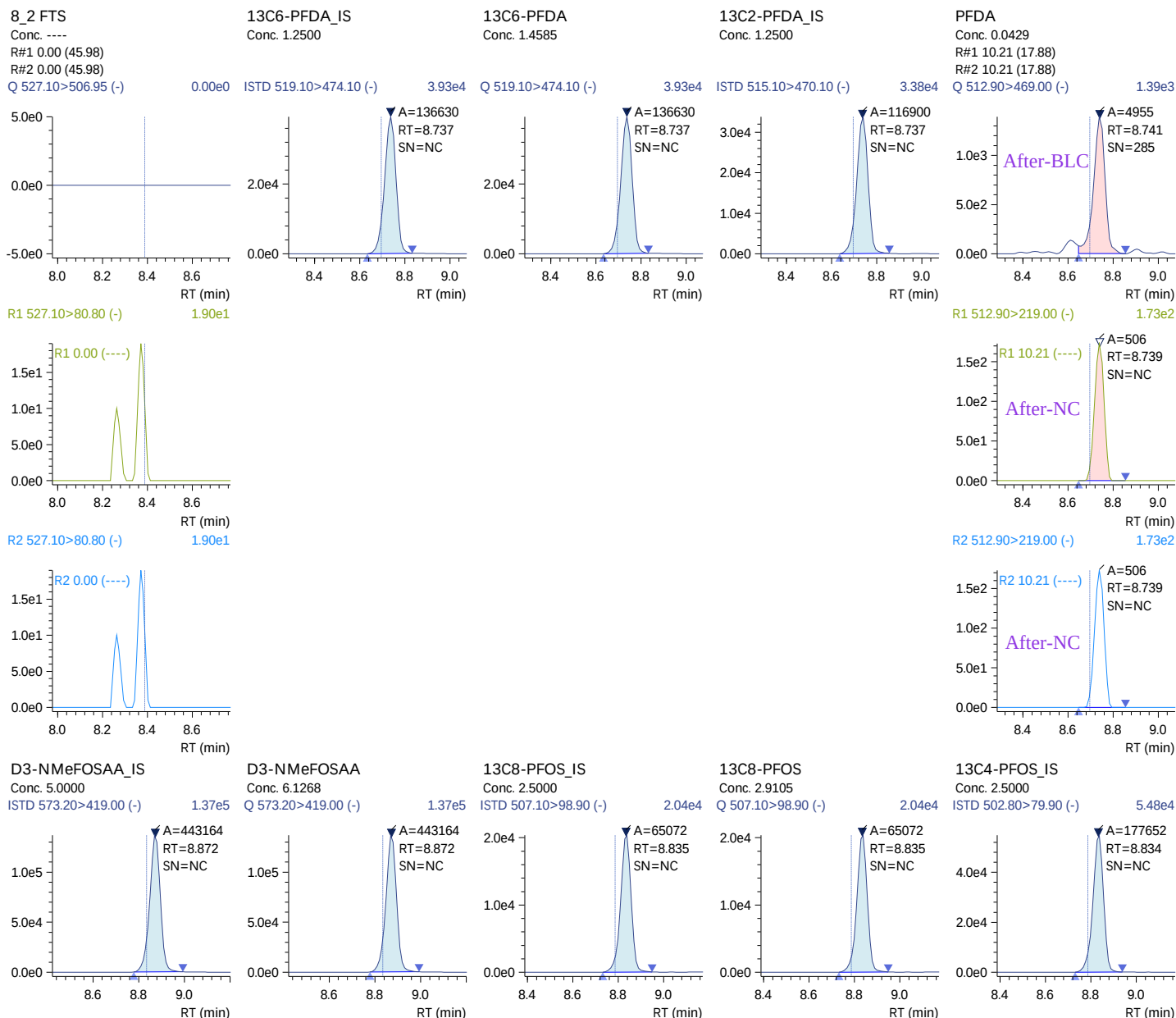


J:\LCMS08\Data\240130_1633_Curve\240130_1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_017 (continued)

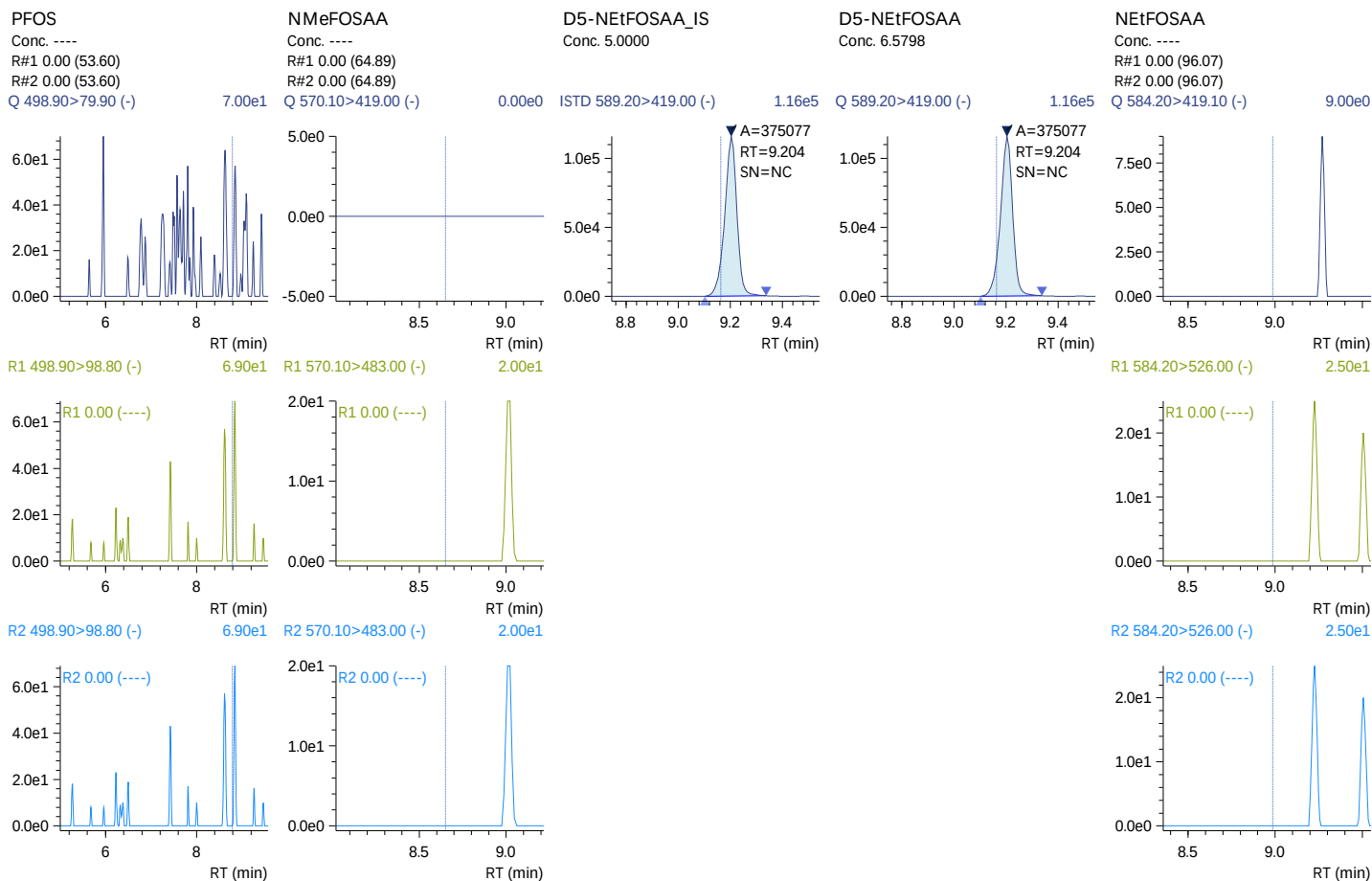


J:\LCMS08\Data\240130_1633_Curve\240130_1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_017 (continued)



J:\LCMS08\Data\240130_1633_Curve\240130_1633_Curve.damIp

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_017 (continued)

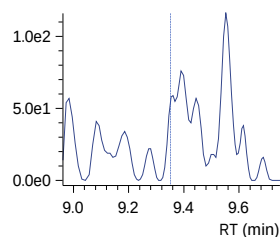
9-Cl-PF3ONS

Conc. ----

R#1 0.00 (30.95)

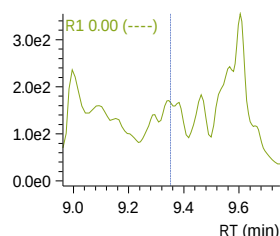
R#2 0.00 (30.95)

Q 530.80>351.00 (-)



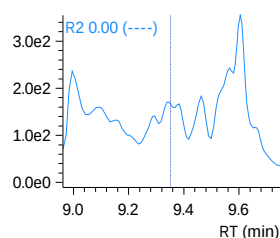
R1 532.80>353.00 (-)

3.55e2



R2 532.80>353.00 (-)

3.55e2



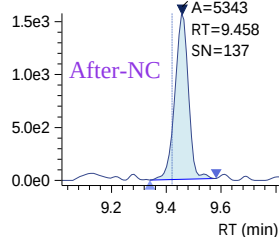
PFUnDA

Conc. 0.0177

R#1 10.44 (11.01)

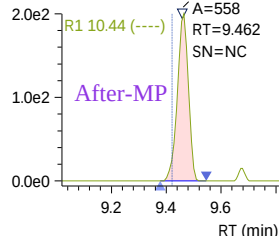
R#2 10.44 (11.01)

Q 563.10>519.00 (-)



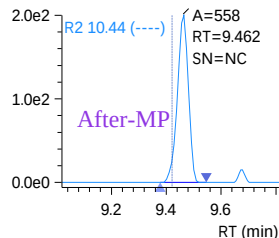
R1 563.10>269.10 (-)

2.00e2



R2 563.10>269.10 (-)

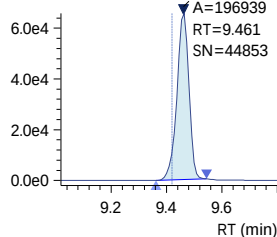
2.00e2



13C7-PFUnDA_IS

Conc. 1.2500

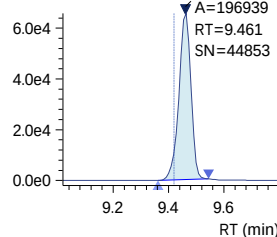
ISTD 570.00>525.10 (-)



13C7-PFUnDA

Conc. 1.6919

Q 570.00>525.10 (-)



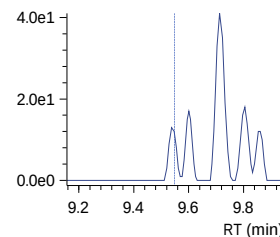
PFNS

Conc. ----

R#1 0.00 (60.44)

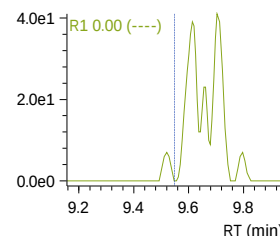
R#2 0.00 (60.44)

Q 548.80>79.90 (-)



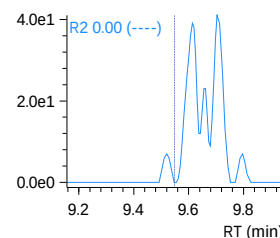
R1 548.80>98.80 (-)

4.10e1



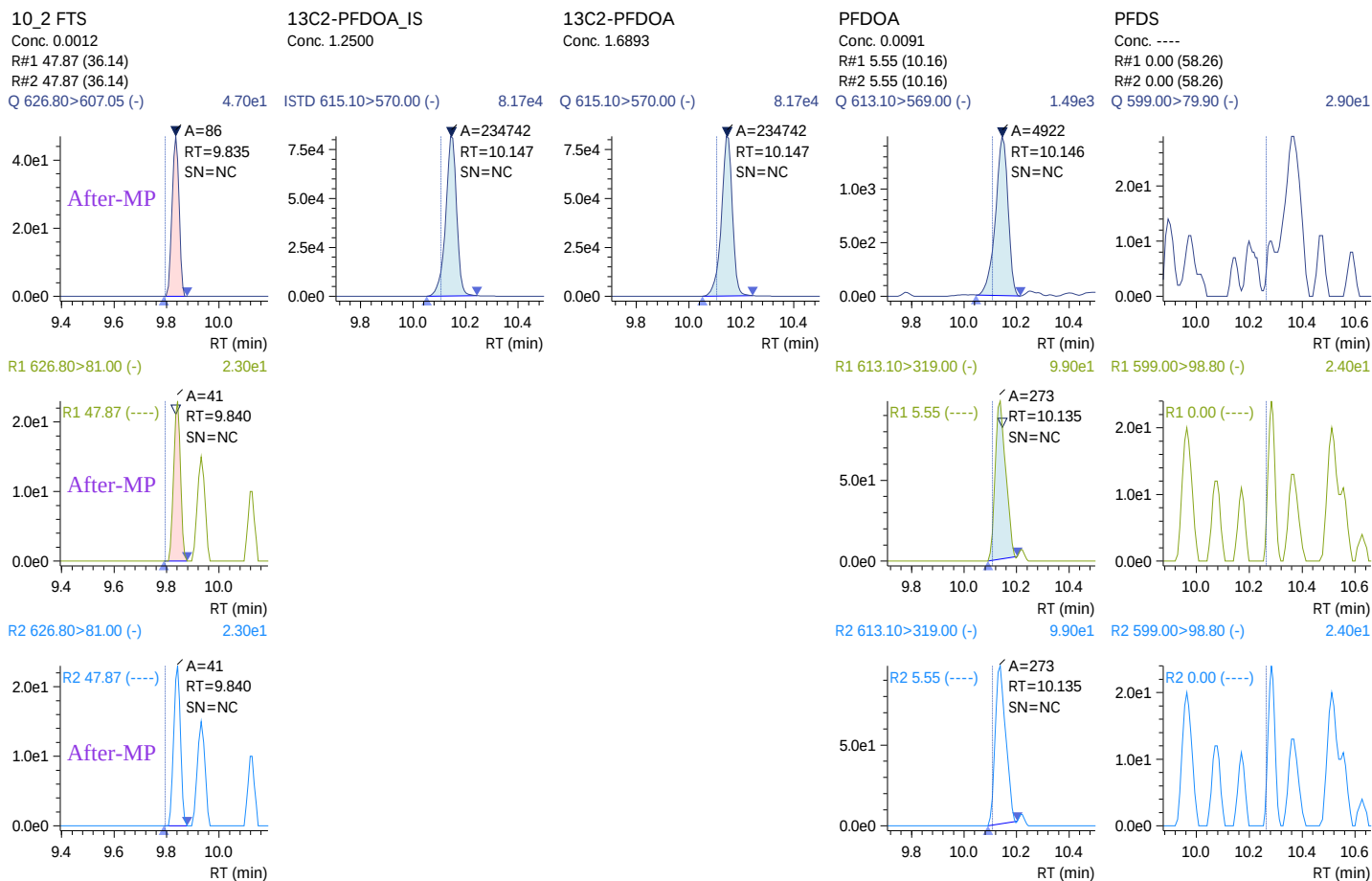
R2 548.80>98.80 (-)

4.10e1





240130_017 (continued)

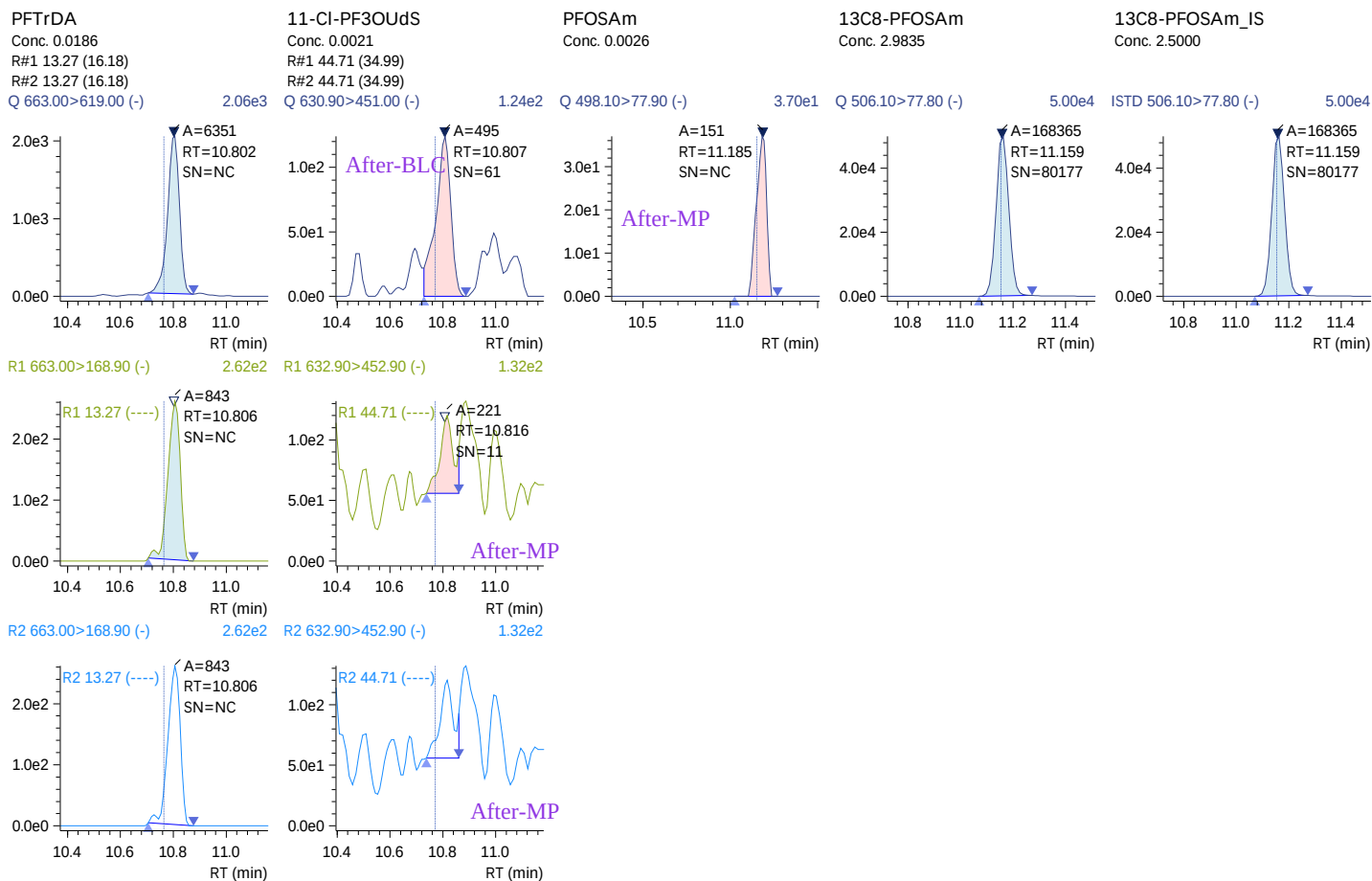


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_017 (continued)

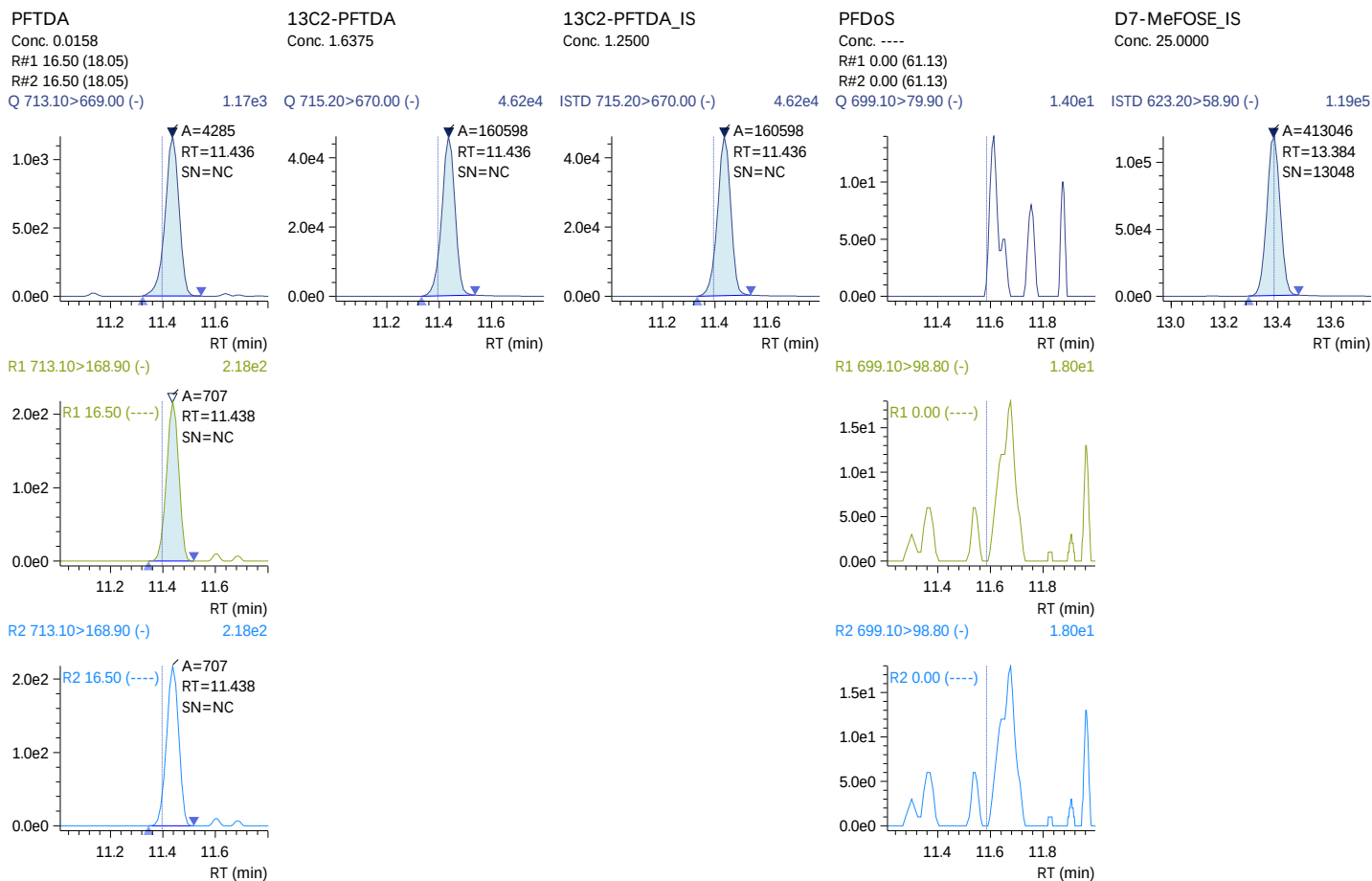


J:\LCMS08\Data\240130_1633_Curve\240130_1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_017 (continued)





240130_017 (continued)

D7-MeFOSE
Conc. 28.5113

MeFOSE
Conc. ----

13C2-PFHXA_IS
Conc. 2.5000

13C2-PFHXA
Conc. 3.3608

PFHXA
Conc. 0.0295
R#1 12.30 (11.66)
R#2 12.30 (11.66)

Q 623.20>58.90 (-)

1.19e5

Q 616.10>59.00 (-)

1.19e2

ISTD 815.00>770.05 (-)

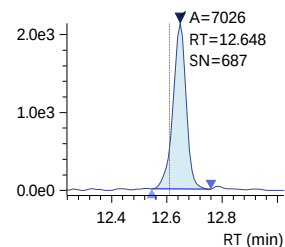
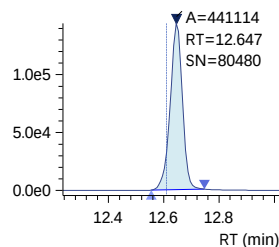
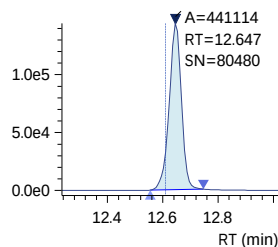
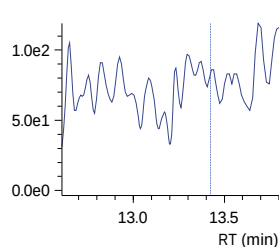
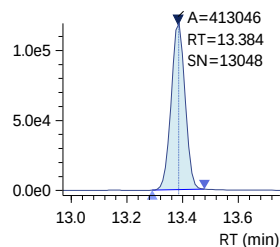
1.44e5

Q 815.00>770.05 (-)

1.44e5

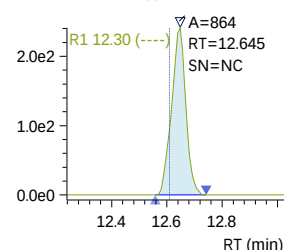
Q 813.00>768.95 (-)

2.14e3



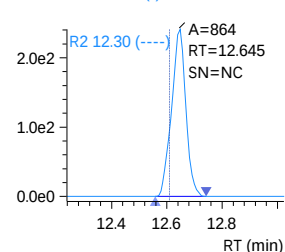
R1 813.00>218.95 (-)

2.41e2



R2 813.00>218.95 (-)

2.41e2





240130_017 (continued)

D3-MeFOSA
Conc. 2.8692

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. ----
R#1 0.00 (160.44)
R#2 0.00 (160.44)

D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 28.0247

Q 515.00>219.00 (-)

1.24e4

ISTD 515.00>219.00 (-)

1.24e4

Q 511.90>219.00 (-)

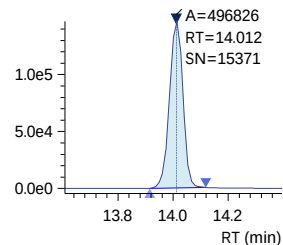
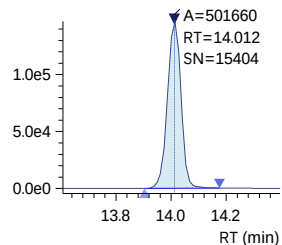
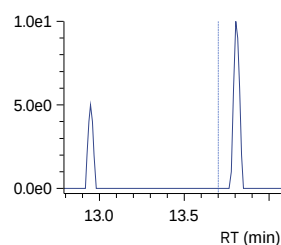
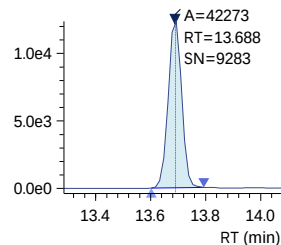
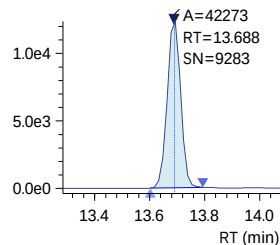
1.00e1

ISTD 639.20>58.90 (-)

1.47e5

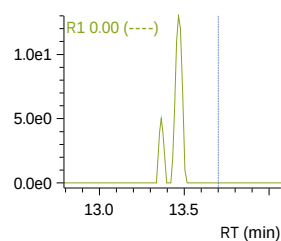
Q 639.20>58.90 (-)

1.47e5



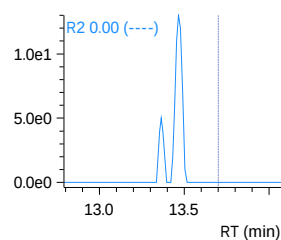
R1 511.90>169.00 (-)

1.30e1



R2 511.90>169.00 (-)

1.30e1





240130_017 (continued)

EtFOSE
Conc. ----

D5-EtFOSAm
Conc. 2.9026

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. ----

PFODA

Conc. 0.0493

R#1 26.95 (36.03)

R#2 26.95 (36.03)

Q 630.00>59.00 (-)

9.10e1

Q 531.10>219.00 (-)

1.83e4

ISTD 531.10>219.00 (-)

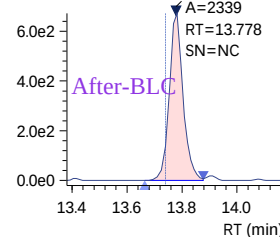
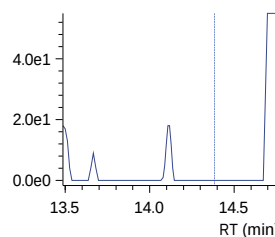
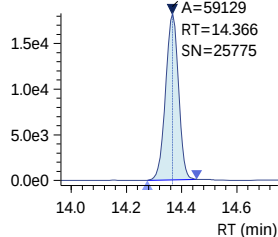
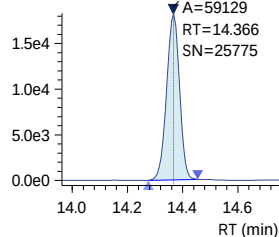
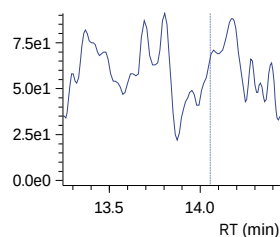
1.83e4

Q 526.00>219.00 (-)

5.50e1

Q 913.00>868.65 (-)

6.72e2

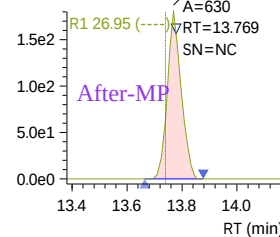
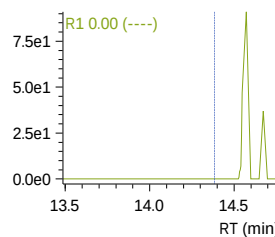


R1 526.00>169.00 (-)

9.10e1

R1 913.00>169.00 (-)

1.80e2

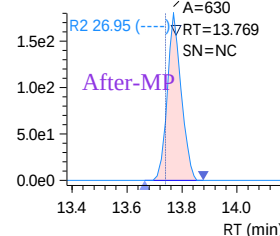
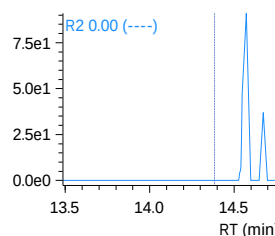


R2 526.00>169.00 (-)

9.10e1

R2 913.00>169.00 (-)

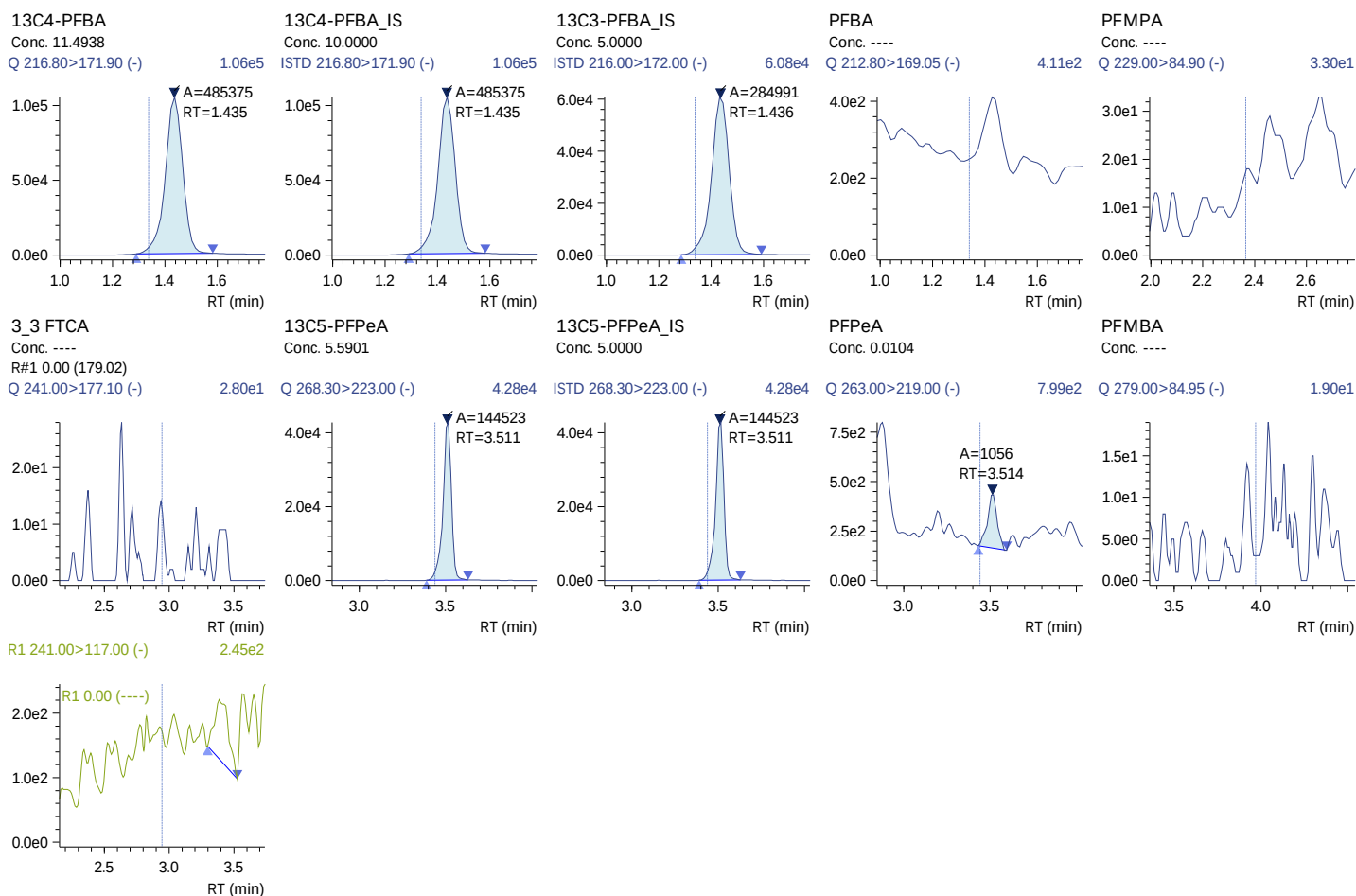
1.80e2





240130_017

Sample ID: 1633 CCB
Date Acquired: 1/30/2024 8:55:40 PM
Acquired by: System Administrator
Data File: 240130_017
Vial: 54 | Inj. Volume: 10.0000uL | Tray: 1





240130_017 (continued)

13C2-4_2 FTS
 Conc. 6.8008

13C2-4_2 FTS_IS
 Conc. 5.0000

4_2 FTS
 Conc. ----
 R#1 0.00 (24.69)
 R#2 0.00 (0.00)

13C3-PFBS_IS
 Conc. 2.5000

PFBS
 Conc. ----
 R#1 0.00 (52.67)
 R#2 0.00 (0.00)

Q 329.10>80.90 (-)

5.40e4 ISTD 329.10>80.90 (-)

5.40e4 Q 327.10>307.00 (-)

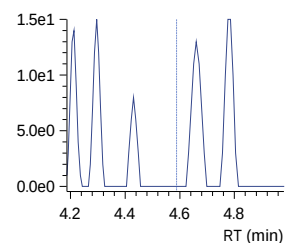
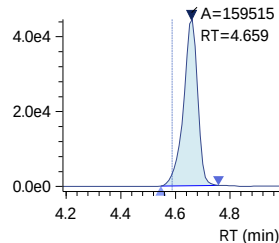
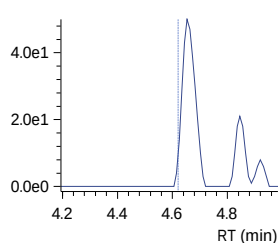
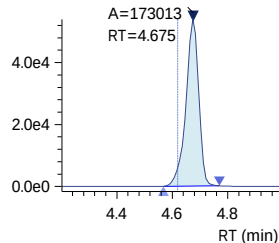
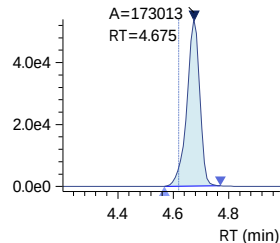
5.00e1

ISTD 302.10>79.90 (-)

4.47e4

Q 298.70>79.90 (-)

1.50e1

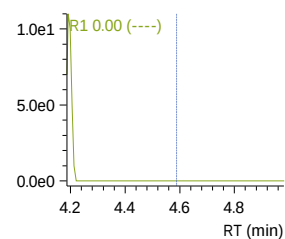
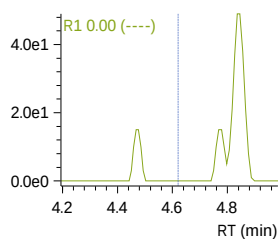


R1 327.10>80.90 (-)

4.90e1

R1 298.70>98.80 (-)

1.10e1

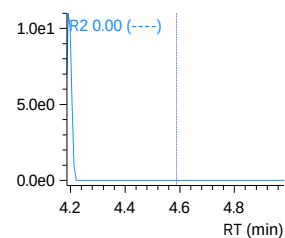
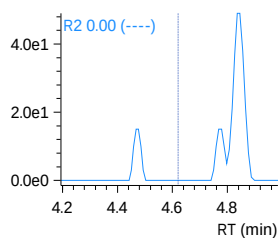


R2 327.10>80.90 (-)

4.90e1

R2 298.70>98.80 (-)

1.10e1





240130_017 (continued)

13C3-PFBS
 Conc. 3.1634

NFDHA
 Conc. ----
 R#1 0.00 (39.38)
 R#2 0.00 (0.00)

13C5-PFHxA
 Conc. 2.9730

13C5-PFHxA_IS
 Conc. 2.5000

13C2-PFHxA_IS
 Conc. 2.5000

Q 302.10>79.90 (-)

4.47e4

Q 295.00>201.00 (-)

1.52e2

Q 318.00>273.00 (-)

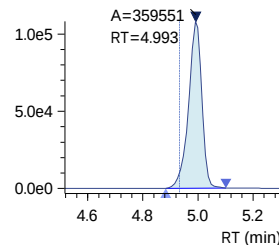
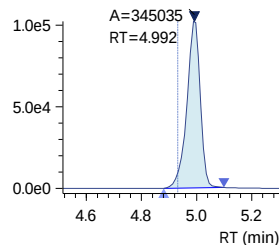
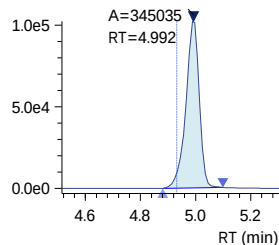
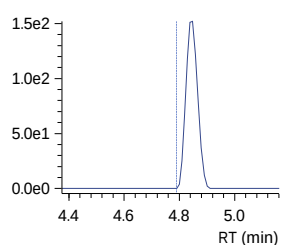
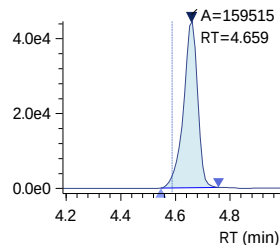
1.02e5

ISTD 318.00>273.00 (-)

1.02e5

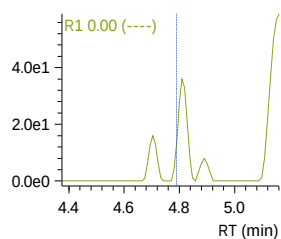
ISTD 315.10>270.00 (-)

1.08e5



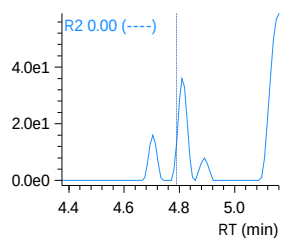
R1 295.00>84.90 (-)

5.90e1



R2 295.00>84.90 (-)

5.90e1





240130_017 (continued)

PFHxA
 Conc. 0.0722

PFEESA
 Conc. 0.0011
 R#1 0.00 (5.25)
 R#2 0.00 (0.00)

13C3-HFPO-DA
 Conc. 10.4609

13C3-HFPO-DA_IS
 Conc. 10.0000

HFPO-DA
 Conc. ----
 R#1 0.00 (69.48)
 R#2 0.00 (0.00)

Q 313.00>269.00 (-)

1.30e3

Q 314.80>135.00 (-)

1.73e2

Q 286.90>168.90 (-)

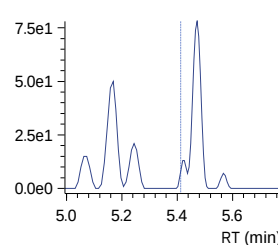
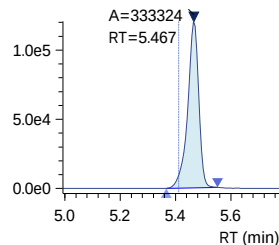
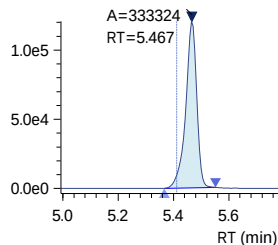
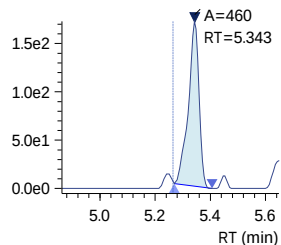
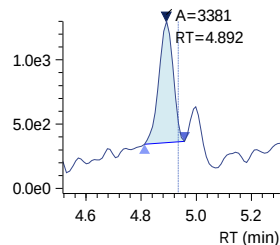
1.21e5

ISTD 286.90>168.90 (-)

1.21e5

Q 284.90>168.90 (-)

7.80e1

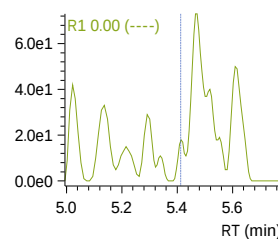
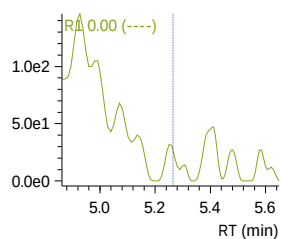


R1 314.80>82.90 (-)

1.46e2

R1 284.90>184.90 (-)

7.30e1

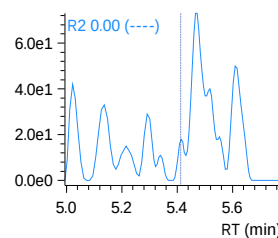
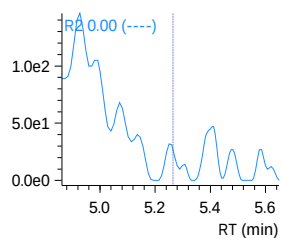


R2 314.80>82.90 (-)

1.46e2

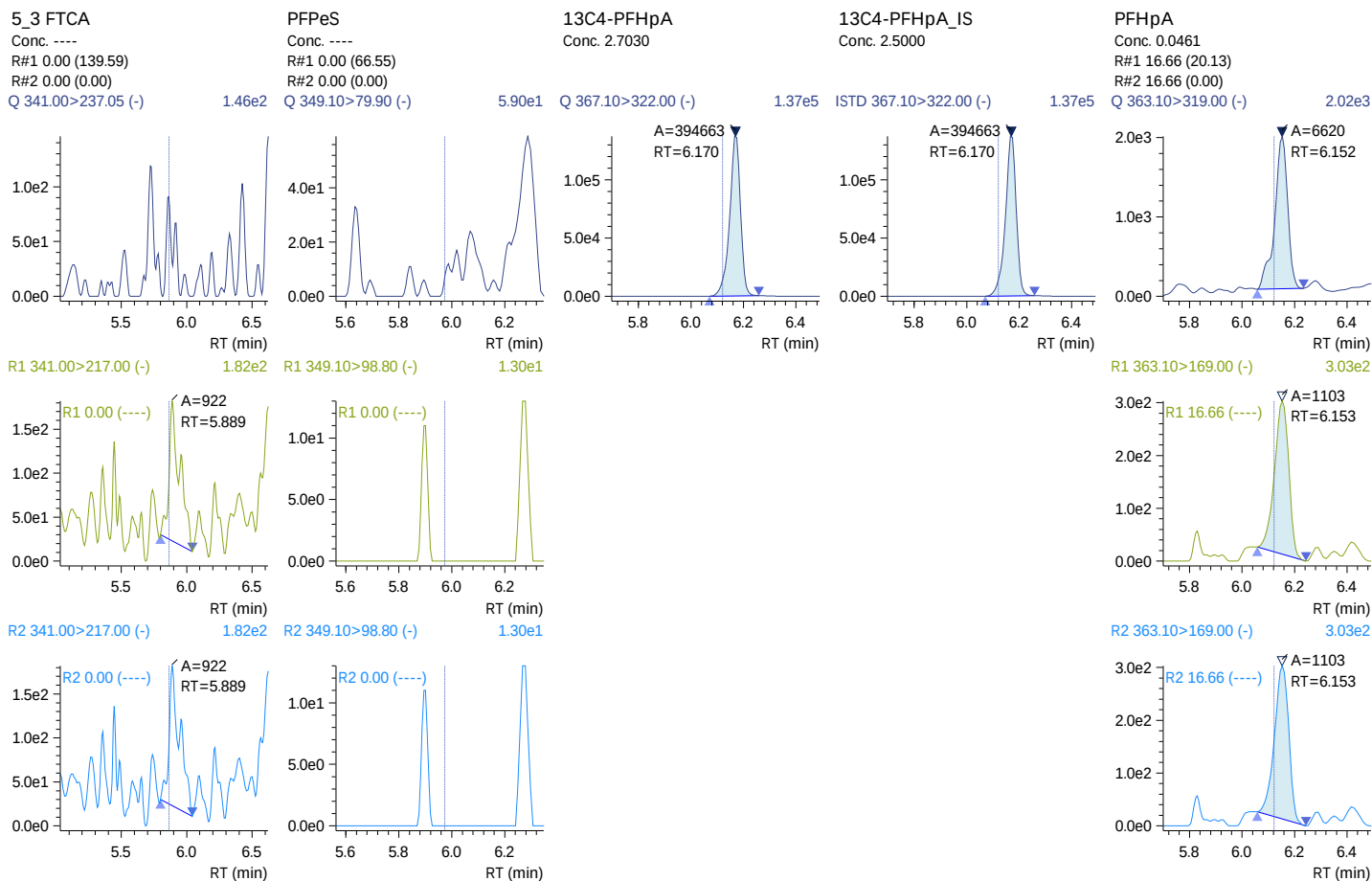
R2 284.90>184.90 (-)

7.30e1



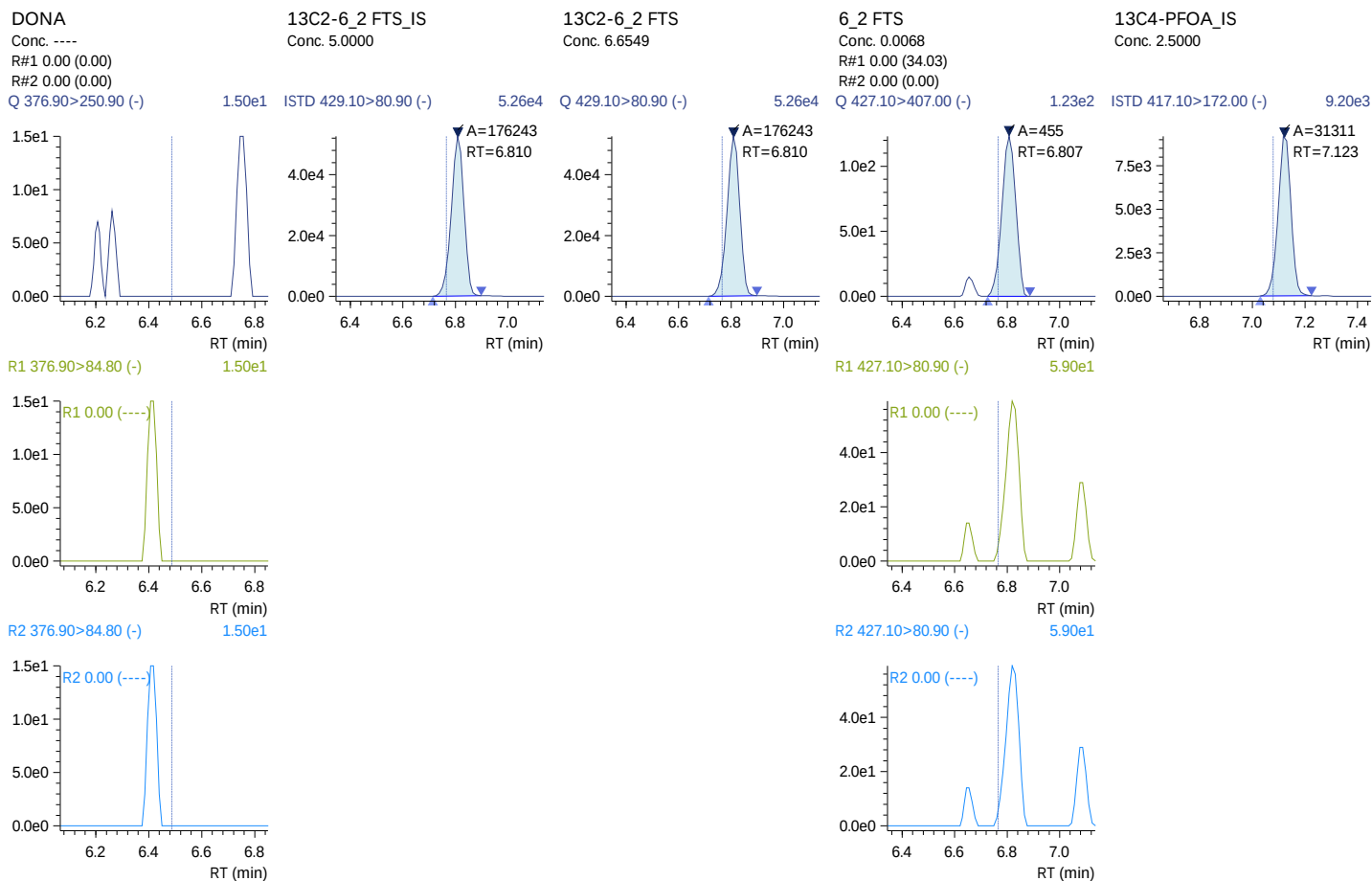


240130_017 (continued)





240130_017 (continued)





240130_017 (continued)

13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.7227

PFOA
Conc. 0.0078
R#1 37.62 (22.46)
R#2 37.62 (0.00)

13C3-PFHxS
Conc. 2.9595

13C3-PFHxS_IS
Conc. 2.5000

ISTD 421.10>376.00 (-)

1.21e5

Q 421.10>376.00 (-)

1.21e5

Q 413.00>369.00 (-)

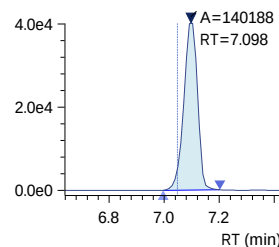
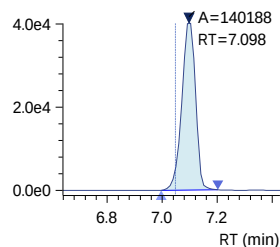
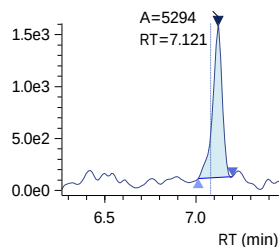
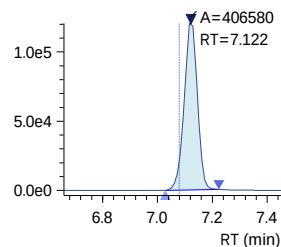
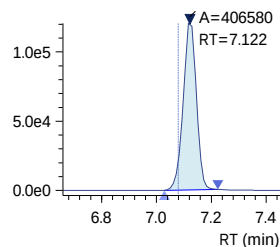
1.61e3

Q 402.10>79.90 (-)

4.02e4

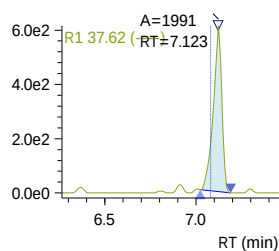
ISTD 402.10>79.90 (-)

4.02e4



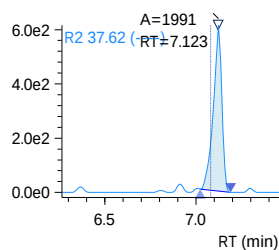
R1 413.00>169.00 (-)

6.16e2



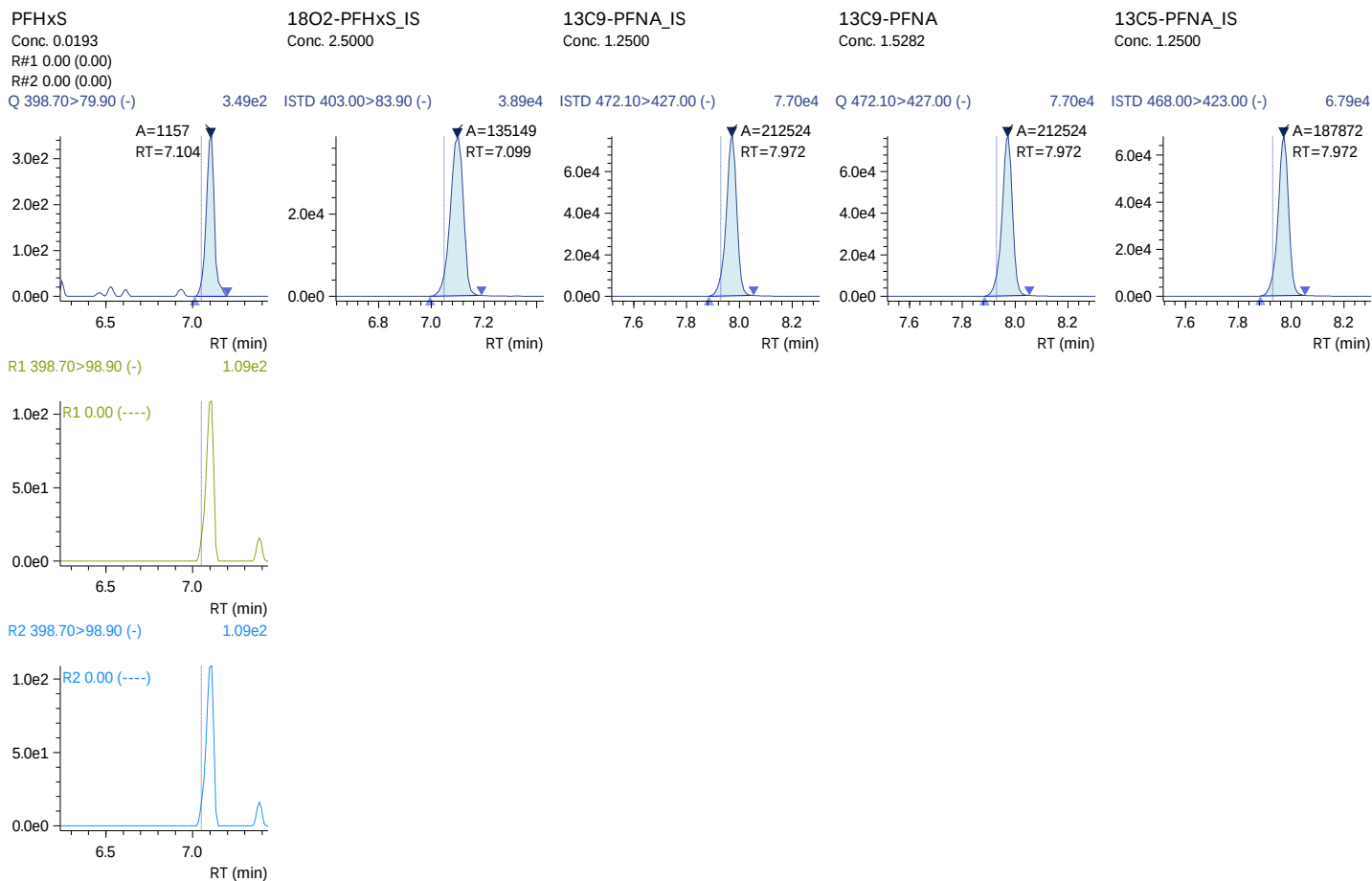
R2 413.00>169.00 (-)

6.16e2



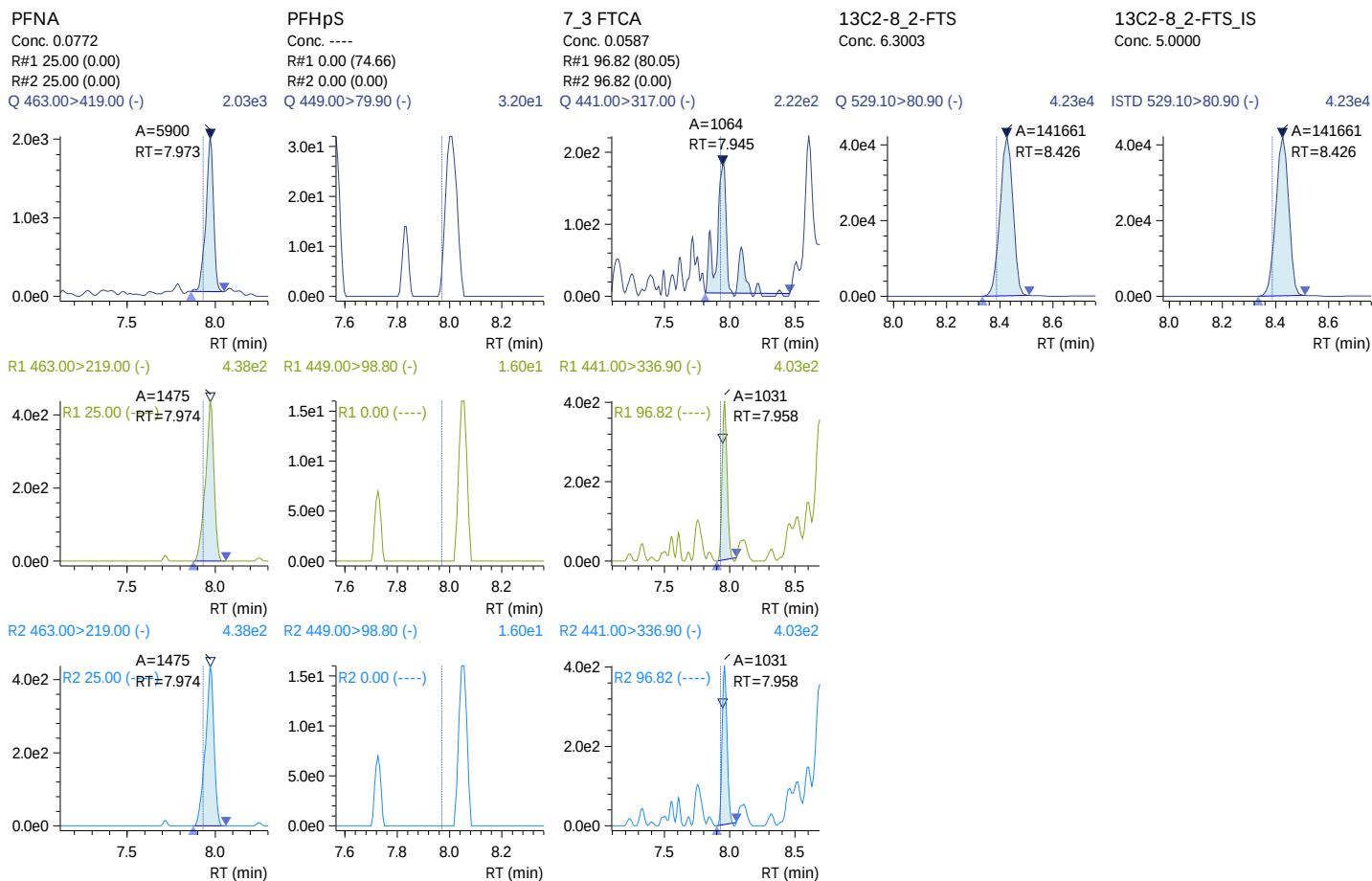


240130_017 (continued)



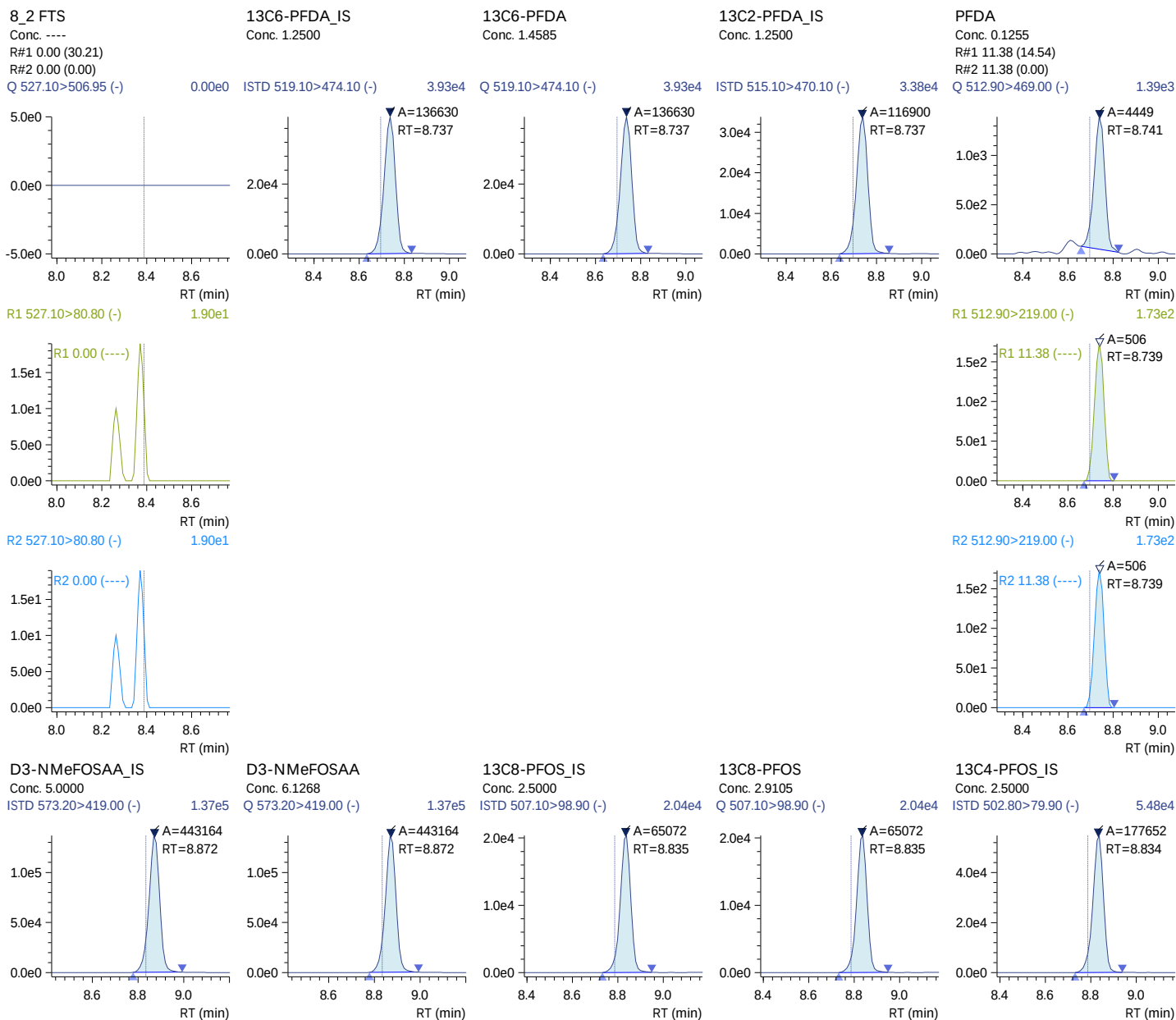


240130_017 (continued)



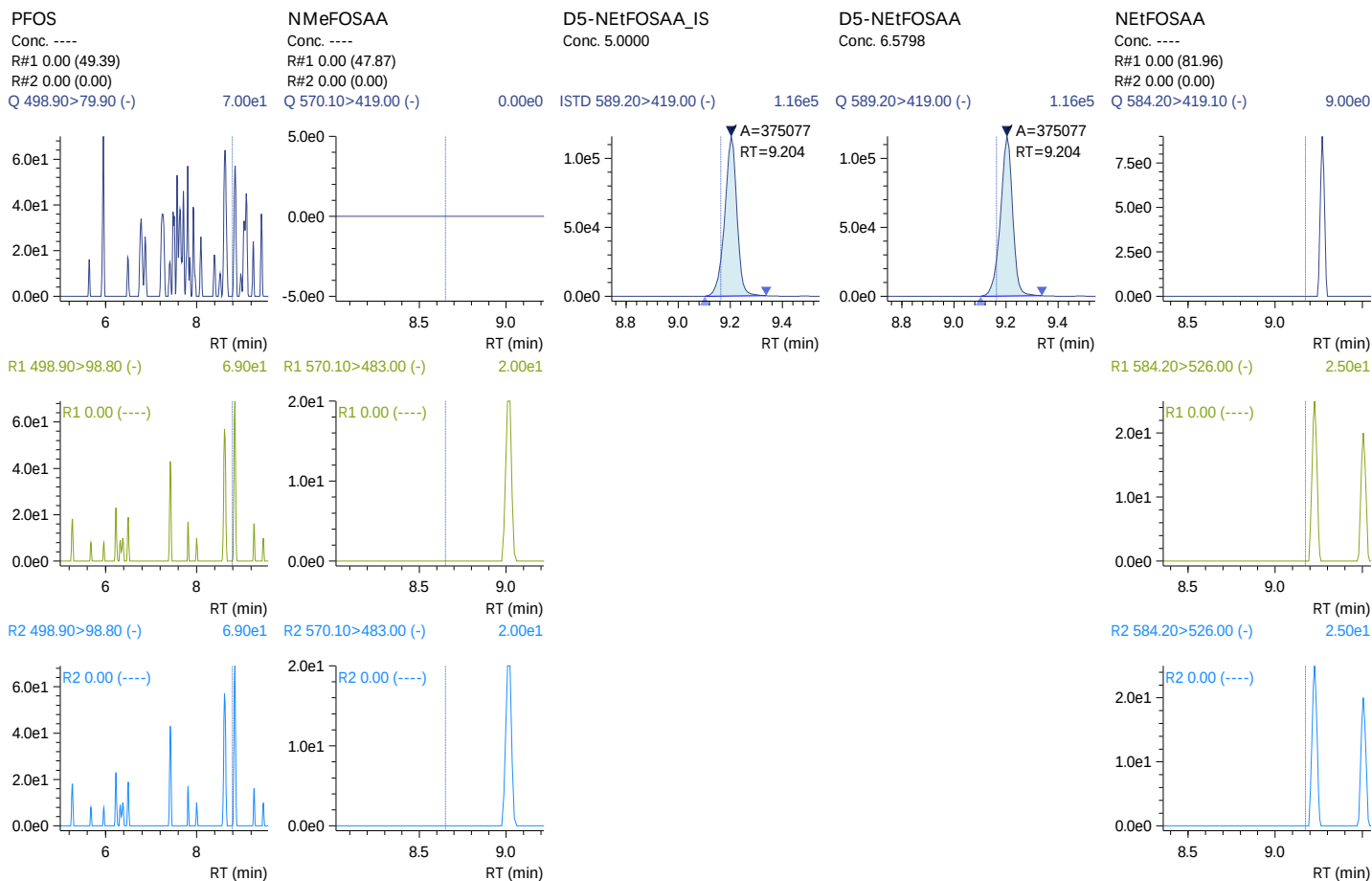


240130_017 (continued)





240130_017 (continued)

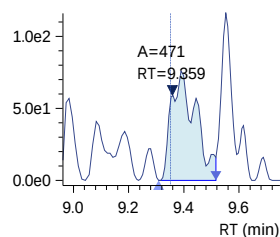




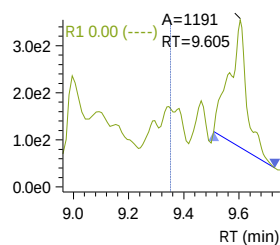
240130_017 (continued)

9-Cl-PF3ONS

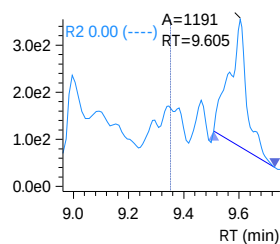
Conc. 0.0014
R#1 0.00 (31.39)
R#2 0.00 (0.00)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-) 3.55e2

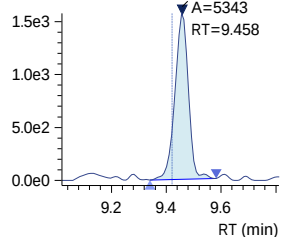


R2 532.80>353.00 (-) 3.55e2

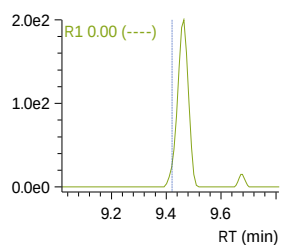


PFUnDA

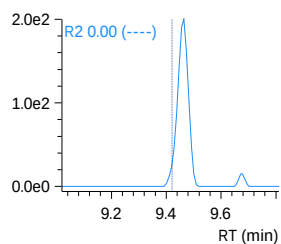
Conc. 0.0188
R#1 0.00 (12.59)
R#2 0.00 (0.00)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-) 2.00e2

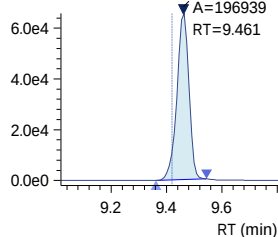


R2 563.10>269.10 (-) 2.00e2



13C7-PFUnDA_IS

Conc. 1.2500
ISTD 570.00>525.10 (-)



Q 570.00>525.10 (-) 6.58e4

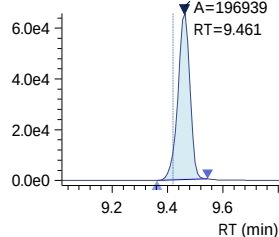


Q 570.00>525.10 (-) 6.58e4



13C7-PFUnDA

Conc. 1.6919
Q 570.00>525.10 (-)



Q 570.00>525.10 (-) 6.58e4

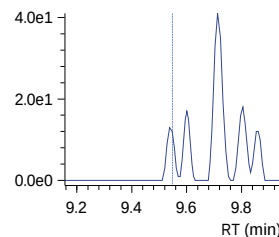


Q 570.00>525.10 (-) 6.58e4

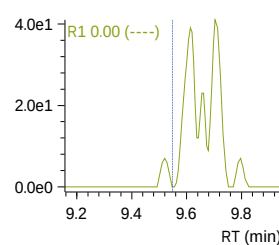


PFNS

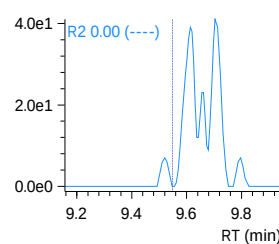
Conc. ----
R#1 0.00 (82.65)
R#2 0.00 (0.00)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-) 4.10e1

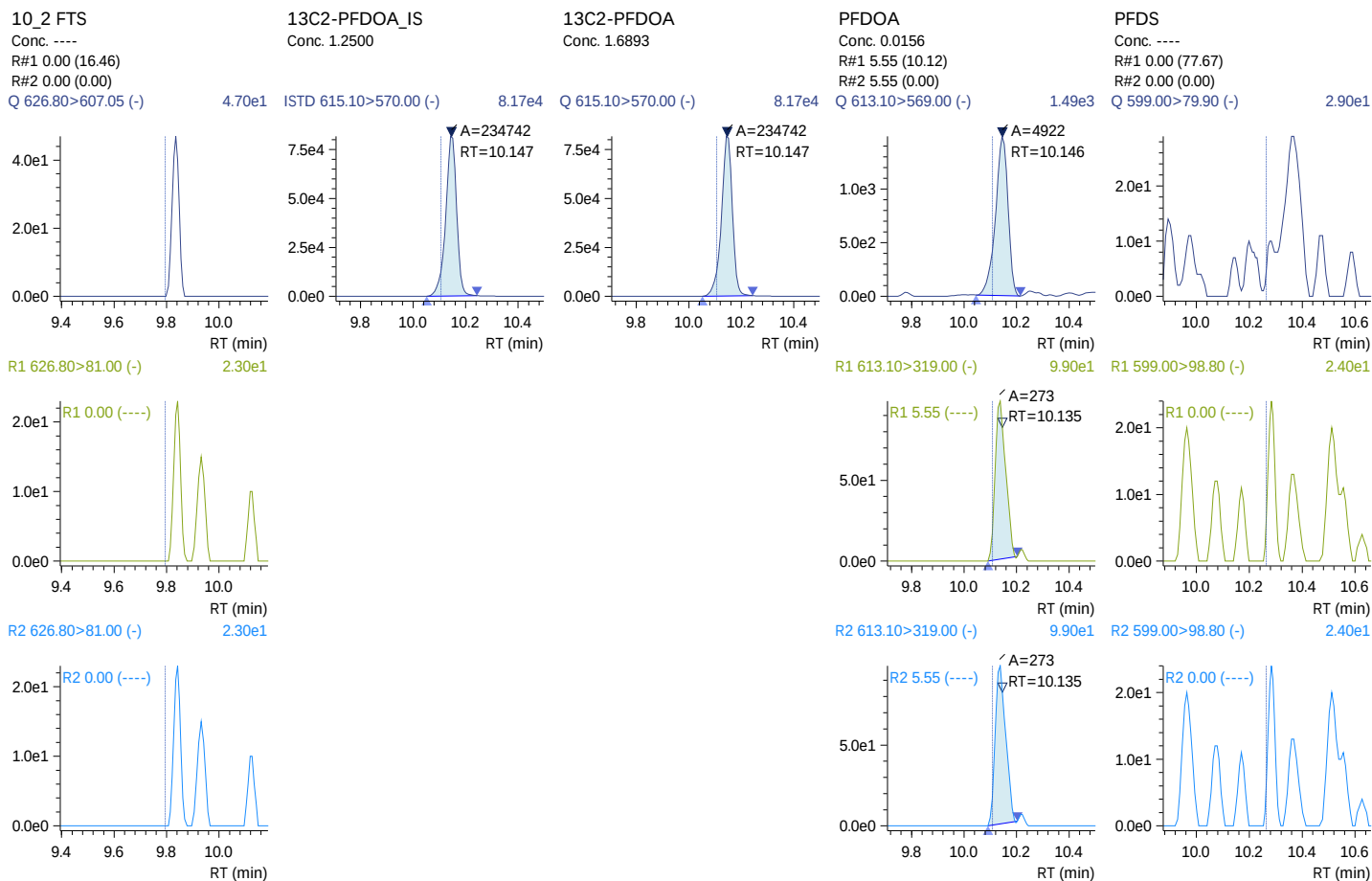


R2 548.80>98.80 (-) 4.10e1



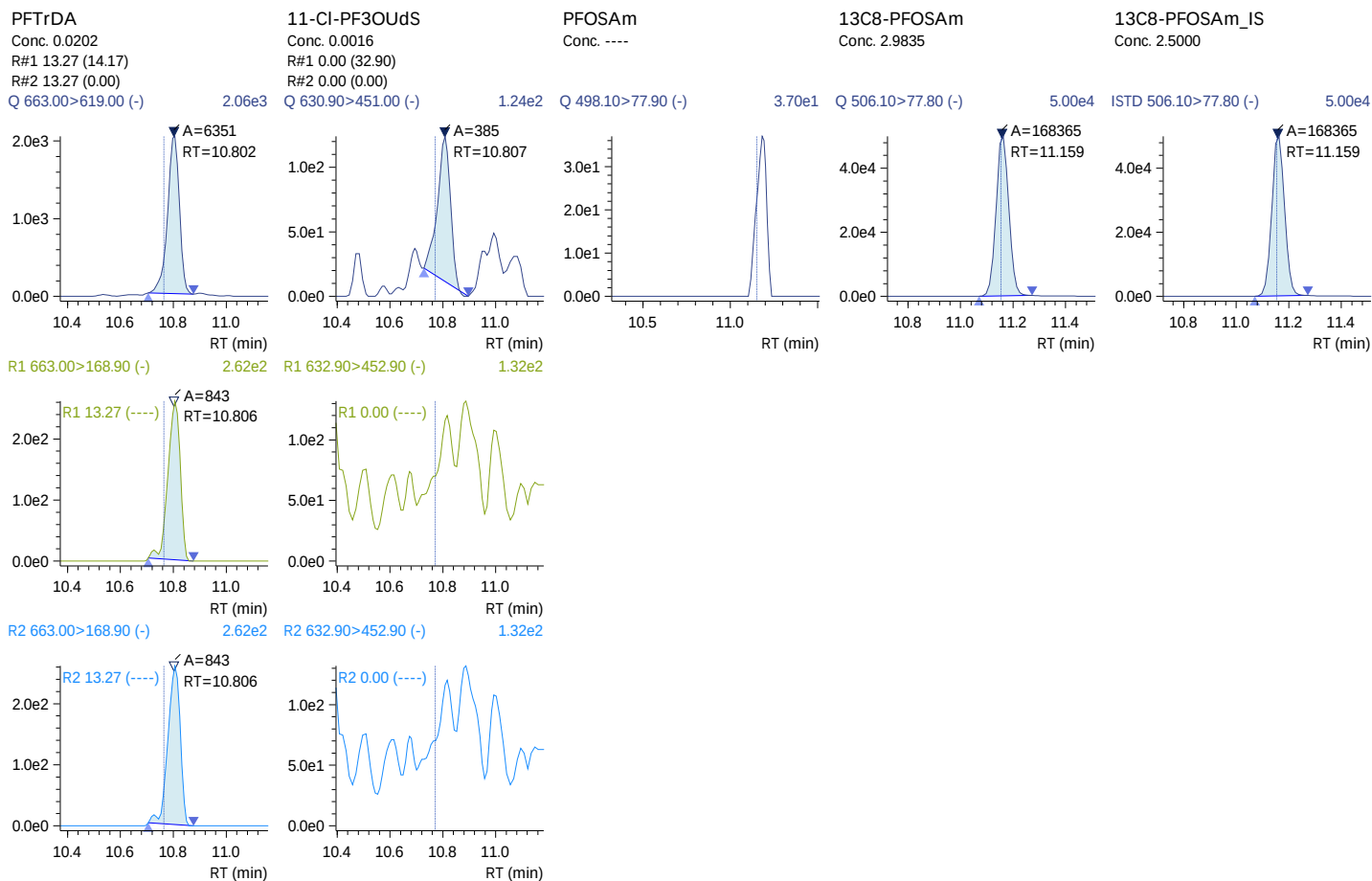


240130_017 (continued)



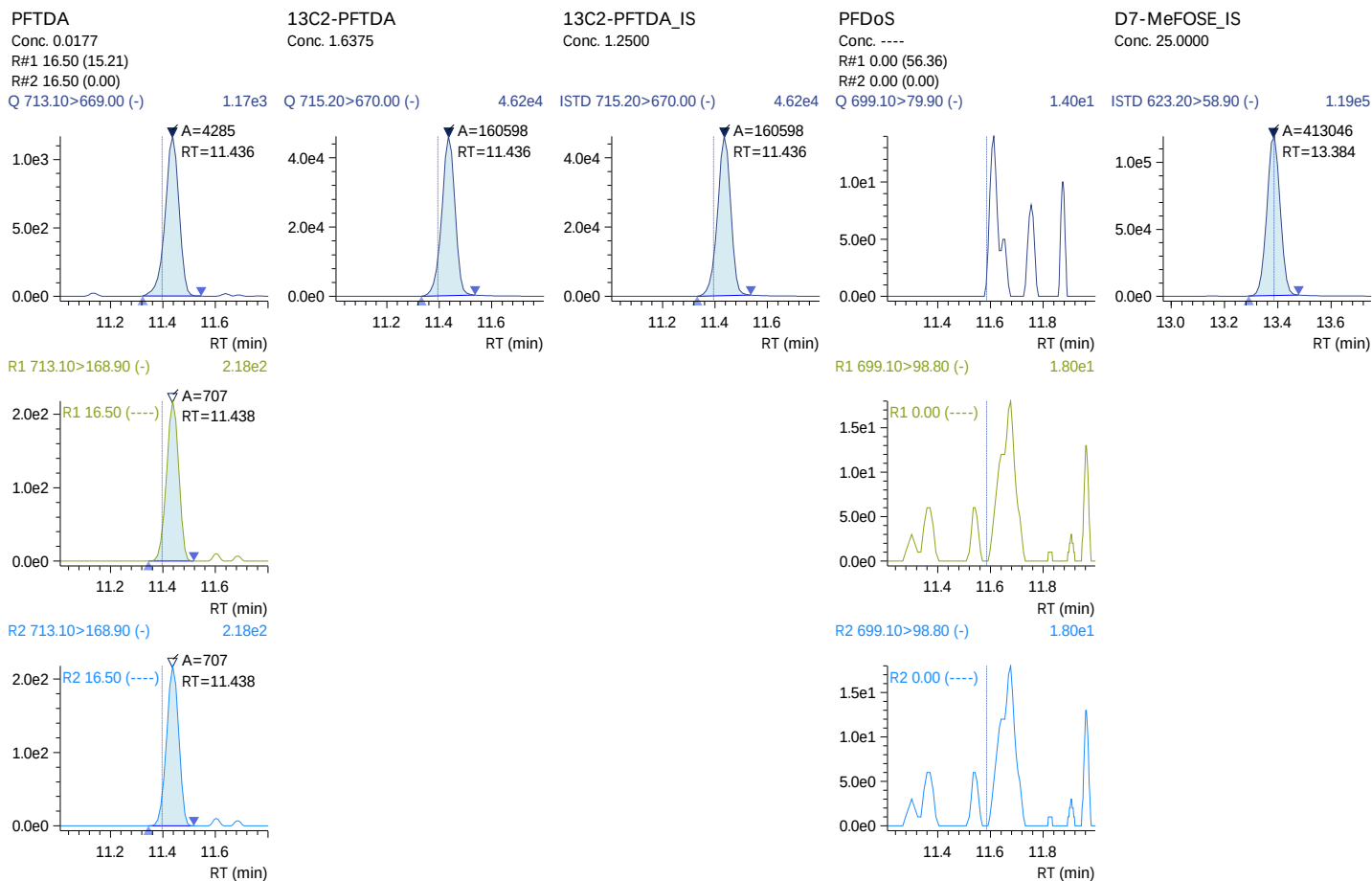


240130_017 (continued)





240130_017 (continued)





240130_017 (continued)

D7-MeFOSE
 Conc. 28.5113

MeFOSE
 Conc. 0.0103

13C2-PFHxDA_IS
 Conc. 2.5000

13C2-PFHxDA
 Conc. 3.3608

PFHXDA
 Conc. 0.0284
 R#1 12.30 (9.60)
 R#2 12.30 (0.00)

Q 623.20>58.90 (-)

1.19e5

Q 616.10>59.00 (-)

1.19e2

ISTD 815.00>770.05 (-)

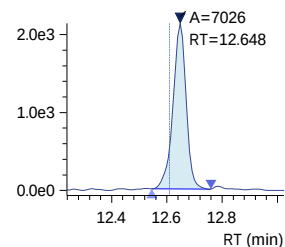
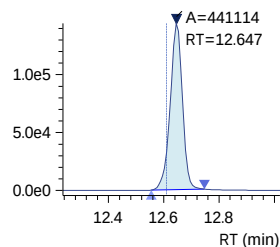
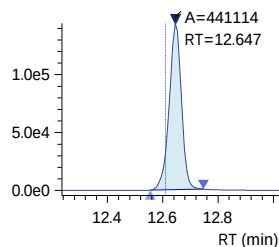
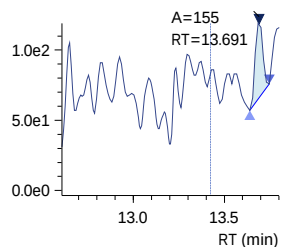
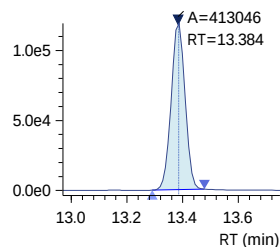
1.44e5

Q 815.00>770.05 (-)

1.44e5

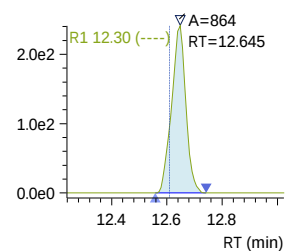
Q 813.00>768.95 (-)

2.14e3



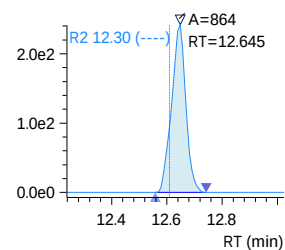
R1 813.00>218.95 (-)

2.41e2



R2 813.00>218.95 (-)

2.41e2





240130_017 (continued)

D3-MeFOSA
 Conc. 2.8692

D3-MeFOSA_IS
 Conc. 2.5000

MeFOSA
 Conc. ----
 R#1 0.00 (98.91)
 R#2 0.00 (0.00)

D9-EtFOSE_IS
 Conc. 25.0000

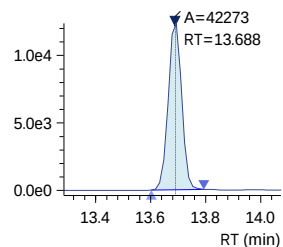
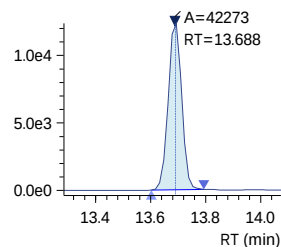
D9-EtFOSE
 Conc. 28.0247

Q 515.00>219.00 (-)

1.24e4

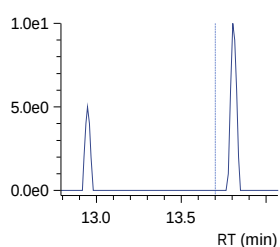
ISTD 515.00>219.00 (-)

1.24e4



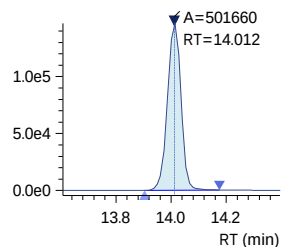
Q 511.90>219.00 (-)

1.00e1



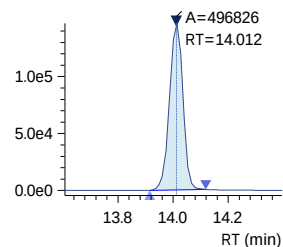
ISTD 639.20>58.90 (-)

1.47e5



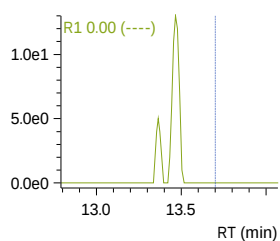
Q 639.20>58.90 (-)

1.47e5



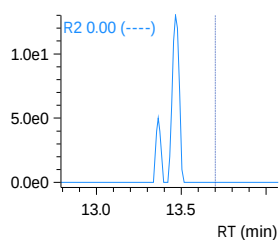
R1 511.90>169.00 (-)

1.30e1



R2 511.90>169.00 (-)

1.30e1





240130_017 (continued)

EtFOSE
Conc. ----

D5-EtFOSAm
Conc. 2.9026

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. ----

PFODA
Conc. 0.0131

Q 630.00>59.00 (-)

9.10e1

Q 531.10>219.00 (-)

1.83e4

ISTD 531.10>219.00 (-)

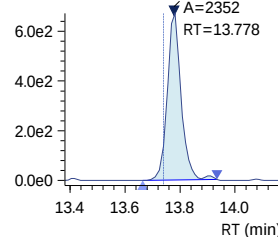
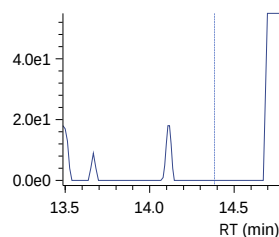
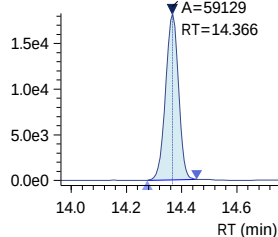
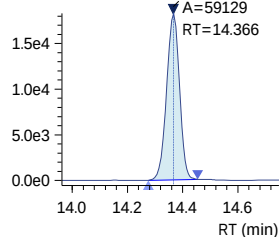
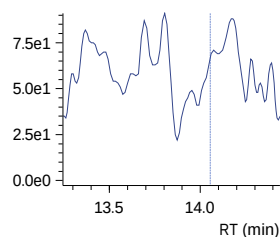
1.83e4

Q 526.00>219.00 (-)

5.50e1

Q 913.00>868.65 (-)

6.72e2

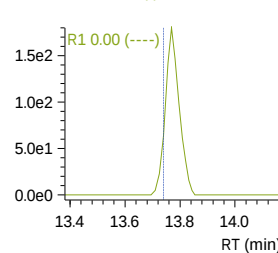
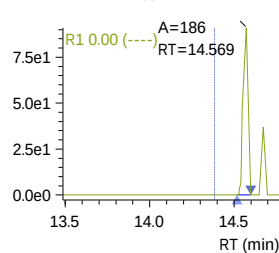


R1 526.00>169.00 (-)

9.10e1

R1 913.00>169.00 (-)

1.80e2

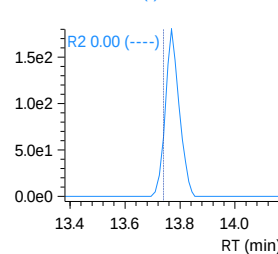
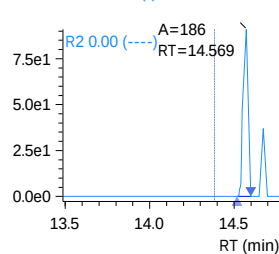


R2 526.00>169.00 (-)

9.10e1

R2 913.00>169.00 (-)

1.80e2

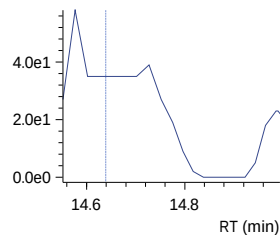


positive trans

Conc. ----

Q 514.80>219.10 (+)

5.80e1





240130_018

Sample ID: 1633 ICAL 0.05PPB
Date Acquired: 1/30/2024 9:18:55 PM
Acquired by: System Administrator
Data File: 240130_018
Vial: 1 | Inj. Volume: 10.0000uL | Tray: 1

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	913822	----	----	----	----	----	----	
13C4-PFBA_IS	216.80>171.90	----	913822	----	----	----	----	----	----	
13C3-PFBA_IS	216.00>172.00	----	629363	----	----	----	----	----	----	
PFBA	212.80>169.05	----	5918	----	----	----	----	----	----	
PFMPA	229.00>84.90	----	3787	----	----	----	----	----	----	
3_3 FTCA	241.00>177.10	241.00>117.00	3415	5032	147.36	139.21	----	----	----	
13C5-PFPeA	268.30>223.00	----	263505	----	----	----	----	----	----	
13C5-PFPeA_IS	268.30>223.00	----	263505	----	----	----	----	----	----	
PFPeA	263.00>219.00	----	9620	----	----	----	----	----	----	
PFMBA	279.00>84.95	----	5904	----	----	----	----	----	----	
13C2-4_2 FTS	329.10>80.90	----	323150	----	----	----	----	----	----	
13C2-4_2 FTS_IS	329.10>80.90	----	323150	----	----	----	----	----	----	
4_2 FTS	327.10>307.00	327.10>80.90	8770	2506	28.58	32.10	2506	28.58	32.10	
13C3-PFBS_IS	302.10>79.90	----	302133	----	----	----	----	----	----	
PFBS	298.70>79.90	298.70>98.80	6555	3183	48.56	44.81	3183	48.56	44.81	
13C3-PFBS	302.10>79.90	----	302133	----	----	----	----	----	----	
NFDHA	295.00>201.00	295.00>84.90	6688	1929	28.85	35.54	1929	28.85	35.54	
13C5-PFHxA	318.00>273.00	----	562116	----	----	----	----	----	----	
13C5-PFHxA_IS	318.00>273.00	----	562116	----	----	----	----	----	----	
13C2-PFHxA_IS	315.10>270.00	----	713147	----	----	----	----	----	----	
PFHxA	313.00>269.00	----	12266	----	----	----	----	----	----	
PFEESA	314.80>135.00	314.80>82.90	31692	1705	5.38	5.22	1705	5.38	5.22	
13C3-HFPO-DA	286.90>168.90	----	630310	----	----	----	----	----	----	
13C3-HFPO-DA_IS	286.90>168.90	----	630310	----	----	----	----	----	----	
HFPO-DA	284.90>168.90	284.90>184.90	3609	2212	61.29	59.79	2212	61.29	59.79	AC
5_3 FTCA	341.00>237.05	341.00>217.00	17206	24292	141.19	157.08	24292	141.19	157.08	
PFPeS	349.10>79.90	349.10>98.80	5061	3131	61.86	55.12	3131	61.86	55.12	
13C4-PFHpA	367.10>322.00	----	736187	----	----	----	----	----	----	
13C4-PFHpA_IS	367.10>322.00	----	736187	----	----	----	----	----	----	
PFHpA	363.10>319.00	363.10>169.00	17379	3968	22.84	23.02	3968	22.84	23.02	
DONA	376.90>250.90	376.90>84.80	27688	7380	26.65	27.50	7380	26.65	27.50	
13C2-6_2 FTS_IS	429.10>80.90	----	349197	----	----	----	----	----	----	
13C2-6_2 FTS	429.10>80.90	----	349197	----	----	----	----	----	----	
6_2 FTS	427.10>407.00	427.10>80.90	6189	2804	45.31	50.47	2804	45.31	50.47	
13C4-PFOA_IS	417.10>172.00	----	59200	----	----	----	----	----	----	
13C8-PFOA_IS	421.10>376.00	----	718555	----	----	----	----	----	----	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240130_018 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	718555	----	----	----	----	----	----	
PFOA	413.00>369.00	413.00>169.00	22779	5996	26.32	28.77	5996	26.32	28.77	AC
13C3-PFHxS	402.10>79.90	----	290234	----	----	----	----	----	----	
13C3-PFHxS_IS	402.10>79.90	----	290234	----	----	----	----	----	----	
PFHxS	398.70>79.90	398.70>98.90	6997	3925	56.09	60.90	3925	56.09	60.90	
18O2-PFHxS_IS	403.00>83.90	----	333625	----	----	----	----	----	----	
13C9-PFNA_IS	472.10>427.00	----	421477	----	----	----	----	----	----	
13C9-PFNA	472.10>427.00	----	421477	----	----	----	----	----	----	
13C5-PFNA_IS	468.00>423.00	----	469041	----	----	----	----	----	----	
PFNA	463.00>419.00	463.00>219.00	21536	4771	22.15	19.31	4771	22.15	19.31	AC
PFHpS	449.00>79.90	449.00>98.80	5357	2980	55.62	52.44	2980	55.62	52.44	
7_3 FTCA	441.00>317.00	441.00>336.90	28167	31785	112.85	129.46	31785	112.85	129.46	
13C2-8_2-FTS	529.10>80.90	----	271540	----	----	----	----	----	----	
13C2-8_2-FTS_IS	529.10>80.90	----	271540	----	----	----	----	----	----	
8_2 FTS	527.10>506.95	527.10>80.80	4946	2264	45.78	45.98	2264	45.78	45.98	
13C6-PFDA_IS	519.10>474.10	----	310064	----	----	----	----	----	----	
13C6-PFDA	519.10>474.10	----	310064	----	----	----	----	----	----	
13C2-PFDA_IS	515.10>470.10	----	292207	----	----	----	----	----	----	
PFDA	512.90>469.00	512.90>219.00	16532	3776	22.84	17.88	3776	22.84	17.88	AC
D3-NMeFOSAA_IS	573.20>419.00	----	821081	----	----	----	----	----	----	
D3-NMeFOSAA	573.20>419.00	----	821081	----	----	----	----	----	----	
13C8-PFOS_IS	507.10>98.90	----	135576	----	----	----	----	----	----	
13C8-PFOS	507.10>98.90	----	135576	----	----	----	----	----	----	
13C4-PFOS_IS	502.80>79.90	----	399487	----	----	----	----	----	----	
PFOS	498.90>79.90	498.90>98.80	5923	3002	50.69	53.60	3002	50.69	53.60	
NMeFOSAA	570.10>419.00	570.10>483.00	4702	3342	71.08	64.89	3342	71.08	64.89	
D5-NEtFOSAA_IS	589.20>419.00	----	689126	----	----	----	----	----	----	
D5-NEtFOSAA	589.20>419.00	----	689126	----	----	----	----	----	----	
NEtFOSAA	584.20>419.10	584.20>526.00	5386	4237	78.67	96.07	4237	78.67	96.07	
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	30706	9028	29.40	30.95	9028	29.40	30.95	
PFUnDA	563.10>519.00	563.10>269.10	18054	2243	12.43	11.01	2243	12.43	11.01	AC
13C7-PFUnDA_IS	570.00>525.10	----	378044	----	----	----	----	----	----	
13C7-PFUnDA	570.00>525.10	----	378044	----	----	----	----	----	----	
PFNS	548.80>79.90	548.80>98.80	5169	3537	68.43	60.44	3537	68.43	60.44	
10_2 FTS	626.80>607.05	626.80>81.00	7426	2294	30.89	36.14	2294	30.89	36.14	
13C2-PFDOA_IS	615.10>570.00	----	431785	----	----	----	----	----	----	
13C2-PFDOA	615.10>570.00	----	431785	----	----	----	----	----	----	
PFDOA	613.10>569.00	613.10>319.00	15207	1477	9.71	10.16	1477	9.71	10.16	AC
PFDS	599.00>79.90	599.00>98.80	4449	2574	57.85	58.26	2574	57.85	58.26	
PFTrDA	663.00>619.00	663.00>168.90	20827	3067	14.73	16.18	3067	14.73	16.18	AC

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240130_018 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	23506	7527	32.02	34.99	7527	32.02	34.99	
PFOSAm	498.10>77.90	----	11468	----	----	----	----	----	----	
13C8-PFOSAm	506.10>77.80	----	324673	----	----	----	----	----	----	
13C8-PFOSAm_IS	506.10>77.80	----	324673	----	----	----	----	----	----	
PFTDA	713.10>669.00	713.10>168.90	14758	2476	16.77	18.05	2476	16.77	18.05	AC
13C2-PFTDA	715.20>670.00	----	308075	----	----	----	----	----	----	
13C2-PFTDA_IS	715.20>670.00	----	308075	----	----	----	----	----	----	
PFDoS	699.10>79.90	699.10>98.80	3060	1817	59.37	61.13	1817	59.37	61.13	
D7-MeFOSE_IS	623.20>58.90	----	831185	----	----	----	----	----	----	
D7-MeFOSE	623.20>58.90	----	831185	----	----	----	----	----	----	
MeFOSE	616.10>59.00	----	2959	----	----	----	----	----	----	
13C2-PFHxDA_IS	815.00>770.05	----	846915	----	----	----	----	----	----	
13C2-PFHxDA	815.00>770.05	----	846915	----	----	----	----	----	----	
PFHxDA	813.00>768.95	813.00>218.95	30851	3468	11.24	11.66	3468	11.24	11.66	AC
D3-MeFOSA	515.00>219.00	----	82077	----	----	----	----	----	----	
D3-MeFOSA_IS	515.00>219.00	----	82077	----	----	----	----	----	----	
MeFOSA	511.90>219.00	511.90>169.00	2557	3402	133.04	160.44	3402	133.04	160.44	
D9-EtFOSE_IS	639.20>58.90	----	1050039	----	----	----	----	----	----	
D9-EtFOSE	639.20>58.90	----	1041752	----	----	----	----	----	----	
EtFOSE	630.00>59.00	----	3721	----	----	----	----	----	----	AC
D5-EtFOSAm	531.10>219.00	----	117263	----	----	----	----	----	----	
D5-EtFOSAm_IS	531.10>219.00	----	117263	----	----	----	----	----	----	
EtFOSAm	526.00>219.00	526.00>169.00	3279	4911	149.77	159.63	4911	149.77	159.63	
PFODA	913.00>868.65	913.00>169.00	12353	3517	28.47	36.03	3517	28.47	36.03	AC

Flag ID key: AC: Accuracy%



240130_018

Sample ID: 1633 ICAL 0.05PPB
Date Acquired: 1/30/2024 9:18:55 PM
Acquired by: System Administrator
Data File: 240130_018
Vial: 1 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.344	0.006	-0.001	913822	629363	13C3-PFBA_IS	9.7989	ng/mL	
13C4-PFBA_IS	Auto	1.344	0.006	----	913822	913822	----	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.345	0.008	----	629363	629363	----	5.0000	ng/mL	
PFBA	M	1.342	0.001	-0.002	5918	913822	13C4-PFBA_IS	0.0569	ng/mL	
PFMPA	Auto	2.375	0.009	-1.073	3787	263505	13C5-PFPeA_IS	0.0503	ng/mL	
3_3 FTCA	Auto	2.951	0.006	-0.497	3415	263505	13C5-PFPeA_IS	0.9047	ng/mL	
13C5-PFPeA	Auto	3.448	0.009	-1.496	263505	713147	13C2-PFHxA_IS	5.1387	ng/mL	
13C5-PFPeA_IS	Auto	3.448	0.009	----	263505	263505	----	5.0000	ng/mL	
PFPeA	Auto	3.452	0.010	0.004	9620	263505	13C5-PFPeA_IS	0.0521	ng/mL	
PFMBA	Auto	3.980	0.011	0.532	5904	263505	13C5-PFPeA_IS	0.0512	ng/mL	
13C2-4_2 FTS	Auto	4.629	0.009	-2.432	323150	333625	18O2-PFHxS_IS	5.1456	ng/mL	
13C2-4_2 FTS_IS	Auto	4.629	0.009	----	323150	323150	----	5.0000	ng/mL	
4_2 FTS	Auto	4.630	0.010	0.001	8770	323150	13C2-4_2 FTS_IS	0.0548	ng/mL	
13C3-PFBS_IS	Auto	4.599	0.012	----	302133	302133	----	2.5000	ng/mL	
PFBS	Auto	4.598	0.010	-0.001	6555	302133	13C3-PFBS_IS	0.0438	ng/mL	
13C3-PFBS	Auto	4.599	0.012	-2.462	302133	333625	18O2-PFHxS_IS	2.4272	ng/mL	
NFDHA	Auto	4.799	0.009	-0.144	6688	562116	13C5-PFHxA_IS	0.0574	ng/mL	
13C5-PFHxA	Auto	4.943	0.011	-0.001	562116	713147	13C2-PFHxA_IS	2.4419	ng/mL	
13C5-PFHxA_IS	Auto	4.943	0.011	----	562116	562116	----	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	4.944	0.011	----	713147	713147	----	2.5000	ng/mL	
PFHxA	M	4.945	0.011	0.002	12266	562116	13C5-PFHxA_IS	0.0526	ng/mL	
PFEESA	Auto	5.278	0.013	0.335	31692	562116	13C5-PFHxA_IS	0.0454	ng/mL	
13C3-HFPO-DA	Auto	5.422	0.010	0.478	630310	713147	13C2-PFHxA_IS	9.9733	ng/mL	
13C3-HFPO-DA_IS	Auto	5.422	0.010	----	630310	630310	----	10.0000	ng/mL	
HFPO-DA	Auto	5.424	0.011	0.002	3609	630310	13C3-HFPO-DA_IS	0.0582	ng/mL	AC
5_3 FTCA	Auto	5.873	0.007	0.930	17206	562116	13C5-PFHxA_IS	1.0240	ng/mL	
PFPeS	Auto	5.986	0.013	-1.075	5061	290234	13C3-PFHxS_IS	0.0441	ng/mL	
13C4-PFHpA	Auto	6.131	0.011	1.187	736187	713147	13C2-PFHxA_IS	2.5421	ng/mL	
13C4-PFHpA_IS	Auto	6.131	0.011	----	736187	736187	----	2.5000	ng/mL	
PFHpA	Auto	6.128	0.006	-0.003	17379	736187	13C4-PFHpA_IS	0.0521	ng/mL	
DONA	Auto	6.498	0.011	1.076	27688	630310	13C3-HFPO-DA_IS	0.0521	ng/mL	
13C2-6_2 FTS_IS	Auto	6.777	0.011	----	349197	349197	----	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.777	0.011	-0.284	349197	333625	18O2-PFHxS_IS	5.3414	ng/mL	
6_2 FTS	Auto	6.775	0.010	-0.002	6189	349197	13C2-6_2 FTS_IS	0.0465	ng/mL	
13C4-PFOA_IS	Auto	7.091	0.012	----	59200	59200	----	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.091	0.013	----	718555	718555	----	2.5000	ng/mL	
13C8-PFOA	Auto	7.091	0.013	0.000	718555	59200	13C4-PFOA_IS	2.5451	ng/mL	
PFOA	Auto	7.092	0.011	0.001	22779	718555	13C8-PFOA_IS	0.0702	ng/mL	AC
13C3-PFHxS	Auto	7.061	0.013	0.000	290234	333625	18O2-PFHxS_IS	2.4821	ng/mL	
13C3-PFHxS_IS	Auto	7.061	0.013	----	290234	290234	----	2.5000	ng/mL	
PFHxS	M	7.060	0.012	-0.001	6997	290234	13C3-PFHxS_IS	0.0552	ng/mL	
18O2-PFHxS_IS	Auto	7.061	0.013	----	333625	333625	----	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.942	0.013	----	421477	421477	----	1.2500	ng/mL	
13C9-PFNA	Auto	7.942	0.013	-0.001	421477	469041	13C5-PFNA_IS	1.2139	ng/mL	
13C5-PFNA_IS	Auto	7.943	0.013	----	469041	469041	----	1.2500	ng/mL	
PFNA	Auto	7.943	0.013	0.001	21536	421477	13C9-PFNA_IS	0.0589	ng/mL	AC
PFHpS	Auto	7.985	0.014	-0.816	5357	135576	13C8-PFOS_IS	0.0470	ng/mL	
7_3 FTCA	Auto	7.939	0.010	2.996	28167	562116	13C5-PFHxA_IS	0.9540	ng/mL	
13C2-8_2-FTS	Auto	8.399	0.011	1.338	271540	333625	18O2-PFHxS_IS	4.8921	ng/mL	
13C2-8_2-FTS_IS	Auto	8.399	0.011	----	271540	271540	----	5.0000	ng/mL	
8_2 FTS	Auto	8.400	0.012	0.001	4946	271540	13C2-8_2-FTS_IS	0.0478	ng/mL	
13C6-PFDA_IS	Auto	8.708	0.013	----	310064	310064	----	1.2500	ng/mL	
13C6-PFDA	Auto	8.708	0.013	-0.001	310064	292207	13C2-PFDA_IS	1.3241	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_018 (continued)

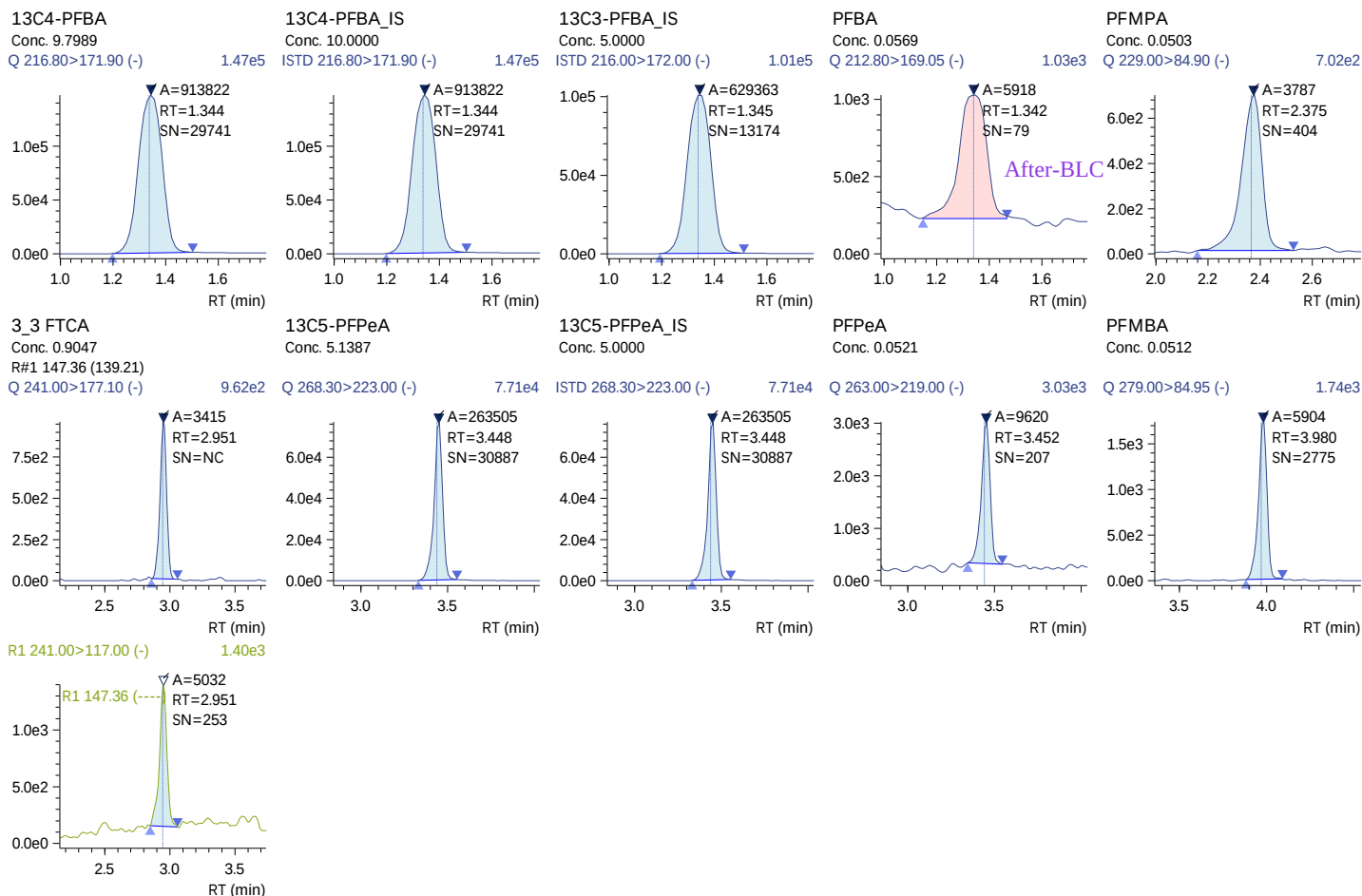
(Table continued from previous page)

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C2-PFDA_IS	Auto	8.709	0.013	----	292207	292207	----	1.2500	ng/mL	
PFDA	Auto	8.709	0.012	0.001	16532	310064	13C6-PFDA_IS	0.0630	ng/mL	AC
D3-NMeFOSAA_IS	Auto	8.846	0.012	----	821081	821081	----	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.846	0.012	0.045	821081	399487	13C4-PFOS_IS	5.0481	ng/mL	
13C8-PFOS_IS	Auto	8.801	0.015	----	135576	135576	----	2.5000	ng/mL	
13C8-PFOS	Auto	8.801	0.015	0.000	135576	399487	13C4-PFOS_IS	2.6966	ng/mL	
13C4-PFOS_IS	Auto	8.801	0.014	----	399487	399487	----	2.5000	ng/mL	
PFOS	M	8.803	0.015	0.002	5923	135576	13C8-PFOS_IS	0.0511	ng/mL	
NMeFOSAA	M	8.851	0.200	0.005	4702	821081	D3-NMeFOSAA_IS	0.0404	ng/mL	
D5-NetFOSAA_IS	Auto	9.177	0.013	----	689126	689126	----	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.177	0.013	0.376	689126	399487	13C4-PFOS_IS	5.3760	ng/mL	
NetFOSAA	M	9.189	0.203	0.012	5386	689126	D5-NetFOSAA_IS	0.0476	ng/mL	
9-CI-PF3ONS	Auto	9.364	0.013	3.942	30706	630310	13C3-HFPO-DA_IS	0.0497	ng/mL	
PFUnDA	Auto	9.432	0.011	0.000	18054	378044	13C7-PFUnDA_IS	0.0480	ng/mL	AC
13C7-PFUnDA_IS	Auto	9.432	0.013	----	378044	378044	----	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.432	0.013	0.723	378044	292207	13C2-PFDA_IS	1.2993	ng/mL	
PFNS	Auto	9.563	0.014	0.762	5169	135576	13C8-PFOS_IS	0.0450	ng/mL	
10_2_FTS	Auto	9.807	0.012	1.408	7426	271540	13C2-8_2-FTS_IS	0.0541	ng/mL	
13C2-PFDOA_IS	Auto	10.119	0.012	----	431785	431785	----	1.2500	ng/mL	
13C2-PFDOA	Auto	10.119	0.012	1.410	431785	292207	13C2-PFDA_IS	1.2431	ng/mL	
PFDOA	Auto	10.120	0.012	0.001	15207	431785	13C2-PFDOA_IS	0.0378	ng/mL	AC
PFDS	Auto	10.278	0.015	1.477	4449	135576	13C8-PFOS_IS	0.0442	ng/mL	
PFTDA	Auto	10.778	0.014	-0.631	20827	308075	13C2-PFTDA_IS	0.0471	ng/mL	AC
11-CI-PF3OUdS	Auto	10.787	0.016	5.365	23506	630310	13C3-HFPO-DA_IS	0.0533	ng/mL	
PFOSAm	M	11.155	0.005	-0.003	11468	324673	13C8-PFOSAm_IS	0.1010	ng/mL	
13C8-PFOSAm	Auto	11.158	0.003	2.357	324673	399487	13C4-PFOS_IS	2.5585	ng/mL	
13C8-PFOSAm_IS	Auto	11.158	0.003	----	324673	324673	----	2.5000	ng/mL	
PFTDA	Auto	11.410	0.014	0.001	14758	308075	13C2-PFTDA_IS	0.0465	ng/mL	AC
13C2-PFTDA	Auto	11.409	0.014	2.700	308075	292207	13C2-PFDA_IS	1.2567	ng/mL	
13C2-PFTDA_IS	Auto	11.409	0.014	----	308075	308075	----	1.2500	ng/mL	
PFDoS	Auto	11.603	0.017	2.802	3060	135576	13C8-PFOS_IS	0.0487	ng/mL	
D7-MeFOSE_IS	Auto	13.391	0.005	----	831185	831185	----	25.0000	ng/mL	
D7-MeFOSE	Auto	13.391	0.005	4.590	831185	399487	13C4-PFOS_IS	25.5143	ng/mL	
MeFOSE	M	13.427	0.004	0.036	2959	831185	D7-MeFOSE_IS	0.0554	ng/mL	
13C2-PFHXA_IS	Auto	12.625	0.016	----	846915	846915	----	2.5000	ng/mL	
13C2-PFHXA	Auto	12.625	0.016	3.916	846915	292207	13C2-PFDA_IS	2.5814	ng/mL	
PFHXA	Auto	12.626	0.016	0.001	30851	846915	13C2-PFHXA_IS	0.0674	ng/mL	AC
D3-MeFOSA	Auto	13.697	0.007	4.896	82077	399487	13C4-PFOS_IS	2.4774	ng/mL	
D3-MeFOSA_IS	Auto	13.697	0.007	----	82077	82077	----	2.5000	ng/mL	
MeFOSA	M	13.702	0.003	0.005	2557	82077	D3-MeFOSA_IS	0.0546	ng/mL	
D9-EtFOSE_IS	Auto	14.020	0.007	----	1050039	1050039	----	25.0000	ng/mL	
D9-EtFOSE	Auto	14.020	0.007	5.219	1041752	399487	13C4-PFOS_IS	26.1318	ng/mL	
EtFOSE	M	14.062	0.007	0.042	3721	1050039	D9-EtFOSE_IS	0.0739	ng/mL	AC
D5-EtFOSAm	Auto	14.373	0.007	5.572	117263	399487	13C4-PFOS_IS	2.5599	ng/mL	
D5-EtFOSAm_IS	Auto	14.373	0.007	----	117263	117263	----	2.5000	ng/mL	
EtFOSAm	M	14.393	0.008	0.019	3279	117263	D5-EtFOSAm_IS	0.0510	ng/mL	
PFODA	Auto	13.759	0.019	1.134	12353	846915	13C2-PFHXA_IS	0.0926	ng/mL	AC

Flag ID key: AC: Accuracy%



240130_018 (continued)





240130_018 (continued)

13C2-4_2 FTS
Conc. 5.1456

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. 0.0548
R#1 28.58 (32.10)
R#2 28.58 (32.10)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 0.0438
R#1 48.56 (44.81)
R#2 48.56 (44.81)

Q 329.10>80.90 (-)

1.02e5

ISTD 329.10>80.90 (-)

1.02e5

Q 327.10>307.00 (-)

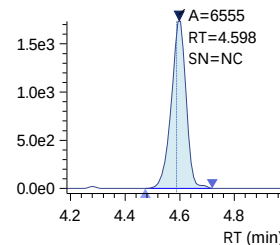
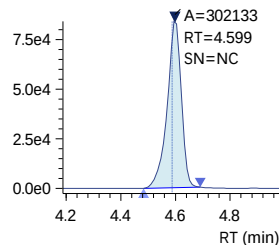
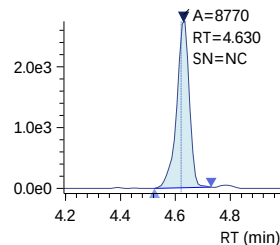
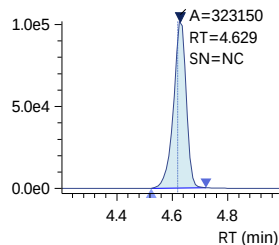
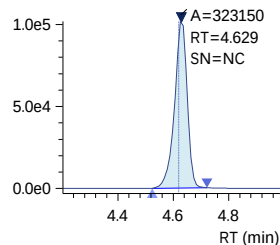
2.75e3

ISTD 302.10>79.90 (-)

8.42e4

Q 298.70>79.90 (-)

1.73e3

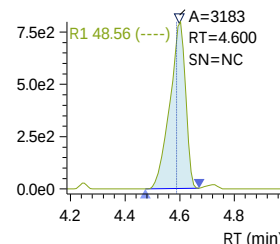
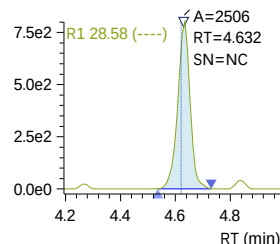


R1 327.10>80.90 (-)

8.01e2

R1 298.70>98.80 (-)

7.99e2

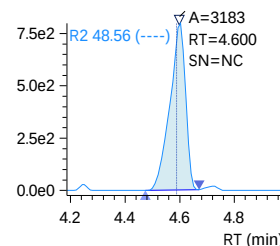
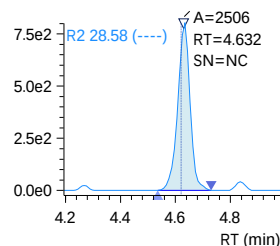


R2 327.10>80.90 (-)

8.01e2

R2 298.70>98.80 (-)

7.99e2





240130_018 (continued)

13C3-PFBS
Conc. 2.4272

NFDHA
Conc. 0.0574
R#1 28.85 (35.54)
R#2 28.85 (35.54)

13C5-PFHxA
Conc. 2.4419

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

Q 302.10>79.90 (-)

8.42e4

Q 295.00>201.00 (-)

1.99e3

Q 318.00>273.00 (-)

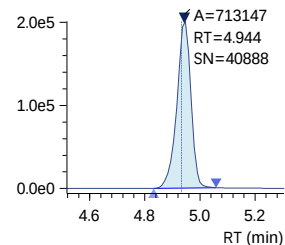
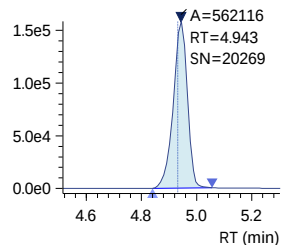
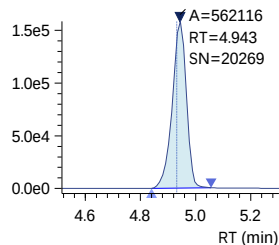
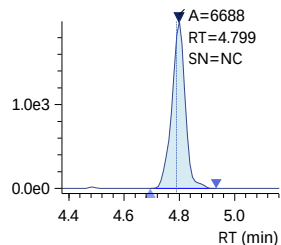
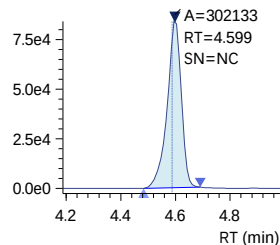
1.59e5

ISTD 318.00>273.00 (-)

1.59e5

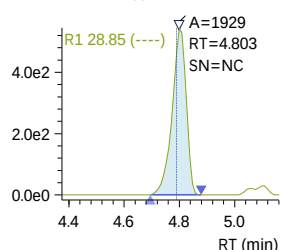
ISTD 315.10>270.00 (-)

2.01e5



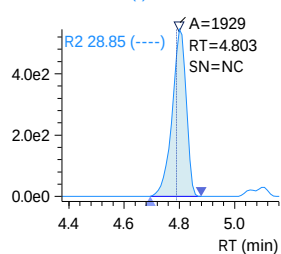
R1 295.00>84.90 (-)

5.45e2



R2 295.00>84.90 (-)

5.45e2

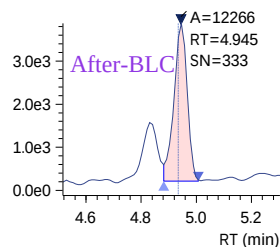




240130_018 (continued)

PFHxA
Conc. 0.0526

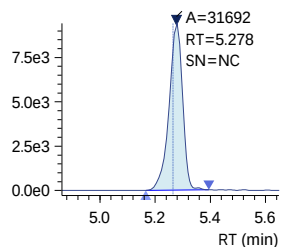
Q 313.00>269.00 (-)



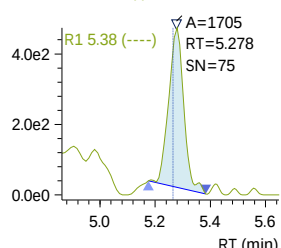
PFEESA
Conc. 0.0454

R#1 5.38 (5.22)
R#2 5.38 (5.22)

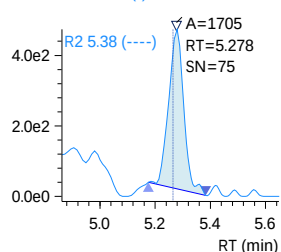
Q 314.80>135.00 (-)



R1 314.80>82.90 (-)

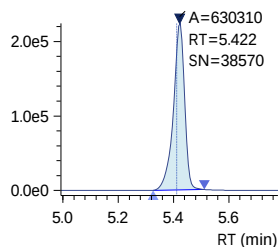


R2 314.80>82.90 (-)



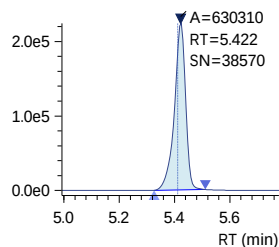
13C3-HFPO-DA
Conc. 9.9733

Q 286.90>168.90 (-)



13C3-HFPO-DA_IS
Conc. 10.0000

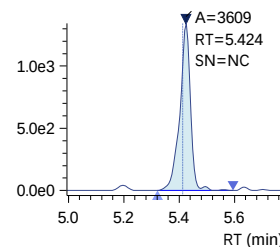
ISTD 286.90>168.90 (-)



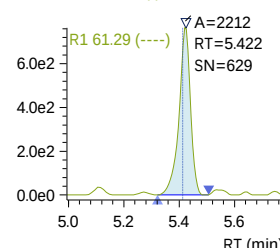
HFPO-DA
Conc. 0.0582

R#1 61.29 (59.79)
R#2 61.29 (59.79)

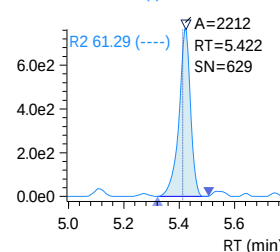
Q 284.90>168.90 (-)



R1 284.90>184.90 (-)

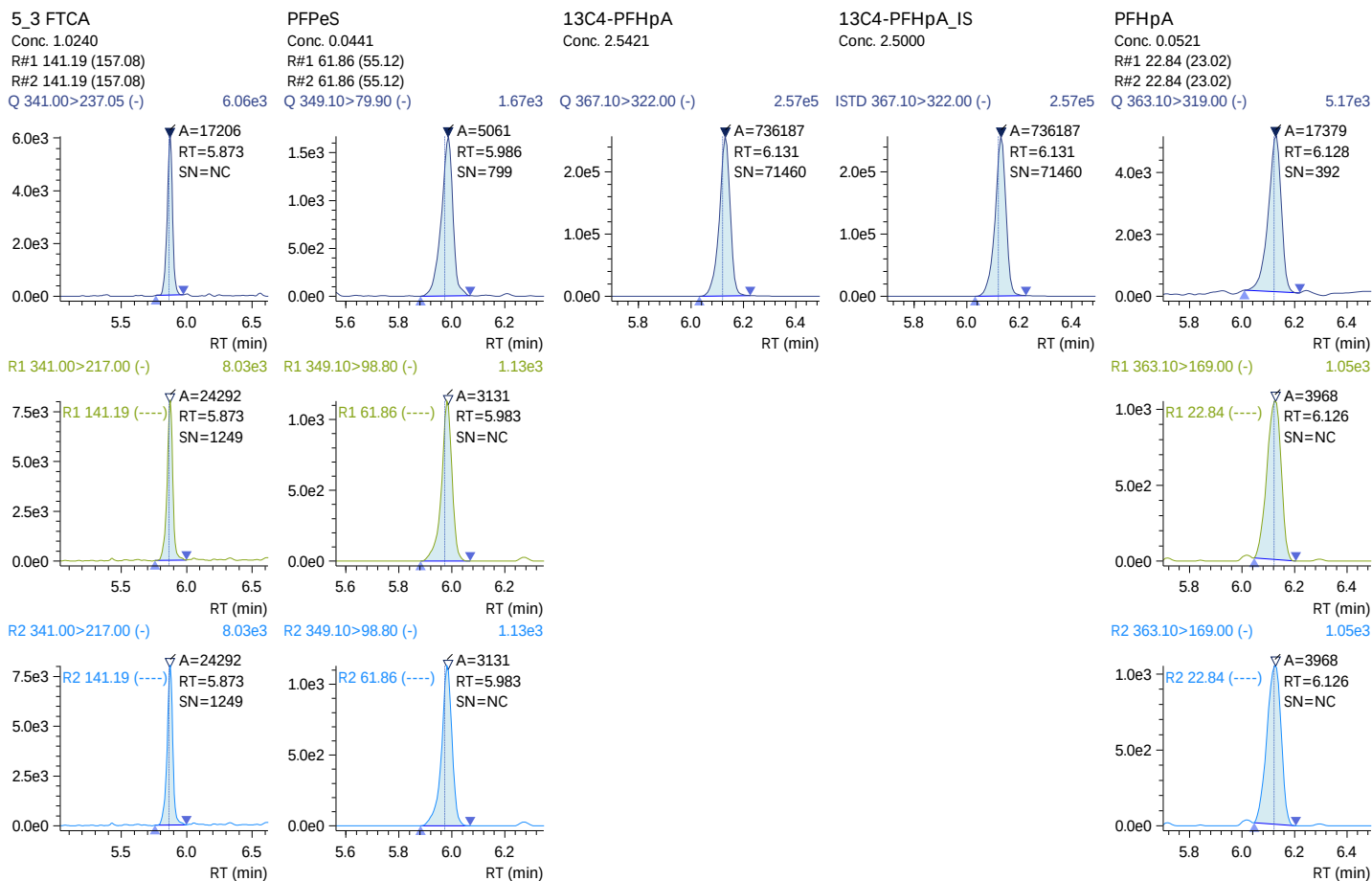


R2 284.90>184.90 (-)





240130_018 (continued)

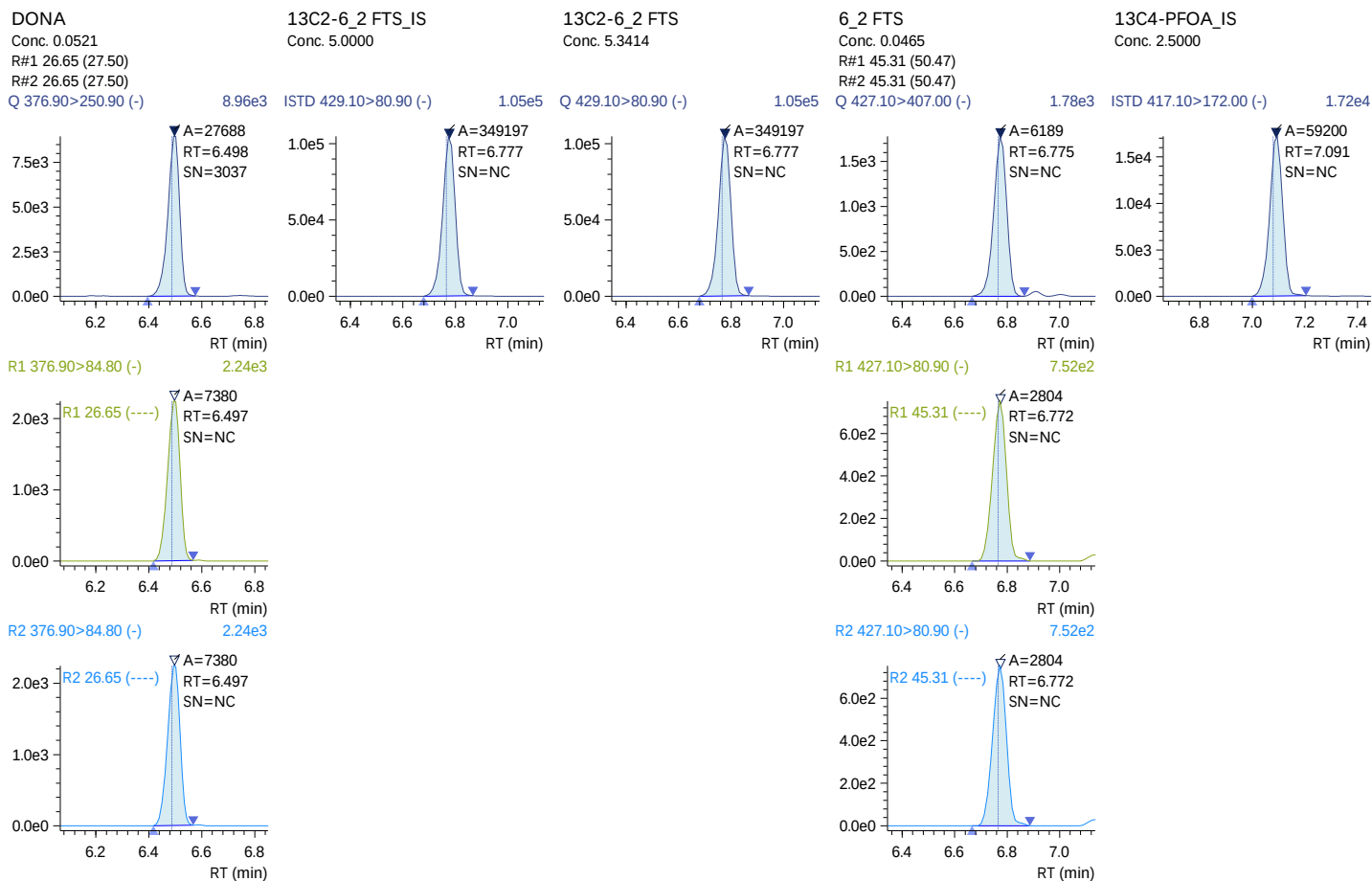


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_018 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_018 (continued)

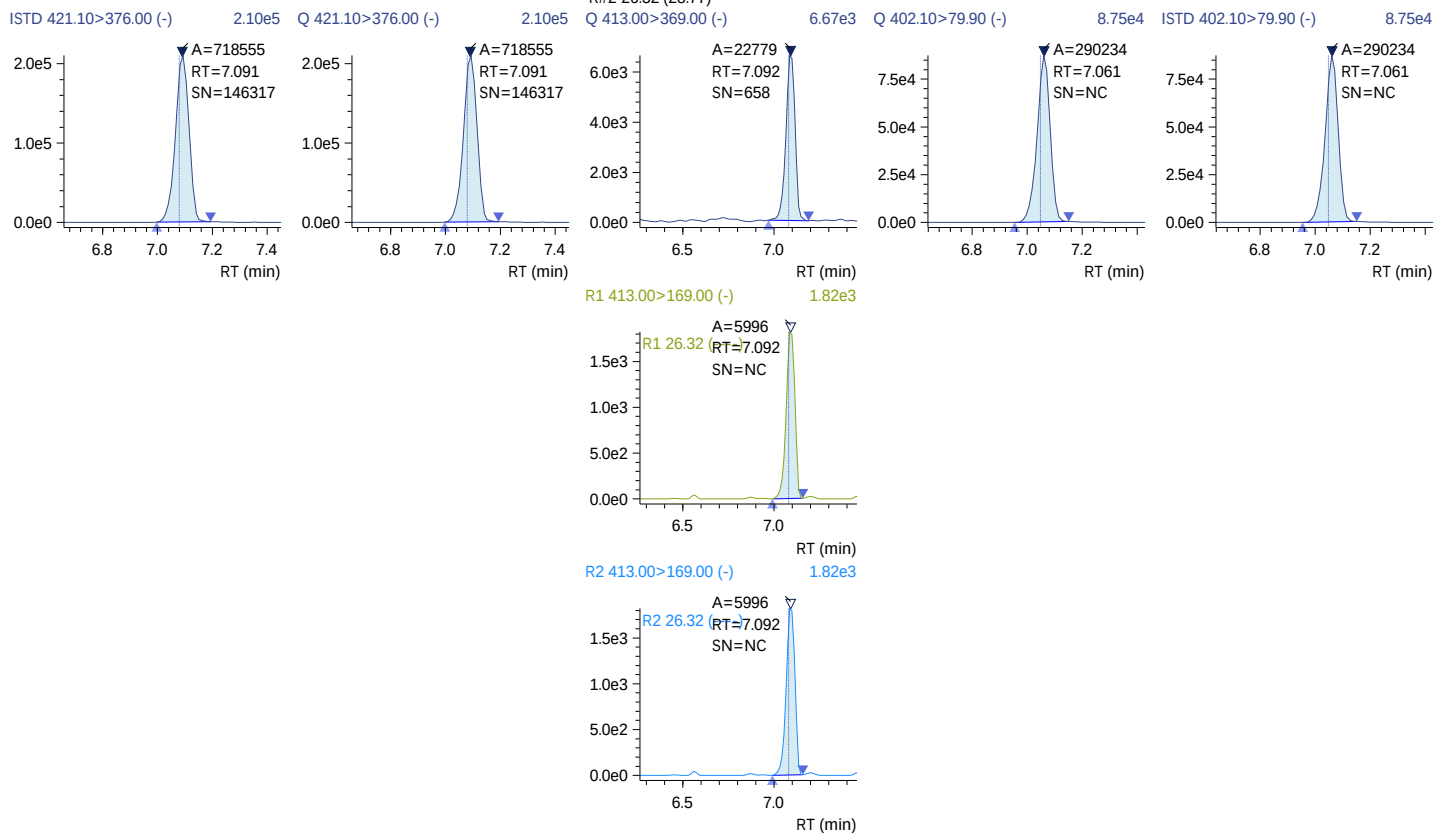
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.5451

PFOA
Conc. 0.0702
R#1 26.32 (28.77)
R#2 26.32 (28.77)

13C3-PFHxS
Conc. 2.4821

13C3-PFHxS_IS
Conc. 2.5000

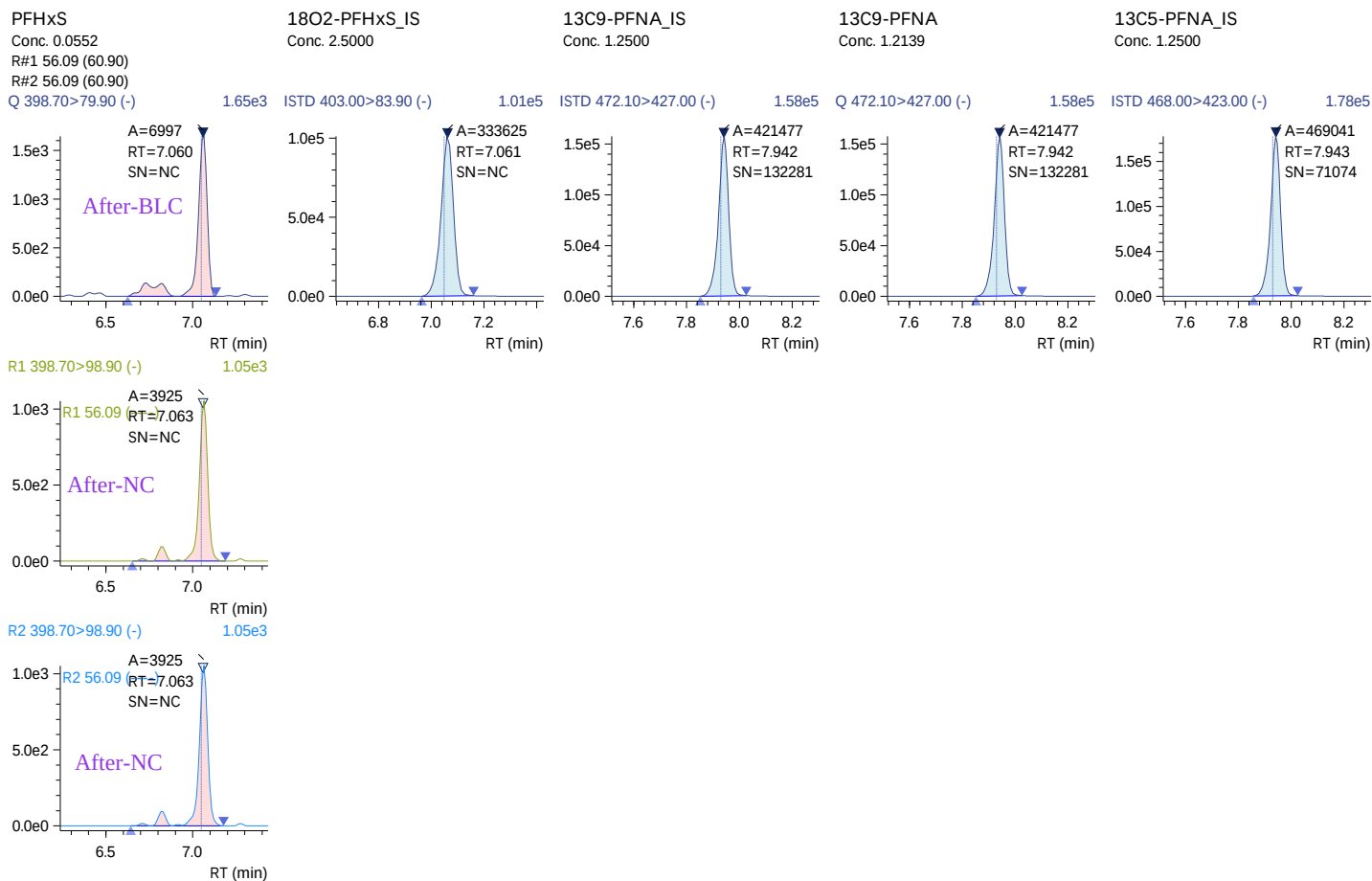


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_018 (continued)

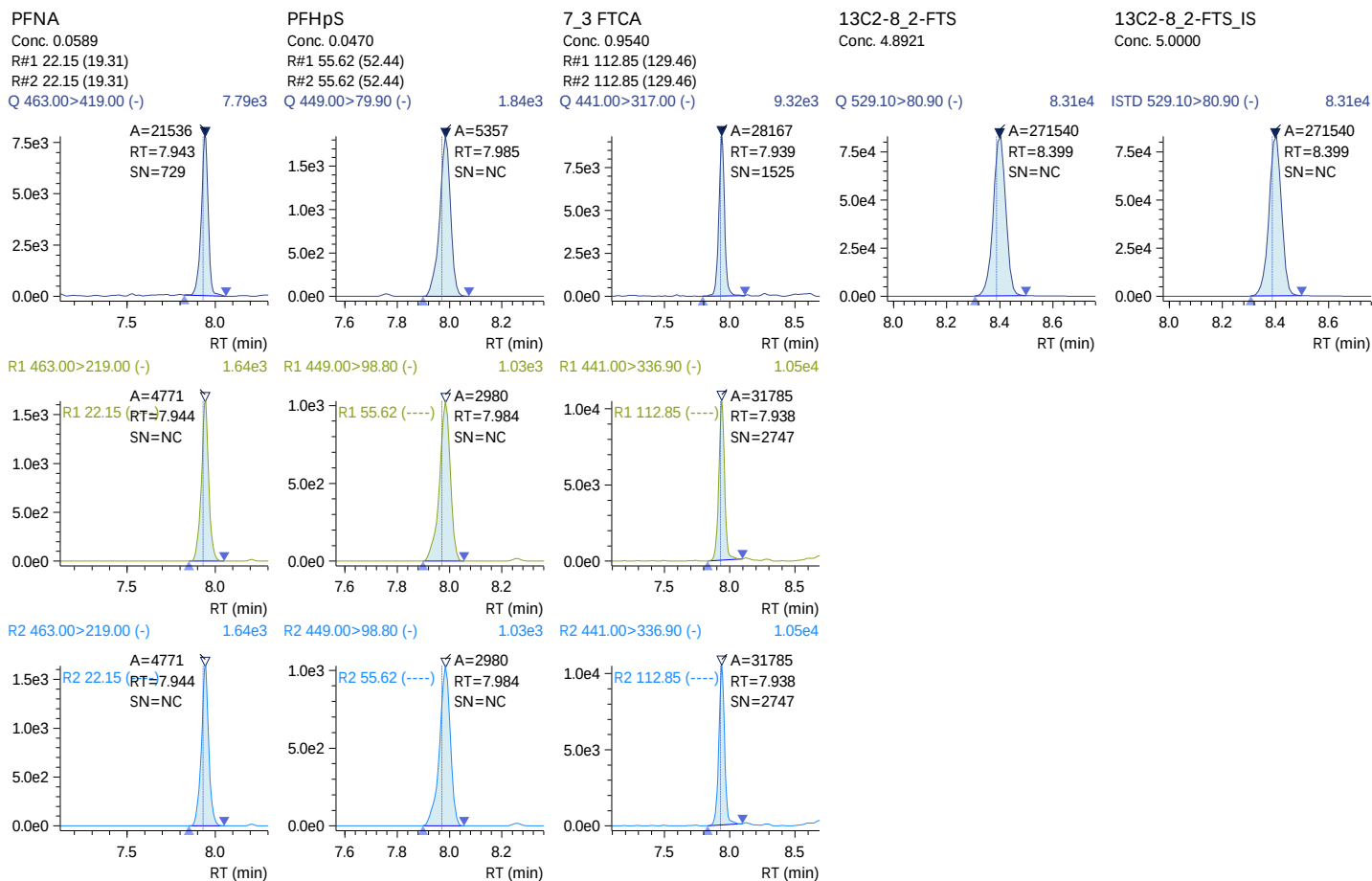


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_018 (continued)

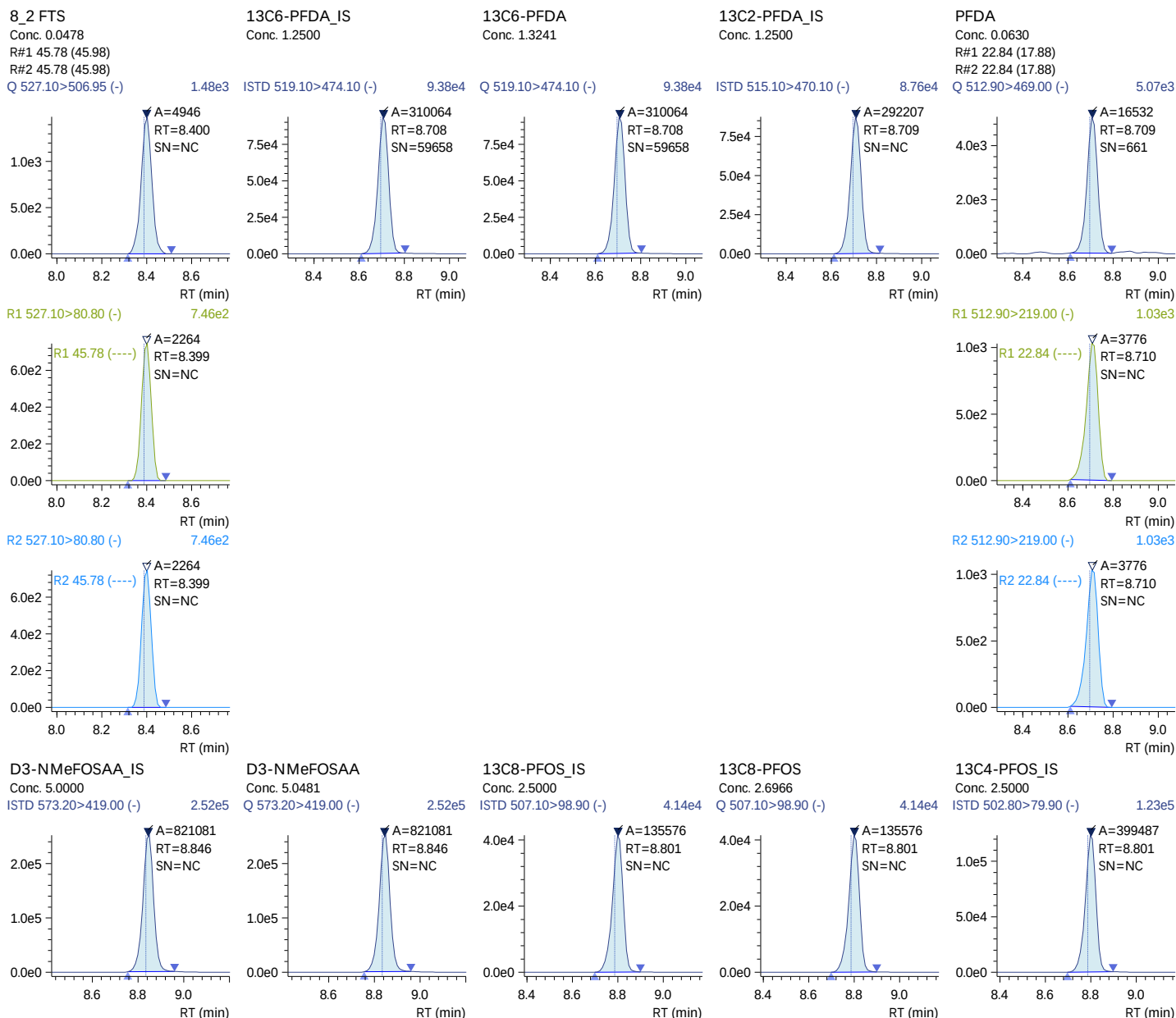


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_018 (continued)

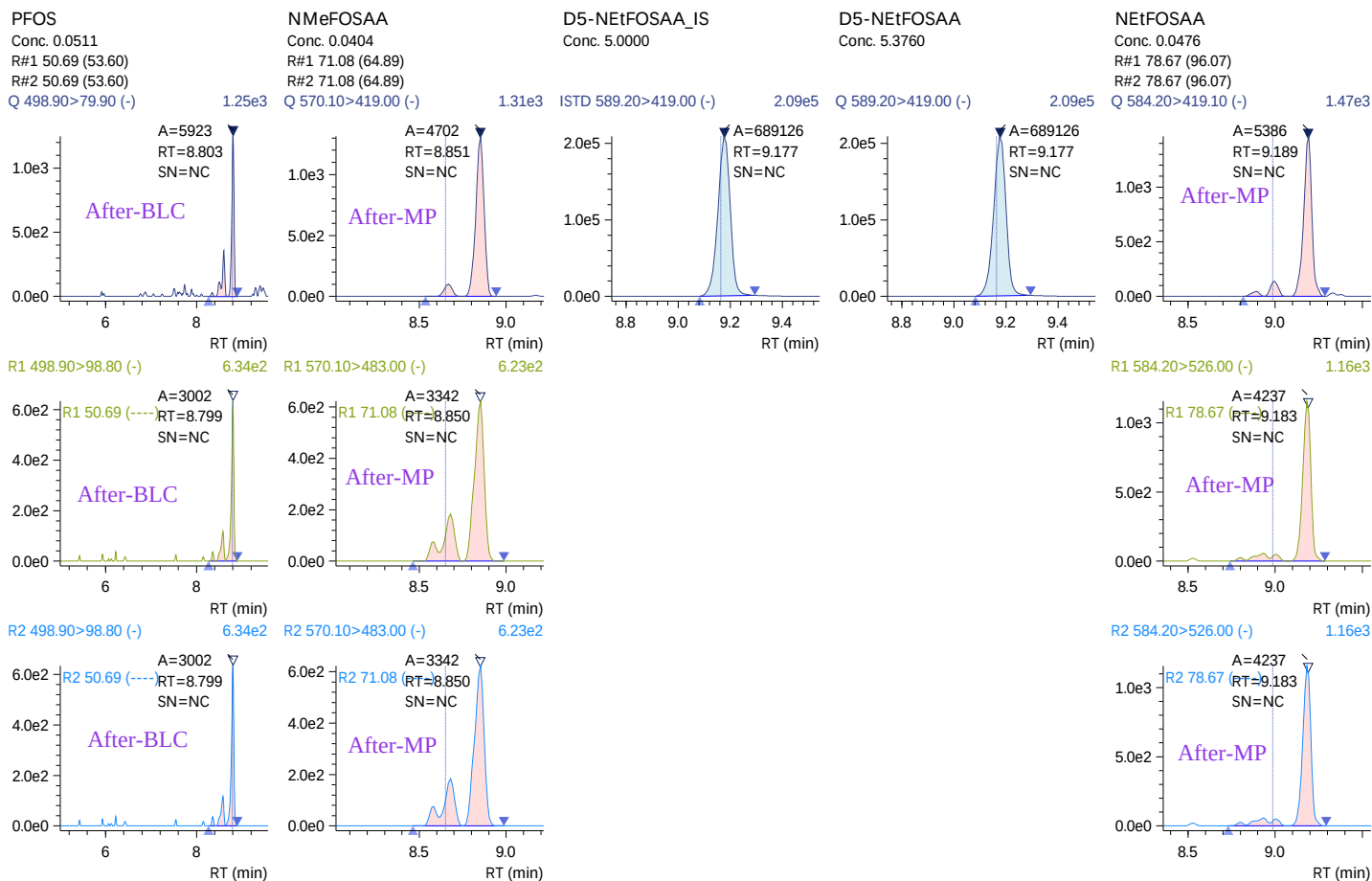


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_018 (continued)



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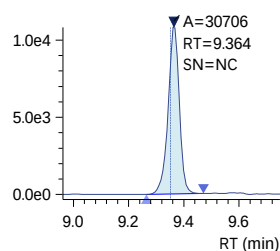
SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



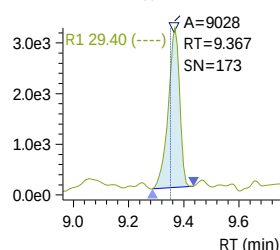
240130_018 (continued)

9-Cl-PF3ONS

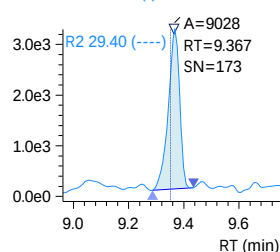
Conc. 0.0497
R#1 29.40 (30.95)
R#2 29.40 (30.95)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-) 3.30e3

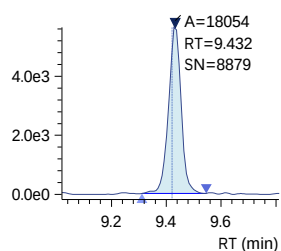


R2 532.80>353.00 (-) 3.30e3

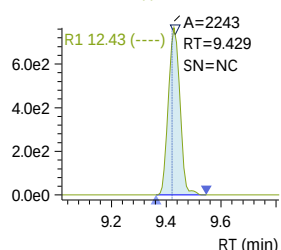


PFUnDA

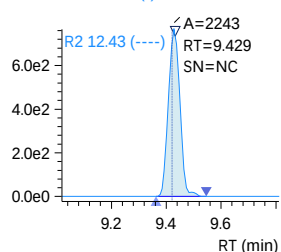
Conc. 0.0480
R#1 12.43 (11.01)
R#2 12.43 (11.01)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-) 7.66e2

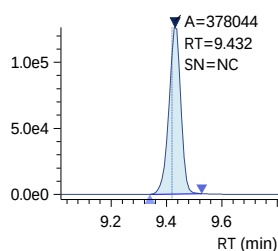


R2 563.10>269.10 (-) 7.66e2



13C7-PFUnDA_IS

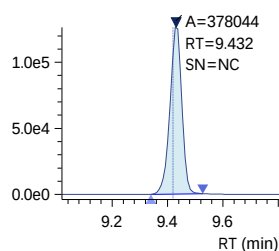
Conc. 1.2500
ISTD 570.00>525.10 (-)



1.26e5

13C7-PFUnDA

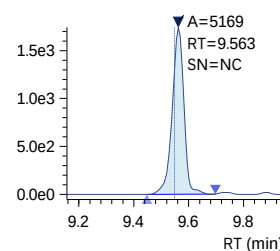
Conc. 1.2993
Q 570.00>525.10 (-)



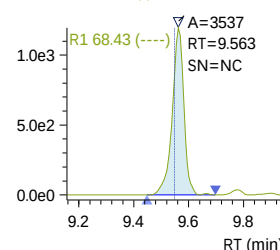
1.26e5

PFNS

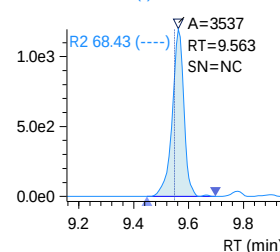
Conc. 0.0450
R#1 68.43 (60.44)
R#2 68.43 (60.44)
Q 548.80>79.90 (-)



1.74e3

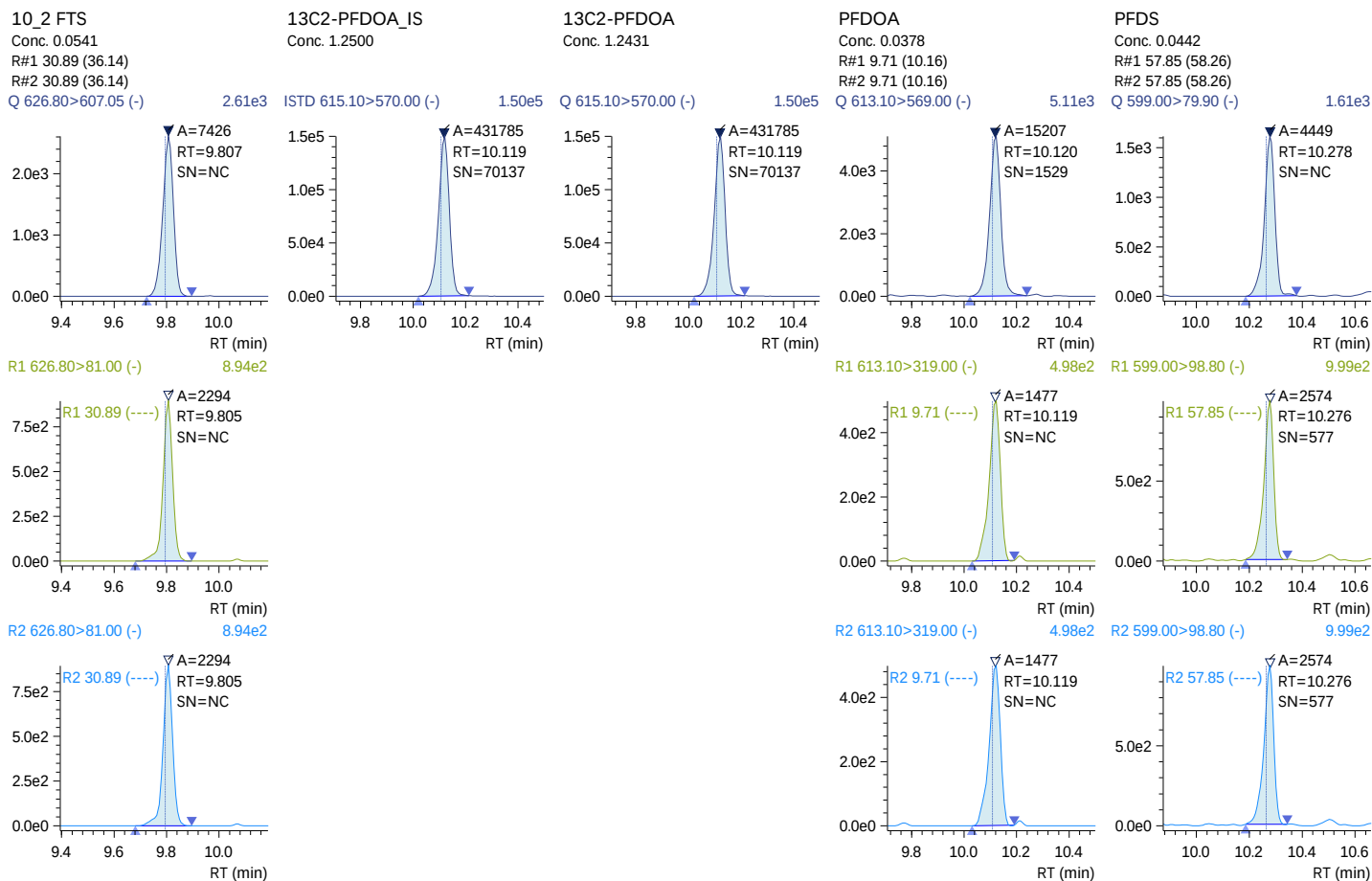


1.20e3





240130_018 (continued)

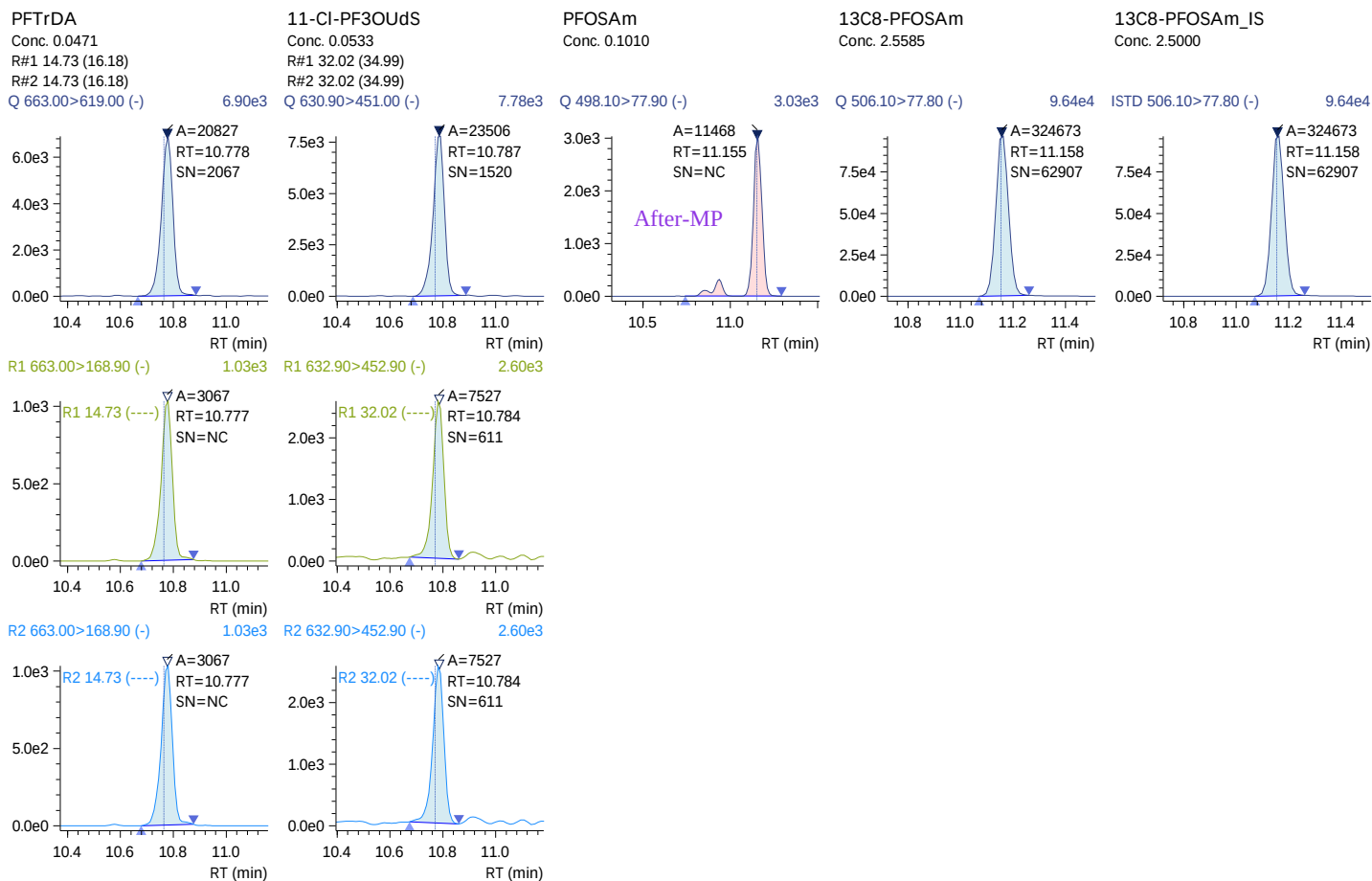


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_018 (continued)

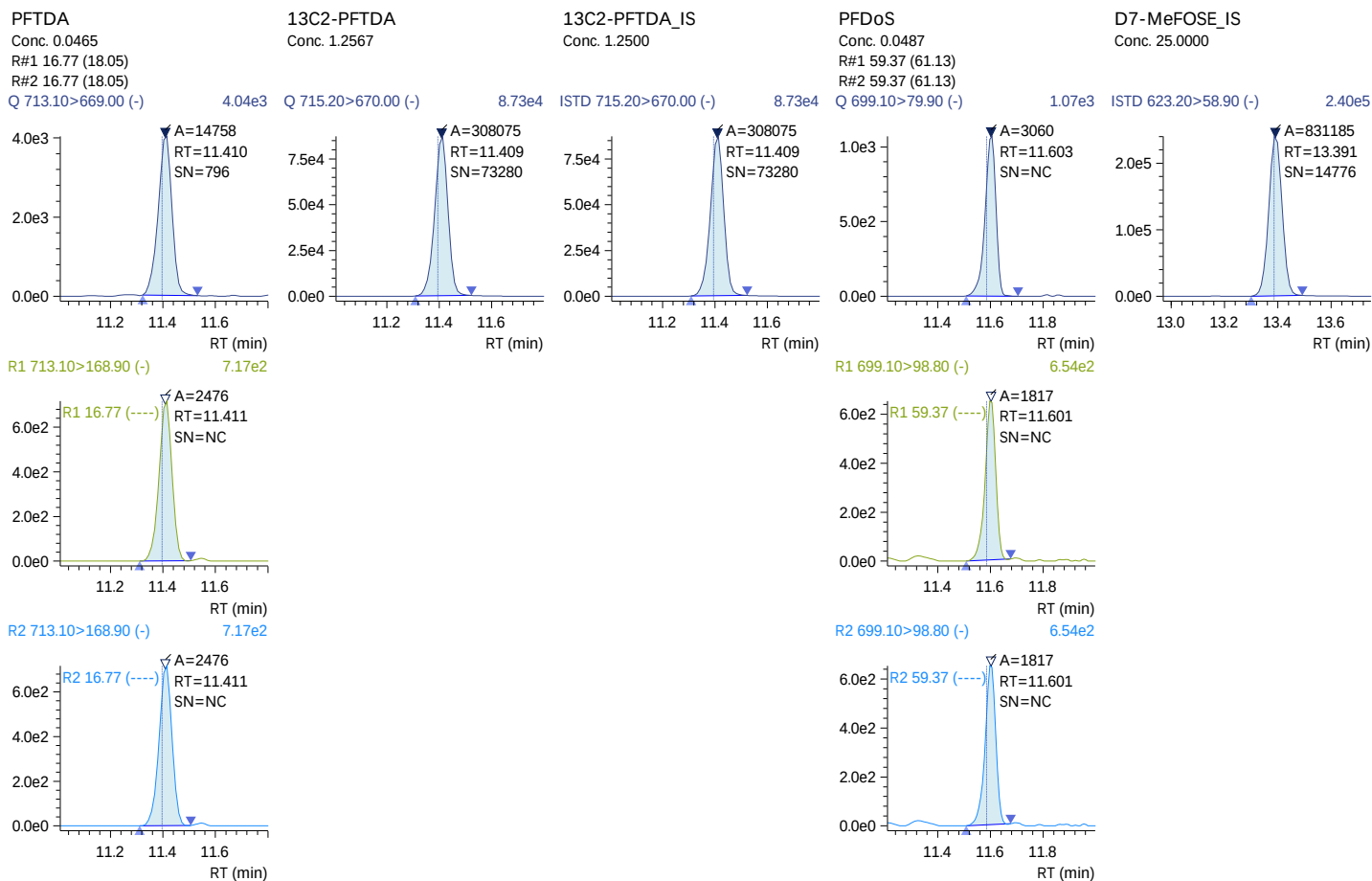


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_018 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_018 (continued)

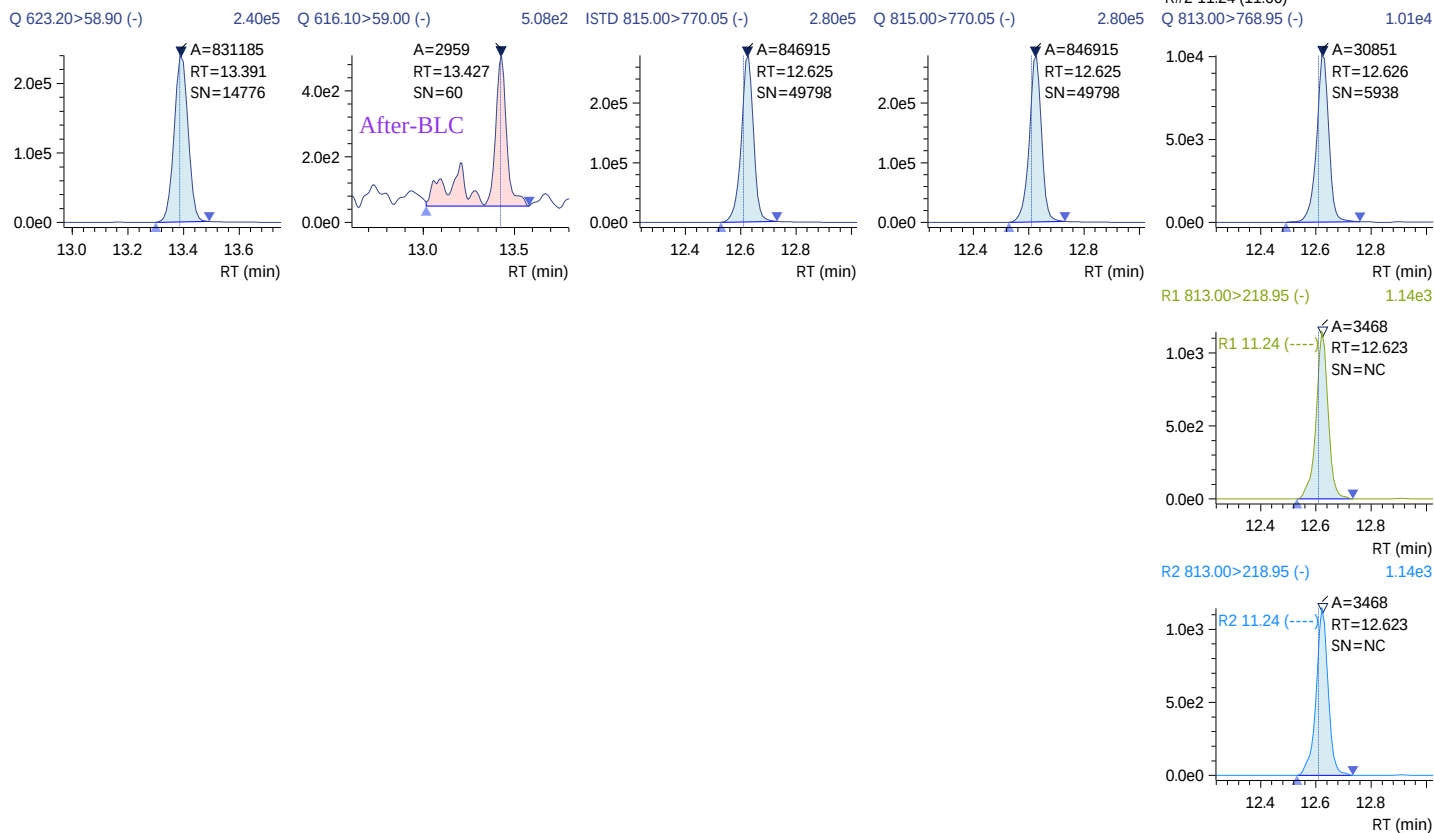
D7-MeFOSE
Conc. 25.5143

MeFOSE
Conc. 0.0554

13C2-PFHXA_IS
Conc. 2.5000

13C2-PFHXA
Conc. 2.5814

PFHXA
Conc. 0.0674
R#1 11.24 (11.66)
R#2 11.24 (11.66)



J:\LCMS08\Data\240130_1633_Curve\240130_1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_018 (continued)

D3-MeFOSA
Conc. 2.4774

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. 0.0546
R#1 133.04 (160.44)
R#2 133.04 (160.44)

D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 26.1318

Q 515.00>219.00 (-)

2.42e4

ISTD 515.00>219.00 (-)

2.42e4

Q 511.90>219.00 (-)

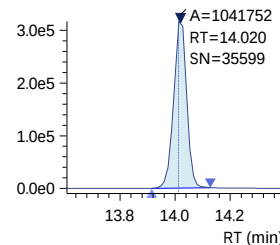
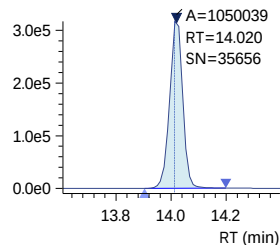
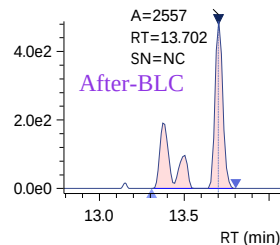
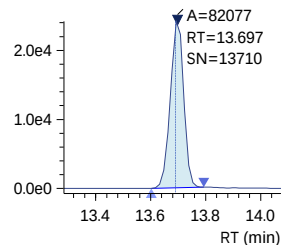
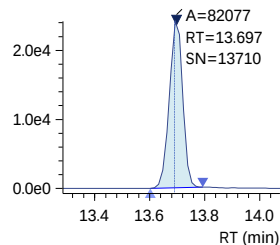
4.88e2

ISTD 639.20>58.90 (-)

3.17e5

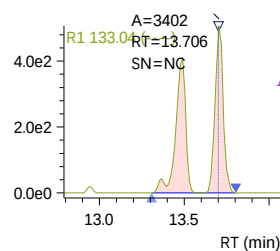
Q 639.20>58.90 (-)

3.17e5



R1 511.90>169.00 (-)

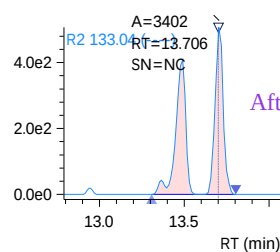
5.07e2



After-BLC

R2 511.90>169.00 (-)

5.07e2



After-BLC



240130_018 (continued)

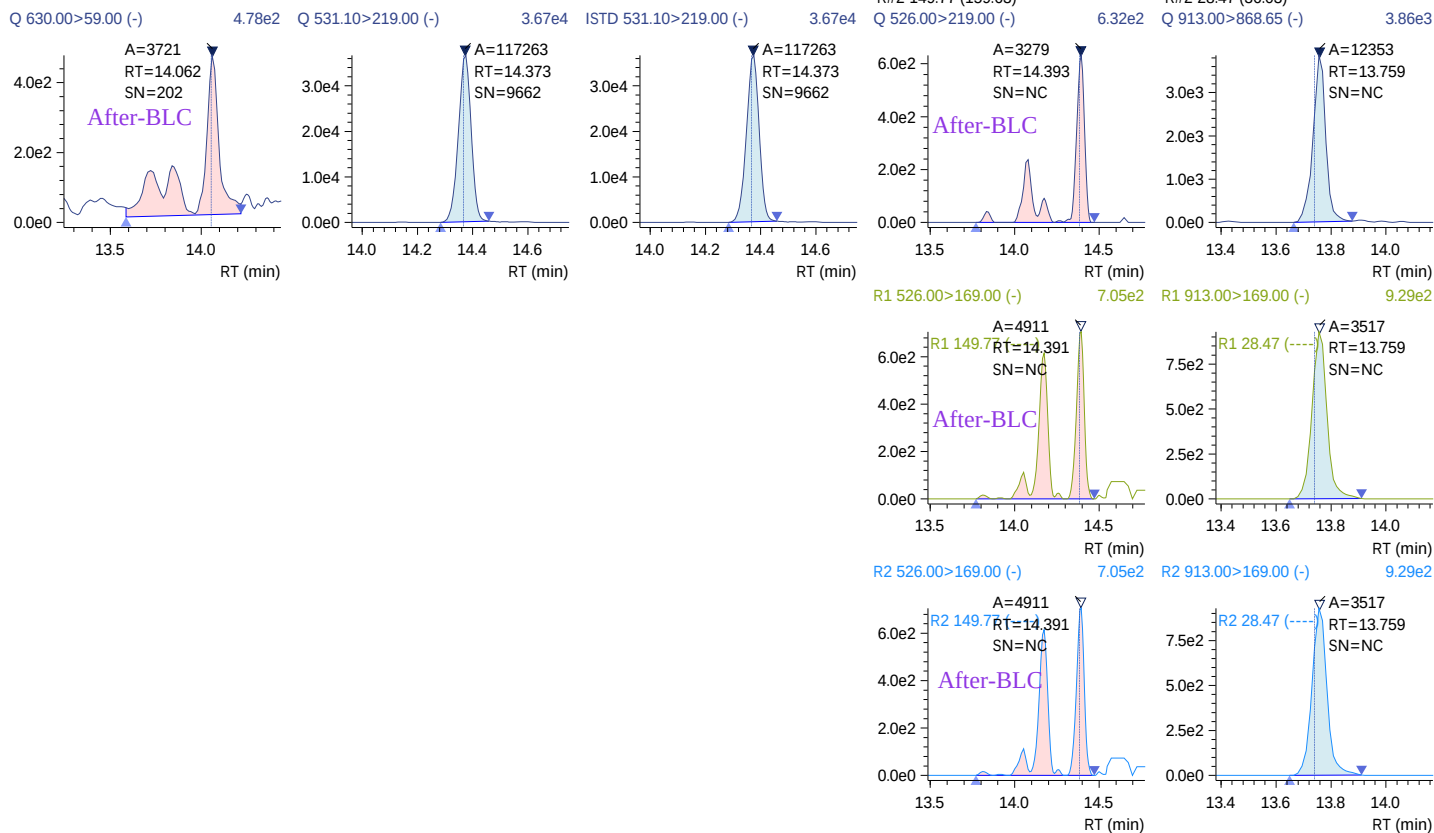
EtFOSE
Conc. 0.0739

D5-EtFOSAm
Conc. 2.5599

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. 0.0510
R#1 149.77 (159.63)
R#2 149.77 (159.63)

PFODA
Conc. 0.0926
R#1 28.47 (36.03)
R#2 28.47 (36.03)



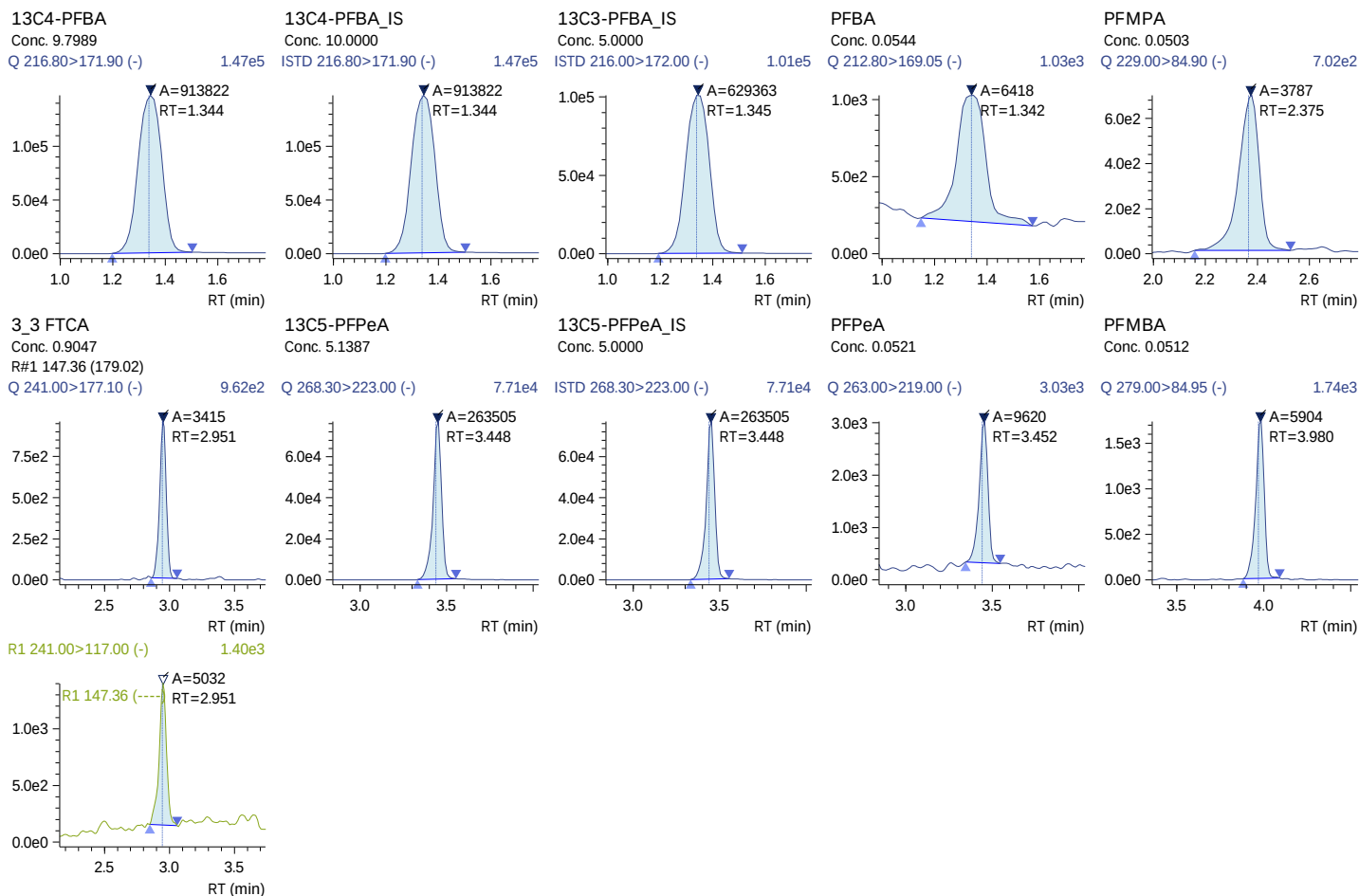
J:\LCMS08\Data\240130_1633_Curve\240130_1633_Curve.damIp

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_018

Sample ID: 1633 ICAL 0.05PPB
Date Acquired: 1/30/2024 9:18:55 PM
Acquired by: System Administrator
Data File: 240130_018
Vial: 1 | Inj. Volume: 10.0000uL | Tray: 1





240130_018 (continued)

13C2-4_2 FTS
Conc. 5.1456

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. 0.1300
R#1 28.58 (24.69)
R#2 28.58 (0.00)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 0.0438
R#1 48.56 (52.67)
R#2 48.56 (0.00)

Q 329.10>80.90 (-)

1.02e5

ISTD 329.10>80.90 (-)

1.02e5

Q 327.10>307.00 (-)

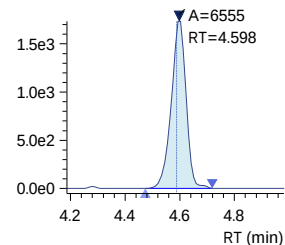
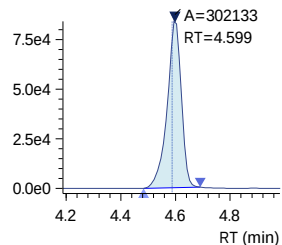
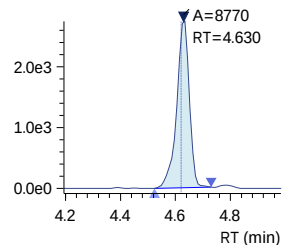
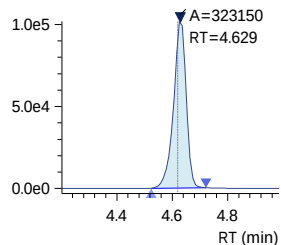
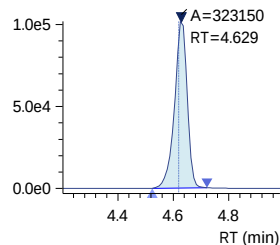
2.75e3

ISTD 302.10>79.90 (-)

8.42e4

Q 298.70>79.90 (-)

1.73e3

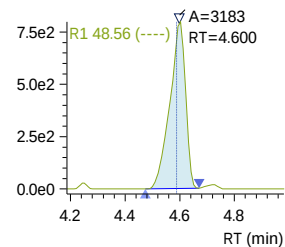
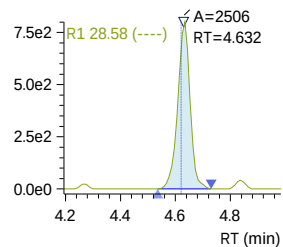


R1 327.10>80.90 (-)

8.01e2

R1 298.70>98.80 (-)

7.99e2

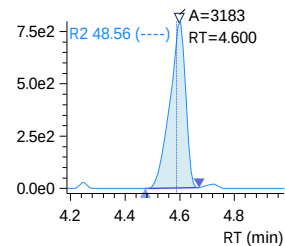
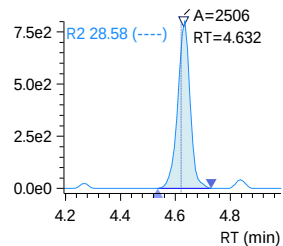


R2 327.10>80.90 (-)

8.01e2

R2 298.70>98.80 (-)

7.99e2





240130_018 (continued)

13C3-PFBS
Conc. 2.4272

NFDHA
Conc. 0.0574
R#1 28.85 (39.38)
R#2 28.85 (0.00)

13C5-PFHxA
Conc. 2.4419

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

Q 302.10>79.90 (-)

8.42e4

Q 295.00>201.00 (-)

1.99e3

Q 318.00>273.00 (-)

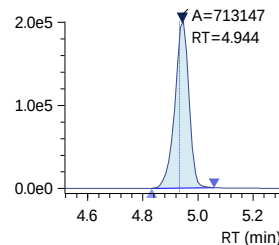
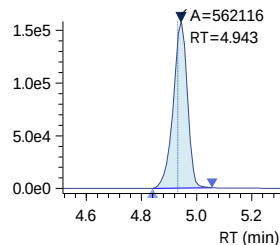
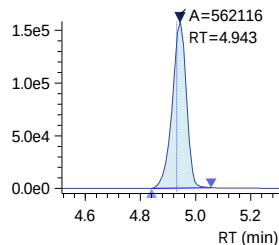
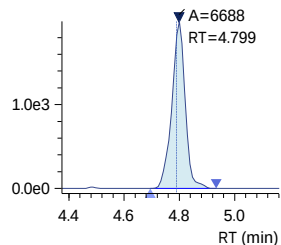
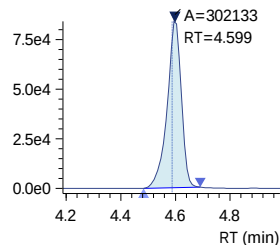
1.59e5

ISTD 318.00>273.00 (-)

1.59e5

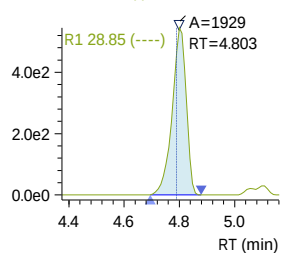
ISTD 315.10>270.00 (-)

2.01e5



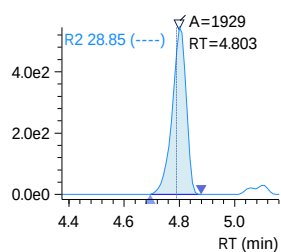
R1 295.00>84.90 (-)

5.45e2



R2 295.00>84.90 (-)

5.45e2





240130_018 (continued)

PFHxA
Conc. 0.0969

PFEESA
Conc. 0.0454
R#1 5.38 (5.25)
R#2 5.38 (0.00)

13C3-HFPO-DA
Conc. 9.9733

13C3-HFPO-DA_IS
Conc. 10.0000

HFPO-DA
Conc. 0.0572
R#1 61.29 (69.48)
R#2 61.29 (0.00)

Q 313.00>269.00 (-)

3.87e3

Q 314.80>135.00 (-)

9.43e3

Q 286.90>168.90 (-)

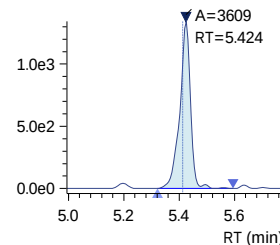
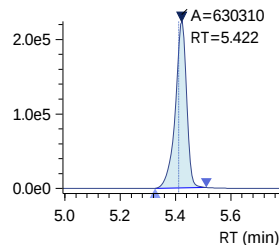
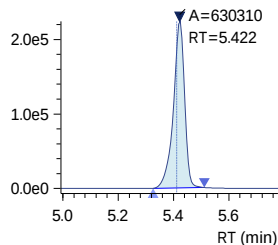
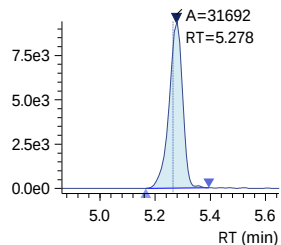
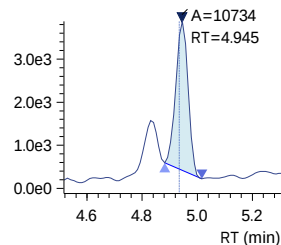
2.24e5

ISTD 286.90>168.90 (-)

2.24e5

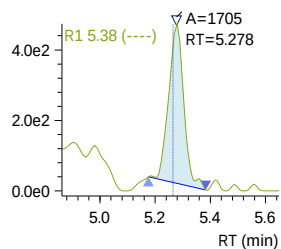
Q 284.90>168.90 (-)

1.34e3



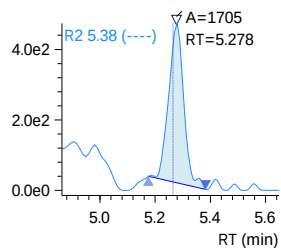
R1 314.80>82.90 (-)

4.74e2



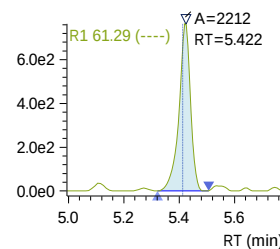
R2 314.80>82.90 (-)

4.74e2



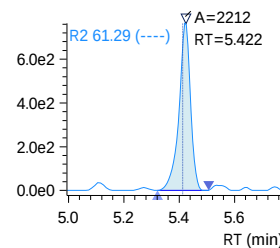
R1 284.90>184.90 (-)

7.64e2



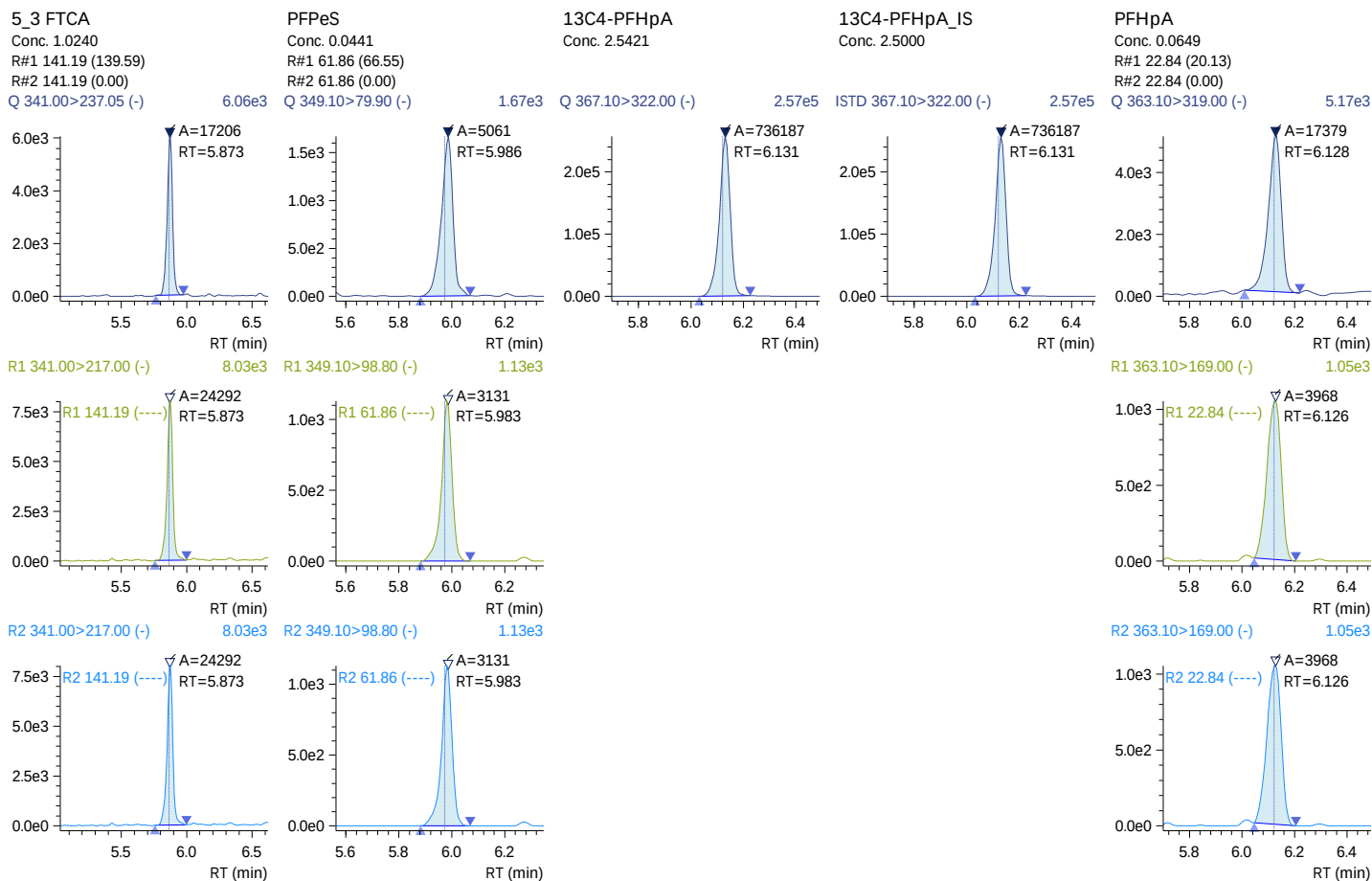
R2 284.90>184.90 (-)

7.64e2



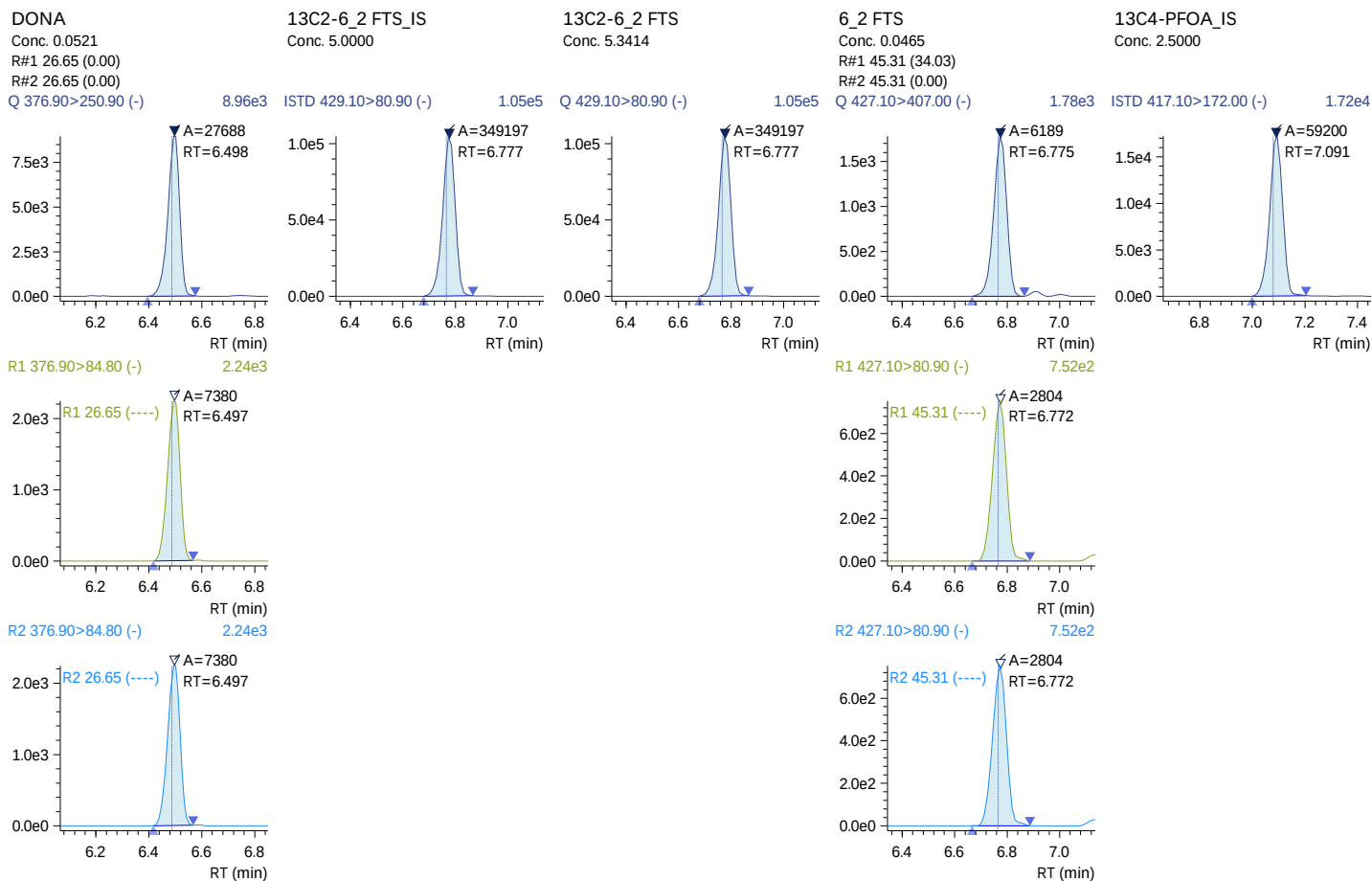


240130_018 (continued)





240130_018 (continued)





240130_018 (continued)

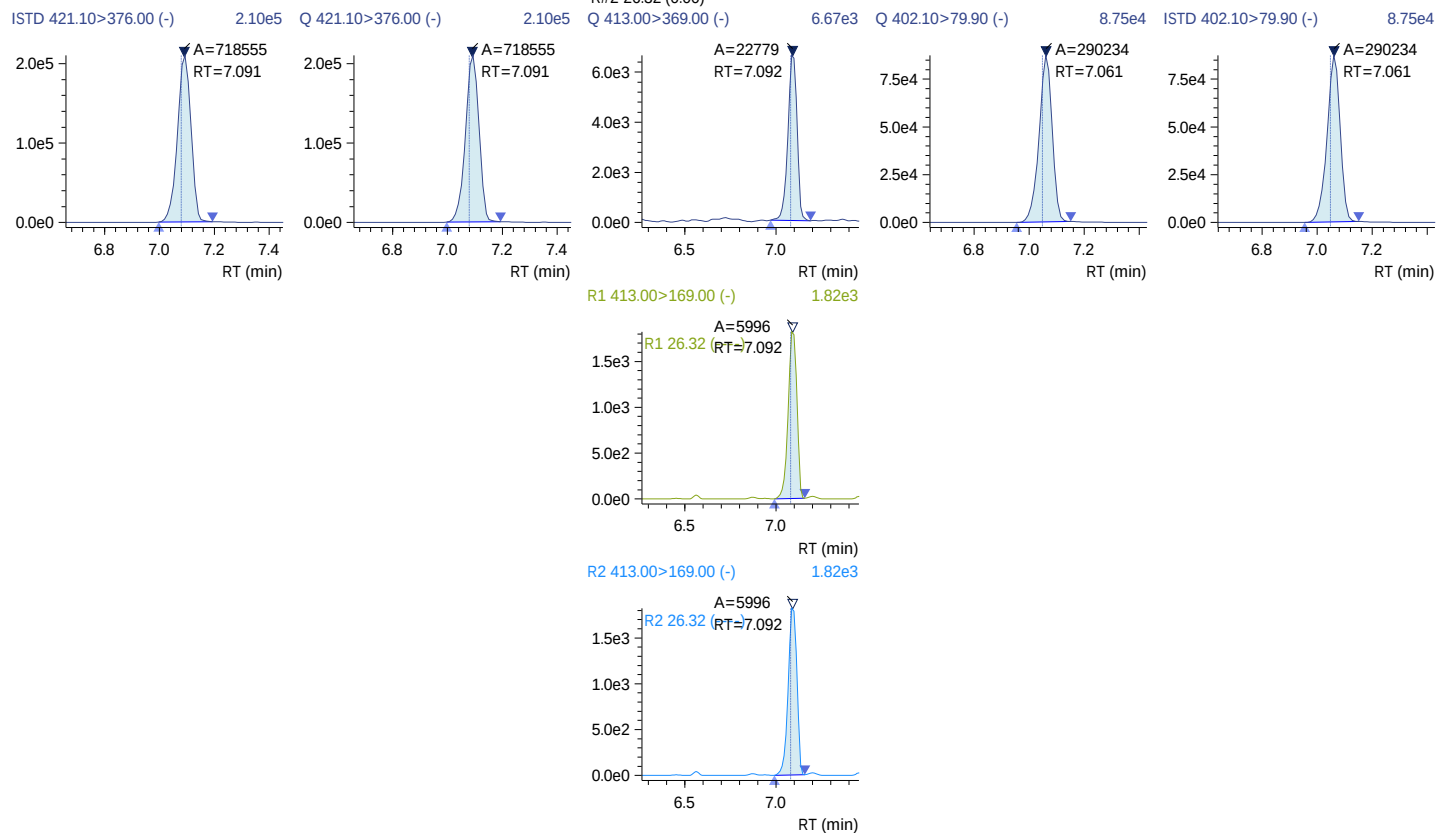
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.5451

PFOA
Conc. 0.0591
R#1 26.32 (22.46)
R#2 26.32 (0.00)

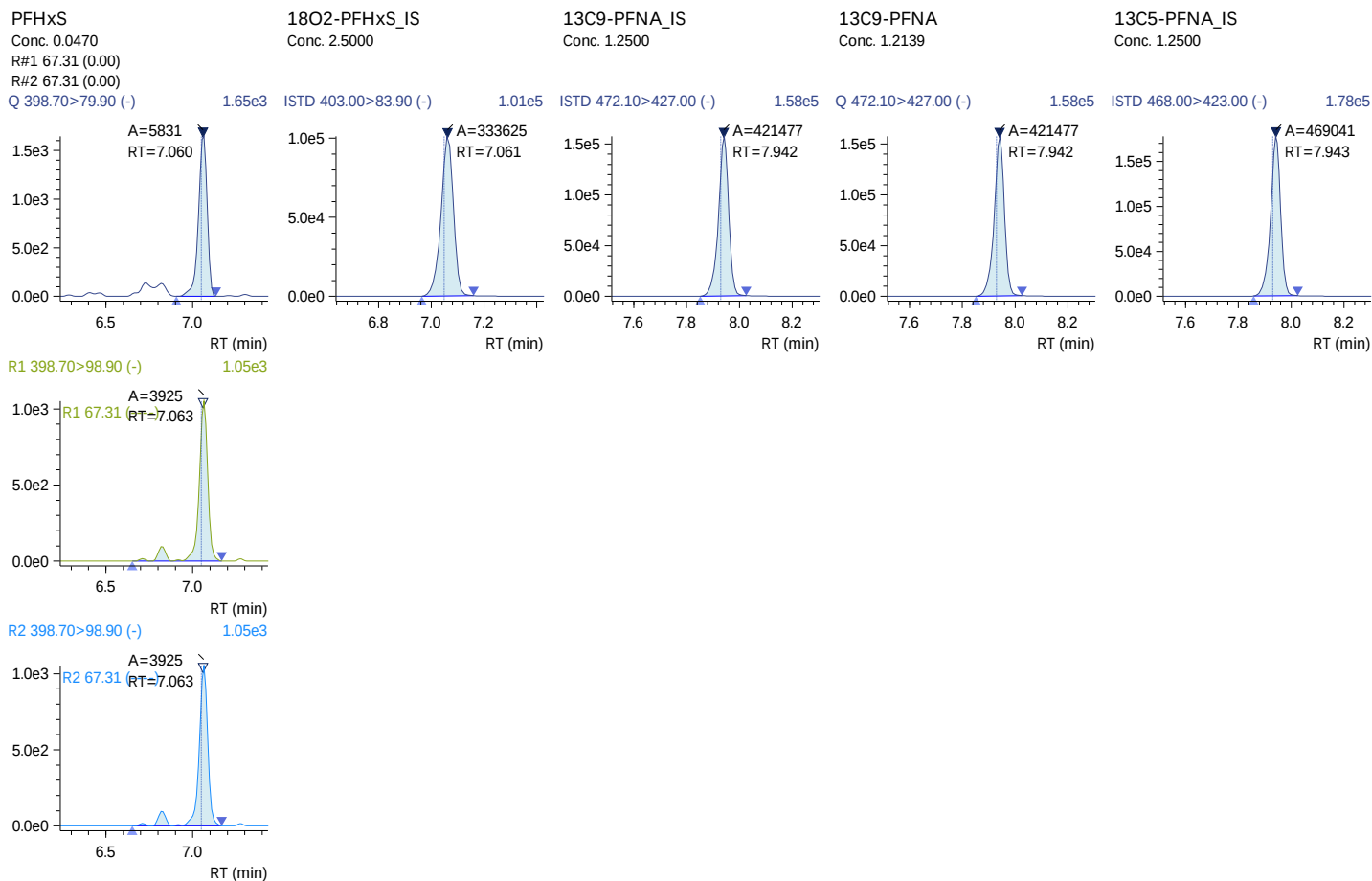
13C3-PFHxS
Conc. 2.4821

13C3-PFHxS_IS
Conc. 2.5000



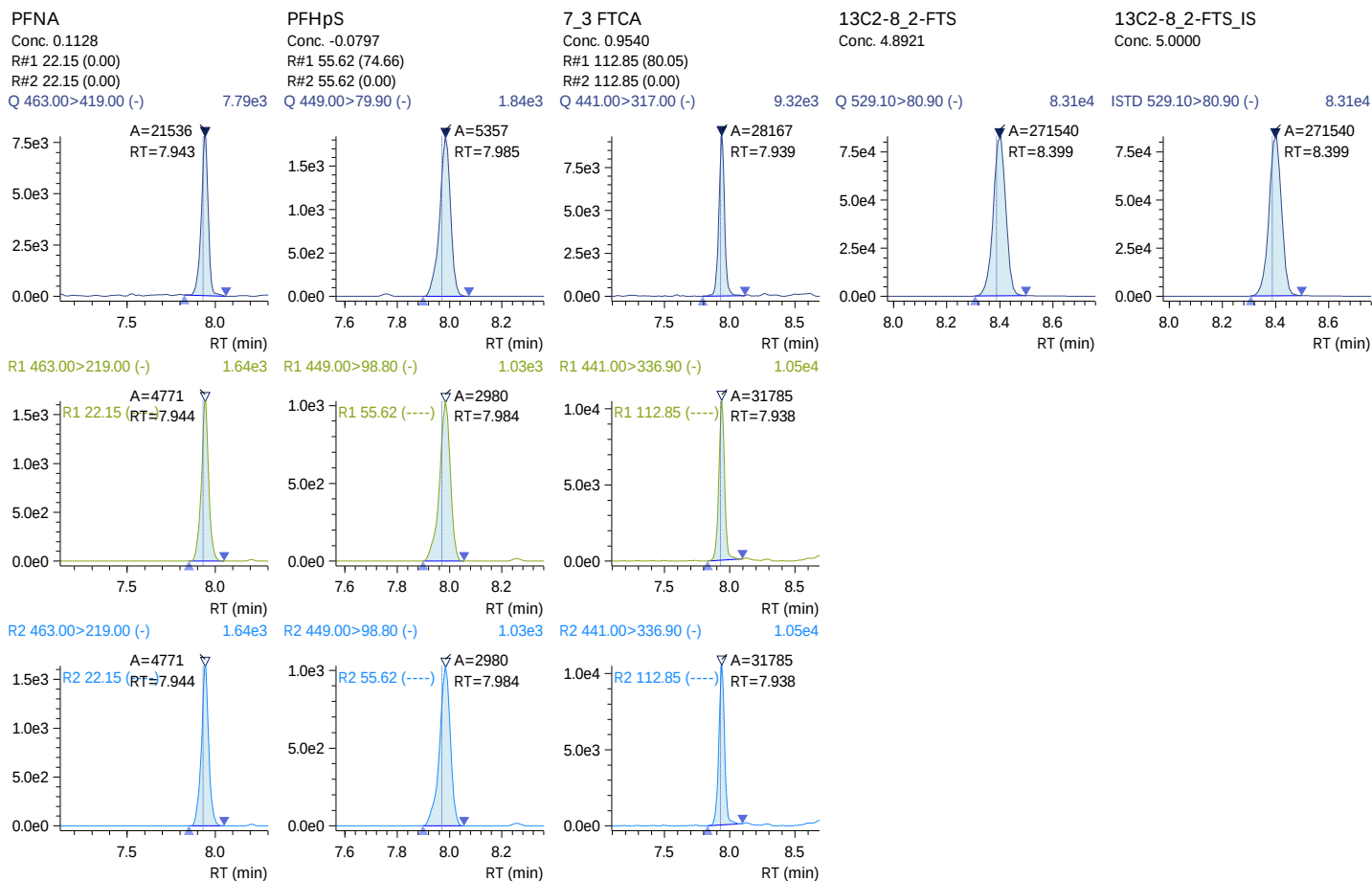


240130_018 (continued)



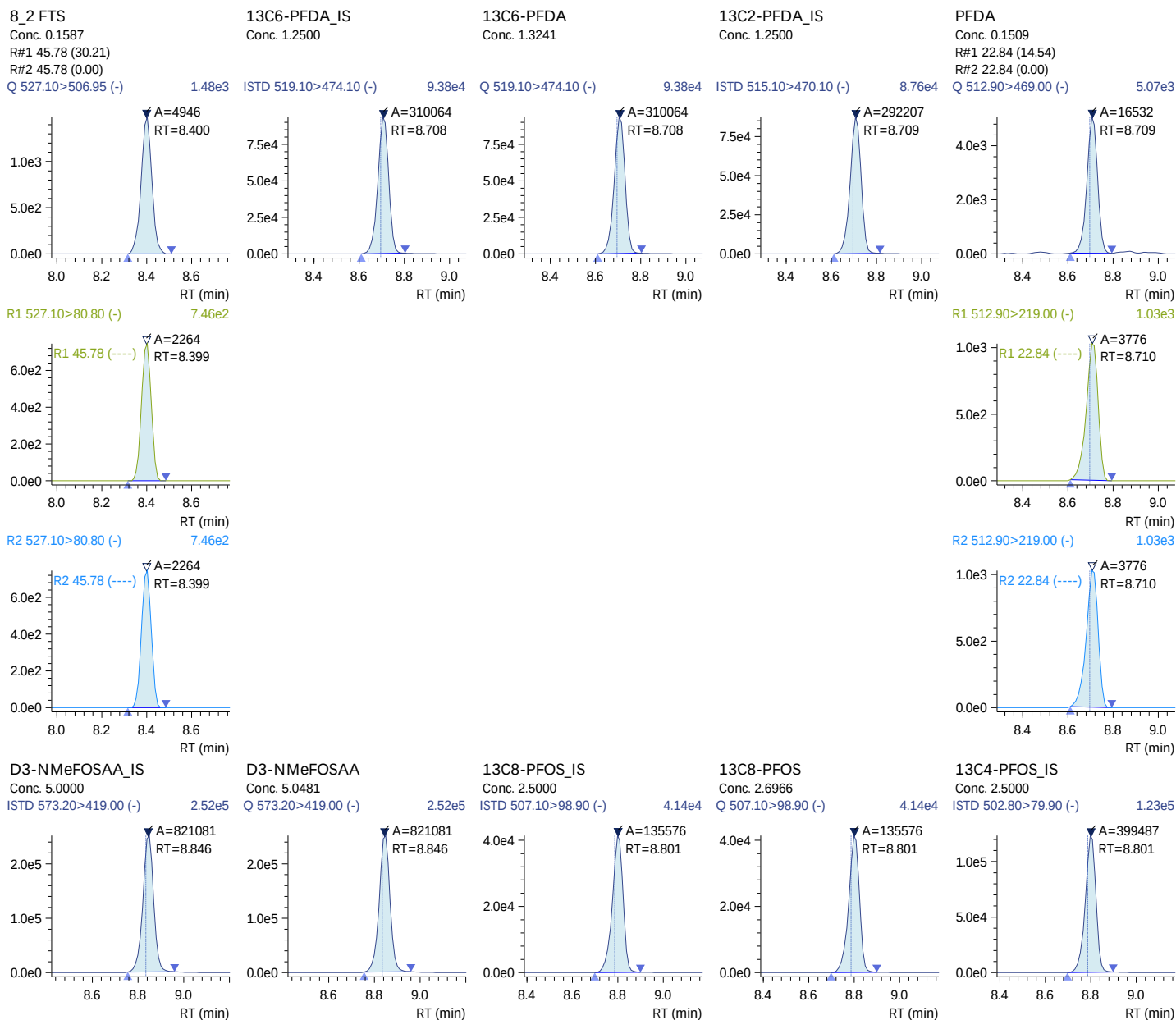


240130_018 (continued)



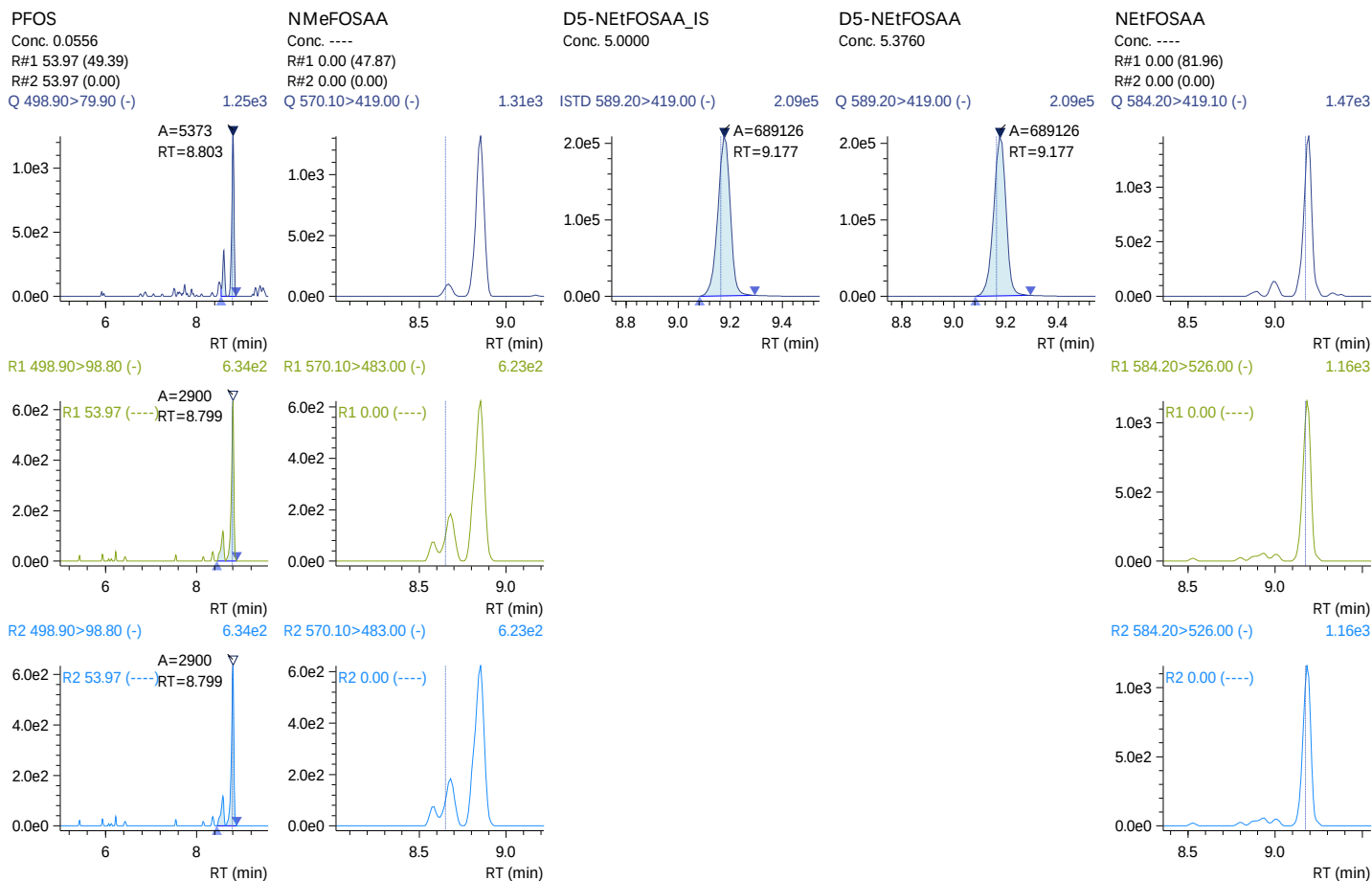


240130_018 (continued)





240130_018 (continued)





240130_018 (continued)

9-Cl-PF3ONS

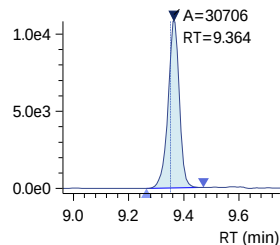
Conc. 0.0497

R#1 29.40 (31.39)

R#2 29.40 (0.00)

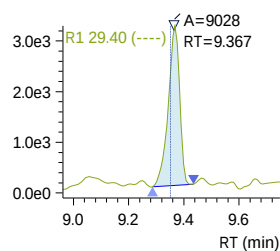
Q 530.80>351.00 (-)

1.08e4



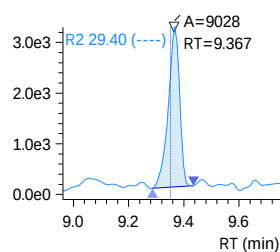
R1 532.80>353.00 (-)

3.30e3



R2 532.80>353.00 (-)

3.30e3



PFUnDA

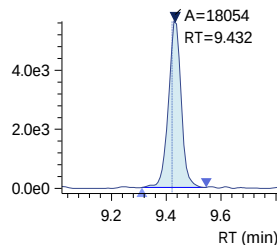
Conc. 0.0491

R#1 12.43 (12.59)

R#2 12.43 (0.00)

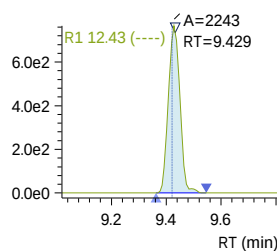
Q 563.10>519.00 (-)

5.65e3



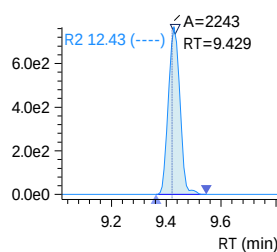
R1 563.10>269.10 (-)

7.66e2



R2 563.10>269.10 (-)

7.66e2

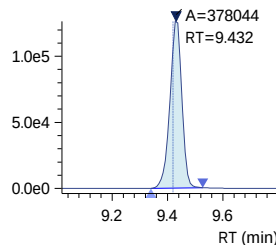


13C7-PFUnDA_IS

Conc. 1.2500

ISTD 570.00>525.10 (-)

1.26e5

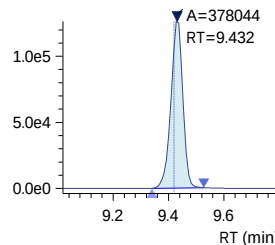


13C7-PFUnDA

Conc. 1.2993

Q 570.00>525.10 (-)

1.26e5



PFNS

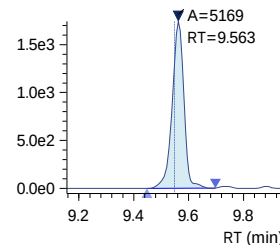
Conc. 0.0450

R#1 68.43 (82.65)

R#2 68.43 (0.00)

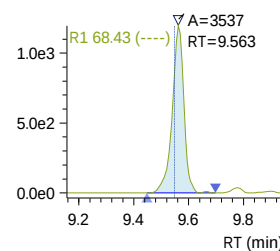
Q 548.80>79.90 (-)

1.74e3



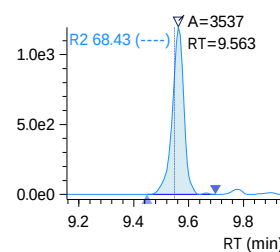
R1 548.80>98.80 (-)

1.20e3



R2 548.80>98.80 (-)

1.20e3





240130_018 (continued)

10_2 FTS

Conc. 0.0395
R#1 30.89 (16.46)
R#2 30.89 (0.00)

Q 626.80>607.05 (-)

2.61e3

13C2-PFDOA_IS

Conc. 1.2500

ISTD 615.10>570.00 (-)

1.50e5

13C2-PFDOA

Conc. 1.2431

Q 615.10>570.00 (-)

1.50e5

PFDOA

Conc. 0.0443
R#1 9.71 (10.12)
R#2 9.71 (0.00)

Q 613.10>569.00 (-)

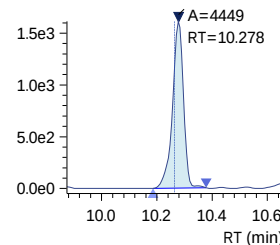
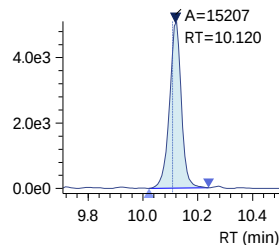
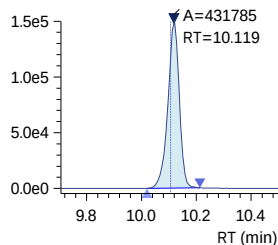
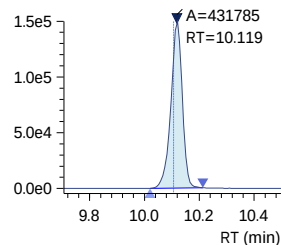
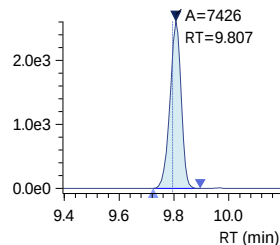
5.11e3

PFDS

Conc. 0.0442
R#1 57.85 (77.67)
R#2 57.85 (0.00)

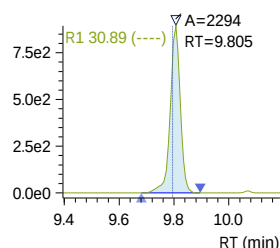
Q 599.00>79.90 (-)

1.61e3



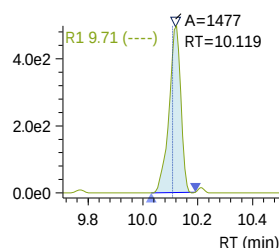
R1 626.80>81.00 (-)

8.94e2



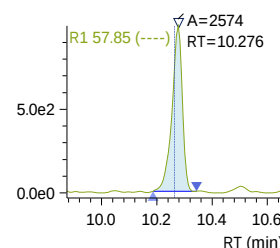
R1 613.10>319.00 (-)

4.98e2



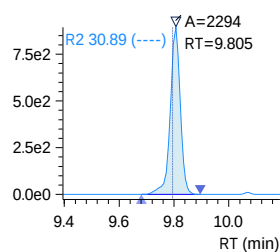
R1 599.00>98.80 (-)

9.99e2



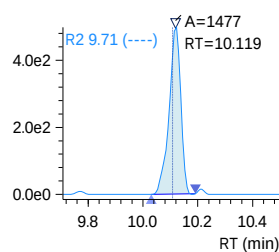
R2 626.80>81.00 (-)

8.94e2



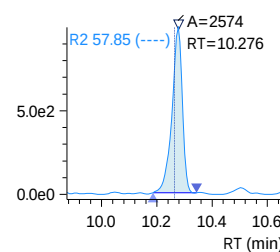
R2 613.10>319.00 (-)

4.98e2



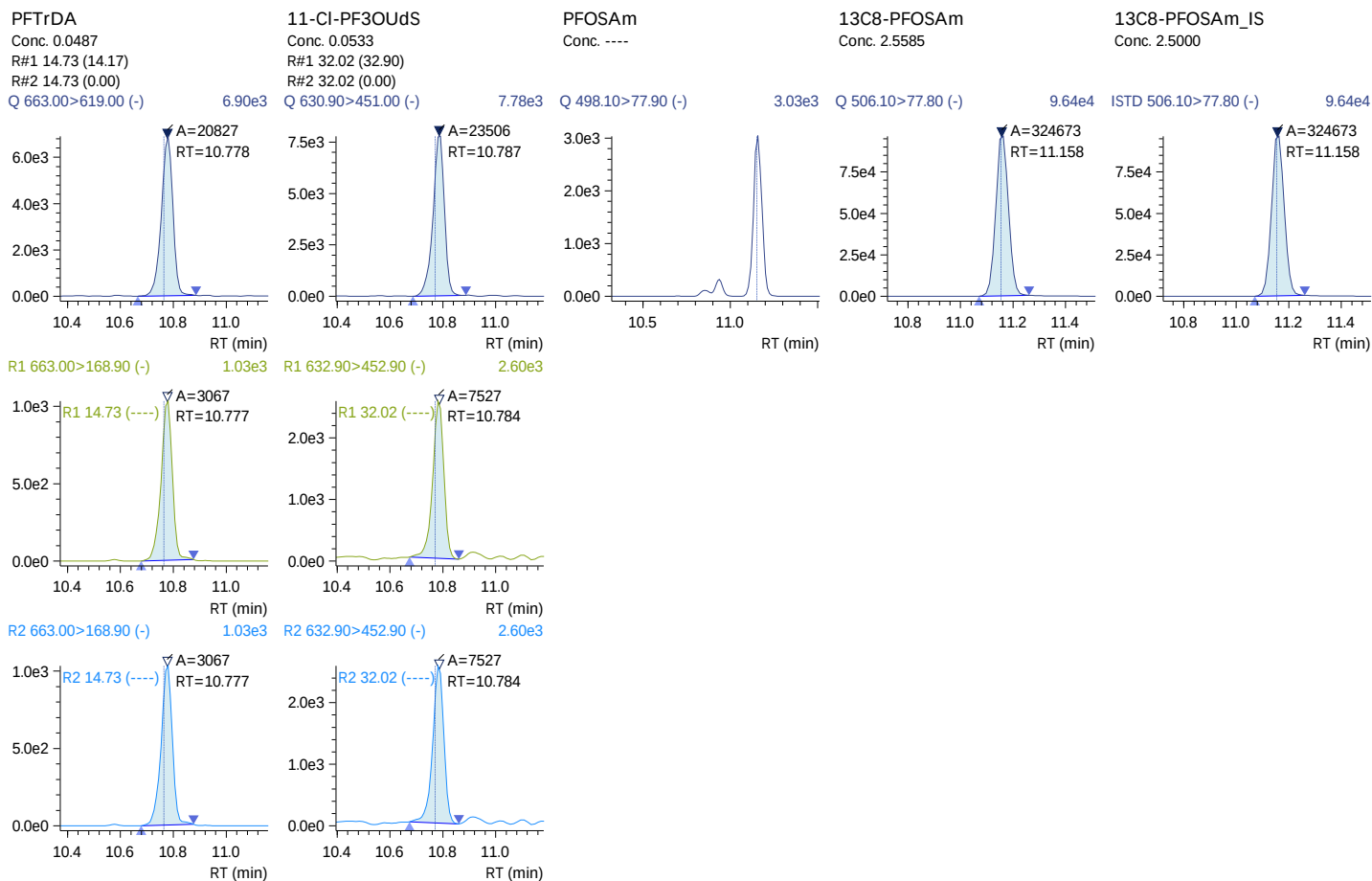
R2 599.00>98.80 (-)

9.99e2



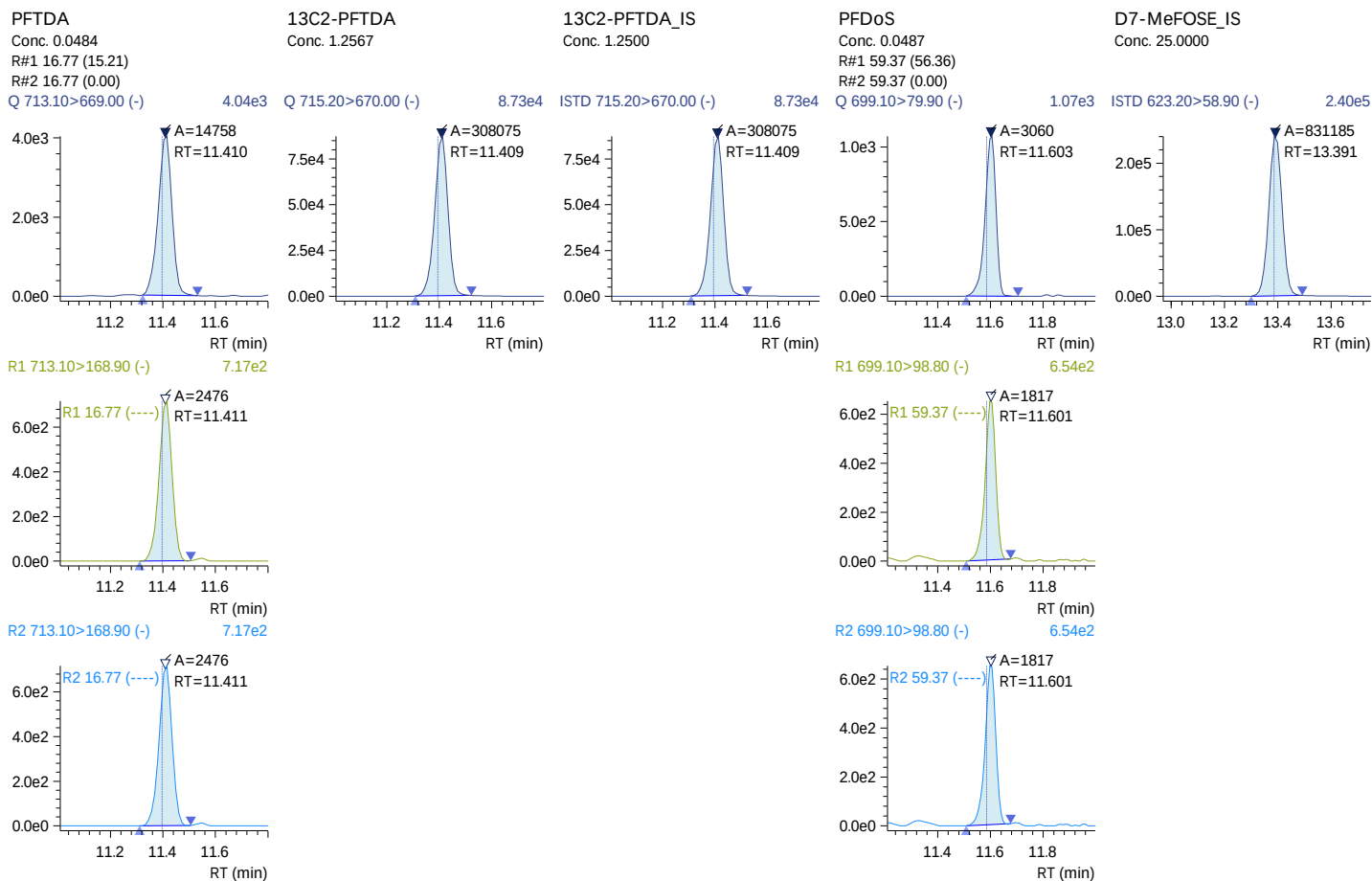


240130_018 (continued)





240130_018 (continued)





240130_018 (continued)

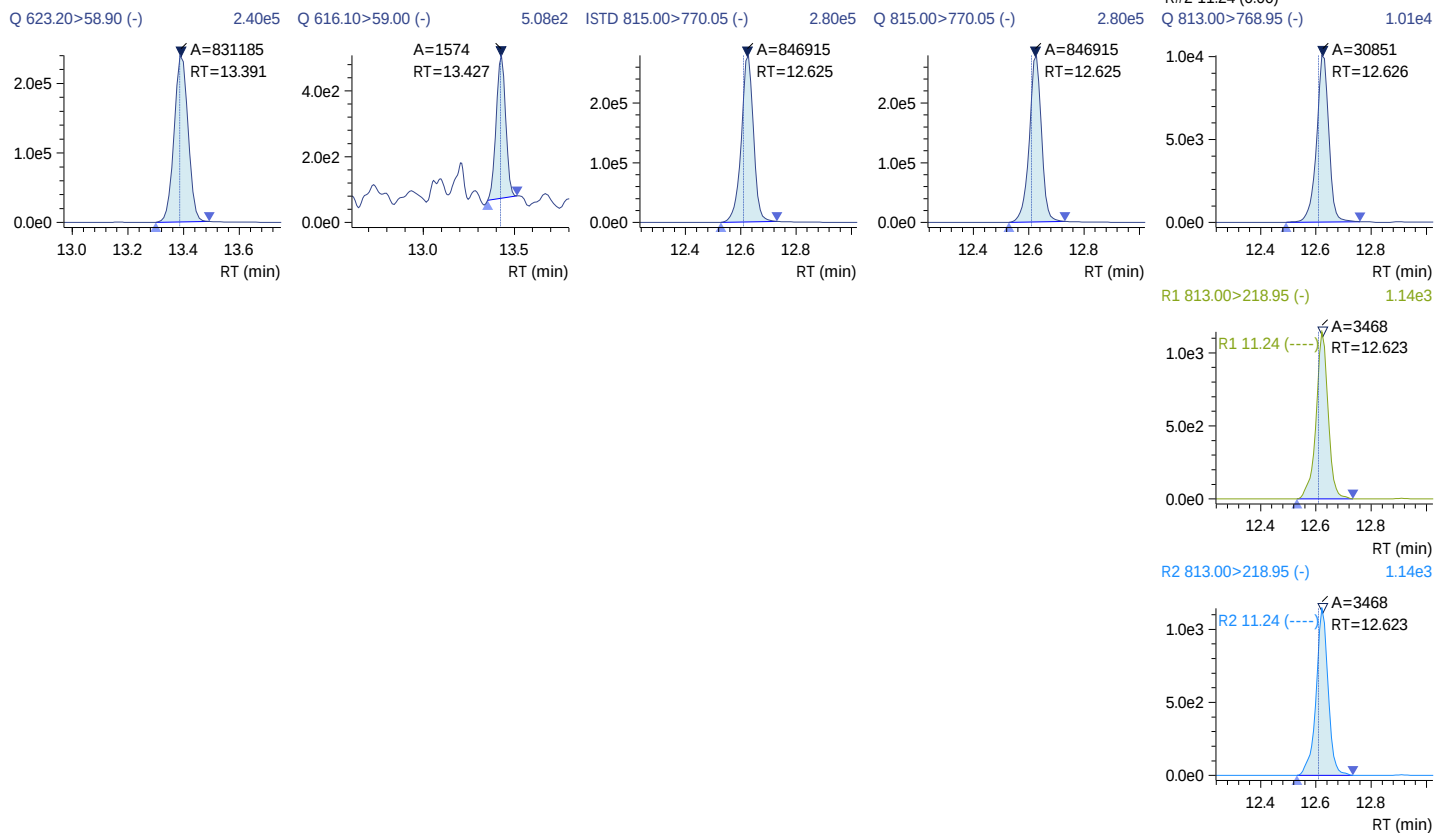
D7-MeFOSE
 Conc. 25.5143

MeFOSE
 Conc. 0.0595

¹³C2-PFHDA_IS
 Conc. 2.5000

¹³C2-PFHDA
 Conc. 2.5814

PFHXDA
 Conc. 0.0649
 R#1 11.24 (9.60)
 R#2 11.24 (0.00)





240130_018 (continued)

D3-MeFOSA
Conc. 2.4774

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. 0.0559
R#1 106.59 (98.91)
R#2 106.59 (0.00)

D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 26.1318

Q 515.00>219.00 (-)

2.42e4

ISTD 515.00>219.00 (-)

2.42e4

Q 511.90>219.00 (-)

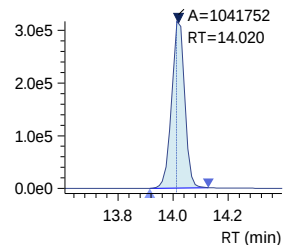
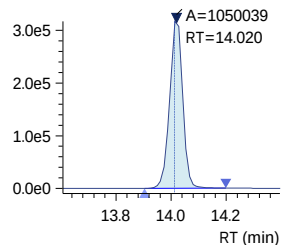
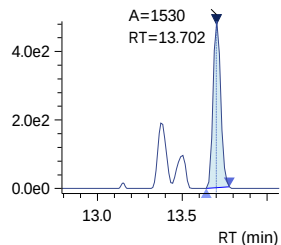
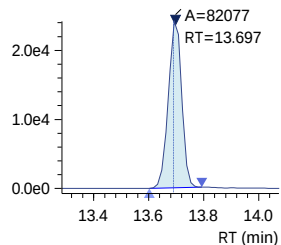
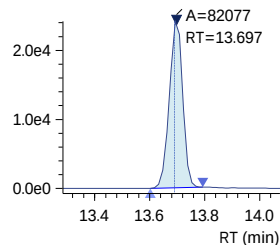
4.88e2

ISTD 639.20>58.90 (-)

3.17e5

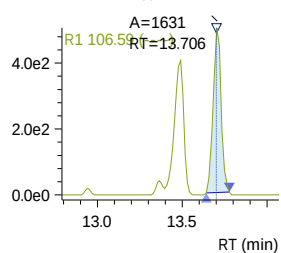
Q 639.20>58.90 (-)

3.17e5



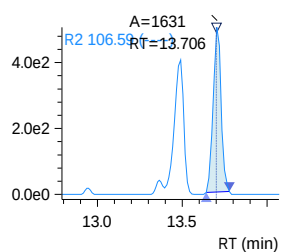
R1 511.90>169.00 (-)

5.07e2



R2 511.90>169.00 (-)

5.07e2





240130_018 (continued)

EtFOSE
Conc. 0.0459

D5-EtFOSAm
Conc. 2.5599

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. 0.0583

PFODA
Conc. 0.0565

Q 630.00>59.00 (-)

4.78e2

Q 531.10>219.00 (-)

3.67e4

ISTD 531.10>219.00 (-)

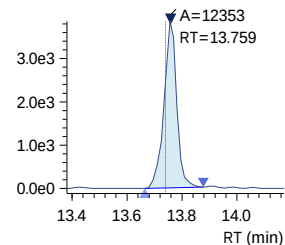
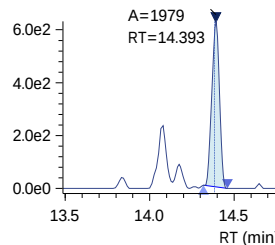
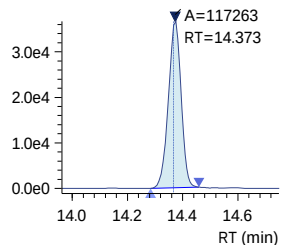
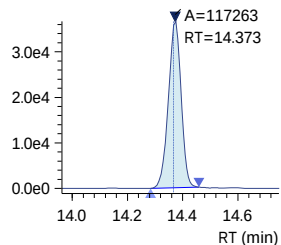
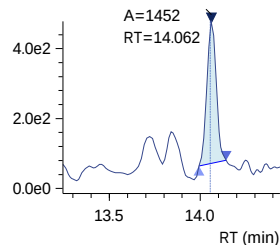
3.67e4

Q 526.00>219.00 (-)

6.32e2

Q 913.00>868.65 (-)

3.86e3

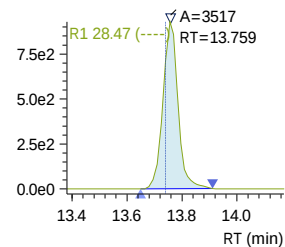
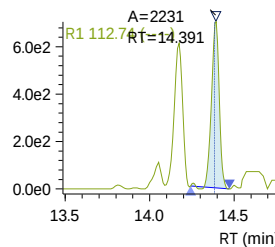


R1 526.00>169.00 (-)

7.05e2

R1 913.00>169.00 (-)

9.29e2

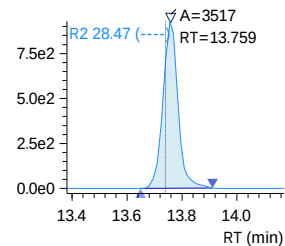
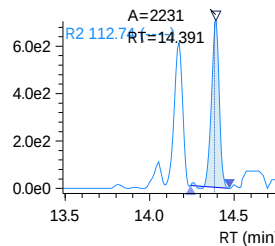


R2 526.00>169.00 (-)

7.05e2

R2 913.00>169.00 (-)

9.29e2

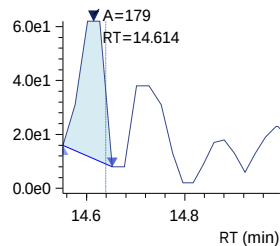


positive trans

Conc. 0.7871

Q 514.80>219.10 (+)

6.20e1





240130_019

Sample ID: 1633 ICAL 0.1PPB
Date Acquired: 1/30/2024 9:42:10 PM
Acquired by: System Administrator
Data File: 240130_019
Vial: 2 | Inj. Volume: 10.0000uL | Tray: 1

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	887749	----	----	----	----	----	----	
13C4-PFBA_IS	216.80>171.90	----	887749	----	----	----	----	----	----	
13C3-PFBA_IS	216.00>172.00	----	611487	----	----	----	----	----	----	
PFBA	212.80>169.05	----	8652	----	----	----	----	----	----	
PFMPA	229.00>84.90	----	6924	----	----	----	----	----	----	
3_3 FTCA	241.00>177.10	241.00>117.00	17348	22460	129.46	139.21	----	----	----	
13C5-PFPeA	268.30>223.00	----	262559	----	----	----	----	----	----	
13C5-PFPeA_IS	268.30>223.00	----	262559	----	----	----	----	----	----	
PFPeA	263.00>219.00	----	19548	----	----	----	----	----	----	
PFMBA	279.00>84.95	----	10445	----	----	----	----	----	----	
13C2-4_2 FTS	329.10>80.90	----	294077	----	----	----	----	----	----	
13C2-4_2 FTS_IS	329.10>80.90	----	294077	----	----	----	----	----	----	
4_2 FTS	327.10>307.00	327.10>80.90	12877	4833	37.53	32.10	4833	37.53	32.10	
13C3-PFBS_IS	302.10>79.90	----	283868	----	----	----	----	----	----	
PFBS	298.70>79.90	298.70>98.80	12849	5296	41.22	44.81	5296	41.22	44.81	
13C3-PFBS	302.10>79.90	----	283868	----	----	----	----	----	----	
NFDHA	295.00>201.00	295.00>84.90	10897	4640	42.58	35.54	4640	42.58	35.54	
13C5-PFHxA	318.00>273.00	----	605014	----	----	----	----	----	----	
13C5-PFHxA_IS	318.00>273.00	----	605014	----	----	----	----	----	----	
13C2-PFHxA_IS	315.10>270.00	----	743357	----	----	----	----	----	----	
PFHxA	313.00>269.00	----	25272	----	----	----	----	----	----	
PFEESA	314.80>135.00	314.80>82.90	61080	2996	4.91	5.22	2996	4.91	5.22	
13C3-HFPO-DA	286.90>168.90	----	616061	----	----	----	----	----	----	
13C3-HFPO-DA_IS	286.90>168.90	----	616061	----	----	----	----	----	----	
HFPO-DA	284.90>168.90	284.90>184.90	5890	4573	77.63	59.79	4573	77.63	59.79	
5_3 FTCA	341.00>237.05	341.00>217.00	82405	124188	150.70	157.08	124188	150.70	157.08	
PFPeS	349.10>79.90	349.10>98.80	10194	5529	54.24	55.12	5529	54.24	55.12	
13C4-PFHpA	367.10>322.00	----	727457	----	----	----	----	----	----	
13C4-PFHpA_IS	367.10>322.00	----	727457	----	----	----	----	----	----	
PFHpA	363.10>319.00	363.10>169.00	28848	6796	23.56	23.02	6796	23.56	23.02	
DONA	376.90>250.90	376.90>84.80	48642	12667	26.04	27.50	12667	26.04	27.50	
13C2-6_2 FTS_IS	429.10>80.90	----	280505	----	----	----	----	----	----	
13C2-6_2 FTS	429.10>80.90	----	280505	----	----	----	----	----	----	
6_2 FTS	427.10>407.00	427.10>80.90	9655	4265	44.17	50.47	4265	44.17	50.47	
13C4-PFOA_IS	417.10>172.00	----	64328	----	----	----	----	----	----	
13C8-PFOA_IS	421.10>376.00	----	749190	----	----	----	----	----	----	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240130_019 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	749190	----	----	----	----	----	----	----
PFOA	413.00>369.00	413.00>169.00	31168	9799	31.44	28.77	9799	31.44	28.77	
13C3-PFHxS	402.10>79.90	----	289359	----	----	----	----	----	----	----
13C3-PFHxS_IS	402.10>79.90	----	289359	----	----	----	----	----	----	----
PFHxS	398.70>79.90	398.70>98.90	11471	7147	62.30	60.90	7147	62.30	60.90	
18O2-PFHxS_IS	403.00>83.90	----	329849	----	----	----	----	----	----	----
13C9-PFNA_IS	472.10>427.00	----	402203	----	----	----	----	----	----	----
13C9-PFNA	472.10>427.00	----	402203	----	----	----	----	----	----	----
13C5-PFNA_IS	468.00>423.00	----	441205	----	----	----	----	----	----	----
PFNA	463.00>419.00	463.00>219.00	31897	6901	21.64	19.31	6901	21.64	19.31	
PFHpS	449.00>79.90	449.00>98.80	8317	5155	61.99	52.44	5155	61.99	52.44	
7_3 FTCA	441.00>317.00	441.00>336.90	135116	170603	126.27	129.46	170603	126.27	129.46	
13C2-8_2-FTS	529.10>80.90	----	257380	----	----	----	----	----	----	----
13C2-8_2-FTS_IS	529.10>80.90	----	257380	----	----	----	----	----	----	----
8_2 FTS	527.10>506.95	527.10>80.80	8986	3959	44.06	45.98	3959	44.06	45.98	
13C6-PFDA_IS	519.10>474.10	----	284199	----	----	----	----	----	----	----
13C6-PFDA	519.10>474.10	----	284199	----	----	----	----	----	----	----
13C2-PFDA_IS	515.10>470.10	----	296813	----	----	----	----	----	----	----
PFDA	512.90>469.00	512.90>219.00	26834	5086	18.95	17.88	5086	18.95	17.88	
D3-NMeFOSAA_IS	573.20>419.00	----	759493	----	----	----	----	----	----	----
D3-NMeFOSAA	573.20>419.00	----	759493	----	----	----	----	----	----	----
13C8-PFOS_IS	507.10>98.90	----	122302	----	----	----	----	----	----	----
13C8-PFOS	507.10>98.90	----	122302	----	----	----	----	----	----	----
13C4-PFOS_IS	502.80>79.90	----	396921	----	----	----	----	----	----	----
PFOS	498.90>79.90	498.90>98.80	9521	4835	50.79	53.60	4835	50.79	53.60	
NMeFOSAA	570.10>419.00	570.10>483.00	10440	8162	78.18	64.89	8162	78.18	64.89	
D5-NeFOSAA_IS	589.20>419.00	----	640602	----	----	----	----	----	----	----
D5-NeFOSAA	589.20>419.00	----	640602	----	----	----	----	----	----	----
NeFOSAA	584.20>419.10	584.20>526.00	9663	8764	90.70	96.07	8764	90.70	96.07	
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	56147	19215	34.22	30.95	19215	34.22	30.95	
PFUnDA	563.10>519.00	563.10>269.10	30069	3615	12.02	11.01	3615	12.02	11.01	
13C7-PFUnDA_IS	570.00>525.10	----	372169	----	----	----	----	----	----	----
13C7-PFUnDA	570.00>525.10	----	372169	----	----	----	----	----	----	----
PFNS	548.80>79.90	548.80>98.80	9695	6611	68.18	60.44	6611	68.18	60.44	
10_2 FTS	626.80>607.05	626.80>81.00	12412	4687	37.77	36.14	4687	37.77	36.14	
13C2-PFDOA_IS	615.10>570.00	----	423800	----	----	----	----	----	----	----
13C2-PFDOA	615.10>570.00	----	423800	----	----	----	----	----	----	----
PFDOA	613.10>569.00	613.10>319.00	25344	2520	9.94	10.16	2520	9.94	10.16	
PFDS	599.00>79.90	599.00>98.80	8808	5169	58.69	58.26	5169	58.69	58.26	
PFTrDA	663.00>619.00	663.00>168.90	35252	6312	17.91	16.18	6312	17.91	16.18	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240130_019 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	39893	14338	35.94	34.99	14338	35.94	34.99	
PFOSAm	498.10>77.90	----	23027	----	----	----	----	----	----	
13C8-PFOSAm	506.10>77.80	----	298785	----	----	----	----	----	----	
13C8-PFOSAm_IS	506.10>77.80	----	298785	----	----	----	----	----	----	
PFTDA	713.10>669.00	713.10>168.90	25508	4415	17.31	18.05	4415	17.31	18.05	
13C2-PFTDA	715.20>670.00	----	292721	----	----	----	----	----	----	
13C2-PFTDA_IS	715.20>670.00	----	292721	----	----	----	----	----	----	
PFDoS	699.10>79.90	699.10>98.80	5511	2921	53.01	61.13	2921	53.01	61.13	
D7-MeFOSE_IS	623.20>58.90	----	782630	----	----	----	----	----	----	
D7-MeFOSE	623.20>58.90	----	782630	----	----	----	----	----	----	
MeFOSE	616.10>59.00	----	4530	----	----	----	----	----	----	
13C2-PFHxDA_IS	815.00>770.05	----	782725	----	----	----	----	----	----	
13C2-PFHxDA	815.00>770.05	----	782725	----	----	----	----	----	----	
PFHxDA	813.00>768.95	813.00>218.95	46779	5730	12.25	11.66	5730	12.25	11.66	
D3-MeFOSA	515.00>219.00	----	79361	----	----	----	----	----	----	
D3-MeFOSA_IS	515.00>219.00	----	79361	----	----	----	----	----	----	
MeFOSA	511.90>219.00	511.90>169.00	4506	6839	151.78	160.44	6839	151.78	160.44	
D9-EtFOSE_IS	639.20>58.90	----	964894	----	----	----	----	----	----	
D9-EtFOSE	639.20>58.90	----	956739	----	----	----	----	----	----	
EtFOSE	630.00>59.00	----	4792	----	----	----	----	----	----	
D5-EtFOSAm	531.10>219.00	----	110665	----	----	----	----	----	----	
D5-EtFOSAm_IS	531.10>219.00	----	110665	----	----	----	----	----	----	
EtFOSAm	526.00>219.00	526.00>169.00	5947	9074	152.57	159.63	9074	152.57	159.63	
PFODA	913.00>868.65	913.00>169.00	20490	6650	32.46	36.03	6650	32.46	36.03	AC

Flag ID key: AC: Accuracy%



240130_019

Sample ID: 1633 ICAL 0.1PPB
Date Acquired: 1/30/2024 9:42:10 PM
Acquired by: System Administrator
Data File: 240130_019
Vial: 2 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.342	0.004	-0.002	887749	611487	13C3-PFBA_IS	9.7976	ng/mL	
13C4-PFBA_IS	Auto	1.342	0.004	----	887749	887749	----	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.344	0.007	----	611487	611487	----	5.0000	ng/mL	
PFBA	Auto	1.342	0.001	0.000	8652	887749	13C4-PFBA_IS	0.0921	ng/mL	
PFMPA	Auto	2.371	0.005	-1.074	6924	262559	13C5-PFPeA_IS	0.0924	ng/mL	
3_3 FTCA	Auto	2.952	0.007	-0.493	17348	262559	13C5-PFPeA_IS	4.6128	ng/mL	
13C5-PFPeA	Auto	3.445	0.006	-1.494	262559	743357	13C2-PFHxA_IS	4.9122	ng/mL	
13C5-PFPeA_IS	Auto	3.445	0.006	----	262559	262559	----	5.0000	ng/mL	
PFPeA	Auto	3.449	0.007	0.004	19548	262559	13C5-PFPeA_IS	0.1063	ng/mL	
PFMBA	Auto	3.975	0.006	0.530	10445	262559	13C5-PFPeA_IS	0.0909	ng/mL	
13C2-4_2 FTS	Auto	4.624	0.004	-2.429	294077	329849	18O2-PFHxS_IS	4.7363	ng/mL	
13C2-4_2 FTS_IS	Auto	4.624	0.004	----	294077	294077	----	5.0000	ng/mL	
4_2 FTS	Auto	4.623	0.003	-0.001	12877	294077	13C2-4_2 FTS_IS	0.0883	ng/mL	
13C3-PFBS_IS	Auto	4.593	0.006	----	283868	283868	----	2.5000	ng/mL	
PFBS	Auto	4.595	0.007	0.002	12849	283868	13C3-PFBS_IS	0.0913	ng/mL	
13C3-PFBS	Auto	4.593	0.006	-2.460	283868	329849	18O2-PFHxS_IS	2.3065	ng/mL	
NFDHA	Auto	4.794	0.004	-0.144	10897	605014	13C5-PFHxA_IS	0.0868	ng/mL	
13C5-PFHxA	Auto	4.938	0.006	-0.001	605014	743357	13C2-PFHxA_IS	2.5215	ng/mL	
13C5-PFHxA_IS	Auto	4.938	0.006	----	605014	605014	----	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	4.939	0.006	----	743357	743357	----	2.5000	ng/mL	
PFHxA	M	4.940	0.006	0.002	25272	605014	13C5-PFHxA_IS	0.1061	ng/mL	
PFEESA	Auto	5.270	0.005	0.332	61080	605014	13C5-PFHxA_IS	0.0813	ng/mL	
13C3-HFPO-DA	Auto	5.417	0.005	0.478	616061	743357	13C2-PFHxA_IS	9.3516	ng/mL	
13C3-HFPO-DA_IS	Auto	5.417	0.005	----	616061	616061	----	10.0000	ng/mL	
HFPO-DA	Auto	5.420	0.007	0.003	5890	616061	13C3-HFPO-DA_IS	0.0972	ng/mL	
5_3 FTCA	Auto	5.869	0.003	0.931	82405	605014	13C5-PFHxA_IS	4.5565	ng/mL	
PFPeS	Auto	5.978	0.005	-1.075	10194	289359	13C3-PFHxS_IS	0.0890	ng/mL	
13C4-PFHpA	Auto	6.124	0.004	1.185	727457	743357	13C2-PFHxA_IS	2.4099	ng/mL	
13C4-PFHpA_IS	Auto	6.124	0.004	----	727457	727457	----	2.5000	ng/mL	
PFHpA	Auto	6.123	0.001	-0.001	28848	727457	13C4-PFHpA_IS	0.0994	ng/mL	
DONA	Auto	6.491	0.004	1.074	48642	616061	13C3-HFPO-DA_IS	0.0937	ng/mL	
13C2-6_2 FTS_IS	Auto	6.770	0.004	----	280505	280505	----	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.770	0.004	-0.283	280505	329849	18O2-PFHxS_IS	4.3398	ng/mL	
6_2 FTS	Auto	6.770	0.005	0.000	9655	280505	13C2-6_2 FTS_IS	0.0903	ng/mL	
13C4-PFOA_IS	Auto	7.085	0.006	----	64328	64328	----	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.084	0.006	----	749190	749190	----	2.5000	ng/mL	
13C8-PFOA	Auto	7.084	0.006	-0.001	749190	64328	13C4-PFOA_IS	2.4420	ng/mL	
PFOA	Auto	7.085	0.004	0.001	31168	749190	13C8-PFOA_IS	0.0974	ng/mL	
13C3-PFHxS	Auto	7.053	0.005	0.000	289359	329849	18O2-PFHxS_IS	2.5029	ng/mL	
13C3-PFHxS_IS	Auto	7.053	0.005	----	289359	289359	----	2.5000	ng/mL	
PFHxS	Auto	7.055	0.007	0.002	11471	289359	13C3-PFHxS_IS	0.0907	ng/mL	
18O2-PFHxS_IS	Auto	7.053	0.005	----	329849	329849	----	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.934	0.005	----	402203	402203	----	1.2500	ng/mL	
13C9-PFNA	Auto	7.934	0.005	0.000	402203	441205	13C5-PFNA_IS	1.2315	ng/mL	
13C5-PFNA_IS	Auto	7.934	0.004	----	441205	441205	----	1.2500	ng/mL	
PFNA	Auto	7.935	0.005	0.001	31897	402203	13C9-PFNA_IS	0.1024	ng/mL	
PFHpS	Auto	7.976	0.005	-0.815	8317	122302	13C8-PFOS_IS	0.0809	ng/mL	
7_3 FTCA	Auto	7.932	0.003	2.994	135116	605014	13C5-PFHxA_IS	4.2517	ng/mL	
13C2-8_2-FTS	Auto	8.392	0.004	1.339	257380	329849	18O2-PFHxS_IS	4.6901	ng/mL	
13C2-8_2-FTS_IS	Auto	8.392	0.004	----	257380	257380	----	5.0000	ng/mL	
8_2 FTS	Auto	8.394	0.006	0.002	8986	257380	13C2-8_2-FTS_IS	0.0916	ng/mL	
13C6-PFDA_IS	Auto	8.698	0.003	----	284199	284199	----	1.2500	ng/mL	
13C6-PFDA	Auto	8.698	0.003	-0.002	284199	296813	13C2-PFDA_IS	1.1948	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_019 (continued)

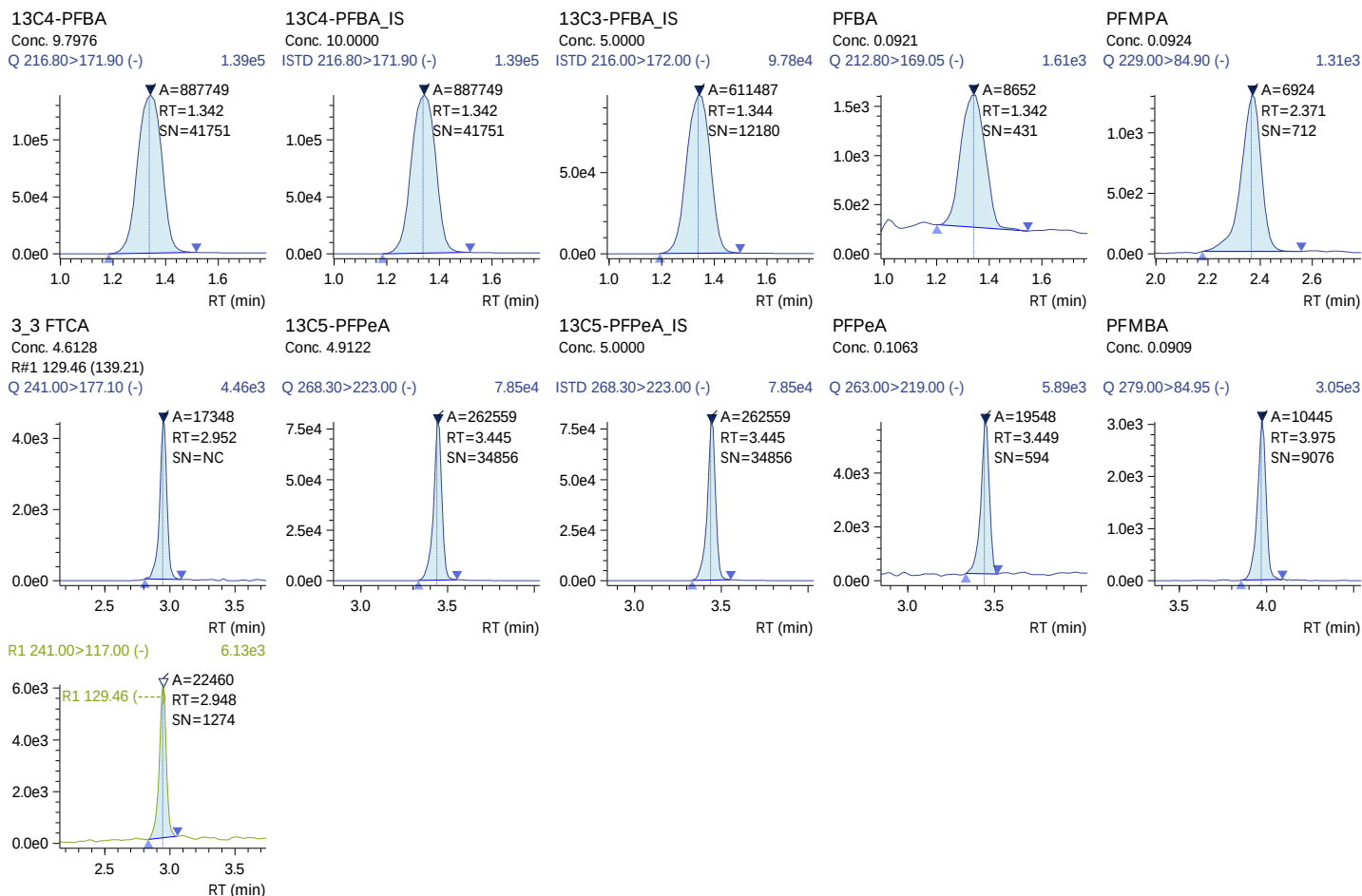
(Table continued from previous page)

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C2-PFDA_IS	Auto	8.700	0.004	----	296813	296813	----	1.2500	ng/mL	
PFDA	Auto	8.701	0.004	0.003	26834	284199	13C6-PFDA_IS	0.1116	ng/mL	
D3-NMeFOSAA_IS	Auto	8.837	0.003	----	759493	759493	----	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.837	0.003	0.045	759493	396921	13C4-PFOS_IS	4.6996	ng/mL	
13C8-PFOS_IS	Auto	8.791	0.005	----	122302	122302	----	2.5000	ng/mL	
13C8-PFOS	Auto	8.791	0.005	-0.001	122302	396921	13C4-PFOS_IS	2.4483	ng/mL	
13C4-PFOS_IS	Auto	8.792	0.005	----	396921	396921	----	2.5000	ng/mL	
PFOS	M	8.791	0.003	0.000	9521	122302	13C8-PFOS_IS	0.0911	ng/mL	
NMeFOSAA	M	8.838	0.187	0.001	10440	759493	D3-NMeFOSAA_IS	0.0971	ng/mL	
D5-NetFOSAA_IS	Auto	9.168	0.004	----	640602	640602	----	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.168	0.004	0.376	640602	396921	13C4-PFOS_IS	5.0298	ng/mL	
NetFOSAA	M	9.180	0.194	0.012	9663	640602	D5-NetFOSAA_IS	0.0919	ng/mL	
9-CI-PF3ONS	Auto	9.356	0.005	3.939	56147	616061	13C3-HFPO-DA_IS	0.0929	ng/mL	
PFUnDA	Auto	9.425	0.004	0.002	30069	372169	13C7-PFUnDA_IS	0.0966	ng/mL	
13C7-PFUnDA_IS	Auto	9.423	0.004	----	372169	372169	----	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.423	0.004	0.723	372169	296813	13C2-PFDA_IS	1.2592	ng/mL	
PFNS	Auto	9.554	0.005	0.763	9695	122302	13C8-PFOS_IS	0.0937	ng/mL	
10_2_FTS	Auto	9.797	0.002	1.405	12412	257380	13C2-8_2-FTS_IS	0.0955	ng/mL	
13C2-PFDOA_IS	Auto	10.109	0.002	----	423800	423800	----	1.2500	ng/mL	
13C2-PFDOA	Auto	10.109	0.002	1.409	423800	296813	13C2-PFDA_IS	1.2012	ng/mL	
PFDOA	Auto	10.110	0.002	0.001	25344	423800	13C2-PFDOA_IS	0.0873	ng/mL	
PFDS	Auto	10.266	0.003	1.475	8808	122302	13C8-PFOS_IS	0.0969	ng/mL	
PFTDA	Auto	10.766	0.002	-0.630	35252	292721	13C2-PFTDA_IS	0.1006	ng/mL	
11-CI-PF3OUdS	Auto	10.773	0.002	5.356	39893	616061	13C3-HFPO-DA_IS	0.0925	ng/mL	
PFOSAm	M	11.147	-0.003	-0.005	23027	298785	13C8-PFOSAm_IS	0.2203	ng/mL	
13C8-PFOSAm	Auto	11.152	-0.003	2.360	298785	396921	13C4-PFOS_IS	2.3697	ng/mL	
13C8-PFOSAm_IS	Auto	11.152	-0.003	----	298785	298785	----	2.5000	ng/mL	
PFTDA	Auto	11.397	0.001	0.001	25508	292721	13C2-PFTDA_IS	0.1033	ng/mL	
13C2-PFTDA	Auto	11.397	0.001	2.696	292721	296813	13C2-PFDA_IS	1.1755	ng/mL	
13C2-PFTDA_IS	Auto	11.397	0.001	----	292721	292721	----	1.2500	ng/mL	
PFDOS	Auto	11.590	0.004	2.799	5511	122302	13C8-PFOS_IS	0.0972	ng/mL	
D7-MeFOSE_IS	Auto	13.384	-0.002	----	782630	782630	----	25.0000	ng/mL	
D7-MeFOSE	Auto	13.384	-0.002	4.592	782630	396921	13C4-PFOS_IS	24.1792	ng/mL	
MeFOSE	M	13.420	-0.003	0.036	4530	782630	D7-MeFOSE_IS	0.1015	ng/mL	
13C2-PFHXA_IS	Auto	12.612	0.003	----	782725	782725	----	2.5000	ng/mL	
13C2-PFHXA	Auto	12.612	0.003	3.912	782725	296813	13C2-PFDA_IS	2.3487	ng/mL	
PFHXA	Auto	12.613	0.003	0.001	46779	782725	13C2-PFHXA_IS	0.1106	ng/mL	
D3-MeFOSA	Auto	13.688	-0.002	4.896	79361	396921	13C4-PFOS_IS	2.4109	ng/mL	
D3-MeFOSA_IS	Auto	13.688	-0.002	----	79361	79361	----	2.5000	ng/mL	
MeFOSA	M	13.694	-0.005	0.006	4506	79361	D3-MeFOSA_IS	0.0995	ng/mL	
D9-EtFOSE_IS	Auto	14.010	-0.003	----	964894	964894	----	25.0000	ng/mL	
D9-EtFOSE	Auto	14.010	-0.003	5.218	956739	396921	13C4-PFOS_IS	24.1545	ng/mL	
EtFOSE	M	14.053	-0.002	0.043	4792	964894	D9-EtFOSE_IS	0.1036	ng/mL	
D5-EtFOSAm	Auto	14.364	-0.002	5.572	110665	396921	13C4-PFOS_IS	2.4315	ng/mL	
D5-EtFOSAm_IS	Auto	14.364	-0.002	----	110665	110665	----	2.5000	ng/mL	
EtFOSAm	M	14.383	-0.001	0.019	5947	110665	D5-EtFOSAm_IS	0.0980	ng/mL	
PFODA	Auto	13.745	0.005	1.133	20490	782725	13C2-PFHXA_IS	0.1467	ng/mL	AC

Flag ID key: AC: Accuracy%



240130_019 (continued)





240130_019 (continued)

13C2-4_2_FTS
Conc. 4.7363

13C2-4_2_FTS_IS
Conc. 5.0000

4_2_FTS
Conc. 0.0883
R#1 37.53 (32.10)
R#2 37.53 (32.10)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 0.0913
R#1 41.22 (44.81)
R#2 41.22 (44.81)

Q 329.10>80.90 (-)

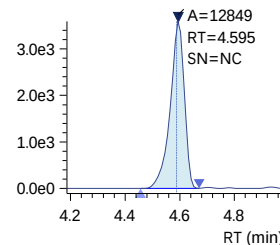
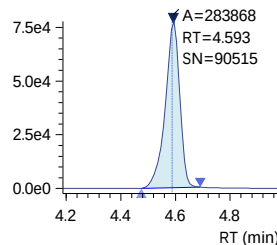
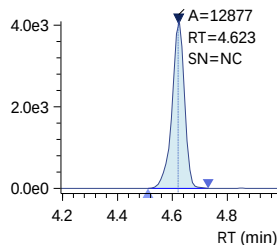
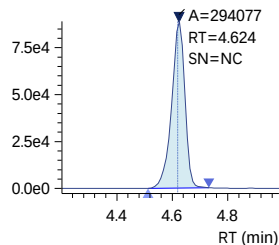
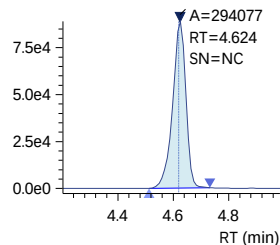
8.90e4 ISTD 329.10>80.90 (-)

8.90e4 Q 327.10>307.00 (-)

4.10e3 ISTD 302.10>79.90 (-)

7.78e4 Q 298.70>79.90 (-)

3.59e3

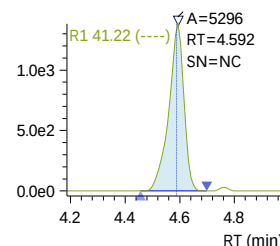
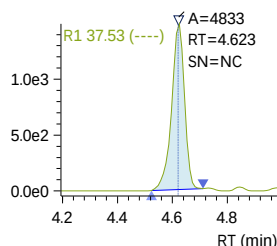


R1 327.10>80.90 (-)

1.50e3

R1 298.70>98.80 (-)

1.38e3

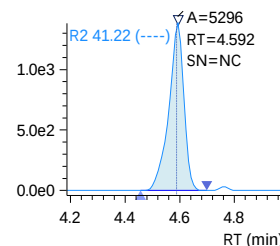
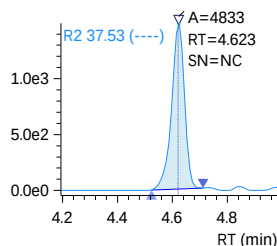


R2 327.10>80.90 (-)

1.50e3

R2 298.70>98.80 (-)

1.38e3





240130_019 (continued)

13C3-PFBS
Conc. 2.3065

NFDHA
Conc. 0.0868
R#1 42.58 (35.54)
R#2 42.58 (35.54)

13C5-PFHxA
Conc. 2.5215

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

Q 302.10>79.90 (-)

7.78e4

Q 295.00>201.00 (-)

3.23e3

Q 318.00>273.00 (-)

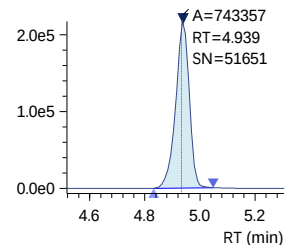
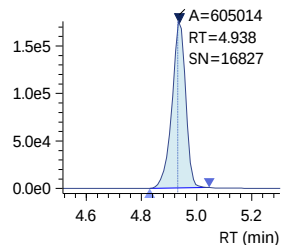
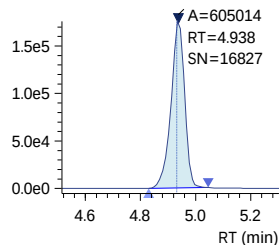
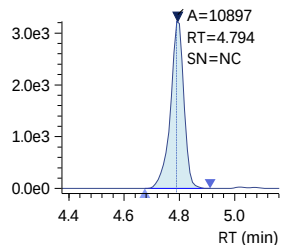
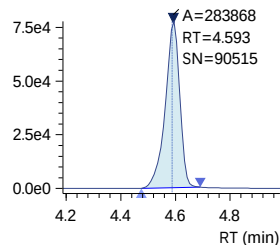
1.76e5

ISTD 318.00>273.00 (-)

1.76e5

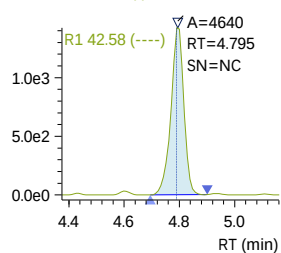
ISTD 315.10>270.00 (-)

2.17e5



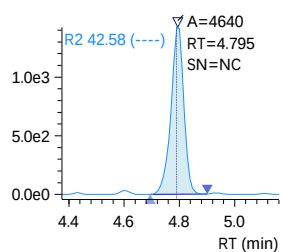
R1 295.00>84.90 (-)

1.43e3



R2 295.00>84.90 (-)

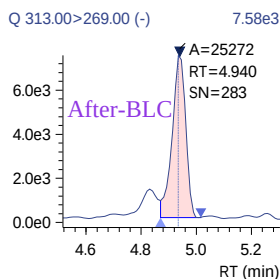
1.43e3



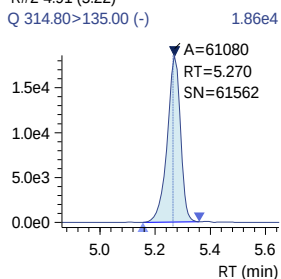


240130_019 (continued)

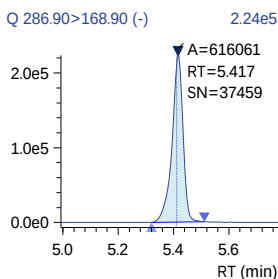
PFHxA
Conc. 0.1061



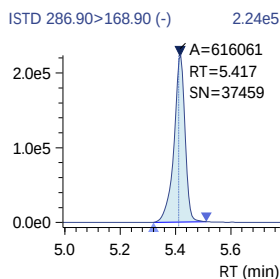
PFEESA
Conc. 0.0813
R#1 4.91 (5.22)
R#2 4.91 (5.22)



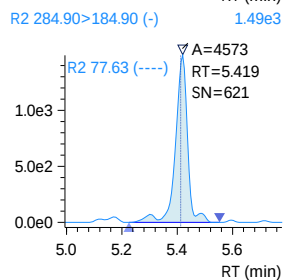
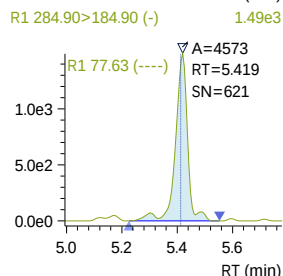
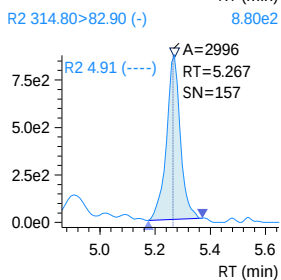
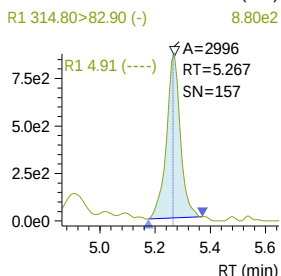
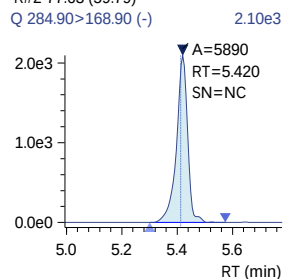
13C3-HFPO-DA
Conc. 9.3516



13C3-HFPO-DA_IS
Conc. 10.0000

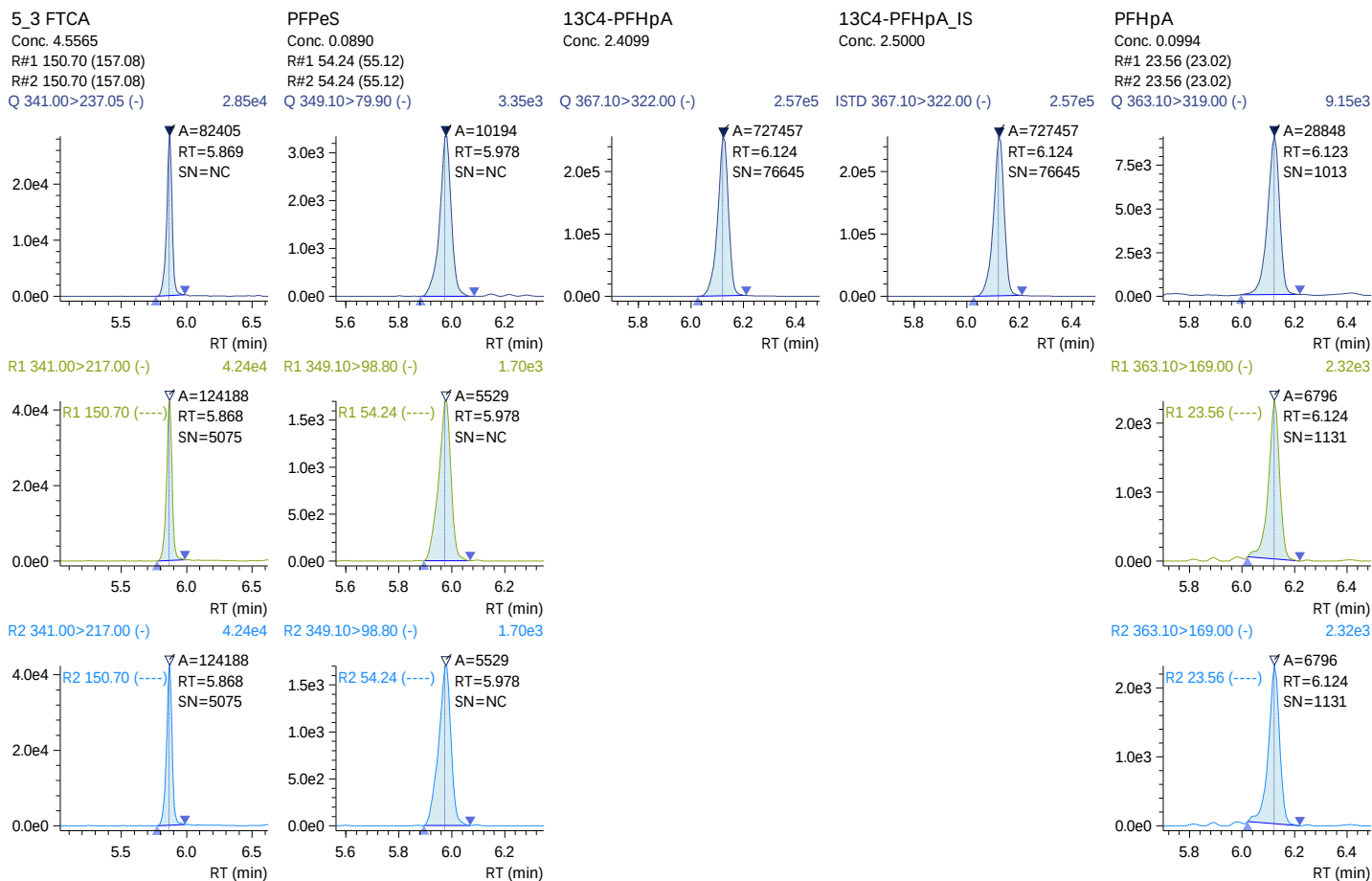


HFPO-DA
Conc. 0.0972
R#1 77.63 (59.79)
R#2 77.63 (59.79)





240130_019 (continued)





240130_019 (continued)

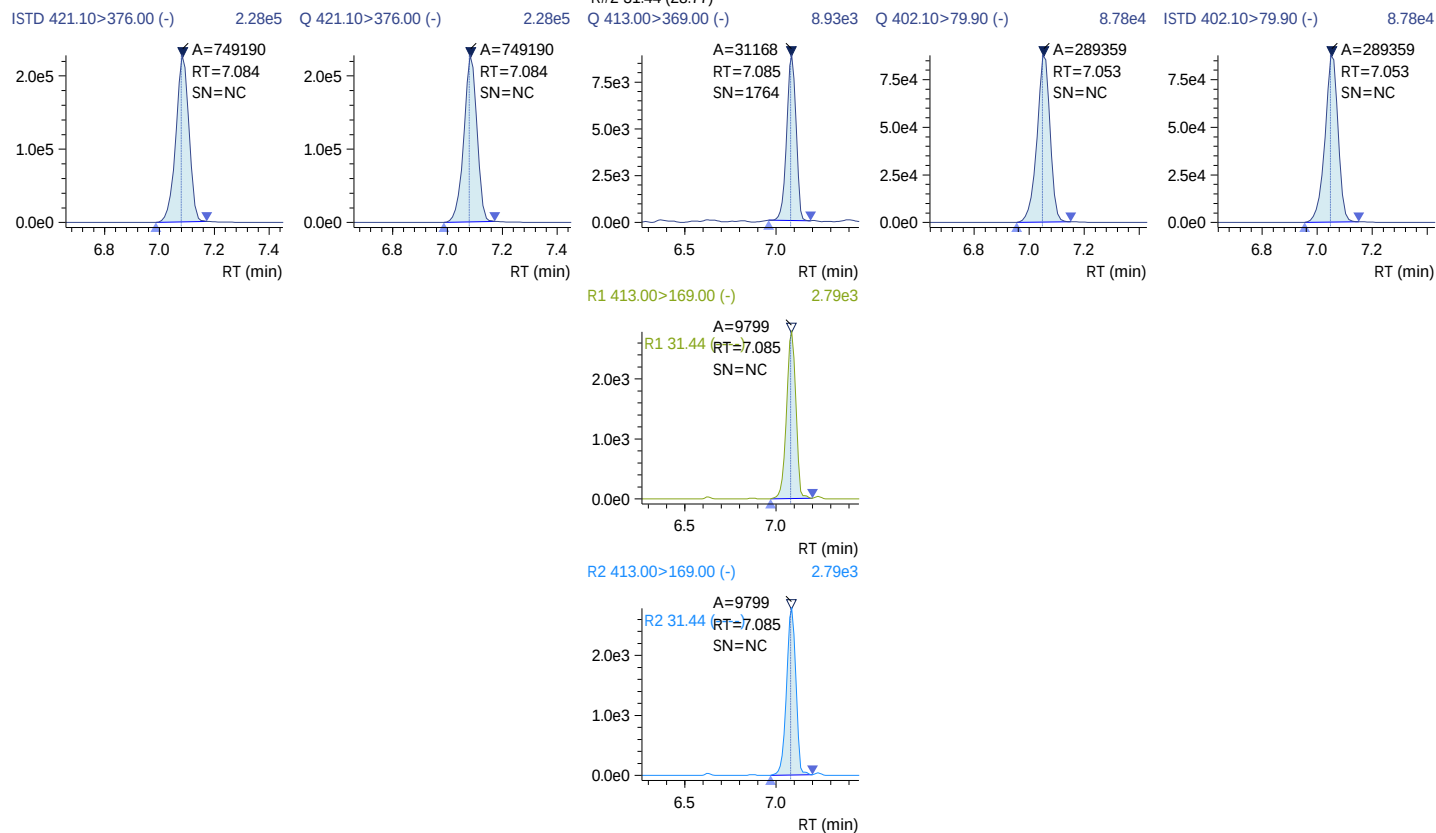
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.4420

PFOA
Conc. 0.0974
R#1 31.44 (28.77)
R#2 31.44 (28.77)

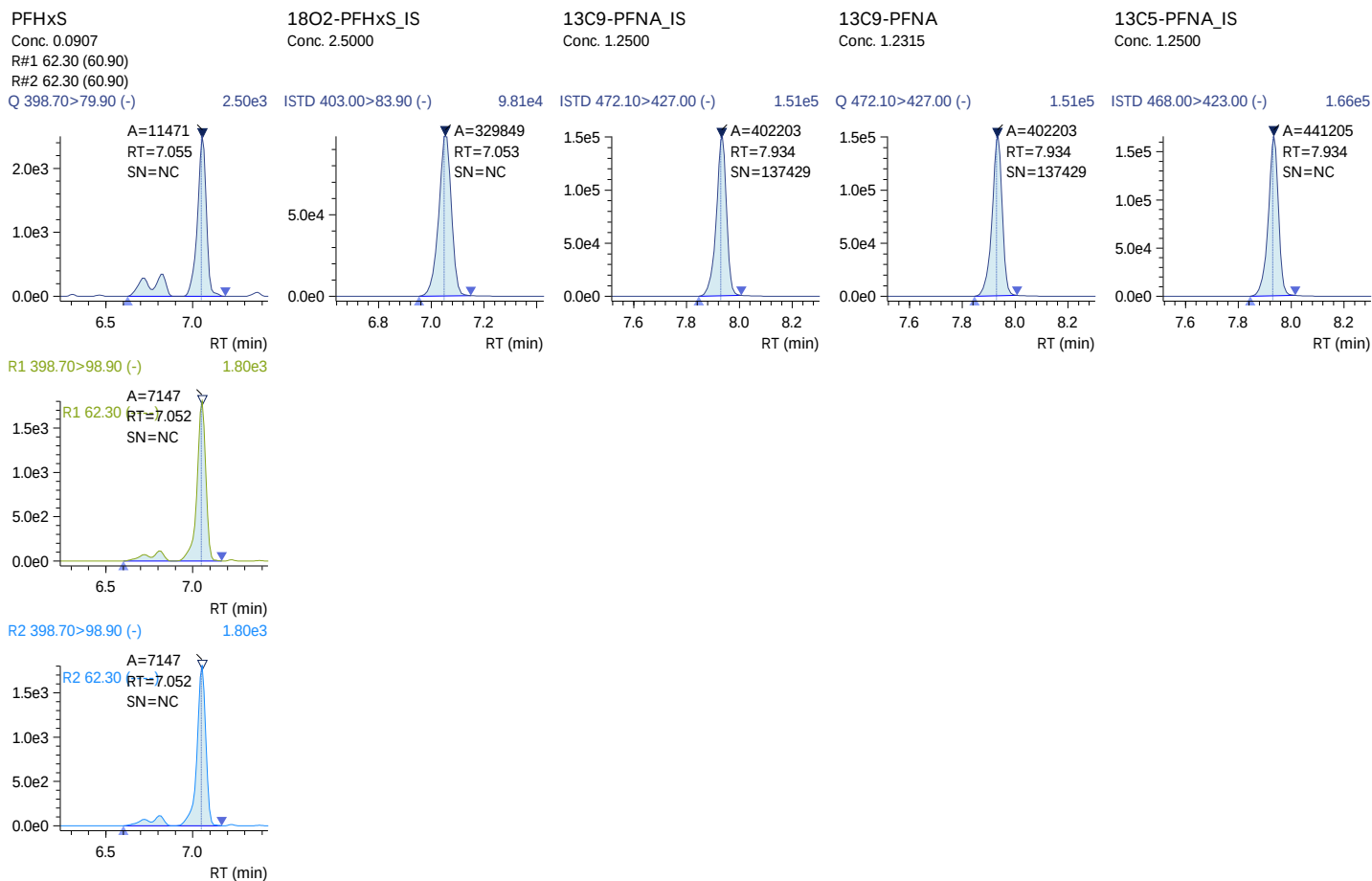
13C3-PFHxS
Conc. 2.5029

13C3-PFHxS_IS
Conc. 2.5000





240130_019 (continued)

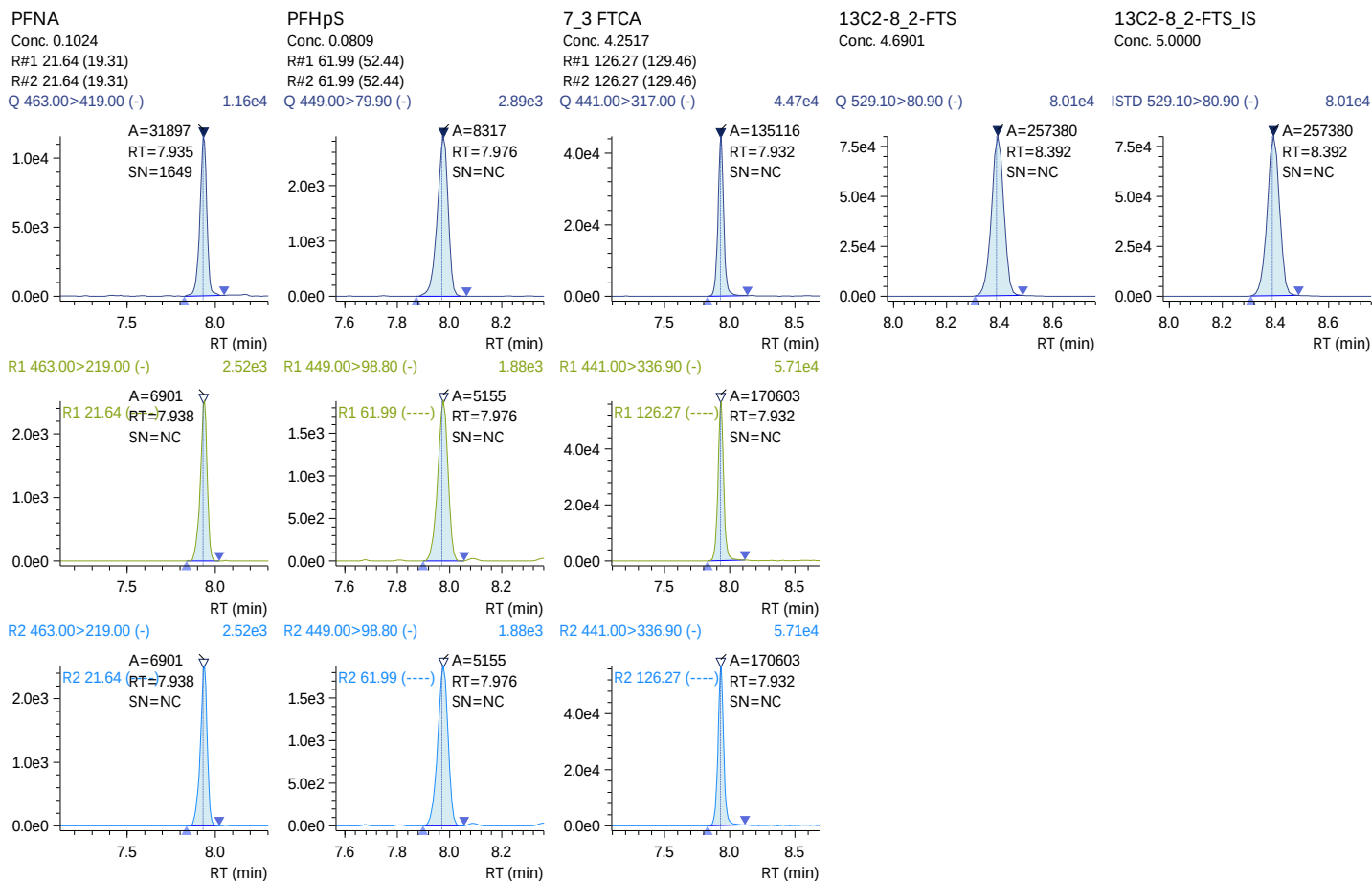


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.

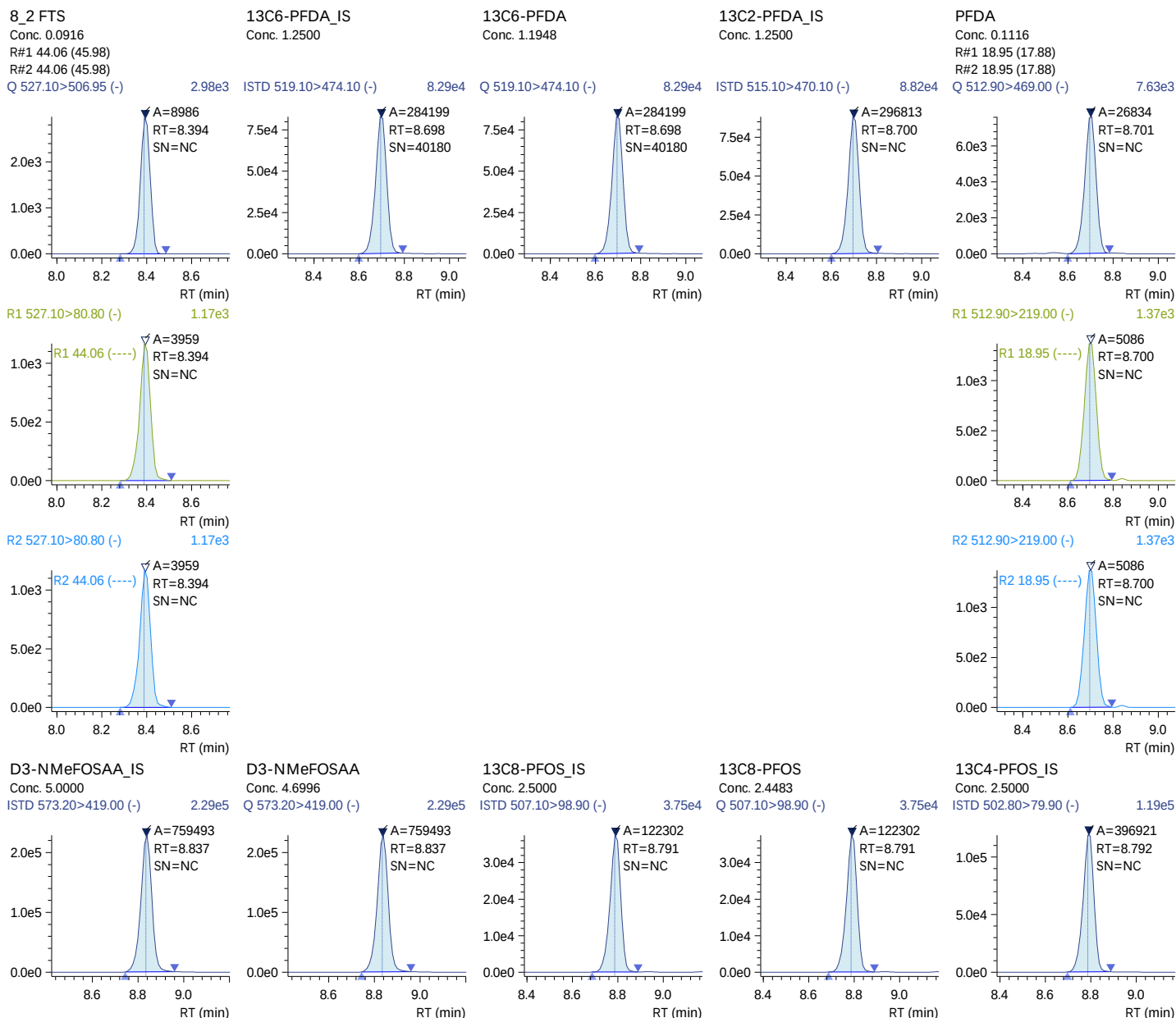


240130_019 (continued)





240130_019 (continued)

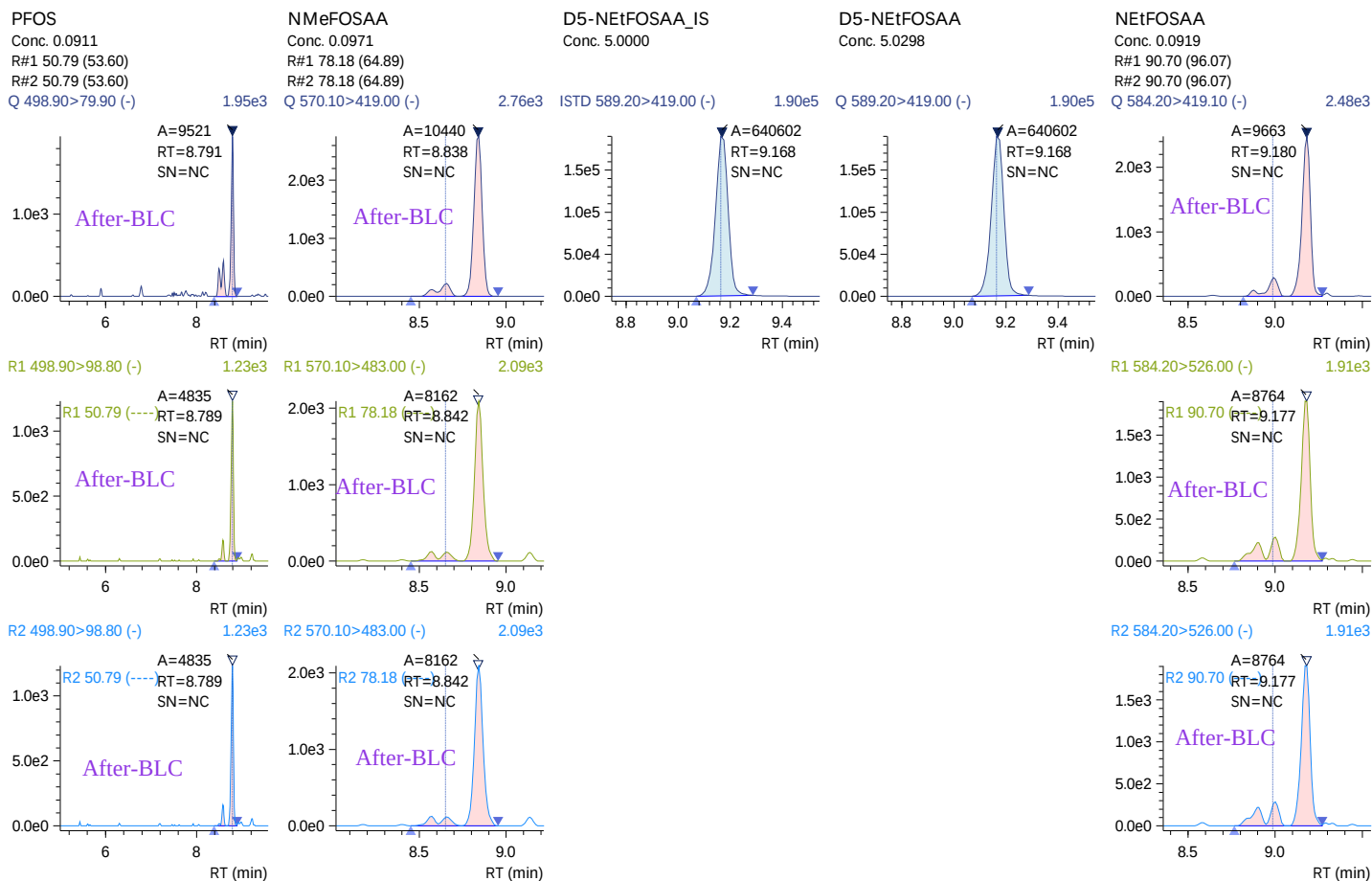


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_019 (continued)



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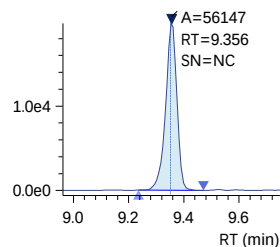
SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



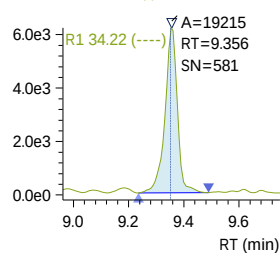
240130_019 (continued)

9-Cl-PF3ONS

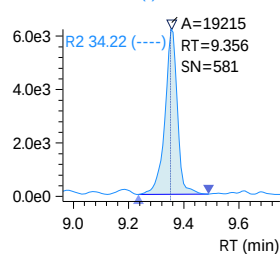
Conc. 0.0929
R#1 34.22 (30.95)
R#2 34.22 (30.95)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-) 6.26e3

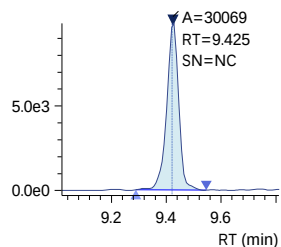


R2 532.80>353.00 (-) 6.26e3

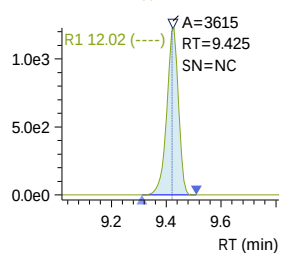


PFUnDA

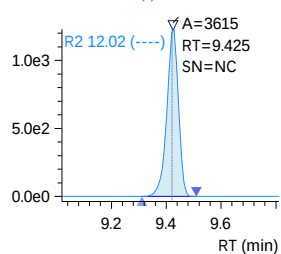
Conc. 0.0966
R#1 12.02 (11.01)
R#2 12.02 (11.01)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-) 1.23e3

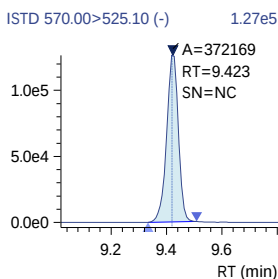


R2 563.10>269.10 (-) 1.23e3



13C7-PFUnDA_IS

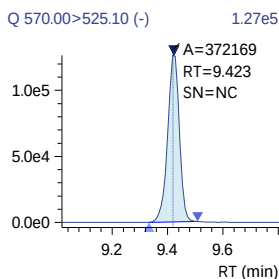
Conc. 1.2500



ISTD 570.00>525.10 (-) 1.27e5

13C7-PFUnDA

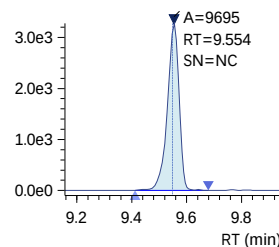
Conc. 1.2592



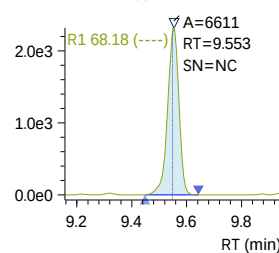
Q 570.00>525.10 (-) 1.27e5

PFNS

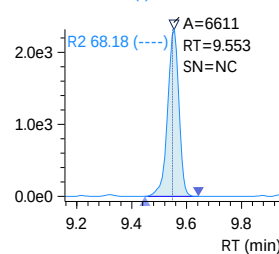
Conc. 0.0937
R#1 68.18 (60.44)
R#2 68.18 (60.44)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-) 2.32e3

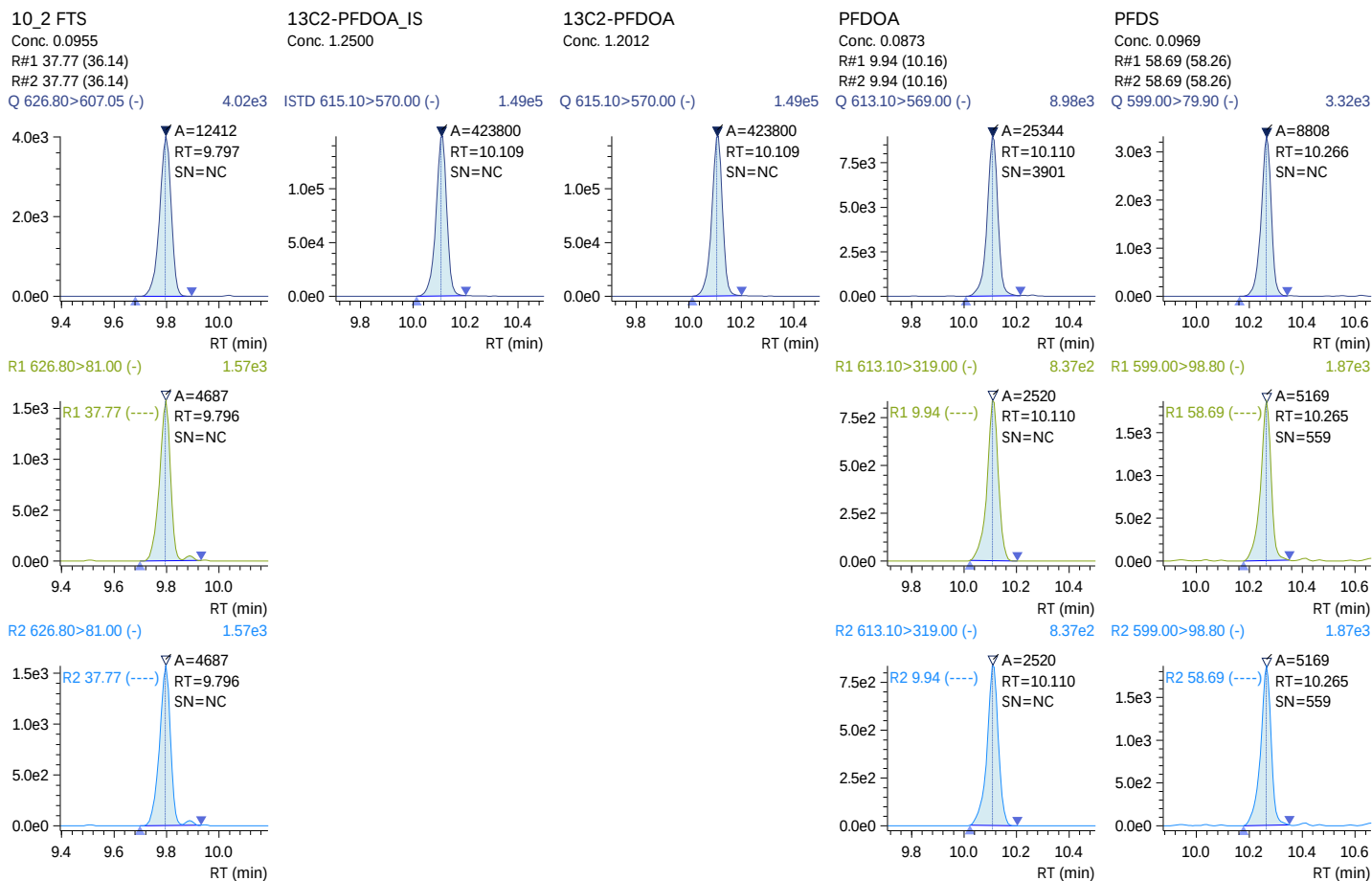


R2 548.80>98.80 (-) 2.32e3





240130_019 (continued)

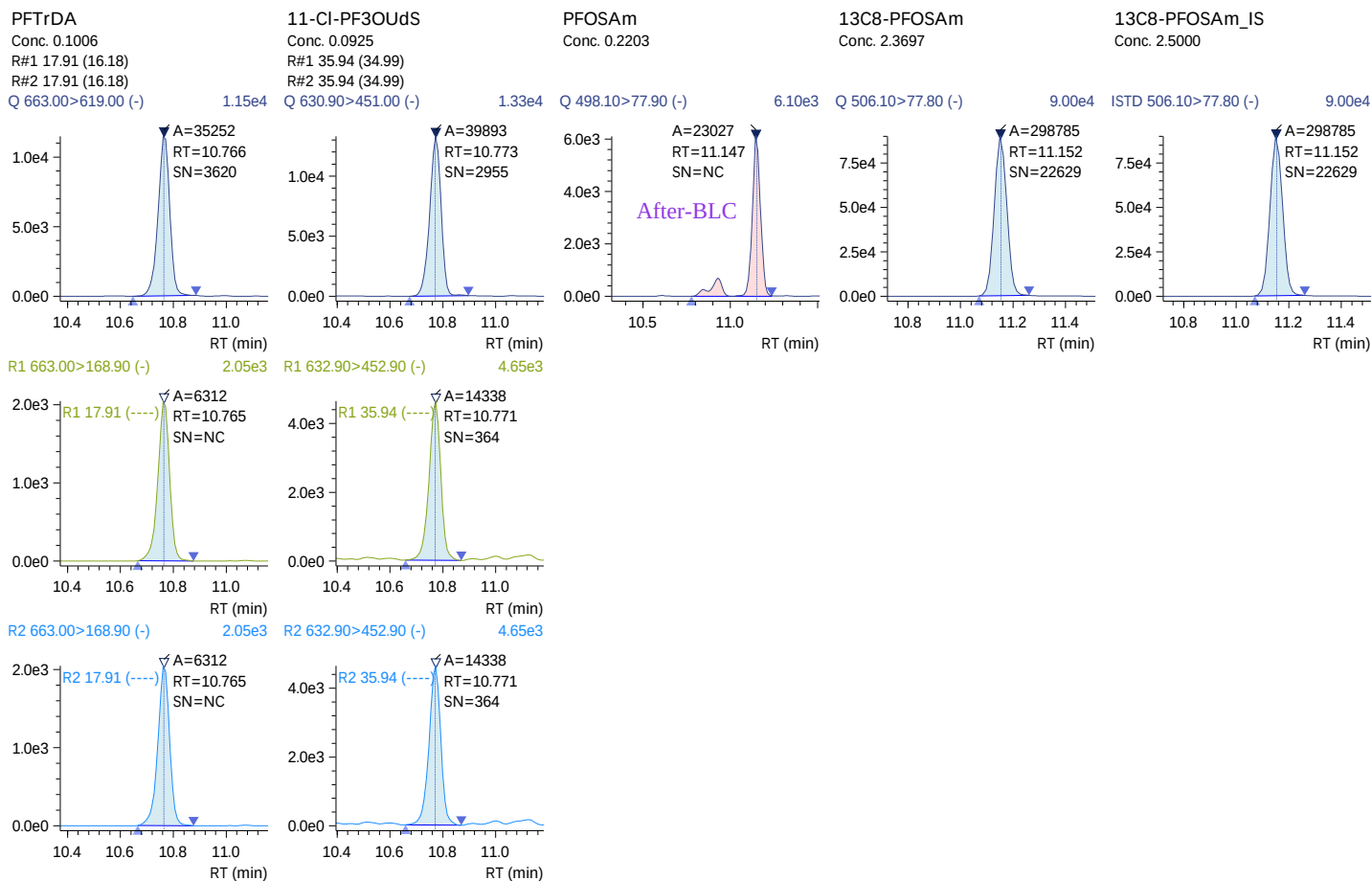


J:\LCMS08\Data\240130_1633_Curve\240130_1633_Curve.dam\lp

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_019 (continued)

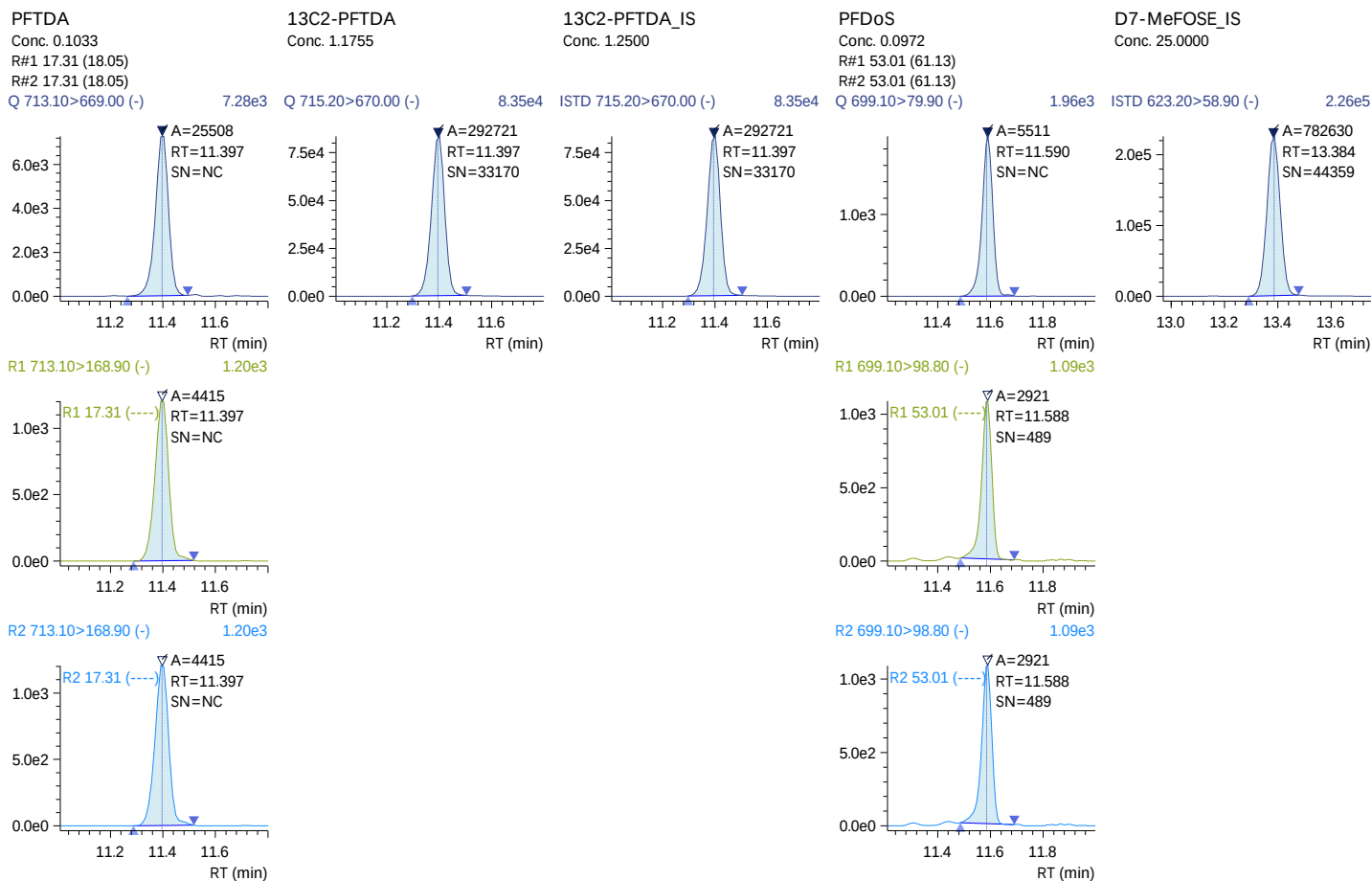


J:\LCMS08\Data\240130_1633_Curve\240130_1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_019 (continued)



J:\LCMS08\Data\240130_1633_Curve\240130_1633_Curve.damlp

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_019 (continued)

D7-MeFOSE
Conc. 24.1792

MeFOSE
Conc. 0.1015

13C2-PFHXA_IS
Conc. 2.5000

13C2-PFHXA
Conc. 2.3487

PFHXA
Conc. 0.1106
R#1 12.25 (11.66)
R#2 12.25 (11.66)

Q 623.20>58.90 (-)

2.26e5

Q 616.10>59.00 (-)

7.32e2

ISTD 815.00>770.05 (-)

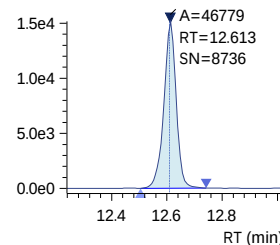
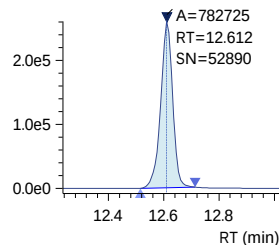
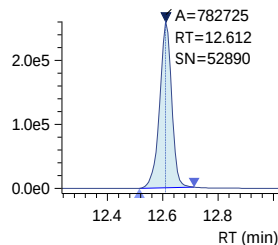
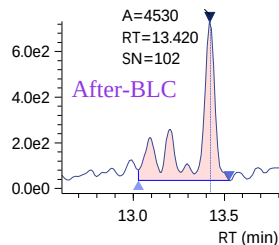
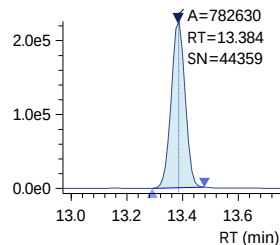
2.61e5

Q 815.00>770.05 (-)

2.61e5

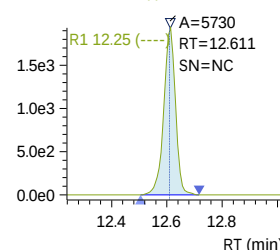
Q 813.00>768.95 (-)

1.52e4



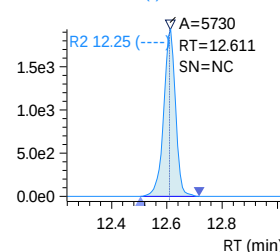
R1 813.00>218.95 (-)

1.93e3



R2 813.00>218.95 (-)

1.93e3





240130_019 (continued)

D3-MeFOSA
Conc. 2.4109

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. 0.0995
R#1 151.78 (160.44)
R#2 151.78 (160.44)

D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 24.1545

Q 515.00>219.00 (-)

2.33e4

ISTD 515.00>219.00 (-)

2.33e4

Q 511.90>219.00 (-)

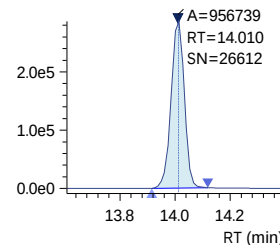
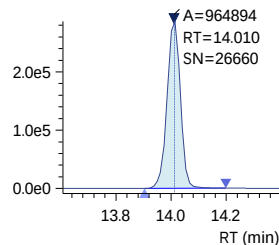
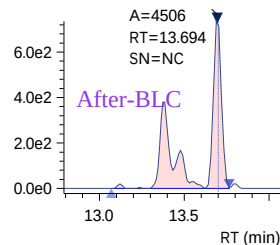
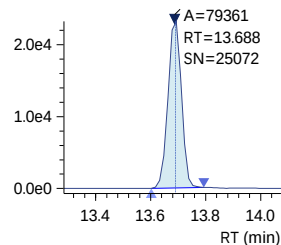
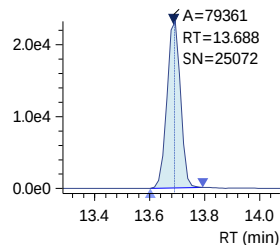
7.35e2

ISTD 639.20>58.90 (-)

2.87e5

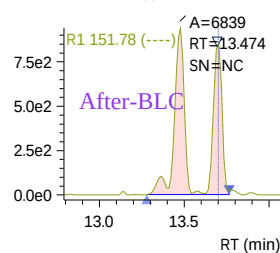
Q 639.20>58.90 (-)

2.87e5



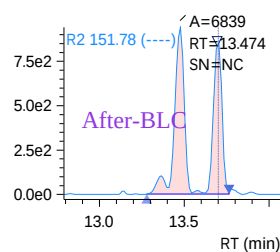
R1 511.90>169.00 (-)

9.42e2



R2 511.90>169.00 (-)

9.42e2





240130_019 (continued)

EtFOSE
Conc. 0.1036

D5-EtFOSAm
Conc. 2.4315

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. 0.0980

PFODA
Conc. 0.1467

Q 630.00>59.00 (-)

8.92e2

Q 531.10>219.00 (-)

3.47e4

ISTD 531.10>219.00 (-)

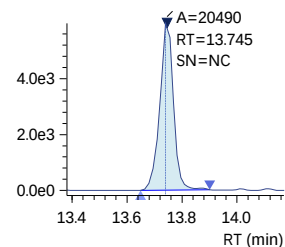
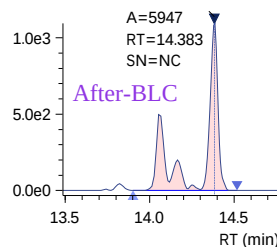
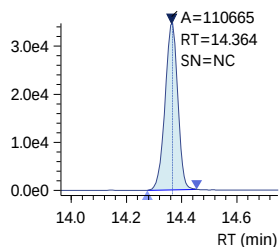
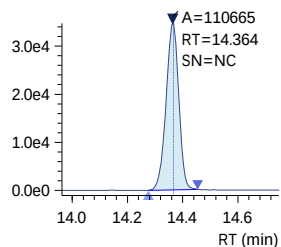
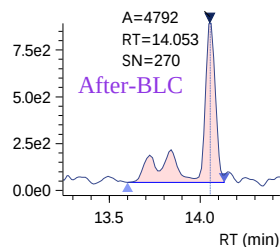
3.47e4

Q 526.00>219.00 (-)

1.10e3

Q 913.00>868.65 (-)

5.98e3

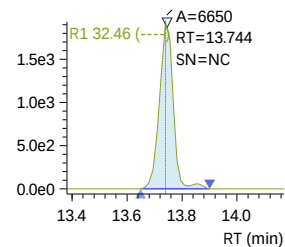
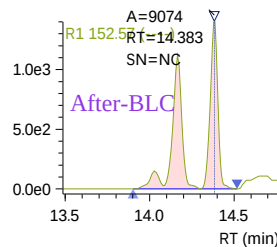


R1 526.00>169.00 (-)

1.40e3

R1 913.00>169.00 (-)

1.93e3

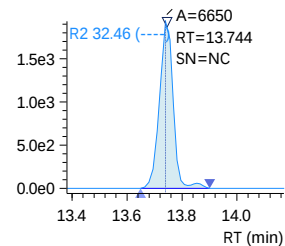
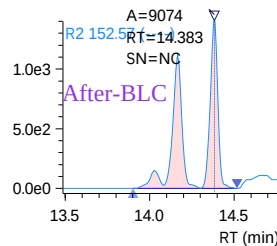


R2 526.00>169.00 (-)

1.40e3

R2 913.00>169.00 (-)

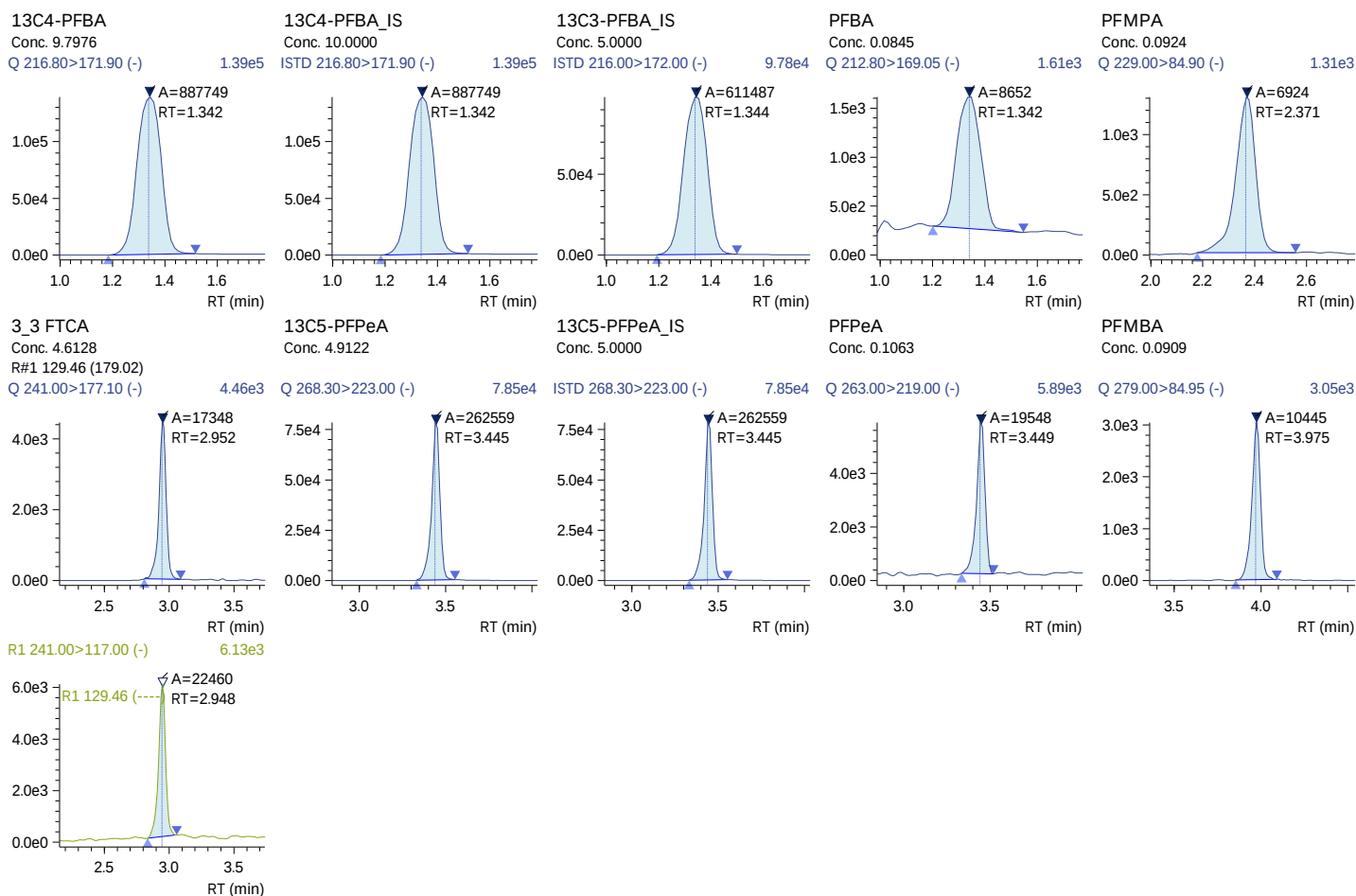
1.93e3





240130_019

Sample ID: 1633 ICAL 0.1PPB
Date Acquired: 1/30/2024 9:42:10 PM
Acquired by: System Administrator
Data File: 240130_019
Vial: 2 | Inj. Volume: 10.0000uL | Tray: 1





240130_019 (continued)

13C2-4_2 FTS
Conc. 4.7363

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. 0.1631
R#1 37.53 (24.69)
R#2 37.53 (0.00)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 0.0913
R#1 41.22 (52.67)
R#2 41.22 (0.00)

Q 329.10>80.90 (-)

8.90e4

ISTD 329.10>80.90 (-)

8.90e4

Q 327.10>307.00 (-)

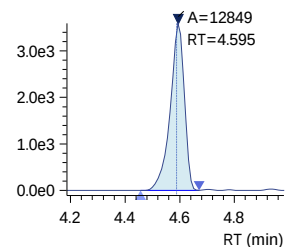
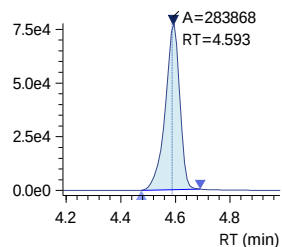
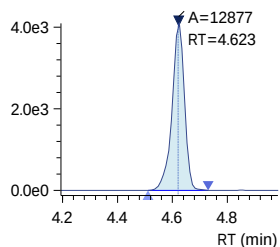
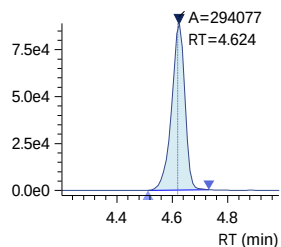
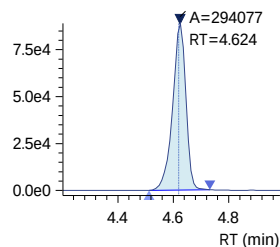
4.10e3

ISTD 302.10>79.90 (-)

7.78e4

Q 298.70>79.90 (-)

3.59e3

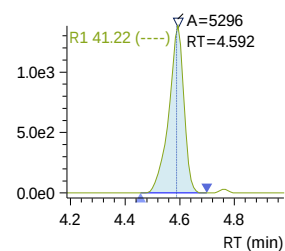
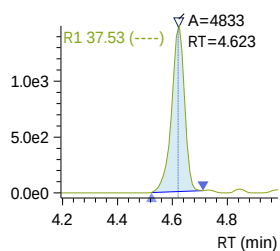


R1 327.10>80.90 (-)

1.50e3

R1 298.70>98.80 (-)

1.38e3

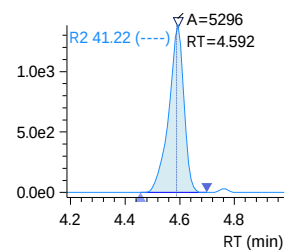
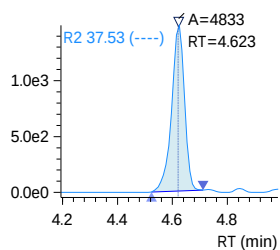


R2 327.10>80.90 (-)

1.50e3

R2 298.70>98.80 (-)

1.38e3





240130_019 (continued)

13C3-PFBS
Conc. 2.3065

NFDHA
Conc. 0.0868
R#1 42.58 (39.38)
R#2 42.58 (0.00)

13C5-PFHxA
Conc. 2.5215

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

Q 302.10>79.90 (-)

7.78e4

Q 295.00>201.00 (-)

3.23e3

Q 318.00>273.00 (-)

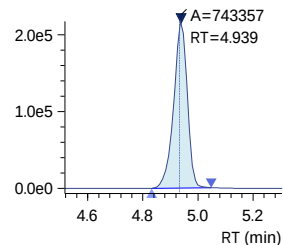
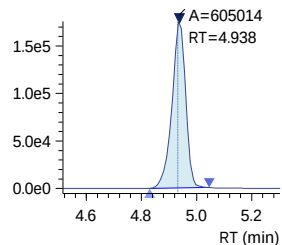
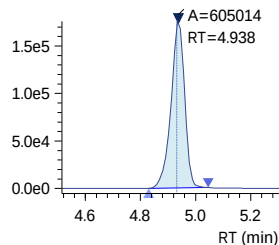
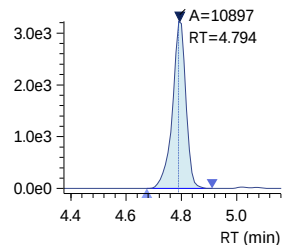
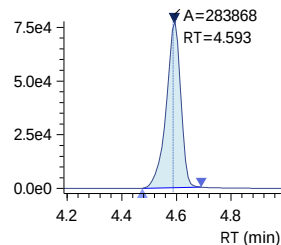
1.76e5

ISTD 318.00>273.00 (-)

1.76e5

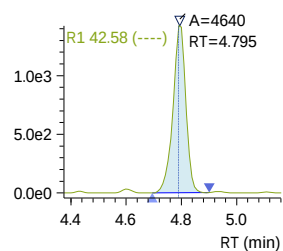
ISTD 315.10>270.00 (-)

2.17e5



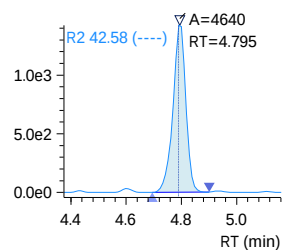
R1 295.00>84.90 (-)

1.43e3



R2 295.00>84.90 (-)

1.43e3





240130_019 (continued)

PFHxA
Conc. 0.1435

PFEESA
Conc. 0.0813
R#1 4.91 (5.25)
R#2 4.91 (0.00)

13C3-HFPO-DA
Conc. 9.3516

13C3-HFPO-DA_IS
Conc. 10.0000

HFPO-DA
Conc. 0.0955
R#1 77.63 (69.48)
R#2 77.63 (0.00)

Q 313.00>269.00 (-)

7.58e3

Q 314.80>135.00 (-)

1.86e4

Q 286.90>168.90 (-)

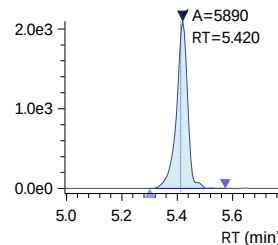
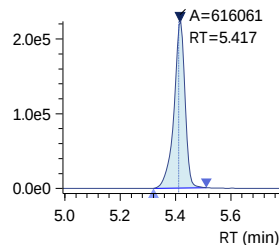
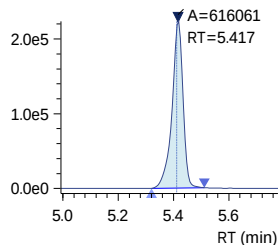
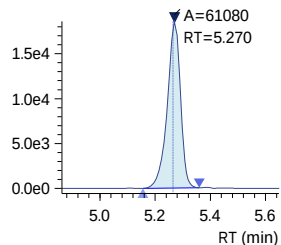
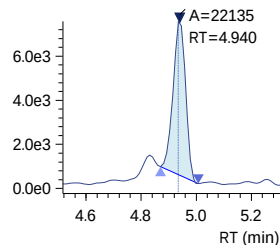
2.24e5

ISTD 286.90>168.90 (-)

2.24e5

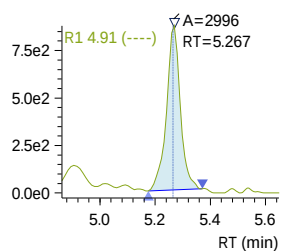
Q 284.90>168.90 (-)

2.10e3



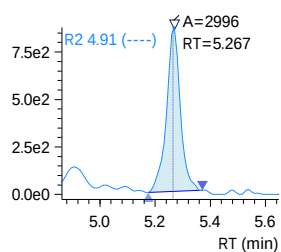
R1 314.80>82.90 (-)

8.80e2



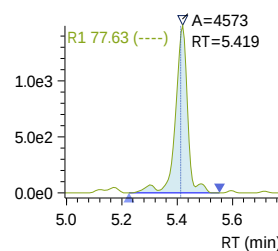
R2 314.80>82.90 (-)

8.80e2



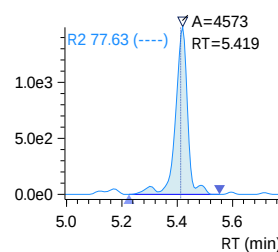
R1 284.90>184.90 (-)

1.49e3



R2 284.90>184.90 (-)

1.49e3

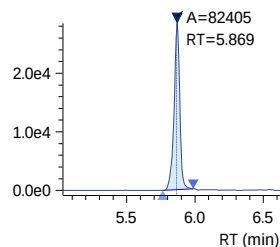




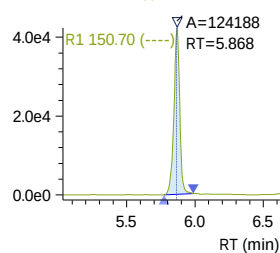
240130_019 (continued)

5_3 FTCA

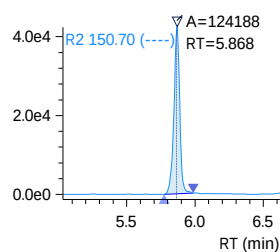
Conc. 4.5565
R#1 150.70 (139.59)
R#2 150.70 (0.00)
Q 341.00>237.05 (-)



R1 341.00>217.00 (-) 4.24e4

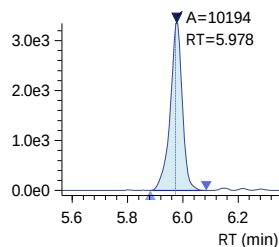


R2 341.00>217.00 (-) 4.24e4

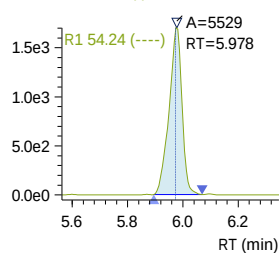


PFPeS

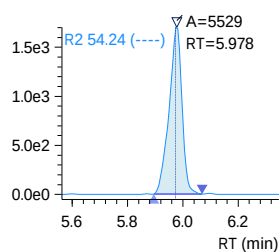
Conc. 0.0890
R#1 54.24 (66.55)
R#2 54.24 (0.00)
Q 349.10>79.90 (-)



R1 349.10>98.80 (-) 1.70e3

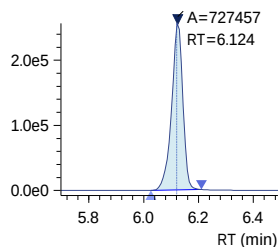


R2 349.10>98.80 (-) 1.70e3



13C4-PFHpa

Conc. 2.4099
Q 367.10>322.00 (-)



Q 367.10>322.00 (-) 2.57e5

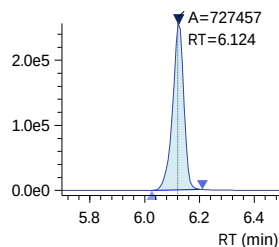


Q 367.10>322.00 (-) 2.57e5



13C4-PFHpa_IS

Conc. 2.5000
ISTD 367.10>322.00 (-)



ISTD 367.10>322.00 (-) 2.57e5

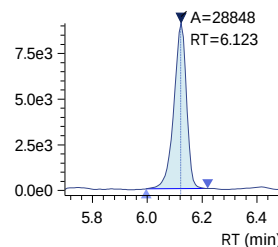


ISTD 367.10>322.00 (-) 2.57e5

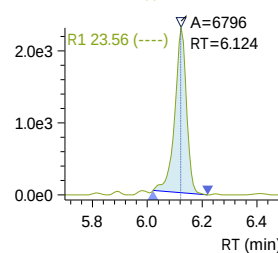


PFHpA

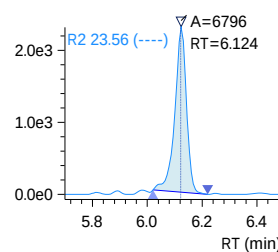
Conc. 0.1090
R#1 23.56 (20.13)
R#2 23.56 (0.00)
Q 363.10>319.00 (-)



R1 363.10>169.00 (-) 2.32e3

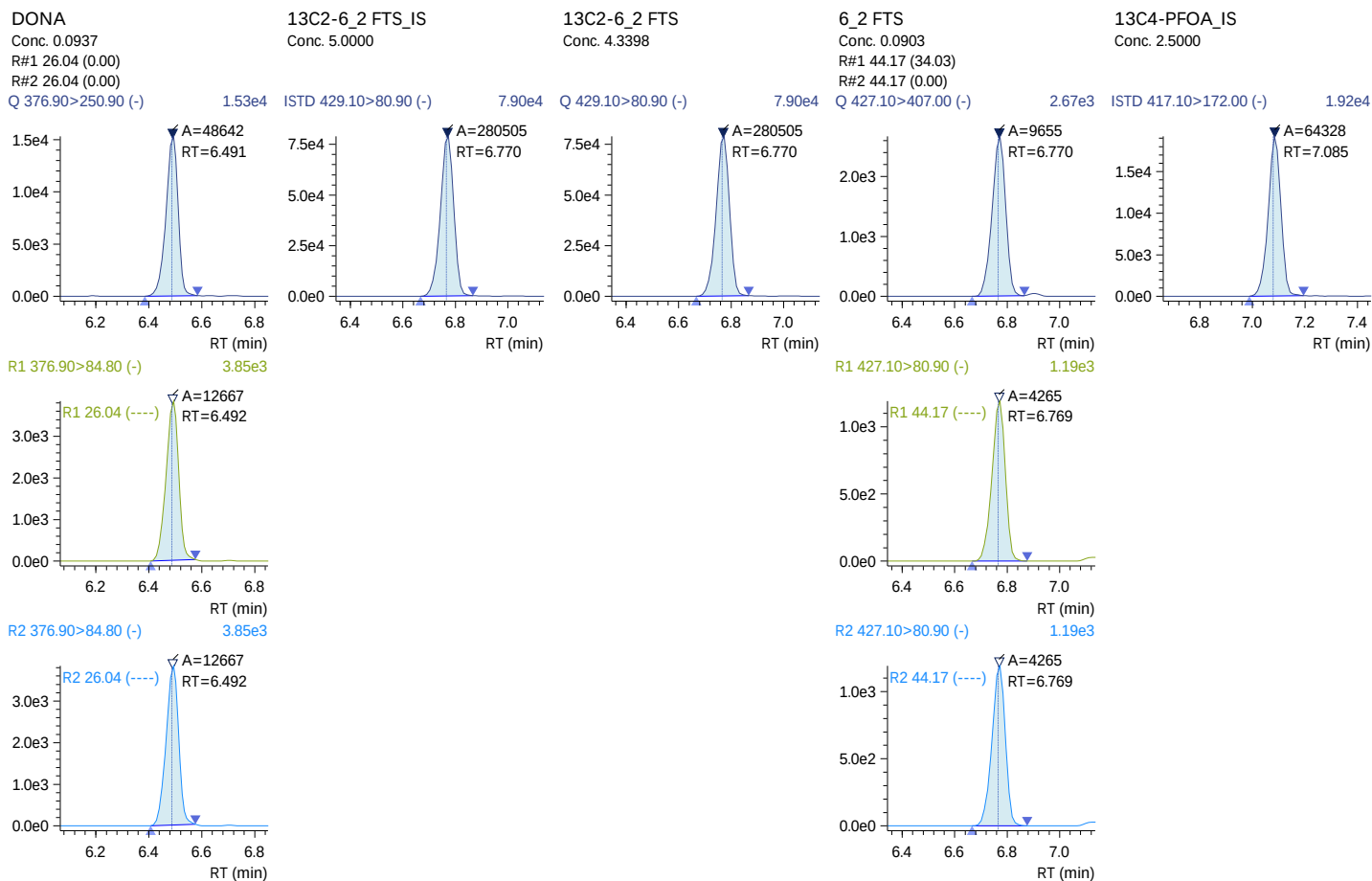


R2 363.10>169.00 (-) 2.32e3





240130_019 (continued)





240130_019 (continued)

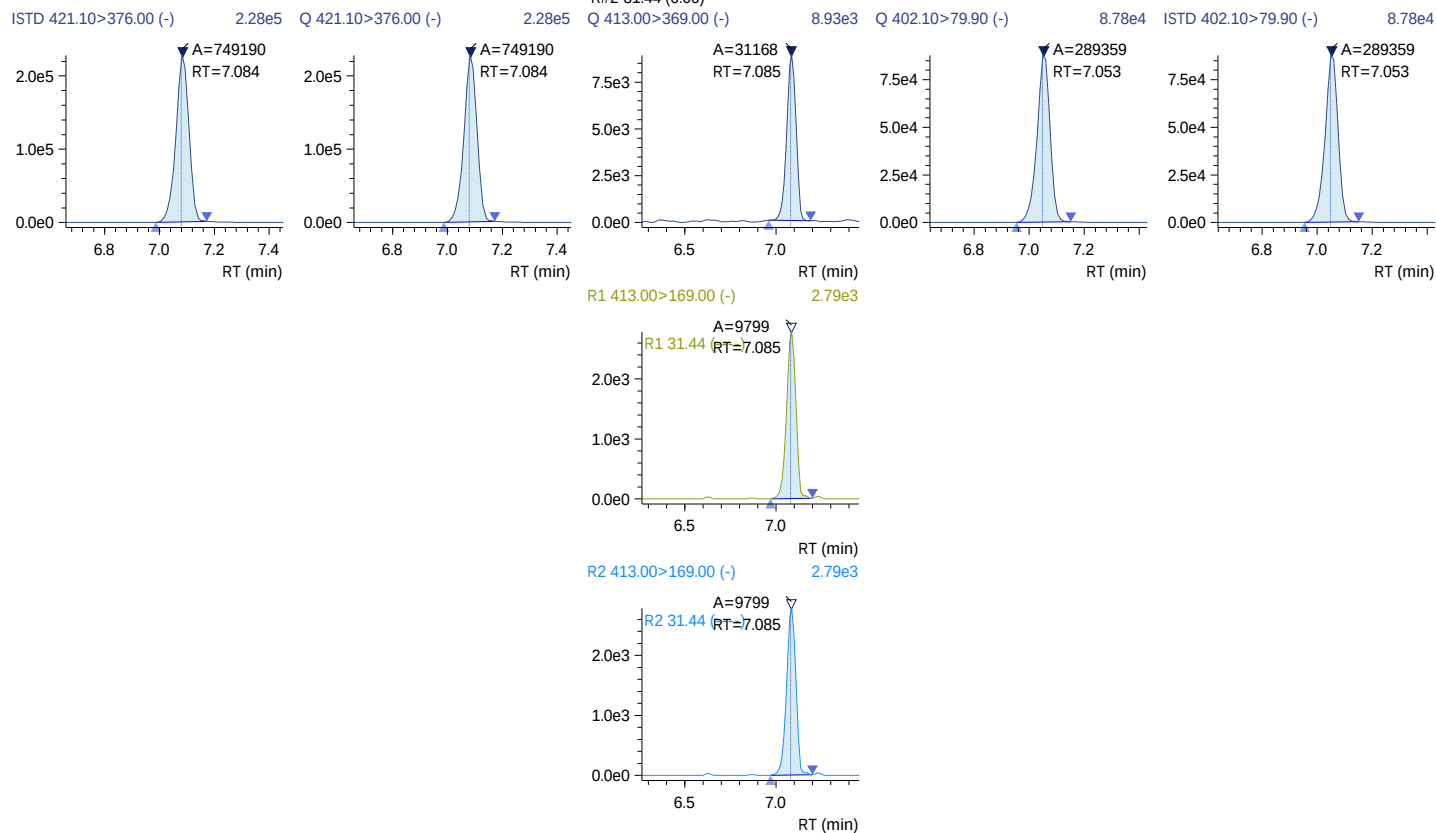
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.4420

PFOA
Conc. 0.0864
R#1 31.44 (22.46)
R#2 31.44 (0.00)

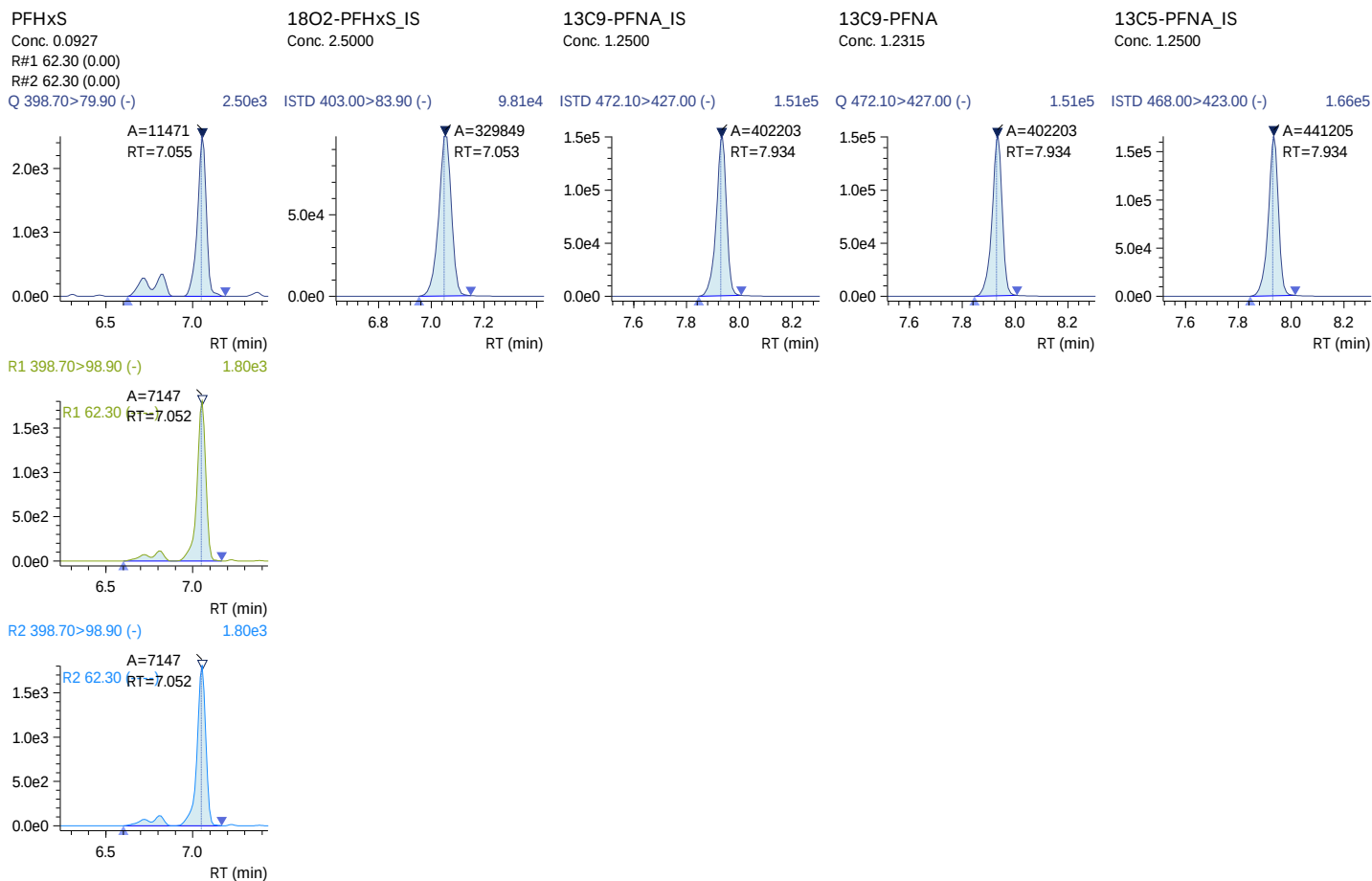
13C3-PFHxS
Conc. 2.5029

13C3-PFHxS_IS
Conc. 2.5000



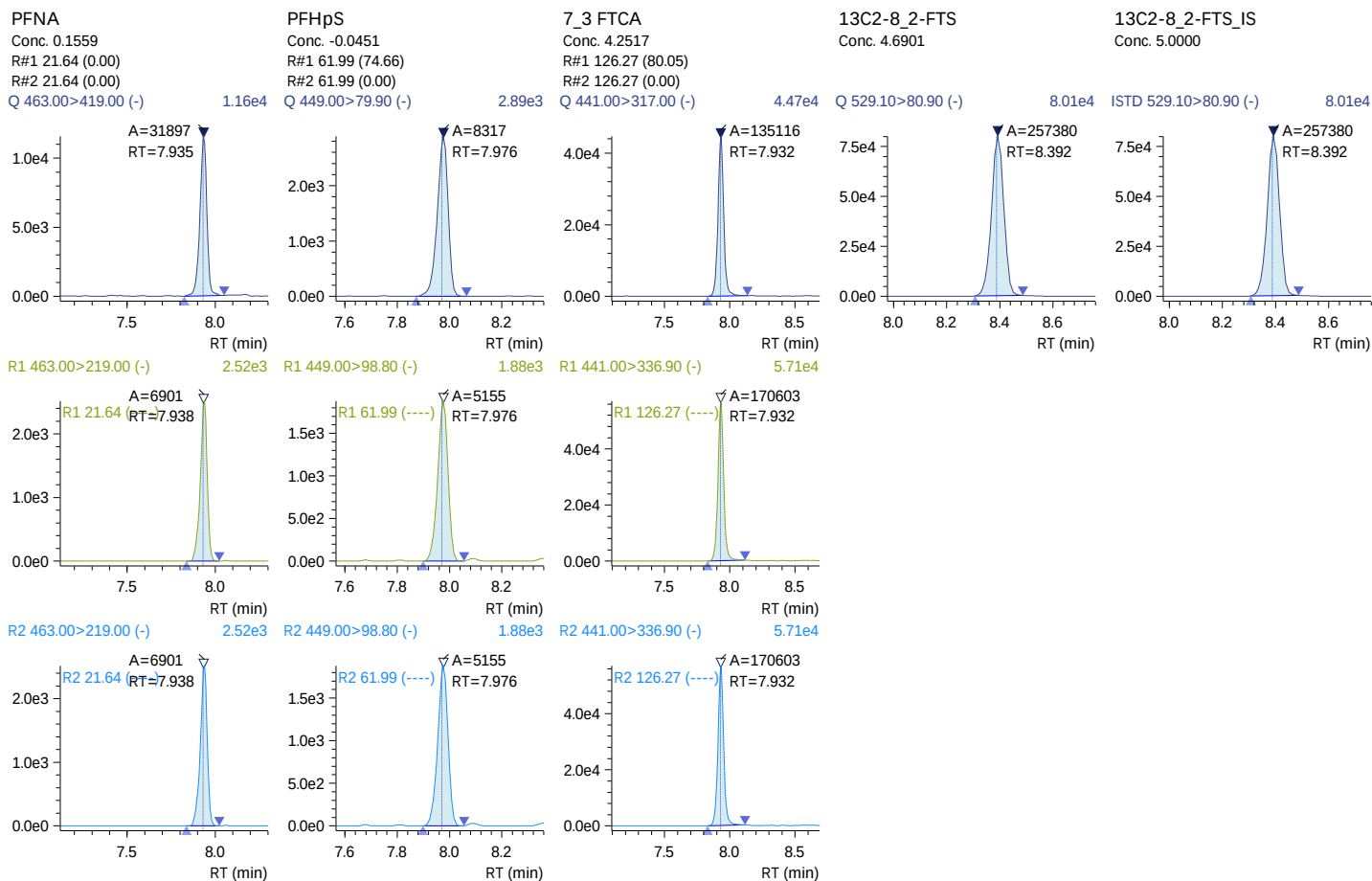


240130_019 (continued)



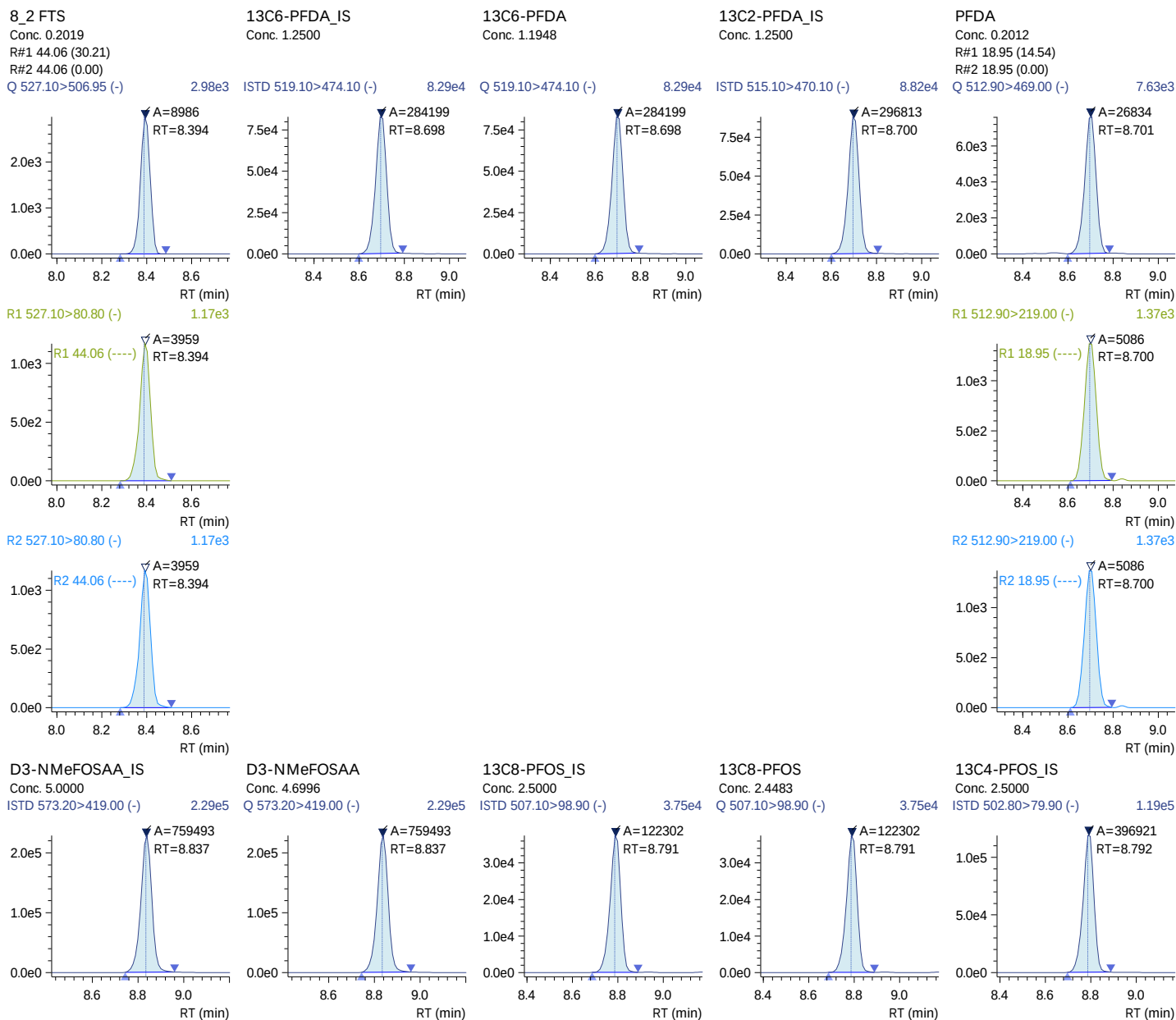


240130_019 (continued)



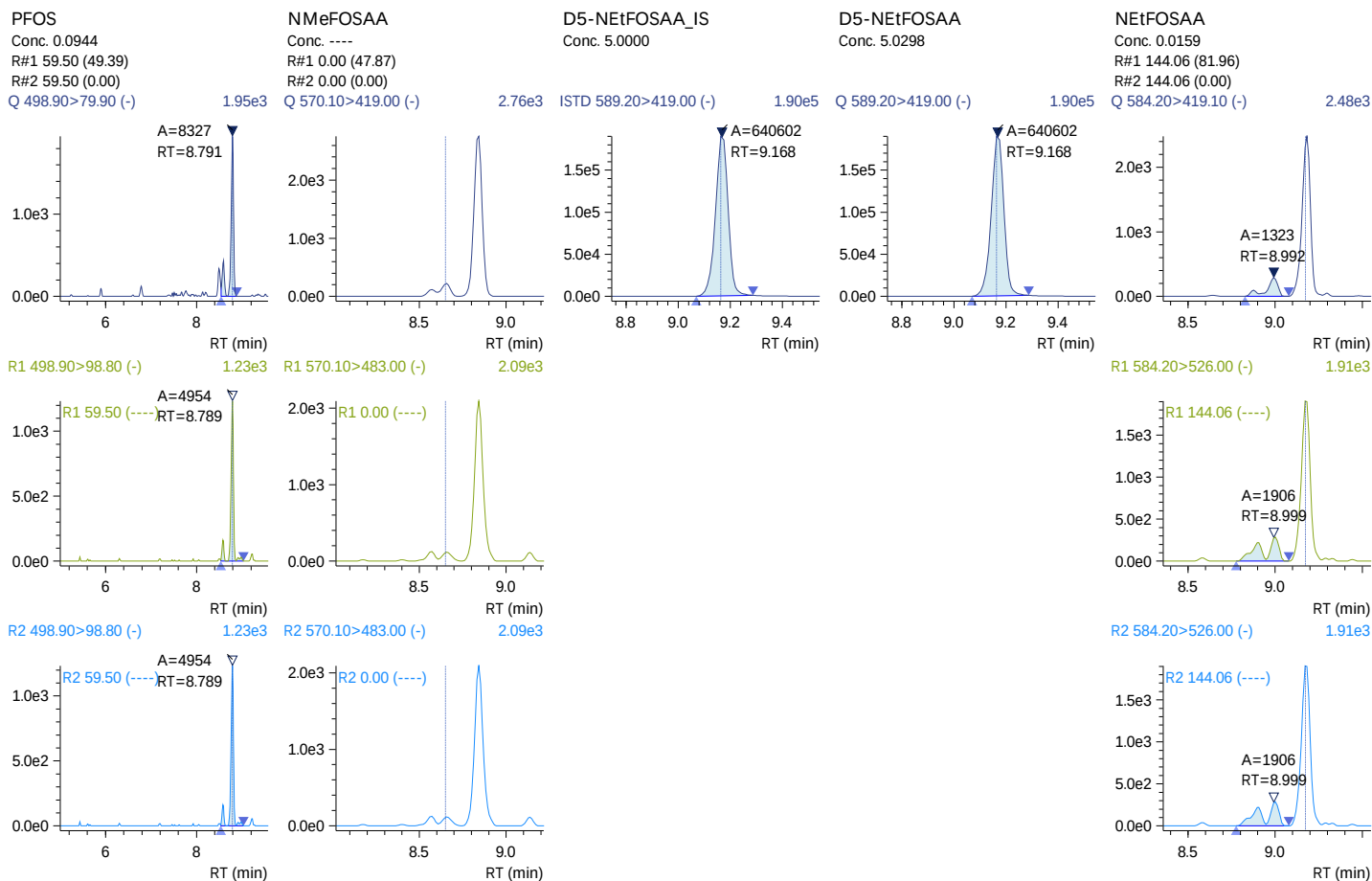


240130_019 (continued)





240130_019 (continued)

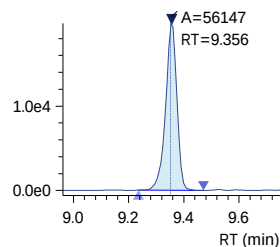




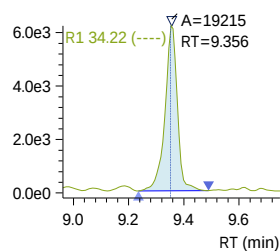
240130_019 (continued)

9-Cl-PF3ONS

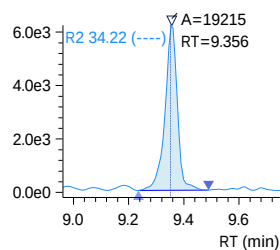
Conc. 0.0929
R#1 34.22 (31.39)
R#2 34.22 (0.00)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-) 6.26e3

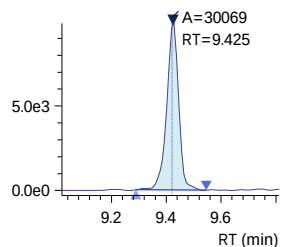


R2 532.80>353.00 (-) 6.26e3

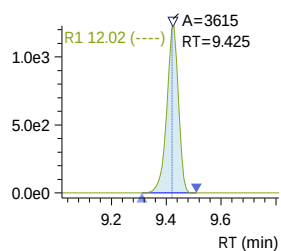


PFUnDA

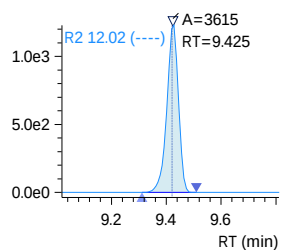
Conc. 0.0977
R#1 12.02 (12.59)
R#2 12.02 (0.00)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-) 1.23e3

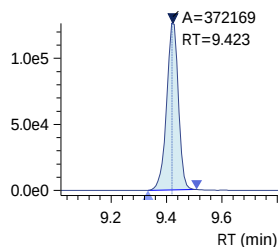


R2 563.10>269.10 (-) 1.23e3



13C7-PFUnDA_IS

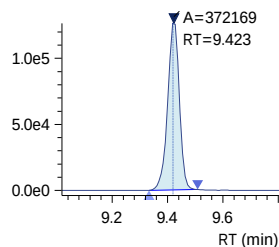
Conc. 1.2500
ISTD 570.00>525.10 (-)



1.27e5

13C7-PFUnDA

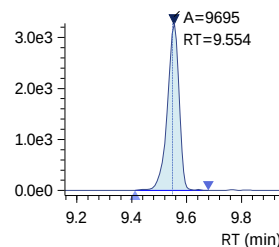
Conc. 1.2592
Q 570.00>525.10 (-)



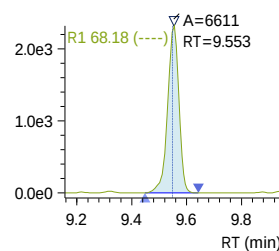
1.27e5

PFNS

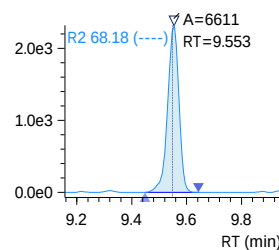
Conc. 0.0937
R#1 68.18 (82.65)
R#2 68.18 (0.00)
Q 548.80>79.90 (-)



3.28e3



R2 548.80>98.80 (-) 2.32e3



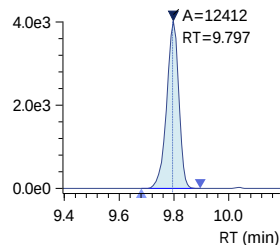


240130_019 (continued)

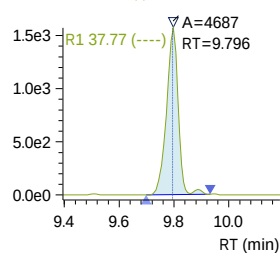
10_2_FTS
Conc. 0.0843

R#1 37.77 (16.46)
R#2 37.77 (0.00)

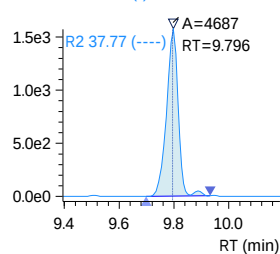
Q 626.80>607.05 (-)



R1 626.80>81.00 (-) 1.57e3

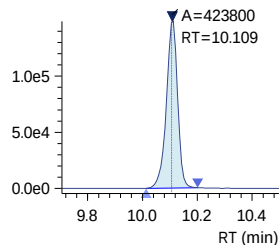


R2 626.80>81.00 (-) 1.57e3



13C2-PFDOA_IS
Conc. 1.2500

ISTD 615.10>570.00 (-)



Q 615.10>570.00 (-) 1.49e5

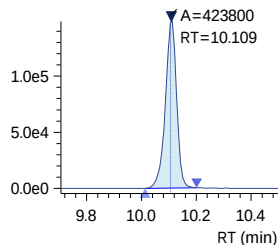


R1 615.10>570.00 (-) 1.49e5



13C2-PFDOA
Conc. 1.2012

Q 615.10>570.00 (-)



Q 615.10>570.00 (-) 1.49e5



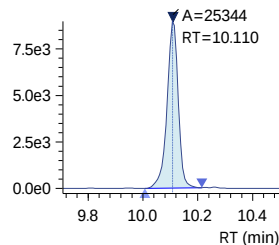
R1 615.10>570.00 (-) 1.49e5



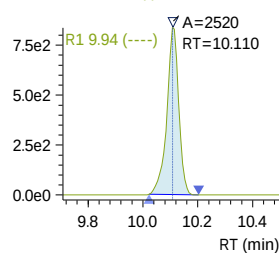
PFDOA
Conc. 0.0938

R#1 9.94 (10.12)
R#2 9.94 (0.00)

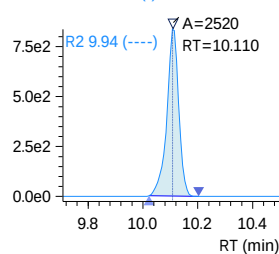
Q 613.10>569.00 (-)



R1 613.10>319.00 (-) 8.37e2



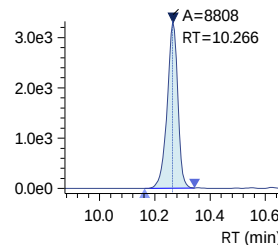
R2 613.10>319.00 (-) 8.37e2



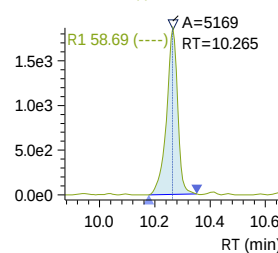
PFDS
Conc. 0.0969

R#1 58.69 (77.67)
R#2 58.69 (0.00)

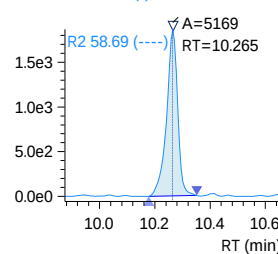
Q 599.00>79.90 (-)



R1 599.00>98.80 (-) 1.87e3



R2 599.00>98.80 (-) 1.87e3





240130_019 (continued)

PFTrDA

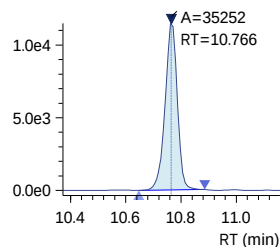
Conc. 0.1022

R#1 17.91 (14.17)

R#2 17.91 (0.00)

Q 663.00>619.00 (-)

1.15e4



11-CI-PF3OUdS

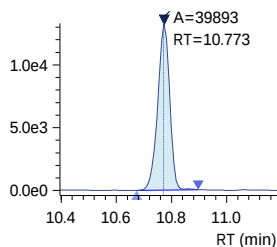
Conc. 0.0925

R#1 35.94 (32.90)

R#2 35.94 (0.00)

Q 630.90>451.00 (-)

1.33e4

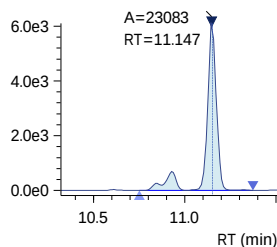


PFOSAm

Conc. 0.2428

Q 498.10>77.90 (-)

6.10e3

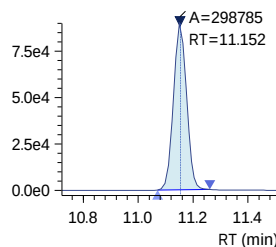


13C8-PFOSAm

Conc. 2.3697

Q 506.10>77.80 (-)

9.00e4

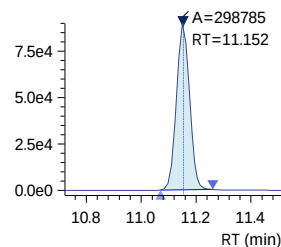


13C8-PFOSAm_IS

Conc. 2.5000

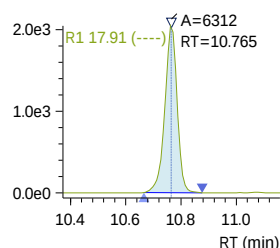
ISTD 506.10>77.80 (-)

9.00e4



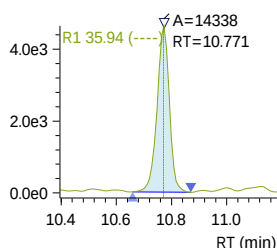
R1 663.00>168.90 (-)

2.05e3



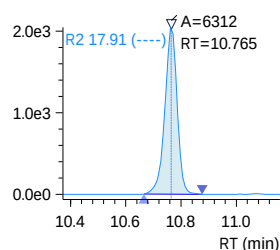
R1 632.90>452.90 (-)

4.65e3



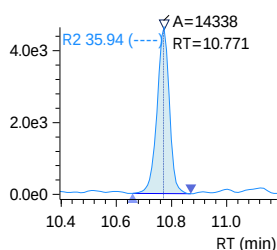
R2 663.00>168.90 (-)

2.05e3



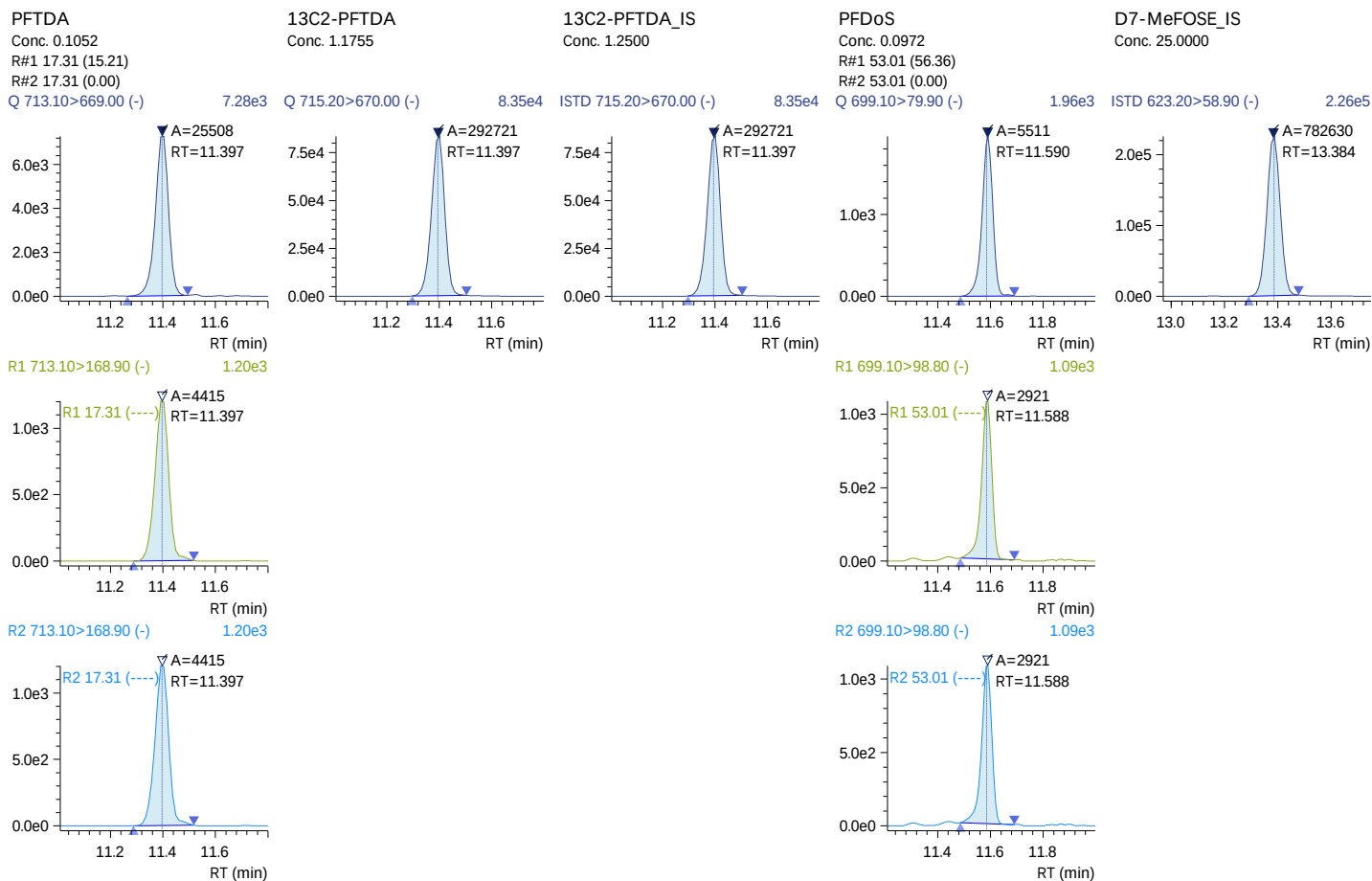
R2 632.90>452.90 (-)

4.65e3





240130_019 (continued)





240130_019 (continued)

D7-MeFOSE
 Conc. 24.1792

MeFOSE
 Conc. 0.0920

13C2-PFHXA IS
 Conc. 2.5000

13C2-PFHXA
 Conc. 2.3487

PFHXA
 Conc. 0.1065
 R#1 12.25 (9.60)
 R#2 12.25 (0.00)

Q 623.20>58.90 (-)

2.26e5

Q 616.10>59.00 (-)

7.32e2

ISTD 815.00>770.05 (-)

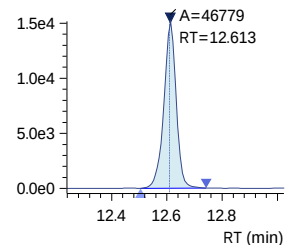
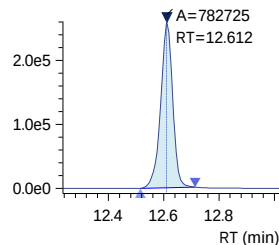
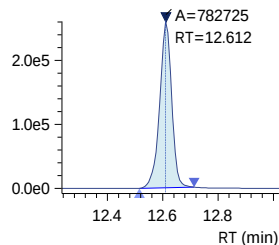
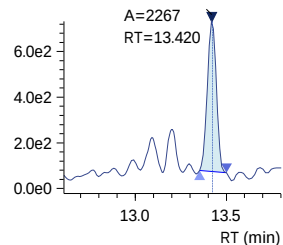
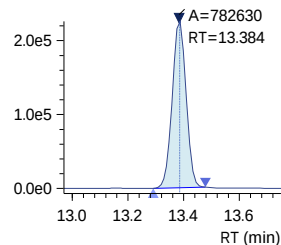
2.61e5

Q 815.00>770.05 (-)

2.61e5

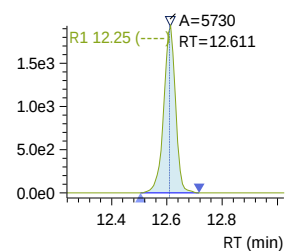
Q 813.00>768.95 (-)

1.52e4



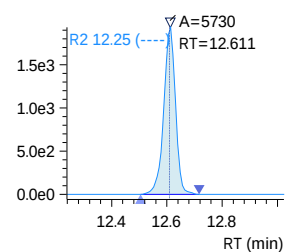
R1 813.00>218.95 (-)

1.93e3



R2 813.00>218.95 (-)

1.93e3





240130_019 (continued)

D3-MeFOSA
 Conc. 2.4109

D3-MeFOSA_IS
 Conc. 2.5000

MeFOSA
 Conc. 0.0914
 R#1 0.00 (98.91)
 R#2 0.00 (0.00)

D9-EtFOSE_IS
 Conc. 25.0000

D9-EtFOSE
 Conc. 24.1545

Q 515.00>219.00 (-)

2.33e4

ISTD 515.00>219.00 (-)

2.33e4

Q 511.90>219.00 (-)

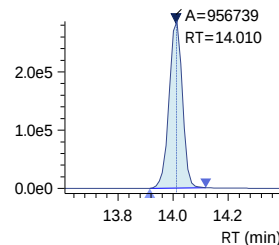
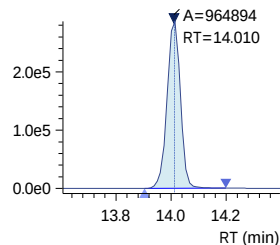
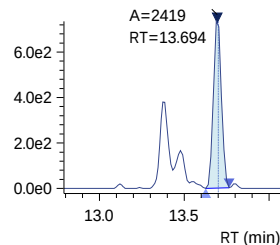
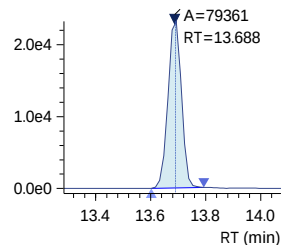
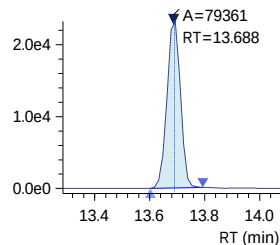
7.35e2

ISTD 639.20>58.90 (-)

2.87e5

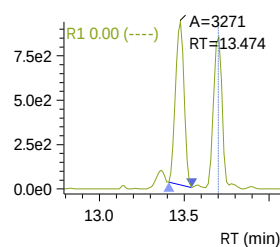
Q 639.20>58.90 (-)

2.87e5



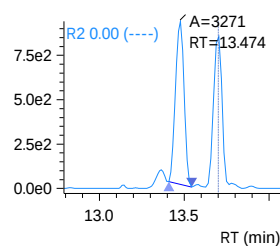
R1 511.90>169.00 (-)

9.42e2



R2 511.90>169.00 (-)

9.42e2





240130_019 (continued)

EtFOSE
Conc. 0.1005

D5-EtFOSAm
Conc. 2.4315

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. 0.1070

PFODA
Conc. 0.1109

Q 630.00>59.00 (-)

8.92e2

Q 531.10>219.00 (-)

3.47e4

ISTD 531.10>219.00 (-)

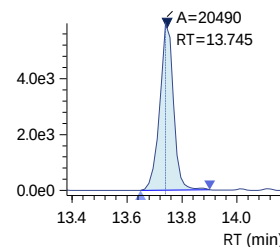
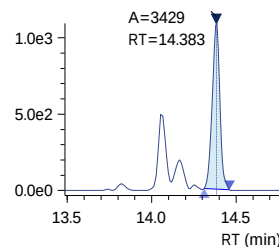
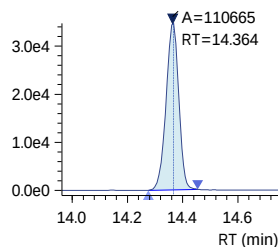
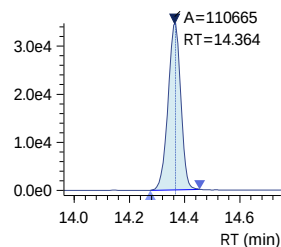
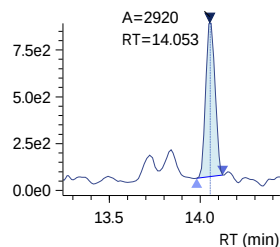
3.47e4

Q 526.00>219.00 (-)

1.10e3

Q 913.00>868.65 (-)

5.98e3

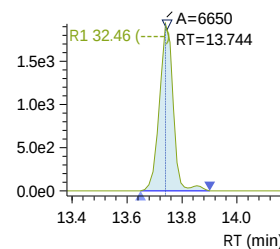
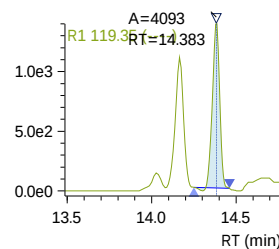


R1 526.00>169.00 (-)

1.40e3

R1 913.00>169.00 (-)

1.93e3

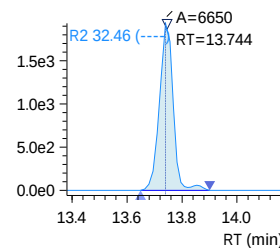
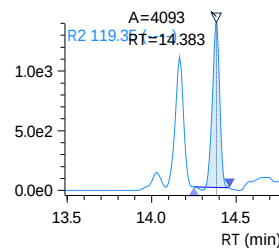


R2 526.00>169.00 (-)

1.40e3

R2 913.00>169.00 (-)

1.93e3

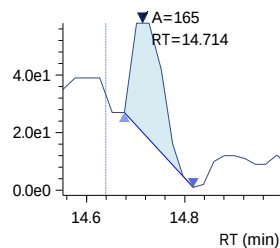


positive trans

Conc. 0.7500

Q 514.80>219.10 (+)

5.80e1





240130_020

Sample ID: 1633 ICAL 0.25PPB
Date Acquired: 1/30/2024 10:05:28 PM
Acquired by: System Administrator
Data File: 240130_020
Vial: 3 | Inj. Volume: 10.0000uL | Tray: 1

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	914999	----	----	----	----	----	----	
13C4-PFBA_IS	216.80>171.90	----	914999	----	----	----	----	----	----	
13C3-PFBA_IS	216.00>172.00	----	621552	----	----	----	----	----	----	
PFBA	212.80>169.05	----	20701	----	----	----	----	----	----	
PFMPA	229.00>84.90	----	18292	----	----	----	----	----	----	
3_3 FTCA	241.00>177.10	241.00>117.00	39811	55469	139.33	139.21	----	----	----	
13C5-PFPeA	268.30>223.00	----	255996	----	----	----	----	----	----	
13C5-PFPeA_IS	268.30>223.00	----	255996	----	----	----	----	----	----	
PFPeA	263.00>219.00	----	43892	----	----	----	----	----	----	
PFMBA	279.00>84.95	----	27604	----	----	----	----	----	----	
13C2-4_2 FTS	329.10>80.90	----	311686	----	----	----	----	----	----	
13C2-4_2 FTS_IS	329.10>80.90	----	311686	----	----	----	----	----	----	
4_2 FTS	327.10>307.00	327.10>80.90	33254	11400	34.28	32.10	11400	34.28	32.10	
13C3-PFBS_IS	302.10>79.90	----	295824	----	----	----	----	----	----	
PFBS	298.70>79.90	298.70>98.80	32640	14151	43.36	44.81	14151	43.36	44.81	
13C3-PFBS	302.10>79.90	----	295824	----	----	----	----	----	----	
NFDHA	295.00>201.00	295.00>84.90	31737	10818	34.09	35.54	10818	34.09	35.54	
13C5-PFHxA	318.00>273.00	----	599260	----	----	----	----	----	----	
13C5-PFHxA_IS	318.00>273.00	----	599260	----	----	----	----	----	----	
13C2-PFHxA_IS	315.10>270.00	----	718007	----	----	----	----	----	----	
PFHxA	313.00>269.00	----	52869	----	----	----	----	----	----	
PFEESA	314.80>135.00	314.80>82.90	153967	8824	5.73	5.22	8824	5.73	5.22	
13C3-HFPO-DA	286.90>168.90	----	622288	----	----	----	----	----	----	
13C3-HFPO-DA_IS	286.90>168.90	----	622288	----	----	----	----	----	----	
HFPO-DA	284.90>168.90	284.90>184.90	15149	8129	53.66	59.79	8129	53.66	59.79	
5_3 FTCA	341.00>237.05	341.00>217.00	174469	283113	162.27	157.08	283113	162.27	157.08	
PFPeS	349.10>79.90	349.10>98.80	24807	14218	57.32	55.12	14218	57.32	55.12	
13C4-PFHpA	367.10>322.00	----	734262	----	----	----	----	----	----	
13C4-PFHpA_IS	367.10>322.00	----	734262	----	----	----	----	----	----	
PFHpA	363.10>319.00	363.10>169.00	64185	14192	22.11	23.02	14192	22.11	23.02	
DONA	376.90>250.90	376.90>84.80	122150	35150	28.78	27.50	35150	28.78	27.50	
13C2-6_2 FTS_IS	429.10>80.90	----	300584	----	----	----	----	----	----	
13C2-6_2 FTS	429.10>80.90	----	300584	----	----	----	----	----	----	
6_2 FTS	427.10>407.00	427.10>80.90	30030	13827	46.05	50.47	13827	46.05	50.47	
13C4-PFOA_IS	417.10>172.00	----	64630	----	----	----	----	----	----	
13C8-PFOA_IS	421.10>376.00	----	752814	----	----	----	----	----	----	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240130_020 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	752814	----	----	----	----	----	----	----
PFOA	413.00>369.00	413.00>169.00	66817	19078	28.55	28.77	19078	28.55	28.77	
13C3-PFHxS	402.10>79.90	----	295390	----	----	----	----	----	----	----
13C3-PFHxS_IS	402.10>79.90	----	295390	----	----	----	----	----	----	----
PFHxS	398.70>79.90	398.70>98.90	28029	15864	56.60	60.90	15864	56.60	60.90	
18O2-PFHxS_IS	403.00>83.90	----	335043	----	----	----	----	----	----	----
13C9-PFNA_IS	472.10>427.00	----	420142	----	----	----	----	----	----	----
13C9-PFNA	472.10>427.00	----	420142	----	----	----	----	----	----	----
13C5-PFNA_IS	468.00>423.00	----	444312	----	----	----	----	----	----	----
PFNA	463.00>419.00	463.00>219.00	72640	15473	21.30	19.31	15473	21.30	19.31	
PFHpS	449.00>79.90	449.00>98.80	24473	12497	51.06	52.44	12497	51.06	52.44	
7_3 FTCA	441.00>317.00	441.00>336.90	307088	391169	127.38	129.46	391169	127.38	129.46	
13C2-8_2-FTS	529.10>80.90	----	243742	----	----	----	----	----	----	----
13C2-8_2-FTS_IS	529.10>80.90	----	243742	----	----	----	----	----	----	----
8_2 FTS	527.10>506.95	527.10>80.80	24388	9586	39.31	45.98	9586	39.31	45.98	
13C6-PFDA_IS	519.10>474.10	----	283149	----	----	----	----	----	----	----
13C6-PFDA	519.10>474.10	----	283149	----	----	----	----	----	----	----
13C2-PFDA_IS	515.10>470.10	----	299603	----	----	----	----	----	----	----
PFDA	512.90>469.00	512.90>219.00	63813	9304	14.58	17.88	9304	14.58	17.88	
D3-NMeFOSAA_IS	573.20>419.00	----	796908	----	----	----	----	----	----	----
D3-NMeFOSAA	573.20>419.00	----	796908	----	----	----	----	----	----	----
13C8-PFOS_IS	507.10>98.90	----	124996	----	----	----	----	----	----	----
13C8-PFOS	507.10>98.90	----	124996	----	----	----	----	----	----	----
13C4-PFOS_IS	502.80>79.90	----	409128	----	----	----	----	----	----	----
PFOS	498.90>79.90	498.90>98.80	25115	13674	54.45	53.60	13674	54.45	53.60	
NMeFOSAA	570.10>419.00	570.10>483.00	28140	16473	58.54	64.89	16473	58.54	64.89	
D5-NetFOSAA_IS	589.20>419.00	----	660800	----	----	----	----	----	----	----
D5-NetFOSAA	589.20>419.00	----	660800	----	----	----	----	----	----	----
NetFOSAA	584.20>419.10	584.20>526.00	25255	23459	92.89	96.07	23459	92.89	96.07	
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	141143	45093	31.95	30.95	45093	31.95	30.95	
PFUnDA	563.10>519.00	563.10>269.10	63273	8246	13.03	11.01	8246	13.03	11.01	
13C7-PFUnDA_IS	570.00>525.10	----	358490	----	----	----	----	----	----	----
13C7-PFUnDA	570.00>525.10	----	358490	----	----	----	----	----	----	----
PFNS	548.80>79.90	548.80>98.80	23506	15167	64.52	60.44	15167	64.52	60.44	
10_2 FTS	626.80>607.05	626.80>81.00	33043	10298	31.17	36.14	10298	31.17	36.14	
13C2-PFDOA_IS	615.10>570.00	----	426378	----	----	----	----	----	----	----
13C2-PFDOA	615.10>570.00	----	426378	----	----	----	----	----	----	----
PFDOA	613.10>569.00	613.10>319.00	55697	5028	9.03	10.16	5028	9.03	10.16	
PFDS	599.00>79.90	599.00>98.80	22388	12950	57.84	58.26	12950	57.84	58.26	
PFTDA	663.00>619.00	663.00>168.90	80746	11328	14.03	16.18	11328	14.03	16.18	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240130_020 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	101646	33449	32.91	34.99	33449	32.91	34.99	
PFOSAm	498.10>77.90	----	51453	----	----	----	----	----	----	
13C8-PFOSAm	506.10>77.80	----	322102	----	----	----	----	----	----	
13C8-PFOSAm_IS	506.10>77.80	----	322102	----	----	----	----	----	----	
PFTDA	713.10>669.00	713.10>168.90	58063	9545	16.44	18.05	9545	16.44	18.05	
13C2-PFTDA	715.20>670.00	----	311002	----	----	----	----	----	----	
13C2-PFTDA_IS	715.20>670.00	----	311002	----	----	----	----	----	----	
PFDoS	699.10>79.90	699.10>98.80	13497	8564	63.45	61.13	8564	63.45	61.13	
D7-MeFOSE_IS	623.20>58.90	----	792340	----	----	----	----	----	----	
D7-MeFOSE	623.20>58.90	----	792340	----	----	----	----	----	----	
MeFOSE	616.10>59.00	----	9922	----	----	----	----	----	----	
13C2-PFHxDA_IS	815.00>770.05	----	847894	----	----	----	----	----	----	
13C2-PFHxDA	815.00>770.05	----	847894	----	----	----	----	----	----	
PFHxDA	813.00>768.95	813.00>218.95	112500	12875	11.45	11.66	12875	11.45	11.66	
D3-MeFOSA	515.00>219.00	----	79245	----	----	----	----	----	----	
D3-MeFOSA_IS	515.00>219.00	----	79245	----	----	----	----	----	----	
MeFOSA	511.90>219.00	511.90>169.00	12330	17705	143.59	160.44	17705	143.59	160.44	
D9-EtFOSE_IS	639.20>58.90	----	964697	----	----	----	----	----	----	
D9-EtFOSE	639.20>58.90	----	955662	----	----	----	----	----	----	
EtFOSE	630.00>59.00	----	11664	----	----	----	----	----	----	
D5-EtFOSAm	531.10>219.00	----	111622	----	----	----	----	----	----	
D5-EtFOSAm_IS	531.10>219.00	----	111622	----	----	----	----	----	----	
EtFOSAm	526.00>219.00	526.00>169.00	15909	24434	153.58	159.63	24434	153.58	159.63	
PFODA	913.00>868.65	913.00>169.00	43522	15155	34.82	36.03	15155	34.82	36.03	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
 IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240130_020

Sample ID: 1633 ICAL 0.25PPB
Date Acquired: 1/30/2024 10:05:28 PM
Acquired by: System Administrator
Data File: 240130_020
Vial: 3 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.338	0.000	0.001	914999	621552	13C3-PFBA_IS	9.9348	ng/mL	
13C4-PFBA_IS	Auto	1.338	0.000	----	914999	914999	----	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.337	0.000	----	621552	621552	----	5.0000	ng/mL	
PFBA	Auto	1.343	0.002	0.005	20701	914999	13C4-PFBA_IS	0.2307	ng/mL	
PFMPA	Auto	2.367	0.001	-1.076	18292	255996	13C5-PFPeA_IS	0.2502	ng/mL	
3_3 FTCA	Auto	2.947	0.002	-0.496	39811	255996	13C5-PFPeA_IS	10.8568	ng/mL	
13C5-PFPeA	Auto	3.443	0.004	-1.495	255996	718007	13C2-PFHxA_IS	4.9585	ng/mL	
13C5-PFPeA_IS	Auto	3.443	0.004	----	255996	255996	----	5.0000	ng/mL	
PFPeA	Auto	3.445	0.003	0.002	43892	255996	13C5-PFPeA_IS	0.2449	ng/mL	
PFMBA	Auto	3.973	0.004	0.530	27604	255996	13C5-PFPeA_IS	0.2464	ng/mL	
13C2-4_2 FTS	Auto	4.623	0.003	-2.429	311686	335043	18O2-PFHxS_IS	4.9421	ng/mL	
13C2-4_2 FTS_IS	Auto	4.623	0.003	----	311686	311686	----	5.0000	ng/mL	
4_2 FTS	Auto	4.623	0.003	0.000	33254	311686	13C2-4_2 FTS_IS	0.2152	ng/mL	
13C3-PFBS_IS	Auto	4.591	0.004	----	295824	295824	----	2.5000	ng/mL	
PFBS	Auto	4.592	0.004	0.001	32640	295824	13C3-PFBS_IS	0.2227	ng/mL	
13C3-PFBS	Auto	4.591	0.004	-2.461	295824	335043	18O2-PFHxS_IS	2.3664	ng/mL	
NFDHA	Auto	4.794	0.004	-0.143	31737	599260	13C5-PFHxA_IS	0.2553	ng/mL	
13C5-PFHxA	Auto	4.937	0.005	-0.001	599260	718007	13C2-PFHxA_IS	2.5857	ng/mL	
13C5-PFHxA_IS	Auto	4.937	0.005	----	599260	599260	----	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	4.938	0.005	----	718007	718007	----	2.5000	ng/mL	
PFHxA	Auto	4.939	0.005	0.002	52869	599260	13C5-PFHxA_IS	0.2309	ng/mL	
PFEESA	Auto	5.271	0.006	0.334	153967	599260	13C5-PFHxA_IS	0.2068	ng/mL	
13C3-HFPO-DA	Auto	5.417	0.005	0.479	622288	718007	13C2-PFHxA_IS	9.7797	ng/mL	
13C3-HFPO-DA_IS	Auto	5.417	0.005	----	622288	622288	----	10.0000	ng/mL	
HFPO-DA	Auto	5.419	0.006	0.002	15149	622288	13C3-HFPO-DA_IS	0.2476	ng/mL	
5_3 FTCA	Auto	5.868	0.002	0.931	174469	599260	13C5-PFHxA_IS	9.7396	ng/mL	
PFPeS	Auto	5.978	0.005	-1.075	24807	295390	13C3-PFHxS_IS	0.2122	ng/mL	
13C4-PFHpA	Auto	6.125	0.005	1.187	734262	718007	13C2-PFHxA_IS	2.5183	ng/mL	
13C4-PFHpA_IS	Auto	6.125	0.005	----	734262	734262	----	2.5000	ng/mL	
PFHpA	Auto	6.126	0.004	0.001	64185	734262	13C4-PFHpA_IS	0.2402	ng/mL	
DONA	Auto	6.491	0.004	1.074	122150	622288	13C3-HFPO-DA_IS	0.2329	ng/mL	
13C2-6_2 FTS_IS	Auto	6.769	0.003	----	300584	300584	----	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.769	0.003	-0.283	300584	335043	18O2-PFHxS_IS	4.5783	ng/mL	
6_2 FTS	Auto	6.770	0.005	0.001	30030	300584	13C2-6_2 FTS_IS	0.2620	ng/mL	
13C4-PFOA_IS	Auto	7.084	0.005	----	64630	64630	----	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.084	0.006	----	752814	752814	----	2.5000	ng/mL	
13C8-PFOA	Auto	7.084	0.006	0.000	752814	64630	13C4-PFOA_IS	2.4424	ng/mL	
PFOA	Auto	7.084	0.003	0.000	66817	752814	13C8-PFOA_IS	0.2268	ng/mL	
13C3-PFHxS	Auto	7.053	0.005	0.001	295390	335043	18O2-PFHxS_IS	2.5155	ng/mL	
13C3-PFHxS_IS	Auto	7.053	0.005	----	295390	295390	----	2.5000	ng/mL	
PFHxS	M	7.054	0.006	0.001	28029	295390	13C3-PFHxS_IS	0.2171	ng/mL	
18O2-PFHxS_IS	Auto	7.052	0.004	----	335043	335043	----	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.933	0.004	----	420142	420142	----	1.2500	ng/mL	
13C9-PFNA	Auto	7.933	0.004	0.000	420142	444312	13C5-PFNA_IS	1.2774	ng/mL	
13C5-PFNA_IS	Auto	7.933	0.003	----	444312	444312	----	1.2500	ng/mL	
PFNA	Auto	7.933	0.003	0.000	72640	420142	13C9-PFNA_IS	0.2467	ng/mL	
PFHpS	Auto	7.975	0.004	-0.816	24473	124996	13C8-PFOS_IS	0.2329	ng/mL	
7_3 FTCA	Auto	7.932	0.003	2.995	307088	599260	13C5-PFHxA_IS	9.7559	ng/mL	
13C2-8_2-FTS	Auto	8.392	0.004	1.340	243742	335043	18O2-PFHxS_IS	4.3727	ng/mL	
13C2-8_2-FTS_IS	Auto	8.392	0.004	----	243742	243742	----	5.0000	ng/mL	
8_2 FTS	Auto	8.392	0.004	0.000	24388	243742	13C2-8_2-FTS_IS	0.2625	ng/mL	
13C6-PFDA_IS	Auto	8.699	0.004	----	283149	283149	----	1.2500	ng/mL	
13C6-PFDA	Auto	8.699	0.004	-0.001	283149	299603	13C2-PFDA_IS	1.1793	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_020 (continued)

(Table continued from previous page)

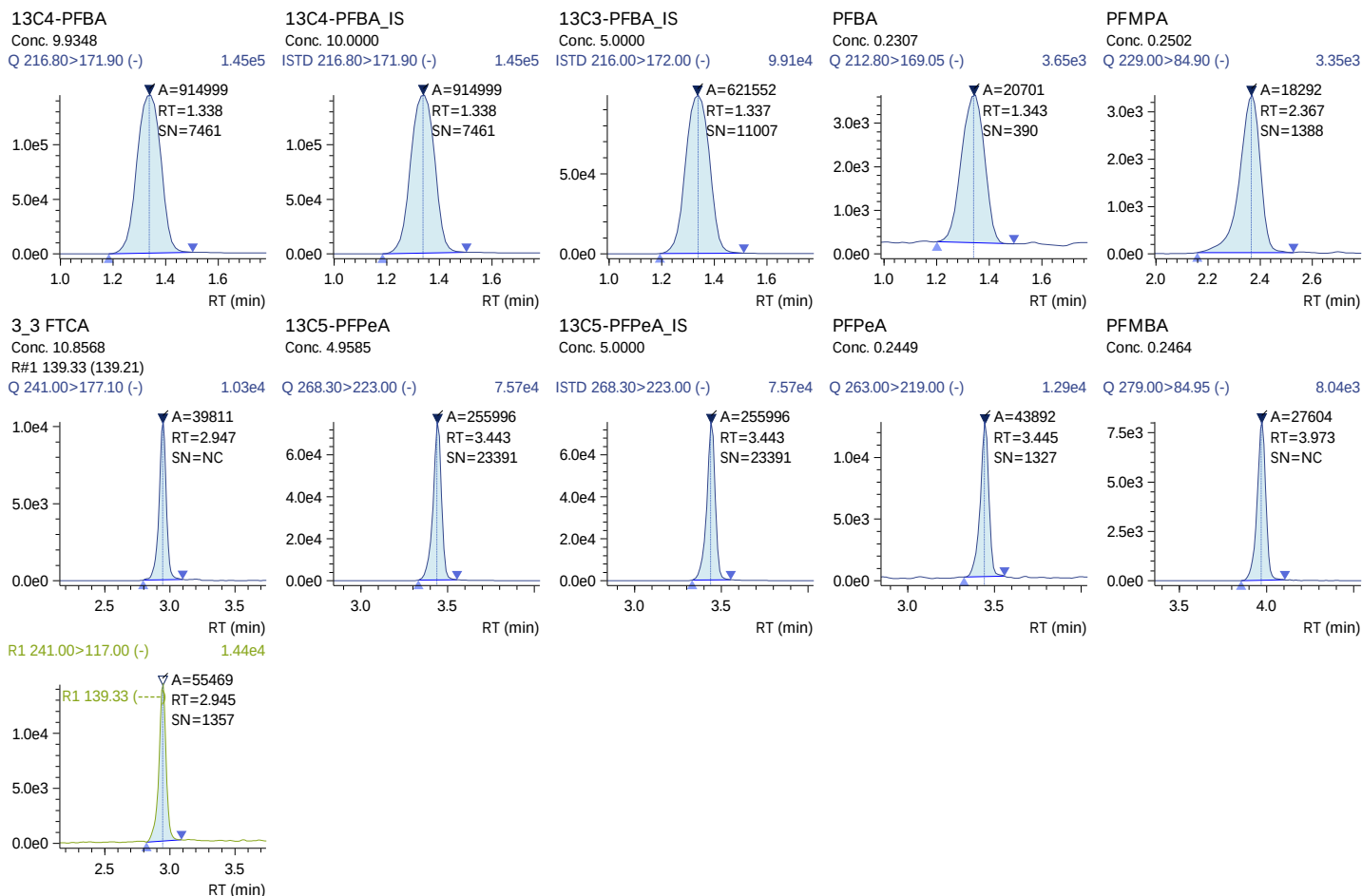
Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C2-PFDA_IS	Auto	8.700	0.004	----	299603	299603	----	1.2500	ng/mL	
PFDA	Auto	8.700	0.003	0.001	63813	283149	13C6-PFDA_IS	0.2665	ng/mL	
D3-NMeFOSAA_IS	Auto	8.837	0.003	----	796908	796908	----	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.837	0.003	0.046	796908	409128	13C4-PFOS_IS	4.7840	ng/mL	
13C8-PFOS_IS	Auto	8.791	0.005	----	124996	124996	----	2.5000	ng/mL	
13C8-PFOS	Auto	8.791	0.005	0.000	124996	409128	13C4-PFOS_IS	2.4276	ng/mL	
13C4-PFOS_IS	Auto	8.791	0.004	----	409128	409128	----	2.5000	ng/mL	
PFOS	M	8.791	0.003	0.000	25115	124996	13C8-PFOS_IS	0.2352	ng/mL	
NMeFOSAA	M	8.844	0.193	0.007	28140	796908	D3-NMeFOSAA_IS	0.2494	ng/mL	
D5-NetFOSAA_IS	Auto	9.169	0.005	----	660800	660800	----	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.169	0.005	0.378	660800	409128	13C4-PFOS_IS	5.0336	ng/mL	
NetFOSAA	M	9.178	0.192	0.009	25255	660800	D5-NetFOSAA_IS	0.2327	ng/mL	
9-CI-PF3ONS	Auto	9.357	0.006	3.940	141143	622288	13C3-HFPO-DA_IS	0.2313	ng/mL	
PFUnDA	Auto	9.425	0.004	0.002	63273	358490	13C7-PFUnDA_IS	0.2374	ng/mL	
13C7-PFUnDA_IS	Auto	9.423	0.004	----	358490	358490	----	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.423	0.004	0.723	358490	299603	13C2-PFDA_IS	1.2017	ng/mL	
PFNS	Auto	9.553	0.004	0.762	23506	124996	13C8-PFOS_IS	0.2222	ng/mL	
10_2_FTS	Auto	9.799	0.004	1.407	33043	243742	13C2-8_2-FTS_IS	0.2684	ng/mL	
13C2-PFDOA_IS	Auto	10.110	0.003	----	426378	426378	----	1.2500	ng/mL	
13C2-PFDOA	Auto	10.110	0.003	1.410	426378	299603	13C2-PFDA_IS	1.1972	ng/mL	
PFDOA	Auto	10.111	0.003	0.001	55697	426378	13C2-PFDOA_IS	0.2301	ng/mL	
PFDS	Auto	10.266	0.003	1.475	22388	124996	13C8-PFOS_IS	0.2410	ng/mL	
PFTDA	Auto	10.766	0.002	-0.629	80746	311002	13C2-PFTDA_IS	0.2419	ng/mL	
11-CI-PF3OUdS	Auto	10.773	0.002	5.356	101646	622288	13C3-HFPO-DA_IS	0.2334	ng/mL	
PFOSAm	M	11.149	-0.001	-0.006	51453	322102	13C8-PFOSAm_IS	0.4565	ng/mL	
13C8-PFOSAm	Auto	11.155	0.000	2.364	322102	409128	13C4-PFOS_IS	2.4784	ng/mL	
13C8-PFOSAm_IS	Auto	11.155	0.000	----	322102	322102	----	2.5000	ng/mL	
PFTDA	Auto	11.396	0.000	0.001	58063	311002	13C2-PFTDA_IS	0.2473	ng/mL	
13C2-PFTDA	Auto	11.395	0.000	2.695	311002	299603	13C2-PFDA_IS	1.2373	ng/mL	
13C2-PFTDA_IS	Auto	11.395	0.000	----	311002	311002	----	1.2500	ng/mL	
PFDoS	Auto	11.587	0.001	2.796	13497	124996	13C8-PFOS_IS	0.2330	ng/mL	
D7-MeFOSE_IS	Auto	13.384	-0.002	----	792340	792340	----	25.0000	ng/mL	
D7-MeFOSE	Auto	13.384	-0.002	4.593	792340	409128	13C4-PFOS_IS	23.7488	ng/mL	
MeFOSE	M	13.422	-0.001	0.038	9922	792340	D7-MeFOSE_IS	0.2408	ng/mL	
13C2-PFHXA_IS	Auto	12.609	0.000	----	847894	847894	----	2.5000	ng/mL	
13C2-PFHXA	Auto	12.609	0.000	3.909	847894	299603	13C2-PFDA_IS	2.5206	ng/mL	
PFHXA	Auto	12.611	0.001	0.002	112500	847894	13C2-PFHXA_IS	0.2455	ng/mL	
D3-MeFOSA	Auto	13.689	-0.001	4.898	79245	409128	13C4-PFOS_IS	2.3355	ng/mL	
D3-MeFOSA_IS	Auto	13.689	-0.001	----	79245	79245	----	2.5000	ng/mL	
MeFOSA	M	13.697	-0.002	0.008	12330	79245	D3-MeFOSA_IS	0.2727	ng/mL	
D9-EtFOSE_IS	Auto	14.012	-0.001	----	964697	964697	----	25.0000	ng/mL	
D9-EtFOSE	Auto	14.012	-0.001	5.221	955662	409128	13C4-PFOS_IS	23.4074	ng/mL	
EtFOSE	M	14.057	0.002	0.045	11664	964697	D9-EtFOSE_IS	0.2521	ng/mL	
D5-EtFOSAm	Auto	14.367	0.001	5.576	111622	409128	13C4-PFOS_IS	2.3793	ng/mL	
D5-EtFOSAm_IS	Auto	14.367	0.001	----	111622	111622	----	2.5000	ng/mL	
EtFOSAm	M	14.386	0.002	0.019	15909	111622	D5-EtFOSAm_IS	0.2598	ng/mL	
PFODA	Auto	13.745	0.005	1.136	43522	847894	13C2-PFHXA_IS	0.2641	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_020 (continued)





240130_020 (continued)

13C2-4_2 FTS
Conc. 4.9421

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. 0.2152
R#1 34.28 (32.10)
R#2 34.28 (32.10)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 0.2227
R#1 43.36 (44.81)
R#2 43.36 (44.81)

Q 329.10>80.90 (-)

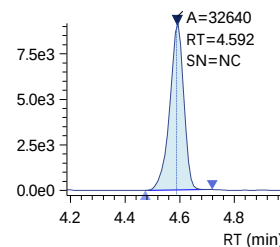
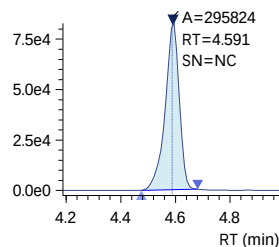
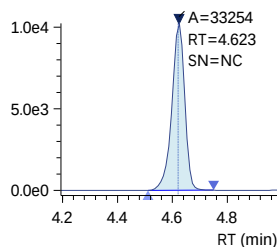
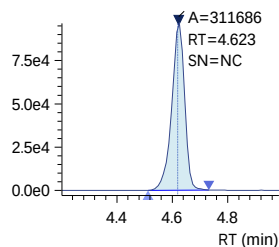
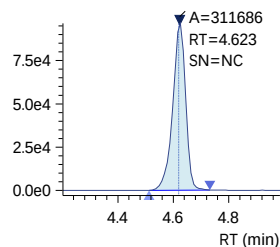
9.65e4 ISTD 329.10>80.90 (-)

9.65e4 Q 327.10>307.00 (-)

1.02e4 ISTD 302.10>79.90 (-)

8.28e4 Q 298.70>79.90 (-)

9.17e3

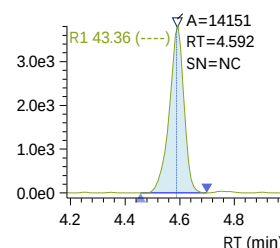
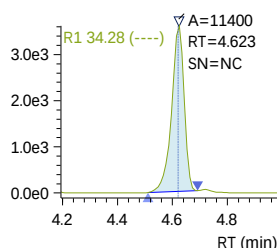


R1 327.10>80.90 (-)

3.62e3

R1 298.70>98.80 (-)

3.82e3

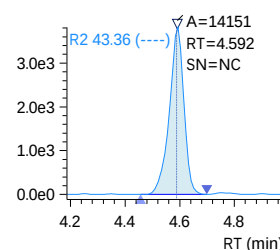
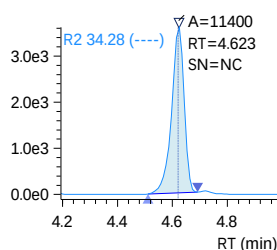


R2 327.10>80.90 (-)

3.62e3

R2 298.70>98.80 (-)

3.82e3





240130_020 (continued)

13C3-PFBS
Conc. 2.3664

NFDHA
Conc. 0.2553
R#1 34.09 (35.54)
R#2 34.09 (35.54)

13C5-PFHxA
Conc. 2.5857

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

Q 302.10>79.90 (-)

8.28e4

Q 295.00>201.00 (-)

9.56e3

Q 318.00>273.00 (-)

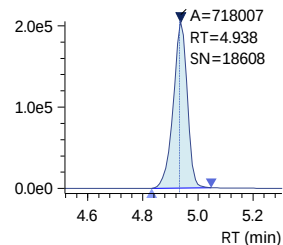
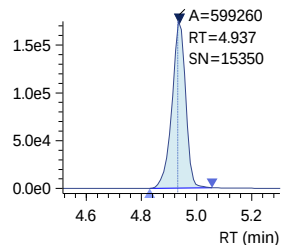
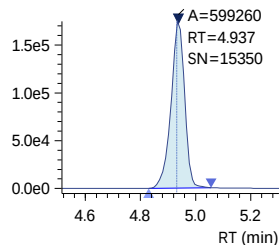
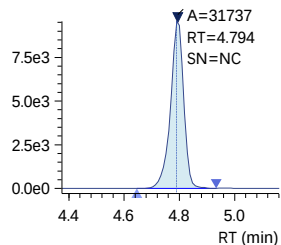
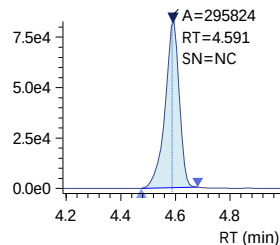
1.75e5

ISTD 318.00>273.00 (-)

1.75e5

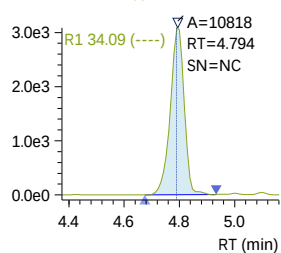
ISTD 315.10>270.00 (-)

2.05e5



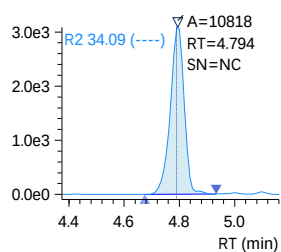
R1 295.00>84.90 (-)

3.09e3



R2 295.00>84.90 (-)

3.09e3





240130_020 (continued)

PFHxA
Conc. 0.2309

PFEESA
Conc. 0.2068
R#1 5.73 (5.22)
R#2 5.73 (5.22)

13C3-HFPO-DA
Conc. 9.7797

13C3-HFPO-DA_IS
Conc. 10.0000

HFPO-DA
Conc. 0.2476

R#1 53.66 (59.79)
R#2 53.66 (59.79)

Q 313.00>269.00 (-)

1.65e4

Q 314.80>135.00 (-)

4.59e4

Q 286.90>168.90 (-)

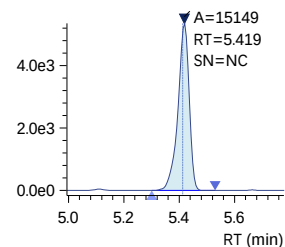
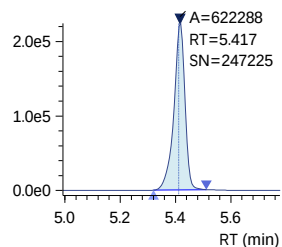
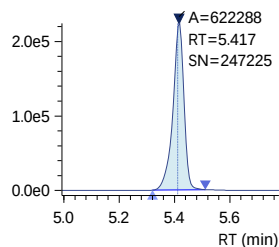
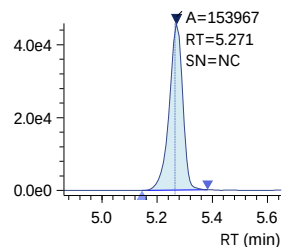
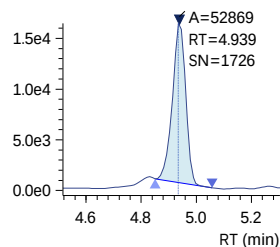
2.24e5

ISTD 286.90>168.90 (-)

2.24e5

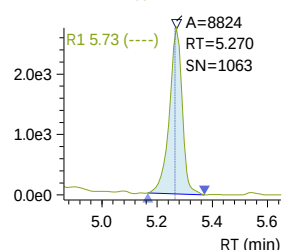
Q 284.90>168.90 (-)

5.36e3



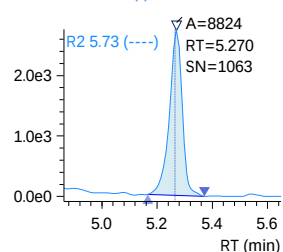
R1 314.80>82.90 (-)

2.77e3



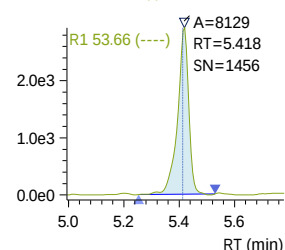
R2 314.80>82.90 (-)

2.77e3



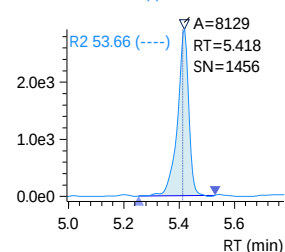
R1 284.90>184.90 (-)

2.93e3



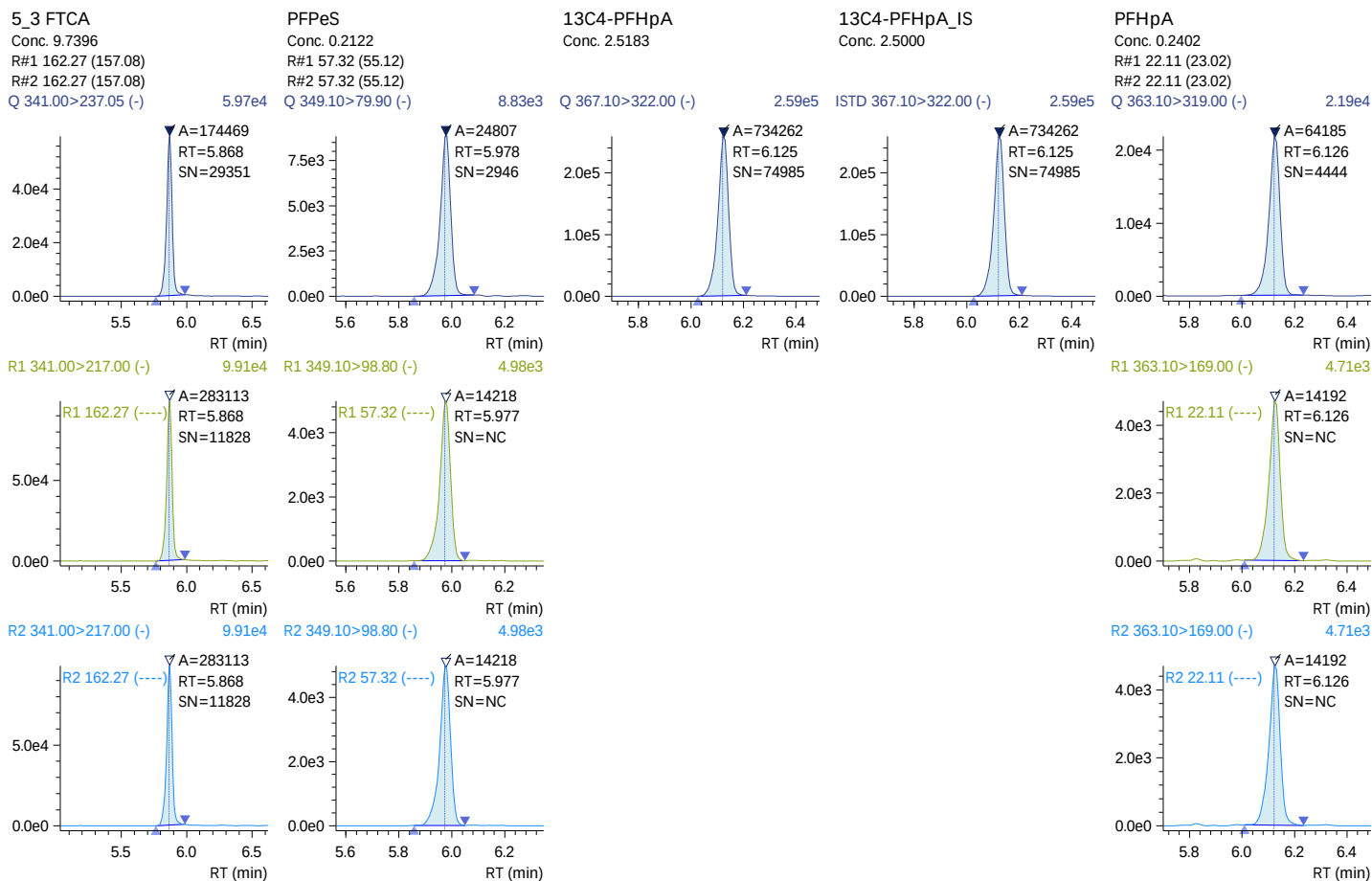
R2 284.90>184.90 (-)

2.93e3





240130_020 (continued)

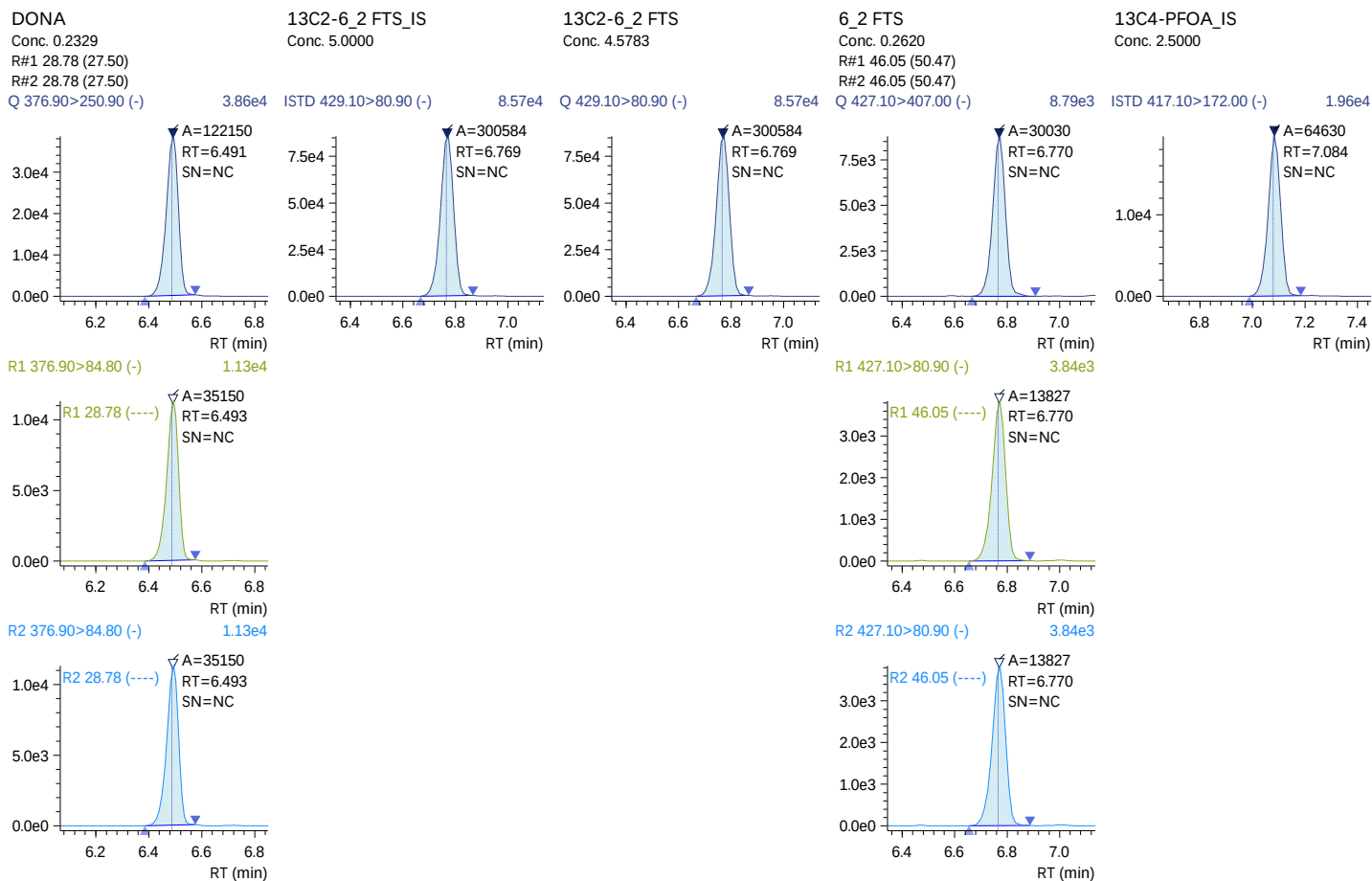


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_020 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_020 (continued)

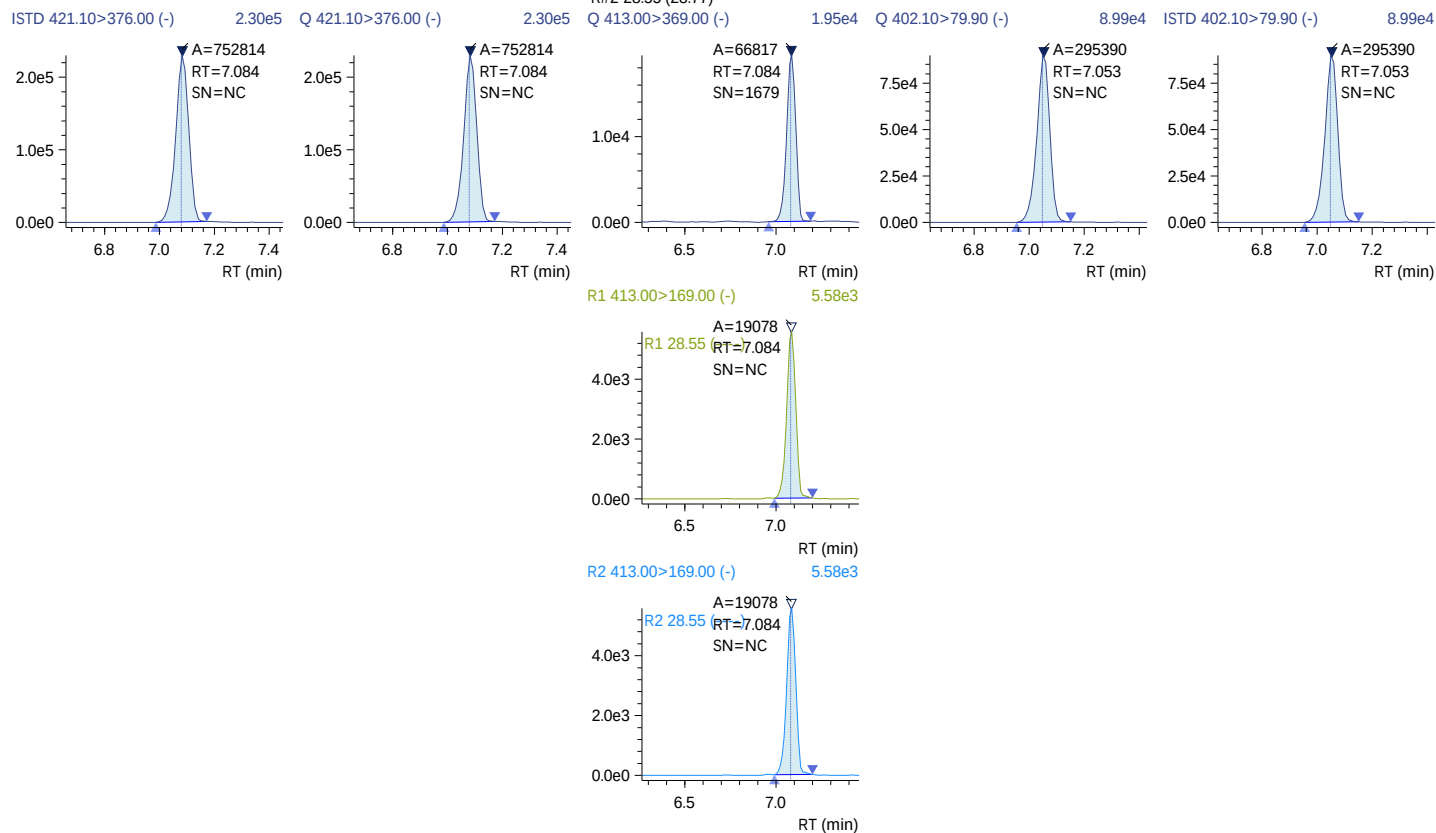
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.4424

PFOA
Conc. 0.2268
R#1 28.55 (28.77)
R#2 28.55 (28.77)

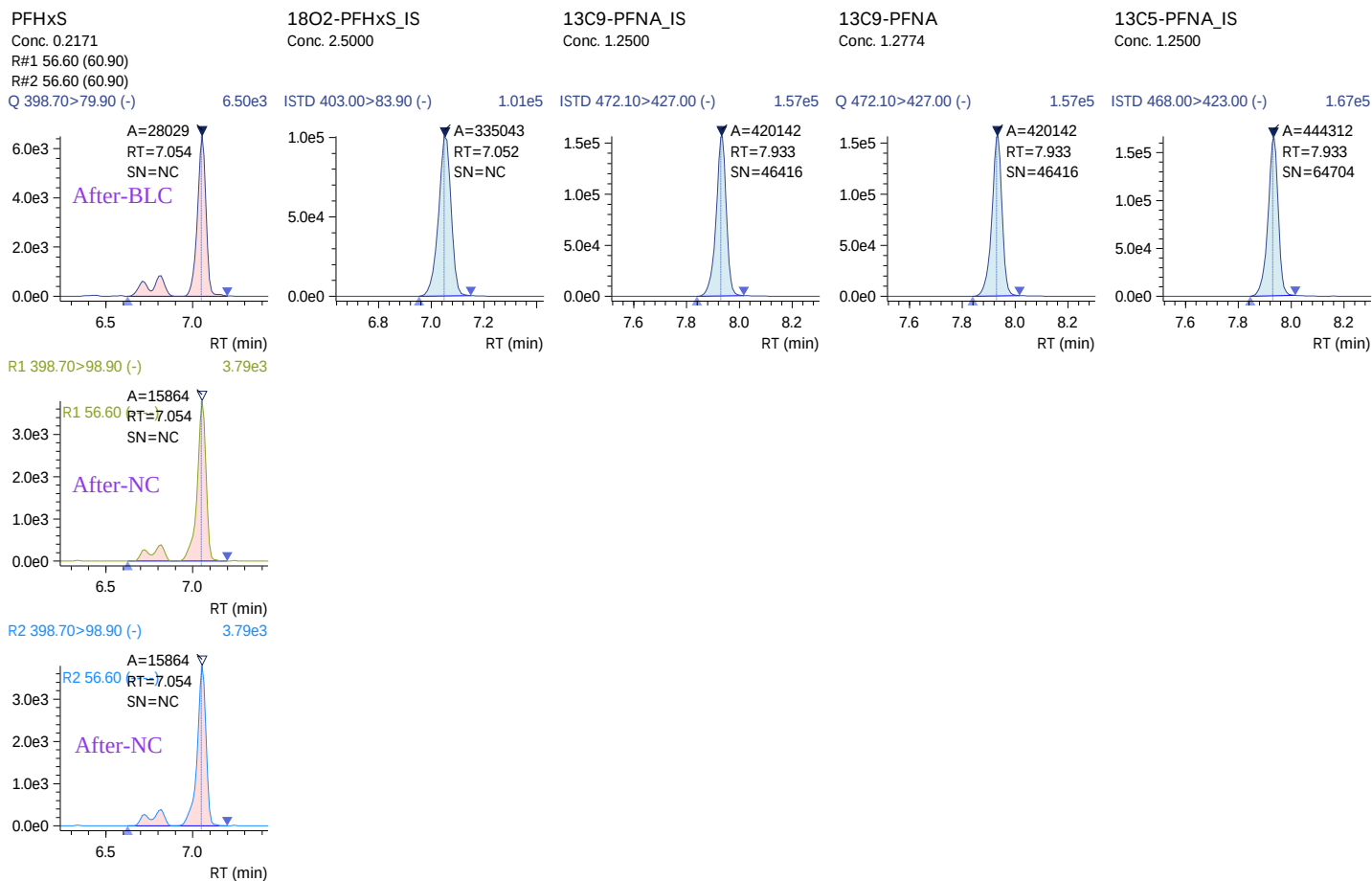
13C3-PFHxS
Conc. 2.5155

13C3-PFHxS_IS
Conc. 2.5000





240130_020 (continued)

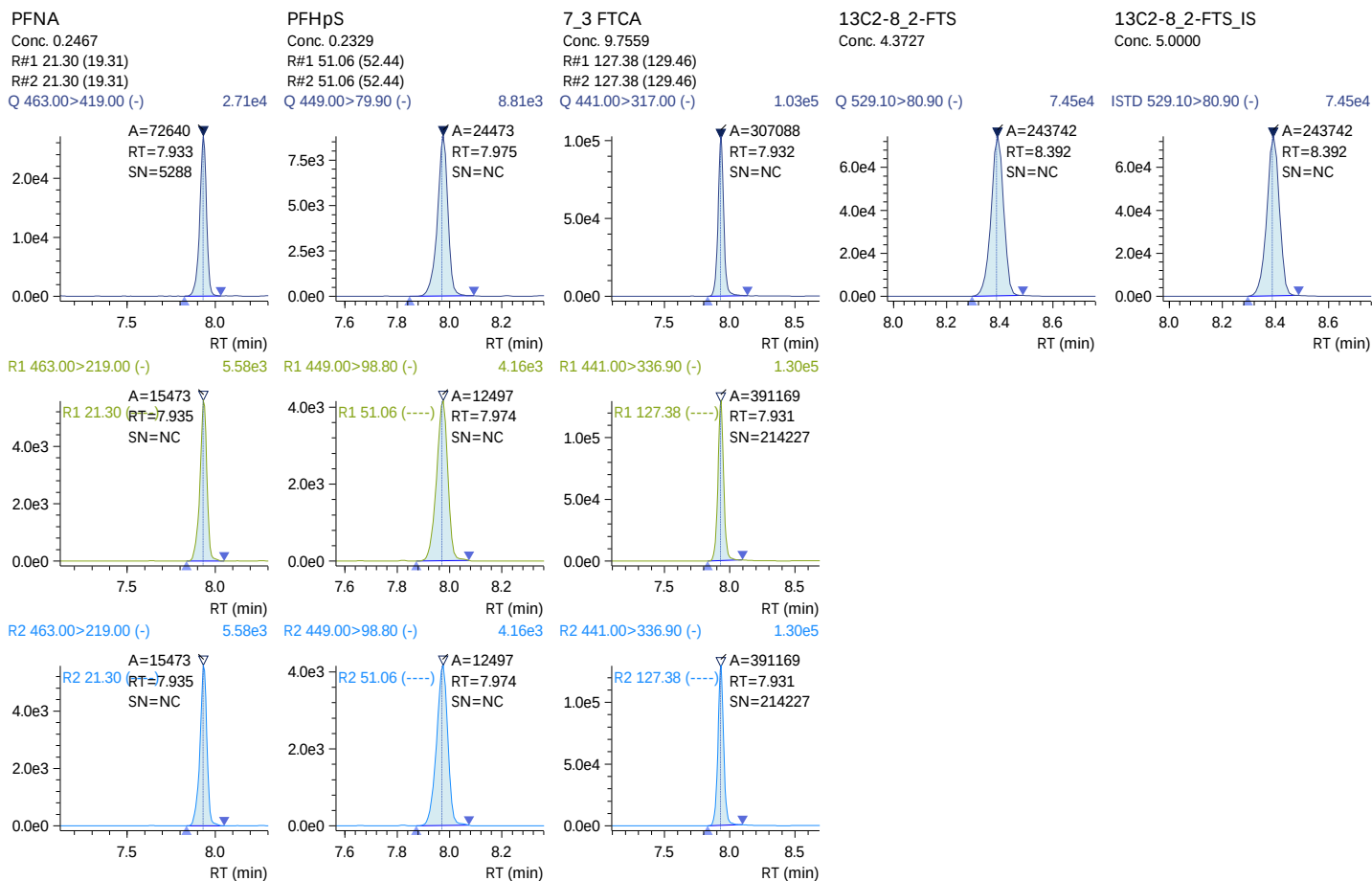


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_020 (continued)

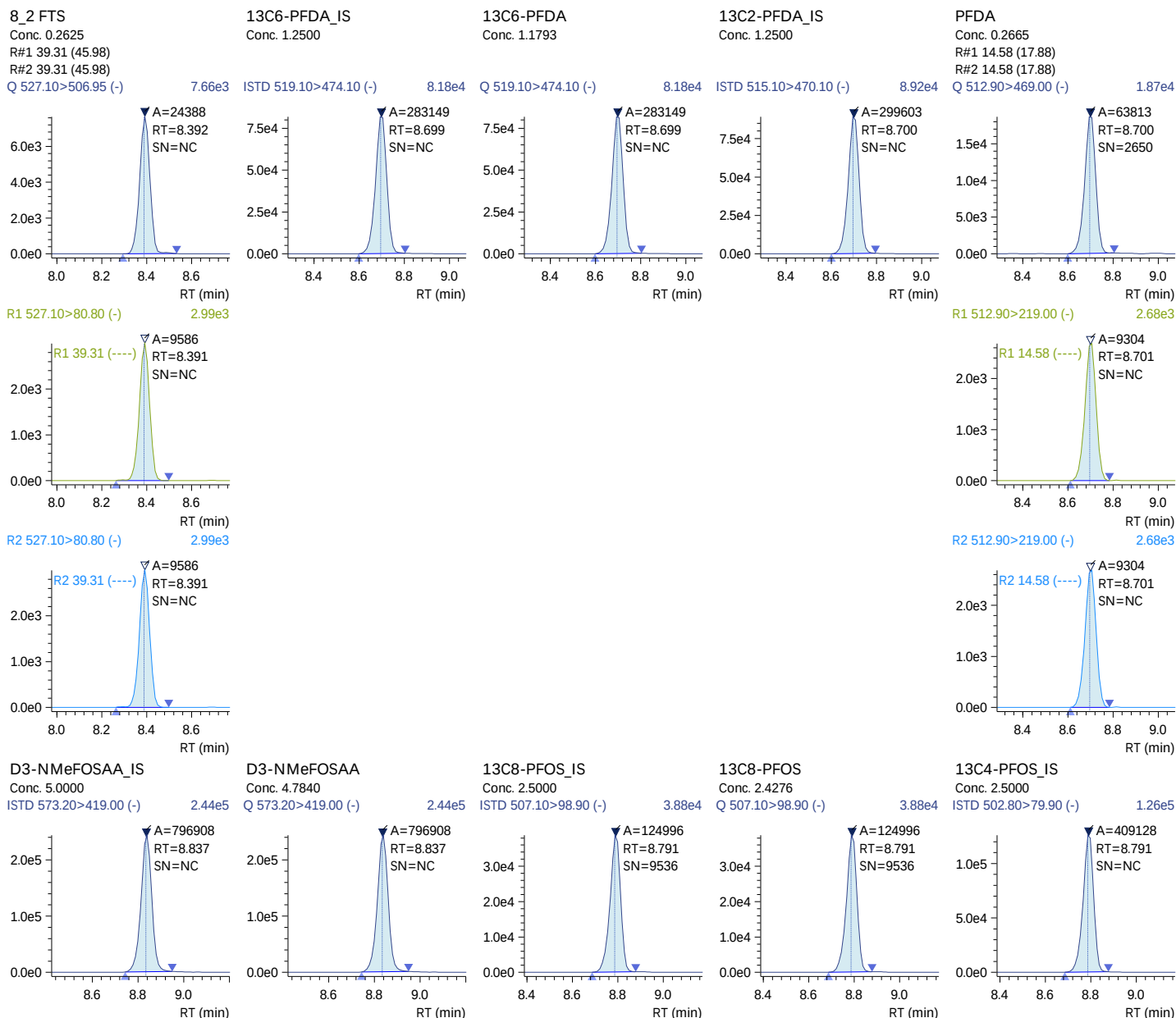


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_020 (continued)

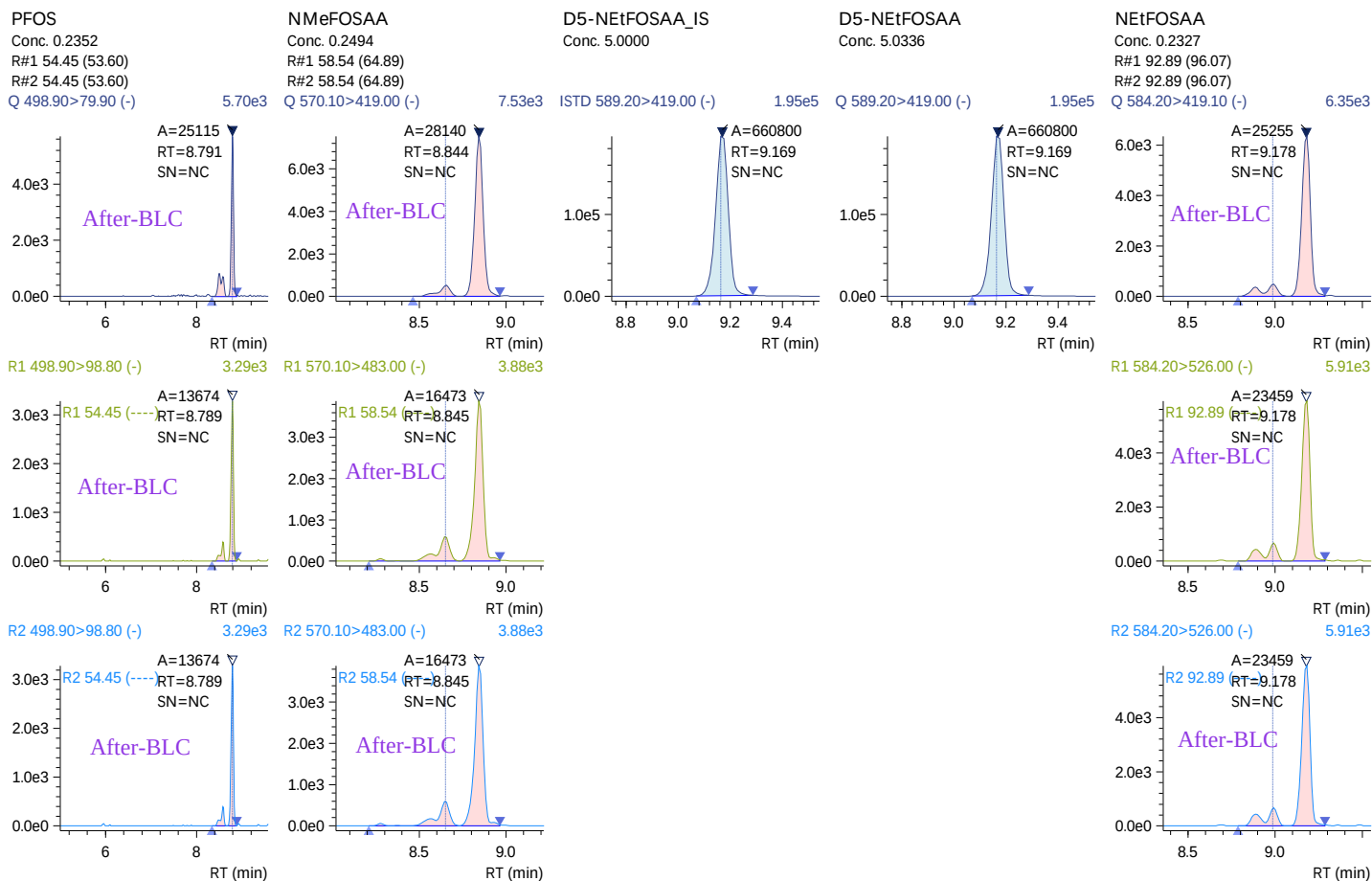


J:\LCMS08\Data\240130_1633_Curve\240130_1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_020 (continued)



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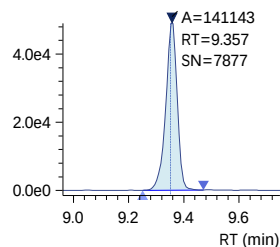
SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



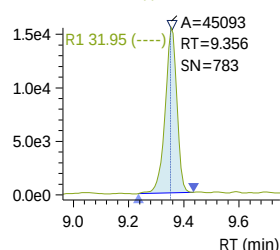
240130_020 (continued)

9-CI-PF3ONS

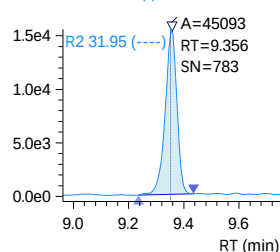
Conc. 0.2313
R#1 31.95 (30.95)
R#2 31.95 (30.95)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-) 1.56e4

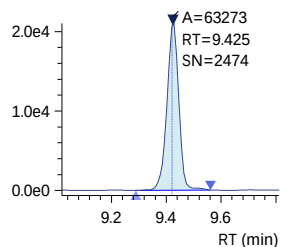


R2 532.80>353.00 (-) 1.56e4

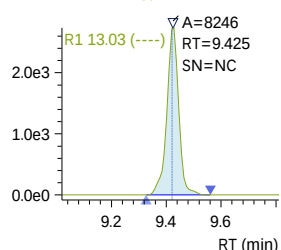


PFUnDA

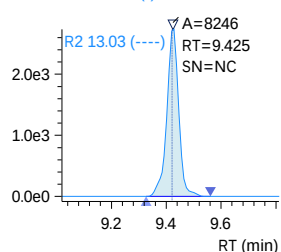
Conc. 0.2374
R#1 13.03 (11.01)
R#2 13.03 (11.01)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-) 2.74e3

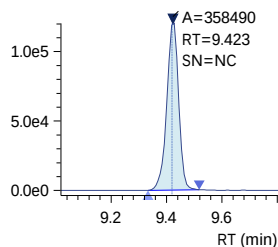


R2 563.10>269.10 (-) 2.74e3



13C7-PFUnDA_IS

Conc. 1.2500

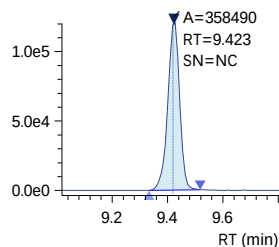


ISTD 570.00>525.10 (-) 1.20e5



13C7-PFUnDA

Conc. 1.2017

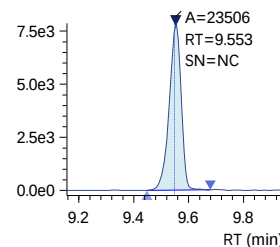


Q 570.00>525.10 (-) 1.20e5

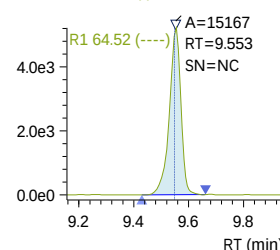


PFNS

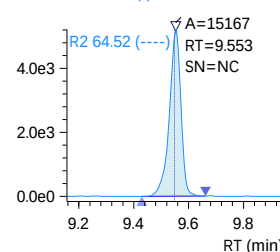
Conc. 0.2222
R#1 64.52 (60.44)
R#2 64.52 (60.44)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-) 5.22e3

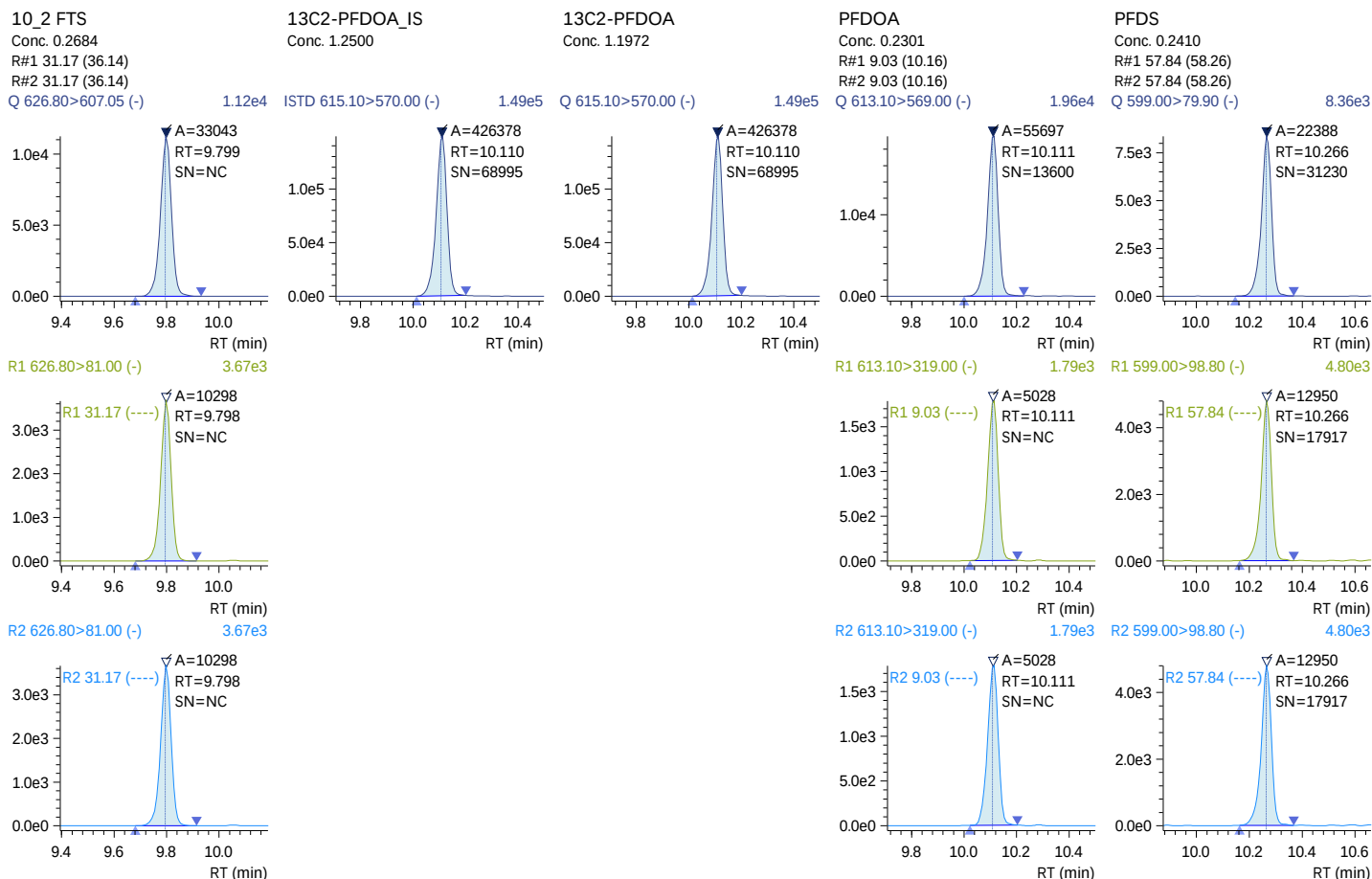


R2 548.80>98.80 (-) 5.22e3





240130_020 (continued)

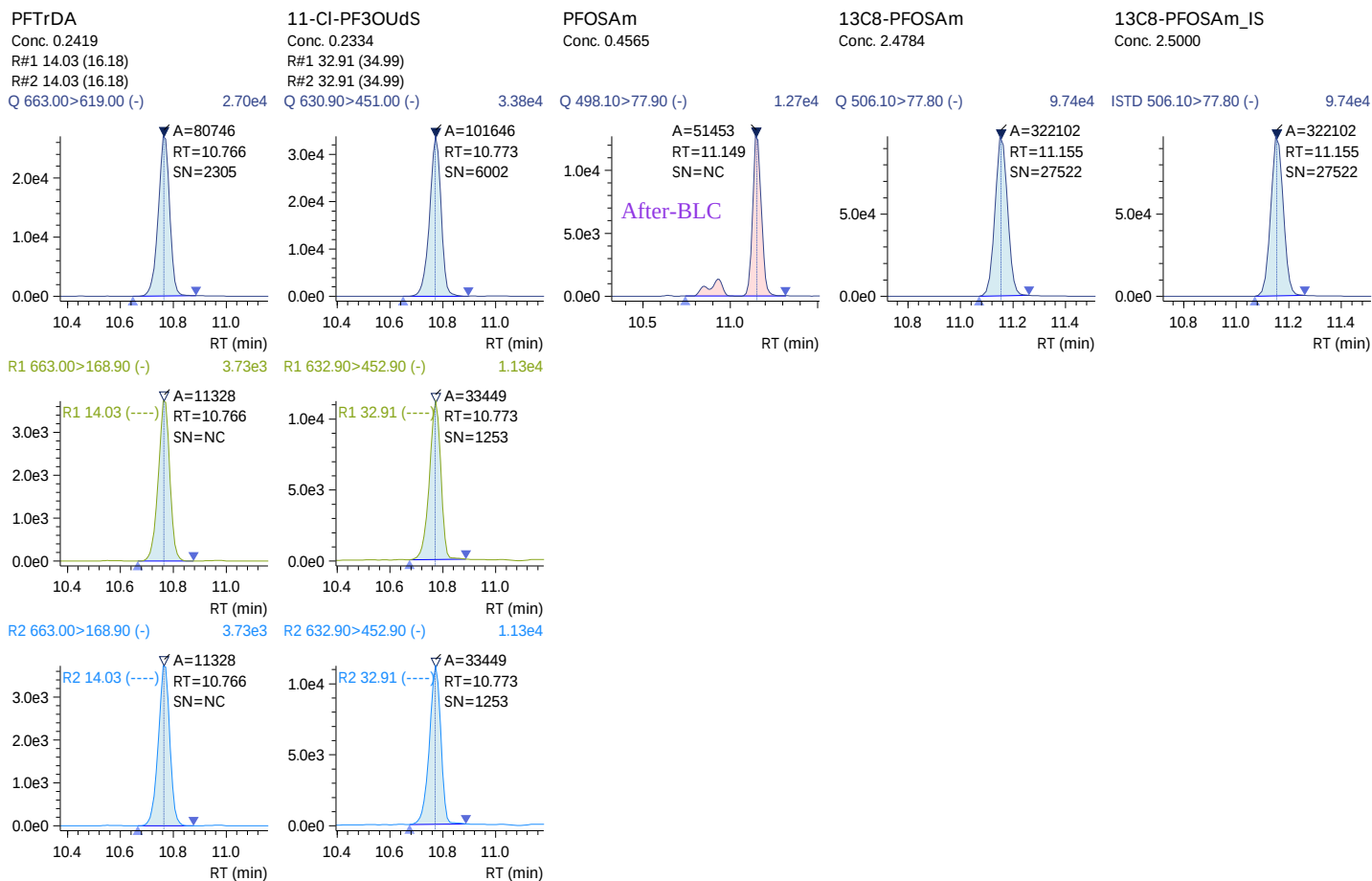


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_020 (continued)

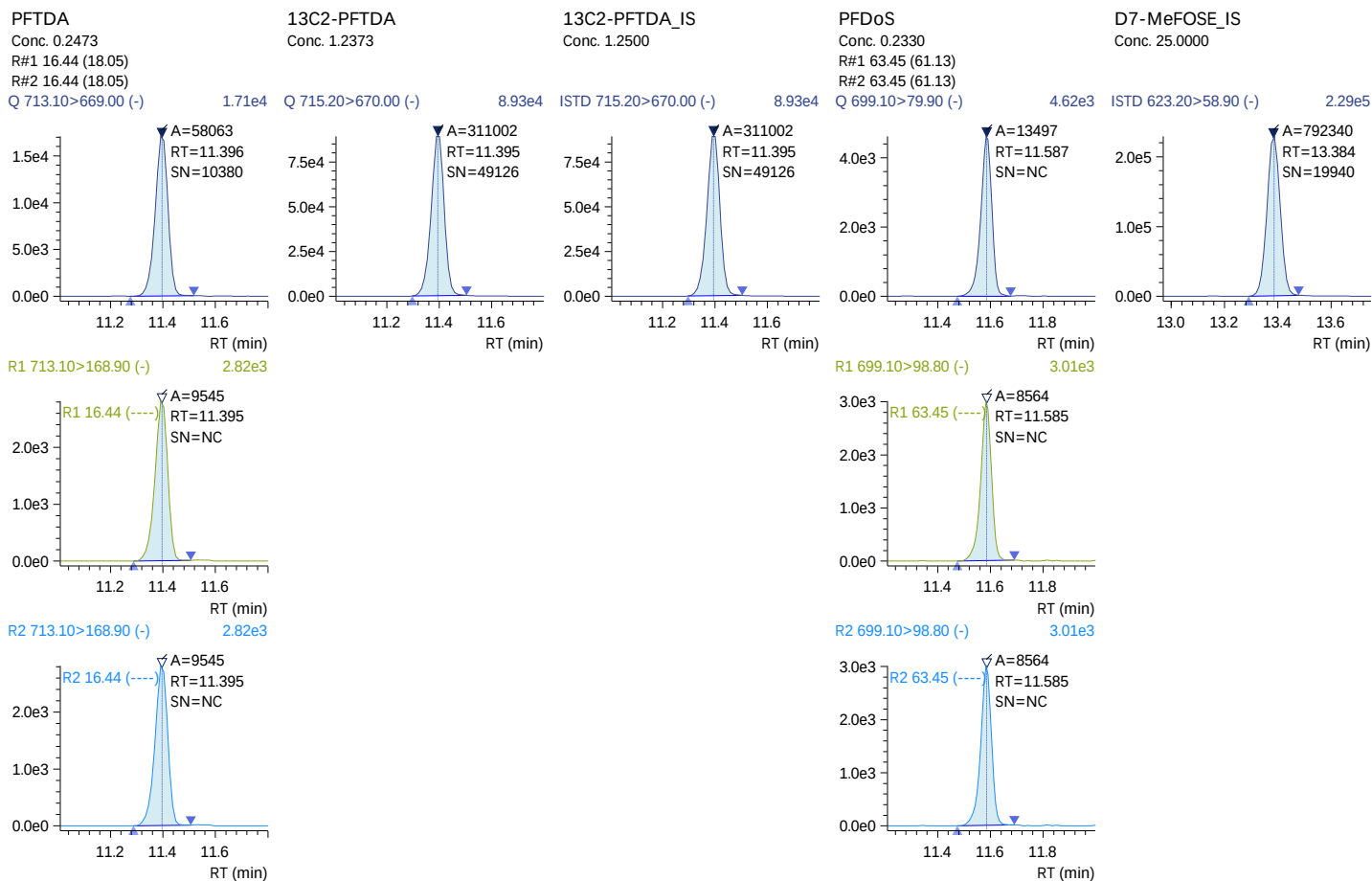


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_020 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_020 (continued)

D7-MeFOSE
Conc. 23.7488

MeFOSE
Conc. 0.2408

13C2-PFHXA_IS
Conc. 2.5000

13C2-PFHXA
Conc. 2.5206

PFHXA
Conc. 0.2455
R#1 11.45 (11.66)
R#2 11.45 (11.66)

Q 623.20>58.90 (-)

2.29e5

Q 616.10>59.00 (-)

1.80e3

ISTD 815.00>770.05 (-)

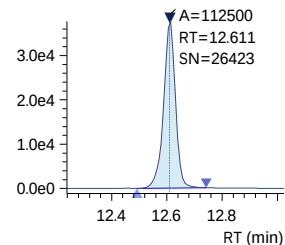
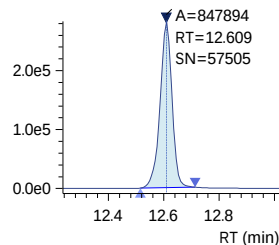
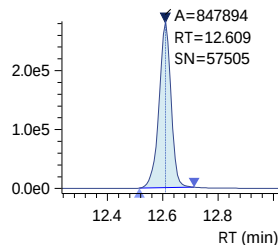
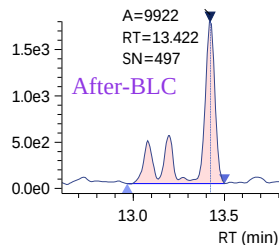
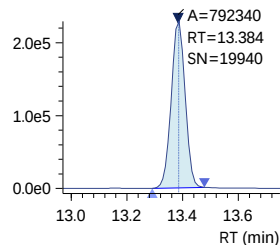
2.84e5

Q 815.00>770.05 (-)

2.84e5

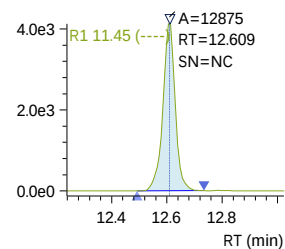
Q 813.00>768.95 (-)

3.77e4



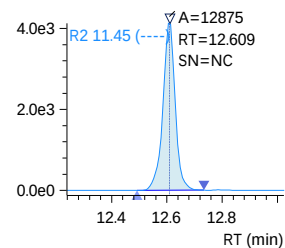
R1 813.00>218.95 (-)

4.13e3



R2 813.00>218.95 (-)

4.13e3





240130_020 (continued)

D3-MeFOSA
Conc. 2.3355

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. 0.2727
R#1 143.59 (160.44)
R#2 143.59 (160.44)

D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 23.4074

Q 515.00>219.00 (-)

2.28e4

ISTD 515.00>219.00 (-)

2.28e4

Q 511.90>219.00 (-)

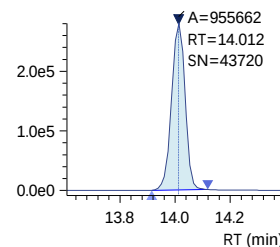
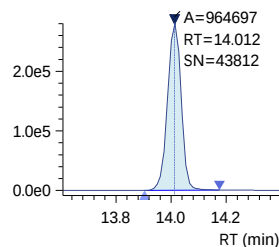
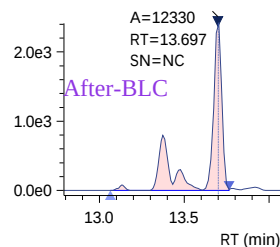
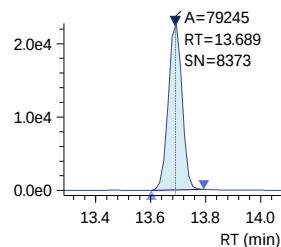
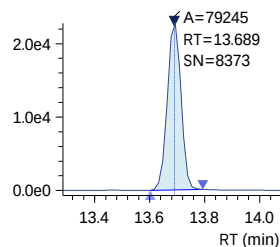
2.41e3

ISTD 639.20>58.90 (-)

2.80e5

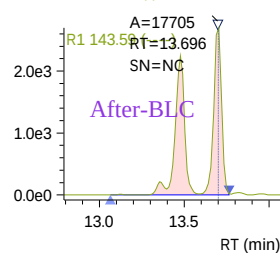
Q 639.20>58.90 (-)

2.80e5



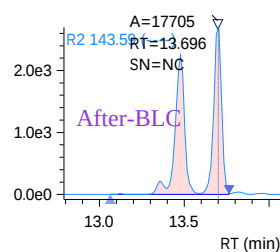
R1 511.90>169.00 (-)

2.70e3



R2 511.90>169.00 (-)

2.70e3





240130_020 (continued)

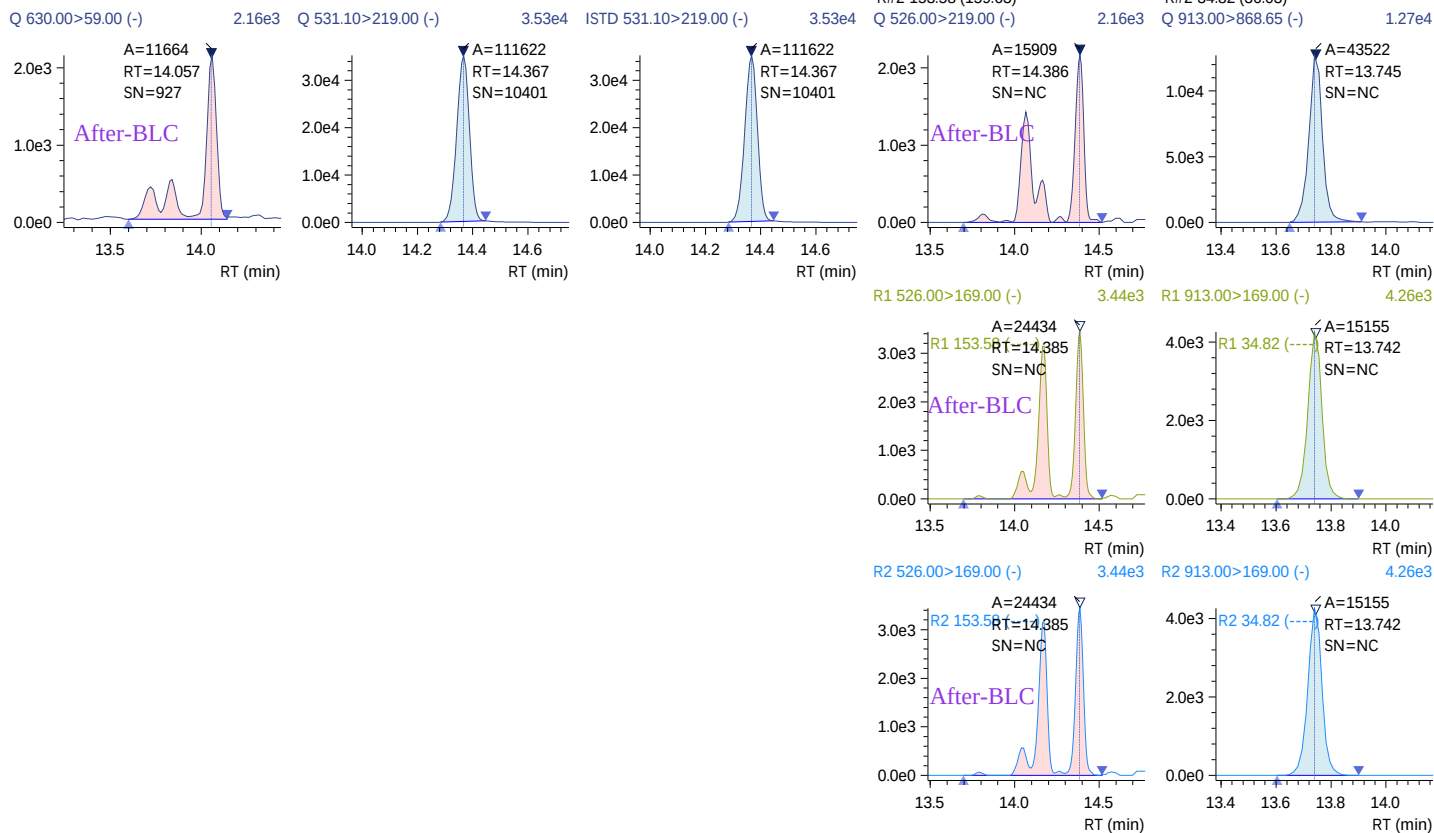
EtFOSE
Conc. 0.2521

D5-EtFOSAm
Conc. 2.3793

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. 0.2598
R#1 153.58 (159.63)
R#2 153.58 (159.63)

PFODA
Conc. 0.2641
R#1 34.82 (36.03)
R#2 34.82 (36.03)



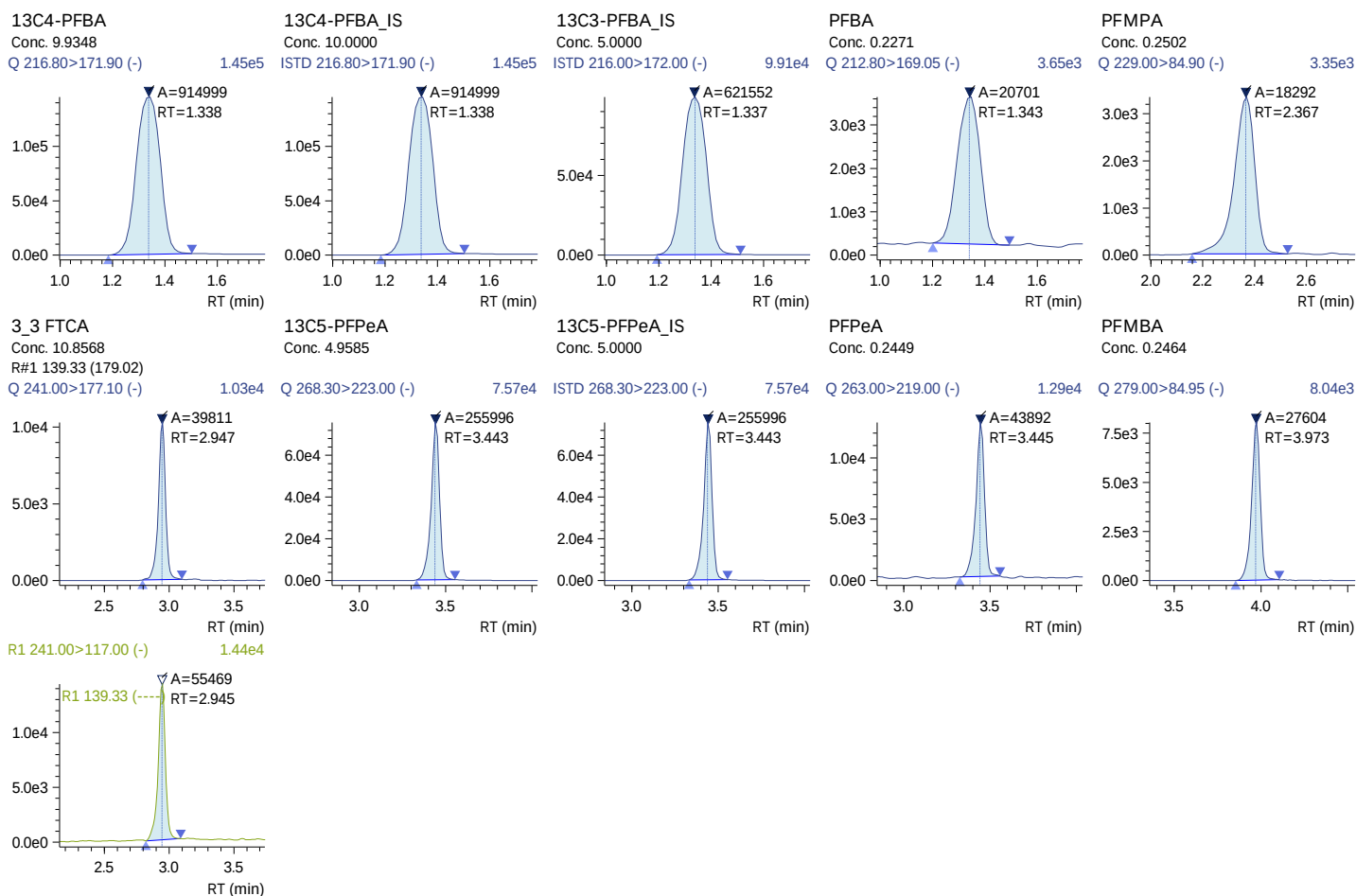
J:\LCMS08\Data\240130_1633_Curve\240130_1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_020

Sample ID: 1633 ICAL 0.25PPB
Date Acquired: 1/30/2024 10:05:28 PM
Acquired by: System Administrator
Data File: 240130_020
Vial: 3 | Inj. Volume: 10.0000uL | Tray: 1





240130_020 (continued)

13C2-4_2 FTS
Conc. 4.9421

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. 0.2879
R#1 34.28 (24.69)
R#2 34.28 (0.00)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 0.2227
R#1 43.36 (52.67)
R#2 43.36 (0.00)

Q 329.10>80.90 (-)

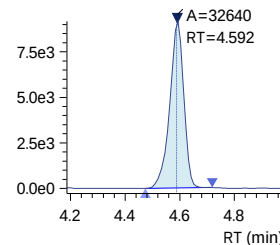
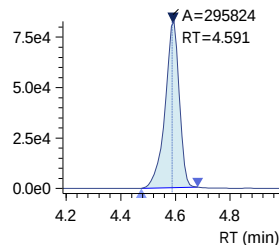
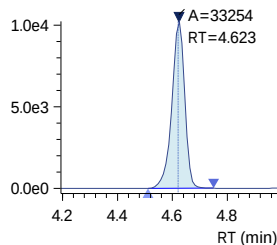
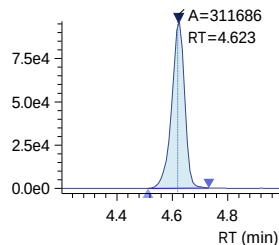
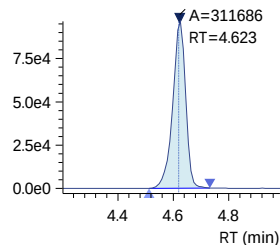
9.65e4 ISTD 329.10>80.90 (-)

9.65e4 Q 327.10>307.00 (-)

1.02e4 ISTD 302.10>79.90 (-)

8.28e4 Q 298.70>79.90 (-)

9.17e3

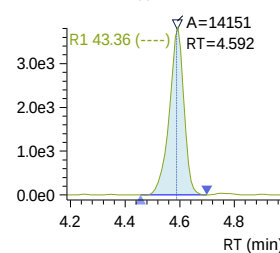
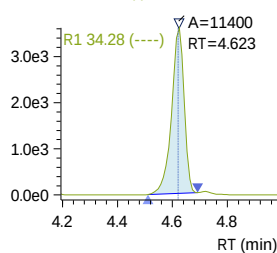


R1 327.10>80.90 (-)

3.62e3

R1 298.70>98.80 (-)

3.82e3

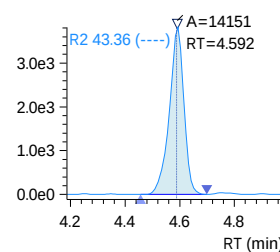
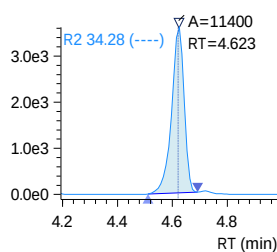


R2 327.10>80.90 (-)

3.62e3

R2 298.70>98.80 (-)

3.82e3





240130_020 (continued)

13C3-PFBS
Conc. 2.3664

NFDHA
Conc. 0.2553
R#1 34.09 (39.38)
R#2 34.09 (0.00)

13C5-PFHxA
Conc. 2.5857

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

Q 302.10>79.90 (-)

8.28e4

Q 295.00>201.00 (-)

9.56e3

Q 318.00>273.00 (-)

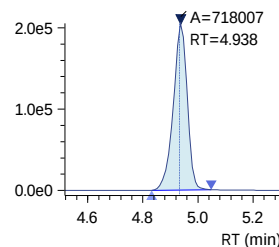
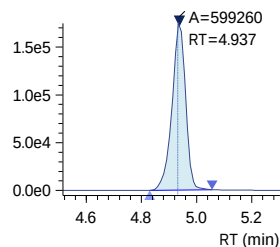
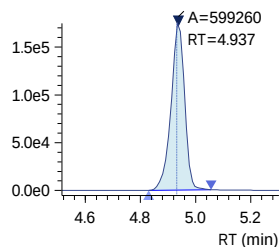
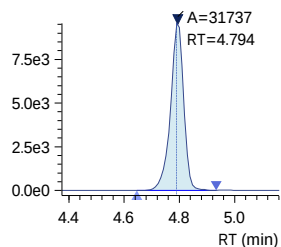
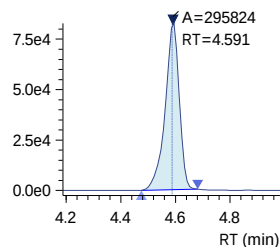
1.75e5

ISTD 318.00>273.00 (-)

1.75e5

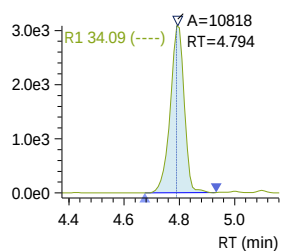
ISTD 315.10>270.00 (-)

2.05e5



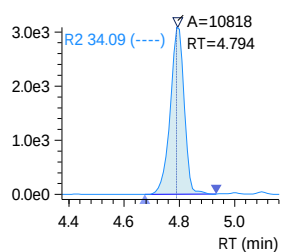
R1 295.00>84.90 (-)

3.09e3



R2 295.00>84.90 (-)

3.09e3





240130_020 (continued)

PFHxA
Conc. 0.2810

PFEESA
Conc. 0.2068
R#1 5.73 (5.25)
R#2 5.73 (0.00)

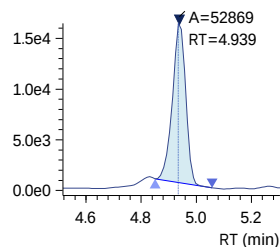
13C3-HFPO-DA
Conc. 9.7797

13C3-HFPO-DA_IS
Conc. 10.0000

HFPO-DA
Conc. 0.2431
R#1 53.66 (69.48)
R#2 53.66 (0.00)

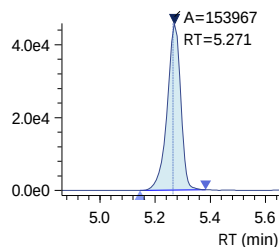
Q 313.00>269.00 (-)

1.65e4



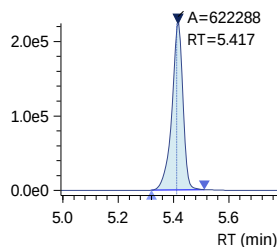
Q 314.80>135.00 (-)

4.59e4



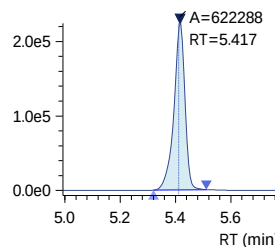
Q 286.90>168.90 (-)

2.24e5



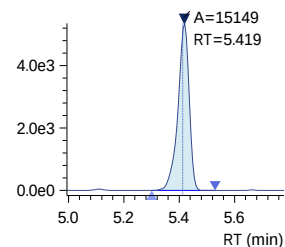
ISTD 286.90>168.90 (-)

2.24e5



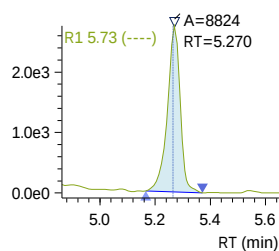
Q 284.90>168.90 (-)

5.36e3



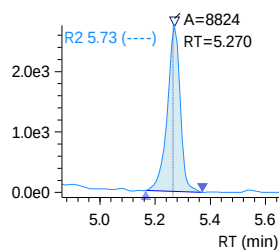
R1 314.80>82.90 (-)

2.77e3



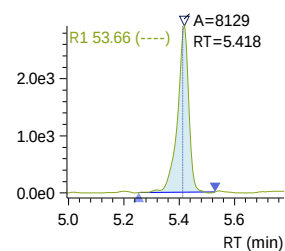
R2 314.80>82.90 (-)

2.77e3



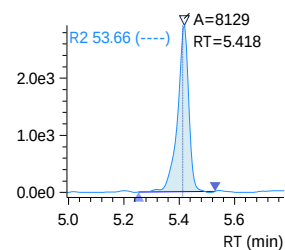
R1 284.90>184.90 (-)

2.93e3



R2 284.90>184.90 (-)

2.93e3

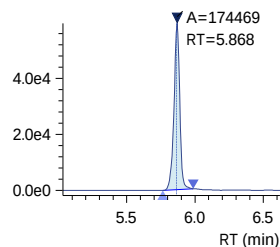




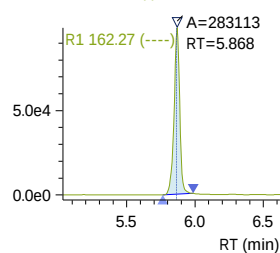
240130_020 (continued)

5_3 FTCA

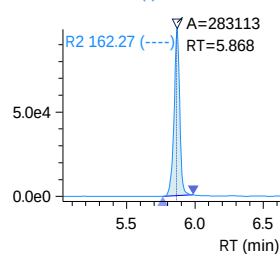
Conc. 9.7396
R#1 162.27 (139.59)
R#2 162.27 (0.00)
Q 341.00>237.05 (-)



R1 341.00>217.00 (-) 9.91e4

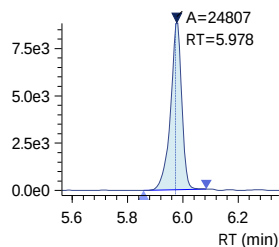


R2 341.00>217.00 (-) 9.91e4

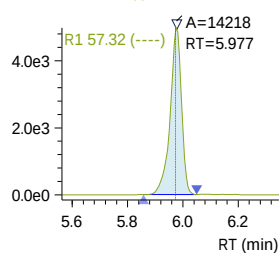


PFPeS

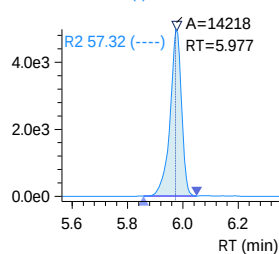
Conc. 0.2122
R#1 57.32 (66.55)
R#2 57.32 (0.00)
Q 349.10>79.90 (-)



R1 349.10>98.80 (-) 4.98e3

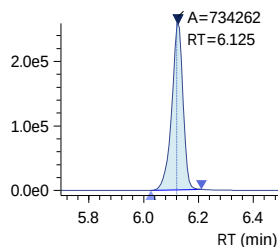


R2 349.10>98.80 (-) 4.98e3



13C4-PFHpA

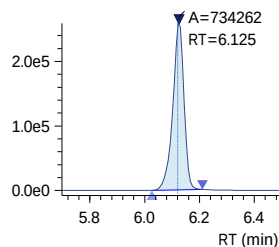
Conc. 2.5183
Q 367.10>322.00 (-)



Q 367.10>322.00 (-) 2.59e5

13C4-PFHpA_IS

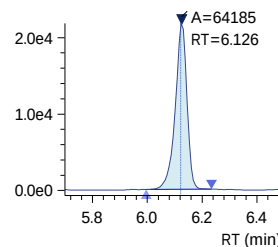
Conc. 2.5000
ISTD 367.10>322.00 (-)



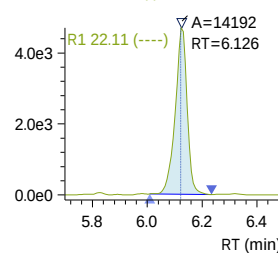
ISTD 367.10>322.00 (-) 2.59e5

PFHpA

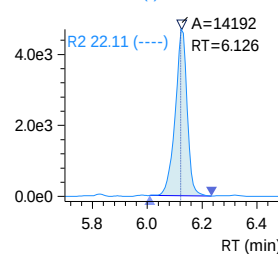
Conc. 0.2402
R#1 22.11 (20.13)
R#2 22.11 (0.00)
Q 363.10>319.00 (-)



R1 363.10>169.00 (-) 4.71e3

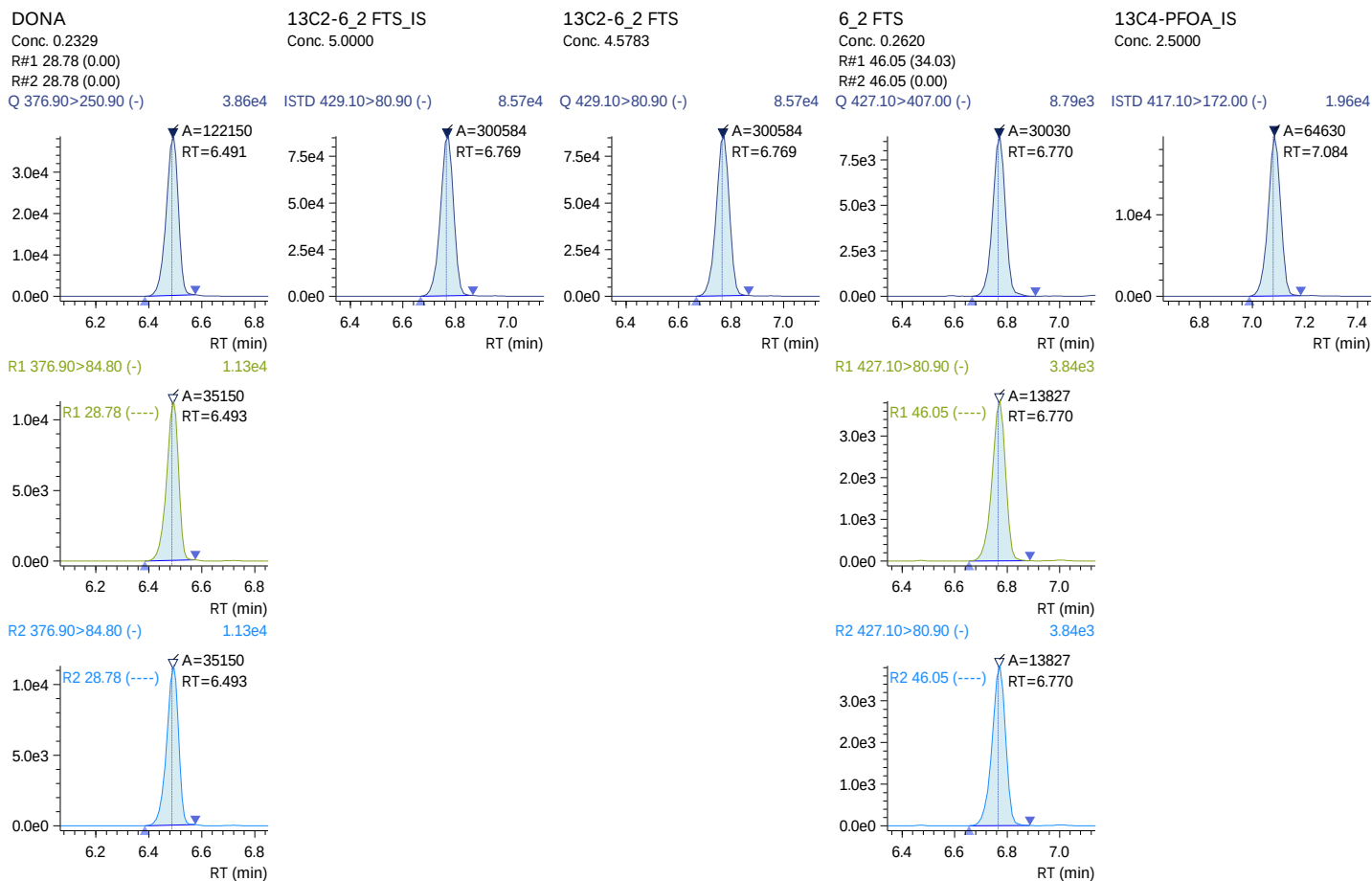


R2 363.10>169.00 (-) 4.71e3





240130_020 (continued)





240130_020 (continued)

13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.4424

PFOA
Conc. 0.2159
R#1 28.55 (22.46)
R#2 28.55 (0.00)

13C3-PFHxS
Conc. 2.5155

13C3-PFHxS_IS
Conc. 2.5000

ISTD 421.10>376.00 (-)

2.30e5

Q 421.10>376.00 (-)

2.30e5

Q 413.00>369.00 (-)

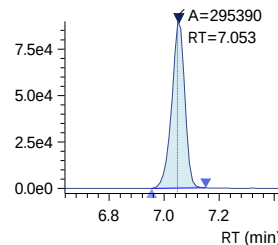
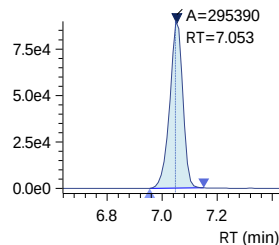
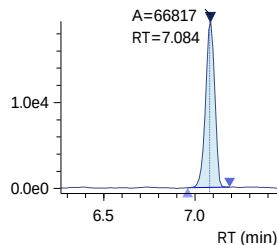
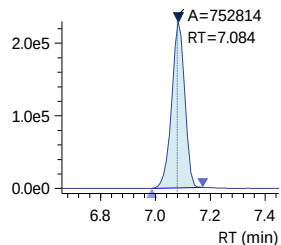
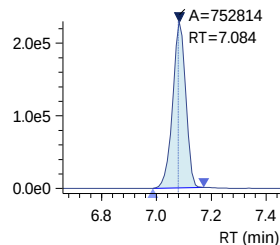
1.95e4

Q 402.10>79.90 (-)

8.99e4

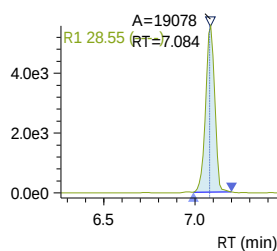
ISTD 402.10>79.90 (-)

8.99e4



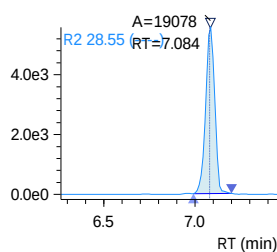
R1 413.00>169.00 (-)

5.58e3



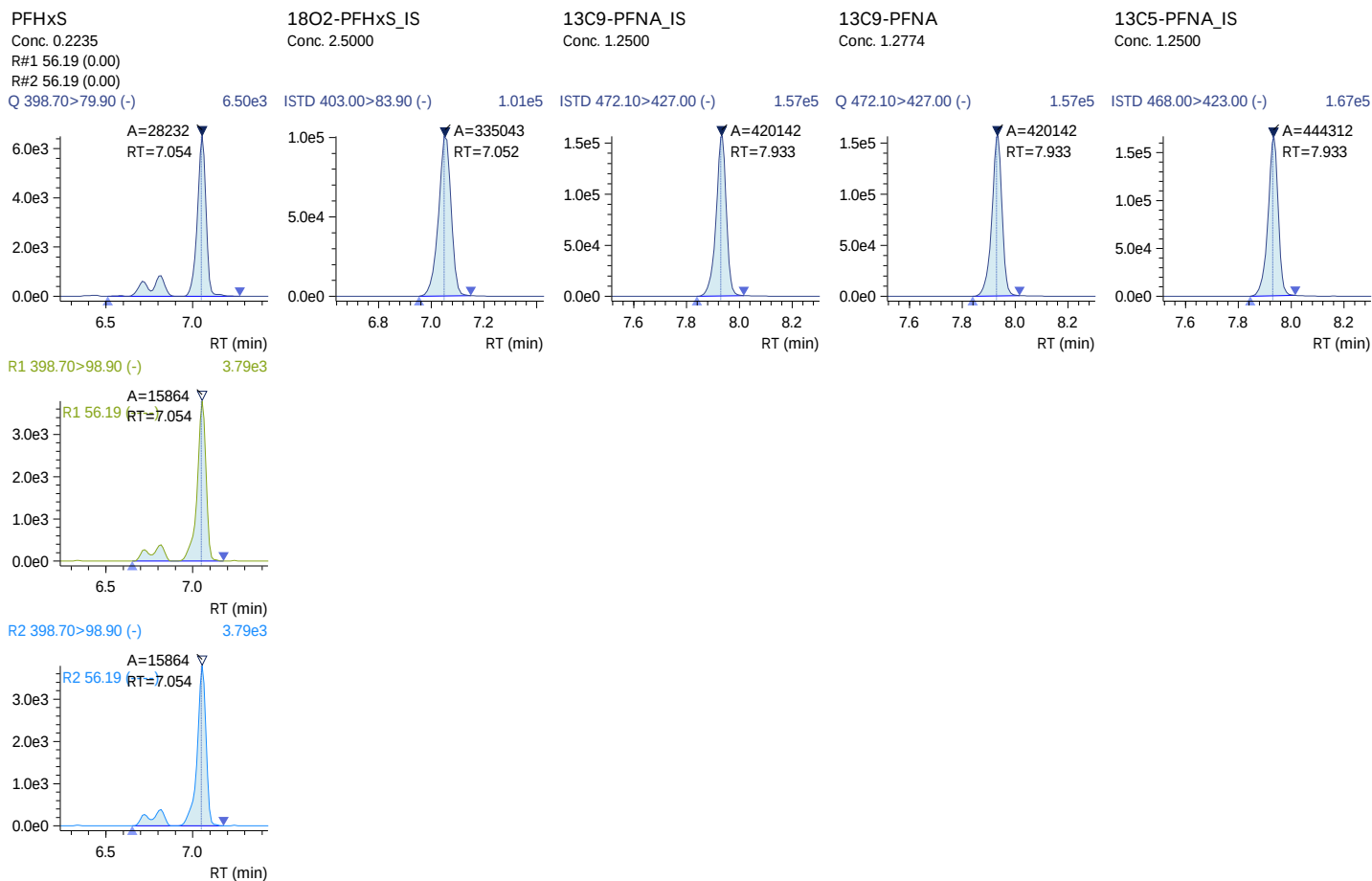
R2 413.00>169.00 (-)

5.58e3



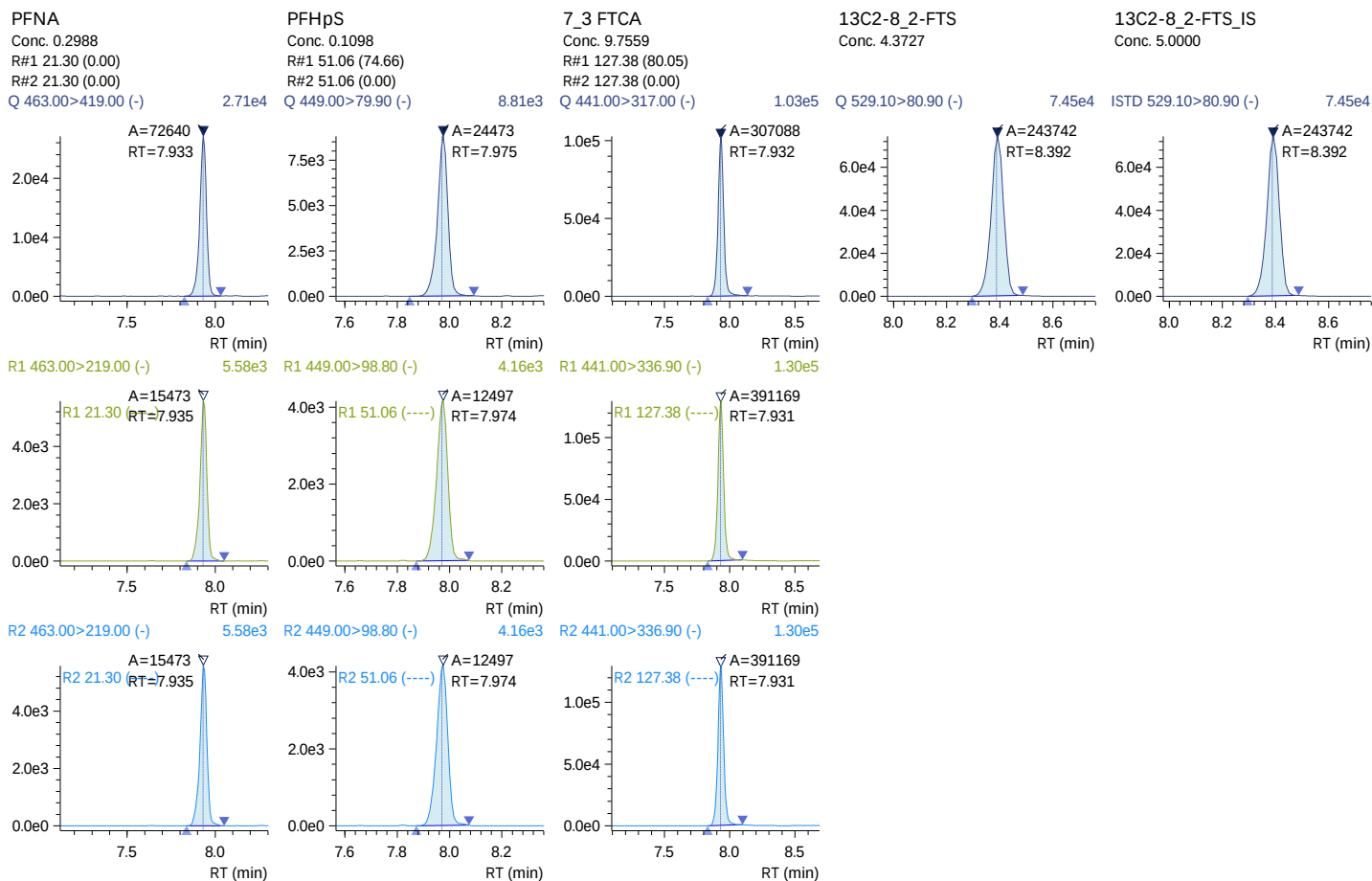


240130_020 (continued)



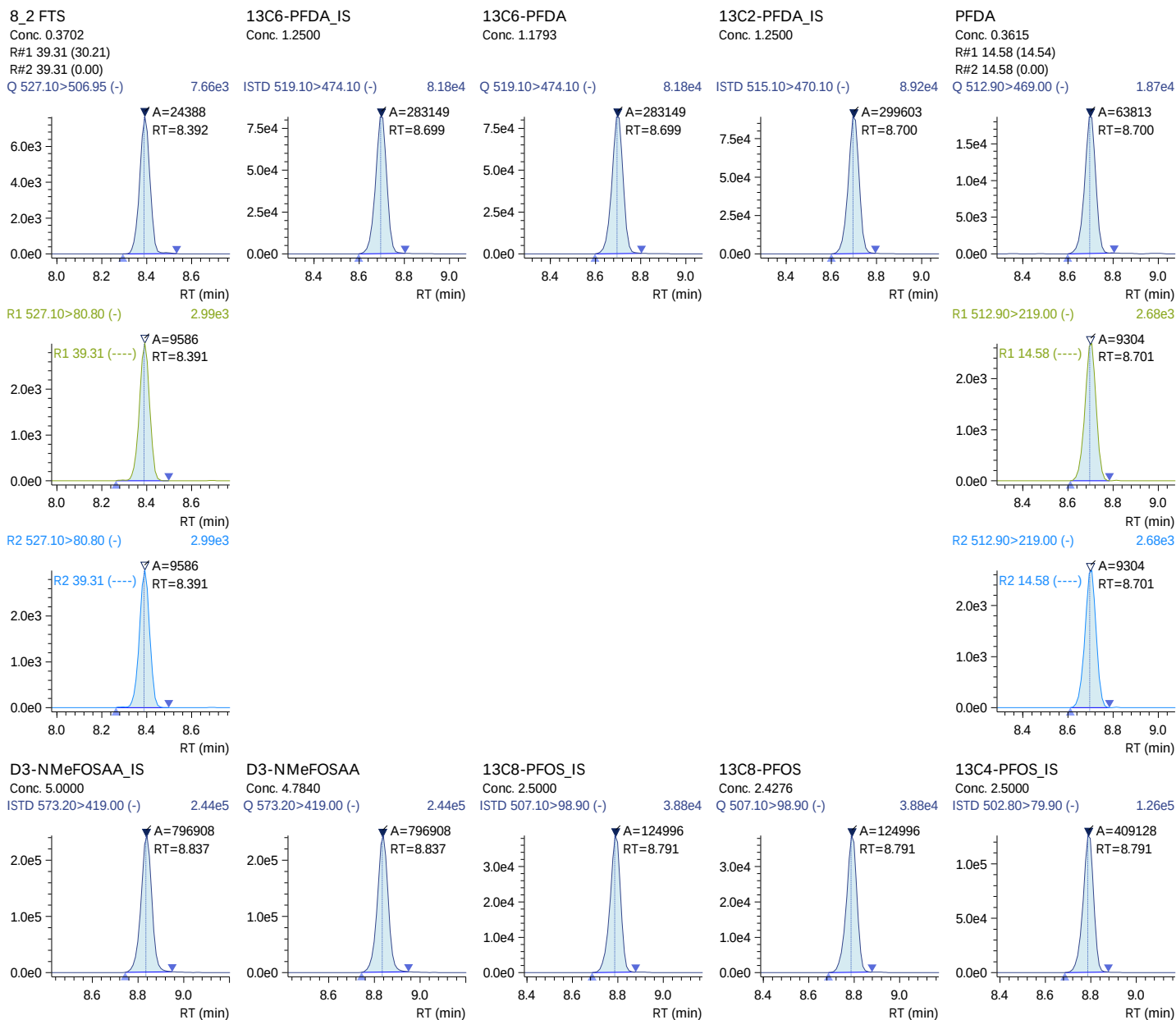


240130_020 (continued)



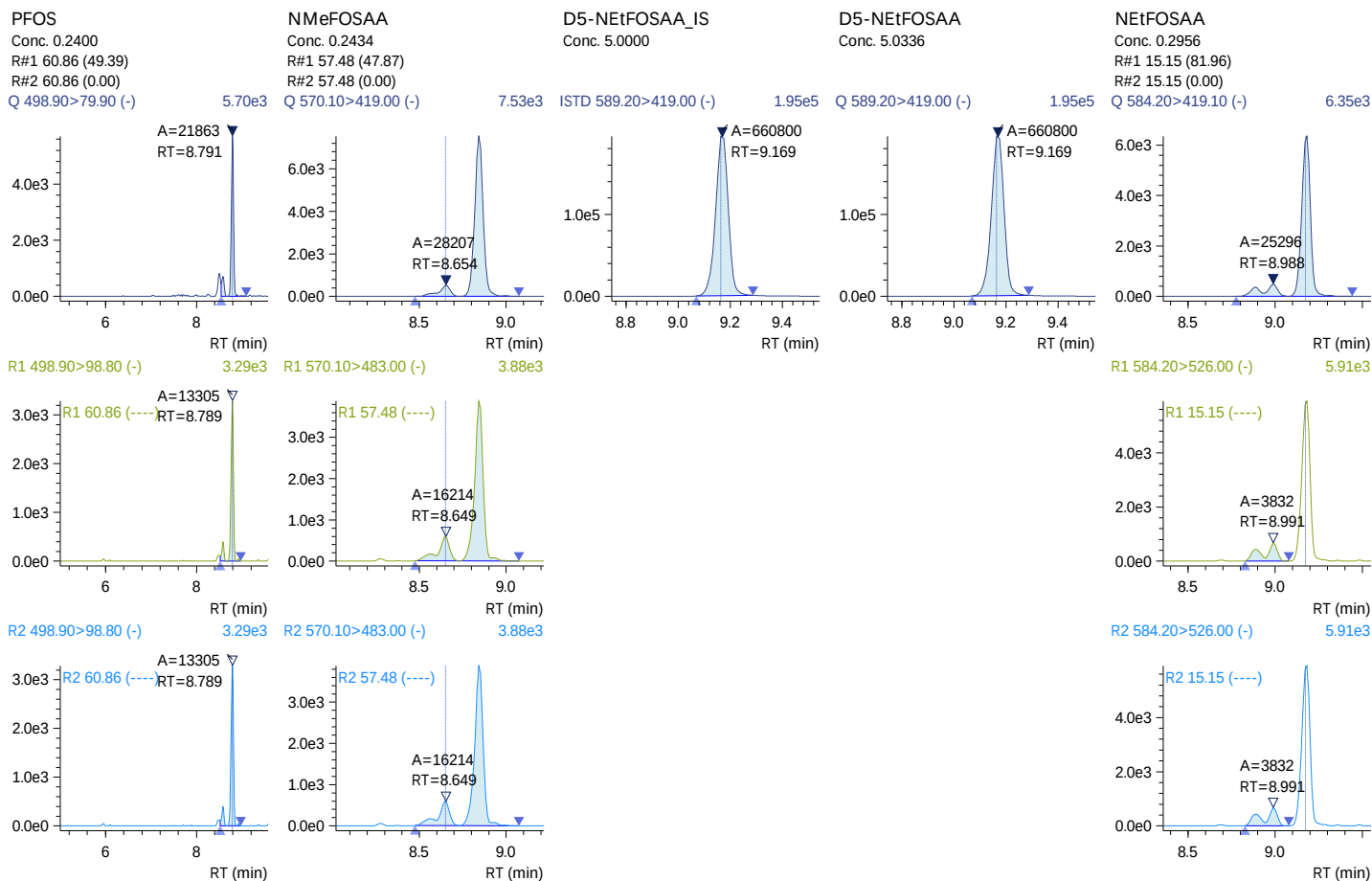


240130_020 (continued)





240130_020 (continued)





240130_020 (continued)

9-Cl-PF3ONS

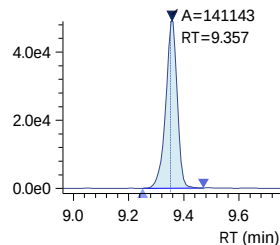
Conc. 0.2313

R#1 31.95 (31.39)

R#2 31.95 (0.00)

Q 530.80>351.00 (-)

4.90e4



PFUnDA

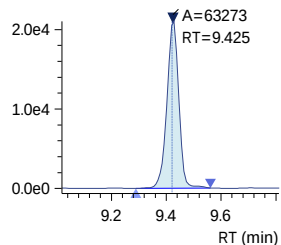
Conc. 0.2384

R#1 13.03 (12.59)

R#2 13.03 (0.00)

Q 563.10>519.00 (-)

2.10e4

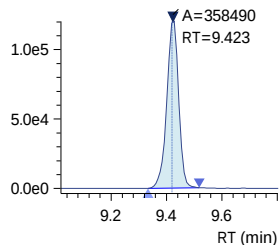


13C7-PFUnDA_IS

Conc. 1.2500

ISTD 570.00>525.10 (-)

1.20e5

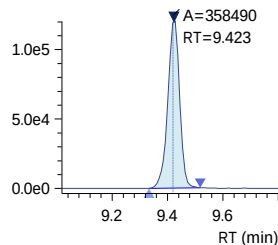


13C7-PFUnDA

Conc. 1.2017

Q 570.00>525.10 (-)

1.20e5



PFNS

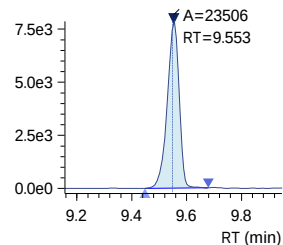
Conc. 0.2222

R#1 64.52 (82.65)

R#2 64.52 (0.00)

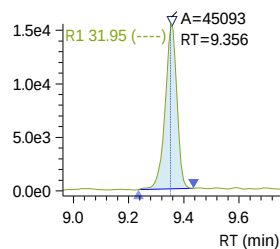
Q 548.80>79.90 (-)

7.87e3



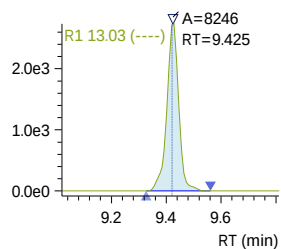
R1 532.80>353.00 (-)

1.56e4



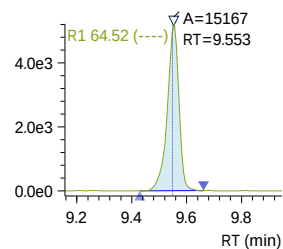
R1 563.10>269.10 (-)

2.74e3



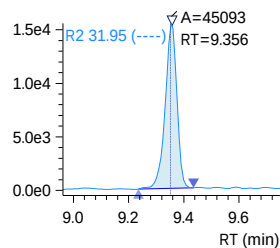
R1 548.80>98.80 (-)

5.22e3



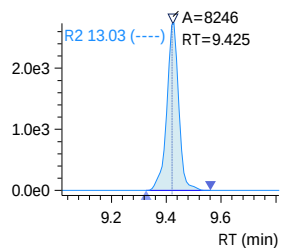
R2 532.80>353.00 (-)

1.56e4



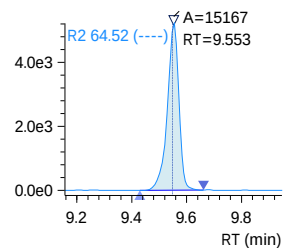
R2 563.10>269.10 (-)

2.74e3



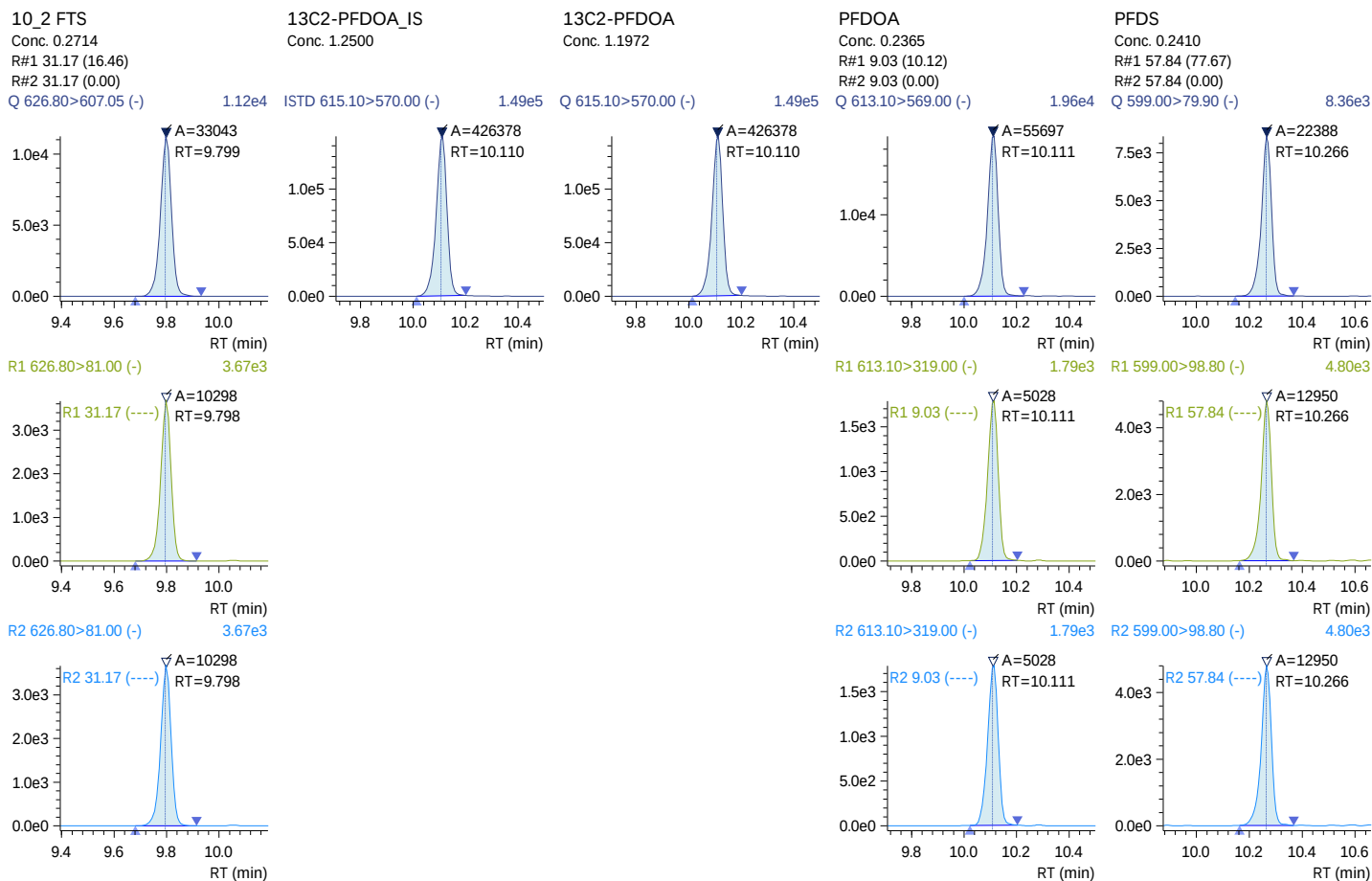
R2 548.80>98.80 (-)

5.22e3





240130_020 (continued)





240130_020 (continued)

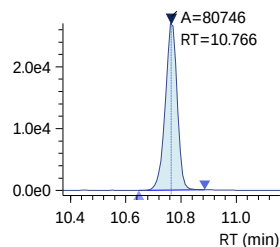
PFTTrDA

Conc. 0.2434

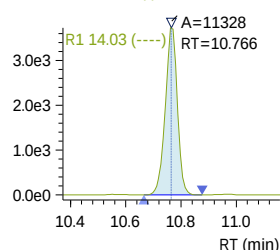
R#1 14.03 (14.17)

R#2 14.03 (0.00)

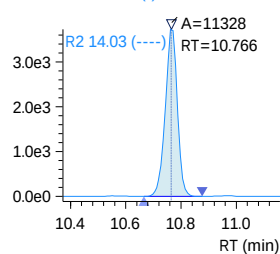
Q 663.00>619.00 (-)



R1 663.00>168.90 (-)



R2 663.00>168.90 (-)



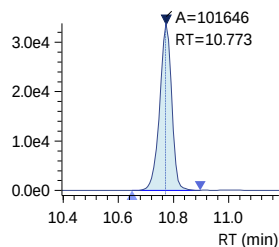
11-Cl-PF3OUdS

Conc. 0.2334

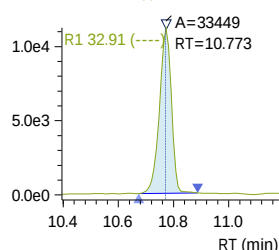
R#1 32.91 (32.90)

R#2 32.91 (0.00)

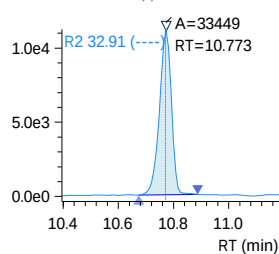
Q 630.90>451.00 (-)



R1 632.90>452.90 (-)



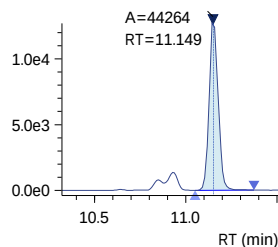
R2 632.90>452.90 (-)



PFOSAm

Conc. 0.4319

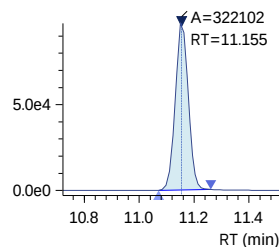
Q 498.10>77.90 (-)



13C8-PFOSAm

Conc. 2.4784

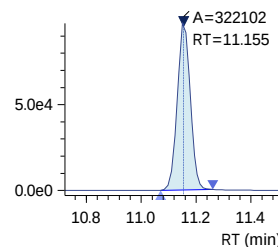
Q 506.10>77.80 (-)



13C8-PFOSAm_IS

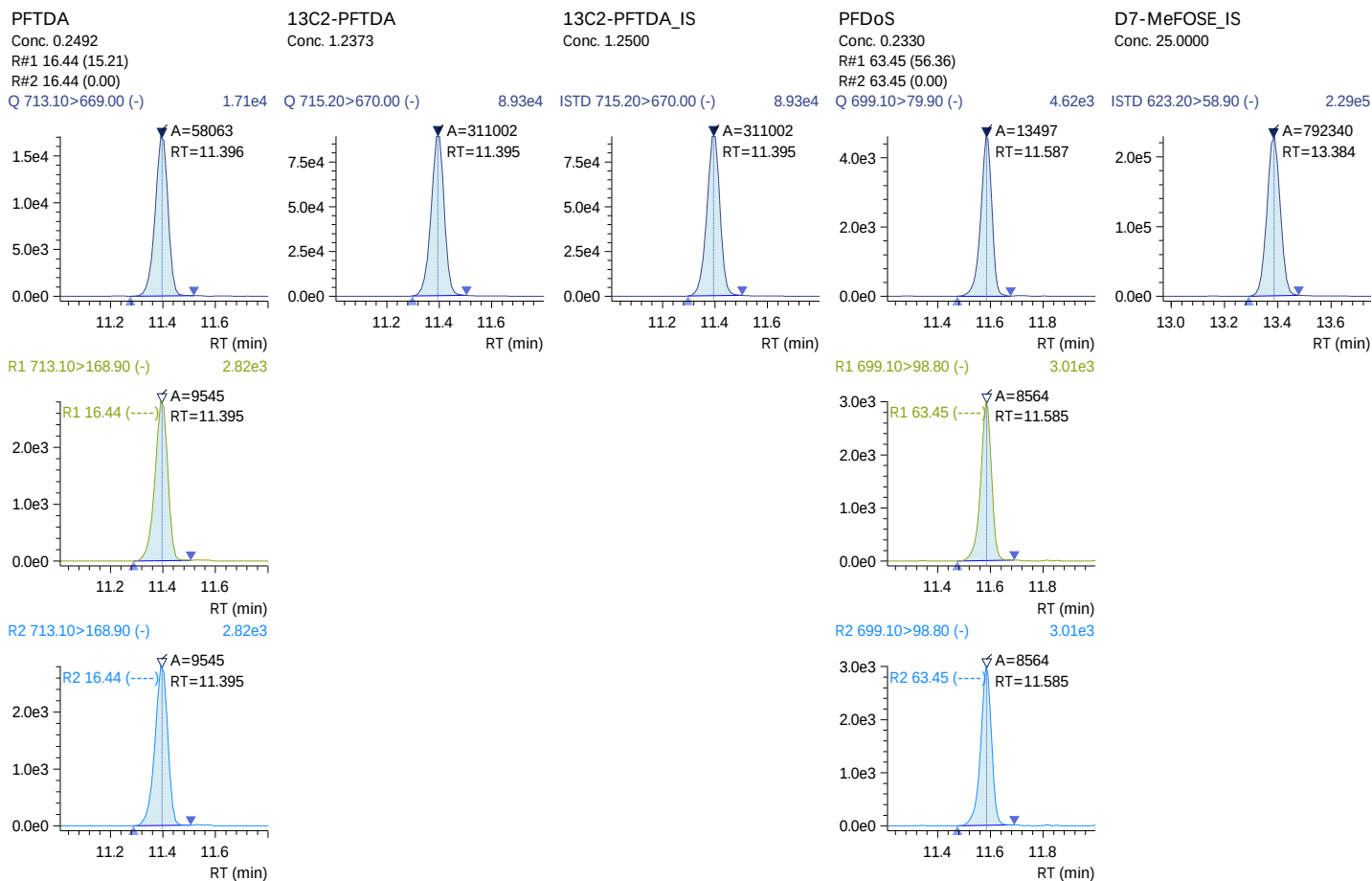
Conc. 2.5000

ISTD 506.10>77.80 (-)





240130_020 (continued)





240130_020 (continued)

D7-MeFOSE
 Conc. 23.7488

MeFOSE
 Conc. 0.2473

13C2-PFHDA_IS
 Conc. 2.5000

13C2-PFHDA
 Conc. 2.5206

PFHXDA
 Conc. 0.2364
 R#1 11.45 (9.60)
 R#2 11.45 (0.00)

Q 623.20>58.90 (-)

2.29e5

Q 616.10>59.00 (-)

1.80e3

ISTD 815.00>770.05 (-)

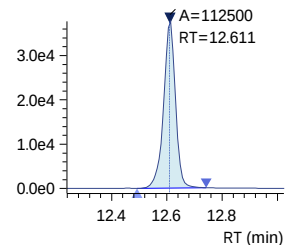
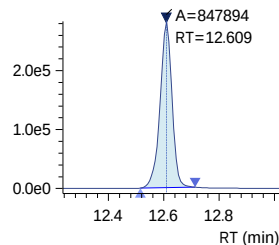
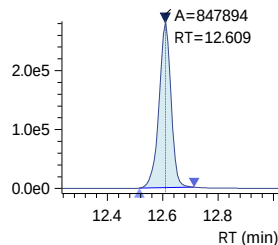
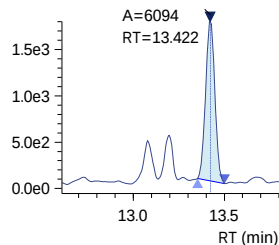
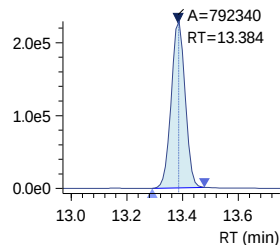
2.84e5

Q 815.00>770.05 (-)

2.84e5

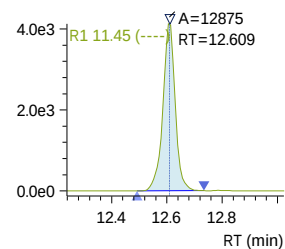
Q 813.00>768.95 (-)

3.77e4



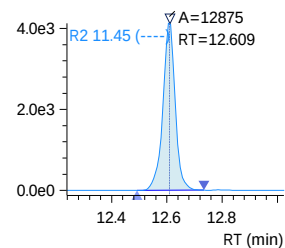
R1 813.00>218.95 (-)

4.13e3



R2 813.00>218.95 (-)

4.13e3





240130_020 (continued)

D3-MeFOSA
 Conc. 2.3355

D3-MeFOSA_IS
 Conc. 2.5000

MeFOSA
 Conc. 0.2915
 R#1 109.63 (98.91)
 R#2 109.63 (0.00)

D9-EtFOSE_IS
 Conc. 25.0000

D9-EtFOSE
 Conc. 23.4074

Q 515.00>219.00 (-)

2.28e4

ISTD 515.00>219.00 (-)

2.28e4

Q 511.90>219.00 (-)

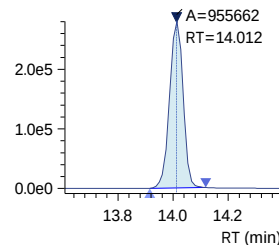
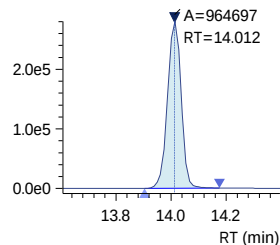
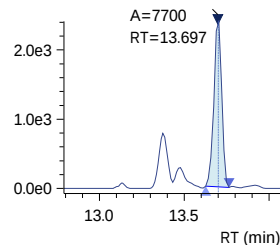
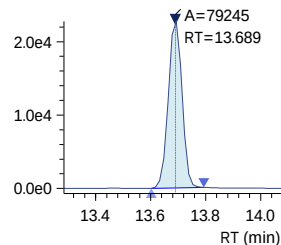
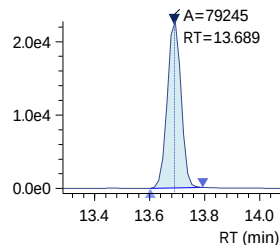
2.41e3

ISTD 639.20>58.90 (-)

2.80e5

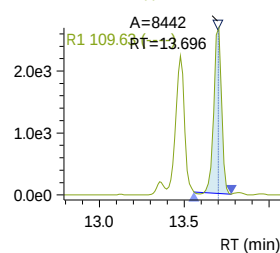
Q 639.20>58.90 (-)

2.80e5



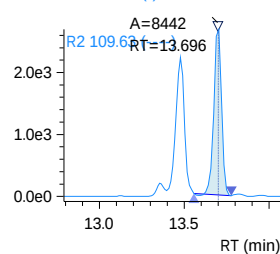
R1 511.90>169.00 (-)

2.70e3



R2 511.90>169.00 (-)

2.70e3





240130_020 (continued)

EtFOSE
Conc. 0.2493

D5-EtFOSAm
Conc. 2.3793

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. 0.2269

PFODA
Conc. 0.2287

Q 630.00>59.00 (-)

2.16e3

Q 531.10>219.00 (-)

3.53e4

ISTD 531.10>219.00 (-)

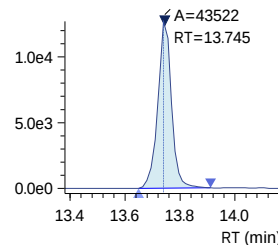
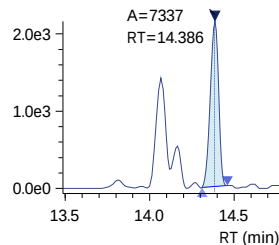
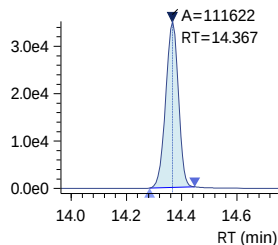
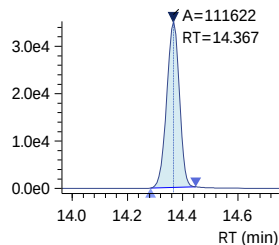
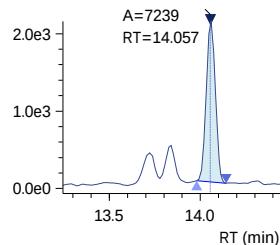
3.53e4

Q 526.00>219.00 (-)

2.16e3

Q 913.00>868.65 (-)

1.27e4

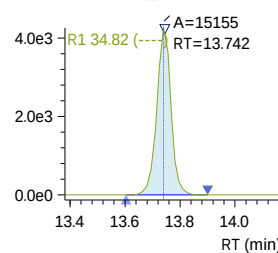
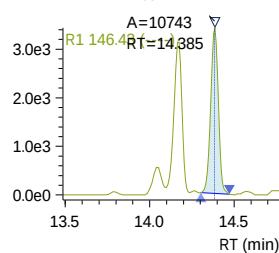


R1 526.00>169.00 (-)

3.44e3

R1 913.00>169.00 (-)

4.26e3

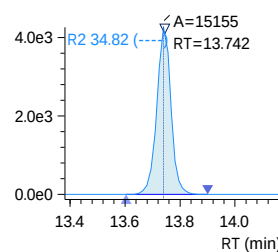
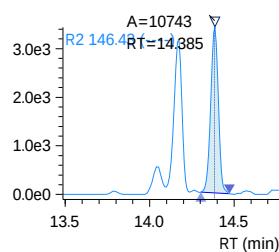


R2 526.00>169.00 (-)

3.44e3

R2 913.00>169.00 (-)

4.26e3

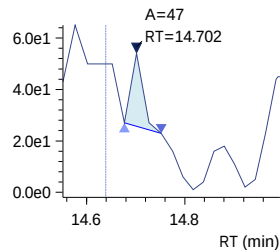


positive trans

Conc. 0.2076

Q 514.80>219.10 (+)

6.50e1





240130_021

Sample ID: 1633 ICAL 0.5PPB
Date Acquired: 1/30/2024 10:28:43 PM
Acquired by: System Administrator
Data File: 240130_021
Vial: 4 | Inj. Volume: 10.0000uL | Tray: 1

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	922570	----	----	----	----	----	----	
13C4-PFBA_IS	216.80>171.90	----	922570	----	----	----	----	----	----	
13C3-PFBA_IS	216.00>172.00	----	638153	----	----	----	----	----	----	
PFBA	212.80>169.05	----	46626	----	----	----	----	----	----	
PFMPA	229.00>84.90	----	38777	----	----	----	----	----	----	
3_3 FTCA	241.00>177.10	241.00>117.00	57832	80526	139.24	139.21	----	----	----	
13C5-PFPeA	268.30>223.00	----	248773	----	----	----	----	----	----	
13C5-PFPeA_IS	268.30>223.00	----	248773	----	----	----	----	----	----	
PFPeA	263.00>219.00	----	89456	----	----	----	----	----	----	
PFMBA	279.00>84.95	----	60862	----	----	----	----	----	----	
13C2-4_2 FTS	329.10>80.90	----	311498	----	----	----	----	----	----	
13C2-4_2 FTS_IS	329.10>80.90	----	311498	----	----	----	----	----	----	
4_2 FTS	327.10>307.00	327.10>80.90	75741	25447	33.60	32.10	25447	33.60	32.10	
13C3-PFBS_IS	302.10>79.90	----	305406	----	----	----	----	----	----	
PFBS	298.70>79.90	298.70>98.80	70091	32417	46.25	44.81	32417	46.25	44.81	
13C3-PFBS	302.10>79.90	----	305406	----	----	----	----	----	----	
NFDHA	295.00>201.00	295.00>84.90	64420	22730	35.28	35.54	22730	35.28	35.54	
13C5-PFHxA	318.00>273.00	----	561692	----	----	----	----	----	----	
13C5-PFHxA_IS	318.00>273.00	----	561692	----	----	----	----	----	----	
13C2-PFHxA_IS	315.10>270.00	----	729140	----	----	----	----	----	----	
PFHxA	313.00>269.00	----	109272	----	----	----	----	----	----	
PFEESA	314.80>135.00	314.80>82.90	329194	18930	5.75	5.22	18930	5.75	5.22	
13C3-HFPO-DA	286.90>168.90	----	639891	----	----	----	----	----	----	
13C3-HFPO-DA_IS	286.90>168.90	----	639891	----	----	----	----	----	----	
HFPO-DA	284.90>168.90	284.90>184.90	34633	19581	56.54	59.79	19581	56.54	59.79	
5_3 FTCA	341.00>237.05	341.00>217.00	267539	422340	157.86	157.08	422340	157.86	157.08	
PFPeS	349.10>79.90	349.10>98.80	54905	31012	56.48	55.12	31012	56.48	55.12	
13C4-PFHpA	367.10>322.00	----	714440	----	----	----	----	----	----	
13C4-PFHpA_IS	367.10>322.00	----	714440	----	----	----	----	----	----	
PFHpA	363.10>319.00	363.10>169.00	135200	30128	22.28	23.02	30128	22.28	23.02	
DONA	376.90>250.90	376.90>84.80	270568	73547	27.18	27.50	73547	27.18	27.50	
13C2-6_2 FTS_IS	429.10>80.90	----	338251	----	----	----	----	----	----	
13C2-6_2 FTS	429.10>80.90	----	338251	----	----	----	----	----	----	
6_2 FTS	427.10>407.00	427.10>80.90	62903	28613	45.49	50.47	28613	45.49	50.47	
13C4-PFOA_IS	417.10>172.00	----	64174	----	----	----	----	----	----	
13C8-PFOA_IS	421.10>376.00	----	738796	----	----	----	----	----	----	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240130_021 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	738796	----	----	----	----	----	----	----
PFOA	413.00>369.00	413.00>169.00	160587	45469	28.32	28.77	45469	28.32	28.77	
13C3-PFHxS	402.10>79.90	----	269787	----	----	----	----	----	----	----
13C3-PFHxS_IS	402.10>79.90	----	269787	----	----	----	----	----	----	----
PFHxS	398.70>79.90	398.70>98.90	58995	30988	52.53	60.90	30988	52.53	60.90	
18O2-PFHxS_IS	403.00>83.90	----	325212	----	----	----	----	----	----	----
13C9-PFNA_IS	472.10>427.00	----	422603	----	----	----	----	----	----	----
13C9-PFNA	472.10>427.00	----	422603	----	----	----	----	----	----	----
13C5-PFNA_IS	468.00>423.00	----	474124	----	----	----	----	----	----	----
PFNA	463.00>419.00	463.00>219.00	150496	31315	20.81	19.31	31315	20.81	19.31	
PFHpS	449.00>79.90	449.00>98.80	51601	27264	52.84	52.44	27264	52.84	52.44	
7_3 FTCA	441.00>317.00	441.00>336.90	461756	580067	125.62	129.46	580067	125.62	129.46	
13C2-8_2-FTS	529.10>80.90	----	253127	----	----	----	----	----	----	----
13C2-8_2-FTS_IS	529.10>80.90	----	253127	----	----	----	----	----	----	----
8_2 FTS	527.10>506.95	527.10>80.80	50315	25210	50.10	45.98	25210	50.10	45.98	
13C6-PFDA_IS	519.10>474.10	----	292654	----	----	----	----	----	----	----
13C6-PFDA	519.10>474.10	----	292654	----	----	----	----	----	----	----
13C2-PFDA_IS	515.10>470.10	----	293151	----	----	----	----	----	----	----
PFDA	512.90>469.00	512.90>219.00	136710	25773	18.85	17.88	25773	18.85	17.88	
D3-NMeFOSAA_IS	573.20>419.00	----	837742	----	----	----	----	----	----	----
D3-NMeFOSAA	573.20>419.00	----	837742	----	----	----	----	----	----	----
13C8-PFOS_IS	507.10>98.90	----	120579	----	----	----	----	----	----	----
13C8-PFOS	507.10>98.90	----	120579	----	----	----	----	----	----	----
13C4-PFOS_IS	502.80>79.90	----	405193	----	----	----	----	----	----	----
PFOS	498.90>79.90	498.90>98.80	49664	24263	48.86	53.60	24263	48.86	53.60	
NMeFOSAA	570.10>419.00	570.10>483.00	62764	38991	62.12	64.89	38991	62.12	64.89	
D5-NEtFOSAA_IS	589.20>419.00	----	621418	----	----	----	----	----	----	----
D5-NEtFOSAA	589.20>419.00	----	621418	----	----	----	----	----	----	----
NEtFOSAA	584.20>419.10	584.20>526.00	56161	52504	93.49	96.07	52504	93.49	96.07	
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	295376	92777	31.41	30.95	92777	31.41	30.95	
PFUnDA	563.10>519.00	563.10>269.10	138165	15167	10.98	11.01	15167	10.98	11.01	
13C7-PFUnDA_IS	570.00>525.10	----	361872	----	----	----	----	----	----	----
13C7-PFUnDA	570.00>525.10	----	361872	----	----	----	----	----	----	----
PFNS	548.80>79.90	548.80>98.80	53655	33033	61.57	60.44	33033	61.57	60.44	
10_2 FTS	626.80>607.05	626.80>81.00	71509	24520	34.29	36.14	24520	34.29	36.14	
13C2-PFDOA_IS	615.10>570.00	----	433141	----	----	----	----	----	----	----
13C2-PFDOA	615.10>570.00	----	433141	----	----	----	----	----	----	----
PFDOA	613.10>569.00	613.10>319.00	118840	12140	10.22	10.16	12140	10.22	10.16	
PFDS	599.00>79.90	599.00>98.80	47532	28734	60.45	58.26	28734	60.45	58.26	
PFTrDA	663.00>619.00	663.00>168.90	164939	25014	15.17	16.18	25014	15.17	16.18	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240130_021 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	213963	73276	34.25	34.99	73276	34.25	34.99	
PFOSAm	498.10>77.90	----	117577	----	----	----	----	----	----	
13C8-PFOSAm	506.10>77.80	----	314231	----	----	----	----	----	----	
13C8-PFOSAm_IS	506.10>77.80	----	314231	----	----	----	----	----	----	
PFTDA	713.10>669.00	713.10>168.90	110388	20396	18.48	18.05	20396	18.48	18.05	
13C2-PFTDA	715.20>670.00	----	309876	----	----	----	----	----	----	
13C2-PFTDA_IS	715.20>670.00	----	309876	----	----	----	----	----	----	
PFDoS	699.10>79.90	699.10>98.80	29307	17388	59.33	61.13	17388	59.33	61.13	
D7-MeFOSE_IS	623.20>58.90	----	807881	----	----	----	----	----	----	
D7-MeFOSE	623.20>58.90	----	807881	----	----	----	----	----	----	
MeFOSE	616.10>59.00	----	20423	----	----	----	----	----	----	
13C2-PFHxDA_IS	815.00>770.05	----	813555	----	----	----	----	----	----	
13C2-PFHxDA	815.00>770.05	----	813555	----	----	----	----	----	----	
PFHxDA	813.00>768.95	813.00>218.95	226920	26902	11.86	11.66	26902	11.86	11.66	
D3-MeFOSA	515.00>219.00	----	80777	----	----	----	----	----	----	
D3-MeFOSA_IS	515.00>219.00	----	80777	----	----	----	----	----	----	
MeFOSA	511.90>219.00	511.90>169.00	23779	36581	153.84	160.44	36581	153.84	160.44	
D9-EtFOSE_IS	639.20>58.90	----	990523	----	----	----	----	----	----	
D9-EtFOSE	639.20>58.90	----	981852	----	----	----	----	----	----	
EtFOSE	630.00>59.00	----	24016	----	----	----	----	----	----	
D5-EtFOSAm	531.10>219.00	----	115251	----	----	----	----	----	----	
D5-EtFOSAm_IS	531.10>219.00	----	115251	----	----	----	----	----	----	
EtFOSAm	526.00>219.00	526.00>169.00	31405	51450	163.83	159.63	51450	163.83	159.63	
PFODA	913.00>868.65	913.00>169.00	92248	30395	32.95	36.03	30395	32.95	36.03	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
 IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240130_021

Sample ID: 1633 ICAL 0.5PPB
Date Acquired: 1/30/2024 10:28:43 PM
Acquired by: System Administrator
Data File: 240130_021
Vial: 4 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.338	0.000	0.001	922570	638153	13C3-PFBA_IS	9.7564	ng/mL	
13C4-PFBA_IS	Auto	1.338	0.000	----	922570	922570	----	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.337	0.000	----	638153	638153	----	5.0000	ng/mL	
PFBA	Auto	1.340	-0.001	0.002	46626	922570	13C4-PFBA_IS	0.5311	ng/mL	
PFMPA	Auto	2.367	0.001	-1.074	38777	248773	13C5-PFPeA_IS	0.5459	ng/mL	
3_3 FTCA	Auto	2.945	0.000	-0.496	57832	248773	13C5-PFPeA_IS	16.2292	ng/mL	
13C5-PFPeA	Auto	3.441	0.002	-1.493	248773	729140	13C2-PFHxA_IS	4.7450	ng/mL	
13C5-PFPeA_IS	Auto	3.441	0.002	----	248773	248773	----	5.0000	ng/mL	
PFPeA	Auto	3.443	0.001	0.002	89456	248773	13C5-PFPeA_IS	0.5135	ng/mL	
PFMBA	Auto	3.970	0.001	0.529	60862	248773	13C5-PFPeA_IS	0.5590	ng/mL	
13C2-4_2 FTS	Auto	4.621	0.001	-2.427	311498	325212	18O2-PFHxS_IS	5.0884	ng/mL	
13C2-4_2 FTS_IS	Auto	4.621	0.001	----	311498	311498	----	5.0000	ng/mL	
4_2 FTS	Auto	4.621	0.001	0.000	75741	311498	13C2-4_2 FTS_IS	0.4905	ng/mL	
13C3-PFBS_IS	Auto	4.588	0.001	----	305406	305406	----	2.5000	ng/mL	
PFBS	Auto	4.589	0.001	0.001	70091	305406	13C3-PFBS_IS	0.4631	ng/mL	
13C3-PFBS	Auto	4.588	0.001	-2.460	305406	325212	18O2-PFHxS_IS	2.5169	ng/mL	
NFDHA	Auto	4.792	0.002	-0.142	64420	561692	13C5-PFHxA_IS	0.5529	ng/mL	
13C5-PFHxA	Auto	4.934	0.002	0.000	561692	729140	13C2-PFHxA_IS	2.3866	ng/mL	
13C5-PFHxA_IS	Auto	4.934	0.002	----	561692	561692	----	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	4.934	0.001	----	729140	729140	----	2.5000	ng/mL	
PFHxA	Auto	4.936	0.002	0.002	109272	561692	13C5-PFHxA_IS	0.5164	ng/mL	
PFEESA	Auto	5.266	0.001	0.332	329194	561692	13C5-PFHxA_IS	0.4717	ng/mL	
13C3-HFPO-DA	Auto	5.412	0.000	0.478	639891	729140	13C2-PFHxA_IS	9.9028	ng/mL	
13C3-HFPO-DA_IS	Auto	5.412	0.000	----	639891	639891	----	10.0000	ng/mL	
HFPO-DA	Auto	5.413	0.000	0.001	34633	639891	13C3-HFPO-DA_IS	0.5504	ng/mL	
5_3 FTCA	Auto	5.865	-0.001	0.931	267539	561692	13C5-PFHxA_IS	15.9341	ng/mL	
PFPeS	Auto	5.972	-0.001	-1.076	54905	269787	13C3-PFHxS_IS	0.5142	ng/mL	
13C4-PFHpA	Auto	6.120	0.000	1.186	714440	729140	13C2-PFHxA_IS	2.4129	ng/mL	
13C4-PFHpA_IS	Auto	6.120	0.000	----	714440	714440	----	2.5000	ng/mL	
PFHpA	Auto	6.122	0.000	0.002	135200	714440	13C4-PFHpA_IS	0.5404	ng/mL	
DONA	Auto	6.487	0.000	1.075	270568	639891	13C3-HFPO-DA_IS	0.5016	ng/mL	
13C2-6_2 FTS_IS	Auto	6.766	0.000	----	338251	338251	----	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.766	0.000	-0.282	338251	325212	18O2-PFHxS_IS	5.3078	ng/mL	
6_2 FTS	Auto	6.766	0.001	0.000	62903	338251	13C2-6_2 FTS_IS	0.4877	ng/mL	
13C4-PFOA_IS	Auto	7.080	0.001	----	64174	64174	----	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.079	0.001	----	738796	738796	----	2.5000	ng/mL	
13C8-PFOA	Auto	7.079	0.001	-0.001	738796	64174	13C4-PFOA_IS	2.4139	ng/mL	
PFOA	Auto	7.081	0.000	0.002	160587	738796	13C8-PFOA_IS	0.5797	ng/mL	
13C3-PFHxS	Auto	7.048	0.000	0.000	269787	325212	18O2-PFHxS_IS	2.3669	ng/mL	
13C3-PFHxS_IS	Auto	7.048	0.000	----	269787	269787	----	2.5000	ng/mL	
PFHxS	Auto	7.049	0.001	0.001	58995	269787	13C3-PFHxS_IS	0.5003	ng/mL	
18O2-PFHxS_IS	Auto	7.048	0.000	----	325212	325212	----	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.931	0.002	----	422603	422603	----	1.2500	ng/mL	
13C9-PFNA	Auto	7.931	0.002	0.000	422603	474124	13C5-PFNA_IS	1.2041	ng/mL	
13C5-PFNA_IS	Auto	7.931	0.001	----	474124	474124	----	1.2500	ng/mL	
PFNA	Auto	7.932	0.002	0.001	150496	422603	13C9-PFNA_IS	0.5291	ng/mL	
PFHpS	Auto	7.973	0.002	-0.814	51601	120579	13C8-PFOS_IS	0.5090	ng/mL	
7_3 FTCA	Auto	7.930	0.001	2.996	461756	561692	13C5-PFHxA_IS	15.6506	ng/mL	
13C2-8_2-FTS	Auto	8.389	0.001	1.341	253127	325212	18O2-PFHxS_IS	4.6784	ng/mL	
13C2-8_2-FTS_IS	Auto	8.389	0.001	----	253127	253127	----	5.0000	ng/mL	
8_2 FTS	Auto	8.390	0.002	0.001	50315	253127	13C2-8_2-FTS_IS	0.5215	ng/mL	
13C6-PFDA_IS	Auto	8.696	0.001	----	292654	292654	----	1.2500	ng/mL	
13C6-PFDA	Auto	8.696	0.001	-0.001	292654	293151	13C2-PFDA_IS	1.2458	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_021 (continued)

(Table continued from previous page)

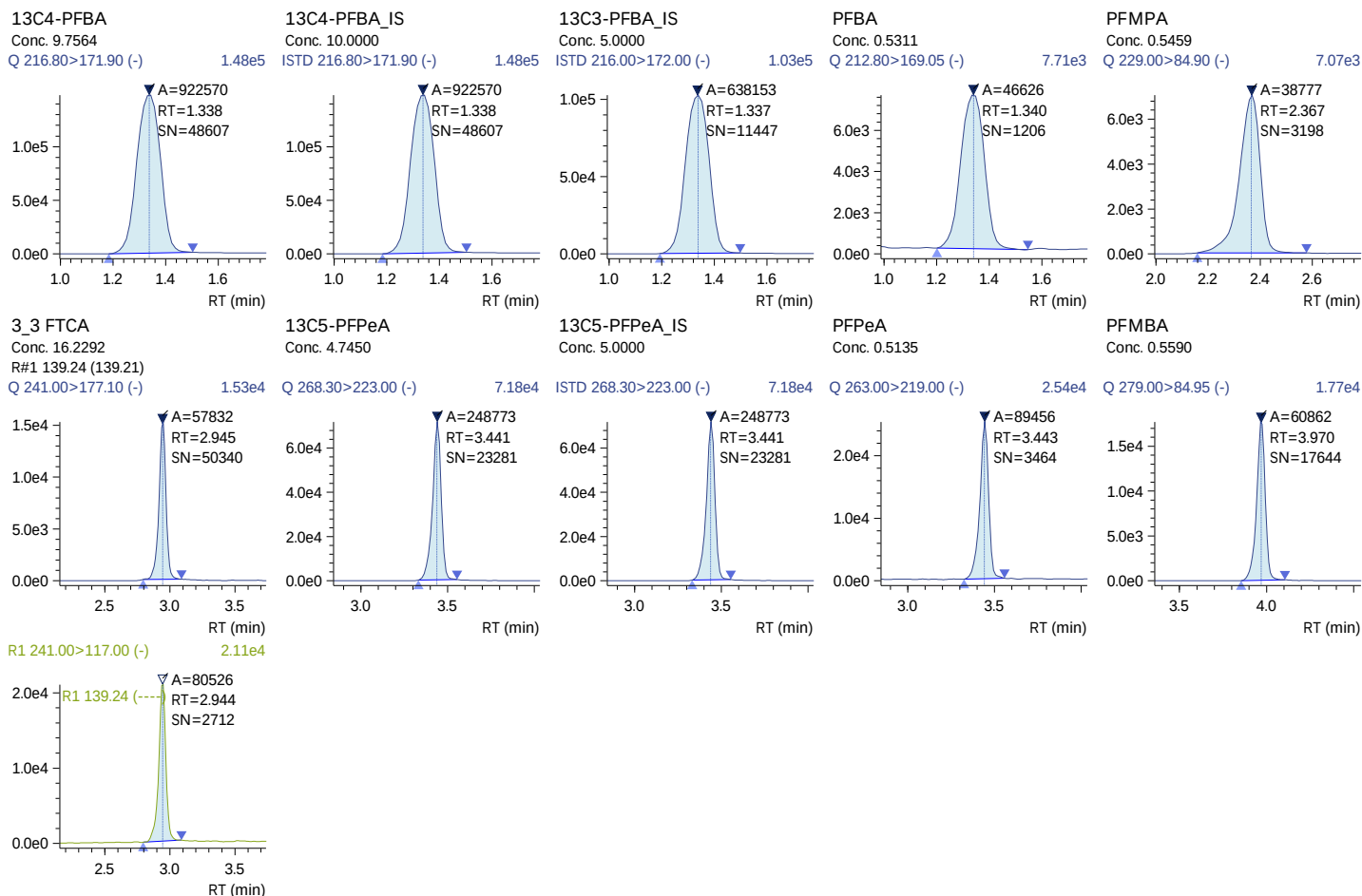
Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C2-PFDA_IS	Auto	8.697	0.001	----	293151	293151	----	1.2500	ng/mL	
PFDA	Auto	8.698	0.001	0.002	136710	292654	13C6-PFDA_IS	0.5523	ng/mL	
D3-NMeFOSAA_IS	Auto	8.835	0.001	----	837742	837742	----	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.835	0.001	0.047	837742	405193	13C4-PFOS_IS	5.0780	ng/mL	
13C8-PFOS_IS	Auto	8.787	0.001	----	120579	120579	----	2.5000	ng/mL	
13C8-PFOS	Auto	8.787	0.001	-0.001	120579	405193	13C4-PFOS_IS	2.3646	ng/mL	
13C4-PFOS_IS	Auto	8.788	0.001	----	405193	405193	----	2.5000	ng/mL	
PFOS	M	8.788	0.000	0.001	49664	120579	13C8-PFOS_IS	0.4822	ng/mL	
NMeFOSAA	M	8.840	0.189	0.005	62764	837742	D3-NMeFOSAA_IS	0.5291	ng/mL	
D5-NetFOSAA_IS	Auto	9.166	0.002	----	621418	621418	----	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.166	0.002	0.378	621418	405193	13C4-PFOS_IS	4.7796	ng/mL	
NetFOSAA	M	9.177	0.191	0.011	56161	621418	D5-NetFOSAA_IS	0.5503	ng/mL	
9-CI-PF3ONS	Auto	9.353	0.002	3.941	295376	639891	13C3-HFPO-DA_IS	0.4707	ng/mL	
PFUnDA	Auto	9.422	0.001	0.002	138165	361872	13C7-PFUnDA_IS	0.5394	ng/mL	
13C7-PFUnDA_IS	Auto	9.421	0.001	----	361872	361872	----	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.421	0.001	0.723	361872	293151	13C2-PFDA_IS	1.2397	ng/mL	
PFNS	Auto	9.549	0.000	0.762	53655	120579	13C8-PFOS_IS	0.5258	ng/mL	
10_2_FTS	Auto	9.795	0.000	1.406	71509	253127	13C2-8_2-FTS_IS	0.5593	ng/mL	
13C2-PFDOA_IS	Auto	10.107	0.000	----	433141	433141	----	1.2500	ng/mL	
13C2-PFDOA	Auto	10.107	0.000	1.410	433141	293151	13C2-PFDA_IS	1.2430	ng/mL	
PFDOA	Auto	10.108	0.000	0.001	118840	433141	13C2-PFDOA_IS	0.5199	ng/mL	
PFDS	Auto	10.263	0.000	1.476	47532	120579	13C8-PFOS_IS	0.5304	ng/mL	
PFTDA	Auto	10.764	0.000	-0.629	164939	309876	13C2-PFTDA_IS	0.5184	ng/mL	
11-CI-PF3OUdS	Auto	10.770	-0.001	5.358	213963	639891	13C3-HFPO-DA_IS	0.4777	ng/mL	
PFOSAm	M	11.149	-0.001	-0.005	117577	314231	13C8-PFOSAm_IS	1.0694	ng/mL	
13C8-PFOSAm	Auto	11.154	-0.001	2.366	314231	405193	13C4-PFOS_IS	2.4413	ng/mL	
13C8-PFOSAm_IS	Auto	11.154	-0.001	----	314231	314231	----	2.5000	ng/mL	
PFTDA	Auto	11.394	-0.002	0.001	110388	309876	13C2-PFTDA_IS	0.4926	ng/mL	
13C2-PFTDA	Auto	11.393	-0.002	2.696	309876	293151	13C2-PFDA_IS	1.2600	ng/mL	
13C2-PFTDA_IS	Auto	11.393	-0.002	----	309876	309876	----	1.2500	ng/mL	
PFDoS	Auto	11.584	-0.002	2.797	29307	120579	13C8-PFOS_IS	0.5244	ng/mL	
D7-MeFOSE_IS	Auto	13.383	-0.003	----	807881	807881	----	25.0000	ng/mL	
D7-MeFOSE	Auto	13.383	-0.003	4.595	807881	405193	13C4-PFOS_IS	24.4498	ng/mL	
MeFOSE	M	13.420	-0.003	0.037	20423	807881	D7-MeFOSE_IS	0.5046	ng/mL	
13C2-PFHxDA_IS	Auto	12.606	-0.003	----	813555	813555	----	2.5000	ng/mL	
13C2-PFHxDA	Auto	12.606	-0.003	3.909	813555	293151	13C2-PFDA_IS	2.4717	ng/mL	
PFHxDA	Auto	12.607	-0.003	0.001	226920	813555	13C2-PFHxDA_IS	0.5162	ng/mL	
D3-MeFOSA	Auto	13.687	-0.003	4.899	80777	405193	13C4-PFOS_IS	2.4038	ng/mL	
D3-MeFOSA_IS	Auto	13.687	-0.003	----	80777	80777	----	2.5000	ng/mL	
MeFOSA	M	13.696	-0.003	0.009	23779	80777	D3-MeFOSA_IS	0.5159	ng/mL	
D9-EtFOSE_IS	Auto	14.010	-0.003	----	990523	990523	----	25.0000	ng/mL	
D9-EtFOSE	Auto	14.010	-0.003	5.222	981852	405193	13C4-PFOS_IS	24.2824	ng/mL	
EtFOSE	M	14.051	-0.004	0.041	24016	990523	D9-EtFOSE_IS	0.5056	ng/mL	
D5-EtFOSAm	Auto	14.364	-0.002	5.576	115251	405193	13C4-PFOS_IS	2.4805	ng/mL	
D5-EtFOSAm_IS	Auto	14.364	-0.002	----	115251	115251	----	2.5000	ng/mL	
EtFOSAm	M	14.381	-0.003	0.017	31405	115251	D5-EtFOSAm_IS	0.4967	ng/mL	
PFODA	Auto	13.737	-0.003	1.131	92248	813555	13C2-PFHxDA_IS	0.5536	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_021 (continued)





240130_021 (continued)

13C2-4_2 FTS
Conc. 5.0884

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. 0.4905
R#1 33.60 (32.10)
R#2 33.60 (32.10)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 0.4631
R#1 46.25 (44.81)
R#2 46.25 (44.81)

Q 329.10>80.90 (-)

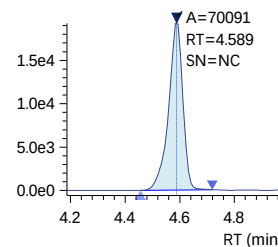
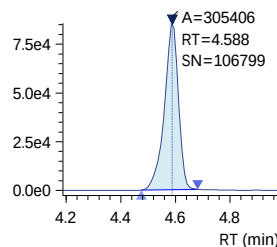
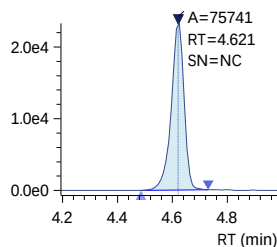
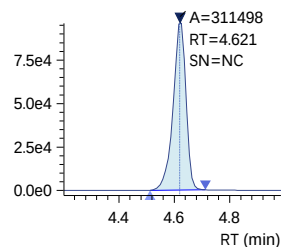
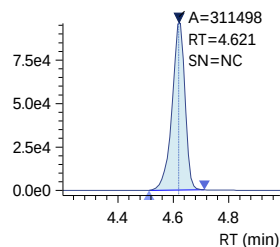
9.62e4 ISTD 329.10>80.90 (-)

9.62e4 Q 327.10>307.00 (-)

2.33e4 ISTD 302.10>79.90 (-)

8.57e4 Q 298.70>79.90 (-)

1.93e4

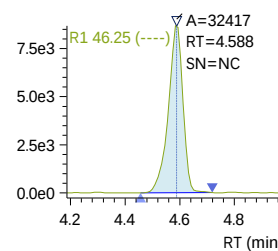
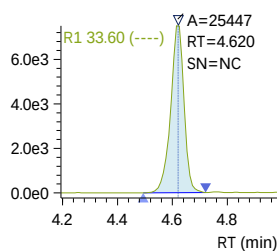


R1 327.10>80.90 (-)

7.51e3

R1 298.70>98.80 (-)

8.68e3

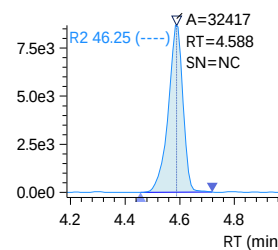
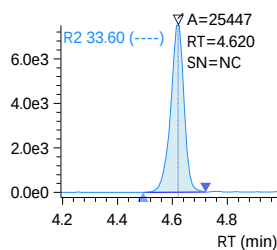


R2 327.10>80.90 (-)

7.51e3

R2 298.70>98.80 (-)

8.68e3





240130_021 (continued)

13C3-PFBS
Conc. 2.5169

NFDHA
Conc. 0.5529
R#1 35.28 (35.54)
R#2 35.28 (35.54)

13C5-PFHxA
Conc. 2.3866

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

Q 302.10>79.90 (-)

8.57e4

Q 295.00>201.00 (-)

1.93e4

Q 318.00>273.00 (-)

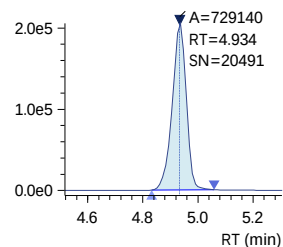
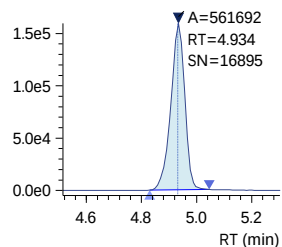
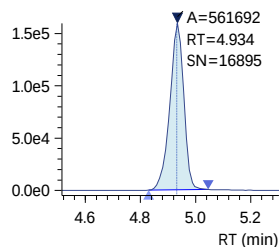
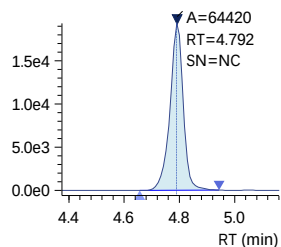
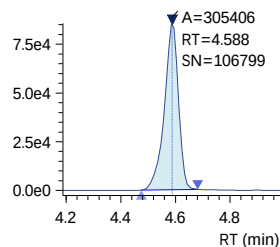
1.60e5

ISTD 318.00>273.00 (-)

1.60e5

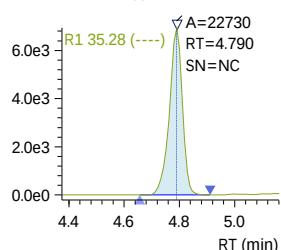
ISTD 315.10>270.00 (-)

2.06e5



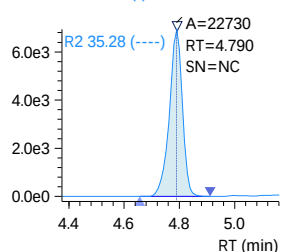
R1 295.00>84.90 (-)

6.94e3



R2 295.00>84.90 (-)

6.94e3





240130_021 (continued)

PFHxA
Conc. 0.5164

PFEESA
Conc. 0.4717
R#1 5.75 (5.22)
R#2 5.75 (5.22)

13C3-HFPO-DA
Conc. 9.9028

13C3-HFPO-DA_IS
Conc. 10.0000

HFPO-DA
Conc. 0.5504
R#1 56.54 (59.79)
R#2 56.54 (59.79)

Q 313.00>269.00 (-)

3.28e4

Q 314.80>135.00 (-)

9.56e4

Q 286.90>168.90 (-)

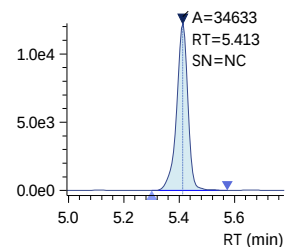
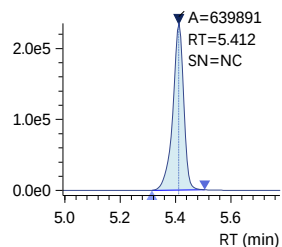
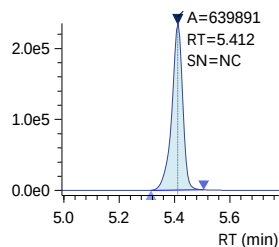
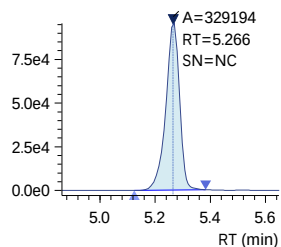
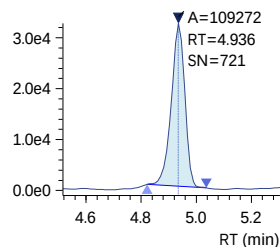
2.35e5

ISTD 286.90>168.90 (-)

2.35e5

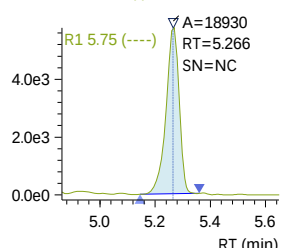
Q 284.90>168.90 (-)

1.22e4



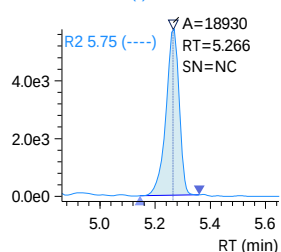
R1 314.80>82.90 (-)

5.78e3



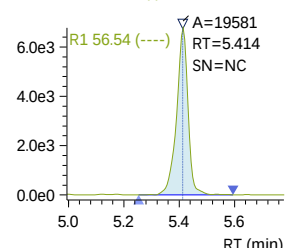
R2 314.80>82.90 (-)

5.78e3



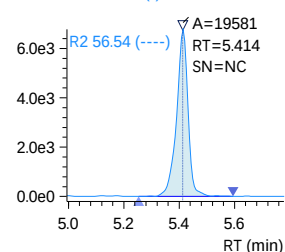
R1 284.90>184.90 (-)

6.78e3



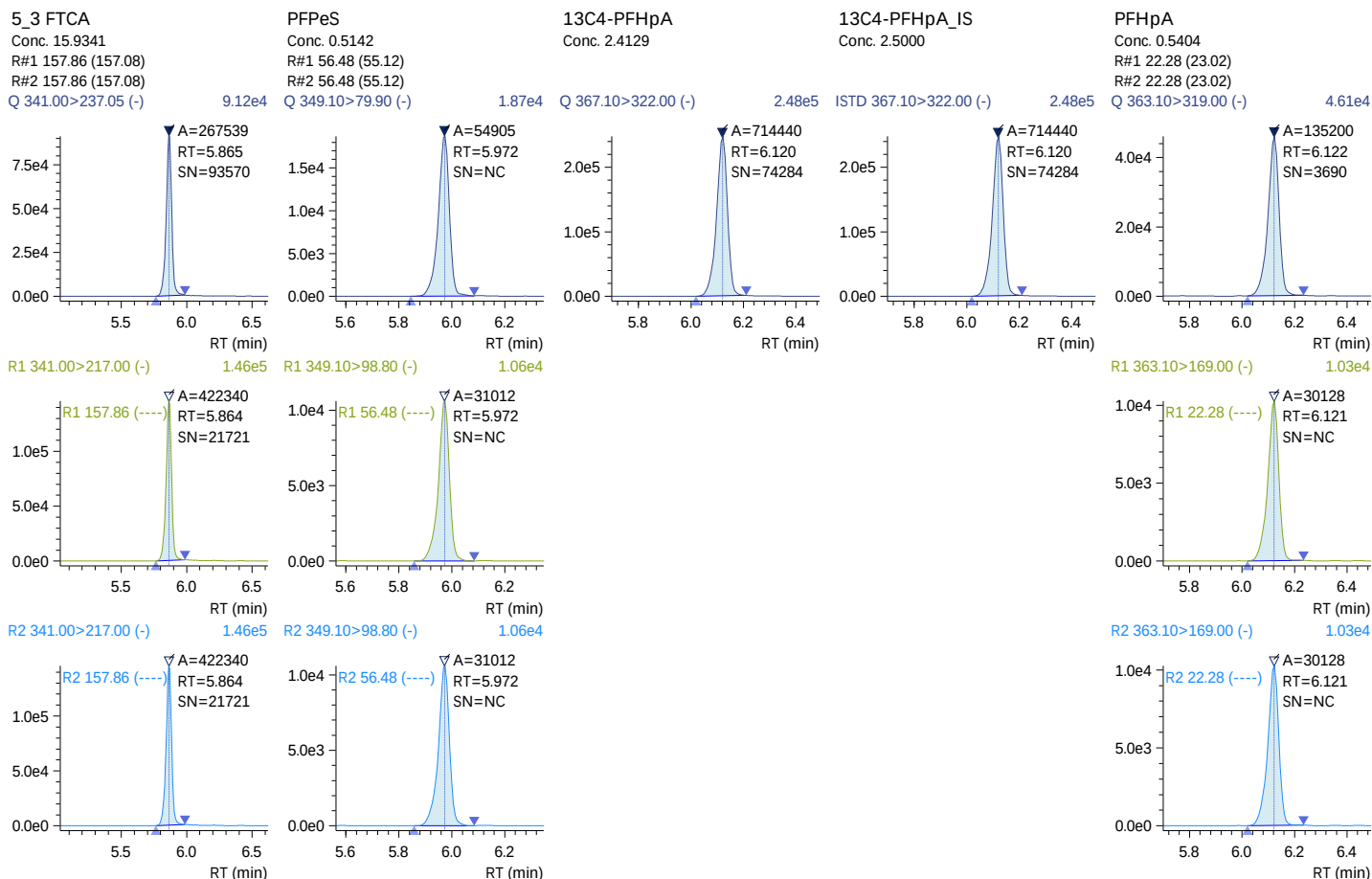
R2 284.90>184.90 (-)

6.78e3



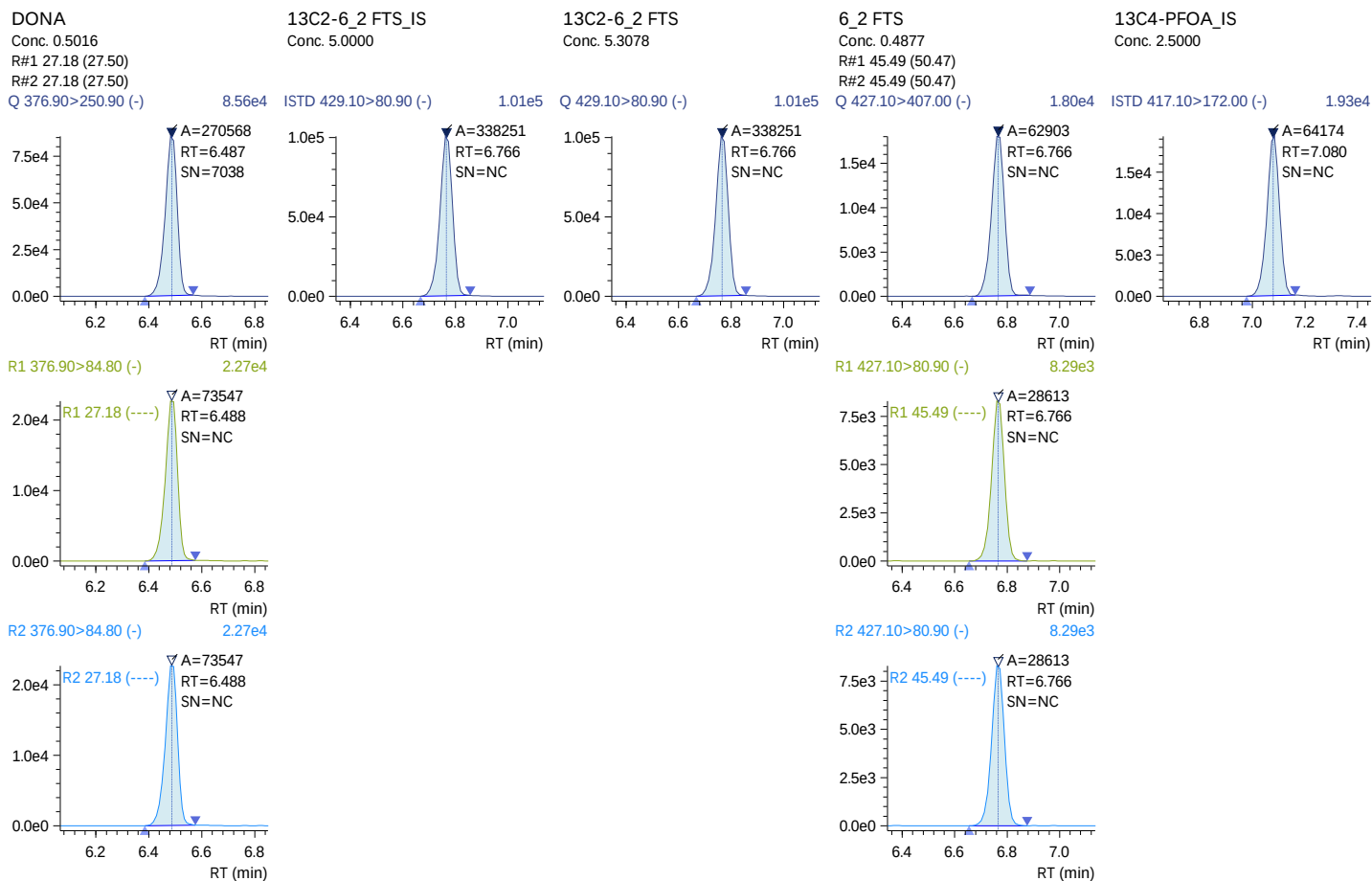


240130_021 (continued)





240130_021 (continued)





240130_021 (continued)

13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.4139

PFOA
Conc. 0.5797
R#1 28.32 (28.77)
R#2 28.32 (28.77)

13C3-PFHxS
Conc. 2.3669

13C3-PFHxS_IS
Conc. 2.5000

ISTD 421.10>376.00 (-)

2.21e5

Q 421.10>376.00 (-)

2.21e5

Q 413.00>369.00 (-)

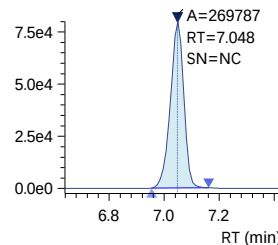
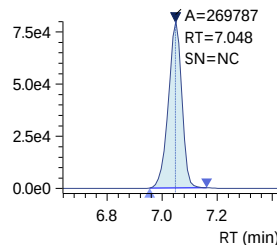
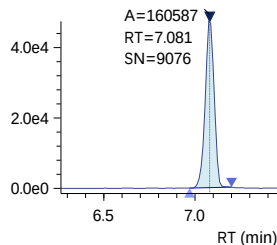
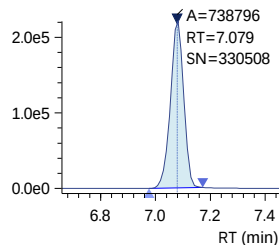
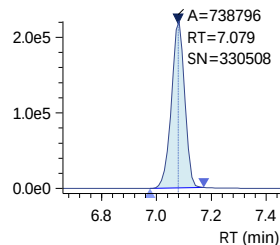
4.75e4

Q 402.10>79.90 (-)

8.01e4

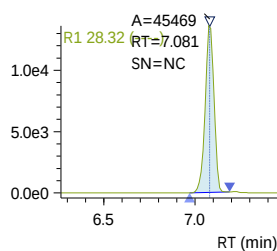
ISTD 402.10>79.90 (-)

8.01e4



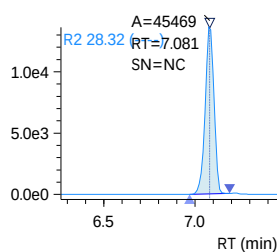
R1 413.00>169.00 (-)

1.36e4



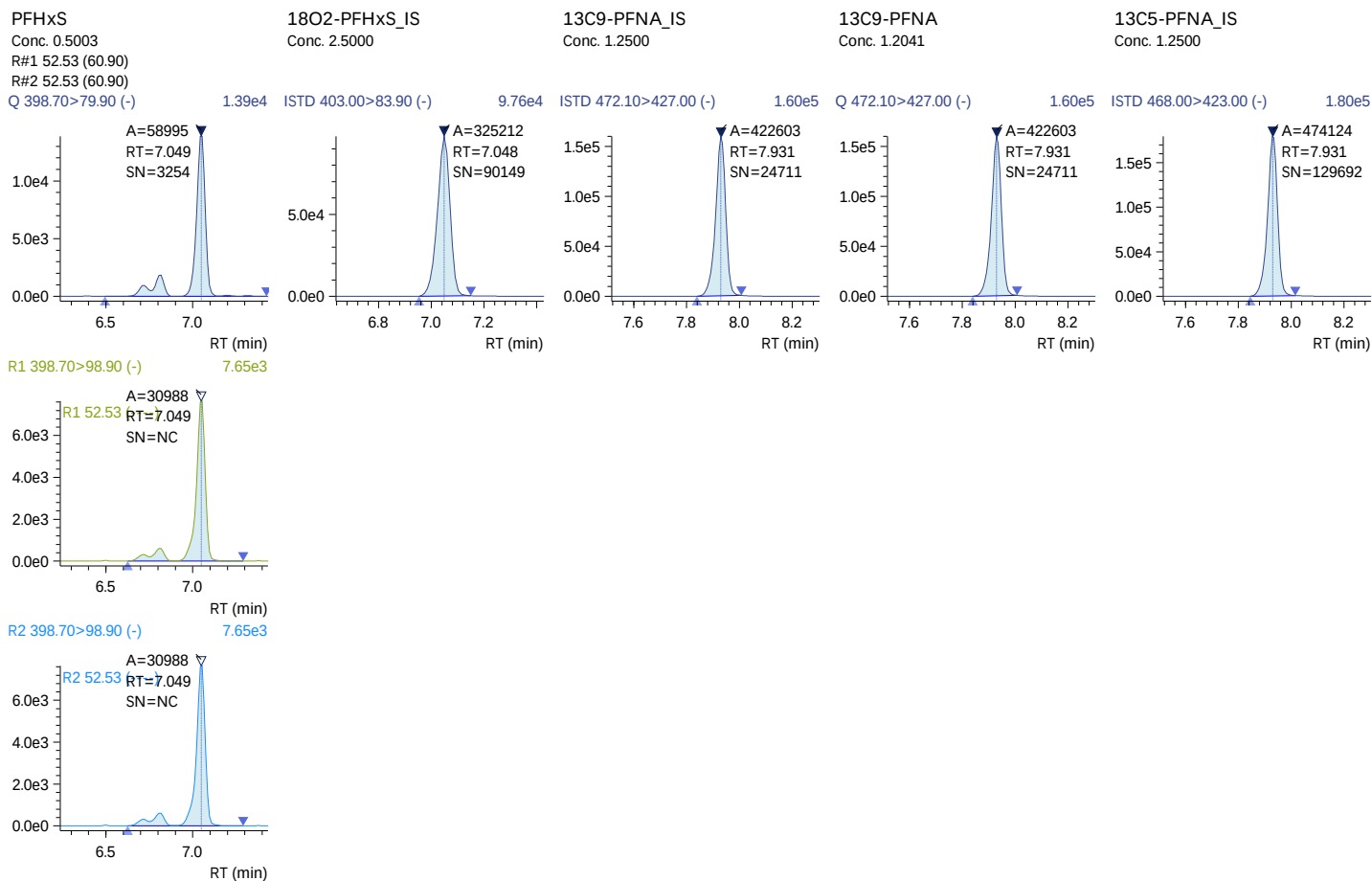
R2 413.00>169.00 (-)

1.36e4





240130_021 (continued)

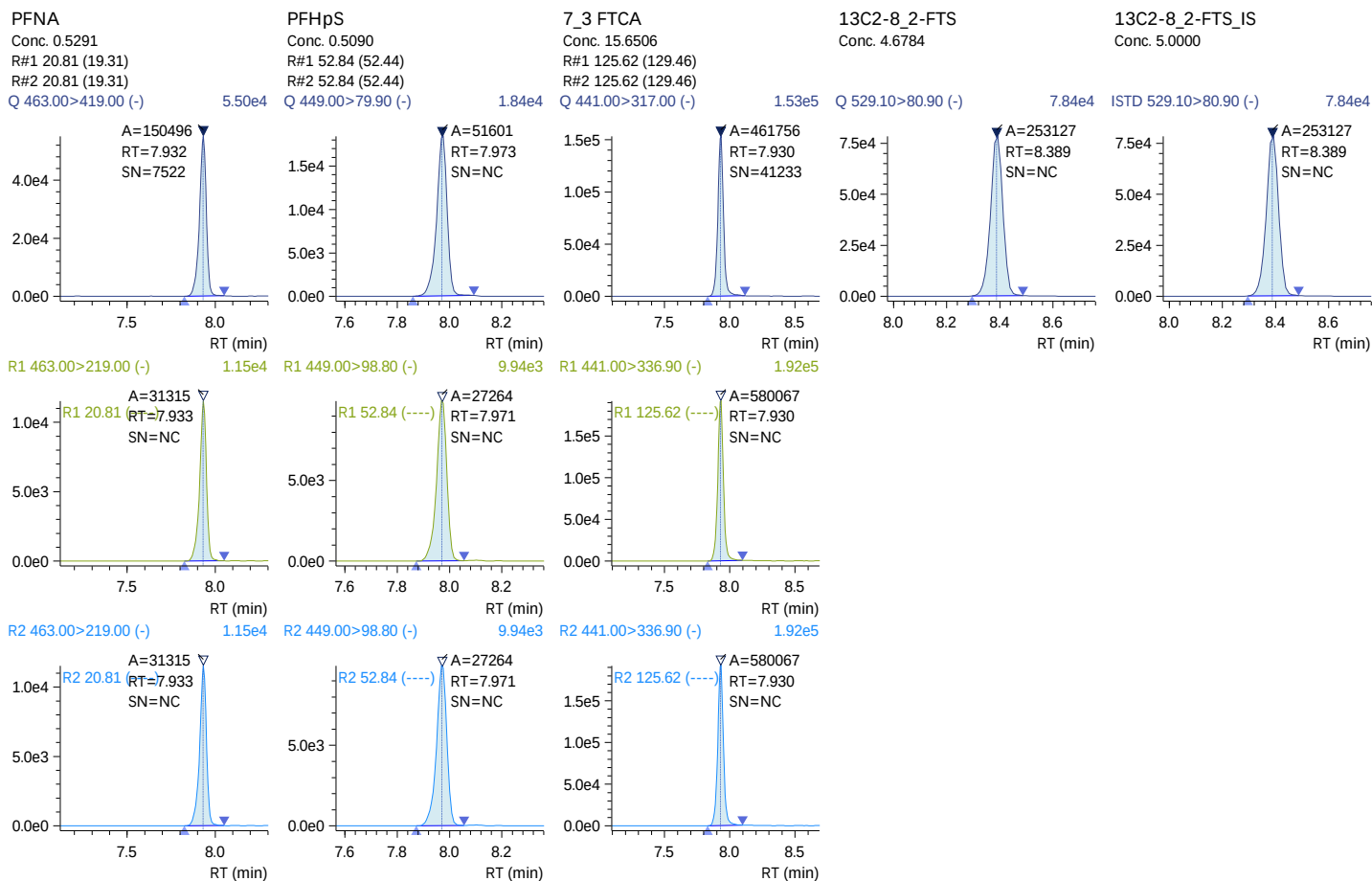


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_021 (continued)

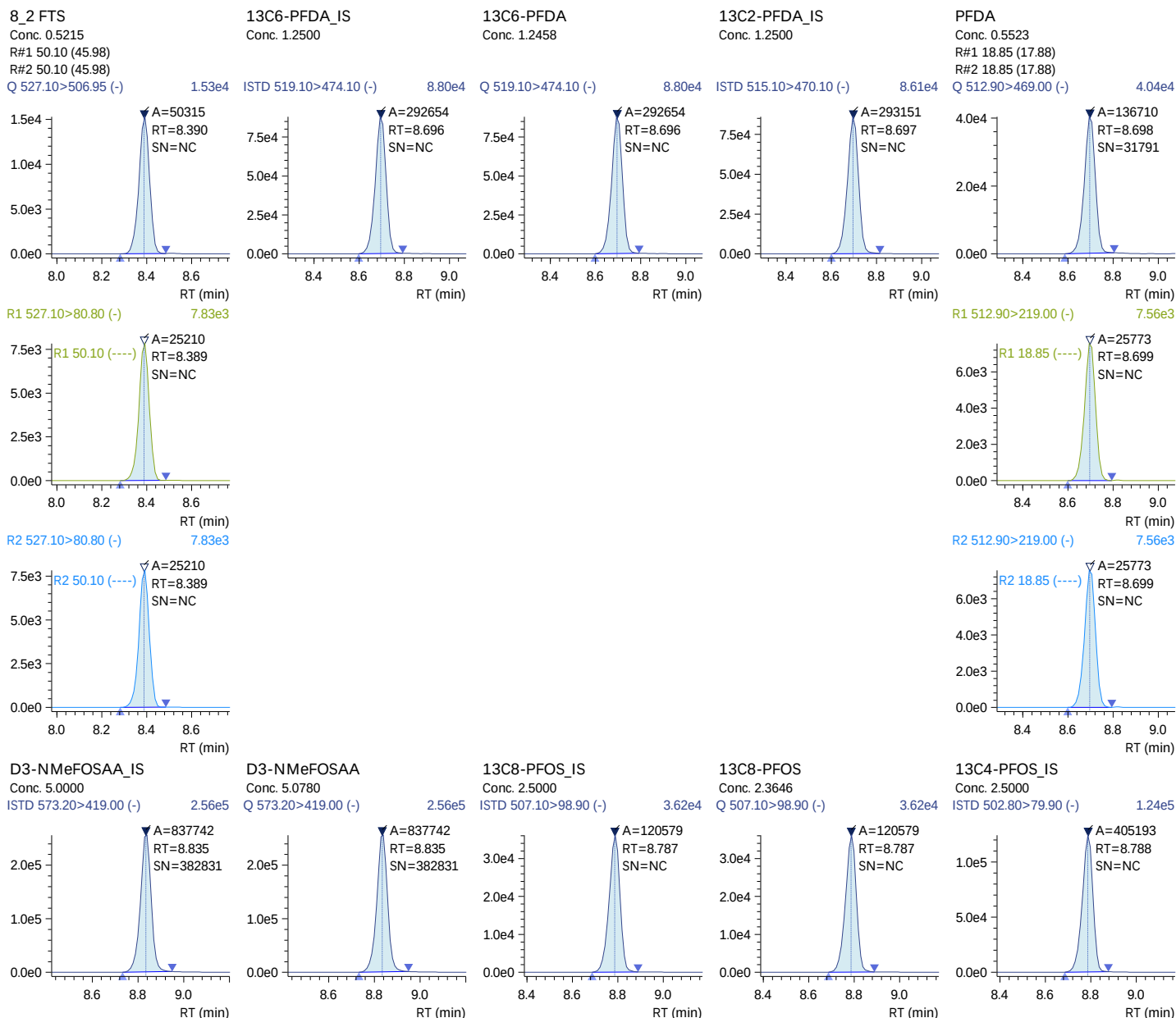


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_021 (continued)

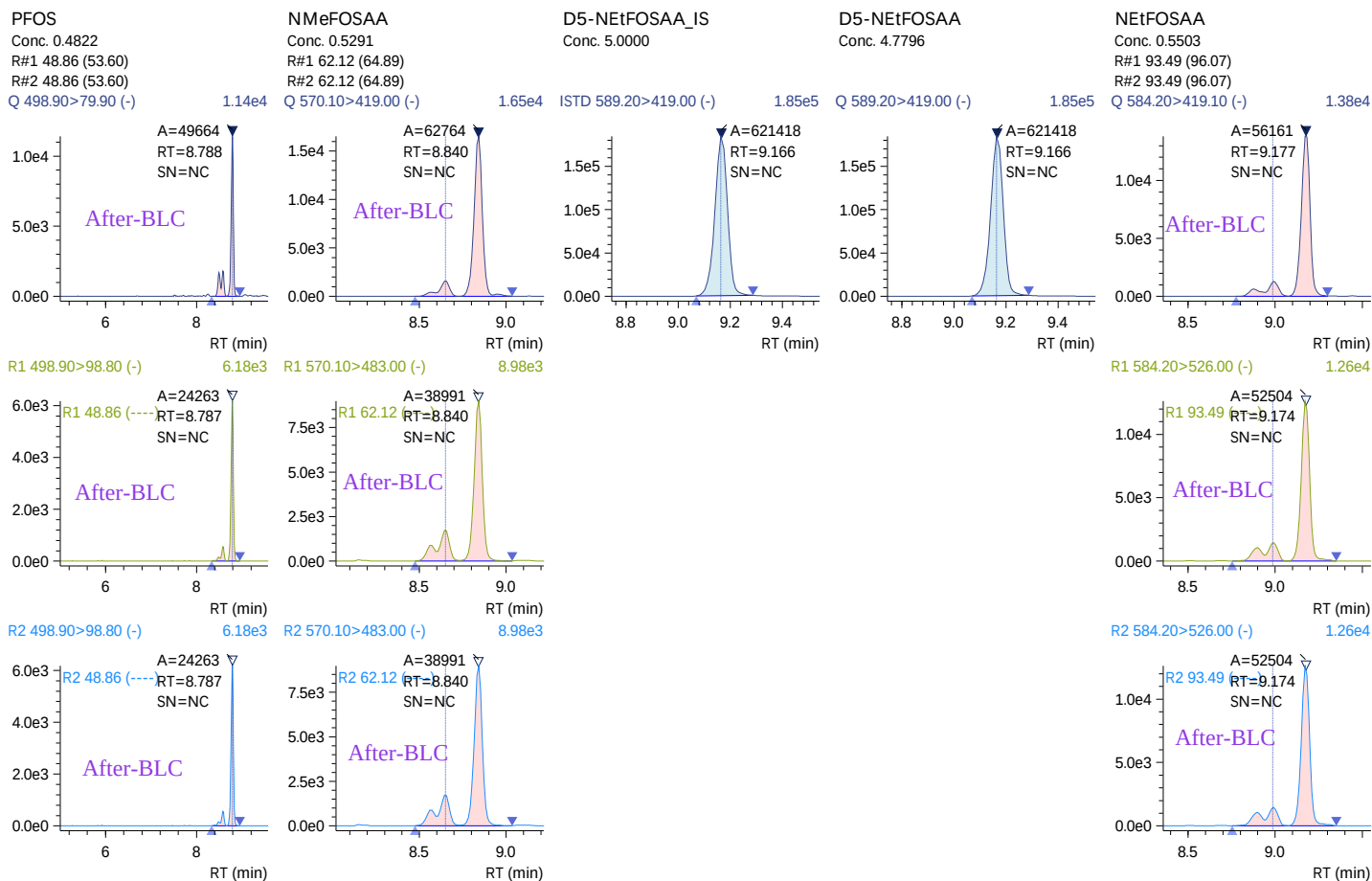


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_021 (continued)



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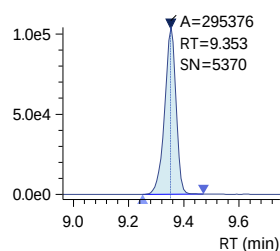
SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



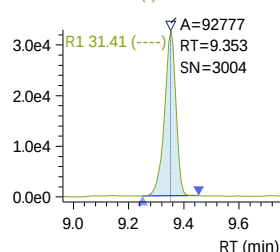
240130_021 (continued)

9-Cl-PF3ONS

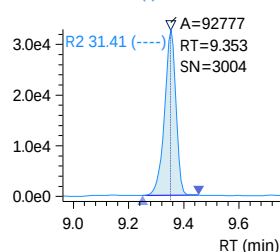
Conc. 0.4707
R#1 31.41 (30.95)
R#2 31.41 (30.95)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-) 3.30e4

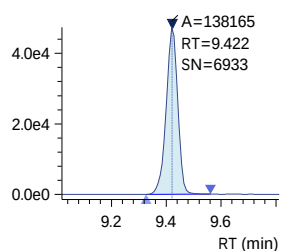


R2 532.80>353.00 (-) 3.30e4

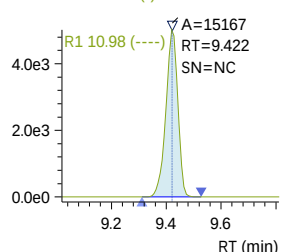


PFUnDA

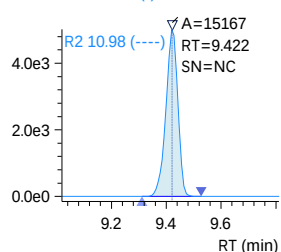
Conc. 0.5394
R#1 10.98 (11.01)
R#2 10.98 (11.01)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-) 5.02e3

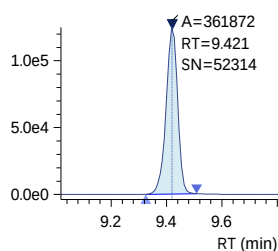


R2 563.10>269.10 (-) 5.02e3



13C7-PFUnDA_IS

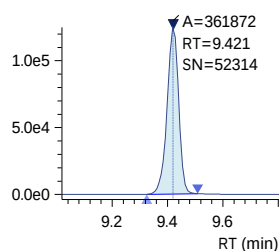
Conc. 1.2500
ISTD 570.00>525.10 (-)



Q 570.00>525.10 (-) 1.25e5

13C7-PFUnDA

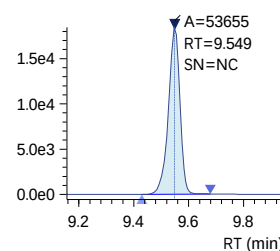
Conc. 1.2397
Q 570.00>525.10 (-)



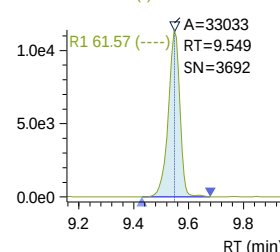
Q 570.00>525.10 (-) 1.25e5

PFNS

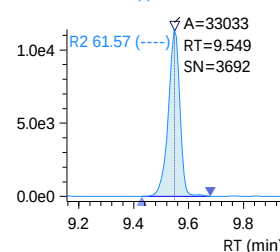
Conc. 0.5258
R#1 61.57 (60.44)
R#2 61.57 (60.44)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-) 1.14e4

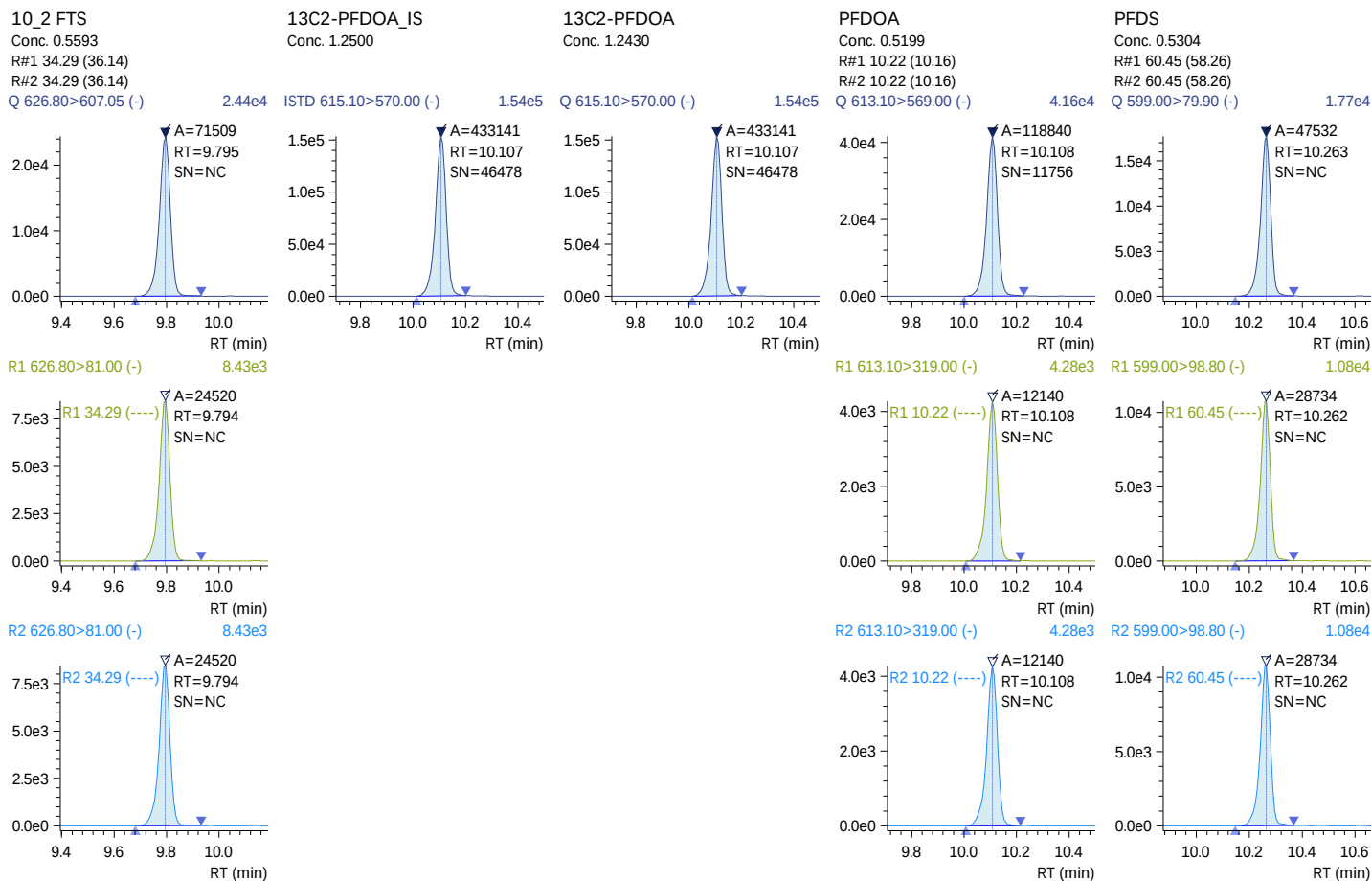


R2 548.80>98.80 (-) 1.14e4





240130_021 (continued)

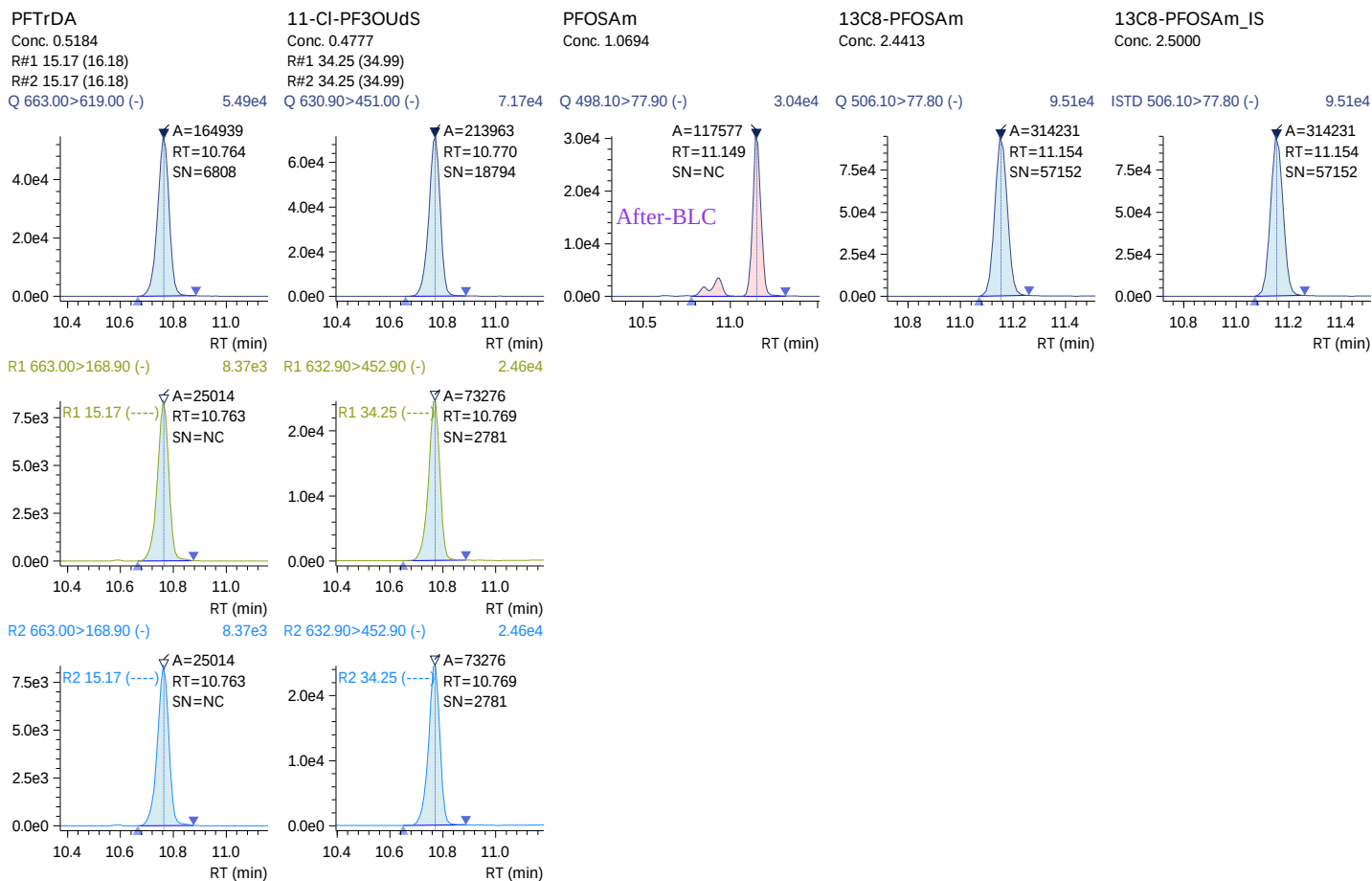


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_021 (continued)

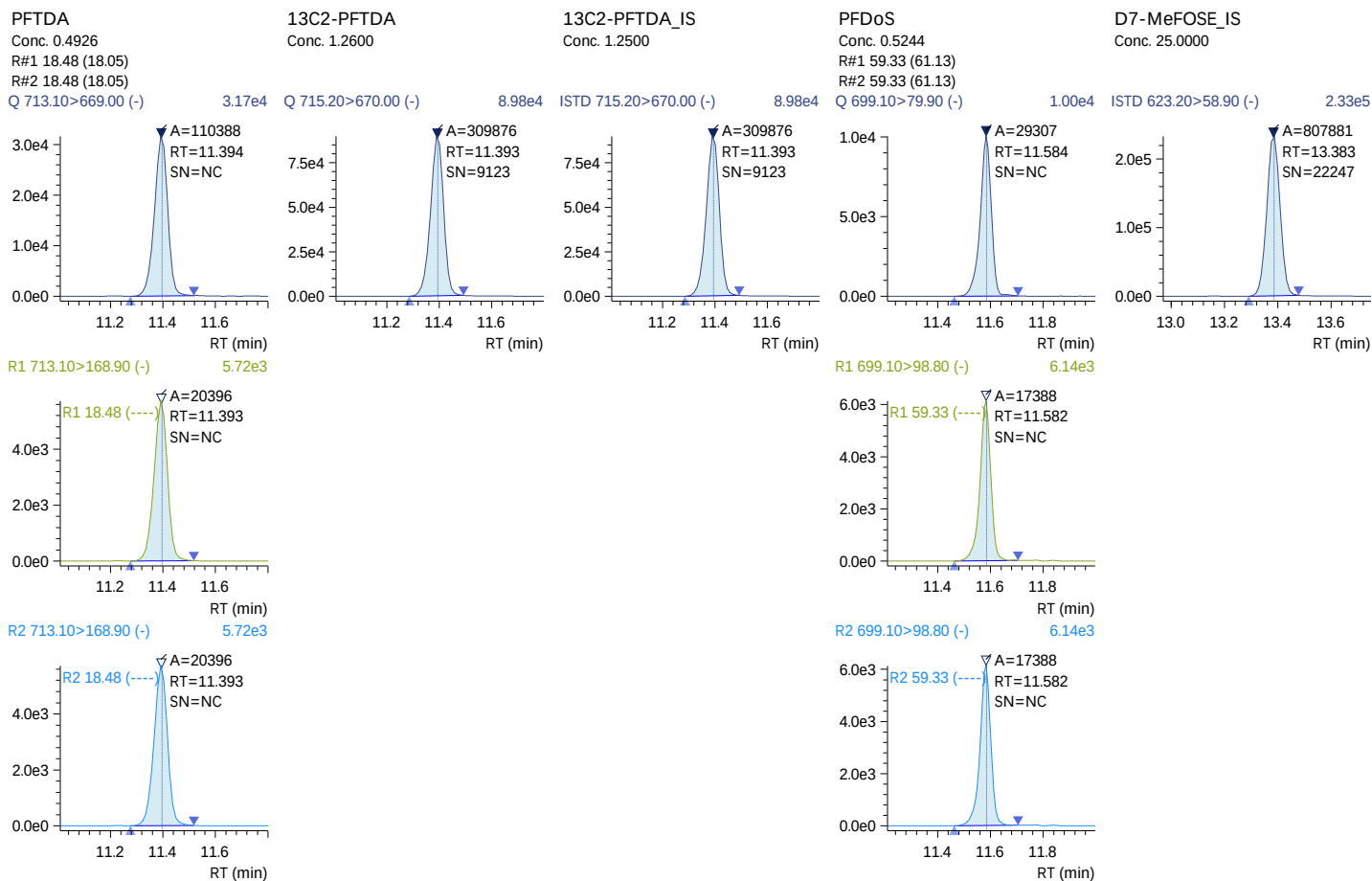


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_021 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_021 (continued)

D7-MeFOSE
Conc. 24.4498

MeFOSE
Conc. 0.5046

13C2-PFHXA_IS
Conc. 2.5000

13C2-PFHXA
Conc. 2.4717

PFHXA
Conc. 0.5162
R#1 11.86 (11.66)
R#2 11.86 (11.66)

Q 623.20>58.90 (-)

2.33e5

Q 616.10>59.00 (-)

3.68e3

ISTD 815.00>770.05 (-)

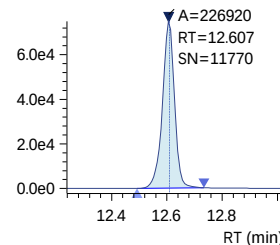
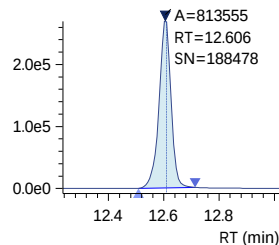
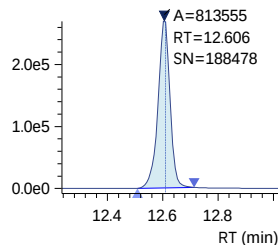
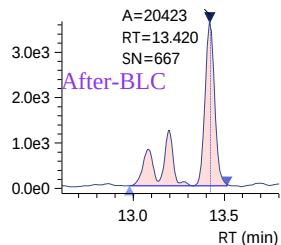
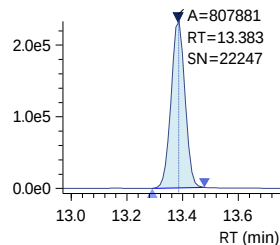
2.70e5

Q 815.00>770.05 (-)

2.70e5

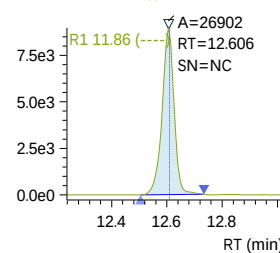
Q 813.00>768.95 (-)

7.50e4



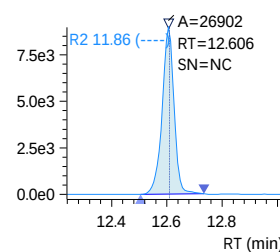
R1 813.00>218.95 (-)

8.97e3



R2 813.00>218.95 (-)

8.97e3





240130_021 (continued)

D3-MeFOSA
Conc. 2.4038

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. 0.5159
R#1 153.84 (160.44)
R#2 153.84 (160.44)

D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 24.2824

Q 515.00>219.00 (-)

2.40e4

ISTD 515.00>219.00 (-)

2.40e4

Q 511.90>219.00 (-)

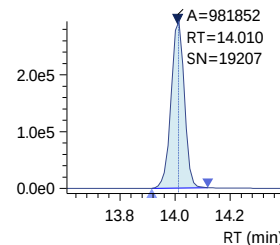
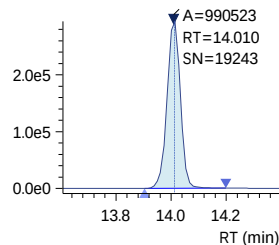
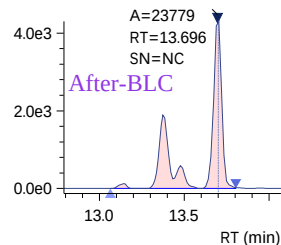
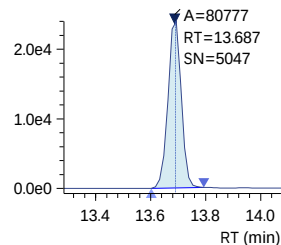
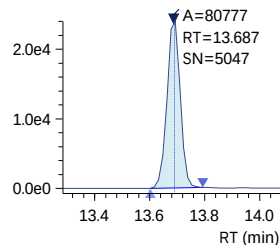
4.30e3

ISTD 639.20>58.90 (-)

2.94e5

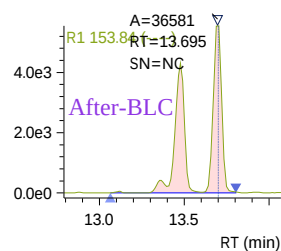
Q 639.20>58.90 (-)

2.94e5



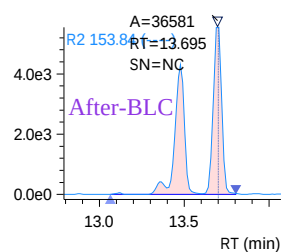
R1 511.90>169.00 (-)

5.55e3



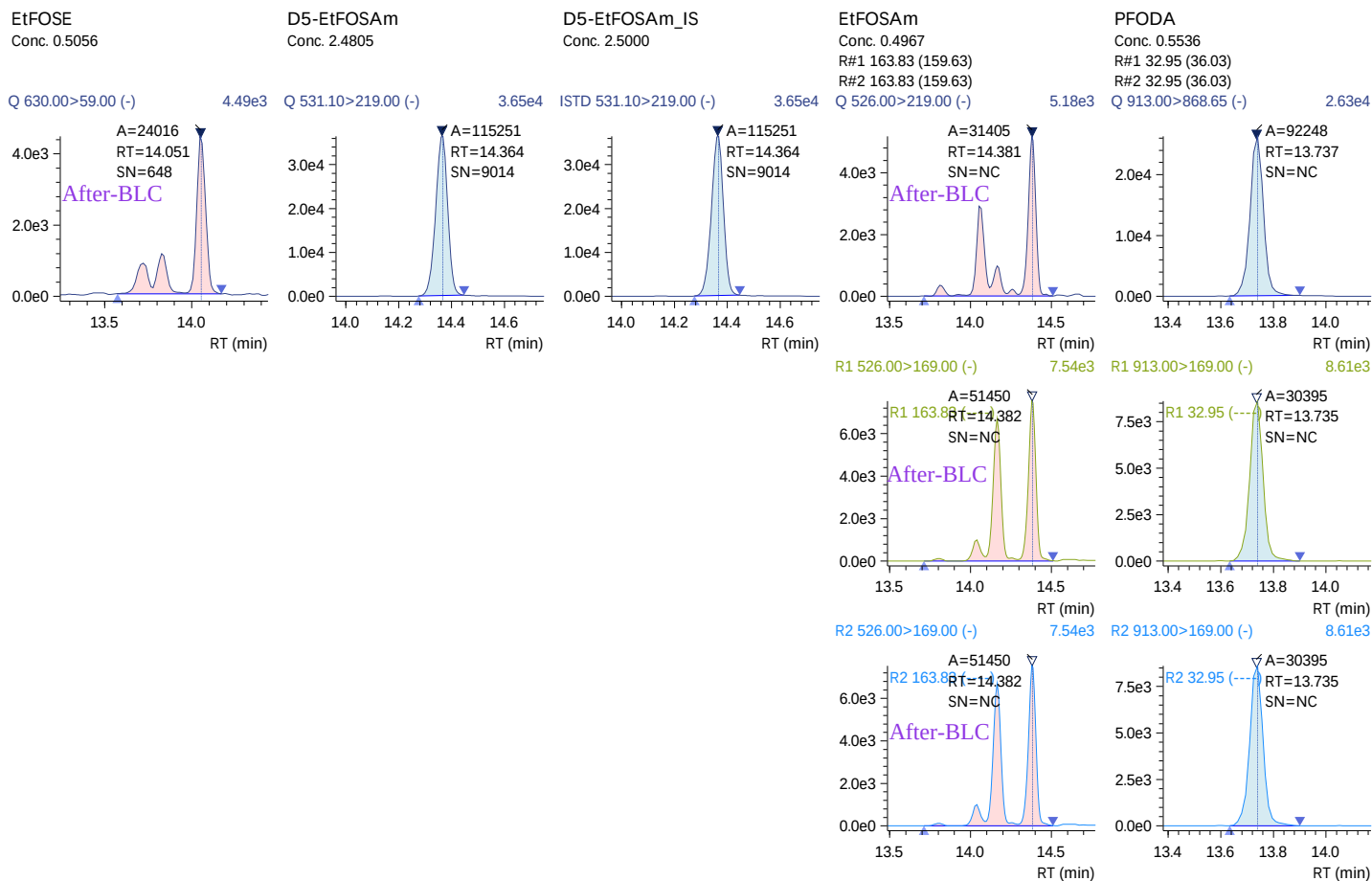
R2 511.90>169.00 (-)

5.55e3





240130_021 (continued)



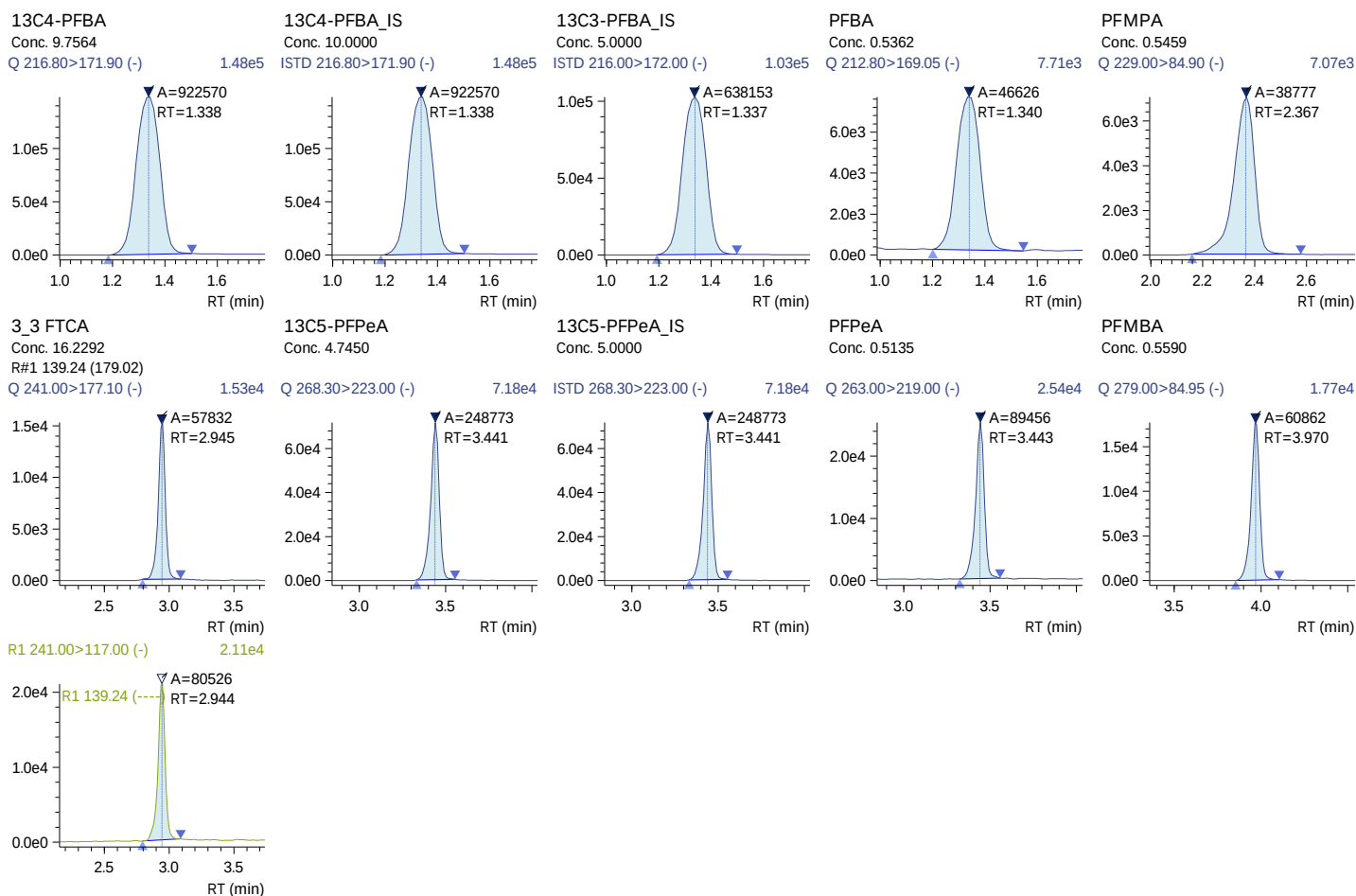
J:\LCMS08\Data\240130_1633_Curve\240130_1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_021

Sample ID: 1633 ICAL 0.5PPB
Date Acquired: 1/30/2024 10:28:43 PM
Acquired by: System Administrator
Data File: 240130_021
Vial: 4 | Inj. Volume: 10.0000uL | Tray: 1





240130_021 (continued)

13C2-4_2 FTS
Conc. 5.0884

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. 0.5586
R#1 33.60 (24.69)
R#2 33.60 (0.00)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 0.4631
R#1 46.25 (52.67)
R#2 46.25 (0.00)

Q 329.10>80.90 (-)

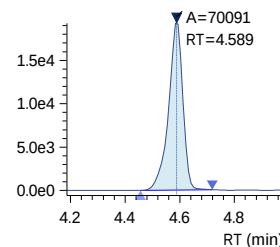
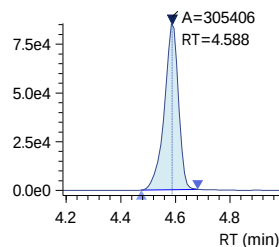
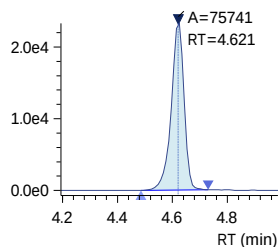
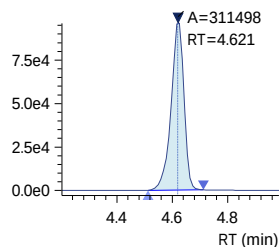
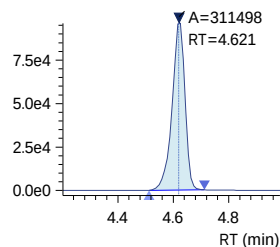
9.62e4 ISTD 329.10>80.90 (-)

9.62e4 Q 327.10>307.00 (-)

2.33e4 ISTD 302.10>79.90 (-)

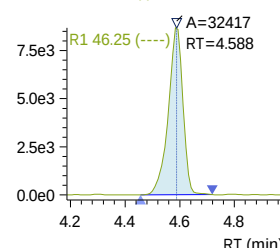
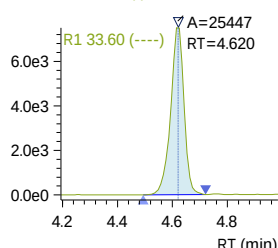
8.57e4 Q 298.70>79.90 (-)

1.93e4



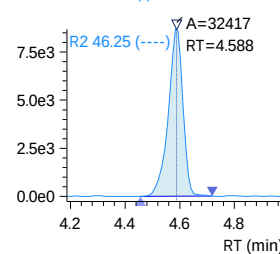
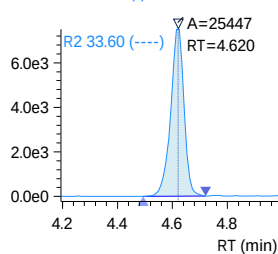
R1 327.10>80.90 (-) 7.51e3

R1 298.70>98.80 (-) 8.68e3



R2 327.10>80.90 (-) 7.51e3

R2 298.70>98.80 (-) 8.68e3





240130_021 (continued)

13C3-PFBS
 Conc. 2.5169

NFDHA
 Conc. 0.5529
 R#1 35.28 (39.38)
 R#2 35.28 (0.00)

13C5-PFHxA
 Conc. 2.3866

13C5-PFHxA_IS
 Conc. 2.5000

13C2-PFHxA_IS
 Conc. 2.5000

Q 302.10>79.90 (-)

8.57e4

Q 295.00>201.00 (-)

1.93e4

Q 318.00>273.00 (-)

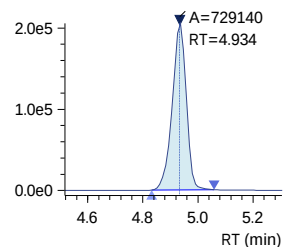
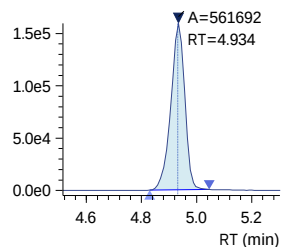
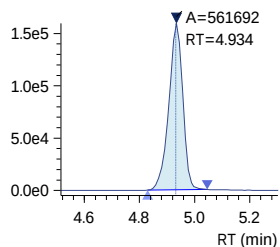
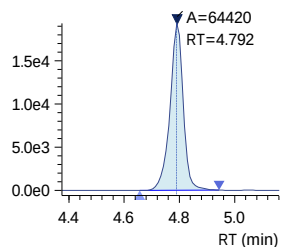
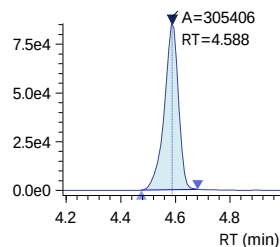
1.60e5

ISTD 318.00>273.00 (-)

1.60e5

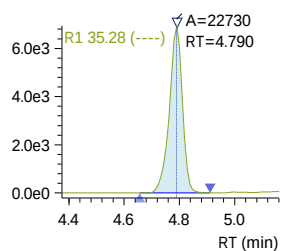
ISTD 315.10>270.00 (-)

2.06e5



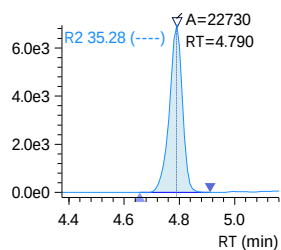
R1 295.00>84.90 (-)

6.94e3



R2 295.00>84.90 (-)

6.94e3





240130_021 (continued)

PFHxA
Conc. 0.5640

PFEESA
Conc. 0.4717
R#1 5.75 (5.25)
R#2 5.75 (0.00)

13C3-HFPO-DA
Conc. 9.9028

13C3-HFPO-DA_IS
Conc. 10.0000

HFPO-DA
Conc. 0.5405
R#1 56.54 (69.48)
R#2 56.54 (0.00)

Q 313.00>269.00 (-)

3.28e4

Q 314.80>135.00 (-)

9.56e4

Q 286.90>168.90 (-)

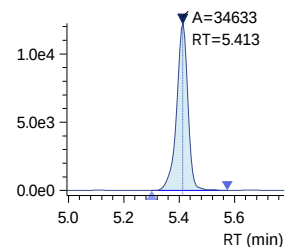
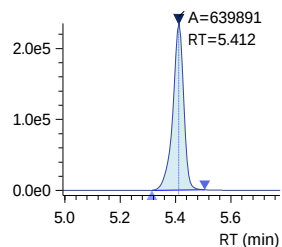
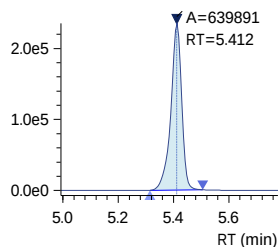
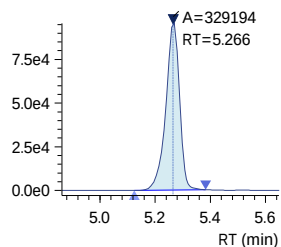
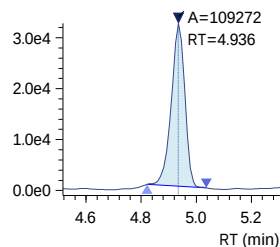
2.35e5

ISTD 286.90>168.90 (-)

2.35e5

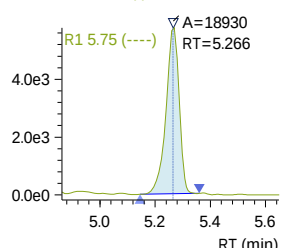
Q 284.90>168.90 (-)

1.22e4



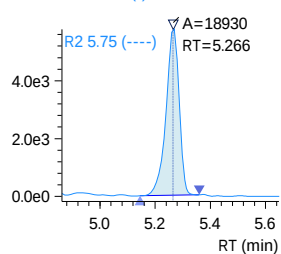
R1 314.80>82.90 (-)

5.78e3



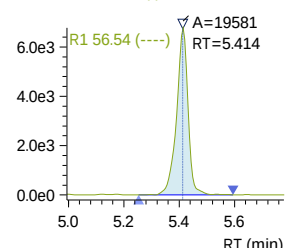
R2 314.80>82.90 (-)

5.78e3



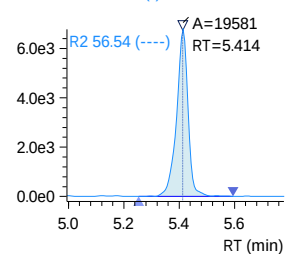
R1 284.90>184.90 (-)

6.78e3



R2 284.90>184.90 (-)

6.78e3





240130_021 (continued)

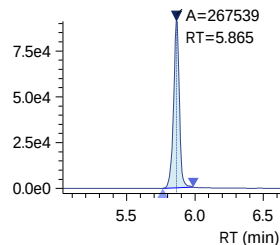
5_3 FTCA

Conc. 15.9341

R#1 157.86 (139.59)

R#2 157.86 (0.00)

Q 341.00>237.05 (-)



R1 341.00>217.00 (-)

9.12e4

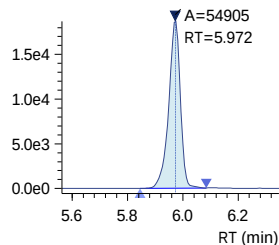
PFPeS

Conc. 0.5142

R#1 56.48 (66.55)

R#2 56.48 (0.00)

Q 349.10>79.90 (-)



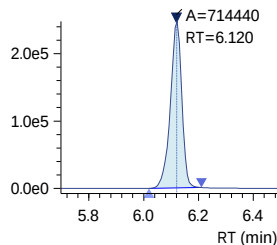
R1 349.10>98.80 (-)

1.87e4

13C4-PFHpA

Conc. 2.4129

Q 367.10>322.00 (-)

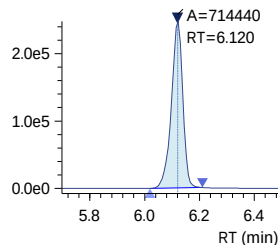


2.48e5

13C4-PFHpA_IS

Conc. 2.5000

ISTD 367.10>322.00 (-)



2.48e5

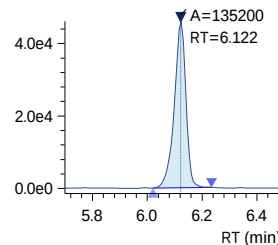
PFHpA

Conc. 0.5201

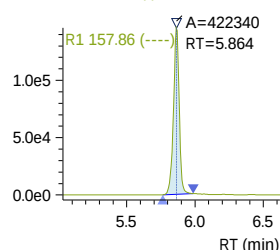
R#1 22.28 (20.13)

R#2 22.28 (0.00)

Q 363.10>319.00 (-)

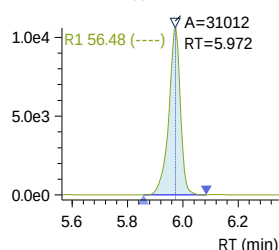


4.61e4



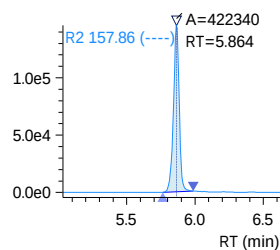
R2 341.00>217.00 (-)

1.46e5



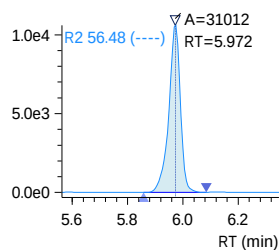
R2 349.10>98.80 (-)

1.06e4



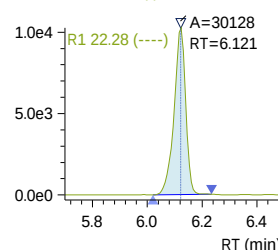
R2 341.00>217.00 (-)

1.46e5



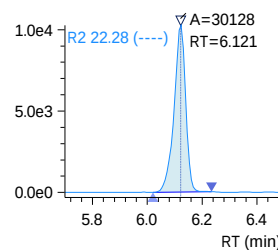
R2 349.10>98.80 (-)

1.06e4



R2 363.10>169.00 (-)

1.03e4

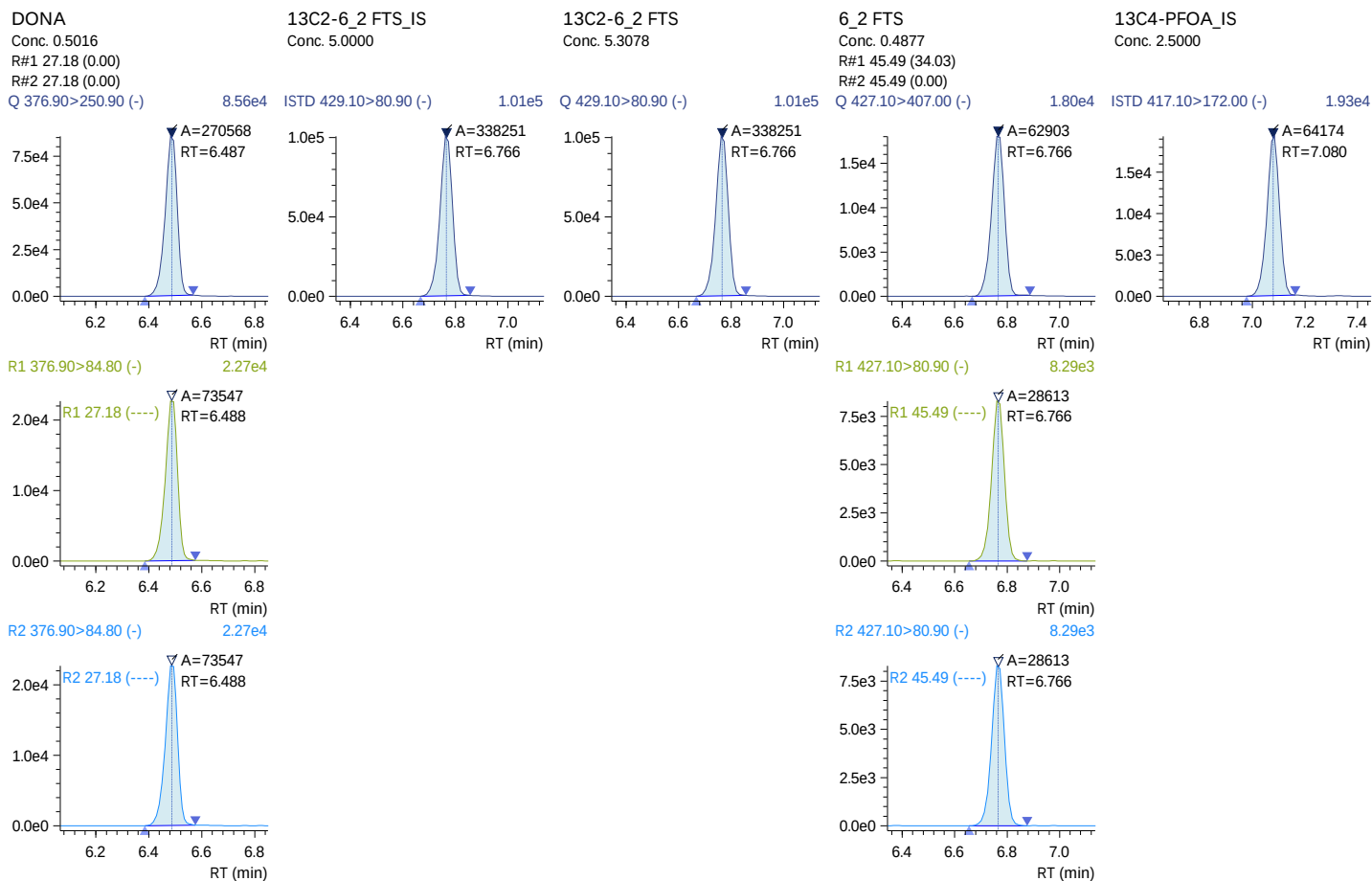


R2 363.10>169.00 (-)

1.03e4



240130_021 (continued)





240130_021 (continued)

13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.4139

PFOA
Conc. 0.5694
R#1 28.32 (22.46)
R#2 28.32 (0.00)

13C3-PFHxS
Conc. 2.3669

13C3-PFHxS_IS
Conc. 2.5000

ISTD 421.10>376.00 (-)

2.21e5

Q 421.10>376.00 (-)

2.21e5

Q 413.00>369.00 (-)

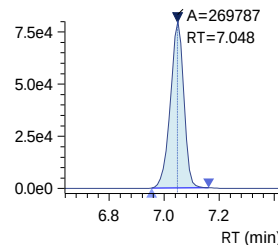
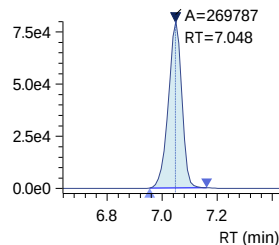
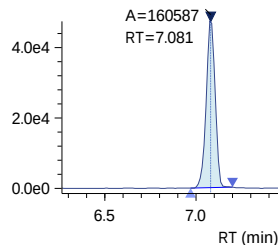
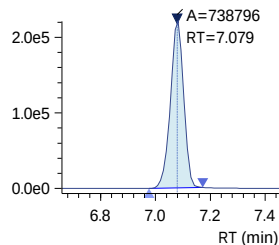
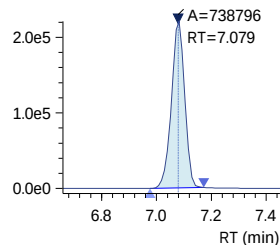
4.75e4

Q 402.10>79.90 (-)

8.01e4

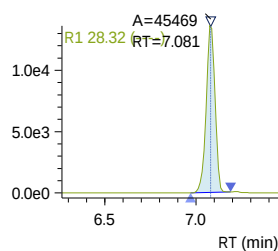
ISTD 402.10>79.90 (-)

8.01e4



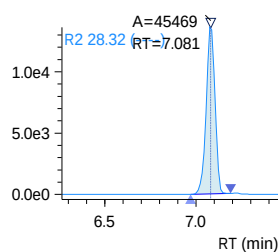
R1 413.00>169.00 (-)

1.36e4



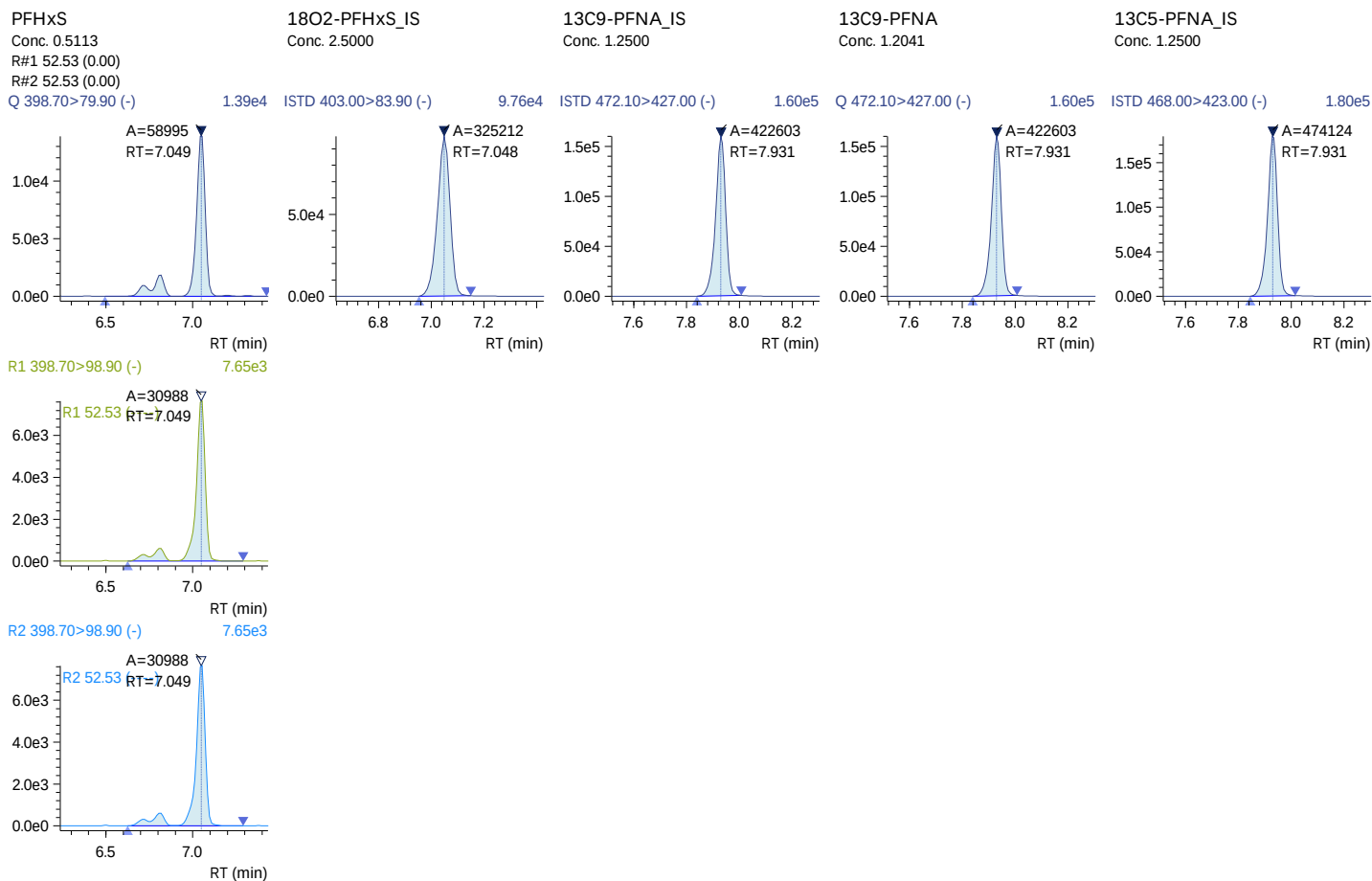
R2 413.00>169.00 (-)

1.36e4



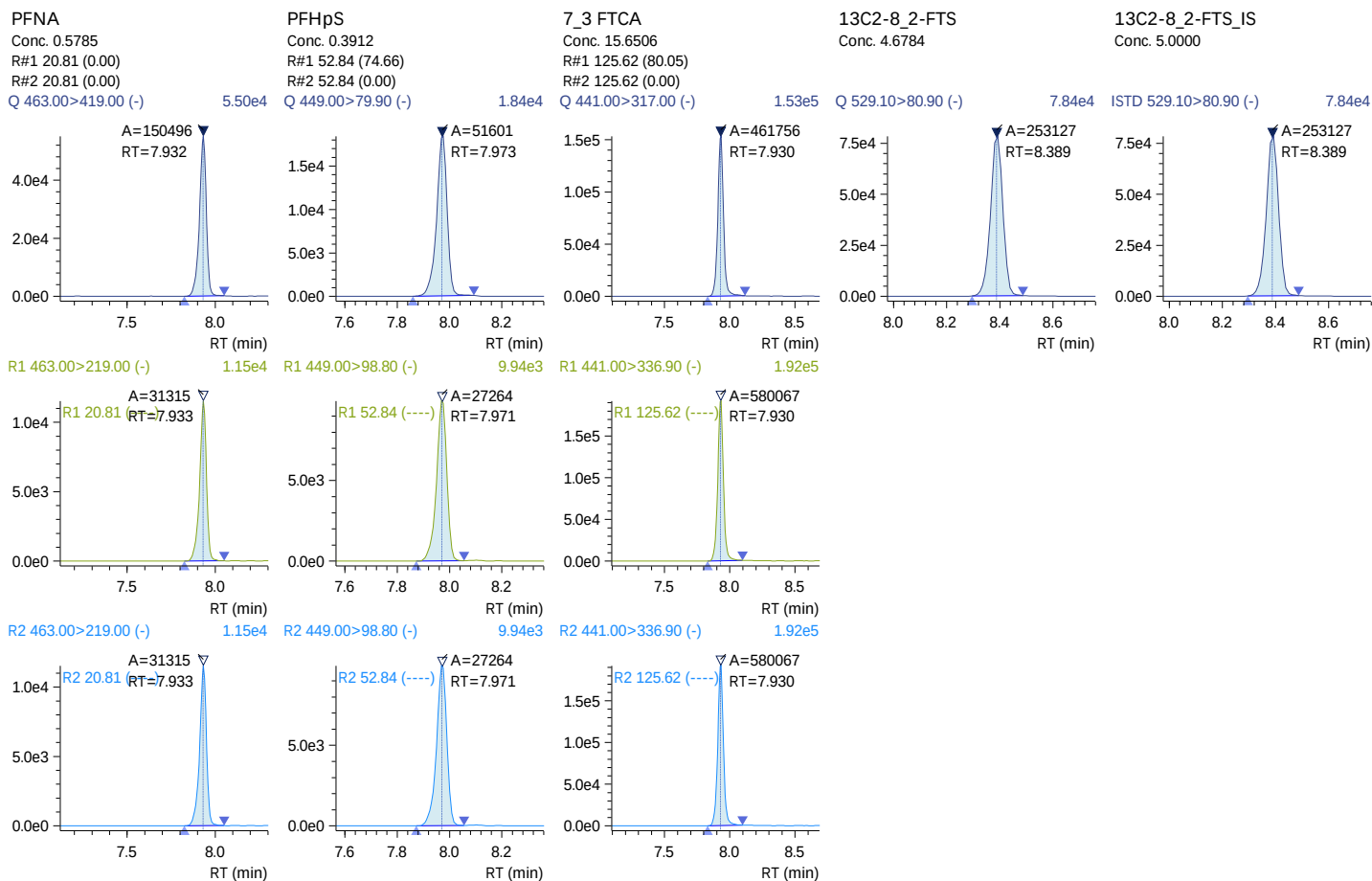


240130_021 (continued)



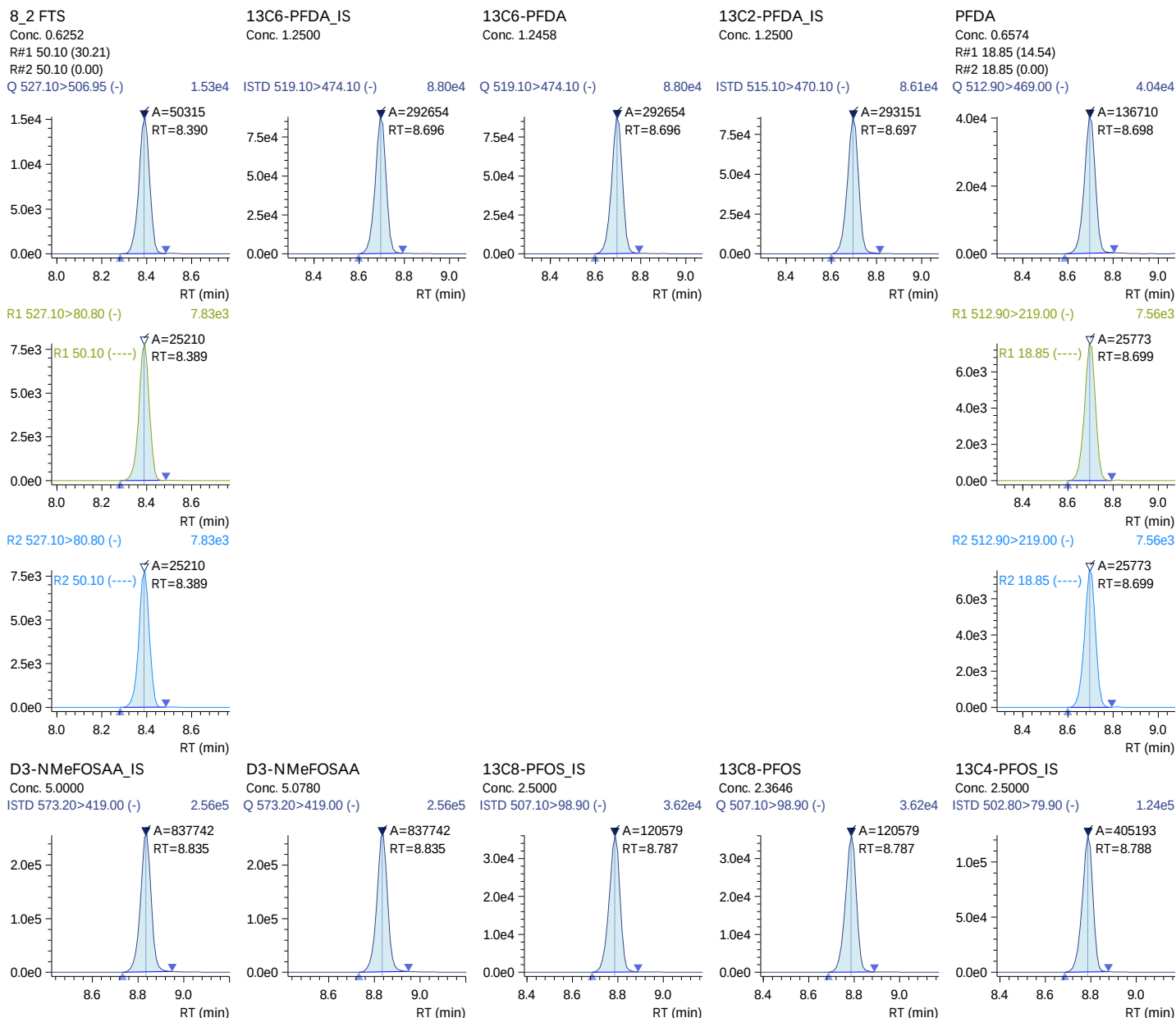


240130_021 (continued)



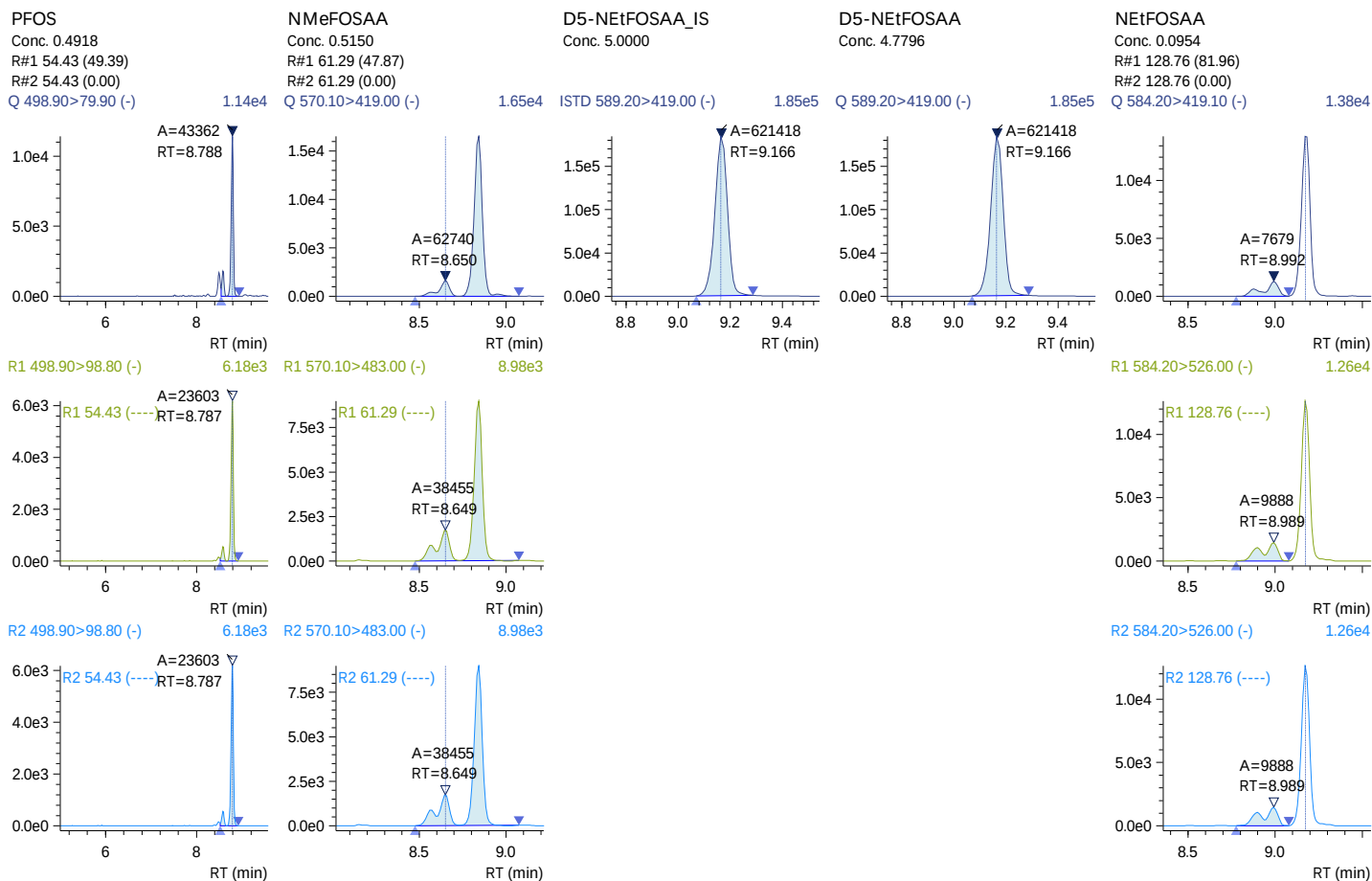


240130_021 (continued)





240130_021 (continued)

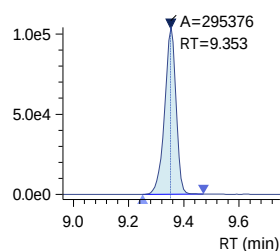




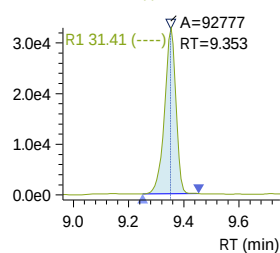
240130_021 (continued)

9-Cl-PF3ONS

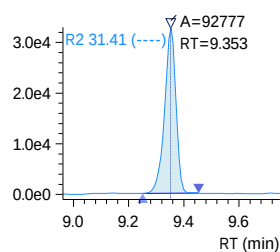
Conc. 0.4707
R#1 31.41 (31.39)
R#2 31.41 (0.00)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-) 3.30e4

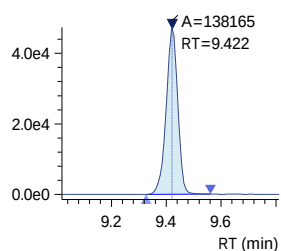


R2 532.80>353.00 (-) 3.30e4

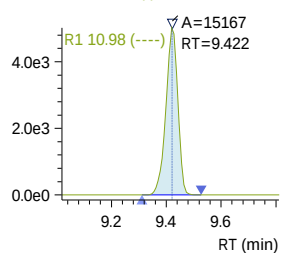


PFUnDA

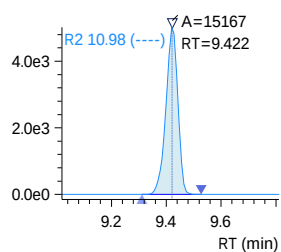
Conc. 0.5404
R#1 10.98 (12.59)
R#2 10.98 (0.00)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-) 5.02e3

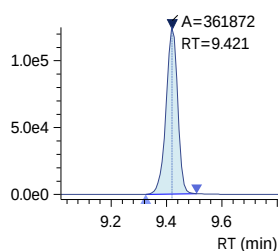


R2 563.10>269.10 (-) 5.02e3



13C7-PFUnDA_IS

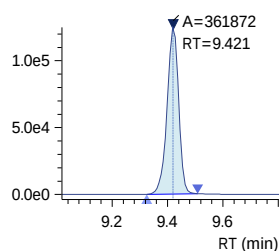
Conc. 1.2500
ISTD 570.00>525.10 (-)



1.25e5

13C7-PFUnDA

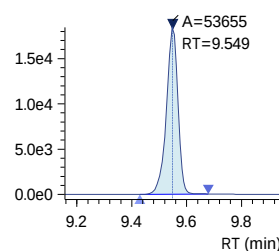
Conc. 1.2397
Q 570.00>525.10 (-)



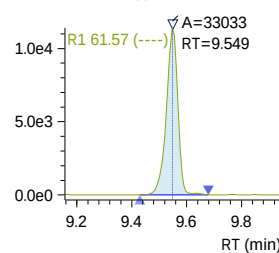
1.25e5

PFNS

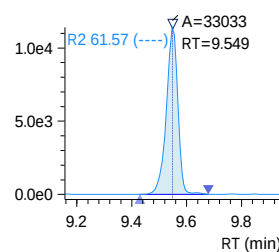
Conc. 0.5258
R#1 61.57 (82.65)
R#2 61.57 (0.00)
Q 548.80>79.90 (-)



1.84e4



1.14e4





240130_021 (continued)

10_2 FTS

Conc. 0.5863
R#1 34.29 (16.46)
R#2 34.29 (0.00)

Q 626.80>607.05 (-)

2.44e4

13C2-PFDOA_IS

Conc. 1.2500

ISTD 615.10>570.00 (-)

1.54e5

13C2-PFDOA

Conc. 1.2430

Q 615.10>570.00 (-)

1.54e5

PFDOA

Conc. 0.5260
R#1 10.22 (10.12)
R#2 10.22 (0.00)

Q 613.10>569.00 (-)

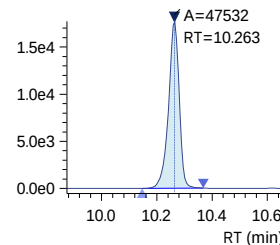
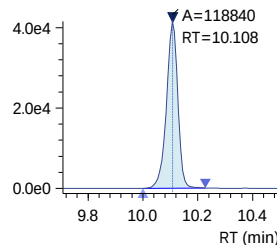
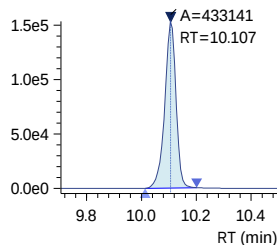
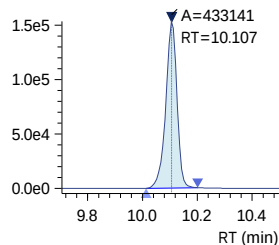
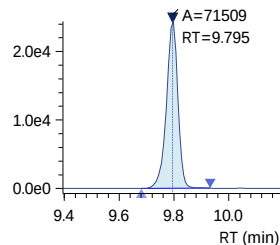
4.16e4

PFDS

Conc. 0.5304
R#1 60.45 (77.67)
R#2 60.45 (0.00)

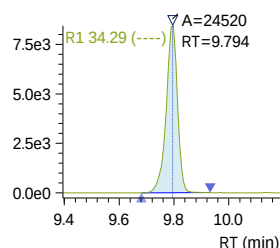
Q 599.00>79.90 (-)

1.77e4



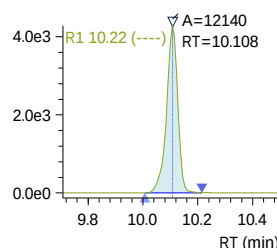
R1 626.80>81.00 (-)

8.43e3



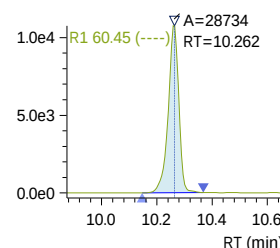
R1 613.10>319.00 (-)

4.28e3



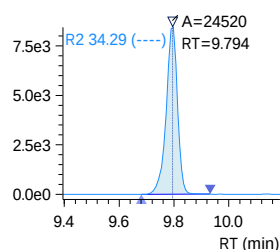
R1 599.00>98.80 (-)

1.08e4



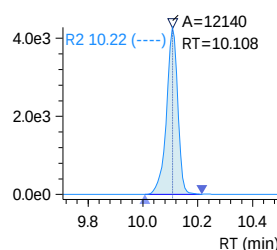
R2 626.80>81.00 (-)

8.43e3



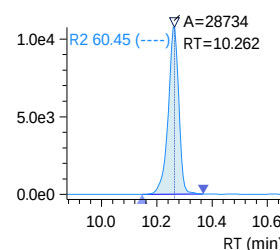
R2 613.10>319.00 (-)

4.28e3



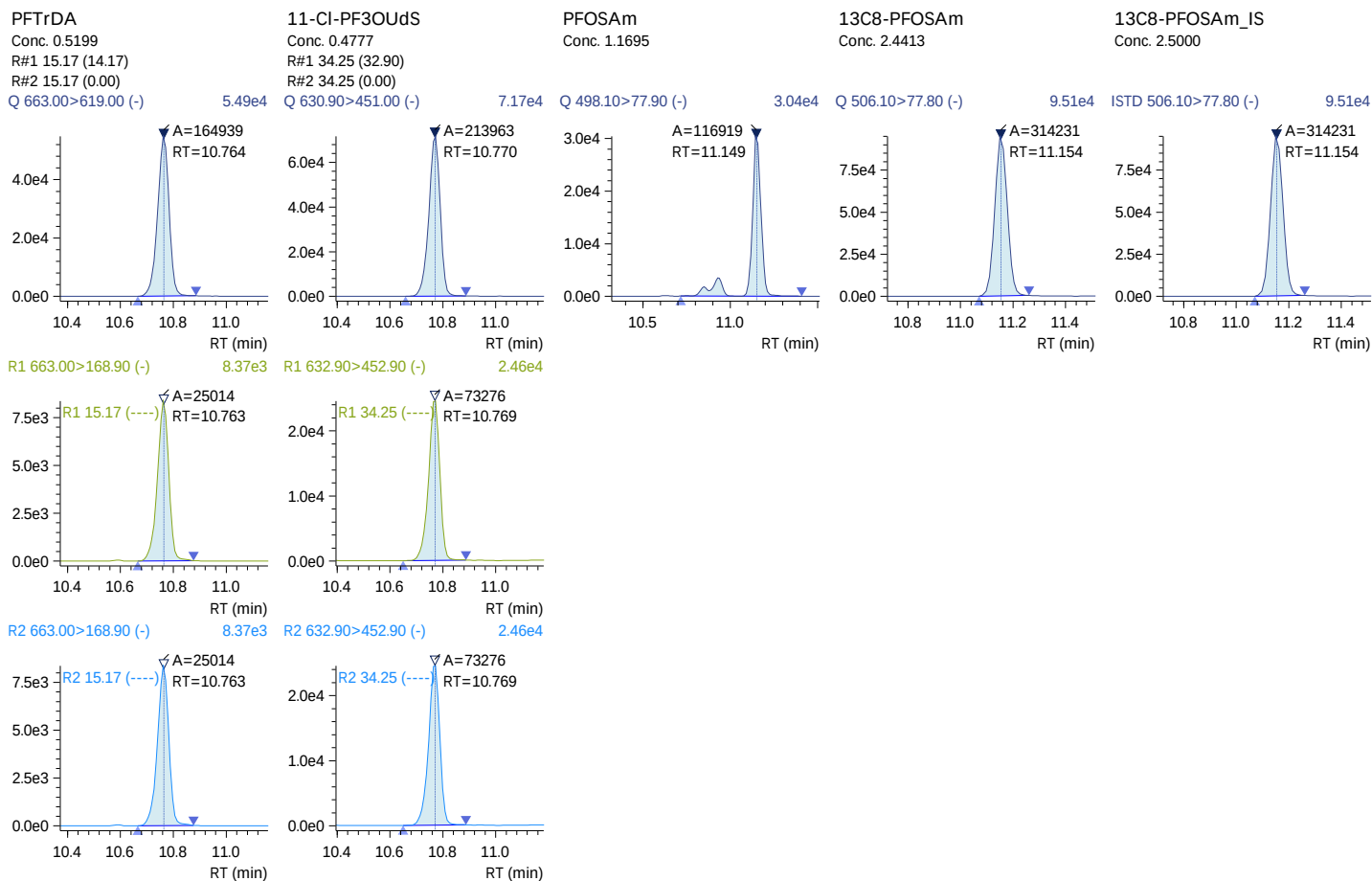
R2 599.00>98.80 (-)

1.08e4



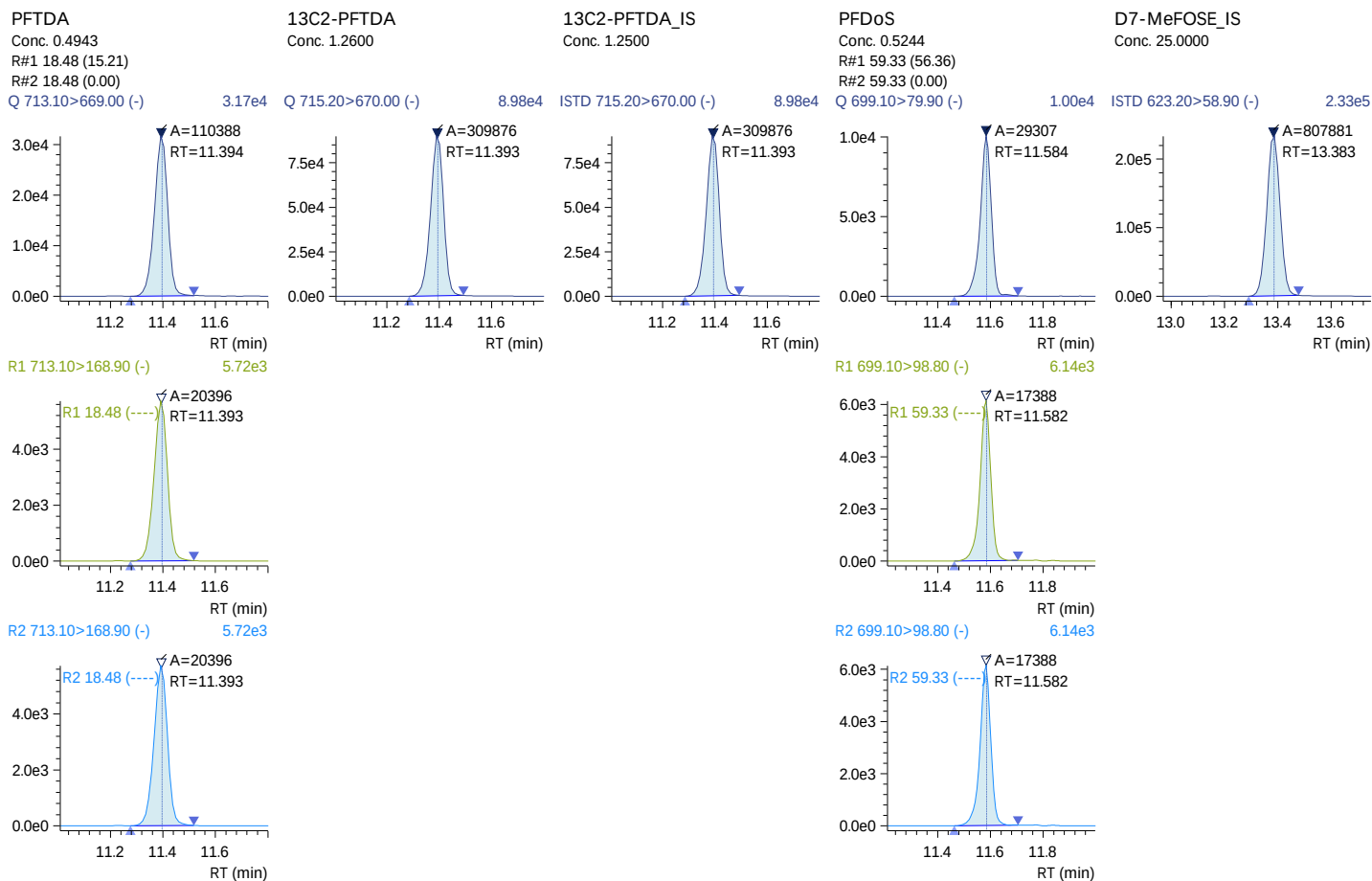


240130_021 (continued)





240130_021 (continued)





240130_021 (continued)

D7-MeFOSE
 Conc. 24.4498

MeFOSE
 Conc. 0.4989

¹³C2-PFHXA_IS
 Conc. 2.5000

¹³C2-PFHXA
 Conc. 2.4717

PFHXA
 Conc. 0.4969
 R#1 11.86 (9.60)
 R#2 11.86 (0.00)

Q 623.20>58.90 (-)

2.33e5

Q 616.10>59.00 (-)

3.68e3

ISTD 815.00>770.05 (-)

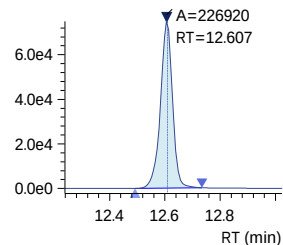
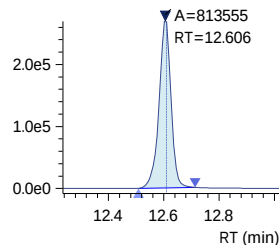
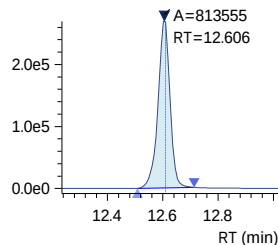
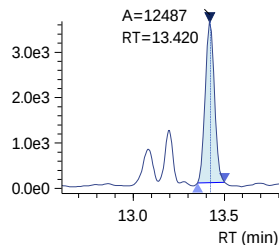
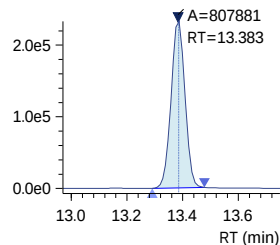
2.70e5

Q 815.00>770.05 (-)

2.70e5

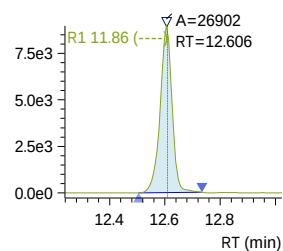
Q 813.00>768.95 (-)

7.50e4



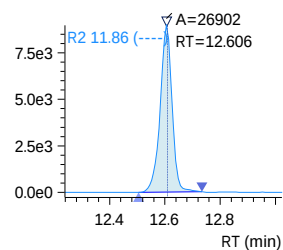
R1 813.00>218.95 (-)

8.97e3



R2 813.00>218.95 (-)

8.97e3





240130_021 (continued)

D3-MeFOSA
 Conc. 2.4038

D3-MeFOSA_IS
 Conc. 2.5000

MeFOSA
 Conc. 0.5046
 R#1 137.09 (98.91)
 R#2 137.09 (0.00)

D9-EtFOSE_IS
 Conc. 25.0000

D9-EtFOSE
 Conc. 24.2824

Q 515.00>219.00 (-)

2.40e4

ISTD 515.00>219.00 (-)

2.40e4

Q 511.90>219.00 (-)

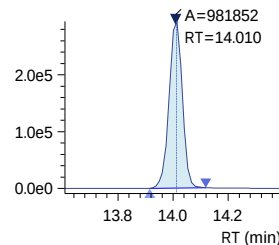
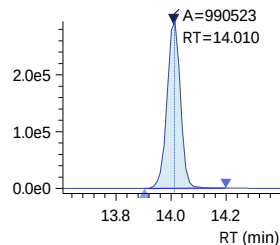
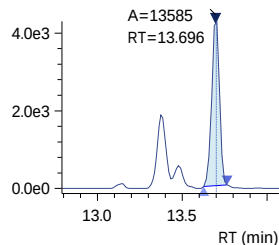
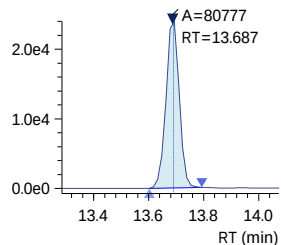
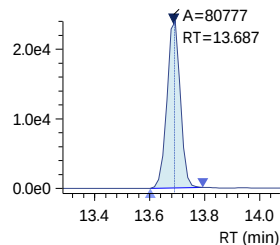
4.30e3

ISTD 639.20>58.90 (-)

2.94e5

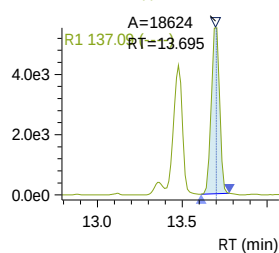
Q 639.20>58.90 (-)

2.94e5



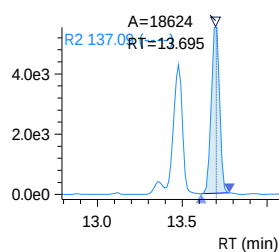
R1 511.90>169.00 (-)

5.55e3



R2 511.90>169.00 (-)

5.55e3





240130_021 (continued)

EtFOSE
Conc. 0.5086

D5-EtFOSAm
Conc. 2.4805

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. 0.4845

PFODA
Conc. 0.5197

Q 630.00>59.00 (-)

4.49e3

Q 531.10>219.00 (-)

3.65e4

ISTD 531.10>219.00 (-)

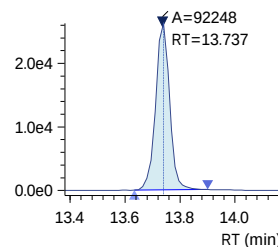
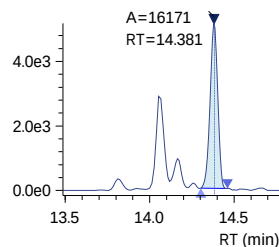
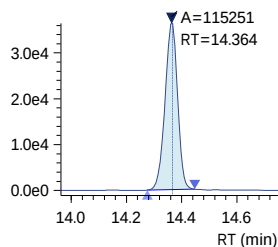
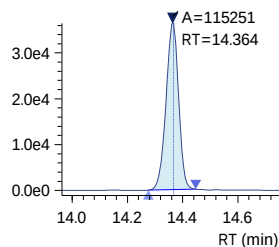
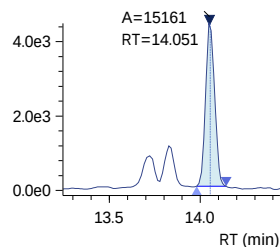
3.65e4

Q 526.00>219.00 (-)

5.18e3

Q 913.00>868.65 (-)

2.63e4

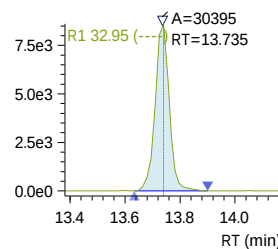
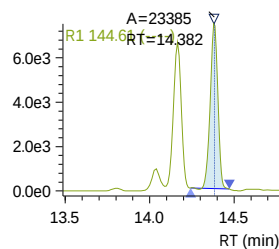


R1 526.00>169.00 (-)

7.54e3

R1 913.00>169.00 (-)

8.61e3

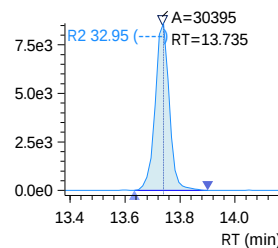
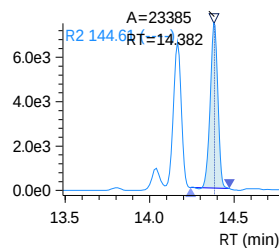


R2 526.00>169.00 (-)

7.54e3

R2 913.00>169.00 (-)

8.61e3

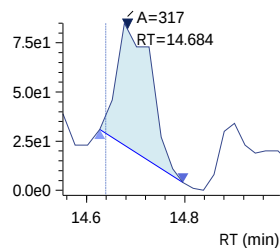


positive trans

Conc. 1.3795

Q 514.80>219.10 (+)

8.50e1





240130_022

Sample ID: 1633 ICAL 1.0PPB
Date Acquired: 1/30/2024 10:51:58 PM
Acquired by: System Administrator
Data File: 240130_022
Vial: 5 | Inj. Volume: 10.0000uL | Tray: 1

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	916994	----	----	----	----	----	----	
13C4-PFBA_IS	216.80>171.90	----	916994	----	----	----	----	----	----	
13C3-PFBA_IS	216.00>172.00	----	617879	----	----	----	----	----	----	
PFBA	212.80>169.05	----	84780	----	----	----	----	----	----	
PFMPA	229.00>84.90	----	71938	----	----	----	----	----	----	
3_3 FTCA	241.00>177.10	241.00>117.00	69413	96626	139.21	139.21	----	----	----	
13C5-PFPeA	268.30>223.00	----	246969	----	----	----	----	----	----	
13C5-PFPeA_IS	268.30>223.00	----	246969	----	----	----	----	----	----	
PFPeA	263.00>219.00	----	168921	----	----	----	----	----	----	
PFMBA	279.00>84.95	----	111827	----	----	----	----	----	----	
13C2-4_2 FTS	329.10>80.90	----	324631	----	----	----	----	----	----	
13C2-4_2 FTS_IS	329.10>80.90	----	324631	----	----	----	----	----	----	
4_2 FTS	327.10>307.00	327.10>80.90	140903	45232	32.10	32.10	45232	32.10	32.10	
13C3-PFBS_IS	302.10>79.90	----	299211	----	----	----	----	----	----	
PFBS	298.70>79.90	298.70>98.80	130330	58401	44.81	44.81	58401	44.81	44.81	
13C3-PFBS	302.10>79.90	----	299211	----	----	----	----	----	----	
NFDHA	295.00>201.00	295.00>84.90	110402	39242	35.54	35.54	39242	35.54	35.54	
13C5-PFHxA	318.00>273.00	----	561283	----	----	----	----	----	----	
13C5-PFHxA_IS	318.00>273.00	----	561283	----	----	----	----	----	----	
13C2-PFHxA_IS	315.10>270.00	----	690527	----	----	----	----	----	----	
PFHxA	313.00>269.00	----	201128	----	----	----	----	----	----	
PFEESA	314.80>135.00	314.80>82.90	623565	32577	5.22	5.22	32577	5.22	5.22	
13C3-HFPO-DA	286.90>168.90	----	636421	----	----	----	----	----	----	
13C3-HFPO-DA_IS	286.90>168.90	----	636421	----	----	----	----	----	----	
HFPO-DA	284.90>168.90	284.90>184.90	59069	35316	59.79	59.79	35316	59.79	59.79	
5_3 FTCA	341.00>237.05	341.00>217.00	334092	524782	157.08	157.08	524782	157.08	157.08	
PFPeS	349.10>79.90	349.10>98.80	100411	55341	55.12	55.12	55341	55.12	55.12	
13C4-PFHpA	367.10>322.00	----	731415	----	----	----	----	----	----	
13C4-PFHpA_IS	367.10>322.00	----	731415	----	----	----	----	----	----	
PFHpA	363.10>319.00	363.10>169.00	238403	54887	23.02	23.02	54887	23.02	23.02	
DONA	376.90>250.90	376.90>84.80	496775	136610	27.50	27.50	136610	27.50	27.50	
13C2-6_2 FTS_IS	429.10>80.90	----	348751	----	----	----	----	----	----	
13C2-6_2 FTS	429.10>80.90	----	348751	----	----	----	----	----	----	
6_2 FTS	427.10>407.00	427.10>80.90	113485	57277	50.47	50.47	57277	50.47	50.47	
13C4-PFOA_IS	417.10>172.00	----	62281	----	----	----	----	----	----	
13C8-PFOA_IS	421.10>376.00	----	729345	----	----	----	----	----	----	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240130_022 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	729345	----	----	----	----	----	----	----
PFOA	413.00>369.00	413.00>169.00	284600	81887	28.77	28.77	81887	28.77	28.77	
13C3-PFHxS	402.10>79.90	----	263901	----	----	----	----	----	----	----
13C3-PFHxS_IS	402.10>79.90	----	263901	----	----	----	----	----	----	----
PFHxS	398.70>79.90	398.70>98.90	103527	63045	60.90	60.90	63045	60.90	60.90	
18O2-PFHxS_IS	403.00>83.90	----	307264	----	----	----	----	----	----	----
13C9-PFNA_IS	472.10>427.00	----	421202	----	----	----	----	----	----	----
13C9-PFNA	472.10>427.00	----	421202	----	----	----	----	----	----	----
13C5-PFNA_IS	468.00>423.00	----	454453	----	----	----	----	----	----	----
PFNA	463.00>419.00	463.00>219.00	272748	52660	19.31	19.31	52660	19.31	19.31	
PFHpS	449.00>79.90	449.00>98.80	97444	51096	52.44	52.44	51096	52.44	52.44	
7_3 FTCA	441.00>317.00	441.00>336.90	541017	700384	129.46	129.46	700384	129.46	129.46	
13C2-8_2-FTS	529.10>80.90	----	277566	----	----	----	----	----	----	----
13C2-8_2-FTS_IS	529.10>80.90	----	277566	----	----	----	----	----	----	----
8_2 FTS	527.10>506.95	527.10>80.80	94760	43573	45.98	45.98	43573	45.98	45.98	
13C6-PFDA_IS	519.10>474.10	----	280455	----	----	----	----	----	----	----
13C6-PFDA	519.10>474.10	----	280455	----	----	----	----	----	----	----
13C2-PFDA_IS	515.10>470.10	----	277320	----	----	----	----	----	----	----
PFDA	512.90>469.00	512.90>219.00	232262	41532	17.88	17.88	41532	17.88	17.88	
D3-NMeFOSAA_IS	573.20>419.00	----	809326	----	----	----	----	----	----	----
D3-NMeFOSAA	573.20>419.00	----	809326	----	----	----	----	----	----	----
13C8-PFOS_IS	507.10>98.90	----	117278	----	----	----	----	----	----	----
13C8-PFOS	507.10>98.90	----	117278	----	----	----	----	----	----	----
13C4-PFOS_IS	502.80>79.90	----	386731	----	----	----	----	----	----	----
PFOS	498.90>79.90	498.90>98.80	89280	47852	53.60	53.60	47852	53.60	53.60	
NMeFOSAA	570.10>419.00	570.10>483.00	116253	75431	64.89	64.89	75431	64.89	64.89	
D5-NEtFOSAA_IS	589.20>419.00	----	600459	----	----	----	----	----	----	----
D5-NEtFOSAA	589.20>419.00	----	600459	----	----	----	----	----	----	----
NEtFOSAA	584.20>419.10	584.20>526.00	99882	95961	96.07	96.07	95961	96.07	96.07	
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	552546	171016	30.95	30.95	171016	30.95	30.95	
PFUnDA	563.10>519.00	563.10>269.10	244961	26979	11.01	11.01	26979	11.01	11.01	
13C7-PFUnDA_IS	570.00>525.10	----	350696	----	----	----	----	----	----	----
13C7-PFUnDA	570.00>525.10	----	350696	----	----	----	----	----	----	----
PFNS	548.80>79.90	548.80>98.80	101117	61112	60.44	60.44	61112	60.44	60.44	
10_2 FTS	626.80>607.05	626.80>81.00	123239	44538	36.14	36.14	44538	36.14	36.14	
13C2-PFDOA_IS	615.10>570.00	----	424303	----	----	----	----	----	----	----
13C2-PFDOA	615.10>570.00	----	424303	----	----	----	----	----	----	----
PFDOA	613.10>569.00	613.10>319.00	208478	21187	10.16	10.16	21187	10.16	10.16	
PFDS	599.00>79.90	599.00>98.80	85943	50072	58.26	58.26	50072	58.26	58.26	
PFTrDA	663.00>619.00	663.00>168.90	303017	49021	16.18	16.18	49021	16.18	16.18	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240130_022 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	398078	139290	34.99	34.99	139290	34.99	34.99	
PFOSAm	498.10>77.90	----	211550	----	----	----	----	----	----	
13C8-PFOSAm	506.10>77.80	----	318648	----	----	----	----	----	----	
13C8-PFOSAm_IS	506.10>77.80	----	318648	----	----	----	----	----	----	
PFTDA	713.10>669.00	713.10>168.90	213487	38537	18.05	18.05	38537	18.05	18.05	
13C2-PFTDA	715.20>670.00	----	304626	----	----	----	----	----	----	
13C2-PFTDA_IS	715.20>670.00	----	304626	----	----	----	----	----	----	
PFDoS	699.10>79.90	699.10>98.80	55077	33666	61.13	61.13	33666	61.13	61.13	
D7-MeFOSE_IS	623.20>58.90	----	775055	----	----	----	----	----	----	
D7-MeFOSE	623.20>58.90	----	775055	----	----	----	----	----	----	
MeFOSE	616.10>59.00	----	36363	----	----	----	----	----	----	
13C2-PFHxDA_IS	815.00>770.05	----	783988	----	----	----	----	----	----	
13C2-PFHxDA	815.00>770.05	----	783988	----	----	----	----	----	----	
PFHxDA	813.00>768.95	813.00>218.95	413181	48172	11.66	11.66	48172	11.66	11.66	
D3-MeFOSA	515.00>219.00	----	78012	----	----	----	----	----	----	
D3-MeFOSA_IS	515.00>219.00	----	78012	----	----	----	----	----	----	
MeFOSA	511.90>219.00	511.90>169.00	43726	70153	160.44	160.44	70153	160.44	160.44	
D9-EtFOSE_IS	639.20>58.90	----	948753	----	----	----	----	----	----	
D9-EtFOSE	639.20>58.90	----	941850	----	----	----	----	----	----	
EtFOSE	630.00>59.00	----	45241	----	----	----	----	----	----	
D5-EtFOSAm	531.10>219.00	----	110231	----	----	----	----	----	----	
D5-EtFOSAm_IS	531.10>219.00	----	110231	----	----	----	----	----	----	
EtFOSAm	526.00>219.00	526.00>169.00	59297	92177	155.45	159.63	92177	155.45	159.63	
PFODA	913.00>868.65	913.00>169.00	149131	53729	36.03	36.03	53729	36.03	36.03	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
 IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240130_022

Sample ID: 1633 ICAL 1.0PPB
Date Acquired: 1/30/2024 10:51:58 PM
Acquired by: System Administrator
Data File: 240130_022
Vial: 5 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.338	0.000	0.001	916994	617879	13C3-PFBA_IS	10.0157	ng/mL	
13C4-PFBA_IS	Auto	1.338	0.000	----	916994	916994	----	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.337	0.000	----	617879	617879	----	5.0000	ng/mL	
PFBA	Auto	1.341	0.000	0.003	84780	916994	13C4-PFBA_IS	0.9822	ng/mL	
PFMPA	Auto	2.366	0.000	-1.073	71938	246969	13C5-PFPeA_IS	1.0201	ng/mL	
3_3 FTCA	Auto	2.945	0.000	-0.494	69413	246969	13C5-PFPeA_IS	19.6213	ng/mL	
13C5-PFPeA	Auto	3.439	0.000	-1.494	246969	690527	13C2-PFHxA_IS	4.9740	ng/mL	
13C5-PFPeA_IS	Auto	3.439	0.000	----	246969	246969	----	5.0000	ng/mL	
PFPeA	Auto	3.442	0.000	0.003	168921	246969	13C5-PFPeA_IS	0.9768	ng/mL	
PFMBA	Auto	3.969	0.000	0.530	111827	246969	13C5-PFPeA_IS	1.0347	ng/mL	
13C2-4_2 FTS	Auto	4.620	0.000	-2.428	324631	307264	18O2-PFHxS_IS	5.6127	ng/mL	
13C2-4_2 FTS_IS	Auto	4.620	0.000	----	324631	324631	----	5.0000	ng/mL	
4_2 FTS	Auto	4.620	0.000	0.000	140903	324631	13C2-4_2 FTS_IS	0.8756	ng/mL	
13C3-PFBS_IS	Auto	4.587	0.000	----	299211	299211	----	2.5000	ng/mL	
PFBS	Auto	4.588	0.000	0.001	130330	299211	13C3-PFBS_IS	0.8790	ng/mL	
13C3-PFBS	Auto	4.587	0.000	-2.461	299211	307264	18O2-PFHxS_IS	2.6099	ng/mL	
NFDHA	Auto	4.790	0.000	-0.142	110402	561283	13C5-PFHxA_IS	0.9483	ng/mL	
13C5-PFHxA	Auto	4.932	0.000	-0.001	561283	690527	13C2-PFHxA_IS	2.5182	ng/mL	
13C5-PFHxA_IS	Auto	4.932	0.000	----	561283	561283	----	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	4.933	0.000	----	690527	690527	----	2.5000	ng/mL	
PFHxA	Auto	4.934	0.000	0.002	201128	561283	13C5-PFHxA_IS	0.9562	ng/mL	
PFEESA	Auto	5.265	0.000	0.333	623565	561283	13C5-PFHxA_IS	0.8942	ng/mL	
13C3-HFPO-DA	Auto	5.412	0.000	0.479	636421	690527	13C2-PFHxA_IS	10.3998	ng/mL	
13C3-HFPO-DA_IS	Auto	5.412	0.000	----	636421	636421	----	10.0000	ng/mL	
HFPO-DA	Auto	5.413	0.000	0.001	59069	636421	13C3-HFPO-DA_IS	0.9439	ng/mL	
5_3 FTCA	Auto	5.866	0.000	0.934	334092	561283	13C5-PFHxA_IS	19.9123	ng/mL	
PFPeS	Auto	5.973	0.000	-1.075	100411	263901	13C3-PFHxS_IS	0.9613	ng/mL	
13C4-PFHpA	Auto	6.120	0.000	1.187	731415	690527	13C2-PFHxA_IS	2.6083	ng/mL	
13C4-PFHpA_IS	Auto	6.120	0.000	----	731415	731415	----	2.5000	ng/mL	
PFHpA	Auto	6.122	0.000	0.002	238403	731415	13C4-PFHpA_IS	0.9435	ng/mL	
DONA	Auto	6.487	0.000	1.075	496775	636421	13C3-HFPO-DA_IS	0.9260	ng/mL	
13C2-6_2 FTS_IS	Auto	6.766	0.000	----	348751	348751	----	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.766	0.000	-0.282	348751	307264	18O2-PFHxS_IS	5.7922	ng/mL	
6_2 FTS	Auto	6.765	0.000	-0.001	113485	348751	13C2-6_2 FTS_IS	0.8533	ng/mL	
13C4-PFOA_IS	Auto	7.079	0.000	----	62281	62281	----	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.078	0.000	----	729345	729345	----	2.5000	ng/mL	
13C8-PFOA	Auto	7.078	0.000	-0.001	729345	62281	13C4-PFOA_IS	2.4555	ng/mL	
PFOA	Auto	7.081	0.000	0.003	284600	729345	13C8-PFOA_IS	1.0540	ng/mL	
13C3-PFHxS	Auto	7.048	0.000	0.000	263901	307264	18O2-PFHxS_IS	2.4505	ng/mL	
13C3-PFHxS_IS	Auto	7.048	0.000	----	263901	263901	----	2.5000	ng/mL	
PFHxS	Auto	7.048	0.000	0.000	103527	263901	13C3-PFHxS_IS	0.8975	ng/mL	
18O2-PFHxS_IS	Auto	7.048	0.000	----	307264	307264	----	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.929	0.000	----	421202	421202	----	1.2500	ng/mL	
13C9-PFNA	Auto	7.929	0.000	-0.001	421202	454453	13C5-PFNA_IS	1.2521	ng/mL	
13C5-PFNA_IS	Auto	7.930	0.000	----	454453	454453	----	1.2500	ng/mL	
PFNA	Auto	7.931	0.000	0.001	272748	421202	13C9-PFNA_IS	0.9784	ng/mL	
PFHpS	Auto	7.971	0.000	-0.815	97444	117278	13C8-PFOS_IS	0.9882	ng/mL	
7_3 FTCA	Auto	7.929	0.000	2.997	541017	561283	13C5-PFHxA_IS	18.3505	ng/mL	
13C2-8_2-FTS	Auto	8.388	0.000	1.340	277566	307264	18O2-PFHxS_IS	5.4297	ng/mL	
13C2-8_2-FTS_IS	Auto	8.388	0.000	----	277566	277566	----	5.0000	ng/mL	
8_2 FTS	Auto	8.388	0.000	0.000	94760	277566	13C2-8_2-FTS_IS	0.8956	ng/mL	
13C6-PFDA_IS	Auto	8.695	0.000	----	280455	280455	----	1.2500	ng/mL	
13C6-PFDA	Auto	8.695	0.000	-0.001	280455	277320	13C2-PFDA_IS	1.2620	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_022 (continued)

(Table continued from previous page)

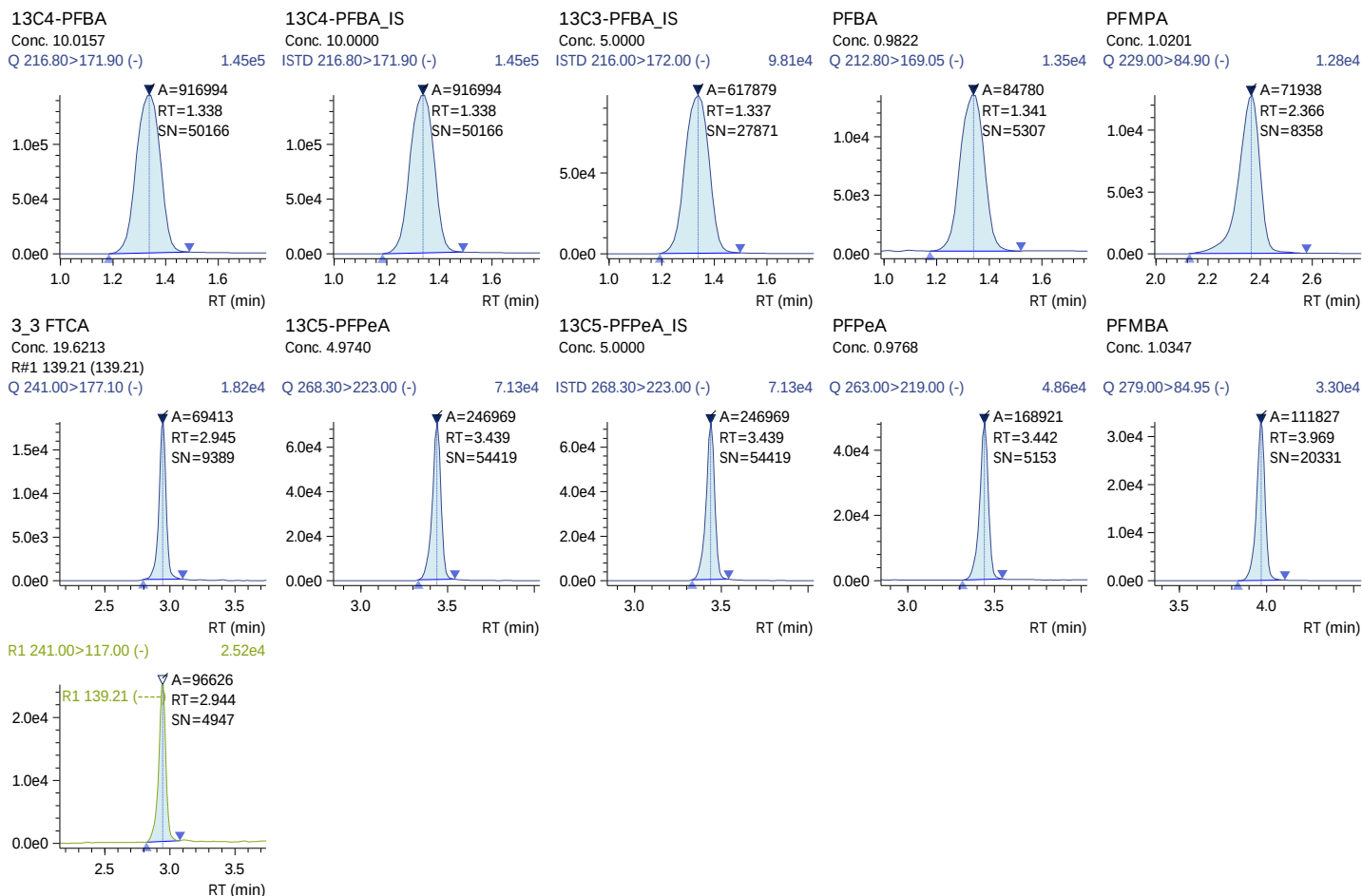
Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C2-PFDA_IS	Auto	8.696	0.000	----	277320	277320	----	1.2500	ng/mL	
PFDA	Auto	8.697	0.000	0.002	232262	280455	13C6-PFDA_IS	0.9792	ng/mL	
D3-NMeFOSAA_IS	Auto	8.834	0.000	----	809326	809326	----	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.834	0.000	0.047	809326	386731	13C4-PFOS_IS	5.1399	ng/mL	
13C8-PFOS_IS	Auto	8.786	0.000	----	117278	117278	----	2.5000	ng/mL	
13C8-PFOS	Auto	8.786	0.000	-0.001	117278	386731	13C4-PFOS_IS	2.4096	ng/mL	
13C4-PFOS_IS	Auto	8.787	0.000	----	386731	386731	----	2.5000	ng/mL	
PFOS	M	8.788	0.000	0.002	89280	117278	13C8-PFOS_IS	0.8912	ng/mL	
NMeFOSAA	M	8.840	0.189	0.006	116253	809326	D3-NMeFOSAA_IS	1.0144	ng/mL	
D5-NetFOSAA_IS	Auto	9.164	0.000	----	600459	600459	----	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.164	0.000	0.377	600459	386731	13C4-PFOS_IS	4.8388	ng/mL	
NetFOSAA	M	9.174	0.188	0.010	99882	600459	D5-NetFOSAA_IS	1.0130	ng/mL	
9-CI-PF3ONS	Auto	9.351	0.000	3.939	552546	636421	13C3-HFPO-DA_IS	0.8854	ng/mL	
PFUnDA	Auto	9.421	0.000	0.002	244961	350696	13C7-PFUnDA_IS	1.0052	ng/mL	
13C7-PFUnDA_IS	Auto	9.419	0.000	----	350696	350696	----	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.419	0.000	0.723	350696	277320	13C2-PFDA_IS	1.2700	ng/mL	
PFNS	Auto	9.549	0.000	0.763	101117	117278	13C8-PFOS_IS	1.0187	ng/mL	
10_2_FTS	Auto	9.795	0.000	1.407	123239	277566	13C2-8_2-FTS_IS	0.8790	ng/mL	
13C2-PFDOA_IS	Auto	10.107	0.000	----	424303	424303	----	1.2500	ng/mL	
13C2-PFDOA	Auto	10.107	0.000	1.411	424303	277320	13C2-PFDA_IS	1.2871	ng/mL	
PFDOA	Auto	10.108	0.000	0.001	208478	424303	13C2-PFDOA_IS	0.9573	ng/mL	
PFDS	Auto	10.263	0.000	1.477	85943	117278	13C8-PFOS_IS	0.9860	ng/mL	
PFTDA	Auto	10.764	0.000	-0.631	303017	304626	13C2-PFTDA_IS	0.9875	ng/mL	
11-CI-PF3OUdS	Auto	10.771	0.000	5.359	398078	636421	13C3-HFPO-DA_IS	0.8936	ng/mL	
PFOSAm	M	11.150	0.000	-0.005	211550	318648	13C8-PFOSAm_IS	1.8975	ng/mL	
13C8-PFOSAm	Auto	11.155	0.000	2.368	318648	386731	13C4-PFOS_IS	2.5938	ng/mL	
13C8-PFOSAm_IS	Auto	11.155	0.000	----	318648	318648	----	2.5000	ng/mL	
PFTDA	Auto	11.396	0.000	0.001	213487	304626	13C2-PFTDA_IS	0.9910	ng/mL	
13C2-PFTDA	Auto	11.395	0.000	2.699	304626	277320	13C2-PFDA_IS	1.3093	ng/mL	
13C2-PFTDA_IS	Auto	11.395	0.000	----	304626	304626	----	1.2500	ng/mL	
PFDoS	Auto	11.586	0.000	2.800	55077	117278	13C8-PFOS_IS	1.0132	ng/mL	
D7-MeFOSE_IS	Auto	13.386	0.000	----	775055	775055	----	25.0000	ng/mL	
D7-MeFOSE	Auto	13.386	0.000	4.599	775055	386731	13C4-PFOS_IS	24.5761	ng/mL	
MeFOSE	M	13.423	0.000	0.037	36363	775055	D7-MeFOSE_IS	0.9521	ng/mL	
13C2-PFHXA_IS	Auto	12.609	0.000	----	783988	783988	----	2.5000	ng/mL	
13C2-PFHXA	Auto	12.609	0.000	3.913	783988	277320	13C2-PFDA_IS	2.5179	ng/mL	
PFHXA	Auto	12.610	0.000	0.001	413181	783988	13C2-PFHXA_IS	0.9753	ng/mL	
D3-MeFOSA	Auto	13.690	0.000	4.903	78012	386731	13C4-PFOS_IS	2.4324	ng/mL	
D3-MeFOSA_IS	Auto	13.690	0.000	----	78012	78012	----	2.5000	ng/mL	
MeFOSA	M	13.699	0.000	0.009	43726	78012	D3-MeFOSA_IS	0.9822	ng/mL	
D9-EtFOSE_IS	Auto	14.013	0.000	----	948753	948753	----	25.0000	ng/mL	
D9-EtFOSE	Auto	14.013	0.000	5.226	941850	386731	13C4-PFOS_IS	24.4051	ng/mL	
EtFOSE	M	14.055	0.000	0.042	45241	948753	D9-EtFOSE_IS	0.9943	ng/mL	
D5-EtFOSAm	Auto	14.366	0.000	5.579	110231	386731	13C4-PFOS_IS	2.4857	ng/mL	
D5-EtFOSAm_IS	Auto	14.366	0.000	----	110231	110231	----	2.5000	ng/mL	
EtFOSAm	M	14.384	0.000	0.018	59297	110231	D5-EtFOSAm_IS	0.9806	ng/mL	
PFODA	Auto	13.740	0.000	1.131	149131	783988	13C2-PFHXA_IS	0.9121	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_022 (continued)





240130_022 (continued)

13C2-4_2_FTS
Conc. 5.6127

13C2-4_2_FTS_IS
Conc. 5.0000

4_2_FTS
Conc. 0.8756
R#1 32.10 (32.10)
R#2 32.10 (32.10)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 0.8790
R#1 44.81 (44.81)
R#2 44.81 (44.81)

Q 329.10>80.90 (-)

1.01e5

ISTD 329.10>80.90 (-)

1.01e5

Q 327.10>307.00 (-)

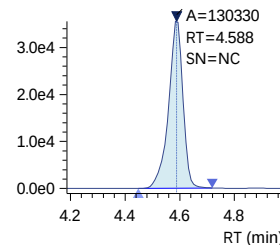
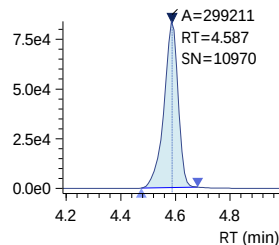
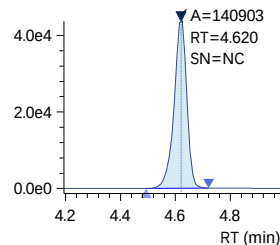
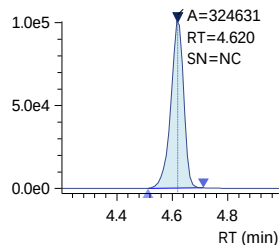
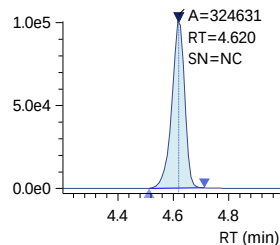
4.37e4

ISTD 302.10>79.90 (-)

8.40e4

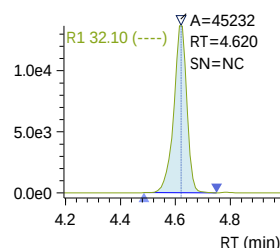
Q 298.70>79.90 (-)

3.56e4



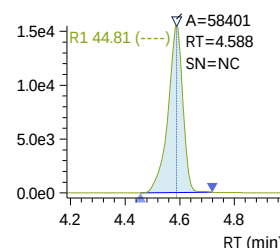
R1 327.10>80.90 (-)

1.37e4



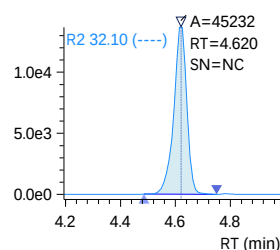
R1 298.70>98.80 (-)

1.55e4



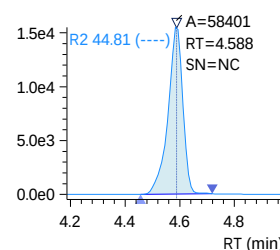
R2 327.10>80.90 (-)

1.37e4



R2 298.70>98.80 (-)

1.55e4





240130_022 (continued)

13C3-PFBS
Conc. 2.6099

NFDHA
Conc. 0.9483
R#1 35.54 (35.54)
R#2 35.54 (35.54)

13C5-PFHxA
Conc. 2.5182

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

Q 302.10>79.90 (-)

8.40e4

Q 295.00>201.00 (-)

3.30e4

Q 318.00>273.00 (-)

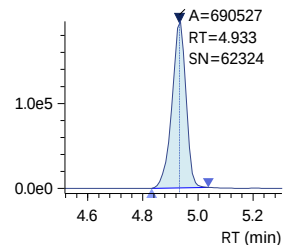
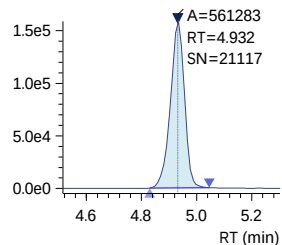
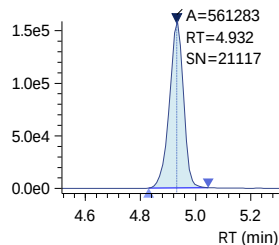
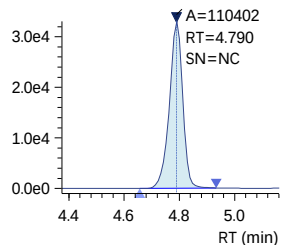
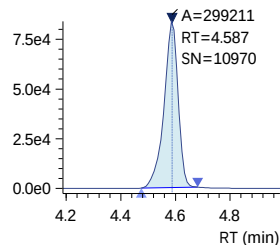
1.59e5

ISTD 318.00>273.00 (-)

1.59e5

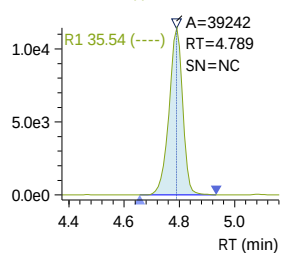
ISTD 315.10>270.00 (-)

1.97e5



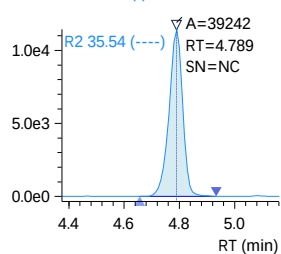
R1 295.00>84.90 (-)

1.14e4



R2 295.00>84.90 (-)

1.14e4

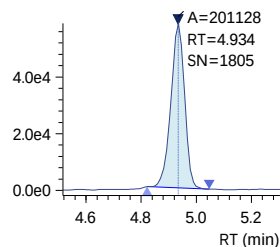




240130_022 (continued)

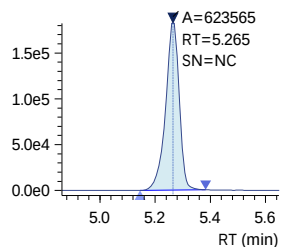
PFHxA
Conc. 0.9562

Q 313.00>269.00 (-)

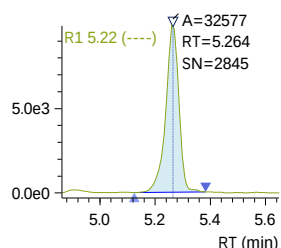


PFEESA
Conc. 0.8942
R#1 5.22 (5.22)
R#2 5.22 (5.22)

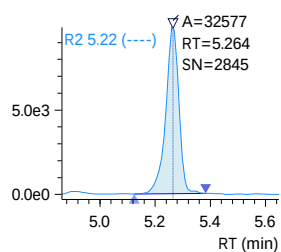
Q 314.80>135.00 (-)



R1 314.80>82.90 (-)

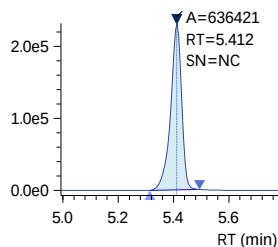


R2 314.80>82.90 (-)



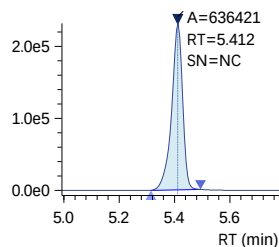
13C3-HFPO-DA
Conc. 10.3998

Q 286.90>168.90 (-)



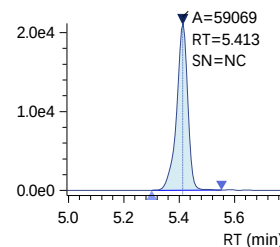
13C3-HFPO-DA_IS
Conc. 10.0000

ISTD 286.90>168.90 (-)

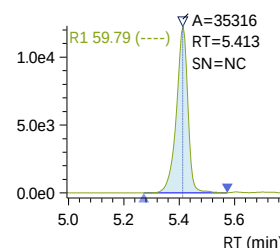


HFPO-DA
Conc. 0.9439
R#1 59.79 (59.79)
R#2 59.79 (59.79)

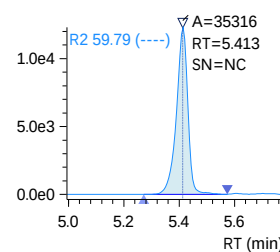
Q 284.90>168.90 (-)



R1 284.90>184.90 (-)

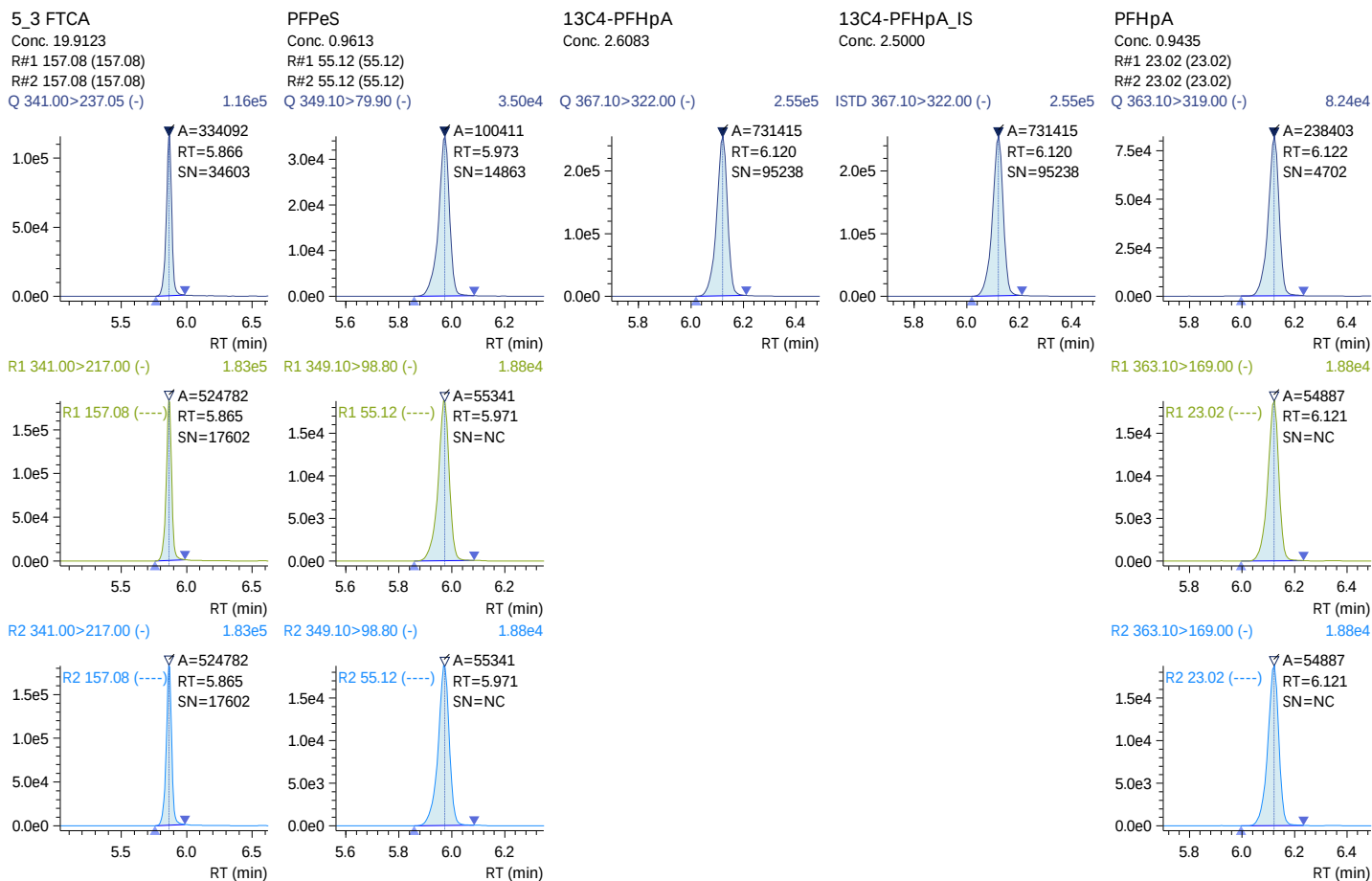


R2 284.90>184.90 (-)



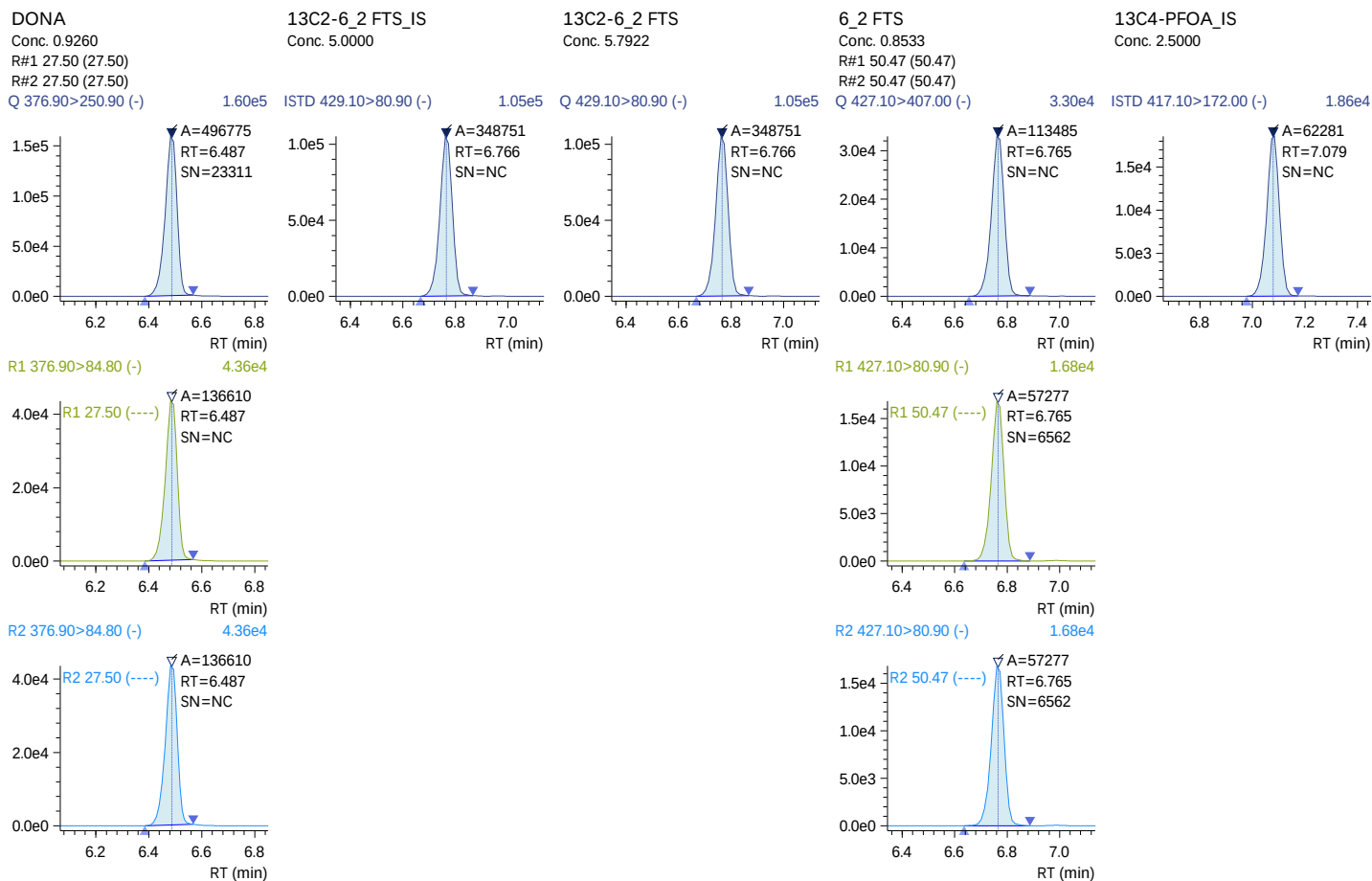


240130_022 (continued)





240130_022 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_022 (continued)

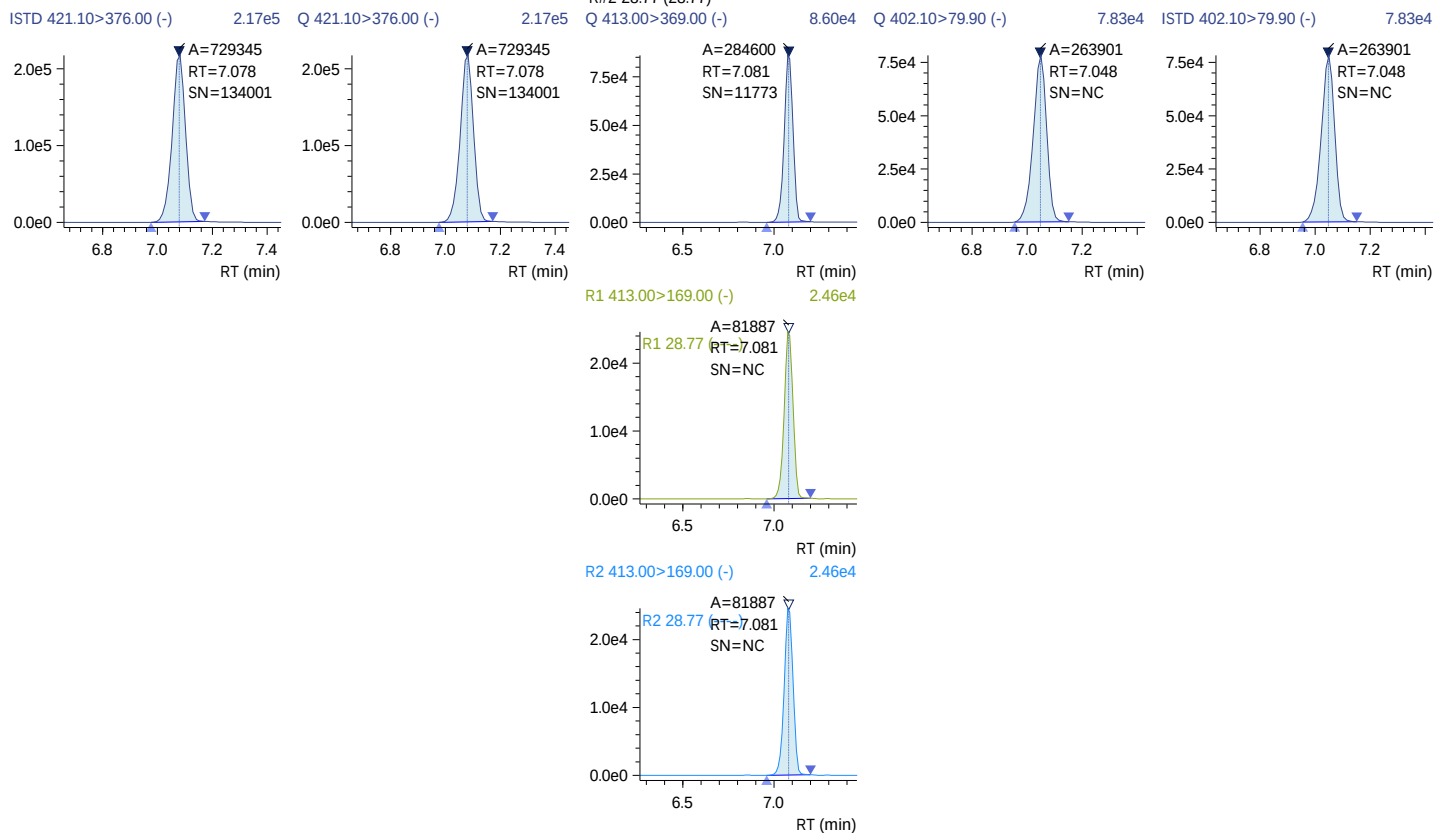
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.4555

PFOA
Conc. 1.0540
R#1 28.77 (28.77)
R#2 28.77 (28.77)

13C3-PFHxS
Conc. 2.4505

13C3-PFHxS_IS
Conc. 2.5000

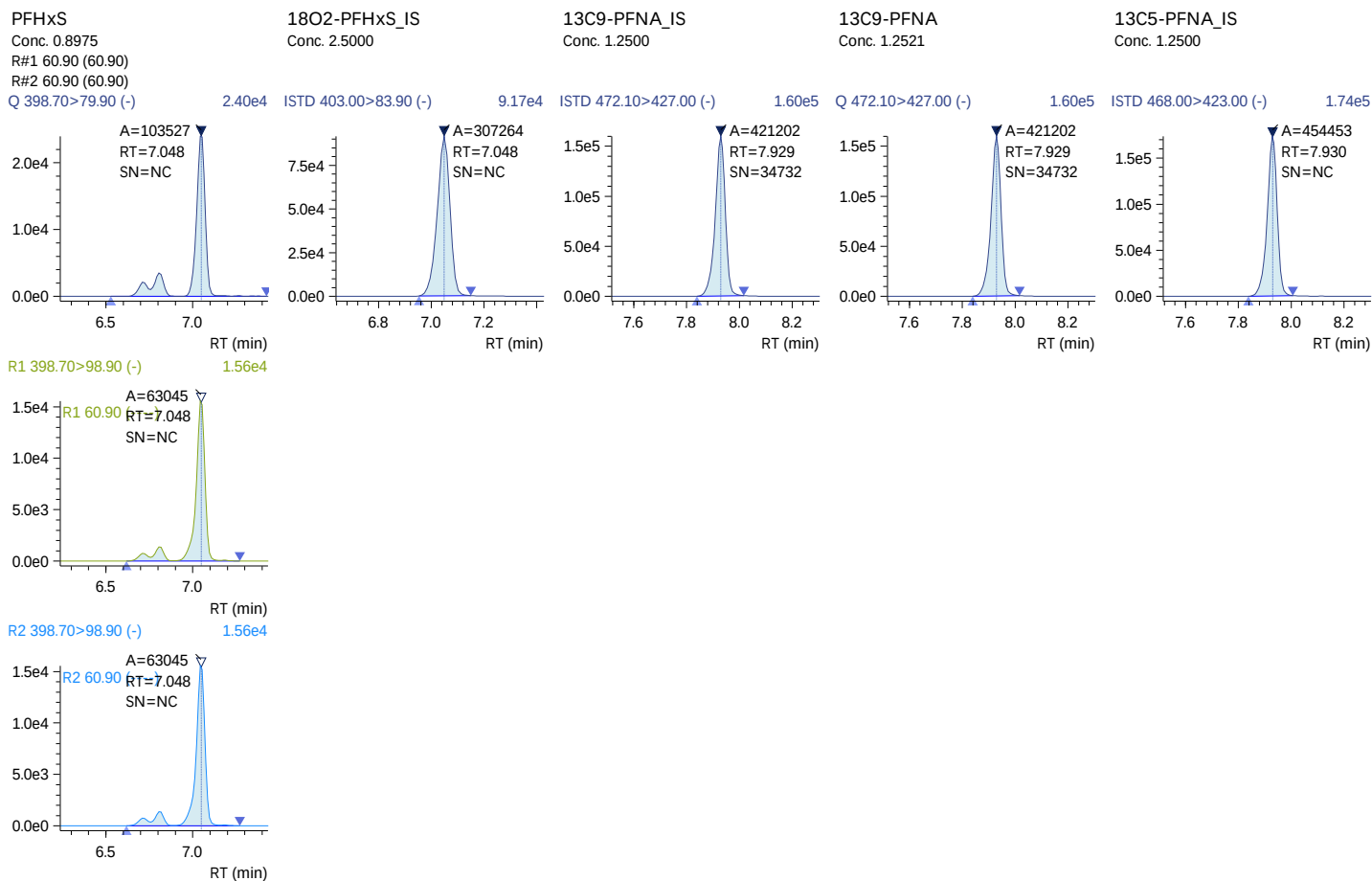


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.

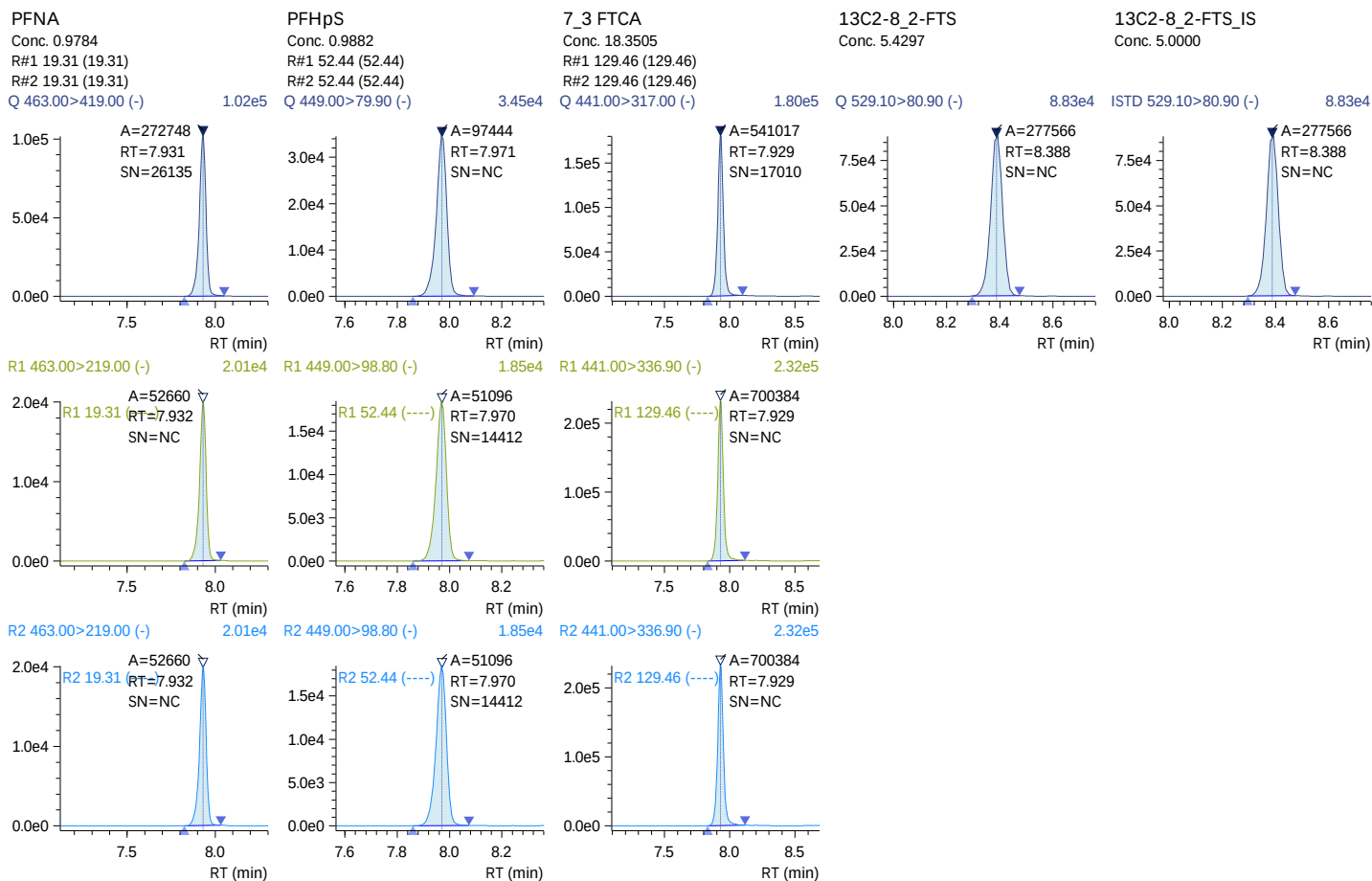


240130_022 (continued)





240130_022 (continued)

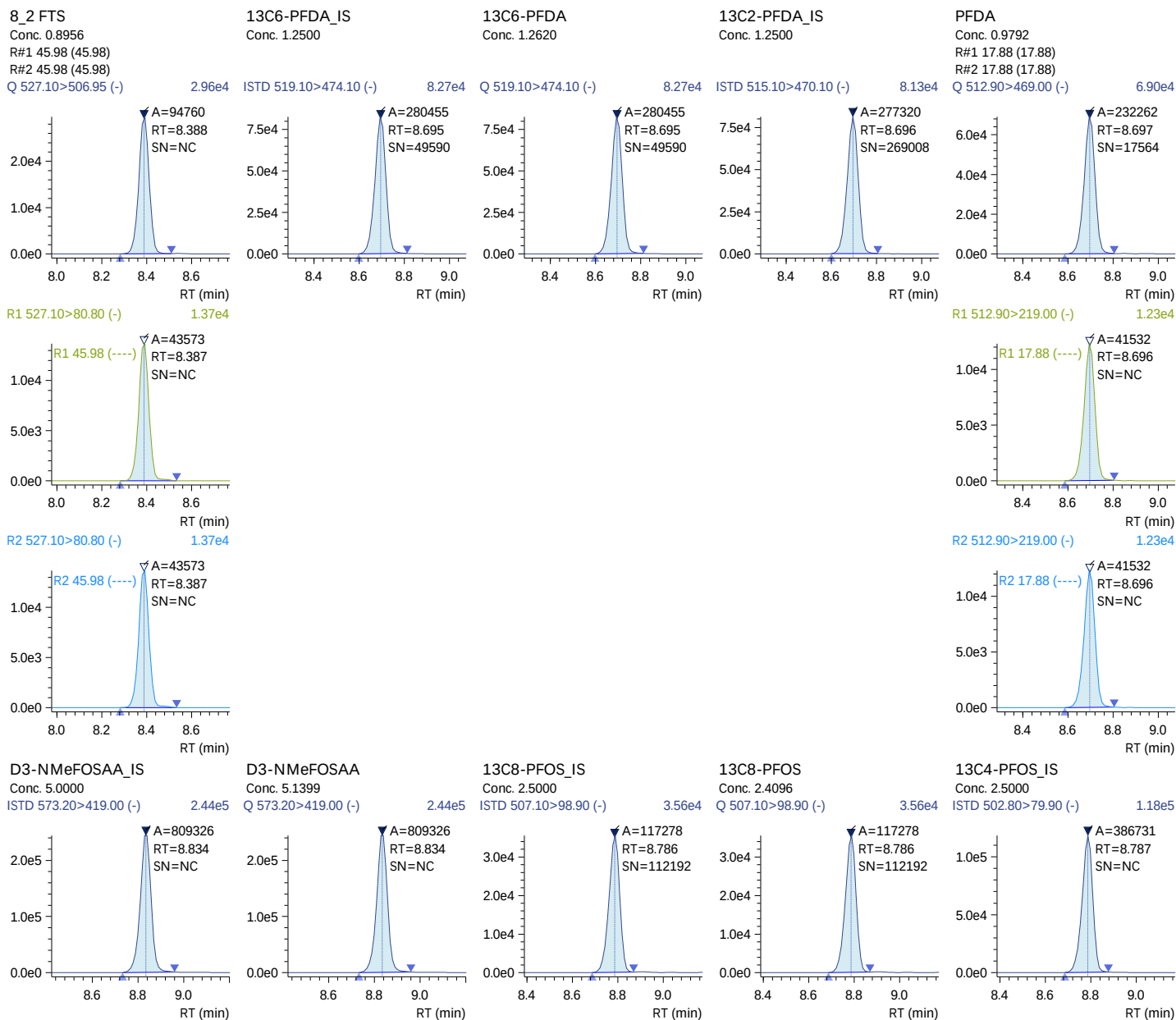


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_022 (continued)

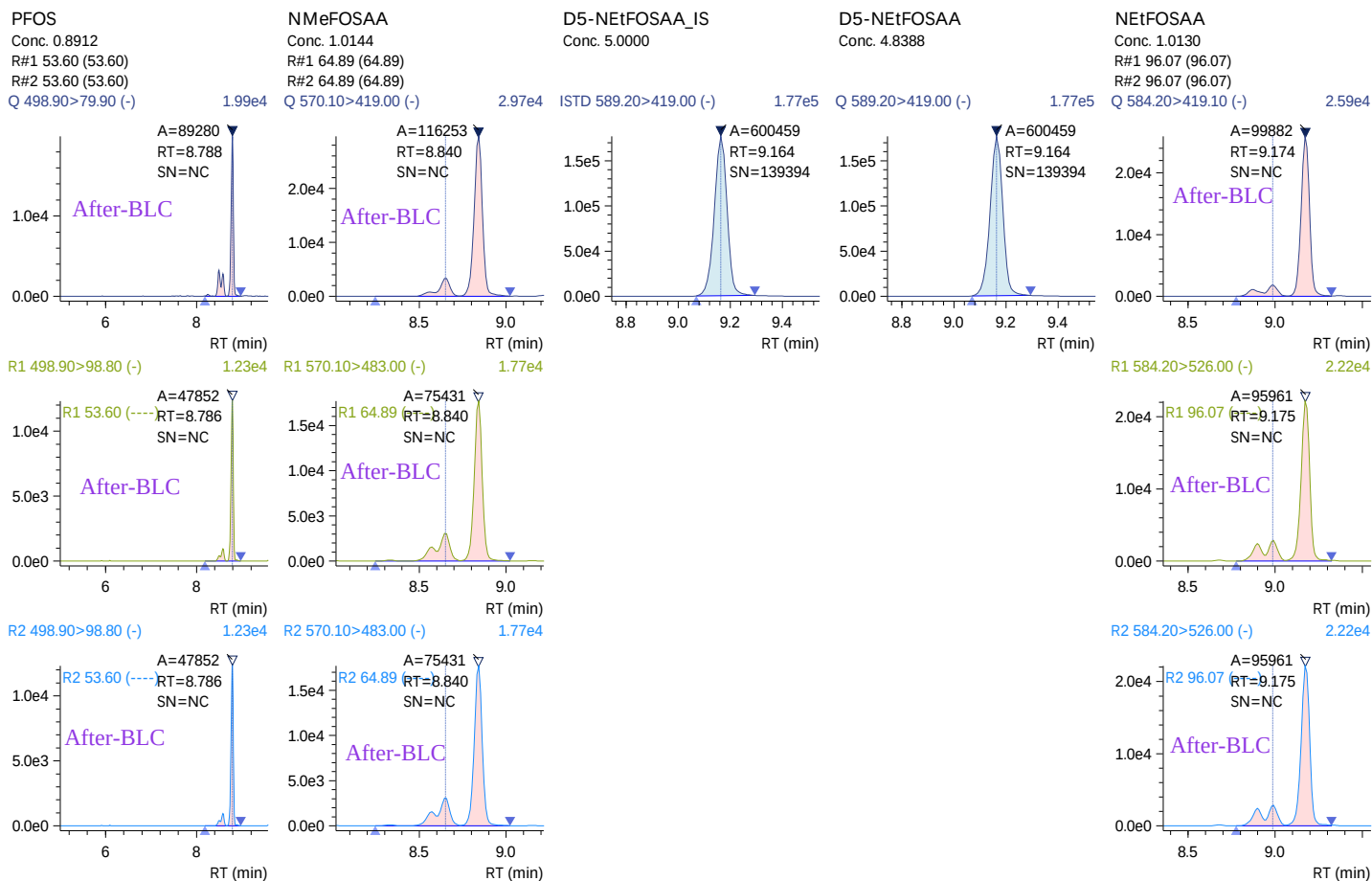


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_022 (continued)



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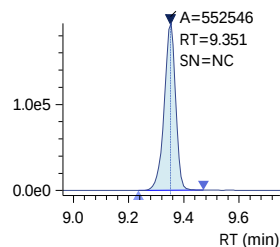
SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



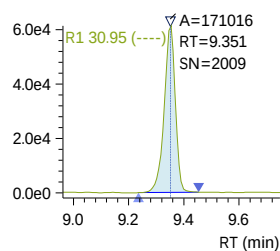
240130_022 (continued)

9-CI-PF3ONS

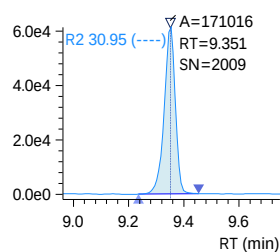
Conc. 0.8854
R#1 30.95 (30.95)
R#2 30.95 (30.95)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-)

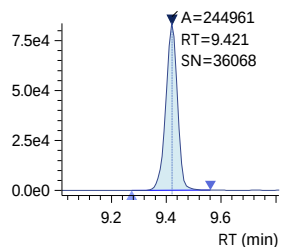


R2 532.80>353.00 (-)

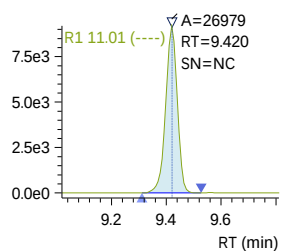


PFUnDA

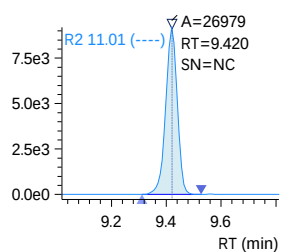
Conc. 1.0052
R#1 11.01 (11.01)
R#2 11.01 (11.01)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-)

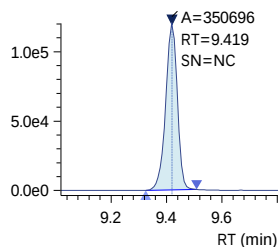


R2 563.10>269.10 (-)



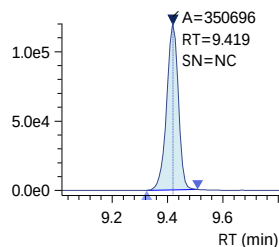
13C7-PFUnDA_IS

Conc. 1.2500
ISTD 570.00>525.10 (-)



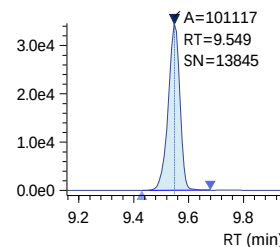
13C7-PFUnDA

Conc. 1.2700
Q 570.00>525.10 (-)

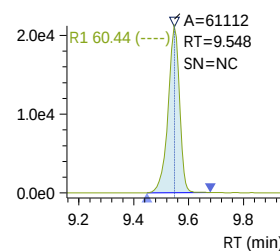


PFNS

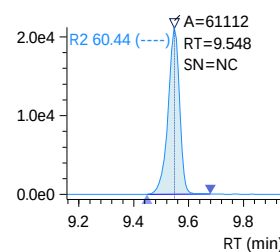
Conc. 1.0187
R#1 60.44 (60.44)
R#2 60.44 (60.44)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-)

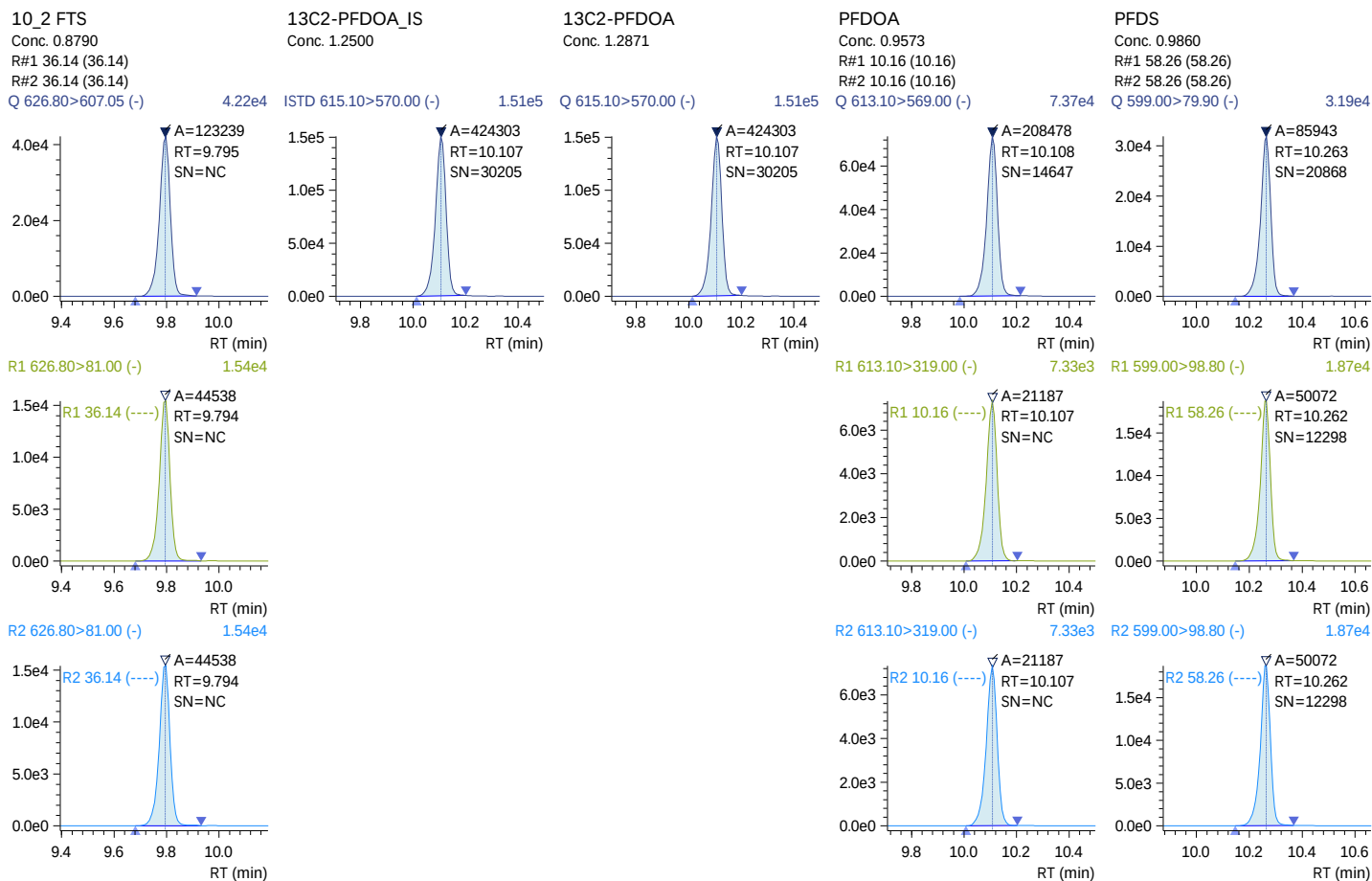


R2 548.80>98.80 (-)





240130_022 (continued)

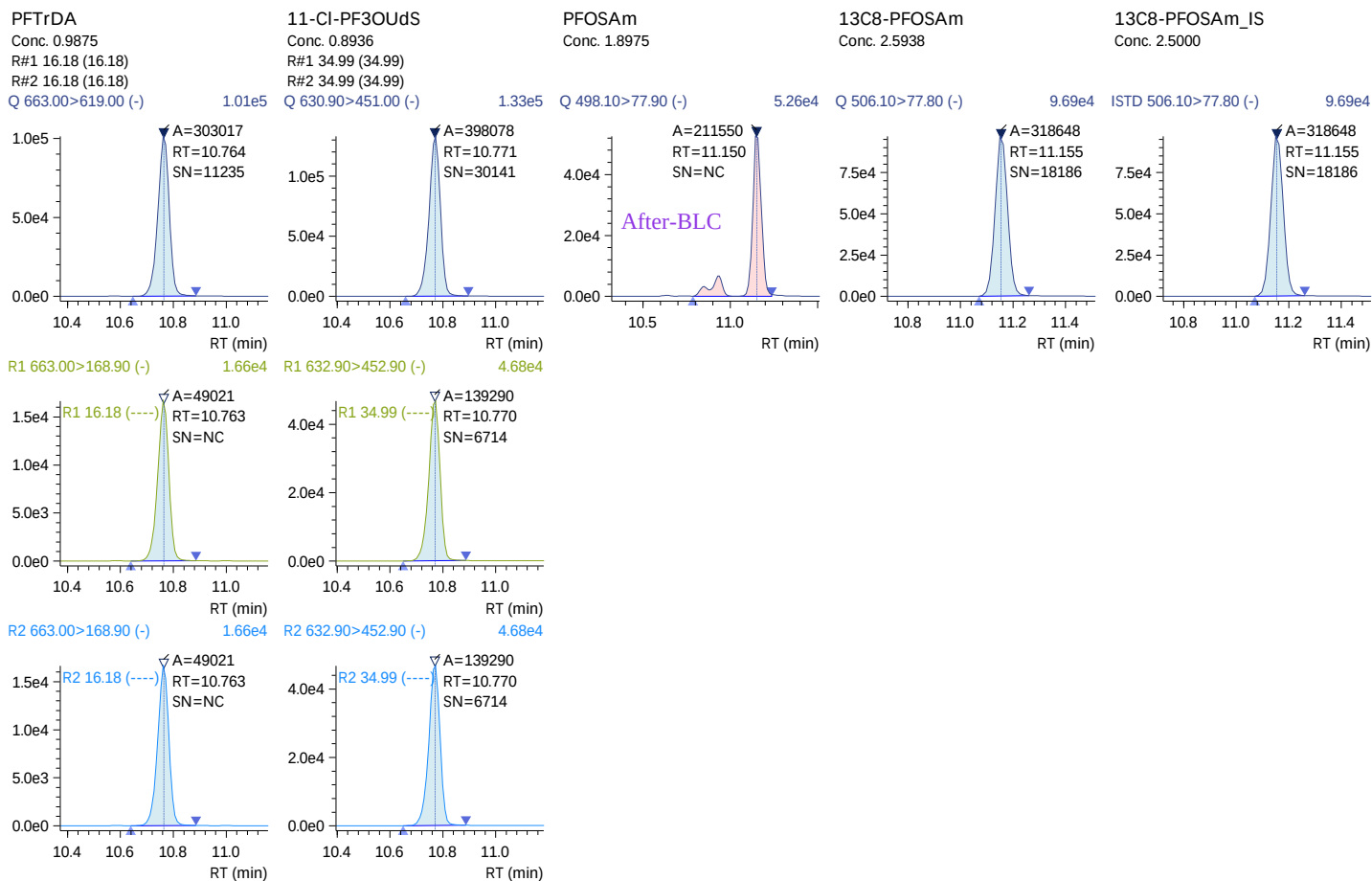


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_022 (continued)

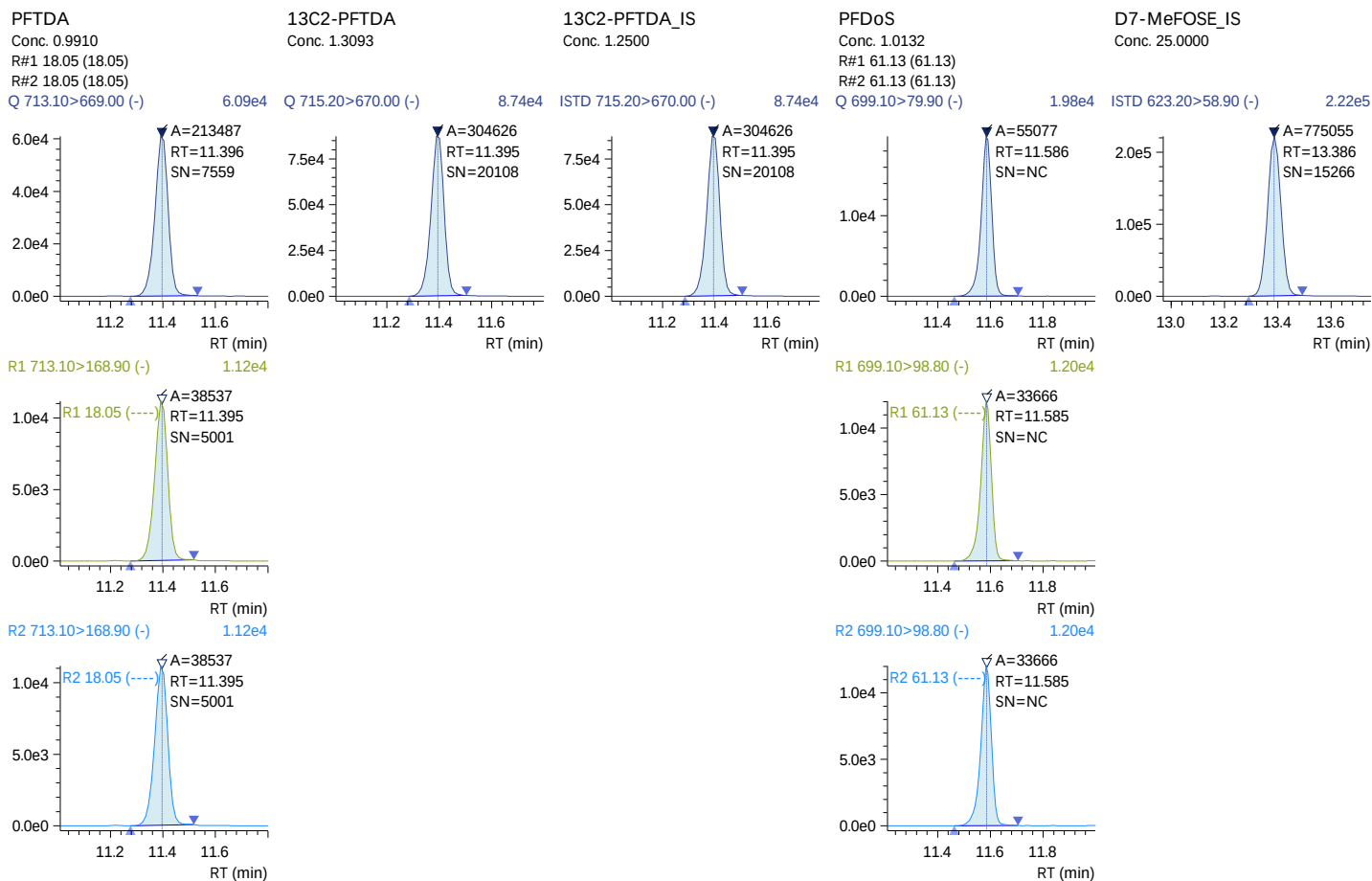


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_022 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_022 (continued)

D7-MeFOSE
Conc. 24.5761

MeFOSE
Conc. 0.9521

13C2-PFHXA_IS
Conc. 2.5000

13C2-PFHXA
Conc. 2.5179

PFHXA
Conc. 0.9753
R#1 11.66 (11.66)
R#2 11.66 (11.66)

Q 623.20>58.90 (-)

2.22e5

Q 616.10>59.00 (-)

6.78e3

ISTD 815.00>770.05 (-)

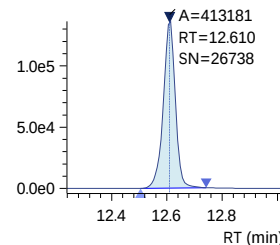
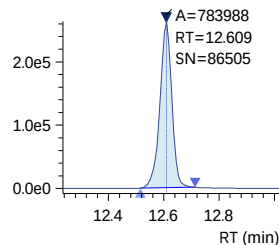
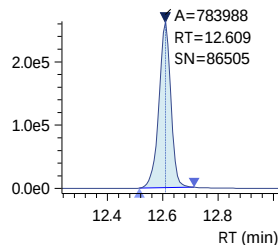
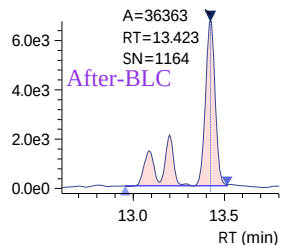
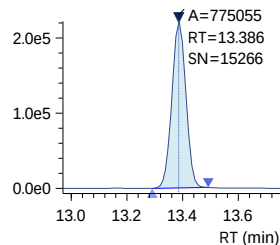
2.64e5

Q 815.00>770.05 (-)

2.64e5

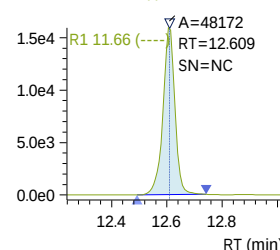
Q 813.00>768.95 (-)

1.36e5



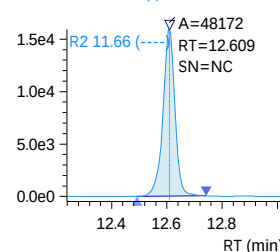
R1 813.00>218.95 (-)

1.59e4



R2 813.00>218.95 (-)

1.59e4





240130_022 (continued)

D3-MeFOSA
Conc. 2.4324

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. 0.9822
R#1 160.44 (160.44)
R#2 160.44 (160.44)

D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 24.4051

Q 515.00>219.00 (-)

2.24e4

ISTD 515.00>219.00 (-)

2.24e4

Q 511.90>219.00 (-)

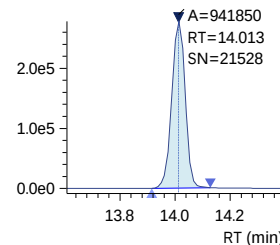
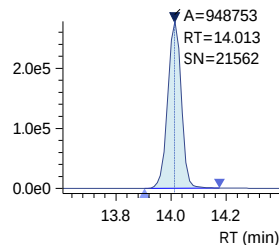
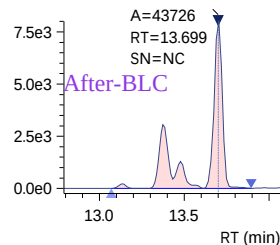
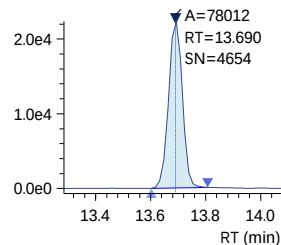
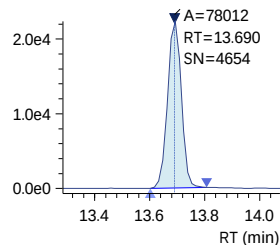
8.00e3

ISTD 639.20>58.90 (-)

2.78e5

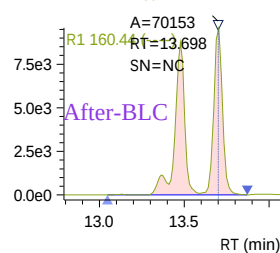
Q 639.20>58.90 (-)

2.78e5



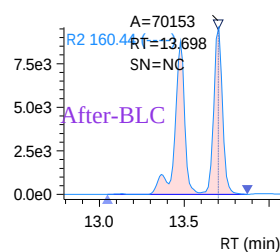
R1 511.90>169.00 (-)

9.59e3



R2 511.90>169.00 (-)

9.59e3





240130_022 (continued)

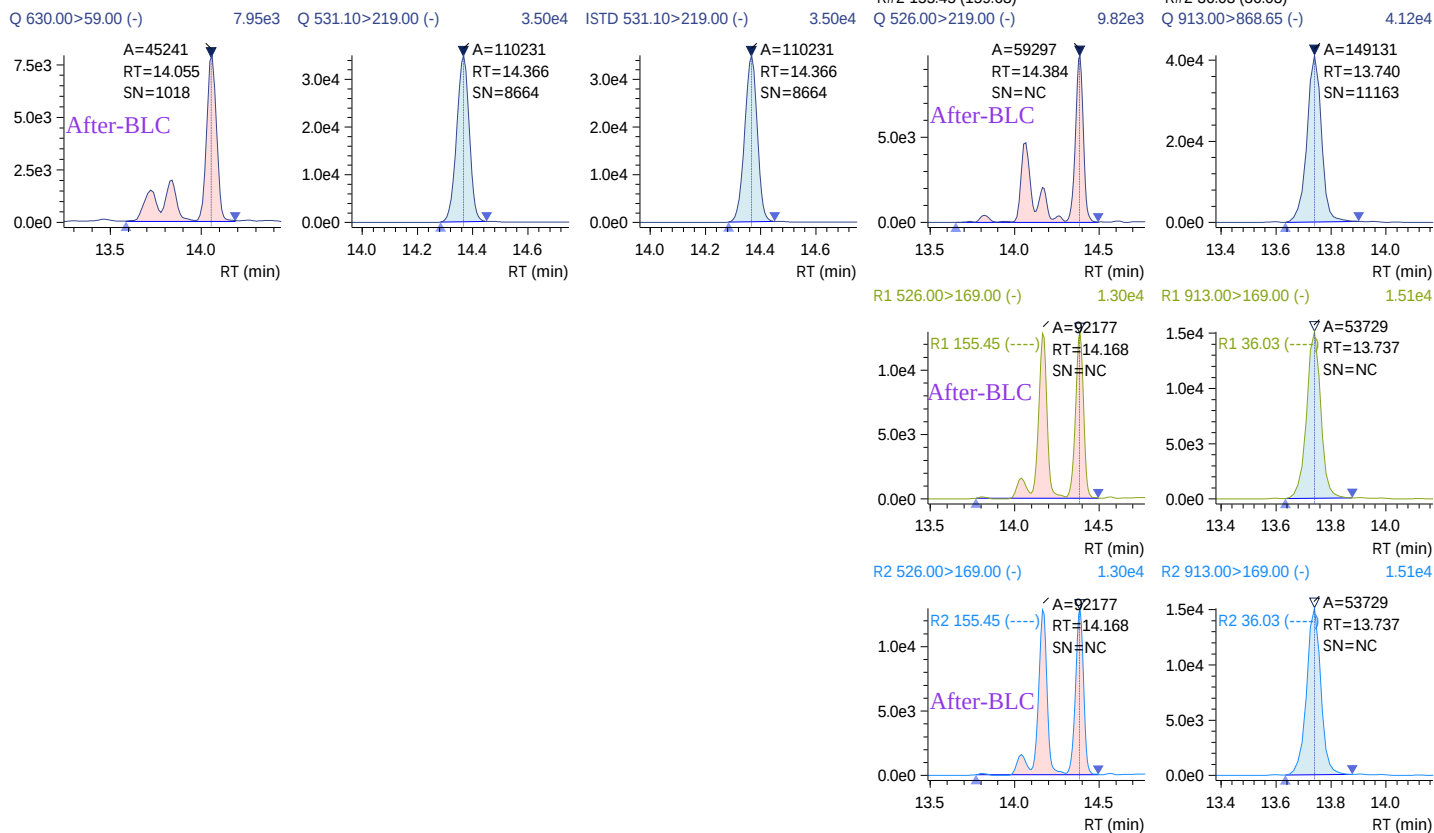
EtFOSE
Conc. 0.9943

D5-EtFOSAm
Conc. 2.4857

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. 0.9806
R#1 155.45 (159.63)
R#2 155.45 (159.63)

PFODA
Conc. 0.9121
R#1 36.03 (36.03)
R#2 36.03 (36.03)



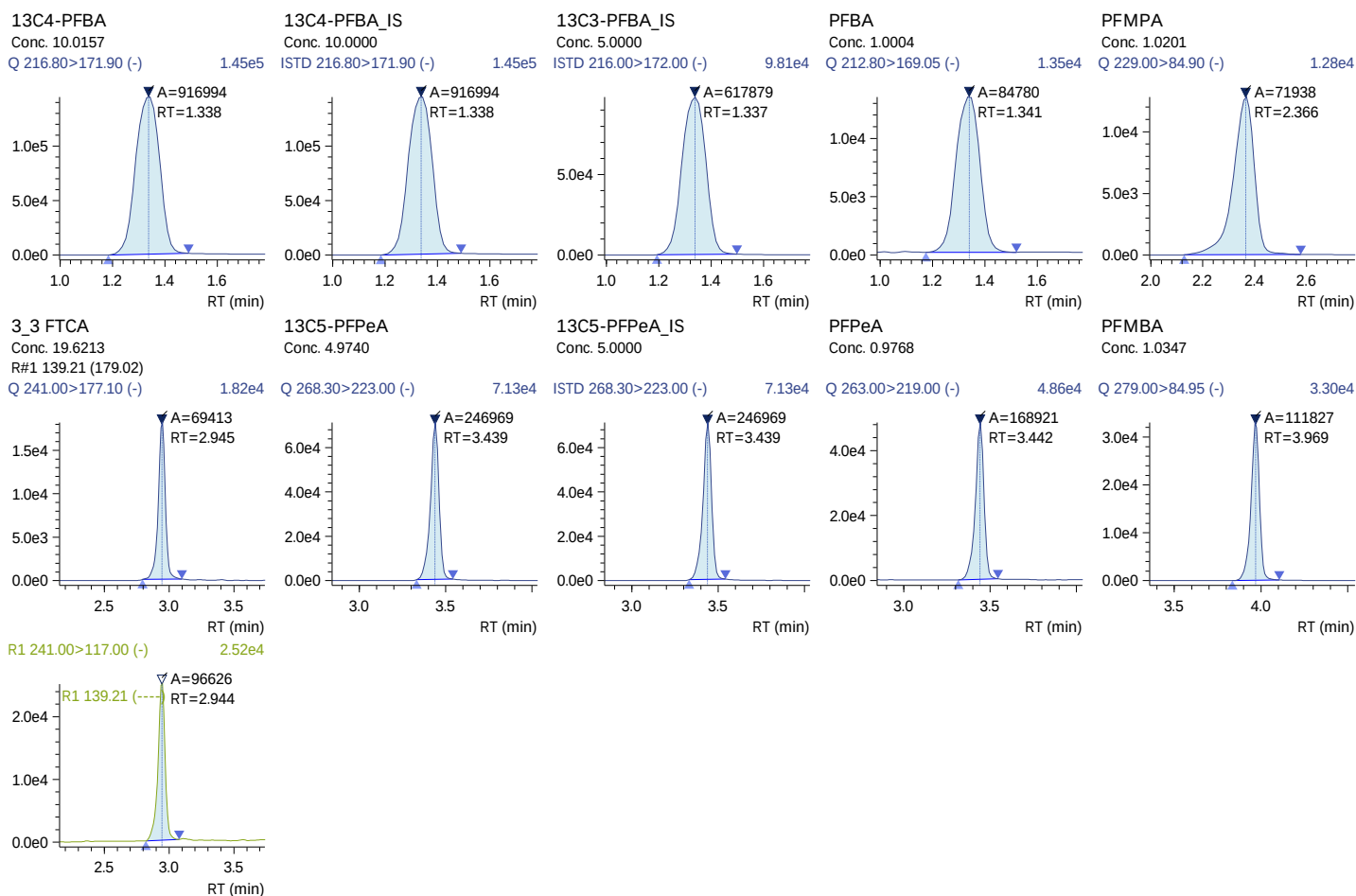
J:\LCMS08\Data\240130_1633_Curve\240130_1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_022

Sample ID: 1633 ICAL 1.0PPB
Date Acquired: 1/30/2024 10:51:58 PM
Acquired by: System Administrator
Data File: 240130_022
Vial: 5 | Inj. Volume: 10.0000uL | Tray: 1





240130_022 (continued)

13C2-4_2 FTS
Conc. 5.6127

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. 0.9373
R#1 32.10 (24.69)
R#2 32.10 (0.00)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 0.8790
R#1 44.81 (52.67)
R#2 44.81 (0.00)

Q 329.10>80.90 (-)

1.01e5

ISTD 329.10>80.90 (-)

1.01e5

Q 327.10>307.00 (-)

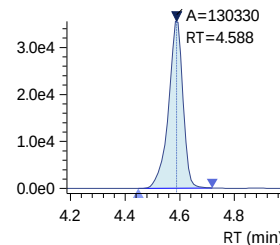
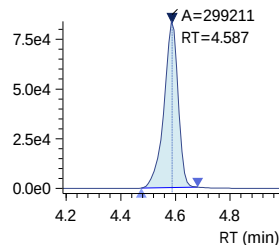
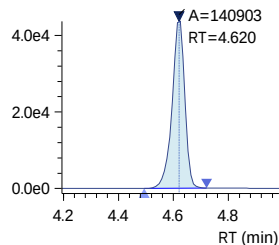
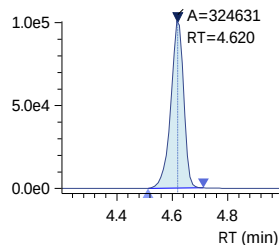
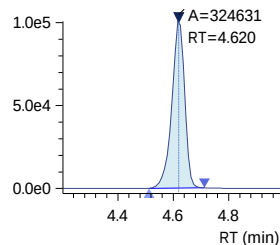
4.37e4

ISTD 302.10>79.90 (-)

8.40e4

Q 298.70>79.90 (-)

3.56e4

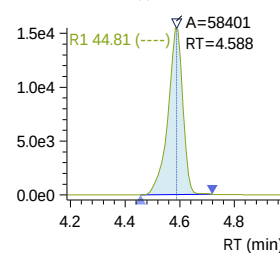
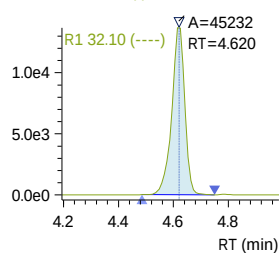


R1 327.10>80.90 (-)

1.37e4

R1 298.70>98.80 (-)

1.55e4

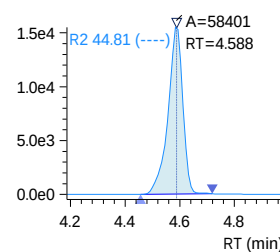
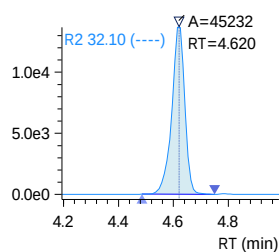


R2 327.10>80.90 (-)

1.37e4

R2 298.70>98.80 (-)

1.55e4





240130_022 (continued)

13C3-PFBS
 Conc. 2.6099

NFDHA
 Conc. 0.9483
 R#1 35.54 (39.38)
 R#2 35.54 (0.00)

13C5-PFHxA
 Conc. 2.5182

13C5-PFHxA_IS
 Conc. 2.5000

13C2-PFHxA_IS
 Conc. 2.5000

Q 302.10>79.90 (-)

8.40e4

Q 295.00>201.00 (-)

3.30e4

Q 318.00>273.00 (-)

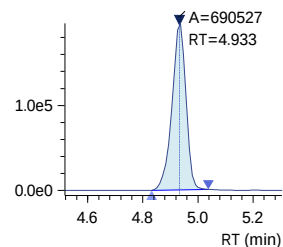
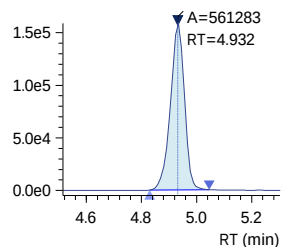
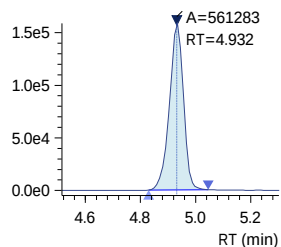
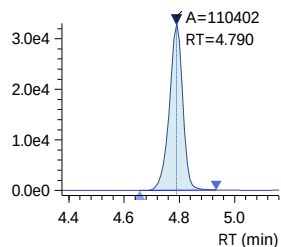
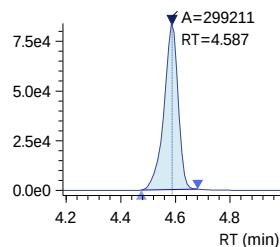
1.59e5

ISTD 318.00>273.00 (-)

1.59e5

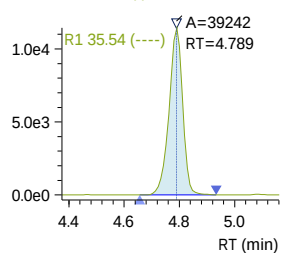
ISTD 315.10>270.00 (-)

1.97e5



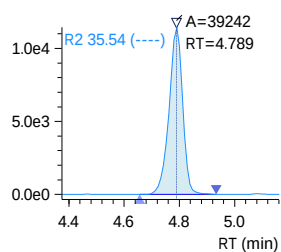
R1 295.00>84.90 (-)

1.14e4



R2 295.00>84.90 (-)

1.14e4

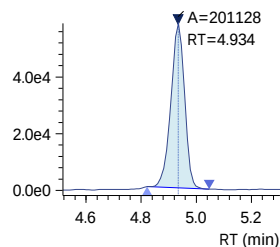




240130_022 (continued)

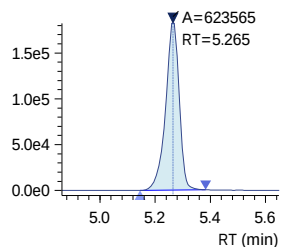
PFHxA
Conc. 1.0000

Q 313.00>269.00 (-)

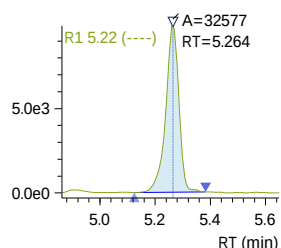


PFEESA
Conc. 0.8942
R#1 5.22 (5.25)
R#2 5.22 (0.00)

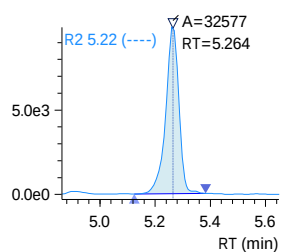
Q 314.80>135.00 (-)



R1 314.80>82.90 (-)

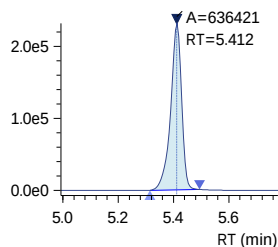


R2 314.80>82.90 (-)



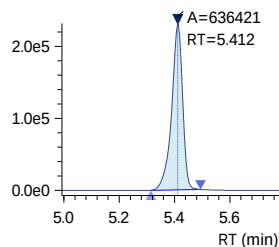
13C3-HFPO-DA
Conc. 10.3998

Q 286.90>168.90 (-)



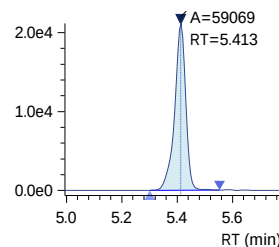
13C3-HFPO-DA_IS
Conc. 10.0000

ISTD 286.90>168.90 (-)

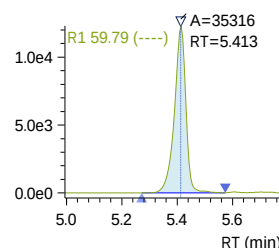


HFPO-DA
Conc. 0.9269
R#1 59.79 (69.48)
R#2 59.79 (0.00)

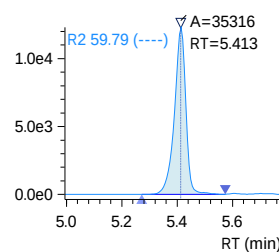
Q 284.90>168.90 (-)



R1 284.90>184.90 (-)



R2 284.90>184.90 (-)





240130_022 (continued)

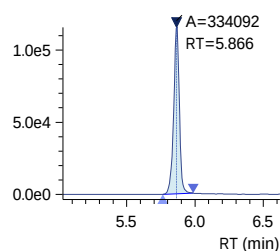
5_3 FTCA

Conc. 19.9123

R#1 157.08 (139.59)

R#2 157.08 (0.00)

Q 341.00>237.05 (-)



R1 341.00>217.00 (-)

1.16e5

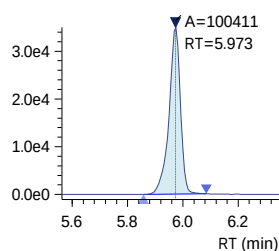
PFPeS

Conc. 0.9613

R#1 55.12 (66.55)

R#2 55.12 (0.00)

Q 349.10>79.90 (-)



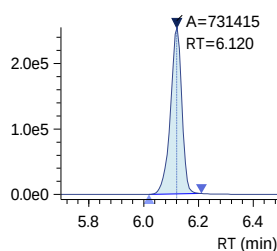
R1 349.10>98.80 (-)

3.50e4

13C4-PFHpA

Conc. 2.6083

Q 367.10>322.00 (-)

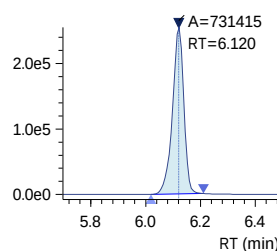


2.55e5

13C4-PFHpA_IS

Conc. 2.5000

ISTD 367.10>322.00 (-)



2.55e5

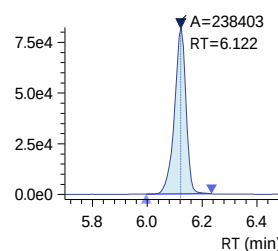
PFHpA

Conc. 0.8957

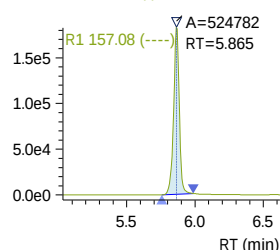
R#1 23.02 (20.13)

R#2 23.02 (0.00)

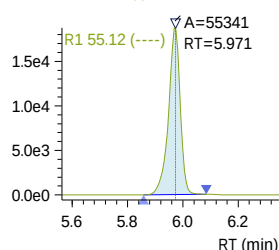
Q 363.10>319.00 (-)



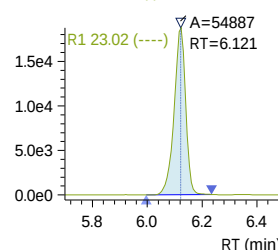
8.24e4



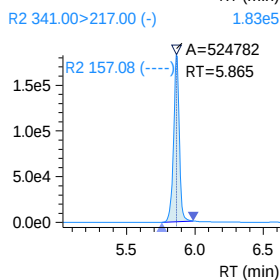
1.83e5



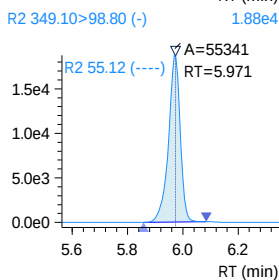
1.88e4



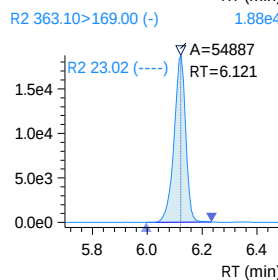
1.88e4



1.83e5



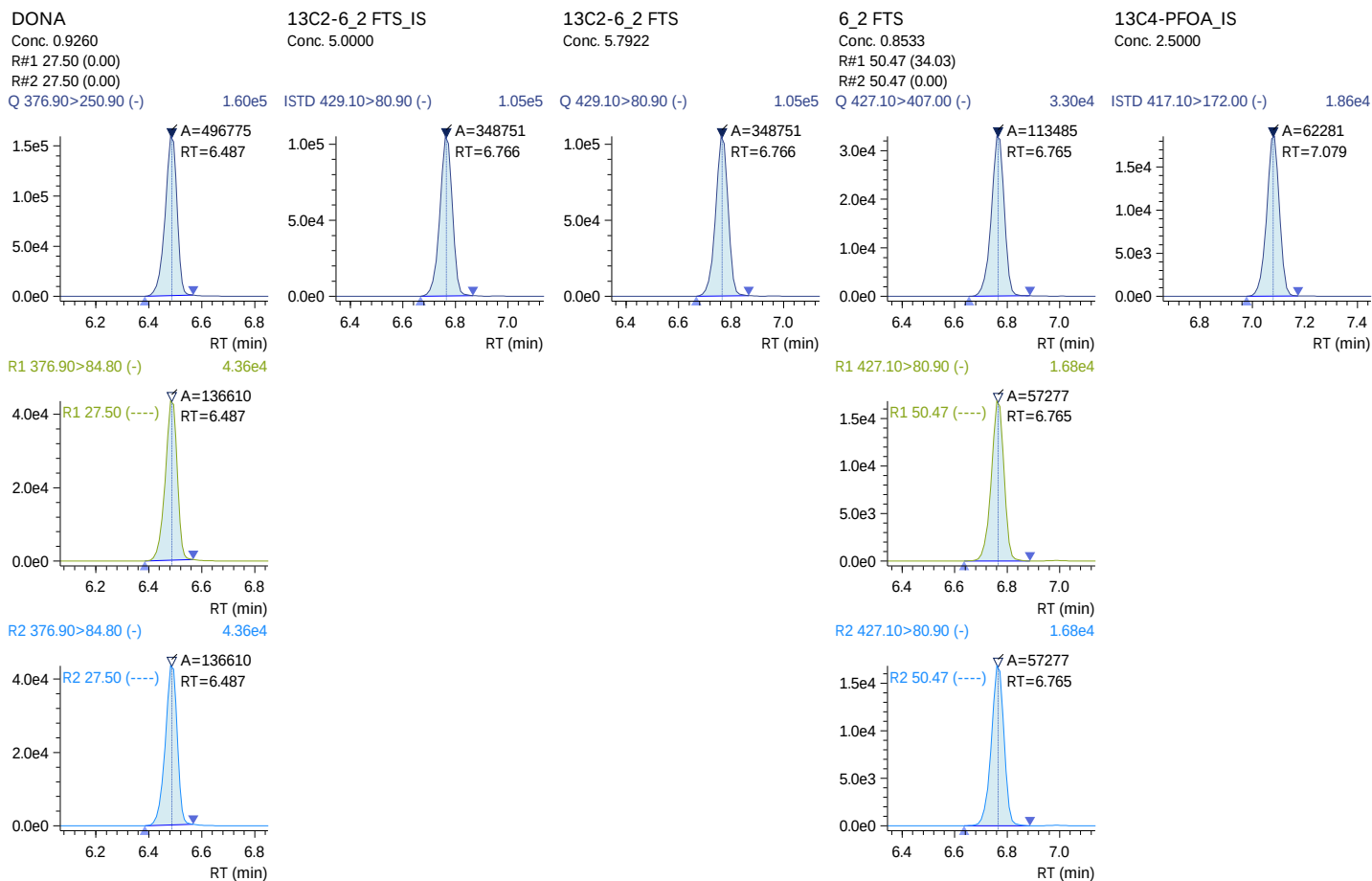
1.88e4



1.88e4



240130_022 (continued)





240130_022 (continued)

13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.4555

PFOA
Conc. 1.0445
R#1 28.77 (22.46)
R#2 28.77 (0.00)

13C3-PFHxS
Conc. 2.4505

13C3-PFHxS_IS
Conc. 2.5000

ISTD 421.10>376.00 (-)

2.17e5

Q 421.10>376.00 (-)

2.17e5

Q 413.00>369.00 (-)

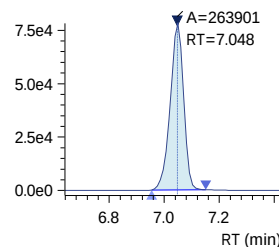
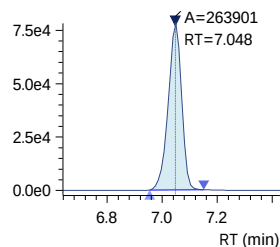
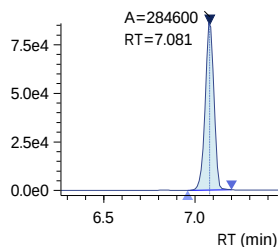
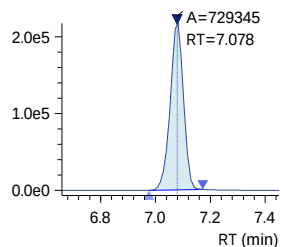
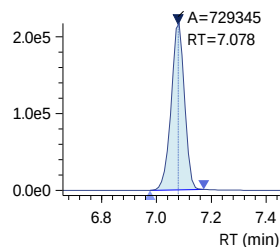
8.60e4

Q 402.10>79.90 (-)

7.83e4

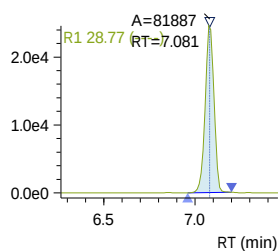
ISTD 402.10>79.90 (-)

7.83e4



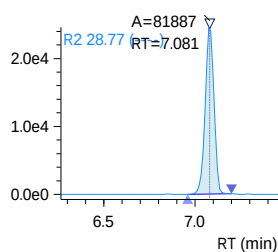
R1 413.00>169.00 (-)

2.46e4



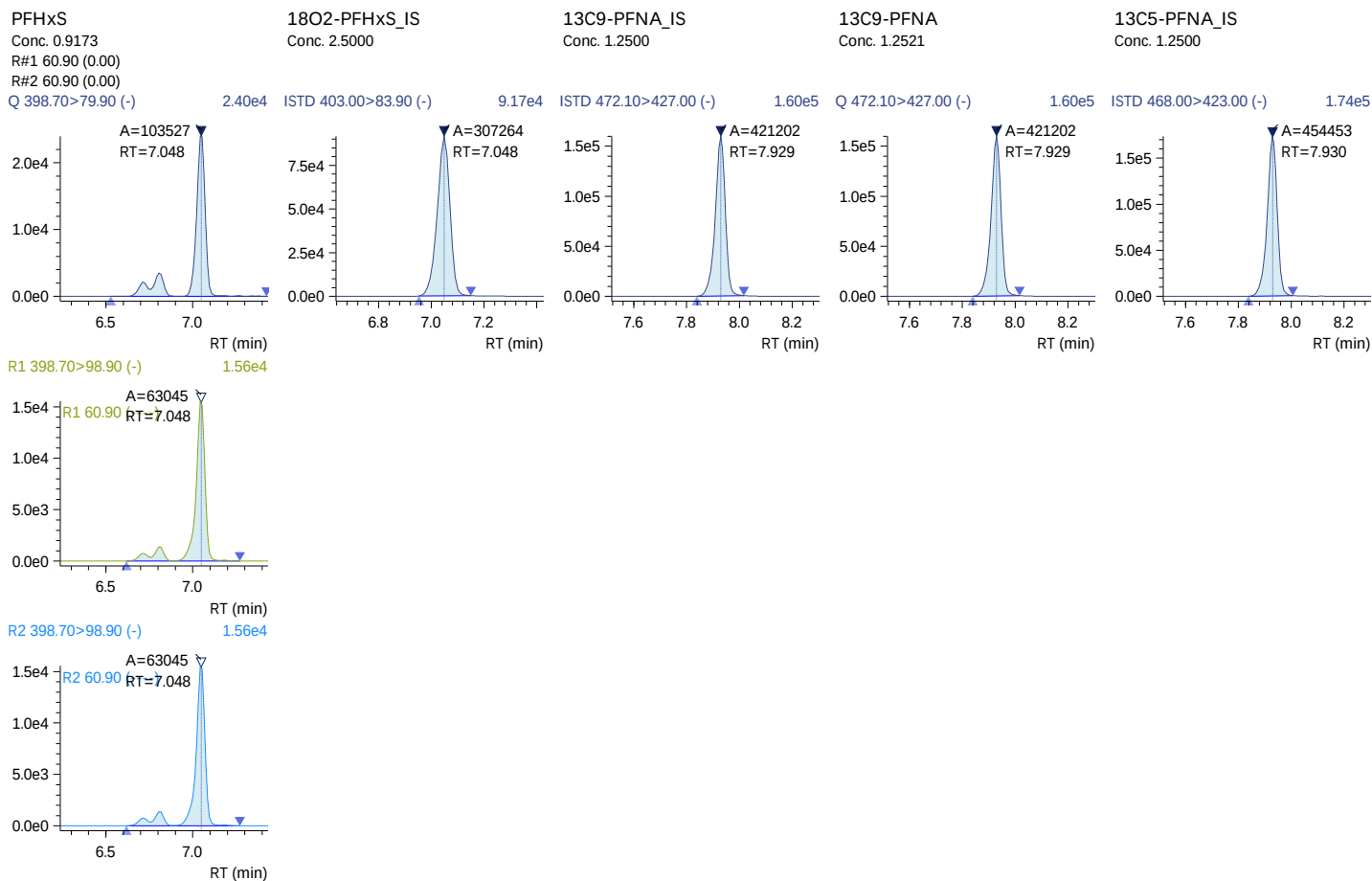
R2 413.00>169.00 (-)

2.46e4



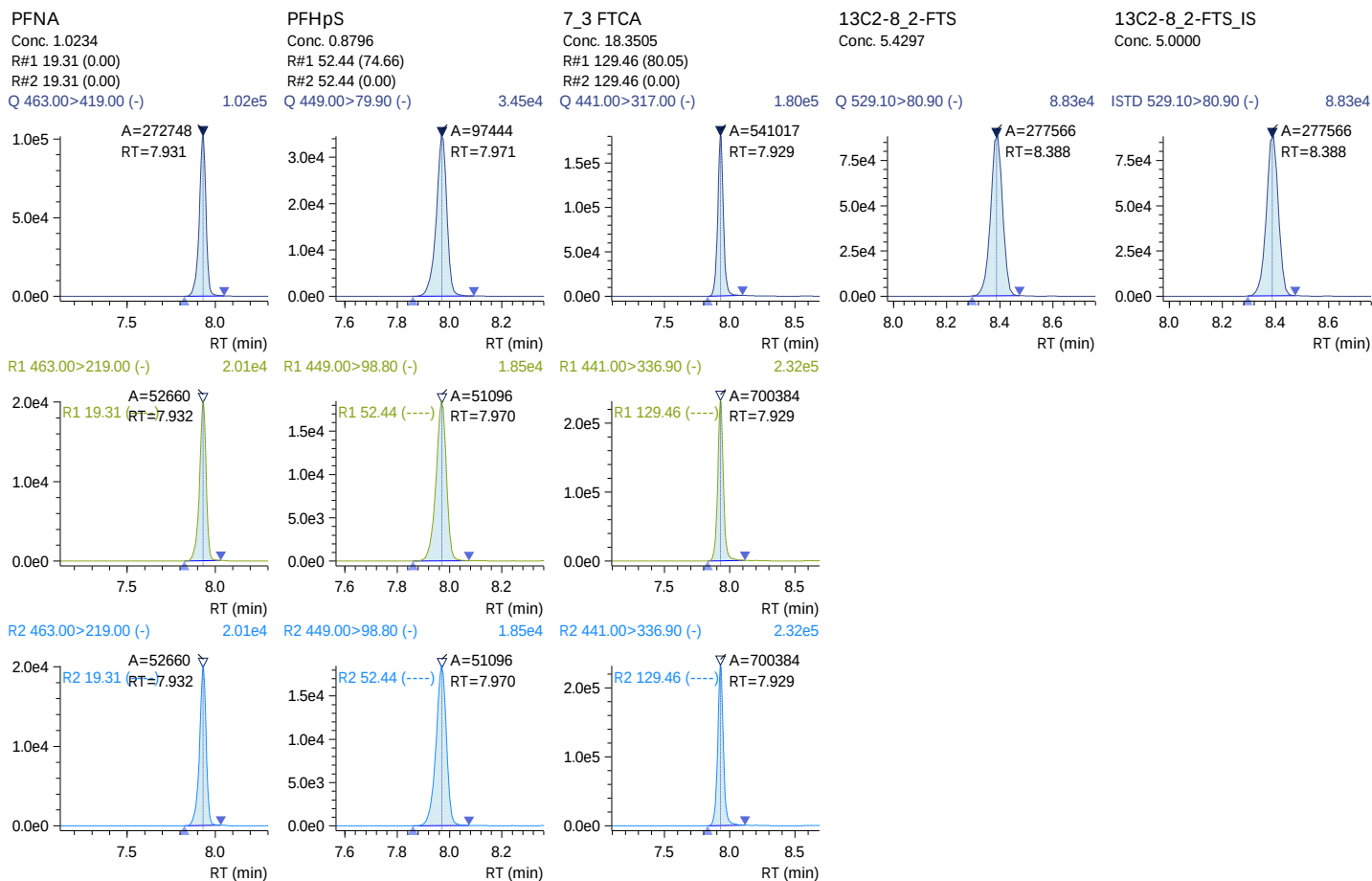


240130_022 (continued)



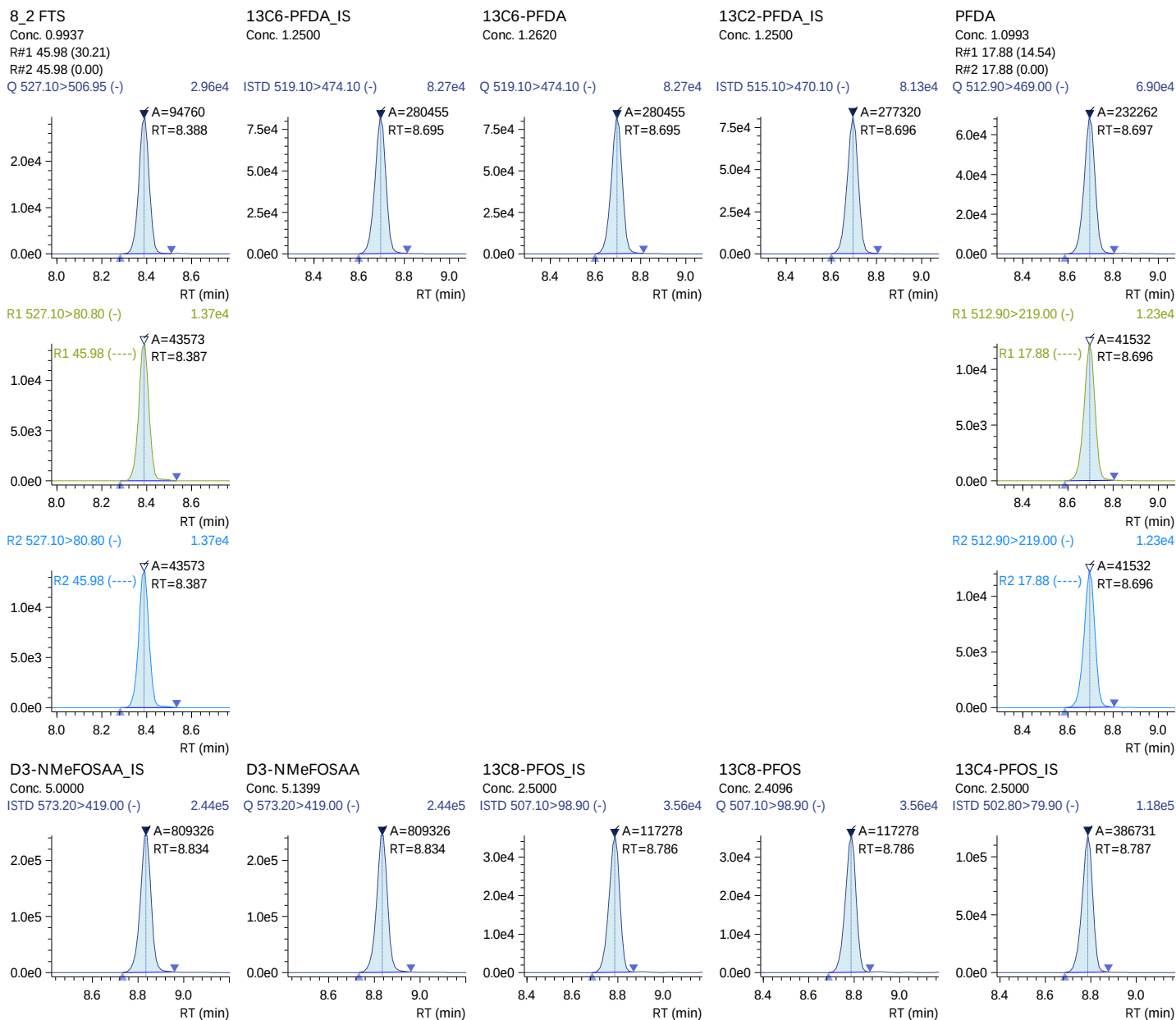


240130_022 (continued)



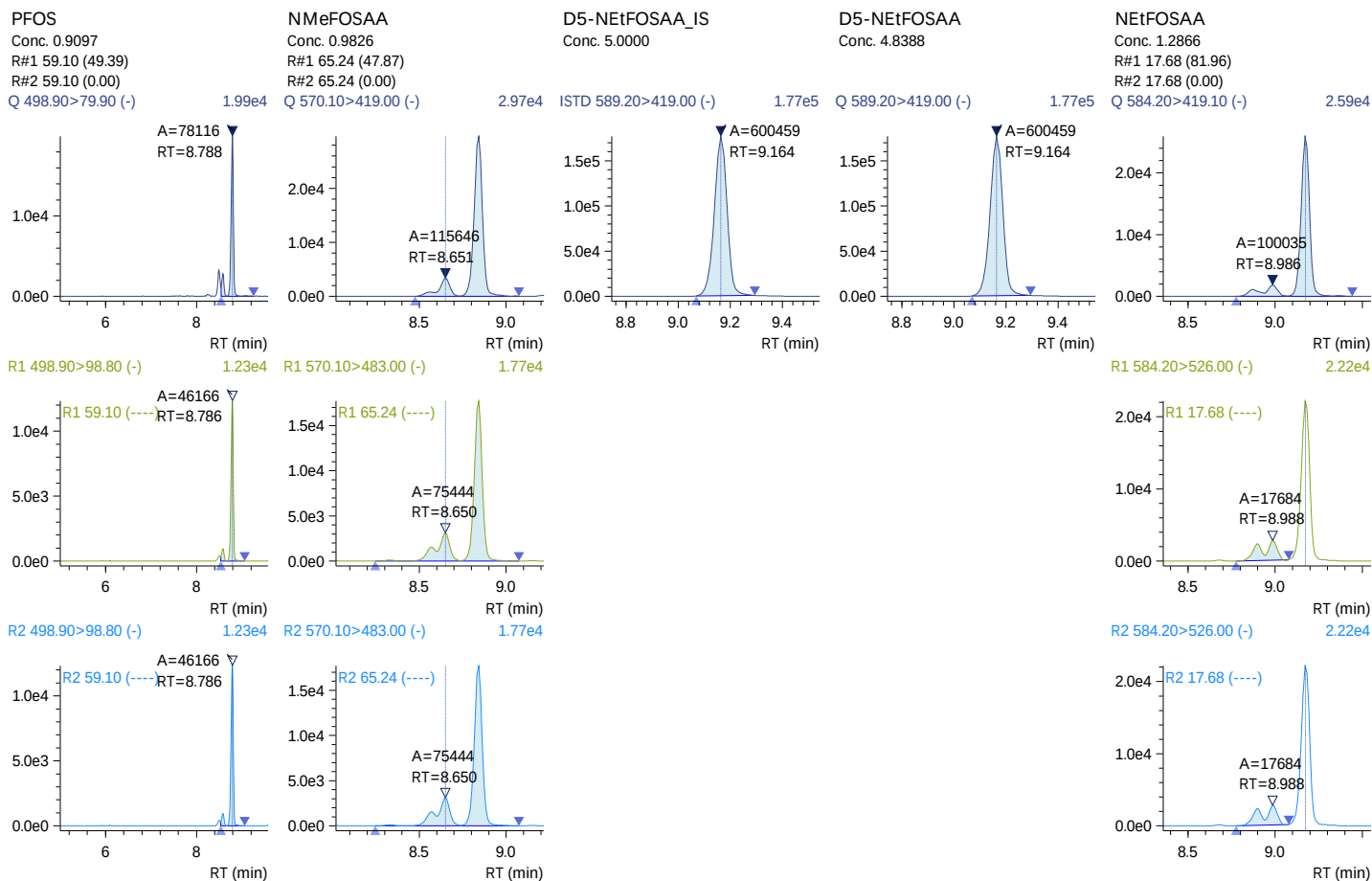


240130_022 (continued)





240130_022 (continued)

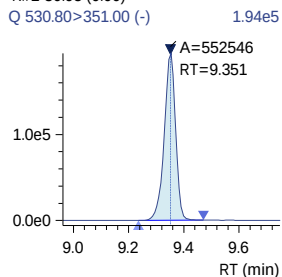




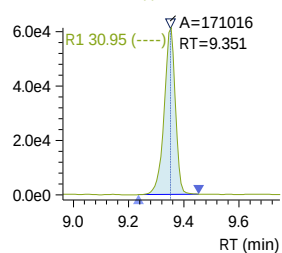
240130_022 (continued)

9-Cl-PF3ONS

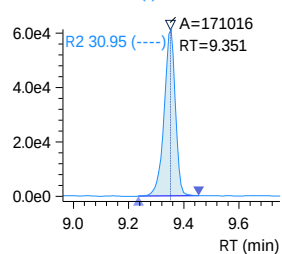
Conc. 0.8854
R#1 30.95 (31.39)
R#2 30.95 (0.00)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-) 6.14e4

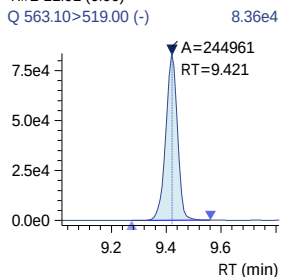


R2 532.80>353.00 (-) 6.14e4

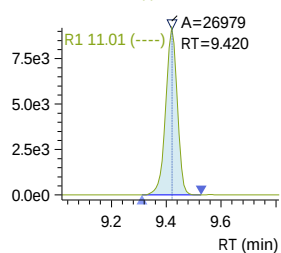


PFUnDA

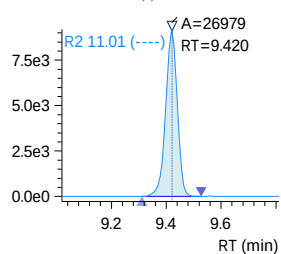
Conc. 1.0061
R#1 11.01 (12.59)
R#2 11.01 (0.00)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-) 9.20e3

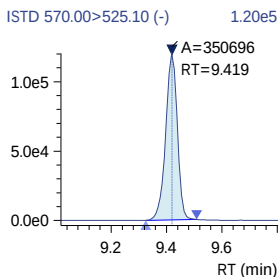


R2 563.10>269.10 (-) 9.20e3



13C7-PFUnDA_IS

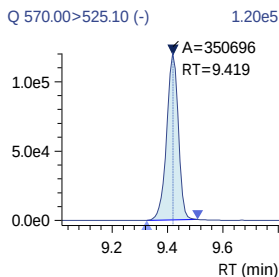
Conc. 1.2500



ISTD 570.00>525.10 (-)

13C7-PFUnDA

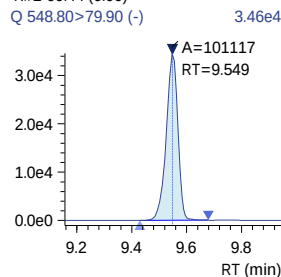
Conc. 1.2700



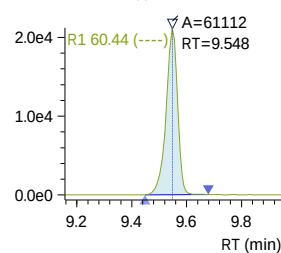
Q 570.00>525.10 (-)

PFNS

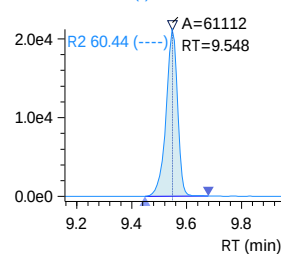
Conc. 1.0187
R#1 60.44 (82.65)
R#2 60.44 (0.00)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-) 2.12e4

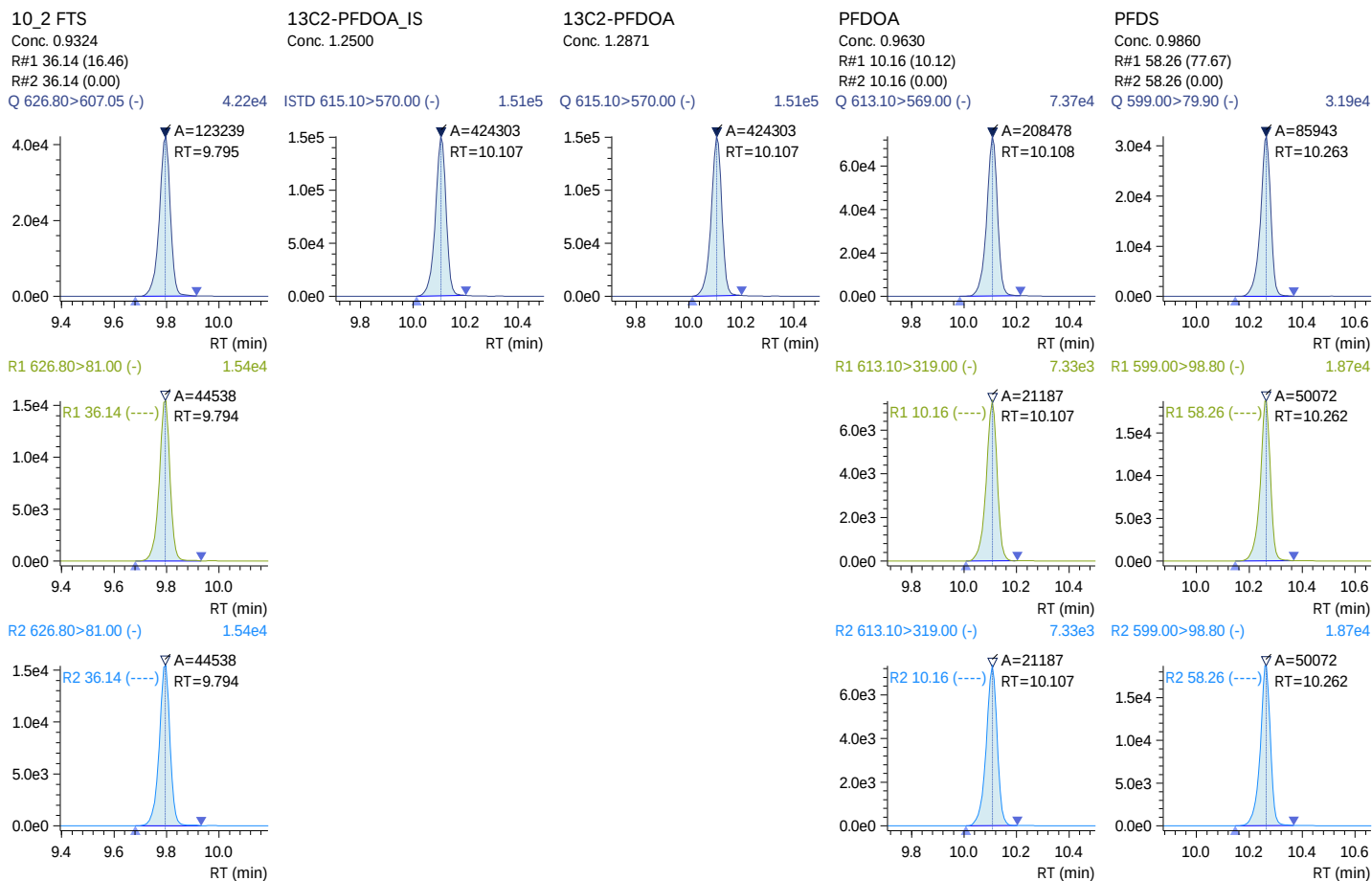


R2 548.80>98.80 (-) 2.12e4



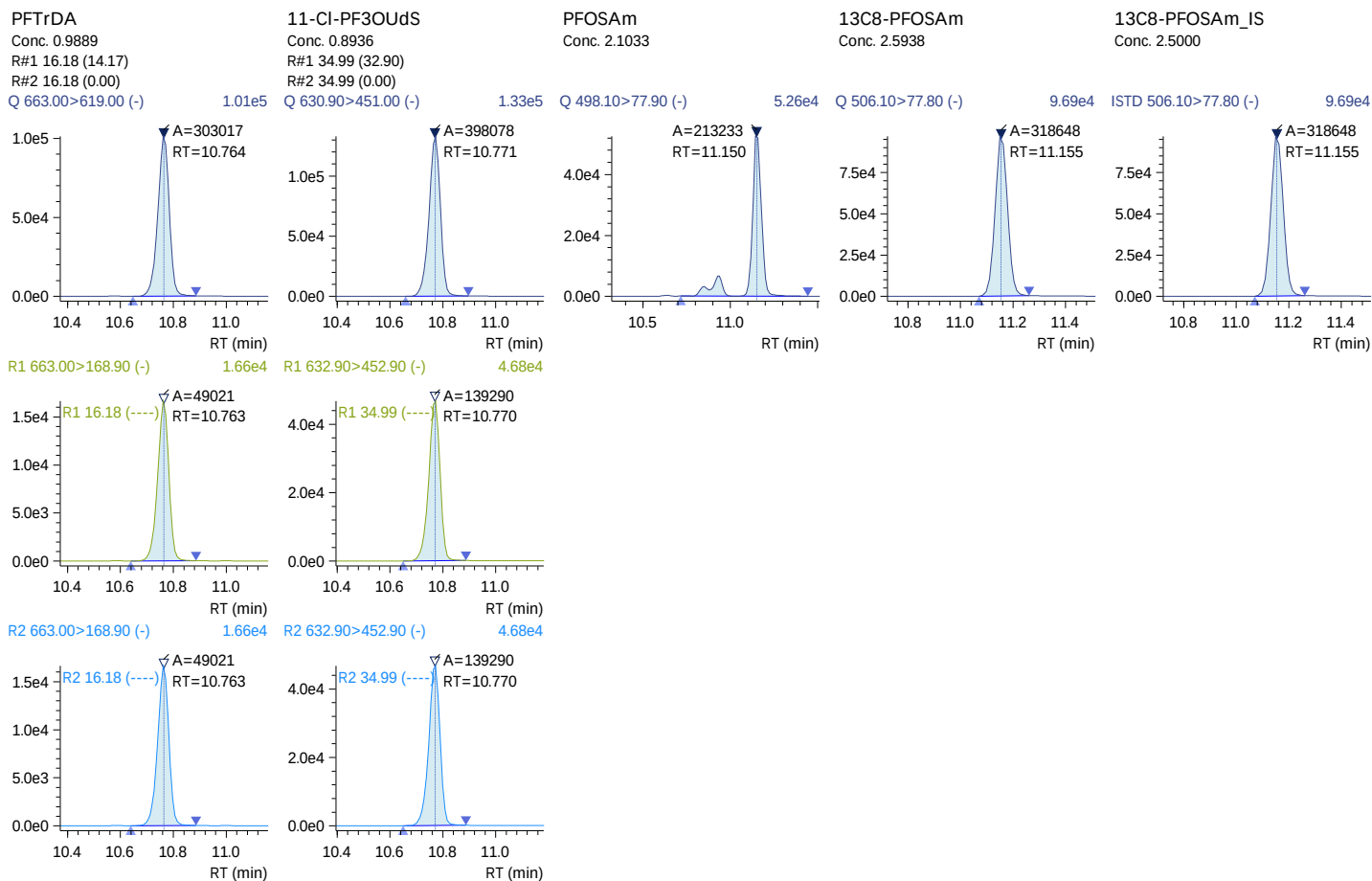


240130_022 (continued)



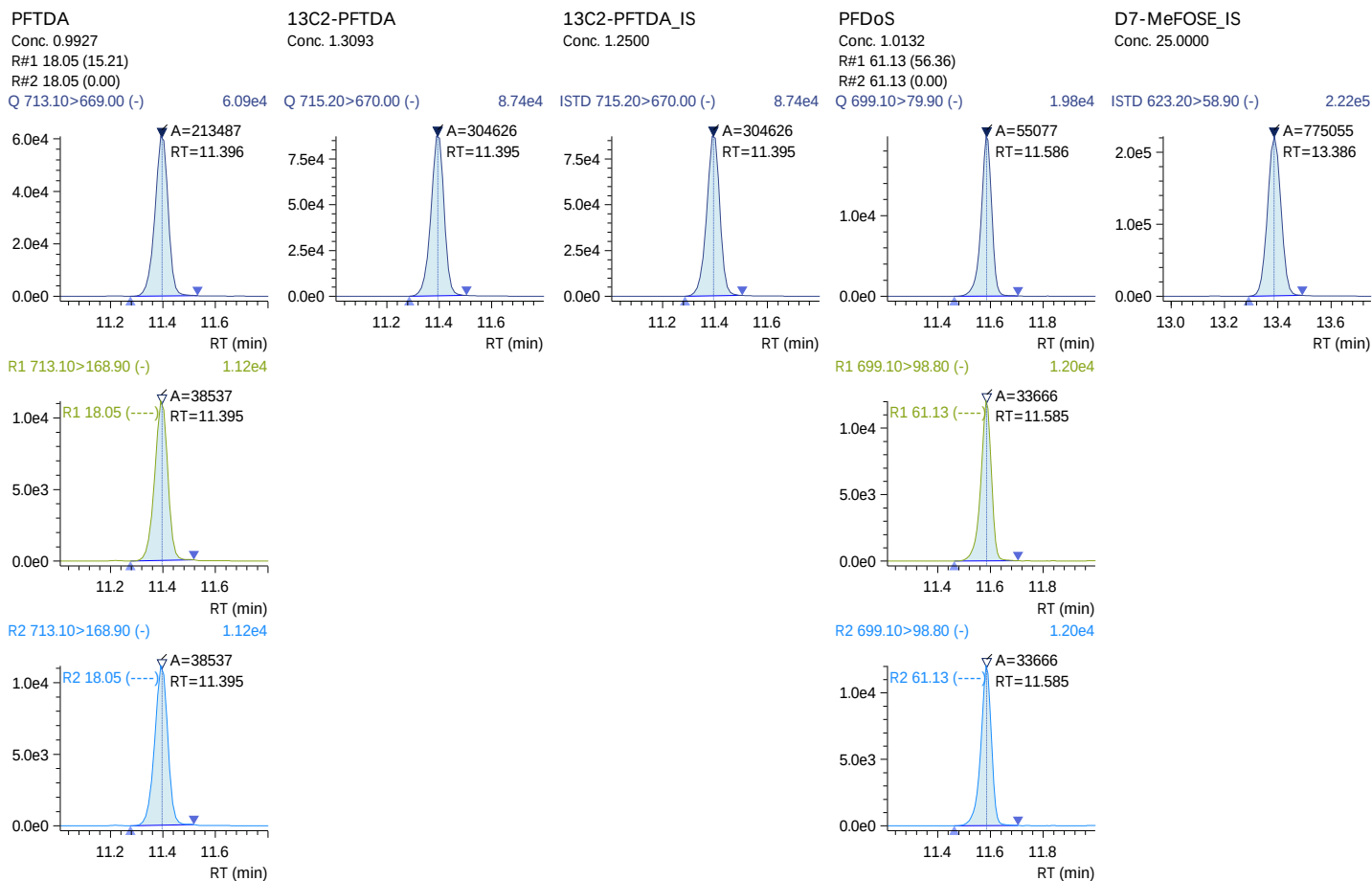


240130_022 (continued)





240130_022 (continued)





240130_022 (continued)

D7-MeFOSE
Conc. 24.5761

MeFOSE
Conc. 0.9880

13C2-PFHDA_IS
Conc. 2.5000

13C2-PFHDA
Conc. 2.5179

PFHXDA
Conc. 0.9389
R#1 11.66 (9.60)
R#2 11.66 (0.00)

Q 623.20>58.90 (-)

2.22e5

Q 616.10>59.00 (-)

6.78e3

ISTD 815.00>770.05 (-)

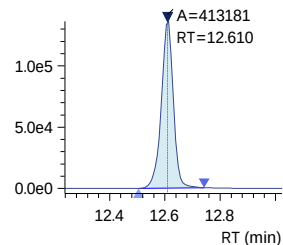
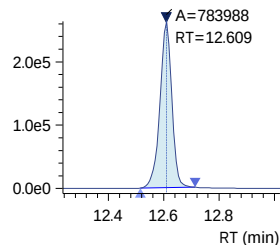
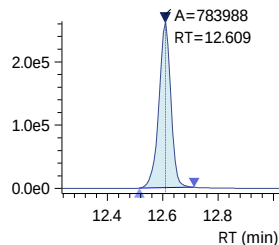
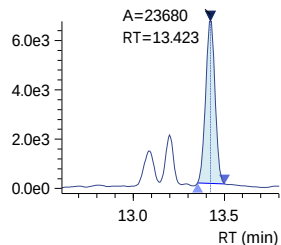
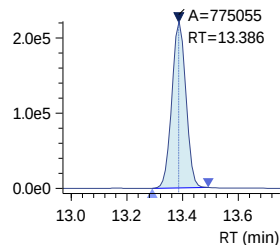
2.64e5

Q 815.00>770.05 (-)

2.64e5

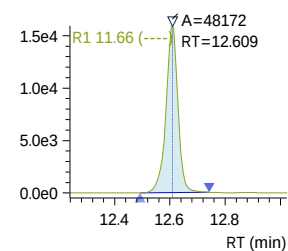
Q 813.00>768.95 (-)

1.36e5



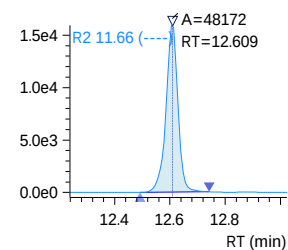
R1 813.00>218.95 (-)

1.59e4



R2 813.00>218.95 (-)

1.59e4





240130_022 (continued)

D3-MeFOSA
Conc. 2.4324

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. 0.9988
R#1 125.34 (98.91)
R#2 125.34 (0.00)

D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 24.4051

Q 515.00>219.00 (-)

2.24e4

ISTD 515.00>219.00 (-)

2.24e4

Q 511.90>219.00 (-)

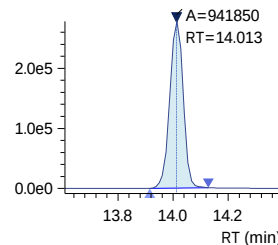
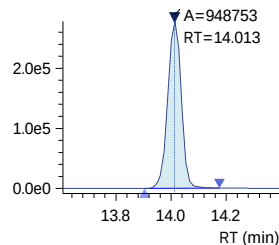
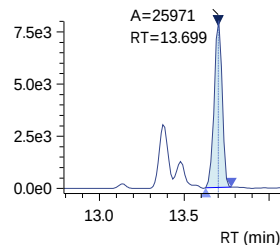
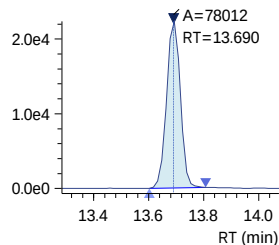
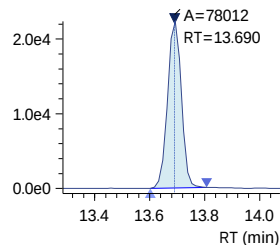
8.00e3

ISTD 639.20>58.90 (-)

2.78e5

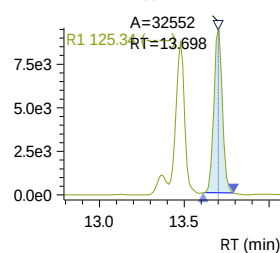
Q 639.20>58.90 (-)

2.78e5



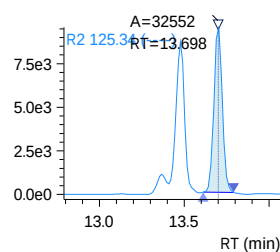
R1 511.90>169.00 (-)

9.59e3



R2 511.90>169.00 (-)

9.59e3





240130_022 (continued)

EtFOSE
Conc. 1.0050

D5-EtFOSAm
Conc. 2.4857

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. 0.9503

PFODA
Conc. 0.8798

Q 630.00>59.00 (-)

7.95e3

Q 531.10>219.00 (-)

3.50e4

ISTD 531.10>219.00 (-)

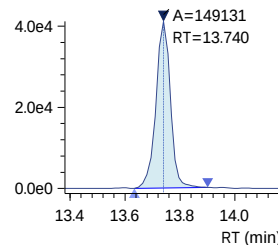
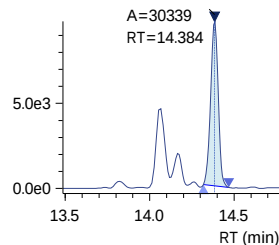
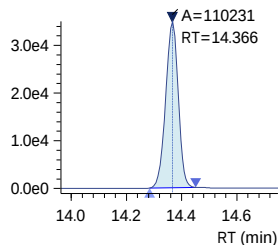
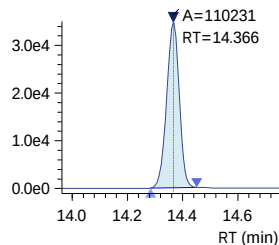
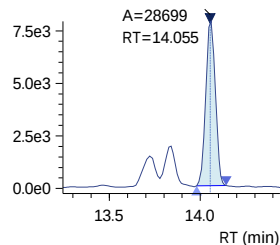
3.50e4

Q 526.00>219.00 (-)

9.82e3

Q 913.00>868.65 (-)

4.12e4

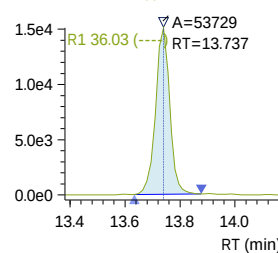
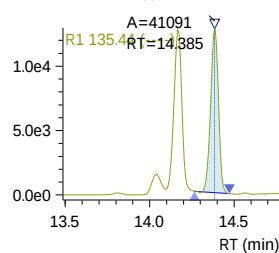


R1 526.00>169.00 (-)

1.30e4

R1 913.00>169.00 (-)

1.51e4

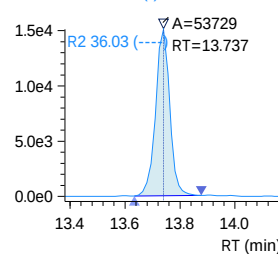
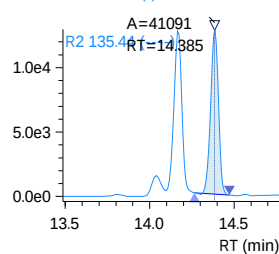


R2 526.00>169.00 (-)

1.30e4

R2 913.00>169.00 (-)

1.51e4

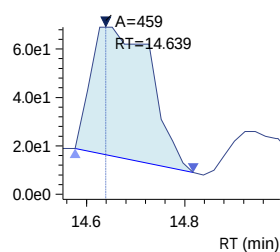


positive trans

Conc. 2.0615

Q 514.80>219.10 (+)

6.90e1





240130_023

Sample ID: 1633 ICAL 5.0PPB
Date Acquired: 1/30/2024 11:15:12 PM
Acquired by: System Administrator
Data File: 240130_023
Vial: 6 | Inj. Volume: 10.0000uL | Tray: 1

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	944228	----	----	----	----	----	----	
13C4-PFBA_IS	216.80>171.90	----	944228	----	----	----	----	----	----	
13C3-PFBA_IS	216.00>172.00	----	628680	----	----	----	----	----	----	
PFBA	212.80>169.05	----	430874	----	----	----	----	----	----	
PFMPA	229.00>84.90	----	362239	----	----	----	----	----	----	
3_3 FTCA	241.00>177.10	241.00>117.00	191337	267765	139.94	139.21	----	----	----	
13C5-PFPeA	268.30>223.00	----	267071	----	----	----	----	----	----	
13C5-PFPeA_IS	268.30>223.00	----	267071	----	----	----	----	----	----	
PFPeA	263.00>219.00	----	910458	----	----	----	----	----	----	
PFMBA	279.00>84.95	----	546893	----	----	----	----	----	----	
13C2-4_2 FTS	329.10>80.90	----	291306	----	----	----	----	----	----	
13C2-4_2 FTS_IS	329.10>80.90	----	291306	----	----	----	----	----	----	
4_2 FTS	327.10>307.00	327.10>80.90	687124	217282	31.62	32.10	217282	31.62	32.10	
13C3-PFBS_IS	302.10>79.90	----	305560	----	----	----	----	----	----	
PFBS	298.70>79.90	298.70>98.80	642368	292172	45.48	44.81	292172	45.48	44.81	
13C3-PFBS	302.10>79.90	----	305560	----	----	----	----	----	----	
NFDHA	295.00>201.00	295.00>84.90	594345	201279	33.87	35.54	201279	33.87	35.54	
13C5-PFHxA	318.00>273.00	----	603366	----	----	----	----	----	----	
13C5-PFHxA_IS	318.00>273.00	----	603366	----	----	----	----	----	----	
13C2-PFHxA_IS	315.10>270.00	----	715943	----	----	----	----	----	----	
PFHxA	313.00>269.00	----	1088160	----	----	----	----	----	----	
PFEESA	314.80>135.00	314.80>82.90	3079790	173033	5.62	5.22	173033	5.62	5.22	
13C3-HFPO-DA	286.90>168.90	----	626931	----	----	----	----	----	----	
13C3-HFPO-DA_IS	286.90>168.90	----	626931	----	----	----	----	----	----	
HFPO-DA	284.90>168.90	284.90>184.90	309657	187219	60.46	59.79	187219	60.46	59.79	
5_3 FTCA	341.00>237.05	341.00>217.00	897007	1410616	157.26	157.08	1410616	157.26	157.08	
PFPeS	349.10>79.90	349.10>98.80	529875	289833	54.70	55.12	289833	54.70	55.12	
13C4-PFHpA	367.10>322.00	----	711946	----	----	----	----	----	----	
13C4-PFHpA_IS	367.10>322.00	----	711946	----	----	----	----	----	----	
PFHpA	363.10>319.00	363.10>169.00	1199703	269283	22.45	23.02	269283	22.45	23.02	
DONA	376.90>250.90	376.90>84.80	2377729	644612	27.11	27.50	644612	27.11	27.50	
13C2-6_2 FTS_IS	429.10>80.90	----	291557	----	----	----	----	----	----	
13C2-6_2 FTS	429.10>80.90	----	291557	----	----	----	----	----	----	
6_2 FTS	427.10>407.00	427.10>80.90	532370	234572	44.06	50.47	234572	44.06	50.47	
13C4-PFOA_IS	417.10>172.00	----	65694	----	----	----	----	----	----	
13C8-PFOA_IS	421.10>376.00	----	810735	----	----	----	----	----	----	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240130_023 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	810735	----	----	----	----	----	----	----
PFOA	413.00>369.00	413.00>169.00	1302596	355024	27.26	28.77	355024	27.26	28.77	
13C3-PFHxS	402.10>79.90	----	291766	----	----	----	----	----	----	----
13C3-PFHxS_IS	402.10>79.90	----	291766	----	----	----	----	----	----	----
PFHxS	398.70>79.90	398.70>98.90	495607	293159	59.15	60.90	293159	59.15	60.90	
18O2-PFHxS_IS	403.00>83.90	----	328304	----	----	----	----	----	----	----
13C9-PFNA_IS	472.10>427.00	----	424831	----	----	----	----	----	----	----
13C9-PFNA	472.10>427.00	----	424831	----	----	----	----	----	----	----
13C5-PFNA_IS	468.00>423.00	----	451675	----	----	----	----	----	----	----
PFNA	463.00>419.00	463.00>219.00	1305517	276927	21.21	19.31	276927	21.21	19.31	
PFHpS	449.00>79.90	449.00>98.80	513354	267257	52.06	52.44	267257	52.06	52.44	
7_3 FTCA	441.00>317.00	441.00>336.90	1687020	2179117	129.17	129.46	2179117	129.17	129.46	
13C2-8_2-FTS	529.10>80.90	----	263601	----	----	----	----	----	----	----
13C2-8_2-FTS_IS	529.10>80.90	----	263601	----	----	----	----	----	----	----
8_2 FTS	527.10>506.95	527.10>80.80	482104	205073	42.54	45.98	205073	42.54	45.98	
13C6-PFDA_IS	519.10>474.10	----	301296	----	----	----	----	----	----	----
13C6-PFDA	519.10>474.10	----	301296	----	----	----	----	----	----	----
13C2-PFDA_IS	515.10>470.10	----	299894	----	----	----	----	----	----	----
PFDA	512.90>469.00	512.90>219.00	1152515	206955	17.96	17.88	206955	17.96	17.88	
D3-NMeFOSAA_IS	573.20>419.00	----	820640	----	----	----	----	----	----	----
D3-NMeFOSAA	573.20>419.00	----	820640	----	----	----	----	----	----	----
13C8-PFOS_IS	507.10>98.90	----	120645	----	----	----	----	----	----	----
13C8-PFOS	507.10>98.90	----	120645	----	----	----	----	----	----	----
13C4-PFOS_IS	502.80>79.90	----	399184	----	----	----	----	----	----	----
PFOS	498.90>79.90	498.90>98.80	457620	226890	49.58	53.60	226890	49.58	53.60	
NMeFOSAA	570.10>419.00	570.10>483.00	558068	358534	64.25	64.89	358534	64.25	64.89	
D5-NetFOSAA_IS	589.20>419.00	----	633420	----	----	----	----	----	----	----
D5-NetFOSAA	589.20>419.00	----	633420	----	----	----	----	----	----	----
NetFOSAA	584.20>419.10	584.20>526.00	516515	464777	89.98	96.07	464777	89.98	96.07	
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	2828313	896862	31.71	30.95	896862	31.71	30.95	
PFUnDA	563.10>519.00	563.10>269.10	1214283	147555	12.15	11.01	147555	12.15	11.01	
13C7-PFUnDA_IS	570.00>525.10	----	362656	----	----	----	----	----	----	----
13C7-PFUnDA	570.00>525.10	----	362656	----	----	----	----	----	----	----
PFNS	548.80>79.90	548.80>98.80	497433	295525	59.41	60.44	295525	59.41	60.44	
10_2 FTS	626.80>607.05	626.80>81.00	595603	205036	34.42	36.14	205036	34.42	36.14	
13C2-PFDOA_IS	615.10>570.00	----	430032	----	----	----	----	----	----	----
13C2-PFDOA	615.10>570.00	----	430032	----	----	----	----	----	----	----
PFDOA	613.10>569.00	613.10>319.00	1063934	104650	9.84	10.16	104650	9.84	10.16	
PFDS	599.00>79.90	599.00>98.80	440049	257026	58.41	58.26	257026	58.41	58.26	
PFTDA	663.00>619.00	663.00>168.90	1513030	227370	15.03	16.18	227370	15.03	16.18	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240130_023 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	2000729	708640	35.42	34.99	708640	35.42	34.99	
PFOSAm	498.10>77.90	----	1048311	----	----	----	----	----	----	
13C8-PFOSAm	506.10>77.80	----	289059	----	----	----	----	----	----	
13C8-PFOSAm_IS	506.10>77.80	----	289059	----	----	----	----	----	----	
PFTDA	713.10>669.00	713.10>168.90	1009560	188528	18.67	18.05	188528	18.67	18.05	
13C2-PFTDA	715.20>670.00	----	286905	----	----	----	----	----	----	
13C2-PFTDA_IS	715.20>670.00	----	286905	----	----	----	----	----	----	
PFDoS	699.10>79.90	699.10>98.80	268074	165018	61.56	61.13	165018	61.56	61.13	
D7-MeFOSE_IS	623.20>58.90	----	823811	----	----	----	----	----	----	
D7-MeFOSE	623.20>58.90	----	823811	----	----	----	----	----	----	
MeFOSE	616.10>59.00	----	190071	----	----	----	----	----	----	
13C2-PFHxDA_IS	815.00>770.05	----	850412	----	----	----	----	----	----	
13C2-PFHxDA	815.00>770.05	----	850412	----	----	----	----	----	----	
PFHxDA	813.00>768.95	813.00>218.95	2102430	243673	11.59	11.66	243673	11.59	11.66	
D3-MeFOSA	515.00>219.00	----	90721	----	----	----	----	----	----	
D3-MeFOSA_IS	515.00>219.00	----	90721	----	----	----	----	----	----	
MeFOSA	511.90>219.00	511.90>169.00	230463	355655	154.32	160.44	355655	154.32	160.44	
D9-EtFOSE_IS	639.20>58.90	----	1034041	----	----	----	----	----	----	
D9-EtFOSE	639.20>58.90	----	1022551	----	----	----	----	----	----	
EtFOSE	630.00>59.00	----	236056	----	----	----	----	----	----	
D5-EtFOSAm	531.10>219.00	----	113863	----	----	----	----	----	----	
D5-EtFOSAm_IS	531.10>219.00	----	113863	----	----	----	----	----	----	
EtFOSAm	526.00>219.00	526.00>169.00	304718	480532	157.70	159.63	480532	157.70	159.63	
PFODA	913.00>868.65	913.00>169.00	875688	286772	32.75	36.03	286772	32.75	36.03	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
 IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240130_023

Sample ID: 1633 ICAL 5.0PPB
Date Acquired: 1/30/2024 11:15:12 PM
Acquired by: System Administrator
Data File: 240130_023
Vial: 6 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.336	-0.002	-0.001	944228	628680	13C3-PFBA_IS	10.1360	ng/mL	
13C4-PFBA_IS	Auto	1.336	-0.002	----	944228	944228	----	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.337	0.000	----	628680	628680	----	5.0000	ng/mL	
PFBA	Auto	1.337	-0.004	0.001	430874	944228	13C4-PFBA_IS	4.8983	ng/mL	
PFMPA	Auto	2.362	-0.004	-1.072	362239	267071	13C5-PFPeA_IS	4.7501	ng/mL	
3_3 FTCA	Auto	2.940	-0.005	-0.494	191337	267071	13C5-PFPeA_IS	50.0154	ng/mL	
13C5-PFPeA	Auto	3.434	-0.005	-1.493	267071	715943	13C2-PFHxA_IS	5.1879	ng/mL	
13C5-PFPeA_IS	Auto	3.434	-0.005	----	267071	267071	----	5.0000	ng/mL	
PFPeA	Auto	3.437	-0.005	0.003	910458	267071	13C5-PFPeA_IS	4.8687	ng/mL	
PFMBA	Auto	3.962	-0.007	0.528	546893	267071	13C5-PFPeA_IS	4.6793	ng/mL	
13C2-4_2 FTS	Auto	4.614	-0.006	-2.428	291306	328304	18O2-PFHxS_IS	4.7138	ng/mL	
13C2-4_2 FTS_IS	Auto	4.614	-0.006	----	291306	291306	----	5.0000	ng/mL	
4_2 FTS	Auto	4.614	-0.006	0.000	687124	291306	13C2-4_2 FTS_IS	4.7585	ng/mL	
13C3-PFBS_IS	Auto	4.581	-0.006	----	305560	305560	----	2.5000	ng/mL	
PFBS	Auto	4.582	-0.006	0.001	642368	305560	13C3-PFBS_IS	4.2423	ng/mL	
13C3-PFBS	Auto	4.581	-0.006	-2.461	305560	328304	18O2-PFHxS_IS	2.4945	ng/mL	
NFDHA	Auto	4.784	-0.006	-0.142	594345	603366	13C5-PFHxA_IS	4.7490	ng/mL	
13C5-PFHxA	Auto	4.926	-0.006	-0.001	603366	715943	13C2-PFHxA_IS	2.6109	ng/mL	
13C5-PFHxA_IS	Auto	4.926	-0.006	----	603366	603366	----	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	4.927	-0.006	----	715943	715943	----	2.5000	ng/mL	
PFHxA	Auto	4.928	-0.006	0.002	1088160	603366	13C5-PFHxA_IS	4.8369	ng/mL	
PFEESA	Auto	5.259	-0.006	0.333	3079790	603366	13C5-PFHxA_IS	4.1084	ng/mL	
13C3-HFPO-DA	Auto	5.405	-0.007	0.478	626931	715943	13C2-PFHxA_IS	9.8810	ng/mL	
13C3-HFPO-DA_IS	Auto	5.405	-0.007	----	626931	626931	----	10.0000	ng/mL	
HFPO-DA	Auto	5.406	-0.007	0.001	309657	626931	13C3-HFPO-DA_IS	5.0230	ng/mL	
5_3 FTCA	Auto	5.858	-0.008	0.932	897007	603366	13C5-PFHxA_IS	49.7338	ng/mL	
PFPeS	Auto	5.965	-0.008	-1.077	529875	291766	13C3-PFHxS_IS	4.5885	ng/mL	
13C4-PFHpA	Auto	6.112	-0.008	1.185	711946	715943	13C2-PFHxA_IS	2.4488	ng/mL	
13C4-PFHpA_IS	Auto	6.112	-0.008	----	711946	711946	----	2.5000	ng/mL	
PFHpA	Auto	6.115	-0.007	0.003	1199703	711946	13C4-PFHpA_IS	4.9511	ng/mL	
DONA	Auto	6.478	-0.009	1.073	2377729	626931	13C3-HFPO-DA_IS	4.4991	ng/mL	
13C2-6_2 FTS_IS	Auto	6.759	-0.007	----	291557	291557	----	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.759	-0.007	-0.283	291557	328304	18O2-PFHxS_IS	4.5320	ng/mL	
6_2 FTS	Auto	6.760	-0.005	0.001	532370	291557	13C2-6_2 FTS_IS	4.7882	ng/mL	
13C4-PFOA_IS	Auto	7.075	-0.004	----	65694	65694	----	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.074	-0.004	----	810735	810735	----	2.5000	ng/mL	
13C8-PFOA	Auto	7.074	-0.004	-0.001	810735	65694	13C4-PFOA_IS	2.5877	ng/mL	
PFOA	Auto	7.076	-0.005	0.002	1302596	810735	13C8-PFOA_IS	4.3922	ng/mL	
13C3-PFHxS	Auto	7.042	-0.006	0.000	291766	328304	18O2-PFHxS_IS	2.5356	ng/mL	
13C3-PFHxS_IS	Auto	7.042	-0.006	----	291766	291766	----	2.5000	ng/mL	
PFHxS	Auto	7.042	-0.006	0.000	495607	291766	13C3-PFHxS_IS	3.8863	ng/mL	
18O2-PFHxS_IS	Auto	7.042	-0.006	----	328304	328304	----	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.924	-0.005	----	424831	424831	----	1.2500	ng/mL	
13C9-PFNA	Auto	7.924	-0.005	0.000	424831	451675	13C5-PFNA_IS	1.2706	ng/mL	
13C5-PFNA_IS	Auto	7.924	-0.006	----	451675	451675	----	1.2500	ng/mL	
PFNA	Auto	7.925	-0.005	0.001	1305517	424831	13C9-PFNA_IS	4.7173	ng/mL	
PFHpS	Auto	7.965	-0.006	-0.813	513354	120645	13C8-PFOS_IS	5.0609	ng/mL	
7_3 FTCA	Auto	7.923	-0.006	2.997	1687020	603366	13C5-PFHxA_IS	53.2301	ng/mL	
13C2-8_2-FTS	Auto	8.381	-0.007	1.339	263601	328304	18O2-PFHxS_IS	4.8261	ng/mL	
13C2-8_2-FTS_IS	Auto	8.381	-0.007	----	263601	263601	----	5.0000	ng/mL	
8_2 FTS	Auto	8.382	-0.006	0.001	482104	263601	13C2-8_2-FTS_IS	4.7979	ng/mL	
13C6-PFDA_IS	Auto	8.686	-0.009	----	301296	301296	----	1.2500	ng/mL	
13C6-PFDA	Auto	8.686	-0.009	-0.001	301296	299894	13C2-PFDA_IS	1.2537	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_023 (continued)

(Table continued from previous page)

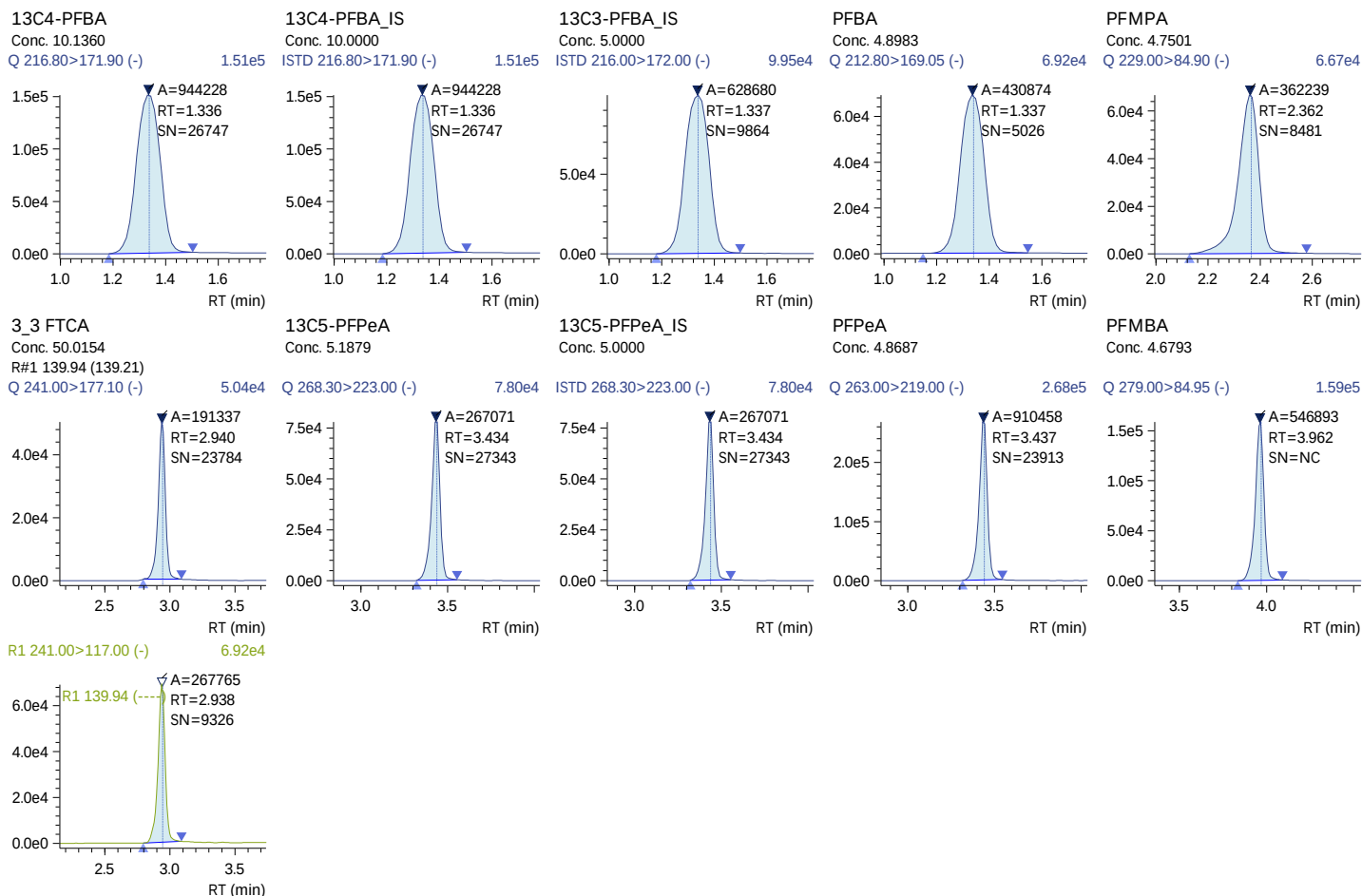
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13C2-PFDA_IS	Auto	8.687	-0.009	----	299894	299894	----	1.2500	ng/mL	
PFDA	Auto	8.687	-0.010	0.001	1152515	301296	13C6-PFDA_IS	4.5229	ng/mL	
D3-NMeFOSAA_IS	Auto	8.826	-0.008	----	820640	820640	----	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.826	-0.008	0.048	820640	399184	13C4-PFOS_IS	5.0492	ng/mL	
13C8-PFOS_IS	Auto	8.778	-0.008	----	120645	120645	----	2.5000	ng/mL	
13C8-PFOS	Auto	8.778	-0.008	0.000	120645	399184	13C4-PFOS_IS	2.4015	ng/mL	
13C4-PFOS_IS	Auto	8.778	-0.009	----	399184	399184	----	2.5000	ng/mL	
PFOS	M	8.778	-0.010	0.000	457620	120645	13C8-PFOS_IS	4.4407	ng/mL	
NMeFOSAA	M	8.831	0.180	0.005	558068	820640	D3-NMeFOSAA_IS	4.8026	ng/mL	
D5-NetFOSAA_IS	Auto	9.157	-0.007	----	633420	633420	----	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.157	-0.007	0.379	633420	399184	13C4-PFOS_IS	4.9452	ng/mL	
NetFOSAA	M	9.166	0.180	0.009	516515	633420	D5-NetFOSAA_IS	4.9657	ng/mL	
9-CI-PF3ONS	Auto	9.344	-0.007	3.939	2828313	626931	13C3-HFPO-DA_IS	4.6007	ng/mL	
PFUnDA	Auto	9.414	-0.007	0.002	1214283	362656	13C7-PFUnDA_IS	4.9026	ng/mL	
13C7-PFUnDA_IS	Auto	9.412	-0.007	----	362656	362656	----	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.412	-0.007	0.725	362656	299894	13C2-PFDA_IS	1.2144	ng/mL	
PFNS	Auto	9.540	-0.009	0.762	497433	120645	13C8-PFOS_IS	4.8716	ng/mL	
10_2_FTS	Auto	9.788	-0.007	1.407	595603	263601	13C2-8_2-FTS_IS	4.4734	ng/mL	
13C2-PFDOA_IS	Auto	10.098	-0.009	----	430032	430032	----	1.2500	ng/mL	
13C2-PFDOA	Auto	10.098	-0.009	1.411	430032	299894	13C2-PFDA_IS	1.2063	ng/mL	
PFDOA	Auto	10.100	-0.008	0.002	1063934	430032	13C2-PFDOA_IS	4.9545	ng/mL	
PFDS	Auto	10.254	-0.009	1.476	440049	120645	13C8-PFOS_IS	4.9078	ng/mL	
PFTDA	Auto	10.756	-0.008	-0.630	1513030	286905	13C2-PFTDA_IS	5.3281	ng/mL	
11-CI-PF3OUdS	Auto	10.762	-0.009	5.357	2000729	626931	13C3-HFPO-DA_IS	4.5593	ng/mL	
PFOSAm	M	11.146	-0.004	-0.002	1048311	289059	13C8-PFOSAm_IS	10.3651	ng/mL	
13C8-PFOSAm	Auto	11.148	-0.007	2.370	289059	399184	13C4-PFOS_IS	2.2796	ng/mL	
13C8-PFOSAm_IS	Auto	11.148	-0.007	----	289059	289059	----	2.5000	ng/mL	
PFTDA	Auto	11.388	-0.008	0.002	1009560	286905	13C2-PFTDA_IS	5.0676	ng/mL	
13C2-PFTDA	Auto	11.386	-0.009	2.699	286905	299894	13C2-PFDA_IS	1.1403	ng/mL	
13C2-PFTDA_IS	Auto	11.386	-0.009	----	286905	286905	----	1.2500	ng/mL	
PFDoS	Auto	11.578	-0.008	2.800	268074	120645	13C8-PFOS_IS	4.7940	ng/mL	
D7-MeFOSE_IS	Auto	13.380	-0.006	----	823811	823811	----	25.0000	ng/mL	
D7-MeFOSE	Auto	13.380	-0.006	4.602	823811	399184	13C4-PFOS_IS	25.3072	ng/mL	
MeFOSE	M	13.417	-0.006	0.037	190071	823811	D7-MeFOSE_IS	4.7535	ng/mL	
13C2-PFHXA_IS	Auto	12.599	-0.010	----	850412	850412	----	2.5000	ng/mL	
13C2-PFHXA	Auto	12.599	-0.010	3.912	850412	299894	13C2-PFDA_IS	2.5256	ng/mL	
PFHXA	Auto	12.601	-0.009	0.002	2102430	850412	13C2-PFHXA_IS	4.5749	ng/mL	
D3-MeFOSA	Auto	13.685	-0.005	4.907	90721	399184	13C4-PFOS_IS	2.7404	ng/mL	
D3-MeFOSA_IS	Auto	13.685	-0.005	----	90721	90721	----	2.5000	ng/mL	
MeFOSA	M	13.694	-0.005	0.009	230463	90721	D3-MeFOSA_IS	4.4516	ng/mL	
D9-EtFOSE_IS	Auto	14.008	-0.005	----	1034041	1034041	----	25.0000	ng/mL	
D9-EtFOSE	Auto	14.008	-0.005	5.230	1022551	399184	13C4-PFOS_IS	25.6696	ng/mL	
EtFOSE	M	14.050	-0.005	0.042	236056	1034041	D9-EtFOSE_IS	4.7600	ng/mL	
D5-EtFOSAm	Auto	14.362	-0.004	5.584	113863	399184	13C4-PFOS_IS	2.4876	ng/mL	
D5-EtFOSAm_IS	Auto	14.362	-0.004	----	113863	113863	----	2.5000	ng/mL	
EtFOSAm	M	14.379	-0.005	0.017	304718	113863	D5-EtFOSAm_IS	4.8783	ng/mL	
PFODA	Auto	13.733	-0.007	1.134	875688	850412	13C2-PFHXA_IS	4.8292	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_023 (continued)





240130_023 (continued)

13C2-4_2_FTS
Conc. 4.7138

13C2-4_2_FTS_IS
Conc. 5.0000

4_2_FTS
Conc. 4.7585
R#1 31.62 (32.10)
R#2 31.62 (32.10)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 4.2423
R#1 45.48 (44.81)
R#2 45.48 (44.81)

Q 329.10>80.90 (-)

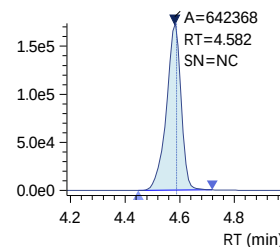
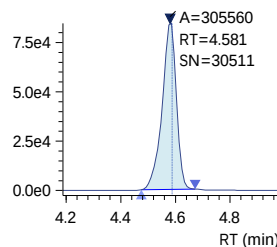
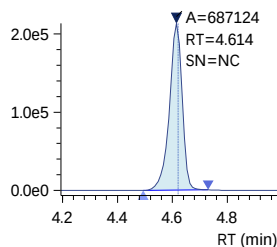
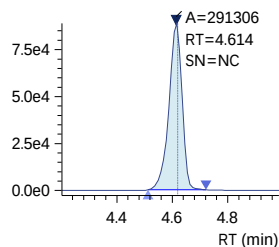
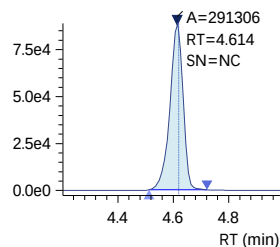
8.90e4 ISTD 329.10>80.90 (-)

8.90e4 Q 327.10>307.00 (-)

2.13e5 ISTD 302.10>79.90 (-)

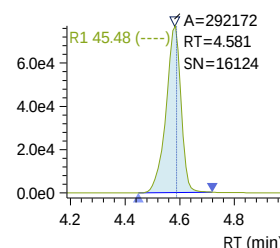
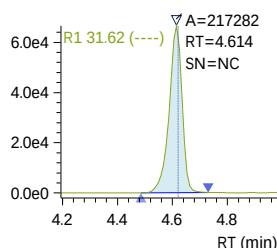
8.47e4 Q 298.70>79.90 (-)

1.74e5



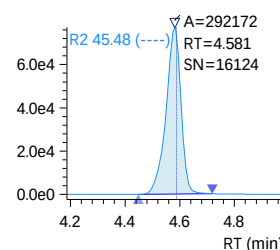
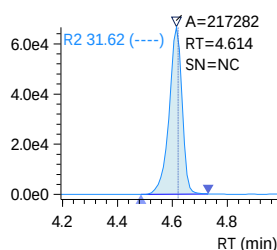
R1 327.10>80.90 (-) 6.66e4

R1 298.70>98.80 (-) 7.72e4



R2 327.10>80.90 (-) 6.66e4

R2 298.70>98.80 (-) 7.72e4





240130_023 (continued)

13C3-PFBS
Conc. 2.4945

NFDHA
Conc. 4.7490
R#1 33.87 (35.54)
R#2 33.87 (35.54)

13C5-PFHxA
Conc. 2.6109

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

Q 302.10>79.90 (-)

8.47e4

Q 295.00>201.00 (-)

1.80e5

Q 318.00>273.00 (-)

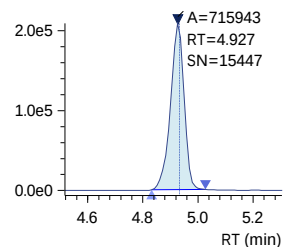
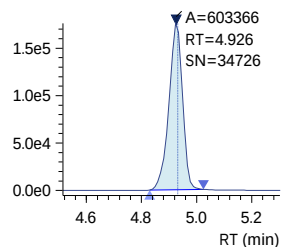
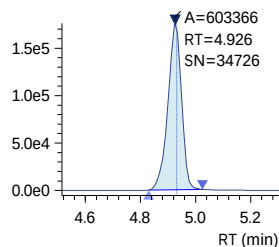
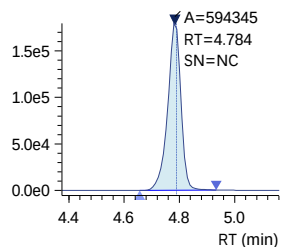
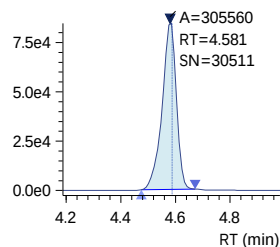
1.76e5

ISTD 318.00>273.00 (-)

1.76e5

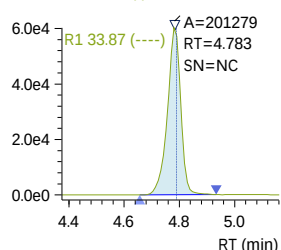
ISTD 315.10>270.00 (-)

2.09e5



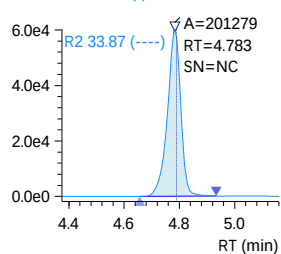
R1 295.00>84.90 (-)

6.02e4



R2 295.00>84.90 (-)

6.02e4





240130_023 (continued)

PFHxA
Conc. 4.8369

PFEESA
Conc. 4.1084
R#1 5.62 (5.22)
R#2 5.62 (5.22)

13C3-HFPO-DA
Conc. 9.8810

13C3-HFPO-DA_IS
Conc. 10.0000

HFPO-DA
Conc. 5.0230
R#1 60.46 (59.79)
R#2 60.46 (59.79)

Q 313.00>269.00 (-)

3.17e5

Q 314.80>135.00 (-)

9.02e5

Q 286.90>168.90 (-)

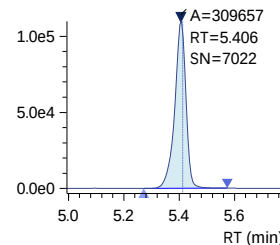
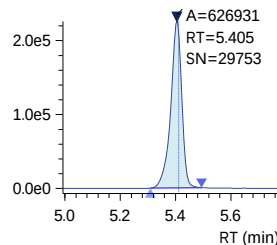
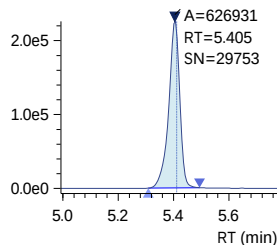
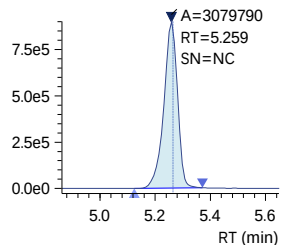
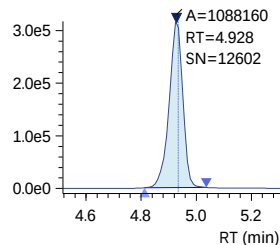
2.26e5

ISTD 286.90>168.90 (-)

2.26e5

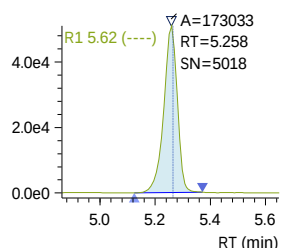
Q 284.90>168.90 (-)

1.10e5



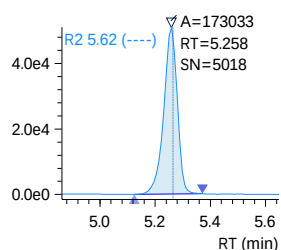
R1 314.80>82.90 (-)

5.11e4



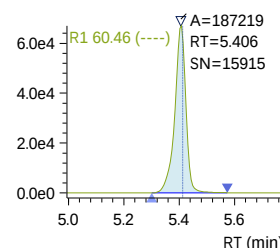
R2 314.80>82.90 (-)

5.11e4



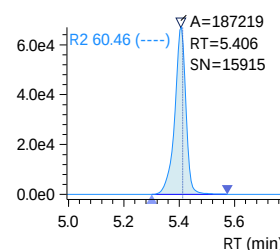
R1 284.90>184.90 (-)

6.70e4



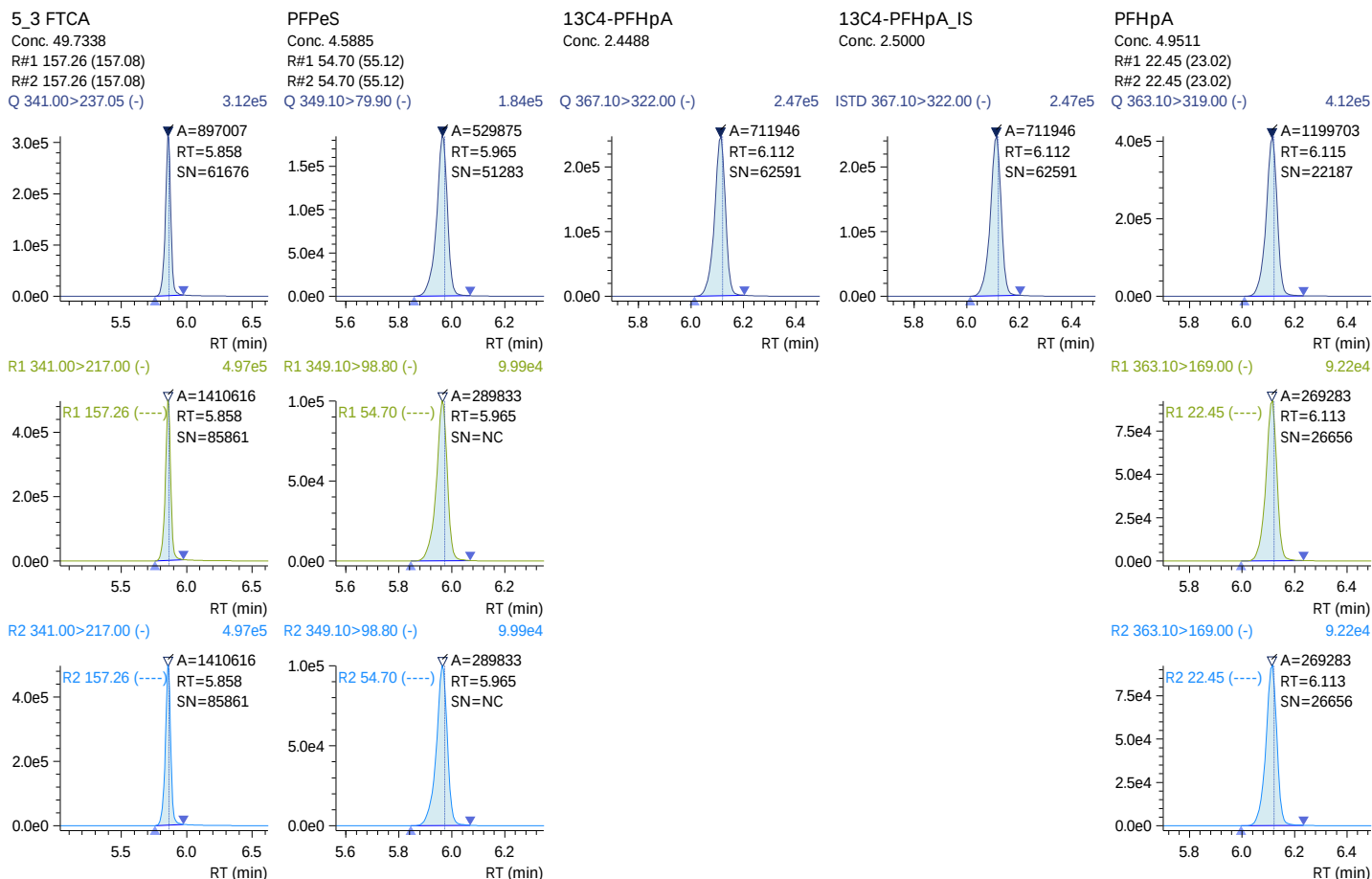
R2 284.90>184.90 (-)

6.70e4





240130_023 (continued)

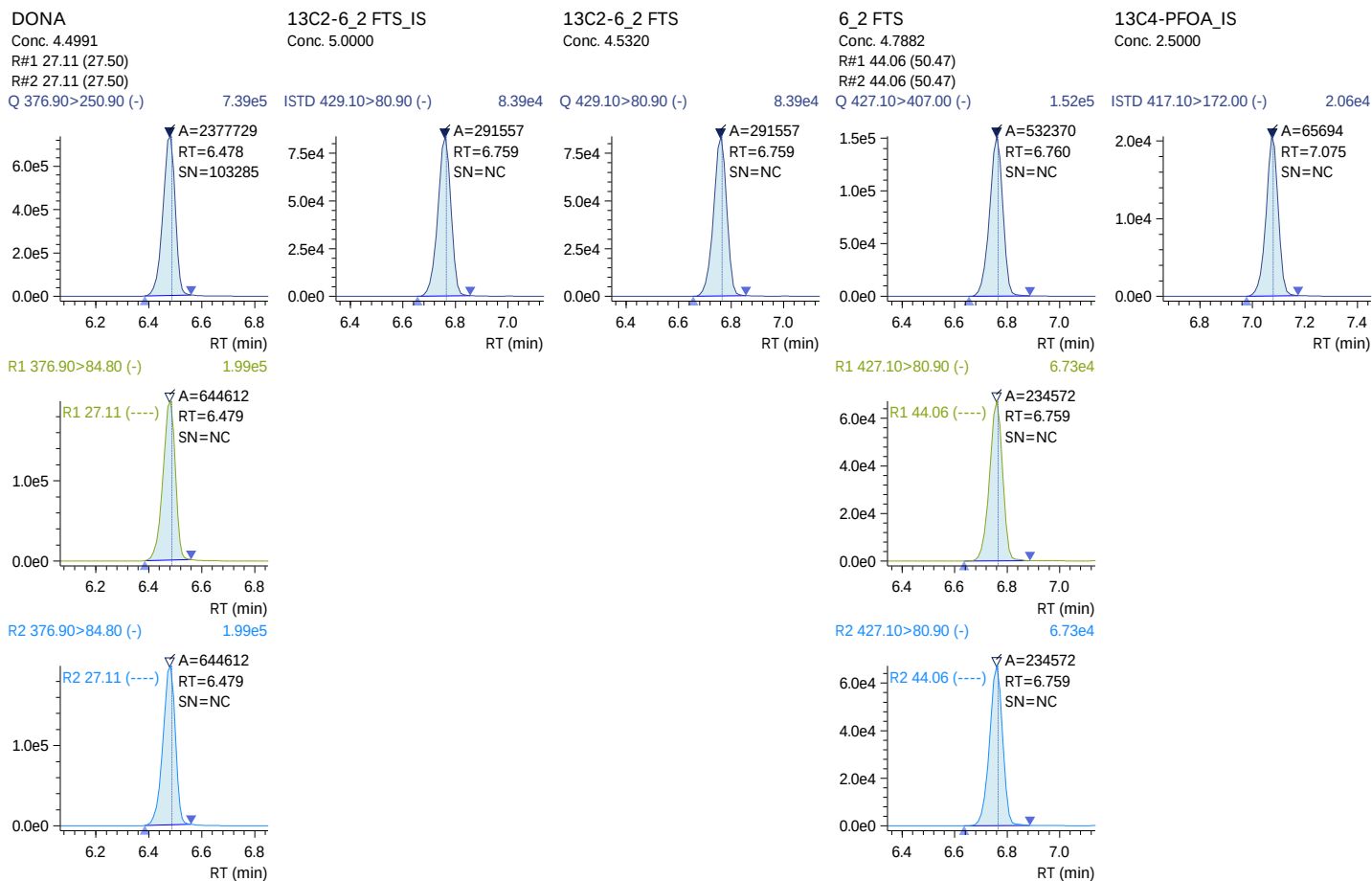


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_023 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_023 (continued)

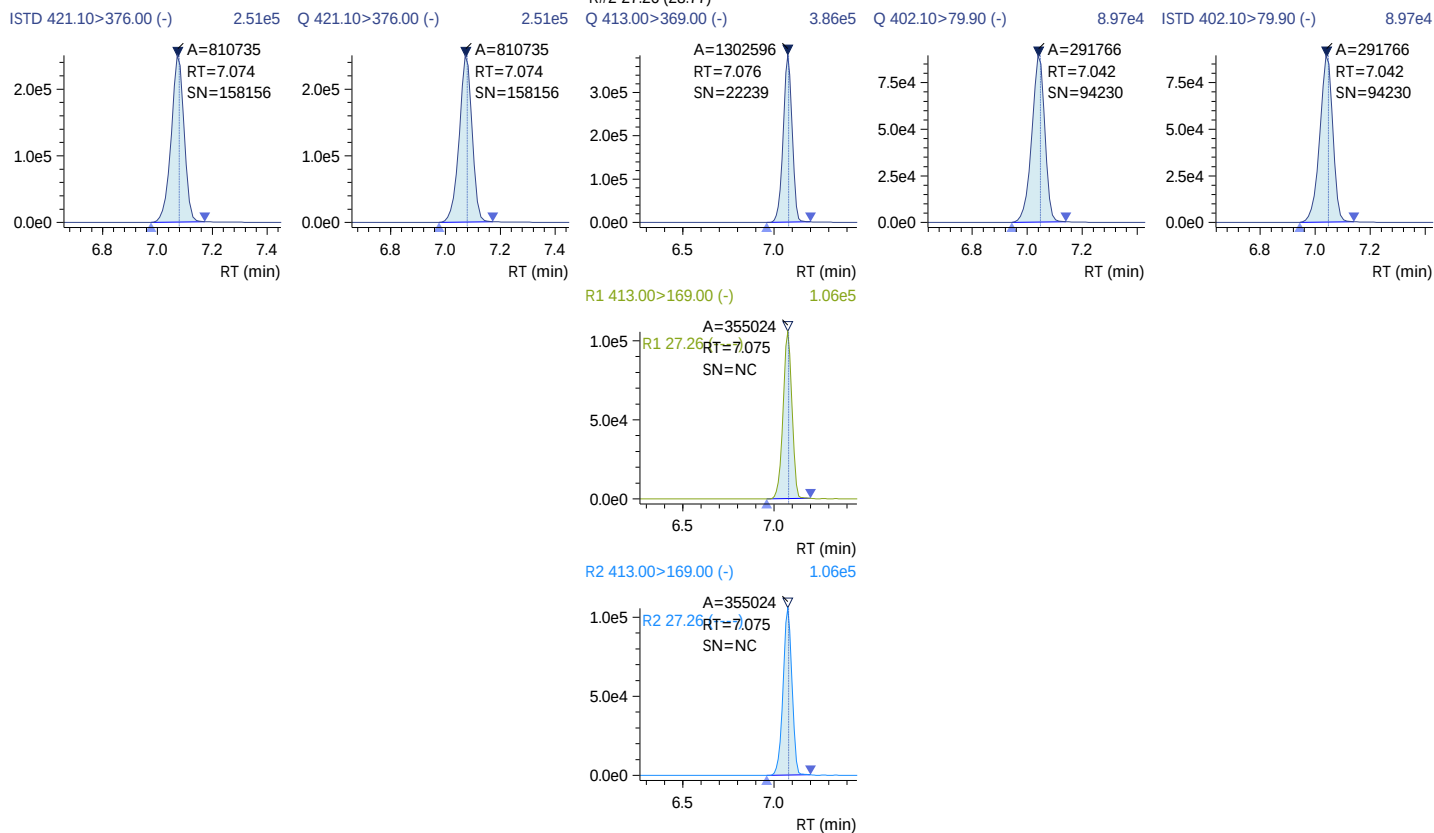
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.5877

PFOA
Conc. 4.3922
R#1 27.26 (28.77)
R#2 27.26 (28.77)

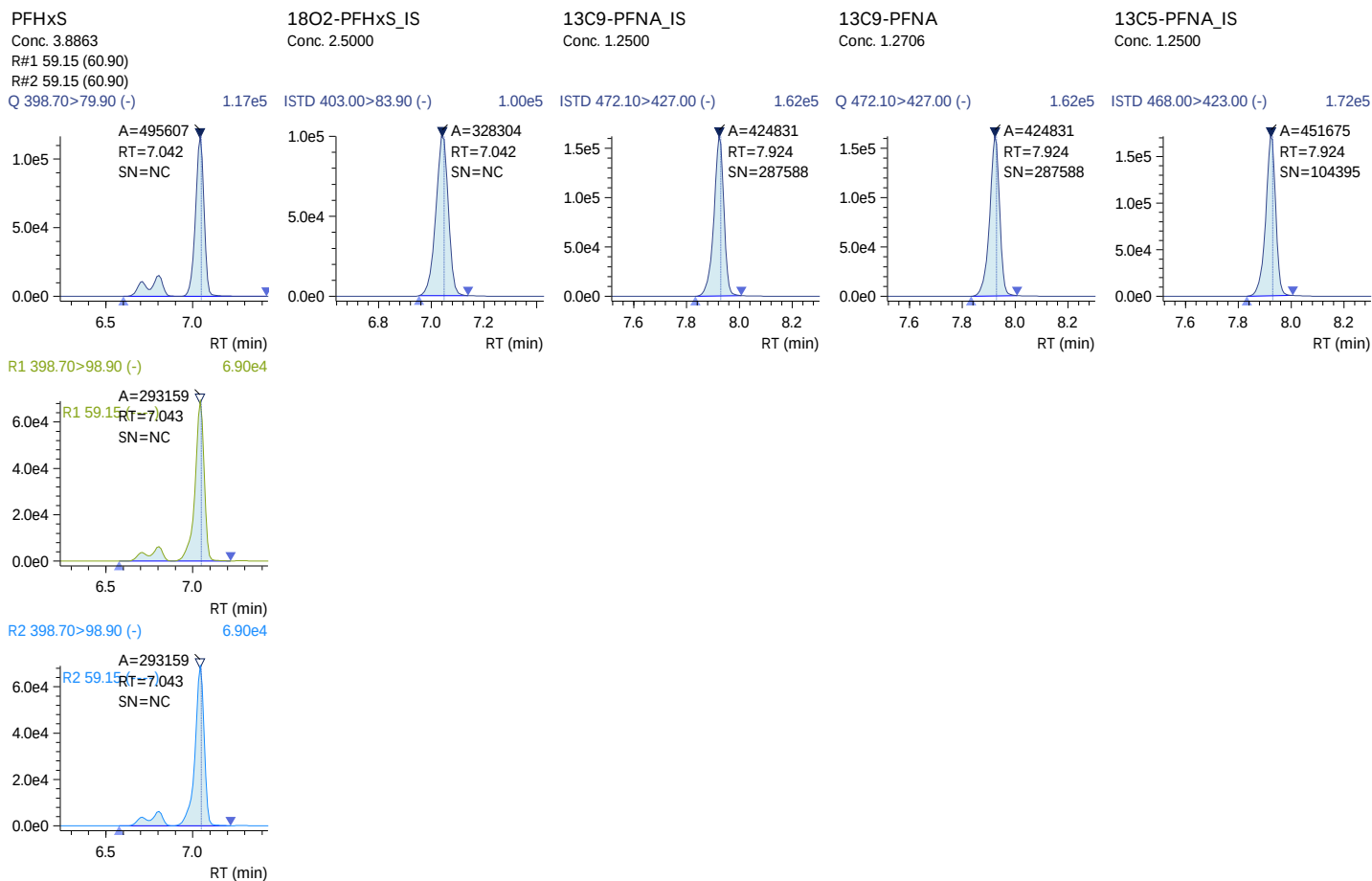
13C3-PFHxS
Conc. 2.5356

13C3-PFHxS_IS
Conc. 2.5000



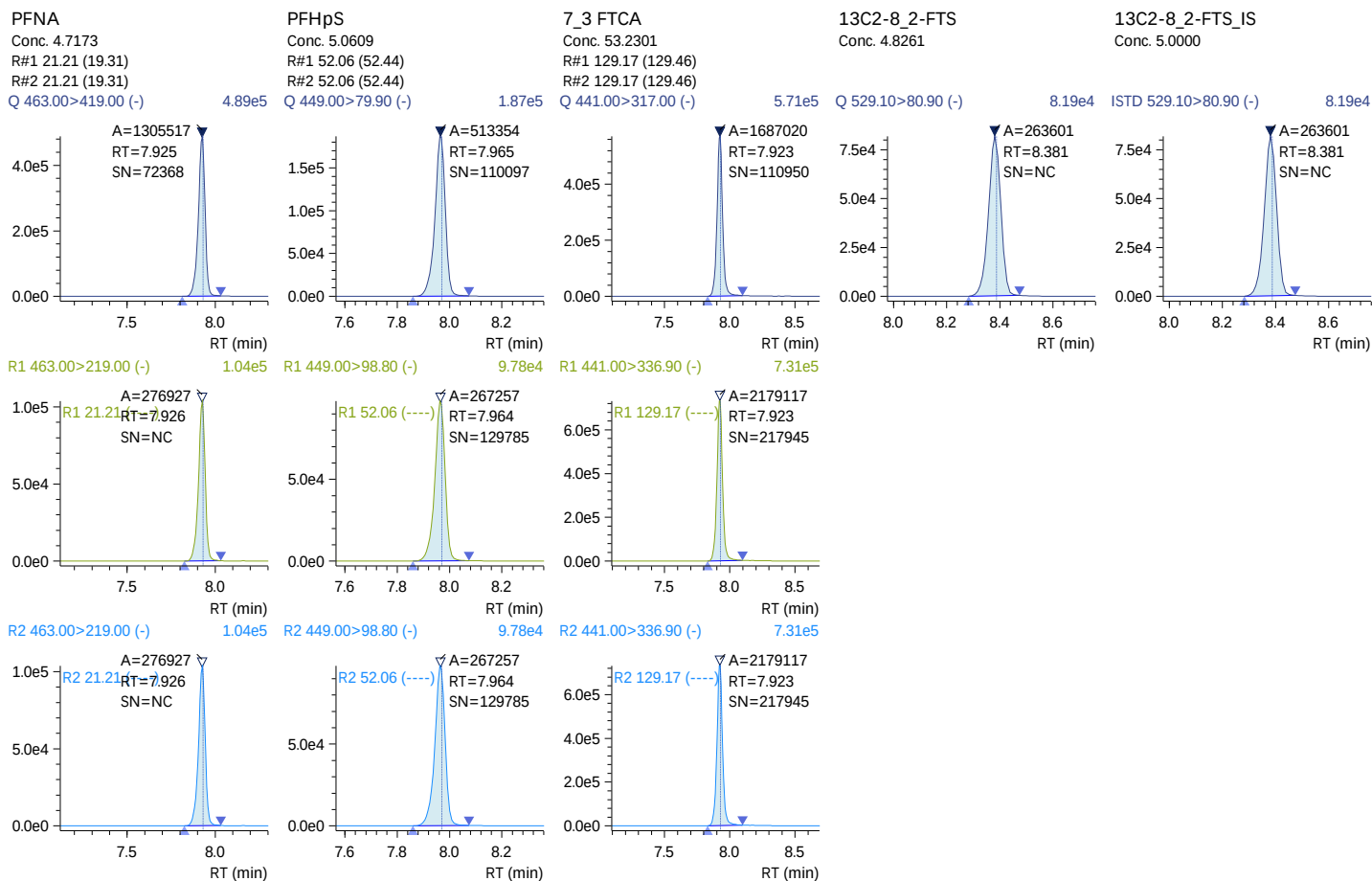


240130_023 (continued)





240130_023 (continued)

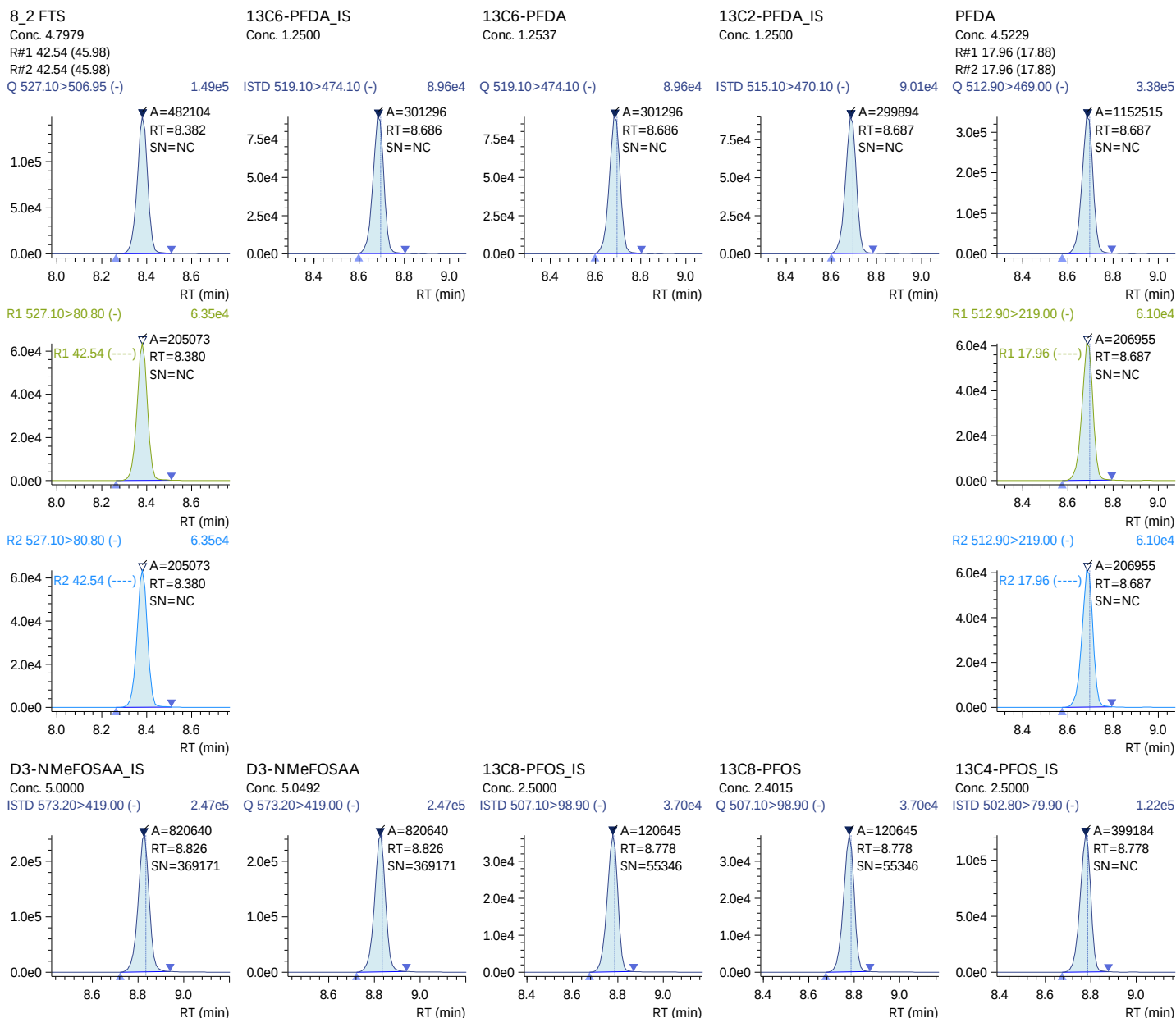


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_023 (continued)

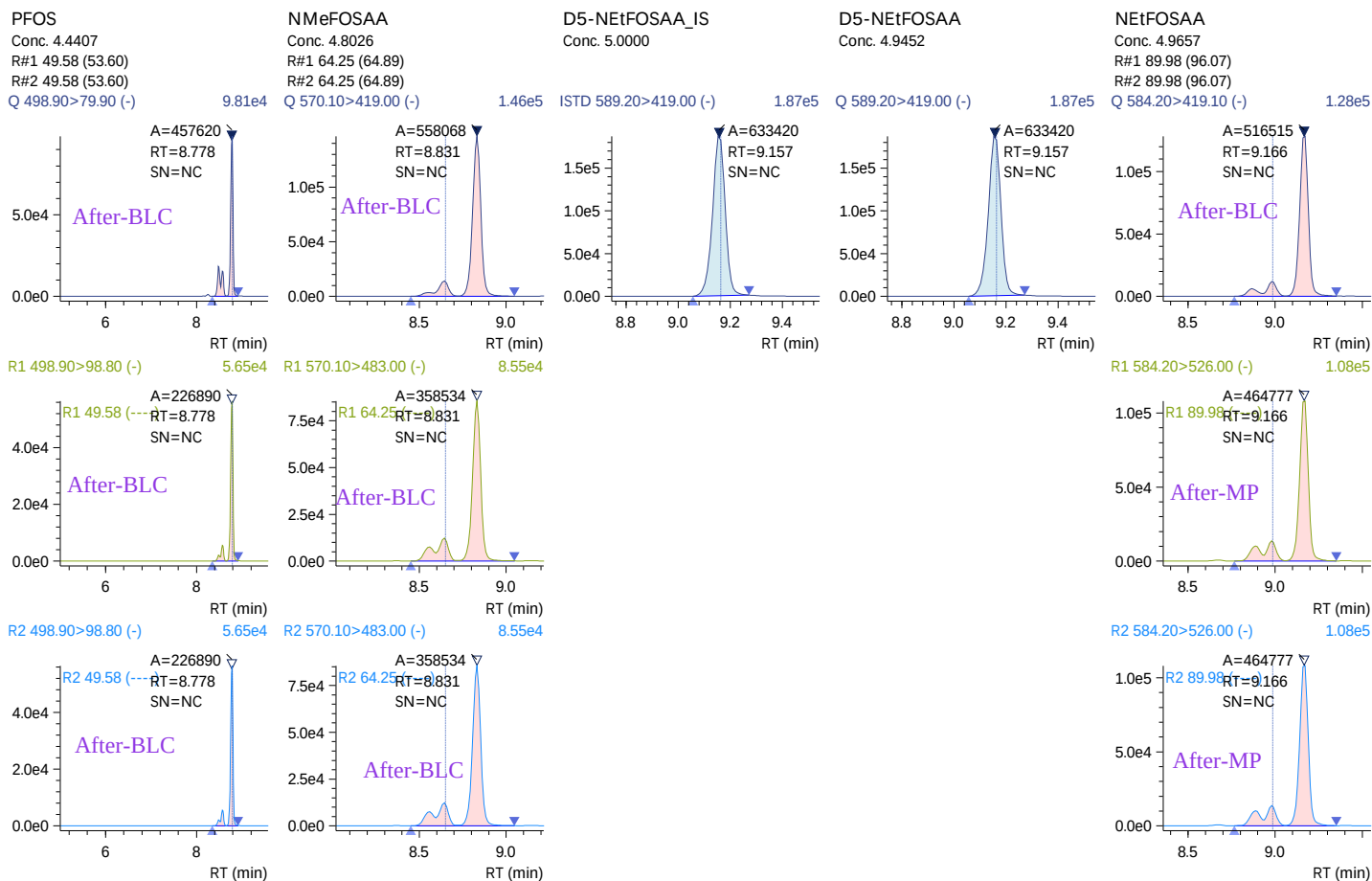


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_023 (continued)



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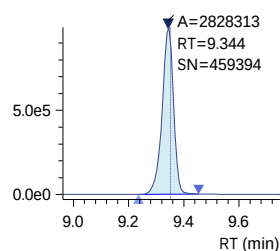
SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_023 (continued)

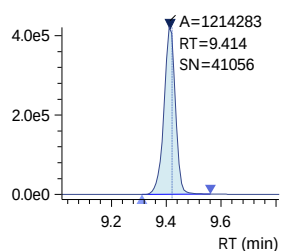
9-CI-PF3ONS

Conc. 4.6007
R#1 31.71 (30.95)
R#2 31.71 (30.95)
Q 530.80>351.00 (-)



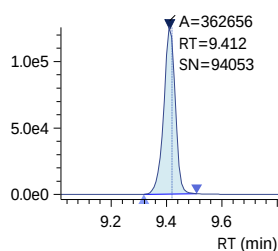
PFUnDA

Conc. 4.9026
R#1 12.15 (11.01)
R#2 12.15 (11.01)
Q 563.10>519.00 (-)



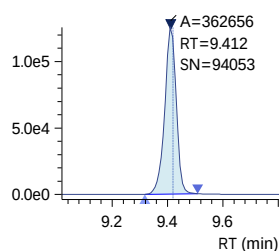
13C7-PFUnDA_IS

Conc. 1.2500
ISTD 570.00>525.10 (-)



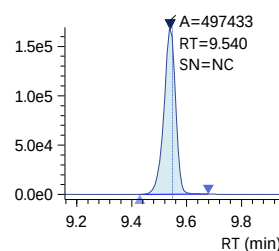
13C7-PFUnDA

Conc. 1.2144
Q 570.00>525.10 (-)

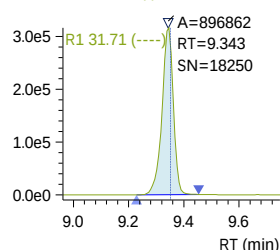


PFNS

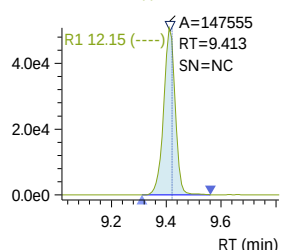
Conc. 4.8716
R#1 59.41 (60.44)
R#2 59.41 (60.44)
Q 548.80>79.90 (-)



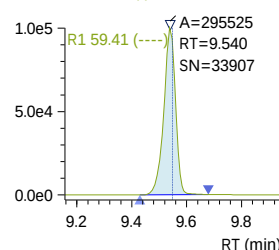
R1 532.80>353.00 (-)



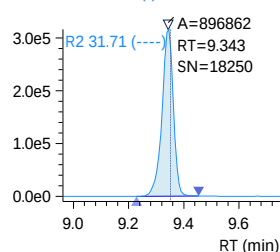
R1 563.10>269.10 (-)



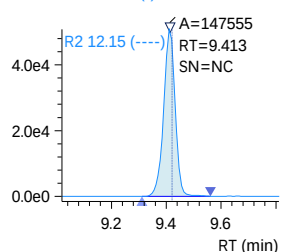
R1 548.80>98.80 (-)



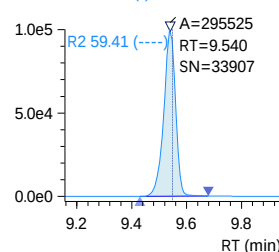
R2 532.80>353.00 (-)



R2 563.10>269.10 (-)

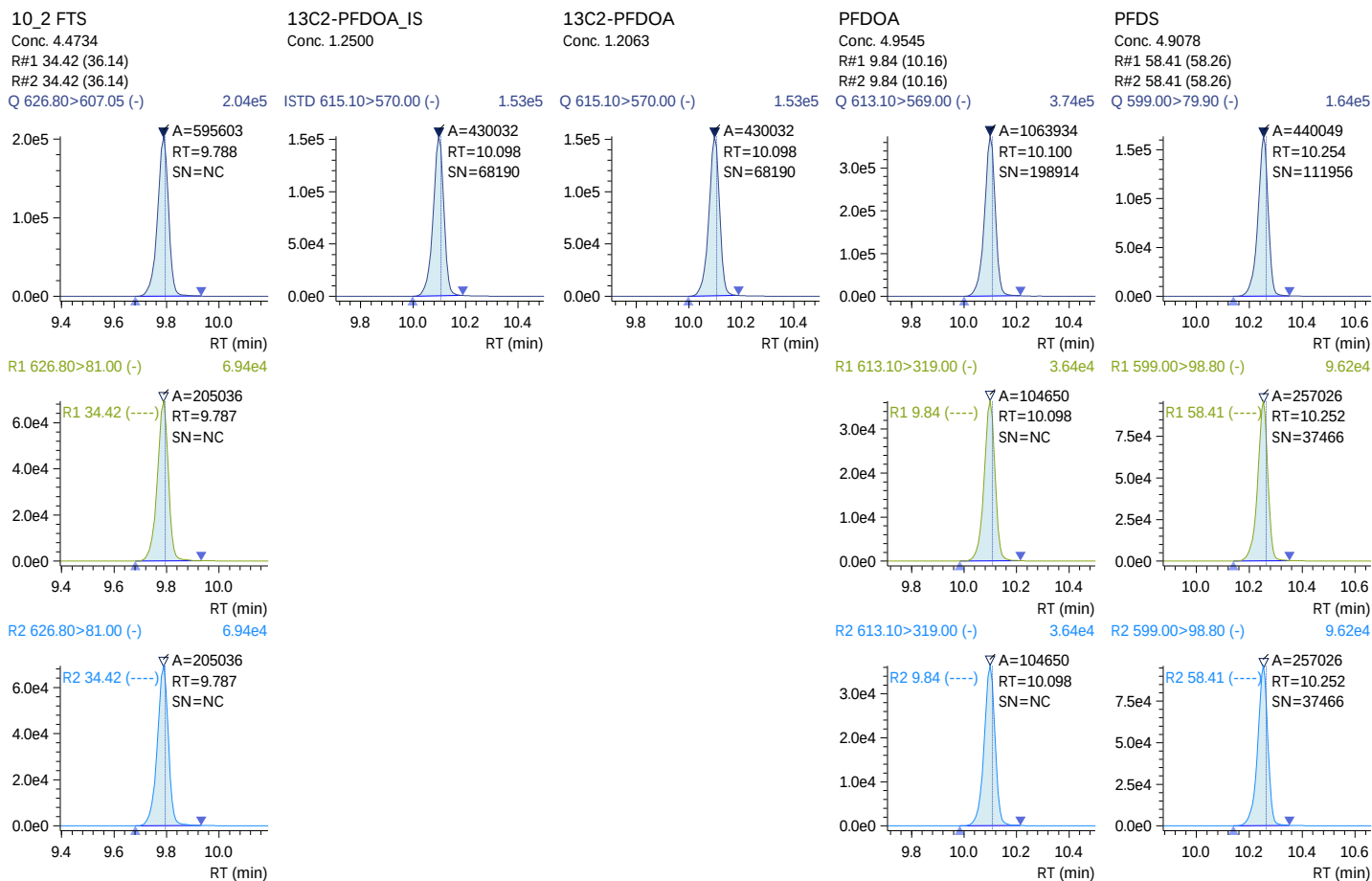


R2 548.80>98.80 (-)





240130_023 (continued)

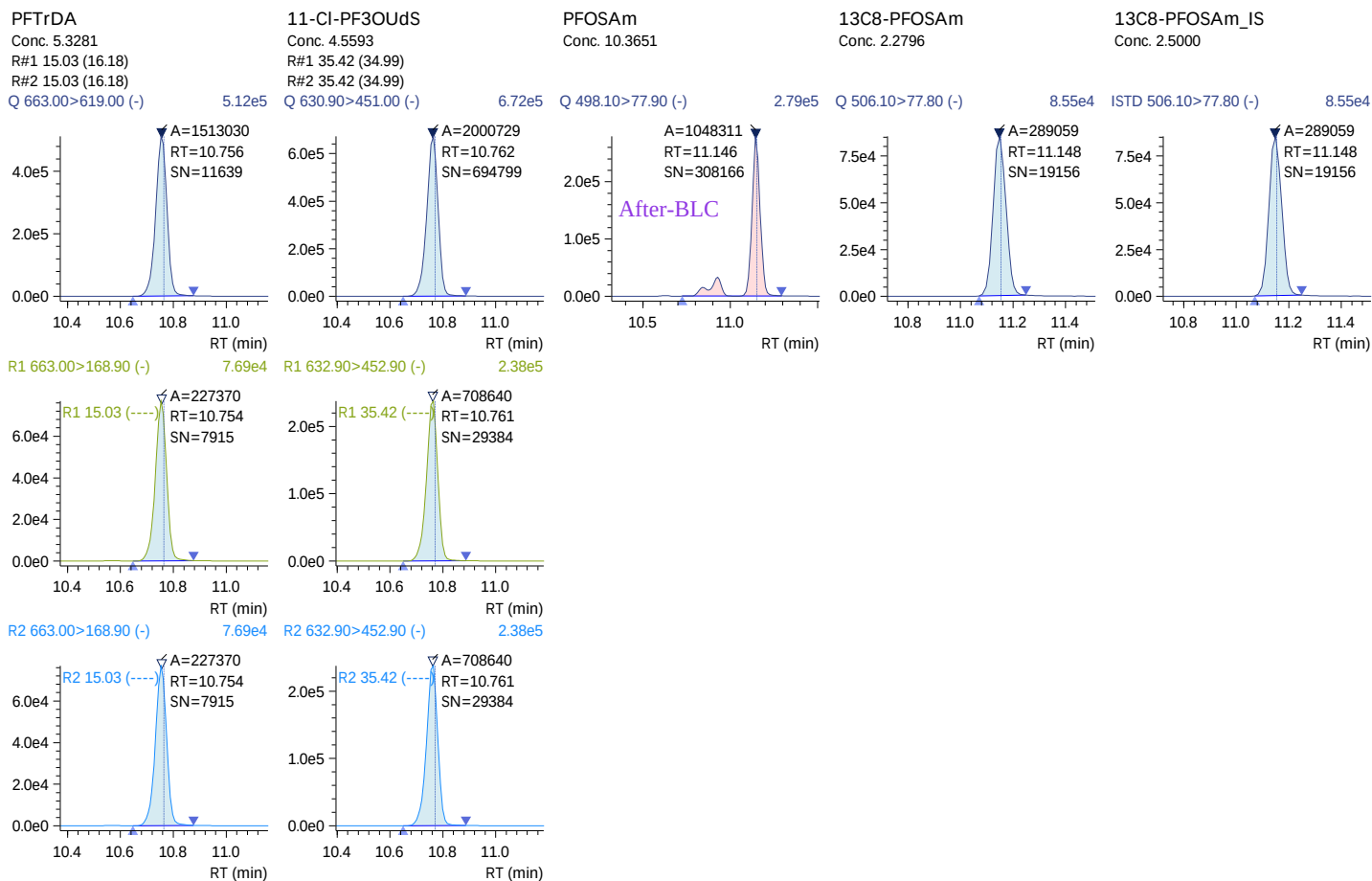


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_023 (continued)

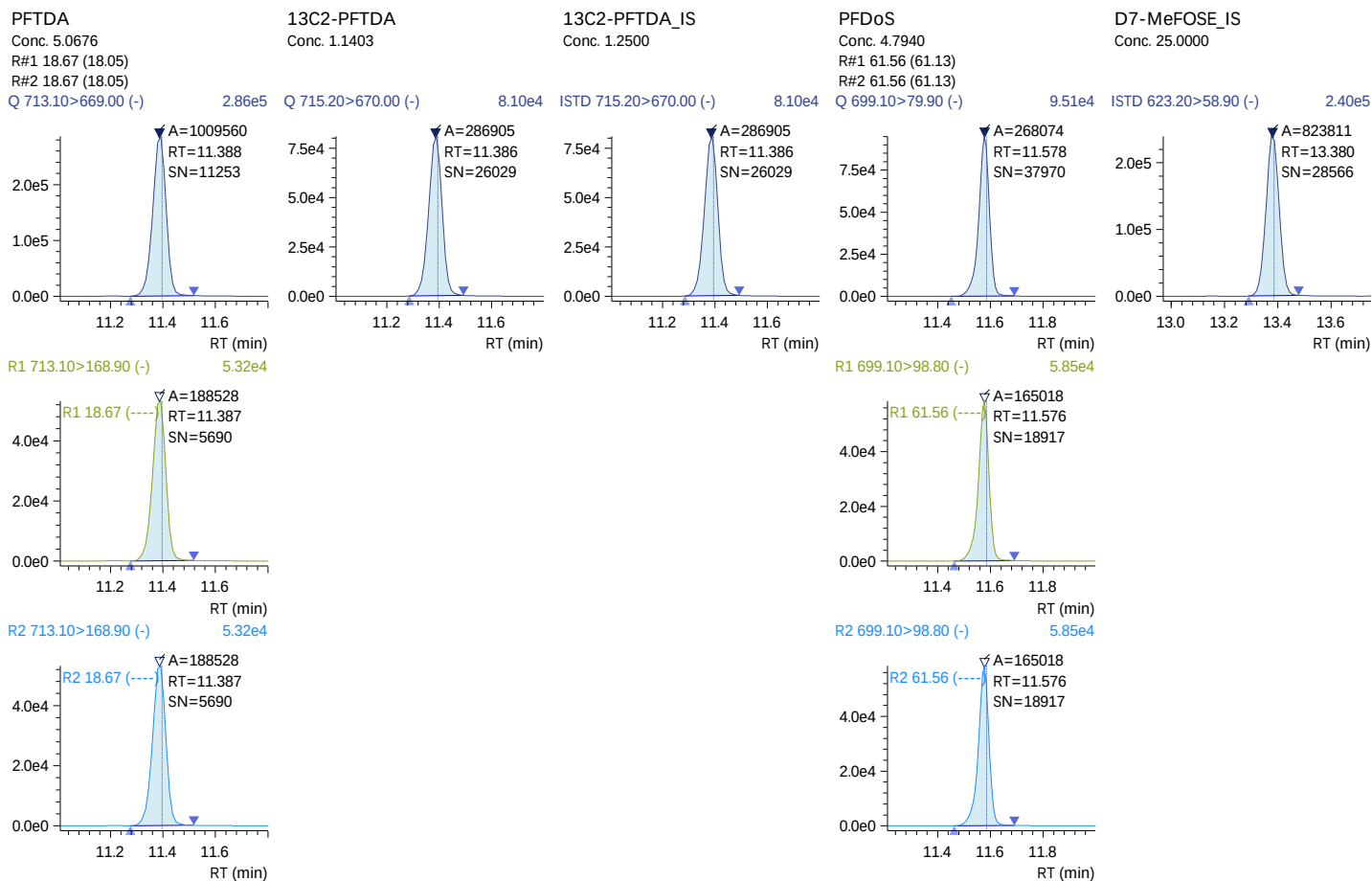


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_023 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_023 (continued)

D7-MeFOSE
Conc. 25.3072

MeFOSE
Conc. 4.7535

13C2-PFHXA_IS
Conc. 2.5000

13C2-PFHXA
Conc. 2.5256

PFHXA
Conc. 4.5749
R#1 11.59 (11.66)
R#2 11.59 (11.66)

Q 623.20>58.90 (-)

2.40e5

Q 616.10>59.00 (-)

3.45e4

ISTD 815.00>770.05 (-)

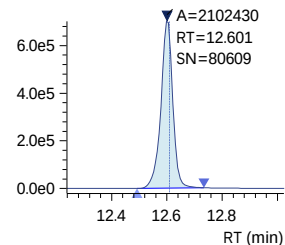
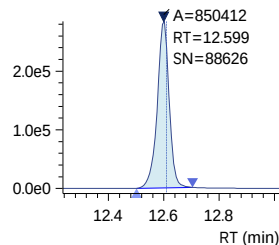
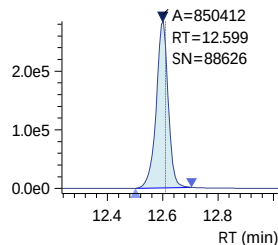
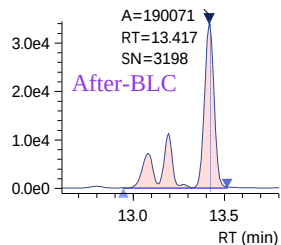
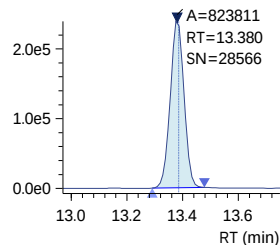
2.85e5

Q 815.00>770.05 (-)

2.85e5

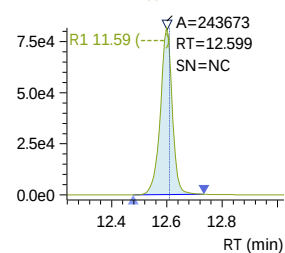
Q 813.00>768.95 (-)

7.02e5



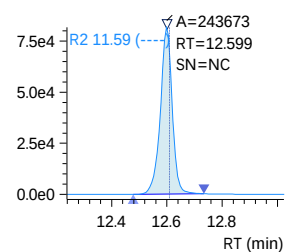
R1 813.00>218.95 (-)

8.17e4



R2 813.00>218.95 (-)

8.17e4





240130_023 (continued)

D3-MeFOSA
Conc. 2.7404

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. 4.4516
R#1 154.32 (160.44)
R#2 154.32 (160.44)

D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 25.6696

Q 515.00>219.00 (-)

2.71e4

ISTD 515.00>219.00 (-)

2.71e4

Q 511.90>219.00 (-)

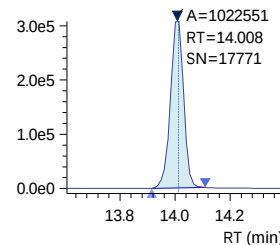
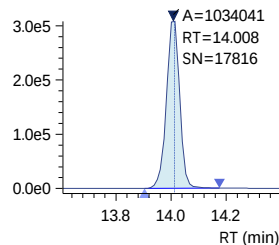
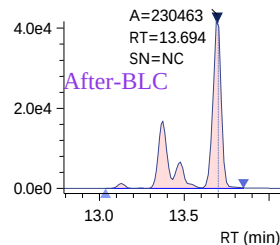
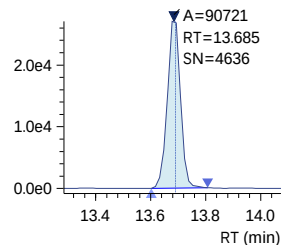
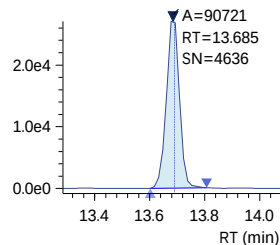
4.17e4

ISTD 639.20>58.90 (-)

3.08e5

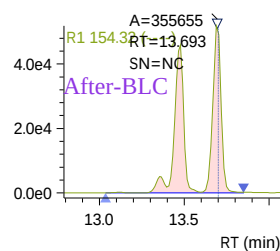
Q 639.20>58.90 (-)

3.08e5



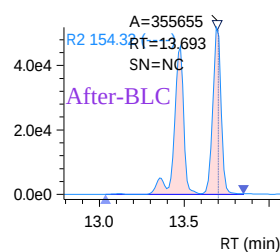
R1 511.90>169.00 (-)

5.18e4



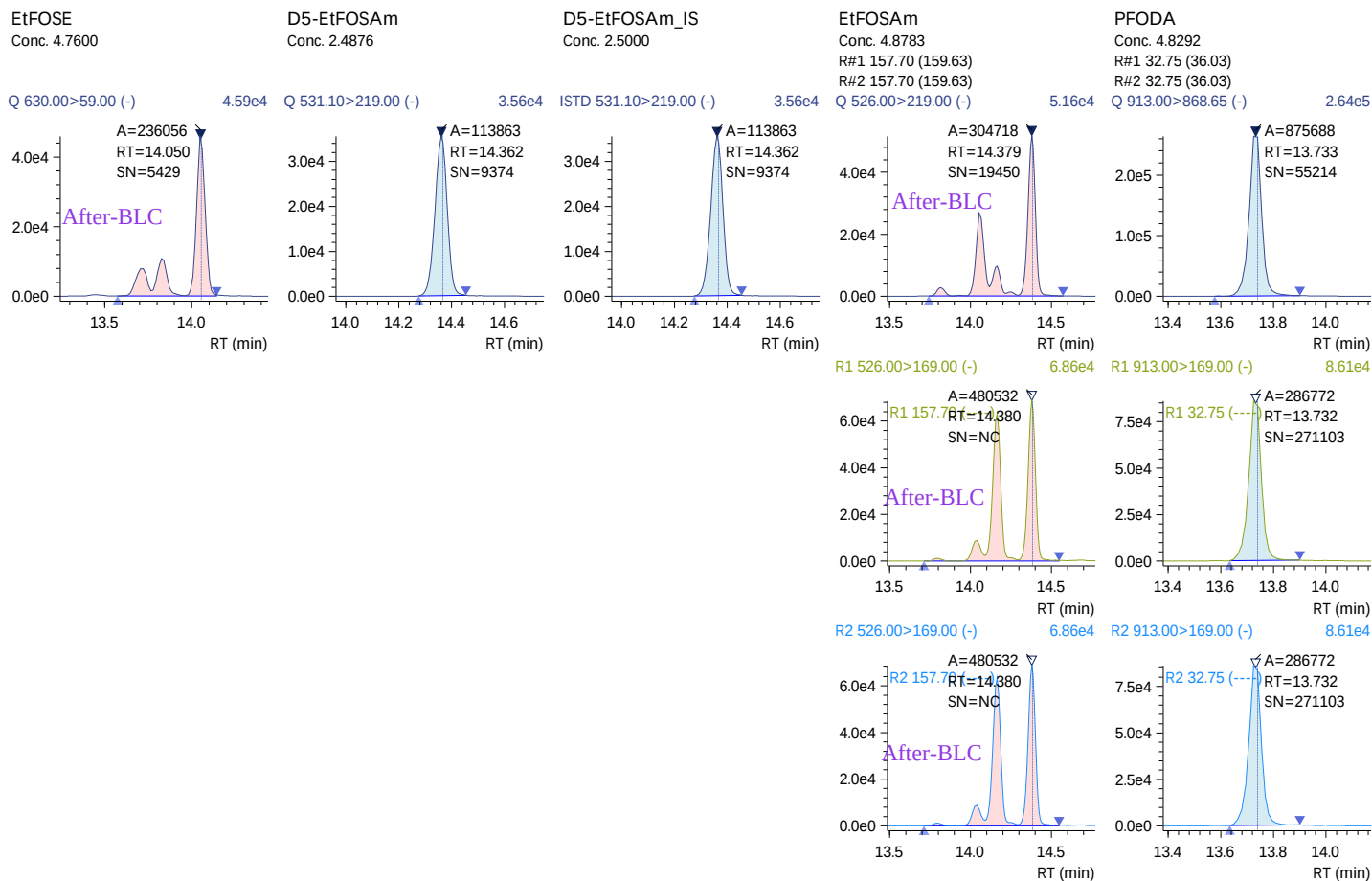
R2 511.90>169.00 (-)

5.18e4





240130_023 (continued)



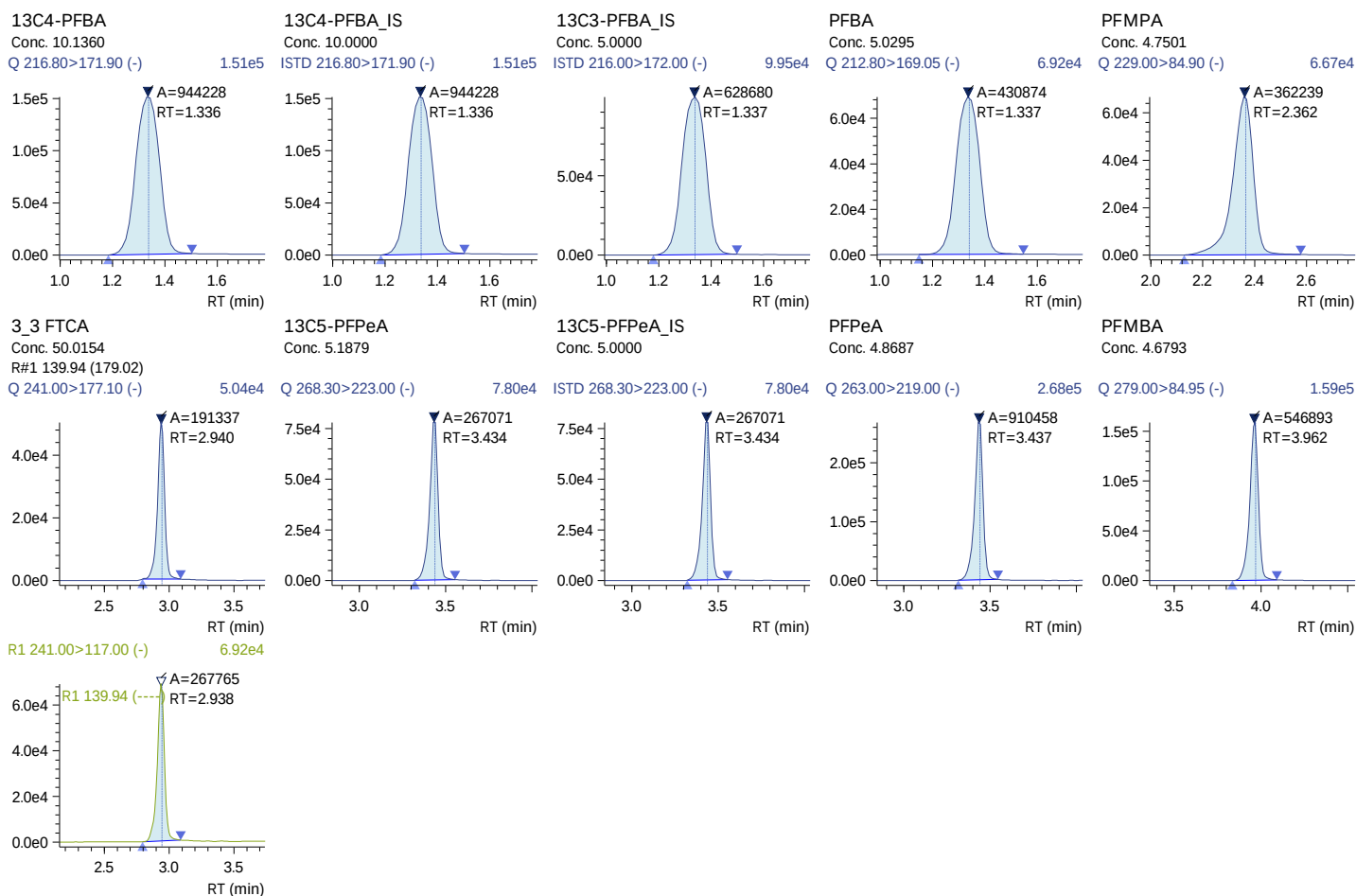
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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_023

Sample ID: 1633 ICAL 5.0PPB
Date Acquired: 1/30/2024 11:15:12 PM
Acquired by: System Administrator
Data File: 240130_023
Vial: 6 | Inj. Volume: 10.0000uL | Tray: 1





240130_023 (continued)

13C2-4_2 FTS
Conc. 4.7138

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. 4.7559
R#1 31.62 (24.69)
R#2 31.62 (0.00)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 4.2423
R#1 45.48 (52.67)
R#2 45.48 (0.00)

Q 329.10>80.90 (-)

8.90e4

ISTD 329.10>80.90 (-)

8.90e4

Q 327.10>307.00 (-)

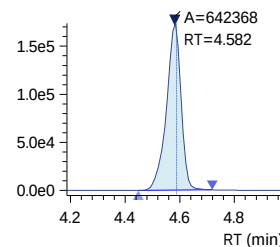
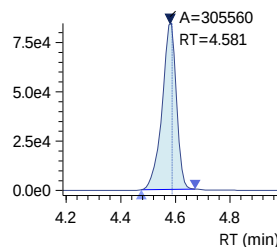
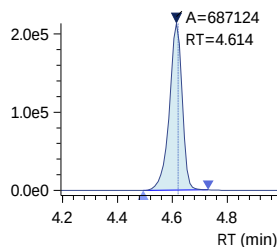
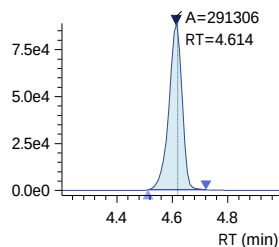
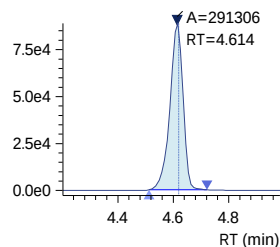
2.13e5

ISTD 302.10>79.90 (-)

8.47e4

Q 298.70>79.90 (-)

1.74e5

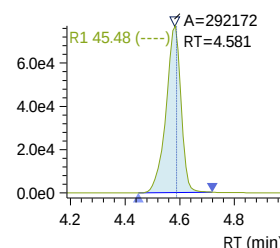
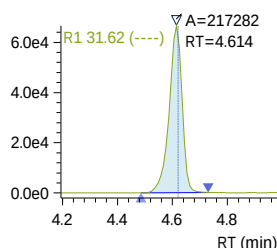


R1 327.10>80.90 (-)

6.66e4

R1 298.70>98.80 (-)

7.72e4

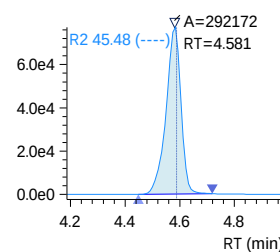
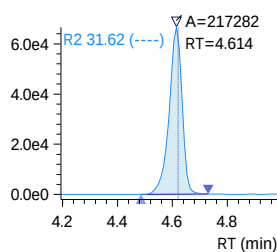


R2 327.10>80.90 (-)

6.66e4

R2 298.70>98.80 (-)

7.72e4





240130_023 (continued)

13C3-PFBS
Conc. 2.4945

NFDHA
Conc. 4.7490
R#1 33.87 (39.38)
R#2 33.87 (0.00)

13C5-PFHxA
Conc. 2.6109

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

Q 302.10>79.90 (-)

8.47e4

Q 295.00>201.00 (-)

1.80e5

Q 318.00>273.00 (-)

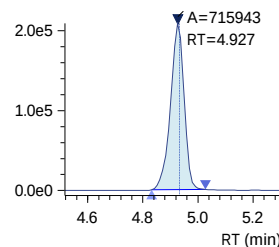
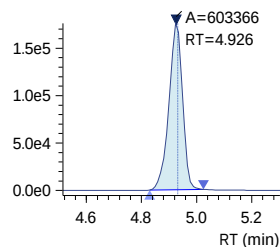
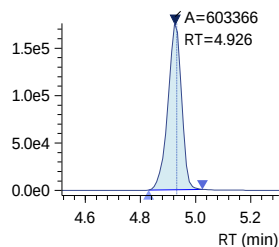
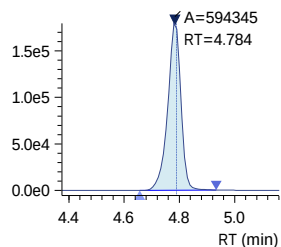
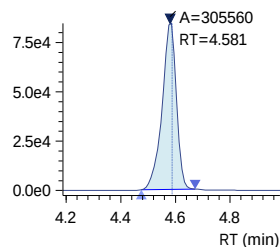
1.76e5

ISTD 318.00>273.00 (-)

1.76e5

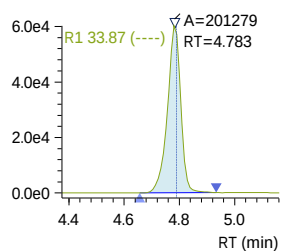
ISTD 315.10>270.00 (-)

2.09e5



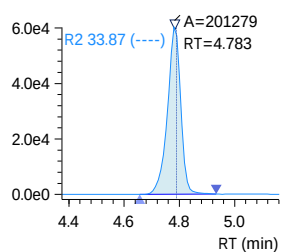
R1 295.00>84.90 (-)

6.02e4



R2 295.00>84.90 (-)

6.02e4





240130_023 (continued)

PFHxA
Conc. 4.8472

PFEESA
Conc. 4.1084
R#1 5.62 (5.25)
R#2 5.62 (0.00)

13C3-HFPO-DA
Conc. 9.8810

13C3-HFPO-DA_IS
Conc. 10.0000

HFPO-DA
Conc. 4.9327
R#1 60.46 (69.48)
R#2 60.46 (0.00)

Q 313.00>269.00 (-)

3.17e5

Q 314.80>135.00 (-)

9.02e5

Q 286.90>168.90 (-)

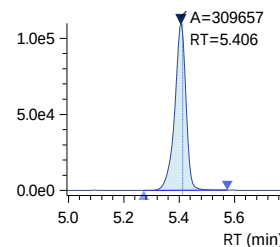
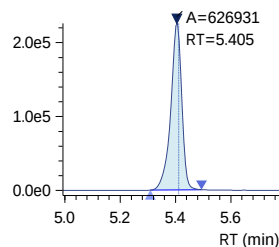
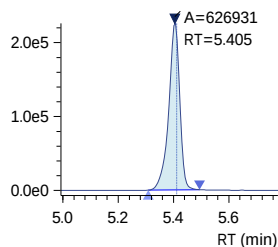
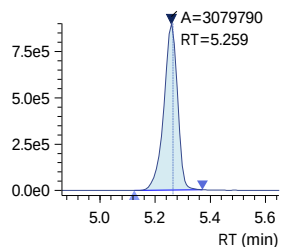
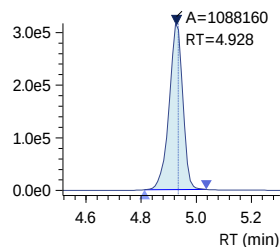
2.26e5

ISTD 286.90>168.90 (-)

2.26e5

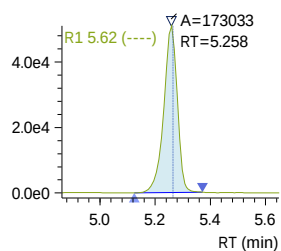
Q 284.90>168.90 (-)

1.10e5



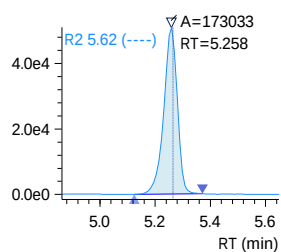
R1 314.80>82.90 (-)

5.11e4



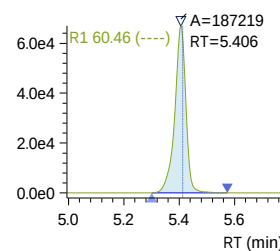
R2 314.80>82.90 (-)

5.11e4



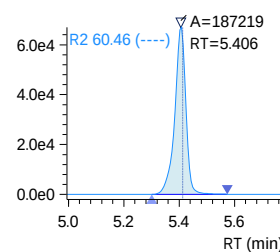
R1 284.90>184.90 (-)

6.70e4



R2 284.90>184.90 (-)

6.70e4

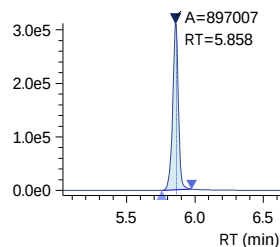




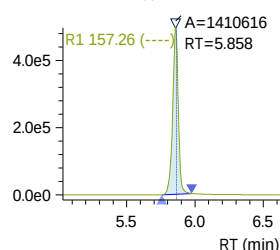
240130_023 (continued)

5_3 FTCA

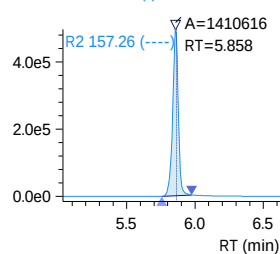
Conc. 49.7338
R#1 157.26 (139.59)
R#2 157.26 (0.00)
Q 341.00>237.05 (-)



R1 341.00>217.00 (-) 4.97e5

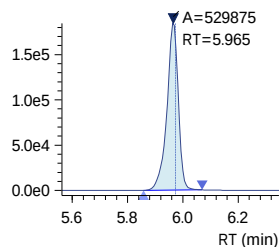


R2 341.00>217.00 (-) 4.97e5

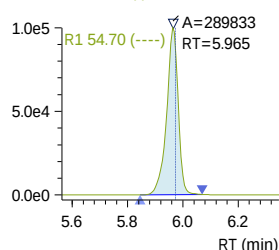


PFPeS

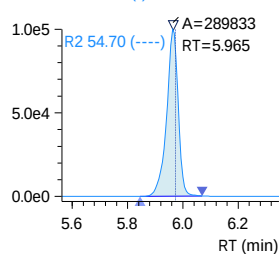
Conc. 4.5885
R#1 54.70 (66.55)
R#2 54.70 (0.00)
Q 349.10>79.90 (-)



R1 349.10>98.80 (-) 9.99e4

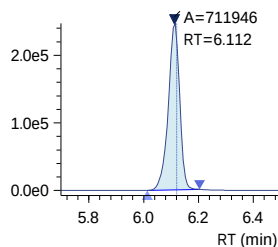


R2 349.10>98.80 (-) 9.99e4



13C4-PFHpA

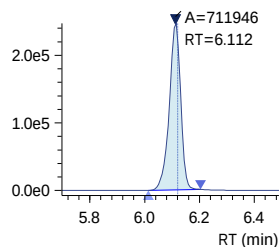
Conc. 2.4488
Q 367.10>322.00 (-)



Q 367.10>322.00 (-) 2.47e5

13C4-PFHpA_IS

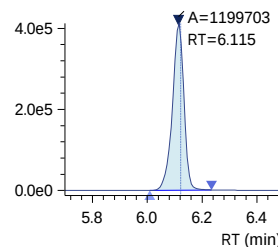
Conc. 2.5000
ISTD 367.10>322.00 (-)



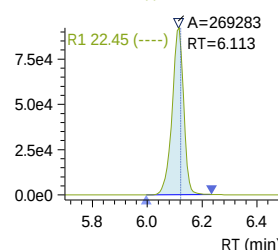
ISTD 367.10>322.00 (-) 2.47e5

PFHpA

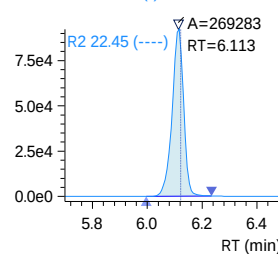
Conc. 4.6309
R#1 22.45 (20.13)
R#2 22.45 (0.00)
Q 363.10>319.00 (-)



R1 363.10>169.00 (-) 9.22e4

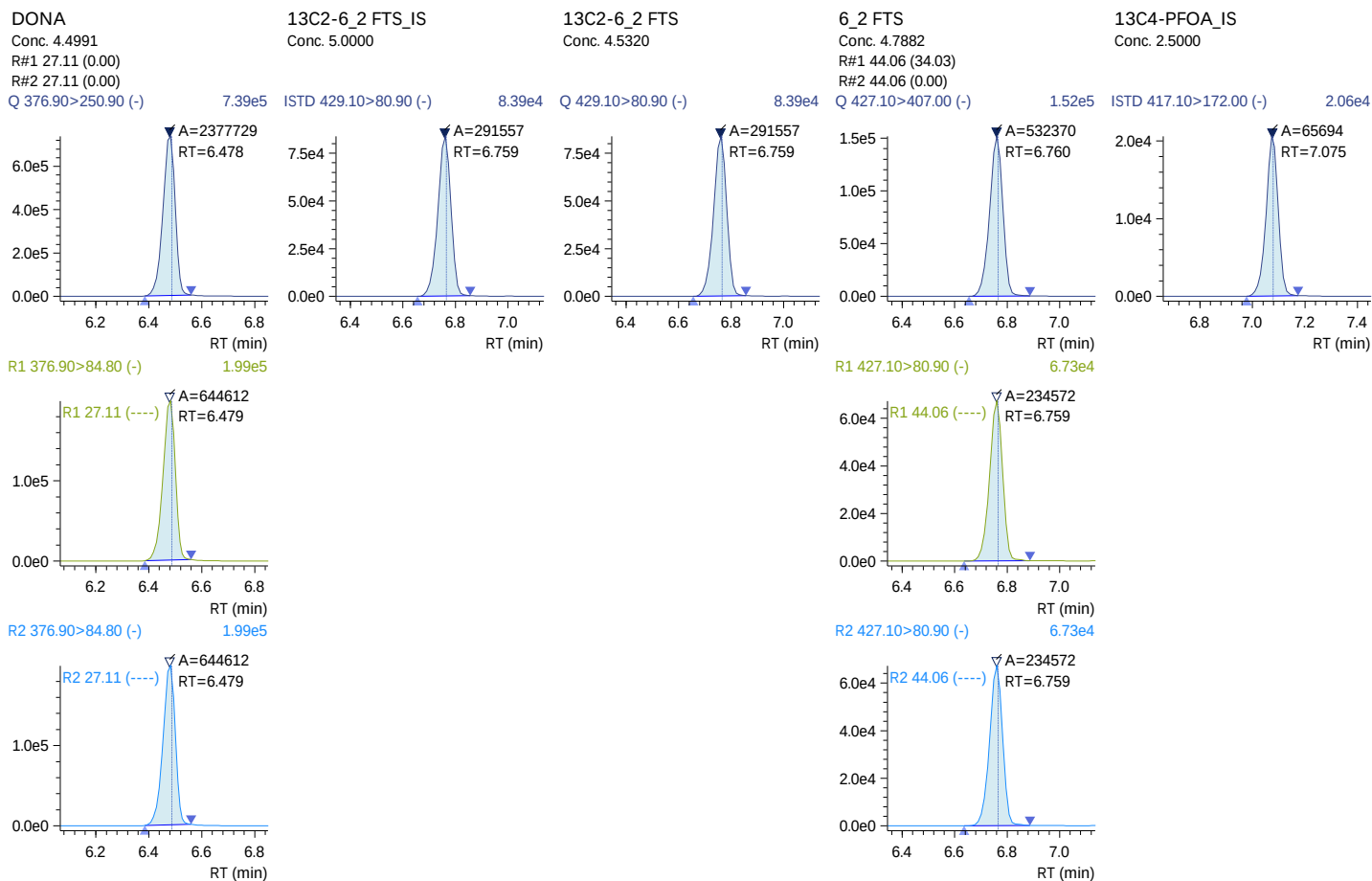


R2 363.10>169.00 (-) 9.22e4





240130_023 (continued)





240130_023 (continued)

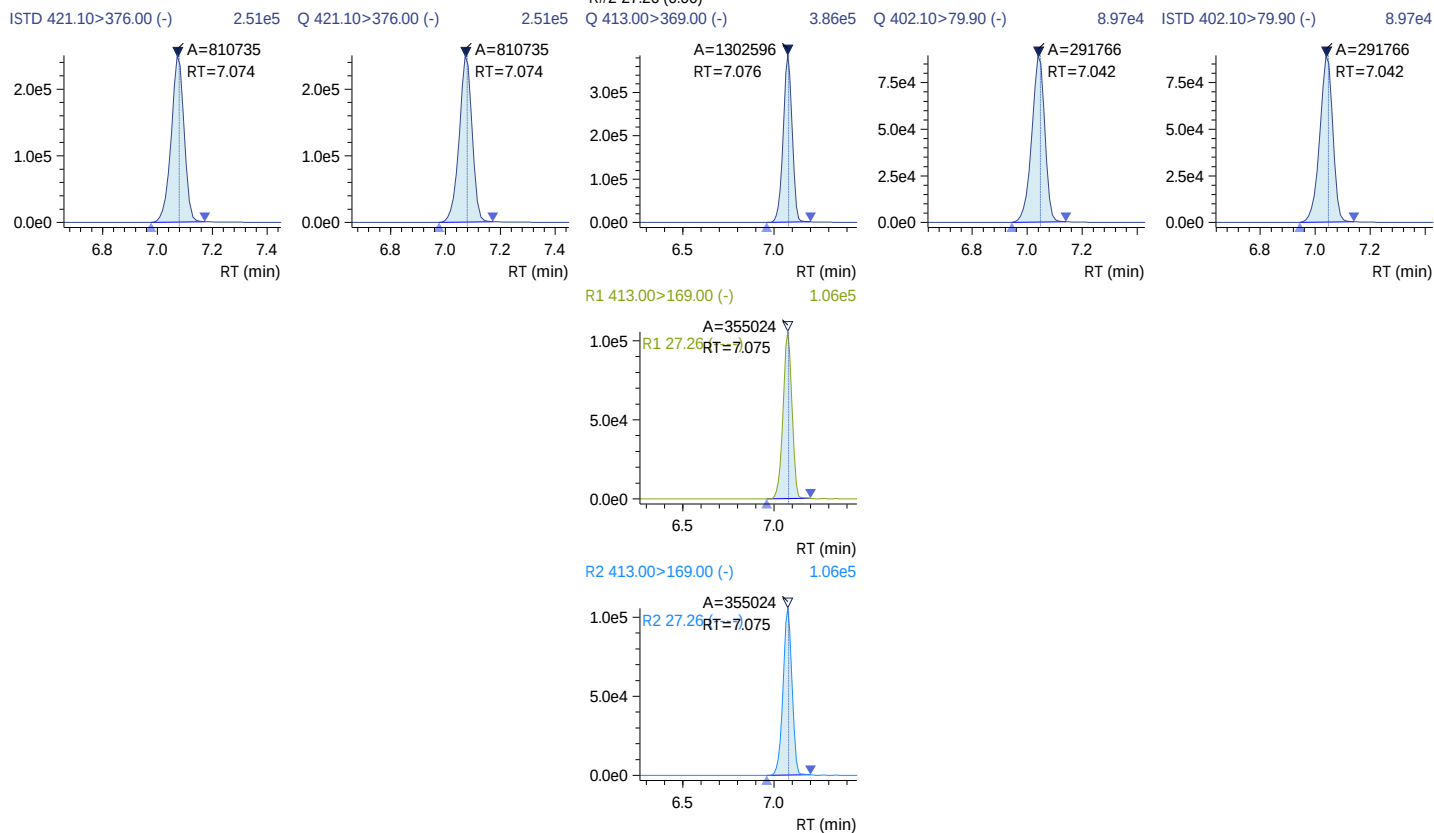
13C8-PFOA_IS
 Conc. 2.5000

13C8-PFOA
 Conc. 2.5877

PFOA
 Conc. 4.3878
 R#1 27.26 (22.46)
 R#2 27.26 (0.00)

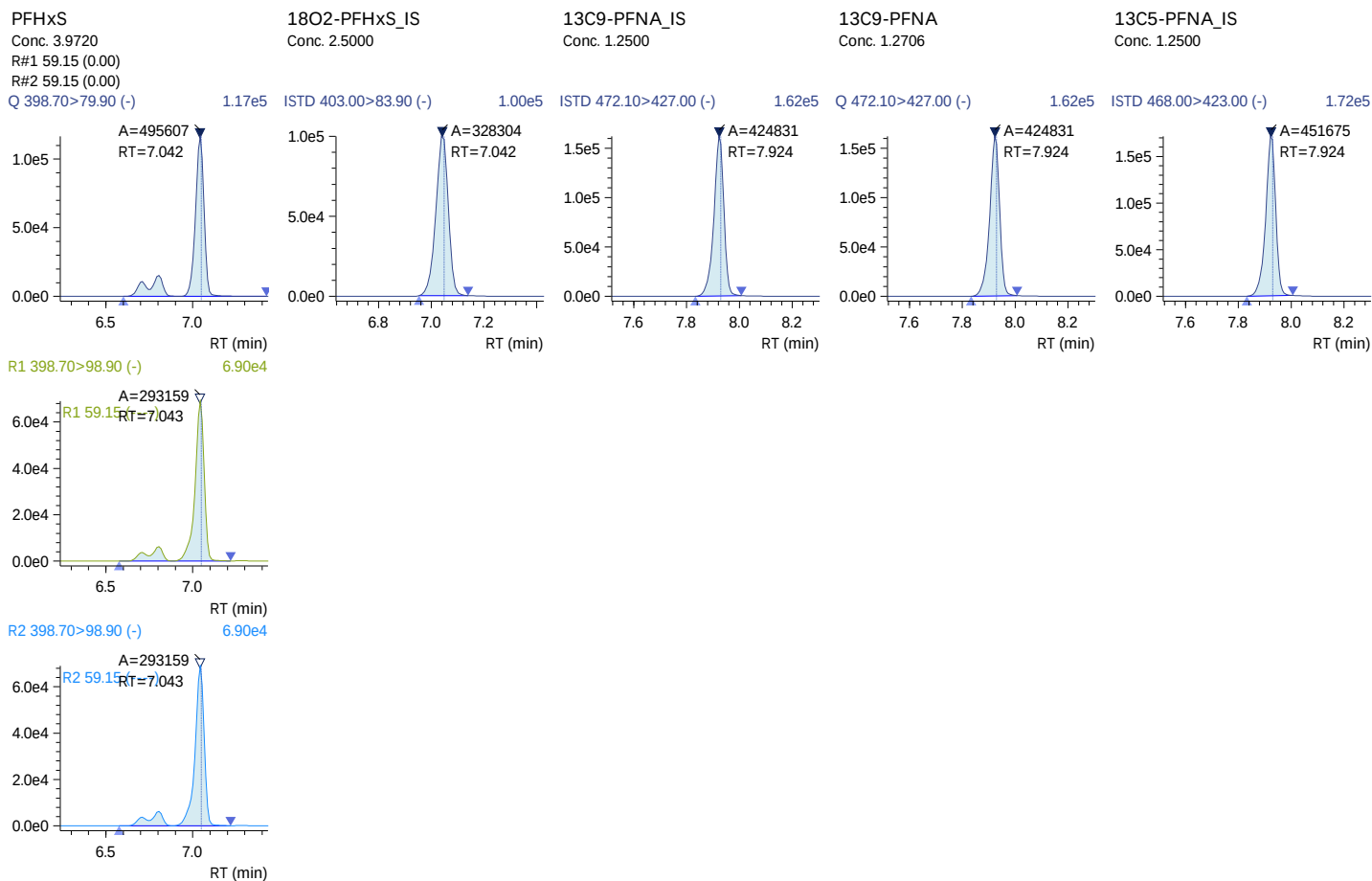
13C3-PFHxS
 Conc. 2.5356

13C3-PFHxS_IS
 Conc. 2.5000



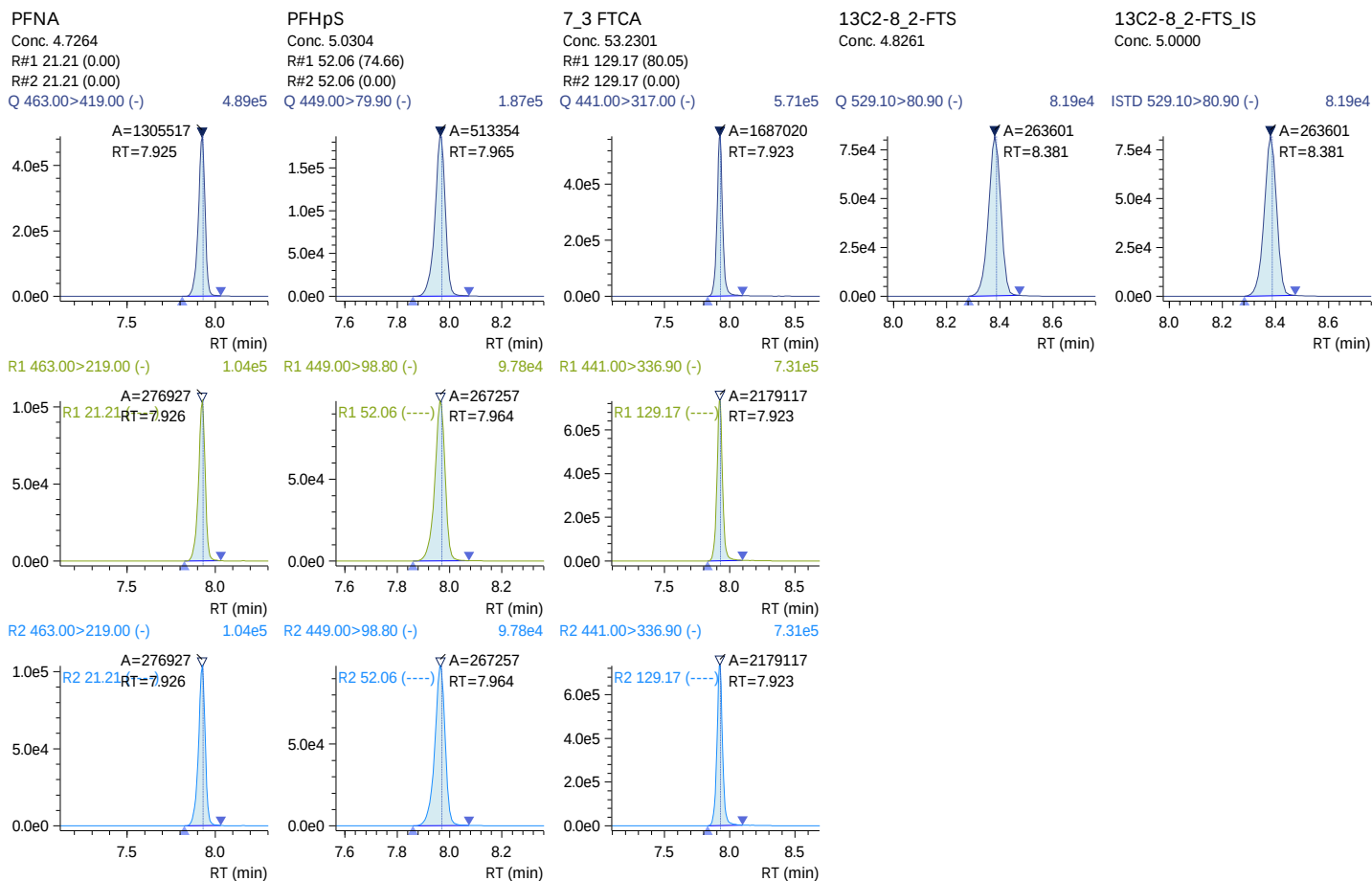


240130_023 (continued)



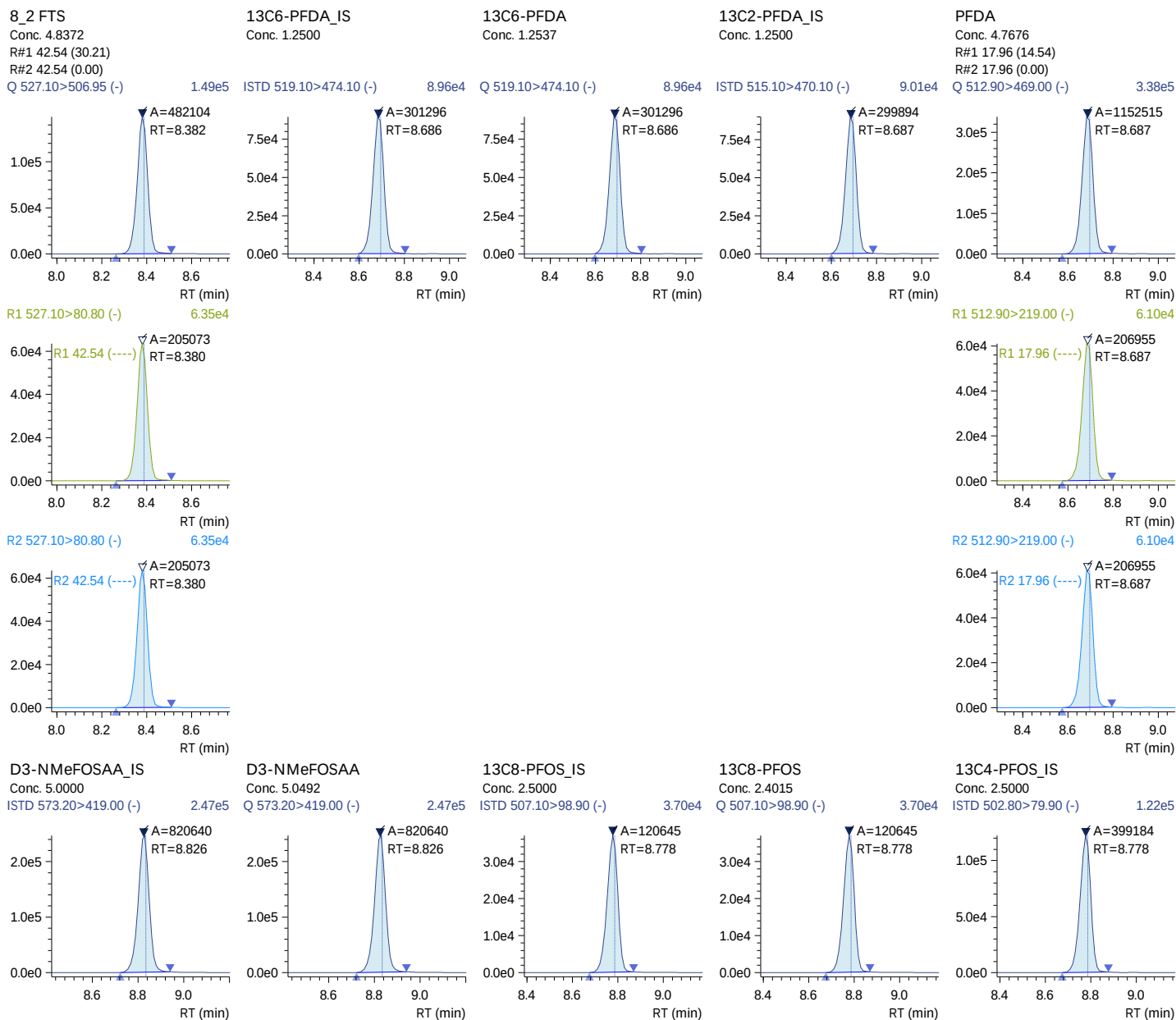


240130_023 (continued)



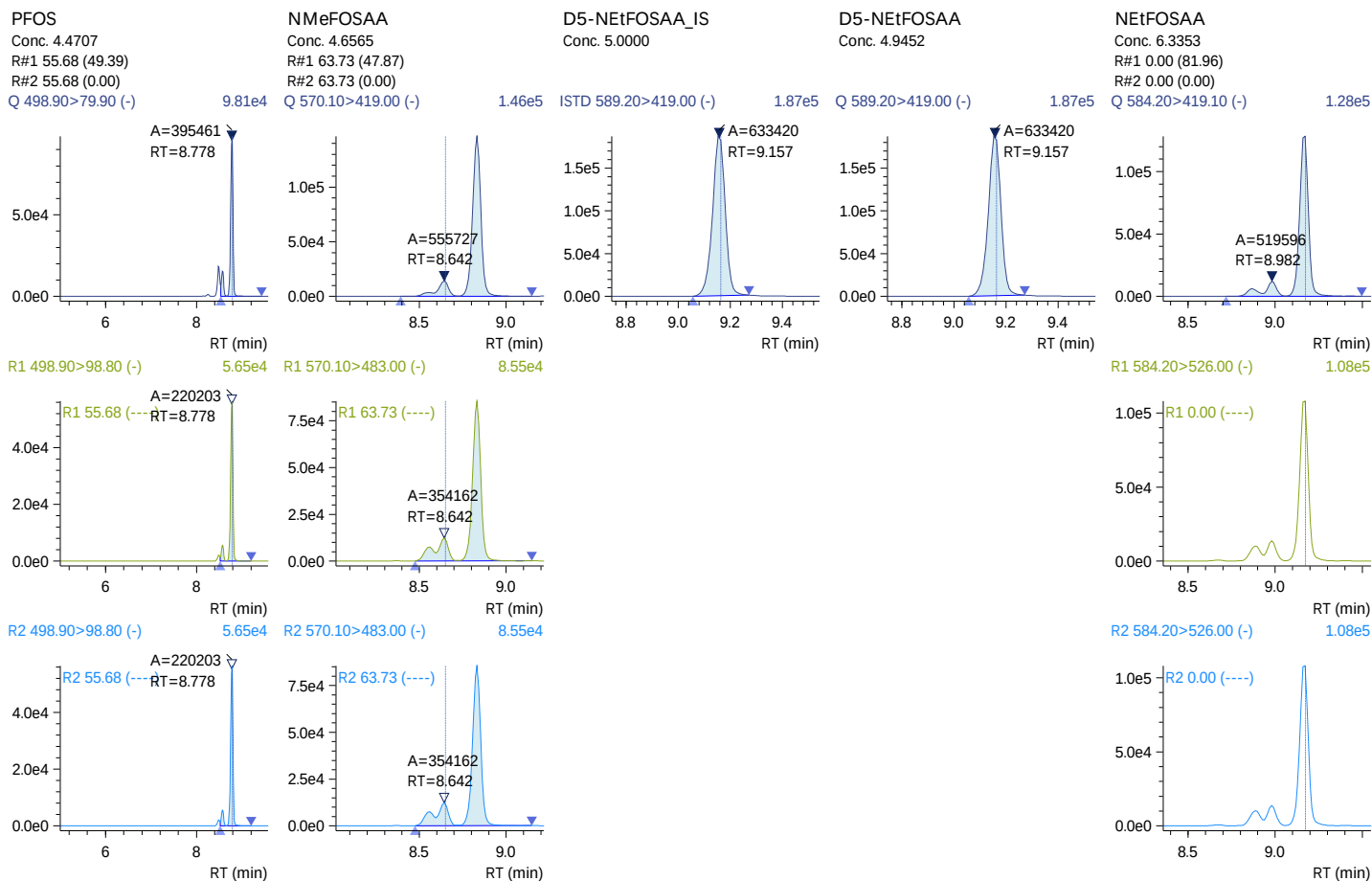


240130_023 (continued)





240130_023 (continued)

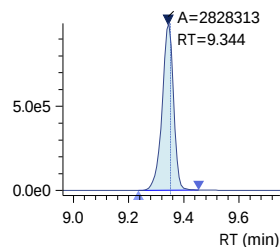




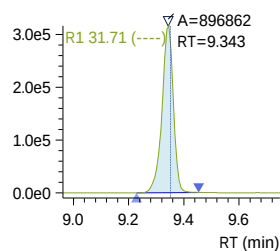
240130_023 (continued)

9-CI-PF3ONS

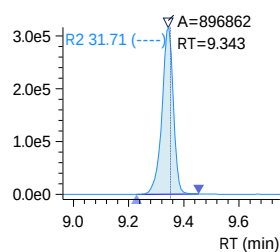
Conc. 4.6007
R#1 31.71 (31.39)
R#2 31.71 (0.00)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-) 3.16e5

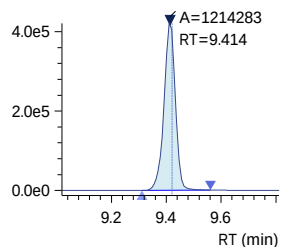


R2 532.80>353.00 (-) 3.16e5

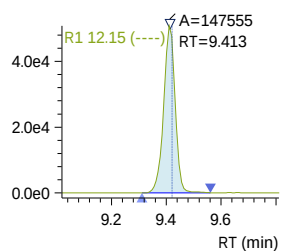


PFUnDA

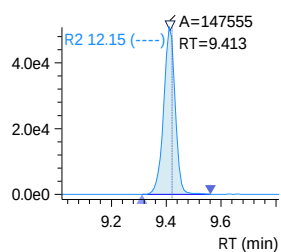
Conc. 4.9029
R#1 12.15 (12.59)
R#2 12.15 (0.00)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-) 5.08e4



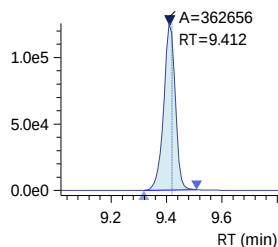
R2 563.10>269.10 (-) 5.08e4



13C7-PFUnDA_IS

Conc. 1.2500

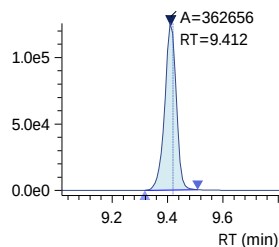
ISTD 570.00>525.10 (-)



13C7-PFUnDA

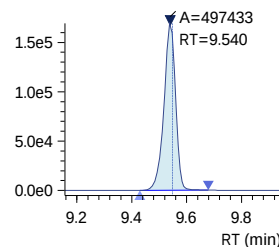
Conc. 1.2144

Q 570.00>525.10 (-)

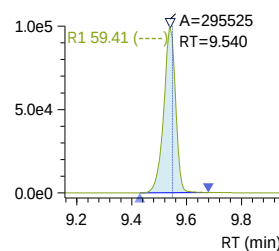


PFNS

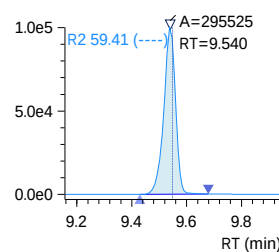
Conc. 4.8716
R#1 59.41 (82.65)
R#2 59.41 (0.00)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-) 1.00e5

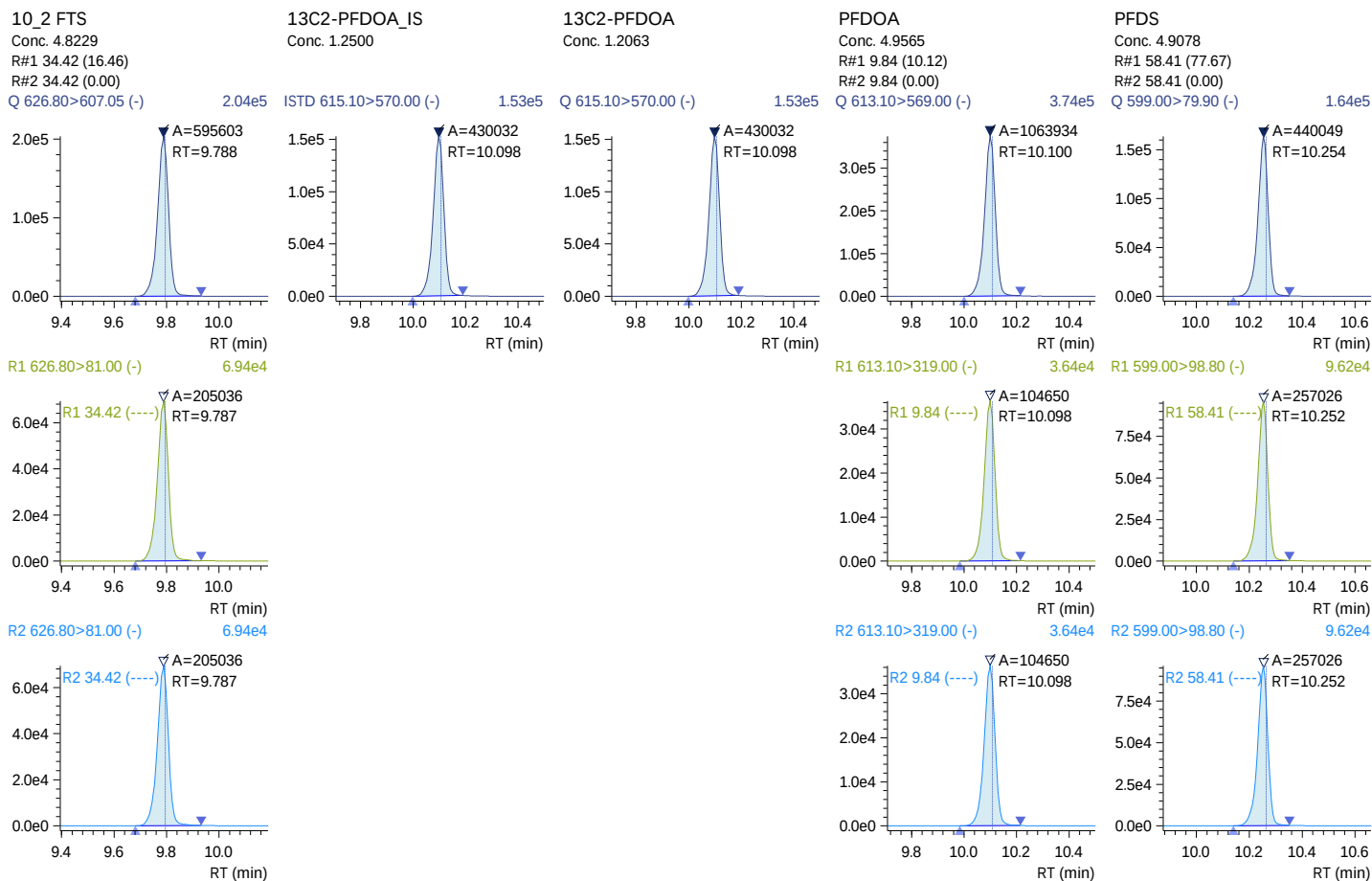


R2 548.80>98.80 (-) 1.00e5





240130_023 (continued)



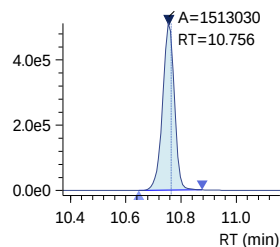


240130_023 (continued)

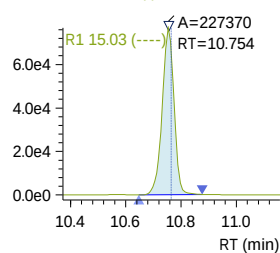
PFTTrDA

Conc. 5.3285
R#1 15.03 (14.17)
R#2 15.03 (0.00)

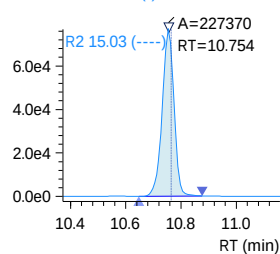
Q 663.00>619.00 (-)



R1 663.00>168.90 (-)



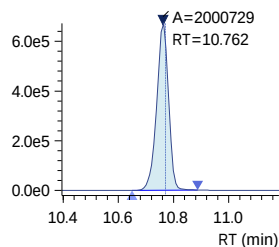
R2 663.00>168.90 (-)



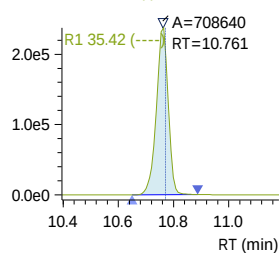
11-Cl-PF3OUdS

Conc. 4.5593
R#1 35.42 (32.90)
R#2 35.42 (0.00)

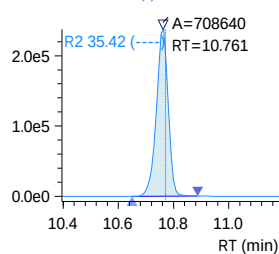
Q 630.90>451.00 (-)



R1 632.90>452.90 (-)



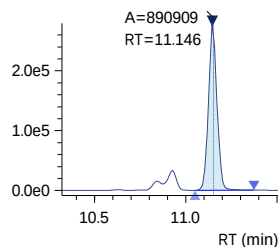
R2 632.90>452.90 (-)



PFOSAm

Conc. 9.6874

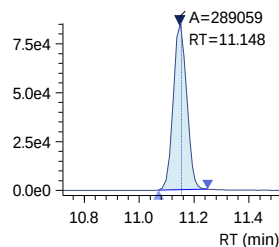
Q 498.10>77.90 (-)



13C8-PFOSAm

Conc. 2.2796

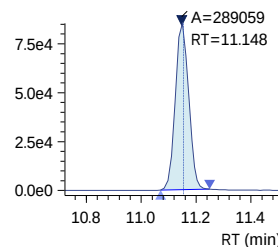
Q 506.10>77.80 (-)



13C8-PFOSAm_IS

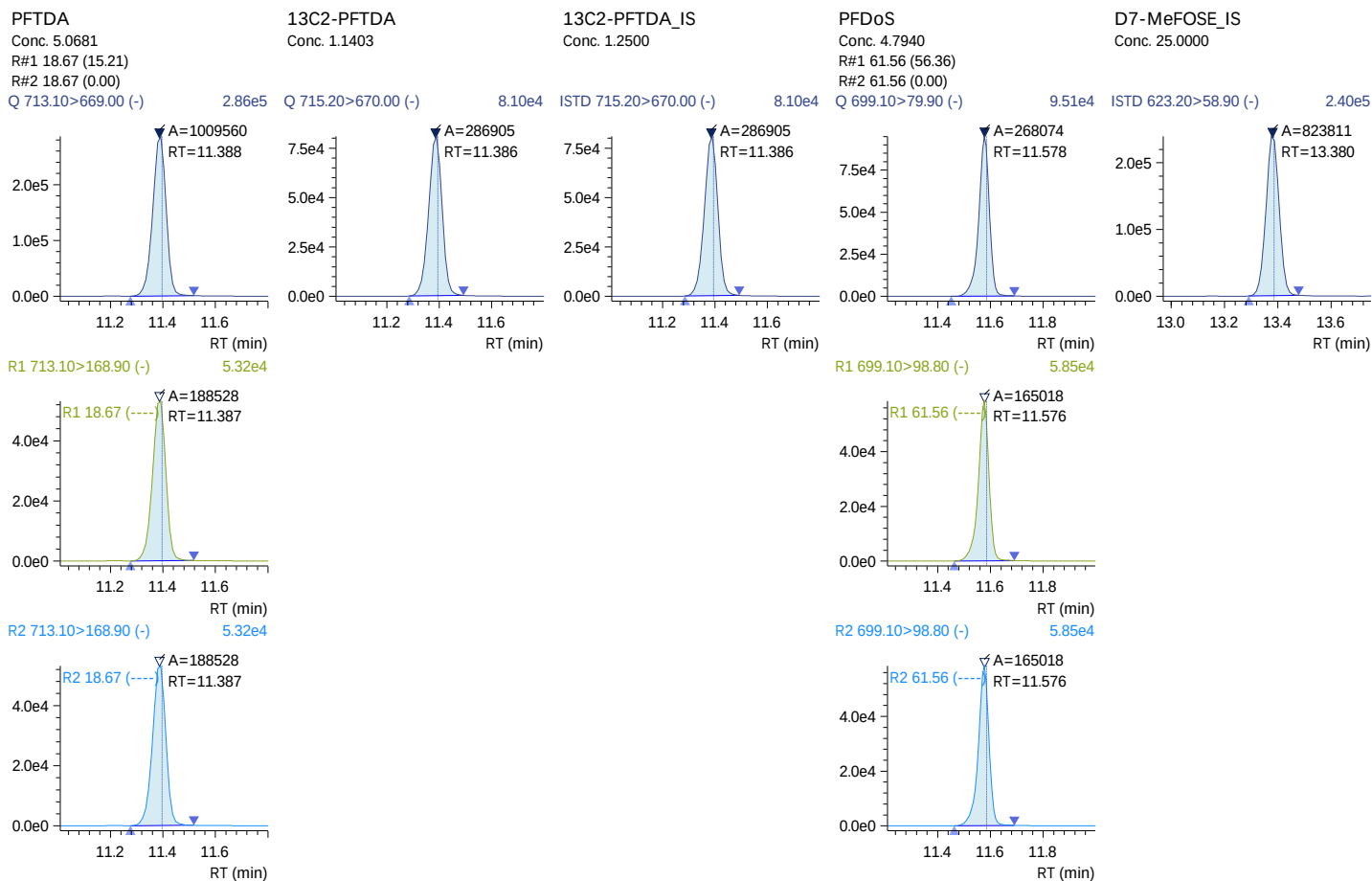
Conc. 2.5000

ISTD 506.10>77.80 (-)





240130_023 (continued)





240130_023 (continued)

D7-MeFOSE
 Conc. 25.3072

MeFOSE
 Conc. 4.5762

13C2-PFHDA_IS
 Conc. 2.5000

13C2-PFHDA
 Conc. 2.5256

PFHXDA
 Conc. 4.4045
 R#1 11.59 (9.60)
 R#2 11.59 (0.00)

Q 623.20>58.90 (-)

2.40e5

Q 616.10>59.00 (-)

3.45e4

ISTD 815.00>770.05 (-)

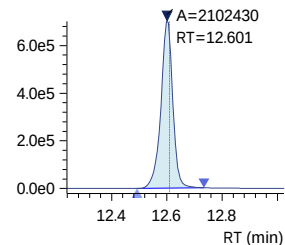
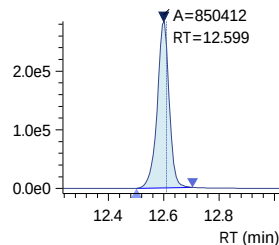
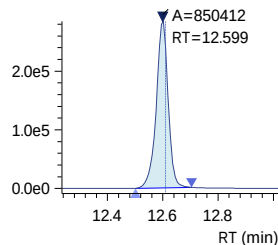
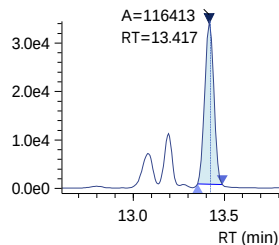
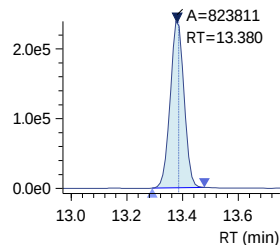
2.85e5

Q 815.00>770.05 (-)

2.85e5

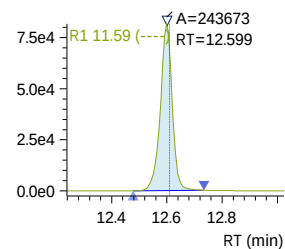
Q 813.00>768.95 (-)

7.02e5



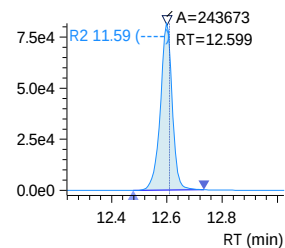
R1 813.00>218.95 (-)

8.17e4



R2 813.00>218.95 (-)

8.17e4





240130_023 (continued)

D3-MeFOSA
Conc. 2.7404

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. 4.4340
R#1 126.44 (98.91)
R#2 126.44 (0.00)

D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 25.6696

Q 515.00>219.00 (-)

2.71e4

ISTD 515.00>219.00 (-)

2.71e4

Q 511.90>219.00 (-)

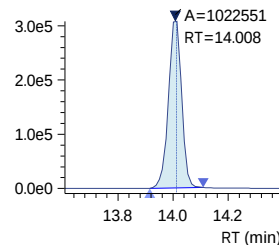
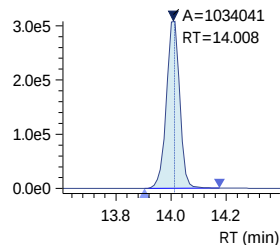
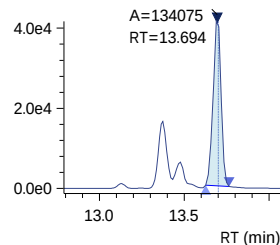
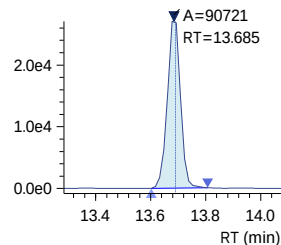
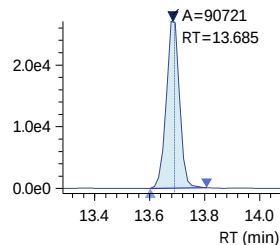
4.17e4

ISTD 639.20>58.90 (-)

3.08e5

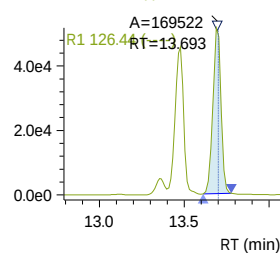
Q 639.20>58.90 (-)

3.08e5



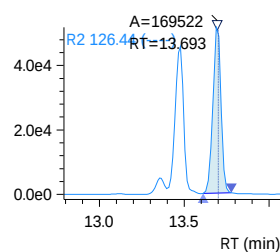
R1 511.90>169.00 (-)

5.18e4



R2 511.90>169.00 (-)

5.18e4





240130_023 (continued)

EtFOSE
Conc. 4.8777

D5-EtFOSAm
Conc. 2.4876

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. 4.8077

PFODA
Conc. 4.8150

Q 630.00>59.00 (-)

4.59e4

Q 531.10>219.00 (-)

3.56e4

ISTD 531.10>219.00 (-)

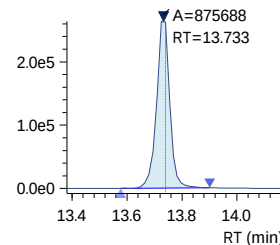
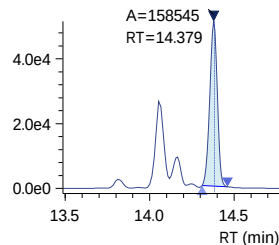
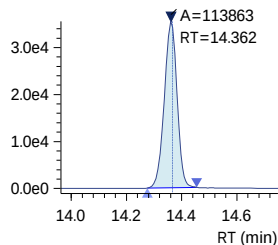
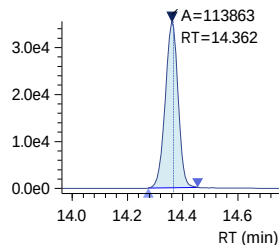
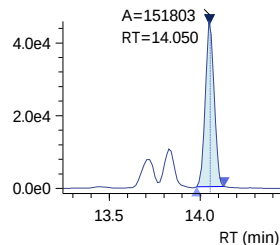
3.56e4

Q 526.00>219.00 (-)

5.16e4

Q 913.00>868.65 (-)

2.64e5

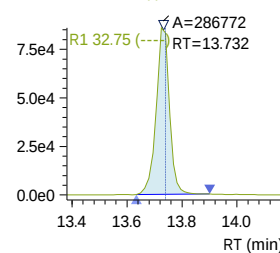
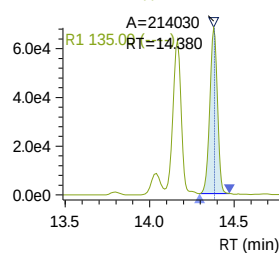


R1 526.00>169.00 (-)

6.86e4

R1 913.00>169.00 (-)

8.61e4

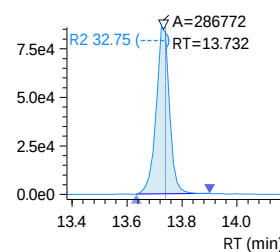
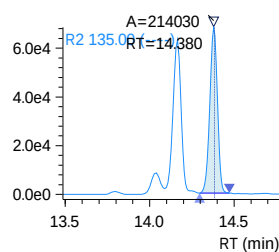


R2 526.00>169.00 (-)

6.86e4

R2 913.00>169.00 (-)

8.61e4

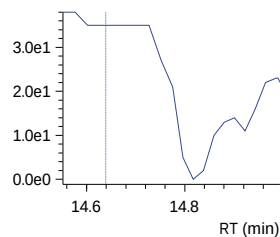


positive trans

Conc. ----

Q 514.80>219.10 (+)

3.80e1





240130_024

Sample ID: 1633 ICAL 10.OPPB
Date Acquired: 1/30/2024 11:38:28 PM
Acquired by: System Administrator
Data File: 240130_024
Vial: 7 | Inj. Volume: 10.0000uL | Tray: 1

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	929844	----	----	----	----	----	----	----
13C4-PFBA_IS	216.80>171.90	----	929844	----	----	----	----	----	----	----
13C3-PFBA_IS	216.00>172.00	----	621636	----	----	----	----	----	----	----
PFBA	212.80>169.05	----	840345	----	----	----	----	----	----	----
PFMPA	229.00>84.90	----	707726	----	----	----	----	----	----	----
3_3 FTCA	241.00>177.10	241.00>117.00	288635	407890	141.32	139.21	----	----	----	----
13C5-PFPeA	268.30>223.00	----	252493	----	----	----	----	----	----	----
13C5-PFPeA_IS	268.30>223.00	----	252493	----	----	----	----	----	----	----
PFPeA	263.00>219.00	----	1679329	----	----	----	----	----	----	----
PFMBA	279.00>84.95	----	1087423	----	----	----	----	----	----	----
13C2-4_2 FTS	329.10>80.90	----	290705	----	----	----	----	----	----	----
13C2-4_2 FTS_IS	329.10>80.90	----	290705	----	----	----	----	----	----	----
4_2 FTS	327.10>307.00	327.10>80.90	1303991	430089	32.98	32.10	430089	32.98	32.10	----
13C3-PFBS_IS	302.10>79.90	----	298172	----	----	----	----	----	----	----
PFBS	298.70>79.90	298.70>98.80	1262864	599870	47.50	44.81	599870	47.50	44.81	----
13C3-PFBS	302.10>79.90	----	298172	----	----	----	----	----	----	----
NFDHA	295.00>201.00	295.00>84.90	1138520	397919	34.95	35.54	397919	34.95	35.54	----
13C5-PFHxA	318.00>273.00	----	563352	----	----	----	----	----	----	----
13C5-PFHxA_IS	318.00>273.00	----	563352	----	----	----	----	----	----	----
13C2-PFHxA_IS	315.10>270.00	----	686662	----	----	----	----	----	----	----
PFHxA	313.00>269.00	----	2087792	----	----	----	----	----	----	----
PFEESA	314.80>135.00	314.80>82.90	6282325	345113	5.49	5.22	345113	5.49	5.22	----
13C3-HFPO-DA	286.90>168.90	----	631094	----	----	----	----	----	----	----
13C3-HFPO-DA_IS	286.90>168.90	----	631094	----	----	----	----	----	----	----
HFPO-DA	284.90>168.90	284.90>184.90	603039	367065	60.87	59.79	367065	60.87	59.79	----
5_3 FTCA	341.00>237.05	341.00>217.00	1356537	2101307	154.90	157.08	2101307	154.90	157.08	----
PFPeS	349.10>79.90	349.10>98.80	1037439	560057	53.99	55.12	560057	53.99	55.12	----
13C4-PFHpA	367.10>322.00	----	715028	----	----	----	----	----	----	----
13C4-PFHpA_IS	367.10>322.00	----	715028	----	----	----	----	----	----	----
PFHpA	363.10>319.00	363.10>169.00	2355874	519199	22.04	23.02	519199	22.04	23.02	----
DONA	376.90>250.90	376.90>84.80	4952725	1368084	27.62	27.50	1368084	27.62	27.50	----
13C2-6_2 FTS_IS	429.10>80.90	----	299993	----	----	----	----	----	----	----
13C2-6_2 FTS	429.10>80.90	----	299993	----	----	----	----	----	----	----
6_2 FTS	427.10>407.00	427.10>80.90	1060397	502739	47.41	50.47	502739	47.41	50.47	----
13C4-PFOA_IS	417.10>172.00	----	59745	----	----	----	----	----	----	----
13C8-PFOA_IS	421.10>376.00	----	722027	----	----	----	----	----	----	----

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240130_024 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	722027	----	----	----	----	----	----	----
PFOA	413.00>369.00	413.00>169.00	2576379	716965	27.83	28.77	716965	27.83	28.77	
13C3-PFHxS	402.10>79.90	----	270780	----	----	----	----	----	----	----
13C3-PFHxS_IS	402.10>79.90	----	270780	----	----	----	----	----	----	----
PFHxS	398.70>79.90	398.70>98.90	1031530	601253	58.29	60.90	601253	58.29	60.90	
18O2-PFHxS_IS	403.00>83.90	----	314839	----	----	----	----	----	----	----
13C9-PFNA_IS	472.10>427.00	----	408350	----	----	----	----	----	----	----
13C9-PFNA	472.10>427.00	----	408350	----	----	----	----	----	----	----
13C5-PFNA_IS	468.00>423.00	----	443658	----	----	----	----	----	----	----
PFNA	463.00>419.00	463.00>219.00	2601947	545568	20.97	19.31	545568	20.97	19.31	
PFHpS	449.00>79.90	449.00>98.80	1003805	522713	52.07	52.44	522713	52.07	52.44	
7_3 FTCA	441.00>317.00	441.00>336.90	2541101	3267670	128.59	129.46	3267670	128.59	129.46	
13C2-8_2-FTS	529.10>80.90	----	271386	----	----	----	----	----	----	----
13C2-8_2-FTS_IS	529.10>80.90	----	271386	----	----	----	----	----	----	----
8_2 FTS	527.10>506.95	527.10>80.80	911590	431896	47.38	45.98	431896	47.38	45.98	
13C6-PFDA_IS	519.10>474.10	----	303254	----	----	----	----	----	----	----
13C6-PFDA	519.10>474.10	----	303254	----	----	----	----	----	----	----
13C2-PFDA_IS	515.10>470.10	----	300386	----	----	----	----	----	----	----
PFDA	512.90>469.00	512.90>219.00	2304753	438164	19.01	17.88	438164	19.01	17.88	
D3-NMeFOSAA_IS	573.20>419.00	----	809888	----	----	----	----	----	----	----
D3-NMeFOSAA	573.20>419.00	----	809888	----	----	----	----	----	----	----
13C8-PFOS_IS	507.10>98.90	----	119449	----	----	----	----	----	----	----
13C8-PFOS	507.10>98.90	----	119449	----	----	----	----	----	----	----
13C4-PFOS_IS	502.80>79.90	----	388576	----	----	----	----	----	----	----
PFOS	498.90>79.90	498.90>98.80	937956	463755	49.44	53.60	463755	49.44	53.60	
NMeFOSAA	570.10>419.00	570.10>483.00	1150659	745857	64.82	64.89	745857	64.82	64.89	
D5-NeFOSAA_IS	589.20>419.00	----	613220	----	----	----	----	----	----	----
D5-NeFOSAA	589.20>419.00	----	613220	----	----	----	----	----	----	----
NeFOSAA	584.20>419.10	584.20>526.00	1045864	947623	90.61	96.07	947623	90.61	96.07	
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	5584038	1747140	31.29	30.95	1747140	31.29	30.95	
PFUnDA	563.10>519.00	563.10>269.10	2457698	279010	11.35	11.01	279010	11.35	11.01	
13C7-PFUnDA_IS	570.00>525.10	----	354515	----	----	----	----	----	----	----
13C7-PFUnDA	570.00>525.10	----	354515	----	----	----	----	----	----	----
PFNS	548.80>79.90	548.80>98.80	1025594	598402	58.35	60.44	598402	58.35	60.44	
10_2 FTS	626.80>607.05	626.80>81.00	1187943	427296	35.97	36.14	427296	35.97	36.14	
13C2-PFDOA_IS	615.10>570.00	----	426372	----	----	----	----	----	----	----
13C2-PFDOA	615.10>570.00	----	426372	----	----	----	----	----	----	----
PFDOA	613.10>569.00	613.10>319.00	2050315	210398	10.26	10.16	210398	10.26	10.16	
PFDS	599.00>79.90	599.00>98.80	865838	516387	59.64	58.26	516387	59.64	58.26	
PFTrDA	663.00>619.00	663.00>168.90	2861649	443047	15.48	16.18	443047	15.48	16.18	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240130_024 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	4090303	1431975	35.01	34.99	1431975	35.01	34.99	
PFOSAm	498.10>77.90	----	2097023	----	----	----	----	----	----	
13C8-PFOSAm	506.10>77.80	----	320571	----	----	----	----	----	----	
13C8-PFOSAm_IS	506.10>77.80	----	320571	----	----	----	----	----	----	
PFTDA	713.10>669.00	713.10>168.90	2175720	376267	17.29	18.05	376267	17.29	18.05	
13C2-PFTDA	715.20>670.00	----	315612	----	----	----	----	----	----	
13C2-PFTDA_IS	715.20>670.00	----	315612	----	----	----	----	----	----	
PFDoS	699.10>79.90	699.10>98.80	538190	327964	60.94	61.13	327964	60.94	61.13	
D7-MeFOSE_IS	623.20>58.90	----	814768	----	----	----	----	----	----	
D7-MeFOSE	623.20>58.90	----	814768	----	----	----	----	----	----	
MeFOSE	616.10>59.00	----	378958	----	----	----	----	----	----	
13C2-PFHxDA_IS	815.00>770.05	----	787072	----	----	----	----	----	----	
13C2-PFHxDA	815.00>770.05	----	787072	----	----	----	----	----	----	
PFHxDA	813.00>768.95	813.00>218.95	4146497	481337	11.61	11.66	481337	11.61	11.66	
D3-MeFOSA	515.00>219.00	----	80639	----	----	----	----	----	----	
D3-MeFOSA_IS	515.00>219.00	----	80639	----	----	----	----	----	----	
MeFOSA	511.90>219.00	511.90>169.00	440931	676647	153.46	160.44	676647	153.46	160.44	
D9-EtFOSE_IS	639.20>58.90	----	1041507	----	----	----	----	----	----	
D9-EtFOSE	639.20>58.90	----	1033595	----	----	----	----	----	----	
EtFOSE	630.00>59.00	----	477297	----	----	----	----	----	----	
D5-EtFOSAm	531.10>219.00	----	114262	----	----	----	----	----	----	
D5-EtFOSAm_IS	531.10>219.00	----	114262	----	----	----	----	----	----	
EtFOSAm	526.00>219.00	526.00>169.00	615655	966215	156.94	159.63	966215	156.94	159.63	
PFODA	913.00>868.65	913.00>169.00	1566507	522488	33.35	36.03	522488	33.35	36.03	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
 IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240130_024

Sample ID: 1633 ICAL 10.0PPB
Date Acquired: 1/30/2024 11:38:28 PM
Acquired by: System Administrator
Data File: 240130_024
Vial: 7 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.337	-0.001	0.001	929844	621636	13C3-PFBA_IS	10.0946	ng/mL	
13C4-PFBA_IS	Auto	1.337	-0.001	----	929844	929844	----	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.336	-0.001	----	621636	621636	----	5.0000	ng/mL	
PFBA	Auto	1.337	-0.004	0.000	840345	929844	13C4-PFBA_IS	9.7136	ng/mL	
PFMPA	Auto	2.367	0.001	-1.075	707726	252493	13C5-PFPeA_IS	9.8162	ng/mL	
3_3 FTCA	Auto	2.948	0.003	-0.494	288635	252493	13C5-PFPeA_IS	79.8048	ng/mL	
13C5-PFPeA	Auto	3.442	0.003	-1.492	252493	686662	13C2-PFHxA_IS	5.1139	ng/mL	
13C5-PFPeA_IS	Auto	3.442	0.003	----	252493	252493	----	5.0000	ng/mL	
PFPeA	Auto	3.445	0.003	0.003	1679329	252493	13C5-PFPeA_IS	9.4987	ng/mL	
PFMBA	Auto	3.970	0.001	0.528	1087423	252493	13C5-PFPeA_IS	9.8413	ng/mL	
13C2-4_2 FTS	Auto	4.622	0.002	-2.427	290705	314839	18O2-PFHxS_IS	4.9052	ng/mL	
13C2-4_2 FTS_IS	Auto	4.622	0.002	----	290705	290705	----	5.0000	ng/mL	
4_2 FTS	Auto	4.622	0.002	0.000	1303991	290705	13C2-4_2 FTS_IS	9.0491	ng/mL	
13C3-PFBS_IS	Auto	4.588	0.001	----	298172	298172	----	2.5000	ng/mL	
PFBS	Auto	4.589	0.001	0.001	1262864	298172	13C3-PFBS_IS	8.5468	ng/mL	
13C3-PFBS	Auto	4.588	0.001	-2.461	298172	314839	18O2-PFHxS_IS	2.5383	ng/mL	
NFDHA	Auto	4.792	0.002	-0.142	1138520	563352	13C5-PFHxA_IS	9.7432	ng/mL	
13C5-PFHxA	Auto	4.934	0.002	0.000	563352	686662	13C2-PFHxA_IS	2.5417	ng/mL	
13C5-PFHxA_IS	Auto	4.934	0.002	----	563352	563352	----	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	4.934	0.001	----	686662	686662	----	2.5000	ng/mL	
PFHxA	Auto	4.936	0.002	0.002	2087792	563352	13C5-PFHxA_IS	9.9457	ng/mL	
PFEESA	Auto	5.266	0.001	0.332	6282325	563352	13C5-PFHxA_IS	8.9759	ng/mL	
13C3-HFPO-DA	Auto	5.412	0.000	0.478	631094	686662	13C2-PFHxA_IS	10.3708	ng/mL	
13C3-HFPO-DA_IS	Auto	5.412	0.000	----	631094	631094	----	10.0000	ng/mL	
HFPO-DA	Auto	5.414	0.001	0.002	603039	631094	13C3-HFPO-DA_IS	9.7174	ng/mL	
5_3 FTCA	Auto	5.866	0.000	0.932	1356537	563352	13C5-PFHxA_IS	80.5544	ng/mL	
PFPeS	Auto	5.973	0.000	-1.075	1037439	270780	13C3-PFHxS_IS	9.6801	ng/mL	
13C4-PFHpA	Auto	6.121	0.001	1.187	715028	686662	13C2-PFHxA_IS	2.5643	ng/mL	
13C4-PFHpA_IS	Auto	6.121	0.001	----	715028	715028	----	2.5000	ng/mL	
PFHpA	Auto	6.123	0.001	0.002	2355874	715028	13C4-PFHpA_IS	9.6974	ng/mL	
DONA	Auto	6.488	0.001	1.076	4952725	631094	13C3-HFPO-DA_IS	9.3097	ng/mL	
13C2-6_2 FTS_IS	Auto	6.767	0.001	----	299993	299993	----	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.767	0.001	-0.282	299993	314839	18O2-PFHxS_IS	4.8625	ng/mL	
6_2 FTS	Auto	6.767	0.002	0.000	1060397	299993	13C2-6_2 FTS_IS	9.2692	ng/mL	
13C4-PFOA_IS	Auto	7.080	0.001	----	59745	59745	----	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.080	0.002	----	722027	722027	----	2.5000	ng/mL	
13C8-PFOA	Auto	7.080	0.002	0.000	722027	59745	13C4-PFOA_IS	2.5341	ng/mL	
PFOA	Auto	7.082	0.001	0.002	2576379	722027	13C8-PFOA_IS	9.7749	ng/mL	
13C3-PFHxS	Auto	7.048	0.000	-0.001	270780	314839	18O2-PFHxS_IS	2.4539	ng/mL	
13C3-PFHxS_IS	Auto	7.048	0.000	----	270780	270780	----	2.5000	ng/mL	
PFHxS	Auto	7.049	0.001	0.001	1031530	270780	13C3-PFHxS_IS	8.7156	ng/mL	
18O2-PFHxS_IS	Auto	7.049	0.001	----	314839	314839	----	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.930	0.001	----	408350	408350	----	1.2500	ng/mL	
13C9-PFNA	Auto	7.930	0.001	0.000	408350	443658	13C5-PFNA_IS	1.2434	ng/mL	
13C5-PFNA_IS	Auto	7.930	0.000	----	443658	443658	----	1.2500	ng/mL	
PFNA	Auto	7.931	0.001	0.001	2601947	408350	13C9-PFNA_IS	9.8026	ng/mL	
PFHpS	Auto	7.971	0.000	-0.816	1003805	119449	13C8-PFOS_IS	9.9950	ng/mL	
7_3 FTCA	Auto	7.929	0.000	2.995	2541101	563352	13C5-PFHxA_IS	85.8737	ng/mL	
13C2-8_2-FTS	Auto	8.389	0.001	1.340	271386	314839	18O2-PFHxS_IS	5.1811	ng/mL	
13C2-8_2-FTS_IS	Auto	8.389	0.001	----	271386	271386	----	5.0000	ng/mL	
8_2 FTS	Auto	8.389	0.001	0.000	911590	271386	13C2-8_2-FTS_IS	8.8119	ng/mL	
13C6-PFDA_IS	Auto	8.696	0.001	----	303254	303254	----	1.2500	ng/mL	
13C6-PFDA	Auto	8.696	0.001	-0.001	303254	300386	13C2-PFDA_IS	1.2598	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_024 (continued)

(Table continued from previous page)

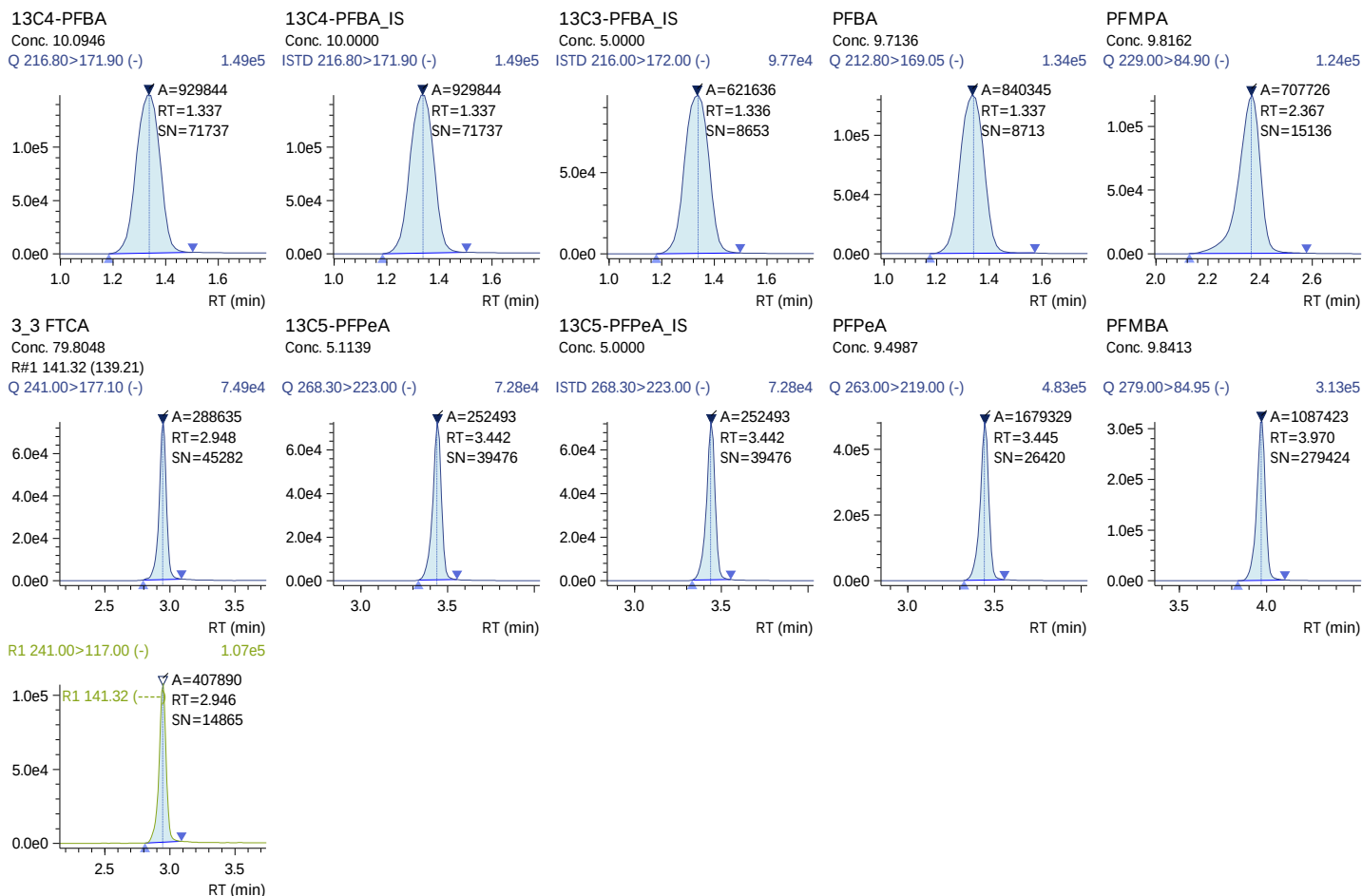
Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C2-PFDA_IS	Auto	8.697	0.001	----	300386	300386	----	1.2500	ng/mL	
PFDA	Auto	8.698	0.001	0.002	2304753	303254	13C6-PFDA_IS	8.9863	ng/mL	
D3-NMeFOSAA_IS	Auto	8.835	0.001	----	809888	809888	----	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.835	0.001	0.048	809888	388576	13C4-PFOS_IS	5.1191	ng/mL	
13C8-PFOS_IS	Auto	8.787	0.001	----	119449	119449	----	2.5000	ng/mL	
13C8-PFOS	Auto	8.787	0.001	0.000	119449	388576	13C4-PFOS_IS	2.4426	ng/mL	
13C4-PFOS_IS	Auto	8.787	0.000	----	388576	388576	----	2.5000	ng/mL	
PFOS	M	8.788	0.000	0.001	937956	119449	13C8-PFOS_IS	9.1931	ng/mL	
NMeFOSAA	M	8.841	0.190	0.006	1150659	809888	D3-NMeFOSAA_IS	10.0339	ng/mL	
D5-NetFOSAA_IS	Auto	9.165	0.001	----	613220	613220	----	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.165	0.001	0.378	613220	388576	13C4-PFOS_IS	4.9182	ng/mL	
NetFOSAA	M	9.176	0.190	0.011	1045864	613220	D5-NetFOSAA_IS	10.3860	ng/mL	
9-CI-PF3ONS	Auto	9.353	0.002	3.941	5584038	631094	13C3-HFPO-DA_IS	9.0234	ng/mL	
PFUnDA	Auto	9.422	0.001	0.002	2457698	354515	13C7-PFUnDA_IS	10.1744	ng/mL	
13C7-PFUnDA_IS	Auto	9.420	0.001	----	354515	354515	----	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.420	0.001	0.723	354515	300386	13C2-PFDA_IS	1.1852	ng/mL	
PFNS	Auto	9.550	0.001	0.763	1025594	119449	13C8-PFOS_IS	10.1448	ng/mL	
10_2_FTS	Auto	9.796	0.001	1.407	1187943	271386	13C2-8_2-FTS_IS	8.6663	ng/mL	
13C2-PFDOA_IS	Auto	10.106	-0.001	----	426372	426372	----	1.2500	ng/mL	
13C2-PFDOA	Auto	10.106	-0.001	1.409	426372	300386	13C2-PFDA_IS	1.1941	ng/mL	
PFDOA	Auto	10.108	0.000	0.002	2050315	426372	13C2-PFDOA_IS	9.6611	ng/mL	
PFDS	Auto	10.263	0.000	1.476	865838	119449	13C8-PFOS_IS	9.7533	ng/mL	
PFTDA	Auto	10.762	-0.002	-0.632	2861649	315612	13C2-PFTDA_IS	9.1762	ng/mL	
11-CI-PF3OUdS	Auto	10.769	-0.002	5.357	4090303	631094	13C3-HFPO-DA_IS	9.2595	ng/mL	
PFOSAm	M	11.152	0.002	-0.004	2097023	320571	13C8-PFOSAm_IS	18.6960	ng/mL	
13C8-PFOSAm	Auto	11.156	0.001	2.369	320571	388576	13C4-PFOS_IS	2.5971	ng/mL	
13C8-PFOSAm_IS	Auto	11.156	0.001	----	320571	320571	----	2.5000	ng/mL	
PFTDA	Auto	11.395	-0.001	0.001	2175720	315612	13C2-PFTDA_IS	9.9497	ng/mL	
13C2-PFTDA	Auto	11.394	-0.001	2.697	315612	300386	13C2-PFDA_IS	1.2524	ng/mL	
13C2-PFTDA_IS	Auto	11.394	-0.001	----	315612	315612	----	1.2500	ng/mL	
PFDoS	Auto	11.586	0.000	2.799	538190	119449	13C8-PFOS_IS	9.7209	ng/mL	
D7-MeFOSE_IS	Auto	13.390	0.004	----	814768	814768	----	25.0000	ng/mL	
D7-MeFOSE	Auto	13.390	0.004	4.603	814768	388576	13C4-PFOS_IS	25.7127	ng/mL	
MeFOSE	M	13.427	0.004	0.037	378958	814768	D7-MeFOSE_IS	9.6010	ng/mL	
13C2-PFHXA_IS	Auto	12.609	0.000	----	787072	787072	----	2.5000	ng/mL	
13C2-PFHXA	Auto	12.609	0.000	3.912	787072	300386	13C2-PFDA_IS	2.3337	ng/mL	
PFHXA	Auto	12.611	0.001	0.002	4146497	787072	13C2-PFHXA_IS	9.7490	ng/mL	
D3-MeFOSA	Auto	13.696	0.006	4.909	80639	388576	13C4-PFOS_IS	2.5023	ng/mL	
D3-MeFOSA_IS	Auto	13.696	0.006	----	80639	80639	----	2.5000	ng/mL	
MeFOSA	M	13.704	0.005	0.008	440931	80639	D3-MeFOSA_IS	9.5819	ng/mL	
D9-EtFOSE_IS	Auto	14.019	0.006	----	1041507	1041507	----	25.0000	ng/mL	
D9-EtFOSE	Auto	14.019	0.006	5.232	1033595	388576	13C4-PFOS_IS	26.6552	ng/mL	
EtFOSE	M	14.064	0.009	0.045	477297	1041507	D9-EtFOSE_IS	9.5555	ng/mL	
D5-EtFOSAm	Auto	14.372	0.006	5.585	114262	388576	13C4-PFOS_IS	2.5644	ng/mL	
D5-EtFOSAm_IS	Auto	14.372	0.006	----	114262	114262	----	2.5000	ng/mL	
EtFOSAm	M	14.390	0.006	0.018	615655	114262	D5-EtFOSAm_IS	9.8218	ng/mL	
PFODA	Auto	13.743	0.003	1.134	1566507	787072	13C2-PFHXA_IS	9.3113	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_024 (continued)





240130_024 (continued)

13C2-4_2_FTS
Conc. 4.9052

13C2-4_2_FTS_IS
Conc. 5.0000

4_2_FTS
Conc. 9.0491
R#1 32.98 (32.10)
R#2 32.98 (32.10)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 8.5468
R#1 47.50 (44.81)
R#2 47.50 (44.81)

Q 329.10>80.90 (-)

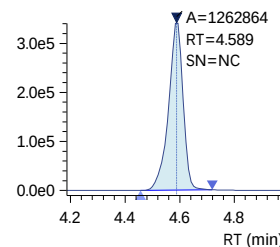
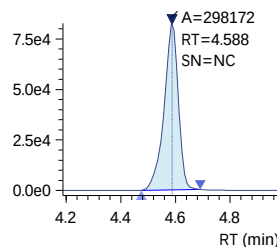
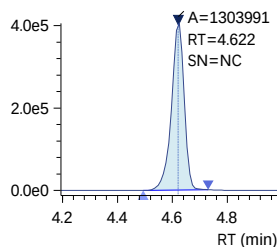
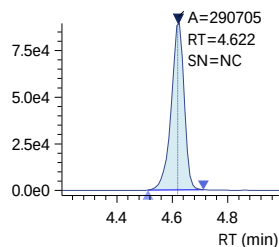
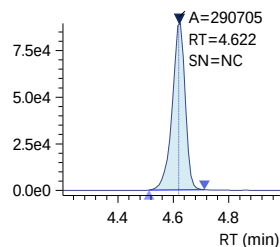
8.96e4 ISTD 329.10>80.90 (-)

8.96e4 Q 327.10>307.00 (-)

4.06e5 ISTD 302.10>79.90 (-)

8.27e4 Q 298.70>79.90 (-)

3.41e5

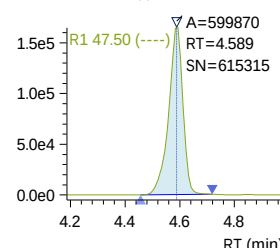
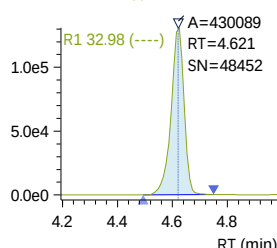


R1 327.10>80.90 (-)

1.31e5

R1 298.70>98.80 (-)

1.65e5

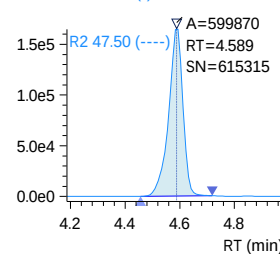
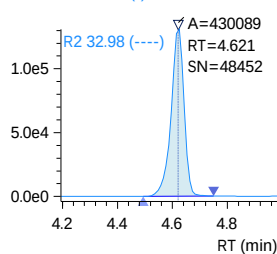


R2 327.10>80.90 (-)

1.31e5

R2 298.70>98.80 (-)

1.65e5





240130_024 (continued)

13C3-PFBS
Conc. 2.5383

NFDHA
Conc. 9.7432
R#1 34.95 (35.54)
R#2 34.95 (35.54)

13C5-PFHxA
Conc. 2.5417

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

Q 302.10>79.90 (-)

8.27e4

Q 295.00>201.00 (-)

3.45e5

Q 318.00>273.00 (-)

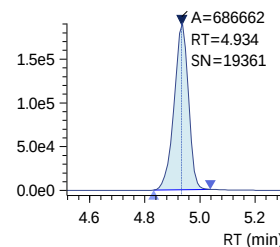
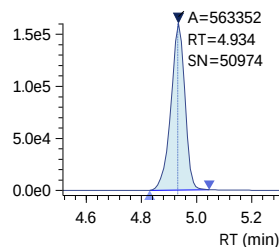
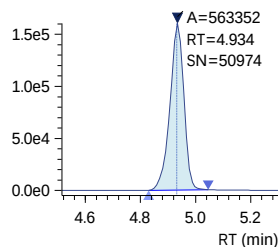
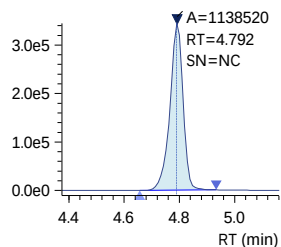
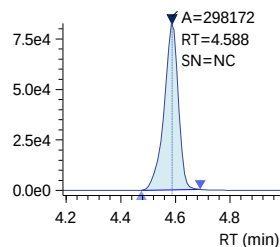
1.61e5

ISTD 318.00>273.00 (-)

1.61e5

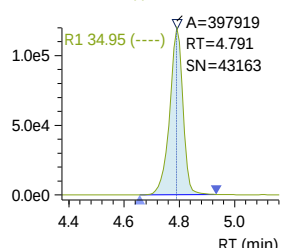
ISTD 315.10>270.00 (-)

1.91e5



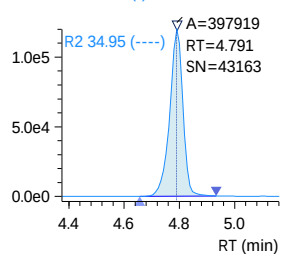
R1 295.00>84.90 (-)

1.20e5



R2 295.00>84.90 (-)

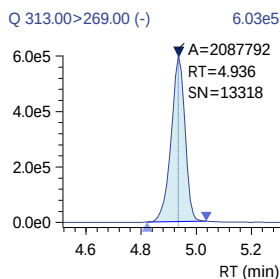
1.20e5





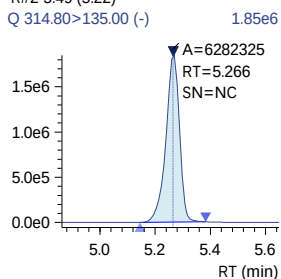
240130_024 (continued)

PFHxA
Conc. 9.9457

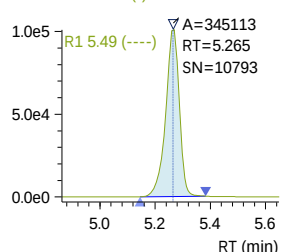


PFEESA
Conc. 8.9759

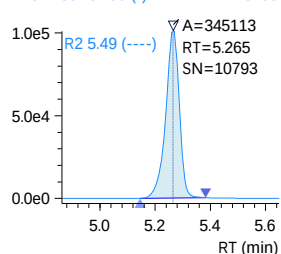
R#1 5.49 (5.22)
R#2 5.49 (5.22)



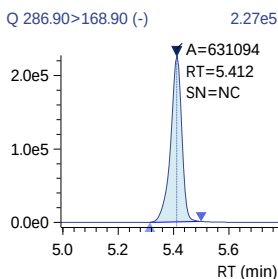
R1 314.80>82.90 (-) 1.01e5



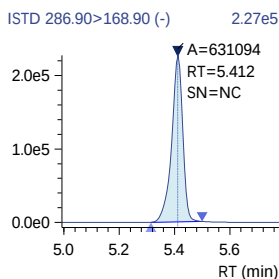
R2 314.80>82.90 (-) 1.01e5



13C3-HFPO-DA
Conc. 10.3708

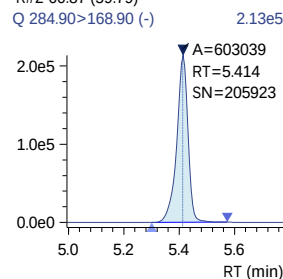


13C3-HFPO-DA_IS
Conc. 10.0000

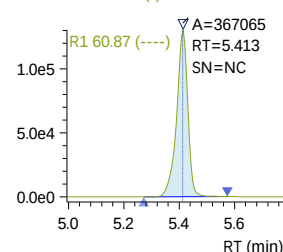


HFPO-DA
Conc. 9.7174

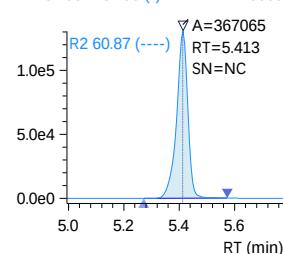
R#1 60.87 (59.79)
R#2 60.87 (59.79)



R1 284.90>184.90 (-) 1.30e5

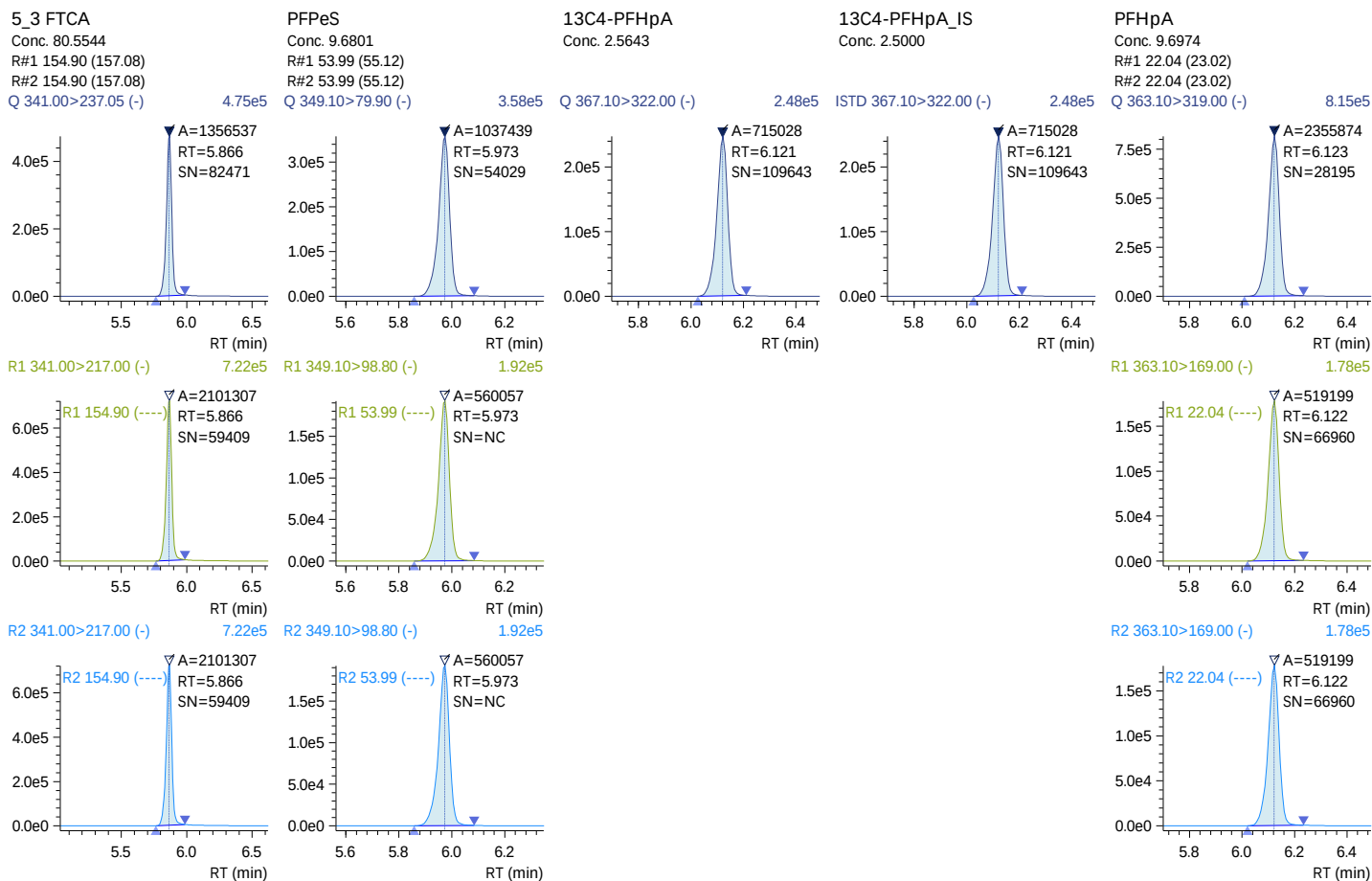


R2 284.90>184.90 (-) 1.30e5





240130_024 (continued)

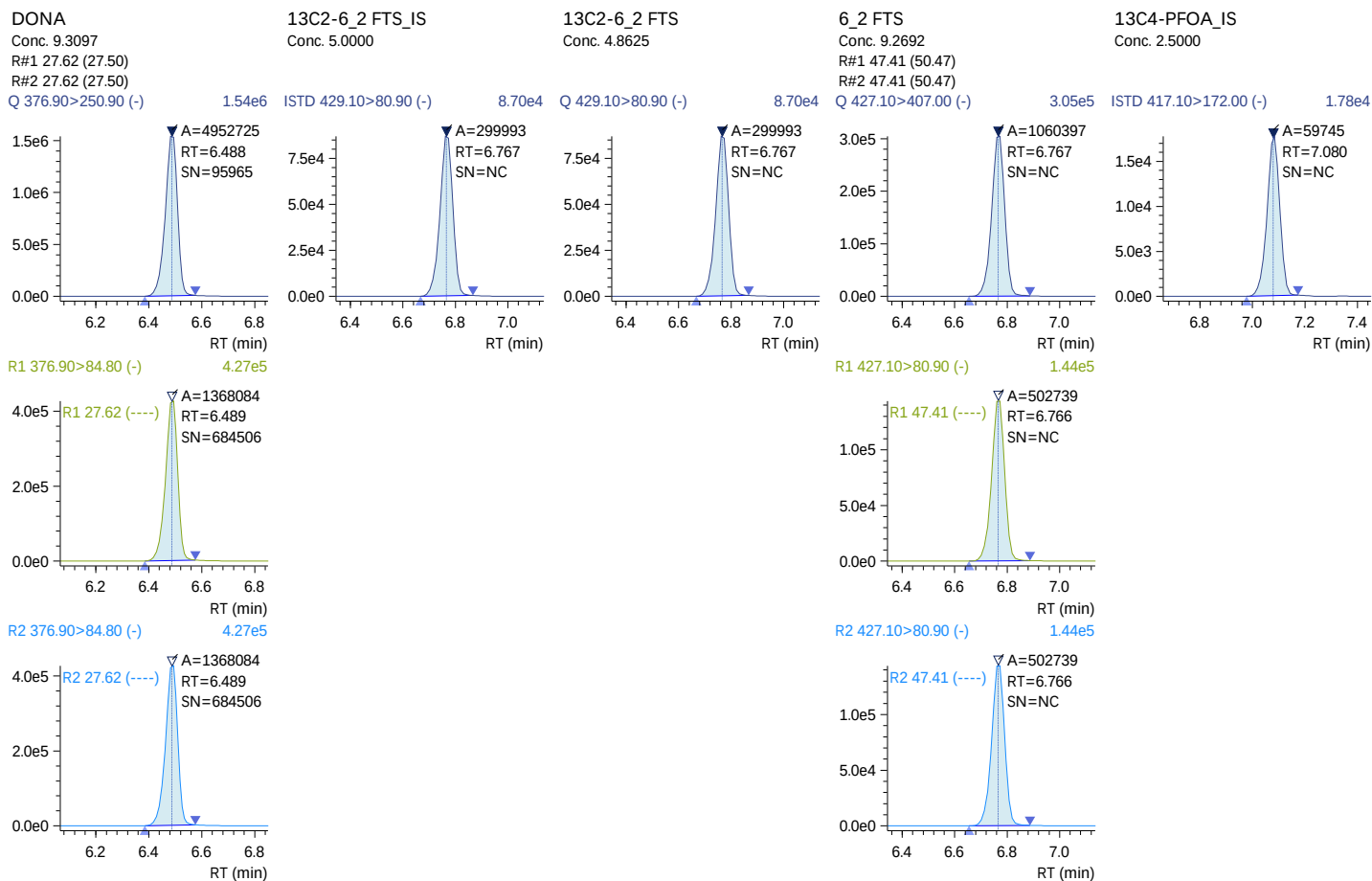


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_024 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_024 (continued)

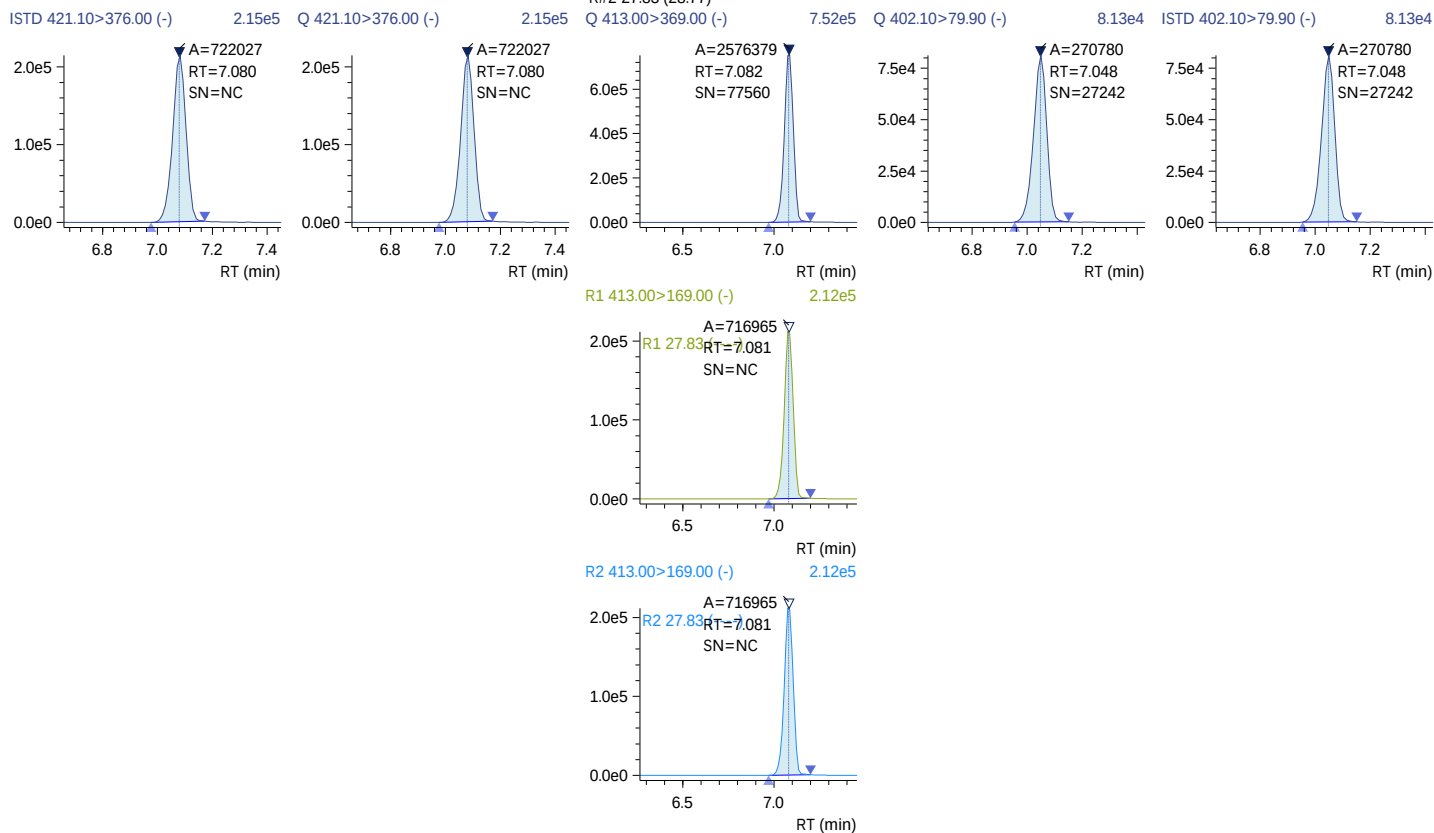
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.5341

PFOA
Conc. 9.7749
R#1 27.83 (28.77)
R#2 27.83 (28.77)

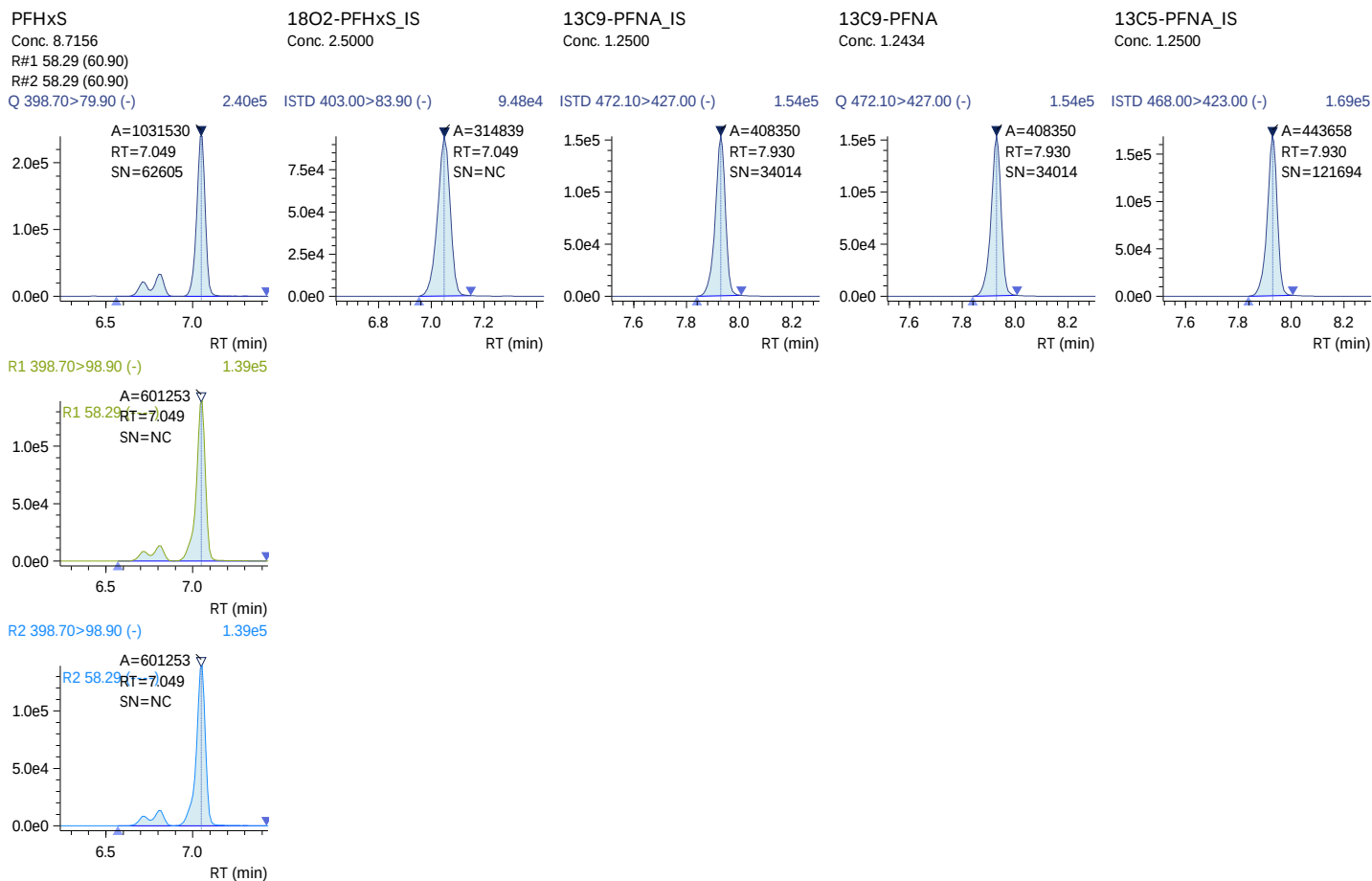
13C3-PFHxS
Conc. 2.4539

13C3-PFHxS_IS
Conc. 2.5000





240130_024 (continued)

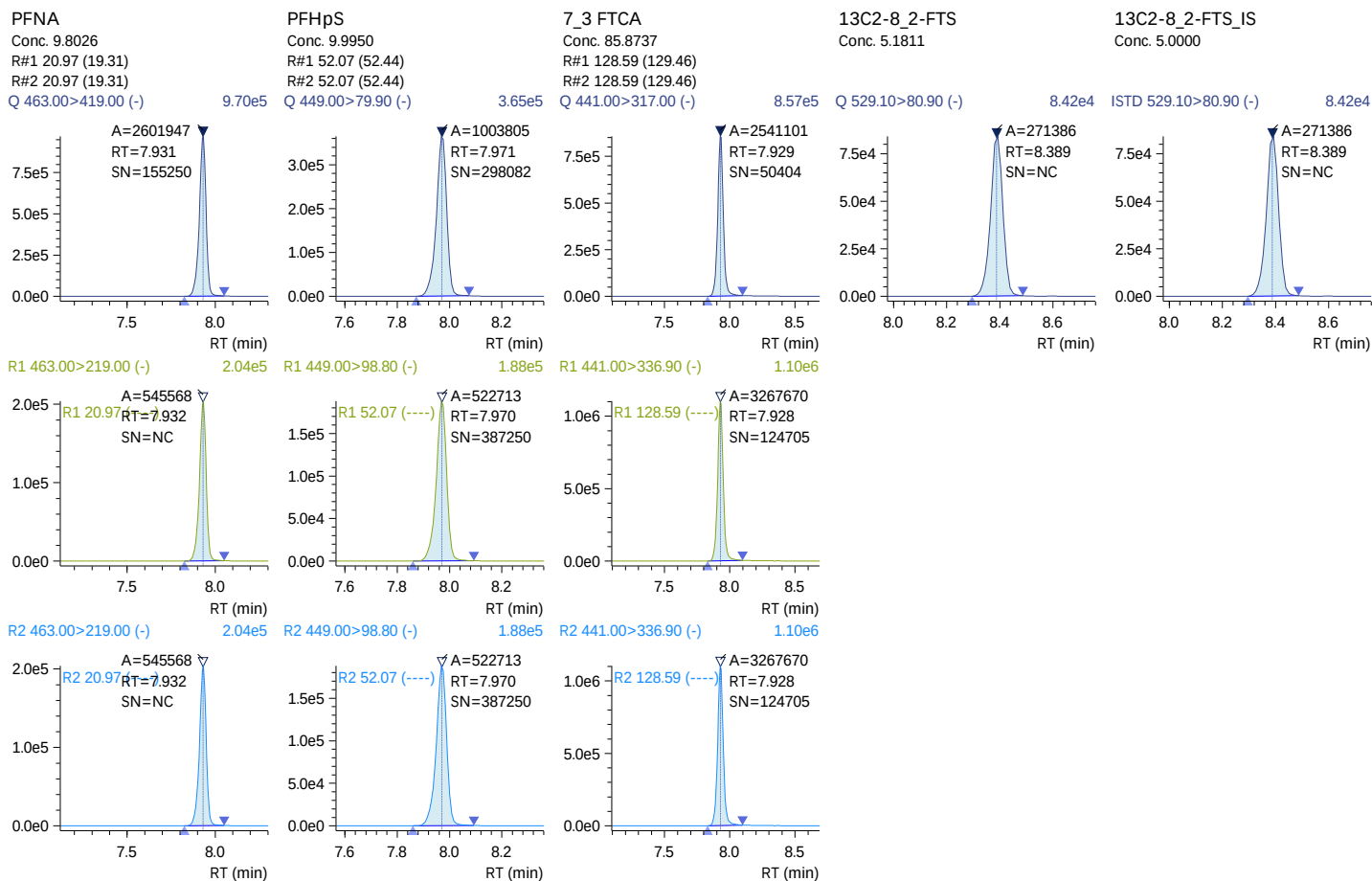


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.

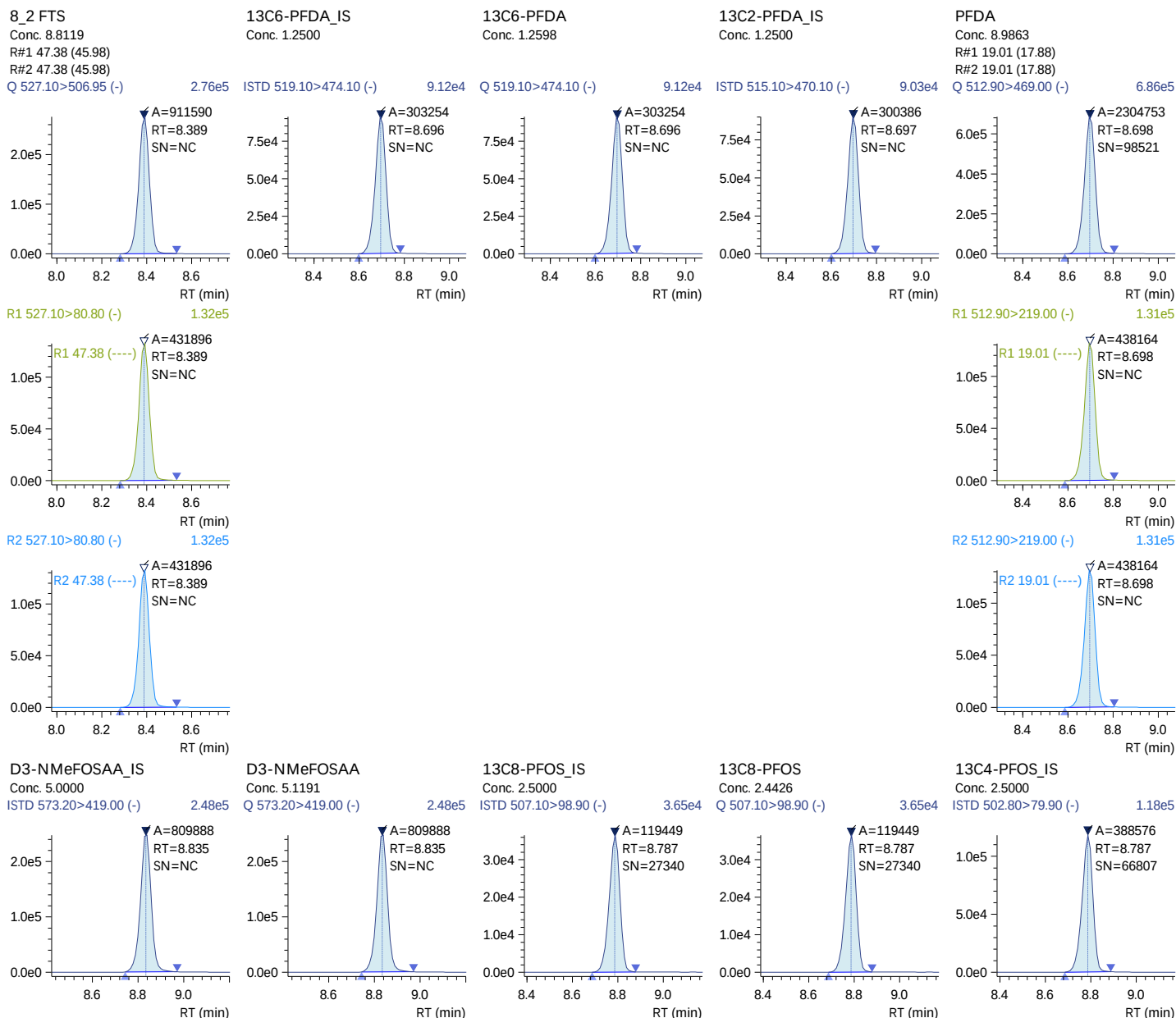


240130_024 (continued)





240130_024 (continued)

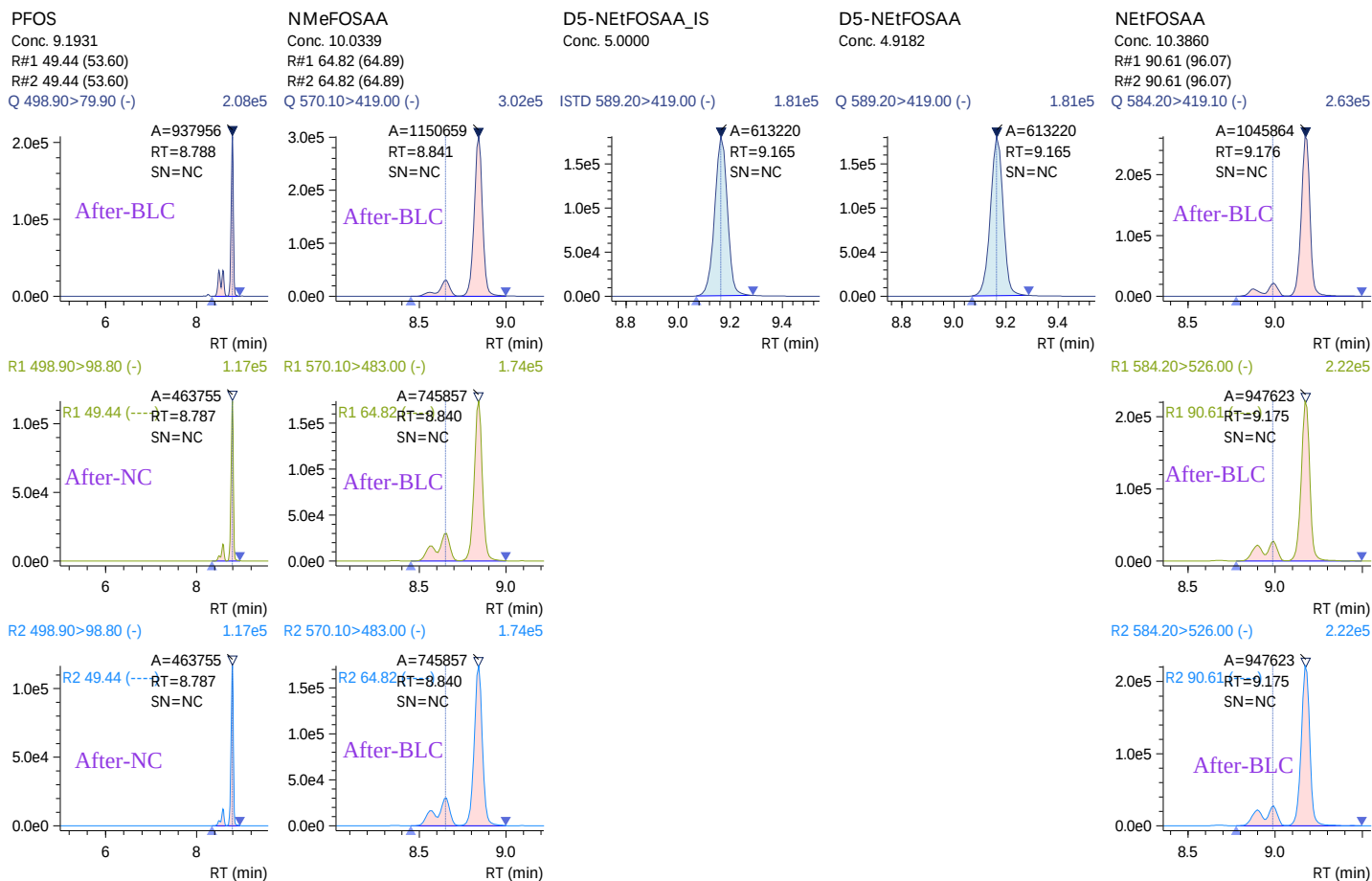


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_024 (continued)



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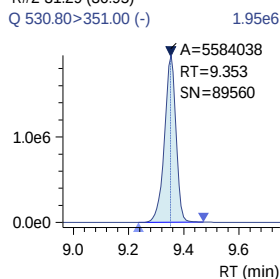
SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_024 (continued)

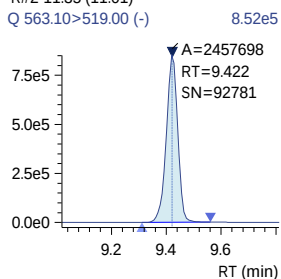
9-Cl-PF3ONS

Conc. 9.0234
R#1 31.29 (30.95)
R#2 31.29 (30.95)
Q 530.80>351.00 (-)



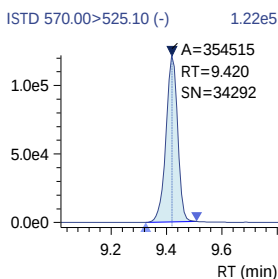
PFUnDA

Conc. 10.1744
R#1 11.35 (11.01)
R#2 11.35 (11.01)
Q 563.10>519.00 (-)



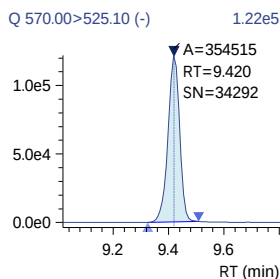
13C7-PFUnDA_IS

Conc. 1.2500



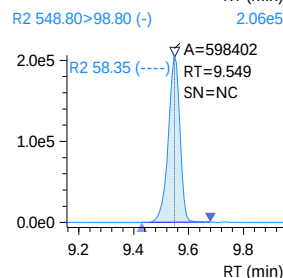
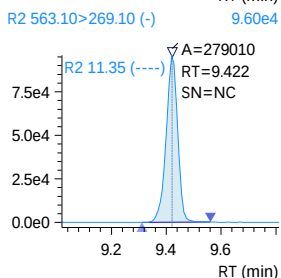
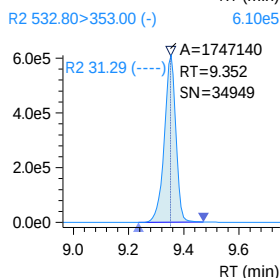
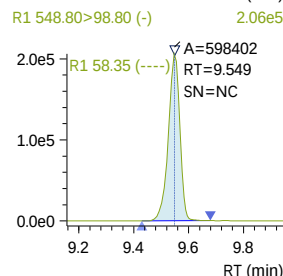
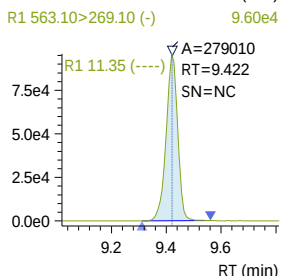
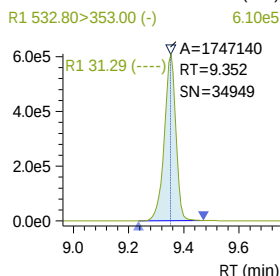
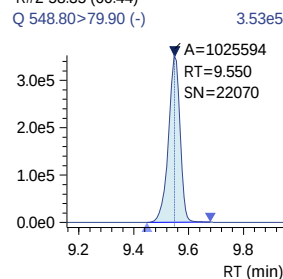
13C7-PFUnDA

Conc. 1.1852



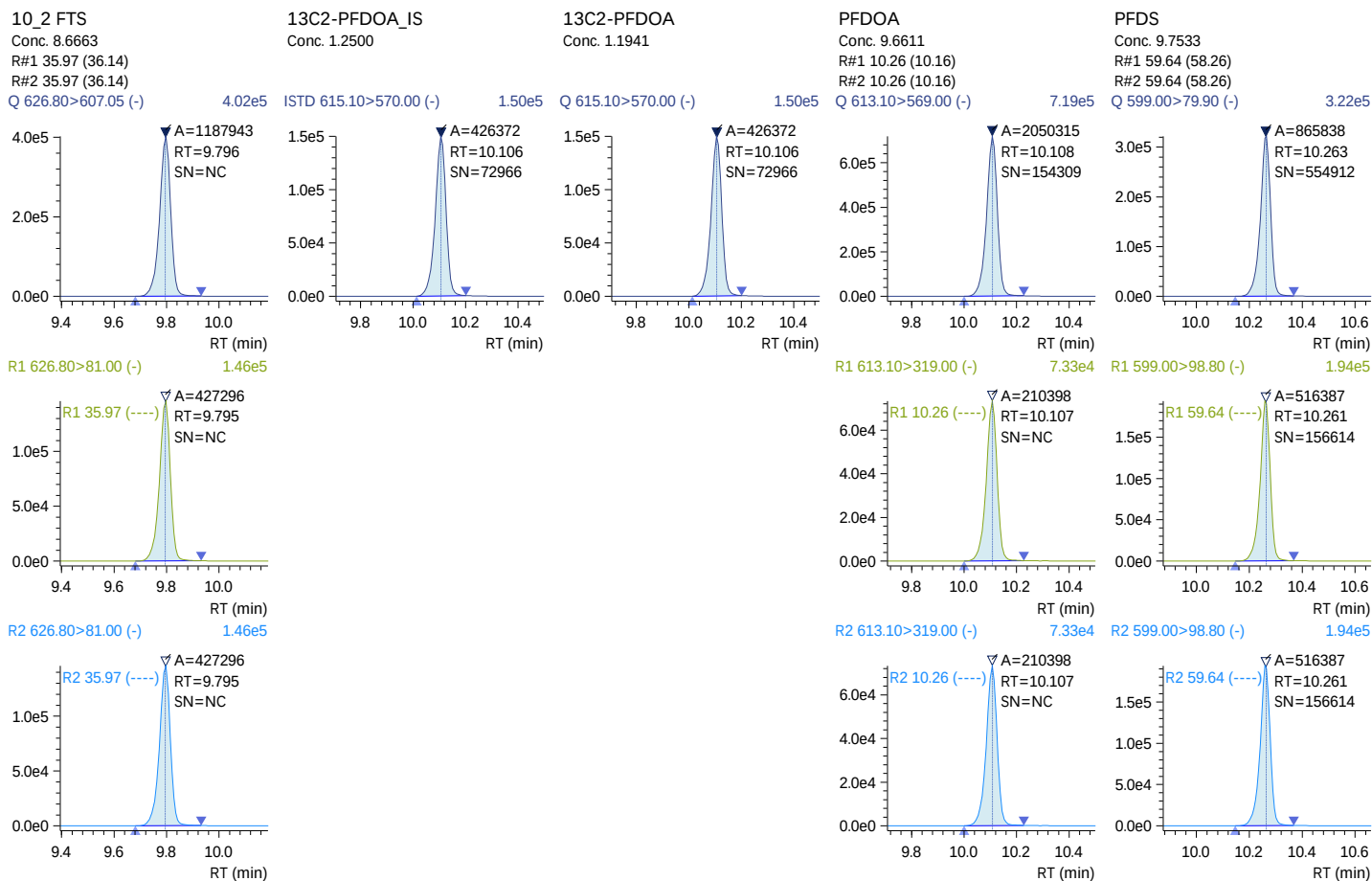
PFNS

Conc. 10.1448
R#1 58.35 (60.44)
R#2 58.35 (60.44)
Q 548.80>79.90 (-)





240130_024 (continued)

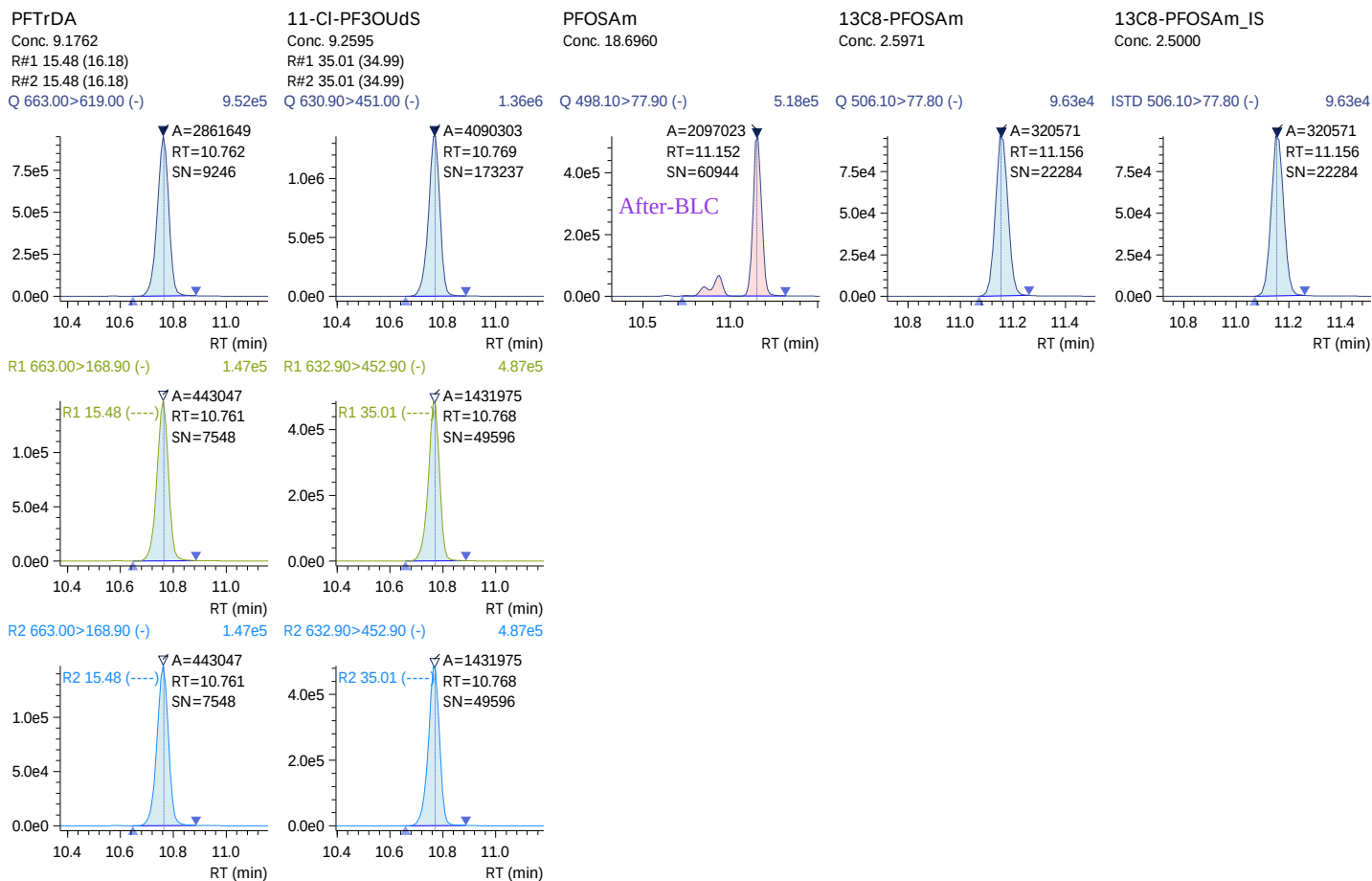


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_024 (continued)

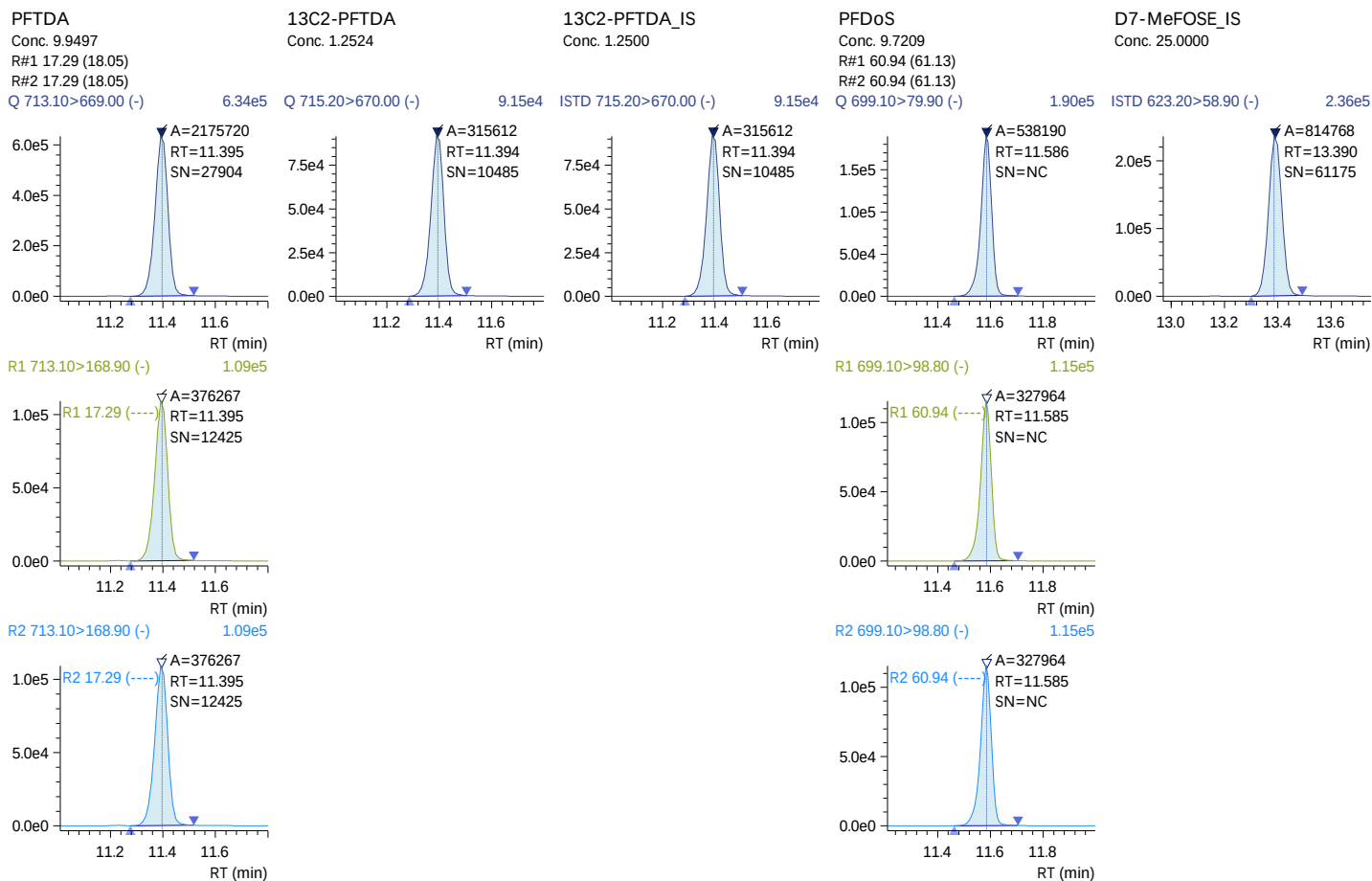


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_024 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_024 (continued)

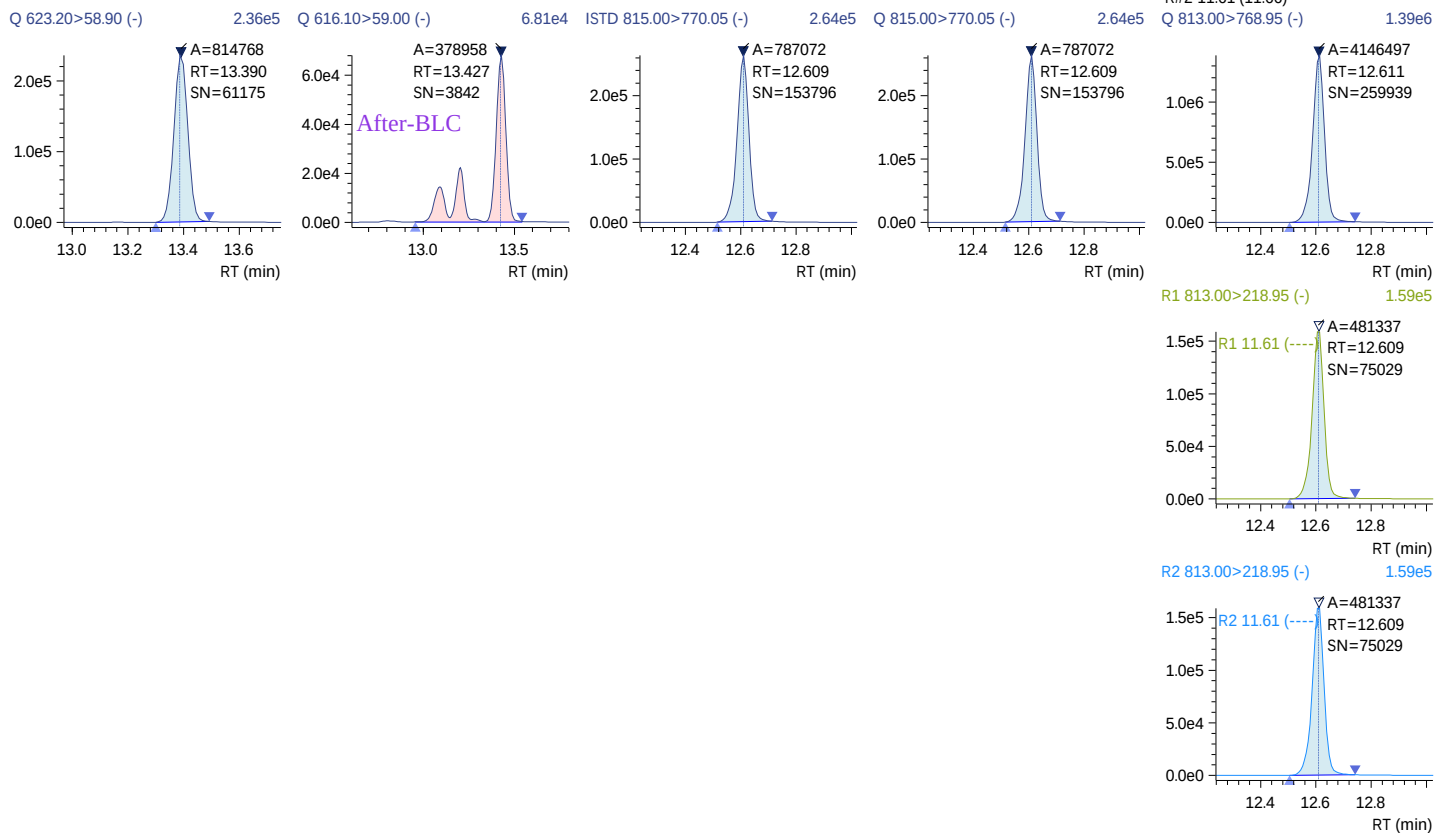
D7-MeFOSE
Conc. 25.7127

MeFOSE
Conc. 9.6010

13C2-PFHXA_IS
Conc. 2.5000

13C2-PFHXA
Conc. 2.3337

PFHXA
Conc. 9.7490
R#1 11.61 (11.66)
R#2 11.61 (11.66)





240130_024 (continued)

D3-MeFOSA
Conc. 2.5023

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. 9.5819
R#1 153.46 (160.44)
R#2 153.46 (160.44)

D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 26.6552

Q 515.00>219.00 (-)

2.36e4

ISTD 515.00>219.00 (-)

2.36e4

Q 511.90>219.00 (-)

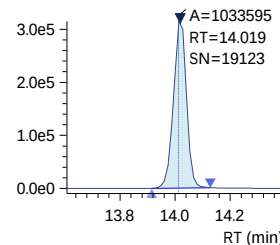
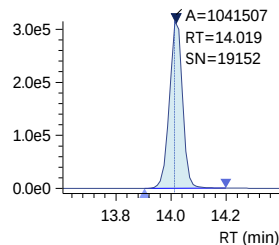
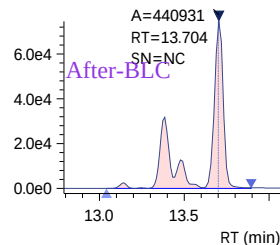
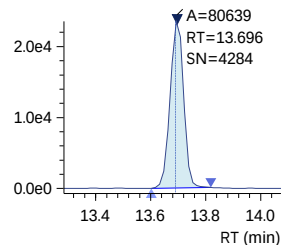
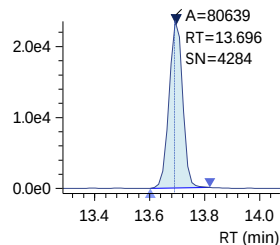
7.46e4

ISTD 639.20>58.90 (-)

3.15e5

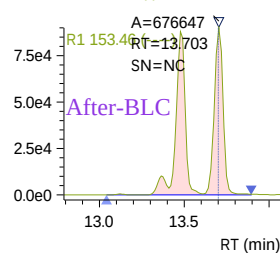
Q 639.20>58.90 (-)

3.15e5



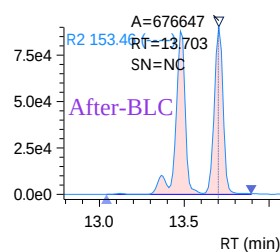
R1 511.90>169.00 (-)

9.00e4



R2 511.90>169.00 (-)

9.00e4





240130_024 (continued)

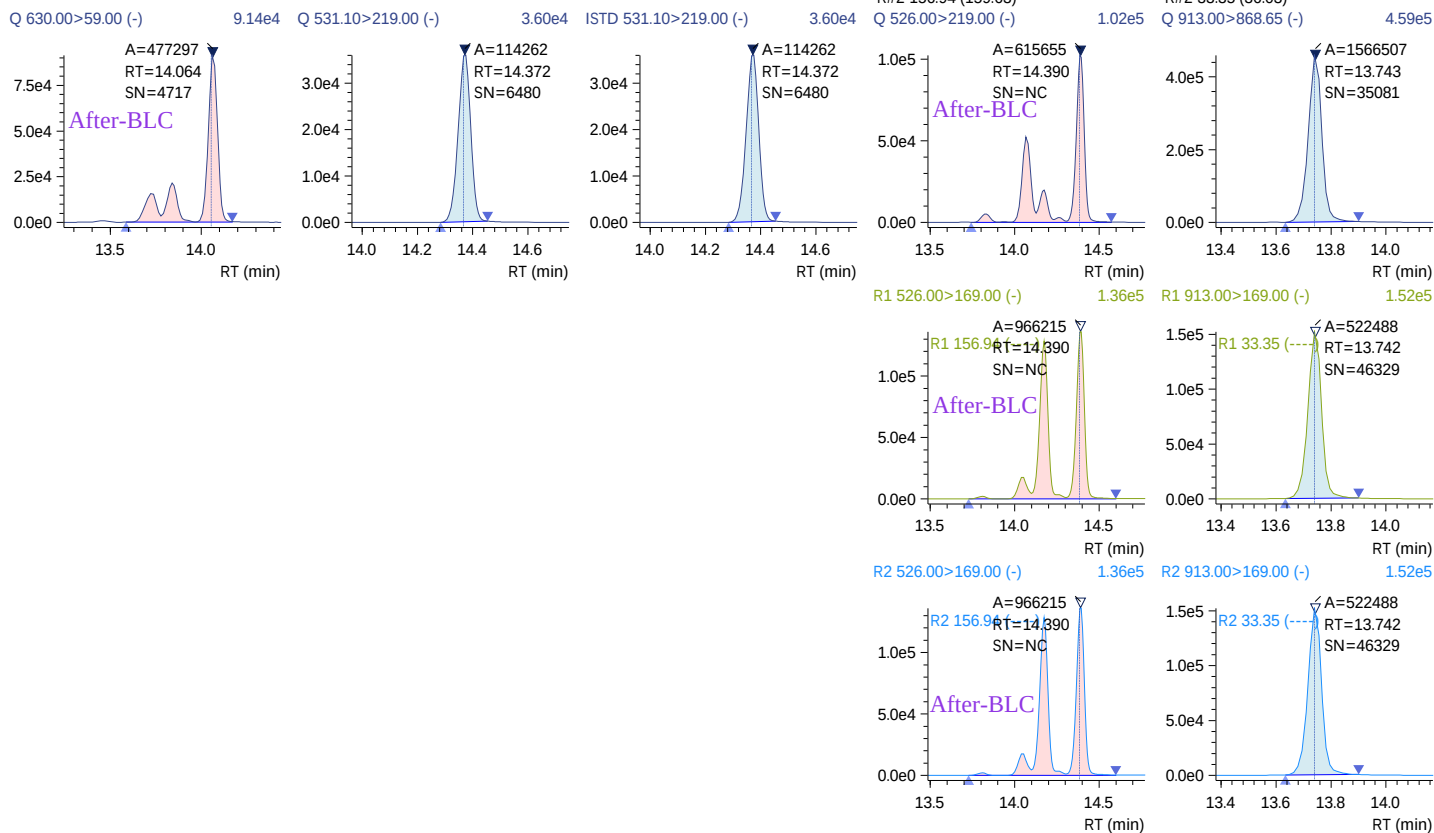
EtFOSE
Conc. 9.5555

D5-EtFOSAm
Conc. 2.5644

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. 9.8218
R#1 156.94 (159.63)
R#2 156.94 (159.63)

PFODA
Conc. 9.3113
R#1 33.35 (36.03)
R#2 33.35 (36.03)



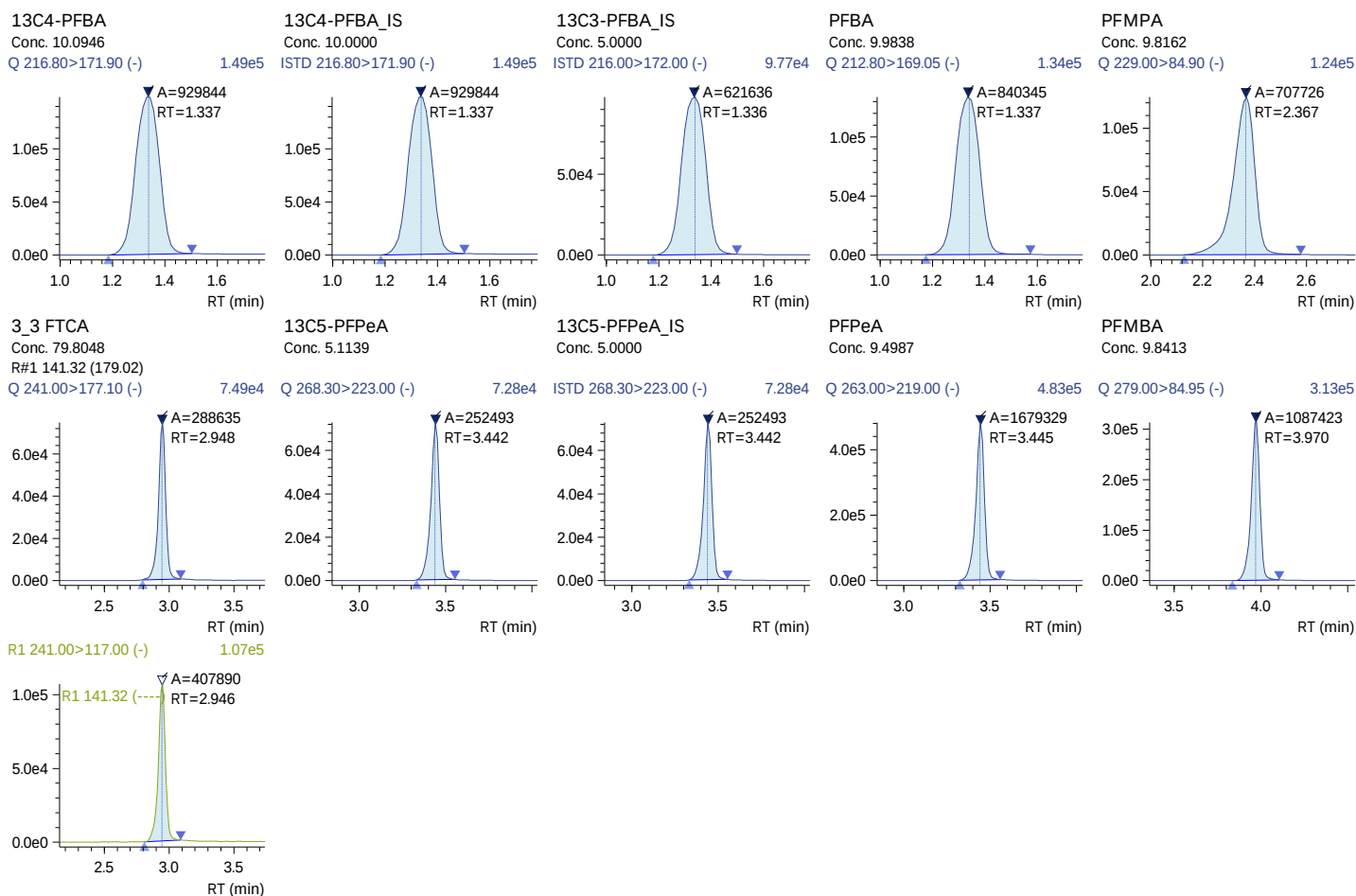
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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_024

Sample ID: 1633 ICAL 10.0PPB
Date Acquired: 1/30/2024 11:38:28 PM
Acquired by: System Administrator
Data File: 240130_024
Vial: 7 | Inj. Volume: 10.0000uL | Tray: 1





240130_024 (continued)

13C2-4_2 FTS
Conc. 4.9052

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. 8.9755
R#1 32.98 (24.69)
R#2 32.98 (0.00)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 8.5468
R#1 47.50 (52.67)
R#2 47.50 (0.00)

Q 329.10>80.90 (-)

8.96e4

ISTD 329.10>80.90 (-)

8.96e4

Q 327.10>307.00 (-)

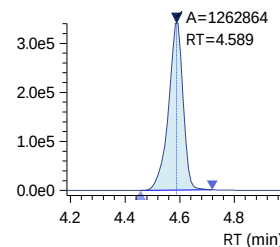
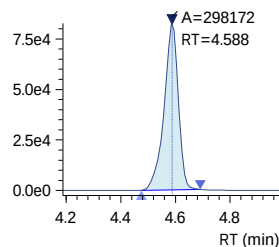
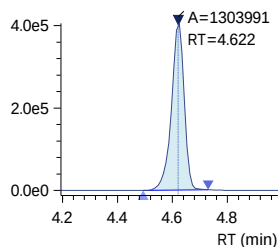
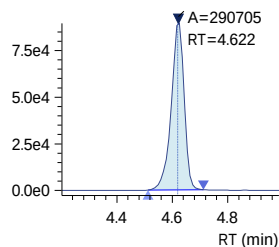
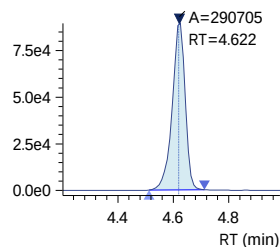
4.06e5

ISTD 302.10>79.90 (-)

8.27e4

Q 298.70>79.90 (-)

3.41e5

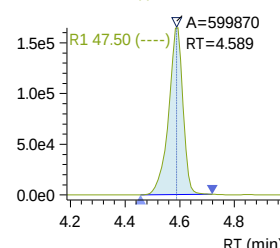
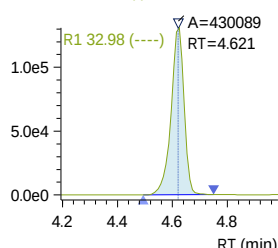


R1 327.10>80.90 (-)

1.31e5

R1 298.70>98.80 (-)

1.65e5

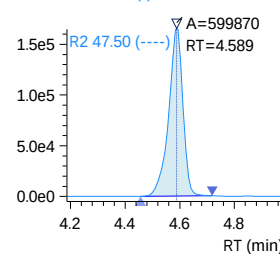
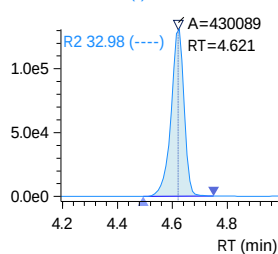


R2 327.10>80.90 (-)

1.31e5

R2 298.70>98.80 (-)

1.65e5





240130_024 (continued)

13C3-PFBS
 Conc. 2.5383

NFDHA
 Conc. 9.7432
 R#1 34.95 (39.38)
 R#2 34.95 (0.00)

13C5-PFHxA
 Conc. 2.5417

13C5-PFHxA_IS
 Conc. 2.5000

13C2-PFHxA_IS
 Conc. 2.5000

Q 302.10>79.90 (-)

8.27e4

Q 295.00>201.00 (-)

3.45e5

Q 318.00>273.00 (-)

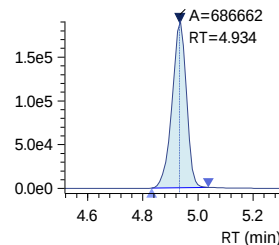
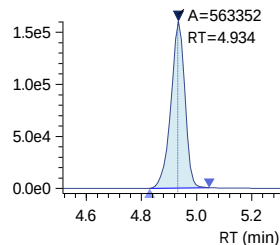
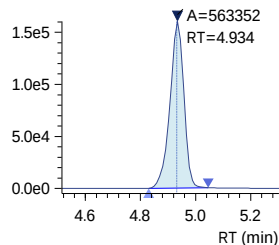
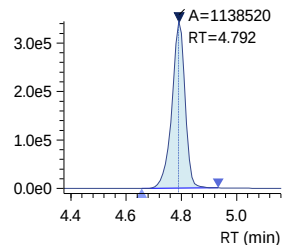
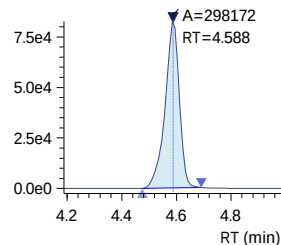
1.61e5

ISTD 318.00>273.00 (-)

1.61e5

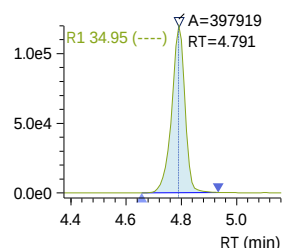
ISTD 315.10>270.00 (-)

1.91e5



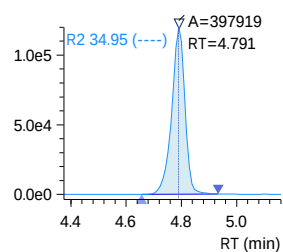
R1 295.00>84.90 (-)

1.20e5



R2 295.00>84.90 (-)

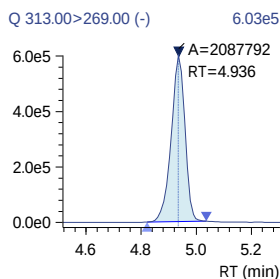
1.20e5





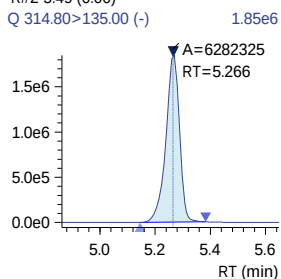
240130_024 (continued)

PFHxA
Conc. 9.9120

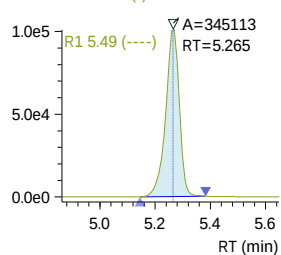


PFEESA
Conc. 8.9759

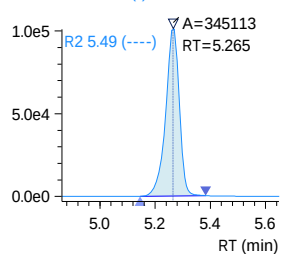
R#1 5.49 (5.25)
R#2 5.49 (0.00)



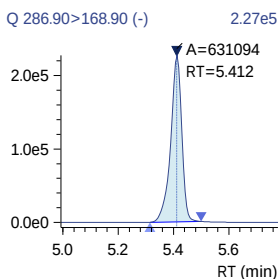
R1 314.80>82.90 (-) 1.01e5



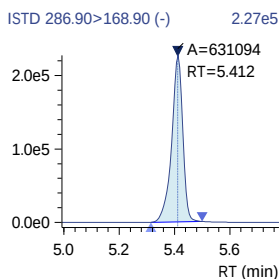
R2 314.80>82.90 (-) 1.01e5



13C3-HFPO-DA
Conc. 10.3708

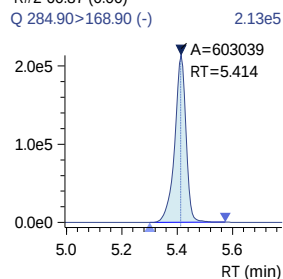


13C3-HFPO-DA_IS
Conc. 10.0000

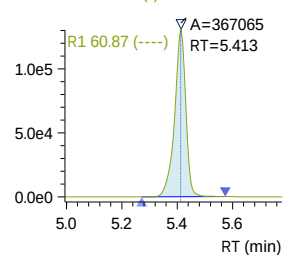


HFPO-DA
Conc. 9.5428

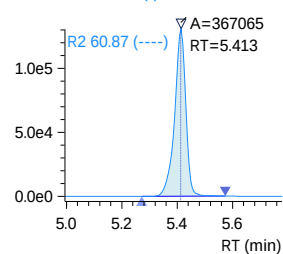
R#1 60.87 (69.48)
R#2 60.87 (0.00)



R1 284.90>184.90 (-) 1.30e5

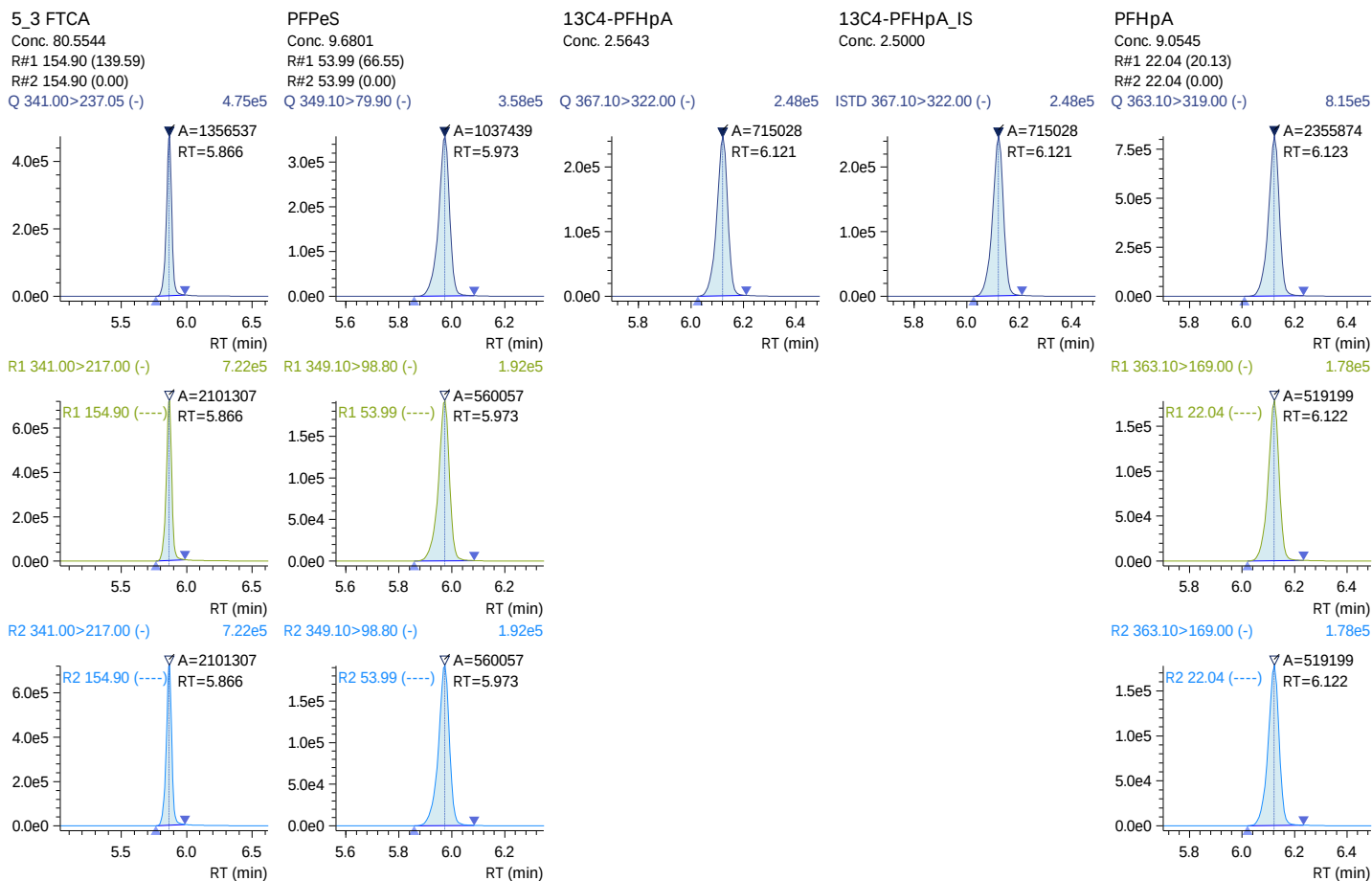


R2 284.90>184.90 (-) 1.30e5



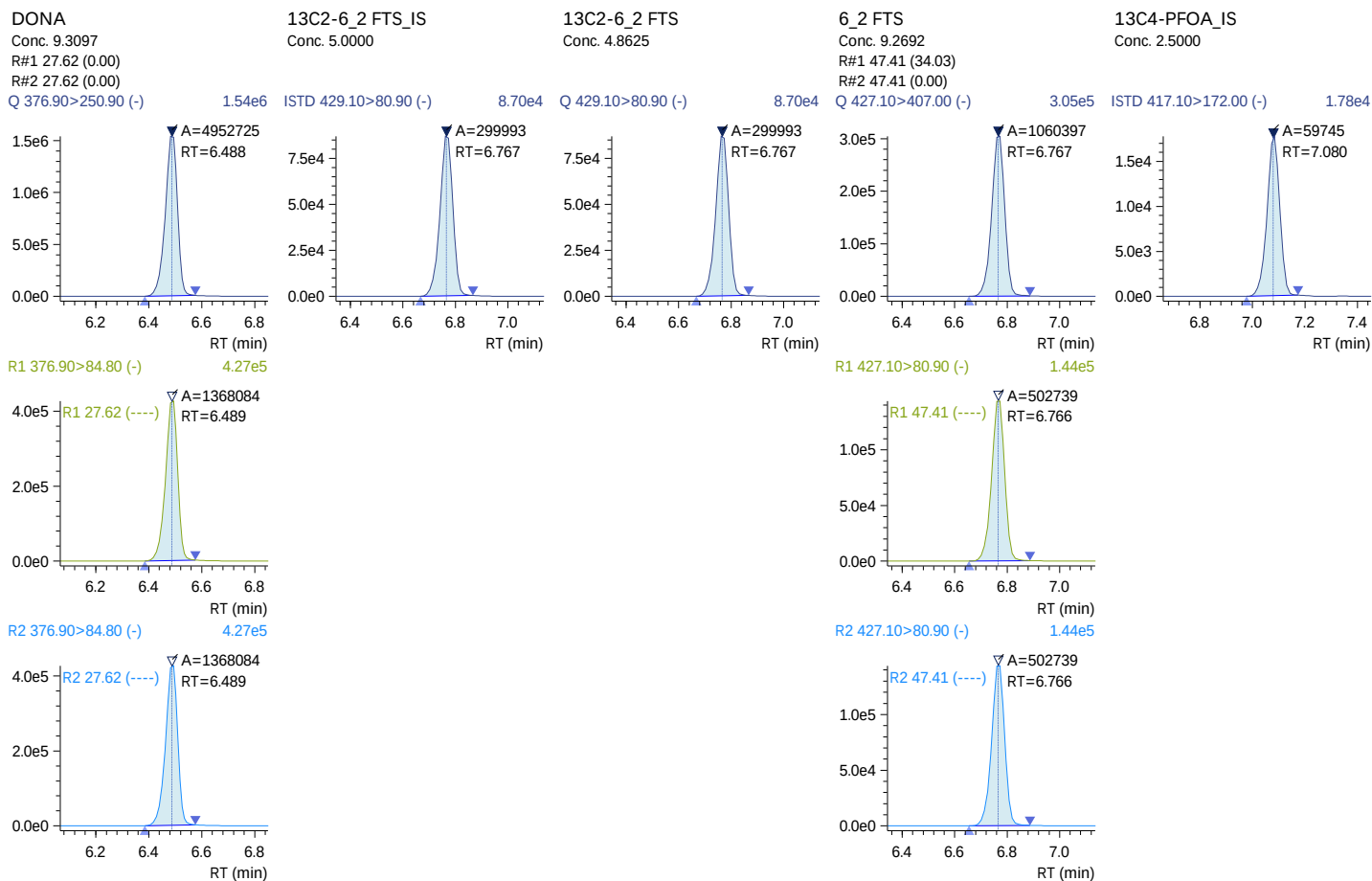


240130_024 (continued)





240130_024 (continued)





240130_024 (continued)

13C8-PFOA_IS
 Conc. 2.5000

13C8-PFOA
 Conc. 2.5341

PFOA
 Conc. 9.7789
 R#1 27.83 (22.46)
 R#2 27.83 (0.00)

13C3-PFHxS
 Conc. 2.4539

13C3-PFHxS_IS
 Conc. 2.5000

ISTD 421.10>376.00 (-)

2.15e5

Q 421.10>376.00 (-)

2.15e5

Q 413.00>369.00 (-)

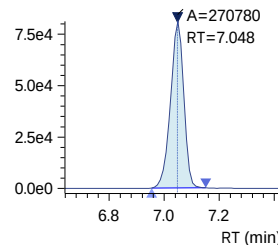
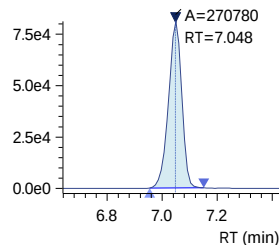
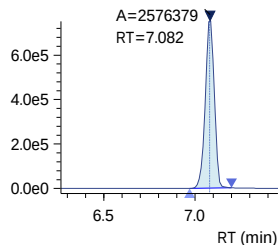
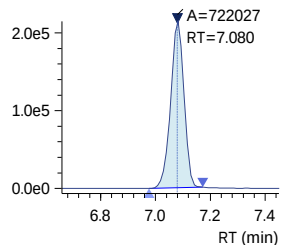
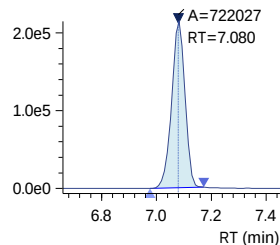
7.52e5

Q 402.10>79.90 (-)

8.13e4

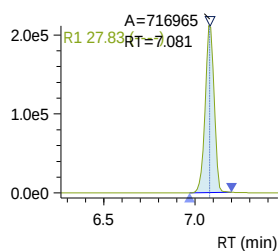
ISTD 402.10>79.90 (-)

8.13e4



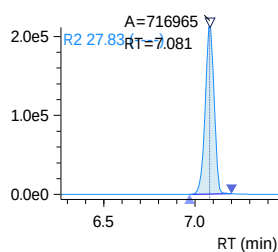
R1 413.00>169.00 (-)

2.12e5



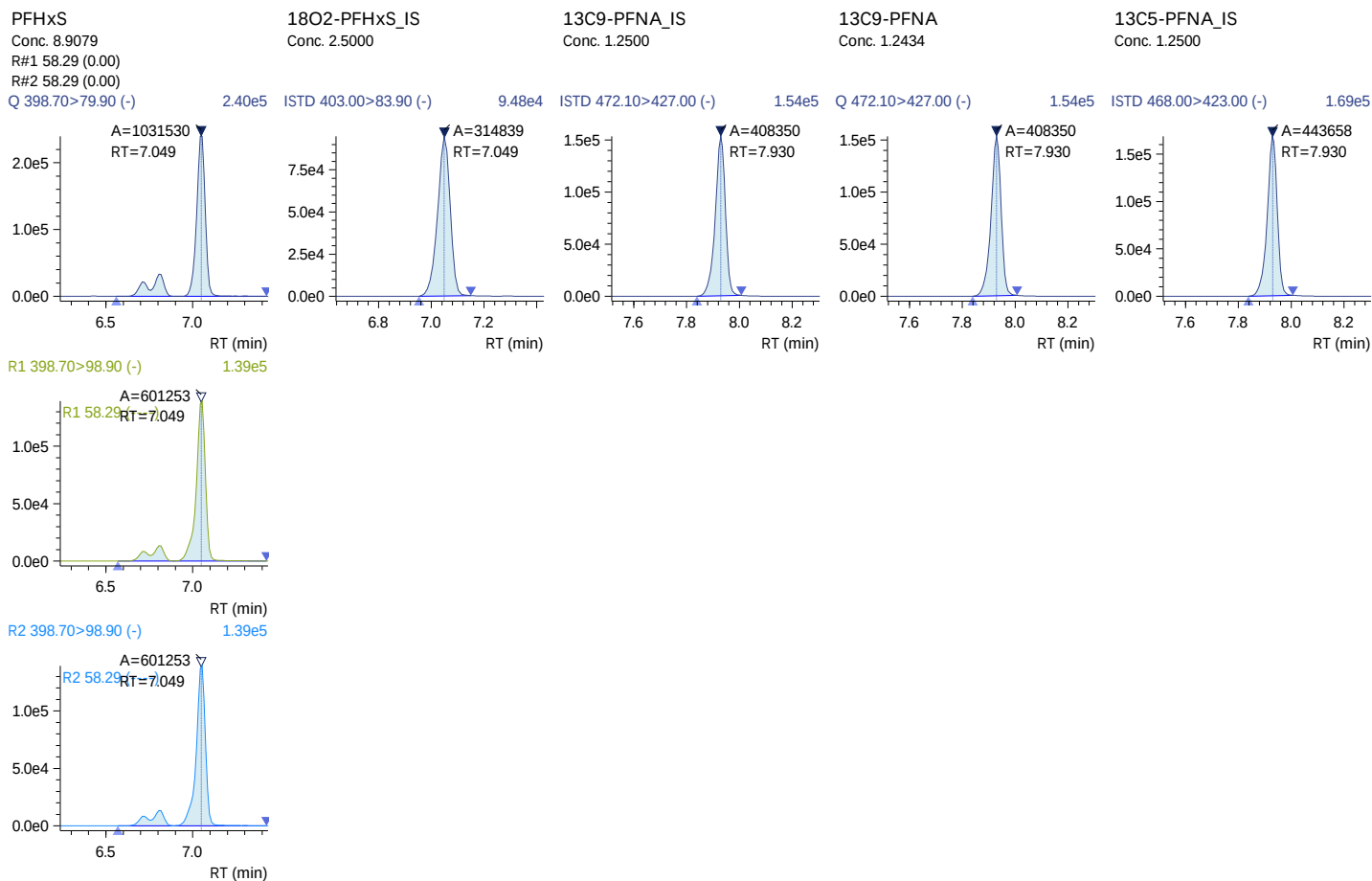
R2 413.00>169.00 (-)

2.12e5



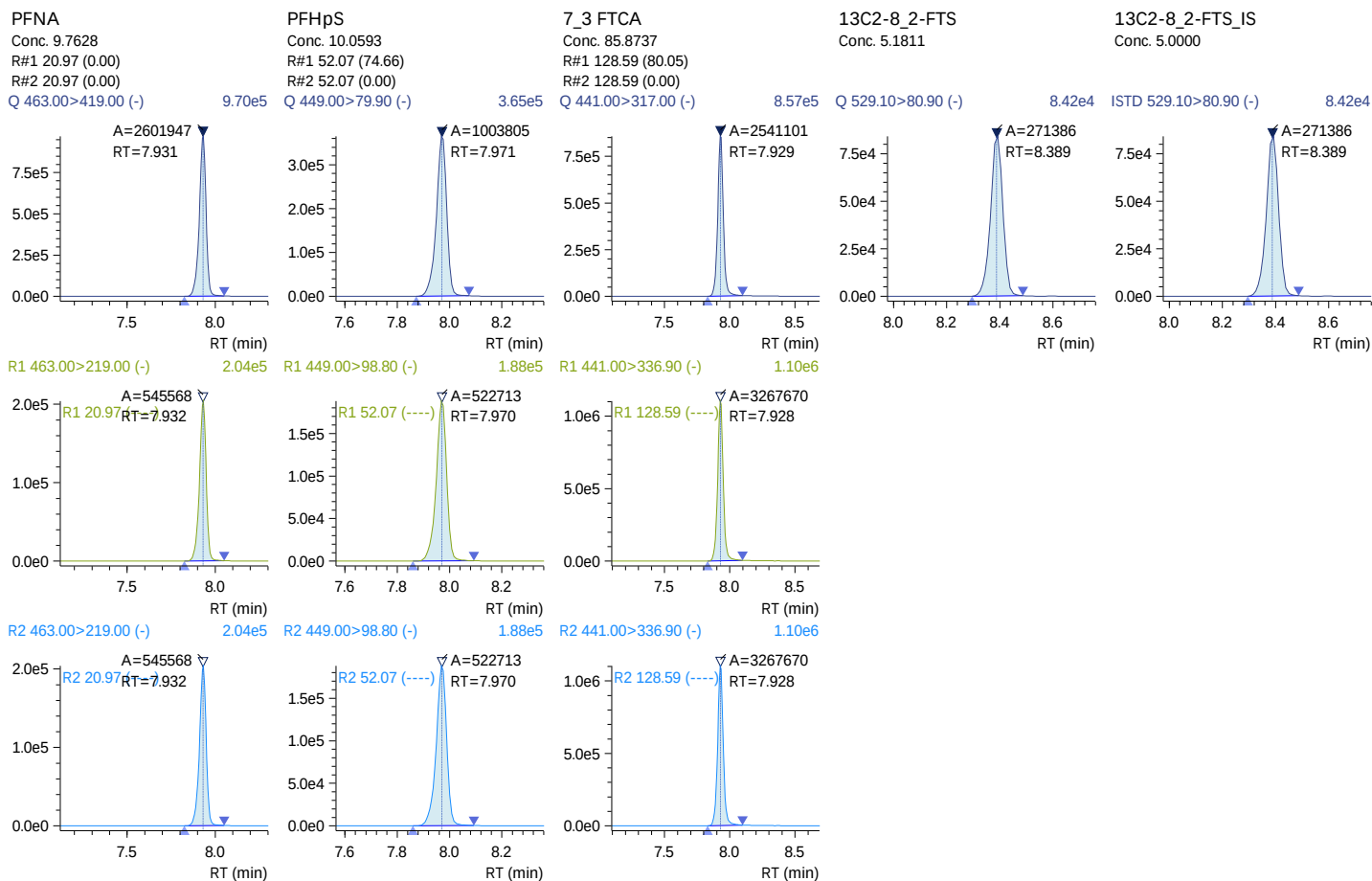


240130_024 (continued)



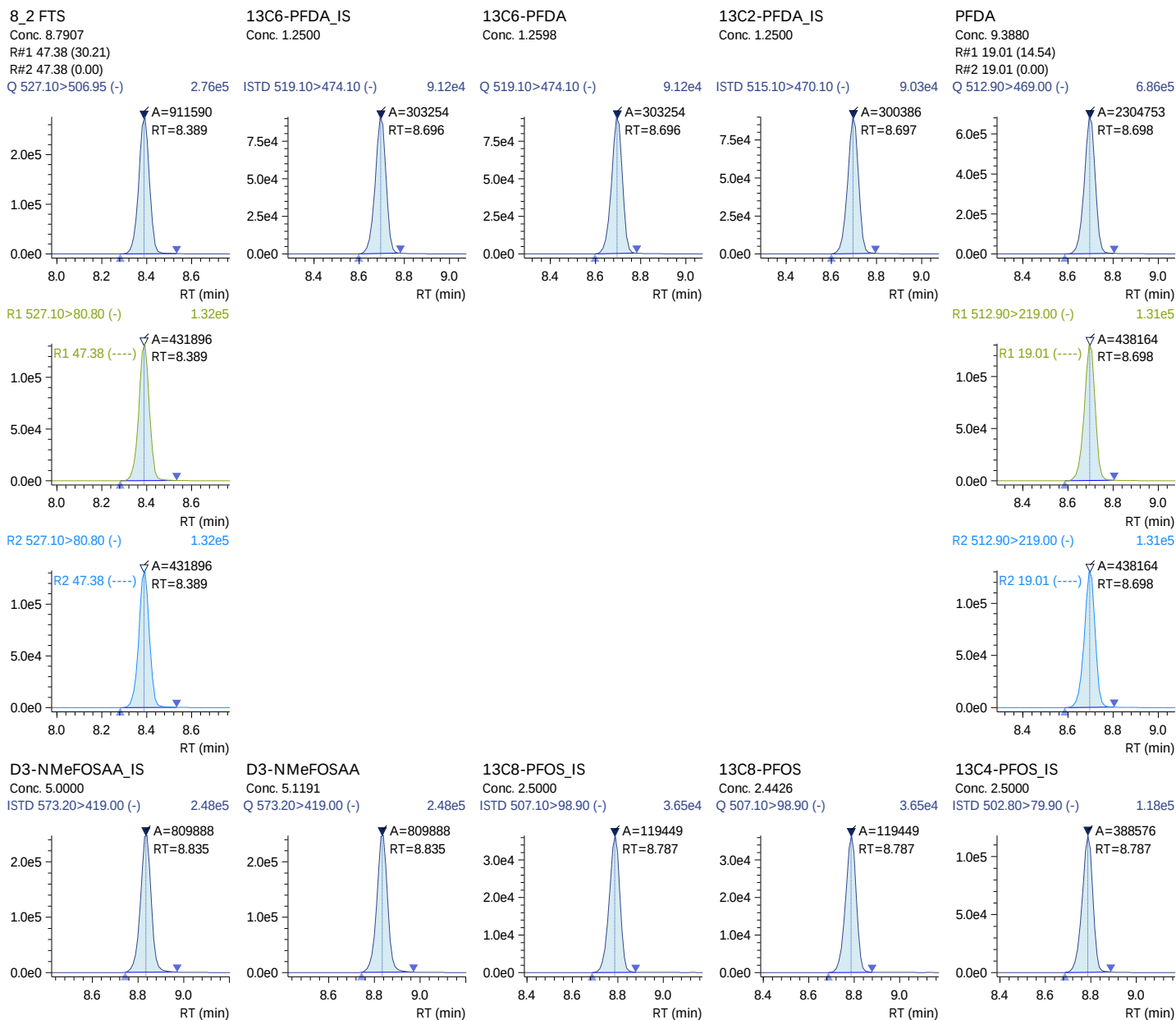


240130_024 (continued)



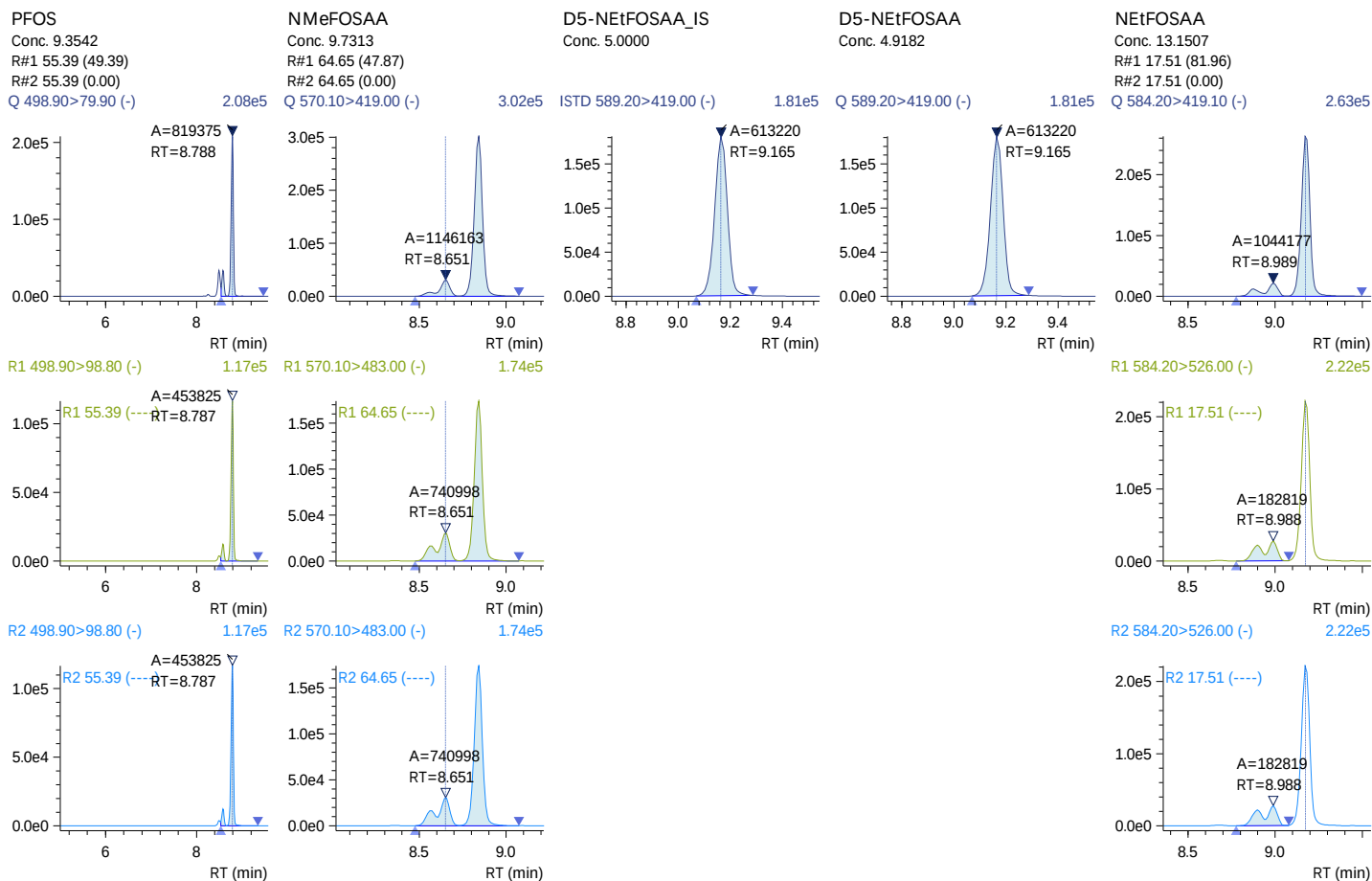


240130_024 (continued)





240130_024 (continued)





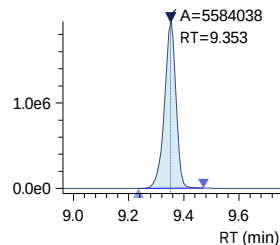
240130_024 (continued)

9-Cl-PF3ONS

Conc. 9.0234
R#1 31.29 (31.39)
R#2 31.29 (0.00)

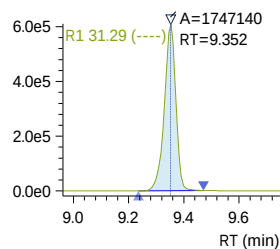
Q 530.80>351.00 (-)

1.95e6



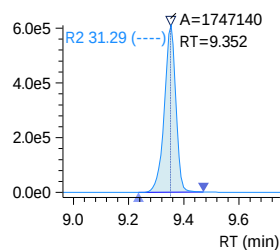
R1 532.80>353.00 (-)

6.10e5



R2 532.80>353.00 (-)

6.10e5

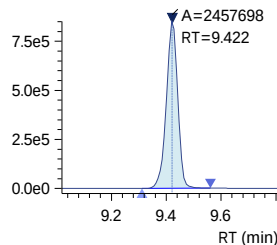


PFUnDA

Conc. 10.1740
R#1 11.35 (12.59)
R#2 11.35 (0.00)

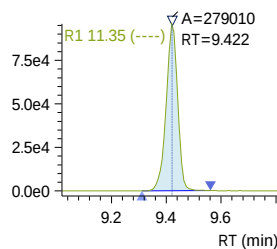
Q 563.10>519.00 (-)

8.52e5



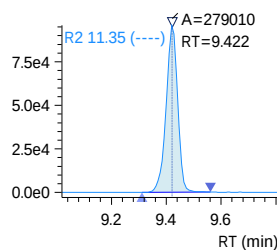
R1 563.10>269.10 (-)

9.60e4



R2 563.10>269.10 (-)

9.60e4

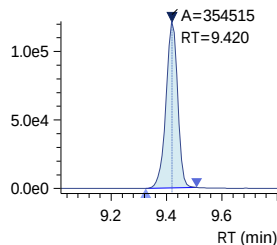


13C7-PFUnDA_IS

Conc. 1.2500

ISTD 570.00>525.10 (-)

1.22e5

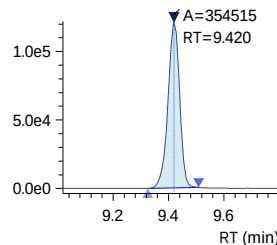


13C7-PFUnDA

Conc. 1.1852

Q 570.00>525.10 (-)

1.22e5

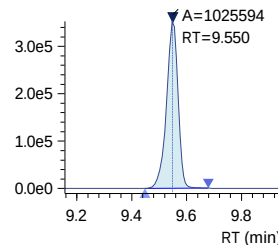


PFNS

Conc. 10.1448
R#1 58.35 (82.65)
R#2 58.35 (0.00)

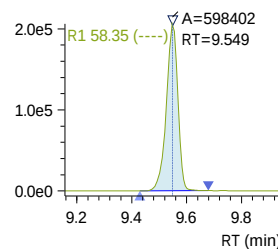
Q 548.80>79.90 (-)

3.53e5



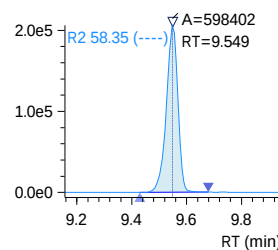
R1 548.80>98.80 (-)

2.06e5



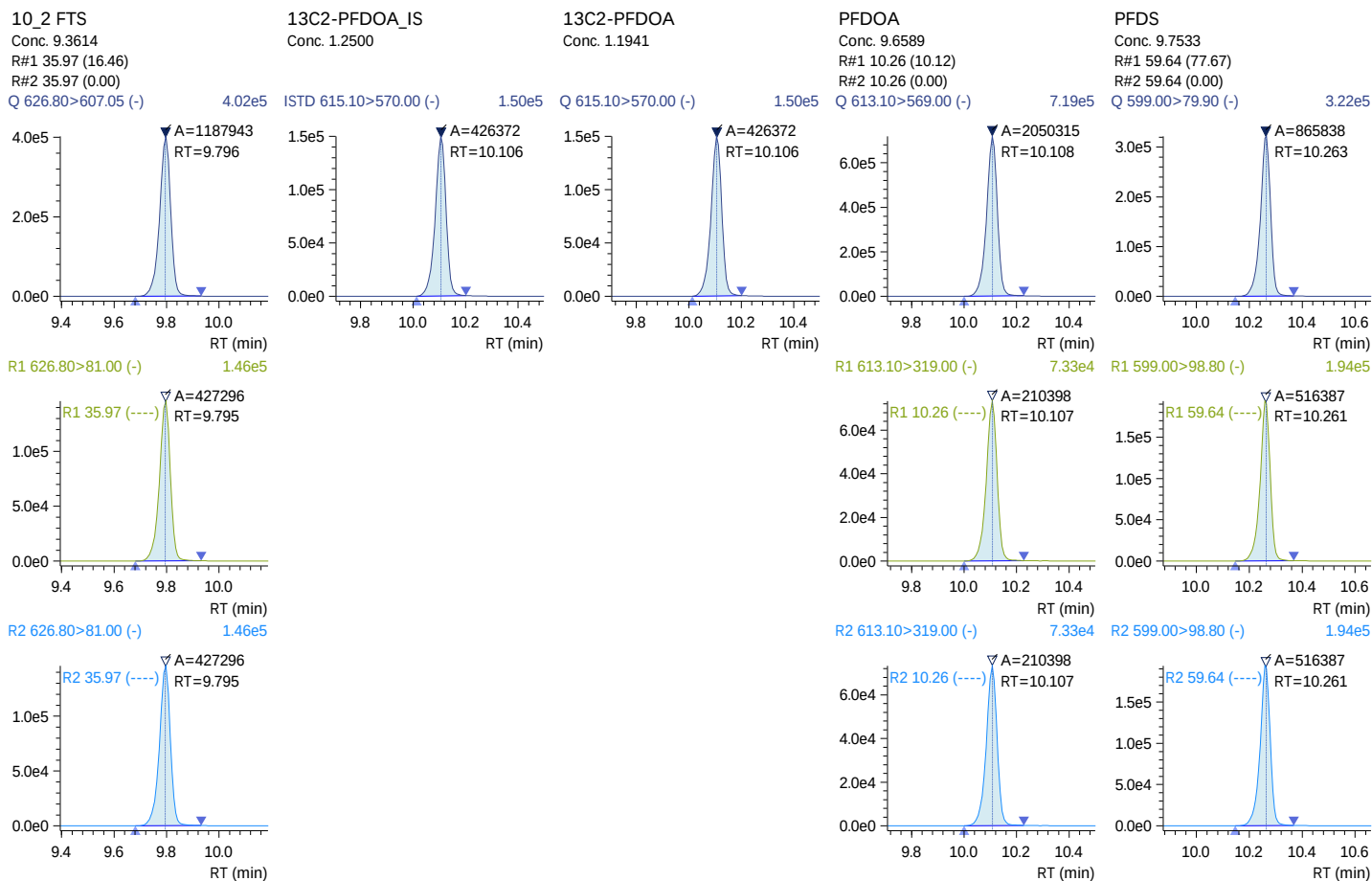
R2 548.80>98.80 (-)

2.06e5





240130_024 (continued)





240130_024 (continued)

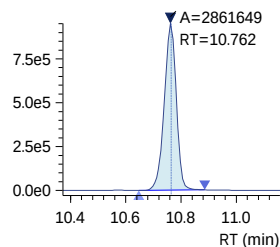
PFTrDA

Conc. 9.1757

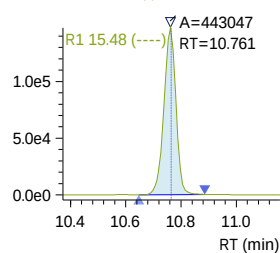
R#1 15.48 (14.17)

R#2 15.48 (0.00)

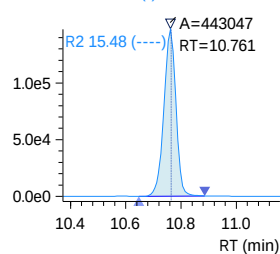
Q 663.00>619.00 (-)



R1 663.00>168.90 (-)



R2 663.00>168.90 (-)



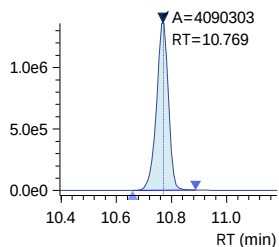
11-Cl-PF3OUdS

Conc. 9.2595

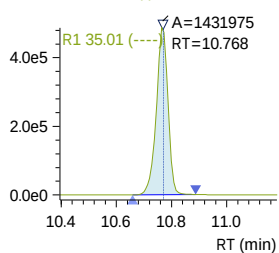
R#1 35.01 (32.90)

R#2 35.01 (0.00)

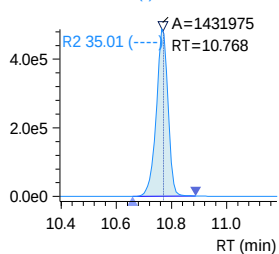
Q 630.90>451.00 (-)



R1 632.90>452.90 (-)



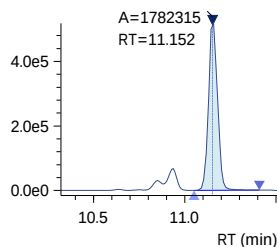
R2 632.90>452.90 (-)



PFOSAm

Conc. 17.4751

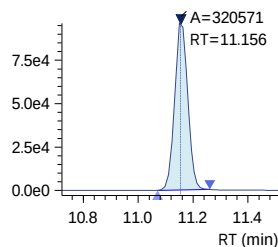
Q 498.10>77.90 (-)



13C8-PFOSAm

Conc. 2.5971

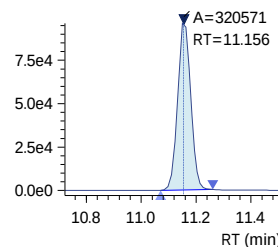
Q 506.10>77.80 (-)



13C8-PFOSAm_IS

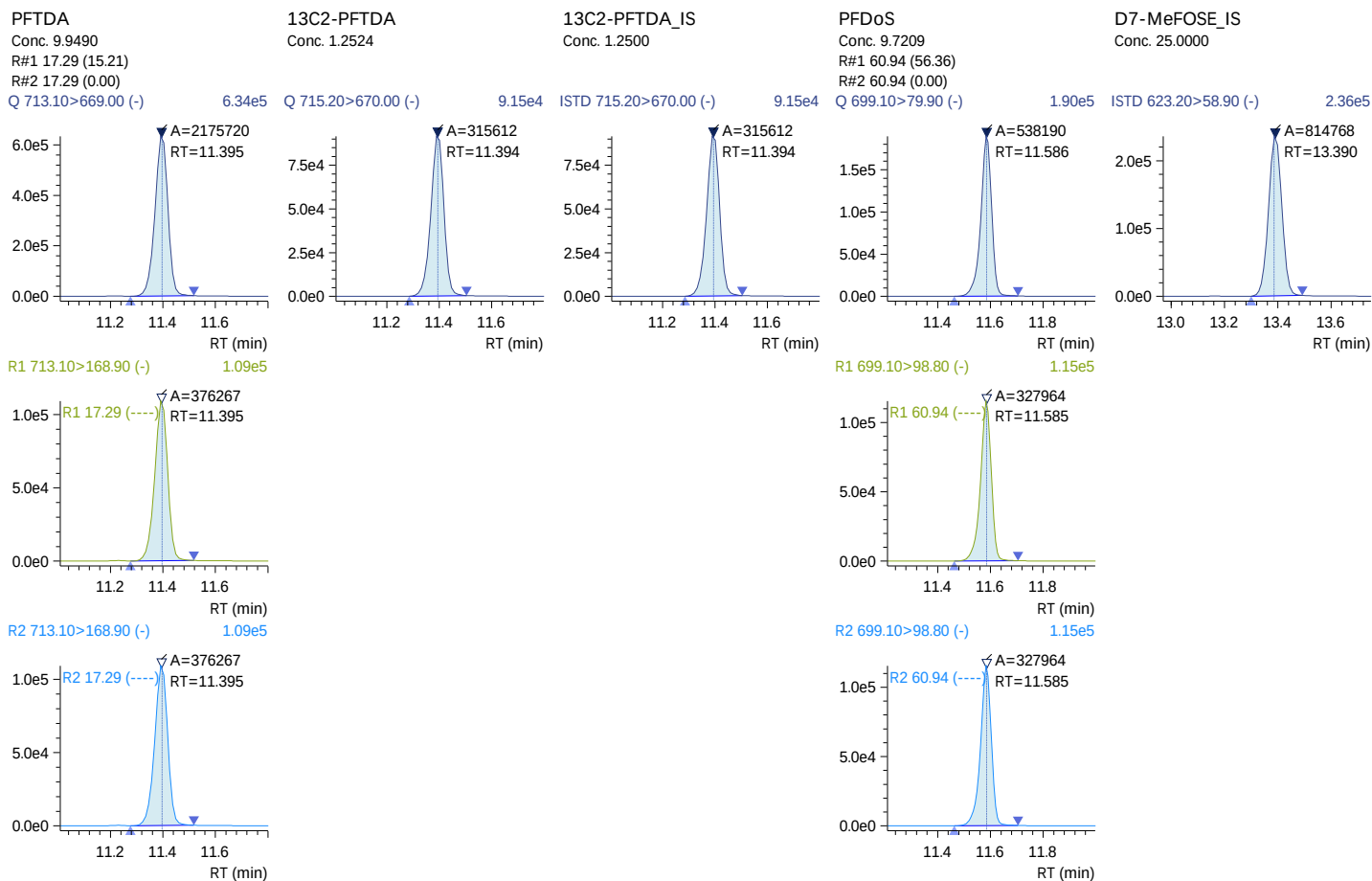
Conc. 2.5000

ISTD 506.10>77.80 (-)





240130_024 (continued)





240130_024 (continued)

D7-MeFOSE
 Conc. 25.7127

MeFOSE
 Conc. 9.2927

13C2-PFHDA_IS
 Conc. 2.5000

13C2-PFHDA
 Conc. 2.3337

PFHXDA
 Conc. 9.3859
 R#1 11.61 (9.60)
 R#2 11.61 (0.00)

Q 623.20>58.90 (-)

2.36e5

Q 616.10>59.00 (-)

6.81e4

ISTD 815.00>770.05 (-)

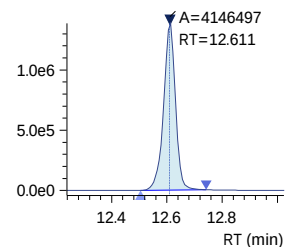
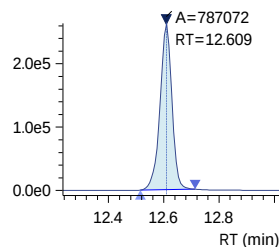
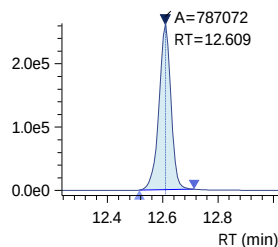
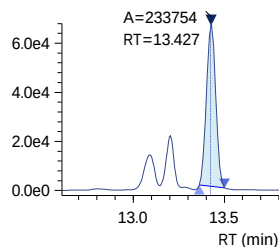
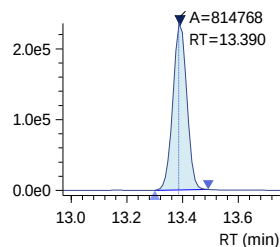
2.64e5

Q 815.00>770.05 (-)

2.64e5

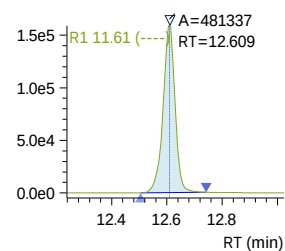
Q 813.00>768.95 (-)

1.39e6



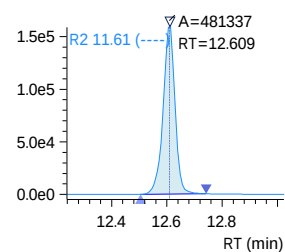
R1 813.00>218.95 (-)

1.59e5



R2 813.00>218.95 (-)

1.59e5





240130_024 (continued)

D3-MeFOSA
 Conc. 2.5023

D3-MeFOSA_IS
 Conc. 2.5000

MeFOSA
 Conc. 9.4710
 R#1 123.28 (98.91)
 R#2 123.28 (0.00)

D9-EtFOSE_IS
 Conc. 25.0000

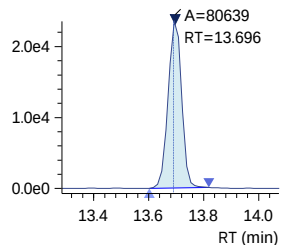
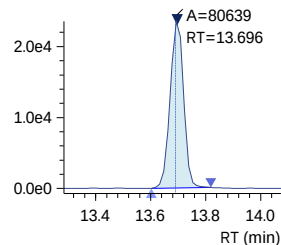
D9-EtFOSE
 Conc. 26.6552

Q 515.00>219.00 (-)

2.36e4

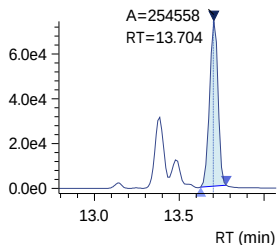
ISTD 515.00>219.00 (-)

2.36e4



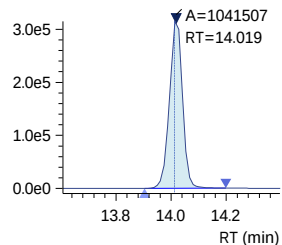
Q 511.90>219.00 (-)

7.46e4



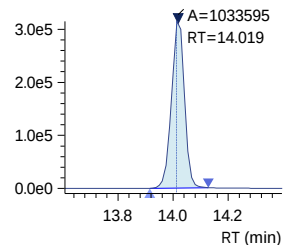
ISTD 639.20>58.90 (-)

3.15e5



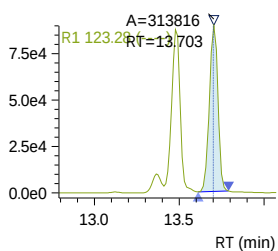
Q 639.20>58.90 (-)

3.15e5



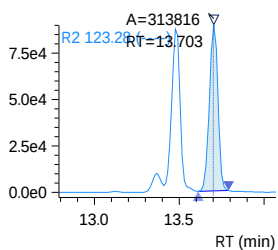
R1 511.90>169.00 (-)

9.00e4



R2 511.90>169.00 (-)

9.00e4





240130_024 (continued)

EtFOSE
Conc. 10.0055

D5-EtFOSAm
Conc. 2.5644

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. 9.6534

PFODA
Conc. 9.3176

Q 630.00>59.00 (-)

9.14e4

Q 531.10>219.00 (-)

3.60e4

ISTD 531.10>219.00 (-)

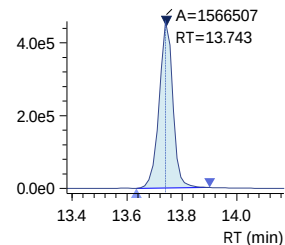
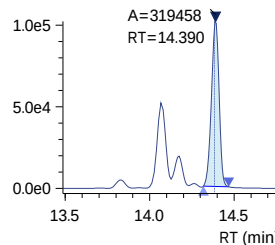
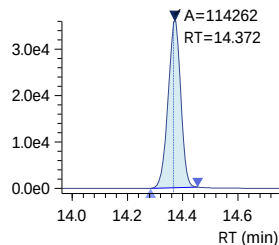
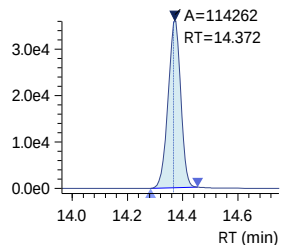
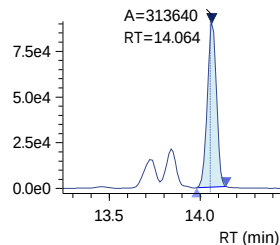
3.60e4

Q 526.00>219.00 (-)

1.02e5

Q 913.00>868.65 (-)

4.59e5

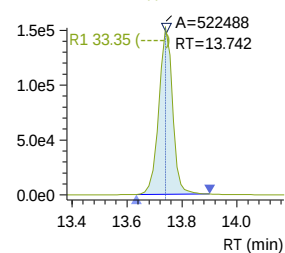
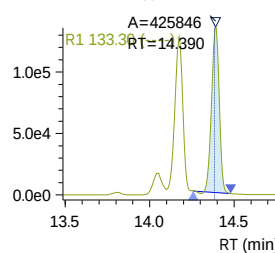


R1 526.00>169.00 (-)

1.36e5

R1 913.00>169.00 (-)

1.52e5

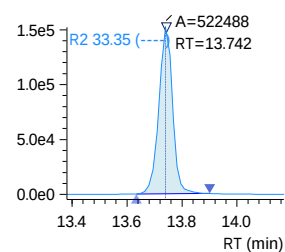
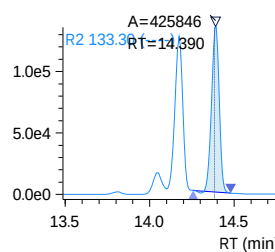


R2 526.00>169.00 (-)

1.36e5

R2 913.00>169.00 (-)

1.52e5

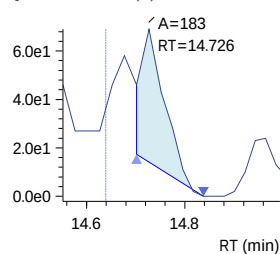


positive trans

Conc. 0.8143

Q 514.80>219.10 (+)

6.90e1





240130_025

Sample ID: 1633 ICAL 15.0PPB
Date Acquired: 1/31/2024 12:01:42 AM
Acquired by: System Administrator
Data File: 240130_025
Vial: 8 | Inj. Volume: 10.0000uL | Tray: 1

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	924727	----	----	----	----	----	----	----
13C4-PFBA_IS	216.80>171.90	----	924727	----	----	----	----	----	----	----
13C3-PFBA_IS	216.00>172.00	----	613287	----	----	----	----	----	----	----
PFBA	212.80>169.05	----	1309857	----	----	----	----	----	----	----
PFMPA	229.00>84.90	----	1082097	----	----	----	----	----	----	----
3_3 FTCA	241.00>177.10	241.00>117.00	358745	499601	139.26	139.21	----	----	----	----
13C5-PFPeA	268.30>223.00	----	248061	----	----	----	----	----	----	----
13C5-PFPeA_IS	268.30>223.00	----	248061	----	----	----	----	----	----	----
PFPeA	263.00>219.00	----	2561274	----	----	----	----	----	----	----
PFMBA	279.00>84.95	----	1662978	----	----	----	----	----	----	----
13C2-4_2 FTS	329.10>80.90	----	289298	----	----	----	----	----	----	----
13C2-4_2 FTS_IS	329.10>80.90	----	289298	----	----	----	----	----	----	----
4_2 FTS	327.10>307.00	327.10>80.90	1969077	656669	33.35	32.10	656669	33.35	32.10	----
13C3-PFBS_IS	302.10>79.90	----	294610	----	----	----	----	----	----	----
PFBS	298.70>79.90	298.70>98.80	1978735	892936	45.13	44.81	892936	45.13	44.81	----
13C3-PFBS	302.10>79.90	----	294610	----	----	----	----	----	----	----
NFDHA	295.00>201.00	295.00>84.90	1687286	578017	34.26	35.54	578017	34.26	35.54	----
13C5-PFHxA	318.00>273.00	----	543788	----	----	----	----	----	----	----
13C5-PFHxA_IS	318.00>273.00	----	543788	----	----	----	----	----	----	----
13C2-PFHxA_IS	315.10>270.00	----	683472	----	----	----	----	----	----	----
PFHxA	313.00>269.00	----	3034528	----	----	----	----	----	----	----
PFEESA	314.80>135.00	314.80>82.90	9844782	532188	5.41	5.22	532188	5.41	5.22	----
13C3-HFPO-DA	286.90>168.90	----	625983	----	----	----	----	----	----	----
13C3-HFPO-DA_IS	286.90>168.90	----	625983	----	----	----	----	----	----	----
HFPO-DA	284.90>168.90	284.90>184.90	936488	556863	59.46	59.79	556863	59.46	59.79	----
5_3 FTCA	341.00>237.05	341.00>217.00	1636192	2574658	157.36	157.08	2574658	157.36	157.08	----
PFPeS	349.10>79.90	349.10>98.80	1595317	874592	54.82	55.12	874592	54.82	55.12	----
13C4-PFHpA	367.10>322.00	----	707625	----	----	----	----	----	----	----
13C4-PFHpA_IS	367.10>322.00	----	707625	----	----	----	----	----	----	----
PFHpA	363.10>319.00	363.10>169.00	3618529	799260	22.09	23.02	799260	22.09	23.02	----
DONA	376.90>250.90	376.90>84.80	7593080	2122065	27.95	27.50	2122065	27.95	27.50	----
13C2-6_2 FTS_IS	429.10>80.90	----	315257	----	----	----	----	----	----	----
13C2-6_2 FTS	429.10>80.90	----	315257	----	----	----	----	----	----	----
6_2 FTS	427.10>407.00	427.10>80.90	1719406	776391	45.16	50.47	776391	45.16	50.47	----
13C4-PFOA_IS	417.10>172.00	----	57896	----	----	----	----	----	----	----
13C8-PFOA_IS	421.10>376.00	----	717087	----	----	----	----	----	----	----

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240130_025 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	717087	----	----	----	----	----	----	----
PFOA	413.00>369.00	413.00>169.00	4128771	1169999	28.34	28.77	1169999	28.34	28.77	
13C3-PFHxS	402.10>79.90	----	267121	----	----	----	----	----	----	----
13C3-PFHxS_IS	402.10>79.90	----	267121	----	----	----	----	----	----	----
PFHxS	398.70>79.90	398.70>98.90	1635166	942924	57.67	60.90	942924	57.67	60.90	
18O2-PFHxS_IS	403.00>83.90	----	297967	----	----	----	----	----	----	----
13C9-PFNA_IS	472.10>427.00	----	395967	----	----	----	----	----	----	----
13C9-PFNA	472.10>427.00	----	395967	----	----	----	----	----	----	----
13C5-PFNA_IS	468.00>423.00	----	422553	----	----	----	----	----	----	----
PFNA	463.00>419.00	463.00>219.00	3942045	830747	21.07	19.31	830747	21.07	19.31	
PFHpS	449.00>79.90	449.00>98.80	1510486	783414	51.87	52.44	783414	51.87	52.44	
7_3 FTCA	441.00>317.00	441.00>336.90	2945658	3852313	130.78	129.46	3852313	130.78	129.46	
13C2-8_2-FTS	529.10>80.90	----	271840	----	----	----	----	----	----	----
13C2-8_2-FTS_IS	529.10>80.90	----	271840	----	----	----	----	----	----	----
8_2 FTS	527.10>506.95	527.10>80.80	1443808	652595	45.20	45.98	652595	45.20	45.98	
13C6-PFDA_IS	519.10>474.10	----	279280	----	----	----	----	----	----	----
13C6-PFDA	519.10>474.10	----	279280	----	----	----	----	----	----	----
13C2-PFDA_IS	515.10>470.10	----	267196	----	----	----	----	----	----	----
PFDA	512.90>469.00	512.90>219.00	3331029	595411	17.88	17.88	595411	17.88	17.88	
D3-NMeFOSAA_IS	573.20>419.00	----	791787	----	----	----	----	----	----	----
D3-NMeFOSAA	573.20>419.00	----	791787	----	----	----	----	----	----	----
13C8-PFOS_IS	507.10>98.90	----	124571	----	----	----	----	----	----	----
13C8-PFOS	507.10>98.90	----	124571	----	----	----	----	----	----	----
13C4-PFOS_IS	502.80>79.90	----	374106	----	----	----	----	----	----	----
PFOS	498.90>79.90	498.90>98.80	1475314	741179	50.24	53.60	741179	50.24	53.60	
NMeFOSAA	570.10>419.00	570.10>483.00	1807851	1174142	64.95	64.89	1174142	64.95	64.89	
D5-NeFOSAA_IS	589.20>419.00	----	614565	----	----	----	----	----	----	----
D5-NeFOSAA	589.20>419.00	----	614565	----	----	----	----	----	----	----
NeFOSAA	584.20>419.10	584.20>526.00	1586663	1337293	84.28	96.07	1337293	84.28	96.07	
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	8791924	2729760	31.05	30.95	2729760	31.05	30.95	
PFUnDA	563.10>519.00	563.10>269.10	3516215	417253	11.87	11.01	417253	11.87	11.01	
13C7-PFUnDA_IS	570.00>525.10	----	334047	----	----	----	----	----	----	----
13C7-PFUnDA	570.00>525.10	----	334047	----	----	----	----	----	----	----
PFNS	548.80>79.90	548.80>98.80	1506457	887272	58.90	60.44	887272	58.90	60.44	
10_2 FTS	626.80>607.05	626.80>81.00	1879129	646204	34.39	36.14	646204	34.39	36.14	
13C2-PFDOA_IS	615.10>570.00	----	415685	----	----	----	----	----	----	----
13C2-PFDOA	615.10>570.00	----	415685	----	----	----	----	----	----	----
PFDOA	613.10>569.00	613.10>319.00	3127318	307860	9.84	10.16	307860	9.84	10.16	
PFDS	599.00>79.90	599.00>98.80	1342005	790745	58.92	58.26	790745	58.92	58.26	
PFTrDA	663.00>619.00	663.00>168.90	4362299	652385	14.96	16.18	652385	14.96	16.18	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240130_025 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	6275977	2182669	34.78	34.99	2182669	34.78	34.99	
PFOSAm	498.10>77.90	----	3230526	----	----	----	----	----	----	
13C8-PFOSAm	506.10>77.80	----	311755	----	----	----	----	----	----	
13C8-PFOSAm_IS	506.10>77.80	----	311755	----	----	----	----	----	----	
PFTDA	713.10>669.00	713.10>168.90	3055755	545838	17.86	18.05	545838	17.86	18.05	
13C2-PFTDA	715.20>670.00	----	302254	----	----	----	----	----	----	
13C2-PFTDA_IS	715.20>670.00	----	302254	----	----	----	----	----	----	
PFDoS	699.10>79.90	699.10>98.80	806944	501187	62.11	61.13	501187	62.11	61.13	
D7-MeFOSE_IS	623.20>58.90	----	784952	----	----	----	----	----	----	
D7-MeFOSE	623.20>58.90	----	784952	----	----	----	----	----	----	
MeFOSE	616.10>59.00	----	588070	----	----	----	----	----	----	
13C2-PFHxDA_IS	815.00>770.05	----	783105	----	----	----	----	----	----	
13C2-PFHxDA	815.00>770.05	----	783105	----	----	----	----	----	----	
PFHxDA	813.00>768.95	813.00>218.95	6283564	731680	11.64	11.66	731680	11.64	11.66	
D3-MeFOSA	515.00>219.00	----	82761	----	----	----	----	----	----	
D3-MeFOSA_IS	515.00>219.00	----	82761	----	----	----	----	----	----	
MeFOSA	511.90>219.00	511.90>169.00	682177	1040888	152.58	160.44	1040888	152.58	160.44	
D9-EtFOSE_IS	639.20>58.90	----	951614	----	----	----	----	----	----	
D9-EtFOSE	639.20>58.90	----	945157	----	----	----	----	----	----	
EtFOSE	630.00>59.00	----	701930	----	----	----	----	----	----	
D5-EtFOSAm	531.10>219.00	----	111178	----	----	----	----	----	----	
D5-EtFOSAm_IS	531.10>219.00	----	111178	----	----	----	----	----	----	
EtFOSAm	526.00>219.00	526.00>169.00	926730	1493287	161.14	159.63	1493287	161.14	159.63	
PFODA	913.00>868.65	913.00>169.00	2345760	848554	36.17	36.03	848554	36.17	36.03	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
 IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240130_025

Sample ID: 1633 ICAL 15.0PPB
Date Acquired: 1/31/2024 12:01:42 AM
Acquired by: System Administrator
Data File: 240130_025
Vial: 8 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.336	-0.002	0.001	924727	613287	13C3-PFBA_IS	10.1758	ng/mL	
13C4-PFBA_IS	Auto	1.336	-0.002	----	924727	924727	----	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.335	-0.002	----	613287	613287	----	5.0000	ng/mL	
PFBA	Auto	1.336	-0.005	0.000	1309857	924727	13C4-PFBA_IS	15.2317	ng/mL	
PFMPA	Auto	2.366	0.000	-1.073	1082097	248061	13C5-PFPeA_IS	15.2770	ng/mL	
3_3 FTCA	Auto	2.945	0.000	-0.494	358745	248061	13C5-PFPeA_IS	100.9621	ng/mL	
13C5-PFPeA	Auto	3.439	0.000	-1.493	248061	683472	13C2-PFHxA_IS	5.0476	ng/mL	
13C5-PFPeA_IS	Auto	3.439	0.000	----	248061	248061	----	5.0000	ng/mL	
PFPeA	Auto	3.441	-0.001	0.002	2561274	248061	13C5-PFPeA_IS	14.7460	ng/mL	
PFMBA	Auto	3.968	-0.001	0.529	1662978	248061	13C5-PFPeA_IS	15.3191	ng/mL	
13C2-4_2 FTS	Auto	4.620	0.000	-2.427	289298	297967	18O2-PFHxS_IS	5.1579	ng/mL	
13C2-4_2 FTS_IS	Auto	4.620	0.000	----	289298	289298	----	5.0000	ng/mL	
4_2 FTS	Auto	4.620	0.000	0.000	1969077	289298	13C2-4_2 FTS_IS	13.7309	ng/mL	
13C3-PFBS_IS	Auto	4.585	-0.002	----	294610	294610	----	2.5000	ng/mL	
PFBS	Auto	4.587	-0.001	0.002	1978735	294610	13C3-PFBS_IS	13.5535	ng/mL	
13C3-PFBS	Auto	4.585	-0.002	-2.462	294610	297967	18O2-PFHxS_IS	2.6500	ng/mL	
NFDHA	Auto	4.789	-0.001	-0.143	1687286	543788	13C5-PFHxA_IS	14.9589	ng/mL	
13C5-PFHxA	Auto	4.932	0.000	0.000	543788	683472	13C2-PFHxA_IS	2.4649	ng/mL	
13C5-PFHxA_IS	Auto	4.932	0.000	----	543788	543788	----	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	4.932	-0.001	----	683472	683472	----	2.5000	ng/mL	
PFHxA	Auto	4.934	0.000	0.002	3034528	543788	13C5-PFHxA_IS	14.9789	ng/mL	
PFEESA	Auto	5.264	-0.001	0.332	9844782	543788	13C5-PFHxA_IS	14.5718	ng/mL	
13C3-HFPO-DA	Auto	5.411	-0.001	0.479	625983	683472	13C2-PFHxA_IS	10.3348	ng/mL	
13C3-HFPO-DA_IS	Auto	5.411	-0.001	----	625983	625983	----	10.0000	ng/mL	
HFPO-DA	Auto	5.413	0.000	0.002	936488	625983	13C3-HFPO-DA_IS	15.2138	ng/mL	
5_3 FTCA	Auto	5.865	-0.001	0.933	1636192	543788	13C5-PFHxA_IS	100.6565	ng/mL	
PFPeS	Auto	5.972	-0.001	-1.075	1595317	267121	13C3-PFHxS_IS	15.0893	ng/mL	
13C4-PFHpA	Auto	6.120	0.000	1.188	707625	683472	13C2-PFHxA_IS	2.5496	ng/mL	
13C4-PFHpA_IS	Auto	6.120	0.000	----	707625	707625	----	2.5000	ng/mL	
PFHpA	Auto	6.121	-0.001	0.001	3618529	707625	13C4-PFHpA_IS	15.0604	ng/mL	
DONA	Auto	6.486	-0.001	1.075	7593080	625983	13C3-HFPO-DA_IS	14.3894	ng/mL	
13C2-6_2 FTS_IS	Auto	6.765	-0.001	----	315257	315257	----	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.765	-0.001	-0.282	315257	297967	18O2-PFHxS_IS	5.3993	ng/mL	
6_2 FTS	Auto	6.766	0.001	0.001	1719406	315257	13C2-6_2 FTS_IS	14.3021	ng/mL	
13C4-PFOA_IS	Auto	7.079	0.000	----	57896	57896	----	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.079	0.001	----	717087	717087	----	2.5000	ng/mL	
13C8-PFOA	Auto	7.079	0.001	0.000	717087	57896	13C4-PFOA_IS	2.5971	ng/mL	
PFOA	Auto	7.081	0.000	0.002	4128771	717087	13C8-PFOA_IS	15.7830	ng/mL	
13C3-PFHxS	Auto	7.047	-0.001	0.000	267121	297967	18O2-PFHxS_IS	2.5578	ng/mL	
13C3-PFHxS_IS	Auto	7.047	-0.001	----	267121	267121	----	2.5000	ng/mL	
PFHxS	Auto	7.047	-0.001	0.000	1635166	267121	13C3-PFHxS_IS	14.0051	ng/mL	
18O2-PFHxS_IS	Auto	7.047	-0.001	----	297967	297967	----	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.929	0.000	----	395967	395967	----	1.2500	ng/mL	
13C9-PFNA	Auto	7.929	0.000	0.000	395967	422553	13C5-PFNA_IS	1.2659	ng/mL	
13C5-PFNA_IS	Auto	7.929	-0.001	----	422553	422553	----	1.2500	ng/mL	
PFNA	Auto	7.930	0.000	0.001	3942045	395967	13C9-PFNA_IS	15.3269	ng/mL	
PFHpS	Auto	7.970	-0.001	-0.814	1510486	124571	13C8-PFOS_IS	14.4217	ng/mL	
7_3 FTCA	Auto	7.928	-0.001	2.996	2945658	543788	13C5-PFHxA_IS	103.1266	ng/mL	
13C2-8_2-FTS	Auto	8.387	-0.001	1.340	271840	297967	18O2-PFHxS_IS	5.4836	ng/mL	
13C2-8_2-FTS_IS	Auto	8.387	-0.001	----	271840	271840	----	5.0000	ng/mL	
8_2 FTS	Auto	8.387	-0.001	0.000	1443808	271840	13C2-8_2-FTS_IS	13.9333	ng/mL	
13C6-PFDA_IS	Auto	8.694	-0.001	----	279280	279280	----	1.2500	ng/mL	
13C6-PFDA	Auto	8.694	-0.001	-0.001	279280	267196	13C2-PFDA_IS	1.3043	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_025 (continued)

(Table continued from previous page)

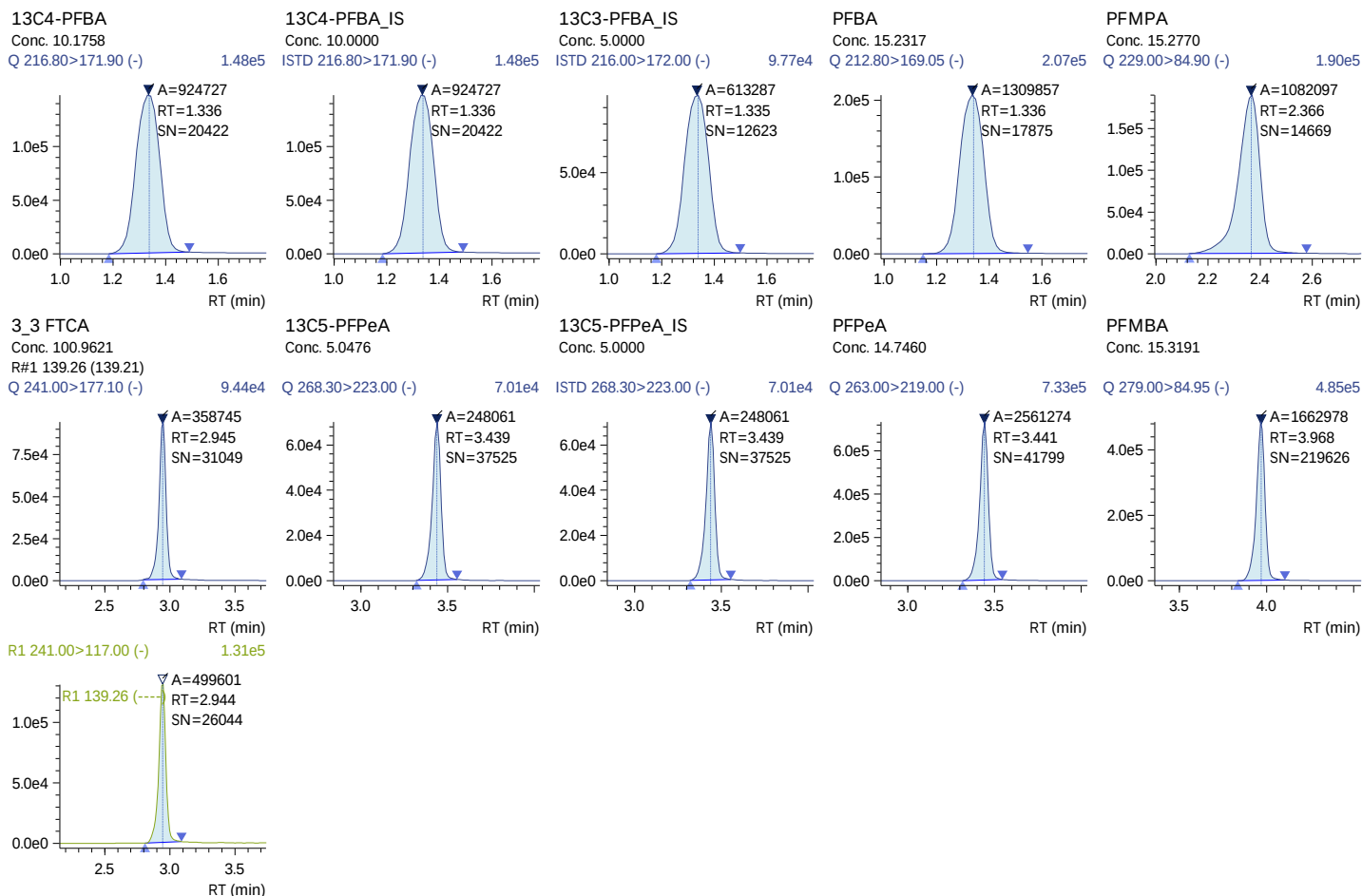
Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C2-PFDA_IS	Auto	8.695	-0.001	----	267196	267196	----	1.2500	ng/mL	
PFDA	Auto	8.695	-0.002	0.001	3331029	279280	13C6-PFDA_IS	14.1027	ng/mL	
D3-NMeFOSAA_IS	Auto	8.832	-0.002	----	791787	791787	----	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.832	-0.002	0.047	791787	374106	13C4-PFOS_IS	5.1982	ng/mL	
13C8-PFOS_IS	Auto	8.784	-0.002	----	124571	124571	----	2.5000	ng/mL	
13C8-PFOS	Auto	8.784	-0.002	-0.001	124571	374106	13C4-PFOS_IS	2.6459	ng/mL	
13C4-PFOS_IS	Auto	8.785	-0.002	----	374106	374106	----	2.5000	ng/mL	
PFOS	M	8.786	-0.002	0.002	1475314	124571	13C8-PFOS_IS	13.8652	ng/mL	
NMeFOSAA	M	8.838	0.187	0.006	1807851	791787	D3-NMeFOSAA_IS	16.1250	ng/mL	
D5-NetFOSAA_IS	Auto	9.163	-0.001	----	614565	614565	----	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.163	-0.001	0.378	614565	374106	13C4-PFOS_IS	5.1196	ng/mL	
NetFOSAA	M	9.173	0.187	0.010	1586663	614565	D5-NetFOSAA_IS	15.7220	ng/mL	
9-CI-PF3ONS	Auto	9.350	-0.001	3.939	8791924	625983	13C3-HFPO-DA_IS	14.3231	ng/mL	
PFUnDA	Auto	9.420	-0.001	0.003	3516215	334047	13C7-PFUnDA_IS	15.4599	ng/mL	
13C7-PFUnDA_IS	Auto	9.417	-0.002	----	334047	334047	----	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.417	-0.002	0.722	334047	267196	13C2-PFDA_IS	1.2555	ng/mL	
PFNS	Auto	9.546	-0.003	0.762	1506457	124571	13C8-PFOS_IS	14.2886	ng/mL	
10_2_FTS	Auto	9.793	-0.002	1.406	1879129	271840	13C2-8_2-FTS_IS	13.6857	ng/mL	
13C2-PFDOA_IS	Auto	10.105	-0.002	----	415685	415685	----	1.2500	ng/mL	
13C2-PFDOA	Auto	10.105	-0.002	1.410	415685	267196	13C2-PFDA_IS	1.3088	ng/mL	
PFDOA	Auto	10.106	-0.002	0.001	3127318	415685	13C2-PFDOA_IS	15.1335	ng/mL	
PFDS	Auto	10.261	-0.002	1.477	1342005	124571	13C8-PFOS_IS	14.4955	ng/mL	
PFTDA	Auto	10.763	-0.001	-0.629	4362299	302254	13C2-PFTDA_IS	14.6191	ng/mL	
11-CI-PF3OUdS	Auto	10.769	-0.002	5.358	6275977	625983	13C3-HFPO-DA_IS	14.3234	ng/mL	
PFOSAm	M	11.152	0.002	-0.004	3230526	311755	13C8-PFOSAm_IS	29.6161	ng/mL	
13C8-PFOSAm	Auto	11.156	0.001	2.371	311755	374106	13C4-PFOS_IS	2.6233	ng/mL	
13C8-PFOSAm_IS	Auto	11.156	0.001	----	311755	311755	----	2.5000	ng/mL	
PFTDA	Auto	11.394	-0.002	0.002	3055755	302254	13C2-PFTDA_IS	14.6024	ng/mL	
13C2-PFTDA	Auto	11.392	-0.003	2.697	302254	267196	13C2-PFDA_IS	1.3484	ng/mL	
13C2-PFTDA_IS	Auto	11.392	-0.003	----	302254	302254	----	1.2500	ng/mL	
PFDOS	Auto	11.583	-0.003	2.799	806944	124571	13C8-PFOS_IS	13.9759	ng/mL	
D7-MeFOSE_IS	Auto	13.386	0.000	----	784952	784952	----	25.0000	ng/mL	
D7-MeFOSE	Auto	13.386	0.000	4.601	784952	374106	13C4-PFOS_IS	25.7299	ng/mL	
MeFOSE	M	13.423	0.000	0.037	588070	784952	D7-MeFOSE_IS	15.4760	ng/mL	
13C2-PFHXA_IS	Auto	12.603	-0.006	----	783105	783105	----	2.5000	ng/mL	
13C2-PFHXA	Auto	12.603	-0.006	3.908	783105	267196	13C2-PFDA_IS	2.6103	ng/mL	
PFHXA	Auto	12.604	-0.006	0.001	6283564	783105	13C2-PFHXA_IS	14.8484	ng/mL	
D3-MeFOSA	Auto	13.690	0.000	4.905	82761	374106	13C4-PFOS_IS	2.6675	ng/mL	
D3-MeFOSA_IS	Auto	13.690	0.000	----	82761	82761	----	2.5000	ng/mL	
MeFOSA	M	13.698	-0.001	0.008	682177	82761	D3-MeFOSA_IS	14.4444	ng/mL	
D9-EtFOSE_IS	Auto	14.013	0.000	----	951614	951614	----	25.0000	ng/mL	
D9-EtFOSE	Auto	14.013	0.000	5.228	945157	374106	13C4-PFOS_IS	25.3173	ng/mL	
EtFOSE	M	14.057	0.002	0.044	701930	951614	D9-EtFOSE_IS	15.3802	ng/mL	
D5-EtFOSAm	Auto	14.366	0.000	5.581	111178	374106	13C4-PFOS_IS	2.5917	ng/mL	
D5-EtFOSAm_IS	Auto	14.366	0.000	----	111178	111178	----	2.5000	ng/mL	
EtFOSAm	M	14.384	0.000	0.018	926730	111178	D5-EtFOSAm_IS	15.1945	ng/mL	
PFODA	Auto	13.735	-0.005	1.132	2345760	783105	13C2-PFHXA_IS	14.0014	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_025 (continued)





240130_025 (continued)

13C2-4_2_FTS
Conc. 5.1579

13C2-4_2_FTS_IS
Conc. 5.0000

4_2_FTS
Conc. 13.7309
R#1 33.35 (32.10)
R#2 33.35 (32.10)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 13.5535
R#1 45.13 (44.81)
R#2 45.13 (44.81)

Q 329.10>80.90 (-)

9.02e4

ISTD 329.10>80.90 (-)

9.02e4

Q 327.10>307.00 (-)

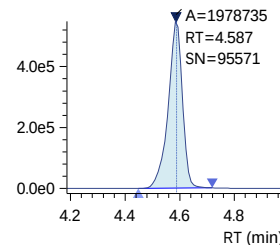
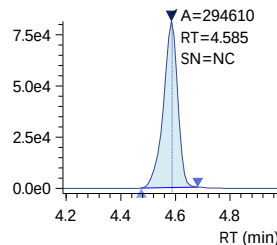
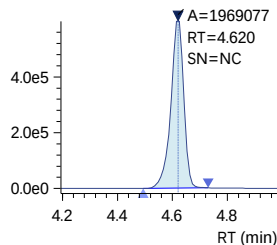
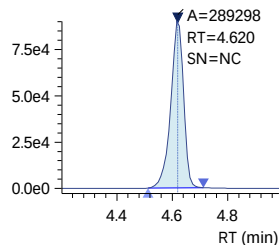
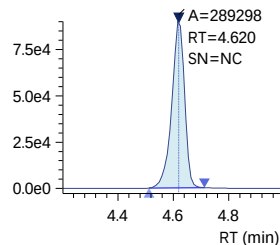
5.99e5

ISTD 302.10>79.90 (-)

8.16e4

Q 298.70>79.90 (-)

5.48e5

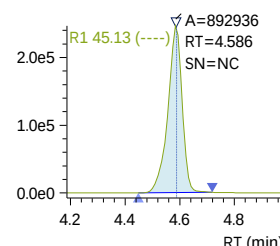
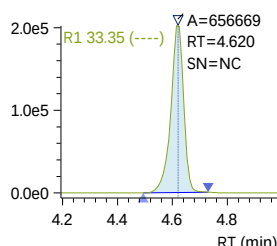


R1 327.10>80.90 (-)

2.02e5

R1 298.70>98.80 (-)

2.47e5

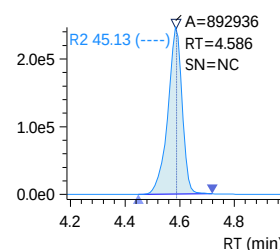
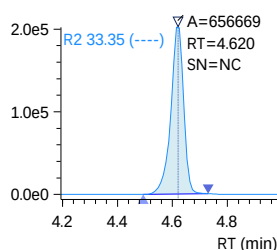


R2 327.10>80.90 (-)

2.02e5

R2 298.70>98.80 (-)

2.47e5





240130_025 (continued)

13C3-PFBS
Conc. 2.6500

NFDHA
Conc. 14.9589
R#1 34.26 (35.54)
R#2 34.26 (35.54)

13C5-PFHxA
Conc. 2.4649

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

Q 302.10>79.90 (-)

8.16e4

Q 295.00>201.00 (-)

4.99e5

Q 318.00>273.00 (-)

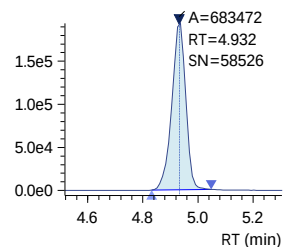
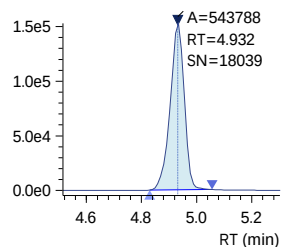
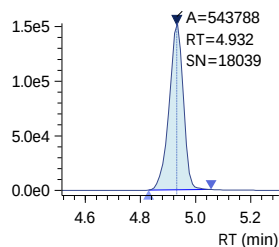
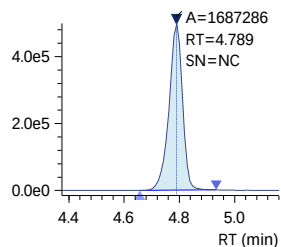
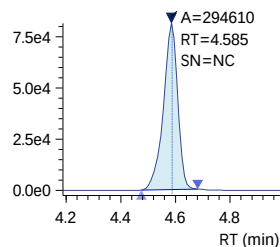
1.53e5

ISTD 318.00>273.00 (-)

1.53e5

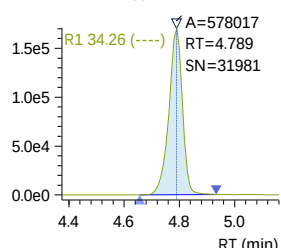
ISTD 315.10>270.00 (-)

1.94e5



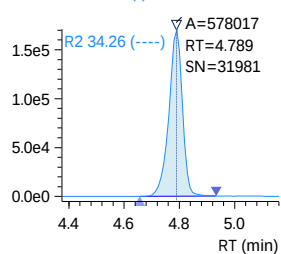
R1 295.00>84.90 (-)

1.71e5



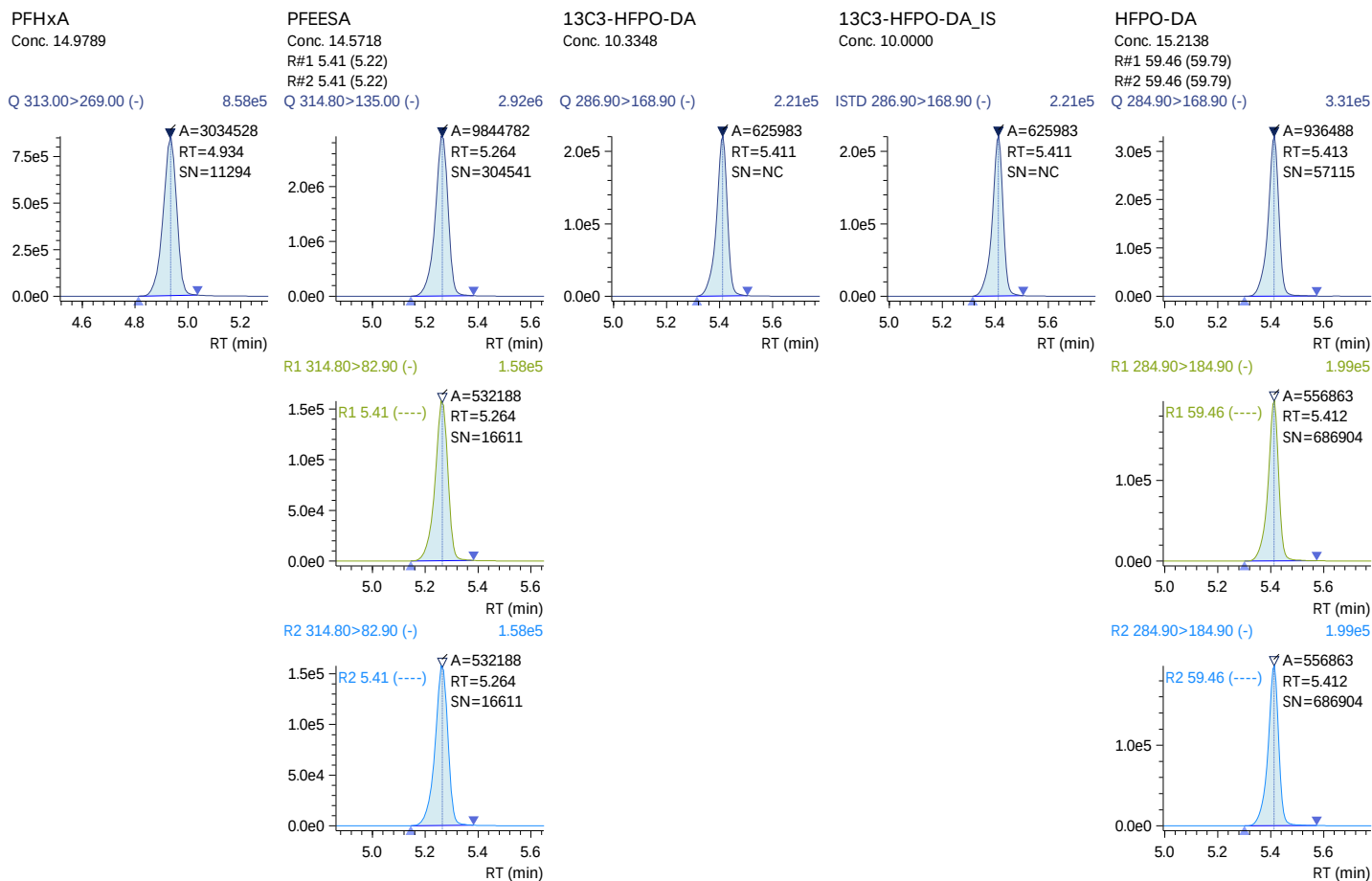
R2 295.00>84.90 (-)

1.71e5





240130_025 (continued)

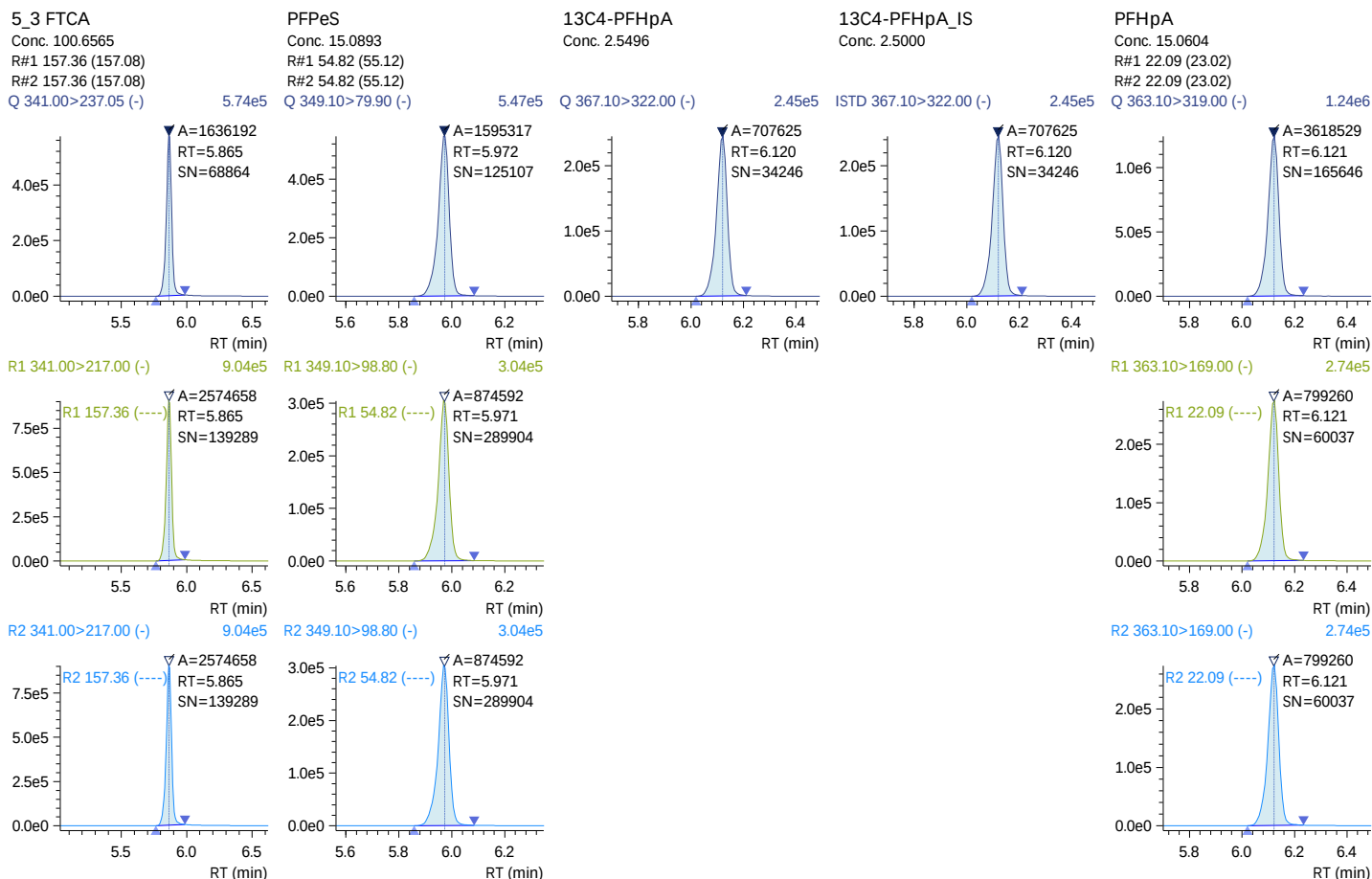


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.

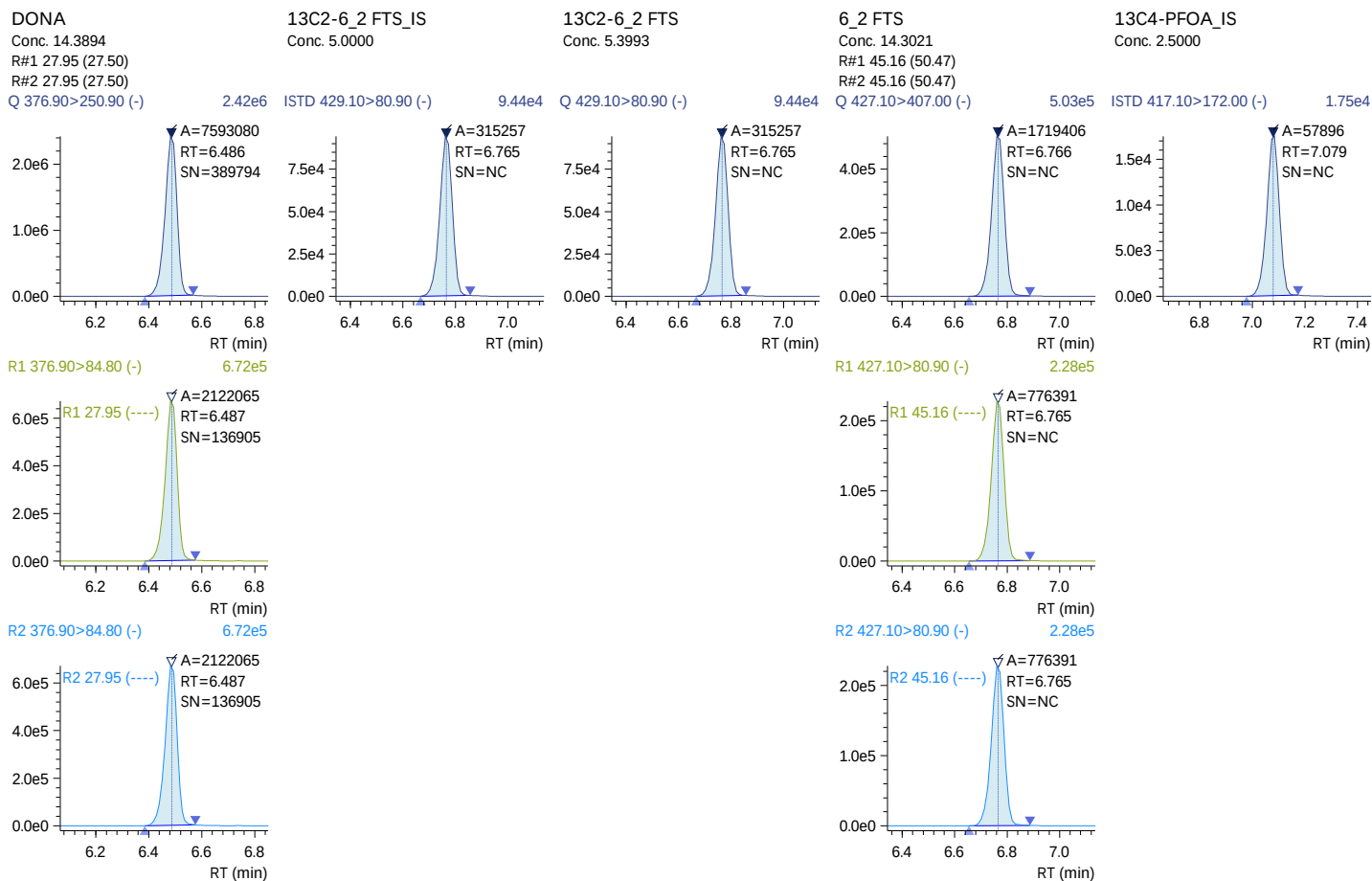


240130_025 (continued)





240130_025 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_025 (continued)

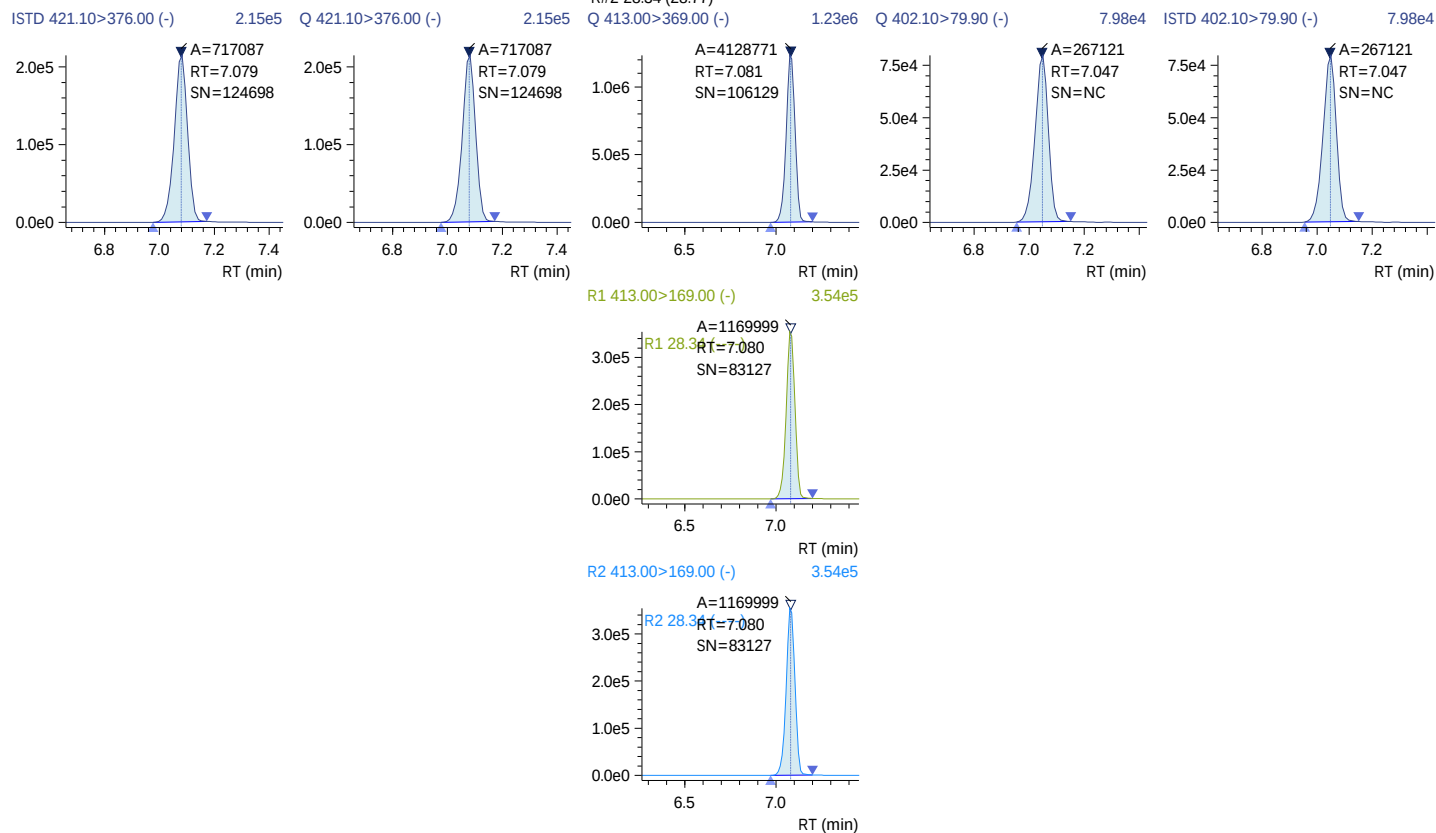
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.5971

PFOA
Conc. 15.7830
R#1 28.34 (28.77)
R#2 28.34 (28.77)

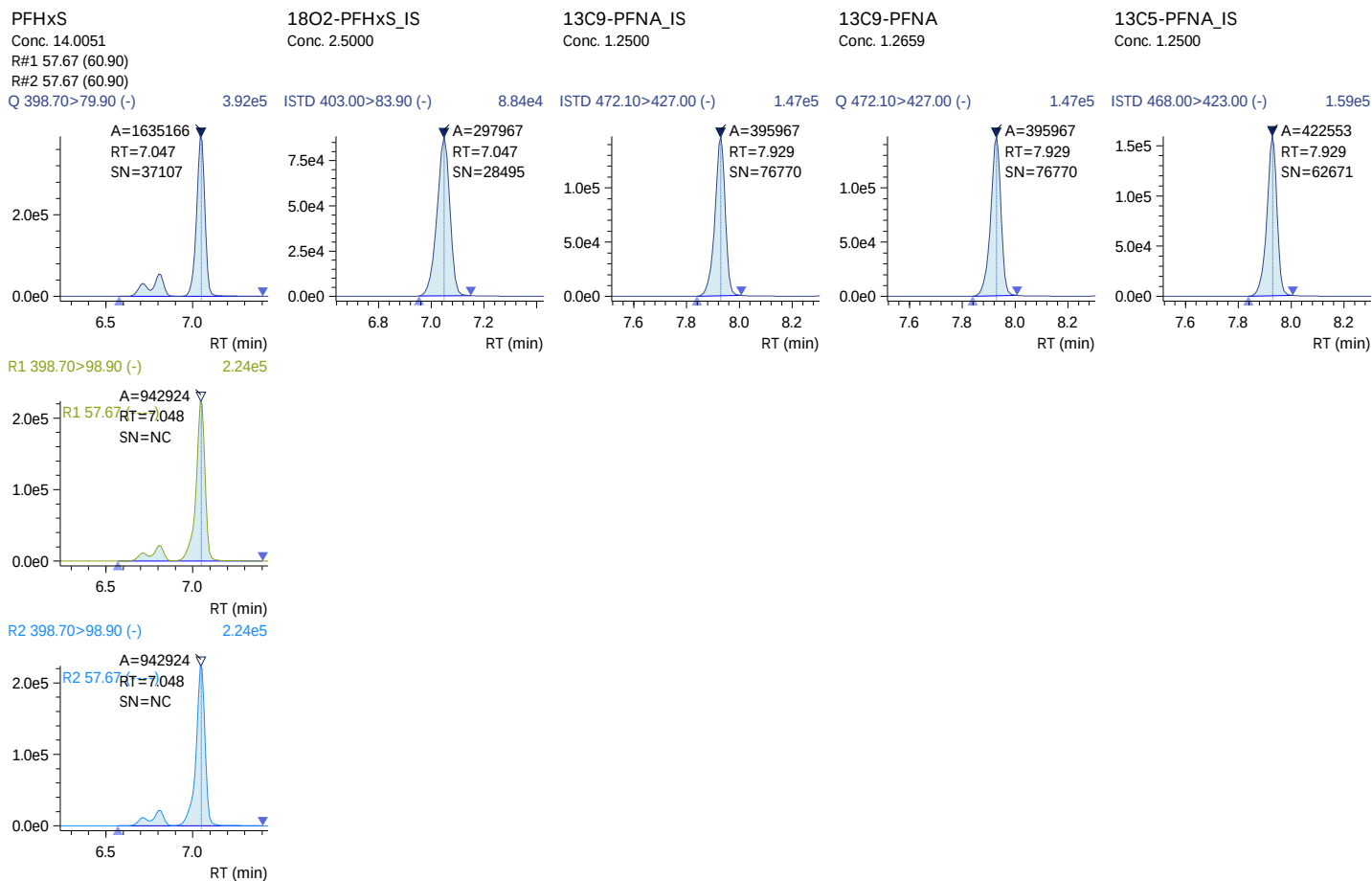
13C3-PFHxS
Conc. 2.5578

13C3-PFHxS_IS
Conc. 2.5000





240130_025 (continued)

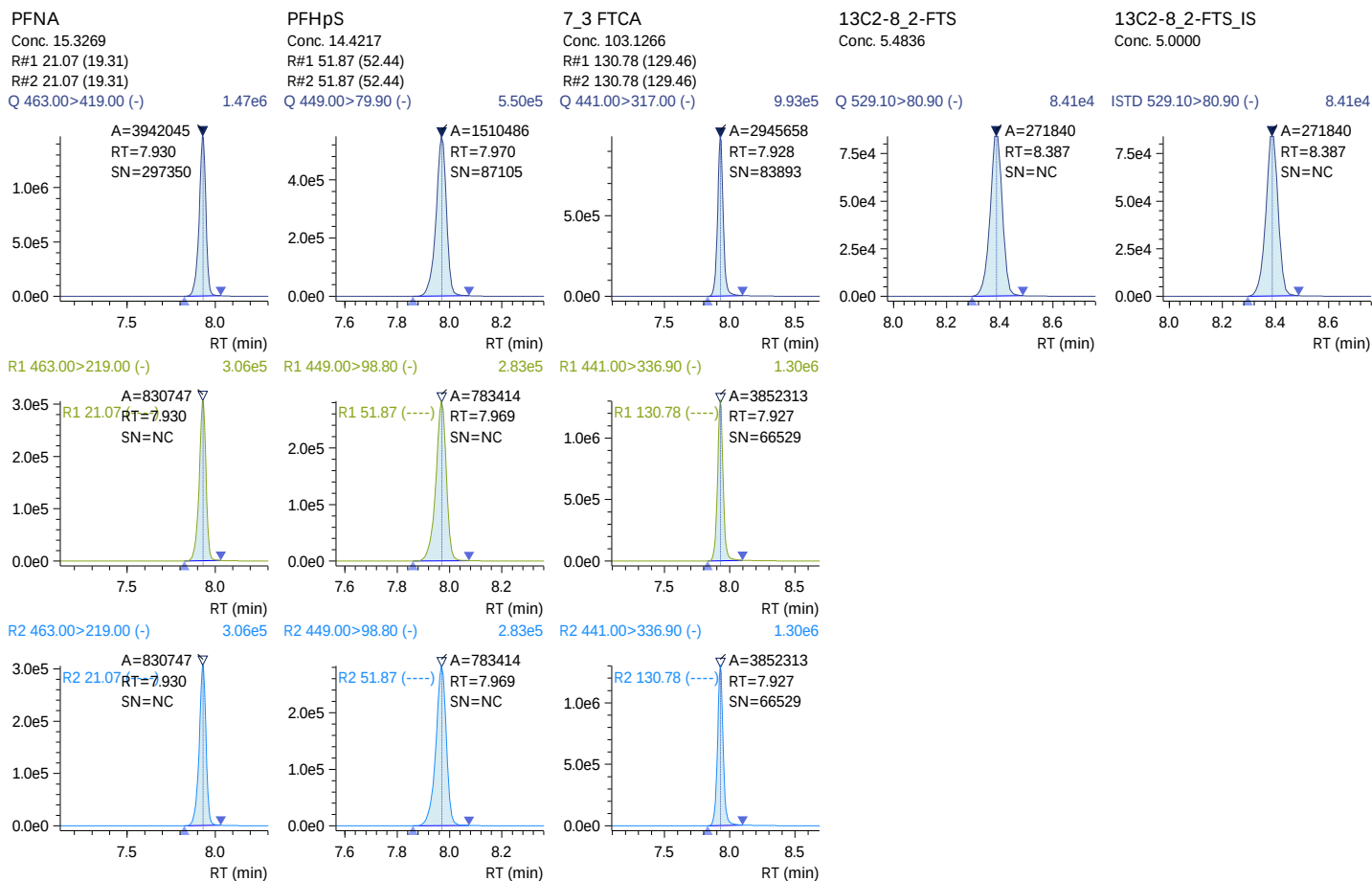


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_025 (continued)

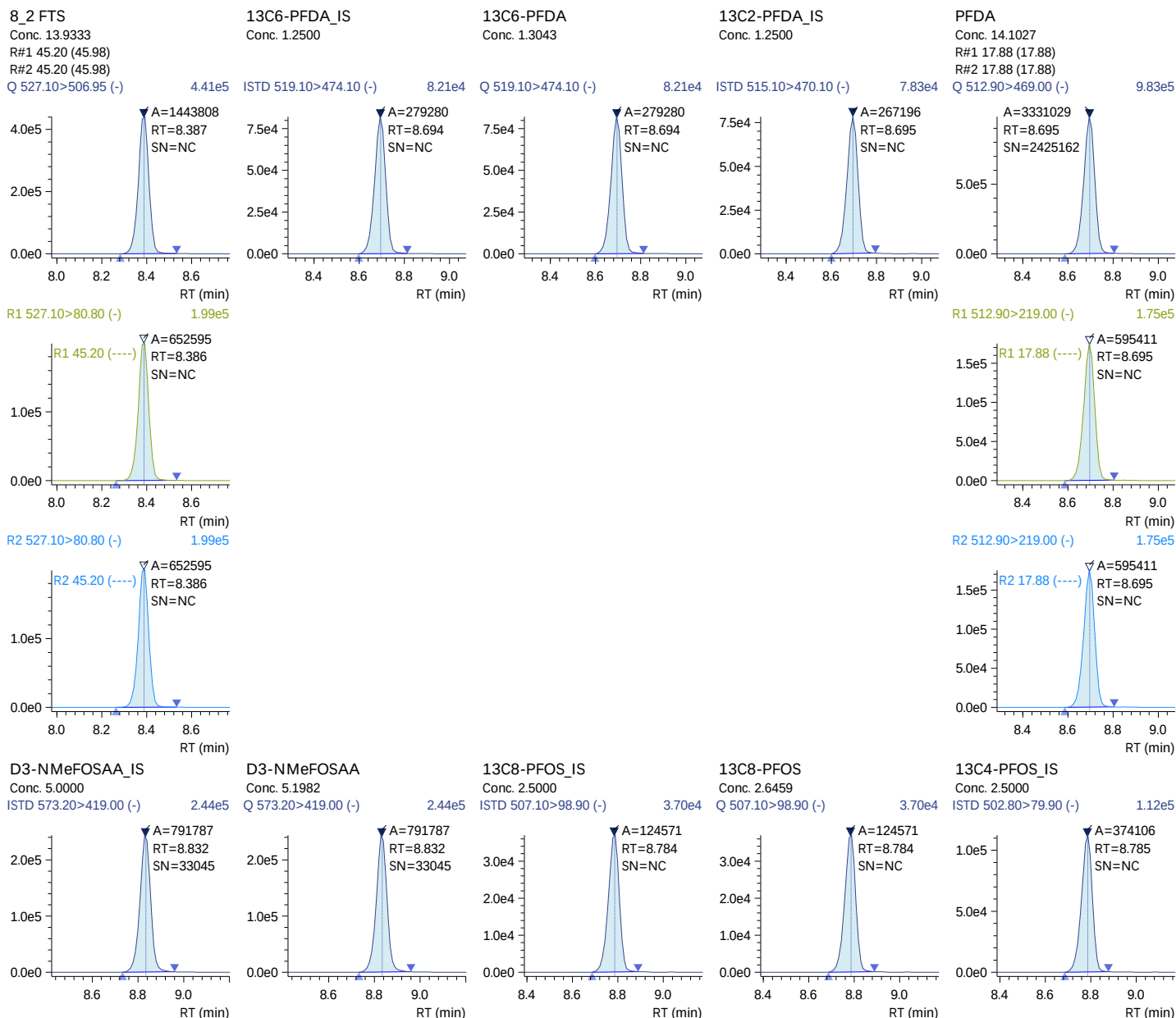


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
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240130_025 (continued)

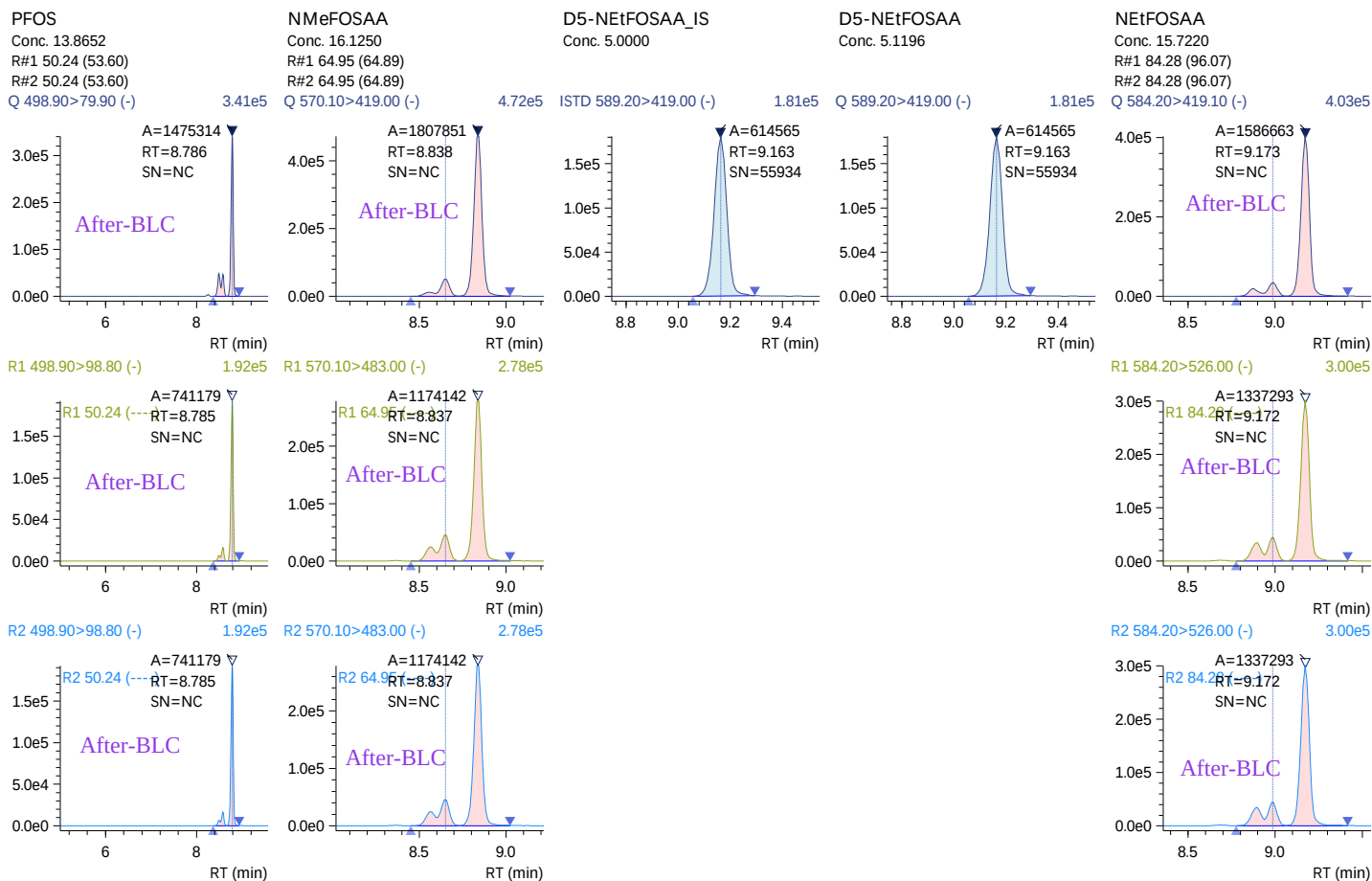


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
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240130_025 (continued)



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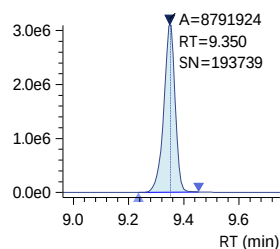
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Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



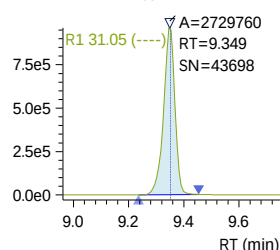
240130_025 (continued)

9-Cl-PF3ONS

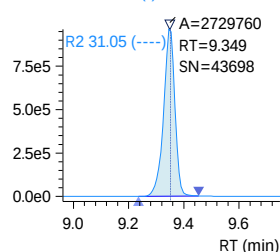
Conc. 14.3231
R#1 31.05 (30.95)
R#2 31.05 (30.95)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-)

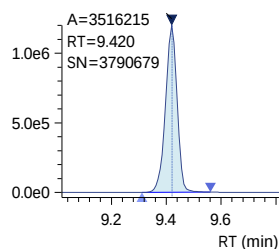


R2 532.80>353.00 (-)

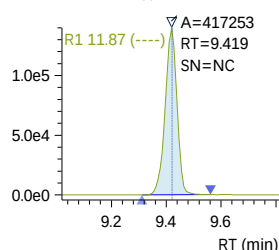


PFUnDA

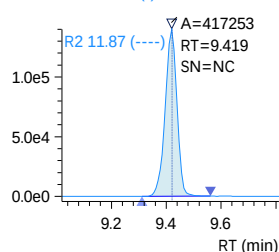
Conc. 15.4599
R#1 11.87 (11.01)
R#2 11.87 (11.01)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-)



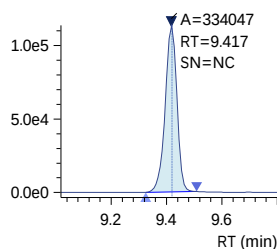
R2 563.10>269.10 (-)



13C7-PFUnDA_IS

Conc. 1.2500

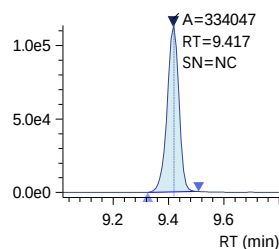
ISTD 570.00>525.10 (-)



13C7-PFUnDA

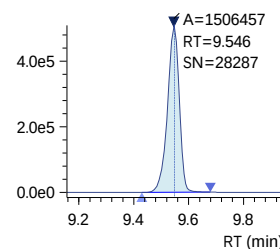
Conc. 1.2555

Q 570.00>525.10 (-)

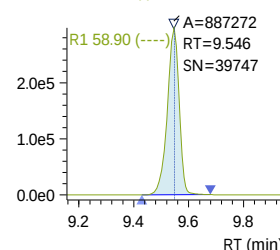


PFNS

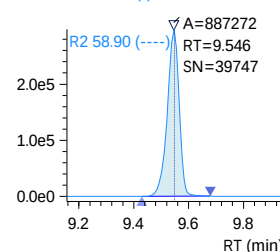
Conc. 14.2886
R#1 58.90 (60.44)
R#2 58.90 (60.44)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-)

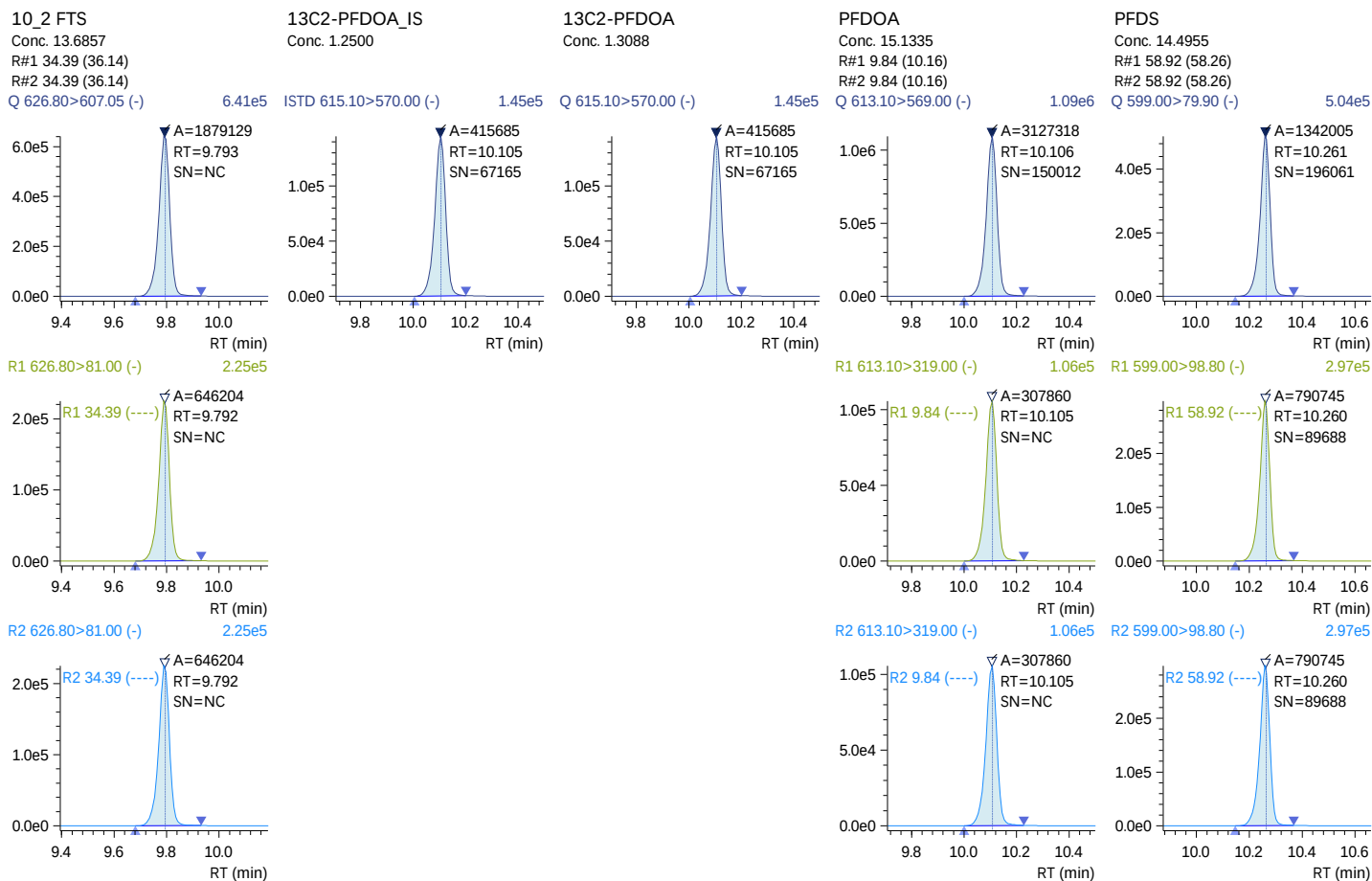


R2 548.80>98.80 (-)





240130_025 (continued)

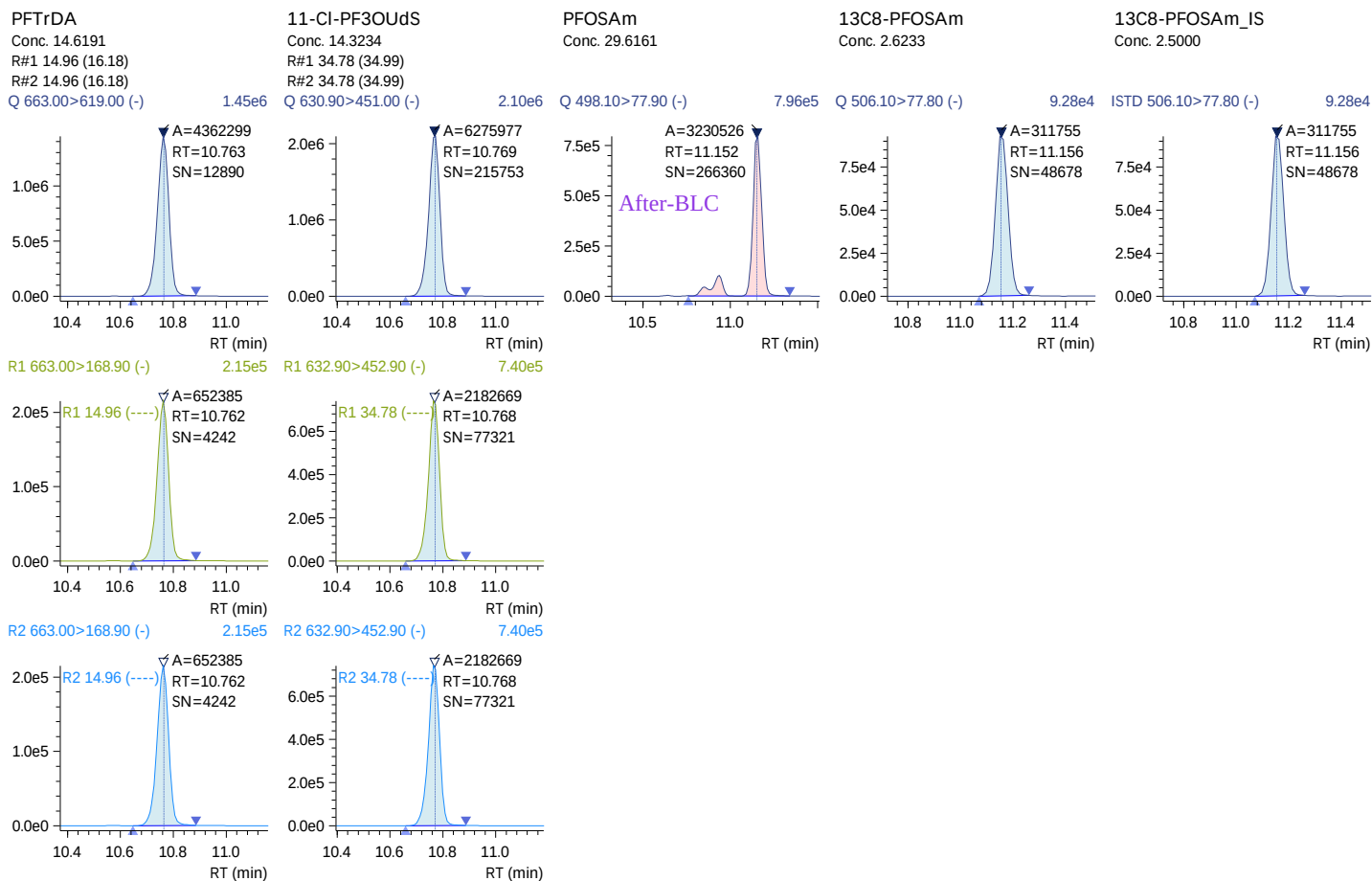


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.

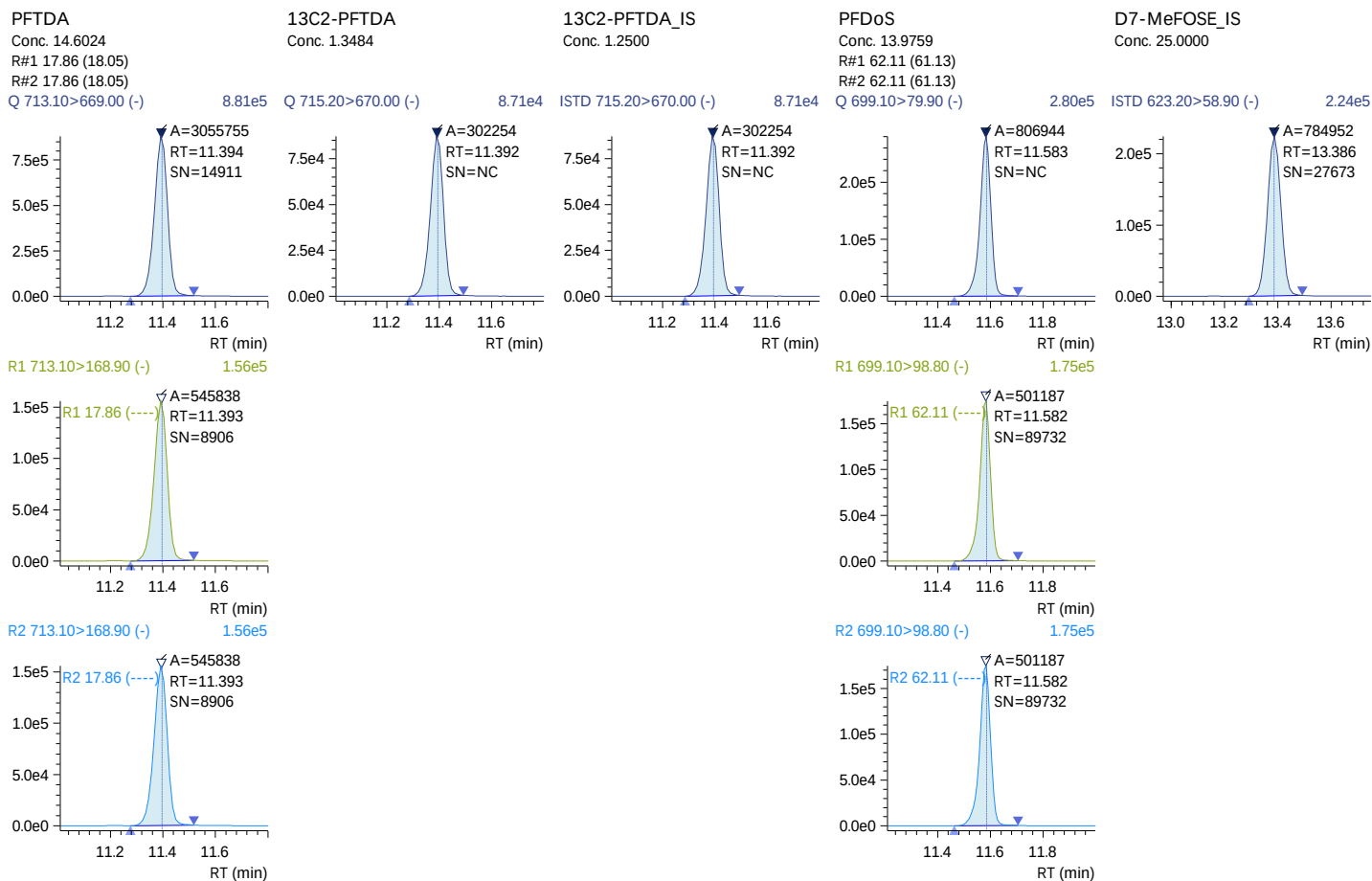


240130_025 (continued)





240130_025 (continued)





240130_025 (continued)

D7-MeFOSE
Conc. 25.7299

MeFOSE
Conc. 15.4760

13C2-PFHXA IS
Conc. 2.5000

13C2-PFHXA
Conc. 2.6103

PFHXA
Conc. 14.8484
R#1 11.64 (11.66)
R#2 11.64 (11.66)

Q 623.20>58.90 (-)

2.24e5

Q 616.10>59.00 (-)

1.07e5

ISTD 815.00>770.05 (-)

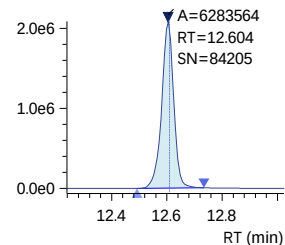
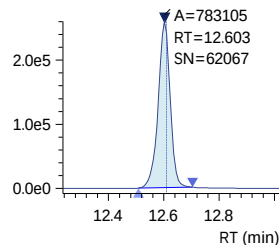
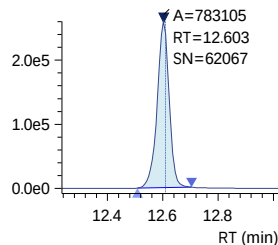
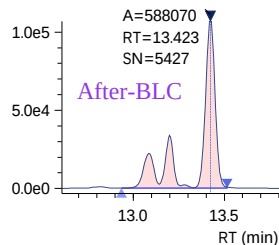
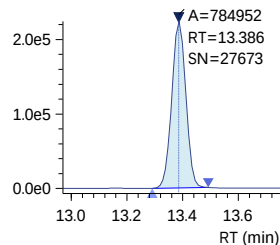
2.60e5

Q 815.00>770.05 (-)

2.60e5

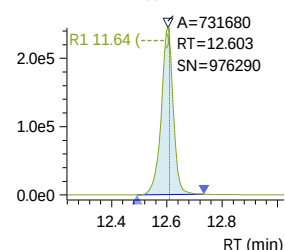
Q 813.00>768.95 (-)

2.09e6



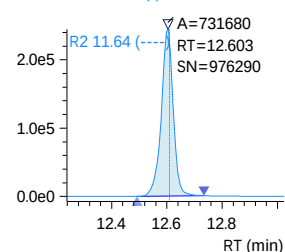
R1 813.00>218.95 (-)

2.45e5



R2 813.00>218.95 (-)

2.45e5





240130_025 (continued)

D3-MeFOSA
Conc. 2.6675

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. 14.4444
R#1 152.58 (160.44)
R#2 152.58 (160.44)

D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 25.3173

Q 515.00>219.00 (-)

2.37e4

ISTD 515.00>219.00 (-)

2.37e4

Q 511.90>219.00 (-)

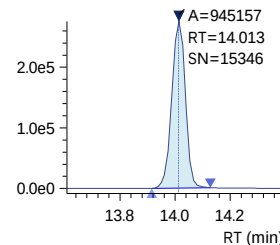
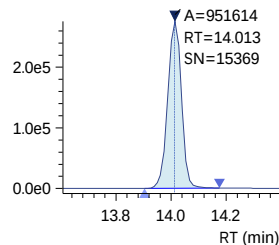
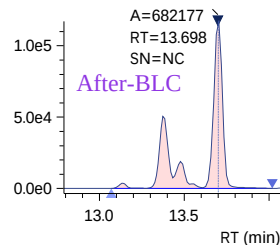
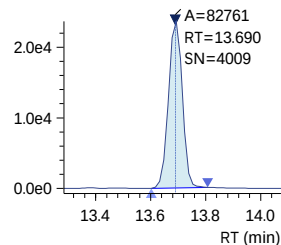
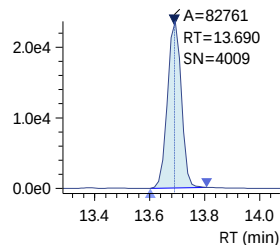
1.17e5

ISTD 639.20>58.90 (-)

2.76e5

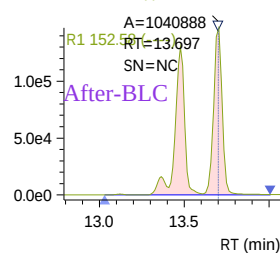
Q 639.20>58.90 (-)

2.76e5



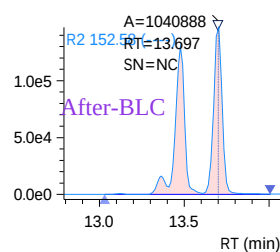
R1 511.90>169.00 (-)

1.47e5



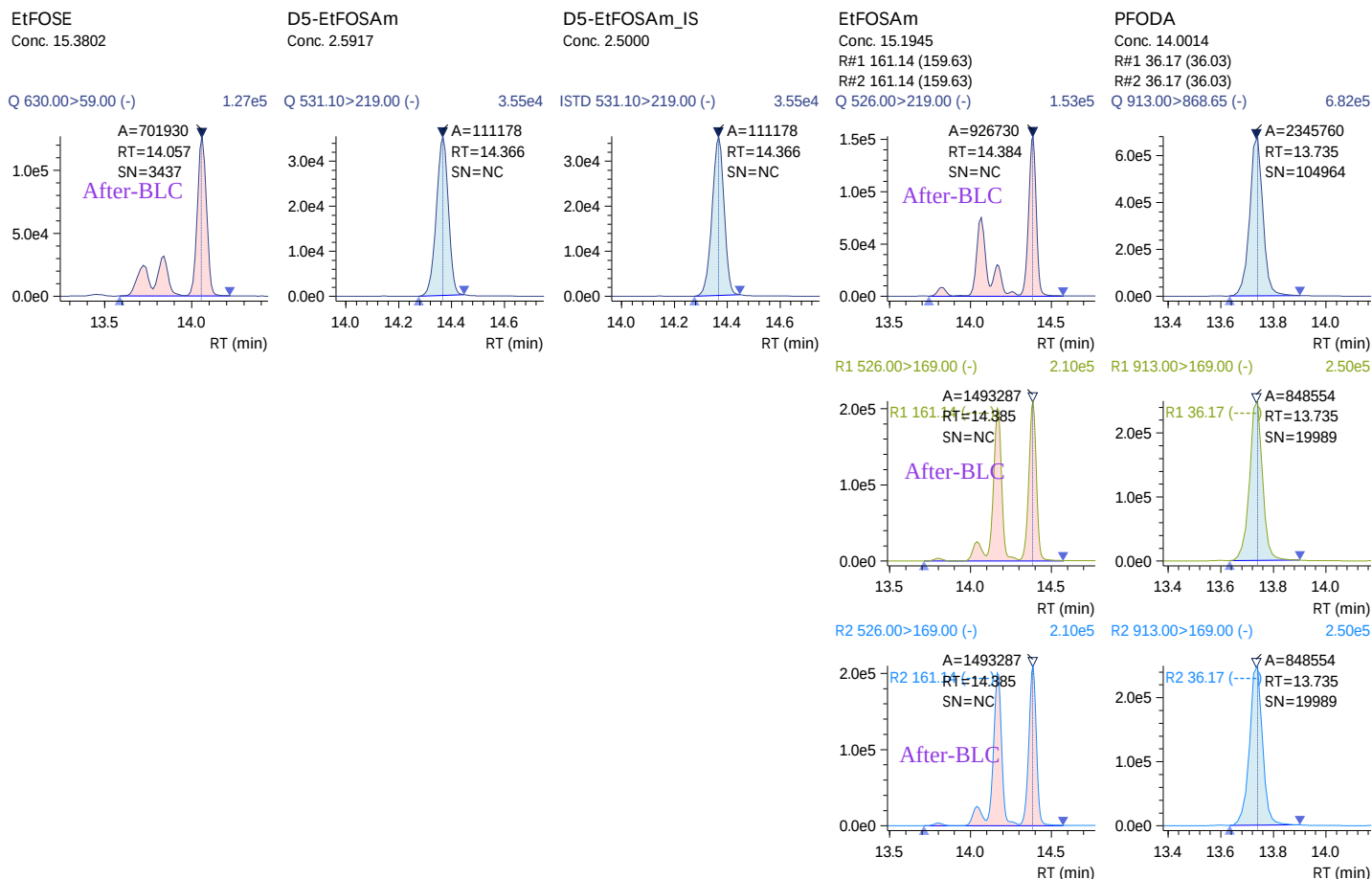
R2 511.90>169.00 (-)

1.47e5





240130_025 (continued)



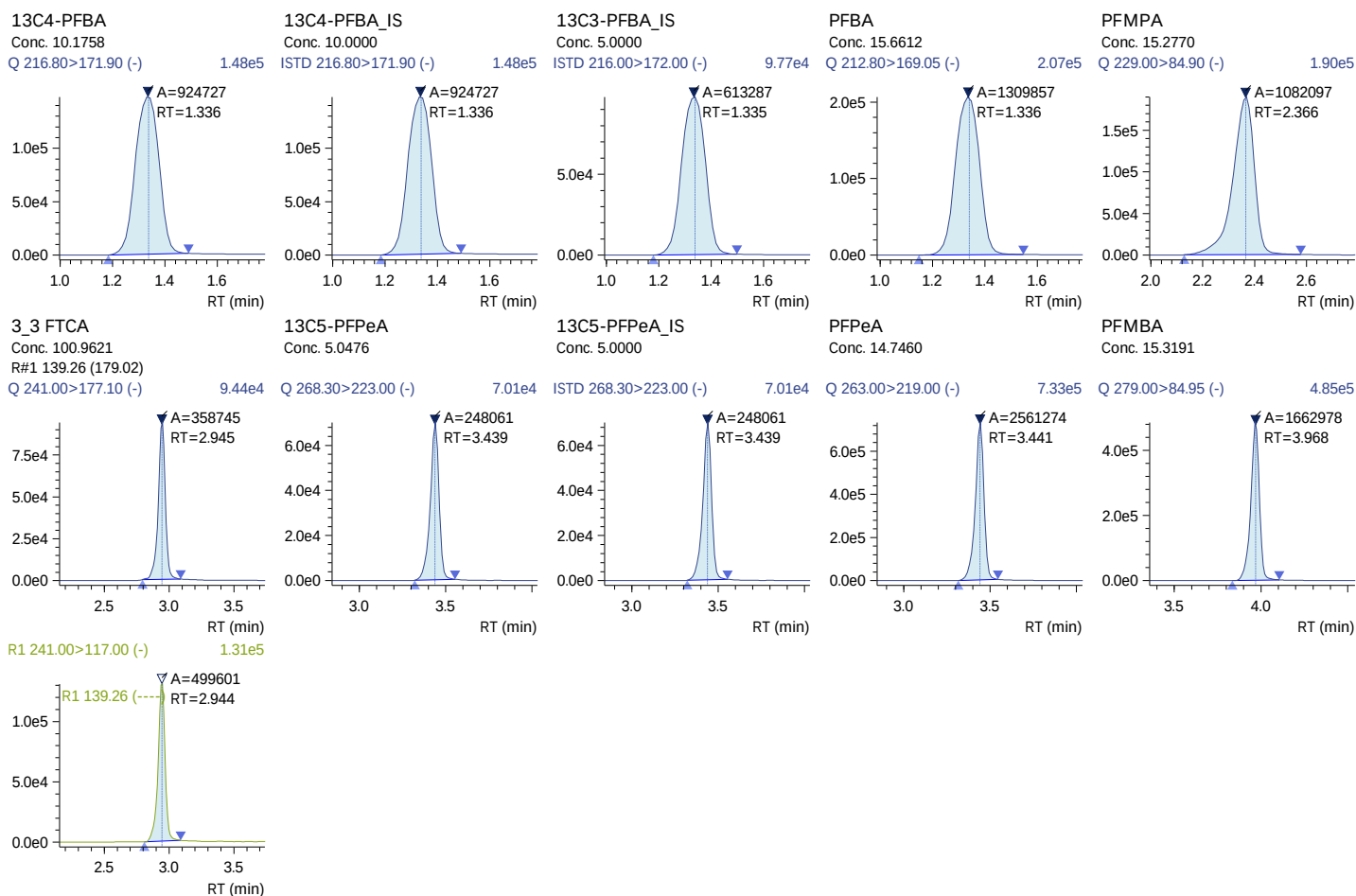
J:\LCMS08\Data\240130_1633_Curve\240130_1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_025

Sample ID: 1633 ICAL 15.0PPB
Date Acquired: 1/31/2024 12:01:42 AM
Acquired by: System Administrator
Data File: 240130_025
Vial: 8 | Inj. Volume: 10.0000uL | Tray: 1





240130_025 (continued)

13C2-4_2 FTS
Conc. 5.1579

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. 13.5799
R#1 33.35 (24.69)
R#2 33.35 (0.00)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 13.5535
R#1 45.13 (52.67)
R#2 45.13 (0.00)

Q 329.10>80.90 (-)

9.02e4

ISTD 329.10>80.90 (-)

9.02e4

Q 327.10>307.00 (-)

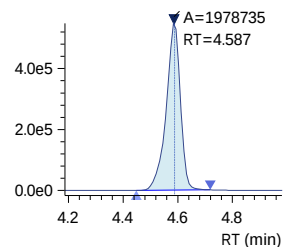
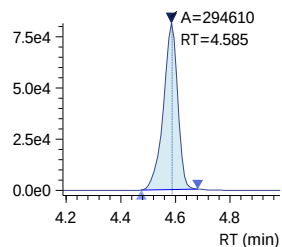
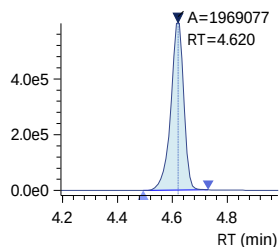
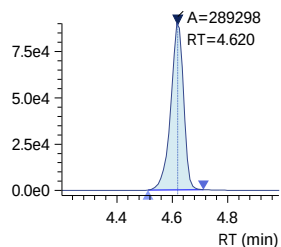
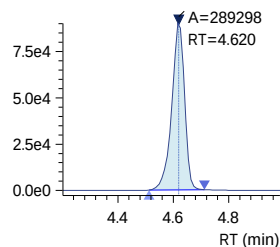
5.99e5

ISTD 302.10>79.90 (-)

8.16e4

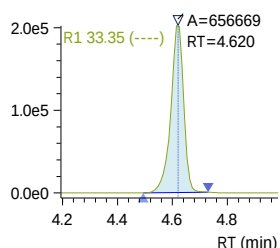
Q 298.70>79.90 (-)

5.48e5



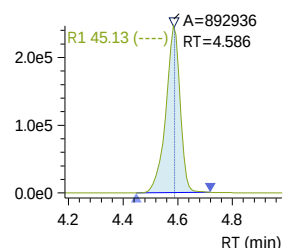
R1 327.10>80.90 (-)

2.02e5



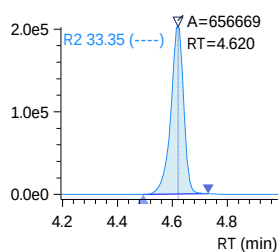
R1 298.70>98.80 (-)

2.47e5



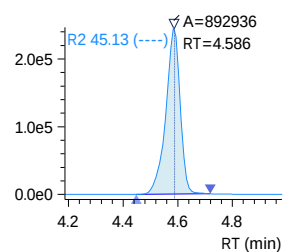
R2 327.10>80.90 (-)

2.02e5



R2 298.70>98.80 (-)

2.47e5





240130_025 (continued)

13C3-PFBS
Conc. 2.6500

NFDHA
Conc. 14.9589
R#1 34.26 (39.38)
R#2 34.26 (0.00)

13C5-PFHxA
Conc. 2.4649

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

Q 302.10>79.90 (-)

8.16e4

Q 295.00>201.00 (-)

4.99e5

Q 318.00>273.00 (-)

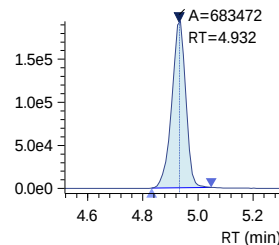
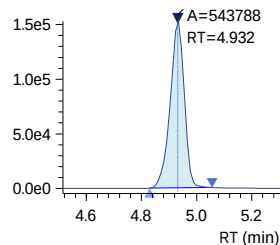
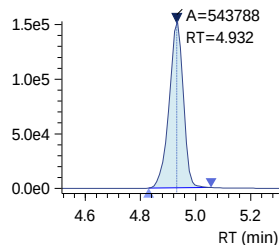
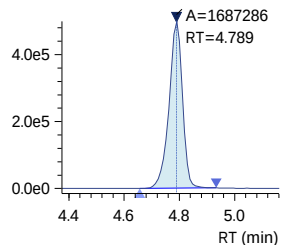
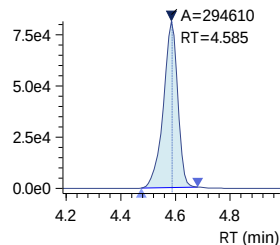
1.53e5

ISTD 318.00>273.00 (-)

1.53e5

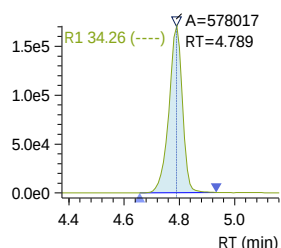
ISTD 315.10>270.00 (-)

1.94e5



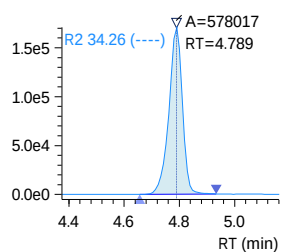
R1 295.00>84.90 (-)

1.71e5



R2 295.00>84.90 (-)

1.71e5

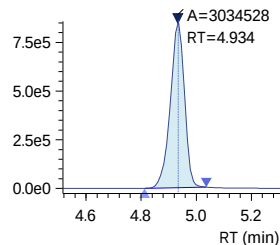




240130_025 (continued)

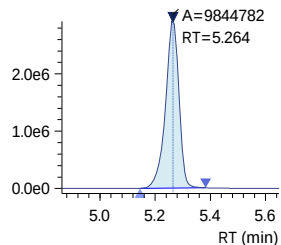
PFHxA
Conc. 14.9017

Q 313.00>269.00 (-) 8.58e5

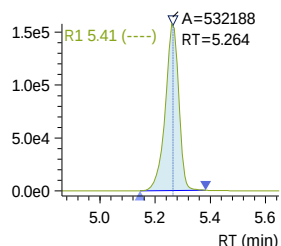


PFEESA
Conc. 14.5718
R#1 5.41 (5.25)
R#2 5.41 (0.00)

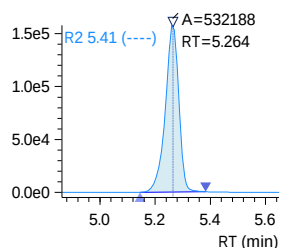
Q 314.80>135.00 (-) 2.92e6



R1 314.80>82.90 (-) 1.58e5

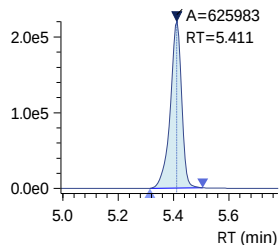


R2 314.80>82.90 (-) 1.58e5



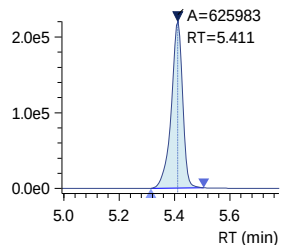
13C3-HFPO-DA
Conc. 10.3348

Q 286.90>168.90 (-) 2.21e5



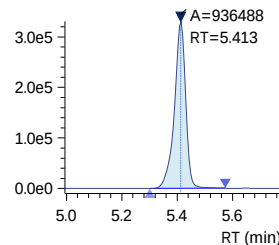
13C3-HFPO-DA_IS
Conc. 10.0000

ISTD 286.90>168.90 (-) 2.21e5

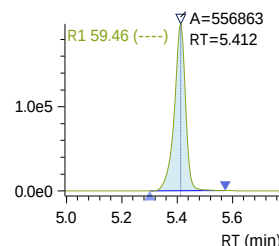


HFPO-DA
Conc. 14.9404
R#1 59.46 (69.48)
R#2 59.46 (0.00)

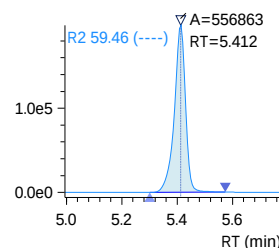
Q 284.90>168.90 (-) 3.31e5



R1 284.90>184.90 (-) 1.99e5



R2 284.90>184.90 (-) 1.99e5

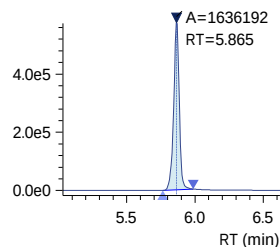




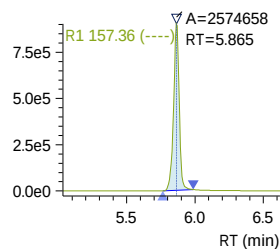
240130_025 (continued)

5_3 FTCA

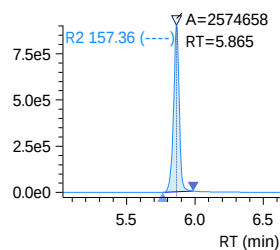
Conc. 100.6565
R#1 157.36 (139.59)
R#2 157.36 (0.00)
Q 341.00>237.05 (-)



R1 341.00>217.00 (-) 9.04e5

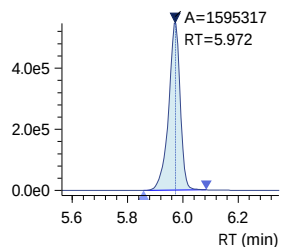


R2 341.00>217.00 (-) 9.04e5

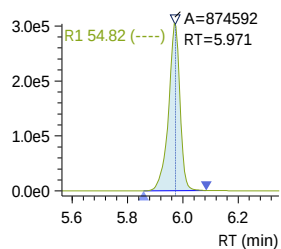


PFPeS

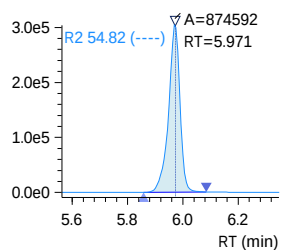
Conc. 15.0893
R#1 54.82 (66.55)
R#2 54.82 (0.00)
Q 349.10>79.90 (-)



R1 349.10>98.80 (-) 3.04e5

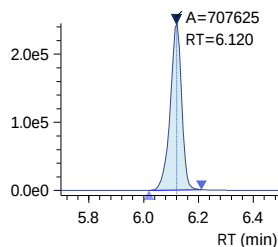


R2 349.10>98.80 (-) 3.04e5



13C4-PFHpA

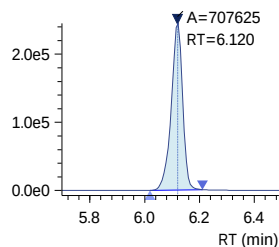
Conc. 2.5496
Q 367.10>322.00 (-)



Q 367.10>322.00 (-) 2.45e5

13C4-PFHpA_IS

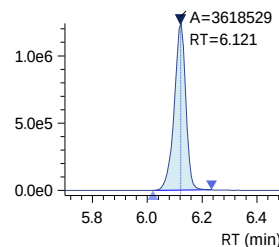
Conc. 2.5000
ISTD 367.10>322.00 (-)



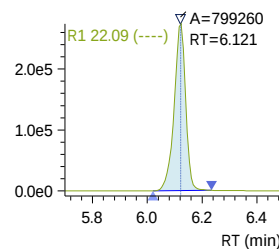
ISTD 367.10>322.00 (-) 2.45e5

PFHpA

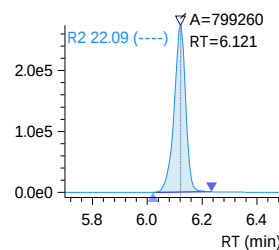
Conc. 14.0529
R#1 22.09 (20.13)
R#2 22.09 (0.00)
Q 363.10>319.00 (-)



R1 363.10>169.00 (-) 2.74e5

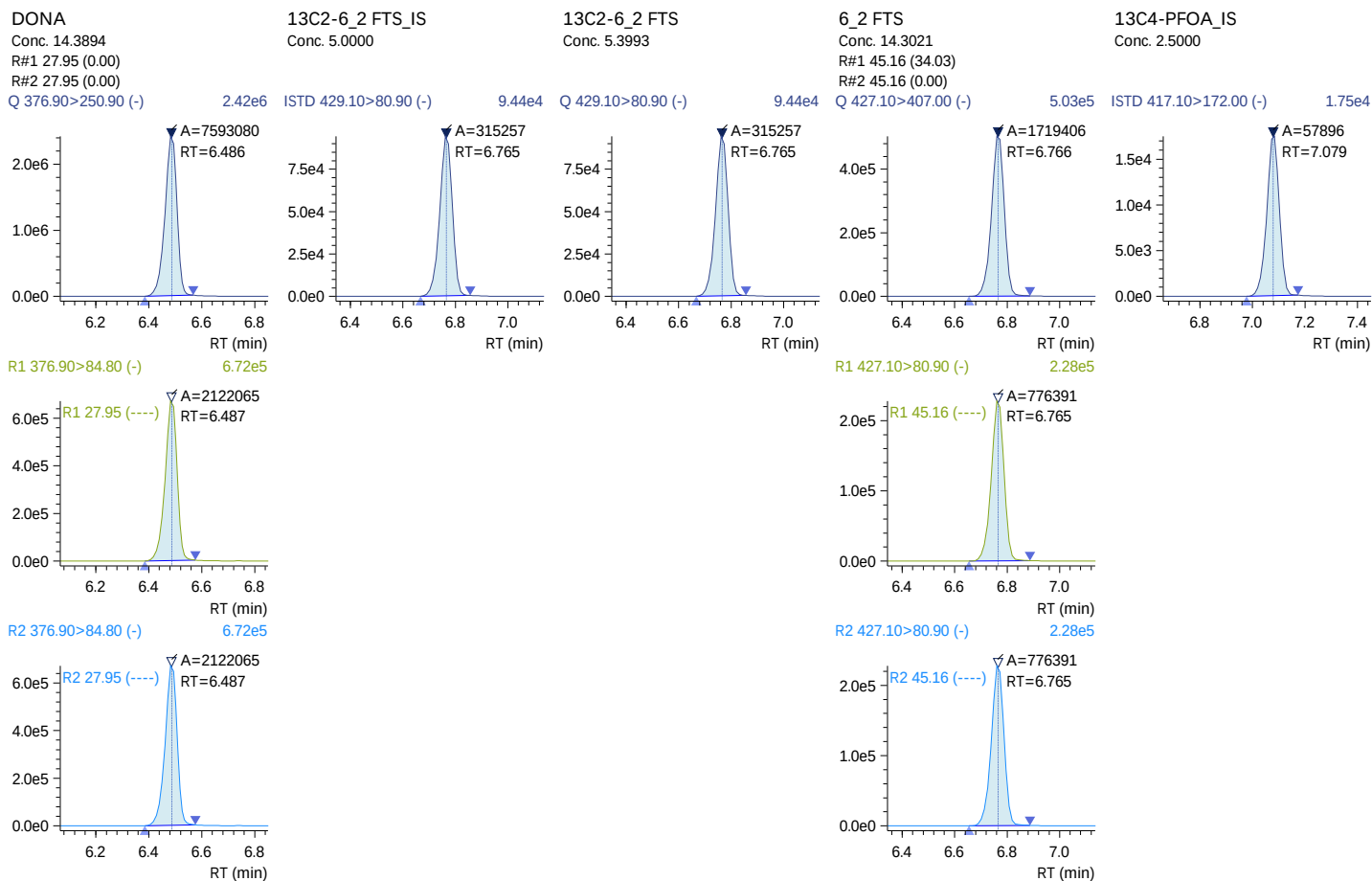


R2 363.10>169.00 (-) 2.74e5





240130_025 (continued)





240130_025 (continued)

13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.5971

PFOA
Conc. 15.7963
R#1 28.34 (22.46)
R#2 28.34 (0.00)

13C3-PFHxS
Conc. 2.5578

13C3-PFHxS_IS
Conc. 2.5000

ISTD 421.10>376.00 (-)

2.15e5

Q 421.10>376.00 (-)

2.15e5

Q 413.00>369.00 (-)

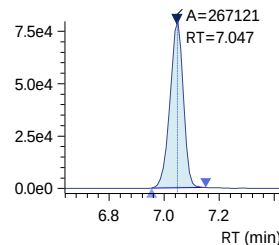
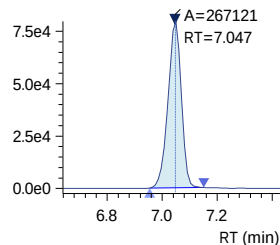
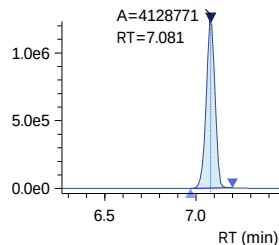
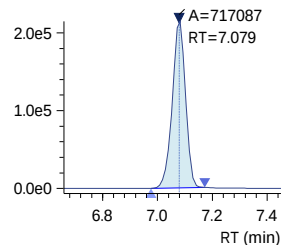
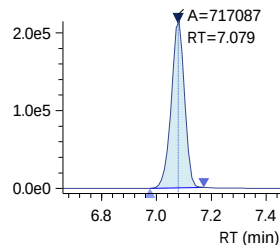
1.23e6

Q 402.10>79.90 (-)

7.98e4

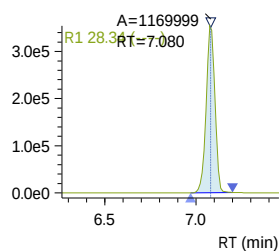
ISTD 402.10>79.90 (-)

7.98e4



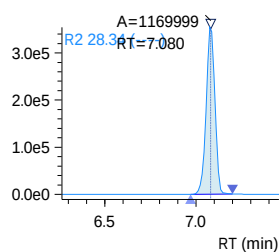
R1 413.00>169.00 (-)

3.54e5



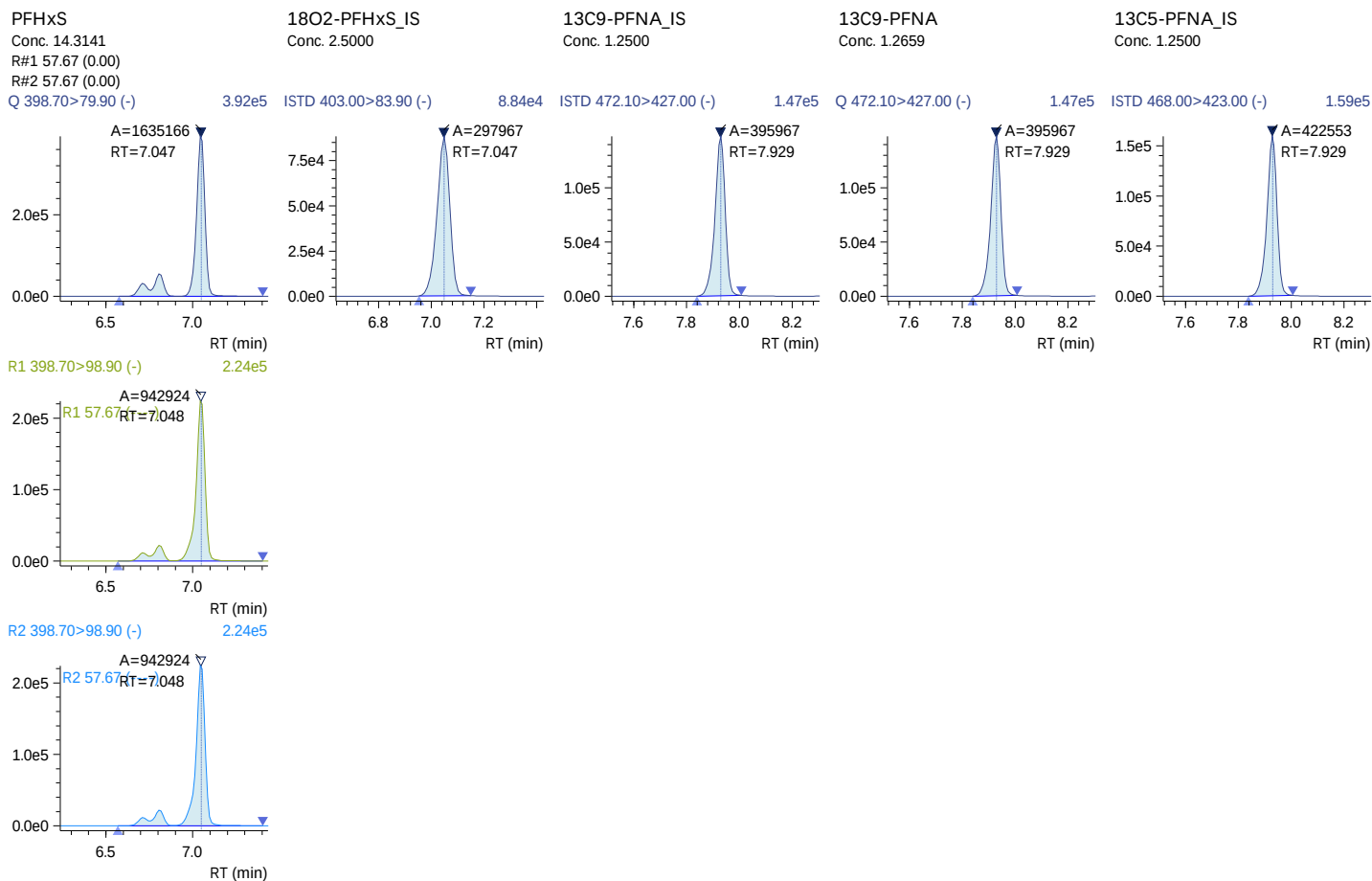
R2 413.00>169.00 (-)

3.54e5



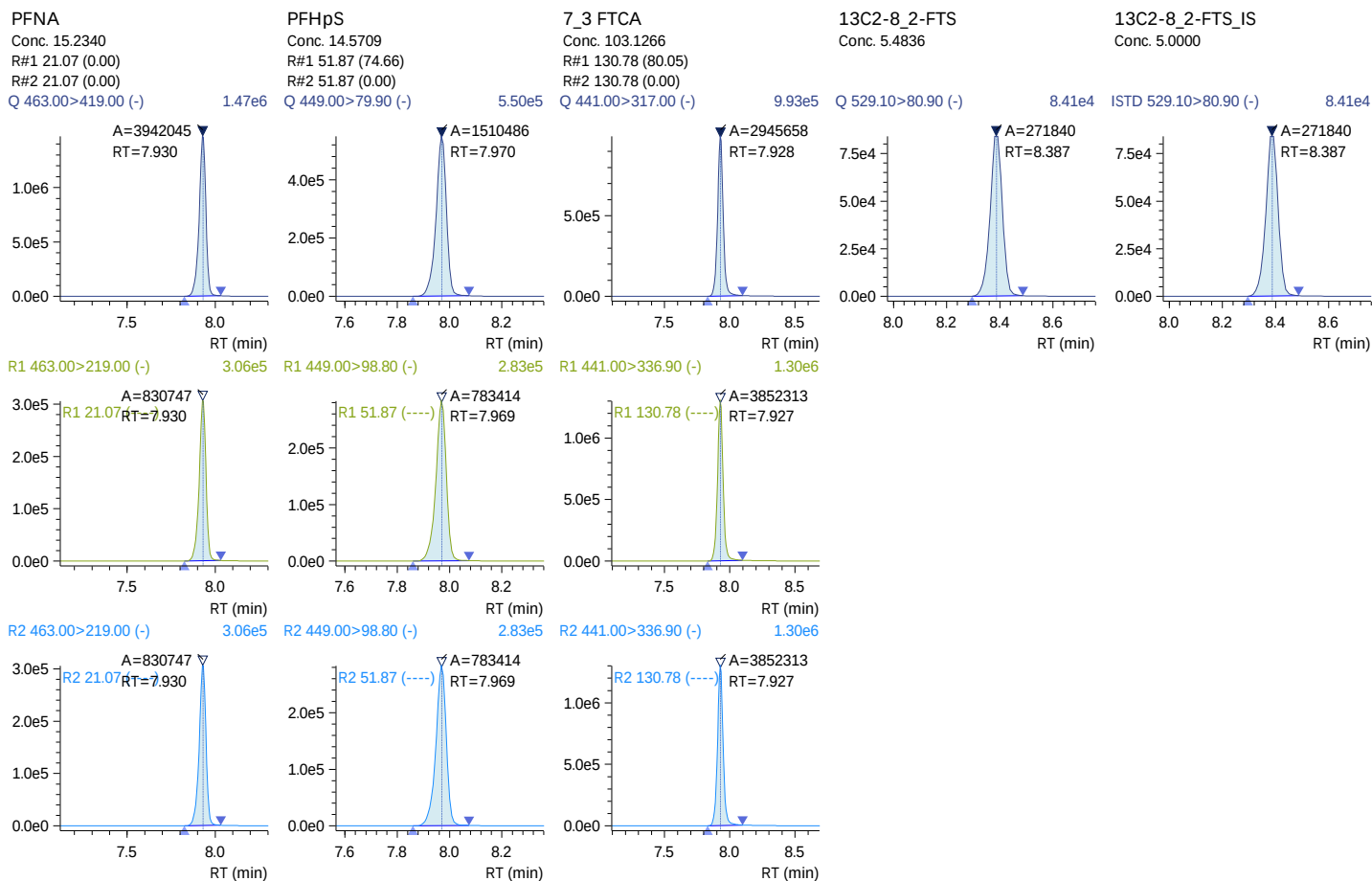


240130_025 (continued)



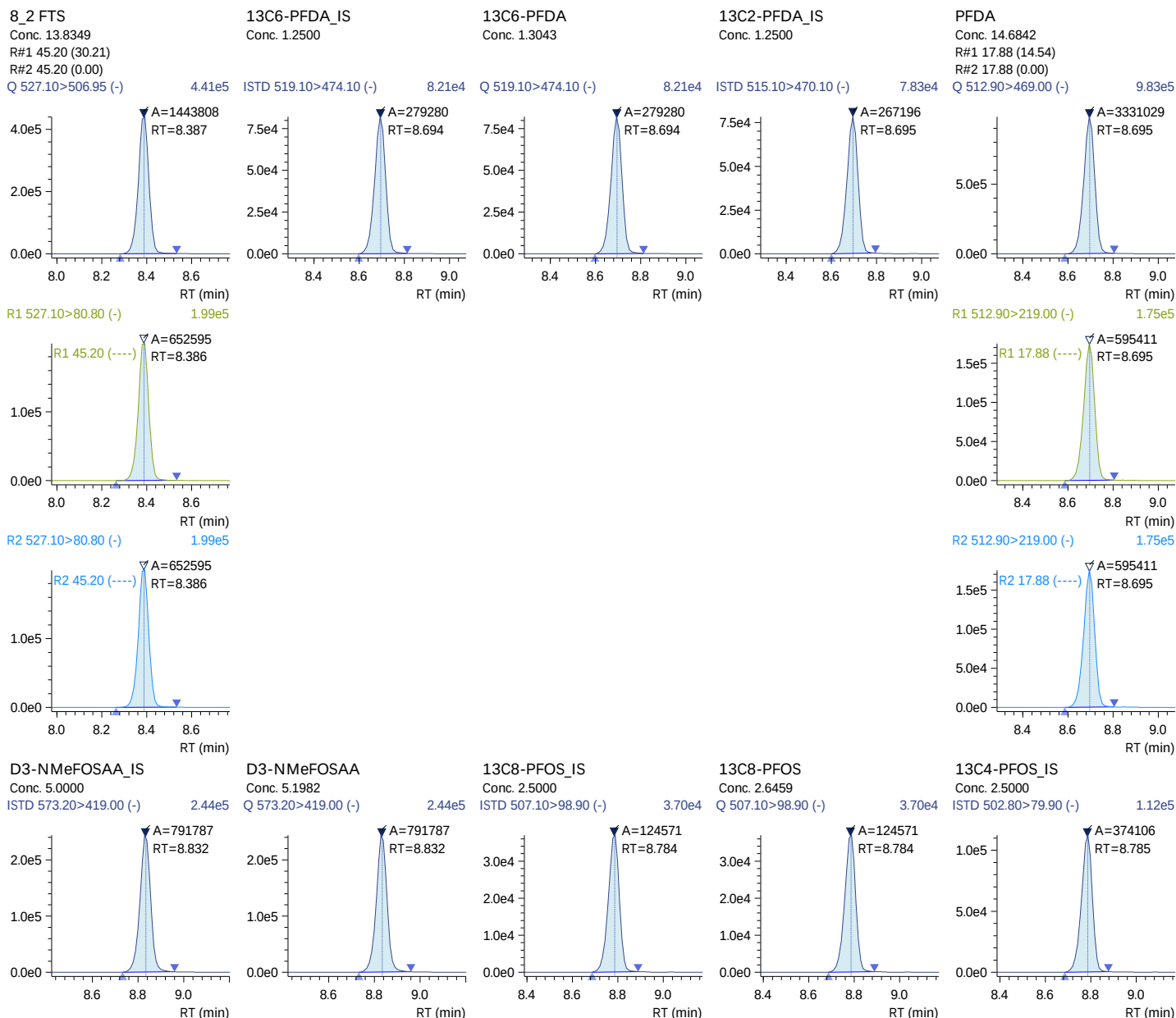


240130_025 (continued)



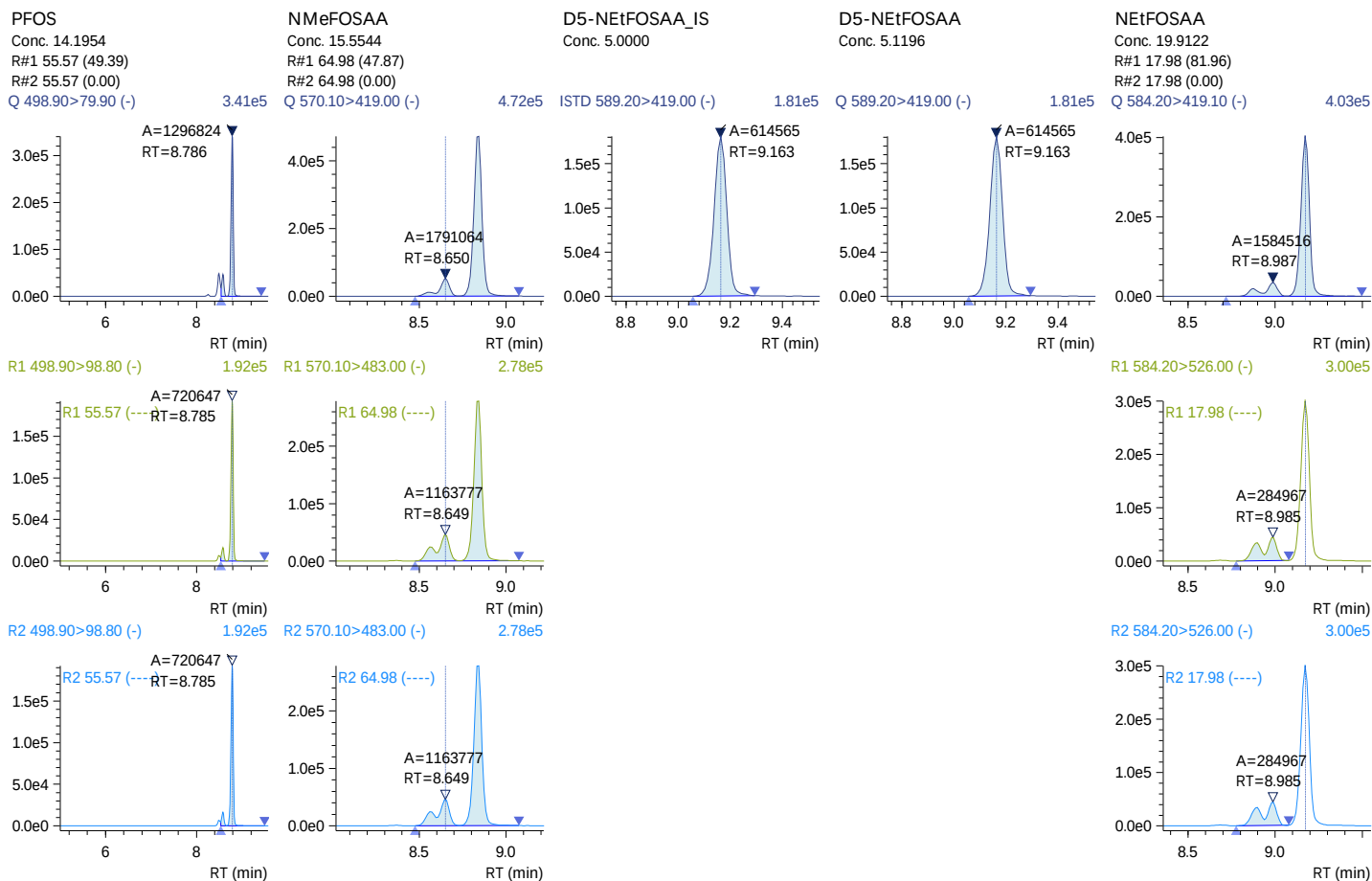


240130_025 (continued)





240130_025 (continued)



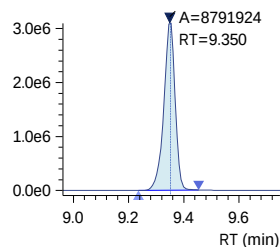


240130_025 (continued)

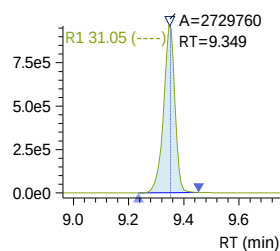
9-CI-PF3ONS

Conc. 14.3231
R#1 31.05 (31.39)
R#2 31.05 (0.00)

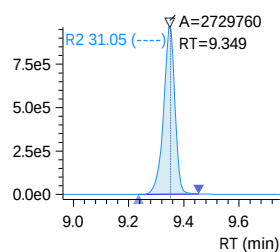
Q 530.80>351.00 (-)



R1 532.80>353.00 (-)



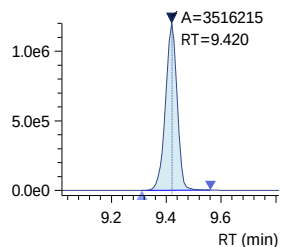
R2 532.80>353.00 (-)



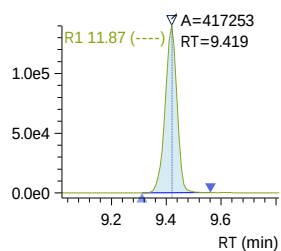
PFUnDA

Conc. 15.4587
R#1 11.87 (12.59)
R#2 11.87 (0.00)

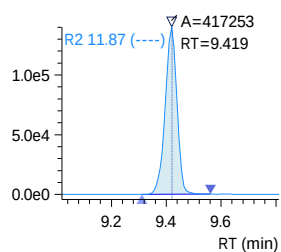
Q 563.10>519.00 (-)



R1 563.10>269.10 (-)



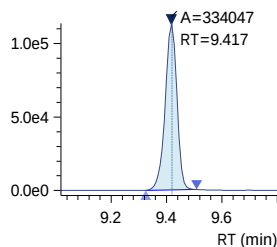
R2 563.10>269.10 (-)



13C7-PFUnDA_IS

Conc. 1.2500

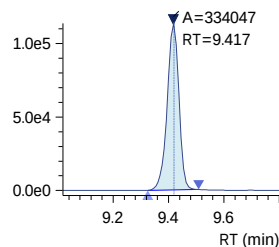
ISTD 570.00>525.10 (-)



13C7-PFUnDA

Conc. 1.2555

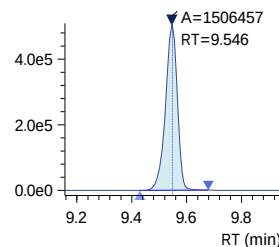
Q 570.00>525.10 (-)



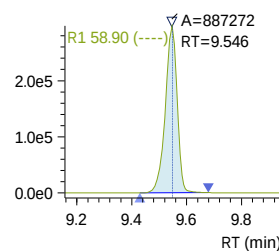
PFNS

Conc. 14.2886
R#1 58.90 (82.65)
R#2 58.90 (0.00)

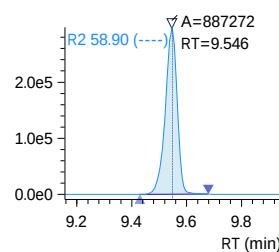
Q 548.80>79.90 (-)



R1 548.80>98.80 (-)



R2 548.80>98.80 (-)





240130_025 (continued)

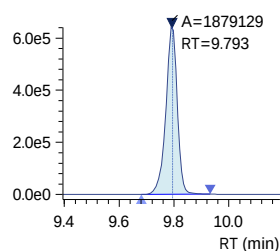
10_2 FTS

Conc. 14.7944

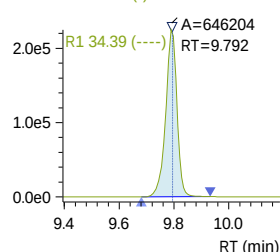
R#1 34.39 (16.46)

R#2 34.39 (0.00)

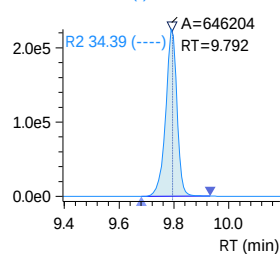
Q 626.80>607.05 (-)



R1 626.80>81.00 (-) 2.25e5



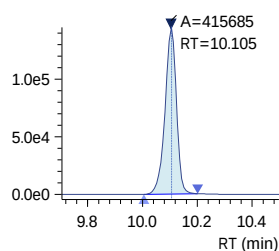
R2 626.80>81.00 (-) 2.25e5



13C2-PFDOA_IS

Conc. 1.2500

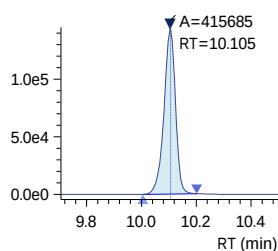
ISTD 615.10>570.00 (-)



13C2-PFDOA

Conc. 1.3088

Q 615.10>570.00 (-)



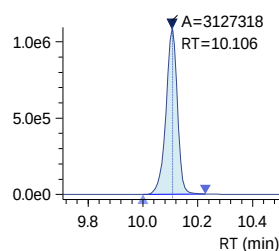
PFDOA

Conc. 15.1264

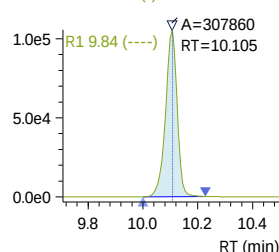
R#1 9.84 (10.12)

R#2 9.84 (0.00)

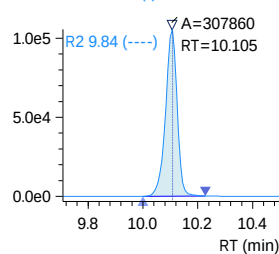
Q 613.10>569.00 (-)



R1 613.10>319.00 (-) 1.06e5



R2 613.10>319.00 (-) 1.06e5



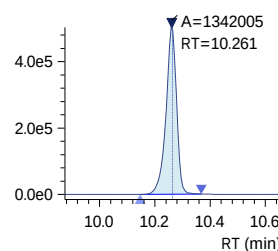
PFDS

Conc. 14.4955

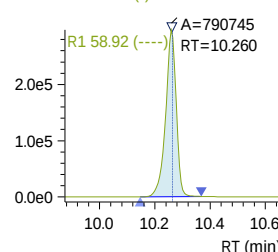
R#1 58.92 (77.67)

R#2 58.92 (0.00)

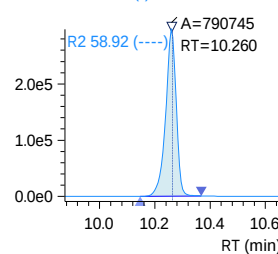
Q 599.00>79.90 (-)



R1 599.00>98.80 (-) 2.97e5



R2 599.00>98.80 (-) 2.97e5

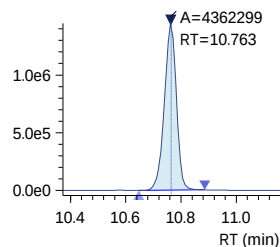




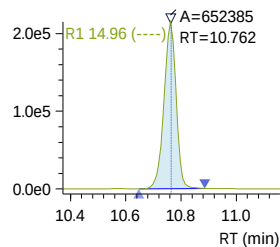
240130_025 (continued)

PFTrDA

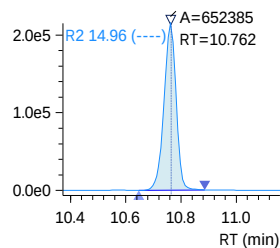
Conc. 14.6174
R#1 14.96 (14.17)
R#2 14.96 (0.00)
Q 663.00>619.00 (-)



R1 663.00>168.90 (-) 2.15e5

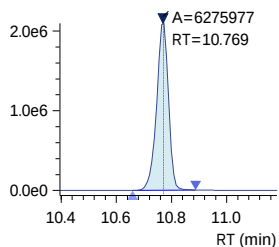


R2 663.00>168.90 (-) 2.15e5

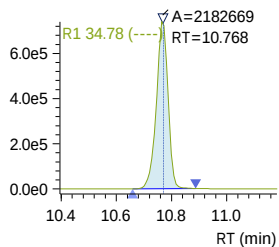


11-Cl-PF3OUds

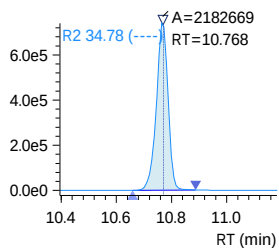
Conc. 14.3234
R#1 34.78 (32.90)
R#2 34.78 (0.00)
Q 630.90>451.00 (-)



R1 632.90>452.90 (-) 7.40e5



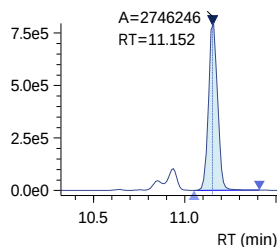
R2 632.90>452.90 (-) 7.40e5



PFOSAm

Conc. 27.6876

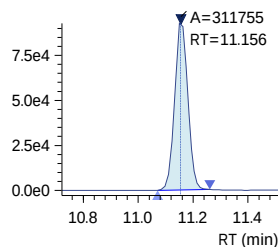
Q 498.10>77.90 (-)



13C8-PFOSAm

Conc. 2.6233

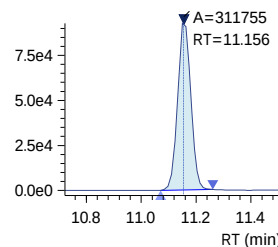
Q 506.10>77.80 (-)



13C8-PFOSAm_IS

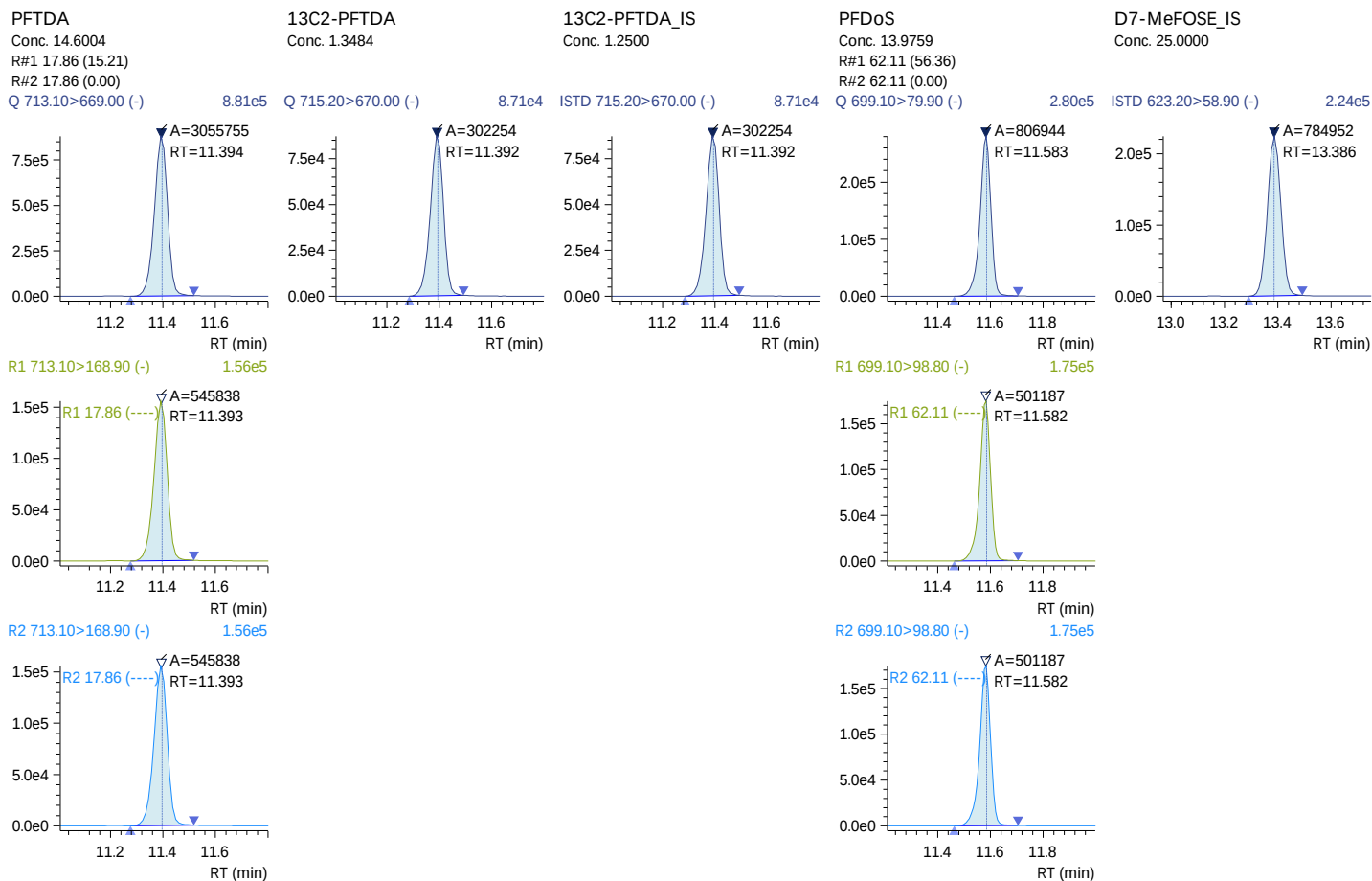
Conc. 2.5000

ISTD 506.10>77.80 (-)





240130_025 (continued)





240130_025 (continued)

D7-MeFOSE
 Conc. 25.7299

MeFOSE
 Conc. 15.8508

13C2-PFHDA_IS
 Conc. 2.5000

13C2-PFHDA
 Conc. 2.6103

PFHXDA
 Conc. 14.2954
 R#1 11.64 (9.60)
 R#2 11.64 (0.00)

Q 623.20>58.90 (-)

2.24e5

Q 616.10>59.00 (-)

1.07e5

ISTD 815.00>770.05 (-)

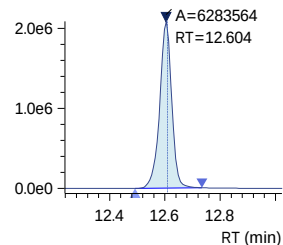
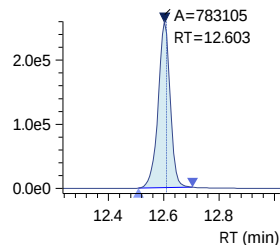
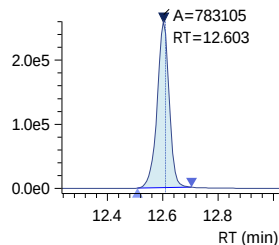
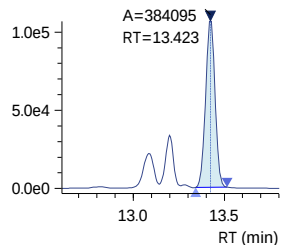
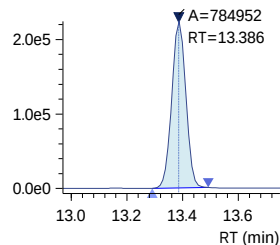
2.60e5

Q 815.00>770.05 (-)

2.60e5

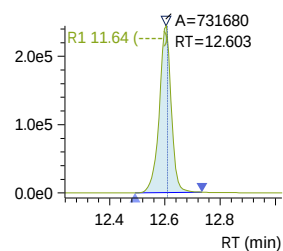
Q 813.00>768.95 (-)

2.09e6



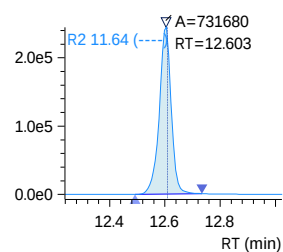
R1 813.00>218.95 (-)

2.45e5



R2 813.00>218.95 (-)

2.45e5





240130_025 (continued)

D3-MeFOSA
Conc. 2.6675

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. 14.3651
R#1 120.23 (98.91)
R#2 120.23 (0.00)

D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 25.3173

Q 515.00>219.00 (-)

2.37e4

ISTD 515.00>219.00 (-)

2.37e4

Q 511.90>219.00 (-)

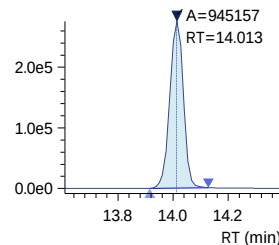
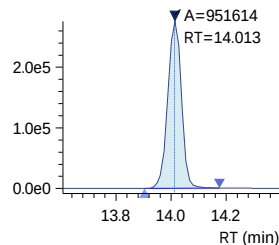
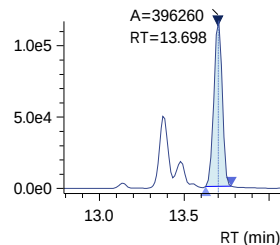
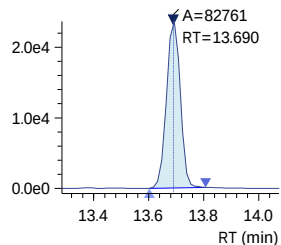
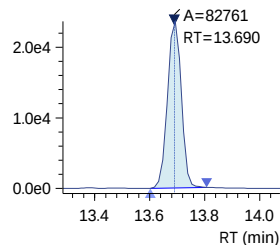
1.17e5

ISTD 639.20>58.90 (-)

2.76e5

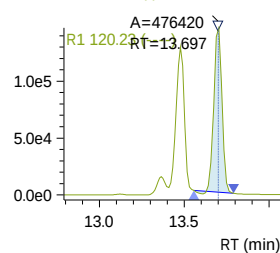
Q 639.20>58.90 (-)

2.76e5



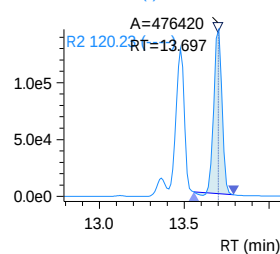
R1 511.90>169.00 (-)

1.47e5



R2 511.90>169.00 (-)

1.47e5





240130_025 (continued)

EtFOSE
Conc. 15.6857

D5-EtFOSAm
Conc. 2.5917

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. 15.0539

PFODA
Conc. 14.0293

Q 630.00>59.00 (-)

1.27e5

Q 531.10>219.00 (-)

3.55e4

ISTD 531.10>219.00 (-)

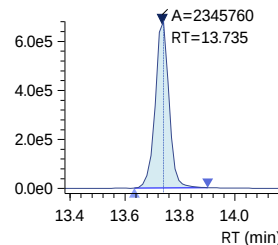
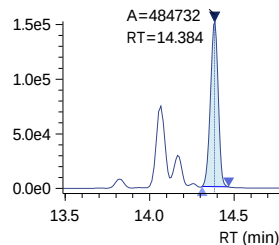
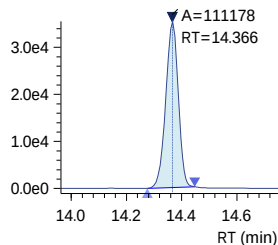
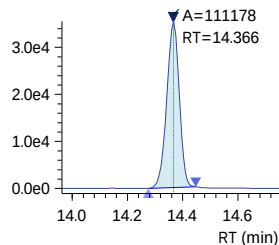
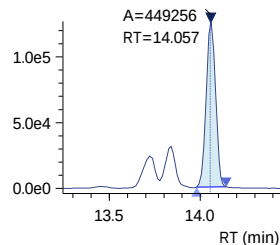
3.55e4

Q 526.00>219.00 (-)

1.53e5

Q 913.00>868.65 (-)

6.82e5

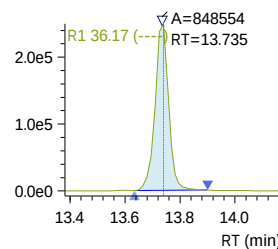
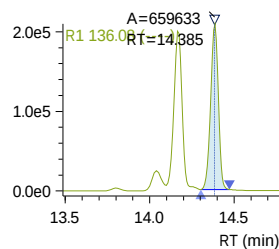


R1 526.00>169.00 (-)

2.10e5

R1 913.00>169.00 (-)

2.50e5

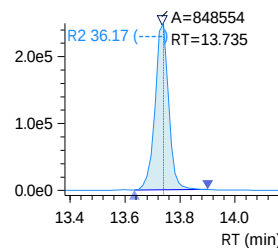
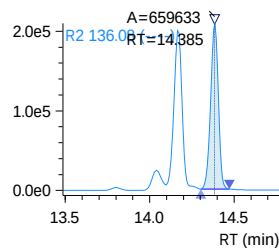


R2 526.00>169.00 (-)

2.10e5

R2 913.00>169.00 (-)

2.50e5

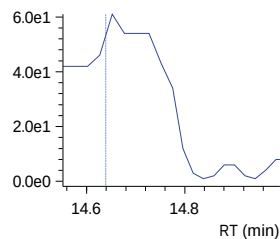


positive trans

Conc. ----

Q 514.80>219.10 (+)

6.10e1





240130_026

Sample ID: 1633 ICAL 20.OPPB
Date Acquired: 1/31/2024 12:24:56 AM
Acquired by: System Administrator
Data File: 240130_026
Vial: 9 | Inj. Volume: 10.0000uL | Tray: 1

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	929320	----	----	----	----	----	----	
13C4-PFBA_IS	216.80>171.90	----	929320	----	----	----	----	----	----	
13C3-PFBA_IS	216.00>172.00	----	609480	----	----	----	----	----	----	
PFBA	212.80>169.05	----	1742228	----	----	----	----	----	----	
PFMPA	229.00>84.90	----	1456610	----	----	----	----	----	----	
3_3 FTCA	241.00>177.10	241.00>117.00	553235	774026	139.91	139.21	----	----	----	
13C5-PFPeA	268.30>223.00	----	253299	----	----	----	----	----	----	
13C5-PFPeA_IS	268.30>223.00	----	253299	----	----	----	----	----	----	
PFPeA	263.00>219.00	----	3561117	----	----	----	----	----	----	
PFMBA	279.00>84.95	----	2188949	----	----	----	----	----	----	
13C2-4_2 FTS	329.10>80.90	----	265598	----	----	----	----	----	----	
13C2-4_2 FTS_IS	329.10>80.90	----	265598	----	----	----	----	----	----	
4_2 FTS	327.10>307.00	327.10>80.90	2571607	814790	31.68	32.10	814790	31.68	32.10	
13C3-PFBS_IS	302.10>79.90	----	290279	----	----	----	----	----	----	
PFBS	298.70>79.90	298.70>98.80	2583503	1185300	45.88	44.81	1185300	45.88	44.81	
13C3-PFBS	302.10>79.90	----	290279	----	----	----	----	----	----	
NFDHA	295.00>201.00	295.00>84.90	2298982	803534	34.95	35.54	803534	34.95	35.54	
13C5-PFHxA	318.00>273.00	----	561062	----	----	----	----	----	----	
13C5-PFHxA_IS	318.00>273.00	----	561062	----	----	----	----	----	----	
13C2-PFHxA_IS	315.10>270.00	----	715684	----	----	----	----	----	----	
PFHxA	313.00>269.00	----	4237779	----	----	----	----	----	----	
PFEESA	314.80>135.00	314.80>82.90	13100930	698518	5.33	5.22	698518	5.33	5.22	
13C3-HFPO-DA	286.90>168.90	----	634641	----	----	----	----	----	----	
13C3-HFPO-DA_IS	286.90>168.90	----	634641	----	----	----	----	----	----	
HFPO-DA	284.90>168.90	284.90>184.90	1250903	761847	60.90	59.79	761847	60.90	59.79	
5_3 FTCA	341.00>237.05	341.00>217.00	2577967	4082034	158.34	157.08	4082034	158.34	157.08	
PFPeS	349.10>79.90	349.10>98.80	2117883	1152499	54.42	55.12	1152499	54.42	55.12	
13C4-PFHpA	367.10>322.00	----	710861	----	----	----	----	----	----	
13C4-PFHpA_IS	367.10>322.00	----	710861	----	----	----	----	----	----	
PFHpA	363.10>319.00	363.10>169.00	4901983	1083949	22.11	23.02	1083949	22.11	23.02	
DONA	376.90>250.90	376.90>84.80	9565286	2687596	28.10	27.50	2687596	28.10	27.50	
13C2-6_2 FTS_IS	429.10>80.90	----	285248	----	----	----	----	----	----	
13C2-6_2 FTS	429.10>80.90	----	285248	----	----	----	----	----	----	
6_2 FTS	427.10>407.00	427.10>80.90	2207651	1006239	45.58	50.47	1006239	45.58	50.47	
13C4-PFOA_IS	417.10>172.00	----	63520	----	----	----	----	----	----	
13C8-PFOA_IS	421.10>376.00	----	751954	----	----	----	----	----	----	

J:\LCMS08\Data\240130_1633_Curve\240130_1633_Curve.damIp

Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240130_026 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	751954	----	----	----	----	----	----	----
PFOA	413.00>369.00	413.00>169.00	5469180	1416842	25.91	28.77	1416842	25.91	28.77	
13C3-PFHxS	402.10>79.90	----	277373	----	----	----	----	----	----	----
13C3-PFHxS_IS	402.10>79.90	----	277373	----	----	----	----	----	----	----
PFHxS	398.70>79.90	398.70>98.90	2078623	1250300	60.15	60.90	1250300	60.15	60.90	
18O2-PFHxS_IS	403.00>83.90	----	300339	----	----	----	----	----	----	----
13C9-PFNA_IS	472.10>427.00	----	398790	----	----	----	----	----	----	----
13C9-PFNA	472.10>427.00	----	398790	----	----	----	----	----	----	----
13C5-PFNA_IS	468.00>423.00	----	417267	----	----	----	----	----	----	----
PFNA	463.00>419.00	463.00>219.00	5216970	1103134	21.15	19.31	1103134	21.15	19.31	
PFHpS	449.00>79.90	449.00>98.80	1996021	1056345	52.92	52.44	1056345	52.92	52.44	
7_3 FTCA	441.00>317.00	441.00>336.90	4818146	6277246	130.28	129.46	6277246	130.28	129.46	
13C2-8_2-FTS	529.10>80.90	----	272129	----	----	----	----	----	----	----
13C2-8_2-FTS_IS	529.10>80.90	----	272129	----	----	----	----	----	----	----
8_2 FTS	527.10>506.95	527.10>80.80	2095846	911868	43.51	45.98	911868	43.51	45.98	
13C6-PFDA_IS	519.10>474.10	----	259549	----	----	----	----	----	----	----
13C6-PFDA	519.10>474.10	----	259549	----	----	----	----	----	----	----
13C2-PFDA_IS	515.10>470.10	----	264157	----	----	----	----	----	----	----
PFDA	512.90>469.00	512.90>219.00	4348016	783094	18.01	17.88	783094	18.01	17.88	
D3-NMeFOSAA_IS	573.20>419.00	----	768052	----	----	----	----	----	----	----
D3-NMeFOSAA	573.20>419.00	----	768052	----	----	----	----	----	----	----
13C8-PFOS_IS	507.10>98.90	----	129460	----	----	----	----	----	----	----
13C8-PFOS	507.10>98.90	----	129460	----	----	----	----	----	----	----
13C4-PFOS_IS	502.80>79.90	----	386238	----	----	----	----	----	----	----
PFOS	498.90>79.90	498.90>98.80	1990001	1016430	51.08	53.60	1016430	51.08	53.60	
NMeFOSAA	570.10>419.00	570.10>483.00	2417048	1518938	62.84	64.89	1518938	62.84	64.89	
D5-NeFOSAA_IS	589.20>419.00	----	614615	----	----	----	----	----	----	----
D5-NeFOSAA	589.20>419.00	----	614615	----	----	----	----	----	----	----
NeFOSAA	584.20>419.10	584.20>526.00	2028765	1766653	87.08	96.07	1766653	87.08	96.07	
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	11750748	3617688	30.79	30.95	3617688	30.79	30.95	
PFUnDA	563.10>519.00	563.10>269.10	4610220	556207	12.07	11.01	556207	12.07	11.01	
13C7-PFUnDA_IS	570.00>525.10	----	348508	----	----	----	----	----	----	----
13C7-PFUnDA	570.00>525.10	----	348508	----	----	----	----	----	----	----
PFNS	548.80>79.90	548.80>98.80	1990009	1192696	59.93	60.44	1192696	59.93	60.44	
10_2 FTS	626.80>607.05	626.80>81.00	2434795	823237	33.81	36.14	823237	33.81	36.14	
13C2-PFDOA_IS	615.10>570.00	----	429899	----	----	----	----	----	----	----
13C2-PFDOA	615.10>570.00	----	429899	----	----	----	----	----	----	----
PFDOA	613.10>569.00	613.10>319.00	4326680	431687	9.98	10.16	431687	9.98	10.16	
PFDS	599.00>79.90	599.00>98.80	1765477	1051439	59.56	58.26	1051439	59.56	58.26	
PFTrDA	663.00>619.00	663.00>168.90	5798907	902559	15.56	16.18	902559	15.56	16.18	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240130_026 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	8132320	2746320	33.77	34.99	2746320	33.77	34.99	
PFOSAm	498.10>77.90	----	4390505	----	----	----	----	----	----	
13C8-PFOSAm	506.10>77.80	----	313888	----	----	----	----	----	----	
13C8-PFOSAm_IS	506.10>77.80	----	313888	----	----	----	----	----	----	
PFTDA	713.10>669.00	713.10>168.90	3972831	729447	18.36	18.05	729447	18.36	18.05	
13C2-PFTDA	715.20>670.00	----	281463	----	----	----	----	----	----	
13C2-PFTDA_IS	715.20>670.00	----	281463	----	----	----	----	----	----	
PFDoS	699.10>79.90	699.10>98.80	1119000	677729	60.57	61.13	677729	60.57	61.13	
D7-MeFOSE_IS	623.20>58.90	----	812046	----	----	----	----	----	----	
D7-MeFOSE	623.20>58.90	----	812046	----	----	----	----	----	----	
MeFOSE	616.10>59.00	----	794445	----	----	----	----	----	----	
13C2-PFHxDA_IS	815.00>770.05	----	768193	----	----	----	----	----	----	
13C2-PFHxDA	815.00>770.05	----	768193	----	----	----	----	----	----	
PFHxDA	813.00>768.95	813.00>218.95	8506394	990100	11.64	11.66	990100	11.64	11.66	
D3-MeFOSA	515.00>219.00	----	81037	----	----	----	----	----	----	
D3-MeFOSA_IS	515.00>219.00	----	81037	----	----	----	----	----	----	
MeFOSA	511.90>219.00	511.90>169.00	922196	1416732	153.63	160.44	1416732	153.63	160.44	
D9-EtFOSE_IS	639.20>58.90	----	970668	----	----	----	----	----	----	
D9-EtFOSE	639.20>58.90	----	962680	----	----	----	----	----	----	
EtFOSE	630.00>59.00	----	947504	----	----	----	----	----	----	
D5-EtFOSAm	531.10>219.00	----	111581	----	----	----	----	----	----	
D5-EtFOSAm_IS	531.10>219.00	----	111581	----	----	----	----	----	----	
EtFOSAm	526.00>219.00	526.00>169.00	1244742	1987505	159.67	159.63	1987505	159.67	159.63	
PFODA	913.00>868.65	913.00>169.00	3597907	1191696	33.12	36.03	1191696	33.12	36.03	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
 IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240130_026

Sample ID: 1633 ICAL 20.OPPB
Date Acquired: 1/31/2024 12:24:56 AM
Acquired by: System Administrator
Data File: 240130_026
Vial: 9 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.335	-0.003	0.001	929320	609480	13C3-PFBA_IS	10.2902	ng/mL	
13C4-PFBA_IS	Auto	1.335	-0.003	----	929320	929320	----	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.334	-0.003	----	609480	609480	----	5.0000	ng/mL	
PFBA	Auto	1.336	-0.005	0.001	1742228	929320	13C4-PFBA_IS	20.1636	ng/mL	
PFMPA	Auto	2.362	-0.004	-1.074	1456610	253299	13C5-PFPeA_IS	20.1391	ng/mL	
3_3 FTCA	Auto	2.940	-0.005	-0.496	553235	253299	13C5-PFPeA_IS	152.4779	ng/mL	
13C5-PFPeA	Auto	3.436	-0.003	-1.494	253299	715684	13C2-PFHxA_IS	4.9222	ng/mL	
13C5-PFPeA_IS	Auto	3.436	-0.003	----	253299	253299	----	5.0000	ng/mL	
PFPeA	Auto	3.439	-0.003	0.003	3561117	253299	13C5-PFPeA_IS	20.0785	ng/mL	
PFMBA	Auto	3.966	-0.003	0.530	2188949	253299	13C5-PFPeA_IS	19.7472	ng/mL	
13C2-4_2 FTS	Auto	4.617	-0.003	-2.427	265598	300339	18O2-PFHxS_IS	4.6979	ng/mL	
13C2-4_2 FTS_IS	Auto	4.617	-0.003	----	265598	265598	----	5.0000	ng/mL	
4_2 FTS	Auto	4.617	-0.003	0.000	2571607	265598	13C2-4_2 FTS_IS	19.5328	ng/mL	
13C3-PFBS_IS	Auto	4.584	-0.003	----	290279	290279	----	2.5000	ng/mL	
PFBS	Auto	4.584	-0.004	0.000	2583503	290279	13C3-PFBS_IS	17.9599	ng/mL	
13C3-PFBS	Auto	4.584	-0.003	-2.460	290279	300339	18O2-PFHxS_IS	2.5904	ng/mL	
NFDHA	Auto	4.786	-0.004	-0.143	2298982	561062	13C5-PFHxA_IS	19.7545	ng/mL	
13C5-PFHxA	Auto	4.929	-0.003	-0.001	561062	715684	13C2-PFHxA_IS	2.4287	ng/mL	
13C5-PFHxA_IS	Auto	4.929	-0.003	----	561062	561062	----	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	4.930	-0.003	----	715684	715684	----	2.5000	ng/mL	
PFHxA	Auto	4.931	-0.003	0.002	4237779	561062	13C5-PFHxA_IS	20.2764	ng/mL	
PFEESA	Auto	5.262	-0.003	0.333	13100930	561062	13C5-PFHxA_IS	18.7944	ng/mL	
13C3-HFPO-DA	Auto	5.408	-0.004	0.478	634641	715684	13C2-PFHxA_IS	10.0062	ng/mL	
13C3-HFPO-DA_IS	Auto	5.408	-0.004	----	634641	634641	----	10.0000	ng/mL	
HFPO-DA	Auto	5.410	-0.003	0.002	1250903	634641	13C3-HFPO-DA_IS	20.0445	ng/mL	
5_3 FTCA	Auto	5.862	-0.004	0.933	2577967	561062	13C5-PFHxA_IS	153.7104	ng/mL	
PFPeS	Auto	5.969	-0.004	-1.074	2117883	277373	13C3-PFHxS_IS	19.2916	ng/mL	
13C4-PFHpA	Auto	6.117	-0.003	1.187	710861	715684	13C2-PFHxA_IS	2.4459	ng/mL	
13C4-PFHpA_IS	Auto	6.117	-0.003	----	710861	710861	----	2.5000	ng/mL	
PFHpA	Auto	6.119	-0.003	0.002	4901983	710861	13C4-PFHpA_IS	20.3154	ng/mL	
DONA	Auto	6.484	-0.003	1.076	9565286	634641	13C3-HFPO-DA_IS	17.8796	ng/mL	
13C2-6_2 FTS_IS	Auto	6.763	-0.003	----	285248	285248	----	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.763	-0.003	-0.281	285248	300339	18O2-PFHxS_IS	4.8468	ng/mL	
6_2 FTS	Auto	6.763	-0.002	0.000	2207651	285248	13C2-6_2 FTS_IS	20.2952	ng/mL	
13C4-PFOA_IS	Auto	7.076	-0.003	----	63520	63520	----	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.076	-0.002	----	751954	751954	----	2.5000	ng/mL	
13C8-PFOA	Auto	7.076	-0.002	0.000	751954	63520	13C4-PFOA_IS	2.4822	ng/mL	
PFOA	Auto	7.078	-0.003	0.002	5469180	751954	13C8-PFOA_IS	19.9420	ng/mL	
13C3-PFHxS	Auto	7.043	-0.005	-0.001	277373	300339	18O2-PFHxS_IS	2.6350	ng/mL	
13C3-PFHxS_IS	Auto	7.043	-0.005	----	277373	277373	----	2.5000	ng/mL	
PFHxS	Auto	7.044	-0.004	0.001	2078623	277373	13C3-PFHxS_IS	17.1453	ng/mL	
18O2-PFHxS_IS	Auto	7.044	-0.004	----	300339	300339	----	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.926	-0.003	----	398790	398790	----	1.2500	ng/mL	
13C9-PFNA	Auto	7.926	-0.003	-0.001	398790	417267	13C5-PFNA_IS	1.2911	ng/mL	
13C5-PFNA_IS	Auto	7.927	-0.003	----	417267	417267	----	1.2500	ng/mL	
PFNA	Auto	7.928	-0.002	0.002	5216970	398790	13C9-PFNA_IS	20.1466	ng/mL	
PFHpS	Auto	7.968	-0.003	-0.814	1996021	129460	13C8-PFOS_IS	18.3378	ng/mL	
7_3 FTCA	Auto	7.925	-0.004	2.996	4818146	561062	13C5-PFHxA_IS	163.4884	ng/mL	
13C2-8_2-FTS	Auto	8.385	-0.003	1.341	272129	300339	18O2-PFHxS_IS	5.4461	ng/mL	
13C2-8_2-FTS_IS	Auto	8.385	-0.003	----	272129	272129	----	5.0000	ng/mL	
8_2 FTS	Auto	8.385	-0.003	0.000	2095846	272129	13C2-8_2-FTS_IS	20.2042	ng/mL	
13C6-PFDA_IS	Auto	8.692	-0.003	----	259549	259549	----	1.2500	ng/mL	
13C6-PFDA	Auto	8.692	-0.003	0.000	259549	264157	13C2-PFDA_IS	1.2261	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_026 (continued)

(Table continued from previous page)

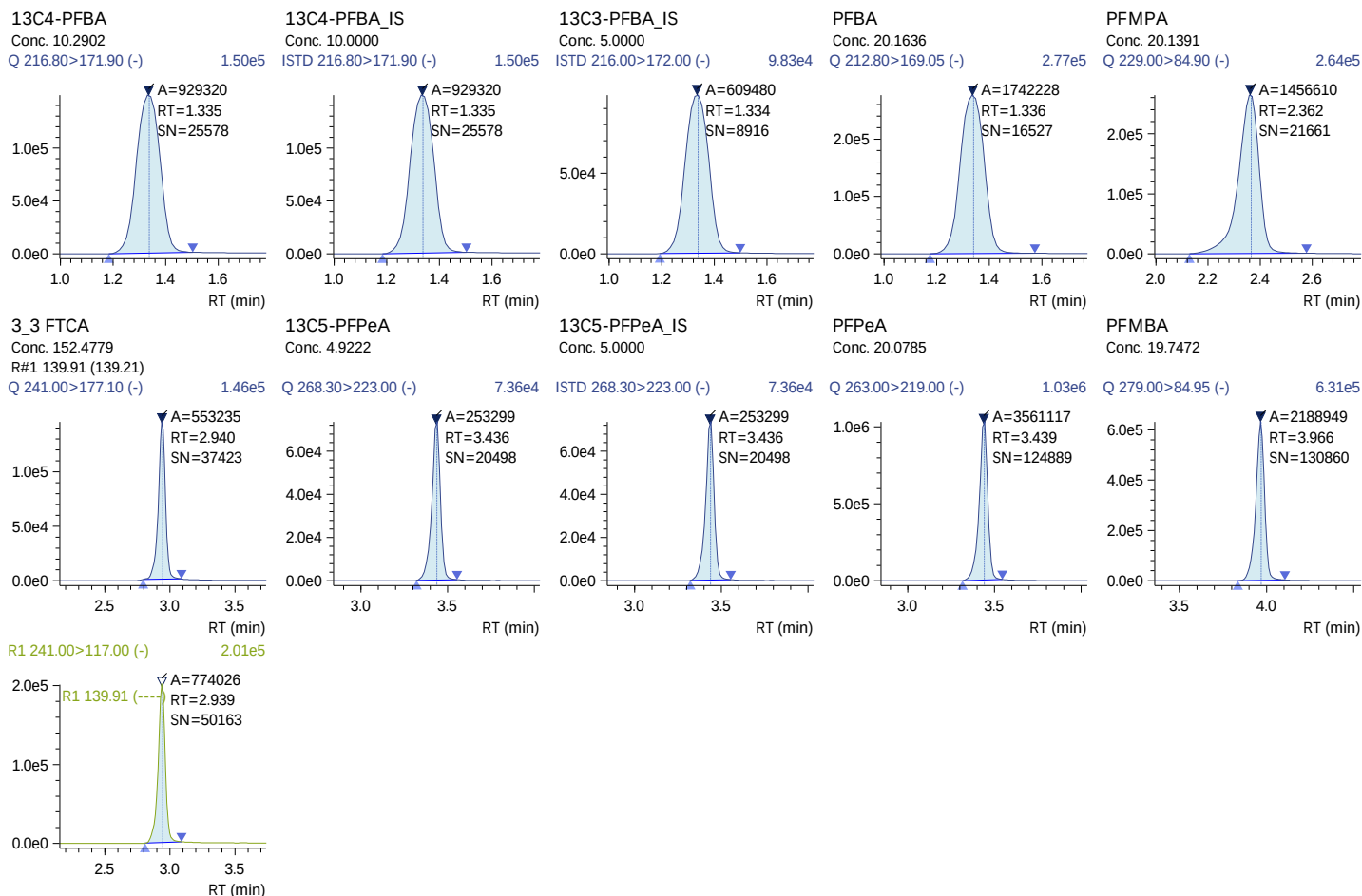
Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C2-PFDA_IS	Auto	8.692	-0.004	----	264157	264157	----	1.2500	ng/mL	
PFDA	Auto	8.694	-0.003	0.002	4348016	259549	13C6-PFDA_IS	19.8078	ng/mL	
D3-NMeFOSAA_IS	Auto	8.831	-0.003	----	768052	768052	----	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.831	-0.003	0.048	768052	386238	13C4-PFOS_IS	4.8840	ng/mL	
13C8-PFOS_IS	Auto	8.782	-0.004	----	129460	129460	----	2.5000	ng/mL	
13C8-PFOS	Auto	8.782	-0.004	-0.001	129460	386238	13C4-PFOS_IS	2.6633	ng/mL	
13C4-PFOS_IS	Auto	8.783	-0.004	----	386238	386238	----	2.5000	ng/mL	
PFOS	M	8.784	-0.004	0.002	1990001	129460	13C8-PFOS_IS	17.9961	ng/mL	
NMeFOSAA	M	8.837	0.185	0.005	2417048	768052	D3-NMeFOSAA_IS	22.2250	ng/mL	
D5-NetFOSAA_IS	Auto	9.160	-0.004	----	614615	614615	----	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.160	-0.004	0.377	614615	386238	13C4-PFOS_IS	4.9592	ng/mL	
NetFOSAA	M	9.170	0.184	0.010	2028765	614615	D5-NetFOSAA_IS	20.1011	ng/mL	
9-CI-PF3ONS	Auto	9.348	-0.003	3.940	11750748	634641	13C3-HFPO-DA_IS	18.8823	ng/mL	
PFUnDA	Auto	9.417	-0.004	0.002	4610220	348508	13C7-PFUnDA_IS	19.4346	ng/mL	
13C7-PFUnDA_IS	Auto	9.415	-0.004	----	348508	348508	----	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.415	-0.004	0.723	348508	264157	13C2-PFDA_IS	1.3250	ng/mL	
PFNS	Auto	9.544	-0.005	0.762	1990009	129460	13C8-PFOS_IS	18.1622	ng/mL	
10_2_FTS	Auto	9.791	-0.004	1.406	2434795	272129	13C2-8_2-FTS_IS	17.7138	ng/mL	
13C2-PFDOA_IS	Auto	10.101	-0.006	----	429899	429899	----	1.2500	ng/mL	
13C2-PFDOA	Auto	10.101	-0.006	1.409	429899	264157	13C2-PFDA_IS	1.3691	ng/mL	
PFDOA	Auto	10.103	-0.005	0.002	4326680	429899	13C2-PFDOA_IS	20.2563	ng/mL	
PFDS	Auto	10.257	-0.006	1.475	1765477	129460	13C8-PFOS_IS	18.3494	ng/mL	
PFTDA	Auto	10.757	-0.007	-0.631	5798907	281463	13C2-PFTDA_IS	20.8782	ng/mL	
11-CI-PF3OUdS	Auto	10.764	-0.007	5.356	8132320	634641	13C3-HFPO-DA_IS	18.3069	ng/mL	
PFOSAm	M	11.149	-0.001	-0.006	4390505	313888	13C8-PFOSAm_IS	39.9768	ng/mL	
13C8-PFOSAm	Auto	11.155	0.000	2.372	313888	386238	13C4-PFOS_IS	2.5583	ng/mL	
13C8-PFOSAm_IS	Auto	11.155	0.000	----	313888	313888	----	2.5000	ng/mL	
PFTDA	Auto	11.389	-0.007	0.001	3972831	281463	13C2-PFTDA_IS	20.3962	ng/mL	
13C2-PFTDA	Auto	11.388	-0.007	2.696	281463	264157	13C2-PFDA_IS	1.2701	ng/mL	
13C2-PFTDA_IS	Auto	11.388	-0.007	----	281463	281463	----	1.2500	ng/mL	
PFDoS	Auto	11.580	-0.006	2.798	1119000	129460	13C8-PFOS_IS	18.6488	ng/mL	
D7-MeFOSE_IS	Auto	13.384	-0.002	----	812046	812046	----	25.0000	ng/mL	
D7-MeFOSE	Auto	13.384	-0.002	4.601	812046	386238	13C4-PFOS_IS	25.7819	ng/mL	
MeFOSE	M	13.421	-0.002	0.037	794445	812046	D7-MeFOSE_IS	20.2152	ng/mL	
13C2-PFHXA_IS	Auto	12.602	-0.007	----	768193	768193	----	2.5000	ng/mL	
13C2-PFHXA	Auto	12.602	-0.007	3.910	768193	264157	13C2-PFDA_IS	2.5901	ng/mL	
PFHXA	Auto	12.604	-0.006	0.002	8506394	768193	13C2-PFHXA_IS	20.4913	ng/mL	
D3-MeFOSA	Auto	13.689	-0.001	4.906	81037	386238	13C4-PFOS_IS	2.5299	ng/mL	
D3-MeFOSA_IS	Auto	13.689	-0.001	----	81037	81037	----	2.5000	ng/mL	
MeFOSA	M	13.696	-0.003	0.007	922196	81037	D3-MeFOSA_IS	19.9417	ng/mL	
D9-EtFOSE_IS	Auto	14.012	-0.001	----	970668	970668	----	25.0000	ng/mL	
D9-EtFOSE	Auto	14.012	-0.001	5.229	962680	386238	13C4-PFOS_IS	24.9767	ng/mL	
EtFOSE	M	14.055	0.000	0.043	947504	970668	D9-EtFOSE_IS	20.3535	ng/mL	
D5-EtFOSAm	Auto	14.365	-0.001	5.582	111581	386238	13C4-PFOS_IS	2.5194	ng/mL	
D5-EtFOSAm_IS	Auto	14.365	-0.001	----	111581	111581	----	2.5000	ng/mL	
EtFOSAm	M	14.383	-0.001	0.018	1244742	111581	D5-EtFOSAm_IS	20.3350	ng/mL	
PFODA	Auto	13.733	-0.007	1.131	3597907	768193	13C2-PFHXA_IS	21.8782	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_026 (continued)





240130_026 (continued)

13C2-4_2 FTS
Conc. 4.6979

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. 19.5328
R#1 31.68 (32.10)
R#2 31.68 (32.10)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 17.9599
R#1 45.88 (44.81)
R#2 45.88 (44.81)

Q 329.10>80.90 (-)

8.19e4

ISTD 329.10>80.90 (-)

8.19e4

Q 327.10>307.00 (-)

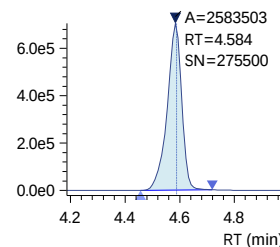
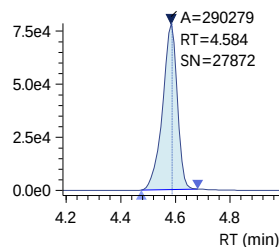
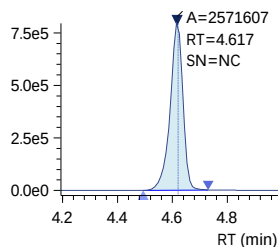
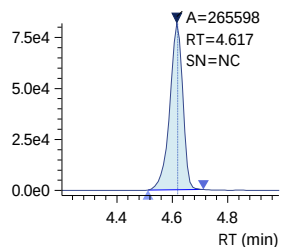
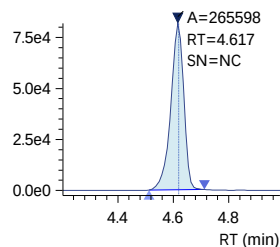
7.95e5

ISTD 302.10>79.90 (-)

7.87e4

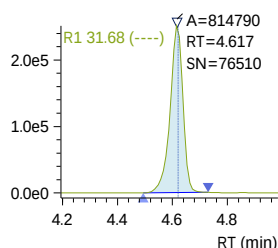
Q 298.70>79.90 (-)

7.05e5



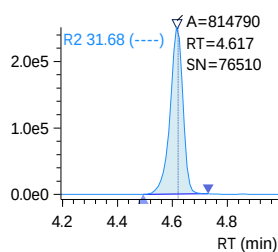
R1 327.10>80.90 (-)

2.51e5



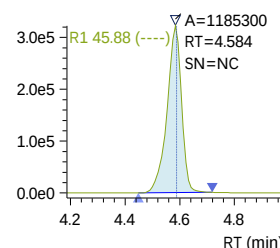
R2 327.10>80.90 (-)

2.51e5



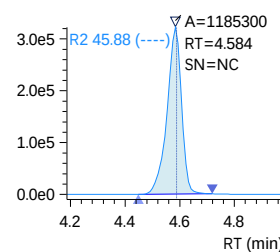
R1 298.70>98.80 (-)

3.22e5



R2 298.70>98.80 (-)

3.22e5





240130_026 (continued)

13C3-PFBS
Conc. 2.5904

NFDHA
Conc. 19.7545
R#1 34.95 (35.54)
R#2 34.95 (35.54)

13C5-PFHxA
Conc. 2.4287

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

Q 302.10>79.90 (-)

7.87e4

Q 295.00>201.00 (-)

6.74e5

Q 318.00>273.00 (-)

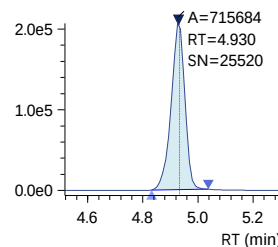
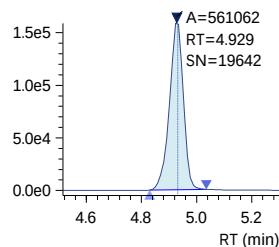
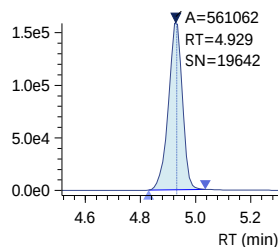
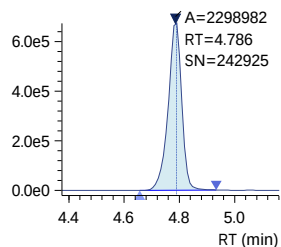
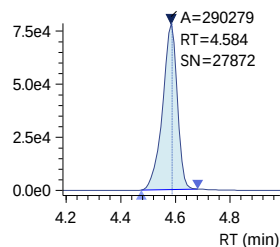
1.59e5

ISTD 318.00>273.00 (-)

1.59e5

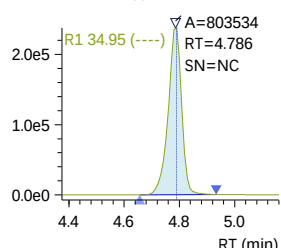
ISTD 315.10>270.00 (-)

2.07e5



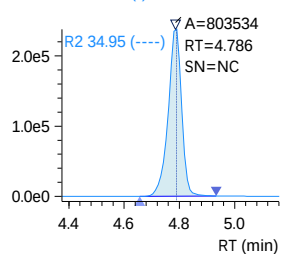
R1 295.00>84.90 (-)

2.38e5



R2 295.00>84.90 (-)

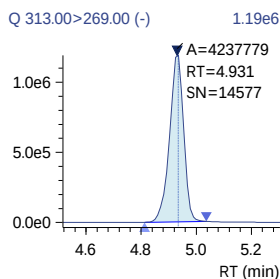
2.38e5





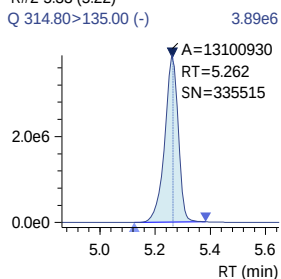
240130_026 (continued)

PFHxA
Conc. 20.2764

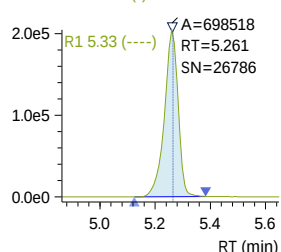


PFEESA
Conc. 18.7944

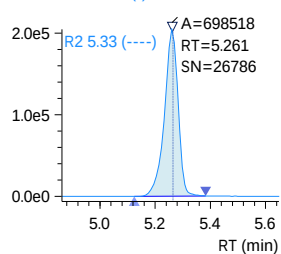
R#1 5.33 (5.22)
R#2 5.33 (5.22)



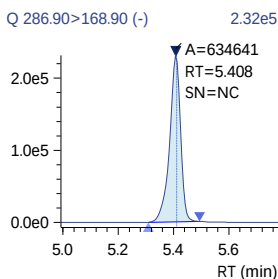
R1 314.80>82.90 (-) 2.05e5



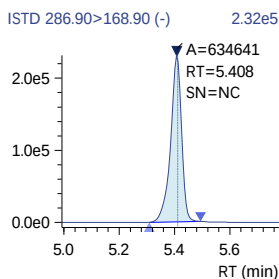
R2 314.80>82.90 (-) 2.05e5



13C3-HFPO-DA
Conc. 10.0062

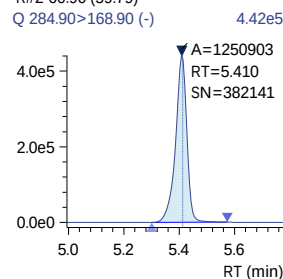


13C3-HFPO-DA_IS
Conc. 10.0000

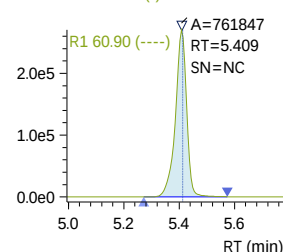


HFPO-DA
Conc. 20.0445

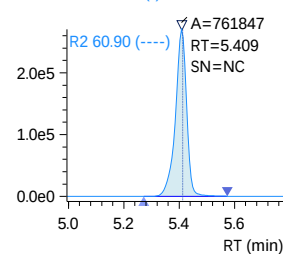
R#1 60.90 (59.79)
R#2 60.90 (59.79)



R1 284.90>184.90 (-) 2.70e5

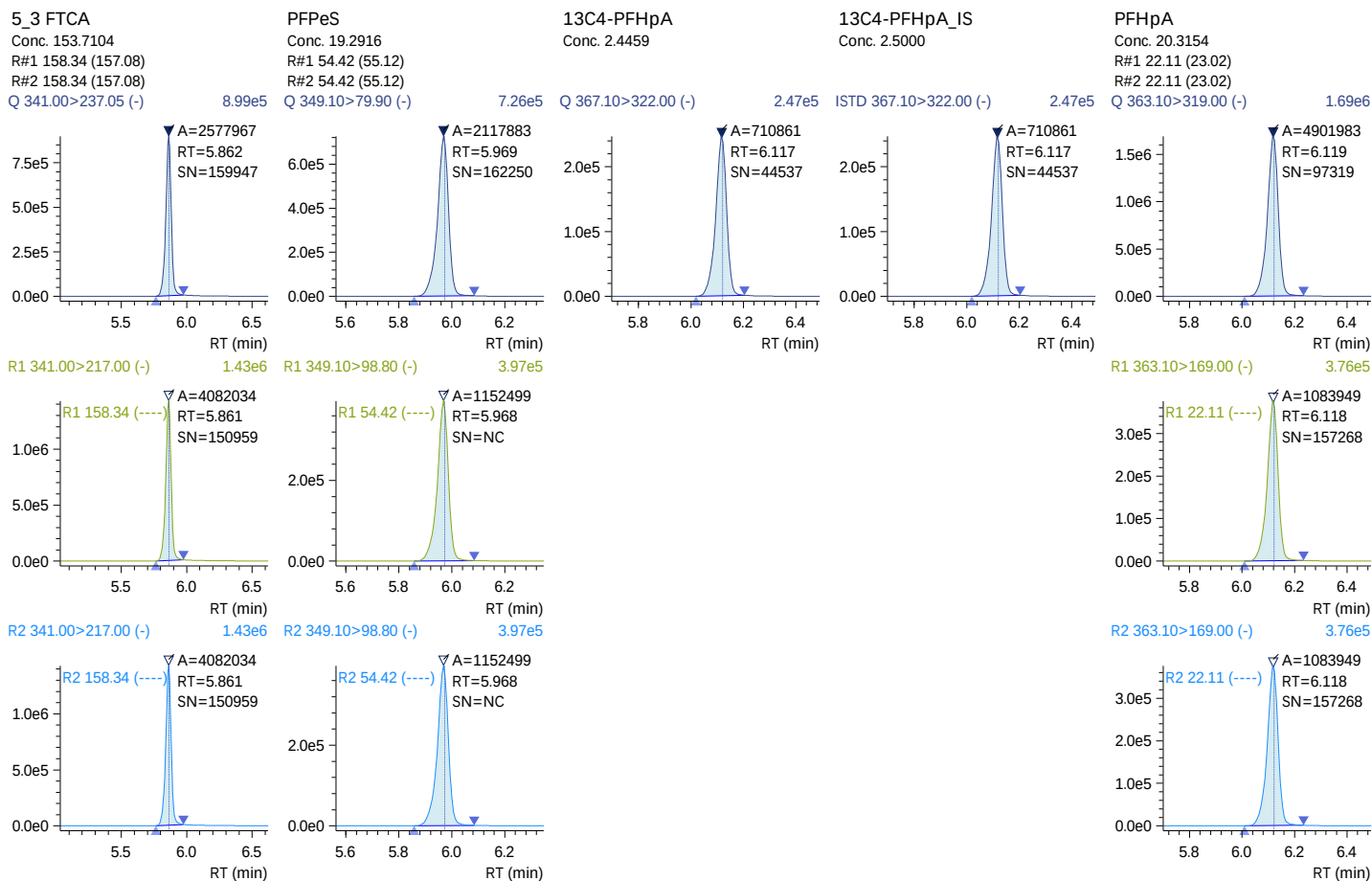


R2 284.90>184.90 (-) 2.70e5



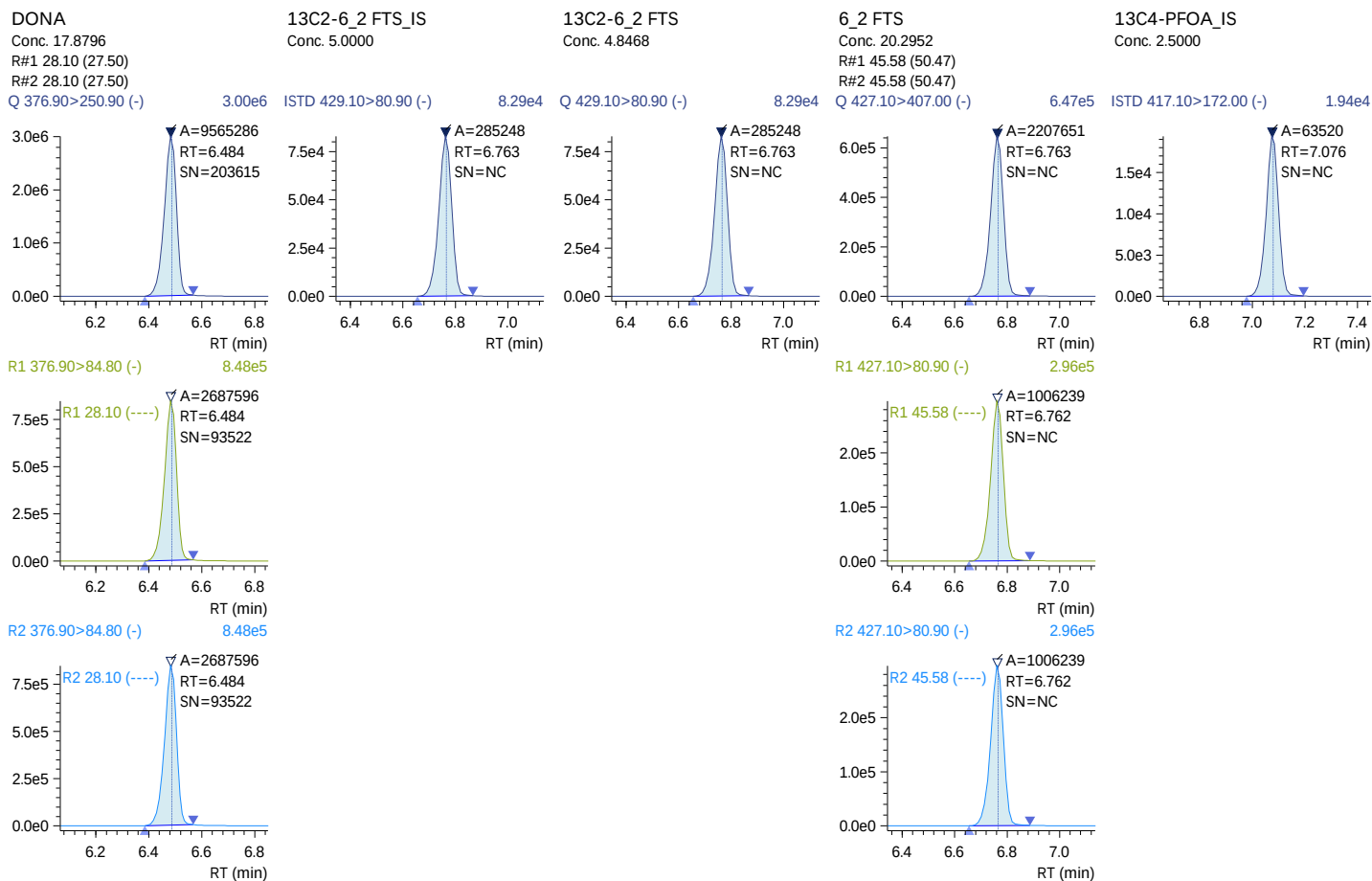


240130_026 (continued)





240130_026 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_026 (continued)

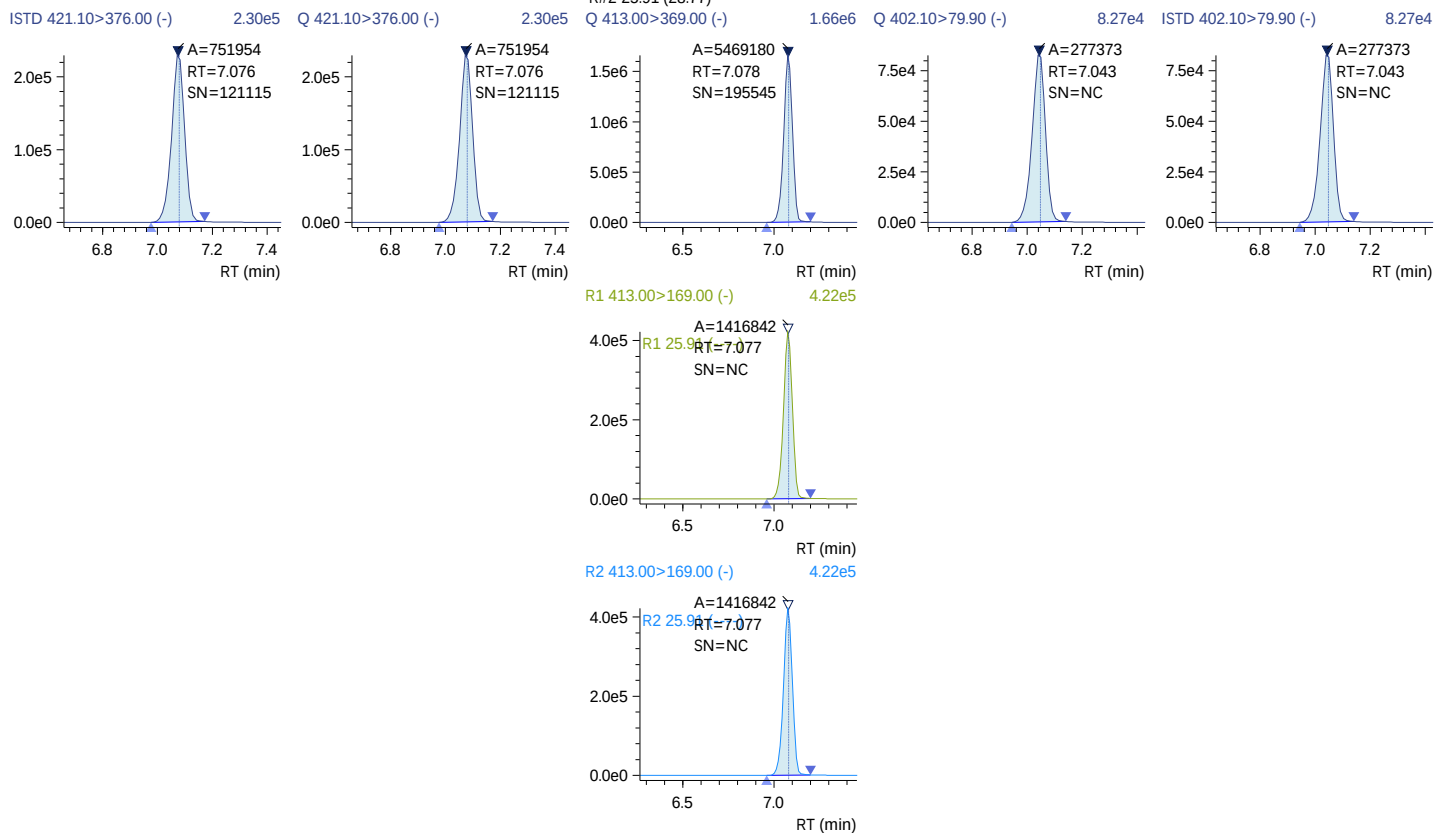
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.4822

PFOA
Conc. 19.9420
R#1 25.91 (28.77)
R#2 25.91 (28.77)

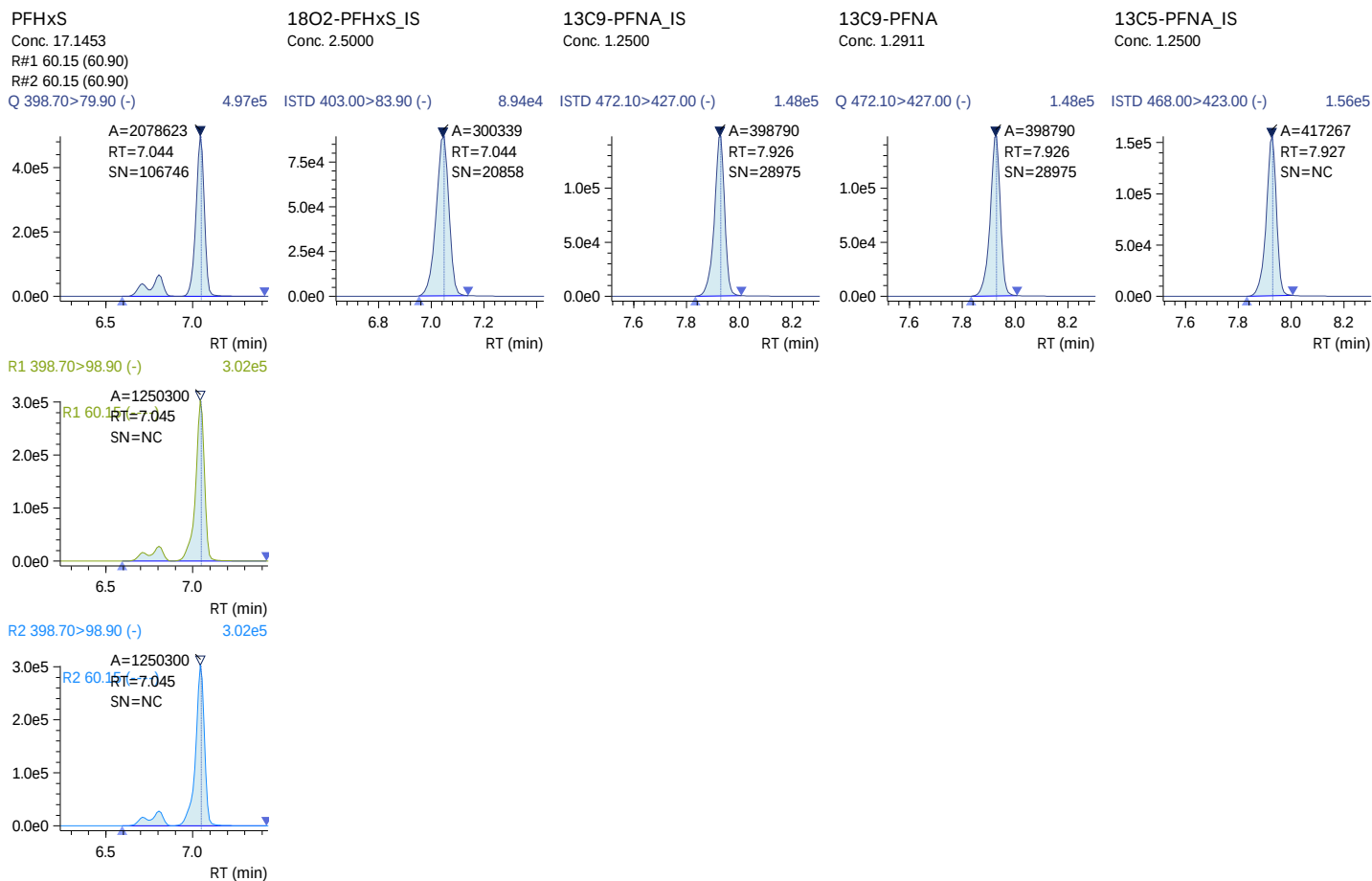
13C3-PFHxS
Conc. 2.6350

13C3-PFHxS_IS
Conc. 2.5000





240130_026 (continued)

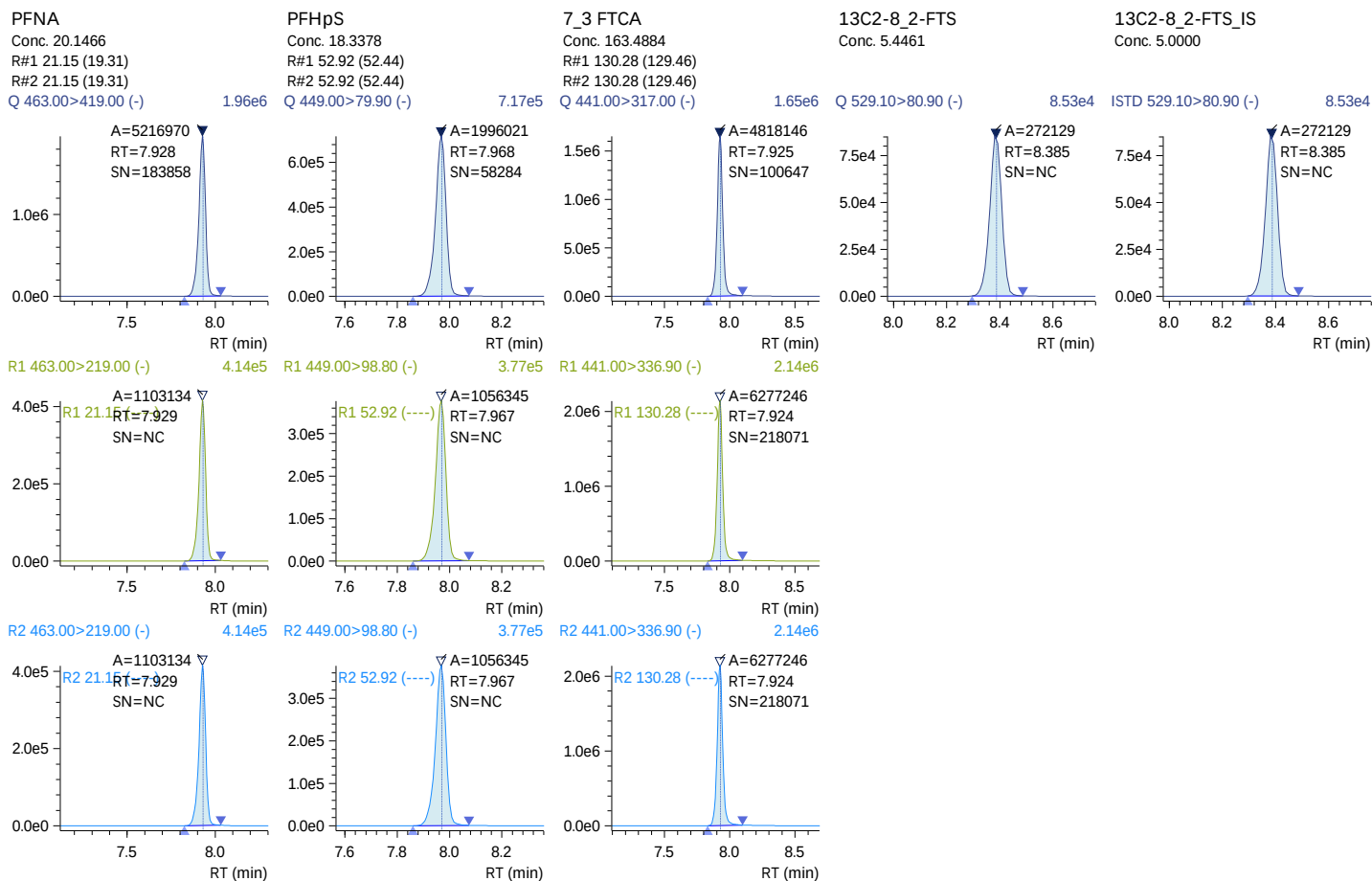


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_026 (continued)

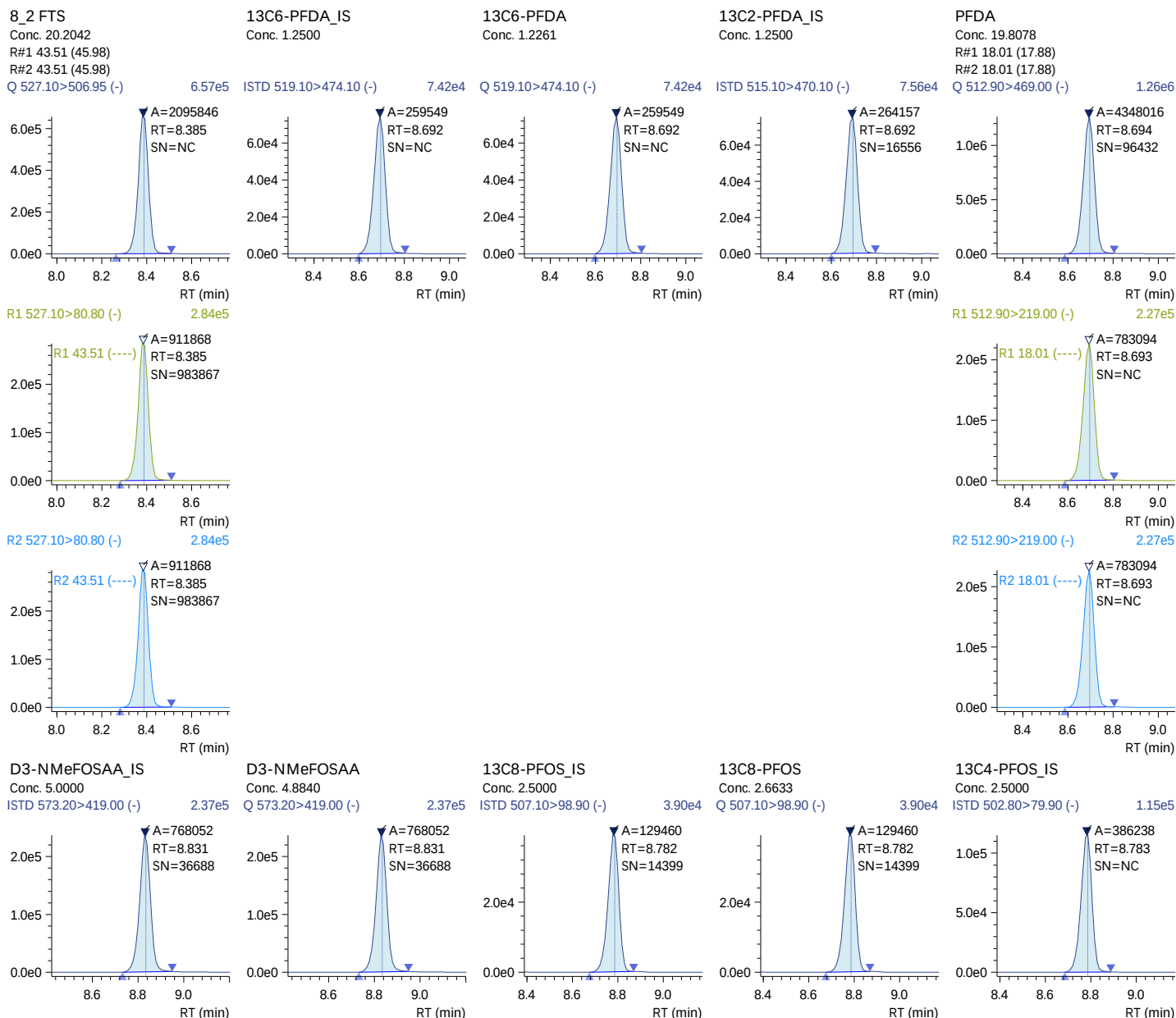


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_026 (continued)

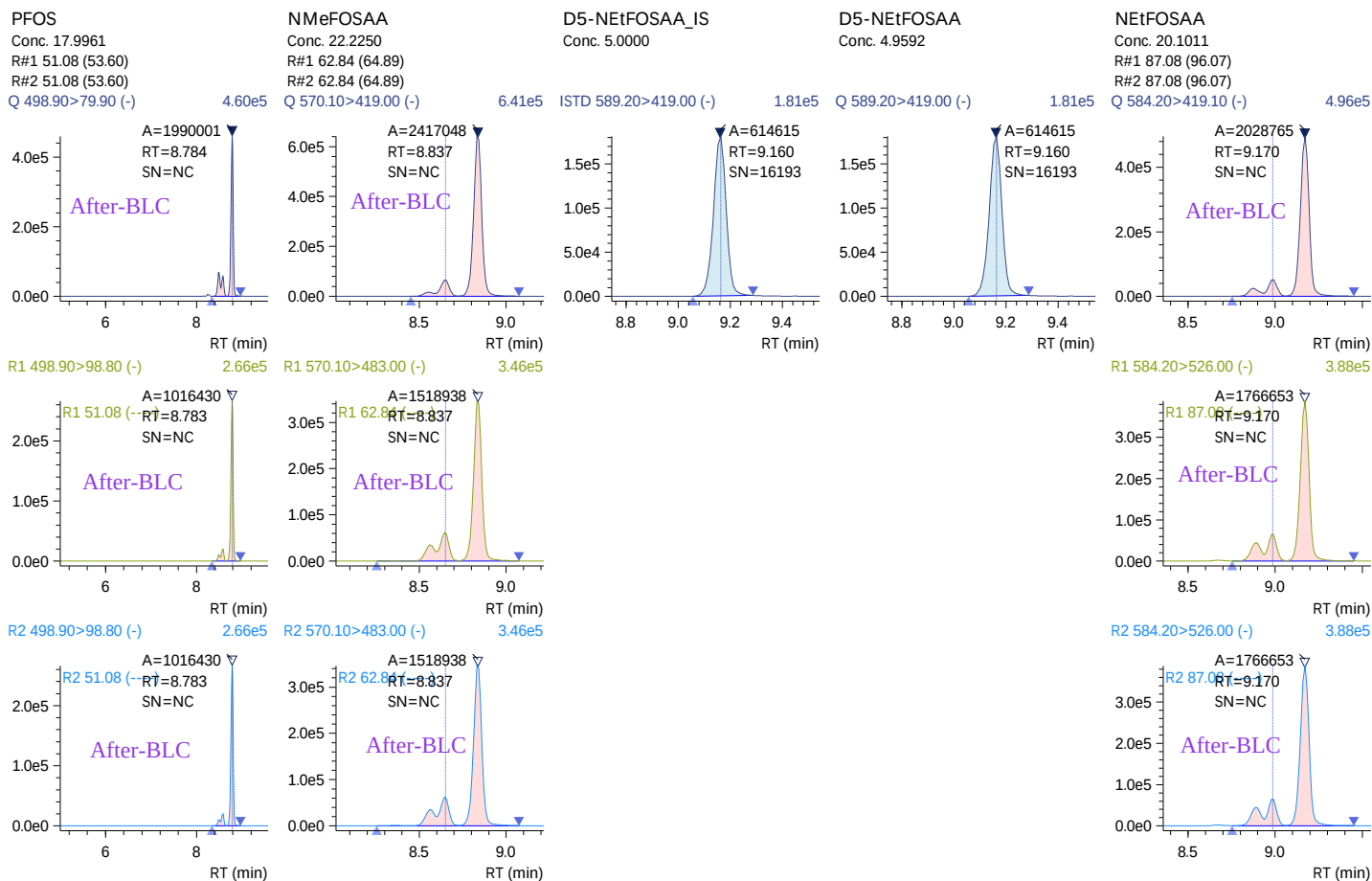


J:\LCMS08\Data\240130_1633_Curve\240130_1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_026 (continued)



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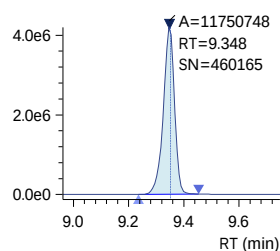
SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



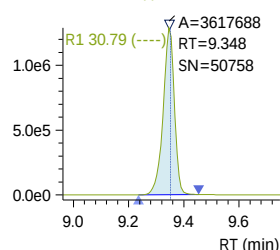
240130_026 (continued)

9-Cl-PF3ONS

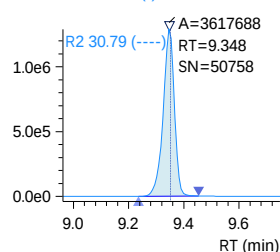
Conc. 18.8823
R#1 30.79 (30.95)
R#2 30.79 (30.95)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-)

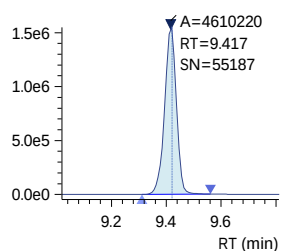


R2 532.80>353.00 (-)

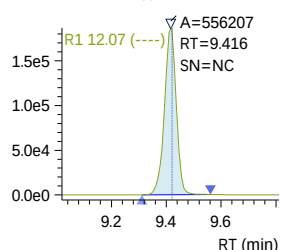


PFUnDA

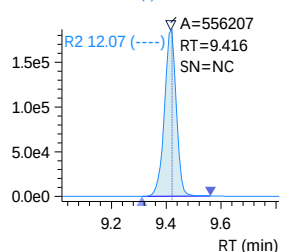
Conc. 19.4346
R#1 12.07 (11.01)
R#2 12.07 (11.01)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-)

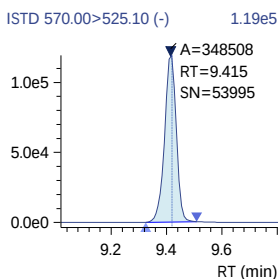


R2 563.10>269.10 (-)



13C7-PFUnDA_IS

Conc. 1.2500



ISTD 570.00>525.10 (-)

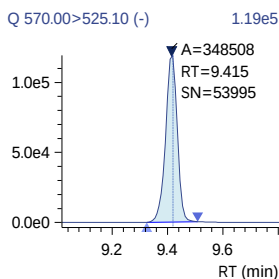


R2 563.10>269.10 (-)



13C7-PFUnDA

Conc. 1.3250



Q 570.00>525.10 (-)

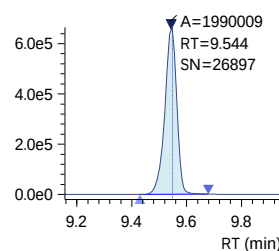


R2 563.10>269.10 (-)

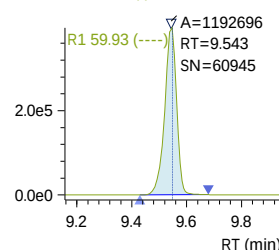


PFNS

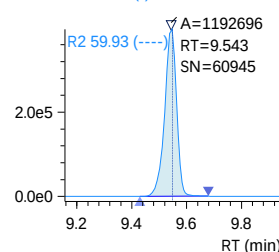
Conc. 18.1622
R#1 59.93 (60.44)
R#2 59.93 (60.44)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-)

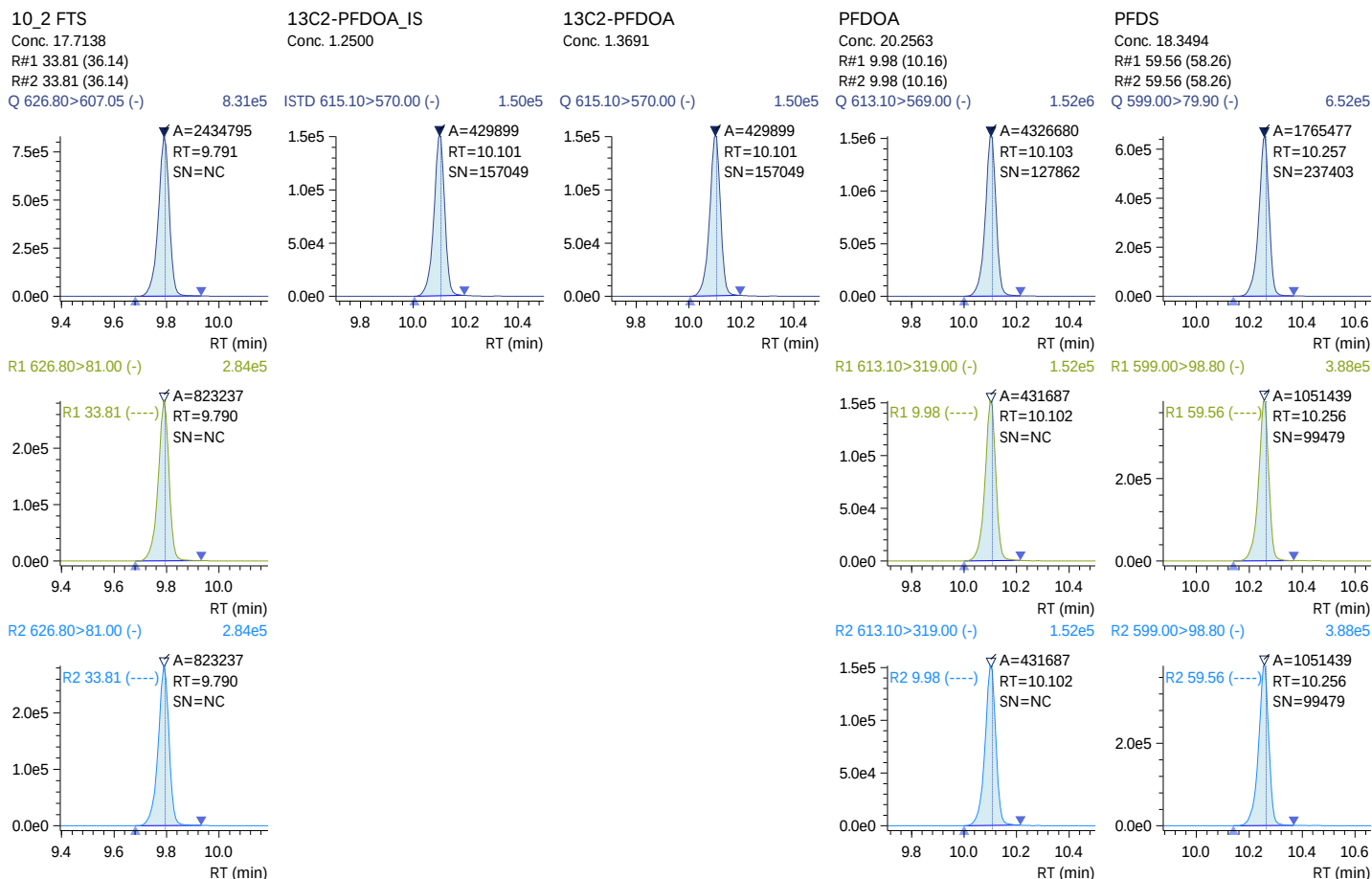


R2 548.80>98.80 (-)





240130_026 (continued)

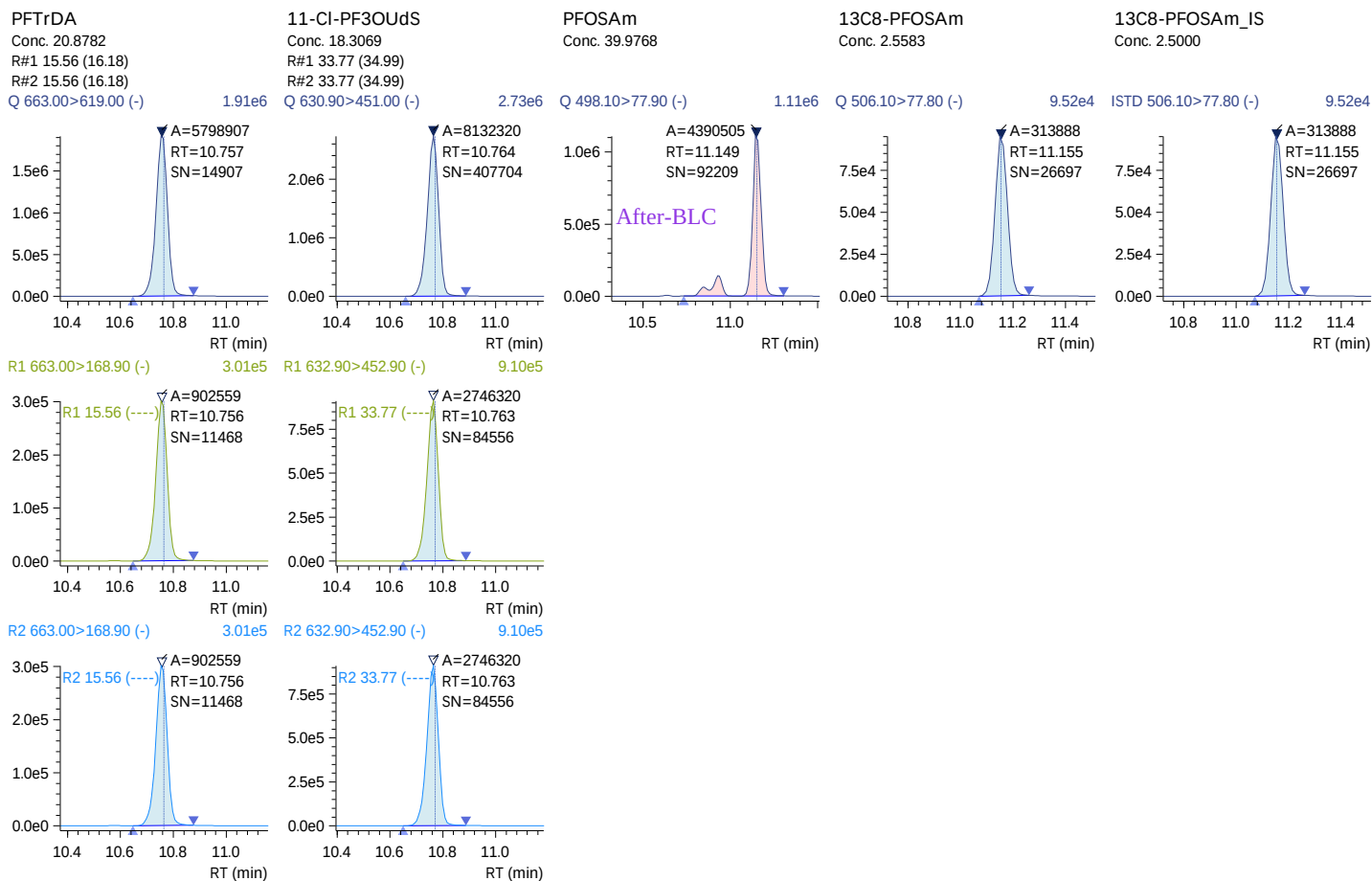


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_026 (continued)

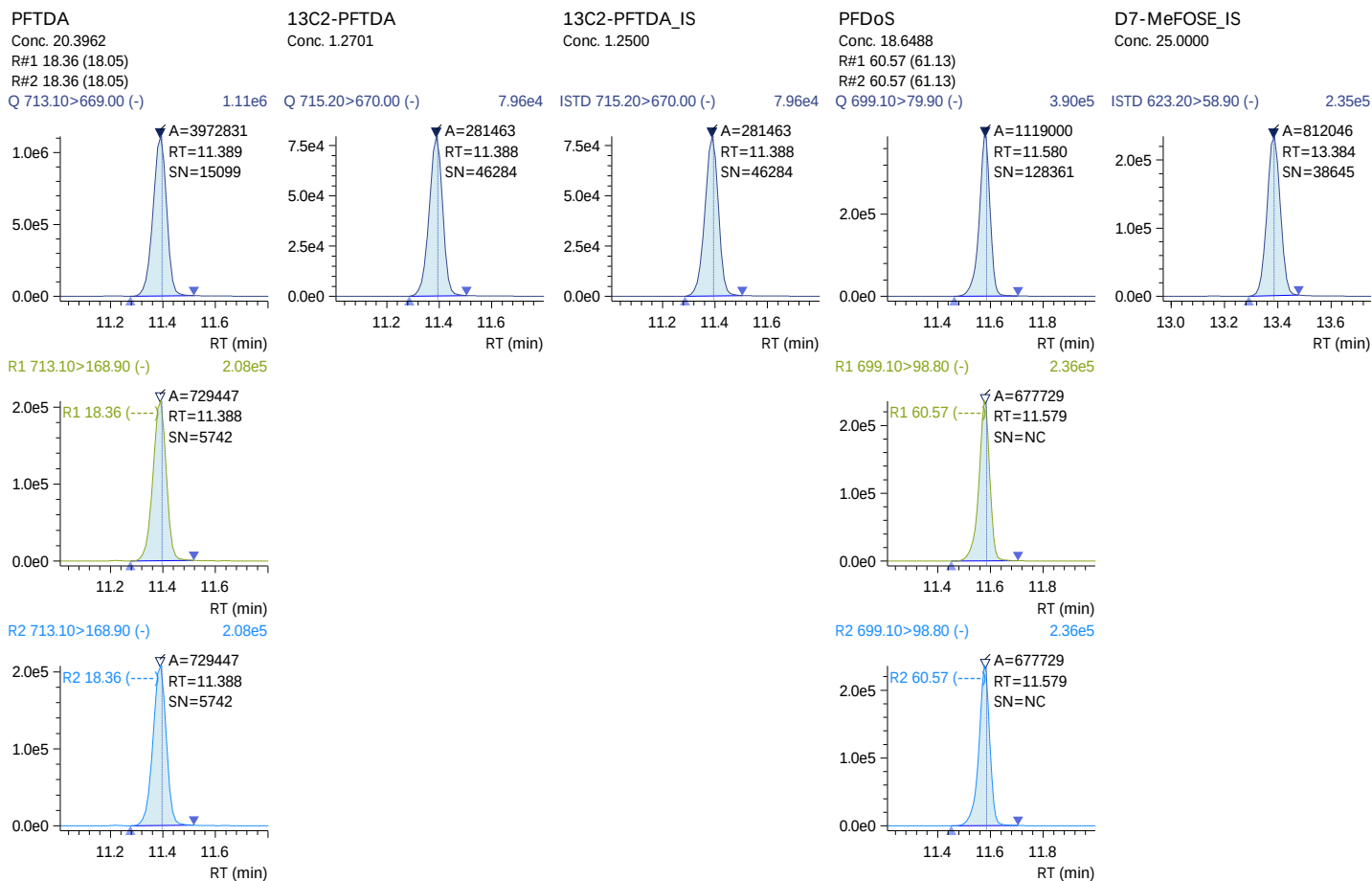


J:\LCMS08\Data\240130_1633_Curve\240130_1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_026 (continued)





240130_026 (continued)

D7-MeFOSE
Conc. 25.7819

MeFOSE
Conc. 20.2152

13C2-PFHXA_IS
Conc. 2.5000

13C2-PFHXA
Conc. 2.5901

PFHXA
Conc. 20.4913
R#1 11.64 (11.66)
R#2 11.64 (11.66)

Q 623.20>58.90 (-)

2.35e5

Q 616.10>59.00 (-)

1.47e5

ISTD 815.00>770.05 (-)

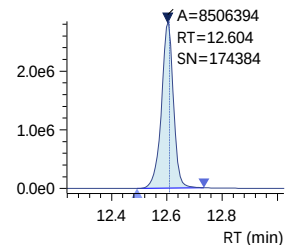
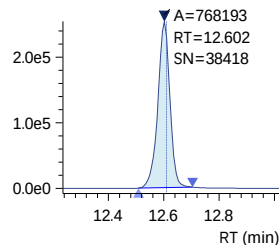
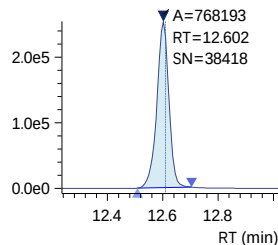
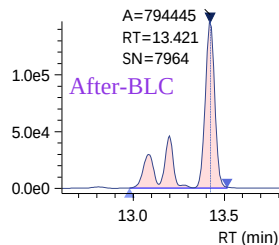
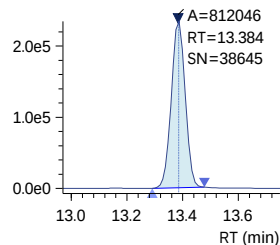
2.54e5

Q 815.00>770.05 (-)

2.54e5

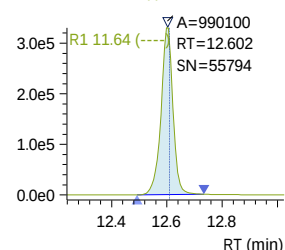
Q 813.00>768.95 (-)

2.85e6



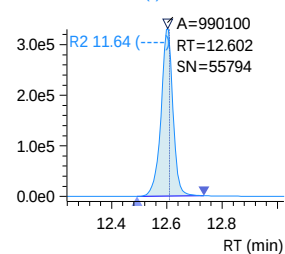
R1 813.00>218.95 (-)

3.30e5



R2 813.00>218.95 (-)

3.30e5





240130_026 (continued)

D3-MeFOSA
Conc. 2.5299

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. 19.9417
R#1 153.63 (160.44)
R#2 153.63 (160.44)

D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 24.9767

Q 515.00>219.00 (-)

2.34e4

ISTD 515.00>219.00 (-)

2.34e4

Q 511.90>219.00 (-)

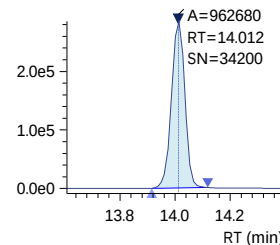
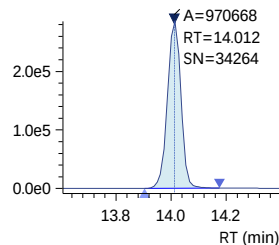
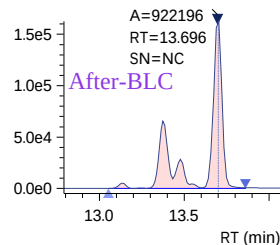
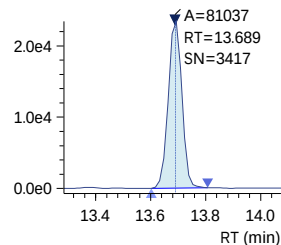
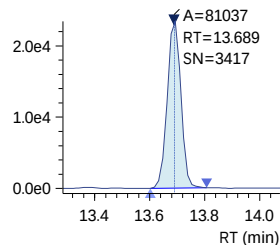
1.63e5

ISTD 639.20>58.90 (-)

2.86e5

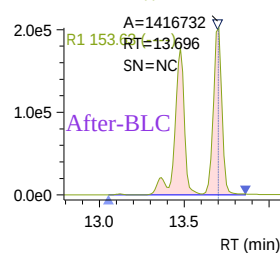
Q 639.20>58.90 (-)

2.86e5



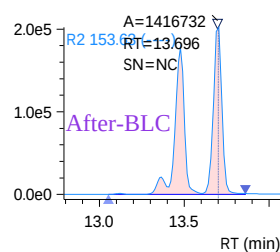
R1 511.90>169.00 (-)

2.02e5



R2 511.90>169.00 (-)

2.02e5





240130_026 (continued)

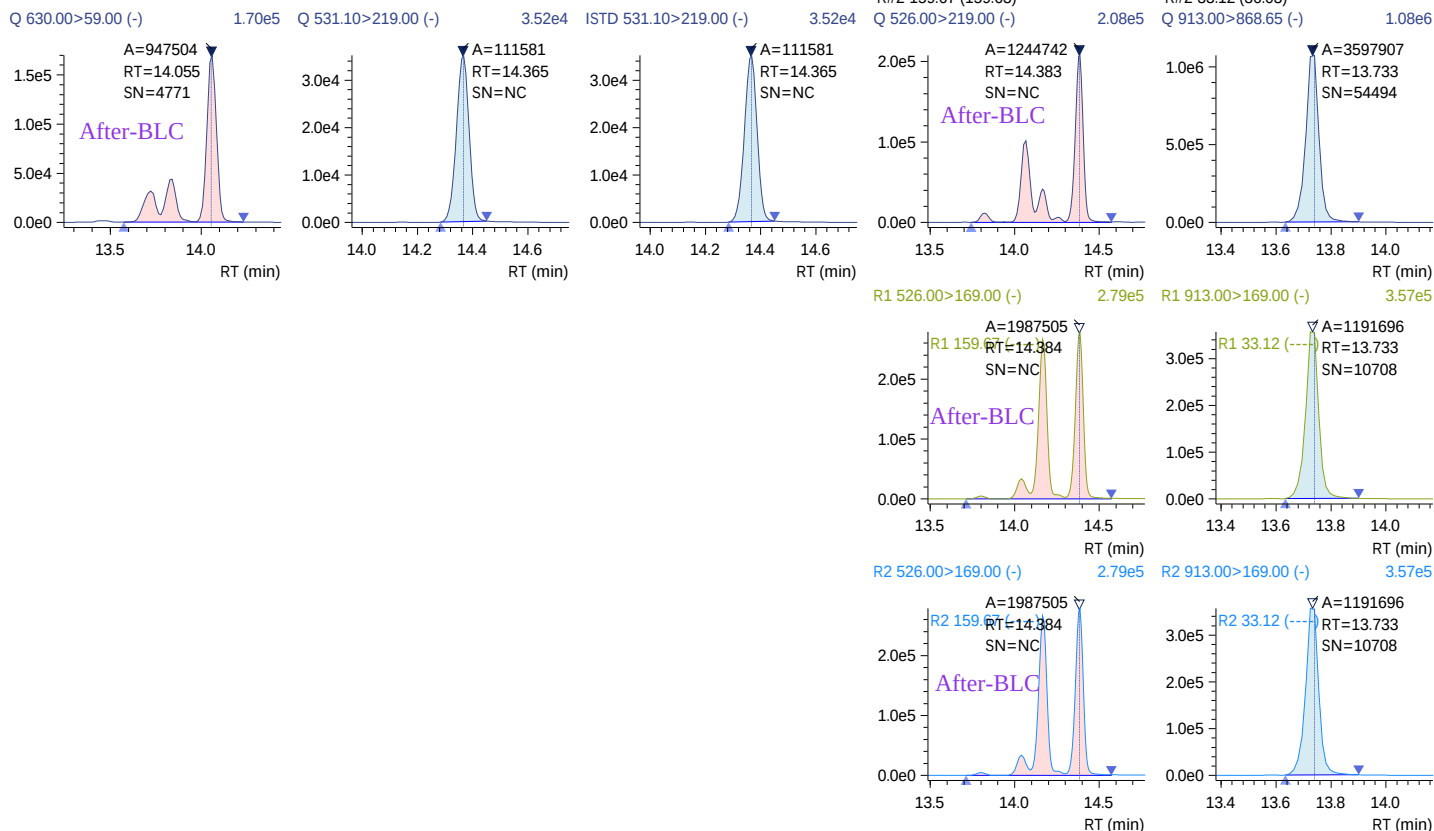
EtFOSE
Conc. 20.3535

D5-EtFOSAm
Conc. 2.5194

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. 20.3350
R#1 159.67 (159.63)
R#2 159.67 (159.63)

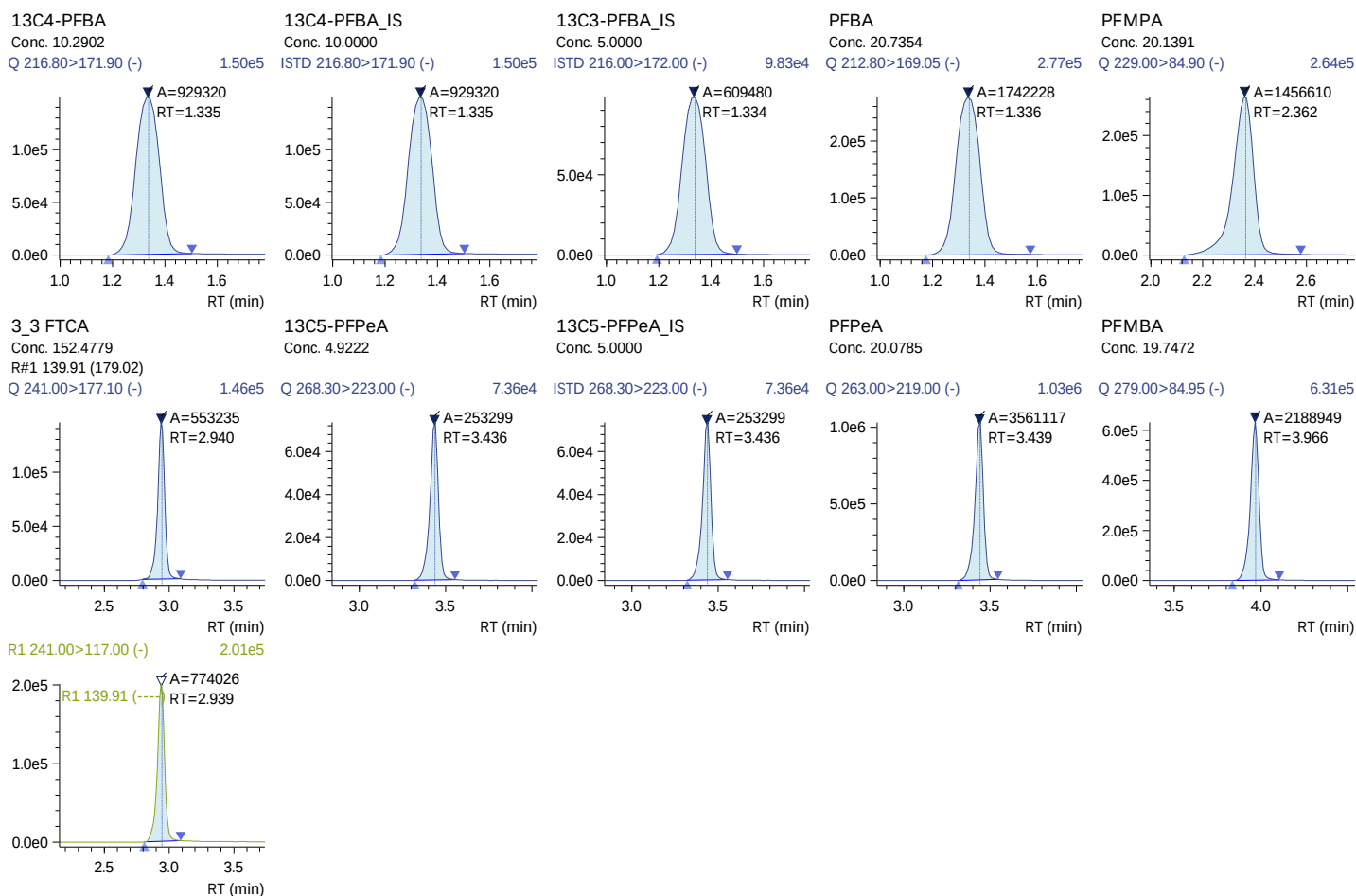
PFODA
Conc. 21.8782
R#1 33.12 (36.03)
R#2 33.12 (36.03)





240130_026

Sample ID: 1633 ICAL 20.0PPB
Date Acquired: 1/31/2024 12:24:56 AM
Acquired by: System Administrator
Data File: 240130_026
Vial: 9 | Inj. Volume: 10.0000uL | Tray: 1





240130_026 (continued)

13C2-4_2_FTS
Conc. 4.6979

13C2-4_2_FTS_IS
Conc. 5.0000

4_2_FTS
Conc. 19.2857
R#1 31.68 (24.69)
R#2 31.68 (0.00)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 17.9599
R#1 45.88 (52.67)
R#2 45.88 (0.00)

Q 329.10>80.90 (-)

8.19e4

ISTD 329.10>80.90 (-)

8.19e4

Q 327.10>307.00 (-)

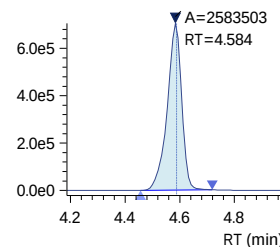
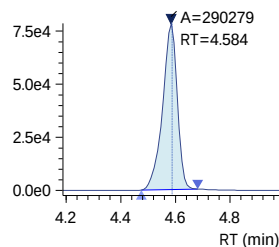
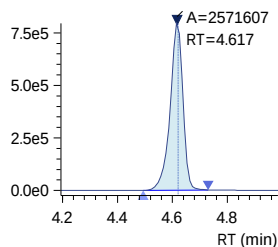
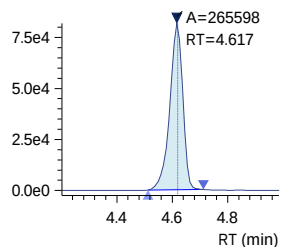
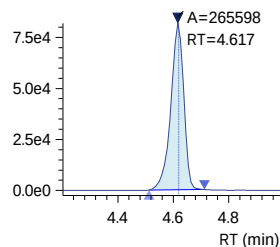
7.95e5

ISTD 302.10>79.90 (-)

7.87e4

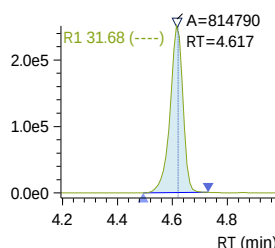
Q 298.70>79.90 (-)

7.05e5



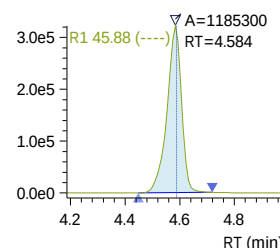
R1 327.10>80.90 (-)

2.51e5



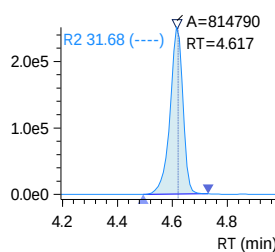
R1 298.70>98.80 (-)

3.22e5



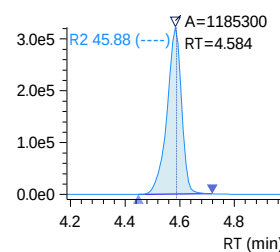
R2 327.10>80.90 (-)

2.51e5



R2 298.70>98.80 (-)

3.22e5





240130_026 (continued)

13C3-PFBS
Conc. 2.5904

NFDHA
Conc. 19.7545
R#1 34.95 (39.38)
R#2 34.95 (0.00)

13C5-PFHxA
Conc. 2.4287

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

Q 302.10>79.90 (-)

7.87e4

Q 295.00>201.00 (-)

6.74e5

Q 318.00>273.00 (-)

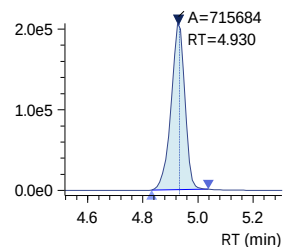
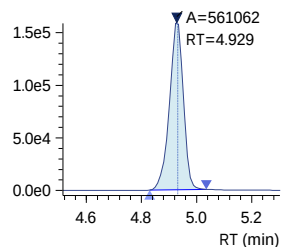
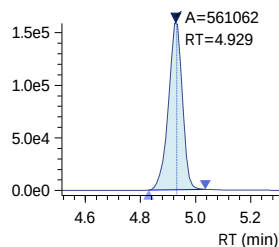
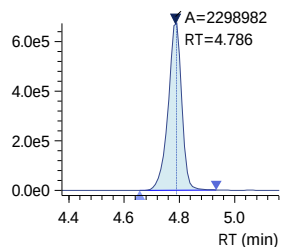
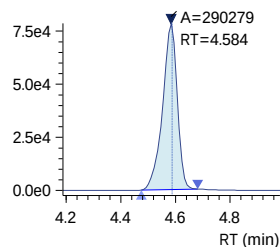
1.59e5

ISTD 318.00>273.00 (-)

1.59e5

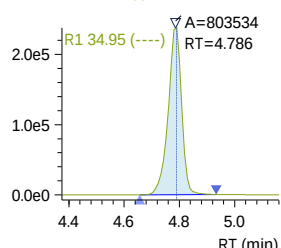
ISTD 315.10>270.00 (-)

2.07e5



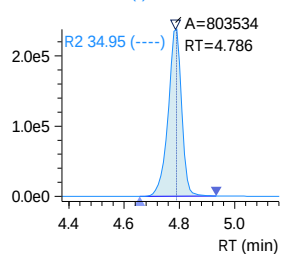
R1 295.00>84.90 (-)

2.38e5



R2 295.00>84.90 (-)

2.38e5

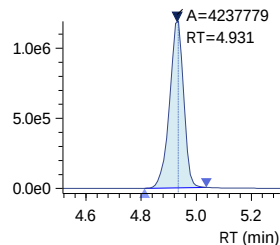




240130_026 (continued)

PFHxA
Conc. 20.1536

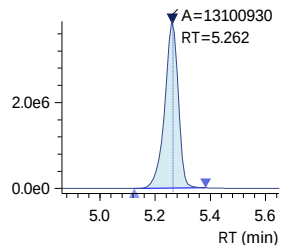
Q 313.00>269.00 (-) 1.19e6



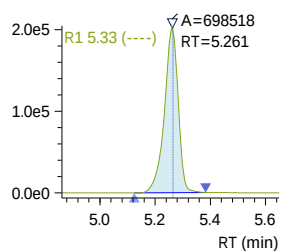
PFEESA
Conc. 18.7944

R#1 5.33 (5.25)
R#2 5.33 (0.00)

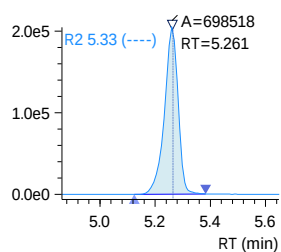
Q 314.80>135.00 (-) 3.89e6



R1 314.80>82.90 (-) 2.05e5

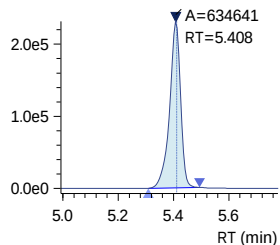


R2 314.80>82.90 (-) 2.05e5



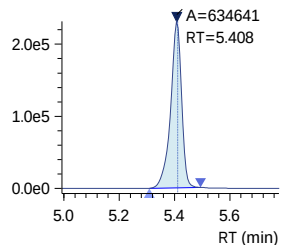
13C3-HFPO-DA
Conc. 10.0062

Q 286.90>168.90 (-) 2.32e5



13C3-HFPO-DA_IS
Conc. 10.0000

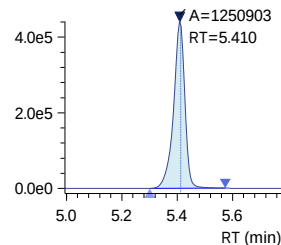
ISTD 286.90>168.90 (-) 2.32e5



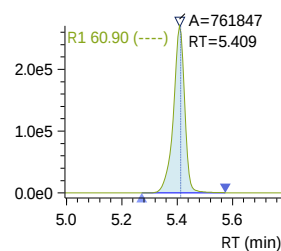
HFPO-DA
Conc. 19.6842

R#1 60.90 (69.48)
R#2 60.90 (0.00)

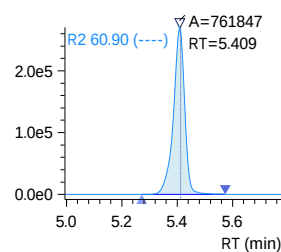
Q 284.90>168.90 (-) 4.42e5



R1 284.90>184.90 (-) 2.70e5

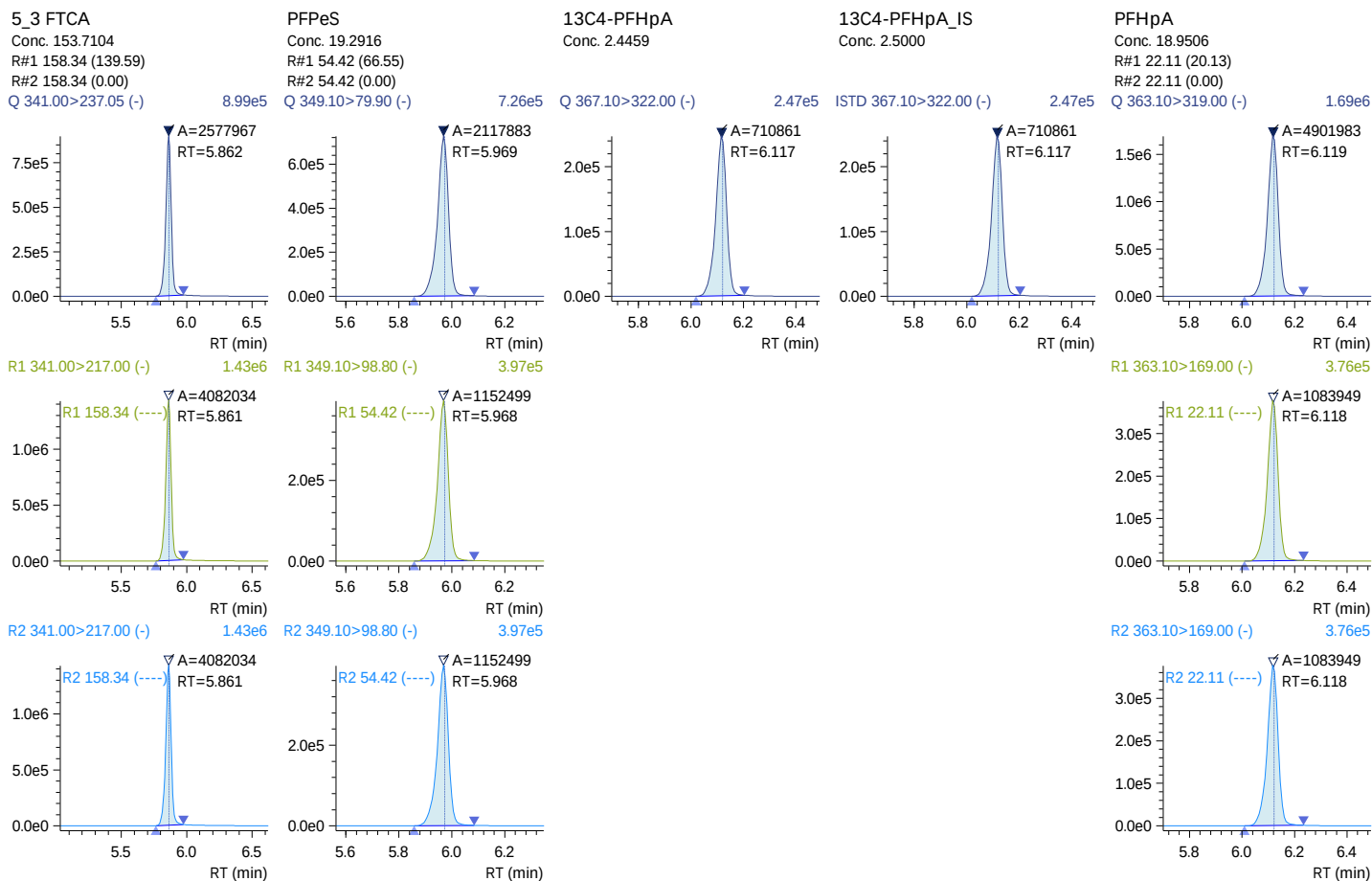


R2 284.90>184.90 (-) 2.70e5



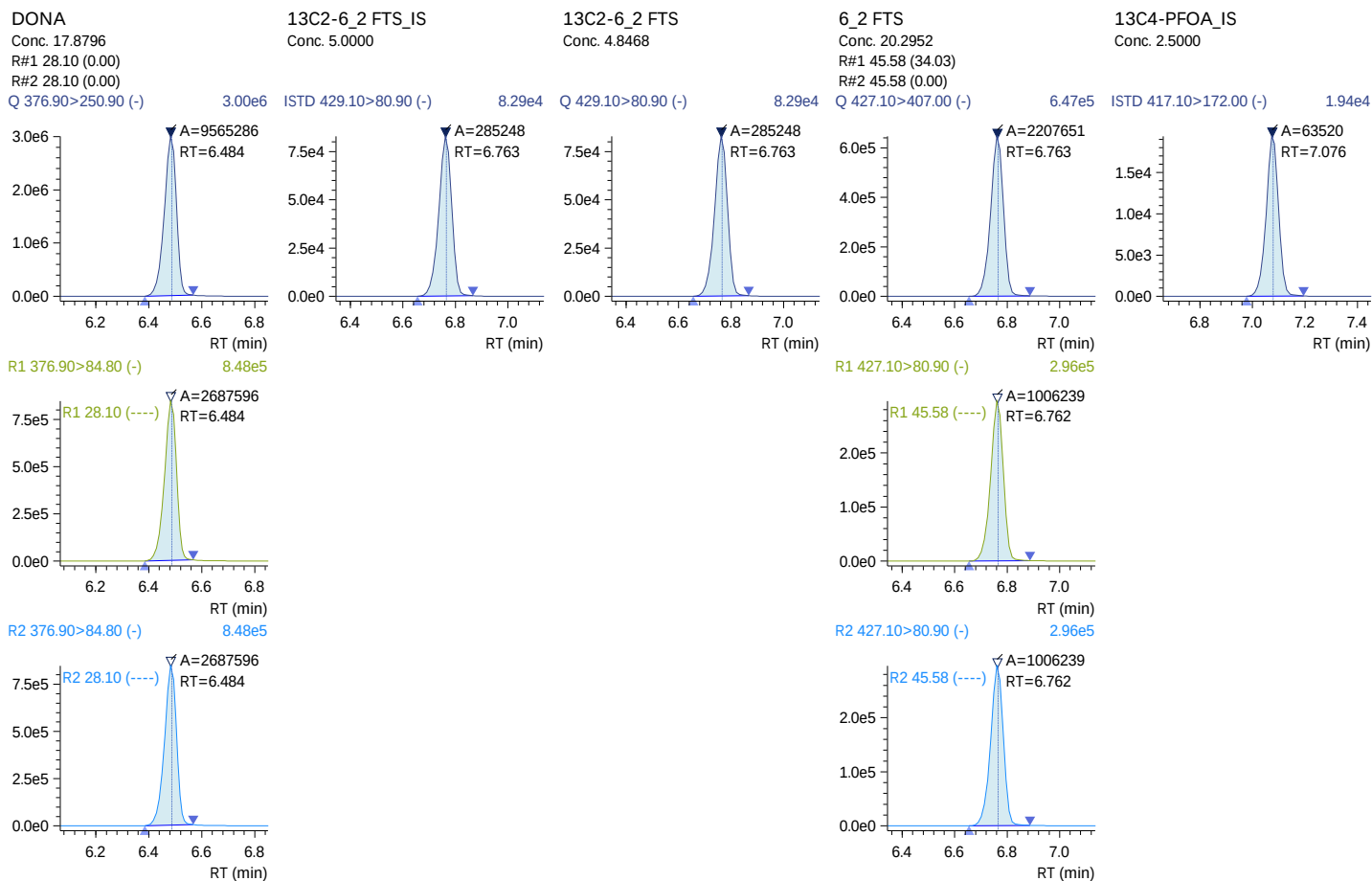


240130_026 (continued)





240130_026 (continued)





240130_026 (continued)

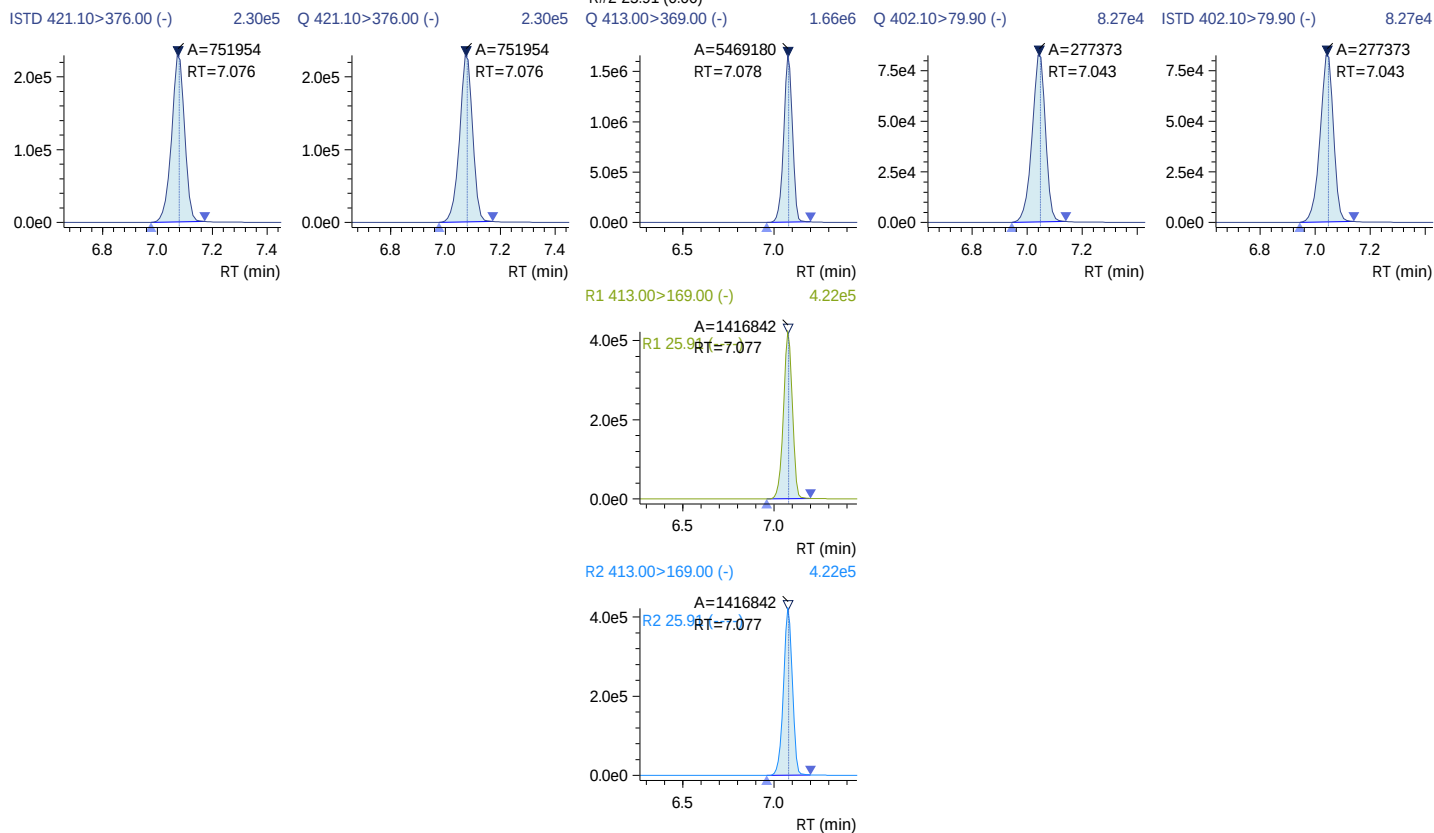
13C8-PFOA_IS
 Conc. 2.5000

13C8-PFOA
 Conc. 2.4822

PFOA
 Conc. 19.9617
 R#1 25.91 (22.46)
 R#2 25.91 (0.00)

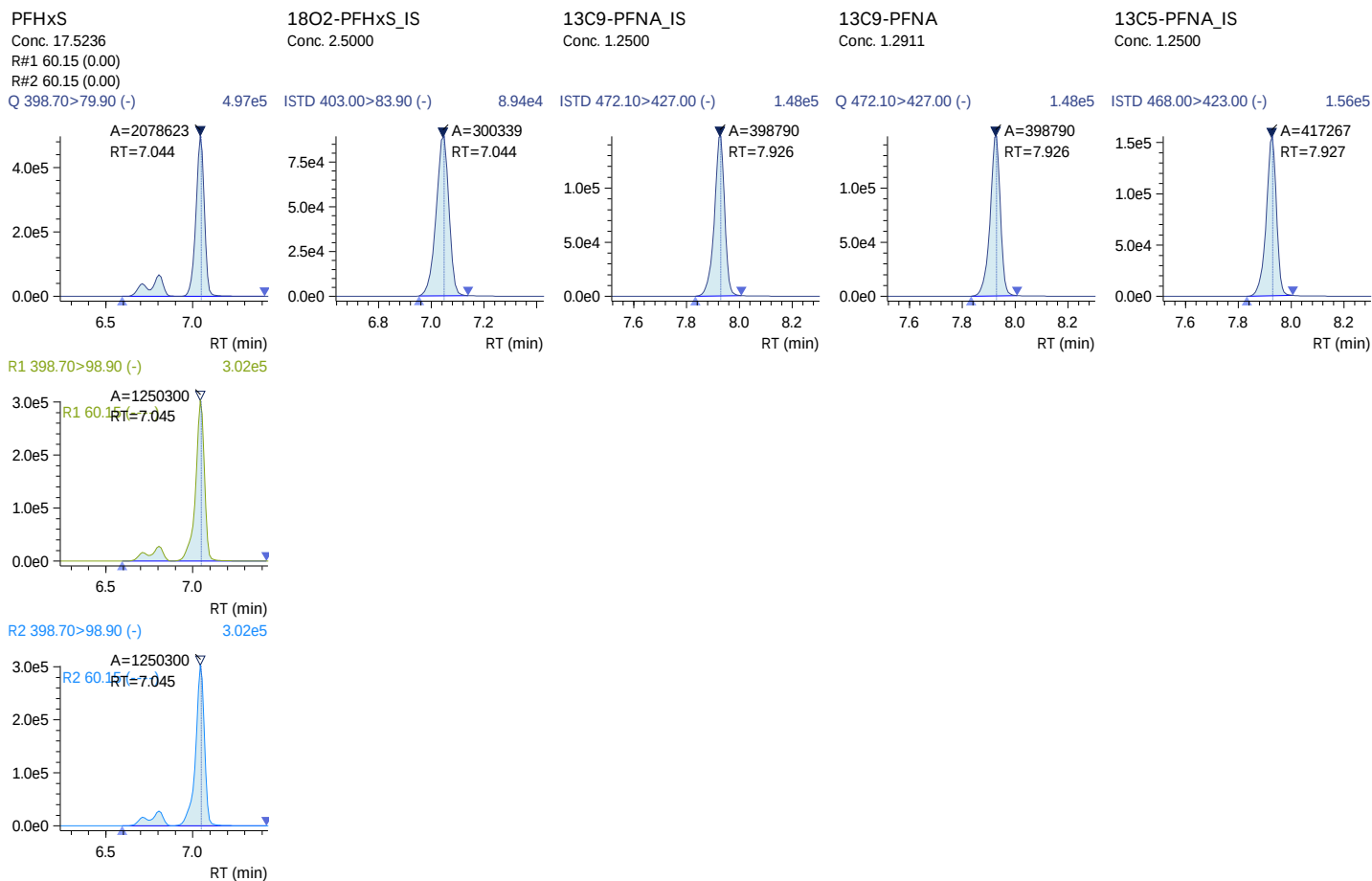
13C3-PFHxS
 Conc. 2.6350

13C3-PFHxS_IS
 Conc. 2.5000



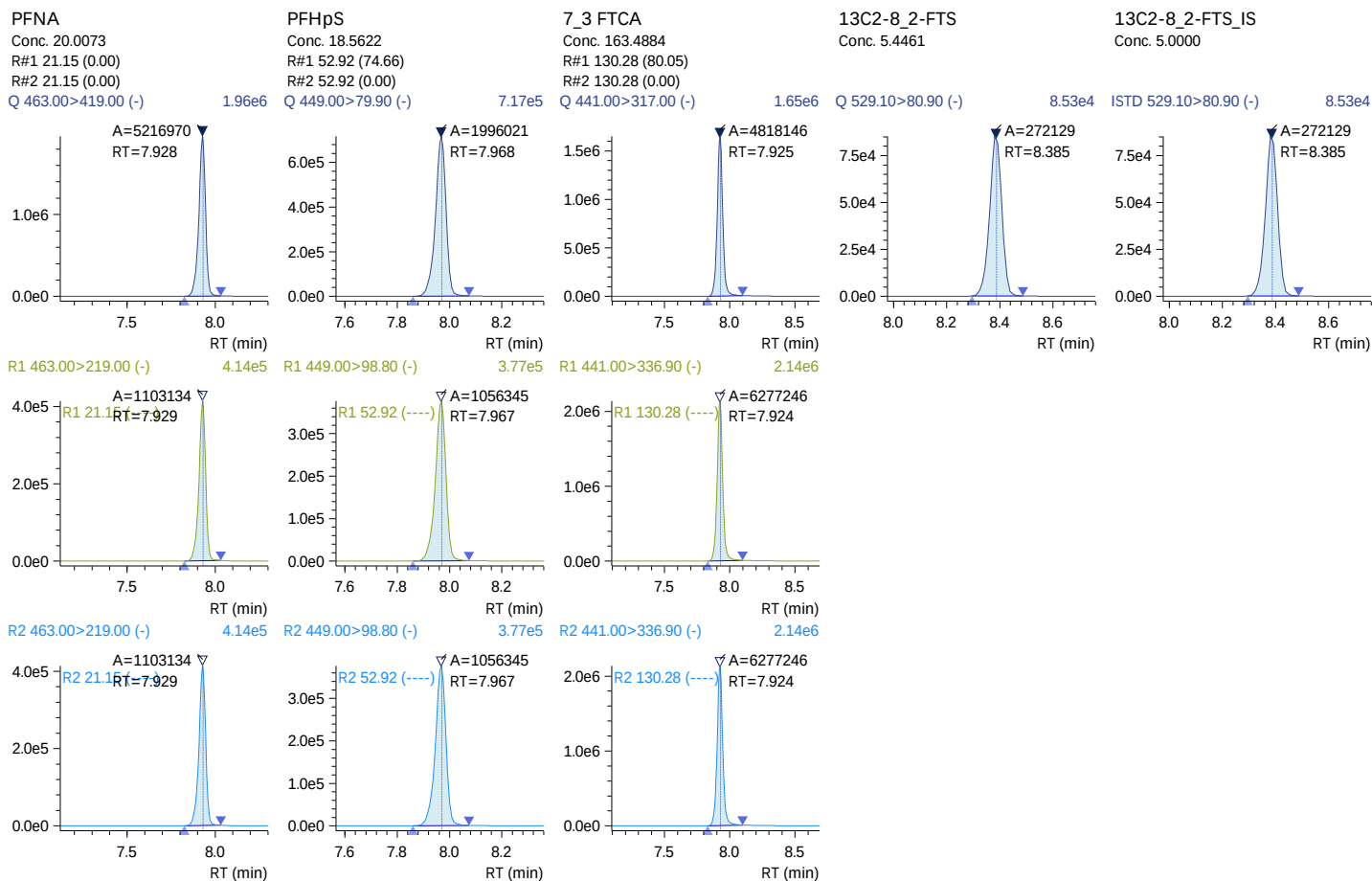


240130_026 (continued)



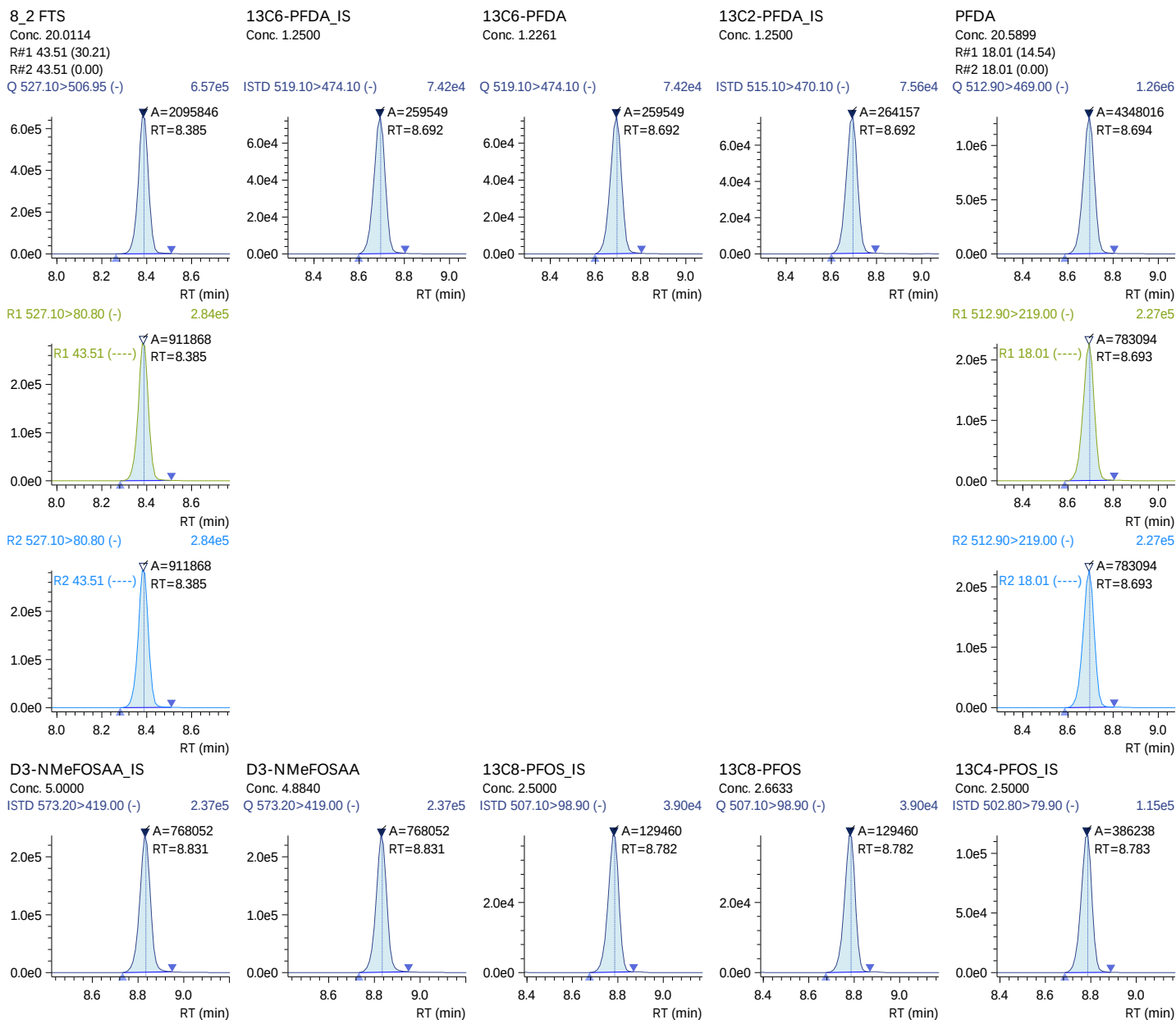


240130_026 (continued)



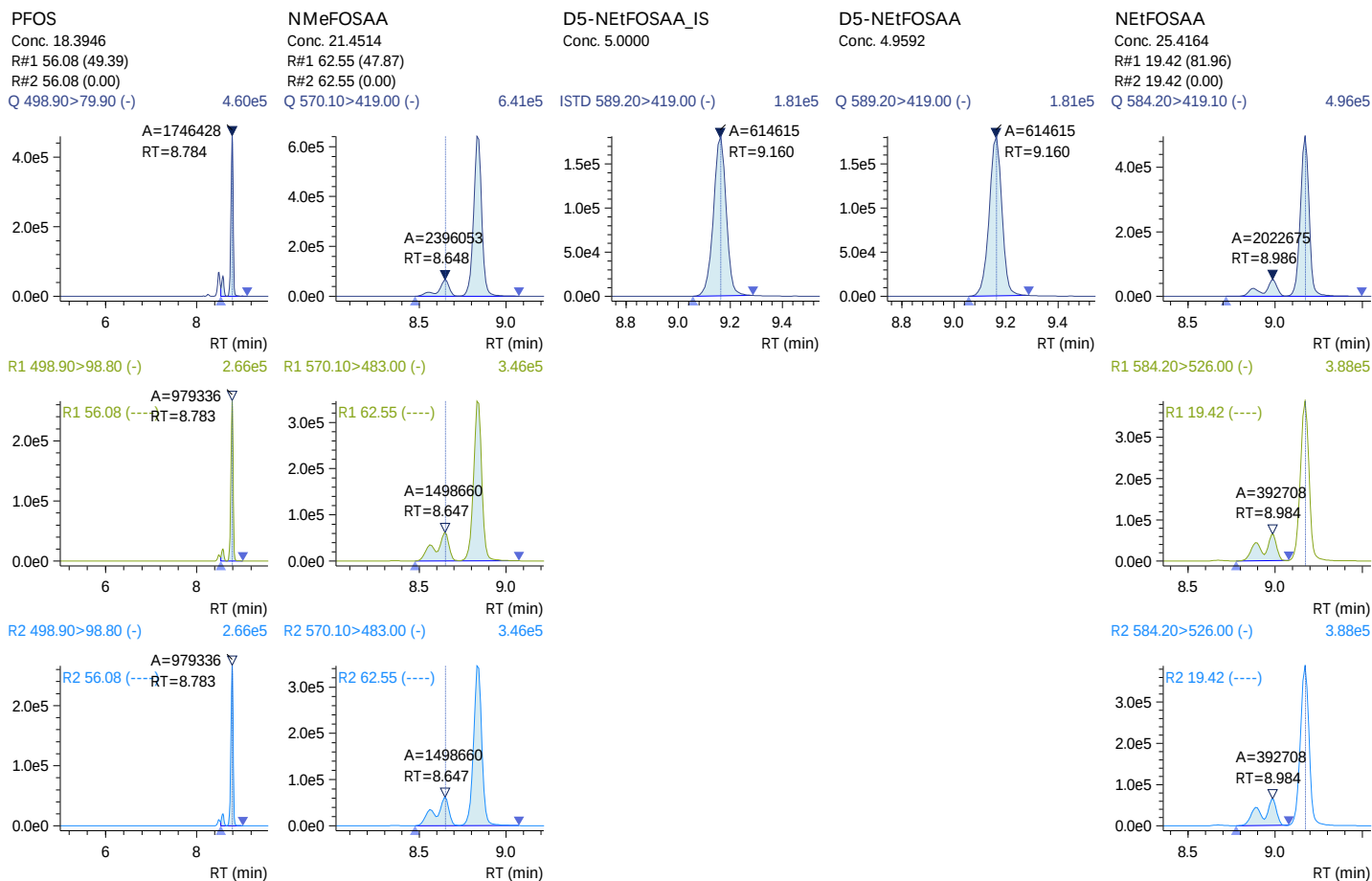


240130_026 (continued)





240130_026 (continued)





240130_026 (continued)

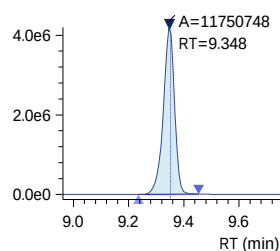
9-Cl-PF3ONS

Conc. 18.8823

R#1 30.79 (31.39)

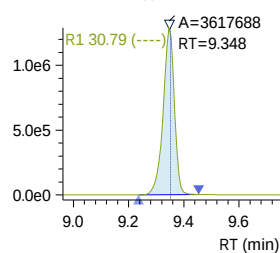
R#2 30.79 (0.00)

Q 530.80>351.00 (-)



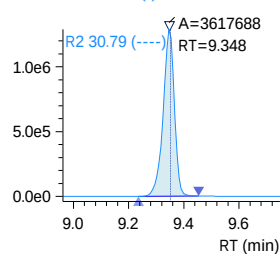
R1 532.80>353.00 (-)

1.29e6



R2 532.80>353.00 (-)

1.29e6



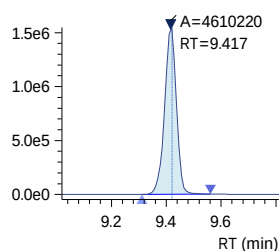
PFUnDA

Conc. 19.4327

R#1 12.07 (12.59)

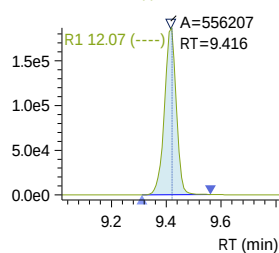
R#2 12.07 (0.00)

Q 563.10>519.00 (-)



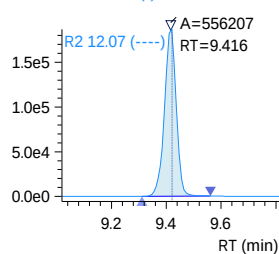
R1 563.10>269.10 (-)

1.87e5



R2 563.10>269.10 (-)

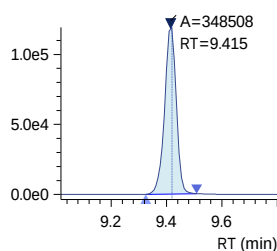
1.87e5



13C7-PFUnDA_IS

Conc. 1.2500

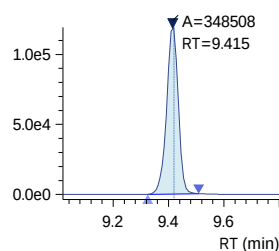
ISTD 570.00>525.10 (-)



13C7-PFUnDA

Conc. 1.3250

Q 570.00>525.10 (-)



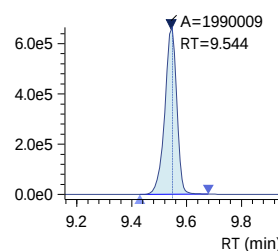
PFNS

Conc. 18.1622

R#1 59.93 (82.65)

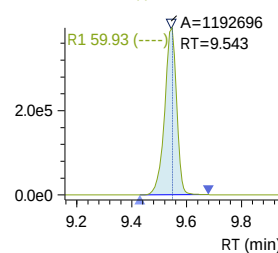
R#2 59.93 (0.00)

Q 548.80>79.90 (-)



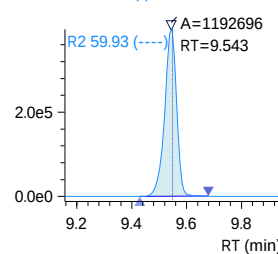
R1 548.80>98.80 (-)

3.97e5



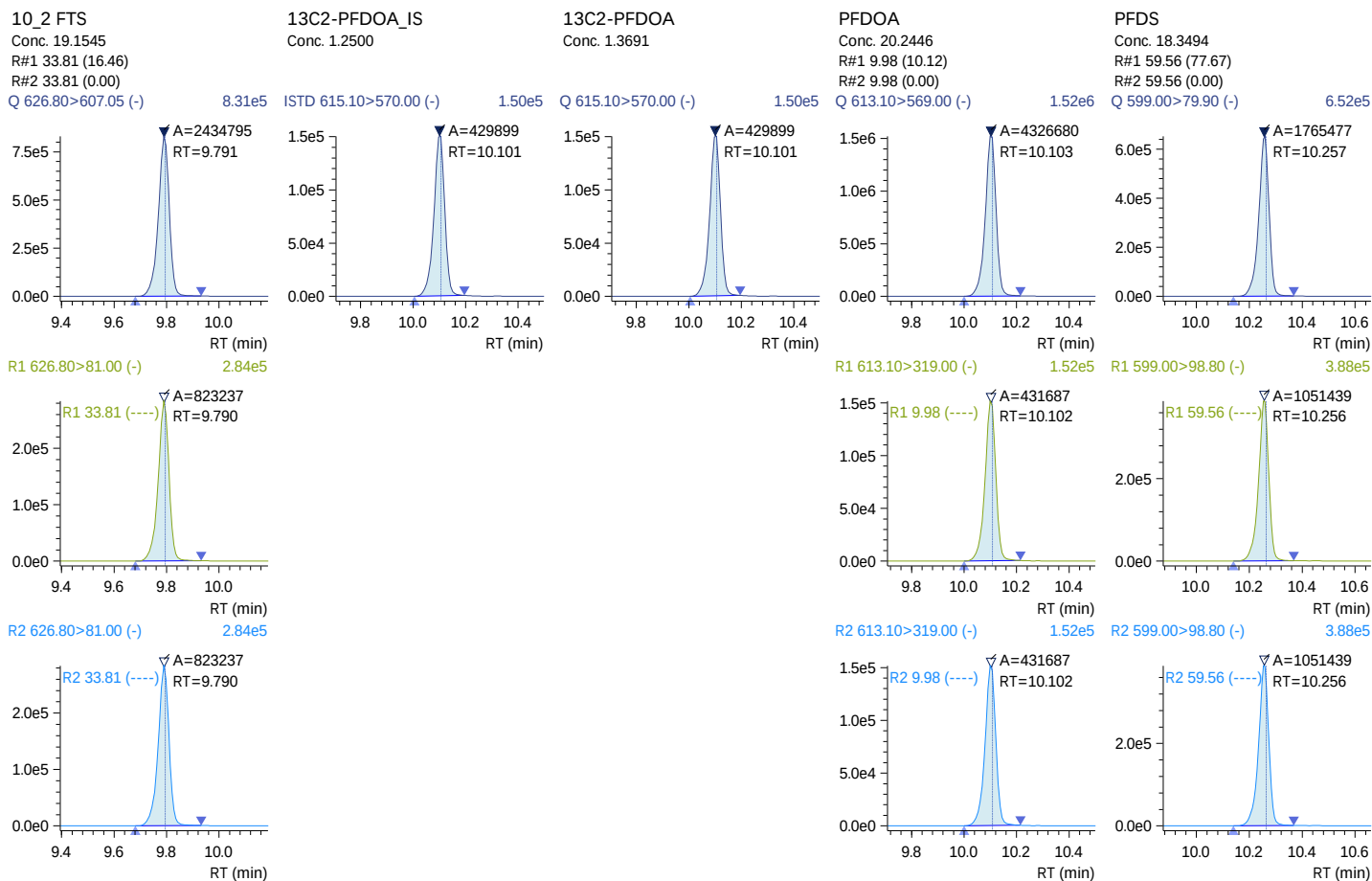
R2 548.80>98.80 (-)

3.97e5





240130_026 (continued)



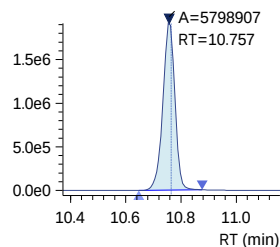


240130_026 (continued)

PFTTrDA

Conc. 20.8751
R#1 15.56 (14.17)
R#2 15.56 (0.00)

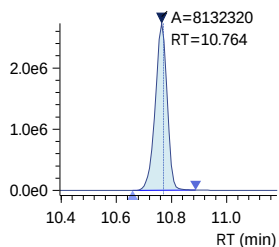
Q 663.00>619.00 (-)



11-Cl-PF3OUds

Conc. 18.3069
R#1 33.77 (32.90)
R#2 33.77 (0.00)

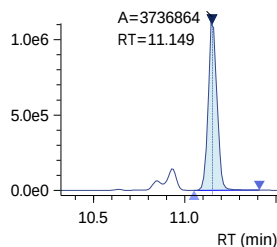
Q 630.90>451.00 (-)



PFOSAm

Conc. 37.4189

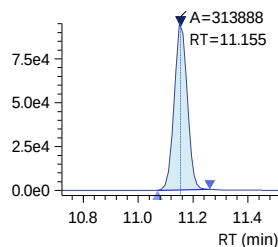
Q 498.10>77.90 (-)



13C8-PFOSAm

Conc. 2.5583

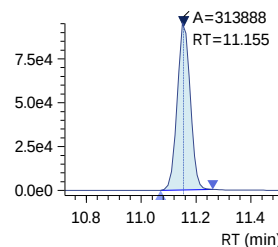
Q 506.10>77.80 (-)



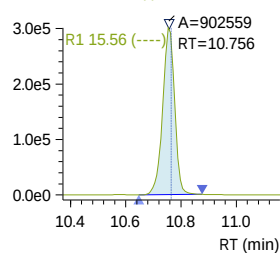
13C8-PFOSAm_IS

Conc. 2.5000

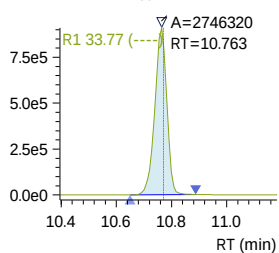
ISTD 506.10>77.80 (-)



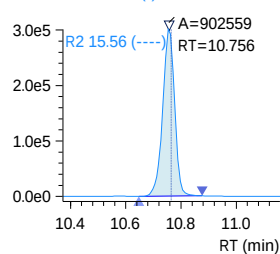
R1 663.00>168.90 (-)



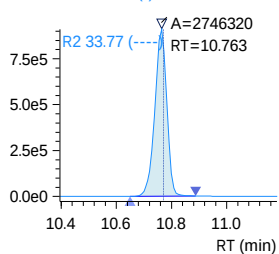
R1 632.90>452.90 (-)



R2 663.00>168.90 (-)

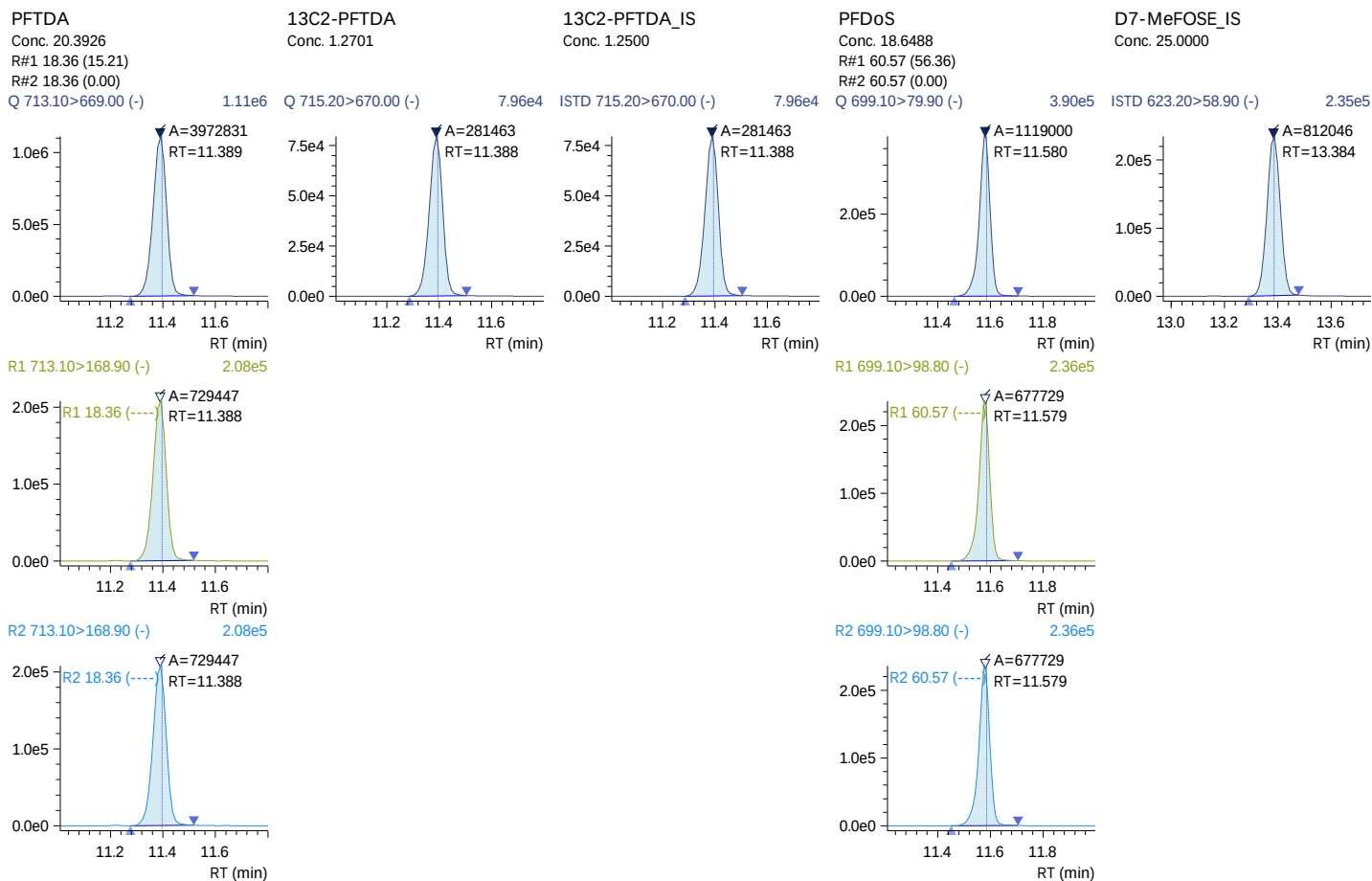


R2 632.90>452.90 (-)





240130_026 (continued)





240130_026 (continued)

D7-MeFOSE
 Conc. 25.7819

MeFOSE
 Conc. 20.2947

13C2-PFHXDA_IS
 Conc. 2.5000

13C2-PFHXDA
 Conc. 2.5901

PFHXDA
 Conc. 19.7281
 R#1 11.64 (9.60)
 R#2 11.64 (0.00)

Q 623.20>58.90 (-)

2.35e5

Q 616.10>59.00 (-)

1.47e5

ISTD 815.00>770.05 (-)

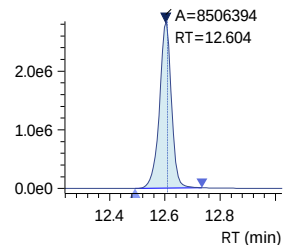
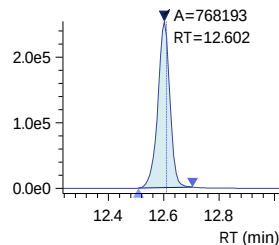
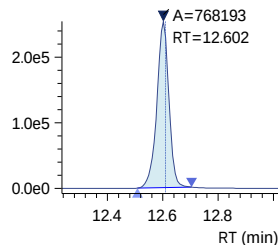
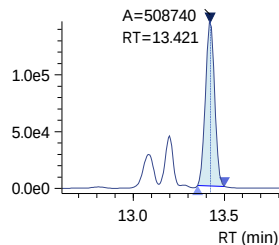
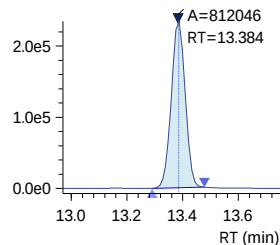
2.54e5

Q 815.00>770.05 (-)

2.54e5

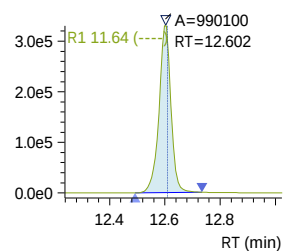
Q 813.00>768.95 (-)

2.85e6



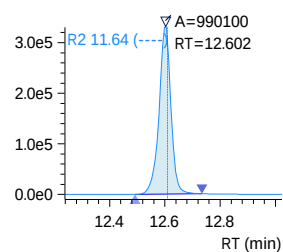
R1 813.00>218.95 (-)

3.30e5



R2 813.00>218.95 (-)

3.30e5





240130_026 (continued)

D3-MeFOSA
Conc. 2.5299

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. 20.0279
R#1 121.49 (98.91)
R#2 121.49 (0.00)

D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 24.9767

Q 515.00>219.00 (-)

2.34e4

ISTD 515.00>219.00 (-)

2.34e4

Q 511.90>219.00 (-)

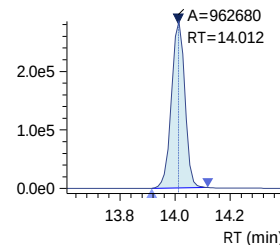
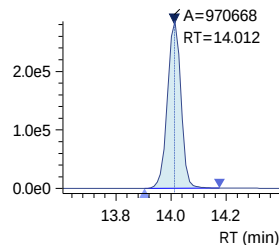
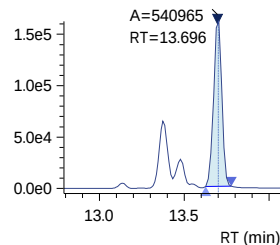
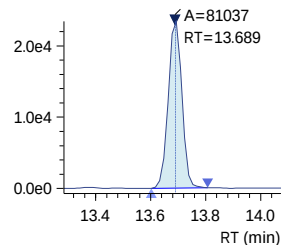
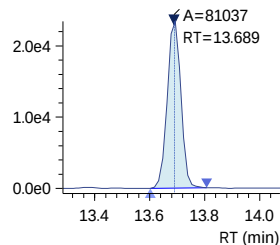
1.63e5

ISTD 639.20>58.90 (-)

2.86e5

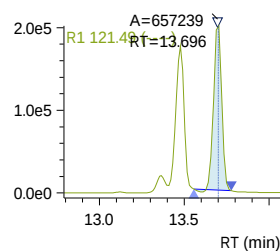
Q 639.20>58.90 (-)

2.86e5



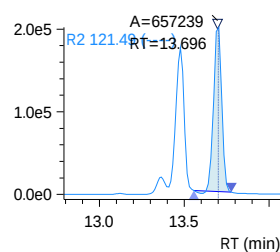
R1 511.90>169.00 (-)

2.02e5



R2 511.90>169.00 (-)

2.02e5





240130_026 (continued)

EtFOSE
Conc. 20.6935

D5-EtFOSAm
Conc. 2.5194

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. 20.1439
R#1 132.35 (0.00)
R#2 132.35 (0.00)

PFODA
Conc. 21.9425
R#1 33.12 (23.45)
R#2 33.12 (0.00)

Q 630.00>59.00 (-)

1.70e5

Q 531.10>219.00 (-)

3.52e4

ISTD 531.10>219.00 (-)

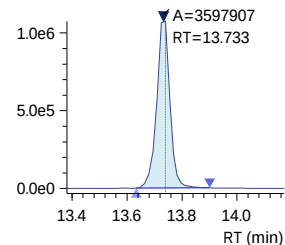
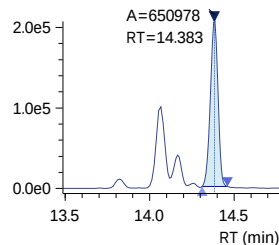
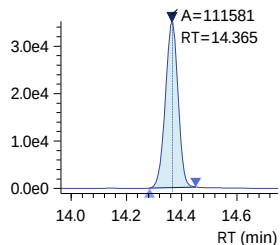
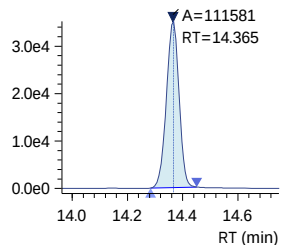
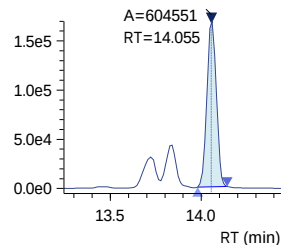
3.52e4

Q 526.00>219.00 (-)

2.08e5

Q 913.00>868.65 (-)

1.08e6

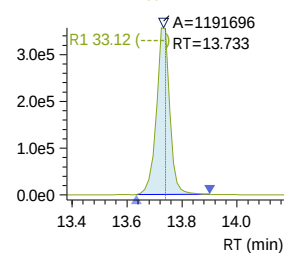
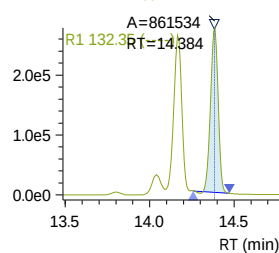


R1 526.00>169.00 (-)

2.79e5

R1 913.00>169.00 (-)

3.57e5

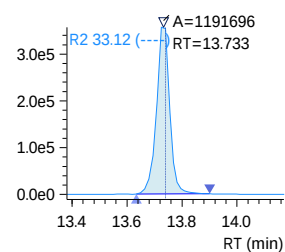
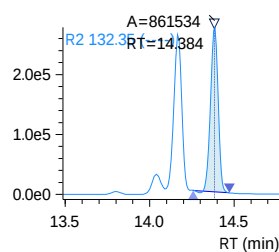


R2 526.00>169.00 (-)

2.79e5

R2 913.00>169.00 (-)

3.57e5

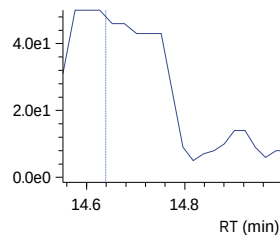


positive trans

Conc. ----

Q 514.80>219.10 (+)

5.00e1





240130_027

Sample ID: 1633 CCB
Date Acquired: 1/31/2024 12:48:12 AM
Acquired by: System Administrator
Data File: 240130_027
Vial: 54 | Inj. Volume: 10.0000uL | Tray: 1

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	496943	----	----	----	----	----	----	
13C4-PFBA_IS	216.80>171.90	----	496943	----	----	----	----	----	----	
13C3-PFBA_IS	216.00>172.00	----	288605	----	----	----	----	----	----	
PFBA	212.80>169.05	----	940	----	----	----	----	----	----	
PFMPA	229.00>84.90	----	----	----	----	----	----	----	----	
3_3 FTCA	241.00>177.10	241.00>117.00	----	0	0.00	139.21	----	----	----	
13C5-PFPeA	268.30>223.00	----	148976	----	----	----	----	----	----	
13C5-PFPeA_IS	268.30>223.00	----	148976	----	----	----	----	----	----	
PFPeA	263.00>219.00	----	2215	----	----	----	----	----	----	
PFMBA	279.00>84.95	----	----	----	----	----	----	----	----	
13C2-4_2 FTS	329.10>80.90	----	176670	----	----	----	----	----	----	
13C2-4_2 FTS_IS	329.10>80.90	----	176670	----	----	----	----	----	----	
4_2 FTS	327.10>307.00	327.10>80.90	184	268	145.61	32.10	268	145.61	32.10	IRr
13C3-PFBS_IS	302.10>79.90	----	159809	----	----	----	----	----	----	
PFBS	298.70>79.90	298.70>98.80	----	0	0.00	44.81	0	0.00	44.81	
13C3-PFBS	302.10>79.90	----	159809	----	----	----	----	----	----	
NFDHA	295.00>201.00	295.00>84.90	----	0	0.00	35.54	0	0.00	35.54	
13C5-PFHxA	318.00>273.00	----	320669	----	----	----	----	----	----	
13C5-PFHxA_IS	318.00>273.00	----	320669	----	----	----	----	----	----	
13C2-PFHxA_IS	315.10>270.00	----	363110	----	----	----	----	----	----	
PFHxA	313.00>269.00	----	784	----	----	----	----	----	----	
PFEESA	314.80>135.00	314.80>82.90	----	0	0.00	5.22	0	0.00	5.22	
13C3-HFPO-DA	286.90>168.90	----	353070	----	----	----	----	----	----	
13C3-HFPO-DA_IS	286.90>168.90	----	353070	----	----	----	----	----	----	
HFPO-DA	284.90>168.90	284.90>184.90	----	0	0.00	59.79	0	0.00	59.79	
5_3 FTCA	341.00>237.05	341.00>217.00	----	0	0.00	157.08	0	0.00	157.08	
PFPeS	349.10>79.90	349.10>98.80	----	0	0.00	55.12	0	0.00	55.12	
13C4-PFHpA	367.10>322.00	----	390280	----	----	----	----	----	----	
13C4-PFHpA_IS	367.10>322.00	----	390280	----	----	----	----	----	----	
PFHpA	363.10>319.00	363.10>169.00	6090	1469	24.12	23.02	1469	24.12	23.02	
DONA	376.90>250.90	376.90>84.80	----	0	0.00	27.50	0	0.00	27.50	
13C2-6_2 FTS_IS	429.10>80.90	----	176361	----	----	----	----	----	----	
13C2-6_2 FTS	429.10>80.90	----	176361	----	----	----	----	----	----	
6_2 FTS	427.10>407.00	427.10>80.90	784	269	34.36	50.47	269	34.36	50.47	
13C4-PFOA_IS	417.10>172.00	----	27197	----	----	----	----	----	----	
13C8-PFOA_IS	421.10>376.00	----	373346	----	----	----	----	----	----	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240130_027 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	373346	----	----	----	----	----	----	----
PFOA	413.00>369.00	413.00>169.00	6217	2094	33.68	28.77	2094	33.68	28.77	
13C3-PFHxS	402.10>79.90	----	148464	----	----	----	----	----	----	----
13C3-PFHxS_IS	402.10>79.90	----	148464	----	----	----	----	----	----	----
PFHxS	398.70>79.90	398.70>98.90	670	450	67.27	60.90	450	67.27	60.90	
18O2-PFHxS_IS	403.00>83.90	----	141765	----	----	----	----	----	----	----
13C9-PFNA_IS	472.10>427.00	----	220821	----	----	----	----	----	----	----
13C9-PFNA	472.10>427.00	----	220821	----	----	----	----	----	----	----
13C5-PFNA_IS	468.00>423.00	----	208066	----	----	----	----	----	----	----
PFNA	463.00>419.00	463.00>219.00	6402	894	13.97	19.31	894	13.97	19.31	
PFHpS	449.00>79.90	449.00>98.80	----	0	0.00	52.44	0	0.00	52.44	
7_3 FTCA	441.00>317.00	441.00>336.90	804	1192	148.35	129.46	1192	148.35	129.46	
13C2-8_2-FTS	529.10>80.90	----	136742	----	----	----	----	----	----	----
13C2-8_2-FTS_IS	529.10>80.90	----	136742	----	----	----	----	----	----	----
8_2 FTS	527.10>506.95	527.10>80.80	----	0	0.00	45.98	0	0.00	45.98	
13C6-PFDA_IS	519.10>474.10	----	153020	----	----	----	----	----	----	----
13C6-PFDA	519.10>474.10	----	153020	----	----	----	----	----	----	----
13C2-PFDA_IS	515.10>470.10	----	129835	----	----	----	----	----	----	----
PFDA	512.90>469.00	512.90>219.00	4556	487	10.70	17.88	487	10.70	17.88	
D3-NMeFOSAA_IS	573.20>419.00	----	432456	----	----	----	----	----	----	----
D3-NMeFOSAA	573.20>419.00	----	432456	----	----	----	----	----	----	----
13C8-PFOS_IS	507.10>98.90	----	71581	----	----	----	----	----	----	----
13C8-PFOS	507.10>98.90	----	71581	----	----	----	----	----	----	----
13C4-PFOS_IS	502.80>79.90	----	184003	----	----	----	----	----	----	----
PFOS	498.90>79.90	498.90>98.80	----	0	0.00	53.60	0	0.00	53.60	
NMeFOSAA	570.10>419.00	570.10>483.00	367	0	0.00	64.89	0	0.00	64.89	IRr
D5-NEtFOSAA_IS	589.20>419.00	----	354849	----	----	----	----	----	----	----
D5-NEtFOSAA	589.20>419.00	----	354849	----	----	----	----	----	----	----
NEtFOSAA	584.20>419.10	584.20>526.00	98	336	343.38	96.07	336	343.38	96.07	IRr, RTi
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	499	737	147.82	30.95	737	147.82	30.95	IRr
PFUnDA	563.10>519.00	563.10>269.10	6037	765	12.68	11.01	765	12.68	11.01	
13C7-PFUnDA_IS	570.00>525.10	----	187169	----	----	----	----	----	----	----
13C7-PFUnDA	570.00>525.10	----	187169	----	----	----	----	----	----	----
PFNS	548.80>79.90	548.80>98.80	----	0	0.00	60.44	0	0.00	60.44	
10_2 FTS	626.80>607.05	626.80>81.00	16	53	325.82	36.14	53	325.82	36.14	IRr
13C2-PFDOA_IS	615.10>570.00	----	221005	----	----	----	----	----	----	----
13C2-PFDOA	615.10>570.00	----	221005	----	----	----	----	----	----	----
PFDOA	613.10>569.00	613.10>319.00	4761	466	9.79	10.16	466	9.79	10.16	
PFDS	599.00>79.90	599.00>98.80	----	0	0.00	58.26	0	0.00	58.26	
PFTrDA	663.00>619.00	663.00>168.90	6111	776	12.70	16.18	776	12.70	16.18	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240130_027 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	----	0	0.00	34.99	0	0.00	34.99	
PFOSAm	498.10>77.90	----	592	----	----	----	----	----	----	
13C8-PFOSAm	506.10>77.80	----	164472	----	----	----	----	----	----	
13C8-PFOSAm_IS	506.10>77.80	----	164472	----	----	----	----	----	----	
PFTDA	713.10>669.00	713.10>168.90	5608	764	13.62	18.05	764	13.62	18.05	
13C2-PFTDA	715.20>670.00	----	151169	----	----	----	----	----	----	
13C2-PFTDA_IS	715.20>670.00	----	151169	----	----	----	----	----	----	
PFDoS	699.10>79.90	699.10>98.80	----	0	0.00	61.13	0	0.00	61.13	
D7-MeFOSE_IS	623.20>58.90	----	405839	----	----	----	----	----	----	
D7-MeFOSE	623.20>58.90	----	405839	----	----	----	----	----	----	
MeFOSE	616.10>59.00	----	----	----	----	----	----	----	----	
13C2-PFHxDA_IS	815.00>770.05	----	408143	----	----	----	----	----	----	
13C2-PFHxDA	815.00>770.05	----	408143	----	----	----	----	----	----	
PFHxDA	813.00>768.95	813.00>218.95	12202	1248	10.23	11.66	1248	10.23	11.66	
D3-MeFOSA	515.00>219.00	----	39471	----	----	----	----	----	----	
D3-MeFOSA_IS	515.00>219.00	----	39471	----	----	----	----	----	----	
MeFOSA	511.90>219.00	511.90>169.00	165	168	101.90	160.44	168	101.90	160.44	
D9-EtFOSE_IS	639.20>58.90	----	489449	----	----	----	----	----	----	
D9-EtFOSE	639.20>58.90	----	486102	----	----	----	----	----	----	
EtFOSE	630.00>59.00	----	----	----	----	----	----	----	----	
D5-EtFOSAm	531.10>219.00	----	57954	----	----	----	----	----	----	
D5-EtFOSAm_IS	531.10>219.00	----	57954	----	----	----	----	----	----	
EtFOSAm	526.00>219.00	526.00>169.00	237	459	193.45	159.63	459	193.45	159.63	
PFODA	913.00>868.65	913.00>169.00	5058	1920	37.96	36.03	1920	37.96	36.03	

Flag ID key: IRr: Ion Ratio (Relative), RTi: RT Diff (Absolute ISTD)



240130_027

Sample ID: 1633 CCB
Date Acquired: 1/31/2024 12:48:12 AM
Acquired by: System Administrator
Data File: 240130_027
Vial: 54 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.422	0.084	0.000	496943	288605	13C3-PFBA_IS	11.6204	ng/mL	
13C4-PFBA_IS	Auto	1.422	0.084	----	496943	496943	----	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.422	0.085	----	288605	288605	----	5.0000	ng/mL	
PFBA	M	1.444	0.103	0.022	940	496943	13C4-PFBA_IS	0.0075	ng/mL	
PFMPA	ND(W/B)	----	----	----	----	148976	13C5-PFPeA_IS	----	ng/mL	
3_3 FTCA	ND(W/B)	----	----	----	----	148976	13C5-PFPeA_IS	----	ng/mL	
13C5-PFPeA	Auto	3.497	0.058	-1.477	148976	363110	13C2-PFHxA_IS	5.7059	ng/mL	
13C5-PFPeA_IS	Auto	3.497	0.058	----	148976	148976	----	5.0000	ng/mL	
PFPeA	M	3.491	0.049	-0.006	2215	148976	13C5-PFPeA_IS	0.0212	ng/mL	
PFMBA	ND(W/B)	----	----	----	----	148976	13C5-PFPeA_IS	----	ng/mL	
13C2-4_2 FTS	Auto	4.658	0.038	-2.419	176670	141765	18O2-PFHxS_IS	6.6205	ng/mL	
13C2-4_2 FTS_IS	Auto	4.658	0.038	----	176670	176670	----	5.0000	ng/mL	
4_2 FTS	M	4.639	0.019	-0.019	184	176670	13C2-4_2 FTS_IS	0.0021	ng/mL	IRr
13C3-PFBS_IS	Auto	4.638	0.051	----	159809	159809	----	2.5000	ng/mL	
PFBS	ND(W/B)	----	----	----	----	159809	13C3-PFBS_IS	----	ng/mL	
13C3-PFBS	Auto	4.638	0.051	-2.439	159809	141765	18O2-PFHxS_IS	3.0213	ng/mL	
NFDHA	ND(W/B)	----	----	----	----	320669	13C5-PFHxA_IS	----	ng/mL	
13C5-PFHxA	Auto	4.974	0.042	0.000	320669	363110	13C2-PFHxA_IS	2.7359	ng/mL	
13C5-PFHxA_IS	Auto	4.974	0.042	----	320669	320669	----	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	4.974	0.041	----	363110	363110	----	2.5000	ng/mL	
PFHxA	M	4.972	0.038	-0.002	784	320669	13C5-PFHxA_IS	0.0005	ng/mL	
PFEESA	ND(W/B)	----	----	----	----	320669	13C5-PFHxA_IS	----	ng/mL	
13C3-HFPO-DA	Auto	5.449	0.037	0.475	353070	363110	13C2-PFHxA_IS	10.9720	ng/mL	
13C3-HFPO-DA_IS	Auto	5.449	0.037	----	353070	353070	----	10.0000	ng/mL	
HFPO-DA	ND(W/B)	----	----	----	----	353070	13C3-HFPO-DA_IS	----	ng/mL	
5_3 FTCA	ND(W/B)	----	----	----	----	320669	13C5-PFHxA_IS	----	ng/mL	
PFPeS	ND(W/B)	----	----	----	----	148464	13C3-PFHxS_IS	----	ng/mL	
13C4-PFHpA	Auto	6.151	0.031	1.177	390280	363110	13C2-PFHxA_IS	2.6468	ng/mL	
13C4-PFHpA_IS	Auto	6.151	0.031	----	390280	390280	----	2.5000	ng/mL	
PFHpA	M	6.132	0.010	-0.019	6090	390280	13C4-PFHpA_IS	0.0285	ng/mL	
DONA	ND(W/B)	----	----	----	----	353070	13C3-HFPO-DA_IS	----	ng/mL	
13C2-6_2 FTS_IS	Auto	6.791	0.025	----	176361	176361	----	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.791	0.025	-0.286	176361	141765	18O2-PFHxS_IS	6.3485	ng/mL	
6_2 FTS	MI R1 R2	6.794	0.029	0.003	784	176361	13C2-6_2 FTS_IS	0.0117	ng/mL	
13C4-PFOA_IS	Auto	7.108	0.029	----	27197	27197	----	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.108	0.030	----	373346	373346	----	2.5000	ng/mL	
13C8-PFOA	Auto	7.108	0.030	0.000	373346	27197	13C4-PFOA_IS	2.8784	ng/mL	
PFOA	Auto	7.103	0.022	-0.005	6217	373346	13C8-PFOA_IS	0.0289	ng/mL	
13C3-PFHxS	Auto	7.076	0.028	-0.001	148464	141765	18O2-PFHxS_IS	2.9880	ng/mL	
13C3-PFHxS_IS	Auto	7.076	0.028	----	148464	148464	----	2.5000	ng/mL	
PFHxS	M	7.063	0.015	-0.013	670	148464	13C3-PFHxS_IS	0.0103	ng/mL	
18O2-PFHxS_IS	Auto	7.077	0.029	----	141765	141765	----	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.954	0.025	----	220821	220821	----	1.2500	ng/mL	
13C9-PFNA	Auto	7.954	0.025	0.000	220821	208066	13C5-PFNA_IS	1.4337	ng/mL	
13C5-PFNA_IS	Auto	7.955	0.024	----	208066	208066	----	1.2500	ng/mL	
PFNA	Auto	7.954	0.024	0.000	6402	220821	13C9-PFNA_IS	0.0248	ng/mL	
PFHpS	ND(W/B)	----	----	----	----	71581	13C8-PFOS_IS	----	ng/mL	
7_3 FTCA	M	7.951	0.022	2.977	804	320669	13C5-PFHxA_IS	0.0477	ng/mL	
13C2-8_2-FTS	Auto	8.409	0.021	1.332	136742	141765	18O2-PFHxS_IS	5.7977	ng/mL	
13C2-8_2-FTS_IS	Auto	8.409	0.021	----	136742	136742	----	5.0000	ng/mL	
8_2 FTS	ND(W/B)	----	----	----	----	136742	13C2-8_2-FTS_IS	----	ng/mL	
13C6-PFDA_IS	Auto	8.719	0.023	----	153020	153020	----	1.2500	ng/mL	
13C6-PFDA	Auto	8.719	0.023	-0.001	153020	129835	13C2-PFDA_IS	1.4707	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_027 (continued)

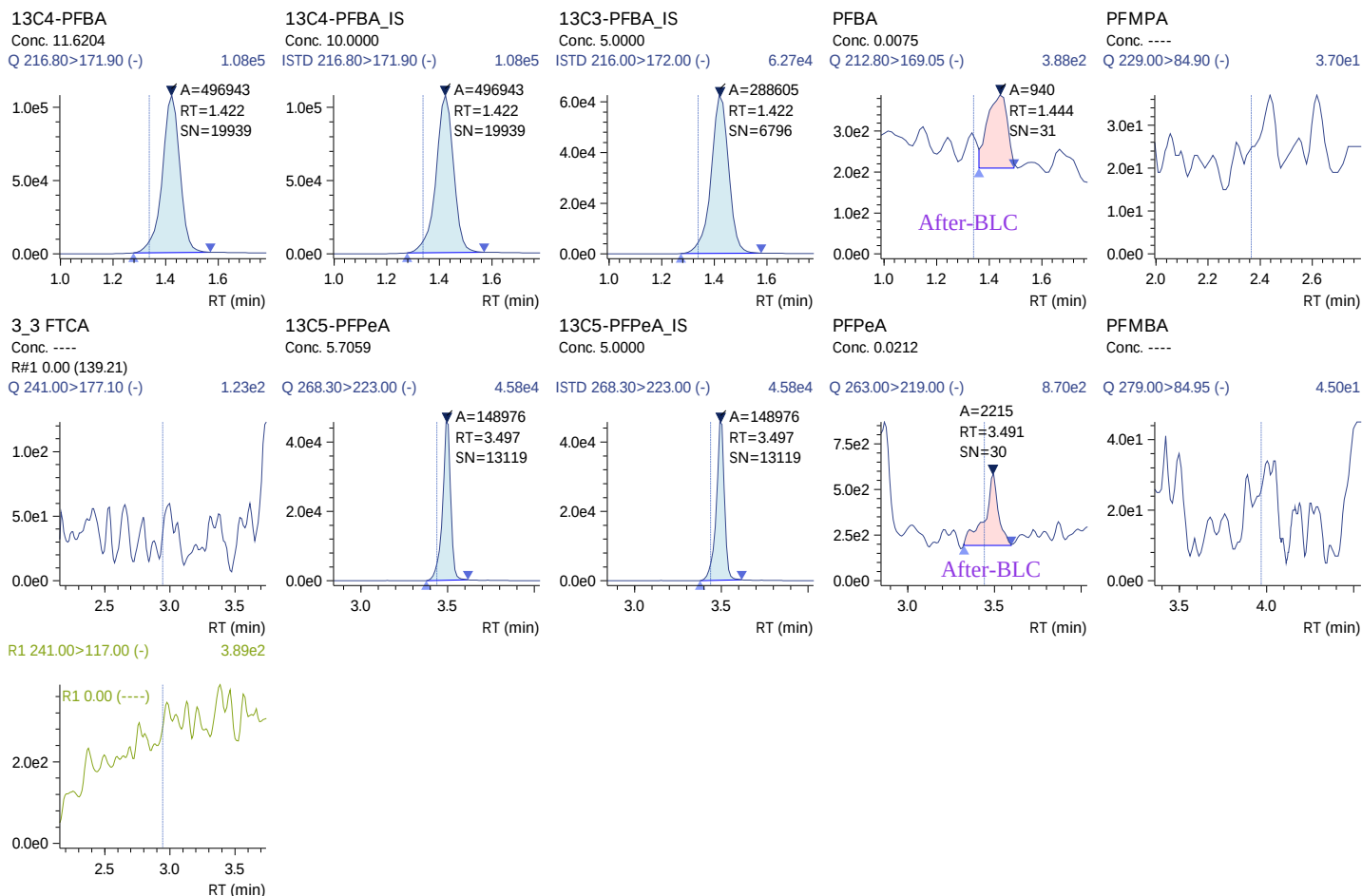
(Table continued from previous page)

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C2-PFDA_IS	Auto	8.719	0.023	----	129835	129835	----	1.2500	ng/mL	
PFDA	Auto	8.721	0.024	0.003	4556	153020	13C6-PFDA_IS	0.0352	ng/mL	
D3-NMeFOSAA_IS	Auto	8.854	0.020	----	432456	432456	----	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.854	0.020	0.042	432456	184003	13C4-PFOS_IS	5.7724	ng/mL	
13C8-PFOS_IS	Auto	8.811	0.025	----	71581	71581	----	2.5000	ng/mL	
13C8-PFOS	Auto	8.811	0.025	-0.001	71581	184003	13C4-PFOS_IS	3.0911	ng/mL	
13C4-PFOS_IS	Auto	8.812	0.025	----	184003	184003	----	2.5000	ng/mL	
PFOS	ND(W/B)	----	----	----	----	71581	13C8-PFOS_IS	----	ng/mL	
NMeFOSAA	M	8.862	0.211	0.008	367	432456	D3-NMeFOSAA_IS	0.0060	ng/mL	IRr
D5-NetFOSAA_IS	Auto	9.185	0.021	----	354849	354849	----	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.185	0.021	0.373	354849	184003	13C4-PFOS_IS	6.0101	ng/mL	
NetFOSAA	M	9.066	0.080	-0.119	98	354849	D5-NetFOSAA_IS	0.0017	ng/mL	IRr, RTi
9-CI-PF3ONS	M	9.375	0.024	3.926	499	353070	13C3-HFPO-DA_IS	0.0014	ng/mL	IRr
PFUnDA	Auto	9.441	0.020	0.001	6037	187169	13C7-PFUnDA_IS	0.0252	ng/mL	
13C7-PFUnDA_IS	Auto	9.440	0.021	----	187169	187169	----	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.440	0.021	0.721	187169	129835	13C2-PFDA_IS	1.4477	ng/mL	
PFNS	ND(W/B)	----	----	----	----	71581	13C8-PFOS_IS	----	ng/mL	
10_2 FTS	M	9.818	0.023	1.409	16	136742	13C2-8_2-FTS_IS	0.0002	ng/mL	IRr
13C2-PFDOA_IS	Auto	10.125	0.018	----	221005	221005	----	1.2500	ng/mL	
13C2-PFDOA	Auto	10.125	0.018	1.406	221005	129835	13C2-PFDA_IS	1.4320	ng/mL	
PFDOA	Auto	10.125	0.017	0.000	4761	221005	13C2-PFDOA_IS	0.0102	ng/mL	
PFDS	ND(W/B)	----	----	----	----	71581	13C8-PFOS_IS	----	ng/mL	
PFTDA	Auto	10.780	0.016	-0.630	6111	151169	13C2-PFTDA_IS	0.0195	ng/mL	
11-CI-PF3OUdS	ND(W/B)	----	----	----	----	353070	13C3-HFPO-DA_IS	----	ng/mL	
PFOSAm	M	11.149	-0.001	-0.009	592	164472	13C8-PFOSAm_IS	0.0103	ng/mL	
13C8-PFOSAm	Auto	11.158	0.003	2.346	164472	184003	13C4-PFOS_IS	2.8139	ng/mL	
13C8-PFOSAm_IS	Auto	11.158	0.003	----	164472	164472	----	2.5000	ng/mL	
PFTDA	Auto	11.409	0.013	-0.001	5608	151169	13C2-PFTDA_IS	0.0309	ng/mL	
13C2-PFTDA	Auto	11.410	0.015	2.691	151169	129835	13C2-PFDA_IS	1.3878	ng/mL	
13C2-PFTDA_IS	Auto	11.410	0.015	----	151169	151169	----	1.2500	ng/mL	
PFDoS	ND(W/B)	----	----	----	----	71581	13C8-PFOS_IS	----	ng/mL	
D7-MeFOSE_IS	Auto	13.385	-0.001	----	405839	405839	----	25.0000	ng/mL	
D7-MeFOSE	Auto	13.385	-0.001	4.573	405839	184003	13C4-PFOS_IS	27.0470	ng/mL	
MeFOSE	ND(W/B)	----	----	----	----	405839	D7-MeFOSE_IS	----	ng/mL	
13C2-PFHXA_IS	Auto	12.623	0.014	----	408143	408143	----	2.5000	ng/mL	
13C2-PFHXA	Auto	12.623	0.014	3.904	408143	129835	13C2-PFDA_IS	2.7998	ng/mL	
PFHXDA	Auto	12.625	0.015	0.002	12202	408143	13C2-PFHXA_IS	0.0553	ng/mL	
D3-MeFOSA	Auto	13.690	0.000	4.878	39471	184003	13C4-PFOS_IS	2.5866	ng/mL	
D3-MeFOSA_IS	Auto	13.690	0.000	----	39471	39471	----	2.5000	ng/mL	
MeFOSA	M	13.747	0.048	0.057	165	39471	D3-MeFOSA_IS	0.0073	ng/mL	
D9-EtFOSE_IS	Auto	14.013	0.000	----	489449	489449	----	25.0000	ng/mL	
D9-EtFOSE	Auto	14.013	0.000	5.201	486102	184003	13C4-PFOS_IS	26.4735	ng/mL	
EtFOSE	ND(W/B)	----	----	----	----	489449	D9-EtFOSE_IS	----	ng/mL	
D5-EtFOSAm	Auto	14.367	0.001	5.555	57954	184003	13C4-PFOS_IS	2.7468	ng/mL	
D5-EtFOSAm_IS	Auto	14.367	0.001	----	57954	57954	----	2.5000	ng/mL	
EtFOSAm	M	14.387	0.003	0.020	237	57954	D5-EtFOSAm_IS	0.0075	ng/mL	
PFODA	Auto	13.756	0.016	1.133	5058	408143	13C2-PFHXA_IS	0.0824	ng/mL	

Flag ID key: IRr: Ion Ratio (Relative), RTi: RT Diff (Absolute ISTD)



240130_027 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_027 (continued)

13C2-4_2 FTS
Conc. 6.6205

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. 0.0021
R#1 145.61 (32.10)
R#2 145.61 (32.10)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. ----
R#1 0.00 (44.81)
R#2 0.00 (44.81)

Q 329.10>80.90 (-)

5.53e4

ISTD 329.10>80.90 (-)

5.53e4

Q 327.10>307.00 (-)

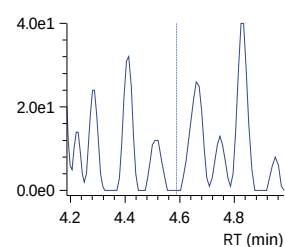
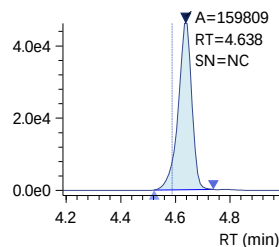
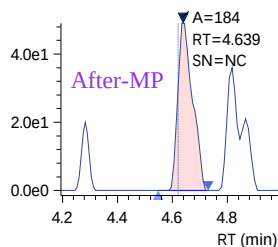
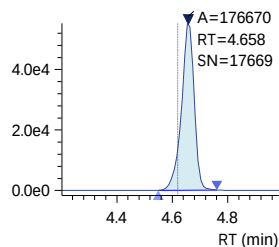
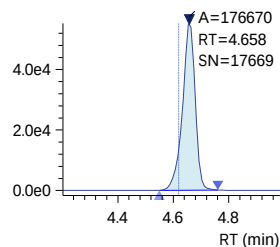
4.90e1

ISTD 302.10>79.90 (-)

4.63e4

Q 298.70>79.90 (-)

4.00e1

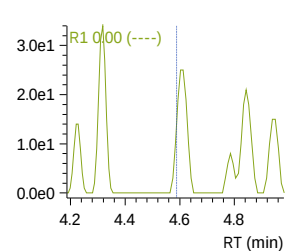
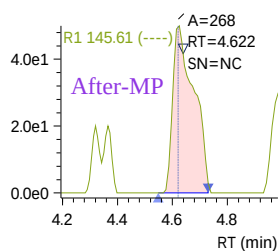


R1 327.10>80.90 (-)

5.00e1

R1 298.70>98.80 (-)

3.40e1

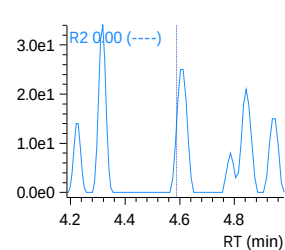
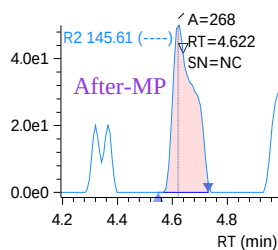


R2 327.10>80.90 (-)

5.00e1

R2 298.70>98.80 (-)

3.40e1





240130_027 (continued)

13C3-PFBS
Conc. 3.0213

NFDHA
Conc. ----
R#1 0.00 (35.54)
R#2 0.00 (35.54)

13C5-PFHxA
Conc. 2.7359

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

Q 302.10>79.90 (-)

4.63e4

Q 295.00>201.00 (-)

1.65e2

Q 318.00>273.00 (-)

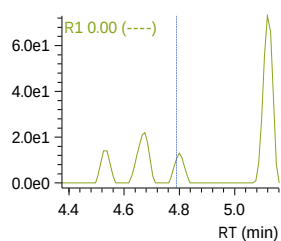
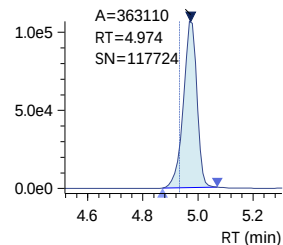
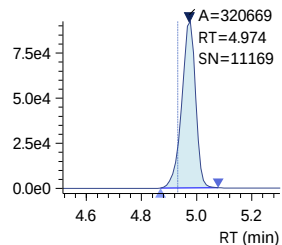
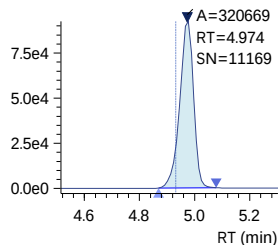
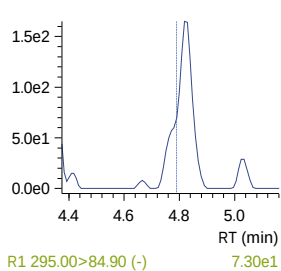
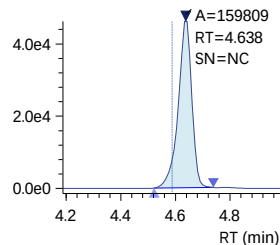
9.26e4

ISTD 318.00>273.00 (-)

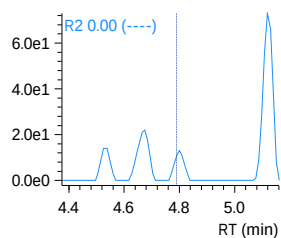
9.26e4

ISTD 315.10>270.00 (-)

1.07e5

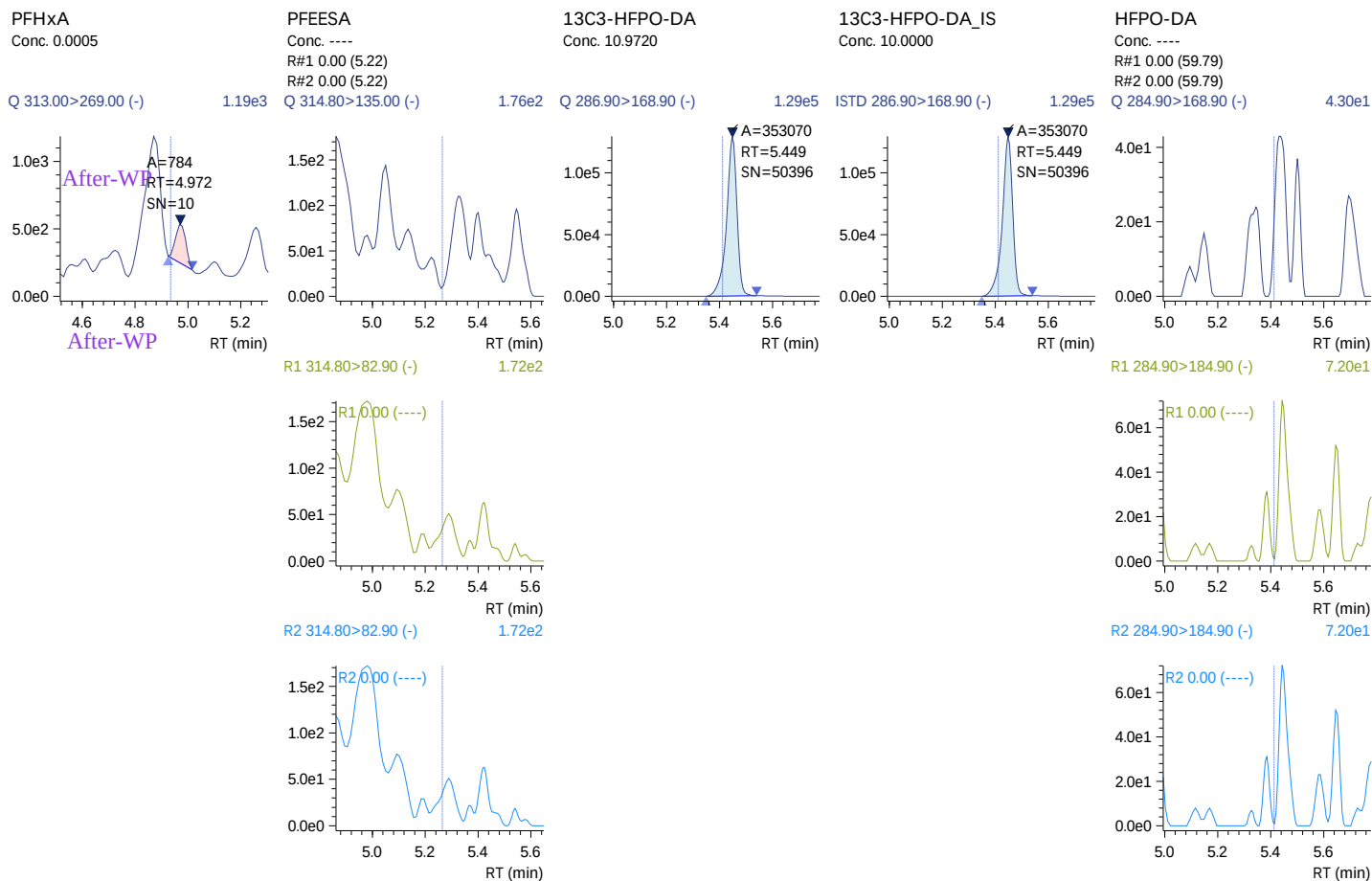


R2 295.00>84.90 (-)



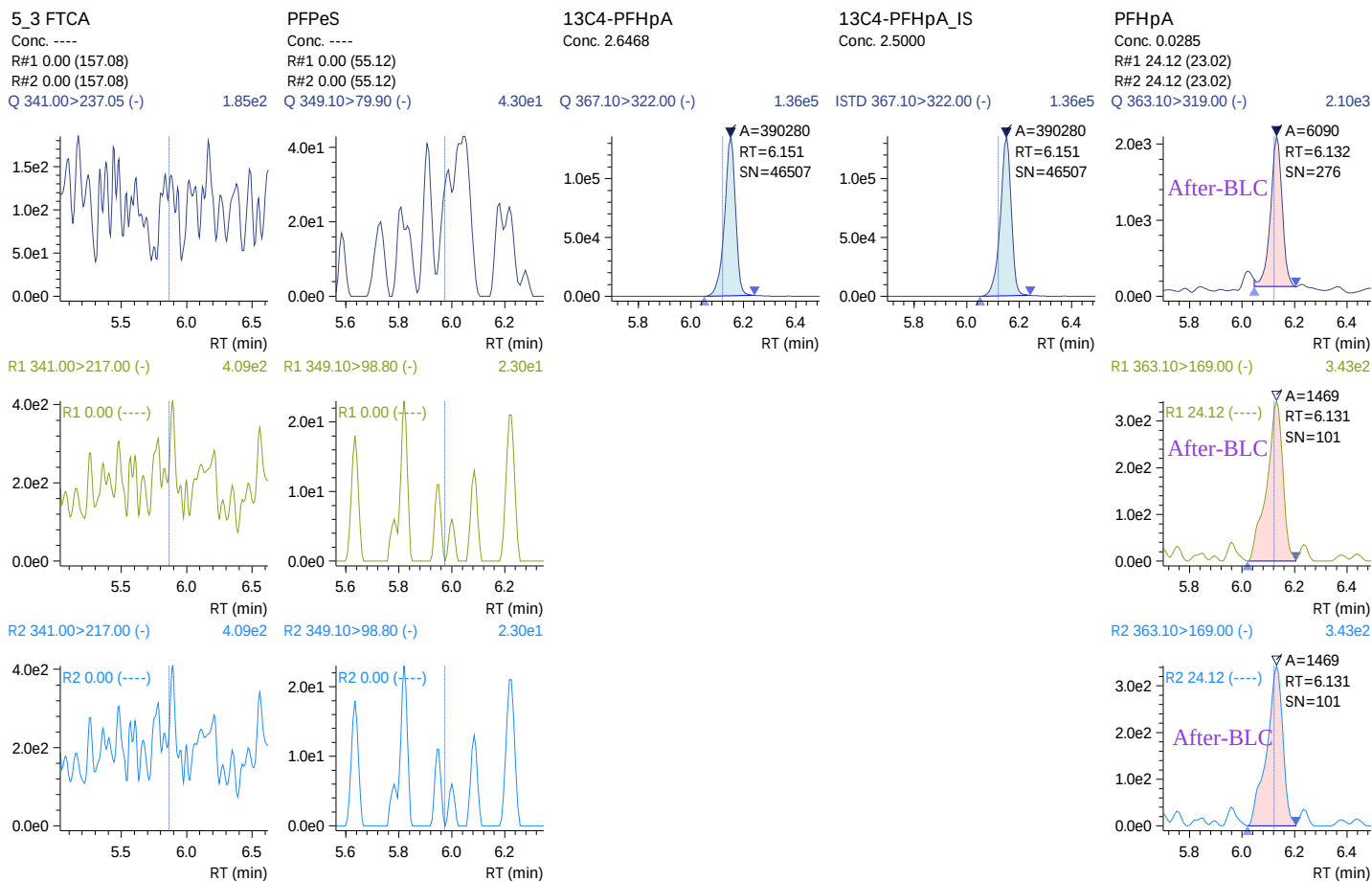


240130_027 (continued)





240130_027 (continued)

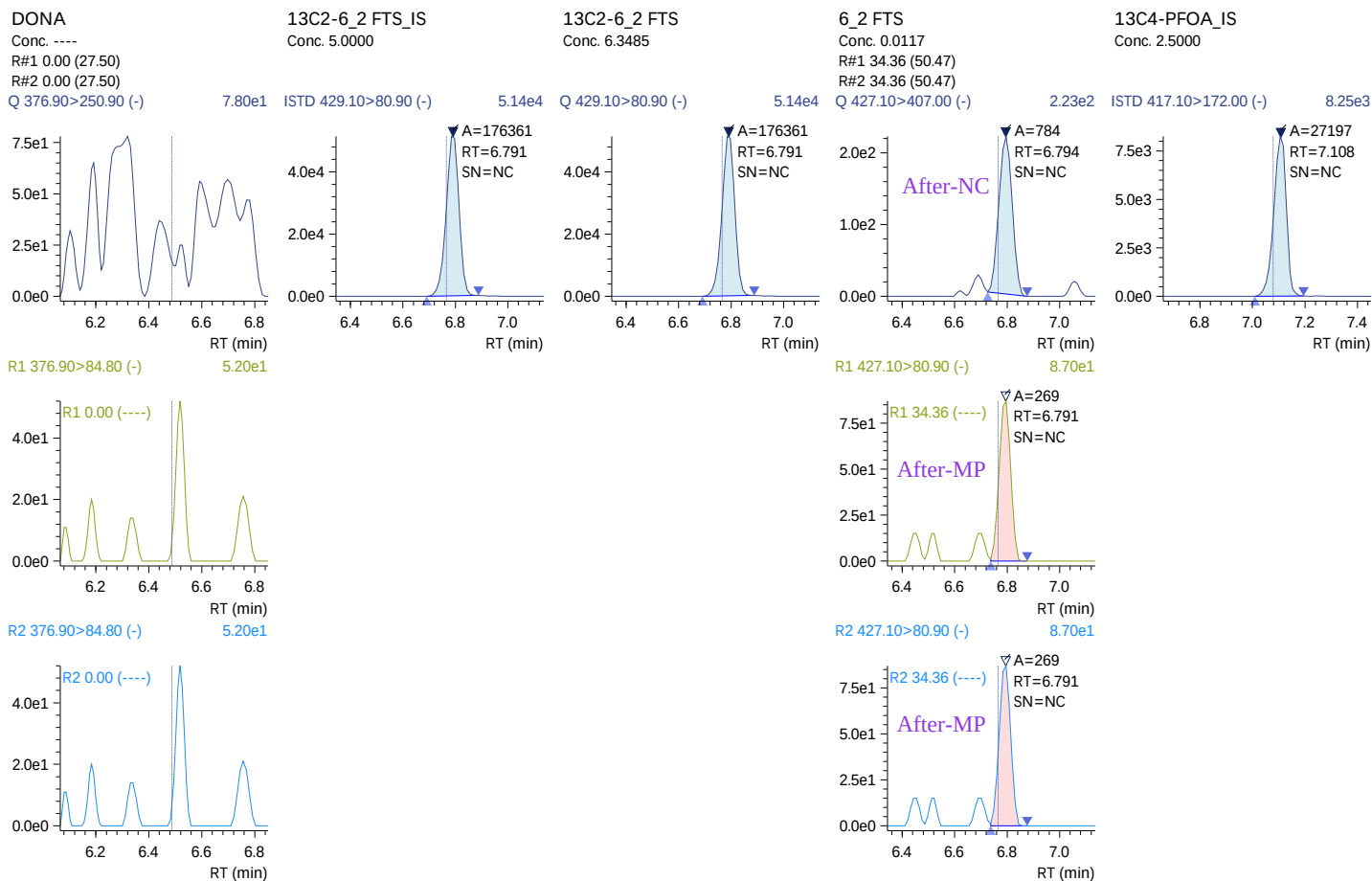


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_027 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_027 (continued)

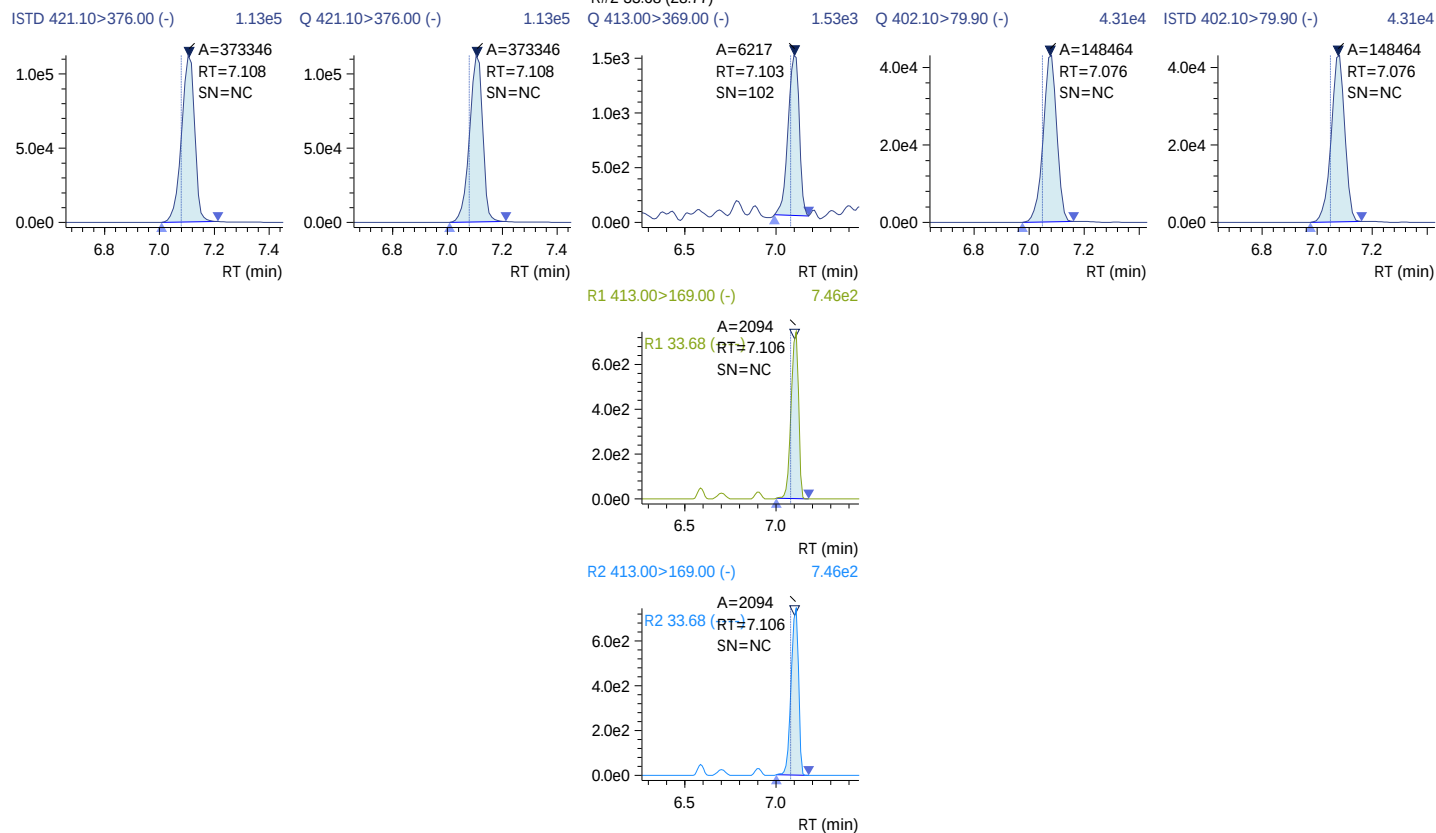
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.8784

PFOA
Conc. 0.0289
R#1 33.68 (28.77)
R#2 33.68 (28.77)

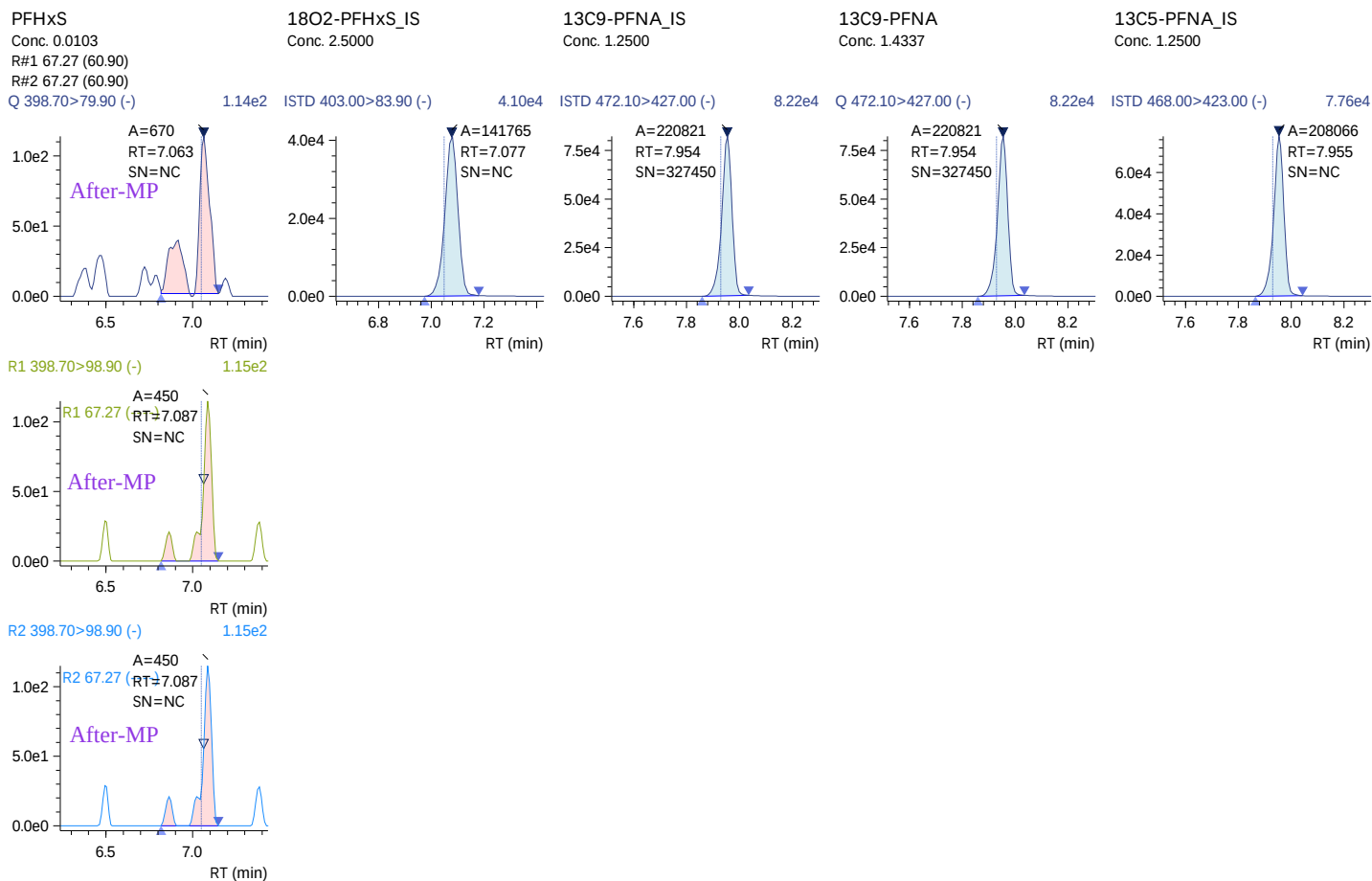
13C3-PFHxS
Conc. 2.9880

13C3-PFHxS_IS
Conc. 2.5000





240130_027 (continued)

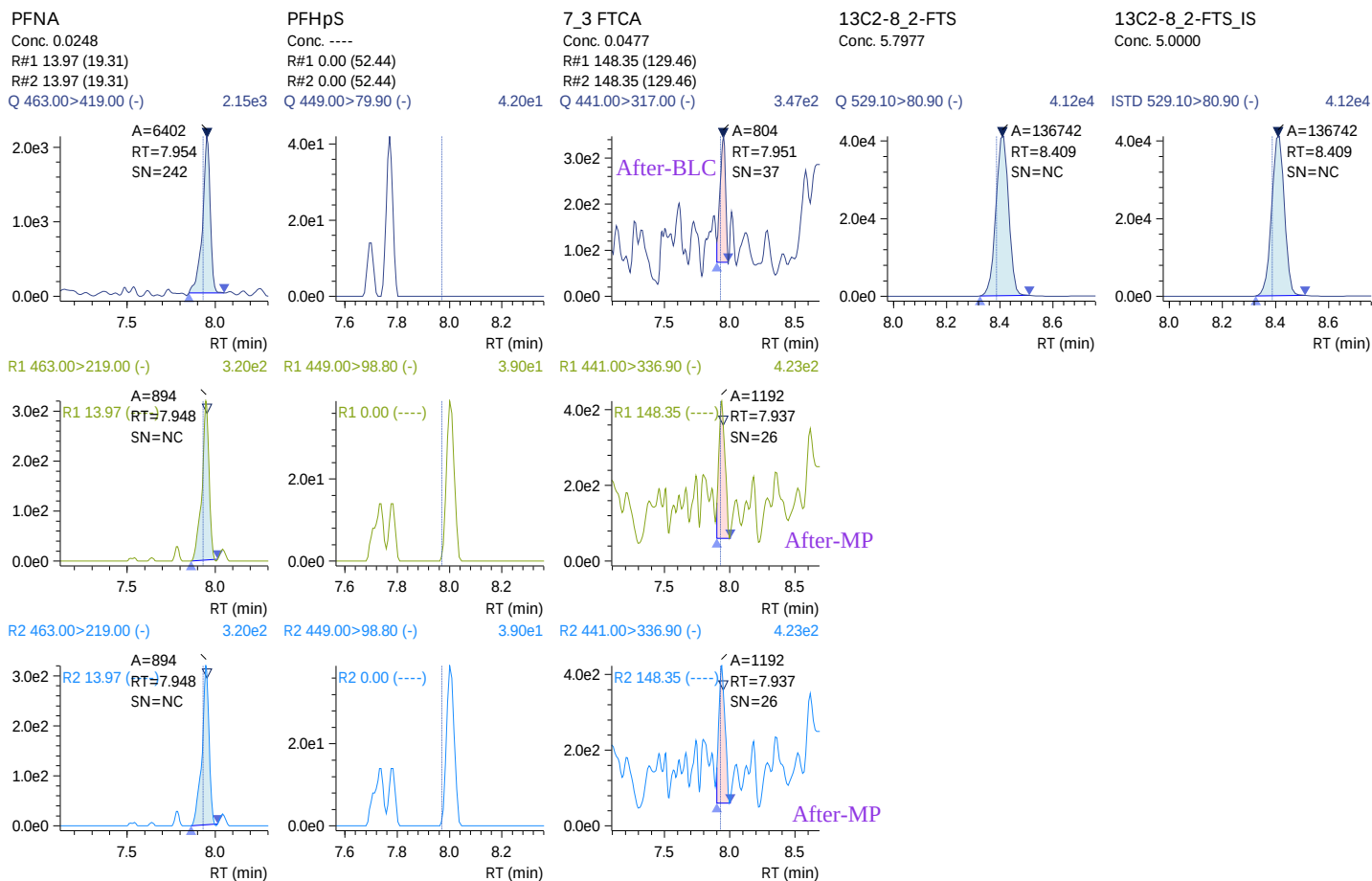


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_027 (continued)

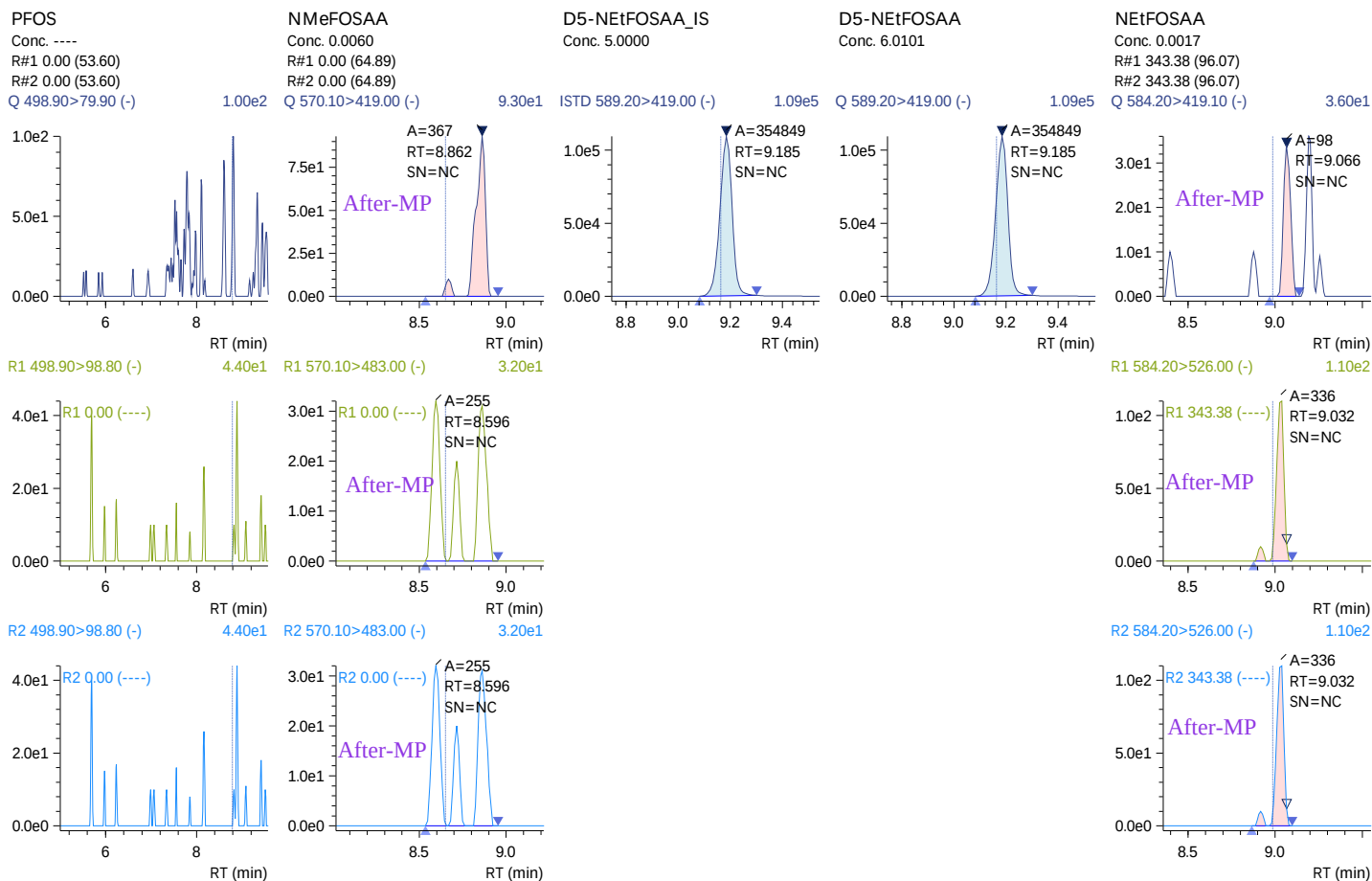


J:\LCMS08\Data\240130_1633_Curve\240130_1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_027 (continued)



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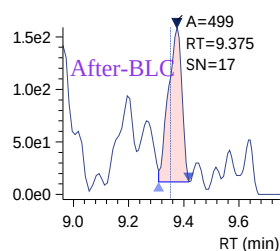
SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



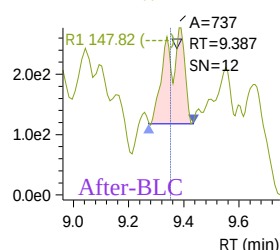
240130_027 (continued)

9-CI-PF3ONS

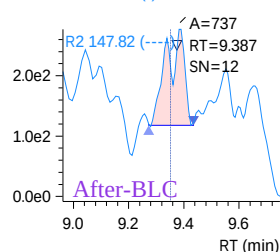
Conc. 0.0014
R#1 147.82 (30.95)
R#2 147.82 (30.95)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-) 2.77e2

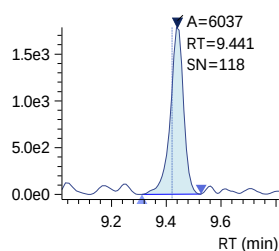


R2 532.80>353.00 (-) 2.77e2

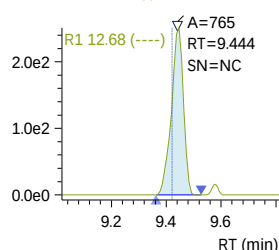


PFUnDA

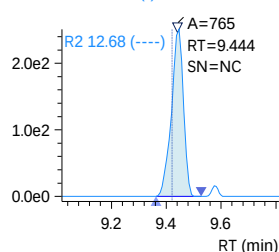
Conc. 0.0252
R#1 12.68 (11.01)
R#2 12.68 (11.01)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-) 2.51e2

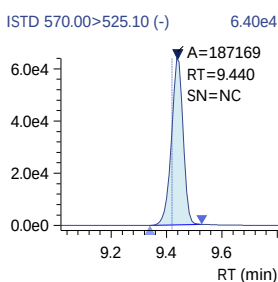


R2 563.10>269.10 (-) 2.51e2



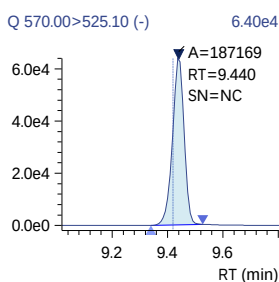
13C7-PFUnDA_IS

Conc. 1.2500



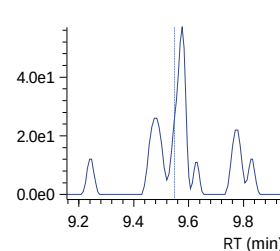
13C7-PFUnDA

Conc. 1.4477

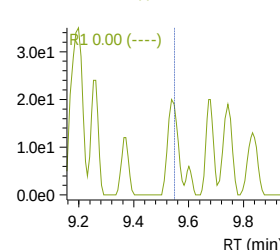


PFNS

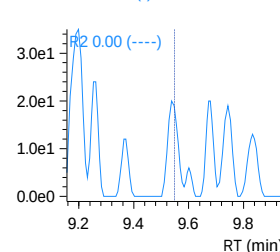
Conc. ----
R#1 0.00 (60.44)
R#2 0.00 (60.44)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-) 3.50e1

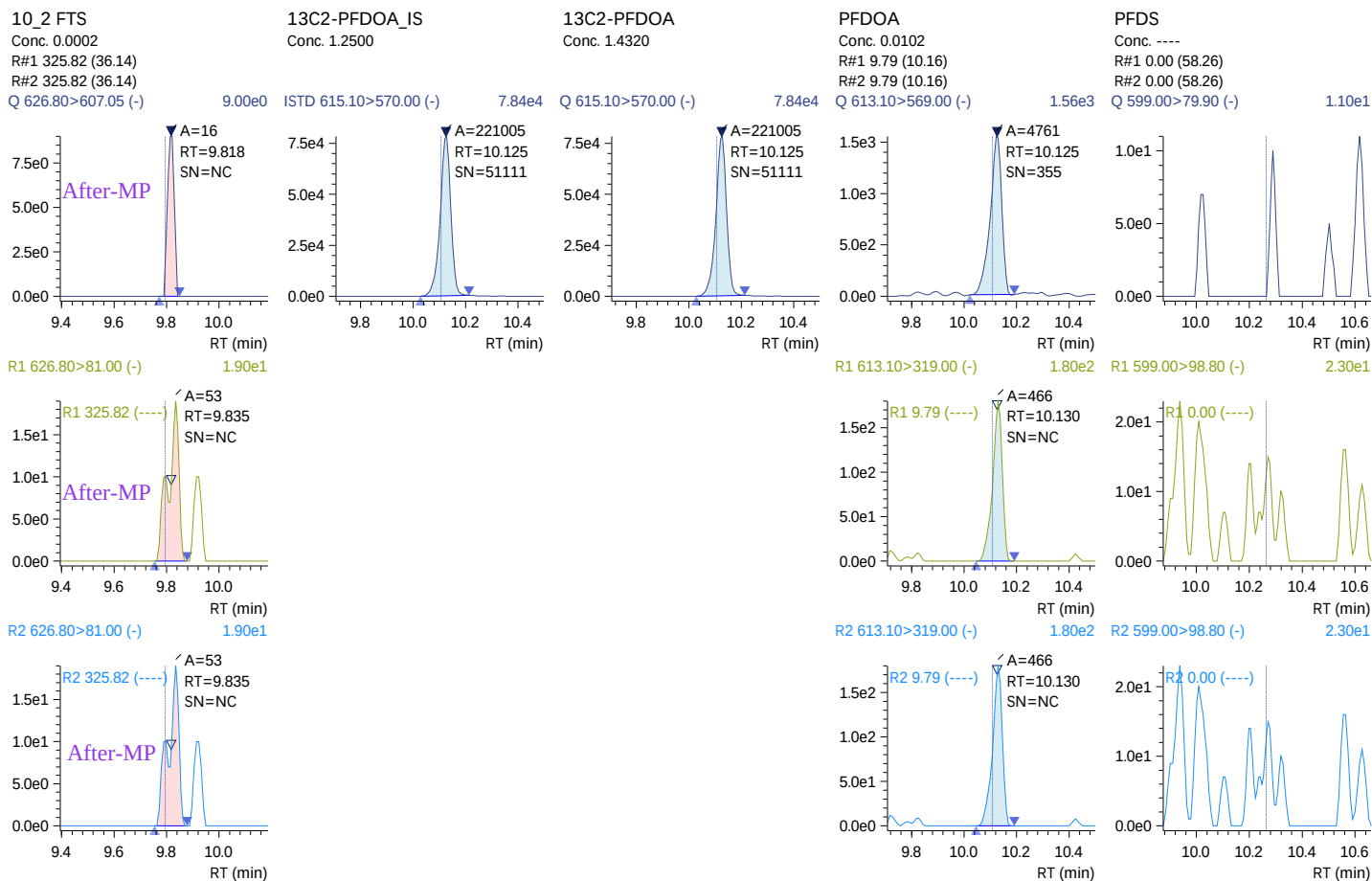


R2 548.80>98.80 (-) 3.50e1





240130_027 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_027 (continued)

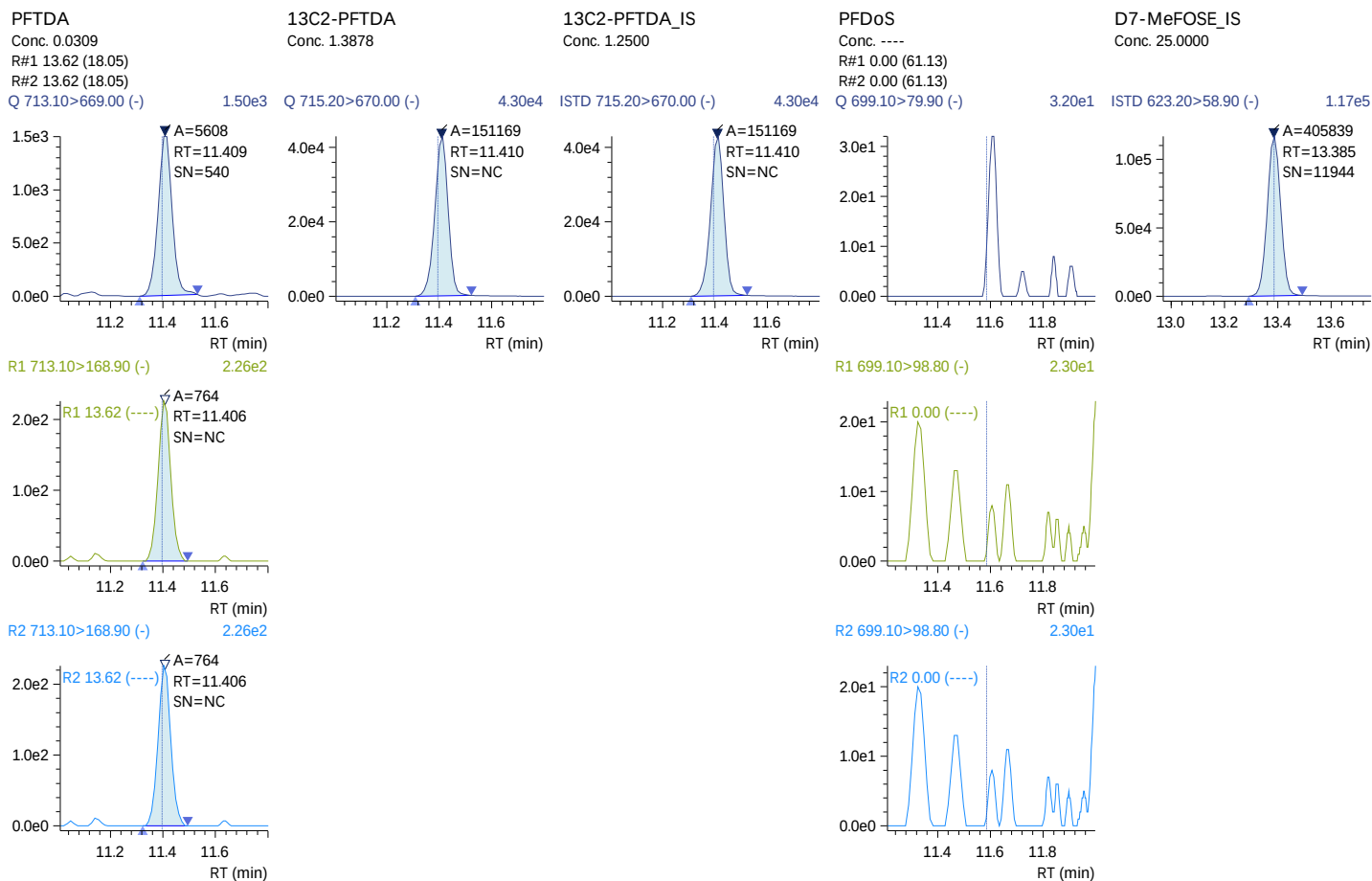


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.

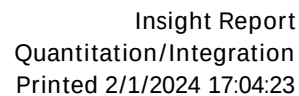


240130_027 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



D7-MeFOSE
Conc. 27.0470

MeFOSE
Conc. ----

13C2-PFHDA_IS
Conc. 2.5000

13C2-PFH_XDA
Conc. 2.7998

PFHXDA
Conc. 0.0553
R#1 10.23 (11.66)



1.17e5

Q 616.10>59.00 (-)

1.31e2

ISTD 815.00>770.05 (-)

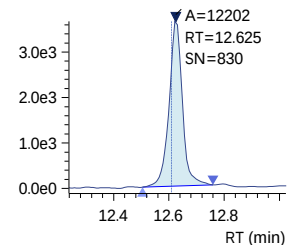
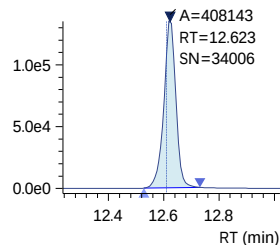
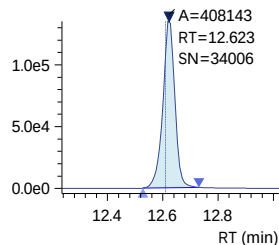
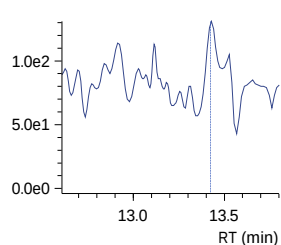
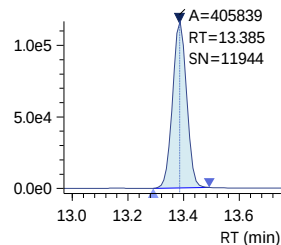
1.35e5

Q 815.00>770.05 (-)

1.35e5

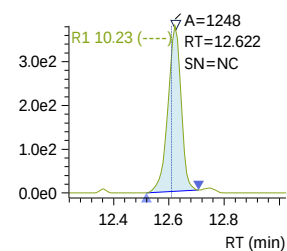
Q 813.00 > 768.95 (-)

3.68e3



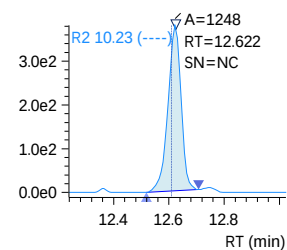
R1 813.00>218.95 (-)

3.82e2



R2 813.00>218.95 (-)

3.82e2





240130_027 (continued)

D3-MeFOSA
Conc. 2.5866

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. 0.0073
R#1 101.90 (160.44)
R#2 101.90 (160.44)

D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 26.4735

Q 515.00>219.00 (-)

1.16e4

ISTD 515.00>219.00 (-)

1.16e4

Q 511.90>219.00 (-)

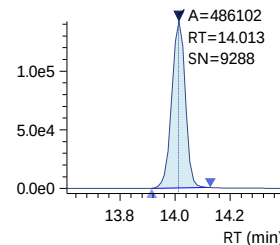
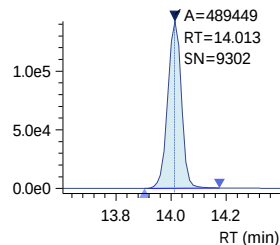
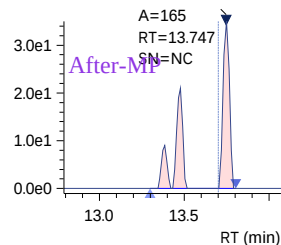
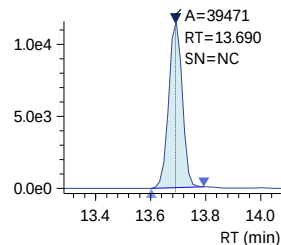
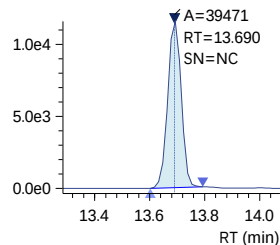
3.50e1

ISTD 639.20>58.90 (-)

1.42e5

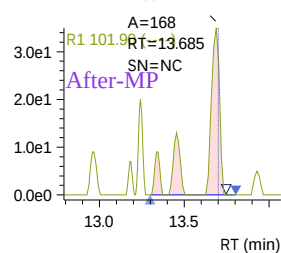
Q 639.20>58.90 (-)

1.42e5



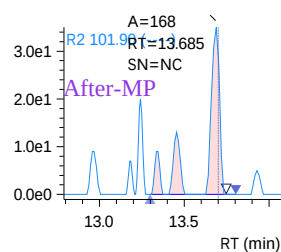
R1 511.90>169.00 (-)

3.50e1



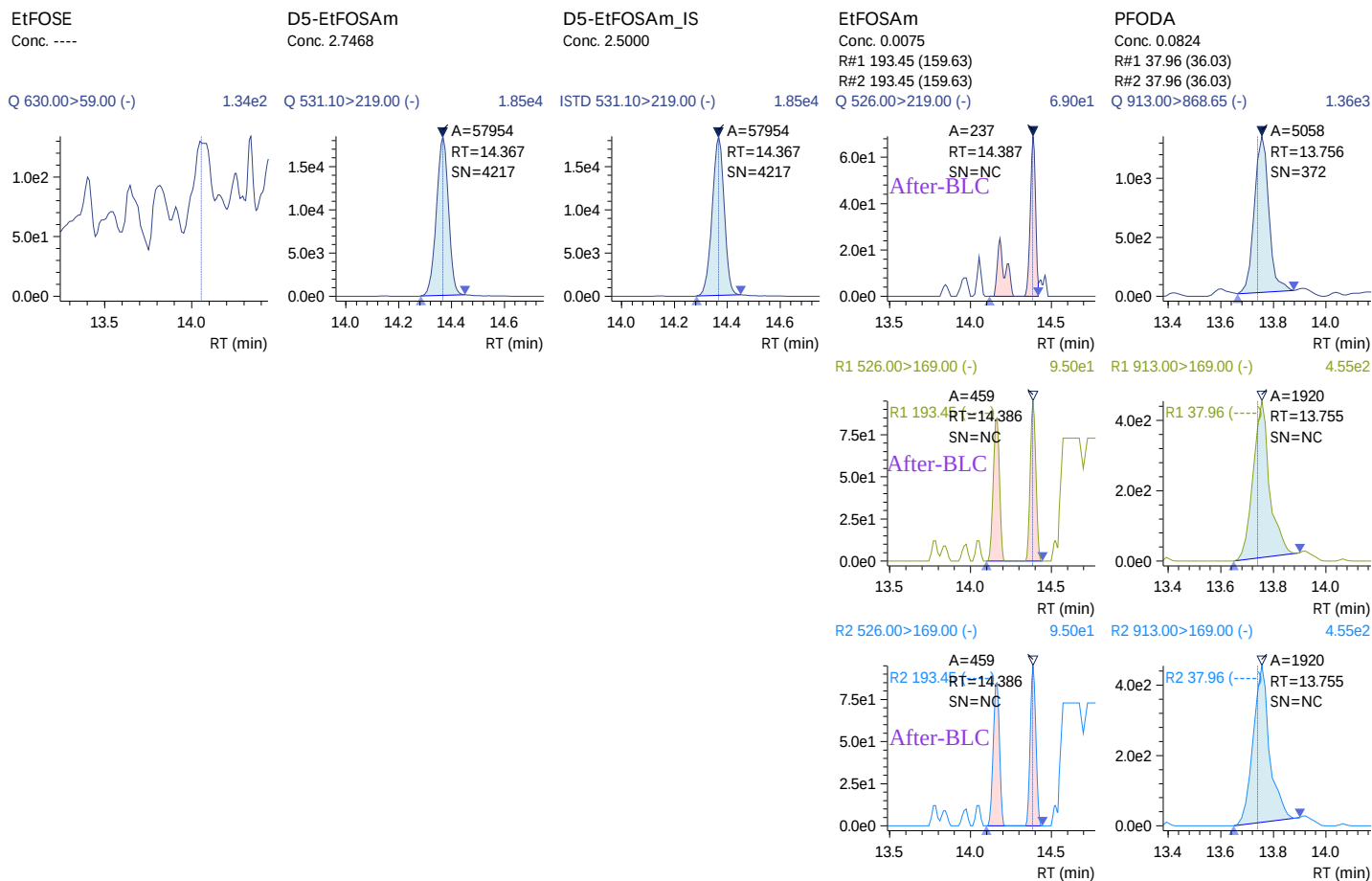
R2 511.90>169.00 (-)

3.50e1





240130_027 (continued)



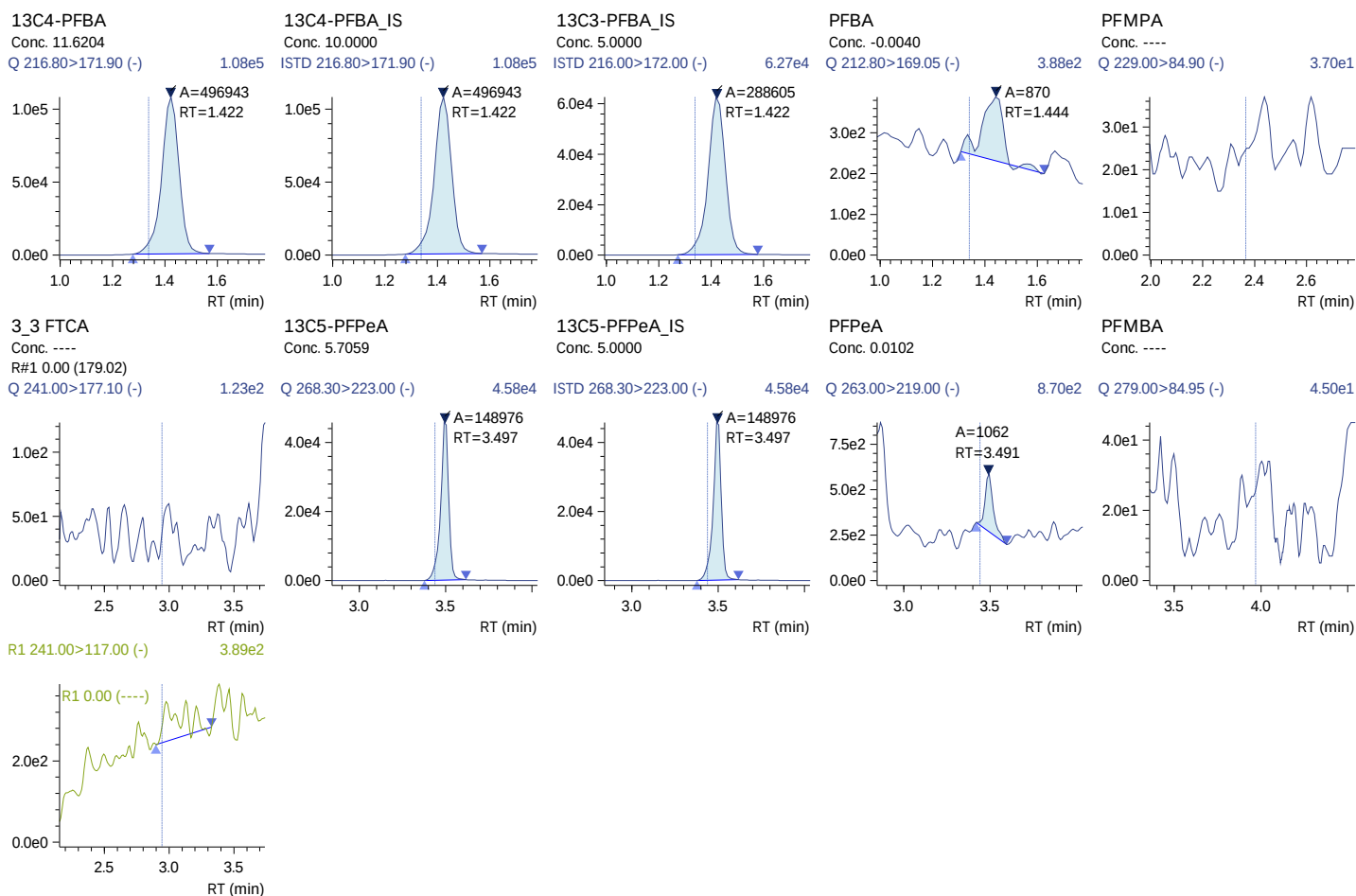
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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_027

Sample ID: 1633 CCB
Date Acquired: 1/31/2024 12:48:12 AM
Acquired by: System Administrator
Data File: 240130_027
Vial: 54 | Inj. Volume: 10.0000uL | Tray: 1





240130_027 (continued)

13C2-4_2 FTS
 Conc. 6.6205

13C2-4_2 FTS_IS
 Conc. 5.0000

4_2 FTS
 Conc. ----
 R#1 0.00 (24.69)
 R#2 0.00 (0.00)

13C3-PFBS_IS
 Conc. 2.5000

PFBS
 Conc. ----
 R#1 0.00 (52.67)
 R#2 0.00 (0.00)

Q 329.10>80.90 (-)

5.53e4

ISTD 329.10>80.90 (-)

5.53e4

Q 327.10>307.00 (-)

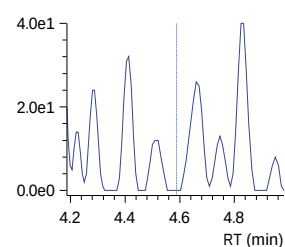
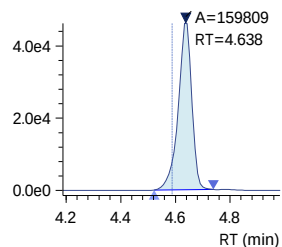
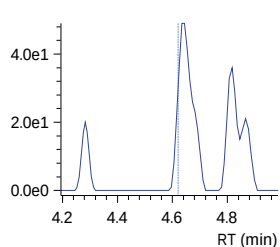
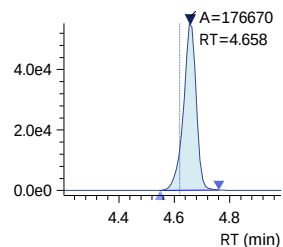
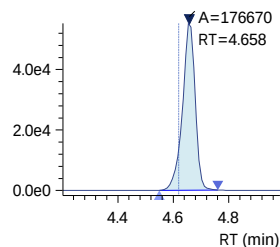
4.90e1

ISTD 302.10>79.90 (-)

4.63e4

Q 298.70>79.90 (-)

4.00e1

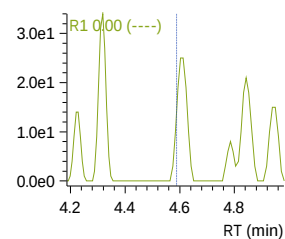
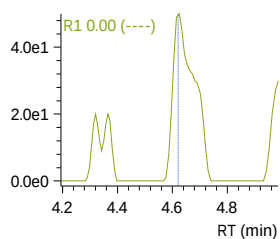


R1 327.10>80.90 (-)

5.00e1

R1 298.70>98.80 (-)

3.40e1

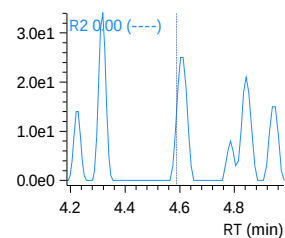
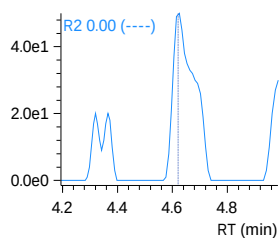


R2 327.10>80.90 (-)

5.00e1

R2 298.70>98.80 (-)

3.40e1





240130_027 (continued)

13C3-PFBS
Conc. 3.0213

NFDHA
Conc. 0.0103
R#1 0.00 (39.38)
R#2 0.00 (0.00)

13C5-PFHxA
Conc. 2.7359

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

Q 302.10>79.90 (-)

4.63e4

Q 295.00>201.00 (-)

1.65e2

Q 318.00>273.00 (-)

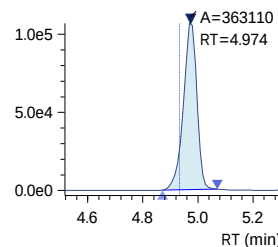
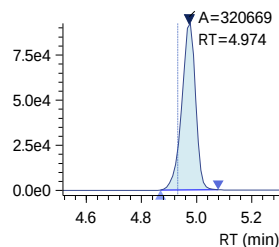
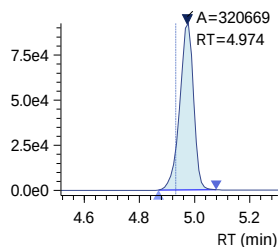
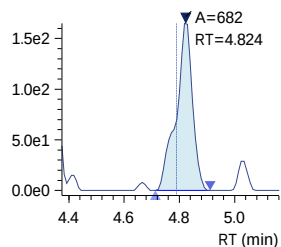
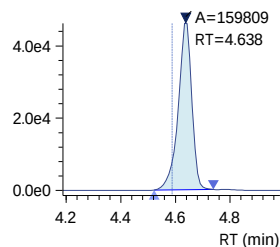
9.26e4

ISTD 318.00>273.00 (-)

9.26e4

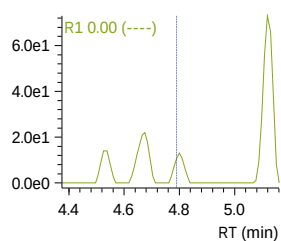
ISTD 315.10>270.00 (-)

1.07e5



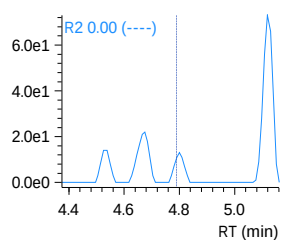
R1 295.00>84.90 (-)

7.30e1



R2 295.00>84.90 (-)

7.30e1





240130_027 (continued)

PFHxA
 Conc. 0.0785

PFEESA
 Conc. 0.0017
 R#1 0.00 (5.25)
 R#2 0.00 (0.00)

13C3-HFPO-DA
 Conc. 10.9720

13C3-HFPO-DA_IS
 Conc. 10.0000

HFPO-DA
 Conc. ----
 R#1 0.00 (69.48)
 R#2 0.00 (0.00)

Q 313.00>269.00 (-)

1.19e3

Q 314.80>135.00 (-)

1.76e2

Q 286.90>168.90 (-)

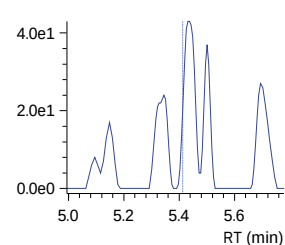
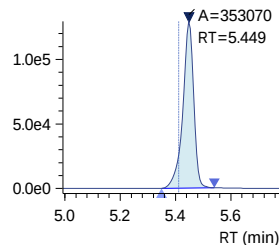
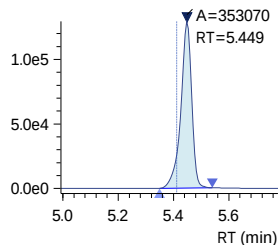
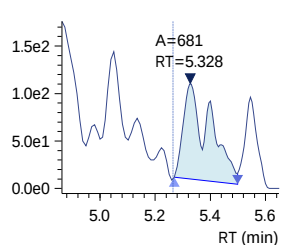
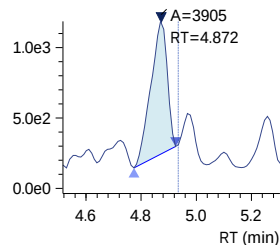
1.29e5

ISTD 286.90>168.90 (-)

1.29e5

Q 284.90>168.90 (-)

4.30e1

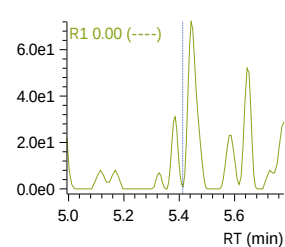
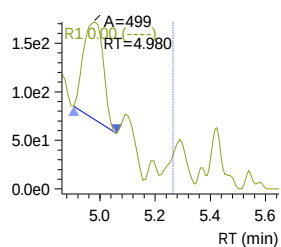


R1 314.80>82.90 (-)

1.72e2

R1 284.90>184.90 (-)

7.20e1

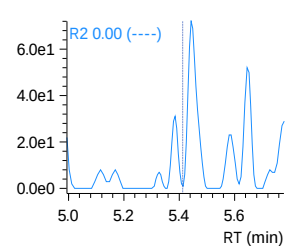
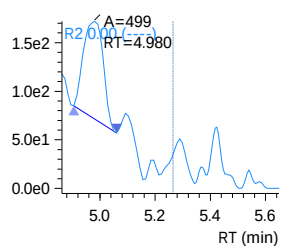


R2 314.80>82.90 (-)

1.72e2

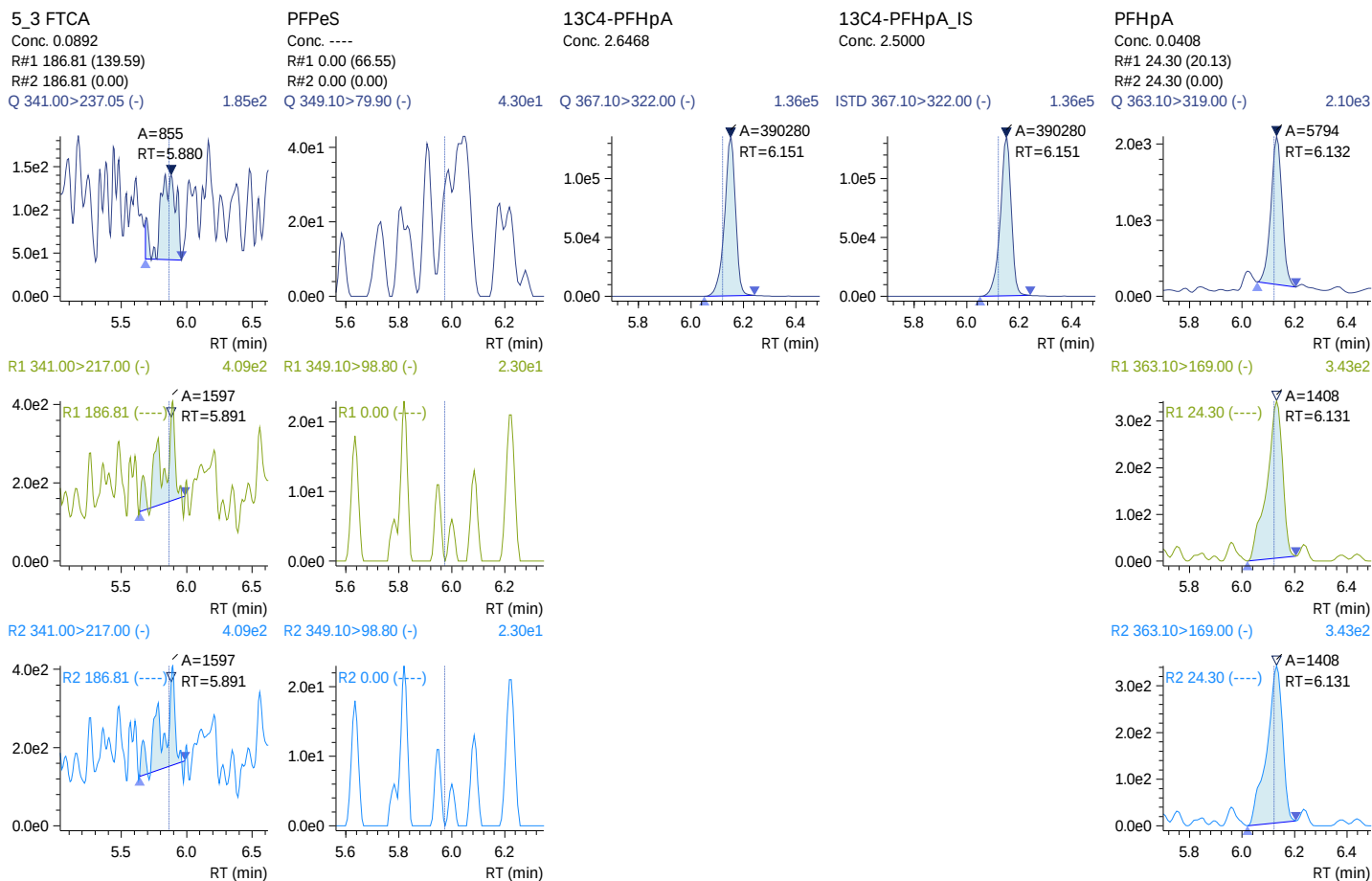
R2 284.90>184.90 (-)

7.20e1



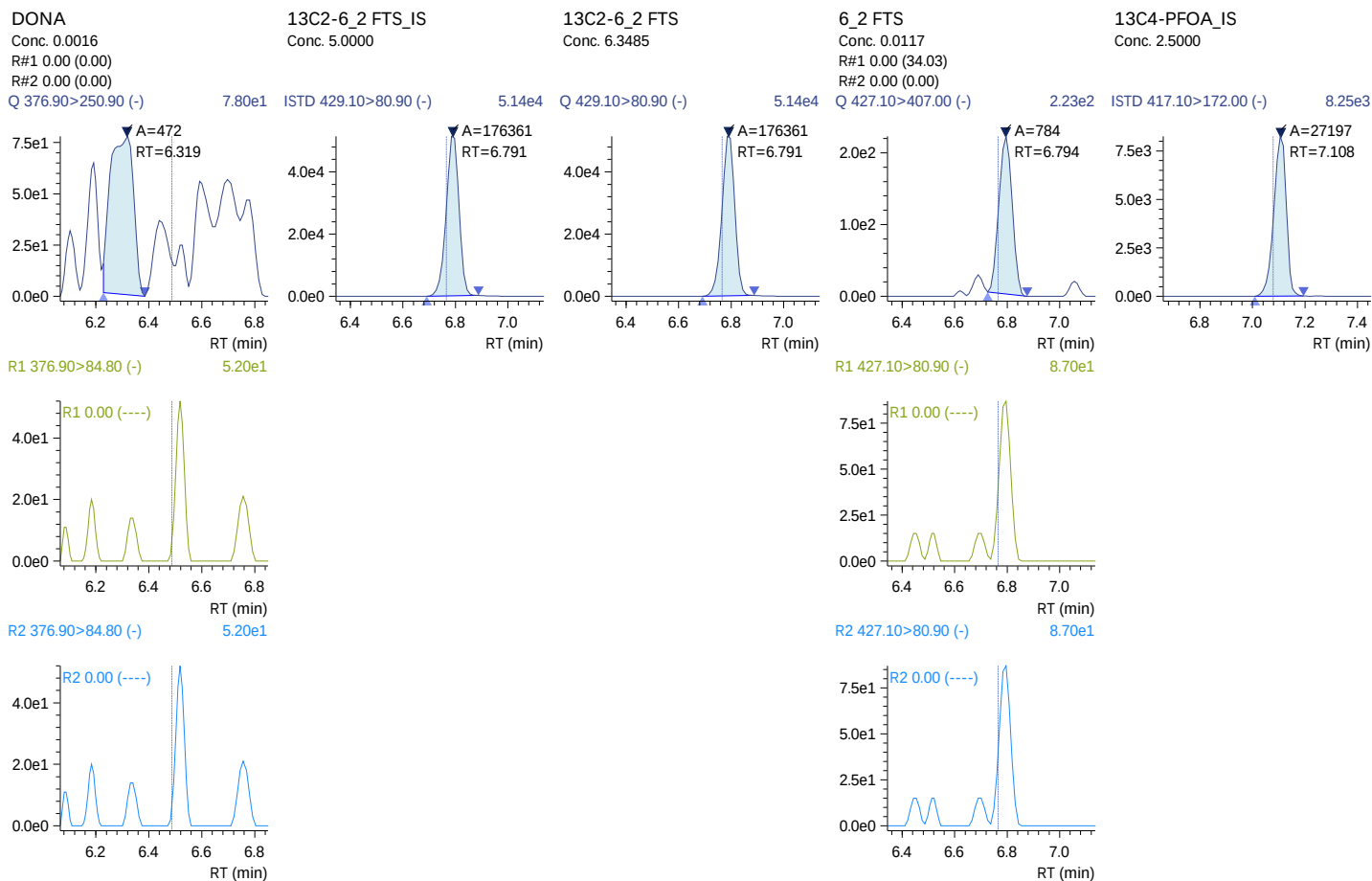


240130_027 (continued)





240130_027 (continued)





240130_027 (continued)

13C8-PFOA_IS
 Conc. 2.5000

13C8-PFOA
 Conc. 2.8784

PFOA
 Conc. 0.0178
 R#1 33.68 (22.46)
 R#2 33.68 (0.00)

13C3-PFHxS
 Conc. 2.9880

13C3-PFHxS_IS
 Conc. 2.5000

ISTD 421.10>376.00 (-)

1.13e5

Q 421.10>376.00 (-)

1.13e5

Q 413.00>369.00 (-)

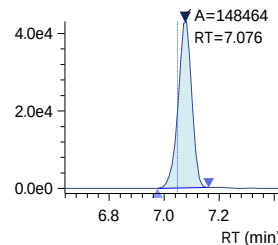
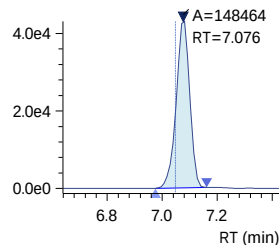
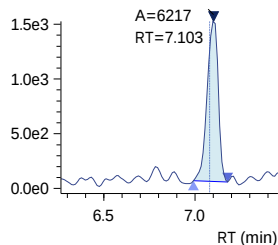
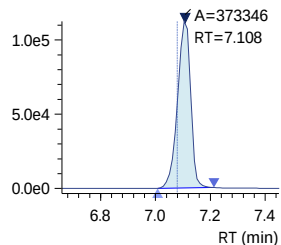
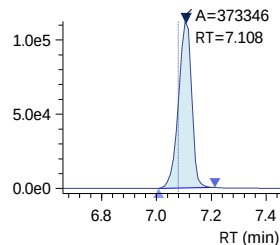
1.53e3

Q 402.10>79.90 (-)

4.31e4

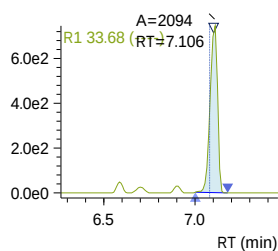
ISTD 402.10>79.90 (-)

4.31e4



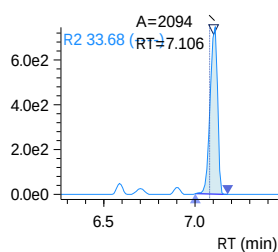
R1 413.00>169.00 (-)

7.46e2



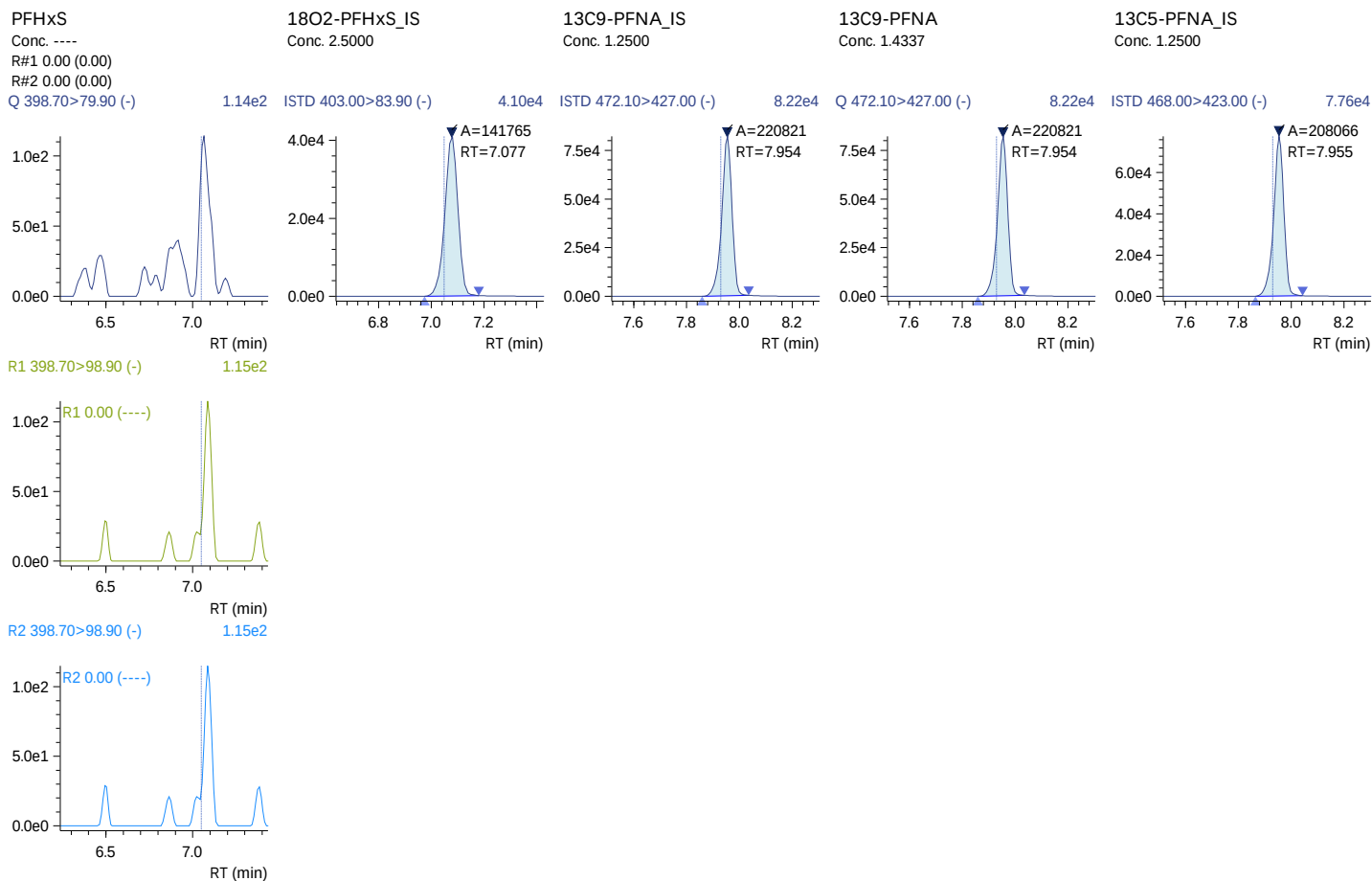
R2 413.00>169.00 (-)

7.46e2



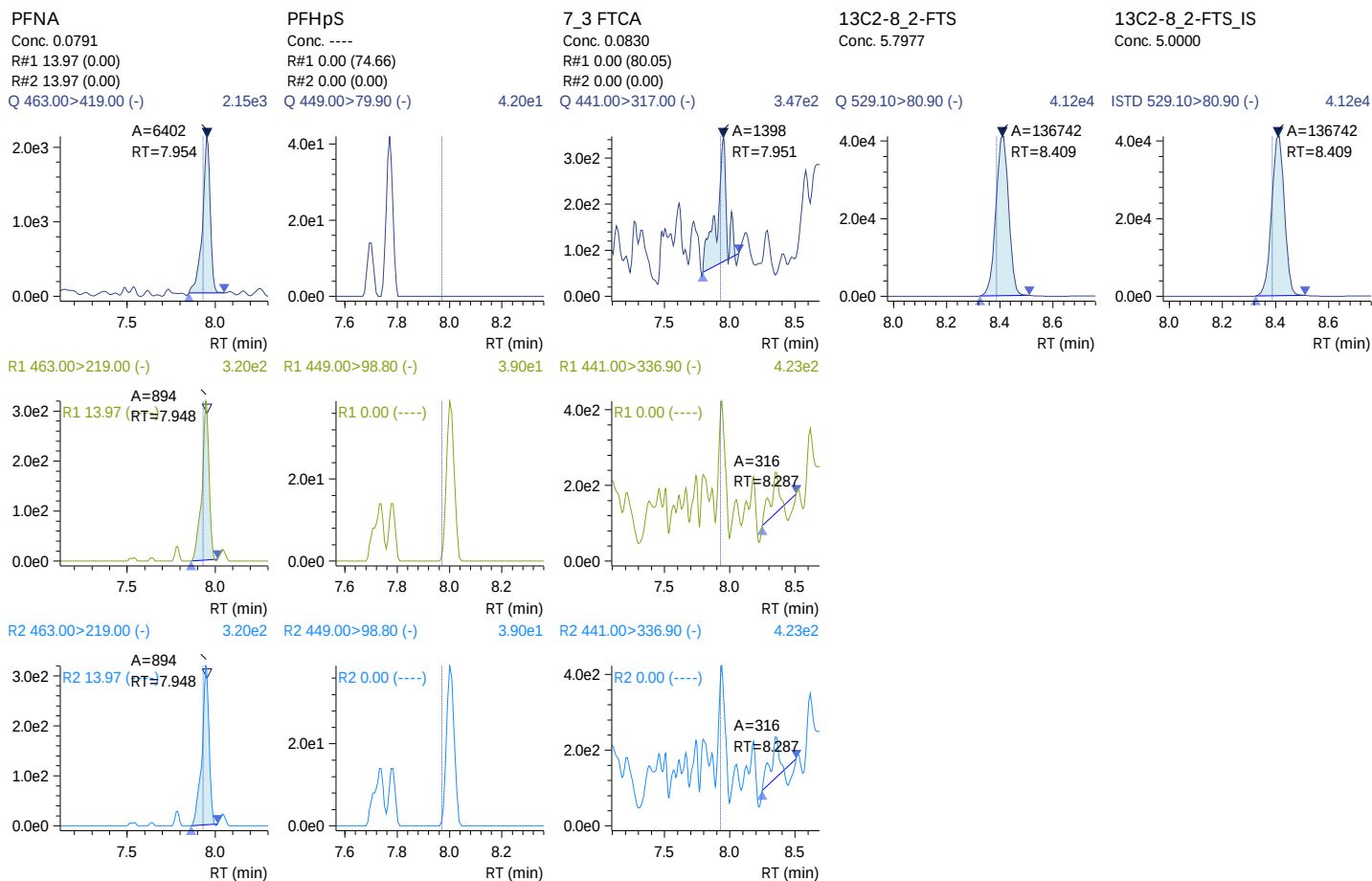


240130_027 (continued)



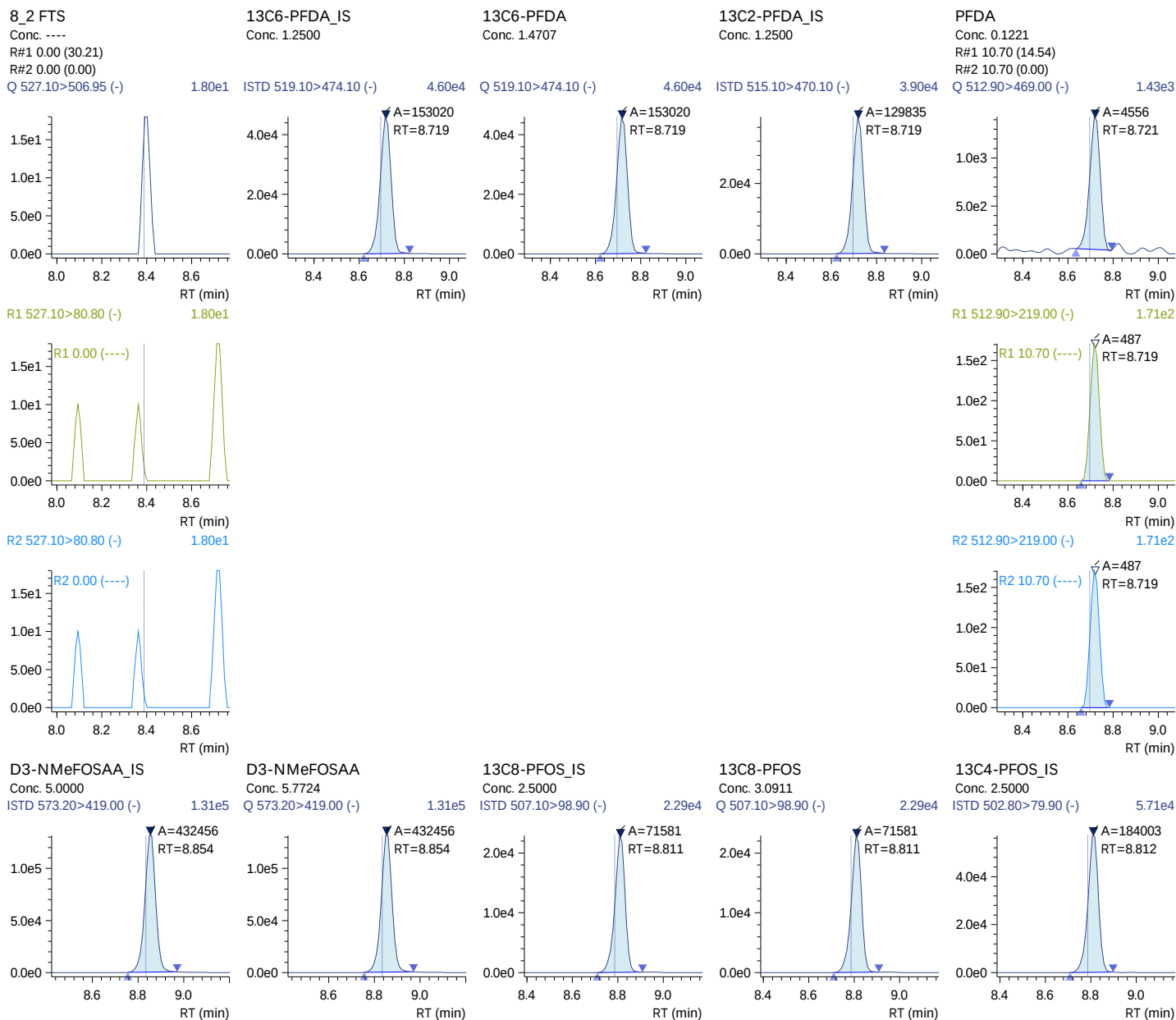


240130_027 (continued)



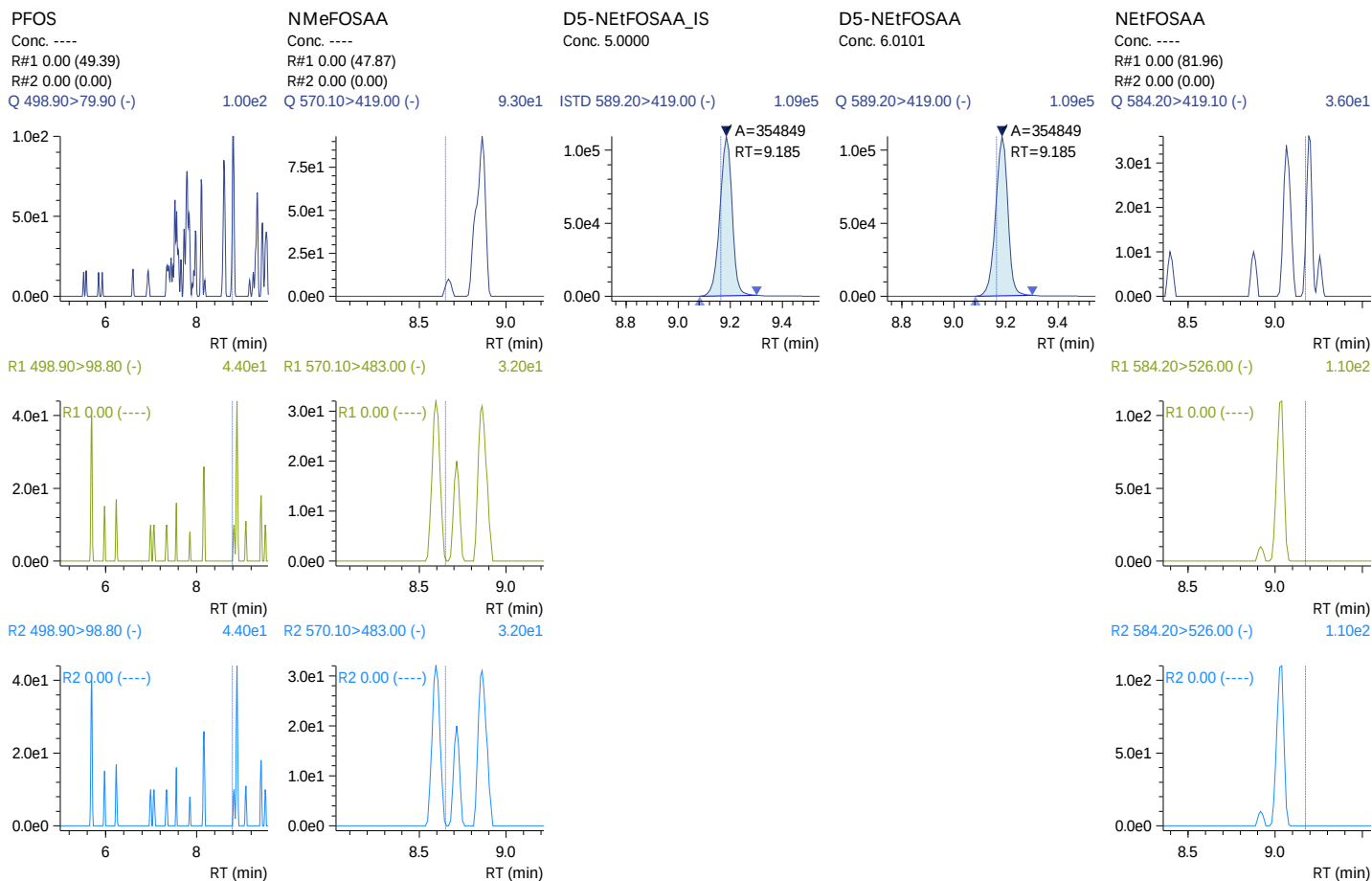


240130_027 (continued)





240130_027 (continued)

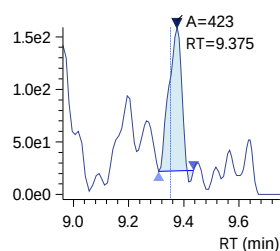




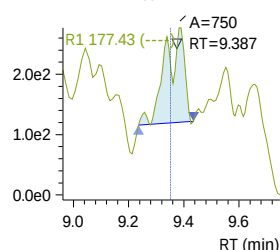
240130_027 (continued)

9-CI-PF3ONS

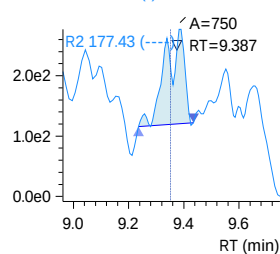
Conc. 0.0012
R#1 177.43 (31.39)
R#2 177.43 (0.00)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-) 2.77e2

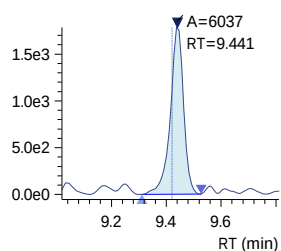


R2 532.80>353.00 (-) 2.77e2

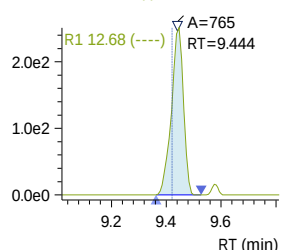


PFUnDA

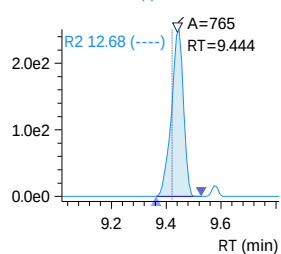
Conc. 0.0263
R#1 12.68 (12.59)
R#2 12.68 (0.00)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-) 2.51e2

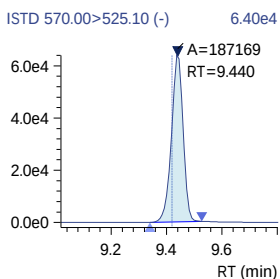


R2 563.10>269.10 (-) 2.51e2



13C7-PFUnDA_IS

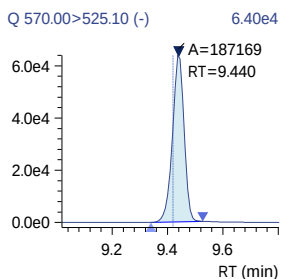
Conc. 1.2500



ISTD 570.00>525.10 (-) 6.40e4

13C7-PFUnDA

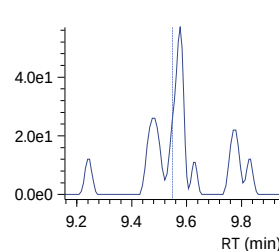
Conc. 1.4477



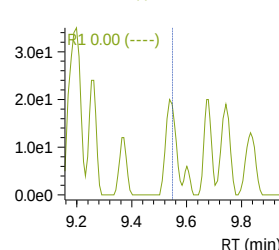
Q 570.00>525.10 (-) 6.40e4

PFNS

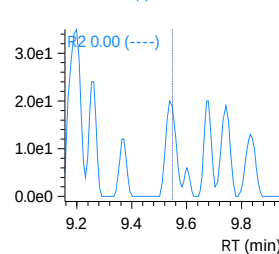
Conc. ----
R#1 0.00 (82.65)
R#2 0.00 (0.00)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-) 3.50e1

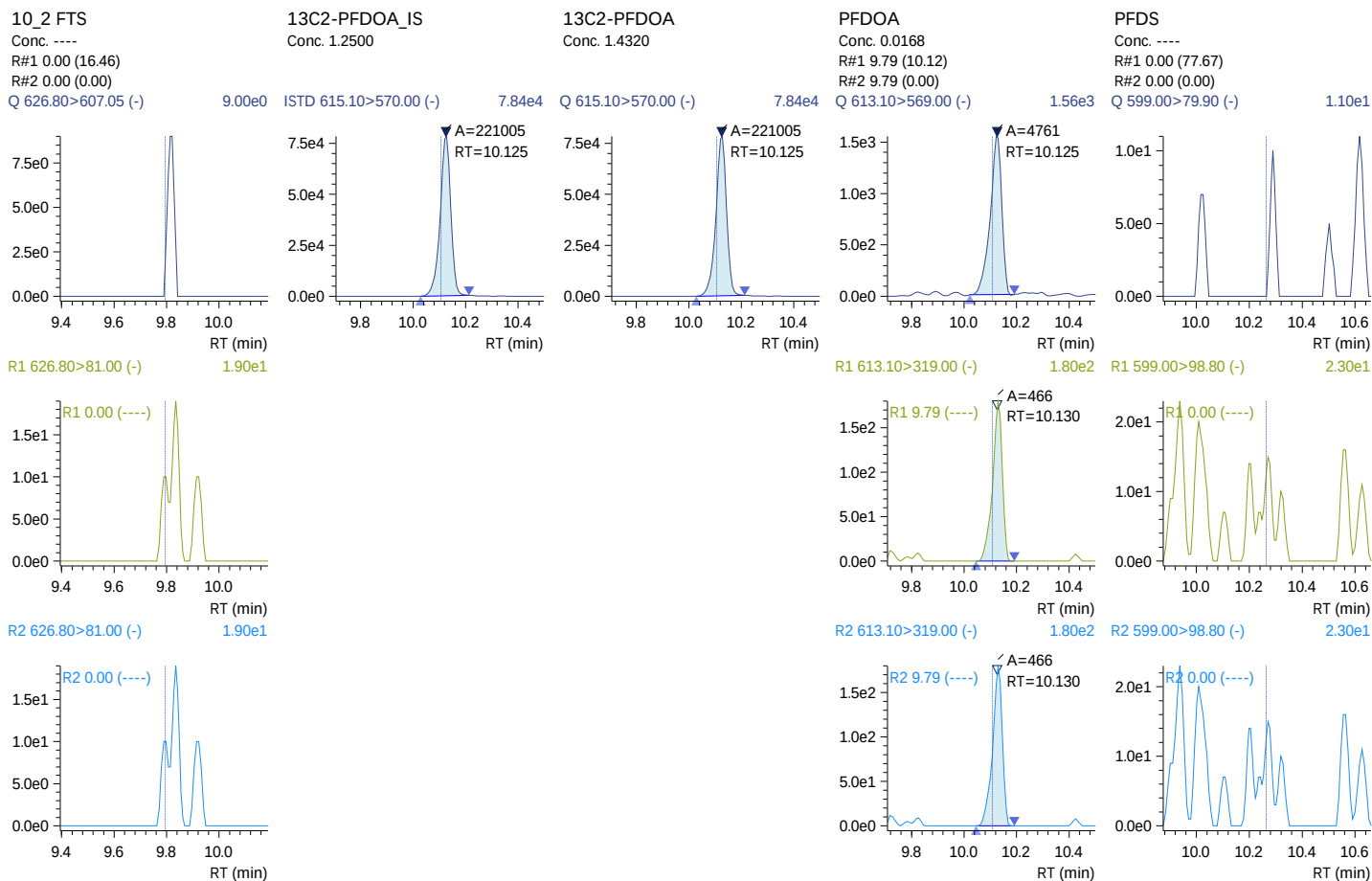


R2 548.80>98.80 (-) 3.50e1



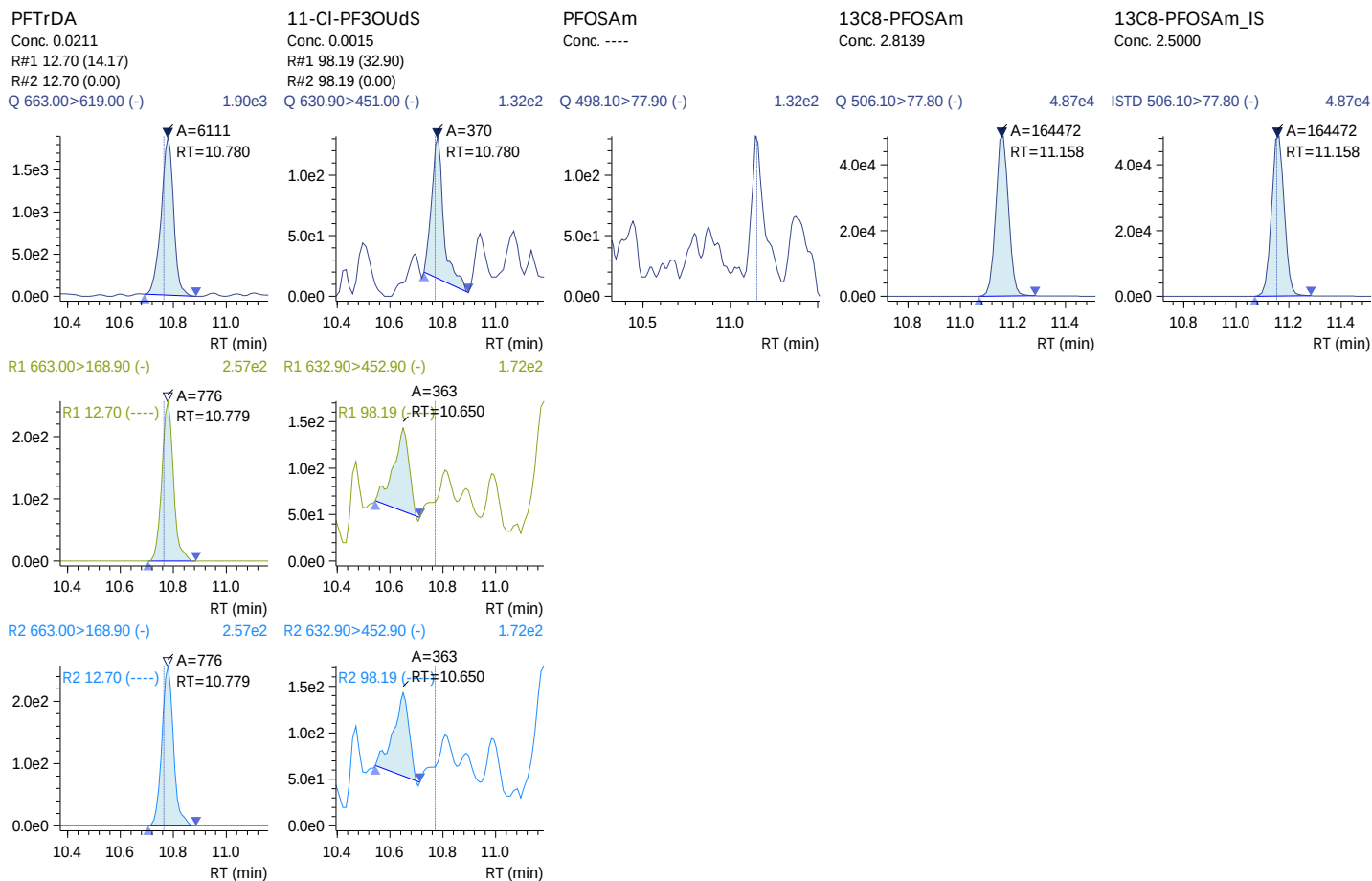


240130_027 (continued)



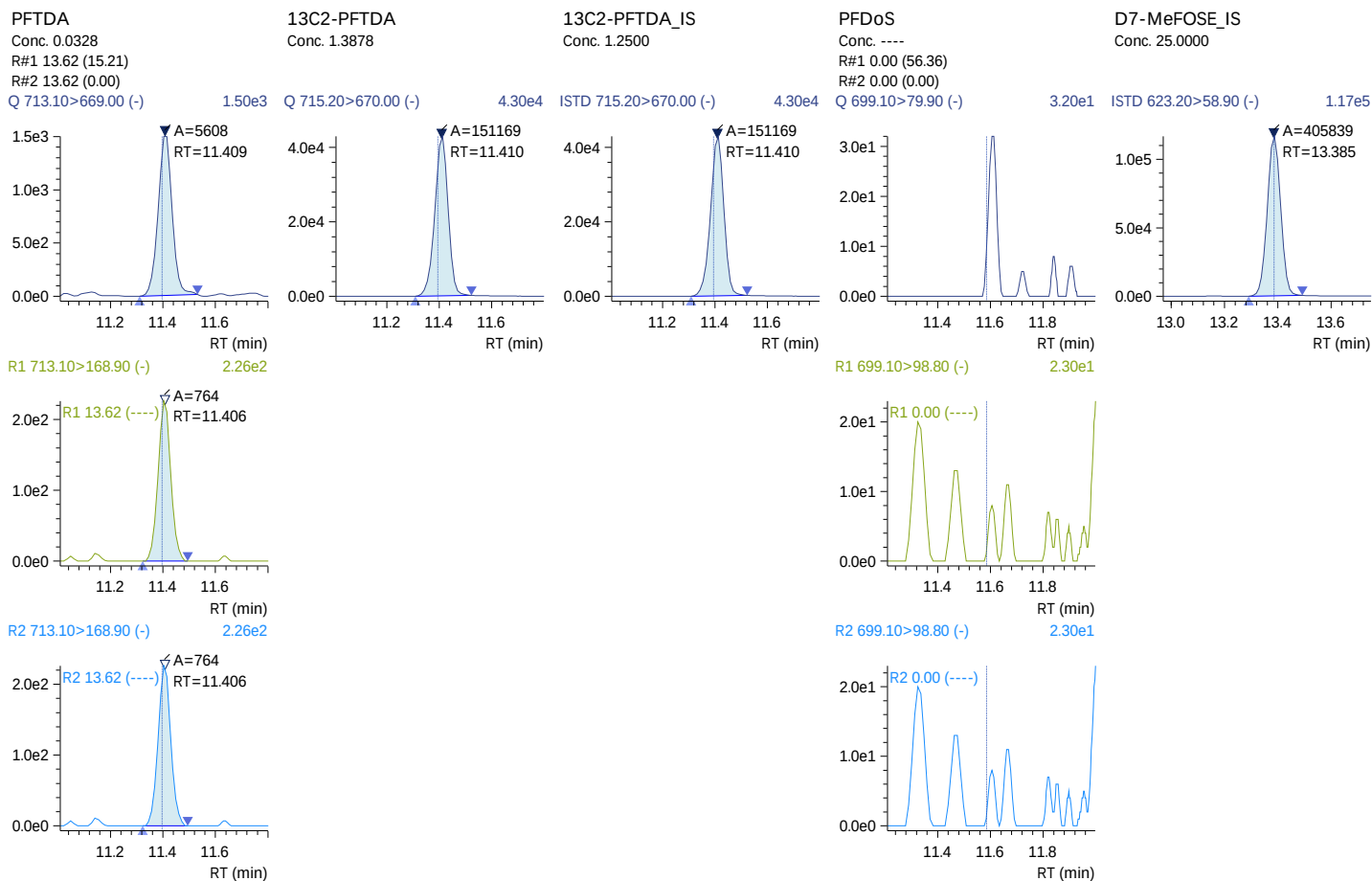


240130_027 (continued)





240130_027 (continued)





240130_027 (continued)

D7-MeFOSE
Conc. 27.0470

MeFOSE
Conc. 0.0406

¹³C2-PFHXA_IS
Conc. 2.5000

¹³C2-PFHXA
Conc. 2.7998

PFHXA
Conc. 0.0533

Q 623.20>58.90 (-)

1.17e5

Q 616.10>59.00 (-)

1.31e2

ISTD 815.00>770.05 (-)

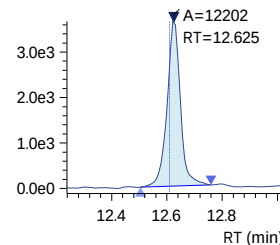
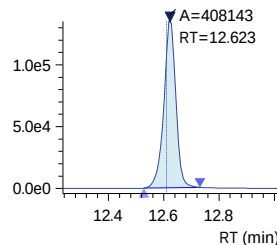
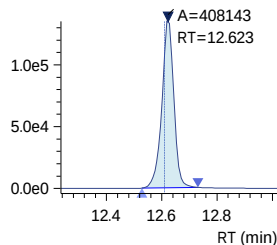
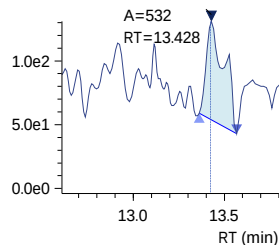
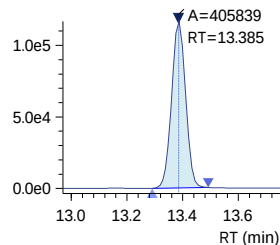
1.35e5

Q 815.00>770.05 (-)

1.35e5

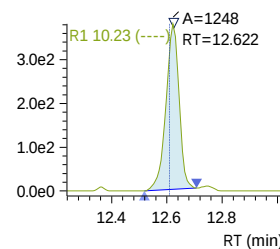
Q 813.00>768.95 (-)

3.68e3



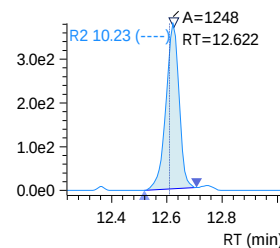
R1 813.00>218.95 (-)

3.82e2



R2 813.00>218.95 (-)

3.82e2





240130_027 (continued)

D3-MeFOSA
 Conc. 2.5866

D3-MeFOSA_IS
 Conc. 2.5000

MeFOSA
 Conc. ----
 R#1 0.00 (98.91)
 R#2 0.00 (0.00)

D9-EtFOSE_IS
 Conc. 25.0000

D9-EtFOSE
 Conc. 26.4735

Q 515.00>219.00 (-)

1.16e4

ISTD 515.00>219.00 (-)

1.16e4

Q 511.90>219.00 (-)

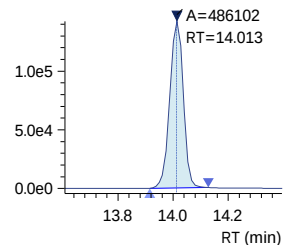
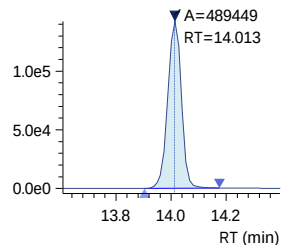
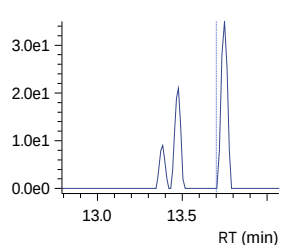
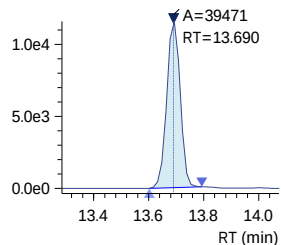
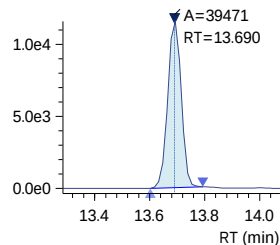
3.50e1

ISTD 639.20>58.90 (-)

1.42e5

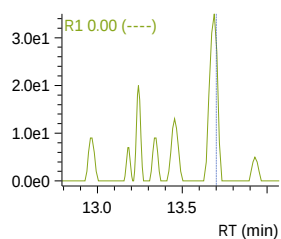
Q 639.20>58.90 (-)

1.42e5



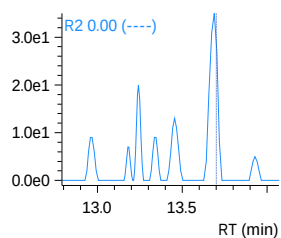
R1 511.90>169.00 (-)

3.50e1



R2 511.90>169.00 (-)

3.50e1





240130_027 (continued)

EtFOSE
Conc. 0.0067

D5-EtFOSAm
Conc. 2.7468

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. 0.0087

PFODA

Conc. 0.0462
R#1 37.96 (23.45)
R#2 37.96 (0.00)

Q 630.00>59.00 (-)

1.34e2

Q 531.10>219.00 (-)

1.85e4

ISTD 531.10>219.00 (-)

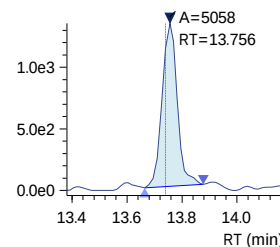
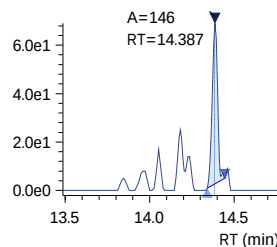
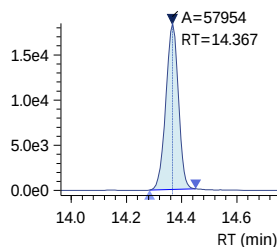
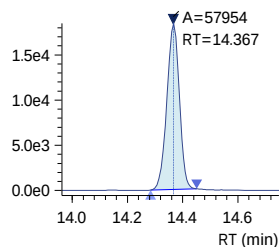
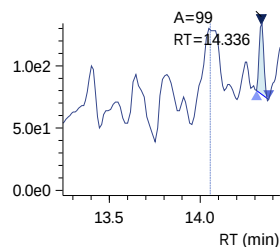
1.85e4

Q 526.00>219.00 (-)

6.90e1

Q 913.00>868.65 (-)

1.36e3

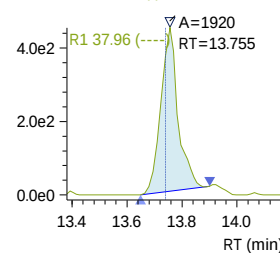
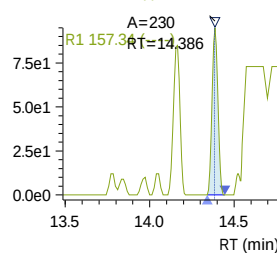


R1 526.00>169.00 (-)

9.50e1

R1 913.00>169.00 (-)

4.55e2

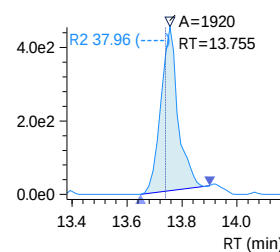
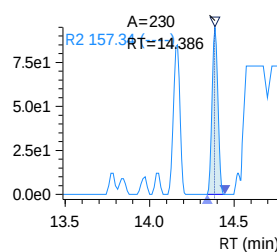


R2 526.00>169.00 (-)

9.50e1

R2 913.00>169.00 (-)

4.55e2

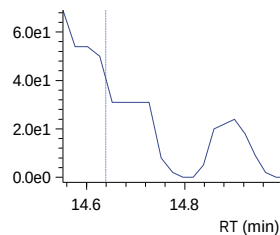


positive trans

Conc. ----

Q 514.80>219.10 (+)

6.90e1





240130_028

Sample ID: 1633 ICV 1.0PPB
Date Acquired: 1/31/2024 1:11:27 AM
Acquired by: System Administrator
Data File: 240130_028
Vial: 10 | Inj. Volume: 10.0000uL | Tray: 1

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	893163	----	----	----	----	----	----	
13C4-PFBA_IS	216.80>171.90	----	893163	----	----	----	----	----	----	
13C3-PFBA_IS	216.00>172.00	----	516731	----	----	----	----	----	----	
PFBA	212.80>169.05	----	91427	----	----	----	----	----	----	
PFMPA	229.00>84.90	----	74730	----	----	----	----	----	----	
3_3 FTCA	241.00>177.10	241.00>117.00	----	0	0.00	139.21	----	----	----	
13C5-PFPeA	268.30>223.00	----	247523	----	----	----	----	----	----	
13C5-PFPeA_IS	268.30>223.00	----	247523	----	----	----	----	----	----	
PFPeA	263.00>219.00	----	182569	----	----	----	----	----	----	
PFMBA	279.00>84.95	----	112916	----	----	----	----	----	----	
13C2-4_2 FTS	329.10>80.90	----	283828	----	----	----	----	----	----	
13C2-4_2 FTS_IS	329.10>80.90	----	283828	----	----	----	----	----	----	
4_2 FTS	327.10>307.00	327.10>80.90	143940	46730	32.47	32.10	46730	32.47	32.10	
13C3-PFBS_IS	302.10>79.90	----	286206	----	----	----	----	----	----	
PFBS	298.70>79.90	298.70>98.80	130070	61291	47.12	44.81	61291	47.12	44.81	
13C3-PFBS	302.10>79.90	----	286206	----	----	----	----	----	----	
NFDHA	295.00>201.00	295.00>84.90	113729	41745	36.71	35.54	41745	36.71	35.54	
13C5-PFHxA	318.00>273.00	----	567720	----	----	----	----	----	----	
13C5-PFHxA_IS	318.00>273.00	----	567720	----	----	----	----	----	----	
13C2-PFHxA_IS	315.10>270.00	----	604927	----	----	----	----	----	----	
PFHxA	313.00>269.00	----	223179	----	----	----	----	----	----	
PFEESA	314.80>135.00	314.80>82.90	670876	37391	5.57	5.22	37391	5.57	5.22	
13C3-HFPO-DA	286.90>168.90	----	610140	----	----	----	----	----	----	
13C3-HFPO-DA_IS	286.90>168.90	----	610140	----	----	----	----	----	----	
HFPO-DA	284.90>168.90	284.90>184.90	63761	39403	61.80	59.79	39403	61.80	59.79	
5_3 FTCA	341.00>237.05	341.00>217.00	----	0	0.00	157.08	0	0.00	157.08	
PFPeS	349.10>79.90	349.10>98.80	111057	59922	53.96	55.12	59922	53.96	55.12	
13C4-PFHpA	367.10>322.00	----	690468	----	----	----	----	----	----	
13C4-PFHpA_IS	367.10>322.00	----	690468	----	----	----	----	----	----	
PFHpA	363.10>319.00	363.10>169.00	255013	53661	21.04	23.02	53661	21.04	23.02	
DONA	376.90>250.90	376.90>84.80	484746	135911	28.04	27.50	135911	28.04	27.50	
13C2-6_2 FTS_IS	429.10>80.90	----	275450	----	----	----	----	----	----	
13C2-6_2 FTS	429.10>80.90	----	275450	----	----	----	----	----	----	
6_2 FTS	427.10>407.00	427.10>80.90	112892	52257	46.29	50.47	52257	46.29	50.47	
13C4-PFOA_IS	417.10>172.00	----	49113	----	----	----	----	----	----	
13C8-PFOA_IS	421.10>376.00	----	717880	----	----	----	----	----	----	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240130_028 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	717880	----	----	----	----	----	----	----
PFOA	413.00>369.00	413.00>169.00	259925	67871	26.11	28.77	67871	26.11	28.77	
13C3-PFHxS	402.10>79.90	----	260431	----	----	----	----	----	----	----
13C3-PFHxS_IS	402.10>79.90	----	260431	----	----	----	----	----	----	----
PFHxS	398.70>79.90	398.70>98.90	103997	63256	60.83	60.90	63256	60.83	60.90	
18O2-PFHxS_IS	403.00>83.90	----	255604	----	----	----	----	----	----	----
13C9-PFNA_IS	472.10>427.00	----	387694	----	----	----	----	----	----	----
13C9-PFNA	472.10>427.00	----	387694	----	----	----	----	----	----	----
13C5-PFNA_IS	468.00>423.00	----	374354	----	----	----	----	----	----	----
PFNA	463.00>419.00	463.00>219.00	273895	55871	20.40	19.31	55871	20.40	19.31	
PFHpS	449.00>79.90	449.00>98.80	105405	50430	47.84	52.44	50430	47.84	52.44	
7_3 FTCA	441.00>317.00	441.00>336.90	----	0	0.00	129.46	0	0.00	129.46	
13C2-8_2-FTS	529.10>80.90	----	229575	----	----	----	----	----	----	----
13C2-8_2-FTS_IS	529.10>80.90	----	229575	----	----	----	----	----	----	----
8_2 FTS	527.10>506.95	527.10>80.80	85585	43278	50.57	45.98	43278	50.57	45.98	
13C6-PFDA_IS	519.10>474.10	----	247123	----	----	----	----	----	----	----
13C6-PFDA	519.10>474.10	----	247123	----	----	----	----	----	----	----
13C2-PFDA_IS	515.10>470.10	----	228831	----	----	----	----	----	----	----
PFDA	512.90>469.00	512.90>219.00	209835	43123	20.55	17.88	43123	20.55	17.88	
D3-NMeFOSAA_IS	573.20>419.00	----	728476	----	----	----	----	----	----	----
D3-NMeFOSAA	573.20>419.00	----	728476	----	----	----	----	----	----	----
13C8-PFOS_IS	507.10>98.90	----	112926	----	----	----	----	----	----	----
13C8-PFOS	507.10>98.90	----	112926	----	----	----	----	----	----	----
13C4-PFOS_IS	502.80>79.90	----	307744	----	----	----	----	----	----	----
PFOS	498.90>79.90	498.90>98.80	96766	46929	48.50	53.60	46929	48.50	53.60	
NMeFOSAA	570.10>419.00	570.10>483.00	119943	78454	65.41	64.89	78454	65.41	64.89	
D5-NEtFOSAA_IS	589.20>419.00	----	611890	----	----	----	----	----	----	----
D5-NEtFOSAA	589.20>419.00	----	611890	----	----	----	----	----	----	----
NEtFOSAA	584.20>419.10	584.20>526.00	111382	95803	86.01	96.07	95803	86.01	96.07	
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	563253	176848	31.40	30.95	176848	31.40	30.95	
PFUnDA	563.10>519.00	563.10>269.10	234990	28371	12.07	11.01	28371	12.07	11.01	
13C7-PFUnDA_IS	570.00>525.10	----	336078	----	----	----	----	----	----	----
13C7-PFUnDA	570.00>525.10	----	336078	----	----	----	----	----	----	----
PFNS	548.80>79.90	548.80>98.80	99039	61706	62.31	60.44	61706	62.31	60.44	
10_2 FTS	626.80>607.05	626.80>81.00	137208	44732	32.60	36.14	44732	32.60	36.14	
13C2-PFDOA_IS	615.10>570.00	----	400786	----	----	----	----	----	----	----
13C2-PFDOA	615.10>570.00	----	400786	----	----	----	----	----	----	----
PFDOA	613.10>569.00	613.10>319.00	215968	21898	10.14	10.16	21898	10.14	10.16	
PFDS	599.00>79.90	599.00>98.80	86414	53550	61.97	58.26	53550	61.97	58.26	
PFTrDA	663.00>619.00	663.00>168.90	299578	45634	15.23	16.18	45634	15.23	16.18	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240130_028 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	395479	143966	36.40	34.99	143966	36.40	34.99	
PFOSAm	498.10>77.90	----	227521	----	----	----	----	----	----	
13C8-PFOSAm	506.10>77.80	----	291002	----	----	----	----	----	----	
13C8-PFOSAm_IS	506.10>77.80	----	291002	----	----	----	----	----	----	
PFTDA	713.10>669.00	713.10>168.90	204528	39397	19.26	18.05	39397	19.26	18.05	
13C2-PFTDA	715.20>670.00	----	270487	----	----	----	----	----	----	
13C2-PFTDA_IS	715.20>670.00	----	270487	----	----	----	----	----	----	
PFDoS	699.10>79.90	699.10>98.80	54785	32967	60.18	61.13	32967	60.18	61.13	
D7-MeFOSE_IS	623.20>58.90	----	723019	----	----	----	----	----	----	
D7-MeFOSE	623.20>58.90	----	723019	----	----	----	----	----	----	
MeFOSE	616.10>59.00	----	38243	----	----	----	----	----	----	
13C2-PFHxDA_IS	815.00>770.05	----	712937	----	----	----	----	----	----	
13C2-PFHxDA	815.00>770.05	----	712937	----	----	----	----	----	----	
PFHxDA	813.00>768.95	813.00>218.95	419412	49300	11.76	11.66	49300	11.76	11.66	
D3-MeFOSA	515.00>219.00	----	69595	----	----	----	----	----	----	
D3-MeFOSA_IS	515.00>219.00	----	69595	----	----	----	----	----	----	
MeFOSA	511.90>219.00	511.90>169.00	45150	67447	149.39	160.44	67447	149.39	160.44	
D9-EtFOSE_IS	639.20>58.90	----	882940	----	----	----	----	----	----	
D9-EtFOSE	639.20>58.90	----	876049	----	----	----	----	----	----	
EtFOSE	630.00>59.00	----	46118	----	----	----	----	----	----	
D5-EtFOSAm	531.10>219.00	----	104251	----	----	----	----	----	----	
D5-EtFOSAm_IS	531.10>219.00	----	104251	----	----	----	----	----	----	
EtFOSAm	526.00>219.00	526.00>169.00	60604	94652	156.18	159.63	94652	156.18	159.63	
PFODA	913.00>868.65	913.00>169.00	154251	52418	33.98	36.03	52418	33.98	36.03	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
 IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240130_028

Sample ID: 1633 ICV 1.0PPB
Date Acquired: 1/31/2024 1:11:27 AM
Acquired by: System Administrator
Data File: 240130_028
Vial: 10 | Inj. Volume: 10.0000uL | Tray: 1

Not used for FTCA compounds

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.377	0.039	0.000	893163	516731	13C3-PFBA_IS	11.6650	ng/mL	
13C4-PFBA_IS	Auto	1.377	0.039	----	893163	893163	----	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.377	0.040	----	516731	516731	----	5.0000	ng/mL	
PFBA	Auto	1.380	0.039	0.003	91427	893163	13C4-PFBA_IS	1.0888	ng/mL	
PFMPA	Auto	2.409	0.043	-1.064	74730	247523	13C5-PFPeA_IS	1.0573	ng/mL	
3_3 FTCA	ND(W/B)	----	----	----	----	247523	13C5-PFPeA_IS	----	ng/mL	
13C5-PFPeA	Auto	3.473	0.034	-1.487	247523	604927	13C2-PFHxA_IS	5.6906	ng/mL	
13C5-PFPeA_IS	Auto	3.473	0.034	----	247523	247523	----	5.0000	ng/mL	
PFPeA	Auto	3.476	0.034	0.003	182569	247523	13C5-PFPeA_IS	1.0534	ng/mL	
PFMBA	Auto	4.000	0.031	0.527	112916	247523	13C5-PFPeA_IS	1.0424	ng/mL	
13C2-4_2 FTS	Auto	4.646	0.026	-2.423	283828	255604	18O2-PFHxS_IS	5.8991	ng/mL	
13C2-4_2 FTS_IS	Auto	4.646	0.026	----	283828	283828	----	5.0000	ng/mL	
4_2 FTS	Auto	4.646	0.026	0.000	143940	283828	13C2-4_2 FTS_IS	1.0231	ng/mL	
13C3-PFBS_IS	Auto	4.618	0.031	----	286206	286206	----	2.5000	ng/mL	
PFBS	Auto	4.619	0.031	0.001	130070	286206	13C3-PFBS_IS	0.9171	ng/mL	
13C3-PFBS	Auto	4.618	0.031	-2.451	286206	255604	18O2-PFHxS_IS	3.0010	ng/mL	
NFDHA	Auto	4.818	0.028	-0.142	113729	567720	13C5-PFHxA_IS	0.9658	ng/mL	
13C5-PFHxA	Auto	4.960	0.028	0.000	567720	604927	13C2-PFHxA_IS	2.9075	ng/mL	
13C5-PFHxA_IS	Auto	4.960	0.028	----	567720	567720	----	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	4.960	0.027	----	604927	604927	----	2.5000	ng/mL	
PFHxA	Auto	4.961	0.027	0.001	223179	567720	13C5-PFHxA_IS	1.0496	ng/mL	
PFEESA	Auto	5.296	0.031	0.336	670876	567720	13C5-PFHxA_IS	0.9511	ng/mL	
13C3-HFPO-DA	Auto	5.437	0.025	0.477	610140	604927	13C2-PFHxA_IS	11.3812	ng/mL	
13C3-HFPO-DA_IS	Auto	5.437	0.025	----	610140	610140	----	10.0000	ng/mL	
HFPO-DA	Auto	5.438	0.025	0.001	63761	610140	13C3-HFPO-DA_IS	1.0627	ng/mL	
5_3 FTCA	ND(W/B)	----	----	----	----	567720	13C5-PFHxA_IS	----	ng/mL	
PFPeS	Auto	5.997	0.024	-1.072	111057	260431	13C3-PFHxS_IS	1.0774	ng/mL	
13C4-PFHpA	Auto	6.142	0.022	1.182	690468	604927	13C2-PFHxA_IS	2.8108	ng/mL	
13C4-PFHpA_IS	Auto	6.142	0.022	----	690468	690468	----	2.5000	ng/mL	
PFHpA	Auto	6.143	0.021	0.001	255013	690468	13C4-PFHpA_IS	1.0715	ng/mL	
DONA	Auto	6.509	0.022	1.072	484746	610140	13C3-HFPO-DA_IS	0.9425	ng/mL	
13C2-6_2 FTS_IS	Auto	6.785	0.019	----	275450	275450	----	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.785	0.019	-0.284	275450	255604	18O2-PFHxS_IS	5.4994	ng/mL	
6_2 FTS	Auto	6.785	0.020	0.000	112892	275450	13C2-6_2 FTS_IS	1.0747	ng/mL	
13C4-PFOA_IS	Auto	7.099	0.020	----	49113	49113	----	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.099	0.021	----	717880	717880	----	2.5000	ng/mL	
13C8-PFOA	Auto	7.099	0.021	0.000	717880	49113	13C4-PFOA_IS	3.0649	ng/mL	
PFOA	Auto	7.103	0.022	0.004	259925	717880	13C8-PFOA_IS	0.9768	ng/mL	
13C3-PFHxS	Auto	7.069	0.021	0.000	260431	255604	18O2-PFHxS_IS	2.9070	ng/mL	
13C3-PFHxS_IS	Auto	7.069	0.021	----	260431	260431	----	2.5000	ng/mL	
PFHxS	Auto	7.068	0.020	-0.001	103997	260431	13C3-PFHxS_IS	0.9136	ng/mL	
18O2-PFHxS_IS	Auto	7.069	0.021	----	255604	255604	----	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.947	0.018	----	387694	387694	----	1.2500	ng/mL	
13C9-PFNA	Auto	7.947	0.018	-0.001	387694	374354	13C5-PFNA_IS	1.3990	ng/mL	
13C5-PFNA_IS	Auto	7.948	0.018	----	374354	374354	----	1.2500	ng/mL	
PFNA	Auto	7.949	0.019	0.002	273895	387694	13C9-PFNA_IS	1.0692	ng/mL	
PFHpS	Auto	7.990	0.019	-0.816	105405	112926	13C8-PFOS_IS	1.1102	ng/mL	
7_3 FTCA	ND(W/B)	----	----	----	----	567720	13C5-PFHxA_IS	----	ng/mL	
13C2-8_2-FTS	Auto	8.404	0.016	1.335	229575	255604	18O2-PFHxS_IS	5.3986	ng/mL	
13C2-8_2-FTS_IS	Auto	8.404	0.016	----	229575	229575	----	5.0000	ng/mL	
8_2 FTS	Auto	8.404	0.016	0.000	85585	229575	13C2-8_2-FTS_IS	0.9780	ng/mL	
13C6-PFDA_IS	Auto	8.712	0.017	----	247123	247123	----	1.2500	ng/mL	
13C6-PFDA	Auto	8.712	0.017	0.000	247123	228831	13C2-PFDA_IS	1.3476	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_028 (continued)

(Table continued from previous page)

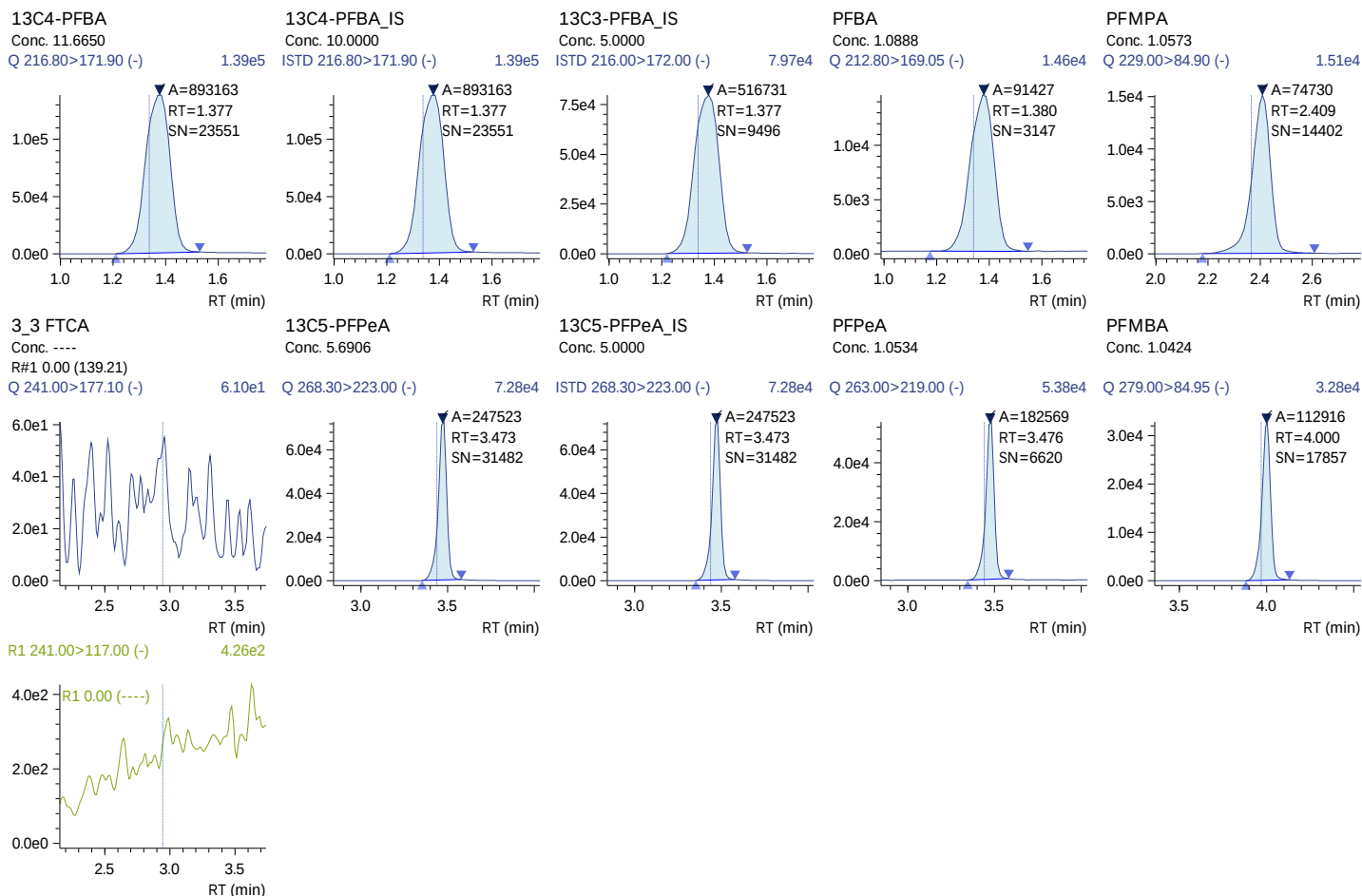
Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C2-PFDA_IS	Auto	8.713	0.016	----	228831	228831	----	1.2500	ng/mL	
PFDA	Auto	8.713	0.016	0.001	209835	247123	13C6-PFDA_IS	1.0040	ng/mL	
D3-NMeFOSAA_IS	Auto	8.850	0.016	----	728476	728476	----	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.850	0.016	0.045	728476	307744	13C4-PFOS_IS	5.8139	ng/mL	
13C8-PFOS_IS	Auto	8.806	0.020	----	112926	112926	----	2.5000	ng/mL	
13C8-PFOS	Auto	8.806	0.020	0.001	112926	307744	13C4-PFOS_IS	2.9157	ng/mL	
13C4-PFOS_IS	Auto	8.805	0.018	----	307744	307744	----	2.5000	ng/mL	
PFOS	MI R1 R2	8.806	0.018	0.000	96766	112926	13C8-PFOS_IS	1.0032	ng/mL	
NMeFOSAA	M	8.856	0.205	0.006	119943	728476	D3-NMeFOSAA_IS	1.1628	ng/mL	
D5-NetFOSAA_IS	Auto	9.181	0.017	----	611890	611890	----	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.181	0.017	0.376	611890	307744	13C4-PFOS_IS	6.1965	ng/mL	
NetFOSAA	M	9.192	0.206	0.011	111382	611890	D5-NetFOSAA_IS	1.1085	ng/mL	
9-CI-PF3ONS	Auto	9.370	0.019	3.933	563253	610140	13C3-HFPO-DA_IS	0.9414	ng/mL	
PFUnDA	Auto	9.438	0.017	0.001	234990	336078	13C7-PFUnDA_IS	1.0062	ng/mL	
13C7-PFUnDA_IS	Auto	9.437	0.018	----	336078	336078	----	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.437	0.018	0.725	336078	228831	13C2-PFDA_IS	1.4749	ng/mL	
PFNS	Auto	9.568	0.019	0.762	99039	112926	13C8-PFOS_IS	1.0362	ng/mL	
10_2_FTS	Auto	9.812	0.017	1.408	137208	229575	13C2-8_2-FTS_IS	1.1833	ng/mL	
13C2-PFDOA_IS	Auto	10.122	0.015	----	400786	400786	----	1.2500	ng/mL	
13C2-PFDOA	Auto	10.122	0.015	1.410	400786	228831	13C2-PFDA_IS	1.4734	ng/mL	
PFDOA	Auto	10.124	0.016	0.002	215968	400786	13C2-PFDOA_IS	1.0531	ng/mL	
PFDS	Auto	10.280	0.017	1.474	86414	112926	13C8-PFOS_IS	1.0296	ng/mL	
PFTDA	Auto	10.781	0.017	-0.628	299578	270487	13C2-PFTDA_IS	1.1020	ng/mL	
11-CI-PF3OUdS	Auto	10.788	0.017	5.351	395479	610140	13C3-HFPO-DA_IS	0.9260	ng/mL	
PFOSAm	M	11.161	0.011	-0.002	227521	291002	13C8-PFOSAm_IS	2.2346	ng/mL	
13C8-PFOSAm	Auto	11.163	0.008	2.358	291002	307744	13C4-PFOS_IS	2.9768	ng/mL	
13C8-PFOSAm_IS	Auto	11.163	0.008	----	291002	291002	----	2.5000	ng/mL	
PFTDA	Auto	11.410	0.014	0.001	204528	270487	13C2-PFTDA_IS	1.0711	ng/mL	
13C2-PFTDA	Auto	11.409	0.014	2.697	270487	228831	13C2-PFDA_IS	1.4089	ng/mL	
13C2-PFTDA_IS	Auto	11.409	0.014	----	270487	270487	----	1.2500	ng/mL	
PFDoS	Auto	11.600	0.014	2.794	54785	112926	13C8-PFOS_IS	1.0467	ng/mL	
D7-MeFOSE_IS	Auto	13.385	-0.001	----	723019	723019	----	25.0000	ng/mL	
D7-MeFOSE	Auto	13.385	-0.001	4.580	723019	307744	13C4-PFOS_IS	28.8104	ng/mL	
MeFOSE	M	13.423	0.000	0.038	38243	723019	D7-MeFOSE_IS	1.0757	ng/mL	
13C2-PFHXA_IS	Auto	12.617	0.007	----	712937	712937	----	2.5000	ng/mL	
13C2-PFHXA	Auto	12.617	0.007	3.904	712937	228831	13C2-PFDA_IS	2.7749	ng/mL	
PFHXA	Auto	12.618	0.008	0.002	419412	712937	13C2-PFHXA_IS	1.0886	ng/mL	
D3-MeFOSA	Auto	13.691	0.001	4.886	69595	307744	13C4-PFOS_IS	2.7268	ng/mL	
D3-MeFOSA_IS	Auto	13.691	0.001	----	69595	69595	----	2.5000	ng/mL	
MeFOSA	M	13.697	-0.002	0.006	45150	69595	D3-MeFOSA_IS	1.1369	ng/mL	
D9-EtFOSE_IS	Auto	14.013	0.000	----	882940	882940	----	25.0000	ng/mL	
D9-EtFOSE	Auto	14.013	0.000	5.208	876049	307744	13C4-PFOS_IS	28.5264	ng/mL	
EtFOSE	M	14.056	0.001	0.043	46118	882940	D9-EtFOSE_IS	1.0891	ng/mL	
D5-EtFOSAm	Auto	14.367	0.001	5.562	104251	307744	13C4-PFOS_IS	2.9543	ng/mL	
D5-EtFOSAm_IS	Auto	14.367	0.001	----	104251	104251	----	2.5000	ng/mL	
EtFOSAm	M	14.384	0.000	0.017	60604	104251	D5-EtFOSAm_IS	1.0597	ng/mL	
PFODA	Auto	13.748	0.008	1.132	154251	712937	13C2-PFHXA_IS	1.0341	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_028 (continued)





240130_028 (continued)

13C2-4_2_FTS
Conc. 5.8991

13C2-4_2_FTS_IS
Conc. 5.0000

4_2_FTS
Conc. 1.0231
R#1 32.47 (32.10)
R#2 32.47 (32.10)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 0.9171
R#1 47.12 (44.81)
R#2 47.12 (44.81)

Q 329.10>80.90 (-)

8.93e4

ISTD 329.10>80.90 (-)

8.93e4

Q 327.10>307.00 (-)

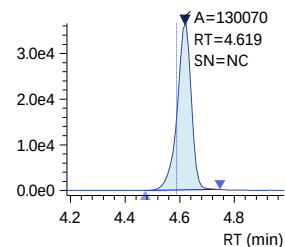
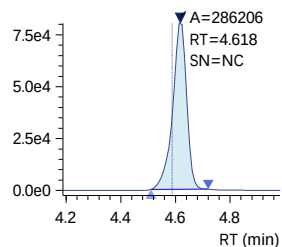
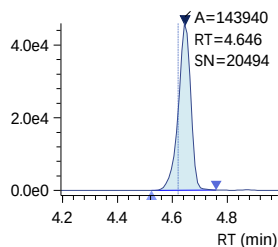
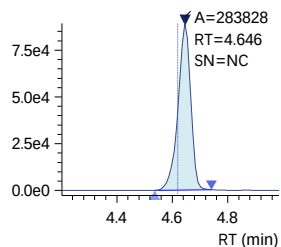
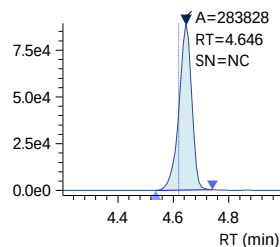
4.60e4

ISTD 302.10>79.90 (-)

8.05e4

Q 298.70>79.90 (-)

3.66e4

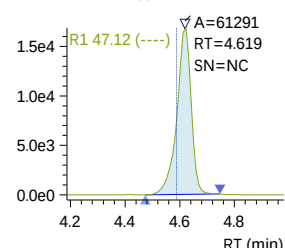
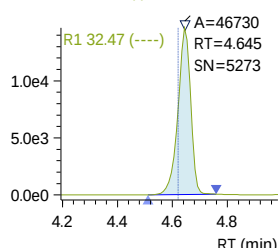


R1 327.10>80.90 (-)

1.47e4

R1 298.70>98.80 (-)

1.69e4

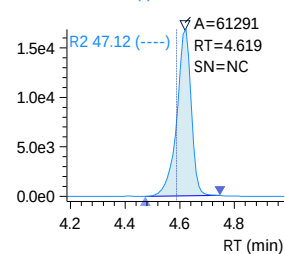
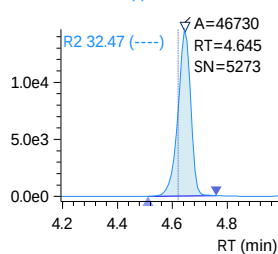


R2 327.10>80.90 (-)

1.47e4

R2 298.70>98.80 (-)

1.69e4





240130_028 (continued)

13C3-PFBS
Conc. 3.0010

NFDHA
Conc. 0.9658
R#1 36.71 (35.54)
R#2 36.71 (35.54)

13C5-PFHxA
Conc. 2.9075

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

Q 302.10>79.90 (-)

8.05e4

Q 295.00>201.00 (-)

3.33e4

Q 318.00>273.00 (-)

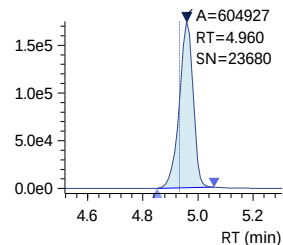
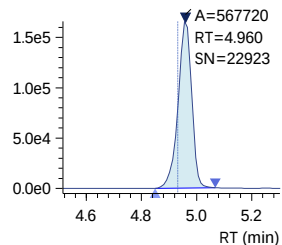
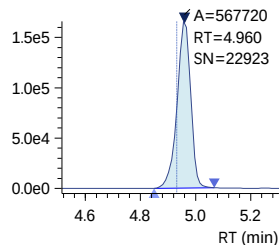
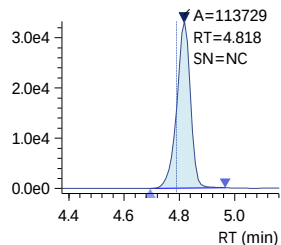
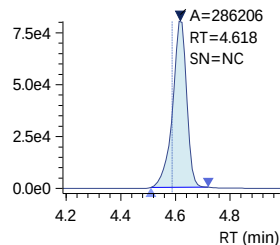
1.66e5

ISTD 318.00>273.00 (-)

1.66e5

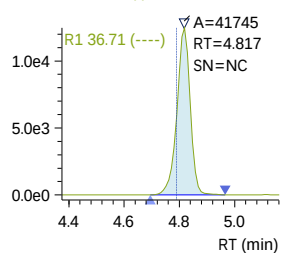
ISTD 315.10>270.00 (-)

1.75e5



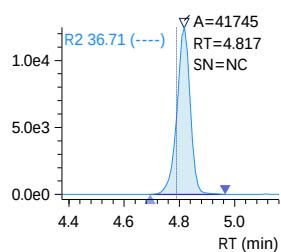
R1 295.00>84.90 (-)

1.25e4



R2 295.00>84.90 (-)

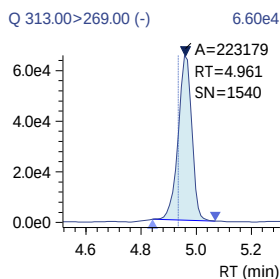
1.25e4





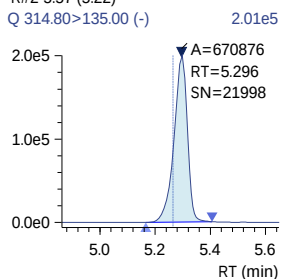
240130_028 (continued)

PFHxA
Conc. 1.0496

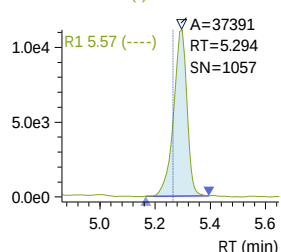


PFEESA
Conc. 0.9511

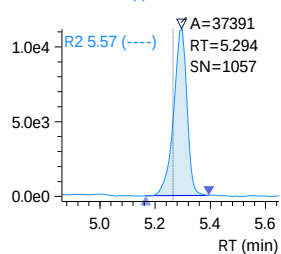
R#1 5.57 (5.22)
R#2 5.57 (5.22)



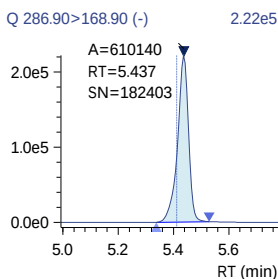
R1 314.80>82.90 (-) 1.12e4



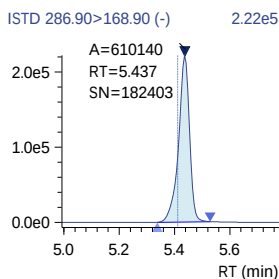
R2 314.80>82.90 (-) 1.12e4



13C3-HFPO-DA
Conc. 11.3812

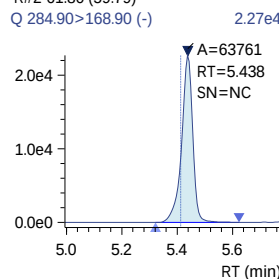


13C3-HFPO-DA_IS
Conc. 10.0000

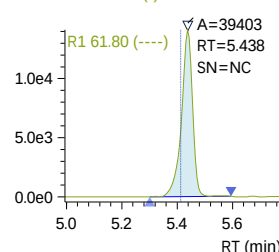


HFPO-DA
Conc. 1.0627

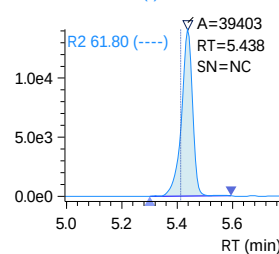
R#1 61.80 (59.79)
R#2 61.80 (59.79)



R1 284.90>184.90 (-) 1.41e4

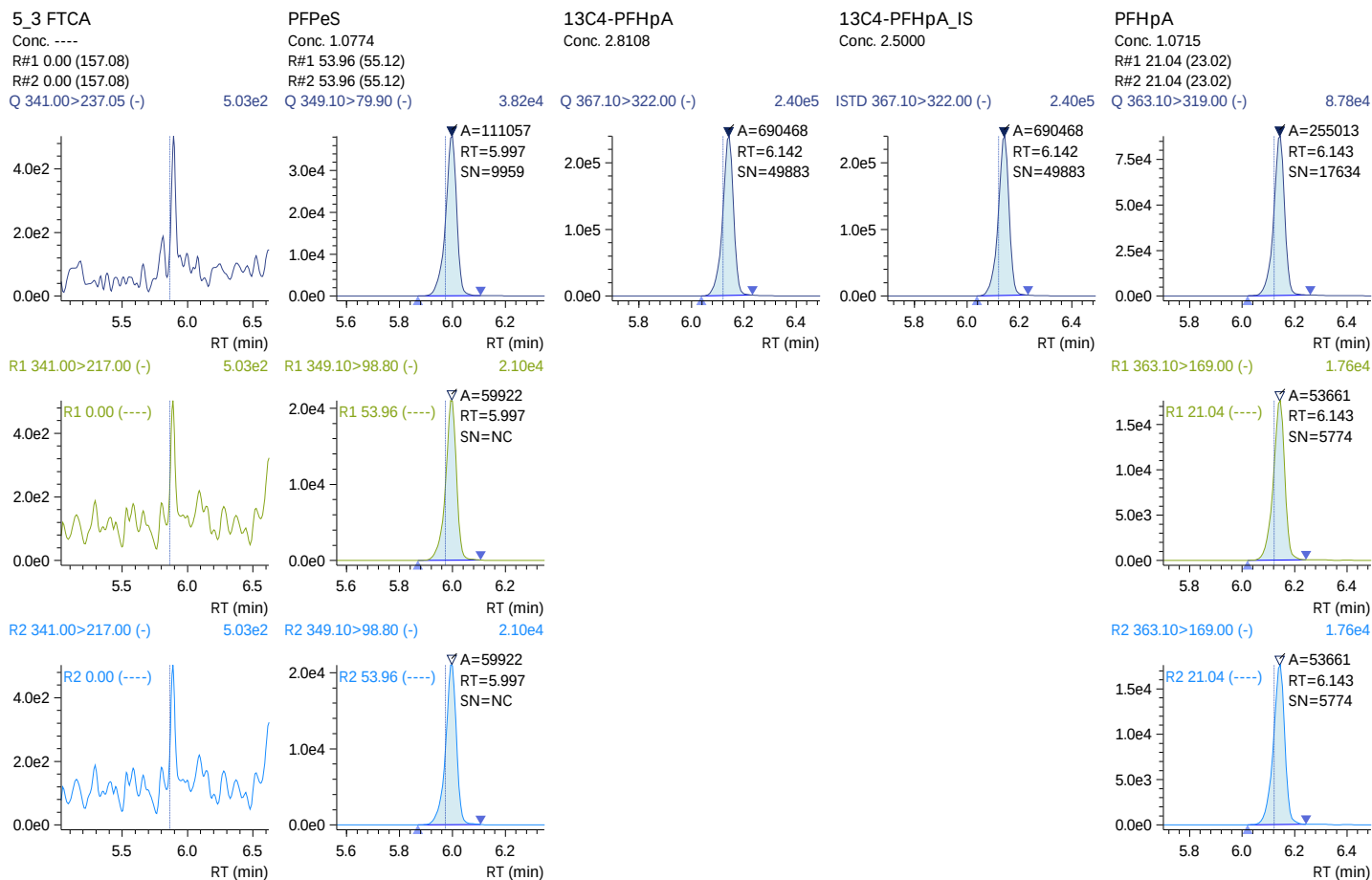


R2 284.90>184.90 (-) 1.41e4





240130_028 (continued)

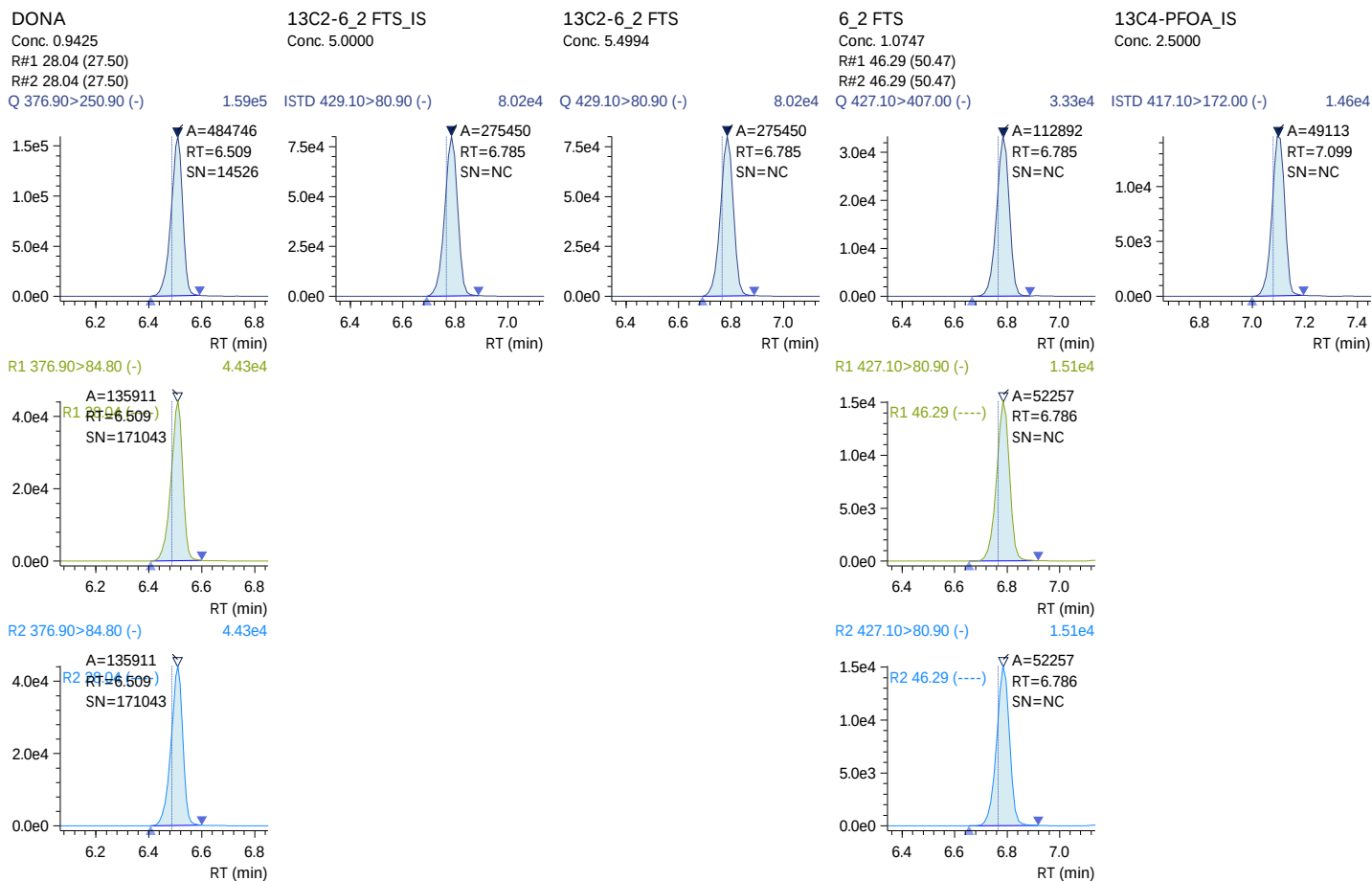


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_028 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_028 (continued)

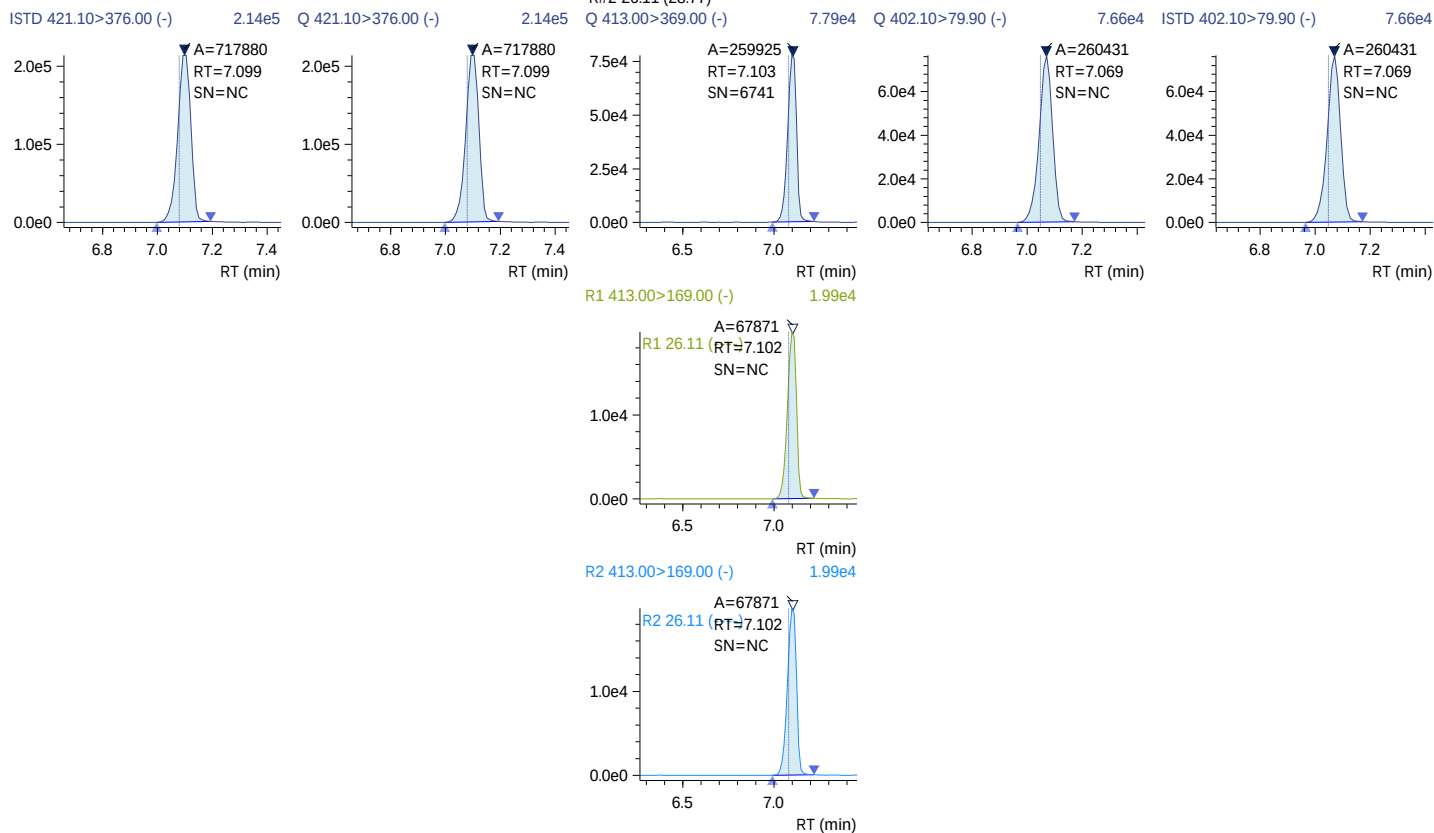
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 3.0649

PFOA
Conc. 0.9768
R#1 26.11 (28.77)
R#2 26.11 (28.77)

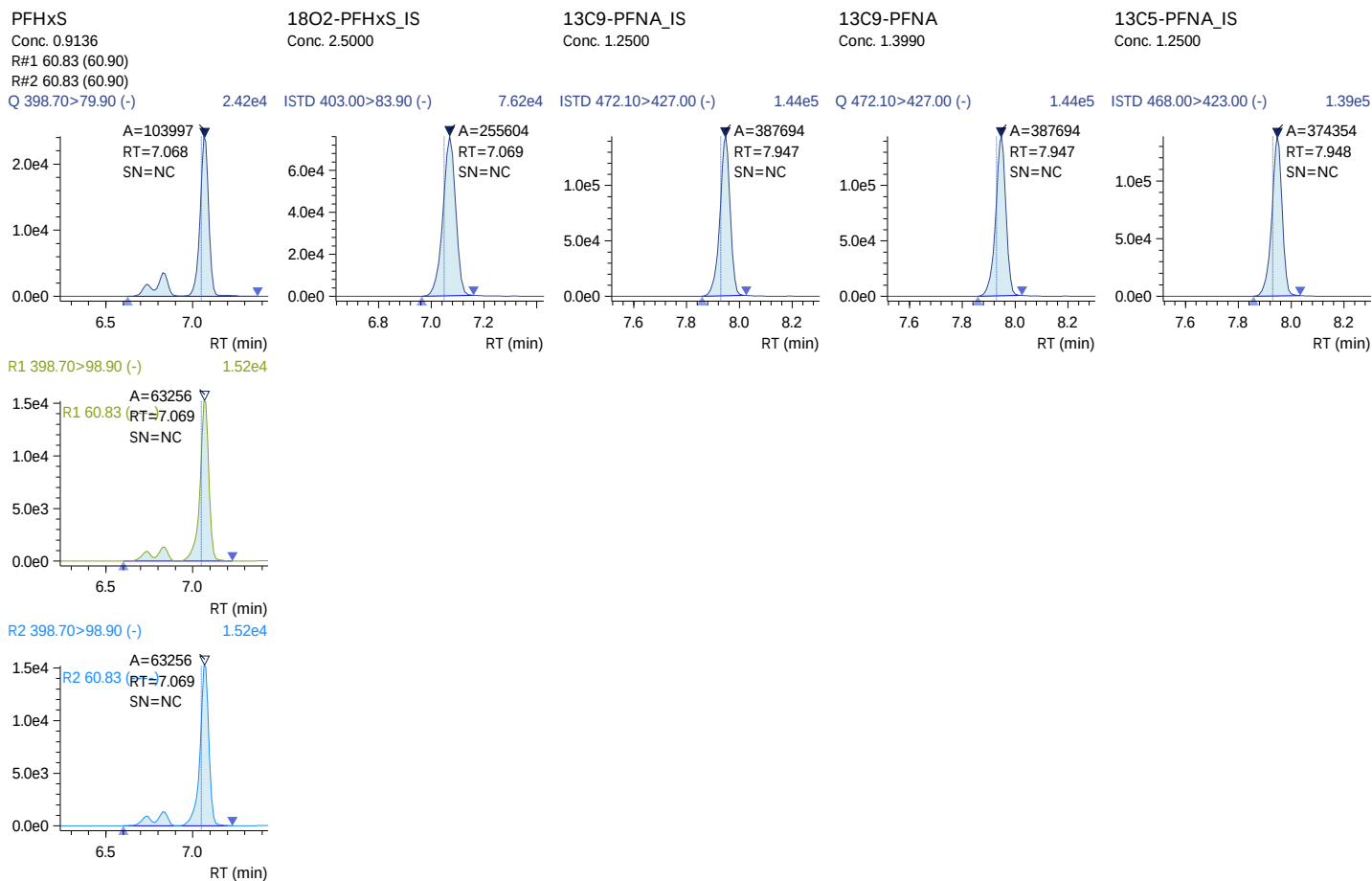
13C3-PFHxS
Conc. 2.9070

13C3-PFHxS_IS
Conc. 2.5000





240130_028 (continued)

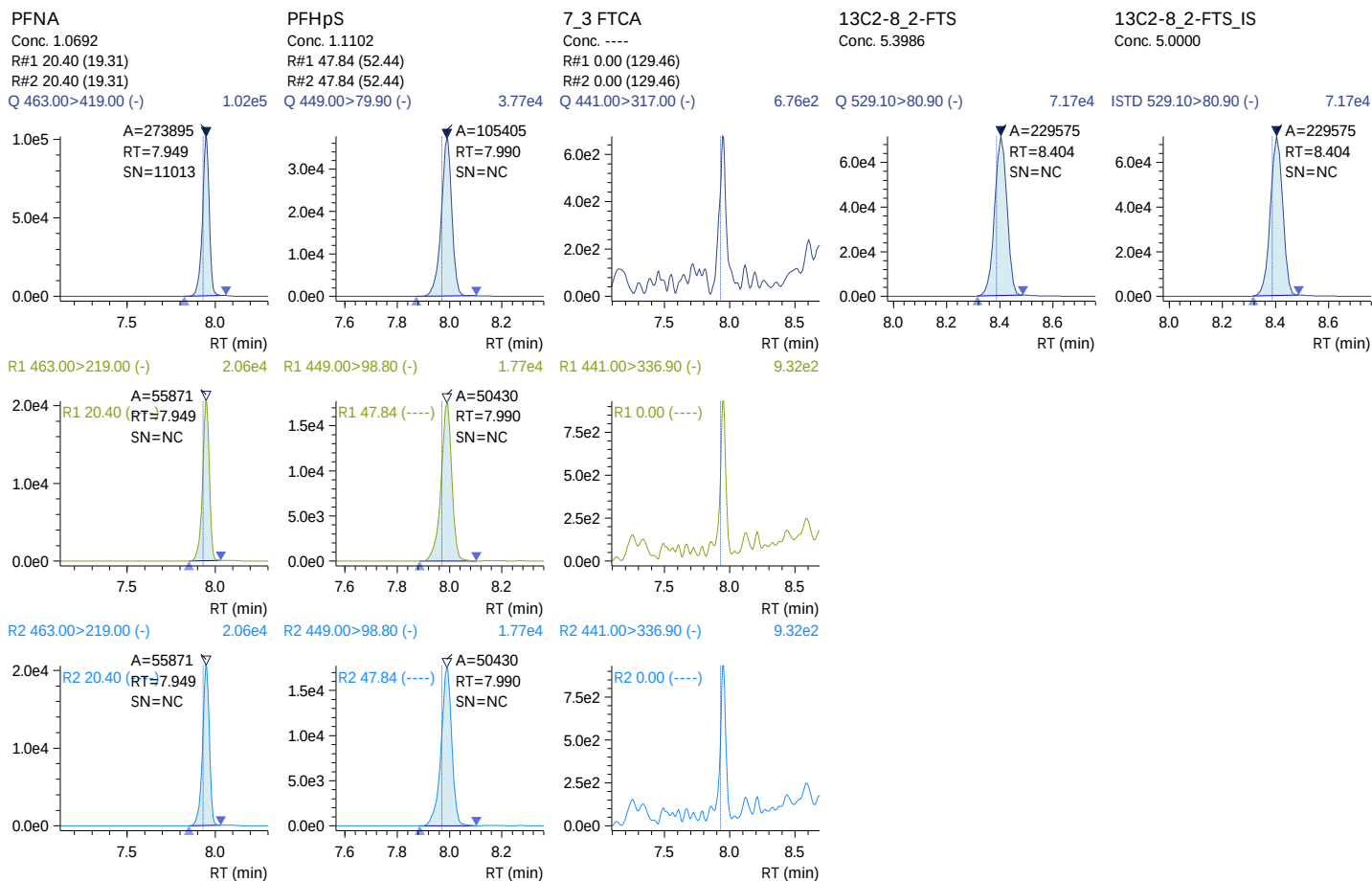


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_028 (continued)

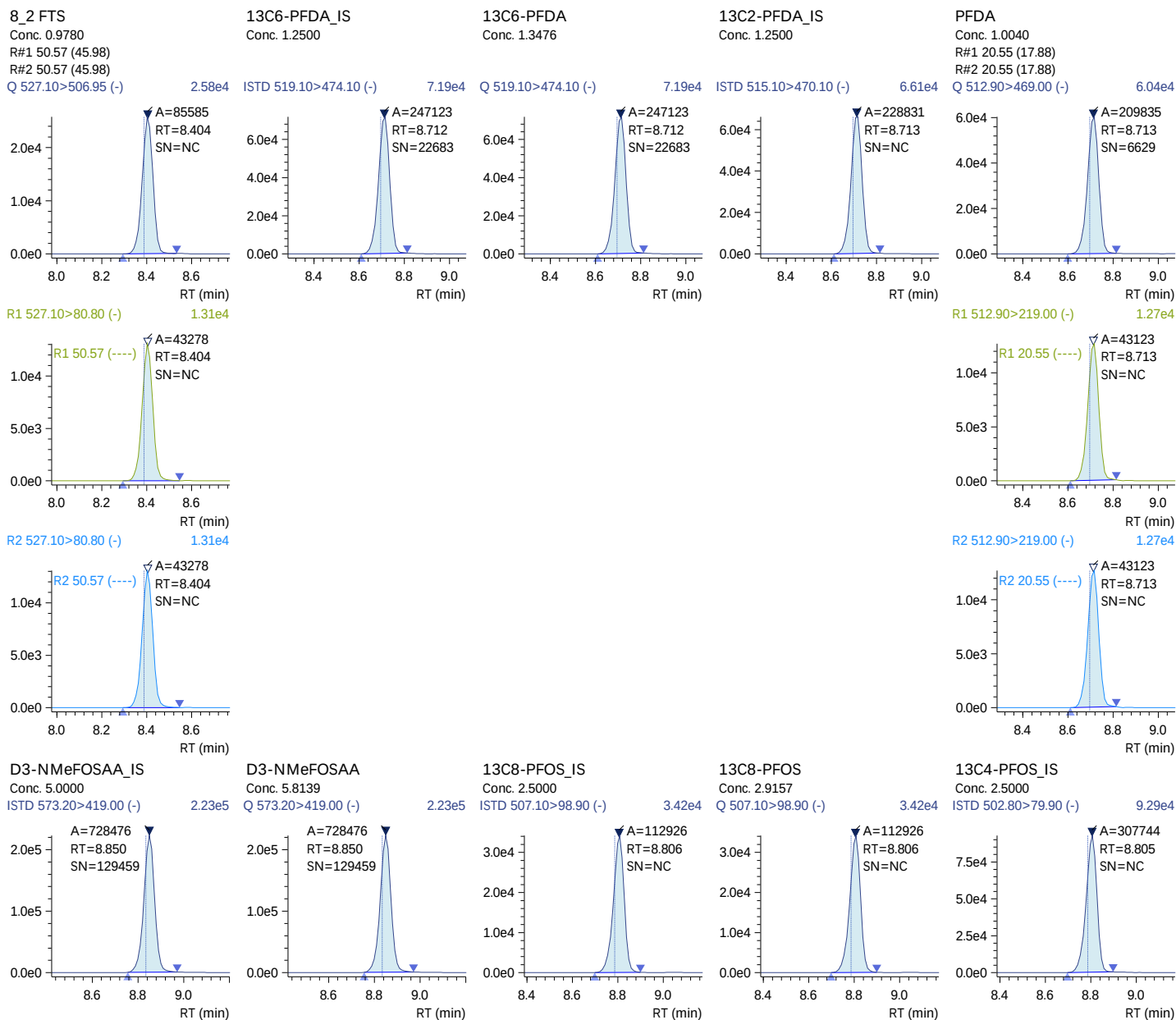


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_028 (continued)

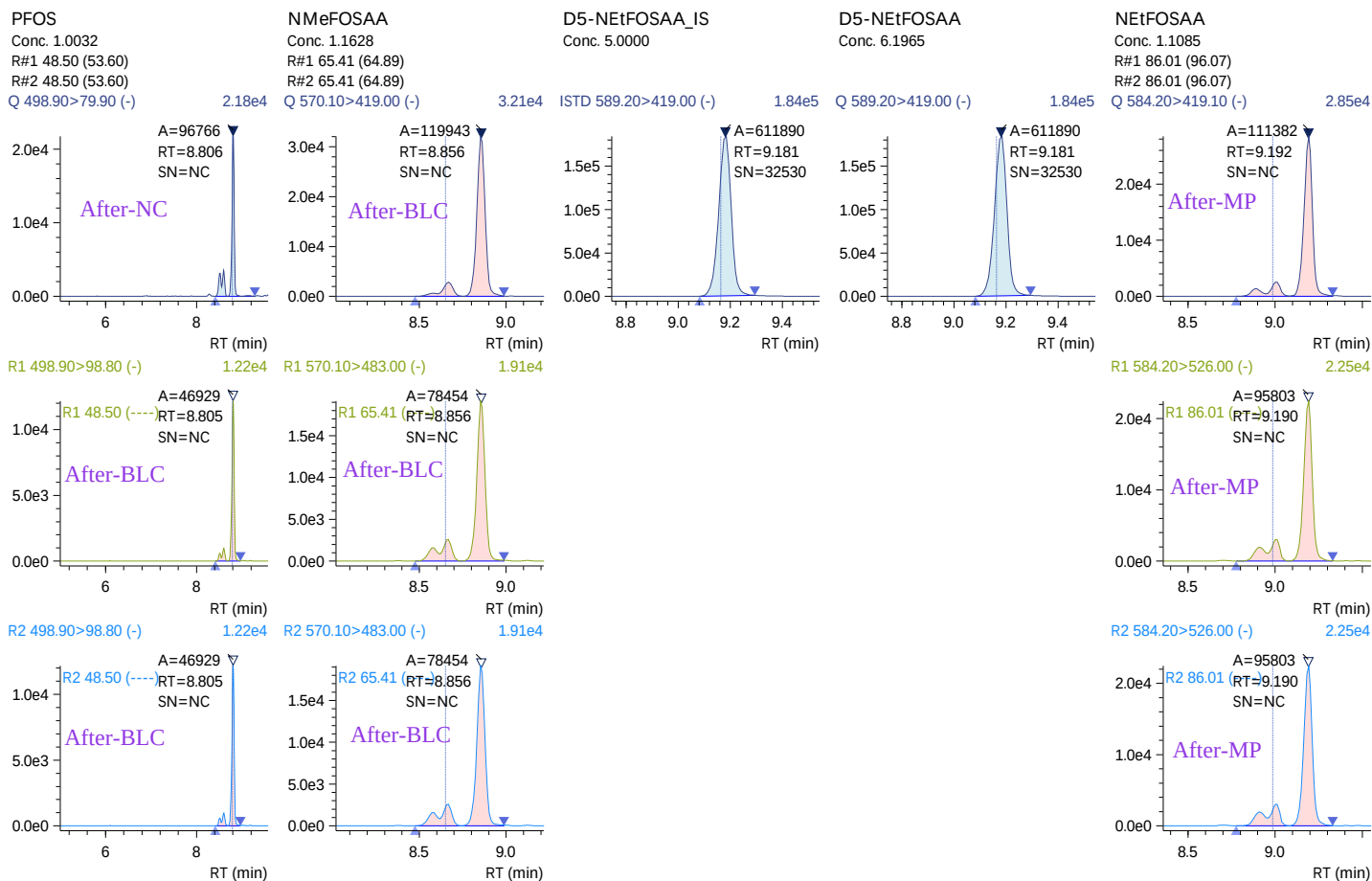


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_028 (continued)



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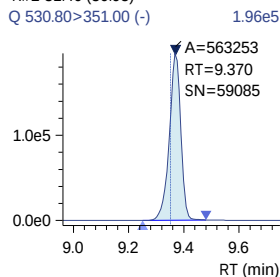
SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



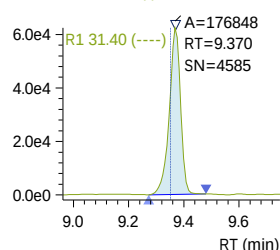
240130_028 (continued)

9-CI-PF3ONS

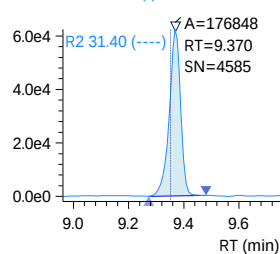
Conc. 0.9414
R#1 31.40 (30.95)
R#2 31.40 (30.95)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-)

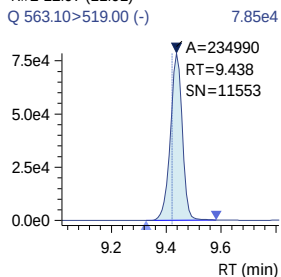


R2 532.80>353.00 (-)

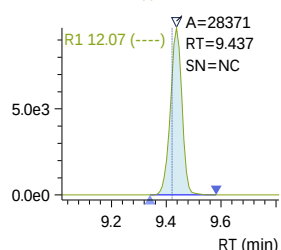


PFUnDA

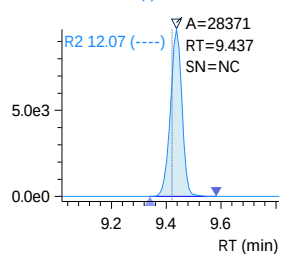
Conc. 1.0062
R#1 12.07 (11.01)
R#2 12.07 (11.01)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-)

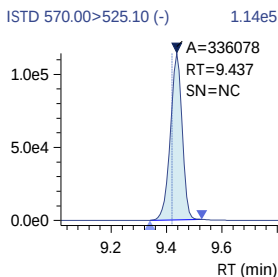


R2 563.10>269.10 (-)



13C7-PFUnDA_IS

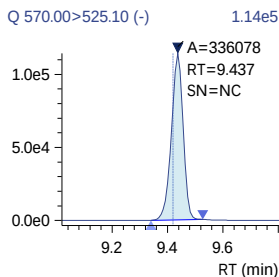
Conc. 1.2500



ISTD 570.00>525.10 (-)

13C7-PFUnDA

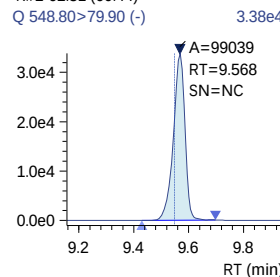
Conc. 1.4749



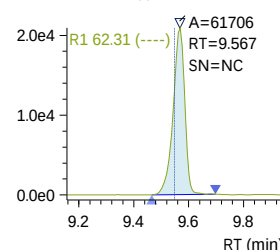
Q 570.00>525.10 (-)

PFNS

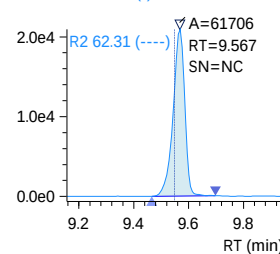
Conc. 1.0362
R#1 62.31 (60.44)
R#2 62.31 (60.44)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-)

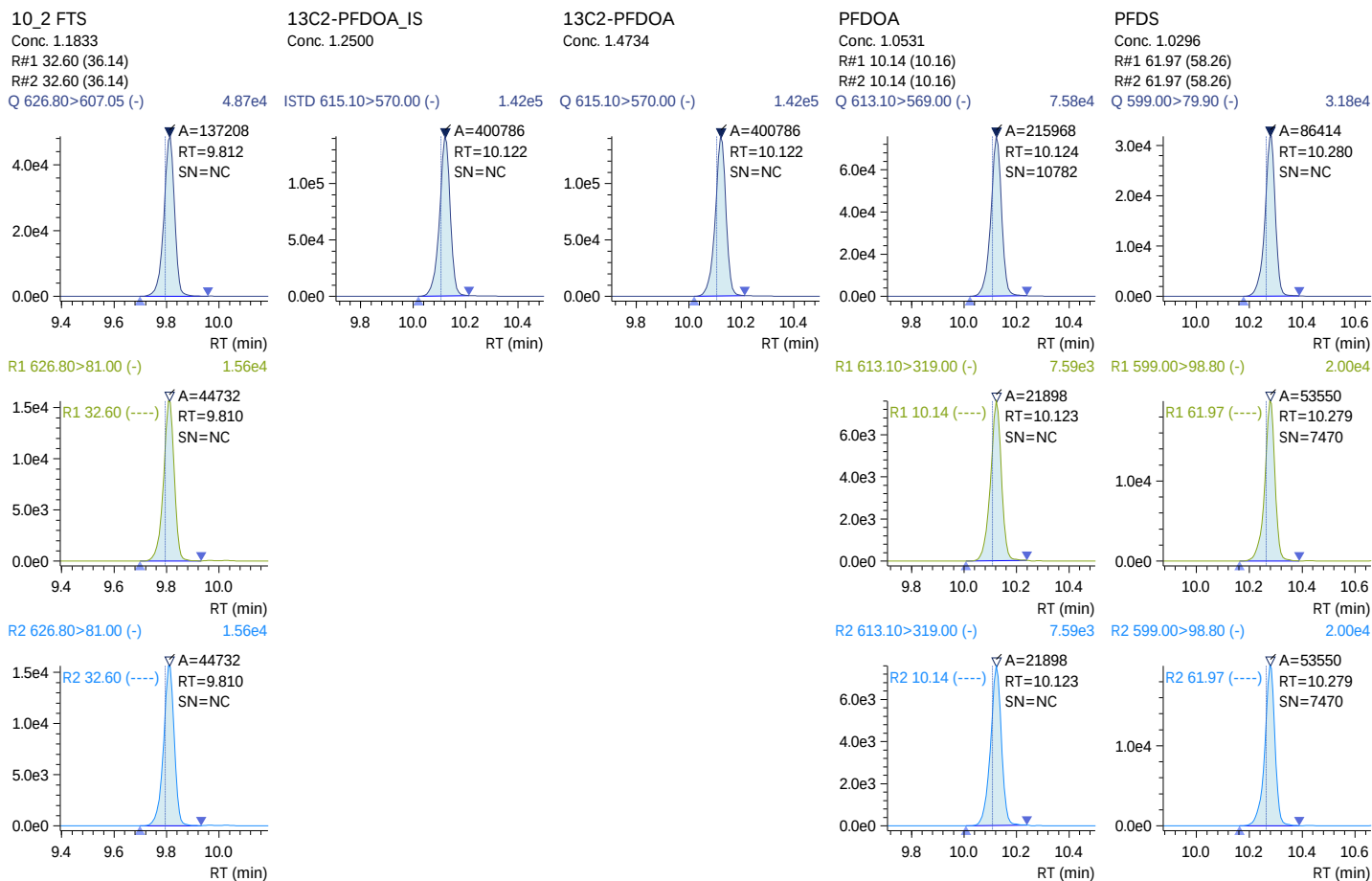


R2 548.80>98.80 (-)



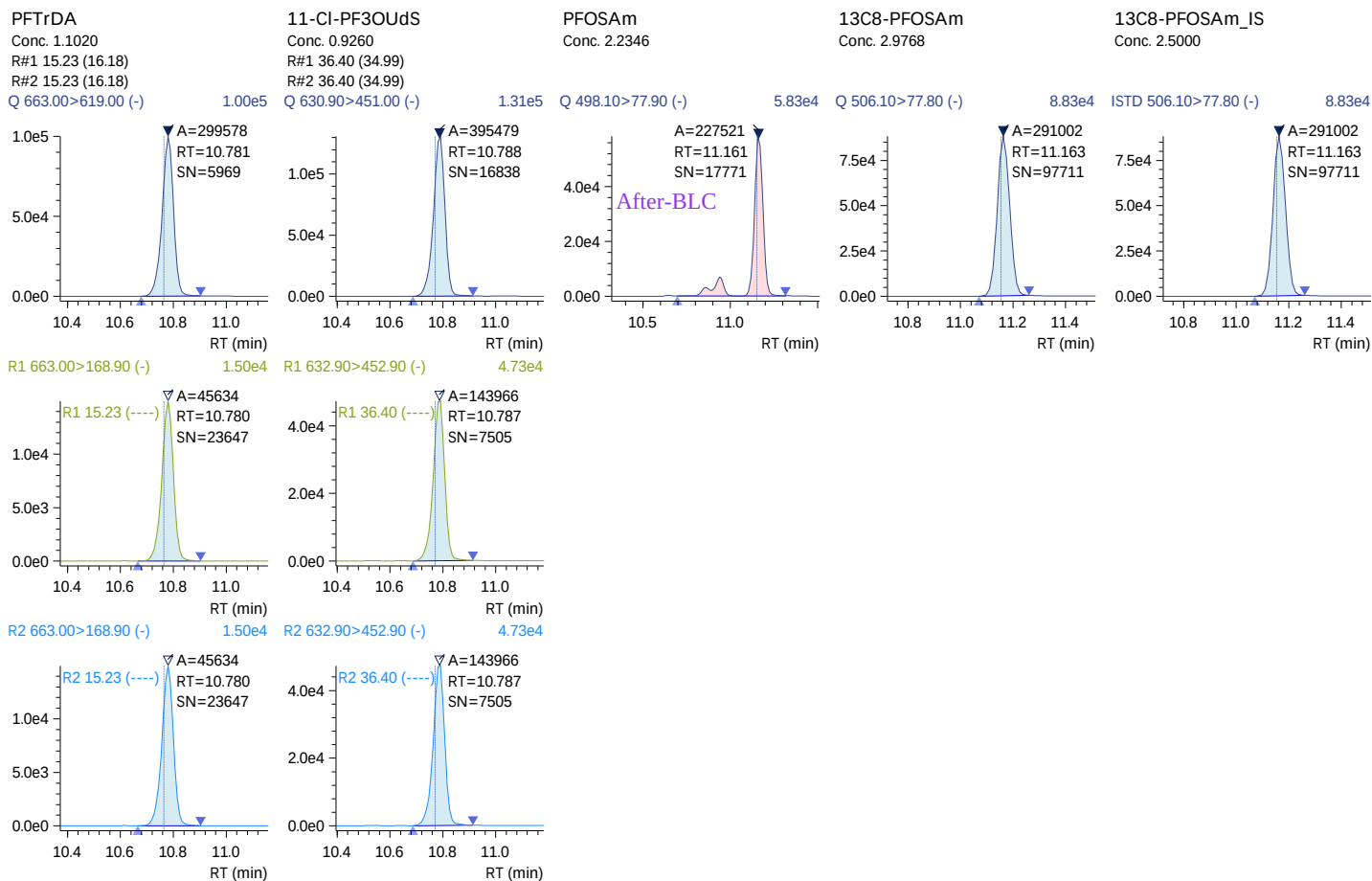


240130_028 (continued)





240130_028 (continued)

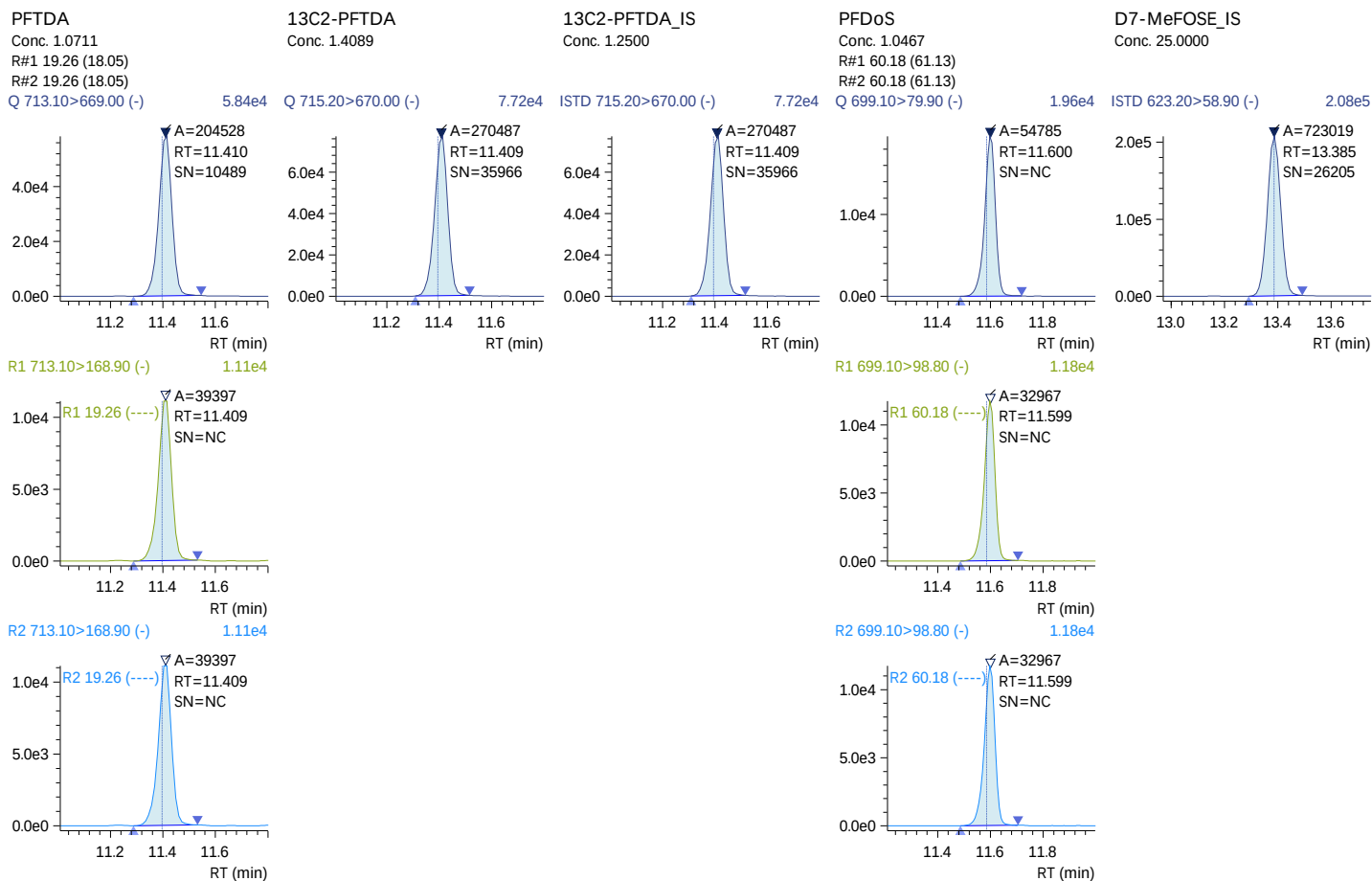


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_028 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_028 (continued)

D7-MeFOSE
Conc. 28.8104

MeFOSE
Conc. 1.0757

13C2-PFHXA_IS
Conc. 2.5000

13C2-PFHXA
Conc. 2.7749

PFHXA
Conc. 1.0886
R#1 11.76 (11.66)
R#2 11.76 (11.66)

Q 623.20>58.90 (-)

2.08e5

Q 616.10>59.00 (-)

7.08e3

ISTD 815.00>770.05 (-)

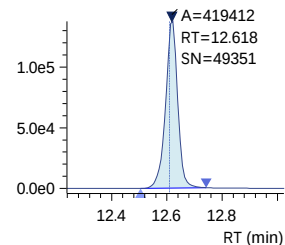
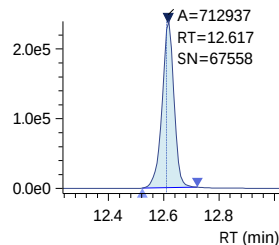
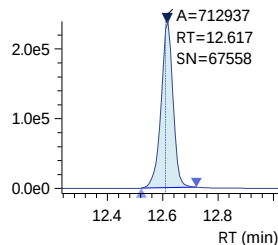
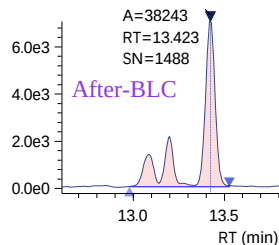
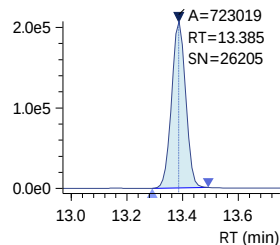
2.40e5

Q 815.00>770.05 (-)

2.40e5

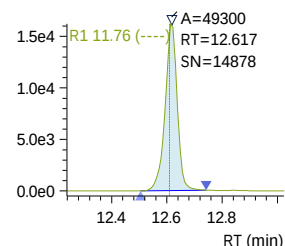
Q 813.00>768.95 (-)

1.38e5



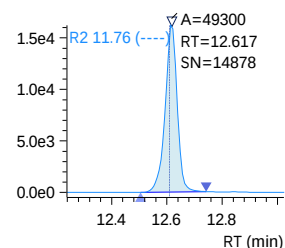
R1 813.00>218.95 (-)

1.62e4



R2 813.00>218.95 (-)

1.62e4





240130_028 (continued)

D3-MeFOSA
Conc. 2.7268

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. 1.1369
R#1 149.39 (160.44)
R#2 149.39 (160.44)

D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 28.5264

Q 515.00>219.00 (-)

1.97e4

ISTD 515.00>219.00 (-)

1.97e4

Q 511.90>219.00 (-)

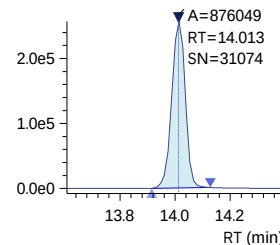
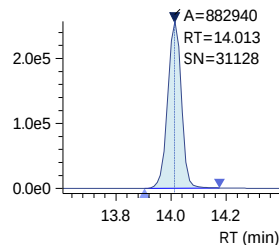
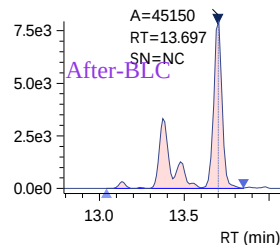
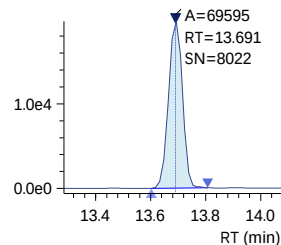
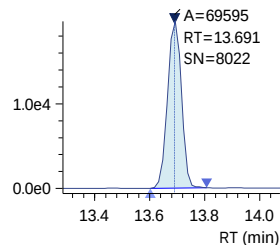
7.94e3

ISTD 639.20>58.90 (-)

2.57e5

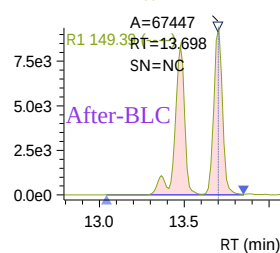
Q 639.20>58.90 (-)

2.57e5



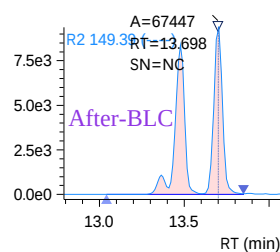
R1 511.90>169.00 (-)

9.37e3



R2 511.90>169.00 (-)

9.37e3





240130_028 (continued)

EtFOSE
Conc. 1.0891

D5-EtFOSAm
Conc. 2.9543

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. 1.0597

PFODA
Conc. 1.0341

Q 630.00>59.00 (-)

8.09e3

Q 531.10>219.00 (-)

3.33e4

ISTD 531.10>219.00 (-)

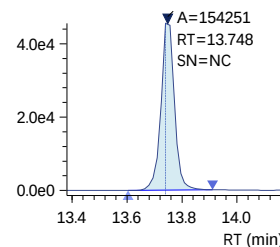
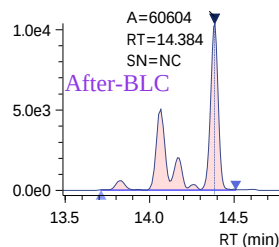
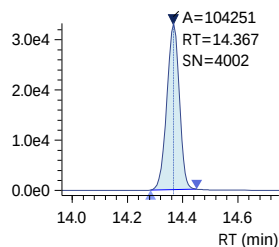
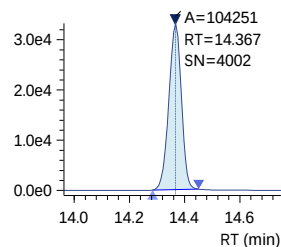
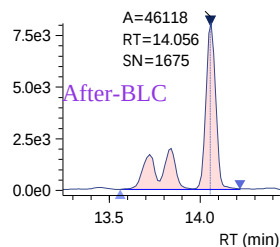
3.33e4

Q 526.00>219.00 (-)

1.04e4

Q 913.00>868.65 (-)

4.56e4

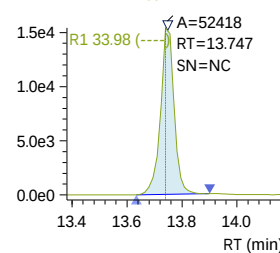
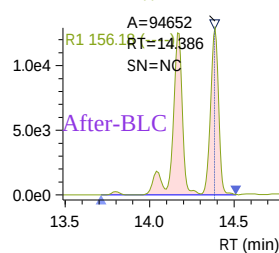


R1 526.00>169.00 (-)

1.29e4

R1 913.00>169.00 (-)

1.54e4

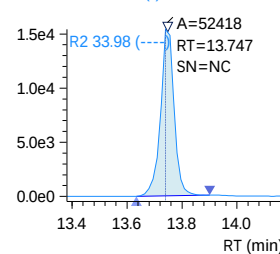
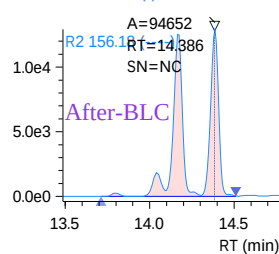


R2 526.00>169.00 (-)

1.29e4

R2 913.00>169.00 (-)

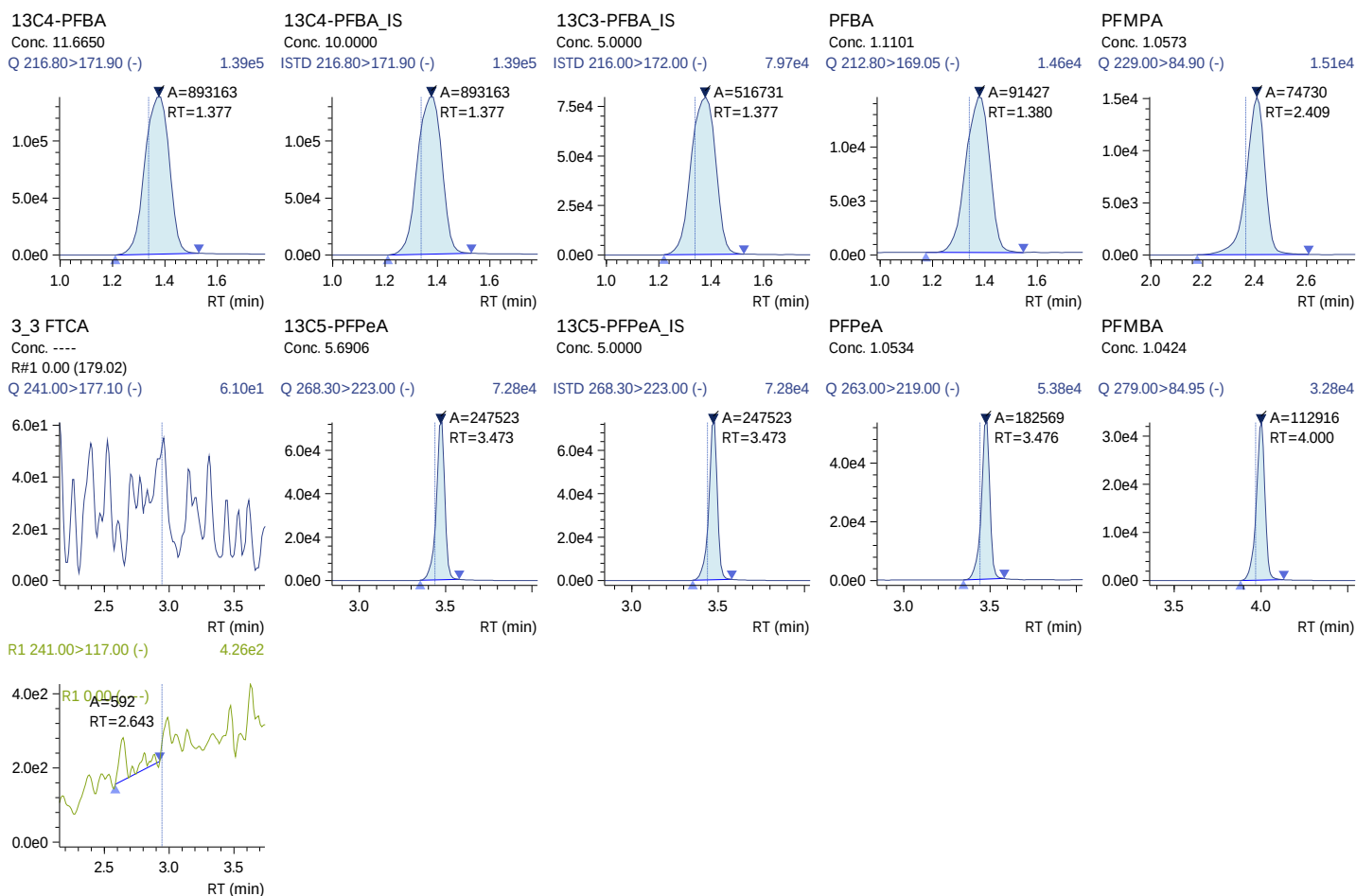
1.54e4





240130_028

Sample ID: 1633 ICV 1.0PPB
Date Acquired: 1/31/2024 1:11:27 AM
Acquired by: System Administrator
Data File: 240130_028
Vial: 10 | Inj. Volume: 10.0000uL | Tray: 1





240130_028 (continued)

13C2-4_2 FTS
Conc. 5.8991

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. 1.0823
R#1 32.47 (24.69)
R#2 32.47 (0.00)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 0.9171
R#1 47.12 (52.67)
R#2 47.12 (0.00)

Q 329.10>80.90 (-)

8.93e4

ISTD 329.10>80.90 (-)

8.93e4

Q 327.10>307.00 (-)

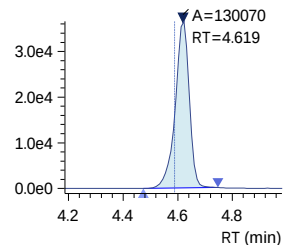
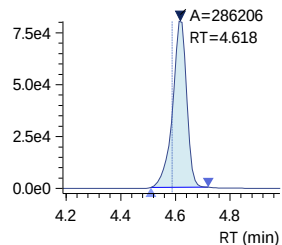
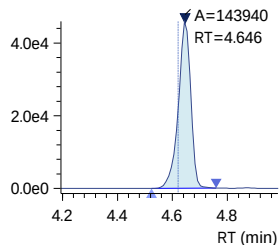
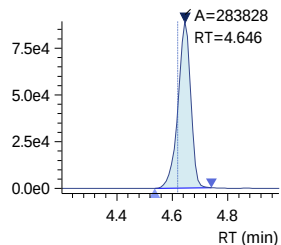
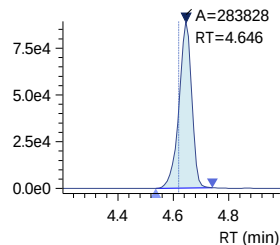
4.60e4

ISTD 302.10>79.90 (-)

8.05e4

Q 298.70>79.90 (-)

3.66e4

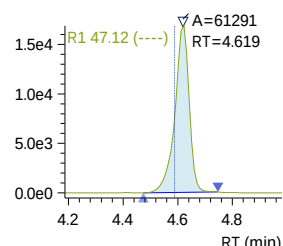
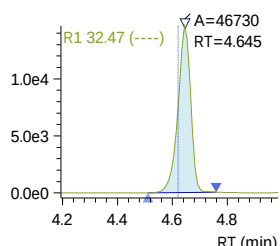


R1 327.10>80.90 (-)

1.47e4

R1 298.70>98.80 (-)

1.69e4

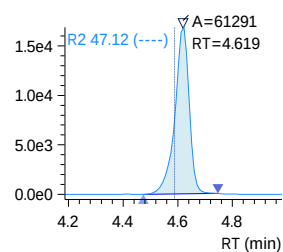
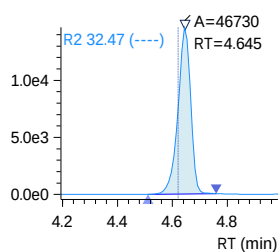


R2 327.10>80.90 (-)

1.47e4

R2 298.70>98.80 (-)

1.69e4





240130_028 (continued)

13C3-PFBS
Conc. 3.0010

NFDHA
Conc. 0.9658
R#1 36.71 (39.38)
R#2 36.71 (0.00)

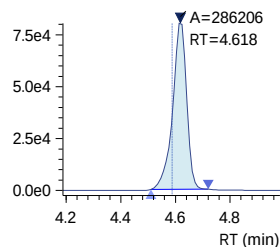
13C5-PFHxA
Conc. 2.9075

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

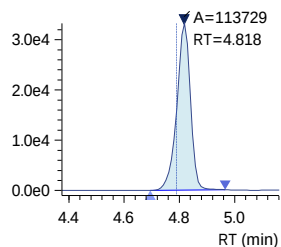
Q 302.10>79.90 (-)

8.05e4



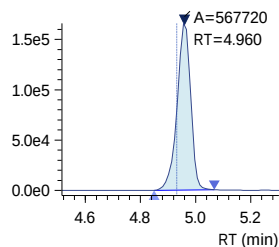
Q 295.00>201.00 (-)

3.33e4



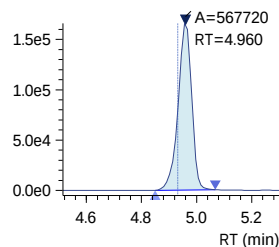
Q 318.00>273.00 (-)

1.66e5



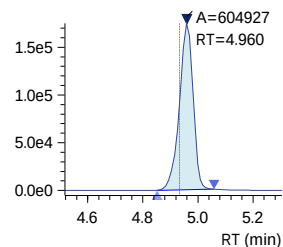
ISTD 318.00>273.00 (-)

1.66e5



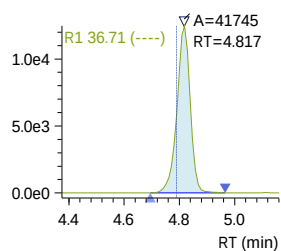
ISTD 315.10>270.00 (-)

1.75e5



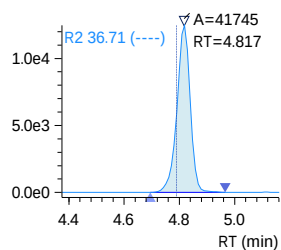
R1 295.00>84.90 (-)

1.25e4



R2 295.00>84.90 (-)

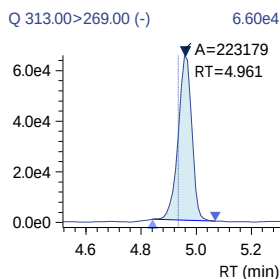
1.25e4



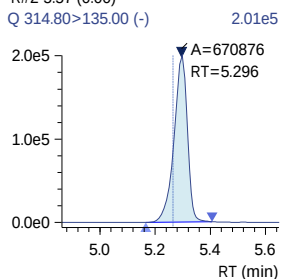


240130_028 (continued)

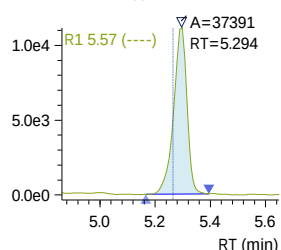
PFHxA
Conc. 1.0926



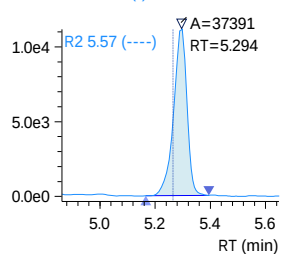
PFEESA
Conc. 0.9511
R#1 5.57 (5.25)
R#2 5.57 (0.00)



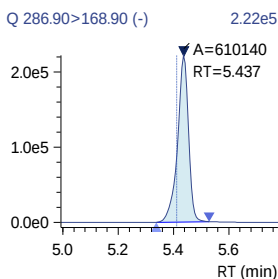
R1 314.80>82.90 (-) 1.12e4



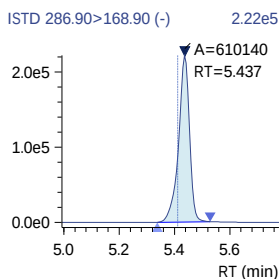
R2 314.80>82.90 (-) 1.12e4



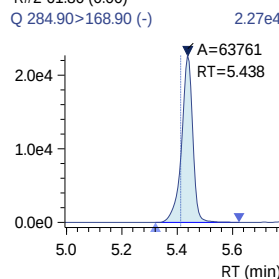
13C3-HFPO-DA
Conc. 11.3812



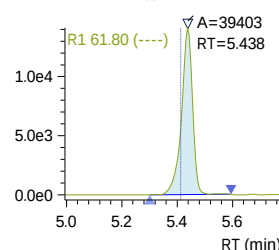
13C3-HFPO-DA_IS
Conc. 10.0000



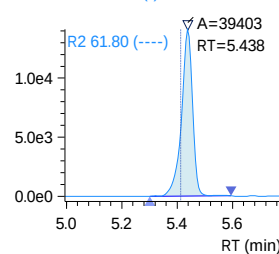
HFPO-DA
Conc. 1.0436
R#1 61.80 (69.48)
R#2 61.80 (0.00)



R1 284.90>184.90 (-) 1.41e4

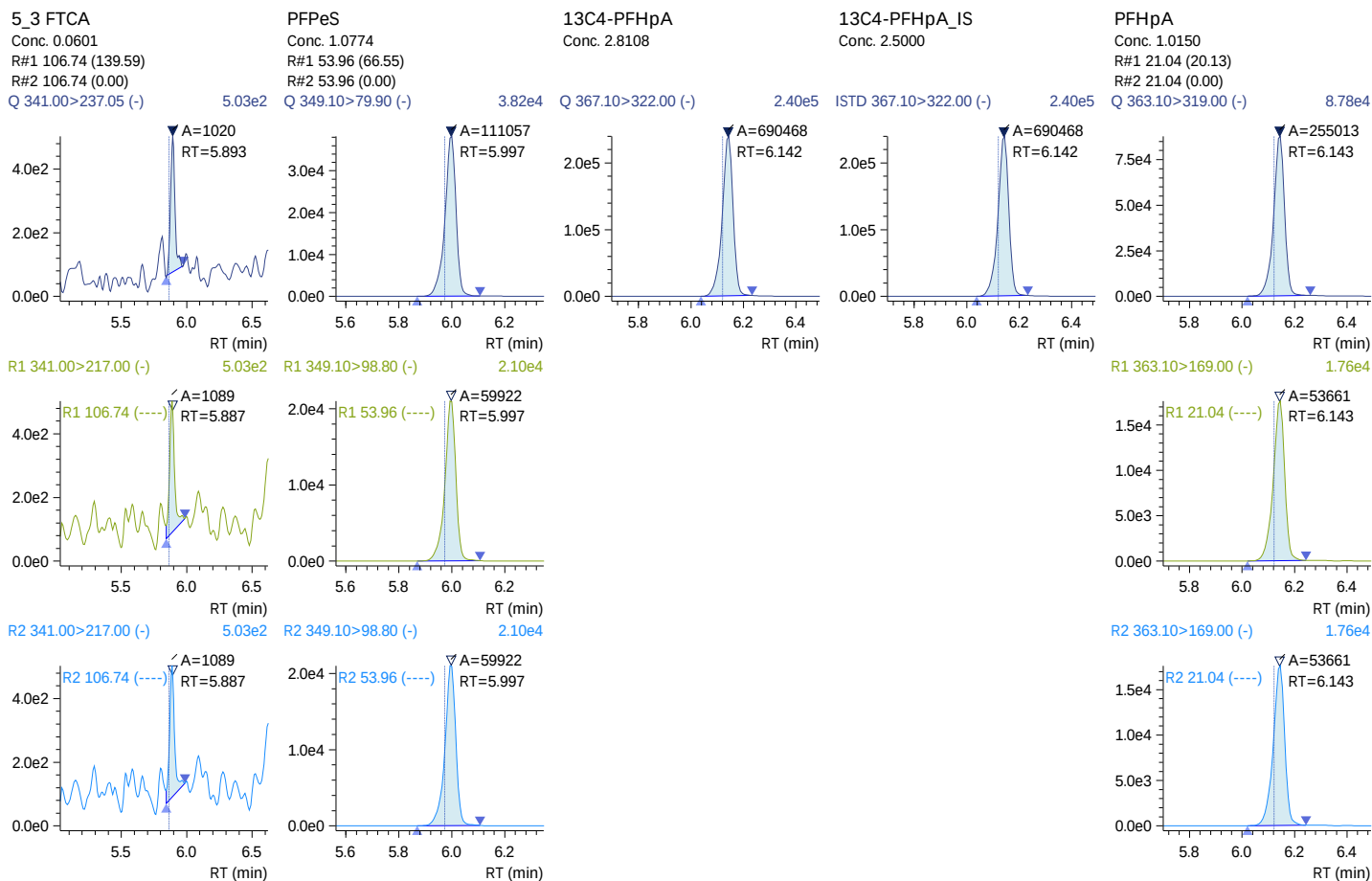


R2 284.90>184.90 (-) 1.41e4



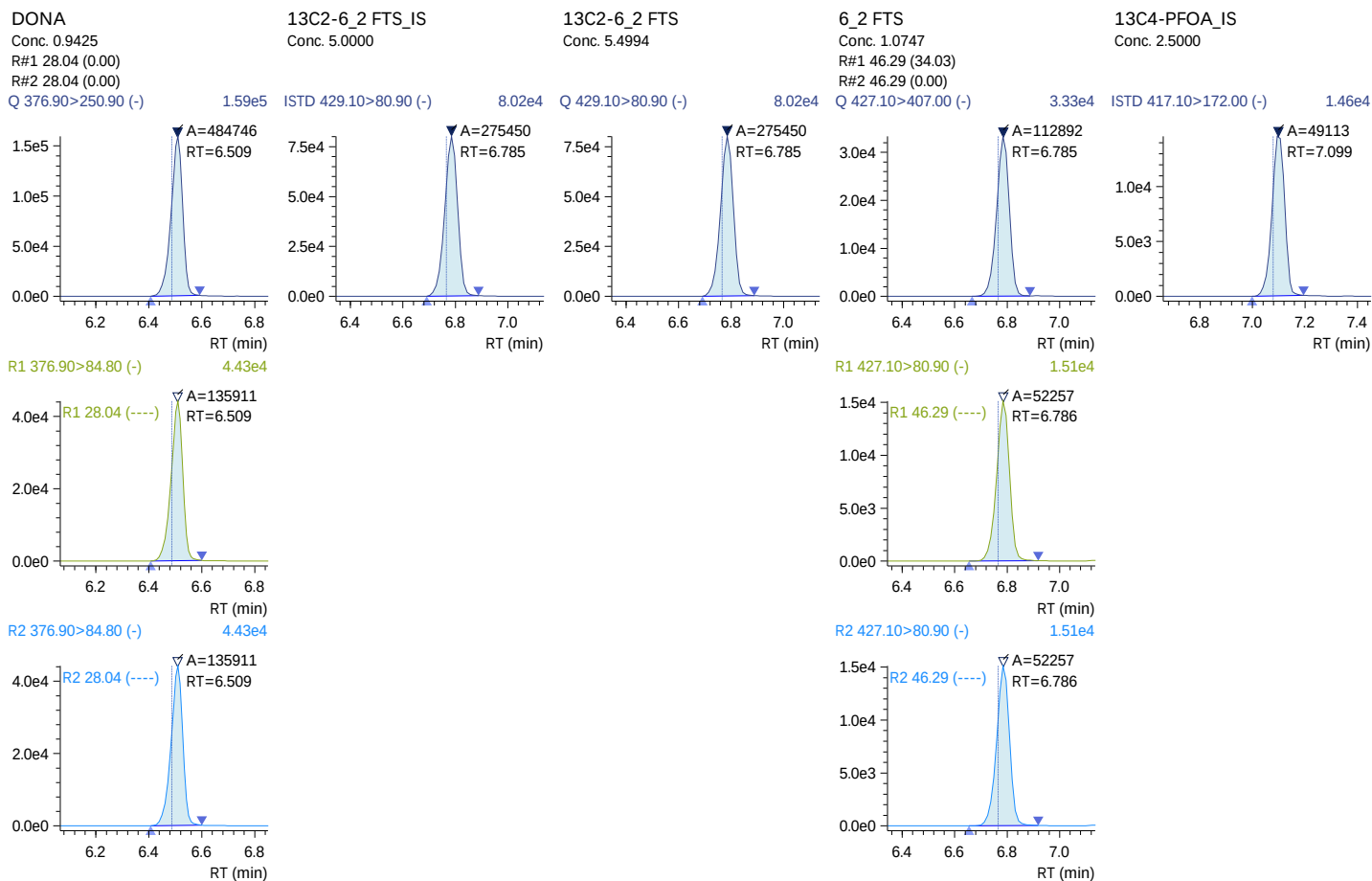


240130_028 (continued)





240130_028 (continued)





240130_028 (continued)

13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 3.0649

PFOA
Conc. 0.9671
R#1 26.11 (22.46)
R#2 26.11 (0.00)

13C3-PFHxS
Conc. 2.9070

13C3-PFHxS_IS
Conc. 2.5000

ISTD 421.10>376.00 (-)

2.14e5

Q 421.10>376.00 (-)

2.14e5

Q 413.00>369.00 (-)

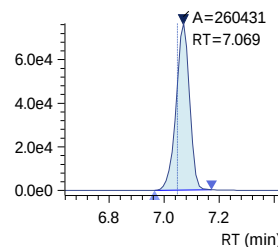
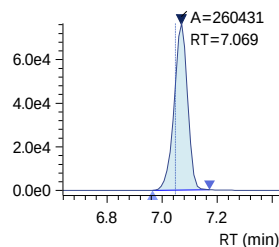
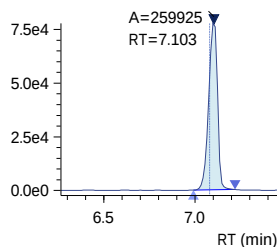
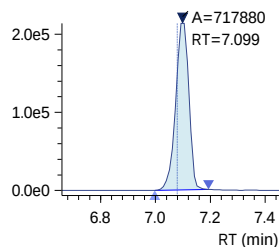
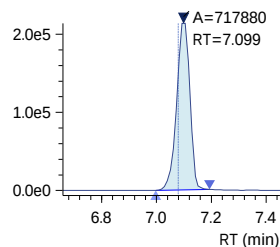
7.79e4

Q 402.10>79.90 (-)

7.66e4

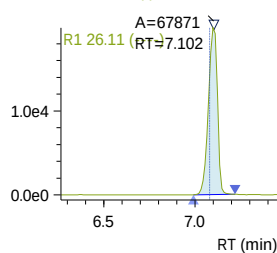
ISTD 402.10>79.90 (-)

7.66e4



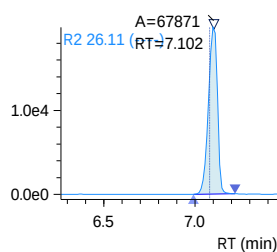
R1 413.00>169.00 (-)

1.99e4



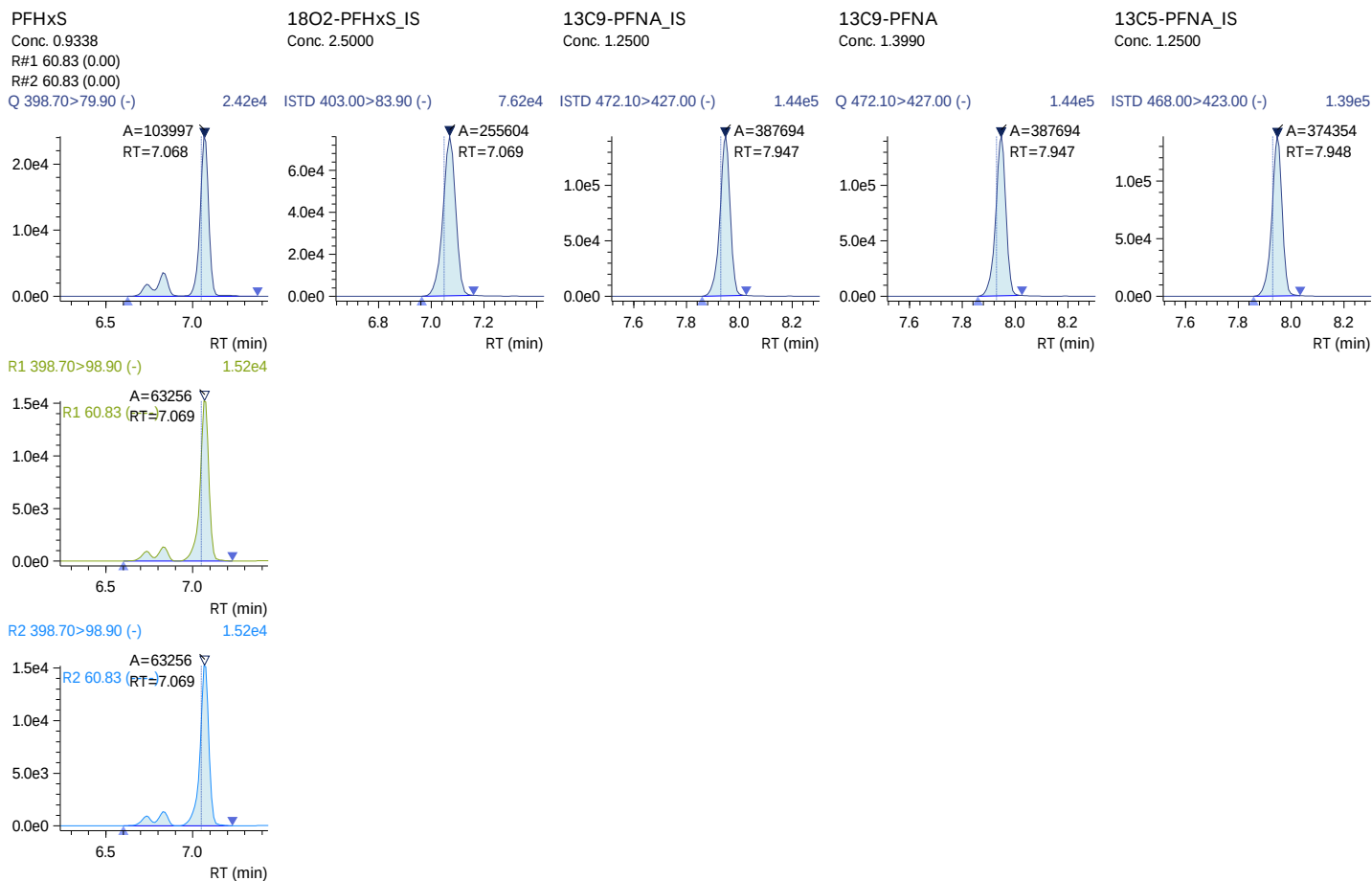
R2 413.00>169.00 (-)

1.99e4



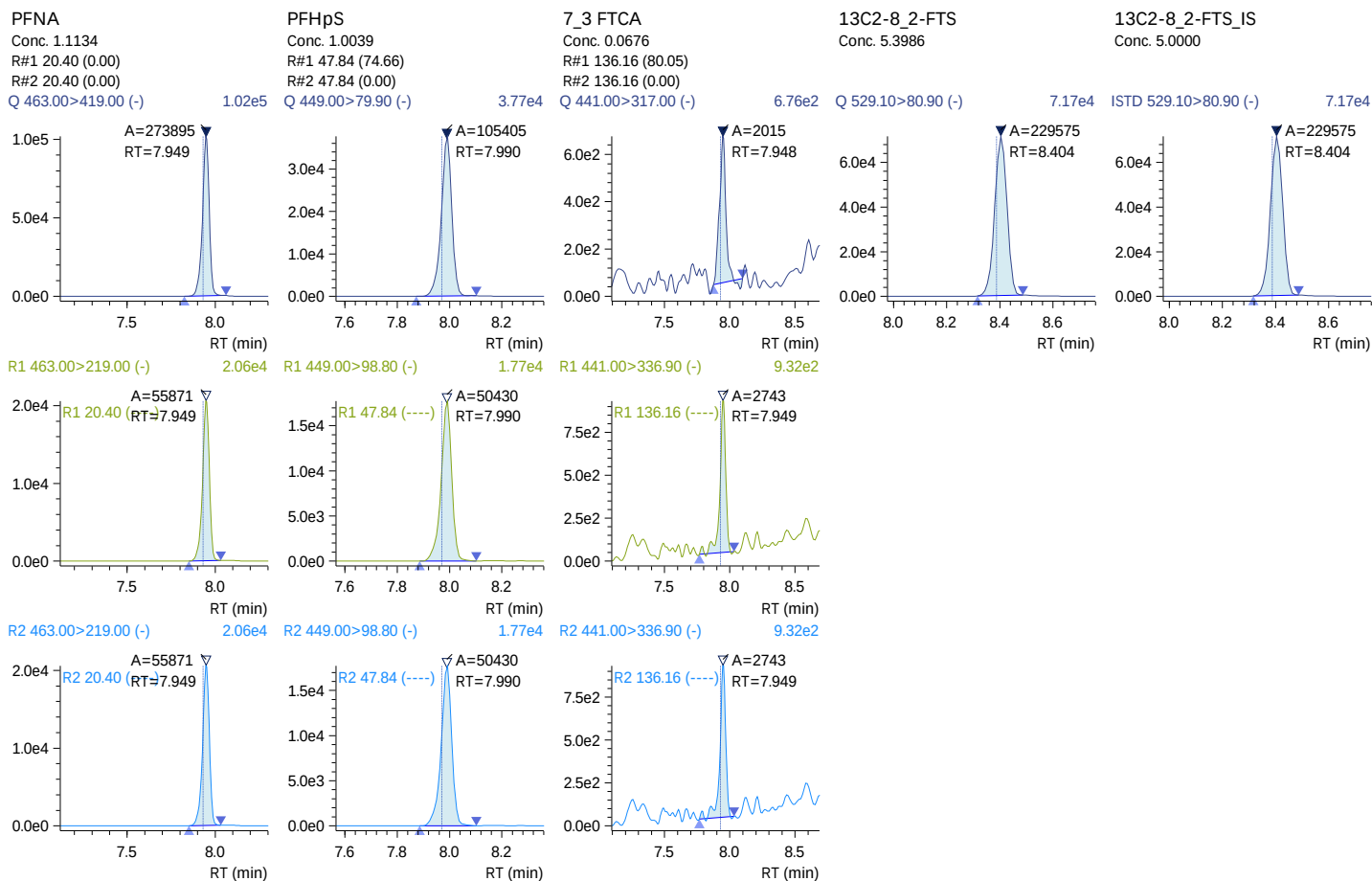


240130_028 (continued)



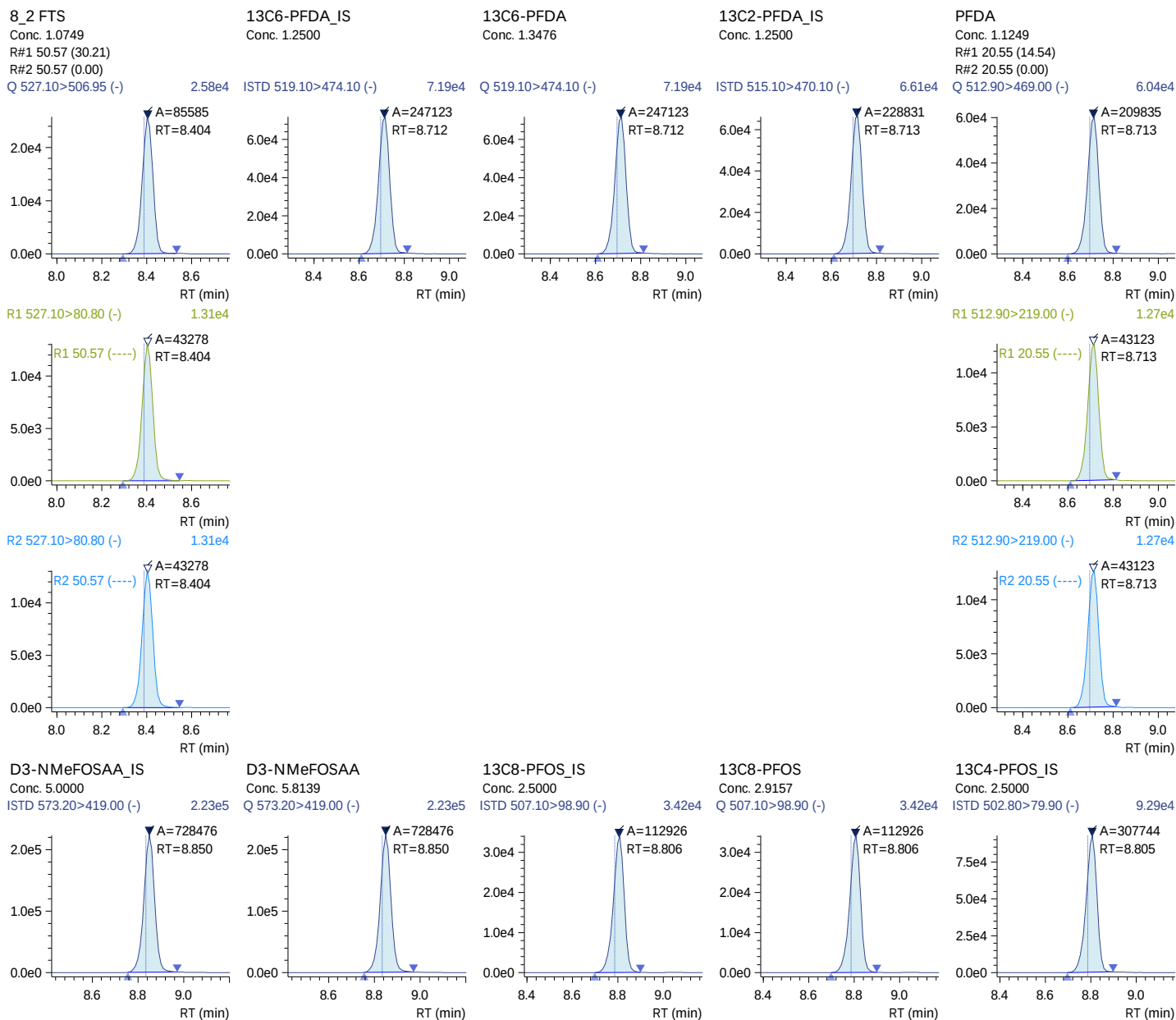


240130_028 (continued)



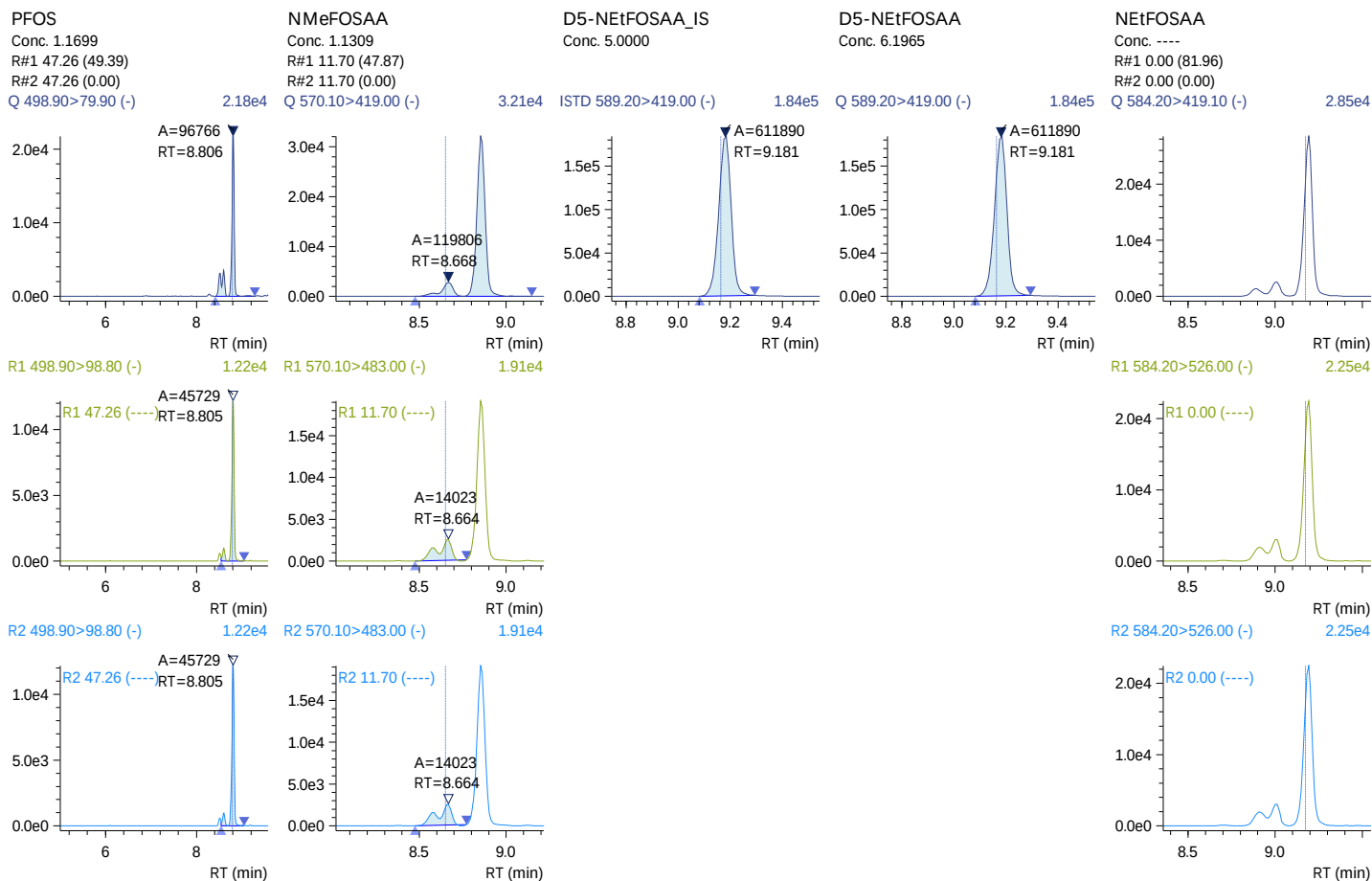


240130_028 (continued)





240130_028 (continued)

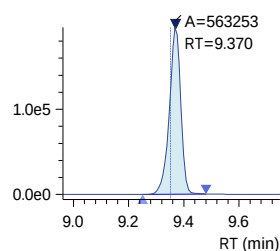




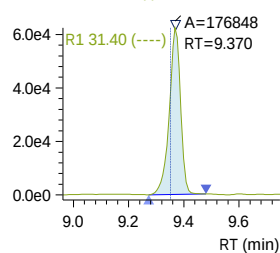
240130_028 (continued)

9-Cl-PF3ONS

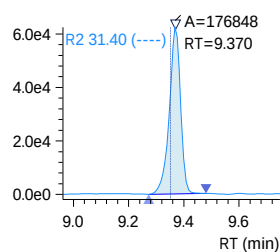
Conc. 0.9414
R#1 31.40 (31.39)
R#2 31.40 (0.00)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-)

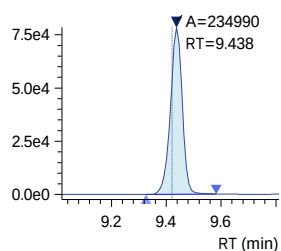


R2 532.80>353.00 (-)

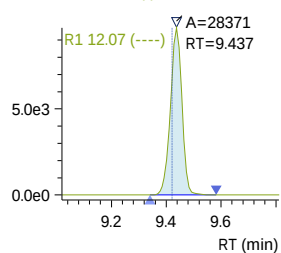


PFUnDA

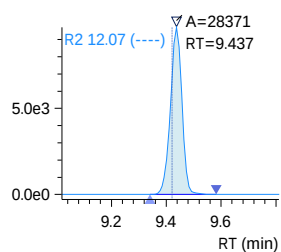
Conc. 1.0071
R#1 12.07 (12.59)
R#2 12.07 (0.00)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-)

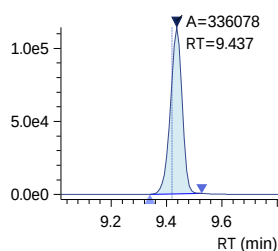


R2 563.10>269.10 (-)



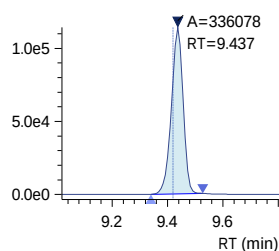
13C7-PFUnDA_IS

Conc. 1.2500
ISTD 570.00>525.10 (-)



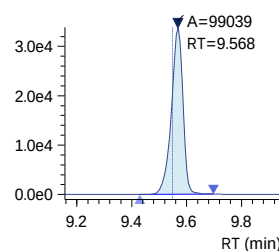
13C7-PFUnDA

Conc. 1.4749
Q 570.00>525.10 (-)

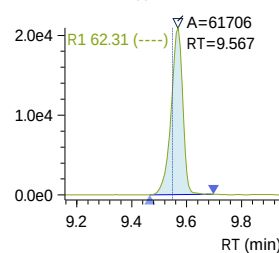


PFNS

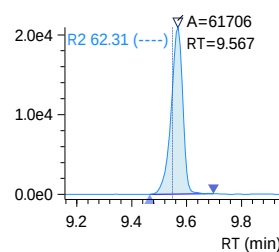
Conc. 1.0362
R#1 62.31 (82.65)
R#2 62.31 (0.00)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-)



R2 548.80>98.80 (-)





240130_028 (continued)

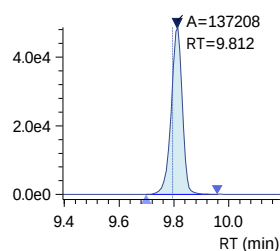
10_2 FTS

Conc. 1.2617

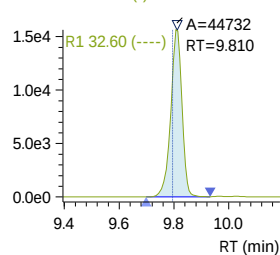
R#1 32.60 (16.46)

R#2 32.60 (0.00)

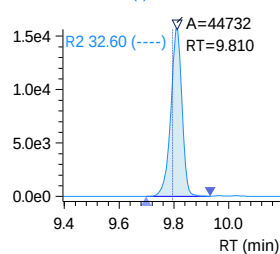
Q 626.80>607.05 (-)



R1 626.80>81.00 (-) 1.56e4



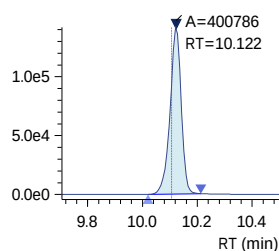
R2 626.80>81.00 (-) 1.56e4



13C2-PFDOA_IS

Conc. 1.2500

ISTD 615.10>570.00 (-)



Q 615.10>570.00 (-) 1.42e5



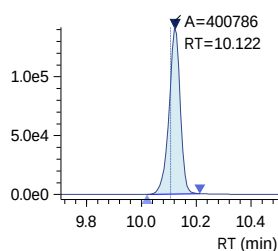
Q 615.10>570.00 (-) 1.42e5



13C2-PFDOA

Conc. 1.4734

Q 615.10>570.00 (-)



Q 615.10>570.00 (-) 1.42e5



Q 615.10>570.00 (-) 1.42e5



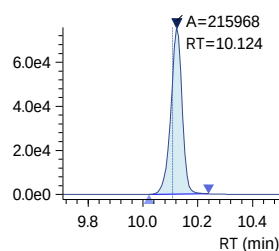
PFDOA

Conc. 1.0587

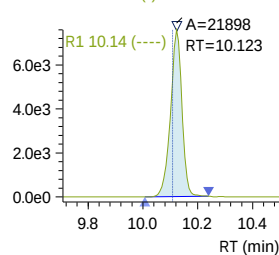
R#1 10.14 (10.12)

R#2 10.14 (0.00)

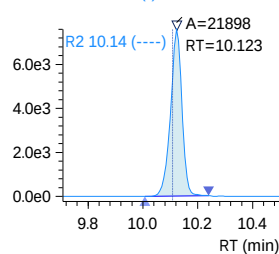
Q 613.10>569.00 (-)



R1 613.10>319.00 (-) 7.59e3



R2 613.10>319.00 (-) 7.59e3



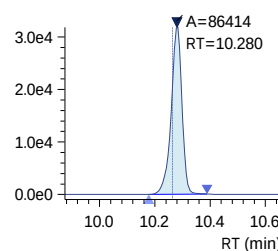
PFDS

Conc. 1.0296

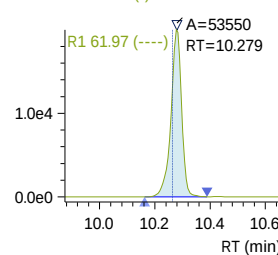
R#1 61.97 (77.67)

R#2 61.97 (0.00)

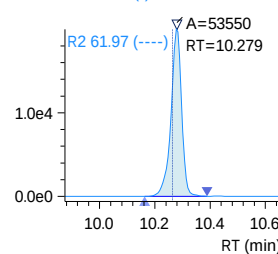
Q 599.00>79.90 (-)



R1 599.00>98.80 (-) 2.00e4



R2 599.00>98.80 (-) 2.00e4

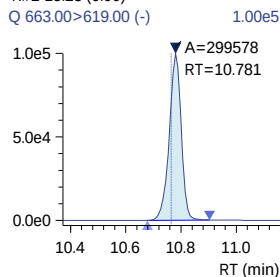




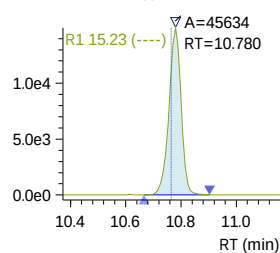
240130_028 (continued)

PFTrDA

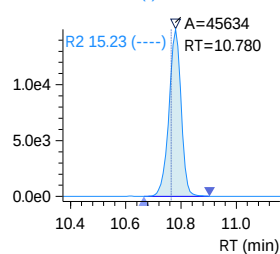
Conc. 1.1034
R#1 15.23 (14.17)
R#2 15.23 (0.00)
Q 663.00>619.00 (-)



R1 663.00>168.90 (-)

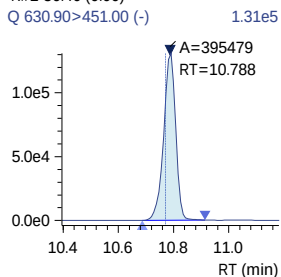


R2 663.00>168.90 (-)

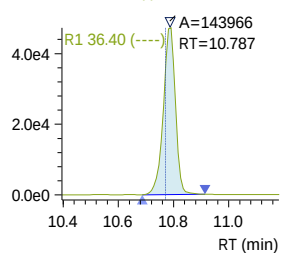


11-CI-PF3OUdS

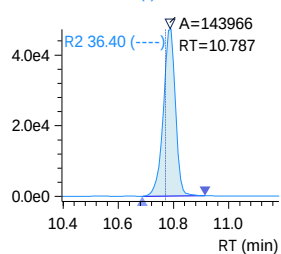
Conc. 0.9260
R#1 36.40 (32.90)
R#2 36.40 (0.00)
Q 630.90>451.00 (-)



R1 632.90>452.90 (-)

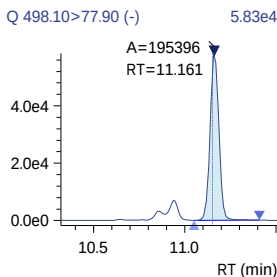


R2 632.90>452.90 (-)



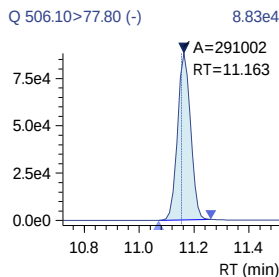
PFOSAm

Conc. 2.1105



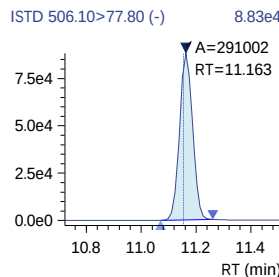
13C8-PFOSAm

Conc. 2.9768



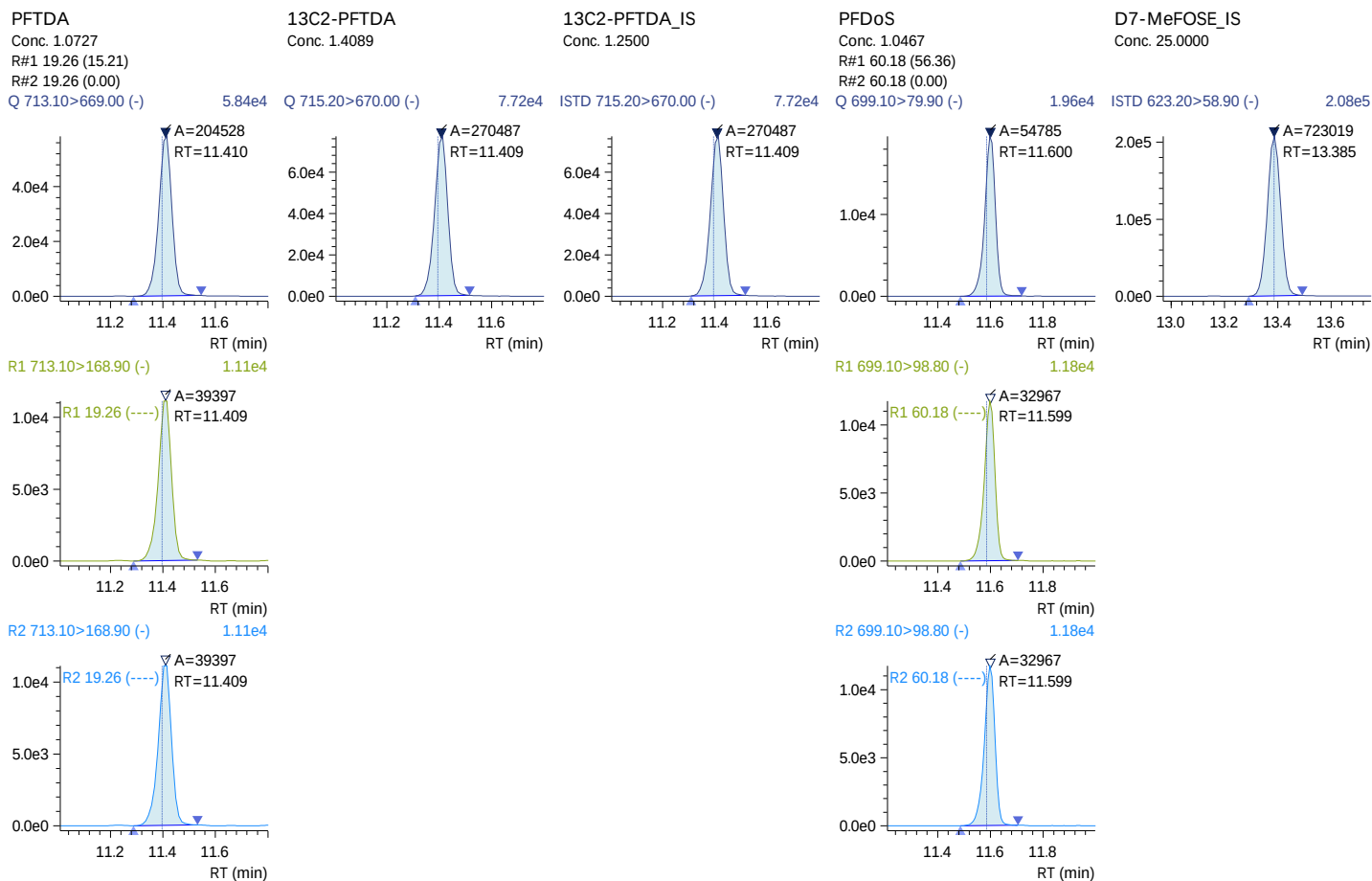
13C8-PFOSAm_IS

Conc. 2.5000





240130_028 (continued)





240130_028 (continued)

D7-MeFOSE
Conc. 28.8104

MeFOSE
Conc. 1.1007

13C2-PFHXA_IS
Conc. 2.5000

13C2-PFHXA
Conc. 2.7749

PFHXA
Conc. 1.0481
R#1 11.76 (9.60)
R#2 11.76 (0.00)

Q 623.20>58.90 (-)

2.08e5

Q 616.10>59.00 (-)

7.08e3

ISTD 815.00>770.05 (-)

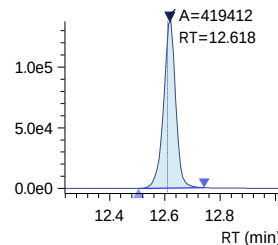
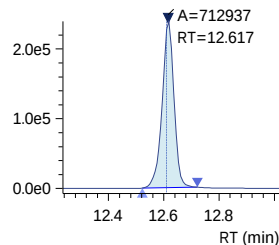
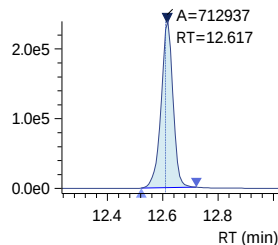
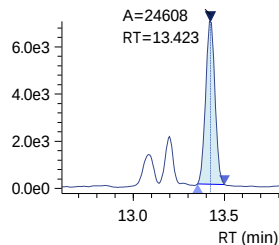
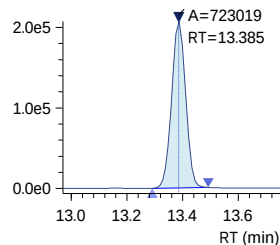
2.40e5

Q 815.00>770.05 (-)

2.40e5

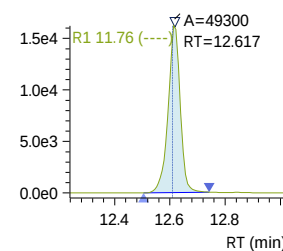
Q 813.00>768.95 (-)

1.38e5



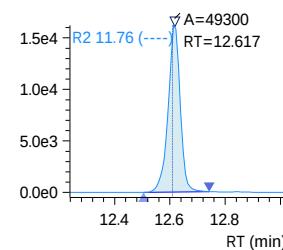
R1 813.00>218.95 (-)

1.62e4



R2 813.00>218.95 (-)

1.62e4





240130_028 (continued)

D3-MeFOSA
Conc. 2.7268

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. 1.0863
R#1 126.85 (98.91)
R#2 126.85 (0.00)

D9-EtFOSE_IS
Conc. 25.0000

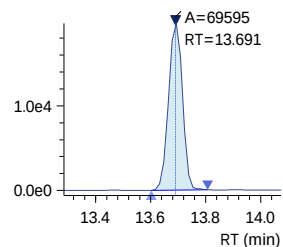
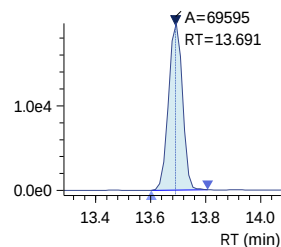
D9-EtFOSE
Conc. 28.5264

Q 515.00>219.00 (-)

1.97e4

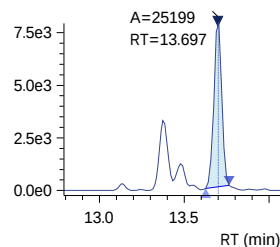
ISTD 515.00>219.00 (-)

1.97e4



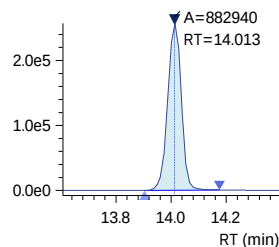
Q 511.90>219.00 (-)

7.94e3



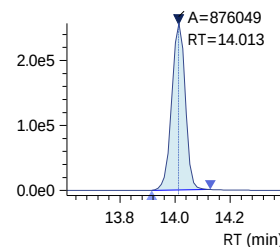
ISTD 639.20>58.90 (-)

2.57e5



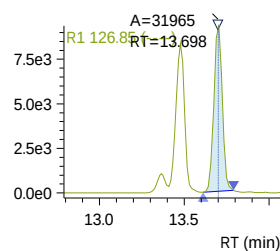
Q 639.20>58.90 (-)

2.57e5



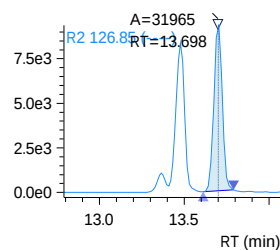
R1 511.90>169.00 (-)

9.37e3



R2 511.90>169.00 (-)

9.37e3





240130_028 (continued)

EtFOSE
Conc. 1.0716

D5-EtFOSAm
Conc. 2.9543

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. 1.0353

PFODA

Conc. 1.0023
R#1 33.98 (23.45)
R#2 33.98 (0.00)

Q 630.00>59.00 (-)

8.09e3

Q 531.10>219.00 (-)

3.33e4

ISTD 531.10>219.00 (-)

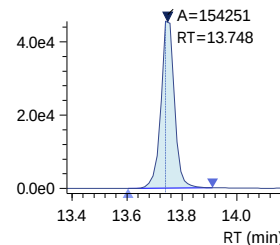
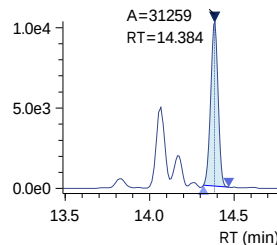
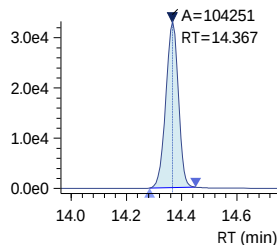
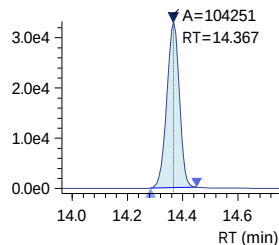
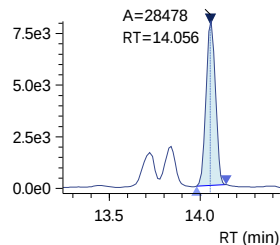
3.33e4

Q 526.00>219.00 (-)

1.04e4

Q 913.00>868.65 (-)

4.56e4

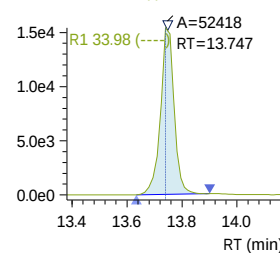
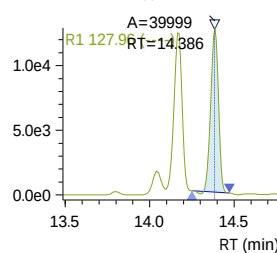


R1 526.00>169.00 (-)

1.29e4

R1 913.00>169.00 (-)

1.54e4

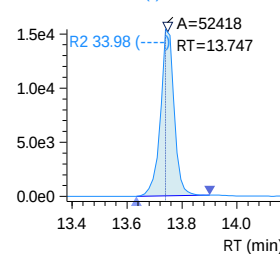
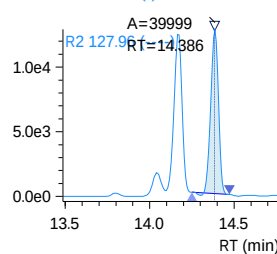


R2 526.00>169.00 (-)

1.29e4

R2 913.00>169.00 (-)

1.54e4

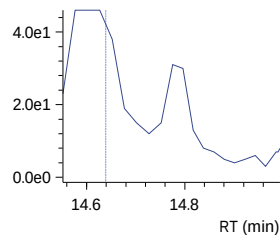


positive trans

Conc. ----

Q 514.80>219.10 (+)

4.60e1





240130_029

Sample ID: 1633 FTCA ICV 1.0PPB
Date Acquired: 1/31/2024 1:34:43 AM
Acquired by: System Administrator
Data File: 240130_029
Vial: 11 | Inj. Volume: 10.0000uL | Tray: 1

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	923003	----	----	----	----	----	----	----
13C4-PFBA_IS	216.80>171.90	----	923003	----	----	----	----	----	----	----
13C3-PFBA_IS	216.00>172.00	----	541225	----	----	----	----	----	----	----
PFBA	212.80>169.05	----	----	----	----	----	----	----	----	----
PFMPA	229.00>84.90	----	----	----	----	----	----	----	----	----
3_3 FTCA	241.00>177.10	241.00>117.00	69173	105192	152.07	139.21	----	----	----	----
13C5-PFPeA	268.30>223.00	----	251435	----	----	----	----	----	----	----
13C5-PFPeA_IS	268.30>223.00	----	251435	----	----	----	----	----	----	----
PFPeA	263.00>219.00	----	----	----	----	----	----	----	----	----
PFMBA	279.00>84.95	----	----	----	----	----	----	----	----	----
13C2-4_2 FTS	329.10>80.90	----	298243	----	----	----	----	----	----	----
13C2-4_2 FTS_IS	329.10>80.90	----	298243	----	----	----	----	----	----	----
4_2 FTS	327.10>307.00	327.10>80.90	----	0	0.00	32.10	0	0.00	32.10	----
13C3-PFBS_IS	302.10>79.90	----	289628	----	----	----	----	----	----	----
PFBS	298.70>79.90	298.70>98.80	----	0	0.00	44.81	0	0.00	44.81	----
13C3-PFBS	302.10>79.90	----	289628	----	----	----	----	----	----	----
NFDHA	295.00>201.00	295.00>84.90	----	0	0.00	35.54	0	0.00	35.54	----
13C5-PFHxA	318.00>273.00	----	558745	----	----	----	----	----	----	----
13C5-PFHxA_IS	318.00>273.00	----	558745	----	----	----	----	----	----	----
13C2-PFHxA_IS	315.10>270.00	----	578360	----	----	----	----	----	----	----
PFHxA	313.00>269.00	----	----	----	----	----	----	----	----	----
PFEESA	314.80>135.00	314.80>82.90	----	0	0.00	5.22	0	0.00	5.22	----
13C3-HFPO-DA	286.90>168.90	----	631071	----	----	----	----	----	----	----
13C3-HFPO-DA_IS	286.90>168.90	----	631071	----	----	----	----	----	----	----
HFPO-DA	284.90>168.90	284.90>184.90	----	0	0.00	59.79	0	0.00	59.79	----
5_3 FTCA	341.00>237.05	341.00>217.00	321466	509256	158.42	157.08	509256	158.42	157.08	----
PFPeS	349.10>79.90	349.10>98.80	----	0	0.00	55.12	0	0.00	55.12	----
13C4-PFHpA	367.10>322.00	----	710612	----	----	----	----	----	----	----
13C4-PFHpA_IS	367.10>322.00	----	710612	----	----	----	----	----	----	----
PFHpA	363.10>319.00	363.10>169.00	----	0	0.00	23.02	0	0.00	23.02	----
DONA	376.90>250.90	376.90>84.80	----	0	0.00	27.50	0	0.00	27.50	----
13C2-6_2 FTS_IS	429.10>80.90	----	285279	----	----	----	----	----	----	----
13C2-6_2 FTS	429.10>80.90	----	285279	----	----	----	----	----	----	----
6_2 FTS	427.10>407.00	427.10>80.90	----	0	0.00	50.47	0	0.00	50.47	----
13C4-PFOA_IS	417.10>172.00	----	55103	----	----	----	----	----	----	----
13C8-PFOA_IS	421.10>376.00	----	728388	----	----	----	----	----	----	----

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240130_029 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	728388	----	----	----	----	----	----	----
PFOA	413.00>369.00	413.00>169.00	----	0	0.00	28.77	0	0.00	28.77	
13C3-PFHxS	402.10>79.90	----	272746	----	----	----	----	----	----	----
13C3-PFHxS_IS	402.10>79.90	----	272746	----	----	----	----	----	----	----
PFHxS	398.70>79.90	398.70>98.90	----	0	0.00	60.90	0	0.00	60.90	
18O2-PFHxS_IS	403.00>83.90	----	265191	----	----	----	----	----	----	----
13C9-PFNA_IS	472.10>427.00	----	410598	----	----	----	----	----	----	----
13C9-PFNA	472.10>427.00	----	410598	----	----	----	----	----	----	----
13C5-PFNA_IS	468.00>423.00	----	376140	----	----	----	----	----	----	----
PFNA	463.00>419.00	463.00>219.00	----	0	0.00	19.31	0	0.00	19.31	
PFHpS	449.00>79.90	449.00>98.80	----	0	0.00	52.44	0	0.00	52.44	
7_3 FTCA	441.00>317.00	441.00>336.90	586057	771315	131.61	129.46	771315	131.61	129.46	
13C2-8_2-FTS	529.10>80.90	----	223671	----	----	----	----	----	----	----
13C2-8_2-FTS_IS	529.10>80.90	----	223671	----	----	----	----	----	----	----
8_2 FTS	527.10>506.95	527.10>80.80	----	0	0.00	45.98	0	0.00	45.98	
13C6-PFDA_IS	519.10>474.10	----	274884	----	----	----	----	----	----	----
13C6-PFDA	519.10>474.10	----	274884	----	----	----	----	----	----	----
13C2-PFDA_IS	515.10>470.10	----	257284	----	----	----	----	----	----	----
PFDA	512.90>469.00	512.90>219.00	----	0	0.00	17.88	0	0.00	17.88	
D3-NMeFOSAA_IS	573.20>419.00	----	745576	----	----	----	----	----	----	----
D3-NMeFOSAA	573.20>419.00	----	745576	----	----	----	----	----	----	----
13C8-PFOS_IS	507.10>98.90	----	123010	----	----	----	----	----	----	----
13C8-PFOS	507.10>98.90	----	123010	----	----	----	----	----	----	----
13C4-PFOS_IS	502.80>79.90	----	336033	----	----	----	----	----	----	----
PFOS	498.90>79.90	498.90>98.80	----	0	0.00	53.60	0	0.00	53.60	
NMeFOSAA	570.10>419.00	570.10>483.00	----	0	0.00	64.89	0	0.00	64.89	
D5-NEtFOSAA_IS	589.20>419.00	----	633609	----	----	----	----	----	----	----
D5-NEtFOSAA	589.20>419.00	----	633609	----	----	----	----	----	----	----
NEtFOSAA	584.20>419.10	584.20>526.00	----	0	0.00	96.07	0	0.00	96.07	
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	----	0	0.00	30.95	0	0.00	30.95	
PFUnDA	563.10>519.00	563.10>269.10	----	0	0.00	11.01	0	0.00	11.01	
13C7-PFUnDA_IS	570.00>525.10	----	339555	----	----	----	----	----	----	----
13C7-PFUnDA	570.00>525.10	----	339555	----	----	----	----	----	----	----
PFNS	548.80>79.90	548.80>98.80	----	0	0.00	60.44	0	0.00	60.44	
10_2 FTS	626.80>607.05	626.80>81.00	----	0	0.00	36.14	0	0.00	36.14	
13C2-PFDOA_IS	615.10>570.00	----	390326	----	----	----	----	----	----	----
13C2-PFDOA	615.10>570.00	----	390326	----	----	----	----	----	----	----
PFDOA	613.10>569.00	613.10>319.00	----	0	0.00	10.16	0	0.00	10.16	
PFDS	599.00>79.90	599.00>98.80	----	0	0.00	58.26	0	0.00	58.26	
PFTTrDA	663.00>619.00	663.00>168.90	----	0	0.00	16.18	0	0.00	16.18	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240130_029 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	----	0	0.00	34.99	0	0.00	34.99	
PFOSAm	498.10>77.90	----	----	----	----	----	----	----	----	
13C8-PFOSAm	506.10>77.80	----	285177	----	----	----	----	----	----	
13C8-PFOSAm_IS	506.10>77.80	----	285177	----	----	----	----	----	----	
PFTDA	713.10>669.00	713.10>168.90	----	0	0.00	18.05	0	0.00	18.05	
13C2-PFTDA	715.20>670.00	----	285248	----	----	----	----	----	----	
13C2-PFTDA_IS	715.20>670.00	----	285248	----	----	----	----	----	----	
PFDoS	699.10>79.90	699.10>98.80	----	0	0.00	61.13	0	0.00	61.13	
D7-MeFOSE_IS	623.20>58.90	----	719244	----	----	----	----	----	----	
D7-MeFOSE	623.20>58.90	----	719244	----	----	----	----	----	----	
MeFOSE	616.10>59.00	----	----	----	----	----	----	----	----	
13C2-PFHxDA_IS	815.00>770.05	----	701448	----	----	----	----	----	----	
13C2-PFHxDA	815.00>770.05	----	701448	----	----	----	----	----	----	
PFHxDA	813.00>768.95	813.00>218.95	----	0	0.00	11.66	0	0.00	11.66	
D3-MeFOSA	515.00>219.00	----	74719	----	----	----	----	----	----	
D3-MeFOSA_IS	515.00>219.00	----	74719	----	----	----	----	----	----	
MeFOSA	511.90>219.00	511.90>169.00	----	0	0.00	160.44	0	0.00	160.44	
D9-EtFOSE_IS	639.20>58.90	----	884294	----	----	----	----	----	----	
D9-EtFOSE	639.20>58.90	----	874963	----	----	----	----	----	----	
EtFOSE	630.00>59.00	----	----	----	----	----	----	----	----	
D5-EtFOSAm	531.10>219.00	----	102635	----	----	----	----	----	----	
D5-EtFOSAm_IS	531.10>219.00	----	102635	----	----	----	----	----	----	
EtFOSAm	526.00>219.00	526.00>169.00	----	0	0.00	159.63	0	0.00	159.63	
PFODA	913.00>868.65	913.00>169.00	----	0	0.00	36.03	0	0.00	36.03	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
 IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240130_029

Sample ID: 1633 FTCA ICV 1.0PPB
Date Acquired: 1/31/2024 1:34:43 AM
Acquired by: System Administrator
Data File: 240130_029
Vial: 11 | Inj. Volume: 10.0000uL | Tray: 1

Only used for FTCA compounds

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.367	0.029	-0.002	923003	541225	13C3-PFBA_IS	11.5091	ng/mL	
13C4-PFBA_IS	Auto	1.367	0.029	----	923003	923003	----	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.369	0.032	----	541225	541225	----	5.0000	ng/mL	
PFBA	ND(W/B)	----	----	----	----	923003	13C4-PFBA_IS	----	ng/mL	
PFMPA	ND(W/B)	----	----	----	----	251435	13C5-PFPeA_IS	----	ng/mL	
3_3 FTCA	Auto	2.979	0.034	-0.489	69173	251435	13C5-PFPeA_IS	19.2063	ng/mL	
13C5-PFPeA	Auto	3.468	0.029	-1.488	251435	578360	13C2-PFHxA_IS	6.0461	ng/mL	
13C5-PFPeA_IS	Auto	3.468	0.029	----	251435	251435	----	5.0000	ng/mL	
PFPeA	ND(W/B)	----	----	----	----	251435	13C5-PFPeA_IS	----	ng/mL	
PFMBA	ND(W/B)	----	----	----	----	251435	13C5-PFPeA_IS	----	ng/mL	
13C2-4_2 FTS	Auto	4.641	0.021	-2.424	298243	265191	18O2-PFHxS_IS	5.9746	ng/mL	
13C2-4_2 FTS_IS	Auto	4.641	0.021	----	298243	298243	----	5.0000	ng/mL	
4_2 FTS	ND(W/B)	----	----	----	----	298243	13C2-4_2 FTS_IS	----	ng/mL	
13C3-PFBS_IS	Auto	4.614	0.027	----	289628	289628	----	2.5000	ng/mL	
PFBS	ND(W/B)	----	----	----	----	289628	13C3-PFBS_IS	----	ng/mL	
13C3-PFBS	Auto	4.614	0.027	-2.451	289628	265191	18O2-PFHxS_IS	2.9271	ng/mL	
NFDHA	ND(W/B)	----	----	----	----	558745	13C5-PFHxA_IS	----	ng/mL	
13C5-PFHxA	Auto	4.956	0.024	0.000	558745	578360	13C2-PFHxA_IS	2.9930	ng/mL	
13C5-PFHxA_IS	Auto	4.956	0.024	----	558745	558745	----	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	4.956	0.023	----	578360	578360	----	2.5000	ng/mL	
PFHxA	ND(W/B)	----	----	----	----	558745	13C5-PFHxA_IS	----	ng/mL	
PFEESA	ND(W/B)	----	----	----	----	558745	13C5-PFHxA_IS	----	ng/mL	
13C3-HFPO-DA	Auto	5.432	0.020	0.476	631071	578360	13C2-PFHxA_IS	12.3123	ng/mL	
13C3-HFPO-DA_IS	Auto	5.432	0.020	----	631071	631071	----	10.0000	ng/mL	
HFPO-DA	ND(W/B)	----	----	----	----	631071	13C3-HFPO-DA_IS	----	ng/mL	
5_3 FTCA	Auto	5.883	0.017	0.927	321466	558745	13C5-PFHxA_IS	19.2468	ng/mL	
PFPeS	ND(W/B)	----	----	----	----	272746	13C3-PFHxS_IS	----	ng/mL	
13C4-PFHpA	Auto	6.138	0.018	1.182	710612	578360	13C2-PFHxA_IS	3.0256	ng/mL	
13C4-PFHpA_IS	Auto	6.138	0.018	----	710612	710612	----	2.5000	ng/mL	
PFHpA	ND(W/B)	----	----	----	----	710612	13C4-PFHpA_IS	----	ng/mL	
DONA	ND(W/B)	----	----	----	----	631071	13C3-HFPO-DA_IS	----	ng/mL	
13C2-6_2 FTS_IS	Auto	6.781	0.015	----	285279	285279	----	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.781	0.015	-0.284	285279	265191	18O2-PFHxS_IS	5.4897	ng/mL	
6_2 FTS	ND(W/B)	----	----	----	----	285279	13C2-6_2 FTS_IS	----	ng/mL	
13C4-PFOA_IS	Auto	7.096	0.017	----	55103	55103	----	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.096	0.018	----	728388	728388	----	2.5000	ng/mL	
13C8-PFOA	Auto	7.096	0.018	0.000	728388	55103	13C4-PFOA_IS	2.7717	ng/mL	
PFOA	ND(W/B)	----	----	----	----	728388	13C8-PFOA_IS	----	ng/mL	
13C3-PFHxS	Auto	7.065	0.017	0.000	272746	265191	18O2-PFHxS_IS	2.9344	ng/mL	
13C3-PFHxS_IS	Auto	7.065	0.017	----	272746	272746	----	2.5000	ng/mL	
PFHxS	ND(W/B)	----	----	----	----	272746	13C3-PFHxS_IS	----	ng/mL	
18O2-PFHxS_IS	Auto	7.065	0.017	----	265191	265191	----	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.945	0.016	----	410598	410598	----	1.2500	ng/mL	
13C9-PFNA	Auto	7.945	0.016	-0.001	410598	376140	13C5-PFNA_IS	1.4747	ng/mL	
13C5-PFNA_IS	Auto	7.946	0.016	----	376140	376140	----	1.2500	ng/mL	
PFNA	ND(W/B)	----	----	----	----	410598	13C9-PFNA_IS	----	ng/mL	
PFHpS	ND(W/B)	----	----	----	----	123010	13C8-PFOS_IS	----	ng/mL	
7_3 FTCA	Auto	7.943	0.014	2.987	586057	558745	13C5-PFHxA_IS	19.9685	ng/mL	
13C2-8_2-FTS	Auto	8.401	0.013	1.336	223671	265191	18O2-PFHxS_IS	5.0696	ng/mL	
13C2-8_2-FTS_IS	Auto	8.401	0.013	----	223671	223671	----	5.0000	ng/mL	
8_2 FTS	ND(W/B)	----	----	----	----	223671	13C2-8_2-FTS_IS	----	ng/mL	
13C6-PFDA_IS	Auto	8.710	0.015	----	274884	274884	----	1.2500	ng/mL	
13C6-PFDA	Auto	8.710	0.015	0.000	274884	257284	13C2-PFDA_IS	1.3332	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_029 (continued)

(Table continued from previous page)

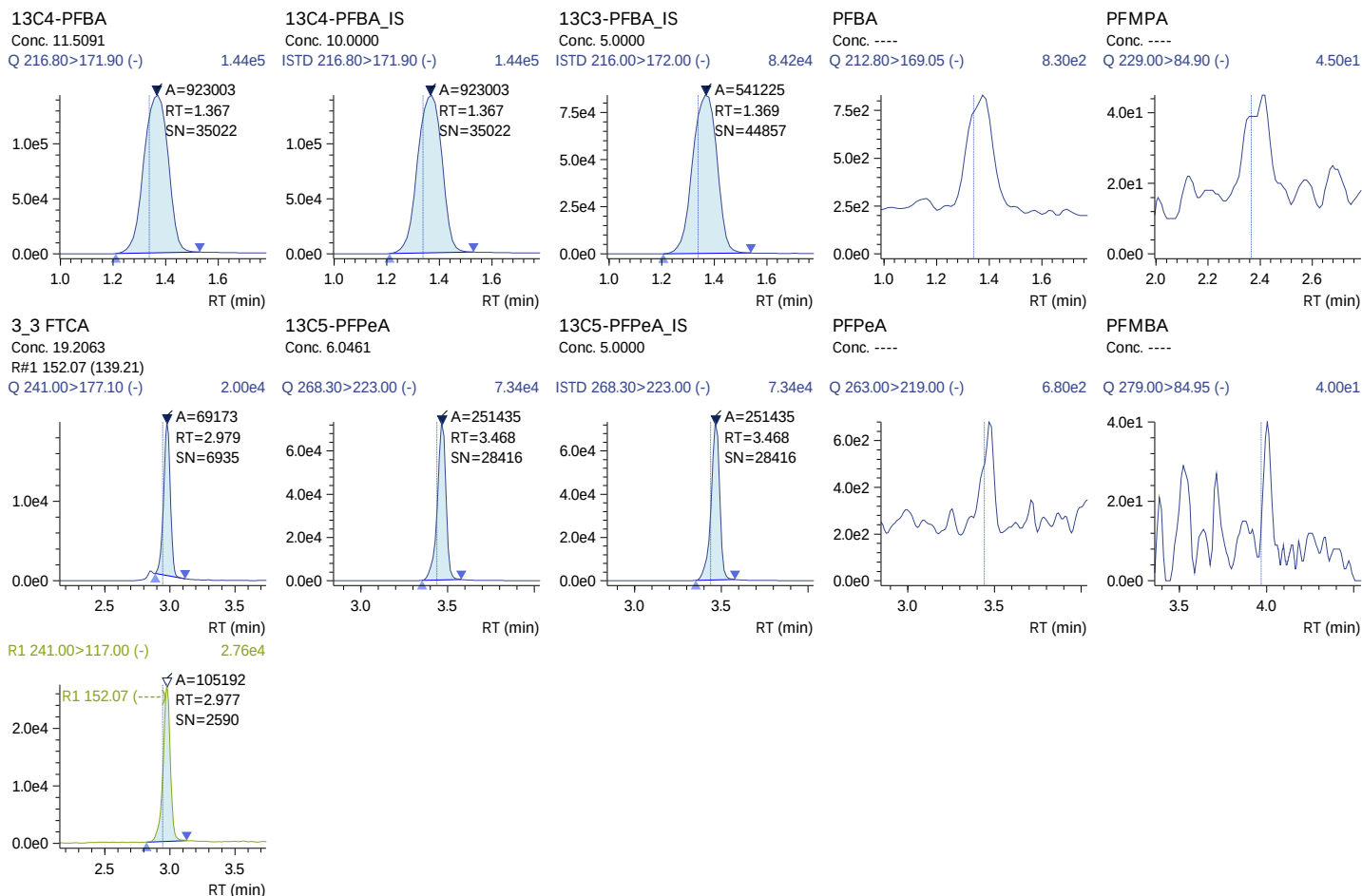
Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C2-PFDA_IS	Auto	8.710	0.014	----	257284	257284	----	1.2500	ng/mL	
PFDA	ND(W/B)	----	----	----	----	274884	13C6-PFDA_IS	----	ng/mL	
D3-NMeFOSAA_IS	Auto	8.847	0.013	----	745576	745576	----	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.847	0.013	0.045	745576	336033	13C4-PFOS_IS	5.4494	ng/mL	
13C8-PFOS_IS	Auto	8.802	0.016	----	123010	123010	----	2.5000	ng/mL	
13C8-PFOS	Auto	8.802	0.016	0.000	123010	336033	13C4-PFOS_IS	2.9087	ng/mL	
13C4-PFOS_IS	Auto	8.802	0.015	----	336033	336033	----	2.5000	ng/mL	
PFOS	ND(W/B)	----	----	----	----	123010	13C8-PFOS_IS	----	ng/mL	
NMeFOSAA	ND(W/B)	----	----	----	----	745576	D3-NMeFOSAA_IS	----	ng/mL	
D5-NetFOSAA_IS	Auto	9.178	0.014	----	633609	633609	----	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.178	0.014	0.376	633609	336033	13C4-PFOS_IS	5.8763	ng/mL	
NetFOSAA	ND(W/B)	----	----	----	----	633609	D5-NetFOSAA_IS	----	ng/mL	
9-CI-PF3ONS	ND(W/B)	----	----	----	----	631071	13C3-HFPO-DA_IS	----	ng/mL	
PFUnDA	ND(W/B)	----	----	----	----	339555	13C7-PFUnDA_IS	----	ng/mL	
13C7-PFUnDA_IS	Auto	9.434	0.015	----	339555	339555	----	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.434	0.015	0.724	339555	257284	13C2-PFDA_IS	1.3254	ng/mL	
PFNS	ND(W/B)	----	----	----	----	123010	13C8-PFOS_IS	----	ng/mL	
10_2_FTS	ND(W/B)	----	----	----	----	223671	13C2-8_2-FTS_IS	----	ng/mL	
13C2-PFDOA_IS	Auto	10.120	0.013	----	390326	390326	----	1.2500	ng/mL	
13C2-PFDOA	Auto	10.120	0.013	1.410	390326	257284	13C2-PFDA_IS	1.2763	ng/mL	
PFDOA	ND(W/B)	----	----	----	----	390326	13C2-PFDOA_IS	----	ng/mL	
PFDS	ND(W/B)	----	----	----	----	123010	13C8-PFOS_IS	----	ng/mL	
PFTDA	ND(W/B)	----	----	----	----	285248	13C2-PFTDA_IS	----	ng/mL	
11-CI-PF3OUdS	ND(W/B)	----	----	----	----	631071	13C3-HFPO-DA_IS	----	ng/mL	
PFOSAm	ND(W/B)	----	----	----	----	285177	13C8-PFOSAm_IS	----	ng/mL	
13C8-PFOSAm	Auto	11.160	0.005	2.358	285177	336033	13C4-PFOS_IS	2.6716	ng/mL	
13C8-PFOSAm_IS	Auto	11.160	0.005	----	285177	285177	----	2.5000	ng/mL	
PFTDA	ND(W/B)	----	----	----	----	285248	13C2-PFTDA_IS	----	ng/mL	
13C2-PFTDA	Auto	11.407	0.012	2.697	285248	257284	13C2-PFDA_IS	1.3215	ng/mL	
13C2-PFTDA_IS	Auto	11.407	0.012	----	285248	285248	----	1.2500	ng/mL	
PFDoS	ND(W/B)	----	----	----	----	123010	13C8-PFOS_IS	----	ng/mL	
D7-MeFOSE_IS	Auto	13.386	0.000	----	719244	719244	----	25.0000	ng/mL	
D7-MeFOSE	Auto	13.386	0.000	4.584	719244	336033	13C4-PFOS_IS	26.2472	ng/mL	
MeFOSE	ND(W/B)	----	----	----	----	719244	D7-MeFOSE_IS	----	ng/mL	
13C2-PFHXA_IS	Auto	12.616	0.007	----	701448	701448	----	2.5000	ng/mL	
13C2-PFHXA	Auto	12.616	0.007	3.906	701448	257284	13C2-PFDA_IS	2.4282	ng/mL	
PFHXA	ND(W/B)	----	----	----	----	701448	13C2-PFHXA_IS	----	ng/mL	
D3-MeFOSA	Auto	13.692	0.002	4.890	74719	336033	13C4-PFOS_IS	2.6812	ng/mL	
D3-MeFOSA_IS	Auto	13.692	0.002	----	74719	74719	----	2.5000	ng/mL	
MeFOSA	ND(W/B)	----	----	----	----	74719	D3-MeFOSA_IS	----	ng/mL	
D9-EtFOSE_IS	Auto	14.015	0.002	----	884294	884294	----	25.0000	ng/mL	
D9-EtFOSE	Auto	14.015	0.002	5.213	874963	336033	13C4-PFOS_IS	26.0925	ng/mL	
EtFOSE	ND(W/B)	----	----	----	----	884294	D9-EtFOSE_IS	----	ng/mL	
D5-EtFOSAm	Auto	14.369	0.002	5.566	102635	336033	13C4-PFOS_IS	2.6636	ng/mL	
D5-EtFOSAm_IS	Auto	14.369	0.002	----	102635	102635	----	2.5000	ng/mL	
EtFOSAm	ND(W/B)	----	----	----	----	102635	D5-EtFOSAm_IS	----	ng/mL	
PFODA	ND(W/B)	----	----	----	----	701448	13C2-PFHXA_IS	----	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_029 (continued)





240130_029 (continued)

13C2-4_2 FTS
Conc. 5.9746

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. ----
R#1 0.00 (32.10)
R#2 0.00 (32.10)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. ----
R#1 0.00 (44.81)
R#2 0.00 (44.81)

Q 329.10>80.90 (-)

9.39e4

ISTD 329.10>80.90 (-)

9.39e4

Q 327.10>307.00 (-)

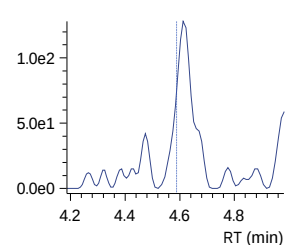
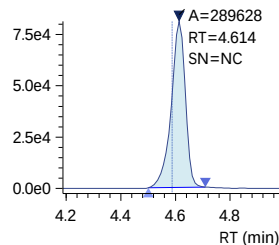
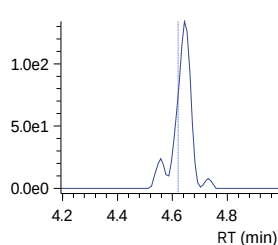
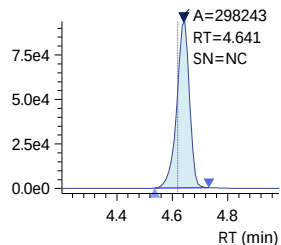
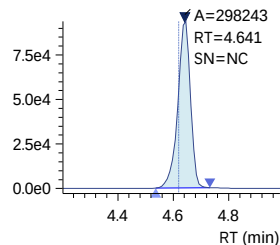
1.34e2

ISTD 302.10>79.90 (-)

8.14e4

Q 298.70>79.90 (-)

1.28e2

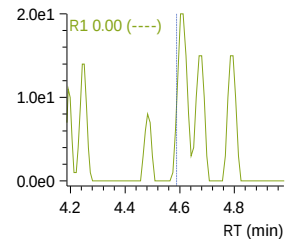
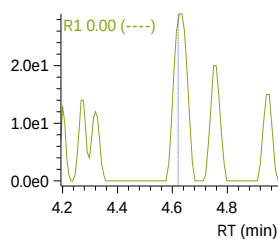


R1 327.10>80.90 (-)

2.90e1

R1 298.70>98.80 (-)

2.00e1

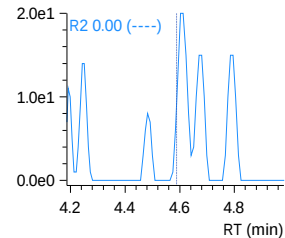
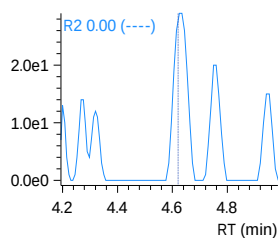


R2 327.10>80.90 (-)

2.90e1

R2 298.70>98.80 (-)

2.00e1





240130_029 (continued)

13C3-PFBS
Conc. 2.9271

NFDHA
Conc. ----
R#1 0.00 (35.54)
R#2 0.00 (35.54)

13C5-PFHxA
Conc. 2.9930

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

Q 302.10>79.90 (-)

8.14e4

Q 295.00>201.00 (-)

3.39e2

Q 318.00>273.00 (-)

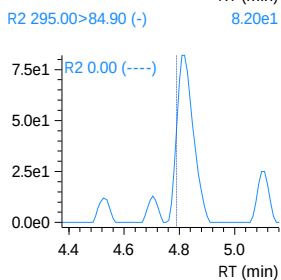
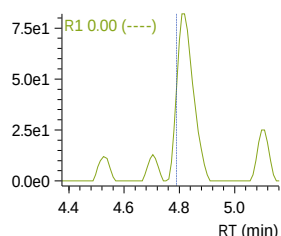
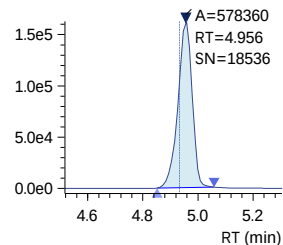
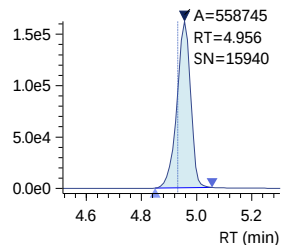
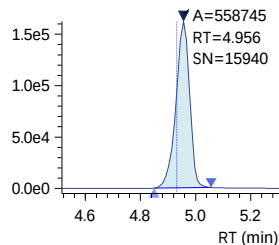
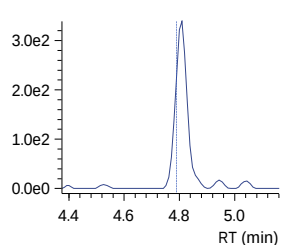
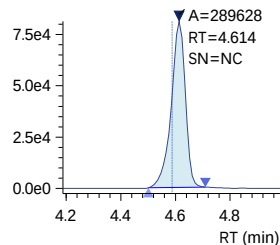
1.63e5

ISTD 318.00>273.00 (-)

1.63e5

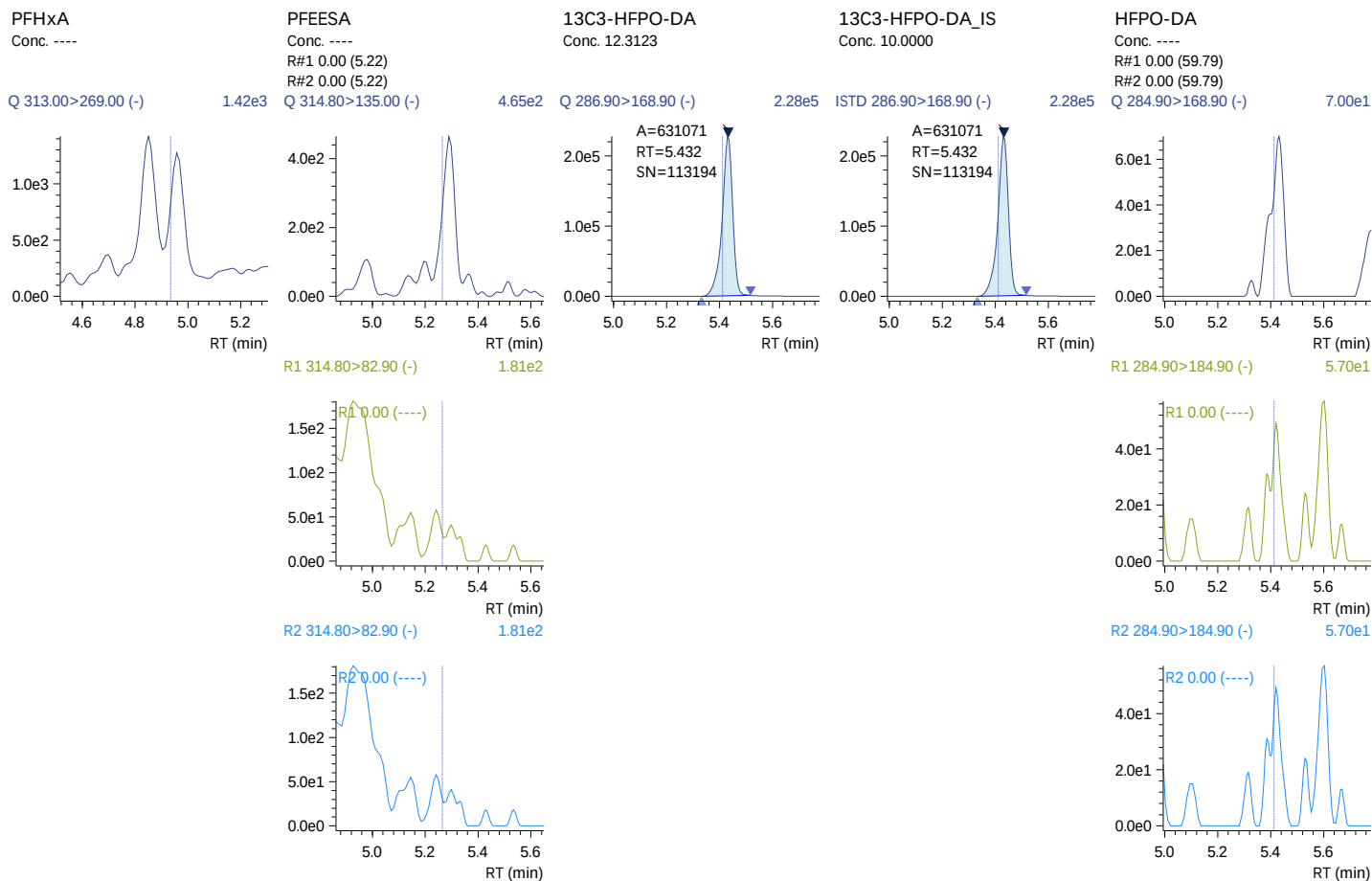
ISTD 315.10>270.00 (-)

1.63e5





240130_029 (continued)

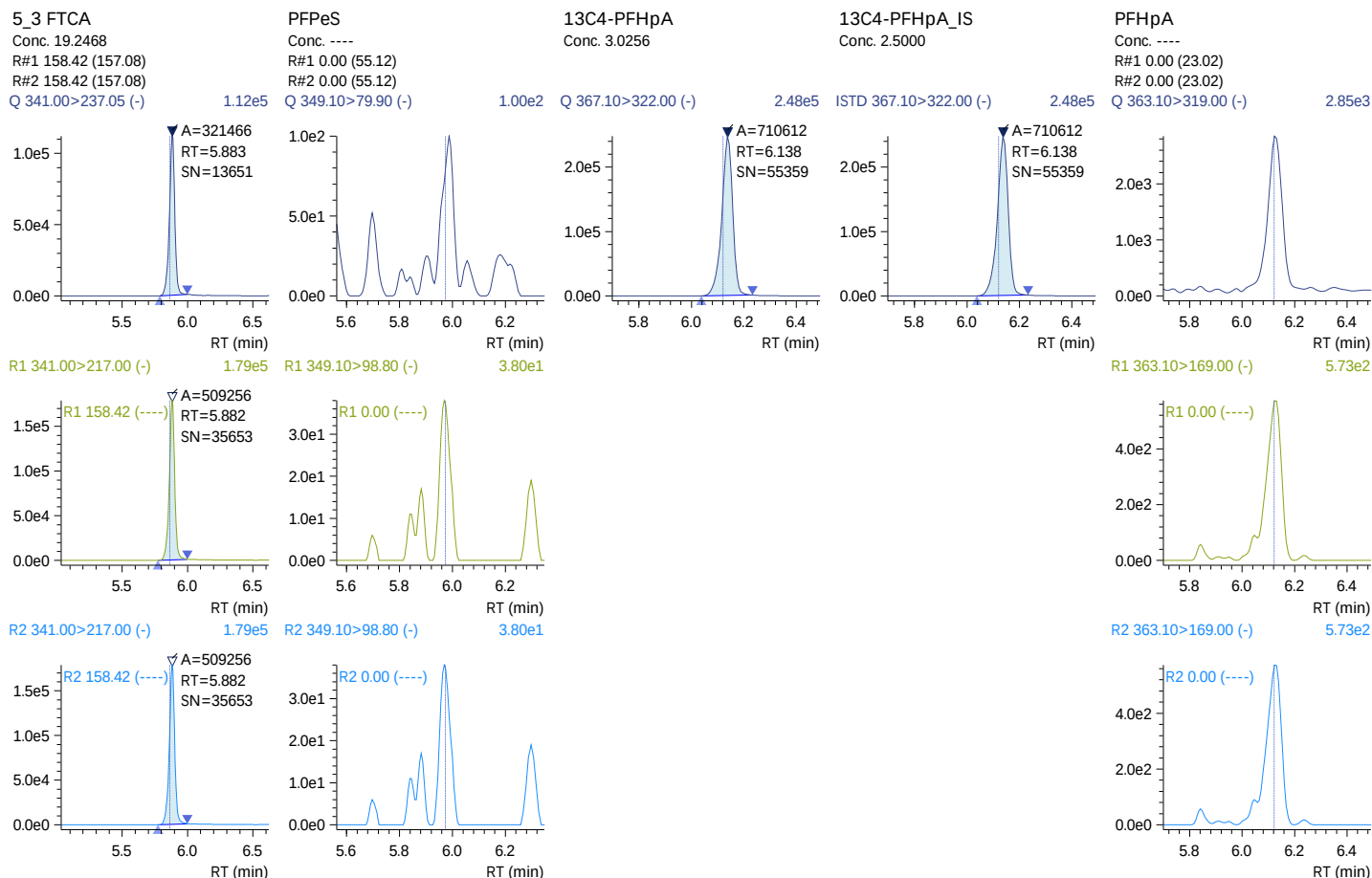


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.

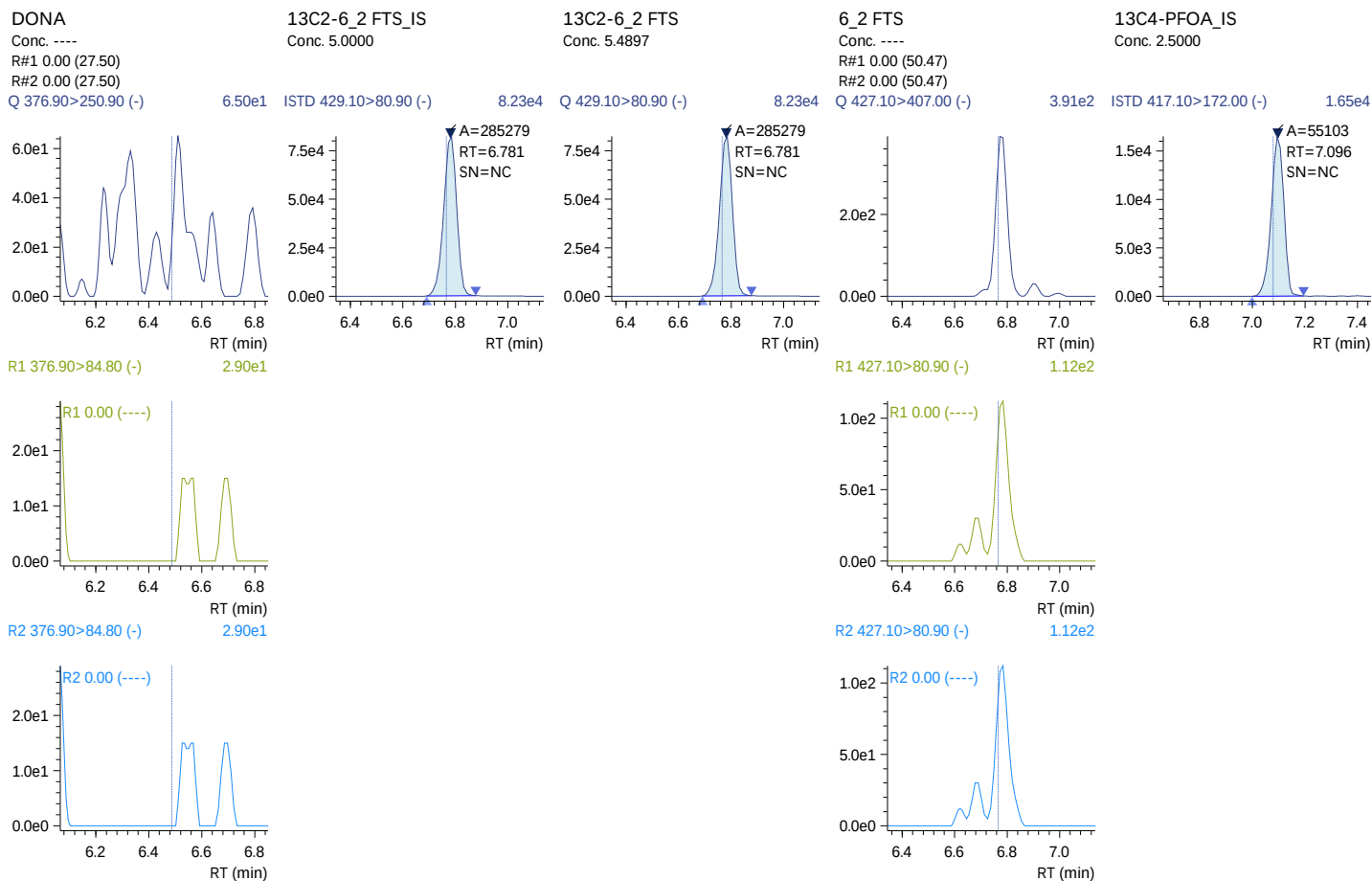


240130_029 (continued)





240130_029 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_029 (continued)

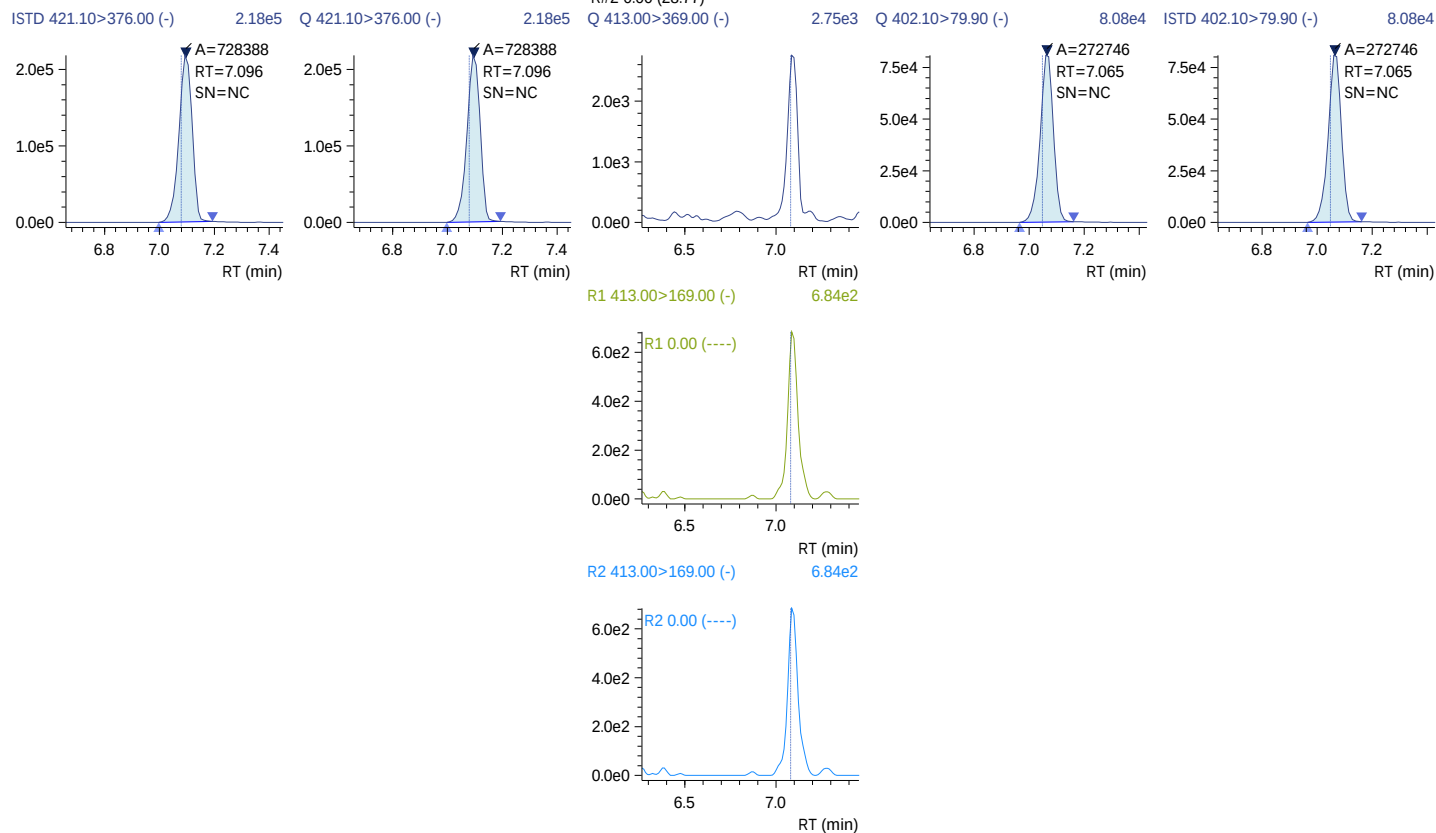
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.7717

PFOA
Conc. ----
R#1 0.00 (28.77)
R#2 0.00 (28.77)

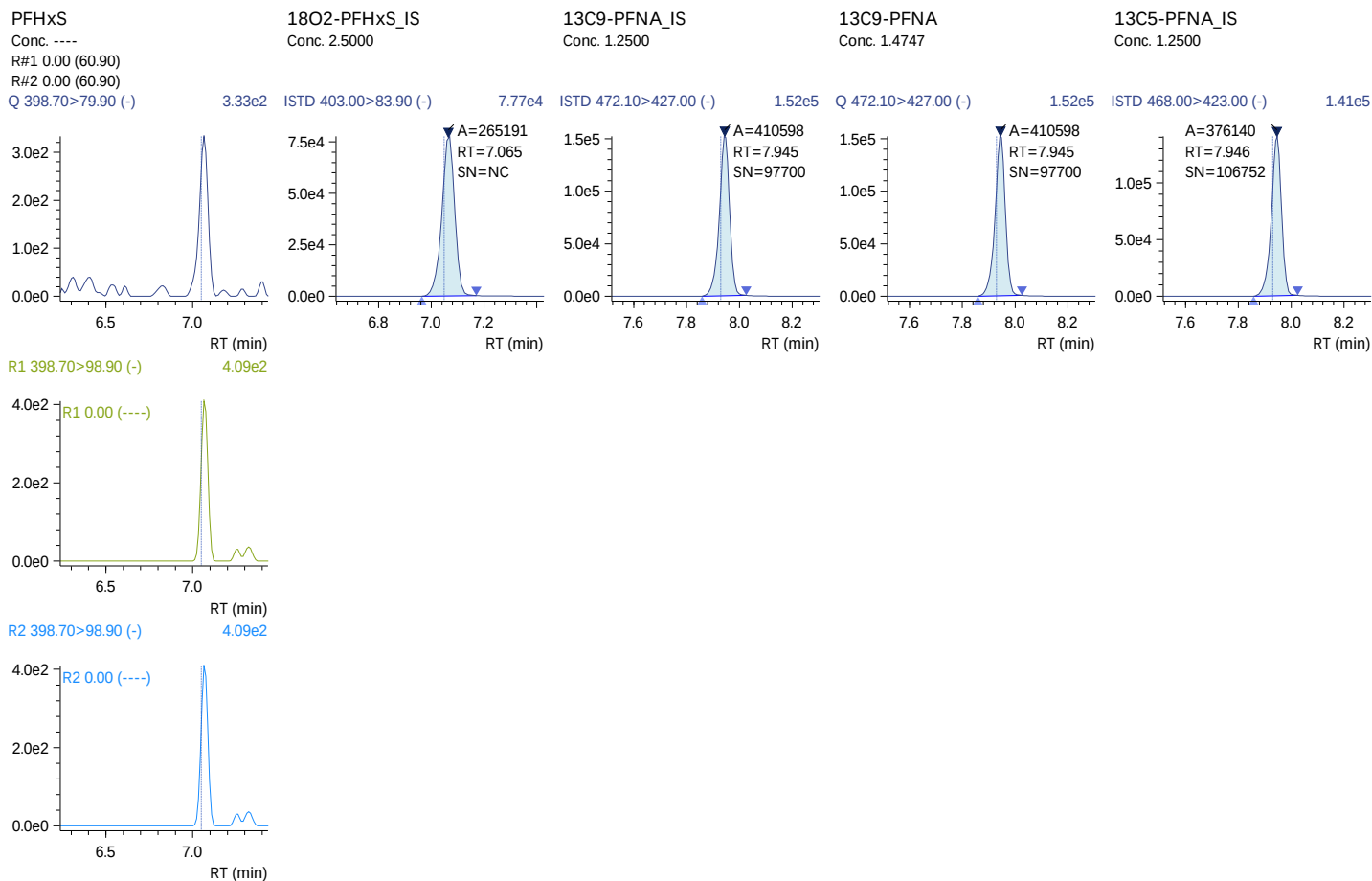
13C3-PFHxS
Conc. 2.9344

13C3-PFHxS_IS
Conc. 2.5000





240130_029 (continued)

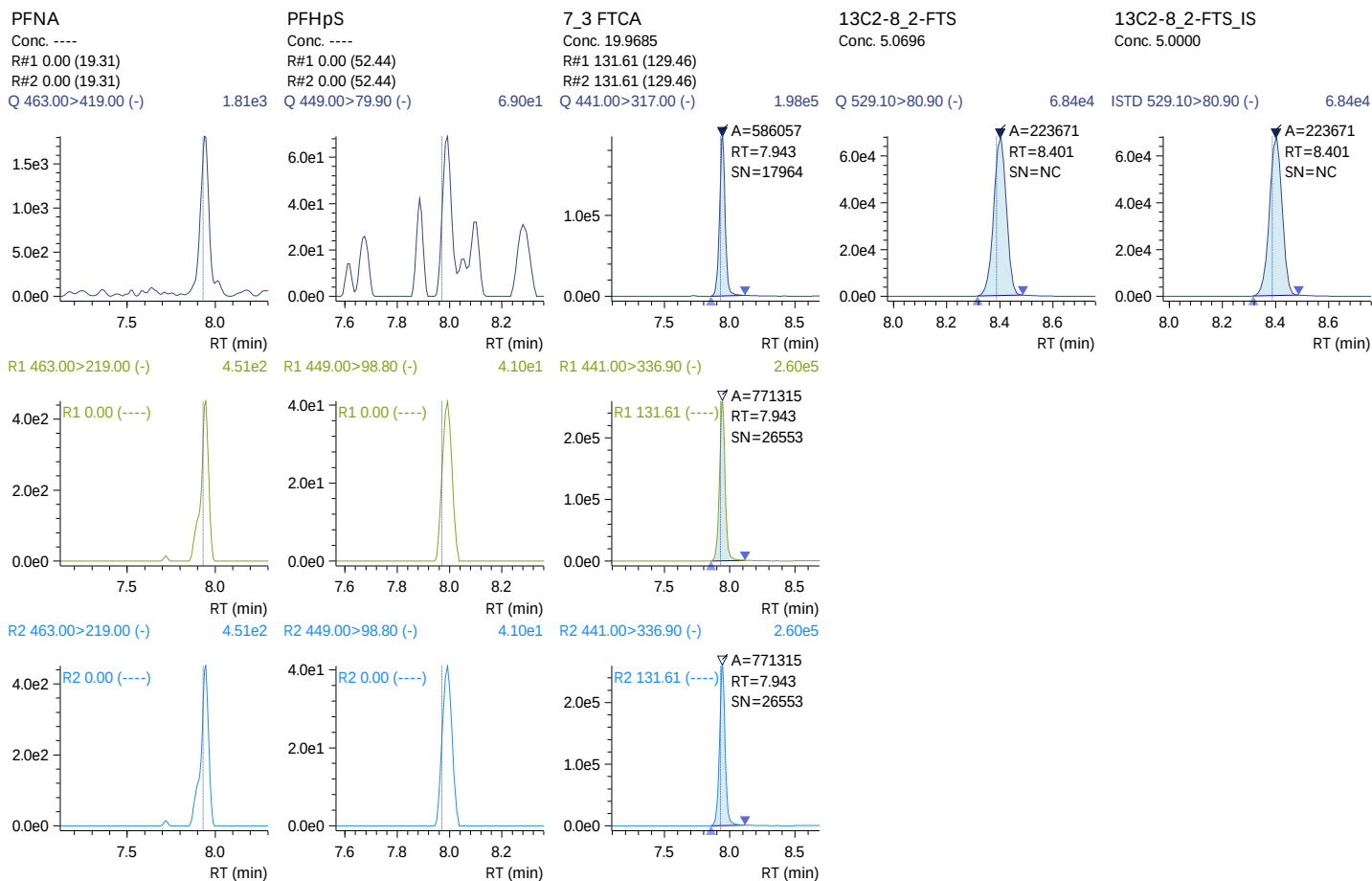


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.

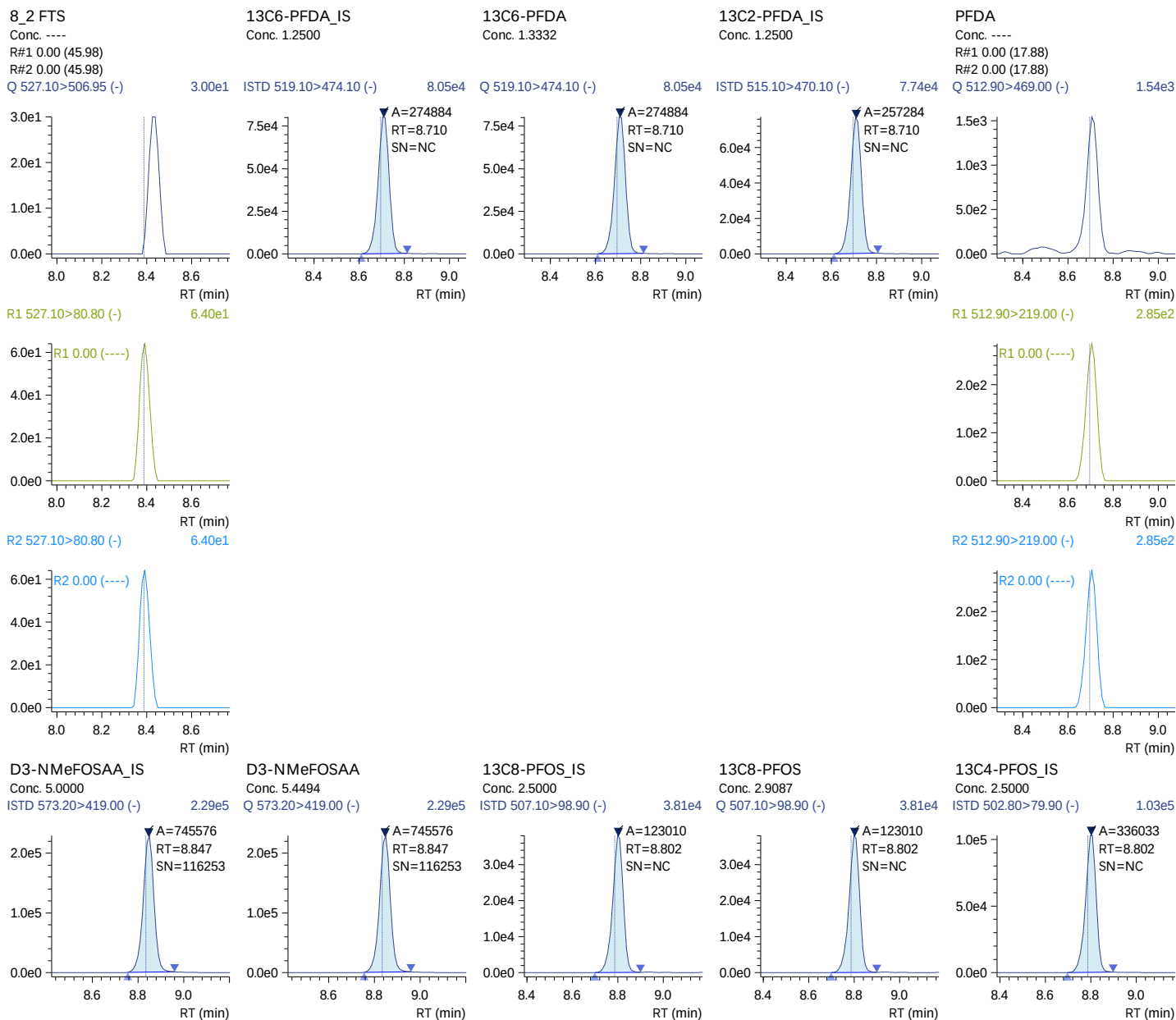


240130_029 (continued)





240130_029 (continued)

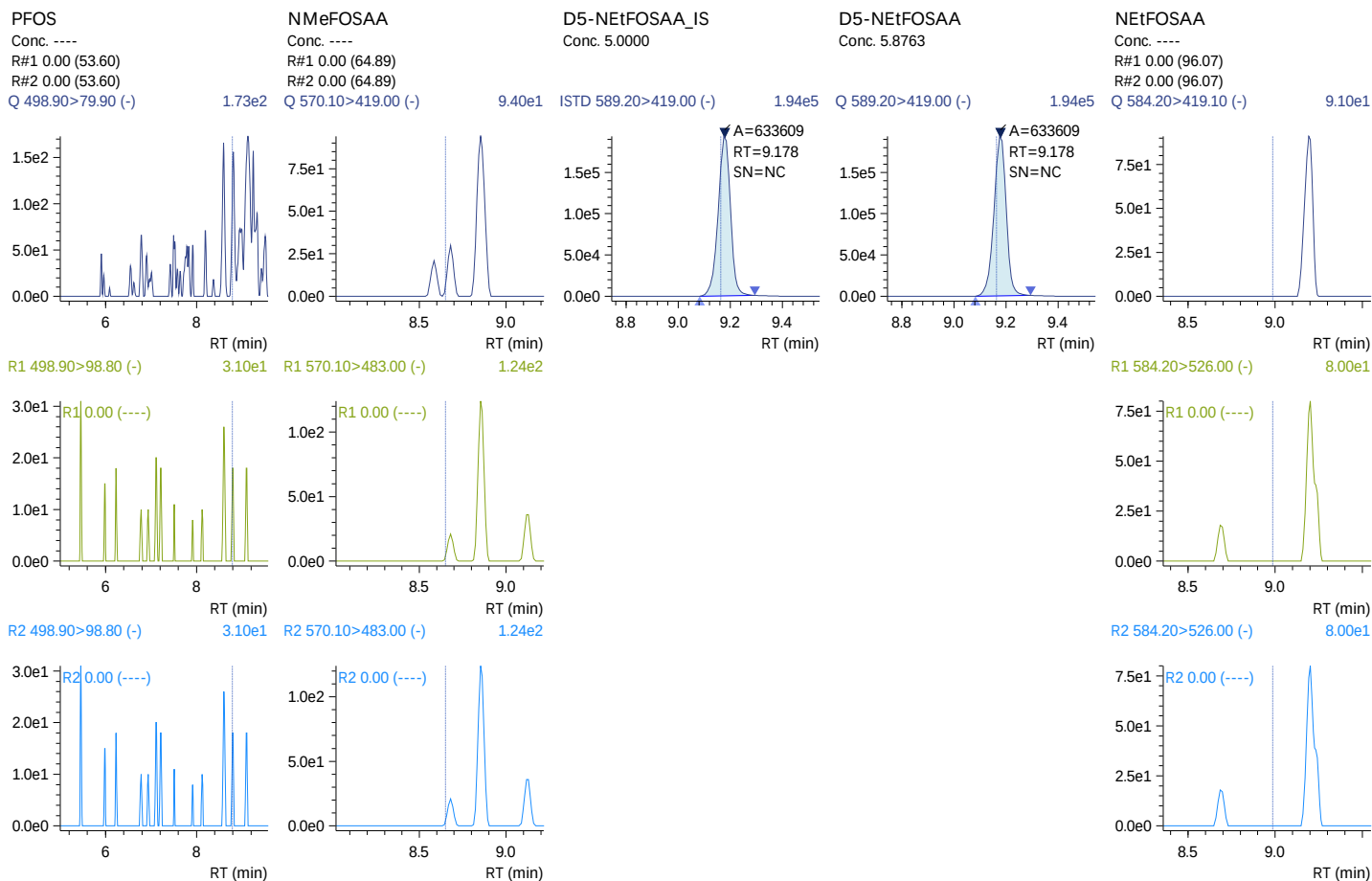


J:\LCMS08\Data\240130_1633_Curve\240130_1633_Curve.damlp

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_029 (continued)





240130_029 (continued)

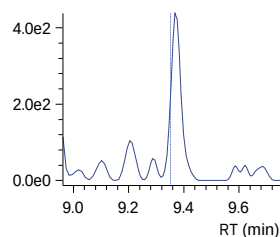
9-Cl-PF3ONS

Conc. ----

R#1 0.00 (30.95)

R#2 0.00 (30.95)

Q 530.80>351.00 (-)



R1 532.80>353.00 (-)

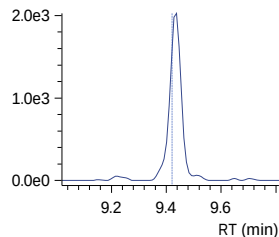
PFUnDA

Conc. ----

R#1 0.00 (11.01)

R#2 0.00 (11.01)

Q 563.10>519.00 (-)

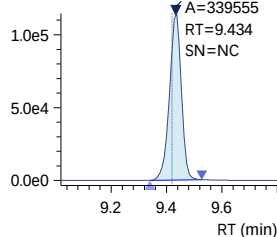


R1 563.10>269.10 (-)

13C7-PFUnDA_IS

Conc. 1.2500

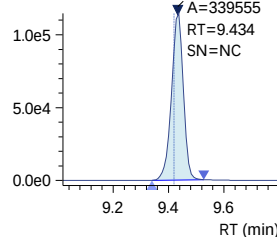
ISTD 570.00>525.10 (-)



13C7-PFUnDA

Conc. 1.3254

Q 570.00>525.10 (-)



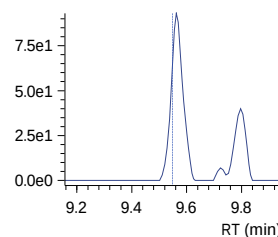
PFNS

Conc. ----

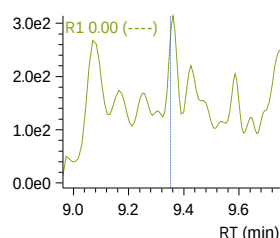
R#1 0.00 (60.44)

R#2 0.00 (60.44)

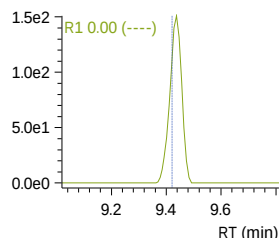
Q 548.80>79.90 (-)



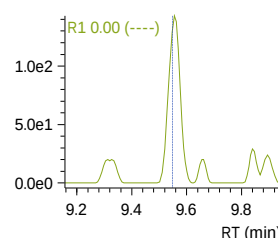
R1 548.80>98.80 (-)



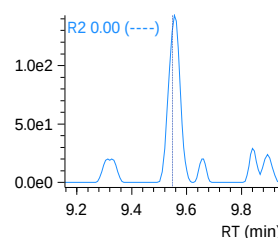
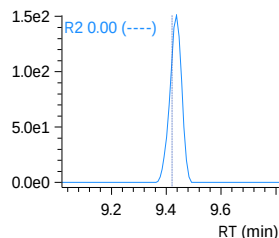
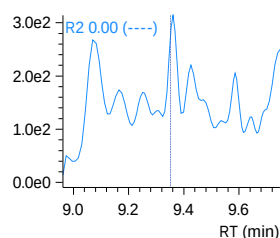
R2 532.80>353.00 (-)



R2 563.10>269.10 (-)

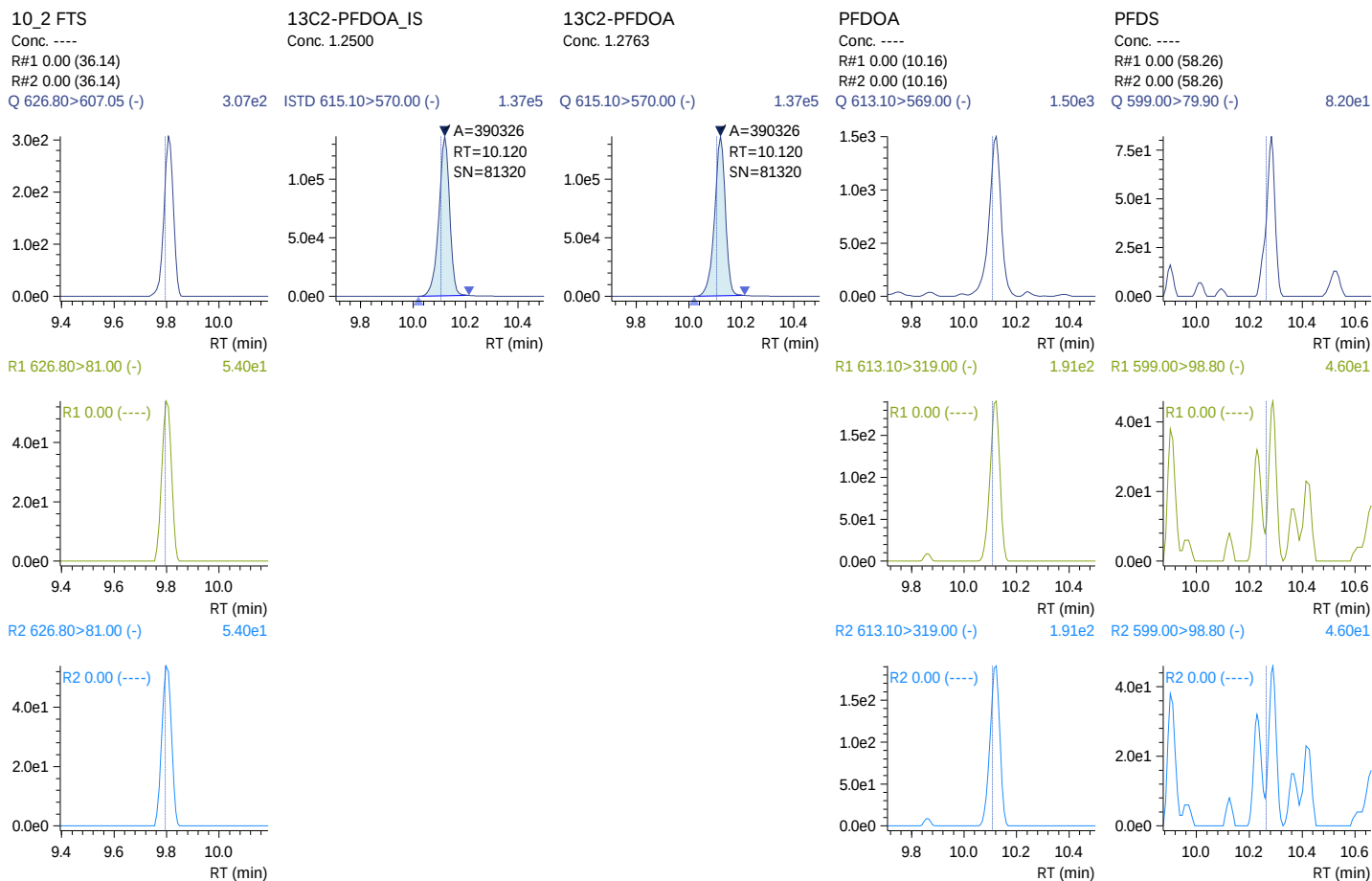


R2 548.80>98.80 (-)





240130_029 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_029 (continued)

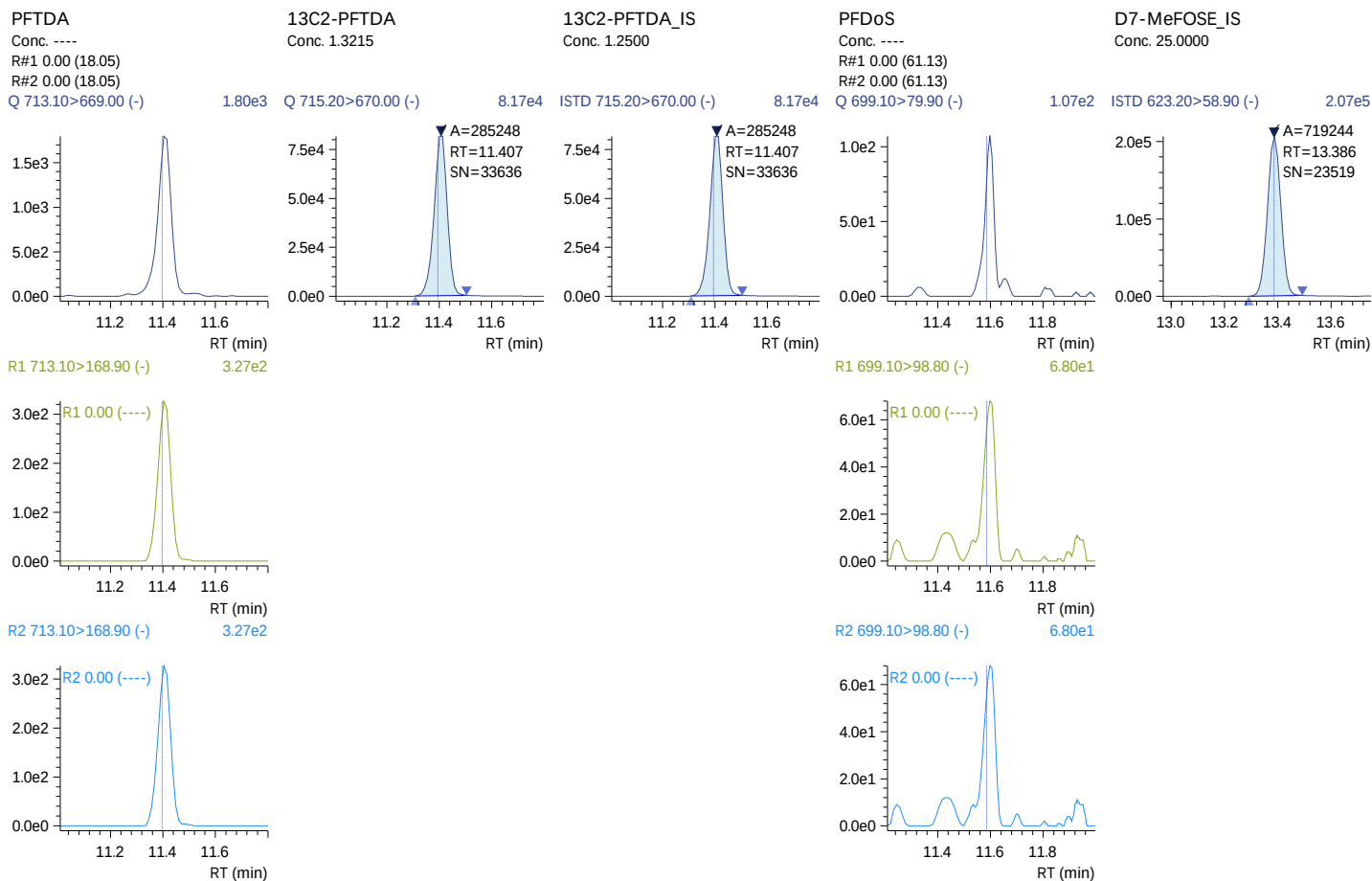


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_029 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_029 (continued)

D7-MeFOSE
Conc. 26.2472

MeFOSE
Conc. ----

13C2-PFHXA_IS
Conc. 2.5000

13C2-PFHXA
Conc. 2.4282

PFHXA
Conc. ----

R#1 0.00 (11.66)

R#2 0.00 (11.66)

Q 623.20>58.90 (-)

2.07e5

Q 616.10>59.00 (-)

1.15e2

ISTD 815.00>770.05 (-)

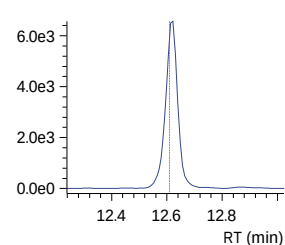
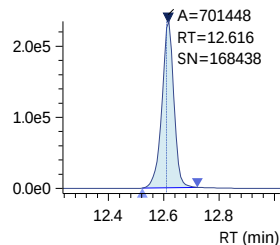
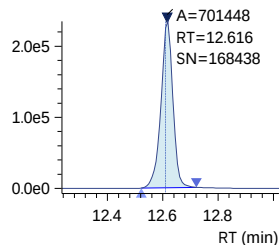
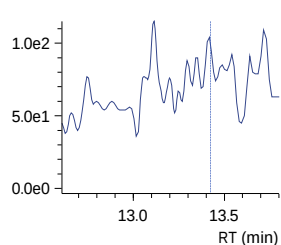
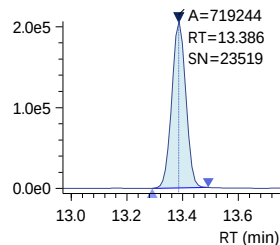
2.35e5

Q 815.00>770.05 (-)

2.35e5

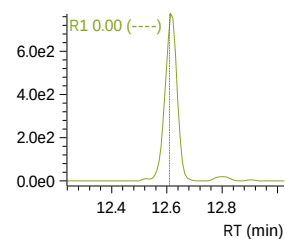
Q 813.00>768.95 (-)

6.57e3



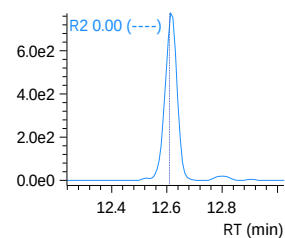
R1 813.00>218.95 (-)

7.73e2



R2 813.00>218.95 (-)

7.73e2





240130_029 (continued)

D3-MeFOSA
Conc. 2.6812

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. ----
R#1 0.00 (160.44)
R#2 0.00 (160.44)

D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 26.0925

Q 515.00>219.00 (-)

2.13e4

ISTD 515.00>219.00 (-)

2.13e4

Q 511.90>219.00 (-)

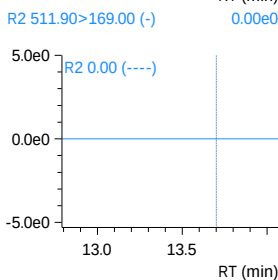
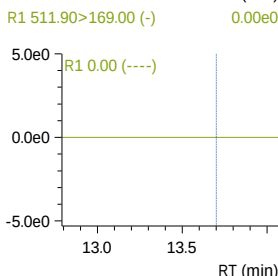
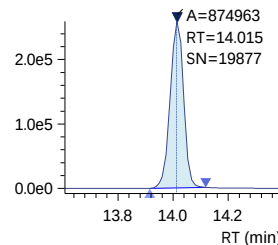
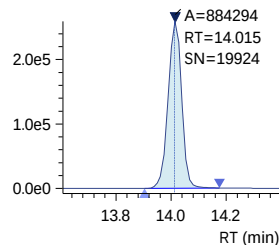
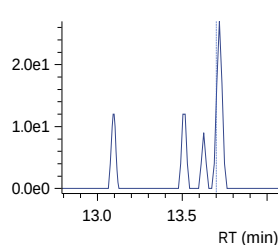
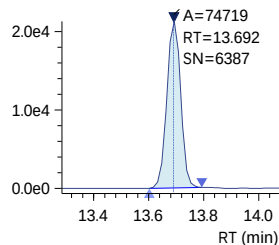
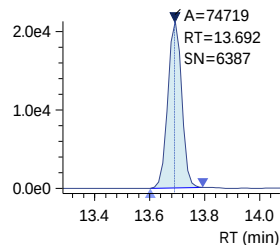
2.70e1

ISTD 639.20>58.90 (-)

2.59e5

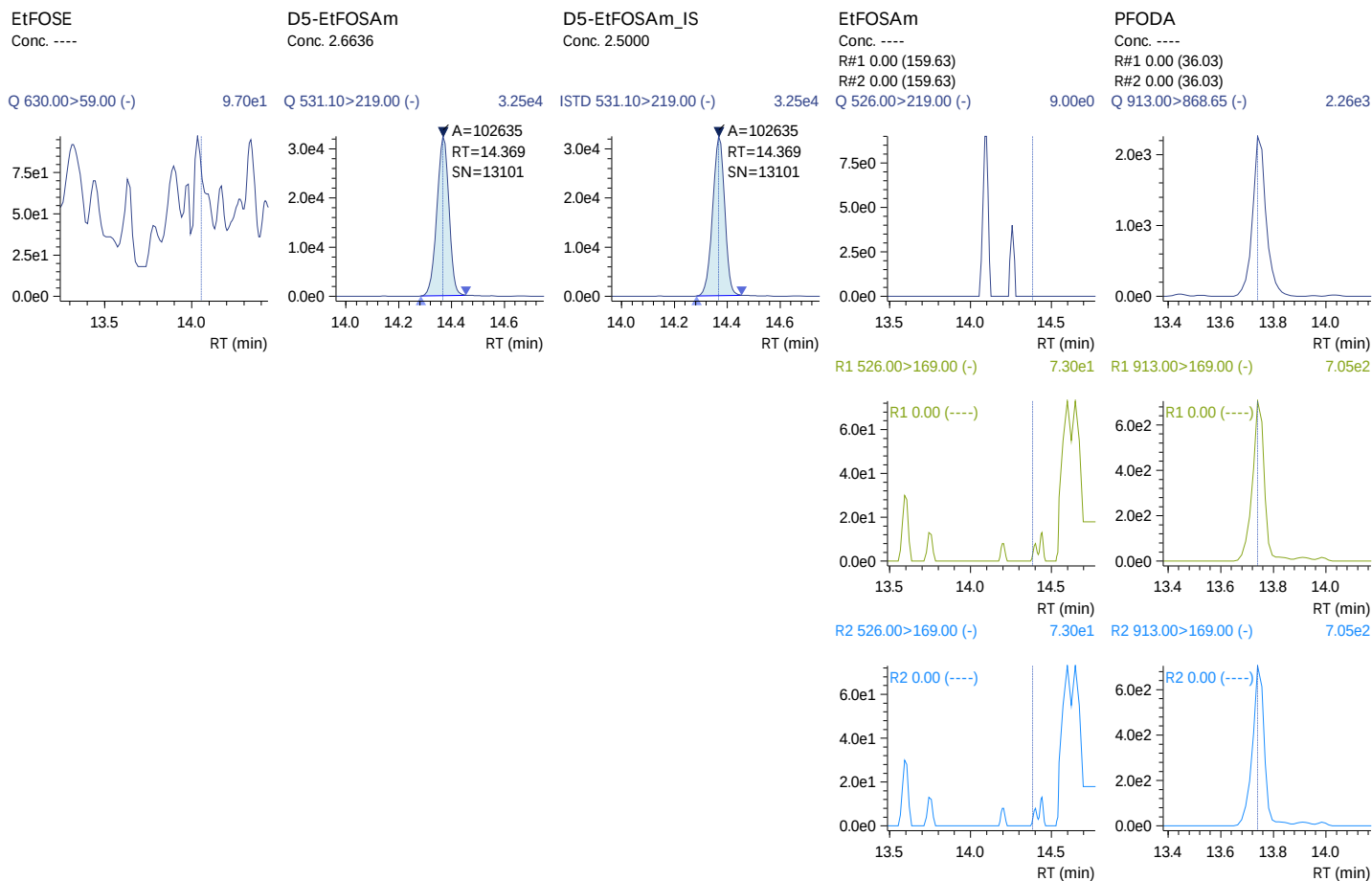
Q 639.20>58.90 (-)

2.59e5





240130_029 (continued)



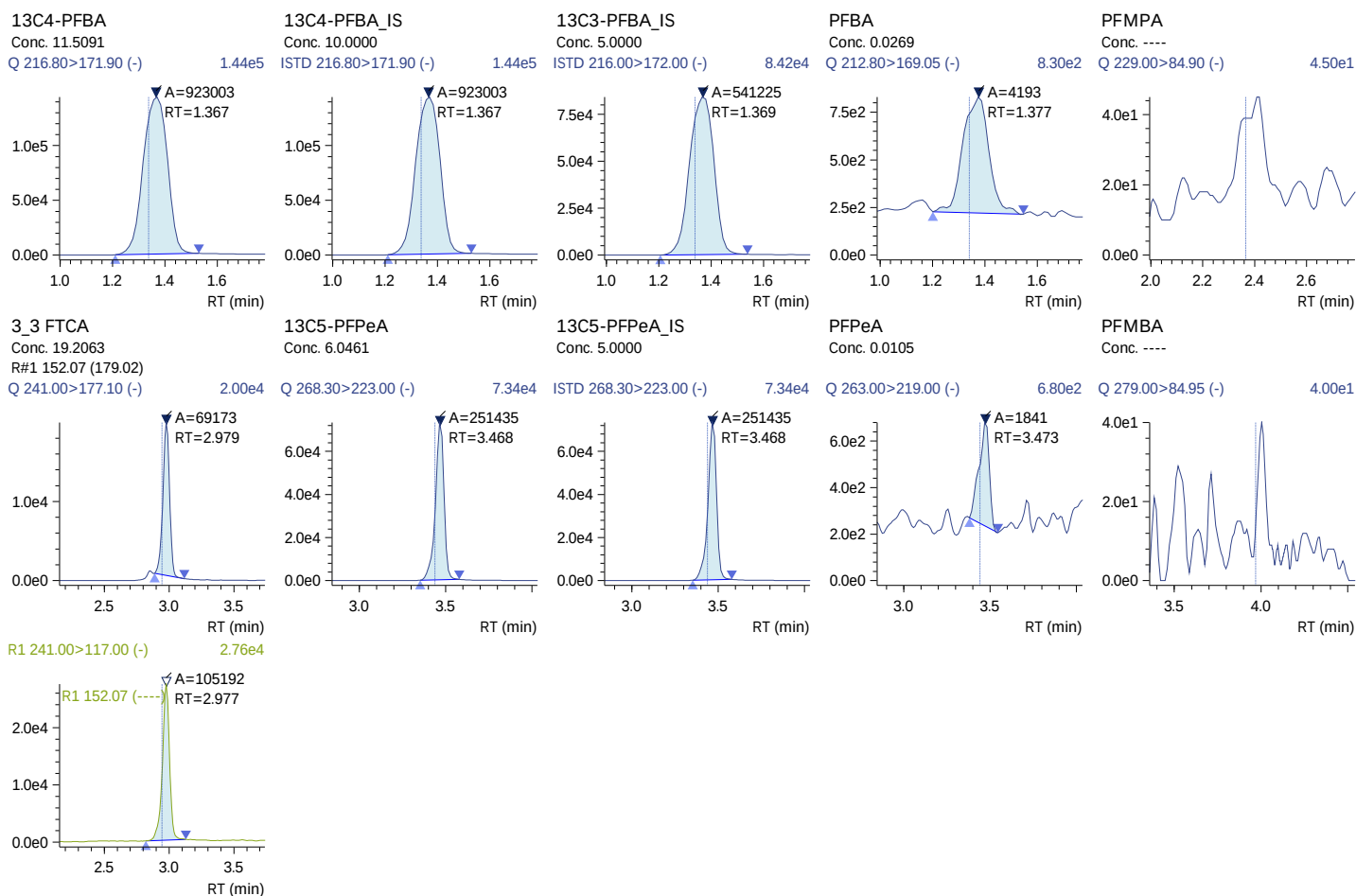
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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_029

Sample ID: 1633 FTCA ICV 1.0PPB
Date Acquired: 1/31/2024 1:34:43 AM
Acquired by: System Administrator
Data File: 240130_029
Vial: 11 | Inj. Volume: 10.0000uL | Tray: 1





240130_029 (continued)

13C2-4_2 FTS
Conc. 5.9746

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. 0.0788
R#1 0.00 (24.69)
R#2 0.00 (0.00)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 0.0040
R#1 0.00 (52.67)
R#2 0.00 (0.00)

Q 329.10>80.90 (-)

9.39e4

ISTD 329.10>80.90 (-)

9.39e4

Q 327.10>307.00 (-)

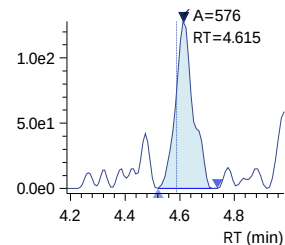
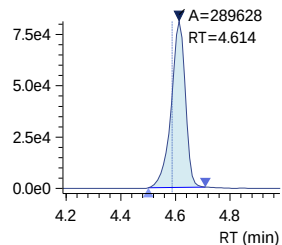
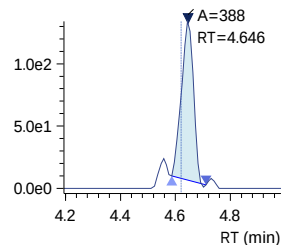
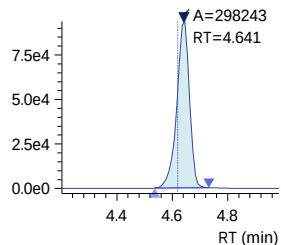
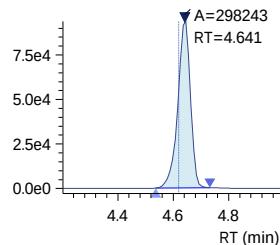
1.34e2

ISTD 302.10>79.90 (-)

8.14e4

Q 298.70>79.90 (-)

1.28e2

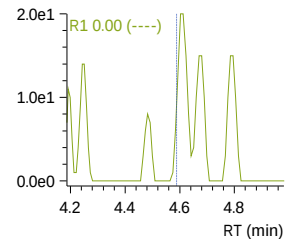
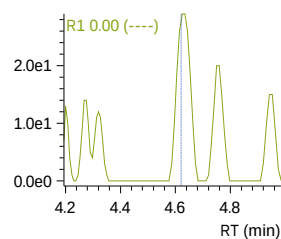


R1 327.10>80.90 (-)

2.90e1

R1 298.70>98.80 (-)

2.00e1

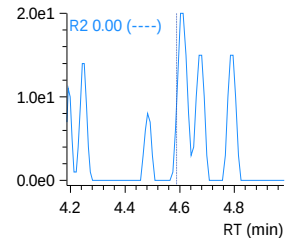
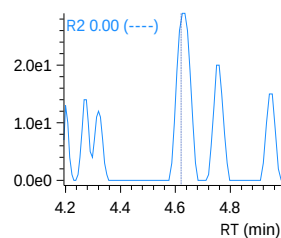


R2 327.10>80.90 (-)

2.90e1

R2 298.70>98.80 (-)

2.00e1





240130_029 (continued)

13C3-PFBS
Conc. 2.9271

NFDHA
Conc. 0.0087
R#1 0.00 (39.38)
R#2 0.00 (0.00)

13C5-PFHxA
Conc. 2.9930

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

Q 302.10>79.90 (-)

8.14e4

Q 295.00>201.00 (-)

3.39e2

Q 318.00>273.00 (-)

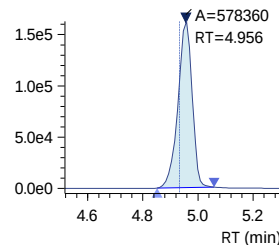
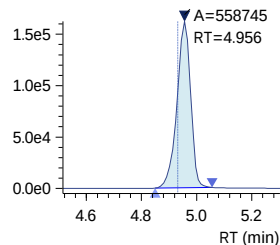
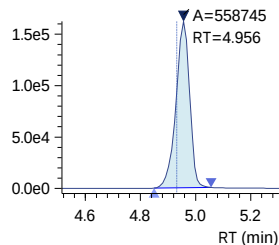
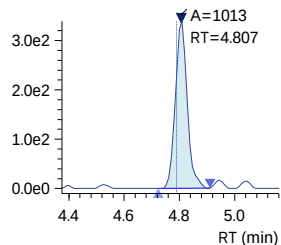
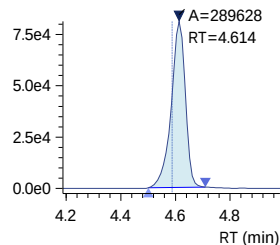
1.63e5

ISTD 318.00>273.00 (-)

1.63e5

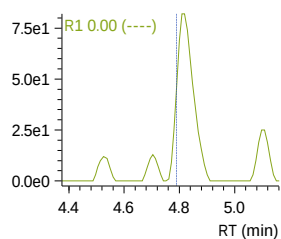
ISTD 315.10>270.00 (-)

1.63e5



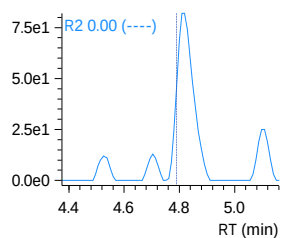
R1 295.00>84.90 (-)

8.20e1



R2 295.00>84.90 (-)

8.20e1

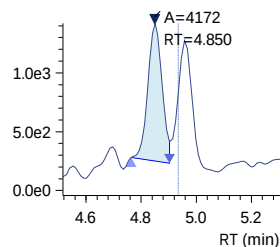




240130_029 (continued)

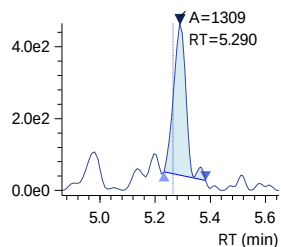
PFHxA
Conc. 0.0660

Q 313.00>269.00 (-)

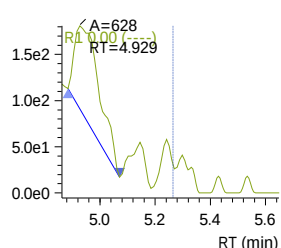


PFEESA
Conc. 0.0019
R#1 0.00 (5.25)
R#2 0.00 (0.00)

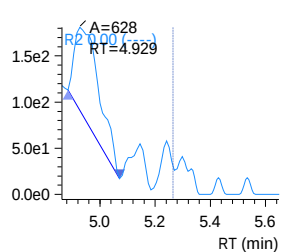
Q 314.80>135.00 (-)



R1 314.80>82.90 (-)

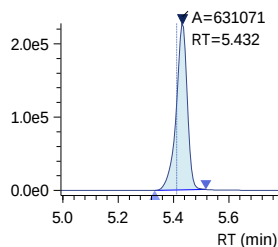


R2 314.80>82.90 (-)



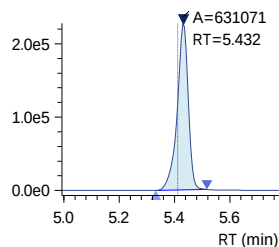
13C3-HFPO-DA
Conc. 12.3123

Q 286.90>168.90 (-)



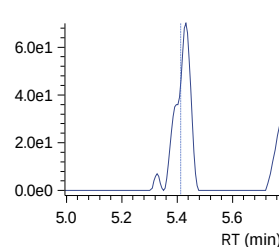
13C3-HFPO-DA_IS
Conc. 10.0000

ISTD 286.90>168.90 (-)

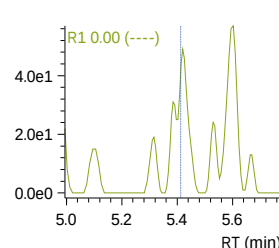


HFPO-DA
Conc. ----
R#1 0.00 (69.48)
R#2 0.00 (0.00)

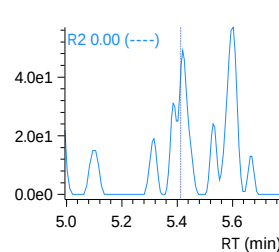
Q 284.90>168.90 (-)



R1 284.90>184.90 (-)

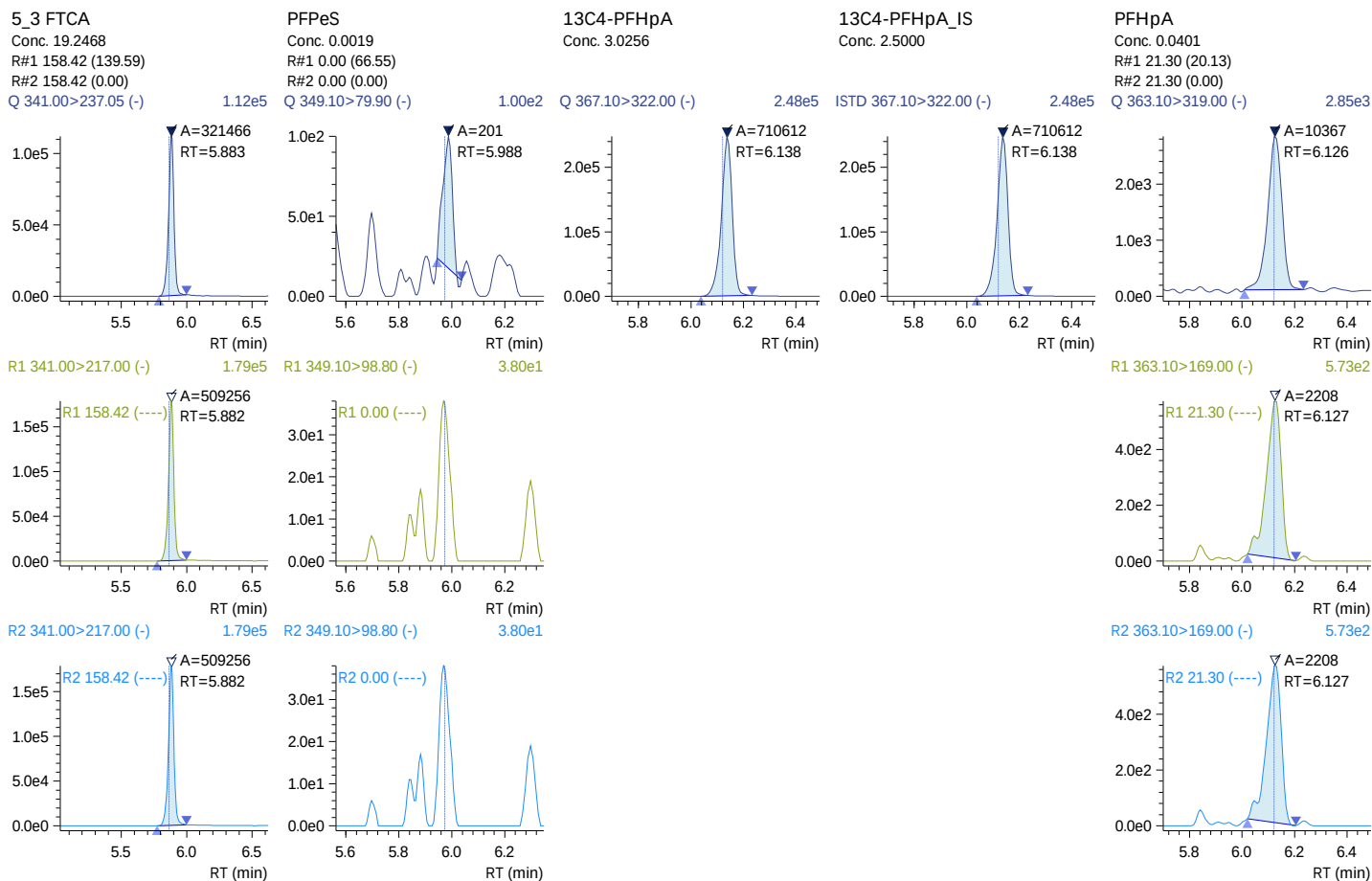


R2 284.90>184.90 (-)



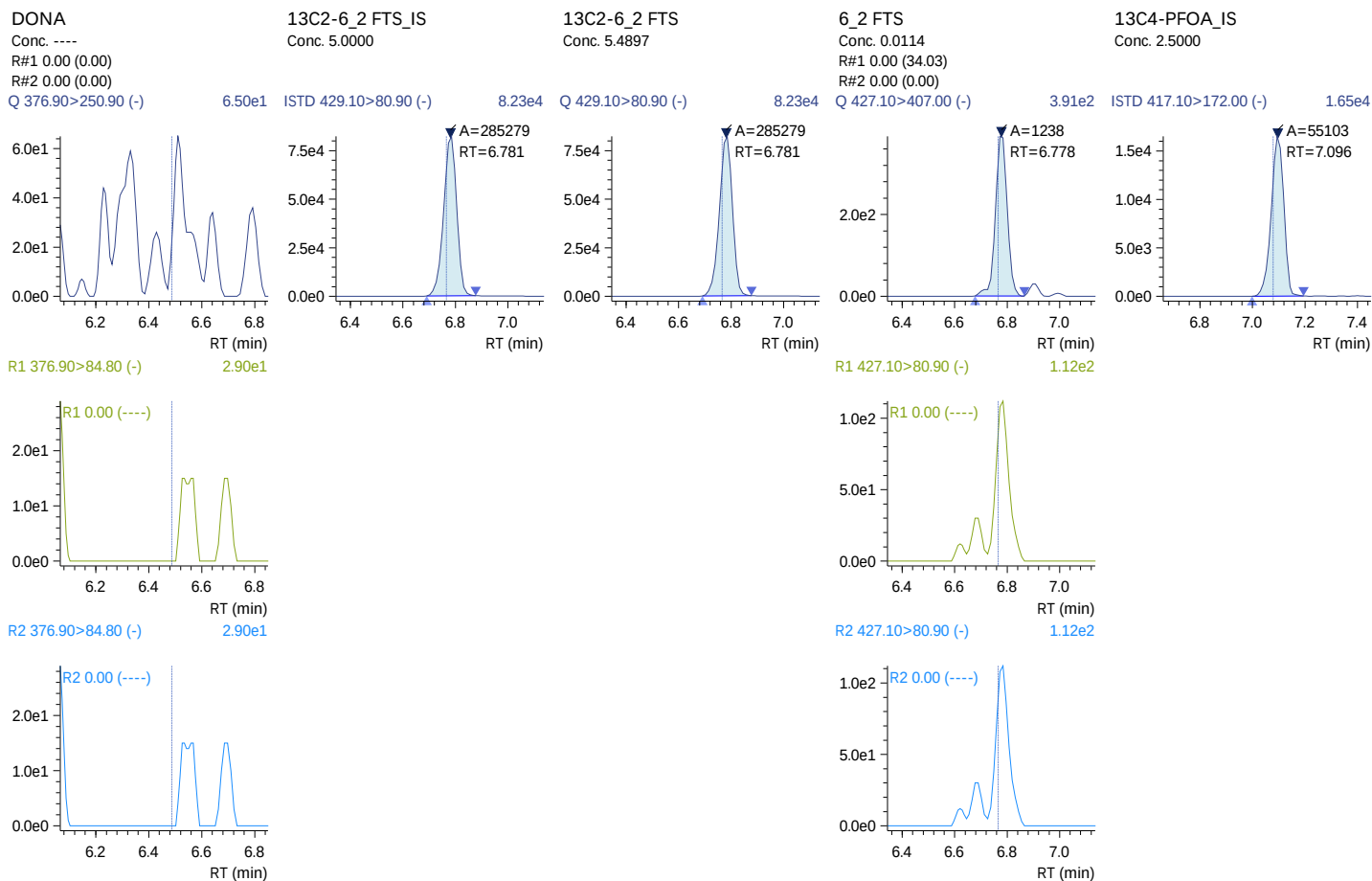


240130_029 (continued)





240130_029 (continued)





240130_029 (continued)

13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.7717

PFOA
Conc. 0.0080
R#1 28.05 (22.46)
R#2 28.05 (0.00)

13C3-PFHxS
Conc. 2.9344

13C3-PFHxS_IS
Conc. 2.5000

ISTD 421.10>376.00 (-)

2.18e5

Q 421.10>376.00 (-)

2.18e5

Q 413.00>369.00 (-)

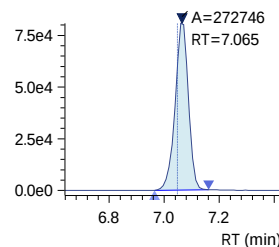
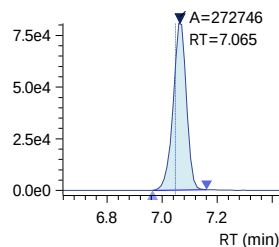
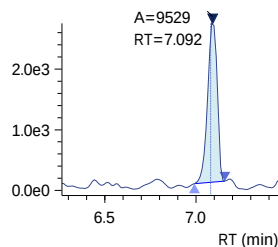
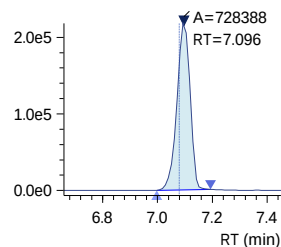
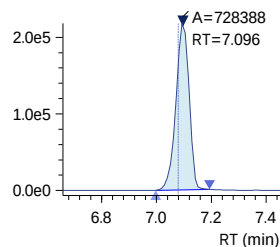
2.75e3

Q 402.10>79.90 (-)

8.08e4

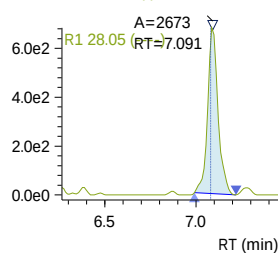
ISTD 402.10>79.90 (-)

8.08e4



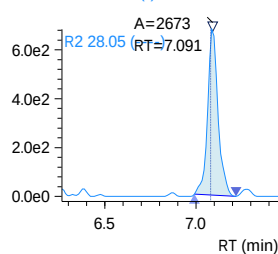
R1 413.00>169.00 (-)

6.84e2



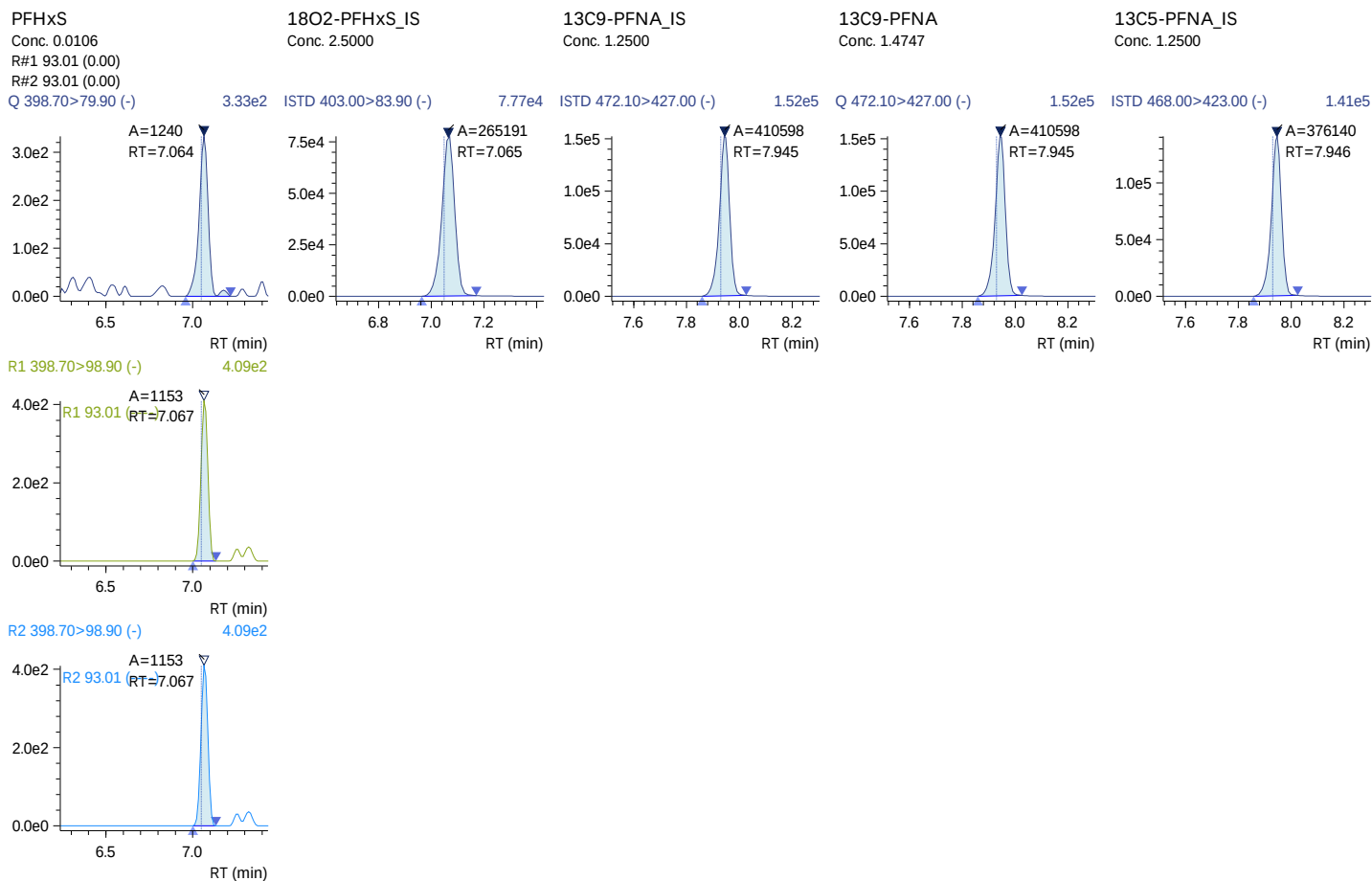
R2 413.00>169.00 (-)

6.84e2



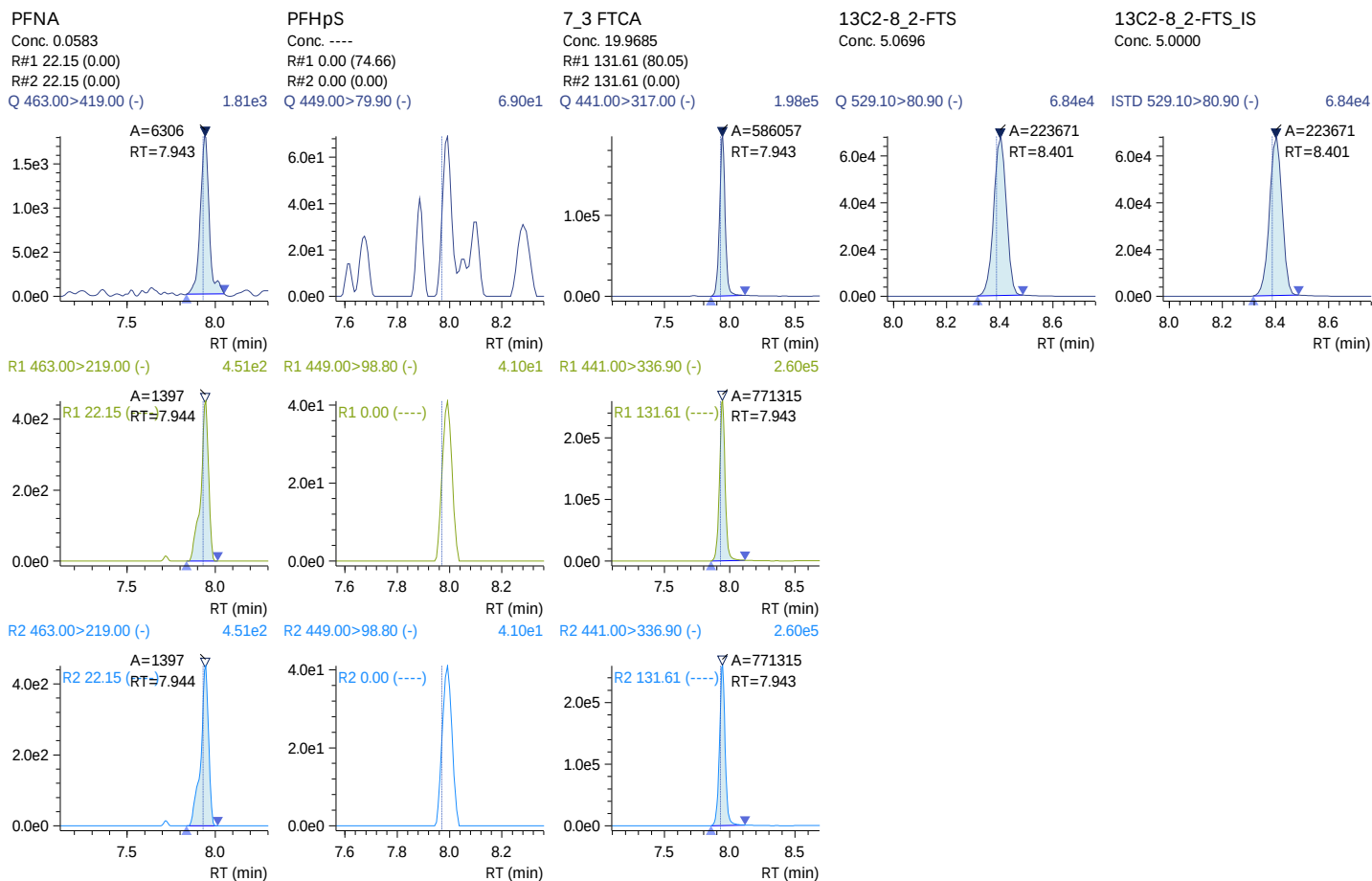


240130_029 (continued)



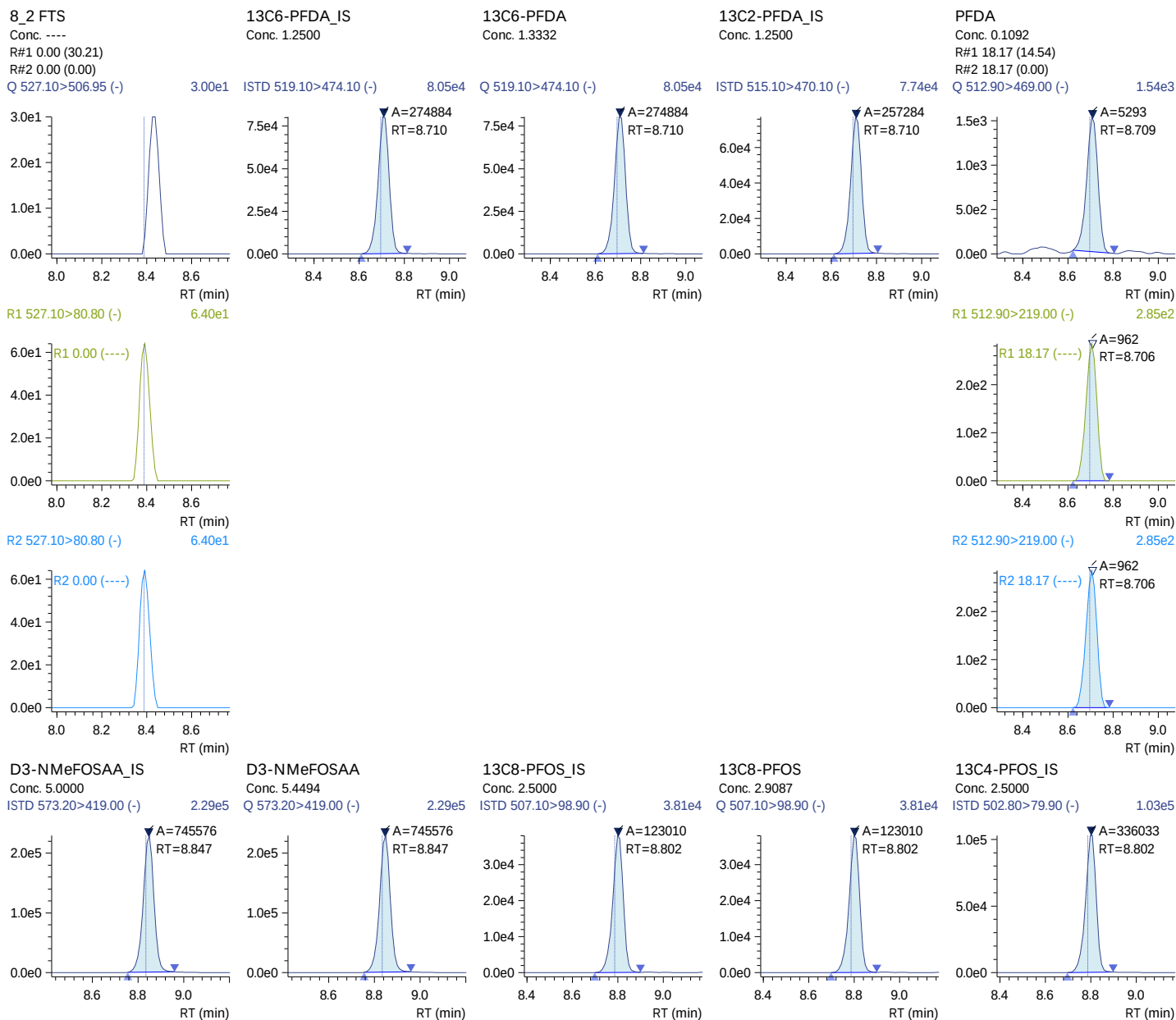


240130_029 (continued)



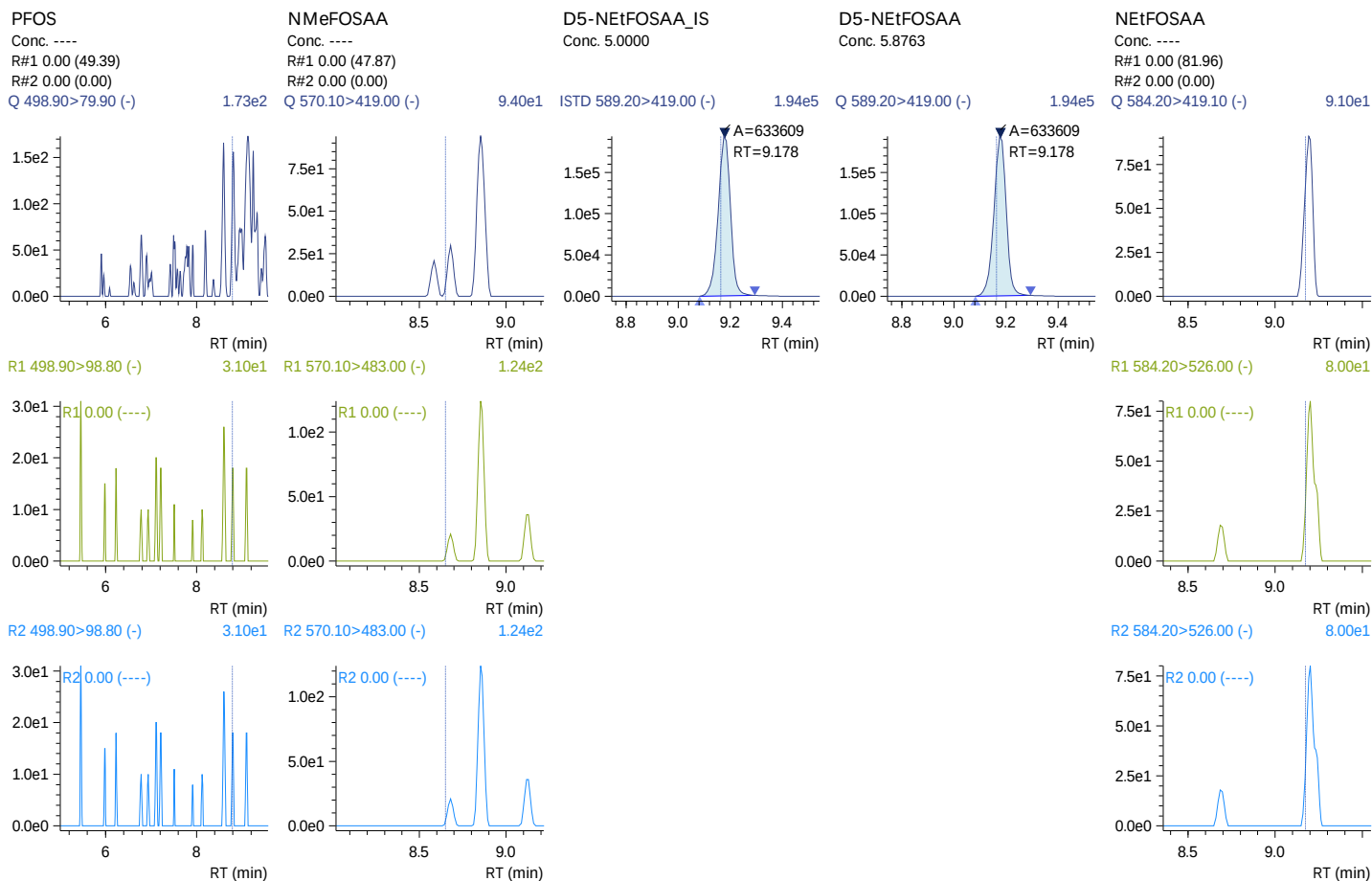


240130_029 (continued)





240130_029 (continued)





240130_029 (continued)

9-Cl-PF3ONS

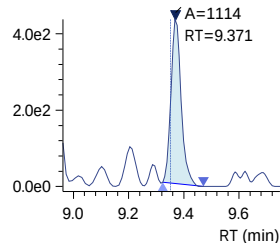
Conc. 0.0018

R#1 0.00 (31.39)

R#2 0.00 (0.00)

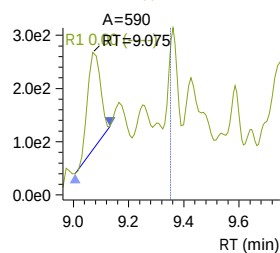
Q 530.80>351.00 (-)

4.38e2



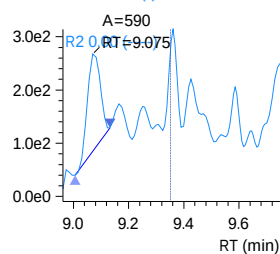
R1 532.80>353.00 (-)

3.14e2



R2 532.80>353.00 (-)

3.14e2



PFUnDA

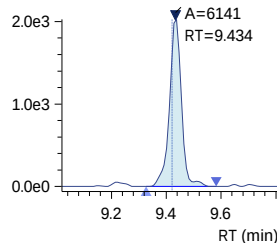
Conc. 0.0055

R#1 0.00 (12.59)

R#2 0.00 (0.00)

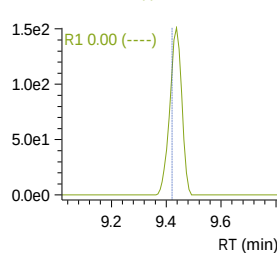
Q 563.10>519.00 (-)

2.03e3



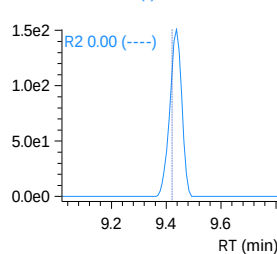
R1 563.10>269.10 (-)

1.51e2



R2 563.10>269.10 (-)

1.51e2

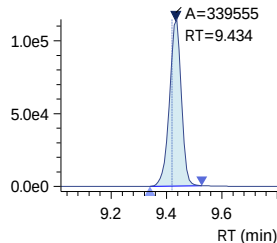


13C7-PFUnDA_IS

Conc. 1.2500

ISTD 570.00>525.10 (-)

1.15e5

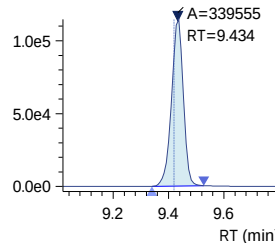


13C7-PFUnDA

Conc. 1.3254

Q 570.00>525.10 (-)

1.15e5



PFNS

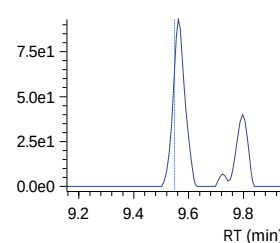
Conc. ----

R#1 0.00 (82.65)

R#2 0.00 (0.00)

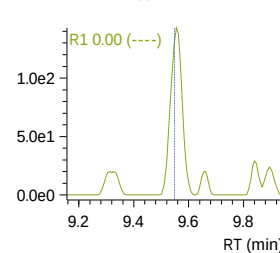
Q 548.80>79.90 (-)

9.30e1



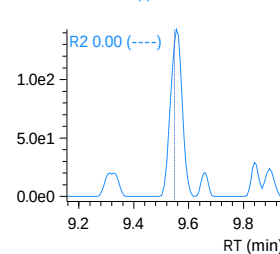
R1 548.80>98.80 (-)

1.43e2



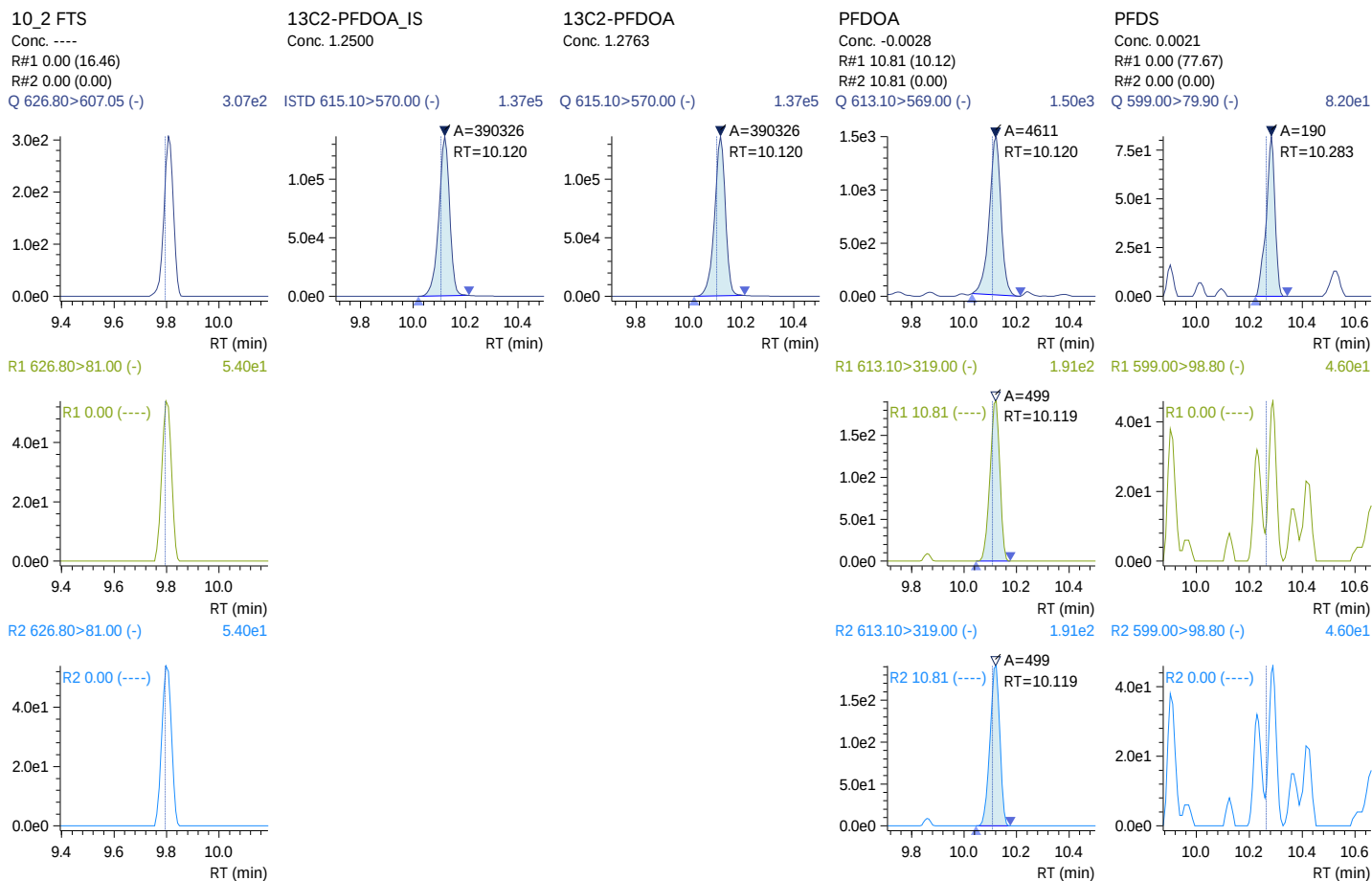
R2 548.80>98.80 (-)

1.43e2



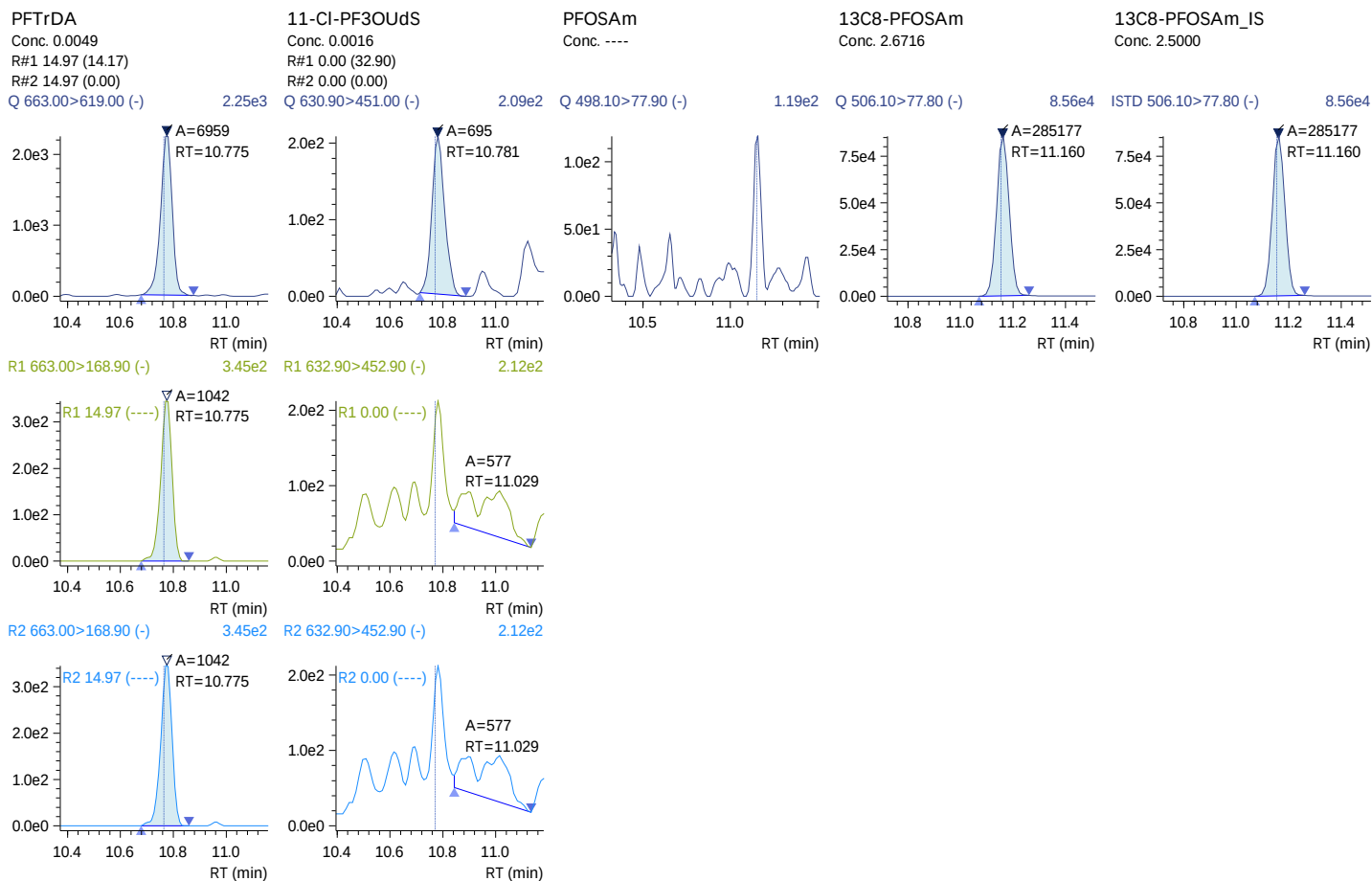


240130_029 (continued)



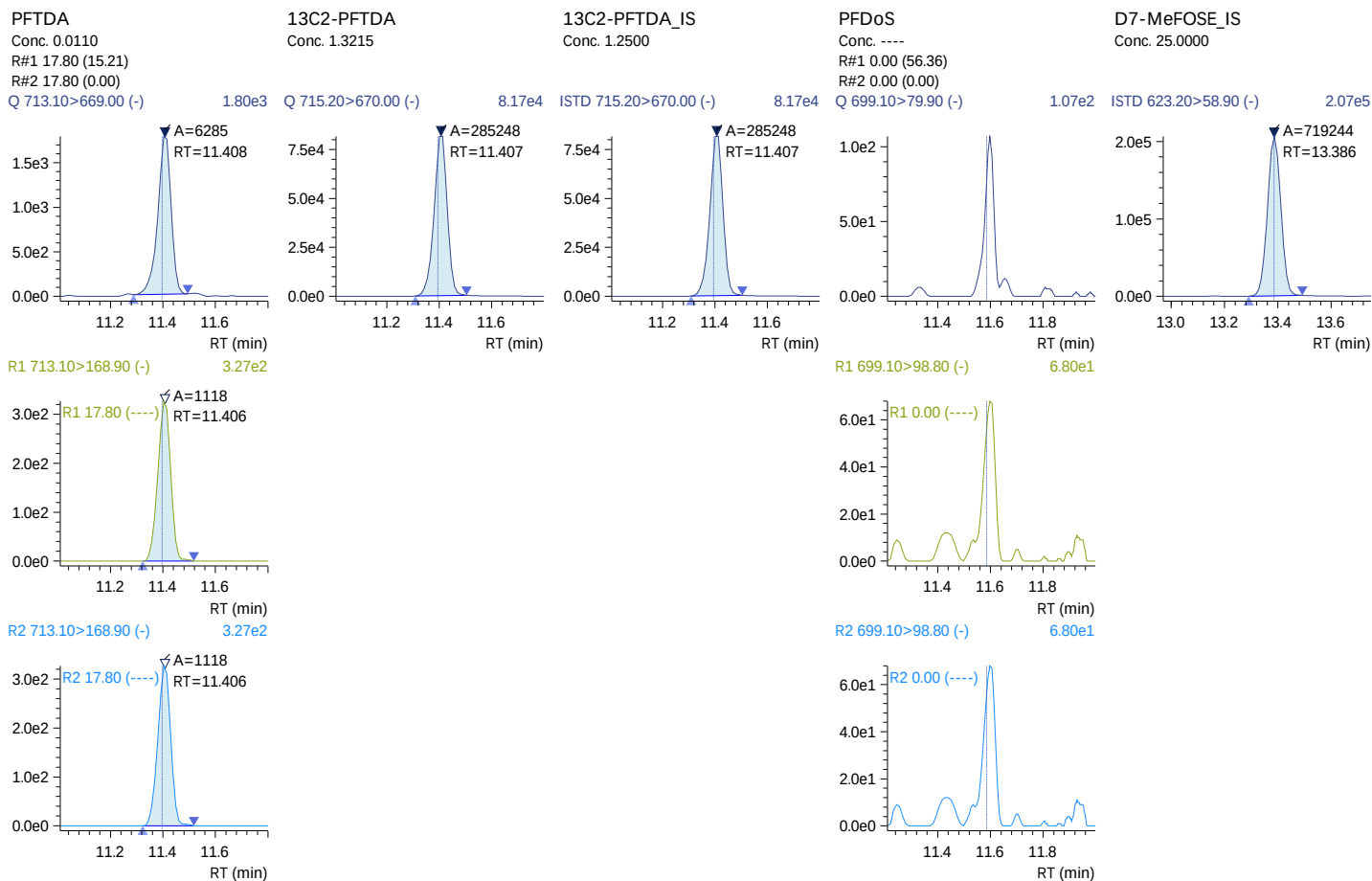


240130_029 (continued)





240130_029 (continued)





240130_029 (continued)

D7-MeFOSE
Conc. 26.2472

MeFOSE
Conc. 0.0117

¹³C2-PFHXA_IS
Conc. 2.5000

¹³C2-PFHXA
Conc. 2.4282

PFHXA
Conc. 0.0511

R#1 11.55 (9.60)

R#2 11.55 (0.00)

Q 623.20>58.90 (-)

2.07e5

Q 616.10>59.00 (-)

1.15e2

ISTD 815.00>770.05 (-)

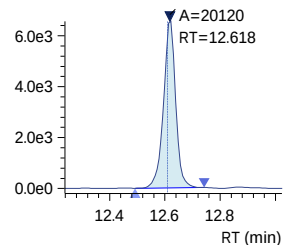
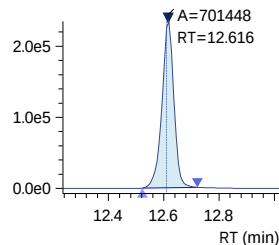
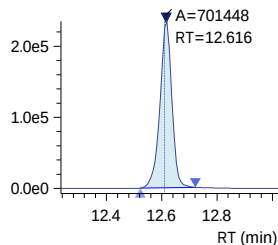
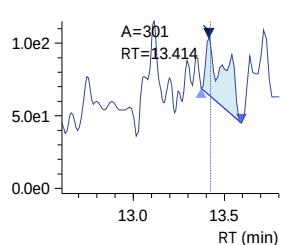
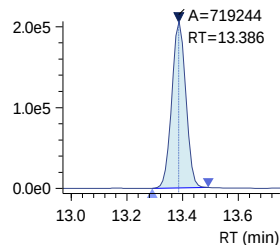
2.35e5

Q 815.00>770.05 (-)

2.35e5

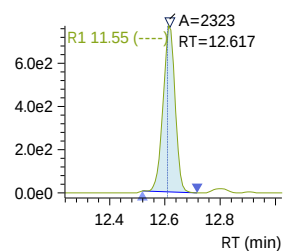
Q 813.00>768.95 (-)

6.57e3



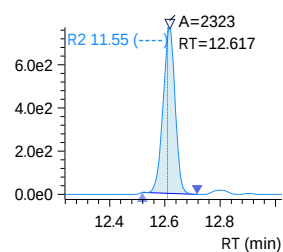
R1 813.00>218.95 (-)

7.73e2



R2 813.00>218.95 (-)

7.73e2





240130_029 (continued)

D3-MeFOSA
 Conc. 2.6812

D3-MeFOSA_IS
 Conc. 2.5000

MeFOSA
 Conc. ----
 R#1 0.00 (98.91)
 R#2 0.00 (0.00)

D9-EtFOSE_IS
 Conc. 25.0000

D9-EtFOSE
 Conc. 26.0925

Q 515.00>219.00 (-)

2.13e4

ISTD 515.00>219.00 (-)

2.13e4

Q 511.90>219.00 (-)

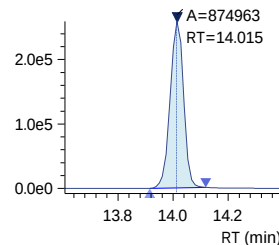
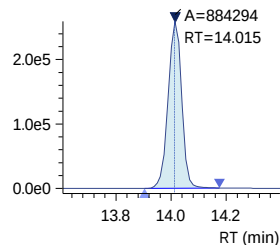
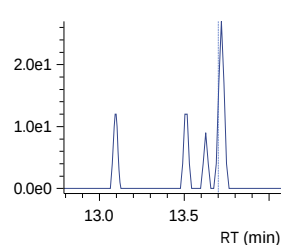
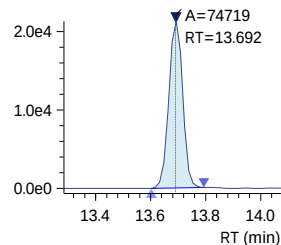
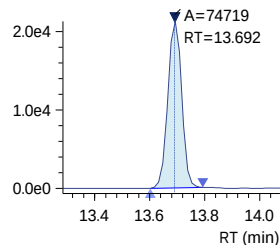
2.70e1

ISTD 639.20>58.90 (-)

2.59e5

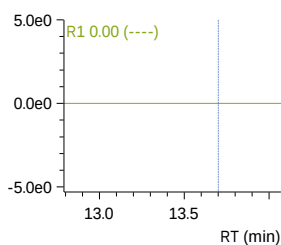
Q 639.20>58.90 (-)

2.59e5



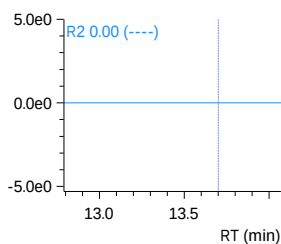
R1 511.90>169.00 (-)

0.00e0



R2 511.90>169.00 (-)

0.00e0





240130_029 (continued)

EtFOSE
Conc. 0.0050

D5-EtFOSAm
Conc. 2.6636

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. ----
R#1 0.00 (0.00)
R#2 0.00 (0.00)

PFODA
Conc. 0.0420
R#1 26.58 (23.45)
R#2 26.58 (0.00)

Q 630.00>59.00 (-)

9.70e1

Q 531.10>219.00 (-)

3.25e4

ISTD 531.10>219.00 (-)

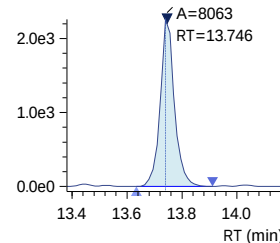
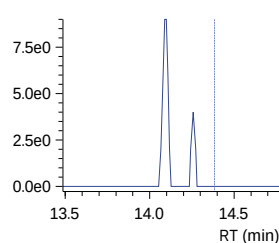
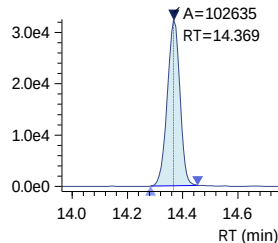
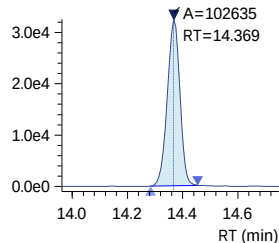
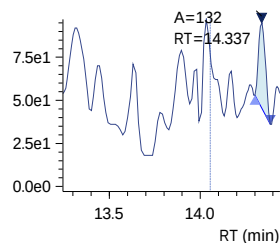
3.25e4

Q 526.00>219.00 (-)

9.00e0

Q 913.00>868.65 (-)

2.26e3

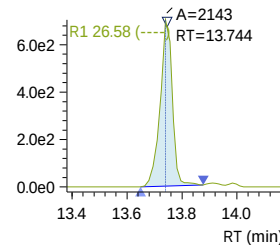
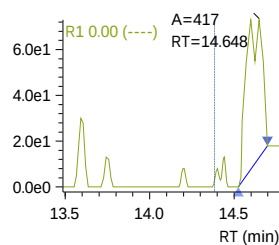


R1 526.00>169.00 (-)

7.30e1

R1 913.00>169.00 (-)

7.05e2

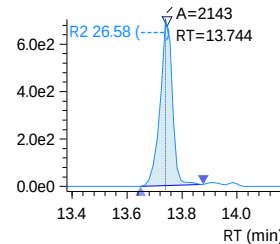
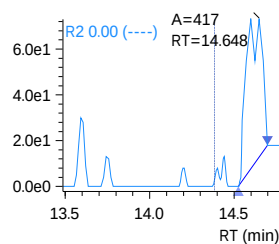


R2 526.00>169.00 (-)

7.30e1

R2 913.00>169.00 (-)

7.05e2

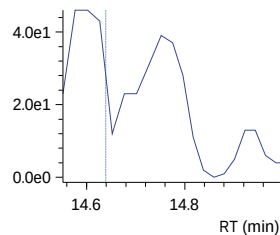


positive trans

Conc. ----

Q 514.80>219.10 (+)

4.60e1





240130_030

Sample ID: TDCA CHECK
Date Acquired: 1/31/2024 1:57:58 AM
Acquired by: System Administrator
Data File: 240130_030
Vial: 12 | Inj. Volume: 10.0000uL | Tray: 1

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	4205	----	----	----	----	----	----	
13C4-PFBA_IS	216.80>171.90	----	4205	----	----	----	----	----	----	
13C3-PFBA_IS	216.00>172.00	----	283	----	----	----	----	----	----	ISs
PFBA	212.80>169.05	----	----	----	----	----	----	----	----	
PFMPA	229.00>84.90	----	----	----	----	----	----	----	----	
3_3 FTCA	241.00>177.10	241.00>117.00	----	0	0.00	139.21	----	----	----	
13C5-PFPeA	268.30>223.00	----	67	----	----	----	----	----	----	
13C5-PFPeA_IS	268.30>223.00	----	67	----	----	----	----	----	----	
PFPeA	263.00>219.00	----	923	----	----	----	----	----	----	RTi
PFMBA	279.00>84.95	----	----	----	----	----	----	----	----	
13C2-4_2 FTS	329.10>80.90	----	48	----	----	----	----	----	----	
13C2-4_2 FTS_IS	329.10>80.90	----	48	----	----	----	----	----	----	
4_2 FTS	327.10>307.00	327.10>80.90	----	0	0.00	32.10	0	0.00	32.10	
13C3-PFBS_IS	302.10>79.90	----	----	----	----	----	----	----	----	
PFBS	298.70>79.90	298.70>98.80	----	0	0.00	44.81	0	0.00	44.81	
13C3-PFBS	302.10>79.90	----	----	----	----	----	----	----	----	
NFDHA	295.00>201.00	295.00>84.90	----	0	0.00	35.54	0	0.00	35.54	
13C5-PFHxA	318.00>273.00	----	184	----	----	----	----	----	----	SN
13C5-PFHxA_IS	318.00>273.00	----	184	----	----	----	----	----	----	SN
13C2-PFHxA_IS	315.10>270.00	----	116	----	----	----	----	----	----	ISs
PFHxA	313.00>269.00	----	4459	----	----	----	----	----	----	RTi
PFEESA	314.80>135.00	314.80>82.90	360	391	108.55	5.22	391	108.55	5.22	IRr
13C3-HFPO-DA	286.90>168.90	----	66	----	----	----	----	----	----	
13C3-HFPO-DA_IS	286.90>168.90	----	66	----	----	----	----	----	----	
HFPO-DA	284.90>168.90	284.90>184.90	----	0	0.00	59.79	0	0.00	59.79	
5_3 FTCA	341.00>237.05	341.00>217.00	----	0	0.00	157.08	0	0.00	157.08	
PFPeS	349.10>79.90	349.10>98.80	----	0	0.00	55.12	0	0.00	55.12	
13C4-PFHpA	367.10>322.00	----	74	----	----	----	----	----	----	
13C4-PFHpA_IS	367.10>322.00	----	74	----	----	----	----	----	----	
PFHpA	363.10>319.00	363.10>169.00	6381	1216	19.05	23.02	1216	19.05	23.02	RTi
DONA	376.90>250.90	376.90>84.80	----	0	0.00	27.50	0	0.00	27.50	
13C2-6_2 FTS_IS	429.10>80.90	----	81	----	----	----	----	----	----	
13C2-6_2 FTS	429.10>80.90	----	81	----	----	----	----	----	----	
6_2 FTS	427.10>407.00	427.10>80.90	662	0	0.00	50.47	0	0.00	50.47	IRr
13C4-PFOA_IS	417.10>172.00	----	----	----	----	----	----	----	----	
13C8-PFOA_IS	421.10>376.00	----	90	----	----	----	----	----	----	

J:\LCMS08\Data\240130_1633_Curve\240130_1633_Curve.damIp

Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240130_030 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	90	----	----	----	----	----	----	
PFOA	413.00>369.00	413.00>169.00	4837	1560	32.24	28.77	1560	32.24	28.77	RTi
13C3-PFHxS	402.10>79.90	----	35	----	----	----	----	----	----	
13C3-PFHxS_IS	402.10>79.90	----	35	----	----	----	----	----	----	
PFHxS	398.70>79.90	398.70>98.90	----	0	0.00	60.90	0	0.00	60.90	
18O2-PFHxS_IS	403.00>83.90	----	----	----	----	----	----	----	----	
13C9-PFNA_IS	472.10>427.00	----	----	----	----	----	----	----	----	
13C9-PFNA	472.10>427.00	----	----	----	----	----	----	----	----	
13C5-PFNA_IS	468.00>423.00	----	----	----	----	----	----	----	----	
PFNA	463.00>419.00	463.00>219.00	5927	1326	22.38	19.31	1326	22.38	19.31	
PFHpS	449.00>79.90	449.00>98.80	----	0	0.00	52.44	0	0.00	52.44	
7_3 FTCA	441.00>317.00	441.00>336.90	1069	373	34.84	129.46	373	34.84	129.46	IRr
13C2-8_2-FTS	529.10>80.90	----	----	----	----	----	----	----	----	
13C2-8_2-FTS_IS	529.10>80.90	----	----	----	----	----	----	----	----	
8_2 FTS	527.10>506.95	527.10>80.80	----	0	0.00	45.98	0	0.00	45.98	
13C6-PFDA_IS	519.10>474.10	----	----	----	----	----	----	----	----	
13C6-PFDA	519.10>474.10	----	----	----	----	----	----	----	----	
13C2-PFDA_IS	515.10>470.10	----	----	----	----	----	----	----	----	
PFDA	512.90>469.00	512.90>219.00	3943	392	9.94	17.88	392	9.94	17.88	
D3-NMeFOSAA_IS	573.20>419.00	----	247	----	----	----	----	----	----	
D3-NMeFOSAA	573.20>419.00	----	247	----	----	----	----	----	----	
13C8-PFOS_IS	507.10>98.90	----	85	----	----	----	----	----	----	
13C8-PFOS	507.10>98.90	----	85	----	----	----	----	----	----	
13C4-PFOS_IS	502.80>79.90	----	43	----	----	----	----	----	----	
PFOS	498.90>79.90	498.90>98.80	----	0	0.00	53.60	0	0.00	53.60	
NMeFOSAA	570.10>419.00	570.10>483.00	----	0	0.00	64.89	0	0.00	64.89	
D5-NEtFOSAA_IS	589.20>419.00	----	129	----	----	----	----	----	----	
D5-NEtFOSAA	589.20>419.00	----	129	----	----	----	----	----	----	
NEtFOSAA	584.20>419.10	584.20>526.00	----	0	0.00	96.07	0	0.00	96.07	
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	403	0	0.00	30.95	0	0.00	30.95	IRr
PFUnDA	563.10>519.00	563.10>269.10	4570	0	0.00	11.01	0	0.00	11.01	IRr
13C7-PFUnDA_IS	570.00>525.10	----	----	----	----	----	----	----	----	
13C7-PFUnDA	570.00>525.10	----	----	----	----	----	----	----	----	
PFNS	548.80>79.90	548.80>98.80	----	0	0.00	60.44	0	0.00	60.44	
10_2 FTS	626.80>607.05	626.80>81.00	----	0	0.00	36.14	0	0.00	36.14	
13C2-PFDOA_IS	615.10>570.00	----	58	----	----	----	----	----	----	
13C2-PFDOA	615.10>570.00	----	58	----	----	----	----	----	----	
PFDOA	613.10>569.00	613.10>319.00	3308	424	12.81	10.16	424	12.81	10.16	RTi
PFDS	599.00>79.90	599.00>98.80	----	0	0.00	58.26	0	0.00	58.26	
PFTrDA	663.00>619.00	663.00>168.90	5448	896	16.45	16.18	896	16.45	16.18	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240130_030 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	----	0	0.00	34.99	0	0.00	34.99	
PFOSAm	498.10>77.90	----	----	----	----	----	----	----	----	
13C8-PFOSAm	506.10>77.80	----	36	----	----	----	----	----	----	
13C8-PFOSAm_IS	506.10>77.80	----	36	----	----	----	----	----	----	
PFTDA	713.10>669.00	713.10>168.90	4517	461	10.21	18.05	461	10.21	18.05	
13C2-PFTDA	715.20>670.00	----	126	----	----	----	----	----	----	
13C2-PFTDA_IS	715.20>670.00	----	126	----	----	----	----	----	----	
PFDoS	699.10>79.90	699.10>98.80	----	0	0.00	61.13	0	0.00	61.13	
D7-MeFOSE_IS	623.20>58.90	----	551	----	----	----	----	----	----	
D7-MeFOSE	623.20>58.90	----	551	----	----	----	----	----	----	
MeFOSE	616.10>59.00	----	----	----	----	----	----	----	----	
13C2-PFHxDA_IS	815.00>770.05	----	537	----	----	----	----	----	----	
13C2-PFHxDA	815.00>770.05	----	537	----	----	----	----	----	----	
PFHxDA	813.00>768.95	813.00>218.95	6715	829	12.35	11.66	829	12.35	11.66	
D3-MeFOSA	515.00>219.00	----	----	----	----	----	----	----	----	
D3-MeFOSA_IS	515.00>219.00	----	----	----	----	----	----	----	----	
MeFOSA	511.90>219.00	511.90>169.00	----	0	0.00	160.44	0	0.00	160.44	
D9-EtFOSE_IS	639.20>58.90	----	----	----	----	----	----	----	----	
D9-EtFOSE	639.20>58.90	----	386	----	----	----	----	----	----	
EtFOSE	630.00>59.00	----	----	----	----	----	----	----	----	
D5-EtFOSAm	531.10>219.00	----	----	----	----	----	----	----	----	
D5-EtFOSAm_IS	531.10>219.00	----	----	----	----	----	----	----	----	
EtFOSAm	526.00>219.00	526.00>169.00	----	0	0.00	159.63	0	0.00	159.63	
PFODA	913.00>868.65	913.00>169.00	2994	1055	35.24	36.03	1055	35.24	36.03	

Flag ID key: IRr: Ion Ratio (Relative), ISS: ISTD Peak Area Deviation (Standards), RTi: RT Diff (Absolute ISTD), SN: S/N



240130_030

Sample ID: TDCA CHECK
Date Acquired: 1/31/2024 1:57:58 AM
Acquired by: System Administrator
Data File: 240130_030
Vial: 12 | Inj. Volume: 10.0000uL | Tray: 1

Only used to confirm sufficient separation from PFOS

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.488	0.150	0.271	4205	283	13C3-PFBA_IS	100.1446	ng/mL	
13C4-PFBA_IS	Auto	1.488	0.150	----	4205	4205	----	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.217	-0.120	----	283	283	----	5.0000	ng/mL	ISs
PFBA	ND(W/B)	----	----	----	----	4205	13C4-PFBA_IS	----	ng/mL	
PFMPA	ND(W/B)	----	----	----	----	67	13C5-PFPeA_IS	----	ng/mL	
3_3 FTCA	ND(W/B)	----	----	----	----	67	13C5-PFPeA_IS	----	ng/mL	
13C5-PFPeA	Auto	3.785	0.346	-0.862	67	116	13C2-PFHxA_IS	8.0323	ng/mL	
13C5-PFPeA_IS	Auto	3.785	0.346	----	67	67	----	5.0000	ng/mL	
PFPeA	Auto	3.445	0.003	-0.340	923	67	13C5-PFPeA_IS	19.6083	ng/mL	RTi
PFMBA	ND(W/B)	----	----	----	----	67	13C5-PFPeA_IS	----	ng/mL	
13C2-4_2 FTS	Auto	4.722	0.102	----	48	----	18O2-PFHxS_IS	ISTD Error	ng/mL	
13C2-4_2 FTS_IS	Auto	4.722	0.102	----	48	48	----	5.0000	ng/mL	
4_2 FTS	ND(W/B)	----	----	----	----	48	13C2-4_2 FTS_IS	----	ng/mL	
13C3-PFBS_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
PFBS	ND(W/B)	----	----	----	----	----	13C3-PFBS_IS	ISTD Error	ng/mL	
13C3-PFBS	ND(W/B)	----	----	----	----	----	18O2-PFHxS_IS	ISTD Error	ng/mL	
NFDHA	ND(W/B)	----	----	----	----	184	13C5-PFHxA_IS	----	ng/mL	
13C5-PFHxA	Auto	4.937	0.005	0.290	184	116	13C2-PFHxA_IS	4.8944	ng/mL	SN
13C5-PFHxA_IS	Auto	4.937	0.005	----	184	184	----	2.5000	ng/mL	SN
13C2-PFHxA_IS	Auto	4.647	-0.286	----	116	116	----	2.5000	ng/mL	ISs
PFHxA	Auto	4.829	-0.105	-0.108	4459	184	13C5-PFHxA_IS	65.1294	ng/mL	RTi
PFEESA	Auto	5.145	-0.120	0.208	360	184	13C5-PFHxA_IS	1.5757	ng/mL	IRr
13C3-HFPO-DA	Auto	5.671	0.259	1.024	66	116	13C2-PFHxA_IS	6.3662	ng/mL	
13C3-HFPO-DA_IS	Auto	5.671	0.259	----	66	66	----	10.0000	ng/mL	
HFPO-DA	ND(W/B)	----	----	----	----	66	13C3-HFPO-DA_IS	----	ng/mL	
5_3 FTCA	ND(W/B)	----	----	----	----	184	13C5-PFHxA_IS	----	ng/mL	
PFPeS	ND(W/B)	----	----	----	----	35	13C3-PFHxS_IS	----	ng/mL	
13C4-PFHpA	Auto	5.986	-0.134	1.339	74	116	13C2-PFHxA_IS	1.5716	ng/mL	
13C4-PFHpA_IS	Auto	5.986	-0.134	----	74	74	----	2.5000	ng/mL	
PFHpA	Auto	6.102	-0.020	0.116	6381	74	13C4-PFHpA_IS	253.3718	ng/mL	RTi
DONA	ND(W/B)	----	----	----	----	66	13C3-HFPO-DA_IS	----	ng/mL	
13C2-6_2 FTS_IS	Auto	6.779	0.013	----	81	81	----	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.779	0.013	----	81	----	18O2-PFHxS_IS	ISTD Error	ng/mL	
6_2 FTS	Auto	6.759	-0.006	-0.020	662	81	13C2-6_2 FTS_IS	21.5076	ng/mL	IRr
13C4-PFOA_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
13C8-PFOA_IS	Auto	7.192	0.114	----	90	90	----	2.5000	ng/mL	
13C8-PFOA	Auto	7.192	0.114	----	90	----	13C4-PFOA_IS	ISTD Error	ng/mL	
PFOA	Auto	7.078	-0.003	-0.114	4837	90	13C8-PFOA_IS	147.1033	ng/mL	RTi
13C3-PFHxS	Auto	7.166	0.118	----	35	----	18O2-PFHxS_IS	ISTD Error	ng/mL	
13C3-PFHxS_IS	Auto	7.166	0.118	----	35	35	----	2.5000	ng/mL	
PFHxS	ND(W/B)	----	----	----	----	35	13C3-PFHxS_IS	----	ng/mL	
18O2-PFHxS_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
13C9-PFNA_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
13C9-PFNA	ND(W/B)	----	----	----	----	----	13C5-PFNA_IS	ISTD Error	ng/mL	
13C5-PFNA_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
PFNA	Auto	7.932	0.002	----	5927	----	13C9-PFNA_IS	ISTD Error	ng/mL	
PFHpS	ND(W/B)	----	----	----	----	85	13C8-PFOS_IS	----	ng/mL	
7_3 FTCA	Auto	7.913	-0.016	2.976	1069	184	13C5-PFHxA_IS	110.7541	ng/mL	IRr
13C2-8_2-FTS	ND(W/B)	----	----	----	----	----	18O2-PFHxS_IS	ISTD Error	ng/mL	
13C2-8_2-FTS_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
8_2 FTS	ND(W/B)	----	----	----	----	----	13C2-8_2-FTS_IS	ISTD Error	ng/mL	
13C6-PFDA_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
13C6-PFDA	ND(W/B)	----	----	----	----	----	13C2-PFDA_IS	ISTD Error	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_030 (continued)

(Table continued from previous page)

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C2-PFDA_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
PFDA	Auto	8.697	0.000	----	3943	----	13C6-PFDA_IS	ISTD Error	ng/mL	
D3-NMeFOSAA_IS	Auto	8.841	0.007	----	247	247	----	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.841	0.007	0.059	247	43	13C4-PFOS_IS	14.0277	ng/mL	
13C8-PFOS_IS	Auto	8.894	0.108	----	85	85	----	2.5000	ng/mL	
13C8-PFOS	Auto	8.894	0.108	0.112	85	43	13C4-PFOS_IS	15.5634	ng/mL	
13C4-PFOS_IS	Auto	8.782	-0.005	----	43	43	----	2.5000	ng/mL	
PFOS	ND(W/B)	----	----	----	----	85	13C8-PFOS_IS	----	ng/mL	
NMeFOSAA	ND(W/B)	----	----	----	----	247	D3-NMeFOSAA_IS	----	ng/mL	
D5-NetFOSAA_IS	Auto	9.167	0.003	----	129	129	----	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.167	0.003	0.385	129	43	13C4-PFOS_IS	9.3161	ng/mL	
NetFOSAA	ND(W/B)	----	----	----	----	129	D5-NetFOSAA_IS	----	ng/mL	
9-CI-PF3ONS	Auto	9.136	-0.215	3.465	403	66	13C3-HFPO-DA_IS	6.2586	ng/mL	IRr
PFUnDA	Auto	9.422	0.001	----	4570	----	13C7-PFUnDA_IS	ISTD Error	ng/mL	IRr
13C7-PFUnDA_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
13C7-PFUnDA	ND(W/B)	----	----	----	----	----	13C2-PFDA_IS	ISTD Error	ng/mL	
PFNS	ND(W/B)	----	----	----	----	85	13C8-PFOS_IS	----	ng/mL	
10_2_FTS	ND(W/B)	----	----	----	----	----	13C2-8_2-FTS_IS	ISTD Error	ng/mL	
13C2-PFDOA_IS	Auto	9.890	-0.217	----	58	58	----	1.2500	ng/mL	
13C2-PFDOA	Auto	9.890	-0.217	----	58	----	13C2-PFDA_IS	ISTD Error	ng/mL	
PFDOA	Auto	10.109	0.001	0.219	3308	58	13C2-PFDOA_IS	114.5071	ng/mL	RTi
PFDS	ND(W/B)	----	----	----	----	85	13C8-PFOS_IS	----	ng/mL	
PFTDA	Auto	10.762	-0.002	-0.628	5448	126	13C2-PFTDA_IS	43.9847	ng/mL	
11-CI-PF3OUdS	ND(W/B)	----	----	----	----	66	13C3-HFPO-DA_IS	----	ng/mL	
PFOSAm	ND(W/B)	----	----	----	----	36	13C8-PFOSAm_IS	----	ng/mL	
13C8-PFOSAm	Auto	11.162	0.007	2.380	36	43	13C4-PFOS_IS	2.6587	ng/mL	
13C8-PFOSAm_IS	Auto	11.162	0.007	----	36	36	----	2.5000	ng/mL	
PFTDA	Auto	11.397	0.001	0.007	4517	126	13C2-PFTDA_IS	52.0157	ng/mL	
13C2-PFTDA	Auto	11.390	-0.005	----	126	----	13C2-PFDA_IS	ISTD Error	ng/mL	
13C2-PFTDA_IS	Auto	11.390	-0.005	----	126	126	----	1.2500	ng/mL	
PFDoS	ND(W/B)	----	----	----	----	85	13C8-PFOS_IS	----	ng/mL	
D7-MeFOSE_IS	Auto	13.393	0.007	----	551	551	----	25.0000	ng/mL	
D7-MeFOSE	Auto	13.393	0.007	4.611	551	43	13C4-PFOS_IS	156.4658	ng/mL	
MeFOSE	ND(W/B)	----	----	----	----	551	D7-MeFOSE_IS	----	ng/mL	
13C2-PFHxDA_IS	Auto	12.611	0.002	----	537	537	----	2.5000	ng/mL	
13C2-PFHxDA	Auto	12.611	0.002	----	537	----	13C2-PFDA_IS	ISTD Error	ng/mL	
PFHxDA	Auto	12.611	0.001	0.000	6715	537	13C2-PFHxDA_IS	23.1386	ng/mL	
D3-MeFOSA	ND(W/B)	----	----	----	----	43	13C4-PFOS_IS	----	ng/mL	
D3-MeFOSA_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
MeFOSA	ND(W/B)	----	----	----	----	----	D3-MeFOSA_IS	ISTD Error	ng/mL	
D9-EtFOSE_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
D9-EtFOSE	Auto	14.011	-0.002	5.229	386	43	13C4-PFOS_IS	89.6243	ng/mL	
EtFOSE	ND(W/B)	----	----	----	----	----	D9-EtFOSE_IS	ISTD Error	ng/mL	
D5-EtFOSAm	ND(W/B)	----	----	----	----	43	13C4-PFOS_IS	----	ng/mL	
D5-EtFOSAm_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
EtFOSAm	ND(W/B)	----	----	----	----	----	D5-EtFOSAm_IS	ISTD Error	ng/mL	
PFODA	Auto	13.745	0.005	1.134	2994	537	13C2-PFHxDA_IS	26.0385	ng/mL	

Flag ID key: IRr: Ion Ratio (Relative), ISS: ISTD Peak Area Deviation (Standards), RTi: RT Diff (Absolute ISTD), SN: S/N



240130_030 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_030 (continued)

13C2-4_2 FTS
Conc. ISTD Error

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. ----
R#1 0.00 (32.10)
R#2 0.00 (32.10)

13C3-PFBS_IS
Conc. ----

PFBS
Conc. ISTD Error
R#1 0.00 (44.81)
R#2 0.00 (44.81)

Q 329.10>80.90 (-)

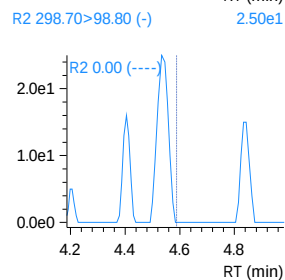
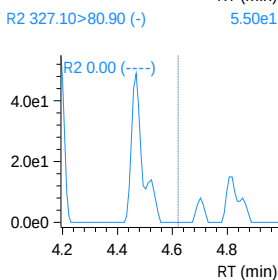
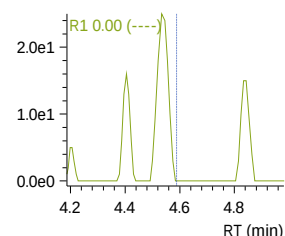
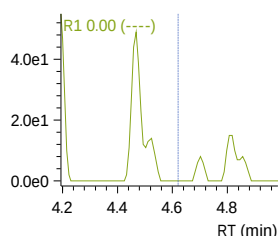
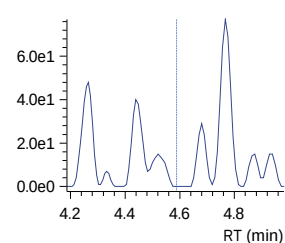
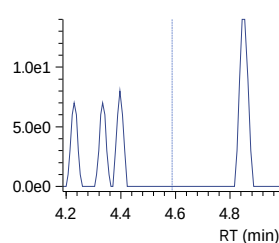
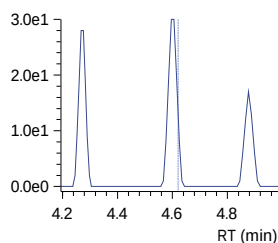
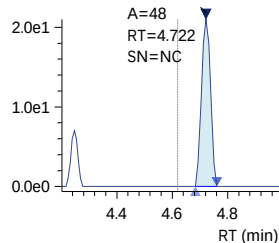
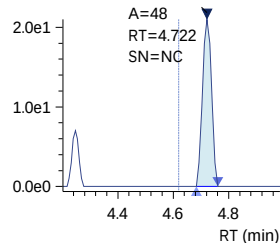
2.10e1 ISTD 329.10>80.90 (-)

2.10e1 Q 327.10>307.00 (-)

3.00e1 ISTD 302.10>79.90 (-)

1.40e1 Q 298.70>79.90 (-)

7.70e1





240130_030 (continued)

13C3-PFBS
Conc. ISTD Error

NFDHA
Conc. ----
R#1 0.00 (35.54)
R#2 0.00 (35.54)

13C5-PFHxA
Conc. 4.8944

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

Q 302.10>79.90 (-)

1.40e1

Q 295.00>201.00 (-)

5.90e1

Q 318.00>273.00 (-)

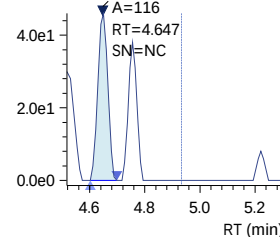
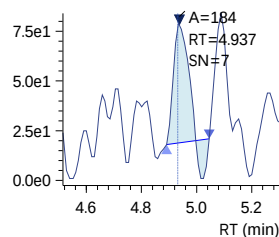
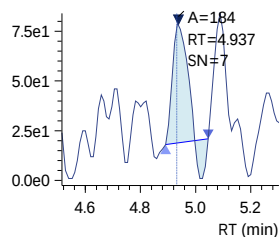
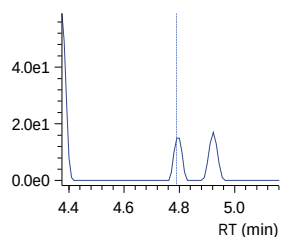
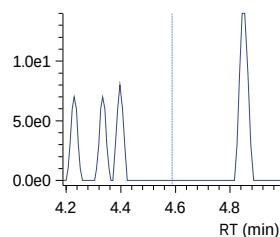
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ISTD 318.00>273.00 (-)

8.40e1

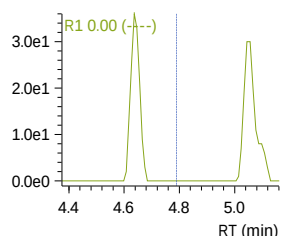
ISTD 315.10>270.00 (-)

4.60e1



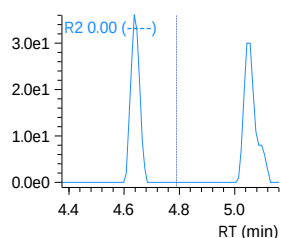
R1 295.00>84.90 (-)

3.60e1



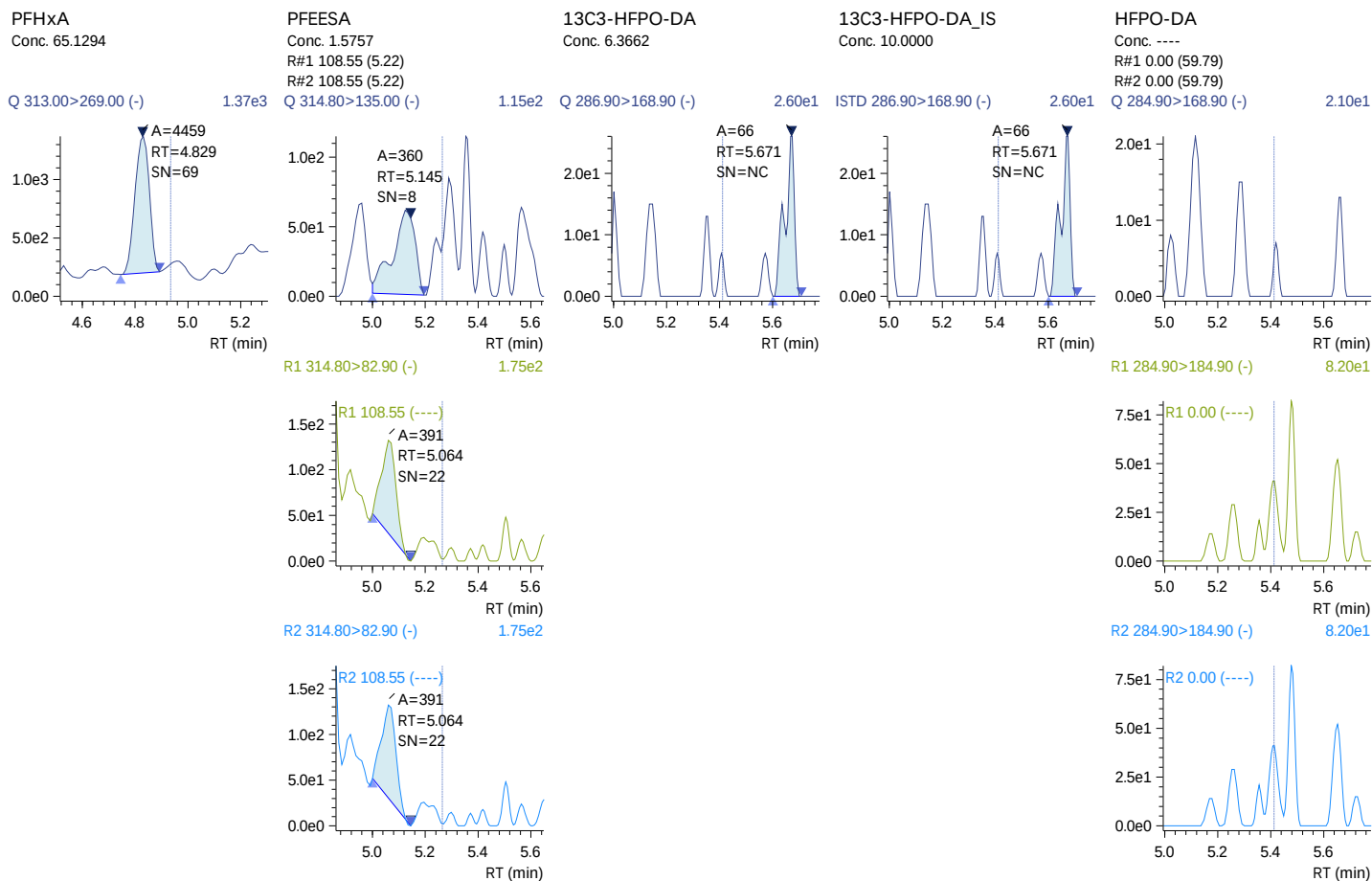
R2 295.00>84.90 (-)

3.60e1



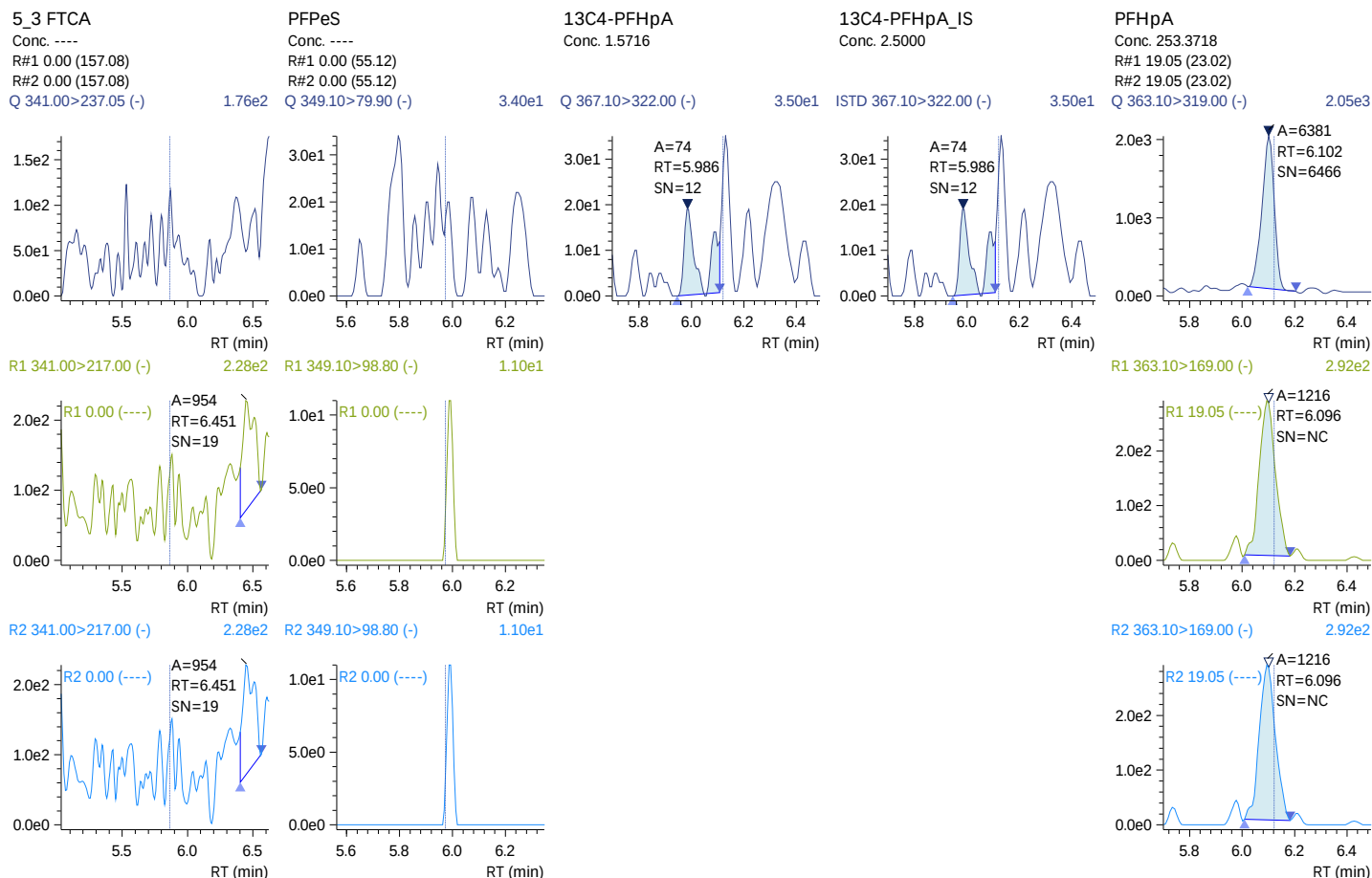


240130_030 (continued)



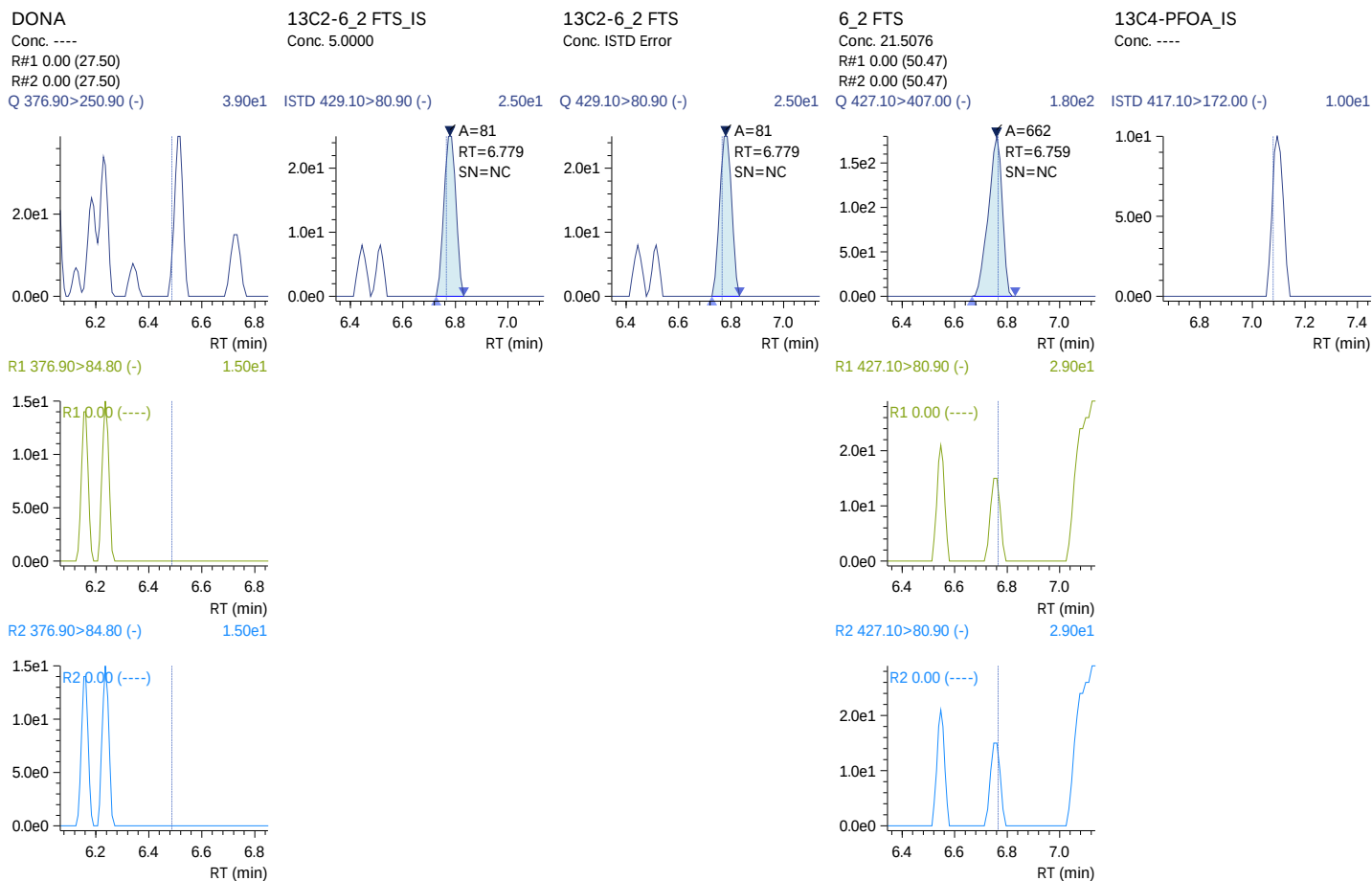


240130_030 (continued)





240130_030 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_030 (continued)

13C8-PFOA_IS
Conc. 2.5000

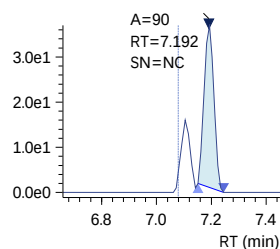
13C8-PFOA
Conc. ISTD Error

PFOA
Conc. 147.1033
R#1 32.24 (28.77)
R#2 32.24 (28.77)

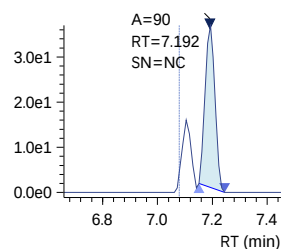
13C3-PFHxS
Conc. ISTD Error

13C3-PFHxS_IS
Conc. 2.5000

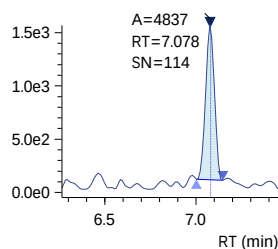
ISTD 421.10>376.00 (-)



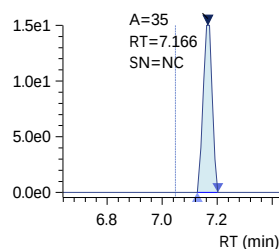
Q 421.10>376.00 (-)



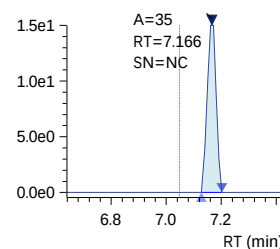
Q 413.00>369.00 (-)



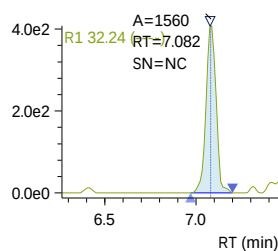
Q 402.10>79.90 (-)



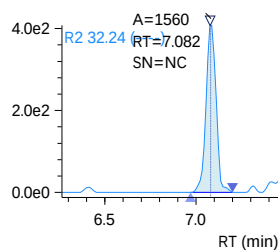
ISTD 402.10>79.90 (-)



R1 413.00>169.00 (-)

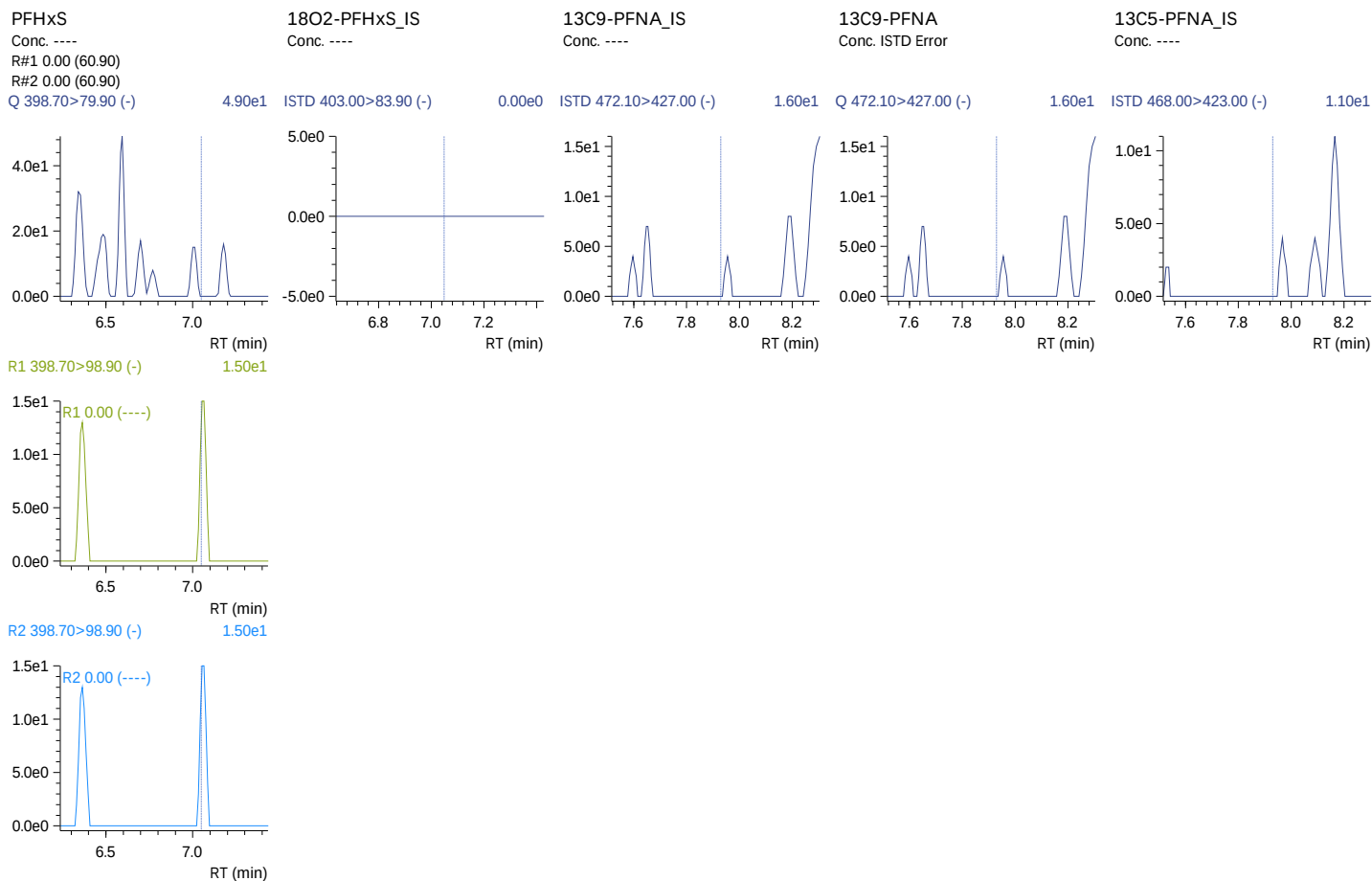


R2 413.00>169.00 (-)





240130_030 (continued)

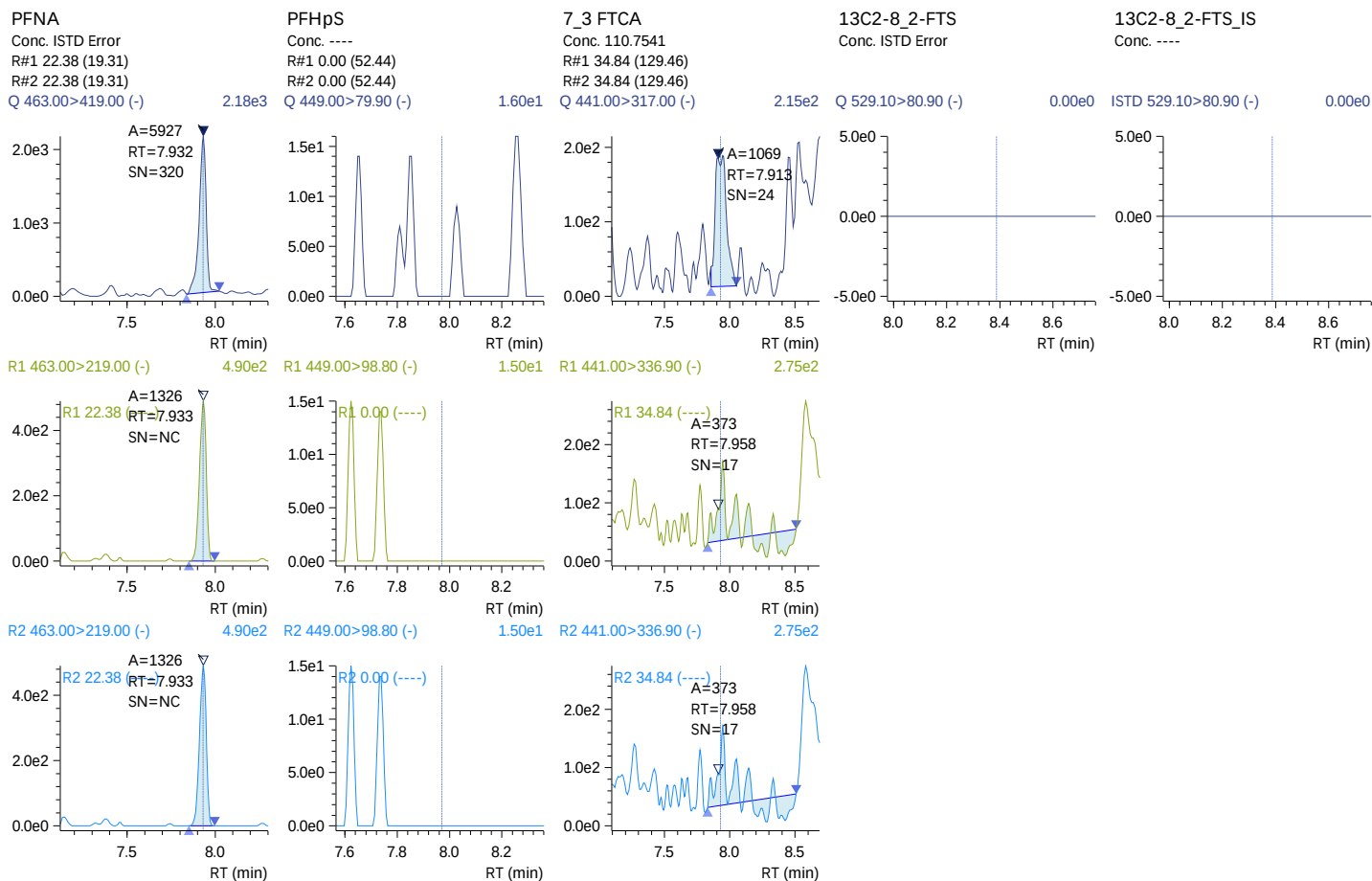


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
 Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_030 (continued)

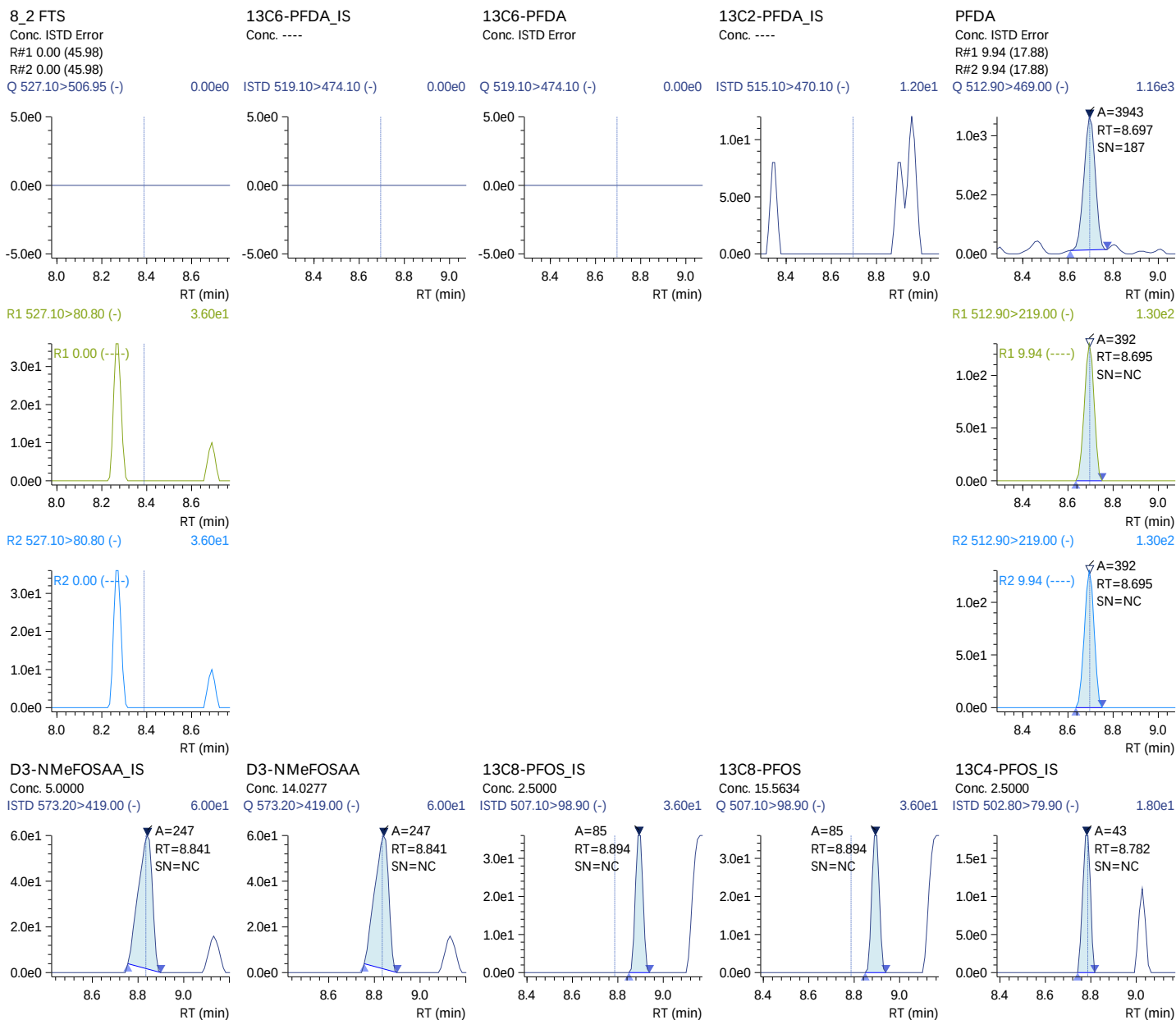


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_030 (continued)

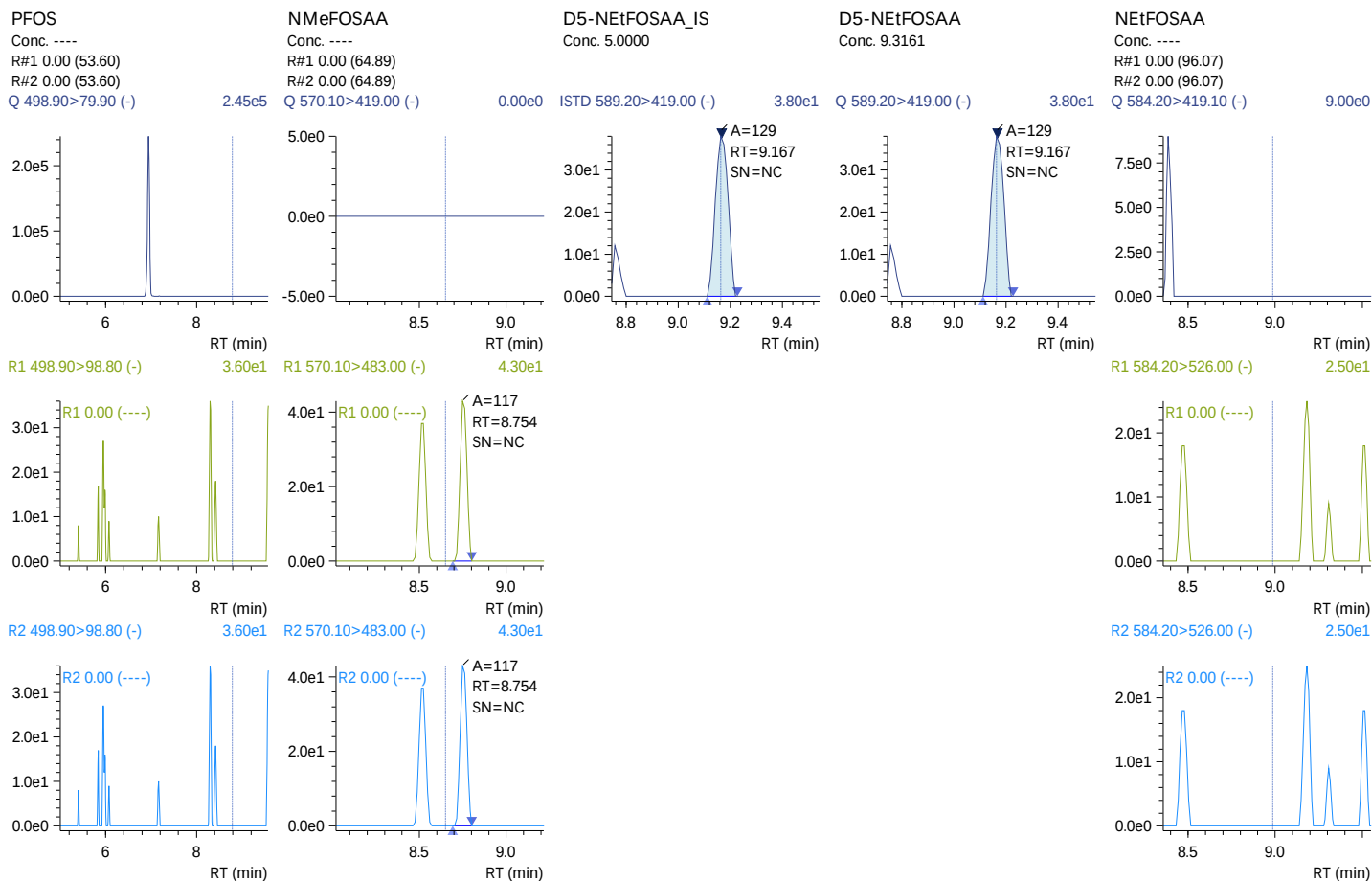


J:\LCMS08\Data\240130_1633_Curve\240130_1633_Curve.damIp

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_030 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_030 (continued)

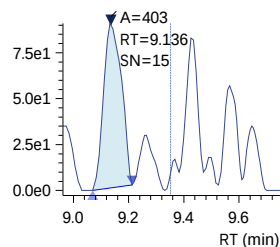
9-Cl-PF3ONS

Conc. 6.2586

R#1 0.00 (30.95)

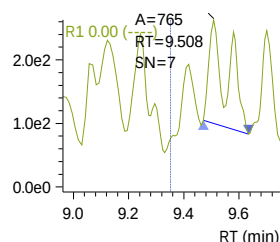
R#2 0.00 (30.95)

Q 530.80>351.00 (-)



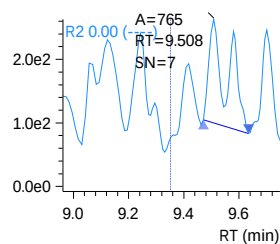
R1 532.80>353.00 (-)

2.63e2



R2 532.80>353.00 (-)

2.63e2



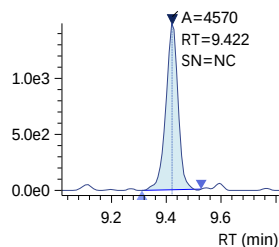
PFUnDA

Conc. ISTD Error

R#1 0.00 (11.01)

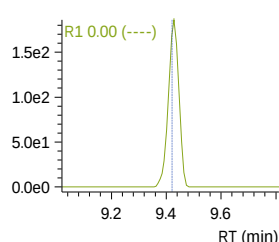
R#2 0.00 (11.01)

Q 563.10>519.00 (-)



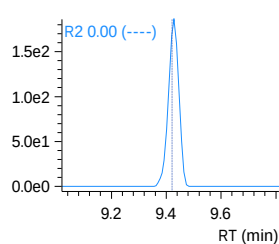
R1 563.10>269.10 (-)

1.86e2



R2 563.10>269.10 (-)

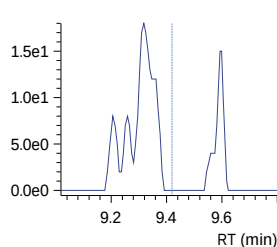
1.86e2



13C7-PFUnDA_IS

Conc. ----

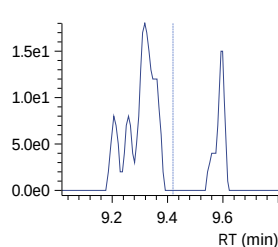
ISTD 570.00>525.10 (-)



13C7-PFUnDA

Conc. ISTD Error

Q 570.00>525.10 (-)



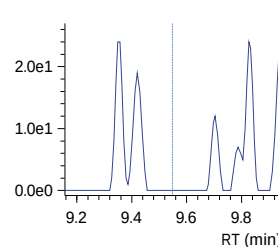
PFNS

Conc. ----

R#1 0.00 (60.44)

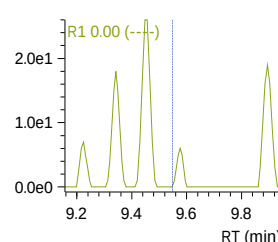
R#2 0.00 (60.44)

Q 548.80>79.90 (-)



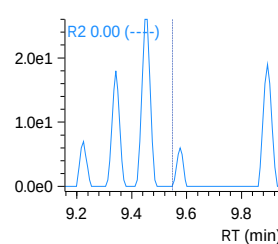
R1 548.80>98.80 (-)

2.60e1



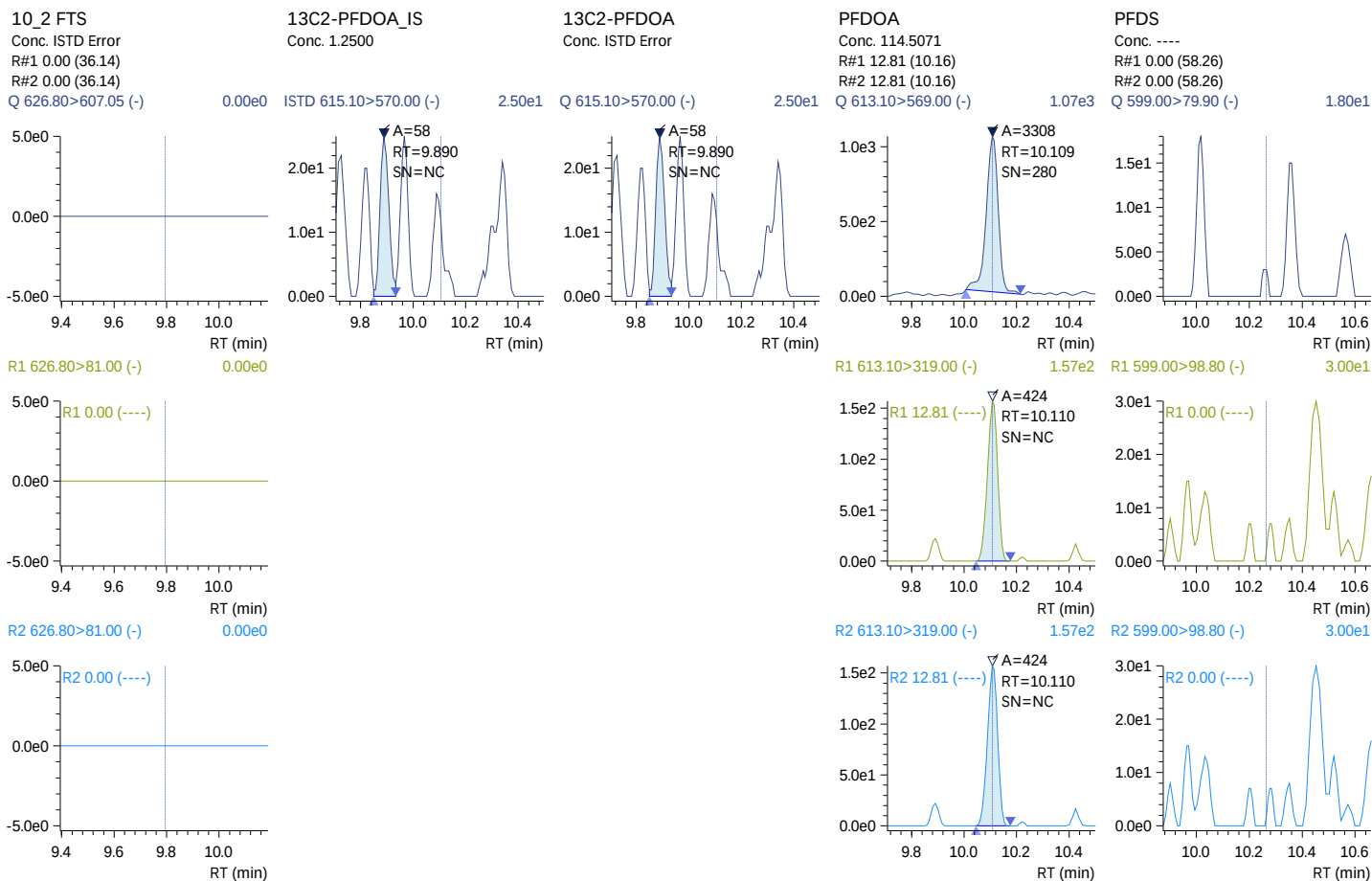
R2 548.80>98.80 (-)

2.60e1





240130_030 (continued)

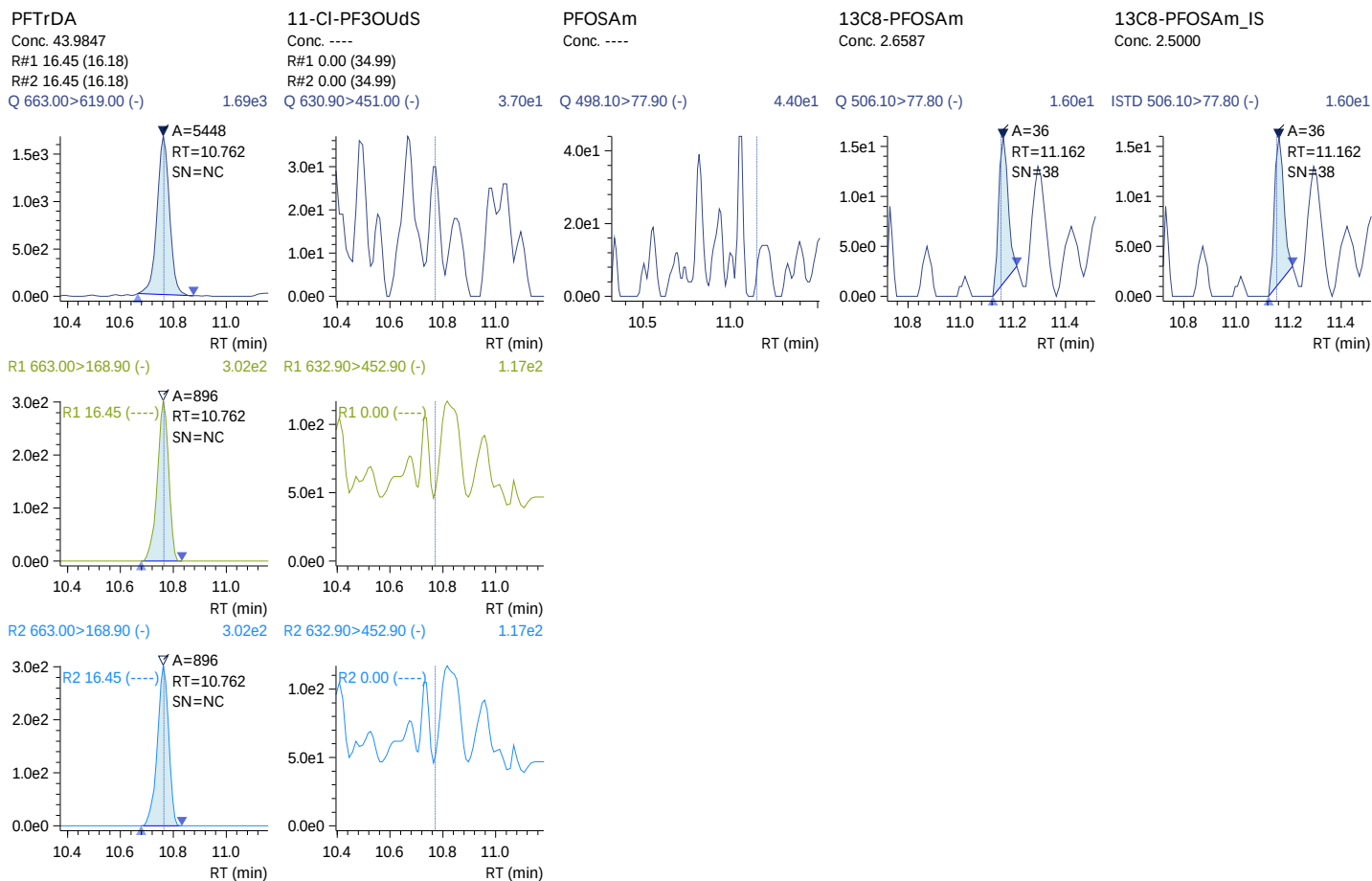


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_030 (continued)

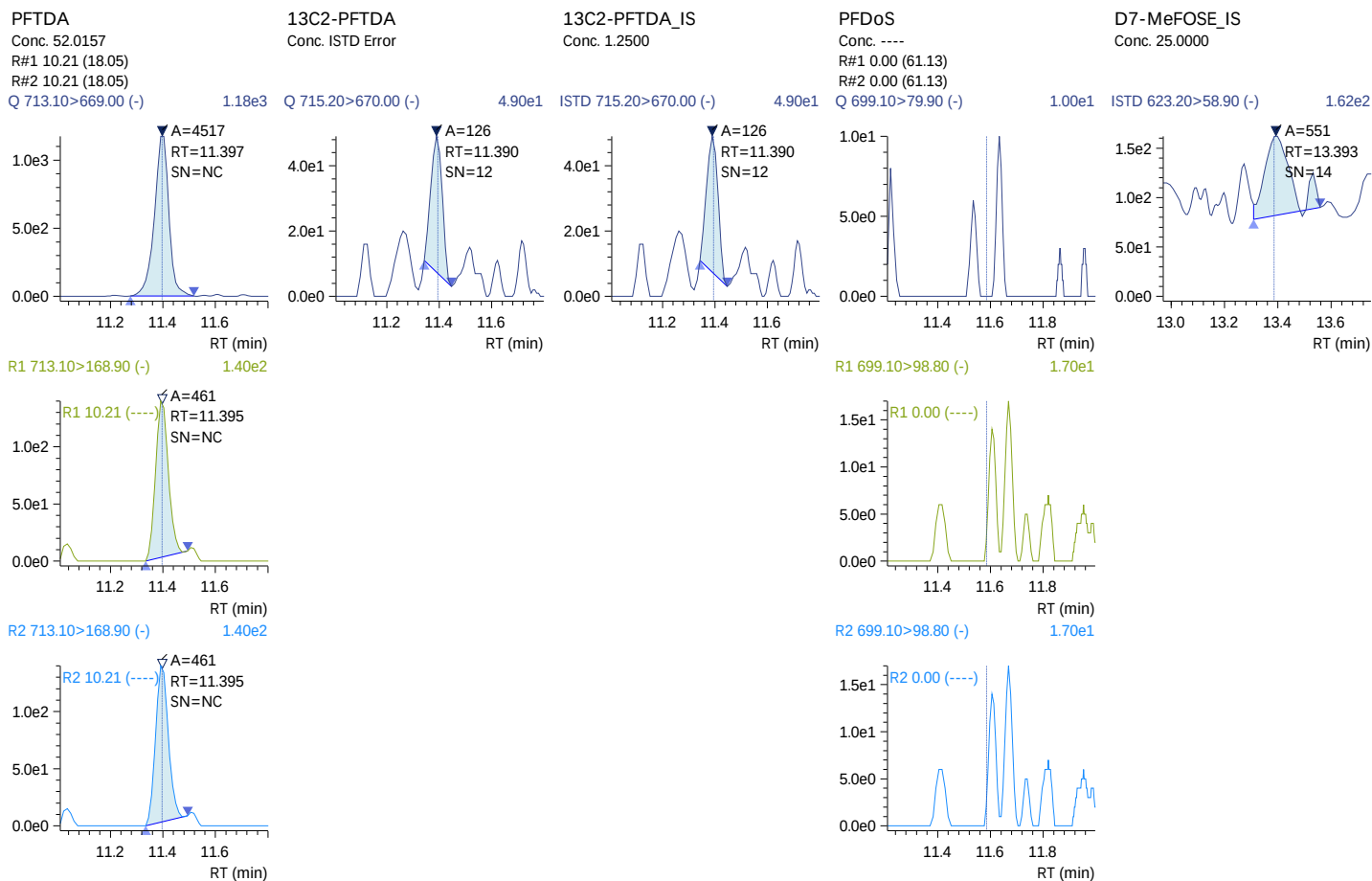


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_030 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_030 (continued)

D7-MeFOSE
Conc. 156.4658

MeFOSE
Conc. ----

13C2-PFHDA_IS
Conc. 2.5000

13C2-PFH₂DA
Conc. ISTD Error

PFHXDA

Conc. 23.1386
R#1 12.35 (11.66)

Q 623.20>58.90 (-)

1.62e2

Q 616.10>59.00 (-)

9.30e1

ISTD 815.00>770.05 (-)

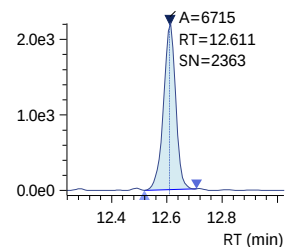
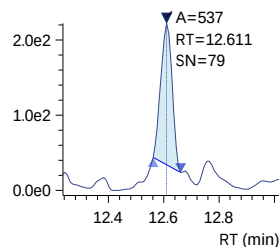
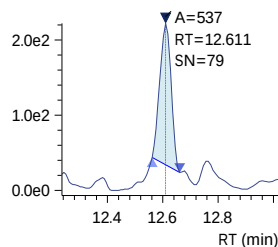
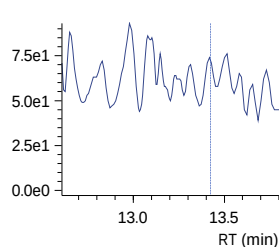
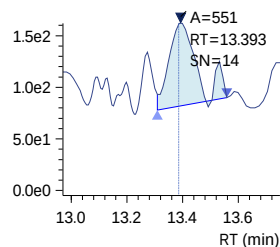
2.22e2

Q 815.00>770.05 (-)

2.22e2

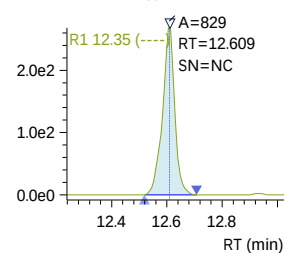
Q 813.00 > 768.95 (-)

2.21e3



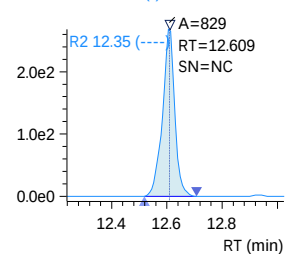
R1 813.00>218.95 (-)

2.68e2



R2 813.00>218.95 (-)

2.68e2





240130_030 (continued)

D3-MeFOSA
Conc. ----

D3-MeFOSA_IS
Conc. ----

MeFOSA
Conc. ISTD Error
R#1 0.00 (160.44)
R#2 0.00 (160.44)

D9-EtFOSE_IS
Conc. ----

D9-EtFOSE
Conc. 89.6243

Q 515.00>219.00 (-)

1.50e1

ISTD 515.00>219.00 (-)

1.50e1

Q 511.90>219.00 (-)

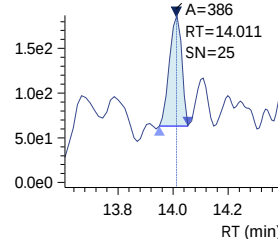
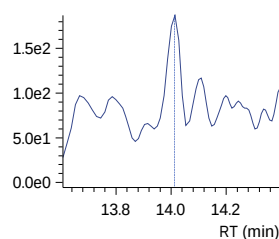
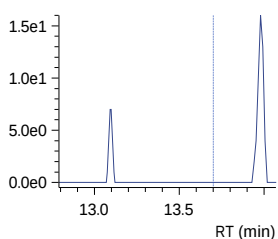
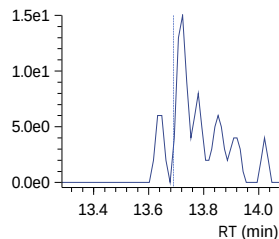
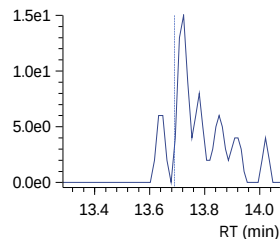
1.60e1

ISTD 639.20>58.90 (-)

1.87e2

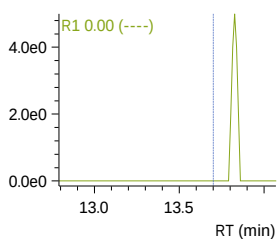
Q 639.20>58.90 (-)

1.87e2



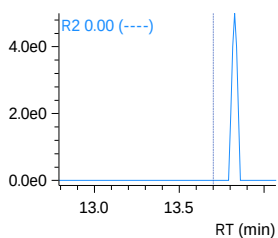
R1 511.90>169.00 (-)

5.00e0



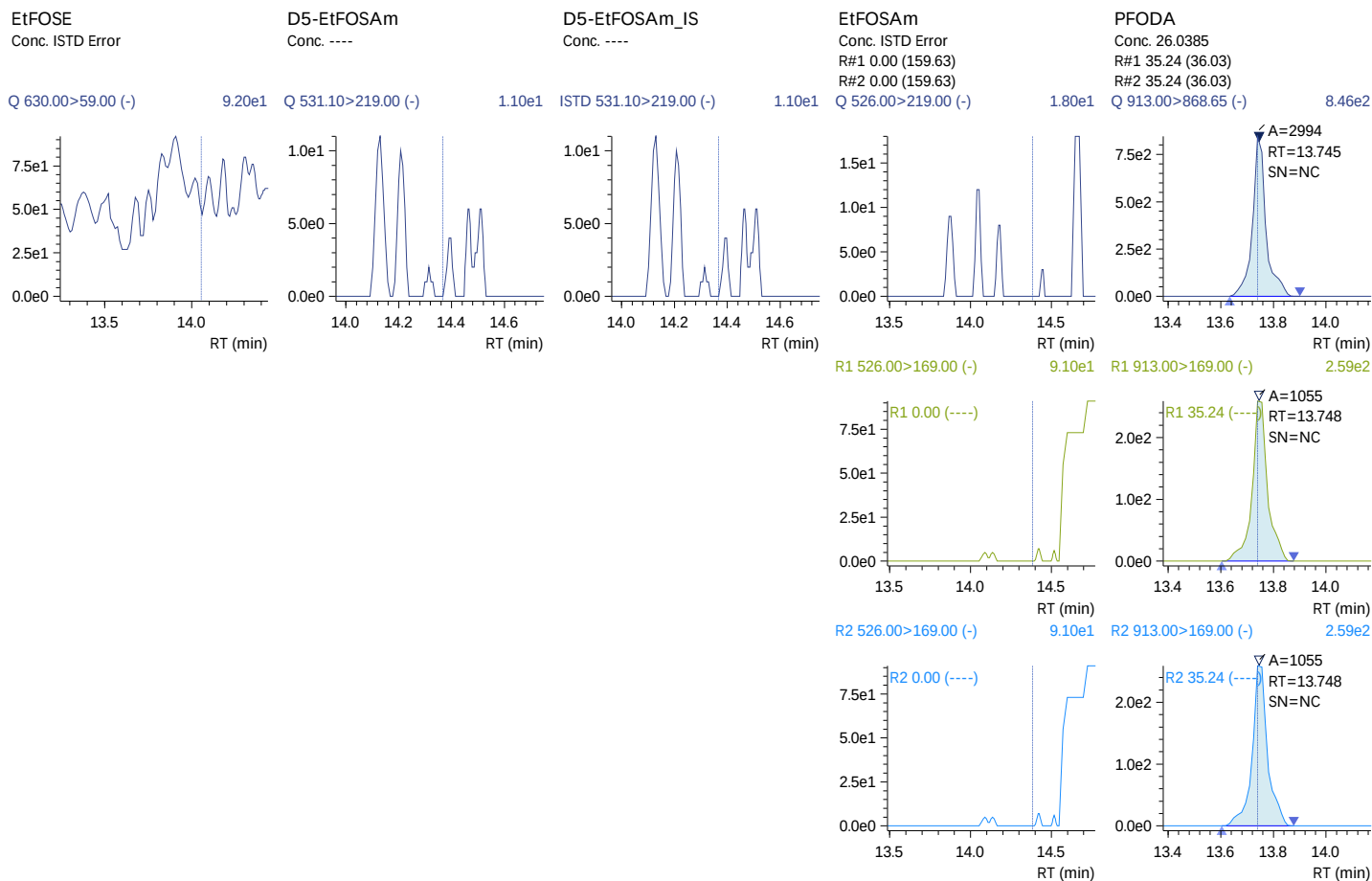
R2 511.90>169.00 (-)

5.00e0





240130_030 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_030

Sample ID: TDCA CHECK
Date Acquired: 1/31/2024 1:57:58 AM
Acquired by: System Administrator
Data File: 240130_030
Vial: 12 | Inj. Volume: 10.0000uL | Tray: 1





240130_030 (continued)

13C2-4_2 FTS
 Conc. ISTD Error

13C2-4_2 FTS_IS
 Conc. 5.0000

4_2 FTS
 Conc. ----
 R#1 0.00 (24.69)
 R#2 0.00 (0.00)

13C3-PFBS_IS
 Conc. ----

PFBS
 Conc. ISTD Error
 R#1 0.00 (52.67)
 R#2 0.00 (0.00)

Q 329.10>80.90 (-)

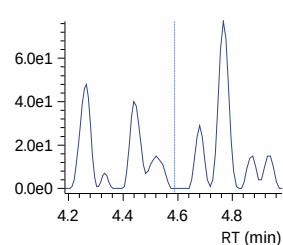
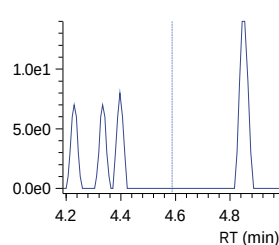
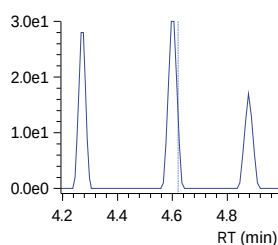
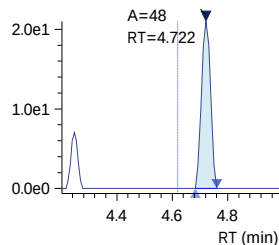
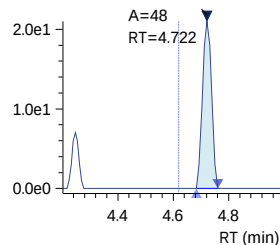
2.10e1 ISTD 329.10>80.90 (-)

2.10e1 Q 327.10>307.00 (-)

3.00e1 ISTD 302.10>79.90 (-)

1.40e1 Q 298.70>79.90 (-)

7.70e1

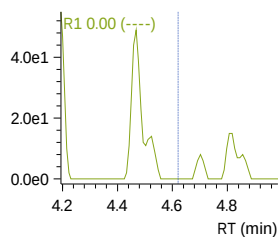


R1 327.10>80.90 (-)

5.50e1

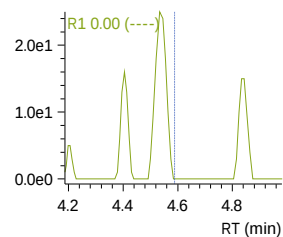
R1 298.70>98.80 (-)

2.50e1



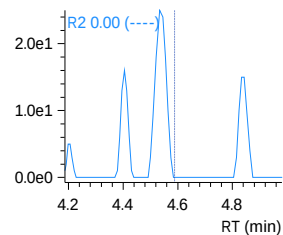
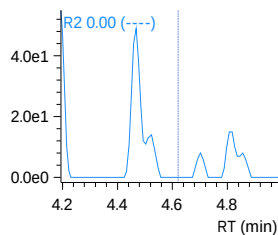
R2 327.10>80.90 (-)

5.50e1



R2 298.70>98.80 (-)

2.50e1





240130_030 (continued)

13C3-PFBS
Conc. ISTD Error

NFDHA
Conc. ----
R#1 0.00 (39.38)
R#2 0.00 (0.00)

13C5-PFHxA
Conc. 4.8944

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

Q 302.10>79.90 (-)

1.40e1

Q 295.00>201.00 (-)

5.90e1

Q 318.00>273.00 (-)

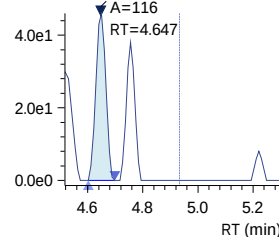
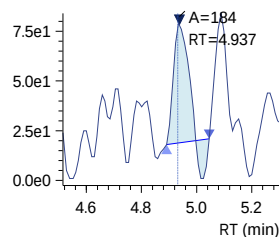
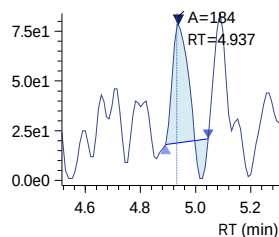
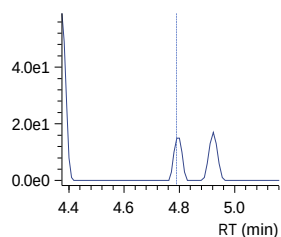
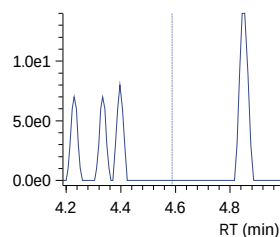
8.40e1

ISTD 318.00>273.00 (-)

8.40e1

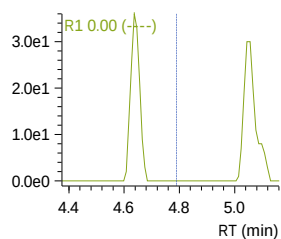
ISTD 315.10>270.00 (-)

4.60e1



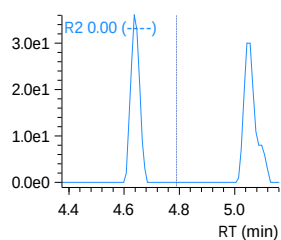
R1 295.00>84.90 (-)

3.60e1



R2 295.00>84.90 (-)

3.60e1





240130_030 (continued)

PFHxA
Conc. 64.6198

PFEESA
Conc. 1.5757
R#1 108.55 (5.25)
R#2 108.55 (0.00)

13C3-HFPO-DA
Conc. 6.3662

13C3-HFPO-DA_IS
Conc. 10.0000

HFPO-DA
Conc. ----
R#1 0.00 (69.48)
R#2 0.00 (0.00)

Q 313.00>269.00 (-)

1.37e3

Q 314.80>135.00 (-)

1.15e2

Q 286.90>168.90 (-)

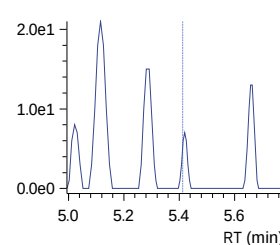
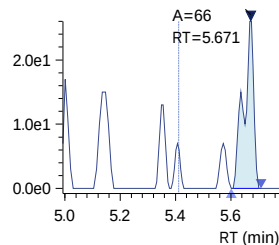
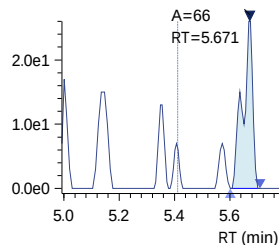
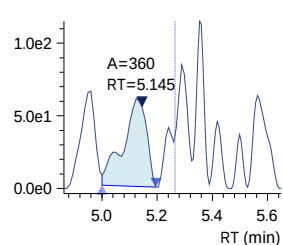
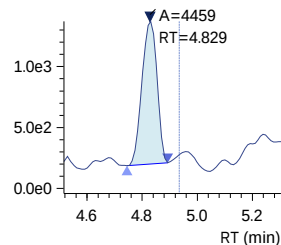
2.60e1

ISTD 286.90>168.90 (-)

2.60e1

Q 284.90>168.90 (-)

2.10e1

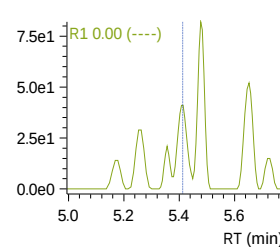
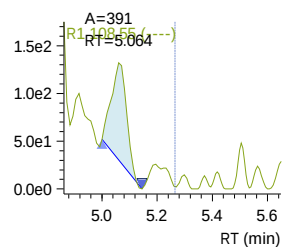


R1 314.80>82.90 (-)

1.75e2

R1 284.90>184.90 (-)

8.20e1

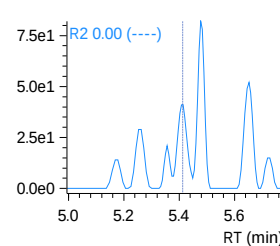
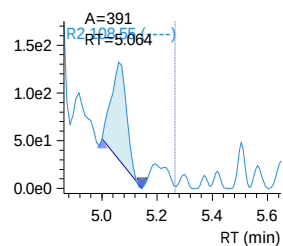


R2 314.80>82.90 (-)

1.75e2

R2 284.90>184.90 (-)

8.20e1





240130_030 (continued)

5_3 FTCA

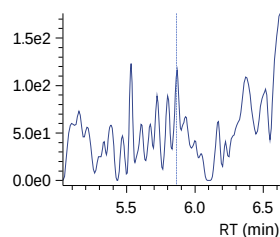
Conc. ----

R#1 0.00 (139.59)

R#2 0.00 (0.00)

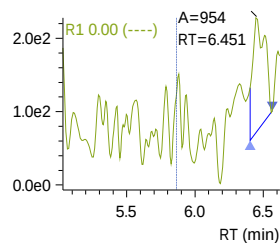
Q 341.00>237.05 (-)

1.76e2



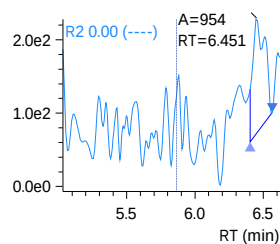
R1 341.00>217.00 (-)

2.28e2



R2 341.00>217.00 (-)

2.28e2



PFPeS

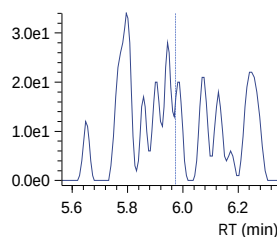
Conc. ----

R#1 0.00 (66.55)

R#2 0.00 (0.00)

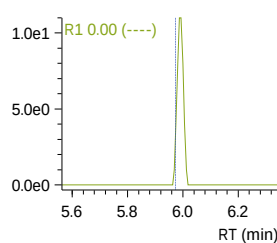
Q 349.10>79.90 (-)

3.40e1



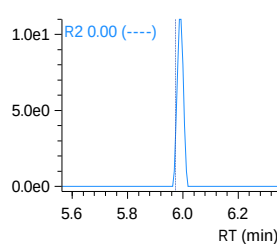
R1 349.10>98.80 (-)

1.10e1



R2 349.10>98.80 (-)

1.10e1

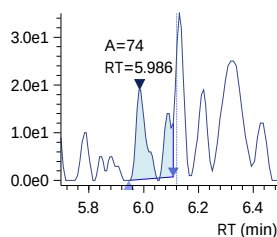


13C4-PFHpA

Conc. 1.5716

Q 367.10>322.00 (-)

3.50e1

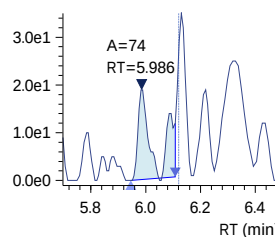


13C4-PFHpA_IS

Conc. 2.5000

ISTD 367.10>322.00 (-)

3.50e1



PFHpA

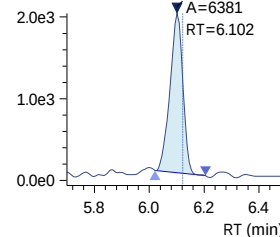
Conc. 236.1626

R#1 19.05 (20.13)

R#2 19.05 (0.00)

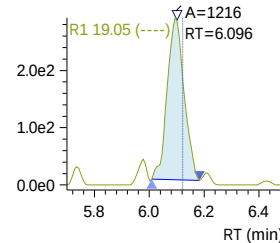
Q 363.10>319.00 (-)

2.05e3



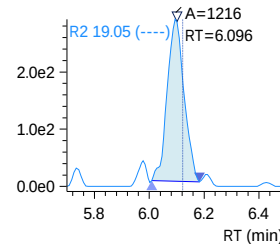
R1 363.10>169.00 (-)

2.92e2



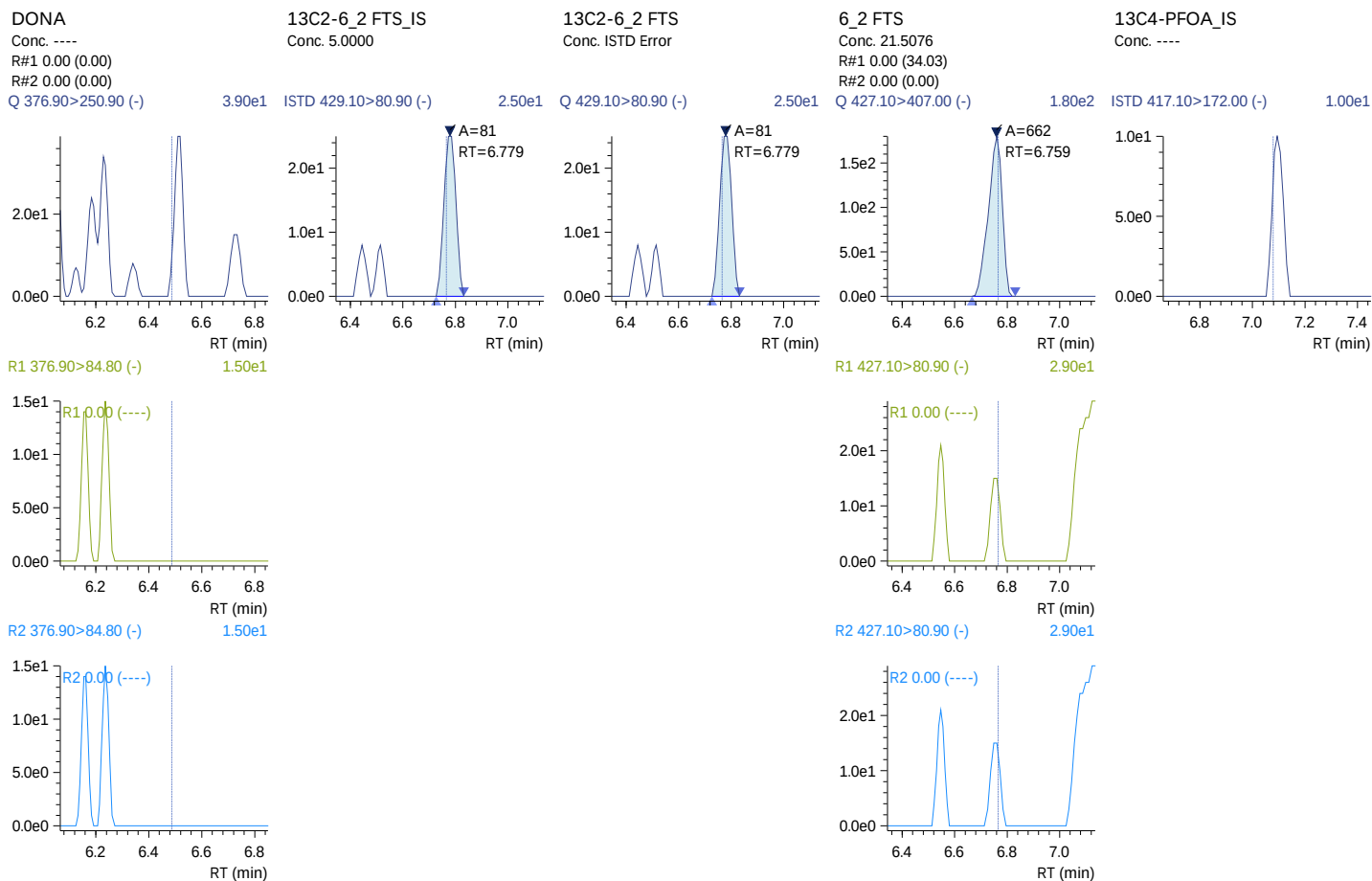
R2 363.10>169.00 (-)

2.92e2





240130_030 (continued)





240130_030 (continued)

13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. ISTD Error

PFOA
Conc. 147.3206
R#1 32.24 (22.46)
R#2 32.24 (0.00)

13C3-PFHxS
Conc. ISTD Error

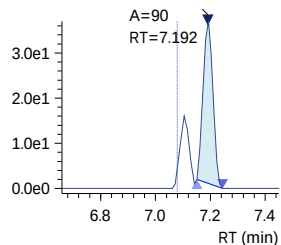
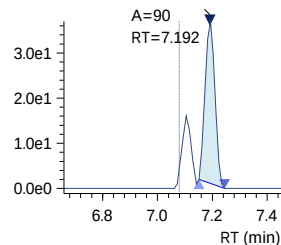
13C3-PFHxS_IS
Conc. 2.5000

ISTD 421.10>376.00 (-)

3.70e1

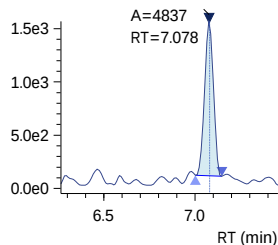
Q 421.10>376.00 (-)

3.70e1



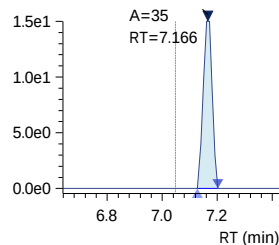
Q 413.00>369.00 (-)

1.57e3



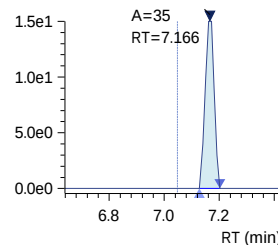
Q 402.10>79.90 (-)

1.50e1



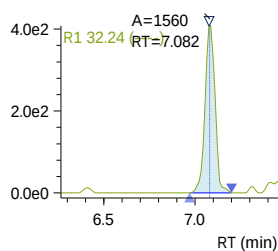
ISTD 402.10>79.90 (-)

1.50e1



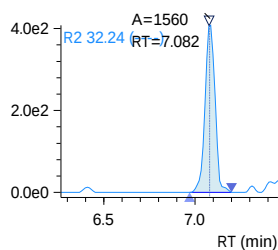
R1 413.00>169.00 (-)

4.08e2



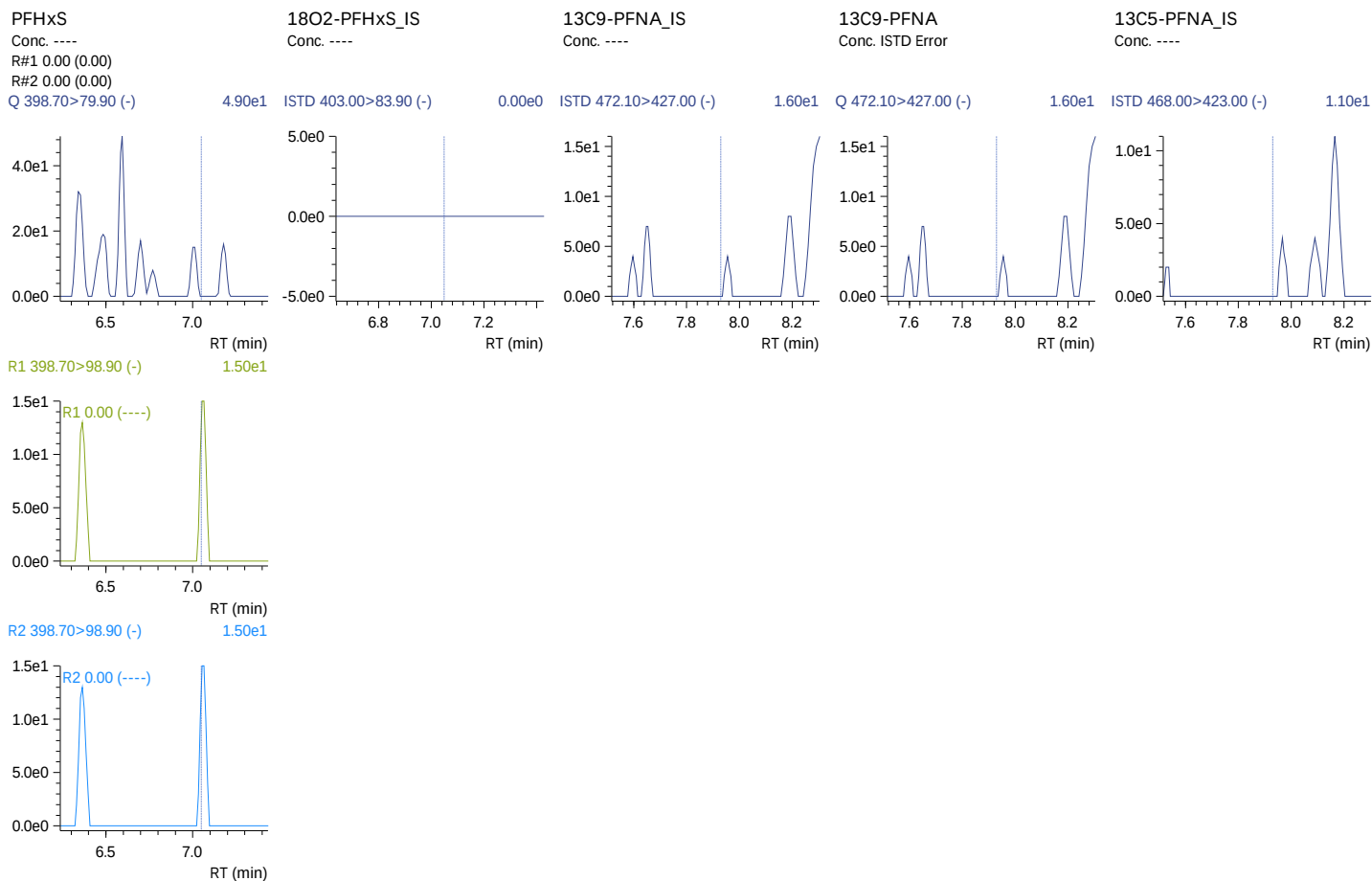
R2 413.00>169.00 (-)

4.08e2



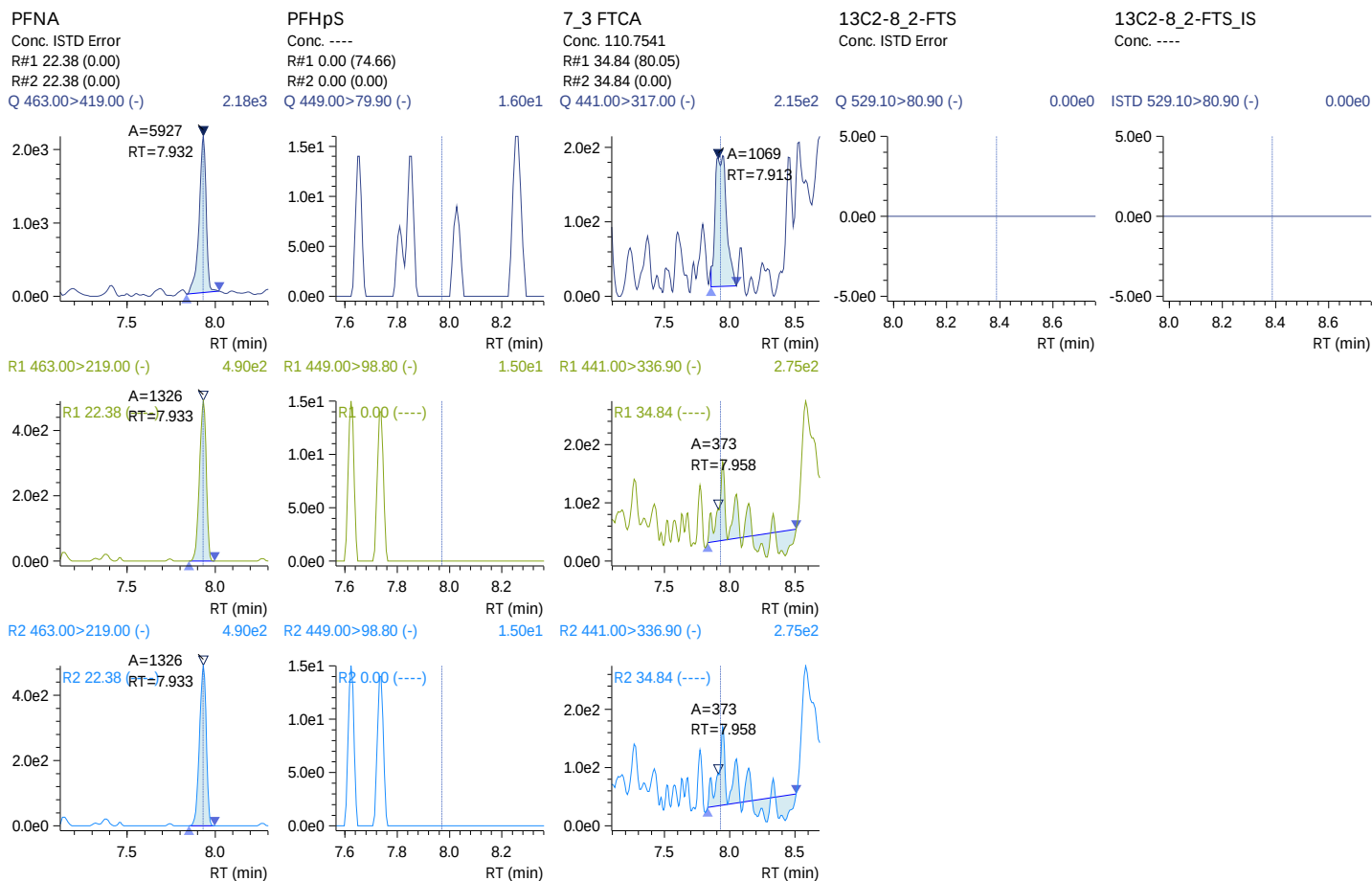


240130_030 (continued)



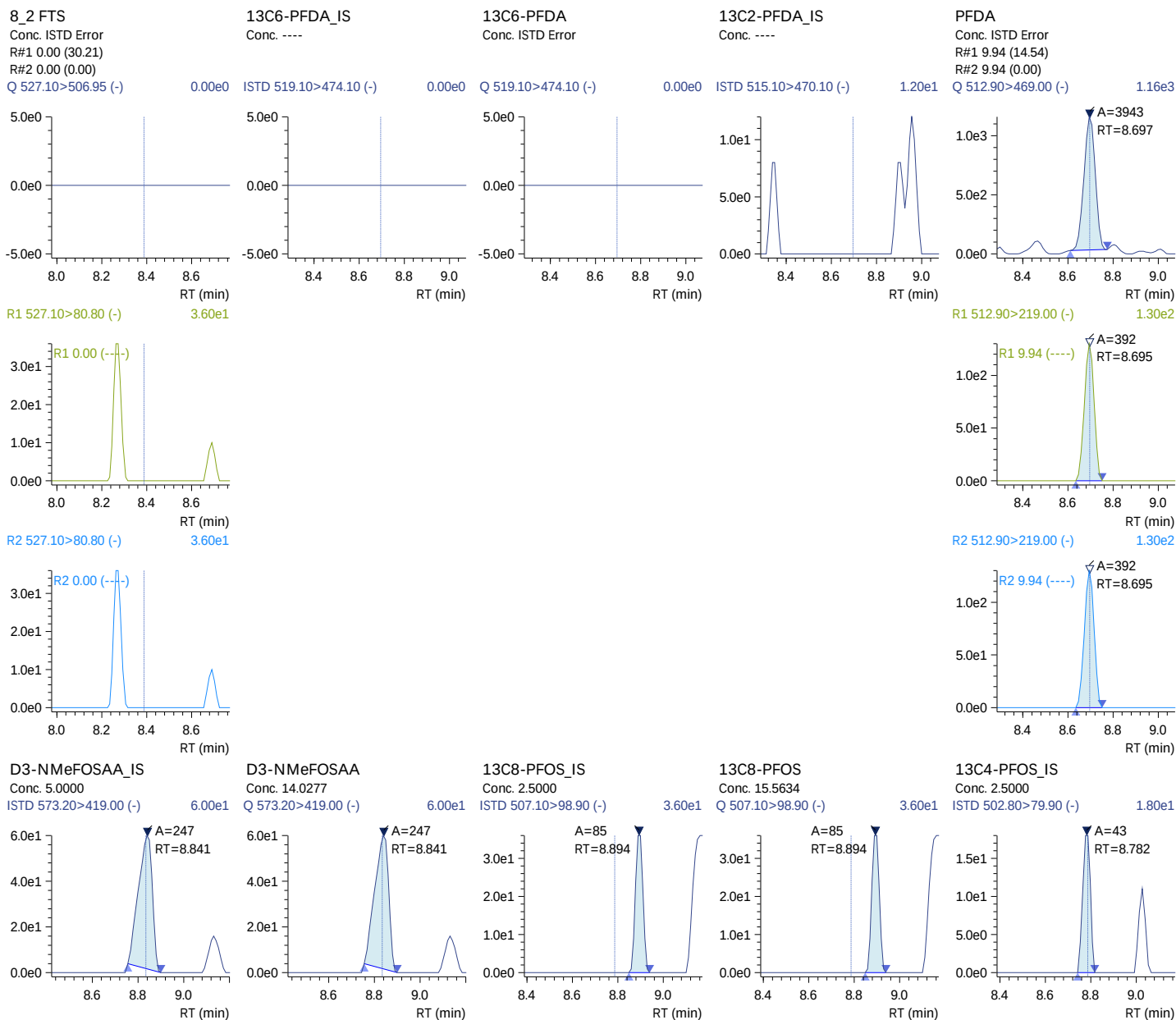


240130_030 (continued)



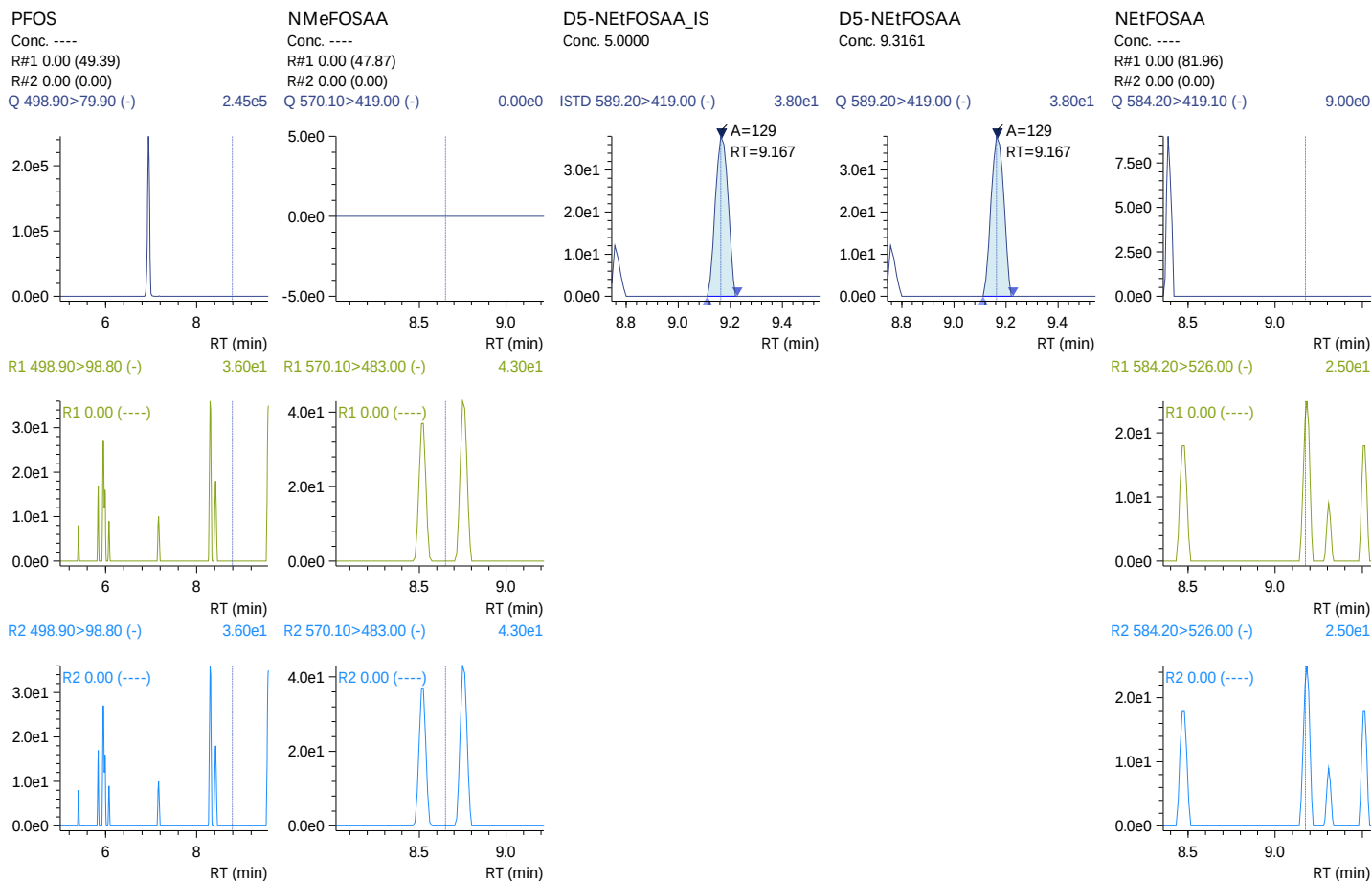


240130_030 (continued)





240130_030 (continued)





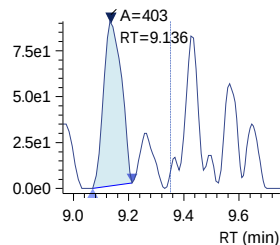
240130_030 (continued)

9-Cl-PF3ONS

Conc. 6.2586
 R#1 0.00 (31.39)
 R#2 0.00 (0.00)

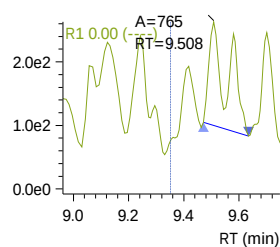
Q 530.80>351.00 (-)

9.10e1



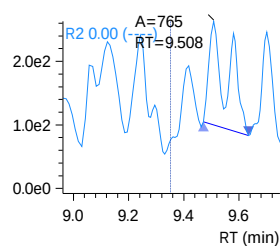
R1 532.80>353.00 (-)

2.63e2



R2 532.80>353.00 (-)

2.63e2

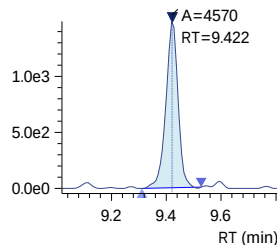


PFUnDA

Conc. ISTD Error
 R#1 0.00 (12.59)
 R#2 0.00 (0.00)

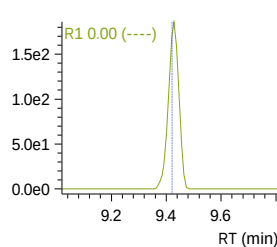
Q 563.10>519.00 (-)

1.49e3



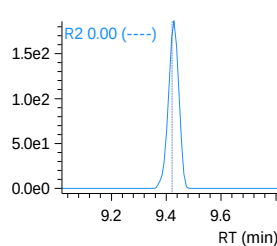
R1 563.10>269.10 (-)

1.86e2



R2 563.10>269.10 (-)

1.86e2

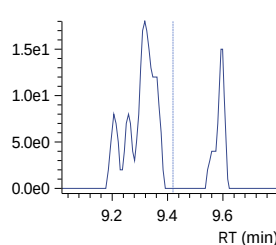


13C7-PFUnDA_IS

Conc. ----

ISTD 570.00>525.10 (-)

1.80e1

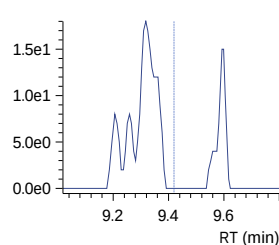


13C7-PFUnDA

Conc. ISTD Error

Q 570.00>525.10 (-)

1.80e1

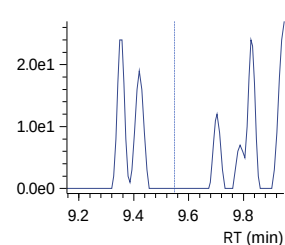


PFNS

Conc. ----
 R#1 0.00 (82.65)
 R#2 0.00 (0.00)

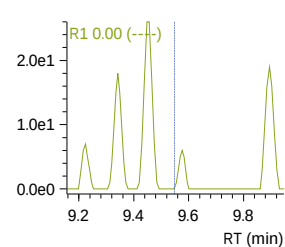
Q 548.80>79.90 (-)

2.70e1



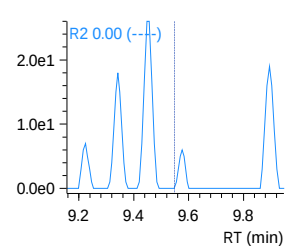
R1 548.80>98.80 (-)

2.60e1



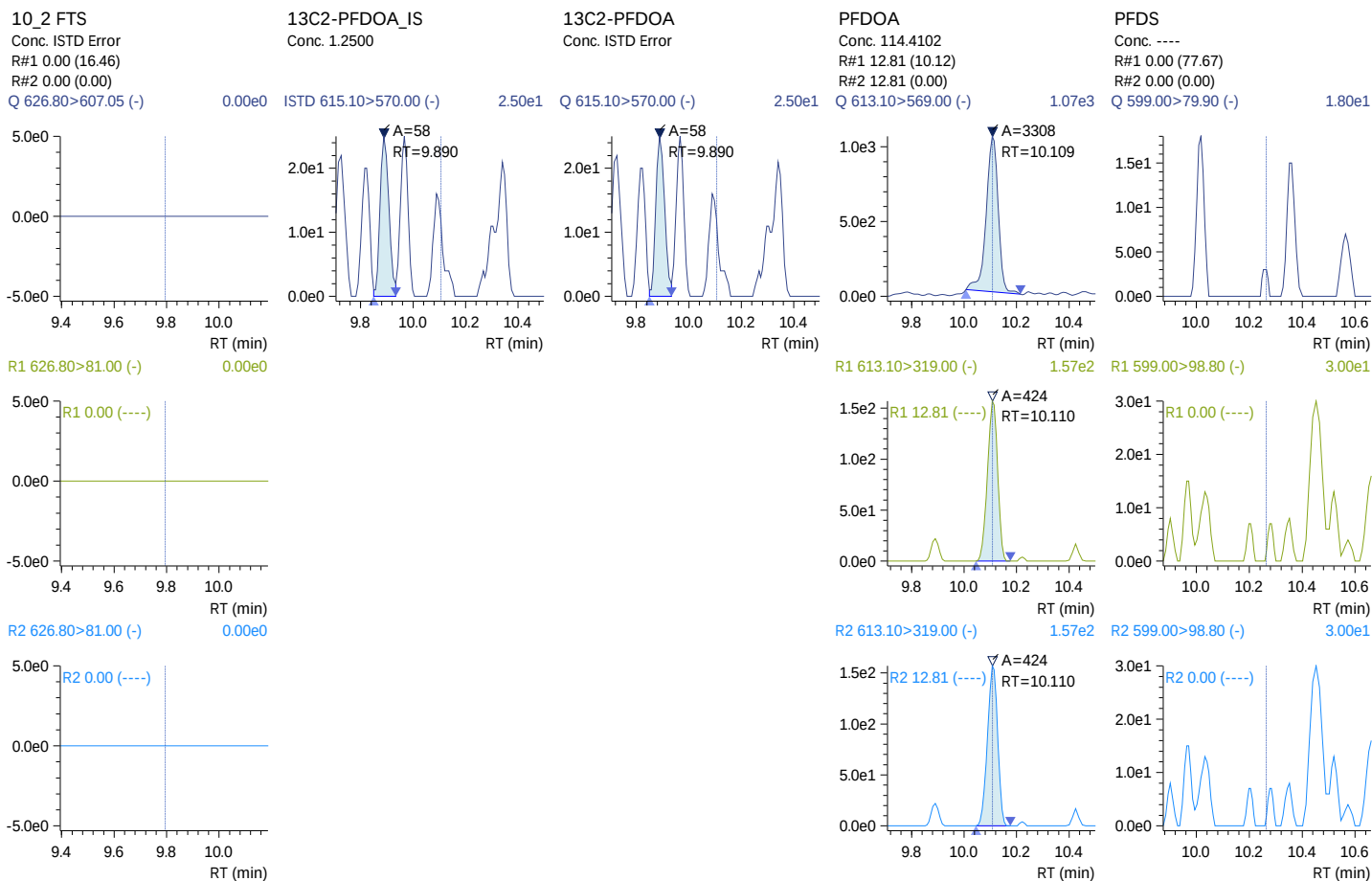
R2 548.80>98.80 (-)

2.60e1



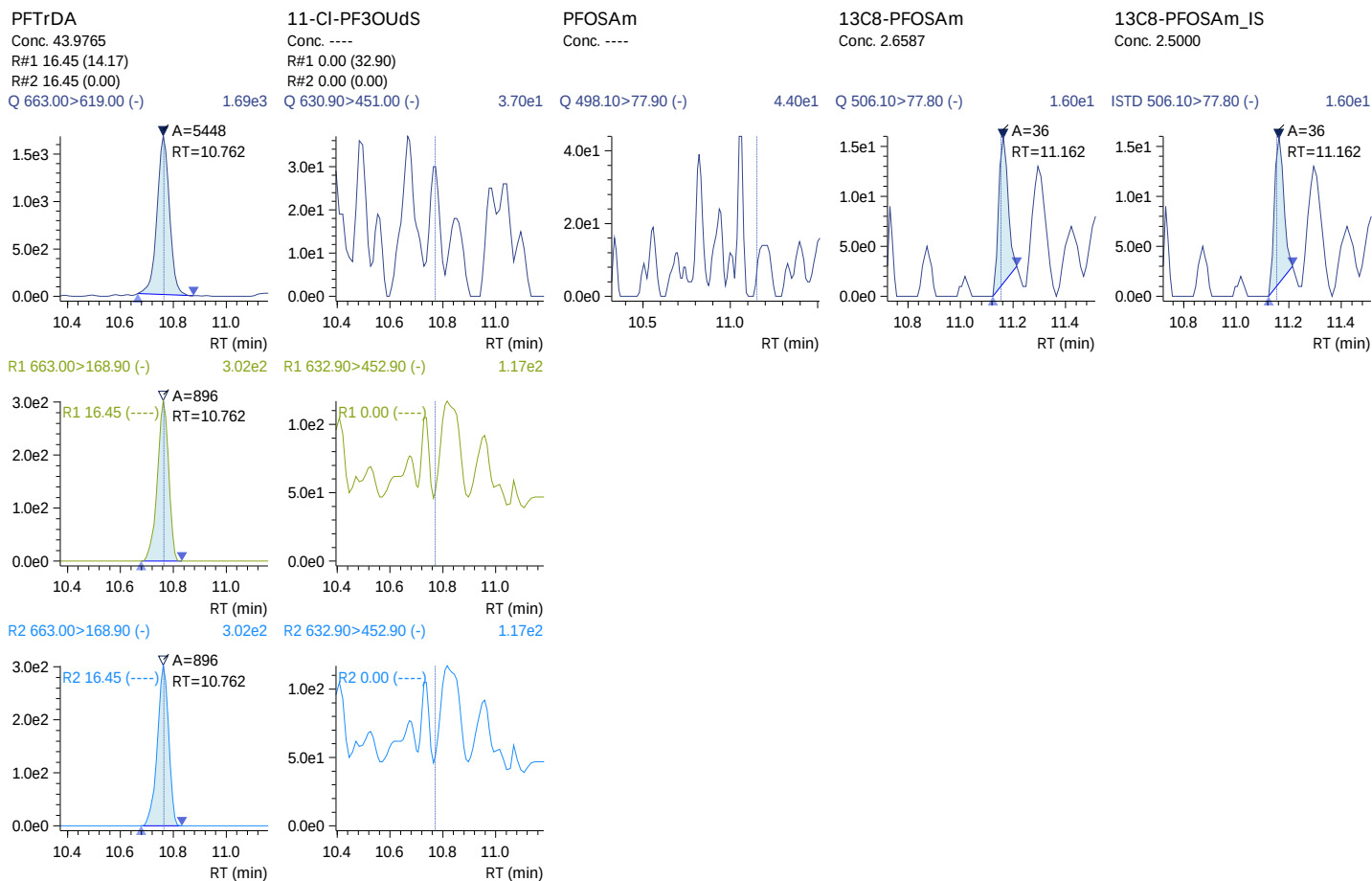


240130_030 (continued)



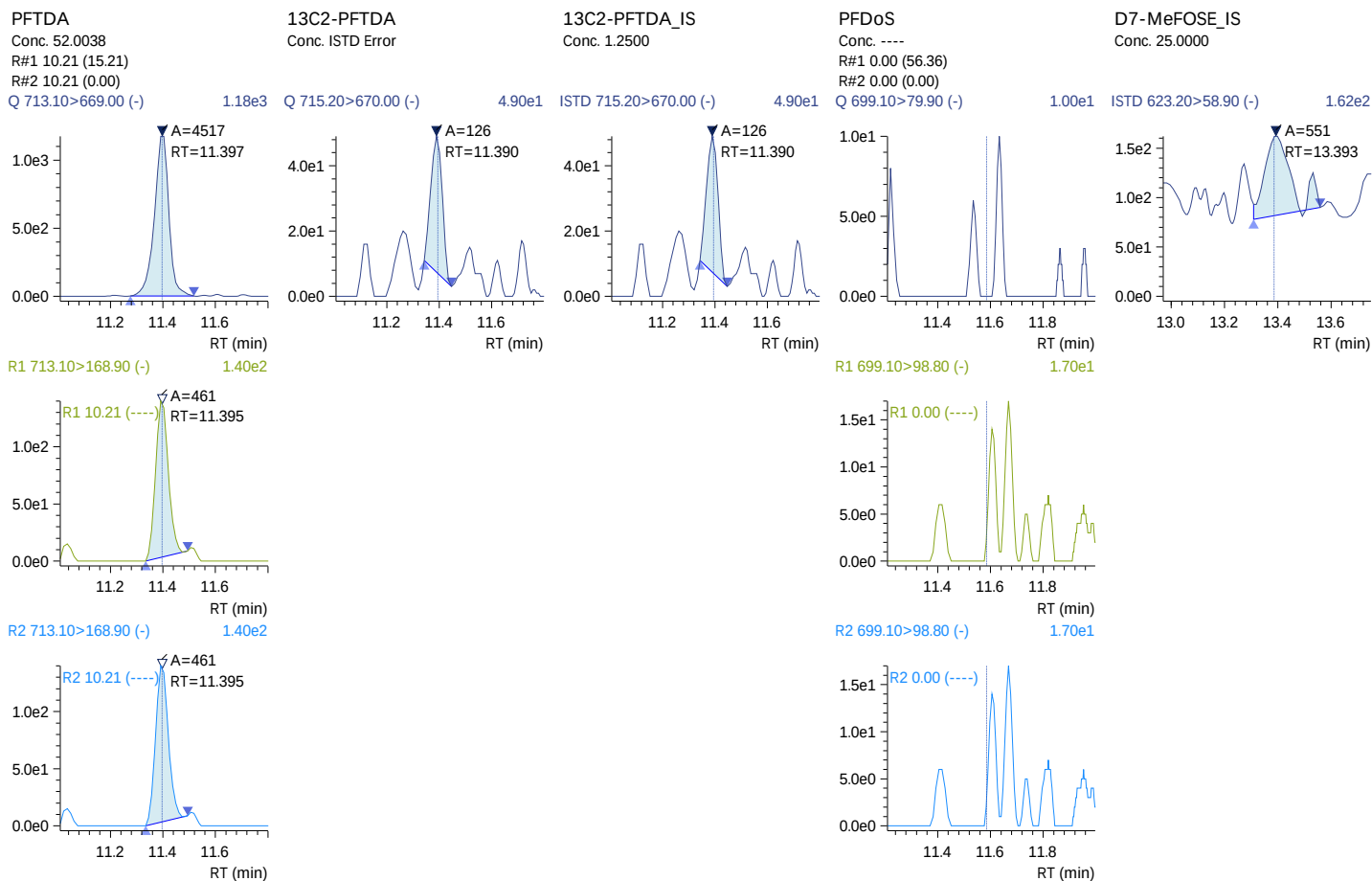


240130_030 (continued)





240130_030 (continued)





240130_030 (continued)

D7-MeFOSE
Conc. 156.4658

MeFOSE
Conc. ----

13C2-PFHXA_IS
Conc. 2.5000

13C2-PFHXA
Conc. ISTD Error

PFHXA
Conc. 22.2768
R#1 12.35 (9.60)
R#2 12.35 (0.00)

Q 623.20>58.90 (-)

1.62e2

Q 616.10>59.00 (-)

9.30e1

ISTD 815.00>770.05 (-)

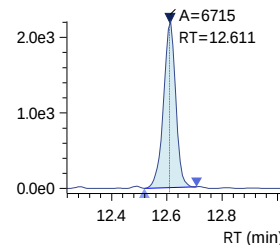
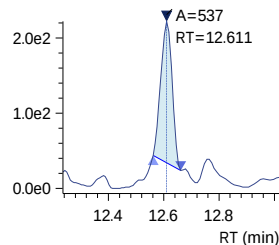
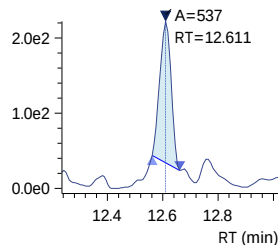
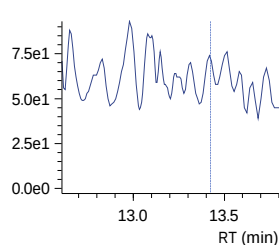
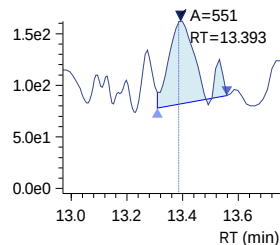
2.22e2

Q 815.00>770.05 (-)

2.22e2

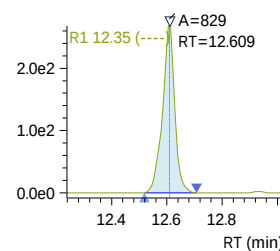
Q 813.00>768.95 (-)

2.21e3



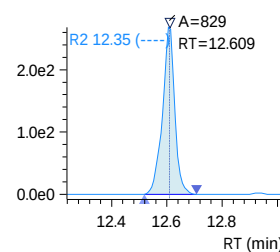
R1 813.00>218.95 (-)

2.68e2



R2 813.00>218.95 (-)

2.68e2





240130_030 (continued)

D3-MeFOSA
 Conc. ----

D3-MeFOSA_IS
 Conc. ----

MeFOSA
 Conc. ISTD Error
 R#1 0.00 (98.91)
 R#2 0.00 (0.00)

D9-EtFOSE_IS
 Conc. ----

D9-EtFOSE
 Conc. 89.6243

Q 515.00>219.00 (-)

1.50e1

ISTD 515.00>219.00 (-)

1.50e1

Q 511.90>219.00 (-)

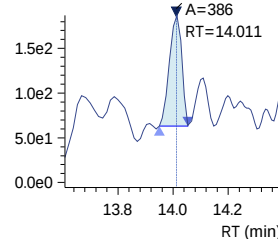
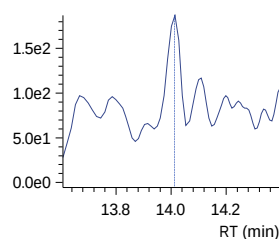
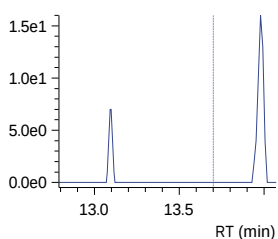
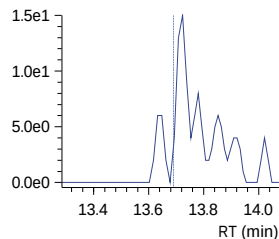
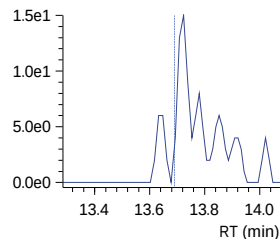
1.60e1

ISTD 639.20>58.90 (-)

1.87e2

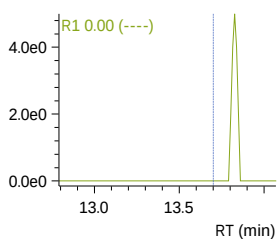
Q 639.20>58.90 (-)

1.87e2



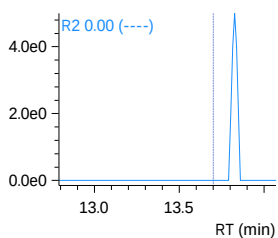
R1 511.90>169.00 (-)

5.00e0



R2 511.90>169.00 (-)

5.00e0





240130_030 (continued)

EtFOSE
Conc. ISTD Error

D5-EtFOSAm
Conc. ----

D5-EtFOSAm_IS
Conc. ----

EtFOSAm
Conc. ISTD Error

PFODA
Conc. 26.1219

Q 630.00>59.00 (-)

9.20e1

Q 531.10>219.00 (-)

1.10e1

ISTD 531.10>219.00 (-)

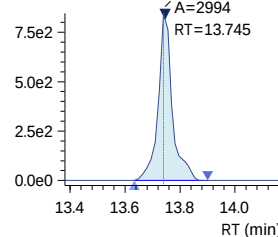
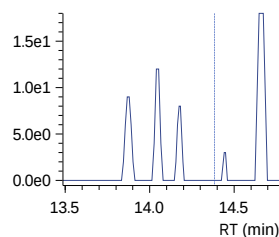
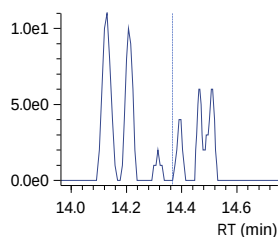
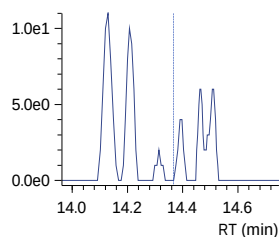
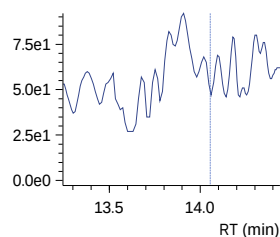
1.10e1

Q 526.00>219.00 (-)

1.80e1

Q 913.00>868.65 (-)

8.46e2

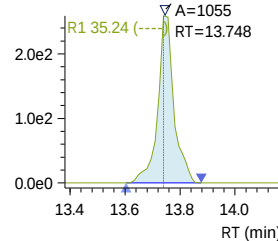
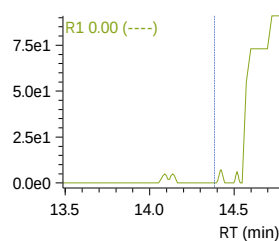


R1 526.00>169.00 (-)

9.10e1

R1 913.00>169.00 (-)

2.59e2

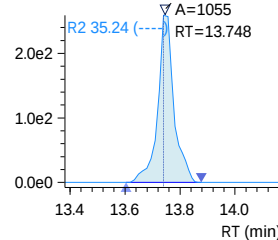
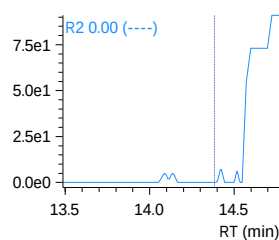


R2 526.00>169.00 (-)

9.10e1

R2 913.00>169.00 (-)

2.59e2

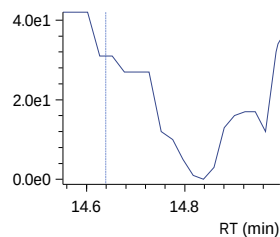


positive trans

Conc. ----

Q 514.80>219.10 (+)

4.20e1





240130_031

Sample ID: 1633 CCB
Date Acquired: 1/31/2024 2:21:13 AM
Acquired by: System Administrator
Data File: 240130_031
Vial: 54 | Inj. Volume: 10.0000uL | Tray: 1

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	491989	----	----	----	----	----	----	
13C4-PFBA_IS	216.80>171.90	----	491989	----	----	----	----	----	----	
13C3-PFBA_IS	216.00>172.00	----	283364	----	----	----	----	----	----	
PFBA	212.80>169.05	----	767	----	----	----	----	----	----	
PFMPA	229.00>84.90	----	----	----	----	----	----	----	----	
3_3 FTCA	241.00>177.10	241.00>117.00	----	0	0.00	139.21	----	----	----	
13C5-PFPeA	268.30>223.00	----	132490	----	----	----	----	----	----	
13C5-PFPeA_IS	268.30>223.00	----	132490	----	----	----	----	----	----	
PFPeA	263.00>219.00	----	784	----	----	----	----	----	----	
PFMBA	279.00>84.95	----	73	----	----	----	----	----	----	
13C2-4_2 FTS	329.10>80.90	----	163286	----	----	----	----	----	----	
13C2-4_2 FTS_IS	329.10>80.90	----	163286	----	----	----	----	----	----	
4_2 FTS	327.10>307.00	327.10>80.90	251	270	107.34	32.10	270	107.34	32.10	IRr
13C3-PFBS_IS	302.10>79.90	----	155340	----	----	----	----	----	----	
PFBS	298.70>79.90	298.70>98.80	234	68	28.99	44.81	68	28.99	44.81	
13C3-PFBS	302.10>79.90	----	155340	----	----	----	----	----	----	
NFDHA	295.00>201.00	295.00>84.90	----	0	0.00	35.54	0	0.00	35.54	
13C5-PFHxA	318.00>273.00	----	317950	----	----	----	----	----	----	
13C5-PFHxA_IS	318.00>273.00	----	317950	----	----	----	----	----	----	
13C2-PFHxA_IS	315.10>270.00	----	356220	----	----	----	----	----	----	
PFHxA	313.00>269.00	----	622	----	----	----	----	----	----	SN
PFEESA	314.80>135.00	314.80>82.90	----	0	0.00	5.22	0	0.00	5.22	
13C3-HFPO-DA	286.90>168.90	----	349142	----	----	----	----	----	----	
13C3-HFPO-DA_IS	286.90>168.90	----	349142	----	----	----	----	----	----	
HFPO-DA	284.90>168.90	284.90>184.90	----	0	0.00	59.79	0	0.00	59.79	
5_3 FTCA	341.00>237.05	341.00>217.00	----	0	0.00	157.08	0	0.00	157.08	
PFPeS	349.10>79.90	349.10>98.80	----	0	0.00	55.12	0	0.00	55.12	
13C4-PFHpA	367.10>322.00	----	382908	----	----	----	----	----	----	
13C4-PFHpA_IS	367.10>322.00	----	382908	----	----	----	----	----	----	
PFHpA	363.10>319.00	363.10>169.00	5761	1265	21.96	23.02	1265	21.96	23.02	
DONA	376.90>250.90	376.90>84.80	----	0	0.00	27.50	0	0.00	27.50	
13C2-6_2 FTS_IS	429.10>80.90	----	178239	----	----	----	----	----	----	
13C2-6_2 FTS	429.10>80.90	----	178239	----	----	----	----	----	----	
6_2 FTS	427.10>407.00	427.10>80.90	788	302	38.29	50.47	302	38.29	50.47	
13C4-PFOA_IS	417.10>172.00	----	27236	----	----	----	----	----	----	
13C8-PFOA_IS	421.10>376.00	----	358205	----	----	----	----	----	----	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240130_031 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	358205	----	----	----	----	----	----	----
PFOA	413.00>369.00	413.00>169.00	7809	1601	20.51	28.77	1601	20.51	28.77	
13C3-PFHxS	402.10>79.90	----	155055	----	----	----	----	----	----	----
13C3-PFHxS_IS	402.10>79.90	----	155055	----	----	----	----	----	----	----
PFHxS	398.70>79.90	398.70>98.90	669	424	63.32	60.90	424	63.32	60.90	
18O2-PFHxS_IS	403.00>83.90	----	142289	----	----	----	----	----	----	----
13C9-PFNA_IS	472.10>427.00	----	217968	----	----	----	----	----	----	----
13C9-PFNA	472.10>427.00	----	217968	----	----	----	----	----	----	----
13C5-PFNA_IS	468.00>423.00	----	201143	----	----	----	----	----	----	----
PFNA	463.00>419.00	463.00>219.00	6016	1524	25.34	19.31	1524	25.34	19.31	
PFHpS	449.00>79.90	449.00>98.80	----	0	0.00	52.44	0	0.00	52.44	
7_3 FTCA	441.00>317.00	441.00>336.90	969	403	41.60	129.46	403	41.60	129.46	IRr
13C2-8_2-FTS	529.10>80.90	----	132911	----	----	----	----	----	----	----
13C2-8_2-FTS_IS	529.10>80.90	----	132911	----	----	----	----	----	----	----
8_2 FTS	527.10>506.95	527.10>80.80	46	46	101.62	45.98	46	101.62	45.98	IRr
13C6-PFDA_IS	519.10>474.10	----	136013	----	----	----	----	----	----	----
13C6-PFDA	519.10>474.10	----	136013	----	----	----	----	----	----	----
13C2-PFDA_IS	515.10>470.10	----	123259	----	----	----	----	----	----	----
PFDA	512.90>469.00	512.90>219.00	4792	583	12.17	17.88	583	12.17	17.88	
D3-NMeFOSAA_IS	573.20>419.00	----	399029	----	----	----	----	----	----	----
D3-NMeFOSAA	573.20>419.00	----	399029	----	----	----	----	----	----	----
13C8-PFOS_IS	507.10>98.90	----	63546	----	----	----	----	----	----	----
13C8-PFOS	507.10>98.90	----	63546	----	----	----	----	----	----	----
13C4-PFOS_IS	502.80>79.90	----	171136	----	----	----	----	----	----	----
PFOS	498.90>79.90	498.90>98.80	----	0	0.00	53.60	0	0.00	53.60	
NMeFOSAA	570.10>419.00	570.10>483.00	----	0	0.00	64.89	0	0.00	64.89	
D5-NEtFOSAA_IS	589.20>419.00	----	342781	----	----	----	----	----	----	----
D5-NEtFOSAA	589.20>419.00	----	342781	----	----	----	----	----	----	----
NEtFOSAA	584.20>419.10	584.20>526.00	----	0	0.00	96.07	0	0.00	96.07	
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	----	0	0.00	30.95	0	0.00	30.95	
PFUnDA	563.10>519.00	563.10>269.10	5108	518	10.14	11.01	518	10.14	11.01	
13C7-PFUnDA_IS	570.00>525.10	----	181880	----	----	----	----	----	----	----
13C7-PFUnDA	570.00>525.10	----	181880	----	----	----	----	----	----	----
PFNS	548.80>79.90	548.80>98.80	----	0	0.00	60.44	0	0.00	60.44	
10_2 FTS	626.80>607.05	626.80>81.00	117	16	13.82	36.14	16	13.82	36.14	IRr
13C2-PFDOA_IS	615.10>570.00	----	219062	----	----	----	----	----	----	----
13C2-PFDOA	615.10>570.00	----	219062	----	----	----	----	----	----	----
PFDOA	613.10>569.00	613.10>319.00	3903	423	10.83	10.16	423	10.83	10.16	
PFDS	599.00>79.90	599.00>98.80	----	0	0.00	58.26	0	0.00	58.26	
PFTrDA	663.00>619.00	663.00>168.90	5652	759	13.42	16.18	759	13.42	16.18	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240130_031 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	165	193	117.01	34.99	193	117.01	34.99	IRr
PFOSAm	498.10>77.90	----	253	----	----	----	----	----	----	
13C8-PFOSAm	506.10>77.80	----	165579	----	----	----	----	----	----	
13C8-PFOSAm_IS	506.10>77.80	----	165579	----	----	----	----	----	----	
PFTDA	713.10>669.00	713.10>168.90	4046	676	16.71	18.05	676	16.71	18.05	
13C2-PFTDA	715.20>670.00	----	151722	----	----	----	----	----	----	
13C2-PFTDA_IS	715.20>670.00	----	151722	----	----	----	----	----	----	
PFDoS	699.10>79.90	699.10>98.80	48	54	112.95	61.13	54	112.95	61.13	IRr
D7-MeFOSE_IS	623.20>58.90	----	397488	----	----	----	----	----	----	
D7-MeFOSE	623.20>58.90	----	397488	----	----	----	----	----	----	
MeFOSE	616.10>59.00	----	----	----	----	----	----	----	----	
13C2-PFHxDA_IS	815.00>770.05	----	387474	----	----	----	----	----	----	
13C2-PFHxDA	815.00>770.05	----	387474	----	----	----	----	----	----	
PFHxDA	813.00>768.95	813.00>218.95	6677	728	10.91	11.66	728	10.91	11.66	
D3-MeFOSA	515.00>219.00	----	38881	----	----	----	----	----	----	
D3-MeFOSA_IS	515.00>219.00	----	38881	----	----	----	----	----	----	
MeFOSA	511.90>219.00	511.90>169.00	----	0	0.00	160.44	0	0.00	160.44	
D9-EtFOSE_IS	639.20>58.90	----	491719	----	----	----	----	----	----	
D9-EtFOSE	639.20>58.90	----	487967	----	----	----	----	----	----	
EtFOSE	630.00>59.00	----	----	----	----	----	----	----	----	
D5-EtFOSAm	531.10>219.00	----	56905	----	----	----	----	----	----	
D5-EtFOSAm_IS	531.10>219.00	----	56905	----	----	----	----	----	----	
EtFOSAm	526.00>219.00	526.00>169.00	----	0	0.00	159.63	0	0.00	159.63	
PFODA	913.00>868.65	913.00>169.00	2557	999	39.09	36.03	999	39.09	36.03	

Flag ID key: IRr: Ion Ratio (Relative), SN: S/N



240130_031

Sample ID: 1633 CCB
Date Acquired: 1/31/2024 2:21:13 AM
Acquired by: System Administrator
Data File: 240130_031
Vial: 54 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.422	0.084	-0.001	491989	283364	13C3-PFBA_IS	11.7173	ng/mL	
13C4-PFBA_IS	Auto	1.422	0.084	----	491989	491989	----	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.423	0.086	----	283364	283364	----	5.0000	ng/mL	
PFBA	M	1.432	0.091	0.010	767	491989	13C4-PFBA_IS	0.0040	ng/mL	
PFMPA	ND(W/B)	----	----	----	----	132490	13C5-PFPeA_IS	----	ng/mL	
3_3 FTCA	ND(W/B)	----	----	----	----	132490	13C5-PFPeA_IS	----	ng/mL	
13C5-PFPeA	Auto	3.503	0.064	-1.480	132490	356220	13C2-PFHxA_IS	5.1726	ng/mL	
13C5-PFPeA_IS	Auto	3.503	0.064	----	132490	132490	----	5.0000	ng/mL	
PFPeA	Auto	3.505	0.063	0.002	784	132490	13C5-PFPeA_IS	0.0084	ng/mL	
PFMBA	M	4.036	0.067	0.533	73	132490	13C5-PFPeA_IS	0.0013	ng/mL	
13C2-4_2 FTS	Auto	4.666	0.046	-2.418	163286	142289	18O2-PFHxS_IS	6.0964	ng/mL	
13C2-4_2 FTS_IS	Auto	4.666	0.046	----	163286	163286	----	5.0000	ng/mL	
4_2 FTS	Auto	4.662	0.042	-0.004	251	163286	13C2-4_2 FTS_IS	0.0031	ng/mL	IRr
13C3-PFBS_IS	Auto	4.646	0.059	----	155340	155340	----	2.5000	ng/mL	
PFBS	M	4.643	0.055	-0.003	234	155340	13C3-PFBS_IS	0.0030	ng/mL	
13C3-PFBS	Auto	4.646	0.059	-2.438	155340	142289	18O2-PFHxS_IS	2.9260	ng/mL	
NFDHA	ND(W/B)	----	----	----	----	317950	13C5-PFHxA_IS	----	ng/mL	
13C5-PFHxA	Auto	4.982	0.050	-0.001	317950	356220	13C2-PFHxA_IS	2.7652	ng/mL	
13C5-PFHxA_IS	Auto	4.982	0.050	----	317950	317950	----	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	4.983	0.050	----	356220	356220	----	2.5000	ng/mL	
PFHxA	M	4.966	0.032	-0.016	622	317950	13C5-PFHxA_IS	-0.0008	ng/mL	SN
PFEESA	ND(W/B)	----	----	----	----	317950	13C5-PFHxA_IS	----	ng/mL	
13C3-HFPO-DA	Auto	5.457	0.045	0.474	349142	356220	13C2-PFHxA_IS	11.0597	ng/mL	
13C3-HFPO-DA_IS	Auto	5.457	0.045	----	349142	349142	----	10.0000	ng/mL	
HFPO-DA	ND(W/B)	----	----	----	----	349142	13C3-HFPO-DA_IS	----	ng/mL	
5_3 FTCA	ND(W/B)	----	----	----	----	317950	13C5-PFHxA_IS	----	ng/mL	
PFPeS	ND(W/B)	----	----	----	----	155055	13C3-PFHxS_IS	----	ng/mL	
13C4-PFHpA	Auto	6.160	0.040	1.177	382908	356220	13C2-PFHxA_IS	2.6470	ng/mL	
13C4-PFHpA_IS	Auto	6.160	0.040	----	382908	382908	----	2.5000	ng/mL	
PFHpA	Auto	6.141	0.019	-0.019	5761	382908	13C4-PFHpA_IS	0.0268	ng/mL	
DONA	ND(W/B)	----	----	----	----	349142	13C3-HFPO-DA_IS	----	ng/mL	
13C2-6_2 FTS_IS	Auto	6.799	0.033	----	178239	178239	----	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.799	0.033	-0.285	178239	142289	18O2-PFHxS_IS	6.3925	ng/mL	
6_2 FTS	MI R1 R2	6.795	0.030	-0.004	788	178239	13C2-6_2 FTS_IS	0.0116	ng/mL	
13C4-PFOA_IS	Auto	7.113	0.034	----	27236	27236	----	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.113	0.035	----	358205	358205	----	2.5000	ng/mL	
13C8-PFOA	Auto	7.113	0.035	0.000	358205	27236	13C4-PFOA_IS	2.7577	ng/mL	
PFOA	Auto	7.111	0.030	-0.002	7809	358205	13C8-PFOA_IS	0.0431	ng/mL	
13C3-PFHxS	Auto	7.084	0.036	0.000	155055	142289	18O2-PFHxS_IS	3.1091	ng/mL	
13C3-PFHxS_IS	Auto	7.084	0.036	----	155055	155055	----	2.5000	ng/mL	
PFHxS	M	7.084	0.036	0.000	669	155055	13C3-PFHxS_IS	0.0099	ng/mL	
18O2-PFHxS_IS	Auto	7.084	0.036	----	142289	142289	----	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.962	0.033	----	217968	217968	----	1.2500	ng/mL	
13C9-PFNA	Auto	7.962	0.033	0.000	217968	201143	13C5-PFNA_IS	1.4639	ng/mL	
13C5-PFNA_IS	Auto	7.962	0.032	----	201143	201143	----	1.2500	ng/mL	
PFNA	M	7.961	0.031	-0.001	6016	217968	13C9-PFNA_IS	0.0227	ng/mL	
PFHpS	ND(W/B)	----	----	----	----	63546	13C8-PFOS_IS	----	ng/mL	
7_3 FTCA	M	7.965	0.036	2.983	969	317950	13C5-PFHxA_IS	0.0580	ng/mL	IRr
13C2-8_2-FTS	Auto	8.417	0.029	1.333	132911	142289	18O2-PFHxS_IS	5.6145	ng/mL	
13C2-8_2-FTS_IS	Auto	8.417	0.029	----	132911	132911	----	5.0000	ng/mL	
8_2 FTS	M	8.403	0.015	-0.014	46	132911	13C2-8_2-FTS_IS	0.0009	ng/mL	IRr
13C6-PFDA_IS	Auto	8.723	0.028	----	136013	136013	----	1.2500	ng/mL	
13C6-PFDA	Auto	8.723	0.028	-0.001	136013	123259	13C2-PFDA_IS	1.3770	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_031 (continued)

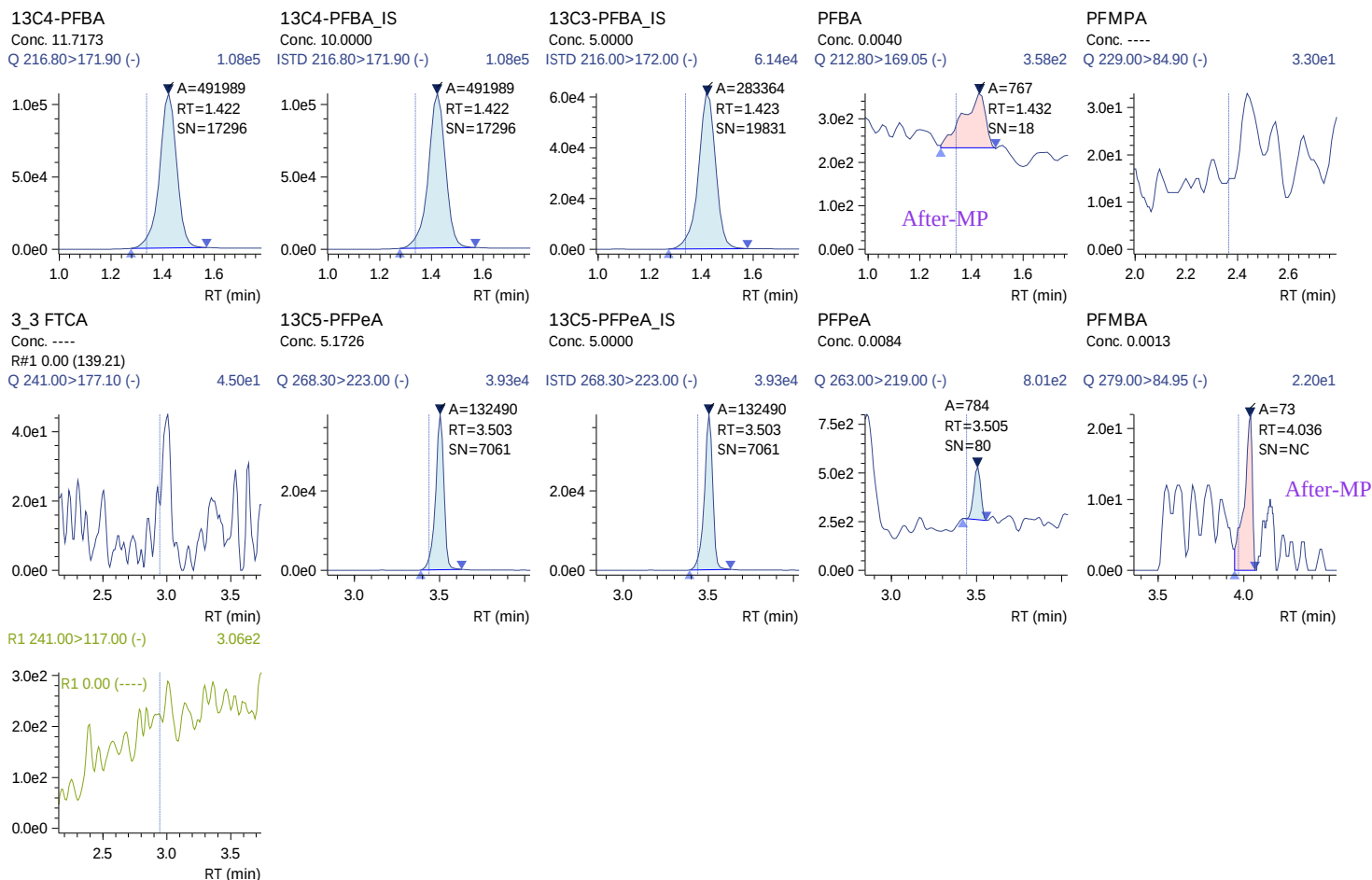
(Table continued from previous page)

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C2-PFDA_IS	Auto	8.724	0.028	----	123259	123259	----	1.2500	ng/mL	
PFDA	M	8.724	0.027	0.001	4792	136013	13C6-PFDA_IS	0.0417	ng/mL	
D3-NMeFOSAA_IS	Auto	8.860	0.026	----	399029	399029	----	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.860	0.026	0.042	399029	171136	13C4-PFOS_IS	5.7267	ng/mL	
13C8-PFOS_IS	Auto	8.817	0.031	----	63546	63546	----	2.5000	ng/mL	
13C8-PFOS	Auto	8.817	0.031	-0.001	63546	171136	13C4-PFOS_IS	2.9505	ng/mL	
13C4-PFOS_IS	Auto	8.818	0.031	----	171136	171136	----	2.5000	ng/mL	
PFOS	ND(W/B)	----	----	----	----	63546	13C8-PFOS_IS	----	ng/mL	
NMeFOSAA	ND(W/B)	----	----	----	----	399029	D3-NMeFOSAA_IS	----	ng/mL	
D5-NetFOSAA_IS	Auto	9.190	0.026	----	342781	342781	----	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.190	0.026	0.372	342781	171136	13C4-PFOS_IS	6.2422	ng/mL	
NetFOSAA	ND(W/B)	----	----	----	----	342781	D5-NetFOSAA_IS	----	ng/mL	
9-CI-PF3ONS	ND(W/B)	----	----	----	----	349142	13C3-HFPO-DA_IS	----	ng/mL	
PFUnDA	Auto	9.448	0.027	0.002	5108	181880	13C7-PFUnDA_IS	0.0191	ng/mL	
13C7-PFUnDA_IS	Auto	9.446	0.027	----	181880	181880	----	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.446	0.027	0.722	181880	123259	13C2-PFDA_IS	1.4819	ng/mL	
PFNS	ND(W/B)	----	----	----	----	63546	13C8-PFOS_IS	----	ng/mL	
10_2 FTS	M	9.822	0.027	1.405	117	132911	13C2-8_2-FTS_IS	0.0017	ng/mL	IRr
13C2-PFDOA_IS	Auto	10.131	0.024	----	219062	219062	----	1.2500	ng/mL	
13C2-PFDOA	Auto	10.131	0.024	1.407	219062	123259	13C2-PFDA_IS	1.4951	ng/mL	
PFDOA	Auto	10.132	0.024	0.001	3903	219062	13C2-PFDOA_IS	0.0027	ng/mL	
PFDS	ND(W/B)	----	----	----	----	63546	13C8-PFOS_IS	----	ng/mL	
PFTDA	Auto	10.790	0.026	-0.628	5652	151722	13C2-PFTDA_IS	0.0163	ng/mL	
11-CI-PF3OUdS	M	10.809	0.038	5.352	165	349142	13C3-HFPO-DA_IS	0.0007	ng/mL	IRr
PFOSAm	M	11.163	0.013	-0.002	253	165579	13C8-PFOSAm_IS	0.0044	ng/mL	
13C8-PFOSAm	Auto	11.165	0.010	2.347	165579	171136	13C4-PFOS_IS	3.0458	ng/mL	
13C8-PFOSAm_IS	Auto	11.165	0.010	----	165579	165579	----	2.5000	ng/mL	
PFTDA	Auto	11.419	0.023	0.001	4046	151722	13C2-PFTDA_IS	0.0158	ng/mL	
13C2-PFTDA	Auto	11.418	0.023	2.694	151722	123259	13C2-PFDA_IS	1.4672	ng/mL	
13C2-PFTDA_IS	Auto	11.418	0.023	----	151722	151722	----	1.2500	ng/mL	
PFDoS	M	11.610	0.024	2.793	48	63546	13C8-PFOS_IS	0.0016	ng/mL	IRr
D7-MeFOSE_IS	Auto	13.388	0.002	----	397488	397488	----	25.0000	ng/mL	
D7-MeFOSE	Auto	13.388	0.002	4.570	397488	171136	13C4-PFOS_IS	28.4821	ng/mL	
MeFOSE	ND(W/B)	----	----	----	----	397488	D7-MeFOSE_IS	----	ng/mL	
13C2-PFHXA_IS	Auto	12.625	0.016	----	387474	387474	----	2.5000	ng/mL	
13C2-PFHXA	Auto	12.625	0.016	3.901	387474	123259	13C2-PFDA_IS	2.7998	ng/mL	
PFHXDA	Auto	12.626	0.016	0.001	6677	387474	13C2-PFHXA_IS	0.0319	ng/mL	
D3-MeFOSA	Auto	13.694	0.004	4.876	38881	171136	13C4-PFOS_IS	2.7395	ng/mL	
D3-MeFOSA_IS	Auto	13.694	0.004	----	38881	38881	----	2.5000	ng/mL	
MeFOSA	ND(W/B)	----	----	----	----	38881	D3-MeFOSA_IS	----	ng/mL	
D9-EtFOSE_IS	Auto	14.017	0.004	----	491719	491719	----	25.0000	ng/mL	
D9-EtFOSE	Auto	14.017	0.004	5.199	487967	171136	13C4-PFOS_IS	28.5731	ng/mL	
EtFOSE	ND(W/B)	----	----	----	----	491719	D9-EtFOSE_IS	----	ng/mL	
D5-EtFOSAm	Auto	14.369	0.003	5.551	56905	171136	13C4-PFOS_IS	2.8998	ng/mL	
D5-EtFOSAm_IS	Auto	14.369	0.003	----	56905	56905	----	2.5000	ng/mL	
EtFOSAm	ND(W/B)	----	----	----	----	56905	D5-EtFOSAm_IS	----	ng/mL	
PFODA	MI R1 R2	13.762	0.022	1.137	2557	387474	13C2-PFHXA_IS	0.0554	ng/mL	

Flag ID key: IRr: Ion Ratio (Relative), SN: S/N



240130_031 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_031 (continued)

13C2-4_2 FTS
Conc. 6.0964

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. 0.0031
R#1 107.34 (32.10)
R#2 107.34 (32.10)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 0.0030
R#1 28.99 (44.81)
R#2 28.99 (44.81)

Q 329.10>80.90 (-)

5.22e4

ISTD 329.10>80.90 (-)

5.22e4

Q 327.10>307.00 (-)

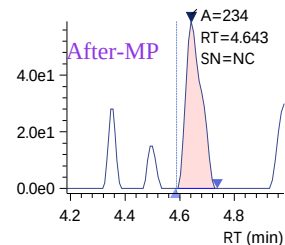
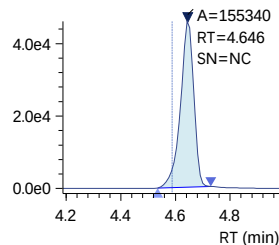
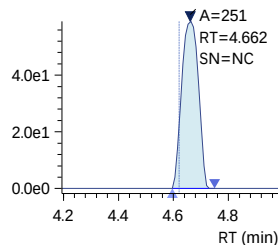
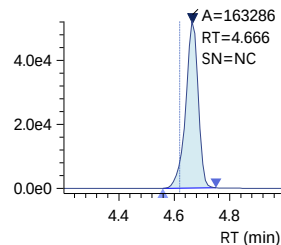
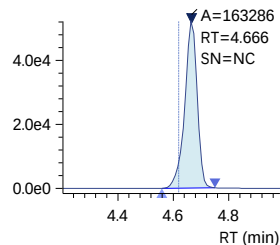
5.90e1

ISTD 302.10>79.90 (-)

4.62e4

Q 298.70>79.90 (-)

5.90e1

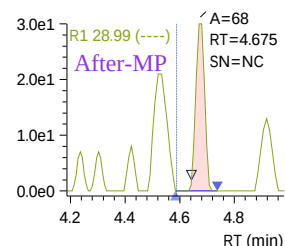
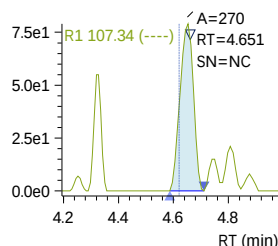


R1 327.10>80.90 (-)

7.90e1

R1 298.70>98.80 (-)

3.00e1

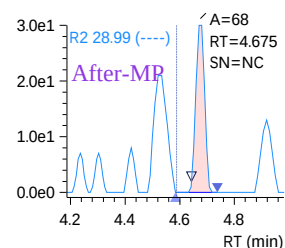
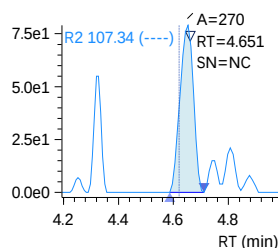


R2 327.10>80.90 (-)

7.90e1

R2 298.70>98.80 (-)

3.00e1





240130_031 (continued)

13C3-PFBS
Conc. 2.9260

NFDHA
Conc. ----
R#1 0.00 (35.54)
R#2 0.00 (35.54)

13C5-PFHxA
Conc. 2.7652

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

Q 302.10>79.90 (-)

4.62e4

Q 295.00>201.00 (-)

1.13e2

Q 318.00>273.00 (-)

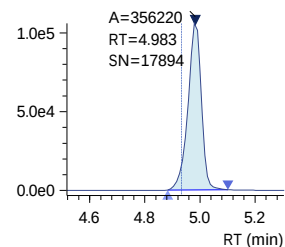
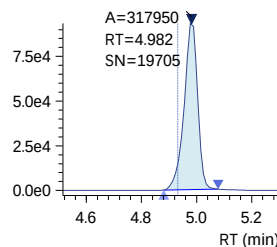
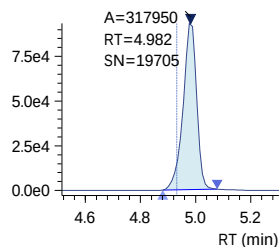
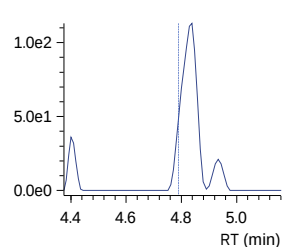
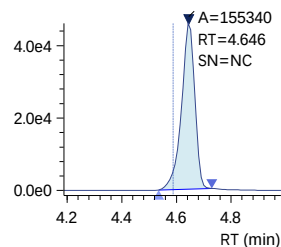
9.35e4

ISTD 318.00>273.00 (-)

9.35e4

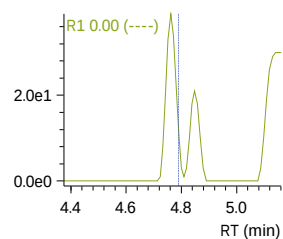
ISTD 315.10>270.00 (-)

1.06e5



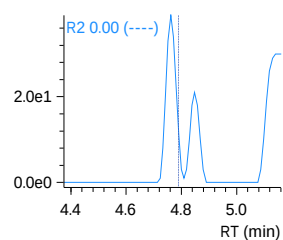
R1 295.00>84.90 (-)

3.90e1



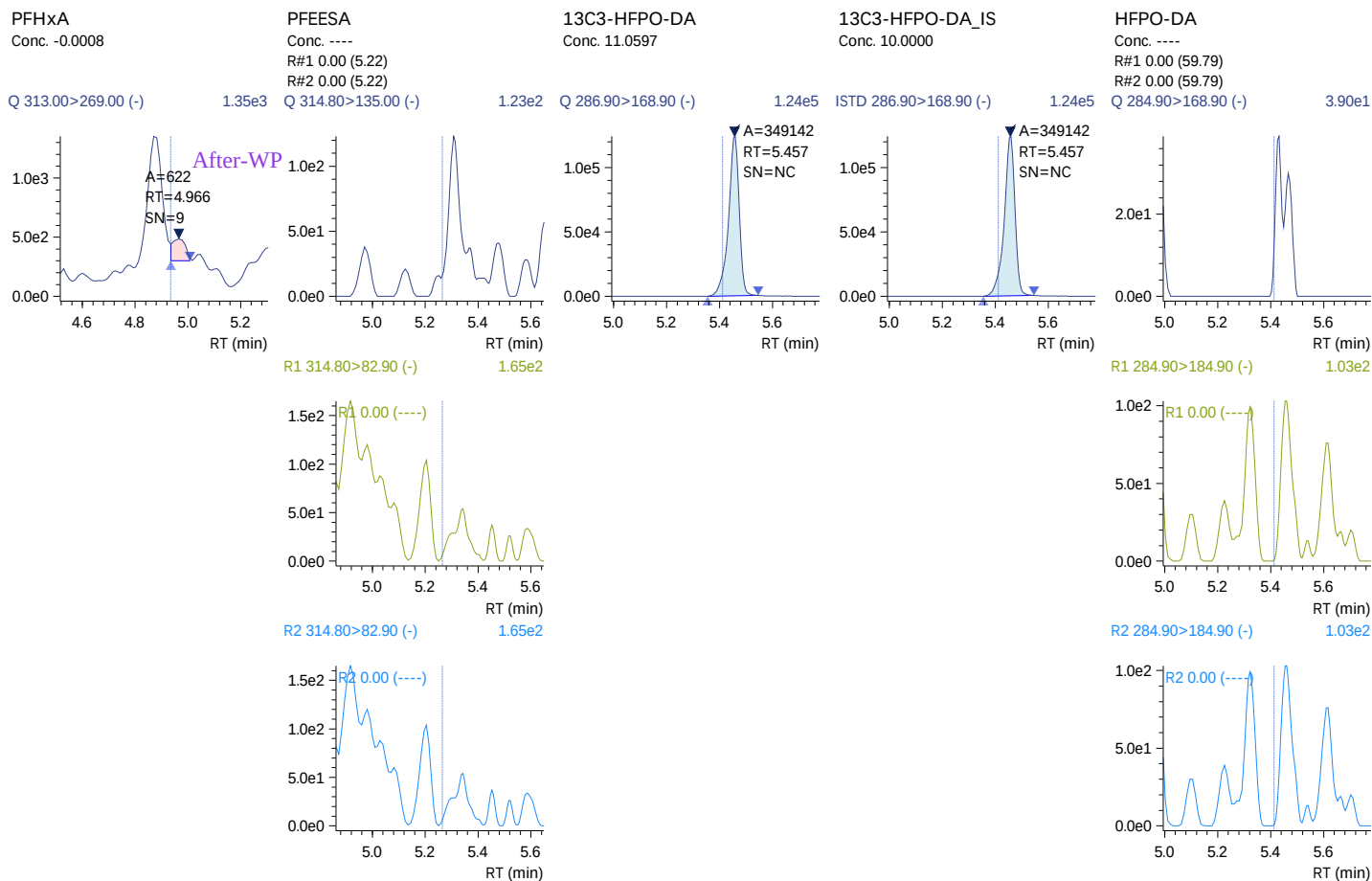
R2 295.00>84.90 (-)

3.90e1





240130_031 (continued)

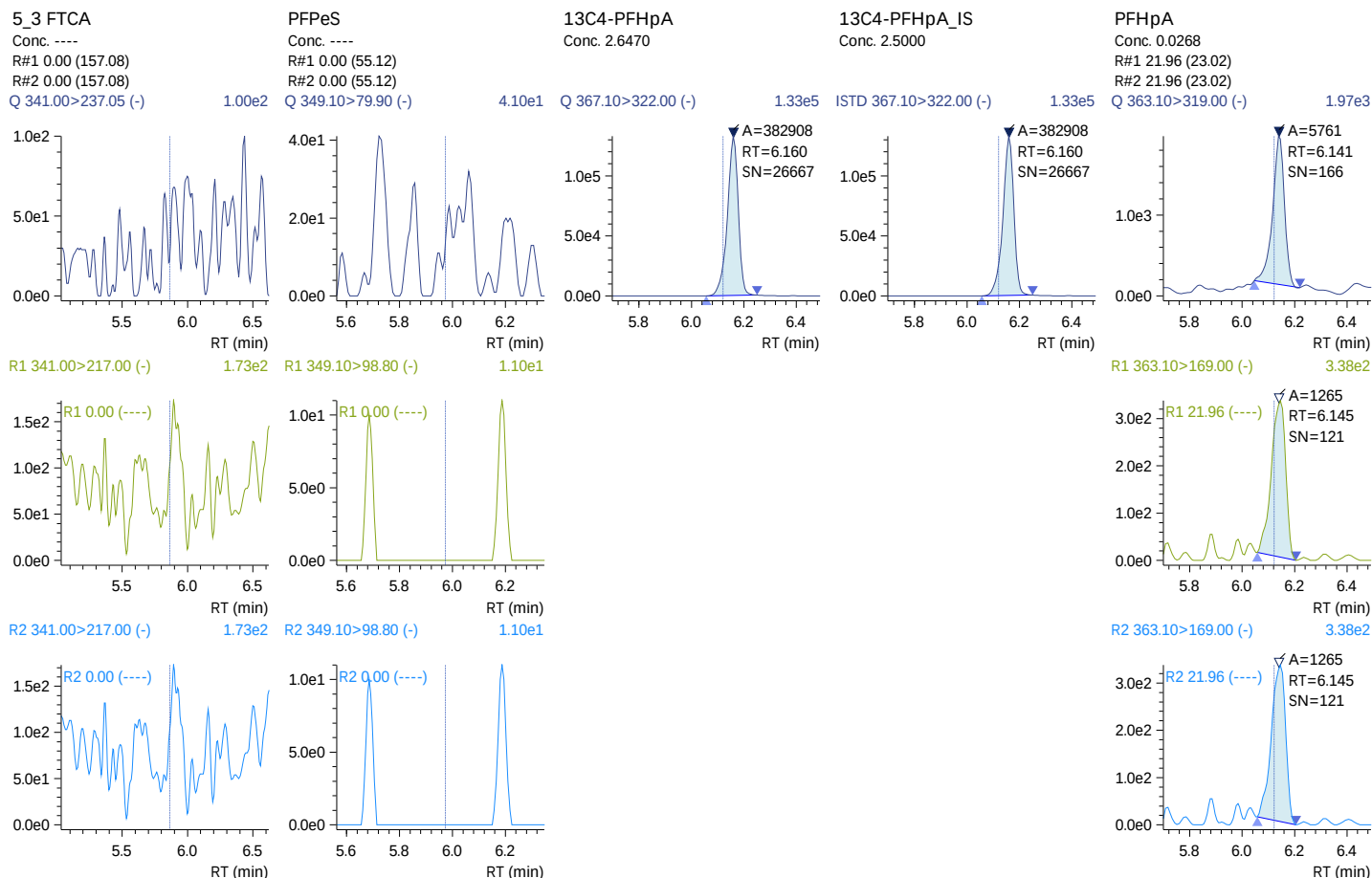


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



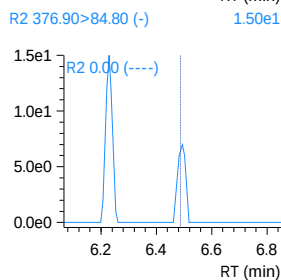
240130_031 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.

DONA		13C2-6_2 FTS_IS		13C2-6_2 FTS		6_2 FTS		13C4-PFOA_IS	
Conc. ----		Conc. 5.0000		Conc. 6.3925		Conc. 0.0116		Conc. 2.5000	
R#1 0.00 (27.50)						R#1 38.29 (50.47)			
R#2 0.00 (27.50)						R#2 38.29 (50.47)			
Q 376.90>250.90 (-)	2.90e1	ISTD 429.10>80.90 (-)	5.39e4	Q 429.10>80.90 (-)	5.39e4	Q 427.10>407.00 (-)	1.95e2	ISTD 417.10>172.00 (-)	8.41e3





240130_031 (continued)

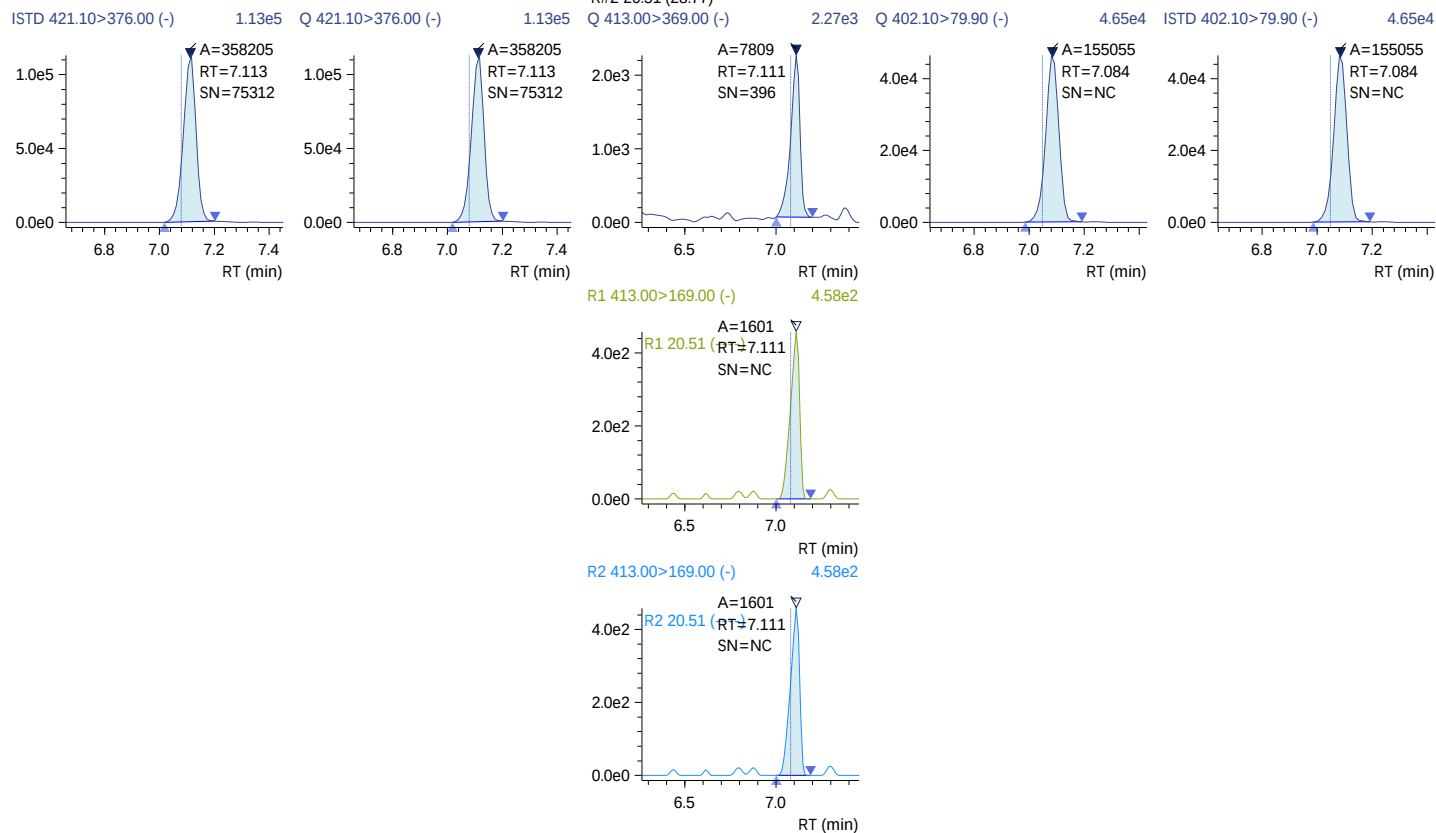
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.7577

PFOA
Conc. 0.0431
R#1 20.51 (28.77)
R#2 20.51 (28.77)

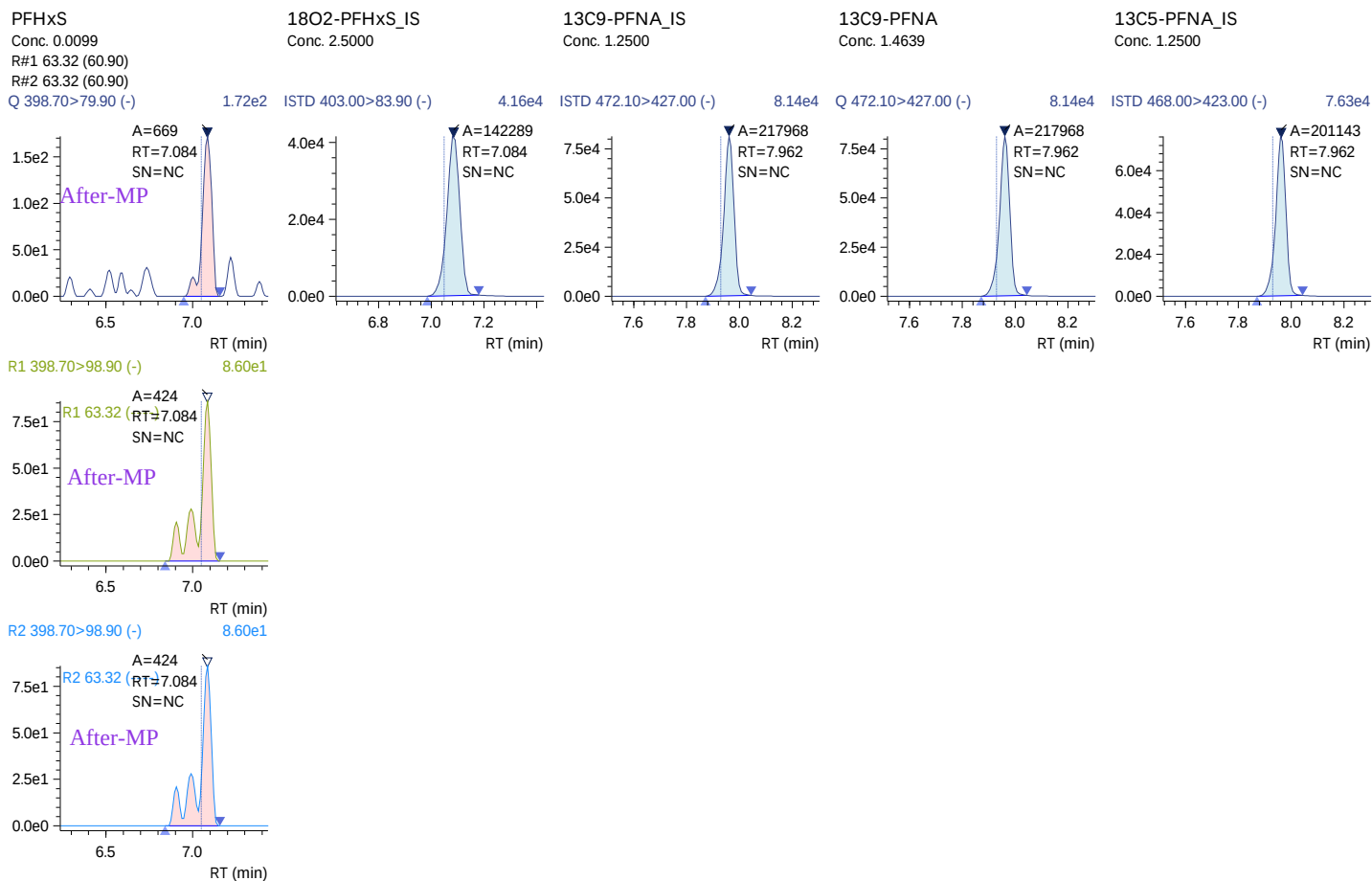
13C3-PFHxS
Conc. 3.1091

13C3-PFHxS_IS
Conc. 2.5000





240130_031 (continued)

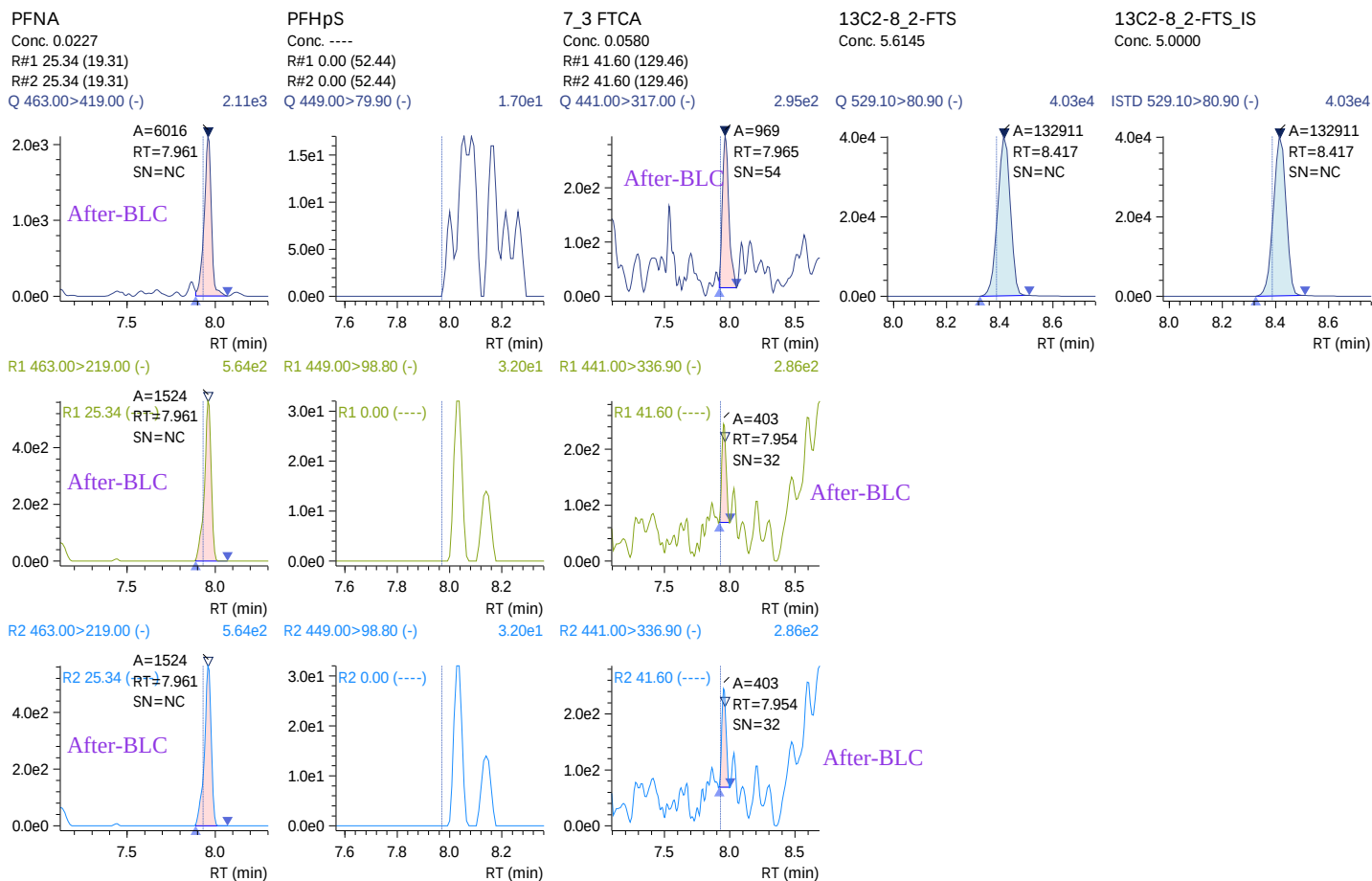


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.

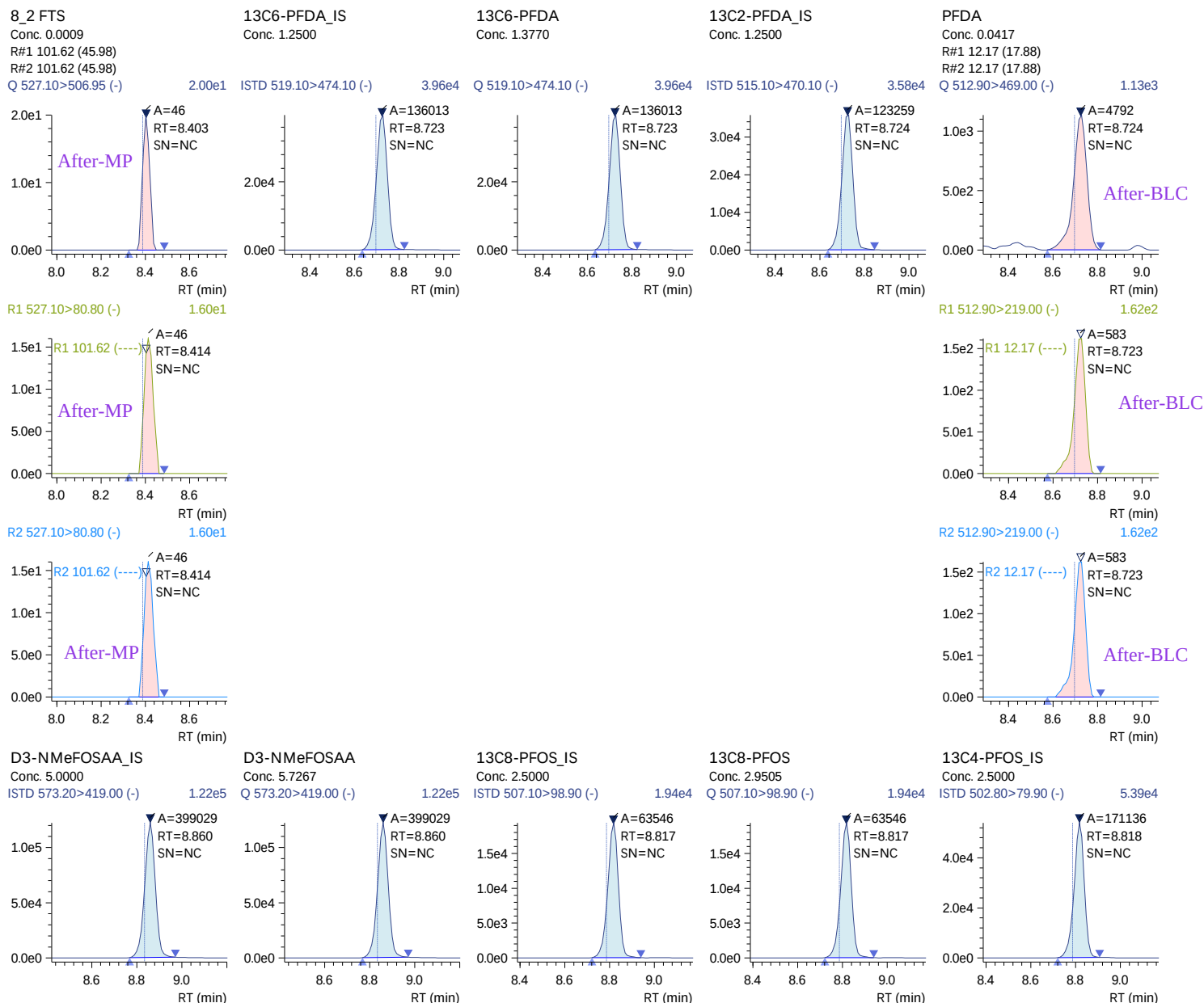


240130_031 (continued)





240130_031 (continued)

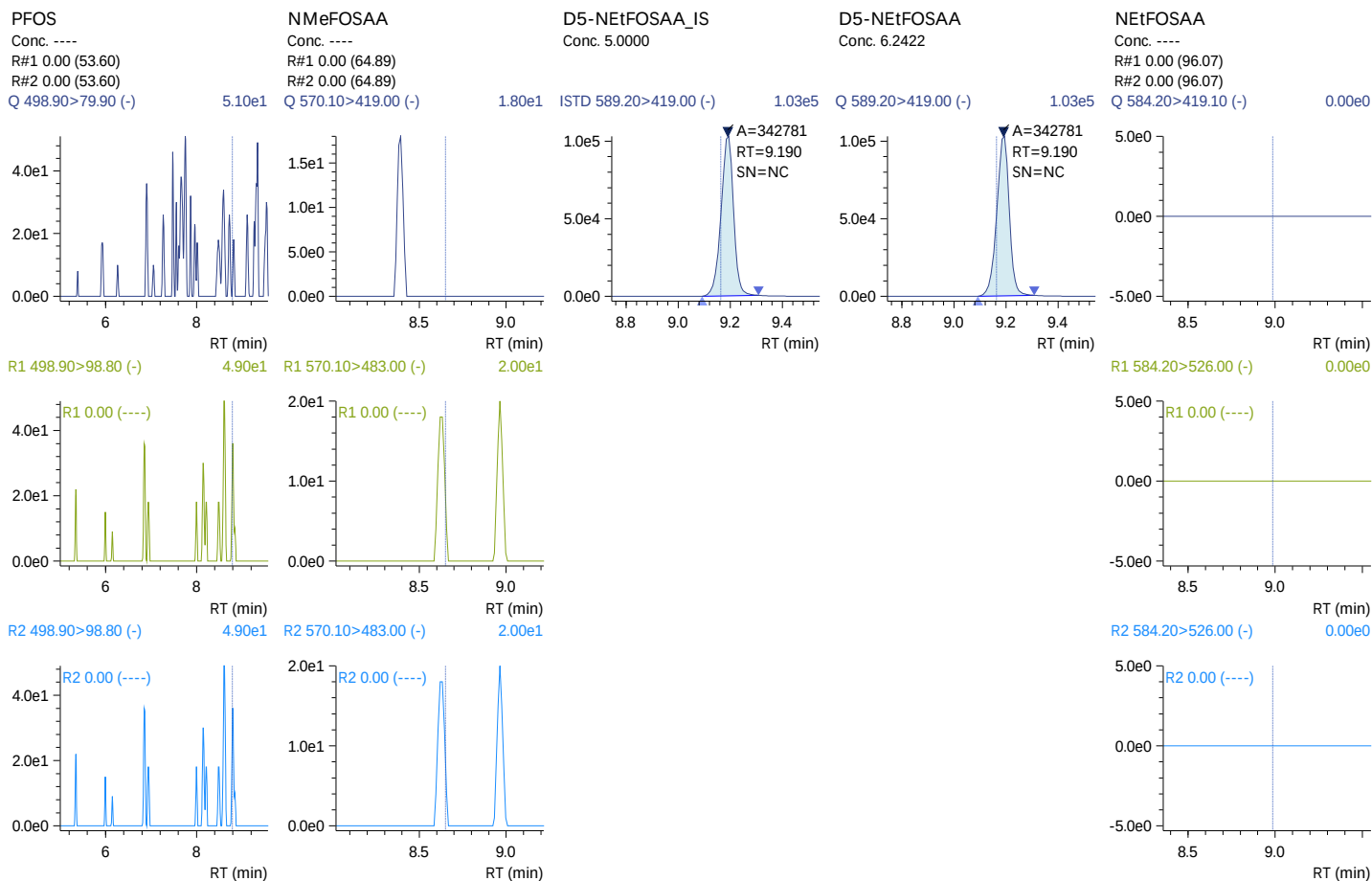


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_031 (continued)





240130_031 (continued)

9-CI-PF3ONS

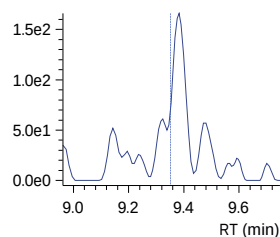
Conc. ----

R#1 0.00 (30.95)

R#2 0.00 (30.95)

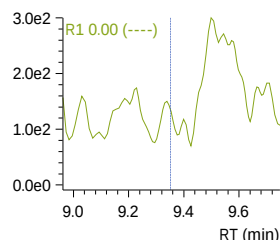
Q 530.80>351.00 (-)

1.66e2



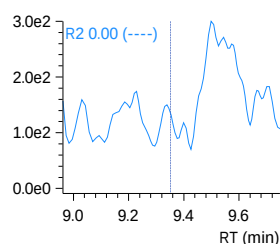
R1 532.80>353.00 (-)

3.00e2



R2 532.80>353.00 (-)

3.00e2



PFUnDA

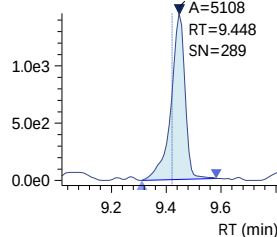
Conc. 0.0191

R#1 10.14 (11.01)

R#2 10.14 (11.01)

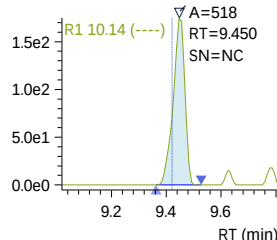
Q 563.10>519.00 (-)

1.46e3



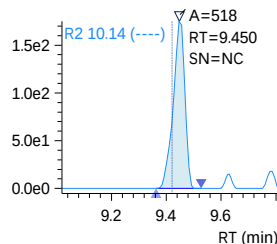
R1 563.10>269.10 (-)

1.75e2



R2 563.10>269.10 (-)

1.75e2

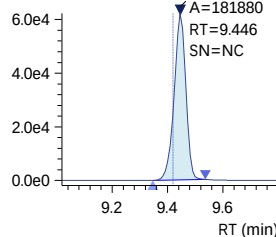


13C7-PFUnDA_IS

Conc. 1.2500

ISTD 570.00>525.10 (-)

6.23e4

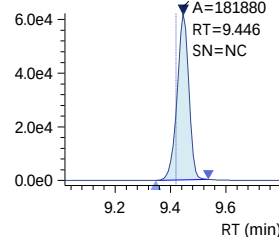


13C7-PFUnDA

Conc. 1.4819

Q 570.00>525.10 (-)

6.23e4



PFNS

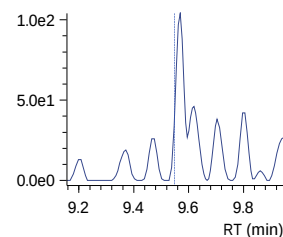
Conc. ----

R#1 0.00 (60.44)

R#2 0.00 (60.44)

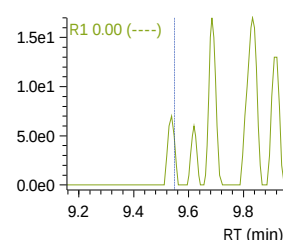
Q 548.80>79.90 (-)

1.04e2



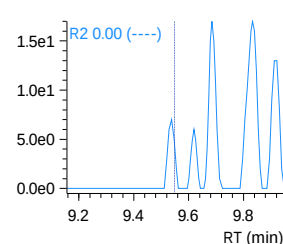
R1 548.80>98.80 (-)

1.70e1



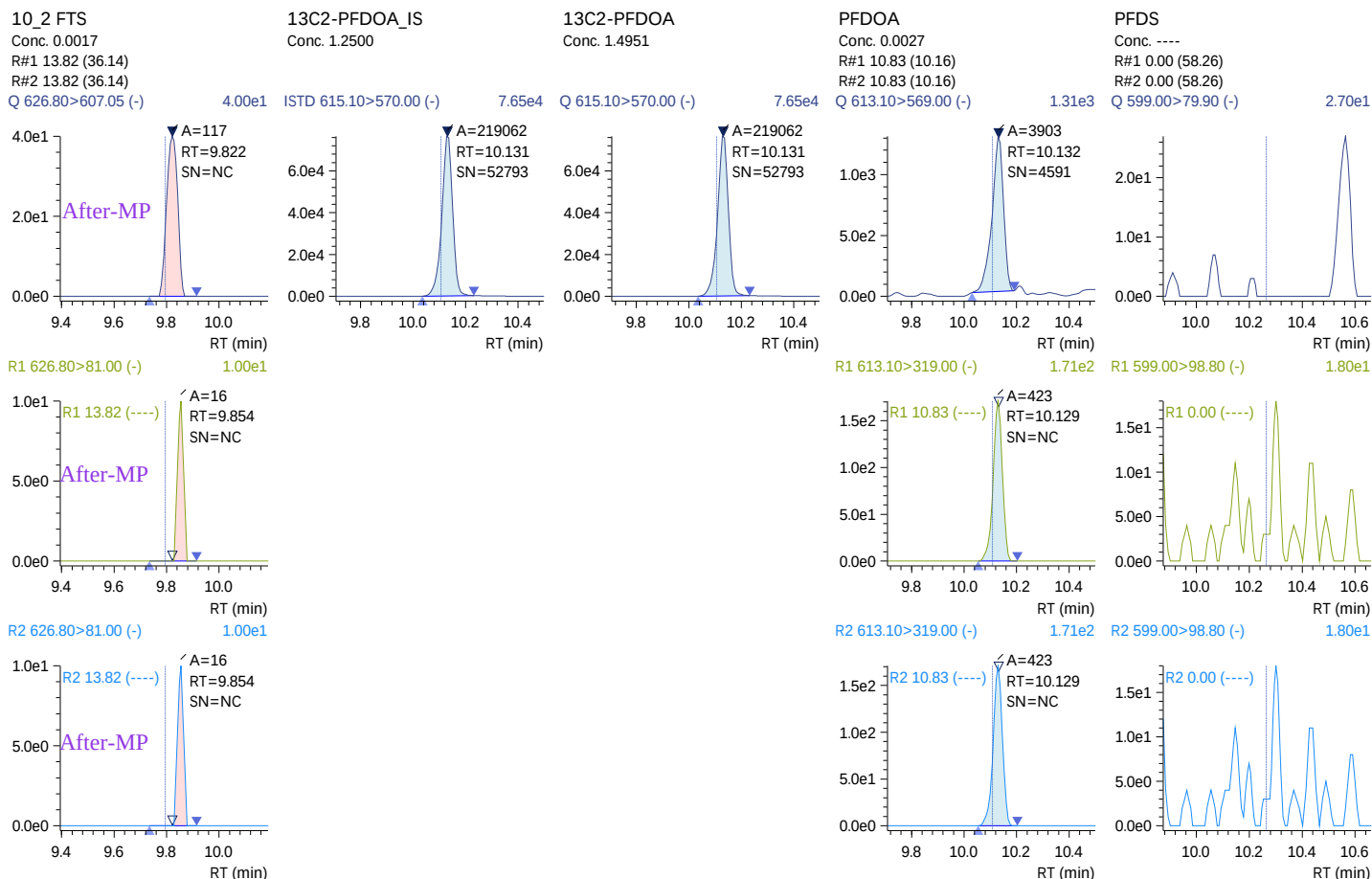
R2 548.80>98.80 (-)

1.70e1



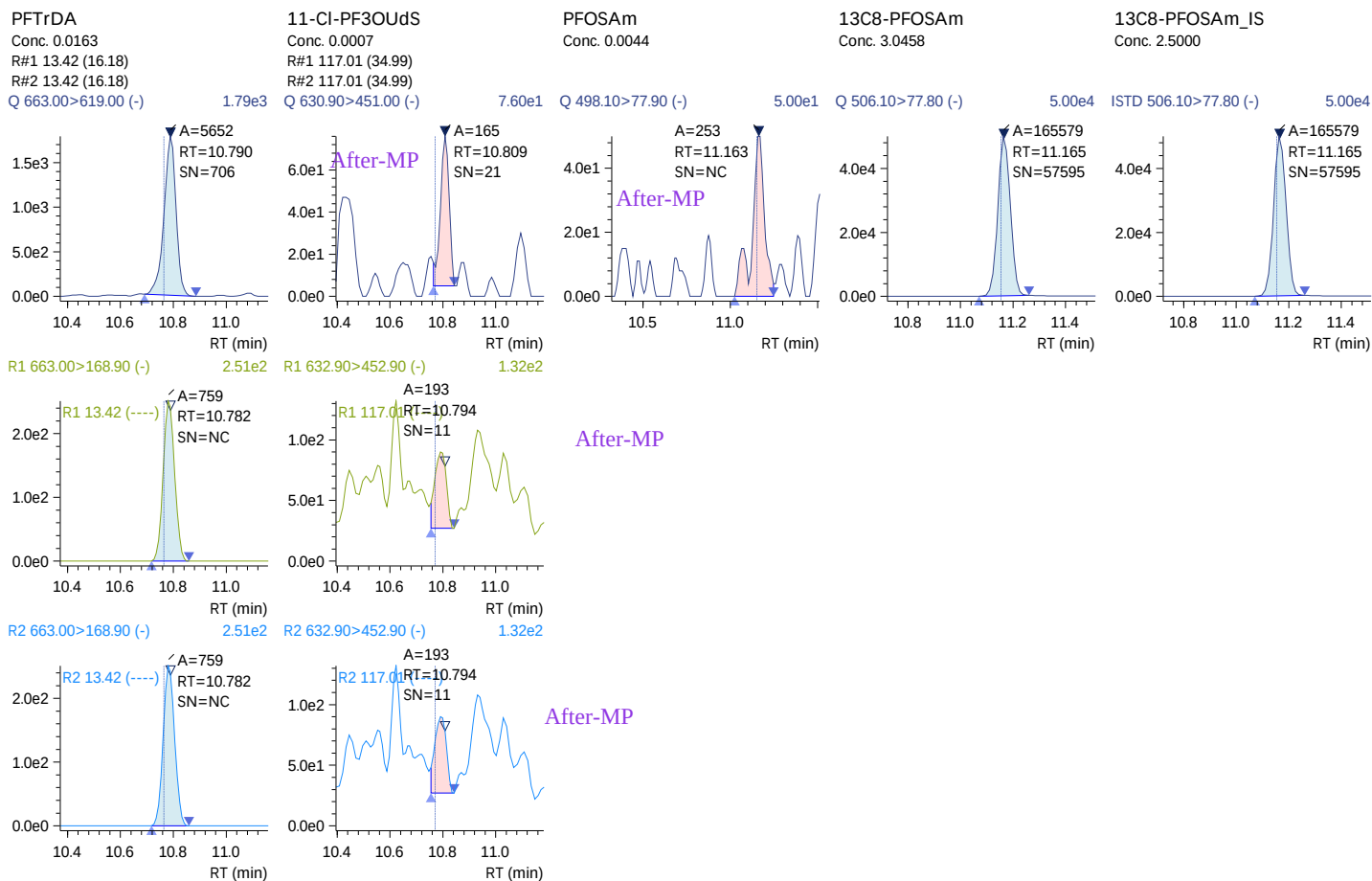


240130_031 (continued)





240130_031 (continued)

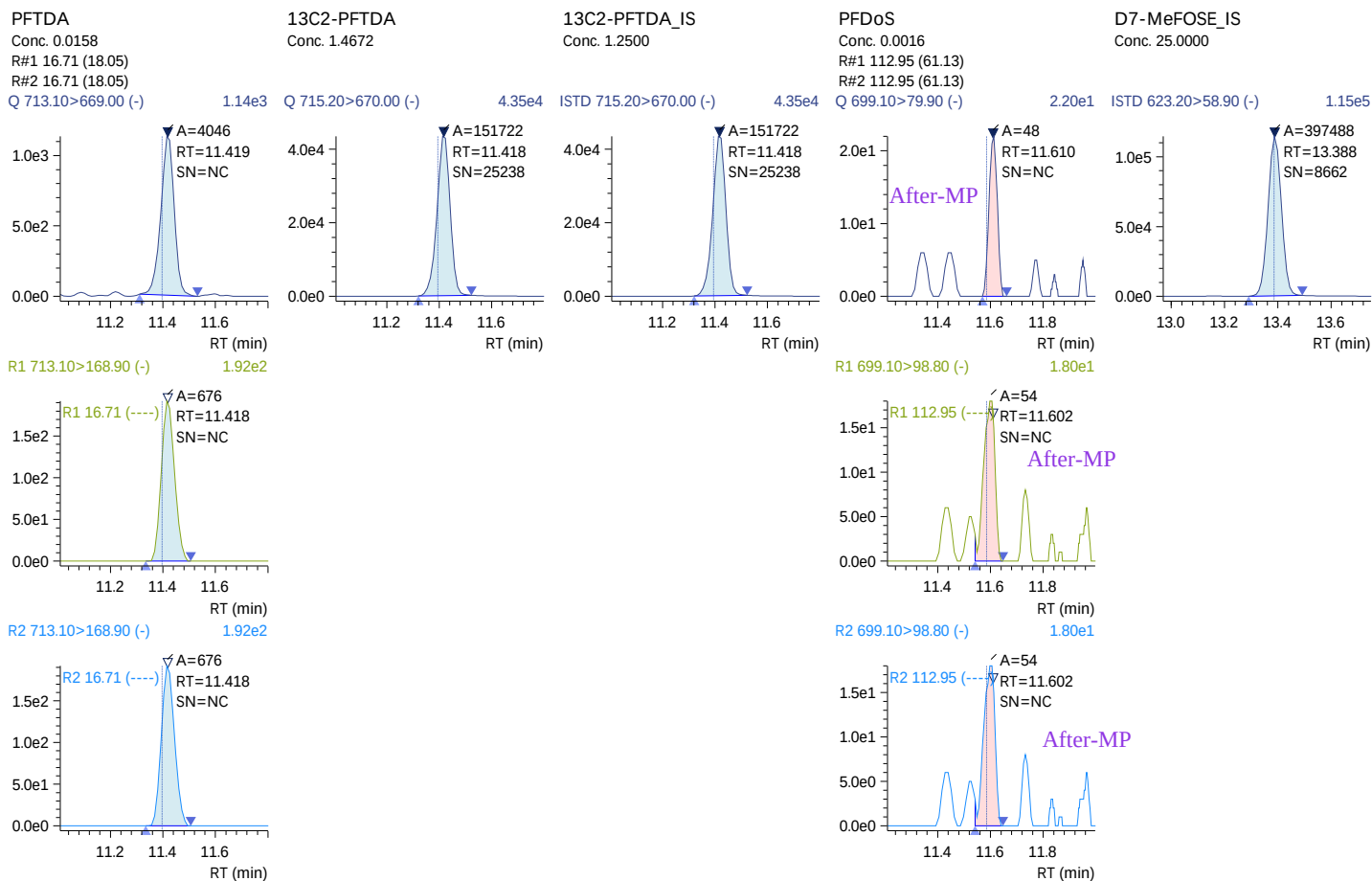


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_031 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_031 (continued)

D7-MeFOSE
Conc. 28.4821

MeFOSE
Conc. ----

13C2-PFHXA_IS
Conc. 2.5000

13C2-PFHXA
Conc. 2.7998

PFHXA
Conc. 0.0319
R#1 10.91 (11.66)
R#2 10.91 (11.66)

Q 623.20>58.90 (-)

1.15e5

Q 616.10>59.00 (-)

8.40e1

ISTD 815.00>770.05 (-)

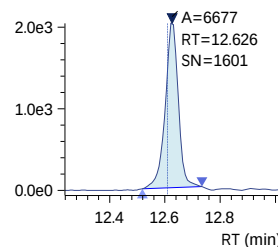
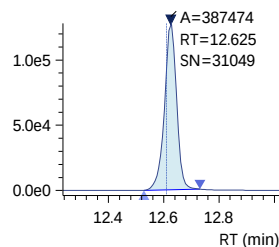
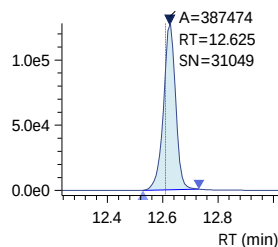
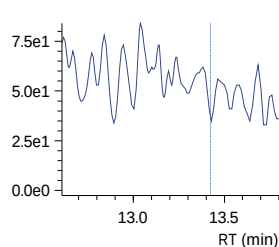
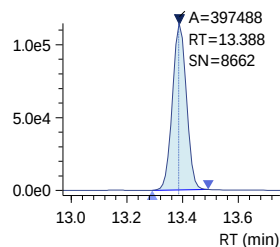
1.28e5

Q 815.00>770.05 (-)

1.28e5

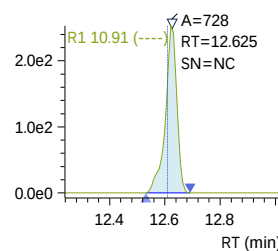
Q 813.00>768.95 (-)

2.05e3



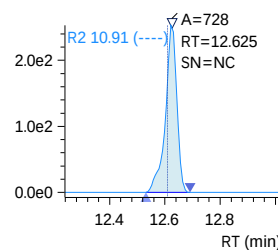
R1 813.00>218.95 (-)

2.53e2



R2 813.00>218.95 (-)

2.53e2





240130_031 (continued)

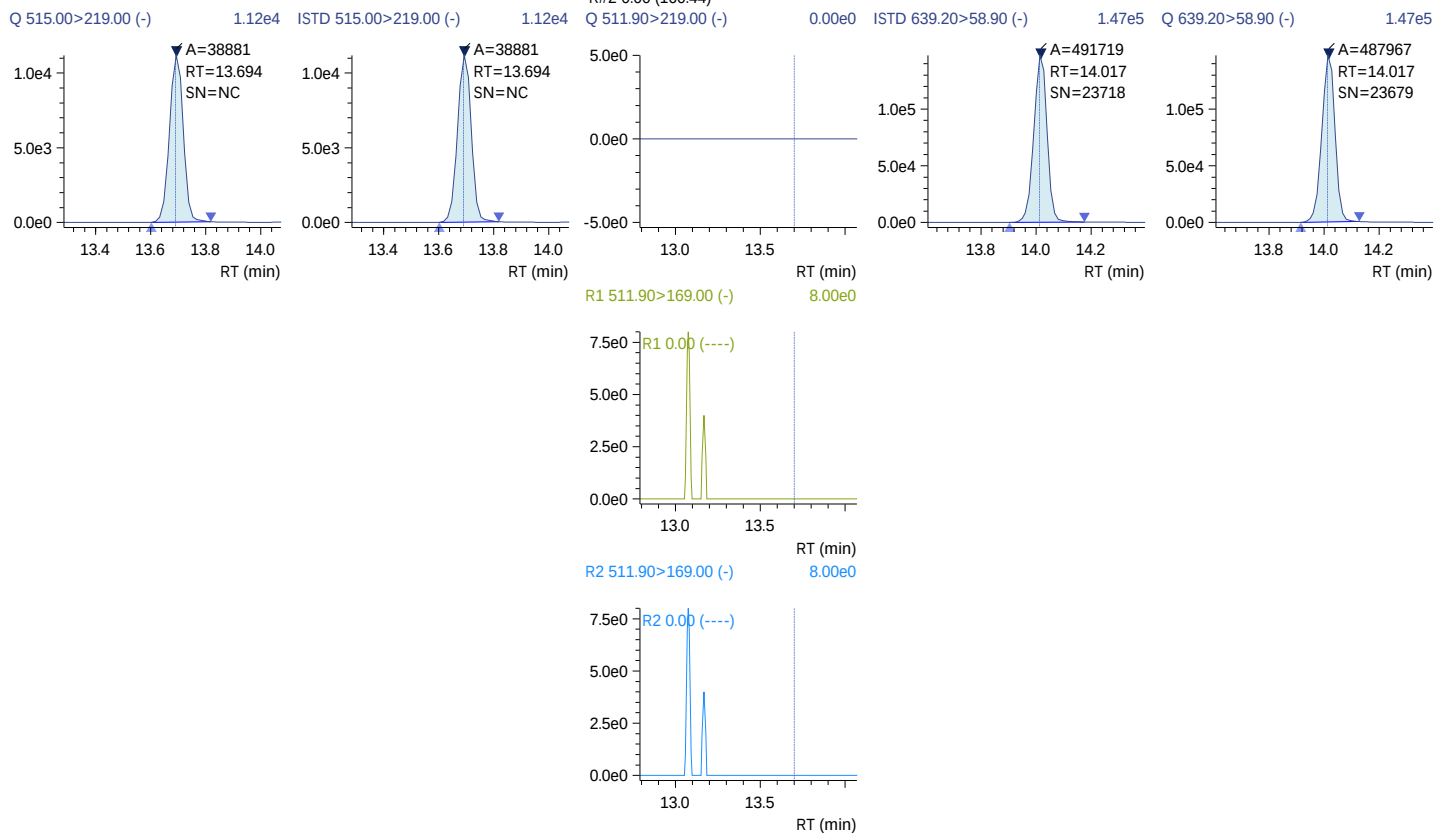
D3-MeFOSA
Conc. 2.7395

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. ----
R#1 0.00 (160.44)
R#2 0.00 (160.44)

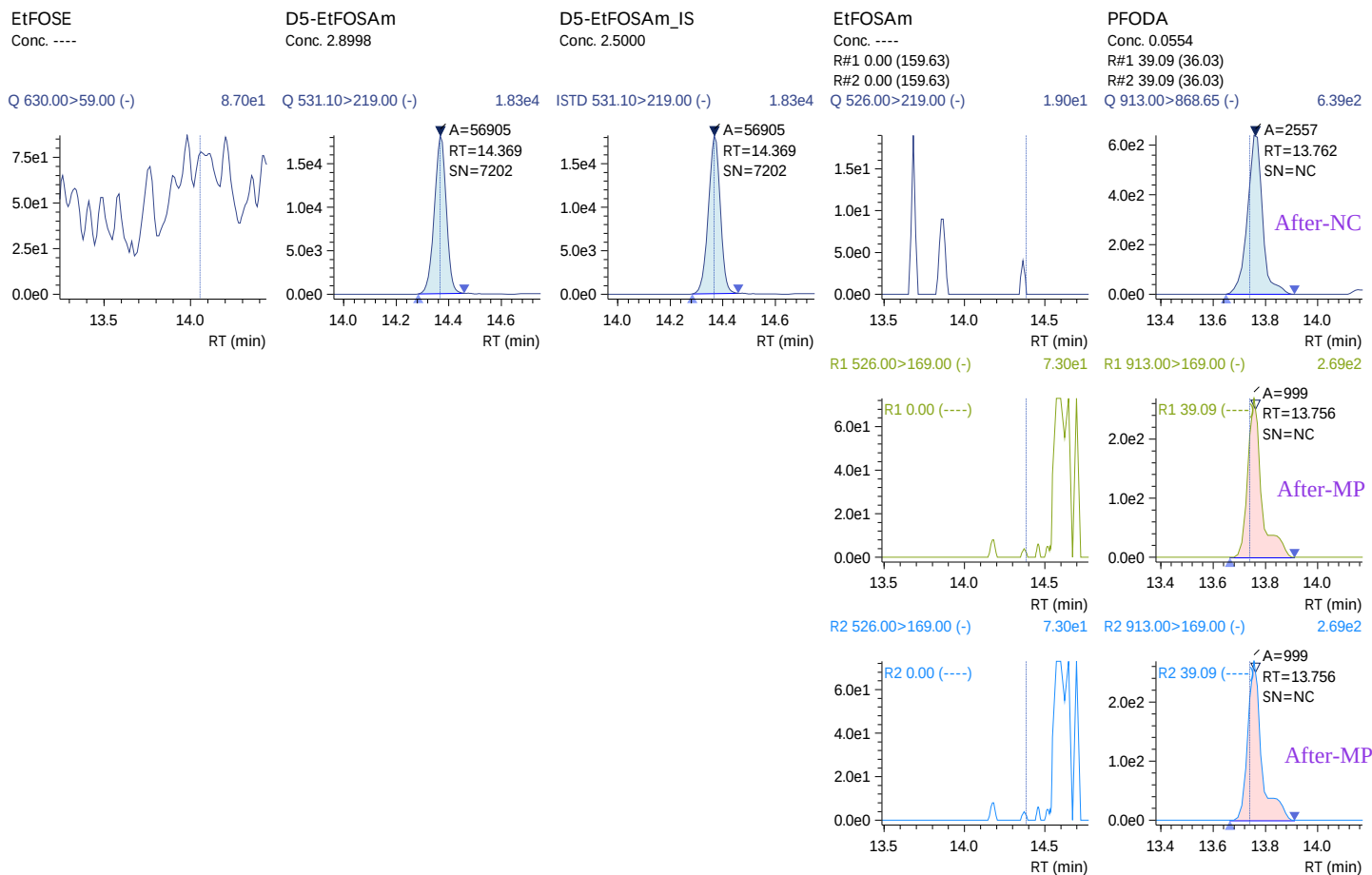
D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 28.5731





240130_031 (continued)



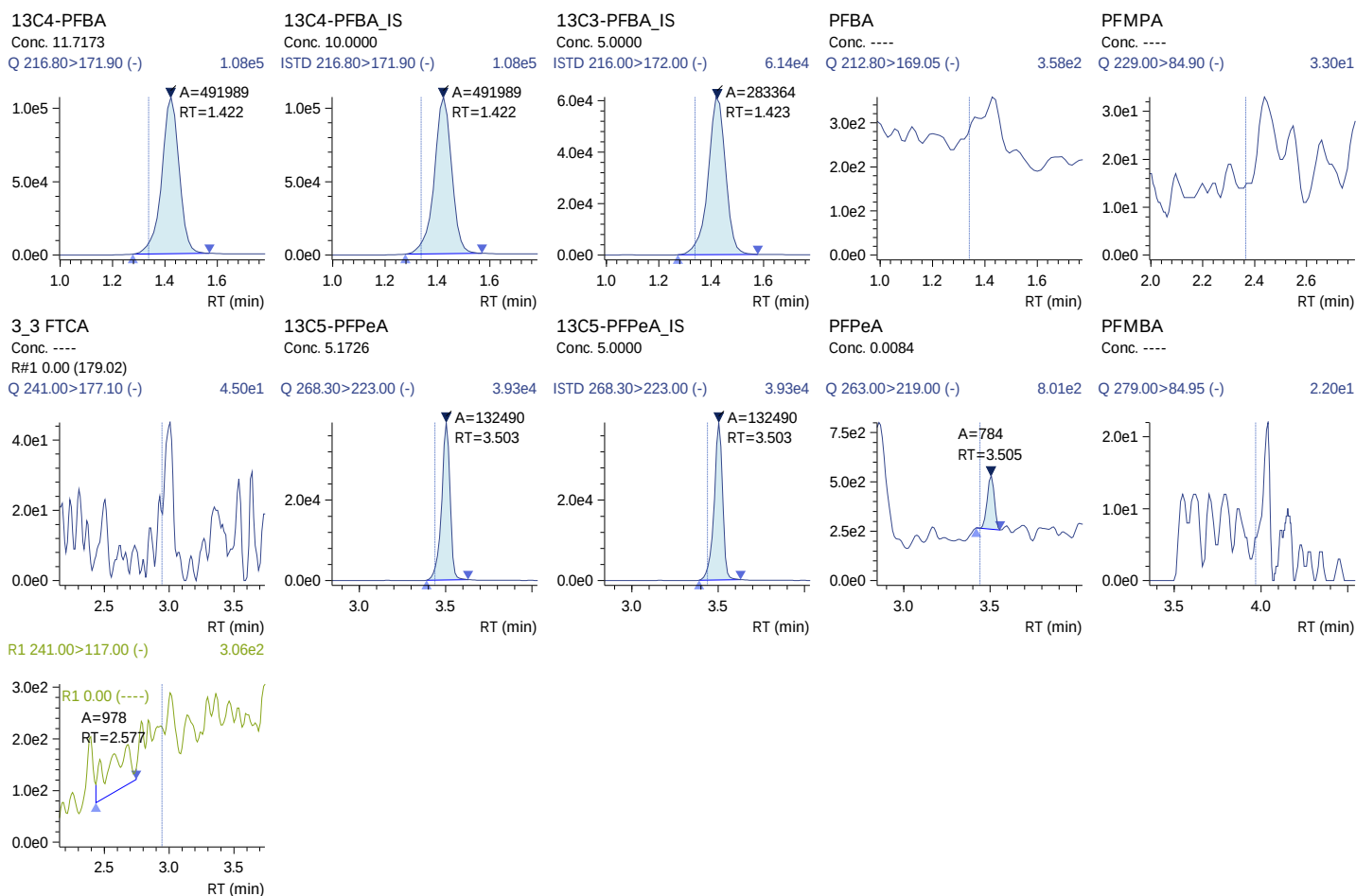
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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_031

Sample ID: 1633 CCB
 Date Acquired: 1/31/2024 2:21:13 AM
 Acquired by: System Administrator
 Data File: 240130_031
 Vial: 54 | Inj. Volume: 10.0000uL | Tray: 1





240130_031 (continued)

13C2-4_2 FTS
Conc. 6.0964

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. 0.0792
R#1 107.34 (24.69)
R#2 107.34 (0.00)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. ----
R#1 0.00 (52.67)
R#2 0.00 (0.00)

Q 329.10>80.90 (-)

5.22e4

ISTD 329.10>80.90 (-)

5.22e4

Q 327.10>307.00 (-)

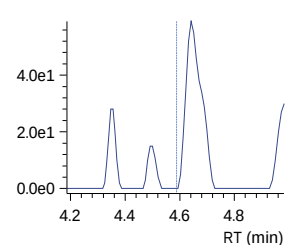
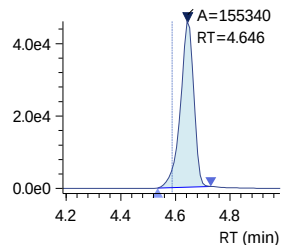
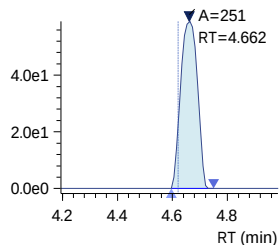
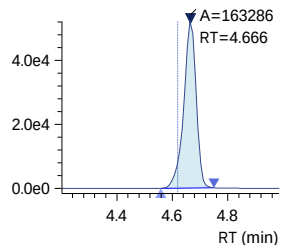
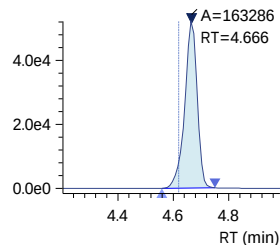
5.90e1

ISTD 302.10>79.90 (-)

4.62e4

Q 298.70>79.90 (-)

5.90e1

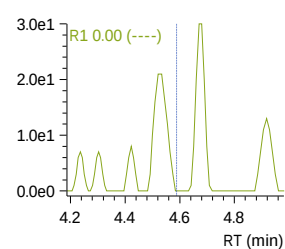
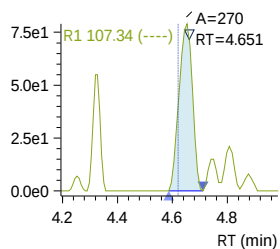


R1 327.10>80.90 (-)

7.90e1

R1 298.70>98.80 (-)

3.00e1

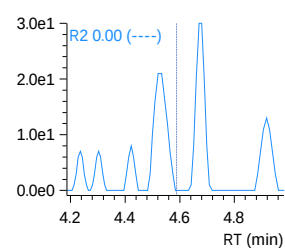
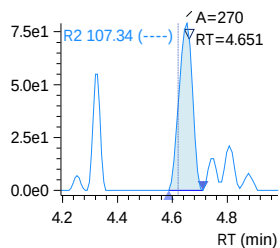


R2 327.10>80.90 (-)

7.90e1

R2 298.70>98.80 (-)

3.00e1





240130_031 (continued)

13C3-PFBS
Conc. 2.9260

NFDHA
Conc. 0.0066
R#1 0.00 (39.38)
R#2 0.00 (0.00)

13C5-PFHxA
Conc. 2.7652

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

Q 302.10>79.90 (-)

4.62e4

Q 295.00>201.00 (-)

1.13e2

Q 318.00>273.00 (-)

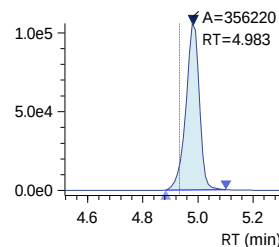
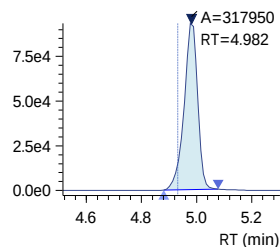
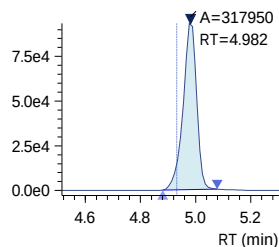
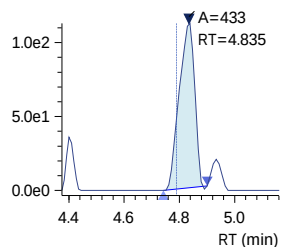
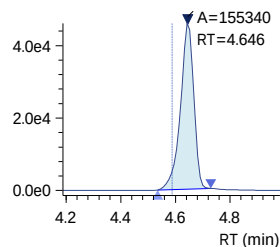
9.35e4

ISTD 318.00>273.00 (-)

9.35e4

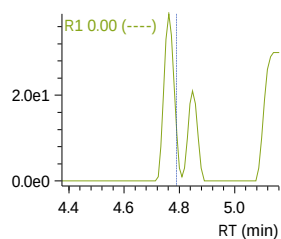
ISTD 315.10>270.00 (-)

1.06e5



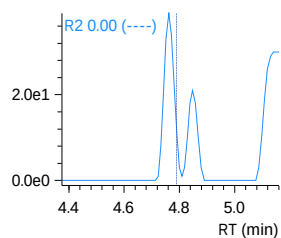
R1 295.00>84.90 (-)

3.90e1



R2 295.00>84.90 (-)

3.90e1





240130_031 (continued)

PFHxA
 Conc. 0.0760

PFEESA
 Conc. 0.0011
 R#1 66.84 (5.25)
 R#2 66.84 (0.00)

13C3-HFPO-DA
 Conc. 11.0597

13C3-HFPO-DA_IS
 Conc. 10.0000

HFPO-DA
 Conc. ----
 R#1 0.00 (69.48)
 R#2 0.00 (0.00)

Q 313.00>269.00 (-)

1.35e3

Q 314.80>135.00 (-)

1.23e2

Q 286.90>168.90 (-)

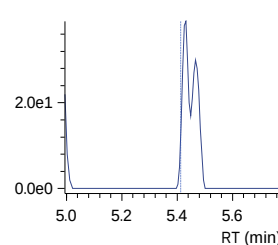
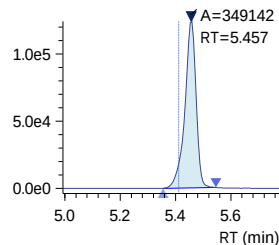
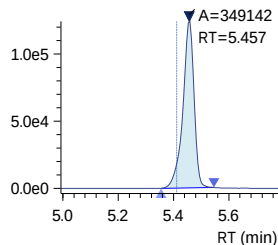
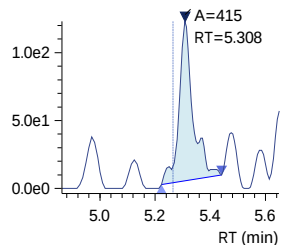
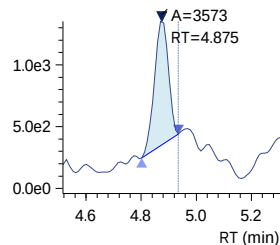
1.24e5

ISTD 286.90>168.90 (-)

1.24e5

Q 284.90>168.90 (-)

3.90e1

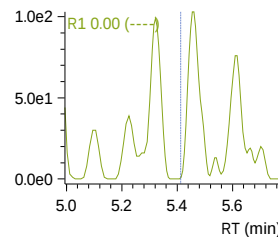
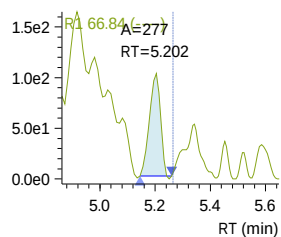


R1 314.80>82.90 (-)

1.65e2

R1 284.90>184.90 (-)

1.03e2

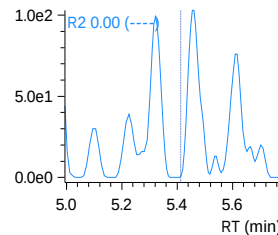
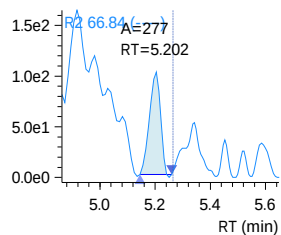


R2 314.80>82.90 (-)

1.65e2

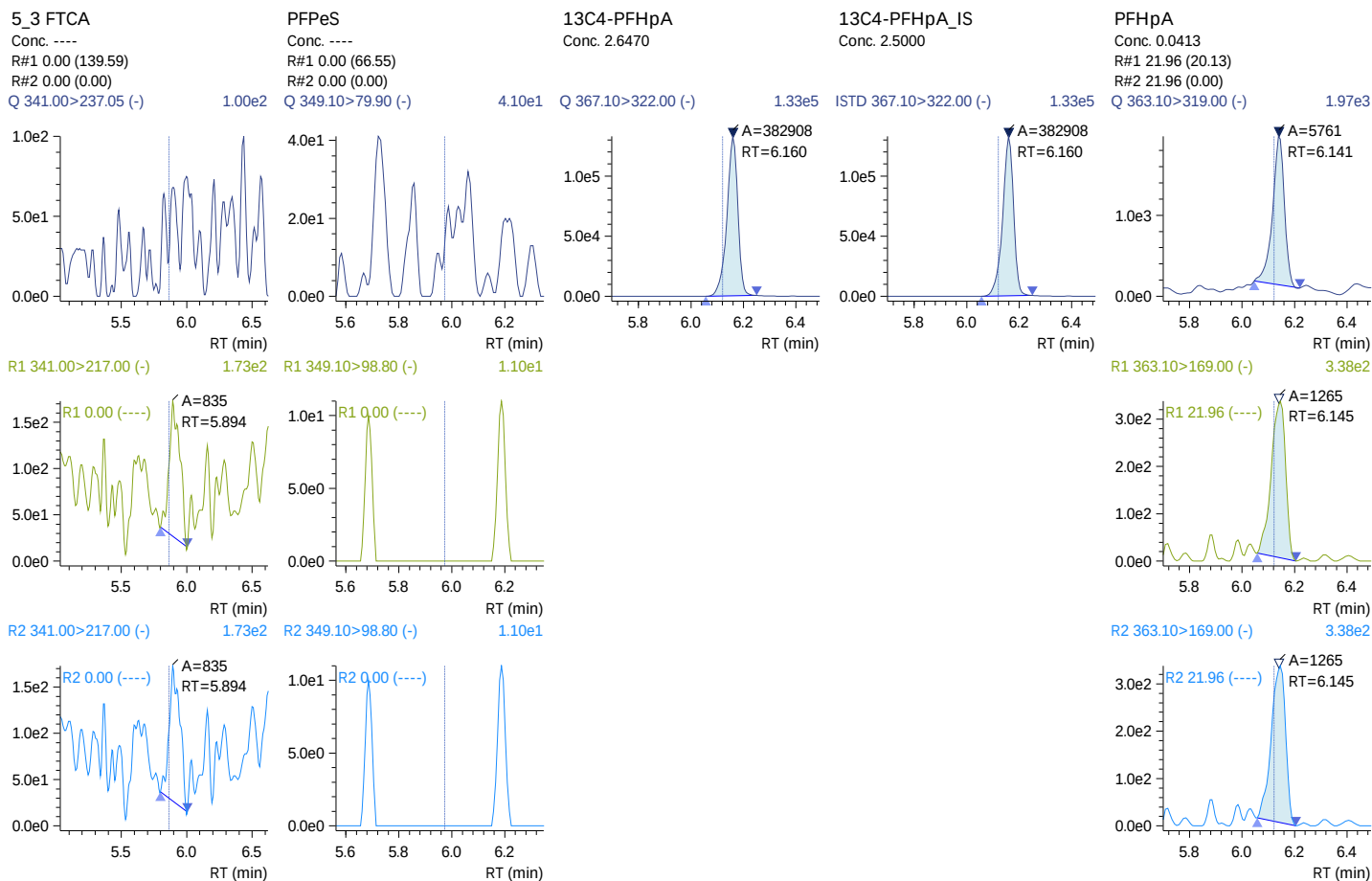
R2 284.90>184.90 (-)

1.03e2



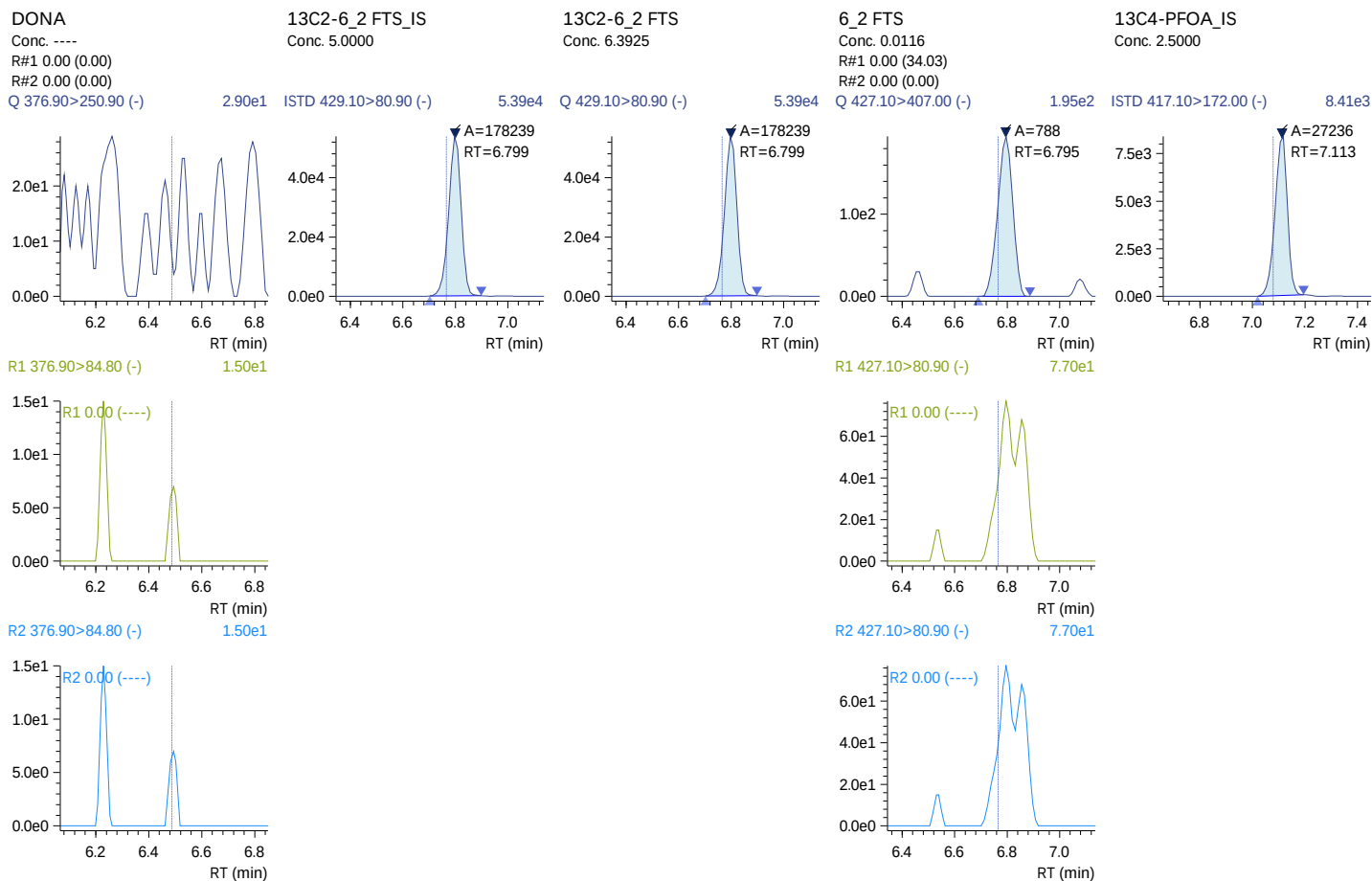


240130_031 (continued)





240130_031 (continued)





240130_031 (continued)

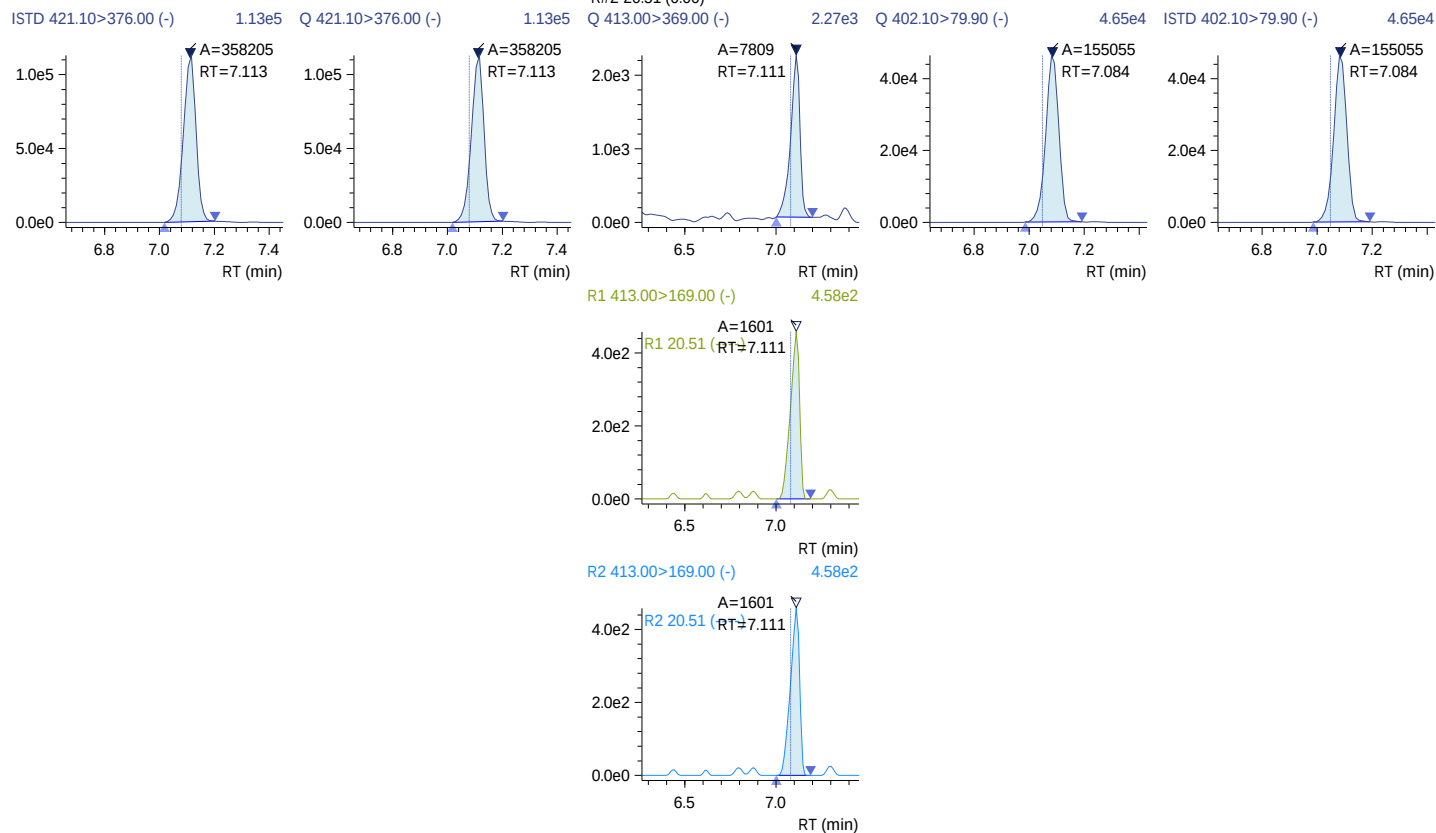
13C8-PFOA_IS
 Conc. 2.5000

13C8-PFOA
 Conc. 2.7577

PFOA
 Conc. 0.0319
 R#1 20.51 (22.46)
 R#2 20.51 (0.00)

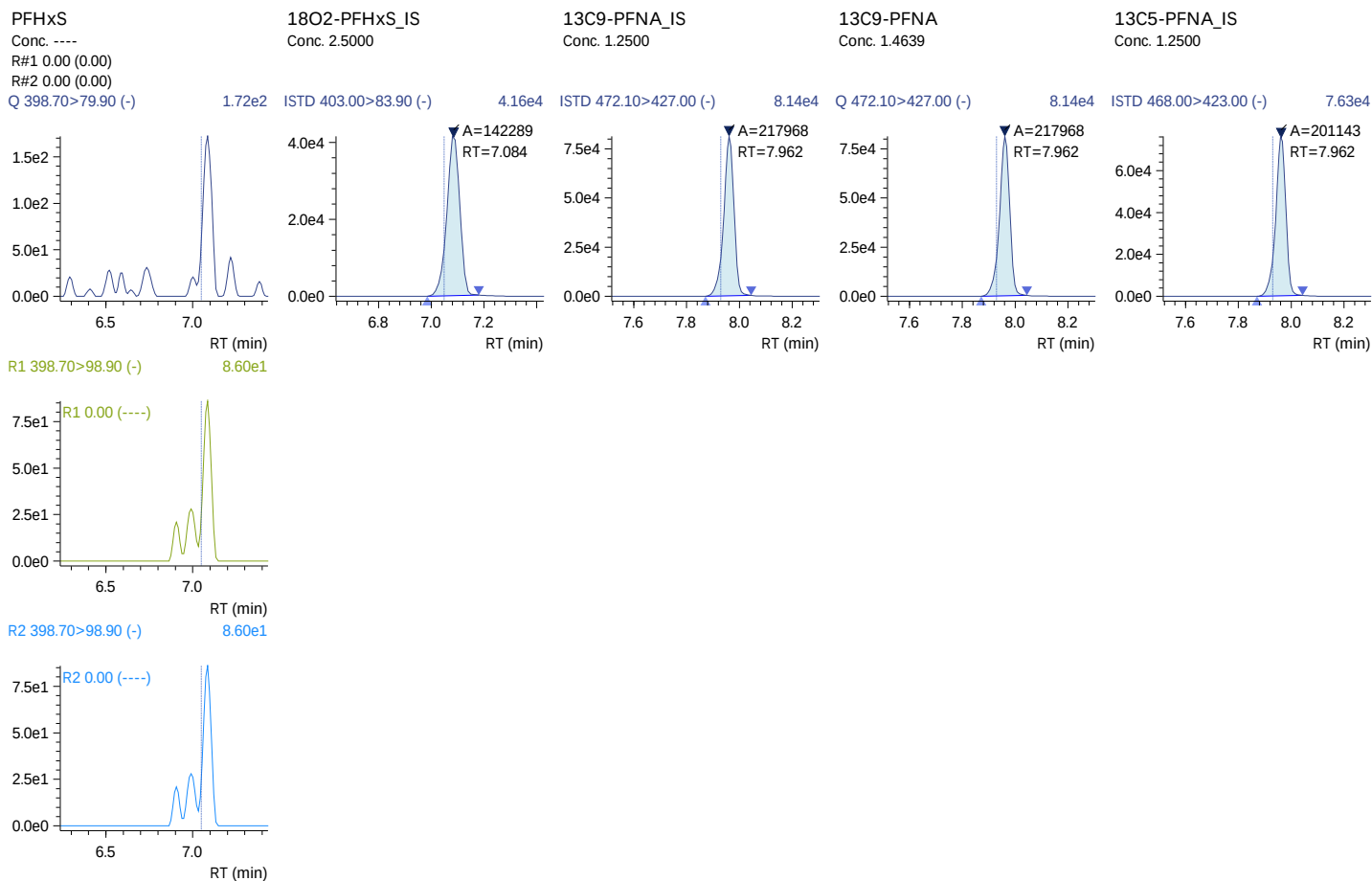
13C3-PFHxS
 Conc. 3.1091

13C3-PFHxS_IS
 Conc. 2.5000



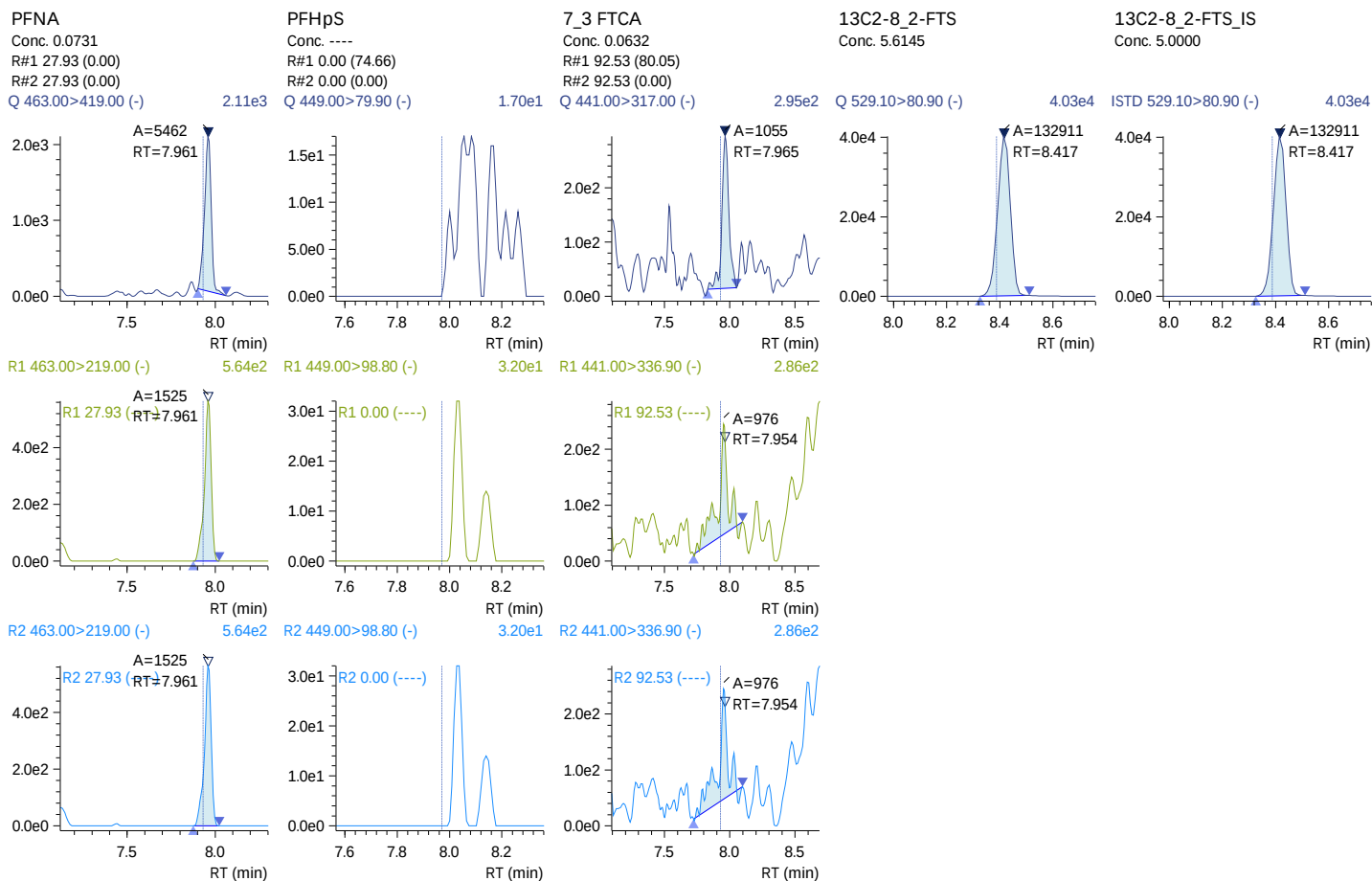


240130_031 (continued)



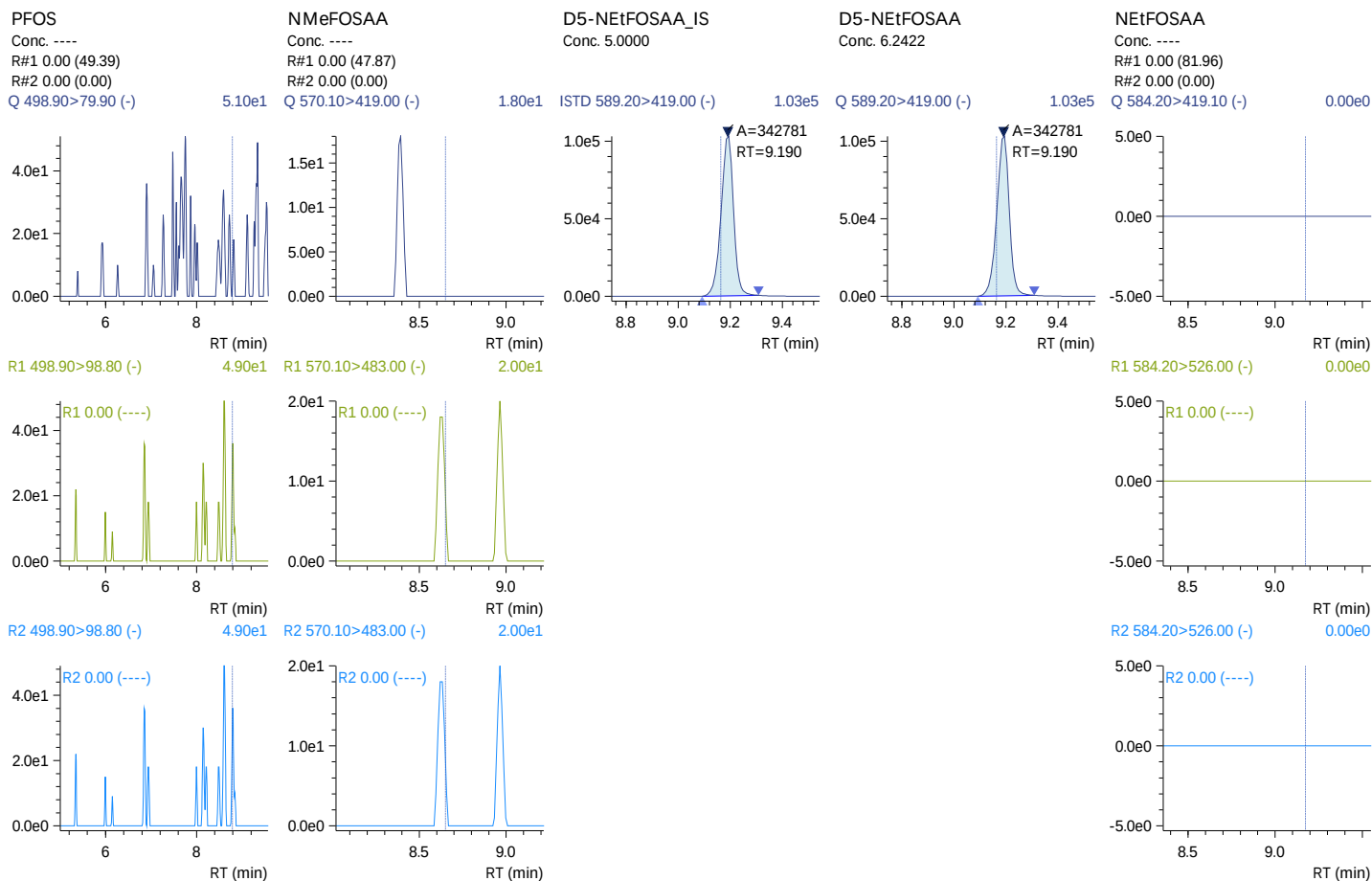


240130_031 (continued)





240130_031 (continued)

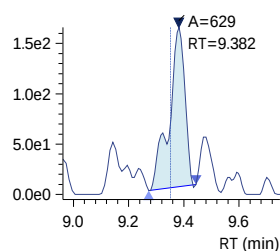




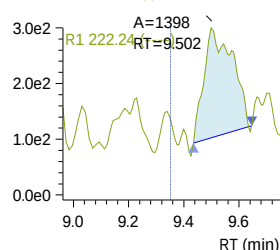
240130_031 (continued)

9-CI-PF3ONS

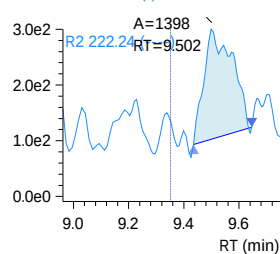
Conc. 0.0018
 R#1 222.24 (31.39)
 R#2 222.24 (0.00)
 Q 530.80>351.00 (-)



R1 532.80>353.00 (-) 3.00e2

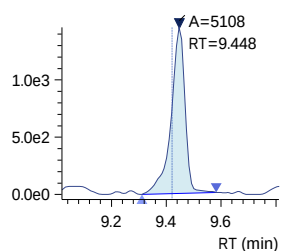


R2 532.80>353.00 (-) 3.00e2

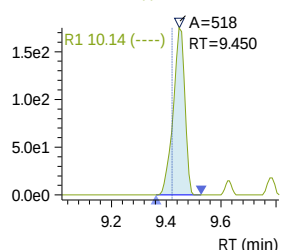


PFUnDA

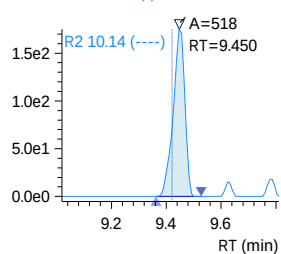
Conc. 0.0202
 R#1 10.14 (12.59)
 R#2 10.14 (0.00)
 Q 563.10>519.00 (-)



R1 563.10>269.10 (-) 1.75e2

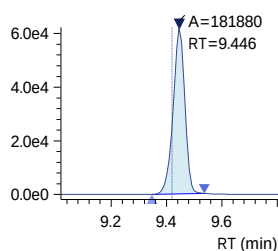


R2 563.10>269.10 (-) 1.75e2



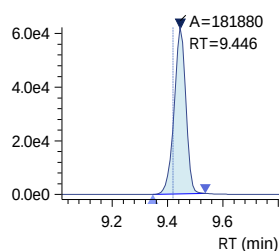
13C7-PFUnDA_IS

Conc. 1.2500
 ISTD 570.00>525.10 (-) 6.23e4



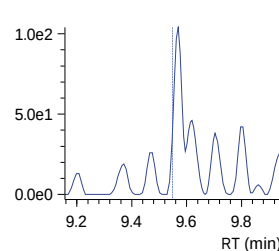
13C7-PFUnDA

Conc. 1.4819
 Q 570.00>525.10 (-) 6.23e4

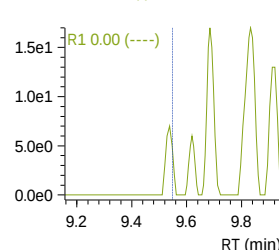


PFNS

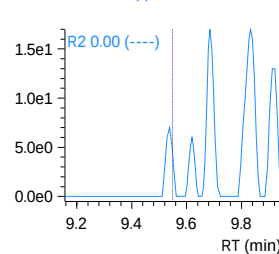
Conc. ----
 R#1 0.00 (82.65)
 R#2 0.00 (0.00)
 Q 548.80>79.90 (-) 1.04e2



R1 548.80>98.80 (-) 1.70e1

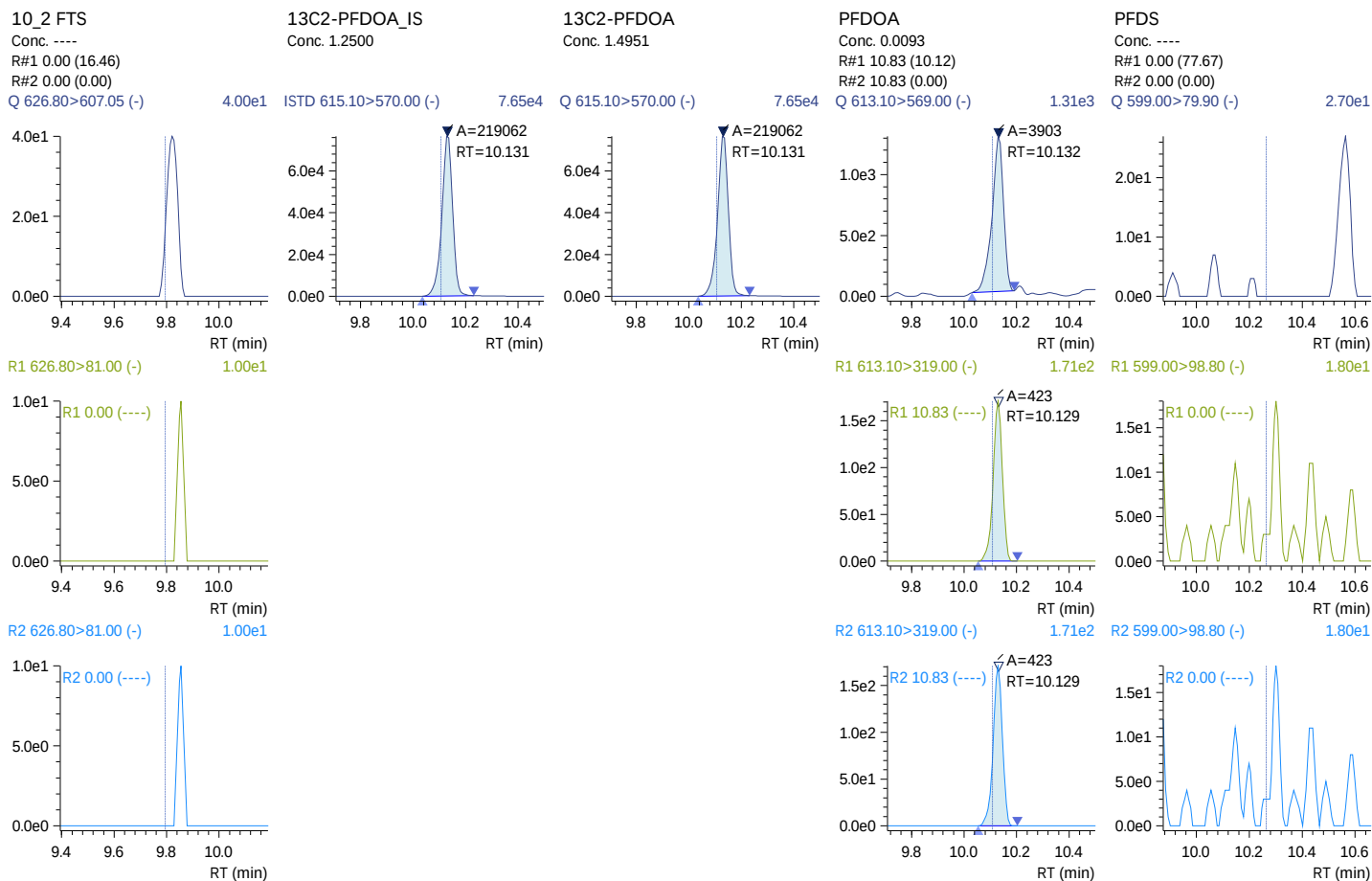


R2 548.80>98.80 (-) 1.70e1



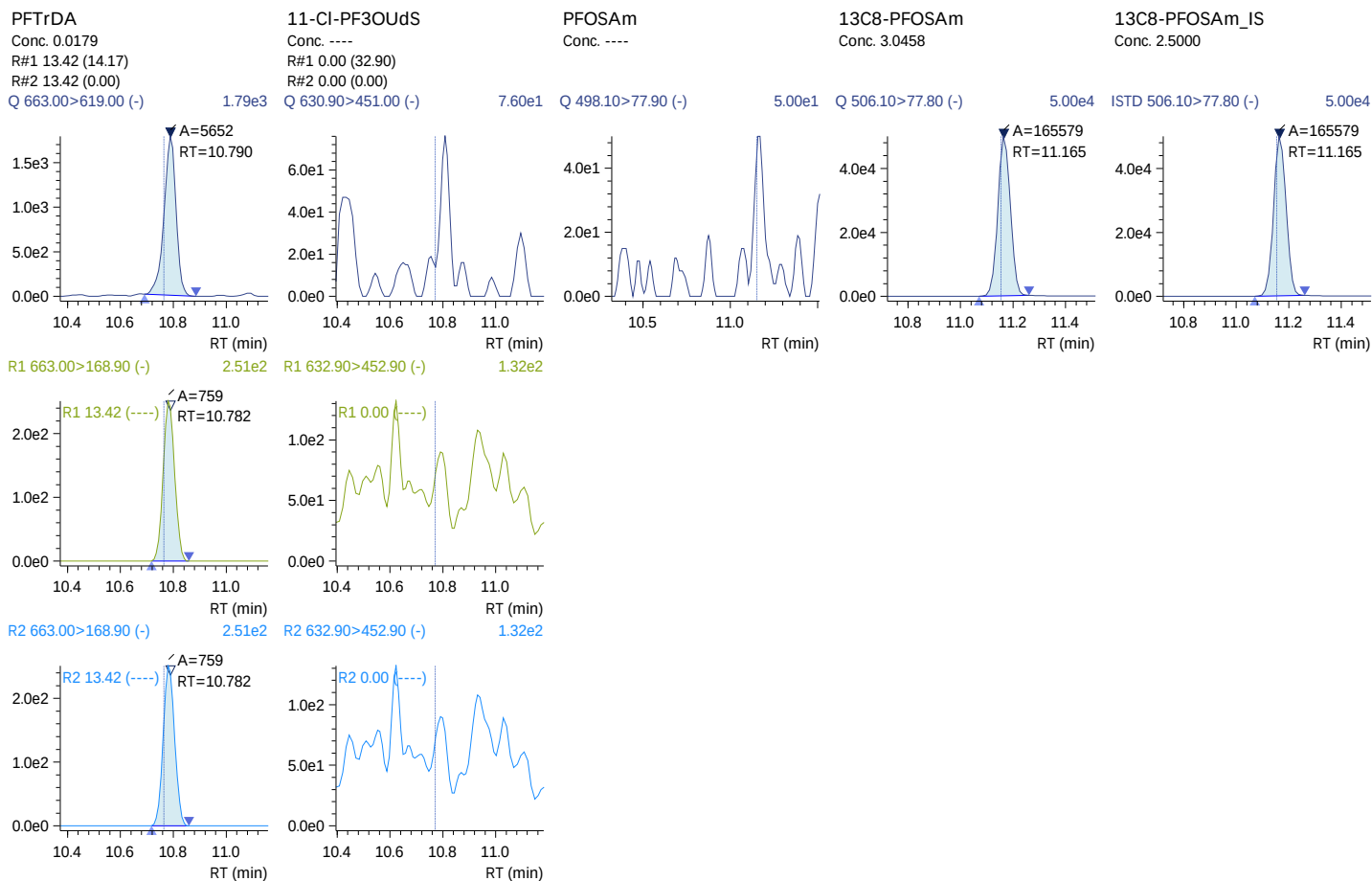


240130_031 (continued)



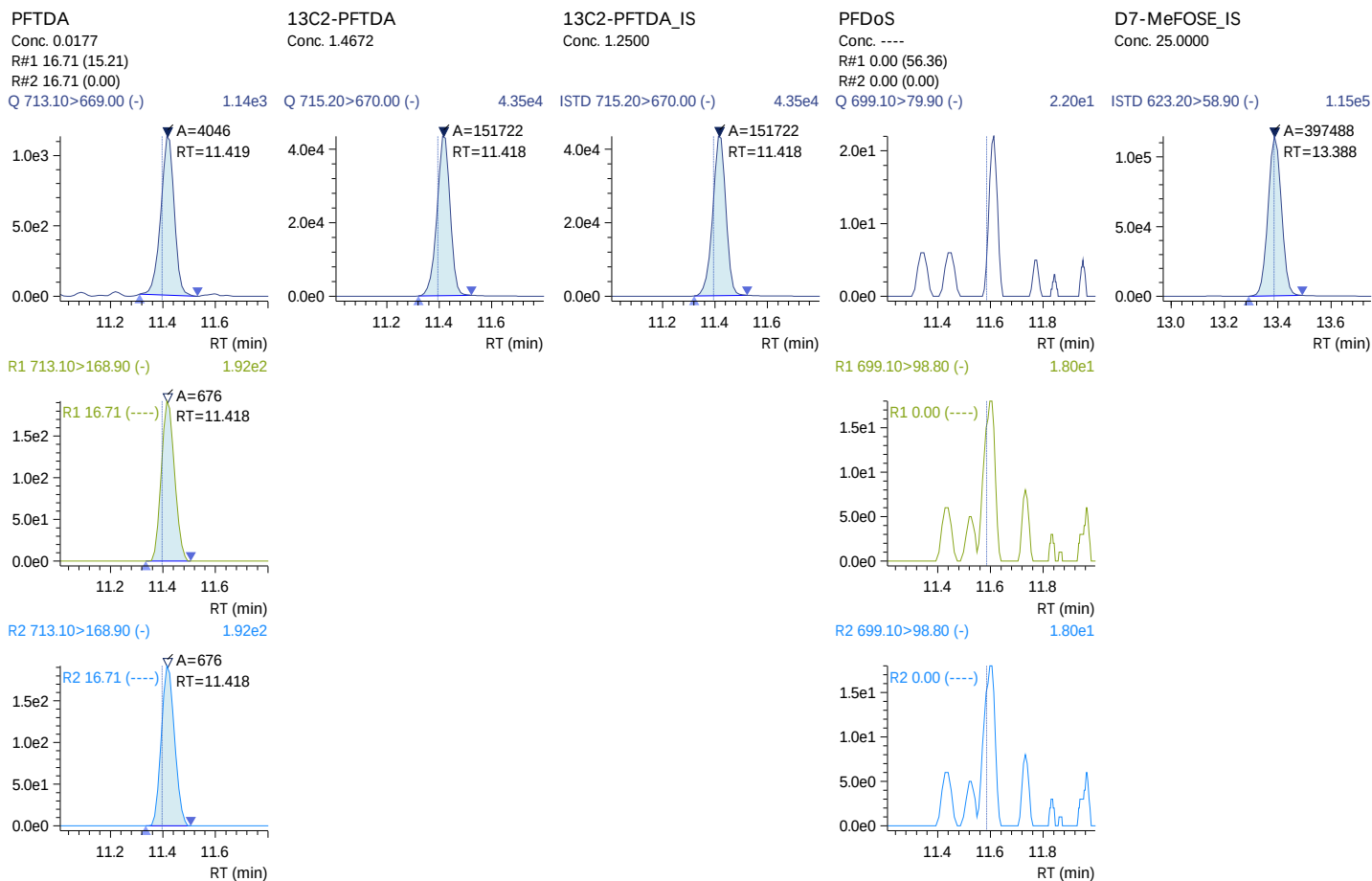


240130_031 (continued)





240130_031 (continued)





240130_031 (continued)

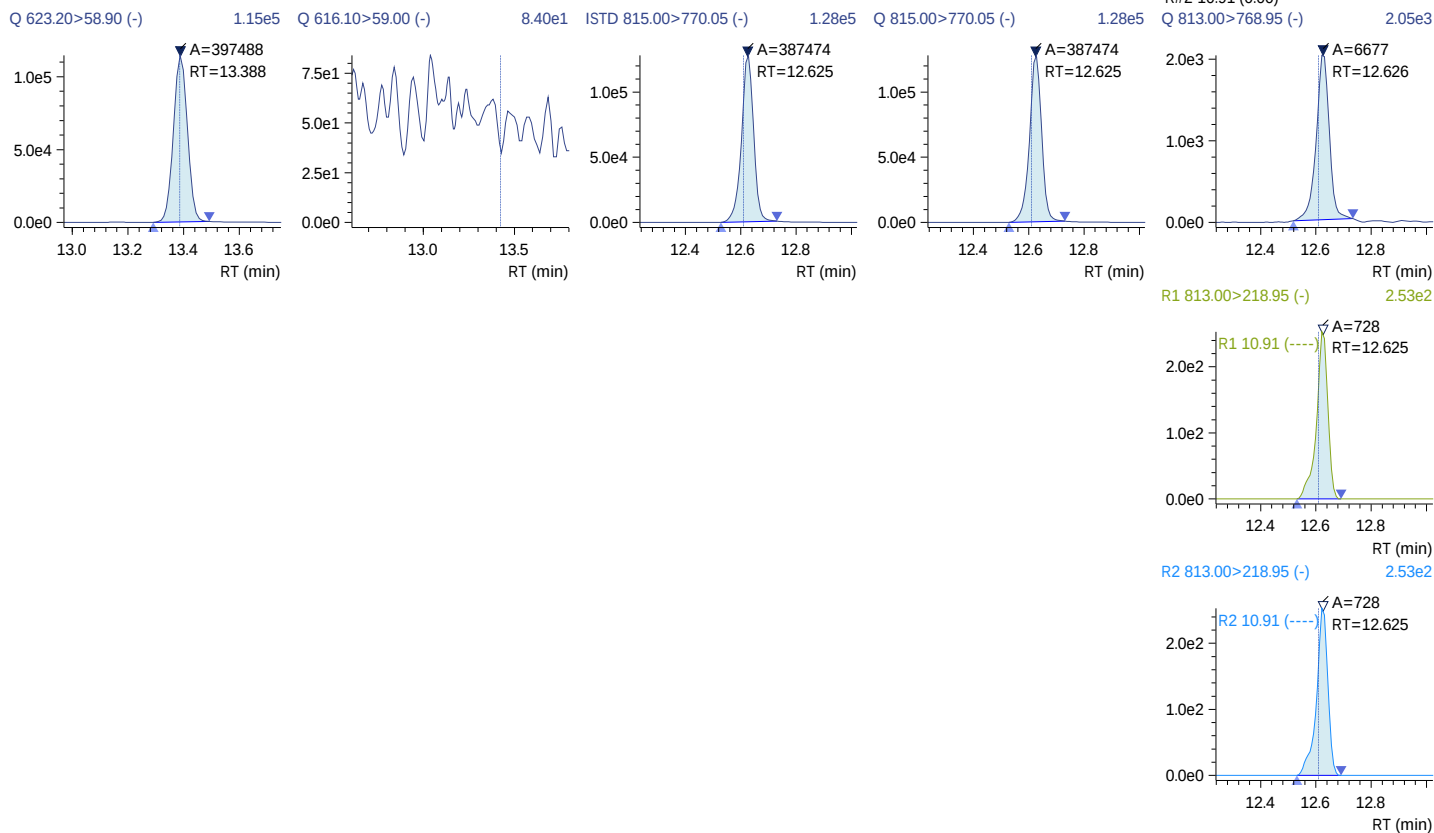
D7-MeFOSE
 Conc. 28.4821

MeFOSE
 Conc. ----

¹³C2-PFHxDA_IS
 Conc. 2.5000

¹³C2-PFHxDA
 Conc. 2.7998

PFHXDA
 Conc. 0.0307
 R#1 10.91 (9.60)
 R#2 10.91 (0.00)





240130_031 (continued)

D3-MeFOSA
 Conc. 2.7395

D3-MeFOSA_IS
 Conc. 2.5000

MeFOSA
 Conc. ----
 R#1 0.00 (98.91)
 R#2 0.00 (0.00)

D9-EtFOSE_IS
 Conc. 25.0000

D9-EtFOSE
 Conc. 28.5731

Q 515.00>219.00 (-)

1.12e4

ISTD 515.00>219.00 (-)

1.12e4

Q 511.90>219.00 (-)

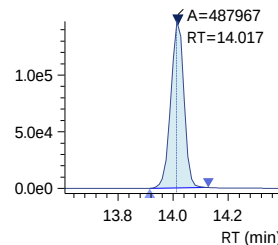
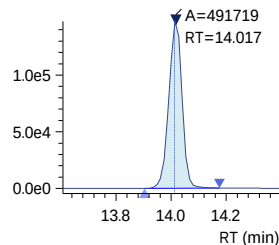
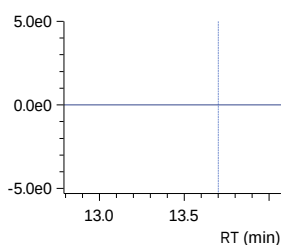
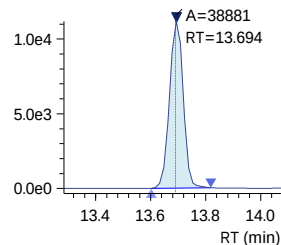
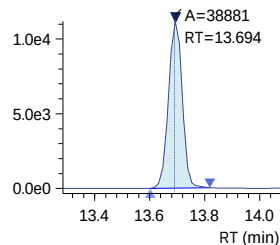
0.00e0

ISTD 639.20>58.90 (-)

1.47e5

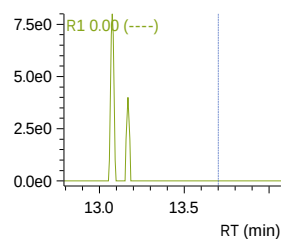
Q 639.20>58.90 (-)

1.47e5



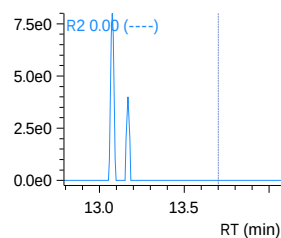
R1 511.90>169.00 (-)

8.00e0



R2 511.90>169.00 (-)

8.00e0





240130_031 (continued)

EtFOSE
Conc. ----

D5-EtFOSAm
Conc. 2.8998

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. ----

PFODA
Conc. 0.0191

Q 630.00>59.00 (-)

8.70e1

Q 531.10>219.00 (-)

1.83e4

ISTD 531.10>219.00 (-)

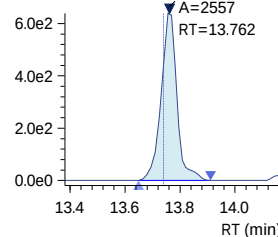
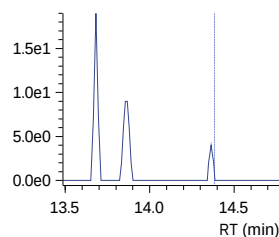
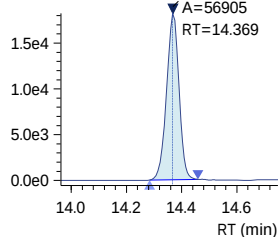
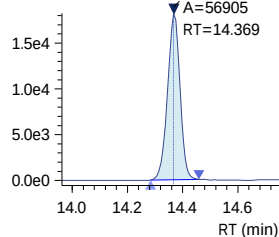
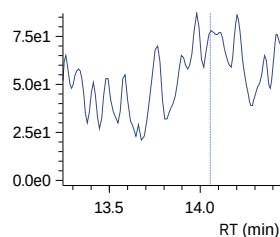
1.83e4

Q 526.00>219.00 (-)

1.90e1

Q 913.00>868.65 (-)

6.39e2

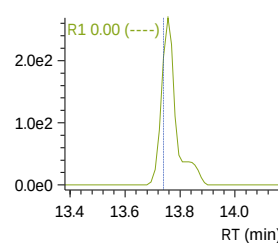
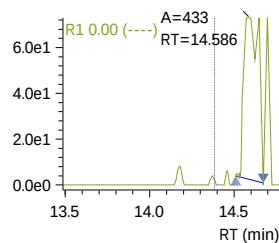


R1 526.00>169.00 (-)

7.30e1

R1 913.00>169.00 (-)

2.69e2

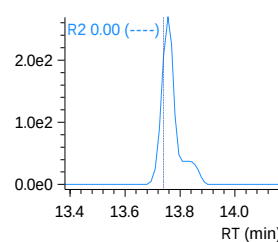
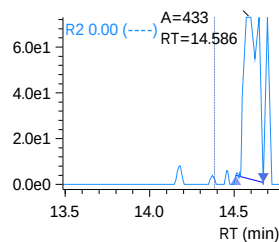


R2 526.00>169.00 (-)

7.30e1

R2 913.00>169.00 (-)

2.69e2

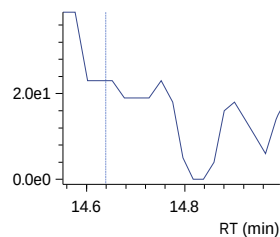


positive trans

Conc. ----

Q 514.80>219.10 (+)

3.90e1





240130_032

Sample ID: 1633 QIS
Date Acquired: 1/31/2024 2:44:28 AM
Acquired by: System Administrator
Data File: 240130_032
Vial: 13 | Inj. Volume: 10.0000uL | Tray: 1

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	934849	----	----	----	----	----	----	
13C4-PFBA_IS	216.80>171.90	----	934849	----	----	----	----	----	----	
13C3-PFBA_IS	216.00>172.00	----	541767	----	----	----	----	----	----	
PFBA	212.80>169.05	----	----	----	----	----	----	----	----	
PFMPA	229.00>84.90	----	----	----	----	----	----	----	----	
3_3 FTCA	241.00>177.10	241.00>117.00	----	0	0.00	139.21	----	----	----	
13C5-PFPeA	268.30>223.00	----	258796	----	----	----	----	----	----	
13C5-PFPeA_IS	268.30>223.00	----	258796	----	----	----	----	----	----	
PFPeA	263.00>219.00	----	1176	----	----	----	----	----	----	
PFMBA	279.00>84.95	----	----	----	----	----	----	----	----	
13C2-4_2 FTS	329.10>80.90	----	305012	----	----	----	----	----	----	
13C2-4_2 FTS_IS	329.10>80.90	----	305012	----	----	----	----	----	----	
4_2 FTS	327.10>307.00	327.10>80.90	----	0	0.00	32.10	0	0.00	32.10	
13C3-PFBS_IS	302.10>79.90	----	299230	----	----	----	----	----	----	
PFBS	298.70>79.90	298.70>98.80	----	0	0.00	44.81	0	0.00	44.81	
13C3-PFBS	302.10>79.90	----	299230	----	----	----	----	----	----	
NFDHA	295.00>201.00	295.00>84.90	1214	0	0.00	35.54	0	0.00	35.54	IRr
13C5-PFHxA	318.00>273.00	----	557603	----	----	----	----	----	----	
13C5-PFHxA_IS	318.00>273.00	----	557603	----	----	----	----	----	----	
13C2-PFHxA_IS	315.10>270.00	----	624964	----	----	----	----	----	----	
PFHxA	313.00>269.00	----	3686	----	----	----	----	----	----	RTi
PFEESA	314.80>135.00	314.80>82.90	361	0	0.00	5.22	0	0.00	5.22	IRr
13C3-HFPO-DA	286.90>168.90	----	637040	----	----	----	----	----	----	
13C3-HFPO-DA_IS	286.90>168.90	----	637040	----	----	----	----	----	----	
HFPO-DA	284.90>168.90	284.90>184.90	----	0	0.00	59.79	0	0.00	59.79	
5_3 FTCA	341.00>237.05	341.00>217.00	443	892	201.43	157.08	892	201.43	157.08	
PFPeS	349.10>79.90	349.10>98.80	----	0	0.00	55.12	0	0.00	55.12	
13C4-PFHpA	367.10>322.00	----	724023	----	----	----	----	----	----	
13C4-PFHpA_IS	367.10>322.00	----	724023	----	----	----	----	----	----	
PFHpA	363.10>319.00	363.10>169.00	8422	1794	21.30	23.02	1794	21.30	23.02	
DONA	376.90>250.90	376.90>84.80	----	0	0.00	27.50	0	0.00	27.50	
13C2-6_2 FTS_IS	429.10>80.90	----	329504	----	----	----	----	----	----	
13C2-6_2 FTS	429.10>80.90	----	329504	----	----	----	----	----	----	
6_2 FTS	427.10>407.00	427.10>80.90	1017	0	0.00	50.47	0	0.00	50.47	IRr
13C4-PFOA_IS	417.10>172.00	----	50509	----	----	----	----	----	----	
13C8-PFOA_IS	421.10>376.00	----	699197	----	----	----	----	----	----	

J:\LCMS08\Data\240130_1633_Curve\240130_1633_Curve.damIp

Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240130_032 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	699197	----	----	----	----	----	----	----
PFOA	413.00>369.00	413.00>169.00	246615	70621	28.64	28.77	70621	28.64	28.77	
13C3-PFHxS	402.10>79.90	----	292833	----	----	----	----	----	----	----
13C3-PFHxS_IS	402.10>79.90	----	292833	----	----	----	----	----	----	----
PFHxS	398.70>79.90	398.70>98.90	1212	0	0.00	60.90	0	0.00	60.90	IRr
18O2-PFHxS_IS	403.00>83.90	----	270943	----	----	----	----	----	----	----
13C9-PFNA_IS	472.10>427.00	----	403965	----	----	----	----	----	----	----
13C9-PFNA	472.10>427.00	----	403965	----	----	----	----	----	----	----
13C5-PFNA_IS	468.00>423.00	----	380585	----	----	----	----	----	----	----
PFNA	463.00>419.00	463.00>219.00	777135	116398	14.98	19.31	116398	14.98	19.31	
PFHpS	449.00>79.90	449.00>98.80	----	0	0.00	52.44	0	0.00	52.44	
7_3 FTCA	441.00>317.00	441.00>336.90	1484	679	45.75	129.46	679	45.75	129.46	IRr
13C2-8_2-FTS	529.10>80.90	----	263942	----	----	----	----	----	----	----
13C2-8_2-FTS_IS	529.10>80.90	----	263942	----	----	----	----	----	----	----
8_2 FTS	527.10>506.95	527.10>80.80	----	0	0.00	45.98	0	0.00	45.98	
13C6-PFDA_IS	519.10>474.10	----	282410	----	----	----	----	----	----	----
13C6-PFDA	519.10>474.10	----	282410	----	----	----	----	----	----	----
13C2-PFDA_IS	515.10>470.10	----	233737	----	----	----	----	----	----	----
PFDA	512.90>469.00	512.90>219.00	6639	615	9.26	17.88	615	9.26	17.88	
D3-NMeFOSAA_IS	573.20>419.00	----	796130	----	----	----	----	----	----	----
D3-NMeFOSAA	573.20>419.00	----	796130	----	----	----	----	----	----	----
13C8-PFOS_IS	507.10>98.90	----	120103	----	----	----	----	----	----	----
13C8-PFOS	507.10>98.90	----	120103	----	----	----	----	----	----	----
13C4-PFOS_IS	502.80>79.90	----	351610	----	----	----	----	----	----	----
PFOS	498.90>79.90	498.90>98.80	----	0	0.00	53.60	0	0.00	53.60	
NMeFOSAA	570.10>419.00	570.10>483.00	----	0	0.00	64.89	0	0.00	64.89	
D5-NEtFOSAA_IS	589.20>419.00	----	637743	----	----	----	----	----	----	----
D5-NEtFOSAA	589.20>419.00	----	637743	----	----	----	----	----	----	----
NEtFOSAA	584.20>419.10	584.20>526.00	----	0	0.00	96.07	0	0.00	96.07	
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	525	873	166.42	30.95	873	166.42	30.95	IRr
PFUnDA	563.10>519.00	563.10>269.10	6163	913	14.81	11.01	913	14.81	11.01	
13C7-PFUnDA_IS	570.00>525.10	----	366840	----	----	----	----	----	----	----
13C7-PFUnDA	570.00>525.10	----	366840	----	----	----	----	----	----	----
PFNS	548.80>79.90	548.80>98.80	----	0	0.00	60.44	0	0.00	60.44	
10_2 FTS	626.80>607.05	626.80>81.00	----	0	0.00	36.14	0	0.00	36.14	
13C2-PFDOA_IS	615.10>570.00	----	416460	----	----	----	----	----	----	----
13C2-PFDOA	615.10>570.00	----	416460	----	----	----	----	----	----	----
PFDOA	613.10>569.00	613.10>319.00	3946	623	15.78	10.16	623	15.78	10.16	IRr
PFDS	599.00>79.90	599.00>98.80	----	0	0.00	58.26	0	0.00	58.26	
PFTrDA	663.00>619.00	663.00>168.90	6053	1086	17.94	16.18	1086	17.94	16.18	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240130_032 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	337	0	0.00	34.99	0	0.00	34.99	IRr
PFOSAm	498.10>77.90	----	76318	----	----	----	----	----	----	
13C8-PFOSAm	506.10>77.80	----	304418	----	----	----	----	----	----	
13C8-PFOSAm_IS	506.10>77.80	----	304418	----	----	----	----	----	----	
PFTDA	713.10>669.00	713.10>168.90	4762	787	16.52	18.05	787	16.52	18.05	
13C2-PFTDA	715.20>670.00	----	280987	----	----	----	----	----	----	
13C2-PFTDA_IS	715.20>670.00	----	280987	----	----	----	----	----	----	
PFDoS	699.10>79.90	699.10>98.80	----	0	0.00	61.13	0	0.00	61.13	
D7-MeFOSE_IS	623.20>58.90	----	784604	----	----	----	----	----	----	
D7-MeFOSE	623.20>58.90	----	784604	----	----	----	----	----	----	
MeFOSE	616.10>59.00	----	----	----	----	----	----	----	----	
13C2-PFHxDA_IS	815.00>770.05	----	730650	----	----	----	----	----	----	
13C2-PFHxDA	815.00>770.05	----	730650	----	----	----	----	----	----	
PFHxDA	813.00>768.95	813.00>218.95	7629	957	12.54	11.66	957	12.54	11.66	
D3-MeFOSA	515.00>219.00	----	77788	----	----	----	----	----	----	
D3-MeFOSA_IS	515.00>219.00	----	77788	----	----	----	----	----	----	
MeFOSA	511.90>219.00	511.90>169.00	----	0	0.00	160.44	0	0.00	160.44	
D9-EtFOSE_IS	639.20>58.90	----	960417	----	----	----	----	----	----	
D9-EtFOSE	639.20>58.90	----	949742	----	----	----	----	----	----	
EtFOSE	630.00>59.00	----	----	----	----	----	----	----	----	
D5-EtFOSAm	531.10>219.00	----	108077	----	----	----	----	----	----	
D5-EtFOSAm_IS	531.10>219.00	----	108077	----	----	----	----	----	----	
EtFOSAm	526.00>219.00	526.00>169.00	----	0	0.00	159.63	0	0.00	159.63	
PFODA	913.00>868.65	913.00>169.00	2557	1168	45.69	36.03	1168	45.69	36.03	

Flag ID key: IRr: Ion Ratio (Relative), RTi: RT Diff (Absolute ISTD)



240130_032

Sample ID: 1633 QIS
Date Acquired: 1/31/2024 2:44:28 AM
Acquired by: System Administrator
Data File: 240130_032
Vial: 13 | Inj. Volume: 10.0000uL | Tray: 1

Only used to confirm isomers present for PFOA and PFNA

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.381	0.043	-0.002	934849	541767	13C3-PFBA_IS	11.6452	ng/mL	
13C4-PFBA_IS	Auto	1.381	0.043	----	934849	934849	----	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.383	0.046	----	541767	541767	----	5.0000	ng/mL	
PFBA	ND(W/B)	----	----	----	----	934849	13C4-PFBA_IS	----	ng/mL	
PFMPA	ND(W/B)	----	----	----	----	258796	13C5-PFPeA_IS	----	ng/mL	
3_3 FTCA	ND(W/B)	----	----	----	----	258796	13C5-PFPeA_IS	----	ng/mL	
13C5-PFPeA	Auto	3.468	0.029	-1.486	258796	624964	13C2-PFHxA_IS	5.7590	ng/mL	
13C5-PFPeA_IS	Auto	3.468	0.029	----	258796	258796	----	5.0000	ng/mL	
PFPeA	Auto	3.467	0.025	-0.001	1176	258796	13C5-PFPeA_IS	0.0065	ng/mL	
PFMBA	ND(W/B)	----	----	----	----	258796	13C5-PFPeA_IS	----	ng/mL	
13C2-4_2 FTS	Auto	4.640	0.020	-2.424	305012	270943	18O2-PFHxS_IS	5.9805	ng/mL	
13C2-4_2 FTS_IS	Auto	4.640	0.020	----	305012	305012	----	5.0000	ng/mL	
4_2 FTS	ND(W/B)	----	----	----	----	305012	13C2-4_2 FTS_IS	----	ng/mL	
13C3-PFBS_IS	Auto	4.613	0.026	----	299230	299230	----	2.5000	ng/mL	
PFBS	ND(W/B)	----	----	----	----	299230	13C3-PFBS_IS	----	ng/mL	
13C3-PFBS	Auto	4.613	0.026	-2.451	299230	270943	18O2-PFHxS_IS	2.9600	ng/mL	
NFDHA	Auto	4.813	0.023	-0.140	1214	557603	13C5-PFHxA_IS	0.0105	ng/mL	IRr
13C5-PFHxA	Auto	4.953	0.021	-0.001	557603	624964	13C2-PFHxA_IS	2.7641	ng/mL	
13C5-PFHxA_IS	Auto	4.953	0.021	----	557603	557603	----	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	4.954	0.021	----	624964	624964	----	2.5000	ng/mL	
PFHxA	Auto	4.847	-0.087	-0.106	3686	557603	13C5-PFHxA_IS	0.0117	ng/mL	RTi
PFEESA	Auto	5.326	0.061	0.373	361	557603	13C5-PFHxA_IS	0.0005	ng/mL	IRr
13C3-HFPO-DA	Auto	5.431	0.019	0.477	637040	624964	13C2-PFHxA_IS	11.5020	ng/mL	
13C3-HFPO-DA_IS	Auto	5.431	0.019	----	637040	637040	----	10.0000	ng/mL	
HFPO-DA	ND(W/B)	----	----	----	----	637040	13C3-HFPO-DA_IS	----	ng/mL	
5_3 FTCA	Auto	5.886	0.020	0.933	443	557603	13C5-PFHxA_IS	0.0266	ng/mL	
PFPeS	ND(W/B)	----	----	----	----	292833	13C3-PFHxS_IS	----	ng/mL	
13C4-PFHpA	Auto	6.137	0.017	1.183	724023	624964	13C2-PFHxA_IS	2.8529	ng/mL	
13C4-PFHpA_IS	Auto	6.137	0.017	----	724023	724023	----	2.5000	ng/mL	
PFHpA	Auto	6.120	-0.002	-0.017	8422	724023	13C4-PFHpA_IS	0.0168	ng/mL	
DONA	ND(W/B)	----	----	----	----	637040	13C3-HFPO-DA_IS	----	ng/mL	
13C2-6_2 FTS_IS	Auto	6.778	0.012	----	329504	329504	----	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.778	0.012	-0.286	329504	270943	18O2-PFHxS_IS	6.2062	ng/mL	
6_2 FTS	Auto	6.782	0.017	0.004	1017	329504	13C2-6_2 FTS_IS	0.0081	ng/mL	IRr
13C4-PFOA_IS	Auto	7.094	0.015	----	50509	50509	----	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.093	0.015	----	699197	699197	----	2.5000	ng/mL	
13C8-PFOA	Auto	7.093	0.015	-0.001	699197	50509	13C4-PFOA_IS	2.9027	ng/mL	
PFOA	M	7.095	0.014	0.002	246615	699197	13C8-PFOA_IS	0.9511	ng/mL	
13C3-PFHxS	Auto	7.064	0.016	0.000	292833	270943	18O2-PFHxS_IS	3.0837	ng/mL	
13C3-PFHxS_IS	Auto	7.064	0.016	----	292833	292833	----	2.5000	ng/mL	
PFHxS	Auto	7.066	0.018	0.002	1212	292833	13C3-PFHxS_IS	0.0095	ng/mL	IRr
18O2-PFHxS_IS	Auto	7.064	0.016	----	270943	270943	----	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.942	0.013	----	403965	403965	----	1.2500	ng/mL	
13C9-PFNA	Auto	7.942	0.013	-0.001	403965	380585	13C5-PFNA_IS	1.4339	ng/mL	
13C5-PFNA_IS	Auto	7.943	0.013	----	380585	380585	----	1.2500	ng/mL	
PFNA	M	7.944	0.014	0.002	777135	403965	13C9-PFNA_IS	2.9457	ng/mL	
PFHpS	ND(W/B)	----	----	----	----	120103	13C8-PFOS_IS	----	ng/mL	
7_3 FTCA	Auto	7.941	0.012	2.988	1484	557603	13C5-PFHxA_IS	0.0507	ng/mL	IRr
13C2-8_2-FTS	Auto	8.398	0.010	1.334	263942	270943	18O2-PFHxS_IS	5.8554	ng/mL	
13C2-8_2-FTS_IS	Auto	8.398	0.010	----	263942	263942	----	5.0000	ng/mL	
8_2 FTS	ND(W/B)	----	----	----	----	263942	13C2-8_2-FTS_IS	----	ng/mL	
13C6-PFDA_IS	Auto	8.707	0.012	----	282410	282410	----	1.2500	ng/mL	
13C6-PFDA	Auto	8.707	0.012	-0.001	282410	233737	13C2-PFDA_IS	1.5077	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_032 (continued)

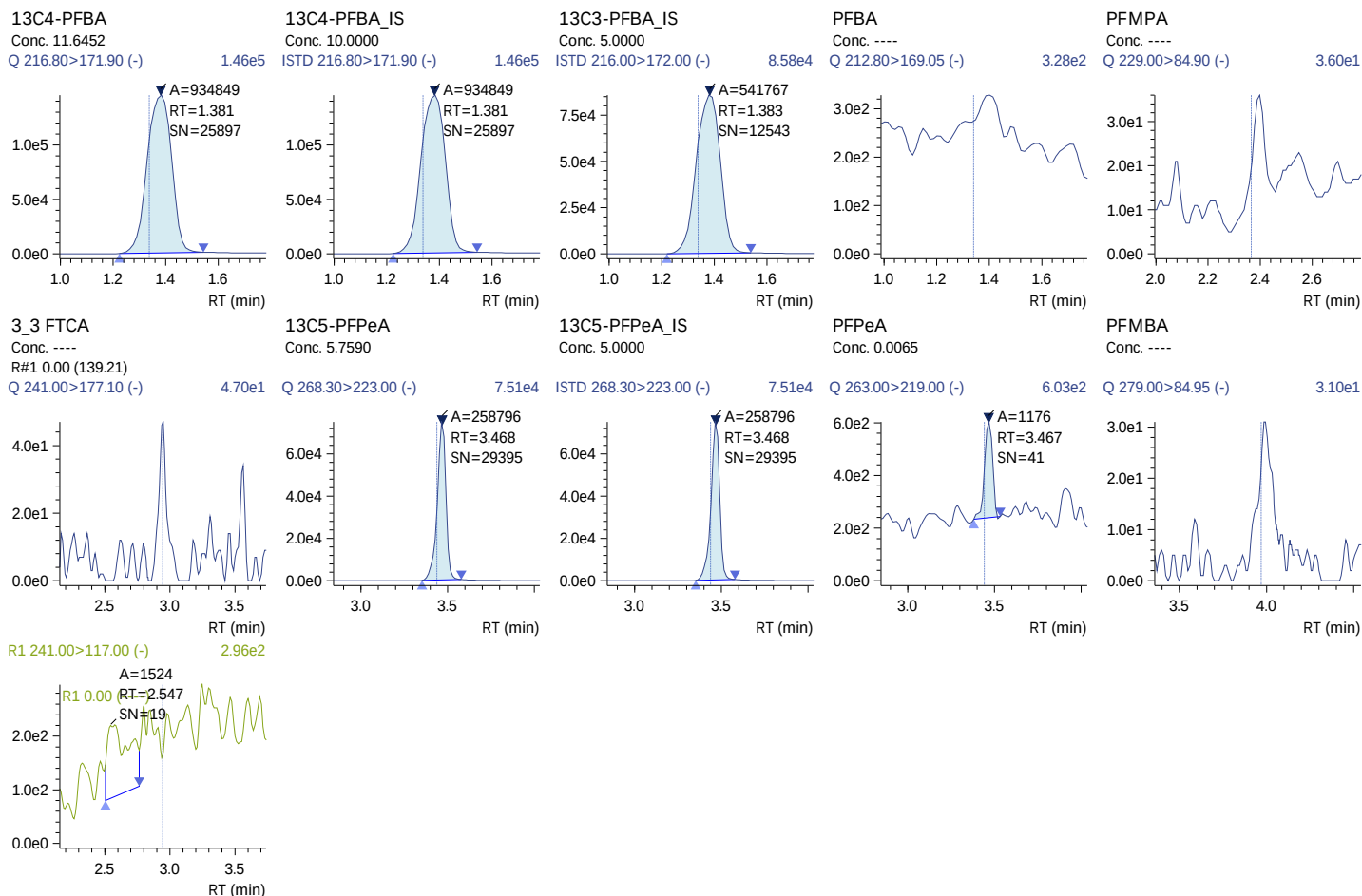
(Table continued from previous page)

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C2-PFDA_IS	Auto	8.708	0.012	----	233737	233737	----	1.2500	ng/mL	
PFDA	Auto	8.708	0.011	0.001	6639	282410	13C6-PFDA_IS	0.0278	ng/mL	
D3-NMeFOSAA_IS	Auto	8.844	0.010	----	796130	796130	----	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.844	0.010	0.044	796130	351610	13C4-PFOS_IS	5.5611	ng/mL	
13C8-PFOS_IS	Auto	8.800	0.014	----	120103	120103	----	2.5000	ng/mL	
13C8-PFOS	Auto	8.800	0.014	0.000	120103	351610	13C4-PFOS_IS	2.7142	ng/mL	
13C4-PFOS_IS	Auto	8.800	0.013	----	351610	351610	----	2.5000	ng/mL	
PFOS	ND(W/B)	----	----	----	----	120103	13C8-PFOS_IS	----	ng/mL	
NMeFOSAA	ND(W/B)	----	----	----	----	796130	D3-NMeFOSAA_IS	----	ng/mL	
D5-NetFOSAA_IS	Auto	9.175	0.011	----	637743	637743	----	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.175	0.011	0.375	637743	351610	13C4-PFOS_IS	5.6526	ng/mL	
NetFOSAA	ND(W/B)	----	----	----	----	637743	D5-NetFOSAA_IS	----	ng/mL	
9-CI-PF3ONS	Auto	9.338	-0.013	3.907	525	637040	13C3-HFPO-DA_IS	0.0008	ng/mL	IRr
PFUnDA	Auto	9.433	0.011	0.002	6163	366840	13C7-PFUnDA_IS	0.0025	ng/mL	
13C7-PFUnDA_IS	Auto	9.431	0.011	----	366840	366840	----	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.431	0.011	0.722	366840	233737	13C2-PFDA_IS	1.5762	ng/mL	
PFNS	ND(W/B)	----	----	----	----	120103	13C8-PFOS_IS	----	ng/mL	
10_2 FTS	ND(W/B)	----	----	----	----	263942	13C2-8_2-FTS_IS	----	ng/mL	
13C2-PFDOA_IS	Auto	10.117	0.010	----	416460	416460	----	1.2500	ng/mL	
13C2-PFDOA	Auto	10.117	0.010	1.409	416460	233737	13C2-PFDA_IS	1.4989	ng/mL	
PFDOA	Auto	10.115	0.007	-0.002	3946	416460	13C2-PFDOA_IS	-0.0141	ng/mL	IRr
PFDS	ND(W/B)	----	----	----	----	120103	13C8-PFOS_IS	----	ng/mL	
PFTDA	Auto	10.772	0.008	-0.631	6053	280987	13C2-PFTDA_IS	0.0003	ng/mL	
11-CI-PF3OUdS	Auto	10.782	0.011	5.351	337	637040	13C3-HFPO-DA_IS	0.0008	ng/mL	IRr
PFOSAm	Auto	11.149	-0.001	-0.005	76318	304418	13C8-PFOSAm_IS	0.7165	ng/mL	
13C8-PFOSAm	Auto	11.154	-0.001	2.354	304418	351610	13C4-PFOS_IS	2.7255	ng/mL	
13C8-PFOSAm_IS	Auto	11.154	-0.001	----	304418	304418	----	2.5000	ng/mL	
PFTDA	Auto	11.406	0.010	0.003	4762	280987	13C2-PFTDA_IS	0.0017	ng/mL	
13C2-PFTDA	Auto	11.403	0.008	2.695	280987	233737	13C2-PFDA_IS	1.4329	ng/mL	
13C2-PFTDA_IS	Auto	11.403	0.008	----	280987	280987	----	1.2500	ng/mL	
PFDoS	ND(W/B)	----	----	----	----	120103	13C8-PFOS_IS	----	ng/mL	
D7-MeFOSE_IS	Auto	13.382	-0.004	----	784604	784604	----	25.0000	ng/mL	
D7-MeFOSE	Auto	13.382	-0.004	4.582	784604	351610	13C4-PFOS_IS	27.3640	ng/mL	
MeFOSE	ND(W/B)	----	----	----	----	784604	D7-MeFOSE_IS	----	ng/mL	
13C2-PFHxDA_IS	Auto	12.613	0.004	----	730650	730650	----	2.5000	ng/mL	
13C2-PFHxDA	Auto	12.613	0.004	3.905	730650	233737	13C2-PFDA_IS	2.7841	ng/mL	
PFHXDA	Auto	12.614	0.004	0.001	7629	730650	13C2-PFHxDA_IS	0.0193	ng/mL	
D3-MeFOSA	Auto	13.687	-0.004	4.886	77788	351610	13C4-PFOS_IS	2.6676	ng/mL	
D3-MeFOSA_IS	Auto	13.687	-0.004	----	77788	77788	----	2.5000	ng/mL	
MeFOSA	ND(W/B)	----	----	----	----	77788	D3-MeFOSA_IS	----	ng/mL	
D9-EtFOSE_IS	Auto	14.009	-0.004	----	960417	960417	----	25.0000	ng/mL	
D9-EtFOSE	Auto	14.009	-0.004	5.209	949742	351610	13C4-PFOS_IS	27.0678	ng/mL	
EtFOSE	ND(W/B)	----	----	----	----	960417	D9-EtFOSE_IS	----	ng/mL	
D5-EtFOSAm	Auto	14.363	-0.003	5.563	108077	351610	13C4-PFOS_IS	2.6806	ng/mL	
D5-EtFOSAm_IS	Auto	14.363	-0.003	----	108077	108077	----	2.5000	ng/mL	
EtFOSAm	ND(W/B)	----	----	----	----	108077	D5-EtFOSAm_IS	----	ng/mL	
PFODA	Auto	13.748	0.008	1.135	2557	730650	13C2-PFHxDA_IS	0.0409	ng/mL	

Flag ID key: IRr: Ion Ratio (Relative), RTi: RT Diff (Absolute ISTD)



240130_032 (continued)





240130_032 (continued)

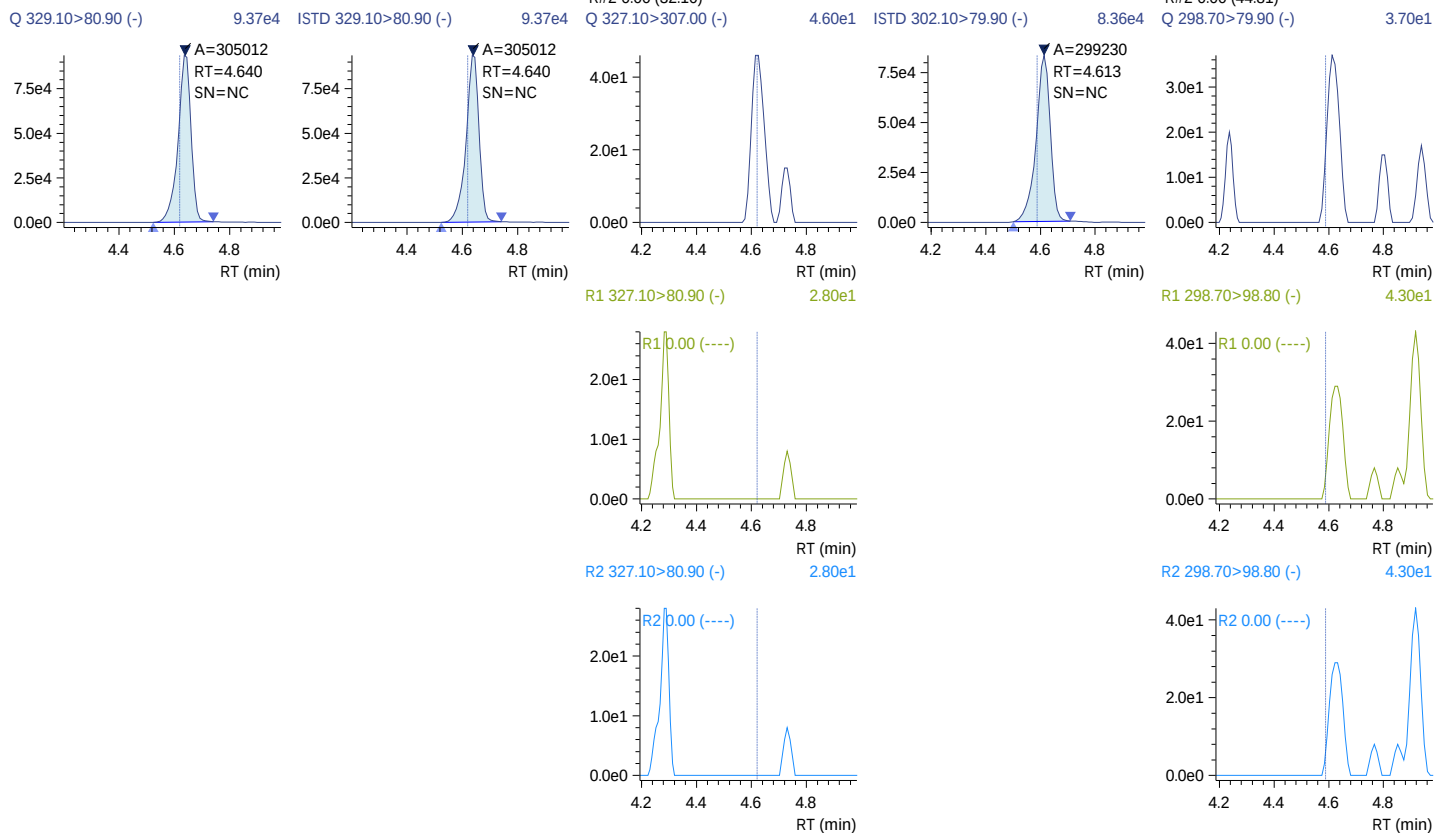
13C2-4_2 FTS
Conc. 5.9805

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. ----
R#1 0.00 (32.10)
R#2 0.00 (32.10)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. ----
R#1 0.00 (44.81)
R#2 0.00 (44.81)





240130_032 (continued)

13C3-PFBS
Conc. 2.9600

NFDHA
Conc. 0.0105
R#1 0.00 (35.54)
R#2 0.00 (35.54)

13C5-PFHxA
Conc. 2.7641

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

Q 302.10>79.90 (-)

8.36e4

Q 295.00>201.00 (-)

3.83e2

Q 318.00>273.00 (-)

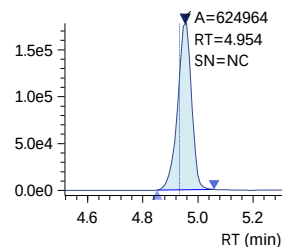
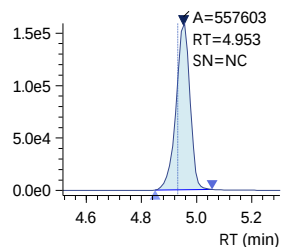
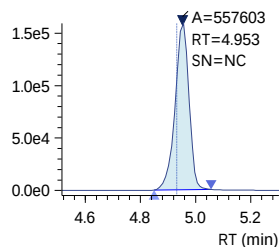
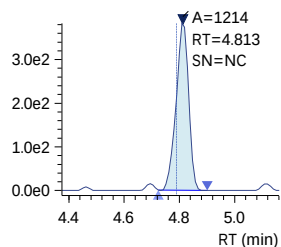
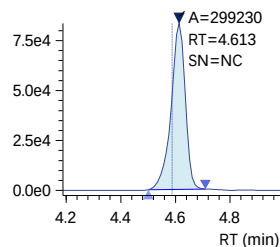
1.59e5

ISTD 318.00>273.00 (-)

1.59e5

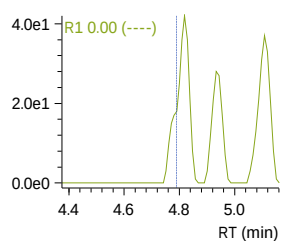
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1.78e5



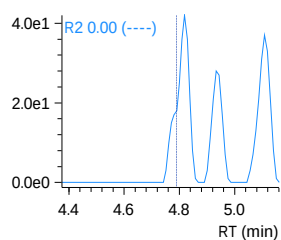
R1 295.00>84.90 (-)

4.20e1



R2 295.00>84.90 (-)

4.20e1





240130_032 (continued)

PFHxA
Conc. 0.0117

PFEESA
Conc. 0.0005

13C3-HFPO-DA
Conc. 11.5020

13C3-HFPO-DA_IS
Conc. 10.0000

HFPO-DA
Conc. ----

Q 313.00>269.00 (-)

1.23e3

Q 314.80>135.00 (-)

5.80e1

Q 286.90>168.90 (-)

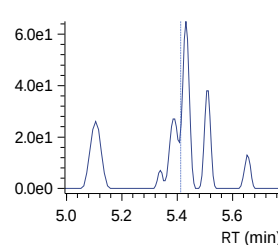
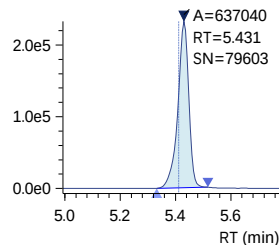
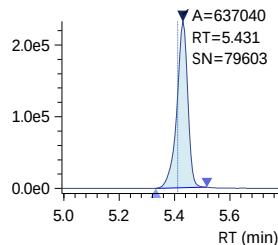
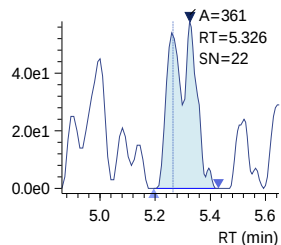
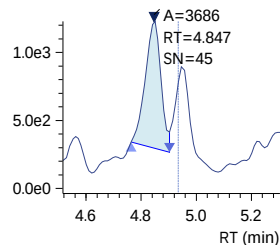
2.33e5

ISTD 286.90>168.90 (-)

2.33e5

Q 284.90>168.90 (-)

6.50e1

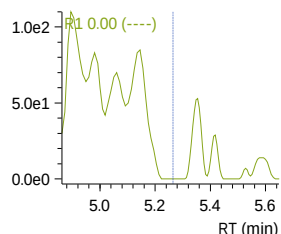


R1 314.80>82.90 (-)

1.10e2

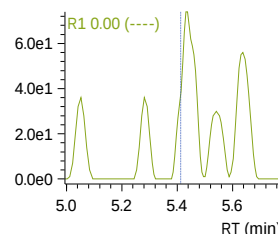
R1 284.90>184.90 (-)

7.40e1



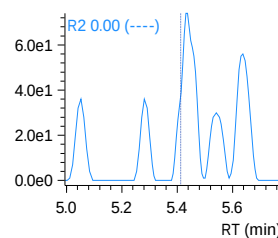
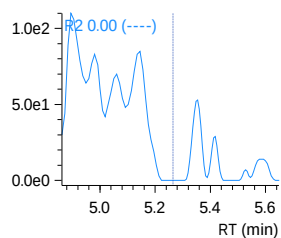
R2 314.80>82.90 (-)

1.10e2



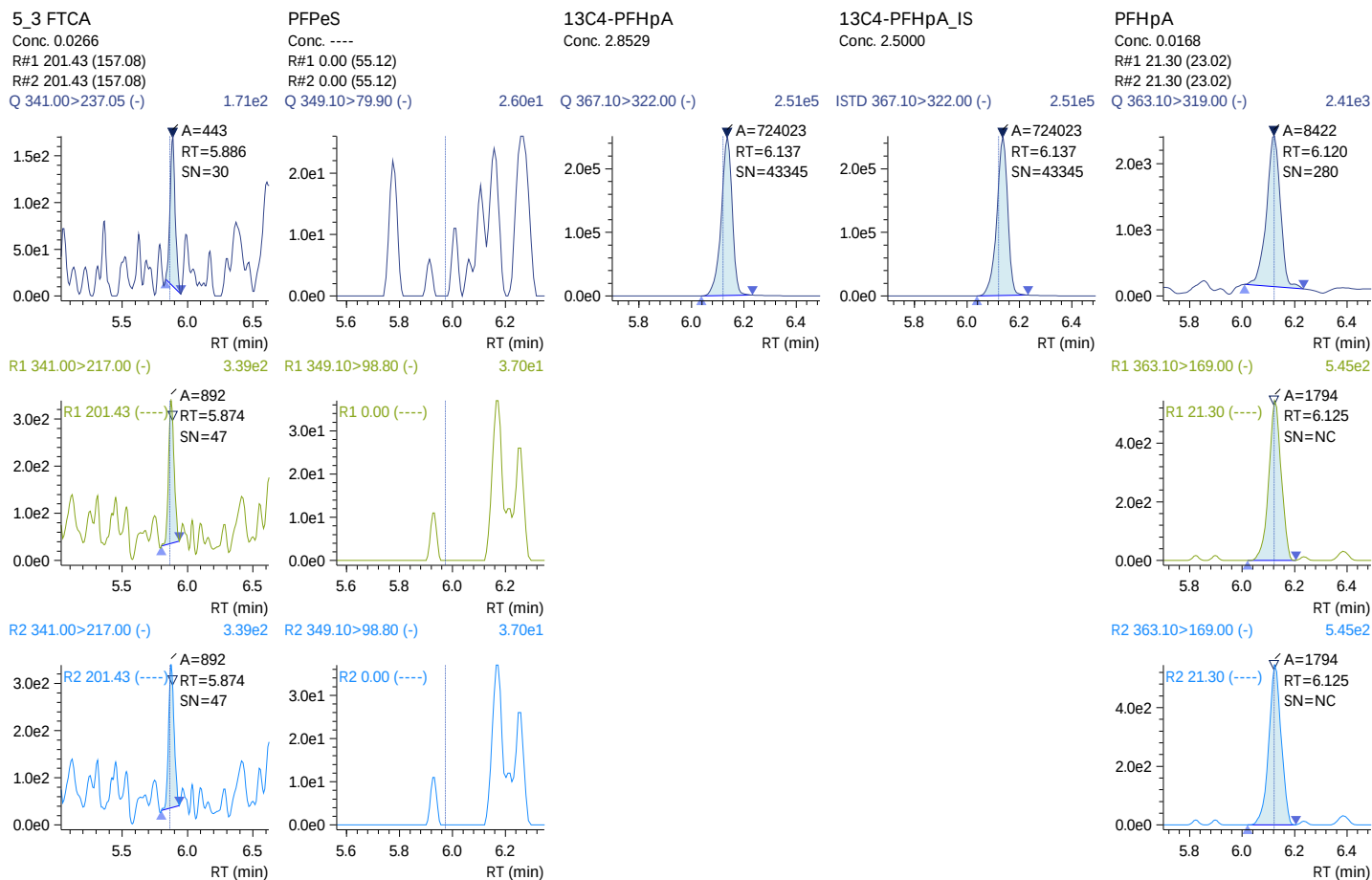
R2 284.90>184.90 (-)

7.40e1



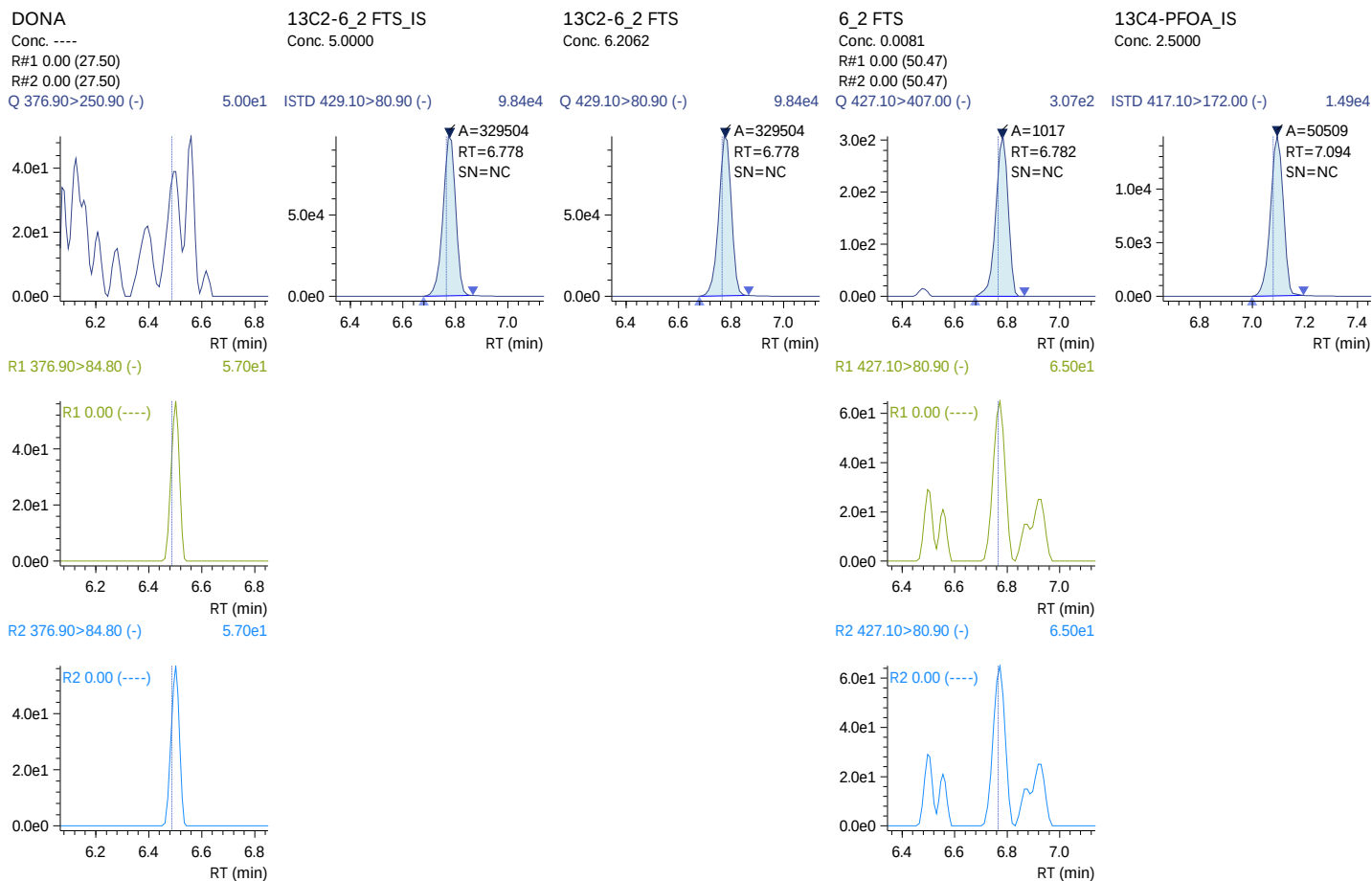


240130_032 (continued)





240130_032 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_032 (continued)

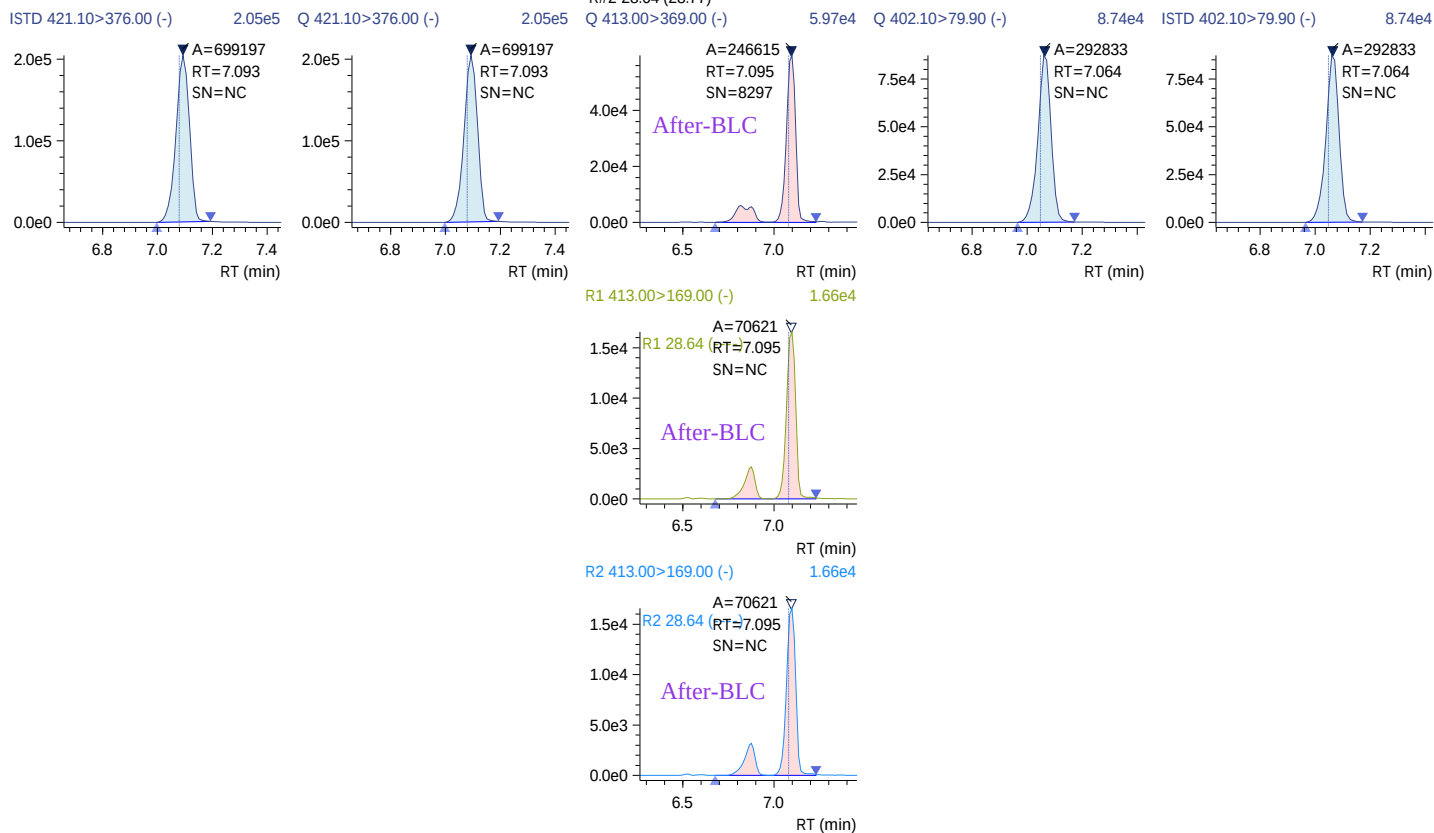
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.9027

PFOA
Conc. 0.9511
R#1 28.64 (28.77)
R#2 28.64 (28.77)

13C3-PFHxS
Conc. 3.0837

13C3-PFHxS_IS
Conc. 2.5000

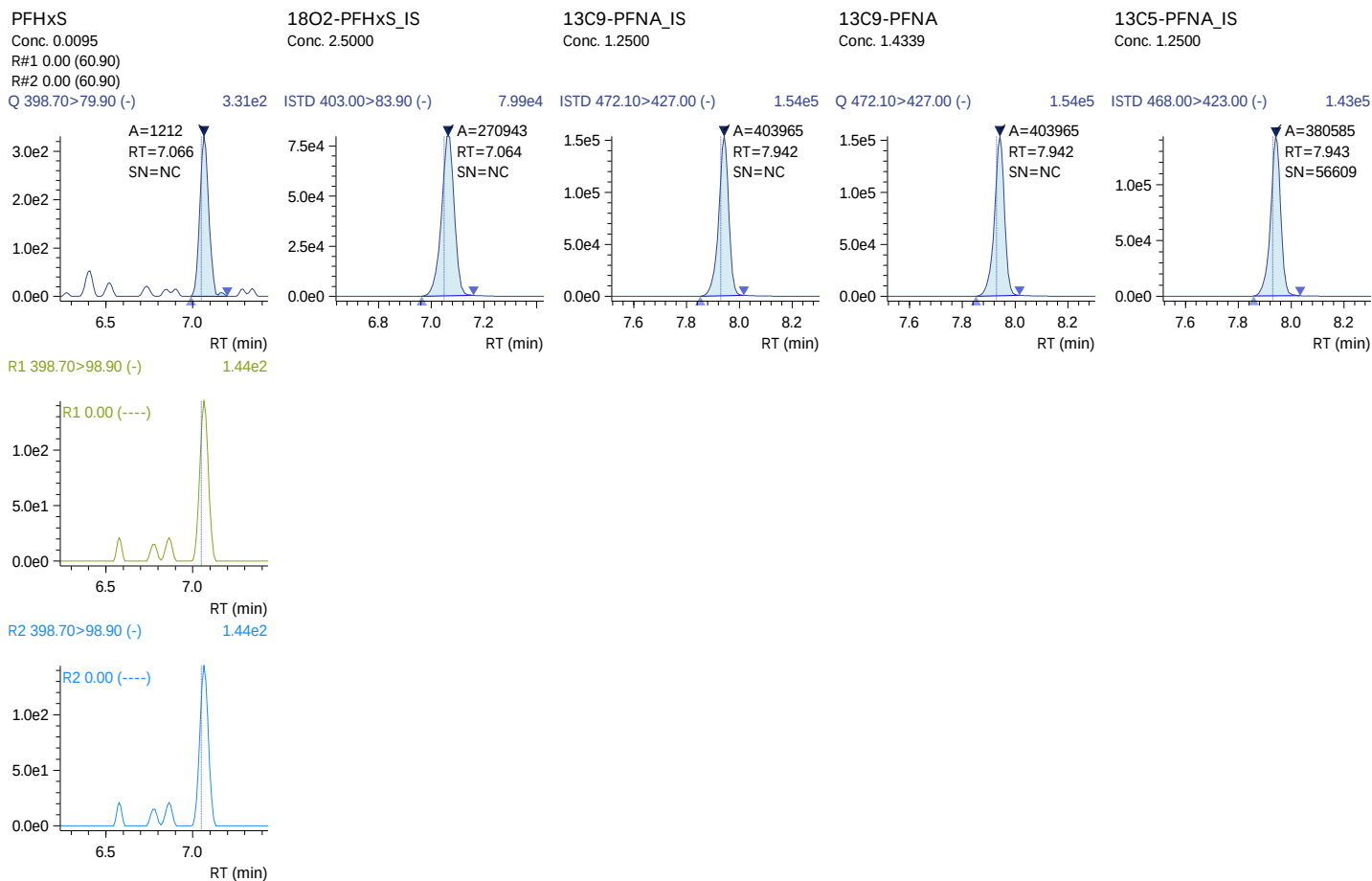


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_032 (continued)

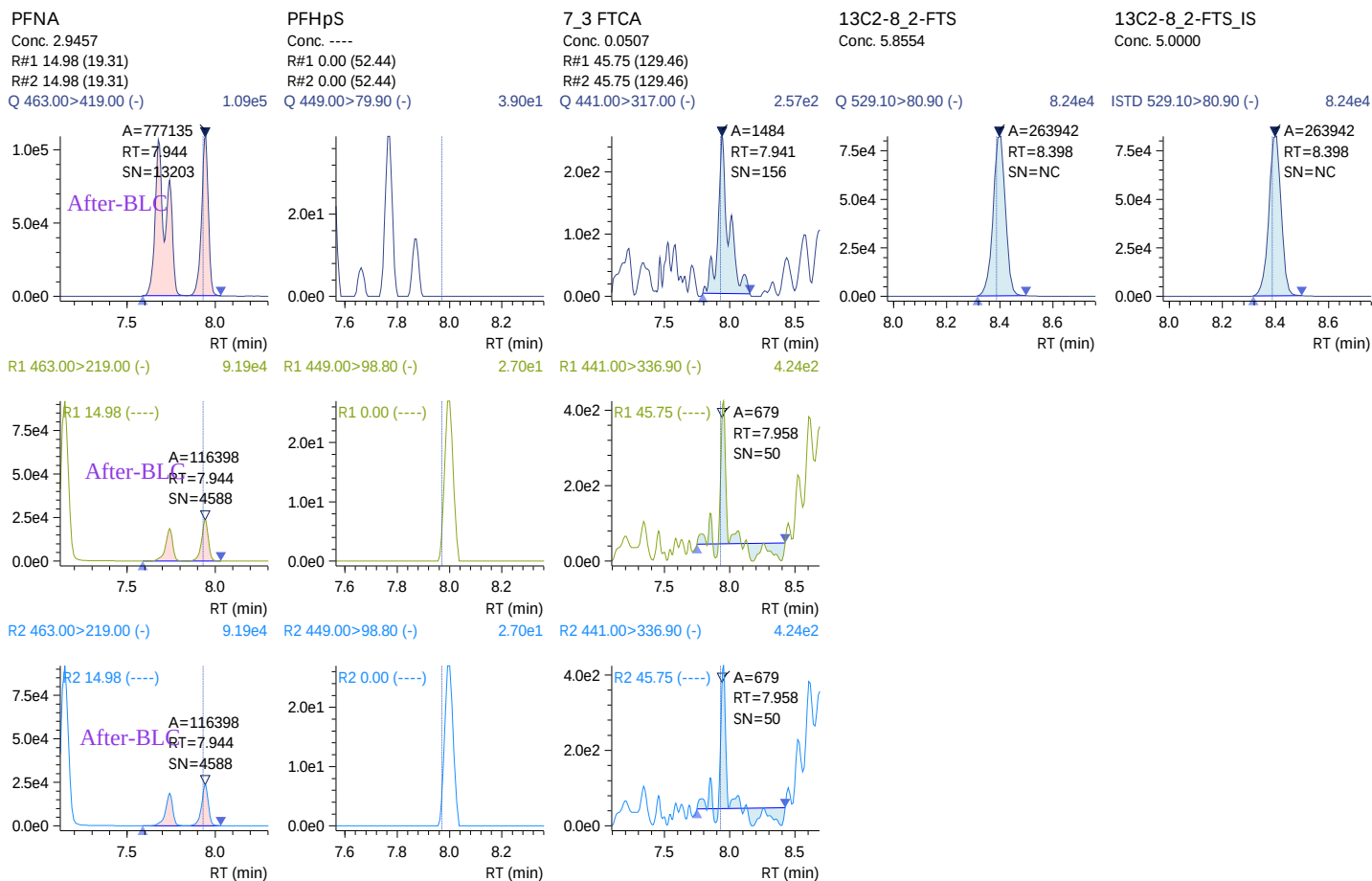


J:\LCMS08\Data\240130_1633_Curve\240130_1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_032 (continued)

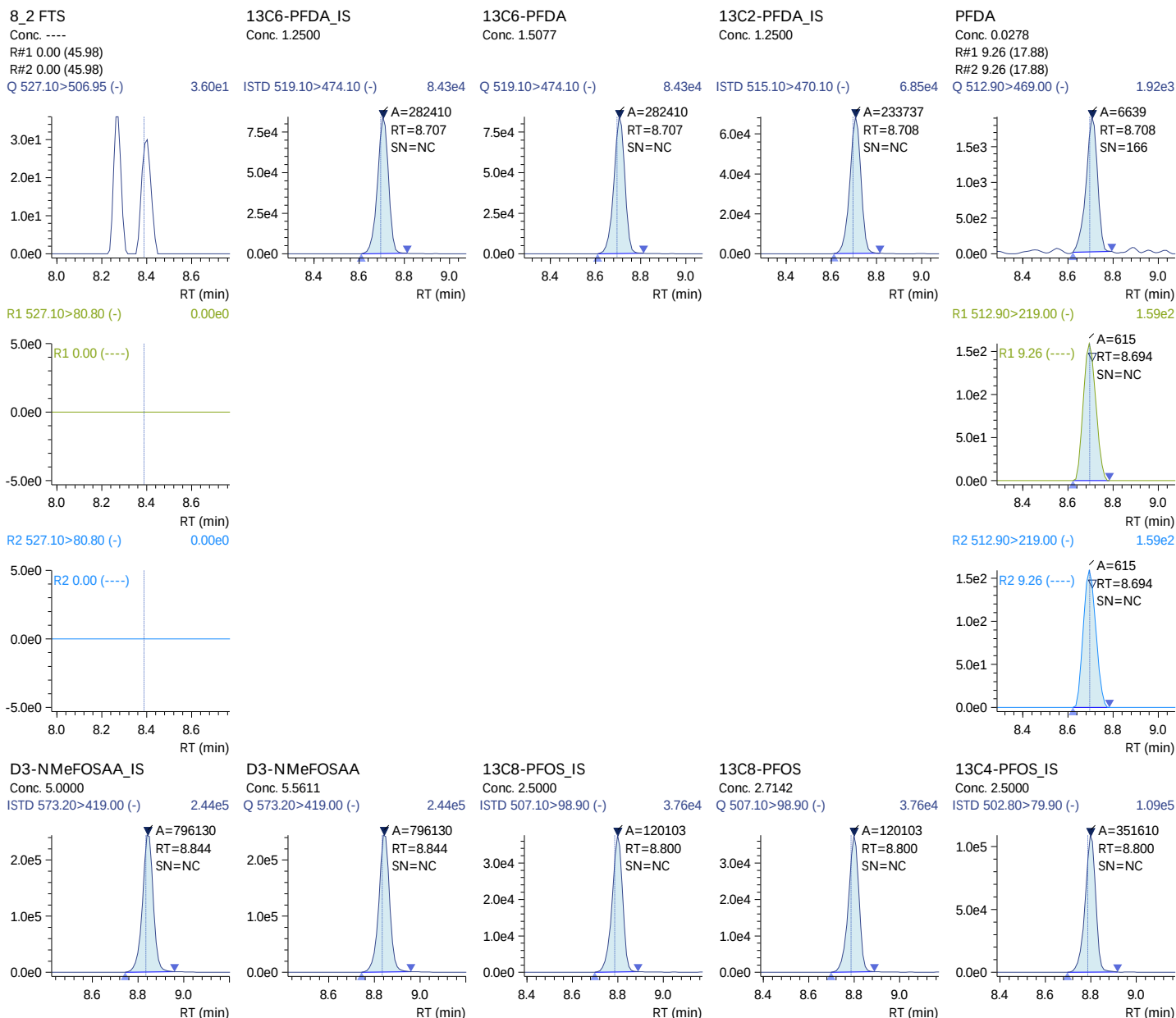


J:\LCMS08\Data\240130_1633_Curve\240130_1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_032 (continued)

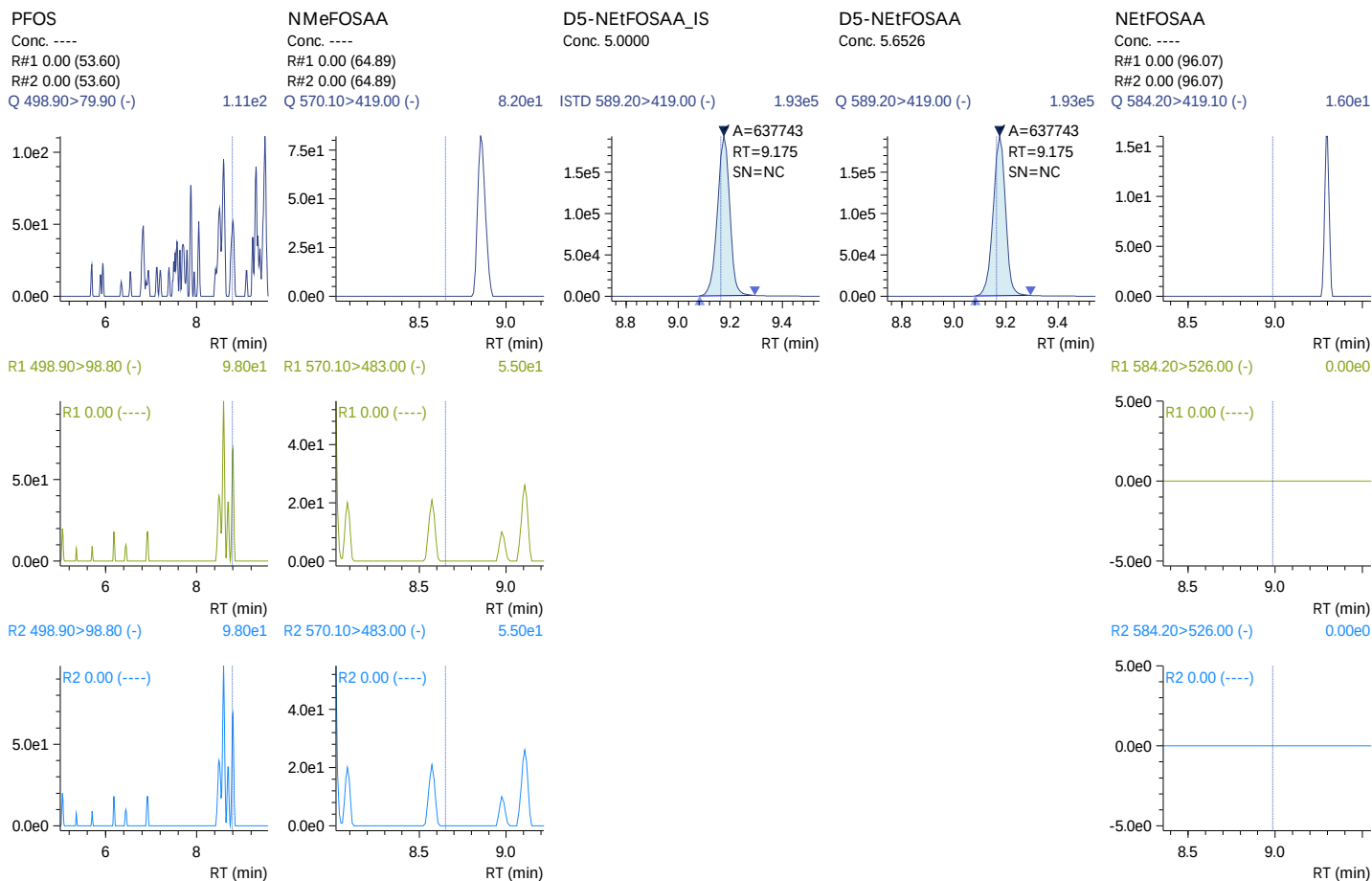


J:\LCMS08\Data\240130_1633_Curve\240130_1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_032 (continued)

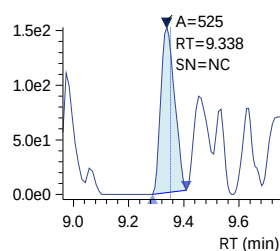




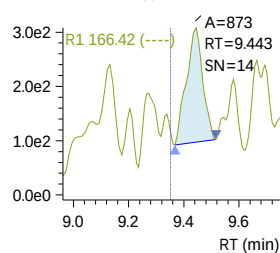
240130_032 (continued)

9-CI-PF3ONS

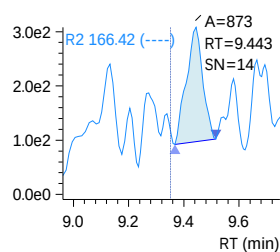
Conc. 0.0008
R#1 166.42 (30.95)
R#2 166.42 (30.95)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-) 3.08e2

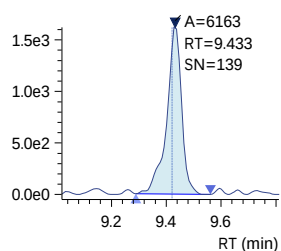


R2 532.80>353.00 (-) 3.08e2

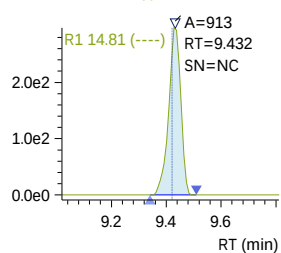


PFUnDA

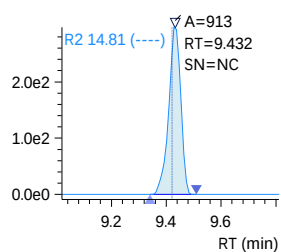
Conc. 0.0025
R#1 14.81 (11.01)
R#2 14.81 (11.01)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-) 2.97e2



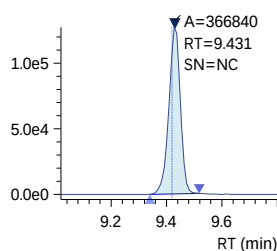
R2 563.10>269.10 (-) 2.97e2



13C7-PFUnDA_IS

Conc. 1.2500

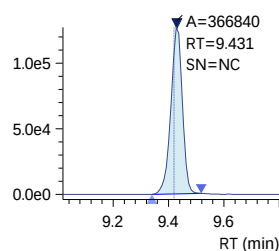
ISTD 570.00>525.10 (-)



13C7-PFUnDA

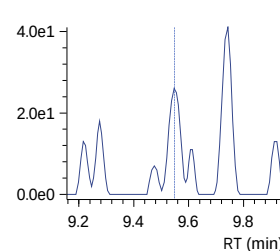
Conc. 1.5762

Q 570.00>525.10 (-)

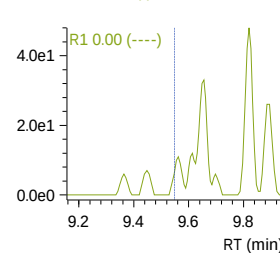


PFNS

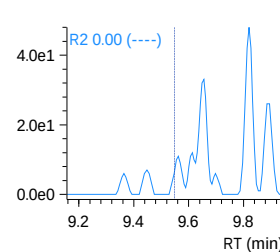
Conc. ----
R#1 0.00 (60.44)
R#2 0.00 (60.44)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-) 4.80e1

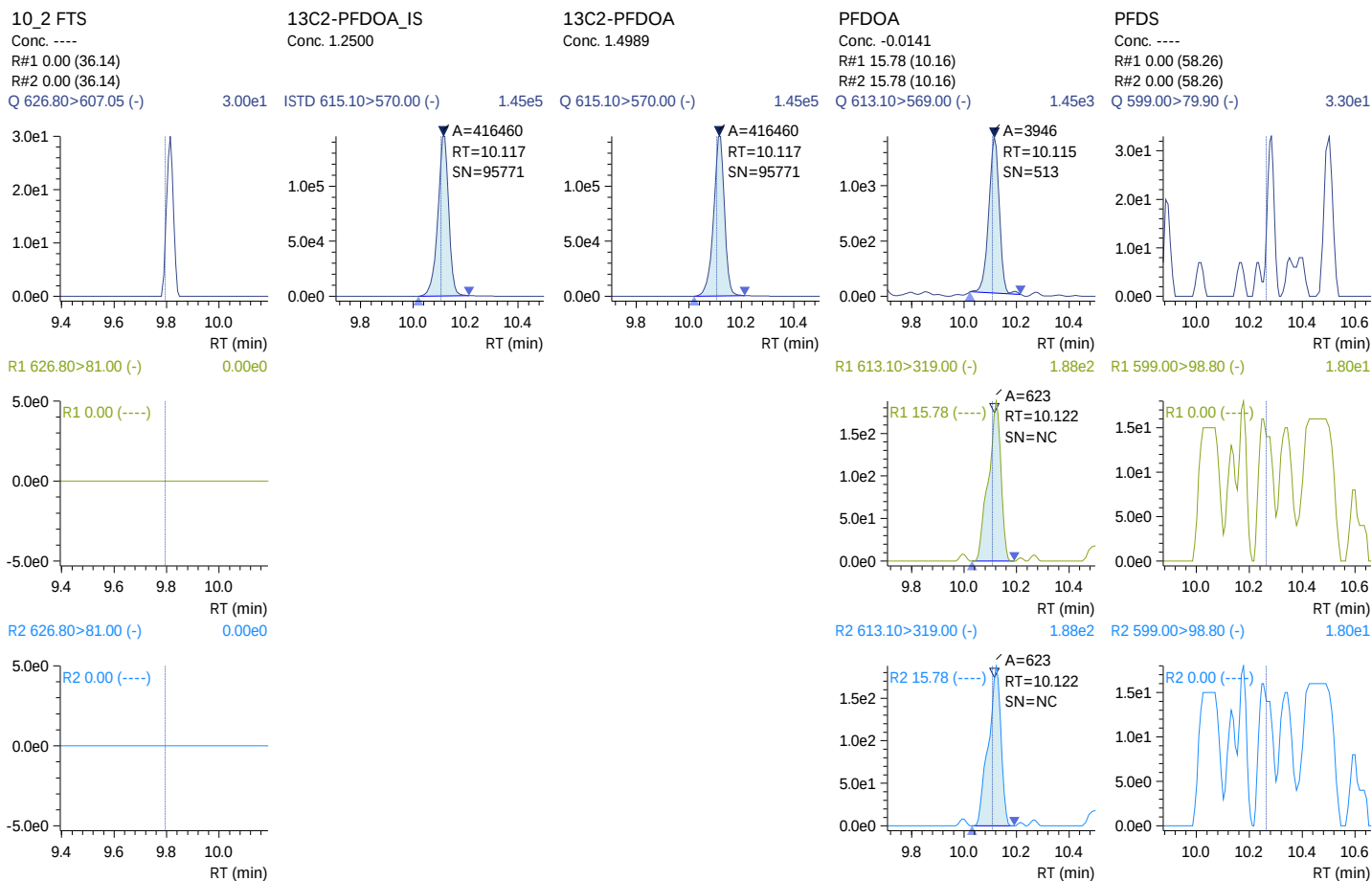


R2 548.80>98.80 (-) 4.80e1





240130_032 (continued)

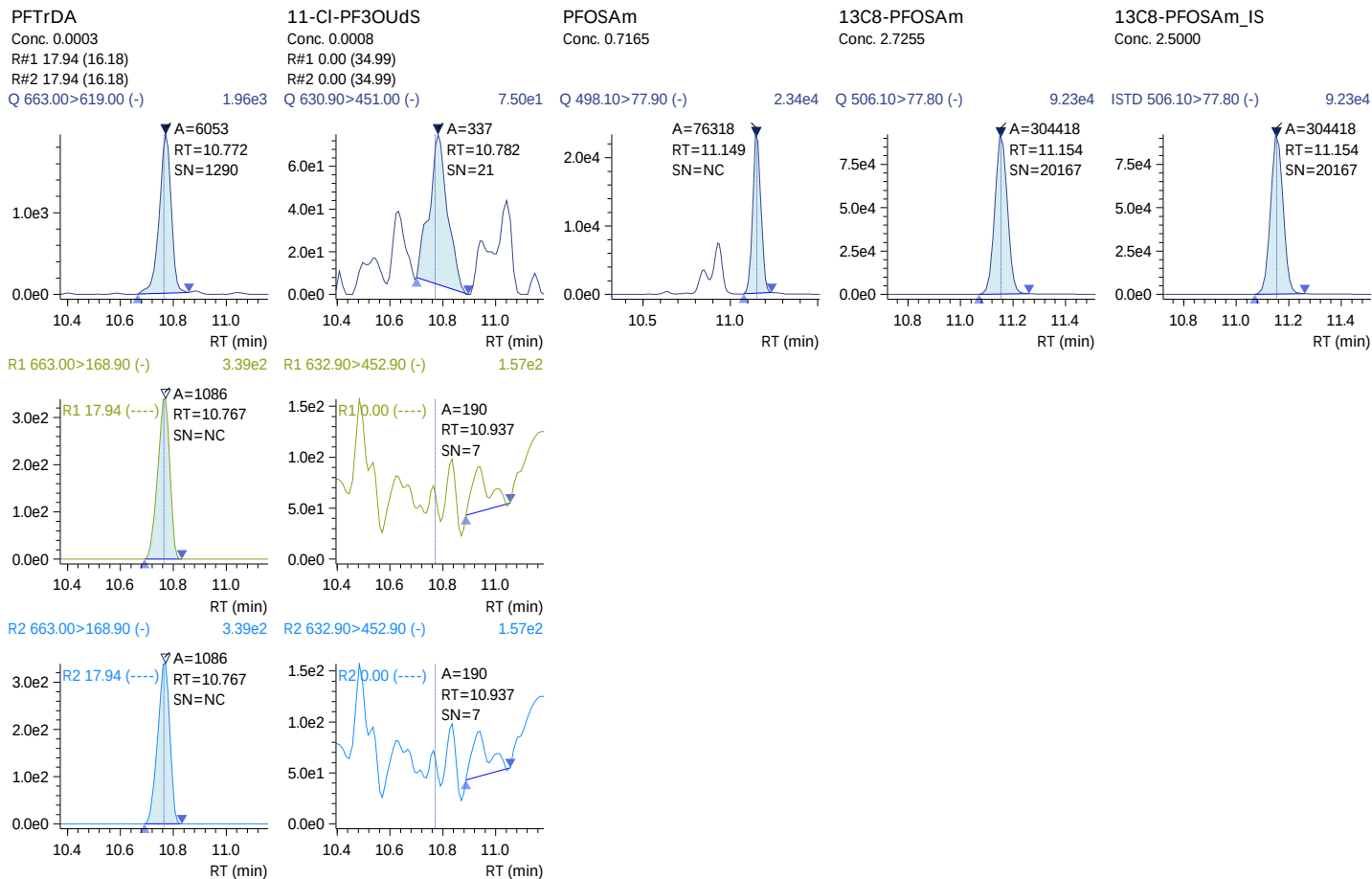


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_032 (continued)

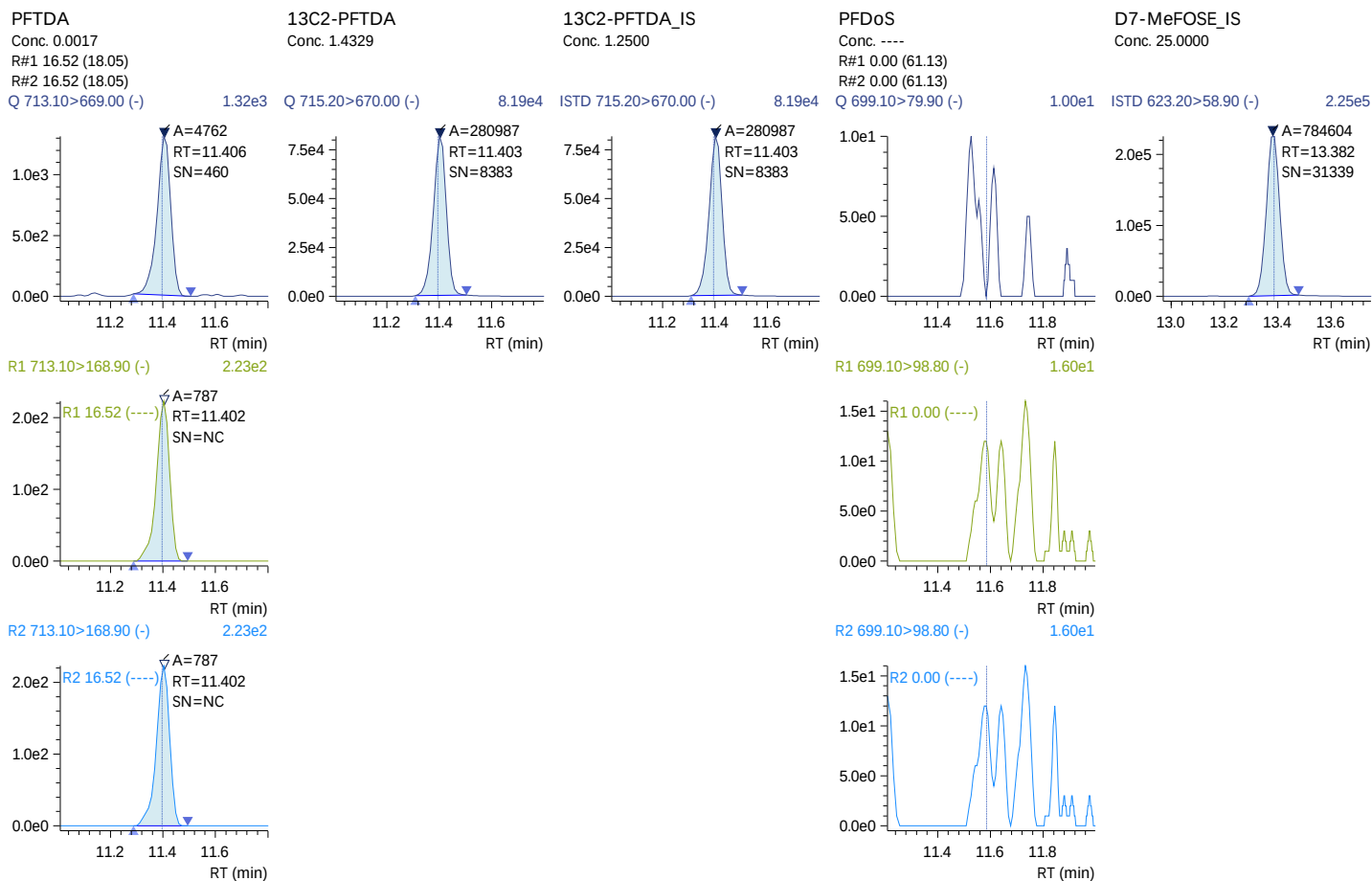


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_032 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_032 (continued)

D7-MeFOSE
Conc. 27.3640

MeFOSE
Conc. ----

13C2-PFHXA_IS
Conc. 2.5000

13C2-PFHXA
Conc. 2.7841

PFHXA
Conc. 0.0193
R#1 12.54 (11.66)
R#2 12.54 (11.66)

Q 623.20>58.90 (-)

2.25e5

Q 616.10>59.00 (-)

8.13e3

ISTD 815.00>770.05 (-)

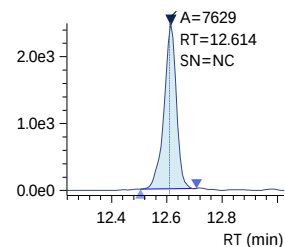
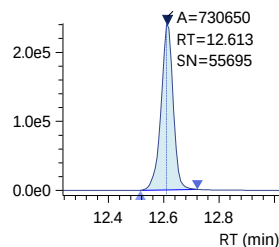
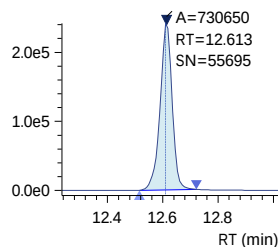
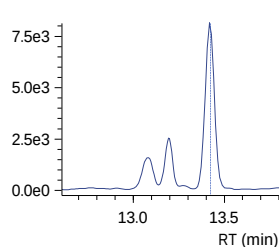
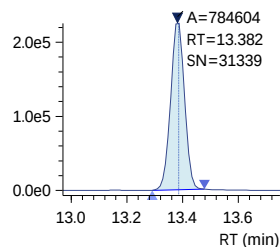
2.42e5

Q 815.00>770.05 (-)

2.42e5

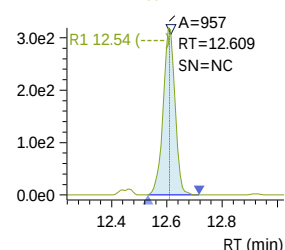
Q 813.00>768.95 (-)

2.50e3



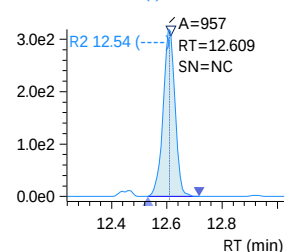
R1 813.00>218.95 (-)

3.19e2



R2 813.00>218.95 (-)

3.19e2





240130_032 (continued)

D3-MeFOSA
Conc. 2.6676

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. ----
R#1 0.00 (160.44)
R#2 0.00 (160.44)

D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 27.0678

Q 515.00>219.00 (-)

2.29e4

ISTD 515.00>219.00 (-)

2.29e4

Q 511.90>219.00 (-)

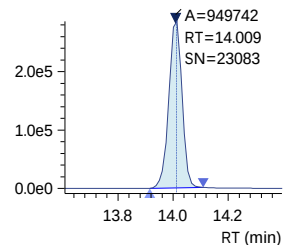
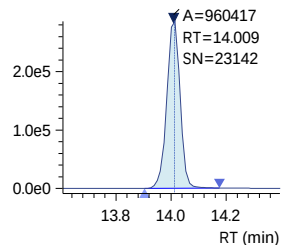
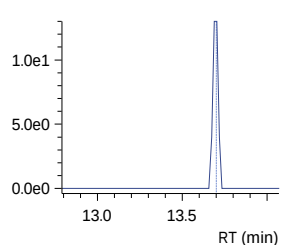
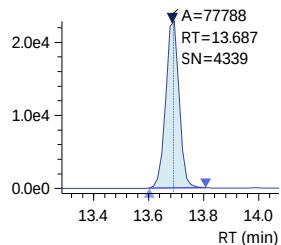
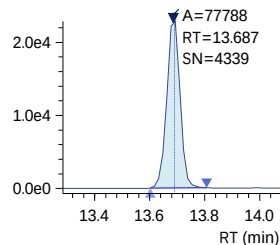
1.30e1

ISTD 639.20>58.90 (-)

2.86e5

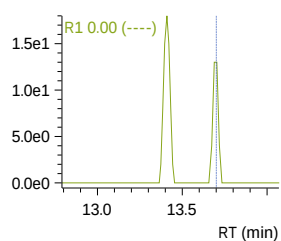
Q 639.20>58.90 (-)

2.86e5



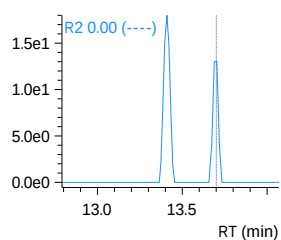
R1 511.90>169.00 (-)

1.80e1



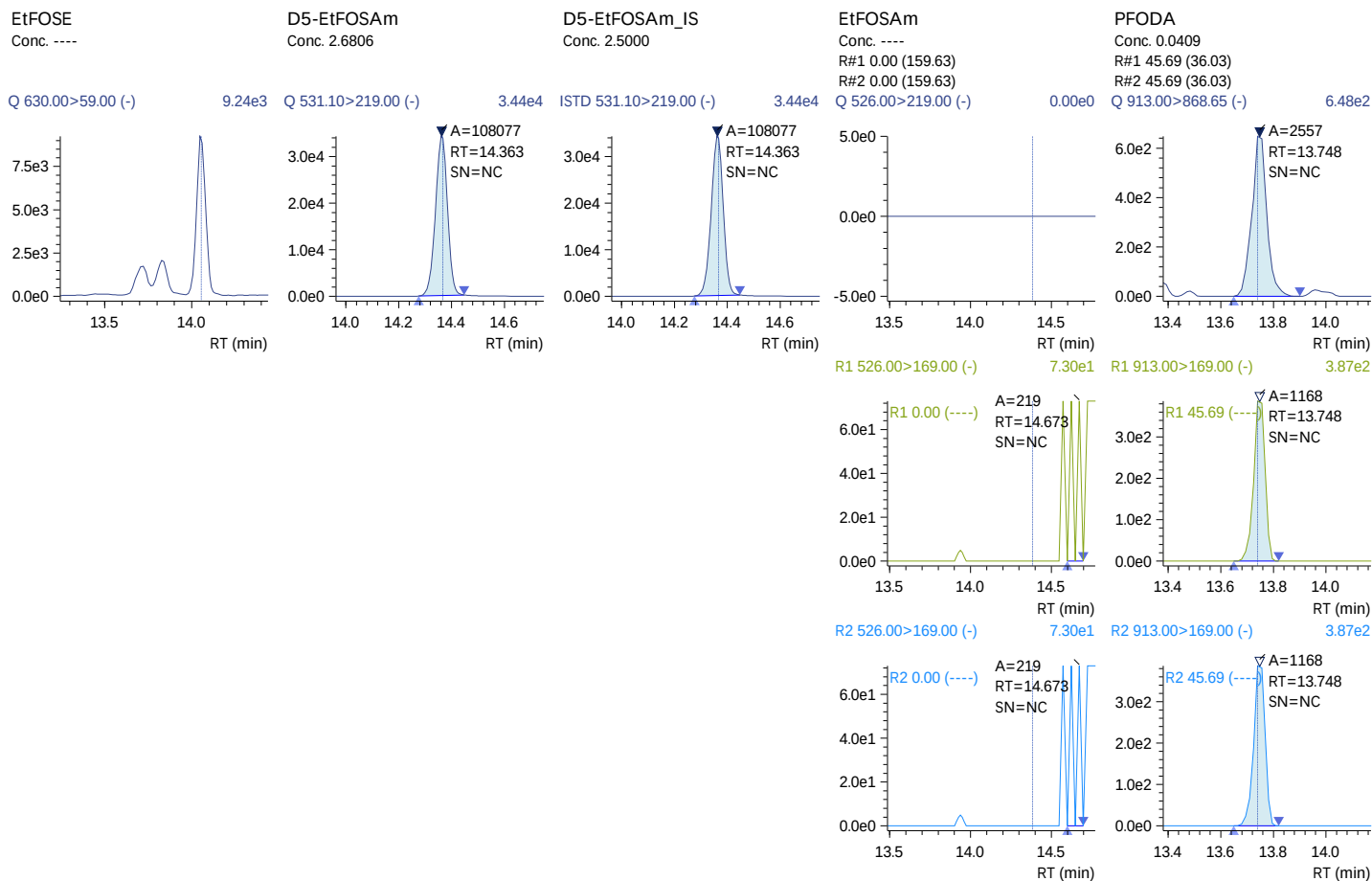
R2 511.90>169.00 (-)

1.80e1





240130_032 (continued)



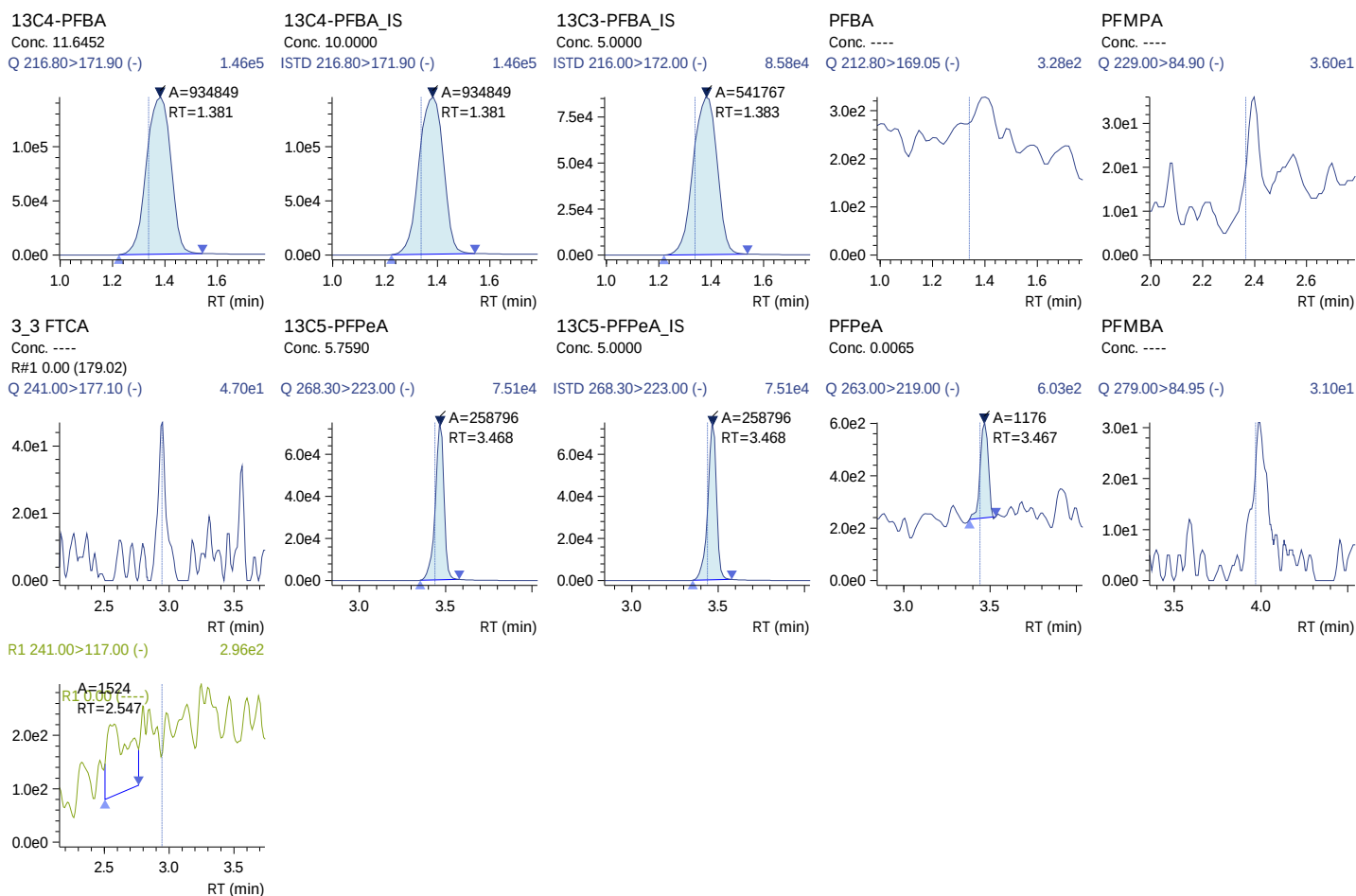
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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240130_032

Sample ID: 1633 QIS
Date Acquired: 1/31/2024 2:44:28 AM
Acquired by: System Administrator
Data File: 240130_032
Vial: 13 | Inj. Volume: 10.0000uL | Tray: 1





240130_032 (continued)

13C2-4_2 FTS
 Conc. 5.9805

13C2-4_2 FTS_IS
 Conc. 5.0000

4_2 FTS
 Conc. ----
 R#1 0.00 (24.69)
 R#2 0.00 (0.00)

13C3-PFBS_IS
 Conc. 2.5000

PFBS
 Conc. ----
 R#1 0.00 (52.67)
 R#2 0.00 (0.00)

Q 329.10>80.90 (-)

9.37e4

ISTD 329.10>80.90 (-)

9.37e4

Q 327.10>307.00 (-)

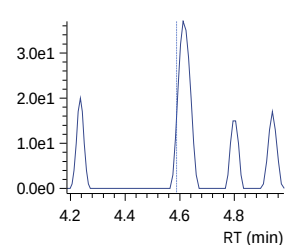
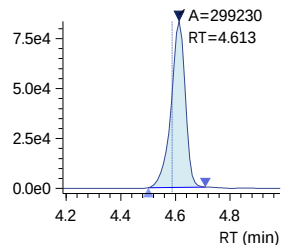
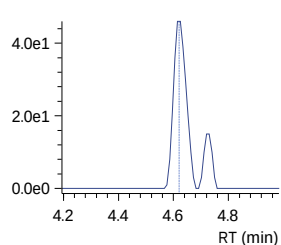
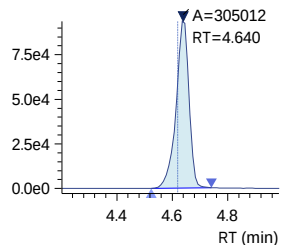
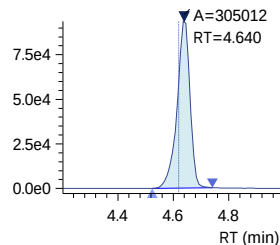
4.60e1

ISTD 302.10>79.90 (-)

8.36e4

Q 298.70>79.90 (-)

3.70e1

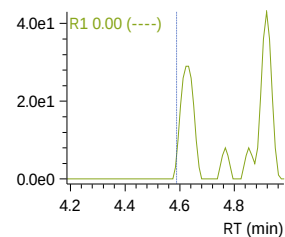
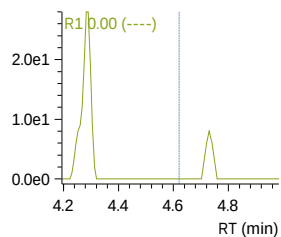


R1 327.10>80.90 (-)

2.80e1

R1 298.70>98.80 (-)

4.30e1

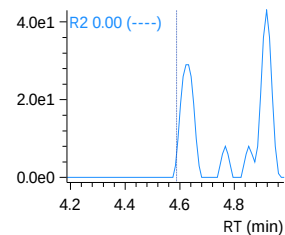
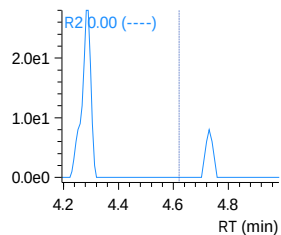


R2 327.10>80.90 (-)

2.80e1

R2 298.70>98.80 (-)

4.30e1





240130_032 (continued)

13C3-PFBS
Conc. 2.9600

NFDHA
Conc. 0.0105
R#1 0.00 (39.38)
R#2 0.00 (0.00)

13C5-PFHxA
Conc. 2.7641

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

Q 302.10>79.90 (-)

8.36e4

Q 295.00>201.00 (-)

3.83e2

Q 318.00>273.00 (-)

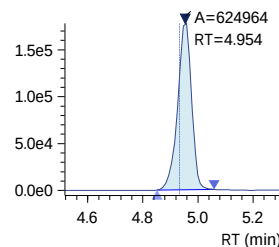
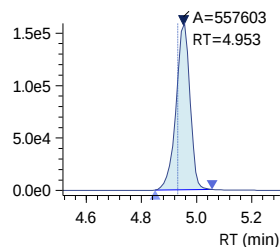
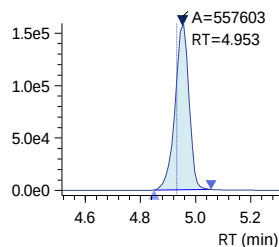
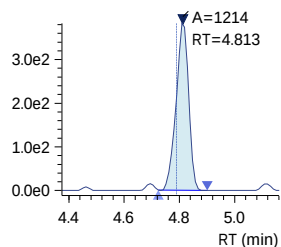
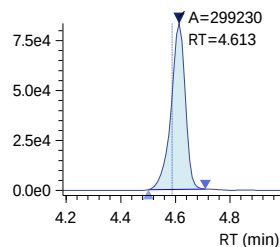
1.59e5

ISTD 318.00>273.00 (-)

1.59e5

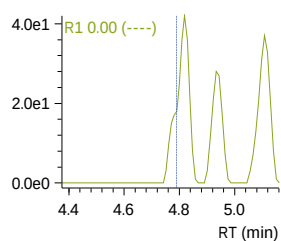
ISTD 315.10>270.00 (-)

1.78e5



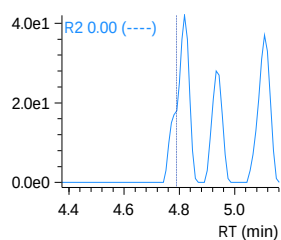
R1 295.00>84.90 (-)

4.20e1



R2 295.00>84.90 (-)

4.20e1

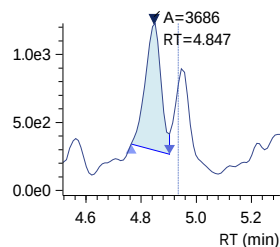




240130_032 (continued)

PFHxA
Conc. 0.0637

Q 313.00>269.00 (-)

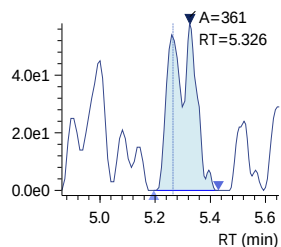


PFEESA
Conc. 0.0005

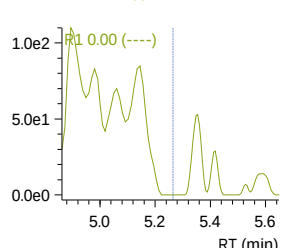
R#1 0.00 (5.25)

R#2 0.00 (0.00)

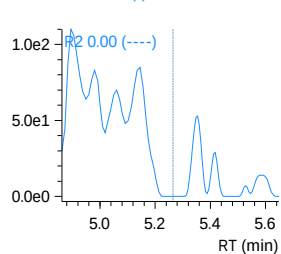
Q 314.80>135.00 (-)



R1 314.80>82.90 (-)

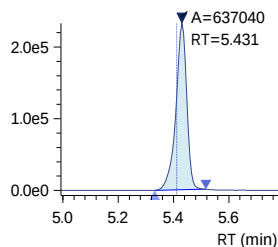


R2 314.80>82.90 (-)



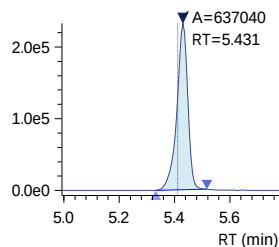
13C3-HFPO-DA
Conc. 11.5020

Q 286.90>168.90 (-)



13C3-HFPO-DA_IS
Conc. 10.0000

ISTD 286.90>168.90 (-)

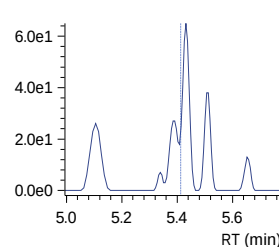


HFPO-DA
Conc. ----

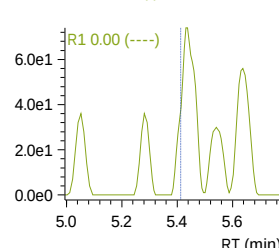
R#1 0.00 (69.48)

R#2 0.00 (0.00)

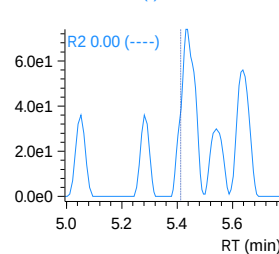
Q 284.90>168.90 (-)



R1 284.90>184.90 (-)



R2 284.90>184.90 (-)





240130_032 (continued)

5_3 FTCA

Conc. 0.0266

R#1 201.43 (139.59)

R#2 201.43 (0.00)

Q 341.00>237.05 (-)

1.71e2

PFPeS

Conc. ----

R#1 0.00 (66.55)

R#2 0.00 (0.00)

Q 349.10>79.90 (-)

2.60e1

13C4-PFHpA

Conc. 2.8529

Q 367.10>322.00 (-)

2.51e5

13C4-PFHpA_IS

Conc. 2.5000

ISTD 367.10>322.00 (-)

2.51e5

PFHpA

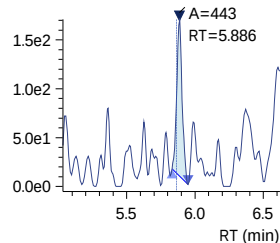
Conc. 0.0320

R#1 21.30 (20.13)

R#2 21.30 (0.00)

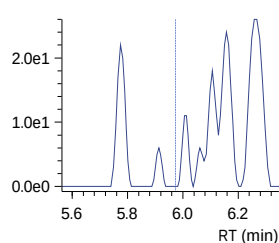
Q 363.10>319.00 (-)

2.41e3



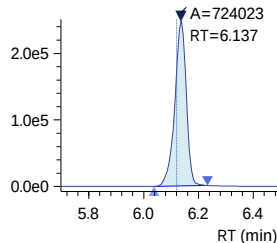
R1 341.00>217.00 (-)

3.39e2



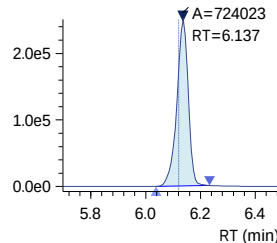
R1 349.10>98.80 (-)

3.70e1



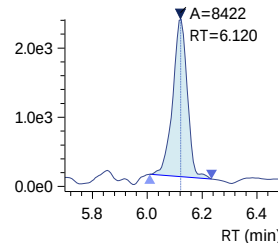
Q 367.10>322.00 (-)

2.51e5



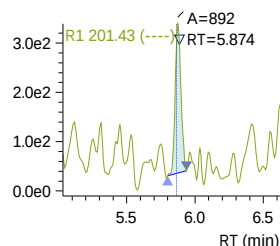
ISTD 367.10>322.00 (-)

2.51e5



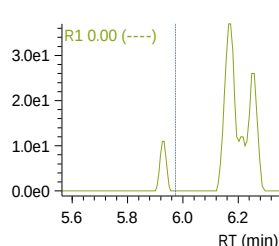
R1 363.10>169.00 (-)

5.45e2



R2 341.00>217.00 (-)

3.39e2



R2 349.10>98.80 (-)

3.70e1



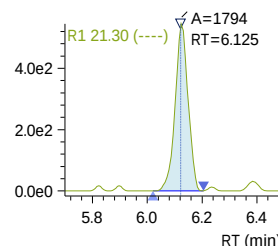
Q 367.10>322.00 (-)

2.51e5



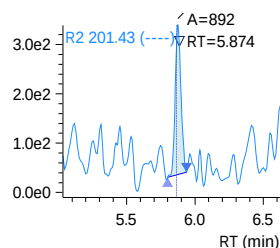
ISTD 367.10>322.00 (-)

2.51e5



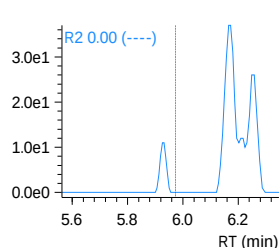
R2 363.10>169.00 (-)

5.45e2



R2 341.00>217.00 (-)

3.39e2



R2 349.10>98.80 (-)

3.70e1



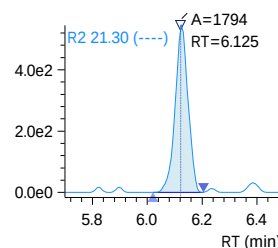
Q 367.10>322.00 (-)

2.51e5



ISTD 367.10>322.00 (-)

2.51e5

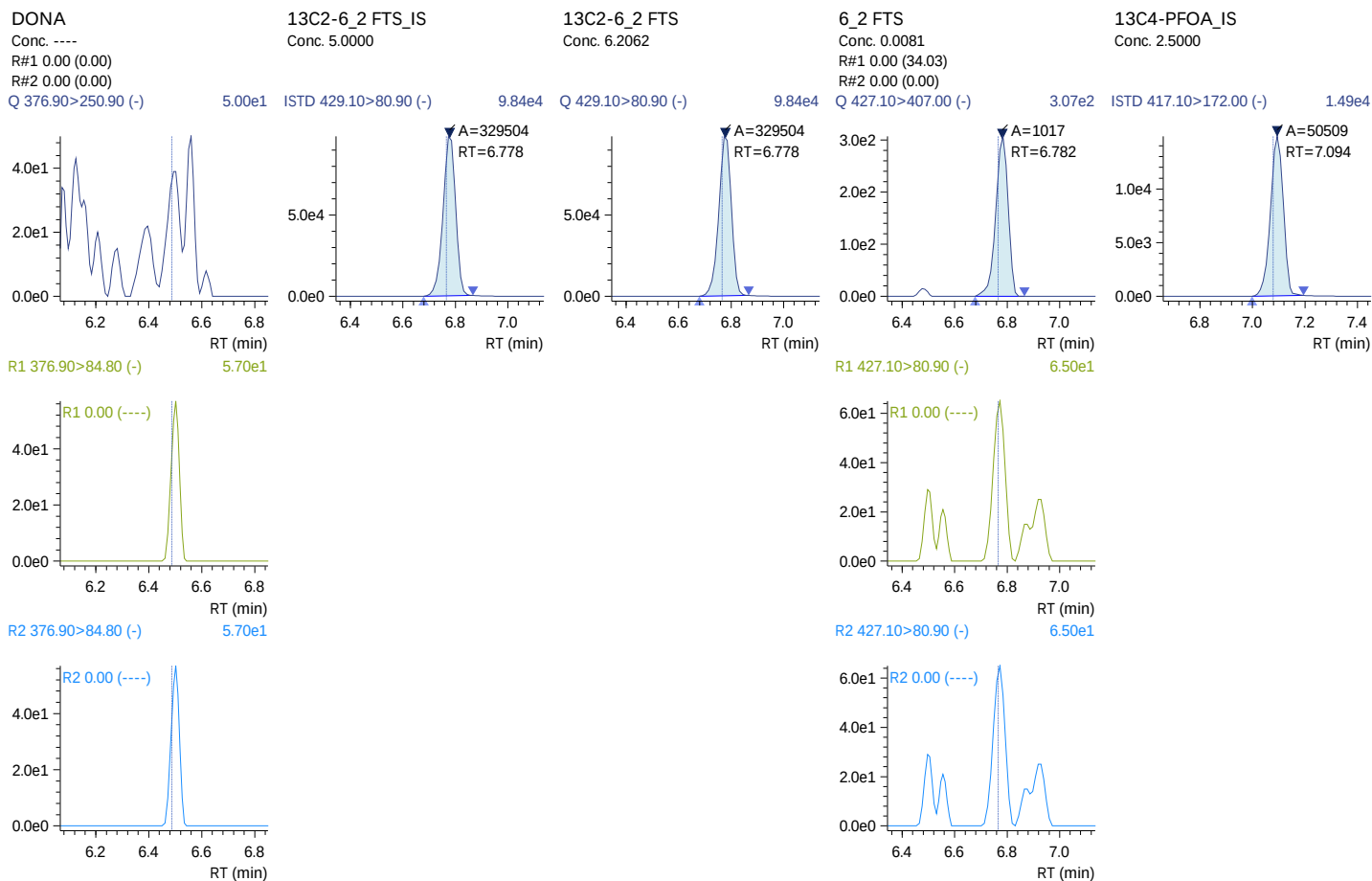


R2 363.10>169.00 (-)

5.45e2



240130_032 (continued)





240130_032 (continued)

13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.9027

PFOA
Conc. 0.7714
R#1 27.58 (22.46)
R#2 27.58 (0.00)

13C3-PFHxS
Conc. 3.0837

13C3-PFHxS_IS
Conc. 2.5000

ISTD 421.10>376.00 (-)

2.05e5

Q 421.10>376.00 (-)

2.05e5

Q 413.00>369.00 (-)

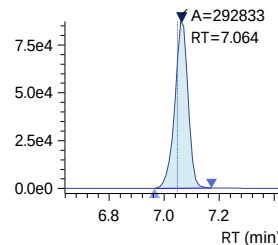
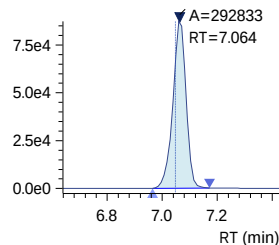
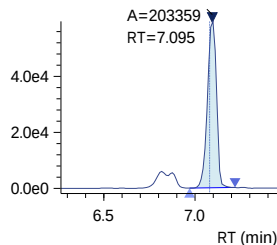
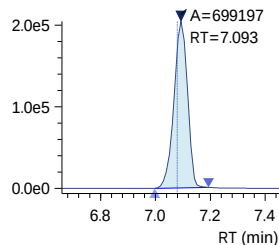
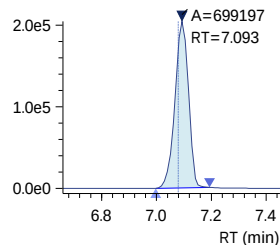
5.97e4

Q 402.10>79.90 (-)

8.74e4

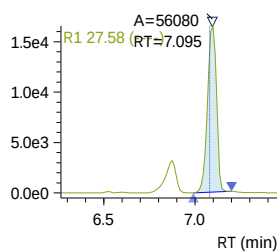
ISTD 402.10>79.90 (-)

8.74e4



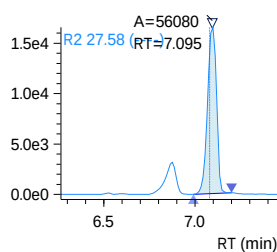
R1 413.00>169.00 (-)

1.66e4



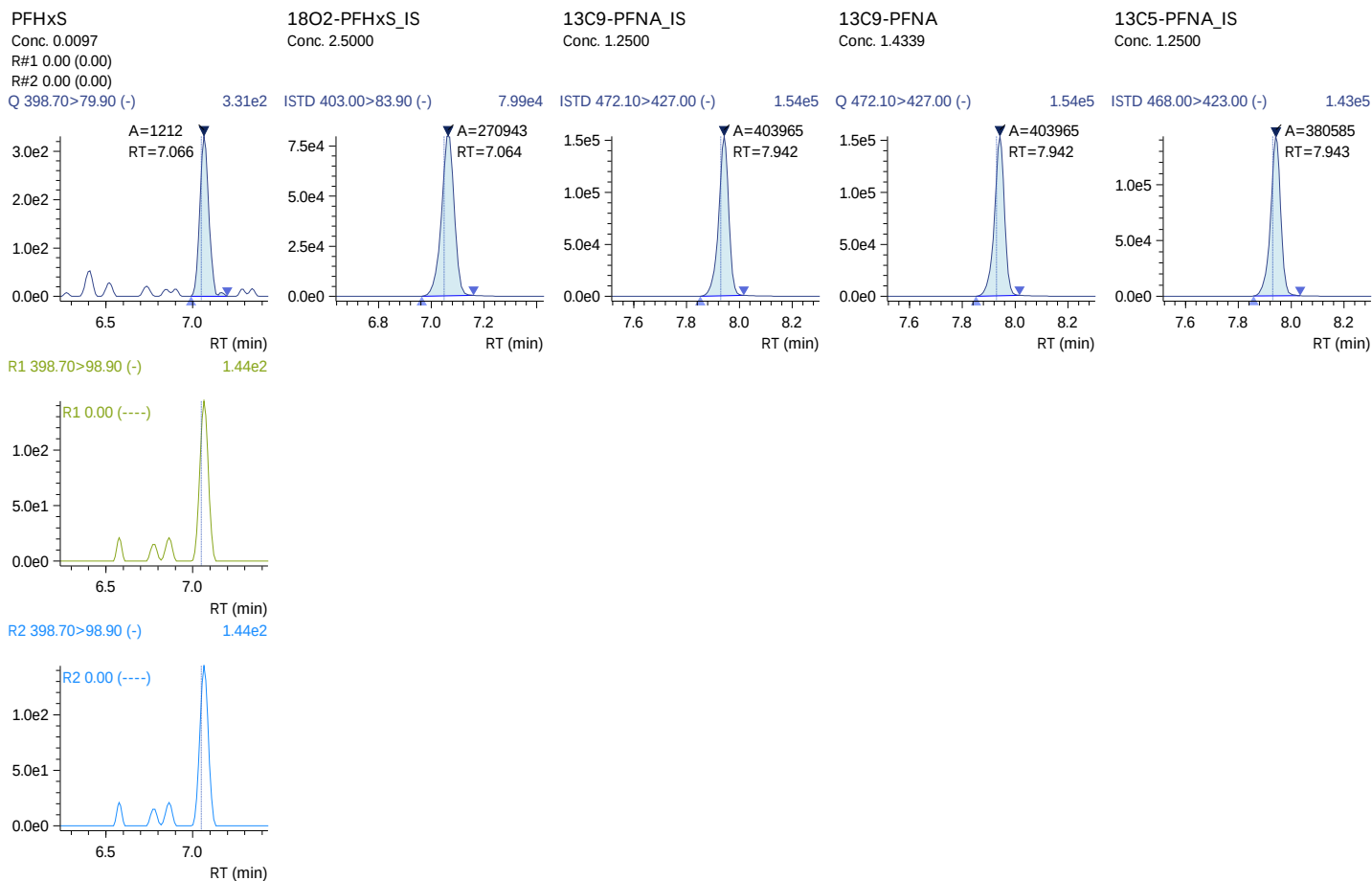
R2 413.00>169.00 (-)

1.66e4



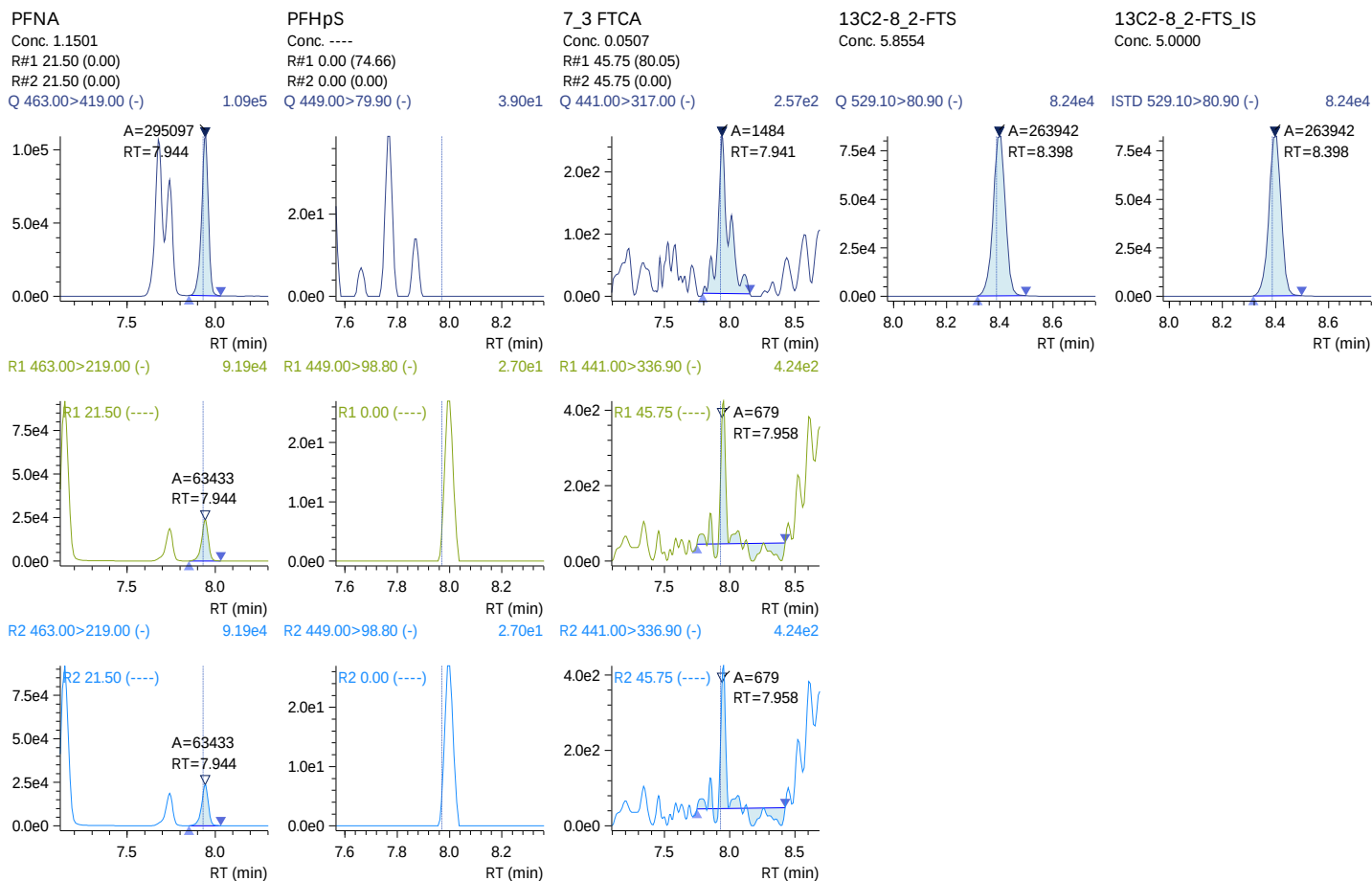


240130_032 (continued)



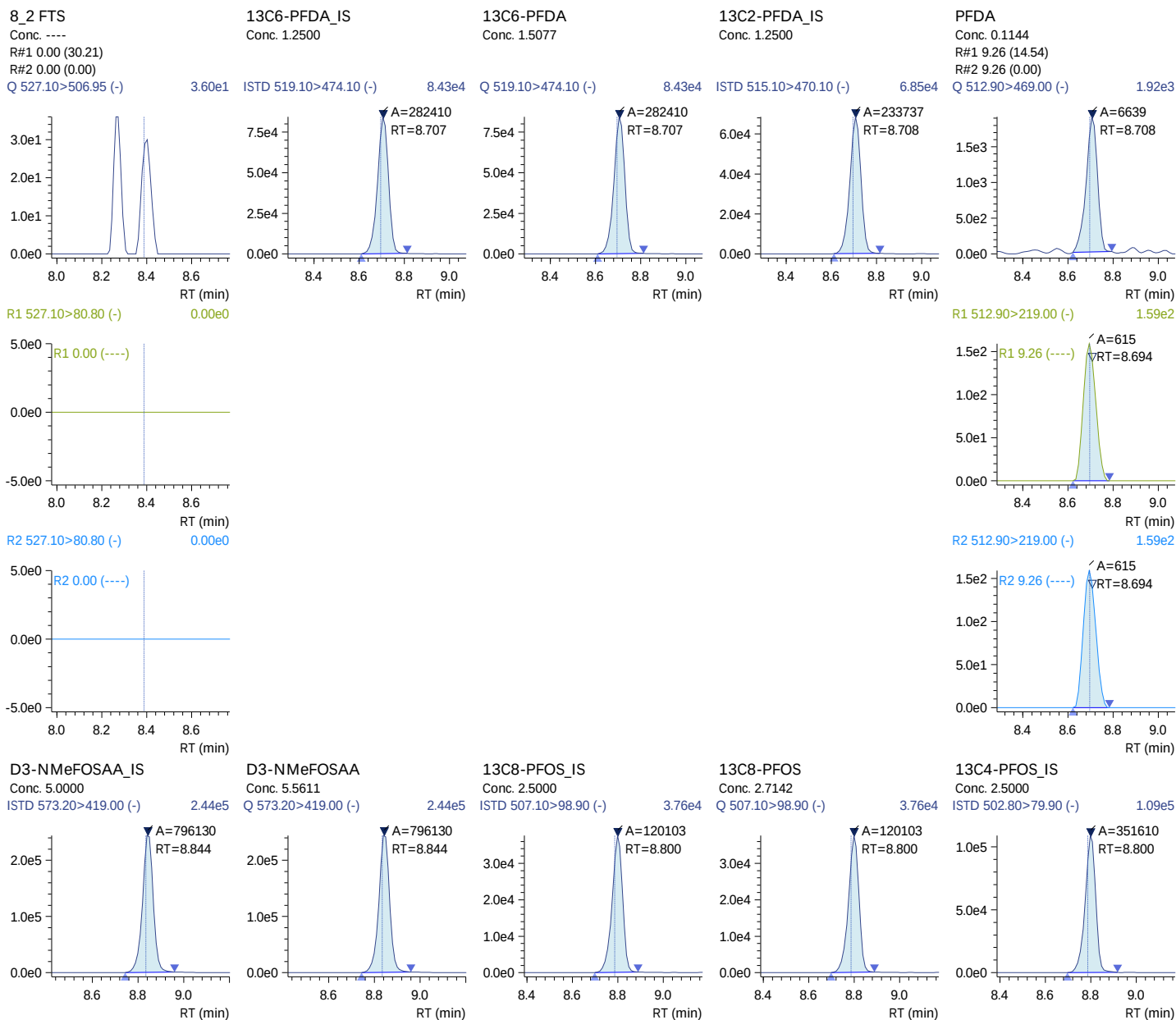


240130_032 (continued)



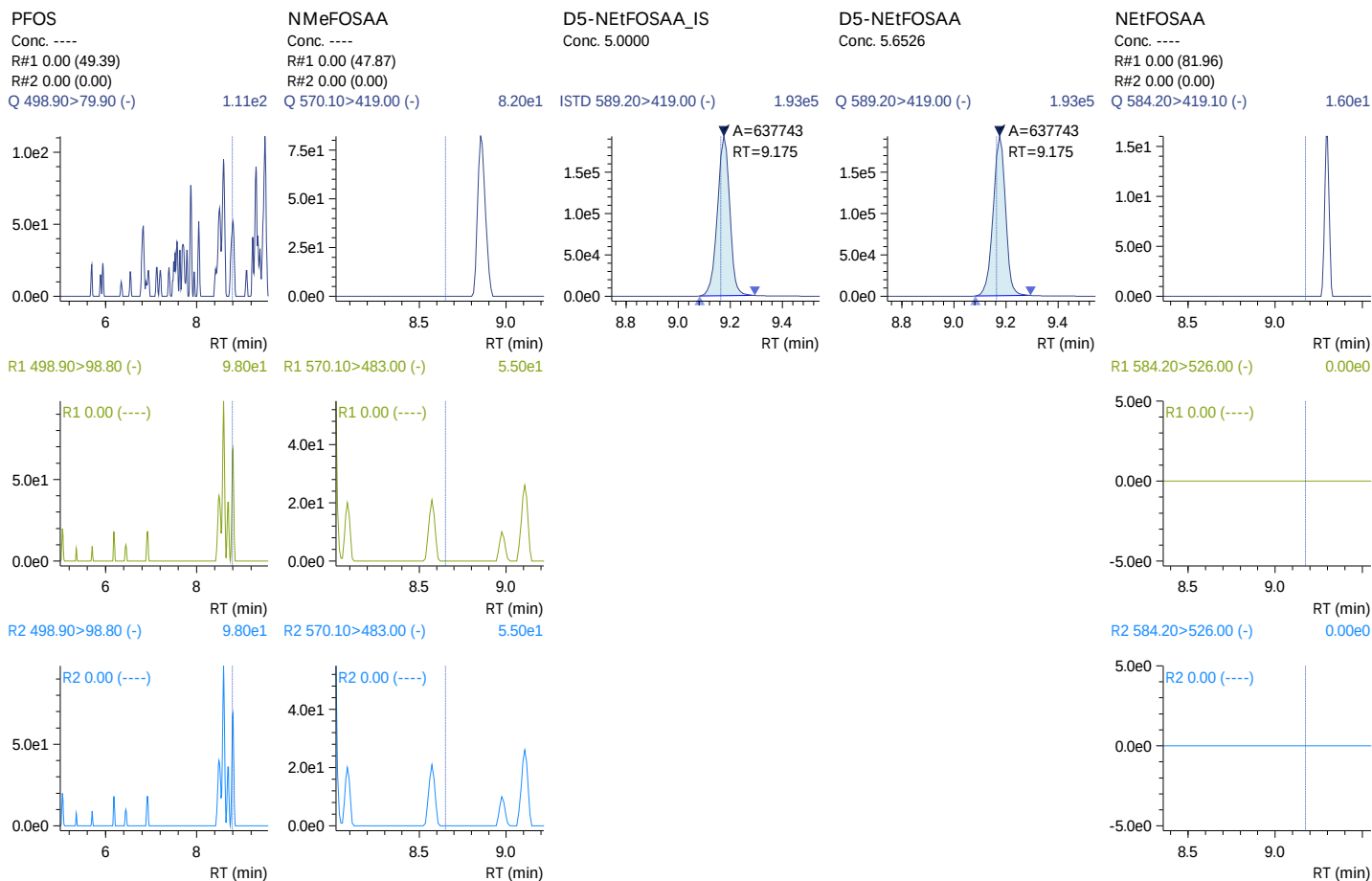


240130_032 (continued)





240130_032 (continued)

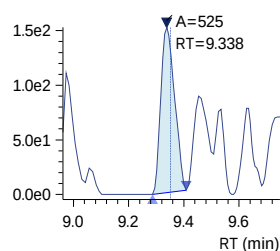




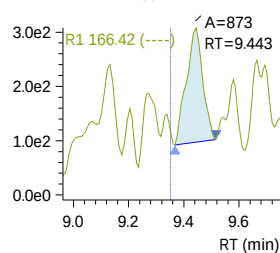
240130_032 (continued)

9-Cl-PF3ONS

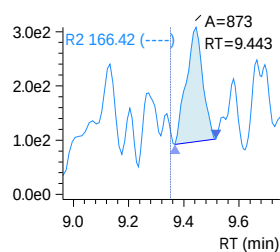
Conc. 0.0008
R#1 166.42 (31.39)
R#2 166.42 (0.00)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-) 3.08e2

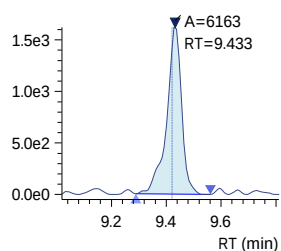


R2 532.80>353.00 (-) 3.08e2

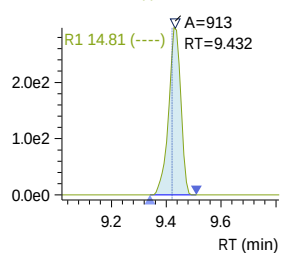


PFUnDA

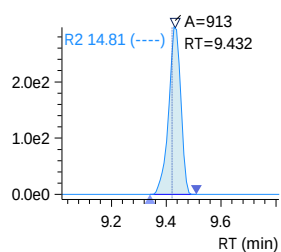
Conc. 0.0036
R#1 14.81 (12.59)
R#2 14.81 (0.00)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-) 2.97e2

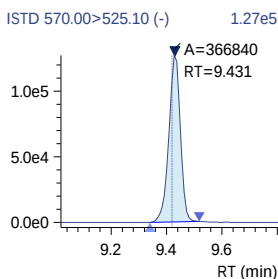


R2 563.10>269.10 (-) 2.97e2



13C7-PFUnDA_IS

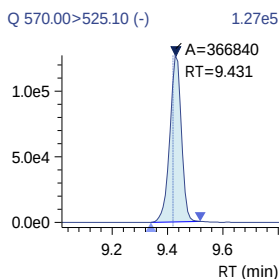
Conc. 1.2500



ISTD 570.00>525.10 (-) 1.27e5

13C7-PFUnDA

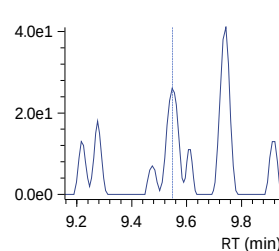
Conc. 1.5762



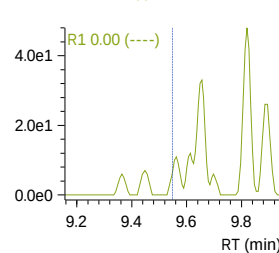
Q 570.00>525.10 (-) 1.27e5

PFNS

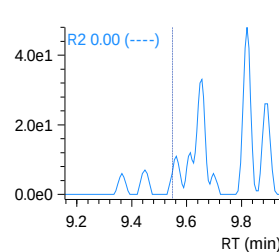
Conc. ----
R#1 0.00 (82.65)
R#2 0.00 (0.00)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-) 4.80e1

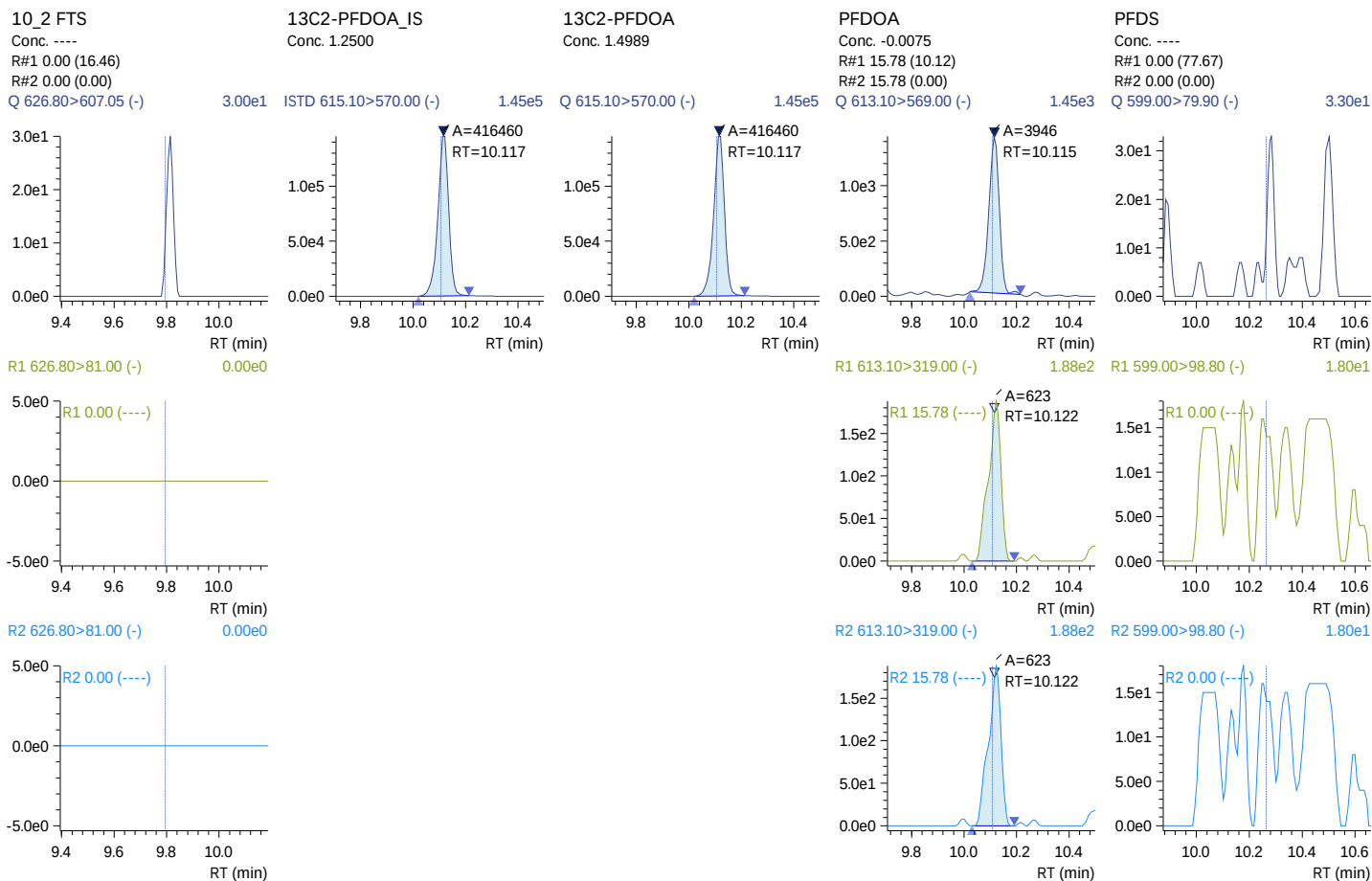


R2 548.80>98.80 (-) 4.80e1





240130_032 (continued)





240130_032 (continued)

PFTTrDA

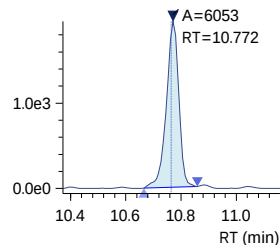
Conc. 0.0020

R#1 17.94 (14.17)

R#2 17.94 (0.00)

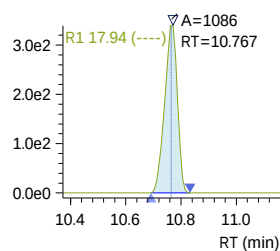
Q 663.00>619.00 (-)

1.96e3



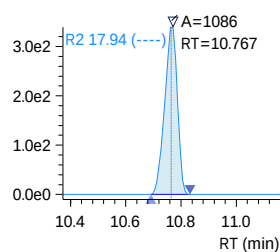
R1 663.00>168.90 (-)

3.39e2



R2 663.00>168.90 (-)

3.39e2



11-Cl-PF3OUdS

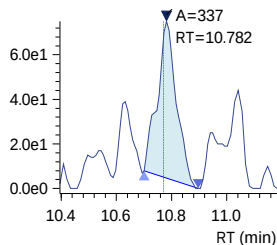
Conc. 0.0008

R#1 0.00 (32.90)

R#2 0.00 (0.00)

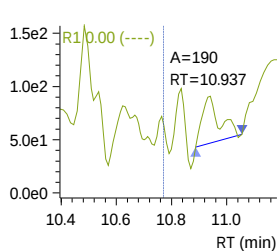
Q 630.90>451.00 (-)

7.50e1



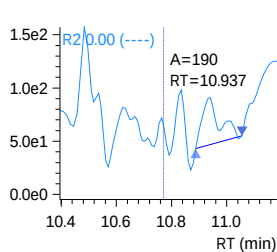
R1 632.90>452.90 (-)

1.57e2



R2 632.90>452.90 (-)

1.57e2

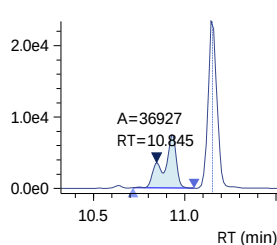


PFOSAm

Conc. 0.3813

Q 498.10>77.90 (-)

2.34e4

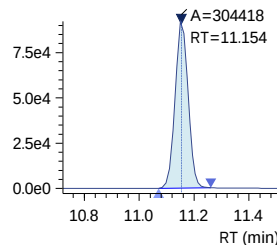


13C8-PFOSAm

Conc. 2.7255

Q 506.10>77.80 (-)

9.23e4

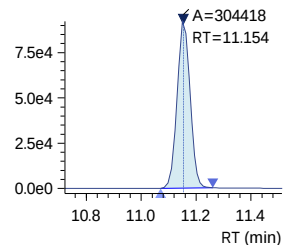


13C8-PFOSAm_IS

Conc. 2.5000

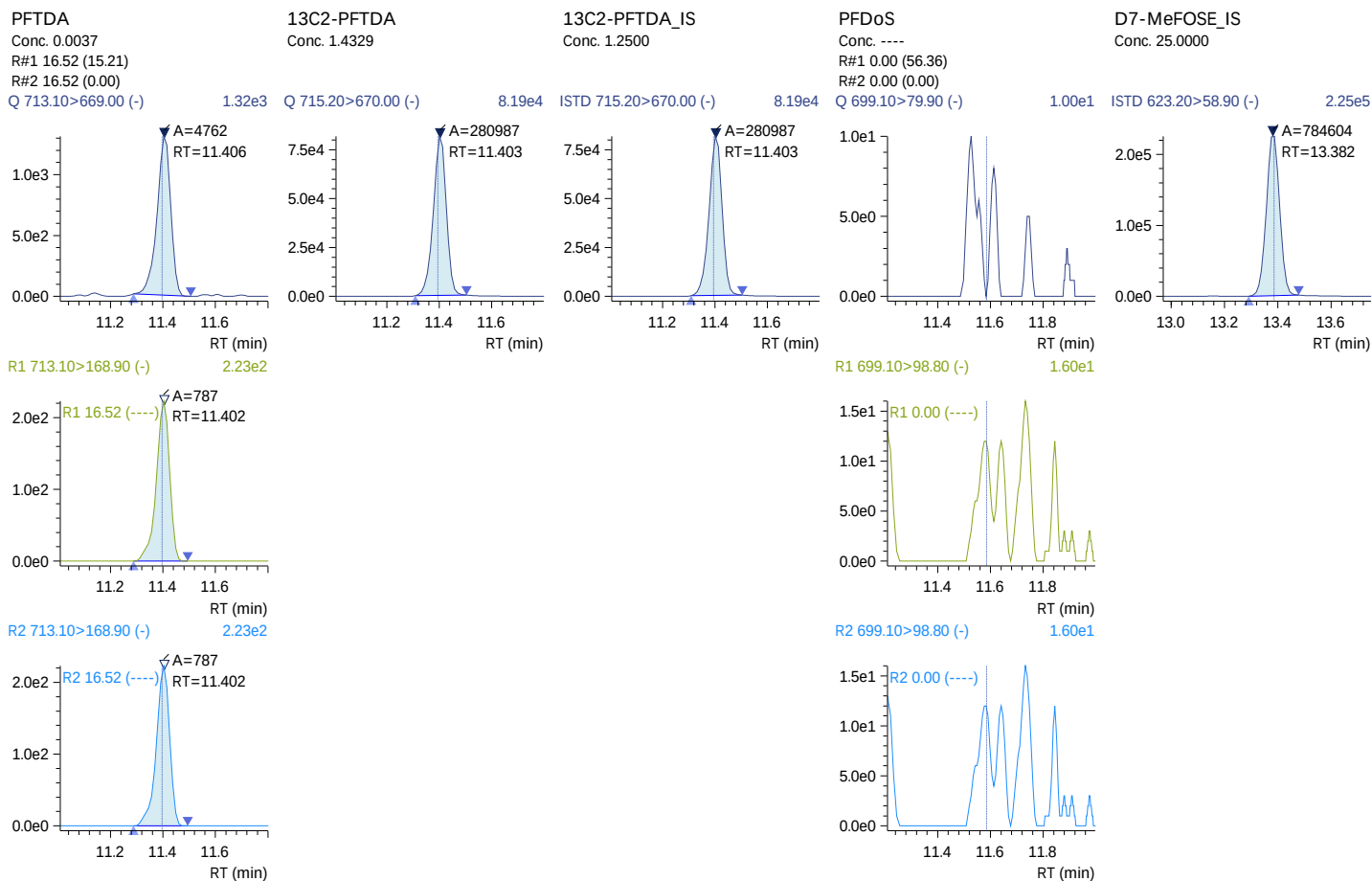
ISTD 506.10>77.80 (-)

9.23e4





240130_032 (continued)





240130_032 (continued)

D7-MeFOSE
 Conc. 27.3640

MeFOSE
 Conc. 1.1647

13C2-PFHXA_IS
 Conc. 2.5000

13C2-PFHXA
 Conc. 2.7841

PFHXA
 Conc. 0.0186
 R#1 12.54 (9.60)
 R#2 12.54 (0.00)

Q 623.20>58.90 (-)

2.25e5

Q 616.10>59.00 (-)

8.13e3

ISTD 815.00>770.05 (-)

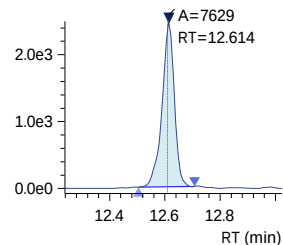
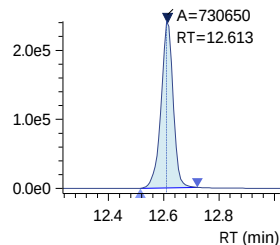
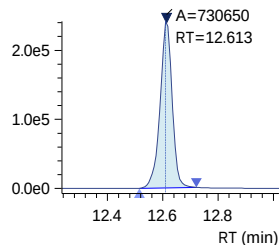
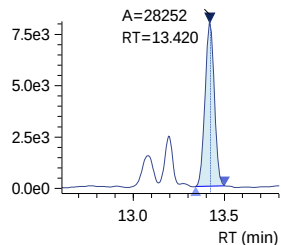
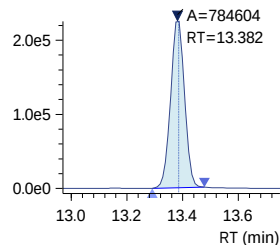
2.42e5

Q 815.00>770.05 (-)

2.42e5

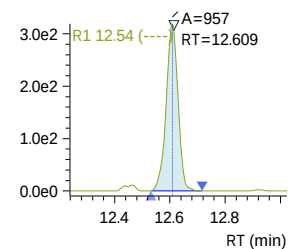
Q 813.00>768.95 (-)

2.50e3



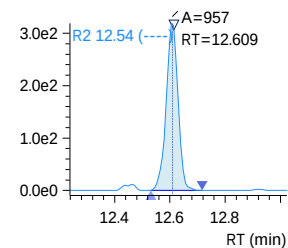
R1 813.00>218.95 (-)

3.19e2



R2 813.00>218.95 (-)

3.19e2





240130_032 (continued)

D3-MeFOSA
Conc. 2.6676

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. ----
R#1 0.00 (98.91)
R#2 0.00 (0.00)

D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 27.0678

Q 515.00>219.00 (-)

2.29e4

ISTD 515.00>219.00 (-)

2.29e4

Q 511.90>219.00 (-)

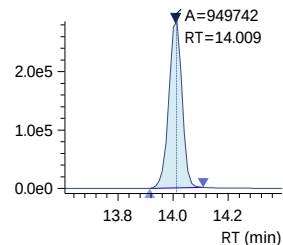
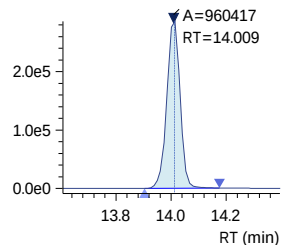
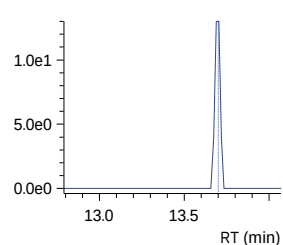
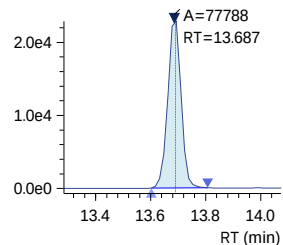
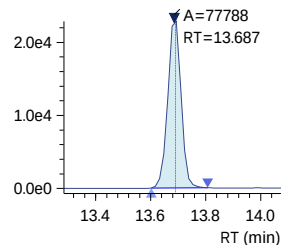
1.30e1

ISTD 639.20>58.90 (-)

2.86e5

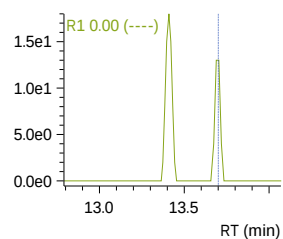
Q 639.20>58.90 (-)

2.86e5



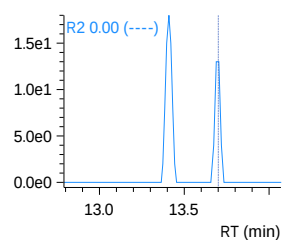
R1 511.90>169.00 (-)

1.80e1



R2 511.90>169.00 (-)

1.80e1





240130_032 (continued)

EtFOSE
Conc. 1.1184

D5-EtFOSAm
Conc. 2.6806

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. ----
R#1 0.00 (0.00)
R#2 0.00 (0.00)

PFODA
Conc. 0.0045
R#1 45.69 (23.45)
R#2 45.69 (0.00)

Q 630.00>59.00 (-)

9.24e3

Q 531.10>219.00 (-)

3.44e4

ISTD 531.10>219.00 (-)

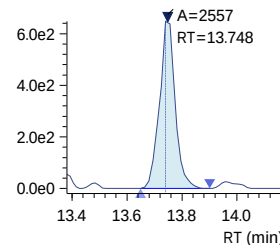
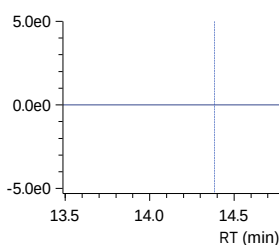
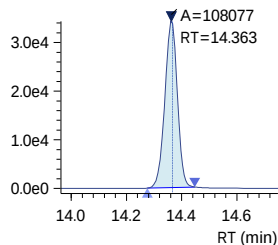
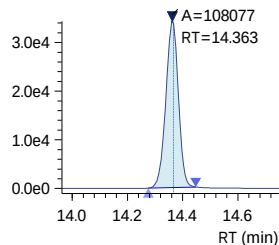
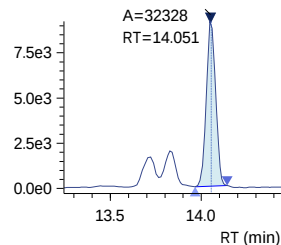
3.44e4

Q 526.00>219.00 (-)

0.00e0

Q 913.00>868.65 (-)

6.48e2

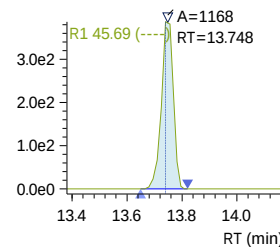
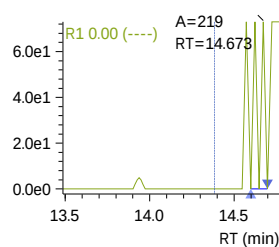


R1 526.00>169.00 (-)

7.30e1

R1 913.00>169.00 (-)

3.87e2

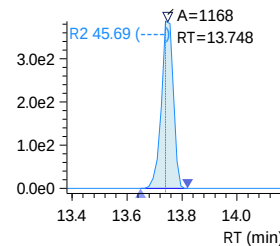
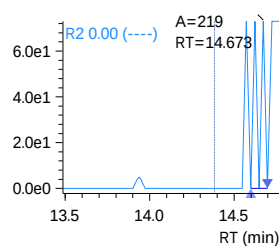


R2 526.00>169.00 (-)

7.30e1

R2 913.00>169.00 (-)

3.87e2

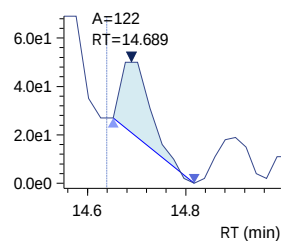


positive trans

Conc. 0.6240

Q 514.80>219.10 (+)

6.90e1



240122_1633_B1



ALS Environmental
Injection Log
LCMS08 - Shimadzu 8060

ICAL Date: 1/18/2024

Std. xp: 2/2/2024

ICAL ID: KC2400027

LIMS ID: 830573

1st Review:

2nd Review:

Column:

Mobile Phases

P. Salyards

M. Sessions 1-25-24

Phenomenex EVO-C18 100X3.0 mm S/N: H23-138925

A: 2mM Ammonium Acetate in H2O:ACN 95%:5% 23-OLC-04-12E

B: ACN Lot #62120

	Sample Name	File Name	Acquisition Method	Dilution	R	
1	TDCA CHECK	23-OLC-04-03E	240122_005	1633_240111.lcm	1x	☒ Showed adequate separation from PFOS
2	1633 CCB	23-OLC-04-06K	240122_006	1633_240111.lcm	1x	☒
3	1633 ICAL 0.25PPB	23-OLC-04-06C	240122_007	1633_240111.lcm	1x	☒ High for some surrogates and native, rerun any samples with hits
4	1633 ICAL 0.50PPB	23-OLC-04-06D	240122_008	1633_240111.lcm	1x	☒ High for some surrogates and native, rerun any samples with hits
5	1633 ICAL 1.0PPB	23-OLC-04-06E	240122_009	1633_240111.lcm	1x	☒ High for some surrogates and native, rerun any samples with hits
6	1633 ICAL 5.0PPB	23-OLC-04-06F	240122_010	1633_240111.lcm	1x	☒ High for some surrogates and native, rerun any samples with hits
7	1633 Q15	23-OLC-04-06J	240122_011	1633_240111.lcm	1x	☒ Showed isomers of both PFOA and PFNA
8	PRIMER		240122_012	1633_240111.lcm	1x	☒ Accidentally replaced CCB with primer, this primer will serve as blank before batch, all native area counts <1/2 MRL
9	PRIMER		240122_013	1633_240111.lcm	1x	☒ NR, not needed
10	k2314044-004	SX	240122_014	1633_240111.lcm	1x	☒ Report PFUNDA
11	K2314044-004		240122_015	1633_240111.lcm	1x	☒
12	PRIMER		240122_016	1633_240111.lcm	1x	☒ NR, not needed
13	kq2321832-09	SX MS	240122_017	1633_240111.lcm	1x	☒ Report PFUNDA
14	KQ2321832-09	MS	240122_018	1633_240111.lcm	1x	☒
15	PRIMER		240122_019	1633_240111.lcm	1x	☒ NR, not needed
16	kq2321832-10	SX DMS	240122_020	1633_240111.lcm	1x	☒ Report PFUNDA
17	KQ2321832-10	DMS	240122_021	1633_240111.lcm	1x	☒
18	PRIMER		240122_022	1633_240111.lcm	1x	☒ NR, not needed
19	R2311404-001		240122_023	1633_240111.lcm	1x	☒
20	R2311404-003		240122_024	1633_240111.lcm	1x	☒
21	R2311404-007		240122_025	1633_240111.lcm	1x	☒
22	1633 ICAL 5.0PPB	23-OLC-04-06F	240122_026	1633_240111.lcm	1x	☒ High for some surrogates and native, rerun any samples with hits
23	1633 CCB	23-OLC-04-06K	240122_027	1633_240111.lcm	1x	☒
24	1633 ICAL 1.0PPB	23-OLC-04-06E	240122_028	1633_240111.lcm	1x	☒ High for some surrogates and native, rerun any samples with hits
25	1633 CCB	23-OLC-04-06K	240122_029	1633_240111.lcm	1x	☒
26	KQ2400483-04	MB	240122_030	1633_240111.lcm	1x	☒
27	KQ2400483-01	LCS	240122_031	1633_240111.lcm	1x	☒ High for NETFOSAA and 3:3 FTCA likely due to instrument bias, rerun along with any samples with hits for these analytes
28	KQ2400483-02	DLCS	240122_032	1633_240111.lcm	1x	☒ High for NETFOSAA, PFMPA and 3:3 FTCA likely due to instrument bias, rerun along with any samples with hits for these analytes
29	KQ2400483-03	LCSLL	240122_033	1633_240111.lcm	1x	☒ High for PFPeA, NETFOSAA, 3:3 FTCA, and PFMPA likely due to instrument bias, rerun along with any samples with hits for these analytes
30	K2314281-001		240122_034	1633_240111.lcm	1x	☒ Rerun for PFPeA hit with high LCSLL
31	K2314281-002		240122_035	1633_240111.lcm	1x	☒ Rerun for PFPeA hit with high LCSLL
32	K2314515-001		240122_036	1633_240111.lcm	1x	☒
33	K2400112-008	LOD	240122_037	1633_240111.lcm	1x	☒
34	K2400114-008	LOQ	240122_038	1633_240111.lcm	1x	☒
35	KQ2400483-05	MRLV	240122_039	1633_240111.lcm	1x	☒
36	r2312025-001	10X	240122_040	1633_240111.lcm	1x	☒ NR, not needed
37	R2312025-001		240122_041	1633_240111.lcm	1x	☒
38	PRIMER		240122_042	1633_240111.lcm	1x	☒ NR, not needed
39	r2312025-002	10X	240122_043	1633_240111.lcm	1x	☒ NR, not needed
40	R2312025-002		240122_044	1633_240111.lcm	1x	☒
41	1633 ICAL 1.0PPB	23-OLC-04-06E	240122_045	1633_240111.lcm	1x	☒
42	1633 CCB	23-OLC-04-06K	240122_046	1633_240111.lcm	1x	☒
43	R2312025-003		240122_047	1633_240111.lcm	1x	☒
44	R2309948-001		240122_048	1633_240111.lcm	1x	☒ Reanalyze due to falling low PFPeA surrogate
45	K2312629-007		240122_049	1633_240111.lcm	1x	☒ Rerun for PFPeA hit with high LCSLL
46	K2313452-001		240122_050	1633_240111.lcm	1x	☒ Rerun for PFPeA hit with high LCSLL
47	K2313452-002		240122_051	1633_240111.lcm	1x	☒ Rerun for PFPeA hit with high LCSLL
48	K2313452-003		240122_052	1633_240111.lcm	1x	☒ Rerun for PFPeA hit with high LCSLL
49	K2313452-004		240122_053	1633_240111.lcm	1x	☒ Rerun for PFPeA hit with high LCSLL
50	1633 ICAL 1.0PPB	23-OLC-04-06E	240122_054	1633_240111.lcm	1x	☒
51	1633 CCB	23-OLC-04-06K	240122_055	1633_240111.lcm	1x	☒

240201_1633_RA



Environmental

Injection Log

LCMS08 - Shimadzu 8060

ICAL Date: 1/30/2024

Std. xp: 2/28/2024 (ICV 2/3/28)

ICAL ID: KC2400048

LIMS ID: 831587

1st Review:

2nd Review:

Column:

Mobile Phases

P. Salyards

M. Sessions 2-6-24

Phenomenex EVO-C18 100X3.0 mm S/N: H23-138925

A: 2mM Ammonium Acetate in H2O:ACN 95%:5% 23-OLC-04-17F

B: ACN Lot #62120

	Sample Name	File Name	Acquisition Method	Dilution	R	
1	1633 CCB	23-OLC-04-06K	240201_005	1633_240130.lcm	1x	☒
2	1633 ICAL 0.25PPB	23-OLC-04-20C	240201_006	1633_240130.lcm	1x	☒
3	1633 ICAL 0.5PPB	23-OLC-04-20D	240201_007	1633_240130.lcm	1x	☒
4	1633 ICAL 1.0PPB	23-OLC-04-20E	240201_008	1633_240130.lcm	1x	☒
5	1633 ICAL 5.0PPB	23-OLC-04-20F	240201_009	1633_240130.lcm	1x	☒
6	1633 QIS	23-OLC-04-06J	240201_010	1633_240130.lcm	1x	☒
7	TDCA CHECK	23-OLC-04-19I	240201_011	1633_240130.lcm	1x	☒
8	1633 CCB	23-OLC-04-06K	240201_012	1633_240130.lcm	1x	☒
9	FTCA ONLY LOT CHECK		240201_013	1633_240130.lcm	1x	☒
10	NO FTCA LOT CHECK		240201_014	1633_240130.lcm	1x	☒
11	MB		240201_015	1633_240130.lcm	1x	☒
12	IPR 1		240201_016	1633_240130.lcm	1x	☒
13	IPR 2		240201_017	1633_240130.lcm	1x	☒
14	IPR 3		240201_018	1633_240130.lcm	1x	☒
15	IPR 4		240201_019	1633_240130.lcm	1x	☒
16	1633 ICAL 1.0PPB	23-OLC-04-20E	240201_020	1633_240130.lcm	1x	☒
17	1633 CCB	23-OLC-04-06K	240201_021	1633_240130.lcm	1x	☒
18	1633 ICAL 5.0PPB	23-OLC-04-20F	240201_022	1633_240130.lcm	1x	☒
19	1633 CCB	23-OLC-04-06K	240201_023	1633_240130.lcm	1x	☒
20	KQ2321223-05	MB	240201_024	1633_240130.lcm	1x	☒
21	KQ2321223-01		240201_025	1633_240130.lcm	1x	☒
22	KQ2321223-02		240201_026	1633_240130.lcm	1x	☒
23	KQ2321223-03		240201_027	1633_240130.lcm	1x	☒
24	KQ2321223-04		240201_028	1633_240130.lcm	1x	☒
25	1633 ICAL 5.0PPB	23-OLC-04-20F	240201_029	1633_240130.lcm	1x	☒
26	1633 CCB	23-OLC-04-06K	240201_030	1633_240130.lcm	1x	☒
27	1633 ICAL 1.0PPB	23-OLC-04-20E	240201_031	1633_240130.lcm	1x	☒
28	1633 CCB	23-OLC-04-06K	240201_032	1633_240130.lcm	1x	☒
29	KQ2400483-03	LCSLL	240201_033	1633_240130.lcm	1x	☒
30	K2314281-001		240201_034	1633_240130.lcm	1x	☒
31	K2314281-002		240201_035	1633_240130.lcm	1x	☒
32	K2312629-007		240201_036	1633_240130.lcm	1x	☒
33	K2313452-001		240201_037	1633_240130.lcm	1x	☒
34	K2313452-002		240201_038	1633_240130.lcm	1x	☒
35	K2313452-003		240201_039	1633_240130.lcm	1x	☒
36	K2313452-004		240201_040	1633_240130.lcm	1x	☒
37	KQ2400842-03	LCS	240201_041	1633_240130.lcm	1x	☒
38	KQ2400842-04	LCSLL	240201_042	1633_240130.lcm	1x	☒
39	KQ2400842-01	MS	240201_043	1633_240130.lcm	1x	☒
40	KQ2400842-02	DMS	240201_044	1633_240130.lcm	1x	☒
41	R2400132-001		240201_045	1633_240130.lcm	1x	☒
42	1633 ICAL 1.0PPB	23-OLC-04-20E	240201_046	1633_240130.lcm	1x	☒
43	1633 CCB	23-OLC-04-06K	240201_047	1633_240130.lcm	1x	☒
44	R2400132-002		240201_048	1633_240130.lcm	1x	☒
45	R2400132-003		240201_049	1633_240130.lcm	1x	☒
46	R2400132-004		240201_050	1633_240130.lcm	1x	☒
47	R2400132-005		240201_051	1633_240130.lcm	1x	☒
48	R2400132-006		240201_052	1633_240130.lcm	1x	☒
49	R2400167-001		240201_053	1633_240130.lcm	1x	☒
50	KQ2400991-02	LCS	240201_054	1633_240130.lcm	1x	☒
51	KQ2400991-03	DLCS	240201_055	1633_240130.lcm	1x	☒
52	KQ2400991-04	LCSLL	240201_056	1633_240130.lcm	1x	☒
53	K2400549-002		240201_057	1633_240130.lcm	1x	☒
54	R2400085-001		240201_058	1633_240130.lcm	1x	☒
55	R2400085-002		240201_059	1633_240130.lcm	1x	☒
56	KQ2400991-01	DUP	240201_060	1633_240130.lcm	1x	☒
57	1633 ICAL 1.0PPB	23-OLC-04-20E	240201_061	1633_240130.lcm	1x	☒
58	1633 CCB	23-OLC-04-06K	240201_062	1633_240130.lcm	1x	☒
59	R2400085-003		240201_063	1633_240130.lcm	1x	☒

Some surrogate failures, but all natives in control

NR, not needed, waters analysis

Some surrogate failures, but all natives in control

NR, not needed, waters analysis

Shows PFOS and PFNA isomers

Shows sufficient separation from PFOS

NR, internal use only

NR, internal use only

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240201_1633_RA



Environmental

Injection Log

LCMS08 - Shimadzu 8060

ICAL Date: 1/30/2024

Std. xp: 2/28/2024 (ICV 2/3/28)

ICAL ID: KC2400048

LIMS ID: 831587

1st Review: P. Salyards

2nd Review:

Column: Phenomenex EVO-C18 100X3.0 mm S/N: H23-138925

Mobile Phases

A: 2mM Ammonium Acetate in H2O:ACN 95%:5% 23-OLC-04-17F

B: ACN Lot #62120

	Sample Name	File Name	Acquisition Method	Dilution	R	
60	R2400085-004	240201_064	1633_240130.lcm	1x	☒	Report PFOS and PFPeA natives. Rerun for HFPO-DA controlled natives
61	R2400085-005	240201_065	1633_240130.lcm	1x	☒	Report PFOS and PFPeA natives. Rerun for HFPO-DA controlled natives
62	R2400085-006	240201_066	1633_240130.lcm	1x	☒	Report PFPeA natives. Rerun for HFPO-DA controlled natives
63	R2400086-001	240201_067	1633_240130.lcm	1x	☒	Rerun for HFPO-DA controlled natives
64	1633 ICAL 1.0PPB	23-OLC-04-20E	240201_068	1x	☒	
65	1633 CCB	23-OLC-04-06K	240201_069	1x	☒	

Analysis: 1633 W		IS/Lot/Exp.: -		Filter lot: -		Solvent/Lot: -	
Pipette: NEUSTON		Envl-Carb: -		Centrifuge: -			
Original analysis batch: 240122_1633_B1		Reruns submitted by: P. Salvyards				Date reruns submitted: 1/25/24	
Sample ID	IS Amount	Sample Aliquot	Final Volume	Dilution Factor	Date	Analyst	Analyte for dilution
03 05 K02400483-04 LCSL	21A	1mL	1mL	1x	1/31/24	PS	High for analytes with hits in samples
K2314281-001							Hit for PFPEa with high LCSL
K2314281-002							Hit for PFPEa with high LCSL
K2312629-007							Hit for PFPEa with high LCSL
K2313452-001							Hit for PFPEa with high LCSL
K2313452-002							Hit for PFPEa with high LCSL
K2313452-003							Hit for PFPEa with high LCSL
K2313452-004							Hit for PFPEa with high LCSL

Storage: 50mms vial
 LIMS: 432516, 830573

Analysis: 1633 W		IS/Lot/Exp.: —		Filter lot: —		Solvent/Lot: —	
Pipette: <i>Newton</i>		Envi-Carb: —		Centrifuge: —		Date reruns submitted: 1/29/24	
Original analysis batch: 240124_1633_B1		Reruns submitted by: Lillian Smith		Date reruns submitted: 1/29/24			
Sample ID	IS Amount	Sample Aliquot	Final Volume	Dilution Factor	Date	Analyst	Analyte for dilution
KQ2400842-03 LCS	<i>N/A</i>	<i>1ML</i>	<i>1ML</i>	1x	<i>1/31/24</i>	<i>DS</i>	3:3 FTCA
KQ2400842-04 LCS_LL	<i>I</i>	<i>I</i>	<i>I</i>	1x	<i>I</i>	<i>I</i>	EtFOSAA, 3:3 FTCA, and PFMPA
KQ2400842-01 MS				1x			3:3 FTCA and PFMPA.
KQ2400842-02 DMS				1x			EtFOSAA, 3:3FTCA.
R2400132-001				1x			EtFOSAA
R2400132-002	<i>I</i>	<i>I</i>	<i>I</i>	1x	<i>I</i>	<i>I</i>	EtFOSAA

Extract storage: second Drink

Prep run: 432742

Analytical run: 430777

Analysis: 1633 W		IS/Lot/Exp.: N/A		Filter lot: N/A		Solvent/Lot: N/A	
Pipette: <i>Lucile</i>		Envl-Carb: N/A		Centrifuge: N/A			
Original analysis batch: 240125_1633_B1				Date reruns submitted: 1/31/24			
Sample ID	IS Amount	Sample Aliquot	Final Volume	Dilution Factor	Date	Analyst	Analyte for dilution
R2300132-003	N/A	<i>1 mL</i>	<i>1 mL</i>	1x	<i>2/1/24</i>	<i>PS</i>	NEFOSAA high in CCV
R2300132-004	N/A			1x			NEFOSAA high in CCV
R2300132-005	N/A			1x			NEFOSAA high in CCV
R2300132-006	N/A			1x			NEFOSAA high in CCV
R2300167-001	N/A	<i>↓</i>	<i>↓</i>	1x	<i>↓</i>	<i>↓</i>	NEFOSAA, PFHps, PFPeA, PFOS high in CCV, <i>PFDA surf.</i>

Extract storage: Second drink

Prep: 432742, ~~830777~~
831088

Analysis: 1633 W		IS/Lot/Exp.: -		Filter lot: -		Solvent/Lot: -	
Pipette: Newton		Env/Carb: -		Centrifuge: -			
Original analysis batch: 240125_1633_B1		Reruns submitted by: P. Salvyards		Date reruns submitted: 1/31/24			
Sample ID	IS Amount	Sample Aliquot	Final Volume	Dilution Factor	Date	Analyst	Analyte for dilution
K02400991-02 LCS	N/A	1 ML	1 ML	1x	1/31/24	AS	High for 3:3 FTCA, low DONA, for 9-Cl and 11-Cl, rerun for low analytes
K02400991-03 DLCS							High for NETFOSAA and low for 9-Cl, rerun for 9-Cl
K02400991-04 LCSLL							Low for EtFOSA, 9-Cl, and 11-Cl, rerun for these
K2400549-002							Rerun for PFHPS, PFOS, PFDS, PFPeA, PFMPA, DONA, and 3:3 FTCA
R2400085-001							Rerun for PFPeA, 9-Cl, and 11-Cl
R2400085-002							Rerun for PFOS, 9-Cl, 11-Cl, and PFPeA
K02400991-01 DUP							Rerun for PFOS, 9-Cl, 11-Cl, and PFPeA
R2400085-003							Rerun for 9-Cl and 11-Cl
R2400085-004							Rerun for PFOS, PFPeA, 9-Cl, and 11-Cl
R2400085-005							Rerun for PFOS, PFPeA, 9-Cl, and 11-Cl
R2400085-006							Rerun for PFPeA, 9-Cl, and 11-Cl
R2400086-001							Rerun for 9-Cl and 11-Cl

LIMS: 830 A87, K33007

Storage: SECOND DRINK



Volatile Organic Compounds by GC/MS

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577- 7222 Fax (360)636-1 068
www.alsglobal.com

Validation Report

1st  12/27/23
2nd  12/27/23

Data File: J:\MS23\DATA\122223\1222F010.D\
Lab ID: K2314281-001
RunType: N/A
Matrix: Water

Date Acquired: 12/22/23 15:04:00
Batch ID: 828027
Analysis Method: 8260C/VOC FP

Validations

Validation Categories	Pass	Fail
Analytical Hold Time	X	
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery		X
Lab Control Sample Recovery	X	
Duplicate Lab Control Sample Recovery	X	
Method Blank	X	
Method Blank Surrogates	X	
Internal Standards	X	
Surrogates	X	
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Continuing Calibration Recovery	trans-1,3-Dichloropropene	-23		20	CCVOK
	Carbon Tetrachloride	24		20	
	Dichlorodifluoromethane	-24		20	
	Chloromethane	-33		20	
	Bromomethane	-32		20	

Primary Review: _____

Secondary Review: _____

Quantitation Report

1st 12/27/23
2nd 12/27/23

Data File:	J:\MS23\DATA\122223\1222F010.D\	Instrument:	K-MS-23
Acqu Date:	12/22/23 15:04:00	Vial:	6
Run Type:	N/A	Dilution:	1
Lab ID:	K2314281-001	Raw Units:	ppb

Bottle ID:	K2314281-001.07	Tier:	IV	Matrix:	Water
Prod Code:	VOC FP	Collect Date:	12/20/23	Receive Date:	12/20/23

Analysis Lot:	828027	Prep Lot:		Report Group:	K2314281
Analysis	8260C	Prep Method:			
		Prep Date:			

Title:	Volatile Organic Compounds by GC/MS	Calibration ID:	KC2300542
		Report List ID:	20915

Internal Standard Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Area Criteria
Chlorobenzene-d5	9.17		446704	10.00	OK
1,4-Dichlorobenzene-d4	11.59		332161	10.00	OK
Fluorobenzene	5.71	-0.01	1105307	10.00	OK

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
4-Bromofluorobenzene	10.42		324788	8.95	90	68 - 117	Y
Dibromofluoromethane	4.86		248771	11.03	110	73 - 122	Y
Toluene-d8	7.59	+0.01	1037572	9.84	98	65 - 144	Y

Target Compounds

Final Conc.Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Acetone	2.36		32586	7.48	7.5	J	Y
Benzene	5.30		6340	0.04	0.040	U	Y
Bromobenzene	0.00		0	0.00	0	U	Y
Bromochloromethane	0.00		0	0.00	0	U	Y
Bromodichloromethane	0.00		0	0.00	0	U	Y
Bromoform	0.00		0	0.00	0	U	Y
Bromomethane	0.00		0	0.00	0	U	Y
2-Butanone (MEK)	0.00		0	0.00	0	U	Y
n-Butylbenzene	0.00		0	0.00	0	U	Y
sec-Butylbenzene	0.00		0	0.00	0	U	Y
tert-Butylbenzene	0.00		0	0.00	0	U	Y
Carbon Disulfide	2.43		6435	0.07	0.070	J	Y
Carbon Tetrachloride	0.00		0	0.00	0	U	Y
Chlorobenzene	0.00		0	0.00	0	U	Y
Chloroethane	0.00		0	0.00	0	U	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 12/27/23 9:45

\\alprews001\starlims\LIMSReps\QuantValidation.rpt

			1st	12/27/23
Data File:	J:\MS23\DATA\122223\1222F010.D\	Instrument:	K-MS-23 nd	12/27/23
Acqu Date:	12/22/23 15:04:00	Vial:	6	
Run Type:	N/A	Dilution:	1	
Lab ID:	K2314281-001	Raw Units:	ppb	

Target Compounds

Final Conc.Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Chloroform	0.00		0	0.00	0	U	Y
Chloromethane	0.00		0	0.00	0	U	Y
2-Chlorotoluene	0.00		0	0.00	0	U	Y
4-Chlorotoluene	0.00		0	0.00	0	U	Y
1,2-Dibromo-3-chloropropane	0.00		0	0.00	0	U	Y
Dibromochloromethane	0.00		0	0.00	0	U	Y
1,2-Dibromoethane (EDB)	0.00		0	0.00	0	U	Y
Dibromomethane	0.00		0	0.00	0	U	Y
1,2-Dichlorobenzene	0.00		0	0.00	0	U	Y
1,3-Dichlorobenzene	0.00		0	0.00	0	U	Y
1,4-Dichlorobenzene	0.00		0	0.00	0	U	Y
Dichlorodifluoromethane	0.00		0	0.00	0	U	Y
1,1-Dichloroethane	0.00		0	0.00	0	U	Y
1,2-Dichloroethane (EDC)	0.00		0	0.00	0	U	Y
1,1-Dichloroethene	0.00		0	0.00	0	U	Y
cis-1,2-Dichloroethene	0.00		0	0.00	0	U	Y
trans-1,2-Dichloroethene	0.00		0	0.00	0	U	Y
1,2-Dichloropropane	0.00		0	0.00	0	U	Y
1,3-Dichloropropane	0.00		0	0.00	0	U	Y
2,2-Dichloropropane	0.00		0	0.00	0	U	Y
1,1-Dichloropropene	0.00		0	0.00	0	U	Y
cis-1,3-Dichloropropene	0.00		0	0.00	0	U	Y
trans-1,3-Dichloropropene	0.00		0	0.00	0	U	Y
Ethylbenzene	0.00		0	0.00	0	U	Y
Hexachlorobutadiene	13.29		782	0.09	0.090	U	Y
2-Hexanone	0.00		0	0.00	0	U	Y
Isopropylbenzene	0.00		0	0.00	0	U	Y
4-Isopropyltoluene	0.00		0	0.00	0	U	Y
4-Methyl-2-pentanone (MIBK)	0.00		0	0.00	0	U	Y
Methylene Chloride	0.00		0	0.00	0	U	Y
Naphthalene	13.40		2184	0.10	0.10	J	Y
n-Propylbenzene	0.00		0	0.00	0	U	Y
Styrene	0.00		0	0.00	0	U	Y
1,1,1,2-Tetrachloroethane	0.00		0	0.00	0	U	Y
1,1,2,2-Tetrachloroethane	0.00		0	0.00	0	U	Y
Tetrachloroethene (PCE)	0.00		0	0.00	0	U	Y
Toluene	7.66		2678	0.03	0.030	U	Y
1,2,3-Trichlorobenzene	13.60	+0.01	1339	0.18	0.18	J	Y
1,2,4-Trichlorobenzene	13.21	+0.01	1249	0.09	0.090	U	Y
1,1,2-Trichloroethane	0.00		0	0.00	0	U	Y
1,1,1-Trichloroethane (TCA)	0.00		0	0.00	0	U	Y

U: Undetected at or above MDL
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N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 12/27/23 9:45

\\alprews001\starlims\LIMSReps\QuantValidation.rpt

			1st	12/27/23
Data File:	J:\MS23\DATA\122223\1222F010.D\	Instrument:	K-MS-23 nd	12/27/23
Acqu Date:	12/22/23 15:04:00	Vial:	6	
Run Type:	N/A	Dilution:	1	
Lab ID:	K2314281-001	Raw Units:	ppb	

<i>Target Compounds</i>		Final Conc.Units: ug/L					
Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Trichloroethene (TCE)	0.00		0	0.00	0	U	Y
Trichlorofluoromethane (CFC 11)	0.00		0	0.00	0	U	Y
1,2,3-Trichloropropane	0.00		0	0.00	0	U	Y
1,2,4-Trimethylbenzene	0.00		0	0.00	0	U	Y
1,3,5-Trimethylbenzene	0.00		0	0.00	0	U	Y
Vinyl Chloride	0.00		0	0.00	0	U	Y
o-Xylene	0.00		0	0.00	0	U	Y
m,p-Xylenes	0.00		0	0.00	0	U	Y

Prep Amount:	10 mL	Dilution:	1
Prep Final Amount:	10.00 mL	Basis Factor:	100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File : J:\MS23\DATA\122223\1222F010.D

Acq On : 22 Dec 2023 3:04 pm

Sample : K2314281-001

Misc :

Vial: 9

Operator: GH/EW/OT/MK

Inst : MS23

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Dec 22 15:29:48 2023

Quant Results File: 091123MS23_8260.RES

Quant Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Mon Sep 18 16:32:32 2023

Response via : Initial Calibration

DataAcq Meth : 8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	5.71	96	1105307	10.00	PPB	0.00
64) Chlorobenzene-d5	9.17	82	446704	10.00	PPB	0.00
85) 1,4-Dichlorobenzene-d4	11.59	152	332161	10.00	PPB	0.00

System Monitoring Compounds

43) Dibromofluoromethane	4.86	113	248771	11.03	PPB	0.00
Spiked Amount 10.000			Recovery	=	110.30%	
47) 1,2-Dichloroethane-d4	5.34	65	325010	12.93	PPB	0.00
Spiked Amount 10.000			Recovery	=	129.30%	
62) Toluene-d8	7.59	98	1037572	9.84	PPB	0.00
Spiked Amount 10.000			Recovery	=	98.40%	
84) 4-Bromofluorobenzene	10.42	95	324788	8.95	PPB	0.00
Spiked Amount 10.000			Recovery	=	89.50%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
13) Acetone	2.36	43	32586	7.48	PPB	92
15) Carbon Disulfide	2.43	76	6435	0.07	PPB	87
48) Benzene	5.30	78	6340	0.04	PPB	# 54
63) Toluene	7.66	92	2678	0.03	PPB	# 47
103) 1,3,5-Trichlorobenzene	12.75	180	867	0.04	PPB	80
104) 1,2,4-Trichlorobenzene	13.21	180	1249	0.09	PPB	81
105) Hexachlorobutadiene	13.29	225	782	0.09	PPB	92
106) Naphthalene	13.40	128	2184	0.10	PPB	65
107) 1,2,3-Trichlorobenzene	13.60	180	1339	0.18	PPB	# 85

Data File : J:\MS23\DATA\122223\1222F010.D

Acq On : 22 Dec 2023 3:04 pm

Sample : K2314281-001

Misc :

Vial: 9

Operator: GH/EW/OT/MK

Inst : MS23

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Dec 27 9:14 2023

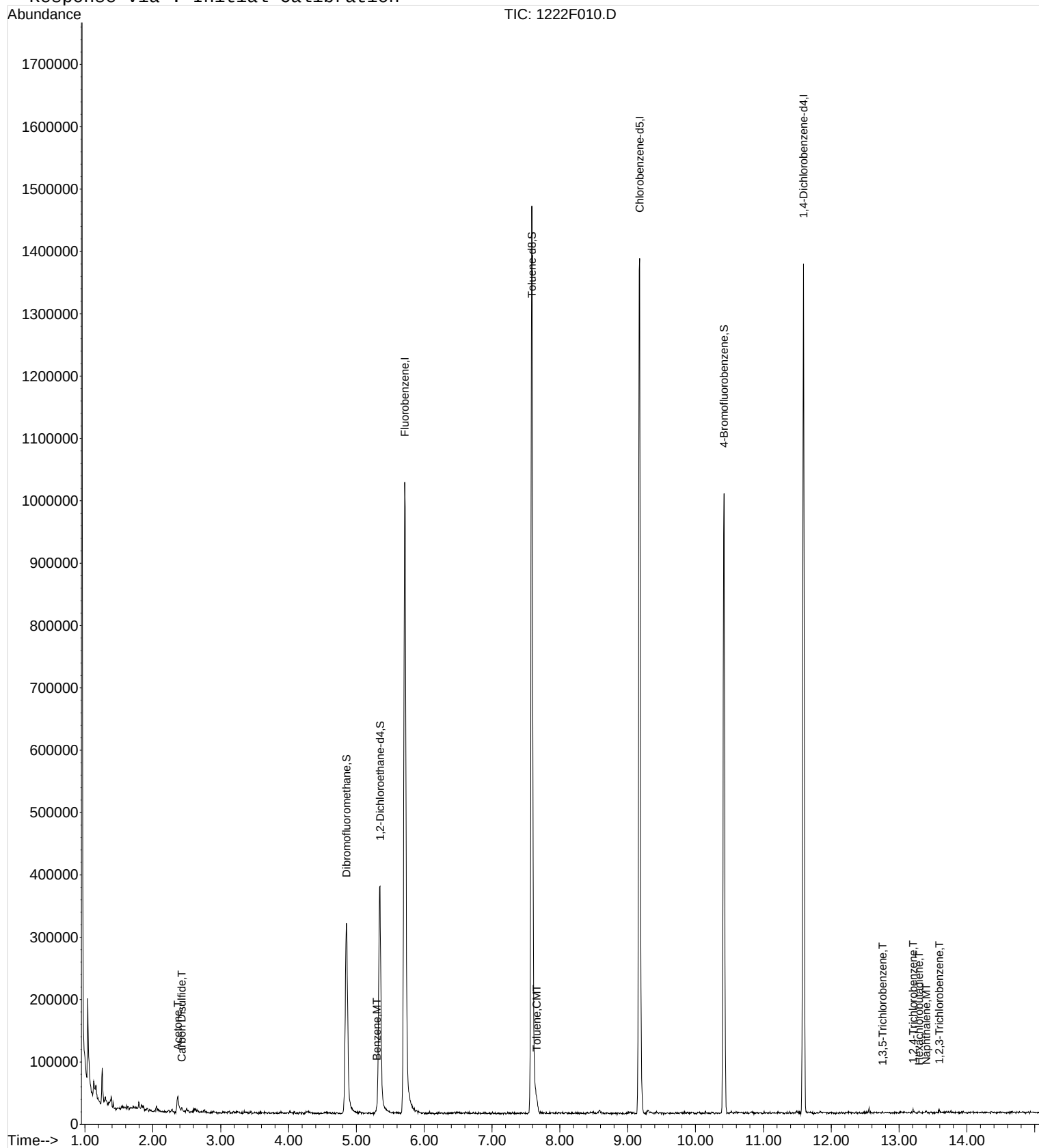
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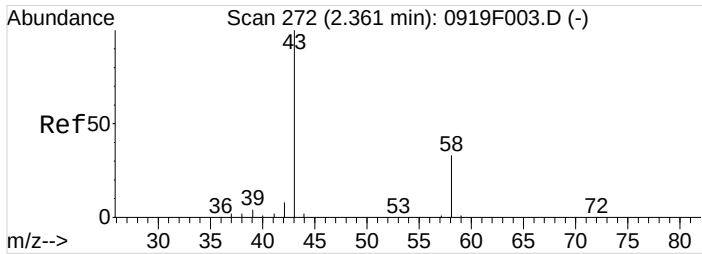
Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Mon Sep 18 16:32:32 2023

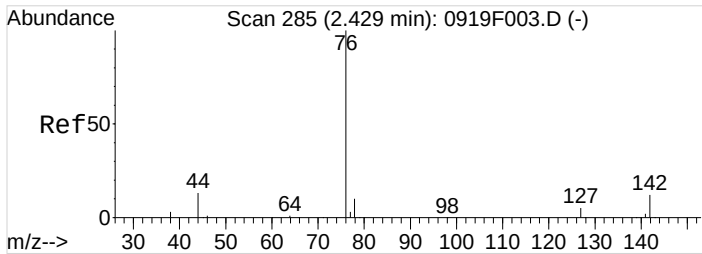
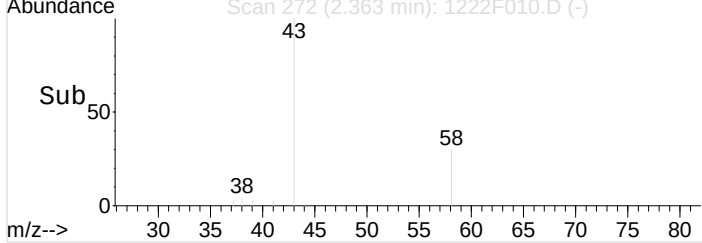
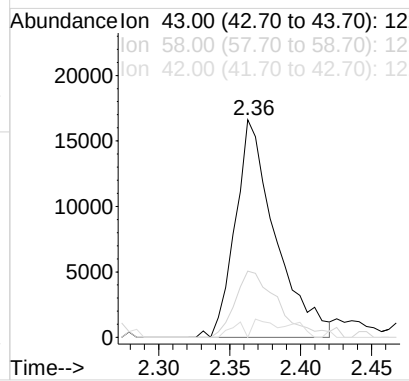
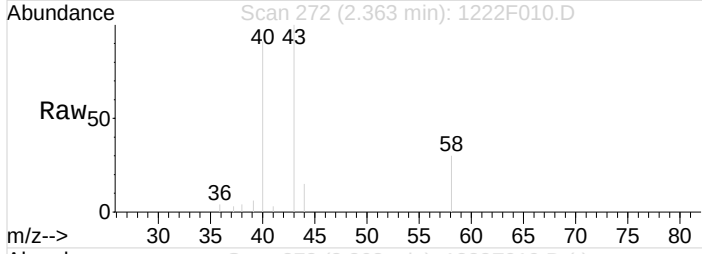
Response via : Initial Calibration





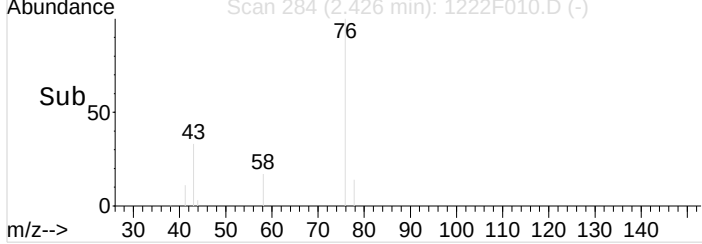
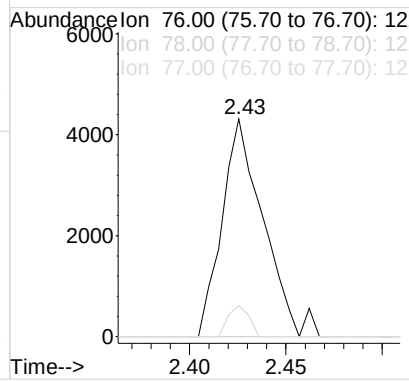
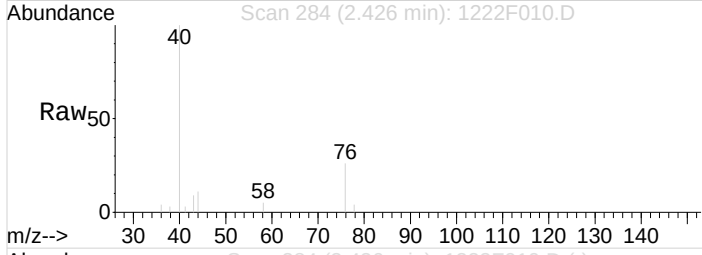
#13
 Acetone
 Concen: 7.48 PPB
 RT: 2.36 min Scan# 272
 Delta R.T. -0.00 min
 Lab File: 1222F010.D
 Acq: 22 Dec 2023 3:04 pm

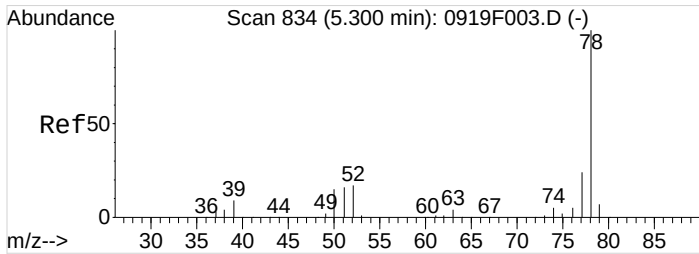
Tgt Ion:	43	Resp:	32586
Ion Ratio	Lower	Upper	
43	100		
58	30.5	2.8	62.8
42	0.0	0.0	38.1



#15
 Carbon Disulfide
 Concen: 0.07 PPB
 RT: 2.43 min Scan# 284
 Delta R.T. -0.01 min
 Lab File: 1222F010.D
 Acq: 22 Dec 2023 3:04 pm

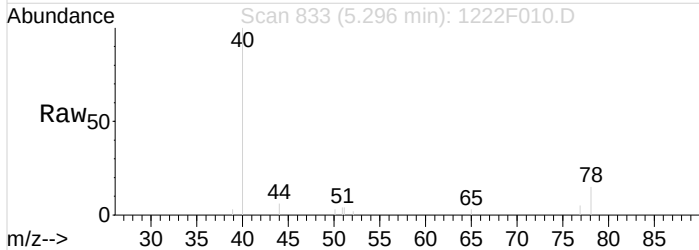
Tgt Ion:	76	Resp:	6435
Ion Ratio	Lower	Upper	
76	100		
78	14.3	0.0	39.0
77	0.0	0.0	32.5



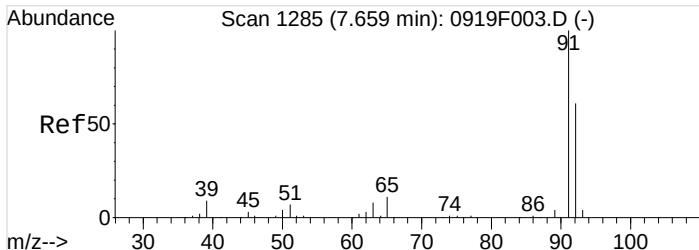
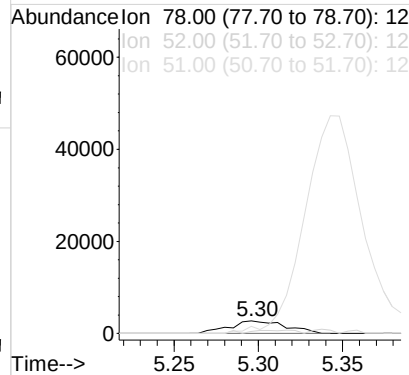
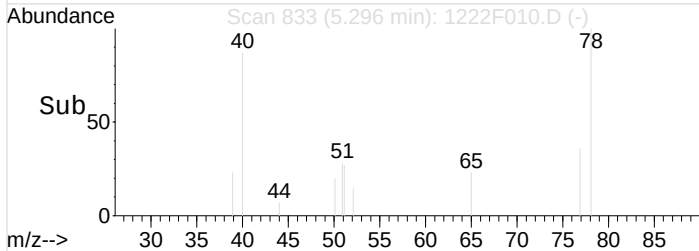


#48
Benzene
Concen: 0.04 PPB
RT: 5.30 min Scan# 833
Delta R.T. -0.01 min
Lab File: 1222F010.D
Acq: 22 Dec 2023 3:04 pm

1st 12/27/23
2nd 12/27/23

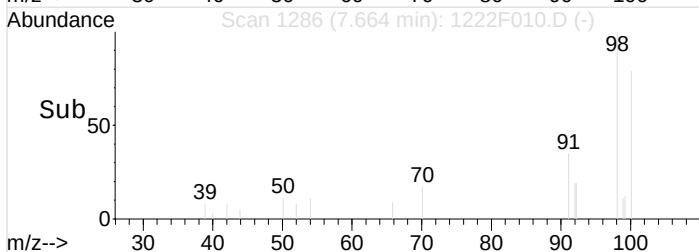
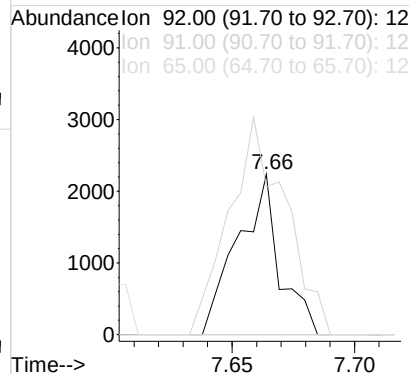
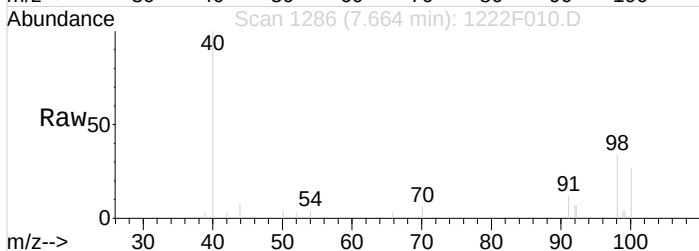


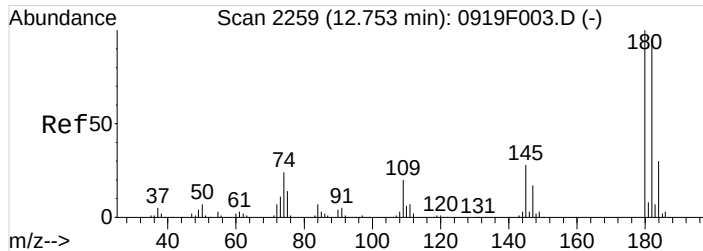
Tgt Ion: 78 Resp: 6340
Ion Ratio Lower Upper
78 100
52 15.4 0.0 47.0
51 55.3 0.0 47.0#



#63
Toluene
Concen: 0.03 PPB
RT: 7.66 min Scan# 1286
Delta R.T. 0.00 min
Lab File: 1222F010.D
Acq: 22 Dec 2023 3:04 pm

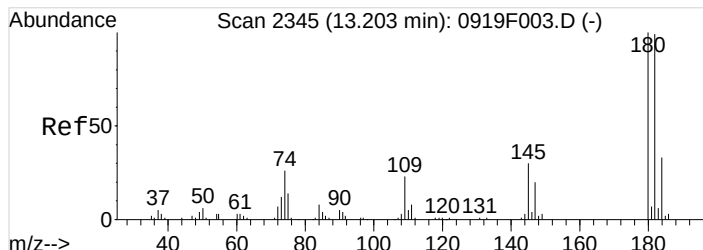
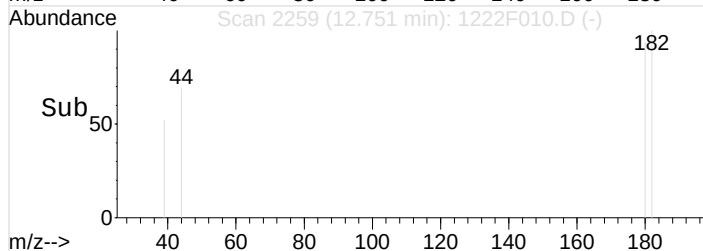
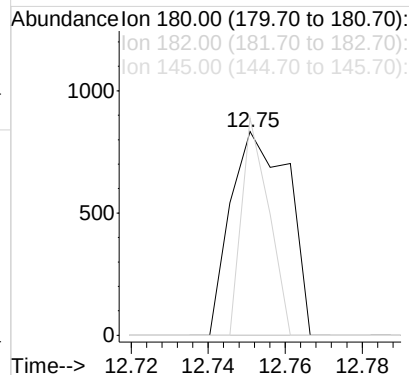
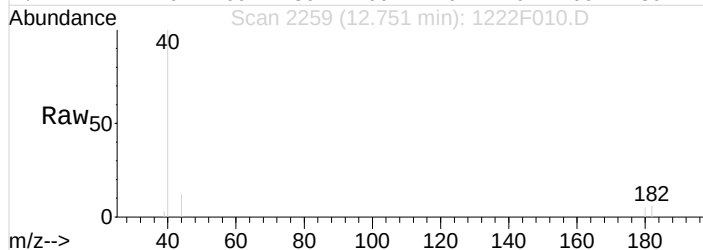
Tgt Ion: 92 Resp: 2678
Ion Ratio Lower Upper
92 100
91 92.2 134.7 194.7#
65 0.0 0.0 49.0





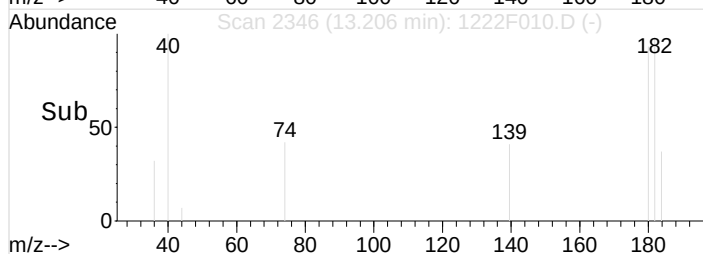
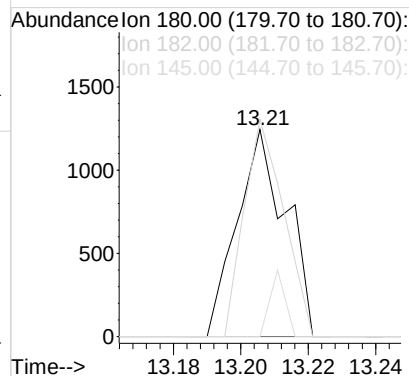
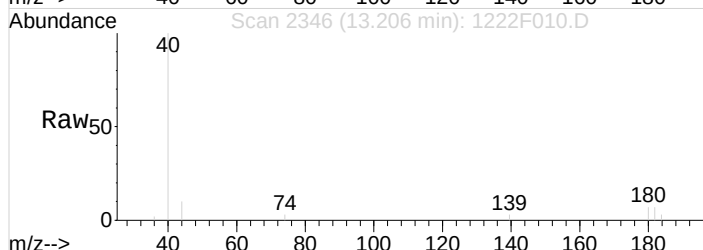
#103
1,3,5-Trichlorobenzene
Concen: 0.04 PPB
RT: 12.75 min Scan# 2259
Delta R.T. -0.01 min
Lab File: 1222F010.D
Acq: 22 Dec 2023 3:04 pm

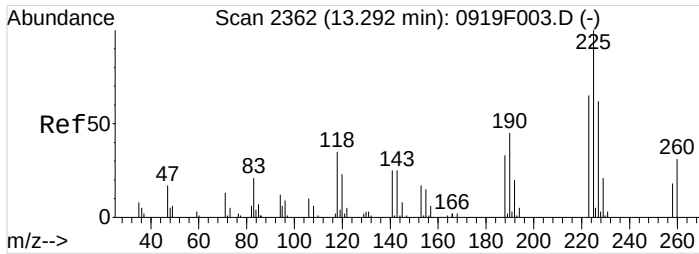
Tgt Ion	Ratio	Lower	Upper
180	100		
182	106.7	66.4	126.4
145	0.0	0.0	57.9



#104
1,2,4-Trichlorobenzene
Concen: 0.09 PPB
RT: 13.21 min Scan# 2346
Delta R.T. -0.00 min
Lab File: 1222F010.D
Acq: 22 Dec 2023 3:04 pm

Tgt Ion	Ratio	Lower	Upper
180	100		
182	105.0	66.3	126.3
145	0.0	0.0	58.9

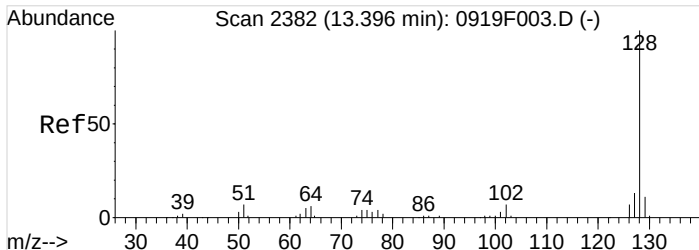
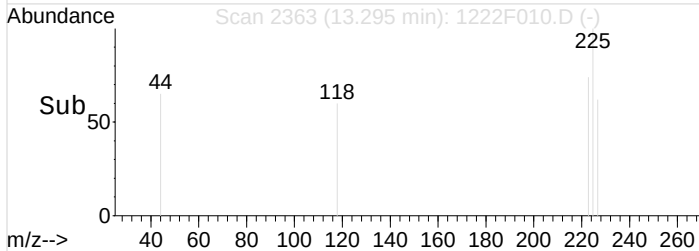
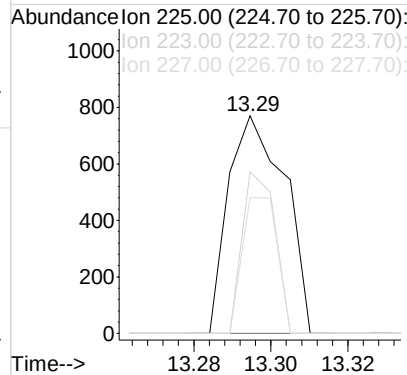
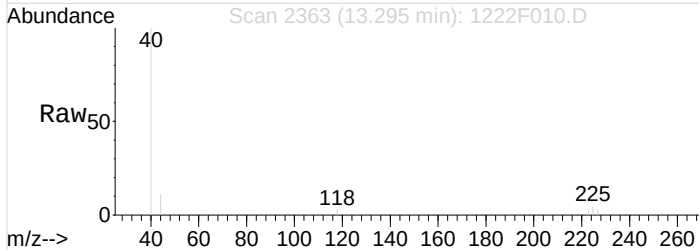




#105
Hexachlorobutadiene
Concen: 0.09 PPB
RT: 13.29 min Scan# 2363
Delta R.T. -0.00 min
Lab File: 1222F010.D
Acq: 22 Dec 2023 3:04 pm

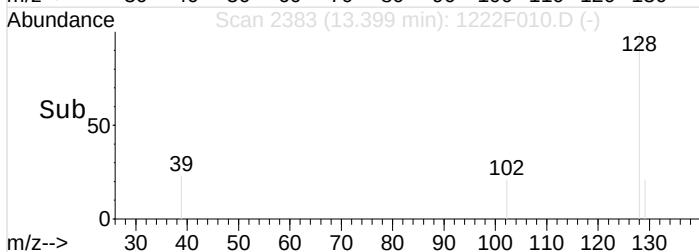
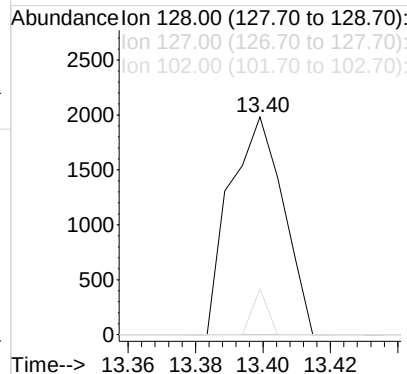
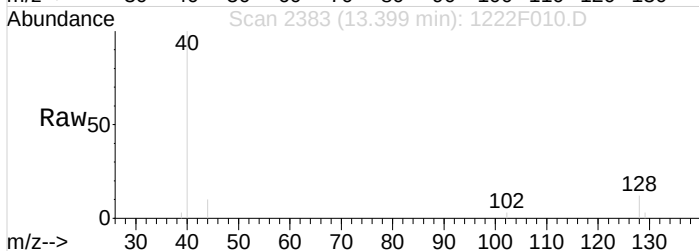
1st 12/27/23
2nd 12/27/23

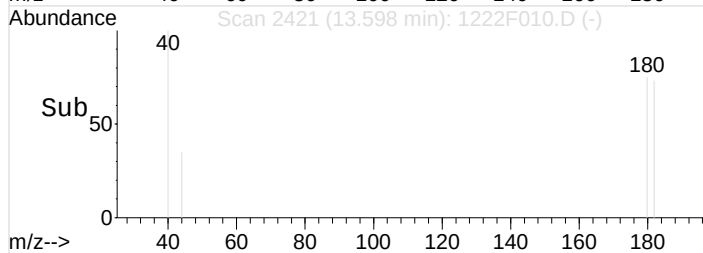
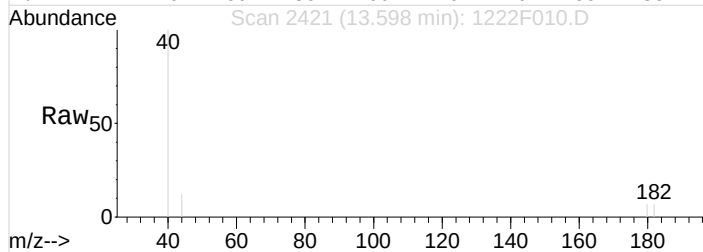
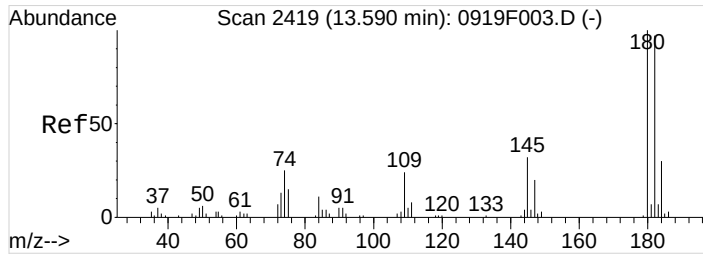
Tgt Ion	Ratio	Lower	Upper
225	100		
223	74.3	35.2	95.2
227	62.3	36.0	96.0



#106
Naphthalene
Concen: 0.10 PPB
RT: 13.40 min Scan# 2383
Delta R.T. -0.00 min
Lab File: 1222F010.D
Acq: 22 Dec 2023 3:04 pm

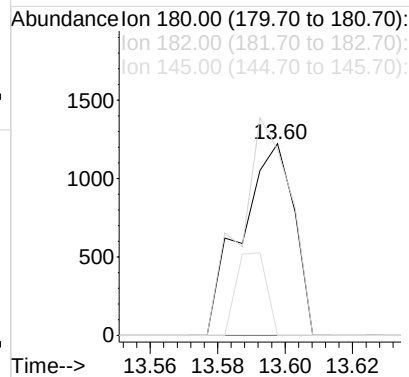
Tgt Ion	Ratio	Lower	Upper
128	100		
127	0.0	0.0	42.6
102	21.1	0.0	37.2





#107
 1,2,3-Trichlorobenzene
 Concen: 0.18 PPB
 RT: 13.60 min Scan# 2421
 Delta R.T. 0.00 min
 Lab File: 1222F010.D
 Acq: 22 Dec 2023 3:04 pm

Tgt Ion	Ratio	Lower	Upper
180	100		
182	97.0	67.9	127.9
145	0.0	2.3	62.3



1st 12/27/23

2nd 12/27/23

Validation Report

1st  12/27/23
2nd  12/27/23

Data File: J:\MS23\DATA\122223\1222F011.D\
Lab ID: K2314281-002
RunType: N/A
Matrix: Water

Date Acquired: 12/22/23 15:28:00
Batch ID: 828027
Analysis Method: 8260C/VOC FP

Validations

Validation Categories	Pass	Fail
Analytical Hold Time	X	
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery		X
Lab Control Sample Recovery	X	
Duplicate Lab Control Sample Recovery	X	
Method Blank	X	
Method Blank Surrogates	X	
Internal Standards	X	
Surrogates	X	
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Continuing Calibration Recovery	trans-1,3-Dichloropropene	-23		20	CCVOK
	Carbon Tetrachloride	24		20	
	Dichlorodifluoromethane	-24		20	
	Chloromethane	-33		20	
	Bromomethane	-32		20	

Primary Review: _____

Secondary Review: _____

Quantitation Report

1st 12/27/23
2nd 12/27/23

Data File:	J:\MS23\DATA\122223\1222F011.D\	Instrument:	K-MS-23
Acqu Date:	12/22/23 15:28:00	Vial:	7
Run Type:	N/A	Dilution:	1
Lab ID:	K2314281-002	Raw Units:	ppb

Bottle ID:	K2314281-002.05	Tier:	IV	Matrix:	Water
Prod Code:	VOC FP	Collect Date:	12/20/23	Receive Date:	12/20/23

Analysis Lot:	828027	Prep Lot:		Report Group:	K2314281
Analysis	8260C	Prep Method:			
		Prep Date:			

Title:	Volatile Organic Compounds by GC/MS	Calibration ID:	KC2300542
		Report List ID:	20915

Internal Standard Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Area Criteria
Chlorobenzene-d5	9.18	+0.01	421971	10.00	OK
1,4-Dichlorobenzene-d4	11.59		314687	10.00	OK
Fluorobenzene	5.71	-0.01	1039989	10.00	OK

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
4-Bromofluorobenzene	10.42		305419	8.91	89	68 - 117	Y
Dibromofluoromethane	4.86		232802	10.97	110	73 - 122	Y
Toluene-d8	7.59	+0.01	976968	9.85	99	65 - 144	Y

Target Compounds

Final Conc.Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Acetone	2.37	+0.01	15522	3.78	3.8	J	Y
Benzene	0.00		0	0.00	0	U	Y
Bromobenzene	0.00		0	0.00	0	U	Y
Bromochloromethane	0.00		0	0.00	0	U	Y
Bromodichloromethane	0.00		0	0.00	0	U	Y
Bromoform	0.00		0	0.00	0	U	Y
Bromomethane	0.00		0	0.00	0	U	Y
2-Butanone (MEK)	0.00		0	0.00	0	U	Y
n-Butylbenzene	0.00		0	0.00	0	U	Y
sec-Butylbenzene	0.00		0	0.00	0	U	Y
tert-Butylbenzene	0.00		0	0.00	0	U	Y
Carbon Disulfide	2.43		5798	0.07	0.070	J	Y
Carbon Tetrachloride	0.00		0	0.00	0	U	Y
Chlorobenzene	0.00		0	0.00	0	U	Y
Chloroethane	0.00		0	0.00	0	U	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 12/27/23 9:45

\\alprews001\starlims\LIMSReps\QuantValidation.rpt

		1st	12/27/23
Data File:	J:\MS23\DATA\122223\1222F011.D\	Instrument:	K-MS-23 nd
Acqu Date:	12/22/23 15:28:00	Vial:	7
Run Type:	N/A	Dilution:	1
Lab ID:	K2314281-002	Raw Units:	ppb

Target Compounds

Final Conc.Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Chloroform	0.00		0	0.00	0	U	Y
Chloromethane	0.00		0	0.00	0	U	Y
2-Chlorotoluene	0.00		0	0.00	0	U	Y
4-Chlorotoluene	0.00		0	0.00	0	U	Y
1,2-Dibromo-3-chloropropane	0.00		0	0.00	0	U	Y
Dibromochloromethane	0.00		0	0.00	0	U	Y
1,2-Dibromoethane (EDB)	0.00		0	0.00	0	U	Y
Dibromomethane	0.00		0	0.00	0	U	Y
1,2-Dichlorobenzene	0.00		0	0.00	0	U	Y
1,3-Dichlorobenzene	0.00		0	0.00	0	U	Y
1,4-Dichlorobenzene	0.00		0	0.00	0	U	Y
Dichlorodifluoromethane	0.00		0	0.00	0	U	Y
1,1-Dichloroethane	0.00		0	0.00	0	U	Y
1,2-Dichloroethane (EDC)	0.00		0	0.00	0	U	Y
1,1-Dichloroethene	0.00		0	0.00	0	U	Y
cis-1,2-Dichloroethene	0.00		0	0.00	0	U	Y
trans-1,2-Dichloroethene	0.00		0	0.00	0	U	Y
1,2-Dichloropropane	0.00		0	0.00	0	U	Y
1,3-Dichloropropane	0.00		0	0.00	0	U	Y
2,2-Dichloropropane	0.00		0	0.00	0	U	Y
1,1-Dichloropropene	0.00		0	0.00	0	U	Y
cis-1,3-Dichloropropene	0.00		0	0.00	0	U	Y
trans-1,3-Dichloropropene	0.00		0	0.00	0	U	Y
Ethylbenzene	0.00		0	0.00	0	U	Y
Hexachlorobutadiene	0.00		0	0.00	0	U	Y
2-Hexanone	0.00		0	0.00	0	U	Y
Isopropylbenzene	0.00		0	0.00	0	U	Y
4-Isopropyltoluene	0.00		0	0.00	0	U	Y
4-Methyl-2-pentanone (MIBK)	0.00		0	0.00	0	U	Y
Methylene Chloride	2.77	+0.01	743	0.02	0.020	U	Y
Naphthalene	0.00		0	0.00	0	U	Y
n-Propylbenzene	0.00		0	0.00	0	U	Y
Styrene	0.00		0	0.00	0	U	Y
1,1,1,2-Tetrachloroethane	0.00		0	0.00	0	U	Y
1,1,2,2-Tetrachloroethane	0.00		0	0.00	0	U	Y
Tetrachloroethene (PCE)	0.00		0	0.00	0	U	Y
Toluene	7.66		1511	0.02	0.020	U	Y
1,2,3-Trichlorobenzene	0.00		0	0.00	0	U	Y
1,2,4-Trichlorobenzene	0.00		0	0.00	0	U	Y
1,1,2-Trichloroethane	0.00		0	0.00	0	U	Y
1,1,1-Trichloroethane (TCA)	0.00		0	0.00	0	U	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 12/27/23 9:45

\\alprews001\starlims\LIMSReps\QuantValidation.rpt

			1st	12/27/23
Data File:	J:\MS23\DATA\122223\1222F011.D\	Instrument:	K-MS-23 nd	12/27/23
Acqu Date:	12/22/23 15:28:00	Vial:	7	
Run Type:	N/A	Dilution:	1	
Lab ID:	K2314281-002	Raw Units:	ppb	

<i>Target Compounds</i>		Final Conc.Units: ug/L					
Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Trichloroethene (TCE)	0.00		0	0.00	0	U	Y
Trichlorofluoromethane (CFC 11)	0.00		0	0.00	0	U	Y
1,2,3-Trichloropropane	0.00		0	0.00	0	U	Y
1,2,4-Trimethylbenzene	0.00		0	0.00	0	U	Y
1,3,5-Trimethylbenzene	0.00		0	0.00	0	U	Y
Vinyl Chloride	0.00		0	0.00	0	U	Y
o-Xylene	0.00		0	0.00	0	U	Y
m,p-Xylenes	0.00		0	0.00	0	U	Y

Prep Amount:	10 mL	Dilution:	1
Prep Final Amount:	10.00 mL	Basis Factor:	100.00

Data File : J:\MS23\DATA\122223\1222F011.D

Acq On : 22 Dec 2023 3:28 pm

Sample : K2314281-002

Misc :

Vial: 10

Operator: GH/EW/OT/MK

Inst : MS23

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Dec 26 07:55:15 2023

Quant Results File: 091123MS23_8260.RES

Quant Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Mon Sep 18 16:32:32 2023

Response via : Initial Calibration

DataAcq Meth : 8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	5.71	96	1039989	10.00	PPB	0.00
64) Chlorobenzene-d5	9.18	82	421971	10.00	PPB	0.00
85) 1,4-Dichlorobenzene-d4	11.59	152	314687	10.00	PPB	0.00

System Monitoring Compounds

43) Dibromofluoromethane	4.86	113	232802	10.97	PPB	0.00
Spiked Amount 10.000			Recovery	=	109.70%	
47) 1,2-Dichloroethane-d4	5.35	65	309983	13.10	PPB	0.00
Spiked Amount 10.000			Recovery	=	131.00%	
62) Toluene-d8	7.59	98	976968	9.85	PPB	0.00
Spiked Amount 10.000			Recovery	=	98.50%	
84) 4-Bromofluorobenzene	10.42	95	305419	8.91	PPB	0.00
Spiked Amount 10.000			Recovery	=	89.10%	

Target Compounds

						Qvalue
13) Acetone	2.37	43	15522	3.78	PPB	82
15) Carbon Disulfide	2.43	76	5798	0.07	PPB	79
20) Methylene Chloride	2.77	84	743	0.02	PPB	# 68
63) Toluene	7.66	92	1511	0.02	PPB	76

Data File : J:\MS23\DATA\122223\1222F011.D

Acq On : 22 Dec 2023 3:28 pm

Sample : K2314281-002

Misc :

Vial: 10

Operator: GH/EW/OT/MK

Inst : MS23

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Dec 27 9:16 2023

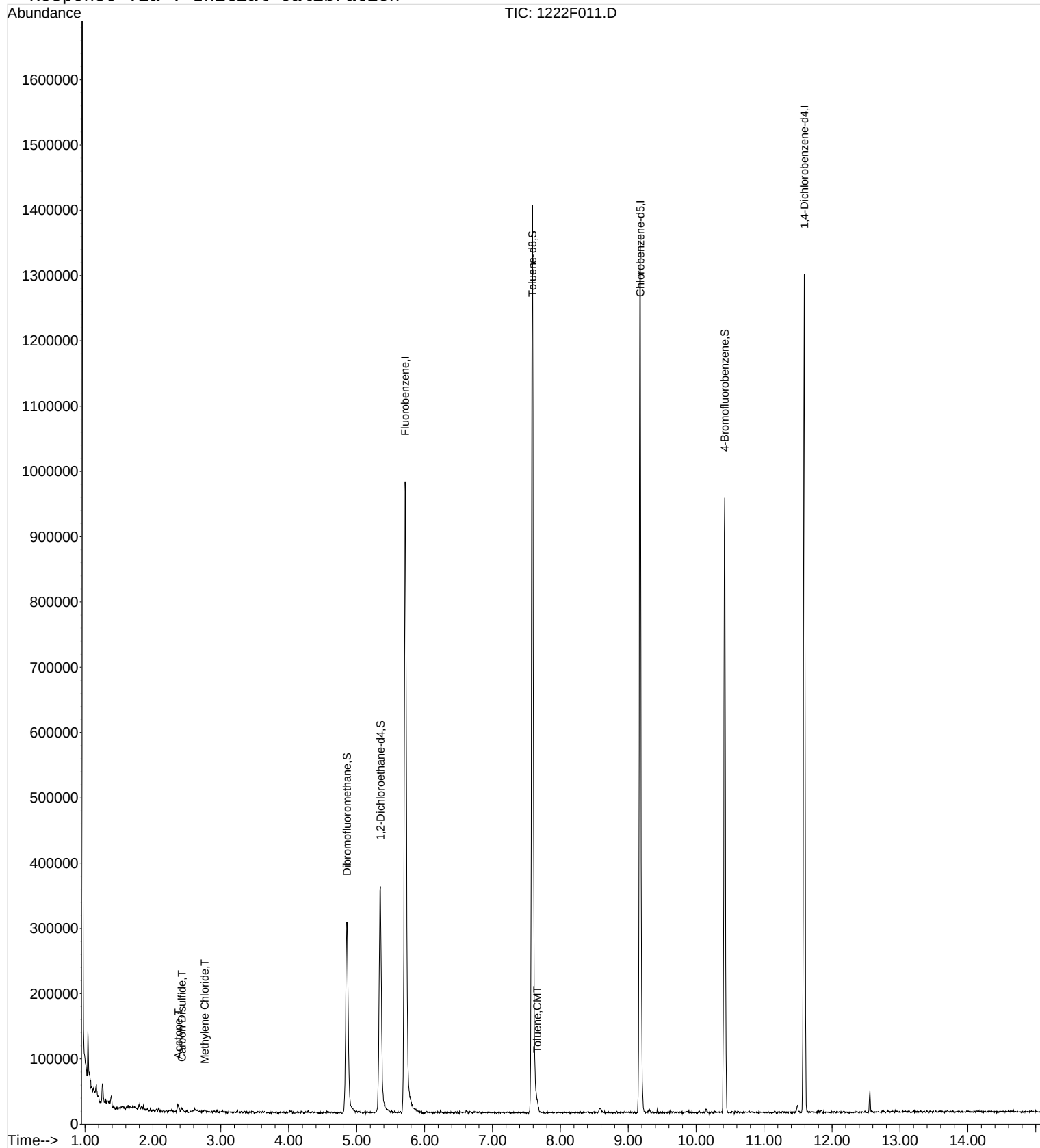
Quant Results File: 091123MS23_8260.RES

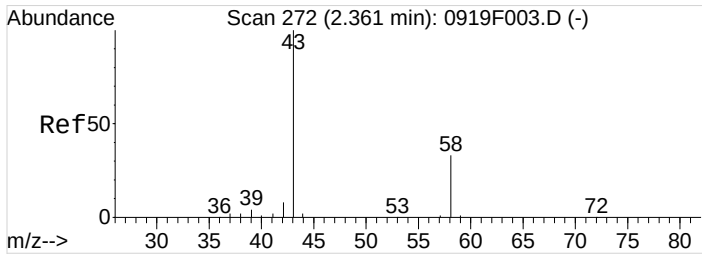
Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Mon Sep 18 16:32:32 2023

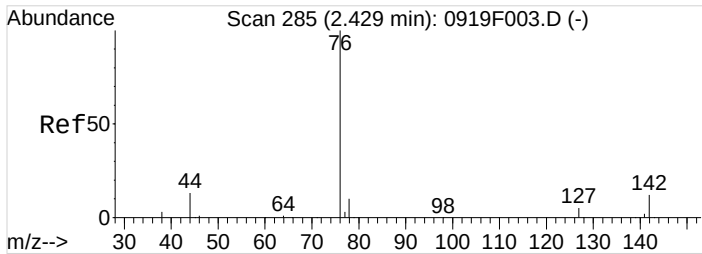
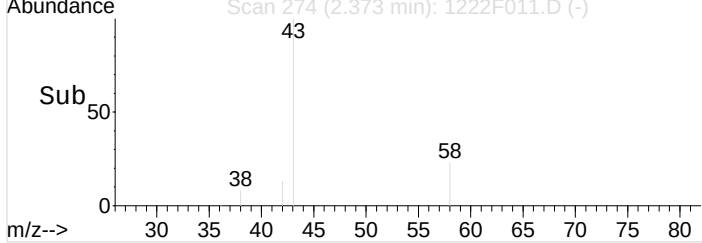
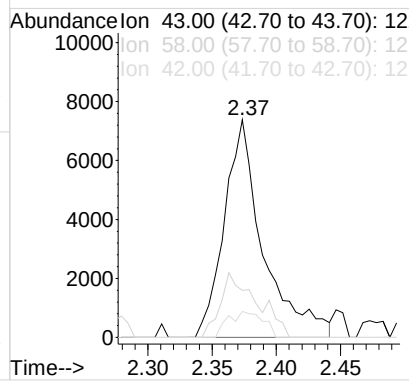
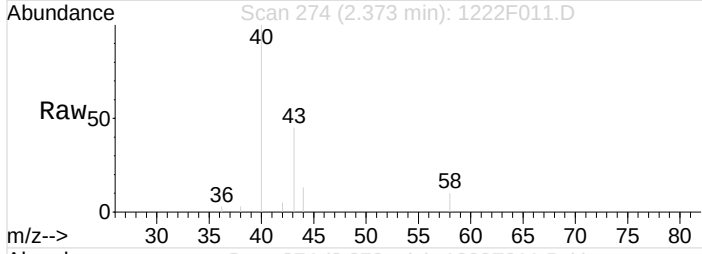
Response via : Initial Calibration





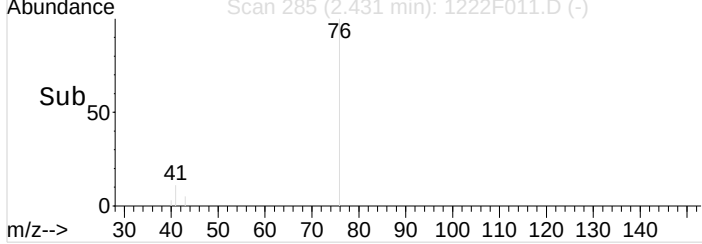
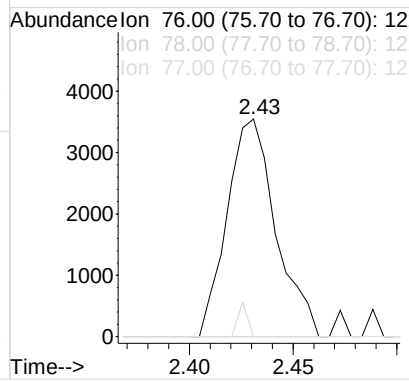
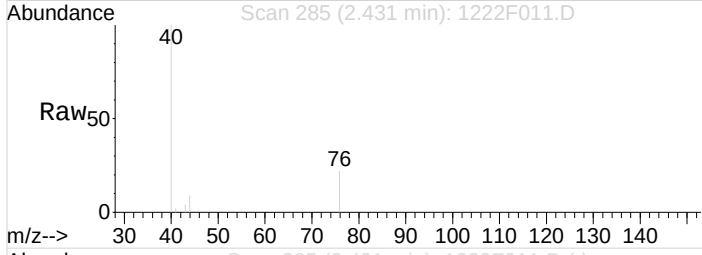
#13
 Acetone
 Concen: 3.78 PPB
 RT: 2.37 min Scan# 274
 Delta R.T. 0.01 min
 Lab File: 1222F011.D
 Acq: 22 Dec 2023 3:28 pm

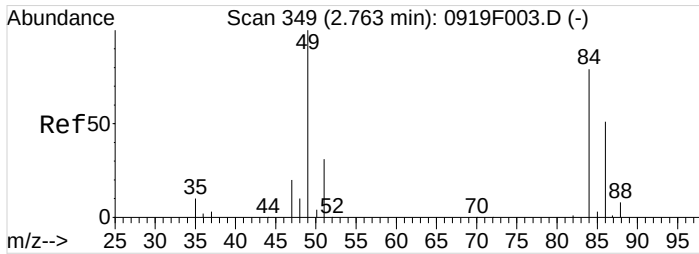
Tgt Ion:	43	Resp:	15522
Ion Ratio	Lower	Upper	
43	100		
58	21.7	2.8	62.8
42	11.9	0.0	38.1



#15
 Carbon Disulfide
 Concen: 0.07 PPB
 RT: 2.43 min Scan# 285
 Delta R.T. -0.00 min
 Lab File: 1222F011.D
 Acq: 22 Dec 2023 3:28 pm

Tgt Ion:	76	Resp:	5798
Ion Ratio	Lower	Upper	
76	100		
78	0.0	0.0	39.0
77	0.0	0.0	32.5

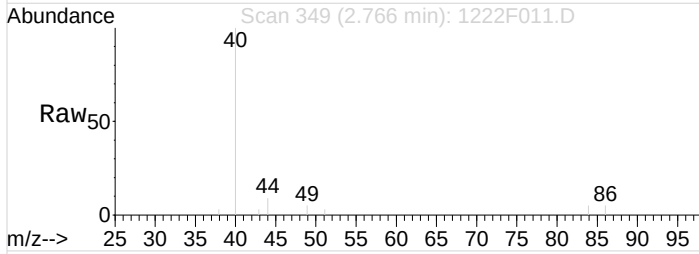




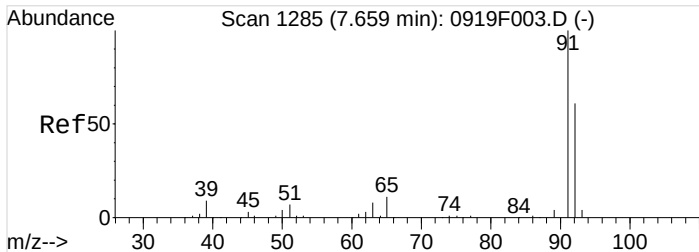
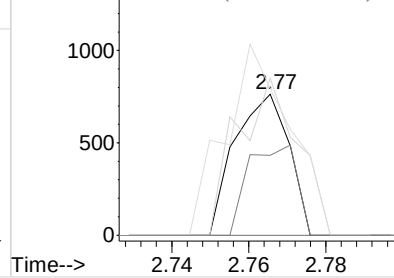
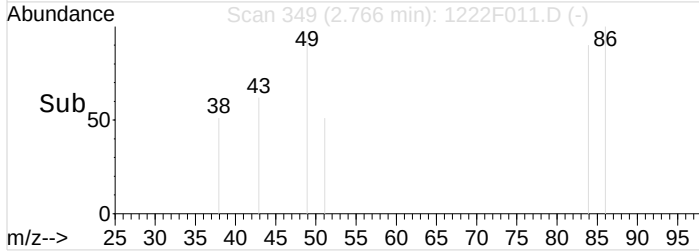
#20
Methylene Chloride
Concen: 0.02 PPB
RT: 2.77 min Scan# 349
Delta R.T. -0.00 min
Lab File: 1222F011.D
Acq: 22 Dec 2023 3:28 pm

1st 12/27/23
2nd 12/27/23

Tgt Ion:	84	Resp:	743
Ion Ratio	Lower	Upper	
84	100		
86	111.4	34.8	94.8#
49	104.2	96.5	156.5
51	56.6	9.0	69.0

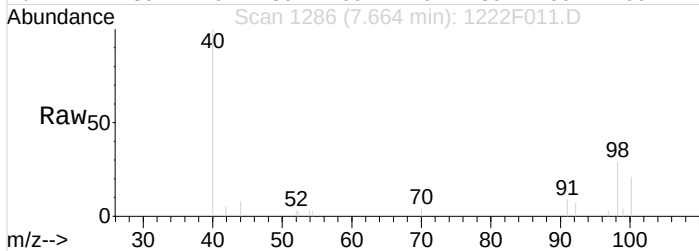


Abundance Ion 84.00 (83.70 to 84.70): 12
Ion 86.00 (85.70 to 86.70): 12
Ion 49.00 (48.70 to 49.70): 12
Ion 51.00 (50.70 to 51.70): 12

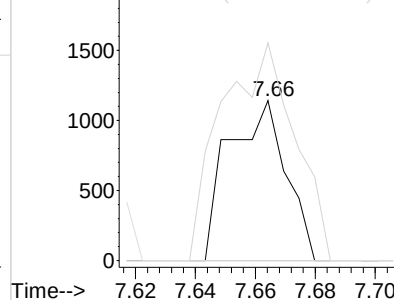
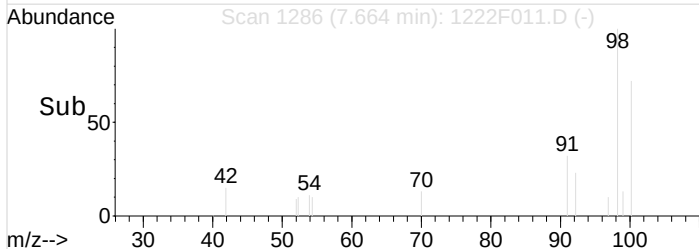


#63
Toluene
Concen: 0.02 PPB
RT: 7.66 min Scan# 1286
Delta R.T. 0.00 min
Lab File: 1222F011.D
Acq: 22 Dec 2023 3:28 pm

Tgt Ion:	92	Resp:	1511
Ion Ratio	Lower	Upper	
92	100		
91	135.9	134.7	194.7
65	0.0	0.0	49.0



Abundance Ion 92.00 (91.70 to 92.70): 12
Ion 91.00 (90.70 to 91.70): 12
Ion 65.00 (64.70 to 65.70): 12



Validation Report

1st *SM* 12/27/23
2nd *Q* 12/27/23

Data File: J:\MS23\DATA\122223\1222F009.D\
Lab ID: KQ2322477-05
RunType: MB
Matrix: Water

Date Acquired: 12/22/23 14:27:00
Batch ID: 828027
Analysis Method: 8260C/VOC FP

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery		X
Internal Standards	X	
Surrogates	X	
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Continuing Calibration Recovery	trans-1,3-Dichloropropene	-23		20	CCVOK
	Carbon Tetrachloride	24		20	
	Dichlorodifluoromethane	-24		20	
	Chloromethane	-33		20	
	Bromomethane	-32		20	

Primary Review: _____

Secondary Review: _____

Quantitation Report

1st 12/27/23
2nd 12/27/23

Data File:	J:\MS23\DATA\122223\1222F009.D\	Instrument:	K-MS-23
Acqu Date:	12/22/23 14:27:00	Vial:	5
Run Type:	MB	Dilution:	1
Lab ID:	KQ2322477-05	Raw Units:	ppb

Bottle ID:		Tier:	IV	Matrix:	Water
Prod Code:	VOC FP	Collect Date:	12/20/23	Receive Date:	12/20/23

Analysis Lot:	828027	Prep Lot:		Report Group:	KQ2322477
Analysis	8260C	Prep Method:			
		Prep Date:			

Title:	Volatile Organic Compounds by GC/MS	Calibration ID:	KC2300542
		Report List ID:	20915

Internal Standard Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Area Criteria
Chlorobenzene-d5	9.17		428384	10.00	OK
1,4-Dichlorobenzene-d4	11.59		317385	10.00	OK
Fluorobenzene	5.72		1075786	10.00	OK

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
4-Bromofluorobenzene	10.42		310404	8.92	89	68 - 117	Y
Dibromofluoromethane	4.86		242366	11.05	111	73 - 122	Y
Toluene-d8	7.59	+0.01	1002718	9.77	98	65 - 144	Y

Target Compounds

Final Conc.Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Acetone	2.37	+0.01	6580	1.55	1.6	U	Y
Benzene	0.00		0	0.00	0	U	Y
Bromobenzene	0.00		0	0.00	0	U	Y
Bromochloromethane	0.00		0	0.00	0	U	Y
Bromodichloromethane	0.00		0	0.00	0	U	Y
Bromoform	0.00		0	0.00	0	U	Y
Bromomethane	0.00		0	0.00	0	U	Y
2-Butanone (MEK)	0.00		0	0.00	0	U	Y
n-Butylbenzene	0.00		0	0.00	0	U	Y
sec-Butylbenzene	0.00		0	0.00	0	U	Y
tert-Butylbenzene	0.00		0	0.00	0	U	Y
Carbon Disulfide	2.43		3334	0.04	0.040	U	Y
Carbon Tetrachloride	0.00		0	0.00	0	U	Y
Chlorobenzene	0.00		0	0.00	0	U	Y
Chloroethane	0.00		0	0.00	0	U	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 12/27/23 9:45

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			1st	12/27/23
Data File:	J:\MS23\DATA\122223\1222F009.D\	Instrument:	K-MS-23 nd	12/27/23
Acqu Date:	12/22/23 14:27:00	Vial:	5	
Run Type:	MB	Dilution:	1	
Lab ID:	KQ2322477-05	Raw Units:	ppb	

Target Compounds

Final Conc.Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Chloroform	0.00		0	0.00	0	U	Y
Chloromethane	0.00		0	0.00	0	U	Y
2-Chlorotoluene	0.00		0	0.00	0	U	Y
4-Chlorotoluene	0.00		0	0.00	0	U	Y
1,2-Dibromo-3-chloropropane	0.00		0	0.00	0	U	Y
Dibromochloromethane	0.00		0	0.00	0	U	Y
1,2-Dibromoethane (EDB)	0.00		0	0.00	0	U	Y
Dibromomethane	0.00		0	0.00	0	U	Y
1,2-Dichlorobenzene	0.00		0	0.00	0	U	Y
1,3-Dichlorobenzene	0.00		0	0.00	0	U	Y
1,4-Dichlorobenzene	11.61		1031	0.02	0.020	U	Y
Dichlorodifluoromethane	0.00		0	0.00	0	U	Y
1,1-Dichloroethane	0.00		0	0.00	0	U	Y
1,2-Dichloroethane (EDC)	0.00		0	0.00	0	U	Y
1,1-Dichloroethene	0.00		0	0.00	0	U	Y
cis-1,2-Dichloroethene	0.00		0	0.00	0	U	Y
trans-1,2-Dichloroethene	0.00		0	0.00	0	U	Y
1,2-Dichloropropane	0.00		0	0.00	0	U	Y
1,3-Dichloropropane	0.00		0	0.00	0	U	Y
2,2-Dichloropropane	0.00		0	0.00	0	U	Y
1,1-Dichloropropene	0.00		0	0.00	0	U	Y
cis-1,3-Dichloropropene	0.00		0	0.00	0	U	Y
trans-1,3-Dichloropropene	0.00		0	0.00	0	U	Y
Ethylbenzene	0.00		0	0.00	0	U	Y
Hexachlorobutadiene	13.29		994	0.12	0.12	J	Y
2-Hexanone	0.00		0	0.00	0	U	Y
Isopropylbenzene	0.00		0	0.00	0	U	Y
4-Isopropyltoluene	0.00		0	0.00	0	U	Y
4-Methyl-2-pentanone (MIBK)	0.00		0	0.00	0	U	Y
Methylene Chloride	2.77	+0.01	9034	0.23	0.23	J	Y
Naphthalene	13.39	-0.01	3959	0.20	0.20	J	Y
n-Propylbenzene	0.00		0	0.00	0	U	Y
Styrene	0.00		0	0.00	0	U	Y
1,1,1,2-Tetrachloroethane	0.00		0	0.00	0	U	Y
1,1,2,2-Tetrachloroethane	0.00		0	0.00	0	U	Y
Tetrachloroethene (PCE)	0.00		0	0.00	0	U	Y
Toluene	0.00		0	0.00	0	U	Y
1,2,3-Trichlorobenzene	13.59		1867	0.27	0.27	J	Y
1,2,4-Trichlorobenzene	13.20		1876	0.14	0.14	J	Y
1,1,2-Trichloroethane	0.00		0	0.00	0	U	Y
1,1,1-Trichloroethane (TCA)	0.00		0	0.00	0	U	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 12/27/23 9:45

\\alprews001\starlims\LIMSReps\QuantValidation.rpt

			1st	12/27/23
Data File:	J:\MS23\DATA\122223\1222F009.D\	Instrument:	K-MS-23 nd	12/27/23
Acqu Date:	12/22/23 14:27:00	Vial:	5	
Run Type:	MB	Dilution:	1	
Lab ID:	KQ2322477-05	Raw Units:	ppb	

<i>Target Compounds</i>		Final Conc.Units: ug/L					
Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Trichloroethene (TCE)	0.00		0	0.00	0	U	Y
Trichlorofluoromethane (CFC 11)	0.00		0	0.00	0	U	Y
1,2,3-Trichloropropane	0.00		0	0.00	0	U	Y
1,2,4-Trimethylbenzene	0.00		0	0.00	0	U	Y
1,3,5-Trimethylbenzene	0.00		0	0.00	0	U	Y
Vinyl Chloride	0.00		0	0.00	0	U	Y
o-Xylene	0.00		0	0.00	0	U	Y
m,p-Xylenes	0.00		0	0.00	0	U	Y

Prep Amount:	10 mL	Dilution:	1
Prep Final Amount:	10.00 mL	Basis Factor:	100.00

Data File : J:\MS23\DATA\122223\1222F009.D

Acq On : 22 Dec 2023 2:27 pm

Sample : MB

Misc :

Vial: 8

Operator: GH/EW/OT/MK

Inst : MS23

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Dec 22 15:29:35 2023

Quant Results File: 091123MS23_8260.RES

Quant Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Mon Sep 18 16:32:32 2023

Response via : Initial Calibration

DataAcq Meth : 8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	5.72	96	1075786	10.00	PPB	0.00
64) Chlorobenzene-d5	9.17	82	428384	10.00	PPB	0.00
85) 1,4-Dichlorobenzene-d4	11.59	152	317385	10.00	PPB	0.00

System Monitoring Compounds

43) Dibromofluoromethane	4.86	113	242366	11.05	PPB	0.00
Spiked Amount 10.000			Recovery	=	110.50%	
47) 1,2-Dichloroethane-d4	5.35	65	311964	12.75	PPB	0.00
Spiked Amount 10.000			Recovery	=	127.50%	
62) Toluene-d8	7.59	98	1002718	9.77	PPB	0.00
Spiked Amount 10.000			Recovery	=	97.70%	
84) 4-Bromofluorobenzene	10.42	95	310404	8.92	PPB	0.00
Spiked Amount 10.000			Recovery	=	89.20%	

Target Compounds

						Qvalue
13) Acetone	2.37	43	6580	1.55	PPB	# 39
15) Carbon Disulfide	2.43	76	3334	0.04	PPB	# 65
20) Methylene Chloride	2.77	84	9034	0.23	PPB	# 78
38) Tetrahydrofuran	4.55	71	1986	0.85	PPB	# 54
99) 1,4-Dichlorobenzene	11.61	146	1031	0.02	PPB	# 67
103) 1,3,5-Trichlorobenzene	12.75	180	1091	0.05	PPB	# 70
104) 1,2,4-Trichlorobenzene	13.20	180	1876	0.14	PPB	# 86
105) Hexachlorobutadiene	13.29	225	994	0.12	PPB	# 81
106) Naphthalene	13.39	128	3959	0.20	PPB	# 81
107) 1,2,3-Trichlorobenzene	13.59	180	1867	0.27	PPB	# 95

Data File : J:\MS23\DATA\122223\1222F009.D

Acq On : 22 Dec 2023 2:27 pm

Sample : MB

Misc :

Vial: 8

Operator: GH/EW/OT/MK

Inst : MS23

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Dec 27 9:12 2023

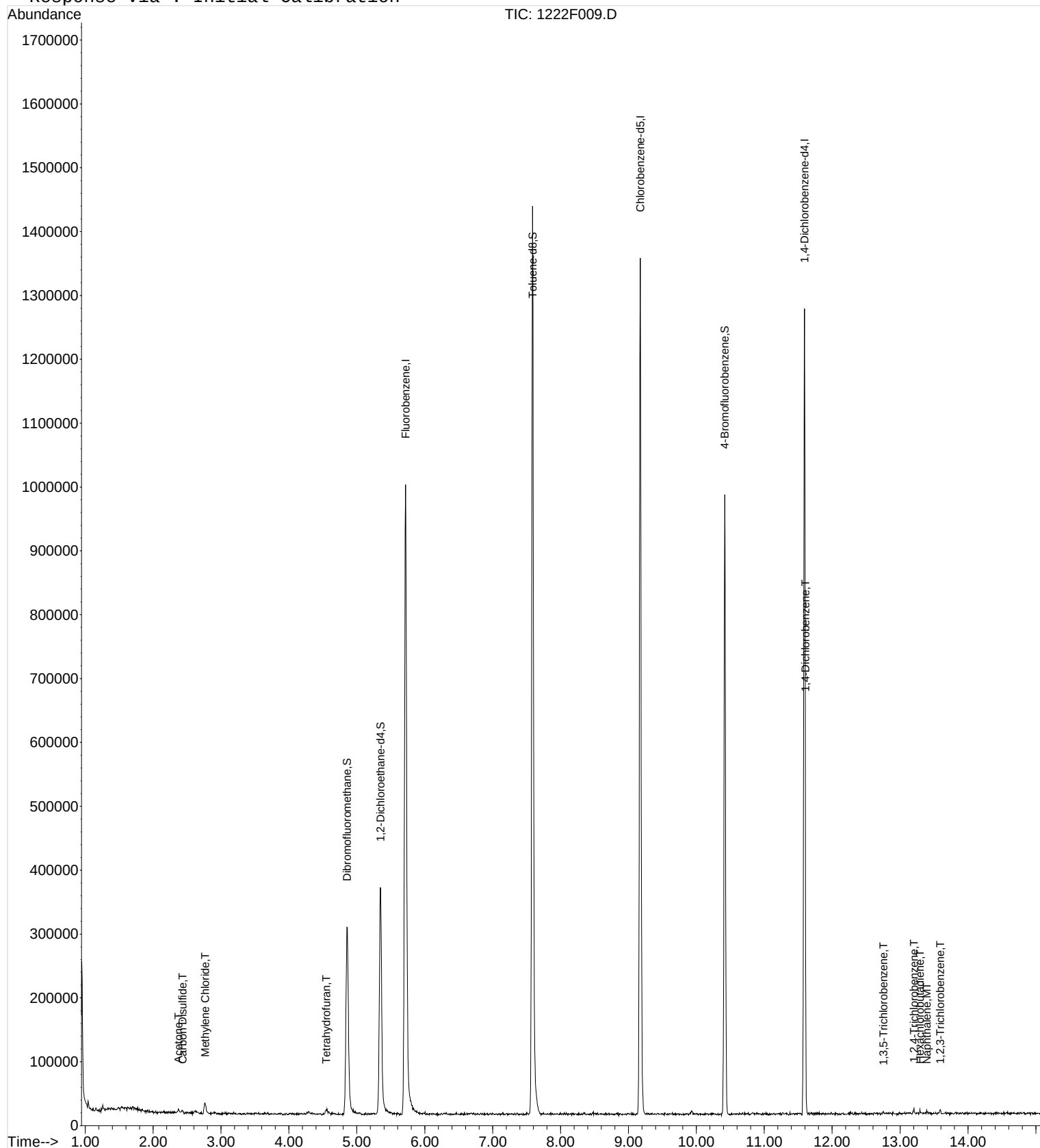
Quant Results File: 091123MS23_8260.RES

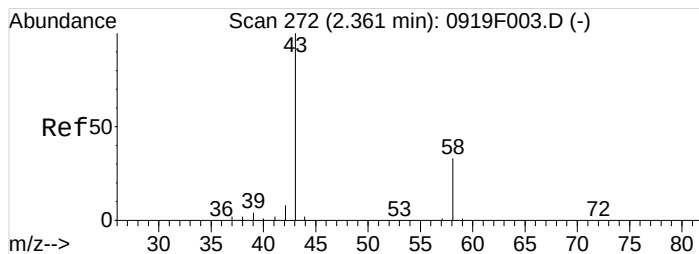
Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Mon Sep 18 16:32:32 2023

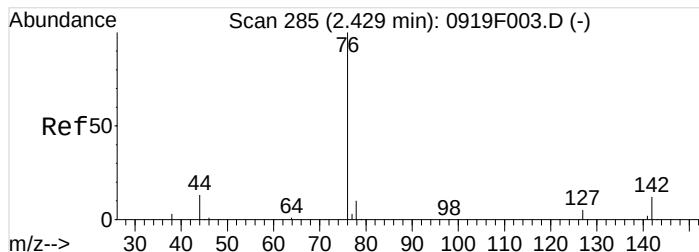
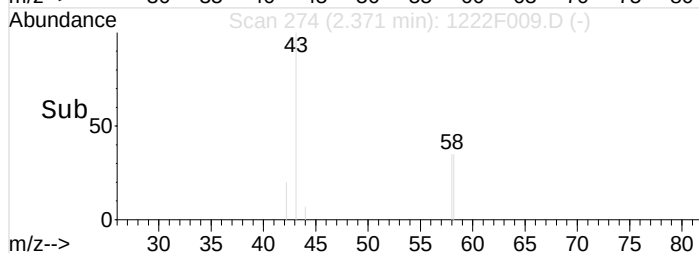
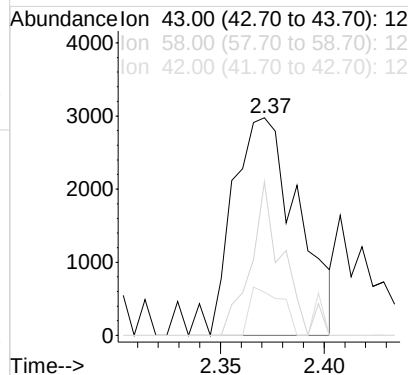
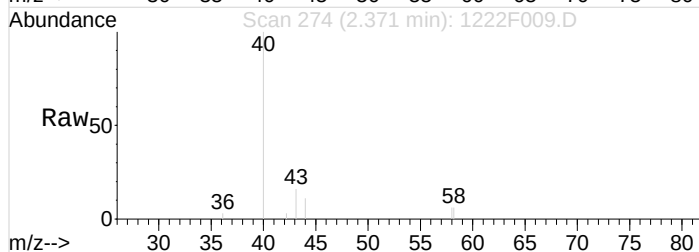
Response via : Initial Calibration





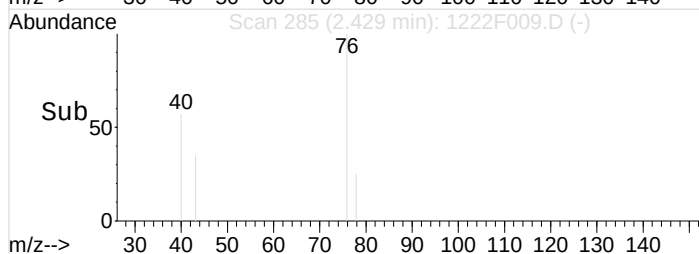
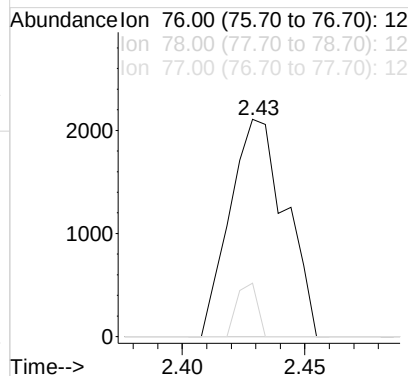
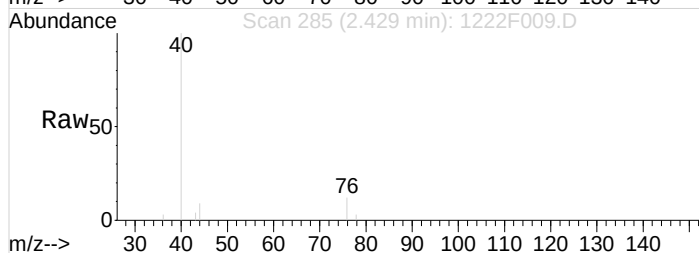
#13
Acetone
Concen: 1.55 PPB
RT: 2.37 min Scan# 274
Delta R.T. 0.01 min
Lab File: 1222F009.D
Acq: 22 Dec 2023 2:27 pm

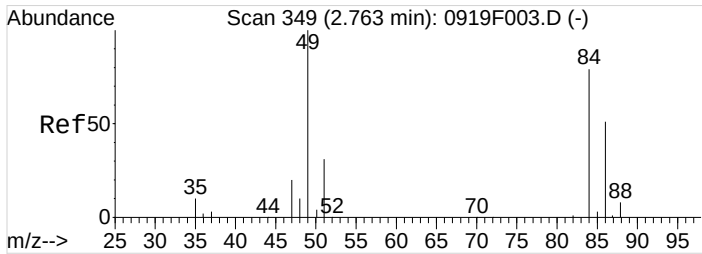
Tgt Ion:	43	Resp:	6580
Ion Ratio	Lower	Upper	
43	100		
58	70.7	2.8	62.8#
42	19.9	0.0	38.1



#15
Carbon Disulfide
Concen: 0.04 PPB
RT: 2.43 min Scan# 285
Delta R.T. -0.00 min
Lab File: 1222F009.D
Acq: 22 Dec 2023 2:27 pm

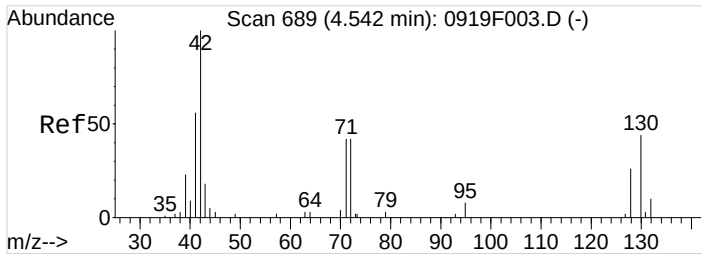
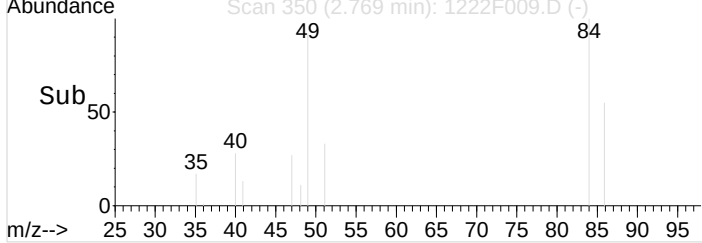
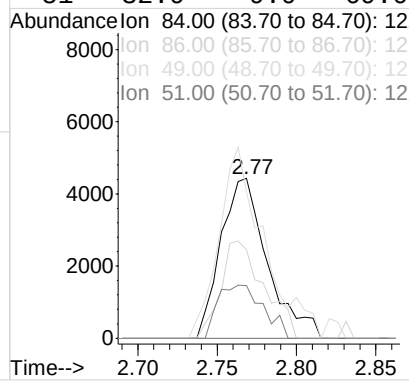
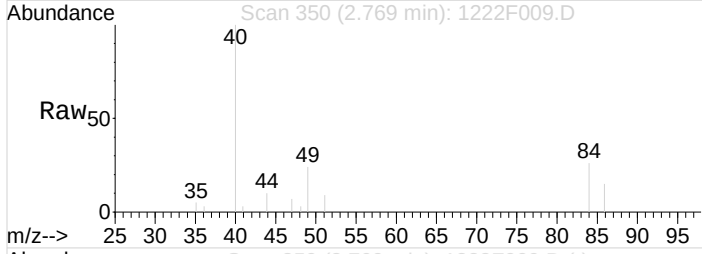
Tgt Ion:	76	Resp:	3334
Ion Ratio	Lower	Upper	
76	100		
78	24.6	0.0	39.0
77	0.0	0.0	32.5





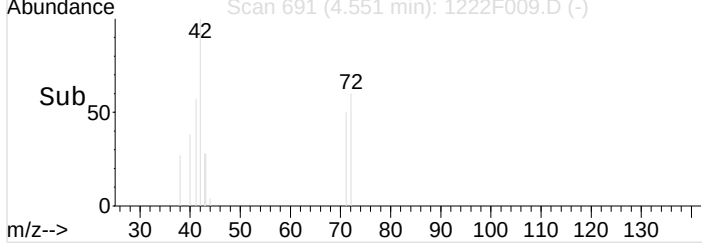
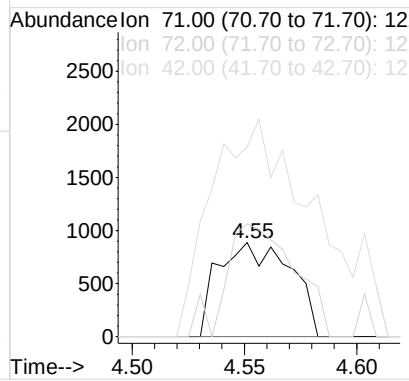
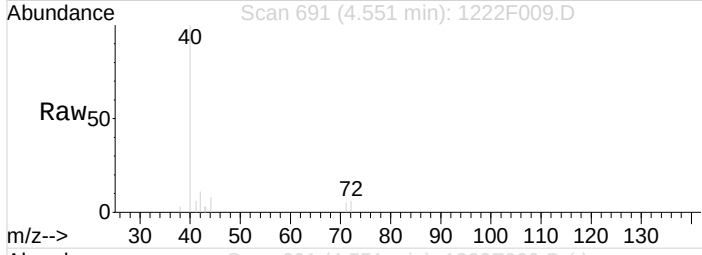
#20
Methylene Chloride
Concen: 0.23 PPB
RT: 2.77 min Scan# 350
Delta R.T. 0.00 min
Lab File: 1222F009.D
Acq: 22 Dec 2023 2:27 pm

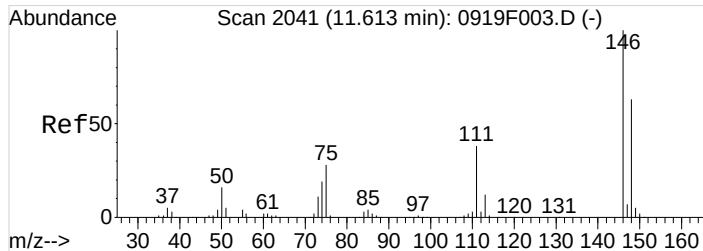
Tgt Ion:	84	Resp:	9034
Ion Ratio	Lower	Upper	
84	100		
86	55.4	34.8	94.8
49	91.6	96.5	156.5#
51	32.9	9.0	69.0



#38
Tetrahydrofuran
Concen: 0.85 PPB
RT: 4.55 min Scan# 691
Delta R.T. 0.01 min
Lab File: 1222F009.D
Acq: 22 Dec 2023 2:27 pm

Tgt Ion:	71	Resp:	1986
Ion Ratio	Lower	Upper	
71	100		
72	119.9	61.5	121.5
42	146.1	204.5	264.5#

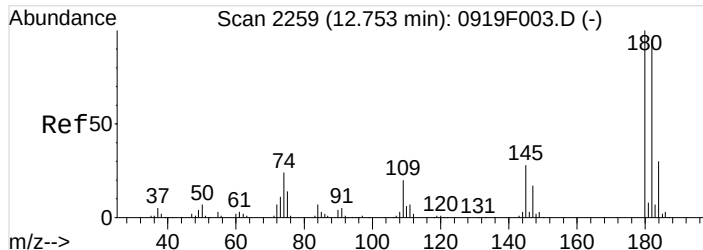
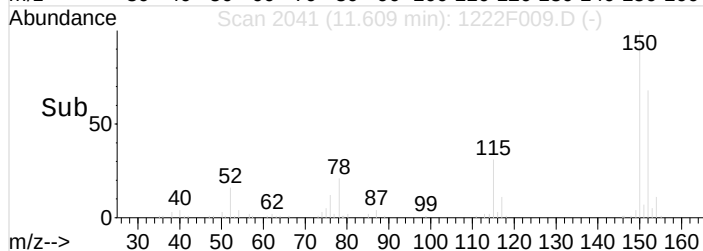
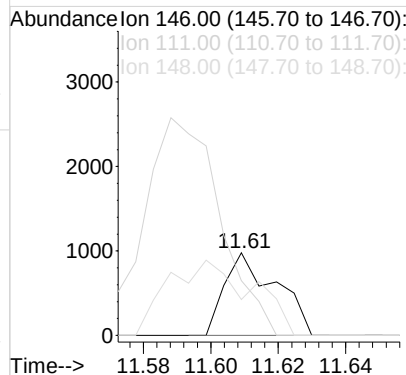
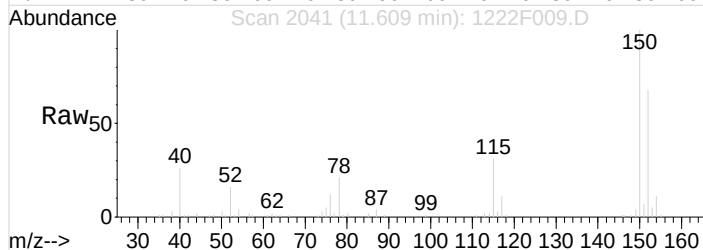




#99
 1,4-Dichlorobenzene
 Concen: 0.02 PPB
 RT: 11.61 min Scan# 2041
 Delta R.T. -0.01 min
 Lab File: 1222F009.D
 Acq: 22 Dec 2023 2:27 pm

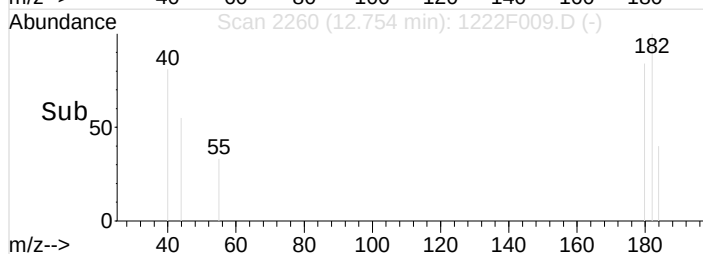
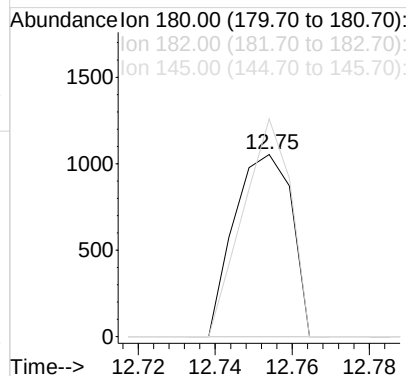
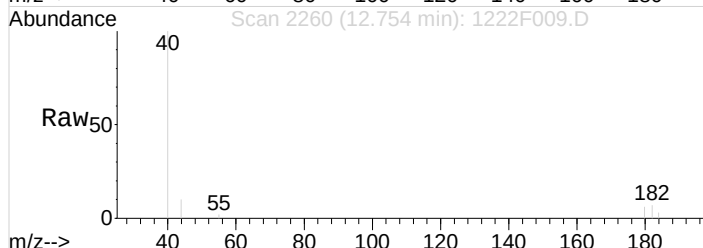
1st 12/27/23
 2nd 12/27/23

Tgt Ion	Ratio	Lower	Upper
146	100		
111	66.3	9.6	69.6
148	43.5	34.2	94.2

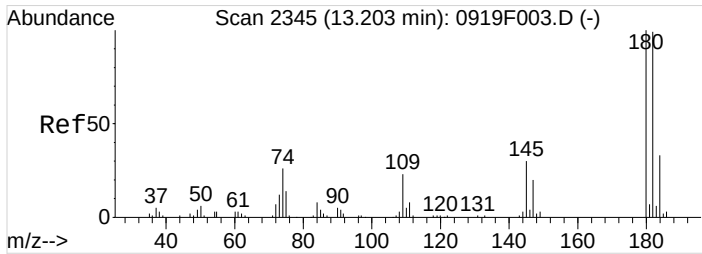


#103
 1,3,5-Trichlorobenzene
 Concen: 0.05 PPB
 RT: 12.75 min Scan# 2260
 Delta R.T. -0.00 min
 Lab File: 1222F009.D
 Acq: 22 Dec 2023 2:27 pm

Tgt Ion	Ratio	Lower	Upper
180	100		
182	119.4	66.4	126.4
145	0.0	0.0	57.9

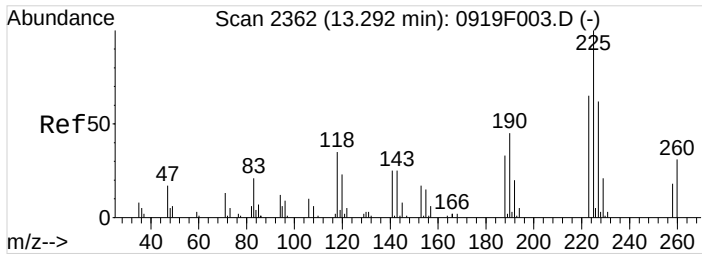
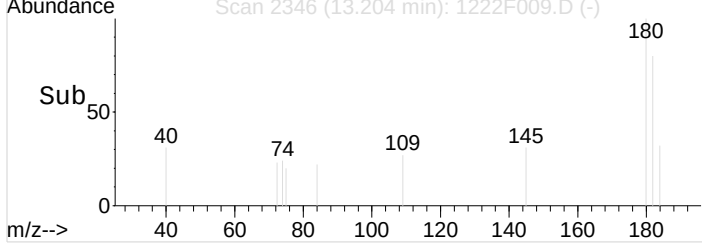
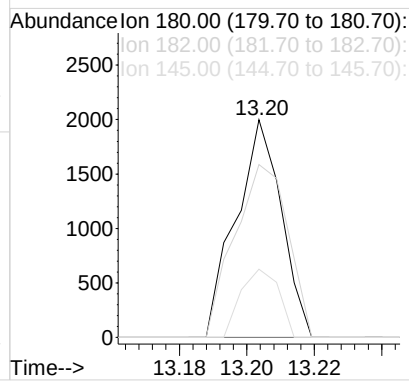
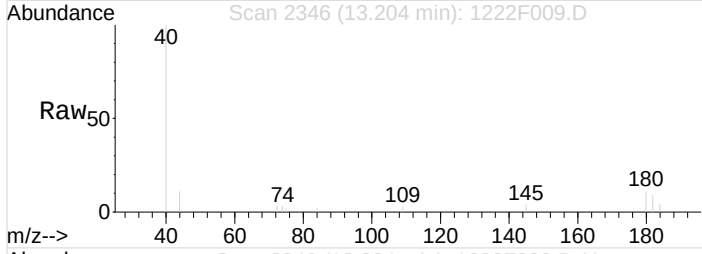


1st 12/27/23
2nd 12/27/23



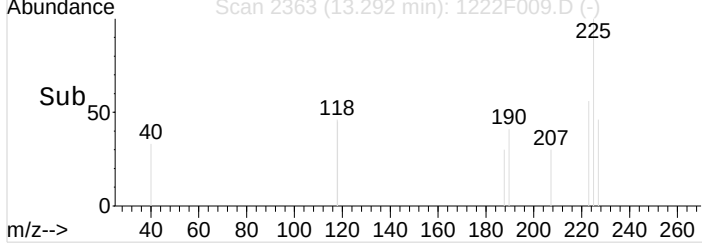
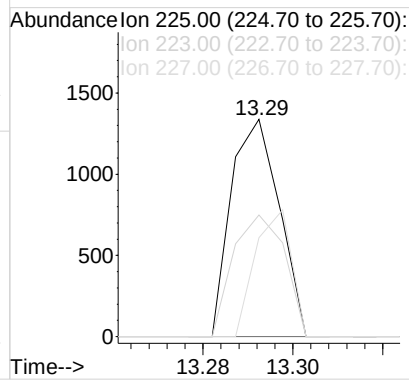
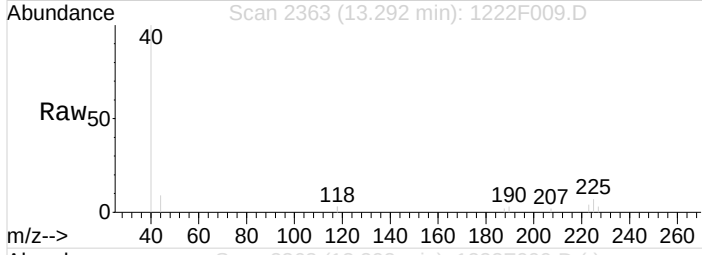
#104
1,2,4-Trichlorobenzene
Concen: 0.14 PPB
RT: 13.20 min Scan# 2346
Delta R.T. -0.00 min
Lab File: 1222F009.D
Acq: 22 Dec 2023 2:27 pm

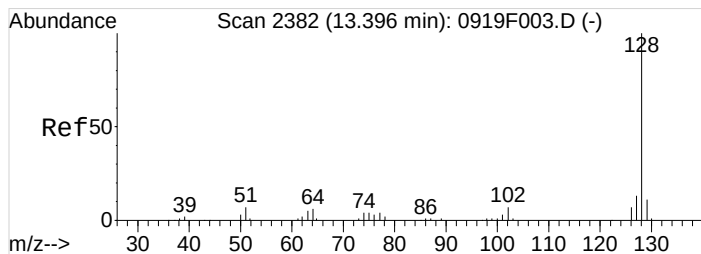
Tgt Ion:	180	Resp:	1876
Ion Ratio	Lower	Upper	
180	100		
182	79.5	66.3	126.3
145	31.4	0.0	58.9



#105
Hexachlorobutadiene
Concen: 0.12 PPB
RT: 13.29 min Scan# 2363
Delta R.T. -0.00 min
Lab File: 1222F009.D
Acq: 22 Dec 2023 2:27 pm

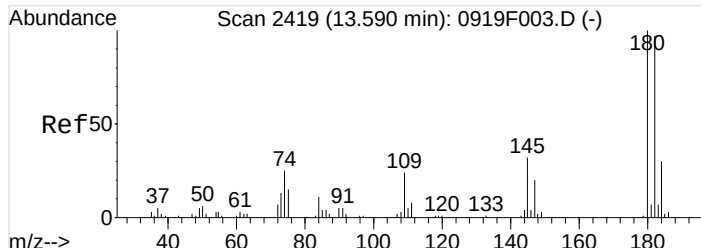
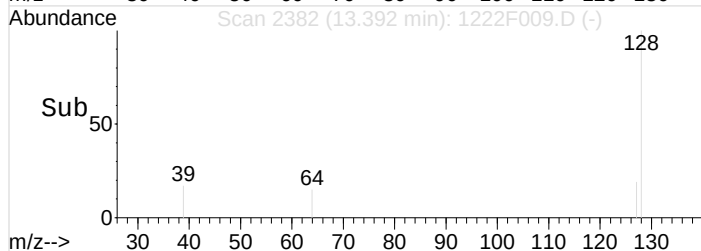
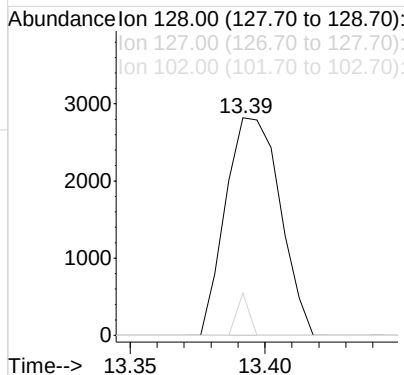
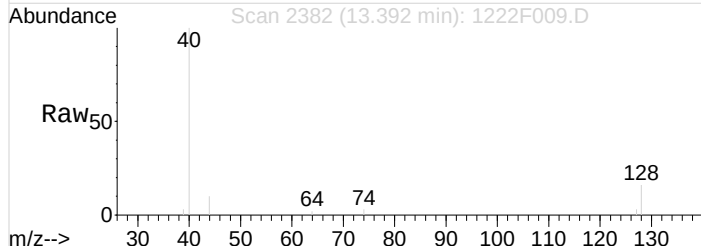
Tgt Ion:	225	Resp:	994
Ion Ratio	Lower	Upper	
225	100		
223	56.0	35.2	95.2
227	45.6	36.0	96.0





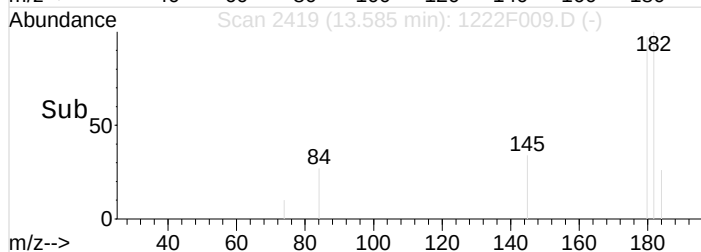
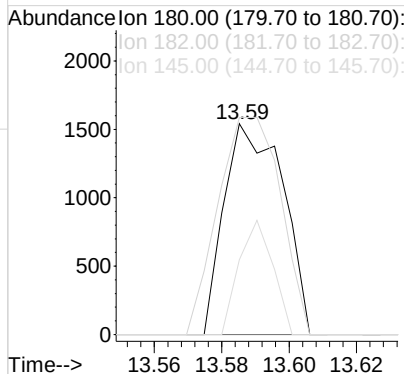
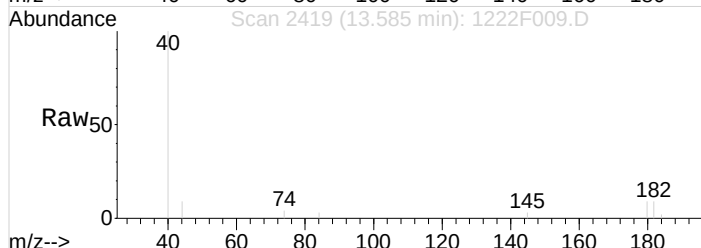
#106
Naphthalene
Concen: 0.20 PPB
RT: 13.39 min Scan# 2382
Delta R.T. -0.01 min
Lab File: 1222F009.D
Acq: 22 Dec 2023 2:27 pm

Tgt Ion:	128	Resp:	3959
Ion Ratio	Lower	Upper	
128	100		
127	19.4	0.0	42.6
102	0.0	0.0	37.2



#107
1,2,3-Trichlorobenzene
Concen: 0.27 PPB
RT: 13.59 min Scan# 2419
Delta R.T. -0.01 min
Lab File: 1222F009.D
Acq: 22 Dec 2023 2:27 pm

Tgt Ion:	180	Resp:	1867
Ion Ratio	Lower	Upper	
180	100		
182	102.9	67.9	127.9
145	35.5	2.3	62.3



Validation Report

1st  12/27/23
2nd  12/27/23

Data File: J:\MS23\DATA\122223\1222F005.D\
Lab ID: KQ2322477-03
RunType: LCS
Matrix: Water

Date Acquired: 12/22/23 11:16:00
Batch ID: 828027
Analysis Method: 8260C/VOC FP

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery		X
Internal Standards	X	
Surrogates	X	
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action	
Continuing Calibration Recovery	Bromomethane	-32		20	CCVOK	
	Carbon Tetrachloride	24		20		
	Chloromethane	-33		20		
	Dichlorodifluoromethane	-24		20		
	trans-1,3-Dichloropropene	-23		20		

Primary Review: _____

Secondary Review: _____

Quantitation Report

1st *24* 12/27/23
2nd *Q* 12/27/23

Data File:	J:\MS23\DATA\122223\1222F005.D\	Instrument:	K-MS-23
Acqu Date:	12/22/23 11:16:00	Vial:	3
Run Type:	LCS	Dilution:	1
Lab ID:	KQ2322477-03	Raw Units:	ppb

Bottle ID:		Tier:	IV	Matrix:	Water
Prod Code:	VOC FP	Collect Date:	12/20/23	Receive Date:	12/20/23

Analysis Lot:	828027	Prep Lot:		Report Group:	KQ2322477
Analysis	8260C	Prep Method:			
		Prep Date:			

Title:	Volatile Organic Compounds by GC/MS	Calibration ID:	KC2300542
		Report List ID:	20915

Internal Standard Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Area Criteria
Chlorobenzene-d5	9.18	+0.01	485155	10.00	OK
1,4-Dichlorobenzene-d4	11.59		388080	10.00	OK
Fluorobenzene	5.71	-0.01	1222155	10.00	OK

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
4-Bromofluorobenzene	10.41	-0.01	403185	10.23	102	68 - 117	Y
Dibromofluoromethane	4.85	-0.01	271589	10.89	109	73 - 122	Y
Toluene-d8	7.59	+0.01	1222041	10.49	105	65 - 144	Y

Target Compounds

Final Conc.Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Acetone	2.36		299484	62.13	62.1		Y
Benzene	5.30		1555059	9.17	9.17		Y
Bromobenzene	10.55		322337	8.62	8.62		Y
Bromochloromethane	4.52		164443	9.82	9.82		Y
Bromodichloromethane	6.83		373178	9.74	9.74		Y
Bromoform	10.08		83117	8.75	8.75		Y
Bromomethane	1.54		125727	7.24	7.24		Y
2-Butanone (MEK)	4.28	+0.01	110536	51.71	51.7		Y
n-Butylbenzene	11.95		641991	9.25	9.25		Y
sec-Butylbenzene	11.38		1009363	9.93	9.93		Y
tert-Butylbenzene	11.15		744324	9.08	9.08		Y
Carbon Disulfide	2.43		1503924	15.76	15.8		Y
Carbon Tetrachloride	4.97	+0.01	379663	10.65	10.7		Y
Chlorobenzene	9.20		948249	9.11	9.11		Y
Chloroethane	1.62	+0.01	229963	8.41	8.41		Y

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Printed: 12/27/23 9:57

\\alprews001\starlims\LIMSReps\QuantValidation.rpt

		1st	12/27/23
Data File:	J:\MS23\DATA\122223\1222F005.D\	Instrument:	K-MS-23 nd
Acqu Date:	12/22/23 11:16:00	Vial:	3
Run Type:	LCS	Dilution:	1
Lab ID:	KQ2322477-03	Raw Units:	ppb

Target Compounds

Final Conc.Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Chloroform	4.63		646651	10.50	10.5		Y
Chloromethane	1.23	+0.01	293466	6.94	6.94		Y
2-Chlorotoluene	10.74		858074	8.60	8.60		Y
4-Chlorotoluene	10.87		1024964	8.96	8.96		Y
1,2-Dibromo-3-chloropropane	12.65	-0.01	14665	7.53	7.53		Y
Dibromochloromethane	8.58		214495	8.26	8.26		Y
1,2-Dibromoethane (EDB)	8.70		232172	9.28	9.28		Y
Dibromomethane	6.63		171117	10.02	10.0		Y
1,2-Dichlorobenzene	11.99		456000	8.67	8.67		Y
1,3-Dichlorobenzene	11.51	-0.01	512158	8.63	8.63		Y
1,4-Dichlorobenzene	11.62	+0.01	540343	8.58	8.58		Y
Dichlorodifluoromethane	1.07	+0.01	360745	8.17	8.17		Y
1,1-Dichloroethane	3.50		647505	9.40	9.40		Y
1,2-Dichloroethane (EDC)	5.45		478216	10.27	10.3		Y
1,1-Dichloroethene	2.24		319215	8.73	8.73		Y
cis-1,2-Dichloroethene	4.21		401589	9.17	9.17		Y
trans-1,2-Dichloroethene	2.99		365771	9.25	9.25		Y
1,2-Dichloropropane	6.49		350936	8.61	8.61		Y
1,3-Dichloropropane	8.39		473216	8.74	8.74		Y
2,2-Dichloropropane	4.16		375844	8.71	8.71		Y
1,1-Dichloropropene	5.03		517265	9.76	9.76		Y
cis-1,3-Dichloropropene	7.36		449488	7.64	7.64		Y
trans-1,3-Dichloropropene	8.02		318140	7.27	7.27		Y
Ethylbenzene	9.30		473139	9.10	9.10		Y
Hexachlorobutadiene	13.29		103096	9.99	9.99		Y
2-Hexanone	8.49	+0.01	116082	48.84	48.8		Y
Isopropylbenzene	10.22		1126951	8.88	8.88		Y
4-Isopropyltoluene	11.53		869415	9.40	9.40		Y
4-Methyl-2-pentanone (MIBK)	7.56	+0.01	347531	47.54	47.5		Y
Methylene Chloride	2.76		388558	8.57	8.57		Y
Naphthalene	13.40		206320	8.37	8.37		Y
n-Propylbenzene	10.64		1311608	9.01	9.01		Y
Styrene	9.88	+0.01	418765	8.97	8.97		Y
1,1,1,2-Tetrachloroethane	9.31		247978	9.09	9.09		Y
1,1,2,2-Tetrachloroethane	10.62		226240	8.86	8.86		Y
Tetrachloroethene (PCE)	8.22		266516	9.12	9.12		Y
Toluene	7.66		942072	9.18	9.18		Y
1,2,3-Trichlorobenzene	13.59		92123	10.73	10.7		Y
1,2,4-Trichlorobenzene	13.21	+0.01	154918	9.29	9.29		Y
1,1,2-Trichloroethane	8.21		217892	8.77	8.77		Y
1,1,1-Trichloroethane (TCA)	4.80	+0.01	501646	10.47	10.5		Y

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

			1st	12/27/23
Data File:	J:\MS23\DATA\122223\1222F005.D\	Instrument:	K-MS-23 nd	12/27/23
Acqu Date:	12/22/23 11:16:00	Vial:	3	
Run Type:	LCS	Dilution:	1	
Lab ID:	KQ2322477-03	Raw Units:	ppb	

<i>Target Compounds</i>		Final Conc.Units: ug/L				
Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q Rpt?
Trichloroethene (TCE)	6.16		370702	9.46	9.46	Y
Trichlorofluoromethane (CFC 11)	1.79		631781	11.47	11.5	Y
1,2,3-Trichloropropane	10.67	+0.01	76156	9.06	9.06	Y
1,2,4-Trimethylbenzene	11.22		953372	9.04	9.04	Y
1,3,5-Trimethylbenzene	10.84		916733	9.12	9.12	Y
Vinyl Chloride	1.28		357569	8.30	8.30	Y
o-Xylene	9.84		535015	8.85	8.85	Y
m,p-Xylenes	9.43		1168254	18.52	18.5	Y

Prep Amount:	10 mL	Dilution:	1
Prep Final Amount:	10.00 mL	Basis Factor:	100.00

Data File : J:\MS23\DATA\122223\1222F005.D

Acq On : 22 Dec 2023 11:16 am

Sample : LCS

Misc :

Vial: 4

Operator: GH/EW/OT/MK

Inst : MS23

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Dec 22 12:47:54 2023

Quant Results File: 091123MS23_8260.RES

Quant Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Mon Sep 18 16:32:32 2023

Response via : Initial Calibration

DataAcq Meth : 8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	5.71	96	1222155	10.00	PPB	0.00
64) Chlorobenzene-d5	9.18	82	485155	10.00	PPB	0.00
85) 1,4-Dichlorobenzene-d4	11.59	152	388080	10.00	PPB	0.00

System Monitoring Compounds

43) Dibromofluoromethane	4.85	113	271589	10.89	PPB	0.00
Spiked Amount 10.000			Recovery	=	108.90%	
47) 1,2-Dichloroethane-d4	5.34	65	323067	11.62	PPB	0.00
Spiked Amount 10.000			Recovery	=	116.20%	
62) Toluene-d8	7.59	98	1222041	10.49	PPB	0.00
Spiked Amount 10.000			Recovery	=	104.90%	
84) 4-Bromofluorobenzene	10.41	95	403185	10.23	PPB	0.00
Spiked Amount 10.000			Recovery	=	102.30%	

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	1.07	85	360745	8.17	PPB	98
3) Chloromethane	1.23	50	293466	6.94	PPB	98
4) Vinyl Chloride	1.28	62	357569	8.30	PPB	98
5) Bromomethane	1.54	96	125727	7.24	PPB	98
6) Chloroethane	1.62	64	229963	8.41	PPB	99
8) Trichlorofluoromethane	1.79	101	631781	11.47	PPB	97
9) Ethyl Ether	2.04	59	260946	10.19	PPB	99
10) Acrolein	2.22	56	369877	113.61	PPB	100
11) Trichlorotrifluoroethane	2.22	151	532191	25.55	PPB	97
12) 1,1-Dichloroethene	2.24	96	319215	8.73	PPB	99
13) Acetone	2.36	43	299484	62.13	PPB	96
14) Iodomethane	2.40	142	993205	26.05	PPB	98
15) Carbon Disulfide	2.43	76	1503924	15.76	PPB	100
17) 3-Chloro-1-propene	2.61	76	543823	31.32	PPB	92
19) Acetonitrile	2.70	40	402290	300.94	PPB	97
20) Methylene Chloride	2.76	84	388558	8.57	PPB	98
21) tert-Butyl Alcohol	2.89	59	92838	84.08	PPB	96
22) Acrylonitrile	3.10	53	294006	38.58	PPB	97
23) Methyl tert-Butyl Ether	2.97	73	584091	7.76	PPB	98
24) trans-1,2-Dichloroethene	2.99	96	365771	9.25	PPB	99
25) Hexane	3.20	57	979771	26.39	PPB	99
26) Diisopropyl Ether	3.50	45	1461900	13.26	PPB	98
27) 1,1-Dichloroethane	3.50	63	647505	9.40	PPB	99
28) Vinyl Acetate	3.56	86	245984	43.84	PPB	96
29) Chloroprene	3.56	53	1736169	34.70	PPB	97
30) tert-Butyl Ethyl Ether	3.93	59	1140287	12.38	PPB	98
31) 2,2-Dichloropropane	4.16	77	375844	8.71	PPB	97
32) cis-1,2-Dichloroethene	4.21	96	401589	9.17	PPB	99
33) 2-Butanone	4.28	72	110536	51.71	PPB	94
34) Ethyl Acetate	4.31	61	77370	21.83	PPB	93
35) Propionitrile	4.45	54	78395	27.80	PPB	94
36) Methacrylonitrile	4.60	67	253413	27.76	PPB	98
37) Bromochloromethane	4.52	128	164443	9.82	PPB	97
39) Chloroform	4.63	83	646651	10.50	PPB	98
42) 1,1,1-Trichloroethane	4.80	97	501646	10.47	PPB	98
44) Carbon Tetrachloride	4.97	117	379663	10.65	PPB	95
45) 1,1-Dichloropropene	5.03	75	517265	9.76	PPB	98
46) Isobutyl Alcohol	5.36	43	123699	219.88	PPB	92
48) Benzene	5.30	78	1555059	9.17	PPB	99
49) 1,2-Dichloroethane	5.45	62	478216	10.27	PPB	98
50) tert-Amyl Methyl Ether	5.46	55	436926	17.42	PPB	# 51
51) Trichloroethene	6.16	95	370702	9.46	PPB	94
53) 1,2-Dichloropropane	6.49	63	350936	8.61	PPB	94

(#)=qualifier out of range (m)=manual integration

1222F005.D 091123MS23_8260.M

Wed Dec 27 09:39:55 2023

3463 of 3623

Data File : J:\MS23\DATA\122223\1222F005.D

Acq On : 22 Dec 2023 11:16 am

Sample : LCS

Misc :

Vial: 4

Operator: GH/EW/OT/MK

Inst : MS23

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Dec 22 12:47:54 2023

Quant Results File: 091123MS23_8260.RES

Quant Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Mon Sep 18 16:32:32 2023

Response via : Initial Calibration

DataAcq Meth : 8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
54) Dibromomethane	6.63	93	171117	10.02	PPB	99
55) Methyl methacrylate	6.66	69	395753	24.79	PPB	98
56) 1,4-Dioxane	6.67	88	50453	256.79	PPB	98
57) Bromodichloromethane	6.83	83	373178	9.74	PPB	98
58) 2-Nitropropane	7.20	41	87674	25.77	PPB	99
59) 2-Chloroethyl Vinyl Ether	7.23	63	130419	9.18	PPB	99
60) cis-1,3-Dichloropropene	7.36	75	449488	7.64	PPB	98
61) 4-Methyl-2-pentanone (MIBK)	7.56	58	347531	47.54	PPB	95
63) Toluene	7.66	92	942072	9.18	PPB	97
66) trans-1,3-Dichloropropene	8.02	75	318140	7.27	PPB	93
67) Ethyl methacrylate	8.08	69	815788	25.57	PPB	99
68) 1,1,2-Trichloroethane	8.21	83	217892	8.77	PPB	98
69) Tetrachloroethene	8.22	164	266516	9.12	PPB	98
70) 2-Hexanone	8.49	57	116082	48.84	PPB	98
71) 1,3-Dichloropropane	8.39	76	473216	8.74	PPB	99
72) Dibromochloromethane	8.58	129	214495	8.26	PPB	99
73) 1,2-Dibromoethane (EDB)	8.70	107	232172	9.28	PPB	99
74) 1-Chlorohexane	9.19	91	315358	8.67	PPB	87
75) Chlorobenzene	9.20	112	948249	9.11	PPB	98
76) Ethylbenzene	9.30	106	473139	9.10	PPB	99
77) 1,1,1,2-Tetrachloroethane	9.31	131	247978	9.09	PPB	95
78) m,p-Xylenes	9.43	106	1168254	18.52	PPB	98
79) o-Xylene	9.84	106	535015	8.85	PPB	99
80) Styrene	9.88	103	418765m	8.97	PPB	
81) Bromoform	10.08	173	83117	8.75	PPB	98
82) Isopropylbenzene	10.22	105	1126951	8.88	PPB	99
83) cis-1,4-Dichloro-2-butene	10.39	89	50199	20.02	PPB	97
86) 1,1,2,2-Tetrachloroethane	10.62	83	226240	8.86	PPB	98
87) trans-1,4-Dichloro-2-buten	10.69	53	162372	23.72	PPB	91
88) Bromobenzene	10.55	156	322337	8.62	PPB	99
89) n-Propylbenzene	10.64	91	1311608	9.01	PPB	100
90) 1,2,3-Trichloropropane	10.67	110	76156	9.06	PPB	95
91) 2-Chlorotoluene	10.74	91	858074	8.60	PPB	98
92) 1,3,5-Trimethylbenzene	10.84	105	916733	9.12	PPB	96
93) 4-Chlorotoluene	10.87	91	1024964	8.96	PPB	98
94) tert-Butylbenzene	11.15	119	744324	9.08	PPB	97
95) 1,2,4-Trimethylbenzene	11.22	105	953372	9.04	PPB	100
96) sec-Butylbenzene	11.38	105	1009363	9.93	PPB	99
97) p-Isopropyltoluene	11.53	119	869415	9.40	PPB	99
98) 1,3-Dichlorobenzene	11.51	146	512158	8.63	PPB	98
99) 1,4-Dichlorobenzene	11.62	146	540343	8.58	PPB	96
100) n-Butylbenzene	11.95	91	641991	9.25	PPB	98
101) 1,2-Dichlorobenzene	11.99	146	456000	8.67	PPB	98
102) 1,2-Dibromo-3-chloropropan	12.65	155	14665	7.53	PPB	87
103) 1,3,5-Trichlorobenzene	12.75	180	245775	9.74	PPB	97
104) 1,2,4-Trichlorobenzene	13.21	180	154918	9.29	PPB	98
105) Hexachlorobutadiene	13.29	225	103096	9.99	PPB	100
106) Naphthalene	13.40	128	206320	8.37	PPB	98
107) 1,2,3-Trichlorobenzene	13.59	180	92123	10.73	PPB	96

(#) = qualifier out of range (m) = manual integration

1222F005.D 091123MS23_8260.M

Wed Dec 27 09:39:55 2023

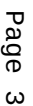
3464 of 3623

Quant Results File: 091123MS23_8260.RES

Response via : Initial Calibration

abundance

TIC: 1222F005.D



Quantitation Report (Qedit)

1st 12/27/23

2nd 12/27/23

Data File : J:\MS23\DATA\122223\1222F005.D

Acq On : 22 Dec 2023 11:16 am

Sample : LCS

Misc :

MS Integration Params: rteint.p

Quant Time: Dec 27 9:03 2023

Vial: 4

Operator: GH/EW/OT/MK

Inst : MS23

Multiplr: 1.00

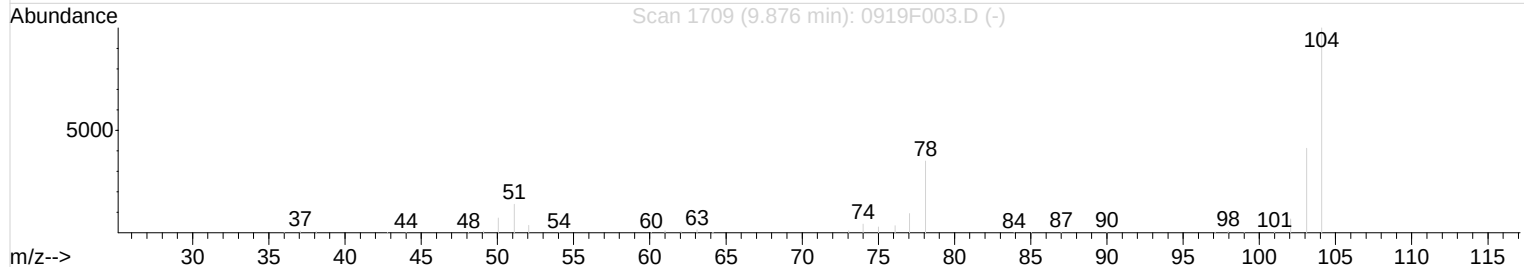
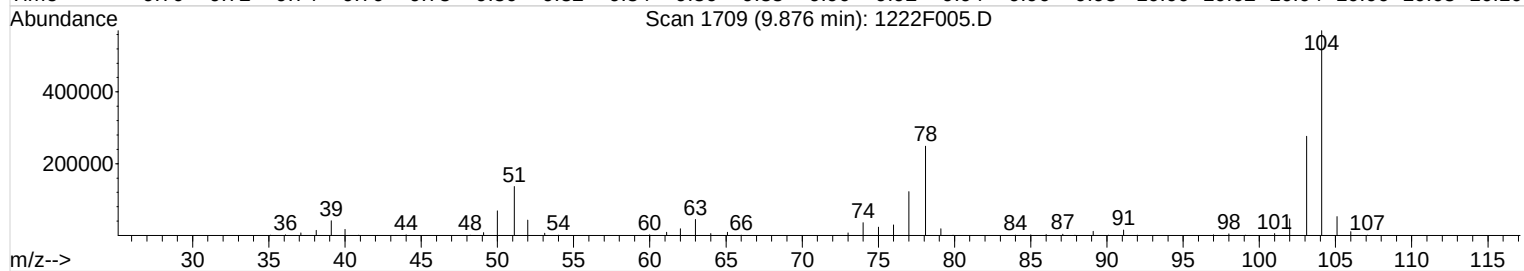
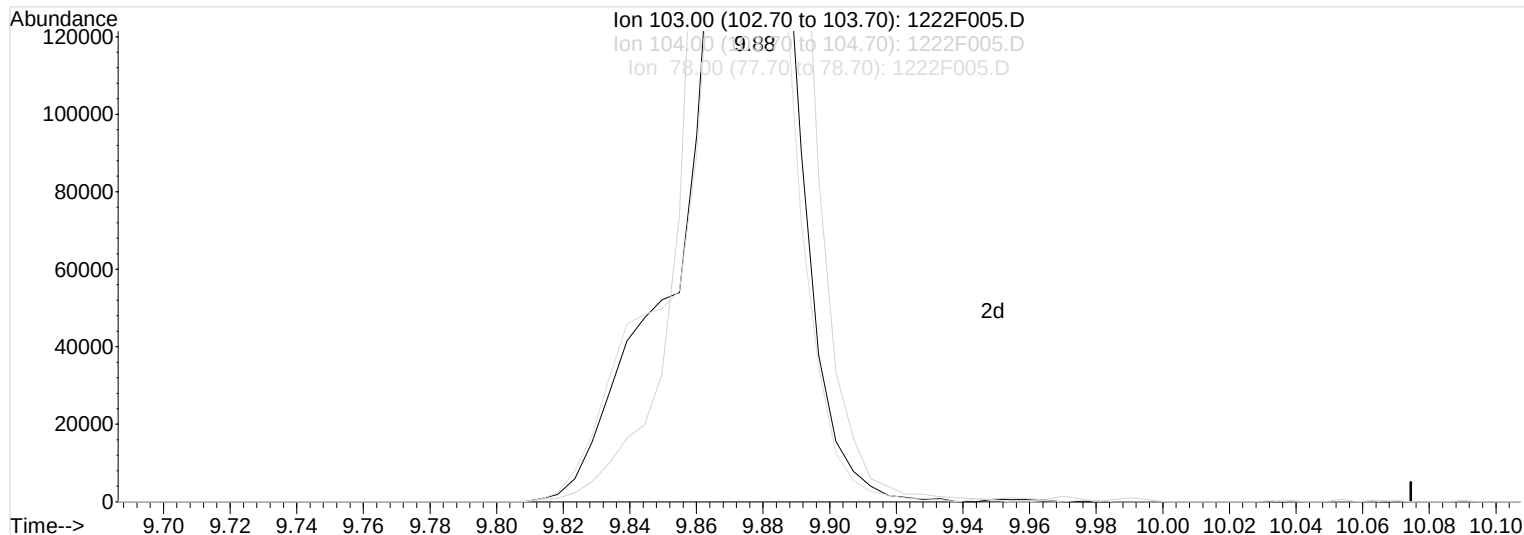
Quant Results File: temp.res

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Mon Sep 18 16:32:32 2023

Response via : Single Level Calibration



TIC: 1222F005.D

(80) Styrene (T)

Manual Integration:

9.88min 10.63PPB

Before

response 496305

12/27/23

Ion Exp% Act%

103.00 100 100

104.00 245.50 206.48#

78.00 102.00 90.07

0.00 0.00 0.00

Quantitation Report (Qedit)

1st *jm* 12/27/232nd *Q* 12/27/23

Data File : J:\MS23\DATA\122223\1222F005.D

Acq On : 22 Dec 2023 11:16 am

Sample : LCS

Misc :

MS Integration Params: rteint.p

Quant Time: Dec 27 9:04 2023

Vial: 4

Operator: GH/EW/OT/MK

Inst : MS23

Multiplr: 1.00

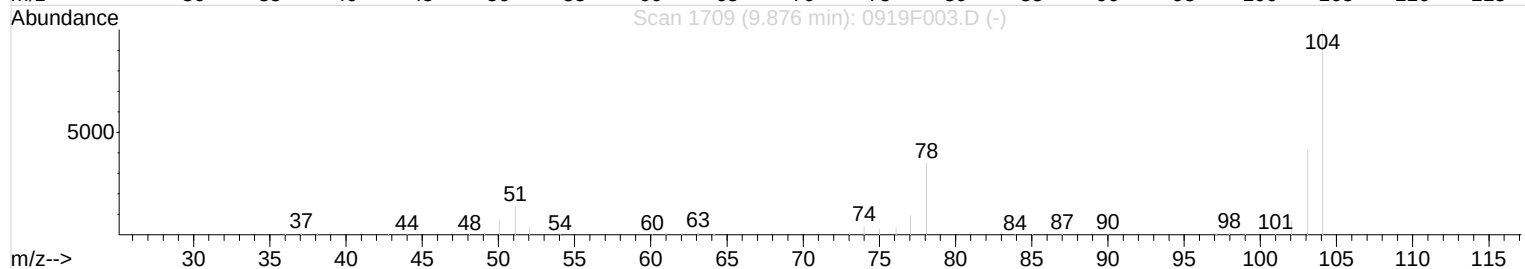
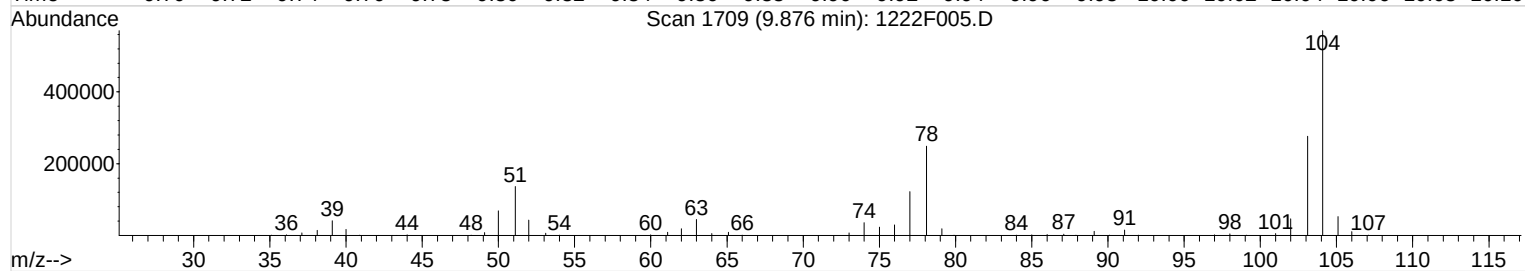
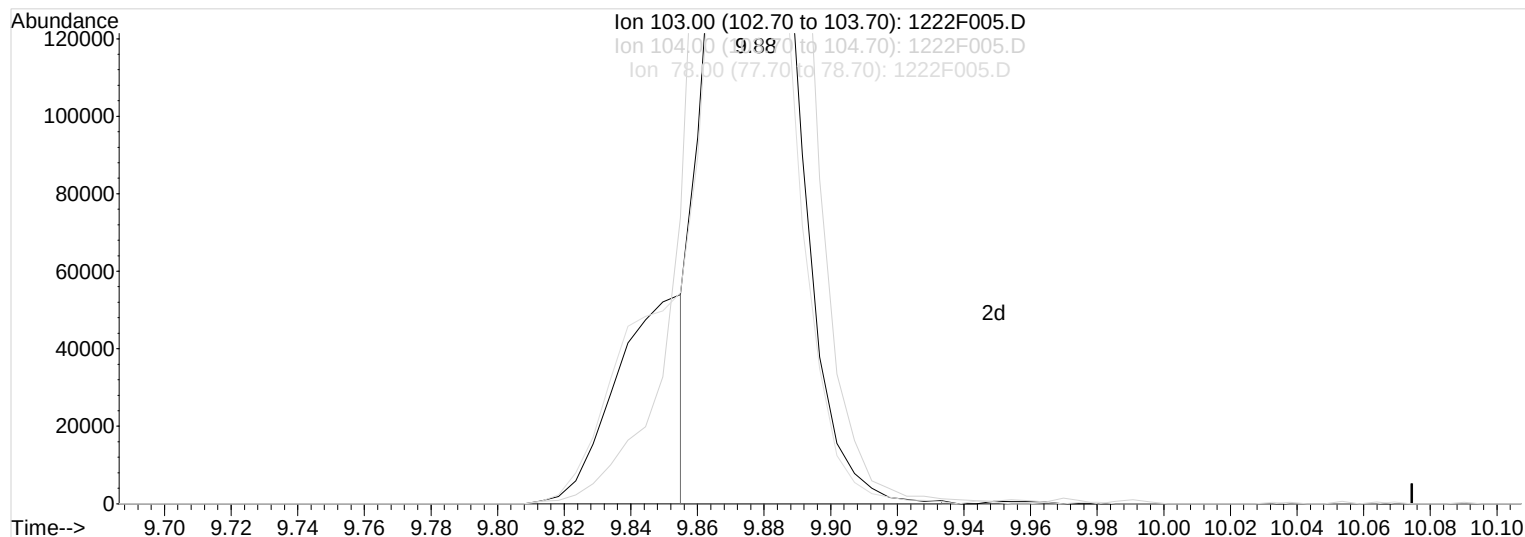
Quant Results File: temp.res

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Mon Sep 18 16:32:32 2023

Response via : Single Level Calibration



TIC: 1222F005.D

(80) Styrene (T)

9.88min 8.97PPB m

response 418765

Ion	Exp%	Act%
103.00	100	100
104.00	245.50	206.48#
78.00	102.00	90.07
0.00	0.00	0.00

Manual Integration:

After

Shoulder

12/27/23

Validation Report

1st  12/27/23
2nd  12/27/23

Data File: J:\MS23\DATA\122223\1222F006.D\
Lab ID: KQ2322477-04
RunType: DLCS
Matrix: Water

Date Acquired: 12/22/23 11:40:00
Batch ID: 828027
Analysis Method: 8260C/VOC FP

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery		X
Internal Standards	X	
Surrogates	X	
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Continuing Calibration Recovery	trans-1,3-Dichloropropene	-23		20	CCVOK
	Carbon Tetrachloride	24		20	
	Dichlorodifluoromethane	-24		20	
	Chloromethane	-33		20	
	Bromomethane	-32		20	

Primary Review: _____

Secondary Review: _____

Quantitation Report

1st  12/27/23
2nd  12/27/23

Data File:	J:\MS23\DATA\122223\1222F006.D\	Instrument:	K-MS-23
Acqu Date:	12/22/23 11:40:00	Vial:	4
Run Type:	DLCS	Dilution:	1
Lab ID:	KQ2322477-04	Raw Units:	ppb

Bottle ID:		Tier:	IV	Matrix:	Water
Prod Code:	VOC FP	Collect Date:	12/20/23	Receive Date:	12/20/23

Analysis Lot:	828027	Prep Lot:		Report Group:	KQ2322477
Analysis	8260C	Prep Method:			
		Prep Date:			

Title:	Volatile Organic Compounds by GC/MS	Calibration ID:	KC2300542
		Report List ID:	20915

Internal Standard Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Area Criteria
Chlorobenzene-d5	9.17		491353	10.00	OK
1,4-Dichlorobenzene-d4	11.59		396709	10.00	OK
Fluorobenzene	5.72		1247832	10.00	OK

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
4-Bromofluorobenzene	10.42		416264	10.43	104	68 - 117	Y
Dibromofluoromethane	4.86		281810	11.07	111	73 - 122	Y
Toluene-d8	7.59	+0.01	1249137	10.50	105	65 - 144	Y

Target Compounds

Final Conc.Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Acetone	2.37	+0.01	328222	66.69	66.7		Y
Benzene	5.30		1643367	9.49	9.49		Y
Bromobenzene	10.55		344352	9.00	9.00		Y
Bromochloromethane	4.53	+0.01	173120	10.13	10.1		Y
Bromodichloromethane	6.83		388630	9.93	9.93		Y
Bromoform	10.08		88357	9.13	9.13		Y
Bromomethane	1.54		135067	7.62	7.62		Y
2-Butanone (MEK)	4.28	+0.01	117904	54.02	54.0		Y
n-Butylbenzene	11.95		691760	9.75	9.75		Y
sec-Butylbenzene	11.38		1077764	10.38	10.4		Y
tert-Butylbenzene	11.15		801318	9.56	9.56		Y
Carbon Disulfide	2.43		1592549	16.34	16.3		Y
Carbon Tetrachloride	4.96		411208	11.30	11.3		Y
Chlorobenzene	9.20		985999	9.35	9.35		Y
Chloroethane	1.61		244800	8.76	8.76		Y

		1st	12/27/23
Data File:	J:\MS23\DATA\122223\1222F006.D\	Instrument:	K-MS-23 nd
Acqu Date:	12/22/23 11:40:00	Vial:	4
Run Type:	DLCS	Dilution:	1
Lab ID:	KQ2322477-04	Raw Units:	ppb

Target Compounds

Final Conc.Units: ug/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Chloroform	4.63		668586	10.63	10.6		Y
Chloromethane	1.23	+0.01	311501	7.21	7.21		Y
2-Chlorotoluene	10.74		900627	8.83	8.83		Y
4-Chlorotoluene	10.87		1074471	9.19	9.19		Y
1,2-Dibromo-3-chloropropane	12.66		15122	7.59	7.59		Y
Dibromochloromethane	8.58		223224	8.47	8.47		Y
1,2-Dibromoethane (EDB)	8.70		245402	9.69	9.69		Y
Dibromomethane	6.63		181640	10.42	10.4		Y
1,2-Dichlorobenzene	11.99		484436	9.01	9.01		Y
1,3-Dichlorobenzene	11.52		550768	9.07	9.07		Y
1,4-Dichlorobenzene	11.61		562675	8.74	8.74		Y
Dichlorodifluoromethane	1.06		383750	8.51	8.51		Y
1,1-Dichloroethane	3.50		692963	9.85	9.85		Y
1,2-Dichloroethane (EDC)	5.45		493024	10.37	10.4		Y
1,1-Dichloroethene	2.25	+0.01	351356	9.42	9.42		Y
cis-1,2-Dichloroethene	4.21		422989	9.46	9.46		Y
trans-1,2-Dichloroethene	2.99		394460	9.77	9.77		Y
1,2-Dichloropropane	6.49		367763	8.84	8.84		Y
1,3-Dichloropropane	8.39		500937	9.14	9.14		Y
2,2-Dichloropropane	4.16		399927	9.08	9.08		Y
1,1-Dichloropropene	5.03		559645	10.34	10.3		Y
cis-1,3-Dichloropropene	7.36		476050	7.91	7.91		Y
trans-1,3-Dichloropropene	8.02		335669	7.56	7.56		Y
Ethylbenzene	9.30		503140	9.55	9.55		Y
Hexachlorobutadiene	13.29		108220	10.26	10.3		Y
2-Hexanone	8.48		126755	52.66	52.7		Y
Isopropylbenzene	10.22		1201891	9.35	9.35		Y
4-Isopropyltoluene	11.54	+0.01	928523	9.82	9.82		Y
4-Methyl-2-pentanone (MIBK)	7.56	+0.01	377147	50.53	50.5		Y
Methylene Chloride	2.76		409061	8.84	8.84		Y
Naphthalene	13.40		229541	9.11	9.11		Y
n-Propylbenzene	10.64		1398662	9.40	9.40		Y
Styrene	9.87		442685	9.36	9.36		Y
1,1,1,2-Tetrachloroethane	9.31		262273	9.49	9.49		Y
1,1,2,2-Tetrachloroethane	10.62		238963	9.15	9.15		Y
Tetrachloroethene (PCE)	8.22		289264	9.78	9.78		Y
Toluene	7.66		1002385	9.56	9.56		Y
1,2,3-Trichlorobenzene	13.59		100825	11.49	11.5		Y
1,2,4-Trichlorobenzene	13.20		166276	9.75	9.75		Y
1,1,2-Trichloroethane	8.21		231019	9.18	9.18		Y
1,1,1-Trichloroethane (TCA)	4.80	+0.01	531760	10.87	10.9		Y

		1st	12/27/23
Data File:	J:\MS23\DATA\122223\1222F006.D\	Instrument:	K-MS-23 nd
Acqu Date:	12/22/23 11:40:00	Vial:	4
Run Type:	DLCS	Dilution:	1
Lab ID:	KQ2322477-04	Raw Units:	ppb

<i>Target Compounds</i>		Final Conc.Units: ug/L					
Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Trichloroethene (TCE)	6.16		393088	9.82	9.82		Y
Trichlorofluoromethane (CFC 11)	1.79		670565	11.92	11.9		Y
1,2,3-Trichloropropane	10.66		82620	9.62	9.62		Y
1,2,4-Trimethylbenzene	11.22		1014600	9.41	9.41		Y
1,3,5-Trimethylbenzene	10.84		977447	9.51	9.51		Y
Vinyl Chloride	1.28		382290	8.69	8.69		Y
o-Xylene	9.84		569789	9.30	9.30		Y
m,p-Xylenes	9.43		1238141	19.38	19.4		Y

Prep Amount:	10 mL	Dilution:	1
Prep Final Amount:	10.00 mL	Basis Factor:	100.00

Data File : J:\MS23\DATA\122223\1222F006.D

Acq On : 22 Dec 2023 11:40 am

Sample : DLCS

Misc :

Vial: 5

Operator: GH/EW/OT/MK

Inst : MS23

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Dec 22 12:48:47 2023

Quant Results File: 091123MS23_8260.RES

Quant Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Mon Sep 18 16:32:32 2023

Response via : Initial Calibration

DataAcq Meth : 8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	5.72	96	1247832	10.00	PPB	0.00
64) Chlorobenzene-d5	9.17	82	491353	10.00	PPB	0.00
85) 1,4-Dichlorobenzene-d4	11.59	152	396709	10.00	PPB	0.00

System Monitoring Compounds

43) Dibromofluoromethane	4.86	113	281810	11.07	PPB	0.00
Spiked Amount 10.000			Recovery	=	110.70%	
47) 1,2-Dichloroethane-d4	5.35	65	333559	11.75	PPB	0.00
Spiked Amount 10.000			Recovery	=	117.50%	
62) Toluene-d8	7.59	98	1249137	10.50	PPB	0.00
Spiked Amount 10.000			Recovery	=	105.00%	
84) 4-Bromofluorobenzene	10.42	95	416264	10.43	PPB	0.00
Spiked Amount 10.000			Recovery	=	104.30%	

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	1.06	85	383750	8.51	PPB	98
3) Chloromethane	1.23	50	311501	7.21	PPB	96
4) Vinyl Chloride	1.28	62	382290	8.69	PPB	98
5) Bromomethane	1.54	96	135067	7.62	PPB	94
6) Chloroethane	1.61	64	244800	8.76	PPB	95
8) Trichlorofluoromethane	1.79	101	670565	11.92	PPB	99
9) Ethyl Ether	2.04	59	282164	10.79	PPB	98
10) Acrolein	2.22	56	412475	124.09	PPB	98
11) Trichlorotrifluoroethane	2.21	151	569145	26.76	PPB	98
12) 1,1-Dichloroethene	2.25	96	351356	9.42	PPB	98
13) Acetone	2.37	43	328222	66.69	PPB	93
14) Iodomethane	2.40	142	1014139	26.05	PPB	98
15) Carbon Disulfide	2.43	76	1592549	16.34	PPB	99
17) 3-Chloro-1-propene	2.61	76	549636	31.01	PPB	94
19) Acetonitrile	2.70	40	428616	314.04	PPB	97
20) Methylene Chloride	2.76	84	409061	8.84	PPB	97
21) tert-Butyl Alcohol	2.88	59	101671	90.19	PPB	96
22) Acrylonitrile	3.10	53	314793	40.46	PPB	97
23) Methyl tert-Butyl Ether	2.97	73	617659	8.04	PPB	97
24) trans-1,2-Dichloroethene	2.99	96	394460	9.77	PPB	97
25) Hexane	3.20	57	984681	25.98	PPB	97
26) Diisopropyl Ether	3.50	45	1534754	13.64	PPB	98
27) 1,1-Dichloroethane	3.50	63	692963m	9.85	PPB	
28) Vinyl Acetate	3.56	86	260507	45.47	PPB	99
29) Chloroprene	3.56	53	1775612	34.75	PPB	97
30) tert-Butyl Ethyl Ether	3.93	59	1205293	12.82	PPB	97
31) 2,2-Dichloropropane	4.16	77	399927	9.08	PPB	97
32) cis-1,2-Dichloroethene	4.21	96	422989	9.46	PPB	94
33) 2-Butanone	4.28	72	117904	54.02	PPB	# 87
34) Ethyl Acetate	4.31	61	94641	26.16	PPB	97
35) Propionitrile	4.45	54	86694	30.11	PPB	96
36) Methacrylonitrile	4.60	67	267879	28.74	PPB	99
37) Bromochloromethane	4.53	128	173120	10.13	PPB	97
39) Chloroform	4.63	83	668586	10.63	PPB	99
42) 1,1,1-Trichloroethane	4.80	97	531760	10.87	PPB	96
44) Carbon Tetrachloride	4.96	117	411208	11.30	PPB	95
45) 1,1-Dichloropropene	5.03	75	559645	10.34	PPB	99
46) Isobutyl Alcohol	5.36	43	137004	238.52	PPB	92
48) Benzene	5.30	78	1643367	9.49	PPB	98
49) 1,2-Dichloroethane	5.45	62	493024	10.37	PPB	98
50) tert-Amyl Methyl Ether	5.46	55	478178	18.67	PPB	# 54
51) Trichloroethene	6.16	95	393088	9.82	PPB	97
53) 1,2-Dichloropropane	6.49	63	367763	8.84	PPB	94

(#)=qualifier out of range (m)=manual integration

1222F006.D 091123MS23_8260.M

Wed Dec 27 09:39:56 2023

3472 of 3623

Data File : J:\MS23\DATA\122223\1222F006.D

Acq On : 22 Dec 2023 11:40 am

Sample : DLCS

Misc :

Vial: 5

Operator: GH/EW/OT/MK

Inst : MS23

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Dec 22 12:48:47 2023

Quant Results File: 091123MS23_8260.RES

Quant Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Mon Sep 18 16:32:32 2023

Response via : Initial Calibration

DataAcq Meth : 8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
54) Dibromomethane	6.63	93	181640	10.42	PPB	97
55) Methyl methacrylate	6.66	69	425760	26.13	PPB	97
56) 1,4-Dioxane	6.66	88	56900	283.65	PPB	84
57) Bromodichloromethane	6.83	83	388630	9.93	PPB	99
58) 2-Nitropropane	7.20	41	91627	26.16	PPB	97
59) 2-Chloroethyl Vinyl Ether	7.23	63	142854	9.85	PPB	96
60) cis-1,3-Dichloropropene	7.36	75	476050	7.91	PPB	97
61) 4-Methyl-2-pentanone (MIBK)	7.56	58	377147	50.53	PPB	93
63) Toluene	7.66	92	1002385	9.56	PPB	100
66) trans-1,3-Dichloropropene	8.02	75	335669	7.56	PPB	96
67) Ethyl methacrylate	8.09	69	887394	27.47	PPB	98
68) 1,1,2-Trichloroethane	8.21	83	231019	9.18	PPB	95
69) Tetrachloroethene	8.22	164	289264	9.78	PPB	98
70) 2-Hexanone	8.48	57	126755	52.66	PPB	98
71) 1,3-Dichloropropane	8.39	76	500937	9.14	PPB	99
72) Dibromochloromethane	8.58	129	223224	8.47	PPB	99
73) 1,2-Dibromoethane (EDB)	8.70	107	245402	9.69	PPB	96
74) 1-Chlorohexane	9.19	91	343595	9.32	PPB	95
75) Chlorobenzene	9.20	112	985999	9.35	PPB	98
76) Ethylbenzene	9.30	106	503140	9.55	PPB	94
77) 1,1,1,2-Tetrachloroethane	9.31	131	262273	9.49	PPB	96
78) m,p-Xylenes	9.43	106	1238141	19.38	PPB	98
79) o-Xylene	9.84	106	569789	9.30	PPB	99
80) Styrene	9.87	103	442685m	9.36	PPB	
81) Bromoform	10.08	173	88357	9.13	PPB	95
82) Isopropylbenzene	10.22	105	1201891	9.35	PPB	99
83) cis-1,4-Dichloro-2-butene	10.39	89	51789	20.25	PPB	99
86) 1,1,2,2-Tetrachloroethane	10.62	83	238963	9.15	PPB	100
87) trans-1,4-Dichloro-2-buten	10.69	53	172235	24.62	PPB	94
88) Bromobenzene	10.55	156	344352	9.00	PPB	98
89) n-Propylbenzene	10.64	91	1398662	9.40	PPB	98
90) 1,2,3-Trichloropropane	10.66	110	82620	9.62	PPB	87
91) 2-Chlorotoluene	10.74	91	900627	8.83	PPB	99
92) 1,3,5-Trimethylbenzene	10.84	105	977447	9.51	PPB	97
93) 4-Chlorotoluene	10.87	91	1074471	9.19	PPB	99
94) tert-Butylbenzene	11.15	119	801318	9.56	PPB	99
95) 1,2,4-Trimethylbenzene	11.22	105	1014600	9.41	PPB	97
96) sec-Butylbenzene	11.38	105	1077764	10.38	PPB	99
97) p-Isopropyltoluene	11.54	119	928523	9.82	PPB	99
98) 1,3-Dichlorobenzene	11.52	146	550768	9.07	PPB	97
99) 1,4-Dichlorobenzene	11.61	146	562675	8.74	PPB	99
100) n-Butylbenzene	11.95	91	691760	9.75	PPB	97
101) 1,2-Dichlorobenzene	11.99	146	484436	9.01	PPB	99
102) 1,2-Dibromo-3-chloropropan	12.66	155	15122	7.59	PPB	83
103) 1,3,5-Trichlorobenzene	12.75	180	260819	10.11	PPB	98
104) 1,2,4-Trichlorobenzene	13.20	180	166276	9.75	PPB	98
105) Hexachlorobutadiene	13.29	225	108220	10.26	PPB	98
106) Naphthalene	13.40	128	229541	9.11	PPB	98
107) 1,2,3-Trichlorobenzene	13.59	180	100825	11.49	PPB	96

(#) = qualifier out of range (m) = manual integration

1222F006.D 091123MS23_8260.M

Wed Dec 27 09:39:56 2023

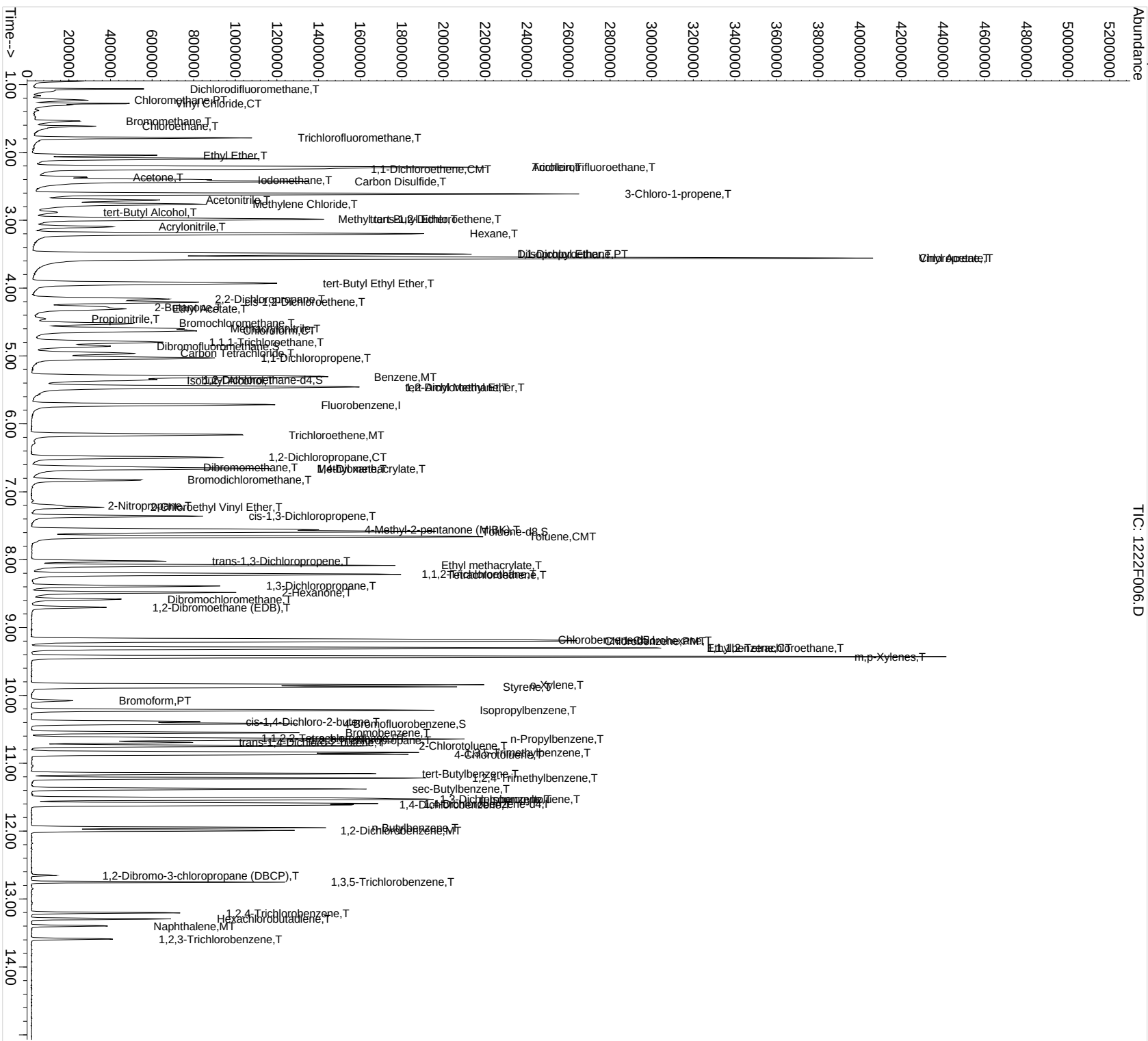
3473 of 3623

Data File : J:\MS23\DATA\122223\1222F006.D
Acq On : 22 Dec 2023 11:40 am
Sample : DLCS
Misc :
MS Integration Params: rteint.p
Quant Time: Dec 27 9:05 2023

Vial: 5
Operator: GH/EW/OT/MK
Inst : MS23
Multiplr: 1.00

Quant Results File: 091123MS23_8260.RES

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)
Title : VOA MS23 EPA Method 8260C
Last Update : Mon Sep 18 16:32:32 2023
Response via : Initial Calibration



Quantitation Report (Qedit)

1st 12/27/23

2nd 12/27/23

Data File : J:\MS23\DATA\122223\1222F006.D

Acq On : 22 Dec 2023 11:40 am

Sample : DLCS

Misc :

MS Integration Params: rteint.p

Quant Time: Dec 27 9:04 2023

Vial: 5

Operator: GH/EW/OT/MK

Inst : MS23

Multiplr: 1.00

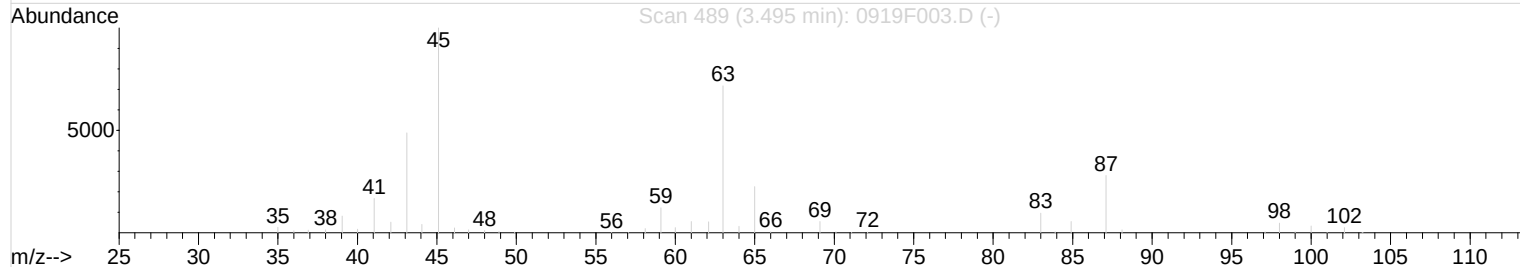
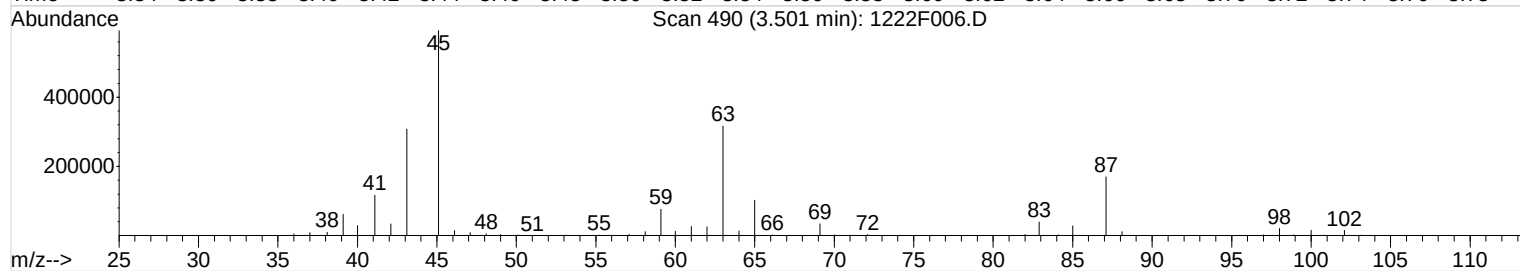
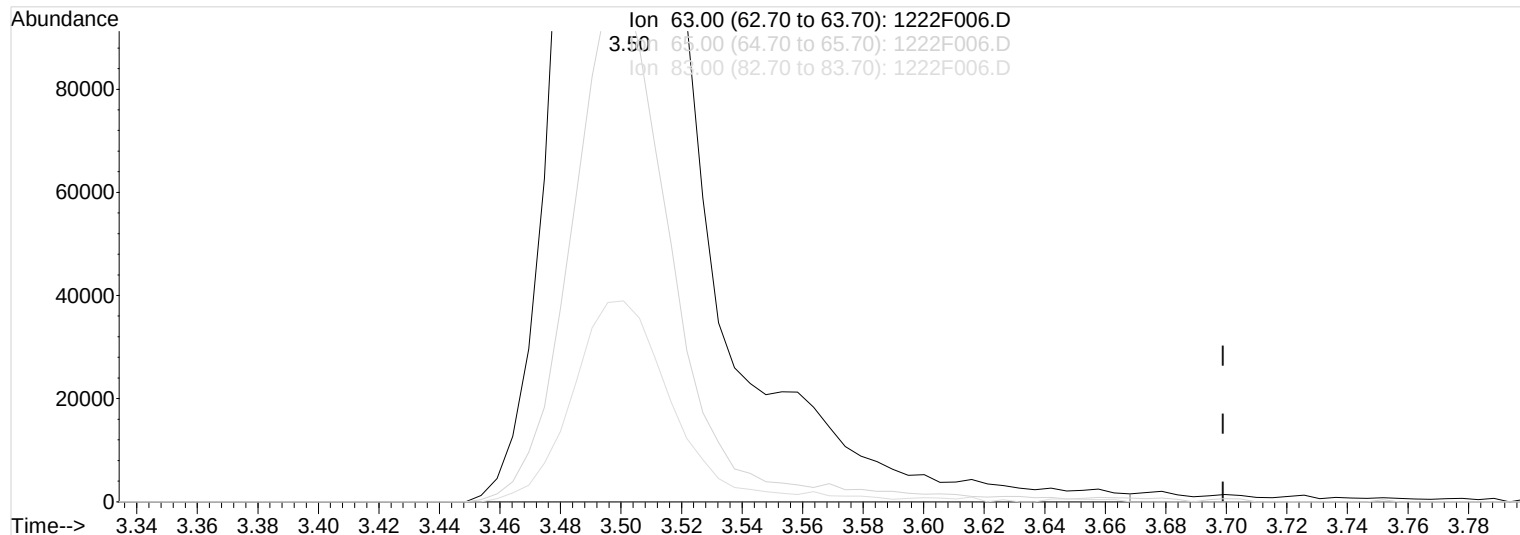
Quant Results File: temp.res

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Mon Sep 18 16:32:32 2023

Response via : Multiple Level Calibration



TIC: 1222F006.D

(27) 1,1-Dichloroethane (PT)

Manual Integration:

3.50min 10.55PPB

Before

response 741857

12/27/23

Ion	Exp%	Act%
63.00	100	100
65.00	32.70	32.09
83.00	12.70	12.29
0.00	0.00	0.00

Quantitation Report (Qedit)

1st *im* 12/27/232nd *Q* 12/27/23

Data File : J:\MS23\DATA\122223\1222F006.D

Acq On : 22 Dec 2023 11:40 am

Sample : DLCS

Misc :

MS Integration Params: rteint.p

Quant Time: Dec 27 9:05 2023

Vial: 5

Operator: GH/EW/OT/MK

Inst : MS23

Multiplr: 1.00

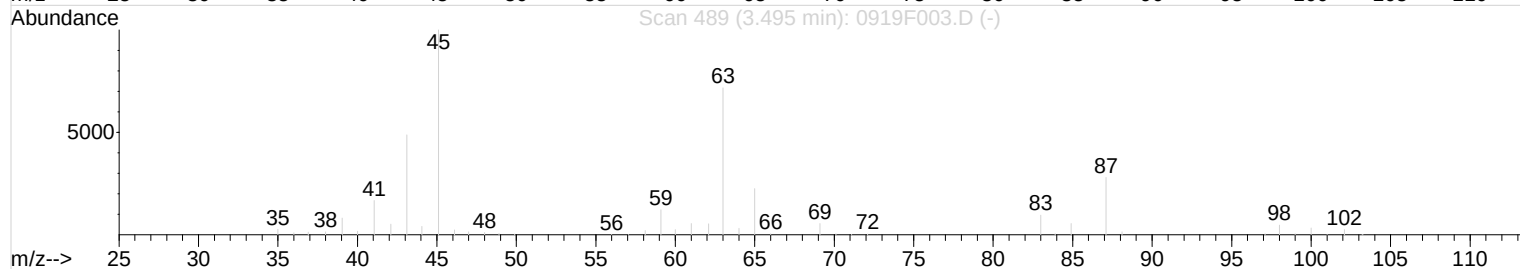
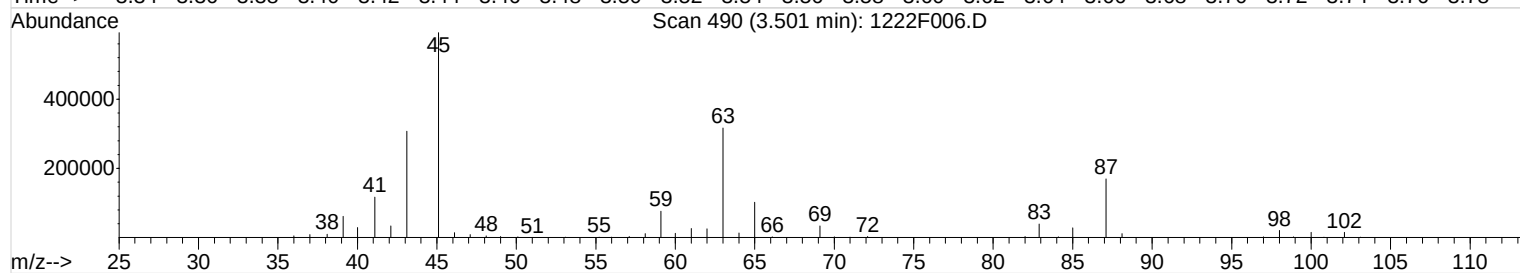
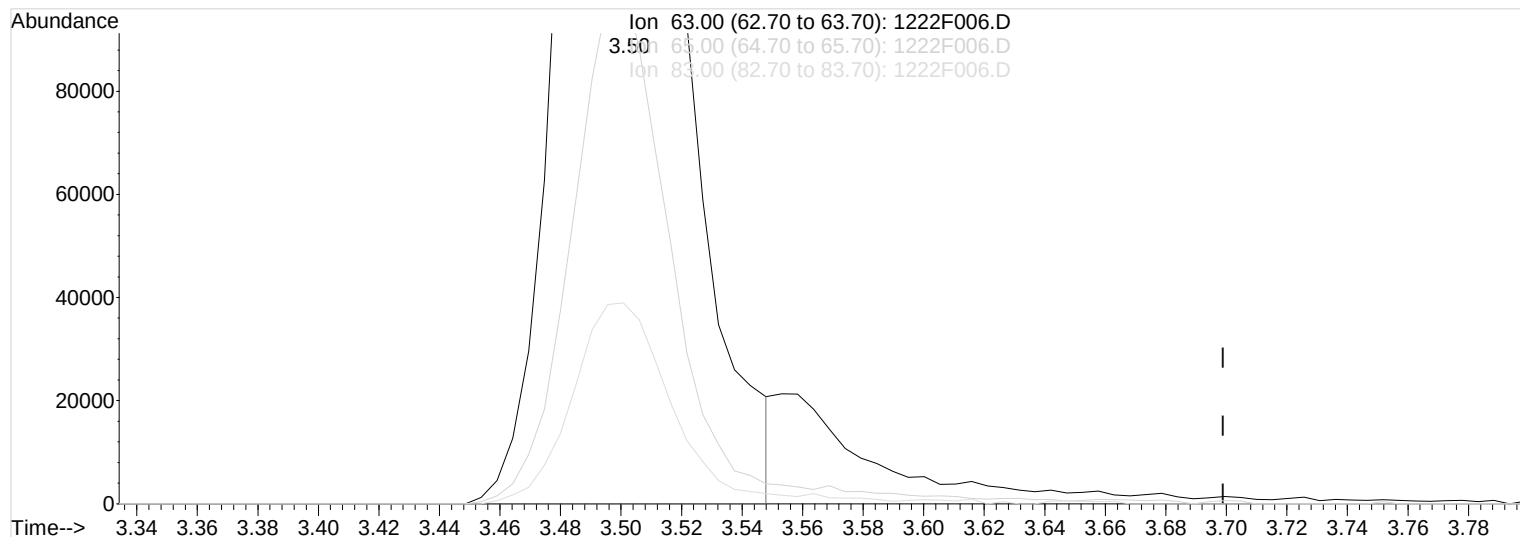
Quant Results File: temp.res

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Mon Sep 18 16:32:32 2023

Response via : Multiple Level Calibration



TIC: 1222F006.D

(27) 1,1-Dichloroethane (PT)

3.50min 9.85PPB m

response 692963

Manual Integration:

After

Shoulder

12/27/23

Ion	Exp%	Act%
63.00	100	100
65.00	32.70	32.09
83.00	12.70	12.29
0.00	0.00	0.00

Quantitation Report (Qedit)

1st *im* 12/27/232nd *Q* 12/27/23

Data File : J:\MS23\DATA\122223\1222F006.D

Acq On : 22 Dec 2023 11:40 am

Sample : DLCS

Misc :

MS Integration Params: rteint.p

Quant Time: Dec 27 9:05 2023

Vial: 5

Operator: GH/EW/OT/MK

Inst : MS23

Multiplr: 1.00

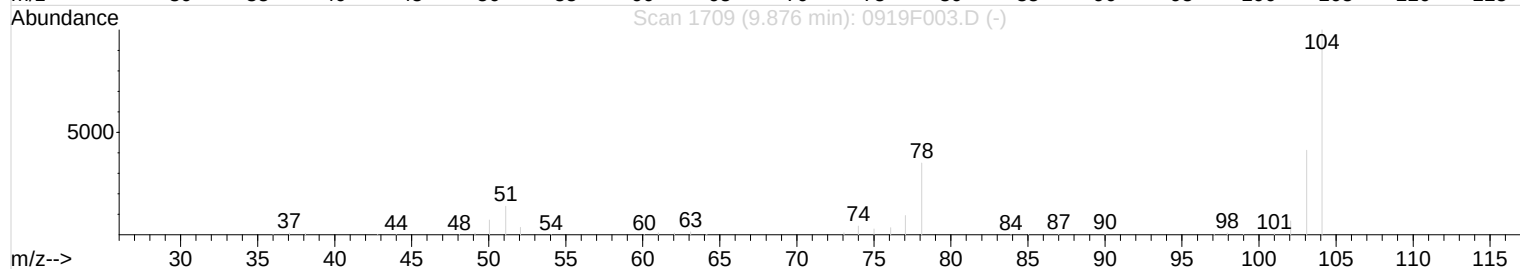
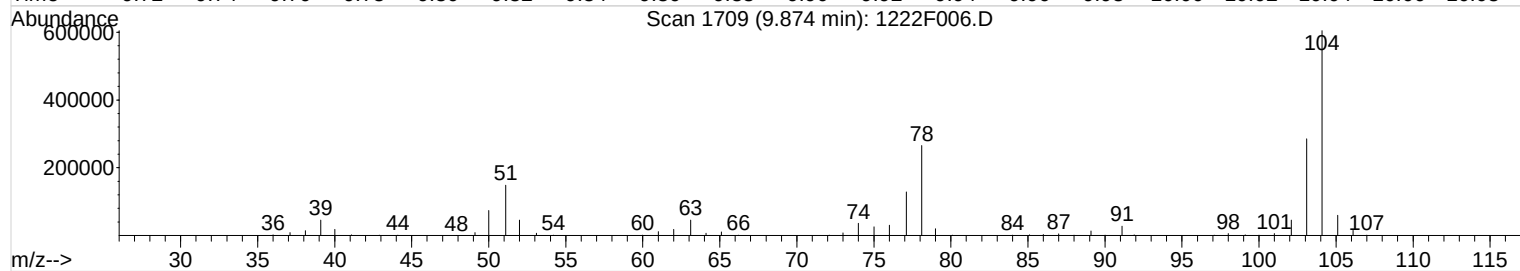
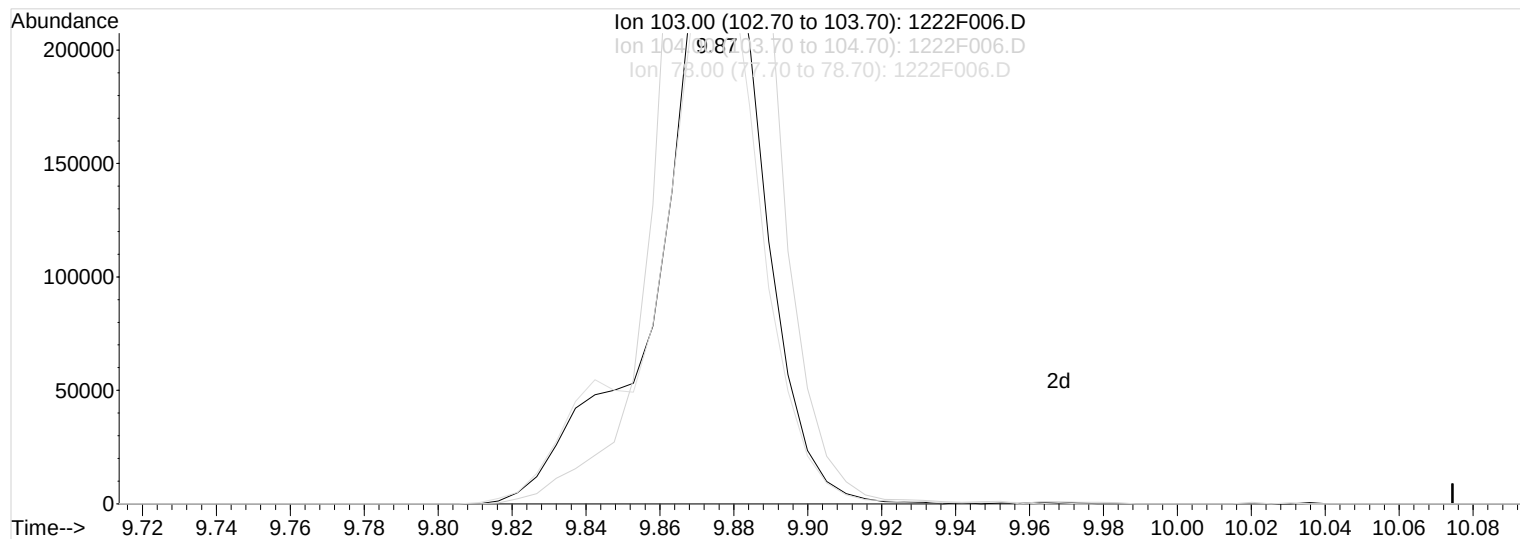
Quant Results File: temp.res

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Mon Sep 18 16:32:32 2023

Response via : Single Level Calibration



TIC: 1222F006.D

(80) Styrene (T)

Manual Integration:

9.87min 10.95PPB

Before

response 517662

Ion	Exp%	Act%
103.00	100	100
104.00	245.50	212.07#
78.00	102.00	92.92
0.00	0.00	0.00

12/27/23

Quantitation Report (Qedit)

1st *im* 12/27/232nd *Q* 12/27/23

Data File : J:\MS23\DATA\122223\1222F006.D

Acq On : 22 Dec 2023 11:40 am

Sample : DLCS

Misc :

MS Integration Params: rteint.p

Quant Time: Dec 27 9:05 2023

Vial: 5

Operator: GH/EW/OT/MK

Inst : MS23

Multiplr: 1.00

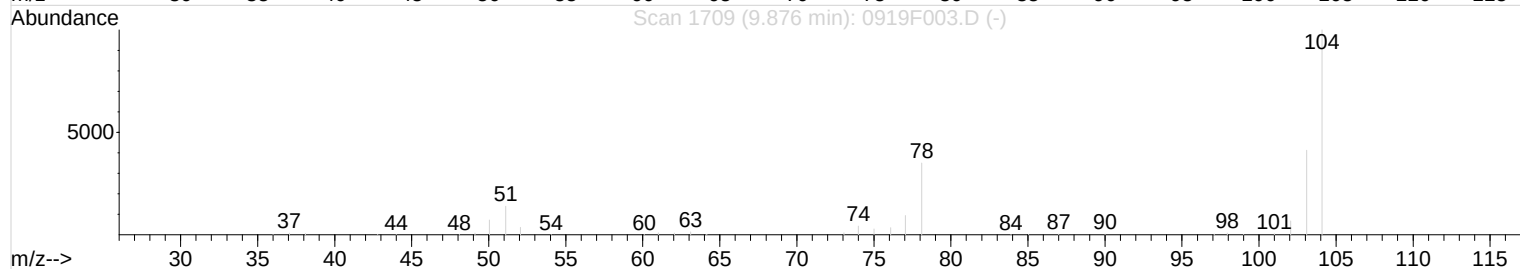
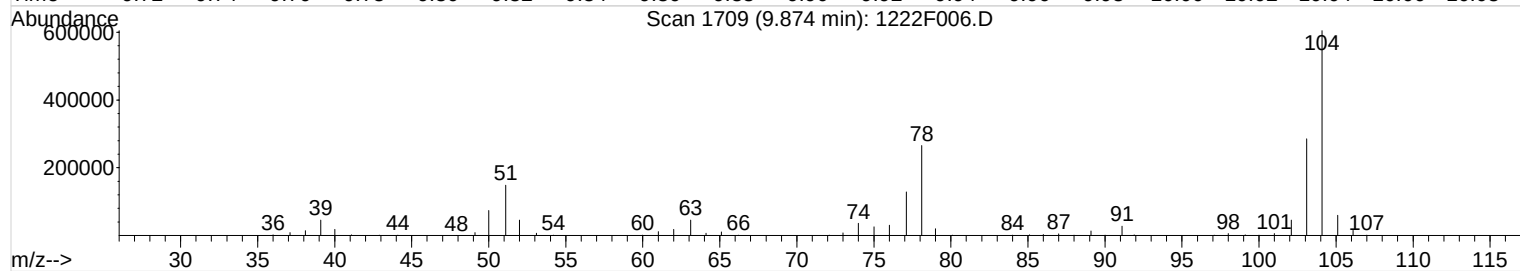
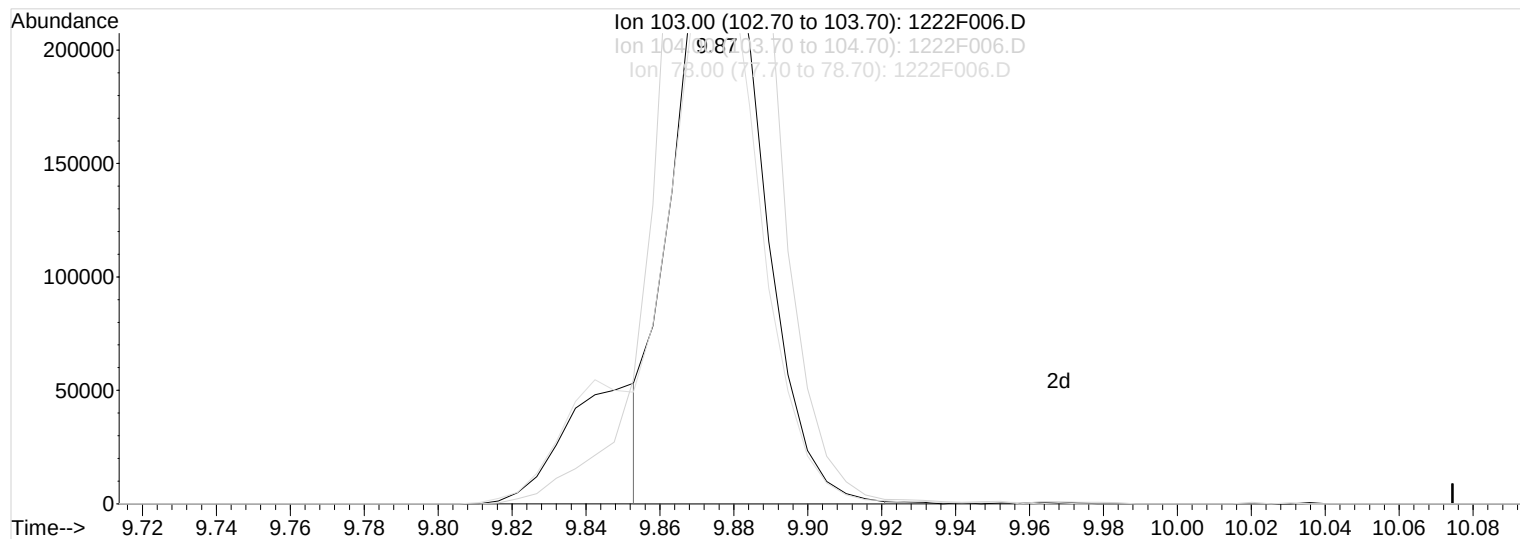
Quant Results File: temp.res

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Mon Sep 18 16:32:32 2023

Response via : Single Level Calibration



TIC: 1222F006.D

(80) Styrene (T)

9.87min 9.36PPB m

response 442685

Ion	Exp%	Act%
103.00	100	100
104.00	245.50	212.07#
78.00	102.00	93.07
0.00	0.00	0.00

Manual Integration:

After

Shoulder

12/27/23

Validation Report

1st  12/27/23
2nd  12/27/23

Data File: J:\MS23\DATA\122223\1222F004.D\
Lab ID: KQ2322477-02
RunType: CCV
Matrix: Water

Date Acquired: 12/22/23 10:52:00
Batch ID: 828027
Analysis Method: 8260C/VOC FP

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Internal Standards	X	

Primary Review: _____

Secondary Review: _____

Quantitation Report

1st 12/27/23
2nd 12/27/23

Data File:	J:\MS23\DATA\122223\1222F004.D\	Instrument:	K-MS-23
Acqu Date:	12/22/23 10:52:00	Vial:	2
Run Type:	CCV	Dilution:	1
Lab ID:	KQ2322477-02	Raw Units:	ppb

Bottle ID:		Tier:	IV	Matrix:	Water
Prod Code:	VOC FP	Collect Date:	12/20/23	Receive Date:	12/20/23

Analysis Lot:	828027	Prep Lot:		Report Group:	KQ2322477
Analysis	8260C	Prep Method:			
		Prep Date:			

Title:	Volatile Organic Compounds by GC/MS	Calibration ID:	KC2300542
		Report List ID:	20915

Internal Standard Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Area Criteria
Chlorobenzene-d5	9.17		472295	10.00	OK
1,4-Dichlorobenzene-d4	11.59		381585	10.00	OK
Fluorobenzene	5.72		1229264	10.00	OK

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Rpt?
4-Bromofluorobenzene	10.42		402709	10.49	Y
Dibromofluoromethane	4.86		273667	10.91	Y
Toluene-d8	7.58		1215788	10.37	Y

Target Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Rpt?
Acetone	2.36		487487	100.55	Y
Benzene	5.30		1674816	9.82	Y
Bromobenzene	10.55		339348	9.22	Y
Bromochloromethane	4.52		182808	10.85	Y
Bromodichloromethane	6.83		405416	10.52	Y
Bromoform	10.08		92861	9.89	Y
Bromomethane	1.54		119054	6.81	Y
2-Butanone (MEK)	4.27		182599	84.93	Y
n-Butylbenzene	11.95		726905	10.65	Y
sec-Butylbenzene	11.38		1105431	11.06	Y
tert-Butylbenzene	11.15		810413	10.05	Y
Carbon Disulfide	2.43		989157	10.30	Y
Carbon Tetrachloride	4.96		443893	12.38	Y
Chlorobenzene	9.20		994580	9.81	Y
Chloroethane	1.61		240306	8.73	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 12/27/23 9:57

\\alprews001\starlims\LIMSReps\QuantValidation.rpt

		1st	12/27/23
Data File:	J:\MS23\DATA\122223\1222F004.D\	Instrument:	K-MS-23 nd
Acqu Date:	12/22/23 10:52:00	Vial:	2
Run Type:	CCV	Dilution:	1
Lab ID:	KQ2322477-02	Raw Units:	ppb

Target Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Rpt?
Chloroform	4.63		687714	11.10	Y
Chloromethane	1.22		285310	6.71	Y
2-Chlorotoluene	10.74		918447	9.37	Y
4-Chlorotoluene	10.87		1097574	9.76	Y
1,2-Dibromo-3-chloropropane	12.66		15338	7.96	Y
Dibromochloromethane	8.58		238321	9.36	Y
1,2-Dibromoethane (EDB)	8.70		242980	9.98	Y
Dibromomethane	6.63		180933	10.54	Y
1,2-Dichlorobenzene	11.99		479405	9.27	Y
1,3-Dichlorobenzene	11.52		543261	9.31	Y
1,4-Dichlorobenzene	11.61		559698	9.04	Y
Dichlorodifluoromethane	1.06		337024	7.58	Y
1,1-Dichloroethane	3.50		702883	10.15	Y
1,2-Dichloroethane (EDC)	5.45		501264	10.70	Y
1,1-Dichloroethene	2.24		391791	10.66	Y
cis-1,2-Dichloroethene	4.21		441630	10.02	Y
trans-1,2-Dichloroethene	2.99		410776	10.33	Y
1,2-Dichloropropane	6.49		383982	9.36	Y
1,3-Dichloropropane	8.39		505276	9.59	Y
2,2-Dichloropropane	4.16		421918	9.72	Y
1,1-Dichloropropene	5.03		580347	10.89	Y
cis-1,3-Dichloropropene	7.36		485565	8.18	Y
trans-1,3-Dichloropropene	8.02		330527	7.73	Y
Ethylbenzene	9.30		520081	10.27	Y
Hexachlorobutadiene	13.29		113383	11.17	Y
2-Hexanone	8.48		207027	89.47	Y
Isopropylbenzene	10.22		1310880	10.61	Y
4-Isopropyltoluene	11.53		924950	10.17	Y
4-Methyl-2-pentanone (MIBK)	7.55		624533	84.94	Y
Methylene Chloride	2.76		418314	9.18	Y
Naphthalene	13.40		204737	8.45	Y
n-Propylbenzene	10.64		1445059	10.10	Y
Styrene	9.87		457348	10.06	Y
1,1,1,2-Tetrachloroethane	9.31		274116	10.32	Y
1,1,2,2-Tetrachloroethane	10.62		235079	9.36	Y
Tetrachloroethene (PCE)	8.22		299894	10.54	Y
Toluene	7.66		1021887	9.90	Y
1,2,3-Trichlorobenzene	13.59		92260	10.93	Y
1,2,4-Trichlorobenzene	13.20		158037	9.64	Y
1,1,2-Trichloroethane	8.21		232514	9.61	Y
1,1,1-Trichloroethane (TCA)	4.79		560647	11.63	Y

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J: Analyte detected above MDL, but below MRL
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E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
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#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 12/27/23 9:57

\\alprews001\starlims\LIMSReps\QuantValidation.rpt

		1st	12/27/23
Data File:	J:\MS23\DATA\122223\1222F004.D\	Instrument:	K-MS-23 nd
Acqu Date:	12/22/23 10:52:00	Vial:	2
Run Type:	CCV	Dilution:	1
Lab ID:	KQ2322477-02	Raw Units:	ppb

Target Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Rpt?
Trichloroethene (TCE)	6.16		404898	10.27	Y
Trichlorofluoromethane (CFC 11)	1.79		657468	11.87	Y
1,2,3-Trichloropropane	10.66		81765	9.89	Y
1,2,4-Trimethylbenzene	11.22		1010135	9.74	Y
1,3,5-Trimethylbenzene	10.84		1013579	10.25	Y
Vinyl Chloride	1.28		349480	8.06	Y
o-Xylene	9.84		565870	9.61	Y
m,p-Xylenes	9.43		1258642	20.49	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 12/27/23 9:57

\\alprews001\starlims\LIMSReps\QuantValidation.rpt

Data File : J:\MS23\DATA\122223\1222F004.D

Acq On : 22 Dec 2023 10:52 am

Sample : CCV

Misc :

Vial: 3

Operator: GH/EW/OT/MK

Inst : MS23

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Dec 22 12:47:06 2023

Quant Results File: 091123MS23_8260.RES

Quant Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Mon Sep 18 16:32:32 2023

Response via : Initial Calibration

DataAcq Meth : 8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	5.72	96	1229264	10.00	PPB	0.00
64) Chlorobenzene-d5	9.17	82	472295	10.00	PPB	0.00
85) 1,4-Dichlorobenzene-d4	11.59	152	381585	10.00	PPB	0.00

System Monitoring Compounds

43) Dibromofluoromethane	4.86	113	273667	10.91	PPB	0.00
Spiked Amount 10.000			Recovery	=	109.10%	
47) 1,2-Dichloroethane-d4	5.35	65	320283	11.45	PPB	0.00
Spiked Amount 10.000			Recovery	=	114.50%	
62) Toluene-d8	7.58	98	1215788	10.37	PPB	0.00
Spiked Amount 10.000			Recovery	=	103.70%	
84) 4-Bromofluorobenzene	10.42	95	402709	10.49	PPB	0.00
Spiked Amount 10.000			Recovery	=	104.90%	

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	1.06	85	337024	7.58	PPB	100
3) Chloromethane	1.22	50	285310	6.71	PPB	98
4) Vinyl Chloride	1.28	62	349480	8.06	PPB	99
5) Bromomethane	1.54	96	119054	6.81	PPB	99
6) Chloroethane	1.61	64	240306	8.73	PPB	98
7) Dichlorofluoromethane	1.78	67	656888	10.81	PPB	97
8) Trichlorofluoromethane	1.79	101	657468	11.87	PPB	98
9) Ethyl Ether	2.04	59	239500	9.29	PPB	98
10) Acrolein	2.21	56	429832	131.27	PPB	97
11) Trichlorotrifluoroethane	2.21	151	250833	11.97	PPB	99
12) 1,1-Dichloroethene	2.24	96	391791	10.66	PPB	96
13) Acetone	2.36	43	487487	100.55	PPB	96
14) Iodomethane	2.40	142	1363079	35.54	PPB	97
15) Carbon Disulfide	2.43	76	989157	10.30	PPB	100
16) 2-Propanol (Isopropyl Alco	2.48	45	331095	440.14	PPB	97
17) 3-Chloro-1-propene	2.61	76	169663	9.72	PPB	96
18) Methyl Acetate	2.64	43	145959	7.37	PPB	98
19) Acetonitrile	2.70	40	596667	443.77	PPB	94
20) Methylene Chloride	2.76	84	418314	9.18	PPB	99
21) tert-Butyl Alcohol	2.88	59	41662	37.52	PPB	92
22) Acrylonitrile	3.09	53	304431	39.72	PPB	98
23) Methyl tert-Butyl Ether	2.97	73	1309034	17.30	PPB	97
24) trans-1,2-Dichloroethene	2.99	96	410776	10.33	PPB	99
25) Hexane	3.20	57	385462	10.32	PPB	97
26) Diisopropyl Ether	3.50	45	978827	8.83	PPB	99
27) 1,1-Dichloroethane	3.50	63	702883	10.15	PPB	98
28) Vinyl Acetate	3.56	86	107847	19.11	PPB	93
29) Chloroprene	3.55	53	2642661	52.51	PPB	96
30) tert-Butyl Ethyl Ether	3.92	59	748568	8.08	PPB	99
31) 2,2-Dichloropropane	4.16	77	421918	9.72	PPB	97
32) cis-1,2-Dichloroethene	4.21	96	441630	10.02	PPB	99
33) 2-Butanone	4.27	72	182599	84.93	PPB	97
34) Ethyl Acetate	4.30	61	59719	16.75	PPB	96
35) Propionitrile	4.45	54	108412	38.23	PPB	97
36) Methacrylonitrile	4.59	67	370843	40.39	PPB	98
37) Bromochloromethane	4.52	128	182808	10.85	PPB	91
38) Tetrahydrofuran	4.54	71	23001	8.58	PPB	96
39) Chloroform	4.63	83	687714	11.10	PPB	97
40) tert-Butyl Formate	4.66	59	33363	4.04	PPB	95
41) Cyclohexane	4.75	56	461932	7.91	PPB	97
42) 1,1,1-Trichloroethane	4.79	97	560647	11.63	PPB	95
44) Carbon Tetrachloride	4.96	117	443893	12.38	PPB	99
45) 1,1-Dichloropropene	5.03	75	580347	10.89	PPB	99

(#)=qualifier out of range (m)=manual integration

1222F004.D 091123MS23_8260.M Wed Dec 27 09:39:48 2023

3483 of 3623

Data File : J:\MS23\DATA\122223\1222F004.D

Acq On : 22 Dec 2023 10:52 am

Sample : CCV

Misc :

Vial: 3

Operator: GH/EW/OT/MK

Inst : MS23

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Dec 22 12:47:06 2023

Quant Results File: 091123MS23_8260.RES

Quant Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Mon Sep 18 16:32:32 2023

Response via : Initial Calibration

DataAcq Meth : 8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
46) Isobutyl Alcohol	5.35	43	190149	336.04	PPB	96
48) Benzene	5.30	78	1674816	9.82	PPB	99
49) 1,2-Dichloroethane	5.45	62	501264	10.70	PPB	97
50) tert-Amyl Methyl Ether	5.46	55	284988	11.30	PPB	# 46
51) Trichloroethene	6.16	95	404898	10.27	PPB	99
52) Methylcyclohexane	6.28	83	412978	9.55	PPB	97
53) 1,2-Dichloropropane	6.49	63	383982	9.36	PPB	92
54) Dibromomethane	6.63	93	180933	10.54	PPB	96
55) Methyl methacrylate	6.66	69	132684	8.26	PPB	97
56) 1,4-Dioxane	6.66	88	73484	371.85	PPB	98
57) Bromodichloromethane	6.83	83	405416	10.52	PPB	98
58) 2-Nitropropane	7.20	41	167832	40.68	PPB	97
59) 2-Chloroethyl Vinyl Ether	7.23	63	112007	7.84	PPB	95
60) cis-1,3-Dichloropropene	7.36	75	485565	8.18	PPB	98
61) 4-Methyl-2-pentanone (MIBK)	7.55	58	624533	84.94	PPB	96
63) Toluene	7.66	92	1021887	9.90	PPB	99
65) n-Octane	7.75	85	140776	9.08	PPB	99
66) trans-1,3-Dichloropropene	8.02	75	330527	7.73	PPB	93
67) Ethyl methacrylate	8.09	69	237640	7.65	PPB	98
68) 1,1,2-Trichloroethane	8.21	83	232514	9.61	PPB	96
69) Tetrachloroethene	8.22	164	299894	10.54	PPB	96
70) 2-Hexanone	8.48	57	207027	89.47	PPB	98
71) 1,3-Dichloropropane	8.39	76	505276	9.59	PPB	99
72) Dibromochloromethane	8.58	129	238321	9.36	PPB	99
73) 1,2-Dibromoethane (EDB)	8.70	107	242980	9.98	PPB	96
74) 1-Chlorohexane	9.19	91	351961	9.93	PPB	94
75) Chlorobenzene	9.20	112	994580	9.81	PPB	98
76) Ethylbenzene	9.30	106	520081	10.27	PPB	99
77) 1,1,1,2-Tetrachloroethane	9.31	131	274116	10.32	PPB	95
78) m,p-Xylenes	9.43	106	1258642	20.49	PPB	97
79) o-Xylene	9.84	106	565870	9.61	PPB	100
80) Styrene	9.87	103	457348m	10.06	PPB	
81) Bromoform	10.08	173	92861	9.89	PPB	93
82) Isopropylbenzene	10.22	105	1310880	10.61	PPB	99
83) cis-1,4-Dichloro-2-butene	10.39	89	83775	28.76	PPB	98
86) 1,1,2,2-Tetrachloroethane	10.62	83	235079	9.36	PPB	100
87) trans-1,4-Dichloro-2-buten	10.69	53	57661	8.57	PPB	94
88) Bromobenzene	10.55	156	339348	9.22	PPB	100
89) n-Propylbenzene	10.64	91	1445059	10.10	PPB	99
90) 1,2,3-Trichloropropane	10.66	110	81765	9.89	PPB	88
91) 2-Chlorotoluene	10.74	91	918447	9.37	PPB	99
92) 1,3,5-Trimethylbenzene	10.84	105	1013579	10.25	PPB	97
93) 4-Chlorotoluene	10.87	91	1097574	9.76	PPB	100
94) tert-Butylbenzene	11.15	119	810413	10.05	PPB	98
95) 1,2,4-Trimethylbenzene	11.22	105	1010135	9.74	PPB	98
96) sec-Butylbenzene	11.38	105	1105431	11.06	PPB	99
97) p-Isopropyltoluene	11.53	119	924950	10.17	PPB	98
98) 1,3-Dichlorobenzene	11.52	146	543261	9.31	PPB	98
99) 1,4-Dichlorobenzene	11.61	146	559698	9.04	PPB	99
100) n-Butylbenzene	11.95	91	726905	10.65	PPB	99
101) 1,2-Dichlorobenzene	11.99	146	479405	9.27	PPB	98
102) 1,2-Dibromo-3-chloropropan	12.66	155	15338	7.96	PPB	82
103) 1,3,5-Trichlorobenzene	12.75	180	255078	10.28	PPB	98
104) 1,2,4-Trichlorobenzene	13.20	180	158037	9.64	PPB	98
105) Hexachlorobutadiene	13.29	225	113383	11.17	PPB	98
106) Naphthalene	13.40	128	204737	8.45	PPB	97
107) 1,2,3-Trichlorobenzene	13.59	180	92260	10.93	PPB	100

(#)=qualifier out of range (m)=manual integration

1222F004.D 091123MS23_8260.M

Wed Dec 27 09:39:48 2023

3484 of 3623

Data File : J:\MS23\DATA\122223\1222F004.D

Acq On : 22 Dec 2023 10:52 am

Sample : CCV

Misc : 12/27/23

MS Integration Params: rteint.p

Quant Time: Dec 27 9:02 2023

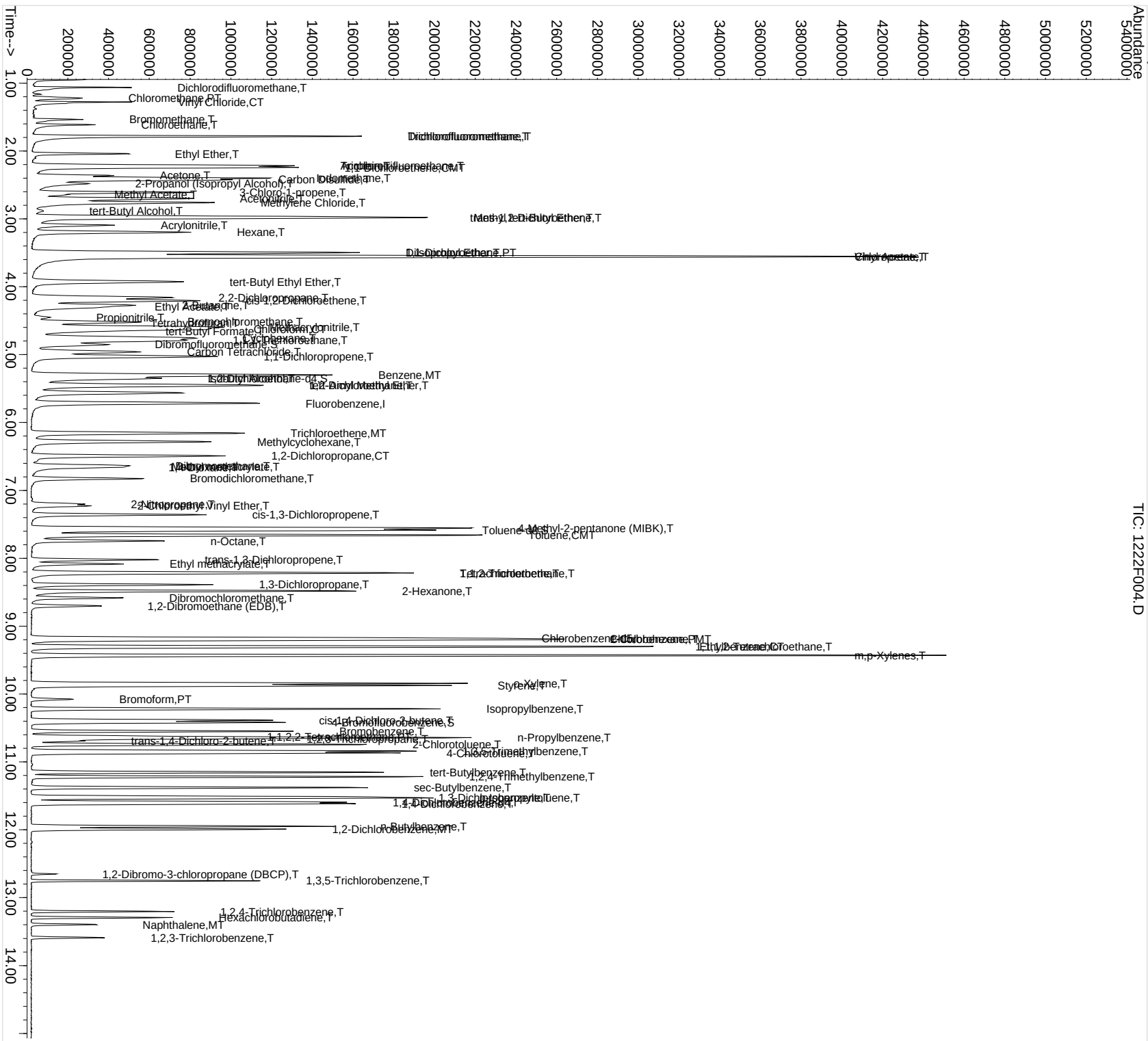
Vial: 3
Operator: GH/EW/OT/MK
Inst : MS23
Multiplr: 1.00

Quant Results File: 091123MS23_8260.RES

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)
Title : VOA MS23 EPA Method 8260C

Last Update : Mon Sep 18 16:32:32 2023

Response via : Initial Calibration



Quantitation Report (Qedit)

1st 12/27/23

2nd 12/27/23

Data File : J:\MS23\DATA\122223\1222F004.D

Acq On : 22 Dec 2023 10:52 am

Sample : CCV

Misc :

MS Integration Params: rteint.p

Quant Time: Dec 22 12:47 2023

Vial: 3

Operator: GH/EW/OT/MK

Inst : MS23

Multiplr: 1.00

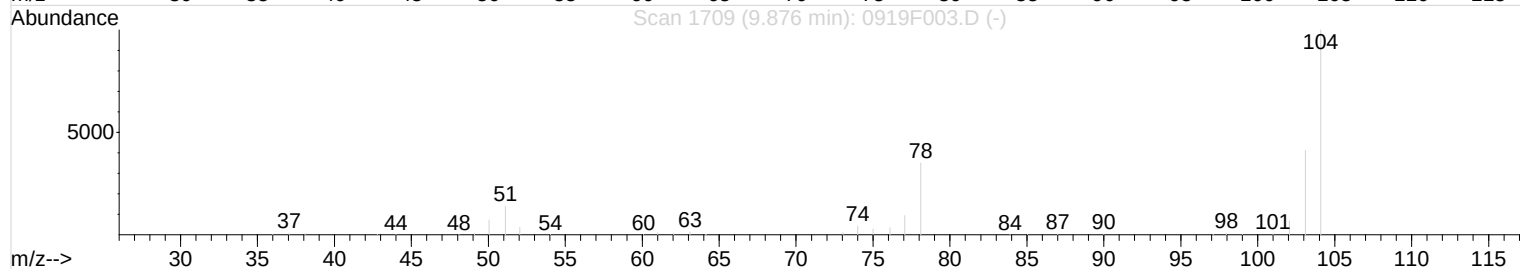
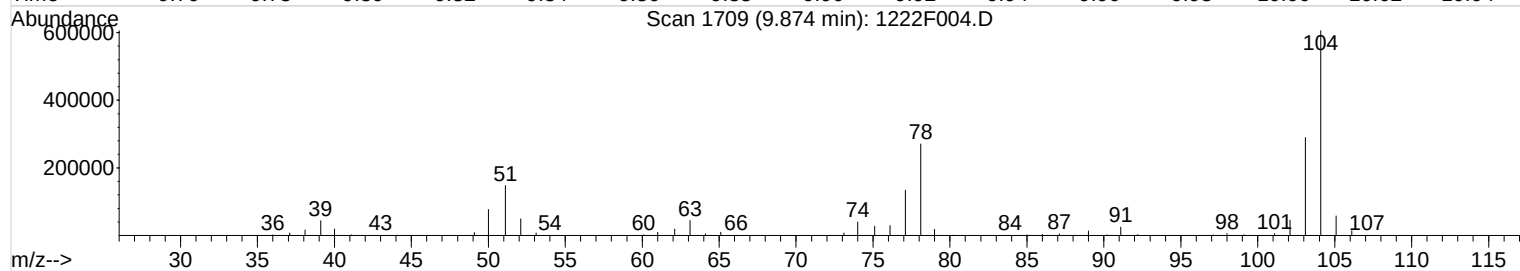
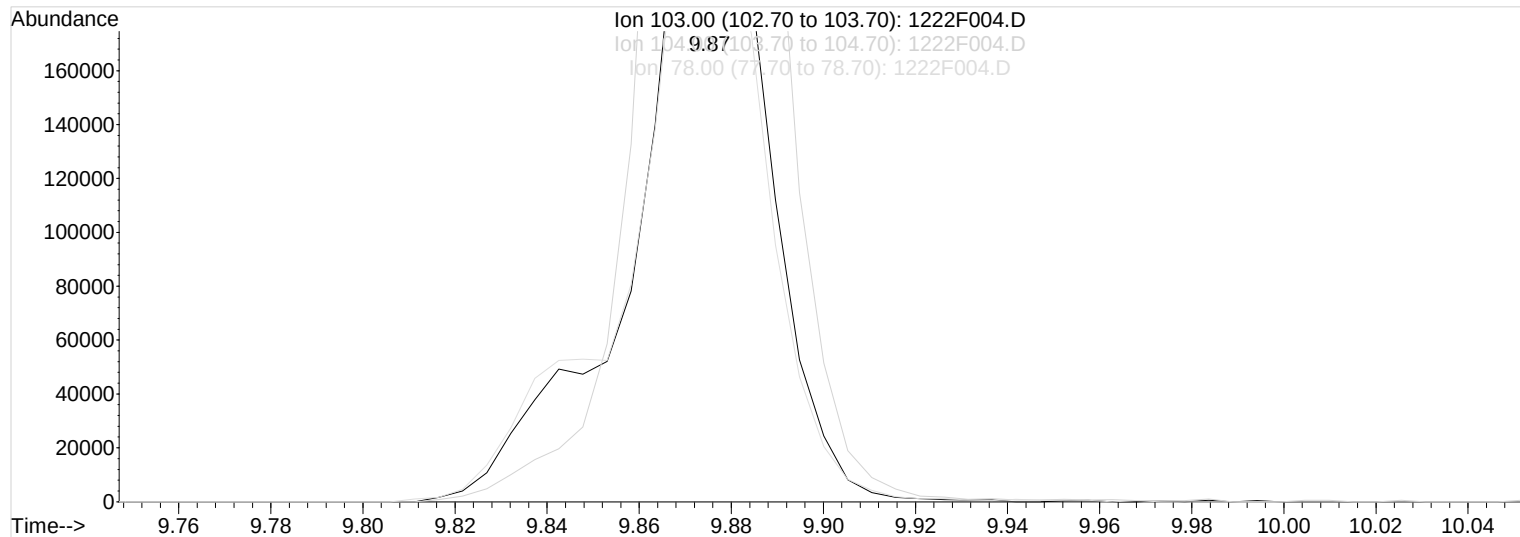
Quant Results File: temp.res

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Mon Sep 18 16:32:32 2023

Response via : Single Level Calibration



TIC: 1222F004.D

(80) Styrene (T)

Manual Integration:

9.87min 11.28PPB

Before

response 512789

Ion Exp% Act%

12/27/23

103.00 100 100

104.00 245.50 209.56#

78.00 102.00 93.74

0.00 0.00 0.00

Quantitation Report (Qedit)

1st *im* 12/27/232nd *Q* 12/27/23

Data File : J:\MS23\DATA\122223\1222F004.D

Acq On : 22 Dec 2023 10:52 am

Sample : CCV

Misc :

MS Integration Params: rteint.p

Quant Time: Dec 27 9:02 2023

Vial: 3

Operator: GH/EW/OT/MK

Inst : MS23

Multiplr: 1.00

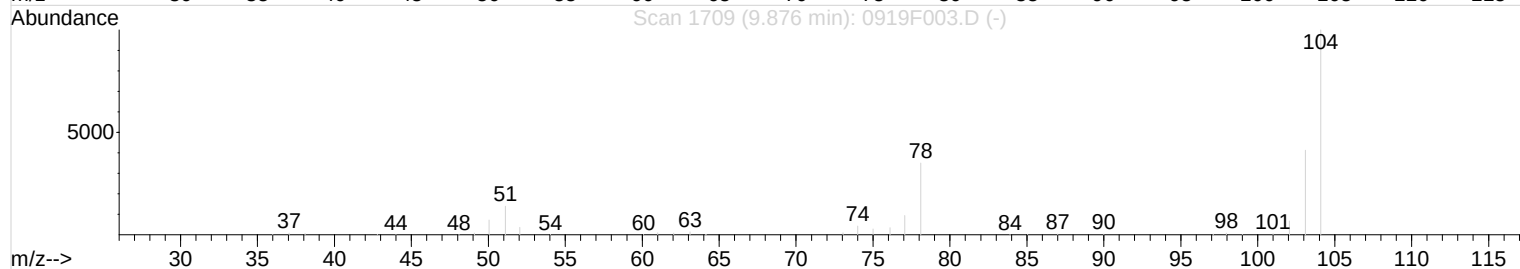
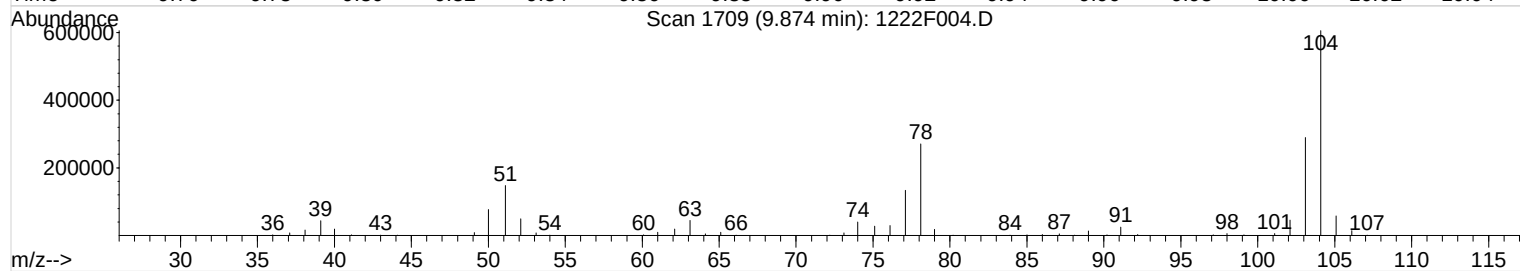
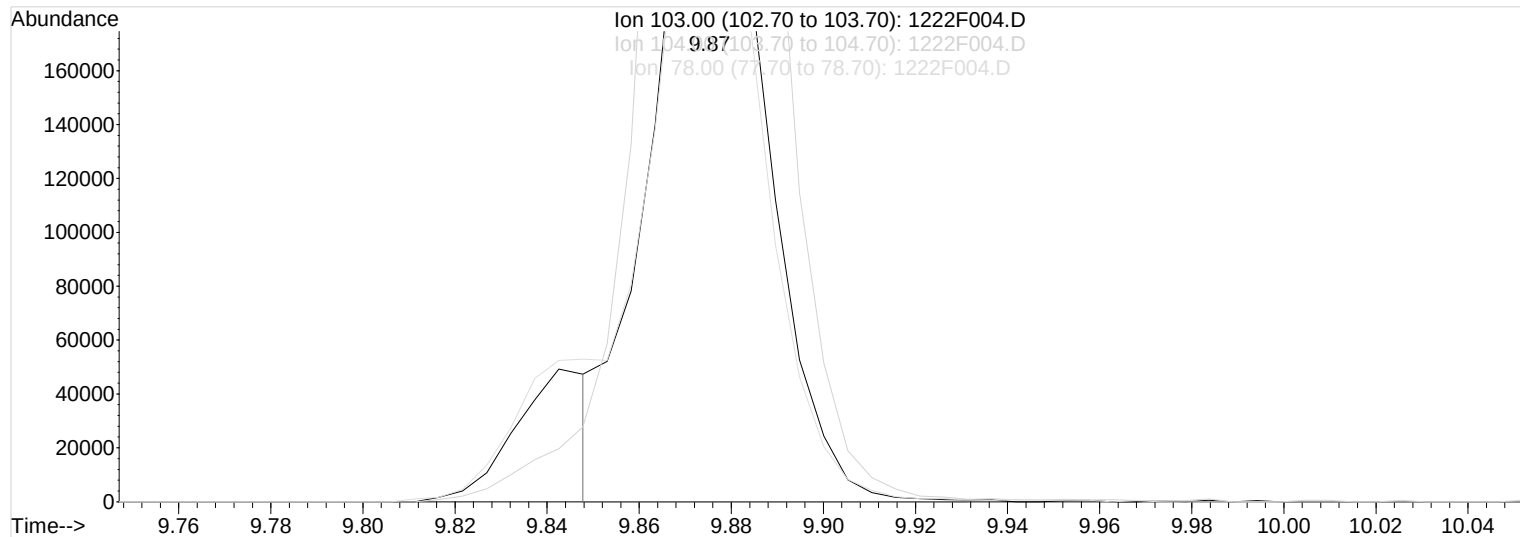
Quant Results File: temp.res

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Mon Sep 18 16:32:32 2023

Response via : Single Level Calibration



TIC: 1222F004.D

(80) Styrene (T)

9.87min 10.06PPB m

response 457348

Ion Exp% Act%

103.00 100 100

104.00 245.50 209.56#

78.00 102.00 93.74

0.00 0.00 0.00

Manual Integration:

After

Shoulder

12/27/23

Validation Report

1st  12/27/23
2nd  12/27/23

Data File: J:\MS23\DATA\122223\1222F002.D\
Lab ID: KQ2322477-01
RunType: TUNE
Matrix: Water

Date Acquired: 12/22/23 10:01:00
Batch ID: 828027
Analysis Method: 8260C/VOC FP

Validations

Validation Categories	Pass	Fail
Tune Ion Ratio	X	

Primary Review: _____

Secondary Review: _____

Quantitation Report

1st 12/27/23

2nd 12/27/23

Data File: J:\MS23\DATA\122223\1222F002.D\
Acqu Date: 12/22/23 10:01:00
Run Type: TUNE
Lab ID: KQ2322477-01

Instrument: K-MS-23
Vial: 1
Dilution: 1
Raw Units:

Bottle ID:
Prod Code: VOC FP

Tier: IV
Collect Date: 12/20/23

Matrix: Water
Receive Date: 12/20/23

Analysis Lot: 828027
Analysis 8260C

Prep Lot:
Prep Method:
Prep Date:

Report Group: KQ2322477

Title: Volatile Organic Compounds by GC/MS

Calibration ID: KC2300542
Report List ID: 20915

Tune Results

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	18.5	14586	Pass
75	95	30	60	49.4	38872	Pass
95	95	100	100	100.0	78746	Pass
96	95	5	9	6.4	5076	Pass
173	174	0	2	0.6	369	Pass
174	95	50	120	78.5	61821	Pass
175	174	5	9	7.3	4535	Pass
176	174	95	101	97.6	60322	Pass
177	176	5	9	7.0	4193	Pass

U: Undetected at or above MDL

J: Analyte detected above MDL, but below MRL

B: Hit above MRL also found in Method Blank

E: Analyte concentration above high point of ICAL

N: Presumptive evidence of compound

D: Result from dilution

m: Manual integration performed

d: Compound manually deleted

NR: Analyte not reported from this analysis

*: Result fails acceptance criteria

#: Acceptance criteria not applicable

?: Insufficient information to determine acceptance

e: Result >= MRL, but MRL less than low point of ICAL

c: check for co-elution

Printed: 12/27/23 9:57

\\alprews001\starlims\LIMSReps\QuantValidation.rpt

BFB

1st 12/27/23

2nd 12/27/23

Data File : J:\MS23\DATA\122223\1222F002.D

Vial: 1

Acq On : 22 Dec 2023 10:01 am

Operator: GH/EW/OT/MK

Sample : BFB

Inst : MS23

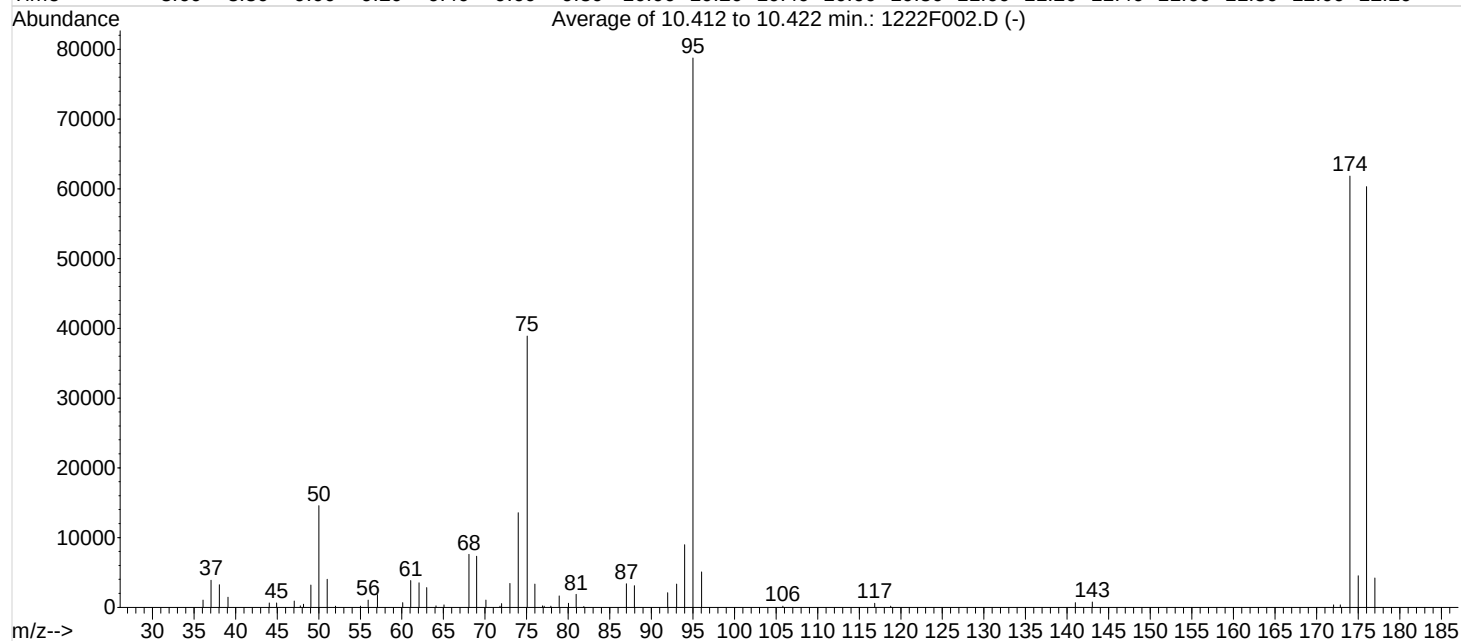
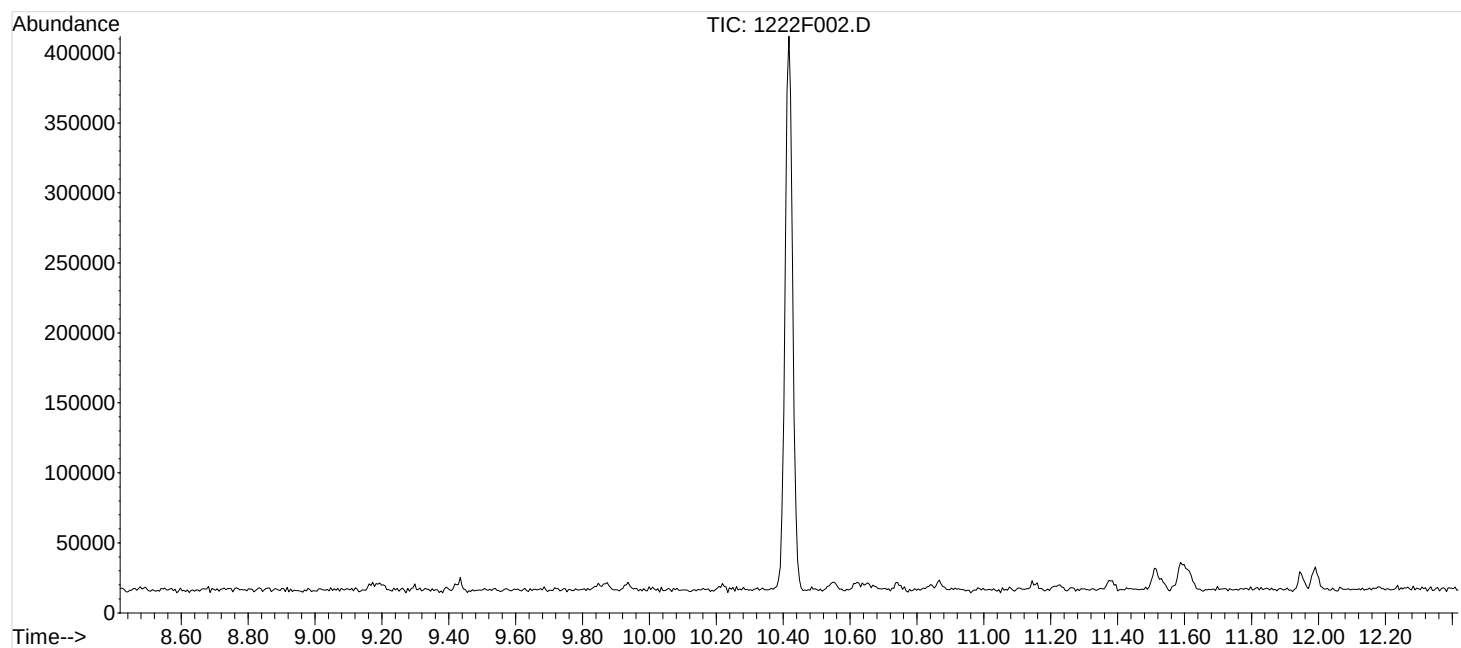
Misc :

Multiplr: 1.00

MS Integration Params: rteint.p

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C



AutoFind: Scans 1812, 1813, 1814; Background Corrected with Scan 1804

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.5	14586	PASS
75	95	30	60	49.4	38872	PASS
95	95	100	100	100.0	78746	PASS
96	95	5	9	6.4	5076	PASS
173	174	0.00	2	0.6	369	PASS
174	95	50	120	78.5	61821	PASS
175	174	5	9	7.3	4535	PASS
176	174	95	101	97.6	60322	PASS
177	176	5	9	7.0	4193	PASS

~~KC2300531~~ 11/9/14/23 6/14/6/19.1/8260
KC2300542

Date: 9/11/23

ALS Environmental

Tune File: BFB

By: SW

Injection Log

New Tune: Yes

IS/SS Std. ID: 103VOA-80H

MS23 - Agilent 5973

Run:

CCV/MRL Std ID: See ical sheet

ICAL Date: 9/11/23

MS/DMS/LCS/ICV Std ID: 7

Second RV:

BFB Std. ID: 103VOA-65B

LIMS ID: 9/11/23

	Sample Name	File Name	Method	Dilution	pH-2	Comments
1	BFB @ 50ng	0908F008	8210	None	NA	5 mL → 50 mL
2	IB	9	7	7	7	
3	IB	10	7	7	7	
4	ICAL 0.1 ppb	11	7	7	7	See ical sheet
5	0.2	12	7	7	7	7
6	0.5	13	7	7	7	7
7	1	14	7	7	7	7
8	2	15	7	7	7	7
9	5	16	7	7	7	7
10	10	17	7	7	7	7
11	20	18	7	7	7	7
12	40	19	7	7	7	7
13	80	20	7	7	7	7
14	120	21	7	7	7	7
15	IB	22	7	7	7	7
16	IB	23	7	7	7	7
17	ICV	24	7	7	7	(NR)
18	ICV	25	7	7	7	↓
19	BFB @ 50ng	26	7	7	7	5 mL → 50 mL
20	IB	27	7	7	7	7
21	ICV	28	7	7	7	See ical sheet
22	ICV CLP	29	7	7	7	7
23						
24						
25						
26						
27						
28						

13:58

Date 9/11/23
Prepared By ELU

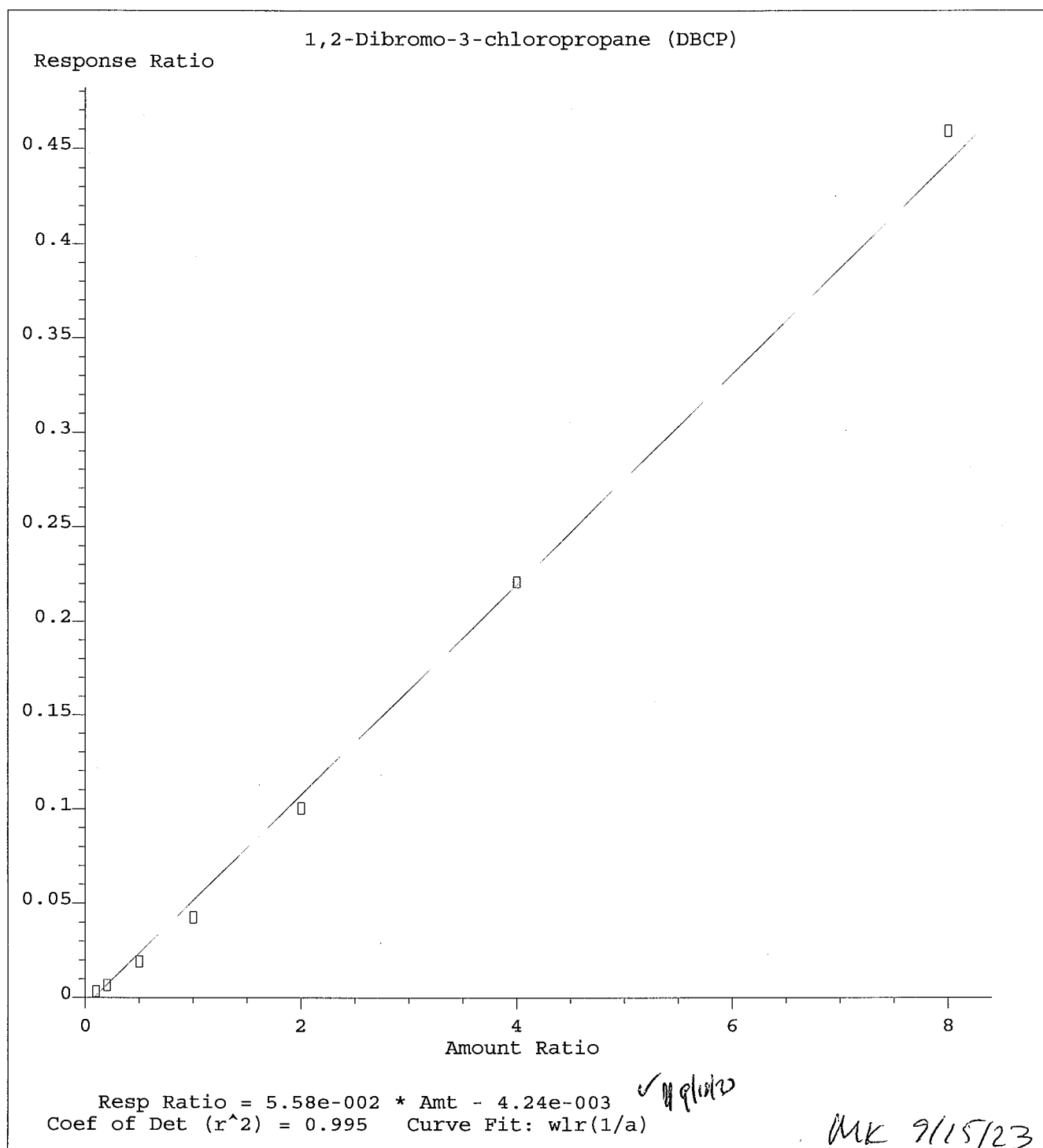
Analysis: 624
Instrument: MS23
Matrix: Water

Stock Solution #1 103V0A-81B 9/11/23
Stock Solution #2 81A 9/11/23
Stock Solution #3 81C 9/11/23
Stock Solution #4 109F 10/11/23

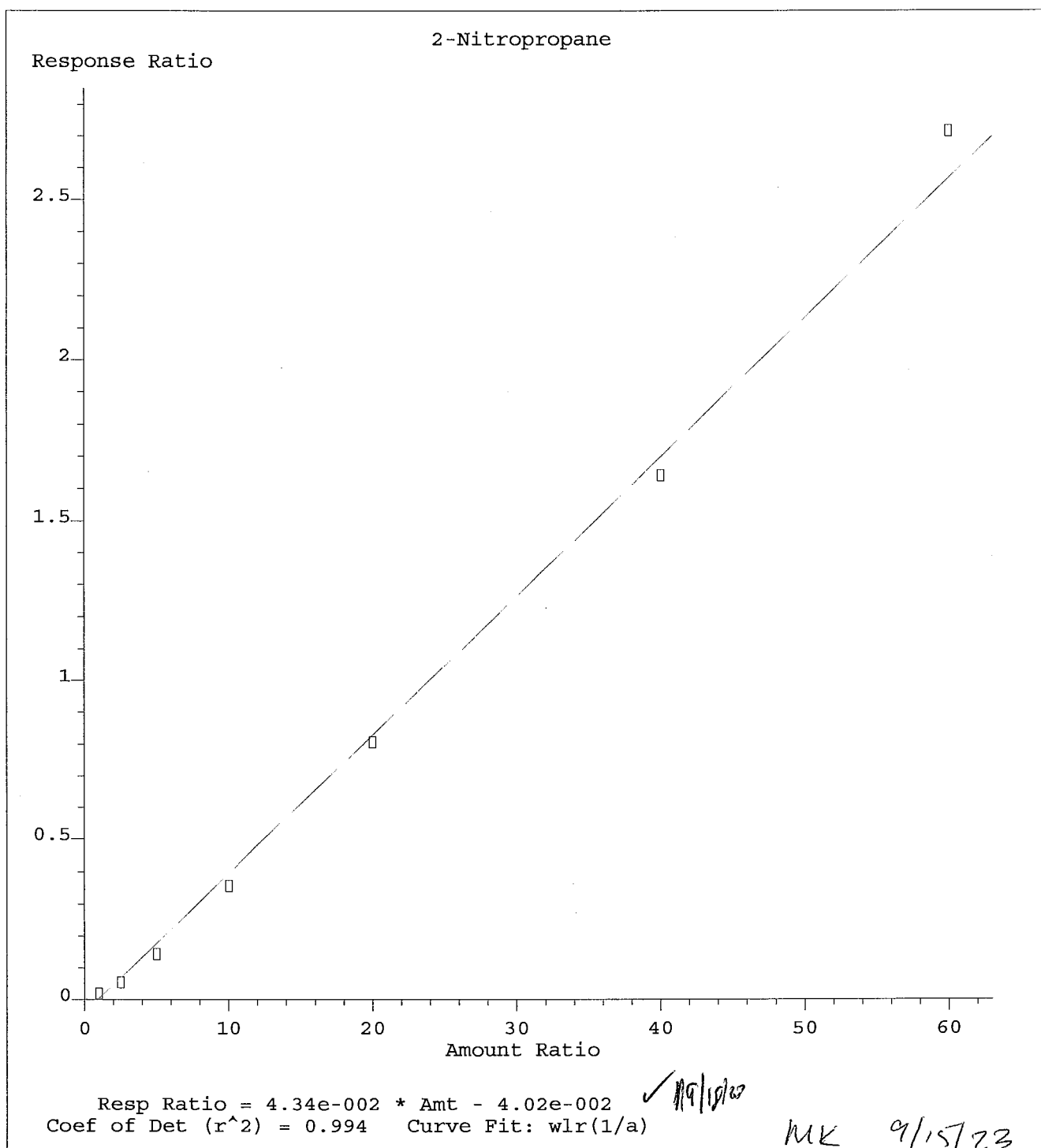
Analytes: Low 624 5ppm
Analytes: 624 50ppm
Analytes: Low Ketones 200ppm
Analytes: Ketones 2000ppm

Aliquot of Stock Solution #1 (µL)	Final Conc. of #1 (µg/L)	Aliquot of Stock Solution #2 (µL)	Final Conc. of #2 (µg/L)	Aliquot of Stock Solution #3 (µL)	Final Conc. of #3 (µg/L)	Aliquot of Stock Solution #4 (µL)	Final Conc. of #4 (µg/L)	Final Volume (mL)	Notes
1	0.1			0.5	2			50	Level ID: 1
2.0	0.2			1	4			50	Level ID: 2
5.0	0.5			2.5	10			50	Level ID: 3
10.0	1.0			5	20			50	Level ID: 4
		2	2	10	40			50	Level ID: 5
		5.0	5			2.5	100	50	Level ID: 6
		10	10			5	200	50	Level ID: 7
		20	20			10	400	50	Level ID: 8
		40	40			20	800	50	Level ID: 9
		80	80			40	1600	50	Level ID: 10
		120	120			60	2400	50	Level ID: 11

8260 ICV: 10µL of 50/250ppm Accusid ICV (103V0A-83A 9/11/23) + 50µL of 100ppm Acrolein (103V0A-57A 9/11/23) + 500µL of 100ppm Dichlorofluoromethane (103V0A-82F 9/11/23) + 5µL of 200ppm n-Octane/TBF/Tetrahydrofuran (103V0A-81D 9/11/23)
5µL of 100ppm Oxygenates (103V0A-82E 11/11/23) + 7.5µL of Appendix ICV mix (103V0A-72A 11/11/23) + 25µL of 1000ppm 2-Propanol (103V0A-55F 9/11/23)
5µL of 100ppm CLP (103V0A-82C 9/11/23)



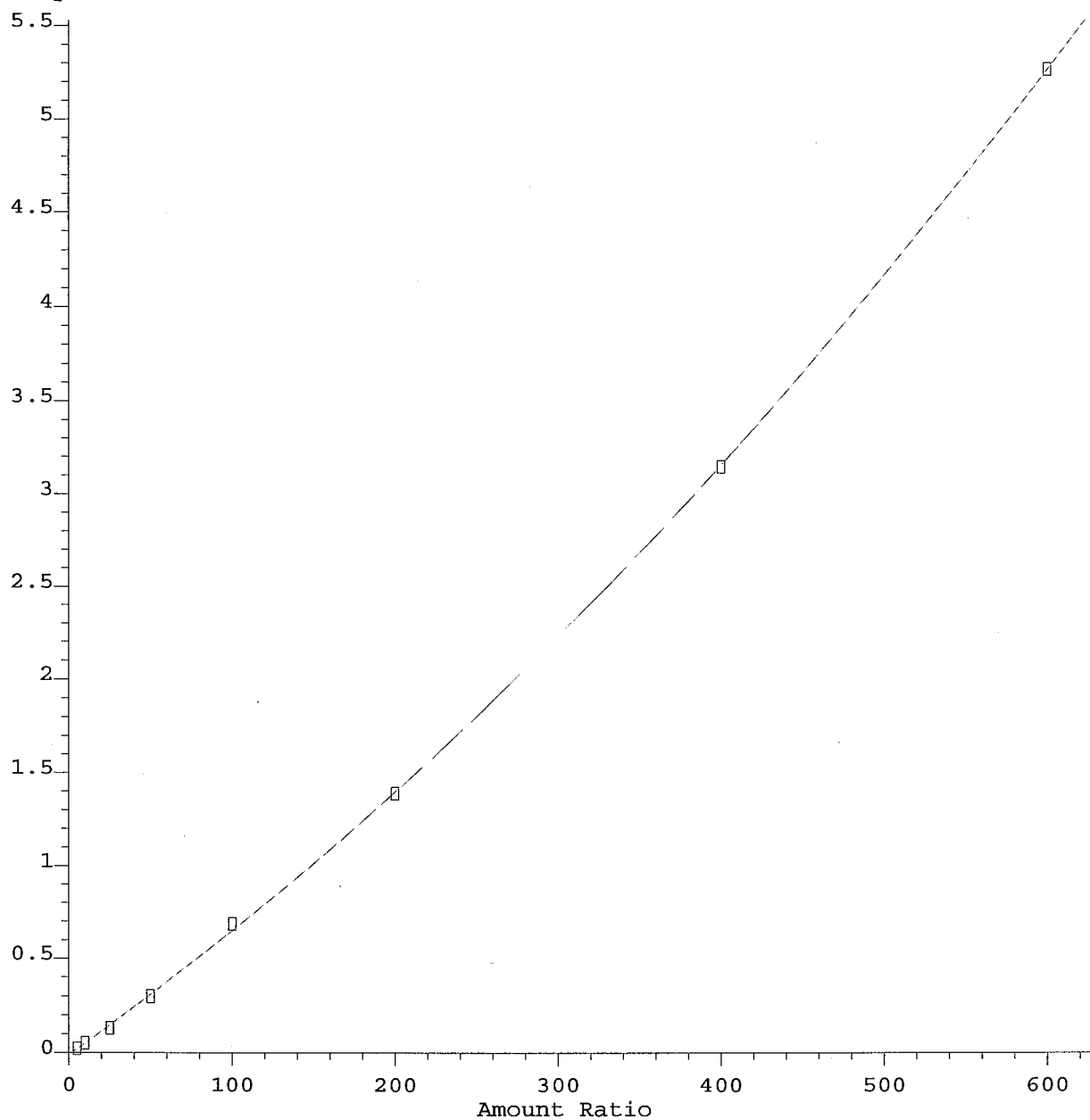
Method Name: J:\MS23\METHODS\091123MS23_8260.M
Calibration Table Last Updated: Fri Sep 15 15:26:27 2023



Method Name: J:\MS23\METHODS\091123MS23_8260.M
Calibration Table Last Updated: Fri Sep 15 15:26:27 2023

2-Propanol (Isopropyl Alcohol)

Response Ratio



$$R = 4.39e-006 A^2 + 6.15e-003 A - 1.00e-002$$

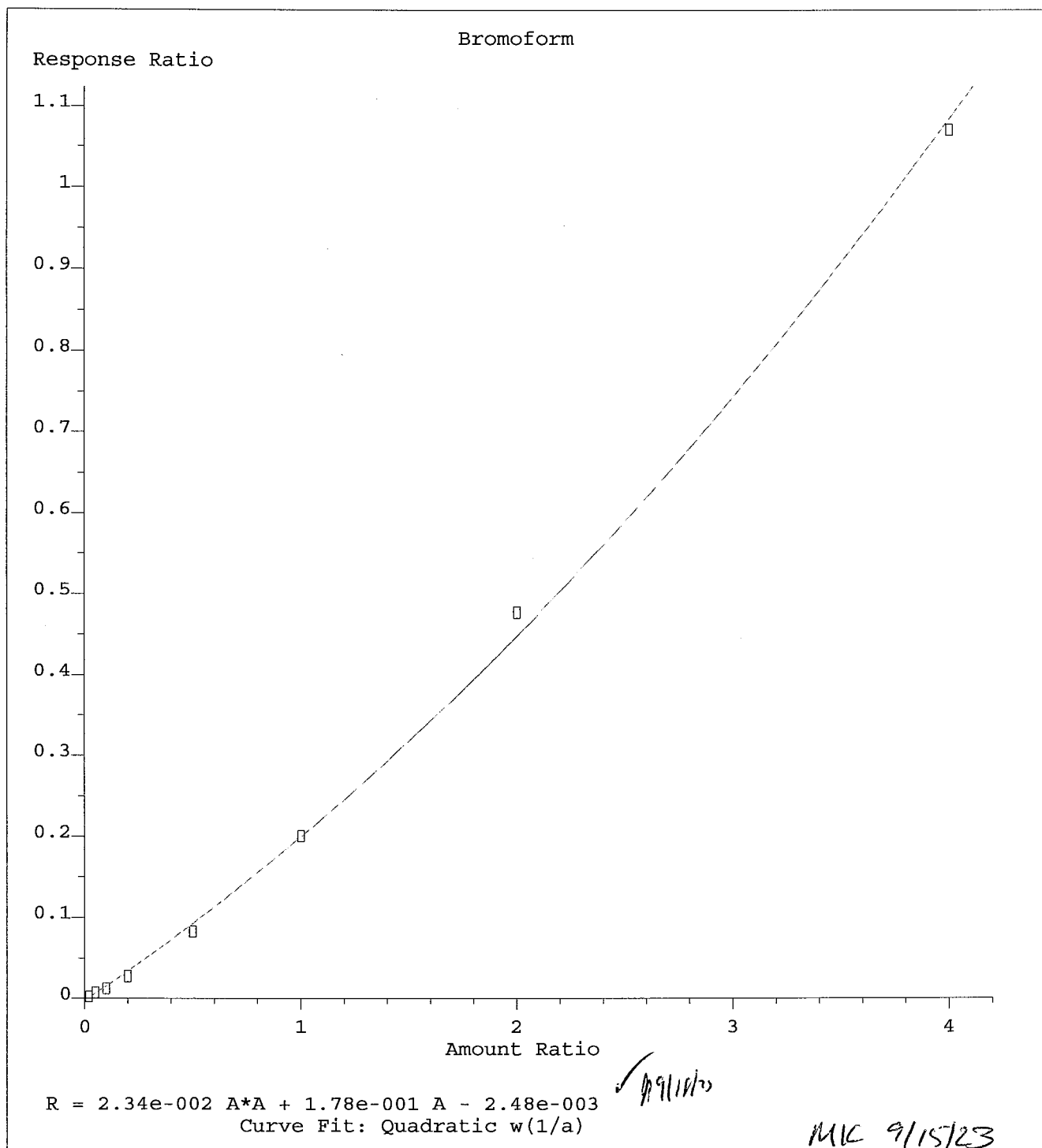
Curve Fit: Quadratic

✓ 9/15/23

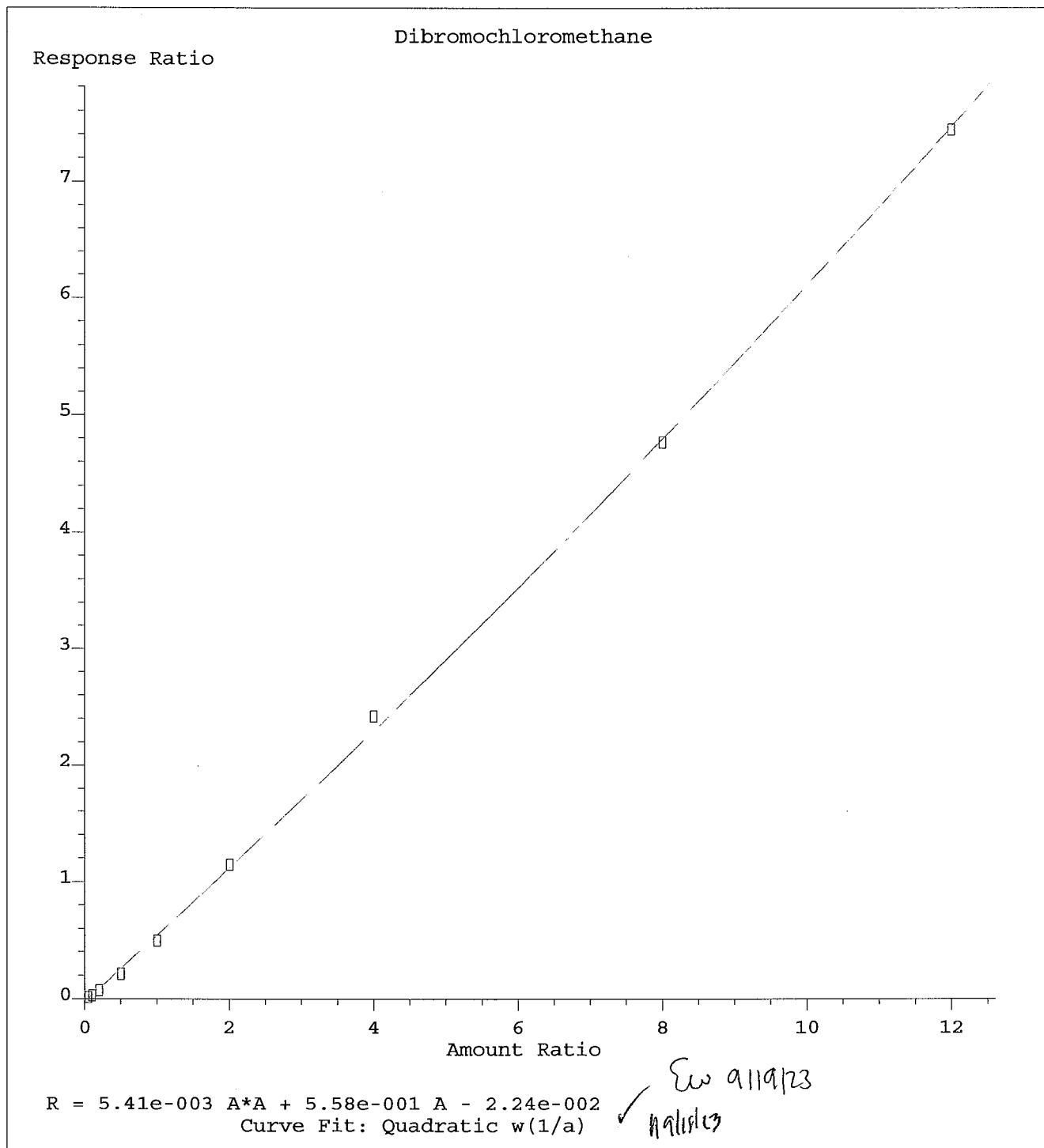
MK 9/15/23

Method Name: J:\MS23\METHODS\091123MS23_8260.M

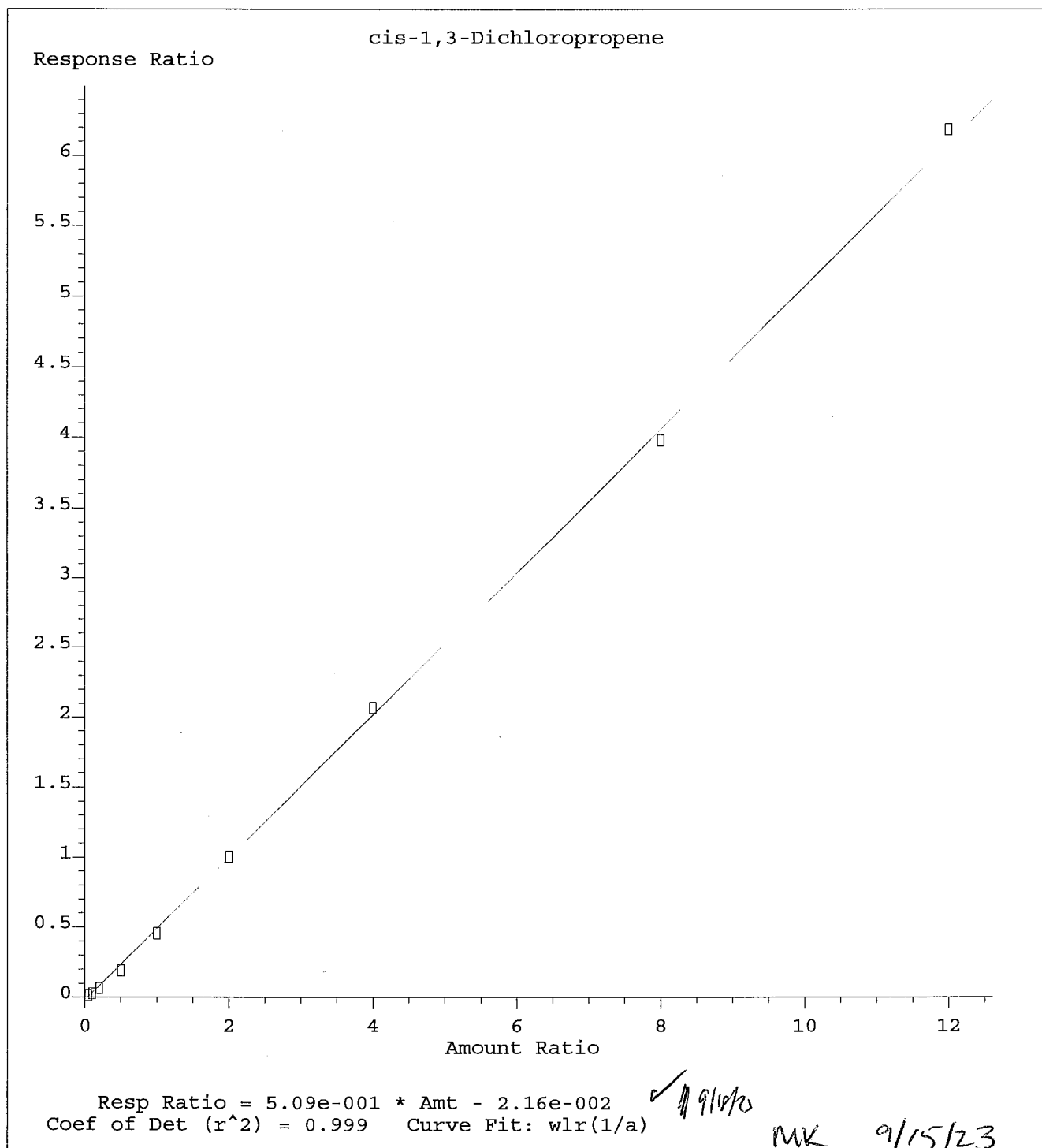
Calibration Table Last Updated: Fri Sep 15 15:26:27 2023



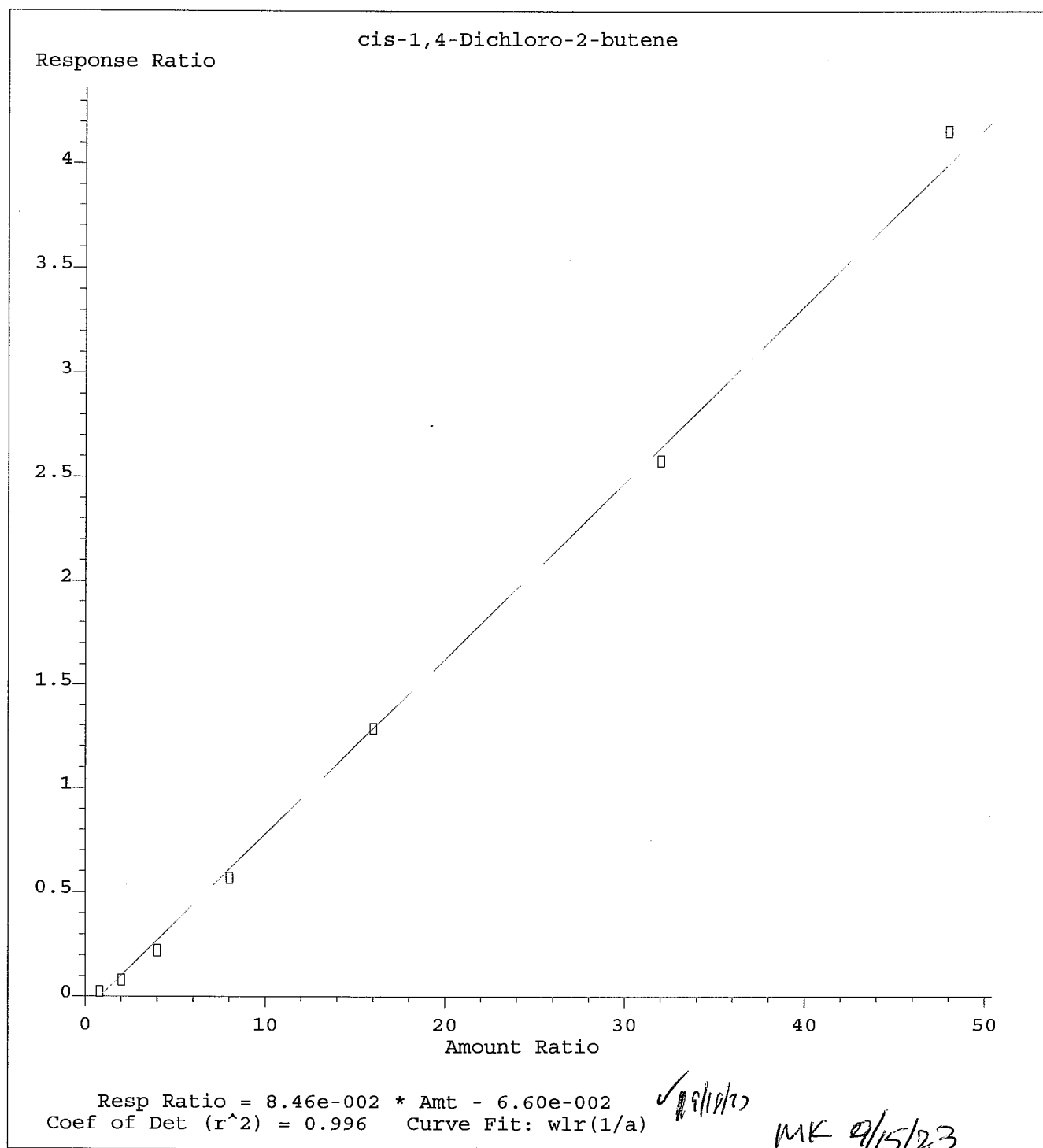
Method Name: J:\MS23\METHODS\091123MS23_8260.M
Calibration Table Last Updated: Fri Sep 15 15:26:27 2023



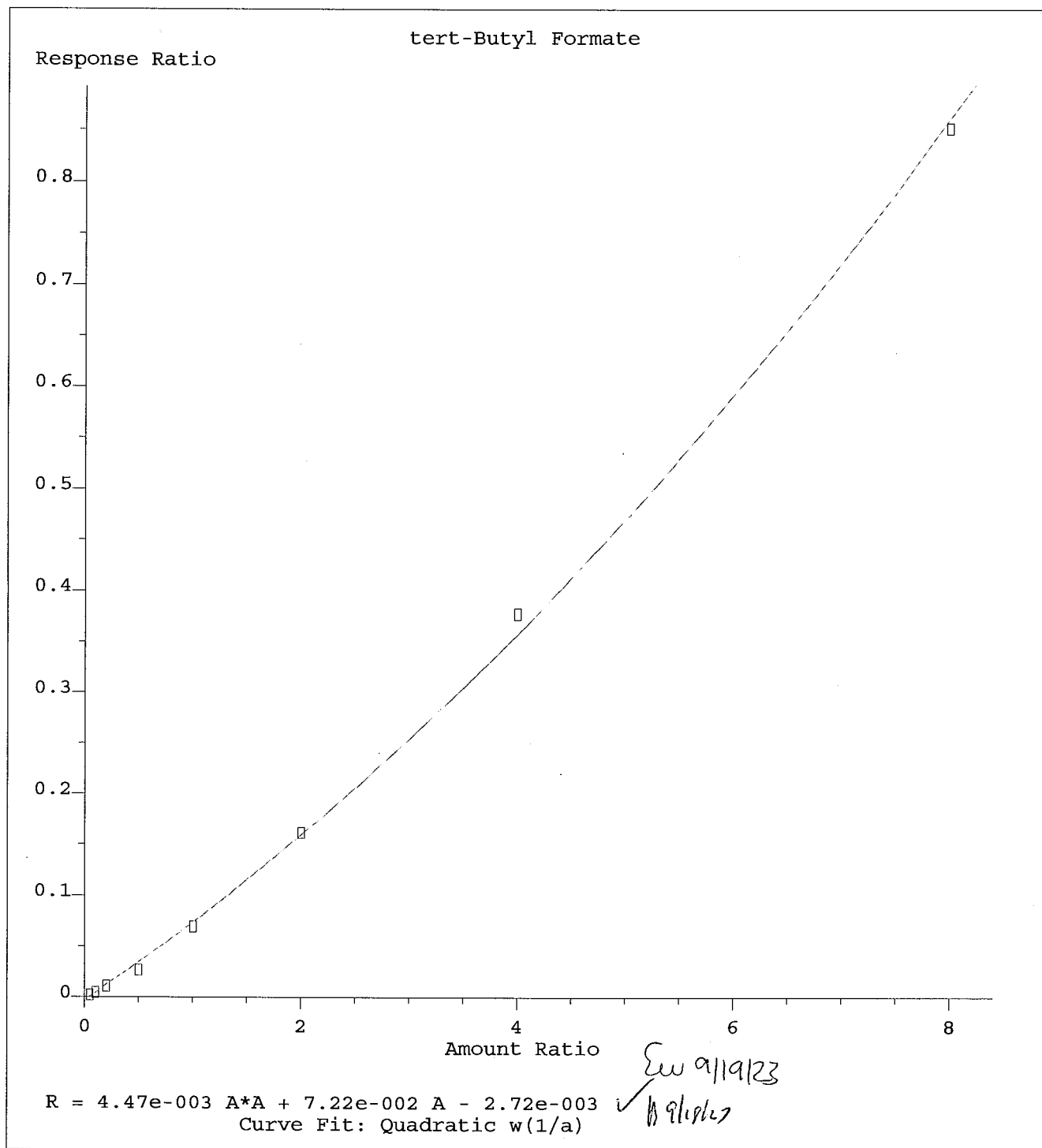
Method Name: J:\MS23\METHODS\091123MS23_8260.M
Calibration Table Last Updated: Mon Sep 18 16:31:39 2023



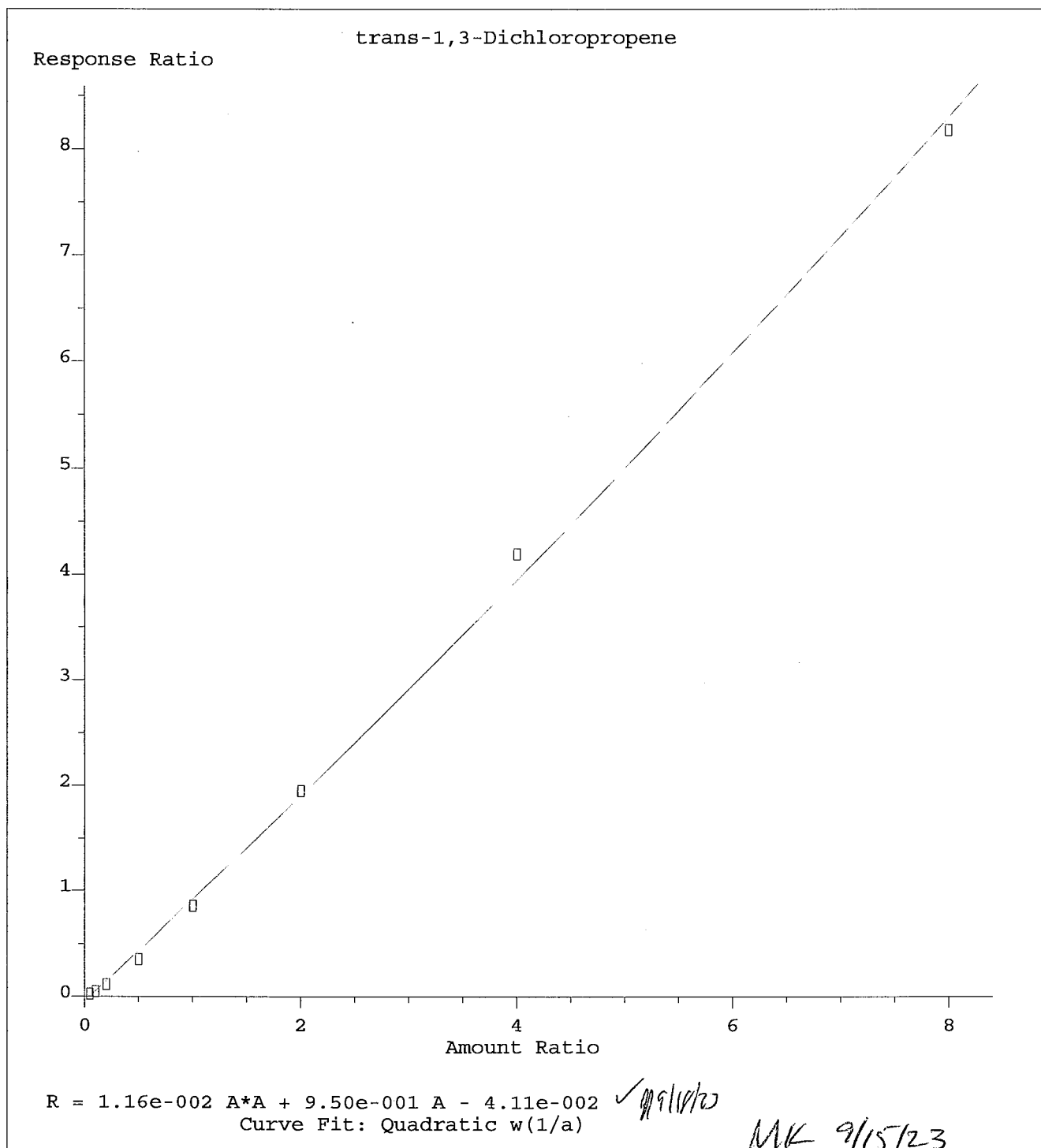
Method Name: J:\MS23\METHODS\091123MS23_8260.M
Calibration Table Last Updated: Fri Sep 15 15:26:27 2023



Method Name: J:\MS23\METHODS\091123MS23_8260.M
Calibration Table Last Updated: Fri Sep 15 15:26:27 2023



Method Name: J:\MS23\METHODS\091123MS23_8260.M
Calibration Table Last Updated: Mon Sep 18 16:29:35 2023



Method Name: J:\MS23\METHODS\091123MS23_8260.M
Calibration Table Last Updated: Fri Sep 15 15:26:27 2023

Data File : J:\MS23\DATA\091123\0908F008.D

Vial: 6

Acq On : 11 Sep 2023 1:58 pm

Operator: EW/GH/MK/OT

Sample : BFB

Inst : MS23

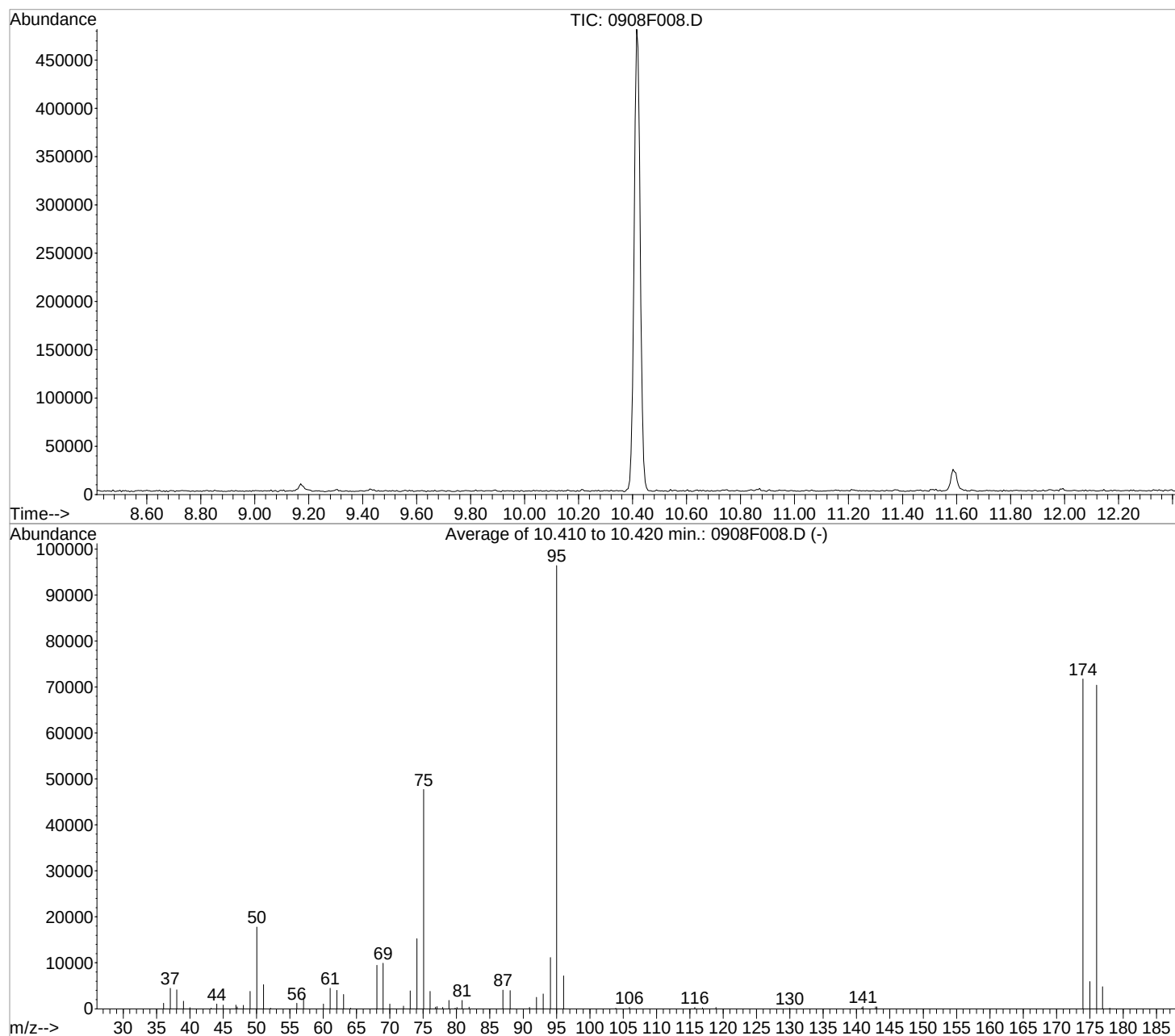
Misc :

Multiplr: 1.00

MS Integration Params: rteint.p

Method : J:\MS23\METHODS\0605233MS23_624_1.M (RTE Integrator)

Title : VOA MS23 EPA Method 624.1



AutoFind: Scans 1811, 1812, 1813; Background Corrected with Scan 1803

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.4	17767	PASS
75	95	30	60	49.5	47712	PASS
95	95	100	100	100.0	96381	PASS
96	95	5	9	7.4	7158	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	74.4	71722	PASS
175	174	5	9	8.3	5934	PASS
176	174	95	101	98.1	70392	PASS
177	176	5	9	6.9	4823	PASS

Data File : J:\MS23\DATA\091123\0908F010.D

Acq On : 11 Sep 2023 3:01 pm

Sample : IB

Misc :

Vial: 3

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Sep 12 10:36:44 2023

Quant Results File: 091123MS23_8260.RES

Quant Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Tue Sep 12 10:03:11 2023

Response via : Initial Calibration

DataAcq Meth : 8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	5.72	96	1172287	10.00	PPB	0.00
64) Chlorobenzene-d5	9.17	82	435937	10.00	PPB	0.00
85) 1,4-Dichlorobenzene-d4	11.59	152	328327	10.00	PPB	0.00

System Monitoring Compounds

43) Dibromofluoromethane	4.86	113	220365	9.22	PPB	0.00
Spiked Amount 10.000			Recovery	=	92.20%	
47) 1,2-Dichloroethane-d4	5.35	65	279227	10.47	PPB	0.00
Spiked Amount 10.000			Recovery	=	104.70%	
62) Toluene-d8	7.59	98	1068884	9.56	PPB	0.00
Spiked Amount 10.000			Recovery	=	95.60%	
84) 4-Bromofluorobenzene	10.42	95	333442	9.41	PPB	0.00
Spiked Amount 10.000			Recovery	=	94.10%	

Target Compounds

						Qvalue	
15) Carbon Disulfide	2.43	76	12684	0.14	PPB	96	< MRL
20) Methylene Chloride	2.76	84	5008	0.12	PPB	92	< MRL

Data File : J:\MS23\DATA\091123\0908F010.D

Acq On : 11 Sep 2023 3:01 pm

Sample : IB

Misc :

MS Integration Params: rteint.p

Quant Time: Sep 12 10:39 2023

Vial: 3

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

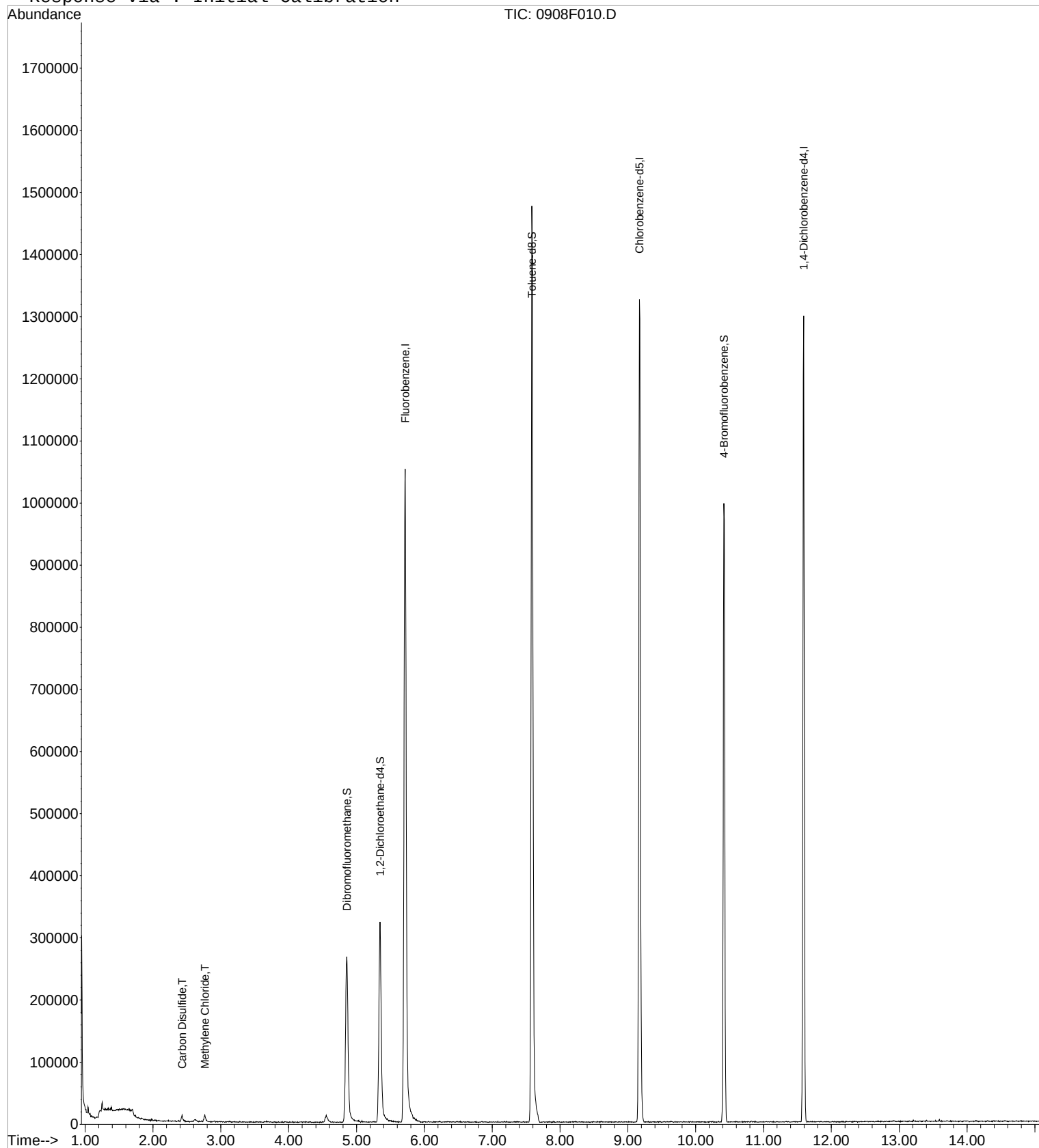
Quant Results File: 091123MS23_8260.RES

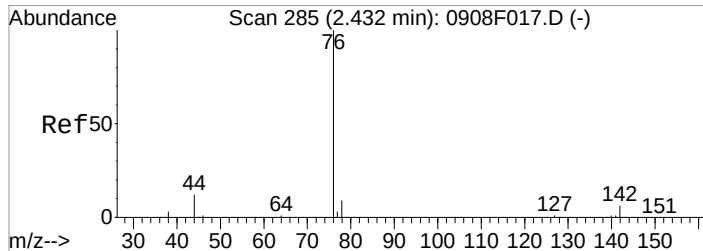
Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Tue Sep 12 10:03:11 2023

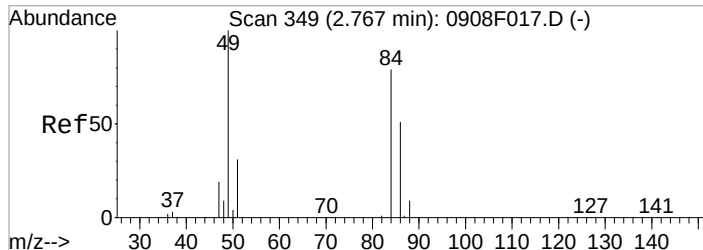
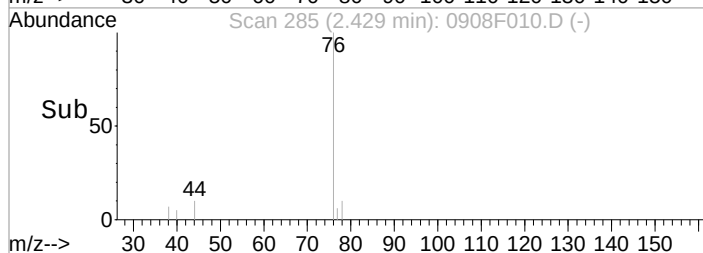
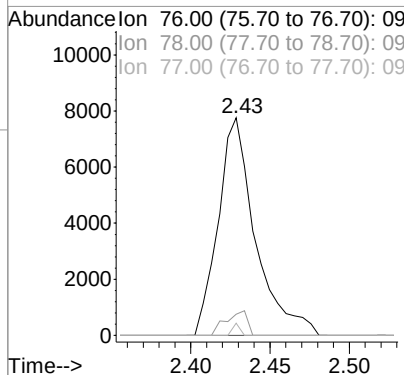
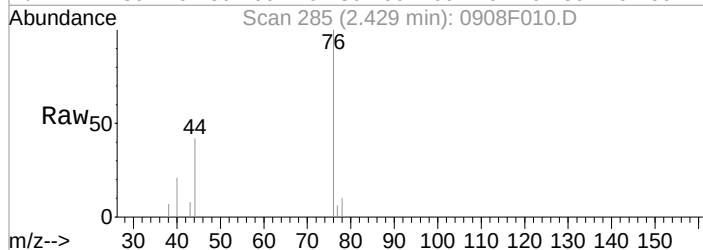
Response via : Initial Calibration





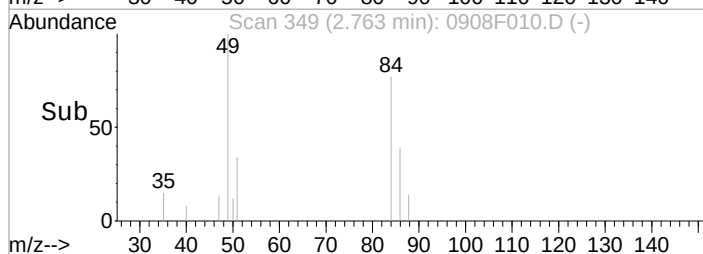
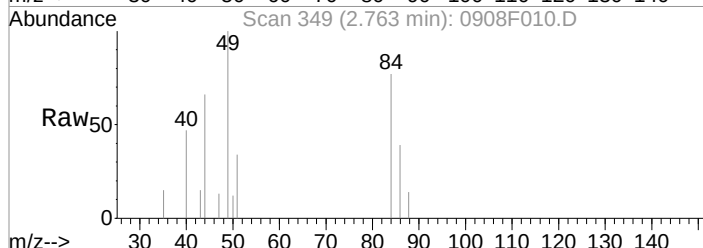
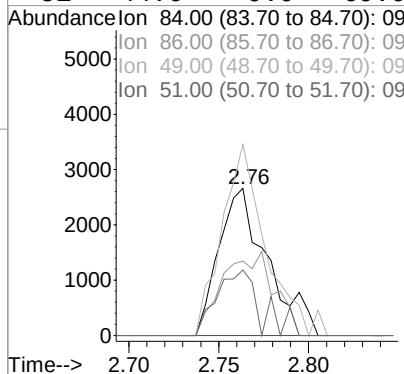
#15
Carbon Disulfide
Concen: 0.14 PPB
RT: 2.43 min Scan# 285
Delta R.T. -0.00 min
Lab File: 0908F010.D
Acq: 11 Sep 2023 3:01 pm

Tgt Ion	Ratio	Lower	Upper
76	100		
78	9.7	0.0	39.0
77	5.6	0.0	32.5



#20
Methylene Chloride
Concen: 0.12 PPB
RT: 2.76 min Scan# 349
Delta R.T. -0.00 min
Lab File: 0908F010.D
Acq: 11 Sep 2023 3:01 pm

Tgt Ion	Ratio	Lower	Upper
84	100		
86	50.7	34.8	94.8
49	129.8	96.5	156.5
51	44.6	9.0	69.0



Data File : J:\MS23\DATA\091123\0908F011.D

Acq On : 11 Sep 2023 3:25 pm

Sample : ICAL 0.1

Misc :

Vial: 4

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Sep 12 08:59:36 2023

Quant Results File: 091123MS23_8260.RES

Quant Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Tue Sep 12 08:58:41 2023

Response via : Initial Calibration

DataAcq Meth : 8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	5.72	96	1128930	10.00	PPB	0.00
64) Chlorobenzene-d5	9.17	82	420797	10.00	PPB	0.00
85) 1,4-Dichlorobenzene-d4	11.59	152	318769	10.00	PPB	0.00

System Monitoring Compounds

43) Dibromofluoromethane	4.86	113	213852	9.29	PPB	0.00
Spiked Amount 10.000			Recovery	=	92.90%	
47) 1,2-Dichloroethane-d4	5.34	65	270485	10.54	PPB	0.00
Spiked Amount 10.000			Recovery	=	105.40%	
62) Toluene-d8	7.59	98	1037990	9.67	PPB	0.00
Spiked Amount 10.000			Recovery	=	96.70%	
84) 4-Bromofluorobenzene	10.42	95	328242	9.62	PPB	0.00
Spiked Amount 10.000			Recovery	=	96.20%	

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	1.06	85	4118m	0.14	PPB	
3) Chloromethane	1.22	50	5056	0.13	PPB	87
4) Vinyl Chloride	1.28	62	3615	0.09	PPB	79
5) Bromomethane	1.54	96	2055	0.13	PPB	# 62
6) Chloroethane	1.62	64	6127	0.24	PPB	86
7) Dichlorofluoromethane	1.78	67	6078	0.11	PPB	88
8) Trichlorofluoromethane	1.79	101	5109	0.10	PPB	89
9) Ethyl Ether	2.04	59	2268	0.09	PPB	97
10) Acrolein	2.22	56	5712	1.71	PPB	90
11) Trichlorotrifluoroethane	2.22	151	1237	0.06	PPB	78
12) 1,1-Dichloroethene	2.24	96	2758	0.08	PPB	97
14) Iodomethane	2.40	142	12151	0.31	PPB	100
15) Carbon Disulfide	2.43	76	20143	0.24	PPB	97
16) 2-Propanol (Isopropyl Alco	2.49	45	2671	3.96	PPB	89
20) Methylene Chloride	2.76	84	12157	0.31	PPB	96
23) Methyl tert-Butyl Ether	2.98	73	13090	0.18	PPB	98
24) trans-1,2-Dichloroethene	2.99	96	3381	0.09	PPB	# 76
25) Hexane	3.20	57	2860	0.08	PPB	86
26) Diisopropyl Ether	3.50	45	9931	0.09	PPB	92
27) 1,1-Dichloroethane	3.50	63	6352	0.09	PPB	97
29) Chloroprene	3.56	53	14524	0.29	PPB	89
30) tert-Butyl Ethyl Ether	3.92	59	8331	0.09	PPB	79
31) 2,2-Dichloropropane	4.15	77	2998	0.07	PPB	82
32) cis-1,2-Dichloroethene	4.20	96	4059	0.10	PPB	# 74
33) 2-Butanone	4.28	72	3442	1.64	PPB	# 42
36) Methacrylonitrile	4.59	67	3198	0.35	PPB	# 43
37) Bromochloromethane	4.51	128	1183	0.07	PPB	# 76
38) Tetrahydrofuran	4.55	71	3138m	1.24	PPB	
39) Chloroform	4.63	83	5129	0.09	PPB	90
41) Cyclohexane	4.74	56	6002	0.11	PPB	# 65
42) 1,1,1-Trichloroethane	4.80	97	2767m	0.06	PPB	
45) 1,1-Dichloropropene	5.03	75	4396	0.09	PPB	84
48) Benzene	5.30	78	16314	0.10	PPB	76
51) Trichloroethene	6.16	95	3876	0.11	PPB	# 75
52) Methylcyclohexane	6.28	83	3523	0.09	PPB	79
53) 1,2-Dichloropropane	6.50	63	3862	0.10	PPB	81
54) Dibromomethane	6.64	93	1054	0.06	PPB	82
60) cis-1,3-Dichloropropene	7.35	75	3195	0.06	PPB	92
63) Toluene	7.66	92	9907	0.10	PPB	93
65) n-Octane	7.75	85	1383	0.10	PPB	# 63
66) trans-1,3-Dichloropropene	8.02	75	1809	0.05	PPB	61
67) Ethyl methacrylate	8.09	69	1236	0.05	PPB	73
68) 1,1,2-Trichloroethane	8.21	83	2097	0.10	PPB	90

(#)=qualifier out of range (m)=manual integration

0908F011.D 091123MS23_8260.M

Fri Sep 15 09:12:27 2023

3508 of 3623

Data File : J:\MS23\DATA\091123\0908F011.D

Acq On : 11 Sep 2023 3:25 pm

Sample : ICAL 0.1

Misc :

Vial: 4

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Sep 12 08:59:36 2023

Quant Results File: 091123MS23_8260.RES

Quant Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Tue Sep 12 08:58:41 2023

Response via : Initial Calibration

DataAcq Meth : 8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
69) Tetrachloroethene	8.22	164	2726	0.11	PPB	86
70) 2-Hexanone	8.48	57	2481	1.09	PPB	# 42
71) 1,3-Dichloropropane	8.39	76	4794	0.10	PPB	91
73) 1,2-Dibromoethane (EDB)	8.70	107	1938	0.08	PPB	91
74) 1-Chlorohexane	9.18	91	3669	0.12	PPB	72
75) Chlorobenzene	9.20	112	9573	0.10	PPB	93
76) Ethylbenzene	9.30	106	4093	0.09	PPB	97
77) 1,1,1,2-Tetrachloroethane	9.31	131	1727	0.07	PPB	# 68
78) m,p-Xylenes	9.43	106	10466	0.18	PPB	99
79) o-Xylene	9.84	106	4738	0.09	PPB	84
80) Styrene	9.87	103	3002	0.07	PPB	93
82) Isopropylbenzene	10.22	105	9322	0.08	PPB	94
88) Bromobenzene	10.55	156	2899	0.09	PPB	# 65
89) n-Propylbenzene	10.64	91	10768	0.08	PPB	97
90) 1,2,3-Trichloropropane	10.66	110	623	0.09	PPB	# 28
91) 2-Chlorotoluene	10.74	91	8407	0.10	PPB	96
92) 1,3,5-Trimethylbenzene	10.84	105	6869	0.08	PPB	96
93) 4-Chlorotoluene	10.87	91	8633	0.09	PPB	95
94) tert-Butylbenzene	11.16	119	5592	0.08	PPB	97
95) 1,2,4-Trimethylbenzene	11.22	105	6824	0.07	PPB	93
96) sec-Butylbenzene	11.38	105	6355	0.07	PPB	91
97) p-Isopropyltoluene	11.53	119	5680	0.07	PPB	96
98) 1,3-Dichlorobenzene	11.52	146	5221	0.11	PPB	96
99) 1,4-Dichlorobenzene	11.62	146	5533	0.11	PPB	95
100) n-Butylbenzene	11.95	91	4241	0.07	PPB	86
101) 1,2-Dichlorobenzene	11.99	146	4491	0.10	PPB	84
103) 1,3,5-Trichlorobenzene	12.76	180	2302	0.11	PPB	91
104) 1,2,4-Trichlorobenzene	13.21	180	1780	0.13	PPB	81
105) Hexachlorobutadiene	13.29	225	820	0.10	PPB	98
107) 1,2,3-Trichlorobenzene	13.59	180	1077	0.15	PPB	# 85

(#) = qualifier out of range (m) = manual integration

0908F011.D 091123MS23_8260.M

Fri Sep 15 09:12:27 2023

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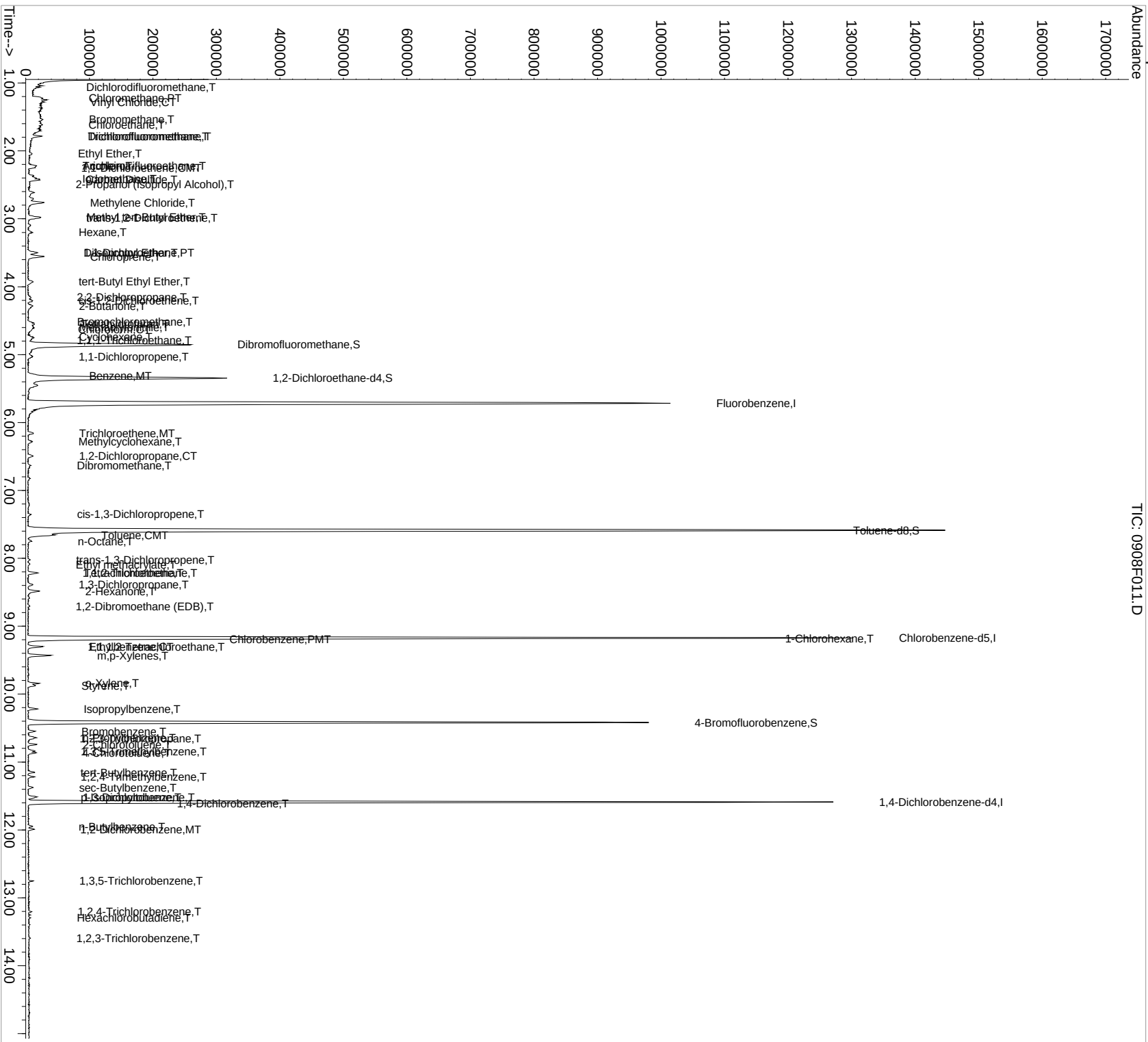
09/12/23

Data File : J:\MS23\DATA\091123\0908F011.D
Acq On : 11 Sep 2023 3:25 pm
Sample : ICAL 0.1
Misc :
MS Integration Params: rteint.p
Quant Time: Sep 15 8:27 2023

Vial: 4
Operator: EW/GH/MK/OT
Inst : MS23
Multiplr: 1.00

Quant Results File: 091123MS23_8260.RES

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)
Title : VOA MS23 EPA Method 8260C
Last Update : Fri Sep 15 08:47:04 2023
Response via : Initial Calibration



Quantitation Report (Qedit)

1st  09/15/232nd  09/15/23

Data File : J:\MS23\DATA\091123\0908F011.D

Acq On : 11 Sep 2023 3:25 pm

Sample : ICAL 0.1

Misc :

Vial: 4

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Sep 12 9:10 2023

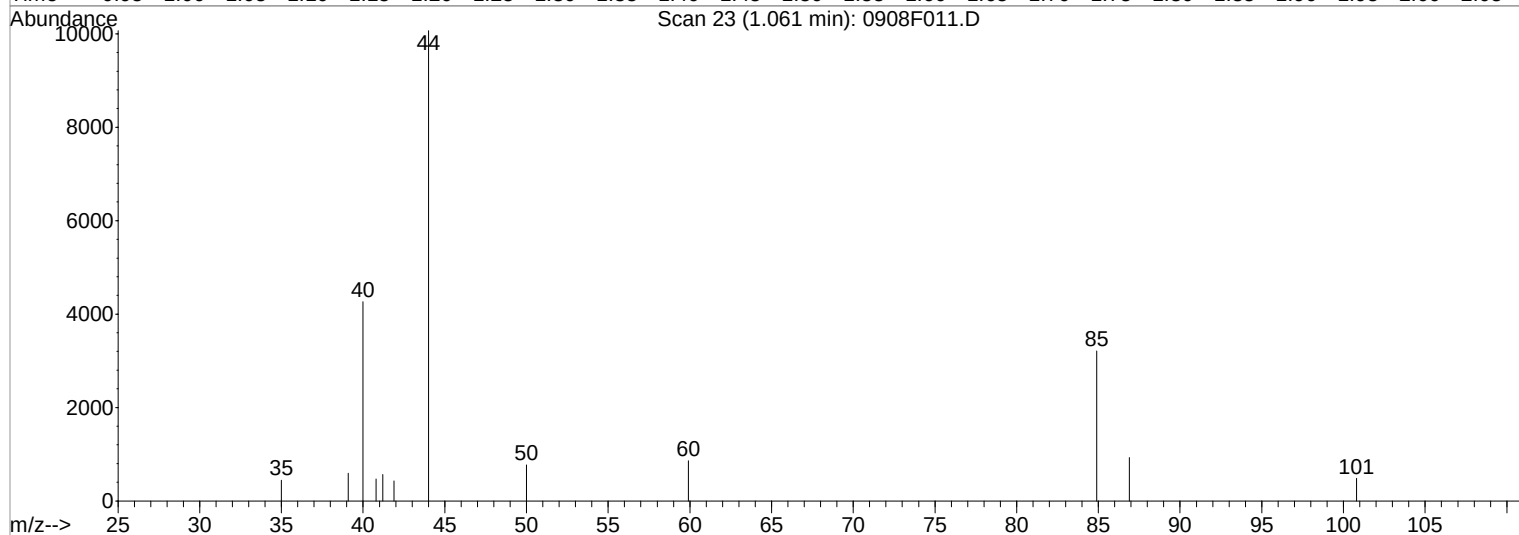
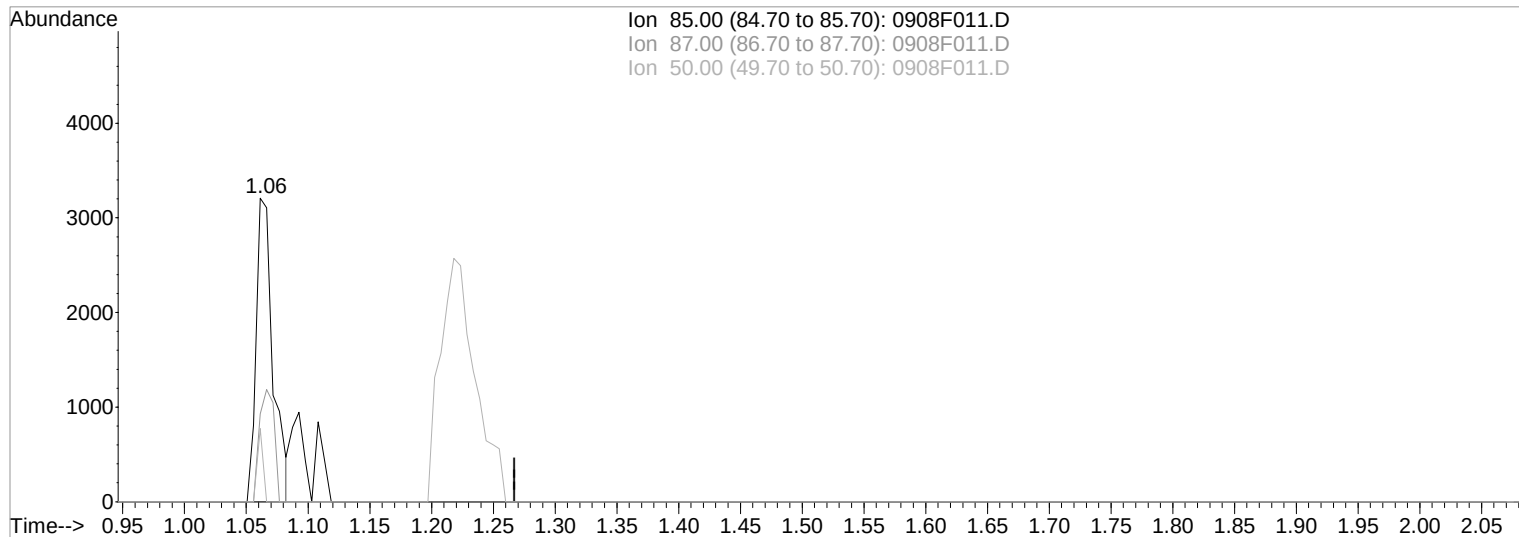
Quant Results File: temp.res

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Tue Sep 12 12:24:38 2023

Response via : Multiple Level Calibration



TIC: 0908F011.D

(2) Dichlorodifluoromethane (T)

Manual Integration:

1.06min 0.10PPB

Before

response 3035

Ion	Exp%	Act%
85.00	100	100
87.00	33.20	29.00
50.00	11.40	24.10
0.00	0.00	0.00

09/15/23

Data File : J:\MS23\DATA\091123\0908F011.D

Acq On : 11 Sep 2023 3:25 pm

Sample : ICAL 0.1

Misc :

Vial: 4

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Sep 15 8:27 2023

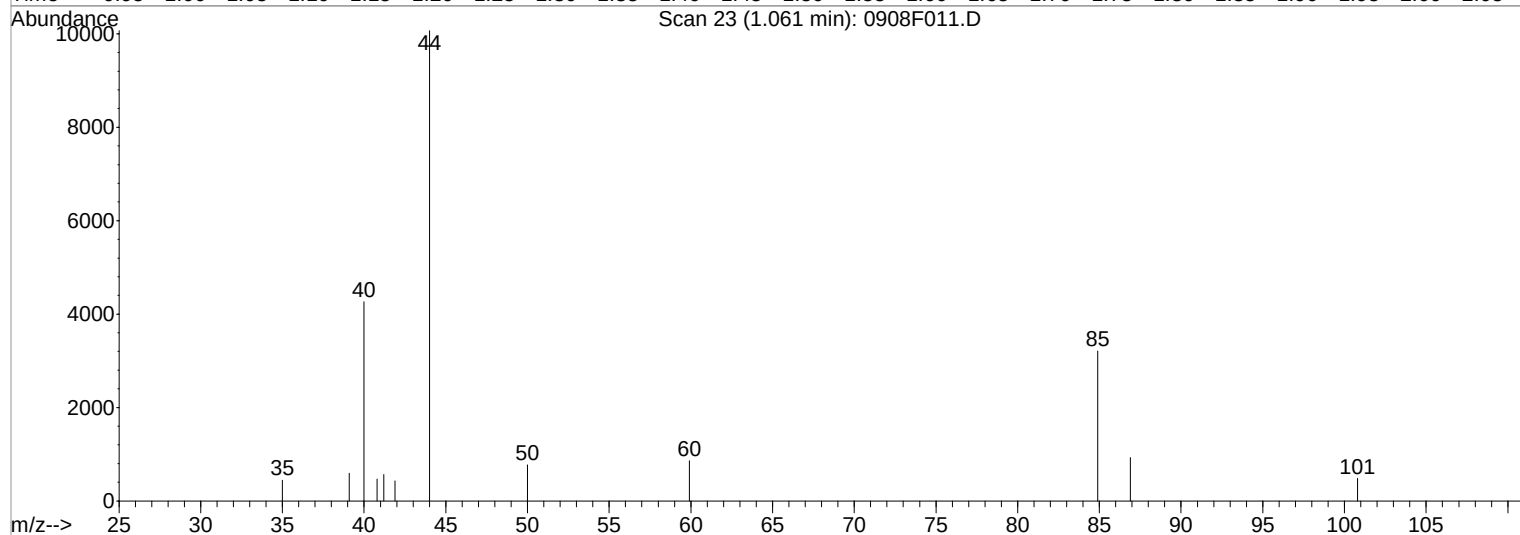
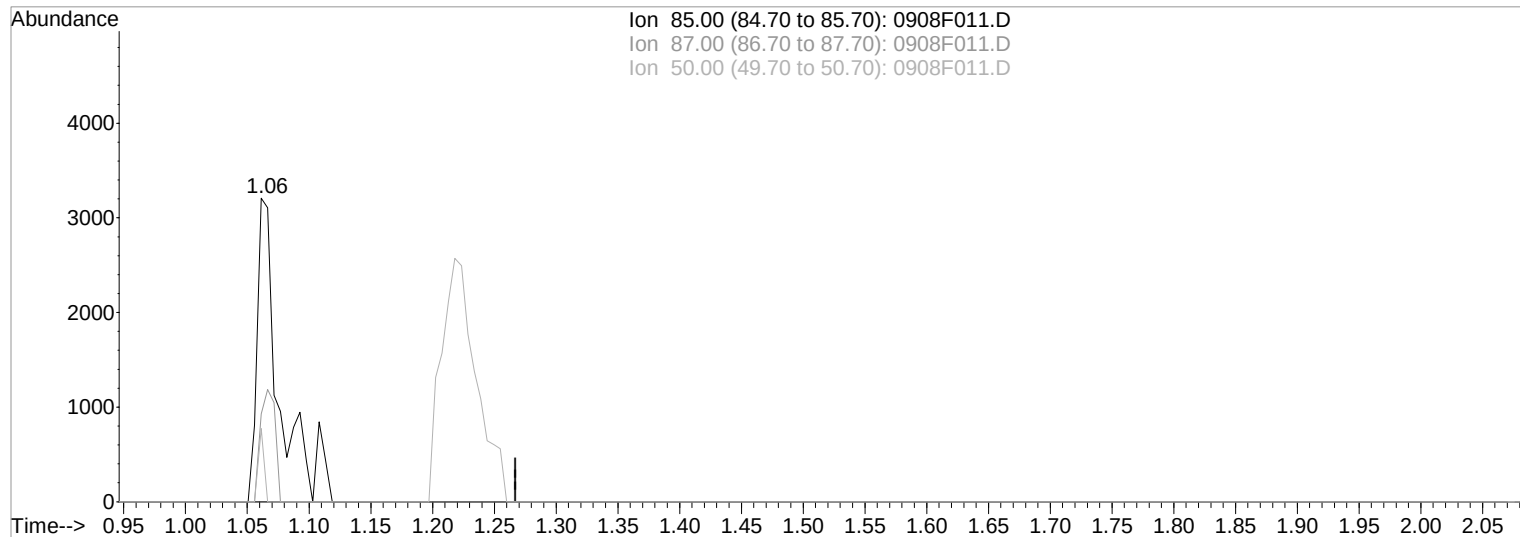
Quant Results File: temp.res

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Tue Sep 12 12:24:38 2023

Response via : Multiple Level Calibration



TIC: 0908F011.D

(2) Dichlorodifluoromethane (T)

Manual Integration:

1.06min 0.14PPB m

After

response 4118

Split peak

09/15/23

Ion	Exp%	Act%
85.00	100	100
87.00	33.20	29.00
50.00	11.40	24.10
0.00	0.00	0.00

Quantitation Report (Qedit)

1st  09/12/232nd  09/15/23

Data File : J:\MS23\DATA\091123\0908F011.D

Acq On : 11 Sep 2023 3:25 pm

Sample : ICAL 0.1

Misc :

Vial: 4

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Sep 12 9:02 2023

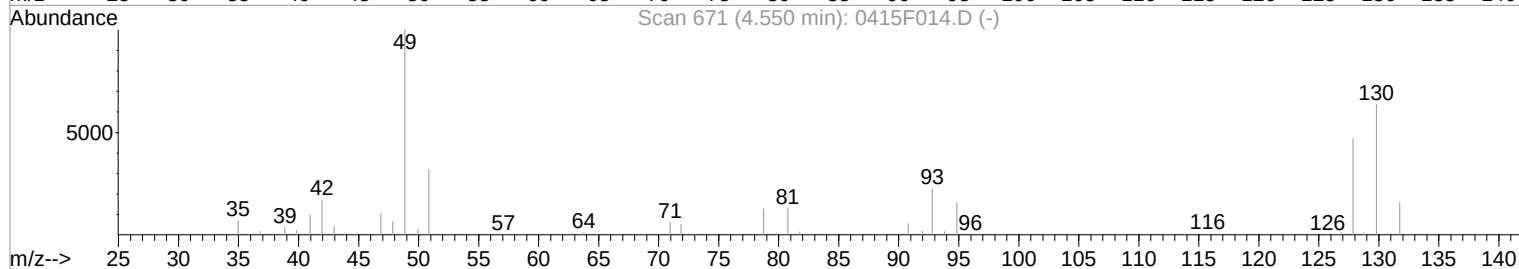
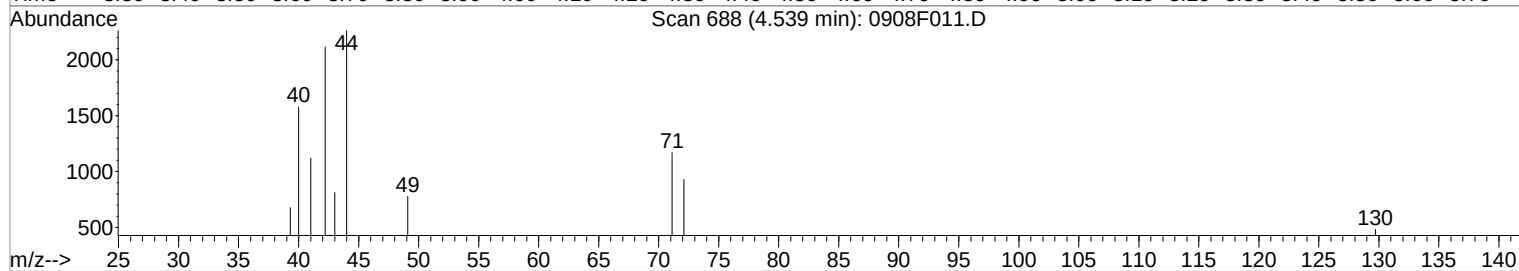
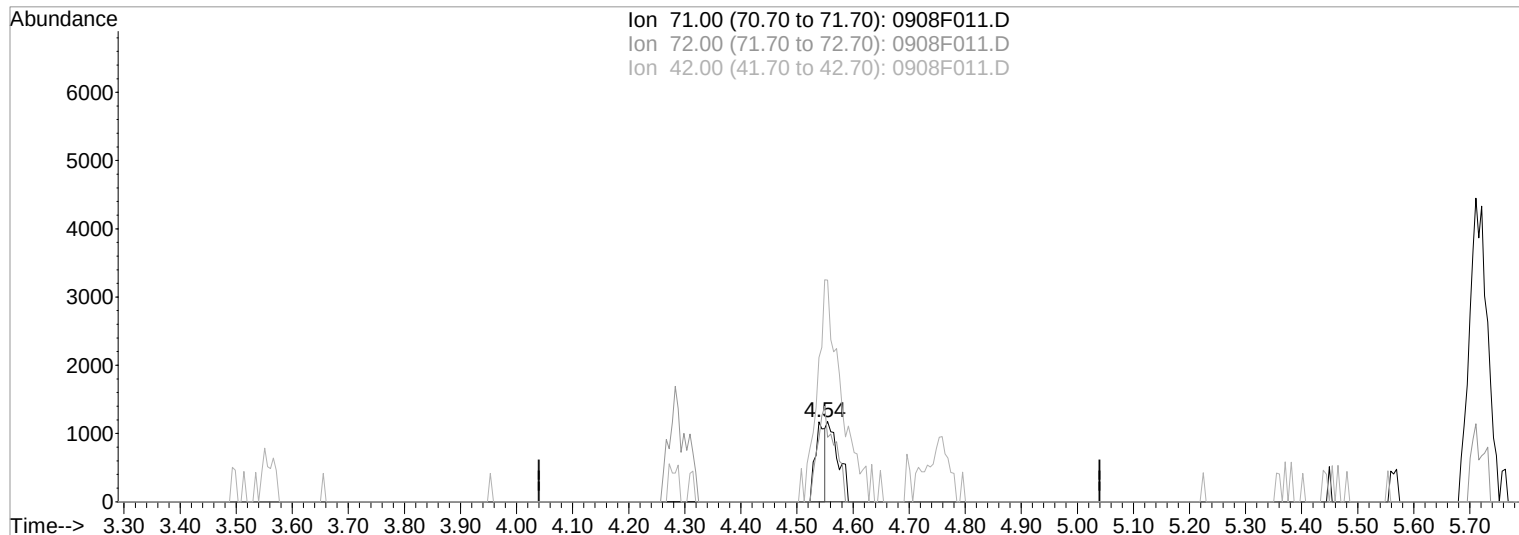
Quant Results File: temp.res

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Tue Sep 12 08:58:41 2023

Response via : Single Level Calibration



TIC: 0908F011.D

(38) Tetrahydrofuran (T)

Manual Integration:

4.54min 0.57PPB

Before

response 1435

Ion	Exp%	Act%
-----	------	------

09/12/23

71.00	100	100
-------	-----	-----

72.00	91.50	79.38
-------	-------	-------

42.00	234.50	132.93#
-------	--------	---------

0.00	0.00	0.00
------	------	------

Quantitation Report (Qedit)

1st  09/12/232nd  09/15/23

Data File : J:\MS23\DATA\091123\0908F011.D

Acq On : 11 Sep 2023 3:25 pm

Sample : ICAL 0.1

Misc :

Vial: 4

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Sep 12 9:02 2023

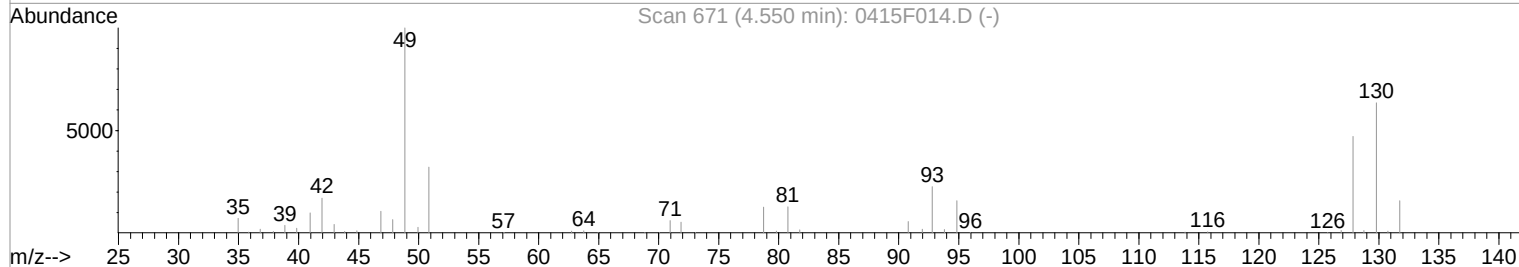
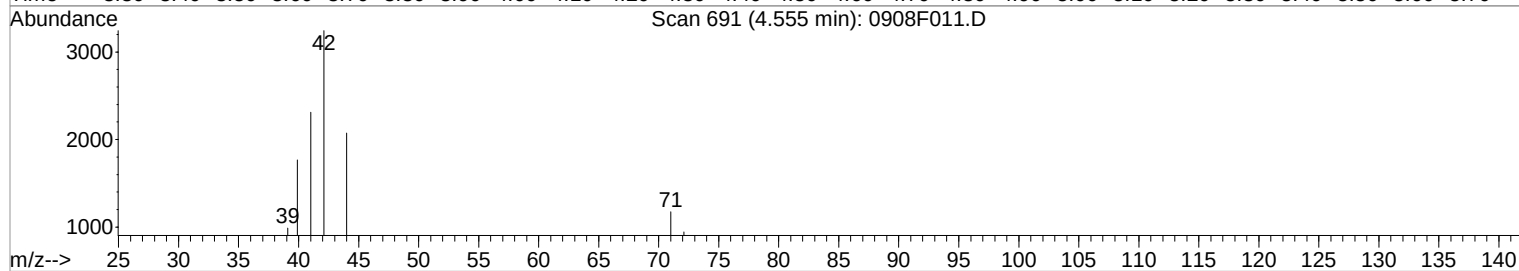
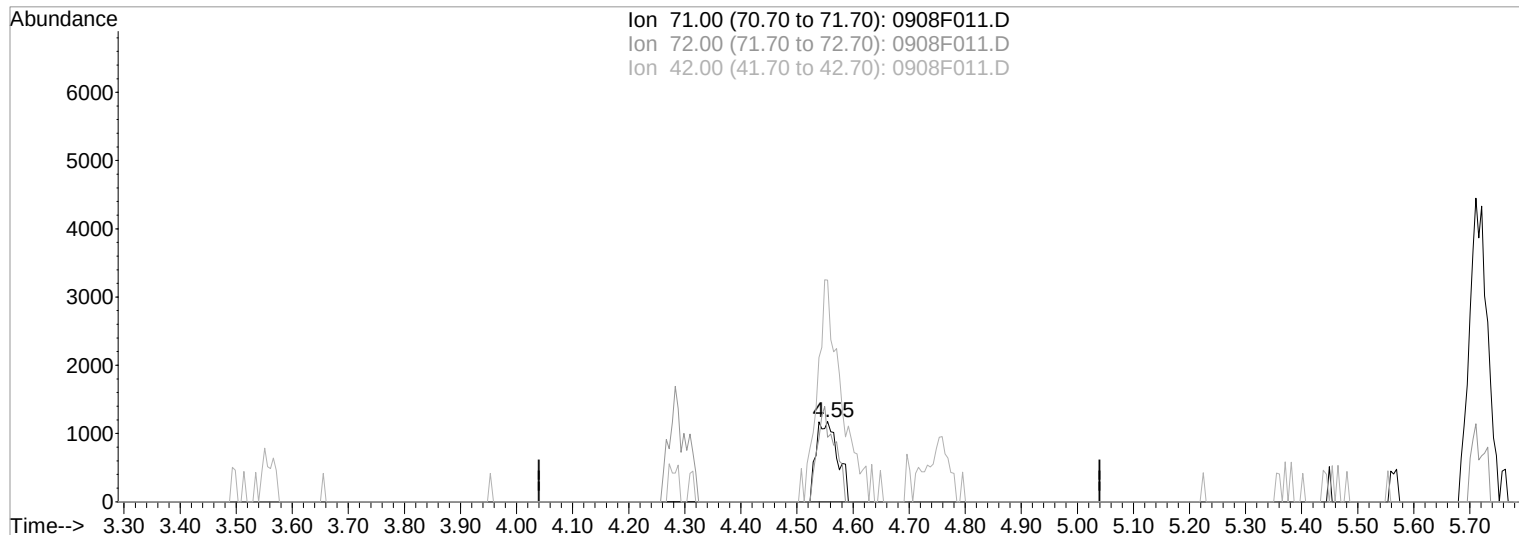
Quant Results File: temp.res

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Tue Sep 12 08:58:41 2023

Response via : Single Level Calibration



TIC: 0908F011.D

(38) Tetrahydrofuran (T)

Manual Integration:

4.55min 1.24PPB m

After

response 3138

Split peak

Ion	Exp%	Act%
-----	------	------

09/12/23

71.00	100	100
-------	-----	-----

72.00	91.50	80.41
-------	-------	-------

42.00	234.50	276.49#
-------	--------	---------

0.00	0.00	0.00
------	------	------

Quantitation Report (Qedit)

1st  09/12/23
2nd  09/15/23

Data File : J:\MS23\DATA\091123\0908F011.D

Acq On : 11 Sep 2023 3:25 pm

Sample : ICAL 0.1

Misc :

MS Integration Params: rteint.p

Quant Time: Sep 12 9:02 2023

Vial: 4

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

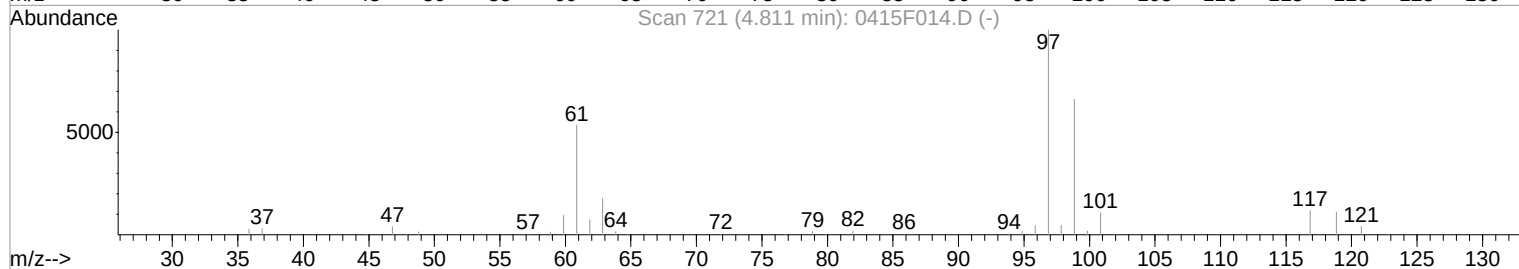
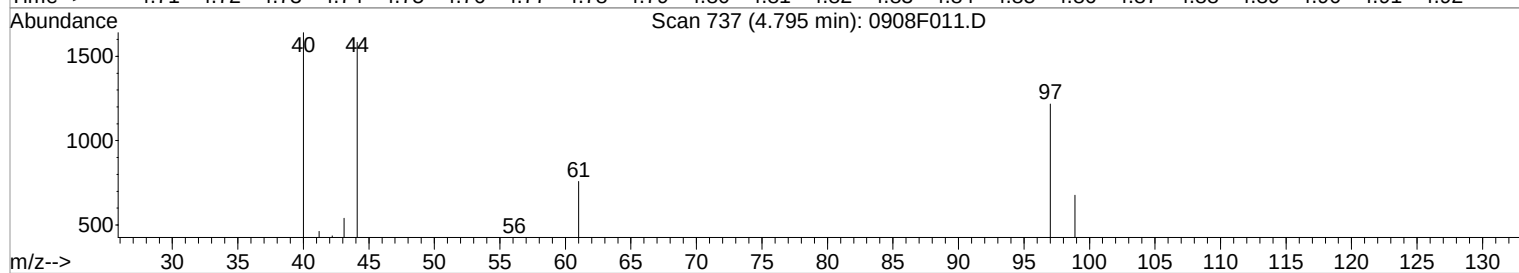
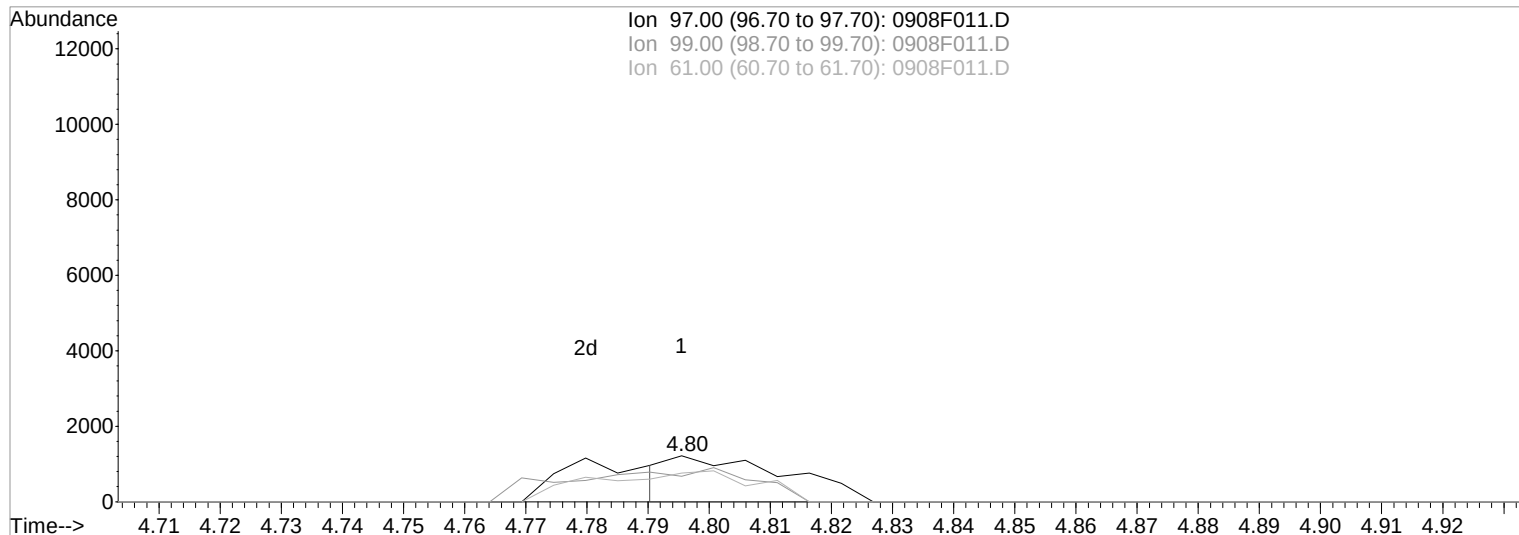
Quant Results File: temp.res

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Tue Sep 12 08:58:41 2023

Response via : Multiple Level Calibration



TIC: 0908F011.D

(42) 1,1,1-Trichloroethane (T)

Manual Integration:

4.80min 0.03PPB

Before

response 1628

Ion	Exp%	Act%
97.00	100	100
99.00	62.30	55.58
61.00	46.70	62.23
0.00	0.00	0.00

09/12/23

Quantitation Report (Qedit)

1st *EW* 09/12/23
 2nd *Q* 09/15/23

Data File : J:\MS23\DATA\091123\0908F011.D

Acq On : 11 Sep 2023 3:25 pm

Sample : ICAL 0.1

Misc :

Vial: 4

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Sep 12 9:03 2023

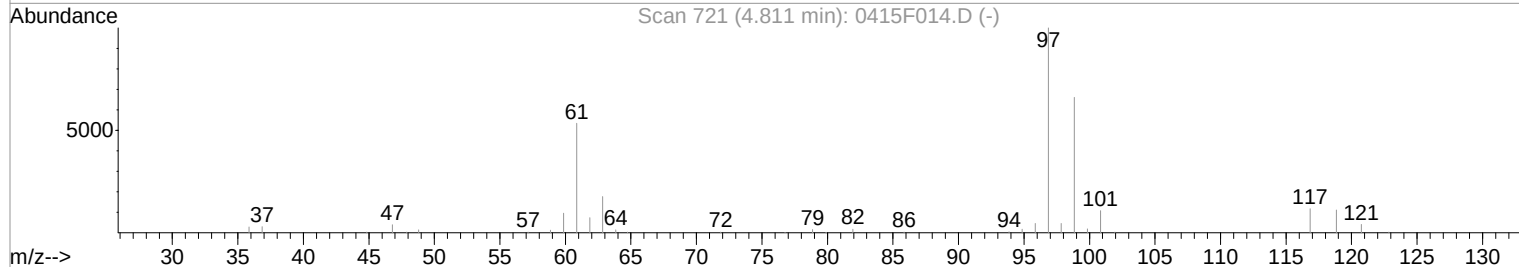
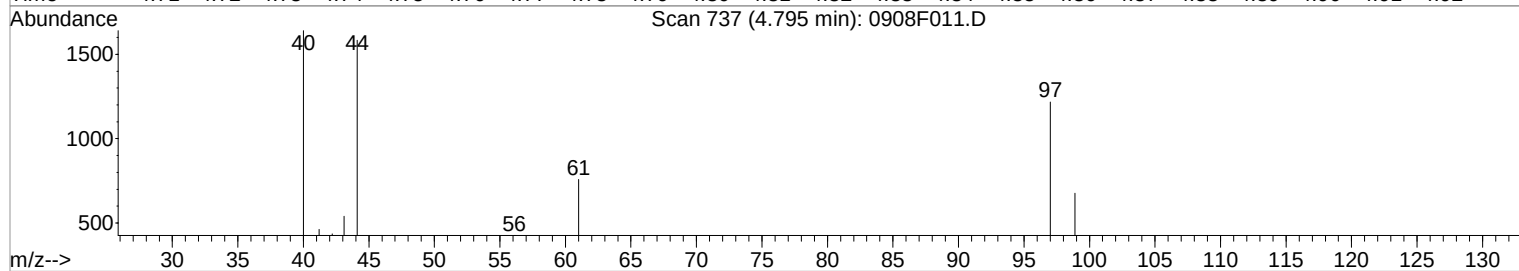
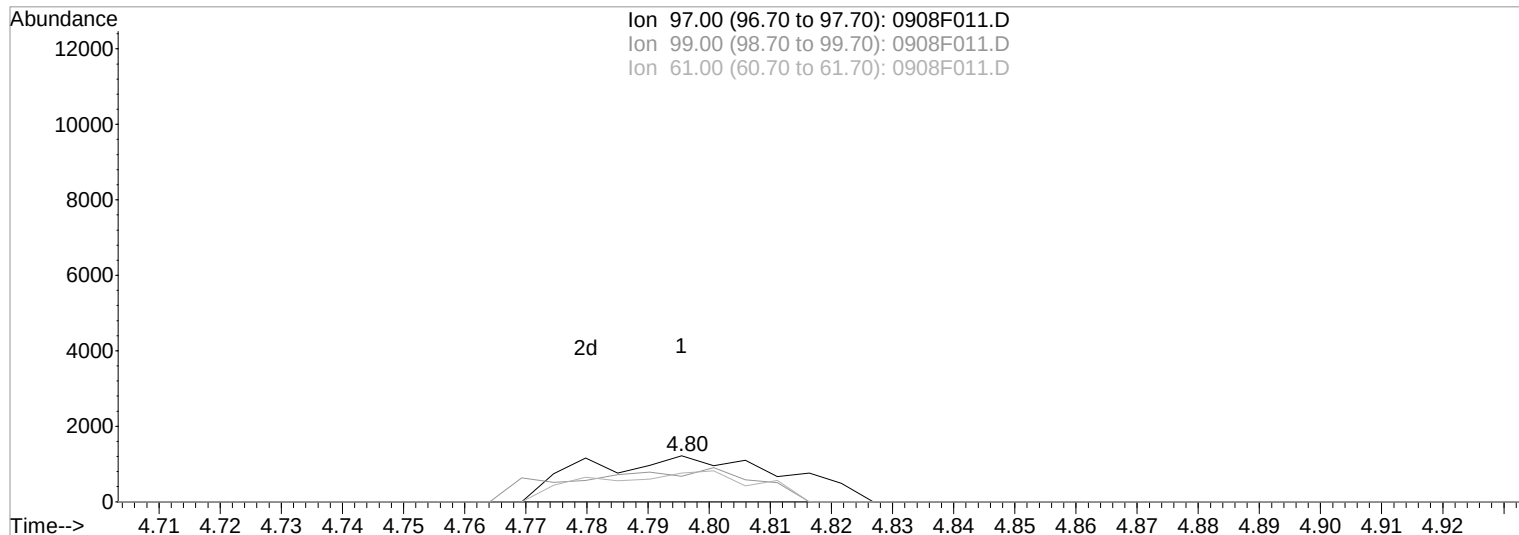
Quant Results File: temp.res

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Tue Sep 12 08:58:41 2023

Response via : Multiple Level Calibration



TIC: 0908F011.D

(42) 1,1,1-Trichloroethane (T)

Manual Integration:

4.80min 0.06PPB m

After

response 2767

Split peak

09/12/23

Ion	Exp%	Act%
97.00	100	100
99.00	62.30	55.58
61.00	46.70	62.23
0.00	0.00	0.00

Data File : J:\MS23\DATA\091123\0908F012.D

Acq On : 11 Sep 2023 3:49 pm

Sample : ICAL 0.2

Misc :

Vial: 5

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Sep 12 08:59:38 2023

Quant Results File: 091123MS23_8260.RES

Quant Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Tue Sep 12 08:58:41 2023

Response via : Initial Calibration

DataAcq Meth : 8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	5.72	96	1161489	10.00	PPB	0.00
64) Chlorobenzene-d5	9.17	82	426043	10.00	PPB	0.00
85) 1,4-Dichlorobenzene-d4	11.59	152	323303	10.00	PPB	0.00

System Monitoring Compounds

43) Dibromofluoromethane	4.86	113	219230	9.26	PPB	0.00
Spiked Amount 10.000			Recovery	=	92.60%	
47) 1,2-Dichloroethane-d4	5.34	65	276777	10.48	PPB	0.00
Spiked Amount 10.000			Recovery	=	104.80%	
62) Toluene-d8	7.59	98	1072989	9.71	PPB	0.00
Spiked Amount 10.000			Recovery	=	97.10%	
84) 4-Bromofluorobenzene	10.42	95	336250	9.73	PPB	0.00
Spiked Amount 10.000			Recovery	=	97.30%	

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	1.07	85	8016m	0.27	PPB	
3) Chloromethane	1.23	50	8494	0.21	PPB	90
4) Vinyl Chloride	1.28	62	8556	0.21	PPB	97
5) Bromomethane	1.54	96	3399	0.20	PPB	77
6) Chloroethane	1.61	64	6681m	0.26	PPB	
7) Dichlorofluoromethane	1.78	67	12486	0.22	PPB	95
8) Trichlorofluoromethane	1.79	101	10313	0.19	PPB	92
9) Ethyl Ether	2.04	59	4369	0.17	PPB	96
10) Acrolein	2.22	56	11416	3.32	PPB	93
11) Trichlorotrifluoroethane	2.22	151	3706	0.19	PPB	92
12) 1,1-Dichloroethene	2.24	96	6526	0.18	PPB	96
14) Iodomethane	2.40	142	23116	0.58	PPB	91
15) Carbon Disulfide	2.43	76	27684	0.32	PPB	96
16) 2-Propanol (Isopropyl Alco	2.50	45	4894	7.06	PPB	86
17) 3-Chloro-1-propene	2.61	76	2670	0.15	PPB	# 79
19) Acetonitrile	2.70	40	10038	7.98	PPB	90
20) Methylene Chloride	2.76	84	15644	0.38	PPB	93
21) tert-Butyl Alcohol	2.90	59	889	0.88	PPB	72
22) Acrylonitrile	3.10	53	5276	0.70	PPB	93
23) Methyl tert-Butyl Ether	2.98	73	25961	0.34	PPB	93
24) trans-1,2-Dichloroethene	2.99	96	7100	0.18	PPB	82
25) Hexane	3.19	57	6584	0.19	PPB	86
26) Diisopropyl Ether	3.50	45	19068	0.17	PPB	93
27) 1,1-Dichloroethane	3.50	63	12673	0.17	PPB	85
28) Vinyl Acetate	3.57	86	1163	0.20	PPB	# 1
29) Chloroprene	3.56	53	32456	0.62	PPB	94
30) tert-Butyl Ethyl Ether	3.93	59	14987	0.16	PPB	92
31) 2,2-Dichloropropane	4.16	77	6355	0.15	PPB	95
32) cis-1,2-Dichloroethene	4.20	96	8076	0.19	PPB	96
33) 2-Butanone	4.28	72	7036	3.27	PPB	92
36) Methacrylonitrile	4.60	67	5410	0.58	PPB	# 69
37) Bromochloromethane	4.52	128	3011	0.17	PPB	92
38) Tetrahydrofuran	4.55	71	3152	1.21	PPB	# 75
39) Chloroform	4.62	83	10259	0.17	PPB	89
40) tert-Butyl Formate	4.66	59	680	0.08	PPB	80
41) Cyclohexane	4.76	56	10728	0.19	PPB	89
42) 1,1,1-Trichloroethane	4.79	97	6860	0.14	PPB	85
44) Carbon Tetrachloride	4.96	117	4343	0.12	PPB	84
45) 1,1-Dichloropropene	5.03	75	9100	0.18	PPB	94
46) Isobutyl Alcohol	5.35	43	4268	8.22	PPB	92
48) Benzene	5.30	78	32238	0.19	PPB	94
49) 1,2-Dichloroethane	5.45	62	9476	0.21	PPB	93
50) tert-Amyl Methyl Ether	5.45	55	5134	0.21	PPB	# 54

(#)=qualifier out of range (m)=manual integration

0908F012.D 091123MS23_8260.M

Fri Sep 15 09:12:29 2023

3515 of 3623

Data File : J:\MS23\DATA\091123\0908F012.D

Acq On : 11 Sep 2023 3:49 pm

Sample : ICAL 0.2

Misc :

Vial: 5

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Sep 12 08:59:38 2023

Quant Results File: 091123MS23_8260.RES

Quant Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Tue Sep 12 08:58:41 2023

Response via : Initial Calibration

DataAcq Meth : 8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
51) Trichloroethene	6.16	95	7432	0.20	PPB	95
52) Methylcyclohexane	6.29	83	6624	0.16	PPB	93
53) 1,2-Dichloropropane	6.50	63	7880	0.20	PPB	94
54) Dibromomethane	6.63	93	2956	0.17	PPB	96
55) Methyl methacrylate	6.67	69	1933	0.12	PPB	89
60) cis-1,3-Dichloropropene	7.36	75	6150	0.12	PPB	99
61) 4-Methyl-2-pentanone (MIBK)	7.56	58	31598	4.27	PPB	# 38
63) Toluene	7.66	92	19880	0.20	PPB	93
65) n-Octane	7.75	85	2262	0.16	PPB	97
66) trans-1,3-Dichloropropene	8.02	75	3922	0.11	PPB	93
67) Ethyl methacrylate	8.09	69	3396	0.12	PPB	74
68) 1,1,2-Trichloroethane	8.21	83	4495	0.20	PPB	# 82
69) Tetrachloroethene	8.22	164	4475	0.18	PPB	# 81
70) 2-Hexanone	8.48	57	7411	3.22	PPB	# 83
71) 1,3-Dichloropropane	8.39	76	9361	0.19	PPB	95
72) Dibromochloromethane	8.59	129	2417	0.11	PPB	85
73) 1,2-Dibromoethane (EDB)	8.70	107	3820	0.16	PPB	86
74) 1-Chlorohexane	9.19	91	6797	0.21	PPB	87
75) Chlorobenzene	9.20	112	18835	0.20	PPB	94
76) Ethylbenzene	9.30	106	8362	0.17	PPB	96
77) 1,1,1,2-Tetrachloroethane	9.31	131	3532	0.14	PPB	76
78) m,p-Xylenes	9.43	106	20555	0.35	PPB	98
79) o-Xylene	9.85	106	9728	0.17	PPB	# 81
80) Styrene	9.87	103	6278	0.14	PPB	96
82) Isopropylbenzene	10.21	105	18291	0.15	PPB	98
86) 1,1,2,2-Tetrachloroethane	10.62	83	3827	0.17	PPB	90
88) Bromobenzene	10.55	156	5896	0.19	PPB	95
89) n-Propylbenzene	10.64	91	21770	0.17	PPB	99
90) 1,2,3-Trichloropropane	10.66	110	992	0.14	PPB	# 47
91) 2-Chlorotoluene	10.74	91	15816	0.19	PPB	97
92) 1,3,5-Trimethylbenzene	10.84	105	13362	0.15	PPB	89
93) 4-Chlorotoluene	10.87	91	17903	0.18	PPB	97
94) tert-Butylbenzene	11.16	119	11449	0.16	PPB	99
95) 1,2,4-Trimethylbenzene	11.22	105	13373	0.14	PPB	94
96) sec-Butylbenzene	11.38	105	13778	0.15	PPB	97
97) p-Isopropyltoluene	11.53	119	10868	0.13	PPB	93
98) 1,3-Dichlorobenzene	11.51	146	9229	0.18	PPB	84
99) 1,4-Dichlorobenzene	11.62	146	11174	0.22	PPB	95
100) n-Butylbenzene	11.94	91	9052	0.14	PPB	98
101) 1,2-Dichlorobenzene	11.99	146	8787	0.20	PPB	80
103) 1,3,5-Trichlorobenzene	12.76	180	4326	0.21	PPB	90
104) 1,2,4-Trichlorobenzene	13.21	180	2404	0.17	PPB	82
105) Hexachlorobutadiene	13.29	225	1341	0.16	PPB	88
107) 1,2,3-Trichlorobenzene	13.59	180	1484	0.21	PPB	74

(#) = qualifier out of range (m) = manual integration

0908F012.D 091123MS23_8260.M

Fri Sep 15 09:12:29 2023

3516 of 3623

Data File : J:\MS23\DATA\091123\0908F012.D

Acq On : 11 Sep 2023 3:49 pm

Sample : ICAL 0.2

Vial: 5

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

MS Integration Params: rteint.p

uant Time: Sep 15 8:28 2023

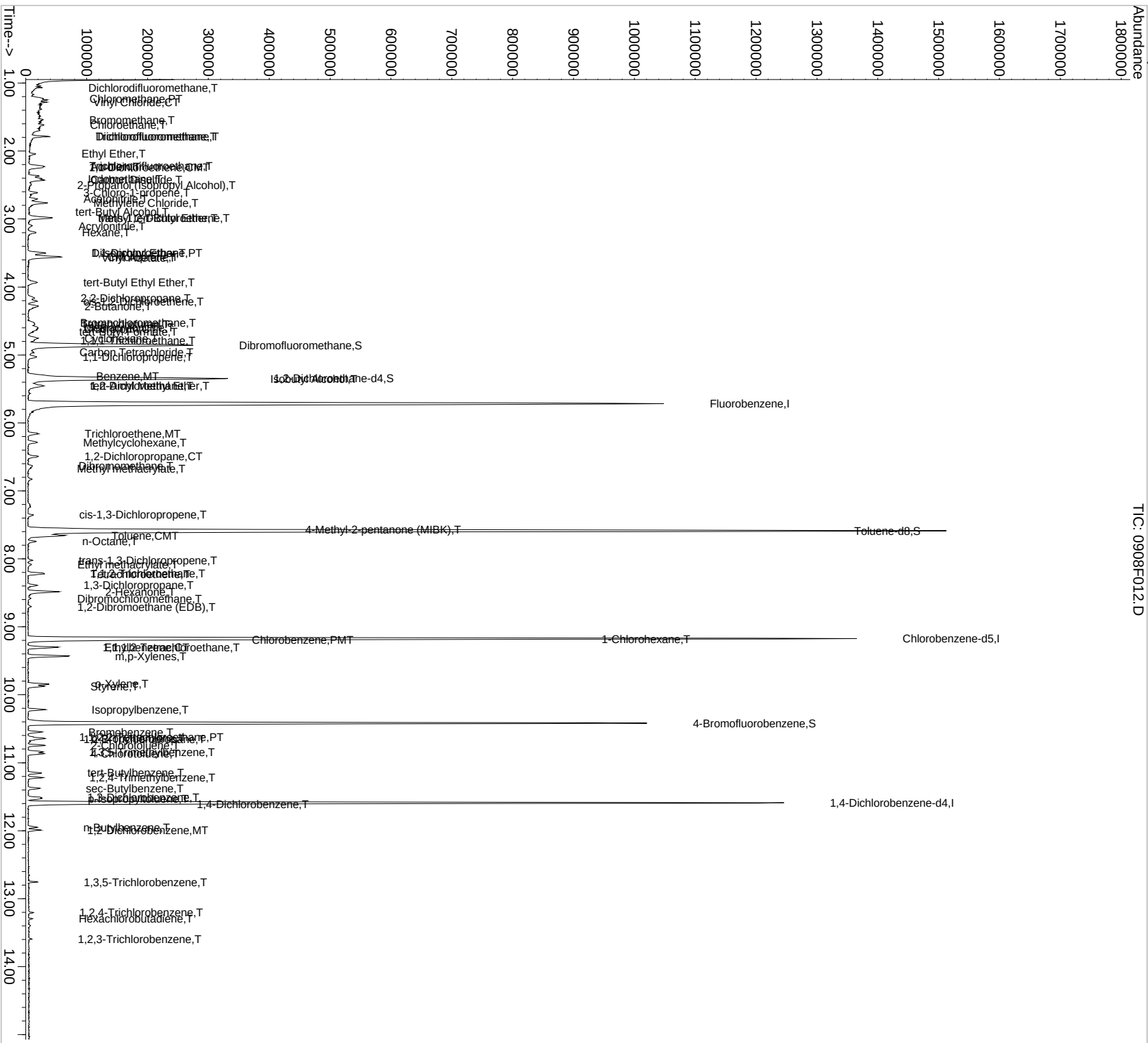
Quant Results File: 091123MS23_8260.RES

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Fri Sep 15 08:47:04 2023

Response via : Initial Calibration



Quantitation Report (Qedit)

1st  09/15/23
2nd  09/15/23

Data File : J:\MS23\DATA\091123\0908F012.D

Acq On : 11 Sep 2023 3:49 pm

Sample : ICAL 0.2

Misc :

Vial: 5

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Sep 12 9:33 2023

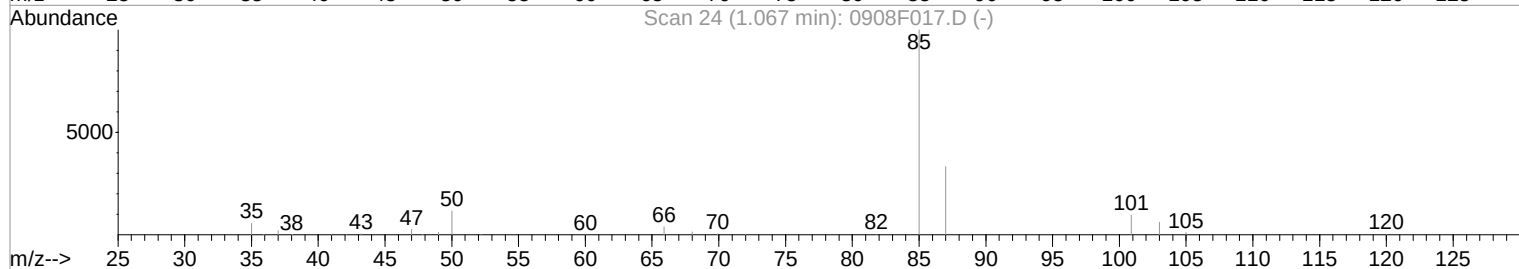
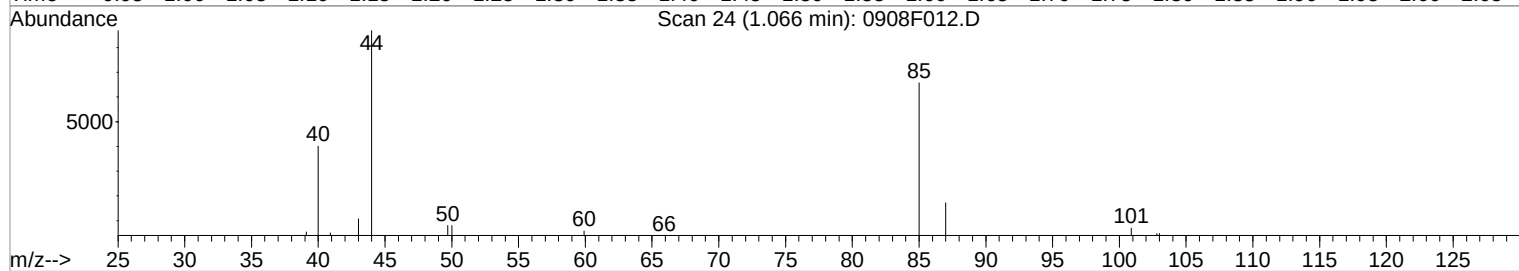
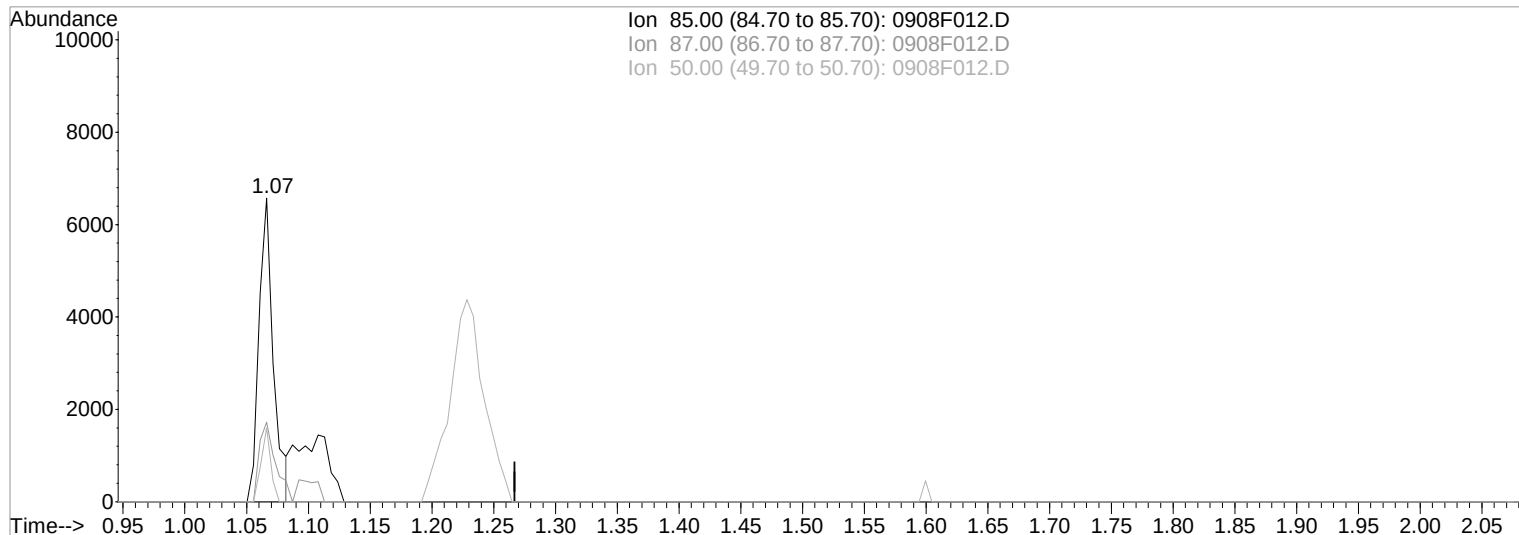
Quant Results File: temp.res

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Fri Sep 15 08:27:43 2023

Response via : Multiple Level Calibration



TIC: 0908F012.D

(2) Dichlorodifluoromethane (T)

Manual Integration:

1.07min 0.18PPB

Before

response 5341

Ion	Exp%	Act%
85.00	100	100
87.00	33.20	26.24
50.00	11.40	24.27
0.00	0.00	0.00

09/15/23

Quantitation Report (Qedit)

1st *EW* 09/15/23
2nd *Q* 09/15/23

Data File : J:\MS23\DATA\091123\0908F012.D

Acq On : 11 Sep 2023 3:49 pm

Sample : ICAL 0.2

Misc :

MS Integration Params: rteint.p

Quant Time: Sep 15 8:28 2023

Vial: 5

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

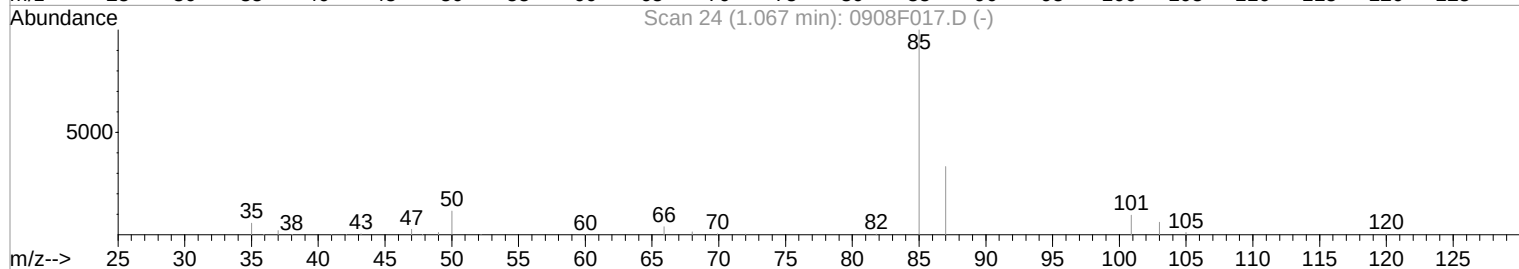
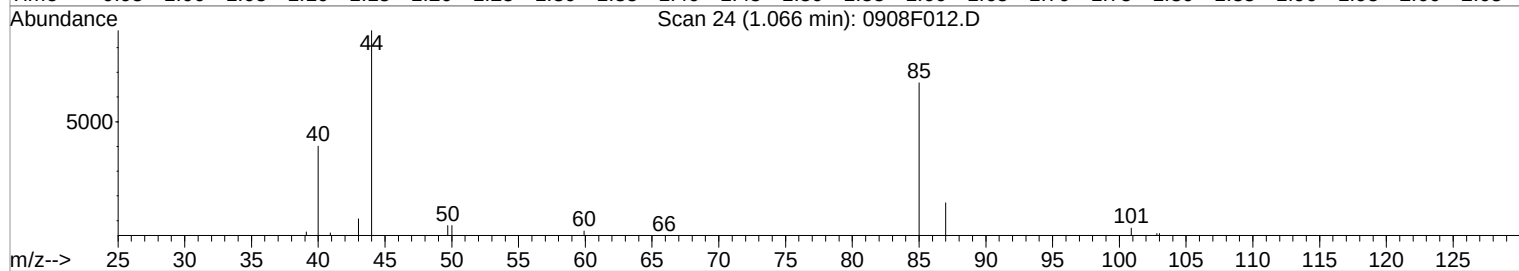
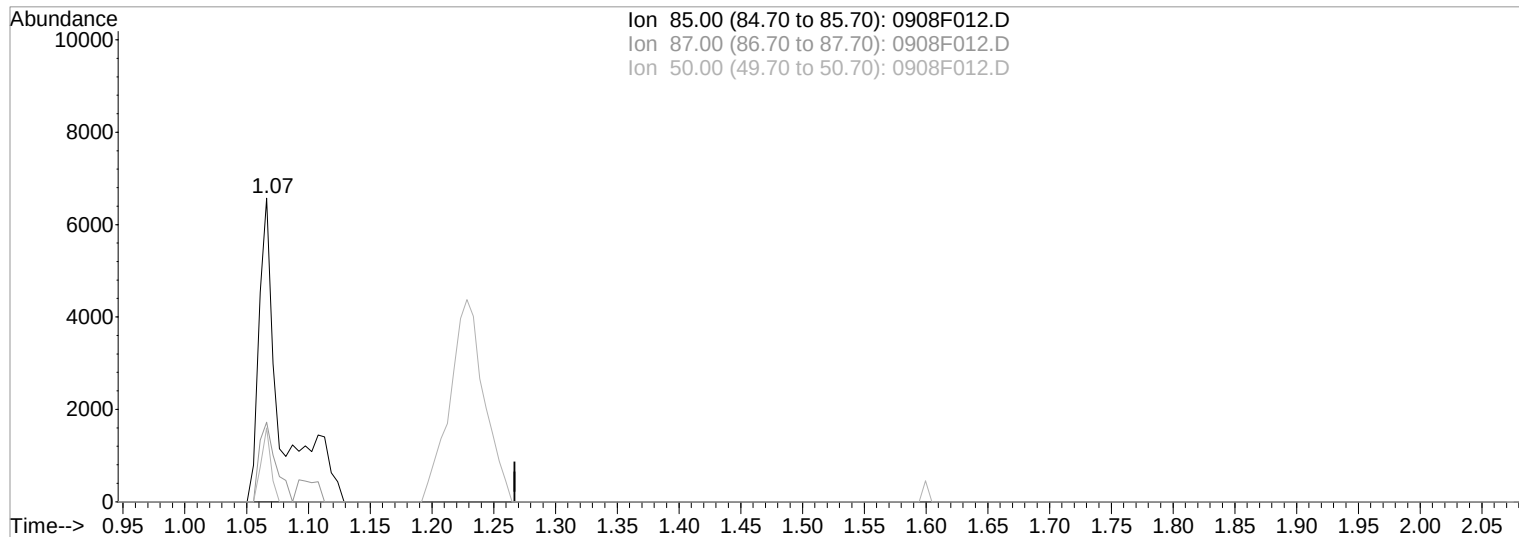
Quant Results File: temp.res

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Fri Sep 15 08:27:43 2023

Response via : Multiple Level Calibration



TIC: 0908F012.D

(2) Dichlorodifluoromethane (T)

1.07min 0.27PPB m

response 8016

Manual Integration:

After

Split peak

09/15/23

Ion	Exp%	Act%
85.00	100	100
87.00	33.20	26.24
50.00	11.40	12.16
0.00	0.00	0.00

Data File : J:\MS23\DATA\091123\0908F012.D

Acq On : 11 Sep 2023 3:49 pm

Sample : ICAL 0.2

Misc :

Vial: 5

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Sep 12 8:59 2023

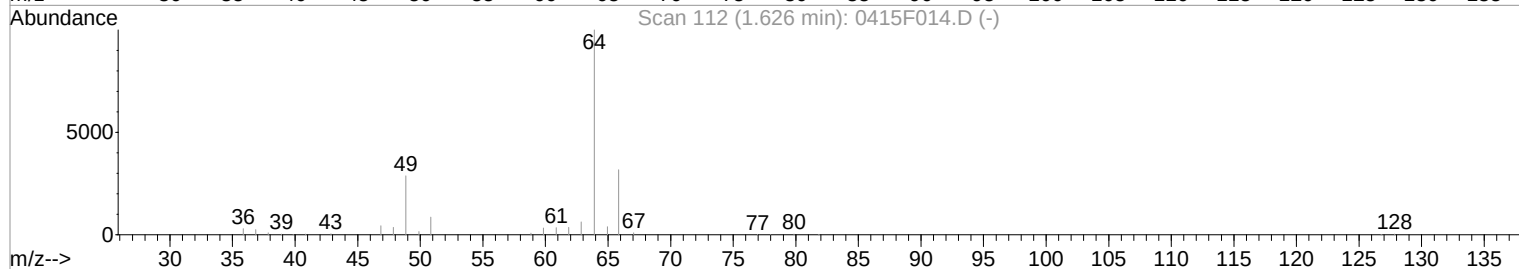
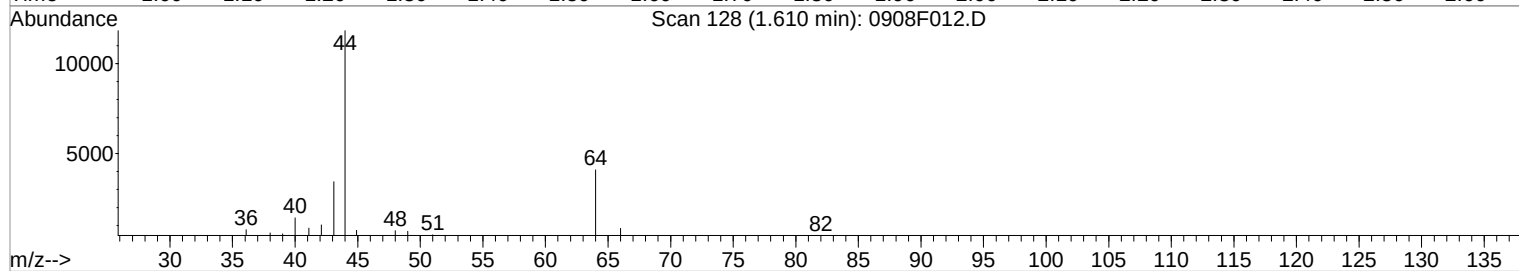
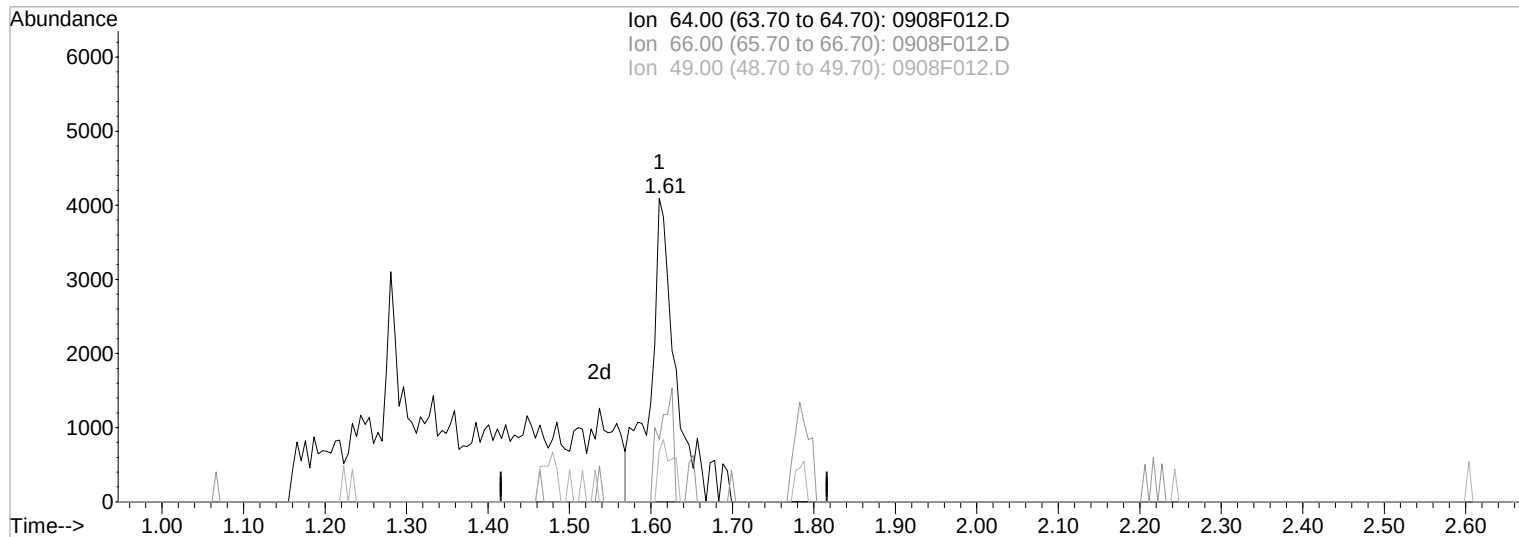
Quant Results File: temp.res

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Tue Sep 12 09:12:50 2023

Response via : Multiple Level Calibration



TIC: 0908F012.D

(6) Chloroethane (T)

Manual Integration:

1.61min 0.33PPB

Before

response 8654

Ion	Exp%	Act%
64.00	100	100
66.00	31.10	20.46
49.00	23.20	16.75
0.00	0.00	0.00

09/12/23

Data File : J:\MS23\DATA\091123\0908F012.D

Acq On : 11 Sep 2023 3:49 pm

Sample : ICAL 0.2

Misc :

MS Integration Params: rteint.p

Quant Time: Sep 12 9:13 2023

Vial: 5

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

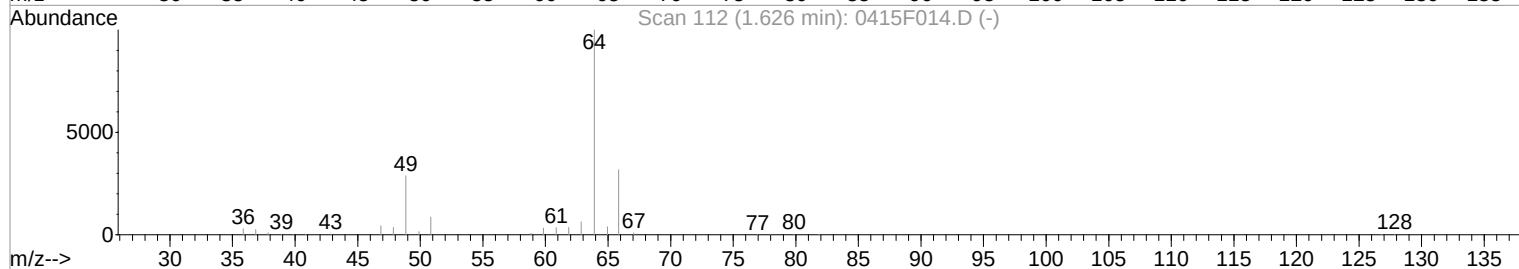
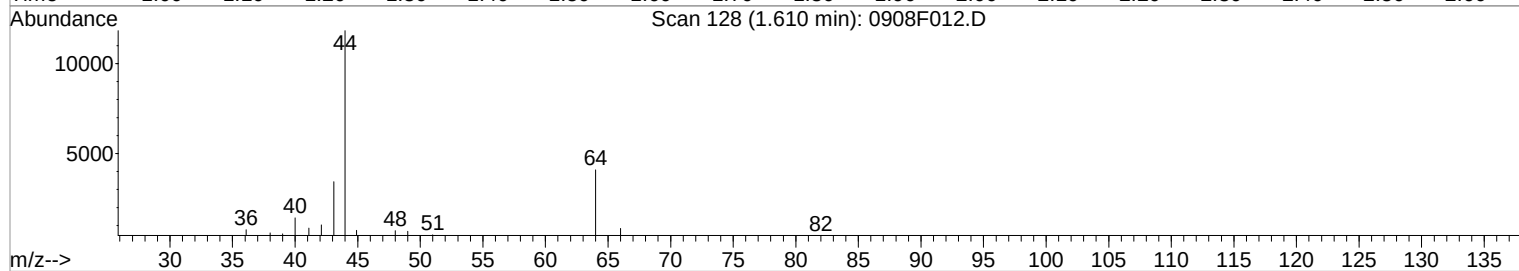
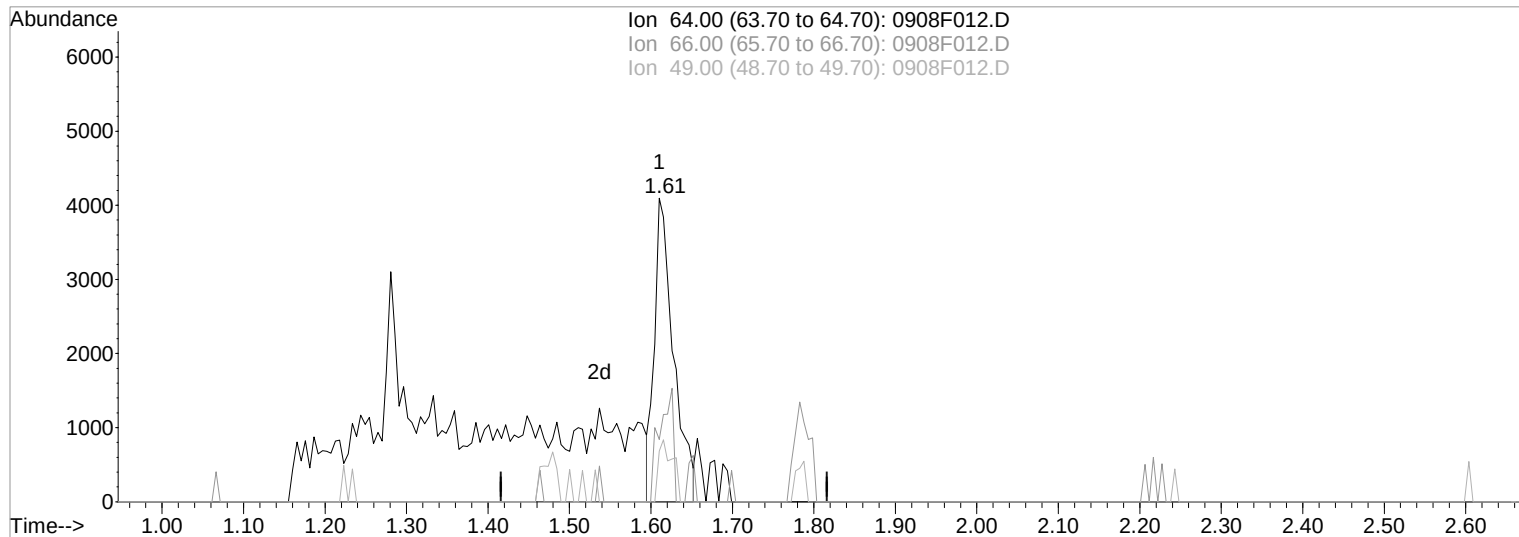
Quant Results File: temp.res

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Tue Sep 12 09:12:50 2023

Response via : Multiple Level Calibration



TIC: 0908F012.D

(6) Chloroethane (T)

1.61min 0.26PPB m

response 6681

Manual Integration:

After

Baseline correction

09/12/23

Ion	Exp%	Act%
64.00	100	100
66.00	31.10	20.46
49.00	23.20	16.75
0.00	0.00	0.00

Data File : J:\MS23\DATA\091123\0908F013.D

Acq On : 11 Sep 2023 4:14 pm

Sample : ICAL 0.5

Misc :

Vial: 6

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Sep 12 08:59:40 2023

Quant Results File: 091123MS23_8260.RES

Quant Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Tue Sep 12 08:58:41 2023

Response via : Initial Calibration

DataAcq Meth : 8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	5.72	96	1132357	10.00	PPB	0.00
64) Chlorobenzene-d5	9.18	82	421213	10.00	PPB	0.00
85) 1,4-Dichlorobenzene-d4	11.59	152	321430	10.00	PPB	0.00

System Monitoring Compounds

43) Dibromofluoromethane	4.86	113	217494	9.42	PPB	0.00
Spiked Amount 10.000			Recovery	=	94.20%	
47) 1,2-Dichloroethane-d4	5.35	65	270934	10.52	PPB	0.00
Spiked Amount 10.000			Recovery	=	105.20%	
62) Toluene-d8	7.59	98	1050826	9.76	PPB	0.00
Spiked Amount 10.000			Recovery	=	97.60%	
84) 4-Bromofluorobenzene	10.42	95	330575	9.68	PPB	0.00
Spiked Amount 10.000			Recovery	=	96.80%	

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	1.06	85	20878m	0.71	PPB	
3) Chloromethane	1.23	50	20104	0.51	PPB	87
4) Vinyl Chloride	1.28	62	20849	0.52	PPB	95
5) Bromomethane	1.54	96	8238	0.51	PPB	98
6) Chloroethane	1.61	64	13493	0.53	PPB	99
7) Dichlorofluoromethane	1.79	67	28301	0.50	PPB	90
8) Trichlorofluoromethane	1.79	101	25909	0.50	PPB	98
9) Ethyl Ether	2.05	59	12021	0.48	PPB	91
10) Acrolein	2.22	56	30137	8.98	PPB	97
11) Trichlorotrifluoroethane	2.21	151	9935	0.51	PPB	93
12) 1,1-Dichloroethene	2.25	96	16158	0.46	PPB	96
14) Iodomethane	2.40	142	62316	1.60	PPB	98
15) Carbon Disulfide	2.43	76	51061	0.60	PPB	98
16) 2-Propanol (Isopropyl Alco	2.50	45	10697	15.82	PPB	81
17) 3-Chloro-1-propene	2.61	76	6581	0.38	PPB	91
18) Methyl Acetate	2.65	43	9208	0.60	PPB	93
19) Acetonitrile	2.70	40	24407	19.89	PPB	96
20) Methylene Chloride	2.76	84	28409	0.71	PPB	96
21) tert-Butyl Alcohol	2.89	59	2014	2.06	PPB	72
22) Acrylonitrile	3.10	53	14390	1.95	PPB	92
23) Methyl tert-Butyl Ether	2.98	73	66167	0.89	PPB	97
24) trans-1,2-Dichloroethene	2.99	96	17829	0.47	PPB	94
25) Hexane	3.20	57	16543	0.48	PPB	98
26) Diisopropyl Ether	3.50	45	48557	0.44	PPB	96
27) 1,1-Dichloroethane	3.50	63	31348	0.44	PPB	96
28) Vinyl Acetate	3.56	86	3469	0.63	PPB	# 79
29) Chloroprene	3.55	53	84451	1.67	PPB	97
30) tert-Butyl Ethyl Ether	3.94	59	38363	0.43	PPB	90
31) 2,2-Dichloropropane	4.16	77	16760	0.41	PPB	96
32) cis-1,2-Dichloroethene	4.21	96	19731	0.47	PPB	92
33) 2-Butanone	4.29	72	19476	9.28	PPB	91
34) Ethyl Acetate	4.32	61	2944	0.92	PPB	84
35) Propionitrile	4.45	54	5213	1.96	PPB	67
36) Methacrylonitrile	4.60	67	15934	1.75	PPB	86
37) Bromochloromethane	4.53	128	7346	0.43	PPB	98
38) Tetrahydrofuran	4.55	71	4377	1.73	PPB	# 75
39) Chloroform	4.63	83	27585	0.46	PPB	96
40) tert-Butyl Formate	4.67	59	2284	0.29	PPB	86
41) Cyclohexane	4.76	56	26750	0.48	PPB	91
42) 1,1,1-Trichloroethane	4.79	97	18886	0.40	PPB	92
44) Carbon Tetrachloride	4.97	117	13194	0.38	PPB	82
45) 1,1-Dichloropropene	5.02	75	22998	0.46	PPB	96
46) Isobutyl Alcohol	5.36	43	8588	16.98	PPB	82

(#)=qualifier out of range (m)=manual integration

0908F013.D 091123MS23_8260.M

Fri Sep 15 09:12:31 2023

3522 of 3623

Data File : J:\MS23\DATA\091123\0908F013.D

Acq On : 11 Sep 2023 4:14 pm

Sample : ICAL 0.5

Misc :

Vial: 6

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Sep 12 08:59:40 2023

Quant Results File: 091123MS23_8260.RES

Quant Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Tue Sep 12 08:58:41 2023

Response via : Initial Calibration

DataAcq Meth : 8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
48) Benzene	5.30	78	78958	0.49	PPB	99
49) 1,2-Dichloroethane	5.45	62	23143	0.53	PPB	94
50) tert-Amyl Methyl Ether	5.46	55	12880	0.54	PPB #	60
51) Trichloroethene	6.16	95	17200	0.47	PPB	93
52) Methylcyclohexane	6.28	83	17857	0.44	PPB	94
53) 1,2-Dichloropropane	6.50	63	17078	0.43	PPB	88
54) Dibromomethane	6.63	93	7669	0.44	PPB	92
55) Methyl methacrylate	6.66	69	5600	0.37	PPB	95
56) 1,4-Dioxane	6.67	88	2760	18.12	PPB	84
60) cis-1,3-Dichloropropene	7.36	75	15646	0.30	PPB	95
61) 4-Methyl-2-pentanone (MIBK)	7.56	58	62031	8.60	PPB #	81
63) Toluene	7.66	92	47373	0.49	PPB	97
65) n-Octane	7.74	85	6220	0.45	PPB	97
66) trans-1,3-Dichloropropene	8.02	75	10739	0.30	PPB	92
67) Ethyl methacrylate	8.08	69	9191	0.34	PPB	95
68) 1,1,2-Trichloroethane	8.21	83	10375	0.47	PPB	93
69) Tetrachloroethene	8.22	164	13106	0.52	PPB	98
70) 2-Hexanone	8.49	57	16461	7.23	PPB #	83
71) 1,3-Dichloropropane	8.39	76	22896	0.47	PPB	93
72) Dibromochloromethane	8.59	129	6717m	0.32	PPB	
73) 1,2-Dibromoethane (EDB)	8.70	107	9893	0.42	PPB	93
74) 1-Chlorohexane	9.19	91	14632	0.47	PPB	78
75) Chlorobenzene	9.20	112	45603	0.50	PPB	93
76) Ethylbenzene	9.30	106	22139	0.47	PPB	86
77) 1,1,1,2-Tetrachloroethane	9.31	131	8679	0.35	PPB	94
78) m,p-Xylenes	9.43	106	53567	0.93	PPB	95
79) o-Xylene	9.85	106	25862	0.47	PPB	87
80) Styrene	9.88	103	15731m	0.36	PPB	
82) Isopropylbenzene	10.22	105	50544	0.42	PPB	95
86) 1,1,2,2-Tetrachloroethane	10.62	83	9864	0.44	PPB	93
87) trans-1,4-Dichloro-2-buten	10.69	53	2442m	0.42	PPB	
88) Bromobenzene	10.55	156	15271	0.48	PPB	96
89) n-Propylbenzene	10.65	91	55428	0.43	PPB	97
90) 1,2,3-Trichloropropane	10.66	110	3207	0.44	PPB #	82
91) 2-Chlorotoluene	10.75	91	40953	0.49	PPB	96
92) 1,3,5-Trimethylbenzene	10.84	105	37731	0.42	PPB	94
93) 4-Chlorotoluene	10.87	91	46553	0.47	PPB	98
94) tert-Butylbenzene	11.15	119	30475	0.42	PPB	95
95) 1,2,4-Trimethylbenzene	11.22	105	37721	0.41	PPB	97
96) sec-Butylbenzene	11.38	105	36404	0.40	PPB	95
97) p-Isopropyltoluene	11.53	119	30108	0.37	PPB	96
98) 1,3-Dichlorobenzene	11.51	146	24724	0.50	PPB	98
99) 1,4-Dichlorobenzene	11.61	146	26882	0.53	PPB	96
100) n-Butylbenzene	11.95	91	23412	0.37	PPB	97
101) 1,2-Dichlorobenzene	11.99	146	21730	0.49	PPB	94
103) 1,3,5-Trichlorobenzene	12.75	180	9733	0.47	PPB	89
104) 1,2,4-Trichlorobenzene	13.20	180	6920	0.50	PPB	97
105) Hexachlorobutadiene	13.30	225	4111	0.49	PPB	90
106) Naphthalene	13.40	128	7453	0.38	PPB	95
107) 1,2,3-Trichlorobenzene	13.59	180	3368	0.47	PPB	76

(#) = qualifier out of range (m) = manual integration

0908F013.D 091123MS23_8260.M

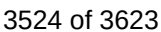
Fri Sep 15 09:12:31 2023

3523 of 3623

Vial: 6
Operator: EW/GH/MK/OT
Inst : MS23
Multiplr: 1.00

09/12/23

Last Update	:	Fri Sep 15 08:47:04	2023
Response via	:	Initial Calibration	



Quantitation Report (Qedit)

1st  09/12/23
2nd  09/15/23

Data File : J:\MS23\DATA\091123\0908F013.D

Acq On : 11 Sep 2023 4:14 pm

Sample : ICAL 0.5

Misc :

MS Integration Params: rteint.p

Quant Time: Sep 12 9:40 2023

Vial: 6

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

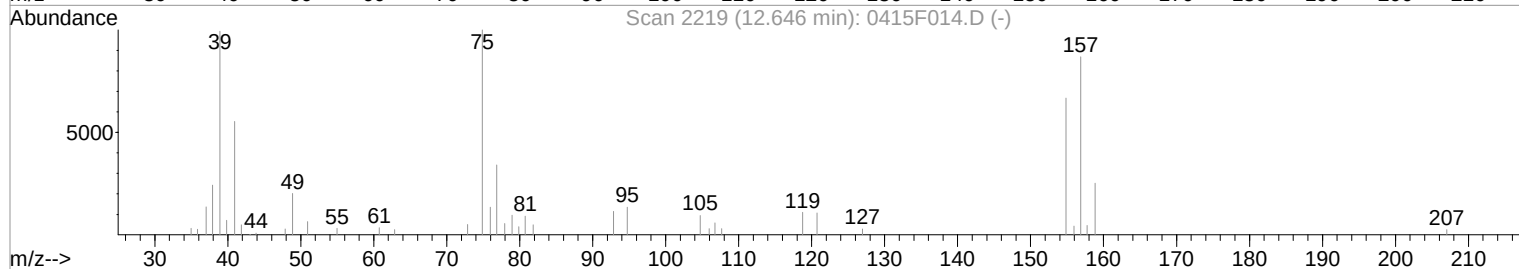
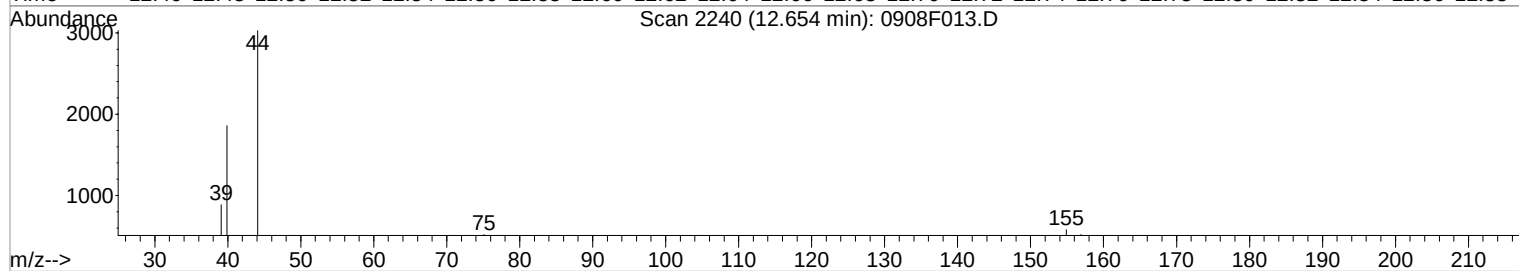
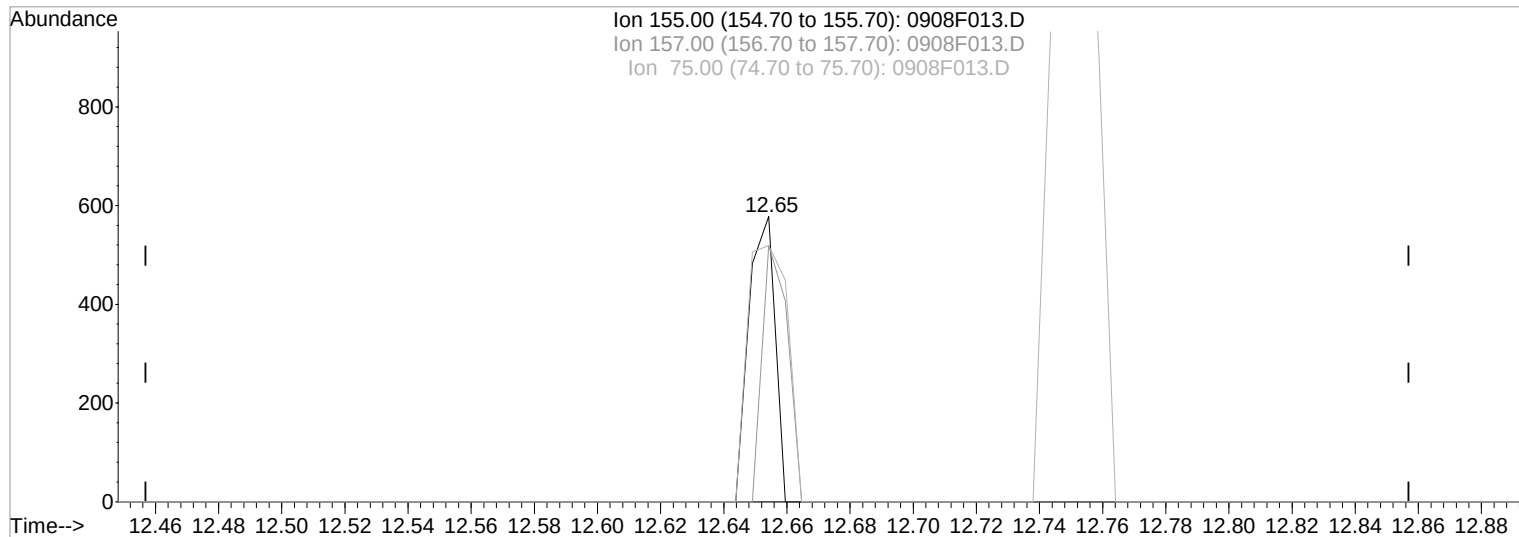
Quant Results File: temp.res

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Tue Sep 12 09:34:55 2023

Response via : Single Level Calibration



TIC: 0908F013.D

(102) 1,2-Dibromo-3-chloropropane (DBCP) (T)

Manual Integration:

12.65min 0.24PPB m

After

response 333

Missed peak

Ion	Exp%	Act%
-----	------	------

09/12/23

155.00	100	100
--------	-----	-----

157.00	117.70	89.79
--------	--------	-------

75.00	94.20	89.79
-------	-------	-------

0.00	0.00	0.00
------	------	------

Quantitation Report (Qedit)

1st *EW* 09/15/23
2nd *Q* 09/15/23

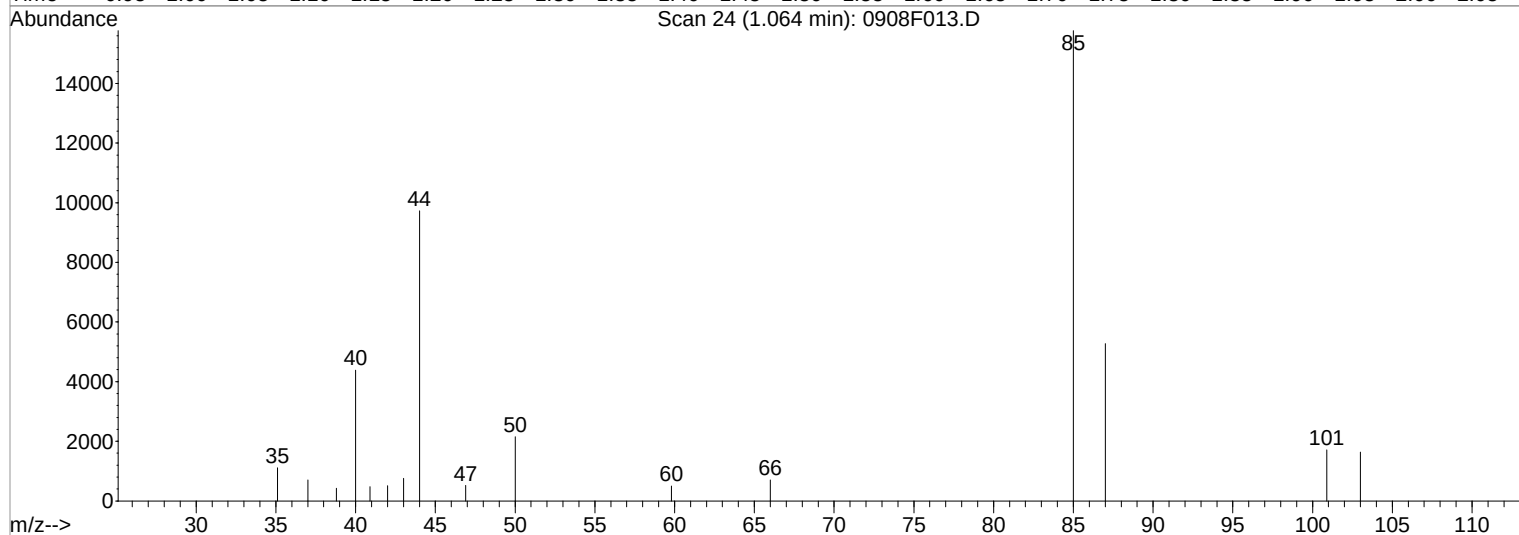
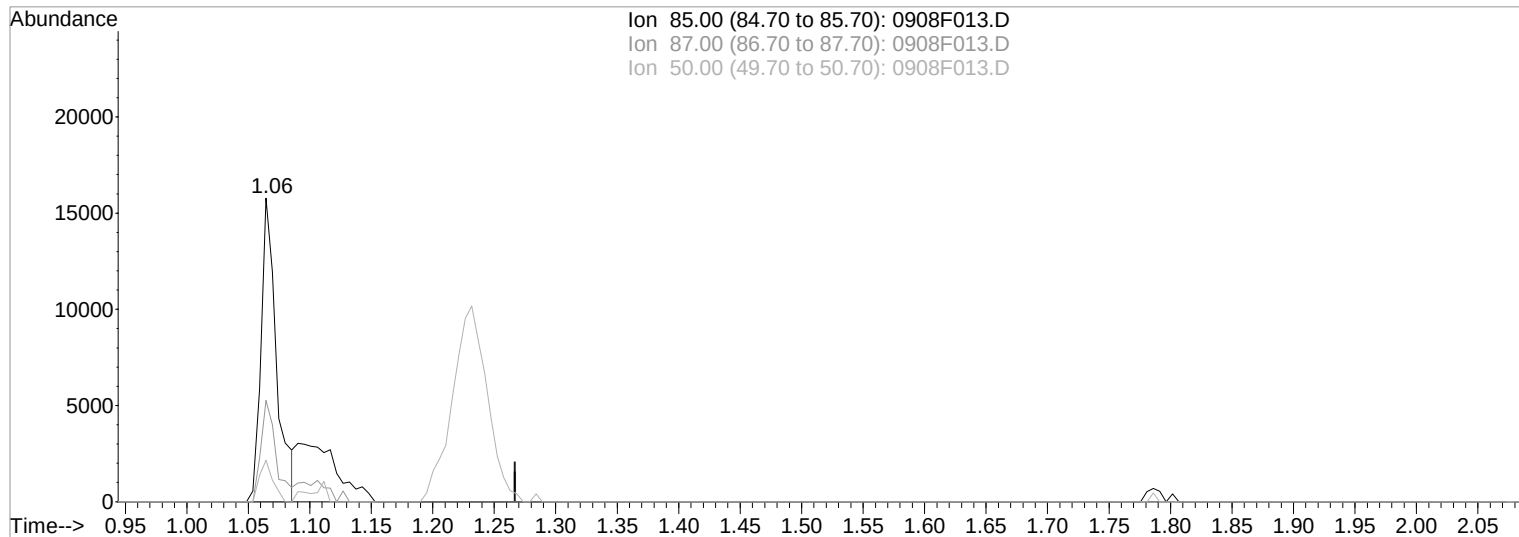
Data File : J:\MS23\DATA\091123\0908F013.D
Acq On : 11 Sep 2023 4:14 pm
Sample : ICAL 0.5
Misc :

Vial: 6
Operator: EW/GH/MK/OT
Inst : MS23
Multiplr: 1.00

MS Integration Params: rteint.p
Quant Time: Sep 12 12:23 2023

Quant Results File: temp.res

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)
Title : VOA MS23 EPA Method 8260C
Last Update : Fri Sep 15 08:28:13 2023
Response via : Multiple Level Calibration



TIC: 0908F013.D

(2) Dichlorodifluoromethane (T)

Manual Integration:

1.06min 0.47PPB

Before

response 13871

Ion	Exp%	Act%
85.00	100	100
87.00	33.20	33.43
50.00	11.40	13.66
0.00	0.00	0.00

09/15/23

Data File : J:\MS23\DATA\091123\0908F013.D

Acq On : 11 Sep 2023 4:14 pm

Sample : ICAL 0.5

Misc :

Vial: 6

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Sep 15 8:28 2023

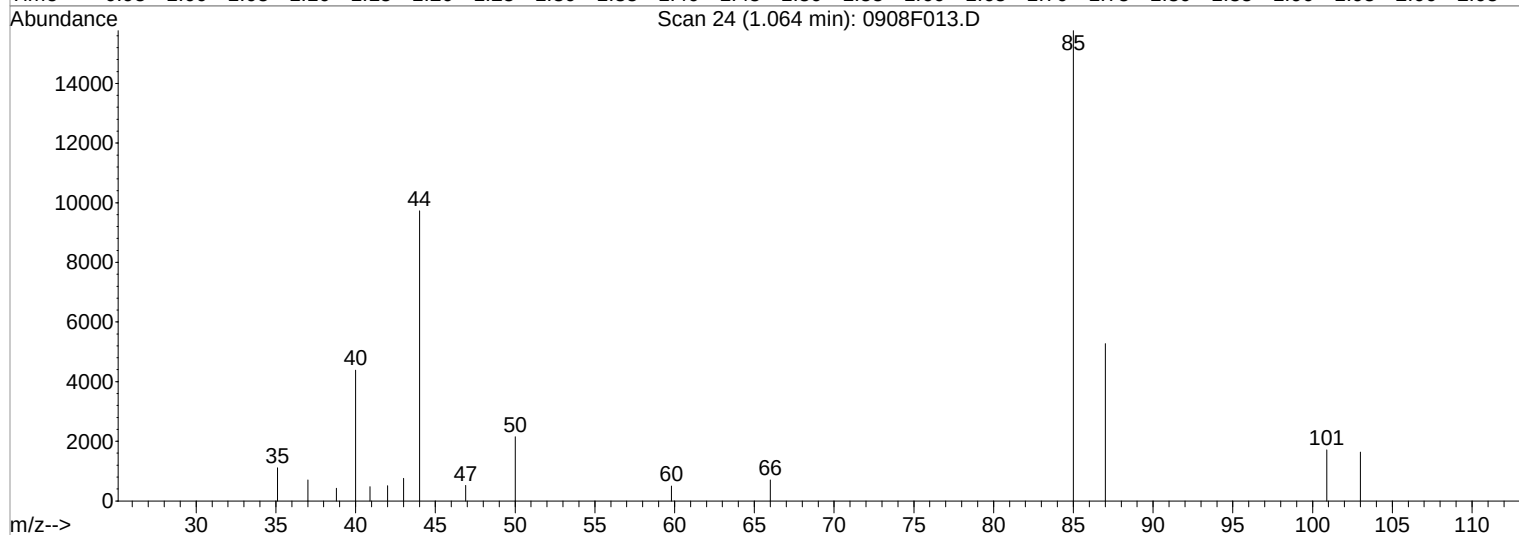
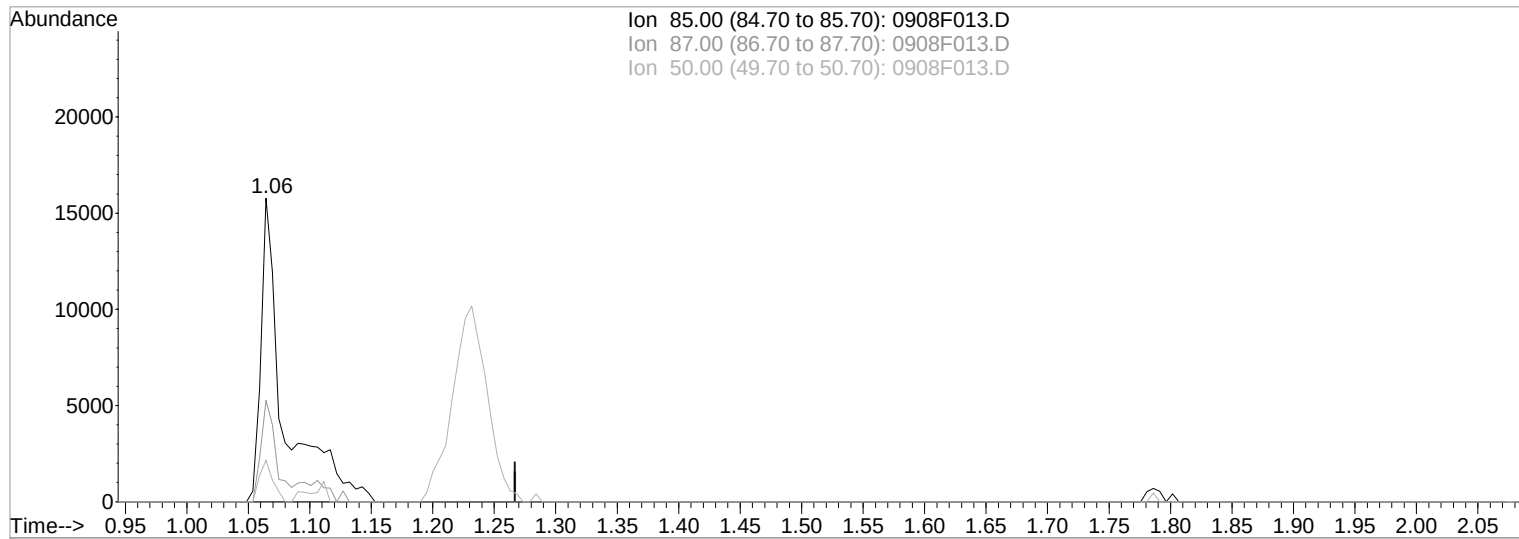
Quant Results File: temp.res

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Fri Sep 15 08:28:13 2023

Response via : Multiple Level Calibration



TIC: 0908F013.D

(2) Dichlorodifluoromethane (T)

1.06min 0.71PPB m

response 20878

Manual Integration:

After

Split peak

09/15/23

Ion	Exp%	Act%
85.00	100	100
87.00	33.20	33.43
50.00	11.40	13.66
0.00	0.00	0.00

Quantitation Report (Qedit)

1st *EW* 09/12/23
2nd *Q* 09/15/23

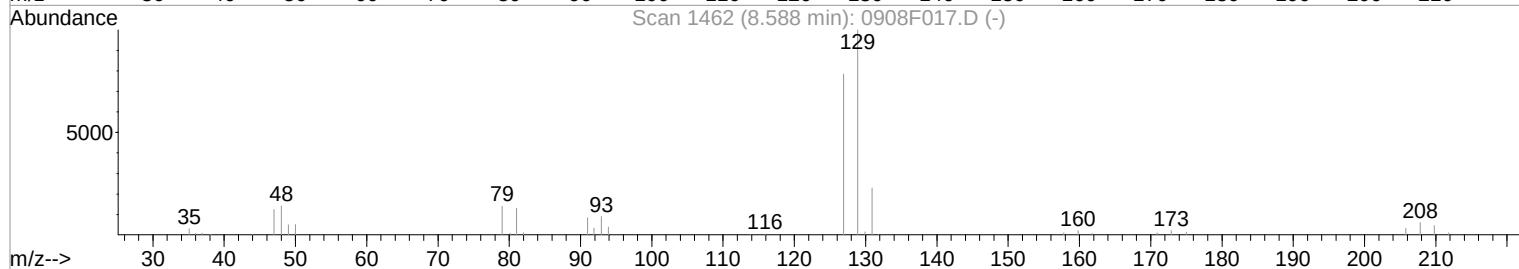
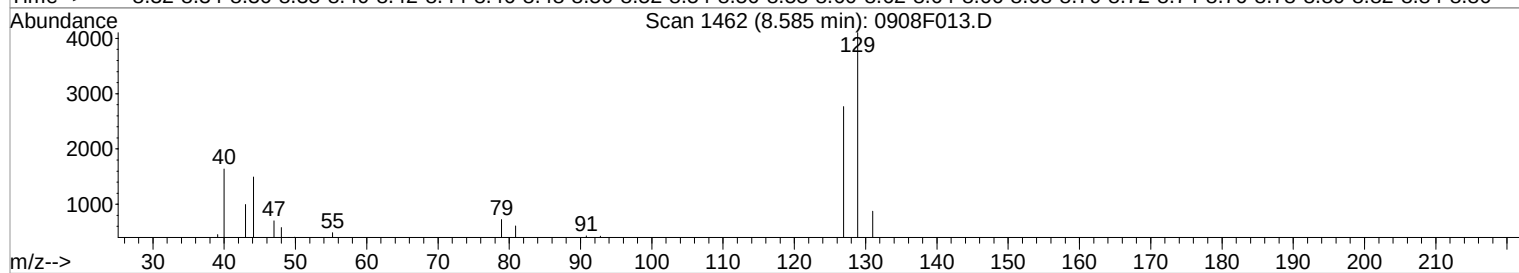
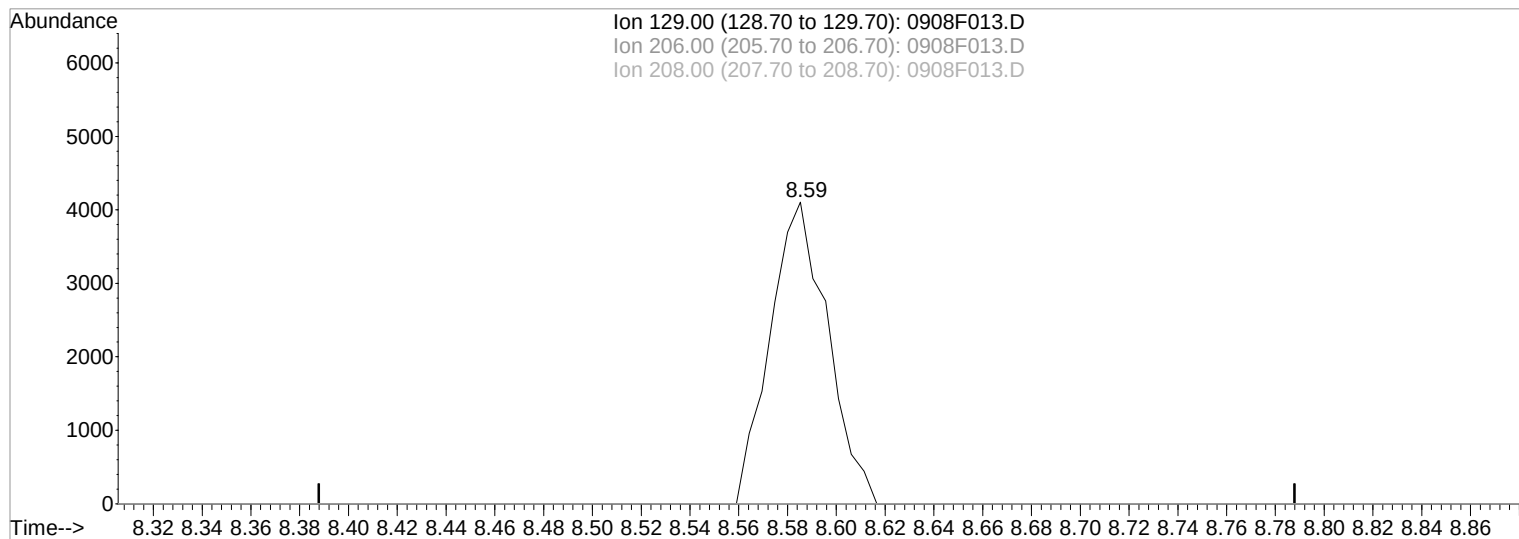
Data File : J:\MS23\DATA\091123\0908F013.D
Acq On : 11 Sep 2023 4:14 pm
Sample : ICAL 0.5
Misc :

Vial: 6
Operator: EW/GH/MK/OT
Inst : MS23
Multiplr: 1.00

MS Integration Params: rteint.p
Quant Time: Sep 12 12:23 2023

Quant Results File: temp.res

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)
Title : VOA MS23 EPA Method 8260C
Last Update : Tue Sep 12 12:10:01 2023
Response via : Single Level Calibration



TIC: 0908F013.D

(72) Dibromochloromethane (T)

Manual Integration:

8.59min 0.32PPB m

After

response 6717

Accidentally deleted, reintegrated

Ion	Exp%	Act%
129.00	100	100
206.00	3.20	0.00
208.00	6.00	0.00
0.00	0.00	0.00

09/12/23

Quantitation Report (Qedit)

1st *EW* 09/12/232nd *Q* 09/15/23

Data File : J:\MS23\DATA\091123\0908F013.D

Acq On : 11 Sep 2023 4:14 pm

Sample : ICAL 0.5

Misc :

Vial: 6

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Sep 12 9:37 2023

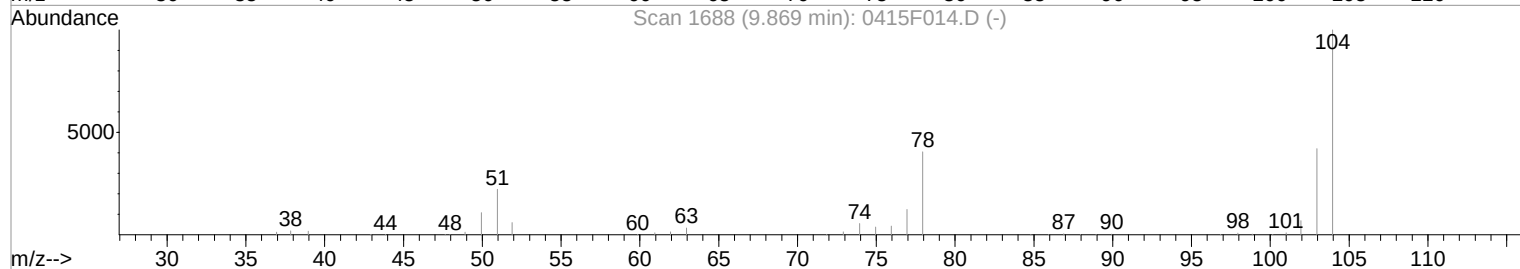
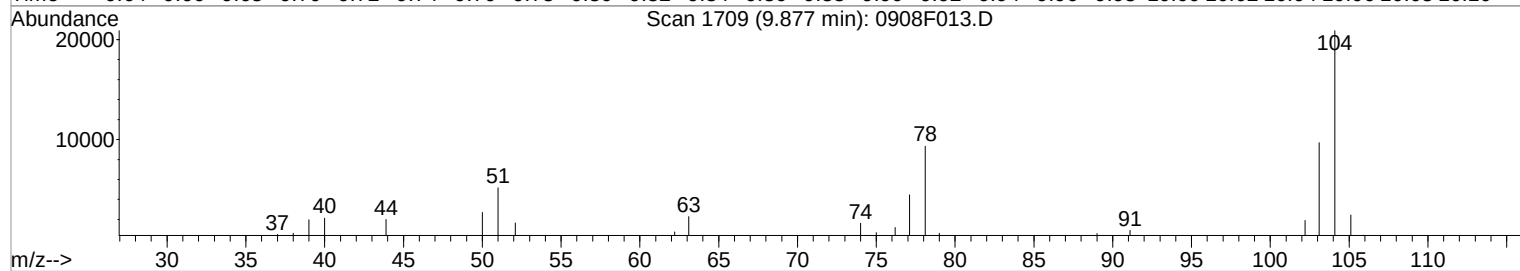
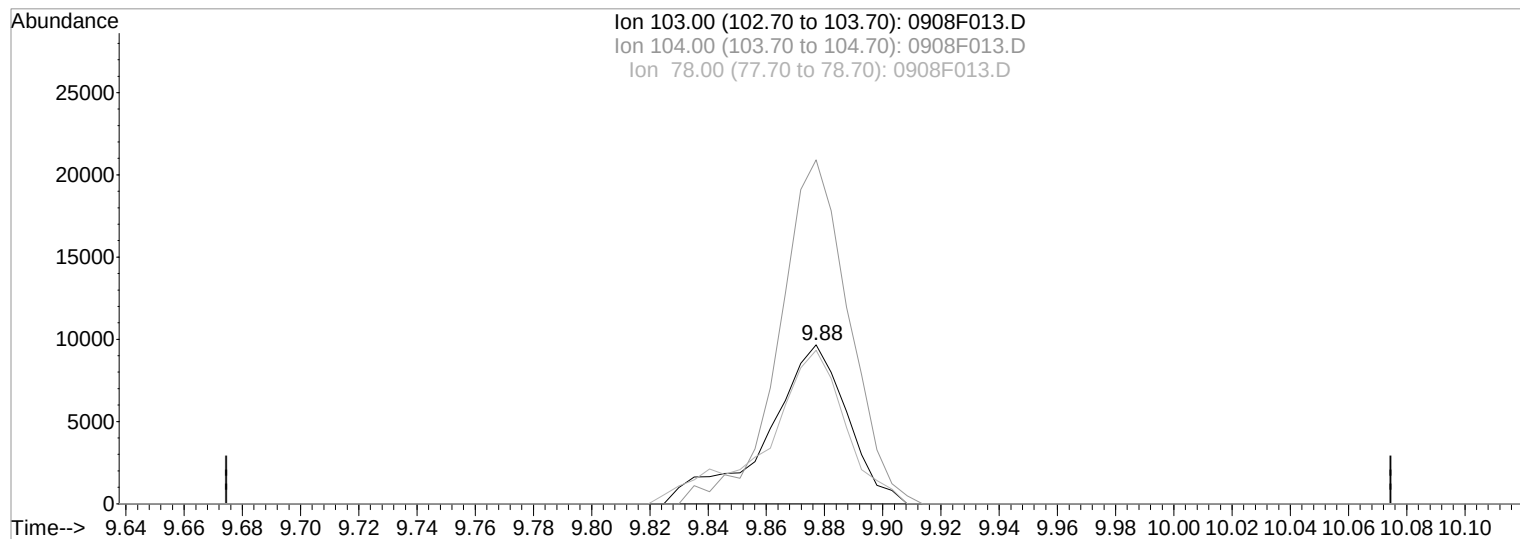
Quant Results File: temp.res

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Tue Sep 12 09:34:55 2023

Response via : Single Level Calibration



TIC: 0908F013.D

(80) Styrene (T)

Manual Integration:

9.88min 0.42PPB

Before

response 18228

Ion	Exp%	Act%
103.00	100	100
104.00	210.00	216.24
78.00	87.20	96.52
0.00	0.00	0.00

09/12/23

Quantitation Report (Qedit)

1st  09/12/23
2nd  09/15/23

Data File : J:\MS23\DATA\091123\0908F013.D

Acq On : 11 Sep 2023 4:14 pm

Sample : ICAL 0.5

Misc :

MS Integration Params: rteint.p

Quant Time: Sep 12 9:37 2023

Vial: 6

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

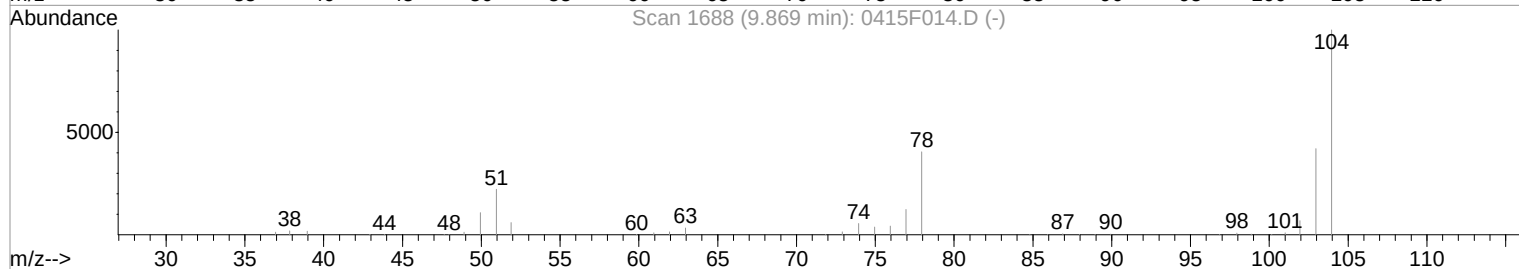
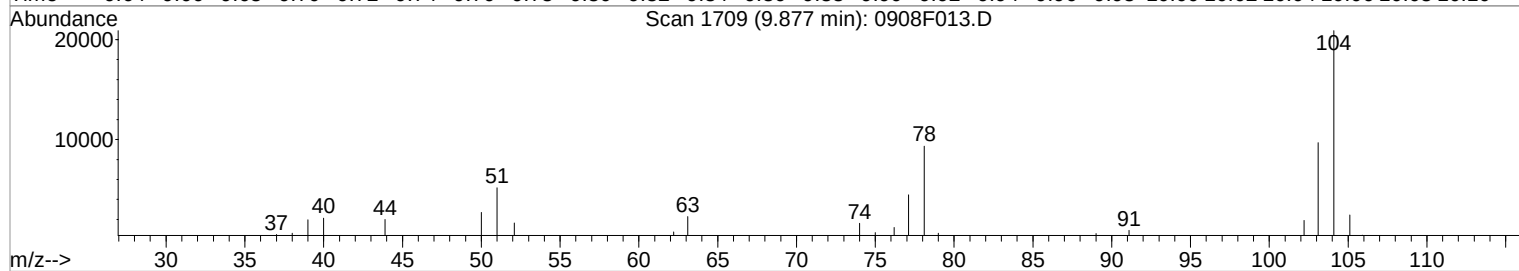
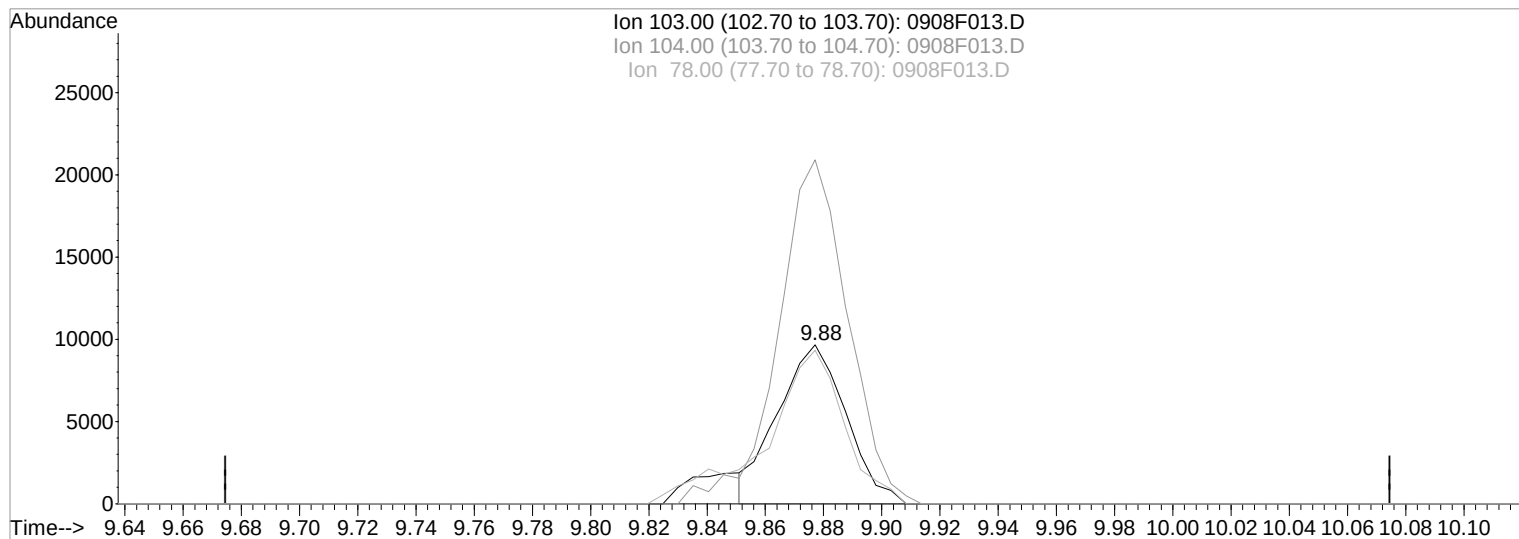
Quant Results File: temp.res

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Tue Sep 12 09:34:55 2023

Response via : Single Level Calibration



TIC: 0908F013.D

(80) Styrene (T)

9.88min 0.36PPB m

response 15731

Ion	Exp%	Act%
-----	------	------

103.00	100	100
--------	-----	-----

104.00	210.00	216.24
--------	--------	--------

78.00	87.20	96.52
-------	-------	-------

0.00	0.00	0.00
------	------	------

Manual Integration:

After

Shoulder

09/12/23

Quantitation Report (Qedit)

1st  09/12/23
2nd  09/15/23

Data File : J:\MS23\DATA\091123\0908F013.D

Acq On : 11 Sep 2023 4:14 pm

Sample : ICAL 0.5

Misc :

MS Integration Params: rteint.p

Quant Time: Sep 12 9:40 2023

Vial: 6

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

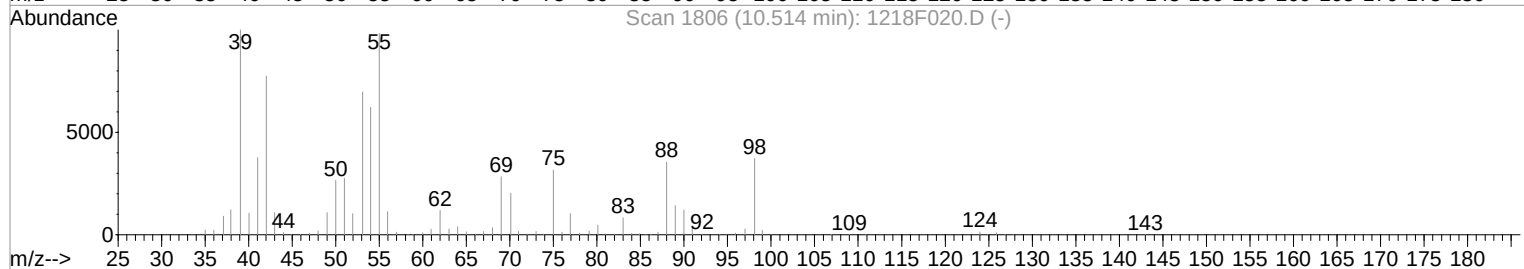
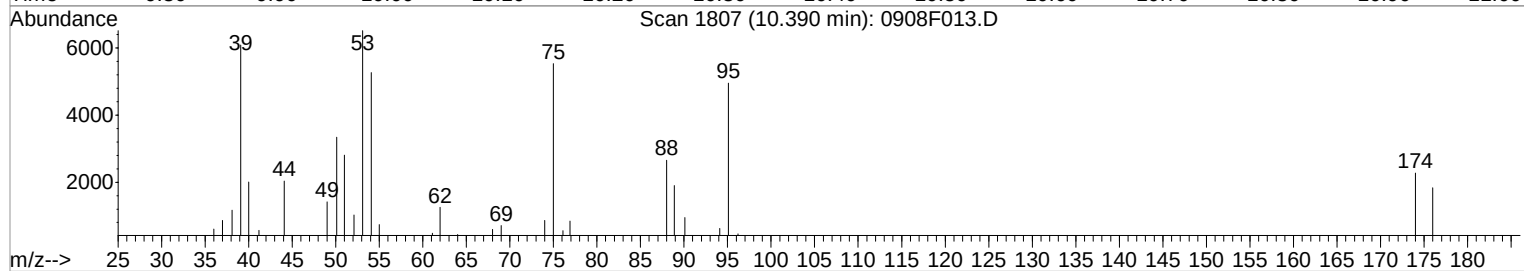
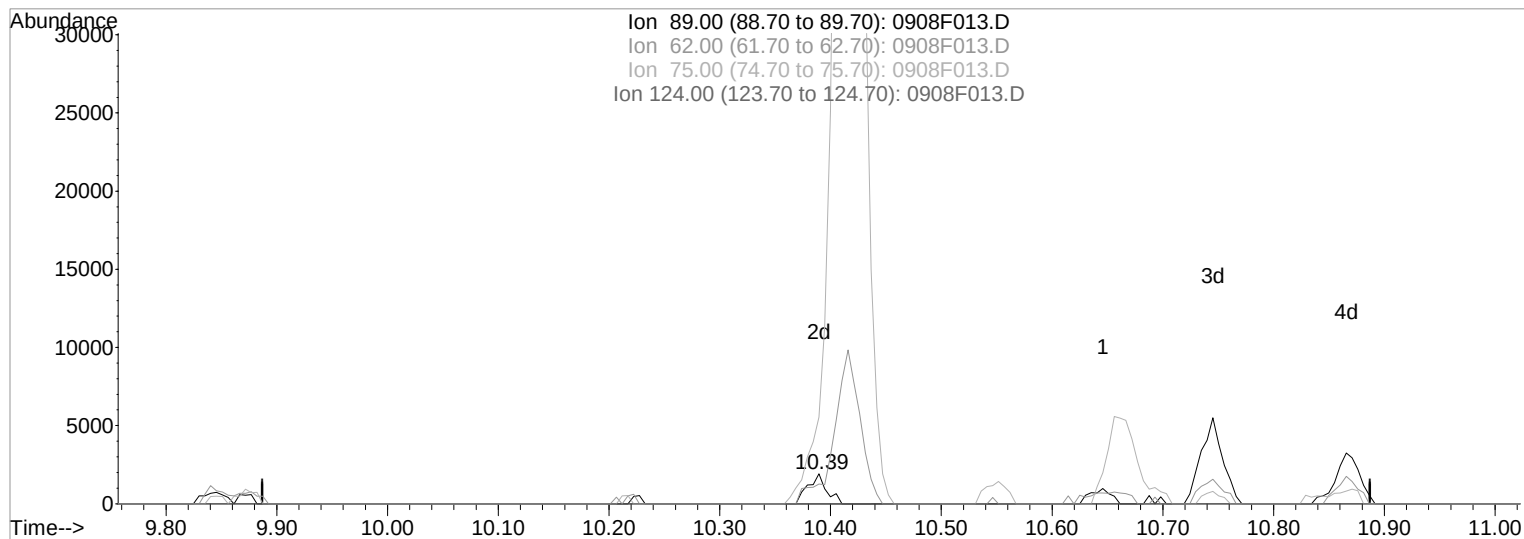
Quant Results File: temp.res

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Tue Sep 12 09:34:55 2023

Response via : Single Level Calibration



TIC: 0908F013.D

(83) cis-1,4-Dichloro-2-butene (T)

10.39min 0.00PPB m

response 2229

Ion	Exp%	Act%
-----	------	------

89.00	100	100
-------	-----	-----

62.00	71.50	65.74
-------	-------	-------

75.00	229.50	290.66#
-------	--------	---------

124.00	7.90	0.00
--------	------	------

Manual Integration:

After Before not Printed

Wrong peak

09/12/23

Quantitation Report (Qedit)

1st  09/12/232nd  09/15/23

Data File : J:\MS23\DATA\091123\0908F013.D

Acq On : 11 Sep 2023 4:14 pm

Sample : ICAL 0.5

Misc :

Vial: 6

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Sep 12 9:39 2023

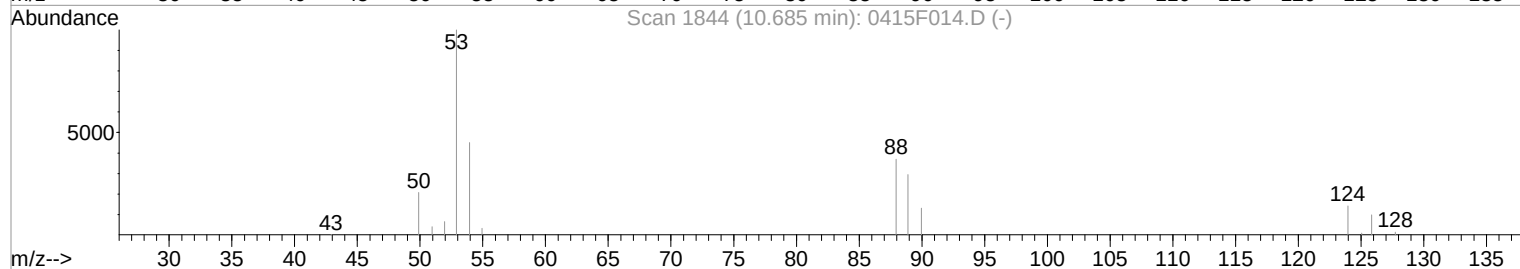
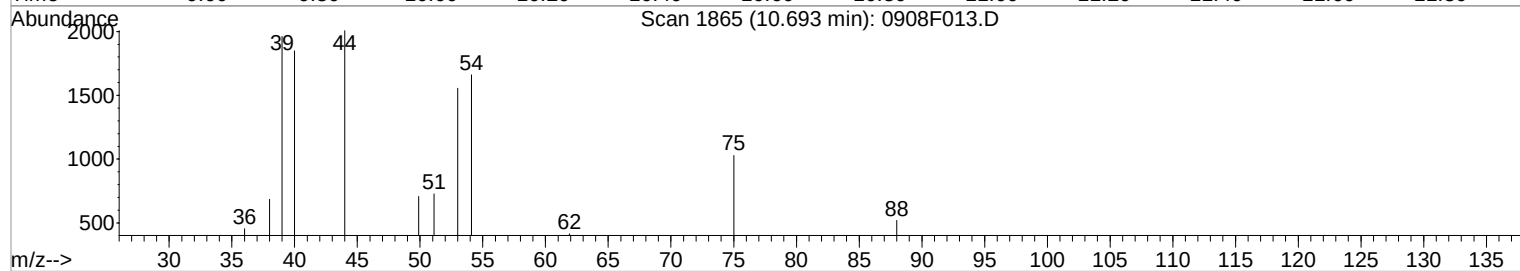
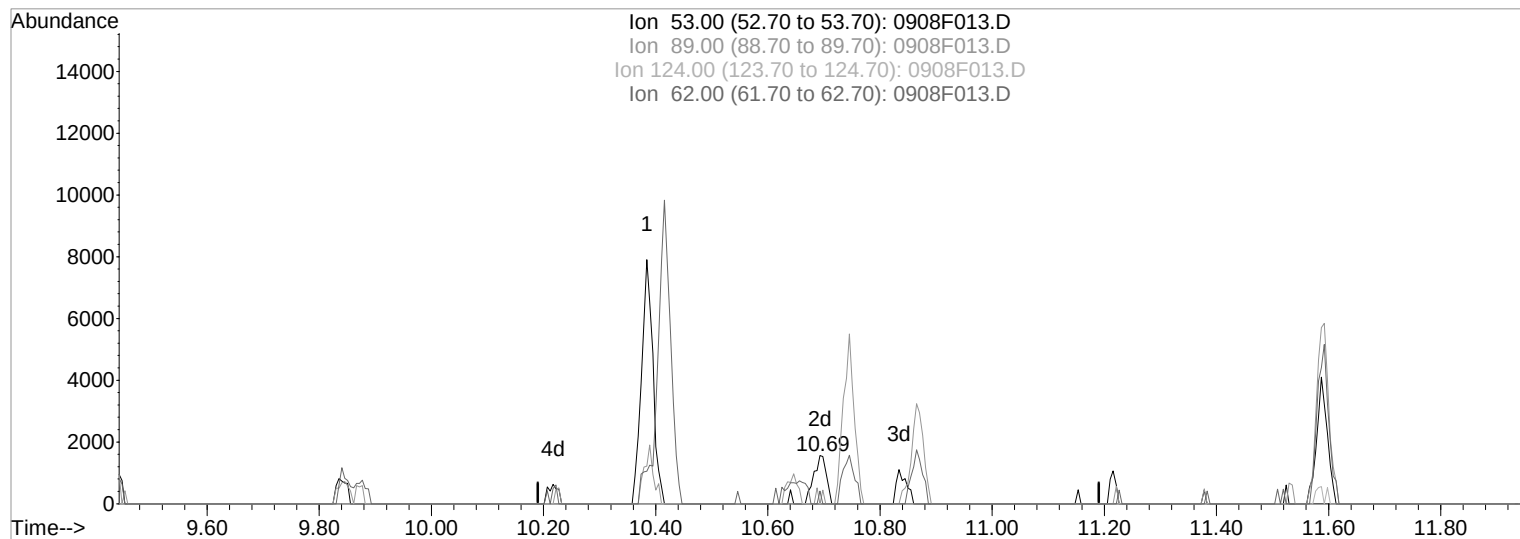
Quant Results File: temp.res

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Tue Sep 12 09:34:55 2023

Response via : Single Level Calibration



TIC: 0908F013.D

(87) trans-1,4-Dichloro-2-butene (T)

10.69min 0.42PPB m

response 2442

Ion	Exp%	Act%
-----	------	------

53.00	100	100
-------	-----	-----

89.00	32.20	0.00#
-------	-------	-------

124.00	16.20	0.00
--------	-------	------

62.00	7.60	26.61
-------	------	-------

Manual Integration:

After **Before not Printed**

Wrong peak

09/12/23

Data File : J:\MS23\DATA\091123\0908F014.D

Acq On : 11 Sep 2023 4:38 pm

Sample : ICAL 1

Misc :

Vial: 7

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Sep 12 08:59:41 2023

Quant Results File: 091123MS23_8260.RES

Quant Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Tue Sep 12 08:58:41 2023

Response via : Initial Calibration

DataAcq Meth : 8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	5.72	96	1185212	10.00	PPB	0.00
64) Chlorobenzene-d5	9.18	82	434403	10.00	PPB	0.00
85) 1,4-Dichlorobenzene-d4	11.59	152	332894	10.00	PPB	0.00

System Monitoring Compounds

43) Dibromofluoromethane	4.86	113	232374	9.62	PPB	0.00
Spiked Amount 10.000			Recovery	=	96.20%	
47) 1,2-Dichloroethane-d4	5.35	65	274482	10.18	PPB	0.00
Spiked Amount 10.000			Recovery	=	101.80%	
62) Toluene-d8	7.59	98	1100924	9.77	PPB	0.00
Spiked Amount 10.000			Recovery	=	97.70%	
84) 4-Bromofluorobenzene	10.41	95	347060	9.85	PPB	0.00
Spiked Amount 10.000			Recovery	=	98.50%	

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	1.06	85	41997m	1.37	PPB	
3) Chloromethane	1.23	50	39975	0.98	PPB	99
4) Vinyl Chloride	1.28	62	41124m	0.98	PPB	
5) Bromomethane	1.54	96	16277	0.96	PPB	98
6) Chloroethane	1.62	64	25915	0.97	PPB	95
7) Dichlorofluoromethane	1.78	67	60250	1.02	PPB	99
8) Trichlorofluoromethane	1.78	101	54176	0.99	PPB	97
9) Ethyl Ether	2.04	59	22745	0.86	PPB	92
10) Acrolein	2.22	56	60888	17.34	PPB	100
11) Trichlorotrifluoroethane	2.22	151	20808	1.03	PPB	87
12) 1,1-Dichloroethene	2.25	96	34973	0.94	PPB	95
14) Iodomethane	2.40	142	133749	3.29	PPB	100
15) Carbon Disulfide	2.43	76	91968	1.03	PPB	99
16) 2-Propanol (Isopropyl Alco	2.49	45	27336	38.62	PPB	92
17) 3-Chloro-1-propene	2.61	76	14440	0.80	PPB	98
18) Methyl Acetate	2.65	43	17694	1.11	PPB	91
19) Acetonitrile	2.71	40	46688	36.35	PPB	96
20) Methylene Chloride	2.76	84	46414	1.12	PPB	91
21) tert-Butyl Alcohol	2.88	59	4805	4.68	PPB	72
22) Acrylonitrile	3.10	53	27900	3.60	PPB	96
23) Methyl tert-Butyl Ether	2.98	73	130072	1.68	PPB	99
24) trans-1,2-Dichloroethene	2.99	96	38177	0.96	PPB	99
25) Hexane	3.20	57	34742	0.96	PPB	99
26) Diisopropyl Ether	3.50	45	93407	0.81	PPB	98
27) 1,1-Dichloroethane	3.50	63	63068	0.84	PPB	95
28) Vinyl Acetate	3.57	86	7550	1.30	PPB	# 65
29) Chloroprene	3.56	53	182057	3.43	PPB	96
30) tert-Butyl Ethyl Ether	3.93	59	75775	0.80	PPB	99
31) 2,2-Dichloropropane	4.16	77	34071	0.80	PPB	92
32) cis-1,2-Dichloroethene	4.21	96	39680	0.90	PPB	96
33) 2-Butanone	4.28	72	36668	16.69	PPB	99
34) Ethyl Acetate	4.31	61	6533	1.95	PPB	80
35) Propionitrile	4.46	54	9012	3.24	PPB	95
36) Methacrylonitrile	4.60	67	30320	3.19	PPB	84
37) Bromochloromethane	4.53	128	15596	0.87	PPB	96
38) Tetrahydrofuran	4.55	71	4724	1.78	PPB	# 90
39) Chloroform	4.63	83	57954	0.92	PPB	95
40) tert-Butyl Formate	4.67	59	5351	0.65	PPB	94
41) Cyclohexane	4.75	56	52743	0.90	PPB	97
42) 1,1,1-Trichloroethane	4.79	97	40956	0.83	PPB	97
44) Carbon Tetrachloride	4.96	117	28046	0.78	PPB	83
45) 1,1-Dichloropropene	5.03	75	50000	0.95	PPB	93
46) Isobutyl Alcohol	5.36	43	15553	29.37	PPB	90

(#)=qualifier out of range (m)=manual integration

0908F014.D 091123MS23_8260.M

Fri Sep 15 09:12:33 2023

3533 of 3623

Data File : J:\MS23\DATA\091123\0908F014.D

Acq On : 11 Sep 2023 4:38 pm

Sample : ICAL 1

Misc :

Vial: 7

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Sep 12 08:59:41 2023

Quant Results File: 091123MS23_8260.RES

Quant Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Tue Sep 12 08:58:41 2023

Response via : Initial Calibration

DataAcq Meth : 8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
48) Benzene	5.30	78	159279	0.94	PPB	98
49) 1,2-Dichloroethane	5.45	62	42367	0.93	PPB	97
50) tert-Amyl Methyl Ether	5.46	55	24092	0.96	PPB	# 78
51) Trichloroethene	6.16	95	35531	0.94	PPB	99
52) Methylcyclohexane	6.29	83	39344	0.93	PPB	97
53) 1,2-Dichloropropane	6.49	63	35124	0.85	PPB	94
54) Dibromomethane	6.63	93	15017	0.83	PPB	84
55) Methyl methacrylate	6.66	69	10941	0.69	PPB	80
56) 1,4-Dioxane	6.68	88	6319	39.65	PPB	84
60) cis-1,3-Dichloropropene	7.36	75	32158	0.60	PPB	98
61) 4-Methyl-2-pentanone (MIBK)	7.55	58	122400	16.21	PPB	96
63) Toluene	7.66	92	95237	0.94	PPB	99
65) n-Octane	7.75	85	13540	0.95	PPB	90
66) trans-1,3-Dichloropropene	8.02	75	21516	0.58	PPB	91
67) Ethyl methacrylate	8.09	69	18552	0.66	PPB	98
68) 1,1,2-Trichloroethane	8.21	83	20425	0.90	PPB	92
69) Tetrachloroethene	8.22	164	26056	1.01	PPB	92
70) 2-Hexanone	8.48	57	34028	14.50	PPB	93
71) 1,3-Dichloropropane	8.39	76	45860	0.91	PPB	97
72) Dibromochloromethane	8.59	129	13294	0.62	PPB	94
73) 1,2-Dibromoethane (EDB)	8.70	107	19958	0.83	PPB	95
74) 1-Chlorohexane	9.19	91	30855	0.95	PPB	94
75) Chlorobenzene	9.20	112	92465	0.98	PPB	98
76) Ethylbenzene	9.30	106	45025	0.92	PPB	94
77) 1,1,1,2-Tetrachloroethane	9.31	131	17540	0.69	PPB	96
78) m,p-Xylenes	9.43	106	111856	1.89	PPB	99
79) o-Xylene	9.84	106	51265	0.90	PPB	93
80) Styrene	9.88	103	36458m	0.82	PPB	
82) Isopropylbenzene	10.22	105	111830	0.90	PPB	97
86) 1,1,2,2-Tetrachloroethane	10.62	83	18418	0.79	PPB	98
87) trans-1,4-Dichloro-2-buten	10.69	53	4888	0.81	PPB	94
88) Bromobenzene	10.55	156	30761	0.94	PPB	94
89) n-Propylbenzene	10.64	91	118499	0.89	PPB	98
90) 1,2,3-Trichloropropane	10.67	110	6804	0.91	PPB	85
91) 2-Chlorotoluene	10.74	91	83924	0.96	PPB	99
92) 1,3,5-Trimethylbenzene	10.84	105	79758	0.85	PPB	93
93) 4-Chlorotoluene	10.87	91	94639	0.92	PPB	96
94) tert-Butylbenzene	11.15	119	69148	0.93	PPB	96
95) 1,2,4-Trimethylbenzene	11.22	105	78970	0.82	PPB	99
96) sec-Butylbenzene	11.38	105	83533	0.89	PPB	100
97) p-Isopropyltoluene	11.53	119	67899	0.81	PPB	97
98) 1,3-Dichlorobenzene	11.51	146	47649	0.92	PPB	99
99) 1,4-Dichlorobenzene	11.61	146	52509	0.99	PPB	99
100) n-Butylbenzene	11.95	91	49973	0.77	PPB	99
101) 1,2-Dichlorobenzene	11.99	146	43084	0.95	PPB	99
102) 1,2-Dibromo-3-chloropropan	12.65	155	1115	0.78	PPB	# 70
103) 1,3,5-Trichlorobenzene	12.75	180	18924	0.88	PPB	98
104) 1,2,4-Trichlorobenzene	13.21	180	12196	0.84	PPB	96
105) Hexachlorobutadiene	13.30	225	7782	0.90	PPB	90
106) Naphthalene	13.40	128	14337	0.71	PPB	99
107) 1,2,3-Trichlorobenzene	13.59	180	6438	0.88	PPB	95

(#) = qualifier out of range (m) = manual integration

0908F014.D 091123MS23_8260.M

Fri Sep 15 09:12:33 2023

3534 of 3623

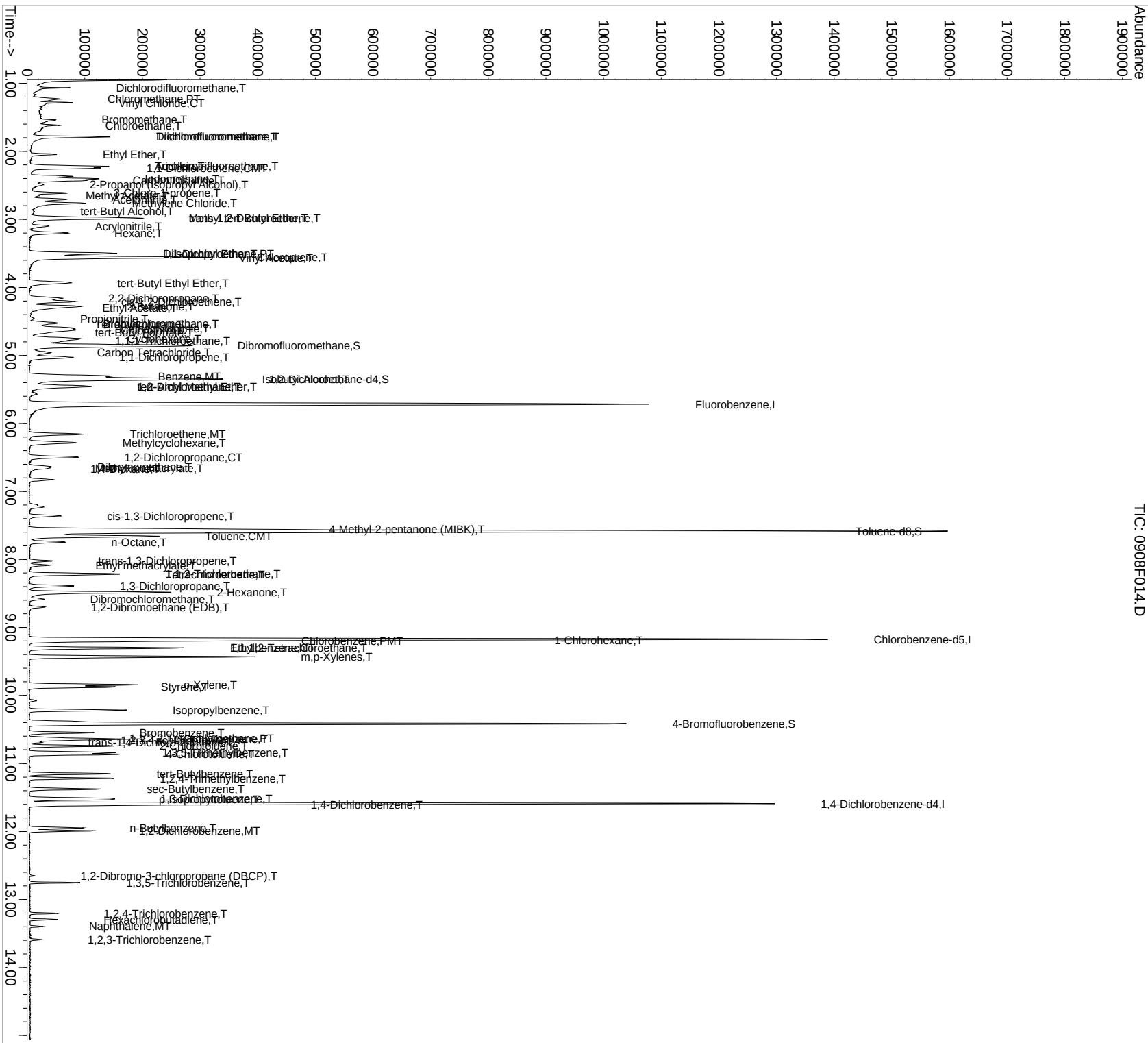
09/12/23

Data File : J:\MS23\DATA\091123\0908F014.D
Acq On : 11 Sep 2023 4:38 pm
Sample : ICAL 1
Misc :
MS Integration Params: rteint.p
uant Time: Sep 15 8:30 2023

Vial: 7
Operator: EW/GH/MK/OT
Inst : MS23
Multiplr: 1.00

Quant Results File: 091123MS23_8260.RES

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)
Title : VOA MS23 EPA Method 8260C
Last Update : Fri Sep 15 08:47:04 2023
Response via : Initial Calibration



Quantitation Report (Qedit)

1st *EW* 09/15/232nd *Q* 09/18/23

Data File : J:\MS23\DATA\091123\0908F014.D

Acq On : 11 Sep 2023 4:38 pm

Sample : ICAL 1

Misc :

Vial: 7

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Sep 12 9:42 2023

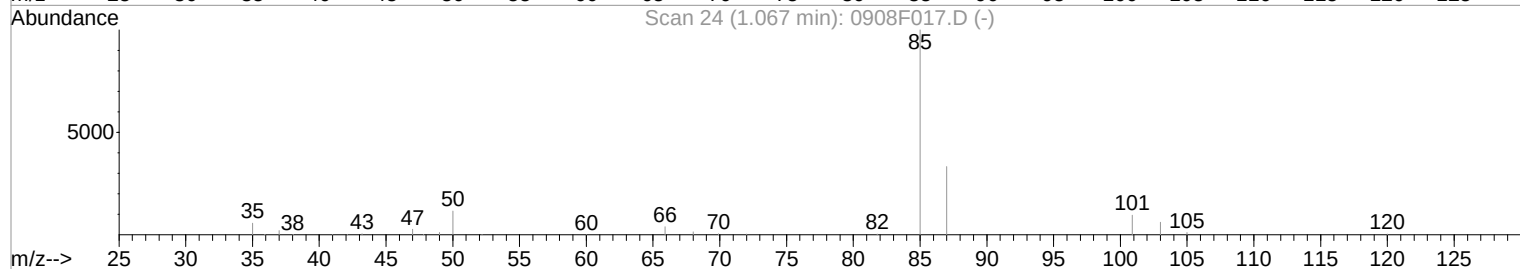
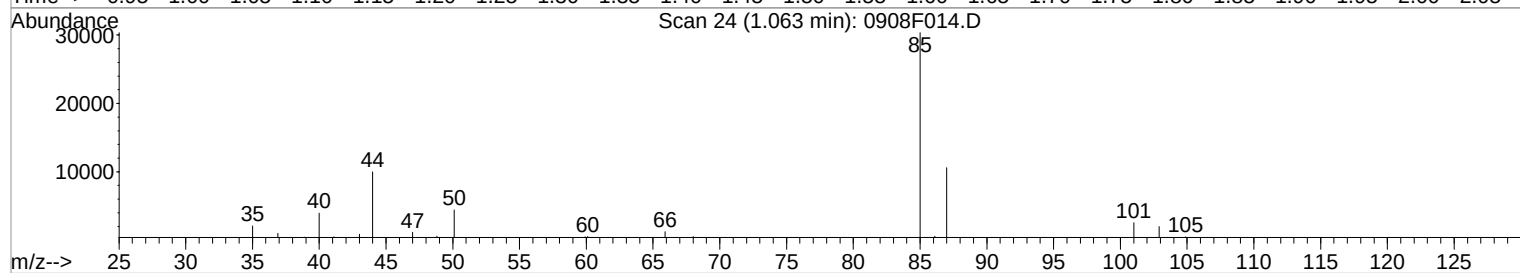
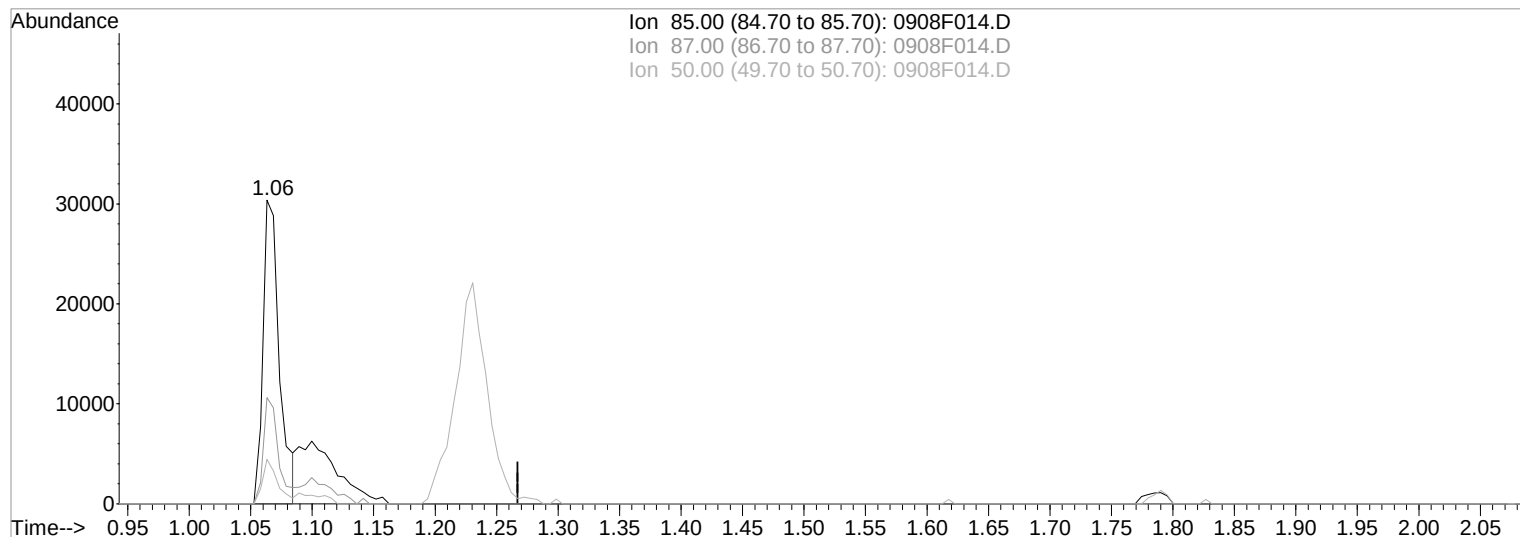
Quant Results File: temp.res

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Fri Sep 15 08:29:33 2023

Response via : Multiple Level Calibration



TIC: 0908F014.D

(2) Dichlorodifluoromethane (T)

Manual Integration:

1.06min 0.92PPB

Before

response 28215

Ion	Exp%	Act%
-----	------	------

09/15/23

85.00	100	100
-------	-----	-----

87.00	33.20	34.92
-------	-------	-------

50.00	11.40	14.63
-------	-------	-------

0.00	0.00	0.00
------	------	------

Quantitation Report (Qedit)

1st  09/15/23
2nd  09/18/23

Data File : J:\MS23\DATA\091123\0908F014.D

Acq On : 11 Sep 2023 4:38 pm

Sample : ICAL 1

Misc :

MS Integration Params: rteint.p

Quant Time: Sep 15 8:29 2023

Vial: 7

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

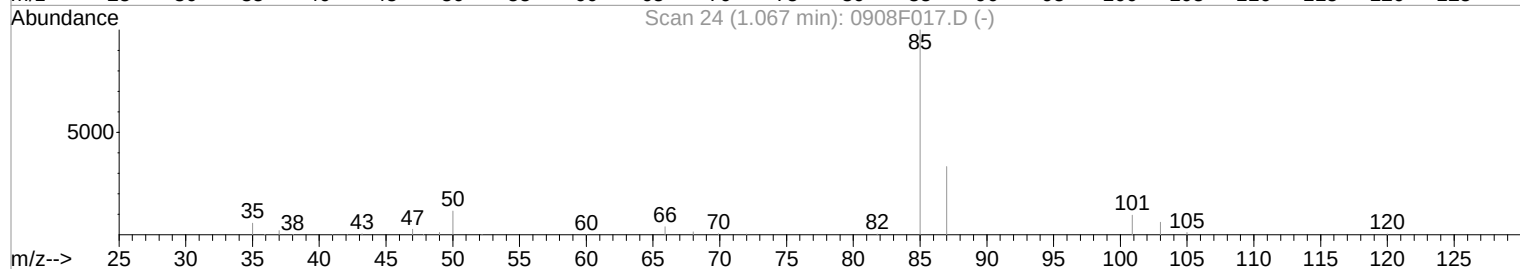
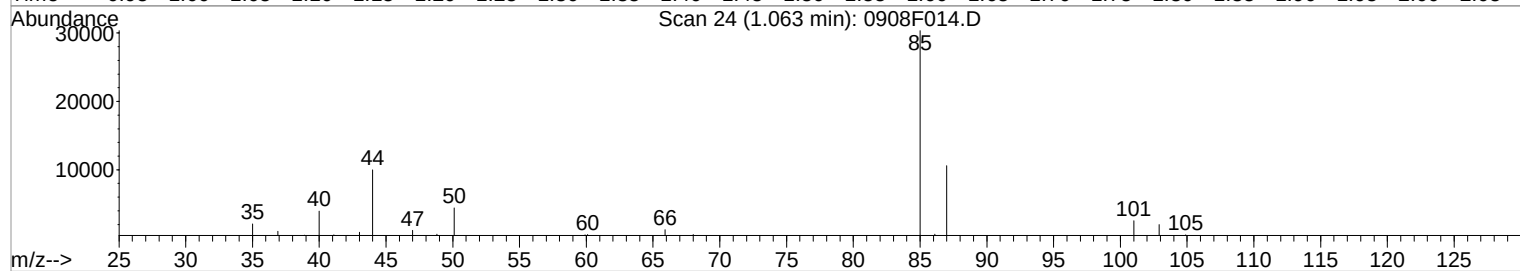
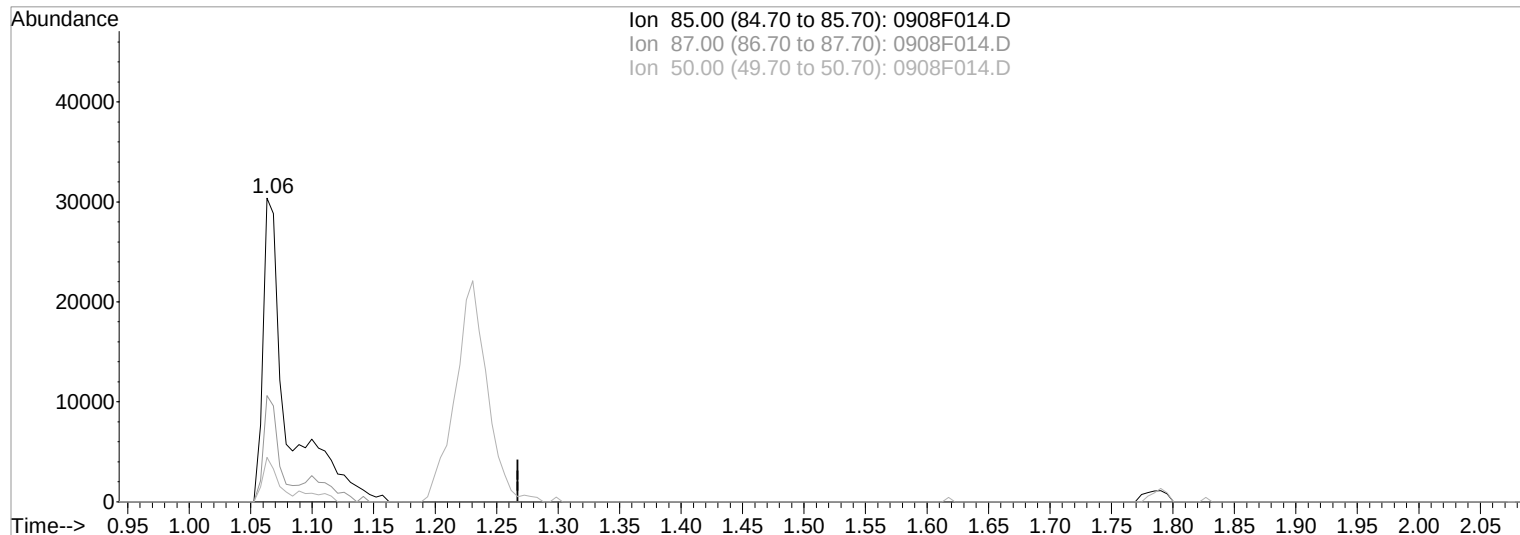
Quant Results File: temp.res

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Fri Sep 15 08:29:33 2023

Response via : Multiple Level Calibration



TIC: 0908F014.D

(2) Dichlorodifluoromethane (T)

1.06min 1.37PPB m

response 41997

Ion	Exp%	Act%
85.00	100	100
87.00	33.20	34.92
50.00	11.40	14.63
0.00	0.00	0.00

Manual Integration:

After

Split peak

09/15/23

Quantitation Report (Qedit)

1st *EW* 09/15/23
 2nd *Q* 09/18/23

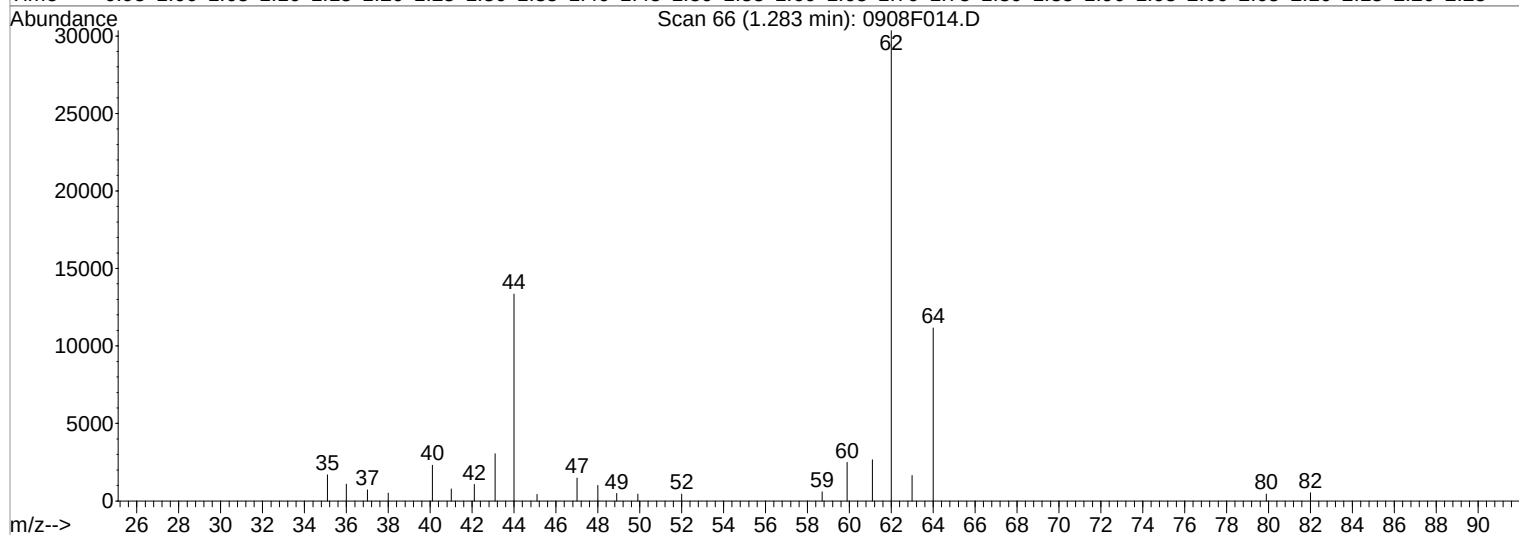
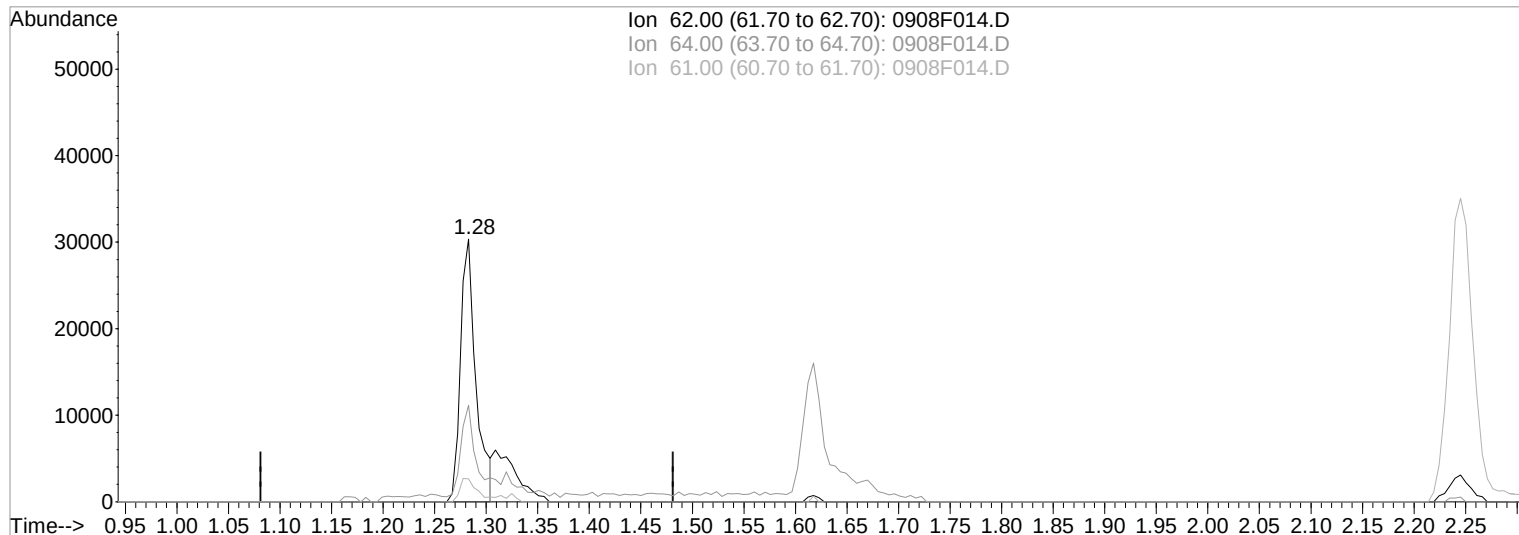
Data File : J:\MS23\DATA\091123\0908F014.D
 Acq On : 11 Sep 2023 4:38 pm
 Sample : ICAL 1
 Misc :

Vial: 7
 Operator: EW/GH/MK/OT
 Inst : MS23
 Multiplr: 1.00

MS Integration Params: rteint.p
 Quant Time: Sep 15 8:29 2023

Quant Results File: temp.res

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)
 Title : VOA MS23 EPA Method 8260C
 Last Update : Fri Sep 15 08:30:03 2023
 Response via : Multiple Level Calibration



TIC: 0908F014.D

(4) Vinyl Chloride (CT)

Manual Integration:

1.28min 0.76PPB

Before

response 31817

Ion	Exp%	Act%
62.00	100	100
64.00	31.50	34.75
61.00	8.80	8.72
0.00	0.00	0.00

09/15/23

Quantitation Report (Qedit)

1st  09/15/23
2nd  09/18/23

Data File : J:\MS23\DATA\091123\0908F014.D

Acq On : 11 Sep 2023 4:38 pm

Sample : ICAL 1

Misc :

MS Integration Params: rteint.p

Quant Time: Sep 15 8:30 2023

Vial: 7

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

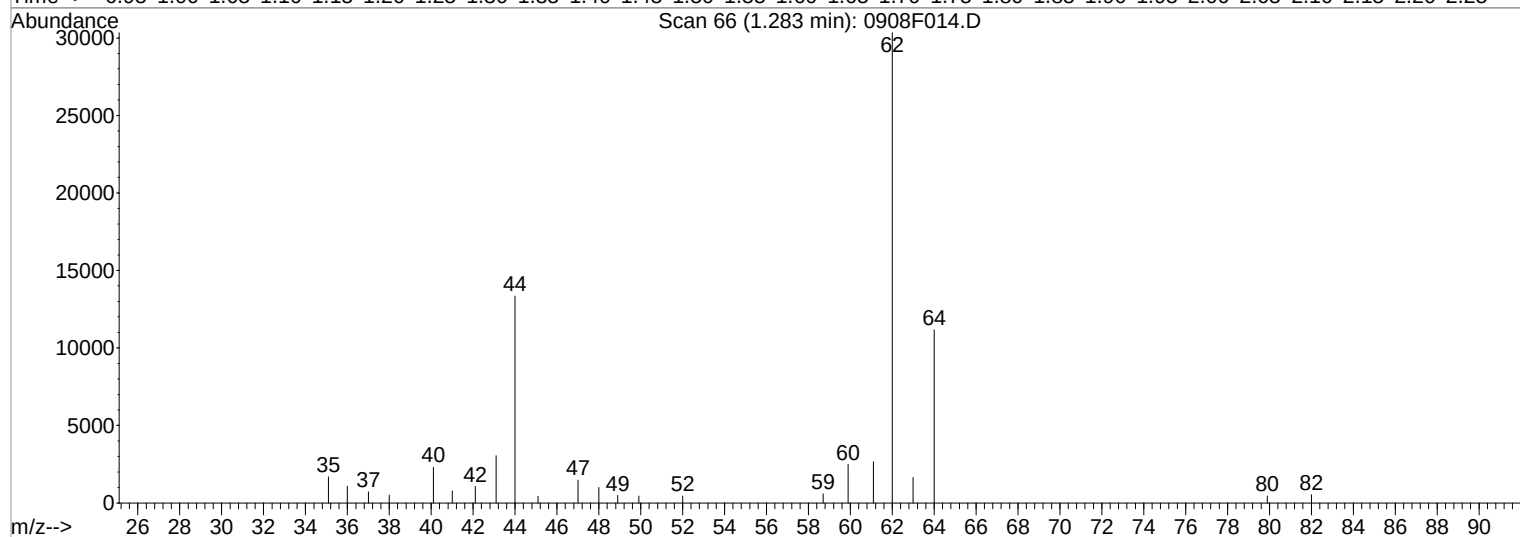
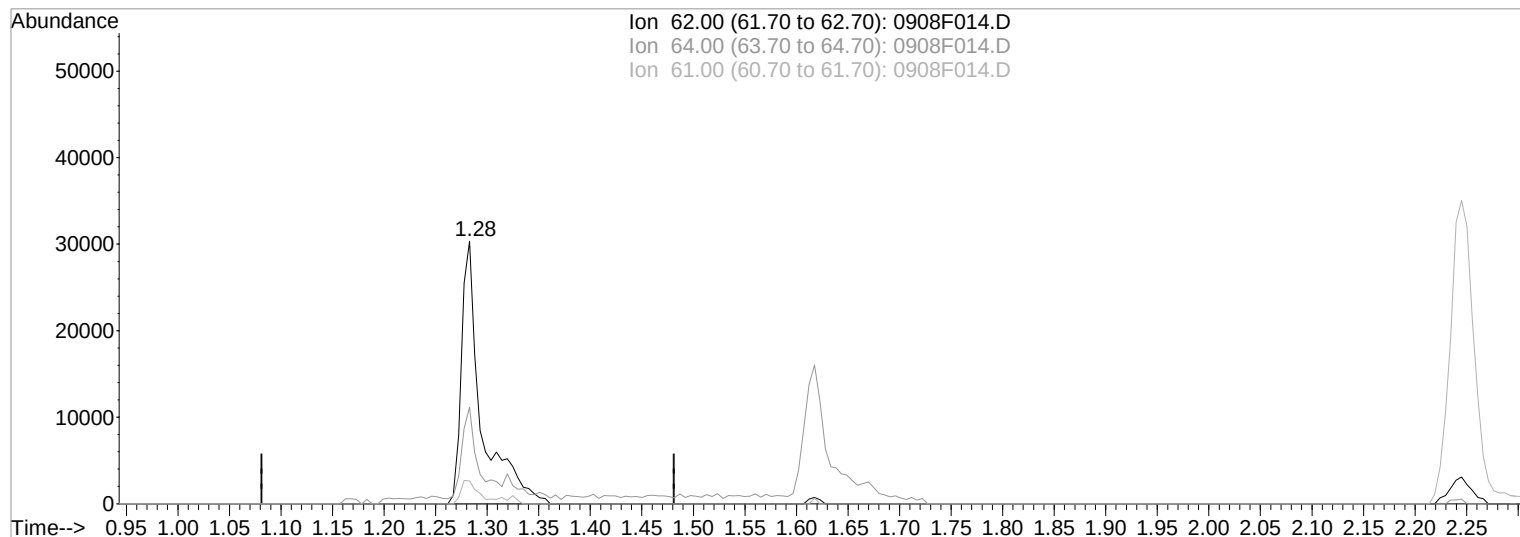
Quant Results File: temp.res

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Fri Sep 15 08:30:03 2023

Response via : Multiple Level Calibration



TIC: 0908F014.D

(4) Vinyl Chloride (CT)

1.28min 0.98PPB m

response 41124

Manual Integration:

After

Split peak

09/15/23

Ion	Exp%	Act%
62.00	100	100
64.00	31.50	36.75
61.00	8.80	8.72
0.00	0.00	0.00

Quantitation Report (Qedit)

1st  09/12/23
2nd  09/18/23

Data File : J:\MS23\DATA\091123\0908F014.D

Acq On : 11 Sep 2023 4:38 pm

Sample : ICAL 1

Misc :

MS Integration Params: rteint.p

Quant Time: Sep 12 8:59 2023

Vial: 7

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

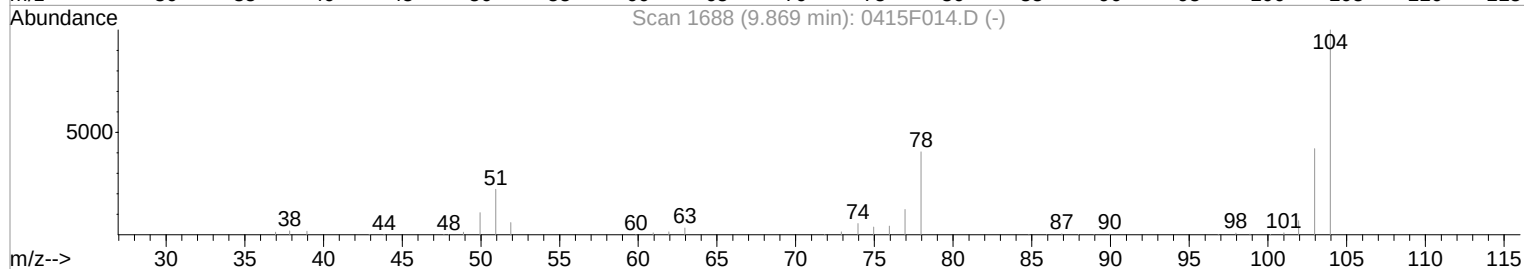
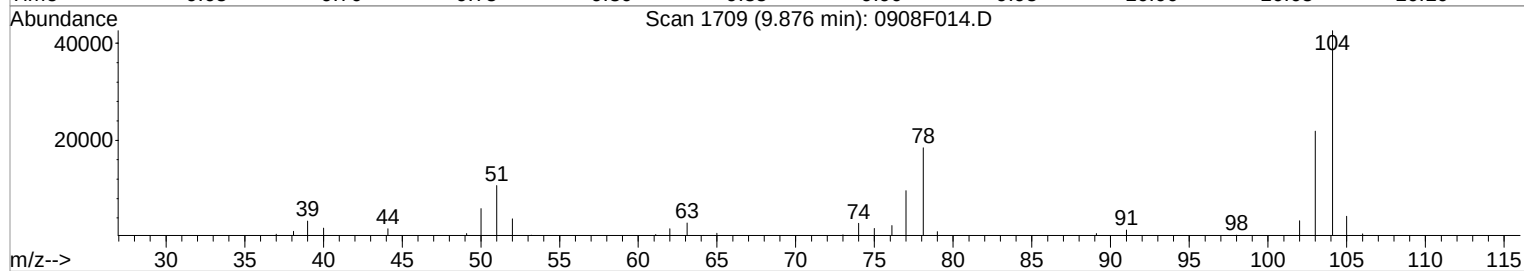
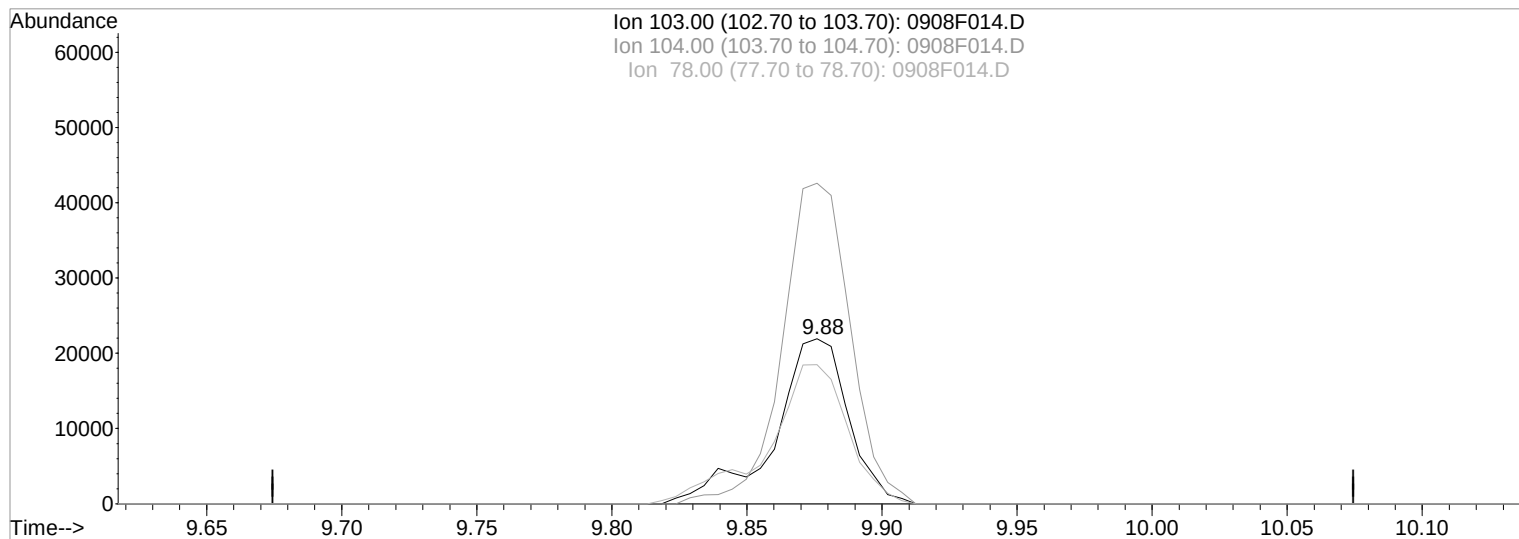
Quant Results File: temp.res

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Tue Sep 12 09:41:10 2023

Response via : Single Level Calibration



TIC: 0908F014.D

(80) Styrene (T)

Manual Integration:

9.88min 0.93PPB

Before

response 41739

09/12/23

Ion	Exp%	Act%
103.00	100	100
104.00	210.00	194.49
78.00	87.20	84.34
0.00	0.00	0.00

Data File : J:\MS23\DATA\091123\0908F014.D

Acq On : 11 Sep 2023 4:38 pm

Sample : ICAL 1

Misc :

MS Integration Params: rteint.p

Quant Time: Sep 12 9:42 2023

Vial: 7

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

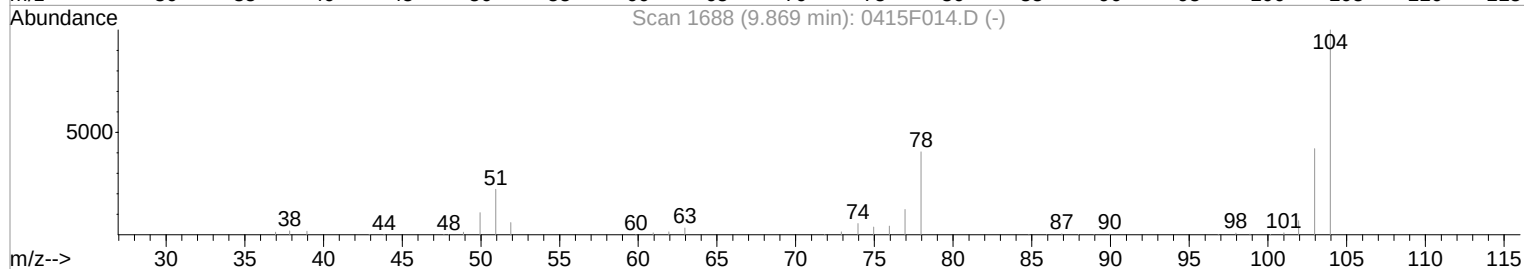
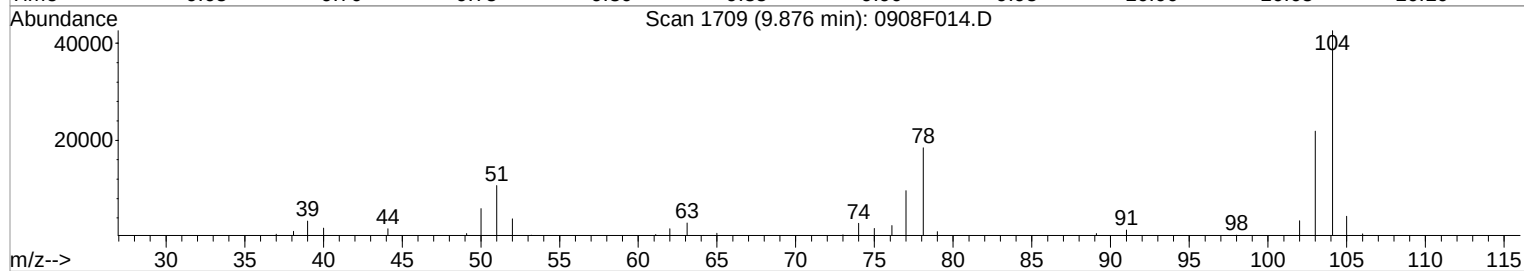
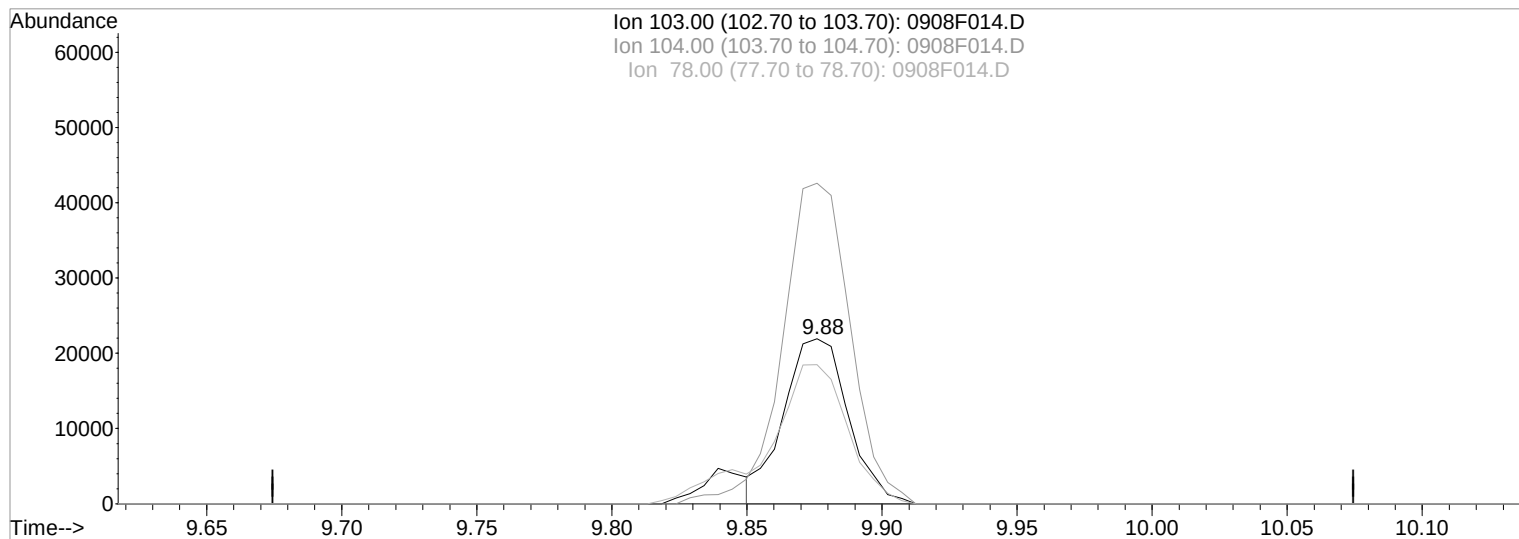
Quant Results File: temp.res

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Tue Sep 12 09:41:10 2023

Response via : Single Level Calibration



TIC: 0908F014.D

(80) Styrene (T)

9.88min 0.82PPB m

response 36458

Ion	Exp%	Act%
-----	------	------

103.00	100	100
--------	-----	-----

104.00	210.00	194.49
--------	--------	--------

78.00	87.20	84.34
-------	-------	-------

0.00	0.00	0.00
------	------	------

Manual Integration:

After

Shoulder

09/12/23

Data File : J:\MS23\DATA\091123\0908F015.D

Acq On : 11 Sep 2023 5:02 pm

Sample : ICAL 2

Misc :

Vial: 8

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Sep 12 08:59:42 2023

Quant Results File: 091123MS23_8260.RES

Quant Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Tue Sep 12 08:58:41 2023

Response via : Initial Calibration

DataAcq Meth : 8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	5.72	96	1157801	10.00	PPB	0.00
64) Chlorobenzene-d5	9.18	82	429265	10.00	PPB	0.00
85) 1,4-Dichlorobenzene-d4	11.59	152	330466	10.00	PPB	0.00

System Monitoring Compounds

43) Dibromofluoromethane	4.86	113	228796	9.69	PPB	0.00
Spiked Amount 10.000			Recovery	=	96.90%	
47) 1,2-Dichloroethane-d4	5.35	65	267564	10.16	PPB	0.00
Spiked Amount 10.000			Recovery	=	101.60%	
62) Toluene-d8	7.59	98	1080828	9.82	PPB	0.00
Spiked Amount 10.000			Recovery	=	98.20%	
84) 4-Bromofluorobenzene	10.41	95	344873	9.91	PPB	0.00
Spiked Amount 10.000			Recovery	=	99.10%	

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	1.07	85	91041m	3.04	PPB	
3) Chloromethane	1.23	50	83109	2.08	PPB	98
4) Vinyl Chloride	1.28	62	83786	2.04	PPB	98
5) Bromomethane	1.54	96	32201	1.94	PPB	93
6) Chloroethane	1.62	64	55683	2.14	PPB	97
7) Dichlorofluoromethane	1.78	67	117241	2.04	PPB	97
8) Trichlorofluoromethane	1.78	101	108342	2.03	PPB	99
9) Ethyl Ether	2.05	59	49170	1.91	PPB	98
10) Acrolein	2.22	56	112761	32.87	PPB	96
11) Trichlorotrifluoroethane	2.22	151	40748	2.06	PPB	98
12) 1,1-Dichloroethene	2.25	96	69741	1.92	PPB	100
14) Iodomethane	2.41	142	286296	7.21	PPB	99
15) Carbon Disulfide	2.43	76	175456	2.01	PPB	99
16) 2-Propanol (Isopropyl Alco	2.49	45	59741	86.41	PPB	93
17) 3-Chloro-1-propene	2.61	76	30540	1.73	PPB	98
18) Methyl Acetate	2.65	43	35500	2.27	PPB	97
19) Acetonitrile	2.71	40	107147	85.41	PPB	97
20) Methylene Chloride	2.76	84	89848	2.21	PPB	98
21) tert-Butyl Alcohol	2.88	59	9193	9.17	PPB	90
22) Acrylonitrile	3.10	53	58843	7.78	PPB	94
23) Methyl tert-Butyl Ether	2.98	73	276847	3.65	PPB	98
24) trans-1,2-Dichloroethene	2.99	96	75829	1.95	PPB	100
25) Hexane	3.20	57	69773	1.97	PPB	100
26) Diisopropyl Ether	3.51	45	201783	1.79	PPB	98
27) 1,1-Dichloroethane	3.50	63	132894	1.81	PPB	97
28) Vinyl Acetate	3.56	86	17789	3.14	PPB	98
29) Chloroprene	3.56	53	389088	7.51	PPB	97
30) tert-Butyl Ethyl Ether	3.93	59	162509	1.76	PPB	96
31) 2,2-Dichloropropane	4.16	77	72321	1.73	PPB	96
32) cis-1,2-Dichloroethene	4.21	96	83401	1.94	PPB	94
33) 2-Butanone	4.27	72	79348	36.97	PPB	98
34) Ethyl Acetate	4.31	61	11282	3.44	PPB	93
35) Propionitrile	4.46	54	21407	7.87	PPB	91
36) Methacrylonitrile	4.60	67	69509	7.48	PPB	99
37) Bromochloromethane	4.52	128	32842	1.88	PPB	99
38) Tetrahydrofuran	4.55	71	7100	2.74	PPB	87
39) Chloroform	4.63	83	120192	1.95	PPB	90
40) tert-Butyl Formate	4.66	59	12213	1.51	PPB	90
41) Cyclohexane	4.76	56	106502	1.87	PPB	92
42) 1,1,1-Trichloroethane	4.80	97	82318	1.71	PPB	97
44) Carbon Tetrachloride	4.96	117	60012	1.71	PPB	96
45) 1,1-Dichloropropene	5.03	75	97355	1.90	PPB	98
46) Isobutyl Alcohol	5.36	43	33640	65.03	PPB	92

(#)=qualifier out of range (m)=manual integration

0908F015.D 091123MS23_8260.M

Fri Sep 15 09:12:35 2023

3542 of 3623

Data File : J:\MS23\DATA\091123\0908F015.D

Acq On : 11 Sep 2023 5:02 pm

Sample : ICAL 2

Misc :

Vial: 8

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Sep 12 08:59:42 2023

Quant Results File: 091123MS23_8260.RES

Quant Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Tue Sep 12 08:58:41 2023

Response via : Initial Calibration

DataAcq Meth : 8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
48) Benzene	5.30	78	320767	1.93	PPB	99
49) 1,2-Dichloroethane	5.46	62	89157	2.01	PPB	96
50) tert-Amyl Methyl Ether	5.46	55	49579	2.02	PPB	# 62
51) Trichloroethene	6.16	95	71063	1.92	PPB	97
52) Methylcyclohexane	6.28	83	79619	1.92	PPB	91
53) 1,2-Dichloropropane	6.50	63	75180	1.87	PPB	95
54) Dibromomethane	6.63	93	32411	1.84	PPB	96
55) Methyl methacrylate	6.66	69	25273	1.64	PPB	93
56) 1,4-Dioxane	6.68	88	13092	84.09	PPB	94
60) cis-1,3-Dichloropropene	7.36	75	75921	1.44	PPB	98
61) 4-Methyl-2-pentanone (MIBK)	7.56	58	263382	35.71	PPB	94
63) Toluene	7.66	92	192315	1.94	PPB	100
65) n-Octane	7.75	85	27858	1.97	PPB	95
66) trans-1,3-Dichloropropene	8.02	75	49542	1.35	PPB	96
67) Ethyl methacrylate	8.09	69	43252	1.55	PPB	95
68) 1,1,2-Trichloroethane	8.21	83	44215	1.97	PPB	93
69) Tetrachloroethene	8.22	164	52455	2.05	PPB	93
70) 2-Hexanone	8.48	57	79919	34.46	PPB	96
71) 1,3-Dichloropropane	8.39	76	95962	1.92	PPB	99
72) Dibromochloromethane	8.58	129	31461	1.48	PPB	96
73) 1,2-Dibromoethane (EDB)	8.70	107	42625	1.79	PPB	98
74) 1-Chlorohexane	9.19	91	59703	1.87	PPB	98
75) Chlorobenzene	9.20	112	185484	1.99	PPB	98
76) Ethylbenzene	9.30	106	92620	1.92	PPB	96
77) 1,1,1,2-Tetrachloroethane	9.31	131	41214	1.64	PPB	96
78) m,p-Xylenes	9.43	106	229930	3.94	PPB	99
79) o-Xylene	9.84	106	105399	1.88	PPB	95
80) Styrene	9.88	103	74286m	1.68	PPB	
82) Isopropylbenzene	10.22	105	230813	1.88	PPB	99
86) 1,1,2,2-Tetrachloroethane	10.62	83	41329	1.79	PPB	97
87) trans-1,4-Dichloro-2-buten	10.69	53	10180	1.69	PPB	90
88) Bromobenzene	10.55	156	63133	1.94	PPB	98
89) n-Propylbenzene	10.64	91	249832	1.88	PPB	99
90) 1,2,3-Trichloropropane	10.66	110	13918	1.87	PPB	96
91) 2-Chlorotoluene	10.74	91	168693	1.95	PPB	99
92) 1,3,5-Trimethylbenzene	10.84	105	170921	1.84	PPB	97
93) 4-Chlorotoluene	10.86	91	196085	1.92	PPB	95
94) tert-Butylbenzene	11.15	119	140804	1.90	PPB	96
95) 1,2,4-Trimethylbenzene	11.22	105	171604	1.80	PPB	98
96) sec-Butylbenzene	11.38	105	176591	1.89	PPB	98
97) p-Isopropyltoluene	11.53	119	149239	1.79	PPB	98
98) 1,3-Dichlorobenzene	11.51	146	99850	1.95	PPB	97
99) 1,4-Dichlorobenzene	11.61	146	105870	2.01	PPB	99
100) n-Butylbenzene	11.95	91	113924	1.76	PPB	96
101) 1,2-Dichlorobenzene	11.99	146	87183	1.93	PPB	99
102) 1,2-Dibromo-3-chloropropan	12.65	155	2200	1.56	PPB	92
103) 1,3,5-Trichlorobenzene	12.75	180	41307	1.94	PPB	99
104) 1,2,4-Trichlorobenzene	13.21	180	26815	1.87	PPB	98
105) Hexachlorobutadiene	13.30	225	16956	1.97	PPB	94
106) Naphthalene	13.40	128	31303	1.56	PPB	95
107) 1,2,3-Trichlorobenzene	13.59	180	13037	1.79	PPB	97

(#) = qualifier out of range (m) = manual integration

0908F015.D 091123MS23_8260.M

Fri Sep 15 09:12:35 2023

3543 of 3623

1st W 09/12/23

```

Data File : J:\MS23\DATA\091123\0908F015.D
Acq On : 11 Sep 2023 5:02 pm
Sample : ICAL 2
Misc :
MS Integration Params: rteint.p

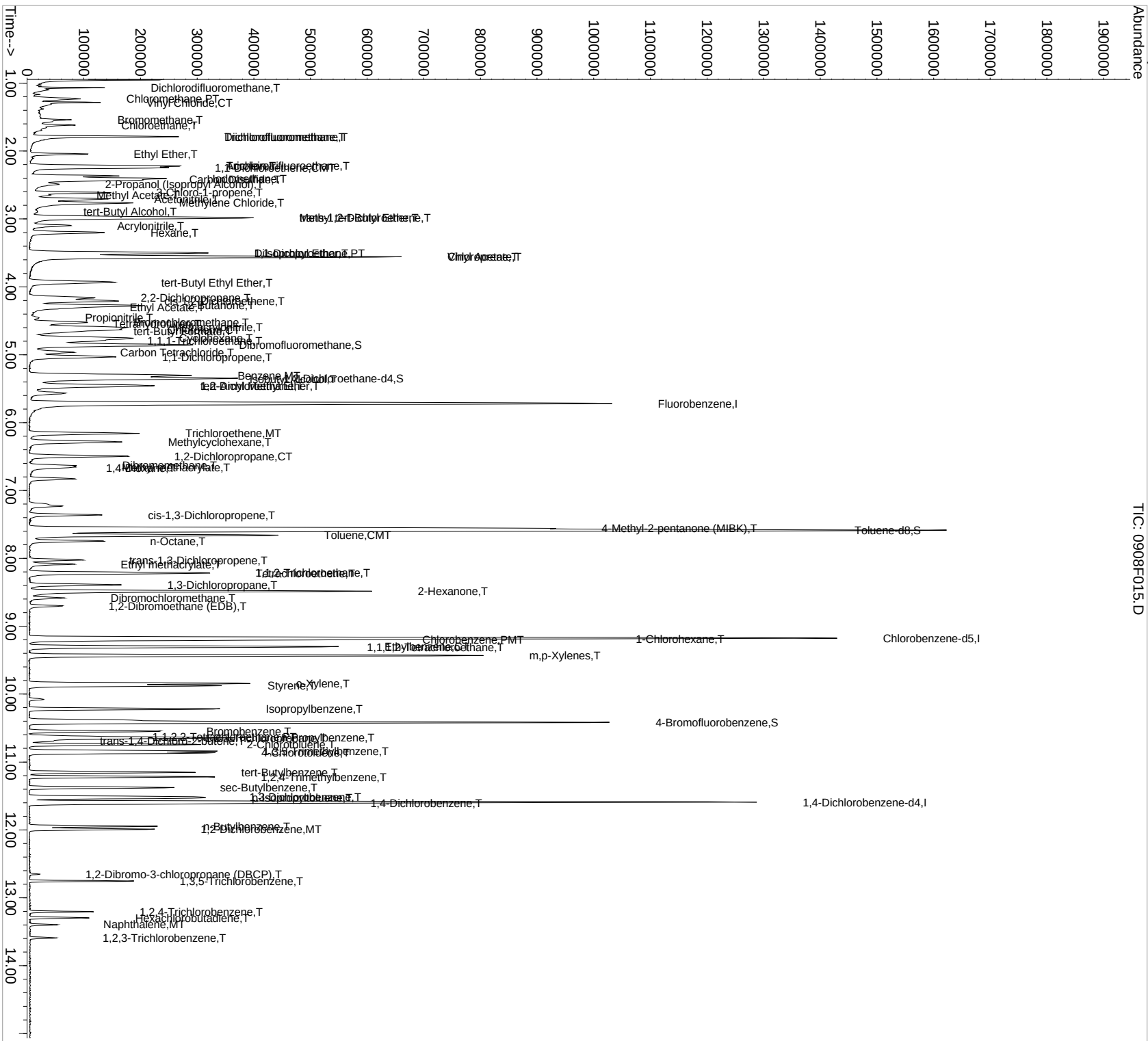
```

Vial: 8
Operator: EW/GH/MK/OT
Inst : MS23
Multiplr: 1.00

Quant Results File: 091123MS23_8260.RES

```
Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)
Title : VQA MS23 EPA Method 8260C
1st
```

Last Update : Fri Sep 15 08:47:04 2023
Response via : Initial Calibration



Quantitation Report (Qedit)

1st  09/15/232nd  09/18/23

Data File : J:\MS23\DATA\091123\0908F015.D

Acq On : 11 Sep 2023 5:02 pm

Sample : ICAL 2

Misc :

Vial: 8

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Sep 12 9:45 2023

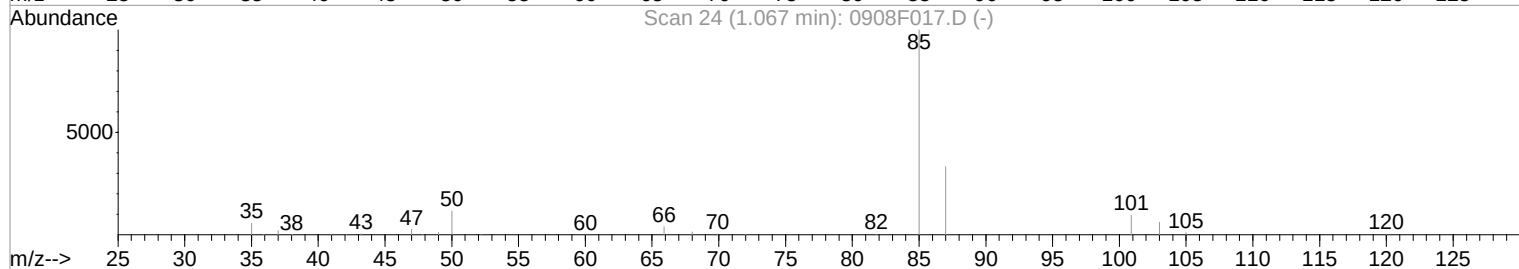
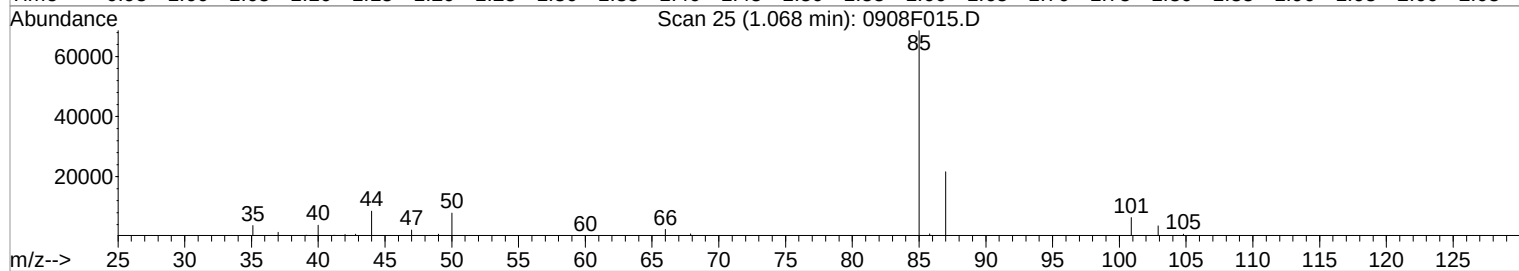
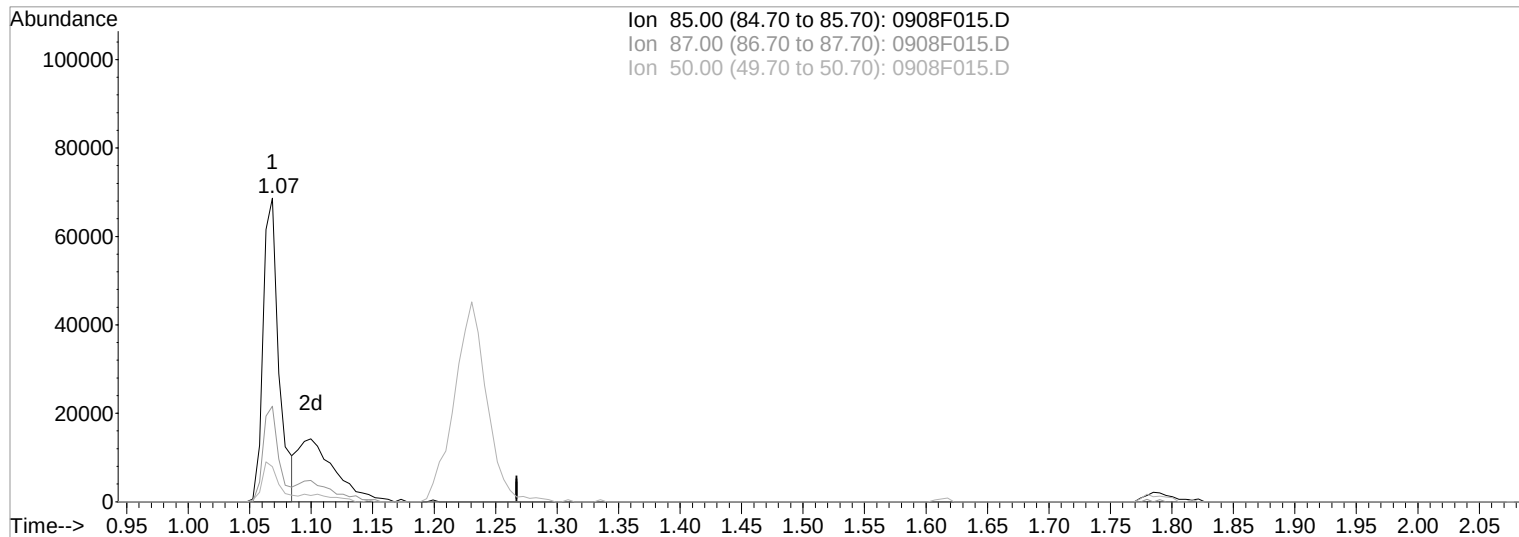
Quant Results File: temp.res

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Fri Sep 15 08:30:43 2023

Response via : Multiple Level Calibration



TIC: 0908F015.D

(2) Dichlorodifluoromethane (T)

Manual Integration:

1.07min 2.05PPB

Before

response 61326

09/15/23

Ion	Exp%	Act%
85.00	100	100
87.00	33.20	31.50
50.00	11.40	11.53
0.00	0.00	0.00

Quantitation Report (Qedit)

1st  09/15/23
2nd  09/18/23

Data File : J:\MS23\DATA\091123\0908F015.D

Acq On : 11 Sep 2023 5:02 pm

Sample : ICAL 2

Misc :

Vial: 8

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Sep 15 8:31 2023

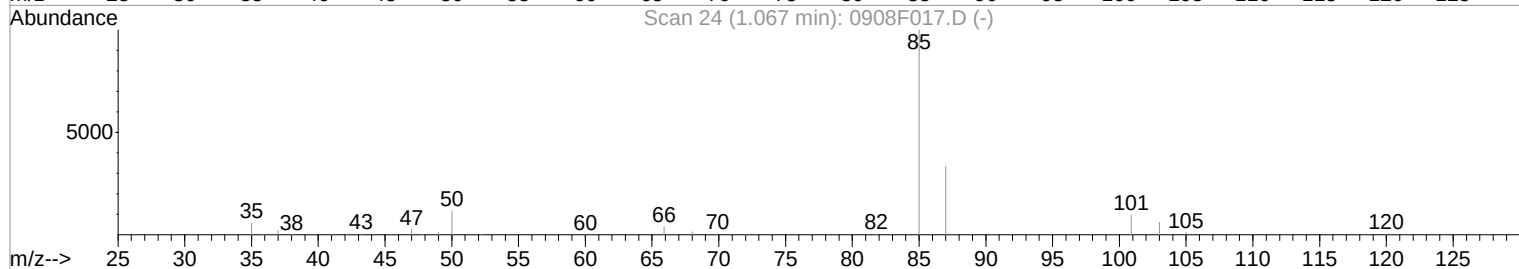
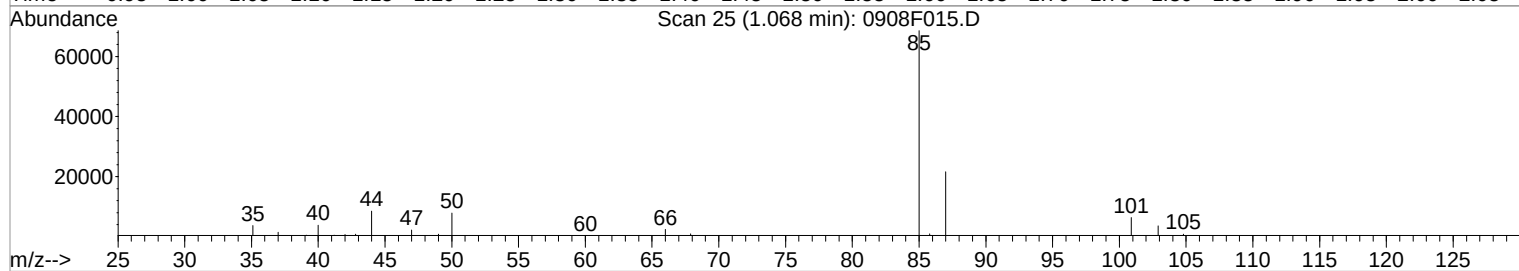
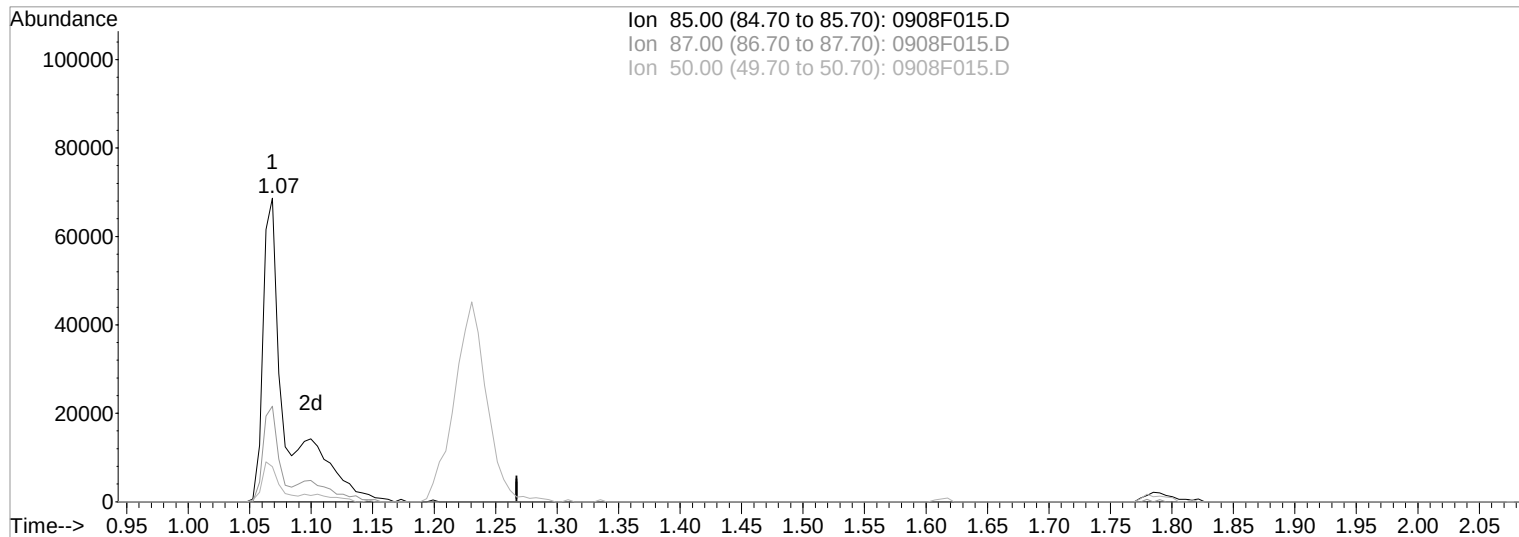
Quant Results File: temp.res

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Fri Sep 15 08:30:43 2023

Response via : Multiple Level Calibration



TIC: 0908F015.D

(2) Dichlorodifluoromethane (T)

Manual Integration:

1.07min 3.04PPB m

After

response 91041

Split peak

09/15/23

Ion	Exp%	Act%
85.00	100	100
87.00	33.20	31.50
50.00	11.40	11.53
0.00	0.00	0.00

Quantitation Report (Qedit)

1st  09/12/23
2nd  09/18/23

Data File : J:\MS23\DATA\091123\0908F015.D

Acq On : 11 Sep 2023 5:02 pm

Sample : ICAL 2

Misc :

MS Integration Params: rteint.p

Quant Time: Sep 12 8:59 2023

Vial: 8

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

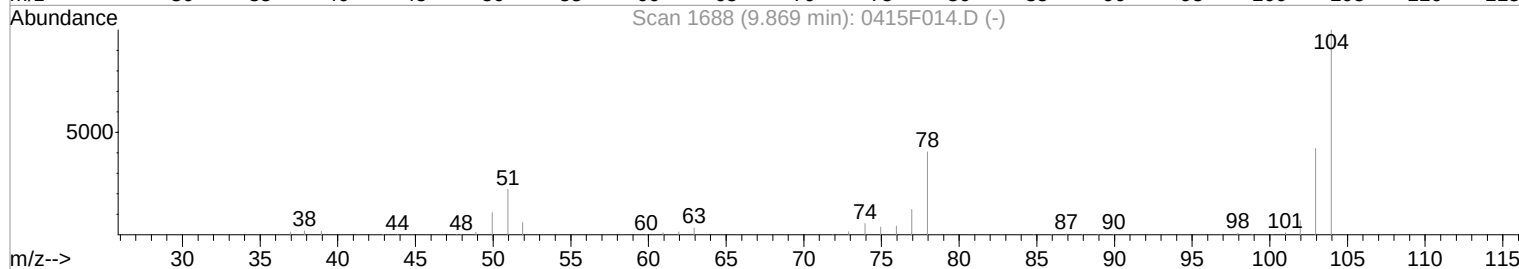
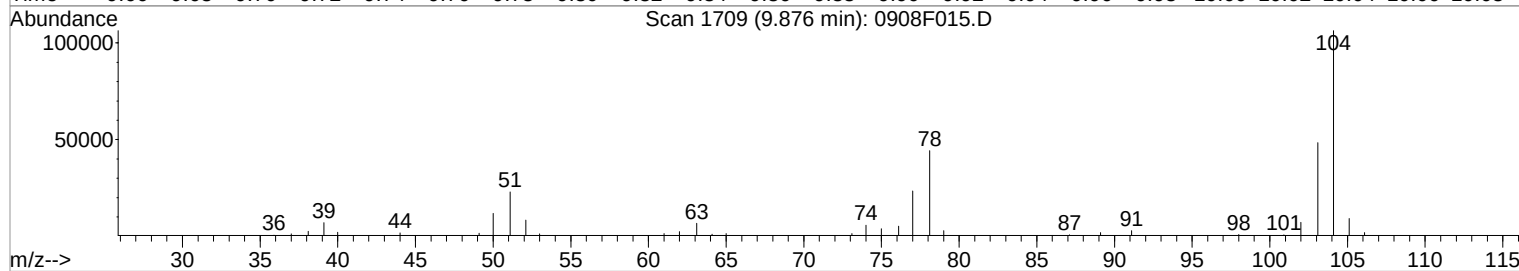
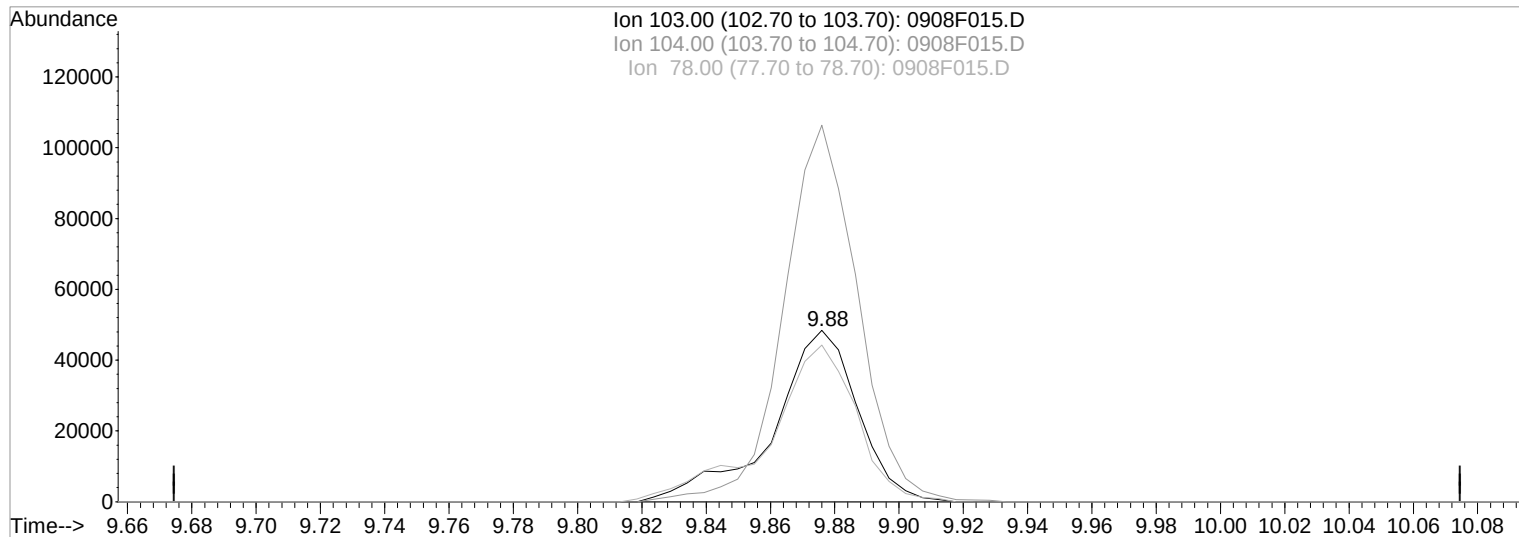
Quant Results File: temp.res

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Tue Sep 12 09:43:46 2023

Response via : Single Level Calibration



TIC: 0908F015.D

(80) Styrene (T)

Manual Integration:

9.88min 2.02PPB

Before

response 89047

Ion Exp% Act%

09/12/23

103.00 100 100

104.00 210.00 219.80

78.00 87.20 91.45

0.00 0.00 0.00

Quantitation Report (Qedit)

1st  09/12/23
2nd  09/18/23

Data File : J:\MS23\DATA\091123\0908F015.D

Acq On : 11 Sep 2023 5:02 pm

Sample : ICAL 2

Misc :

MS Integration Params: rteint.p

Quant Time: Sep 12 9:45 2023

Vial: 8

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

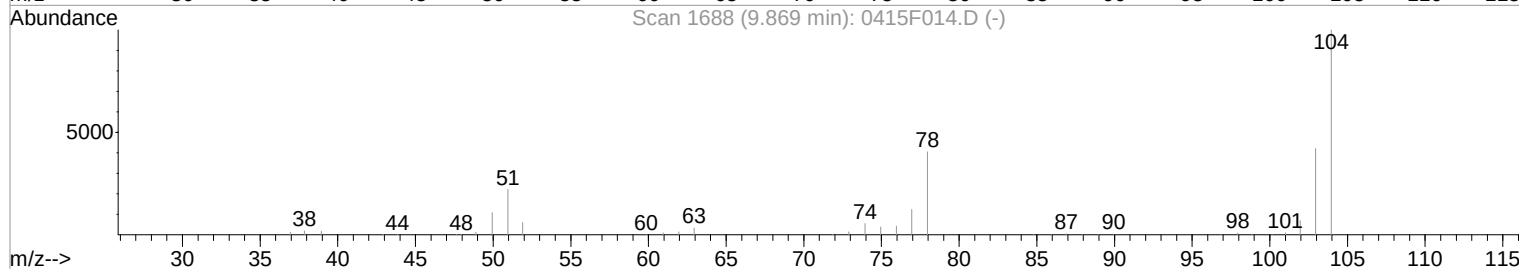
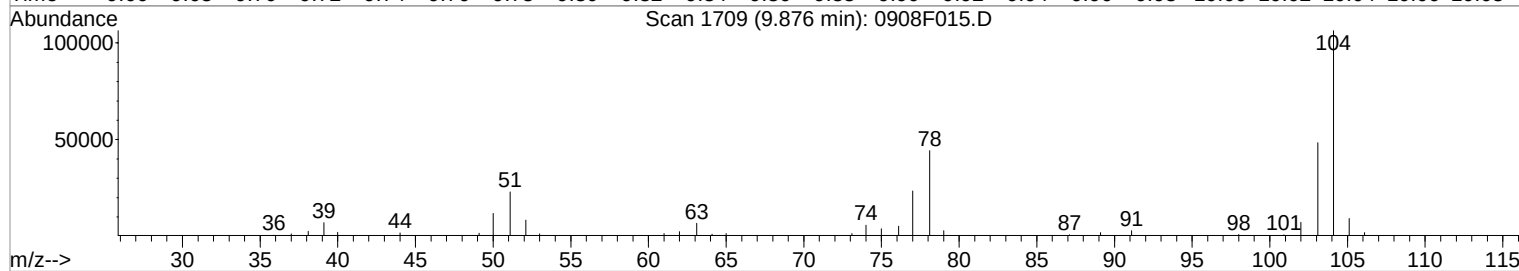
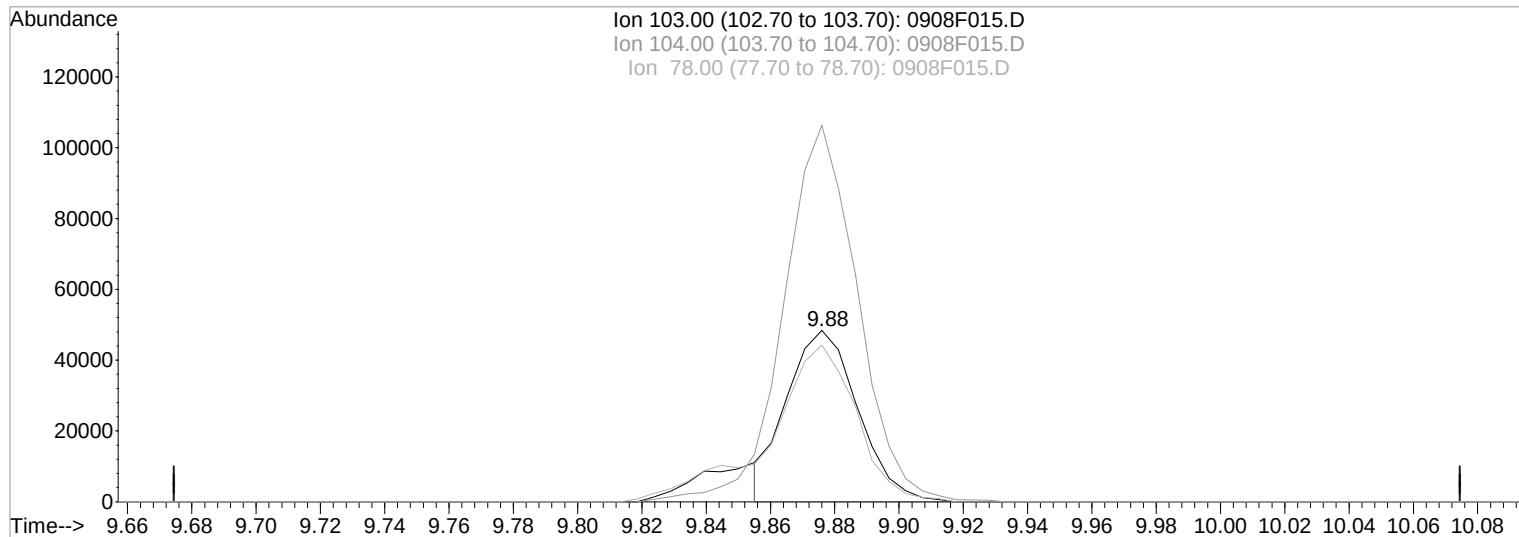
Quant Results File: temp.res

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Tue Sep 12 09:43:46 2023

Response via : Single Level Calibration



TIC: 0908F015.D

(80) Styrene (T)

9.88min 1.68PPB m

response 74286

Ion	Exp%	Act%
-----	------	------

103.00	100	100
--------	-----	-----

104.00	210.00	219.80
--------	--------	--------

78.00	87.20	91.45
-------	-------	-------

0.00	0.00	0.00
------	------	------

Manual Integration:

After

Shoulder

09/12/23

Data File : J:\MS23\DATA\091123\0908F016.D

Acq On : 11 Sep 2023 5:27 pm

Sample : ICAL 5

Misc :

Vial: 9

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Sep 12 08:59:44 2023

Quant Results File: 091123MS23_8260.RES

Quant Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Tue Sep 12 08:58:41 2023

Response via : Initial Calibration

DataAcq Meth : 8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	5.72	96	1216364	10.00	PPB	0.00
64) Chlorobenzene-d5	9.17	82	455385	10.00	PPB	0.00
85) 1,4-Dichlorobenzene-d4	11.59	152	350984	10.00	PPB	0.00

System Monitoring Compounds

43) Dibromofluoromethane	4.86	113	246342	9.93	PPB	0.00
Spiked Amount 10.000			Recovery	=	99.30%	
47) 1,2-Dichloroethane-d4	5.35	65	278249	10.06	PPB	0.00
Spiked Amount 10.000			Recovery	=	100.60%	
62) Toluene-d8	7.59	98	1165464	10.07	PPB	0.00
Spiked Amount 10.000			Recovery	=	100.70%	
84) 4-Bromofluorobenzene	10.41	95	376055	10.18	PPB	0.00
Spiked Amount 10.000			Recovery	=	101.80%	

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	1.06	85	239707m	7.62	PPB	
3) Chloromethane	1.22	50	215933	5.15	PPB	99
4) Vinyl Chloride	1.28	62	227015	5.27	PPB	98
5) Bromomethane	1.54	96	90252	5.18	PPB	98
6) Chloroethane	1.61	64	138721	5.07	PPB	99
7) Dichlorofluoromethane	1.79	67	306308	5.07	PPB	99
8) Trichlorofluoromethane	1.79	101	288277	5.14	PPB	99
9) Ethyl Ether	2.04	59	123979	4.59	PPB	96
10) Acrolein	2.22	56	293853	81.54	PPB	100
11) Trichlorotrifluoroethane	2.21	151	105379	5.07	PPB	95
12) 1,1-Dichloroethene	2.25	96	187356	4.92	PPB	98
14) Iodomethane	2.40	142	808860	19.38	PPB	100
15) Carbon Disulfide	2.43	76	463357	5.05	PPB	98
16) 2-Propanol (Isopropyl Alco	2.49	45	159304	219.32	PPB	98
17) 3-Chloro-1-propene	2.61	76	79744	4.29	PPB	97
18) Methyl Acetate	2.65	43	83095	5.07	PPB	99
19) Acetonitrile	2.70	40	255026	193.49	PPB	97
20) Methylene Chloride	2.76	84	215795	5.05	PPB	97
21) tert-Butyl Alcohol	2.88	59	23715	22.53	PPB	95
22) Acrylonitrile	3.10	53	147512	18.57	PPB	96
23) Methyl tert-Butyl Ether	2.97	73	723659	9.09	PPB	99
24) trans-1,2-Dichloroethene	2.99	96	201616	4.93	PPB	97
25) Hexane	3.20	57	183179	4.94	PPB	99
26) Diisopropyl Ether	3.50	45	533920	4.51	PPB	95
27) 1,1-Dichloroethane	3.50	63	345287m	4.48	PPB	
28) Vinyl Acetate	3.56	86	48425	8.13	PPB	# 84
29) Chloroprene	3.56	53	1068601	19.64	PPB	100
30) tert-Butyl Ethyl Ether	3.93	59	430990	4.45	PPB	99
31) 2,2-Dichloropropane	4.16	77	201071	4.58	PPB	99
32) cis-1,2-Dichloroethene	4.21	96	213262	4.72	PPB	95
33) 2-Butanone	4.27	72	207086	91.84	PPB	91
34) Ethyl Acetate	4.31	61	28799	8.37	PPB	94
35) Propionitrile	4.45	54	54386	19.02	PPB	98
36) Methacrylonitrile	4.59	67	179663	18.41	PPB	96
37) Bromochloromethane	4.52	128	87115	4.75	PPB	99
38) Tetrahydrofuran	4.54	71	14199	5.22	PPB	95
39) Chloroform	4.63	83	311080	4.80	PPB	94
40) tert-Butyl Formate	4.66	59	32166	3.80	PPB	91
41) Cyclohexane	4.76	56	289270	4.83	PPB	95
42) 1,1,1-Trichloroethane	4.80	97	240889	4.78	PPB	98
44) Carbon Tetrachloride	4.96	117	174740	4.75	PPB	98
45) 1,1-Dichloropropene	5.03	75	269545	5.01	PPB	99
46) Isobutyl Alcohol	5.36	43	96596	177.75	PPB	97

(#)=qualifier out of range (m)=manual integration

0908F016.D 091123MS23_8260.M

Fri Sep 15 09:12:37 2023

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Data File : J:\MS23\DATA\091123\0908F016.D

Acq On : 11 Sep 2023 5:27 pm

Sample : ICAL 5

Misc :

Vial: 9

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Sep 12 08:59:44 2023

Quant Results File: 091123MS23_8260.RES

Quant Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Tue Sep 12 08:58:41 2023

Response via : Initial Calibration

DataAcq Meth : 8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
48) Benzene	5.30	78	841045	4.83	PPB	100
49) 1,2-Dichloroethane	5.45	62	223743	4.80	PPB	97
50) tert-Amyl Methyl Ether	5.46	55	121327	4.70	PPB	# 85
51) Trichloroethene	6.16	95	192362	4.94	PPB	98
52) Methylcyclohexane	6.28	83	212320	4.88	PPB	97
53) 1,2-Dichloropropane	6.49	63	198113	4.69	PPB	96
54) Dibromomethane	6.63	93	86978	4.70	PPB	98
55) Methyl methacrylate	6.66	69	71686	4.42	PPB	94
56) 1,4-Dioxane	6.67	88	39497	241.46	PPB	94
60) cis-1,3-Dichloropropene	7.36	75	231487	4.19	PPB	97
61) 4-Methyl-2-pentanone (MIBK)	7.55	58	699902	90.34	PPB	98
63) Toluene	7.66	92	511398	4.90	PPB	99
65) n-Octane	7.75	85	70624	4.72	PPB	99
66) trans-1,3-Dichloropropene	8.02	75	160042	4.12	PPB	97
67) Ethyl methacrylate	8.09	69	131214	4.43	PPB	95
68) 1,1,2-Trichloroethane	8.21	83	116621	4.90	PPB	98
69) Tetrachloroethene	8.22	164	140135	5.16	PPB	98
70) 2-Hexanone	8.48	57	224013	91.04	PPB	96
71) 1,3-Dichloropropane	8.39	76	246651	4.66	PPB	99
72) Dibromochloromethane	8.58	129	96841	4.30	PPB	98
73) 1,2-Dibromoethane (EDB)	8.70	107	118782	4.70	PPB	99
74) 1-Chlorohexane	9.19	91	165977	4.90	PPB	94
75) Chlorobenzene	9.20	112	484831	4.90	PPB	99
76) Ethylbenzene	9.30	106	255031	4.98	PPB	99
77) 1,1,1,2-Tetrachloroethane	9.31	131	120697	4.53	PPB	96
78) m,p-Xylenes	9.43	106	610004	9.84	PPB	98
79) o-Xylene	9.84	106	290386	4.87	PPB	96
80) Styrene	9.88	103	222778m	4.76	PPB	
82) Isopropylbenzene	10.22	105	632321	4.85	PPB	98
86) 1,1,2,2-Tetrachloroethane	10.62	83	111382	4.54	PPB	98
87) trans-1,4-Dichloro-2-buten	10.69	53	28024	4.38	PPB	95
88) Bromobenzene	10.55	156	165826	4.81	PPB	96
89) n-Propylbenzene	10.64	91	683223	4.85	PPB	97
90) 1,2,3-Trichloropropane	10.66	110	36308	4.60	PPB	93
91) 2-Chlorotoluene	10.74	91	442808	4.81	PPB	98
92) 1,3,5-Trimethylbenzene	10.84	105	472889	4.78	PPB	97
93) 4-Chlorotoluene	10.86	91	519415	4.80	PPB	98
94) tert-Butylbenzene	11.15	119	380472	4.83	PPB	98
95) 1,2,4-Trimethylbenzene	11.22	105	473023	4.66	PPB	99
96) sec-Butylbenzene	11.38	105	481306	4.84	PPB	99
97) p-Isopropyltoluene	11.53	119	415964	4.71	PPB	97
98) 1,3-Dichlorobenzene	11.51	146	261370	4.80	PPB	96
99) 1,4-Dichlorobenzene	11.61	146	266872	4.77	PPB	100
100) n-Butylbenzene	11.95	91	314400	4.57	PPB	99
101) 1,2-Dichlorobenzene	11.99	146	227632	4.75	PPB	100
102) 1,2-Dibromo-3-chloropropan	12.66	155	6747	4.49	PPB	95
103) 1,3,5-Trichlorobenzene	12.75	180	103215	4.57	PPB	98
104) 1,2,4-Trichlorobenzene	13.21	180	68285	4.49	PPB	99
105) Hexachlorobutadiene	13.30	225	40685	4.44	PPB	96
106) Naphthalene	13.40	128	90105	4.24	PPB	99
107) 1,2,3-Trichlorobenzene	13.59	180	35121	4.53	PPB	98

(#) = qualifier out of range (m) = manual integration

0908F016.D 091123MS23_8260.M

Fri Sep 15 09:12:37 2023

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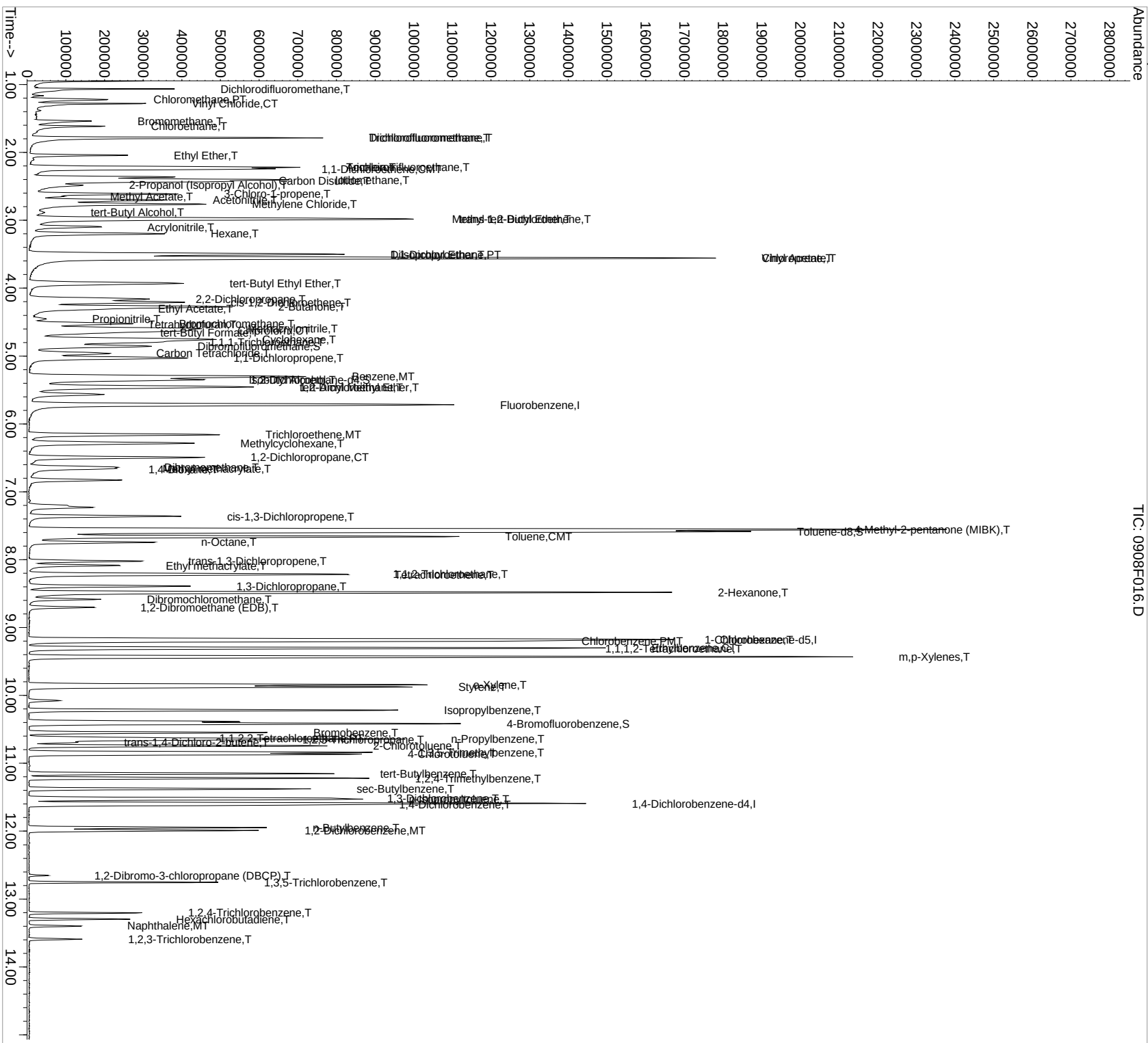
1st 09/12/23

Data File : J:\MS23\DATA\091123\0908F016.D
Acq On : 11 Sep 2023 5:27 pm
Sample : ICAL 5
Misc :
MS Integration Params: rteint.p
uant Time: Sep 15 8:32 2023

Vial: 9
Operator: EW/GH/MK/OT
Inst : MS23
Multiplr: 1.00

Quant Results File: 091123MS23_8260.RES

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)
Title : VOA MS23 EPA Method 8260C
Last Update : Fri Sep 15 08:47:04 2023
Response via : Initial Calibration



Data File : J:\MS23\DATA\091123\0908F016.D

Acq On : 11 Sep 2023 5:27 pm

Sample : ICAL 5

Misc :

Vial: 9

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Sep 12 9:47 2023

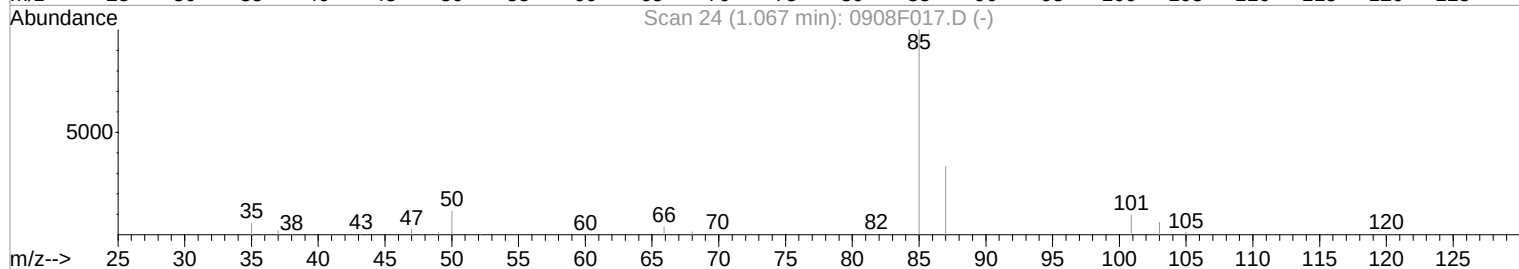
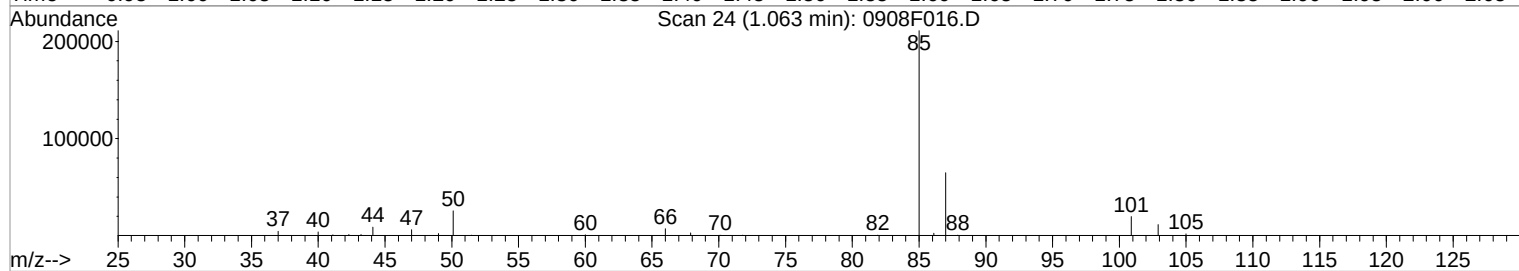
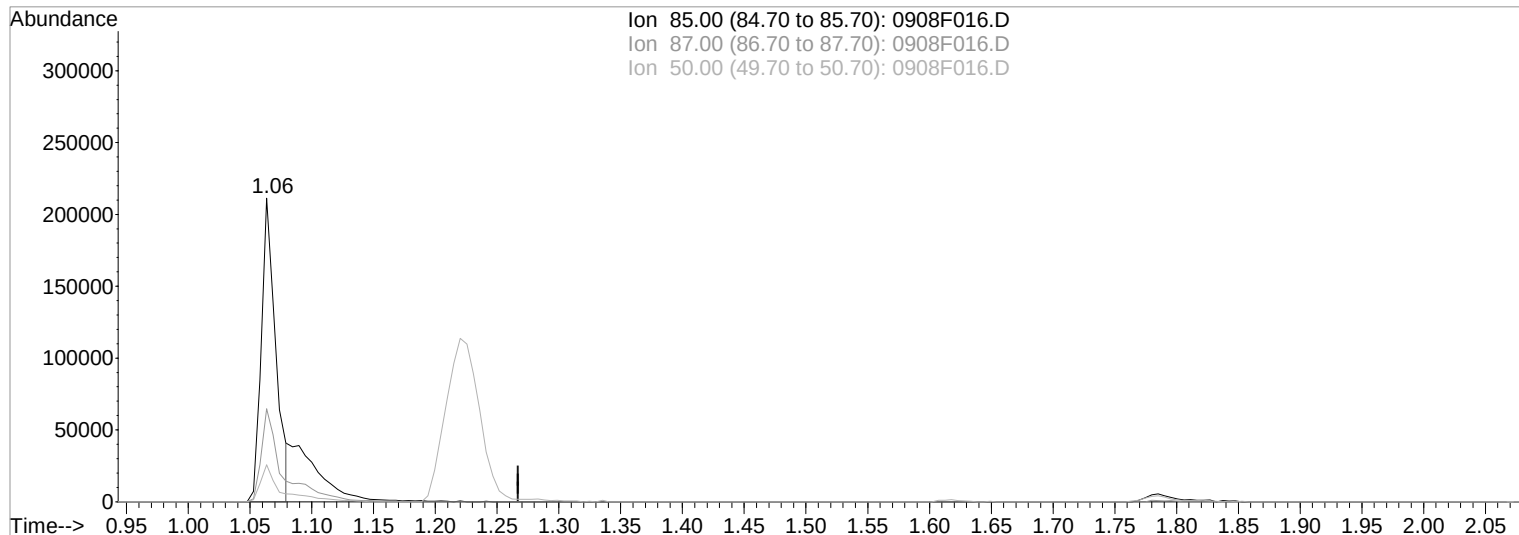
Quant Results File: temp.res

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Fri Sep 15 08:31:34 2023

Response via : Multiple Level Calibration



TIC: 0908F016.D

(2) Dichlorodifluoromethane (T)

Manual Integration:

1.06min 5.46PPB m

Before

response 171800

Ion	Exp%	Act%
85.00	100	100
87.00	33.20	30.68
50.00	11.40	12.13
0.00	0.00	0.00

09/15/23

Quantitation Report (Qedit)

1st  09/15/23
2nd  09/18/23

Data File : J:\MS23\DATA\091123\0908F016.D

Acq On : 11 Sep 2023 5:27 pm

Sample : ICAL 5

Misc :

MS Integration Params: rteint.p

Quant Time: Sep 15 8:31 2023

Vial: 9

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

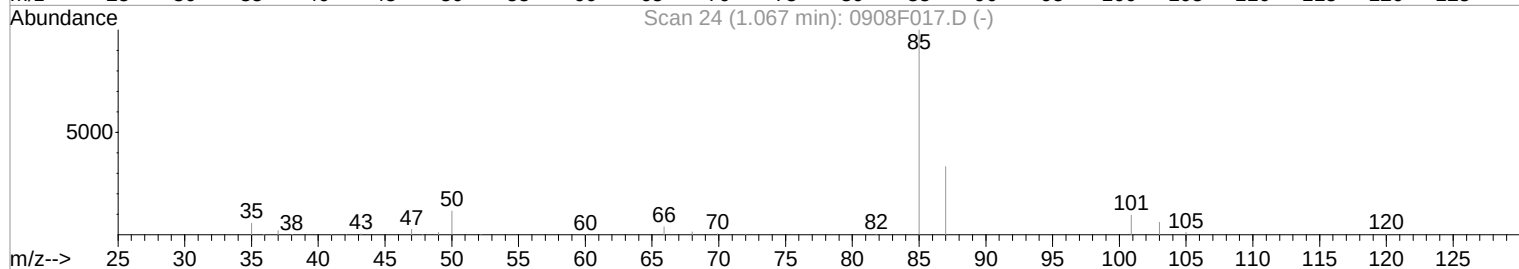
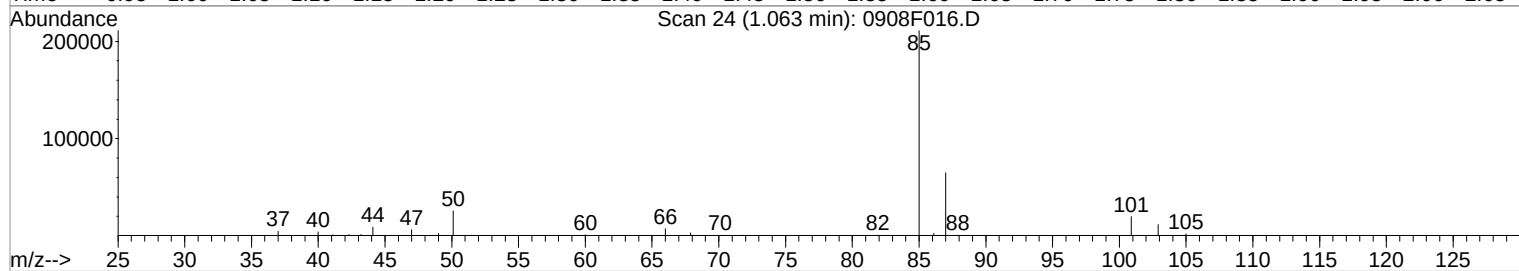
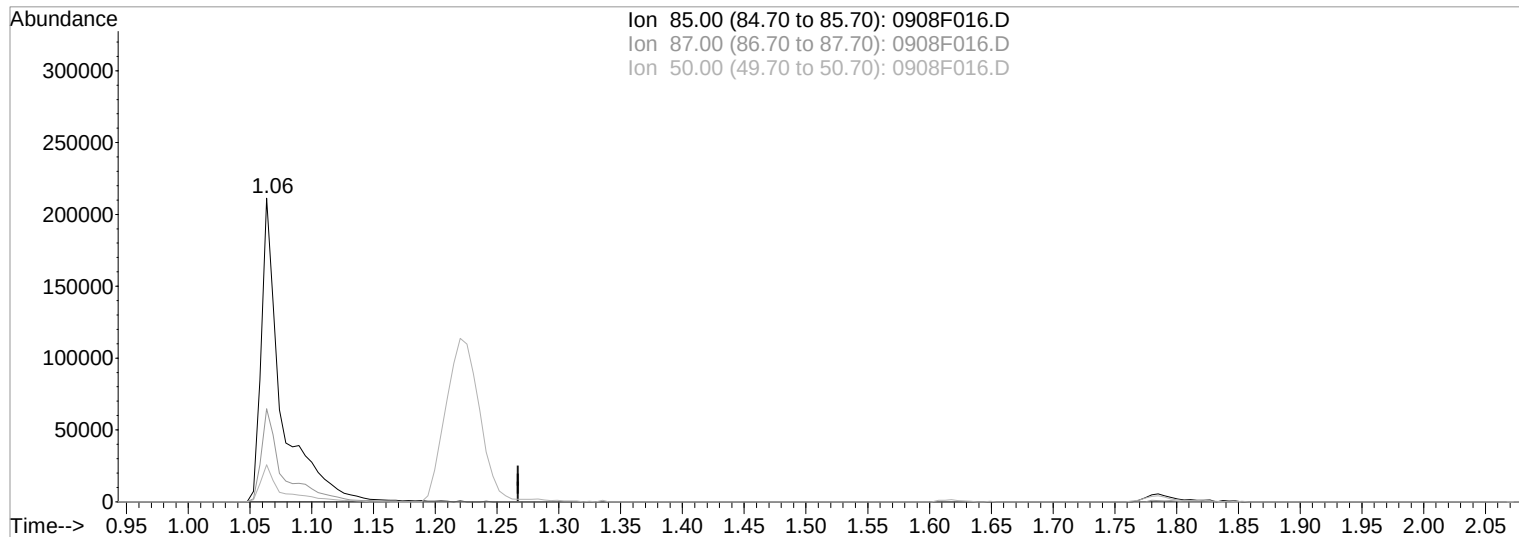
Quant Results File: temp.res

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Fri Sep 15 08:31:34 2023

Response via : Multiple Level Calibration



TIC: 0908F016.D

(2) Dichlorodifluoromethane (T)

1.06min 7.62PPB m

response 239707

Ion	Exp%	Act%
-----	------	------

85.00	100	100
-------	-----	-----

87.00	33.20	30.68
-------	-------	-------

50.00	11.40	12.13
-------	-------	-------

0.00	0.00	0.00
------	------	------

Manual Integration:

After

Split peak

09/15/23

Quantitation Report (Qedit)

1st *EW* 09/15/232nd *Q* 09/18/23

Data File : J:\MS23\DATA\091123\0908F016.D

Acq On : 11 Sep 2023 5:27 pm

Sample : ICAL 5

Misc :

MS Integration Params: rteint.p

Quant Time: Sep 15 8:31 2023

Vial: 9

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

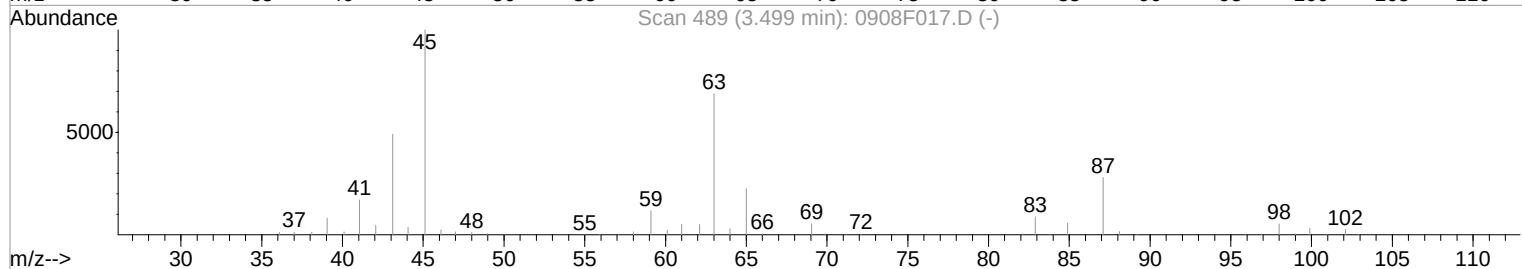
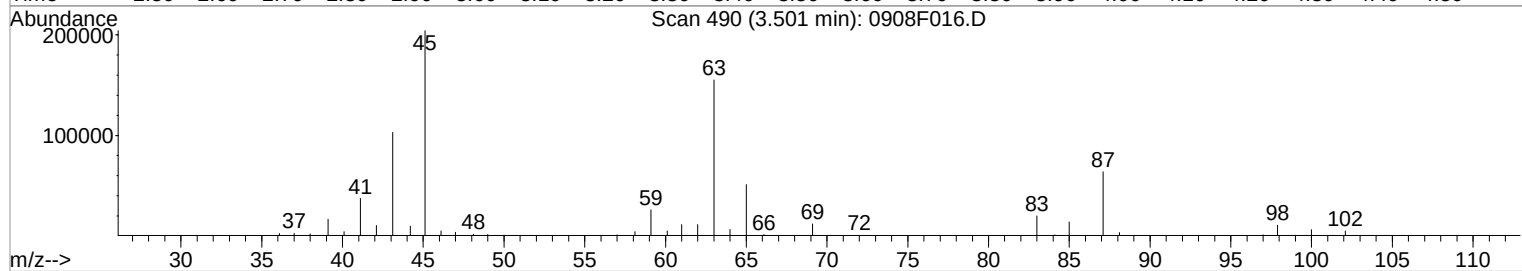
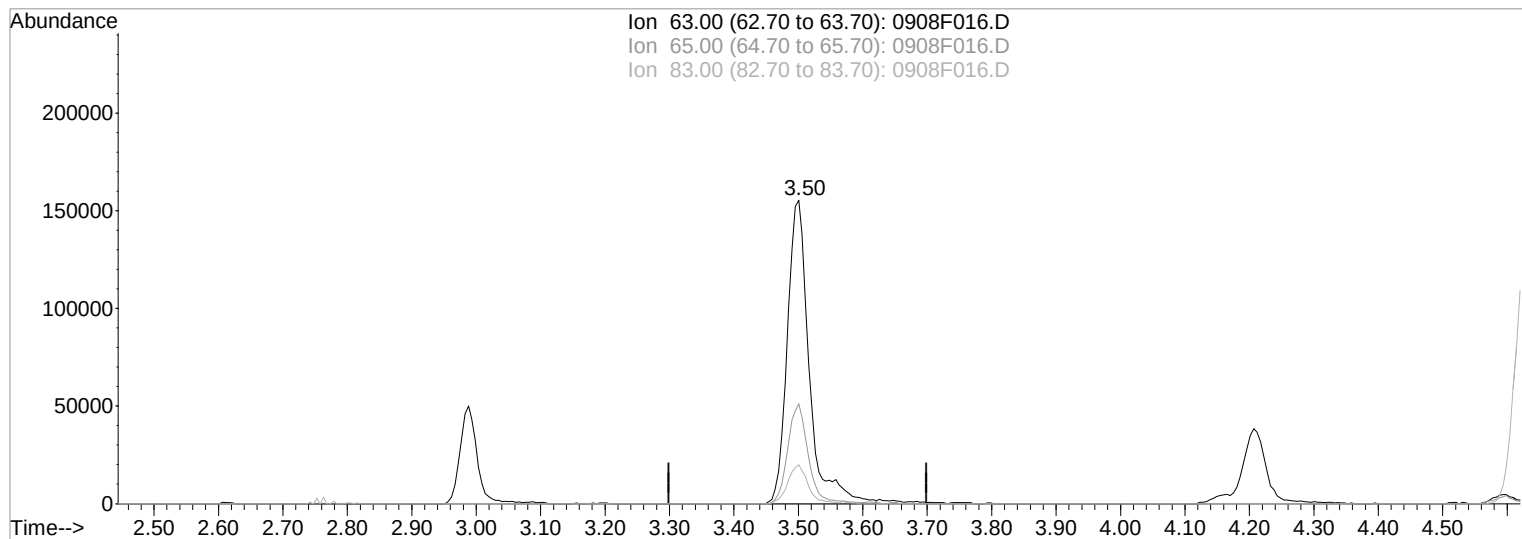
Quant Results File: temp.res

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Fri Sep 15 08:31:34 2023

Response via : Multiple Level Calibration



TIC: 0908F016.D

(27) 1,1-Dichloroethane (PT)

Manual Integration:

3.50min 4.78PPB

Before

response 368354

09/15/23

Ion Exp% Act%

63.00 100 100

65.00 32.70 32.94

83.00 12.70 12.79

0.00 0.00 0.00

Quantitation Report (Qedit)

1st  09/15/23
2nd  09/18/23

Data File : J:\MS23\DATA\091123\0908F016.D

Acq On : 11 Sep 2023 5:27 pm

Sample : ICAL 5

Misc :

MS Integration Params: rteint.p

Quant Time: Sep 15 8:32 2023

Vial: 9

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

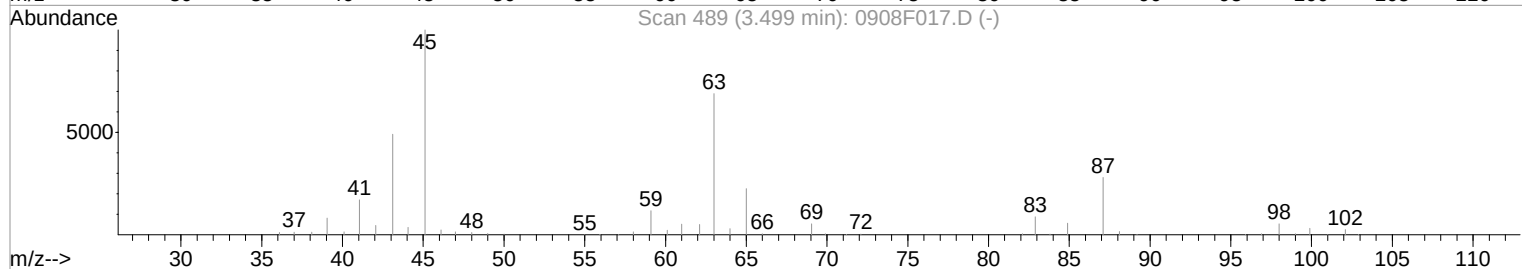
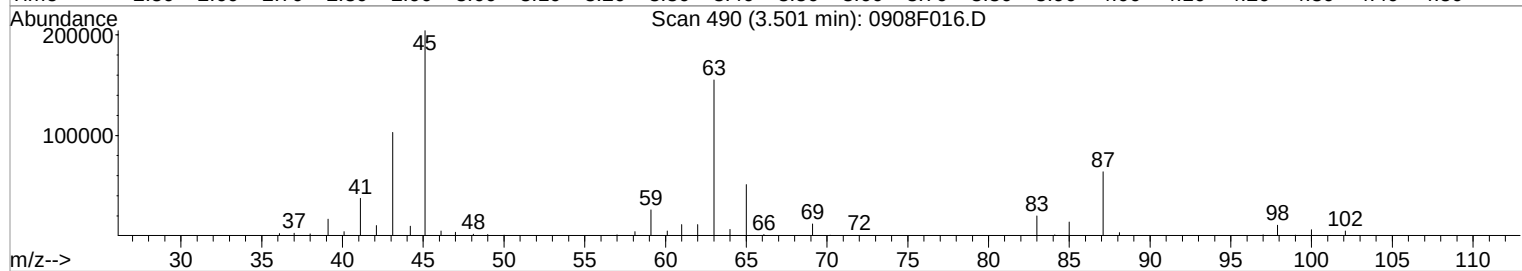
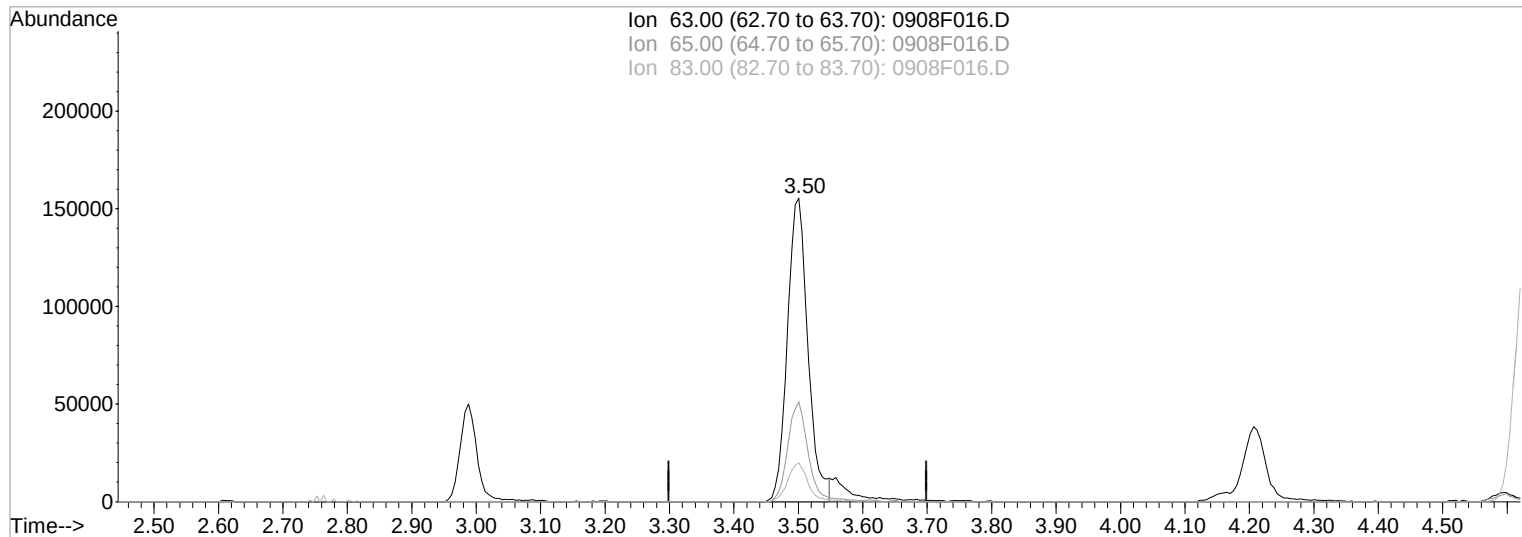
Quant Results File: temp.res

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Fri Sep 15 08:31:34 2023

Response via : Multiple Level Calibration



TIC: 0908F016.D

(27) 1,1-Dichloroethane (PT)

Manual Integration:

3.50min 4.48PPB m

After

response 345287

Shoulder

Ion	Exp%	Act%
-----	------	------

09/15/23

63.00	100	100
-------	-----	-----

65.00	32.70	32.94
-------	-------	-------

83.00	12.70	12.79
-------	-------	-------

0.00	0.00	0.00
------	------	------

Quantitation Report (Qedit)

1st *EW* 09/12/23
2nd *Q* 09/18/23

Data File : J:\MS23\DATA\091123\0908F016.D

Acq On : 11 Sep 2023 5:27 pm

Sample : ICAL 5

Misc :

MS Integration Params: rteint.p

Quant Time: Sep 12 9:46 2023

Vial: 9

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

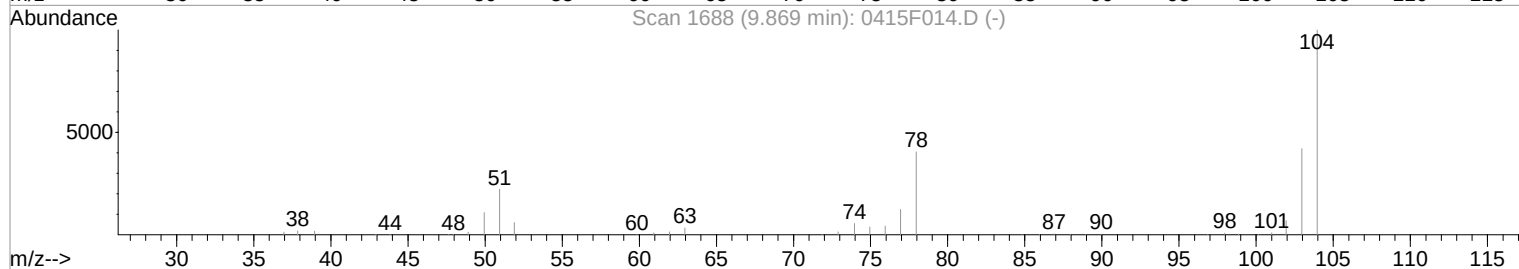
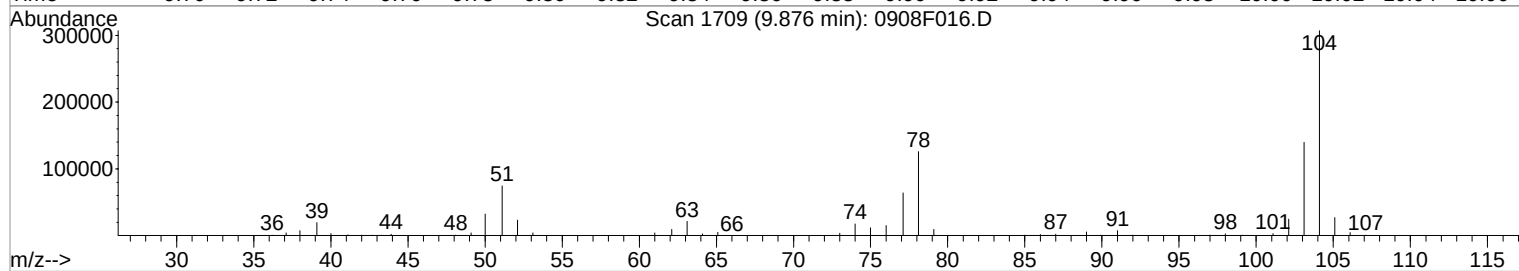
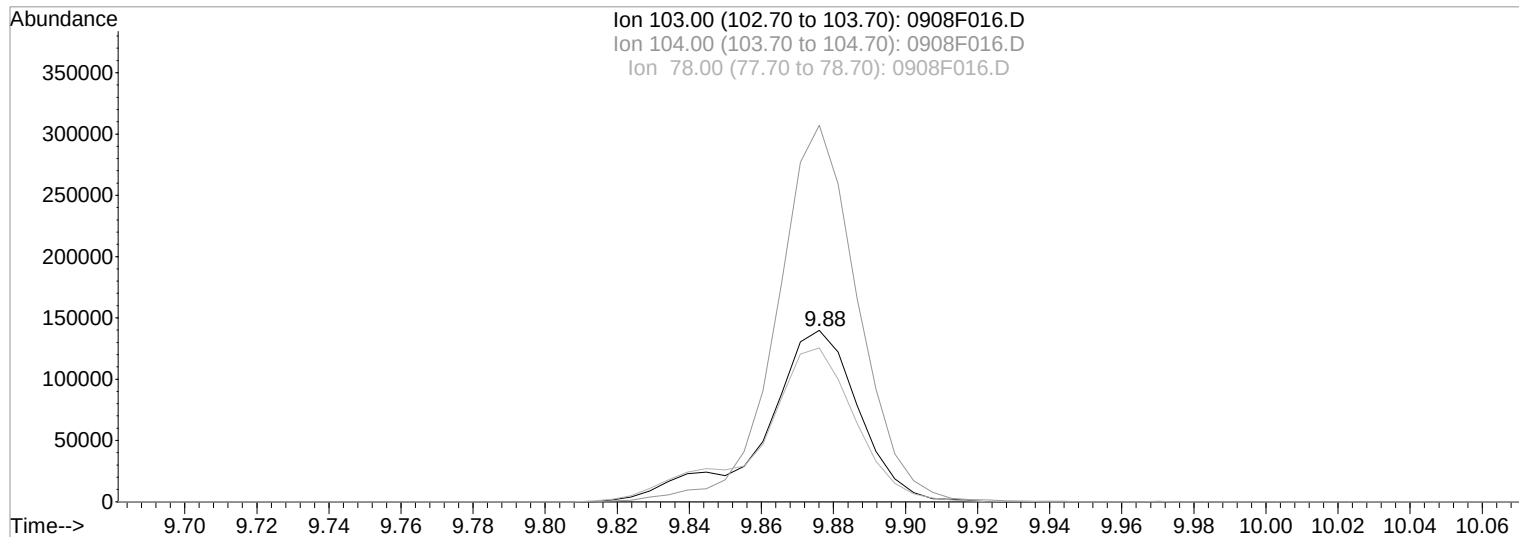
Quant Results File: temp.res

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Tue Sep 12 09:46:19 2023

Response via : Single Level Calibration



TIC: 0908F016.D

(80) Styrene (T)

Manual Integration:

9.88min 5.42PPB

Before

response 253715

09/12/23

Ion	Exp%	Act%
103.00	100	100
104.00	210.00	219.68
78.00	87.20	89.81
0.00	0.00	0.00

Quantitation Report (Qedit)

1st *EW* 09/12/23
2nd *Q* 09/18/23

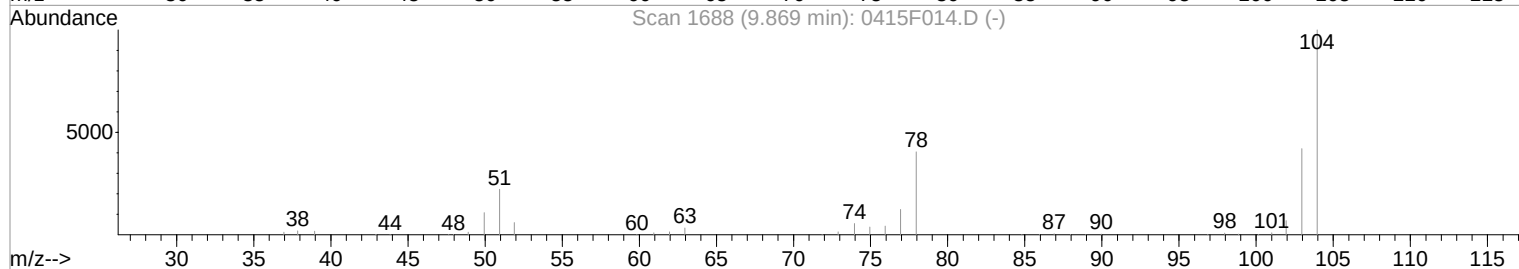
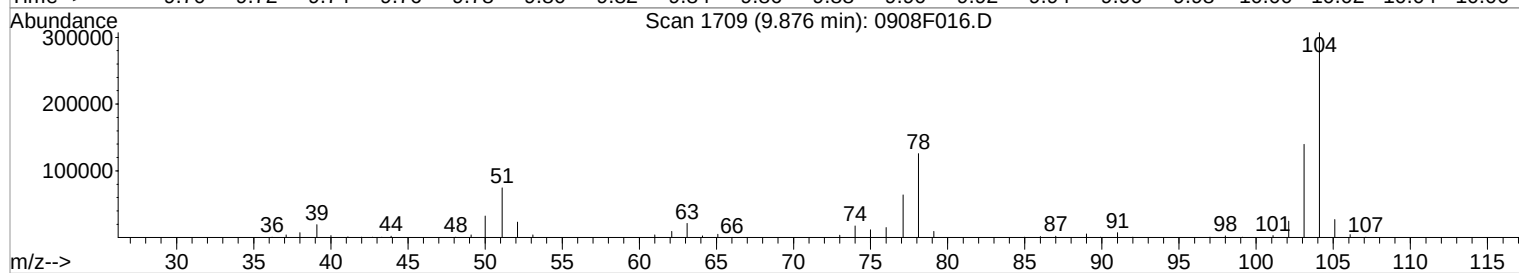
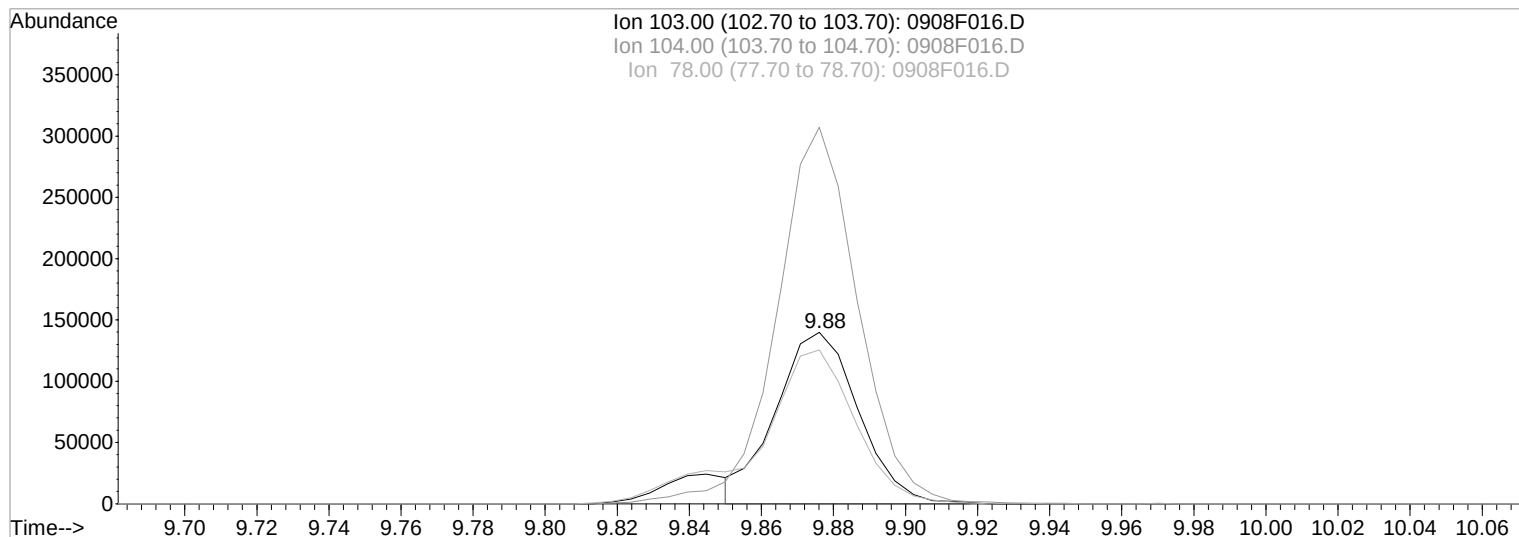
Data File : J:\MS23\DATA\091123\0908F016.D
Acq On : 11 Sep 2023 5:27 pm
Sample : ICAL 5
Misc :

Vial: 9
Operator: EW/GH/MK/OT
Inst : MS23
Multiplr: 1.00

MS Integration Params: rteint.p
Quant Time: Sep 12 9:47 2023

Quant Results File: temp.res

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)
Title : VOA MS23 EPA Method 8260C
Last Update : Tue Sep 12 09:46:19 2023
Response via : Single Level Calibration



TIC: 0908F016.D

(80) Styrene (T)
9.88min 4.76PPB m
response 222778

Manual Integration:

After

Shoulder

09/12/23

Ion	Exp%	Act%
103.00	100	100
104.00	210.00	219.68
78.00	87.20	89.81
0.00	0.00	0.00

Data File : J:\MS23\DATA\091123\0908F017.D

Acq On : 11 Sep 2023 5:51 pm

Sample : ICAL 10

Misc :

Vial: 10

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Sep 12 08:59:00 2023

Quant Results File: 091123MS23_8260.RES

Quant Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Tue Sep 12 08:58:41 2023

Response via : Initial Calibration

DataAcq Meth : 8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	5.72	96	1167762	10.00	PPB	0.00
64) Chlorobenzene-d5	9.17	82	440732	10.00	PPB	0.00
85) 1,4-Dichlorobenzene-d4	11.59	152	335926	10.00	PPB	0.00

System Monitoring Compounds

43) Dibromofluoromethane	4.85	113	238488	10.02	PPB	0.00
Spiked Amount 10.000			Recovery	=	100.20%	
47) 1,2-Dichloroethane-d4	5.35	65	266020	10.02	PPB	0.00
Spiked Amount 10.000			Recovery	=	100.20%	
62) Toluene-d8	7.59	98	1112482	10.02	PPB	0.00
Spiked Amount 10.000			Recovery	=	100.20%	
84) 4-Bromofluorobenzene	10.42	95	357472	10.00	PPB	0.00
Spiked Amount 10.000			Recovery	=	100.00%	

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	1.07	85	429967m	14.23	PPB	
3) Chloromethane	1.23	50	403425	10.02	PPB	100
4) Vinyl Chloride	1.28	62	414089	10.02	PPB	100
5) Bromomethane	1.54	96	167571	10.02	PPB	100
6) Chloroethane	1.62	64	263160	10.02	PPB	100
7) Dichlorofluoromethane	1.78	67	581049	10.02	PPB	100
8) Trichlorofluoromethane	1.79	101	539342	10.02	PPB	100
9) Ethyl Ether	2.04	59	260003	10.02	PPB	100
10) Acrolein	2.22	56	693158	200.34	PPB	100
11) Trichlorotrifluoroethane	2.22	151	200034	10.02	PPB	100
12) 1,1-Dichloroethene	2.24	96	365783	10.00	PPB	100
14) Iodomethane	2.41	142	1605809	40.07	PPB	100
15) Carbon Disulfide	2.43	76	883123	10.02	PPB	100
16) 2-Propanol (Isopropyl Alco	2.48	45	349252	500.85	PPB	100
17) 3-Chloro-1-propene	2.62	76	178560	10.02	PPB	100
18) Methyl Acetate	2.65	43	157694	10.02	PPB	100
19) Acetonitrile	2.70	40	506996	400.68	PPB	100
20) Methylene Chloride	2.77	84	410748	10.02	PPB	100
21) tert-Butyl Alcohol	2.89	59	50618	50.08	PPB	100
22) Acrylonitrile	3.10	53	305533	40.07	PPB	100
23) Methyl tert-Butyl Ether	2.97	73	1531191	20.03	PPB	100
24) trans-1,2-Dichloroethene	2.99	96	393560	10.02	PPB	100
25) Hexane	3.20	57	356941	10.02	PPB	100
26) Diisopropyl Ether	3.50	45	1137746	10.02	PPB	100
27) 1,1-Dichloroethane	3.50	63	684747m	9.26	PPB	
28) Vinyl Acetate	3.56	86	114593	20.03	PPB	100
29) Chloroprene	3.56	53	2092649	40.07	PPB	100
30) tert-Butyl Ethyl Ether	3.93	59	930454	10.02	PPB	100
31) 2,2-Dichloropropane	4.16	77	421826	10.02	PPB	100
32) cis-1,2-Dichloroethene	4.21	96	434496	10.02	PPB	100
33) 2-Butanone	4.27	72	433682	200.34	PPB	100
34) Ethyl Acetate	4.31	61	66204	20.03	PPB	100
35) Propionitrile	4.45	54	109972	40.07	PPB	100
36) Methacrylonitrile	4.60	67	375388	40.07	PPB	100
37) Bromochloromethane	4.52	128	176335	10.02	PPB	100
38) Tetrahydrofuran	4.54	71	26170	10.02	PPB	100
39) Chloroform	4.63	83	622763	10.02	PPB	100
40) tert-Butyl Formate	4.67	59	81500	10.02	PPB	100
41) Cyclohexane	4.75	56	576034	10.02	PPB	100
42) 1,1,1-Trichloroethane	4.80	97	485064	10.02	PPB	100
44) Carbon Tetrachloride	4.96	117	354117	10.02	PPB	100
45) 1,1-Dichloropropene	5.03	75	517432	10.02	PPB	100
46) Isobutyl Alcohol	5.36	43	209049	400.68	PPB	100

(#)=qualifier out of range (m)=manual integration

0908F017.D 091123MS23_8260.M

Fri Sep 15 09:12:40 2023

3558 of 3623

Data File : J:\MS23\DATA\091123\0908F017.D

Acq On : 11 Sep 2023 5:51 pm

Sample : ICAL 10

Misc :

Vial: 10

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Sep 12 08:59:00 2023

Quant Results File: 091123MS23_8260.RES

Quant Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Tue Sep 12 08:58:41 2023

Response via : Initial Calibration

DataAcq Meth : 8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
48) Benzene	5.30	78	1676056	10.02	PPB	100
49) 1,2-Dichloroethane	5.46	62	448369	10.02	PPB	100
50) tert-Amyl Methyl Ether	5.46	55	248056	10.02	PPB	100
51) Trichloroethene	6.16	95	374397	10.02	PPB	100
52) Methylcyclohexane	6.28	83	418020	10.02	PPB	100
53) 1,2-Dichloropropane	6.50	63	406624	10.02	PPB	100
54) Dibromomethane	6.64	93	178076	10.02	PPB	100
55) Methyl methacrylate	6.66	69	155967	10.02	PPB	100
56) 1,4-Dioxane	6.66	88	62922	400.68	PPB	100
60) cis-1,3-Dichloropropene	7.36	75	531315	10.02	PPB	100
61) 4-Methyl-2-pentanone (MIBK)	7.56	58	1490157	200.34	PPB	100
63) Toluene	7.66	92	1003759	10.02	PPB	100
65) n-Octane	7.75	85	144879	10.00	PPB	100
66) trans-1,3-Dichloropropene	8.02	75	376284	10.00	PPB	100
67) Ethyl methacrylate	8.09	69	286723	10.00	PPB	100
68) 1,1,2-Trichloroethane	8.21	83	230510	10.00	PPB	100
69) Tetrachloroethene	8.22	164	262936	10.00	PPB	100
70) 2-Hexanone	8.48	57	476260	200.00	PPB	100
71) 1,3-Dichloropropane	8.39	76	511908	10.00	PPB	100
72) Dibromochloromethane	8.59	129	218153	10.00	PPB	100
73) 1,2-Dibromoethane (EDB)	8.70	107	244685	10.00	PPB	100
74) 1-Chlorohexane	9.19	91	327820	10.00	PPB	100
75) Chlorobenzene	9.20	112	957520	10.00	PPB	100
76) Ethylbenzene	9.30	106	495922	10.00	PPB	100
77) 1,1,1,2-Tetrachloroethane	9.31	131	258052	10.00	PPB	100
78) m,p-Xylenes	9.43	106	1199511	20.00	PPB	100
79) o-Xylene	9.84	106	577076	10.00	PPB	100
80) Styrene	9.87	103	453363m	10.00	PPB	100
82) Isopropylbenzene	10.22	105	1261396	10.00	PPB	100
86) 1,1,2,2-Tetrachloroethane	10.62	83	234873	10.00	PPB	100
87) trans-1,4-Dichloro-2-buten	10.69	53	61222	10.00	PPB	100
88) Bromobenzene	10.55	156	330264	10.00	PPB	100
89) n-Propylbenzene	10.64	91	1349455	10.00	PPB	100
90) 1,2,3-Trichloropropane	10.66	110	75489	10.00	PPB	100
91) 2-Chlorotoluene	10.74	91	880709	10.00	PPB	100
92) 1,3,5-Trimethylbenzene	10.84	105	946482	10.00	PPB	100
93) 4-Chlorotoluene	10.87	91	1035712	10.00	PPB	100
94) tert-Butylbenzene	11.15	119	753157	10.00	PPB	100
95) 1,2,4-Trimethylbenzene	11.22	105	970633	10.00	PPB	100
96) sec-Butylbenzene	11.38	105	951881	10.00	PPB	100
97) p-Isopropyltoluene	11.53	119	845964	10.00	PPB	100
98) 1,3-Dichlorobenzene	11.51	146	521058	10.00	PPB	100
99) 1,4-Dichlorobenzene	11.62	146	535074	10.00	PPB	100
100) n-Butylbenzene	11.95	91	658715	10.00	PPB	100
101) 1,2-Dichlorobenzene	11.99	146	458926	10.00	PPB	100
102) 1,2-Dibromo-3-chloropropan	12.66	155	14368	10.00	PPB	100
103) 1,3,5-Trichlorobenzene	12.76	180	216102	10.00	PPB	100
104) 1,2,4-Trichlorobenzene	13.21	180	145702	10.00	PPB	100
105) Hexachlorobutadiene	13.30	225	87691	10.00	PPB	100
106) Naphthalene	13.40	128	203501	10.00	PPB	100
107) 1,2,3-Trichlorobenzene	13.59	180	74210	10.00	PPB	100

(#) = qualifier out of range (m) = manual integration

0908F017.D 091123MS23_8260.M

Fri Sep 15 09:12:40 2023

3559 of 3623

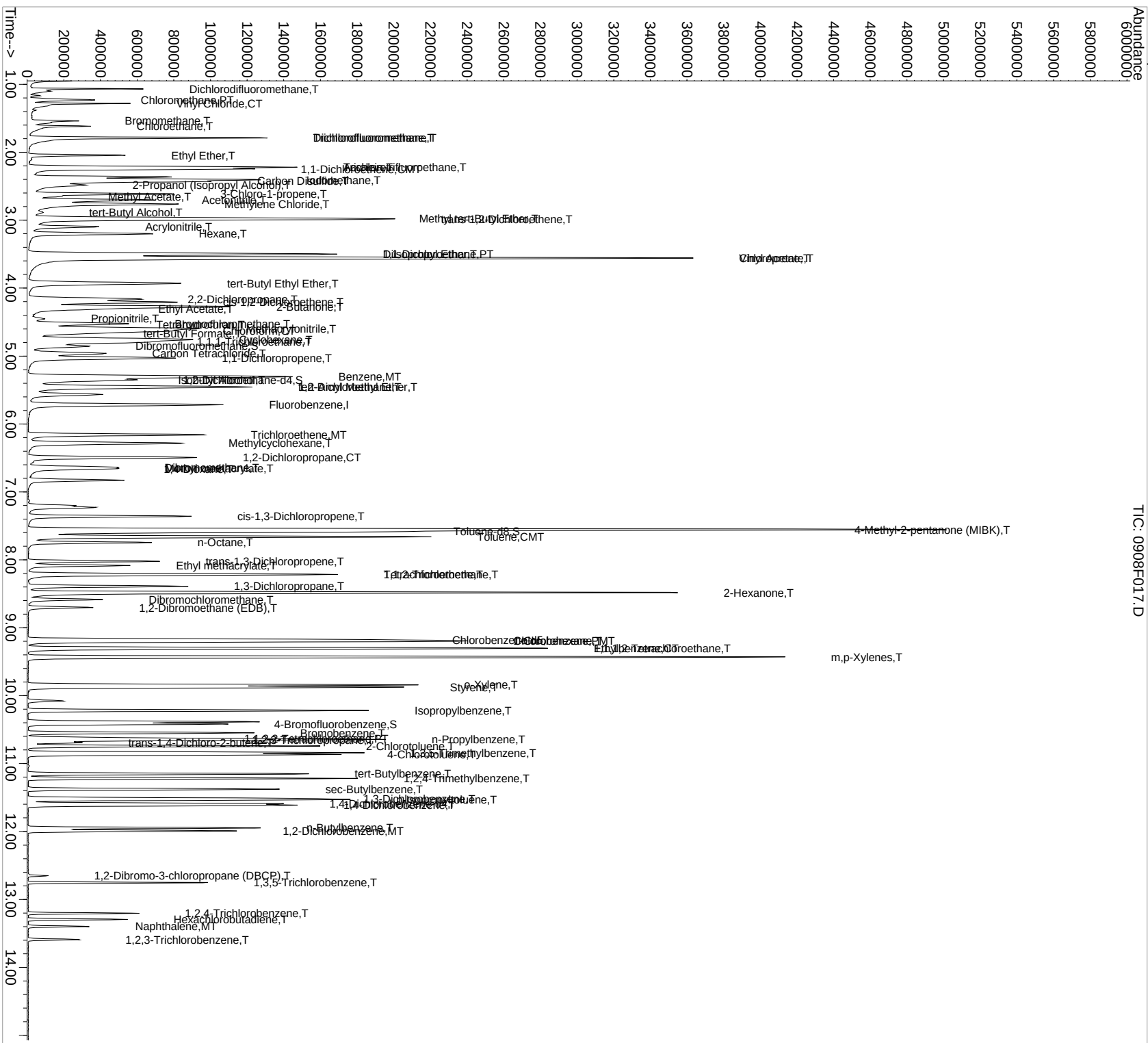
1st 09/12/23

Data File : J:\MS23\DATA\091123\0908F017.D
Acq On : 11 Sep 2023 5:51 pm
Sample : ICAL 10
Misc :
MS Integration Params: rteint.p
uant Time: Sep 15 8:33 2023

Vial: 10
Operator: EW/GH/MK/OT
Inst : MS23
Multiplr: 1.00

Quant Results File: 091123MS23_8260.RES

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)
Title : VOA MS23 EPA Method 8260C
Last Update : Fri Sep 15 08:47:04 2023
Response via : Initial Calibration



Quantitation Report (Qedit)

1st  09/15/23
2nd  09/18/23

Data File : J:\MS23\DATA\091123\0908F017.D

Acq On : 11 Sep 2023 5:51 pm

Sample : ICAL 10

Misc :

Vial: 10

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Sep 12 8:59 2023

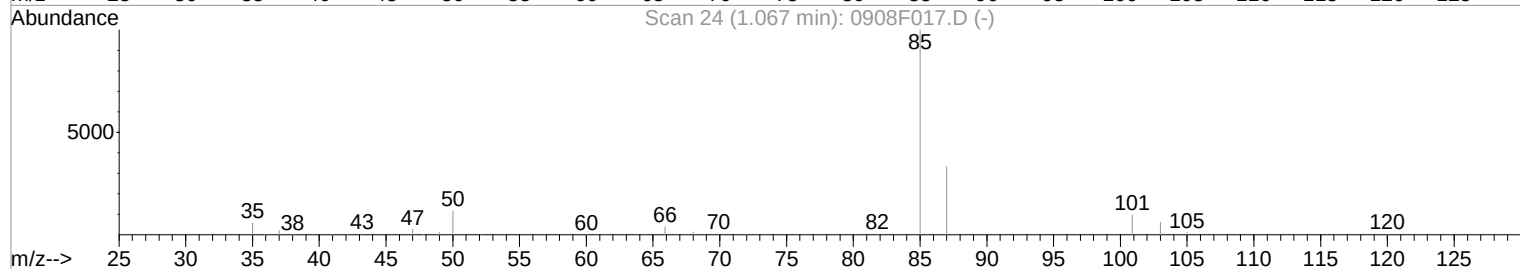
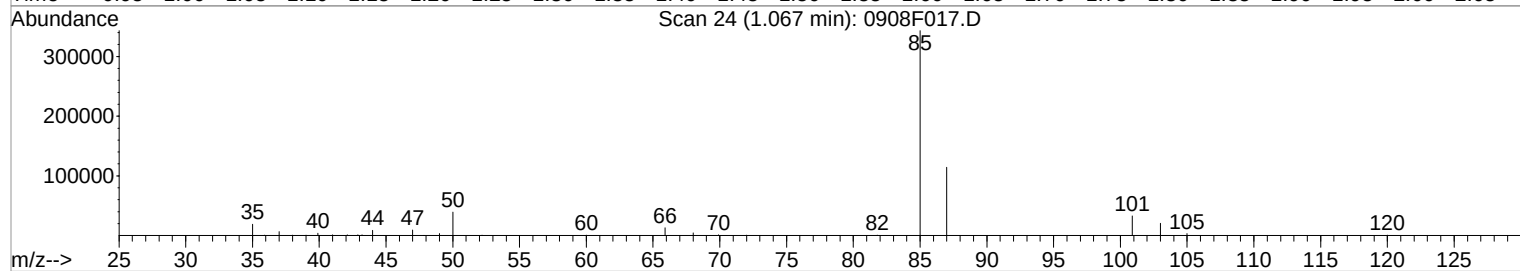
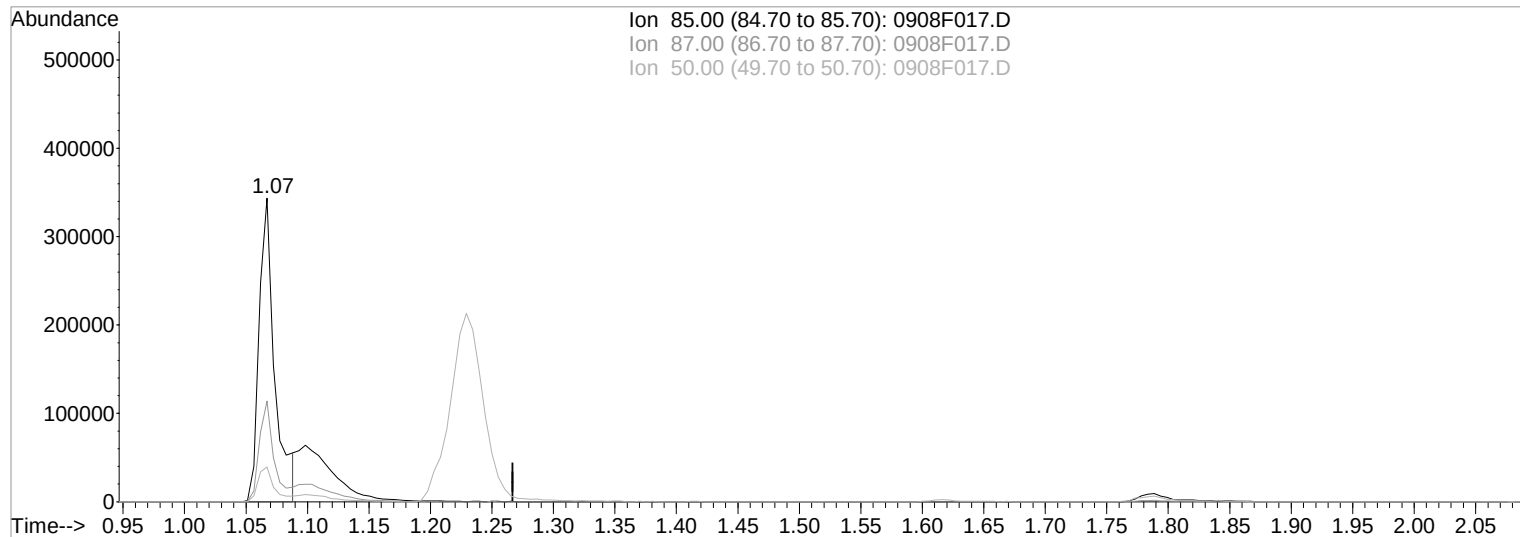
Quant Results File: temp.res

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Fri Sep 15 08:32:31 2023

Response via : Multiple Level Calibration



TIC: 0908F017.D

(2) Dichlorodifluoromethane (T)

Manual Integration:

1.07min 10.02PPB

Before

response 302656

Ion	Exp%	Act%
85.00	100	100
87.00	33.20	33.22
50.00	11.40	11.42
0.00	0.00	0.00

09/15/23

Data File : J:\MS23\DATA\091123\0908F017.D

Acq On : 11 Sep 2023 5:51 pm

Sample : ICAL 10

Misc :

Vial: 10

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Sep 15 8:32 2023

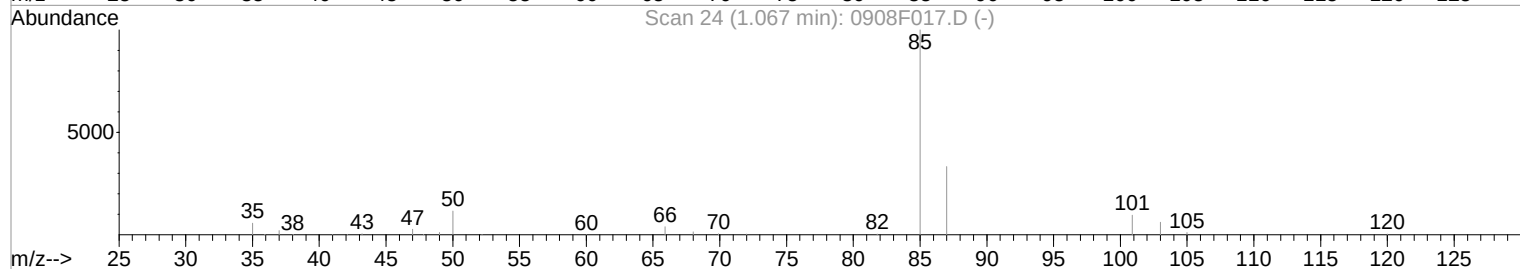
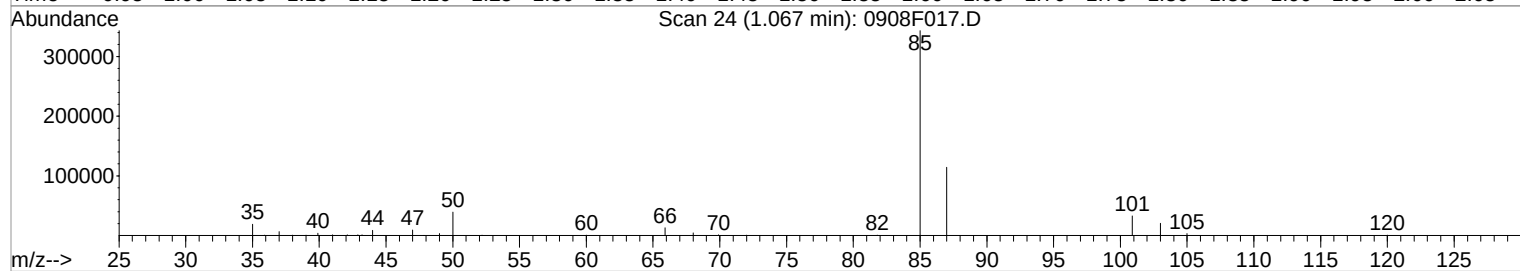
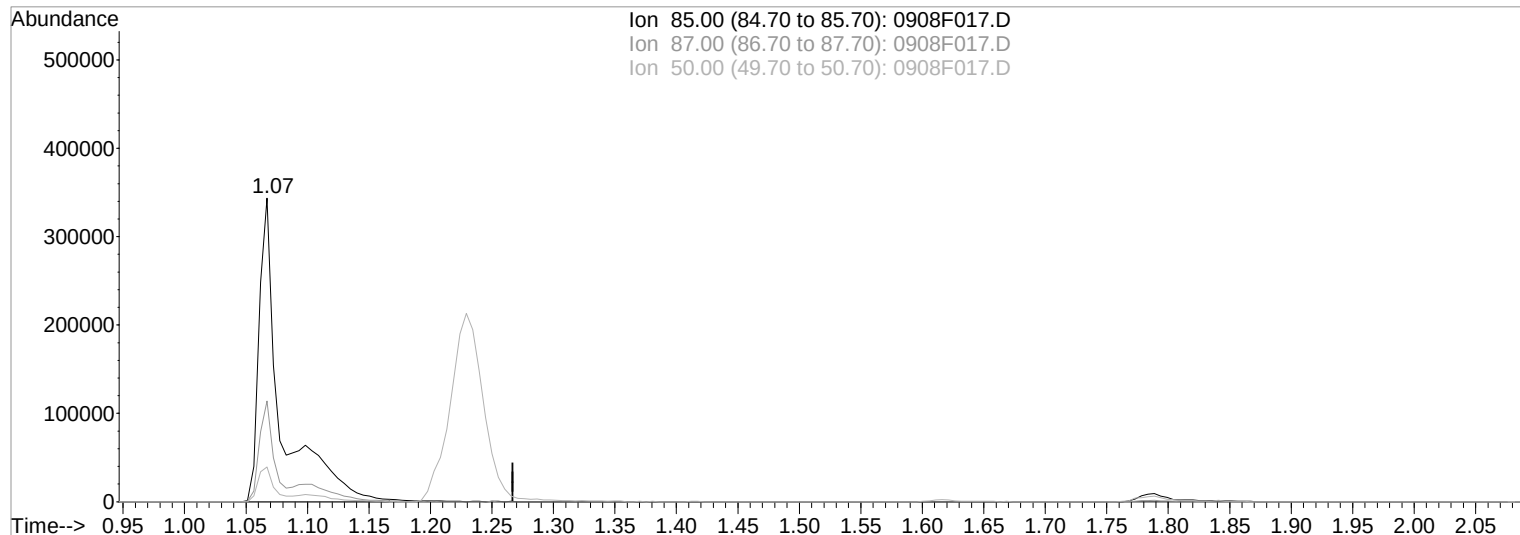
Quant Results File: temp.res

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Fri Sep 15 08:32:31 2023

Response via : Multiple Level Calibration



TIC: 0908F017.D

(2) Dichlorodifluoromethane (T)

Manual Integration:

1.07min 14.23PPB m

After

response 429967

Split peak

09/15/23

Ion	Exp%	Act%
85.00	100	100
87.00	33.20	33.22
50.00	11.40	11.42
0.00	0.00	0.00

Quantitation Report (Qedit)

1st  09/15/23
2nd  09/18/23

Data File : J:\MS23\DATA\091123\0908F017.D

Acq On : 11 Sep 2023 5:51 pm

Sample : ICAL 10

Misc :

MS Integration Params: rteint.p

Quant Time: Sep 15 8:32 2023

Vial: 10

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

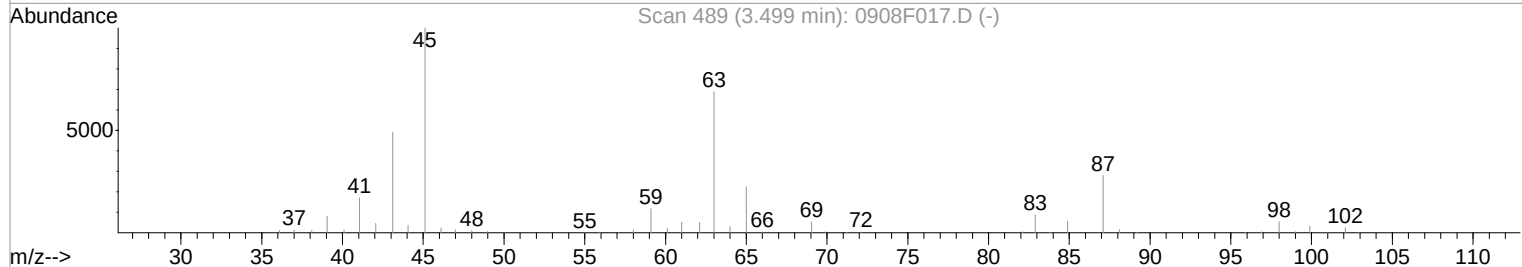
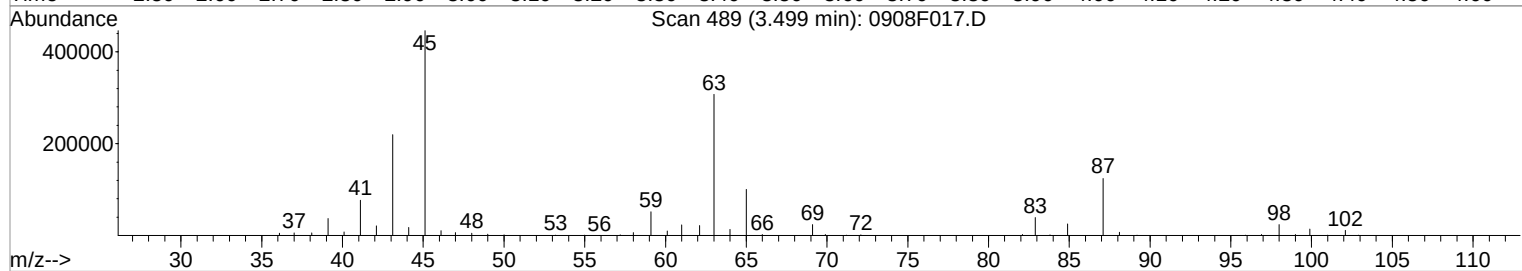
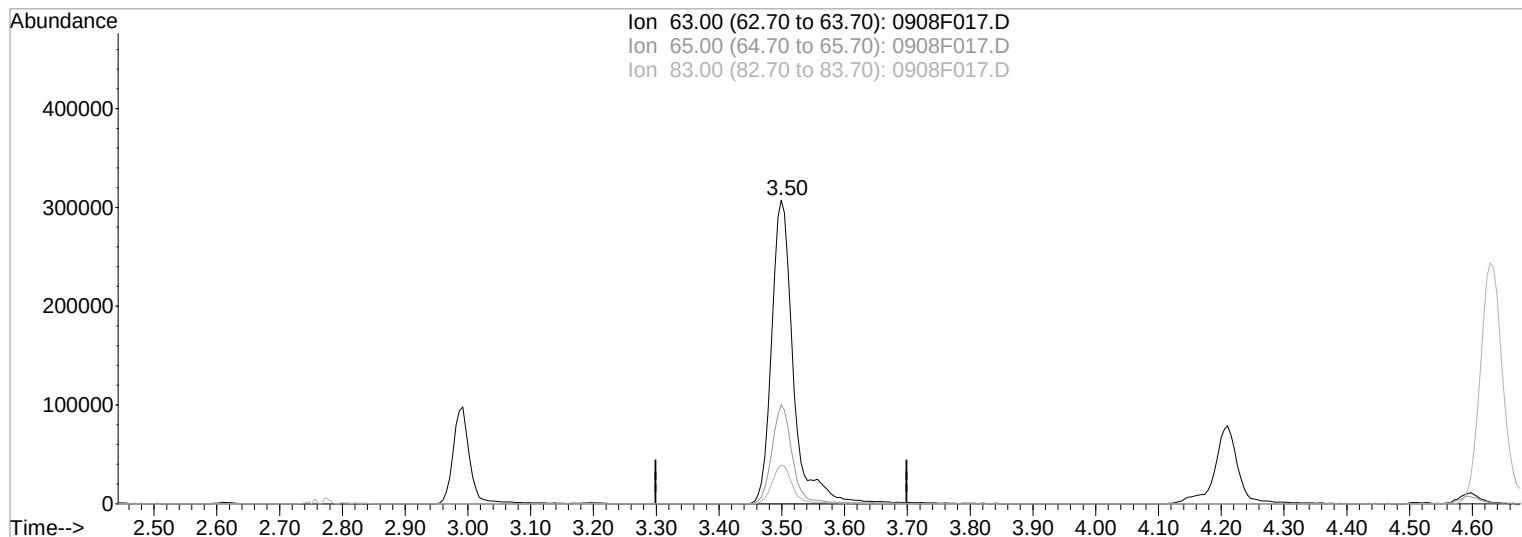
Quant Results File: temp.res

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Fri Sep 15 08:32:31 2023

Response via : Multiple Level Calibration



TIC: 0908F017.D

(27) 1,1-Dichloroethane (PT)

Manual Integration:

3.50min 10.02PPB

Before

response 740377

09/15/23

Ion	Exp%	Act%
63.00	100	100
65.00	32.70	32.69
83.00	12.70	12.69
0.00	0.00	0.00

Quantitation Report (Qedit)

1st  09/15/23
2nd  09/18/23

Data File : J:\MS23\DATA\091123\0908F017.D

Acq On : 11 Sep 2023 5:51 pm

Sample : ICAL 10

Misc :

MS Integration Params: rteint.p

Quant Time: Sep 15 8:33 2023

Vial: 10

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

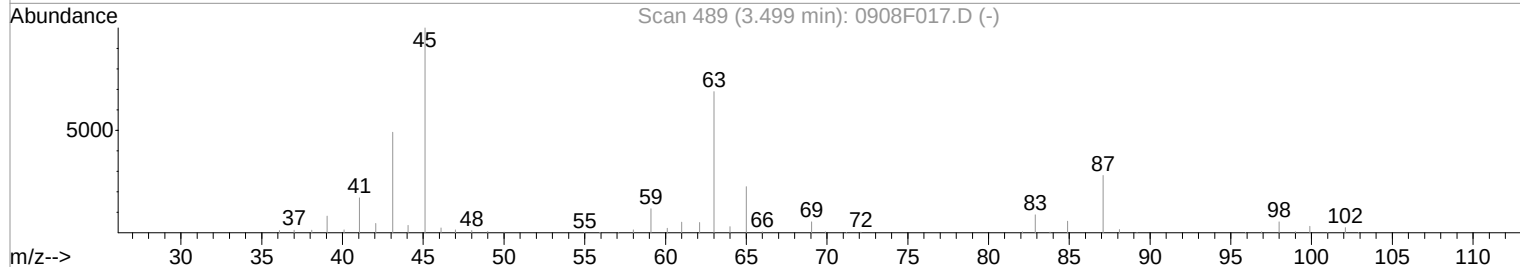
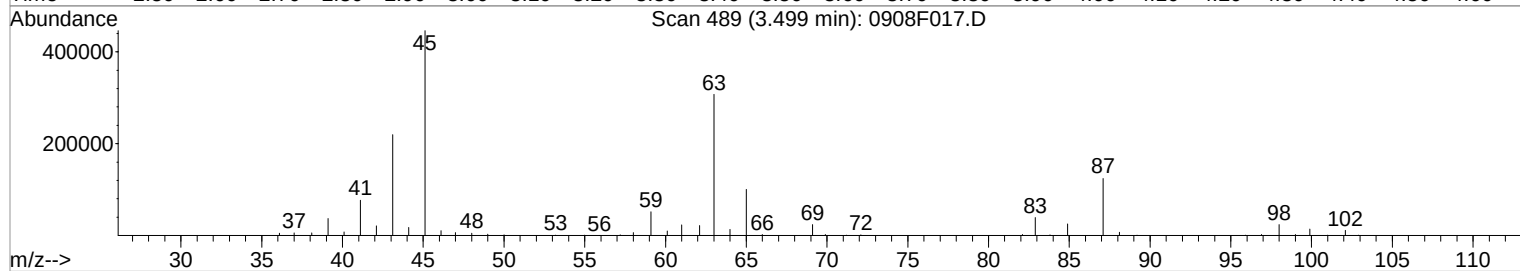
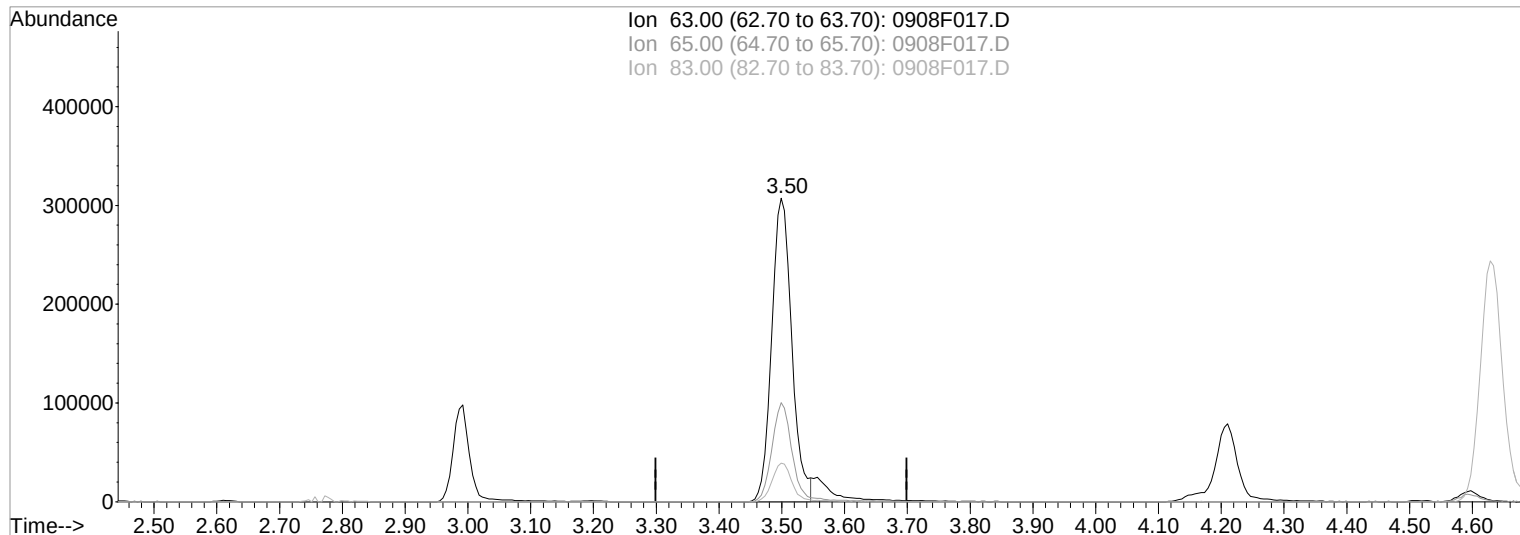
Quant Results File: temp.res

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Fri Sep 15 08:32:31 2023

Response via : Multiple Level Calibration



TIC: 0908F017.D

(27) 1,1-Dichloroethane (PT)

Manual Integration:

3.50min 9.26PPB m

After

response 684747

Shoulder

Ion	Exp%	Act%
63.00	100	100
65.00	32.70	32.69
83.00	12.70	12.69
0.00	0.00	0.00

09/15/23

Quantitation Report (Qedit)

1st *EW* 09/12/23
2nd *Q* 09/18/23

Data File : J:\MS23\DATA\091123\0908F017.D

Acq On : 11 Sep 2023 5:51 pm

Sample : ICAL 10

Misc :

MS Integration Params: rteint.p

Quant Time: Sep 12 8:55 2023

Vial: 10

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

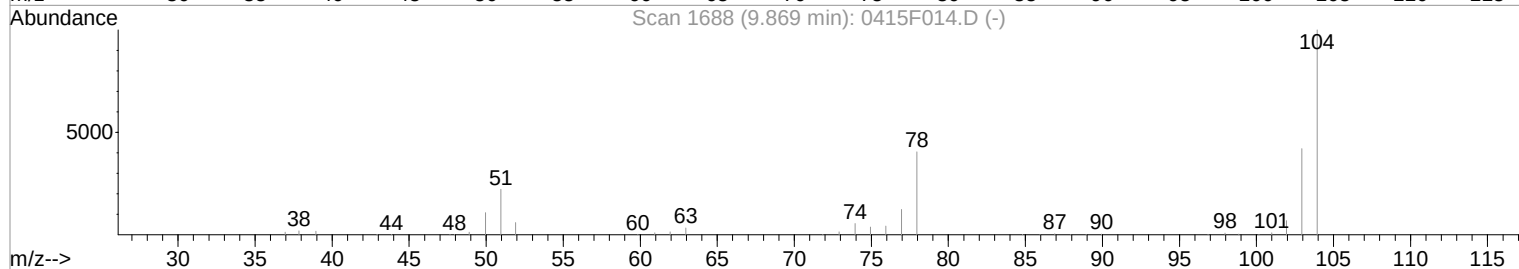
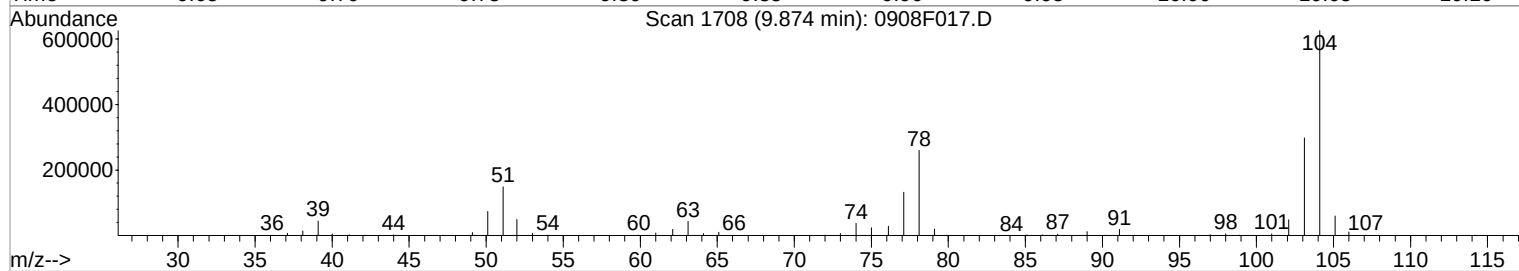
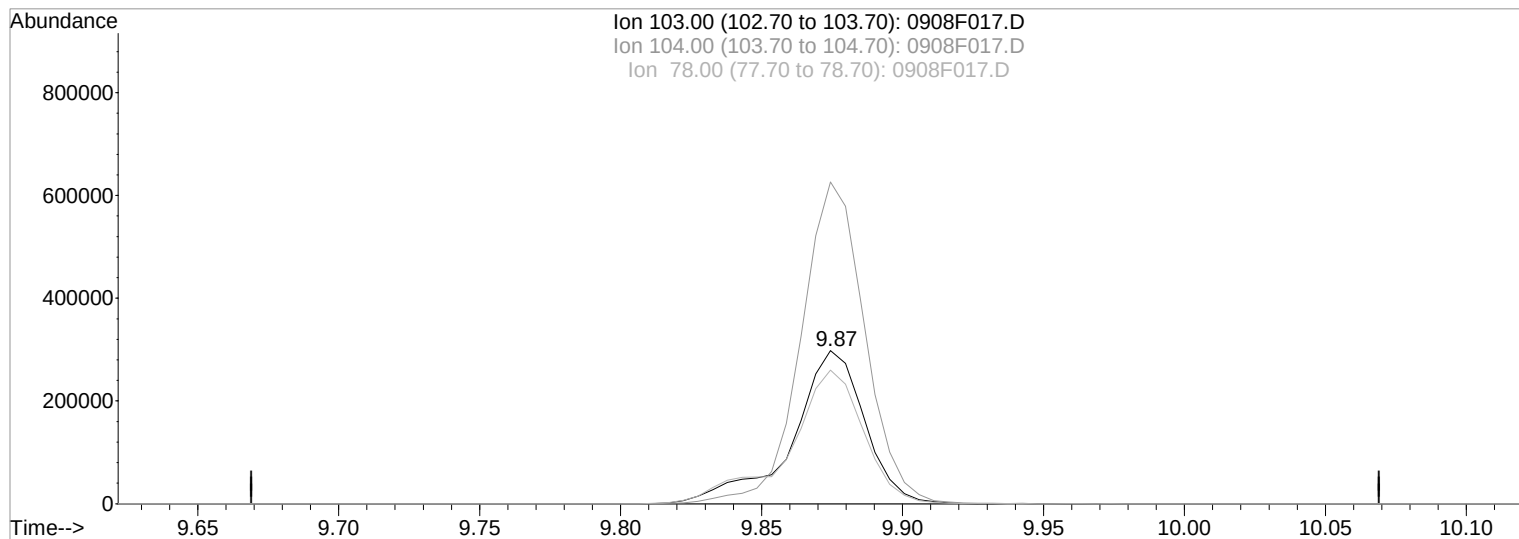
Quant Results File: temp.res

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Sat Apr 30 11:34:42 2022

Response via : Single Level Calibration



TIC: 0908F017.D

(80) Styrene (T)

Manual Integration:

9.87min 16.61PPB

Before

response 530099

Ion	Exp%	Act%
-----	------	------

09/12/23

103.00	100	100
--------	-----	-----

104.00	215.00	209.98
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78.00	99.40	87.23
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0.00	0.00	0.00
------	------	------

Quantitation Report (Qedit)

1st *EW* 09/12/232nd *Q* 09/18/23

Data File : J:\MS23\DATA\091123\0908F017.D

Acq On : 11 Sep 2023 5:51 pm

Sample : ICAL 10

Misc :

Vial: 10

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Sep 12 8:57 2023

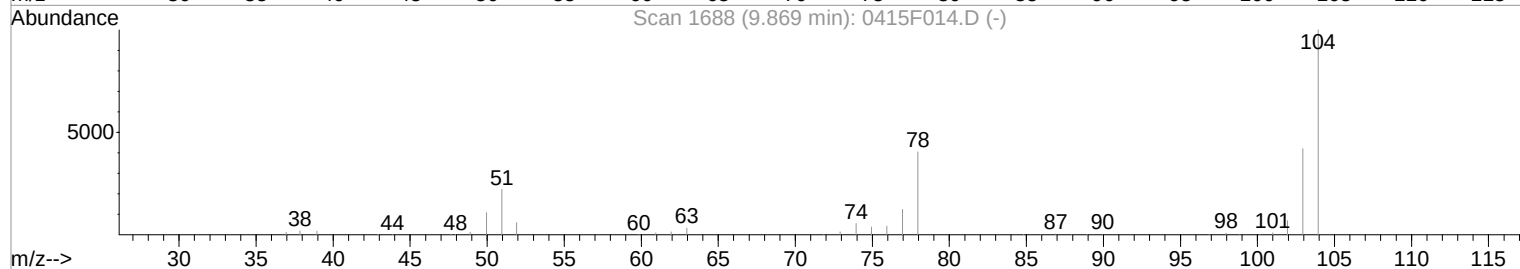
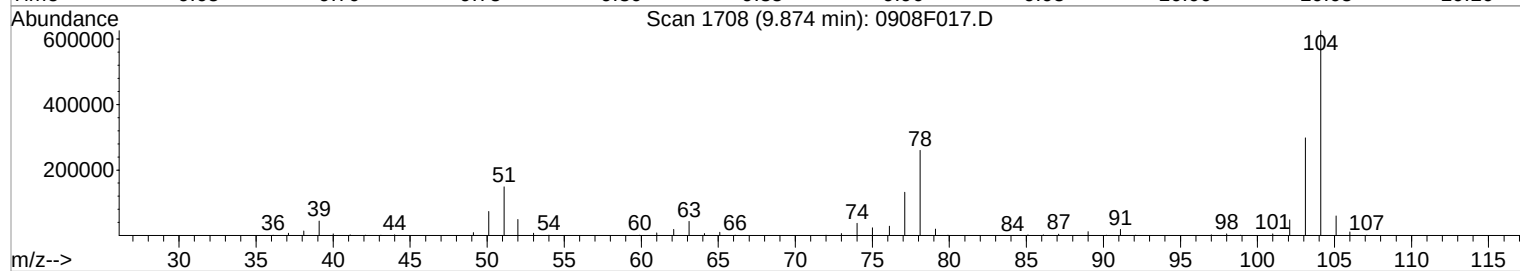
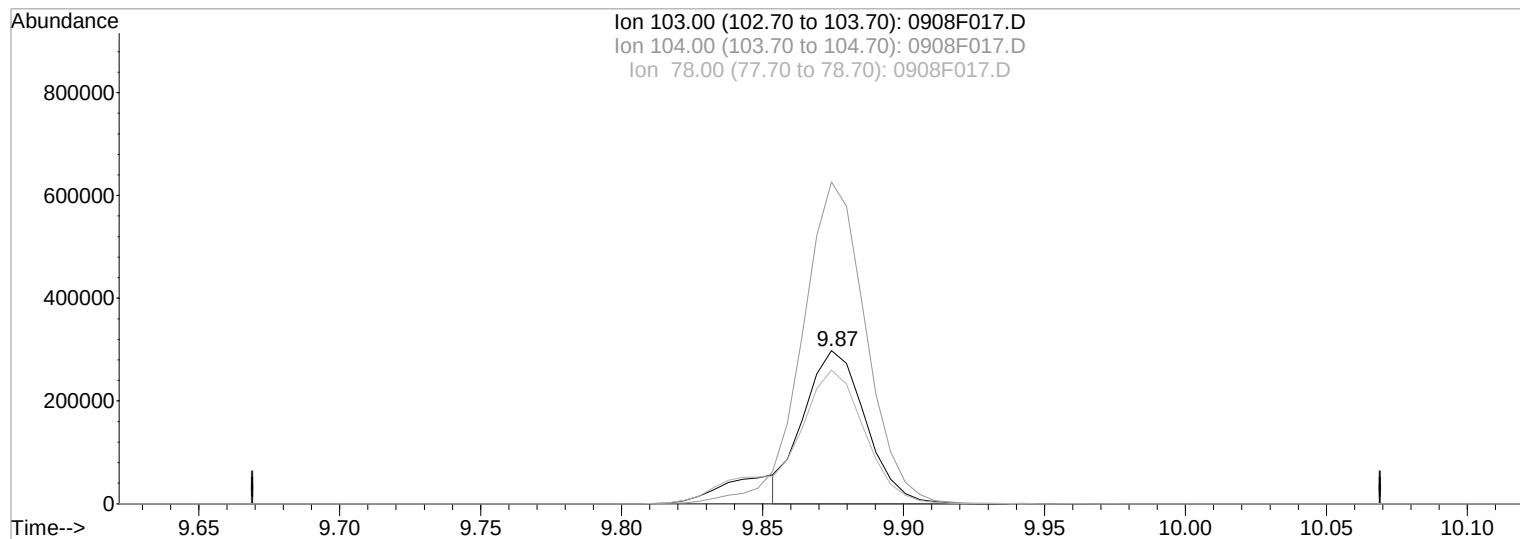
Quant Results File: temp.res

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Sat Apr 30 11:34:42 2022

Response via : Single Level Calibration



TIC: 0908F017.D

(80) Styrene (T)

Manual Integration:

9.87min 14.26PPB m

After

response 453363

Shoulder

Ion	Exp%	Act%
103.00	100	100
104.00	215.00	209.98
78.00	99.40	87.23
0.00	0.00	0.00

09/12/23

Data File : J:\MS23\DATA\091123\0908F018.D

Acq On : 11 Sep 2023 6:16 pm

Sample : ICAL 20

Misc :

Vial: 11

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Sep 12 08:59:46 2023

Quant Results File: 091123MS23_8260.RES

Quant Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Tue Sep 12 08:58:41 2023

Response via : Initial Calibration

DataAcq Meth : 8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	5.72	96	1184334	10.00	PPB	0.00
64) Chlorobenzene-d5	9.17	82	448832	10.00	PPB	0.00
85) 1,4-Dichlorobenzene-d4	11.59	152	336299	10.00	PPB	0.00

System Monitoring Compounds

43) Dibromofluoromethane	4.86	113	245498	10.17	PPB	0.00
Spiked Amount 10.000			Recovery	=	101.70%	
47) 1,2-Dichloroethane-d4	5.35	65	267345	9.93	PPB	0.00
Spiked Amount 10.000			Recovery	=	99.30%	
62) Toluene-d8	7.59	98	1141234	10.13	PPB	0.00
Spiked Amount 10.000			Recovery	=	101.30%	
84) 4-Bromofluorobenzene	10.42	95	364157	10.00	PPB	0.00
Spiked Amount 10.000			Recovery	=	100.00%	

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	1.06	85	816610m	26.65	PPB	
3) Chloromethane	1.23	50	798237	19.54	PPB	99
4) Vinyl Chloride	1.28	62	812903	19.39	PPB	100
5) Bromomethane	1.54	96	346526	20.42	PPB	97
6) Chloroethane	1.62	64	503685	18.90	PPB	97
7) Dichlorofluoromethane	1.79	67	1132863	19.26	PPB	98
8) Trichlorofluoromethane	1.79	101	1043132	19.10	PPB	99
9) Ethyl Ether	2.04	59	542830	20.62	PPB	99
10) Acrolein	2.22	56	1384548	394.57	PPB	100
11) Trichlorotrifluoroethane	2.21	151	386825	19.10	PPB	97
12) 1,1-Dichloroethene	2.25	96	703429	18.97	PPB	96
14) Iodomethane	2.40	142	3354341	82.53	PPB	99
15) Carbon Disulfide	2.43	76	1779699	19.90	PPB	99
16) 2-Propanol (Isopropyl Alco	2.49	45	811942	1148.08	PPB	96
17) 3-Chloro-1-propene	2.61	76	370436	20.49	PPB	96
18) Methyl Acetate	2.65	43	418794	26.23	PPB	97
19) Acetonitrile	2.70	40	1047114	815.96	PPB	100
20) Methylene Chloride	2.76	84	838979	20.17	PPB	99
21) tert-Butyl Alcohol	2.88	59	112820	110.07	PPB	96
22) Acrylonitrile	3.09	53	626017	80.95	PPB	99
23) Methyl tert-Butyl Ether	2.97	73	3276186	42.27	PPB	99
24) trans-1,2-Dichloroethene	2.99	96	777383	19.51	PPB	99
25) Hexane	3.20	57	701663	19.42	PPB	98
26) Diisopropyl Ether	3.50	45	2359796	20.49	PPB	99
27) 1,1-Dichloroethane	3.50	63	1368401m	18.25	PPB	
28) Vinyl Acetate	3.56	86	240633	41.48	PPB	98
29) Chloroprene	3.56	53	4102881	77.46	PPB	99
30) tert-Butyl Ethyl Ether	3.93	59	2018244	21.42	PPB	99
31) 2,2-Dichloropropane	4.16	77	911140	21.33	PPB	99
32) cis-1,2-Dichloroethene	4.21	96	886768	20.16	PPB	99
33) 2-Butanone	4.27	72	898392	409.21	PPB	98
34) Ethyl Acetate	4.31	61	146740	43.78	PPB	94
35) Propionitrile	4.45	54	232880	83.66	PPB	97
36) Methacrylonitrile	4.59	67	807619	85.00	PPB	98
37) Bromochloromethane	4.53	128	364945	20.44	PPB	98
38) Tetrahydrofuran	4.54	71	52379	19.77	PPB	91
39) Chloroform	4.63	83	1271781	20.17	PPB	98
40) tert-Butyl Formate	4.66	59	191052	23.15	PPB	92
41) Cyclohexane	4.76	56	1105003	18.95	PPB	97
42) 1,1,1-Trichloroethane	4.79	97	997847	20.32	PPB	98
44) Carbon Tetrachloride	4.96	117	749340	20.90	PPB	97
45) 1,1-Dichloropropene	5.03	75	1037458	19.80	PPB	99
46) Isobutyl Alcohol	5.36	43	493172	932.03	PPB	98

(#)=qualifier out of range (m)=manual integration

0908F018.D 091123MS23_8260.M

Fri Sep 15 09:12:42 2023

3567 of 3623

Data File : J:\MS23\DATA\091123\0908F018.D

Acq On : 11 Sep 2023 6:16 pm

Sample : ICAL 20

Misc :

Vial: 11

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Sep 12 08:59:46 2023

Quant Results File: 091123MS23_8260.RES

Quant Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Tue Sep 12 08:58:41 2023

Response via : Initial Calibration

DataAcq Meth : 8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
48) Benzene	5.31	78	3373480	19.88	PPB	98
49) 1,2-Dichloroethane	5.45	62	929200	20.47	PPB	99
50) tert-Amyl Methyl Ether	5.46	55	495344	19.72	PPB	87
51) Trichloroethene	6.16	95	774588	20.43	PPB	96
52) Methylcyclohexane	6.28	83	855632	20.22	PPB	97
53) 1,2-Dichloropropane	6.49	63	846923	20.57	PPB	99
54) Dibromomethane	6.63	93	376032	20.86	PPB	98
55) Methyl methacrylate	6.66	69	347770	22.02	PPB	97
56) 1,4-Dioxane	6.67	88	164687	1034.03	PPB	99
60) cis-1,3-Dichloropropene	7.36	75	1188807	22.10	PPB	99
61) 4-Methyl-2-pentanone (MIBK)	7.55	58	3113692	412.75	PPB	99
63) Toluene	7.66	92	2036773	20.04	PPB	99
65) n-Octane	7.74	85	318787	21.61	PPB	98
66) trans-1,3-Dichloropropene	8.02	75	874648	22.82	PPB	98
67) Ethyl methacrylate	8.08	69	645933	22.12	PPB	99
68) 1,1,2-Trichloroethane	8.21	83	486829	20.74	PPB	96
69) Tetrachloroethene	8.22	164	529642	19.78	PPB	99
70) 2-Hexanone	8.48	57	1017159	419.44	PPB	100
71) 1,3-Dichloropropane	8.39	76	1059032	20.31	PPB	99
72) Dibromochloromethane	8.59	129	512459	23.07	PPB	99
73) 1,2-Dibromoethane (EDB)	8.70	107	520852	20.90	PPB	99
74) 1-Chlorohexane	9.19	91	668212	20.02	PPB	97
75) Chlorobenzene	9.20	112	1971512	20.22	PPB	99
76) Ethylbenzene	9.30	106	1015285	20.10	PPB	96
77) 1,1,1,2-Tetrachloroethane	9.31	131	583960	22.22	PPB	97
78) m,p-Xylenes	9.43	106	2433359	39.84	PPB	98
79) o-Xylene	9.85	106	1204914	20.50	PPB	97
80) Styrene	9.88	103	973371m	21.08	PPB	
82) Isopropylbenzene	10.22	105	2576553	20.06	PPB	99
86) 1,1,2,2-Tetrachloroethane	10.62	83	495078	21.06	PPB	99
87) trans-1,4-Dichloro-2-buten	10.69	53	136644	22.29	PPB	73
88) Bromobenzene	10.55	156	704480	21.31	PPB	96
89) n-Propylbenzene	10.64	91	2767646	20.49	PPB	99
90) 1,2,3-Trichloropropane	10.66	110	157700	20.87	PPB	95
91) 2-Chlorotoluene	10.75	91	1816751	20.61	PPB	99
92) 1,3,5-Trimethylbenzene	10.84	105	1986278	20.96	PPB	98
93) 4-Chlorotoluene	10.87	91	2136928	20.61	PPB	98
94) tert-Butylbenzene	11.15	119	1575000	20.89	PPB	97
95) 1,2,4-Trimethylbenzene	11.22	105	2034868	20.94	PPB	100
96) sec-Butylbenzene	11.38	105	2019763	21.20	PPB	99
97) p-Isopropyltoluene	11.53	119	1798842	21.24	PPB	98
98) 1,3-Dichlorobenzene	11.51	146	1092809	20.95	PPB	99
99) 1,4-Dichlorobenzene	11.61	146	1135580	21.20	PPB	99
100) n-Butylbenzene	11.95	91	1458607	22.12	PPB	98
101) 1,2-Dichlorobenzene	11.99	146	972983	21.18	PPB	99
102) 1,2-Dibromo-3-chloropropan	12.65	155	33745	23.46	PPB	90
103) 1,3,5-Trichlorobenzene	12.75	180	477881	22.09	PPB	99
104) 1,2,4-Trichlorobenzene	13.20	180	330273	22.64	PPB	98
105) Hexachlorobutadiene	13.30	225	197028	22.44	PPB	98
106) Naphthalene	13.40	128	493922	24.24	PPB	99
107) 1,2,3-Trichlorobenzene	13.59	180	166856	22.46	PPB	98

(#) = qualifier out of range (m) = manual integration

0908F018.D 091123MS23_8260.M

Fri Sep 15 09:12:42 2023

3568 of 3623

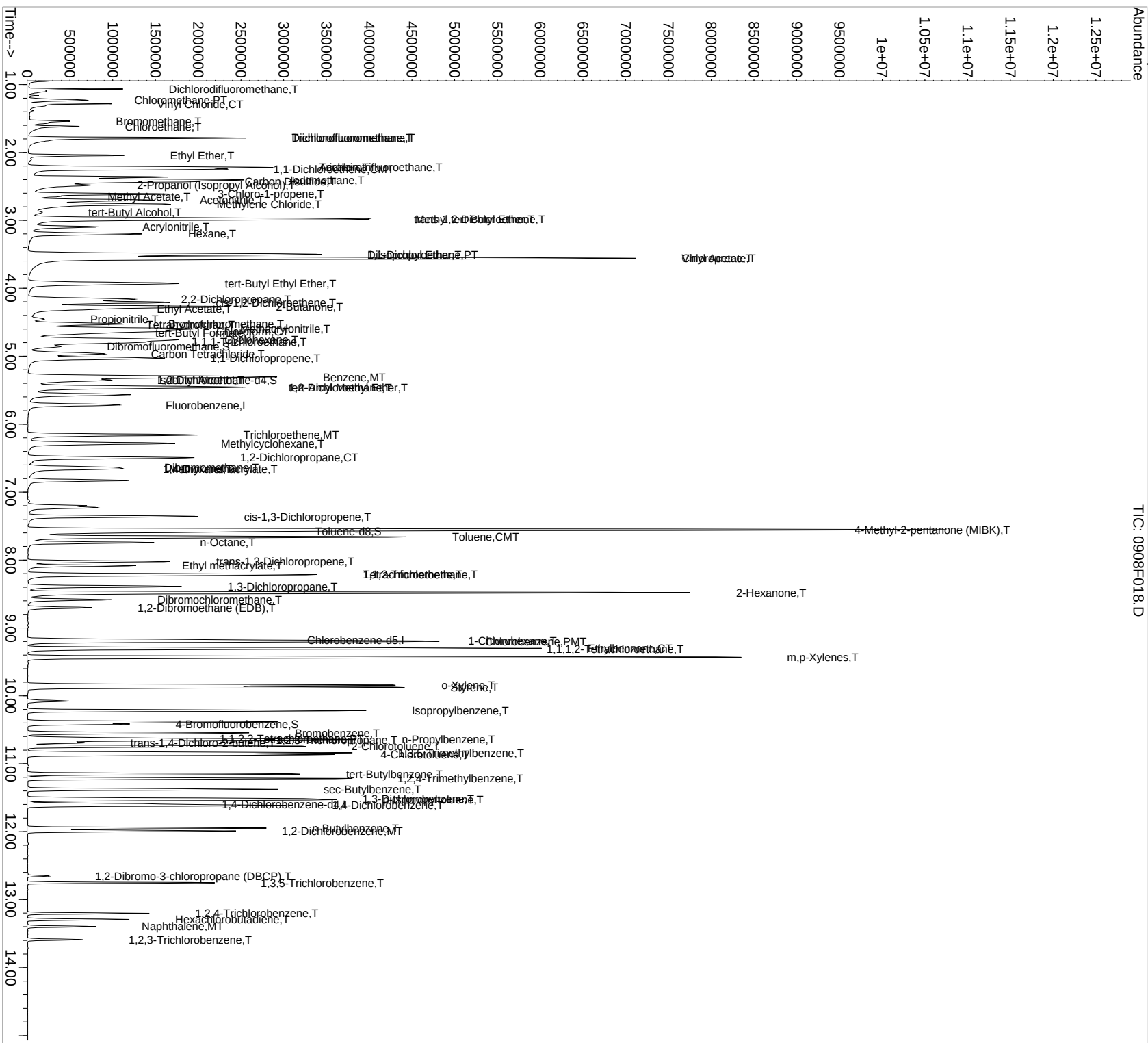
1st 09/12/23

Data File : J:\MS23\DATA\091123\0908F018.D
Acq On : 11 Sep 2023 6:16 pm
Sample : ICAL 20
Misc :
MS Integration Params: rteint.p
uant Time: Sep 15 8:33 2023

Vial: 11
Operator: EW/GH/MK/OT
Inst : MS23
Multiplr: 1.00

Quant Results File: 091123MS23_8260.RES

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)
Title : VOA MS23 EPA Method 8260C
Last Update : Fri Sep 15 08:47:04 2023
Response via : Initial Calibration



Data File : J:\MS23\DATA\091123\0908F018.D

Acq On : 11 Sep 2023 6:16 pm

Sample : ICAL 20

Misc :

Vial: 11

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Sep 12 9:50 2023

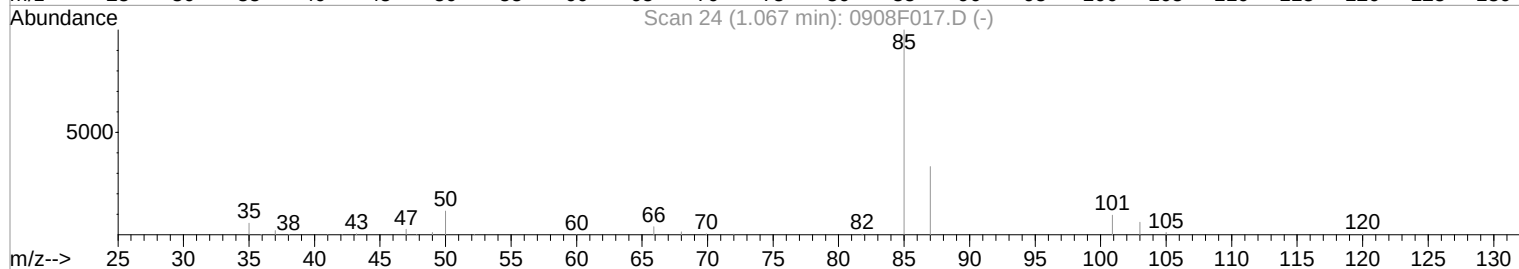
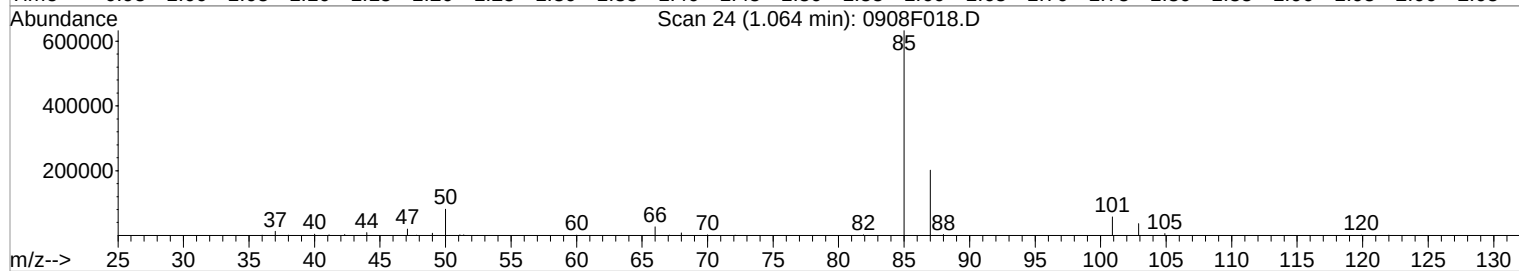
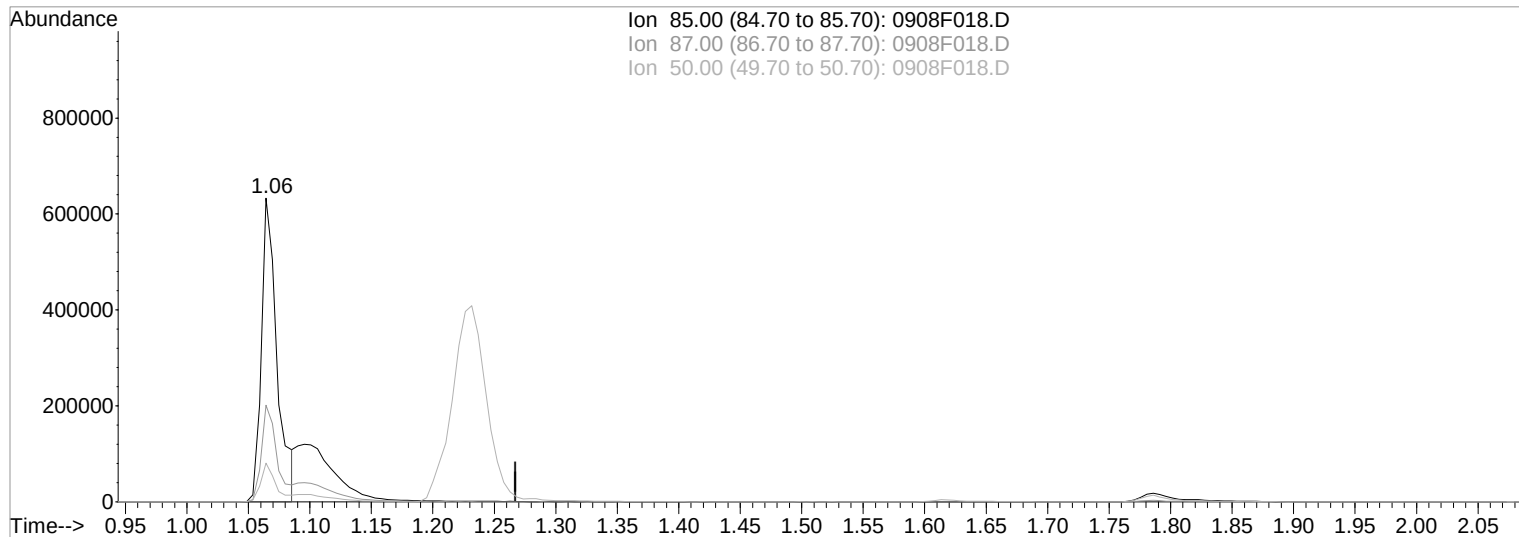
Quant Results File: temp.res

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Fri Sep 15 08:33:28 2023

Response via : Multiple Level Calibration



TIC: 0908F018.D

(2) Dichlorodifluoromethane (T)

Manual Integration:

1.06min 18.23PPB

Before

response 558614

Ion	Exp%	Act%
-----	------	------

09/15/23

85.00	100	100
-------	-----	-----

87.00	33.20	31.78
-------	-------	-------

50.00	11.40	12.74
-------	-------	-------

0.00	0.00	0.00
------	------	------

Data File : J:\MS23\DATA\091123\0908F018.D

Acq On : 11 Sep 2023 6:16 pm

Sample : ICAL 20

Misc :

MS Integration Params: rteint.p

Quant Time: Sep 15 8:33 2023

Vial: 11

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

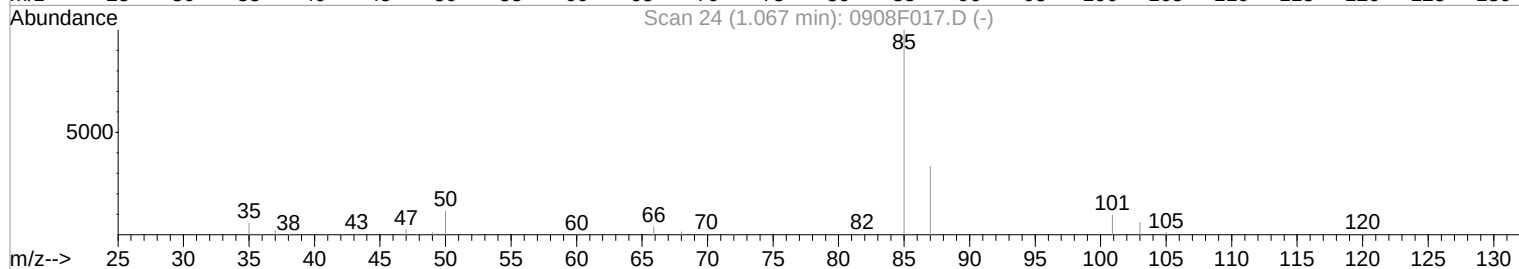
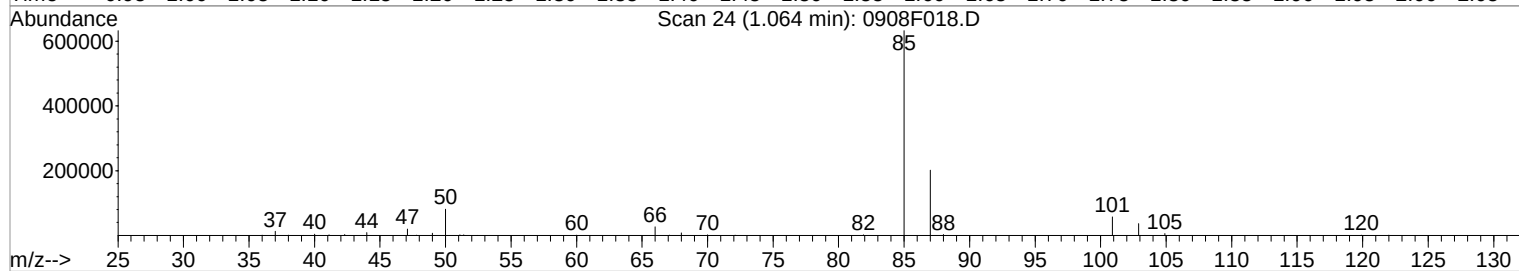
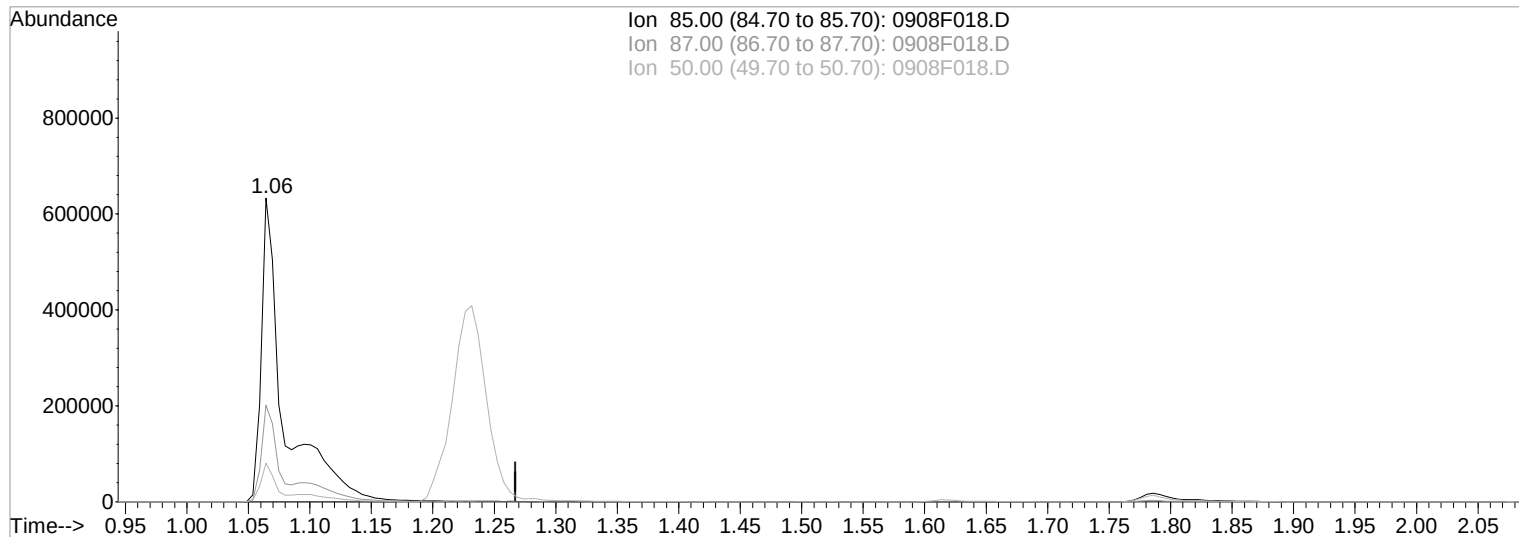
Quant Results File: temp.res

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Fri Sep 15 08:33:28 2023

Response via : Multiple Level Calibration



TIC: 0908F018.D

(2) Dichlorodifluoromethane (T)

Manual Integration:

1.06min 26.65PPB m

After

response 816610

Split peak

Ion	Exp%	Act%
85.00	100	100
87.00	33.20	31.78
50.00	11.40	12.74
0.00	0.00	0.00

09/15/23

Quantitation Report (Qedit)

1st  09/12/23
2nd  09/18/23

Data File : J:\MS23\DATA\091123\0908F018.D

Acq On : 11 Sep 2023 6:16 pm

Sample : ICAL 20

Misc :

MS Integration Params: rteint.p

Quant Time: Sep 12 8:59 2023

Vial: 11

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

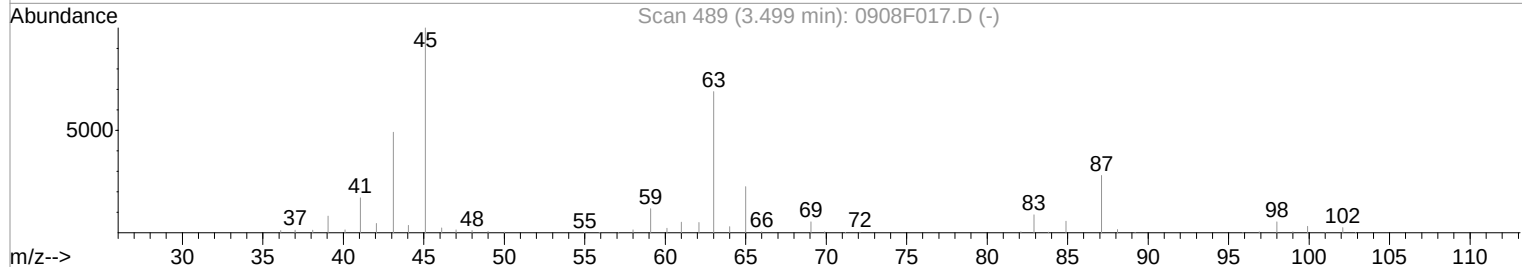
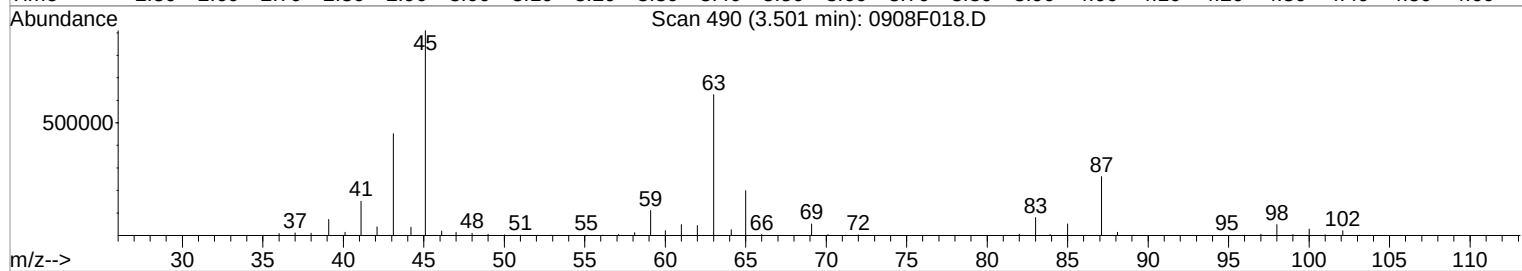
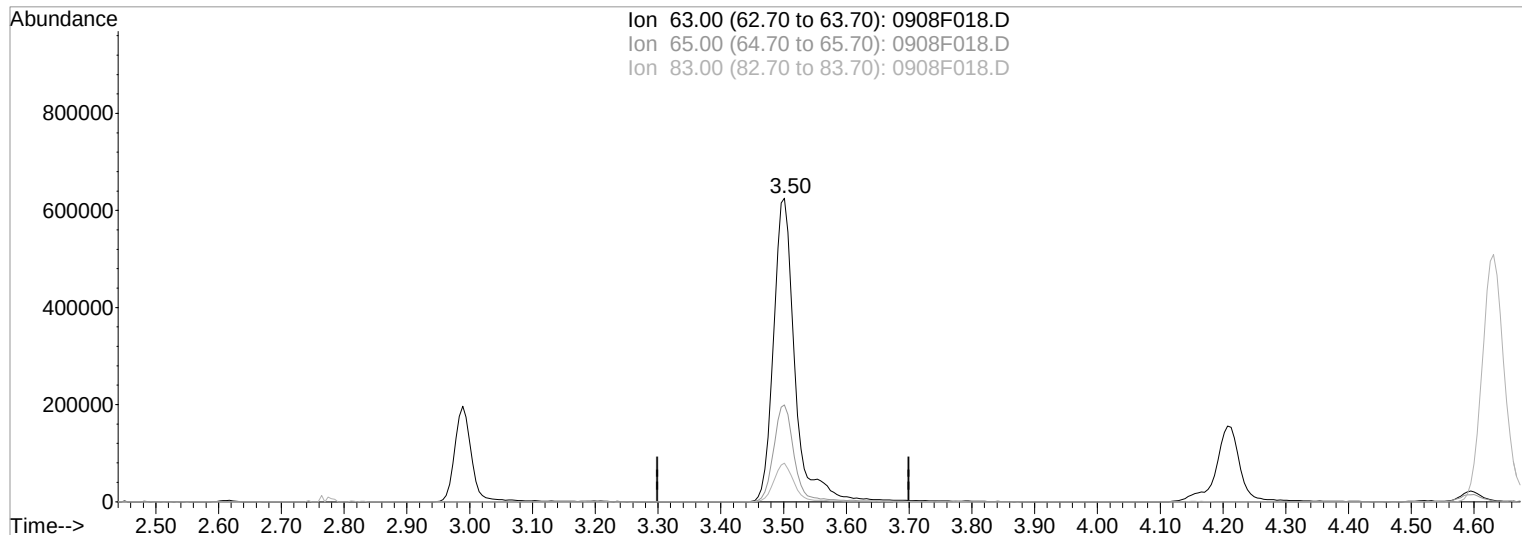
Quant Results File: temp.res

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Tue Sep 12 09:48:20 2023

Response via : Multiple Level Calibration



TIC: 0908F018.D

(27) 1,1-Dichloroethane (PT)

Manual Integration:

3.50min 19.80PPB

Before

response 1484107

Ion	Exp%	Act%
63.00	100	100
65.00	32.70	31.91
83.00	12.70	12.67
0.00	0.00	0.00

09/12/23

Quantitation Report (Qedit)

1st  09/12/23
2nd  09/18/23

Data File : J:\MS23\DATA\091123\0908F018.D

Acq On : 11 Sep 2023 6:16 pm

Sample : ICAL 20

Misc :

MS Integration Params: rteint.p

Quant Time: Sep 12 9:49 2023

Vial: 11

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

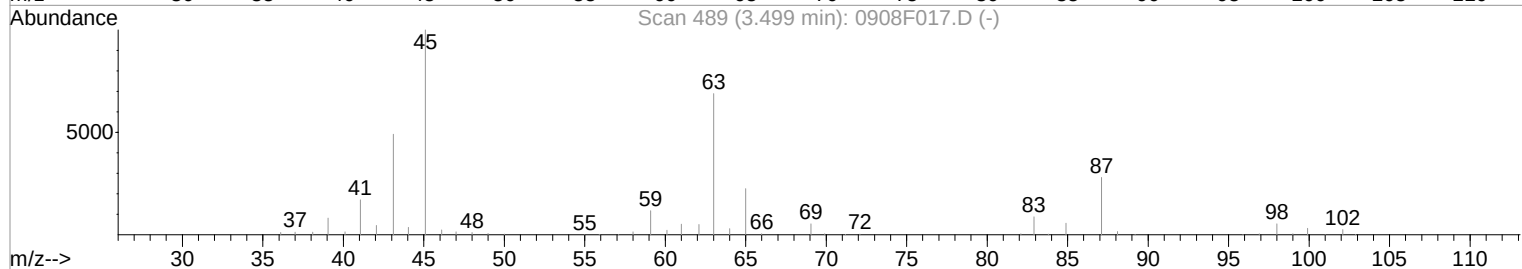
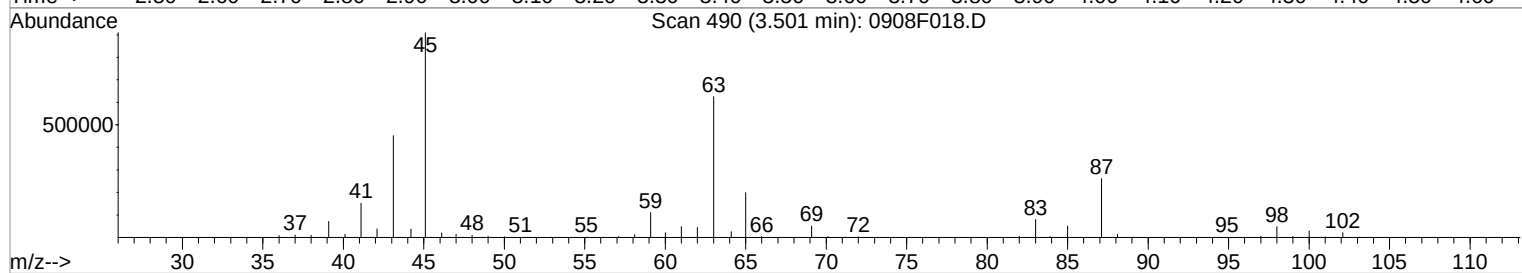
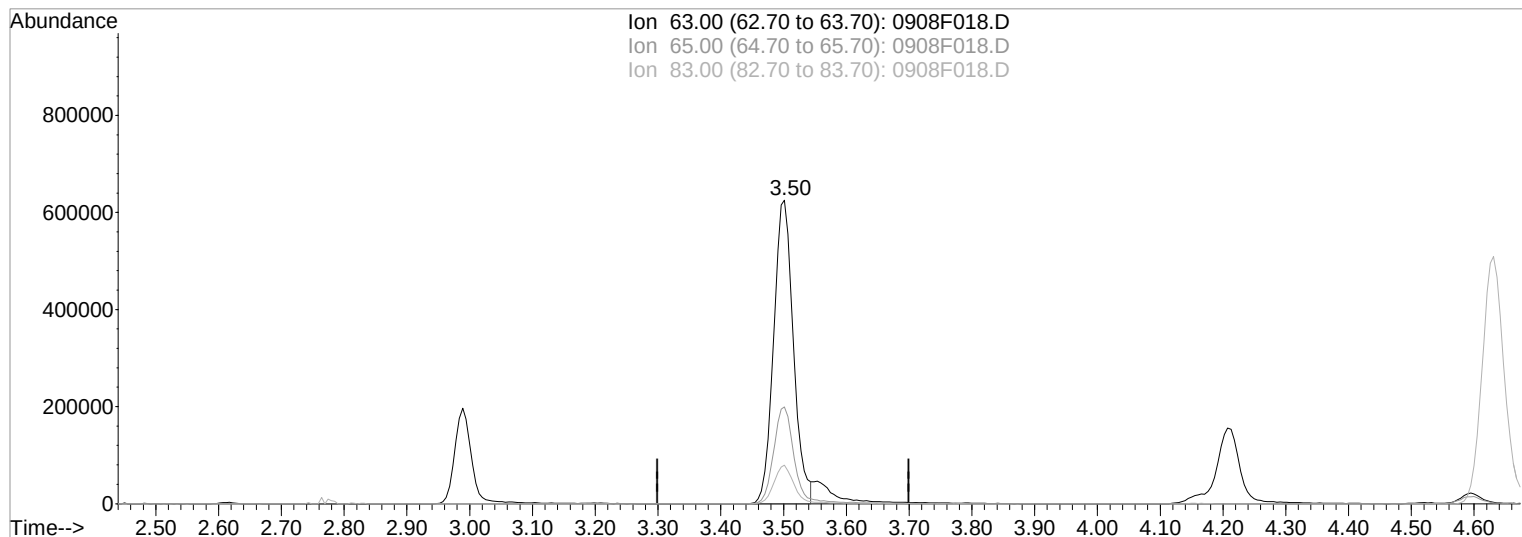
Quant Results File: temp.res

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Tue Sep 12 09:48:20 2023

Response via : Multiple Level Calibration



TIC: 0908F018.D

(27) 1,1-Dichloroethane (PT)

3.50min 18.25PPB m

response 1368401

Ion	Exp%	Act%
-----	------	------

63.00	100	100
-------	-----	-----

65.00	32.70	31.91
-------	-------	-------

83.00	12.70	12.67
-------	-------	-------

0.00	0.00	0.00
------	------	------

Manual Integration:

After

Shoulder

09/12/23

Quantitation Report (Qedit)

1st *EW* 09/12/232nd *Q* 09/18/23

Data File : J:\MS23\DATA\091123\0908F018.D

Acq On : 11 Sep 2023 6:16 pm

Sample : ICAL 20

Misc :

Vial: 11

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Sep 12 9:49 2023

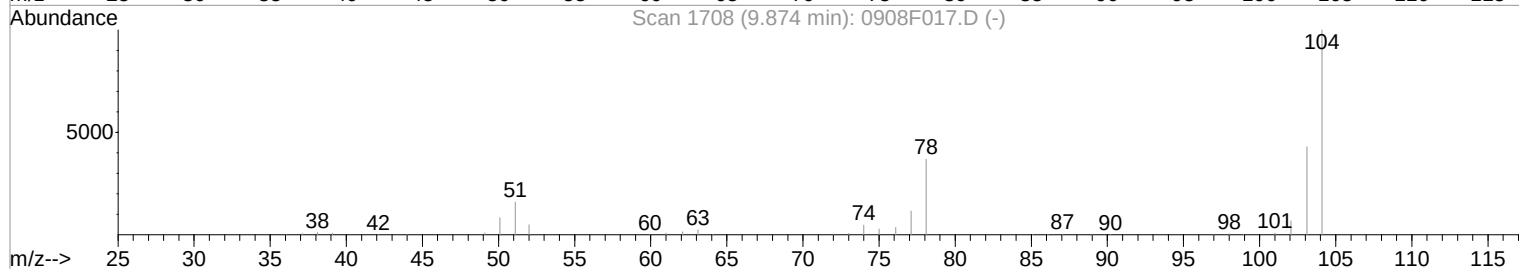
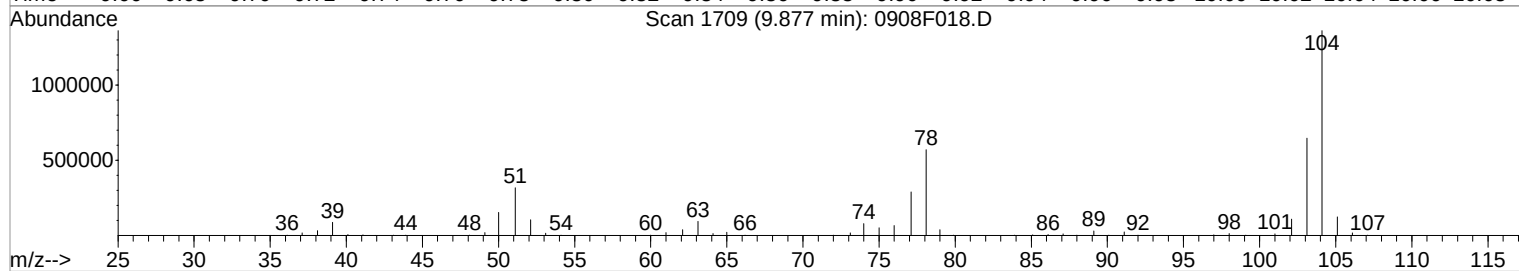
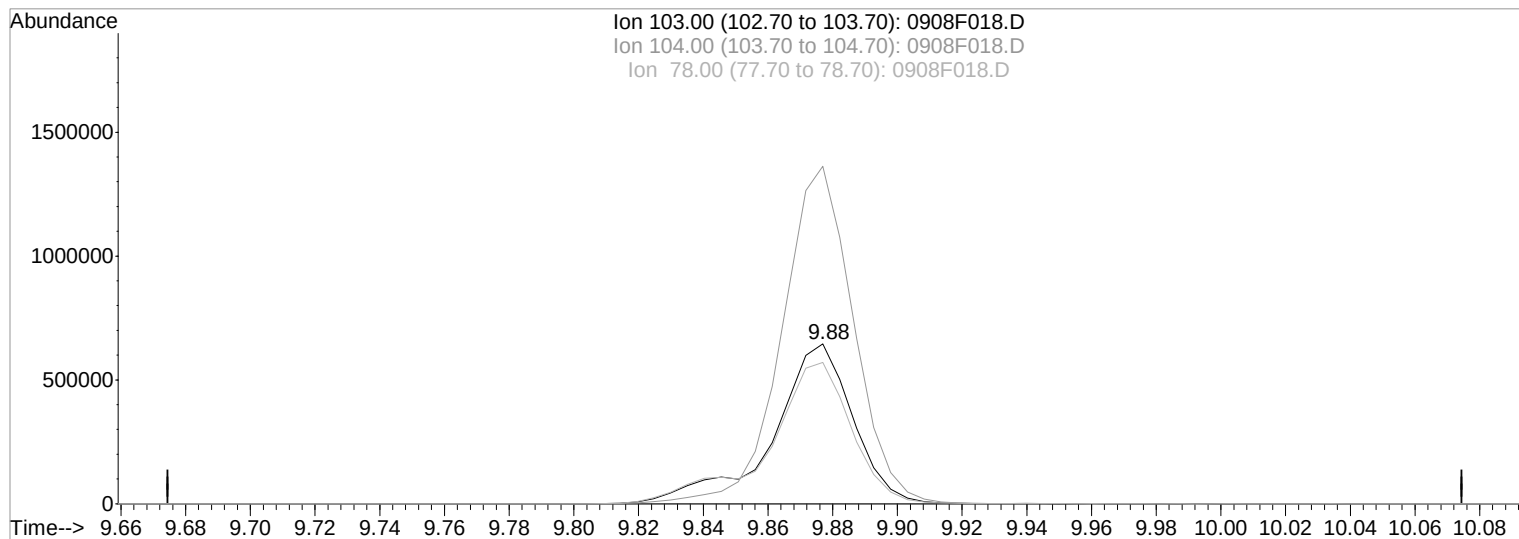
Quant Results File: temp.res

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Tue Sep 12 09:48:20 2023

Response via : Single Level Calibration



TIC: 0908F018.D

(80) Styrene (T)

Manual Integration:

9.88min 24.15PPB

Before

response 1114969

Ion Exp% Act%

09/12/23

103.00 100 100

104.00 210.00 211.05

78.00 87.20 88.33

0.00 0.00 0.00

Quantitation Report (Qedit)

1st *EW* 09/12/23
2nd *Q* 09/18/23

Data File : J:\MS23\DATA\091123\0908F018.D

Acq On : 11 Sep 2023 6:16 pm

Sample : ICAL 20

Misc :

MS Integration Params: rteint.p

Quant Time: Sep 12 9:50 2023

Vial: 11

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

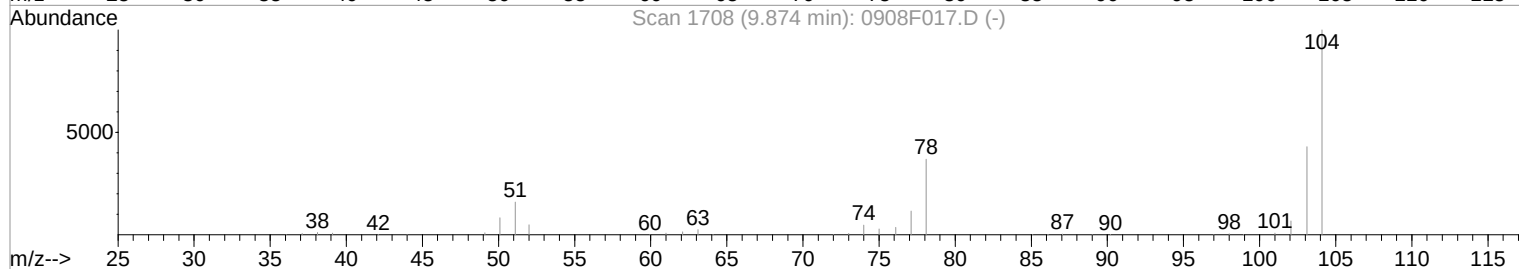
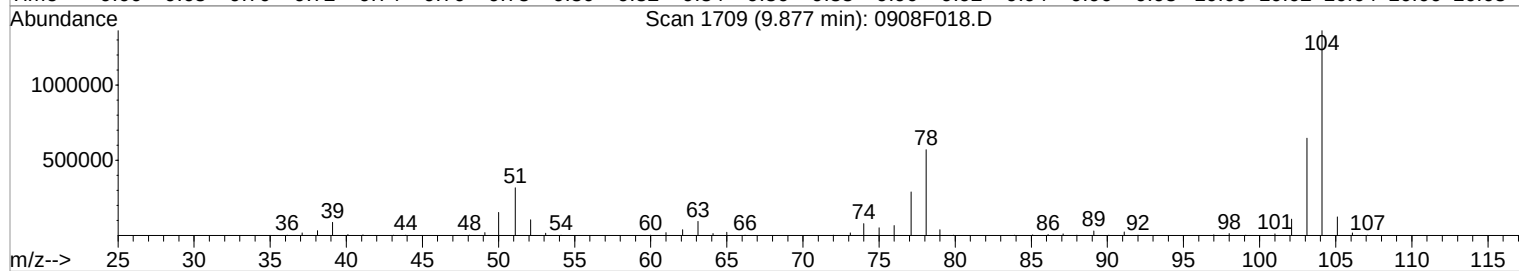
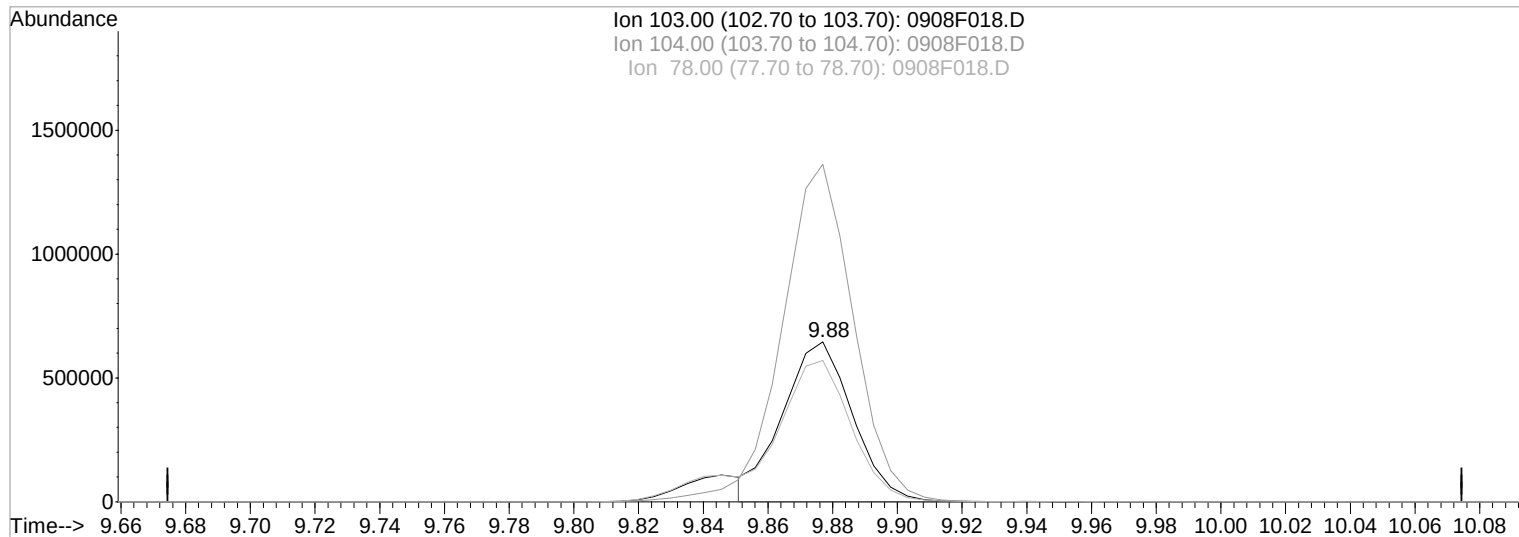
Quant Results File: temp.res

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Tue Sep 12 09:48:20 2023

Response via : Single Level Calibration



TIC: 0908F018.D

(80) Styrene (T)

9.88min 21.08PPB m

response 973371

Ion Exp% Act%

103.00 100 100

104.00 210.00 211.05

78.00 87.20 88.33

0.00 0.00 0.00

Manual Integration:

After

Shoulder

09/12/23

Data File : J:\MS23\DATA\091123\0908F019.D

Acq On : 11 Sep 2023 6:40 pm

Sample : ICAL 40

Misc :

Vial: 12

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Sep 12 08:59:48 2023

Quant Results File: 091123MS23_8260.RES

Quant Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Tue Sep 12 08:58:41 2023

Response via : Initial Calibration

DataAcq Meth : 8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	5.71	96	1195531	10.00	PPB	0.00
64) Chlorobenzene-d5	9.17	82	448332	10.00	PPB	0.00
85) 1,4-Dichlorobenzene-d4	11.59	152	339711	10.00	PPB	0.00

System Monitoring Compounds

43) Dibromofluoromethane	4.86	113	249610	10.24	PPB	0.00
Spiked Amount 10.000			Recovery	=	102.40%	
47) 1,2-Dichloroethane-d4	5.34	65	271571	9.99	PPB	0.00
Spiked Amount 10.000			Recovery	=	99.90%	
62) Toluene-d8	7.59	98	1152353	10.13	PPB	0.00
Spiked Amount 10.000			Recovery	=	101.30%	
84) 4-Bromofluorobenzene	10.42	95	370167	10.18	PPB	0.00
Spiked Amount 10.000			Recovery	=	101.80%	

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	1.07	85	1561721m	50.49	PPB	
3) Chloromethane	1.23	50	1570376	38.09	PPB	99
4) Vinyl Chloride	1.28	62	1579933	37.33	PPB	99
5) Bromomethane	1.54	96	695903	40.63	PPB	99
6) Chloroethane	1.61	64	967772	35.98	PPB	98
7) Dichlorofluoromethane	1.79	67	2194552	36.95	PPB	99
8) Trichlorofluoromethane	1.79	101	2002602	36.33	PPB	99
9) Ethyl Ether	2.04	59	1059977	39.89	PPB	98
10) Acrolein	2.22	56	2678939	756.30	PPB	100
11) Trichlorotrifluoroethane	2.22	151	754865	36.92	PPB	98
12) 1,1-Dichloroethene	2.25	96	1378601	36.83	PPB	94
14) Iodomethane	2.40	142	6667242	162.50	PPB	99
15) Carbon Disulfide	2.43	76	3544158	39.27	PPB	99
16) 2-Propanol (Isopropyl Alco	2.48	45	1659362	2324.36	PPB	97
17) 3-Chloro-1-propene	2.61	76	769599	42.17	PPB	96
18) Methyl Acetate	2.64	43	860262	53.38	PPB	97
19) Acetonitrile	2.70	40	2221198	1714.64	PPB	97
20) Methylene Chloride	2.77	84	1628625	38.80	PPB	99
21) tert-Butyl Alcohol	2.88	59	233165	225.35	PPB	96
22) Acrylonitrile	3.09	53	1229591	157.50	PPB	99
23) Methyl tert-Butyl Ether	2.97	73	6498235	83.05	PPB	99
24) trans-1,2-Dichloroethene	2.99	96	1554905	38.66	PPB	99
25) Hexane	3.20	57	1444757	39.60	PPB	98
26) Diisopropyl Ether	3.50	45	4703957	40.45	PPB	99
27) 1,1-Dichloroethane	3.50	63	2704321m	35.74	PPB	
28) Vinyl Acetate	3.56	86	509838	87.06	PPB	97
29) Chloroprene	3.55	53	7947293	148.63	PPB	99
30) tert-Butyl Ethyl Ether	3.93	59	4073753	42.84	PPB	99
31) 2,2-Dichloropropane	4.16	77	1932711	44.83	PPB	99
32) cis-1,2-Dichloroethene	4.21	96	1744742	39.29	PPB	99
33) 2-Butanone	4.27	72	1907361	860.64	PPB	94
34) Ethyl Acetate	4.31	61	301613	89.15	PPB	90
35) Propionitrile	4.45	54	467691	166.44	PPB	98
36) Methacrylonitrile	4.60	67	1593994	166.19	PPB	98
37) Bromochloromethane	4.52	128	711047	39.45	PPB	99
38) Tetrahydrofuran	4.54	71	101844	38.08	PPB	93
39) Chloroform	4.63	83	2527612	39.71	PPB	98
40) tert-Butyl Formate	4.66	59	451074	54.15	PPB	90
41) Cyclohexane	4.75	56	2190868	37.21	PPB	98
42) 1,1,1-Trichloroethane	4.79	97	2035083	41.05	PPB	98
44) Carbon Tetrachloride	4.96	117	1559699	43.09	PPB	97
45) 1,1-Dichloropropene	5.03	75	2065893	39.06	PPB	99
46) Isobutyl Alcohol	5.35	43	1030578	1929.41	PPB	96

(#)=qualifier out of range (m)=manual integration

0908F019.D 091123MS23_8260.M

Fri Sep 15 09:12:45 2023

3576 of 3623

Data File : J:\MS23\DATA\091123\0908F019.D

Acq On : 11 Sep 2023 6:40 pm

Sample : ICAL 40

Misc :

Vial: 12

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Sep 12 08:59:48 2023

Quant Results File: 091123MS23_8260.RES

Quant Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Tue Sep 12 08:58:41 2023

Response via : Initial Calibration

DataAcq Meth : 8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
48) Benzene	5.30	78	6627044	38.69	PPB	99
49) 1,2-Dichloroethane	5.45	62	1826186	39.85	PPB	100
50) tert-Amyl Methyl Ether	5.46	55	946366	37.33	PPB	# 75
51) Trichloroethene	6.16	95	1539170	40.22	PPB	96
52) Methylcyclohexane	6.29	83	1748950	40.94	PPB	99
53) 1,2-Dichloropropane	6.49	63	1674465	40.29	PPB	99
54) Dibromomethane	6.64	93	749538	41.18	PPB	99
55) Methyl methacrylate	6.66	69	712725	44.71	PPB	98
56) 1,4-Dioxane	6.66	88	319620	1988.03	PPB	97
60) cis-1,3-Dichloropropene	7.36	75	2473682	45.55	PPB	100
61) 4-Methyl-2-pentanone (MIBK)	7.56	58	6281999	824.95	PPB	92
63) Toluene	7.66	92	3998423	38.98	PPB	99
65) n-Octane	7.74	85	619661	42.05	PPB	100
66) trans-1,3-Dichloropropene	8.02	75	1878539	49.08	PPB	98
67) Ethyl methacrylate	8.08	69	1322564	45.34	PPB	100
68) 1,1,2-Trichloroethane	8.21	83	965409	41.17	PPB	98
69) Tetrachloroethene	8.22	164	1054683	39.43	PPB	98
70) 2-Hexanone	8.48	57	2071991	855.36	PPB	91
71) 1,3-Dichloropropane	8.39	76	2094034	40.21	PPB	99
72) Dibromochloromethane	8.59	129	1083973	48.85	PPB	99
73) 1,2-Dibromoethane (EDB)	8.70	107	1037378	41.68	PPB	99
74) 1-Chlorohexane	9.19	91	1380223	41.39	PPB	98
75) Chlorobenzene	9.20	112	3849662	39.52	PPB	99
76) Ethylbenzene	9.30	106	1999110	39.63	PPB	98
77) 1,1,1,2-Tetrachloroethane	9.31	131	1210358	46.11	PPB	96
78) m,p-Xylenes	9.43	106	4766645	78.13	PPB	96
79) o-Xylene	9.84	106	2383319	40.60	PPB	96
80) Styrene	9.87	103	1927258m	41.79	PPB	
82) Isopropylbenzene	10.22	105	5095940	39.71	PPB	98
86) 1,1,2,2-Tetrachloroethane	10.62	83	988592	41.62	PPB	99
87) trans-1,4-Dichloro-2-buten	10.69	53	283684	45.82	PPB	66
88) Bromobenzene	10.55	156	1390761	41.64	PPB	98
89) n-Propylbenzene	10.64	91	5474550	40.12	PPB	99
90) 1,2,3-Trichloropropane	10.66	110	312975	41.00	PPB	97
91) 2-Chlorotoluene	10.74	91	3586733	40.27	PPB	99
92) 1,3,5-Trimethylbenzene	10.84	105	3943597	41.20	PPB	99
93) 4-Chlorotoluene	10.87	91	4210854	40.20	PPB	100
94) tert-Butylbenzene	11.15	119	3149537	41.35	PPB	98
95) 1,2,4-Trimethylbenzene	11.22	105	4005415	40.81	PPB	100
96) sec-Butylbenzene	11.38	105	3995069	41.50	PPB	99
97) p-Isopropyltoluene	11.53	119	3571182	41.74	PPB	98
98) 1,3-Dichlorobenzene	11.52	146	2156194	40.92	PPB	97
99) 1,4-Dichlorobenzene	11.61	146	2216309	40.96	PPB	99
100) n-Butylbenzene	11.95	91	2905099	43.61	PPB	99
101) 1,2-Dichlorobenzene	11.99	146	1903462	41.01	PPB	99
102) 1,2-Dibromo-3-chloropropan	12.66	155	75005	51.62	PPB	87
103) 1,3,5-Trichlorobenzene	12.75	180	942832	43.14	PPB	99
104) 1,2,4-Trichlorobenzene	13.20	180	652972	44.32	PPB	99
105) Hexachlorobutadiene	13.29	225	396351	44.70	PPB	98
106) Naphthalene	13.40	128	1037420	50.41	PPB	99
107) 1,2,3-Trichlorobenzene	13.59	180	332641	44.32	PPB	97

(#) = qualifier out of range (m) = manual integration

0908F019.D 091123MS23_8260.M

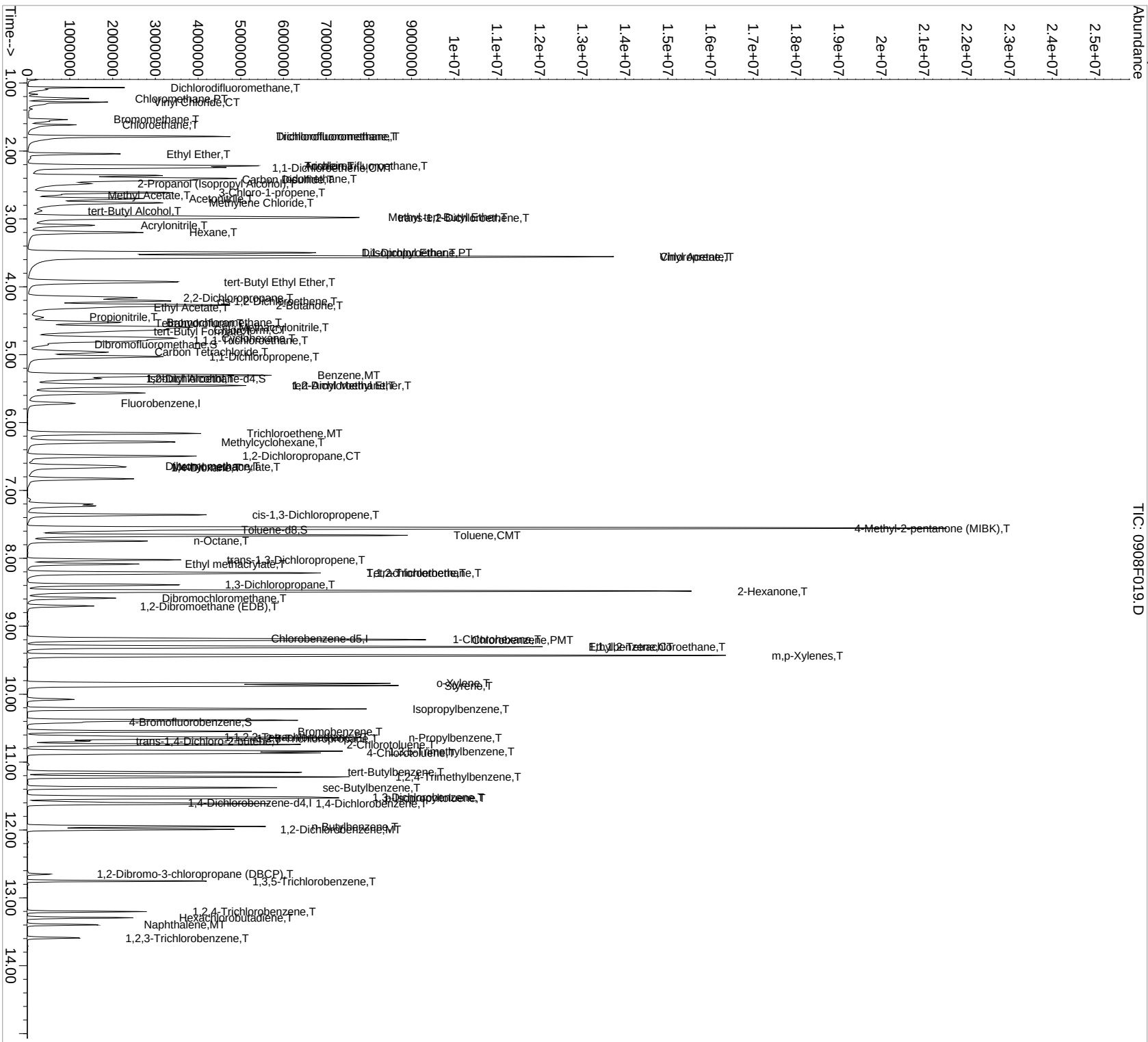
Fri Sep 15 09:12:45 2023

3577 of 3623

Quantitation Report (QT Reviewed)

quant Results File: 091123MS23_8260.RES

```
Method      : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)
Title       : VOA MS23 EPA Method 8260C
Last Update : Fri Sep 15 08:47:04 2023
Response via : Initial Calibration
```



Data File : J:\MS23\DATA\091123\0908F019.D

Acq On : 11 Sep 2023 6:40 pm

Sample : ICAL 40

Misc :

Vial: 12

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Sep 12 9:52 2023

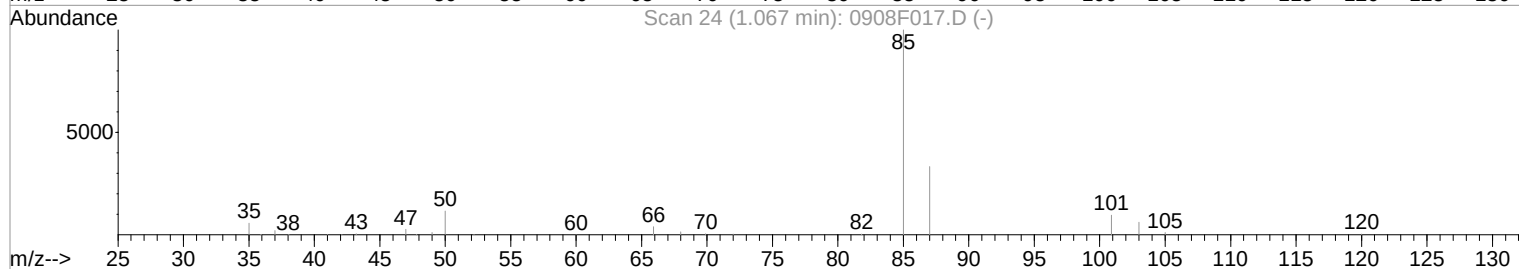
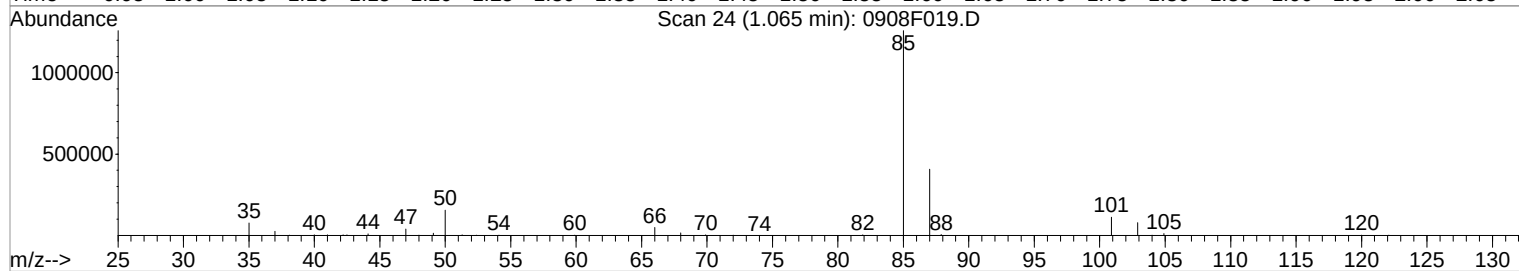
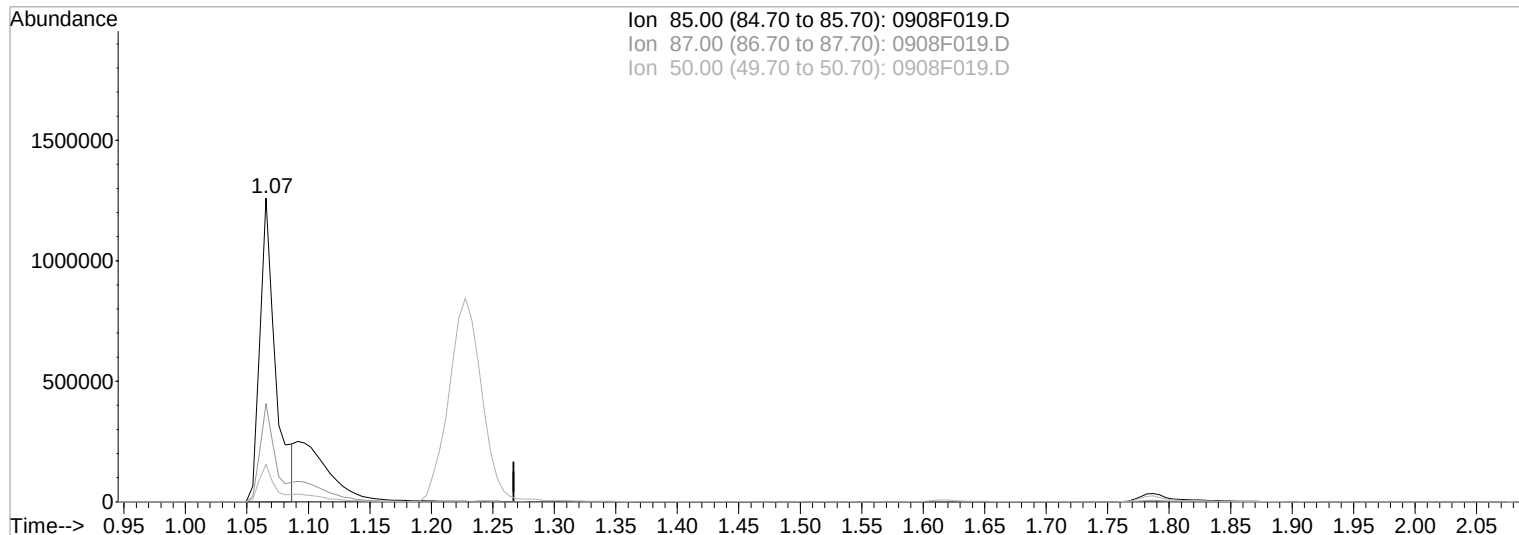
Quant Results File: temp.res

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Fri Sep 15 08:34:05 2023

Response via : Multiple Level Calibration



TIC: 0908F019.D

(2) Dichlorodifluoromethane (T)

Manual Integration:

1.07min 35.55PPB

Before

response 1099758

Ion	Exp%	Act%
85.00	100	100
87.00	33.20	32.37
50.00	11.40	12.26
0.00	0.00	0.00

09/15/23

Data File : J:\MS23\DATA\091123\0908F019.D

Acq On : 11 Sep 2023 6:40 pm

Sample : ICAL 40

Misc :

Vial: 12

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Sep 15 8:34 2023

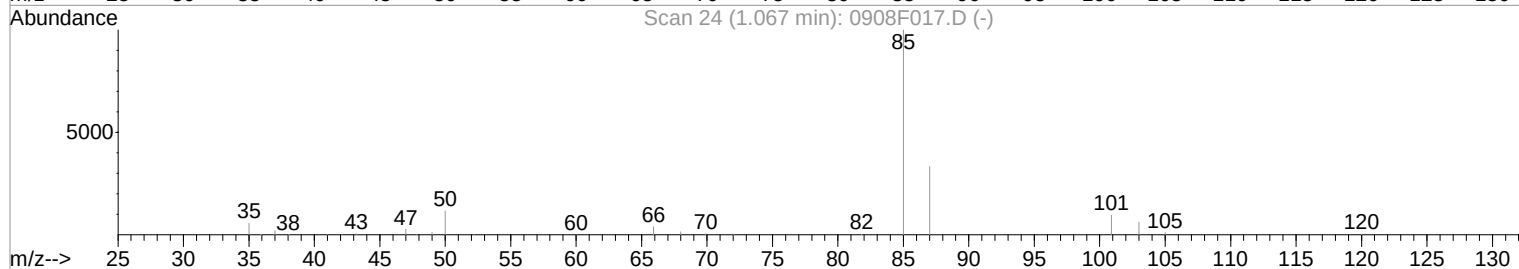
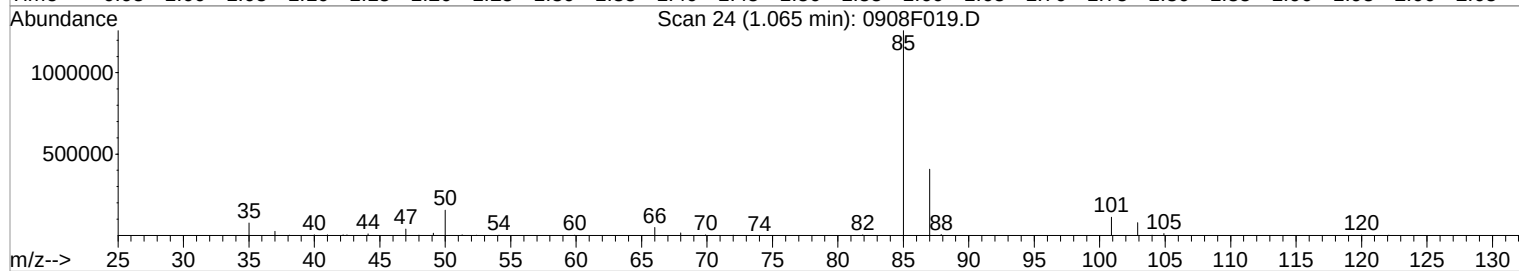
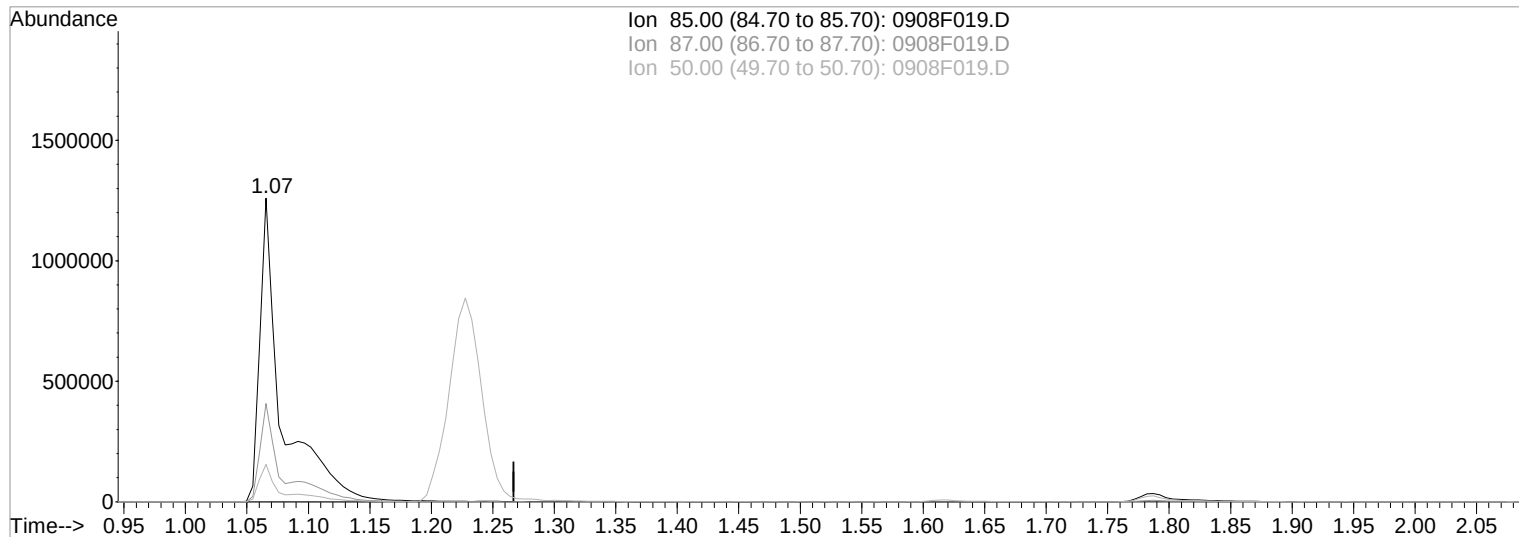
Quant Results File: temp.res

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Fri Sep 15 08:34:05 2023

Response via : Multiple Level Calibration



TIC: 0908F019.D

(2) Dichlorodifluoromethane (T)

Manual Integration:

1.07min 50.49PPB m

After

response 1561721

Split peak

09/15/23

Ion	Exp%	Act%
85.00	100	100
87.00	33.20	32.37
50.00	11.40	12.26
0.00	0.00	0.00

Quantitation Report (Qedit)

1st  09/12/23
2nd  09/18/23

Data File : J:\MS23\DATA\091123\0908F019.D

Acq On : 11 Sep 2023 6:40 pm

Sample : ICAL 40

Misc :

MS Integration Params: rteint.p

Quant Time: Sep 12 8:59 2023

Vial: 12

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

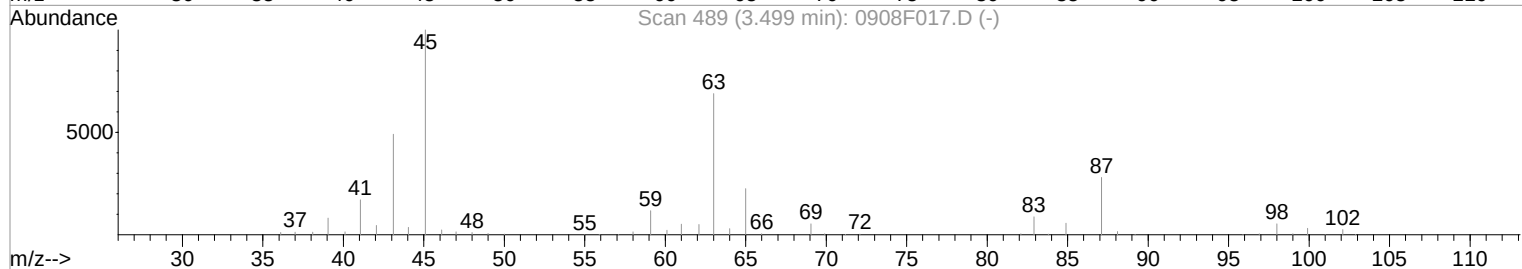
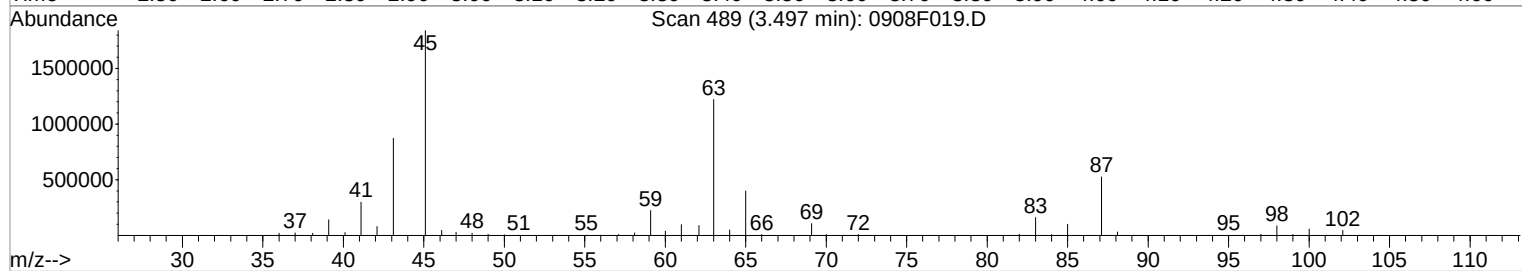
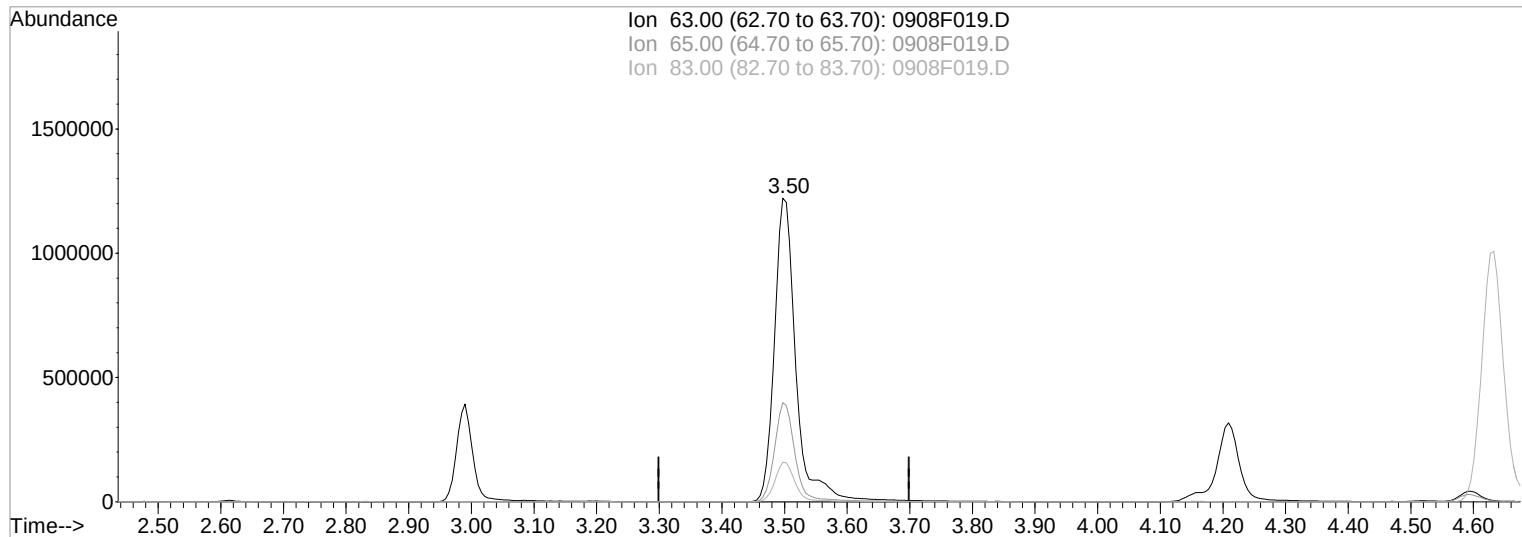
Quant Results File: temp.res

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Tue Sep 12 09:51:29 2023

Response via : Multiple Level Calibration



TIC: 0908F019.D

(27) 1,1-Dichloroethane (PT)

Manual Integration:

3.50min 38.63PPB

Before

response 2923047

Ion	Exp%	Act%
-----	------	------

09/12/23

63.00	100	100
-------	-----	-----

65.00	32.70	32.66
-------	-------	-------

83.00	12.70	13.03
-------	-------	-------

0.00	0.00	0.00
------	------	------

Quantitation Report (Qedit)

1st  09/12/23
2nd  09/18/23

Data File : J:\MS23\DATA\091123\0908F019.D

Acq On : 11 Sep 2023 6:40 pm

Sample : ICAL 40

Misc :

MS Integration Params: rteint.p

Quant Time: Sep 12 9:52 2023

Vial: 12

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

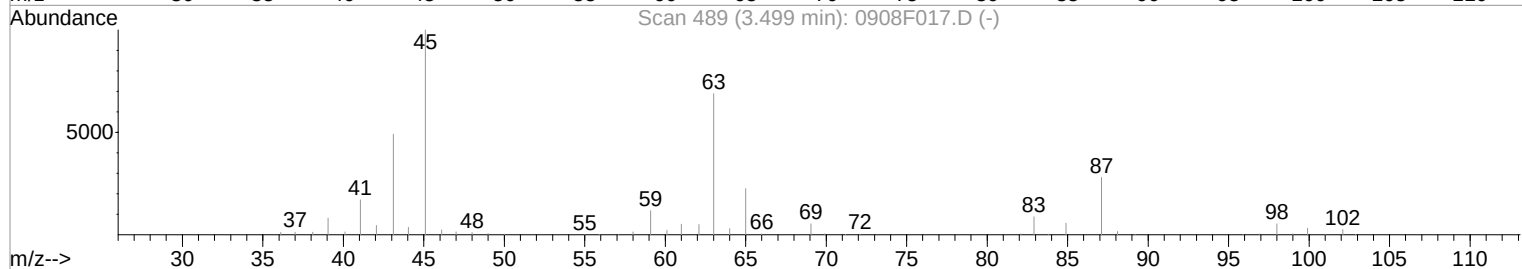
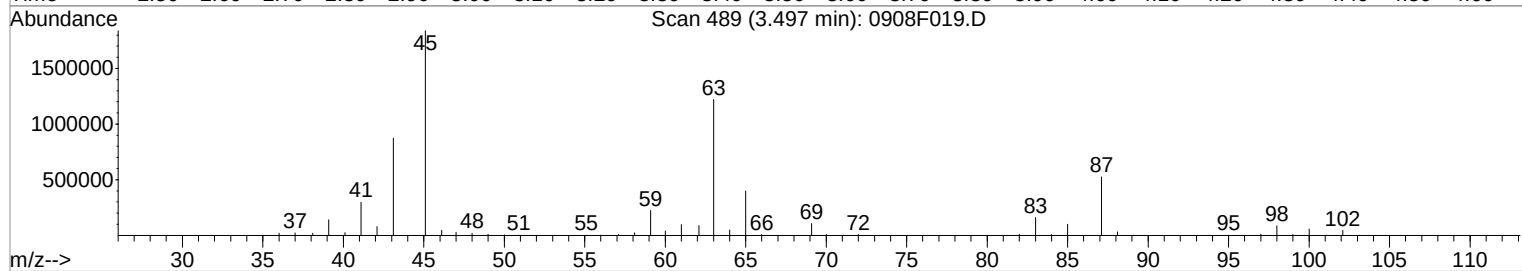
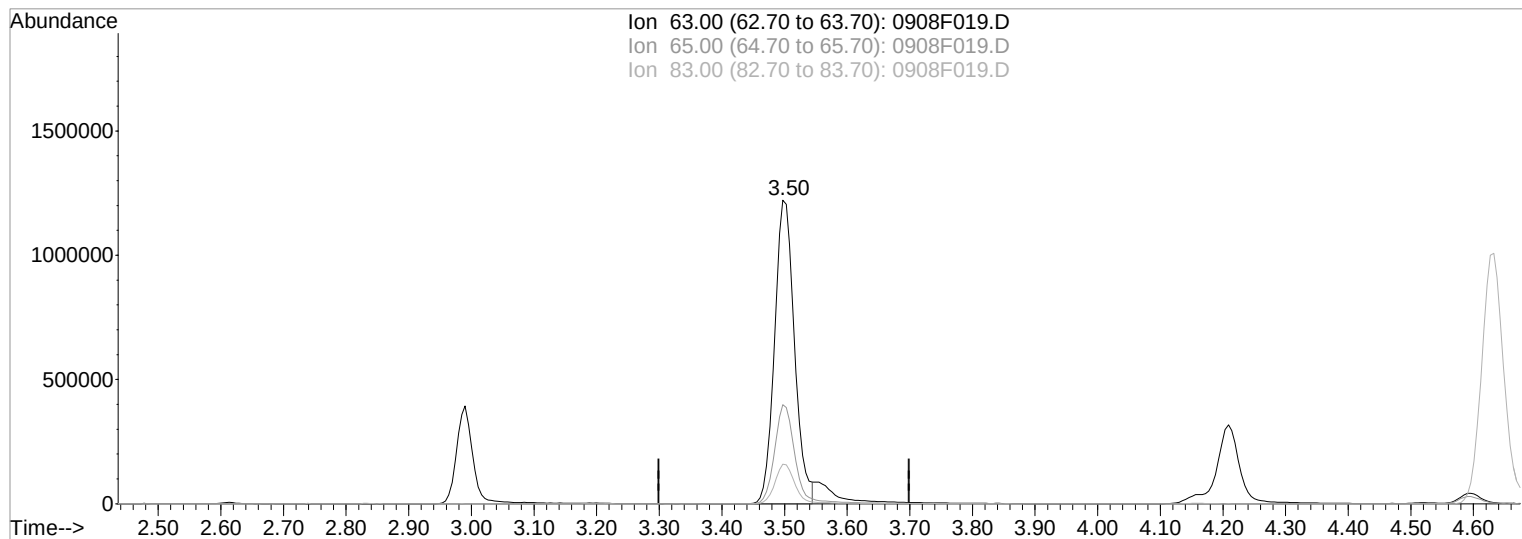
Quant Results File: temp.res

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Tue Sep 12 09:51:29 2023

Response via : Multiple Level Calibration



TIC: 0908F019.D

(27) 1,1-Dichloroethane (PT)

3.50min 35.74PPB m

response 2704321

Ion	Exp%	Act%
-----	------	------

63.00	100	100
-------	-----	-----

65.00	32.70	32.66
-------	-------	-------

83.00	12.70	13.03
-------	-------	-------

0.00	0.00	0.00
------	------	------

Manual Integration:

After

Shoulder

09/12/23

Quantitation Report (Qedit)

1st *EW* 09/12/23
2nd *Q* 09/18/23

Data File : J:\MS23\DATA\091123\0908F019.D

Acq On : 11 Sep 2023 6:40 pm

Sample : ICAL 40

Misc :

Vial: 12

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Sep 12 9:52 2023

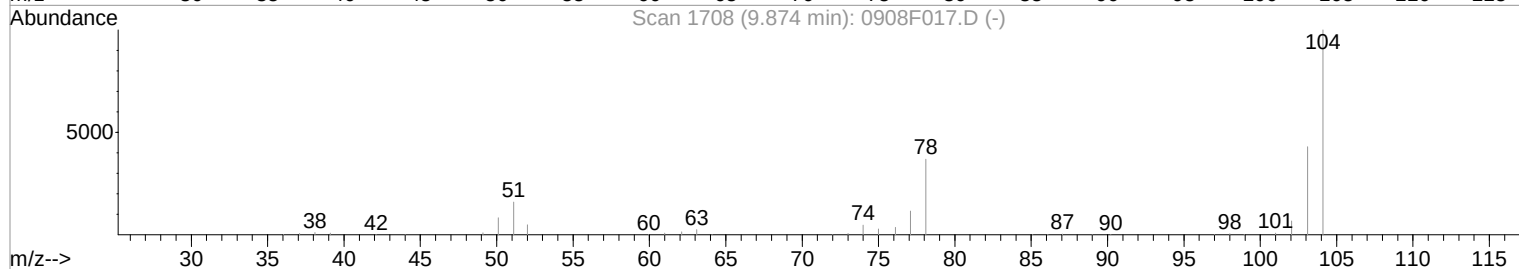
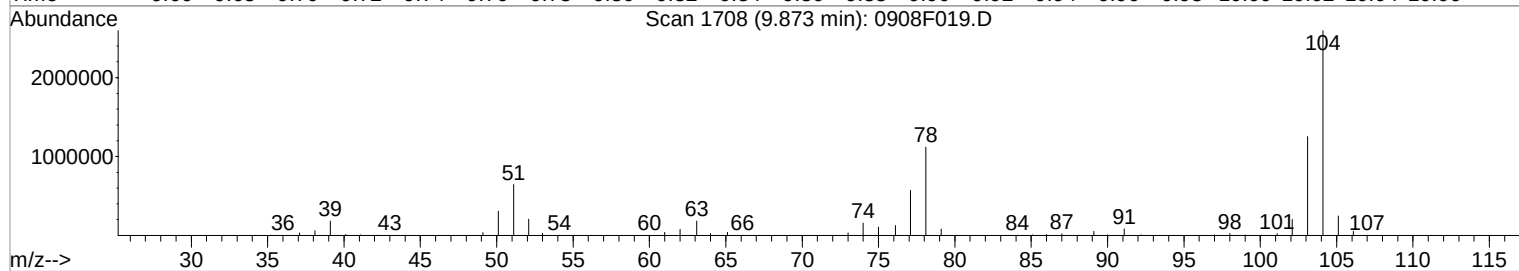
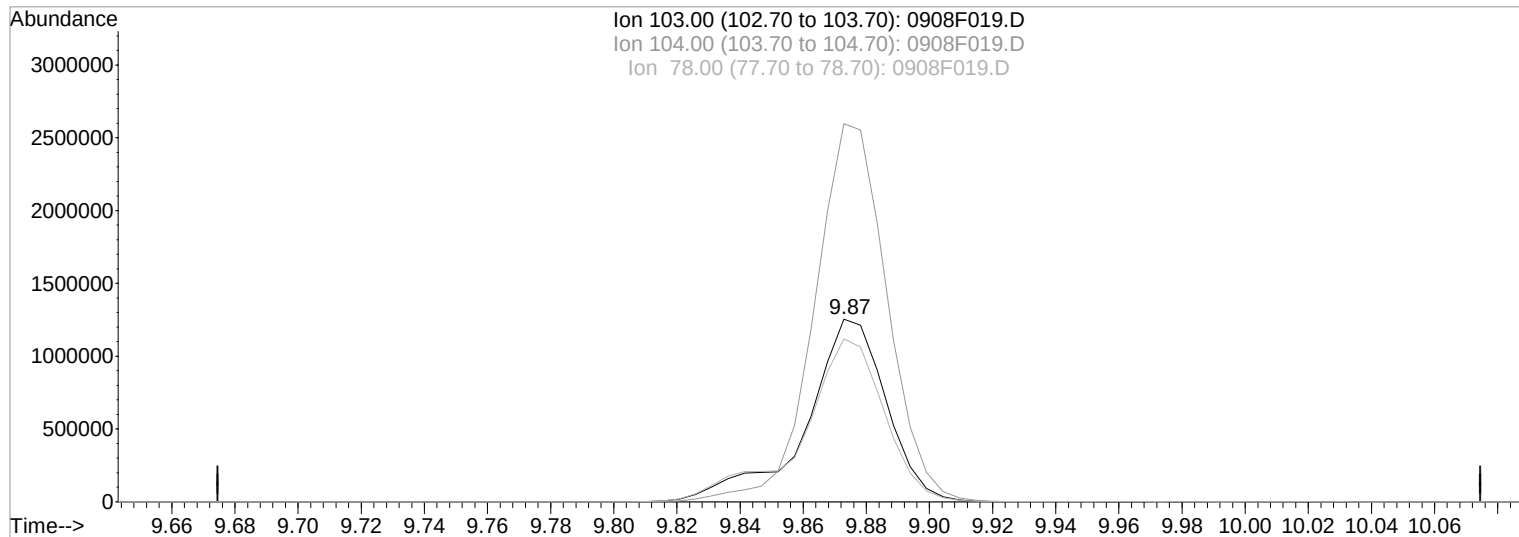
Quant Results File: temp.res

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Tue Sep 12 09:51:29 2023

Response via : Single Level Calibration



TIC: 0908F019.D

(80) Styrene (T)

Manual Integration:

9.87min 48.18PPB

Before

response 2221885

Ion	Exp%	Act%
-----	------	------

09/12/23

103.00	100	100
--------	-----	-----

104.00	210.00	207.27
--------	--------	--------

78.00	87.20	89.13
-------	-------	-------

0.00	0.00	0.00
------	------	------

Quantitation Report (Qedit)

1st *EW* 09/12/23
2nd *Q* 09/18/23

Data File : J:\MS23\DATA\091123\0908F019.D

Acq On : 11 Sep 2023 6:40 pm

Sample : ICAL 40

Misc :

Vial: 12

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Sep 12 9:52 2023

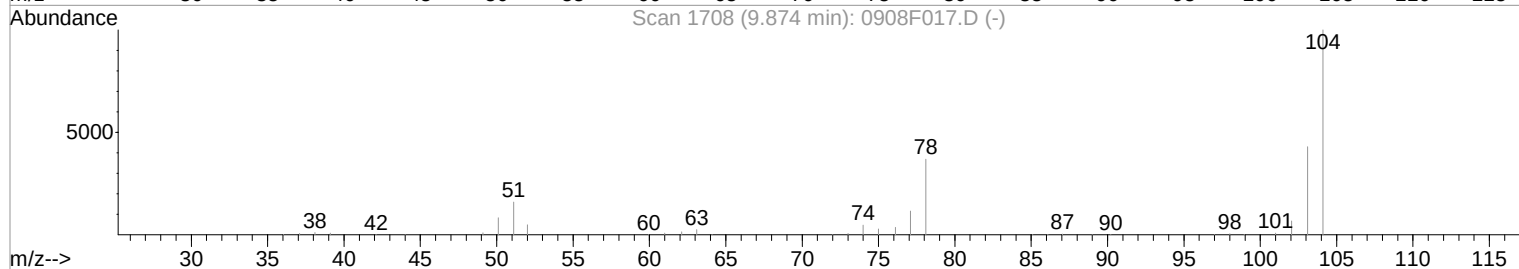
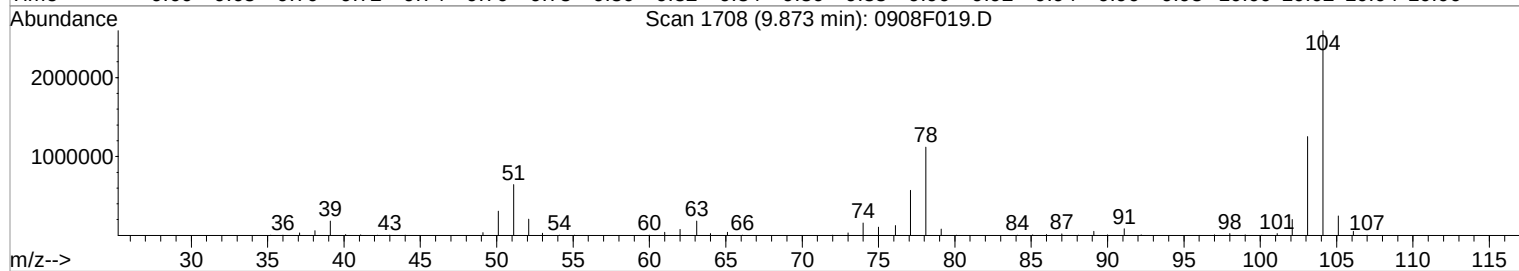
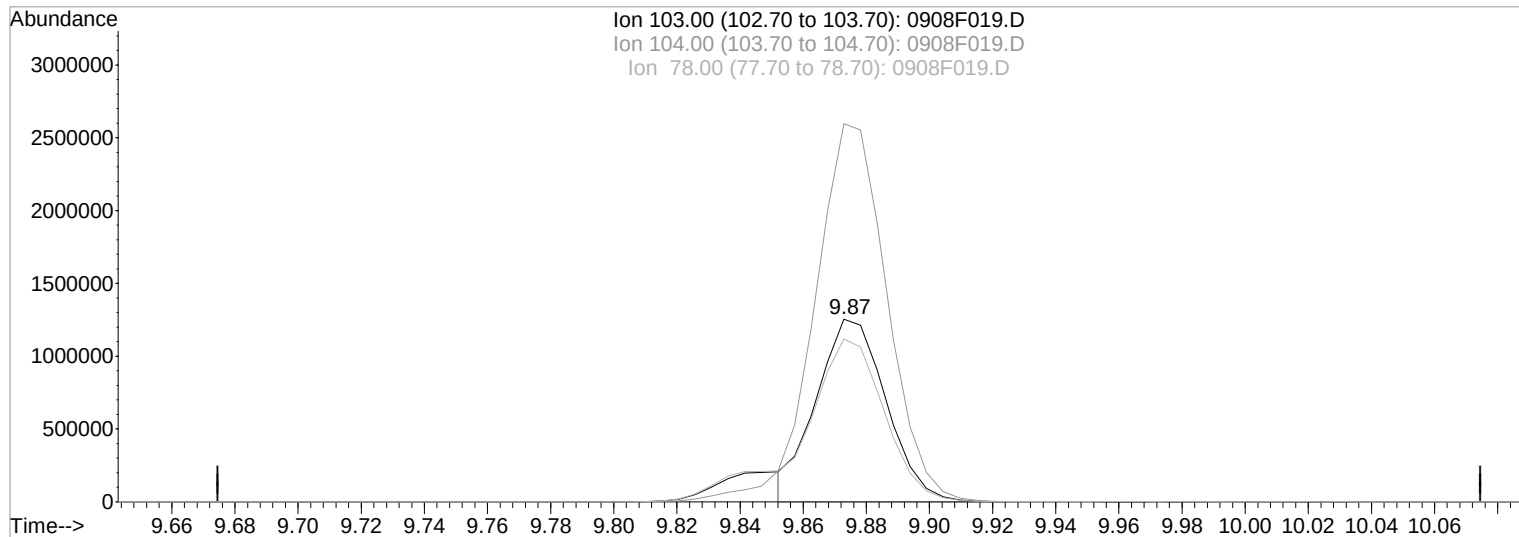
Quant Results File: temp.res

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Tue Sep 12 09:51:29 2023

Response via : Single Level Calibration



TIC: 0908F019.D

(80) Styrene (T)

9.87min 41.79PPB m

response 1927258

Ion	Exp%	Act%
-----	------	------

103.00	100	100
--------	-----	-----

104.00	210.00	207.27
--------	--------	--------

78.00	87.20	89.13
-------	-------	-------

0.00	0.00	0.00
------	------	------

Manual Integration:

After

Shoulder

09/12/23

Data File : J:\MS23\DATA\091123\0908F020.D

Acq On : 11 Sep 2023 7:04 pm

Sample : ICAL 80

Misc :

Vial: 13

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Sep 12 08:59:50 2023

Quant Results File: 091123MS23_8260.RES

Quant Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Tue Sep 12 08:58:41 2023

Response via : Initial Calibration

DataAcq Meth : 8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	5.72	96	1232718	10.00	PPB	0.00
64) Chlorobenzene-d5	9.17	82	463804	10.00	PPB	0.00
85) 1,4-Dichlorobenzene-d4	11.59	152	349431	10.00	PPB	0.00

System Monitoring Compounds

43) Dibromofluoromethane	4.86	113	252979	10.07	PPB	0.00
Spiked Amount 10.000			Recovery	=	100.70%	
47) 1,2-Dichloroethane-d4	5.35	65	273208	9.75	PPB	0.00
Spiked Amount 10.000			Recovery	=	97.50%	
62) Toluene-d8	7.59	98	1186693	10.12	PPB	0.00
Spiked Amount 10.000			Recovery	=	101.20%	
84) 4-Bromofluorobenzene	10.42	95	376340	10.00	PPB	0.00
Spiked Amount 10.000			Recovery	=	100.00%	

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	1.06	85	3540974m	111.02	PPB	
3) Chloromethane	1.23	50	3293111	77.46	PPB	98
4) Vinyl Chloride	1.28	62	3497496	80.15	PPB	98
5) Bromomethane	1.53	96	1357652m	76.88	PPB	
6) Chloroethane	1.61	64	1949242	70.29	PPB	98
7) Dichlorofluoromethane	1.79	67	4516485	73.76	PPB	99
8) Trichlorofluoromethane	1.79	101	4383719	77.13	PPB	99
9) Ethyl Ether	2.04	59	2067477	75.46	PPB	100
10) Acrolein	2.22	56	5318492	1456.18	PPB	100
11) Trichlorotrifluoroethane	2.21	151	1722175	81.70	PPB	99
12) 1,1-Dichloroethene	2.25	96	3061771	79.32	PPB	94
14) Iodomethane	2.40	142	13326246	314.99	PPB	97
15) Carbon Disulfide	2.43	76	7739094	83.16	PPB	99
16) 2-Propanol (Isopropyl Alco	2.49	45	3877994	5268.25	PPB	96
17) 3-Chloro-1-propene	2.61	76	1642728	87.30	PPB	94
18) Methyl Acetate	2.65	43	1688836	101.62	PPB	98
19) Acetonitrile	2.70	40	4257179	3187.17	PPB	97
20) Methylene Chloride	2.76	84	3183947	73.56	PPB	99
21) tert-Butyl Alcohol	2.88	59	483171	452.89	PPB	97
22) Acrylonitrile	3.10	53	2372585	294.75	PPB	99
23) Methyl tert-Butyl Ether	2.97	73	12546705	155.51	PPB	98
24) trans-1,2-Dichloroethene	2.99	96	3276845	79.01	PPB	98
25) Hexane	3.20	57	3171990	84.33	PPB	100
26) Diisopropyl Ether	3.50	45	9169075	76.47	PPB	97
27) 1,1-Dichloroethane	3.50	63	5574306m	71.44	PPB	
28) Vinyl Acetate	3.56	86	995383	164.85	PPB	95
29) Chloroprene	3.56	53	16681279	302.57	PPB	95
30) tert-Butyl Ethyl Ether	3.93	59	8107596	82.68	PPB	98
31) 2,2-Dichloropropane	4.16	77	4417011	99.36	PPB	99
32) cis-1,2-Dichloroethene	4.21	96	3561825	77.79	PPB	99
33) 2-Butanone	4.27	72	3650478	1597.48	PPB	91
34) Ethyl Acetate	4.31	61	666701	191.12	PPB	93
35) Propionitrile	4.45	54	908449	313.55	PPB	98
36) Methacrylonitrile	4.59	67	3085687	312.00	PPB	99
37) Bromochloromethane	4.53	128	1351790	72.74	PPB	98
38) Tetrahydrofuran	4.54	71	198673	72.04	PPB	96
39) Chloroform	4.63	83	5079496	77.40	PPB	99
40) tert-Butyl Formate	4.66	59	1049175	122.16	PPB	92
41) Cyclohexane	4.76	56	4929853	81.21	PPB	99
42) 1,1,1-Trichloroethane	4.80	97	4538792	88.79	PPB	97
44) Carbon Tetrachloride	4.96	117	3665215	98.22	PPB	97
45) 1,1-Dichloropropene	5.03	75	4565893	83.73	PPB	99
46) Isobutyl Alcohol	5.36	43	2041507	3706.73	PPB	96

(#)=qualifier out of range (m)=manual integration

0908F020.D 091123MS23_8260.M Fri Sep 15 09:12:47 2023

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Data File : J:\MS23\DATA\091123\0908F020.D

Acq On : 11 Sep 2023 7:04 pm

Sample : ICAL 80

Misc :

Vial: 13

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Sep 12 08:59:50 2023

Quant Results File: 091123MS23_8260.RES

Quant Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Tue Sep 12 08:58:41 2023

Response via : Initial Calibration

DataAcq Meth : 8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
48) Benzene	5.31	78	13283419	75.21	PPB	100
49) 1,2-Dichloroethane	5.45	62	3510526	74.30	PPB	99
50) tert-Amyl Methyl Ether	5.46	55	1789625	68.46	PPB	# 67
51) Trichloroethene	6.16	95	3256797	82.54	PPB	99
52) Methylcyclohexane	6.28	83	3821094	86.74	PPB	98
53) 1,2-Dichloropropane	6.49	63	3323187	77.55	PPB	100
54) Dibromomethane	6.63	93	1457996	77.69	PPB	99
55) Methyl methacrylate	6.66	69	1411474	85.88	PPB	97
56) 1,4-Dioxane	6.66	88	623357	3760.30	PPB	99
60) cis-1,3-Dichloropropene	7.36	75	4906481	87.63	PPB	99
61) 4-Methyl-2-pentanone (MIBK)	7.55	58	11399406	1451.81	PPB	# 60
63) Toluene	7.66	92	8077686	76.36	PPB	94
65) n-Octane	7.75	85	1240341	81.35	PPB	98
66) trans-1,3-Dichloropropene	8.02	75	3792914	95.78	PPB	98
67) Ethyl methacrylate	8.08	69	2576601	85.39	PPB	99
68) 1,1,2-Trichloroethane	8.21	83	1861714	76.75	PPB	97
69) Tetrachloroethene	8.22	164	2269139	82.01	PPB	98
70) 2-Hexanone	8.48	57	3883912	1549.87	PPB	# 65
71) 1,3-Dichloropropane	8.39	76	4024756	74.71	PPB	99
72) Dibromochloromethane	8.58	129	2208412	96.20	PPB	99
73) 1,2-Dibromoethane (EDB)	8.71	107	2020027	78.45	PPB	97
74) 1-Chlorohexane	9.19	91	2984371	86.51	PPB	97
75) Chlorobenzene	9.20	112	7540477	74.83	PPB	97
76) Ethylbenzene	9.30	106	4101996	78.60	PPB	88
77) 1,1,1,2-Tetrachloroethane	9.31	131	2435442	89.68	PPB	98
78) m,p-Xylenes	9.43	106	9438276	149.54	PPB	# 69
79) o-Xylene	9.85	106	4751164	78.24	PPB	92
80) Styrene	9.88	103	3728814m	78.16	PPB	
82) Isopropylbenzene	10.22	105	10289323	77.51	PPB	96
86) 1,1,2,2-Tetrachloroethane	10.62	83	1916921	78.46	PPB	99
87) trans-1,4-Dichloro-2-buten	10.69	53	570769	89.63	PPB	68
88) Bromobenzene	10.55	156	2710572	78.90	PPB	97
89) n-Propylbenzene	10.65	91	10952739	78.03	PPB	95
90) 1,2,3-Trichloropropane	10.67	110	603741	76.89	PPB	93
91) 2-Chlorotoluene	10.75	91	7113715	77.65	PPB	98
92) 1,3,5-Trimethylbenzene	10.84	105	7858754	79.82	PPB	99
93) 4-Chlorotoluene	10.87	91	8299108	77.03	PPB	99
94) tert-Butylbenzene	11.15	119	6359035	81.17	PPB	96
95) 1,2,4-Trimethylbenzene	11.22	105	7861994	77.87	PPB	98
96) sec-Butylbenzene	11.38	105	8018205	80.98	PPB	98
97) p-Isopropyltoluene	11.53	119	7101224	80.70	PPB	97
98) 1,3-Dichlorobenzene	11.51	146	4200492	77.50	PPB	98
99) 1,4-Dichlorobenzene	11.61	146	4286271	77.01	PPB	99
100) n-Butylbenzene	11.95	91	5817017	84.90	PPB	99
101) 1,2-Dichlorobenzene	11.99	146	3663640	76.75	PPB	99
102) 1,2-Dibromo-3-chloropropan	12.65	155	160445	107.35	PPB	88
103) 1,3,5-Trichlorobenzene	12.75	180	1811659	80.59	PPB	99
104) 1,2,4-Trichlorobenzene	13.20	180	1250401	82.50	PPB	97
105) Hexachlorobutadiene	13.29	225	777936	85.28	PPB	97
106) Naphthalene	13.40	128	2016113	95.24	PPB	98
107) 1,2,3-Trichlorobenzene	13.59	180	622263	80.61	PPB	99

(#) = qualifier out of range (m) = manual integration

0908F020.D 091123MS23_8260.M

Fri Sep 15 09:12:47 2023

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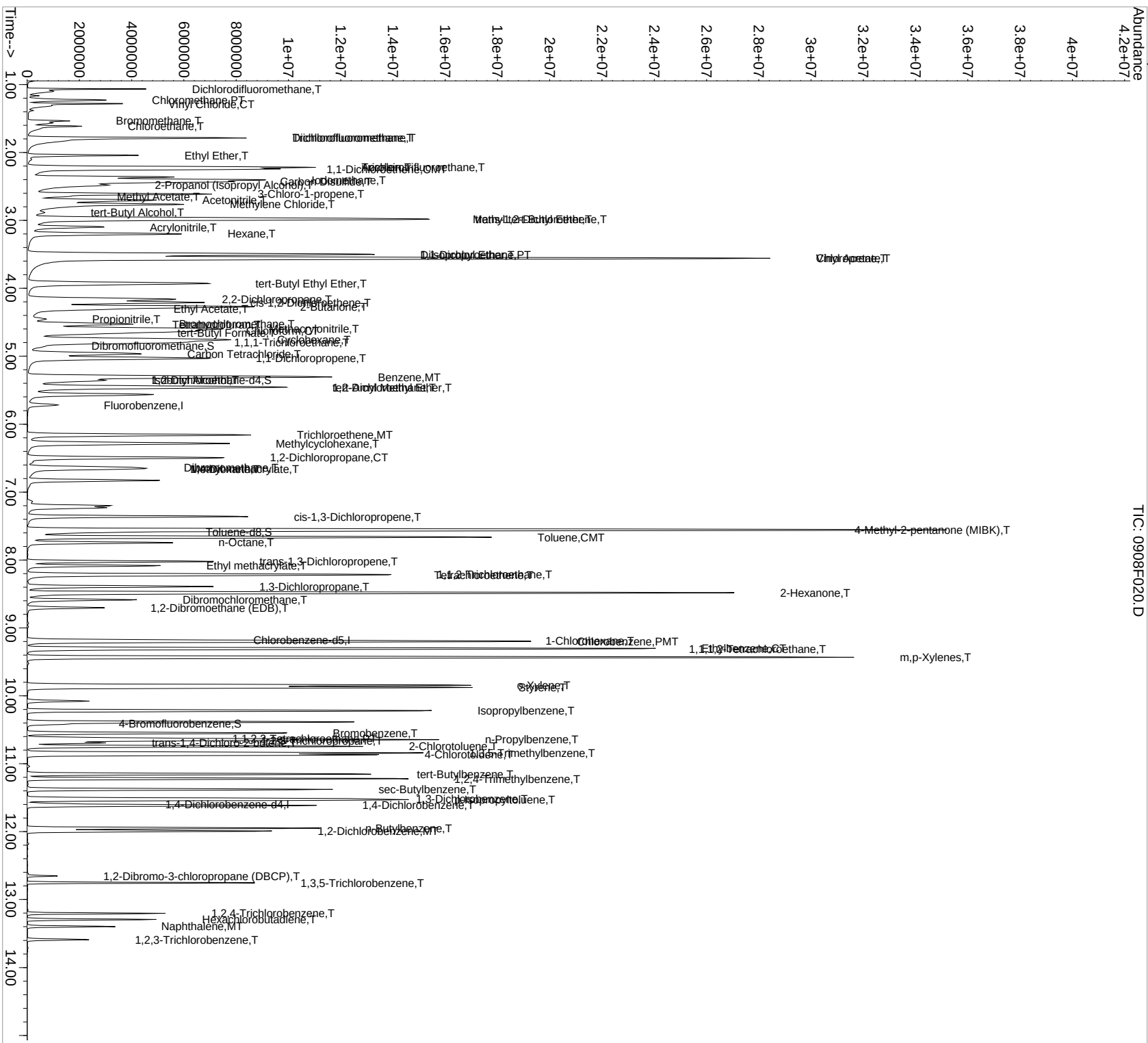
1st 09/12/23

Data File : J:\MS23\DATA\091123\0908F020.D
Acq On : 11 Sep 2023 7:04 pm
Sample : ICAL 80
Misc :
MS Integration Params: rteint.p
Quant Time: Sep 15 8:34 2023

Vial: 13
Operator: EW/GH/MK/OT
Inst : MS23
Multiplr: 1.00

Quant Results File: 091123MS23_8260.RES

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)
Title : VOA MS23 EPA Method 8260C
Last Update : Fri Sep 15 08:47:04 2023
Response via : Initial Calibration



Quantitation Report (Qedit)

1st  09/15/232nd  09/18/23

Data File : J:\MS23\DATA\091123\0908F020.D

Acq On : 11 Sep 2023 7:04 pm

Sample : ICAL 80

Misc :

Vial: 13

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Sep 12 9:55 2023

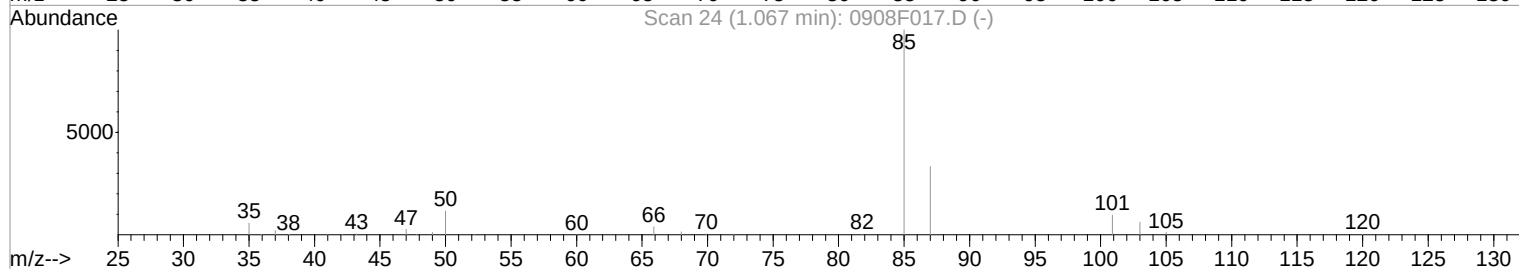
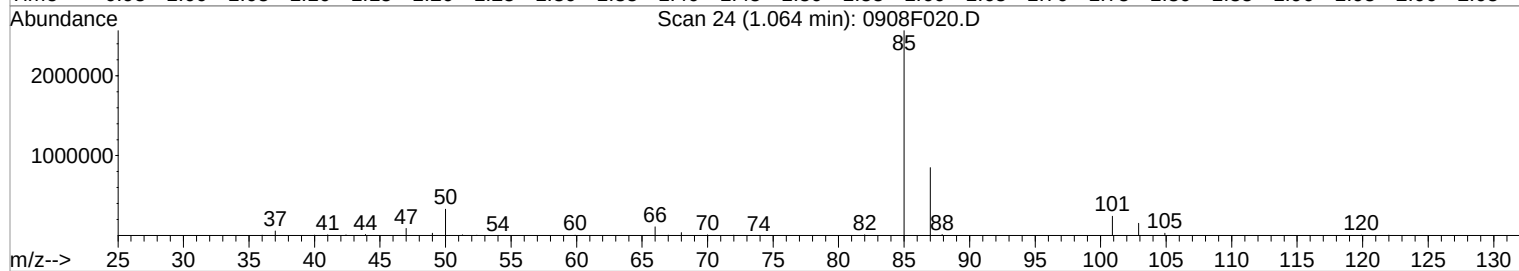
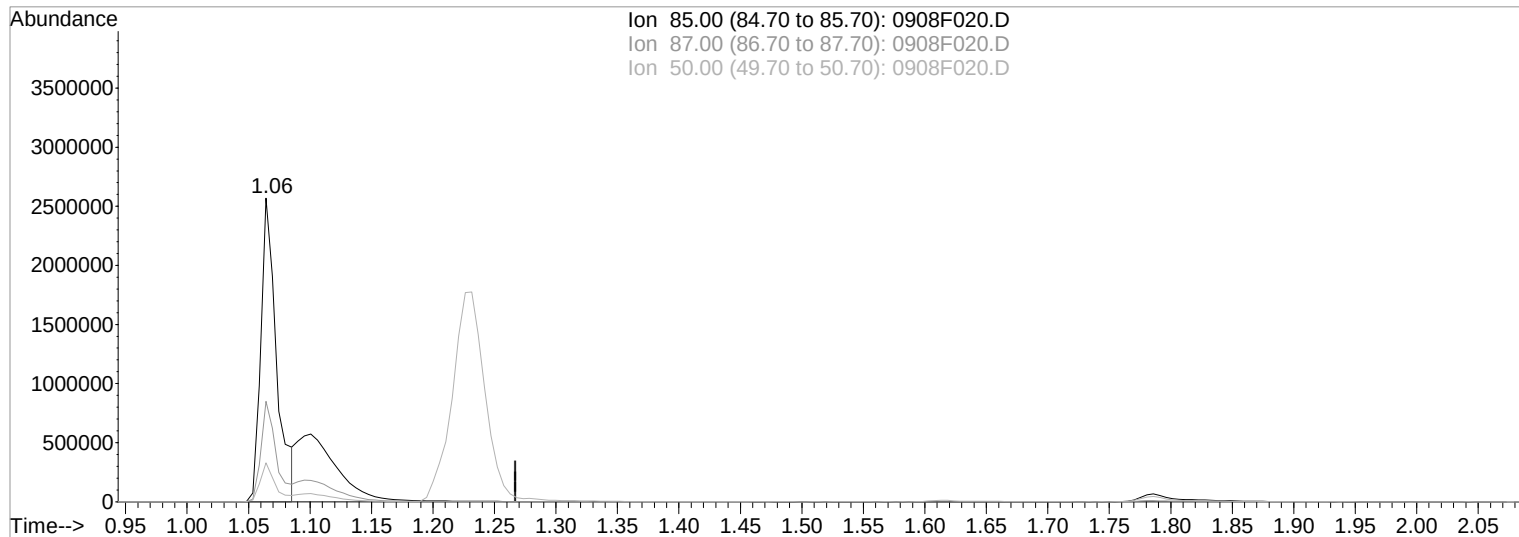
Quant Results File: temp.res

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Fri Sep 15 08:34:38 2023

Response via : Multiple Level Calibration



TIC: 0908F020.D

(2) Dichlorodifluoromethane (T)

Manual Integration:

1.06min 71.29PPB

Before

response 2273670

Ion	Exp%	Act%
85.00	100	100
87.00	33.20	33.07
50.00	11.40	12.81
0.00	0.00	0.00

09/15/23

Data File : J:\MS23\DATA\091123\0908F020.D

Acq On : 11 Sep 2023 7:04 pm

Sample : ICAL 80

Misc :

Vial: 13

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Sep 15 8:34 2023

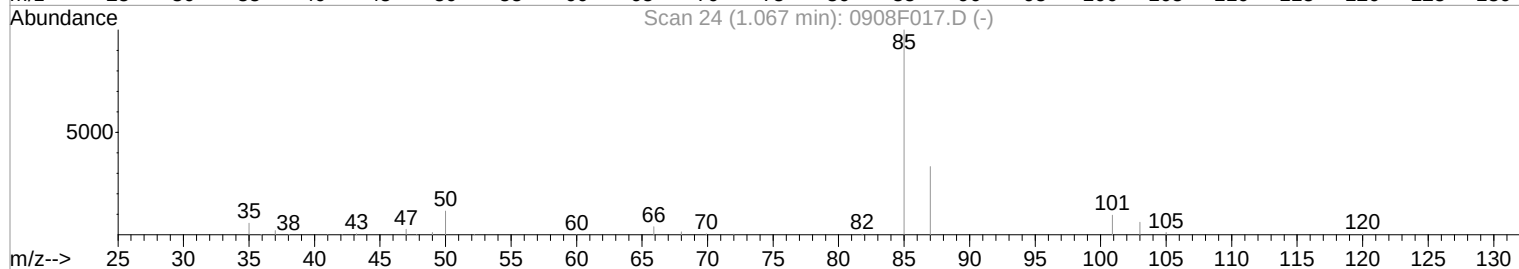
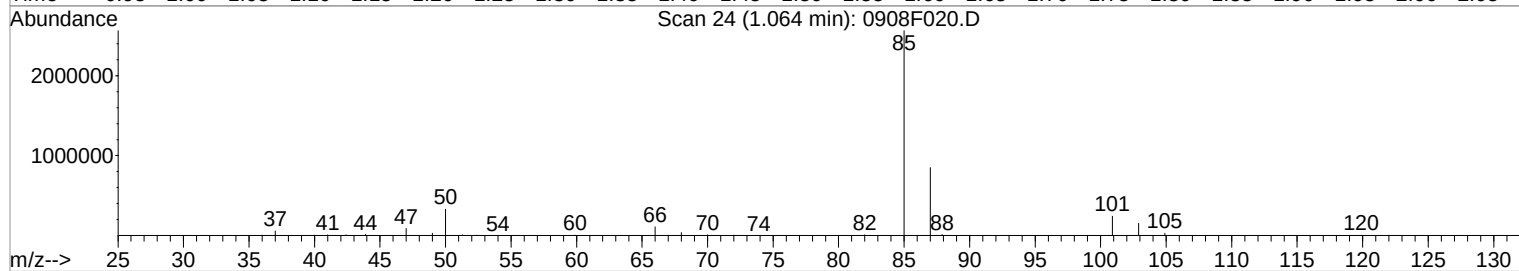
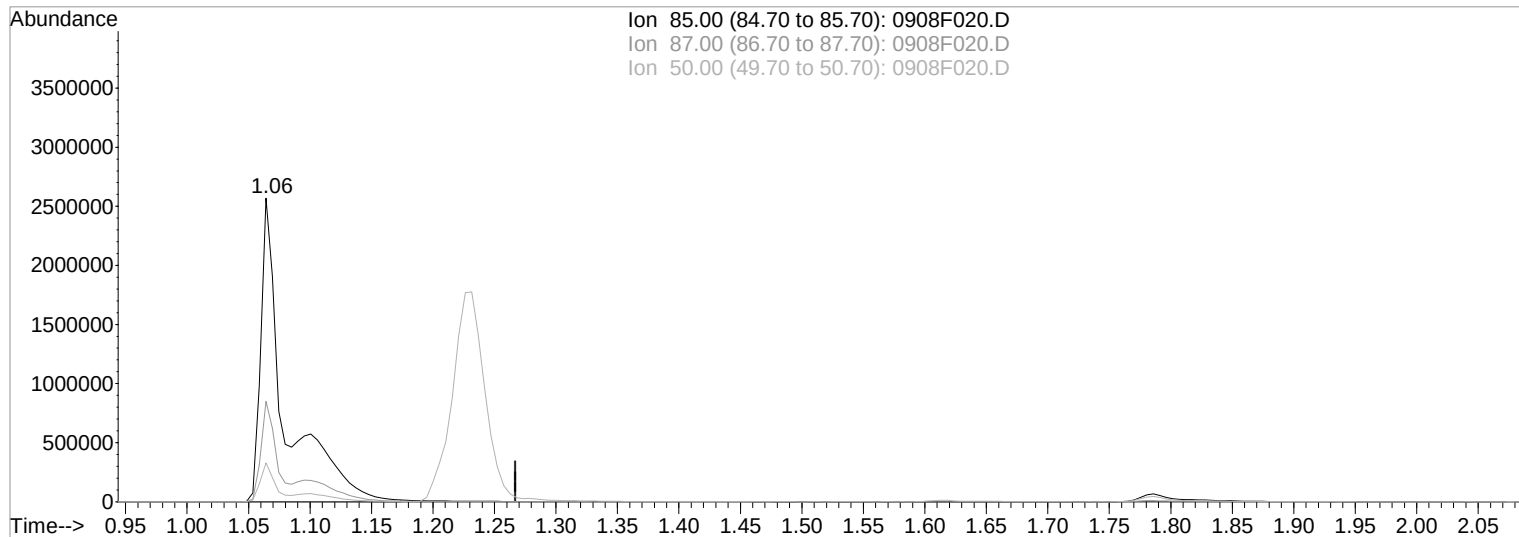
Quant Results File: temp.res

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Fri Sep 15 08:34:38 2023

Response via : Multiple Level Calibration



TIC: 0908F020.D

(2) Dichlorodifluoromethane (T)

Manual Integration:

1.06min 111.02PPB m

After

response 3540974

Split peak

Ion	Exp%	Act%
85.00	100	100
87.00	33.20	33.07
50.00	11.40	12.81
0.00	0.00	0.00

09/15/23

Quantitation Report (Qedit)

1st  09/12/23
2nd  09/18/23

Data File : J:\MS23\DATA\091123\0908F020.D

Acq On : 11 Sep 2023 7:04 pm

Sample : ICAL 80

Misc :

Vial: 13

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Sep 12 9:53 2023

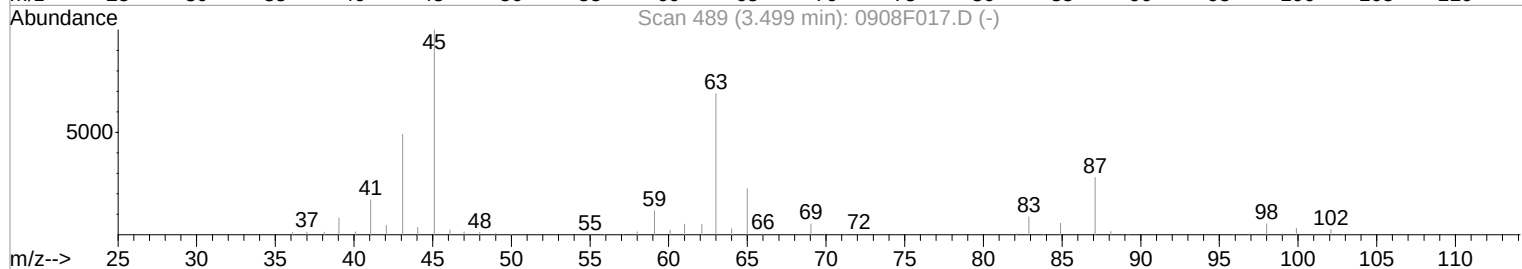
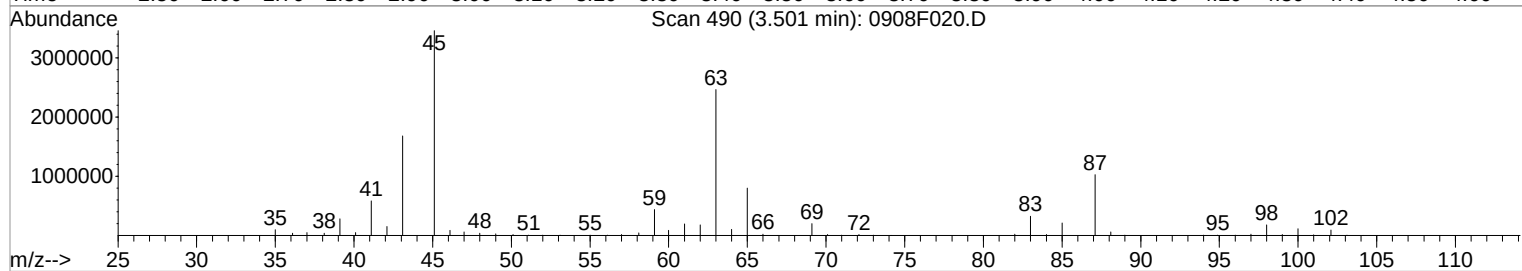
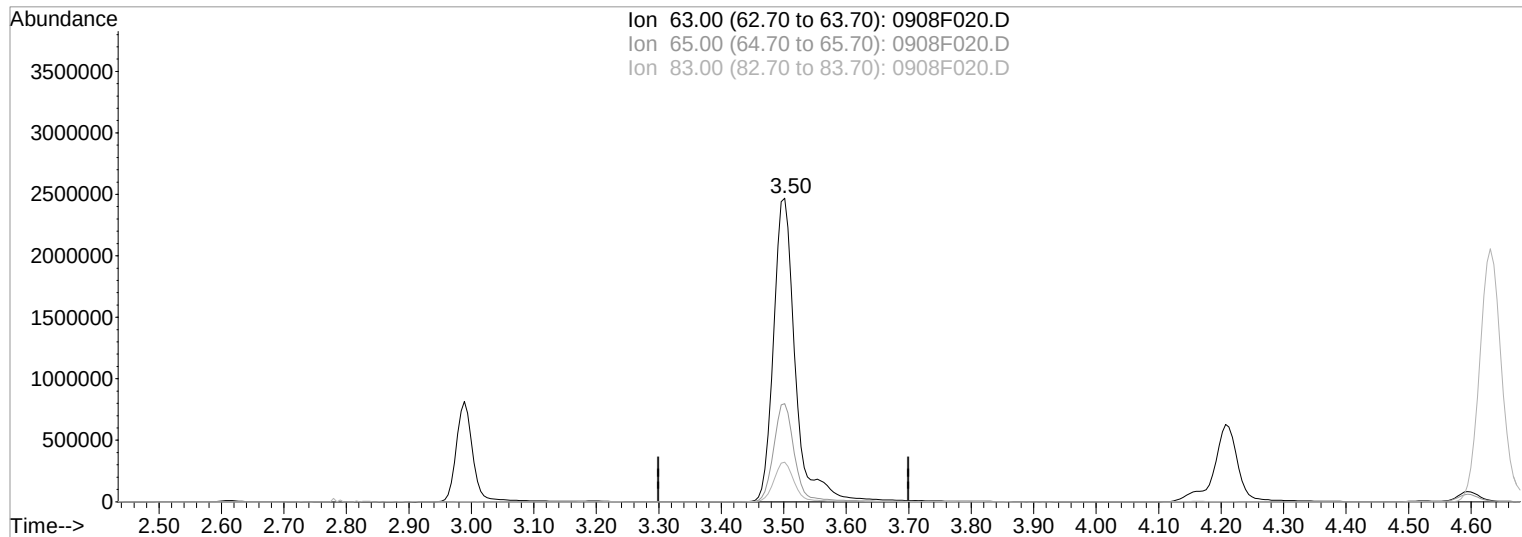
Quant Results File: temp.res

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Tue Sep 12 09:53:13 2023

Response via : Multiple Level Calibration



TIC: 0908F020.D

(27) 1,1-Dichloroethane (PT)

Manual Integration:

3.50min 76.74PPB

Before

response 5987475

Ion	Exp%	Act%
63.00	100	100
65.00	32.70	32.29
83.00	12.70	13.07
0.00	0.00	0.00

09/12/23

Quantitation Report (Qedit)

1st  09/12/23
2nd  09/18/23

Data File : J:\MS23\DATA\091123\0908F020.D

Acq On : 11 Sep 2023 7:04 pm

Sample : ICAL 80

Misc :

Vial: 13

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Sep 12 9:53 2023

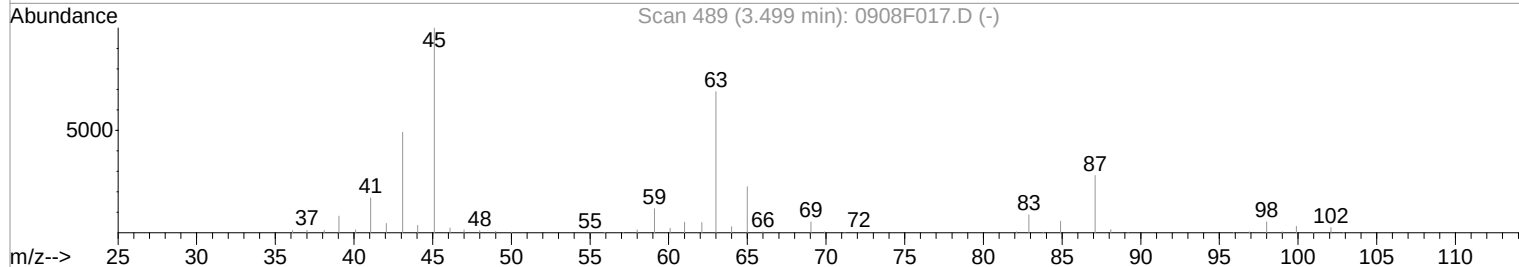
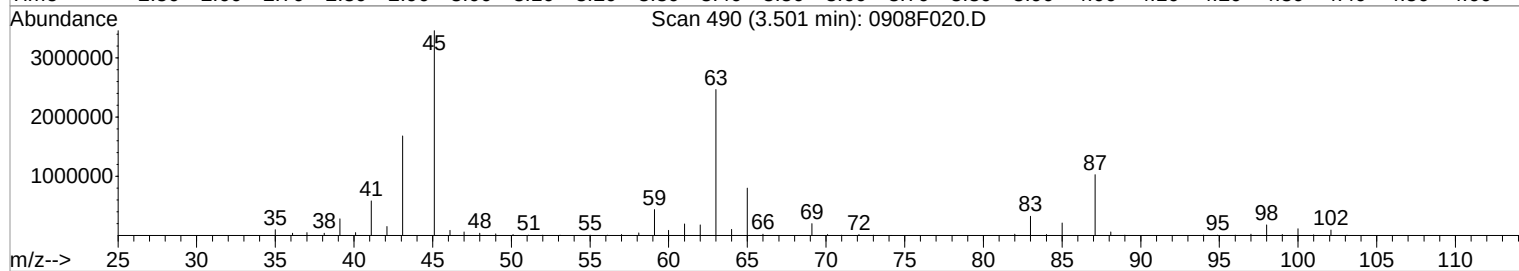
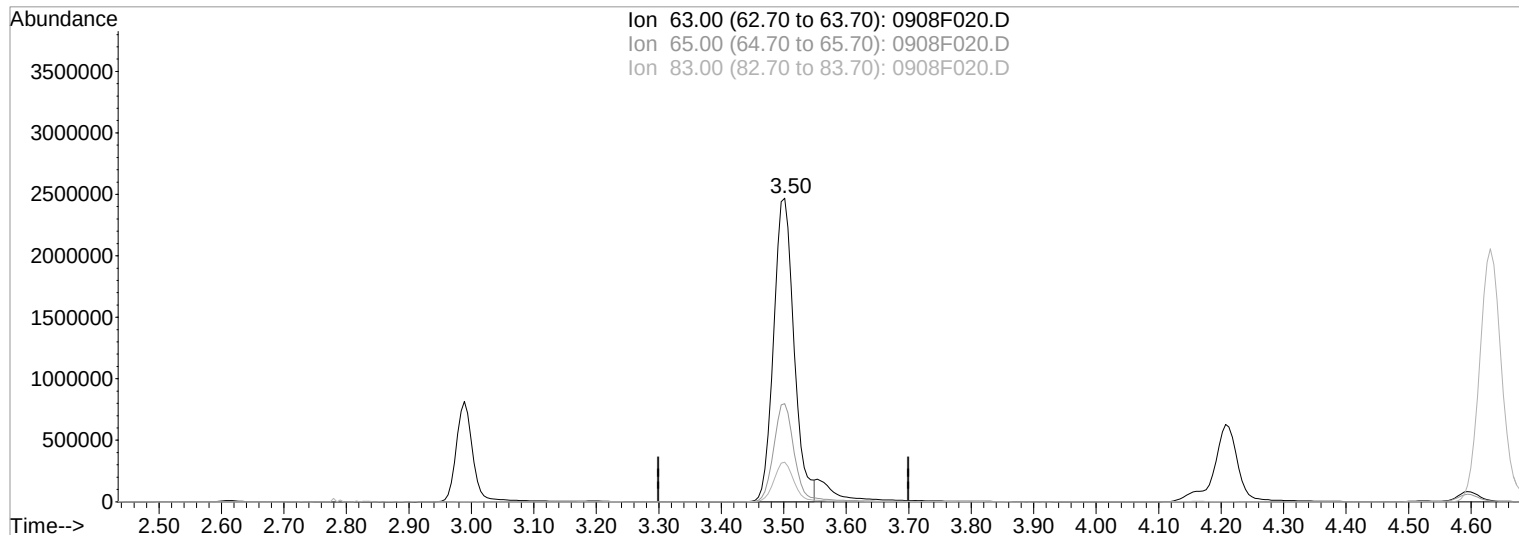
Quant Results File: temp.res

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Tue Sep 12 09:53:13 2023

Response via : Multiple Level Calibration



TIC: 0908F020.D

(27) 1,1-Dichloroethane (PT)

Manual Integration:

3.50min 71.44PPB m

After

response 5574306

Shoulder

Ion	Exp%	Act%
63.00	100	100
65.00	32.70	32.29
83.00	12.70	13.07
0.00	0.00	0.00

09/12/23

Quantitation Report (Qedit)

1st *EW* 09/12/23
2nd *Q* 09/18/23

Data File : J:\MS23\DATA\091123\0908F020.D

Acq On : 11 Sep 2023 7:04 pm

Sample : ICAL 80

Misc :

MS Integration Params: rteint.p

Quant Time: Sep 12 8:59 2023

Vial: 13

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

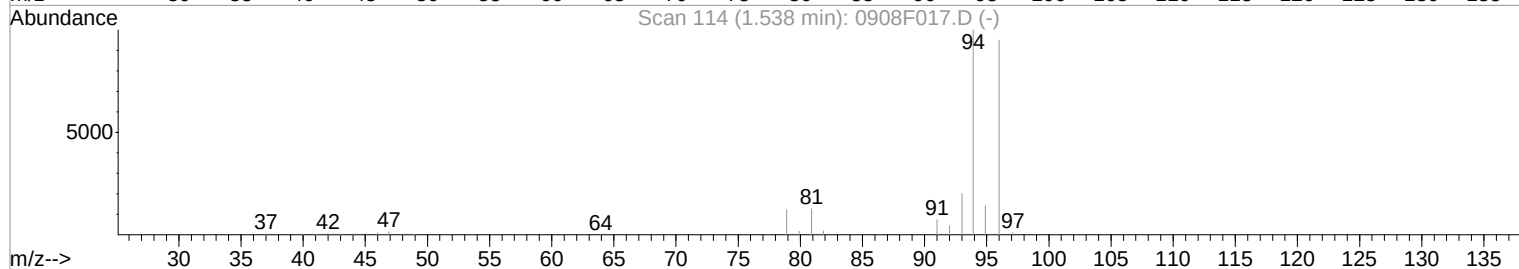
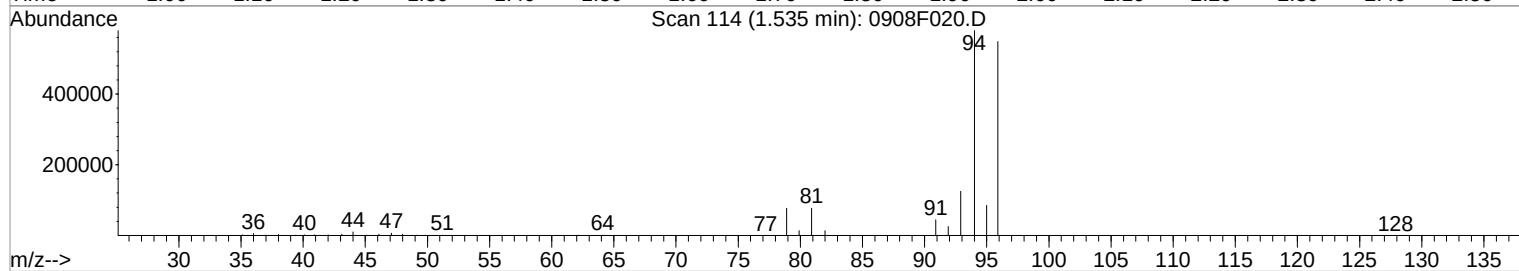
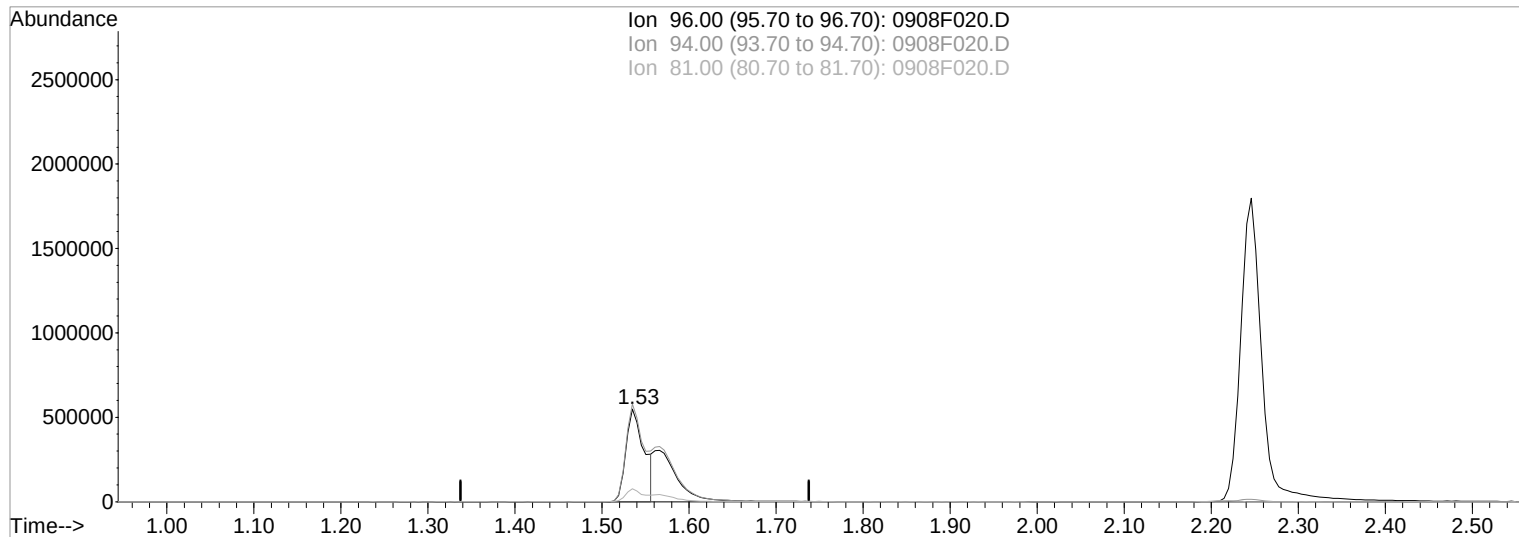
Quant Results File: temp.res

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Tue Sep 12 09:53:13 2023

Response via : Single Level Calibration



TIC: 0908F020.D

(5) Bromomethane (T)

Manual Integration:

1.53min 45.10PPB

Before

response 796353

09/12/23

Ion	Exp%	Act%
96.00	100	100
94.00	105.40	105.77
81.00	13.30	13.89
0.00	0.00	0.00

Quantitation Report (Qedit)

1st *EW* 09/12/23
2nd *Q* 09/18/23

Data File : J:\MS23\DATA\091123\0908F020.D

Acq On : 11 Sep 2023 7:04 pm

Sample : ICAL 80

Misc :

MS Integration Params: rteint.p

Quant Time: Sep 12 9:53 2023

Vial: 13

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

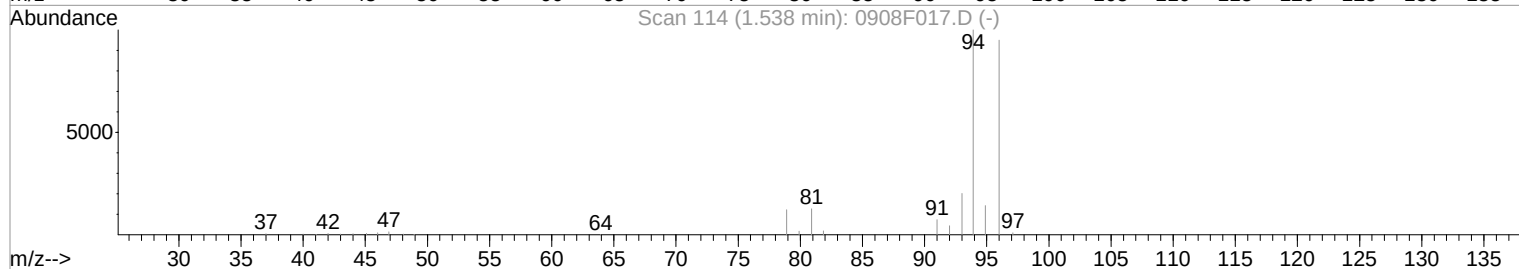
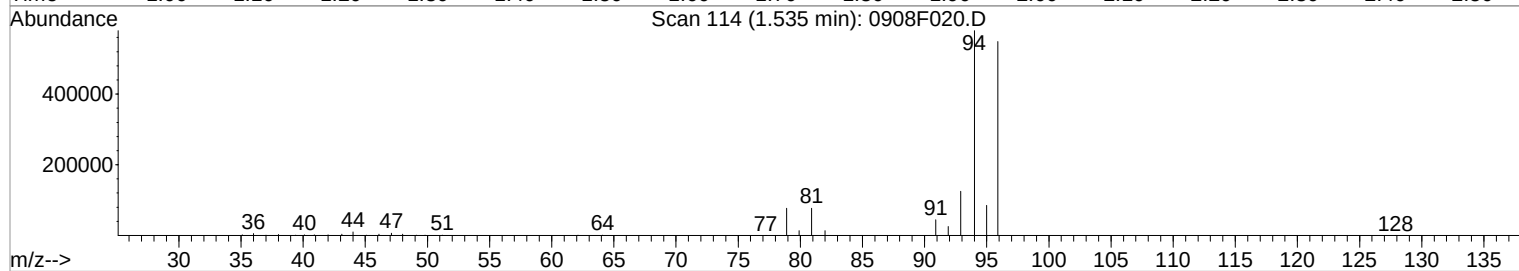
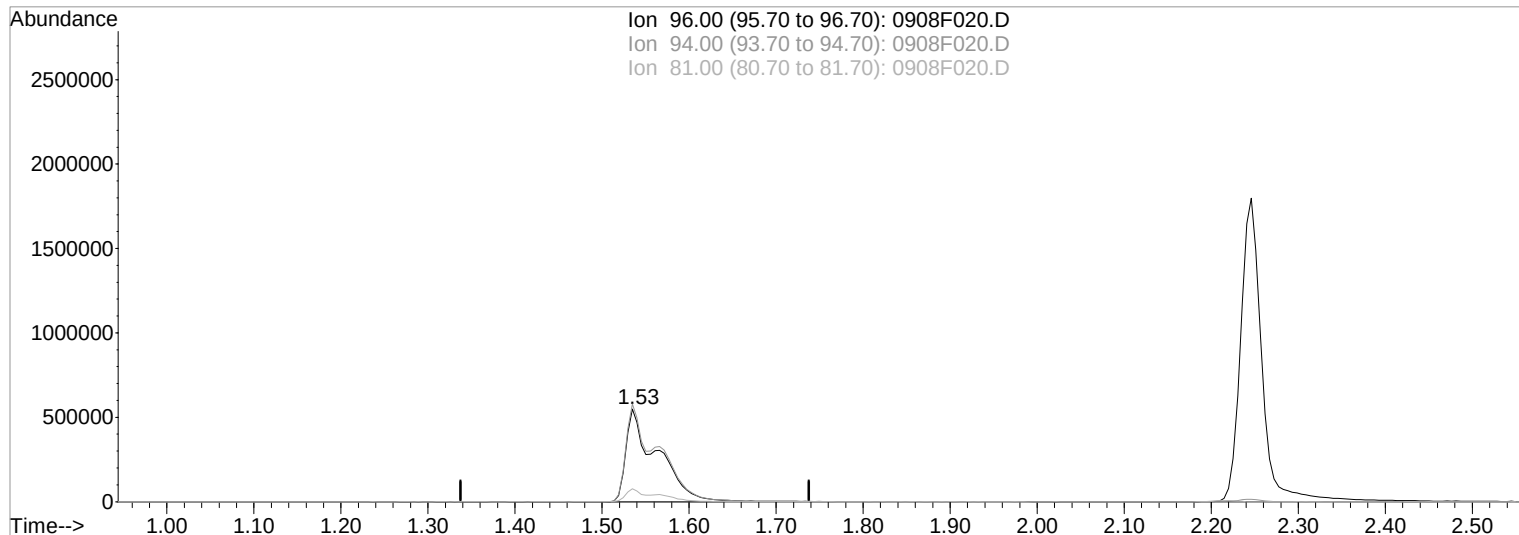
Quant Results File: temp.res

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Tue Sep 12 09:53:13 2023

Response via : Single Level Calibration



TIC: 0908F020.D

(5) Bromomethane (T)

1.53min 76.88PPB m

response 1357652

Ion	Exp%	Act%
-----	------	------

96.00	100	100
-------	-----	-----

94.00	105.40	105.77
-------	--------	--------

81.00	13.30	14.01
-------	-------	-------

0.00	0.00	0.00
------	------	------

Manual Integration:

After

Split peak

09/12/23

Quantitation Report (Qedit)

1st  09/12/23
2nd  09/18/23

Data File : J:\MS23\DATA\091123\0908F020.D

Acq On : 11 Sep 2023 7:04 pm

Sample : ICAL 80

Misc :

MS Integration Params: rteint.p

Quant Time: Sep 12 9:53 2023

Vial: 13

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

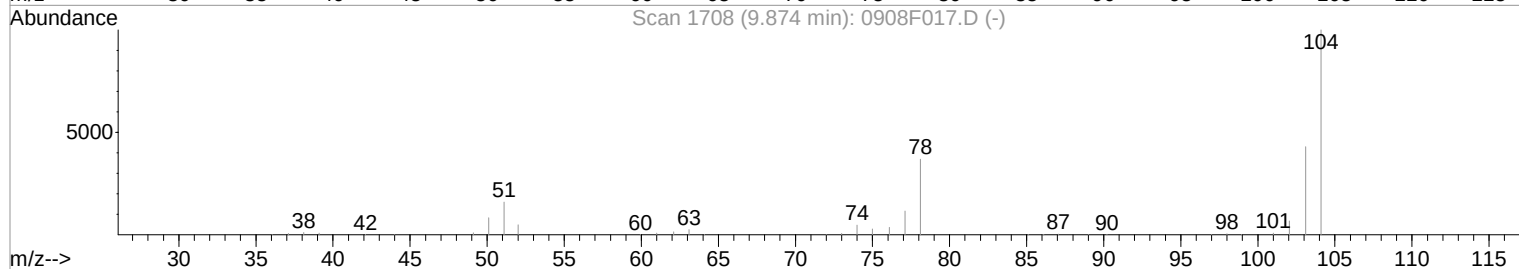
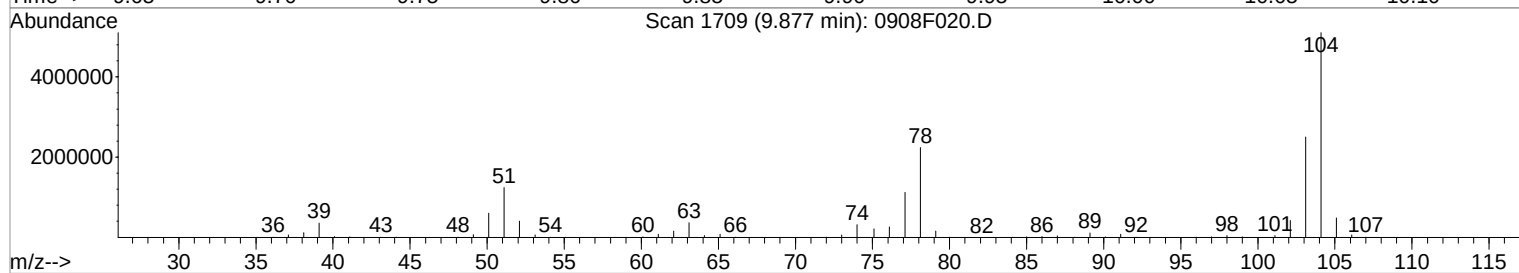
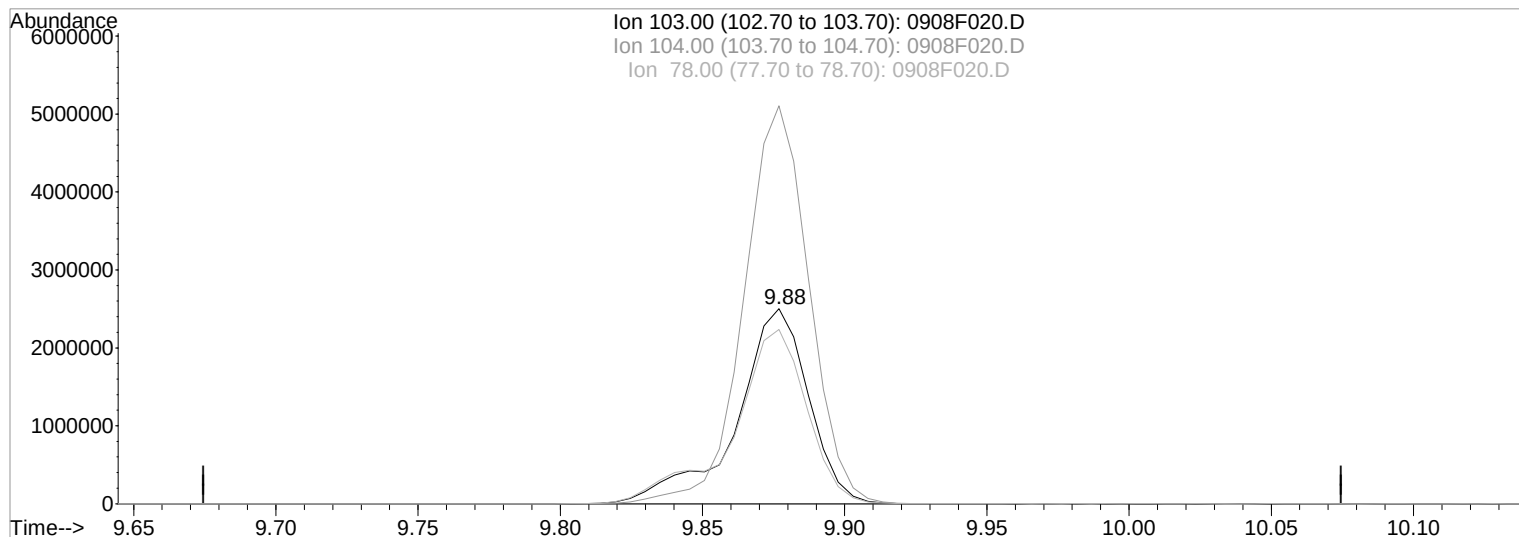
Quant Results File: temp.res

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Tue Sep 12 09:53:13 2023

Response via : Single Level Calibration



TIC: 0908F020.D

(80) Styrene (T)

Manual Integration:

9.88min 92.78PPB

Before

response 4426502

Ion	Exp%	Act%
-----	------	------

09/12/23

103.00	100	100
--------	-----	-----

104.00	210.00	204.11
--------	--------	--------

78.00	87.20	89.40
-------	-------	-------

0.00	0.00	0.00
------	------	------

Quantitation Report (Qedit)

1st  09/12/23
2nd  09/18/23

Data File : J:\MS23\DATA\091123\0908F020.D

Acq On : 11 Sep 2023 7:04 pm

Sample : ICAL 80

Misc :

MS Integration Params: rteint.p

Quant Time: Sep 12 9:55 2023

Vial: 13

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

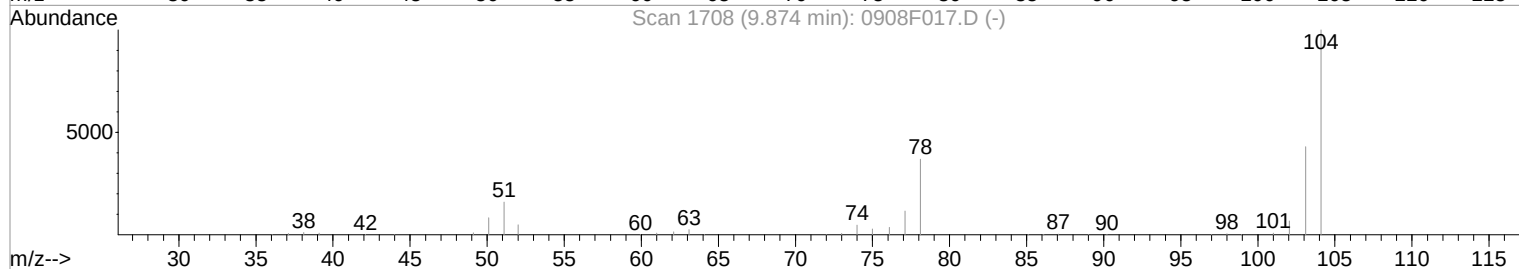
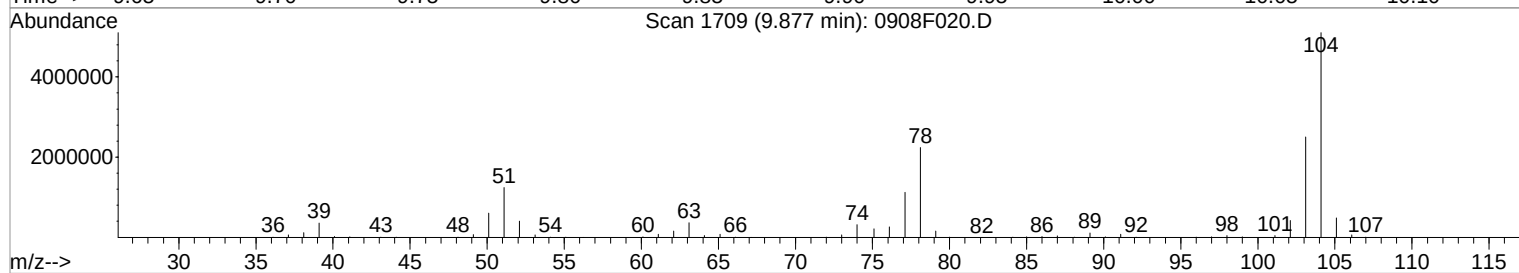
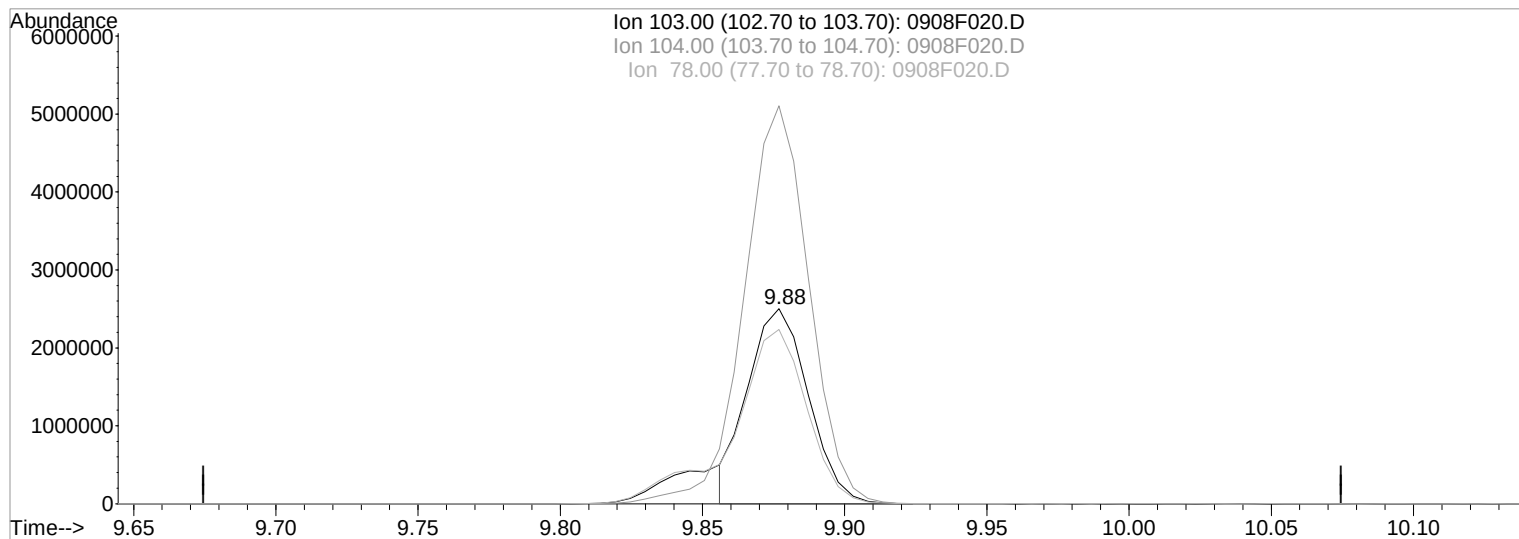
Quant Results File: temp.res

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Tue Sep 12 09:53:13 2023

Response via : Single Level Calibration



TIC: 0908F020.D

(80) Styrene (T)

9.88min 78.16PPB m

response 3728814

Ion	Exp%	Act%
-----	------	------

103.00	100	100
--------	-----	-----

104.00	210.00	204.11
--------	--------	--------

78.00	87.20	89.40
-------	-------	-------

0.00	0.00	0.00
------	------	------

Manual Integration:

After

Shoulder

09/12/23

Data File : J:\MS23\DATA\091123\0908F021.D

Acq On : 11 Sep 2023 7:28 pm

Sample : ICAL 120

Misc :

Vial: 14

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Sep 12 08:59:53 2023

Quant Results File: 091123MS23_8260.RES

Quant Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Tue Sep 12 08:58:41 2023

Response via : Initial Calibration

DataAcq Meth : 8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	5.72	96	1205936	10.00	PPB	0.00
64) Chlorobenzene-d5	9.17	82	463786	10.00	PPB	0.00
85) 1,4-Dichlorobenzene-d4	11.59	152	349770	10.00	PPB	0.00

System Monitoring Compounds

43) Dibromofluoromethane	4.86	113	253307	10.30	PPB	0.00
Spiked Amount 10.000			Recovery	=	103.00%	
47) 1,2-Dichloroethane-d4	5.35	65	272550	9.94	PPB	0.00
Spiked Amount 10.000			Recovery	=	99.40%	
62) Toluene-d8	7.59	98	1164633	10.15	PPB	0.00
Spiked Amount 10.000			Recovery	=	101.50%	
84) 4-Bromofluorobenzene	10.42	95	376968	10.02	PPB	0.00
Spiked Amount 10.000			Recovery	=	100.20%	

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	1.06	85	5175517m	165.87	PPB	
3) Chloromethane	1.22	50	4972546	119.56	PPB	99
4) Vinyl Chloride	1.28	62	5175299	121.23	PPB	98
5) Bromomethane	1.53	96	1965440	113.77	PPB	100
6) Chloroethane	1.61	64	2708627	99.84	PPB	98
7) Dichlorofluoromethane	1.78	67	6554001	109.41	PPB	97
8) Trichlorofluoromethane	1.78	101	6346084	114.13	PPB	99
9) Ethyl Ether	2.04	59	3086540	115.15	PPB	98
10) Acrolein	2.22	56	7849720	2196.95	PPB	99
11) Trichlorotrifluoroethane	2.21	151	2565942	124.43	PPB	98
12) 1,1-Dichloroethene	2.24	96	4500728	119.19	PPB	94
14) Iodomethane	2.40	142	19168699	463.16	PPB	95
15) Carbon Disulfide	2.43	76	11554712	126.91	PPB	99
16) 2-Propanol (Isopropyl Alco	2.49	45	6351062	8819.52	PPB	97
17) 3-Chloro-1-propene	2.61	76	2428055	131.90	PPB	93
18) Methyl Acetate	2.65	43	2671572	164.33	PPB	97
19) Acetonitrile	2.70	40	6630179	5073.98	PPB	95
20) Methylene Chloride	2.76	84	4803659	113.44	PPB	99
21) tert-Butyl Alcohol	2.89	59	772793	740.45	PPB	99
22) Acrylonitrile	3.10	53	3722103	472.67	PPB	99
23) Methyl tert-Butyl Ether	2.97	73	18631053	236.05	PPB	96
24) trans-1,2-Dichloroethene	2.99	96	4841101	119.32	PPB	98
25) Hexane	3.20	57	4932885	134.05	PPB	99
26) Diisopropyl Ether	3.50	45	13617931	116.10	PPB	96
27) 1,1-Dichloroethane	3.50	63	8233815m	107.87	PPB	
28) Vinyl Acetate	3.56	86	1550851	262.55	PPB	# 84
29) Chloroprene	3.55	53	22690957	420.71	PPB	90
30) tert-Butyl Ethyl Ether	3.93	59	12367422	128.93	PPB	97
31) 2,2-Dichloropropane	4.16	77	6752078	155.26	PPB	99
32) cis-1,2-Dichloroethene	4.21	96	5332755	119.05	PPB	100
33) 2-Butanone	4.27	72	5554226	2484.56	PPB	# 83
34) Ethyl Acetate	4.31	61	1004561	294.37	PPB	91
35) Propionitrile	4.46	54	1417645	500.16	PPB	97
36) Methacrylonitrile	4.60	67	4763445	492.34	PPB	98
37) Bromochloromethane	4.52	128	1962225	107.94	PPB	99
38) Tetrahydrofuran	4.53	71	310917	115.24	PPB	90
39) Chloroform	4.63	83	7618745	118.67	PPB	99
40) tert-Butyl Formate	4.66	59	1818499	216.43	PPB	93
41) Cyclohexane	4.75	56	7535529	126.89	PPB	99
42) 1,1,1-Trichloroethane	4.80	97	6851591	137.01	PPB	97
44) Carbon Tetrachloride	4.96	117	5622165	154.00	PPB	97
45) 1,1-Dichloropropene	5.03	75	6891345	129.19	PPB	98
46) Isobutyl Alcohol	5.36	43	3298506	6122.05	PPB	96

(#)=qualifier out of range (m)=manual integration

0908F021.D 091123MS23_8260.M

Fri Sep 15 09:12:49 2023

3596 of 3623

Data File : J:\MS23\DATA\091123\0908F021.D
Acq On : 11 Sep 2023 7:28 pm
Sample : ICAL 120
Misc :

Vial: 14
Operator: EW/GH/MK/OT
Inst : MS23
Multiplr: 1.00

MS Integration Params: rteint.p
Quant Time: Sep 12 08:59:53 2023

Quant Results File: 091123MS23_8260.RES

Quant Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C
Last Update : Tue Sep 12 08:58:41 2023
Response via : Initial Calibration
DataAcq Meth : 8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
48) Benzene	5.30	78	19327204	111.85	PPB	97
49) 1,2-Dichloroethane	5.45	62	5345893	115.65	PPB	99
50) tert-Amyl Methyl Ether	5.46	55	2690851	105.22	PPB #	59
51) Trichloroethene	6.16	95	4890215	126.70	PPB	97
52) Methylcyclohexane	6.29	83	5814282	134.92	PPB	98
53) 1,2-Dichloropropane	6.50	63	5016734	119.67	PPB	99
54) Dibromomethane	6.64	93	2241859	122.12	PPB	98
55) Methyl methacrylate	6.66	69	2213226	137.65	PPB	98
56) 1,4-Dioxane	6.67	88	975689	6016.40	PPB	98
60) cis-1,3-Dichloropropene	7.36	75	7462651	136.24	PPB	99
61) 4-Methyl-2-pentanone (MIBK)	7.56	58	16281055	2119.57	PPB #	42
63) Toluene	7.67	92	11873577	114.74	PPB #	75
65) n-Octane	7.75	85	1941542	127.35	PPB	100
66) trans-1,3-Dichloropropene	8.02	75	5934402	149.87	PPB	99
67) Ethyl methacrylate	8.09	69	4009362	132.88	PPB	100
68) 1,1,2-Trichloroethane	8.21	83	2845765	117.32	PPB	99
69) Tetrachloroethene	8.22	164	3432268	124.05	PPB	98
70) 2-Hexanone	8.48	57	5749894	2294.58	PPB #	27
71) 1,3-Dichloropropane	8.39	76	6124855	113.70	PPB	98
72) Dibromochloromethane	8.59	129	3446681	150.14	PPB	99
73) 1,2-Dibromoethane (EDB)	8.70	107	3089314	119.98	PPB	96
74) 1-Chlorohexane	9.19	91	4518859	130.99	PPB	98
75) Chlorobenzene	9.20	112	11107112	110.23	PPB	96
76) Ethylbenzene	9.30	106	6117871	117.23	PPB #	57
77) 1,1,1,2-Tetrachloroethane	9.31	131	3721845	137.06	PPB	97
78) m,p-Xylenes	9.43	106	13585272	215.25	PPB #	46
79) o-Xylene	9.84	106	7075306	116.51	PPB	88
80) Styrene	9.88	103	5770972m	120.97	PPB	
82) Isopropylbenzene	10.22	105	14641925	110.31	PPB	87
86) 1,1,2,2-Tetrachloroethane	10.62	83	3003747	122.83	PPB	99
87) trans-1,4-Dichloro-2-buten	10.69	53	909938m	142.75	PPB	
88) Bromobenzene	10.55	156	4138111	120.34	PPB	98
90) 1,2,3-Trichloropropane	10.66	110	933174	118.72	PPB	99
91) 2-Chlorotoluene	10.75	91	10624013	115.86	PPB	96
92) 1,3,5-Trimethylbenzene	10.84	105	11646501	118.18	PPB	96
93) 4-Chlorotoluene	10.87	91	12420617	115.18	PPB	98
94) tert-Butylbenzene	11.16	119	9537060	121.62	PPB	95
95) 1,2,4-Trimethylbenzene	11.22	105	11645350	115.23	PPB	96
96) sec-Butylbenzene	11.38	105	11926212	120.33	PPB	96
97) p-Isopropyltoluene	11.54	119	10662325	121.05	PPB	94
98) 1,3-Dichlorobenzene	11.52	146	6418699	118.31	PPB	99
99) 1,4-Dichlorobenzene	11.62	146	6592892	118.34	PPB	99
100) n-Butylbenzene	11.95	91	8928225	130.18	PPB	97
101) 1,2-Dichlorobenzene	11.99	146	5706472	119.42	PPB	98
102) 1,2-Dibromo-3-chloropropan	12.65	155	280163	187.27	PPB	87
103) 1,3,5-Trichlorobenzene	12.75	180	2855732	126.92	PPB	96
104) 1,2,4-Trichlorobenzene	13.21	180	2017056	132.96	PPB	99
105) Hexachlorobutadiene	13.29	225	1223045	133.95	PPB	98
106) Naphthalene	13.39	128	3441828	162.44	PPB	98
107) 1,2,3-Trichlorobenzene	13.59	180	1064645	137.79	PPB	97

(#) = qualifier out of range (m) = manual integration

0908F021.D 091123MS23_8260.M Fri Sep 15 09:12:49 2023

3597 of 3623

1st 09/12/23

```

Data File : J:\MS23\DATA\091123\0908F021.D
Acq On    : 11 Sep 2023    7:28 pm
Sample    : ICAL 120
:
:
:
MISc      :
WMS Integration Params: rteint.p
Want Time: Sep 15  8:36 2023

```

Vial:	14
Operator:	EW/GH/MK/OT
Inst	: MS23
Multiplr:	1.00

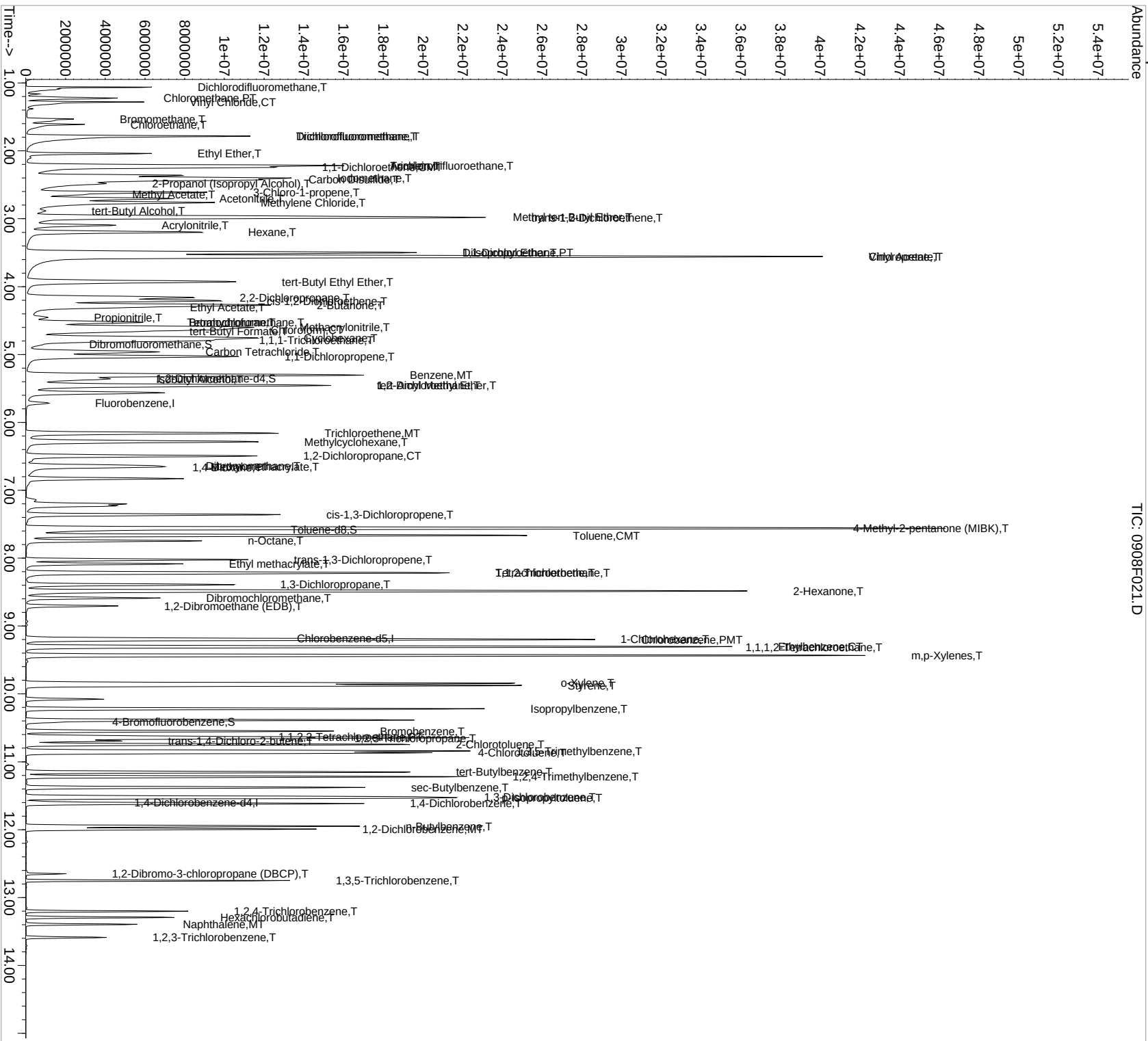
Quant Results File: 091123MS23_8260.RES

```
Method      : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)
```

Title	:	VOA MS23 EPA Method 8260C
-------	---	---------------------------

Last Update : Fri Sep 15 08:47:04 2023

Response via : Initial Calibration



Data File : J:\MS23\DATA\091123\0908F021.D

Acq On : 11 Sep 2023 7:28 pm

Sample : ICAL 120

Misc :

Vial: 14

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Sep 12 9:59 2023

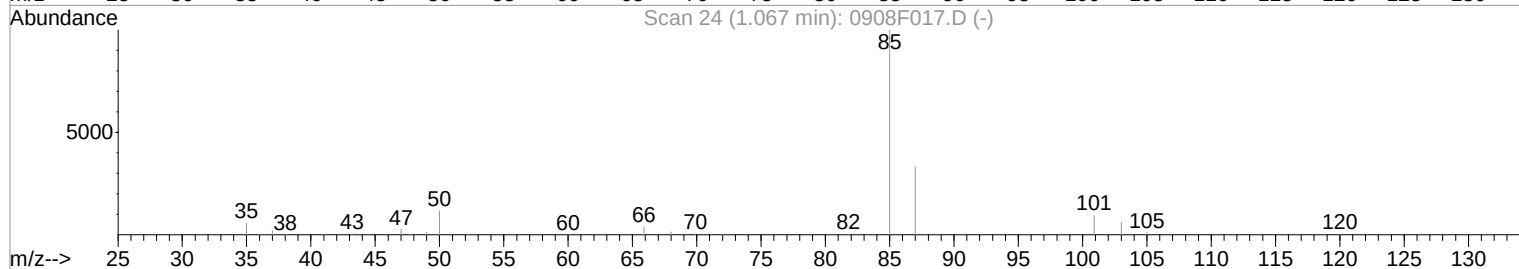
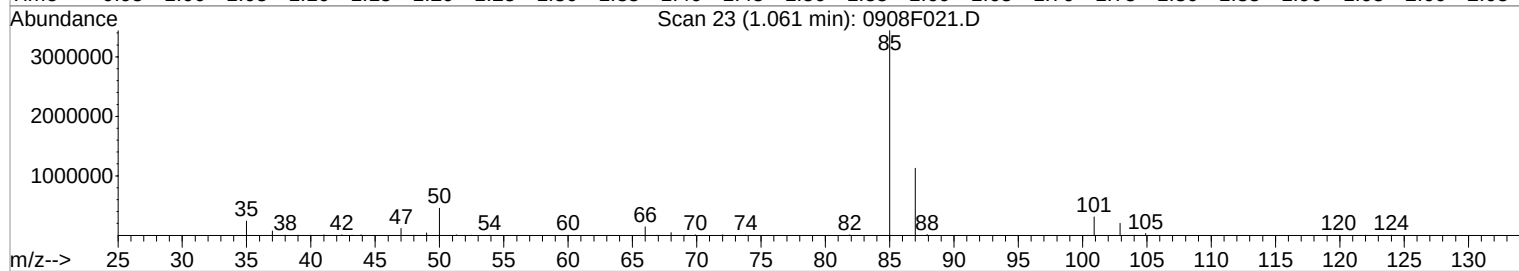
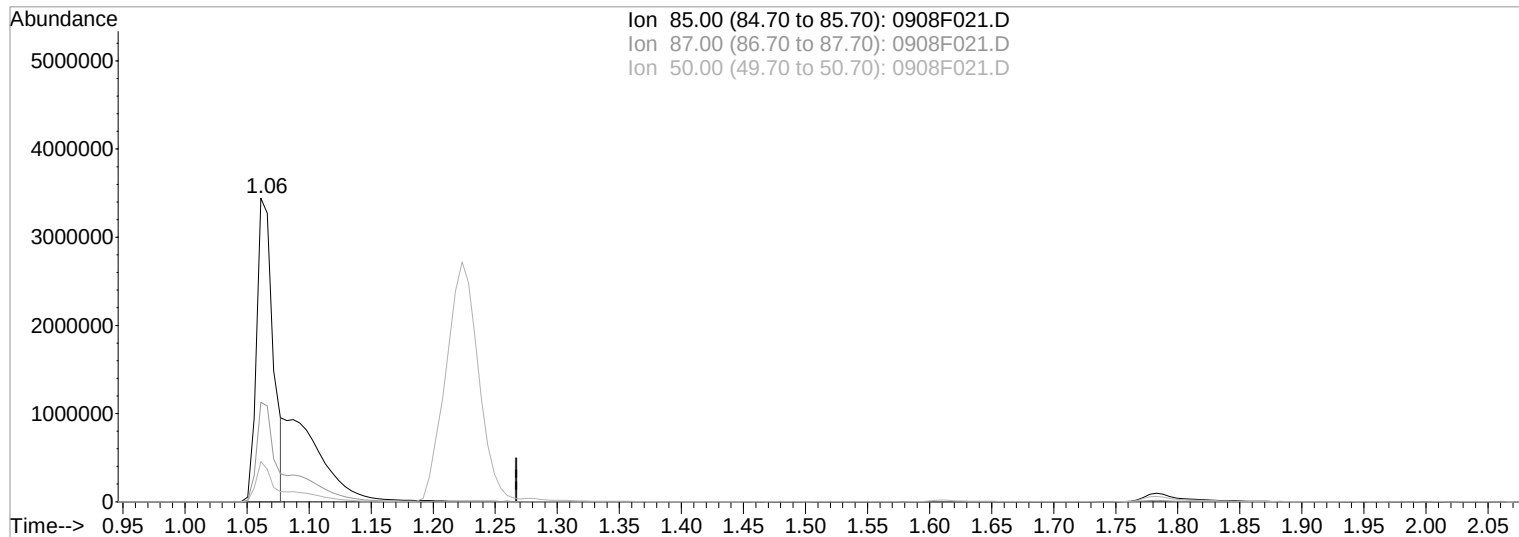
Quant Results File: temp.res

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Fri Sep 15 08:35:05 2023

Response via : Multiple Level Calibration



TIC: 0908F021.D

(2) Dichlorodifluoromethane (T)

Manual Integration:

1.06min 102.06PPB m

Before

response 3184396

09/15/23

Ion	Exp%	Act%
85.00	100	100
87.00	33.20	32.72
50.00	11.40	13.20
0.00	0.00	0.00

Data File : J:\MS23\DATA\091123\0908F021.D

Acq On : 11 Sep 2023 7:28 pm

Sample : ICAL 120

Misc :

Vial: 14

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Sep 15 8:35 2023

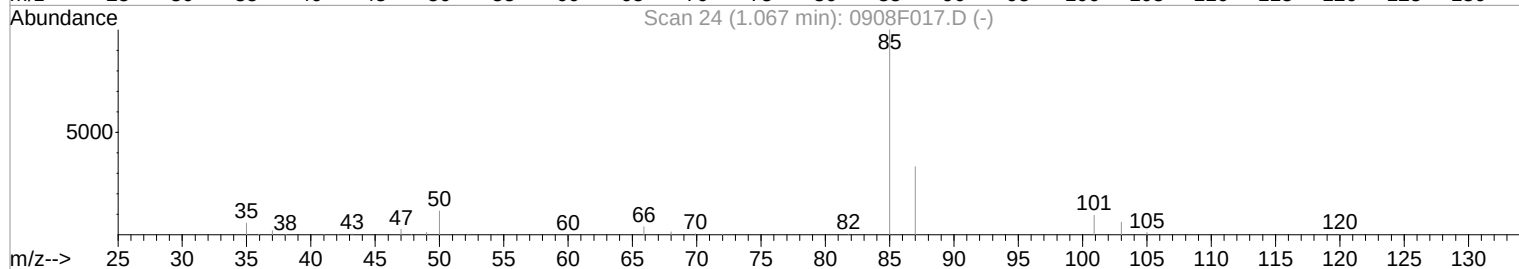
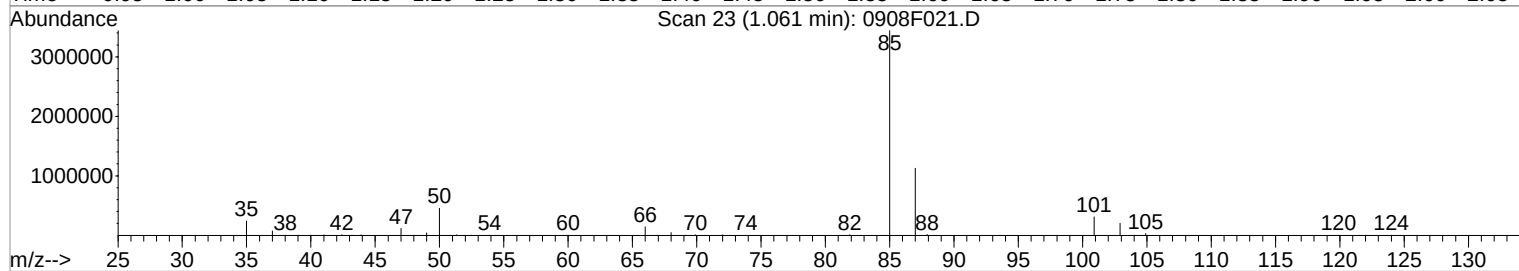
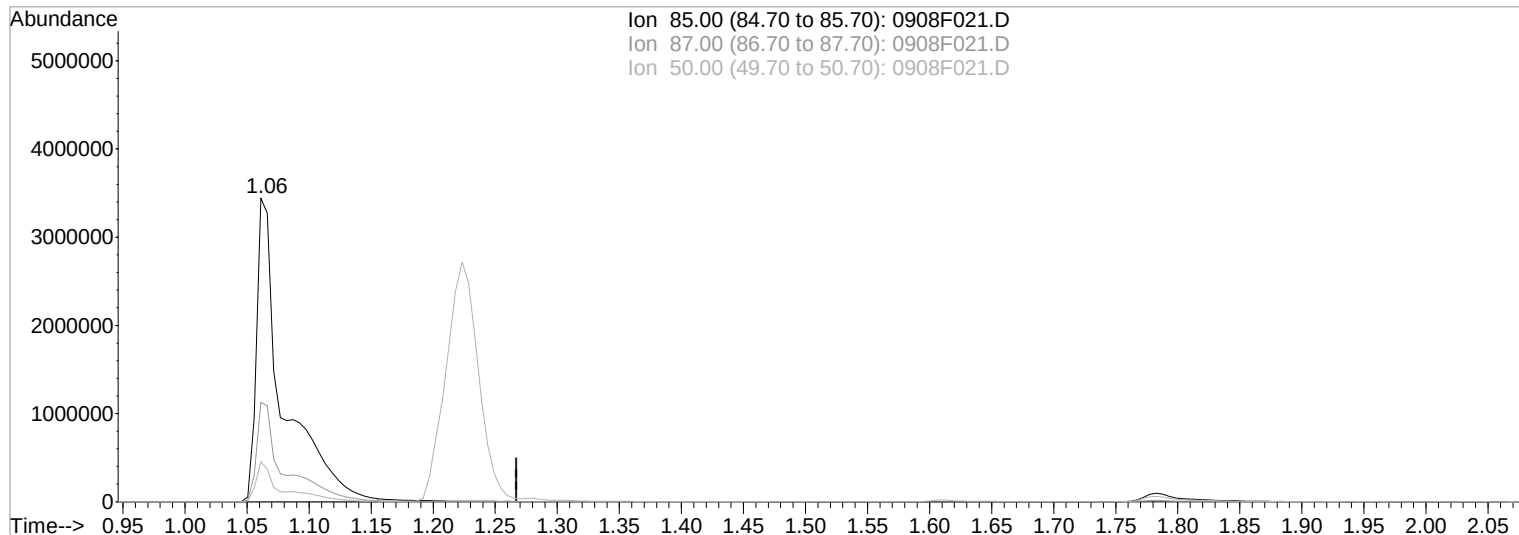
Quant Results File: temp.res

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Fri Sep 15 08:35:05 2023

Response via : Multiple Level Calibration



TIC: 0908F021.D

(2) Dichlorodifluoromethane (T)

Manual Integration:

1.06min 165.87PPB m

After

response 5175517

Split peak

Ion	Exp%	Act%
85.00	100	100
87.00	33.20	32.72
50.00	11.40	13.20
0.00	0.00	0.00

09/15/23

Quantitation Report (Qedit)

1st  09/12/23
2nd  09/18/23

Data File : J:\MS23\DATA\091123\0908F021.D

Acq On : 11 Sep 2023 7:28 pm

Sample : ICAL 120

Misc :

MS Integration Params: rteint.p

Quant Time: Sep 12 9:56 2023

Vial: 14

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

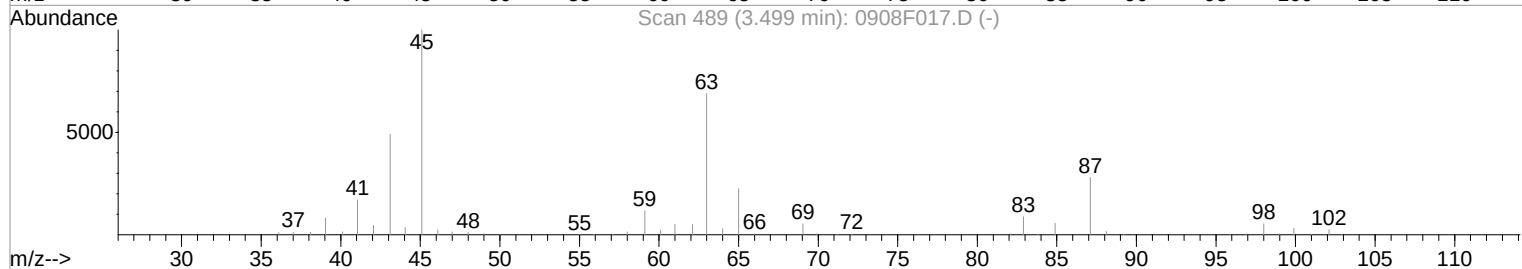
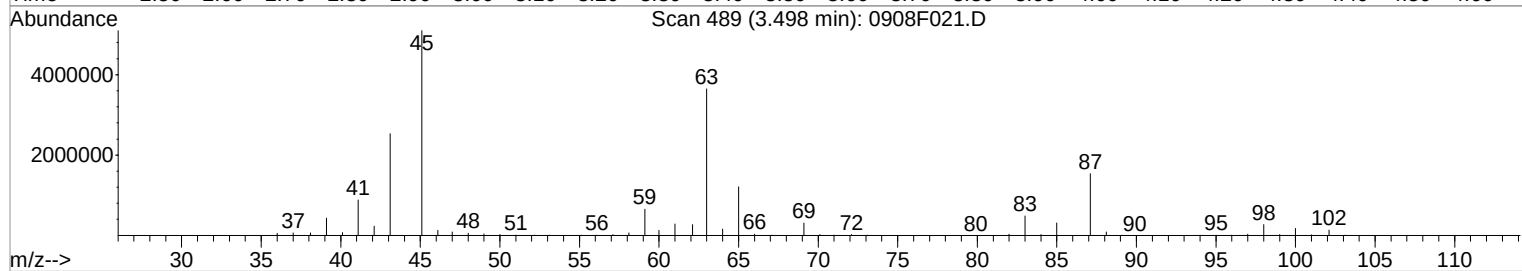
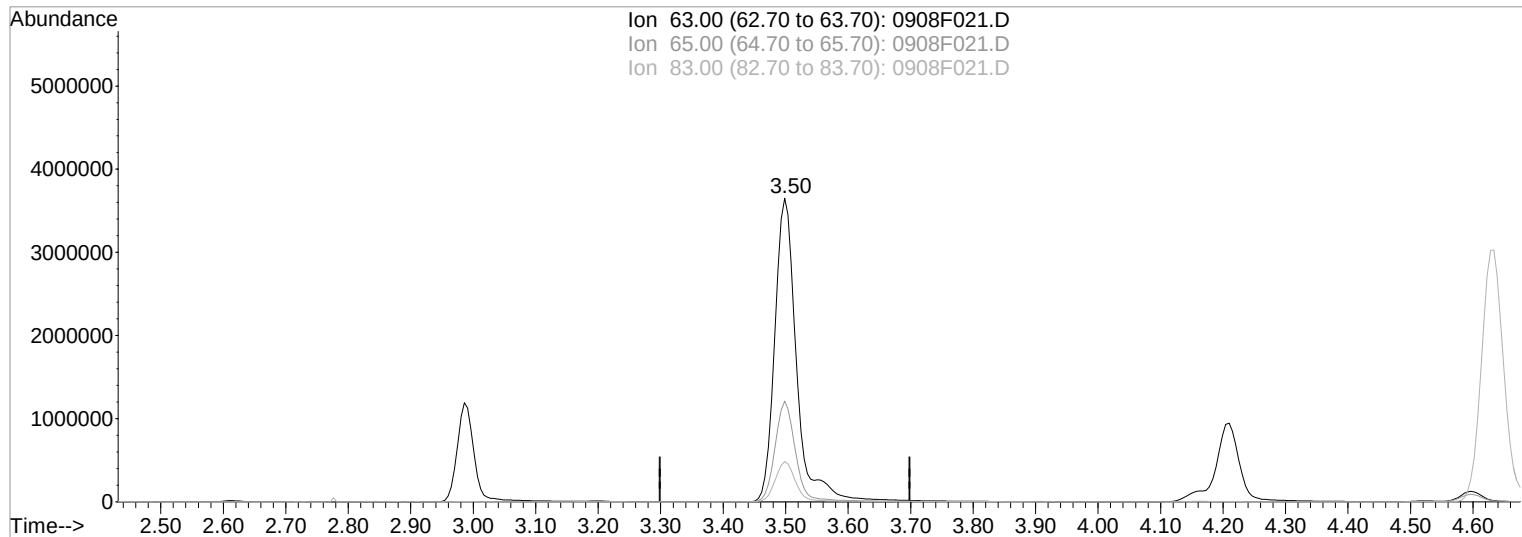
Quant Results File: temp.res

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Tue Sep 12 09:56:01 2023

Response via : Multiple Level Calibration



TIC: 0908F021.D

(27) 1,1-Dichloroethane (PT)

Manual Integration:

3.50min 116.24PPB

Before

response 8872054

Ion	Exp%	Act%
-----	------	------

09/12/23

63.00	100	100
-------	-----	-----

65.00	32.70	33.13
-------	-------	-------

83.00	12.70	13.29
-------	-------	-------

0.00	0.00	0.00
------	------	------

Quantitation Report (Qedit)

1st  09/12/23
2nd  09/18/23

Data File : J:\MS23\DATA\091123\0908F021.D

Acq On : 11 Sep 2023 7:28 pm

Sample : ICAL 120

Misc :

MS Integration Params: rteint.p

Quant Time: Sep 12 9:57 2023

Vial: 14

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

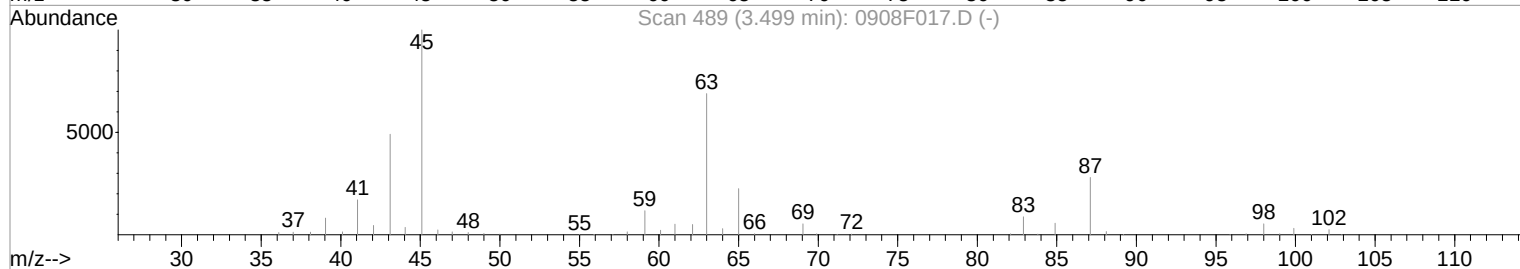
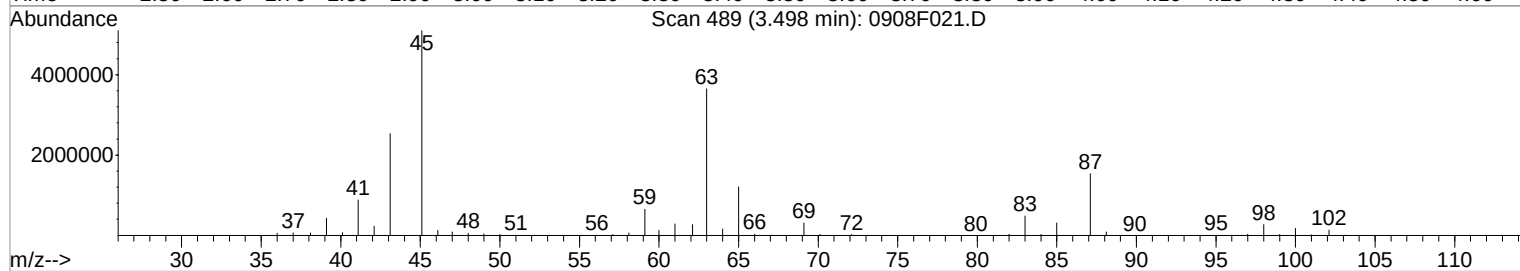
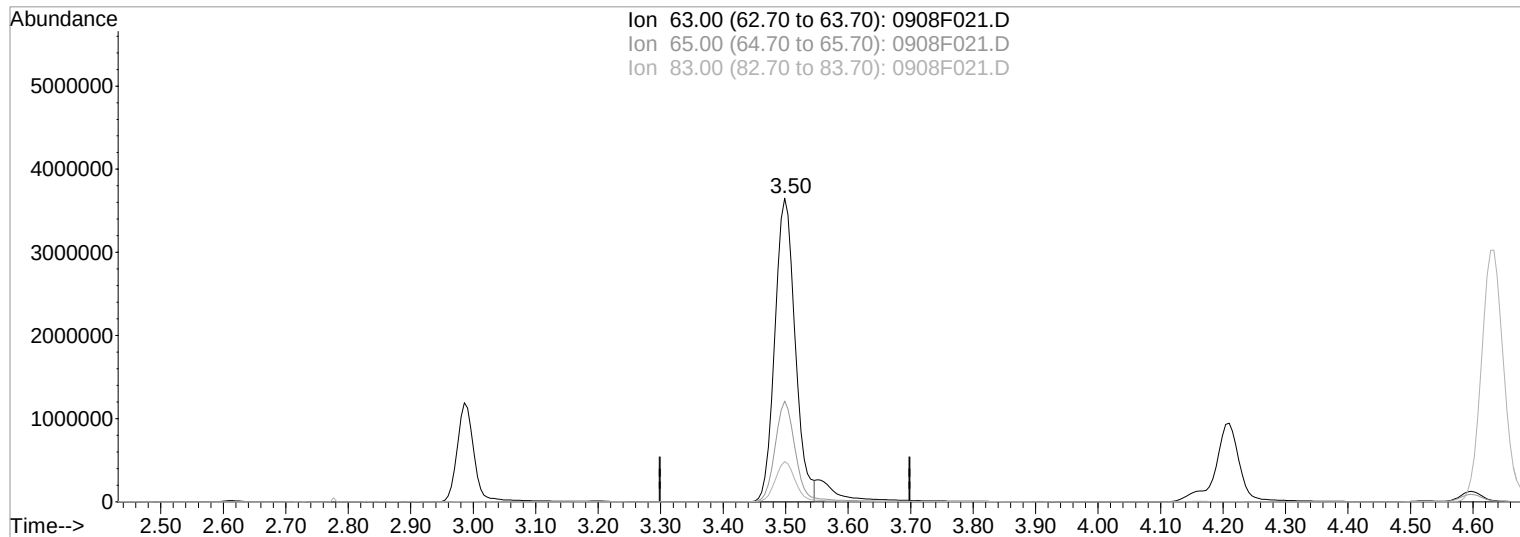
Quant Results File: temp.res

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Tue Sep 12 09:56:01 2023

Response via : Multiple Level Calibration



TIC: 0908F021.D

(27) 1,1-Dichloroethane (PT)

Manual Integration:

3.50min 107.87PPB m

After

response 8233815

Shoulder

Ion	Exp%	Act%
-----	------	------

09/12/23

63.00	100	100
-------	-----	-----

65.00	32.70	33.13
-------	-------	-------

83.00	12.70	13.29
-------	-------	-------

0.00	0.00	0.00
------	------	------

Quantitation Report (Qedit)

1st  09/12/23
2nd  09/18/23

Data File : J:\MS23\DATA\091123\0908F021.D

Acq On : 11 Sep 2023 7:28 pm

Sample : ICAL 120

Misc :

MS Integration Params: rteint.p

Quant Time: Sep 12 9:57 2023

Vial: 14

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

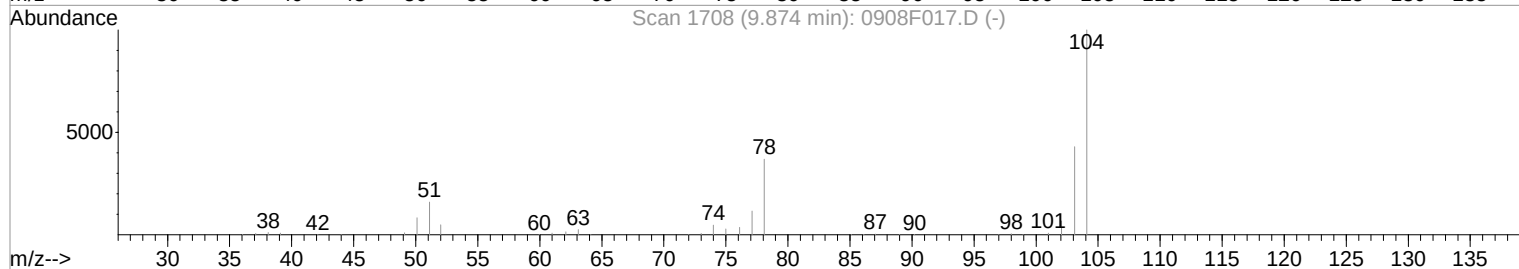
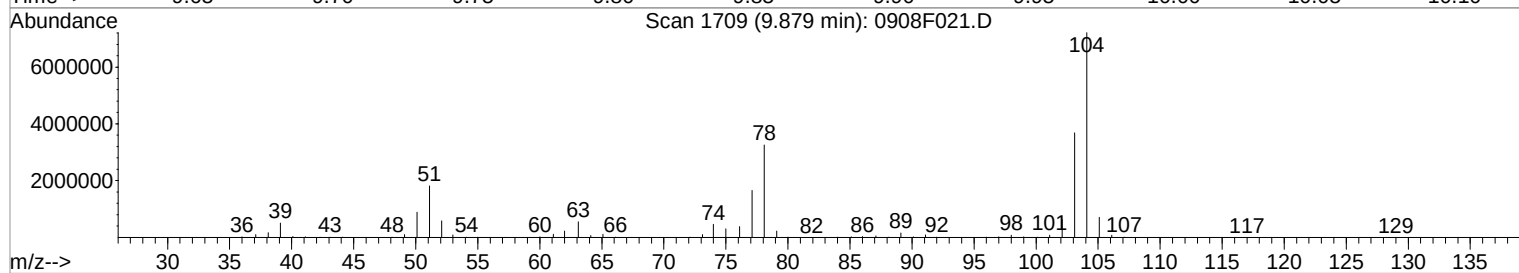
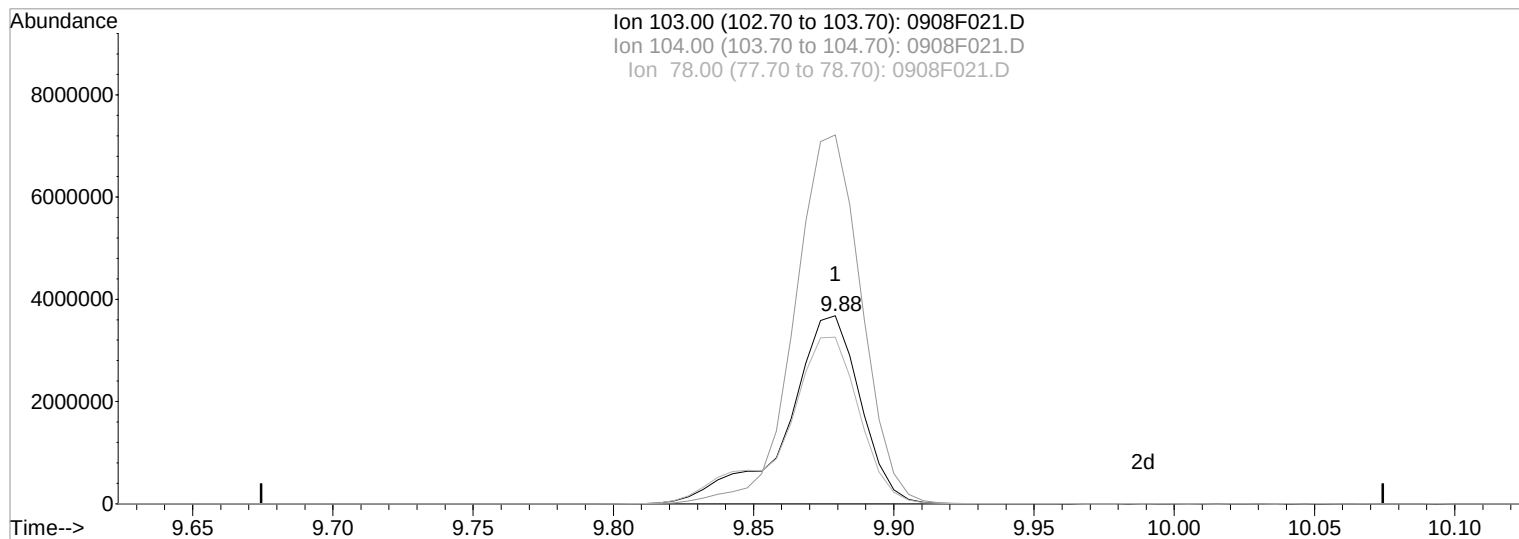
Quant Results File: temp.res

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Tue Sep 12 09:56:01 2023

Response via : Single Level Calibration



TIC: 0908F021.D

(80) Styrene (T)

Manual Integration:

9.88min 139.40PPB

Before

response 6650390

Ion Exp% Act%

09/12/23

103.00 100 100

104.00 210.00 196.23

78.00 87.20 88.60

0.00 0.00 0.00

Quantitation Report (Qedit)

1st  09/12/23
2nd  09/18/23

Data File : J:\MS23\DATA\091123\0908F021.D

Acq On : 11 Sep 2023 7:28 pm

Sample : ICAL 120

Misc :

MS Integration Params: rteint.p

Quant Time: Sep 12 9:59 2023

Vial: 14

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

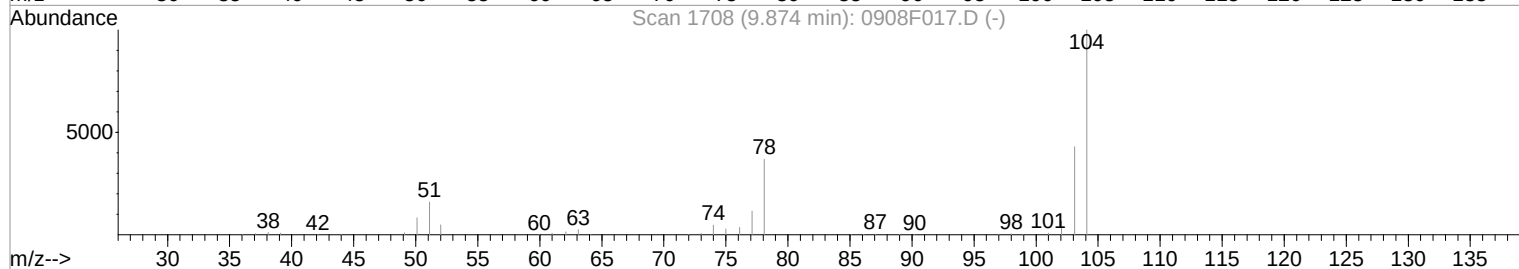
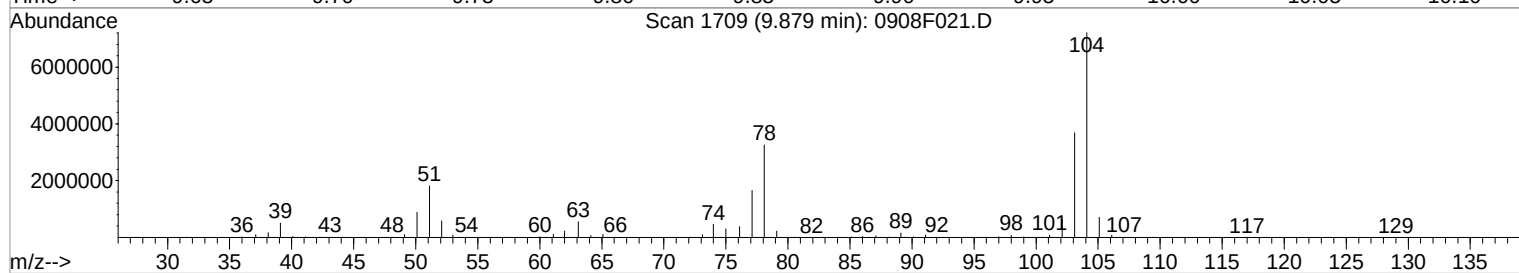
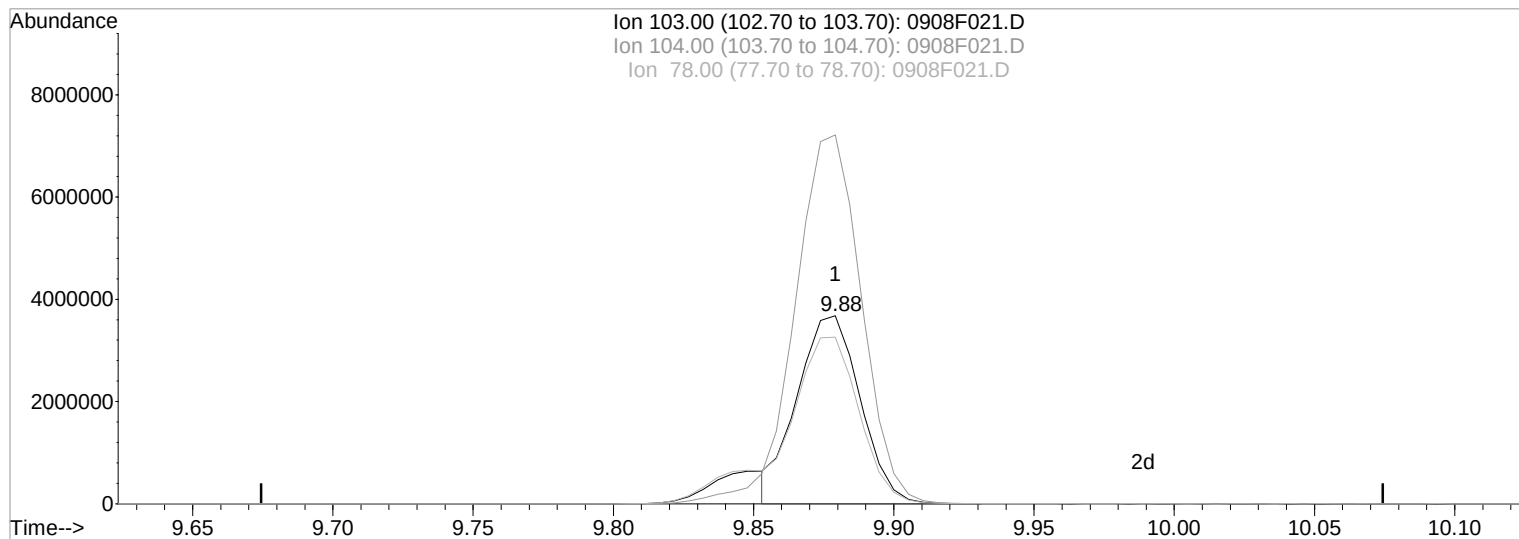
Quant Results File: temp.res

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Tue Sep 12 09:56:01 2023

Response via : Single Level Calibration



TIC: 0908F021.D

(80) Styrene (T)

9.88min 120.97PPB m

response 5770972

Ion	Exp%	Act%
-----	------	------

103.00	100	100
--------	-----	-----

104.00	210.00	196.23
--------	--------	--------

78.00	87.20	88.60
-------	-------	-------

0.00	0.00	0.00
------	------	------

Manual Integration:

After

Shoulder

09/12/23

Quantitation Report (Qedit)

1st  09/15/23
2nd  09/18/23

Data File : J:\MS23\DATA\091123\0908F021.D

Acq On : 11 Sep 2023 7:28 pm

Sample : ICAL 120

Misc :

MS Integration Params: rteint.p

Quant Time: Sep 15 8:35 2023

Vial: 14

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

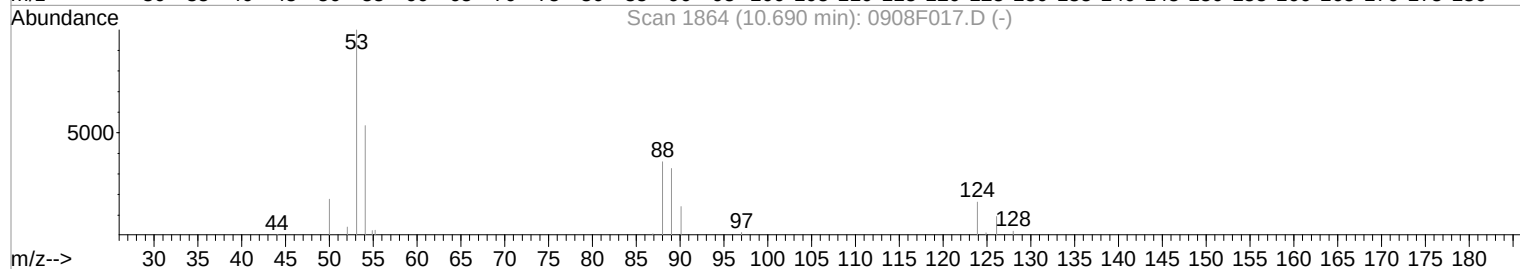
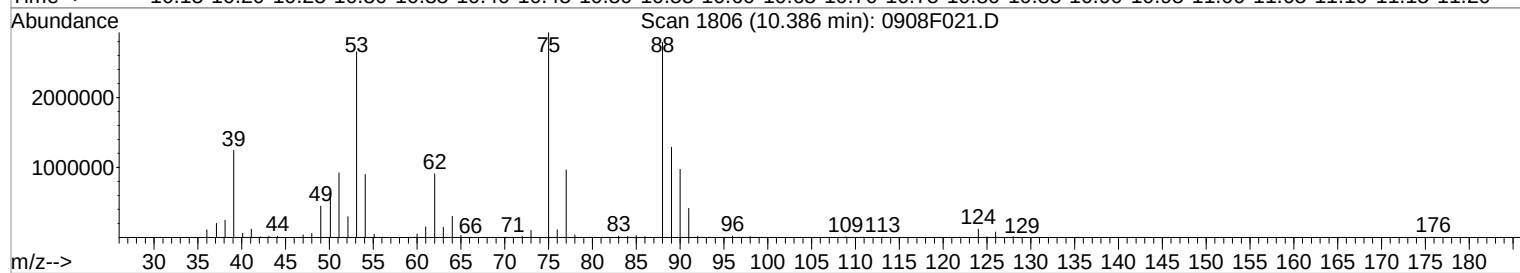
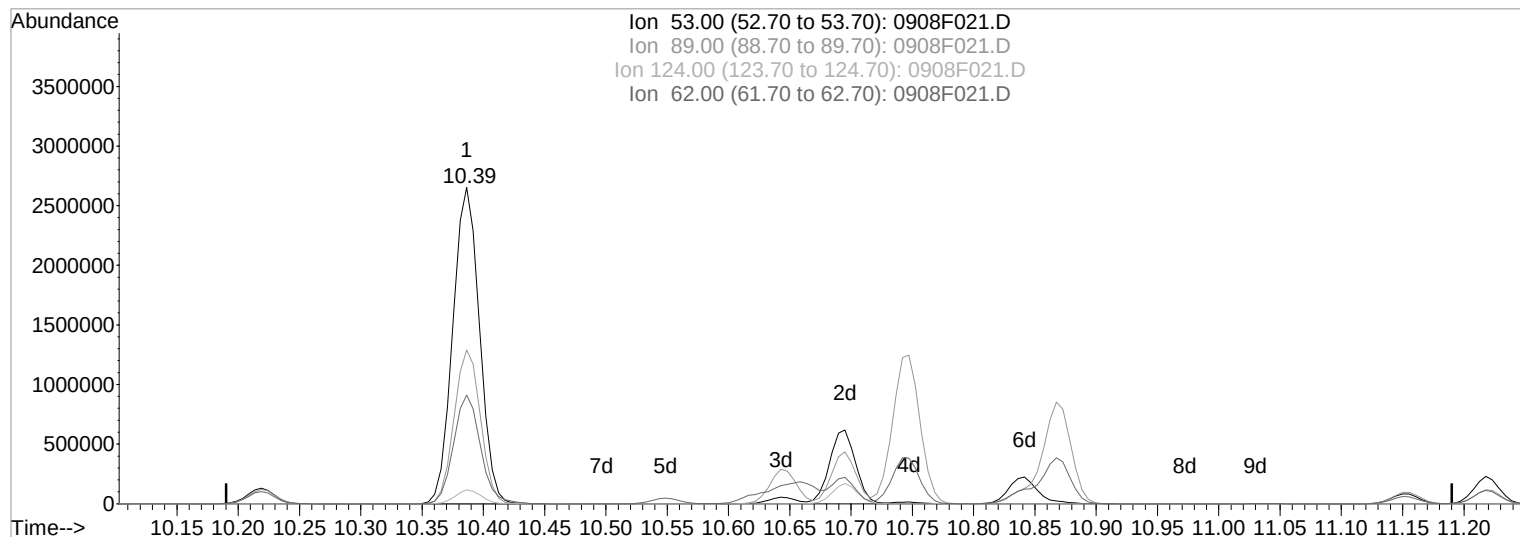
Quant Results File: temp.res

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Fri Sep 15 08:35:05 2023

Response via : Single Level Calibration



TIC: 0908F021.D

(87) trans-1,4-Dichloro-2-butene (T)

Manual Integration:

10.39min 630.26PPB

Before

response 4017615

Ion	Exp%	Act%
53.00	100	100
89.00	32.20	48.65
124.00	16.20	4.36
62.00	7.60	34.33

09/15/23

Data File : J:\MS23\DATA\091123\0908F021.D

Acq On : 11 Sep 2023 7:28 pm

Sample : ICAL 120

Misc :

Vial: 14

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Sep 15 8:35 2023

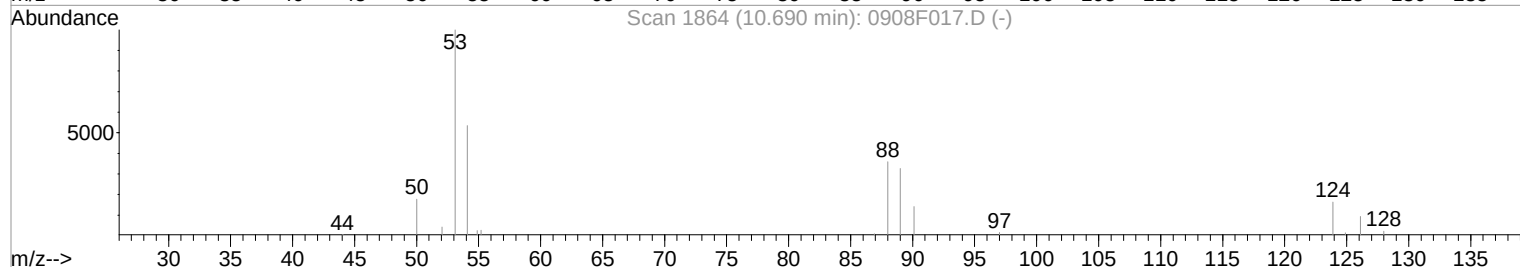
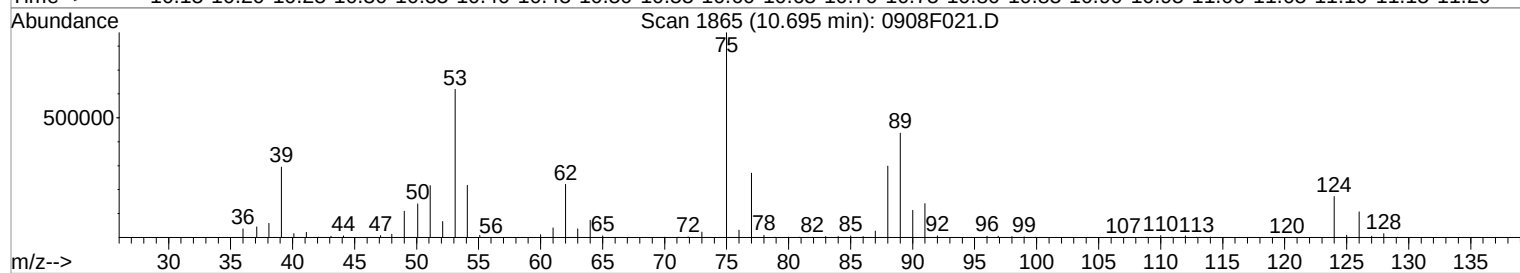
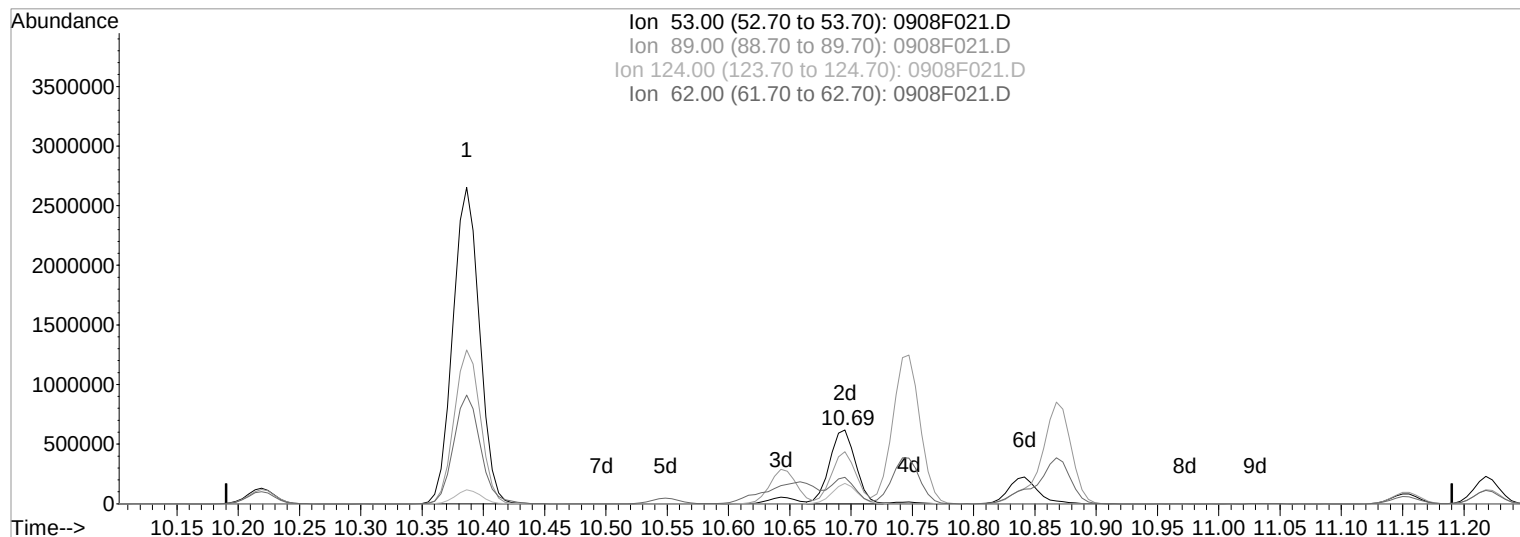
Quant Results File: temp.res

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Fri Sep 15 08:35:05 2023

Response via : Single Level Calibration



TIC: 0908F021.D

(87) trans-1,4-Dichloro-2-butene (T)

Manual Integration:

10.69min 142.75PPB m

After

response 909938

Wrong peak

Ion	Exp%	Act%
53.00	100	100
89.00	32.20	70.50#
124.00	16.20	27.58
62.00	7.60	35.89

09/15/23

Data File : J:\MS23\DATA\091123\0908F026.D

Vial: 19

Acq On : 12 Sep 2023 10:26 am

Operator: EW/GH/MK/OT

Sample : BFB

Inst : MS23

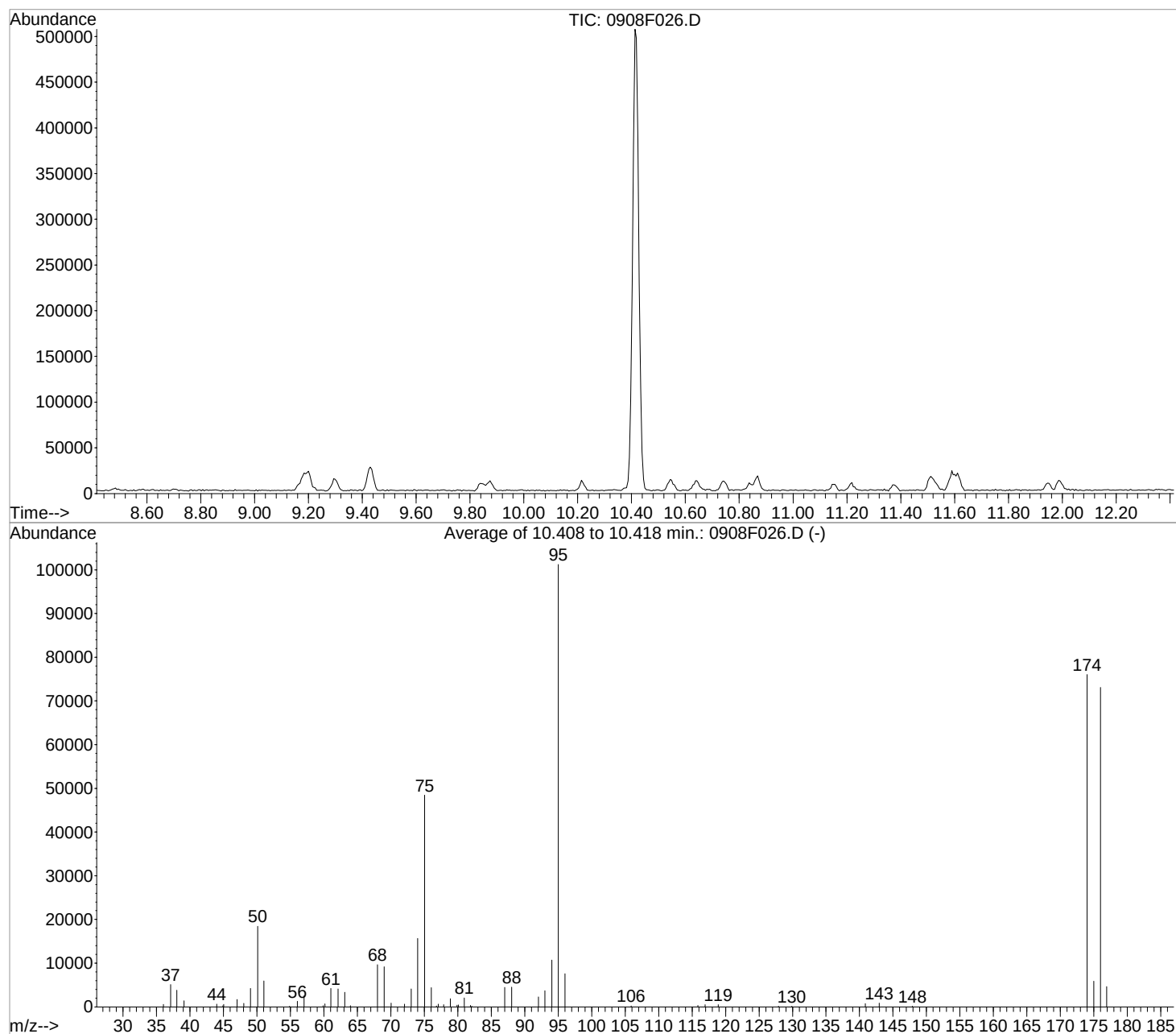
Misc :

Multiplr: 1.00

MS Integration Params: rteint.p

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C



AutoFind: Scans 1810, 1811, 1812; Background Corrected with Scan 1803

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.2	18405	PASS
75	95	30	60	47.9	48429	PASS
95	95	100	100	100.0	101205	PASS
96	95	5	9	7.5	7552	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	75.1	76024	PASS
175	174	5	9	7.7	5878	PASS
176	174	95	101	96.1	73082	PASS
177	176	5	9	6.3	4633	PASS

Data File : I:\MS23\DATA\091123\0908F028.D

Acq On : 12 Sep 2023 11:43 am

Sample : ICV

Misc :

Vial: 21

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Sep 18 16:33:47 2023

Quant Results File: 091123MS23_8260.RES

Quant Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Mon Sep 18 16:32:32 2023

Response via : Initial Calibration

DataAcq Meth : 8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	5.72	96	1190981	10.00	PPB	0.00
64) Chlorobenzene-d5	9.17	82	446589	10.00	PPB	0.00
85) 1,4-Dichlorobenzene-d4	11.59	152	342368	10.00	PPB	0.00

System Monitoring Compounds

43) Dibromofluoromethane	4.85	113	239127	9.84	PPB	0.00
Spiked Amount 10.000			Recovery	=	98.40%	
47) 1,2-Dichloroethane-d4	5.35	65	270728	9.99	PPB	0.00
Spiked Amount 10.000			Recovery	=	99.90%	
62) Toluene-d8	7.59	98	1123991	9.90	PPB	0.00
Spiked Amount 10.000			Recovery	=	99.00%	
84) 4-Bromofluorobenzene	10.42	95	364113	10.03	PPB	0.00
Spiked Amount 10.000			Recovery	=	100.30%	

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	1.07	85	315140m	7.32	PPB	
3) Chloromethane	1.23	50	362342	8.79	PPB	97
4) Vinyl Chloride	1.28	62	393870	9.38	PPB	100
5) Bromomethane	1.54	96	172530	10.19	PPB	98
6) Chloroethane	1.61	64	233561	8.76	PPB	99
7) Dichlorofluoromethane	1.78	67	584555	9.93	PPB	97
8) Trichlorofluoromethane	1.79	101	517936	9.65	PPB	100
9) Ethyl Ether	2.04	59	278117	11.14	PPB	96
10) Acrolein	2.22	56	362370	114.22	PPB	99
11) Trichlorotrifluoroethane	2.22	151	472930	23.30	PPB	98
12) 1,1-Dichloroethene	2.24	96	320246	8.99	PPB	99
13) Acetone	2.36	43	240886	51.28	PPB	99
14) Iodomethane	2.40	142	1269547	34.16	PPB	99
15) Carbon Disulfide	2.43	76	1562049	16.79	PPB	99
16) 2-Propanol (Isopropyl Alco	2.49	45	371905	505.48	PPB	98
17) 3-Chloro-1-propene	2.61	76	601943	35.58	PPB	96
19) Acetonitrile	2.70	40	369972	284.01	PPB	96
20) Methylene Chloride	2.76	84	383841	8.69	PPB	99
21) tert-Butyl Alcohol	2.88	59	102085	94.88	PPB	97
22) Acrylonitrile	3.10	53	302185	40.69	PPB	99
23) Methyl tert-Butyl Ether	2.97	73	711658	9.71	PPB	98
24) trans-1,2-Dichloroethene	2.99	96	362565	9.41	PPB	99
25) Hexane	3.20	57	1207336	33.37	PPB	97
26) Diisopropyl Ether	3.50	45	2174033	20.24	PPB	99
27) 1,1-Dichloroethane	3.50	63	629780m	9.38	PPB	
28) Vinyl Acetate	3.56	86	273757	50.07	PPB	# 88
29) Chloroprene	3.56	53	1777707	36.46	PPB	99
30) tert-Butyl Ethyl Ether	3.93	59	1784578	19.89	PPB	99
31) 2,2-Dichloropropane	4.16	77	420236	9.99	PPB	98
32) cis-1,2-Dichloroethene	4.21	96	403746	9.46	PPB	99
33) 2-Butanone	4.28	72	105484	50.64	PPB	88
34) Ethyl Acetate	4.30	61	94578	27.39	PPB	91
35) Propionitrile	4.45	54	77046	28.04	PPB	96
36) Methacrylonitrile	4.60	67	280739	31.56	PPB	98
37) Bromochloromethane	4.52	128	161311	9.88	PPB	98
38) Tetrahydrofuran	4.54	71	48144	18.54	PPB	96
39) Chloroform	4.63	83	590553	9.84	PPB	98
40) tert-Butyl Formate	4.66	59	209022	21.77	PPB	91
42) 1,1,1-Trichloroethane	4.79	97	454996	9.74	PPB	97
44) Carbon Tetrachloride	4.96	117	323907	9.32	PPB	99
45) 1,1-Dichloropropene	5.03	75	501194	9.71	PPB	99
46) Isobutyl Alcohol	5.36	43	144737	264.01	PPB	96
48) Benzene	5.30	78	1551545	9.39	PPB	99

(#)=qualifier out of range (m)=manual integration

0908F028.D 091123MS23_8260.M

Mon Sep 18 16:34:31 2023

3608 of 3623

Data File : I:\MS23\DATA\091123\0908F028.D

Acq On : 12 Sep 2023 11:43 am

Sample : ICV

Misc :

Vial: 21

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Sep 18 16:33:47 2023

Quant Results File: 091123MS23_8260.RES

Quant Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Mon Sep 18 16:32:32 2023

Response via : Initial Calibration

DataAcq Meth : 8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
49) 1,2-Dichloroethane	5.45	62	425545	9.38	PPB	98
50) tert-Amyl Methyl Ether	5.46	55	446604	18.27	PPB	91
51) Trichloroethene	6.15	95	354207	9.27	PPB	100
53) 1,2-Dichloropropane	6.49	63	372793	9.38	PPB	98
54) Dibromomethane	6.63	93	165949	9.98	PPB	98
55) Methyl methacrylate	6.66	69	455198	29.26	PPB	97
56) 1,4-Dioxane	6.67	88	62517m	326.53	PPB	
57) Bromodichloromethane	6.83	83	352343	9.43	PPB	99
58) 2-Nitropropane	7.20	41	88053	26.27	PPB	91
59) 2-Chloroethyl Vinyl Ether	7.23	63	156418	11.30	PPB	96
60) cis-1,3-Dichloropropene	7.36	75	489109	8.49	PPB	100
61) 4-Methyl-2-pentanone (MIBK)	7.56	58	370058	51.95	PPB	98
63) Toluene	7.66	92	918714	9.18	PPB	99
65) n-Octane	7.74	85	258445	17.63	PPB	97
66) trans-1,3-Dichloropropene	8.02	75	357173	8.76	PPB	99
67) Ethyl methacrylate	8.08	69	929384	31.65	PPB	100
68) 1,1,2-Trichloroethane	8.21	83	215493	9.42	PPB	99
69) Tetrachloroethene	8.22	164	248193	9.23	PPB	96
70) 2-Hexanone	8.48	57	117336	53.63	PPB	99
71) 1,3-Dichloropropane	8.39	76	479710	9.63	PPB	99
72) Dibromochloromethane	8.58	129	196938	8.24	PPB	99
73) 1,2-Dibromoethane (EDB)	8.70	107	228694	9.94	PPB	97
74) 1-Chlorohexane	9.19	91	330333	9.86	PPB	97
75) Chlorobenzene	9.20	112	908875	9.48	PPB	99
76) Ethylbenzene	9.30	106	468016	9.78	PPB	98
77) 1,1,1,2-Tetrachloroethane	9.31	131	239291	9.53	PPB	96
78) m,p-Xylenes	9.43	106	1124449	19.36	PPB	100
79) o-Xylene	9.84	106	539591	9.69	PPB	98
80) Styrene	9.87	103	432999m	10.08	PPB	
81) Bromoform	10.08	173	77704	8.87	PPB	99
82) Isopropylbenzene	10.22	105	1194547	10.23	PPB	99
83) cis-1,4-Dichloro-2-butene	10.39	89	66220	25.32	PPB	95
86) 1,1,2,2-Tetrachloroethane	10.62	83	220748	9.79	PPB	98
87) trans-1,4-Dichloro-2-buten	10.69	53	181024	29.98	PPB	85
88) Bromobenzene	10.55	156	320327	9.70	PPB	97
89) n-Propylbenzene	10.64	91	1307831	10.19	PPB	99
90) 1,2,3-Trichloropropane	10.66	110	69678	9.40	PPB	96
91) 2-Chlorotoluene	10.74	91	843482	9.59	PPB	99
92) 1,3,5-Trimethylbenzene	10.84	105	900016	10.14	PPB	98
93) 4-Chlorotoluene	10.87	91	987406	9.78	PPB	99
94) tert-Butylbenzene	11.15	119	732137	10.12	PPB	99
95) 1,2,4-Trimethylbenzene	11.22	105	918841	9.87	PPB	98
96) sec-Butylbenzene	11.38	105	979306	10.93	PPB	99
97) p-Isopropyltoluene	11.53	119	836856	10.26	PPB	99
98) 1,3-Dichlorobenzene	11.51	146	495971	9.47	PPB	99
99) 1,4-Dichlorobenzene	11.61	146	522142	9.40	PPB	98
100) n-Butylbenzene	11.94	91	646294	10.55	PPB	99
101) 1,2-Dichlorobenzene	11.99	146	438988	9.46	PPB	98
102) 1,2-Dibromo-3-chloropropan	12.66	155	12335	7.21	PPB	97
103) 1,3,5-Trichlorobenzene	12.76	180	225261	10.12	PPB	99
104) 1,2,4-Trichlorobenzene	13.20	180	135316	9.20	PPB	97
105) Hexachlorobutadiene	13.30	225	85205	9.36	PPB	98
106) Naphthalene	13.40	128	178201	8.19	PPB	99
107) 1,2,3-Trichlorobenzene	13.59	180	65162	8.61	PPB	99

(#) = qualifier out of range (m) = manual integration

0908F028.D 091123MS23_8260.M Mon Sep 18 16:34:31 2023

3609 of 3623

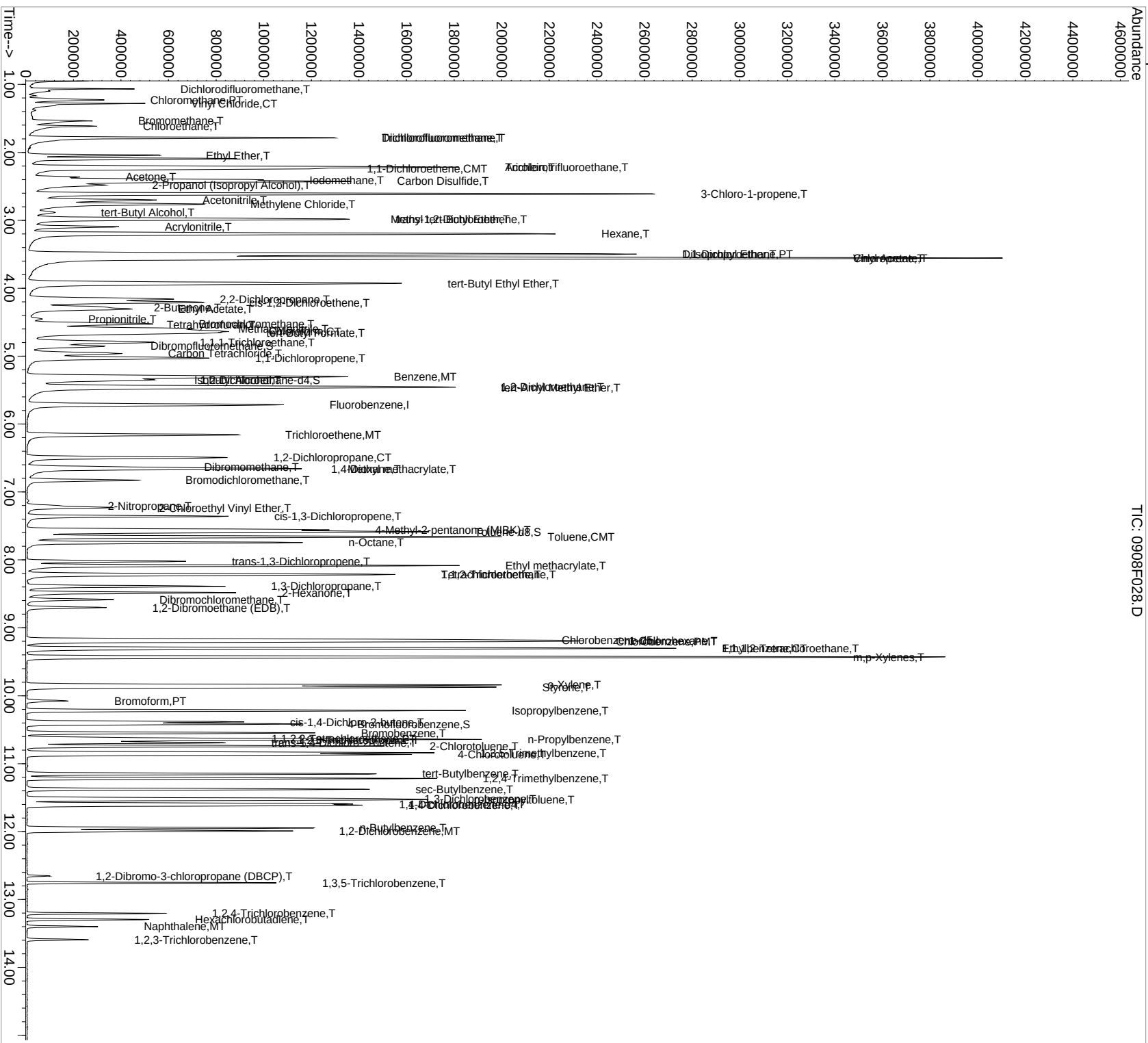
09/12/23

Data File : I:\MS23\DATA\091123\0908F028.D
Acq On : 12 Sep 2023 11:43 am
Sample : ICV
Misc :
MS Integration Params: rteint.p
uant Time: Sep 18 16:33 2023

Vial: 21
Operator: EW/GH/MK/OT
Inst : MS23
Multiplr: 1.00

Quant Results File: 091123MS23_8260.RES

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)
Title : VOA MS23 EPA Method 8260C
Last Update : Mon Sep 18 16:32:32 2023
Response via : Initial Calibration



Data File : J:\MS23\DATA\091123\0908F028.D

Acq On : 12 Sep 2023 11:43 am

Sample : ICV

Misc :

MS Integration Params: rteint.p

Quant Time: Sep 15 14:22 2023

Vial: 21

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

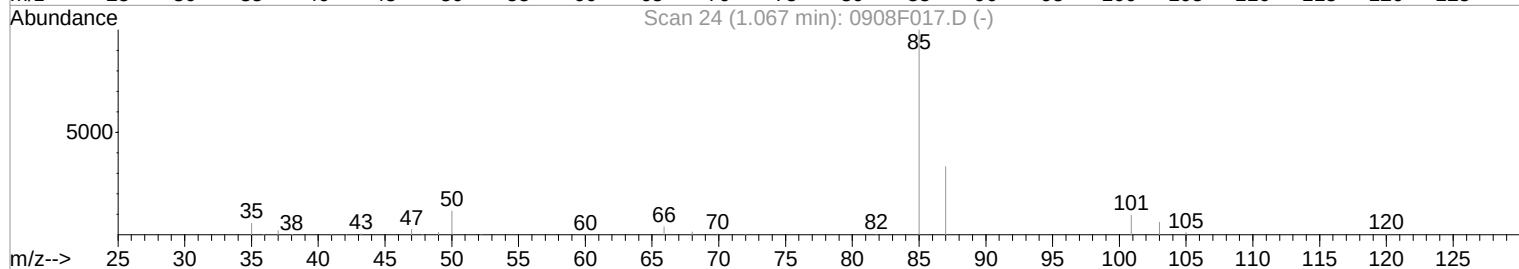
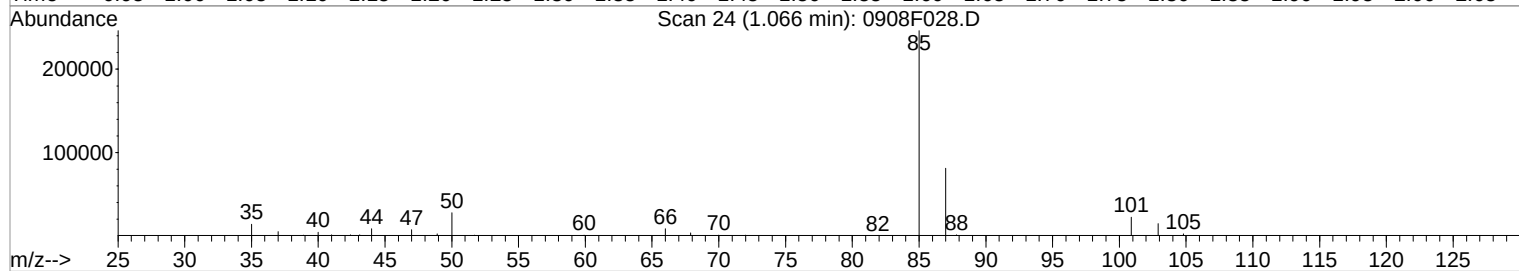
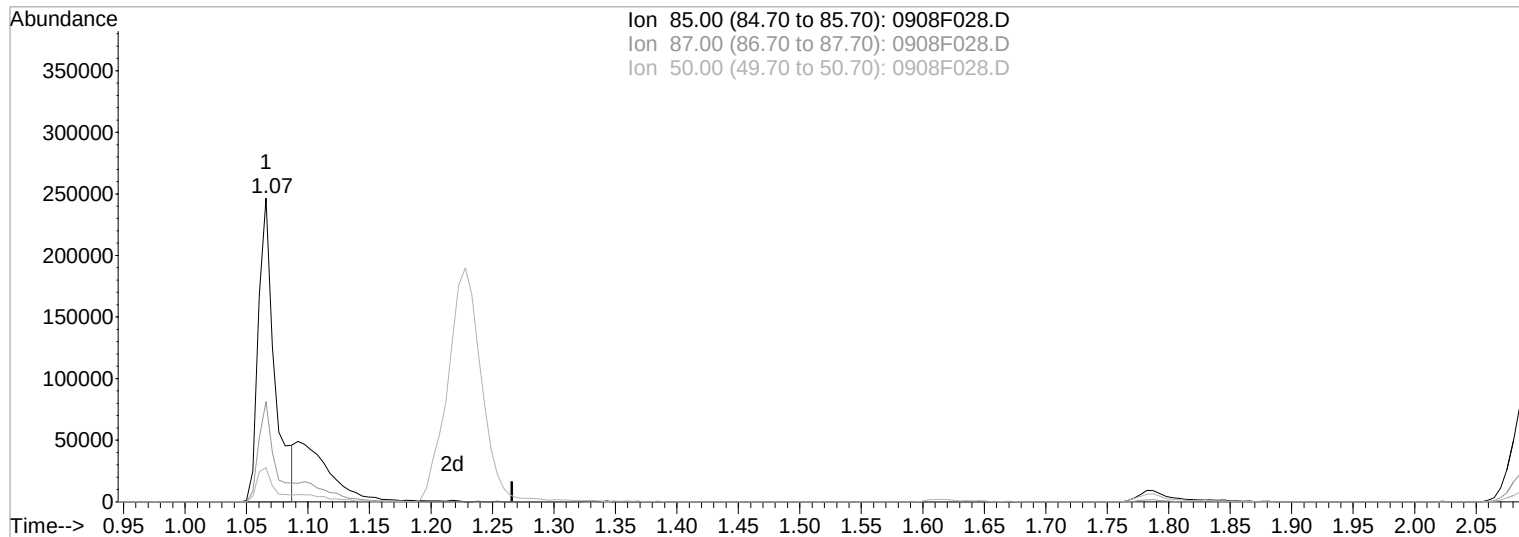
Quant Results File: temp.res

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Fri Sep 15 14:21:38 2023

Response via : Multiple Level Calibration



TIC: 0908F028.D

(2) Dichlorodifluoromethane (T)

Manual Integration:

1.07min 5.20PPB

Before

response 223757

09/15/23

Ion	Exp%	Act%
85.00	100	100
87.00	33.20	32.97
50.00	11.40	11.20
0.00	0.00	0.00

Data File : J:\MS23\DATA\091123\0908F028.D

Acq On : 12 Sep 2023 11:43 am

Sample : ICV

Misc :

MS Integration Params: rteint.p

Quant Time: Sep 15 14:23 2023

Vial: 21

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

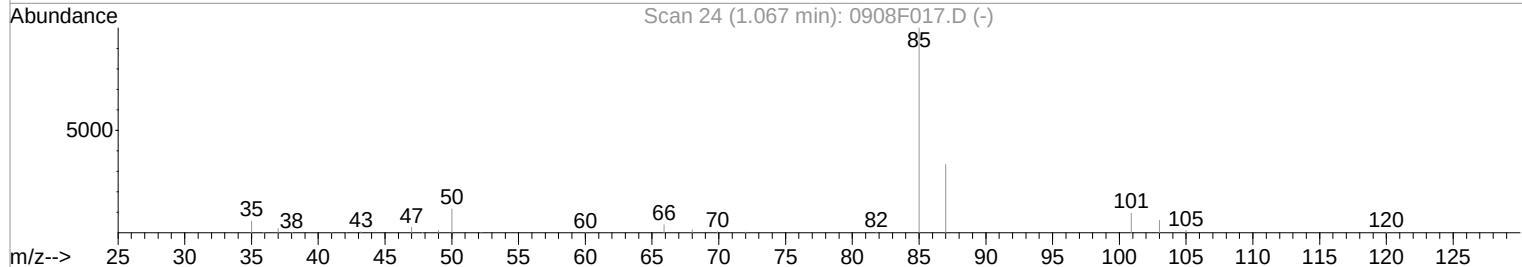
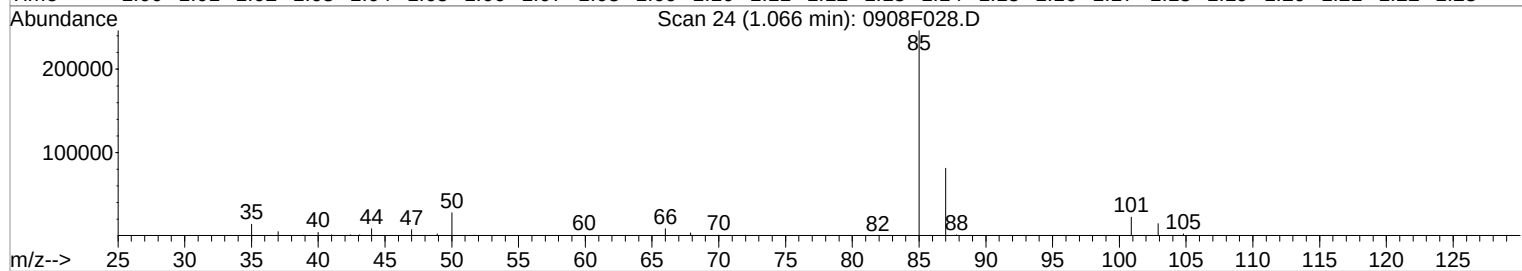
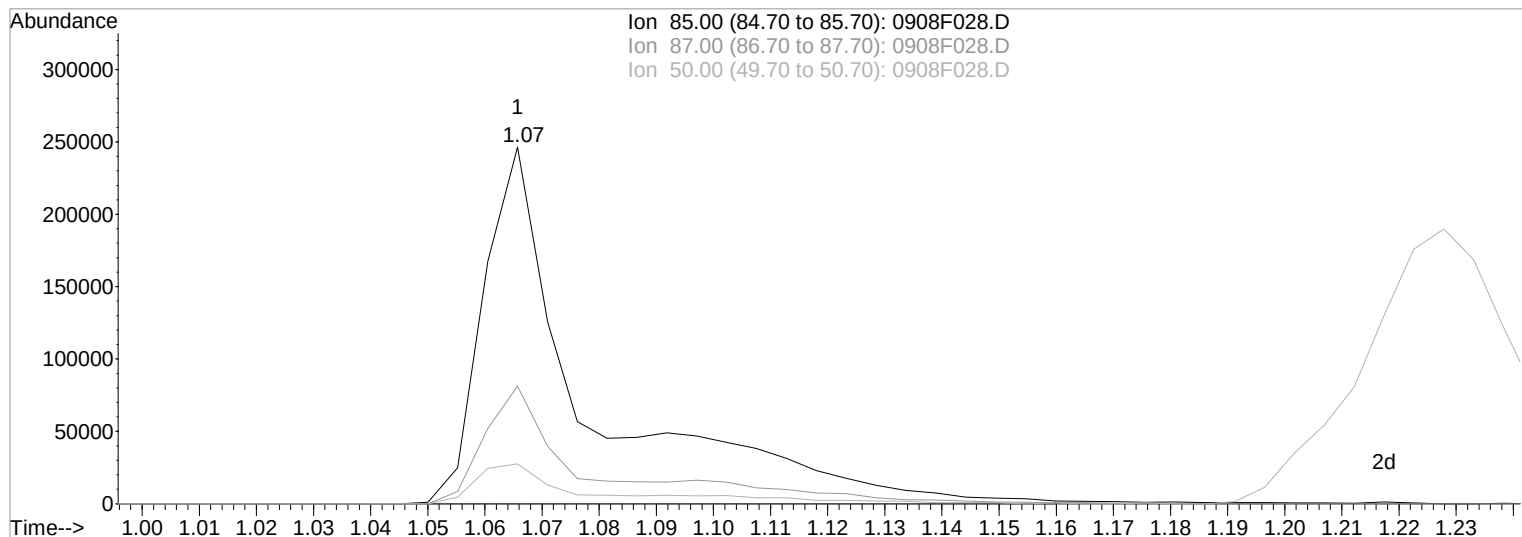
Quant Results File: temp.res

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Fri Sep 15 14:21:38 2023

Response via : Multiple Level Calibration



TIC: 0908F028.D

(2) Dichlorodifluoromethane (T)

1.07min 7.32PPB m

response 315140

Manual Integration:

After

Baseline correction

09/15/23

Ion	Exp%	Act%
85.00	100	100
87.00	33.20	32.97
50.00	11.40	11.20
0.00	0.00	0.00

Data File : J:\MS23\DATA\091123\0908F028.D

Acq On : 12 Sep 2023 11:43 am

Sample : ICV

Misc :

Vial: 21

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Sep 15 14:24 2023

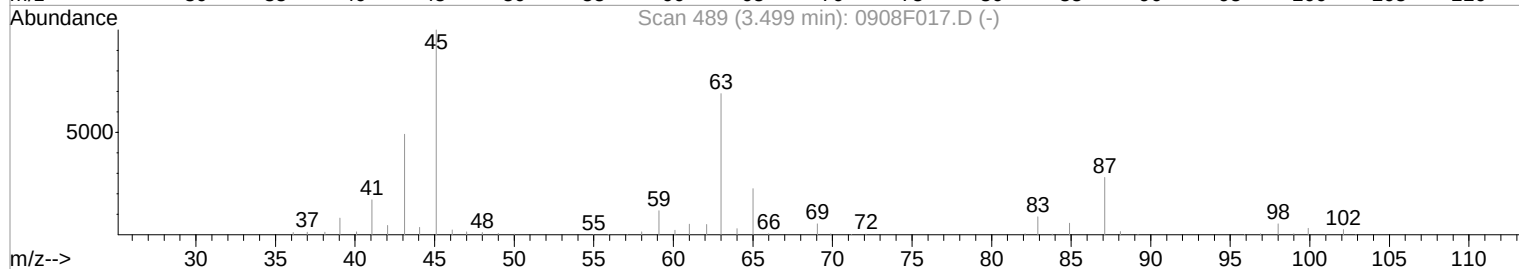
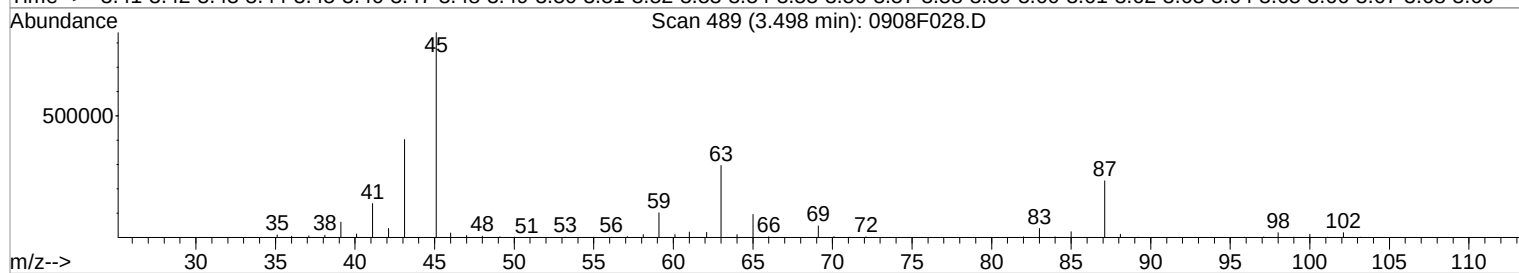
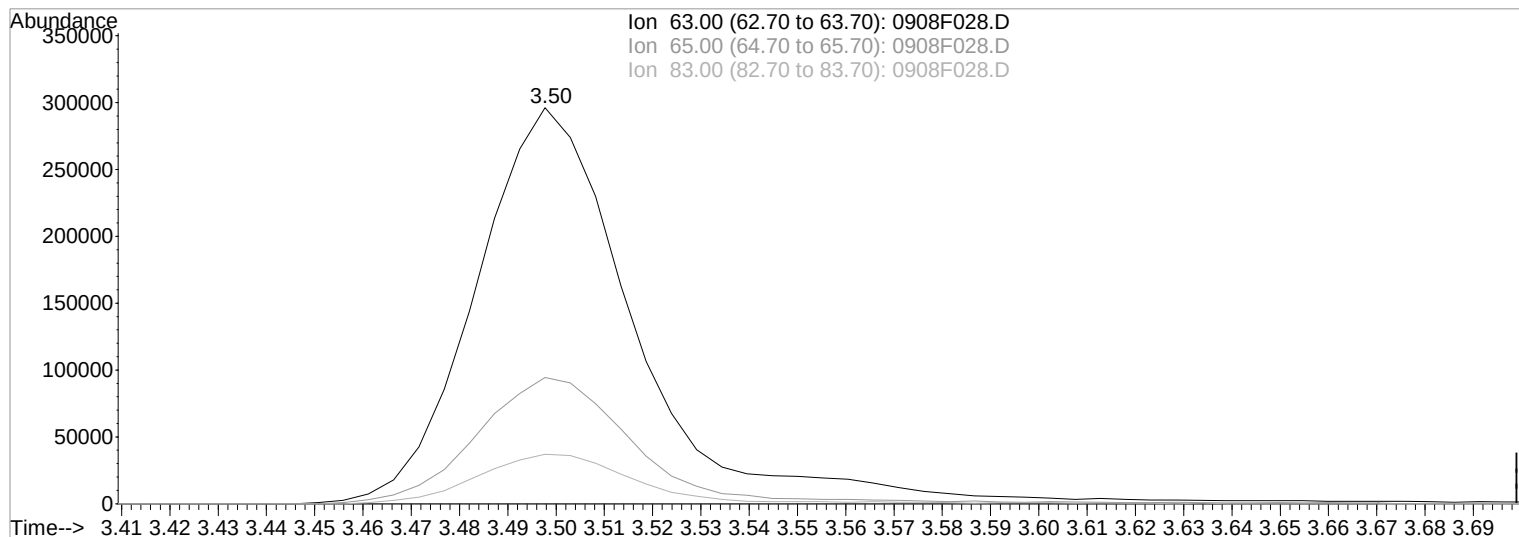
Quant Results File: temp.res

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Fri Sep 15 14:21:38 2023

Response via : Multiple Level Calibration



TIC: 0908F028.D

(27) 1,1-Dichloroethane (PT)

Manual Integration:

3.50min 10.21PPB

Before

response 685388

09/15/23

Ion	Exp%	Act%
63.00	100	100
65.00	32.70	31.87
83.00	12.70	12.52
0.00	0.00	0.00

Quantitation Report (Qedit)

1st *UK* 09/15/23
2nd *Q* 09/18/23

Data File : J:\MS23\DATA\091123\0908F028.D

Acq On : 12 Sep 2023 11:43 am

Sample : ICV

Misc :

MS Integration Params: rteint.p

Quant Time: Sep 15 14:25 2023

Vial: 21

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

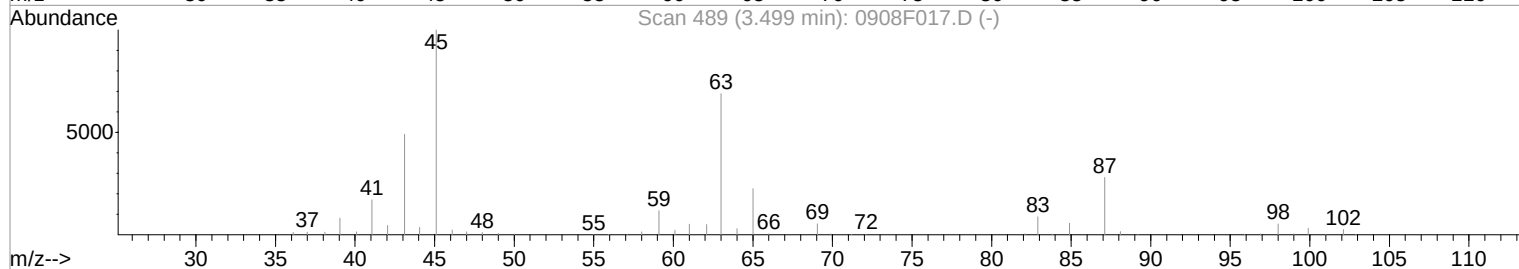
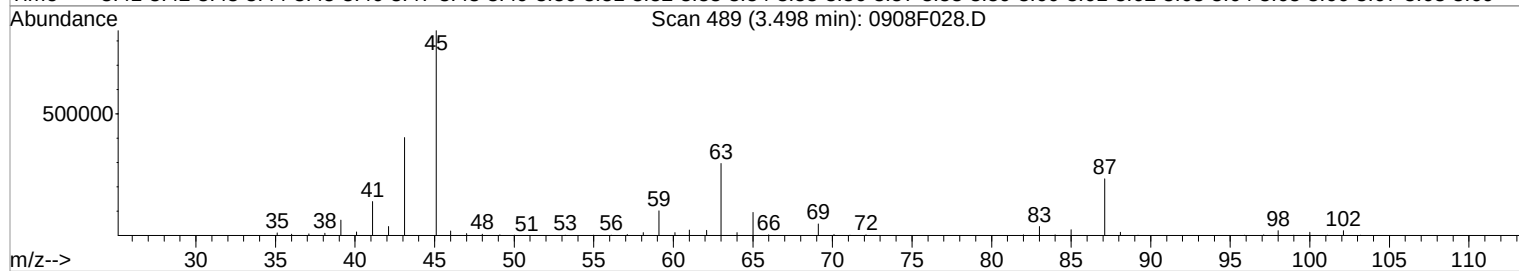
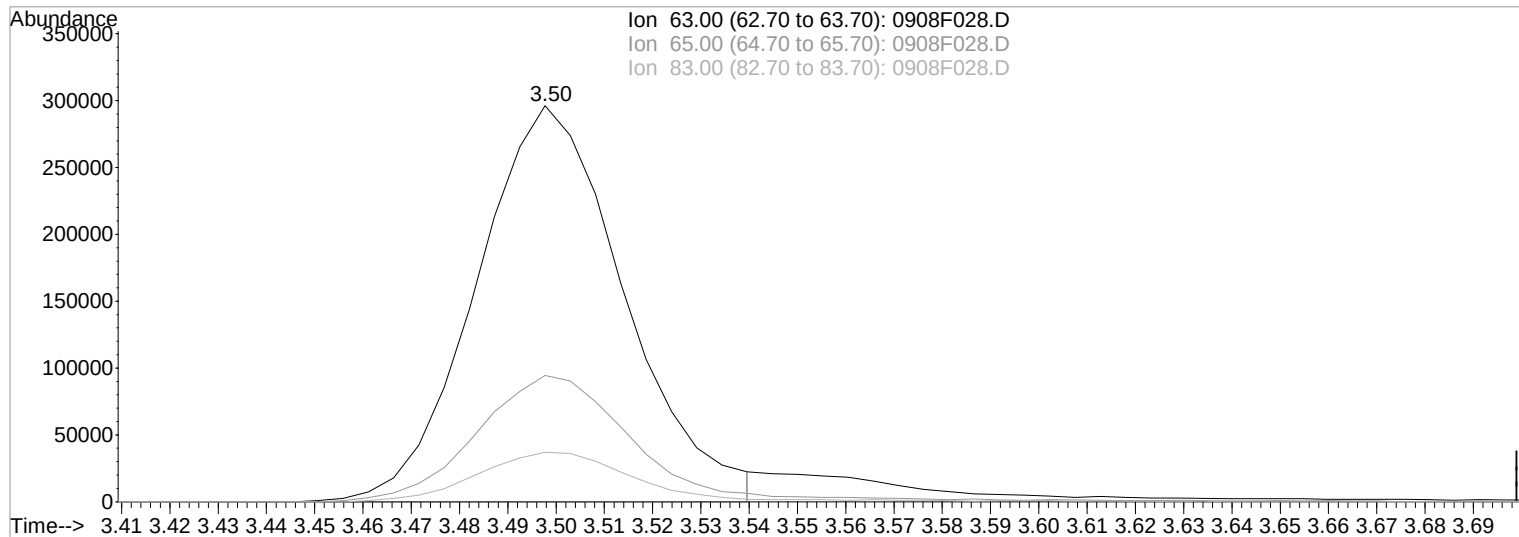
Quant Results File: temp.res

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Fri Sep 15 14:21:38 2023

Response via : Multiple Level Calibration



TIC: 0908F028.D

(27) 1,1-Dichloroethane (PT)

3.50min 9.38PPB m

response 629780

Ion	Exp%	Act%
-----	------	------

63.00	100	100
-------	-----	-----

65.00	32.70	31.87
-------	-------	-------

83.00	12.70	12.52
-------	-------	-------

0.00	0.00	0.00
------	------	------

Manual Integration:

After

Shoulder

09/15/23

Quantitation Report (Qedit)

1st *UK* 09/15/23
2nd *Q* 09/18/23

Data File : J:\MS23\DATA\091123\0908F028.D

Acq On : 12 Sep 2023 11:43 am

Sample : ICV

Misc :

MS Integration Params: rteint.p

Quant Time: Sep 15 14:25 2023

Vial: 21

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

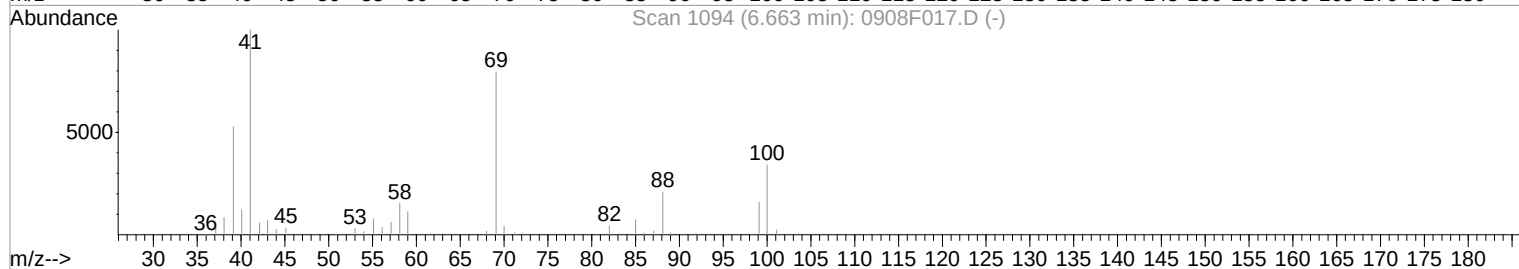
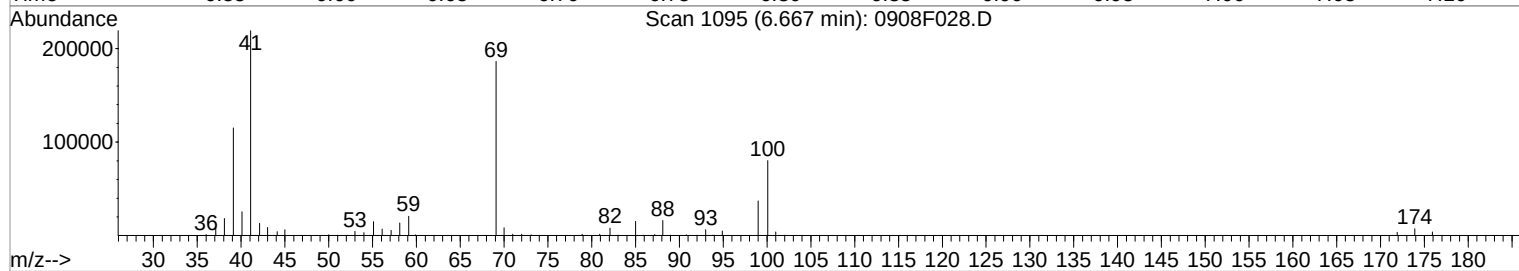
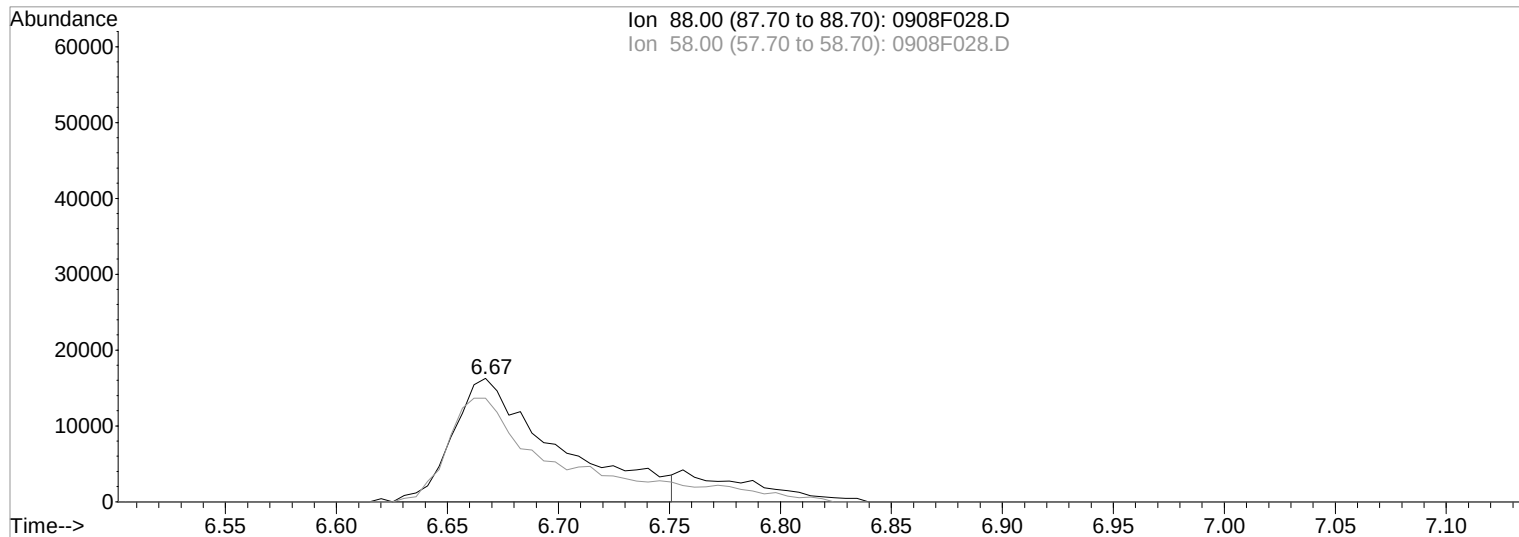
Quant Results File: temp.res

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Fri Sep 15 14:21:38 2023

Response via : Single Level Calibration



TIC: 0908F028.D

(56) 1,4-Dioxane (T)

Manual Integration:

6.67min 278.10PPB

Before

response 53245

Ion	Exp%	Act%
-----	------	------

09/15/23

88.00	100	100
-------	-----	-----

58.00	73.60	84.06
-------	-------	-------

0.00	0.00	0.00
------	------	------

0.00	0.00	0.00
------	------	------

Quantitation Report (Qedit)

1st *UK* 09/15/23
2nd *Q* 09/18/23

Data File : J:\MS23\DATA\091123\0908F028.D

Acq On : 12 Sep 2023 11:43 am

Sample : ICV

Misc :

MS Integration Params: rteint.p

Quant Time: Sep 15 14:26 2023

Vial: 21

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

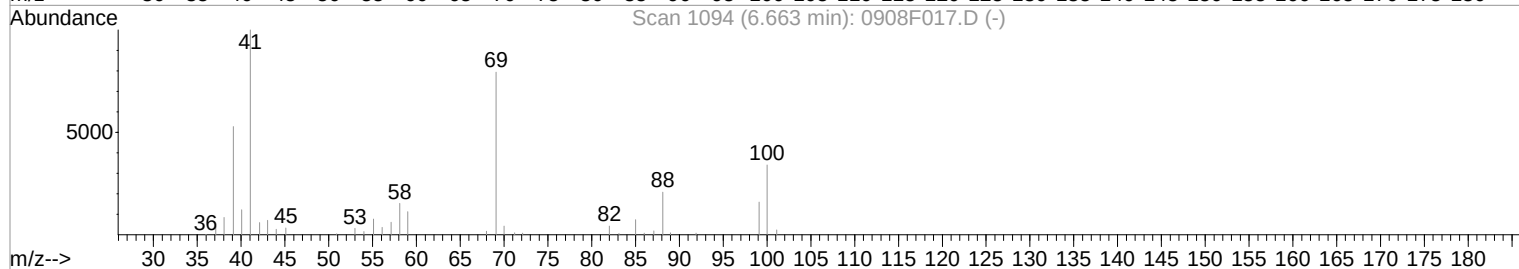
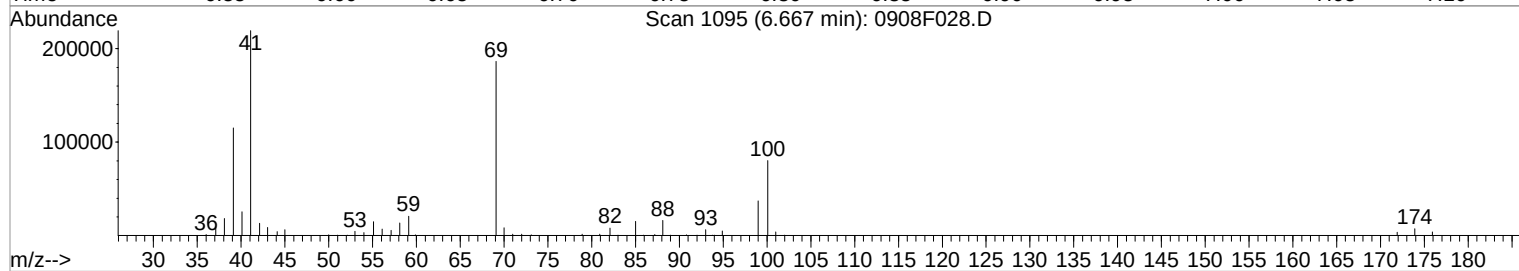
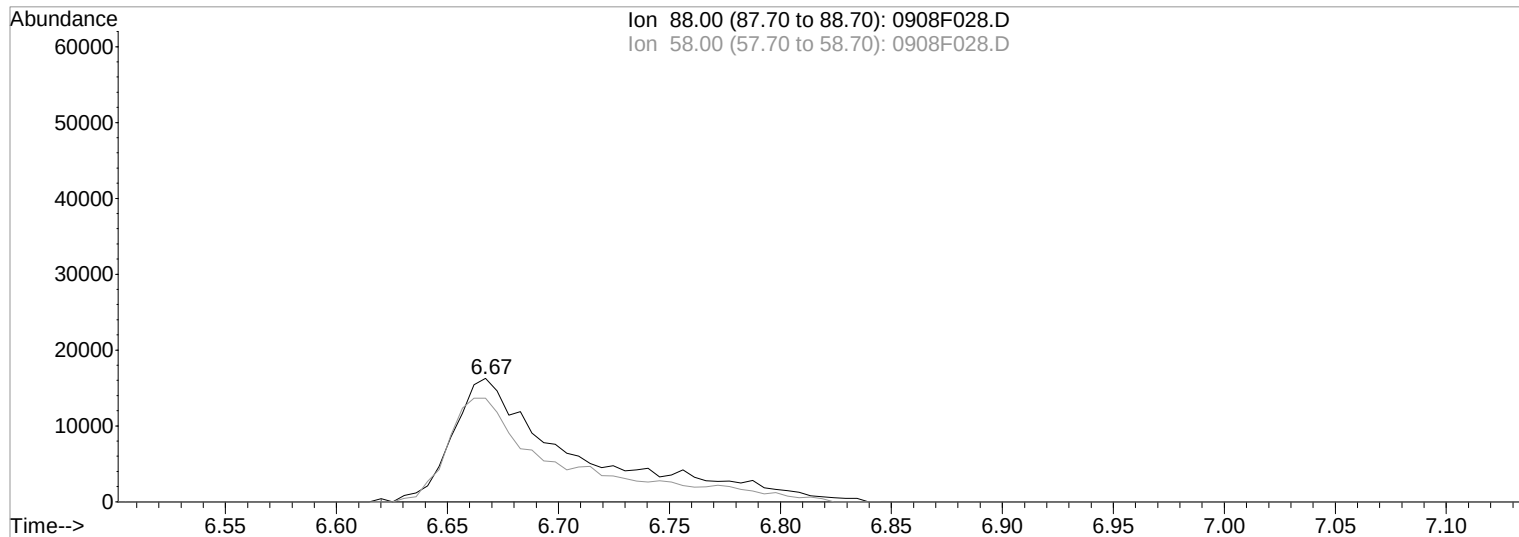
Quant Results File: temp.res

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Fri Sep 15 14:21:38 2023

Response via : Single Level Calibration



TIC: 0908F028.D

(56) 1,4-Dioxane (T)

Manual Integration:

6.67min 326.53PPB m

After

response 62517

Baseline correction

Ion	Exp%	Act%
-----	------	------

09/15/23

88.00	100	100
-------	-----	-----

58.00	73.60	84.06
-------	-------	-------

0.00	0.00	0.00
------	------	------

0.00	0.00	0.00
------	------	------

Quantitation Report (Qedit)

1st *UK* 09/15/23
2nd *Q* 09/18/23

Data File : J:\MS23\DATA\091123\0908F028.D

Acq On : 12 Sep 2023 11:43 am

Sample : ICV

Misc :

MS Integration Params: rteint.p

Quant Time: Sep 15 14:26 2023

Vial: 21

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

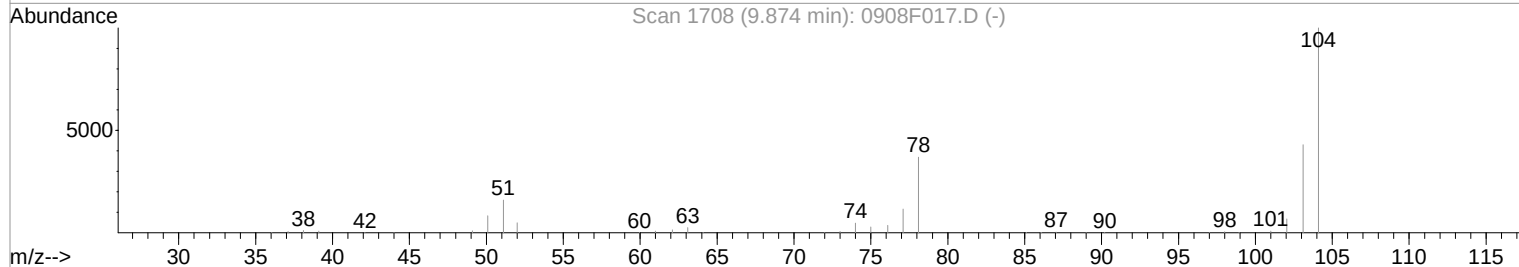
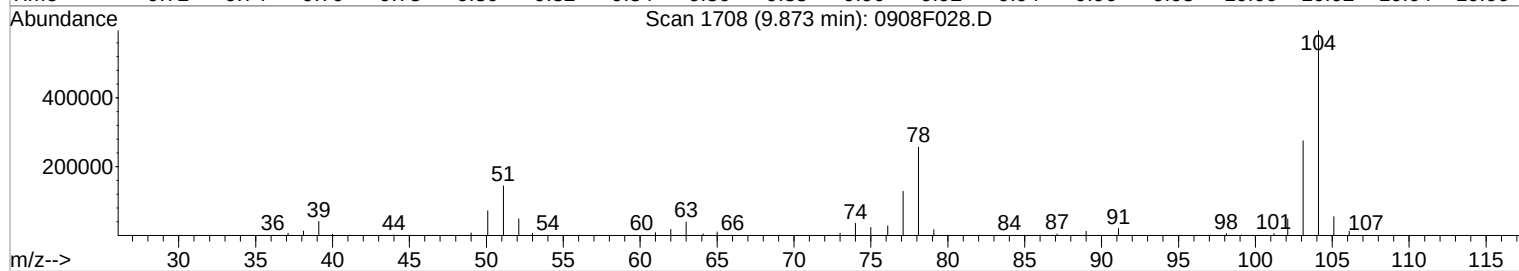
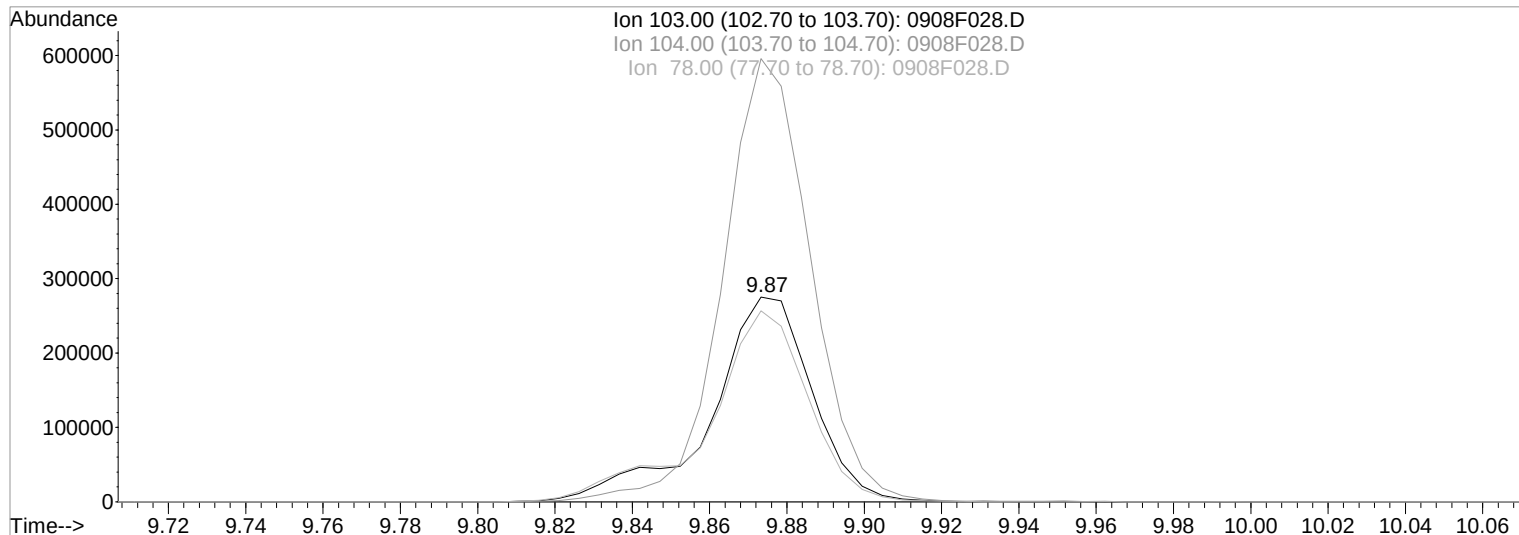
Quant Results File: temp.res

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Fri Sep 15 14:21:38 2023

Response via : Single Level Calibration



TIC: 0908F028.D

(80) Styrene (T)

Manual Integration:

9.87min 11.65PPB

Before

response 500738

Ion	Exp%	Act%
-----	------	------

09/15/23

103.00	100	100
--------	-----	-----

104.00	245.50	216.46
--------	--------	--------

78.00	102.00	93.21
-------	--------	-------

0.00	0.00	0.00
------	------	------

Data File : J:\MS23\DATA\091123\0908F028.D

Acq On : 12 Sep 2023 11:43 am

Sample : ICV

Misc :

MS Integration Params: rteint.p

Quant Time: Sep 15 14:26 2023

Vial: 21

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

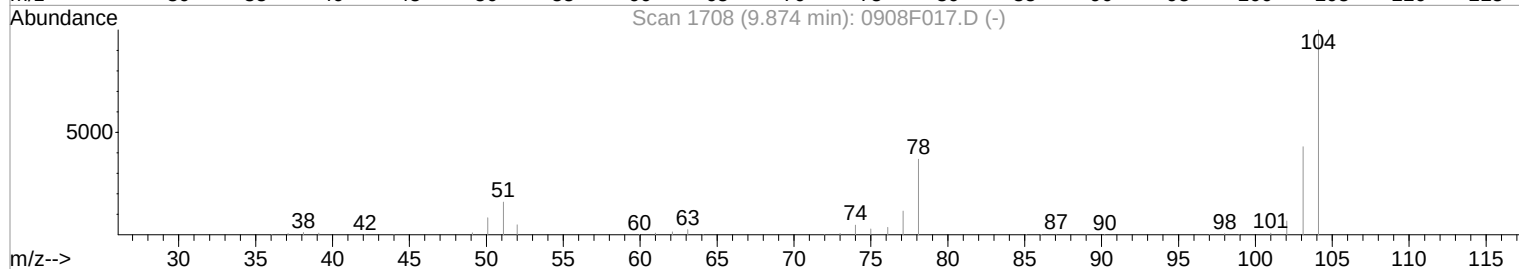
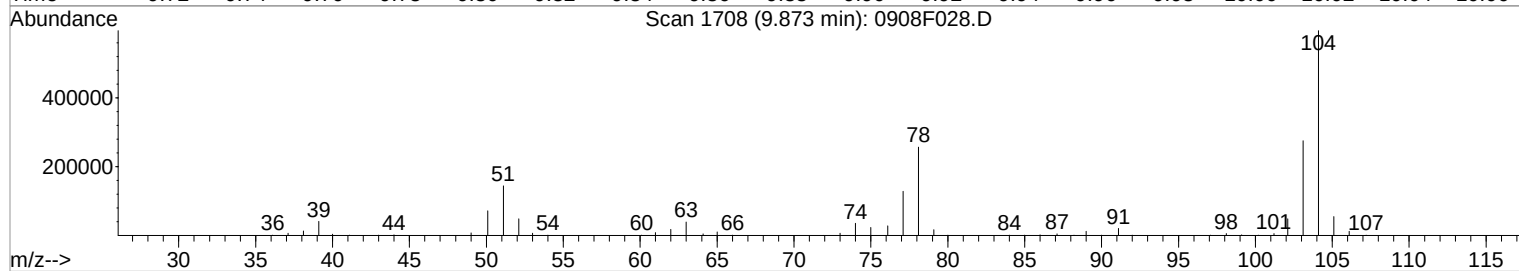
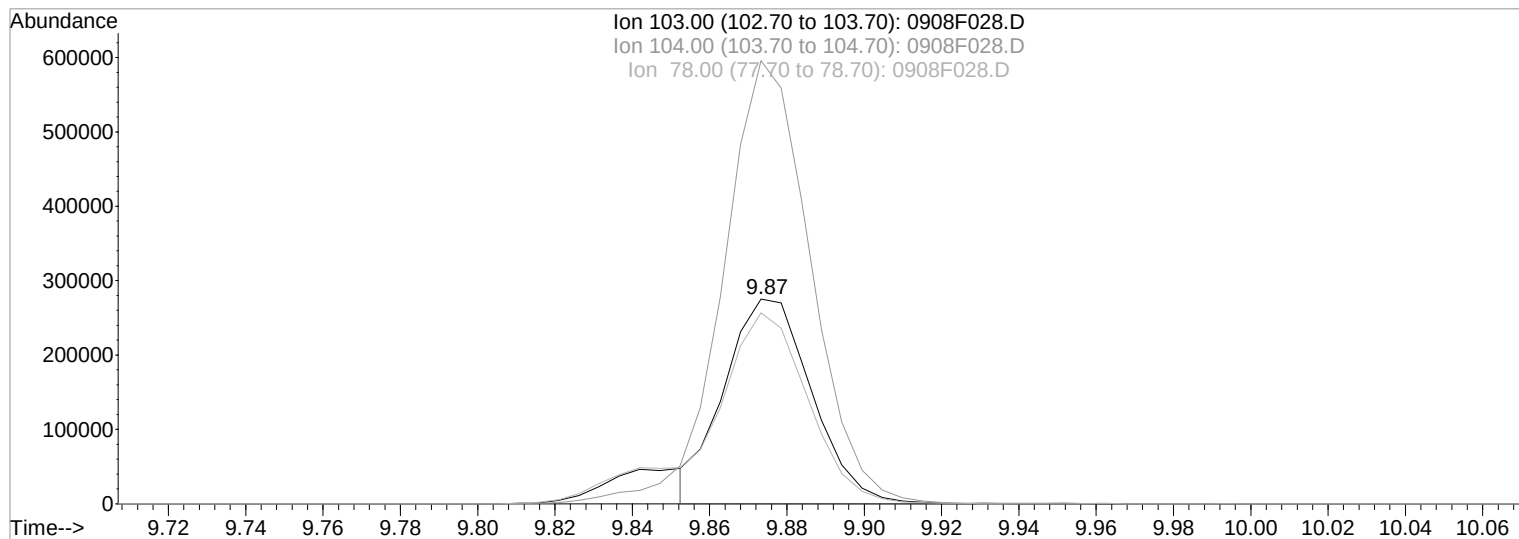
Quant Results File: temp.res

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Fri Sep 15 14:21:38 2023

Response via : Single Level Calibration



TIC: 0908F028.D

(80) Styrene (T)

9.87min 10.08PPB m

response 432999

Ion	Exp%	Act%
-----	------	------

103.00	100	100
--------	-----	-----

104.00	245.50	216.46
--------	--------	--------

78.00	102.00	93.21
-------	--------	-------

0.00	0.00	0.00
------	------	------

Manual Integration:

After

Shoulder

09/15/23

Data File : J:\MS23\DATA\091123\0908F029.D

Acq On : 12 Sep 2023 1:23 pm

Sample : ICV CLP

Misc :

Vial: 22

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Sep 15 15:27:15 2023

Quant Results File: 091123MS23_8260.RES

Quant Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Fri Sep 15 15:26:27 2023

Response via : Initial Calibration

DataAcq Meth : 8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	5.72	96	1347701	10.00	PPB	0.00
64) Chlorobenzene-d5	9.17	82	499014	10.00	PPB	0.00
85) 1,4-Dichlorobenzene-d4	11.59	152	382257	10.00	PPB	0.00

System Monitoring Compounds

43) Dibromofluoromethane	4.85	113	259097	9.43	PPB	0.00
Spiked Amount 10.000			Recovery	=	94.30%	
47) 1,2-Dichloroethane-d4	5.34	65	315469	10.29	PPB	0.00
Spiked Amount 10.000			Recovery	=	102.90%	
62) Toluene-d8	7.59	98	1225116	9.53	PPB	0.00
Spiked Amount 10.000			Recovery	=	95.30%	
84) 4-Bromofluorobenzene	10.42	95	398927	9.84	PPB	0.00
Spiked Amount 10.000			Recovery	=	98.40%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
18) Methyl Acetate	2.65	43	154575	7.12	PPB	95
41) Cyclohexane	4.75	56	525583m	8.20	PPB	
52) Methylcyclohexane	6.28	83	316369	6.68	PPB	98

Data File : J:\MS23\DATA\091123\0908F029.D

Acq On : 12 Sep 2023 1:23 pm

Sample : ICV CLP

Misc :

Vial: 22

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Sep 15 15:42 2023

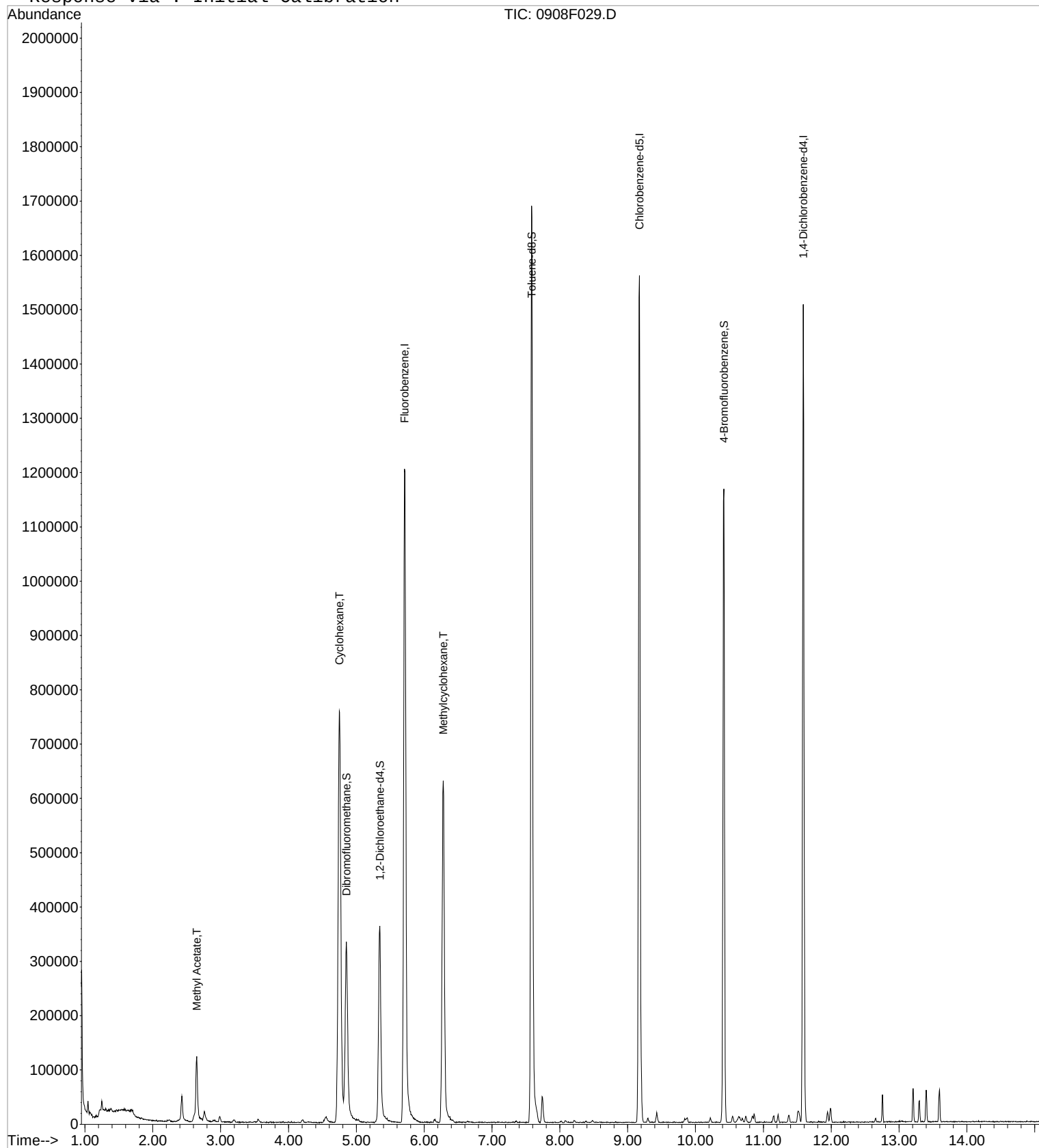
Quant Results File: 091123MS23_8260.RES

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Fri Sep 15 15:26:27 2023

Response via : Initial Calibration



Quantitation Report (Qedit)

1st *UK* 09/15/23
2nd *Q* 09/18/23

Data File : J:\MS23\DATA\091123\0908F029.D

Acq On : 12 Sep 2023 1:23 pm

Sample : ICV CLP

Misc :

MS Integration Params: rteint.p

Quant Time: Sep 15 15:42 2023

Vial: 22

Operator: EW/GH/MK/OT

Inst : MS23

Multiplr: 1.00

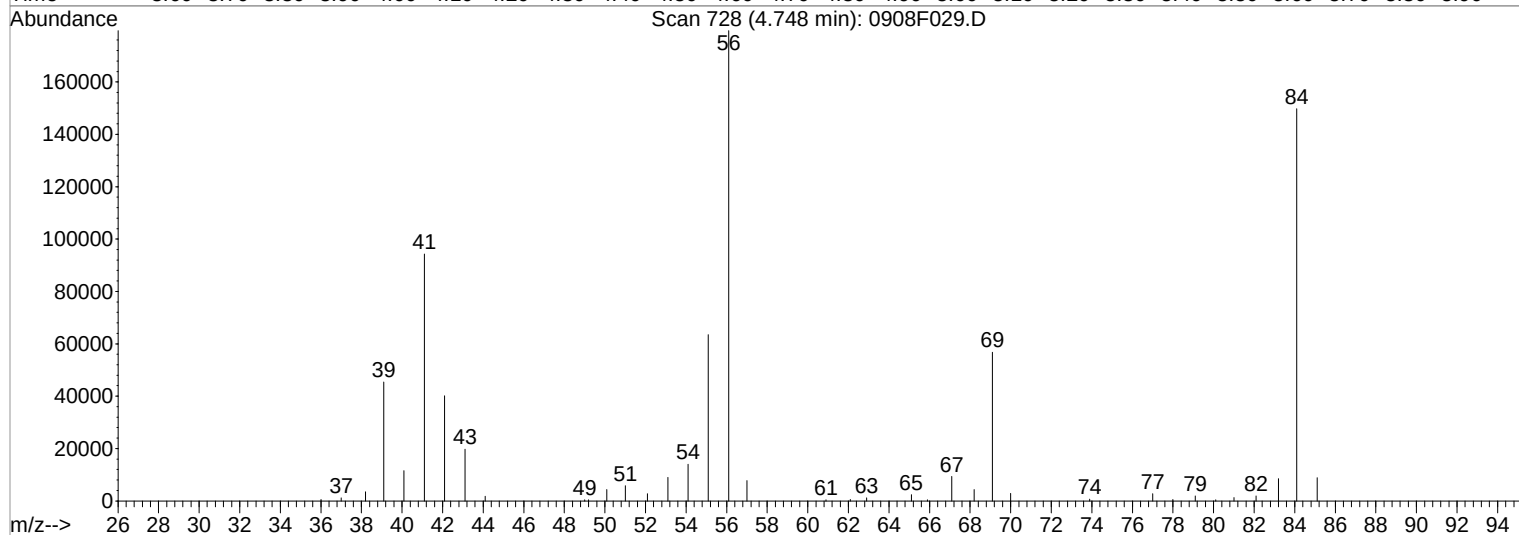
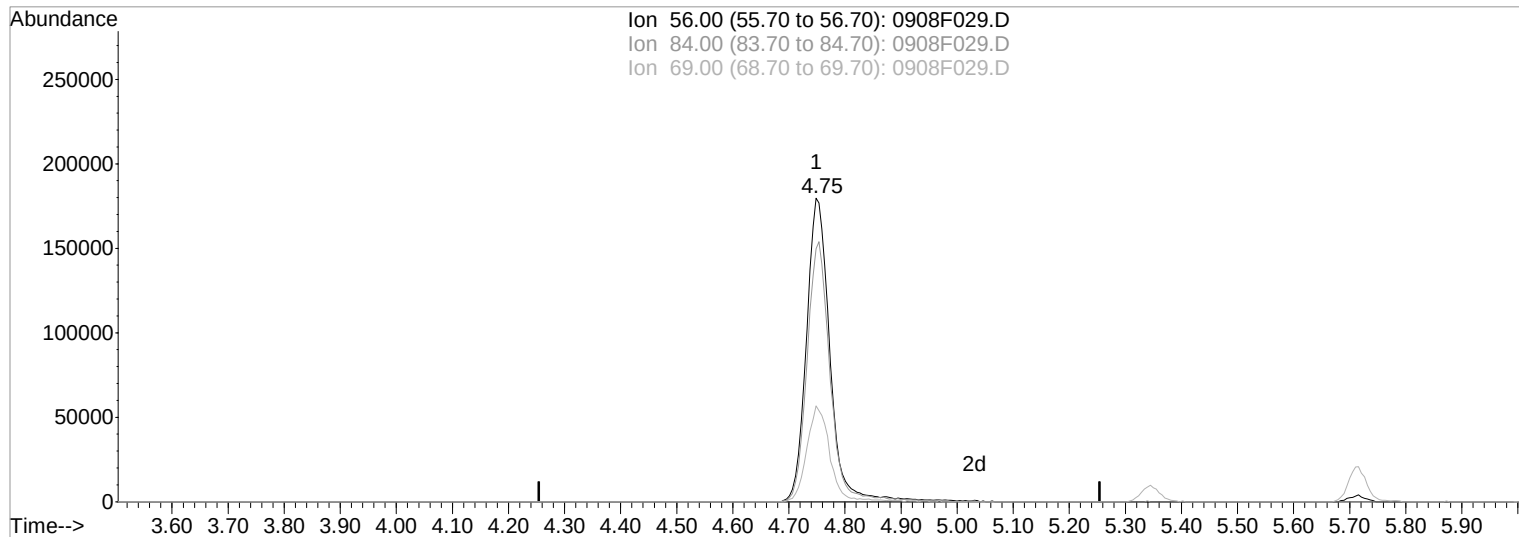
Quant Results File: temp.res

Method : J:\MS23\METHODS\091123MS23_8260.M (RTE Integrator)

Title : VOA MS23 EPA Method 8260C

Last Update : Fri Sep 15 15:26:27 2023

Response via : Multiple Level Calibration



TIC: 0908F029.D

(41) Cyclohexane (T)

4.75min 8.20PPB m

response 525583

Ion	Exp%	Act%
-----	------	------

56.00	100	100
-------	-----	-----

84.00	86.10	83.36
-------	-------	-------

69.00	30.20	31.59
-------	-------	-------

0.00	0.00	0.00
------	------	------

Manual Integration:

After

Accidentally deleted, reintegrated

09/15/23

Date: 12/22/23

ALS Environmental Injection Log MS23 - Agilent 5973

Tune File: BFB

By: JH

New Tune: yes

IS/SS Std. ID: 104V0A-41D

Run:

CCV/MRL Std ID: 104V0A-44A/32C

ICAL Date: 9/11/23

MS/DMS/LCS/ICV Std ID: 104V0A-43A/19A/27A/30D

Second RV:

LIMS ID: 828027

11/21/23

BFB Std. ID: 104V0A-47E

	Sample Name	File Name	Method	Dilution	pH<2	Comments
1	BFB Song	1222Foot	B260	None	ne	5ul → Sonul
2	Primer	7 3	7	7	7	
3	CCV	4				10/2.5ul → Sonul
4	LCS	5				10/1.5/7.5ul → Sonul
5	DLCs	6				7
6	IB	7				
7	MRL	8				0.5/6.5ul → Sonul
8	MB	9				
9	K2314281-1	10			42	
10	7 2	11			7	
11	14192-1	12				
12	7 3	13				
13	14245-1	14			3	rerun @ dil.
14	14294-1	15			42	
15	7 2	16			7	
16	7 3	17				
17	7 4	18				
18	7 5	19				
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						

10:01

6:43

Injection Log

Directory: J:\MS23\DATA\122223

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	1222f001.d	1.	PRIMER FIL 2		22 Dec 2023 08:56
2	1	1222f002.d	1.	BFB		22 Dec 2023 10:01
3	2	1222f003.d	1.	PRIMER		22 Dec 2023 10:27
4	3	1222f004.d	1.	CCV		22 Dec 2023 10:52
5	4	1222f005.d	1.	LCS		22 Dec 2023 11:16
6	5	1222f006.d	1.	DLCS		22 Dec 2023 11:40
7	6	1222f007.d	1.	IB		22 Dec 2023 13:38
8	7	1222f008.d	1.	MRL		22 Dec 2023 14:02
9	8	1222f009.d	1.	MB		22 Dec 2023 14:27
10	9	1222f010.d	1.	K2314281-001		22 Dec 2023 15:04
11	10	1222f011.d	1.	K2314281-002		22 Dec 2023 15:28
12	11	1222f012.d	1.	K2314192-001		22 Dec 2023 15:53
13	12	1222f013.d	1.	K2314192-003		22 Dec 2023 16:17
14	13	1222f014.d	1.	K2314245-001		22 Dec 2023 16:41
15	14	1222f015.d	1.	K2314294-001		22 Dec 2023 17:05
16	15	1222f016.d	1.	K2314294-002		22 Dec 2023 17:30
17	16	1222f017.d	1.	K2314294-003		22 Dec 2023 17:54
18	17	1222f018.d	1.	K2314294-004		22 Dec 2023 18:19
19	18	1222f019.d	1.	K2314294-005		22 Dec 2023 18:43
20	19	1222f020.d	1.	IB		22 Dec 2023 19:07
21	20	1222f021.d	1.	IB		22 Dec 2023 19:32
22	21	1222f022.d	1.	IB		22 Dec 2023 19:56



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January 24, 2024

Analytical Report for Service Request No: K2314283

Michael Pickering
Maul Foster & Alongi, Incorporated
6 Centerpointe Drive, Suite 360
Lake Oswego, OR 97035

RE: POP- PDX Taxiway A / M0232.17.089

Dear Michael,

Enclosed are the results of the sample(s) submitted to our laboratory December 20, 2023
For your reference, these analyses have been assigned our service request number **K2314283**.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3260. You may also contact me via email at Luke.Rahn@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Luke Rahn
Project Manager



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Semi-Volatile Petroleum Productsby Silica Gel Treated by GC/FID

Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS Compliant with Table B-24 of DOD QSM 5.4

Volatile Organic Compounds by GCMS

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Inorganic Data Qualifiers

- * The result is an outlier. See case narrative.
- # The control limit criteria is not applicable.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
- E The result is an estimate amount because the value exceeded the instrument calibration range.
- J The result is an estimated value.
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
DOD-QSM 4.2 definition : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- i The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
- X See case narrative.
- Q See case narrative. One or more quality control criteria was outside the limits.
- H The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

- # The control limit criteria is not applicable.
- J The result is an estimated value.
- E The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
- M The duplicate injection precision was not met.
- N The Matrix Spike sample recovery is not within control limits. See case narrative.
- S The reported value was determined by the Method of Standard Additions (MSA).
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
DOD-QSM 4.2 definition : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- W The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
- i The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
- X See case narrative.
- + The correlation coefficient for the MSA is less than 0.995.
- Q See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

- * The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- A A tentatively identified compound, a suspected aldol-condensation product.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
- C The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
- D The reported result is from a dilution.
- E The result is an estimated value.
- J The result is an estimated value.
- N The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
- P The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
DOD-QSM 4.2 definition : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- i The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
- X See case narrative.
- Q See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

- F The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
- L The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
- H The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
- O The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
- Y The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
- Z The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjllabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdwlabservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.

Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/analyte is offered by that state.



Case Narrative

ALS Environmental—Kelso Laboratory
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Phone (360)577- 7222 Fax (360)636- 1068
www.alsglobal.com

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A
Sample Matrix: Soil

Service Request: K2314283
Date Received: 12/20/2023

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier level IV requested by the client.

Sample Receipt:

Two soil samples were received for analysis at ALS Environmental on 12/20/2023. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Semivolatile GC:

Method NWTPH-Dx, 12/27/2023: The upper control criterion was exceeded for Diesel Range Organic (DRO) species in Laboratory Control Sample (LCS) KQ2322297-03. The analyte(s) in question were not detected in the associated field samples above the reporting limit. The error associated with elevated recovery indicated a high bias. The sample data was not significantly affected. No further corrective action was appropriate.

Metals:

Method 6020B, 01/05/2024: The Relative Percent Difference (RPD) for the replicate analysis of Arsenic and Cadmium in sample TA-01-S was outside the normal ALS control limits. The variability in the results was attributed to the heterogeneous character of the sample. Standard mixing techniques were used, but were not sufficient for complete homogenization of this sample.

Volatiles by GC/MS:

Acetone was flagged as outside the control criterion for Continuing Calibration Verification (CCV) KQ2322502-02. In accordance with the EPA Method, 80% or more of the CCV analytes must have passed within 20% of the true value. The remaining analytes are allowed a 40% difference as per the ALS SOP. The CCV met these criteria. No further corrective action was required.

Method 8260C, 12/22/2023: The upper control criterion was exceeded for Dichlorodifluoromethane and Trichlorofluoromethane (CFC 11) in Continuing Calibration Verification (CCV) KQ2322502-02. The field samples analyzed in this sequence did not contain the analytes in question. Since the apparent problem indicated a potential high bias, the data quality was not affected. No further corrective action was required.

Method 8260C, 12/22/2023: The upper control criterion was exceeded for Dichlorodifluoromethane in Laboratory Control Sample (LCS) KQ2322502-02. The analyte in question was not detected in the associated field samples. The error associated with elevated recovery indicated a high bias. The sample data was not significantly affected. No further corrective action was appropriate.

Organic LC:

The control criteria were exceeded for 13C2-4:2FTS and 13C2-6:2 FTS in Continuing Calibration Verification (CCV) KQ2400951-19. The recovery of the associated native analytes was within control criteria, which indicated the analysis was in control. No further corrective action was appropriate.

Approved by



Date

01/24/2024



Chain of Custody

ALS Environmental—Kelso Laboratory
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K2314283



MAUL FOSTER ALONGI

Client Name: Maul Foster & Alongi
Address: 3140 NE Broadway
City/State/Zip: Portland, OR 97232

Telephone Number: 971-227-2566

Project Manager: Michael Pickering

Analytical Lab: ALS

Project Name: POP - PDX Taxiway A

Report To: mpickering@maulfoster.com

Project Number: M0232.17.089

Page: 1 of 1

Sampler Name: C. Clough

Sample ID / Description	Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Field Filtered	Preservative						Matrix				1633/PFAS	Analyze For:				RUSH TAT (Pre-Schedule)	Standard TAT	Fax Results	Send QC with report			
							Ice	HNO ₃ (Red Label)	HCl (Blue Label)	NaOH (Orange Label)	H ₂ SO ₄ Plastic (Yellow Label)	H ₂ SO ₄ Glass (Yellow Label)	None (Black Label)	Groundwater	Wastewater	Drinking Water		Sludge	Soil	Other (specify):	RCRA 8 Metals (6020/7471)					VOCs by 8260C	TPH-Dx (SG)	
TA-01-S	12/20/23	1250	6	X			X									X		X	X	X						X		
TA-02-S	12/20/23	0200	6	X			X									X		X	X	X						X		
Special Instructions:	Bill to MFA using Port rates EQuIS 4-file EDD required with final report.															Laboratory Comments:												
No metals for TA-02-S																Temperature Upon Receipt: Sample Containers Intact? Y N VOCs Free of Headspace? Y N												
Relinquished by: Name/Company	Date	Time	Received by: Name/Company				Date	Time																				
CHRIS CLOUGH/MFA	12/20/23	1015	Daniel Sulcok/AUS				12/20/23	1015																				
Relinquished by: Name/Company	Date	Time	Received by: Name/Company				Date	Time																				
Devin 8/105	12/20/23	1345	Neele				12/20/23	1300																				
Relinquished by: Name/Company	Date	Time	Received by: Name/Company				Date	Time																				
Relinquished by: Name/Company	Date	Time	Received by: Name/Company				Date	Time																				

Cooler Receipt and Preservation Form

Client Mark Foster Service Request K2314283
 Received: 12/20/23 Opened: 12/20/23 By: RP Unloaded: 12/20/23 By: RP

- Samples were received via? USPS Fed Ex UPS DHL PDX Courier Hand Delivered
- Samples were received in: (circle) Cooler Box Envelope Other NA
- Were custody seals on coolers? NA Y N If yes, how many and where? _____
 If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / NA	Out of temp Indicate with "X"	PM Notified If out of temp	Tracking Number <u>NA</u>	Filed
<u>4.9</u>	<u>1201</u>						

- Was a Temperature Blank present in cooler? NA Y N If yes, notate the temperature in the appropriate column above:
 If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":
- Were samples received within the method specified temperature ranges? NA Y N
 If no, were they received on ice and same day as collected? If not, notate the cooler # above and notify the PM. NA Y N
- If applicable, tissue samples were received: Frozen Partially Thawed Thawed
- Packing material: Inserts Baggies Bubble Wrap Gel Packs Wet Ice Dry Ice Sleeves
- Were custody papers properly filled out (ink, signed, etc.)? NA Y N
- Were samples received in good condition (unbroken) NA Y N
- Were all sample labels complete (ie, analysis, preservation, etc.)? NA Y N
- Did all sample labels and tags agree with custody papers? NA Y N
- Were appropriate bottles/containers and volumes received for the tests indicated? NA Y N
- Were the pH-preserved bottles (see SMO GEN SOP) received at the appropriate pH? Indicate in the table below NA Y N
- Were VOA vials received without headspace? Indicate in the table below NA Y N
- Was C12/Res negative? NA Y N
- Were samples received within the method specified time limit? If not, notate the error below and notify the PM NA Y N
- Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? NA Y N Underfilled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Head- space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, Resolutions: _____



Metals

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ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Soil

Service Request: K2314283
Date Collected: 12/20/23 12:50
Date Received: 12/20/23 13:45

Sample Name: TA-01-S
Lab Code: K2314283-001

Basis: Dry

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	6020B	4.80	mg/Kg	0.55	0.07	5	01/05/24 08:48	12/22/23	
Barium	6020B	197	mg/Kg	0.055	0.022	5	01/05/24 08:48	12/22/23	
Cadmium	6020B	0.331	mg/Kg	0.022	0.008	5	01/05/24 08:48	12/22/23	
Chromium	6020B	26.8	mg/Kg	0.22	0.07	5	01/05/24 08:48	12/22/23	
Lead	6020B	10.1	mg/Kg	0.055	0.022	5	01/05/24 08:48	12/22/23	
Mercury	7471B	0.042	mg/Kg	0.022	0.002	1	12/28/23 11:17	12/27/23	
Selenium	6020B	0.5 J	mg/Kg	1.1	0.10	5	01/05/24 08:48	12/22/23	
Silver	6020B	0.111	mg/Kg	0.022	0.004	5	01/05/24 08:48	12/22/23	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Soil

Sample Name: Method Blank
Lab Code: KQ2322295-03

Service Request: K2314283
Date Collected: NA
Date Received: NA

Basis: Dry

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	6020B	ND U	mg/Kg	0.5	0.06	5	01/05/24 08:44	12/22/23	
Barium	6020B	ND U	mg/Kg	0.05	0.020	5	01/05/24 08:44	12/22/23	
Cadmium	6020B	ND U	mg/Kg	0.020	0.007	5	01/05/24 08:44	12/22/23	
Chromium	6020B	ND U	mg/Kg	0.20	0.06	5	01/05/24 08:44	12/22/23	
Lead	6020B	ND U	mg/Kg	0.05	0.020	5	01/05/24 08:44	12/22/23	
Selenium	6020B	ND U	mg/Kg	1.0	0.09	5	01/05/24 08:44	12/22/23	
Silver	6020B	ND U	mg/Kg	0.020	0.004	5	01/05/24 08:44	12/22/23	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Soil

Sample Name: Method Blank
Lab Code: KQ2322457-01

Service Request: K2314283
Date Collected: NA
Date Received: NA

Basis: Dry

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Mercury	7471B	ND U	mg/Kg	0.02	0.002	1	12/28/23 11:03	12/27/23	

ALS Group USA, Corp.

dba ALS Environmental

QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Soil

Service Request: K2314283
Date Collected: 12/20/23
Date Received: 12/20/23
Date Analyzed: 01/05/24

Replicate Sample Summary

Total Metals

Sample Name: TA-01-S
Lab Code: K2314283-001

Units: mg/Kg
Basis: Dry

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample	Average	RPD	RPD Limit
					KQ2322295-01 Result			
Arsenic	6020B	0.68	0.08	4.80	6.69	5.75	33 *	20
Barium	6020B	0.068	0.027	197	191	194	3	20
Cadmium	6020B	0.027	0.009	0.331	0.236	0.284	33 *	20
Chromium	6020B	0.27	0.08	26.8	25.4	26.1	5	20
Lead	6020B	0.068	0.027	10.1	10.3	10.2	1	20
Selenium	6020B	1.4	0.1	0.5 J	0.5 J	0.5	9	20
Silver	6020B	0.027	0.005	0.111	0.116	0.114	4	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp.

dba ALS Environmental

QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Soil

Service Request: K2314283
Date Collected: 12/20/23
Date Received: 12/20/23
Date Analyzed: 12/28/23

Replicate Sample Summary**Total Metals**

Sample Name: TA-01-S
Lab Code: K2314283-001

Units: mg/Kg
Basis: Dry

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample	Average	RPD	RPD Limit
					KQ2322457-03 Result			
Mercury	7471B	0.022	0.002	0.042	0.040	0.041	7	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Soil

Service Request: K2314283
Date Collected: 12/20/23
Date Received: 12/20/23
Date Analyzed: 01/5/24
Date Extracted: 12/22/23

Matrix Spike Summary
Total Metals

Sample Name: TA-01-S
Lab Code: K2314283-001
Analysis Method: 6020B
Prep Method: EPA 3050B

Units: mg/Kg
Basis: Dry

Matrix Spike
KQ2322295-02

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	4.80	121	120	97	75-125
Barium	197	441	241	102	75-125
Cadmium	0.331	11.5	12.0	93	75-125
Chromium	26.8	75.0	48.0	100	75-125
Lead	10.1	118	120	90	75-125
Selenium	0.5 J	117	120	97	75-125
Silver	0.111	11.5	12.0	94	75-125

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Soil

Service Request: K2314283
Date Collected: 12/20/23
Date Received: 12/20/23
Date Analyzed: 12/28/23
Date Extracted: 12/27/23

Matrix Spike Summary
Total Metals

Sample Name: TA-01-S
Lab Code: K2314283-001
Analysis Method: 7471B
Prep Method: Method

Units: mg/Kg
Basis: Dry

Matrix Spike
KQ2322457-04

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Mercury	0.042	0.632	0.557	106	80-120

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

ALS Group USA, Corp.
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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Soil

Service Request: K2314283
Date Analyzed: 01/05/24

Lab Control Sample Summary
Total Metals

Units:mg/Kg
Basis:Dry

Lab Control Sample
KQ2322295-04

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	6020B	101	100	101	80-120
Barium	6020B	196	200	98	80-120
Cadmium	6020B	9.65	10.0	97	80-120
Chromium	6020B	40.0	40.0	100	80-120
Lead	6020B	99.3	100	99	80-120
Selenium	6020B	102	100	102	80-120
Silver	6020B	10.0	10.0	100	80-120

ALS Group USA, Corp.
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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Soil

Service Request: K2314283
Date Analyzed: 12/28/23

Lab Control Sample Summary
Total Metals

Units:mg/Kg
Basis:Dry

Lab Control Sample
KQ2322457-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Mercury	7471B	0.529	0.500	106	80-120

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Prep Summary Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Soil

Service Request:K2314283

Metals

Prep Method: EPA 3050B
Analytical Method: 6020B

Extraction Lot: 431765
Extraction Date: 12/22/23 10:51

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Amount	Percent Solids
TA-01-S	K2314283-001	12/20/23	12/20/23	1.253 g	100 mL	
Duplicate	KQ2322295-01DUP	12/20/23	12/20/23	1.014 g	100 mL	
Matrix Spike	KQ2322295-02MS	12/20/23	12/20/23	1.145 g	100 mL	
Method Blank	KQ2322295-03MB	NA	NA	1.0000 g	100 mL	
Lab Control Sample	KQ2322295-04LCS	NA	NA	1.0000 g	100 mL	

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Prep Summary Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Soil

Service Request:K2314283

Metals

Prep Method: Method
Analytical Method: 7471B

Extraction Lot: 431884
Extraction Date: 12/27/23 10:16

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Amount	Percent Solids
TA-01-S	K2314283-001	12/20/23	12/20/23	0.6200 g	50 mL	
Method Blank	KQ2322457-01MB	NA	NA	0.5 g	50 mL	
Lab Control Sample	KQ2322457-02LCS	NA	NA	0.5 g	50 mL	
Duplicate	KQ2322457-03DUP	12/20/23	12/20/23	0.6300 g	50 mL	
Matrix Spike	KQ2322457-04MS	12/20/23	12/20/23	0.6180 g	50 mL	

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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request: K2314283

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Concentration Units: ug/L

Sample ID	Analyte	Method	Analysis Batch:	Result	True Value	% Rec	% Rec. Limits
ICV 12/28/23 07:56	Mercury	7471B	828359	4.99	5.00	100	90-110
CCV 12/28/23 08:01	Mercury	7471B	828359	4.88	5.00	98	90-110
CCV 12/28/23 08:25	Mercury	7471B	828359	4.79	5.00	96	90-110
CCV 12/28/23 08:53	Mercury	7471B	828359	4.79	5.00	96	90-110
CCV 12/28/23 09:14	Mercury	7471B	828359	4.78	5.00	96	90-110
ICV 12/28/23 10:14	Mercury	7471B	828359	4.89	5.00	98	90-110
CCV 12/28/23 10:19	Mercury	7471B	828359	4.97	5.00	99	90-110
CCV 12/28/23 10:40	Mercury	7471B	828359	4.88	5.00	98	90-110
CCV 12/28/23 11:10	Mercury	7471B	828359	4.79	5.00	96	90-110
CCV 12/28/23 11:59	Mercury	7471B	828359	4.64	5.00	93	90-110
CCV 12/28/23 12:58	Mercury	7471B	828359	4.64	5.00	93	90-110
ICV 01/05/24 07:48	Arsenic	6020B	828953	24.8	25.0	99	90-110
	Barium	6020B	828953	99.3	100	99	90-110
	Cadmium	6020B	828953	12.2	12.5	98	90-110
	Chromium	6020B	828953	9.97	10.0	100	90-110
	Lead	6020B	828953	24.9	25.0	99	90-110
	Selenium	6020B	828953	25.5	25.0	102	90-110
	Silver	6020B	828953	12.6	12.5	101	90-110
CCV 01/05/24 07:50	Arsenic	6020B	828953	25.3	25.0	101	90-110
	Barium	6020B	828953	24.9	25.0	100	90-110
	Cadmium	6020B	828953	24.9	25.0	99	90-110
	Chromium	6020B	828953	25.1	25.0	100	90-110
	Lead	6020B	828953	25.2	25.0	101	90-110
	Selenium	6020B	828953	24.9	25.0	99	90-110

ALS Group USA, Corp.
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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request: K2314283

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Concentration Units: ug/L

Sample ID	Analyte	Method	Analysis Batch:	Result	True Value	% Rec	% Rec. Limits
CCV 01/05/24 07:50	Silver	6020B	828953	12.4	12.5	99	90-110
CCV 01/05/24 08:39	Arsenic	6020B	828953	25.3	25.0	101	90-110
	Barium	6020B	828953	25.2	25.0	101	90-110
	Cadmium	6020B	828953	25.3	25.0	101	90-110
	Chromium	6020B	828953	25.2	25.0	101	90-110
	Lead	6020B	828953	25.0	25.0	100	90-110
	Selenium	6020B	828953	25.3	25.0	101	90-110
	Silver	6020B	828953	12.6	12.5	101	90-110
CCV 01/05/24 09:03	Arsenic	6020B	828953	25.3	25.0	101	90-110
	Barium	6020B	828953	24.9	25.0	100	90-110
	Cadmium	6020B	828953	24.9	25.0	100	90-110
	Chromium	6020B	828953	25.4	25.0	101	90-110
	Lead	6020B	828953	25.1	25.0	100	90-110
	Selenium	6020B	828953	25.1	25.0	100	90-110
	Silver	6020B	828953	12.4	12.5	99	90-110
CCV 01/05/24 09:23	Arsenic	6020B	828953	24.9	25.0	100	90-110
	Barium	6020B	828953	24.8	25.0	99	90-110
	Cadmium	6020B	828953	24.5	25.0	98	90-110
	Chromium	6020B	828953	24.9	25.0	100	90-110
	Lead	6020B	828953	24.7	25.0	99	90-110
	Selenium	6020B	828953	25.3	25.0	101	90-110
	Silver	6020B	828953	12.3	12.5	98	90-110

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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request: K2314283

INITIAL AND CONTINUING CALIBRATION BLANKS

Concentration Units: ug/L

Sample ID		Method	Analysis Batch:	Result	C
Analyte					
ICB	12/28/23 07:58				
	Mercury	7471B	828359	0.02	U
CCB	12/28/23 08:02				
	Mercury	7471B	828359	0.02	U
CCB	12/28/23 08:27				
	Mercury	7471B	828359	0.02	U
CCB	12/28/23 08:55				
	Mercury	7471B	828359	0.02	U
CCB	12/28/23 09:15				
	Mercury	7471B	828359	0.02	U
ICB	12/28/23 10:16				
	Mercury	7471B	828359	0.02	U
CCB	12/28/23 10:21				
	Mercury	7471B	828359	0.02	U
CCB	12/28/23 10:41				
	Mercury	7471B	828359	0.02	U
CCB	12/28/23 11:12				
	Mercury	7471B	828359	0.02	U
CCB	12/28/23 12:02				
	Mercury	7471B	828359	-0.0440	J
CCB	12/28/23 12:59				
	Mercury	7471B	828359	0.02	U
ICB	01/05/24 07:52				
	Arsenic	6020B	828953	0.1	U
	Barium	6020B	828953	0.04	U
	Cadmium	6020B	828953	0.014	U
	Chromium	6020B	828953	0.12	U
	Lead	6020B	828953	0.04	U
	Selenium	6020B	828953	0.2	U
	Silver	6020B	828953	0.008	U
CCB	01/05/24 07:55				
	Arsenic	6020B	828953	0.1	U
	Barium	6020B	828953	0.04	U
	Cadmium	6020B	828953	0.014	U
	Chromium	6020B	828953	0.12	U
	Lead	6020B	828953	0.04	U
	Selenium	6020B	828953	0.2	U

ALS Group USA, Corp.
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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request: K2314283

INITIAL AND CONTINUING CALIBRATION BLANKS

Concentration Units: ug/L

Sample ID

Analyte	Method	Analysis Batch:	Result	C
CCB 01/05/24 07:55				
Silver	6020B	828953	0.008	U
CCB 01/05/24 08:42				
Arsenic	6020B	828953	0.1	U
Barium	6020B	828953	0.04	U
Cadmium	6020B	828953	0.014	U
Chromium	6020B	828953	0.12	U
Lead	6020B	828953	0.04	U
Selenium	6020B	828953	0.2	U
Silver	6020B	828953	0.008	U
CCB 01/05/24 09:05				
Arsenic	6020B	828953	0.1	U
Barium	6020B	828953	0.04	U
Cadmium	6020B	828953	0.014	U
Chromium	6020B	828953	0.12	U
Lead	6020B	828953	0.04	U
Selenium	6020B	828953	0.2	U
Silver	6020B	828953	0.008	U
CCB 01/05/24 09:25				
Arsenic	6020B	828953	0.1	U
Barium	6020B	828953	0.04	U
Cadmium	6020B	828953	0.014	U
Chromium	6020B	828953	0.12	U
Lead	6020B	828953	0.04	U
Selenium	6020B	828953	0.2	U
Silver	6020B	828953	0.008	U

ALS Group USA, Corp.
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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request: K2314283

LOW LEVEL INITIAL AND LOW LEVEL CONTINUING CALIBRATION VERIFICATION

Concentration Units: ug/L

Sample ID	Analyte	Method	Analysis Batch:	Result	True Value	% Rec	% Rec. Limits	Analysis Date
LLICV								
	Mercury	7471B	828359	0.18	0.2	92	50-150	12/28/23 07:59
LLICV								
	Mercury	7471B	828359	0.17	0.2	87	50-150	12/28/23 10:18
LLICVS								
	Arsenic	6020B	828953	0.96	1.0	96	80-120	01/05/24 07:57
	Barium	6020B	828953	0.10	0.1	100	80-120	01/05/24 07:57
	Cadmium	6020B	828953	0.037	0.04	92	80-120	01/05/24 07:57
	Chromium	6020B	828953	0.40	0.4	99	80-120	01/05/24 07:57
	Lead	6020B	828953	0.086	0.1	86	80-120	01/05/24 07:57
	Selenium	6020B	828953	1.9	2.0	95	80-120	01/05/24 07:57
	Silver	6020B	828953	0.039	0.04	96	80-120	01/05/24 07:57
LLCCVS								
	Arsenic	6020B	828953	0.96	1.0	96	70-130	01/05/24 09:27
	Barium	6020B	828953	0.11	0.1	107	70-130	01/05/24 09:27
	Cadmium	6020B	828953	0.040	0.04	100	70-130	01/05/24 09:27
	Chromium	6020B	828953	0.41	0.4	102	70-130	01/05/24 09:27
	Lead	6020B	828953	0.087	0.1	87	70-130	01/05/24 09:27
	Selenium	6020B	828953	2.0	2.0	100	70-130	01/05/24 09:27
	Silver	6020B	828953	0.039	0.04	97	70-130	01/05/24 09:27

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request: K2314283

ICP INTERFERENCE CHECK SAMPLE

Sample ID ICSA **Concentration Units:** ug/L

Analyte	Method	Analysis Batch:	Result	True Value	% Rec	% Rec. Limits	Analysis Date
Arsenic	6020B	828953	0.1	-	-	-	01/05/24 08:13
Barium	6020B	828953	0.15	-	-	-	01/05/24 08:13
Cadmium	6020B	828953	0.435	-	-	-	01/05/24 08:13
Chromium	6020B	828953	0.25	-	-	-	01/05/24 08:13
Lead	6020B	828953	0.23	-	-	-	01/05/24 08:13
Selenium	6020B	828953	0.07	-	-	-	01/05/24 08:13
Silver	6020B	828953	0.009	-	-	-	01/05/24 08:13

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request: K2314283

ICP INTERFERENCE CHECK SAMPLE

Sample ID ICSAB **Concentration Units:** ug/L

Analyte	Method	Analysis Batch:	Result	True Value	% Rec	% Rec. Limits	Analysis Date
Arsenic	6020B	828953	24.8	25.0	99	80-120	01/05/24 08:15
Barium	6020B	828953	0.18	-	-	-	01/05/24 08:15
Cadmium	6020B	828953	23.7	25.0	95	80-120	01/05/24 08:15
Chromium	6020B	828953	47.8	50.0	96	80-120	01/05/24 08:15
Lead	6020B	828953	0.22	-	-	-	01/05/24 08:15
Selenium	6020B	828953	23.5	25.0	94	80-120	01/05/24 08:15
Silver	6020B	828953	12.0	12.5	96	80-120	01/05/24 08:15

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request: K2314283

POST SPIKE SAMPLE RECOVERY

Concentration Units: ug/L

Sample ID				Initial Sample Result	Post Spike Result	True Value	% Rec	% Rec. Limits	Analysis Date
Analyte	Method	Analysis Batch:							
K2314283-001A									
Mercury	7471B	828359		0.38	5.59	5.00	104	80-120	12/28/23 11:51
K2314283-001A									
Arsenic	6020B	828953		8.7	61.4	50.0	105	75-125	01/05/24 08:55
Barium	6020B	828953		359	434	50.0	150 #	75-125	01/05/24 08:55
Cadmium	6020B	828953		0.60	51.4	50.0	102	75-125	01/05/24 08:55
Chromium	6020B	828953		48.9	105	50.0	113	75-125	01/05/24 08:55
Lead	6020B	828953		18.5	68.8	50.0	101	75-125	01/05/24 08:55
Selenium	6020B	828953		0.9 J	51	50	100	75-125	01/05/24 08:55
Silver	6020B	828953		0.20	10.6	10.0	104	75-125	01/05/24 08:55

Results flagged with a pound (#) indicate the control criteria is not applicable.

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request: K2314283

ICP SERIAL DILUTIONS

Concentration Units: ug/L

Sample ID				Initial Sample Result	Serial Dillution Result	% Diff	% Diff. Limit	Analysis Date
Analyte	Method	Analysis Batch:						
K2314283-001SDL								
Arsenic	6020B	828953		44	45	2	10	01/05/24 08:53
Barium	6020B	828953		1790	1770	1	10	01/05/24 08:53
Cadmium	6020B	828953		3.0	3.1	3	10	01/05/24 08:53
Chromium	6020B	828953		244	246	1	10	01/05/24 08:53
Lead	6020B	828953		92.3	100	9	10	01/05/24 08:53
Selenium	6020B	828953		4	6 J	25	10	01/05/24 08:53
Silver	6020B	828953		1.0	1.0	2	10	01/05/24 08:53

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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request: K2314283

Detection Limits

Instrument: K-CVAA-04

Matrix: Soil

Analyte	Wavelength (nm)	Units	MRL	MDL	Method
Mercury	253	ug/L	0.2	0.02	7471B

ALS Group USA, Corp.
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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request: K2314283

Detection Limits

Instrument: K-ICP-MS-05

Matrix: Soil

Analyte	Mass	Units	MRL	MDL	Method
Arsenic	75	ug/L	1	0.12	6020B
Barium	137	ug/L	0.1	0.04	6020B
Cadmium	111	ug/L	0.04	0.014	6020B
Chromium	52	ug/L	0.4	0.12	6020B
Lead	208	ug/L	0.1	0.04	6020B
Selenium	78	ug/L	2	0.18	6020B
Silver	107	ug/L	0.04	0.008	6020B

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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request: K2314283

ICP Linear Range (Quarterly)

Instrument: K-ICP-MS-05

Analyte	Concentration (ug/L)	Method
Arsenic 75	3600	6020B
Barium 137	3600	6020B
Cadmium 111	3600	6020B
Chromium 52	3600	6020B
Lead 208	3600	6020B
Selenium 78	3600	6020B
Silver 107	180	6020B

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request: K2314283

Analysis Run Log

Instrument ID: K-CVAA-04

Analytical BatchID: 828359

Sample	Dilution Factor	Date/Time	H g
ZZZZZZ	1	12/28/23 07:46	
ZZZZZZ	1	12/28/23 07:48	
ZZZZZZ	1	12/28/23 07:49	
ZZZZZZ	1	12/28/23 07:51	
ZZZZZZ	1	12/28/23 07:53	
ZZZZZZ	1	12/28/23 07:54	
ICV1	1	12/28/23 07:56	X
ICB1	1	12/28/23 07:58	X
LLICV1	1	12/28/23 07:59	X
CCV1	1	12/28/23 08:01	X
CCB1	1	12/28/23 08:02	X
ZZZZZZ	1	12/28/23 08:04	
ZZZZZZ	1	12/28/23 08:06	
ZZZZZZ	1	12/28/23 08:07	
ZZZZZZ	1	12/28/23 08:10	
ZZZZZZ	1	12/28/23 08:14	
ZZZZZZ	1	12/28/23 08:17	
ZZZZZZ	1	12/28/23 08:19	
ZZZZZZ	1	12/28/23 08:20	
ZZZZZZ	1	12/28/23 08:22	
ZZZZZZ	1	12/28/23 08:24	
CCV2	1	12/28/23 08:25	X
CCB2	1	12/28/23 08:27	X
ZZZZZZ	1	12/28/23 08:28	
ZZZZZZ	1	12/28/23 08:32	
ZZZZZZ	1	12/28/23 08:40	
ZZZZZZ	1	12/28/23 08:42	
ZZZZZZ	1	12/28/23 08:44	
ZZZZZZ	1	12/28/23 08:45	
ZZZZZZ	1	12/28/23 08:47	
ZZZZZZ	1	12/28/23 08:48	
ZZZZZZ	1	12/28/23 08:50	
ZZZZZZ	1	12/28/23 08:52	
CCV3	1	12/28/23 08:53	X
CCB3	1	12/28/23 08:55	X
ZZZZZZ	1	12/28/23 08:57	
ZZZZZZ	1	12/28/23 08:58	

ALS Group USA, Corp.
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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request: K2314283

Analysis Run Log

Instrument ID: K-CVAA-04

Analytical BatchID: 828359

Sample	Dilution Factor	Date/Time	H g
ZZZZZZ	1	12/28/23 09:00	
ZZZZZZ	1	12/28/23 09:01	
ZZZZZZ	1	12/28/23 09:03	
ZZZZZZ	1	12/28/23 09:05	
ZZZZZZ	1	12/28/23 09:06	
ZZZZZZ	1	12/28/23 09:08	
ZZZZZZ	1	12/28/23 09:10	
ZZZZZZ	1	12/28/23 09:12	
CCV4	1	12/28/23 09:14	X
CCB4	1	12/28/23 09:15	X
ZZZZZZ	1	12/28/23 09:20	
ZZZZZZ	1	12/28/23 09:21	
ZZZZZZ	1	12/28/23 09:23	
ZZZZZZ	1	12/28/23 09:25	
ZZZZZZ	1	12/28/23 09:32	
ZZZZZZ	1	12/28/23 09:36	
ZZZZZZ	2	12/28/23 09:44	
ZZZZZZ	2	12/28/23 09:46	
ZZZZZZ	2	12/28/23 09:48	
ZZZZZZ	2	12/28/23 09:56	
ZZZZZZ	1	12/28/23 09:58	
ZZZZZZ	1	12/28/23 10:02	
ZZZZZZ	1	12/28/23 10:05	
ZZZZZZ	1	12/28/23 10:06	
ZZZZZZ	1	12/28/23 10:08	
ZZZZZZ	1	12/28/23 10:09	
ZZZZZZ	1	12/28/23 10:11	
ZZZZZZ	1	12/28/23 10:13	
ICV2	1	12/28/23 10:14	X
ICB2	1	12/28/23 10:16	X
LLICV2	1	12/28/23 10:18	X
CCV1	1	12/28/23 10:19	X
CCB1	1	12/28/23 10:21	X
ZZZZZZ	1	12/28/23 10:22	
ZZZZZZ	1	12/28/23 10:24	
ZZZZZZ	2	12/28/23 10:26	
ZZZZZZ	2	12/28/23 10:28	

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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request: K2314283

Analysis Run Log

Instrument ID: K-CVAA-04

Analytical BatchID: 828359

Sample	Dilution Factor	Date/Time	H g
ZZZZZZ	2	12/28/23 10:29	
ZZZZZZ	2	12/28/23 10:31	
ZZZZZZ	2	12/28/23 10:32	
ZZZZZZ	2	12/28/23 10:34	
ZZZZZZ	1	12/28/23 10:36	
ZZZZZZ	1	12/28/23 10:38	
CCV2	1	12/28/23 10:40	X
CCB2	1	12/28/23 10:41	X
ZZZZZZ	1	12/28/23 10:43	
ZZZZZZ	1	12/28/23 10:45	
ZZZZZZ	1	12/28/23 10:46	
ZZZZZZ	1	12/28/23 10:58	
ZZZZZZ	1	12/28/23 11:00	
ZZZZZZ	1	12/28/23 11:02	
KQ2322457-01MB	1	12/28/23 11:03	X
KQ2322457-02LCS	1	12/28/23 11:05	X
ZZZZZZ	1	12/28/23 11:07	
ZZZZZZ	1	12/28/23 11:09	
CCV3	1	12/28/23 11:10	X
CCB3	1	12/28/23 11:12	X
ZZZZZZ	1	12/28/23 11:14	
ZZZZZZ	1	12/28/23 11:15	
K2314283-001	1	12/28/23 11:17	X
K2314283-001DUP	1	12/28/23 11:19	X
K2314283-001MS	1	12/28/23 11:20	X
K2314283-001PS	1	12/28/23 11:51	X
ZZZZZZ	1	12/28/23 11:53	
ZZZZZZ	1	12/28/23 11:54	
ZZZZZZ	1	12/28/23 11:56	
ZZZZZZ	1	12/28/23 11:58	
CCV4	1	12/28/23 11:59	X
CCB4	1	12/28/23 12:02	X
ZZZZZZ	1	12/28/23 12:04	
ZZZZZZ	1	12/28/23 12:05	
ZZZZZZ	1	12/28/23 12:07	
ZZZZZZ	1	12/28/23 12:09	
ZZZZZZ	1	12/28/23 12:10	

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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request: K2314283

Analysis Run Log

Instrument ID: K-CVAA-04

Analytical BatchID: 828359

Sample	Dilution Factor	Date/Time	H g
ZZZZZZ	1	12/28/23 12:56	
CCV5	1	12/28/23 12:58	X
CCB5	1	12/28/23 12:59	X

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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request: K2314283

Analysis Run Log

Instrument ID: K-ICP-MS-05

Analytical BatchID: 828953

Sample	Dilution Factor	Date/Time	A s	B a	C d	C r	P b	S e	A g
ZZZZZZ	1	01/05/24 07:44							
ZZZZZZ	1	01/05/24 07:46							
ICV	1	01/05/24 07:48	X	X	X	X	X	X	X
CCV	1	01/05/24 07:50	X	X	X	X	X	X	X
ICB	1	01/05/24 07:52	X	X	X	X	X	X	X
CCB	1	01/05/24 07:55	X	X	X	X	X	X	X
LLICVS	1	01/05/24 07:57	X	X	X	X	X	X	X
ZZZZZZ	1	01/05/24 08:04							
ZZZZZZ	1	01/05/24 08:06							
ICSA	1	01/05/24 08:13	X	X	X	X	X	X	X
ICSAB	1	01/05/24 08:15	X	X	X	X	X	X	X
ZZZZZZ	1	01/05/24 08:17							
ZZZZZZ	5	01/05/24 08:22							
ZZZZZZ	20	01/05/24 08:24							
ZZZZZZ	5	01/05/24 08:26							
ZZZZZZ	5	01/05/24 08:28							
ZZZZZZ	25	01/05/24 08:30							
ZZZZZZ	5	01/05/24 08:33							
ZZZZZZ	5	01/05/24 08:35							
ZZZZZZ	5	01/05/24 08:37							
CCV	1	01/05/24 08:39	X	X	X	X	X	X	X
CCB	1	01/05/24 08:42	X	X	X	X	X	X	X
KQ2322295-03MB	5	01/05/24 08:44	X	X	X	X	X	X	X
KQ2322295-04LCS	20	01/05/24 08:46	X	X	X	X	X	X	X
K2314283-001	5	01/05/24 08:48	X	X	X	X	X	X	X
K2314283-001DUP	5	01/05/24 08:50	X	X	X	X	X	X	X
K2314283-001SDL	25	01/05/24 08:53	X	X	X	X	X	X	X
K2314283-001PS	5	01/05/24 08:55	X	X	X	X	X	X	X
K2314283-001MS	5	01/05/24 08:57	X	X	X	X	X	X	X
ZZZZZZ	1	01/05/24 08:59							
CCV	1	01/05/24 09:03	X	X	X	X	X	X	X
CCB	1	01/05/24 09:05	X	X	X	X	X	X	X
ZZZZZZ	5	01/05/24 09:08							
ZZZZZZ	20	01/05/24 09:10							
ZZZZZZ	5	01/05/24 09:12							
ZZZZZZ	5	01/05/24 09:14							
ZZZZZZ	25	01/05/24 09:16							

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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request: K2314283

Analysis Run Log

Instrument ID: K-ICP-MS-05

Analytical BatchID: 828953

Sample	Dilution Factor	Date/Time	A s	B a	C d	C r	P b	S e	A g
ZZZZZZ	5	01/05/24 09:19							
ZZZZZZ	5	01/05/24 09:21							
CCV	1	01/05/24 09:23	X	X	X	X	X	X	X
CCB	1	01/05/24 09:25	X	X	X	X	X	X	X
LLCCVS	1	01/05/24 09:27	X	X	X	X	X	X	X

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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request: K2314283

ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Instrument ID: K-ICP-MS-05

Analytical BatchID: 828953

Sample	Date/Time	Ge72H2	Ge72He	In115He	Th232He
ZZZZZZ	01/05/24 07:44				
ZZZZZZ	01/05/24 07:46				
ICV	01/05/24 07:48	102	100	100	98
CCV	01/05/24 07:50	103	102	101	99
ICB	01/05/24 07:52	101	99	98	100
CCB	01/05/24 07:55	101	100	100	100
LLICVS	01/05/24 07:57	101	100	99	99
ZZZZZZ	01/05/24 08:04				
ZZZZZZ	01/05/24 08:06				
ICSA	01/05/24 08:13	96	98	94	97
ICSAB	01/05/24 08:15	96	94	91	95
ZZZZZZ	01/05/24 08:17				
ZZZZZZ	01/05/24 08:22				
ZZZZZZ	01/05/24 08:24				
ZZZZZZ	01/05/24 08:26				
ZZZZZZ	01/05/24 08:28				
ZZZZZZ	01/05/24 08:30				
ZZZZZZ	01/05/24 08:33				
ZZZZZZ	01/05/24 08:35				
ZZZZZZ	01/05/24 08:37				
CCV	01/05/24 08:39	100	101	99	99
CCB	01/05/24 08:42	100	100	101	99
KQ2322295-03MB	01/05/24 08:44	101	100	100	100
KQ2322295-04LCS	01/05/24 08:46	99	98	98	98
K2314283-001	01/05/24 08:48	102	101	97	102
K2314283-001DUP	01/05/24 08:50	101	103	98	101
K2314283-001SDL	01/05/24 08:53	91	103	99	97
K2314283-001PS	01/05/24 08:55	100	100	94	97
K2314283-001MS	01/05/24 08:57	99	100	96	100
ZZZZZZ	01/05/24 08:59				
CCV	01/05/24 09:03	103	101	100	97
CCB	01/05/24 09:05	103	100	98	96
ZZZZZZ	01/05/24 09:08				
ZZZZZZ	01/05/24 09:10				
ZZZZZZ	01/05/24 09:12				
ZZZZZZ	01/05/24 09:14				
ZZZZZZ	01/05/24 09:16				

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request: K2314283

ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Instrument ID: K-ICP-MS-05 Analytical BatchID: 828953

Sample	Date/Time	Ge72H2	Ge72He	In115He	Th232He
ZZZZZZ	01/05/24 09:19				
ZZZZZZ	01/05/24 09:21				
CCV	01/05/24 09:23	101	99	100	100
CCB	01/05/24 09:25	103	96	96	97
LLCCVS	01/05/24 09:27	100	96	97	98



Semi-Volatile Petroleum Products by Silica Gel Treated by GC/FID

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

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Analytical Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Soil

Service Request: K2314283
Date Collected: 12/20/23 12:50
Date Received: 12/20/23 13:45

Sample Name: TA-01-S
Lab Code: K2314283-001

Units: mg/Kg
Basis: Dry

Semi-Volatile Petroleum Products, Silica Gel Treated by GC/FID

Analysis Method: NWTPH-Dx
Prep Method: EPA 3550B

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Diesel Range Organics (C12 - C25 DRO)	3.6 J	34	2.5	1	12/27/23 21:10	12/22/23	*
Residual Range Organics (C25 - C36 RRO)	ND U	140	5.4	1	12/27/23 21:10	12/22/23	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
o-Terphenyl	111	50 - 150	12/27/23 21:10	
n-Triacontane	122	50 - 150	12/27/23 21:10	

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Analytical Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Soil

Service Request: K2314283
Date Collected: 12/20/23 02:00
Date Received: 12/20/23 13:45

Sample Name: TA-02-S
Lab Code: K2314283-002

Units: mg/Kg
Basis: Dry

Semi-Volatile Petroleum Products, Silica Gel Treated by GC/FID

Analysis Method: NWTPH-Dx
Prep Method: EPA 3550B

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Diesel Range Organics (C12 - C25 DRO)	3.3 J	29	2.2	1	12/27/23 21:53	12/22/23	*
Residual Range Organics (C25 - C36 RRO)	ND U	120	4.6	1	12/27/23 21:53	12/22/23	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
o-Terphenyl	112	50 - 150	12/27/23 21:53	
n-Triacontane	123	50 - 150	12/27/23 21:53	

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Analytical Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Soil

Service Request: K2314283
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: KQ2322297-02

Units: mg/Kg
Basis: Dry

Semi-Volatile Petroleum Products, Silica Gel Treated by GC/FID

Analysis Method: NWTPH-Dx
Prep Method: EPA 3550B

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Diesel Range Organics (C12 - C25 DRO)	2.4 J	24	1.8	1	12/27/23 20:27	12/22/23	
Residual Range Organics (C25 - C36 RRO)	ND U	98	3.9	1	12/27/23 20:27	12/22/23	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
o-Terphenyl	111	50 - 150	12/27/23 20:27	
n-Triacontane	121	50 - 150	12/27/23 20:27	

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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Soil

Service Request: K2314283

SURROGATE RECOVERY SUMMARY
Semi-Volatile Petroleum Products, Silica Gel Treated by GC/FID

Analysis Method: NWTPH-Dx
Extraction Method: EPA 3550B

Sample Name	Lab Code	n-Triacontane	o-Terphenyl
		50 - 150	50 - 150
TA-01-S	K2314283-001	122	111
TA-02-S	K2314283-002	123	112
TA-01-S DUP	KQ2322297-01	118	107
Method Blank	KQ2322297-02	121	111
Lab Control Sample	KQ2322297-03	142	137

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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Soil

Service Request: K2314283
Date Collected: 12/20/23
Date Received: 12/20/23
Date Analyzed: 12/27/23

Replicate Sample Summary**Semi-Volatile Petroleum Products, Silica Gel Treated by GC/FID**

Sample Name: TA-01-S **Units:** mg/Kg
Lab Code: K2314283-001 **Basis:** Dry

						Duplicate Sample KQ2322297- 01		
Analyte Name	Analysis Method	MRL	MDL	Sample Result	Result	Average	RPD	RPD Limit
Diesel Range Organics (C12 - C25 DRO)	NWTPH-Dx	34	2.5	3.6 J	4.3 J	3.98	17	40
Residual Range Organics (C25 - C36 RRO)	NWTPH-Dx	130	5.3	ND U	ND U	NC	NC	40

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Soil

Service Request: K2314283
Date Analyzed: 12/27/23
Date Extracted: 12/22/23

Lab Control Sample Summary
Semi-Volatile Petroleum Products, Silica Gel Treated by GC/FID

Analysis Method: NWTPH-Dx
Prep Method: EPA 3550B

Units: mg/Kg
Basis: Dry
Analysis Lot: 828342

Lab Control Sample
KQ2322297-03

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
Diesel Range Organics (C12 - C25 DRO)	379	267	142 *	42-134
Residual Range Organics (C25 - C36 RRO)	186	133	140	48-141

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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Soil

Service Request: K2314283
Date Analyzed: 12/27/23 20:27
Date Extracted: 12/22/23

Method Blank Summary**Semi-Volatile Petroleum Products, Silica Gel Treated by GC/FID**

Sample Name: Method Blank **Instrument ID:** K-GC-21
Lab Code: KQ2322297-02 **File ID:** J:\GC21\DATA\122723F\1227031.D\
Analysis Method: NWTPH-Dx **Analysis Lot:** 828342
Prep Method: EPA 3550B **Extraction Lot:** 431767

This Method Blank applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Lab Control Sample	KQ2322297-03	J:\GC21\DATA\122723F\1227032.D\	12/27/23 20:48
TA-01-S	K2314283-001	J:\GC21\DATA\122723F\1227033.D\	12/27/23 21:10
TA-01-SDUP	KQ2322297-01	J:\GC21\DATA\122723F\1227034.D\	12/27/23 21:32
TA-02-S	K2314283-002	J:\GC21\DATA\122723F\1227035.D\	12/27/23 21:53

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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Soil

Service Request: K2314283
Date Analyzed: 12/27/23 20:48
Date Extracted: 12/22/23

Lab Control Sample Summary
Semi-Volatile Petroleum Products, Silica Gel Treated by GC/FID

Sample Name: Lab Control Sample **Instrument ID:** K-GC-21
Lab Code: KQ2322297-03 **File ID:** J:\GC21\DATA\122723F\1227032.D\
Analysis Method: NWTPH-Dx **Analysis Lot:** 828342
Prep Method: EPA 3550B **Extraction Lot:** 431767

This Lab Control Sample applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Method Blank	KQ2322297-02	J:\GC21\DATA\122723F\1227031.D\	12/27/23 20:27
TA-01-S	K2314283-001	J:\GC21\DATA\122723F\1227033.D\	12/27/23 21:10
TA-01-SDUP	KQ2322297-01	J:\GC21\DATA\122723F\1227034.D\	12/27/23 21:32
TA-02-S	K2314283-002	J:\GC21\DATA\122723F\1227035.D\	12/27/23 21:53

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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A

Service Request: K2314283
Calibration Date: 9/1/2023

Initial Calibration Summary
Semi-Volatile Petroleum Products, Silica Gel Treated by GC/FID

Calibration ID: KC2300522
Instrument ID: K-GC-21

Signal ID: ZB-1

#	Lab Code	Sample Name	File Location	Acquisition Date
01	KC2300522-01	AK103 SVF04-58M 50	J:\GC21\DATA\090123\0901F032.D	09/01/2023 21:03
02	KC2300522-02	AK103 SVF04-58L 200	J:\GC21\DATA\090123\0901F033.D	09/01/2023 21:25
03	KC2300522-03	AK103 SVF04-58K 500	J:\GC21\DATA\090123\0901F034.D	09/01/2023 21:46
04	KC2300522-04	AK103 SVF04-58J 2000	J:\GC21\DATA\090123\0901F035.D	09/01/2023 22:08
05	KC2300522-05	AK103 SVF04-58I 5000	J:\GC21\DATA\090123\0901F036.D	09/01/2023 22:29
07	KC2300522-07	DRO SVF04-62A 20/1.0	J:\GC21\DATA\090623\0906F014.D	09/06/2023 13:22
08	KC2300522-08	DRO SVF04-61L 50/2.5	J:\GC21\DATA\090623\0906F015.D	09/06/2023 13:44
09	KC2300522-09	DRO SVF04-61K 200/10	J:\GC21\DATA\090623\0906F016.D	09/06/2023 14:05
10	KC2300522-10	DRO SVF04-61J 500/25	J:\GC21\DATA\090623\0906F017.D	09/06/2023 14:27
11	KC2300522-11	DRO SVF04-61I 2000/100	J:\GC21\DATA\090623\0906F018.D	09/06/2023 14:48
12	KC2300522-12	DRO SVF04-61H 5000/250	J:\GC21\DATA\090623\0906F019.D	09/06/2023 15:10
13	KC2300522-13	DRO SVF04-61G 20K	J:\GC21\DATA\090623\0906F020.D	09/06/2023 15:31
14	KC2300522-14	DRO SVF04-61F 50K	J:\GC21\DATA\090623\0906F021.D	09/06/2023 15:53
16	KC2300522-16	RRO SVF04-63A 50	J:\GC21\DATA\090723\0907F003.D	09/07/2023 11:19
17	KC2300522-17	RRO SVF04-62M 200	J:\GC21\DATA\090723\0907F004.D	09/07/2023 11:40
18	KC2300522-18	RRO SVF04-62L 500	J:\GC21\DATA\090723\0907F005.D	09/07/2023 12:02
19	KC2300522-19	RRO SVF04-62K 2000	J:\GC21\DATA\090723\0907F006.D	09/07/2023 12:23
20	KC2300522-20	RRO SVF04-62J 5000	J:\GC21\DATA\090723\0907F007.D	09/07/2023 12:45

Analyte

Diesel Range Organics (C12 - C25 DRO)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
07	20.000	927.2	08	50.000	812.8	09	200.000	760.1	10	500.000	766.6
11	2000.000	761.8	12	5000.000	883.2	13	20000.000	697.1	14	50000.000	736.7

Residual Range Organics (C25 - C36 RRO)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
16	50.000	529.5	17	200.000	532.5	18	500.000	630.3	19	2000.000	606.5
20	5000.000	537.9									

n-Triacontane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
07	1.000	1.054E3	08	2.500	939.6	09	10.000	939.7	10	25.000	913
11	100.000	907.7	12	250.000	1.016E3						

o-Terphenyl

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
07	1.000	1.277E3	08	2.500	1.097E3	09	10.000	1.083E3	10	25.000	1.062E3
11	100.000	1.049E3	12	250.000	1.183E3						

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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A

Service Request: K2314283
Calibration Date: 9/1/2023

Initial Calibration Summary
Semi-Volatile Petroleum Products, Silica Gel Treated by GC/FID

Calibration ID: KC2300522
Instrument ID: K-GC-21

Signal ID: ZB-1

Analyte Name	Compound Type	Calibration Evaluation				Calibration Evaluation	
		Fit Type	Eval	Eval Result	Control Criteria	Average RRF	Minimum RRF
Diesel Range Organics (C12 - C25 DRO)	TRG	Average RF	% RSD	9.7	≤20	793.2	
Residual Range Organics (C25 - C36 RRO)	TRG	Average RF	% RSD	8.4	≤20	567.4	
n-Triacontane	SURR	Average RF	% RSD	6.2	≤20	961.7	
o-Terphenyl	SURR	Average RF	% RSD	7.8	≤20	1.125E3	

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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A

Service Request: K2314283
Calibration Date: 9/1/2023

Initial Calibration Verification Summary
Semi-Volatile Petroleum Products, Silica Gel Treated by GC/FID

Calibration ID: KC2300522
Instrument ID: K-GC-21

Signal ID: ZB-1

#	Lab Code	Sample Name	File Location	Acquisition Date
06	KC2300522-06	AK103 SVF04-58N ICV@1000	J:\GC21\DATA\090123\0901F039.D	09/01/2023 23:34
15	KC2300522-15	DRO SVF04-62B ICV@1000	J:\GC21\DATA\090623\0906F025.D	09/06/2023 17:19
21	KC2300522-21	RRO SVF04-63B ICV@1000	J:\GC21\DATA\090723\0907F010.D	09/07/2023 13:50

Analyte Name	Expected	Result	Average RF	SSV RF	% D	Criteria	Curve Fit
Diesel Range Organics (C12 - C25 DRO)	1000	1080	7.932E2	8.538E2	7.64	±15	Average RF
Residual Range Organics (C25 - C36 RRO)	1000	895	5.674E2	5.078E2	-10.506	±15	Average RF

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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request:K2314283

Analysis Run Log
Semi-Volatile Petroleum Products, Silica Gel Treated by GC/FID

Analysis Method:

Analysis Lot:828342
Instrument ID:K-GC-21

Raw Data File	Sample Name	Lab Code	Date Analyzed	Time Analyzed	Q
J:\GC21\DATA\122723F\1227013.D\	ZZZZZZZZ	ZZZZZZZZ	12/27/2023	13:58:00	
J:\GC21\DATA\122723F\1227014.D\	ZZZZZZZZ	ZZZZZZZZ	12/27/2023	14:20:00	
J:\GC21\DATA\122723F\1227016.D\	ZZZZZZZZ	ZZZZZZZZ	12/27/2023	15:03:00	
J:\GC21\DATA\122723F\1227018.D\	ZZZZZZZZ	ZZZZZZZZ	12/27/2023	15:46:00	
J:\GC21\DATA\122723F\1227019.D\	ZZZZZZZZ	ZZZZZZZZ	12/27/2023	16:08:00	
J:\GC21\DATA\122723F\1227020.D\	ZZZZZZZZ	ZZZZZZZZ	12/27/2023	16:29:00	
J:\GC21\DATA\122723F\1227021.D\	ZZZZZZZZ	ZZZZZZZZ	12/27/2023	16:51:00	
J:\GC21\DATA\122723F\1227026.D\	ZZZZZZZZ	ZZZZZZZZ	12/27/2023	18:39:00	
J:\GC21\DATA\122723F\1227027.D\	ZZZZZZZZ	ZZZZZZZZ	12/27/2023	19:01:00	
J:\GC21\DATA\122723F\1227028.D\	ZZZZZZZZ	ZZZZZZZZ	12/27/2023	19:22:00	
J:\GC21\DATA\122723F\1227029.D\	ZZZZZZZZ	ZZZZZZZZ	12/27/2023	19:44:00	
J:\GC21\DATA\122723F\1227030.D\	ZZZZZZZZ	ZZZZZZZZ	12/27/2023	20:05:00	
J:\GC21\DATA\122723F\1227031.D\	Method Blank	KQ2322297-02	12/27/2023	20:27:00	
J:\GC21\DATA\122723F\1227032.D\	Lab Control Sample	KQ2322297-03	12/27/2023	20:48:00	
J:\GC21\DATA\122723F\1227033.D\	TA-01-S	K2314283-001	12/27/2023	21:10:00	
J:\GC21\DATA\122723F\1227034.D\	TA-01-S DUP	KQ2322297-01	12/27/2023	21:32:00	
J:\GC21\DATA\122723F\1227035.D\	TA-02-S	K2314283-002	12/27/2023	21:53:00	
J:\GC21\DATA\122723F\1227036.D\	ZZZZZZZZ	ZZZZZZZZ	12/27/2023	22:15:00	
J:\GC21\DATA\122723F\1227037.D\	ZZZZZZZZ	ZZZZZZZZ	12/27/2023	22:37:00	
J:\GC21\DATA\122723F\1227038.D\	ZZZZZZZZ	ZZZZZZZZ	12/27/2023	22:58:00	

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Prep Summary Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Soil

Service Request:K2314283

Semi-Volatile Petroleum Products, Silica Gel Treated by GC/FID

Prep Method: EPA 3550B
Analytical Method: NWTPH-Dx

Extraction Lot: 431767
Extraction Date: 12/22/23 09:57

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Amount	Percent Solids
TA-01-S	K2314283-001	12/20/23	12/20/23	30.328 g	10 mL	72.7
TA-02-S	K2314283-002	12/20/23	12/20/23	30.125 g	10 mL	85.3
Duplicate	KQ2322297-01DUP	12/20/23	12/20/23	30.716 g	10 mL	72.7
Method Blank	KQ2322297-02MB	NA	NA	30.7160 g	10 mL	
Lab Control Sample	KQ2322297-03LCS	NA	NA	30 g	10 mL	



Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
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Analytical Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Soil

Service Request: K2314283
Date Collected: 12/20/23 12:50
Date Received: 12/20/23 13:45

Sample Name: TA-01-S
Lab Code: K2314283-001

Units: ng/g
Basis: Dry

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Perfluoroalkyl Sulfonic Acids (PFSA)s							
Perfluorobutane sulfonic acid (PFBS)	ND U	0.50	0.10	1	01/19/24 23:03	12/22/23	
Perfluoropentane sulfonic acid (PFPeS)	ND U	0.50	0.10	1	01/19/24 23:03	12/22/23	
Perfluorohexane sulfonic acid (PFHxS)	ND U	0.50	0.10	1	01/19/24 23:03	12/22/23	
Perfluoroheptane sulfonic acid (PFHpS)	ND U	0.50	0.10	1	01/19/24 23:03	12/22/23	
Perfluorooctane sulfonic acid (PFOS)	ND U	0.50	0.10	1	01/19/24 23:03	12/22/23	
Perfluorononane sulfonic acid (PFNS)	ND U	0.50	0.10	1	01/19/24 23:03	12/22/23	
Perfluorodecane sulfonic acid (PFDS)	ND U	0.50	0.10	1	01/19/24 23:03	12/22/23	
Perfluorododecane sulfonic acid (PFDoS)	ND U	0.50	0.10	1	01/19/24 23:03	12/22/23	
Perfluoroalkyl Carboxylic Acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	ND U	0.50	0.10	1	01/19/24 23:03	12/22/23	
Perfluoropentanoic acid (PFPeA)	ND U	0.50	0.10	1	01/19/24 23:03	12/22/23	
Perfluorohexanoic acid (PFHxA)	ND U	0.50	0.10	1	01/19/24 23:03	12/22/23	
Perfluoroheptanoic acid (PFHpA)	ND U	0.50	0.10	1	01/19/24 23:03	12/22/23	
Perfluorooctanoic acid (PFOA)	0.36 J	0.50	0.10	1	01/19/24 23:03	12/22/23	
Perfluorononanoic acid (PFNA)	ND U	0.50	0.10	1	01/19/24 23:03	12/22/23	
Perfluorodecanoic acid (PFDA)	ND U	0.50	0.10	1	01/19/24 23:03	12/22/23	
Perfluoroundecanoic acid (PFUnDA)	ND U	0.50	0.10	1	01/19/24 23:03	12/22/23	
Perfluorododecanoic acid (PFDOA)	ND U	0.50	0.10	1	01/19/24 23:03	12/22/23	
Perfluorotridecanoic acid (PFTTrDA)	ND U	0.50	0.10	1	01/19/24 23:03	12/22/23	
Perfluorotetradecanoic acid (PFTDA)	ND U	0.50	0.10	1	01/19/24 23:03	12/22/23	
Perfluoroalkyl Sulfonamido Substances							
Perfluorooctane sulfonamide (PFOSAm)	ND U	0.50	0.10	1	01/19/24 23:03	12/22/23	
N-Methylperfluorooctane sulfonamide (MeFOSA)	ND U	0.50	0.10	1	01/19/24 23:03	12/22/23	
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	ND U	0.50	0.10	1	01/19/24 23:03	12/22/23	
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	ND U	0.50	0.10	1	01/19/24 23:03	12/22/23	
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	ND U	0.50	0.10	1	01/19/24 23:03	12/22/23	
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	ND U	0.50	0.10	1	01/19/24 23:03	12/22/23	
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	ND U	0.50	0.10	1	01/19/24 23:03	12/22/23	

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Analytical Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Soil

Service Request: K2314283
Date Collected: 12/20/23 12:50
Date Received: 12/20/23 13:45

Sample Name: TA-01-S
Lab Code: K2314283-001

Units: ng/g
Basis: Dry

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Fluorotelomer Sulfonic Acids (FTSAs)							
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	ND U	0.50	0.10	1	01/19/24 23:03	12/22/23	
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND U	0.50	0.10	1	01/19/24 23:03	12/22/23	
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND U	0.50	0.10	1	01/19/24 23:03	12/22/23	
Fluorotelomer Carboxylic Acids (FTCAs)							
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	ND U	15	0.60	1	01/19/24 23:03	12/22/23	
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	ND U	15	0.60	1	01/19/24 23:03	12/22/23	
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	ND U	15	0.60	1	01/19/24 23:03	12/22/23	
Perfluoroalkyl Ether Sulfonic Acids (PFESAs)							
Perfluoro(2-ethoxyethane) sulfonic acid (PFEESA)	ND U	0.50	0.10	1	01/19/24 23:03	12/22/23	
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	ND U	0.50	0.10	1	01/19/24 23:03	12/22/23	
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	ND U	0.50	0.10	1	01/19/24 23:03	12/22/23	
Perfluoroalkyl Ether Carboxylic Acids (PFECAs)							
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND U	0.50	0.10	1	01/19/24 23:03	12/22/23	
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND U	0.50	0.10	1	01/19/24 23:03	12/22/23	
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	ND U	0.50	0.10	1	01/19/24 23:03	12/22/23	
Nonafluoro-3,6-dioxahexanoic acid (NFDHA)	ND U	0.50	0.10	1	01/19/24 23:03	12/22/23	
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	ND U	0.50	0.10	1	01/19/24 23:03	12/22/23	

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Analytical Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Soil

Service Request: K2314283
Date Collected: 12/20/23 12:50
Date Received: 12/20/23 13:45

Sample Name: TA-01-S
Lab Code: K2314283-001

Units: ng/g
Basis: Dry

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
Prep Method: Method

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
13C3-PFBS	82	20 - 150	01/19/24 23:03	
13C3-PFHxS	84	20 - 150	01/19/24 23:03	
13C8-PFOS	74	20 - 150	01/19/24 23:03	
13C4-PFBA	85	20 - 150	01/19/24 23:03	
13C5-PFPeA	80	20 - 150	01/19/24 23:03	
13C5-PFHxA	80	20 - 150	01/19/24 23:03	
13C4-PFHpA	84	20 - 150	01/19/24 23:03	
13C8-PFOA	81	20 - 150	01/19/24 23:03	
13C9-PFNA	78	20 - 150	01/19/24 23:03	
13C6-PFDA	88	20 - 150	01/19/24 23:03	
13C7-PFUnDA	85	20 - 150	01/19/24 23:03	
13C2-PFDoDA	77	20 - 150	01/19/24 23:03	
13C2-PFTeDA	76	20 - 150	01/19/24 23:03	
13C8-FOSA	72	20 - 150	01/19/24 23:03	
D3-MeFOSA	71	20 - 150	01/19/24 23:03	
D5-EtFOSA	64	20 - 150	01/19/24 23:03	
D7-MeFOSE	80	20 - 150	01/19/24 23:03	
D9-EtFOSE	80	20 - 150	01/19/24 23:03	
D3-MeFOSAA	80	20 - 150	01/19/24 23:03	
D5-EtFOSAA	77	20 - 150	01/19/24 23:03	
13C2-4:2 FTS	104	20 - 150	01/19/24 23:03	
13C2-6:2 FTS	106	20 - 150	01/19/24 23:03	
13C2-8:2 FTS	107	20 - 150	01/19/24 23:03	
13C3-HFPO-DA	88	20 - 150	01/19/24 23:03	

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Analytical Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Soil

Service Request: K2314283
Date Collected: 12/20/23 02:00
Date Received: 12/20/23 13:45

Sample Name: TA-02-S
Lab Code: K2314283-002

Units: ng/g
Basis: Dry

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Perfluoroalkyl Sulfonic Acids (PFSA)s							
Perfluorobutane sulfonic acid (PFBS)	ND U	0.50	0.10	1	01/19/24 23:26	12/22/23	
Perfluoropentane sulfonic acid (PFPeS)	ND U	0.50	0.10	1	01/19/24 23:26	12/22/23	
Perfluorohexane sulfonic acid (PFHxS)	ND U	0.50	0.10	1	01/19/24 23:26	12/22/23	
Perfluoroheptane sulfonic acid (PFHpS)	ND U	0.50	0.10	1	01/19/24 23:26	12/22/23	
Perfluorooctane sulfonic acid (PFOS)	ND U	0.50	0.10	1	01/19/24 23:26	12/22/23	
Perfluorononane sulfonic acid (PFNS)	ND U	0.50	0.10	1	01/19/24 23:26	12/22/23	
Perfluorodecane sulfonic acid (PFDS)	ND U	0.50	0.10	1	01/19/24 23:26	12/22/23	
Perfluorododecane sulfonic acid (PFDoS)	ND U	0.50	0.10	1	01/19/24 23:26	12/22/23	
Perfluoroalkyl Carboxylic Acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	ND U	0.50	0.10	1	01/19/24 23:26	12/22/23	
Perfluoropentanoic acid (PFPeA)	ND U	0.50	0.10	1	01/19/24 23:26	12/22/23	
Perfluorohexanoic acid (PFHxA)	ND U	0.50	0.10	1	01/19/24 23:26	12/22/23	
Perfluoroheptanoic acid (PFHpA)	ND U	0.50	0.10	1	01/19/24 23:26	12/22/23	
Perfluorooctanoic acid (PFOA)	ND U	0.50	0.10	1	01/19/24 23:26	12/22/23	
Perfluorononanoic acid (PFNA)	ND U	0.50	0.10	1	01/19/24 23:26	12/22/23	
Perfluorodecanoic acid (PFDA)	ND U	0.50	0.10	1	01/19/24 23:26	12/22/23	
Perfluoroundecanoic acid (PFUnDA)	ND U	0.50	0.10	1	01/19/24 23:26	12/22/23	
Perfluorododecanoic acid (PFDOA)	ND U	0.50	0.10	1	01/19/24 23:26	12/22/23	
Perfluorotridecanoic acid (PFTrDA)	ND U	0.50	0.10	1	01/19/24 23:26	12/22/23	
Perfluorotetradecanoic acid (PFTDA)	ND U	0.50	0.10	1	01/19/24 23:26	12/22/23	
Perfluoroalkyl Sulfonamido Substances							
Perfluorooctane sulfonamide (PFOSAm)	ND U	0.50	0.10	1	01/19/24 23:26	12/22/23	
N-Methylperfluorooctane sulfonamide (MeFOSA)	ND U	0.50	0.10	1	01/19/24 23:26	12/22/23	
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	ND U	0.50	0.10	1	01/19/24 23:26	12/22/23	
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	ND U	0.50	0.10	1	01/19/24 23:26	12/22/23	
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	ND U	0.50	0.10	1	01/19/24 23:26	12/22/23	
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	ND U	0.50	0.10	1	01/19/24 23:26	12/22/23	
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	ND U	0.50	0.10	1	01/19/24 23:26	12/22/23	

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Analytical Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Soil

Service Request: K2314283
Date Collected: 12/20/23 02:00
Date Received: 12/20/23 13:45

Sample Name: TA-02-S
Lab Code: K2314283-002

Units: ng/g
Basis: Dry

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Fluorotelomer Sulfonic Acids (FTSAs)							
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	ND U	0.50	0.10	1	01/19/24 23:26	12/22/23	
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND U	0.50	0.10	1	01/19/24 23:26	12/22/23	
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND U	0.50	0.10	1	01/19/24 23:26	12/22/23	
Fluorotelomer Carboxylic Acids (FTCAs)							
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	ND U	15	0.60	1	01/19/24 23:26	12/22/23	
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	ND U	15	0.60	1	01/19/24 23:26	12/22/23	
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	ND U	15	0.60	1	01/19/24 23:26	12/22/23	
Perfluoroalkyl Ether Sulfonic Acids (PFESAs)							
Perfluoro(2-ethoxyethane) sulfonic acid (PFEESA)	ND U	0.50	0.10	1	01/19/24 23:26	12/22/23	
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	ND U	0.50	0.10	1	01/19/24 23:26	12/22/23	
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	ND U	0.50	0.10	1	01/19/24 23:26	12/22/23	
Perfluoroalkyl Ether Carboxylic Acids (PFECAs)							
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND U	0.50	0.10	1	01/19/24 23:26	12/22/23	
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND U	0.50	0.10	1	01/19/24 23:26	12/22/23	
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	ND U	0.50	0.10	1	01/19/24 23:26	12/22/23	
Nonafluoro-3,6-dioxahheptanoic acid (NFDHA)	ND U	0.50	0.10	1	01/19/24 23:26	12/22/23	
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	ND U	0.50	0.10	1	01/19/24 23:26	12/22/23	

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Analytical Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Soil

Service Request: K2314283
Date Collected: 12/20/23 02:00
Date Received: 12/20/23 13:45

Sample Name: TA-02-S
Lab Code: K2314283-002

Units: ng/g
Basis: Dry

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
Prep Method: Method

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
13C3-PFBS	86	20 - 150	01/19/24 23:26	
13C3-PFHxS	84	20 - 150	01/19/24 23:26	
13C8-PFOS	78	20 - 150	01/19/24 23:26	
13C4-PFBA	87	20 - 150	01/19/24 23:26	
13C5-PFPeA	76	20 - 150	01/19/24 23:26	
13C5-PFHxA	84	20 - 150	01/19/24 23:26	
13C4-PFHpA	84	20 - 150	01/19/24 23:26	
13C8-PFOA	81	20 - 150	01/19/24 23:26	
13C9-PFNA	77	20 - 150	01/19/24 23:26	
13C6-PFDA	79	20 - 150	01/19/24 23:26	
13C7-PFUnDA	81	20 - 150	01/19/24 23:26	
13C2-PFDoDA	74	20 - 150	01/19/24 23:26	
13C2-PFTeDA	65	20 - 150	01/19/24 23:26	
13C8-FOSA	68	20 - 150	01/19/24 23:26	
D3-MeFOSA	66	20 - 150	01/19/24 23:26	
D5-EtFOSA	61	20 - 150	01/19/24 23:26	
D7-MeFOSE	74	20 - 150	01/19/24 23:26	
D9-EtFOSE	74	20 - 150	01/19/24 23:26	
D3-MeFOSAA	82	20 - 150	01/19/24 23:26	
D5-EtFOSAA	80	20 - 150	01/19/24 23:26	
13C2-4:2 FTS	113	20 - 150	01/19/24 23:26	
13C2-6:2 FTS	109	20 - 150	01/19/24 23:26	
13C2-8:2 FTS	94	20 - 150	01/19/24 23:26	
13C3-HFPO-DA	86	20 - 150	01/19/24 23:26	

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Analytical Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Soil

Service Request: K2314283
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: KQ2400355-03

Units: ng/g
Basis: Dry

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Perfluoroalkyl Sulfonic Acids (PFSA's)							
Perfluorobutane sulfonic acid (PFBS)	ND U	0.50	0.10	1	01/19/24 21:06	12/22/23	
Perfluoropentane sulfonic acid (PFPeS)	ND U	0.50	0.10	1	01/19/24 21:06	12/22/23	
Perfluorohexane sulfonic acid (PFHxS)	ND U	0.50	0.10	1	01/19/24 21:06	12/22/23	
Perfluoroheptane sulfonic acid (PFHpS)	ND U	0.50	0.10	1	01/19/24 21:06	12/22/23	
Perfluorooctane sulfonic acid (PFOS)	ND U	0.50	0.10	1	01/19/24 21:06	12/22/23	
Perfluorononane sulfonic acid (PFNS)	ND U	0.50	0.10	1	01/19/24 21:06	12/22/23	
Perfluorodecane sulfonic acid (PFDS)	ND U	0.50	0.10	1	01/19/24 21:06	12/22/23	
Perfluorododecane sulfonic acid (PFDoS)	ND U	0.50	0.10	1	01/19/24 21:06	12/22/23	
Perfluoroalkyl Carboxylic Acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	ND U	0.50	0.10	1	01/19/24 21:06	12/22/23	
Perfluoropentanoic acid (PFPeA)	ND U	0.50	0.10	1	01/19/24 21:06	12/22/23	
Perfluorohexanoic acid (PFHxA)	ND U	0.50	0.10	1	01/19/24 21:06	12/22/23	
Perfluoroheptanoic acid (PFHpA)	ND U	0.50	0.10	1	01/19/24 21:06	12/22/23	
Perfluorooctanoic acid (PFOA)	ND U	0.50	0.10	1	01/19/24 21:06	12/22/23	
Perfluorononanoic acid (PFNA)	ND U	0.50	0.10	1	01/19/24 21:06	12/22/23	
Perfluorodecanoic acid (PFDA)	ND U	0.50	0.10	1	01/19/24 21:06	12/22/23	
Perfluoroundecanoic acid (PFUnDA)	ND U	0.50	0.10	1	01/19/24 21:06	12/22/23	
Perfluorododecanoic acid (PFDOA)	ND U	0.50	0.10	1	01/19/24 21:06	12/22/23	
Perfluorotridecanoic acid (PFTrDA)	ND U	0.50	0.10	1	01/19/24 21:06	12/22/23	
Perfluorotetradecanoic acid (PFTDA)	ND U	0.50	0.10	1	01/19/24 21:06	12/22/23	
Perfluoroalkyl Sulfonamido Substances							
Perfluorooctane sulfonamide (PFOSAm)	ND U	0.50	0.10	1	01/19/24 21:06	12/22/23	
N-Methylperfluorooctane sulfonamide (MeFOSA)	ND U	0.50	0.10	1	01/19/24 21:06	12/22/23	
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	ND U	0.50	0.10	1	01/19/24 21:06	12/22/23	
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	ND U	0.50	0.10	1	01/19/24 21:06	12/22/23	
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	ND U	0.50	0.10	1	01/19/24 21:06	12/22/23	
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	ND U	0.50	0.10	1	01/19/24 21:06	12/22/23	
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	ND U	0.50	0.10	1	01/19/24 21:06	12/22/23	

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Analytical Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Soil

Service Request: K2314283
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: KQ2400355-03

Units: ng/g
Basis: Dry

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
Prep Method: Method

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Fluorotelomer Sulfonic Acids (FTSAs)							
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	ND U	0.50	0.10	1	01/19/24 21:06	12/22/23	
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND U	0.50	0.10	1	01/19/24 21:06	12/22/23	
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND U	0.50	0.10	1	01/19/24 21:06	12/22/23	
Fluorotelomer Carboxylic Acids (FTCAs)							
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	ND U	15	0.60	1	01/19/24 21:06	12/22/23	
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	ND U	15	0.60	1	01/19/24 21:06	12/22/23	
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	ND U	15	0.60	1	01/19/24 21:06	12/22/23	
Perfluoroalkyl Ether Sulfonic Acids (PFESAs)							
Perfluoro(2-ethoxyethane) sulfonic acid (PFEESA)	ND U	0.50	0.10	1	01/19/24 21:06	12/22/23	
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	ND U	0.50	0.10	1	01/19/24 21:06	12/22/23	
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	ND U	0.50	0.10	1	01/19/24 21:06	12/22/23	
Perfluoroalkyl Ether Carboxylic Acids (PFECAs)							
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND U	0.50	0.10	1	01/19/24 21:06	12/22/23	
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND U	0.50	0.10	1	01/19/24 21:06	12/22/23	
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	ND U	0.50	0.10	1	01/19/24 21:06	12/22/23	
Nonafluoro-3,6-dioxahexanoic acid (NFDHA)	ND U	0.50	0.10	1	01/19/24 21:06	12/22/23	
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	ND U	0.50	0.10	1	01/19/24 21:06	12/22/23	

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Analytical Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Soil

Service Request: K2314283
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: KQ2400355-03

Units: ng/g
Basis: Dry

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
Prep Method: Method

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
13C3-PFBS	104	20 - 150	01/19/24 21:06	
13C3-PFHxS	100	20 - 150	01/19/24 21:06	
13C8-PFOS	100	20 - 150	01/19/24 21:06	
13C4-PFBA	106	20 - 150	01/19/24 21:06	
13C5-PFPeA	100	20 - 150	01/19/24 21:06	
13C5-PFHxA	105	20 - 150	01/19/24 21:06	
13C4-PFHpA	111	20 - 150	01/19/24 21:06	
13C8-PFOA	103	20 - 150	01/19/24 21:06	
13C9-PFNA	101	20 - 150	01/19/24 21:06	
13C6-PFDA	102	20 - 150	01/19/24 21:06	
13C7-PFUnDA	102	20 - 150	01/19/24 21:06	
13C2-PFDoDA	93	20 - 150	01/19/24 21:06	
13C2-PFTeDA	87	20 - 150	01/19/24 21:06	
13C8-FOSA	88	20 - 150	01/19/24 21:06	
D3-MeFOSA	78	20 - 150	01/19/24 21:06	
D5-EtFOSA	73	20 - 150	01/19/24 21:06	
D7-MeFOSE	93	20 - 150	01/19/24 21:06	
D9-EtFOSE	94	20 - 150	01/19/24 21:06	
D3-MeFOSAA	115	20 - 150	01/19/24 21:06	
D5-EtFOSAA	105	20 - 150	01/19/24 21:06	
13C2-4:2 FTS	133	20 - 150	01/19/24 21:06	
13C2-6:2 FTS	144	20 - 150	01/19/24 21:06	
13C2-8:2 FTS	129	20 - 150	01/19/24 21:06	
13C3-HFPO-DA	114	20 - 150	01/19/24 21:06	

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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Soil

Service Request: K2314283

SURROGATE RECOVERY SUMMARY

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633

Extraction Method: Method

Surrogate	Control Limits	TA-01-S K2314283-001	TA-02-S K2314283-002	Method Blank KQ2400355-03
13C3-PFBS	20-150	82	86	104
13C3-PFHxS	20-150	84	84	100
13C8-PFOS	20-150	74	78	100
13C4-PFBA	20-150	85	87	106
13C5-PFPeA	20-150	80	76	100
13C5-PFHxA	20-150	80	84	105
13C4-PFHpA	20-150	84	84	111
13C8-PFOA	20-150	81	81	103
13C9-PFNA	20-150	78	77	101
13C6-PFDA	20-150	88	79	102
13C7-PFUnDA	20-150	85	81	102
13C2-PFDoDA	20-150	77	74	93
13C2-PFTeDA	20-150	76	65	87
13C8-FOSA	20-150	72	68	88
D3-MeFOSA	20-150	71	66	78
D5-EtFOSA	20-150	64	61	73
D7-MeFOSE	20-150	80	74	93
D9-EtFOSE	20-150	80	74	94
D3-MeFOSAA	20-150	80	82	115
D5-EtFOSAA	20-150	77	80	105
13C2-4:2 FTS	20-150	104	113	133
13C2-6:2 FTS	20-150	106	109	144
13C2-8:2 FTS	20-150	107	94	129
13C3-HFPO-DA	20-150	88	86	114

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with an pound (#) indicate the control criteria is not acceptable.

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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Soil

Service Request: K2314283

SURROGATE RECOVERY SUMMARY

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633

Extraction Method: Method

Surrogate	Control Limits	Lab Control Sample	Low Level Lab Control
		KQ2400355-01	Sample KQ2400355-02
13C3-PFBS	20-150	77	80
13C3-PFHxS	20-150	78	82
13C8-PFOS	20-150	76	70
13C4-PFBA	20-150	82	82
13C5-PFPeA	20-150	75	75
13C5-PFHxA	20-150	78	75
13C4-PFHpA	20-150	80	80
13C8-PFOA	20-150	80	86
13C9-PFNA	20-150	76	77
13C6-PFDA	20-150	78	79
13C7-PFUnDA	20-150	78	80
13C2-PFDoDA	20-150	69	73
13C2-PFTeDA	20-150	58	61
13C8-FOSA	20-150	69	66
D3-MeFOSA	20-150	59	64
D5-EtFOSA	20-150	54	61
D7-MeFOSE	20-150	65	67
D9-EtFOSE	20-150	61	67
D3-MeFOSAA	20-150	82	82
D5-EtFOSAA	20-150	83	81
13C2-4:2 FTS	20-150	102	117
13C2-6:2 FTS	20-150	102	111
13C2-8:2 FTS	20-150	89	97
13C3-HFPO-DA	20-150	83	82

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with an pound (#) indicate the control criteria is not acceptable.

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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request:K2314283
Date Analyzed:01/19/24 14:31

Internal Standard Area and RT SUMMARY

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

File ID: J:\LCMS08\Data\240119_1633_B1\240119_008
Instrument ID: K-LCMS-08
Analysis Method: Draft EPA Method 1633

Lab Code:KQ2400951-19
Analysis Lot:830171
Signal ID:1

		18O2-PFHxS		13C4-PFOS		13C3-PFBA	
		Area	RT	Area	RT	Area	RT
Result ==>		231,874	7.09	275,937	8.82	583,858	1.41
Upper Limit ==>		463,748	7.49	551,874	9.22	1,167,716	1.81
Lower Limit ==>		69,562	6.69	82,781	8.42	175,157	1.01
Associated Analyses							
Low Level Continuing Calibration Verification	KQ2400951-19	230411	7.070	289170	8.808	602501	1.409
Performance Evaluation	KQ2400951-21	228647	7.074	276559	8.811	605394	1.462
Continuing Calibration Blank	KQ2400951-22	216206	7.063	264916	8.801	576781	1.400

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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request:K2314283
Date Analyzed:01/19/24 14:31

Internal Standard Area and RT SUMMARY

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

File ID: J:\LCMS08\Data\240119_1633_B1\240119_008
Instrument ID: K-LCMS-08
Analysis Method: Draft EPA Method 1633

Lab Code:KQ2400951-19
Analysis Lot:830171
Signal ID:1

		13C2-PFHxA		13C4-PFOA		13C5-PFNA	
		Area	RT	Area	RT	Area	RT
	Result ==>	623,952	4.98	42,584	7.11	308,818	7.96
	Upper Limit ==>	1,247,904	5.38	85,168	7.51	617,636	8.36
	Lower Limit ==>	187,186	4.58	12,775	6.71	92,645	7.56
Associated Analyses							
Low Level Continuing Calibration Verification	KQ2400951-19	615711	4.958	47699	7.093	335130	7.945
Performance Evaluation	KQ2400951-21	619888	4.963	46315	7.099	327720	7.949
Continuing Calibration Blank	KQ2400951-22	576658	4.948	46172	7.089	311185	7.939

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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request:K2314283
Date Analyzed:01/19/24 14:31

Internal Standard Area and RT SUMMARY

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

File ID: J:\LCMS08\Data\240119_1633_B1\240119_008
Instrument ID: K-LCMS-08
Analysis Method: Draft EPA Method 1633

Lab Code:KQ2400951-19
Analysis Lot:830171
Signal ID:1

	13C2-PFDA	
	Area	RT
Result ==>	226,796	8.72
Upper Limit ==>	453,592	9.12
Lower Limit ==>	68,039	8.32

Associated Analyses

Low Level Continuing Calibration Verification	KQ2400951-19	238566	8.710
Performance Evaluation	KQ2400951-21	218271	8.715
Continuing Calibration Blank	KQ2400951-22	212527	8.705

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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request:K2314283
Date Analyzed:01/19/24 19:33

Internal Standard Area and RT SUMMARY

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

File ID: J:\LCMS08\Data\240119_1633_B1\240119_021
Instrument ID: K-LCMS-08
Analysis Method: Draft EPA Method 1633

Lab Code:KQ2400951-09
Analysis Lot:830171
Signal ID:1

		18O2-PFHxS		13C4-PFOS		13C3-PFBA	
		Area	RT	Area	RT	Area	RT
	Result ==>	231,874	7.09	275,937	8.82	583,858	1.41
	Upper Limit ==>	463,748	7.49	551,874	9.22	1,167,716	1.81
	Lower Limit ==>	69,562	6.69	82,781	8.42	175,157	1.01
Associated Analyses							
Continuing Calibration Verification	KQ2400951-09	222127	7.069	260638	8.806	581918	1.407
Continuing Calibration Blank	KQ2400951-10	213201	7.069	256900	8.806	565454	1.400
Method Blank	KQ2400355-03	158444	7.086	192888	8.820	417827	1.442
Lab Control Sample	KQ2400355-01	235818	7.086	269158	8.821	611232	1.457
Low Level Lab Control Sample	KQ2400355-02	213454	7.100	257490	8.834	597870	1.511
TA-01-S	K2314283-001	174182	7.089	198172	8.825	433563	1.448
TA-02-S	K2314283-002	211178	7.089	250914	8.821	532461	1.447

ALS Group USA, Corp.
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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request:K2314283
Date Analyzed:01/19/24 19:33

Internal Standard Area and RT SUMMARY

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

File ID: J:\LCMS08\Data\240119_1633_B1\240119_021
Instrument ID: K-LCMS-08
Analysis Method: Draft EPA Method 1633

Lab Code:KQ2400951-09
Analysis Lot:830171
Signal ID:1

		13C2-PFHxA		13C4-PFOA		13C5-PFNA	
		Area	RT	Area	RT	Area	RT
	Result ==>	623,952	4.98	42,584	7.11	308,818	7.96
	Upper Limit ==>	1,247,904	5.38	85,168	7.51	617,636	8.36
	Lower Limit ==>	187,186	4.58	12,775	6.71	92,645	7.56
Associated Analyses							
Continuing Calibration Verification	KQ2400951-09	607514	4.956	44831	7.094	303868	7.943
Continuing Calibration Blank	KQ2400951-10	562672	4.958	43985	7.094	297718	7.944
Method Blank	KQ2400355-03	458116	4.976	29424	7.108	228229	7.957
Lab Control Sample	KQ2400355-01	668626	4.978	40008	7.108	322765	7.957
Low Level Lab Control Sample	KQ2400355-02	666928	4.998	39176	7.123	294473	7.969
TA-01-S	K2314283-001	485230	4.984	34780	7.113	235884	7.961
TA-02-S	K2314283-002	603272	4.987	40153	7.112	295304	7.959

ALS Group USA, Corp.
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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request:K2314283
Date Analyzed:01/19/24 19:33

Internal Standard Area and RT SUMMARY

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

File ID: J:\LCMS08\Data\240119_1633_B1\240119_021
Instrument ID: K-LCMS-08
Analysis Method: Draft EPA Method 1633

Lab Code:KQ2400951-09
Analysis Lot:830171
Signal ID:1

13C2-PFDA		
	Area	RT
Result ==>	226,796	8.72
Upper Limit ==>	453,592	9.12
Lower Limit ==>	68,039	8.32

Associated Analyses

Continuing Calibration Verification	KQ2400951-09	217993	8.709
Continuing Calibration Blank	KQ2400951-10	221823	8.708
Method Blank	KQ2400355-03	159784	8.721
Lab Control Sample	KQ2400355-01	220491	8.722
Low Level Lab Control Sample	KQ2400355-02	204933	8.734
TA-01-S	K2314283-001	158277	8.727
TA-02-S	K2314283-002	201906	8.722

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request:K2314283
Date Analyzed:01/20/24 01:22

Internal Standard Area and RT SUMMARY

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

File ID: J:\LCMS08\Data\240119_1633_B1\240119_036
Instrument ID: K-LCMS-08
Analysis Method: Draft EPA Method 1633

Lab Code:KQ2400951-11
Analysis Lot:830171
Signal ID:1

		18O2-PFHxS		13C4-PFOS		13C3-PFBA	
		Area	RT	Area	RT	Area	RT
	Result ==>	231,874	7.09	275,937	8.82	583,858	1.41
	Upper Limit ==>	463,748	7.49	551,874	9.22	1,167,716	1.81
	Lower Limit ==>	69,562	6.69	82,781	8.42	175,157	1.01
Associated Analyses							
Continuing Calibration Verification	KQ2400951-11	224321	7.077	250747	8.813	542401	1.411
Continuing Calibration Blank	KQ2400951-12	216791	7.068	236128	8.803	517244	1.400
Continuing Calibration Blank	KQ2400951-13	214508	7.070	255055	8.802	543758	1.401
Continuing Calibration Blank	KQ2400951-15	202129	7.072	237771	8.803	558028	1.403

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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request:K2314283
Date Analyzed:01/20/24 01:22

Internal Standard Area and RT SUMMARY

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

File ID: J:\LCMS08\Data\240119_1633_B1\240119_036
Instrument ID: K-LCMS-08
Analysis Method: Draft EPA Method 1633

Lab Code:KQ2400951-11
Analysis Lot:830171
Signal ID:1

		13C2-PFHxA		13C4-PFOA		13C5-PFNA	
		Area	RT	Area	RT	Area	RT
	Result ==>	623,952	4.98	42,584	7.11	308,818	7.96
	Upper Limit ==>	1,247,904	5.38	85,168	7.51	617,636	8.36
	Lower Limit ==>	187,186	4.58	12,775	6.71	92,645	7.56
Associated Analyses							
Continuing Calibration Verification	KQ2400951-11	579560	4.967	41855	7.102	308747	7.950
Continuing Calibration Blank	KQ2400951-12	526523	4.960	39492	7.093	311633	7.941
Continuing Calibration Blank	KQ2400951-13	527282	4.961	40244	7.094	305563	7.942
Continuing Calibration Blank	KQ2400951-15	540537	4.963	40858	7.095	289532	7.943

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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request:K2314283
Date Analyzed:01/20/24 01:22

Internal Standard Area and RT SUMMARY

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

File ID: J:\LCMS08\Data\240119_1633_B1\240119_036
Instrument ID: K-LCMS-08
Analysis Method: Draft EPA Method 1633

Lab Code:KQ2400951-11
Analysis Lot:830171
Signal ID:1

	13C2-PFDA	
	Area	RT
Result ==>	226,796	8.72
Upper Limit ==>	453,592	9.12
Lower Limit ==>	68,039	8.32

Associated Analyses

Continuing Calibration Verification	KQ2400951-11	201826	8.715
Continuing Calibration Blank	KQ2400951-12	212523	8.706
Continuing Calibration Blank	KQ2400951-13	202805	8.705
Continuing Calibration Blank	KQ2400951-15	204274	8.706

ALS Group USA, Corp.
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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Soil

Service Request: K2314283
Date Analyzed: 01/19/24
Date Extracted: 12/22/23

Lab Control Sample Summary

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
Prep Method: Method

Units: ng/g
Basis: Dry
Analysis Lot: 830171

Lab Control Sample
KQ2400355-01

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	4.00	4.72	85	40-150
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	5.34	4.80	111	40-150
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	4.92	4.69	105	40-150
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	4.95	4.76	104	40-150
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	52.3	50.0	105	40-150
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	51.1	50.0	102	40-150
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	55.9	50.0	112	40-150
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	4.16	4.73	88	40-150
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	3.90	4.67	84	40-150
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	5.19	5.00	104	40-150
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	4.81	5.00	96	40-150
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	5.63	5.00	113	40-150
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	5.22	5.00	104	40-150
N-Methylperfluorooctane sulfonamide (MeFOSA)	4.20	5.00	84	40-150
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	5.65	5.00	113	40-150
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	5.22	5.00	104	40-150
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	5.67	5.00	113	40-150
Perfluoro(2-ethoxyethane) sulfonic acid (PFEEESA)	4.29	4.45	96	40-150
Perfluoro-3-methoxypropanoic acid (PFMPA)	5.79	5.00	116	40-150
Perfluoro-4-methoxybutanoic acid (PFMBA)	5.96	5.00	119	40-150
Perfluorobutane sulfonic acid (PFBS)	4.30	4.44	97	40-150
Perfluorobutanoic acid (PFBA)	5.08	5.00	102	40-150
Perfluorodecane sulfonic acid (PFDS)	4.77	4.83	99	40-150
Perfluorodecanoic acid (PFDA)	4.80	5.00	96	40-150
Perfluorododecane sulfonic acid (PFDoS)	3.79	4.85	78	40-150
Perfluorododecanoic acid (PFDOA)	5.51	5.00	110	40-150
Perfluoroheptane sulfonic acid (PFHpS)	5.11	4.77	107	40-150
Perfluoroheptanoic acid (PFHpA)	5.14	5.00	103	40-150
Perfluorohexane sulfonic acid (PFHxS)	4.43	4.57	97	40-150
Perfluorohexanoic acid (PFHxA)	5.19	5.00	104	40-150
Perfluorononane sulfonic acid (PFNS)	4.90	4.81	102	40-150

ALS Group USA, Corp.
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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Soil

Service Request: K2314283
Date Analyzed: 01/19/24
Date Extracted: 12/22/23

Lab Control Sample Summary

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
Prep Method: Method

Units: ng/g
Basis: Dry
Analysis Lot: 830171

Lab Control Sample
KQ2400355-01

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
Perfluorononanoic acid (PFNA)	5.26	5.00	105	40-150
Perfluorooctane sulfonamide (PFOSAm)	5.19	5.00	104	40-150
Perfluorooctane sulfonic acid (PFOS)	4.61	4.64	99	40-150
Perfluorooctanoic acid (PFOA)	5.73	5.00	115	40-150
Perfluoropentane sulfonic acid (PFPeS)	4.75	4.71	101	40-150
Perfluoropentanoic acid (PFPeA)	5.27	5.00	105	40-150
Perfluorotetradecanoic acid (PFTDA)	5.56	5.00	111	40-150
Perfluorotridecanoic acid (PFTrDA)	6.00	5.00	120	40-150
Perfluoroundecanoic acid (PFUnDA)	5.04	5.00	101	40-150

ALS Group USA, Corp.
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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Soil

Service Request: K2314283
Date Analyzed: 01/19/24
Date Extracted: 12/22/23

Lab Control Sample Summary

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
Prep Method: Method

Units: ng/g
Basis: Dry
Analysis Lot: 830171

Low Level Lab Control Sample

KQ2400355-02

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	0.750	0.943	80	40-150
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	0.978	0.960	102	40-150
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	0.941	0.937	100	40-150
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	0.851	0.951	89	40-150
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	19.7	20.0	98	40-150
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	19.2	20.0	96	40-150
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	20.6	20.0	103	40-150
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	0.814	0.945	86	40-150
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	0.716	0.933	77	40-150
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	0.991	1.00	99	40-150
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	0.916	1.00	92	40-150
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	1.01	1.00	101	40-150
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	1.02	1.00	102	40-150
N-Methylperfluorooctane sulfonamide (MeFOSA)	0.949	1.00	95	40-150
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	1.12	1.00	112	40-150
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	1.01	1.00	101	40-150
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	1.09	1.00	109	40-150
Perfluoro(2-ethoxyethane) sulfonic acid (PFEEESA)	0.824	0.890	93	40-150
Perfluoro-3-methoxypropanoic acid (PFMPA)	1.13	1.00	113	40-150
Perfluoro-4-methoxybutanoic acid (PFMBA)	1.14	1.00	114	40-150
Perfluorobutane sulfonic acid (PFBS)	0.869	0.887	98	40-150
Perfluorobutanoic acid (PFBA)	1.03	1.00	103	40-150
Perfluorodecane sulfonic acid (PFDS)	1.01	0.965	105	40-150
Perfluorodecanoic acid (PFDA)	0.922	1.00	92	40-150
Perfluorododecane sulfonic acid (PFDoS)	0.796	0.970	82	40-150
Perfluorododecanoic acid (PFDOA)	1.03	1.00	103	40-150
Perfluoroheptane sulfonic acid (PFHpS)	1.10	0.953	115	40-150
Perfluoroheptanoic acid (PFHpA)	0.990	1.00	99	40-150
Perfluorohexane sulfonic acid (PFHxS)	0.779	0.914	85	40-150
Perfluorohexanoic acid (PFHxA)	1.06	1.00	106	40-150
Perfluorononane sulfonic acid (PFNS)	1.03	0.962	107	40-150

ALS Group USA, Corp.
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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Soil

Service Request: K2314283
Date Analyzed: 01/19/24
Date Extracted: 12/22/23

Lab Control Sample Summary

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
Prep Method: Method

Units: ng/g
Basis: Dry
Analysis Lot: 830171

Low Level Lab Control Sample
KQ2400355-02

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
Perfluorononanoic acid (PFNA)	0.996	1.00	100	40-150
Perfluorooctane sulfonamide (PFOSAm)	1.12	1.00	112	40-150
Perfluorooctane sulfonic acid (PFOS)	1.00	0.928	108	40-150
Perfluorooctanoic acid (PFOA)	0.977	1.00	98	40-150
Perfluoropentane sulfonic acid (PFPeS)	0.967	0.941	103	40-150
Perfluoropentanoic acid (PFPeA)	1.06	1.00	106	40-150
Perfluorotetradecanoic acid (PFTDA)	1.07	1.00	107	40-150
Perfluorotridecanoic acid (PFTrDA)	1.20	1.00	120	40-150
Perfluoroundecanoic acid (PFUnDA)	0.992	1.00	99	40-150

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Soil

Service Request: K2314283
Date Analyzed: NA
Date Extracted:

Method Blank Summary

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Sample Name:
Lab Code:
Analysis Method: Draft EPA Method 1633
Prep Method: None

Instrument ID:
File ID:
Analysis Lot:830171

This Method Blank applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Performance Evaluation	KQ2400951-17	J:\LCMS08\Data\240119_1633_B1\240119_005	01/19/24 13:21
Performance Evaluation	KQ2400951-21	J:\LCMS08\Data\240119_1633_B1\240119_011	01/19/24 15:41

ALS Group USA, Corp.
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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Soil

Service Request: K2314283
Date Analyzed: 01/19/24 21:06
Date Extracted: 12/22/23

Method Blank Summary

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Sample Name: Method Blank **Instrument ID:** K-LCMS-08
Lab Code: KQ2400355-03 **File ID:** J:\LCMS08\Data\240119_1633_B1\240119_025
Analysis Method: Draft EPA Method 1633 **Analysis Lot:** 830171
Prep Method: Method **Extraction Lot:** 431421

This Method Blank applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Lab Control Sample	KQ2400355-01	J:\LCMS08\Data\240119_1633_B1\240119_026	01/19/24 21:29
Low Level Lab Control Sample	KQ2400355-02	J:\LCMS08\Data\240119_1633_B1\240119_027	01/19/24 21:53
TA-01-S	K2314283-001	J:\LCMS08\Data\240119_1633_B1\240119_030	01/19/24 23:03
TA-02-S	K2314283-002	J:\LCMS08\Data\240119_1633_B1\240119_031	01/19/24 23:26

ALS Group USA, Corp.
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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Soil

Service Request: K2314283
Date Analyzed: NA
Date Extracted:

Lab Control Sample Summary

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Sample Name:
Lab Code:
Analysis Method: Draft EPA Method 1633
Prep Method: None

Instrument ID:
File ID:
Analysis Lot:830171

This Lab Control Sample applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Performance Evaluation	KQ2400951-17	J:\LCMS08\Data\240119_1633_B1\240119_005	01/19/24 13:21
Performance Evaluation	KQ2400951-21	J:\LCMS08\Data\240119_1633_B1\240119_011	01/19/24 15:41

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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Soil

Service Request: K2314283
Date Analyzed: 01/19/24 21:29
Date Extracted: 12/22/23

Lab Control Sample Summary

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Sample Name: Lab Control Sample **Instrument ID:** K-LCMS-08
Lab Code: KQ2400355-01 **File ID:** J:\LCMS08\Data\240119_1633_B1\240119_026
Analysis Method: Draft EPA Method 1633 **Analysis Lot:** 830171
Prep Method: Method **Extraction Lot:** 431421

This Lab Control Sample applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Method Blank	KQ2400355-03	J:\LCMS08\Data\240119_1633_B1\240119_025	01/19/24 21:06
Low Level Lab Control Sample	KQ2400355-02	J:\LCMS08\Data\240119_1633_B1\240119_027	01/19/24 21:53
TA-01-S	K2314283-001	J:\LCMS08\Data\240119_1633_B1\240119_030	01/19/24 23:03
TA-02-S	K2314283-002	J:\LCMS08\Data\240119_1633_B1\240119_031	01/19/24 23:26

ALS Group USA, Corp.
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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A

Service Request: K2314283
Calibration Date: 1/18/2024

Initial Calibration Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Calibration ID: KC2400027
Instrument ID: K-LCMS-08

Signal ID: 1

#	Lab Code	Sample Name	File Location	Acquisition Date
01	KC2400027-01	1633 ICAL 0.05PPB	240118_006	01/18/2024 14:04
02	KC2400027-02	1633 ICAL 0.1PPB	240118_007	01/18/2024 14:27
03	KC2400027-03	1633 ICAL 0.25PPB	240118_008	01/18/2024 14:51
04	KC2400027-04	1633 ICAL 0.50PPB	240118_009	01/18/2024 15:14
05	KC2400027-05	1633 ICAL 1.0PPB	240118_010	01/18/2024 15:37
06	KC2400027-06	1633 ICAL 5.0PPB	240118_011	01/18/2024 16:00
07	KC2400027-07	1633 ICAL 10.0PPB	240118_012	01/18/2024 16:24
08	KC2400027-08	1633 ICAL 15.0PPB	240118_013	01/18/2024 16:47
09	KC2400027-09	1633 ICAL 20.0PPB	240118_014	01/18/2024 17:10

Analyte

11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0472	8.159	02	0.0940	5.935	03	0.2360	6.05	04	0.4720	5.441
05	0.9400	5.688	06	4.7200	5.661	07	9.4000	5.714	08	14.1000	5.604
09	18.9000	5.418									

13C2-4:2 FTS

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	5.0000	0.4093	02	5.0000	0.4132	03	5.0000	0.3727	04	5.0000	0.3378
05	5.0000	0.344	06	5.0000	0.3352	07	5.0000	0.3214	08	5.0000	0.274
09	5.0000	0.2886									

13C2-6:2 FTS

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	5.0000	0.35	02	5.0000	0.3648	03	5.0000	0.3532	04	5.0000	0.3579
05	5.0000	0.3215	06	5.0000	0.2981	07	5.0000	0.3028	08	5.0000	0.2913
09	5.0000	0.2889									

13C2-8:2 FTS

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	5.0000	0.3261	02	5.0000	0.3235	03	5.0000	0.2753	04	5.0000	0.261
05	5.0000	0.2421	06	5.0000	0.2535	07	5.0000	0.2524	08	5.0000	0.2247
09	5.0000	0.247									

13C2-PFDoDA

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.2500	1.476	02	1.2500	1.359	03	1.2500	1.333	04	1.2500	1.446
05	1.2500	1.352	06	1.2500	1.316	07	1.2500	1.3	08	1.2500	1.402
09	1.2500	1.419									

13C2-PFTeDA

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.2500	0.6351	02	1.2500	0.5806	03	1.2500	0.5694	04	1.2500	0.6471
05	1.2500	0.5758	06	1.2500	0.5474	07	1.2500	0.5611	08	1.2500	0.6105
09	1.2500	0.6284									

ALS Group USA, Corp.
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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A

Service Request: K2314283
Calibration Date: 1/18/2024

Initial Calibration Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Calibration ID: KC2400027
Instrument ID: K-LCMS-08

Signal ID: 1

Analyte

13C3-HFPO-DA

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	10.0000	0.2408	02	10.0000	0.2273	03	10.0000	0.2277	04	10.0000	0.2494
05	10.0000	0.2412	06	10.0000	0.2497	07	10.0000	0.2476	08	10.0000	0.2521
09	10.0000	0.2666									

13C3-PFBS

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.5000	1.466	02	2.5000	1.487	03	2.5000	1.353	04	2.5000	1.421
05	2.5000	1.389	06	2.5000	1.428	07	2.5000	1.37	08	2.5000	1.383
09	2.5000	1.473									

13C3-PFHxS

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.5000	1.176	02	2.5000	1.049	03	2.5000	1.05	04	2.5000	1.085
05	2.5000	1.074	06	2.5000	1.022	07	2.5000	1.032	08	2.5000	1.075
09	2.5000	1.094									

13C4-PFBA

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	10.0000	1.093	02	10.0000	1.124	03	10.0000	1.113	04	10.0000	1.124
05	10.0000	1.136	06	10.0000	1.121	07	10.0000	1.112	08	10.0000	1.094
09	10.0000	1.14									

13C4-PFHpA

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.5000	0.9829	02	2.5000	0.8939	03	2.5000	0.935	04	2.5000	0.9545
05	2.5000	0.9493	06	2.5000	0.9889	07	2.5000	0.9572	08	2.5000	0.9323
09	2.5000	0.9902									

13C5-PFHxA

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.5000	1.096	02	2.5000	1.054	03	2.5000	1.009	04	2.5000	1.047
05	2.5000	1.045	06	2.5000	1.072	07	2.5000	1.057	08	2.5000	1.008
09	2.5000	1.094									

13C5-PFPeA

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	5.0000	0.1233	02	5.0000	0.1067	03	5.0000	0.1095	04	5.0000	0.1171
05	5.0000	0.1113	06	5.0000	0.1117	07	5.0000	0.1063	08	5.0000	0.1142
09	5.0000	0.1155									

13C6-PFDA

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.2500	1.051	02	1.2500	0.9903	03	1.2500	0.9543	04	1.2500	1.057
05	1.2500	1.018	06	1.2500	0.9832	07	1.2500	0.9726	08	1.2500	1.042
09	1.2500	0.9836									

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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A

Service Request: K2314283
Calibration Date: 1/18/2024

Initial Calibration Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

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13C7-PFUnDA

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.2500	1.298	02	1.2500	1.194	03	1.2500	1.189	04	1.2500	1.316
05	1.2500	1.137	06	1.2500	1.074	07	1.2500	1.097	08	1.2500	1.219
09	1.2500	1.272									

13C8-FOSA

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.5000	1.09	02	2.5000	1.077	03	2.5000	1.038	04	2.5000	1.119
05	2.5000	1.037	06	2.5000	0.9911	07	2.5000	1.028	08	2.5000	1.053
09	2.5000	1.118									

13C8-PFOA

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.5000	13.87	02	2.5000	13.24	03	2.5000	14.02	04	2.5000	14.75
05	2.5000	14.39	06	2.5000	13.2	07	2.5000	13.2	08	2.5000	13.95
09	2.5000	15.13									

13C8-PFOS

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.5000	0.4161	02	2.5000	0.4179	03	2.5000	0.4115	04	2.5000	0.4327
05	2.5000	0.4166	06	2.5000	0.3954	07	2.5000	0.4129	08	2.5000	0.4123
09	2.5000	0.4371									

13C9-PFNA

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.2500	0.9393	02	1.2500	0.9497	03	1.2500	0.9695	04	1.2500	0.9879
05	1.2500	1.001	06	1.2500	0.9931	07	1.2500	0.9953	08	1.2500	0.9603
09	1.2500	1.013									

1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0480	2.54	02	0.0960	1.65	03	0.2400	2.154	04	0.4800	2.055
05	0.9600	2.129	06	4.8000	2.256	07	9.6000	2.084	08	14.4000	2.302
09	19.2000	2.167									

1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0469	2.831	02	0.0940	2.384	03	0.2340	2.349	04	0.4690	2.463
05	0.9400	2.474	06	4.6900	2.404	07	9.4000	2.413	08	14.1000	2.489
09	18.7000	2.327									

1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	0.0950	2.604	03	0.2380	2.409	04	0.4760	1.834	05	0.9500	2.458
06	4.7600	2.337	07	9.5000	2.22	08	14.3000	2.287	09	19.0000	2.065

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A

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Initial Calibration Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Calibration ID: KC2400027
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2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	5.0000	0.08112	03	10.0000	0.08179	04	15.0000	0.0808	05	20.0000	0.07912
06	50.0000	0.09713	07	80.0000	0.08443	08	100.0000	0.09652	09	150.0000	0.08971

2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.0000	0.07256	02	5.0000	0.0662	03	10.0000	0.06464	04	15.0000	0.06163
05	20.0000	0.06217	06	50.0000	0.0661	07	80.0000	0.0586	08	100.0000	0.06738
09	150.0000	0.06271									

4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.0000	0.1087	02	5.0000	0.1136	03	10.0000	0.1076	04	15.0000	0.103
05	20.0000	0.1066	06	50.0000	0.1219	07	80.0000	0.1097	08	100.0000	0.1142
09	150.0000	0.1126									

4,8-Dioxa-3H-perfluorononanoic acid (DONA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0473	9.878	02	0.0950	7.963	03	0.2360	8.164	04	0.4730	6.965
05	0.9500	7.41	06	4.7300	7.468	07	9.5000	7.309	08	14.2000	7.309
09	18.9000	7.289									

9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0467	10.11	02	0.0930	8.255	03	0.2340	8.495	04	0.4670	7.402
05	0.9300	8.204	06	4.6700	7.923	07	9.3000	7.92	08	14.0000	8.313
09	18.7000	7.579									

D3-MeFOSA

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.5000	0.213	02	2.5000	0.2211	03	2.5000	0.211	04	2.5000	0.2096
05	2.5000	0.228	06	2.5000	0.1997	07	2.5000	0.2021	08	2.5000	0.2129
09	2.5000	0.2262									

D3-MeFOSAA

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	5.0000	0.5007	02	5.0000	0.4569	03	5.0000	0.4449	04	5.0000	0.4459
05	5.0000	0.4209	06	5.0000	0.4019	07	5.0000	0.3982	08	5.0000	0.396
09	5.0000	0.4398									

D5-EtFOSA

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.5000	0.2807	02	2.5000	0.2848	03	2.5000	0.2861	04	2.5000	0.293
05	2.5000	0.269	06	2.5000	0.2635	07	2.5000	0.274	08	2.5000	0.2986
09	2.5000	0.3114									

Client: Maul Foster & Alongi, Incorporated
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Initial Calibration Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

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D5-EtFOSAA

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	5.0000	0.5569	02	5.0000	0.5672	03	5.0000	0.5493	04	5.0000	0.5385
05	5.0000	0.4957	06	5.0000	0.4756	07	5.0000	0.485	08	5.0000	0.4892
09	5.0000	0.5146									

D7-MeFOSE

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	25.0000	0.2613	02	25.0000	0.2549	03	25.0000	0.2571	04	25.0000	0.2719
05	25.0000	0.2466	06	25.0000	0.2402	07	25.0000	0.2587	08	25.0000	0.2694
09	25.0000	0.2948									

D9-EtFOSE

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	25.0000	0.265	02	25.0000	0.2651	03	25.0000	0.2623	04	25.0000	0.2793
05	25.0000	0.2597	06	25.0000	0.2497	07	25.0000	0.2533	08	25.0000	0.2669
09	25.0000	0.2904									

Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0500	1.224	02	0.1000	1.2	03	0.2500	1.147	04	0.5000	0.9938
05	1.0000	1.114	06	5.0000	1.064	07	10.0000	1.067	08	15.0000	1.08
09	20.0000	1.05									

N-Ethylperfluorooctane sulfonamide (EtFOSAm)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0500	1.77	02	0.1000	1.305	03	0.2500	1.37	04	0.5000	1.409
05	1.0000	1.415	06	5.0000	1.458	07	10.0000	1.471	08	15.0000	1.469
09	20.0000	1.432									

N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0500	0.8615	02	0.1000	0.5059	03	0.2500	0.67	04	0.5000	0.5919
05	1.0000	0.6858	06	5.0000	0.6483	07	10.0000	0.6483	08	15.0000	0.7286
09	20.0000	0.6696									

N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	0.1000	1.413	03	0.2500	1.439	04	0.5000	1.255	05	1.0000	1.219
06	5.0000	1.276	07	10.0000	1.323	08	15.0000	1.329	09	20.0000	1.269

N-Methylperfluorooctane sulfonamide (MeFOSA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0500	2.065	02	0.1000	1.667	03	0.2500	1.844	04	0.5000	1.811
05	1.0000	1.704	06	5.0000	1.793	07	10.0000	1.761	08	15.0000	1.8
09	20.0000	1.774									

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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A

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Calibration Date: 1/18/2024

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N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	0.1000	1.541	03	0.2500	1.245	04	0.5000	1.328	05	1.0000	1.359
06	5.0000	1.257	07	10.0000	1.337	08	15.0000	1.457	09	20.0000	1.328

N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	0.1000	1.173	03	0.2500	0.9782	04	0.5000	0.8163	05	1.0000	0.9017
06	5.0000	0.8644	07	10.0000	0.8531	08	15.0000	0.9135	09	20.0000	0.8446

Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0500	0.7167	02	0.1000	0.5219	03	0.2500	0.5649	04	0.5000	0.5333
05	1.0000	0.5269	06	5.0000	0.5333	07	10.0000	0.5302	08	15.0000	0.5622
09	20.0000	0.5027									

Perfluoro(2-ethoxyethane) sulfonic acid (PFEESA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0445	3.419	02	0.0890	2.655	03	0.2230	2.792	04	0.4450	2.604
05	0.8900	2.688	06	4.4500	2.678	07	8.9000	2.73	08	13.4000	2.912
09	17.8000	2.725									

Perfluoro-3-methoxypropanoic acid (PFMPA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0500	3.807	02	0.1000	3.337	03	0.2500	3.257	04	0.5000	2.966
05	1.0000	3.144	06	5.0000	3.161	07	10.0000	3.223	08	15.0000	3.087
09	20.0000	3.1									

Perfluoro-4-methoxybutanoic acid (PFMBA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0500	5.244	02	0.1000	4.709	03	0.2500	4.443	04	0.5000	4.262
05	1.0000	4.491	06	5.0000	4.412	07	10.0000	4.526	08	15.0000	4.526
09	20.0000	4.586									

Perfluorobutane sulfonic acid (PFBS)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0444	1.464	02	0.0890	1.252	03	0.2210	1.381	04	0.4440	1.148
05	0.8900	1.294	06	4.4400	1.239	07	8.9000	1.265	08	13.3000	1.287
09	17.7000	1.187									

Perfluorobutanoic acid (PFBA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	0.1000	0.915	03	0.2500	0.8907	04	0.5000	0.8273	05	1.0000	0.848
06	5.0000	0.8351	07	10.0000	0.8419	08	15.0000	0.8721	09	20.0000	0.8433

Perfluorodecane sulfonic acid (PFDS)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0483	2.225	02	0.0970	1.693	03	0.2410	1.65	04	0.4830	1.529
05	0.9700	1.606	06	4.8300	1.595	07	9.7000	1.589	08	14.5000	1.71

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A

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Initial Calibration Summary
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Perfluorodecane sulfonic acid (PFDS)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
09	19.3000	1.66									

Perfluorodecanoic acid (PFDA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0500	1.928	02	0.1000	1.503	03	0.2500	1.274	04	0.5000	1.176
05	1.0000	1.202	06	5.0000	1.209	07	10.0000	1.176	08	15.0000	1.175
09	20.0000	1.216									

Perfluorododecane sulfonic acid (PFDoS)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0485	1.277	02	0.0970	1.045	03	0.2430	1.045	04	0.4850	0.8994
05	0.9700	0.9459	06	4.8500	0.931	07	9.7000	0.9379	08	14.6000	0.9927
09	19.4000	0.9492									

Perfluorododecanoic acid (PFDOA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0500	1.188	02	0.1000	0.799	03	0.2000	0.9867	04	0.5000	0.6951
05	1.0000	0.7279	06	5.0000	0.6971	07	10.0000	0.7067	08	15.0000	0.7158
09	20.0000	0.698									

Perfluoroheptane sulfonic acid (PFHpS)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0477	2.322	02	0.0950	1.898	03	0.2390	2.001	04	0.4770	1.863
05	0.9500	1.808	06	4.7700	1.899	07	9.5000	1.861	08	14.3000	1.976
09	19.1000	1.935									

Perfluoroheptanoic acid (PFHpA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0500	1.848	02	0.1000	1.409	03	0.2500	1.171	04	0.5000	1.028
05	1.0000	1.069	06	5.0000	1.031	07	10.0000	1.031	08	15.0000	1.061
09	20.0000	1.032									

Perfluorohexane sulfonic acid (PFHxS)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0457	1.752	02	0.0910	1.415	03	0.2290	1.272	04	0.4570	1.127
05	0.9100	1.234	06	4.5700	1.329	07	9.1000	1.278	08	13.7000	1.188
09	18.3000	1.146									

Perfluorohexanoic acid (PFHxA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0500	1.197	02	0.1000	0.8301	03	0.2500	0.8418	04	0.5000	0.7245
05	1.0000	0.8263	06	5.0000	0.8144	07	10.0000	0.8325	08	15.0000	0.871
09	20.0000	0.8124									

Perfluorononane sulfonic acid (PFNS)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0481	2.25	02	0.0960	1.982	03	0.2400	1.885	04	0.4810	1.792

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Perfluorononane sulfonic acid (PFNS)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
05	0.9600	1.798	06	4.8100	1.812	07	9.6000	1.795	08	14.4000	1.937
09	19.2000	1.845									

Perfluorononanoic acid (PFNA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0500	1.157	02	0.1000	0.9651	03	0.2500	0.8215	04	0.5000	0.7306
05	1.0000	0.7031	06	5.0000	0.698	07	10.0000	0.7054	08	15.0000	0.7434
09	20.0000	0.6998									

Perfluorooctane sulfonamide (PFOSAm)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.1000	0.9782	02	0.2000	0.851	03	0.5000	0.8459	04	1.0000	0.7456
05	2.0000	0.7947	06	10.0000	0.7908	07	20.0000	0.783	08	30.0000	0.8152
09	40.0000	0.8118									

Perfluorooctane sulfonic acid (PFOS)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0464	3.278	02	0.0930	2.714	03	0.2330	2.904	04	0.4640	2.31
05	0.9300	2.352	06	4.6400	2.321	07	9.3000	2.377	08	13.9000	2.592
09	18.6000	2.555									

Perfluorooctanoic acid (PFOA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0500	1.058	02	0.1000	0.9445	03	0.2500	0.8119	04	0.5000	0.6195
05	1.0000	0.7174	06	5.0000	0.743	07	10.0000	0.738	08	15.0000	0.6692
09	20.0000	0.5616									

Perfluoropentane sulfonic acid (PFPeS)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0471	1.39	02	0.0940	1.366	03	0.2350	1.372	04	0.4710	1.202
05	0.9400	1.278	06	4.7100	1.348	07	9.4000	1.321	08	14.1000	1.288
09	18.8000	1.25									

Perfluoropentanoic acid (PFPeA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0500	8.294	02	0.1000	7.05	03	0.2500	6.206	04	0.5000	5.996
05	1.0000	5.995	06	5.0000	6.022	07	10.0000	6.167	08	15.0000	6.288
09	20.0000	6.268									

Perfluorotetradecanoic acid (PFTDA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0500	2.237	02	0.1000	1.643	03	0.2500	1.528	04	0.5000	1.291
05	1.0000	1.372	06	5.0000	1.37	07	10.0000	1.367	08	15.0000	1.341
09	20.0000	1.337									

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Perfluorotridecanoic acid (PFTrDA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0500	2.927	02	0.1000	2.234	03	0.2500	2.018	04	0.5000	1.746
05	1.0000	1.873	06	5.0000	1.802	07	10.0000	1.778	08	15.0000	1.827
09	20.0000	1.71									

Perfluoroundecanoic acid (PFUnDA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.0500	1.549	02	0.1000	1.099	03	0.2500	1.007	04	0.5000	0.8931
05	1.0000	0.9549	06	5.0000	0.9139	07	10.0000	0.927	08	15.0000	0.9252
09	20.0000	0.8829									

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A

Service Request: K2314283
Calibration Date: 1/18/2024

Initial Calibration Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Calibration ID: KC2400027
Instrument ID: K-LCMS-08

Signal ID: 1

Analyte Name	Compound Type	Calibration Evaluation				Calibration Evaluation	
		Fit Type	Eval	Eval Result	Control Criteria	Average RRF	Minimum RRF
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	TRG	Linear	R2	0.9995	≥	5.963	
13C2-4:2 FTS	SURR	Average RF	% RSD	14.0	≤20	0.344	
13C2-6:2 FTS	SURR	Average RF	% RSD	9.6	≤20	0.3254	
13C2-8:2 FTS	SURR	Average RF	% RSD	13.2	≤20	0.2673	
13C2-PFDoDA	SURR	Average RF	% RSD	4.4	≤20	1.378	
13C2-PFTeDA	SURR	Average RF	% RSD	6.0	≤20	0.595	
13C3-HFPO-DA	SURR	Average RF	% RSD	5.0	≤20	0.2447	
13C3-PFBS	SURR	Average RF	% RSD	3.4	≤20	1.419	
13C3-PFHxS	SURR	Average RF	% RSD	4.3	≤20	1.073	
13C4-PFBA	SURR	Average RF	% RSD	1.5	≤20	1.118	
13C4-PFHpA	SURR	Average RF	% RSD	3.3	≤20	0.9538	
13C5-PFHxA	SURR	Average RF	% RSD	3.0	≤20	1.054	
13C5-PFPeA	SURR	Average RF	% RSD	4.8	≤20	0.1128	
13C6-PFDA	SURR	Average RF	% RSD	3.7	≤20	1.006	
13C7-PFUnDA	SURR	Average RF	% RSD	7.2	≤20	1.2	
13C8-FOSA	SURR	Average RF	% RSD	4.0	≤20	1.061	
13C8-PFOA	SURR	Average RF	% RSD	5.0	≤20	13.97	
13C8-PFOS	SURR	Average RF	% RSD	2.9	≤20	0.4169	
13C9-PFNA	SURR	Average RF	% RSD	2.6	≤20	0.9787	
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	TRG	Average RF	% RSD	11.1	≤20	2.149	
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	TRG	Average RF	% RSD	6.1	≤20	2.459	
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	TRG	Average RF	% RSD	10.6	≤20	2.277	
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	TRG	Average RF	% RSD	8.4	≤20	0.08633	
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	TRG	Average RF	% RSD	6.2	≤20	0.06467	
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	TRG	Average RF	% RSD	4.9	≤20	0.1109	
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	TRG	Average RF	% RSD	11.3	≤20	7.751	
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	TRG	Average RF	% RSD	9.5	≤20	8.244	
D3-MeFOSA	SURR	Average RF	% RSD	4.6	≤20	0.2137	

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A

Service Request: K2314283
Calibration Date: 1/18/2024

Initial Calibration Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Calibration ID: KC2400027
Instrument ID: K-LCMS-08

Signal ID: 1

Analyte Name	Compound Type	Calibration Evaluation				Calibration Evaluation	
		Fit Type	Eval	Eval Result	Control Criteria	Average RRF	Minimum RRF
D3-MeFOSAA	SURR	Average RF	% RSD	7.8	≤20	0.4339	
D5-EtFOSA	SURR	Average RF	% RSD	5.3	≤20	0.2846	
D5-EtFOSAA	SURR	Average RF	% RSD	6.7	≤20	0.5191	
D7-MeFOSE	SURR	Average RF	% RSD	6.1	≤20	0.2617	
D9-EtFOSE	SURR	Average RF	% RSD	4.7	≤20	0.2658	
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	TRG	Average RF	% RSD	6.7	≤20	1.104	
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	TRG	Average RF	% RSD	8.9	≤20	1.455	
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	TRG	Average RF	% RSD	14.4	≤20	0.6678	
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	TRG	Average RF	% RSD	5.9	≤20	1.315	
N-Methylperfluorooctane sulfonamide (MeFOSA)	TRG	Average RF	% RSD	6.2	≤20	1.802	
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	TRG	Average RF	% RSD	7.3	≤20	1.357	
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	TRG	Average RF	% RSD	12.5	≤20	0.9181	
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	TRG	Average RF	% RSD	11.5	≤20	0.5547	
Perfluoro(2-ethoxyethane) sulfonic acid (PFEESA)	TRG	Average RF	% RSD	8.9	≤20	2.8	
Perfluoro-3-methoxypropanoic acid (PFMPA)	TRG	Average RF	% RSD	7.5	≤20	3.231	
Perfluoro-4-methoxybutanoic acid (PFMBA)	TRG	Average RF	% RSD	6.1	≤20	4.578	
Perfluorobutane sulfonic acid (PFBS)	TRG	Average RF	% RSD	7.5	≤20	1.28	
Perfluorobutanoic acid (PFBA)	TRG	Average RF	% RSD	3.6	≤20	0.8592	
Perfluorodecane sulfonic acid (PFDS)	TRG	Linear	R2	0.9990	≥	1.695	
Perfluorodecanoic acid (PFDA)	TRG	Linear	R2	0.9996	≥	1.318	
Perfluorododecane sulfonic acid (PFDoS)	TRG	Average RF	% RSD	11.4	≤20	1.003	
Perfluorododecanoic acid (PFDOA)	TRG	Linear	R2	0.9995	≥	0.8016	
Perfluoroheptane sulfonic acid (PFHpS)	TRG	Average RF	% RSD	7.7	≤20	1.951	
Perfluoroheptanoic acid (PFHpA)	TRG	Linear	R2	0.9997	≥	1.187	
Perfluorohexane sulfonic acid (PFHxS)	TRG	Linear	R2	0.9971	≥	1.305	
Perfluorohexanoic acid (PFHxA)	TRG	Linear	R2	0.9988	≥	0.8611	

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A

Service Request: K2314283
Calibration Date: 1/18/2024

Initial Calibration Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Calibration ID: KC2400027
Instrument ID: K-LCMS-08

Signal ID: 1

Analyte Name	Compound Type	Calibration Evaluation				Calibration Evaluation	
		Fit Type	Eval	Eval Result	Control Criteria	Average RRF	Minimum RRF
Perfluorononane sulfonic acid (PFNS)	TRG	Average RF	% RSD	7.8	≤20	1.899	
Perfluorononanoic acid (PFNA)	TRG	Linear	R2	0.9992	≥	0.8026	
Perfluorooctane sulfonamide (PFOSAm)	TRG	Average RF	% RSD	8.0	≤20	0.824	
Perfluorooctane sulfonic acid (PFOS)	TRG	Average RF	% RSD	12.5	≤20	2.6	
Perfluorooctanoic acid (PFOA)	TRG	Linear	R2	0.9865	≥	0.7626	
Perfluoropentane sulfonic acid (PFPeS)	TRG	Average RF	% RSD	4.8	≤20	1.313	
Perfluoropentanoic acid (PFPeA)	TRG	Average RF	% RSD	11.6	≤20	6.476	
Perfluorotetradecanoic acid (PFTDA)	TRG	Linear	R2	0.9998	≥	1.498	
Perfluorotridecanoic acid (PFTrDA)	TRG	Linear	R2	0.9991	≥	1.99	
Perfluoroundecanoic acid (PFUnDA)	TRG	Linear	R2	0.9994	≥	1.017	

QA/QC Report

Service Request: K2314283
Calibration Date: 1/18/2024

Calibration ID: KC2400027
Instrument ID: K-LCMS-08

Signal ID: 1

Analyte Name	Expected	Result	Average RF	SSV RF	% D	Criteria	Curve Fit
Perfluorobutane sulfonic acid (PFBS)	0.890	0.864	1.28E0	1.243E0	-2.883	±30	Average RF
Perfluoropentane sulfonic acid (PFPeS)	0.940	0.982	1.313E0	1.371E0	4.43	±30	Average RF
Perfluorohexane sulfonic acid (PFHxS)	0.910	0.924	1.305E0	1.244E0	1.56	±30	Linear
Perfluoroheptane sulfonic acid (PFHpS)	0.950	1.00	1.951E0	2.061E0	5.62	±30	Average RF
Perfluorooctane sulfonic acid (PFOS)	0.930	0.855	2.6E0	2.39E0	-8.068	±30	Average RF
Perfluorononane sulfonic acid (PFNS)	0.960	0.974	1.899E0	1.927E0	1.46	±30	Average RF
Perfluorodecane sulfonic acid (PFDS)	0.970	0.984	1.695E0	1.685E0	1.39	±30	Linear
Perfluorododecane sulfonic acid (PFDoS)	0.970	0.935	1.003E0	9.668E-1	-3.574	±30	Average RF
Perfluorobutanoic acid (PFBA)	1.00	0.990	8.592E-1	8.509E-1	-0.971	±30	Average RF
Perfluoropentanoic acid (PFPeA)	1.00	0.968	6.476E0	6.266E0	-3.247	±30	Average RF
Perfluorohexanoic acid (PFHxA)	1.00	0.994	8.611E-1	8.343E-1	-0.573	±30	Linear
Perfluoroheptanoic acid (PFHpA)	1.00	0.976	1.187E0	1.048E0	-2.365	±30	Linear
Perfluorooctanoic acid (PFOA)	1.00	0.969	7.626E-1	6.537E-1	-3.067	±30	Linear
Perfluorononanoic acid (PFNA)	1.00	0.952	8.026E-1	6.993E-1	-4.785	±30	Linear
Perfluorodecanoic acid (PFDA)	1.00	0.982	1.318E0	1.2E0	-1.825	±30	Linear
Perfluoroundecanoic acid (PFUnDA)	1.00	1.02	1.017E0	9.491E-1	1.90	±30	Linear
Perfluorododecanoic acid (PFDOA)	1.00	0.966	8.016E-1	7.022E-1	-3.407	±30	Linear
Perfluorotridecanoic acid (PFTrDA)	1.00	0.932	1.99E0	1.697E0	-6.843	±30	Linear
Perfluorotetradecanoic acid (PFTDA)	1.00	1.03	1.498E0	1.416E0	2.64	±30	Linear
Perfluorooctane sulfonamide (PFOSAm)	2.00	2.07	8.24E-1	8.516E-1	3.35	±30	Average RF
N-Methylperfluorooctane sulfonamide (MeFOSA)	1.00	0.957	1.802E0	1.724E0	-4.338	±30	Average RF
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	1.00	1.02	1.455E0	1.483E0	1.86	±30	Average RF
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	1.00	0.962	9.181E-1	8.831E-1	-3.816	±30	Average RF
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	1.00	0.994	1.315E0	1.308E0	-0.586	±30	Average RF
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	1.00	0.928	1.357E0	1.258E0	-7.240	±30	Average RF
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	1.00	1.01	6.678E-1	6.732E-1	0.817	±30	Average RF
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	0.940	0.904	2.459E0	2.364E0	-3.875	±30	Average RF
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	0.950	0.887	2.277E0	2.126E0	-6.638	±30	Average RF
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	0.960	0.989	2.149E0	2.215E0	3.07	±30	Average RF
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	20.0	21.8	1.109E-1	1.207E-1	8.89	±30	Average RF
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	20.0	19.4	6.467E-2	6.264E-2	-3.133	±30	Average RF
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	20.0	20.4	8.633E-2	8.815E-2	2.11	±30	Average RF

QA/QC Report

Service Request: K2314283
Calibration Date: 1/18/2024

Calibration ID: KC2400027
Instrument ID: K-LCMS-08

Signal ID: 1

Analyte Name	Expected	Result	Average RF	SSV RF	% D	Criteria	Curve Fit
Perfluoro(2-ethoxyethane) sulfonic acid (PFEEA)	0.890	0.831	2.8E0	2.615E0	-6.611	±30	Average RF
9-Chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9-Cl-PF3ONS)	0.930	0.806	8.244E0	7.146E0	-13.325	±30	Average RF
11-Chloroheptafluoro-3-oxadecane-1-sulfonic acid (11-Cl-PF3OUdS)	0.940	0.892	5.963E0	5.362E0	-5.139	±30	Linear
Perfluoro-3-methoxypropanoic acid (PFMPA)	1.00	1.00	3.231E0	3.235E0	0.105	±30	Average RF
Perfluoro-4-methoxybutanoic acid (PFMBA)	1.00	1.08	4.578E0	4.958E0	8.30	±30	Average RF
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	1.00	0.955	1.104E0	1.055E0	-4.505	±30	Average RF
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	1.00	0.954	5.547E-1	5.289E-1	-4.647	±30	Average RF
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	0.950	0.861	7.751E0	7.027E0	-9.339	±30	Average RF

Analyte Name	Expected	Result	Average RF	SSV		% D	Criteria	Curve Fit
				RF				
13C3-PFBS	2.50	2.72	1.419E0	1.545E0	8.90	±30	Average RF	
13C3-PFBS	2.50	2.59	1.419E0	1.471E0	3.66	±30	Average RF	
13C3-PFHxS	2.50	2.59	1.073E0	1.112E0	3.67	±30	Average RF	
13C3-PFHxS	2.50	2.67	1.073E0	1.146E0	6.75	±30	Average RF	
13C8-PFOS	2.50	2.34	4.169E-1	3.897E-1	-6.527	±30	Average RF	
13C8-PFOS	2.50	2.47	4.169E-1	4.113E-1	-1.357	±30	Average RF	
13C4-PFBA	10.0	9.94	1.118E0	1.111E0	-0.606	±30	Average RF	
13C4-PFBA	10.0	9.94	1.118E0	1.111E0	-0.557	±30	Average RF	
13C5-PFPeA	5.00	4.63	1.128E-1	1.046E-1	-7.315	±30	Average RF	
13C5-PFPeA	5.00	5.14	1.128E-1	1.161E-1	2.85	±30	Average RF	
13C5-PFHxA	2.50	2.49	1.054E0	1.049E0	-0.429	±30	Average RF	
13C5-PFHxA	2.50	2.51	1.054E0	1.057E0	0.343	±30	Average RF	
13C4-PFHpA	2.50	2.56	9.538E-1	9.766E-1	2.39	±30	Average RF	
13C4-PFHpA	2.50	2.42	9.538E-1	9.242E-1	-3.099	±30	Average RF	
13C8-PFOA	2.50	2.53	1.397E1	1.415E1	1.28	±30	Average RF	
13C8-PFOA	2.50	2.37	1.397E1	1.322E1	-5.378	±30	Average RF	
13C9-PFNA	1.25	1.28	9.787E-1	1.0E0	2.21	±30	Average RF	
13C9-PFNA	1.25	1.24	9.787E-1	9.717E-1	-0.716	±30	Average RF	
13C6-PFDA	1.25	1.24	1.006E0	9.95E-1	-1.055	±30	Average RF	
13C6-PFDA	1.25	1.35	1.006E0	1.083E0	7.73	±30	Average RF	
13C7-PFUnDA	1.25	1.28	1.2E0	1.224E0	2.02	±30	Average RF	
13C7-PFUnDA	1.25	1.24	1.2E0	1.195E0	-0.414	±30	Average RF	
13C2-PFDoDA	1.25	1.21	1.378E0	1.333E0	-3.255	±30	Average RF	

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A

Service Request: K2314283
Calibration Date: 1/18/2024

Initial Calibration Verification Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Calibration ID: KC2400027
Instrument ID: K-LCMS-08

Signal ID: 1

Analyte Name	Expected	Result	Average RF	SSV RF	% D	Criteria	Curve Fit
13C2-PFDoDA	1.25	1.24	1.378E0	1.364E0	-1.012	±30	Average RF
13C2-PFTeDA	1.25	1.28	5.95E-1	6.075E-1	2.09	±30	Average RF
13C2-PFTeDA	1.25	1.18	5.95E-1	5.612E-1	-5.692	±30	Average RF
13C8-FOSA	2.50	2.29	1.061E0	9.73E-1	-8.316	±30	Average RF
13C8-FOSA	2.50	2.37	1.061E0	1.006E0	-5.183	±30	Average RF
D3-MeFOSA	2.50	2.31	2.137E-1	1.974E-1	-7.653	±30	Average RF
D3-MeFOSA	2.50	2.44	2.137E-1	2.09E-1	-2.216	±30	Average RF
D5-EtFOSA	2.50	2.35	2.846E-1	2.677E-1	-5.915	±30	Average RF
D5-EtFOSA	2.50	2.33	2.846E-1	2.652E-1	-6.801	±30	Average RF
D7-MeFOSE	25.0	24.1	2.617E-1	2.519E-1	-3.740	±30	Average RF
D7-MeFOSE	25.0	23.4	2.617E-1	2.449E-1	-6.389	±30	Average RF
D9-EtFOSE	25.0	23.6	2.658E-1	2.507E-1	-5.671	±30	Average RF
D9-EtFOSE	25.0	22.9	2.658E-1	2.429E-1	-8.589	±30	Average RF
D3-MeFOSAA	5.00	4.83	4.339E-1	4.19E-1	-3.438	±30	Average RF
D3-MeFOSAA	5.00	4.49	4.339E-1	3.896E-1	-10.216	±30	Average RF
D5-EtFOSAA	5.00	4.28	5.191E-1	4.445E-1	-14.367	±30	Average RF
D5-EtFOSAA	5.00	4.22	5.191E-1	4.382E-1	-15.594	±30	Average RF
13C2-4:2 FTS	5.00	4.53	3.44E-1	3.118E-1	-9.366	±30	Average RF
13C2-4:2 FTS	5.00	5.13	3.44E-1	3.531E-1	2.65	±30	Average RF
13C2-6:2 FTS	5.00	4.73	3.254E-1	3.077E-1	-5.422	±30	Average RF
13C2-6:2 FTS	5.00	4.45	3.254E-1	2.894E-1	-11.051	±30	Average RF
13C2-8:2 FTS	5.00	4.17	2.673E-1	2.229E-1	-16.593	±30	Average RF
13C2-8:2 FTS	5.00	5.54	2.673E-1	2.961E-1	10.77	±30	Average RF
13C3-HFPO-DA	10.0	10.6	2.447E-1	2.598E-1	6.15	±30	Average RF
13C3-HFPO-DA	10.0	10.0	2.447E-1	2.455E-1	0.304	±30	Average RF

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request: K2314283
Date Analyzed: 01/19/24 19:33

Continuing Calibration Verification (CCV) Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
File ID: J:\LCMS08\Data\240119_1633_B1\240119_021
Signal ID: 1

Calibration Date: 1/18/2024
Calibration ID: KC2400027
Analysis Lot: 830171
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	Rec.	% Drift	Criteria	Curve Fit
Perfluorobutane sulfonic acid (PFBS)	4.44	4.08	1.2797	1.1769	92.0	NA	±30	Average RF
Perfluoropentane sulfonic acid (PFPeS)	4.71	4.05	1.3129	1.1289	86.0	NA	±30	Average RF
Perfluorohexane sulfonic acid (PFHxS)	4.57	4.14	1.3045	1.0908	90.5	-9.5	±30	Linear
Perfluoroheptane sulfonic acid (PFHpS)	4.77	4.82	1.9513	1.9735	101	NA	±30	Average RF
Perfluorooctane sulfonic acid (PFOS)	4.64	4.57	2.6003	2.5597	98.4	NA	±30	Average RF
Perfluorononane sulfonic acid (PFNS)	4.81	4.89	1.8995	1.9297	102	NA	±30	Average RF
Perfluorodecane sulfonic acid (PFDS)	4.83	5.17	1.6952	1.7699	107	7.1	±30	Linear
Perfluorododecane sulfonic acid (PFDoS)	4.85	4.66	1.0026	0.9635	96.1	NA	±30	Average RF
Perfluorobutanoic acid (PFBA)	5.00	4.84	0.8592	0.8319	96.8	NA	±30	Average RF
Perfluoropentanoic acid (PFPeA)	5.00	4.99	6.4761	6.4571	99.7	NA	±30	Average RF
Perfluorohexanoic acid (PFHxA)	5.00	4.89	0.8611	0.8159	97.9	-2.1	±30	Linear
Perfluoroheptanoic acid (PFHpA)	5.00	4.81	1.1866	1.0055	96.3	-3.7	±30	Linear
Perfluorooctanoic acid (PFOA)	5.00	5.43	0.7626	0.7058	109	8.5	±30	Linear
Perfluorononanoic acid (PFNA)	5.00	4.95	0.8026	0.7084	99.0	-1.0	±30	Linear
Perfluorodecanoic acid (PFDA)	5.00	4.46	1.3176	1.068	89.1	-10.9	±30	Linear
Perfluoroundecanoic acid (PFUnDA)	5.00	4.67	1.0169	0.8512	93.5	-6.6	±30	Linear
Perfluorododecanoic acid (PFDOA)	5.00	4.78	0.8016	0.6764	95.6	-4.4	±30	Linear
Perfluorotridecanoic acid (PFTrDA)	5.00	4.93	1.9905	1.7496	98.6	-1.4	±30	Linear
Perfluorotetradecanoic acid (PFTDA)	5.00	5.17	1.4984	1.3959	103	3.4	±30	Linear
Perfluorooctane sulfonamide (PFOSAm)	10.0	10.2	0.824	0.8402	102	NA	±30	Average RF
N-Methylperfluorooctane sulfonamide (MeFOSA)	5.00	4.59	1.8021	1.6542	91.8	NA	±30	Average RF
N-Ethylperfluorooctane sulfonamide (EtFOSA)	5.00	4.99	1.4555	1.4539	99.9	NA	±30	Average RF
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	5.00	4.86	0.9181	0.8921	97.2	NA	±30	Average RF
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	5.00	4.49	1.3154	1.1799	89.7	NA	±30	Average RF
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	5.00	4.84	1.3567	1.3136	96.8	NA	±30	Average RF
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	5.00	5.33	0.6678	0.7115	107	NA	±30	Average RF
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	4.69	4.94	2.4593	2.5927	105	NA	±30	Average RF
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	4.76	4.34	2.2768	2.08	91.4	NA	±30	Average RF

ALS Group USA, Corp.
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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request: K2314283
Date Analyzed: 01/19/24 19:33

Continuing Calibration Verification (CCV) Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
File ID: J:\LCMS08\Data\240119_1633_B1\240119_021
Signal ID: 1

Calibration Date: 1/18/2024
Calibration ID: KC2400027
Analysis Lot: 830171
Units: ng/mL

1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	4.80	4.80	2.1486	2.1481	100	NA	±30	Average RF
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	50.0	55.3	0.1109	0.1226	111	NA	±30	Average RF
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	50.0	55.4	0.0647	0.0716	111	NA	±30	Average RF
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	50.0	61.5	0.0863	0.1061	123	NA	±30	Average RF
Perfluoro(2-ethoxyethane) sulfonic acid (PFEESA)	4.45	4.19	2.8002	2.637	94.2	NA	±30	Average RF
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	4.67	4.35	8.2443	7.6787	93.1	NA	±30	Average RF
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	4.72	4.37	5.9633	5.1584	92.6	-7.4	±30	Linear
Perfluoro-3-methoxypropanoic acid (PFMPA)	5.00	5.45	3.2313	3.522	109	NA	±30	Average RF
Perfluoro-4-methoxybutanoic acid (PFMBA)	5.00	4.70	4.5778	4.305	94.0	NA	±30	Average RF
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	5.00	4.85	1.1045	1.0702	96.9	NA	±30	Average RF
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	5.00	5.39	0.5547	0.5983	108	NA	±30	Average RF
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	4.73	4.11	7.7507	6.7368	86.9	NA	±30	Average RF

Analyte Name	Expected	Result	Average RF	CCV RF	Rec.	% Drift	Criteria	Curve Fit
13C3-PFBS	2.50	2.44	1.4187	1.3874	97.8	NA	±30	Average RF
13C3-PFHxS	2.50	2.69	1.0731	1.1543	108	NA	±30	Average RF
13C8-PFOS	2.50	2.24	0.4169	0.373	89.5	NA	±30	Average RF
13C4-PFBA	10.0	9.89	1.1176	1.1054	98.9	NA	±30	Average RF
13C5-PFPeA	5.00	4.78	0.1128	0.108	95.7	NA	±30	Average RF
13C5-PFHxA	2.50	2.35	1.0536	0.9889	93.9	NA	±30	Average RF
13C4-PFHpA	2.50	2.65	0.9538	1.0109	106	NA	±30	Average RF
13C8-PFOA	2.50	2.39	13.9732	13.3321	95.4	NA	±30	Average RF
13C9-PFNA	1.25	1.26	0.9787	0.9897	101	NA	±30	Average RF
13C6-PFDA	1.25	1.34	1.0057	1.0758	107	NA	±30	Average RF
13C7-PFUnDA	1.25	1.30	1.1996	1.2469	104	NA	±30	Average RF
13C2-PFDoDA	1.25	1.21	1.3782	1.3388	97.1	NA	±30	Average RF
13C2-PFTeDA	1.25	1.21	0.595	0.5745	96.6	NA	±30	Average RF
13C8-FOSA	2.50	2.40	1.0613	1.0196	96.1	NA	±30	Average RF
D3-MeFOSA	2.50	2.68	0.2137	0.2292	107	NA	±30	Average RF

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request: K2314283
Date Analyzed: 01/19/24 19:33

Continuing Calibration Verification (CCV) Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
File ID: J:\LCMS08\Data\240119_1633_B1\240119_021
Signal ID: 1

Calibration Date: 1/18/2024
Calibration ID: KC2400027
Analysis Lot: 830171
Units: ng/mL

D5-EtFOSA	2.50	2.45	0.2846	0.2791	98.1	NA	±30	Average RF
D7-MeFOSE	25.0	25.4	0.2617	0.2663	102	NA	±30	Average RF
D9-EtFOSE	25.0	26.6	0.2658	0.2833	107	NA	±30	Average RF
D3-MeFOSAA	5.00	6.14	0.4339	0.533	123	NA	±30	Average RF
D5-EtFOSAA	5.00	5.59	0.5191	0.5807	112	NA	±30	Average RF
13C2-4:2 FTS	5.00	6.01	0.344	0.4139	120	NA	±30	Average RF
13C2-6:2 FTS	5.00	6.45	0.3254	0.4201	129	NA	±30	Average RF
13C2-8:2 FTS	5.00	5.86	0.2673	0.3133	117	NA	±30	Average RF
13C3-HFPO-DA	10.0	10.6	0.2447	0.2587	106	NA	±30	Average RF

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request: K2314283
Date Analyzed: 01/20/24 01:22

Continuing Calibration Verification (CCV) Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
File ID: J:\LCMS08\Data\240119_1633_B1\240119_036
Signal ID: 1

Calibration Date: 1/18/2024
Calibration ID: KC2400027
Analysis Lot: 830171
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	Rec.	% Drift	Criteria	Curve Fit
Perfluorobutane sulfonic acid (PFBS)	4.44	3.77	1.2797	1.0873	85.0	NA	±30	Average RF
Perfluoropentane sulfonic acid (PFPeS)	4.71	4.34	1.3129	1.2113	92.3	NA	±30	Average RF
Perfluorohexane sulfonic acid (PFHxS)	4.57	3.92	1.3045	1.0342	85.8	-14.2	±30	Linear
Perfluoroheptane sulfonic acid (PFHpS)	4.77	4.74	1.9513	1.9405	99.4	NA	±30	Average RF
Perfluorooctane sulfonic acid (PFOS)	4.64	4.30	2.6003	2.4092	92.7	NA	±30	Average RF
Perfluorononane sulfonic acid (PFNS)	4.81	4.64	1.8995	1.8315	96.4	NA	±30	Average RF
Perfluorodecane sulfonic acid (PFDS)	4.83	4.69	1.6952	1.6074	97.2	-2.8	±30	Linear
Perfluorododecane sulfonic acid (PFDoS)	4.85	4.13	1.0026	0.8529	85.1	NA	±30	Average RF
Perfluorobutanoic acid (PFBA)	5.00	4.82	0.8592	0.8287	96.5	NA	±30	Average RF
Perfluoropentanoic acid (PFPeA)	5.00	5.11	6.4761	6.6203	102	NA	±30	Average RF
Perfluorohexanoic acid (PFHxA)	5.00	4.85	0.8611	0.8088	97.0	-3.0	±30	Linear
Perfluoroheptanoic acid (PFHpA)	5.00	4.55	1.1866	0.9504	91.0	-9.0	±30	Linear
Perfluorooctanoic acid (PFOA)	5.00	4.64	0.7626	0.6042	92.8	-7.2	±30	Linear
Perfluorononanoic acid (PFNA)	5.00	4.99	0.8026	0.7146	99.8	-0.2	±30	Linear
Perfluorodecanoic acid (PFDA)	5.00	4.46	1.3176	1.0682	89.1	-10.9	±30	Linear
Perfluoroundecanoic acid (PFUnDA)	5.00	4.54	1.0169	0.8275	90.8	-9.2	±30	Linear
Perfluorododecanoic acid (PFDOA)	5.00	4.68	0.8016	0.6629	93.6	-6.4	±30	Linear
Perfluorotridecanoic acid (PFTrDA)	5.00	4.76	1.9905	1.6908	95.3	-4.7	±30	Linear
Perfluorotetradecanoic acid (PFTDA)	5.00	4.98	1.4984	1.3456	99.6	-0.4	±30	Linear
Perfluorooctane sulfonamide (PFOSAm)	10.0	10.5	0.824	0.8682	105	NA	±30	Average RF
N-Methylperfluorooctane sulfonamide (MeFOSA)	5.00	4.61	1.8021	1.6613	92.2	NA	±30	Average RF
N-Ethylperfluorooctane sulfonamide (EtFOSA)	5.00	4.74	1.4555	1.3786	94.7	NA	±30	Average RF
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	5.00	4.92	0.9181	0.9031	98.4	NA	±30	Average RF
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	5.00	4.48	1.3154	1.1787	89.6	NA	±30	Average RF
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	5.00	4.68	1.3567	1.2688	93.5	NA	±30	Average RF
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	5.00	5.54	0.6678	0.7405	111	NA	±30	Average RF
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	4.69	4.70	2.4593	2.4664	100	NA	±30	Average RF
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	4.76	4.54	2.2768	2.173	95.4	NA	±30	Average RF

ALS Group USA, Corp.
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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request: K2314283
Date Analyzed: 01/20/24 01:22

Continuing Calibration Verification (CCV) Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
File ID: J:\LCMS08\Data\240119_1633_B1\240119_036
Signal ID: 1

Calibration Date: 1/18/2024
Calibration ID: KC2400027
Analysis Lot: 830171
Units: ng/mL

1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	4.80	4.89	2.1486	2.1907	102	NA	±30	Average RF
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	50.0	53.5	0.1109	0.1186	107	NA	±30	Average RF
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	50.0	53.7	0.0647	0.0695	107	NA	±30	Average RF
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	50.0	59.7	0.0863	0.1031	119	NA	±30	Average RF
Perfluoro(2-ethoxyethane) sulfonic acid (PFEESA)	4.45	4.52	2.8002	2.8441	102	NA	±30	Average RF
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	4.67	4.34	8.2443	7.6693	93.0	NA	±30	Average RF
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	4.72	4.59	5.9633	5.4148	97.3	-2.7	±30	Linear
Perfluoro-3-methoxypropanoic acid (PFMPA)	5.00	5.11	3.2313	3.3038	102	NA	±30	Average RF
Perfluoro-4-methoxybutanoic acid (PFMBA)	5.00	4.64	4.5778	4.2452	92.7	NA	±30	Average RF
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	5.00	4.74	1.1045	1.0464	94.7	NA	±30	Average RF
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	5.00	5.24	0.5547	0.5815	105	NA	±30	Average RF
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	4.73	3.81	7.7507	6.2551	80.7	NA	±30	Average RF

Analyte Name	Expected	Result	Average RF	CCV RF	Rec.	% Drift	Criteria	Curve Fit
13C3-PFBS	2.50	2.46	1.4187	1.3975	98.5	NA	±30	Average RF
13C3-PFHxS	2.50	2.55	1.0731	1.0953	102	NA	±30	Average RF
13C8-PFOS	2.50	2.44	0.4169	0.4072	97.7	NA	±30	Average RF
13C4-PFBA	10.0	10.3	1.1176	1.1488	103	NA	±30	Average RF
13C5-PFPeA	5.00	4.77	0.1128	0.1077	95.5	NA	±30	Average RF
13C5-PFHxA	2.50	2.39	1.0536	1.0054	95.4	NA	±30	Average RF
13C4-PFHpA	2.50	2.70	0.9538	1.0294	108	NA	±30	Average RF
13C8-PFOA	2.50	2.62	13.9732	14.6516	105	NA	±30	Average RF
13C9-PFNA	1.25	1.19	0.9787	0.9301	95.0	NA	±30	Average RF
13C6-PFDA	1.25	1.38	1.0057	1.1088	110	NA	±30	Average RF
13C7-PFUnDA	1.25	1.38	1.1996	1.327	111	NA	±30	Average RF
13C2-PFDoDA	1.25	1.32	1.3782	1.4604	106	NA	±30	Average RF
13C2-PFTeDA	1.25	1.30	0.595	0.621	104	NA	±30	Average RF
13C8-FOSA	2.50	2.10	1.0613	0.8906	83.9	NA	±30	Average RF
D3-MeFOSA	2.50	2.69	0.2137	0.23	108	NA	±30	Average RF

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request: K2314283
Date Analyzed: 01/20/24 01:22

Continuing Calibration Verification (CCV) Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
File ID: J:\LCMS08\Data\240119_1633_B1\240119_036
Signal ID: 1

Calibration Date: 1/18/2024
Calibration ID: KC2400027
Analysis Lot: 830171
Units: ng/mL

D5-EtFOSA	2.50	2.60	0.2846	0.2963	104	NA	±30	Average RF
D7-MeFOSE	25.0	26.9	0.2617	0.2812	107	NA	±30	Average RF
D9-EtFOSE	25.0	28.3	0.2658	0.3006	113	NA	±30	Average RF
D3-MeFOSAA	5.00	5.82	0.4339	0.5051	116	NA	±30	Average RF
D5-EtFOSAA	5.00	5.40	0.5191	0.5606	108	NA	±30	Average RF
13C2-4:2 FTS	5.00	6.25	0.344	0.4304	125	NA	±30	Average RF
13C2-6:2 FTS	5.00	5.67	0.3254	0.3689	113	NA	±30	Average RF
13C2-8:2 FTS	5.00	6.22	0.2673	0.3323	124	NA	±30	Average RF
13C3-HFPO-DA	10.0	10.6	0.2447	0.2599	106	NA	±30	Average RF

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request: K2314283
Date Analyzed: 01/19/24 14:31

Continuing Calibration Verification (CCV) Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
File ID: J:\LCMS08\Data\240119_1633_B1\240119_008
Signal ID: 1

Calibration Date: 1/18/2024
Calibration ID: KC2400027
Analysis Lot: 830171
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	Rec.	% Drift	Criteria	Curve Fit
Perfluorobutane sulfonic acid (PFBS)	0.444	0.393	1.2797	1.1332	88.5	NA	±30	Average RF
Perfluoropentane sulfonic acid (PFPeS)	0.471	0.420	1.3129	1.172	89.3	NA	±30	Average RF
Perfluorohexane sulfonic acid (PFHxS)	0.457	0.389	1.3045	1.0711	85.1	-14.9	±30	Linear
Perfluoroheptane sulfonic acid (PFHpS)	0.477	0.439	1.9513	1.796	92.0	NA	±30	Average RF
Perfluorooctane sulfonic acid (PFOS)	0.464	0.414	2.6003	2.32	89.2	NA	±30	Average RF
Perfluorononane sulfonic acid (PFNS)	0.481	0.432	1.8995	1.7055	89.8	NA	±30	Average RF
Perfluorodecane sulfonic acid (PFDS)	0.483	0.441	1.6952	1.5316	91.5	-8.5	±30	Linear
Perfluorododecane sulfonic acid (PFDoS)	0.485	0.414	1.0026	0.855	85.3	NA	±30	Average RF
Perfluorobutanoic acid (PFBA)	0.500	0.457	0.8592	0.7844	91.3	NA	±30	Average RF
Perfluoropentanoic acid (PFPeA)	0.500	0.450	6.4761	5.8253	90.0	NA	±30	Average RF
Perfluorohexanoic acid (PFHxA)	0.500	0.467	0.8611	0.7905	93.3	-6.7	±30	Linear
Perfluoroheptanoic acid (PFHpA)	0.500	0.459	1.1866	1.0231	91.7	-8.3	±30	Linear
Perfluorooctanoic acid (PFOA)	0.500	0.527	0.7626	0.7359	105	5.3	±30	Linear
Perfluorononanoic acid (PFNA)	0.500	0.514	0.8026	0.775	103	2.8	±30	Linear
Perfluorodecanoic acid (PFDA)	0.500	0.463	1.3176	1.1642	92.6	-7.4	±30	Linear
Perfluoroundecanoic acid (PFUnDA)	0.500	0.469	1.0169	0.9025	93.8	-6.2	±30	Linear
Perfluorododecanoic acid (PFDOA)	0.500	0.465	0.8016	0.7006	93.1	-6.9	±30	Linear
Perfluorotridecanoic acid (PFTrDA)	0.500	0.475	1.9905	1.7829	94.9	-5.1	±30	Linear
Perfluorotetradecanoic acid (PFTDA)	0.500	0.494	1.4984	1.4028	98.9	-1.1	±30	Linear
Perfluorooctane sulfonamide (PFOSAm)	1.00	0.966	0.824	0.7956	96.6	NA	±30	Average RF
N-Methylperfluorooctane sulfonamide (MeFOSA)	0.500	0.426	1.8021	1.5343	85.1	NA	±30	Average RF
N-Ethylperfluorooctane sulfonamide (EtFOSA)	0.500	0.532	1.4555	1.5471	106	NA	±30	Average RF
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	0.500	0.473	0.9181	0.8679	94.5	NA	±30	Average RF
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	0.500	0.467	1.3154	1.2288	93.4	NA	±30	Average RF
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	0.500	0.423	1.3567	1.1467	84.5	NA	±30	Average RF
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	0.500	0.488	0.6678	0.6513	97.5	NA	±30	Average RF
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	0.469	0.439	2.4593	2.3062	93.8	NA	±30	Average RF
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	0.476	0.495	2.2768	2.372	104	NA	±30	Average RF

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request: K2314283
Date Analyzed: 01/19/24 14:31

Continuing Calibration Verification (CCV) Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
File ID: J:\LCMS08\Data\240119_1633_B1\240119_008
Signal ID: 1

Calibration Date: 1/18/2024
Calibration ID: KC2400027
Analysis Lot: 830171
Units: ng/mL

1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	0.480	0.515	2.1486	2.3053	107	NA	±30	Average RF
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	15.0	13.2	0.1109	0.0976	88.0	NA	±30	Average RF
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	15.0	15.3	0.0647	0.0662	102	NA	±30	Average RF
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	15.0	15.9	0.0863	0.0917	106	NA	±30	Average RF
Perfluoro(2-ethoxyethane) sulfonic acid (PFEESA)	0.445	0.414	2.8002	2.6039	93.0	NA	±30	Average RF
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	0.467	0.407	8.2443	7.1983	87.3	NA	±30	Average RF
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	0.472	0.439	5.9633	5.3592	93.0	-7.0	±30	Linear
Perfluoro-3-methoxypropanoic acid (PFMPA)	0.500	0.492	3.2313	3.1813	98.5	NA	±30	Average RF
Perfluoro-4-methoxybutanoic acid (PFMBA)	0.500	0.422	4.5778	3.8624	84.4	NA	±30	Average RF
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	0.500	0.465	1.1045	1.028	93.1	NA	±30	Average RF
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	0.500	0.519	0.5547	0.5759	104	NA	±30	Average RF
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	0.473	0.398	7.7507	6.5358	84.3	NA	±30	Average RF

Analyte Name	Expected	Result	Average RF	CCV RF	Rec.	% Drift	Criteria	Curve Fit
13C3-PFBS	2.50	2.54	1.4187	1.4392	101	NA	±30	Average RF
13C3-PFHxS	2.50	2.72	1.0731	1.1662	109	NA	±30	Average RF
13C8-PFOS	2.50	2.48	0.4169	0.413	99.0	NA	±30	Average RF
13C4-PFBA	10.0	9.96	1.1176	1.1129	99.6	NA	±30	Average RF
13C5-PFPeA	5.00	5.35	0.1128	0.1207	107	NA	±30	Average RF
13C5-PFHxA	2.50	2.46	1.0536	1.0365	98.4	NA	±30	Average RF
13C4-PFHpA	2.50	2.74	0.9538	1.0471	110	NA	±30	Average RF
13C8-PFOA	2.50	2.39	13.9732	13.3568	95.6	NA	±30	Average RF
13C9-PFNA	1.25	1.19	0.9787	0.9335	95.4	NA	±30	Average RF
13C6-PFDA	1.25	1.21	1.0057	0.9757	97.0	NA	±30	Average RF
13C7-PFUnDA	1.25	1.19	1.1996	1.1426	95.2	NA	±30	Average RF
13C2-PFDoDA	1.25	1.17	1.3782	1.2925	93.8	NA	±30	Average RF
13C2-PFTeDA	1.25	1.22	0.595	0.579	97.3	NA	±30	Average RF
13C8-FOSA	2.50	2.38	1.0613	1.0087	95.0	NA	±30	Average RF
D3-MeFOSA	2.50	2.56	0.2137	0.2186	102	NA	±30	Average RF

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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request: K2314283
Date Analyzed: 01/19/24 14:31

Continuing Calibration Verification (CCV) Summary
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633
File ID: J:\LCMS08\Data\240119_1633_B1\240119_008
Signal ID: 1

Calibration Date: 1/18/2024
Calibration ID: KC2400027
Analysis Lot: 830171
Units: ng/mL

D5-EtFOSA	2.50	2.31	0.2846	0.2628	92.3	NA	±30	Average RF
D7-MeFOSE	25.0	23.5	0.2617	0.2464	94.2	NA	±30	Average RF
D9-EtFOSE	25.0	24.2	0.2658	0.2577	97.0	NA	±30	Average RF
D3-MeFOSAA	5.00	6.25	0.4339	0.5423	125	NA	±30	Average RF
D5-EtFOSAA	5.00	6.08	0.5191	0.6314	122	NA	±30	Average RF
13C2-4:2 FTS	5.00	6.97	0.344	0.4796	139*	NA	±30	Average RF
13C2-6:2 FTS	5.00	6.68	0.3254	0.4345	134*	NA	±30	Average RF
13C2-8:2 FTS	5.00	6.32	0.2673	0.3377	126	NA	±30	Average RF
13C3-HFPO-DA	10.0	11.0	0.2447	0.268	110	NA	±30	Average RF

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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request:K2314283

Analysis Run Log
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633

Analysis Lot:830171
Instrument ID:K-LCMS-08

Raw Data File	Sample Name	Lab Code	Date Analyzed	Time Analyzed	Q
J:\LCMS08\Data\240119_1633_B1\240119_005	Performance Evaluation	KQ2400951-17	1/19/2024	13:21	
J:\LCMS08\Data\240119_1633_B1\240119_005	ZZZZZZZ	ZZZZZZZ	1/19/2024	13:21	
J:\LCMS08\Data\240119_1633_B1\240119_006	ZZZZZZZ	ZZZZZZZ	1/19/2024	13:44	
J:\LCMS08\Data\240119_1633_B1\240119_006	Continuing Calibration Blank	KQ2400951-18	1/19/2024	13:44	
J:\LCMS08\Data\240119_1633_B1\240119_007	ZZZZZZZ	ZZZZZZZ	1/19/2024	14:08	
J:\LCMS08\Data\240119_1633_B1\240119_008	Low Level Continuing Calibration Verification	KQ2400951-19	1/19/2024	14:31	
J:\LCMS08\Data\240119_1633_B1\240119_009	ZZZZZZZ	ZZZZZZZ	1/19/2024	14:54	
J:\LCMS08\Data\240119_1633_B1\240119_010	ZZZZZZZ	ZZZZZZZ	1/19/2024	15:17	
J:\LCMS08\Data\240119_1633_B1\240119_011	Performance Evaluation	KQ2400951-21	1/19/2024	15:41	
J:\LCMS08\Data\240119_1633_B1\240119_011	ZZZZZZZ	ZZZZZZZ	1/19/2024	15:41	
J:\LCMS08\Data\240119_1633_B1\240119_012	Continuing Calibration Blank	KQ2400951-22	1/19/2024	16:04	
J:\LCMS08\Data\240119_1633_B1\240119_012	ZZZZZZZ	ZZZZZZZ	1/19/2024	16:04	
J:\LCMS08\Data\240119_1633_B1\240119_013	ZZZZZZZ	ZZZZZZZ	1/19/2024	16:27	
J:\LCMS08\Data\240119_1633_B1\240119_015	ZZZZZZZ	ZZZZZZZ	1/19/2024	17:14	
J:\LCMS08\Data\240119_1633_B1\240119_016	ZZZZZZZ	ZZZZZZZ	1/19/2024	17:37	
J:\LCMS08\Data\240119_1633_B1\240119_019	ZZZZZZZ	ZZZZZZZ	1/19/2024	18:47	
J:\LCMS08\Data\240119_1633_B1\240119_020	ZZZZZZZ	ZZZZZZZ	1/19/2024	19:10	
J:\LCMS08\Data\240119_1633_B1\240119_021	Continuing Calibration Verification	KQ2400951-09	1/19/2024	19:33	
J:\LCMS08\Data\240119_1633_B1\240119_022	Continuing Calibration Blank	KQ2400951-10	1/19/2024	19:56	
J:\LCMS08\Data\240119_1633_B1\240119_023	ZZZZZZZ	ZZZZZZZ	1/19/2024	20:20	
J:\LCMS08\Data\240119_1633_B1\240119_024	ZZZZZZZ	ZZZZZZZ	1/19/2024	20:43	
J:\LCMS08\Data\240119_1633_B1\240119_025	Method Blank	KQ2400355-03	1/19/2024	21:06	
J:\LCMS08\Data\240119_1633_B1\240119_026	Lab Control Sample	KQ2400355-01	1/19/2024	21:29	

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Superset Reference:

ALS Group USA, Corp.
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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request:K2314283

Analysis Run Log
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633

Analysis Lot:830171
Instrument ID:K-LCMS-08

Raw Data File	Sample Name	Lab Code	Date Analyzed	Time Analyzed	Q
J:\LCMS08\Data\240119_1633_B1\240119_027	Low Level Lab Control Sample	KQ2400355-02	1/19/2024	21:53	
J:\LCMS08\Data\240119_1633_B1\240119_028	ZZZZZZZ	ZZZZZZZ	1/19/2024	22:16	
J:\LCMS08\Data\240119_1633_B1\240119_029	ZZZZZZZ	ZZZZZZZ	1/19/2024	22:39	
J:\LCMS08\Data\240119_1633_B1\240119_030	TA-01-S	K2314283-001	1/19/2024	23:03	
J:\LCMS08\Data\240119_1633_B1\240119_031	TA-02-S	K2314283-002	1/19/2024	23:26	
J:\LCMS08\Data\240119_1633_B1\240119_032	ZZZZZZZ	ZZZZZZZ	1/19/2024	23:49	
J:\LCMS08\Data\240119_1633_B1\240119_033	ZZZZZZZ	ZZZZZZZ	1/20/2024	00:12	
J:\LCMS08\Data\240119_1633_B1\240119_034	ZZZZZZZ	ZZZZZZZ	1/20/2024	00:36	
J:\LCMS08\Data\240119_1633_B1\240119_035	ZZZZZZZ	ZZZZZZZ	1/20/2024	00:59	
J:\LCMS08\Data\240119_1633_B1\240119_036	Continuing Calibration Verification	KQ2400951-11	1/20/2024	01:22	
J:\LCMS08\Data\240119_1633_B1\240119_037	Continuing Calibration Blank	KQ2400951-12	1/20/2024	01:45	
J:\LCMS08\Data\240119_1633_B1\240119_038	ZZZZZZZ	ZZZZZZZ	1/20/2024	02:09	
J:\LCMS08\Data\240119_1633_B1\240119_039	ZZZZZZZ	ZZZZZZZ	1/20/2024	02:32	
J:\LCMS08\Data\240119_1633_B1\240119_040	ZZZZZZZ	ZZZZZZZ	1/20/2024	02:55	
J:\LCMS08\Data\240119_1633_B1\240119_041	ZZZZZZZ	ZZZZZZZ	1/20/2024	03:18	
J:\LCMS08\Data\240119_1633_B1\240119_042	ZZZZZZZ	ZZZZZZZ	1/20/2024	03:42	
J:\LCMS08\Data\240119_1633_B1\240119_043	ZZZZZZZ	ZZZZZZZ	1/20/2024	04:05	
J:\LCMS08\Data\240119_1633_B1\240119_044	ZZZZZZZ	ZZZZZZZ	1/20/2024	04:28	
J:\LCMS08\Data\240119_1633_B1\240119_045	ZZZZZZZ	ZZZZZZZ	1/20/2024	04:51	
J:\LCMS08\Data\240119_1633_B1\240119_046	ZZZZZZZ	ZZZZZZZ	1/20/2024	05:15	
J:\LCMS08\Data\240119_1633_B1\240119_047	ZZZZZZZ	ZZZZZZZ	1/20/2024	05:38	
J:\LCMS08\Data\240119_1633_B1\240119_048	ZZZZZZZ	ZZZZZZZ	1/20/2024	06:01	
J:\LCMS08\Data\240119_1633_B1\240119_049	ZZZZZZZ	ZZZZZZZ	1/20/2024	06:24	

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Superset Reference:

ALS Group USA, Corp.
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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request:K2314283

Analysis Run Log
Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Analysis Method: Draft EPA Method 1633

Analysis Lot:830171
Instrument ID:K-LCMS-08

Raw Data File	Sample Name	Lab Code	Date Analyzed	Time Analyzed	Q
J:\LCMS08\Data\240119_1633_B1\240119_050	ZZZZZZZ	ZZZZZZZ	1/20/2024	06:48	
J:\LCMS08\Data\240119_1633_B1\240119_051	ZZZZZZZ	ZZZZZZZ	1/20/2024	07:11	
J:\LCMS08\Data\240119_1633_B1\240119_052	Continuing Calibration Blank	KQ2400951-13	1/20/2024	07:34	
J:\LCMS08\Data\240119_1633_B1\240119_053	ZZZZZZZ	ZZZZZZZ	1/20/2024	07:57	
J:\LCMS08\Data\240119_1633_B1\240119_054	ZZZZZZZ	ZZZZZZZ	1/20/2024	08:21	
J:\LCMS08\Data\240119_1633_B1\240119_055	ZZZZZZZ	ZZZZZZZ	1/20/2024	08:44	
J:\LCMS08\Data\240119_1633_B1\240119_057	ZZZZZZZ	ZZZZZZZ	1/20/2024	09:31	
J:\LCMS08\Data\240119_1633_B1\240119_058	ZZZZZZZ	ZZZZZZZ	1/20/2024	09:54	
J:\LCMS08\Data\240119_1633_B1\240119_060	ZZZZZZZ	ZZZZZZZ	1/20/2024	10:40	
J:\LCMS08\Data\240119_1633_B1\240119_061	ZZZZZZZ	ZZZZZZZ	1/20/2024	11:04	
J:\LCMS08\Data\240119_1633_B1\240119_063	ZZZZZZZ	ZZZZZZZ	1/20/2024	11:50	
J:\LCMS08\Data\240119_1633_B1\240119_064	ZZZZZZZ	ZZZZZZZ	1/20/2024	12:13	
J:\LCMS08\Data\240119_1633_B1\240119_065	ZZZZZZZ	ZZZZZZZ	1/20/2024	12:37	
J:\LCMS08\Data\240119_1633_B1\240119_066	ZZZZZZZ	ZZZZZZZ	1/20/2024	13:00	
J:\LCMS08\Data\240119_1633_B1\240119_067	Continuing Calibration Blank	KQ2400951-15	1/20/2024	13:23	

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Prep Summary Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Soil

Service Request:K2314283

Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

Prep Method: Method
Analytical Method: Draft EPA Method 1633
Extraction Lot: 431421
Extraction Date: 12/22/23 10:41

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Amount	Percent Solids
TA-01-S	K2314283-001	12/20/23	12/20/23	6.878 g	5 mL	72.7
TA-02-S	K2314283-002	12/20/23	12/20/23	5.862 g	5 mL	85.3
Lab Control Sample	KQ2400355-01LCS	NA	NA	5 g	5 mL	
Low Level Lab Control Sample	KQ2400355-02LCS_LL	NA	NA	5 g	5 mL	
Method Blank	KQ2400355-03MB	NA	NA	5 g	5 mL	



Volatile Organic Compounds by GC/MS

ALS Environmental—Kelso Laboratory
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Analytical Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Soil

Service Request: K2314283
Date Collected: 12/20/23 12:50
Date Received: 12/20/23 13:45

Sample Name: TA-01-S
Lab Code: K2314283-001

Units: ug/Kg
Basis: Dry

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Acetone	4.4 J	26	3.8	1	12/22/23 13:55	*
Benzene	0.40 J	6.5	0.071	1	12/22/23 13:55	
Bromobenzene	ND U	6.5	0.12	1	12/22/23 13:55	
Bromochloromethane	ND U	6.5	0.32	1	12/22/23 13:55	
Bromodichloromethane	ND U	6.5	0.21	1	12/22/23 13:55	
Bromoform	ND U	6.5	0.19	1	12/22/23 13:55	
Bromomethane	ND U	6.5	0.27	1	12/22/23 13:55	
2-Butanone (MEK)	ND U	26	1.2	1	12/22/23 13:55	
n-Butylbenzene	ND U	26	0.091	1	12/22/23 13:55	
sec-Butylbenzene	ND U	26	0.097	1	12/22/23 13:55	
tert-Butylbenzene	ND U	26	0.19	1	12/22/23 13:55	
Carbon Disulfide	ND U	6.5	0.13	1	12/22/23 13:55	
Carbon Tetrachloride	ND U	6.5	0.13	1	12/22/23 13:55	
Chlorobenzene	ND U	6.5	0.085	1	12/22/23 13:55	
Chloroethane	ND U	6.5	0.97	1	12/22/23 13:55	
Chloroform	ND U	6.5	0.15	1	12/22/23 13:55	
Chloromethane	ND U	6.5	0.24	1	12/22/23 13:55	
2-Chlorotoluene	ND U	26	0.16	1	12/22/23 13:55	
4-Chlorotoluene	ND U	26	0.12	1	12/22/23 13:55	
1,2-Dibromo-3-chloropropane	ND U	26	0.53	1	12/22/23 13:55	
Dibromochloromethane	ND U	6.5	0.24	1	12/22/23 13:55	
1,2-Dibromoethane (EDB)	ND U	26	0.13	1	12/22/23 13:55	
Dibromomethane	ND U	6.5	0.37	1	12/22/23 13:55	
1,2-Dichlorobenzene	ND U	6.5	0.11	1	12/22/23 13:55	
1,3-Dichlorobenzene	ND U	6.5	0.13	1	12/22/23 13:55	
1,4-Dichlorobenzene	ND U	6.5	0.12	1	12/22/23 13:55	
Dichlorodifluoromethane	ND U	6.5	0.16	1	12/22/23 13:55	*
1,1-Dichloroethane	ND U	6.5	0.16	1	12/22/23 13:55	
1,2-Dichloroethane (EDC)	ND U	6.5	0.092	1	12/22/23 13:55	
1,1-Dichloroethene	ND U	6.5	0.33	1	12/22/23 13:55	
cis-1,2-Dichloroethene	ND U	6.5	0.16	1	12/22/23 13:55	
trans-1,2-Dichloroethene	ND U	6.5	0.16	1	12/22/23 13:55	
1,2-Dichloropropane	ND U	6.5	0.17	1	12/22/23 13:55	
1,3-Dichloropropane	ND U	6.5	0.16	1	12/22/23 13:55	
2,2-Dichloropropane	ND U	6.5	0.13	1	12/22/23 13:55	
1,1-Dichloropropene	ND U	6.5	0.17	1	12/22/23 13:55	
cis-1,3-Dichloropropene	ND U	6.5	0.17	1	12/22/23 13:55	
trans-1,3-Dichloropropene	ND U	6.5	0.15	1	12/22/23 13:55	
Ethylbenzene	ND U	6.5	0.13	1	12/22/23 13:55	
Hexachlorobutadiene	ND U	26	0.53	1	12/22/23 13:55	
2-Hexanone	ND U	26	1.3	1	12/22/23 13:55	

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Analytical Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Soil

Service Request: K2314283
Date Collected: 12/20/23 12:50
Date Received: 12/20/23 13:45

Sample Name: TA-01-S
Lab Code: K2314283-001

Units: ug/Kg
Basis: Dry

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Isopropylbenzene	ND U	26	0.11	1	12/22/23 13:55	
4-Isopropyltoluene	ND U	26	0.084	1	12/22/23 13:55	
4-Methyl-2-pentanone (MIBK)	ND U	26	2.4	1	12/22/23 13:55	
Methylene Chloride	ND U	13	0.21	1	12/22/23 13:55	
Naphthalene	ND U	26	0.17	1	12/22/23 13:55	
n-Propylbenzene	ND U	26	0.17	1	12/22/23 13:55	
Styrene	ND U	6.5	0.19	1	12/22/23 13:55	
1,1,1,2-Tetrachloroethane	ND U	6.5	0.15	1	12/22/23 13:55	
1,1,2,2-Tetrachloroethane	ND U	6.5	0.17	1	12/22/23 13:55	
Tetrachloroethene (PCE)	ND U	6.5	0.21	1	12/22/23 13:55	
Toluene	ND U	6.5	0.20	1	12/22/23 13:55	
1,2,3-Trichlorobenzene	ND U	26	0.25	1	12/22/23 13:55	
1,2,4-Trichlorobenzene	ND U	26	0.17	1	12/22/23 13:55	
1,1,2-Trichloroethane	ND U	6.5	0.20	1	12/22/23 13:55	
1,1,1-Trichloroethane (TCA)	ND U	6.5	0.15	1	12/22/23 13:55	
Trichloroethene (TCE)	ND U	6.5	0.20	1	12/22/23 13:55	
Trichlorofluoromethane (CFC 11)	ND U	6.5	0.12	1	12/22/23 13:55	*
1,2,3-Trichloropropane	ND U	6.5	0.59	1	12/22/23 13:55	
1,2,4-Trimethylbenzene	ND U	26	0.071	1	12/22/23 13:55	
1,3,5-Trimethylbenzene	ND U	26	0.13	1	12/22/23 13:55	
Vinyl Chloride	ND U	6.5	0.24	1	12/22/23 13:55	
o-Xylene	ND U	6.5	0.11	1	12/22/23 13:55	
m,p-Xylenes	ND U	6.5	0.14	1	12/22/23 13:55	
Xylenes, Total	ND U	6.5	0.24	1	12/22/23 13:55	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	89	61 - 133	12/22/23 13:55	
Dibromofluoromethane	95	59 - 134	12/22/23 13:55	
Toluene-d8	95	77 - 122	12/22/23 13:55	

ALS Group USA, Corp.
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Analytical Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Soil

Service Request: K2314283
Date Collected: 12/20/23 02:00
Date Received: 12/20/23 13:45

Sample Name: TA-02-S
Lab Code: K2314283-002

Units: ug/Kg
Basis: Dry

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Acetone	ND U	26	3.9	1	12/22/23 14:16	*
Benzene	ND U	6.6	0.071	1	12/22/23 14:16	
Bromobenzene	ND U	6.6	0.12	1	12/22/23 14:16	
Bromochloromethane	ND U	6.6	0.32	1	12/22/23 14:16	
Bromodichloromethane	ND U	6.6	0.21	1	12/22/23 14:16	
Bromoform	ND U	6.6	0.19	1	12/22/23 14:16	
Bromomethane	ND U	6.6	0.27	1	12/22/23 14:16	
2-Butanone (MEK)	ND U	26	1.2	1	12/22/23 14:16	
n-Butylbenzene	ND U	26	0.091	1	12/22/23 14:16	
sec-Butylbenzene	ND U	26	0.097	1	12/22/23 14:16	
tert-Butylbenzene	ND U	26	0.19	1	12/22/23 14:16	
Carbon Disulfide	ND U	6.6	0.13	1	12/22/23 14:16	
Carbon Tetrachloride	ND U	6.6	0.13	1	12/22/23 14:16	
Chlorobenzene	ND U	6.6	0.086	1	12/22/23 14:16	
Chloroethane	ND U	6.6	0.97	1	12/22/23 14:16	
Chloroform	ND U	6.6	0.15	1	12/22/23 14:16	
Chloromethane	ND U	6.6	0.24	1	12/22/23 14:16	
2-Chlorotoluene	ND U	26	0.16	1	12/22/23 14:16	
4-Chlorotoluene	ND U	26	0.12	1	12/22/23 14:16	
1,2-Dibromo-3-chloropropane	ND U	26	0.53	1	12/22/23 14:16	
Dibromochloromethane	ND U	6.6	0.24	1	12/22/23 14:16	
1,2-Dibromoethane (EDB)	ND U	26	0.13	1	12/22/23 14:16	
Dibromomethane	ND U	6.6	0.37	1	12/22/23 14:16	
1,2-Dichlorobenzene	ND U	6.6	0.11	1	12/22/23 14:16	
1,3-Dichlorobenzene	ND U	6.6	0.13	1	12/22/23 14:16	
1,4-Dichlorobenzene	ND U	6.6	0.12	1	12/22/23 14:16	
Dichlorodifluoromethane	ND U	6.6	0.16	1	12/22/23 14:16	*
1,1-Dichloroethane	ND U	6.6	0.16	1	12/22/23 14:16	
1,2-Dichloroethane (EDC)	ND U	6.6	0.092	1	12/22/23 14:16	
1,1-Dichloroethene	ND U	6.6	0.33	1	12/22/23 14:16	
cis-1,2-Dichloroethene	ND U	6.6	0.16	1	12/22/23 14:16	
trans-1,2-Dichloroethene	ND U	6.6	0.16	1	12/22/23 14:16	
1,2-Dichloropropane	ND U	6.6	0.18	1	12/22/23 14:16	
1,3-Dichloropropane	ND U	6.6	0.16	1	12/22/23 14:16	
2,2-Dichloropropane	ND U	6.6	0.13	1	12/22/23 14:16	
1,1-Dichloropropene	ND U	6.6	0.18	1	12/22/23 14:16	
cis-1,3-Dichloropropene	ND U	6.6	0.18	1	12/22/23 14:16	
trans-1,3-Dichloropropene	ND U	6.6	0.15	1	12/22/23 14:16	
Ethylbenzene	ND U	6.6	0.13	1	12/22/23 14:16	
Hexachlorobutadiene	ND U	26	0.53	1	12/22/23 14:16	
2-Hexanone	ND U	26	1.3	1	12/22/23 14:16	

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Analytical Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Soil

Service Request: K2314283
Date Collected: 12/20/23 02:00
Date Received: 12/20/23 13:45

Sample Name: TA-02-S
Lab Code: K2314283-002

Units: ug/Kg
Basis: Dry

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Isopropylbenzene	ND U	26	0.11	1	12/22/23 14:16	
4-Isopropyltoluene	ND U	26	0.084	1	12/22/23 14:16	
4-Methyl-2-pentanone (MIBK)	ND U	26	2.4	1	12/22/23 14:16	
Methylene Chloride	ND U	13	0.21	1	12/22/23 14:16	
Naphthalene	ND U	26	0.18	1	12/22/23 14:16	
n-Propylbenzene	ND U	26	0.18	1	12/22/23 14:16	
Styrene	ND U	6.6	0.19	1	12/22/23 14:16	
1,1,1,2-Tetrachloroethane	ND U	6.6	0.15	1	12/22/23 14:16	
1,1,2,2-Tetrachloroethane	ND U	6.6	0.18	1	12/22/23 14:16	
Tetrachloroethene (PCE)	ND U	6.6	0.21	1	12/22/23 14:16	
Toluene	ND U	6.6	0.20	1	12/22/23 14:16	
1,2,3-Trichlorobenzene	ND U	26	0.25	1	12/22/23 14:16	
1,2,4-Trichlorobenzene	ND U	26	0.18	1	12/22/23 14:16	
1,1,2-Trichloroethane	ND U	6.6	0.20	1	12/22/23 14:16	
1,1,1-Trichloroethane (TCA)	ND U	6.6	0.15	1	12/22/23 14:16	
Trichloroethene (TCE)	ND U	6.6	0.20	1	12/22/23 14:16	
Trichlorofluoromethane (CFC 11)	ND U	6.6	0.12	1	12/22/23 14:16	*
1,2,3-Trichloropropane	ND U	6.6	0.59	1	12/22/23 14:16	
1,2,4-Trimethylbenzene	ND U	26	0.071	1	12/22/23 14:16	
1,3,5-Trimethylbenzene	ND U	26	0.13	1	12/22/23 14:16	
Vinyl Chloride	ND U	6.6	0.24	1	12/22/23 14:16	
o-Xylene	ND U	6.6	0.11	1	12/22/23 14:16	
m,p-Xylenes	ND U	6.6	0.14	1	12/22/23 14:16	
Xylenes, Total	ND U	6.6	0.24	1	12/22/23 14:16	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	88	61 - 133	12/22/23 14:16	
Dibromofluoromethane	95	59 - 134	12/22/23 14:16	
Toluene-d8	94	77 - 122	12/22/23 14:16	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Soil

Service Request: K2314283
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: KQ2322502-05

Units: ug/Kg
Basis: Dry

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Acetone	ND U	20	2.9	1	12/22/23 12:52	
Benzene	ND U	5.0	0.054	1	12/22/23 12:52	
Bromobenzene	ND U	5.0	0.088	1	12/22/23 12:52	
Bromochloromethane	ND U	5.0	0.24	1	12/22/23 12:52	
Bromodichloromethane	ND U	5.0	0.16	1	12/22/23 12:52	
Bromoform	ND U	5.0	0.14	1	12/22/23 12:52	
Bromomethane	ND U	5.0	0.20	1	12/22/23 12:52	
2-Butanone (MEK)	ND U	20	0.90	1	12/22/23 12:52	
n-Butylbenzene	ND U	20	0.069	1	12/22/23 12:52	
sec-Butylbenzene	ND U	20	0.074	1	12/22/23 12:52	
tert-Butylbenzene	ND U	20	0.14	1	12/22/23 12:52	
Carbon Disulfide	ND U	5.0	0.092	1	12/22/23 12:52	
Carbon Tetrachloride	ND U	5.0	0.094	1	12/22/23 12:52	
Chlorobenzene	ND U	5.0	0.065	1	12/22/23 12:52	
Chloroethane	ND U	5.0	0.74	1	12/22/23 12:52	
Chloroform	ND U	5.0	0.11	1	12/22/23 12:52	
Chloromethane	ND U	5.0	0.18	1	12/22/23 12:52	
2-Chlorotoluene	ND U	20	0.12	1	12/22/23 12:52	
4-Chlorotoluene	ND U	20	0.088	1	12/22/23 12:52	
1,2-Dibromo-3-chloropropane	ND U	20	0.40	1	12/22/23 12:52	
Dibromochloromethane	ND U	5.0	0.18	1	12/22/23 12:52	
1,2-Dibromoethane (EDB)	ND U	20	0.094	1	12/22/23 12:52	
Dibromomethane	ND U	5.0	0.28	1	12/22/23 12:52	
1,2-Dichlorobenzene	ND U	5.0	0.077	1	12/22/23 12:52	
1,3-Dichlorobenzene	ND U	5.0	0.094	1	12/22/23 12:52	
1,4-Dichlorobenzene	ND U	5.0	0.086	1	12/22/23 12:52	
Dichlorodifluoromethane	ND U	5.0	0.12	1	12/22/23 12:52	
1,1-Dichloroethane	ND U	5.0	0.12	1	12/22/23 12:52	
1,2-Dichloroethane (EDC)	ND U	5.0	0.070	1	12/22/23 12:52	
1,1-Dichloroethene	ND U	5.0	0.25	1	12/22/23 12:52	
cis-1,2-Dichloroethene	ND U	5.0	0.12	1	12/22/23 12:52	
trans-1,2-Dichloroethene	ND U	5.0	0.12	1	12/22/23 12:52	
1,2-Dichloropropane	ND U	5.0	0.13	1	12/22/23 12:52	
1,3-Dichloropropane	ND U	5.0	0.12	1	12/22/23 12:52	
2,2-Dichloropropane	ND U	5.0	0.098	1	12/22/23 12:52	
1,1-Dichloropropene	ND U	5.0	0.13	1	12/22/23 12:52	
cis-1,3-Dichloropropene	ND U	5.0	0.13	1	12/22/23 12:52	
trans-1,3-Dichloropropene	ND U	5.0	0.11	1	12/22/23 12:52	
Ethylbenzene	ND U	5.0	0.094	1	12/22/23 12:52	
Hexachlorobutadiene	ND U	20	0.40	1	12/22/23 12:52	
2-Hexanone	ND U	20	0.93	1	12/22/23 12:52	

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Analytical Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Soil

Service Request: K2314283
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: KQ2322502-05

Units: ug/Kg
Basis: Dry

Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
Isopropylbenzene	ND U	20	0.081	1	12/22/23 12:52	
4-Isopropyltoluene	ND U	20	0.064	1	12/22/23 12:52	
4-Methyl-2-pentanone (MIBK)	ND U	20	1.8	1	12/22/23 12:52	
Methylene Chloride	1.5 J	10	0.16	1	12/22/23 12:52	
Naphthalene	0.54 J	20	0.13	1	12/22/23 12:52	
n-Propylbenzene	ND U	20	0.13	1	12/22/23 12:52	
Styrene	ND U	5.0	0.14	1	12/22/23 12:52	
1,1,1,2-Tetrachloroethane	ND U	5.0	0.11	1	12/22/23 12:52	
1,1,2,2-Tetrachloroethane	ND U	5.0	0.13	1	12/22/23 12:52	
Tetrachloroethene (PCE)	ND U	5.0	0.16	1	12/22/23 12:52	
Toluene	ND U	5.0	0.15	1	12/22/23 12:52	
1,2,3-Trichlorobenzene	0.48 J	20	0.19	1	12/22/23 12:52	
1,2,4-Trichlorobenzene	ND U	20	0.13	1	12/22/23 12:52	
1,1,2-Trichloroethane	ND U	5.0	0.15	1	12/22/23 12:52	
1,1,1-Trichloroethane (TCA)	ND U	5.0	0.11	1	12/22/23 12:52	
Trichloroethene (TCE)	ND U	5.0	0.15	1	12/22/23 12:52	
Trichlorofluoromethane (CFC 11)	ND U	5.0	0.085	1	12/22/23 12:52	
1,2,3-Trichloropropane	ND U	5.0	0.45	1	12/22/23 12:52	
1,2,4-Trimethylbenzene	ND U	20	0.054	1	12/22/23 12:52	
1,3,5-Trimethylbenzene	ND U	20	0.092	1	12/22/23 12:52	
Vinyl Chloride	ND U	5.0	0.18	1	12/22/23 12:52	
o-Xylene	ND U	5.0	0.081	1	12/22/23 12:52	
m,p-Xylenes	ND U	5.0	0.10	1	12/22/23 12:52	
Xylenes, Total	ND U	5.0	0.19	1	12/22/23 12:52	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
4-Bromofluorobenzene	86	61 - 133	12/22/23 12:52	
Dibromofluoromethane	92	59 - 134	12/22/23 12:52	
Toluene-d8	95	77 - 122	12/22/23 12:52	

ALS Group USA, Corp.
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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Soil

Service Request: K2314283

SURROGATE RECOVERY SUMMARY
Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Extraction Method: None

Sample Name	Lab Code	4-Bromofluorobenzene	Dibromofluoromethane	Toluene-d8
		61 - 133	59 - 134	77 - 122
TA-01-S	K2314283-001	89	95	95
TA-02-S	K2314283-002	88	95	94
Lab Control Sample	KQ2322502-03	91	93	96
Duplicate Lab Control Sample	KQ2322502-04	94	96	97
Method Blank	KQ2322502-05	86	92	95

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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request:K2314283
Date Analyzed:12/22/23 10:49

Internal Standard Area and RT SUMMARY
Volatile Organic Compounds by GC/MS

File ID: J:\MS24\DATA\122223\1222F003.D\
Instrument ID: K-MS-24
Analysis Method: 8260C

Lab Code:KQ2322502-02
Analysis Lot:828030
Signal ID:1

		Chlorobenzene-d5		1,4-Dichlorobenzene-d4		Fluorobenzene	
		Area	RT	Area	RT	Area	RT
	Result ==>	131,065	6.62	120,112	8.94	301,987	3.99
	Upper Limit ==>	262,130	7.12	240,224	9.44	603,974	4.49
	Lower Limit ==>	65,533	6.12	60,056	8.44	150,994	3.49
Associated Analyses							
Lab Control Sample	KQ2322502-03	132941	6.61	122850	8.94	301338	3.99
Duplicate Lab Control Sample	KQ2322502-04	129775	6.62	122057	8.94	291375	3.99
Method Blank	KQ2322502-05	128735	6.62	115559	8.94	289823	3.99
TA-01-S	K2314283-001	125013	6.62	118229	8.94	280256	3.99
TA-02-S	K2314283-002	126219	6.62	118529	8.94	288865	3.99

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Soil

Service Request: K2314283
Date Analyzed: 12/22/23
Date Extracted: NA

Duplicate Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Units: ug/Kg
Basis: Dry
Analysis Lot: 828030

Lab Control Sample KQ2322502-03				Duplicate Lab Control Sample KQ2322502-04					
Analyte Name	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	53.2	50.0	106	46.4	50.0	93	71-119	14	40
1,1,1-Trichloroethane (TCA)	57.3	50.0	115	48.0	50.0	96	59-146	18	40
1,1,2,2-Tetrachloroethane	49.2	50.0	98	44.6	50.0	89	60-128	10	40
1,1,2-Trichloroethane	48.7	50.0	97	43.8	50.0	88	72-118	11	40
1,1-Dichloroethane	49.5	50.0	99	44.8	50.0	90	59-137	10	40
1,1-Dichloroethene	53.0	50.0	106	43.4	50.0	87	64-152	20	40
1,1-Dichloropropene	57.2	50.0	114	48.4	50.0	97	52-142	17	40
1,2,3-Trichlorobenzene	48.5	50.0	97	42.7	50.0	85	52-138	13	40
1,2,3-Trichloropropane	47.1	50.0	94	42.4	50.0	85	53-134	11	40
1,2,4-Trichlorobenzene	50.0	50.0	100	43.2	50.0	86	57-136	15	40
1,2,4-Trimethylbenzene	53.4	50.0	107	44.9	50.0	90	65-132	17	40
1,2-Dibromo-3-chloropropane	46.7	50.0	93	46.6	50.0	93	55-127	<1	40
1,2-Dibromoethane (EDB)	50.4	50.0	101	45.5	50.0	91	71-116	10	40
1,2-Dichlorobenzene	51.9	50.0	104	45.7	50.0	91	67-124	13	40
1,2-Dichloroethane (EDC)	53.5	50.0	107	48.2	50.0	96	65-121	10	40
1,2-Dichloropropane	54.2	50.0	108	47.1	50.0	94	71-121	14	40
1,3,5-Trimethylbenzene	51.2	50.0	102	42.9	50.0	86	66-132	18	40
1,3-Dichlorobenzene	51.7	50.0	103	43.3	50.0	87	69-128	18	40
1,3-Dichloropropane	51.2	50.0	102	45.6	50.0	91	72-118	12	40
1,4-Dichlorobenzene	51.3	50.0	103	43.1	50.0	86	69-125	17	40
2,2-Dichloropropane	55.3	50.0	111	46.0	50.0	92	50-138	18	40
2-Butanone (MEK)	85.1	100	85	83.2	100	83	54-116	2	40
2-Chlorotoluene	52.3	50.0	105	43.4	50.0	87	65-129	19	40
2-Hexanone	97.3	100	97	89.3	100	89	67-121	9	40
4-Chlorotoluene	51.8	50.0	104	43.5	50.0	87	51-134	17	40
4-Isopropyltoluene	54.6	50.0	109	44.7	50.0	89	61-132	20	40
4-Methyl-2-pentanone (MIBK)	106	100	106	104	100	104	69-126	2	40
Acetone	66.8	100	67	66.3	100	66	32-135	<1	40
Benzene	52.4	50.0	105	45.1	50.0	90	68-122	15	40
Bromobenzene	50.7	50.0	101	43.2	50.0	86	71-124	16	40
Bromochloromethane	52.6	50.0	105	47.2	50.0	94	65-131	11	40
Bromodichloromethane	56.3	50.0	113	48.5	50.0	97	61-143	15	40
Bromoform	55.6	50.0	111	49.4	50.0	99	62-134	12	40
Bromomethane	47.6	50.0	95	42.9	50.0	86	22-180	10	40
Carbon Disulfide	54.1	50.0	108	44.9	50.0	90	55-141	19	40
Carbon Tetrachloride	59.0	50.0	118	49.1	50.0	98	51-135	18	40
Chlorobenzene	50.9	50.0	102	43.5	50.0	87	70-116	16	40
Chloroethane	52.5	50.0	105	44.3	50.0	89	51-122	17	40
Chloroform	54.2	50.0	108	47.0	50.0	94	61-137	14	40
Chloromethane	49.6	50.0	99	42.2	50.0	84	37-146	16	40
cis-1,2-Dichloroethene	51.4	50.0	103	44.0	50.0	88	62-138	16	40

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Soil

Service Request: K2314283
Date Analyzed: 12/22/23
Date Extracted: NA

Duplicate Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
Prep Method: None

Units: ug/Kg
Basis: Dry
Analysis Lot: 828030

Lab Control Sample KQ2322502-03				Duplicate Lab Control Sample KQ2322502-04					
Analyte Name	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
cis-1,3-Dichloropropene	57.1	50.0	114	49.8	50.0	100	58-138	14	40
Dibromochloromethane	57.2	50.0	114	50.4	50.0	101	69-120	13	40
Dibromomethane	53.2	50.0	106	48.5	50.0	97	68-125	9	40
Dichlorodifluoromethane	86.1	50.0	172 *	69.4	50.0	139	38-160	21	40
Ethylbenzene	52.4	50.0	105	44.1	50.0	88	70-118	17	40
Hexachlorobutadiene	51.7	50.0	103	43.3	50.0	87	54-140	18	40
Isopropylbenzene	54.4	50.0	109	45.2	50.0	90	67-133	18	40
m,p-Xylenes	107	100	107	89.6	100	90	69-127	18	40
Methylene Chloride	51.1	50.0	102	44.3	50.0	89	65-122	14	40
Naphthalene	47.8	50.0	96	43.9	50.0	88	54-134	8	40
n-Butylbenzene	57.4	50.0	115	46.2	50.0	92	53-139	22	40
n-Propylbenzene	54.6	50.0	109	44.7	50.0	89	57-143	20	40
o-Xylene	53.4	50.0	107	45.8	50.0	92	69-124	15	40
sec-Butylbenzene	56.0	50.0	112	45.7	50.0	91	55-146	20	40
Styrene	54.1	50.0	108	47.1	50.0	94	62-135	14	40
tert-Butylbenzene	50.9	50.0	102	42.5	50.0	85	67-131	18	40
Tetrachloroethene (PCE)	53.4	50.0	107	44.5	50.0	89	66-126	18	40
Toluene	52.8	50.0	106	44.7	50.0	89	75-117	17	40
trans-1,2-Dichloroethene	47.8	50.0	96	40.6	50.0	81	63-127	16	40
trans-1,3-Dichloropropene	52.6	50.0	105	46.3	50.0	93	63-121	13	40
Trichloroethene (TCE)	53.1	50.0	106	45.4	50.0	91	67-126	16	40
Trichlorofluoromethane (CFC 11)	66.2	50.0	132	56.5	50.0	113	51-140	16	40
Vinyl Chloride	57.1	50.0	114	47.3	50.0	95	54-127	19	40
Xylenes, Total	161	150	107	135	150	90	70-130	17	40

ALS Group USA, Corp.
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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Soil

Service Request: K2314283
Date Analyzed: 12/22/23 12:52
Date Extracted:

Method Blank Summary
Volatile Organic Compounds by GC/MS

Sample Name: Method Blank
Lab Code: KQ2322502-05
Analysis Method: 8260C
Prep Method: None

Instrument ID: K-MS-24
File ID: J:\MS24\DATA\122223\1222F008.D\
Analysis Lot: 828030

This Method Blank applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Lab Control Sample	KQ2322502-03	J:\MS24\DATA\122223\1222F004.D\	12/22/23 11:29
Duplicate Lab Control Sample	KQ2322502-04	J:\MS24\DATA\122223\1222F005.D\	12/22/23 11:50
TA-01-S	K2314283-001	J:\MS24\DATA\122223\1222F011.D\	12/22/23 13:55
TA-02-S	K2314283-002	J:\MS24\DATA\122223\1222F012.D\	12/22/23 14:16

ALS Group USA, Corp.
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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089
Sample Matrix: Soil

Service Request: K2314283
Date Analyzed: 12/22/23 11:29
Date Extracted:

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS

Sample Name: Lab Control Sample
Lab Code: KQ2322502-03
Analysis Method: 8260C
Prep Method: None

Instrument ID: K-MS-24
File ID: J:\MS24\DATA\122223\1222F004.D\
Analysis Lot: 828030

This Lab Control Sample applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Duplicate Lab Control Sample	KQ2322502-04	J:\MS24\DATA\122223\1222F005.D\	12/22/23 11:50
Method Blank	KQ2322502-05	J:\MS24\DATA\122223\1222F008.D\	12/22/23 12:52
TA-01-S	K2314283-001	J:\MS24\DATA\122223\1222F011.D\	12/22/23 13:55
TA-02-S	K2314283-002	J:\MS24\DATA\122223\1222F012.D\	12/22/23 14:16

ALS Group USA, Corp.
dba ALS Environmental

QC/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request:K2314283
Date Analyzed:12/22/23 09:39

Tune Summary
Volatile Organic Compounds by GC/MS

File ID: J:\MS24\DATA\122223\1222F001.D\
Instrument ID: K-MS-24

Analytical Method: 8260C
Analysis Lot: 828030

Target Mass	Relative to Mass	Lower Limit %	Upper Limit %	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	21.9	3918	Pass
75	95	30	80	47.7	8516	Pass
95	95	100	100	100.0	17864	Pass
96	95	5	9	6.6	1182	Pass
173	174	0.00	2	0.0	0	Pass
174	95	50	120	87.1	15568	Pass
175	174	5	9	8.9	1389	Pass
176	174	95	101	98.6	15351	Pass
177	176	5	9	6.3	968	Pass

Sample Name	Lab Code	File ID:	Date Analyzed:	Q
Continuing Calibration Verification	KQ2322502-02	J:\MS24\DATA\122223\1222F003.D\	12/22/23 10:49	
Lab Control Sample	KQ2322502-03	J:\MS24\DATA\122223\1222F004.D\	12/22/23 11:29	
Duplicate Lab Control Sample	KQ2322502-04	J:\MS24\DATA\122223\1222F005.D\	12/22/23 11:50	
Method Blank	KQ2322502-05	J:\MS24\DATA\122223\1222F008.D\	12/22/23 12:52	
TA-01-S	K2314283-001	J:\MS24\DATA\122223\1222F011.D\	12/22/23 13:55	
TA-02-S	K2314283-002	J:\MS24\DATA\122223\1222F012.D\	12/22/23 14:16	

ALS Group USA, Corp.
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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A

Service Request: K2314283
Calibration Date: 10/30/2023

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

Calibration ID: KC2300633
Instrument ID: K-MS-24

Signal ID: 1

#	Lab Code	Sample Name	File Location	Acquisition Date
01	KC2300633-01	ICAL 1	J:\MS24\DATA\103023A\1030F008.D	10/30/2023 16:17
02	KC2300633-02	ICAL 2	J:\MS24\DATA\103023A\1030F009.D	10/30/2023 16:37
03	KC2300633-03	ICAL 5	J:\MS24\DATA\103023A\1030F010.D	10/30/2023 16:58
04	KC2300633-04	ICAL 10	J:\MS24\DATA\103023A\1030F011.D	10/30/2023 17:19
05	KC2300633-05	ICAL 20	J:\MS24\DATA\103023A\1030F012.D	10/30/2023 17:40
06	KC2300633-06	ICAL 50	J:\MS24\DATA\103023A\1030F013.D	10/30/2023 18:01
07	KC2300633-07	ICAL 100	J:\MS24\DATA\103023A\1030F014.D	10/30/2023 18:22
08	KC2300633-08	ICAL 200	J:\MS24\DATA\103023A\1030F015.D	10/30/2023 18:42
09	KC2300633-09	ICAL 300	J:\MS24\DATA\103023A\1030F016.D	10/30/2023 19:03

Analyte

1,1,1,2-Tetrachloroethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.5966	02	2.000	0.7021	03	5.000	0.6767	04	10.000	0.6343
05	20.000	0.6882	06	50.000	0.7594	07	100.000	0.7288	08	200.000	0.746
09	300.000	0.7077									

1,1,1-Trichloroethane (TCA)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	2.000	0.4409	03	5.000	0.3729	04	10.000	0.3453	05	20.000	0.3724
06	50.000	0.407	07	100.000	0.3877	08	200.000	0.4176	09	300.000	0.3878

1,1,2,2-Tetrachloroethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.8966	02	2.000	0.9423	03	5.000	0.9137	04	10.000	0.8837
05	20.000	0.9255	06	50.000	0.9908	07	100.000	0.9938	08	200.000	0.9873
09	300.000	0.935									

1,1,2-Trichloroethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.5594	02	2.000	0.5883	03	5.000	0.5892	04	10.000	0.5531
05	20.000	0.5625	06	50.000	0.6039	07	100.000	0.5838	08	200.000	0.59
09	300.000	0.5655									

1,1-Dichloroethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.5301	02	2.000	0.5793	03	5.000	0.5503	04	10.000	0.4838
05	20.000	0.5589	06	50.000	0.5826	07	100.000	0.5471	08	200.000	0.5832
09	300.000	0.5544									

1,1-Dichloroethene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.2568	02	2.000	0.2488	03	5.000	0.2214	04	10.000	0.1933
05	20.000	0.2002	06	50.000	0.2194	07	100.000	0.2052	08	200.000	0.2148
09	300.000	0.1969									

ALS Group USA, Corp.
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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A

Service Request: K2314283
Calibration Date: 10/30/2023

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

Calibration ID: KC2300633
Instrument ID: K-MS-24

Signal ID: 1

Analyte

1,1-Dichloropropene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.3882	02	2.000	0.4073	03	5.000	0.3692	04	10.000	0.3376
05	20.000	0.3597	06	50.000	0.3879	07	100.000	0.3685	08	200.000	0.387
09	300.000	0.3477									

1,2,3-Trichlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.226	02	2.000	1.202	03	5.000	1.019	04	10.000	0.9943
05	20.000	1.022	06	50.000	1.092	07	100.000	1.101	08	200.000	1.141
09	300.000	1.06									

1,2,3-Trichloropropane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	2.000	0.3313	03	5.000	0.2893	04	10.000	0.2929	05	20.000	0.2957
06	50.000	0.315	07	100.000	0.3152	08	200.000	0.3014	09	300.000	0.2914

1,2,4-Trichlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.377	02	2.000	1.27	03	5.000	1.169	04	10.000	1.062
05	20.000	1.154	06	50.000	1.222	07	100.000	1.178	08	200.000	1.244
09	300.000	1.127									

1,2,4-Trimethylbenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	2.661	02	2.000	3.093	03	5.000	3	04	10.000	2.869
05	20.000	3.074	06	50.000	3.335	07	100.000	3.265	08	200.000	3.304
09	300.000	2.944									

1,2-Dibromo-3-chloropropane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	5.000	0.1157	04	10.000	0.1403	05	20.000	0.1331	06	50.000	0.1404
07	100.000	0.151	08	200.000	0.1624	09	300.000	0.1582			

1,2-Dibromoethane (EDB)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.5851	02	2.000	0.7036	03	5.000	0.6284	04	10.000	0.6083
05	20.000	0.6267	06	50.000	0.6752	07	100.000	0.6695	08	200.000	0.6685
09	300.000	0.6497									

1,2-Dichlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.728	02	2.000	1.749	03	5.000	1.705	04	10.000	1.594
05	20.000	1.693	06	50.000	1.796	07	100.000	1.744	08	200.000	1.773
09	300.000	1.601									

1,2-Dichloroethane (EDC)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.3953	02	2.000	0.4395	03	5.000	0.4162	04	10.000	0.3954

ALS Group USA, Corp.
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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A

Service Request: K2314283
Calibration Date: 10/30/2023

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

Calibration ID: KC2300633
Instrument ID: K-MS-24

Signal ID: 1

Analyte

1,2-Dichloroethane (EDC)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
05	20.000	0.4068	06	50.000	0.4365	07	100.000	0.4196	08	200.000	0.4225
09	300.000	0.4071									

1,2-Dichloropropane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.3283	02	2.000	0.3587	03	5.000	0.3337	04	10.000	0.3087
05	20.000	0.3297	06	50.000	0.3585	07	100.000	0.3436	08	200.000	0.3545
09	300.000	0.3374									

1,3,5-Trimethylbenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	3.075	02	2.000	3.209	03	5.000	3.066	04	10.000	2.874
05	20.000	3.122	06	50.000	3.353	07	100.000	3.236	08	200.000	3.299
09	300.000	2.923									

1,3-Dichlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.987	02	2.000	2.014	03	5.000	1.808	04	10.000	1.714
05	20.000	1.812	06	50.000	1.922	07	100.000	1.872	08	200.000	1.881
09	300.000	1.699									

1,3-Dichloropropane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.083	02	2.000	1.219	03	5.000	1.196	04	10.000	1.107
05	20.000	1.201	06	50.000	1.263	07	100.000	1.218	08	200.000	1.223
09	300.000	1.179									

1,4-Dichlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	2.03	02	2.000	2.092	03	5.000	1.857	04	10.000	1.73
05	20.000	1.825	06	50.000	1.946	07	100.000	1.877	08	200.000	1.87
09	300.000	1.684									

2,2-Dichloropropane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.4088	02	2.000	0.4416	03	5.000	0.367	04	10.000	0.35
05	20.000	0.3816	06	50.000	0.4029	07	100.000	0.3892	08	200.000	0.417

2-Butanone (MEK)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	10.000	0.04048	04	20.000	0.04141	05	40.000	0.03697	06	100.000	0.04011
07	200.000	0.03604	08	400.000	0.03583	09	600.000	0.03392			

2-Chlorotoluene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	2.573	02	2.000	2.708	03	5.000	2.644	04	10.000	2.407
05	20.000	2.62	06	50.000	2.819	07	100.000	2.743	08	200.000	2.781

ALS Group USA, Corp.
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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A

Service Request: K2314283
Calibration Date: 10/30/2023

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

Calibration ID: KC2300633
Instrument ID: K-MS-24

Signal ID: 1

Analyte

2-Chlorotoluene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
09	300.000	2.506									

2-Hexanone

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	10.000	0.1007	04	20.000	0.08125	05	40.000	0.09283	06	100.000	0.096
07	200.000	0.0944	08	400.000	0.09414	09	600.000	0.09145			

4-Bromofluorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	10.000	0.9787	03	20.000	0.9794	04	30.000	0.9537	05	40.000	0.9489
06	50.000	0.9063	07	70.000	0.9327	08	80.000	0.8922	09	120.000	0.803

4-Chlorotoluene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	2.824	02	2.000	2.914	03	5.000	2.799	04	10.000	2.608
05	20.000	2.798	06	50.000	2.95	07	100.000	2.854	08	200.000	2.896
09	300.000	2.593									

4-Isopropyltoluene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	3.004	02	2.000	3.249	03	5.000	3.045	04	10.000	2.903
05	20.000	3.232	06	50.000	3.463	07	100.000	3.349	08	200.000	3.414
09	300.000	3.023									

4-Methyl-2-pentanone (MIBK)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.000	0.1043	02	4.000	0.1114	03	10.000	0.0968	04	20.000	0.09827
05	40.000	0.1054	06	100.000	0.1134	07	200.000	0.1119	08	400.000	0.1114
09	600.000	0.1045									

Acetone

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	10.000	0.1652	04	20.000	0.1423	05	40.000	0.1279	06	100.000	0.1274
07	200.000	0.1019	08	400.000	0.1026						

Benzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.244	02	2.000	1.396	03	5.000	1.337	04	10.000	1.182
05	20.000	1.257	06	50.000	1.321	07	100.000	1.257	08	200.000	1.302
09	300.000	1.219									

Bromobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.9899	02	2.000	1.045	03	5.000	1.004	04	10.000	0.9029
05	20.000	0.9531	06	50.000	1.056	07	100.000	1.029	08	200.000	1.046
09	300.000	0.9715									

ALS Group USA, Corp.
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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A

Service Request: K2314283
Calibration Date: 10/30/2023

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

Calibration ID: KC2300633
Instrument ID: K-MS-24

Signal ID: 1

Analyte

Bromochloromethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.1495	02	2.000	0.1587	03	5.000	0.1605	04	10.000	0.1423
05	20.000	0.1516	06	50.000	0.1654	07	100.000	0.1628	08	200.000	0.1645
09	300.000	0.1606									

Bromodichloromethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.3613	02	2.000	0.3798	03	5.000	0.3597	04	10.000	0.3445
05	20.000	0.3824	06	50.000	0.4129	07	100.000	0.4092	08	200.000	0.4303
09	300.000	0.4142									

Bromoform

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	2.000	0.3532	03	5.000	0.3611	04	10.000	0.3819	05	20.000	0.4073
06	50.000	0.4662	07	100.000	0.4787	08	200.000	0.4879	09	300.000	0.4744

Bromomethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	2.000	0.254	03	5.000	0.2066	04	10.000	0.165	05	20.000	0.1512
06	50.000	0.1368	07	100.000	0.1216						

Carbon Disulfide

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	2.000	0.7064	03	5.000	0.6522	04	10.000	0.5773	05	20.000	0.6321
06	50.000	0.6716	07	100.000	0.6352	08	200.000	0.6858	09	300.000	0.6402

Carbon Tetrachloride

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	5.000	0.2955	04	10.000	0.2807	05	20.000	0.3045	06	50.000	0.3348
07	100.000	0.319	08	200.000	0.3437	09	300.000	0.314			

Chlorobenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	2.204	02	2.000	2.391	03	5.000	2.164	04	10.000	2.004
05	20.000	2.126	06	50.000	2.204	07	100.000	2.092	08	200.000	2.162
09	300.000	1.978									

Chloroethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.1839	02	2.000	0.2081	03	5.000	0.1982	04	10.000	0.1737
05	20.000	0.19	06	50.000	0.1925	07	100.000	0.181	08	200.000	0.188
09	300.000	0.1747									

Chloroform

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.4816	02	2.000	0.5655	03	5.000	0.5339	04	10.000	0.4863
05	20.000	0.513	06	50.000	0.5447	07	100.000	0.5191	08	200.000	0.5409
09	300.000	0.5143									

ALS Group USA, Corp.
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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A

Service Request: K2314283
Calibration Date: 10/30/2023

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

Calibration ID: KC2300633
Instrument ID: K-MS-24

Signal ID: 1

Analyte

Chloromethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.4105	02	2.000	0.4154	03	5.000	0.3541	04	10.000	0.317
05	20.000	0.3165	06	50.000	0.3255	07	100.000	0.3054	08	200.000	0.3166
09	300.000	0.3002									

Dibromochloromethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.5356	02	2.000	0.6134	03	5.000	0.6087	04	10.000	0.6
05	20.000	0.6573	06	50.000	0.7324	07	100.000	0.7378	08	200.000	0.764
09	300.000	0.752									

Dibromofluoromethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	10.000	0.2635	03	20.000	0.2675	04	30.000	0.2633	05	40.000	0.257
06	50.000	0.2562	07	70.000	0.2681	08	80.000	0.2673	09	120.000	0.2568

Dibromomethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	2.000	0.1912	03	5.000	0.1819	04	10.000	0.1698	05	20.000	0.1797
06	50.000	0.1924	07	100.000	0.1872	08	200.000	0.189	09	300.000	0.1821

Dichlorodifluoromethane

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
03	5.000	0.153	04	10.000	0.1621	05	20.000	0.1641	06	50.000	0.19
07	100.000	0.1683	08	200.000	0.156	09	300.000	0.1429			

Ethylbenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.12	02	2.000	1.197	03	5.000	1.115	04	10.000	1.018
05	20.000	1.087	06	50.000	1.168	07	100.000	1.115	08	200.000	1.146
09	300.000	1.038									

Hexachlorobutadiene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	2.000	0.7205	03	5.000	0.629	04	10.000	0.606	05	20.000	0.6244
06	50.000	0.6579	07	100.000	0.6307	08	200.000	0.6722	09	300.000	0.5883

Isopropylbenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	3.206	02	2.000	3.557	03	5.000	3.324	04	10.000	3.096
05	20.000	3.381	06	50.000	3.599	07	100.000	3.362	08	200.000	3.407
09	300.000	3.007									

Methylene Chloride

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	2.000	0.504	03	5.000	0.373	04	10.000	0.3089	05	20.000	0.316
06	50.000	0.3084	07	100.000	0.2882	08	200.000	0.2912	09	300.000	0.2807

ALS Group USA, Corp.
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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A

Service Request: K2314283
Calibration Date: 10/30/2023

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

Calibration ID: KC2300633
Instrument ID: K-MS-24

Signal ID: 1

Analyte

Naphthalene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	2.733	02	2.000	2.584	03	5.000	2.232	04	10.000	2.343
05	20.000	2.397	06	50.000	2.65	07	100.000	2.754	08	200.000	2.898
09	300.000	2.795									

Styrene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.993	02	2.000	1.042	03	5.000	1.017	04	10.000	0.9686
05	20.000	1.06	06	50.000	1.154	07	100.000	1.114	08	200.000	1.145
09	300.000	1.02									

Tetrachloroethene (PCE)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.6752	02	2.000	0.6933	03	5.000	0.619	04	10.000	0.5713
05	20.000	0.6064	06	50.000	0.6158	07	100.000	0.5892	08	200.000	0.6264
09	300.000	0.5569									

Toluene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.8788	02	2.000	0.885	03	5.000	0.829	04	10.000	0.7693
05	20.000	0.8053	06	50.000	0.8551	07	100.000	0.803	08	200.000	0.8354
09	300.000	0.757									

Toluene-d8

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	10.000	1.114	03	20.000	1.13	04	30.000	1.105	05	40.000	1.082
06	50.000	1.066	07	70.000	1.082	08	80.000	1.092	09	120.000	0.9836

Trichloroethene (TCE)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.307	02	2.000	0.3333	03	5.000	0.3117	04	10.000	0.2787
05	20.000	0.2959	06	50.000	0.3135	07	100.000	0.2936	08	200.000	0.3077
09	300.000	0.2808									

Trichlorofluoromethane (CFC 11)

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	2.000	0.3455	03	5.000	0.2828	04	10.000	0.2667	05	20.000	0.2912
06	50.000	0.3138	07	100.000	0.2917	08	200.000	0.2936	09	300.000	0.2691

Vinyl Chloride

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	2.000	0.3073	03	5.000	0.2839	04	10.000	0.2523	05	20.000	0.2646
06	50.000	0.2844	07	100.000	0.2628	08	200.000	0.2766	09	300.000	0.2567

cis-1,2-Dichloroethene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.3796	02	2.000	0.3615	03	5.000	0.3479	04	10.000	0.3037
05	20.000	0.3264	06	50.000	0.3507	07	100.000	0.3321	08	200.000	0.3449

ALS Group USA, Corp.
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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A

Service Request: K2314283
Calibration Date: 10/30/2023

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

Calibration ID: KC2300633
Instrument ID: K-MS-24

Signal ID: 1

Analyte

cis-1,2-Dichloroethene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
09	300.000	0.3277									

cis-1,3-Dichloropropene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.4281	02	2.000	0.449	03	5.000	0.4348	04	10.000	0.4319
05	20.000	0.4762	06	50.000	0.5383	07	100.000	0.532	08	200.000	0.5514
09	300.000	0.5261									

m,p-Xylenes

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	2.000	1.301	02	4.000	1.482	03	10.000	1.402	04	20.000	1.267
05	40.000	1.371	06	100.000	1.462	07	200.000	1.376	08	400.000	1.415
09	600.000	1.265									

n-Butylbenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	2.000	2.795	03	5.000	2.776	04	10.000	2.513	05	20.000	2.829
06	50.000	3.072	07	100.000	2.966	08	200.000	3.053	09	300.000	2.698

n-Propylbenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	3.909	02	2.000	4.327	03	5.000	4.216	04	10.000	3.855
05	20.000	4.261	06	50.000	4.666	07	100.000	4.498	08	200.000	4.656
09	300.000	4.107									

o-Xylene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	1.264	02	2.000	1.325	03	5.000	1.349	04	10.000	1.214
05	20.000	1.362	06	50.000	1.423	07	100.000	1.354	08	200.000	1.374
09	300.000	1.252									

sec-Butylbenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
02	2.000	3.824	03	5.000	3.678	04	10.000	3.351	05	20.000	3.711
06	50.000	3.947	07	100.000	3.766	08	200.000	3.851	09	300.000	3.355

tert-Butylbenzene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	2.695	02	2.000	2.987	03	5.000	2.729	04	10.000	2.515
05	20.000	2.73	06	50.000	2.89	07	100.000	2.766	08	200.000	2.813
09	300.000	2.489									

trans-1,2-Dichloroethene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.3136	02	2.000	0.31	03	5.000	0.2784	04	10.000	0.2481
05	20.000	0.2697	06	50.000	0.2825	07	100.000	0.2586	08	200.000	0.2723
09	300.000	0.2531									

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A

Service Request: K2314283
Calibration Date: 10/30/2023

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

Calibration ID: KC2300633
Instrument ID: K-MS-24

Signal ID: 1

Analyte

trans-1,3-Dichloropropene

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	1.000	0.9294	02	2.000	0.937	03	5.000	0.9082	04	10.000	0.8845
05	20.000	0.9972	06	50.000	1.091	07	100.000	1.102	08	200.000	1.152
09	300.000	1.133									

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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A

Service Request: K2314283
Calibration Date: 10/30/2023

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

Calibration ID: KC2300633
Instrument ID: K-MS-24

Signal ID: 1

Analyte Name	Compound Type	Calibration Evaluation				Calibration Evaluation	
		Fit Type	Eval	Eval Result	Control Criteria	Average RRF	Minimum RRF
1,1,1,2-Tetrachloroethane	TRG	Average RF	% RSD	7.5	≤20	0.6933	0.01
1,1,1-Trichloroethane (TCA)	TRG	Average RF	% RSD	7.6	≤20	0.3914	0.100
1,1,2,2-Tetrachloroethane	TRG	Average RF	% RSD	4.4	≤20	0.941	0.300
1,1,2-Trichloroethane	TRG	Average RF	% RSD	3.0	≤20	0.5773	0.100
1,1-Dichloroethane	TRG	Average RF	% RSD	5.7	≤20	0.5522	0.200
1,1-Dichloroethene	TRG	Average RF	% RSD	10.3	≤20	0.2174	0.100
1,1-Dichloropropene	TRG	Average RF	% RSD	5.9	≤20	0.3726	0.01
1,2,3-Trichlorobenzene	TRG	Average RF	% RSD	7.4	≤20	1.095	0.01
1,2,3-Trichloropropane	TRG	Average RF	% RSD	4.9	≤20	0.304	0.01
1,2,4-Trichlorobenzene	TRG	Average RF	% RSD	7.6	≤20	1.2	0.200
1,2,4-Trimethylbenzene	TRG	Average RF	% RSD	7.2	≤20	3.061	0.01
1,2-Dibromo-3-chloropropane	TRG	Average RF	% RSD	11.2	≤20	0.143	0.025
1,2-Dibromoethane (EDB)	TRG	Average RF	% RSD	5.8	≤20	0.6461	0.100
1,2-Dichlorobenzene	TRG	Average RF	% RSD	4.1	≤20	1.709	0.400
1,2-Dichloroethane (EDC)	TRG	Average RF	% RSD	3.8	≤20	0.4154	0.100
1,2-Dichloropropane	TRG	Average RF	% RSD	4.9	≤20	0.3392	0.100
1,3,5-Trimethylbenzene	TRG	Average RF	% RSD	5.2	≤20	3.129	0.01
1,3-Dichlorobenzene	TRG	Average RF	% RSD	5.9	≤20	1.857	0.600
1,3-Dichloropropane	TRG	Average RF	% RSD	4.9	≤20	1.188	0.01
1,4-Dichlorobenzene	TRG	Average RF	% RSD	6.9	≤20	1.879	0.500
2,2-Dichloropropane	TRG	Average RF	% RSD	7.4	≤20	0.3948	0.01
2-Butanone (MEK)	TRG	Average RF	% RSD	7.5	≤20	0.03782	0.010
2-Chlorotoluene	TRG	Average RF	% RSD	5.1	≤20	2.645	0.01
2-Hexanone	TRG	Average RF	% RSD	6.4	≤20	0.09297	0.015
4-Bromofluorobenzene	SURR	Average RF	% RSD	6.3	≤20	0.9244	0.01
4-Chlorotoluene	TRG	Average RF	% RSD	4.5	≤20	2.804	0.01
4-Isopropyltoluene	TRG	Average RF	% RSD	6.3	≤20	3.187	0.01
4-Methyl-2-pentanone (MIBK)	TRG	Average RF	% RSD	5.7	≤20	0.1064	0.010
Acetone	TRG	Linear	R2	0.9938	≥.990	0.1279	0.010
Benzene	TRG	Average RF	% RSD	5.1	≤20	1.279	0.500
Bromobenzene	TRG	Average RF	% RSD	5.1	≤20	0.9997	0.01
Bromochloromethane	TRG	Average RF	% RSD	5.0	≤20	0.1573	0.01
Bromodichloromethane	TRG	Average RF	% RSD	7.6	≤20	0.3883	0.200
Bromoform	TRG	Average RF	% RSD	13.3	≤20	0.4263	0.100

ALS Group USA, Corp.
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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A

Service Request: K2314283
Calibration Date: 10/30/2023

Initial Calibration Summary
Volatile Organic Compounds by GC/MS

Calibration ID: KC2300633
Instrument ID: K-MS-24

Signal ID: 1

Analyte Name	Compound Type	Calibration Evaluation				Calibration Evaluation	
		Fit Type	Eval	Eval Result	Control Criteria	Average RRF	Minimum RRF
Bromomethane	TRG	Linear	R2	0.9947	≥.990	0.1725	0.100
Carbon Disulfide	TRG	Average RF	% RSD	6.1	≤20	0.6501	0.100
Carbon Tetrachloride	TRG	Average RF	% RSD	7.0	≤20	0.3132	0.100
Chlorobenzene	TRG	Average RF	% RSD	5.7	≤20	2.147	0.500
Chloroethane	TRG	Average RF	% RSD	5.9	≤20	0.1878	0.100
Chloroform	TRG	Average RF	% RSD	5.2	≤20	0.5221	0.200
Chloromethane	TRG	Average RF	% RSD	12.9	≤20	0.3402	0.100
Dibromochloromethane	TRG	Average RF	% RSD	12.3	≤20	0.6668	0.100
Dibromofluoromethane	SURR	Average RF	% RSD	2.0	≤20	0.2625	0.01
Dibromomethane	TRG	Average RF	% RSD	4.0	≤20	0.1841	0.01
Dichlorodifluoromethane	TRG	Average RF	% RSD	9.1	≤20	0.1623	0.100
Ethylbenzene	TRG	Average RF	% RSD	5.2	≤20	1.112	0.100
Hexachlorobutadiene	TRG	Average RF	% RSD	6.5	≤20	0.6411	0.01
Isopropylbenzene	TRG	Average RF	% RSD	5.9	≤20	3.327	0.100
Methylene Chloride	TRG	Linear	R2	0.9994	≥.990	0.3338	0.100
Naphthalene	TRG	Average RF	% RSD	8.8	≤20	2.598	0.01
Styrene	TRG	Average RF	% RSD	6.3	≤20	1.057	0.300
Tetrachloroethene (PCE)	TRG	Average RF	% RSD	7.2	≤20	0.6171	0.200
Toluene	TRG	Average RF	% RSD	5.4	≤20	0.8242	0.400
Toluene-d8	SURR	Average RF	% RSD	4.1	≤20	1.082	0.01
Trichloroethene (TCE)	TRG	Average RF	% RSD	5.7	≤20	0.3025	0.200
Trichlorofluoromethane (CFC 11)	TRG	Average RF	% RSD	8.7	≤20	0.2943	0.100
Vinyl Chloride	TRG	Average RF	% RSD	6.6	≤20	0.2736	0.100
cis-1,2-Dichloroethene	TRG	Average RF	% RSD	6.5	≤20	0.3416	0.100
cis-1,3-Dichloropropene	TRG	Average RF	% RSD	10.6	≤20	0.4853	0.200
m,p-Xylenes	TRG	Average RF	% RSD	5.8	≤20	1.371	0.100
n-Butylbenzene	TRG	Average RF	% RSD	6.6	≤20	2.838	0.01
n-Propylbenzene	TRG	Average RF	% RSD	6.9	≤20	4.277	0.01
o-Xylene	TRG	Average RF	% RSD	5.1	≤20	1.324	0.300
sec-Butylbenzene	TRG	Average RF	% RSD	6.0	≤20	3.685	0.01
tert-Butylbenzene	TRG	Average RF	% RSD	5.9	≤20	2.735	0.01
trans-1,2-Dichloroethene	TRG	Average RF	% RSD	8.4	≤20	0.2762	0.100
trans-1,3-Dichloropropene	TRG	Average RF	% RSD	10.3	≤20	1.015	0.100

QA/QC Report

Service Request: K2314283
Calibration Date: 10/30/2023

Calibration ID: KC2300633
Instrument ID: K-MS-24

Signal ID: 1

Analyte Name	Expected	Result	Average RF	SSV		Criteria	Curve Fit
				RF	% D		
Acetone	250	199	1.279E-1	8.483E-2	-20.443	±30	Linear
Benzene	50.0	47.1	1.279E0	1.205E0	-5.820	±30	Average RF
Bromobenzene	50.0	47.2	9.997E-1	9.445E-1	-5.524	±30	Average RF
Bromochloromethane	50.0	46.7	1.573E-1	1.469E-1	-6.627	±30	Average RF
Bromodichloromethane	50.0	47.6	3.883E-1	3.694E-1	-4.863	±30	Average RF
Bromoform	50.0	44.9	4.263E-1	3.832E-1	-10.110	±30	Average RF
Bromomethane	50.0	51.4	1.725E-1	1.343E-1	2.76	±30	Linear
2-Butanone (MEK)	250	242	3.782E-2	3.655E-2	-3.359	±30	Average RF
n-Butylbenzene	50.0	50.8	2.838E0	2.886E0	1.69	±30	Average RF
sec-Butylbenzene	50.0	52.5	3.685E0	3.872E0	5.07	±30	Average RF
tert-Butylbenzene	50.0	48.5	2.735E0	2.653E0	-2.986	±30	Average RF
Carbon Disulfide	100	91.3	6.501E-1	5.937E-1	-8.678	±30	Average RF
Carbon Tetrachloride	50.0	48.6	3.132E-1	3.045E-1	-2.757	±30	Average RF
Chlorobenzene	50.0	47.6	2.147E0	2.046E0	-4.729	±30	Average RF
Chloroethane	50.0	47.3	1.878E-1	1.778E-1	-5.324	±30	Average RF
Chloroform	50.0	47.4	5.221E-1	4.95E-1	-5.204	±30	Average RF
Chloromethane	50.0	45.2	3.402E-1	3.076E-1	-9.575	±30	Average RF
2-Chlorotoluene	50.0	48.0	2.645E0	2.538E0	-4.025	±30	Average RF
4-Chlorotoluene	50.0	48.3	2.804E0	2.709E0	-3.392	±30	Average RF
1,2-Dibromo-3-chloropropane	50.0	41.7	1.43E-1	1.193E-1	-16.588	±30	Average RF
Dibromochloromethane	50.0	47.6	6.668E-1	6.349E-1	-4.778	±30	Average RF
1,2-Dibromoethane (EDB)	50.0	45.6	6.461E-1	5.895E-1	-8.767	±30	Average RF
Dibromomethane	50.0	46.5	1.841E-1	1.712E-1	-7.040	±30	Average RF
1,2-Dichlorobenzene	50.0	45.9	1.709E0	1.569E0	-8.200	±30	Average RF
1,3-Dichlorobenzene	50.0	46.9	1.857E0	1.741E0	-6.230	±30	Average RF
1,4-Dichlorobenzene	50.0	46.4	1.879E0	1.742E0	-7.299	±30	Average RF
Dichlorodifluoromethane	50.0	48.6	1.623E-1	1.577E-1	-2.872	±30	Average RF
1,1-Dichloroethane	50.0	45.2	5.522E-1	4.989E-1	-9.645	±30	Average RF
1,2-Dichloroethane (EDC)	50.0	46.9	4.154E-1	3.897E-1	-6.206	±30	Average RF
1,1-Dichloroethene	50.0	42.9	2.174E-1	1.866E-1	-14.163	±30	Average RF
cis-1,2-Dichloroethene	50.0	46.0	3.416E-1	3.145E-1	-7.941	±30	Average RF
trans-1,2-Dichloroethene	50.0	45.1	2.762E-1	2.493E-1	-9.767	±30	Average RF

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QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A

Service Request: K2314283
Calibration Date: 10/30/2023

Initial Calibration Verification Summary
Volatile Organic Compounds by GC/MS

Calibration ID: KC2300633
Instrument ID: K-MS-24

Signal ID: 1

Analyte Name	Expected	Result	Average RF	SSV RF	% D	Criteria	Curve Fit
1,2-Dichloropropane	50.0	47.4	3.392E-1	3.215E-1	-5.220	±30	Average RF
1,3-Dichloropropane	50.0	46.4	1.188E0	1.103E0	-7.137	±30	Average RF
2,2-Dichloropropane	50.0	45.0	3.948E-1	3.549E-1	-10.089	±30	Average RF
1,1-Dichloropropene	50.0	50.8	3.726E-1	3.782E-1	1.52	±30	Average RF
cis-1,3-Dichloropropene	50.0	50.2	4.853E-1	4.875E-1	0.458	±30	Average RF
trans-1,3-Dichloropropene	50.0	48.8	1.015E0	9.907E-1	-2.387	±30	Average RF
Ethylbenzene	50.0	48.2	1.112E0	1.072E0	-3.518	±30	Average RF
Hexachlorobutadiene	50.0	45.5	6.411E-1	5.836E-1	-8.978	±30	Average RF
2-Hexanone	250	271	9.297E-2	1.008E-1	8.45	±30	Average RF
Isopropylbenzene	50.0	46.7	3.327E0	3.104E0	-6.699	±30	Average RF
4-Isopropyltoluene	50.0	52.8	3.187E0	3.363E0	5.53	±30	Average RF
4-Methyl-2-pentanone (MIBK)	250	282	1.064E-1	1.201E-1	12.93	±30	Average RF
Methylene Chloride	50.0	46.4	3.338E-1	2.726E-1	-7.288	±30	Linear
Naphthalene	50.0	45.1	2.598E0	2.345E0	-9.751	±30	Average RF
n-Propylbenzene	50.0	50.2	4.277E0	4.294E0	0.390	±30	Average RF
Styrene	50.0	49.5	1.057E0	1.046E0	-1.051	±30	Average RF
1,1,1,2-Tetrachloroethane	50.0	47.2	6.933E-1	6.544E-1	-5.616	±30	Average RF
1,1,2,2-Tetrachloroethane	50.0	43.2	9.41E-1	8.136E-1	-13.538	±30	Average RF
Tetrachloroethene (PCE)	50.0	46.9	6.171E-1	5.788E-1	-6.197	±30	Average RF
Toluene	50.0	47.5	8.242E-1	7.822E-1	-5.097	±30	Average RF
1,2,3-Trichlorobenzene	50.0	45.9	1.095E0	1.006E0	-8.109	±30	Average RF
1,2,4-Trichlorobenzene	50.0	45.8	1.2E0	1.099E0	-8.407	±30	Average RF
1,1,2-Trichloroethane	50.0	45.1	5.773E-1	5.206E-1	-9.821	±30	Average RF
1,1,1-Trichloroethane (TCA)	50.0	48.9	3.914E-1	3.828E-1	-2.207	±30	Average RF
Trichloroethene (TCE)	50.0	47.6	3.025E-1	2.881E-1	-4.769	±30	Average RF
Trichlorofluoromethane (CFC 11)	50.0	52.0	2.943E-1	3.062E-1	4.05	±30	Average RF
1,2,3-Trichloropropane	50.0	42.6	3.04E-1	2.593E-1	-14.704	±30	Average RF
1,2,4-Trimethylbenzene	50.0	51.1	3.061E0	3.127E0	2.18	±30	Average RF
1,3,5-Trimethylbenzene	50.0	48.9	3.129E0	3.06E0	-2.194	±30	Average RF
Vinyl Chloride	50.0	49.9	2.736E-1	2.73E-1	-0.194	±30	Average RF
o-Xylene	50.0	50.1	1.324E0	1.326E0	0.122	±30	Average RF
m,p-Xylenes	100	98.9	1.371E0	1.356E0	-1.121	±30	Average RF

QA/QC Report

Service Request: K2314283
Calibration Date: 10/30/2023

Calibration ID: KC2300633
Instrument ID: K-MS-24

Signal ID: 1

Analyte Name	Expected	Result	Average RF	SSV RF	% D	Criteria	Curve Fit
4-Bromofluorobenzene	50.0	49.5	9.244E-1	9.15E-1	-1.013	±30	Average RF
Dibromofluoromethane	50.0	48.3	2.625E-1	2.534E-1	-3.447	±30	Average RF
Toluene-d8	50.0	48.4	1.082E0	1.048E0	-3.159	±30	Average RF

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request: K2314283
Date Analyzed: 12/22/23 10:49

Continuing Calibration Verification (CCV) Summary
Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
File ID: J:\MS24\DATA\122223\1222F003.D\
Signal ID: 1

Calibration Date: 10/30/2023
Calibration ID: KC2300633
Analysis Lot: 828030
Units: ppb

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
Acetone	100	72.4	0.1279	0.0822	NA	-27.6*	±20	Linear
Benzene	50.0	52.3	1.2793	1.3373	4.5	NA	±20	Average RF
Bromobenzene	50.0	50.9	0.9997	1.0185	1.9	NA	±20	Average RF
Bromochloromethane	50.0	53.1	0.1573	0.1671	6.2	NA	±20	Average RF
Bromodichloromethane	50.0	56.2	0.3883	0.4365	12.4	NA	±20	Average RF
Bromoform	50.0	57.1	0.4263	0.4865	14.1	NA	±20	Average RF
Bromomethane	50.0	48.2	0.1725	0.1264	NA	-3.6	±20	Linear
2-Butanone (MEK)	100	88.3	0.0378	0.0334	-11.7	NA	±20	Average RF
n-Butylbenzene	50.0	57.3	2.8378	3.2521	14.6	NA	±20	Average RF
sec-Butylbenzene	50.0	56.8	3.6854	4.1876	13.6	NA	±20	Average RF
tert-Butylbenzene	50.0	51.2	2.7348	2.8027	2.5	NA	±20	Average RF
Carbon Disulfide	50.0	53.7	0.6501	0.6988	7.5	NA	±20	Average RF
Carbon Tetrachloride	50.0	59.8	0.3132	0.3742	19.5	NA	±20	Average RF
Chlorobenzene	50.0	50.8	2.1473	2.1818	1.6	NA	±20	Average RF
Chloroethane	50.0	52.7	0.1878	0.1978	5.3	NA	±20	Average RF
Chloroform	50.0	54.3	0.5221	0.5666	8.5	NA	±20	Average RF
Chloromethane	50.0	50.4	0.3402	0.343	0.8	NA	±20	Average RF
2-Chlorotoluene	50.0	52.4	2.6447	2.7694	4.7	NA	±20	Average RF
4-Chlorotoluene	50.0	51.0	2.8041	2.8574	1.9	NA	±20	Average RF
1,2-Dibromo-3-chloropropane	50.0	50.2	0.143	0.1437	0.5	NA	±20	Average RF
Dibromochloromethane	50.0	58.2	0.6668	0.7762	16.4	NA	±20	Average RF
1,2-Dibromoethane (EDB)	50.0	51.4	0.6461	0.6645	2.9	NA	±20	Average RF
Dibromomethane	50.0	53.3	0.1841	0.1962	6.5	NA	±20	Average RF
1,2-Dichlorobenzene	50.0	51.8	1.7094	1.7717	3.6	NA	±20	Average RF
1,3-Dichlorobenzene	50.0	50.8	1.8566	1.8855	1.6	NA	±20	Average RF
1,4-Dichlorobenzene	50.0	50.9	1.8789	1.9117	1.7	NA	±20	Average RF
Dichlorodifluoromethane	50.0	85.9	0.1623	0.2788	71.7*	NA	±20	Average RF
1,1-Dichloroethane	50.0	52.8	0.5522	0.5831	5.6	NA	±20	Average RF
1,2-Dichloroethane (EDC)	50.0	53.1	0.4154	0.4414	6.2	NA	±20	Average RF
1,1-Dichloroethene	50.0	53.8	0.2174	0.234	7.6	NA	±20	Average RF
cis-1,2-Dichloroethene	50.0	51.3	0.3416	0.3507	2.7	NA	±20	Average RF
trans-1,2-Dichloroethene	50.0	49.0	0.2762	0.2708	-2.0	NA	±20	Average RF
1,2-Dichloropropane	50.0	54.1	0.3392	0.3668	8.1	NA	±20	Average RF
1,3-Dichloropropane	50.0	51.9	1.1877	1.2335	3.9	NA	±20	Average RF
2,2-Dichloropropane	50.0	55.9	0.3948	0.4409	11.7	NA	±20	Average RF
1,1-Dichloropropene	50.0	58.0	0.3726	0.4322	16.0	NA	±20	Average RF
cis-1,3-Dichloropropene	50.0	57.1	0.4853	0.5546	14.3	NA	±20	Average RF
trans-1,3-Dichloropropene	50.0	54.0	1.0149	1.0954	7.9	NA	±20	Average RF
Ethylbenzene	50.0	53.0	1.1115	1.1778	6.0	NA	±20	Average RF

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request: K2314283
Date Analyzed: 12/22/23 10:49

Continuing Calibration Verification (CCV) Summary
Volatile Organic Compounds by GC/MS

Analysis Method: 8260C
File ID: J:\MS24\DATA\122223\1222F003.D\
Signal ID: 1

Calibration Date: 10/30/2023
Calibration ID: KC2300633
Analysis Lot: 828030
Units: ppb

Hexachlorobutadiene	50.0	53.4	0.6411	0.6849	6.8	NA	±20	Average RF
2-Hexanone	100	99.9	0.093	0.0928	-0.1	NA	±20	Average RF
Isopropylbenzene	50.0	54.5	3.3265	3.6279	9.1	NA	±20	Average RF
4-Isopropyltoluene	50.0	54.2	3.1869	3.4554	8.4	NA	±20	Average RF
4-Methyl-2-pentanone (MIBK)	100	110	0.1064	0.1165	9.5	NA	±20	Average RF
Methylene Chloride	50.0	50.5	0.3338	0.2961	NA	1.0	±20	Linear
Naphthalene	50.0	48.2	2.5984	2.5039	-3.6	NA	±20	Average RF
n-Propylbenzene	50.0	54.8	4.2772	4.6892	9.6	NA	±20	Average RF
Styrene	50.0	55.4	1.0572	1.1703	10.7	NA	±20	Average RF
1,1,1,2-Tetrachloroethane	50.0	54.8	0.6933	0.7599	9.6	NA	±20	Average RF
1,1,2,2-Tetrachloroethane	50.0	51.2	0.941	0.9631	2.4	NA	±20	Average RF
Tetrachloroethene (PCE)	50.0	52.8	0.6171	0.6516	5.6	NA	±20	Average RF
Toluene	50.0	51.6	0.8242	0.8501	3.1	NA	±20	Average RF
1,2,3-Trichlorobenzene	50.0	47.4	1.0952	1.0386	-5.2	NA	±20	Average RF
1,2,4-Trichlorobenzene	50.0	48.8	1.2003	1.1703	-2.5	NA	±20	Average RF
1,1,2-Trichloroethane	50.0	50.8	0.5773	0.586	1.5	NA	±20	Average RF
1,1,1-Trichloroethane (TCA)	50.0	58.2	0.3914	0.4556	16.4	NA	±20	Average RF
Trichloroethene (TCE)	50.0	52.3	0.3025	0.3161	4.5	NA	±20	Average RF
Trichlorofluoromethane (CFC 11)	50.0	68.7	0.2943	0.4044	37.4*	NA	±20	Average RF
1,2,3-Trichloropropane	50.0	47.9	0.304	0.2915	-4.1	NA	±20	Average RF
1,2,4-Trimethylbenzene	50.0	53.5	3.0606	3.2772	7.1	NA	±20	Average RF
1,3,5-Trimethylbenzene	50.0	51.9	3.1286	3.2478	3.8	NA	±20	Average RF
Vinyl Chloride	50.0	57.7	0.2736	0.3156	15.4	NA	±20	Average RF
o-Xylene	50.0	52.6	1.3241	1.3922	5.1	NA	±20	Average RF
m,p-Xylenes	100	106	1.3712	1.4522	5.9	NA	±20	Average RF
Xylenes, Total	150	158	NA	NA	NA	NA	±20	

Analyte Name	Expected	Result	Average RF	CCV RF	% D	% Drift	Criteria	Curve Fit
4-Bromofluorobenzene	50.0	45.4	0.9244	0.8387	-9.3	NA	±20	Average RF
Dibromofluoromethane	50.0	46.4	0.2625	0.2435	-7.2	NA	±20	Average RF
Toluene-d8	50.0	47.9	1.0818	1.0364	-4.2	NA	±20	Average RF

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Maul Foster & Alongi, Incorporated
Project: POP- PDX Taxiway A/M0232.17.089

Service Request:K2314283

Analysis Run Log
Volatile Organic Compounds by GC/MS

Analysis Method:

Analysis Lot:828030
Instrument ID:K-MS-24

Raw Data File	Sample Name	Lab Code	Date Analyzed	Time Analyzed	Q
J:\MS24\DATA\122223\1222F001.D\	ZZZZZZZ	ZZZZZZZ	12/22/2023	09:39:00	
J:\MS24\DATA\122223\1222F003.D\	Continuing Calibration Verification	KQ2322502-02	12/22/2023	10:49:00	
J:\MS24\DATA\122223\1222F004.D\	Lab Control Sample	KQ2322502-03	12/22/2023	11:29:00	
J:\MS24\DATA\122223\1222F005.D\	Duplicate Lab Control Sample	KQ2322502-04	12/22/2023	11:50:00	
J:\MS24\DATA\122223\1222F008.D\	Method Blank	KQ2322502-05	12/22/2023	12:52:00	
J:\MS24\DATA\122223\1222F011.D\	TA-01-S	K2314283-001	12/22/2023	13:55:00	
J:\MS24\DATA\122223\1222F012.D\	TA-02-S	K2314283-002	12/22/2023	14:16:00	
J:\MS24\DATA\122223\1222F013.D\	ZZZZZZZ	ZZZZZZZ	12/22/2023	14:37:00	
J:\MS24\DATA\122223\1222F014.D\	ZZZZZZZ	ZZZZZZZ	12/22/2023	14:58:00	
J:\MS24\DATA\122223\1222F015.D\	ZZZZZZZ	ZZZZZZZ	12/22/2023	15:19:00	



Raw Data

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com



Total Solids

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Benchsheet

Service Request #: K2314249, KQ2322267, T2302165,
K2314273, K2314283
Test: TS
Method: 160.3 Modified

Run #: 827842
Balance ID: K-BALANCE-50

Matrix	Lab Code	Tare (g)	Wet Wt. (g)	Tare + Dry Wt. (g)	Dry Weight (g)	% Total Solids	RPD
Misc. Solid	K2314249-001	1.267	10.531	10.924	9.66	91.7	
Misc. Solid	K2314249-001DUP	1.269	10.503	10.859	9.59	91.3	<1
Misc. Solid	K2314249-002	1.262	10.490	10.639	9.38	89.4	
Misc. Solid	K2314249-003	1.253	10.208	10.371	9.12	89.3	
Misc. Solid	K2314249-004	1.264	10.510	10.051	8.79	83.6	
Bark	T2302165-001	1.258	5.708	6.899	5.64	98.8	
Bark	T2302165-002	1.257	5.093	6.304	5.05	99.1	
Bark	T2302165-003	1.256	5.739	6.940	5.68	99.0	
Soil	K2314273-004	1.251	10.301	11.250	10.00	97.1	
Soil	K2314273-005	1.277	10.397	10.956	9.68	93.1	
Soil	K2314283-001	1.263	10.384	8.808	7.55	72.7	
Soil	K2314283-002	1.268	10.448	10.185	8.92	85.3	
Soil	K2314283-002DUP	1.262	10.379	10.083	8.82	85.0	<1

Oven1	Oven ID	Temp In	Temp Out	Date In	Time In	Date Out	Time Out	Thermometer ID
	k-oven-07	105	105	12/21/2023	12:21	12/22/2023	06:00	

	Cal EQID	Cal Start Value	Cal End Value	Start Date	Start Time	End Date	End Time
Calibration1	K-BALANCE-50	1.000, 100.000	1.000, 100.000	12/21/2023	10:35	12/21/2023	12:21
Calibration2	K-BALANCE-55	1.000, 100.000	1.000, 100.000	12/22/2023	06:47	12/22/2023	06:48

Comments: ZZB SN: 11012 FINISHED BY TR SN11010 REVIEWED BY PDP



Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Preparation Information Benchsheet

Prep Run#: 431765

Team: Metals/MCHATTICK

Prep Workflow: MetDigSICP

Prep Method: EPA 3050B

Status: Prepped

Prep Date/Time: 12/22/23 10:51

Number of Copies to make: 1

#	Lab Code	Client ID	B#	Method /Test	pH	Matrix	Amt. Ext.	Final Vol	Sample Description
1	KQ2322295-03	MB		6020B/Metals T		Solid	1.0000g	100.00mL	10%HNO3,10%HCl
2	KQ2322295-04	LCS		6020B/Metals T		Solid	1.0000g	100.00mL	10%HNO3,10%HCl
3	K2314283-001	TA-01-S	.01	6020B/Metals T		Soil	1.253g	100.00mL	ZBIBI k-balance-50 / 10%HNO3,10%HCl
4	KQ2322295-01	K2314283-001 DUP	.01	6020B/Metals T		Solid	1.014g	100.00mL	ZBIBI k-balance-50 / 10%HNO3,10%HCl
5	KQ2322295-02	K2314283-001 MS	.01	6020B/Metals T		Solid	1.145g	100.00mL	ZBIBI k-balance-50 / 10%HNO3,10%HCl

Spiking Solutions

Name:	K-MET SS3	Inventory ID	230879	Logbook Ref:	MET4-49-G	Expires On:	01/31/2024
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KQ2322295-02 1.00mL KQ2322295-04 1.00mL

Name:	K-MET SS4	Inventory ID	231929	Logbook Ref:	MET4-51-N	Expires On:	06/08/2024
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KQ2322295-02 1.00mL KQ2322295-04 1.00mL

Name:	K-MET SS5	Inventory ID	232007	Logbook Ref:	MET4-52-C	Expires On:	01/31/2024
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KQ2322295-02 1.00mL KQ2322295-04 1.00mL

Name:	K-MET SS1	Inventory ID	232732	Logbook Ref:	MET4-53-G	Expires On:	03/21/2024
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KQ2322295-02 2.00mL KQ2322295-04 2.00mL

Preparation Materials

K-MET 100ml Centrifuge Tube	2211204 (231828)	K-MET HCL	22L0562005 (229758)	K-MET H2O2	62182249 (231007)
K-MET HNO3	23C1462002 (231013)	K-METPTFE Boiling chips	29036769 (230126)		

Preparation Steps

Step:	Weigh	Step:	Digestion
Started:	12/22/23 10:51	Started:	12/22/23 10:51
Finished:	12/22/23 14:16	Finished:	12/22/23 14:16
By:	MCHATTICK	By:	MCHATTICK
Comments		Comments	

Preparation Equipment

K-BlockDigester-01	Digestion	IR Thermometer ID: IR03	K-BlockDigester-01	Digestion	Temperature	94.1 deg C
K-BlockDigester-01	Digestion	Temperature Check Location	30	K-41585306	Digestion	
K-DGV 100-1000B	Digestion					

Preparation Information Benchsheet

Prep Run#: 431765
Team: Metals/MCHATTICK

Prep WorkFlow: MetDigSICP
Prep Method: EPA 3050B

Status: Prepped
Prep Date/Time: 12/22/23 10:51

Comments: R1:15min,R2:120min,R3:15min

Reviewed By: WL **Date:** 12.26.23

METALS SPIKING SOLUTIONS CONCENTRATIONS FORM

Solution Name	Element	mLs of 1000ppm Solution	Final Volume	Solution Conc. mg/L	Enter mls Added
K-MET SS1 *** Add after HNO3 and before ALS-89 when making the solution	HNO3	50.0	1000ml	-	
	Al	100*	1000ml	200	
	Ag	100*	1000ml	5	
	Ba	100*	1000ml	100	
	Be	100*	1000ml	5	
	Cd	100*	1000ml	5	
	Co	100*	1000ml	50	
	Cr	100*	1000ml	20	
	Cu	100*	1000ml	25	
	Fe	100*	1000ml	100	
	Pb	100*	1000ml	50	
	Mn	100*	1000ml	50	
	Ni	100*	1000ml	50	
	Sb***	50.0	1000ml	50	
	V	100*	1000ml	50	
	Zn	100*	1000ml	50	
K-MET SS3	HNO3	25.0	500ml	-	
	As	50.0	500ml	100	
	Se	50.0	500ml	100	
	Tl	10.0	500ml	20	
	Hg	6.00	500ml	12	
K-MET SS4	HNO3	25.0	500ml	-	
	B	25.0	500ml	50	
	Mo	50.0	500ml	100	
	U	10.0	500ml	20	
K-MET SS5	HNO3	25.0	500ml	-	
	K**	50.0	500ml	1000	
	Na**	50.0	500ml	1000	
	Mg**	50.0	500ml	1000	
	Ca**	50.0	500ml	1000	

K-MET QCP-CICV-1	Ca, Mg, Na, K	no dilution	-	2500	
	Al, Ba	no dilution	-	1000	
	Fe	no dilution	-	500	
	Co, Mn, Ni, V, Zn	no dilution	-	250	
	Cu, Ag	no dilution	-	125	
	Cr	no dilution	-	100	
	Be	no dilution	-	25	
K-MET QCP-CICV-3	As, Pb, Se, Tl	no dilution	-	500	
	Cd	no dilution	-	250	

* Denotes volume of mixed stock standard.

** Denotes 10,000 ppm individual stock standards.

Standard	mls of standard	ppm	Logbook #	Exp. Date

Preparation Information Benchsheet

Prep Run#: 431765
 Team: Metals/ZBIBI
 Number of Copies to make: 1

Prep WorkFlow: MetDigSICP
 Prep Method: EPA 3050B

Status: Draft
 Prep Date/Time: 12/21/23 12:30 PM

#	Lab Code	Client ID	B#	✓	Method /Test	Matrix	Amt. Ext.	pH	Int. Vol	Final Vol	Surr Amt	Spike Amt
1	KQ2322295-03	MB			6020B / Metals T	Solid						
2	KQ2322295-04	LCS			6020B / Metals T	Solid						
3	K2314283-001	TA-01-S	.01		6020B / Metals T	Soil						
4	KQ2322295-01	K2314283-001 DUP	.01		6020B / Metals T	Solid						
5	KQ2322295-02	K2314283-001 MS	.01		6020B / Metals T	Solid						

R1: 1051-1106
 R2: 1112-1157
 H2O2: 1234-1349
 R3: 1401-1416

Comments: + 2ml SS1, 1ml SS3, SS4, SS5 BD:1 TL:30 T:94.1

Surrogate ID: _____

Spike ID: _____

Witnessed By: _____

Analyst: _____

Assisted By: _____

Pre-Prep Information Benchsheet

Prep Run #: 431765

Container Lot No: 2304355

Prep Due Date: Jan-03-2024

#	Lab Code	Bottle	Test Name	Weight	Sample Comments	Test Comments
1	K2314283-001	.01	Metals T : 6020B/	1.253g		ZBIBI k-balance-50
2	K2314283-001 DUP KQ2322295-01	.01	Metals T : 6020B/	1.014g		ZBIBI k-balance-50
3	K2314283-001 MS KQ2322295-02	.01	Metals T : 6020B/	1.145g		ZBIBI k-balance-50

Relinquished By:	<i>ZLB</i>	Date/Time: <i>12/21/23 12:38pm</i>	Received By: <i>Me</i>	Date/Time: <i>12/22/23 1017</i>
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Service Request # K2314278, K3214283, K2314395

Instrument ID # K-ICP-MS-05

Calibration 010524AICPMS05

ALS LIMS Run # 828953

Cal Std: MS32-81-A

ICSA Std: MS32-79-H

ICV Std: MS32-75-H

ICSAB Std: MS32-79-I

LLICV Std: MS32-81-B

I.S. Solution: MS32-34-B

EPA Tune Solution: MS32-48-B

Pipette IDs: 38480473, 41987849, 41785872

ICP-MS Data Review Form

	Yes	No	NA
1. Appropriate standardization completed	<u>X</u>	_____	_____
2. ICV in control (+/- 10%)	<u>X</u>	_____	_____
3. CCV's in control (+/- 10%)	<u>X</u>	_____	_____
4. ICB/CCB's below MRL	<u>X</u>	_____	_____
5. LLICV standard analyzed and in control	<u>X</u>	_____	_____
6. ICS standards within 20% of true value	<u>X</u>	_____	_____
6. All analytes within instrument linear range	<u>X</u>	_____	_____
7. Adequate rinse out time allowed	<u>X</u>	_____	_____
8. Internal standards in control	<u>X</u>	_____	_____
9. Interferences checked	<u>X</u>	_____	_____
10. Was the run terminated? If so, why.	_____	<u>X</u>	_____

See Benchsheet exception report for sample batch QC information.
Comments:

Prep Batch: 431736, 431765, 431927

Primary Review by SL Date 11/5/24

Secondary Review by QMM Date 11/5/24

Data Review Form

Instrument ID#: **K-ICP-MS-05**

DataFile Name: **R:\ICP\WIP\DATA\K-ICP-MS-05 (Agilent)\010524A.csv**

RUNNO: **828953**

K2314278

No exceptions to report.

K2314283

K2314283-001DUP - Metals T -

DUP RPD

6020B/Metals T - 75 As [He] - RPD: 33 Limit: 20

6020B/Metals T - 111 Cd [He] - RPD: 33 Limit: 20

K2314395

K2314395-001DUP - Metals T -

DUP RPD

6020A/Metals T - 52 Cr [He] - RPD: 21 Limit: 20

6020A/Metals T - 107 Ag [He] - RPD: 46 Limit: 20

Primary Approver: 3L 1/5/24

Secondary Approver: AM 1/5/24

Sample								
	Rjct	Data File	Acq. Date-Time	Type	Level	Sample Name	Comment	Vial Number
1		001CALB.	2024-01-05 07:39:36	CalBlk		Prime		2
2		002CALB.	2024-01-05 07:41:49	CalBlk		Rinse		3
3		003CALB.	2024-01-05 07:44:03	CalBlk	1	Blank		3
4		004CALB.	2024-01-05 07:46:15	CalStd	2	25ppb		2
5		005_ICV.d	2024-01-05 07:48:28	ICV		ICV		1103
6		006_CCV.	2024-01-05 07:50:41	CCV		CCV		2
7		007_ICB.d	2024-01-05 07:52:54	ICB		ICB		3
8		008_CCB.	2024-01-05 07:55:07	CCB		CCB		3
9		009LICV.d	2024-01-05 07:57:20	LLICV		LLICVS		1104
10		010SMPL.	2024-01-05 08:04:51	Sample		LRSTD	+3000	2511
11		011SMPL.	2024-01-05 08:06:32	Sample		LRSTD	+300 +50A	2512
12		012ICSA.d	2024-01-05 08:13:19	ICSA		ICSA		1102
13		013ICSB.d	2024-01-05 08:15:30	ICSB		ICSAB		1101
14		014SMPL.	2024-01-05 08:17:44	Sample		MoSTD		1107
15		015_PB.d	2024-01-05 08:22:09	PB		KQ2322272-03	5X	2101
16		016_LCS.d	2024-01-05 08:24:21	LCS		KQ2322272-04	20X	2102
17		017_ARF.d	2024-01-05 08:26:33	AllRef		K2314278-001	5X	2103
18		018_Dup.d	2024-01-05 08:28:46	Dup		KQ2322272-01	5X	2104
19		019SMPL.	2024-01-05 08:30:58	Sample		K2314278-001	25X	2105
20		020_PDS.d	2024-01-05 08:33:11	PDS		K2314278-001	5X	2106
21		021_Spk.d	2024-01-05 08:35:21	Spike		KQ2322272-02	5X	2107
22		022_PDS.d	2024-01-05 08:37:25	PDS		K2314278-001	5X	2106
23		023_CCV.	2024-01-05 08:39:47	CCV		CCV		2
24		024_CCB.	2024-01-05 08:42:01	CCB		CCB		3
25		025_PB.d	2024-01-05 08:44:13	PB		KQ2322295-03	5X	2201
26		026_LCS.d	2024-01-05 08:46:26	LCS		KQ2322295-04	20X	2202
27		027_ARF.d	2024-01-05 08:48:38	AllRef		K2314283-001	5X	2203
28		028_Dup.d	2024-01-05 08:50:50	Dup		KQ2322295-01	5X	2204
29		029SMPL.	2024-01-05 08:53:02	Sample		K2314283-001	25X	2205
30		030_PDS.d	2024-01-05 08:55:15	PDS		K2314283-001	5X	2206
31		031_Spk.d	2024-01-05 08:57:25	Spike		KQ2322295-02	5X	2207
32		032_CCV.	2024-01-05 08:59:30	CCV		CCV		2
33		033_CCV.	2024-01-05 09:03:34	CCV		CCV		2
34		034_CCB.	2024-01-05 09:05:47	CCB		CCB		3
35		035_PB.d	2024-01-05 09:08:00	PB		KQ2322512-03	5X	2301
36		036_LCS.d	2024-01-05 09:10:13	LCS		KQ2322512-04	20X	2302
37		037_ARF.d	2024-01-05 09:12:25	AllRef		K2314395-001	5X	2303
38		038_Dup.d	2024-01-05 09:14:36	Dup		KQ2322512-01	5X	2304
39		039SMPL.	2024-01-05 09:16:48	Sample		K2314395-001	25X	2305

Sample								
	Rjct	Data File	Acq. Date-Time	Type	Level	Sample Name	Comment	Vial Number
40		040_PDS.d	2024-01-05 09:19:01	PDS		K2314395-001	5X	2306
41		041_Spk.d	2024-01-05 09:21:09	Spike		KQ2322512-02	5X	2307
42		042_CCV.	2024-01-05 09:23:27	CCV		CCV		2
43		043_CCB.	2024-01-05 09:25:41	CCB		CCB		3
44		044LCCV.	2024-01-05 09:27:53	LLCCV		LLCCVS		1104

Analyte							
	Name	Mass	ISTD	Tune Mode	Conc.	Units	Replicate
1	Cr	52	72	He	0.4075	ug/l	3
2	Cr	53	72	He	0.4485	ug/l	3
3	Ni	60	72	He	0.3706	ug/l	3
4	Ni	62	72	He	0.3783	ug/l	3
5	Cu	63	72	He	0.1945	ug/l	3
6	Cu	65	72	He	0.2041	ug/l	3
7	Zn	66	72	He	1.0259	ug/l	3
8	As	75	72	He	0.9597	ug/l	3
9	Se	77	72	H2	1.7914	ug/l	3
10	Se	78	72	H2	1.9994	ug/l	3
11	Mo	95	115	He	0.1032	ug/l	3
12	Mo	98	115	He	0.1103	ug/l	3
13	Ag	107	115	He	0.0388	ug/l	3
14	Ag	109	115	He	0.0385	ug/l	3
15	Cd	111	115	He	0.0398	ug/l	3
16	Cd	114	115	He	0.0422	ug/l	3
17	Ba	135	115	He	0.1006	ug/l	3
18	Ba	137	115	He	0.1071	ug/l	3
19	[Pb]	206	232	He	0.0901	ug/l	3
20	[Pb]	207	232	He	0.0865	ug/l	3
21	Pb	208	232	He	0.0872	ug/l	3
22	Ge	72		H2			3
23	Ge	72		He			3
24	In	115		He			3
25	Lu	175		He			3
26	Th	232		He			3

US EPA Tune Check Report

Operator Name ALKLS NoUser
Acq/Data Batch D:\Agilent\ICPMH1\DATA\100524.b
Acq. Date-Time 2024-01-05 06:38:57
Report Comment ALS Tune
Instrument Name G3281A JP13482848

[No Gas]

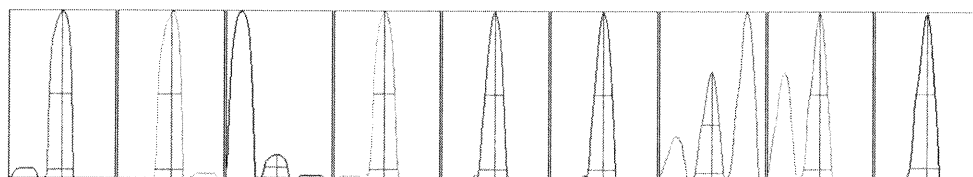
Sensitivity

Mass	CPS	RSD%	RSD% (Required)	RSD% (Flag)
7	115545.67	1.266	5.000	
9	42369.63	1.058	5.000	
24	386313.16	0.770	5.000	
59	896388.94	0.860	5.000	
115	1151413.71	0.911	5.000	
140	1073345.67	1.473	5.000	
208	455953.41	0.838	5.000	
209	711493.41	1.071	5.000	
238	860377.20	2.148	5.000	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
7	11500	11773	11618	11491	11391
9	4246	4281	4277	4192	4188
24	38401	39040	38815	38583	38318
59	88663	89741	90491	89064	90236
115	115490	115480	116547	114073	114117
140	106416	107702	109917	105937	106701
208	45044	45906	46003	45471	45553
209	69967	71665	71942	70980	71193
238	84396	88427	85647	87448	84270

Integration Time [sec] 0.1

Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)	W-5%	W-5% (Flag)	W-5% (Required)
7	19086.94	7.05	6.90 - 7.10		0.740		0.900
9	7009.31	9.05	8.90 - 9.10		0.781		0.900
24	62517.87	23.95	23.90 - 24.10		0.782		0.900

US EPA Tune Check Report

Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)	W-5%	W-5% (Flag)	W-5% (Required)
59	153621.71	58.95	58.90 - 59.10		0.816		0.900
115	224733.37	115.00	114.90 - 115.10		0.777		0.900
140	216708.21	140.00	139.90 - 140.10		0.768		0.900
208	92956.40	208.00	207.90 - 208.10		0.804		0.900
209	144236.52	209.00	208.90 - 209.10		0.794		0.900
238	166943.60	238.00	237.90 - 238.10		0.826		0.900

Integration Time [sec] 0.1
 Acquisition Time [sec] 268.4
 Y Axis Linear

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.57 L/min	Dilution Gas	0.50 L/min
RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.76 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	8.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	7.7 V	Deflect	12.4 V
Extract 2	-195.0 V	Cell Entrance	-30 V	Plate Bias	-40 V
Omega Bias	-95 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	0.0 mL/min	OctP RF	200 V		

QP Parameters

Mass Gain	126	Axis Gain	1.0007	QP Bias	-3.0 V
Mass Offset	125	Axis Offset	0.02		

Hardware Settings

Torch

Torch H	-0.3 mm	Torch V	0.8 mm
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EM

Discriminator	4.5 mV	Analog HV	1755 V	Pulse HV	1389 V
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Calibration Blank Report

Sample Name Blank
File Name 003CALB.d
Data Path Name D:\Agilent\ICPMH1\DATA\010524A.b
Acq Time 2024-01-05 07:44:03
Sample Type CalBlk
Comment ---
ISTD Ref FileName 003CALB.d
Operator ALKLS
QC Analyte Table NoUser

Name	Mass	ISTD	Tune Mode	CPS	CPS RSD
Se	77	72	H2	3525.03	2.1
Se	78	72	H2	68.33	4.5
Cr	52	72	He	1582.31	4.3
Cr	53	72	He	456.68	9.6
Ni	60	72	He	1123.38	3.6
Ni	62	72	He	161.12	34.6
Cu	63	72	He	742.24	0.5
Cu	65	72	He	372.23	8.3
Zn	66	72	He	264.45	5.1
As	75	72	He	41.00	8.4
Mo	95	115	He	27.78	27.7
Mo	98	115	He	66.67	31.2
Ag	107	115	He	53.33	45.1
Ag	109	115	He	50.00	11.5
Cd	111	115	He	11.00	29.8
Cd	114	115	He	67.67	4.1
Ba	135	115	He	21.11	63.8
Ba	137	115	He	20.56	47.5
[Pb]	206	232	He	701.13	5.5
[Pb]	207	232	He	627.80	6.1
Pb	208	232	He	2849.02	1.1

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD
Ge	72	H2	4569010.37	4.3
Ge	72	He	503324.62	0.5
In	115	He	4086929.31	1.0
Lu	175	He	8141934.95	0.9
Th	232	He	12890173.14	1.0

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1/5/24



Calibration Standard Report

Sample Name 25ppb
File Name 004CAL.S.d
Data Path Name D:\Agilent\ICPMH1\DATA\010524A.b
Acq Time 2024-01-05 07:46:15
Sample Type CalStd
Comment ---
ISTD Ref FileName 003CALB.d
Operator ALKLS
QC Analyte Table NoUser

Name	Mass	ISTD	Tune Mode	CPS	CPS RSD
Se	77	72	H2	27884.15	7.8
Se	78	72	H2	75574.96	8.2
Cr	52	72	He	465294.89	0.8
Cr	53	72	He	57590.84	1.2
Ni	60	72	He	248878.65	0.6
Ni	62	72	He	39098.84	0.4
Cu	63	72	He	716969.61	0.7
Cu	65	72	He	356851.07	0.7
Zn	66	72	He	90594.13	1.6
As	75	72	He	54780.37	1.2
Mo	95	115	He	144776.27	0.8
Mo	98	115	He	247933.62	1.3
Ag	107	115	He	515082.90	1.5
Ag	109	115	He	501357.08	1.1
Cd	111	115	He	126097.07	0.8
Cd	114	115	He	311337.31	0.9
Ba	135	115	He	52076.47	0.6
Ba	137	115	He	93481.65	1.0
[Pb]	206	232	He	568038.27	2.1
[Pb]	207	232	He	492611.28	0.7
Pb	208	232	He	2283227.77	0.8

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Ge	72	H2	4655943.29	2.1	4569010.37	101.9	
Ge	72	He	511903.89	1.2	503324.62	101.7	
In	115	He	4084396.67	1.0	4086929.31	99.94	
Lu	175	He	8046610.79	0.6	8141934.95	98.83	
Th	232	He	12738922.73	0.8	12890173.14	98.83	

Initial Calibration Verification (ICV) Report

Sample Name ICV
File Name 005_ICV.d
Data Path Name D:\Agilent\ICPMH\1\DATA\010524A.b
Acq Time 2024-01-05 07:48:28
Sample Type ICV
Comment —
ISTD Ref FileName 003CALB.d
Operator ALKLS
QC Analyte Table NoUser

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
Se	77	72	H2	25.3899	ug/l	4.4	28174.29	101.56	
Se	78	72	H2	25.4720	ug/l	3.1	76743.17	101.89	
Cr	52	72	He	9.9725	ug/l	0.8	183985.48	99.72	
Cr	53	72	He	10.0982	ug/l	0.4	23212.29	100.98	
Ni	60	72	He	25.2195	ug/l	1.5	247562.38	100.88	
Ni	62	72	He	24.4846	ug/l	1.4	37767.05	97.94	
Cu	63	72	He	12.2894	ug/l	1.0	347915.66	98.32	
Cu	65	72	He	12.3426	ug/l	0.4	173929.59	98.74	
Zn	66	72	He	24.6632	ug/l	1.0	88136.90	98.65	
As	75	72	He	24.7941	ug/l	0.8	53570.53	99.18	
Mo	95	115	He	25.1387	ug/l	1.0	289928.60	100.55	
Mo	98	115	He	25.2567	ug/l	1.4	498762.57	101.03	
Ag	107	115	He	12.6176	ug/l	0.8	517774.13	100.94	
Ag	109	115	He	12.6522	ug/l	0.8	505379.86	101.22	
Cd	111	115	He	12.2209	ug/l	0.4	61393.35	97.77	
Cd	114	115	He	12.7742	ug/l	0.4	158455.63	102.19	
Ba	135	115	He	97.9275	ug/l	0.2	203089.78	97.93	
Ba	137	115	He	99.3423	ug/l	0.6	369855.07	99.34	
[Pb]	206	232	He	24.6441	ug/l	1.8	556869.75	98.58	
[Pb]	207	232	He	24.9456	ug/l	1.7	488850.26	99.78	
Pb	208	232	He	24.8721	ug/l	1.7	2259074.85	99.49	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Ge	72	H2	4641626.76	2.9	4569010.37	101.59	
Ge	72	He	504775.35	1.2	503324.62	100.29	
In	115	He	4067467.37	1.0	4086929.31	99.52	
Lu	175	He	8033489.96	2.0	8141934.95	98.67	
Th	232	He	12671103.14	2.1	12890173.14	98.3	

Continuing Calibration Verification (CCV) Report

Sample Name CCV
File Name 006_CCV.d
Data Path Name D:\Agilent\ICPMH\1\DATA\010524A.b
Acq Time 2024-01-05 07:50:41
Sample Type CCV
Comment ---
ISTD Ref FileName 003CALB.d
Operator ALKLS
QC Analyte Table NoUser

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
Se	77	72	H2	24.8068	ug/l	6.1	28078.47	99.23	
Se	78	72	H2	24.8654	ug/l	4.9	76187.84	99.46	
Cr	52	72	He	25.0878	ug/l	0.8	467230.41	100.35	
Cr	53	72	He	24.7908	ug/l	1.1	57144.98	99.16	
Ni	60	72	He	24.8787	ug/l	0.7	247831.01	99.51	
Ni	62	72	He	25.0541	ug/l	1.3	39206.91	100.22	
Cu	63	72	He	25.0235	ug/l	0.2	718072.28	100.09	
Cu	65	72	He	25.0676	ug/l	0.6	358030.65	100.27	
Zn	66	72	He	25.2033	ug/l	0.9	91375.91	100.81	
As	75	72	He	25.3086	ug/l	0.3	55486.25	101.23	
Mo	95	115	He	12.4190	ug/l	1.6	145269.74	99.35	
Mo	98	115	He	12.4223	ug/l	1.5	248826.05	99.38	
Ag	107	115	He	12.4058	ug/l	1.0	516262.13	99.25	
Ag	109	115	He	12.4513	ug/l	1.0	504363.45	99.61	
Cd	111	115	He	24.8567	ug/l	1.3	126620.98	99.43	
Cd	114	115	He	24.8596	ug/l	1.2	312665.71	99.44	
Ba	135	115	He	24.9040	ug/l	2.6	52398.65	99.62	
Ba	137	115	He	24.9330	ug/l	1.2	94155.93	99.73	
[Pb]	206	232	He	25.3702	ug/l	1.3	578479.07	101.48	
[Pb]	207	232	He	25.1120	ug/l	1.5	496583.45	100.45	
Pb	208	232	He	25.1818	ug/l	1.0	2308165.67	100.73	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Ge	72	H2	4725430.79	5.6	4569010.37	103.42	
Ge	72	He	512178.54	0.4	503324.62	101.76	
In	115	He	4125255.63	1.1	4086929.31	100.94	
Lu	175	He	8066480.51	1.1	8141934.95	99.07	
Th	232	He	12786327.31	1.9	12890173.14	99.19	

Initial Calibration Blank (ICB) Report

Sample Name ICB
File Name 007_ICB.d
Data Path Name D:\Agilent\ICPMH1\DATA\010524A.b
Acq Time 2024-01-05 07:52:54
Sample Type ICB
Comment ---
ISTD Ref FileName 003CALB.d
Operator ALKLS
QC Analyte Table NoUser

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Se	77	72	H2	-0.0090	ug/l	N/A	3548.05	
Se	78	72	H2	0.0202	ug/l	19.6	129.33	
Cr	52	72	He	0.0025	ug/l	133.2	1617.87	
Cr	53	72	He	-0.0196	ug/l	N/A	410.01	
Ni	60	72	He	0.0184	ug/l	35.2	1293.39	
Ni	62	72	He	0.0160	ug/l	63.5	184.45	
Cu	63	72	He	0.0026	ug/l	57.6	808.91	
Cu	65	72	He	-0.0019	ug/l	N/A	342.23	
Zn	66	72	He	-0.0017	ug/l	N/A	256.67	
As	75	72	He	0.0023	ug/l	168.1	45.67	
Mo	95	115	He	0.0090	ug/l	31.4	130.00	
Mo	98	115	He	0.0074	ug/l	23.0	210.00	
Ag	107	115	He	0.0013	ug/l	22.7	105.55	
Ag	109	115	He	0.0008	ug/l	67.6	78.89	
Cd	111	115	He	0.0024	ug/l	37.4	22.83	
Cd	114	115	He	0.0018	ug/l	52.0	88.00	
Ba	135	115	He	-0.0020	ug/l	N/A	16.67	
Ba	137	115	He	0.0037	ug/l	76.0	33.89	
[Pb]	206	232	He	-0.0033	ug/l	N/A	627.80	
[Pb]	207	232	He	-0.0035	ug/l	N/A	560.01	
Pb	208	232	He	-0.0025	ug/l	N/A	2630.11	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Ge	72	H2	4610641.76	3.2	4569010.37	100.91	
Ge	72	He	499984.65	0.8	503324.62	99.34	
In	115	He	4013538.86	1.5	4086929.31	98.2	
Lu	175	He	7954376.07	1.1	8141934.95	97.7	
Th	232	He	12921871.89	1.3	12890173.14	100.25	



Continuing Calibration Blank (CCB) Report

Sample Name CCB
File Name 008_CCB.d
Data Path Name D:\Agilent\ICPMH\1\DATA\010524A.b
Acq Time 2024-01-05 07:55:07
Sample Type CCB
Comment ---
ISTD Ref FileName 003CALB.d
Operator ALKLS
QC Analyte Table NoUser

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Se	77	72	H2	-0.0494	ug/l	N/A	3506.37	
Se	78	72	H2	0.0051	ug/l	89.2	84.33	
Cr	52	72	He	-0.0075	ug/l	N/A	1447.85	
Cr	53	72	He	0.0221	ug/l	48.8	506.68	
Ni	60	72	He	0.0124	ug/l	23.9	1245.61	
Ni	62	72	He	0.0135	ug/l	77.6	182.22	
Cu	63	72	He	-0.0016	ug/l	N/A	698.91	
Cu	65	72	He	-0.0047	ug/l	N/A	306.67	
Zn	66	72	He	-0.0017	ug/l	N/A	258.89	
As	75	72	He	0.0062	ug/l	71.9	54.33	
Mo	95	115	He	0.0024	ug/l	107.0	55.56	
Mo	98	115	He	0.0024	ug/l	38.8	113.33	
Ag	107	115	He	-0.0001	ug/l	N/A	51.11	
Ag	109	115	He	0.0000	ug/l	1561.0	51.11	
Cd	111	115	He	0.0003	ug/l	261.4	12.50	
Cd	114	115	He	-0.0007	ug/l	N/A	58.67	
Ba	135	115	He	-0.0032	ug/l	N/A	14.44	
Ba	137	115	He	0.0023	ug/l	57.0	28.89	
[Pb]	206	232	He	-0.0027	ug/l	N/A	641.13	
[Pb]	207	232	He	-0.0091	ug/l	N/A	446.68	
Pb	208	232	He	-0.0062	ug/l	N/A	2283.42	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Ge	72	H2	4604147.73	2.5	4569010.37	100.77	
Ge	72	He	503966.42	0.8	503324.62	100.13	
In	115	He	4075009.30	2.1	4086929.31	99.71	
Lu	175	He	8028189.13	0.9	8141934.95	98.6	
Th	232	He	12923263.14	0.6	12890173.14	100.26	

Low Level Initial Calibration Verification (LLICV) Report

Sample Name LLICVS
File Name 009LICV.d
Data Path Name D:\Agilent\ICPMH1\DATA\010524A.b
Acq Time 2024-01-05 07:57:20
Sample Type LLICV
Comment ---
ISTD Ref FileName 003CALB.d
Operator ALKLS
QC Analyte Table NoUser

Name	Mass	ISTD	Tune	Conc.	Units	Conc.RSD	CPS	% Rec	QC Flag
Se	77	72	H2	1.9025	ug/l	9.4	5368.86	-190.25	
Se	78	72	H2	1.9044	ug/l	5.6	5741.65	95.22	
Cr	52	72	He	0.3970	ug/l	5.4	8810.08	99.25	
Cr	53	72	He	0.3945	ug/l	3.5	1341.17	98.62	
Ni	60	72	He	0.3932	ug/l	2.6	4947.42	98.3	
Ni	62	72	He	0.3958	ug/l	16.9	766.69	98.95	
Cu	63	72	He	0.1991	ug/l	0.5	6342.32	99.55	
Cu	65	72	He	0.1838	ug/l	4.7	2945.83	91.9	
Zn	66	72	He	0.9709	ug/l	1.5	3708.20	97.09	
As	75	72	He	0.9611	ug/l	2.5	2107.14	96.11	
Mo	95	115	He	0.1016	ug/l	5.6	1194.50	101.6	
Mo	98	115	He	0.0917	ug/l	3.3	1871.24	91.7	
Ag	107	115	He	0.0385	ug/l	4.4	1626.76	96.25	
Ag	109	115	He	0.0373	ug/l	6.6	1534.53	93.25	
Cd	111	115	He	0.0368	ug/l	1.2	195.33	92	
Cd	114	115	He	0.0398	ug/l	6.9	558.68	99.5	
Ba	135	115	He	0.1000	ug/l	16.0	227.78	100	
Ba	137	115	He	0.1002	ug/l	4.8	392.23	100.2	
[Pb]	206	232	He	0.0877	ug/l	5.1	2695.81	87.7	
[Pb]	207	232	He	0.0819	ug/l	2.6	2242.40	81.9	
Pb	208	232	He	0.0860	ug/l	4.1	10706.01	86	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Ge	72	H2	4592005.65	2.4	4569010.37	100.5	
Ge	72	He	502640.43	0.7	503324.62	99.86	
In	115	He	4054387.50	1.8	4086929.31	99.2	
Lu	175	He	8001889.96	1.8	8141934.95	98.28	
Th	232	He	12791463.98	0.8	12890173.14	99.23	

Sample Report

Sample Name LRASTD
File Name 010SMPL.d
Data Path Name D:\Agilent\ICPMH\1\DATA\010524A.b
Acq Time 2024-01-05 08:04:51
Sample Type Sample
Comment +3000
ISTD Ref FileName 003CALB.d
Operator ALKLS
QC Analyte Table NoUser

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Se	77	72	H2	2852.4643	ug/l	3.7	2654894.50	
Se	78	72	H2	2790.2304	ug/l	2.7	8063177.67	
Cr	52	72	He	2878.8878	ug/l	0.3	50890372.42	
Cr	53	72	He	2837.2601	ug/l	2.4	6177663.36	
Ni	60	72	He	2808.7762	ug/l	1.9	26523984.50	
Ni	62	72	He	2879.9253	ug/l	4.3	4273664.41	
Cu	63	72	He	2874.1873	ug/l	1.6	78474819.11	
Cu	65	72	He	2919.9390	ug/l	0.3	39678338.42	
Zn	66	72	He	2871.1224	ug/l	2.2	9884012.38	
As	75	72	He	2935.3429	ug/l	1.2	6124589.50	
Mo	95	115	He	0.0015	ug/l	143.8	44.44	
Mo	98	115	He	0.0018	ug/l	20.5	101.11	
Ag	107	115	He	0.0019	ug/l	35.1	130.00	
Ag	109	115	He	0.0015	ug/l	12.8	108.89	
Cd	111	115	He	2768.3093	ug/l	2.5	13819640.00	
Cd	114	115	He	2817.0954	ug/l	2.2	34716442.67	
Ba	135	115	He	2864.0936	ug/l	2.7	5902355.60	
Ba	137	115	He	2793.9638	ug/l	2.3	10338114.59	
[Pb]	206	232	He	2790.6240	ug/l	2.2	63410144.15	
[Pb]	207	232	He	2725.8958	ug/l	2.3	53712851.20	
Pb	208	232	He	2773.3718	ug/l	1.9	253301154.38	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Ge	72	H2	4458491.63	0.6	4569010.37	97.58	
Ge	72	He	487807.88	1.0	503324.62	96.92	
In	115	He	4043908.66	2.4	4086929.31	98.95	
Lu	175	He	7909746.35	1.4	8141934.95	97.15	
Th	232	He	12757173.56	1.5	12890173.14	98.97	



Sample Report

Sample Name LRASTD
File Name 011SMPL.d
Data Path Name D:\Agilent\NCPMH\1\DATA\010524A.b
Acq Time 2024-01-05 08:06:32
Sample Type Sample
Comment +300 +50Ag
ISTD Ref FileName 003CALB.d
Operator ALKLS
QC Analyte Table NoUser

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Se	77	72	H2	303.3962	ug/l	5.0	282586.81	
Se	78	72	H2	302.5395	ug/l	5.4	865511.57	
Cr	52	72	He	299.4856	ug/l	0.2	5272999.65	
Cr	53	72	He	295.4536	ug/l	0.5	641063.19	
Ni	60	72	He	299.4660	ug/l	0.7	2817109.82	
Ni	62	72	He	294.9851	ug/l	0.9	436096.01	
Cu	63	72	He	289.6430	ug/l	0.9	7875291.63	
Cu	65	72	He	295.8697	ug/l	1.5	4003755.12	
Zn	66	72	He	292.6308	ug/l	1.5	1003416.76	
As	75	72	He	300.2481	ug/l	1.1	623814.29	
Mo	95	115	He	291.3790	ug/l	1.4	3314181.26	
Mo	98	115	He	294.6850	ug/l	2.4	5738481.02	
Ag	107	115	He	52.2317	ug/l	2.3	2113444.43	
Ag	109	115	He	53.5368	ug/l	3.3	2108408.04	
Cd	111	115	He	290.5425	ug/l	1.8	1439160.04	
Cd	114	115	He	301.0484	ug/l	1.9	3681330.17	
Ba	135	115	He	291.6754	ug/l	1.1	596560.20	
Ba	137	115	He	295.4309	ug/l	1.3	1084795.37	
[Pb]	206	232	He	295.6013	ug/l	0.9	6699690.29	
[Pb]	207	232	He	291.7406	ug/l	1.8	5734068.80	
Pb	208	232	He	293.4969	ug/l	0.9	26738036.85	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Ge	72	H2	4412540.52	0.7	4569010.37	96.58	
Ge	72	He	485747.36	1.0	503324.62	96.51	
In	115	He	4012170.19	1.8	4086929.31	98.17	
Lu	175	He	7977163.85	0.3	8141934.95	97.98	
Th	232	He	12721836.89	0.5	12890173.14	98.69	

Interference Check Solution A (ICS-A) Report

Sample Name ICSA
File Name 012ICSA.d
Data Path Name D:\Agilent\ICPMH\1\DATA\010524A.b
Acq Time 2024-01-05 08:13:19
Sample Type ICSA
Comment ---
ISTD Ref FileName 003CALB.d
Operator ALKLS
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	ExpValue	CPS	QC Flag
Se	77	72	H2	0.6490	ug/l	26.1	-1	3970.14	
Se	78	72	H2	0.0737	ug/l	11.0	-1	274.67	
Cr	52	72	He	0.2466	ug/l	1.7	-1	5954.39	
Cr	53	72	He	0.2027	ug/l	12.4	-1	893.36	
Ni	60	72	He	0.4890	ug/l	5.3	-1	5764.34	
Ni	62	72	He	0.4985	ug/l	11.5	-1	904.48	
Cu	63	72	He	0.5133	ug/l	3.4	-1	14880.93	
Cu	65	72	He	0.5178	ug/l	2.2	-1	7471.68	
Zn	66	72	He	0.6041	ug/l	6.8	-1	2359.07	
As	75	72	He	0.1106	ug/l	11.9	-1	273.00	
Mo	95	115	He	50.9880	ug/l	2.3	50	553846.65	
Mo	98	115	He	50.9204	ug/l	2.8	50	947036.66	
Ag	107	115	He	0.0087	ug/l	7.3	-1	385.56	
Ag	109	115	He	0.0074	ug/l	8.0	-1	325.56	
Cd	111	115	He	0.4351	ug/l	2.0	-1	2068.80	
Cd	114	115	He	0.4259	ug/l	2.2	-1	5036.93	
Ba	135	115	He	0.1429	ug/l	15.9	-1	298.89	
Ba	137	115	He	0.1544	ug/l	5.7	-1	560.57	
[Pb]	206	232	He	0.2580	ug/l	5.5	-1	6408.05	
[Pb]	207	232	He	0.2243	ug/l	5.0	-1	4926.38	
Pb	208	232	He	0.2346	ug/l	0.9	-1	23701.70	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Ge	72	H2	4373585.52	2.3	4569010.37	95.72	
Ge	72	He	492803.95	1.4	503324.62	97.91	
In	115	He	3832120.13	2.1	4086929.31	93.77	
Lu	175	He	7894710.24	1.6	8141934.95	96.96	
Th	232	He	12469225.23	1.1	12890173.14	96.73	



Interference Check Solution AB (ICS-AB) Report

Sample Name ICSAB
File Name 013ICSB.d
Data Path Name D:\Agilent\ICPMH\1\DATA\010524A.b
Acq Time 2024-01-05 08:15:30
Sample Type ICSB
Comment ---
ISTD Ref FileName 003CALB.d
Operator ALKLS
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	ExpValue	CPS	QC Flag
Se	77	72	H2	24.3165	ug/l	6.2	25	25552.82	
Se	78	72	H2	23.5213	ug/l	5.5	25	66760.56	
Cr	52	72	He	47.8356	ug/l	0.9	50	822075.32	
Cr	53	72	He	47.7644	ug/l	2.0	50	101358.54	
Ni	60	72	He	45.9892	ug/l	1.7	50	422518.41	
Ni	62	72	He	45.7057	ug/l	0.3	50	65985.82	
Cu	63	72	He	44.7438	ug/l	1.1	50	1186190.93	
Cu	65	72	He	44.6200	ug/l	1.3	50	588753.92	
Zn	66	72	He	23.3419	ug/l	2.7	25	78229.31	
As	75	72	He	24.8474	ug/l	0.8	25	50350.80	
Mo	95	115	He	50.9263	ug/l	0.4	50	539357.01	
Mo	98	115	He	51.1415	ug/l	0.2	50	927442.53	
Ag	107	115	He	11.9558	ug/l	0.9	12.5	450526.02	
Ag	109	115	He	11.9928	ug/l	0.8	12.5	439883.20	
Cd	111	115	He	23.6578	ug/l	1.1	25	109127.33	
Cd	114	115	He	23.7744	ug/l	0.1	25	270766.44	
Ba	135	115	He	0.1655	ug/l	9.0	-1	334.45	
Ba	137	115	He	0.1780	ug/l	6.3	-1	627.24	
[Pb]	206	232	He	0.2131	ug/l	2.9	-1	5326.52	
[Pb]	207	232	He	0.2196	ug/l	1.9	-1	4761.87	
Pb	208	232	He	0.2193	ug/l	1.0	-1	21995.28	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Ge	72	H2	4372739.41	2.5	4569010.37	95.7	
Ge	72	He	473423.10	0.9	503324.62	94.06	
In	115	He	3735190.76	0.5	4086929.31	91.39	
Lu	175	He	7675631.08	0.5	8141934.95	94.27	
Th	232	He	12275979.82	1.9	12890173.14	95.24	



Sample Report

Sample Name MoSTD
File Name 014SMPL.d
Data Path Name D:\Agilent\ICPMH\1\DATA\010524A.b
Acq Time 2024-01-05 08:17:44
Sample Type Sample
Comment ---
ISTD Ref FileName 003CALB.d
Operator ALKLS
QC Analyte Table NoUser

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Se	77	72	H2	-0.1240	ug/l	N/A	3618.06	
Se	78	72	H2	0.0269	ug/l	14.4	157.00	
Cr	52	72	He	0.0294	ug/l	15.7	2096.81	
Cr	53	72	He	-0.0527	ug/l	N/A	334.45	
Ni	60	72	He	-0.0210	ug/l	N/A	908.92	
Ni	62	72	He	-0.0033	ug/l	N/A	154.45	
Cu	63	72	He	0.0131	ug/l	34.5	1097.82	
Cu	65	72	He	0.0122	ug/l	27.2	537.79	
Zn	66	72	He	0.1564	ug/l	10.4	811.14	
As	75	72	He	-0.0012	ug/l	N/A	38.00	
Mo	95	115	He	47.0352	ug/l	1.0	550716.28	
Mo	98	115	He	47.2789	ug/l	0.4	947824.82	
Ag	107	115	He	0.0019	ug/l	21.3	131.11	
Ag	109	115	He	0.0019	ug/l	63.5	125.56	
Cd	111	115	He	0.0246	ug/l	9.1	136.67	
Cd	114	115	He	0.0173	ug/l	5.2	286.33	
Ba	135	115	He	0.0121	ug/l	94.1	46.67	
Ba	137	115	He	0.0132	ug/l	10.8	70.56	
[Pb]	206	232	He	-0.0059	ug/l	N/A	571.13	
[Pb]	207	232	He	-0.0098	ug/l	N/A	436.68	
Pb	208	232	He	-0.0087	ug/l	N/A	2067.85	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Ge	72	H2	4850266.20	1.9	4569010.37	106.16	
Ge	72	He	497870.52	0.9	503324.62	98.92	
In	115	He	4129197.50	0.8	4086929.31	101.03	
Lu	175	He	8226167.17	1.1	8141934.95	101.03	
Th	232	He	13013185.64	0.9	12890173.14	100.95	

Prep Blank (PB) Report

Sample Name KQ2322272-03
File Name 015_PB.d
Data Path Name D:\Agilent\ICPMH\1\DATA\010524A.b
Acq Time 2024-01-05 08:22:09
Sample Type PB
Comment 5X
ISTD Ref FileName 003CALB.d
Operator ALKLS
QC Analyte Table NoUser

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Se	77	72	H2	-0.0701	ug/l	N/A	3449.69	
Se	78	72	H2	0.0188	ug/l	14.8	123.67	
Cr	52	72	He	0.0918	ug/l	15.5	3075.85	
Cr	53	72	He	0.1048	ug/l	69.6	645.57	
Ni	60	72	He	0.0452	ug/l	33.2	1476.74	
Ni	62	72	He	0.0706	ug/l	35.0	253.34	
Cu	63	72	He	0.0359	ug/l	28.6	1652.32	
Cu	65	72	He	0.0344	ug/l	7.0	811.14	
Zn	66	72	He	0.2289	ug/l	6.8	1020.04	
As	75	72	He	0.0090	ug/l	33.0	57.00	
Mo	95	115	He	0.0467	ug/l	27.4	542.23	
Mo	98	115	He	0.0453	ug/l	27.6	917.81	
Ag	107	115	He	0.0001	ug/l	684.5	56.67	
Ag	109	115	He	0.0002	ug/l	171.9	55.56	
Cd	111	115	He	0.0154	ug/l	16.4	85.00	
Cd	114	115	He	0.1236	ug/l	15.3	1540.24	Flag
Ba	135	115	He	0.0027	ug/l	280.3	24.45	
Ba	137	115	He	0.0117	ug/l	30.6	61.11	
[Pb]	206	232	He	0.0099	ug/l	78.6	895.59	
[Pb]	207	232	He	0.0068	ug/l	74.9	742.25	
Pb	208	232	He	0.0081	ug/l	83.1	3471.29	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Ge	72	H2	4555559.68	2.8	4569010.37	99.71	
Ge	72	He	478427.09	12.0	503324.62	95.05	
In	115	He	3972295.06	15.0	4086929.31	97.2	
Lu	175	He	7872423.85	14.4	8141934.95	96.69	
Th	232	He	12648120.23	13.8	12890173.14	98.12	

Laboratory Control Sample (LCS) Report

Sample Name KQ2322272-04
File Name 016_LCS.d
Data Path Name D:\Agilent\ICPMH1\DATA\010524A.b
Acq Time 2024-01-05 08:24:21
Sample Type LCS
Comment 20X
ISTD Ref FileName 003CALB.d
Operator ALKLS
QC Analyte Table NoUser

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	ExpValue	% Rec	QC Flag
Se	77	72	H2	50.7292	ug/l	3.9	50279.37	50	101.46	
Se	78	72	H2	50.7780	ug/l	4.5	145902.86	50	101.56	
Cr	52	72	He	19.8408	ug/l	1.2	352114.46	20	99.2	
Cr	53	72	He	19.6250	ug/l	2.8	43166.95	20	98.12	
Ni	60	72	He	48.9099	ug/l	1.0	462802.81	50	97.82	
Ni	62	72	He	49.0671	ug/l	2.1	72944.78	50	98.13	
Cu	63	72	He	23.9942	ug/l	0.5	655567.56	25	95.98	
Cu	65	72	He	23.9082	ug/l	1.0	325137.17	25	95.63	
Zn	66	72	He	47.7698	ug/l	1.1	164661.00	50	95.54	
As	75	72	He	50.1658	ug/l	0.8	104675.02	50	100.33	
Mo	95	115	He	50.0469	ug/l	0.4	566381.47	50	100.09	
Mo	98	115	He	50.0577	ug/l	0.7	970011.32	50	100.12	
Ag	107	115	He	4.9407	ug/l	0.5	198979.60	5	98.81	
Ag	109	115	He	4.9398	ug/l	0.6	193650.91	5	98.8	
Cd	111	115	He	4.7739	ug/l	0.5	23539.27	5	95.48	
Cd	114	115	He	4.8364	ug/l	0.2	58911.01	5	96.73	
Ba	135	115	He	95.1479	ug/l	0.8	193627.17	100	95.15	
Ba	137	115	He	96.7459	ug/l	0.3	353467.52	100	96.75	
[Pb]	206	232	He	49.7877	ug/l	2.3	1112620.37	50	99.58	
[Pb]	207	232	He	47.5195	ug/l	1.5	920940.10	50	95.04	
Pb	208	232	He	49.3074	ug/l	1.3	4429009.34	50	98.61	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Ge	72	H2	4427782.18	3.1	4569010.37	96.91	
Ge	72	He	487660.55	1.5	503324.62	96.89	
In	115	He	3991338.14	1.2	4086929.31	97.66	
Lu	175	He	7898096.08	1.6	8141934.95	97.01	
Th	232	He	12535951.06	0.6	12890173.14	97.25	



Reference Sample Report

Sample Name K2314278-001
File Name 017_ARF.d
Data Path Name D:\Agilent\CPMH\1\DATA\010524A.b
Acq Time 2024-01-05 08:26:33
Sample Type AllRef
Comment 5X
ISTD Ref FileName 003CALB.d
Sample QC Pass/Fail Pass
ISTD QC Pass/Fail Pass
Operator ALKLS
QC Analyte Table NoUser

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Se	77	72	H2	1.7506	ug/l	1.3	5233.82	
Se	78	72	H2	1.7881	ug/l	3.3	5408.20	
Cr	52	72	He	5.3344	ug/l	0.3	97400.15	
Cr	53	72	He	5.4242	ug/l	1.1	12454.55	
Ni	60	72	He	5.0559	ug/l	1.1	49637.97	
Ni	62	72	He	5.0264	ug/l	4.8	7742.91	
Cu	63	72	He	50.4094	ug/l	0.6	1399563.45	
Cu	65	72	He	50.2631	ug/l	1.2	694572.52	
Zn	66	72	He	152.6686	ug/l	0.9	534500.86	
As	75	72	He	0.4522	ug/l	6.6	999.03	
Mo	95	115	He	1.2949	ug/l	2.3	14875.57	
Mo	98	115	He	1.2986	ug/l	0.6	25566.27	
Ag	107	115	He	0.4205	ug/l	1.8	17209.00	
Ag	109	115	He	0.4157	ug/l	1.9	16560.59	
Cd	111	115	He	0.2466	ug/l	2.9	1242.55	
Cd	114	115	He	0.4720	ug/l	0.9	5887.05	
Ba	135	115	He	52.9890	ug/l	0.8	109286.30	
Ba	137	115	He	53.0519	ug/l	1.1	196423.91	
[Pb]	206	232	He	2.4831	ug/l	0.8	56459.38	
[Pb]	207	232	He	2.4644	ug/l	0.6	48615.18	
Pb	208	232	He	2.4634	ug/l	0.9	225186.20	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Ge	72	H2	4603606.34	4.8	4569010.37	100.76	
Ge	72	He	495819.88	0.7	503324.62	98.51	
In	115	He	4044841.37	0.9	4086929.31	98.97	
Lu	175	He	7970814.68	0.3	8141934.95	97.9	
Th	232	He	12608241.48	0.4	12890173.14	97.81	

Duplicate Sample Report

Sample Name KQ2322272-01
File Name 018_Dup.d
Data Path Name D:\Agilent\NCPMH\1\DATA\010524A.b
Acq Time 2024-01-05 08:28:46
Sample Type Dup
Total Dilution 1.0000
Comment 5X
ISTD Ref FileName 003CALB.d
Sample QC Pass/Fail Pass
ISTD Ref FileName Pass
QC Ref File Name 017_
Default Text ARKLS
NoUser

QC Analyte Table

Name	Mass	Tune Mode	CPS	Conc.	Units	Conc. RSD	RPD	Flag
Se	77	H2	5287.49	1.7964	ug/l	7.4		< 5X MRL
Se	78	H2	5708.64	1.8839	ug/l	9.7		< 5X MRL
Cr	52	He	91775.29	4.9815	ug/l	0.2	6.84	
Cr	53	He	11728.47	5.0546	ug/l	3.3	7.06	
Ni	60	He	48281.89	4.8756	ug/l	0.9	3.63	
Ni	62	He	7478.33	4.8129	ug/l	2.2	4.34	
Cu	63	He	1422841.92	50.8498	ug/l	1.4	0.87	
Cu	65	He	710503.57	51.0160	ug/l	1.0	1.49	
Zn	66	He	552244.16	156.5109	ug/l	0.8	2.49	
As	75	He	1013.03	0.4549	ug/l	1.1		< 5X MRL
Mo	95	He	14964.51	1.3026	ug/l	3.5	0.6	
Mo	98	He	25922.34	1.3169	ug/l	2.5	1.4	
Ag	107	He	20588.39	0.5033	ug/l	0.7	17.93	
Ag	109	He	20200.15	0.5074	ug/l	0.8	19.86	
Cd	111	He	1263.72	0.2509	ug/l	2.9	1.71	
Cd	114	He	5909.55	0.4739	ug/l	1.0	0.39	
Ba	135	He	108920.84	52.8145	ug/l	2.4	0.33	
Ba	137	He	197393.14	53.3159	ug/l	1.9	0.5	
[Pb]	206	He	55480.49	2.4485	ug/l	1.0	1.4	
[Pb]	207	He	47148.55	2.3978	ug/l	1.8	2.74	
Pb	208	He	219532.95	2.4097	ug/l	1.8	2.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Ge	72	H2	4612196.48	3.2	4569010.37	100.95	69.55	125.44	
Ge	72	He	499710.76	0.8	503324.62	99.28	69.55	125.44	
In	115	He	4044822.91	0.7	4086929.31	98.97	69.55	125.44	
Lu	175	He	7982453.57	0.8	8141934.95	98.04	69.55	125.44	
Th	232	He	12563928.15	1.8	12890173.14	97.47	69.55	125.44	



Sample Report

Sample Name K2314278-001L
File Name 019SMPL.d
Data Path Name D:\Agilent\NCPMH\1\DATA\010524A.b
Acq Time 2024-01-05 08:30:58
Sample Type Sample
Comment 25X
ISTD Ref FileName 003CALB.d
Operator ALKLS
QC Analyte Table NoUser

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Se	77	72	H2	0.1730	ug/l	9.1	3697.07	
Se	78	72	H2	0.3683	ug/l	0.9	1160.71	
Cr	52	72	He	1.0755	ug/l	1.7	20950.48	
Cr	53	72	He	1.1068	ug/l	0.9	2909.15	
Ni	60	72	He	1.0010	ug/l	5.0	10748.99	
Ni	62	72	He	1.0622	ug/l	4.7	1766.77	
Cu	63	72	He	10.2318	ug/l	1.4	285592.84	
Cu	65	72	He	10.1638	ug/l	1.6	141206.48	
Zn	66	72	He	30.9564	ug/l	1.2	108945.37	
As	75	72	He	0.0785	ug/l	6.4	207.67	
Mo	95	115	He	0.2559	ug/l	4.1	2952.51	
Mo	98	115	He	0.2631	ug/l	1.2	5217.52	
Ag	107	115	He	0.0826	ug/l	7.8	3408.15	
Ag	109	115	He	0.0861	ug/l	2.0	3459.28	
Cd	111	115	He	0.0555	ug/l	4.2	287.50	
Cd	114	115	He	0.0974	ug/l	0.9	1263.72	
Ba	135	115	He	10.6521	ug/l	2.8	21910.33	
Ba	137	115	He	10.6834	ug/l	1.9	39441.51	
[Pb]	206	232	He	0.4926	ug/l	4.9	11832.38	
[Pb]	207	232	He	0.4789	ug/l	2.2	10014.42	
Pb	208	232	He	0.4817	ug/l	2.5	46610.08	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Ge	72	H2	4574983.15	2.6	4569010.37	100.13	
Ge	72	He	497465.55	0.6	503324.62	98.84	
In	115	He	4032173.40	1.9	4086929.31	98.66	
Lu	175	He	7959677.18	1.4	8141934.95	97.76	
Th	232	He	12703645.23	2.1	12890173.14	98.55	

Post Digestion Spike Sample (PDS) Report

Sample Name K2314278-001A
File Name 020_PDS.d
Data Path Name D:\Agilent\NCPMH\1\DATA\010524A.b
Acq Time 2024-01-05 08:33:11
Sample Type PDS
Comment 5X
ISTD Ref FileName 003CALB.d
QC Ref File Name 017_
 ARF.
Default Text ALKLS
 NoUser

QC Analyte Table

Name	Mass	Tune	Conc.	Units	Conc. RSD	CPS	Spk Amt	% Rec	Flag
Se	77	H2	51.2284	ug/l	5.4	52946.77	50	98.96	
Se	78	H2	51.0912	ug/l	5.2	153146.85	50	98.61	
Cr	52	He	63.9766	ug/l	22.8	1012168.68	50	117.28	
Cr	53	He	64.0451	ug/l	23.1	125017.23	50	117.24	
Ni	60	He	63.4681	ug/l	22.5	536926.63	50	116.82	
Ni	62	He	62.9331	ug/l	22.0	83715.87	50	115.81	
Cu	63	He	117.5902	ug/l	23.4	2867885.24	50	134.36	Flag
Cu	65	He	117.0824	ug/l	22.2	1423631.26	50	133.64	Flag
Zn	66	He	237.1946	ug/l	22.0	730978.06	50	169.05	Flag
As	75	He	59.0011	ug/l	22.4	110125.83	50	117.1	
Mo	95	He	58.8061	ug/l	23.1	579076.61	50	115.02	
Mo	98	He	58.9482	ug/l	23.7	993175.93	50	115.3	
Ag	107	He	12.1339	ug/l	23.1	425127.42	10	117.13	
Ag	109	He	12.2555	ug/l	22.8	418140.28	10	118.4	
Cd	111	He	58.0680	ug/l	23.3	248979.41	50	115.64	
Cd	114	He	59.4679	ug/l	23.4	629405.73	50	117.99	
Ba	135	He	120.6290	ug/l	24.2	213295.93	50	135.28	Flag
Ba	137	He	121.7422	ug/l	23.0	387090.09	50	137.38	Flag
[Pb]	206	He	64.1132	ug/l	27.0	1177798.84	50	123.26	Flag
[Pb]	207	He	63.6635	ug/l	27.3	1013817.53	50	122.4	Flag
Pb	208	He	65.0106	ug/l	26.9	4801394.39	50	125.09	Flag

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Ge	72	H2	4621121.06	3.4	4569010.37	101.14	
Ge	72	He	449092.02	19.2	503324.62	89.23	
In	115	He	3583762.40	20.1	4086929.31	87.69	
Lu	175	He	6900909.03	22.5	8141934.95	84.76	
Th	232	He	10755458.80	23.2	12890173.14	83.44	

Matrix Spike Sample (MS) Report

Sample Name KQ2322272-02
File Name 021_Spk.d
Data Path Name D:\Agilent\ICPMH\1\DATA\010524A.b
Acq Time 2024-01-05 08:35:21
Sample Type Spike
Comment 5X
ISTD Ref FileName 003CALB.d
QC Ref File Name 017_
 ARF.
Default Text ALKLS
 NoUser

QC Analyte Table

Name	Mass	Tune	Conc.	Units	Conc. RSD	CPS	Spk Amt	% Rec	Flag
Se	77	H2	181.8007	ug/l	5.0	190467.90	200	90.03	
Se	78	H2	183.3770	ug/l	5.4	585357.69	200	90.79	
Cr	52	He	87.5093	ug/l	2.6	1559278.79	80	102.72	
Cr	53	He	85.2010	ug/l	2.2	187293.83	80	99.72	
Ni	60	He	203.9766	ug/l	3.2	1940778.95	200	99.46	
Ni	62	He	200.2215	ug/l	2.2	299438.28	200	97.6	
Cu	63	He	154.3008	ug/l	2.8	4242917.89	100	103.89	
Cu	65	He	157.5002	ug/l	2.3	2155780.89	100	107.24	
Zn	66	He	373.1148	ug/l	2.3	1293965.16	200	110.22	
As	75	He	201.5159	ug/l	2.1	423495.90	200	100.53	
Mo	95	He	204.9821	ug/l	3.4	2293057.69	200	101.84	
Mo	98	He	205.5929	ug/l	3.0	3938301.23	200	102.15	
Ag	107	He	20.4692	ug/l	1.6	814931.98	20	100.24	
Ag	109	He	20.6050	ug/l	0.7	798618.89	20	100.95	
Cd	111	He	19.6449	ug/l	1.7	95744.57	20	96.99	
Cd	114	He	19.9985	ug/l	1.7	240665.97	20	97.63	
Ba	135	He	448.0740	ug/l	1.4	901588.23	400	98.77	
Ba	137	He	453.9331	ug/l	1.8	1639802.50	400	100.22	
[Pb]	206	He	208.3118	ug/l	3.1	4557425.65	200	102.91	
[Pb]	207	He	198.1513	ug/l	3.6	3759029.16	200	97.84	
Pb	208	He	199.9884	ug/l	2.9	17587565.28	200	98.76	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Ge	72	H2	4933617.72	8.9	4569010.37	107.98	
Ge	72	He	491464.96	2.6	503324.62	97.64	
In	115	He	3947548.00	2.5	4086929.31	96.59	
Lu	175	He	7764639.69	3.5	8141934.95	95.37	
Th	232	He	12288119.40	3.7	12890173.14	95.33	

Post Digestion Spike Sample (PDS) Report

Sample Name K2314278-001A
File Name 022_PDS.d
Data Path Name D:\Agilent\NCPMH\1\DATA\010524A.b
Acq Time 2024-01-05 08:37:25
Sample Type PDS
Comment 5X
ISTD Ref FileName 003CALB.d
QC Ref File Name 017_
 ARF.
Default Text ALKLS
 NoUser

QC Analyte Table

Name	Mass	Tune	Conc.	Units	Conc. RSD	CPS	Spk Amt	% Rec	Flag
Se	77	H2	50.6912	ug/l	6.0	52814.38	50	97.88	
Se	78	H2	50.6759	ug/l	5.6	153027.21	50	97.78	
Cr	52	He	54.8330	ug/l	1.5	995583.19	50	99	
Cr	53	He	54.3781	ug/l	0.6	121898.00	50	97.91	
Ni	60	He	54.2693	ug/l	1.1	526739.96	50	98.43	
Ni	62	He	53.5555	ug/l	1.2	81679.48	50	97.06	
Cu	63	He	99.9959	ug/l	1.6	2800968.50	50	99.17	
Cu	65	He	99.8042	ug/l	1.9	1391315.99	50	99.08	
Zn	66	He	203.0335	ug/l	0.7	717208.90	50	100.73	
As	75	He	50.3484	ug/l	2.1	107772.00	50	99.79	
Mo	95	He	49.7351	ug/l	1.5	572102.01	50	96.88	
Mo	98	He	49.9129	ug/l	0.6	983114.58	50	97.23	
Ag	107	He	10.2837	ug/l	0.6	420889.40	10	98.63	
Ag	109	He	10.3587	ug/l	0.8	412665.77	10	99.43	
Cd	111	He	48.7324	ug/l	0.7	244132.05	50	96.97	
Cd	114	He	50.0813	ug/l	1.1	619416.83	50	99.22	
Ba	135	He	102.0796	ug/l	1.2	211143.86	50	98.18	
Ba	137	He	102.9687	ug/l	1.1	382360.58	50	99.83	
[Pb]	206	He	52.2039	ug/l	0.9	1173687.25	50	99.44	
[Pb]	207	He	50.9744	ug/l	0.5	993874.02	50	97.02	
Pb	208	He	52.6303	ug/l	0.2	4756032.97	50	100.33	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Ge	72	H2	4653237.59	2.2	4569010.37	101.84	
Ge	72	He	500340.02	1.3	503324.62	99.41	
In	115	He	4056770.43	0.4	4086929.31	99.26	
Lu	175	He	8036830.23	0.2	8141934.95	98.71	
Th	232	He	12612605.23	1.2	12890173.14	97.85	

Continuing Calibration Verification (CCV) Report

Sample Name CCV
File Name 023_CCV.d
Data Path Name D:\Agilent\ICPMH\1\DATA\010524A.b
Acq Time 2024-01-05 08:39:47
Sample Type CCV
Comment ---
ISTD Ref FileName 003CALB.d
Operator ALKLS
QC Analyte Table NoUser

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
Se	77	72	H2	25.0308	ug/l	6.0	27509.21	100.12	
Se	78	72	H2	25.3296	ug/l	4.7	75449.97	101.32	
Cr	52	72	He	25.2005	ug/l	0.8	463947.25	100.8	
Cr	53	72	He	24.9015	ug/l	1.7	56738.02	99.61	
Ni	60	72	He	24.9508	ug/l	1.0	245702.80	99.8	
Ni	62	72	He	24.9720	ug/l	2.2	38628.88	99.89	
Cu	63	72	He	24.9443	ug/l	0.6	707620.84	99.78	
Cu	65	72	He	24.9150	ug/l	0.9	351787.76	99.66	
Zn	66	72	He	25.2068	ug/l	0.2	90347.20	100.83	
As	75	72	He	25.3058	ug/l	1.1	54844.65	101.22	
Mo	95	115	He	12.4022	ug/l	1.0	141743.53	99.22	
Mo	98	115	He	12.6248	ug/l	1.2	247070.63	101	
Ag	107	115	He	12.5843	ug/l	0.9	511661.85	100.67	
Ag	109	115	He	12.6933	ug/l	1.1	502360.48	101.55	
Cd	111	115	He	25.2896	ug/l	0.7	125867.46	101.16	
Cd	114	115	He	25.3847	ug/l	0.7	311937.62	101.54	
Ba	135	115	He	24.8446	ug/l	1.8	51073.35	99.38	
Ba	137	115	He	25.1798	ug/l	0.7	92910.74	100.72	
[Pb]	206	232	He	25.2919	ug/l	0.9	572799.00	101.17	
[Pb]	207	232	He	24.8637	ug/l	0.7	488407.34	99.45	
Pb	208	232	He	25.0494	ug/l	0.6	2280424.53	100.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Ge	72	H2	4587617.04	2.9	4569010.37	100.41	
Ge	72	He	506343.92	0.9	503324.62	100.6	
In	115	He	4030484.87	1.5	4086929.31	98.62	
Lu	175	He	7938245.79	1.1	8141934.95	97.5	
Th	232	He	12698734.81	1.4	12890173.14	98.51	

Continuing Calibration Blank (CCB) Report

Sample Name CCB
File Name 024_CCB.d
Data Path Name D:\Agilent\CPMH\1\DATA\010524A.b
Acq Time 2024-01-05 08:42:01
Sample Type CCB
Comment —
ISTD Ref FileName 003CALB.d
Operator ALKLS
QC Analyte Table NoUser

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Se	77	72	H2	-0.0077	ug/l	N/A	3520.37	
Se	78	72	H2	0.0621	ug/l	3.6	252.33	
Cr	52	72	He	0.0044	ug/l	72.1	1660.09	
Cr	53	72	He	0.0292	ug/l	49.2	522.24	
Ni	60	72	He	-0.0209	ug/l	N/A	916.70	
Ni	62	72	He	-0.0150	ug/l	N/A	137.78	
Cu	63	72	He	0.0094	ug/l	35.0	1005.59	
Cu	65	72	He	0.0104	ug/l	57.9	517.79	
Zn	66	72	He	0.0103	ug/l	104.9	300.00	
As	75	72	He	0.0134	ug/l	34.5	69.67	
Mo	95	115	He	0.0176	ug/l	10.1	233.33	
Mo	98	115	He	0.0138	ug/l	3.6	342.23	
Ag	107	115	He	0.0004	ug/l	170.9	72.22	
Ag	109	115	He	0.0002	ug/l	15.1	60.00	
Cd	111	115	He	0.0075	ug/l	27.0	49.00	
Cd	114	115	He	0.0069	ug/l	15.3	153.83	
Ba	135	115	He	0.0037	ug/l	63.5	28.89	
Ba	137	115	He	0.0070	ug/l	15.5	47.22	
[Pb]	206	232	He	0.0019	ug/l	246.7	735.58	
[Pb]	207	232	He	-0.0044	ug/l	N/A	533.35	
Pb	208	232	He	-0.0009	ug/l	N/A	2735.68	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Ge	72	H2	4569846.76	3.7	4569010.37	100.02	
Ge	72	He	502810.81	2.9	503324.62	99.9	
In	115	He	4108954.41	2.5	4086929.31	100.54	
Lu	175	He	8092950.79	2.5	8141934.95	99.4	
Th	232	He	12770680.64	2.7	12890173.14	99.07	

Prep Blank (PB) Report

Sample Name KQ2322295-03
File Name 025_PB.d
Data Path Name D:\Agilent\CPMH\1\DATA\010524A.b
Acq Time 2024-01-05 08:44:13
Sample Type PB
Comment 5X
ISTD Ref FileName 003CALB.d
Operator ALKLS
QC Analyte Table NoUser

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Se	77	72	H2	-0.0825	ug/l	N/A	3481.36	
Se	78	72	H2	0.0278	ug/l	11.5	152.33	
Cr	52	72	He	0.1177	ug/l	2.6	3715.98	
Cr	53	72	He	0.1273	ug/l	14.3	740.02	
Ni	60	72	He	0.0400	ug/l	20.8	1507.86	
Ni	62	72	He	0.0309	ug/l	19.1	207.78	
Cu	63	72	He	0.0432	ug/l	9.7	1952.34	
Cu	65	72	He	0.0388	ug/l	12.3	913.36	
Zn	66	72	He	0.1981	ug/l	7.3	964.48	
As	75	72	He	0.0079	ug/l	49.6	57.67	
Mo	95	115	He	0.0245	ug/l	9.4	311.12	
Mo	98	115	He	0.0253	ug/l	3.3	567.79	
Ag	107	115	He	0.0002	ug/l	127.0	60.00	
Ag	109	115	He	0.0001	ug/l	414.8	55.55	
Cd	111	115	He	0.0046	ug/l	10.4	34.00	
Cd	114	115	He	0.1082	ug/l	1.0	1412.89	Flag
Ba	135	115	He	0.0097	ug/l	83.4	41.11	
Ba	137	115	He	0.0140	ug/l	10.9	72.78	
[Pb]	206	232	He	-0.0035	ug/l	N/A	618.91	
[Pb]	207	232	He	-0.0062	ug/l	N/A	502.24	
Pb	208	232	He	-0.0048	ug/l	N/A	2400.10	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Ge	72	H2	4612599.82	4.1	4569010.37	100.95	
Ge	72	He	501538.51	0.6	503324.62	99.65	
In	115	He	4079183.48	0.8	4086929.31	99.81	
Lu	175	He	8060746.62	1.4	8141934.95	99	
Th	232	He	12869223.56	0.7	12890173.14	99.84	

Laboratory Control Sample (LCS) Report

Sample Name KQ2322295-04
File Name 026_LCS.d
Data Path Name D:\Agilent\NCPMH\1\DATA\010524A.b
Acq Time 2024-01-05 08:46:26
Sample Type LCS
Comment 20X
ISTD Ref FileName 003CALB.d
Operator ALKLS
QC Analyte Table NoUser

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	ExpValue	% Rec	QC Flag
Se	77	72	H2	51.2090	ug/l	1.7	51907.84	50	102.42	
Se	78	72	H2	51.0066	ug/l	2.5	149970.55	50	102.01	
Cr	52	72	He	19.9950	ug/l	0.3	359972.34	20	99.98	
Cr	53	72	He	19.5935	ug/l	1.8	43712.80	20	97.97	
Ni	60	72	He	48.8916	ug/l	1.0	469318.14	50	97.78	
Ni	62	72	He	48.1273	ug/l	1.2	72595.53	50	96.25	
Cu	63	72	He	24.0149	ug/l	0.7	665602.00	25	96.06	
Cu	65	72	He	23.8280	ug/l	0.5	328716.26	25	95.31	
Zn	66	72	He	47.8875	ug/l	0.7	167456.32	50	95.78	
As	75	72	He	50.5161	ug/l	0.7	106927.85	50	101.03	
Mo	95	115	He	50.1084	ug/l	1.7	567067.98	50	100.22	
Mo	98	115	He	50.6718	ug/l	1.3	981920.06	50	101.34	
Ag	107	115	He	5.0193	ug/l	1.8	202128.57	5	100.39	
Ag	109	115	He	5.0186	ug/l	2.0	196737.93	5	100.37	
Cd	111	115	He	4.8272	ug/l	0.8	23802.14	5	96.54	
Cd	114	115	He	4.8589	ug/l	1.2	59183.97	5	97.18	
Ba	135	115	He	97.3734	ug/l	1.5	198156.21	100	97.37	
Ba	137	115	He	97.9993	ug/l	1.0	358039.85	100	98	
[Pb]	206	232	He	49.8123	ug/l	1.2	1121985.61	50	99.62	
[Pb]	207	232	He	47.3581	ug/l	1.3	925111.53	50	94.72	
Pb	208	232	He	49.6619	ug/l	0.6	4496389.75	50	99.32	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Ge	72	H2	4531924.96	5.1	4569010.37	99.19	
Ge	72	He	494680.22	0.4	503324.62	98.28	
In	115	He	3991452.23	0.9	4086929.31	97.66	
Lu	175	He	7945518.85	1.2	8141934.95	97.59	
Th	232	He	12636337.31	0.4	12890173.14	98.03	



Reference Sample Report

Sample Name K2314283-001
File Name 027_ARF.d
Data Path Name D:\Agilent\ICPMH\1\DATA\010524A.b
Acq Time 2024-01-05 08:48:38
Sample Type AllRef
Comment 5X
ISTD Ref FileName 003CALB.d
Sample QC Pass/Fail Pass
ISTD QC Pass/Fail Pass
Operator ALKLS
QC Analyte Table NoUser

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Se	77	72	H2	2.4273	ug/l	6.5	5947.72	
Se	78	72	H2	0.8912	ug/l	5.1	2758.57	
Cr	52	72	He	48.8975	ug/l	1.6	901884.37	
Cr	53	72	He	48.5124	ug/l	1.5	110490.42	
Ni	60	72	He	41.1361	ug/l	1.2	405830.48	
Ni	62	72	He	41.0370	ug/l	1.4	63607.05	
Cu	63	72	He	53.9514	ug/l	1.6	1535048.27	
Cu	65	72	He	52.4114	ug/l	1.2	742245.84	
Zn	66	72	He	156.1611	ug/l	1.1	560346.44	
As	75	72	He	8.7458	ug/l	1.0	19050.61	
Mo	95	115	He	0.7626	ug/l	2.1	8558.89	
Mo	98	115	He	0.7566	ug/l	2.4	14562.01	
Ag	107	115	He	0.2025	ug/l	1.7	8114.26	
Ag	109	115	He	0.1978	ug/l	0.6	7712.95	
Cd	111	115	He	0.6028	ug/l	1.2	2948.26	
Cd	114	115	He	0.6946	ug/l	0.8	8422.14	
Ba	135	115	He	354.2305	ug/l	0.9	712721.95	
Ba	137	115	He	358.6355	ug/l	0.2	1295592.24	
[Pb]	206	232	He	18.9214	ug/l	1.2	444932.24	
[Pb]	207	232	He	18.0357	ug/l	1.4	367850.57	
Pb	208	232	He	18.4563	ug/l	1.3	1744532.04	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Ge	72	H2	4651663.29	3.3	4569010.37	101.81	
Ge	72	He	508186.67	1.9	503324.62	100.97	
In	115	He	3946776.81	1.5	4086929.31	96.57	
Lu	175	He	7894208.58	1.0	8141934.95	96.96	
Th	232	He	13179334.80	1.4	12890173.14	102.24	

Duplicate Sample Report

Sample Name KQ2322295-01
File Name 028_Dup.d
Data Path Name D:\Agilent\ICPMH\1\DATA\010524A.b
Acq Time 2024-01-05 08:50:50
Sample Type Dup
Total Dilution 1.0000
Comment 5X
ISTD Ref FileName 003CALB.d
Sample QC Pass/Fail Fail
ISTD Ref FileName Pass
QC Ref File Name 027_
Default Text ARLS
NoUser

QC Analyte Table

Name	Mass	Tune Mode	CPS	Conc.	Units	Conc. RSD	RPD	Flag
Se	77	H2	5386.19	1.8863	ug/l	7.8		< 5X MRL
Se	78	H2	2082.13	0.6711	ug/l	5.3		< 5X MRL
Cr	52	He	703148.62	37.4342	ug/l	1.9	26.56	Dup Fail
Cr	53	He	87070.55	37.5112	ug/l	1.9	25.58	Dup Fail
Ni	60	He	326016.18	32.4454	ug/l	1.6	23.62	Dup Fail
Ni	62	He	51019.95	32.3160	ug/l	0.9	23.78	Dup Fail
Cu	63	He	1216071.20	41.9862	ug/l	1.6	24.94	Dup Fail
Cu	65	He	605081.19	41.9692	ug/l	0.8	22.13	Dup Fail
Zn	66	He	404631.89	110.7632	ug/l	0.5	34.02	Dup Fail
As	75	He	21873.65	9.8672	ug/l	2.1	12.05	
Mo	95	He	8025.30	0.7021	ug/l	1.8	8.25	
Mo	98	He	13574.45	0.6927	ug/l	2.3	8.82	
Ag	107	He	6987.07	0.1711	ug/l	4.4	16.82	
Ag	109	He	6642.48	0.1671	ug/l	1.0		< 5X MRL
Cd	111	He	1736.26	0.3478	ug/l	3.0	53.65	Dup Fail
Cd	114	He	5539.60	0.4469	ug/l	0.8	43.41	Dup Fail
Ba	135	He	577388.55	281.8793	ug/l	0.4	22.75	Dup Fail
Ba	137	He	1036682.88	281.9137	ug/l	0.9	23.95	Dup Fail
[Pb]	206	He	358688.97	15.5124	ug/l	1.4	19.8	
[Pb]	207	He	299107.34	14.9142	ug/l	2.0	18.95	
Pb	208	He	1408237.17	15.1506	ug/l	1.8	19.67	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Ge	72	H2	4623413.56	2.8	4569010.37	101.19	69.55	125.44	
Ge	72	He	517269.16	1.7	503324.62	102.77	69.55	125.44	
In	115	He	4017846.61	1.5	4086929.31	98.31	69.55	125.44	
Lu	175	He	7998424.41	1.9	8141934.95	98.24	69.55	125.44	
Th	232	He	12955044.81	0.4	12890173.14	100.5	69.55	125.44	



Sample Report

Sample Name K2314283-001L
File Name 029SMPL.d
Data Path Name D:\Agilent\ICPMH\1\DATA\010524A.b
Acq Time 2024-01-05 08:53:02
Sample Type Sample
Comment 25X
ISTD Ref FileName 003CALB.d
Operator ALKLS
QC Analyte Table NoUser

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Se	77	72	H2	0.5170	ug/l	12.4	3653.73	
Se	78	72	H2	0.2234	ug/l	4.1	662.35	
Cr	52	72	He	9.8399	ug/l	1.0	185599.94	
Cr	53	72	He	9.7682	ug/l	1.9	22968.61	
Ni	60	72	He	8.4089	ug/l	0.8	85150.13	
Ni	62	72	He	8.5020	ug/l	1.5	13512.04	
Cu	63	72	He	10.7977	ug/l	1.7	312569.40	
Cu	65	72	He	10.8854	ug/l	1.5	156837.79	
Zn	66	72	He	32.1997	ug/l	0.8	117533.68	
As	75	72	He	1.7926	ug/l	0.4	3998.48	
Mo	95	115	He	0.1560	ug/l	3.5	1815.67	
Mo	98	115	He	0.1514	ug/l	1.3	3038.08	
Ag	107	115	He	0.0414	ug/l	4.9	1742.33	
Ag	109	115	He	0.0426	ug/l	4.7	1738.99	
Cd	111	115	He	0.1236	ug/l	4.0	628.01	
Cd	114	115	He	0.1417	ug/l	2.5	1813.77	
Ba	135	115	He	70.3936	ug/l	0.5	145107.45	
Ba	137	115	He	70.9444	ug/l	0.3	262538.11	
[Pb]	206	232	He	4.2030	ug/l	4.1	94490.71	
[Pb]	207	232	He	3.8837	ug/l	1.2	75809.78	
Pb	208	232	He	4.0052	ug/l	1.9	362187.34	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Ge	72	H2	4155008.17	9.2	4569010.37	90.94	
Ge	72	He	516001.89	0.8	503324.62	102.52	
In	115	He	4042816.55	1.1	4086929.31	98.92	
Lu	175	He	7843821.91	1.3	8141934.95	96.34	
Th	232	He	12535796.90	2.2	12890173.14	97.25	

Post Digestion Spike Sample (PDS) Report

Sample Name K2314283-001A
File Name 030_PDS.d
Data Path Name D:\Agilent\ICPMH\1\DATA\010524A.b
Acq Time 2024-01-05 08:55:15
Sample Type PDS
Comment 5X
ISTD Ref FileName 003CALB.d
QC Ref File Name 027_
ARF.
Default Text ALKLS
NoUser
QC Analyte Table

Name	Mass	Tune	Conc.	Units	Conc. RSD	CPS	Spk Amt	% Rec	Flag
Se	77	H2	52.1809	ug/l	5.2	53480.49	50	99.51	
Se	78	H2	50.8394	ug/l	4.6	151303.68	50	99.9	
Cr	52	He	105.1929	ug/l	5.7	1910682.84	50	112.59	
Cr	53	He	102.1603	ug/l	7.0	228731.81	50	107.3	
Ni	60	He	91.9030	ug/l	5.9	892131.70	50	101.53	
Ni	62	He	91.4114	ug/l	7.0	139382.46	50	100.75	
Cu	63	He	103.2242	ug/l	7.0	2892834.82	50	98.55	
Cu	65	He	103.4822	ug/l	5.9	1444032.86	50	102.14	
Zn	66	He	211.7058	ug/l	5.9	748551.29	50	111.09	
As	75	He	61.4378	ug/l	6.8	131594.61	50	105.38	
Mo	95	He	53.5386	ug/l	6.0	579710.95	50	105.55	
Mo	98	He	53.3493	ug/l	6.5	988938.43	50	105.19	
Ag	107	He	10.5598	ug/l	5.4	406913.58	10	103.57	
Ag	109	He	10.6400	ug/l	5.9	399021.24	10	104.42	
Cd	111	He	51.3911	ug/l	6.2	242316.93	50	101.58	
Cd	114	He	52.5892	ug/l	6.2	612199.21	50	103.79	
Ba	135	He	432.7108	ug/l	5.9	842463.42	50	156.96	Flag
Ba	137	He	433.8266	ug/l	5.4	1516729.80	50	150.38	Flag
[Pb]	206	He	69.1040	ug/l	7.8	1527572.02	50	100.37	
[Pb]	207	He	66.9334	ug/l	8.2	1282891.51	50	97.8	
Pb	208	He	68.7758	ug/l	8.7	6108219.44	50	100.64	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Ge	72	H2	4586928.43	2.1	4569010.37	100.39	
Ge	72	He	502054.73	6.4	503324.62	99.75	
In	115	He	3827791.89	6.0	4086929.31	93.66	
Lu	175	He	7571643.31	8.8	8141934.95	93	
Th	232	He	12460141.48	8.7	12890173.14	96.66	

Matrix Spike Sample (MS) Report

Sample Name KQ2322295-02
File Name 031_Spk.d
Data Path Name D:\Agilent\CPMH\1\DATA\010524A.b
Acq Time 2024-01-05 08:57:25
Sample Type Spike
Comment 5X
ISTD Ref FileName 003CALB.d
QC Ref File Name 027_
Default Text ARF.
ALKLS
NoUser

QC Analyte Table

Name	Mass	Tune	Conc.	Units	Conc. RSD	CPS	Spk Amt	% Rec	Flag
Se	77	H2	196.0810	ug/l	4.8	187644.52	200	96.83	
Se	78	H2	194.3734	ug/l	5.4	567659.47	200	96.74	
Cr	52	He	124.8553	ug/l	0.7	2274537.76	80	94.95	
Cr	53	He	120.4607	ug/l	0.6	270595.62	80	89.94	
Ni	60	He	226.5782	ug/l	1.3	2204901.23	200	92.72	
Ni	62	He	218.5165	ug/l	0.8	334171.00	200	88.74	
Cu	63	He	139.3137	ug/l	0.9	3917881.93	100	85.36	
Cu	65	He	140.0530	ug/l	0.3	1960399.02	100	87.64	
Zn	66	He	318.1391	ug/l	0.3	1128307.25	200	80.99	
As	75	He	201.0181	ug/l	0.3	431994.15	200	96.14	
Mo	95	He	192.0283	ug/l	1.6	2130469.50	200	95.63	
Mo	98	He	193.0571	ug/l	1.8	3666915.27	200	96.15	
Ag	107	He	19.0743	ug/l	1.3	752867.43	20	94.36	
Ag	109	He	19.1566	ug/l	1.2	735996.58	20	94.79	
Cd	111	He	19.0963	ug/l	0.9	92274.01	20	92.47	
Cd	114	He	19.2765	ug/l	0.8	229986.56	20	92.91	
Ba	135	He	713.9424	ug/l	0.9	1424150.60	400	89.93	
Ba	137	He	734.7277	ug/l	2.8	2630850.59	400	94.02	
[Pb]	206	He	205.9170	ug/l	1.0	4708216.06	200	93.5	
[Pb]	207	He	193.6102	ug/l	0.7	3839535.96	200	87.79	
Pb	208	He	196.6206	ug/l	0.7	18070677.48	200	89.08	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Ge	72	H2	4501933.57	2.4	4569010.37	98.53	
Ge	72	He	502384.11	0.5	503324.62	99.81	
In	115	He	3913000.98	1.5	4086929.31	95.74	
Lu	175	He	7838429.97	1.5	8141934.95	96.27	
Th	232	He	12834017.73	1.5	12890173.14	99.56	

Continuing Calibration Verification (CCV) Report

Sample Name CCV
File Name 032_CCV.d
Data Path Name D:\Agilent\CPMH\1\DATA\010524A.b
Acq Time 2024-01-05 08:59:30
Sample Type CCV
Comment —
ISTD Ref FileName 003CALB.d
Operator ALKLS
QC Analyte Table NoUser

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
Se	77	72	H2	31.6851	ug/l	7.4	30004.66	126.74	
Se	78	72	H2	31.7489	ug/l	7.1	83713.36	127	CCV Failed
Cr	52	72	He	25.5007	ug/l	1.5	470665.64	102	
Cr	53	72	He	25.2405	ug/l	1.1	57658.69	100.96	
Ni	60	72	He	25.2045	ug/l	1.6	248826.87	100.82	
Ni	62	72	He	24.8080	ug/l	1.5	38478.52	99.23	
Cu	63	72	He	25.1399	ug/l	1.9	714943.24	100.56	
Cu	65	72	He	25.0810	ug/l	1.6	855032.85	100.32	
Zn	66	72	He	25.2639	ug/l	2.2	90770.87	101.06	
As	75	72	He	25.4428	ug/l	1.6	55284.39	101.77	
Mo	95	115	He	12.8413	ug/l	2.1	145575.49	102.73	
Mo	98	115	He	12.8045	ug/l	2.4	248561.20	102.44	
Ag	107	115	He	12.7108	ug/l	2.6	512559.20	101.69	
Ag	109	115	He	12.7620	ug/l	2.1	500981.37	102.1	
Cd	111	115	He	25.6109	ug/l	2.2	126431.15	102.44	
Cd	114	115	He	25.5922	ug/l	2.0	311950.52	102.37	
Ba	135	115	He	25.2871	ug/l	3.3	51546.95	101.15	
Ba	137	115	He	25.5310	ug/l	2.9	93427.55	102.12	
[Pb]	206	232	He	26.1507	ug/l	3.0	568620.97	104.6	
[Pb]	207	232	He	25.6024	ug/l	2.5	482891.66	102.41	
Pb	208	232	He	25.7714	ug/l	2.8	2252655.60	103.09	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Ge	72	H2	4081830.81	8.7	4569010.37	89.34	
Ge	72	He	507730.97	2.2	503324.62	100.88	
In	115	He	3999325.56	3.2	4086929.31	97.86	
Lu	175	He	7722358.30	4.3	8141934.95	94.85	
Th	232	He	12203475.65	4.8	12890173.14	94.67	

Continuing Calibration Verification (CCV) Report

Sample Name CCV
File Name 033_CCV.d
Data Path Name D:\Agilent\ICPMH\1\DATA\010524A.b
Acq Time 2024-01-05 09:03:34
Sample Type CCV
Comment ---
ISTD Ref FileName 003CALB.d
Operator ALKLS
QC Analyte Table NoUser

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
Se	77	72	H2	24.6237	ug/l	3.7	27757.95	98.49	
Se	78	72	H2	25.0557	ug/l	4.7	76438.06	100.22	
Cr	52	72	He	25.3670	ug/l	1.0	469973.37	101.47	
Cr	53	72	He	25.5436	ug/l	0.8	58563.01	102.17	
Ni	60	72	He	24.9245	ug/l	0.3	247012.81	99.7	
Ni	62	72	He	24.8617	ug/l	1.6	38709.03	99.45	
Cu	63	72	He	24.8061	ug/l	0.3	708196.19	99.22	
Cu	65	72	He	24.8618	ug/l	0.5	353277.02	99.45	
Zn	66	72	He	25.3795	ug/l	0.5	91544.49	101.52	
As	75	72	He	25.3135	ug/l	0.4	55212.05	101.25	
Mo	95	115	He	12.3515	ug/l	1.2	143078.82	98.81	
Mo	98	115	He	12.3668	ug/l	1.2	245311.65	98.93	
Ag	107	115	He	12.4029	ug/l	1.4	511100.88	99.22	
Ag	109	115	He	12.4805	ug/l	0.9	500613.57	99.84	
Cd	111	115	He	24.9088	ug/l	1.2	125648.75	99.64	
Cd	114	115	He	25.0237	ug/l	1.0	311660.16	100.09	
Ba	135	115	He	24.6840	ug/l	0.2	51426.58	98.74	
Ba	137	115	He	24.9406	ug/l	1.1	93274.41	99.76	
[Pb]	206	232	He	25.3917	ug/l	0.4	564679.72	101.57	
[Pb]	207	232	He	24.8826	ug/l	0.4	479923.78	99.53	
Pb	208	232	He	25.0730	ug/l	0.8	2241388.03	100.29	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Ge	72	H2	4696787.73	5.0	4569010.37	102.8	
Ge	72	He	509561.47	0.7	503324.62	101.24	
In	115	He	4084923.19	0.8	4086929.31	99.95	
Lu	175	He	7896716.35	1.5	8141934.95	96.99	
Th	232	He	12468845.65	0.7	12890173.14	96.73	

Continuing Calibration Blank (CCB) Report

Sample Name CCB
File Name 034_CCB.d
Data Path Name D:\Agilent\ICPMH\1\DATA\010524A.b
Acq Time 2024-01-05 09:05:47
Sample Type CCB
Comment —
ISTD Ref FileName 003CALB.d
Operator ALKLS
QC Analyte Table NoUser

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Se	77	72	H2	-0.1686	ug/l	N/A	3465.03	
Se	78	72	H2	0.0333	ug/l	9.1	172.00	
Cr	52	72	He	0.0018	ug/l	231.5	1610.09	
Cr	53	72	He	0.0269	ug/l	16.8	515.57	
Ni	60	72	He	-0.0283	ug/l	N/A	845.58	
Ni	62	72	He	-0.0195	ug/l	N/A	131.11	
Cu	63	72	He	0.0062	ug/l	26.2	913.36	
Cu	65	72	He	0.0031	ug/l	43.0	414.45	
Zn	66	72	He	0.0107	ug/l	92.6	301.11	
As	75	72	He	0.0094	ug/l	28.6	61.00	
Mo	95	115	He	0.0169	ug/l	14.7	218.89	
Mo	98	115	He	0.0133	ug/l	8.8	324.45	
Ag	107	115	He	0.0021	ug/l	41.4	138.89	
Ag	109	115	He	0.0008	ug/l	130.6	82.22	
Cd	111	115	He	0.0063	ug/l	9.6	42.00	
Cd	114	115	He	0.0046	ug/l	25.3	123.17	
Ba	135	115	He	-0.0008	ug/l	N/A	18.89	
Ba	137	115	He	0.0062	ug/l	18.8	42.78	
[Pb]	206	232	He	0.0003	ug/l	862.6	676.69	
[Pb]	207	232	He	-0.0031	ug/l	N/A	542.24	
Pb	208	232	He	-0.0023	ug/l	N/A	2526.77	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Ge	72	H2	4701117.31	2.5	4569010.37	102.89	
Ge	72	He	501756.13	1.3	503324.62	99.69	
In	115	He	4008121.42	0.1	4086929.31	98.07	
Lu	175	He	7951936.90	1.1	8141934.95	97.67	
Th	232	He	12336094.82	0.4	12890173.14	95.7	



Prep Blank (PB) Report

Sample Name KQ2322512-03
File Name 035_PB.d
Data Path Name D:\Agilent\CPMH\1\DATA\010524A.b
Acq Time 2024-01-05 09:08:00
Sample Type PB
Comment 5X
ISTD Ref FileName 003CALB.d
Operator ALKLS
QC Analyte Table NoUser

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Se	77	72	H2	-0.1613	ug/l	N/A	3563.72	
Se	78	72	H2	0.0146	ug/l	65.9	118.67	
Cr	52	72	He	0.0864	ug/l	10.3	3171.42	
Cr	53	72	He	0.0840	ug/l	17.4	647.80	
Ni	60	72	He	0.0308	ug/l	26.9	1428.96	
Ni	62	72	He	0.0277	ug/l	115.8	204.45	
Cu	63	72	He	0.0420	ug/l	14.9	1932.35	
Cu	65	72	He	0.0357	ug/l	20.1	876.70	
Zn	66	72	He	0.2193	ug/l	7.2	1047.82	
As	75	72	He	0.0046	ug/l	19.8	51.00	
Mo	95	115	He	0.0304	ug/l	14.2	380.01	
Mo	98	115	He	0.0275	ug/l	15.1	613.35	
Ag	107	115	He	0.0009	ug/l	74.2	91.11	
Ag	109	115	He	0.0009	ug/l	71.4	84.45	
Cd	111	115	He	0.0031	ug/l	47.6	26.50	
Cd	114	115	He	0.1080	ug/l	2.9	1412.73	Flag
Ba	135	115	He	0.0161	ug/l	41.7	54.45	
Ba	137	115	He	0.0211	ug/l	8.5	99.44	
[Pb]	206	232	He	-0.0023	ug/l	N/A	634.46	
[Pb]	207	232	He	-0.0025	ug/l	N/A	565.57	
Pb	208	232	He	-0.0028	ug/l	N/A	2535.66	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Ge	72	H2	4824161.61	4.8	4569010.37	105.58	
Ge	72	He	505355.40	0.1	503324.62	100.4	
In	115	He	4087694.45	1.6	4086929.31	100.02	
Lu	175	He	8038163.85	0.2	8141934.95	98.73	
Th	232	He	12619453.98	0.8	12890173.14	97.9	



Laboratory Control Sample (LCS) Report

Sample Name KQ2322512-04
File Name 036_LCS.d
Data Path Name D:\Agilent\ICPMH1\DATA\010524A.b
Acq Time 2024-01-05 09:10:13
Sample Type LCS
Comment 20X
ISTD Ref FileName 003CALB.d
Operator ALKLS
QC Analyte Table NoUser

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	ExpValue	% Rec	QC Flag
Se	77	72	H2	57.5449	ug/l	5.4	57825.51	50	115.09	
Se	78	72	H2	57.7544	ug/l	4.8	169570.48	50	115.51	
Cr	52	72	He	22.5257	ug/l	0.2	409575.81	20	112.63	
Cr	53	72	He	22.3818	ug/l	2.2	50390.74	20	111.91	
Ni	60	72	He	55.1434	ug/l	0.5	534742.82	50	110.29	
Ni	62	72	He	55.2426	ug/l	0.9	84179.06	50	110.49	
Cu	63	72	He	27.1219	ug/l	0.7	759468.39	25	108.49	
Cu	65	72	He	27.0536	ug/l	0.3	377073.04	25	108.21	
Zn	66	72	He	54.5170	ug/l	0.3	192592.48	50	109.03	
As	75	72	He	57.4740	ug/l	0.4	122924.41	50	114.95	
Mo	95	115	He	57.9653	ug/l	1.1	657887.96	50	115.93	
Mo	98	115	He	57.8647	ug/l	1.0	1124579.92	50	115.73	
Ag	107	115	He	5.6609	ug/l	0.6	228630.36	5	113.22	
Ag	109	115	He	5.6945	ug/l	0.8	223881.45	5	113.89	
Cd	111	115	He	5.4383	ug/l	1.8	26889.33	5	108.77	
Cd	114	115	He	5.5136	ug/l	1.1	67350.31	5	110.27	
Ba	135	115	He	110.2532	ug/l	1.3	225026.44	100	110.25	
Ba	137	115	He	109.9699	ug/l	0.4	402962.33	100	109.97	
[Pb]	206	232	He	56.8775	ug/l	1.3	1263929.64	50	113.76	
[Pb]	207	232	He	54.0090	ug/l	0.7	1040800.03	50	108.02	
Pb	208	232	He	56.0390	ug/l	1.2	5005667.61	50	112.08	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Ge	72	H2	4525125.65	2.1	4569010.37	99.04	
Ge	72	He	499859.27	1.1	503324.62	99.31	
In	115	He	4003118.02	1.8	4086929.31	97.95	
Lu	175	He	7846444.13	2.2	8141934.95	96.37	
Th	232	He	12466478.98	1.6	12890173.14	96.71	



Reference Sample Report

Sample Name K2314395-001
File Name 037_ARF.d
Data Path Name D:\Agilent\ICPMH\1\DATA\010524A.b
Acq Time 2024-01-05 09:12:25
Sample Type AllRef
Comment 5X
ISTD Ref FileName 003CALB.d
Sample QC Pass/Fail Pass
ISTD QC Pass/Fail Pass
Operator ALKLS
QC Analyte Table NoUser

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Se	77	72	H2	0.5201	ug/l	28.2	4089.50	
Se	78	72	H2	0.2419	ug/l	0.9	798.02	
Cr	52	72	He	31.2505	ug/l	1.4	557834.54	
Cr	53	72	He	31.3044	ug/l	0.7	69091.55	
Ni	60	72	He	17.7913	ug/l	0.9	170299.81	
Ni	62	72	He	17.9823	ug/l	2.0	27032.39	
Cu	63	72	He	96.7278	ug/l	1.9	2660146.98	
Cu	65	72	He	94.0690	ug/l	0.7	1287643.32	
Zn	66	72	He	270.5376	ug/l	0.5	938242.53	
As	75	72	He	11.7378	ug/l	1.7	24701.81	
Mo	95	115	He	2.3188	ug/l	0.8	25872.23	
Mo	98	115	He	2.3588	ug/l	1.0	45086.05	
Ag	107	115	He	0.5233	ug/l	2.5	20803.10	
Ag	109	115	He	0.5195	ug/l	1.4	20101.13	
Cd	111	115	He	0.6479	ug/l	0.8	3155.80	
Cd	114	115	He	0.8359	ug/l	0.3	10083.06	
Ba	135	115	He	89.4977	ug/l	1.3	179385.29	
Ba	137	115	He	91.2245	ug/l	0.5	328267.98	
[Pb]	206	232	He	29.7879	ug/l	2.0	657543.46	
[Pb]	207	232	He	29.4989	ug/l	2.1	564729.46	
Pb	208	232	He	29.5103	ug/l	1.6	2618494.08	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Ge	72	H2	4646300.65	1.3	4569010.37	101.69	
Ge	72	He	491244.74	0.6	503324.62	97.6	
In	115	He	3931276.30	0.7	4086929.31	96.19	
Lu	175	He	7845646.35	1.4	8141934.95	96.36	
Th	232	He	12379445.23	0.6	12890173.14	96.04	

Duplicate Sample Report

Sample Name KQ2322512-01
File Name 038_Dup.d
Data Path Name D:\Agilent\ICPMH\1\DATA\010524A.b
Acq Time 2024-01-05 09:14:36
Sample Type Dup
Total Dilution 1.0000
Comment 5X
ISTD Ref FileName 003CALB.d
Sample QC Pass/Fail Fail
ISTD Ref FileName Pass
QC Ref File Name 037_
Default Text ARLS
NoUser

QC Analyte Table

Name	Mass	Tune Mode	CPS	Conc.	Units	Conc. RSD	RPD	Flag
Se	77	H2	4151.85	0.6603	ug/l	11.5		< 5X MRL
Se	78	H2	780.02	0.2405	ug/l	6.9		< 5X MRL
Cr	52	He	869811.55	48.7146	ug/l	1.0	43.68	Dup Fail
Cr	53	He	106037.19	48.0892	ug/l	0.8	42.28	Dup Fail
Ni	60	He	261756.40	27.3716	ug/l	0.6	42.43	Dup Fail
Ni	62	He	41131.23	27.3782	ug/l	0.6	41.43	Dup Fail
Cu	63	He	2758017.18	100.1517	ug/l	1.8	3.48	
Cu	65	He	1347726.27	98.3309	ug/l	0.3	4.43	
Zn	66	He	1204702.83	346.9304	ug/l	0.8	24.74	Dup Fail
As	75	He	26181.34	12.4248	ug/l	1.0	5.69	
Mo	95	He	40838.55	3.6386	ug/l	2.1	44.31	Dup Fail
Mo	98	He	69453.50	3.6130	ug/l	1.7	42	Dup Fail
Ag	107	He	16565.01	0.4138	ug/l	1.2	23.38	Dup Fail
Ag	109	He	16483.82	0.4231	ug/l	1.5	20.46	Dup Fail
Cd	111	He	3847.61	0.7853	ug/l	0.8	19.17	
Cd	114	He	12136.60	1.0008	ug/l	0.8	17.95	
Ba	135	He	260653.60	129.2194	ug/l	1.0	36.32	Dup Fail
Ba	137	He	472378.54	130.4398	ug/l	0.9	35.38	Dup Fail
[Pb]	206	He	762736.52	34.6410	ug/l	1.2	15.06	
[Pb]	207	He	653673.15	34.2337	ug/l	1.8	14.86	
Pb	208	He	3023960.96	34.1695	ug/l	1.8	14.63	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	%QC Low	%QC High	QC Flag
Ge	72	H2	4563529.54	1.3	4569010.37	99.88	69.55	125.44	
Ge	72	He	491887.31	0.7	503324.62	97.73	69.55	125.44	
In	115	He	3956892.21	2.2	4086929.31	96.82	69.55	125.44	
Lu	175	He	7782708.30	1.6	8141934.95	95.59	69.55	125.44	
Th	232	He	12349815.65	2.0	12890173.14	95.81	69.55	125.44	



Sample Report

Sample Name K2314395-001L
File Name 039SMPL.d
Data Path Name D:\Agilent\ICPMH\1\DATA\010524A.b
Acq Time 2024-01-05 09:16:48
Sample Type Sample
Comment 25X
ISTD Ref FileName 003CALB.d
Operator ALKLS
QC Analyte Table NoUser

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	QC Flag
Se	77	72	H2	-0.1243	ug/l	N/A	3457.36	
Se	78	72	H2	0.0510	ug/l	22.0	223.33	
Cr	52	72	He	6.3749	ug/l	0.9	114638.69	
Cr	53	72	He	6.2934	ug/l	2.3	14199.25	
Ni	60	72	He	3.6637	ug/l	2.0	35821.70	
Ni	62	72	He	3.6912	ug/l	2.1	5655.42	
Cu	63	72	He	19.2742	ug/l	0.5	528890.27	
Cu	65	72	He	19.2814	ug/l	0.4	263343.53	
Zn	66	72	He	54.9616	ug/l	0.7	190182.46	
As	75	72	He	2.3649	ug/l	1.2	4992.74	
Mo	95	115	He	0.4633	ug/l	4.7	5216.41	
Mo	98	115	He	0.4742	ug/l	1.4	9162.57	
Ag	107	115	He	0.1074	ug/l	1.5	4332.82	
Ag	109	115	He	0.1071	ug/l	7.3	4206.12	
Cd	111	115	He	0.1326	ug/l	8.3	657.18	
Cd	114	115	He	0.1713	ug/l	3.5	2129.14	
Ba	135	115	He	17.9424	ug/l	1.7	36171.28	
Ba	137	115	He	18.1710	ug/l	1.7	65750.34	
[Pb]	206	232	He	6.0863	ug/l	1.1	134693.70	
[Pb]	207	232	He	6.0149	ug/l	0.5	115475.52	
Pb	208	232	He	6.0208	ug/l	0.9	535666.13	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Ge	72	H2	4633646.76	2.9	4569010.37	101.41	
Ge	72	He	489618.94	0.5	503324.62	97.28	
In	115	He	3952739.91	1.6	4086929.31	96.72	
Lu	175	He	7818001.63	0.8	8141934.95	96.02	
Th	232	He	12362716.48	1.9	12890173.14	95.91	

Post Digestion Spike Sample (PDS) Report

Sample Name K2314395-001A
File Name 040_PDS.d
Data Path Name D:\Agilent\ICPMH\1\DATA\010524A.b
Acq Time 2024-01-05 09:19:01
Sample Type PDS
Comment 5X
ISTD Ref FileName 003CALB.d
QC Ref File Name 037_
ARF.
Default Text ALKLS
NoUser

QC Analyte Table

Name	Mass	Tune	Conc.	Units	Conc. RSD	CPS	Spk Amt	% Rec	Flag
Se	77	H2	51.4272	ug/l	7.0	51955.02	50	101.81	
Se	78	H2	51.5106	ug/l	7.1	150973.46	50	102.54	
Cr	52	He	85.2841	ug/l	2.3	1515429.97	50	108.07	
Cr	53	He	81.3004	ug/l	1.7	178224.82	50	99.99	
Ni	60	He	66.9347	ug/l	1.1	635879.43	50	98.29	
Ni	62	He	66.8733	ug/l	0.2	99827.21	50	97.78	
Cu	63	He	145.6718	ug/l	0.6	3994567.76	50	97.89	
Cu	65	He	150.0174	ug/l	0.6	2047472.14	50	111.9	
Zn	66	He	321.8702	ug/l	0.7	1113095.82	50	102.67	
As	75	He	63.1851	ug/l	0.1	132429.28	50	102.89	
Mo	95	He	52.5530	ug/l	1.9	587504.80	50	100.47	
Mo	98	He	52.6418	ug/l	1.8	1007662.88	50	100.57	
Ag	107	He	10.5395	ug/l	1.1	419225.44	10	100.16	
Ag	109	He	10.4392	ug/l	1.6	404179.19	10	99.2	
Cd	111	He	49.6249	ug/l	1.8	241606.59	50	97.95	
Cd	114	He	50.8008	ug/l	1.6	610626.17	50	99.93	
Ba	135	He	140.2089	ug/l	1.8	281844.32	50	101.42	
Ba	137	He	140.8195	ug/l	1.1	508195.92	50	99.19	
[Pb]	206	He	82.9746	ug/l	0.9	1838126.46	50	106.37	
[Pb]	207	He	77.8708	ug/l	0.9	1496306.89	50	96.74	
Pb	208	He	80.5668	ug/l	0.6	7174550.13	50	102.11	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Ge	72	H2	4519910.65	0.3	4569010.37	98.93	
Ge	72	He	489861.11	0.2	503324.62	97.33	
In	115	He	3942693.87	0.5	4086929.31	96.47	
Lu	175	He	7867362.47	0.5	8141934.95	96.63	
Th	232	He	12432021.90	1.4	12890173.14	96.45	

Matrix Spike Sample (MS) Report

Sample Name KQ2322512-02
File Name 041_Spk.d
Data Path Name D:\Agilent\NCPMH\1\DATA\010524A.b
Acq Time 2024-01-05 09:21:09
Sample Type Spike
Comment 5X
ISTD Ref FileName 003CALB.d
QC Ref File Name 037_
 ARF.
Default Text ALKLS
 NoUser

QC Analyte Table

Name	Mass	Tune	Conc.	Units	Conc. RSD	CPS	Spk Amt	% Rec	Flag
Se	77	H2	191.7983	ug/l	5.6	186545.06	200	95.64	
Se	78	H2	193.0804	ug/l	5.2	572743.02	200	96.42	
Cr	52	He	112.1612	ug/l	1.1	1991245.34	80	101.14	
Cr	53	He	108.4033	ug/l	1.2	237339.63	80	96.37	
Ni	60	He	205.5752	ug/l	0.9	1949534.72	200	93.89	
Ni	62	He	198.0850	ug/l	0.9	295207.03	200	90.05	
Cu	63	He	170.6433	ug/l	1.3	4676406.48	100	73.92	Flag
Cu	65	He	171.7857	ug/l	2.3	2343271.02	100	77.72	
Zn	66	He	465.3848	ug/l	0.3	1608341.36	200	97.42	
As	75	He	203.2782	ug/l	0.2	425713.33	200	95.77	
Mo	95	He	198.2581	ug/l	1.0	2180550.19	200	97.97	
Mo	98	He	200.5260	ug/l	1.2	3776387.63	200	99.08	
Ag	107	He	18.7879	ug/l	1.0	735219.45	20	91.32	
Ag	109	He	18.8812	ug/l	1.0	719198.84	20	91.81	
Cd	111	He	18.8174	ug/l	1.3	90144.19	20	90.85	
Cd	114	He	18.9361	ug/l	1.0	223983.87	20	90.5	
Ba	135	He	455.8168	ug/l	1.3	901433.09	400	91.58	
Ba	137	He	460.8691	ug/l	0.5	1636369.83	400	92.41	
[Pb]	206	He	219.4521	ug/l	0.7	4783411.47	200	94.83	
[Pb]	207	He	209.5264	ug/l	0.8	3960407.76	200	90.01	
Pb	208	He	211.5251	ug/l	0.5	18531748.01	200	91.01	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Ge	72	H2	4571450.51	3.5	4569010.37	100.05	
Ge	72	He	489573.33	0.6	503324.62	97.27	
In	115	He	3879202.74	0.6	4086929.31	94.92	
Lu	175	He	7818207.19	1.2	8141934.95	96.02	
Th	232	He	12233663.99	1.0	12890173.14	94.91	

Continuing Calibration Verification (CCV) Report

Sample Name CCV
File Name 042_CCV.d
Data Path Name D:\Agilent\CPMH\1\DATA\010524A.b
Acq Time 2024-01-05 09:23:27
Sample Type CCV
Comment ---
ISTD Ref FileName 003CALB.d
Operator ALKLS
QC Analyte Table NoUser

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
Se	77	72	H2	25.0067	ug/l	3.5	27588.67	100.03	
Se	78	72	H2	25.3309	ug/l	3.3	75736.17	101.32	
Cr	52	72	He	24.9373	ug/l	3.8	453018.47	99.75	
Cr	53	72	He	24.6872	ug/l	3.5	55512.04	98.75	
Ni	60	72	He	24.7065	ug/l	2.0	240163.78	98.83	
Ni	62	72	He	24.5105	ug/l	4.4	37412.85	98.04	
Cu	63	72	He	24.4921	ug/l	2.6	685738.48	97.97	
Cu	65	72	He	24.6878	ug/l	2.7	344039.97	98.75	
Zn	66	72	He	25.0887	ug/l	2.9	88742.29	100.35	
As	75	72	He	24.9483	ug/l	4.2	53346.52	99.79	
Mo	95	115	He	12.2341	ug/l	4.8	140968.16	97.87	
Mo	98	115	He	12.2626	ug/l	4.9	241947.34	98.1	
Ag	107	115	He	12.2750	ug/l	4.5	503204.70	98.2	
Ag	109	115	He	12.3850	ug/l	4.1	494268.40	99.08	
Cd	111	115	He	24.5079	ug/l	4.3	122995.27	98.03	
Cd	114	115	He	24.6944	ug/l	4.4	305970.45	98.78	
Ba	135	115	He	24.4316	ug/l	5.6	50615.10	97.73	
Ba	137	115	He	24.7908	ug/l	5.2	92202.65	99.16	
[Pb]	206	232	He	24.8372	ug/l	4.0	568187.25	99.35	
[Pb]	207	232	He	24.4942	ug/l	3.5	486028.09	97.98	
Pb	208	232	He	24.6734	ug/l	3.3	2269260.92	98.69	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Ge	72	H2	4605436.62	3.9	4569010.37	100.8	
Ge	72	He	499983.92	3.2	503324.62	99.34	
In	115	He	4069903.72	5.2	4086929.31	99.58	
Lu	175	He	8033296.07	3.8	8141934.95	98.67	
Th	232	He	12839618.14	4.0	12890173.14	99.61	

Continuing Calibration Blank (CCB) Report

Sample Name CCB
File Name 043_CCB.d
Data Path Name D:\Agilent\ICPMH\1\DATA\010524A.b
Acq Time 2024-01-05 09:25:41
Sample Type CCB
Comment —
ISTD Ref FileName 003CALB.d
Operator ALKLS
QC Analyte Table NoUser

Name	Mass	ISTD	Tune Mode	Conc.	Units	Conc. RSD	CPS	QC Flag
Se	77	72	H2	-0.1602	ug/l	N/A	3466.69	
Se	78	72	H2	0.0398	ug/l	22.0	191.67	
Cr	52	72	He	0.0030	ug/l	157.4	1573.42	
Cr	53	72	He	0.0082	ug/l	245.2	456.68	
Ni	60	72	He	-0.0247	ug/l	N/A	848.92	
Ni	62	72	He	-0.0147	ug/l	N/A	133.33	
Cu	63	72	He	0.0082	ug/l	17.7	934.48	
Cu	65	72	He	0.0030	ug/l	79.6	397.79	
Zn	66	72	He	0.0088	ug/l	72.1	284.45	
As	75	72	He	0.0088	ug/l	73.0	57.67	
Mo	95	115	He	0.0126	ug/l	10.6	167.78	
Mo	98	115	He	0.0141	ug/l	12.9	333.34	
Ag	107	115	He	0.0012	ug/l	72.9	100.00	
Ag	109	115	He	0.0016	ug/l	10.8	110.00	
Cd	111	115	He	0.0042	ug/l	21.0	31.00	
Cd	114	115	He	0.0043	ug/l	20.4	117.00	
Ba	135	115	He	0.0037	ug/l	112.1	27.78	
Ba	137	115	He	0.0076	ug/l	18.6	47.22	
[Pb]	206	232	He	-0.0001	ug/l	N/A	678.91	
[Pb]	207	232	He	-0.0020	ug/l	N/A	572.24	
Pb	208	232	He	-0.0010	ug/l	N/A	2676.78	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Ge	72	H2	4693904.82	1.5	4569010.37	102.73	
Ge	72	He	483894.91	0.4	503324.62	96.14	
In	115	He	3941764.90	0.1	4086929.31	96.45	
Lu	175	He	7875046.08	1.0	8141934.95	96.72	
Th	232	He	12518200.23	1.3	12890173.14	97.11	

Low Level Continuing Calibration Verification (LLCCV) Report

Sample Name LLCCVS
File Name 044LCCV.d
Data Path Name D:\Agilent\ICPMH1\DATA\010524A.b
Acq Time 2024-01-05 09:27:53
Sample Type LLCCV
Comment —
ISTD Ref FileName 003CALB.d
Sample QC Pass/Fail Pass
ISTD QC Pass/Fail Pass
Operator ALKLS
NoUser

QC Analyte Table

Name	Mass	ISTD	Tune	Conc.	Units	Conc. RSD	CPS	% Rec	QC Flag
Se	77	72	H2	1.7914	ug/l	2.0	5243.82	-179.14	
Se	78	72	H2	1.9994	ug/l	6.0	6007.41	99.97	
Cr	52	72	He	0.4075	ug/l	5.1	8646.66	101.87	
Cr	53	72	He	0.4485	ug/l	8.0	1404.51	-44.85	
Ni	60	72	He	0.3706	ug/l	2.8	4541.75	92.65	
Ni	62	72	He	0.3783	ug/l	18.9	710.02	94.58	
Cu	63	72	He	0.1945	ug/l	0.7	5968.86	97.25	
Cu	65	72	He	0.2041	ug/l	7.5	3101.41	102.05	
Zn	66	72	He	1.0259	ug/l	3.0	3749.33	102.59	
As	75	72	He	0.9597	ug/l	2.1	2021.12	95.97	
Mo	95	115	He	0.1032	ug/l	5.6	1182.27	103.2	
Mo	98	115	He	0.1103	ug/l	11.2	2179.05	110.3	
Ag	107	115	He	0.0388	ug/l	6.3	1596.76	97	
Ag	109	115	He	0.0385	ug/l	7.1	1543.42	96.25	
Cd	111	115	He	0.0398	ug/l	6.2	204.83	99.5	
Cd	114	115	He	0.0422	ug/l	5.0	572.84	105.5	
Ba	135	115	He	0.1006	ug/l	26.5	223.34	100.6	
Ba	137	115	He	0.1071	ug/l	11.8	406.67	107.1	
[Pb]	206	232	He	0.0901	ug/l	5.6	2704.70	90.1	
[Pb]	207	232	He	0.0865	ug/l	3.5	2294.64	86.5	
Pb	208	232	He	0.0872	ug/l	5.0	10638.19	87.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	CPS RSD	Ref CPS	% Rec	QC Flag
Ge	72	H2	4577128.15	3.4	4569010.37	100.18	
Ge	72	He	482830.34	0.6	503324.62	95.93	
In	115	He	3949453.15	1.2	4086929.31	96.64	
Lu	175	He	8027767.18	2.6	8141934.95	98.6	
Th	232	He	12588813.14	1.5	12890173.14	97.66	



CVAA Mercury Soil Data Review Form
K-CVAA-03

Element: Hg

Analysis Lot #: 122823A HG3

Starlims #: 828359

Cal. STD/CCV Source: HG4-2-T

Pipette IDs: HG-41585305/HG38883934

16mL Tube Lot #: P7636178

KMnO₄: HG4-1-X Expiration Date: 11/17/2024

NH₂OH-HCl/NaCl: HG4-2-N Expiration Date: 12/14/2024

SnCl₂/HCl: HG4-2-I Expiration Date: 12/6/2024

Service Request Numbers:

K2313788, K2313965, K2313982, K2314089, K2314165, K2314174, K2314183,
K2314197, K2314202, K2314221, K2314249, K2314278, K2314283, K2314301,
K2314408, T23202086, T2302165

01/21/23

	Yes	No	NA
1) Appropriate standardization completed	<u>X</u>	<u> </u>	<u> </u>
2) ICV within 10% of true value	<u>X</u>	<u> </u>	<u> </u>
3) CCVs in control (+/- 10%)	<u>X</u>	<u> </u>	<u> </u>
4) CCBs and or ICBs below MRL	<u>X</u>	<u> </u>	<u> </u>
5) CCV/CCB check run every 10 samples	<u>X</u>	<u> </u>	<u> </u>
6) All reported samples within calibration range	<u>X</u>	<u> </u>	<u> </u>
7) Calculations correct	<u>X</u>	<u> </u>	<u> </u>

Comments:

Data reviewed against service request(s) to ensure no samples were omitted: AA (Initials)

Primary Reviewed By: AA

Date: 12/28/23

Secondary Reviewed By: M

Date: 12.28.23

Data Review Form

Instrument ID#: K-CVAA-04
DataFile Name: R:\ICPI\WIP\DATA\K-CVAA-04 (M-7600)\122823A HG4.csv
RUNNO: 828359

K2313788

No exceptions to report.

K2313965

No exceptions to report.

K2313982

No exceptions to report.

K2314089

No exceptions to report.

K2314165

No exceptions to report.

K2314174

No exceptions to report.

K2314183

No exceptions to report.

K2314197

No exceptions to report.

K2314202

No exceptions to report.

K2314221

No exceptions to report.

K2314249

No exceptions to report.

K2314278

No exceptions to report.

Primary Approver: AA 12/28/23
Secondary Approver: W 12.28.23

Data Review Form

Instrument ID#: **K-CVAA-04**
DataFile Name: **R:\ICPI\WIP\DATA\K-CVAA-04 (M-7600)\122823A HG4.csv**
RUNNO: **828359**

K2314283

No exceptions to report.

K2314301

No exceptions to report.

K2314408

No exceptions to report.

T2302086

No exceptions to report.

T2302165

No exceptions to report.

CVAA Hg ANALYTICAL WORKSHEET

Page 1

Method: 7471			Cal. Inter. Std* (100ppb): HG4-2-T 2nd Source Inter Std** (1ppm): HG4-2-B			
Analysis For: Hg		DATA				
Pos.	SAMPLE NUMBER	Measured (µg/L)	Dilution Factor	Recoveries (ICV, CCV, LCS, MS)		Comments:
1	Cal. Blk.	0.000	~	~		
2	Std 0.2*	0.200	~	(0.1-50mL)		
3	Std 0.5*	0.500	~	(0.25-50mL)		
4	Std 1.0*	1.000	~	(0.5-50mL)		
5	Std 5.0*	5.000	~	(2.5-50mL)		
6	Std 10.0*	10.000	~	(5.0-50mL)		
7	ICV1**	4.993	~	100%		
8	ICB1	0.003	~			
9	LLICV1*	0.183	~	92%		
10	CCV1*	4.884	~	98%		
11	CCB1	0.002	~			
12	KQ2321765-03	0.018	~			
13	KQ2321765-04	5.218	~	104%		
14	K2313788-008	0.192	~			
15	KQ2321765-01	0.235	~			
16	KQ2321765-02	4.220	~	81%		
17	K2313788-008A	4.914	~	94%		
18	K2314165-008	0.282	~			
19	KQ2322112-03	0.009	~			
20	KQ2322112-04	4.903	~	98%		
21	T2302086-001	0.005	~			
22	CCV2	4.786	~	96%		
23	CCB2	0.000	~			
24	KQ2322112-01	0.009	~			
25	KQ2322112-02	4.297	~	86%		
26	T2302086-001A	4.810	~	96%		
27	T2302165-001	0.044	~			
28	T2302165-002	0.057	~			
29	T2302165-003	0.052	~			
30	KQ2322438-03	-0.007	~			
31	KQ2322438-04	4.921	~	98%		
32	K2313965-001	0.006	~			
Comments:						

CVAA Hg ANALYTICAL WORKSHEET

Page 2

Analysis For: Hg		DATA				
Pos.	SAMPLE NUMBER	Measured (µg/L)	Dilution Factor	Recoveries (ICV, CCV, LCS, MS)		Comments:
33	K2314174-001	0.013	~			
34	CCV3	4.788	~	96%		
35	CCB3	-0.001	~			
36	K2314174-002	0.012	~			
37	K2314197-004	0.011	~			
38	K2314301-004	0.014	~			
39	K2314301-007	0.011	~			
40	K2314301-008	0.014	~			
41	K2314408-001	0.013	~			
42	KQ2322438-01	0.013	~			
43	KQ2322438-02	4.932	~	99%		
44	K2314408-001A	4.382	~	88%		
45	K2314408-002	0.004	~			
46	CCV4	4.778	~	96%		
47	CCB4	-0.004	~			
48	KQ2321897-03	-0.005	~			★ CCV failure
49	KQ2321897-04	4.947	~			
50	K2313982-001	2.609	~			
51	KQ2321897-01	3.751	~			
52	KQ2321897-02	6.226	~			
53	K2313982-001A	6.403	~			
54	K2313982-001 2X	1.438	~			
55	K2313982-001A 2X	4.941	~			
56	KQ2321897-01 2X	2.049	~			
57	KQ2321897-01A 2X	5.521	~			
58	CCV5	3.947	~	79%		
59	CCV5	4.061	~	81%		
60	Cal. Blk.	0.000	~	~		
61	Std 0.2*	0.200	~	(0.1-50mL)		
62	Std 0.5*	0.500	~	(0.25-50mL)		
63	Std 1.0*	1.000	~	(0.5-50mL)		
64	Std 5.0*	5.000	~	(2.5-50mL)		
Comments: ★ JJ 12/29/23						
Soil/Tissue Spike Level:						
Method	Spike Level	MRL	LCS Limit	MS Limit	RPD	Post-Spike @ 5ppb
7470A Water	5.0 µg/L	0.2 µg/L	80-120%	80-120%	20%	+/- 20%
245.1 Water	5.0 µg/L	0.2 µg/L	85-115%	70-130%	20%	N/A
7470A TCLP	5.0 µg/L	1.0 µg/L	80-120%	75-125%	20%	+/- 20%
7471A Soil LCS	0.5mg/kg	0.02 mg/kg	80-120%	80-120%	20%	+/- 20%
7471B Tissue Dorm	0.316mg/kg	0.02 mg/kg	76-126%	80-120%	20%	MSA

[122823A HG4 7471] HG2.XLS

CVAA Hg ANALYTICAL WORKSHEET

Page 3

Analysis For: Hg			DATA			
Pos.	SAMPLE NUMBER	Measured (µg/L)	Dilution Factor	Recoveries (ICV, CCV, LCS, MS)		Comments:
65	Std 10.0*	10.000	~	(5.0-50mL)		
66	ICV2**	4.885	~	98%		
67	ICB2	-0.006	~			
68	LLICV2*	0.174	~	87%		
69	CCV1*	4.967	~	99%		
70	CCB1	-0.008	~			
71	KQ2321897-03	-0.005	~			
72	KQ2321897-04	5.346	~	107%		
73	K2313982-001 2X	1.656	2		Cx=	1.841
74	K2313982-001A 2X	6.154	2	90%		
75	KQ2321897-01 2X	2.356	2		Cx=	2.551
76	KQ2321897-01A 2X	6.974	2	92%		
77	KQ2321897-02 2X	4.389	2	105%	Cx=	4.662
78	KQ2321897-02A 2X	9.096	2	94%		
79	KQ2322277-03	-0.010	~			
80	KQ2322277-04	5.351	~	107%		
81	CCV2	4.878	~	98%		
82	CCB2	-0.007	~			
83	K2314278-001	0.593	~			
84	KQ2322277-01	0.372	~			
85	KQ2322277-02	3.845	~			
86	K2314278-001A	5.066	~	89%		
87	KQ2322277-01	0.453	~			
88	KQ2322277-02	6.030	~	111%		
89	KQ2322457-01	-0.010	~			
90	KQ2322457-02	5.289	~	106%		
91	K2314249-001	0.137	~			
92	K2314249-002	0.157	~			
93	CCV3	4.785	~	96%		
94	CCB3	-0.009	~			
95	K2314249-003	0.181	~			
96	K2314249-004	0.152	~			
Comments: ★ 12/28/27						
Soil/Tissue Spike Level:						
Method	Spike Level	MRL	LCS Limit	MS Limit	RPD	Post-Spike @ 5ppb
7470A Water	5.0 µg/L	0.2 µg/L	80-120%	80-120%	20%	+/- 20%
245.1 Water	5.0 µg/L	0.2 µg/L	85-115%	70-130%	20%	N/A
7470A TCLP	5.0 µg/L	1.0 µg/L	80-120%	75-125%	20%	+/- 20%
7471A Soil LCS	0.5mg/kg	0.02 mg/kg	80-120%	80-120%	20%	+/- 20%
7471B Tissue Dorm	0.316mg/kg	0.02 mg/kg	76-126%	80-120%	20%	MSA

[122823A HG4 7471] HG3.XLS

CVAA Hg ANALYTICAL WORKSHEET

Page 4

Analysis For: Hg			DATA			
Pos.	SAMPLE NUMBER	Measured (µg/L)	Dilution Factor	Recoveries (ICV, CCV, LCS, MS)		Comments:
97	K2314283-001	0.381	~			
98	KQ2322457-02	0.368	~			
99	KQ2322457-03	5.676	~	106%		
100	K2314283-001A	5.593	~	104%		
101	KQ2321888-03	-0.009	~			
102	KQ2321888-04	5.169	~	103%		
103	K2314089-001	1.118	~			
104	KQ2321888-01	0.841	~			
105	CCV4	4.642	~	93%		
106	CCB4	-0.044	~			
107	KQ2321888-02	4.970	~			
108	K2314089-001A	5.572	~	89%		
109	K2314183-001	0.074	~			
110	K2314202-008	0.261	~			
111	K2314221-001	1.999	~			
112	KQ2321888-02	5.693	~	93%		
113	CCV5	4.635	~	93%		
114	CCB5	0.004	~			
115						
116						
117						
118						
119						
120						
121						
122						
123						
124						
125						
126						
127						
128						
Comments: <i>AS 12/28/23</i>						
Soil/Tissue Spike Level:						
Method	Spike Level	MRL	LCS Limit	MS Limit	RPD	Post-Spike @ 5ppb
7470A Water	5.0 µg/L	0.2 µg/L	80-120%	80-120%	20%	+/- 20%
245.1 Water	5.0 µg/L	0.2 µg/L	85-115%	70-130%	20%	N/A
7470A TCLP	5.0 µg/L	1.0 µg/L	80-120%	75-125%	20%	+/- 20%
7471A Soil LCS	0.5mg/kg	0.02 mg/kg	80-120%	80-120%	20%	+/- 20%
7471B Tissue Dorm	0.316mg/kg	0.02 mg/kg	76-126%	80-120%	20%	MSA

[122823A HG4 7471] HG4.XLS

Report Generated By Teledyne Leeman QuickTrace

Analyst: ALKLS.NoUser

Worksheet file: C:\Users\Public\Documents\Teledyne CETAC\QuickTrace\Worksheets\122823A HG4.wszf

Creation Date: 12/28/2023 7:12:35 AM

Comment:

Results

Sample Name	Aliq. Vol.	Diln. Vol	DF	Type	Conc (ug/L)	µAbs	%RSD	Residual	Flags	Wt. (g)	Vol (ml)
				Spike Vol	% Recovery						

Calibration Blank				STD	0.000	311	1.59				
		1.0000			N/A						

Replicates	310.1		318.6		309.8	307.3					
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Standard #1 (0.2 ug/L)				STD	0.200	1636	1.43	-7.96%			
		1.0000			N/A						

Replicates	1637.0		1655.5		1647.7	1602.5					
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Standard #2 (0.5 ug/L)				STD	0.500	3971	2.69	1.75%			
		1.0000			N/A						

Replicates	4033.0		4060.4		3969.5	3821.7					
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Standard #3 (1 ug/L)				STD	1.000	7398	1.98	-1.49%			
		1.0000			N/A						

Replicates	7506.4		7473.8		7427.8	7183.5					
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Standard #4 (5 ug/L)				STD	5.000	35890	2.87	-1.09%			
		1.0000			N/A						

Replicates	35212.1		36754.5		36784.0	34809.0					
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Standard #5 (10 ug/L)				STD	10.000	72454	2.80	0.29%			
		1.0000			N/A						

Replicates	73288.9		74260.6		72697.9	69568.9					
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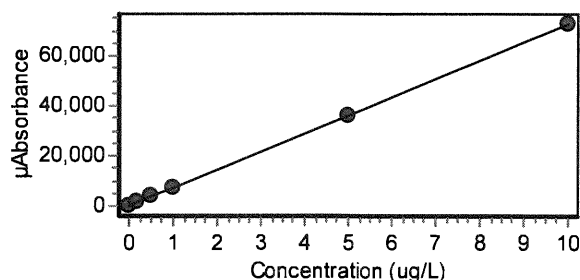
Calibration

Equation: Abs = 7193.754x + 311.464

R2: 0.99994 RSE: 4.83%

SEE: 272.6424

Flags:



ICV1				ICV	4.993	36228	2.66				
		1.0000			99.86						

Replicates	35905.5		37127.6		36852.4	35028.4					
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ICB1				ICB	0.003	331	25.09				
		1.0000			N/A						

Replicates	337.1		326.7		327.7	334.0					
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LLICV1				CRDL	0.183	1627	1.73				
		1.0000			91.44						

Replicates	1616.6		1607.1		1659.4	1625.4					
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Sample Name	Aliq. Vol.	Diln. Vol	DF	Type	Conc (ug/L)	µAbs	%RSD	Residual	Flags	Wt. (g)	Vol (ml)
				Spike Vol	% Recovery						
CCV1				CCV	4.884	35445	2.42				
			1.0000		97.68						
Replicates	35032.5		36157.4	36144.5	34447.5						
CCB1				CCB	0.002	326	90.97				
			1.0000		N/A						
Replicates	339.2		334.4	322.9	308.9						
KQ2321765-03				UNK	0.018	443	18.18				
			1.0000		N/A						
Replicates	417.9		432.1	473.5	450.1						
KQ2321765-04				UNK	5.218	37848	3.28				
			1.0000		N/A						
Replicates	36867.1		38949.1	38877.4	36696.6						
K2313788-008				UNK	0.192	1691	3.55				
			1.0000		N/A						
Replicates	1697.4		1743.4	1699.9	1625.2						
KQ2321765-01				UNK	0.235	2000	3.26				
			1.0000		N/A						
Replicates	2041.9		2030.5	2006.2	1920.2						
KQ2321765-02				UNK	4.220	30672	3.48				
			1.0000		N/A						
Replicates	31203.0		31464.6	30893.1	29126.3						
K2313788-008A				UNK	4.914	35665	3.52				
			1.0000		N/A						
Replicates	36275.7		36604.5	35937.7	33841.4						
K2314165-008				UNK	0.282	2339	4.27				
			1.0000		N/A						
Replicates	2363.4		2404.7	2375.7	2211.5						
KQ2322112-03				UNK	0.009	380	15.04				
			1.0000		N/A						
Replicates	385.5		365.9	389.0	377.9						
KQ2322112-04				UNK	4.903	35586	1.77				
			1.0000		N/A						
Replicates	35244.8		36055.8	36163.1	34879.0						
T2302086-001				UNK	0.005	344	55.97				
			1.0000		N/A						
Replicates	365.9		332.2	351.2	326.2						
CCV2				CCV	4.785	34737	1.77				
			1.0000		95.71						
Replicates	34692.2		35267.3	35091.1	33897.1						
CCB2				CCB	0.000	310	478.00				
			1.0000		N/A						
Replicates	316.8		298.5	313.8	310.0						

Sample Name	Aliq. Vol.	Diln. Vol	DF	Type Spike Vol	Conc (ug/L) % Recovery	µAbs	%RSD	Residual	Flags	Wt. (g)	Vol (ml)
KQ2322112-01				UNK	0.009	373	17.72				
		1.0000			N/A						
Replicates	357.0		380.3		378.6	377.9					
KQ2322112-02				UNK	4.297	31225	1.73				
		1.0000			N/A						
Replicates	31399.0		31635.3		31425.6	30440.0					
T2302086-001A				UNK	4.810	34912	2.11				
		1.0000			N/A						
Replicates	35236.4		35420.0		35160.0	33829.7					
T2302165-001				UNK	0.044	628	1.72				
		1.0000			N/A						
Replicates	633.9		626.0		621.1	629.6					
T2302165-002				UNK	0.057	720	3.11				
		1.0000			N/A						
Replicates	707.7		726.8		711.0	734.3					
T2302165-003				UNK	0.052	683	6.98				
		1.0000			N/A						
Replicates	698.4		706.0		678.3	648.0					
KQ2322438-03				UNK	-0.007	258	29.53				
		1.0000			N/A						
Replicates	274.5		260.5		262.0	237.0					
KQ2322438-04				UNK	4.921	35712	1.93				
		1.0000			N/A						
Replicates	35922.3		36192.4		36035.2	34698.4					
K2313965-001				UNK	0.006	356	27.76				
		1.0000			N/A						
Replicates	374.1		351.1		348.6	349.1					
K2314174-001				UNK	0.013	403	20.31				
		1.0000			N/A						
Replicates	385.8		428.8		395.5	400.0					
CCV3				CCV	4.788	34757	2.07				
		1.0000			95.77						
Replicates	34579.0		35343.7		35282.9	33824.2					
CCB3				CCB	-0.001	307	322.69				
		1.0000			N/A						
Replicates	302.4		322.1		314.6	288.7					
K2314174-002				UNK	0.012	398	17.17				
		1.0000			N/A						
Replicates	401.3		413.5		398.0	377.9					
K2314197-004				UNK	0.011	393	16.09				
		1.0000			N/A						
Replicates	385.3		412.1		387.1	385.8					

Sample Name	Aliq. Vol.	Diln. Vol	DF	Type Spike Vol	Conc (ug/L) % Recovery	µAbs	%RSD	Residual	Flags	Wt. (g)	Vol (ml)
K2314301-004			1.0000	UNK	0.014	411	9.19				
Replicates	422.0			404.1	402.6	414.6					
K2314301-007			1.0000	UNK	0.011	391	6.50				
Replicates	389.2			392.4	384.2	396.4					
K2314301-008			1.0000	UNK	0.014	411	12.52				
Replicates	427.2			405.4	412.7	398.0					
K2314408-001			1.0000	UNK	0.013	407	7.26				
Replicates	402.1			412.9	400.6	413.8					
KQ2322438-01			1.0000	UNK	0.013	402	7.09				
Replicates	400.7			402.2	411.0	395.5					
KQ2322438-02			1.0000	UNK	4.932	35789	2.06				
Replicates	35999.1			36324.6	36123.1	34711.1					
K2314408-001A			1.0000	UNK	4.382	31834	2.34				
Replicates	32109.0			32383.2	32099.0	30744.7					
K2314408-002			1.0000	UNK	0.004	342	51.24				
Replicates	338.1			365.1	336.3	329.3					
CCV4			1.0000	CCV	4.778	34682	2.03				
Replicates	34458.5			35232.3	35242.5	33793.8					
CCB4			1.0000	CCB	-0.004	283	36.44				
Replicates	269.6			293.4	280.9	288.4					
KQ2321897-03			1.0000	UNK	-0.005	273	53.09				
Replicates	290.2			247.2	288.5	264.9					
KQ2321897-04			1.0000	UNK	4.947	35895	2.13				
Replicates	36153.3			36424.4	36231.0	34772.5					
K2313982-001			1.0000	UNK	2.609	19079	3.24				
Replicates	19397.8			19494.0	19243.5	18181.5					
KQ2321897-01			1.0000	UNK	3.751	27298	3.68				
Replicates	27836.6			27966.6	27558.3	25831.8					

AD 12/28/23

Sample Name	Aliq. Vol.	Diln. Vol	DF	Type	Conc (ug/L)	µAbs	%RSD	Residual	Flags	Wt. (g)	Vol (ml)
				Spike Vol	% Recovery						
KQ2321897-02				UNK		6.226	45099	2.28			
		1.0000			N/A						
Replicates	45536.7		45778.2	45504.2	43578.5						
K2313982-001A				UNK		6.403	46374	2.91			
		1.0000			N/A						
Replicates	47048.8		47340.6	46704.8	44400.5						
K2313982-001 2X				UNK		1.438	10659	0.51			
		1.0000			N/A						
Replicates	10593.4		10697.3	10705.5	10639.2						
K2313982-001A 2X				UNK		4.941	35858	1.90			
		1.0000			N/A						
Replicates	36008.8		36333.7	36226.3	34863.5						
KQ2321897-01 2X				UNK		2.049	15050	2.06			
		1.0000			N/A						
Replicates	15128.7		15270.0	15199.0	14604.0						
KQ2321897-01A 2X				UNK		5.521	40025	2.00			
		1.0000			N/A						
Replicates	40263.6		40564.2	40422.5	38848.7						
CCV5				CCV		3.947	28704	1.49	Q		
		1.0000			78.94						
Replicates	28404.0		28961.3	29163.3	28288.1						
CCV5				CCV		4.061	29528	1.63	Q		
		1.0000			81.23						
Replicates	29153.8		29827.5	30037.0	29092.2						
Calibration Blank				STD		0.000	278	4.23			
		1.0000			N/A						
Replicates	271.2		291.1	266.1	285.6						
Standard #1 (0.2 ug/L)				STD		0.200	1321	1.63	-12.54%		
		1.0000			N/A						
Replicates	1329.5		1340.0	1325.7	1290.5						
Standard #2 (0.5 ug/L)				STD		0.500	3152	1.47	-3.60%		
		1.0000			N/A						
Replicates	3125.9		3193.9	3188.9	3100.3						
Standard #3 (1 ug/L)				STD		1.000	5971	1.26	-4.53%		
		1.0000			N/A						
Replicates	5924.0		6012.4	6054.2	5892.5						
Standard #4 (5 ug/L)				STD		5.000	30222	1.49	0.44%		
		1.0000			N/A						
Replicates	29874.0		30467.5	30732.2	29814.5						

NA 12/28/23

Sample Name	Aliq. Vol.	Diln. Vol.	DF	Type	Conc (ug/L)	μAbs	%RSD	Residual	Flags	Wt. (g)	Vol (ml)
				Spike Vol	% Recovery						

Standard #5 (10 ug/L)				STD	10.000	59872	1.55	-0.05%			
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1.0000

N/A

Replicates	59260.7	60482.0	60832.4	58911.5
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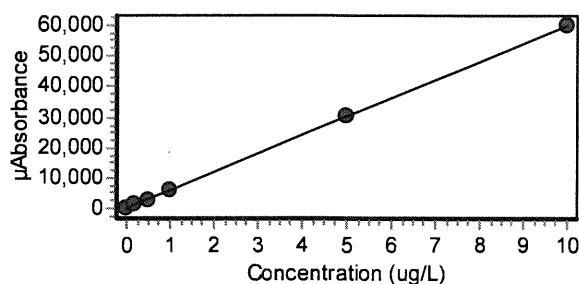
Calibration

Equation: Abs = 5962.366x + 278.494

R2: 0.99995 RSE: 7.98%

SEE: 204.2351

Flags:



ICV2				ICV	4.885	29404	1.58
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1.0000

97.70

Replicates	29026.4	29691.2	29901.2	28995.7
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ICB2				ICB	-0.006	241	18.02
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1.0000

N/A

Replicates	241.7	240.2	249.2	232.7
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LLICV2				CRDL	0.174	1316	2.85
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1.0000

87.00

Replicates	1301.1	1336.6	1344.3	1281.8
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CCV1				CCV	4.967	29891	1.64
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1.0000

99.33

Replicates	29587.1	30221.1	30382.6	29373.3
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CCB1				CCB	-0.008	228	12.43
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1.0000

N/A

Replicates	227.8	221.4	228.0	236.5
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KQ2321897-03				UNK	-0.005	247	42.44
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1.0000

N/A

Replicates	233.8	238.1	254.8	261.8
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KQ2321897-04				UNK	5.346	32151	1.51
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1.0000

N/A

Replicates	31981.9	32513.7	32561.9	31546.9
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K2313982-001 2X				UNK	1.656	10151	2.12
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1.0000

N/A

Replicates	10174.3	10295.9	10285.9	9848.5
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K2313982-001A 2X				UNK	6.154	36971	1.92
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1.0000

N/A

Replicates	37055.9	37477.5	37400.8	35950.1
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KQ2321897-01 2X				UNK	2.356	14326	2.23
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1.0000

N/A

Replicates	14391.5	14553.2	14491.7	13867.1
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Sample Name	Aliq. Vol.	Diln. Vol	DF	Type	Conc (ug/L)	µAbs	%RSD	Residual	Flags	Wt. (g)	Vol (ml)
				Spike Vol	% Recovery						

KQ2321897-01A 2X				UNK	6.974	41862	2.00				
		1.0000			N/A						

Replicates	42025.8	42463.0	42313.0	40644.2
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KQ2321897-02 2X				UNK	4.389	26448	2.15				
		1.0000			N/A						

Replicates	26567.1	26861.6	26740.3	25624.1
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KQ2321897-02A 2X				UNK	9.096	54511	2.05				
		1.0000			N/A						

Replicates	54703.6	55317.3	55131.1	52891.1
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KQ2322277-03				UNK	-0.010	219	13.76				
		1.0000			N/A						

Replicates	208.3	228.0	221.0	220.0
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KQ2322277-04				UNK	5.351	32183	1.45				
		1.0000			N/A						

Replicates	31890.8	32490.2	32655.9	31696.4
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CCV2				CCV	4.878	29360	1.54				
		1.0000			97.55						

Replicates	29083.5	29631.1	29836.4	28889.2
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CCB2				CCB	-0.007	237	47.46				
		1.0000			N/A						

Replicates	219.7	253.5	254.8	220.8
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K2314278-001				UNK	0.593	3815	2.50				
		1.0000			N/A						

Replicates	3910.2	3869.7	3743.9	3735.5
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KQ2322277-01				UNK	0.372	2494	1.58				
		1.0000			N/A						

Replicates	2540.4	2470.1	2464.4	2501.1
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KQ2322277-02				UNK	3.845	23203	2.10				
		1.0000			N/A						

Replicates	22539.9	23310.8	23693.3	23269.0
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K2314278-001A				UNK	5.066	30484	1.18				
		1.0000			N/A						

Replicates	30216.3	30781.2	30802.0	30137.9
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KQ2322277-01				UNK	0.453	2981	1.82				
		1.0000			N/A						

Replicates	2971.0	3027.1	3010.0	2916.3
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KQ2322277-02				UNK	6.030	36233	1.50				
		1.0000			N/A						

Replicates	36357.7	36554.5	36580.9	35437.9
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KQ2322457-01				UNK	-0.010	221	17.26				
		1.0000			N/A						

Replicates	229.8	212.5	212.5	229.5
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AD 12/28/23

Sample Name	Aliq. Vol.	Diln. Vol	DF	Type Spike Vol	Conc (ug/L) % Recovery	µAbs	%RSD	Residual	Flags	Wt. (g)	Vol (ml)
KQ2322457-02				UNK	5.289	31813	1.20				
			1.0000		N/A						
Replicates	31373.3		31895.4	32277.0	31705.2						
K2314249-001				UNK	0.137	1096	3.24				
			1.0000		N/A						
Replicates	1064.5		1095.6	1129.3	1093.8						
K2314249-002				UNK	0.157	1214	2.90				
			1.0000		N/A						
Replicates	1173.5		1225.5	1231.1	1226.3						
CCV3				CCV	4.785	28810	1.54				
			1.0000		95.71						
Replicates	28330.5		28978.3	29332.8	28598.4						
CCB3				CCB	-0.009	224	31.88				
			1.0000		N/A						
Replicates	232.7		204.5	243.7	217.0						
K2314249-003				UNK	0.181	1359	1.59				
			1.0000		N/A						
Replicates	1334.3		1358.7	1368.9	1372.5						
K2314249-004				UNK	0.152	1185	2.28				
			1.0000		N/A						
Replicates	1170.8		1195.7	1208.0	1164.2						
K2314283-001				UNK	0.381	2548	1.49				
			1.0000		N/A						
Replicates	2510.7		2577.6	2575.8	2527.9						
KQ2322457-02				UNK	0.368	2471	1.52				
			1.0000		N/A						
Replicates	2450.8		2490.1	2506.8	2435.3						
KQ2322457-03				UNK	5.676	34123	1.26				
			1.0000		N/A						
Replicates	33626.2		34269.8	34625.3	33971.8						
K2314283-001A				UNK	5.593	33623	1.42				
			1.0000		N/A						
Replicates	32994.7		33747.3	34135.8	33615.3						
KQ2321888-03				UNK	-0.009	227	22.36				
			1.0000		N/A						
Replicates	227.4		219.5	243.5	219.0						
KQ2321888-04				UNK	5.169	31099	1.18				
			1.0000		N/A						
Replicates	30644.8		31198.5	31518.2	31035.5						
K2314089-001				UNK	1.117	6942	1.02				
			1.0000		N/A						
Replicates	6894.0		6965.7	7027.2	6879.9						

Sample Name	Aliq. Vol.	Diln. Vol	DF	Type	Conc (ug/L)	μAbs	%RSD	Residual	Flags	Wt. (g)	Vol (ml)
				Spike Vol	% Recovery						

KQ2321888-01				UNK	0.841	5292	2.23				
--------------	--	--	--	-----	-------	------	------	--	--	--	--

1.0000

N/A

Replicates	5172.3	5231.1	5344.6	5420.8
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CCV4				CCV	4.642	27957	1.45				
------	--	--	--	-----	-------	-------	------	--	--	--	--

1.0000

92.84

Replicates	27458.7	28109.1	28404.8	27853.8
------------	---------	---------	---------	---------

CCB4				CCB	-0.044	16	4.03				
------	--	--	--	-----	--------	----	------	--	--	--	--

1.0000

N/A

Replicates	30.4	14.1	13.9	5.1
------------	------	------	------	-----

KQ2321888-02				UNK	4.970	29913	0.84				
--------------	--	--	--	-----	-------	-------	------	--	--	--	--

1.0000

N/A

Replicates	29784.3	30051.7	30181.0	29633.7
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NA 12/28/23

K2314089-001A				UNK	5.572	33503	1.16				
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1.0000

N/A

Replicates	33595.9	33734.8	33746.2	32933.2
------------	---------	---------	---------	---------

K2314183-001				UNK	0.074	718	5.07				
--------------	--	--	--	-----	-------	-----	------	--	--	--	--

1.0000

N/A

Replicates	709.5	749.6	717.3	697.4
------------	-------	-------	-------	-------

K2314202-008				UNK	0.261	1834	0.36				
--------------	--	--	--	-----	-------	------	------	--	--	--	--

1.0000

N/A

Replicates	1826.3	1835.4	1838.0	1838.2
------------	--------	--------	--------	--------

K2314221-001				UNK	1.999	12198	0.68				
--------------	--	--	--	-----	-------	-------	------	--	--	--	--

1.0000

N/A

Replicates	12084.9	12196.6	12244.6	12266.8
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KQ2321888-02				UNK	5.693	34224	0.81				
--------------	--	--	--	-----	-------	-------	------	--	--	--	--

1.0000

N/A

Replicates	33962.0	34312.6	34572.9	34050.1
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CCV5				CCV	4.635	27912	1.40				
------	--	--	--	-----	-------	-------	------	--	--	--	--

1.0000

92.69

Replicates	27471.2	28067.0	28361.2	27749.7
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CCB5				CCB	0.004	304	19.17				
------	--	--	--	-----	-------	-----	-------	--	--	--	--

1.0000

N/A

Replicates	306.4	307.1	296.9	306.9
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Preparation Information Benchsheet

Prep Run#: 431288

Team: Metals/SSOLADEY

Number of Copies to make: 2

Prep Workflow: HgDigs

Prep Method: Method

Status: Prepped

Prep Date/Time: 12/27/23 10:16

#	Lab Code	Client ID	B#	Method / Test	pH	Matrix	Amt. Ext.	Final Vol	Sample Description
1	KQ2321765-03	MB		7471B/Hg_RPTA		Solid	0.5g	50.00mL	
2	KQ2321765-04	LCS		7471B/Hg_RPTA		Solid	0.5g	50.00mL	
3	K2313788-008	Composite	.01	7471B/Hg_RPTA		Paperboard	0.540g	50.00mL	TRICKMAN K-BALANCE-55
4	KQ2321765-01	K2313788-008 DUP	.01	7471B/Hg_RPTA		Solid	0.567g	50.00mL	TRICKMAN K-BALANCE-55
5	KQ2321765-02	K2313788-008 MS	.01	7471B/Hg_RPTA		Solid	0.540g	50.00mL	TRICKMAN K-BALANCE-55
6	K2314165-008	Composite	.01	7471B/Hg_RPTA		Paperboard	0.567g	50.00mL	TRICKMAN K-BALANCE-55

Spiking Solutions

Name:	K-MET Hg Source Standard 1000 ug/L	Inventory ID	232562	Logbook Ref:	HG4-2-B	Expires On:	01/01/2024
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Preparation Materials

K-MET 100ml Centrifuge Tube	2211204 (231828)	K-MET HCl Hg	22L0562005 (2301114)	K-MET HNO3 Hg	23C1462002 (232296)
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Preparation Steps

Step: Weigh	Step: Digestion
Started: 12/27/23 10:16	Started: 12/27/23 10:16
Finished: 12/27/23 10:46	Finished: 12/27/23 10:46
By: SSOLADEY	By: SSOLADEY
Comments	Comments

Preparation Equipment

K-BlockDigester-15	Digestion	IR Thermometer ID: IR03	K-BlockDigester-15	Digestion	Temperature	95 deg C
K-BlockDigester-15	Digestion	Temperature Check Location	HG-39591307	Digestion		
Hg-43188965	Digestion		K-U72662	Digestion		

Comments: Cal Std/CCV Source: HG4-2-T

Reviewed By: W Date: 12.28.23

Preparation Information Benchsheet

Prep Run#: 431288
Team: Metals/TRICKMAN

Number of Copies to make: 2

Prep Workflow: HgDigs
Prep Method: Method

Status: Draft
Prep Date/Time: 12/13/23 07:46 AM

#	Lab Code	Client ID	B#	Method /Test	Matrix	Amt. Ext.	pH	Int. Vol	Final Vol	Surr Amt	Spike Amt
1	KQ2321765-03	MB		7471B / Hg_RPTA	Solid						
2	KQ2321765-04	LCS		7471B / Hg_RPTA	Solid						
3	K2313788-008	Composite	.01	7471B / Hg_RPTA	Paperboard						
4	KQ2321765-01	K2313788-008 DUP	.01	7471B / Hg_RPTA	Solid						
5	KQ2321765-02	K2313788-008 MS	.01	7471B / Hg_RPTA	Solid						
6	K2314165-008	Composite	.01	7471B / Hg_RPTA	Paperboard						

Comments: 464-2-5 R157220595 10.15 - 10.46

Surrogate ID: _____ Spike ID: _____

Witnessed By: _____

Analyst: _____ Assisted By: _____

Pre-Prep Information Benchsheet

Prep Run #: 431288

Container Lot No: 2111109

Prep Due Date: Jan-04-2024

#	Lab Code	Bottle	Test Name	Weight	Sample Comments	Test Comments
1	K2313788-008	.01	Hg_RPTA : 7471B/	0.540g	.0172 .184	TRICKMAN K-BALANCE-55
2	K2313788-008 DUP	.01	Hg_RPTA : 7471B/	0.567g	.0237 .0214	TRICKMAN K-BALANCE-55
3	K2313788-008 MS	.01	Hg_RPTA : 7471B/	0.540g	.404 81X	TRICKMAN K-BALANCE-55

RS .471 9-11

MS 443
MS 479

Relinquished By: <i>HE</i>	Date/Time: 12/27/23	Received By: <i>AA</i>	Date/Time: 12/27/23
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Pre-Prep Information Benchsheet

Prep Run #: 431750

Container Lot No: 2111109

Prep Due Date: Jan-18-2024

#	Lab Code	Bottle	Test Name	Weight	Sample Comments	Test Comments
1	K2314165-008	.01	Hg_RPTA : 7471B/	0.567g		TRICKMAN K-BALANCE-55
2	K2314165-008 DUP KQ2322278-01	.01	Hg_RPTA : 7471B/	0.520g		TRICKMAN K-BALANCE-55
3	K2314165-008 MS KQ2322278-02	.01	Hg_RPTA : 7471B/	0.593g		TRICKMAN K-BALANCE-55

Relinquished By: <i>tu</i>	Date/Time: <i>8-25-23</i>	Received By: <i>A</i>	Date/Time: <i>12/27/23 9:00</i>
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Preparation Information Benchsheet

Prep Run#: 431589

Team: Metals/SSOLADEY

Number of Copies to make: 2

Prep WorkFlow: HgDigs

Prep Method: Method

Status: Prepped

Prep Date/Time: 12/27/23 10:16

#	Lab Code	Client ID	B#	Method /Test	pH	Matrix	Amt. Ext.	Final Vol	Sample Description
1	KQ2322112-03	MB		7471B/Hg		Solid	0.5g	50.00mL	
2	KQ2322112-04	LCS		7471B/Hg		Solid	0.5g	50.00mL	
3	T2302086-001	Klin 1	.02	7471B/Hg		Solid Fuel	0.524g	50.00mL	PPRICE k-balance-49
4	KQ2322112-01	T2302086-001 DUP	.01	7471B/Hg		Solid	0.565g	50.00mL	PPRICE k-balance-49
5	KQ2322112-02	T2302086-001 MS	.01	7471B/Hg		Solid	0.576g	50.00mL	PPRICE k-balance-49
6	T2302165-001	20231205-bark composite 1	.04	7471B/Hg		Bark	0.549g	50.00mL	ZBIB1 k-balance-50
7	T2302165-002	20231206-bark composite 2	.04	7471B/Hg		Bark	0.542g	50.00mL	ZBIB1 k-balance-50
8	T2302165-003	20231207-bark composite 3	.04	7471B/Hg		Bark	0.508g	50.00mL	ZBIB1 k-balance-50

Spiking Solutions

Name:	K-MET Hg Source Standard	1000 ug/L	Inventory ID	232562	Logbook Ref:	HG4-2-B	Expires On:	01/01/2024
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KQ2322112-02 0.25mL KQ2322112-04 0.25mL

Preparation Materials

K-MET 100mL Centrifuge Tube	2211204 (231828)	K-MET HCl Hg	22L0562005 (230114)	K-MET HNO3 Hg	23C1462002 (232296)
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Preparation Steps

Step:	Weigh	Step:	Digestion
Started:	12/27/23 10:16	Started:	12/27/23 10:16
Finished:	12/27/23 10:46	Finished:	12/27/23 10:46
By:	SSOLADEY	By:	SSOLADEY
Comments	Comments		

Preparation Equipment

K-BlockDigerster-15	Digestion	IR Thermometer ID: IR03		K-BlockDigerster-15	Digestion	Temperature	95 deg C
K-BlockDigerster-15	Digestion	Temperature Check Location	20	Hg-43188965	Digestion		
HG-39591307	Digestion			K-U72662	Digestion		

Comments: Cal Std/CCV Source: HG4-2-T

Reviewed By: W Date: 12.28.23

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Preparation Information Benchsheet

Prep Run#: 431589

Team: Metals/PPRICE

Number of Copies to make: 2

Prep Workflow: HgDigs

Prep Method: Method

Status: Draft

Prep Date/Time: 12/19/23 10:44 AM

#	Lab Code	Client ID	B#	✓	Method / Test	Matrix	Amt. Ext.	pH	Int. Vol	Final Vol	Surr Amt	Spike Amt
1	KQ2322112-03	MB			7471B / Hg	Solid						
2	KQ2322112-04	LCS			7471B / Hg	Solid						
3	T2302086-001	Klin 1			7471B / Hg	Solid Fuel						
4	KQ2322112-01	T2302086-001 DUP	.02		7471B / Hg	Solid						
5	KQ2322112-02	T2302086-001 MS	.01		7471B / Hg	Solid						
6	T2302165-001	20231205-bark composite 1	.04		7471B / Hg	Bark						
7	T2302165-002	20231206-bark composite 2	.04		7471B / Hg	Bark						
8	T2302165-003	20231207-bark composite 3	.04		7471B / Hg	Bark						

Comments:

HG-4-2-T

BIST20T95

10:16-10:46

Surrogate ID:

Spike ID:

Witnessed By:

Analyst:

Assisted By:

Pre-Prep Information Benchsheet

Prep Run #: 431589

NOTS.

Container Lot No: 2304355

Prep Due Date: Dec-19-2023

#	Lab Code	Bottle	Test Name	Weight	Sample Comments	Test Comments
1	T2302086-001	.01	Hg : 7471B/	0.524g	C	PPRICE k-balance-49
2	T2302086-001 DUP KQ2322112-01	.01	Hg : 7471B/	0.565g	Ø	PPRICE k-balance-49
3	T2302086-001 MS KQ2322112-02	.01	Hg : 7471B/	0.576g	, 373	PPRICE k-balance-49

PS .459

PS .471

MS .434

Relinquished By: FDP	Date/Time: 12/19/23	Received By: AL	Date/Time: 12/19/23 900
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Preparation Information Benchsheet

Prep Run#: 431863

Team: Metals/SSOLADEY

Number of Copies to make: 5

Prep Workflow: HgDigS

Prep Method: Method

Status: Prepped

Prep Date/Time: 12/27/23 10:16

#	Lab Code	Client ID	E#	Method /Test	pH	Matrix	Amt. Ext.	Final Vol	Sample Description
1	KQ2322438-03	MB		7471B/Hg		Solid	0.5g	50.00mL	
2	KQ2322438-04	LCS		7471B/Hg		Solid	0.5g	50.00mL	
3	K2313965-001	CDP-C2	.05	7471B/Hg		Sediment	0.536g	50.00mL	ZB1B1 K-balance-50
4	K2314174-001	CDP-C3	.02	7471B/Hg		Sediment	0.585g	50.00mL	ZB1B1 K-balance-50
5	K2314174-002	CZ-C3	.02	7471B/Hg		Sediment	0.580g	50.00mL	ZB1B1 K-balance-50
6	K2314197-004	CDP-C4	.01	7471B/Hg		Sediment	0.553g	50.00mL	ZB1B1 K-balance-50
7	K2314301-004	CDP-C5	.07	7471B/Hg		Sediment	0.578g	50.00mL	TRICKMAN K-BALANCE-55
8	K2314301-007	CDP-B3	.07	7471B/Hg		Sediment	0.579g	50.00mL	TRICKMAN K-BALANCE-55
9	K2314301-008	CZ-B3	.07	7471B/Hg		Sediment	0.590g	50.00mL	TRICKMAN K-BALANCE-55
10	K2314408-001	CDP-B1	.01	7471B/Hg		Sediment	0.522g	50.00mL	TRICKMAN K-BALANCE-55
11	KQ2322438-01	K2314408-001 DUP	.01	7471B/Hg		Solid	0.528g	50.00mL	TRICKMAN K-BALANCE-55
12	KQ2322438-02	K2314408-001 MS	.01	7471B/Hg		Solid	0.522g	50.00mL	TRICKMAN K-BALANCE-55
13	K2314408-002	CZ-B1	.01	7471B/Hg		Sediment	0.596g	50.00mL	TRICKMAN K-BALANCE-55

Spiking Solutions

Name: K-MET Hg Source Standard 1000 ug/L

Inventory ID 232562

Logbook Ref: HG4-2-B

Expires On: 01/01/2024

KQ2322438-02 0.25mL KQ2322438-04 0.25mL

Preparation Materials

K-MET 100ml Centrifuge Tube 2211204 (231828) K-MET HCl Hg 22L0562005 (230114) K-MET HNO3 Hg 23C1462002 (232296)

Preparation Steps

Step: Weigh

Started: 12/27/23 10:16

Finished: 12/27/23 10:46

By: SSOLADEY

Comments

Step: Digestion

Started: 12/27/23 10:16

Finished: 12/27/23 10:46

By: SSOLADEY

Comments

Preparation Equipment

K-Block-Digester-14

Digestion

IR Thermometer ID: IR03

K-Block-Digester-14

Digestion

Temperature Check Location

K-Block-Digester-15

Digestion

Temperature

Hg-43188965

Digestion

95 deg C

K-U72662

Digestion

HG-39591307

K-Block-Digester-14

Digestion

Temperature

K-Block-Digester-15

Digestion

IR Thermometer ID: IR03

K-Block-Digester-15

Digestion

Temperature Check Location

HG-39591307

Digestion

20

Preparation Information Benchsheet

Prep Run#: 431863
Team: Metals/SSOLADEY

Prep WorkFlow: HgDigs
Prep Method: Method

Status: Prepped
Prep Date/Time: 12/27/23 10:16

Comments: Cal Std/CCV Source: HG4-2-T

Reviewed By: W Date: 12.28.23

Preparation Information Benchsheet

Prep Run#: 431863

Team: Metals/TRICKMAN

Number of Copies to make: 5

Prep WorkFlow: HgDigs

Prep Method: Method

Status: Draft

Prep Date/Time: 12/26/23 14:10 PM

#	Lab Code	Client ID	B#	✓	Method /Test	Matrix	Amt. Ext.	pH	Int. Vol	Final Vol	Surr Amt	Spike Amt
1	KQ2322438-03	MB			7471B /Hg	Solid						
2	KQ2322438-04	LCS			7471B /Hg	Solid						
3	K2313965-001	CDP-C2	.05		7471B /Hg	Sediment						
4	K2314174-001	CDP-C3	.02		7471B /Hg	Sediment						
5	K2314174-002	CZ-C3	.02		7471B /Hg	Sediment						
6	K2314197-004	CDP-C4	.01		7471B /Hg	Sediment						
7	K2314301-004	CDP-C5	.07		7471B /Hg	Sediment						
8	K2314301-007	CDP-B3	.07		7471B /Hg	Sediment						
9	K2314301-008	CZ-B3	.07		7471B /Hg	Sediment						
10	K2314408-001	CDP-B1	.01		7471B /Hg	Sediment						
11	KQ2322438-01	K2314408-001 DUP	.01		7471B /Hg	Solid						
12	KQ2322438-02	K2314408-001 MS	.01		7471B /Hg	Solid						
13	K2314408-002	CZ-B1	.01		7471B /Hg	Sediment						

ca1 B1572207 95

Comments: Hg 4-2-5 B1572207 95 10:16-10:46

Surrogate ID: Spike ID:

Witnessed By:

Analyst: Assisted By:

Pre-Prep Information Benchsheet

Prep Run #: 431320

Container Lot No: 2108282

Prep Due Date: Dec-26-2023

#	Lab Code	Bottle	Test Name	Weight	Sample Comments	Test Comments
1	K2313965-001	.05	Hg : 7471B/	0.536g		ZBIBI k-balance-50
2	K2313965-001 DUP KQ2321807-01	.05	Hg : 7471B/	0.567g		ZBIBI k-balance-50
3	K2313965-001 MS KQ2321807-02	.05	Hg : 7471B/	0.561g		ZBIBI k-balance-50

Relinquished By:	12/13/23	14:24pm	Received By:	12/27/23	900
	2213				

Pre-Prep Information Benchsheet

Prep Run #: 431626

Container Lot No: 2304355

Prep Due Date: Dec-29-2023

#	Lab Code	Bottle	Test Name	Weight	Sample Comments	Test Comments
1	K2314197-004	.01	Hg : 7471B/	0.553g		ZBIBI k-balance-50
2	K2314197-004 DUP KQ2322163-01	.01	Hg : 7471B/	0.502g		ZBIBI k-balance-50
3	K2314197-004 MS KQ2322163-02	.01	Hg : 7471B/	0.549g		ZBIBI k-balance-50
4	K2314202-008	.01	Hg : 7471B/ move to 431395	0.538g		ZBIBI k-balance-50

Relinquished By:	228	Date/Time:	12/19/23	Received By:	15-33pm	Date/Time:	12/27/23 900
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Pre-Prep Information Benchsheet

Prep Run #: 431827

Container Lot No: 2111109

Prep Due Date: Jan-04-2024

#	Lab Code	Bottle	Test Name	Weight	Sample Comments	Test Comments
1	K2314301-004	.07	Hg : 7471B/	0.578g		TRICKMAN K-BALANCE-55
2	K2314301-004 DUP KQ2322399-01	.07	Hg : 7471B/	0.593g		TRICKMAN K-BALANCE-55
3	K2314301-004 MS KQ2322399-02	.07	Hg : 7471B/	0.509g		TRICKMAN K-BALANCE-55
4	K2314301-007	.07	Hg : 7471B/	0.579g		TRICKMAN K-BALANCE-55
5	K2314301-008	.07	Hg : 7471B/	0.590g		TRICKMAN K-BALANCE-55

Relinquished By: 	Date/Time: 12-26-23 08:40	Received By: 	Date/Time: 12/27/23 9:00
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Prep Run #: 431863

Container Lot No: 2111109

Prep Due Date: Jan-05-2024

Pre-Prep Information Benchsheet

#	Lab Code	Bottle	Test Name	Weight	Sample Comments	Test Comments
1	K2314408-001	.01	Hg : 7471B/	0.522g		TRICKMAN K-BALANCE-55
2	K2314408-001 DUP KQ2322438-01	.01	Hg : 7471B/	0.528g		TRICKMAN K-BALANCE-55
3	K2314408-001 MS KQ2322438-02	.01	Hg : 7471B/	0.522g	.472	TRICKMAN K-BALANCE-55
4	K2314408-002	.01	Hg : 7471B/	0.596g		TRICKMAN K-BALANCE-55

PS .472 88

PS .479
MSD

Relinquished By:

Date/Time:

Received By:

Date/Time:

Preparation Information Benchsheet

Prep Run#: 431398

Team: Metals/SSOLADEY

Number of Copies to make: 1

Prep Workflow: HgDigs

Prep Method: Method

Status: Prepped

Prep Date/Time: 12/27/23 10:16

#	Lab Code	Client ID	B#	Method / Test	pH	Matrix	Amt. Ext.	Final Vol	Sample Description
1	KQ2321897-03	MB		7471B/Hg		Solid	0.5g	50.00mL	
2	KQ2321897-04	LCS		7471B/Hg		Solid	0.5g	50.00mL	
3	K2313982-001	FCCMP-1204-1208	.04	7471B/Hg		Misc. Solid	0.612g	50.00mL	PPRICE k-balance-49
4	KQ2321897-01	K2313982-001 DUP	.04	7471B/Hg		Solid	0.695g	50.00mL	PPRICE k-balance-49
5	KQ2321897-02	K2313982-001 MS	.04	7471B/Hg		Solid	0.681g	50.00mL	PPRICE k-balance-49

Spiking Solutions

Name:	K-MET Hg Source Standard 1000 ug/L	Inventory ID	232562	Logbook Ref:	HG4-2-B	Expires On:	01/01/2024
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KQ2321897-02 0.25mL KQ2321897-04 0.25mL

Preparation Materials

K-MET 100ml Centrifuge Tube 2211204 (231828) K-MET HCl Hg 2210562005 (230114) K-MET HNO3 Hg 23C1462002 (232296)

Preparation Steps

Step: Weigh

Started: 12/27/23 10:16

Finished: 12/27/23 10:46

By: SSOLADEY

Comments

Step: Digestion

Started: 12/27/23 10:16

Finished: 12/27/23 10:46

By: SSOLADEY

Comments

Preparation Equipment

K-BlockDigester-15

Digestion

IR Thermometer ID: IK03

95 deg C

K-BlockDigester-15

Digestion

Temperature Check Location

20

HG-39591307

Digestion

K-BlockDigester-15

Digestion

Hg-43188965

Digestion

K-U72662

Digestion

Temperature

Comments: Cal Std/CCV Source: HG4-2-T

Reviewed By: W Date: 12.28.23

Preparation Information Benchsheet

Prep Run#: 431398

Team: Metals/PPRICE

Number of Copies to make: 1

Prep Workflow: HgDigs

Prep Method: Method

Status: Draft

Prep Date/Time: 12/14/23 15:28 PM

#	Lab Code	Client ID	B#	✓	Method / Test	Matrix	Amt. Ext.	pH	Int. Vol	Final Vol	Surr Amt	Spike Amt
1	KQ2321897-03	MB			7471B / Hg	Solid						
2	KQ2321897-04	LCS			7471B / Hg	Solid						
3	K2313982-001	FCCMP-1204-1208	.04		7471B / Hg	Misc. Solid						
4	KQ2321897-01	K2313982-001 DUP	.04		7471B / Hg	Solid						
5	KQ2321897-02	K2313982-001 MS	.04		7471B / Hg	Solid						

RR due to car failure

MSA 2
i .8998
D .9238
S .9414
Gr 2x
1.841
2.55
4.66
mg kg
1.158
1.409
2.634
1.284
20%
105%

Comments:

HC-4-2-5 R15720T95 1016-10:46

Surrogate ID:

Spike ID:

Witnessed By:

Analyst:

Assisted By:

Pre-Prep Information Benchsheet

Prep Run #: 431398

Container Lot No: 2304355

Prep Due Date: Dec-22-2023

#	Lab Code	Bottle	Test Name	Weight	Sample Comments	Test Comments
1	K2313982-001	.04	Hg: 7471B/	0.612g	.218 .820	PPRICE k-balance-49 .928
2	K2313982-001 DUP KQ2321897-01	.04	Hg: 7471B/	0.695g	.270 1.036	PPRICE k-balance-49 .241 28X
3	KQ2321897-02	.04	Hg: 7471B/	0.681g	1.759 26X	PPRICE k-balance-49

2.01 76.1.

MSA

MS 1.41
PS 1.57

MSA
1 .7588
Cx 3.438
mg/kg 1.08

Relinquished By: <i>PP</i>	Date/Time: <i>12/14/23</i>	Received By: <i>AL</i>	Date/Time: <i>12/27/23 9:00</i>
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Preparation Information Benchsheet

Prep Run#: 431741

Team: Metals/SSOLADEY

Number of Copies to make: 1

Prep Workflow: HgDigs

Prep Method: Method

Status: Prepped

Prep Date/Time: 12/27/23 10:16

#	Lab Code	Client ID	B#	Method /Test	pH	Matrix	Amt. Ext.	Final Vol	Sample Description
1	KQ2322277-03	MB		7471 A/Hg		Solid	0.5g	50.00mL	
2	KQ2322277-04	LCS		7471 A/Hg		Solid	0.5g	50.00mL	
3	K2314278-001	SWWTP-VNA-SLUDGE		7471 A/Hg		Soil	0.788g	50.00mL	PPRICE k-balance-49
4	KQ2322277-01	K2314278-001 DUP	.01	7471 A/Hg		Solid	0.612g	50.00mL	PPRICE k-balance-49
5	KQ2322277-02	K2314278-001 MS	.01	7471 A/Hg		Solid	0.658g	50.00mL	PPRICE k-balance-49

Spiking Solutions

Name:	K-MET Hg Source Standard	1000 ug/L	Inventory ID	232562	Logbook Ref:	HG4-2-B	Expires On:	01/01/2024
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KQ2322277-02 0.25mL KQ2322277-04 0.25mL

Preparation Materials

K-MET 100ml Centrifuge Tube 2211204 (231828) K-MET HCl Hg 221.0562005 (230114) K-MET HNO3 Hg 23C1462002 (232296)

Preparation Steps

Step: Weigh Step: Digestion
Started: 12/27/23 10:16 Started: 12/27/23 10:16
Finished: 12/27/23 10:46 Finished: 12/27/23 10:46
By: SSOLADEY By: SSOLADEY
Comments Comments

Preparation Equipment

K-BlockDigester-15	Digestion	IR Thermometer ID: IR03		K-BlockDigester-15	Digestion	Temperature	95 deg C
K-BlockDigester-15	Digestion	Temperature Check Location	20	HG-39591307	Digestion		
K-U72662	Digestion			Hg-43188965	Digestion		

Comments: Cal Std/CCV Source: HG4-2-T

Reviewed By: W Date: 11.18.23

Preparation Information Benchsheet

Prep Run#: 431741

Team: Metals/PPRICE

Number of Copies to make: 1

Prep Workflow: HgDigs

Prep Method: Method

Status: Draft

Prep Date/Time: 12/21/23 10:54 AM

#	Lab Code	Client ID	B#	✓	Method / Test	Matrix	Amt. Ext.	pH	Int. Vol	Final Vol	Surr Amt	Spike Amt
1	KQ2322277-03	MB			7471A / Hg	Solid						
2	KQ2322277-04	LCS			7471A / Hg	Solid						
3	K2314278-001	SWWTP-VNA-SLUDGE			7471A / Hg	Soil						
4	KQ2322277-01	K2314278-001 DUP			7471A / Hg	Solid						
5	KQ2322277-02	K2314278-001 MS			7471A / Hg	Solid						

Comments:

46-4-25

BS157220795

10.16-10.46

Surrogate ID:

Spike ID:

Witnessed By:

Analyst:

Assisted By:

Pre-Prep Information Benchsheet

Prep Run #: 431741

15.5

Container Lot No: 2304355

Prep Due Date:

#	Lab Code	Bottle	Test Name	Weight	Sample Comments	Test Comments
1	K2314278-001	.01	Hg : 7471A/	0.788g	.243	PPRICE k-balance-49
2	K2314278-001 DUP K02322277-01	.01	Hg : 7471A/	0.612g	.196	PPRICE k-balance-49
3	K2314278-001 MS K02322277-02	.01	Hg : 7471A/	0.658g	1.98	PPRICE k-balance-49

2.95

PS 2.076

PS 2.049
MS 2.451

Relinquished By: <i>[Signature]</i>	Date/Time: 12/21/23	Received By: <i>[Signature]</i>	Date/Time: 12/27/23 900
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Preparation Information Benchsheet

Prep Run#: 431884

Team: Metals/SSOLADEY

Number of Copies to make: 2

Prep Workflow: HgDigs

Prep Method: Method

Status: Prepped

Prep Date/Time: 12/27/23 10:16

#	Lab Code	Client ID	B#	Method / Test	pH	Matrix	Amt. Ext.	Final Vol	Sample Description
1	KQ2322457-01	MB		7471B/Hg		Solid	0.5g	50.00mL	
2	KQ2322457-02	LCS		7471B/Hg		Solid	0.5g	50.00mL	
3	K2314249-001	VAN-C-179	.01	7471B/Hg		Misc. Solid	0.536g	50.00mL	ZB1B1 k-balance-50
4	K2314249-002	VAN-C-180	.01	7471B/Hg		Misc. Solid	0.536g	50.00mL	ZB1B1 k-balance-50
5	K2314249-003	VAN-C-191	.01	7471B/Hg		Misc. Solid	0.551g	50.00mL	ZB1B1 k-balance-50
6	K2314249-004	Soil Pile Composite Sample	.01	7471B/Hg		Misc. Solid	0.548g	50.00mL	ZB1B1 k-balance-50
7	K2314283-001	TA-01-S	.01	7471B/Hg		Soil	0.6200g	50.00mL	ZB1B1 k-balance-50
8	KQ2322457-03	K2314283-001 DUP	.01	7471B/Hg		Solid	0.6300g	50.00mL	
9	KQ2322457-04	K2314283-001 MS	.01	7471B/Hg		Solid	0.6180g	50.00mL	

Spiking Solutions

Name:	K-MET Hg Source Standard 1000 ug/L	Inventory ID	232562	Logbook Ref:	HG4-2-B	Expires On:	01/01/2024
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Preparation Materials

KQ2322457-02	0.25mL	KQ2322457-04	0.25mL
K-MET 100ml Centrifuge Tube	2211204 (231828)	K-MET HCl Hg	22L0562005 (2301114)
		K-MET HNO3 Hg	23C1462002 (232296)

Preparation Steps

Step: Weigh	Step: Digestion
Started: 12/27/23 10:16	Started: 12/27/23 10:16
Finished: 12/27/23 10:46	Finished: 12/27/23 10:46
By: SSOLADEY	By: SSOLADEY
Comments	Comments

Preparation Equipment

K-Block-Digester-14	Digestion	IR Thermometer ID: IR03	K-Block-Digester-14	Digestion	Temperature	95 deg C
K-Block-Digester-14	Digestion	Temperature Check Location	K-Block-Digester-15	Digestion	IR Thermometer ID: IR03	
K-Block-Digester-15	Digestion	Temperature	K-Block-Digester-15	Digestion	Temperature Check Location	20
K-Balance-37	Weigh	Date Checked	HG-39591307	Digestion		
K-U72662	Digestion		Hg-43188965	Digestion		

Comments: Cal Std/CCV Source: HG4-2-T

Reviewed By: W Date: 12.28.23

Preparation Information Benchsheet

Prep Run#: 431884

Team: Metals/SSOLADEY

Number of Copies to make: 2

Prep Workflow: HgDigs

Prep Method: Method

Status: Draft

Prep Date/Time: 12/27/23 06:28 AM

#	Lab Code	Client ID	B#	✓	Method / Test	Matrix	Amt. Ext.	pH	Int. Vol	Final Vol	Surr Amt	Spike Amt
1	KQ2322457-01	MB			7471B / Hg	Solid						
2	KQ2322457-02	LCS <i>106</i>			7471B / Hg	Solid						
3	K2314249-001	VAN-C-179	.01		7471B / Hg	Misc. Solid						
4	K2314249-002	VAN-C-180	.01		7471B / Hg	Misc. Solid						
5	K2314249-003	VAN-C-191	.01		7471B / Hg	Misc. Solid						
6	K2314249-004	Soil Pile Composite Sample	.01		7471B / Hg	Misc. Solid						
7	K2314283-001	TA-01-S	.01		7471B / Hg	Soil						
8	KQ2322457-03	K2314283-001 DUP	.01		7471B / Hg	Solid	<i>.630 g</i>			<i>.0292</i>		<i>.0292</i>
9	KQ2322457-04	K2314283-001 MS	.01		7471B / Hg	Solid	<i>.611 g</i>			<i>.457</i>		<i>.405</i>

K-Bal-37 12/27/23 AB

B5720T95

RS

Wu KANON
12-4-2-46

Comments: *11-4-2-5*

B14720T95

10:16-10:46

Surrogate ID:

Spike ID:

Witnessed By:

Analyst:

Assisted By:

Pre-Prep Information Benchsheet

Prep Run #: 431763

Container Lot No: 2304355

Prep Due Date: Dec-21-2023

#	Lab Code	Bottle	Test Name	Weight	Sample Comments	Test Comments
1	K2314249-001	.01	Hg : 7471B/	0.536g		ZBIBI k-balance-50
2	K2314249-001 DUP KQ2322293-01	.01	Hg : 7471B/	0.538g		ZBIBI k-balance-50
3	K2314249-001 MS KQ2322293-02	.01	Hg : 7471B/	0.538g		ZBIBI k-balance-50
4	K2314249-002	.01	Hg : 7471B/	0.536g		ZBIBI k-balance-50
5	K2314249-003	.01	Hg : 7471B/	0.551g		ZBIBI k-balance-50
6	K2314249-004	.01	Hg : 7471B/	0.548g		ZBIBI k-balance-50
7	K2314283-001	.01	Hg : 7471B/ <i>Mediscac Tier IV</i>	0.554g		ZBIBI k-balance-50
8	T2302165-001	.04	Hg : 7471B/ <i>WAC to</i>	0.549g		ZBIBI k-balance-50
9	T2302165-002	.04	Hg : 7471B/ <i>1431589</i>	0.542g		ZBIBI k-balance-50
10	T2302165-003	.04	Hg : 7471B/	0.508g		ZBIBI k-balance-50

Relinquished By:	<i>ZZ</i>	Date/Time:	<i>12/21/23 12:38 PM</i>	Received By:	<i>[Signature]</i>	Date/Time:	<i>12/27/23 900</i>
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Preparation Information Benchsheet

Prep Run#: 431395

Team: Metals/SSOLADEY

Number of Copies to make: 4

Prep WorkFlow: HgDigs

Prep Method: Method

Status: Prepped

Prep Date/Time: 12/27/23 10:16

#	Lab Code	Client ID	B#	Method /Test	pH	Matrix	Amt. Ext.	Final Vol	Sample Description
1	KQ2321888-03	MB		7471B/Hg		Solid	0.5g	50.00mL	
2	KQ2321888-04	LCS		7471B/Hg		Solid	0.5g	50.00mL	
3	K2314089-001	Event 6	.01	7471B/Hg		Biosolids Solids	0.572g	50.00mL	ZBIB1 k-balance-50
4	KQ2321888-01	K2314089-001 DUP	.01	7471B/Hg		Solid	0.500g	50.00mL	ZBIB1 k-balance-50
5	KQ2321888-02	K2314089-001 MS	.01	7471B/Hg		Solid	0.523g	50.00mL	ZBIB1 k-balance-50
6	K2314183-001	IP PCS 12-12-23	.01	7471B/Hg		Sludge, Solid	0.511g	50.00mL	ZBIB1 k-balance-50
7	K2314202-008	Digester #8	.01	7471B/Hg		Biosolids Solids	0.538g	50.00mL	ZBIB1 k-balance-50
8	K2314221-001	EQ Biosolids	.01	7471B/Hg		Biosolids Solids	0.513g	50.00mL	TRICKMAN K-BALANCE-55

Spiking Solutions

Name:	K-MET Hg Source Standard 1000 ug/L	Inventory ID	232562	Logbook Ref:	HG4-2-B	Expires On:	01/01/2024
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KQ2321888-02 0.25mL KQ2321888-04 0.25mL

Preparation Materials

K-MET 100mL Centrifuge Tube 2211204 (231828) K-MET HCl Hg 221.0562005 (230114) K-MET HNO3 Hg 23C1462002 (232296)

Preparation Steps

Step: Weigh

Started: 12/27/23 10:16

Finished: 12/27/23 10:46

By: SSOLADEY

Comments

Step: Digestion

Started: 12/27/23 10:16

Finished: 12/27/23 10:46

By: SSOLADEY

Comments

Preparation Equipment

K-Block-Digester-14

Digestion

IR Thermometer ID: IR03

95 deg C

K-Block-Digester-14

Digestion

Temperature Check Location

K-Block-Digester-15

Digestion

Temperature

20

HG-39591307

Digestion

K-BlockDigester-15

95 deg C

K-U72662

Digestion

Hg-43188965

Digestion

Comments: Cal Std/CCV Source: HG4-2-T

Reviewed By: W Date: 12.28.23

Preparation Information Benchsheet

Prep Run#: 431395
Team: Metals/ZBIBI

Prep Workflow: HgDigs
Prep Method: Method

Status: Draft
Prep Date/Time: 12/14/23 15:03 PM

Number of Copies to make: 4

#	Lab Code	Client ID	B#	✓	Method / Test	Matrix	Amt. Ext.	pH	Int. Vol	Final Vol	Surr Amt	Spike Amt
1	KQ2321888-03	MB			7471B / Hg	Solid						
2	KQ2321888-04	LCS <i>103</i>			7471B / Hg	Solid						
3	K2314089-001	Event 6	.01		7471B / Hg	Biosolids Solids						
4	KQ2321888-01	K2314089-001 DUP	.01		7471B / Hg	Solid						
5	KQ2321888-02	K2314089-001 MS <i>2943</i>	.01		7471B / Hg <i>99</i>	Solid						
6	K2314183-001	IP PCS 12-12-23	.01		7471B / Hg	Sludge, Solid						
7	K2314202-008	Digester #8	.01		7471B / Hg	Biosolids Solids						
8	K2314221-001	EQ Biosolids	.01		7471B / Hg	Biosolids Solids						

Ca1B157120T95

Comments: *H64-2-T* *8147120T95* *10:16-10:46*

Surrogate ID: _____ Spike ID: _____

Witnessed By: _____

Analyst: _____ Assisted By: _____

Pre-Prep Information Benchsheet

Prep Run #: 431395

Container Lot No: 2108282

Prep Due Date: Dec-25-2023

#	Lab Code	Bottle	Test Name	Weight	Sample Comments	Test Comments
1	K2314089-001	.01	Hg : 7471B/	0.572g	.0977	ZBIBI k-balance-50
2	K2314089-001 DUP K02321888-01	.01	Hg : 7471B/	0.500g	.0841	ZBIBI k-balance-50
3	K2314089-001 MS K02321888-02	.01	Hg : 7471B/	0.523g	.475	ZBIBI k-balance-50

ms 796.22 ms .478
ps .437 ps .437

Relinquished By:	728	Date/Time:	12/14/23 15:13pm	Received By:	A	Date/Time:	12/27/23 9:00
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Pre-Prep Information Benchsheet

Prep Run #: 431836

Container Lot No: 2111109

Prep Due Date: Dec-26-2023

#	Lab Code	Bottle	Test Name	Weight	Sample Comments	Test Comments
1	K2314221-001	.01	Hg : 7471B/	0.513g		TRICKMAN K-BALANCE-55
2	K2314221-001 DCP KQ2322409-01	.01	Hg : 7471B/	0.577g		TRICKMAN K-BALANCE-55
3	K2314221-001 MS KQ2322409-02	.01	Hg : 7471B/	0.538g		TRICKMAN K-BALANCE-55

Relinquished By:

Date/Time:

Received By:

Date/Time:

Pre-Prep Information Benchsheet

Prep Run #: 431519

Container Lot No: 2304355

Prep Due Date: Dec-28-2023

#	Lab Code	Bottle	Test Name	Weight	Sample Comments	Test Comments
1	K2314174-001	.02	Hg : 7471B/	0.585g		ZBIBI k-balance-50
2	K2314174-002	.02	Hg : 7471B/	0.580g		ZBIBI k-balance-50
3	K2314183-001	.01	Hg : 7471B/	0.511g		ZBIBI k-balance-50
4	K2314183-001 DUP	.01	Hg : 7471B/	0.570g		ZBIBI k-balance-50
5	K2314183-001 MS	.01	Hg : 7471B/	0.578g		ZBIBI k-balance-50

Relinquished By:	12/8/23	Date/Time:	11:24am	Received By:	12/27/23	Date/Time:
	248					



Semi-Volatile Petroleum Products by Silica Gel Treated by GC/FID

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Preparation Information Benchsheet

Prep Run#: 431767
Team: Semivoa GC/GTRIGG
Number of Copies to make: 1

Prep Workflow: OrgExtS(14)
Prep Method: EPA 3550B

Status: Prepped
Prep Date/Time: 12/22/23 09:57

#	Lab Code	Client ID	B#	Method /Test	pH	Matrix	Amt. Ext.	Final Vol	Sample Description
1	KQ2322297-02	MB		NWTPH-Dx/NW_TPH_SGT		Solid	30.7160g	10.00mL	
2	KQ2322297-03	LCS		NWTPH-Dx/NW_TPH_SGT		Solid	30g	10.00mL	
3	K2314283-001	TA-01-S	.01	NWTPH-Dx/NW_TPH_SGT		Soil	30.328g	10.00mL	ZBI1 k-balance-50
4	KQ2322297-01	K2314283-001 DUP	.01	NWTPH-Dx/NW_TPH_SGT		Solid	30.716g	10.00mL	ZBI1 k-balance-50
5	K2314283-002	TA-02-S	.01	NWTPH-Dx/NW_TPH_SGT		Soil	30.125g	10.00mL	ZBI1 k-balance-50

Spiking Solutions

Name:	SVF-DRO/RRO MS	Inventory ID	230901	Logbook Ref:	SVF04-50A	Expires On:	12/29/2023
	KQ2322297-03	500.00µL					

Name:	SVF-DRO/RRO SURR	Inventory ID	231888	Logbook Ref:	SVF04-69B	Expires On:	04/19/2024
K2314283-001	500.00µL	K2314283-002	500.00µL	KQ2322297-01	500.00µL	KQ2322297-02	500.00µL
				KQ2322297-03	500.00µL		

Preparation Steps

Step:	Weight	Step:	Extraction	Step:	Acid Clean-EPA 3665A	Step:	Final Volume
Started:	12/21/23 12:33	Started:	12/22/23 09:57	Started:	12/22/23 13:00	Started:	12/22/23 14:33
Finished:	12/21/23 12:38	Finished:	12/22/23 10:12	Finished:	12/22/23 14:33	Finished:	12/22/23 15:07
By:	GTRIGG	By:	GTRIGG	By:	GTRIGG	By:	GTRIGG
Comments		Comments		Comments		Comments	

Comments:

Reviewed By: KB Date: 12/22/23

Chain of Custody

Relinquished By:	AK	Date:	12/22/23
Received By:	AK	Date:	12/27/23
Extracts Examined			
☒ Yes ☐ No			

Preparation Information Benchsheet

Prep Run#: 431767

Team: Semivoa GC/ZBIBI

Number of Copies to make: 1

Prep WorkFlow: OrgExtS(14)

Prep Method: EPA 3550B

Status: Draft

Prep Date/Time: 12/21/23 12:33 PM

#	Lab Code	Client ID	B#	Method / Test	Matrix	Amt Ext.	pH	Int. Vol	Final Vol	Surf Amt	Spike Amt
1	KQ2322297-02	MB		NWTPH-Dx / NW_TPH_SGT	Solid	30.716		10	10	500	500
2	KQ2322297-03	LCS		NWTPH-Dx / NW_TPH_SGT	Solid	30.000					
3	K2314283-001	TA-01-S		NWTPH-Dx / NW_TPH_SGT	Soil	*					
4	KQ2322297-01	K2314283-001 DUP		NWTPH-Dx / NW_TPH_SGT	Solid						
5	K2314283-002	TA-02-S		NWTPH-Dx / NW_TPH_SGT	Soil						

Comments:

* Check before sheet

Surrogate ID:

SVF04-608 50000 Dec 5000 x 4-19-24

Spike ID:

SVF04-504 16000/8000 Rm Dec 5000 x 12-29-23

Witnessed By:

KR

Analyst:

Assisted By:

Printed 12/22/23 7:23

Preparation Information Benchsheet

Pre-Prep Information Benchsheet

Prep Run #: 431767

Container Lot No: 789737

Prep Due Date: Dec-28-2023

#	Lab Code	Bottle	Test Name	Weight	Sample Comments	Test Comments
1	K2314283-001	.01	NW_TPH_SGT : NWTPH-Dx/	30.328g		ZBIBI k-balance-50
2	K2314283-001 DUP KQ2322297-01	.01	NW_TPH_SGT : NWTPH-Dx/	30.716g		ZBIBI k-balance-50
3	K2314283-002	.01	NW_TPH_SGT : NWTPH-Dx/	30.125g		ZBIBI k-balance-50

Relinquished By:	228	Date/Time: 12/21/23 12:30pm	Received By:		Date/Time: 12/22/23 
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**Appendix from EXT-3550 Extracting Hydrocarbons in Soil
EPA Method 3550B**

Clean-Up Work Group # —

DCM Lot # 2300662007

Sonic Horns Tuned (date/initial): 12/22/23 LB

Extraction Stop (time/date/initial): 10/2 12/22/23 CK

Temp as measured: 75^{10/7} °C Correction factor: 0 °C Adjusted temp: 75 °C

Temp as measured: — °C Correction factor: — °C Adjusted temp: — °C

Sulfuric Acid Clean-up (3665) (time/date/initial): 1300 12/22/23 KB Acid Lot #: 2021060905

Silica Gel Clean-up (3630) (time/date/initial): 1433 12/22/23 CB Silica Gel Lot #: 15K230010
12/22/23 KB

Pipette (1 mL) Lot # ~~21112023~~ 30523645

Completed (time/date/initial): 1507 12/22/23 KB

Vial: clear / m / Vial Storage: RON A6-A10

Clean-up Vial Storage: _____

Archived Storage: MAE BY

Bench Sheet Review Check List	
☒	Hold times met; if no, reason: _____
☒	Prep date, time, method, department, product code correct
☒	Spike information and Q.C. correct (insufficient volume or mass recorded if no Q.C.)
☒	Weights/Volumes and units correct on raw and final bench sheets
☒	Sample IDs have been checked - bottle numbers appended if required
☒	Names present for: started by, completed by, relinquished by, and witnessed by
☒	Extract storage recorded
☒	Additional prep sheet completely filled out (NA or line out blanks)
☒	All clean-ups have been noted on additional prep sheet

Validation Report

1st *JS* 12/28/23
2nd *SW* 12/29/23

Data File: J:\GC21\DATA\122723F\1227033.D\
Lab ID: K2314283-001
RunType: N/A
Matrix: Soil

Date Acquired: 12/27/23 21:10:00
Batch ID: 828342
Analysis Method: NWTPH-Dx/NW_TPH_SG

Validations

Validation Categories	Pass	Fail
Preparation Hold Time	X	
Analytical Hold Time	X	
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Lab Control Sample Recovery		X
Method Blank	X	
Method Blank Surrogates	X	
Surrogates	X	
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	
Analyte Coelutions	X	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Lab Control Sample Recovery	Diesel Range Organics (C12 - C25 DRO)	142	42	134	LCS+ND

Primary Review: _____

Secondary Review: _____

Quantitation Report

1st *JS* 12/28/23
2nd *SW* 12/29/23

Data File:	J:\GC21\DATA\122723F\1227033.D\	Instrument:	K-GC-21
Acqu Date:	12/27/23 21:10:00	Vial:	15
Run Type:	N/A	Dilution:	1
Lab ID:	K2314283-001	Raw Units:	ppm

Bottle ID:	K2314283-001.01	Tier:	IV	Matrix:	Soil
Prod Code:	NW_TPH_SGT	Collect Date:	12/20/23	Receive Date:	12/20/23

Analysis Lot:	828342	Prep Lot:	431767	Report Group:	K2314283
Analysis	NWTPH-Dx	Prep Method:	EPA 3550B		
		Prep Date:	12/22/23		

Title:	Semi-Volatile Petroleum Products, Silica Gel Treated by GC/FID	Calibration ID:	KC2300522
		Report List ID:	22367

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
o-Terphenyl	5.43		31114	27.656	111	50 - 150	Y
n-Triacontane	7.56		29361	30.531	122	50 - 150	Y

Target Compounds

Final Conc.Units: mg/Kg

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Diesel Range Organics (C12 - C25 DRO)	3.75		6383	8.047	3.6	J	Y
Residual Range Organics (C25 - C36 RRO)	6.61		4583	8.078	3.7	U	Y

Prep Amount:	30.328 g	Dilution:	1
Prep Final Amount:	10.00 mL	Basis Factor:	72.70

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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Data File : J:\GC21\DATA\122723F\1227033.D Vial: 17
 Acq On : 27 Dec 23 09:10 pm Operator: AA
 Sample : K2314283-001 Inst : 6890
 Misc : Multiplr: 1.00
 IntFile : rteint.p
 Quant Time: Dec 28 10:26:50 2023 Quant Results File: 122723F.RES

Quant Method : J:\GC21\METHODS\122723F.M (RTE Integrator)
 Title : 8015/NWTPH/AK SVF MJ257 KC2000628
 Last Update : Fri Dec 22 13:00:01 2023
 Response via : Initial Calibration
 DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL
 Signal Phase : ZB-1
 Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
1) S 4-Bromofluorobenzene	2.75	14032	26.542 ppm
Spiked Amount 50.000	Recovery	=	53.08%
2) S o-Terphenyl	5.43	31114	27.656 ppm
Spiked Amount 50.000	Recovery	=	55.31%
3) S n-Triacontane	7.56	29361	30.531 ppm
Spiked Amount 50.000	Recovery	=	61.06%
Target Compounds			
6) H C10-C25ex DRO [AK102]	3.10	7794	8.041 ppm
7) H C10-C28in DRO [8015]	3.20	9462	9.330 ppm
8) H C12-C25ex DRO [NWTPH]	3.75	6383	8.047 ppm
10) H C25-C36in RRO [NWTPH]	6.61	4583	8.078 ppm
11) H C25-C36in RRO [AK103]	6.71	4583	7.528 ppm

Data File : J:\GC21\DATA\122723F\1227033.D

Vial: 17

Acq On : 27 Dec 23 09:10 pm

Operator: AA

Sample : K2314283-001

Inst : 6890

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Dec 28 10:27 2023 Quant Results File: 122723F.RES

Quant Method : J:\GC21\METHODS\122723F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Fri Dec 22 13:00:01 2023

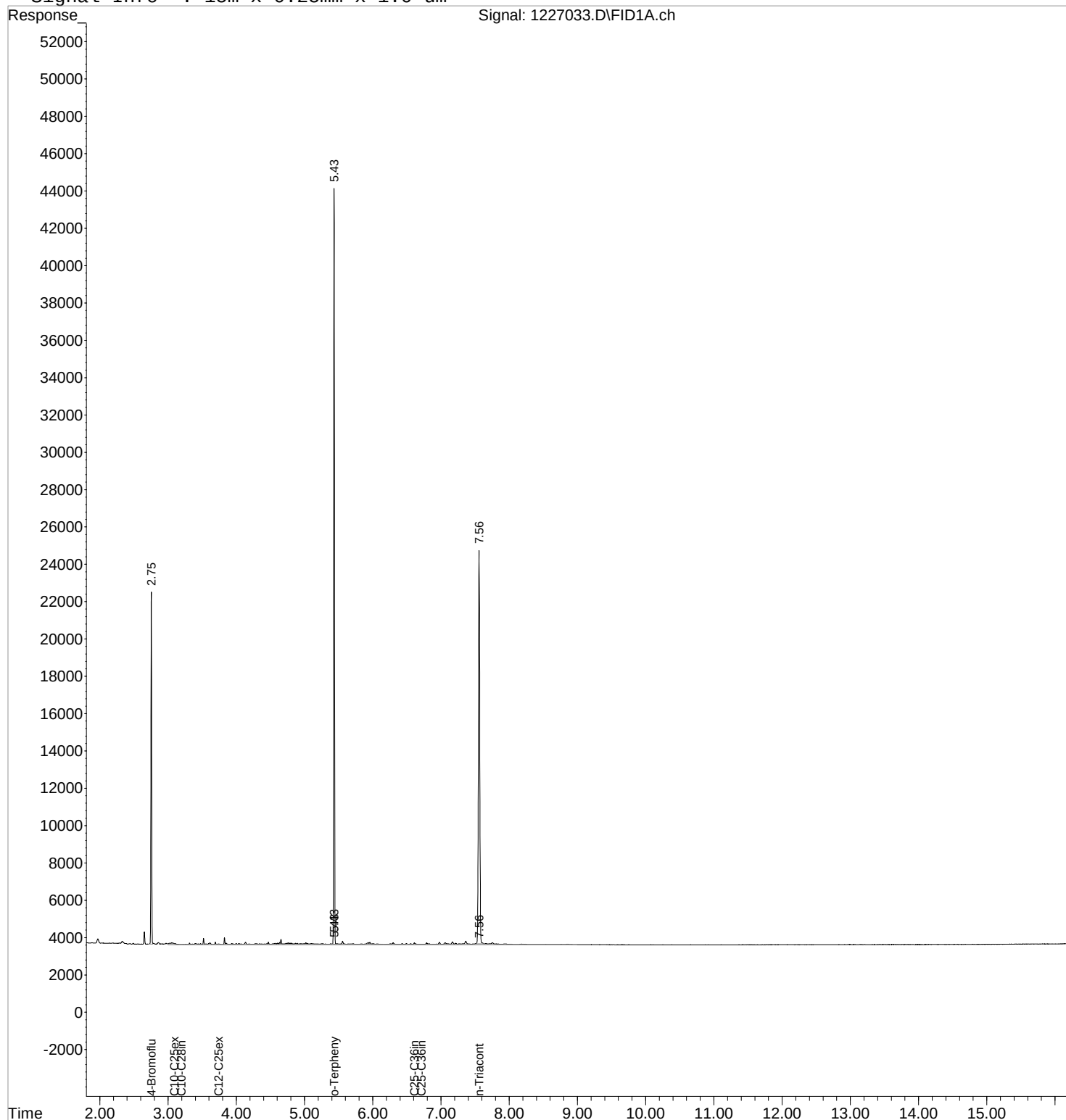
Response via : Single Level Calibration

DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Validation Report

1st *JS* 12/28/23
2nd *SW* 12/29/23

Data File: J:\GC21\DATA\122723F\1227035.D\
Lab ID: K2314283-002
RunType: N/A
Matrix: Soil

Date Acquired: 12/27/23 21:53:00
Batch ID: 828342
Analysis Method: NWTPH-Dx/NW_TPH_SG

Validations

Validation Categories	Pass	Fail
Preparation Hold Time	X	
Analytical Hold Time	X	
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Lab Control Sample Recovery		X
Method Blank	X	
Method Blank Surrogates	X	
Surrogates	X	
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	
Analyte Coelutions	X	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Lab Control Sample Recovery	Diesel Range Organics (C12 - C25 DRO)	142	42	134	LCS+ND

Primary Review: _____

Secondary Review: _____

Quantitation Report

1st *JS* 12/28/23
2nd *SW* 12/29/23

Data File:	J:\GC21\DATA\122723F\1227035.D\	Instrument:	K-GC-21
Acqu Date:	12/27/23 21:53:00	Vial:	17
Run Type:	N/A	Dilution:	1
Lab ID:	K2314283-002	Raw Units:	ppm

Bottle ID:	K2314283-002.01	Tier:	IV	Matrix:	Soil
Prod Code:	NW_TPH_SGT	Collect Date:	12/20/23	Receive Date:	12/20/23

Analysis Lot:	828342	Prep Lot:	431767	Report Group:	K2314283
Analysis	NWTPH-Dx	Prep Method:	EPA 3550B		
		Prep Date:	12/22/23		

Title:	Semi-Volatile Petroleum Products, Silica Gel Treated by GC/FID	Calibration ID:	KC2300522
		Report List ID:	22367

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
o-Terphenyl	5.43		31556	28.049	112	50 - 150	Y
n-Triacontane	7.56		29550	30.728	123	50 - 150	Y

Target Compounds

Final Conc.Units: mg/Kg

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Diesel Range Organics (C12 - C25 DRO)	3.75		6644	8.376	3.3	J	Y
Residual Range Organics (C25 - C36 RRO)	6.61		3273	5.769	2.2	U	Y

Prep Amount:	30.125 g	Dilution:	1
Prep Final Amount:	10.00 mL	Basis Factor:	85.30

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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Data File : J:\GC21\DATA\122723F\1227035.D Vial: 19
 Acq On : 27 Dec 23 09:53 pm Operator: AA
 Sample : K2314283-002 Inst : 6890
 Misc : Multiplr: 1.00
 IntFile : rteint.p
 Quant Time: Dec 28 10:26:52 2023 Quant Results File: 122723F.RES

Quant Method : J:\GC21\METHODS\122723F.M (RTE Integrator)
 Title : 8015/NWTPH/AK SVF MJ257 KC2000628
 Last Update : Fri Dec 22 13:00:01 2023
 Response via : Initial Calibration
 DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL
 Signal Phase : ZB-1
 Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
1) S 4-Bromofluorobenzene	2.75	14215	26.888 ppm
Spiked Amount 50.000	Recovery	=	53.78%
2) S o-Terphenyl	5.43	31556	28.049 ppm
Spiked Amount 50.000	Recovery	=	56.10%
3) S n-Triacontane	7.56	29550	30.728 ppm
Spiked Amount 50.000	Recovery	=	61.46%
Target Compounds			
6) H C10-C25ex DRO [AK102]	3.10	8138	8.396 ppm
7) H C10-C28in DRO [8015]	3.20	9434	9.303 ppm
8) H C12-C25ex DRO [NWTPH]	3.75	6644	8.376 ppm
10) H C25-C36in RRO [NWTPH]	6.61	3273	5.769 ppm
11) H C25-C36in RRO [AK103]	6.71	3273	5.376 ppm

Data File : J:\GC21\DATA\122723F\1227035.D

Vial: 19

Acq On : 27 Dec 23 09:53 pm

Operator: AA

Sample : K2314283-002

Inst : 6890

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Dec 28 10:27 2023 Quant Results File: 122723F.RES

Quant Method : J:\GC21\METHODS\122723F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Fri Dec 22 13:00:01 2023

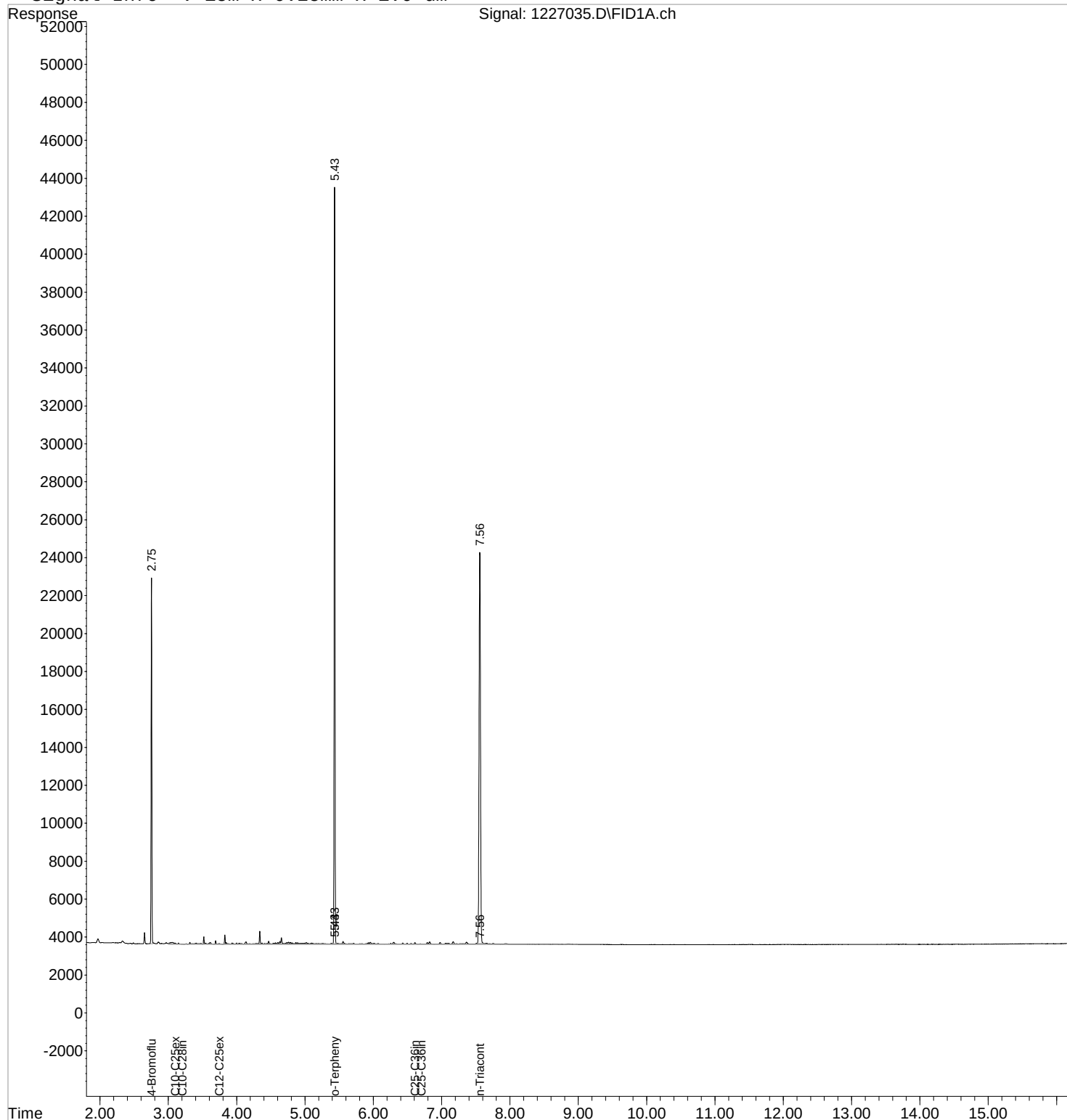
Response via : Single Level Calibration

DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Validation Report

1st *[Signature]* 12/28/23
2nd *[Signature]* 12/29/23

Data File: J:\GC21\DATA\122723F\1227031.D\
Lab ID: KQ2322297-02
RunType: MB
Matrix: Soil

Date Acquired: 12/27/23 20:27:00
Batch ID: 828342
Analysis Method: NWTPH-Dx/NW_TPH_SG

Validations

Validation Categories	Pass	Fail
Analytical Hold Time	X	
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Surrogates	X	
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	
Analyte Coelutions	X	

Primary Review: _____

Secondary Review: _____

Quantitation Report

1st *JS* 12/28/23
2nd *SW* 12/29/23

Data File:	J:\GC21\DATA\122723F\1227031.D\	Instrument:	K-GC-21
Acqu Date:	12/27/23 20:27:00	Vial:	13
Run Type:	MB	Dilution:	1
Lab ID:	KQ2322297-02	Raw Units:	ppm

Bottle ID:		Tier:	IV	Matrix:	Soil
Prod Code:	NW_TPH_SGT	Collect Date:	12/20/23	Receive Date:	12/20/23

Analysis Lot:	828342	Prep Lot:	431767	Report Group:	KQ2322297
Analysis	NWTPH-Dx	Prep Method:	EPA 3550B		
		Prep Date:	12/22/23		

Title:	Semi-Volatile Petroleum Products, Silica Gel Treated by GC/FID	Calibration ID:	KC2300522
		Report List ID:	22367

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
o-Terphenyl	5.43		31289	27.812	111	50 - 150	Y
n-Triacontane	7.56		29022	30.179	121	50 - 150	Y

Target Compounds

Final Conc.Units: mg/Kg

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Diesel Range Organics (C12 - C25 DRO)	3.75		5920	7.464	2.4	J	Y
Residual Range Organics (C25 - C36 RRO)	6.61		3564	6.282	2.0	U	Y

Prep Amount:	30.7160 g	Dilution:	1
Prep Final Amount:	10.00 mL	Basis Factor:	100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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Data File : J:\GC21\DATA\122723F\1227031.D Vial: 15
 Acq On : 27 Dec 23 08:27 pm Operator: AA
 Sample : KQ2322297-02-MB Inst : 6890
 Misc : Multiplr: 1.00
 IntFile : rteint.p
 Quant Time: Dec 28 10:26:48 2023 Quant Results File: 122723F.RES

Quant Method : J:\GC21\METHODS\122723F.M (RTE Integrator)
 Title : 8015/NWTPH/AK SVF MJ257 KC2000628
 Last Update : Fri Dec 22 13:00:01 2023
 Response via : Initial Calibration
 DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL
 Signal Phase : ZB-1
 Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
1) S 4-Bromofluorobenzene	2.75	13992	26.466 ppm
Spiked Amount 50.000	Recovery	=	52.93%
2) S o-Terphenyl	5.43	31289	27.812 ppm
Spiked Amount 50.000	Recovery	=	55.62%
3) S n-Triacontane	7.56	29022	30.179 ppm
Spiked Amount 50.000	Recovery	=	60.36%
Target Compounds			
6) H C10-C25ex DRO [AK102]	3.10	7414	7.649 ppm
7) H C10-C28in DRO [8015]	3.20	8846	8.723 ppm
8) H C12-C25ex DRO [NWTPH]	3.75	5920	7.464 ppm
10) H C25-C36in RRO [NWTPH]	6.61	3564	6.282 ppm
11) H C25-C36in RRO [AK103]	6.71	3564	5.854 ppm

Data File : J:\GC21\DATA\122723F\1227031.D

Vial: 15

Acq On : 27 Dec 23 08:27 pm

Operator: AA

Sample : KQ2322297-02-MB

Inst : 6890

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Dec 28 10:27 2023 Quant Results File: 122723F.RES

Quant Method : J:\GC21\METHODS\122723F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Fri Dec 22 13:00:01 2023

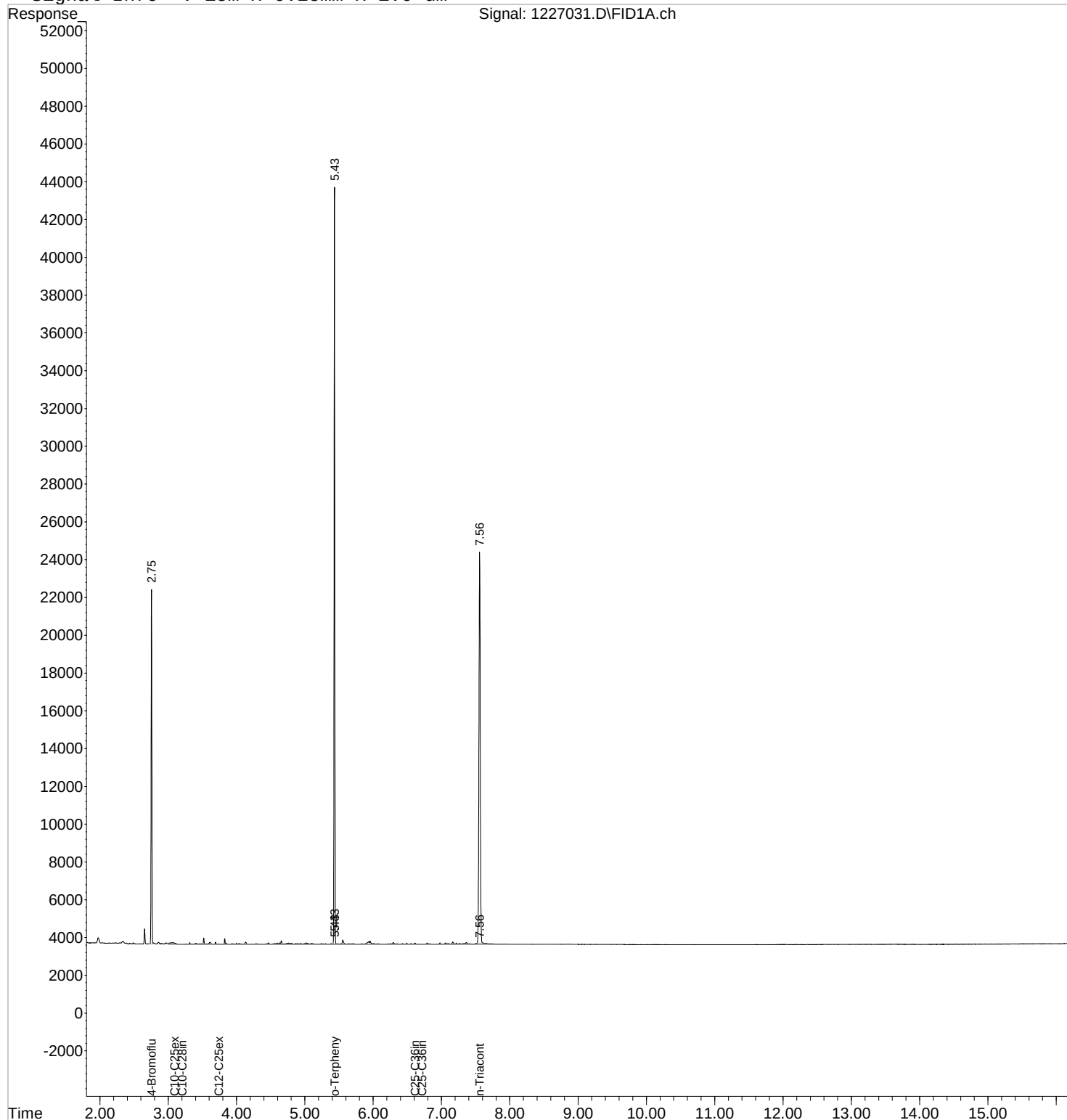
Response via : Single Level Calibration

DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Validation Report

1st  12/28/23
2nd  12/29/23

Data File: J:\GC21\DATA\122723F\1227032.D\
Lab ID: KQ2322297-03
RunType: LCS
Matrix: Soil

Date Acquired: 12/27/23 20:48:00
Batch ID: 828342
Analysis Method: NWTPH-Dx/NW_TPH_SG

Validations

Validation Categories	Pass	Fail
Analytical Hold Time	X	
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Surrogates	X	
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	
Analyte Coelutions	X	

Primary Review: _____

Secondary Review: _____

Quantitation Report

1st *JS* 12/28/23
2nd *SW* 12/29/23

Data File:	J:\GC21\DATA\122723F\1227032.D\	Instrument:	K-GC-21
Acqu Date:	12/27/23 20:48:00	Vial:	14
Run Type:	LCS	Dilution:	1
Lab ID:	KQ2322297-03	Raw Units:	ppm

Bottle ID:		Tier:	IV	Matrix:	Soil
Prod Code:	NW_TPH_SGT	Collect Date:	12/20/23	Receive Date:	12/20/23

Analysis Lot:	828342	Prep Lot:	431767	Report Group:	KQ2322297
Analysis	NWTPH-Dx	Prep Method:	EPA 3550B		
		Prep Date:	12/22/23		

Title:	Semi-Volatile Petroleum Products, Silica Gel Treated by GC/FID	Calibration ID:	KC2300522
		Report List ID:	22367

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
o-Terphenyl	5.43		38646	34.351	137	50 - 150	Y
n-Triacontane	7.56		34041	35.398	142	50 - 150	Y

Target Compounds

Final Conc.Units: mg/Kg

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Diesel Range Organics (C12 - C25 DRO)	3.75		901810	1136.956	379		Y
Residual Range Organics (C25 - C36 RRO)	6.61		317432	559.492	186		Y

Prep Amount: 30 g **Dilution:** 1
Prep Final Amount: 10.00 mL **Basis Factor:** 100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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Data File : J:\GC21\DATA\122723F\1227032.D Vial: 16
 Acq On : 27 Dec 23 08:48 pm Operator: AA
 Sample : KQ2322297-03-LCS Inst : 6890
 Misc : Multiplr: 1.00
 IntFile : rteint.p
 Quant Time: Dec 28 10:26:49 2023 Quant Results File: 122723F.RES

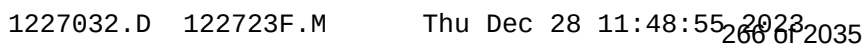
Quant Method : J:\GC21\METHODS\122723F.M (RTE Integrator)
 Title : 8015/NWTPH/AK SVF MJ257 KC2000628
 Last Update : Fri Dec 22 13:00:01 2023
 Response via : Initial Calibration
 DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL
 Signal Phase : ZB-1
 Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
1) S 4-Bromofluorobenzene	2.76	17785	33.641 ppm
Spiked Amount 50.000	Recovery	=	67.28%
2) S o-Terphenyl	5.43	38646	34.351 ppm
Spiked Amount 50.000	Recovery	=	68.70%
3) S n-Triacontane	7.56	34041	35.398 ppm
Spiked Amount 50.000	Recovery	=	70.80%
Target Compounds			
6) H C10-C25ex DRO [AK102]	3.10	1016432	1048.638 ppm
7) H C10-C28in DRO [8015]	3.20	1124355	1108.685 ppm
8) H C12-C25ex DRO [NWTPH]	3.75	901810	1136.956 ppm
10) H C25-C36in RRO [NWTPH]	6.61	317432	559.492 ppm
11) H C25-C36in RRO [AK103]	6.71	317432	521.437 ppm

Volume Inj. : 1 uL
Signal Phase : ZB-1
Signal Info : 15m x 0.25mm x 1.0 um



Validation Report

1st  12/28/23
2nd  12/29/23

Data File: J:\GC21\DATA\122723F\1227034.D\
Lab ID: KQ2322297-01
RunType: DUP
Matrix: Soil

Date Acquired: 12/27/23 21:32:00
Batch ID: 828342
Analysis Method: NWTPH-Dx/NW_TPH_SG

Validations

Validation Categories	Pass	Fail
Analytical Hold Time	X	
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Surrogates	X	
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	
Analyte Coelutions	X	

Primary Review: _____

Secondary Review: _____

Quantitation Report

1st *SW* 12/28/23
2nd *SW* 12/29/23

Data File:	J:\GC21\DATA\122723F\1227034.D\	Instrument:	K-GC-21
Acqu Date:	12/27/23 21:32:00	Vial:	16
Run Type:	DUP	Dilution:	1
Lab ID:	KQ2322297-01	Raw Units:	ppm

Bottle ID:	K2314283-001.01	Tier:	IV	Matrix:	Soil
Prod Code:	NW_TPH_SGT	Collect Date:	12/20/23	Receive Date:	12/20/23

Analysis Lot:	828342	Prep Lot:	431767	Report Group:	KQ2322297
Analysis	NWTPH-Dx	Prep Method:	EPA 3550B		
		Prep Date:	12/22/23		

Title:	Semi-Volatile Petroleum Products, Silica Gel Treated by GC/FID	Calibration ID:	KC2300522
		Report List ID:	22367

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
o-Terphenyl	5.43		30169	26.816	107	50 - 150	Y
n-Triacontane	7.56		28371	29.502	118	50 - 150	Y

Target Compounds

Final Conc.Units: mg/Kg

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Diesel Range Organics (C12 - C25 DRO)	3.75		7637	9.628	4.3	J	Y
Residual Range Organics (C25 - C36 RRO)	6.61		4995	8.804	3.9	U	Y

Prep Amount: 30.716 g **Dilution:** 1
Prep Final Amount: 10.00 mL **Basis Factor:** 72.70

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 12/28/23 13:11

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Data File : J:\GC21\DATA\122723F\1227034.D Vial: 18
 Acq On : 27 Dec 23 09:32 pm Operator: AA
 Sample : K2314283-001-DUP Inst : 6890
 Misc : Multiplr: 1.00
 IntFile : rteint.p
 Quant Time: Dec 28 10:26:51 2023 Quant Results File: 122723F.RES

Quant Method : J:\GC21\METHODS\122723F.M (RTE Integrator)
 Title : 8015/NWTPH/AK SVF MJ257 KC2000628
 Last Update : Fri Dec 22 13:00:01 2023
 Response via : Initial Calibration
 DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL
 Signal Phase : ZB-1
 Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
1) S 4-Bromofluorobenzene	2.75	13350	25.252 ppm
Spiked Amount 50.000	Recovery	=	50.50%
2) S o-Terphenyl	5.43	30169	26.816 ppm
Spiked Amount 50.000	Recovery	=	53.63%
3) S n-Triacontane	7.56	28371	29.502 ppm
Spiked Amount 50.000	Recovery	=	59.00%
Target Compounds			
6) H C10-C25ex DRO [AK102]	3.10	9192	9.483 ppm
7) H C10-C28in DRO [8015]	3.20	10944	10.791 ppm
8) H C12-C25ex DRO [NWTPH]	3.75	7637	9.628 ppm
10) H C25-C36in RRO [NWTPH]	6.61	4995	8.804 ppm
11) H C25-C36in RRO [AK103]	6.71	4995	8.205 ppm

Data File : J:\GC21\DATA\122723F\1227034.D

Vial: 18

Acq On : 27 Dec 23 09:32 pm

Operator: AA

Sample : K2314283-001-DUP

Inst : 6890

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Dec 28 10:27 2023 Quant Results File: 122723F.RES

Quant Method : J:\GC21\METHODS\122723F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Fri Dec 22 13:00:01 2023

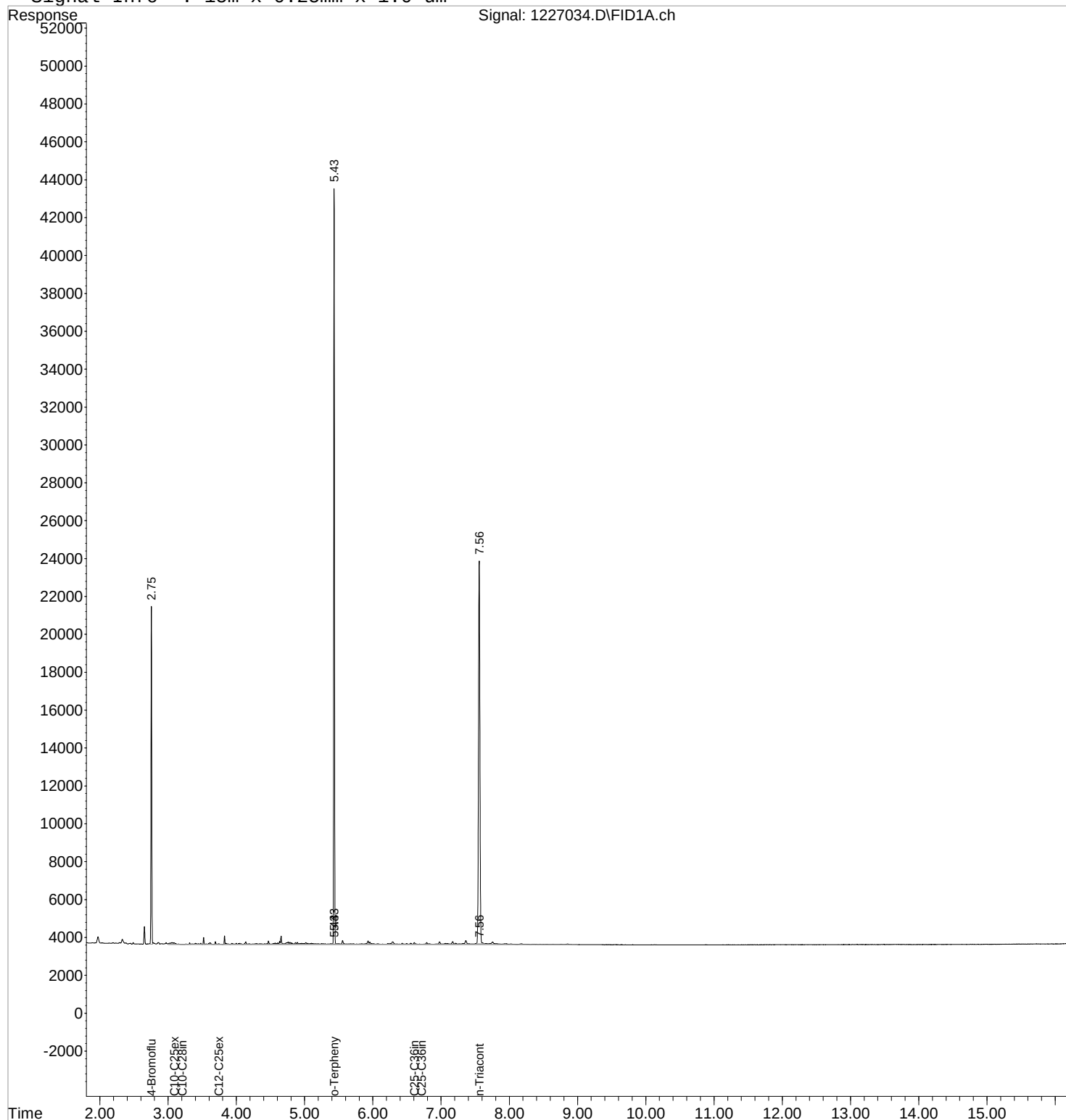
Response via : Single Level Calibration

DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Injection Log

Directory: J:\GC21\DATA\090123

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	91	0901f001.d	1.	ALIPHATICS		01 Sep 2023 09:56
2	96	0901f002.d	1.	DRO@1000/50 SVF04-57C		01 Sep 2023 10:17
3	97	0901f003.d	1.	RRO@1000 SVF04-57D		01 Sep 2023 10:39
4	98	0901f004.d	1.	AK103@1000 SVF04-47J		01 Sep 2023 11:00
5	86	0901f005.d	1.	IB		01 Sep 2023 11:22
6	100	0901f006.d	1.	IB		01 Sep 2023 11:43
7	100	0901f007.d	1.	IB		01 Sep 2023 12:05
8	1	0901f008.d	1.	IB		01 Sep 2023 12:26
9	2	0901f009.d	1.	DRO SVF04-58A 20/1.0		01 Sep 2023 12:48
10	3	0901f010.d	1.	DRO SVF04-57K 50/2.5		01 Sep 2023 13:09
11	4	0901f011.d	1.	DRO SVF04-57J 200/10		01 Sep 2023 13:31
12	5	0901f012.d	1.	DRO SVF04-57I 500/25		01 Sep 2023 13:53
13	6	0901f013.d	1.	DRO SVF04-57H 2000/100		01 Sep 2023 14:14
14	7	0901f014.d	1.	DRO SVF04-57G 5000/250		01 Sep 2023 14:36
15	8	0901f015.d	1.	DRO SVF04-57F 20K		01 Sep 2023 14:57
16	9	0901f016.d	1.	DRO SVF04-57E 50K		01 Sep 2023 15:19
17	1	0901f017.d	1.	IB		01 Sep 2023 15:40
18	1	0901f018.d	1.	IB		01 Sep 2023 16:02
19	10	0901f019.d	1.	DRO SVF04-58B ICV@1000		01 Sep 2023 16:23
20	1	0901f020.d	1.	IB		01 Sep 2023 16:45
21	1	0901f021.d	1.	IB		01 Sep 2023 17:06
22	11	0901f022.d	1.	RRO SVF04-58G 50		01 Sep 2023 17:28
23	12	0901f023.d	1.	RRO SVF04-58F 200		01 Sep 2023 17:49
24	13	0901f024.d	1.	RRO SVF04-58E 500		01 Sep 2023 18:11
25	14	0901f025.d	1.	RRO SVF04-58D 2000		01 Sep 2023 18:32
26	15	0901f026.d	1.	RRO SVF04-58C 5000		01 Sep 2023 18:54
27	1	0901f027.d	1.	IB		01 Sep 2023 19:16
28	1	0901f028.d	1.	IB		01 Sep 2023 19:37
29	16	0901f029.d	1.	RRO SVF04-58H ICV@1000		01 Sep 2023 19:59
30	1	0901f030.d	1.	IB		01 Sep 2023 20:20
31	1	0901f031.d	1.	IB		01 Sep 2023 20:42
32	17	0901f032.d	1.	AK103 SVF04-58M 50		01 Sep 2023 21:03
33	18	0901f033.d	1.	AK103 SVF04-58L 200		01 Sep 2023 21:25
34	19	0901f034.d	1.	AK103 SVF04-58K 500		01 Sep 2023 21:46
35	20	0901f035.d	1.	AK103 SVF04-58J 2000		01 Sep 2023 22:08
36	21	0901f036.d	1.	AK103 SVF04-58I 5000		01 Sep 2023 22:29
37	1	0901f037.d	1.	IB		01 Sep 2023 22:51
38	1	0901f038.d	1.	IB		01 Sep 2023 23:12
39	22	0901f039.d	1.	AK103 SVF04-58N ICV@1000		01 Sep 2023 23:34
40	1	0901f040.d	1.	IB		01 Sep 2023 23:55
41	1	0901f041.d	1.	IB		02 Sep 2023 00:17
42	100	0901f042.d	1.	IB		02 Sep 2023 00:38
43	100	0901f043.d	1.	IB		02 Sep 2023 01:00
44	100	0901f044.d	1.	IB		02 Sep 2023 01:21

15C2300522

Injection Log

Directory: J:\GC21\DATA\090623

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	100	0906f001.d	1.	IB		06 Sep 2023 08:02
2	100	0906f002.d	1.	IB		06 Sep 2023 08:23
3	100	0906f003.d	1.	IB		06 Sep 2023 08:45
4	100	0906f004.d	1.	IB		06 Sep 2023 09:06
5	100	0906f005.d	1.	IB		06 Sep 2023 09:28
6	100	0906f006.d	1.	IB		06 Sep 2023 09:49
7	100	0906f007.d	1.	IB		06 Sep 2023 10:11
8	100	0906f008.d	1.	IB		06 Sep 2023 10:32
9	91	0906f009.d	1.	ALIPHATICS		06 Sep 2023 11:35
10	1	0906f010.d	1.	IB		06 Sep 2023 11:56
11	2	0906f011.d	1.	RRO SVF04-62C ICV@1000		06 Sep 2023 12:18
12	1	0906f012.d	1.	IB		06 Sep 2023 12:39
13	1	0906f013.d	1.	IB		06 Sep 2023 13:01
14	3	0906f014.d	1.	DRO SVF04-62A 20/1.0		06 Sep 2023 13:22
15	4	0906f015.d	1.	DRO SVF04-61L 50/2.5		06 Sep 2023 13:44
16	5	0906f016.d	1.	DRO SVF04-61K 200/10		06 Sep 2023 14:05
17	6	0906f017.d	1.	DRO SVF04-61J 500/25		06 Sep 2023 14:27
18	7	0906f018.d	1.	DRO SVF04-61I 2000/100		06 Sep 2023 14:48
19	8	0906f019.d	1.	DRO SVF04-61H 5000/250		06 Sep 2023 15:10
20	9	0906f020.d	1.	DRO SVF04-61G 20K		06 Sep 2023 15:31
21	10	0906f021.d	1.	DRO SVF04-61F 50K		06 Sep 2023 15:53
22	1	0906f022.d	1.	IB		06 Sep 2023 16:14
23	1	0906f023.d	1.	IB		06 Sep 2023 16:36
24	1	0906f024.d	1.	IB		06 Sep 2023 16:57
25	11	0906f025.d	1.	DRO SVF04-62B ICV@1000		06 Sep 2023 17:19
26	1	0906f026.d	1.	IB		06 Sep 2023 17:40
27	1	0906f027.d	1.	IB		06 Sep 2023 18:02
28	1	0906f028.d	1.	IB		06 Sep 2023 18:23
29	12	0906f029.d	1.	RRO SVF04-62G ICV@1000		06 Sep 2023 18:45
30	1	0906f030.d	1.	IB		06 Sep 2023 19:06
31	1	0906f031.d	1.	IB		06 Sep 2023 19:28
32	100	0906f032.d	1.	IB		06 Sep 2023 19:49
33	100	0906f033.d	1.	IB		06 Sep 2023 20:11
34	100	0906f034.d	1.	IB		06 Sep 2023 20:33
35	100	0906f035.d	1.	IB		06 Sep 2023 20:54
36	100	0906f036.d	1.	IB		06 Sep 2023 21:16
37	100	0906f037.d	1.	IB		06 Sep 2023 21:37
38	100	0906f038.d	1.	IB		06 Sep 2023 21:59
39	100	0906f039.d	1.	IB		06 Sep 2023 22:20
40	100	0906f040.d	1.	IB		06 Sep 2023 22:42
41	100	0906f041.d	1.	IB		06 Sep 2023 23:03
42	100	0906f042.d	1.	IB		06 Sep 2023 23:25
43	100	0906f043.d	1.	IB		06 Sep 2023 23:46
44	100	0906f044.d	1.	IB		07 Sep 2023 00:08
45	100	0906f045.d	1.	IB		07 Sep 2023 00:30
46	100	0906f046.d	1.	IB		07 Sep 2023 00:51
47	100	0906f047.d	1.	IB		07 Sep 2023 01:13
48	100	0906f048.d	1.	IB		07 Sep 2023 01:34
49	100	0906f049.d	1.	IB		07 Sep 2023 01:56
50	100	0906f050.d	1.	IB		07 Sep 2023 02:17
51	100	0906f051.d	1.	IB		07 Sep 2023 02:39
52	100	0906f052.d	1.	IB		07 Sep 2023 03:00
53	100	0906f053.d	1.	IB		07 Sep 2023 03:22
54	100	0906f054.d	1.	IB		07 Sep 2023 03:43
55	100	0906f055.d	1.	IB		07 Sep 2023 04:05

MC2300522

Injection Log

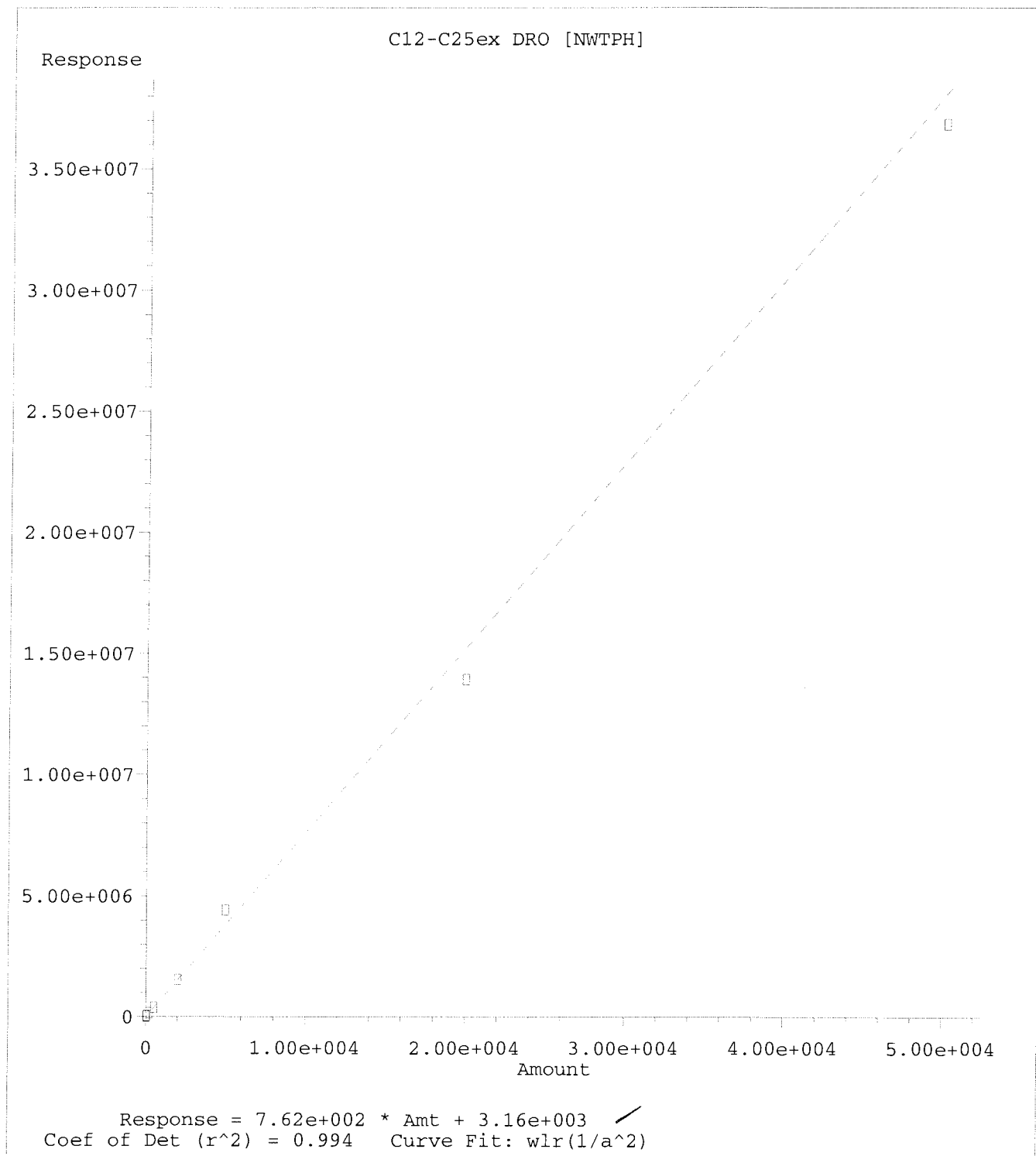
Directory: J:\GC21\DATA\090623

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
56	100	0906f056.d	1.	IB		07 Sep 2023 04:27
57	100	0906f057.d	1.	IB		07 Sep 2023 04:48
58	100	0906f058.d	1.	IB		07 Sep 2023 05:10
59	100	0906f059.d	1.	IB		07 Sep 2023 05:31
60	100	0906f060.d	1.	IB		07 Sep 2023 05:53
61	100	0906f061.d	1.	IB		07 Sep 2023 06:14
62	100	0906f062.d	1.	IB		07 Sep 2023 06:36
63	100	0906f063.d	1.	IB		07 Sep 2023 06:57
64	100	0906f064.d	1.	IB		07 Sep 2023 07:19
65	100	0906f065.d	1.	IB		07 Sep 2023 07:40
66	100	0906f066.d	1.	IB		07 Sep 2023 08:02
67	100	0906f067.d	1.	IB		07 Sep 2023 08:24
68	100	0906f068.d	1.	IB		07 Sep 2023 08:45
69	100	0906f069.d	1.	IB		07 Sep 2023 09:07
70	100	0906f070.d	1.	IB		07 Sep 2023 09:28

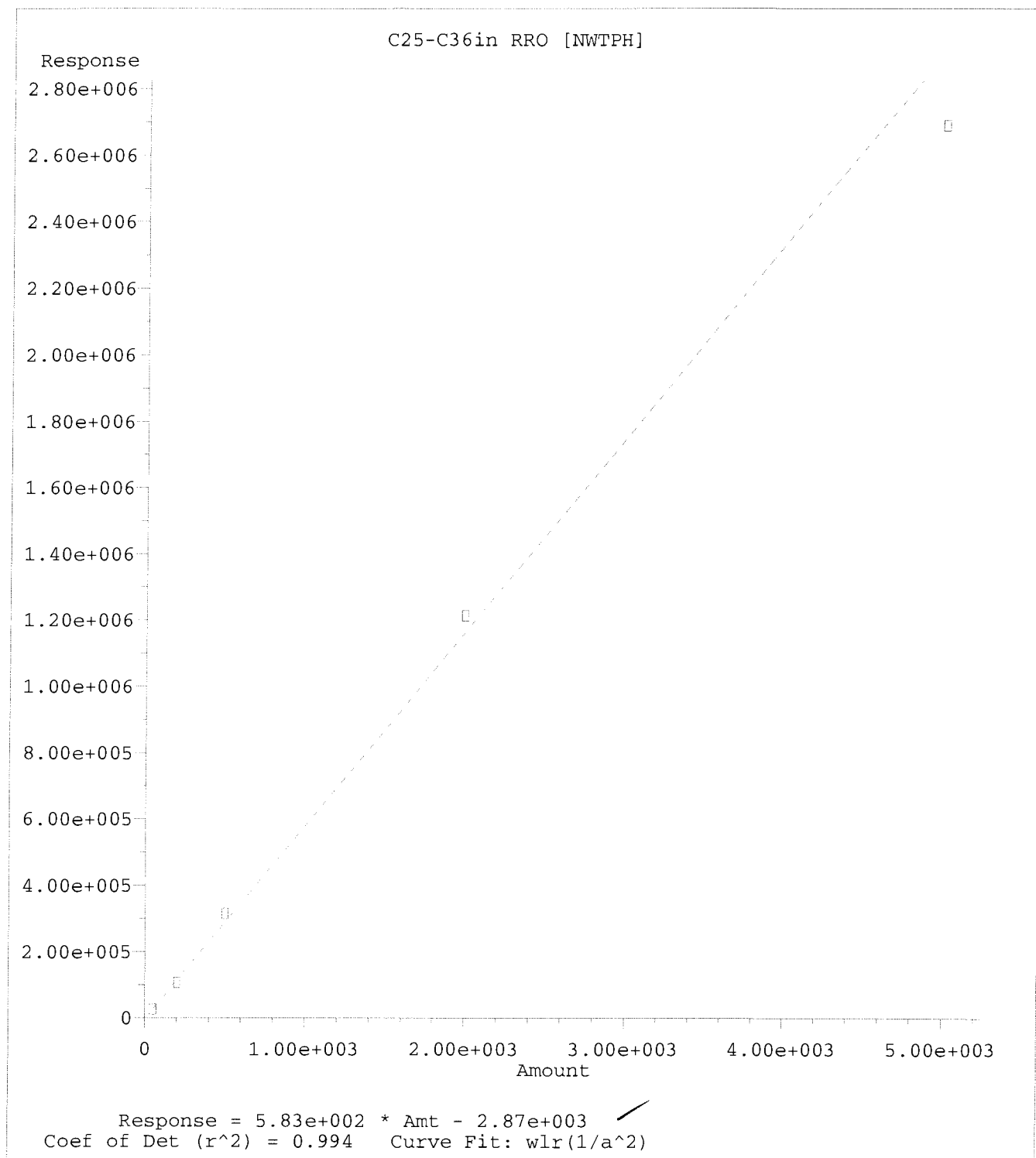
Injection Log

Directory: J:\GC21\DATA\090723

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	91	0907f001.d	1.	ALIPHATICS		07 Sep 2023 10:36
2	1	0907f002.d	1.	IB		07 Sep 2023 10:57
3	2	0907f003.d	1.	RRO SVF04-63A 50	162300522	07 Sep 2023 11:19
4	3	0907f004.d	1.	RRO SVF04-62M 200		07 Sep 2023 11:40
5	4	0907f005.d	1.	RRO SVF04-62L 500		07 Sep 2023 12:02
6	5	0907f006.d	1.	RRO SVF04-62K 2000		07 Sep 2023 12:23
7	6	0907f007.d	1.	RRO SVF04-62J 5000		07 Sep 2023 12:45
8	1	0907f008.d	1.	IB		07 Sep 2023 13:07
9	1	0907f009.d	1.	IB		07 Sep 2023 13:28
10	7	0907f010.d	1.	RRO SVF04-63B ICV@1000		07 Sep 2023 13:50



Method Name: J:\GC21\METHODS\090723F.M
Calibration Table Last Updated: Thu Sep 07 13:35:15 2023



Method Name: J:\GC21\METHODS\090723F.M
Calibration Table Last Updated: Thu Sep 07 13:35:15 2023

Data File : J:\GC21\DATA\090123\0901F031.D Vial: 1
Acq On : 01 Sep 2023 8:42 pm Operator: AA
Sample : IB Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Sep 05 06:55:55 2023 Quant Results File: 090123F.RES

Quant Method : J:\GC21\METHODS\090123F.M (RTE Integrator)
Title : 8015/NWTPH/AK SVF MJ257 KC2000628
Last Update : Fri Sep 01 10:57:30 2023
Response via : Initial Calibration
DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL
Signal Phase : ZB-1
Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

Target Compounds

6)	H	C10-C25ex DRO [AK102]	3.11	11908	12.154 ppm
7)	H	C10-C28in DRO [8015]	3.21	13288	13.047 ppm
8)	H	C12-C25ex DRO [NWTPH]	3.75	9740	12.086 ppm
10)	H	C25-C36in RRO [NWTPH]	6.62	4606	8.440 ppm
11)	H	C25-C36in RRO [AK103]	6.72	4606	9.856 ppm

Data File : J:\GC21\DATA\090123\0901F031.D

Vial: 1

Acq On : 01 Sep 2023 8:42 pm

Operator: AA

Sample : IB

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Sep 5 6:55 2023 Quant Results File: 090123F.RES

Quant Method : J:\GC21\METHODS\090123F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Fri Sep 01 10:57:30 2023

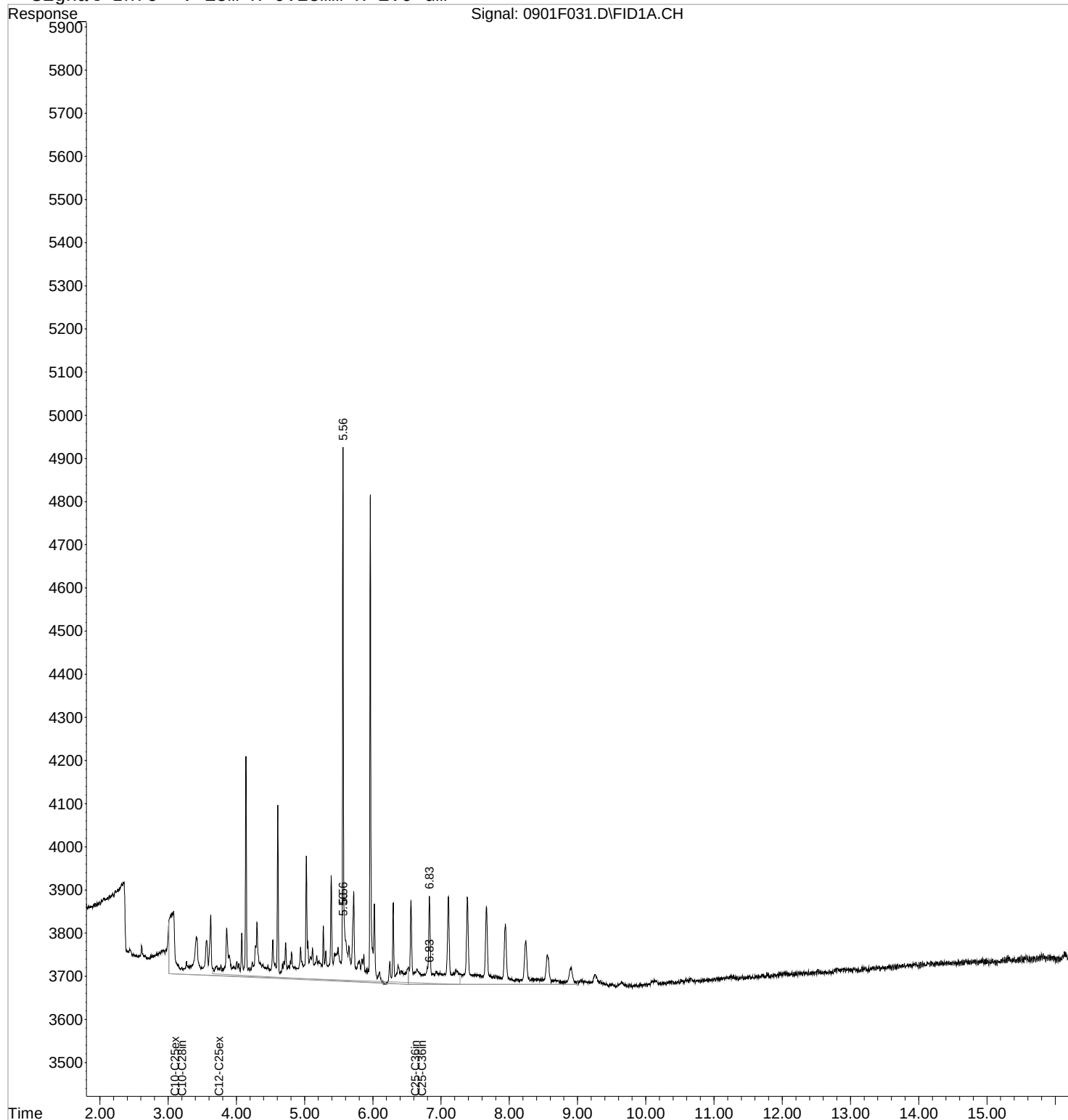
Response via : Single Level Calibration

DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Data File : J:\GC21\DATA\090123\0901F032.D Vial: 17
Acq On : 01 Sep 2023 9:03 pm Operator: AA
Sample : AK103 SVF04-58M 50 Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Sep 05 06:55:56 2023 Quant Results File: 090123F.RES

Quant Method : J:\GC21\METHODS\090123F.M (RTE Integrator)
Title : 8015/NWTPH/AK SVF MJ257 KC2000628
Last Update : Fri Sep 01 10:57:30 2023
Response via : Initial Calibration
DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL
Signal Phase : ZB-1
Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

Target Compounds

11) H C25-C36in RRO [AK103]	6.72	35028	74.952 ppm
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Data File : J:\GC21\DATA\090123\0901F032.D

Vial: 17

Acq On : 01 Sep 2023 9:03 pm

Operator: AA

Sample : AK103 SVF04-58M 50

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Sep 5 7:02 2023 Quant Results File: 090123F.RES

Quant Method : J:\GC21\METHODS\090123F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Fri Sep 01 10:57:30 2023

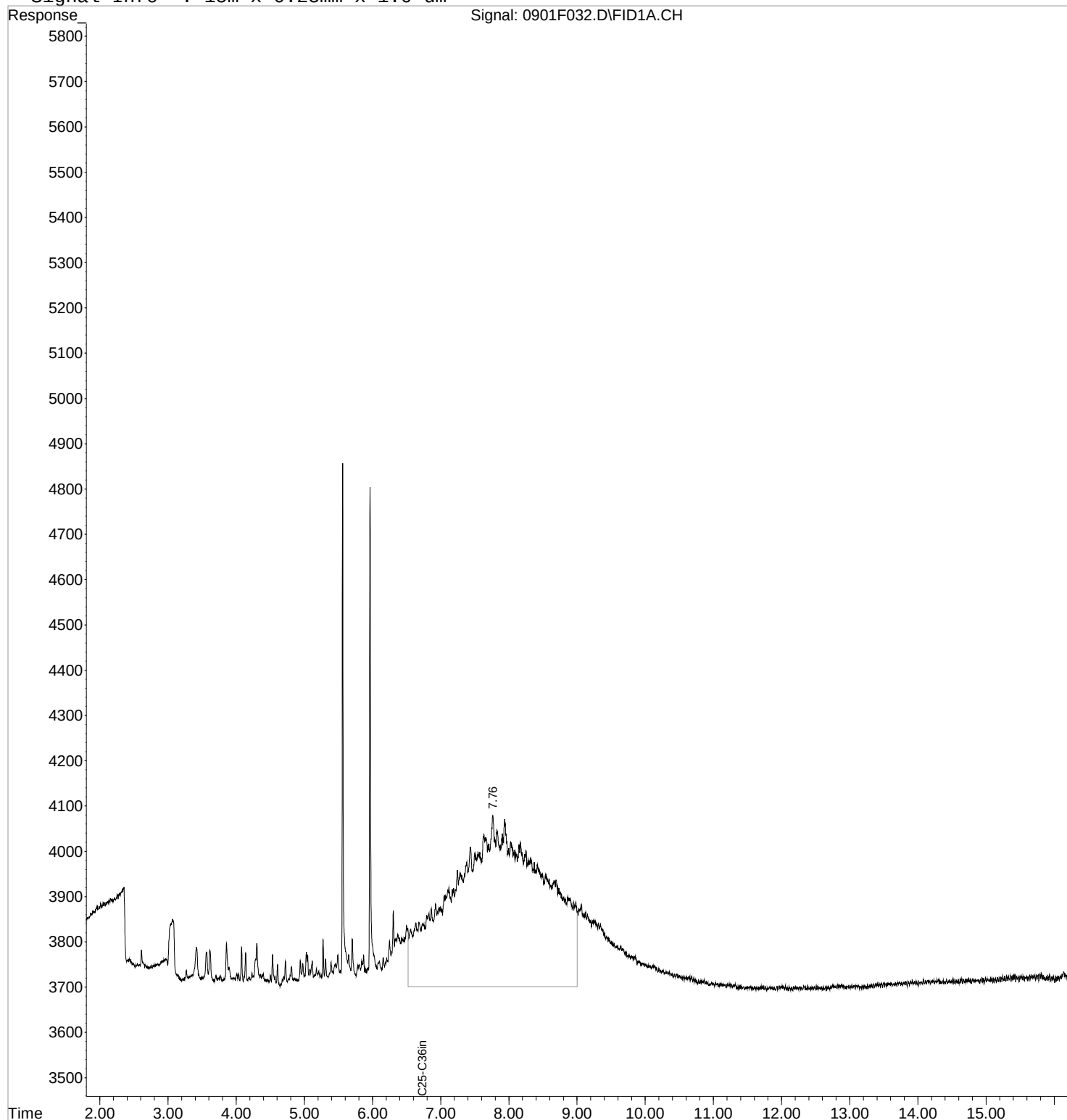
Response via : Single Level Calibration

DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Data File : J:\GC21\DATA\090123\0901F033.D Vial: 18
Acq On : 01 Sep 2023 9:25 pm Operator: AA
Sample : AK103 SVF04-58L 200 Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Sep 05 06:55:57 2023 Quant Results File: 090123F.RES

Quant Method : J:\GC21\METHODS\090123F.M (RTE Integrator)
Title : 8015/NWTPH/AK SVF MJ257 KC2000628
Last Update : Fri Sep 01 10:57:30 2023
Response via : Initial Calibration
DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL
Signal Phase : ZB-1
Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

Target Compounds

11) H C25-C36in RRO [AK103]	6.72	120072	256.927 ppm
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Data File : J:\GC21\DATA\090123\0901F033.D

Vial: 18

Acq On : 01 Sep 2023 9:25 pm

Operator: AA

Sample : AK103 SVF04-58L 200

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Sep 5 7:02 2023 Quant Results File: 090123F.RES

Quant Method : J:\GC21\METHODS\090123F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Fri Sep 01 10:57:30 2023

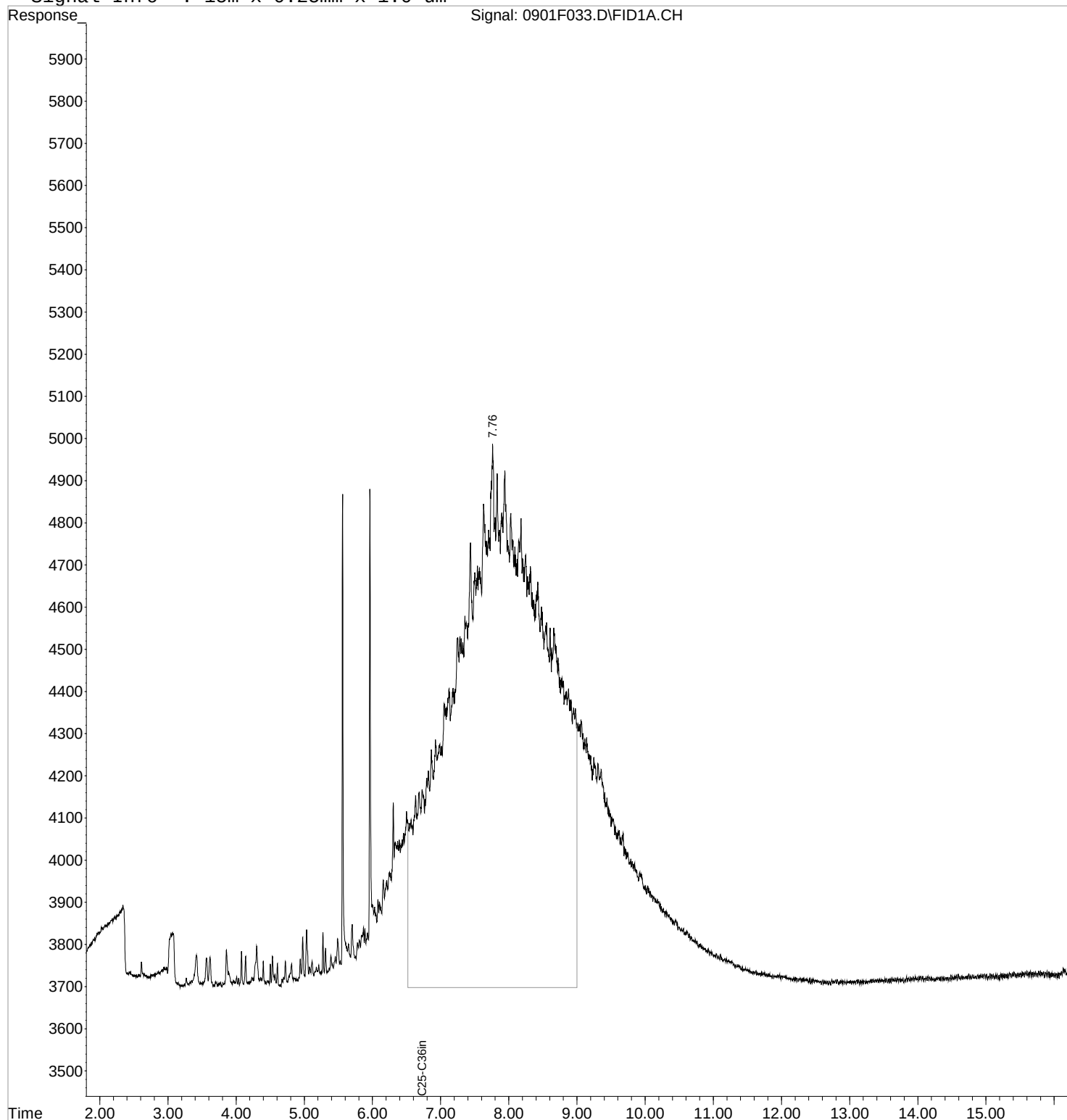
Response via : Single Level Calibration

DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Data File : J:\GC21\DATA\090123\0901F034.D Vial: 19
Acq On : 01 Sep 2023 9:46 pm Operator: AA
Sample : AK103 SVF04-58K 500 Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Sep 05 06:55:59 2023 Quant Results File: 090123F.RES

Quant Method : J:\GC21\METHODS\090123F.M (RTE Integrator)
Title : 8015/NWTPH/AK SVF MJ257 KC2000628
Last Update : Fri Sep 01 10:57:30 2023
Response via : Initial Calibration
DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL
Signal Phase : ZB-1
Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

Target Compounds

11) H C25-C36in RRO [AK103]	6.72	327663	701.126 ppm
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Data File : J:\GC21\DATA\090123\0901F034.D

Vial: 19

Acq On : 01 Sep 2023 9:46 pm

Operator: AA

Sample : AK103 SVF04-58K 500

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Sep 5 7:03 2023 Quant Results File: 090123F.RES

Quant Method : J:\GC21\METHODS\090123F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Fri Sep 01 10:57:30 2023

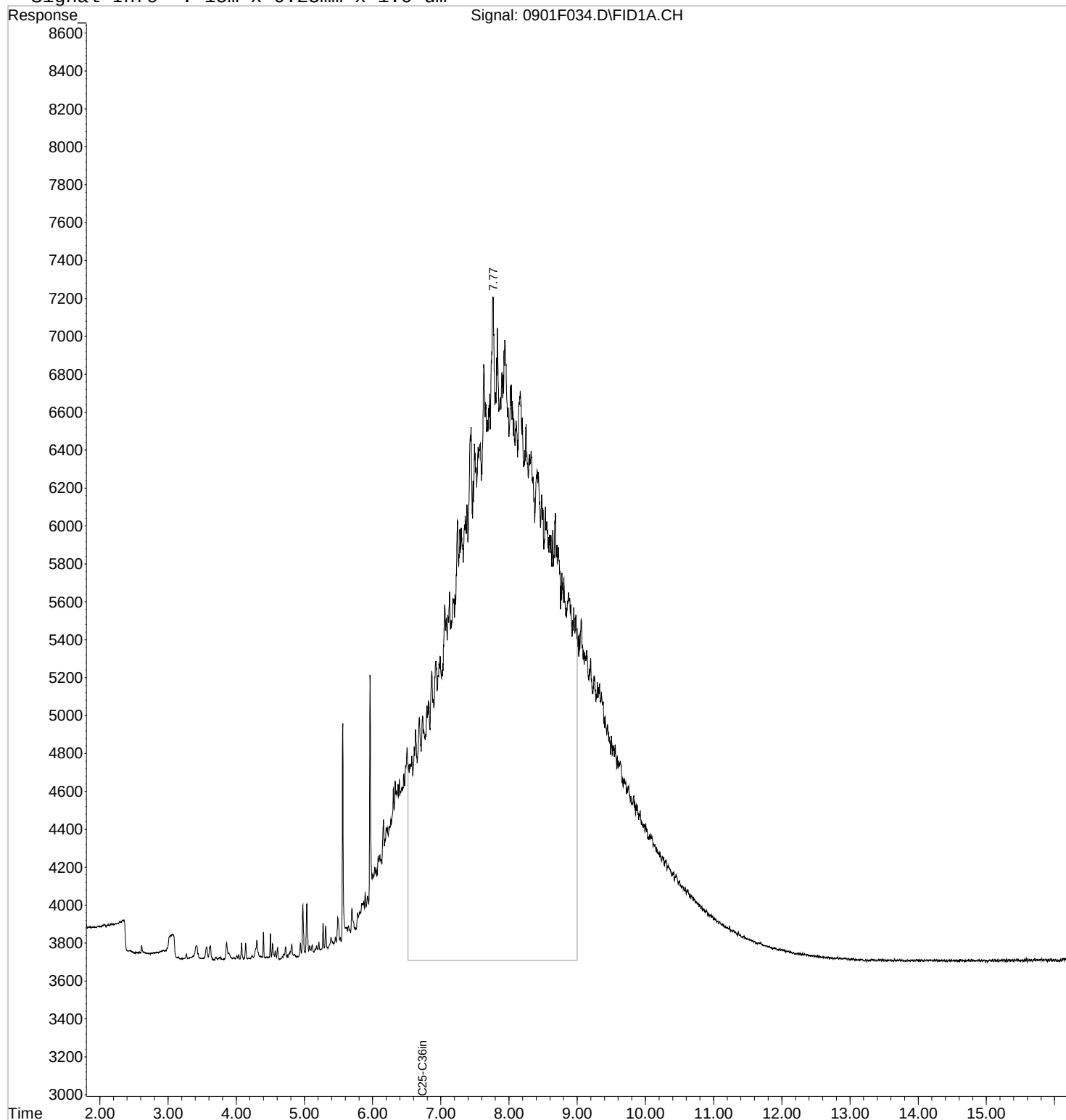
Response via : Single Level Calibration

DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Data File : J:\GC21\DATA\090123\0901F035.D Vial: 20
Acq On : 01 Sep 2023 10:08 pm Operator: AA
Sample : AK103 SVF04-58J 2000 Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Sep 05 06:56:01 2023 Quant Results File: 090123F.RES

Quant Method : J:\GC21\METHODS\090123F.M (RTE Integrator)
Title : 8015/NWTPH/AK SVF MJ257 KC2000628
Last Update : Fri Sep 01 10:57:30 2023
Response via : Initial Calibration
DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL
Signal Phase : ZB-1
Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

Target Compounds

11) H C25-C36in RRO [AK103]	6.72	1080464	2311.954 ppm
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Data File : J:\GC21\DATA\090123\0901F035.D

Vial: 20

Acq On : 01 Sep 2023 10:08 pm

Operator: AA

Sample : AK103 SVF04-58J 2000

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Sep 5 7:03 2023 Quant Results File: 090123F.RES

Quant Method : J:\GC21\METHODS\090123F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Fri Sep 01 10:57:30 2023

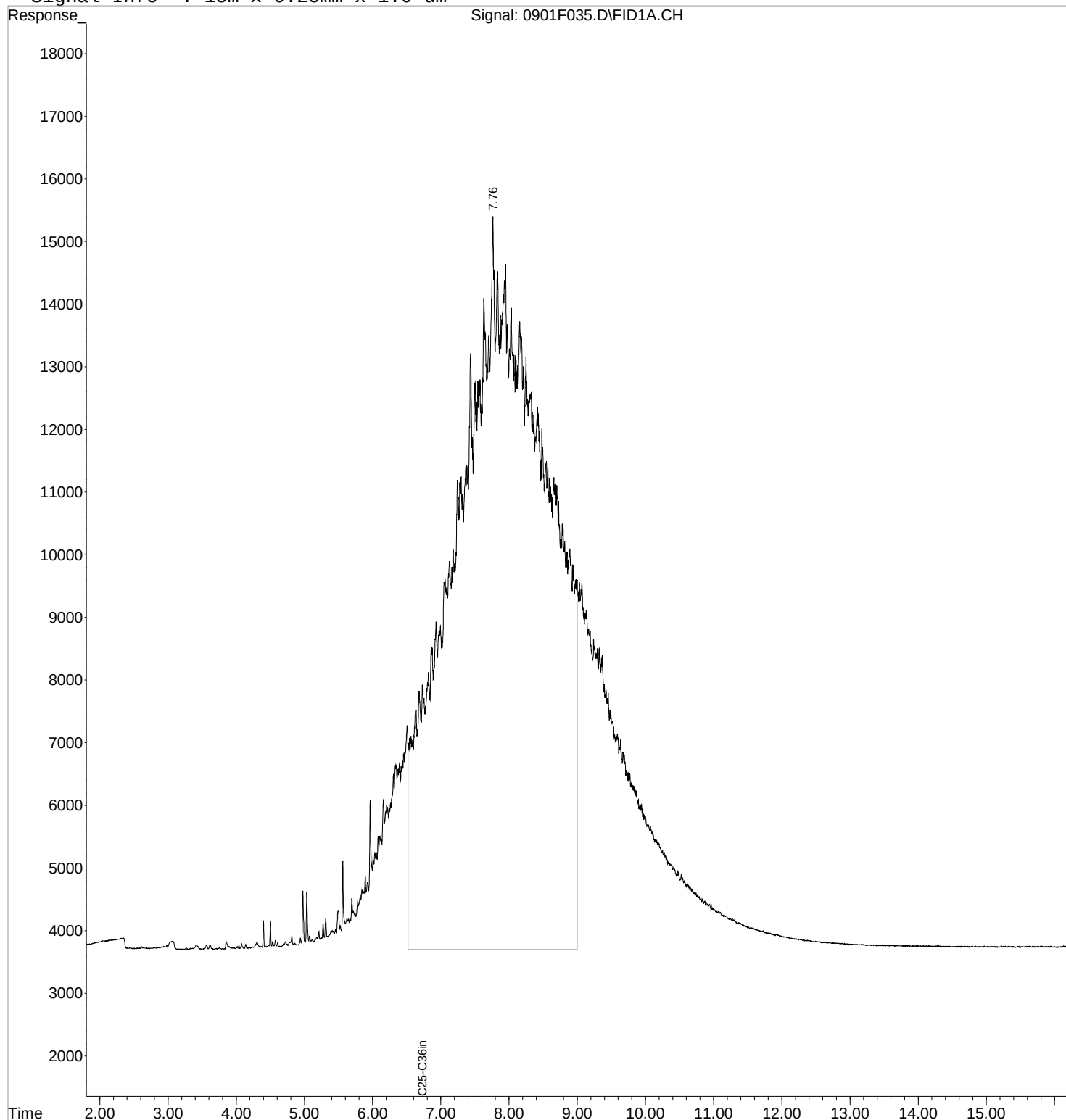
Response via : Single Level Calibration

DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Data File : J:\GC21\DATA\090123\0901F036.D Vial: 21
Acq On : 01 Sep 2023 10:29 pm Operator: AA
Sample : AK103 SVF04-58I 5000 Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Sep 05 06:56:02 2023 Quant Results File: 090123F.RES

Quant Method : J:\GC21\METHODS\090123F.M (RTE Integrator)
Title : 8015/NWTPH/AK SVF MJ257 KC2000628
Last Update : Fri Sep 01 10:57:30 2023
Response via : Initial Calibration
DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL
Signal Phase : ZB-1
Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

Target Compounds

11) H C25-C36in RRO [AK103]	6.72	2736698	5855.928 ppm
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Data File : J:\GC21\DATA\090123\0901F036.D

Vial: 21

Acq On : 01 Sep 2023 10:29 pm

Operator: AA

Sample : AK103 SVF04-58I 5000

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Sep 5 7:03 2023 Quant Results File: 090123F.RES

Quant Method : J:\GC21\METHODS\090123F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Fri Sep 01 10:57:30 2023

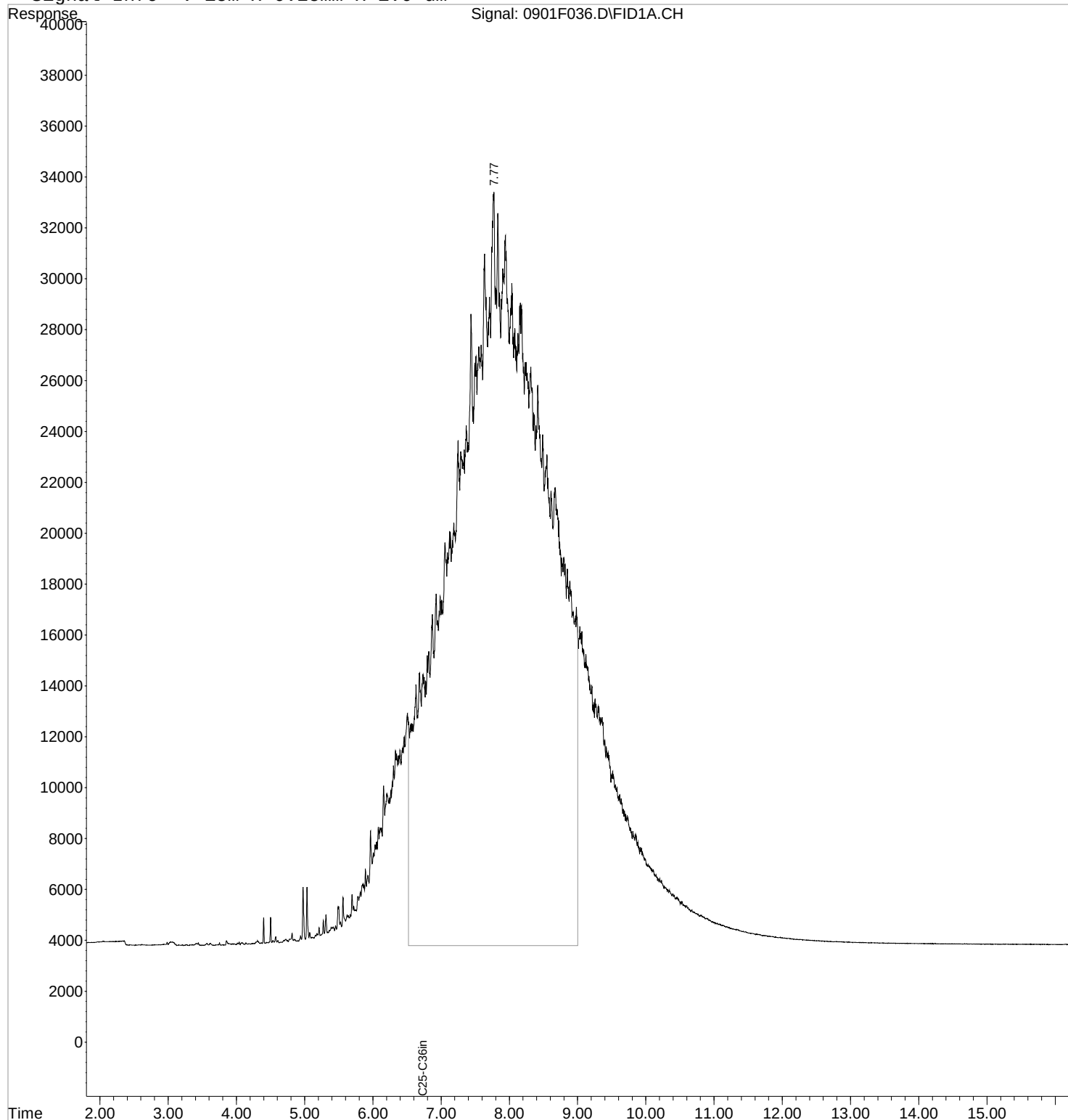
Response via : Single Level Calibration

DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Data File : J:\GC21\DATA\090123\0901F038.D Vial: 1
Acq On : 01 Sep 2023 11:12 pm Operator: AA
Sample : IB Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Sep 05 06:56:04 2023 Quant Results File: 090123F.RES

Quant Method : J:\GC21\METHODS\090123F.M (RTE Integrator)
Title : 8015/NWTPH/AK SVF MJ257 KC2000628
Last Update : Fri Sep 01 10:57:30 2023
Response via : Initial Calibration
DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL
Signal Phase : ZB-1
Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

Target Compounds

6)	H	C10-C25ex DRO [AK102]	3.11	10624	10.843 ppm
7)	H	C10-C28in DRO [8015]	3.21	12739	12.508 ppm
8)	H	C12-C25ex DRO [NWTPH]	3.75	8554	10.614 ppm
10)	H	C25-C36in RRO [NWTPH]	6.62	8260	15.136 ppm
11)	H	C25-C36in RRO [AK103]	6.72	8260	17.675 ppm

Data File : J:\GC21\DATA\090123\0901F038.D

Vial: 1

Acq On : 01 Sep 2023 11:12 pm

Operator: AA

Sample : IB

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Sep 5 6:56 2023 Quant Results File: 090123F.RES

Quant Method : J:\GC21\METHODS\090123F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Fri Sep 01 10:57:30 2023

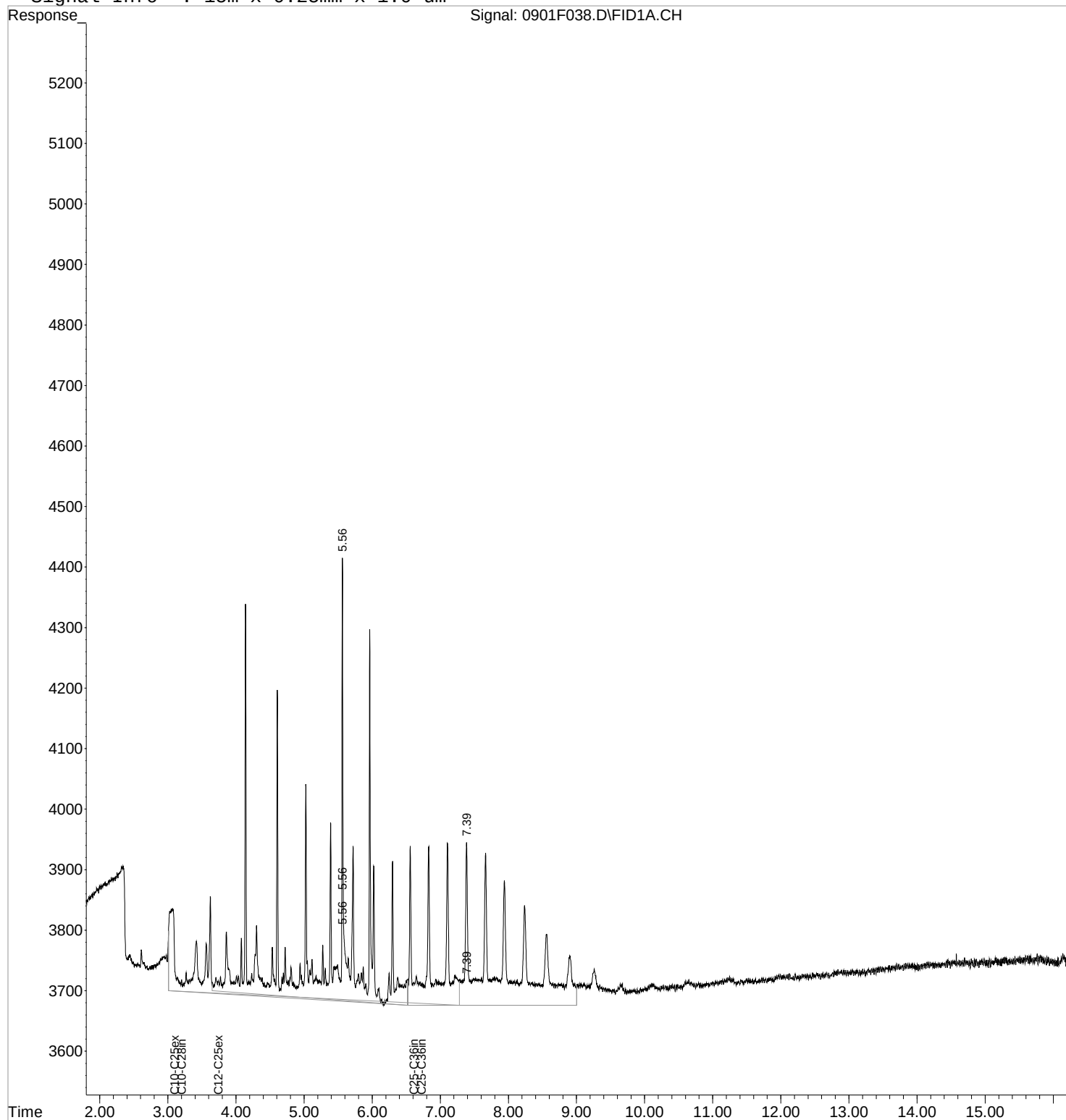
Response via : Single Level Calibration

DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Data File : J:\GC21\DATA\090123\0901F039.D Vial: 22
Acq On : 01 Sep 2023 11:34 pm Operator: AA
Sample : AK103 SVF04-58N ICV@1000 Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Sep 05 07:44:14 2023 Quant Results File: 090123F.RES

Quant Method : J:\GC21\METHODS\090123F.M (RTE Integrator)
Title : 8015/NWTPH/AK SVF MJ257 KC2000628
Last Update : Tue Sep 05 07:11:11 2023
Response via : Initial Calibration
DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL
Signal Phase : ZB-1
Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

Target Compounds

11) H C25-C36in RRO [AK103]	6.72	511899	840.883 ppm
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Data File : J:\GC21\DATA\090123\0901F039.D

Vial: 22

Acq On : 01 Sep 2023 11:34 pm

Operator: AA

Sample : AK103 SVF04-58N ICV@1000

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Sep 5 7:44 2023 Quant Results File: 090123F.RES

Quant Method : J:\GC21\METHODS\090123F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Tue Sep 05 07:11:11 2023

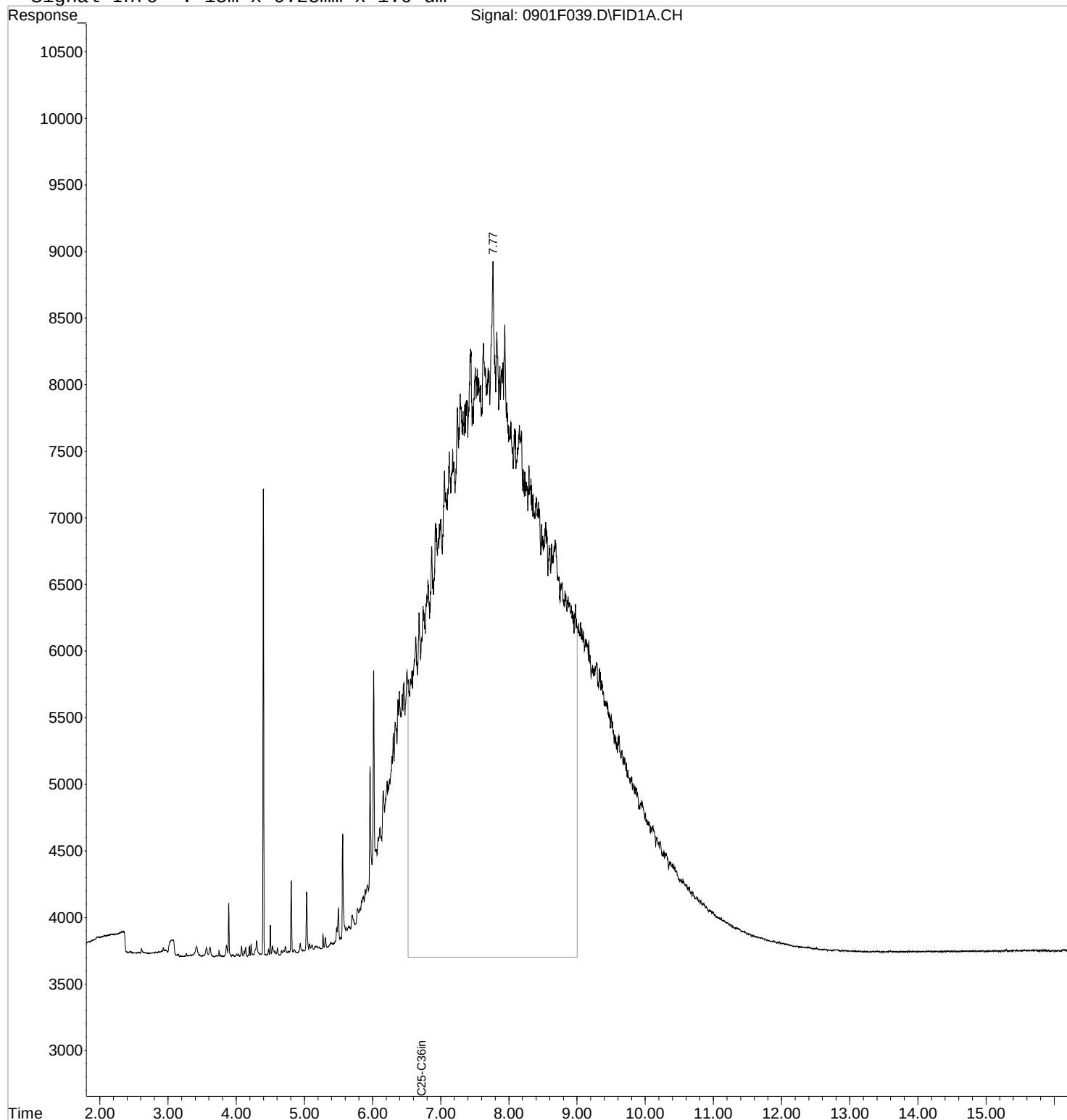
Response via : Single Level Calibration

DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Data File : J:\GC21\DATA\090623\0906F013.D Vial: 1
Acq On : 06 Sep 2023 1:01 pm Operator: AA
Sample : IB Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Sep 07 14:30:18 2023 Quant Results File: 090623F.RES

Quant Method : J:\GC21\METHODS\090623F.M (RTE Integrator)
Title : 8015/NWTPH/AK SVF MJ257 KC2000628
Last Update : Thu Sep 07 07:26:08 2023
Response via : Initial Calibration
DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL
Signal Phase : ZB-1
Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

Target Compounds

6)	H	C10-C25ex DRO [AK102]	3.11	8681	8.956 ppm
7)	H	C10-C28in DRO [8015]	3.21	10455	10.309 ppm
8)	H	C12-C25ex DRO [NWTPH]	3.75	6325	7.974 ppm
10)	H	C25-C36in RRO [NWTPH]	6.62	4778	7.190 ppm
11)	H	C25-C36in RRO [AK103]	6.72	4778	7.849 ppm

Data File : J:\GC21\DATA\090623\0906F013.D

Vial: 1

Acq On : 06 Sep 2023 1:01 pm

Operator: AA

Sample : IB

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Sep 7 14:31 2023 Quant Results File: 090623F.RES

Quant Method : J:\GC21\METHODS\090623F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Thu Sep 07 07:26:08 2023

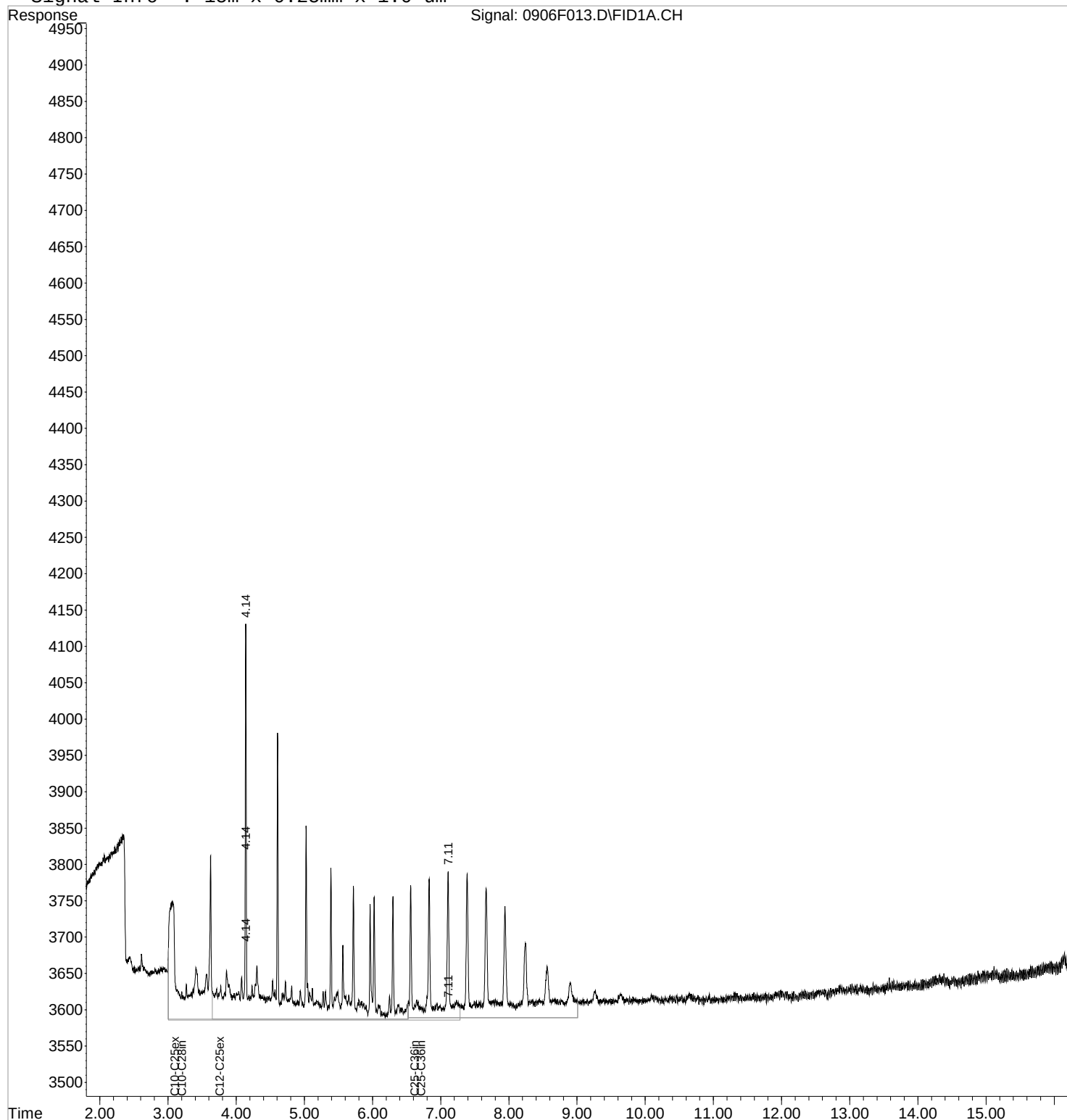
Response via : Single Level Calibration

DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Data File : J:\GC21\DATA\090623\0906F013.D

Acq On : 06 Sep 2023 1:01 pm

Sample : IB

Misc :

IntFile : rteint.p

Quant Time: Sep 7 14:30 2023 Quant Results File: 090623F.RES

Vial: 1

Operator: AA

Inst : GC21

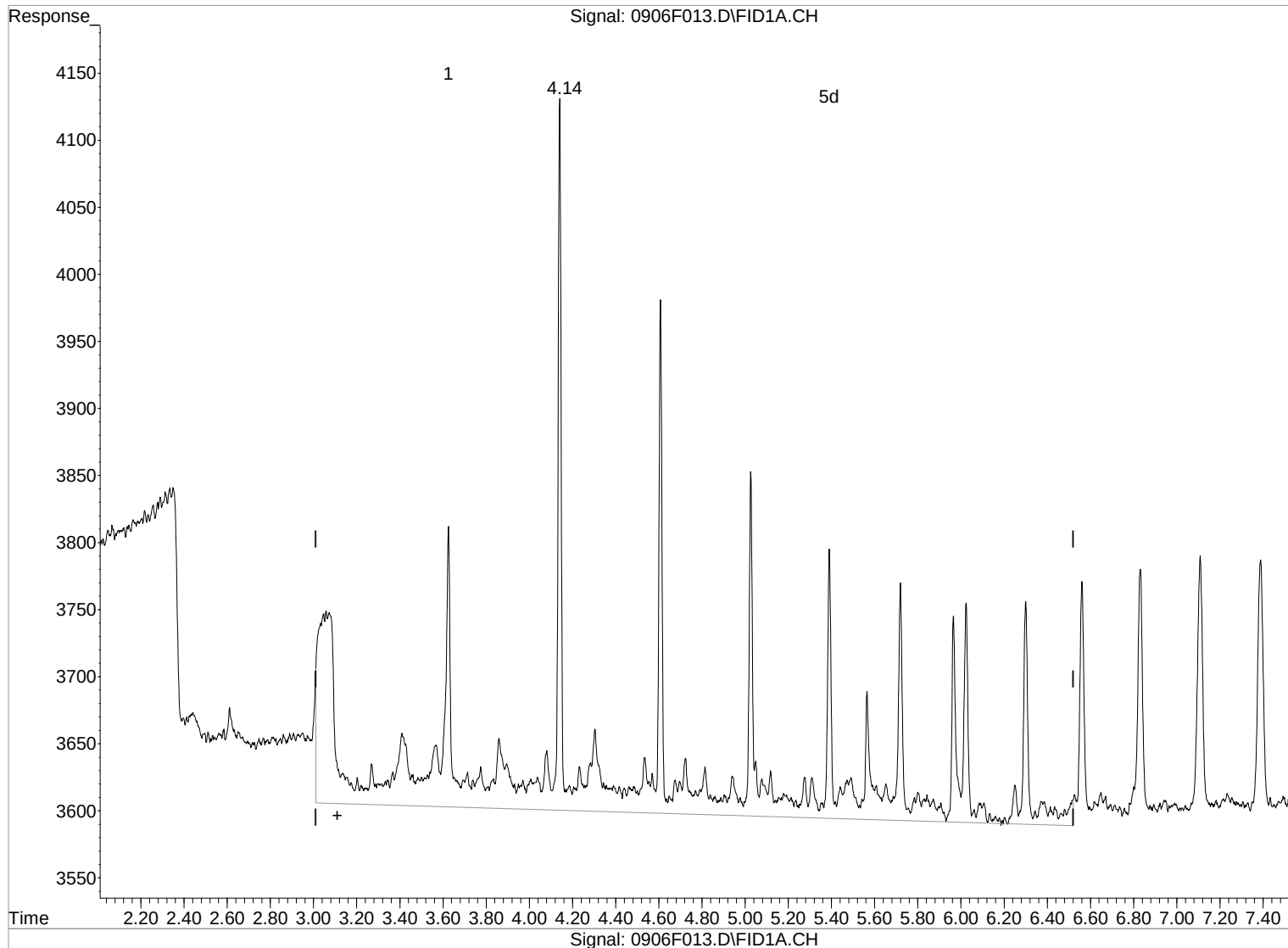
Multiplr: 1.00

Method : J:\GC21\METHODS\090623F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Thu Sep 07 07:26:08 2023

Response via : Multiple Level Calibration



(6) C10-C25ex DRO [AK102] (H)

Manual Integration:

3.11min 6.720ppm

Before

response 6514

09/07/23

(+) = Expected Retention Time

0906F013.D 090623F.M Thu Sep 07 14:30:44 2023

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Data File : J:\GC21\DATA\090623\0906F013.D

Acq On : 06 Sep 2023 1:01 pm

Sample : IB

Misc :

IntFile : rteint.p

Quant Time: Sep 7 14:30 2023 Quant Results File: 090623F.RES

Vial: 1

Operator: AA

Inst : GC21

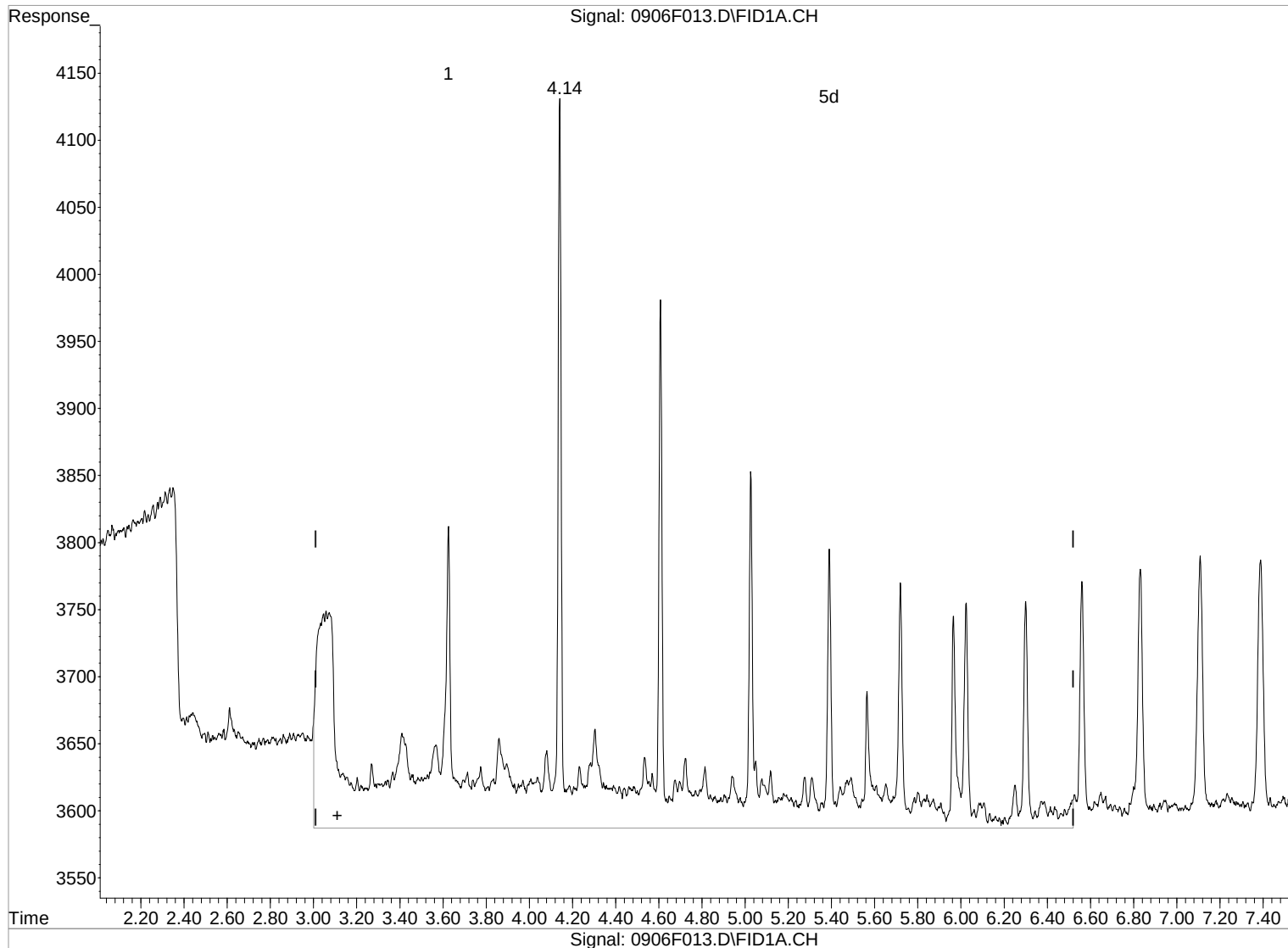
Multiplr: 1.00

Method : J:\GC21\METHODS\090623F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Thu Sep 07 07:26:08 2023

Response via : Multiple Level Calibration



(6) C10-C25ex DRO [AK102] (H)

3.11min 8.956ppm

response 8681

Manual Integration:

After

Baseline/Shoulder

09/07/23

(+) = Expected Retention Time

0906F013.D 090623F.M Thu Sep 07 14:31:02 2023

296 of 2035

Data File : J:\GC21\DATA\090623\0906F013.D

Acq On : 06 Sep 2023 1:01 pm

Sample : IB

Misc :

IntFile : rteint.p

Quant Time: Sep 7 14:30 2023 Quant Results File: 090623F.RES

Vial: 1

Operator: AA

Inst : GC21

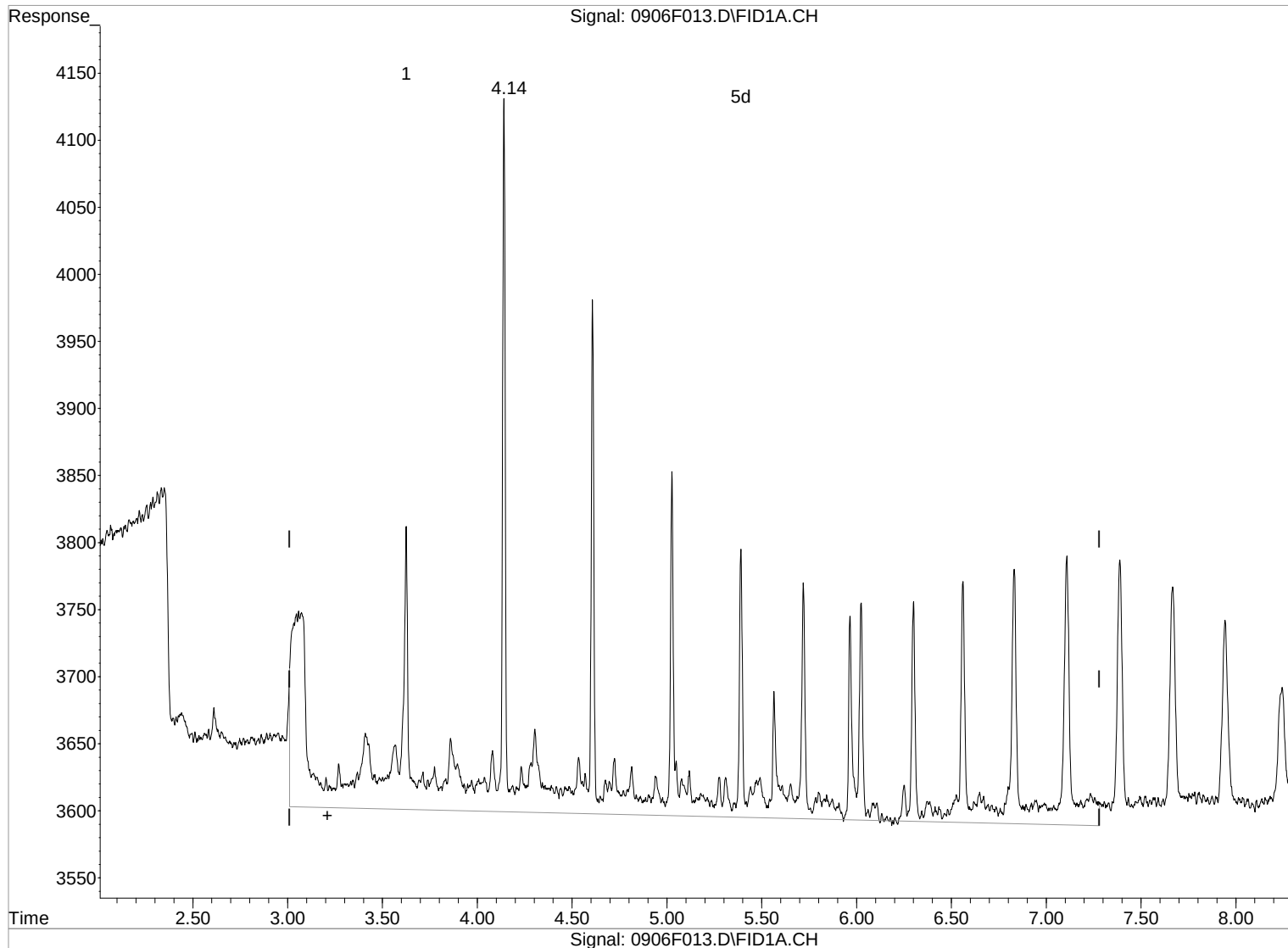
Multiplr: 1.00

Method : J:\GC21\METHODS\090623F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Thu Sep 07 07:26:08 2023

Response via : Multiple Level Calibration



(7) C10-C28in DRO [8015] (H)

Manual Integration:

3.21min 7.746ppm

Before

response 7855

09/07/23

(+) = Expected Retention Time

0906F013.D 090623F.M Thu Sep 07 14:31:06 2023

297 of 2035

Data File : J:\GC21\DATA\090623\0906F013.D

Acq On : 06 Sep 2023 1:01 pm

Sample : IB

Misc :

IntFile : rteint.p

Quant Time: Sep 7 14:30 2023 Quant Results File: 090623F.RES

Vial: 1

Operator: AA

Inst : GC21

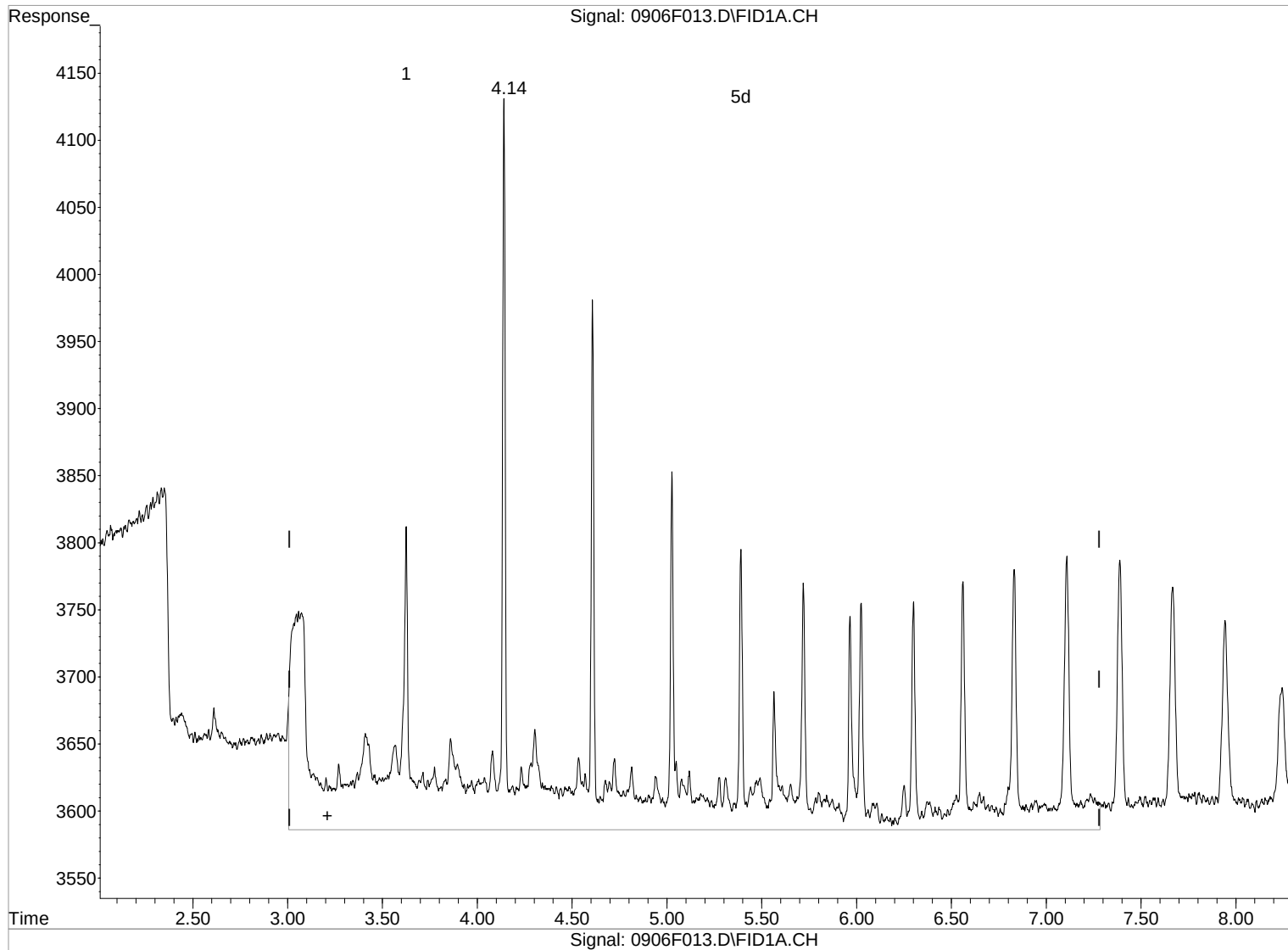
Multiplr: 1.00

Method : J:\GC21\METHODS\090623F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Thu Sep 07 07:26:08 2023

Response via : Multiple Level Calibration



(7) C10-C28in DRO [8015] (H)

3.21min 10.309ppm

response 10455

Manual Integration:

After

Baseline/Shoulder

09/07/23

(+) = Expected Retention Time

0906F013.D 090623F.M Thu Sep 07 14:31:24 2023

298 of 2035

Data File : J:\GC21\DATA\090623\0906F013.D

Acq On : 06 Sep 2023 1:01 pm

Sample : IB

Misc :

IntFile : rteint.p

Quant Time: Sep 7 14:30 2023 Quant Results File: 090623F.RES

Vial: 1

Operator: AA

Inst : GC21

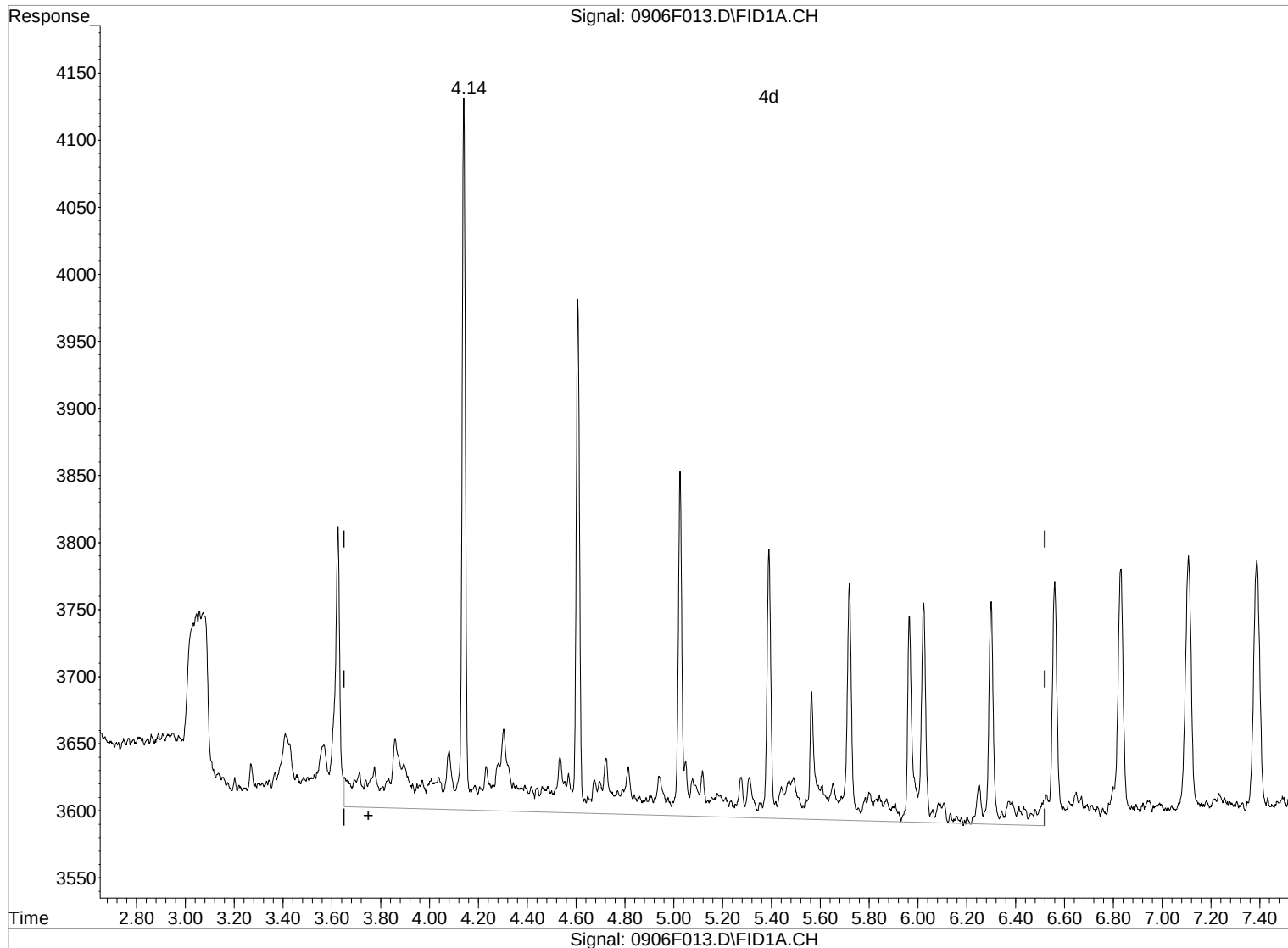
Multiplr: 1.00

Method : J:\GC21\METHODS\090623F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Thu Sep 07 07:26:08 2023

Response via : Multiple Level Calibration



(8) C12-C25ex DRO [NWTPH] (H)

Manual Integration:

3.75min 6.015ppm

Before

response 4771

09/07/23

(+) = Expected Retention Time

0906F013.D 090623F.M Thu Sep 07 14:31:27 2023

299 of 2035

Data File : J:\GC21\DATA\090623\0906F013.D

Acq On : 06 Sep 2023 1:01 pm

Sample : IB

Misc :

IntFile : rteint.p

Quant Time: Sep 7 14:30 2023 Quant Results File: 090623F.RES

Vial: 1

Operator: AA

Inst : GC21

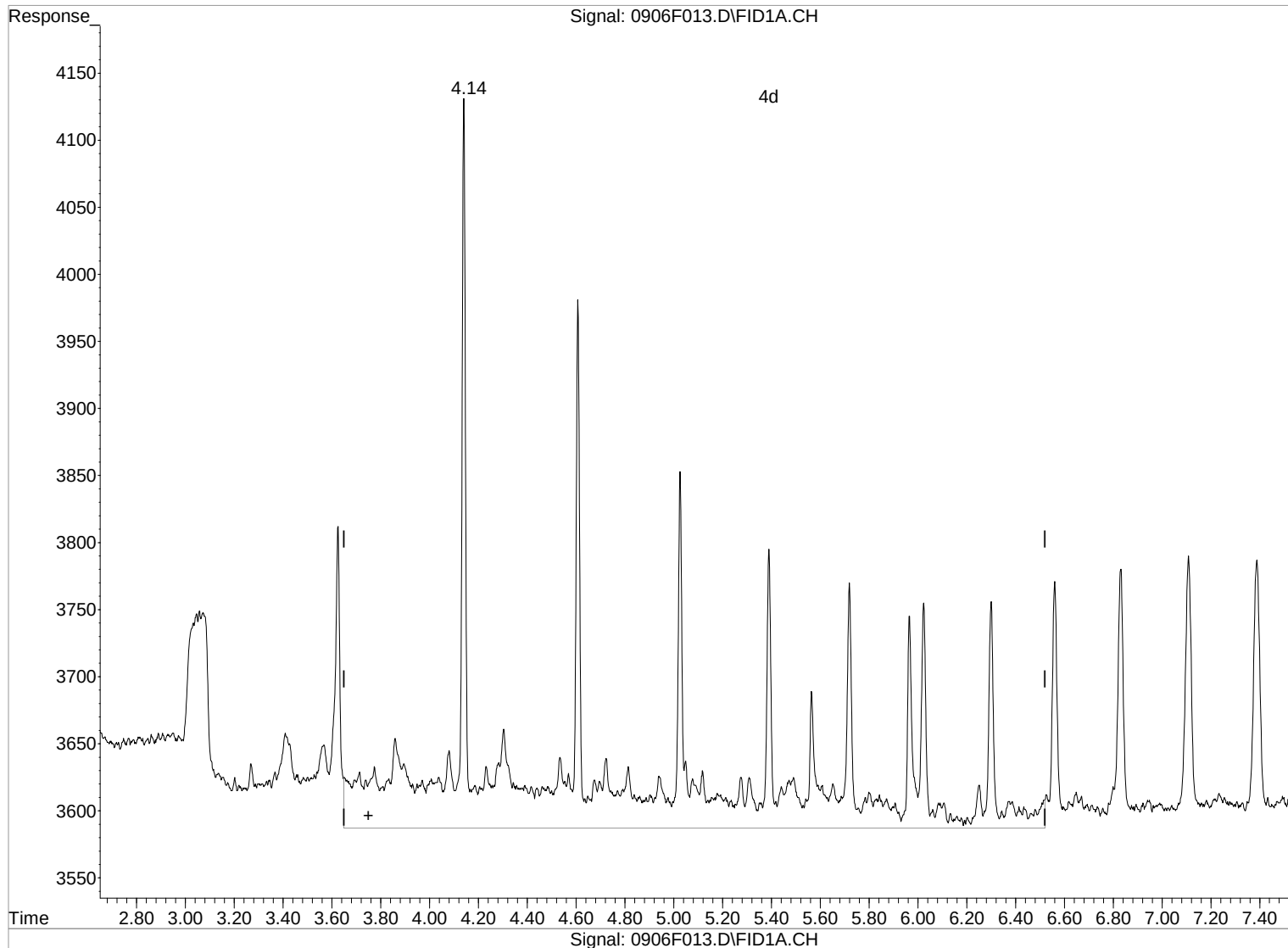
Multiplr: 1.00

Method : J:\GC21\METHODS\090623F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Thu Sep 07 07:26:08 2023

Response via : Multiple Level Calibration



(8) C12-C25ex DRO [NWTPH] (H)

3.75min 7.974ppm

response 6325

Manual Integration:

After

Baseline/Shoulder

09/07/23

(+) = Expected Retention Time

0906F013.D 090623F.M Thu Sep 07 14:31:26 2023

300 of 2035

Data File : J:\GC21\DATA\090623\0906F014.D Vial: 3
Acq On : 06 Sep 2023 1:22 pm Operator: AA
Sample : DRO SVF04-62A 20/1.0 Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Sep 07 07:15:37 2023 Quant Results File: 090623F.RES

Quant Method : J:\GC21\METHODS\090623F.M (RTE Integrator)
Title : 8015/NWTPH/AK SVF MJ257 KC2000628
Last Update : Wed Sep 06 06:47:48 2023
Response via : Initial Calibration
DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL
Signal Phase : ZB-1
Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

1) S 4-Bromofluorobenzene	2.76	614	1.065 ppm
Spiked Amount 50.000	Recovery	=	2.13%
2) S o-Terphenyl	5.44	1277	1.043 ppm
Spiked Amount 50.000	Recovery	=	2.09%
3) S n-Triacontane	7.57	1054	1.001 ppm
Spiked Amount 50.000	Recovery	=	2.00%

Target Compounds

6) H C10-C25ex DRO [AK102]	3.11	23717	22.212 ppm
7) H C10-C28in DRO [8015]	3.21	25775	23.077 ppm
8) H C12-C25ex DRO [NWTPH]	3.75	18544	20.980 ppm

Data File : J:\GC21\DATA\090623\0906F014.D

Vial: 3

Acq On : 06 Sep 2023 1:22 pm

Operator: AA

Sample : DRO SVF04-62A 20/1.0

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Sep 7 7:20 2023 Quant Results File: 090623F.RES

Quant Method : J:\GC21\METHODS\090623F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Wed Sep 06 06:47:48 2023

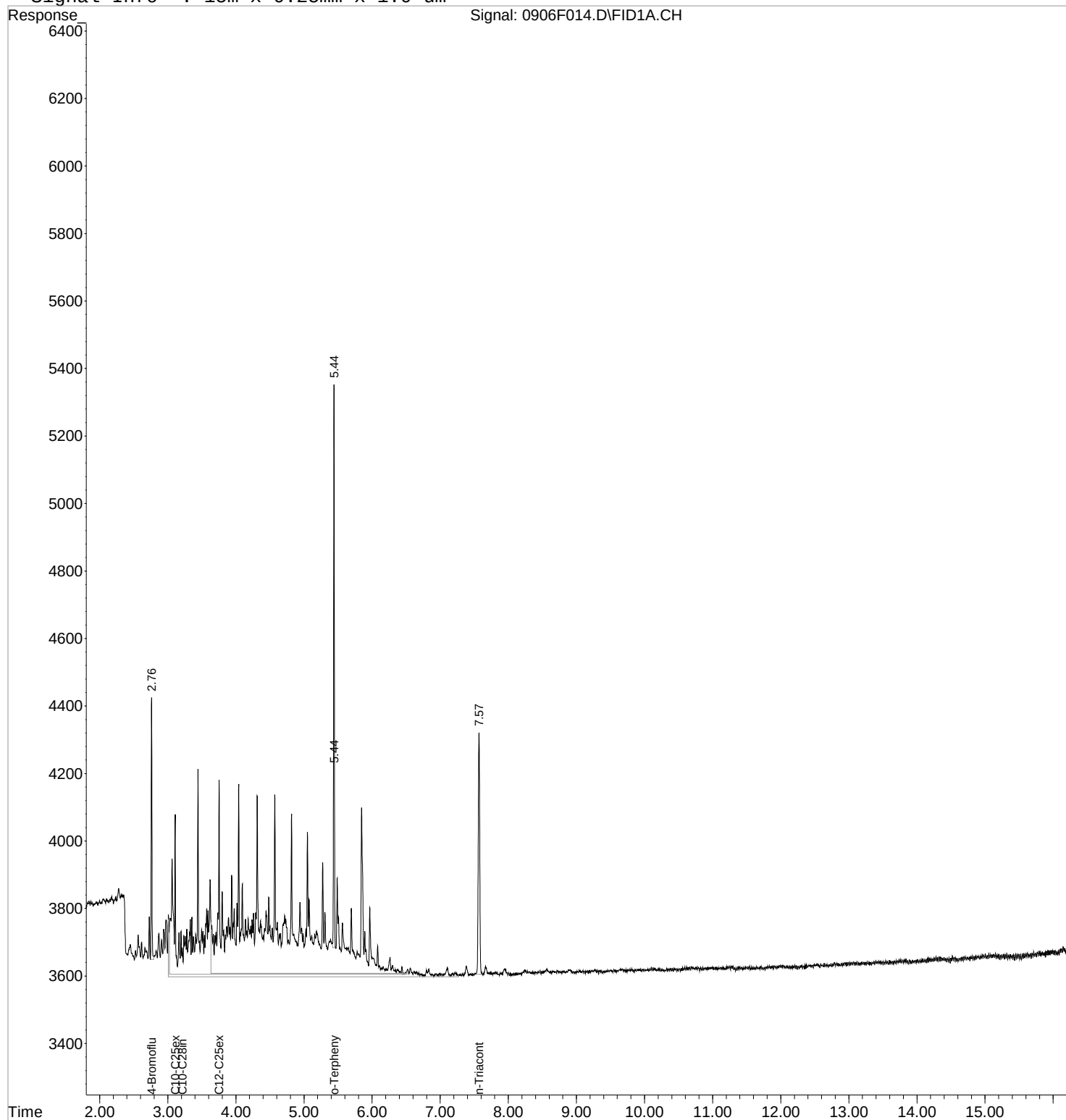
Response via : Single Level Calibration

DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Quantitation Report (Qedit)

1st *AA* 09/08/232nd *SW* 09/08/23

Data File : J:\GC21\DATA\090623\0906F014.D

Vial: 3

Acq On : 06 Sep 2023 1:22 pm

Operator: AA

Sample : DRO SVF04-62A 20/1.0

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

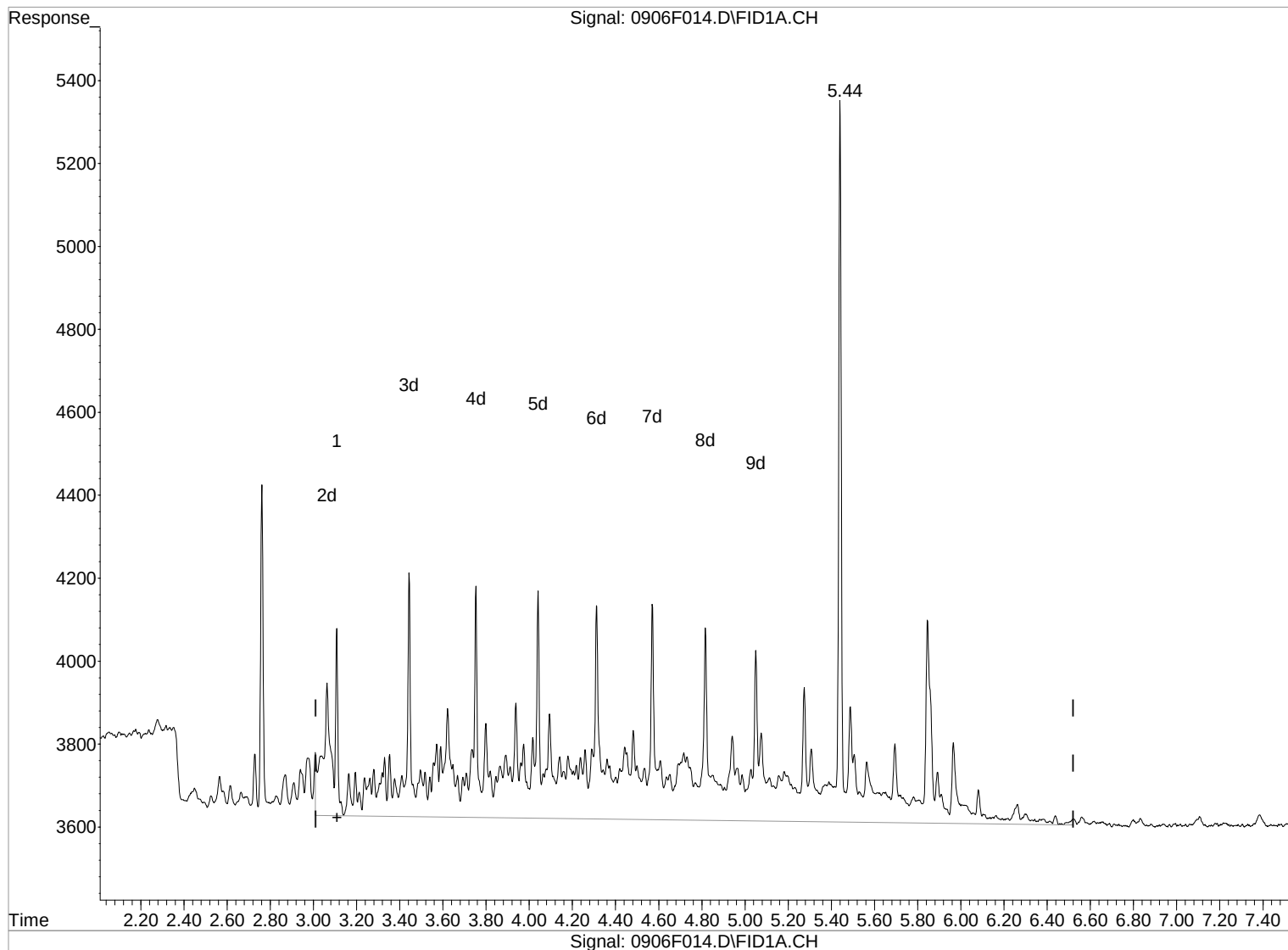
Quant Time: Sep 7 7:15 2023 Quant Results File: 090623F.RES

Method : J:\GC21\METHODS\090623F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Wed Sep 06 06:47:48 2023

Response via : Multiple Level Calibration



(6) C10-C25ex DRO [AK102] (H)

Manual Integration:

3.11min 20.164ppm

Before

response 21530

09/07/23

(+) = Expected Retention Time

0906F014.D 090623F.M Thu Sep 07 07:19:17 2023

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Data File : J:\GC21\DATA\090623\0906F014.D

Vial: 3

Acq On : 06 Sep 2023 1:22 pm

Operator: AA

Sample : DRO SVF04-62A 20/1.0

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

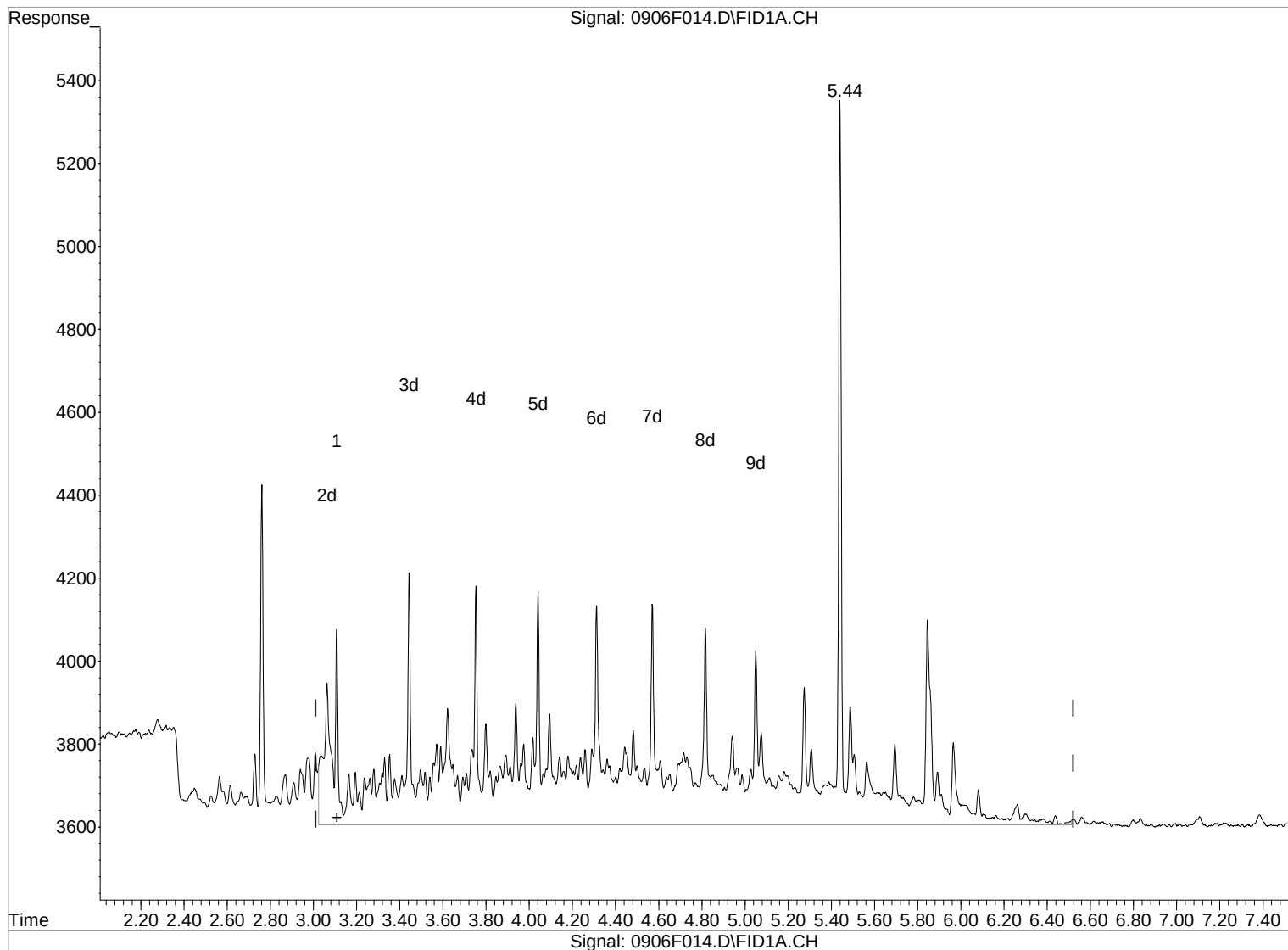
Quant Time: Sep 7 7:15 2023 Quant Results File: 090623F.RES

Method : J:\GC21\METHODS\090623F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Wed Sep 06 06:47:48 2023

Response via : Multiple Level Calibration



(6) C10-C25ex DRO [AK102] (H)

Manual Integration:

3.11min 22.212ppm

After

response 23717

Baseline/Shoulder

09/07/23

(+) = Expected Retention Time

0906F014.D 090623F.M

Thu Sep 07 07:19:49 2023

304 of 2035

Quantitation Report (Qedit)

1st *AA* 09/08/232nd *SW* 09/08/23

Data File : J:\GC21\DATA\090623\0906F014.D

Vial: 3

Acq On : 06 Sep 2023 1:22 pm

Operator: AA

Sample : DRO SVF04-62A 20/1.0

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

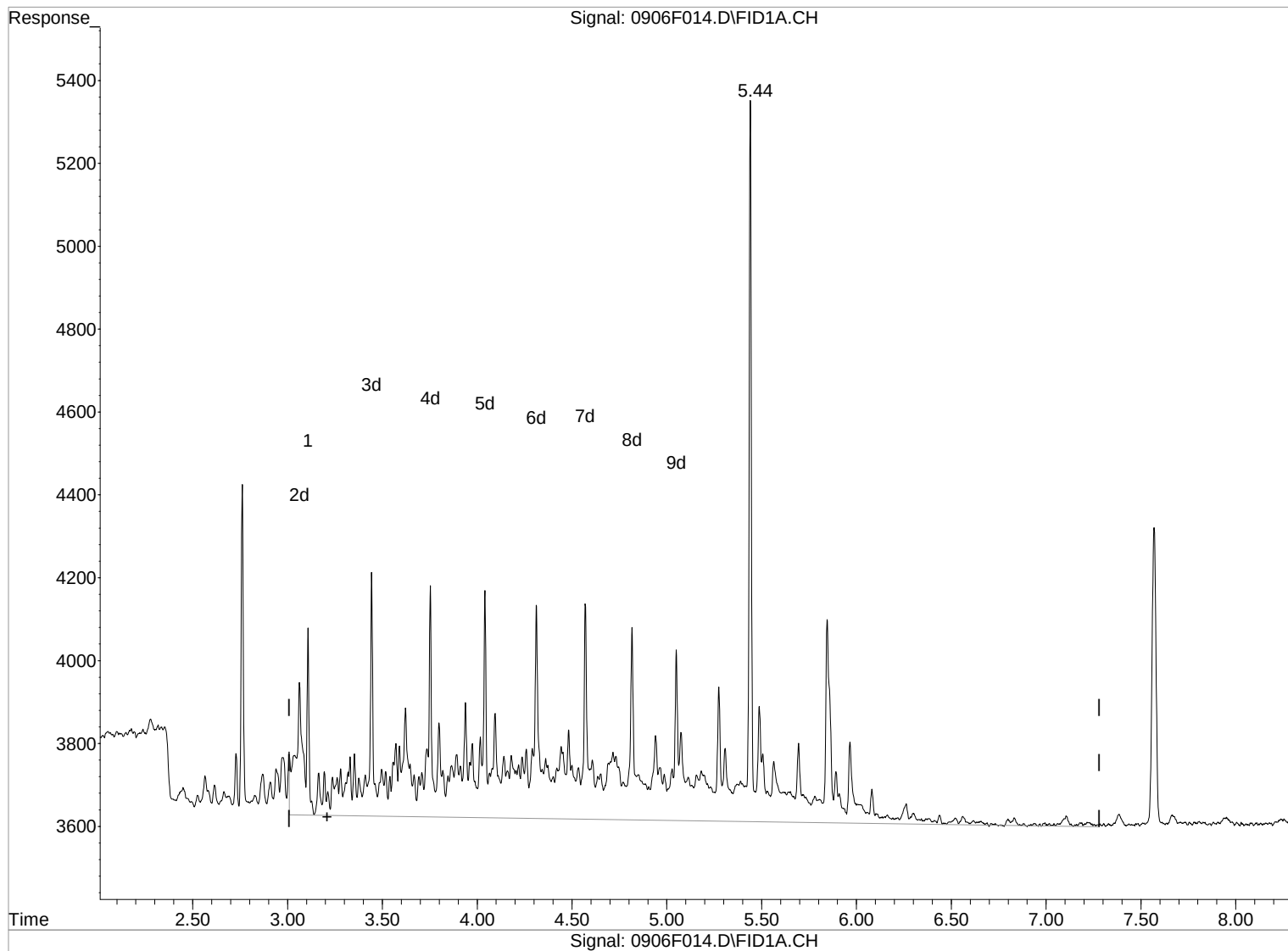
Quant Time: Sep 7 7:15 2023 Quant Results File: 090623F.RES

Method : J:\GC21\METHODS\090623F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Wed Sep 06 06:47:48 2023

Response via : Multiple Level Calibration



(7) C10-C28in DRO [8015] (H)

Manual Integration:

3.21min 19.608ppm

Before

response 21900

09/07/23

(+) = Expected Retention Time

0906F014.D 090623F.M Thu Sep 07 07:19:04 2023

305 of 2035

Quantitation Report (Qedit)

1st *AA* 09/08/232nd *SW* 09/08/23

Data File : J:\GC21\DATA\090623\0906F014.D

Vial: 3

Acq On : 06 Sep 2023 1:22 pm

Operator: AA

Sample : DRO SVF04-62A 20/1.0

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

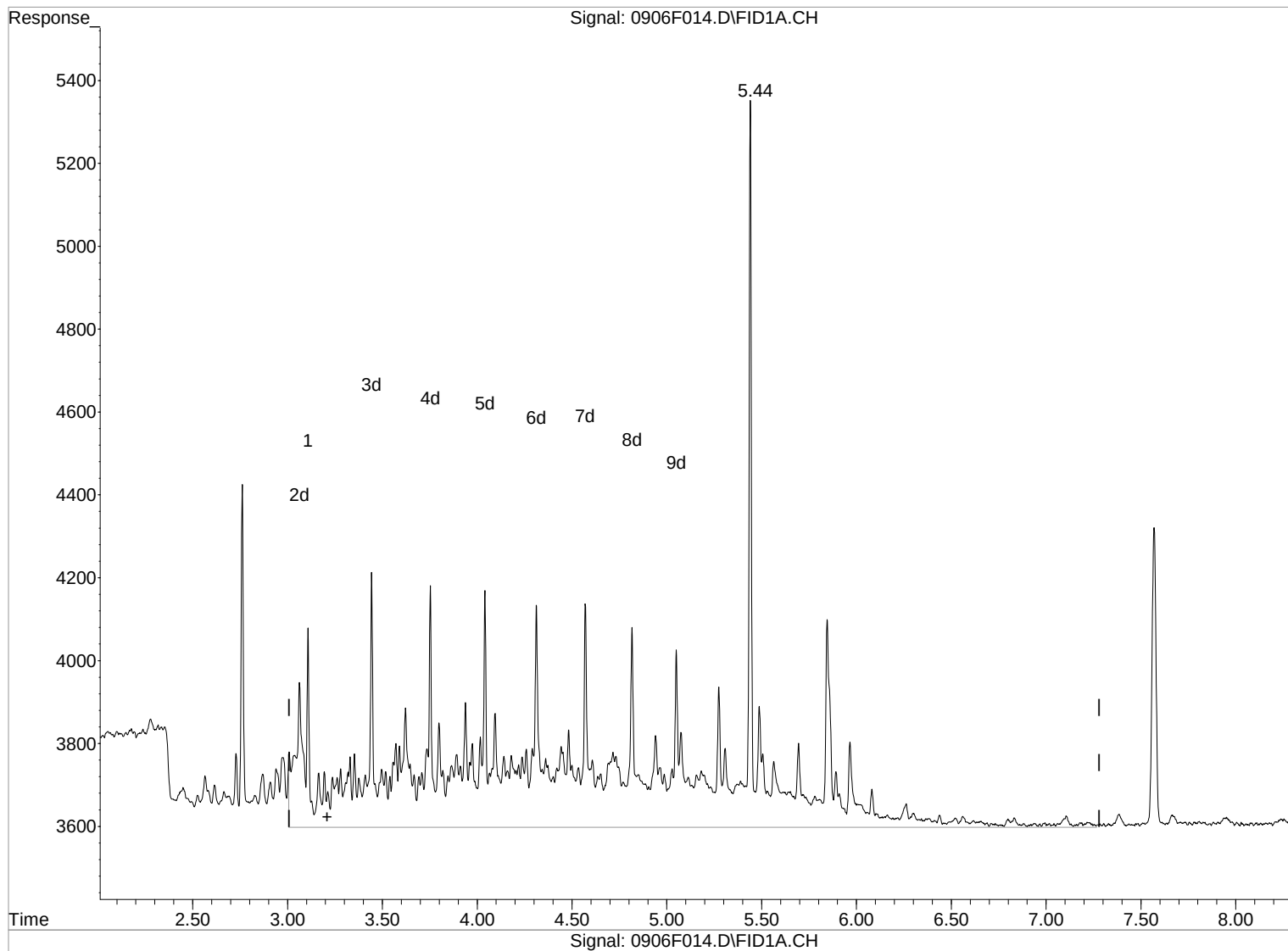
Quant Time: Sep 7 7:15 2023 Quant Results File: 090623F.RES

Method : J:\GC21\METHODS\090623F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Wed Sep 06 06:47:48 2023

Response via : Multiple Level Calibration



(7) C10-C28in DRO [8015] (H)

Manual Integration:

3.21min 23.077ppm

After

response 25775

Baseline/Shoulder

09/07/23

(+) = Expected Retention Time

0906F014.D 090623F.M Thu Sep 07 07:19:14 2023

306 of 2035

Data File : J:\GC21\DATA\090623\0906F014.D

Vial: 3

Acq On : 06 Sep 2023 1:22 pm

Operator: AA

Sample : DRO SVF04-62A 20/1.0

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

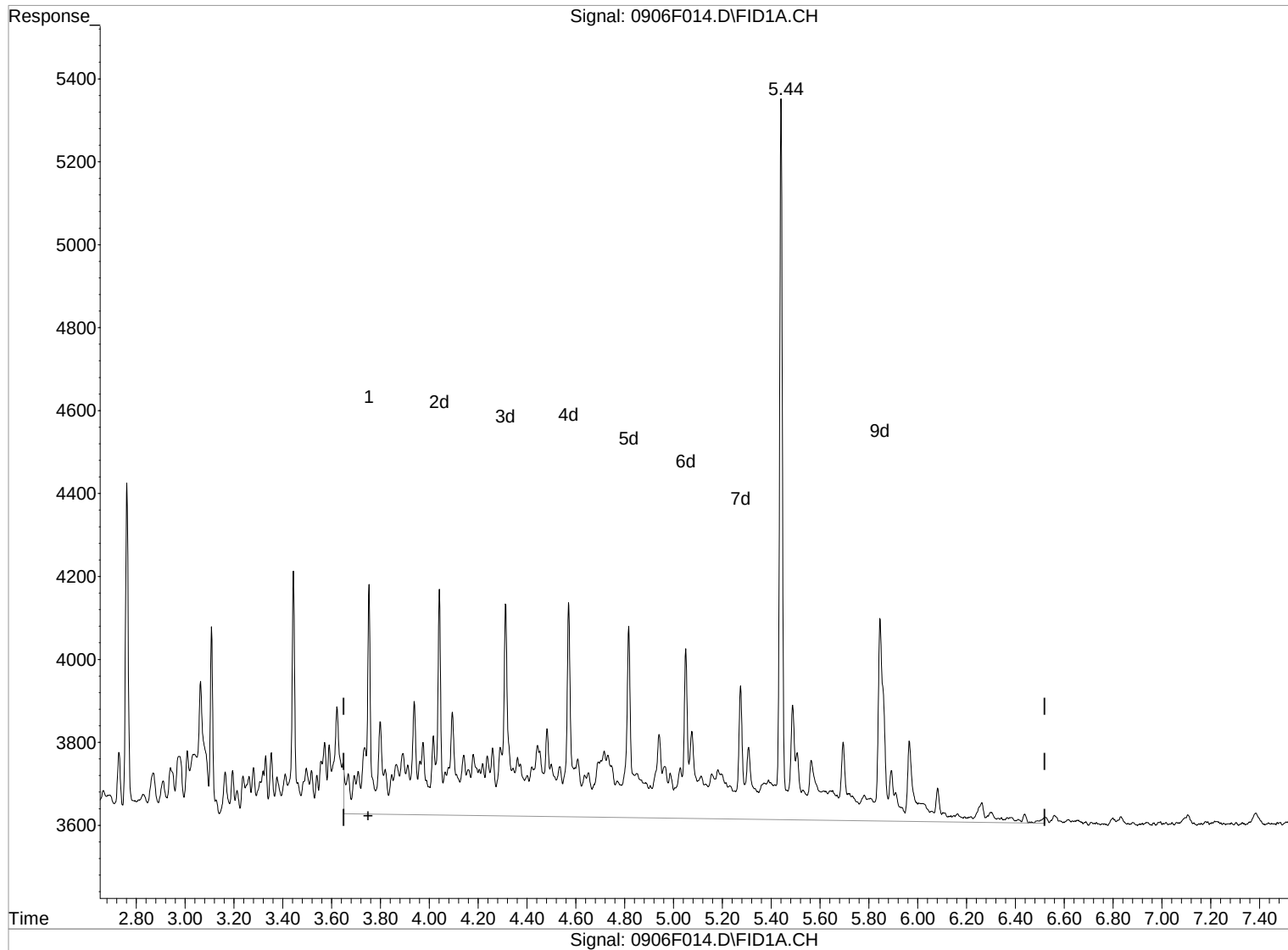
Quant Time: Sep 7 7:15 2023 Quant Results File: 090623F.RES

Method : J:\GC21\METHODS\090623F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Wed Sep 06 06:47:48 2023

Response via : Multiple Level Calibration



(8) C12-C25ex DRO [NWTPH] (H)

Manual Integration:

3.75min 19.290ppm

Before

response 17050

09/07/23

(+) = Expected Retention Time

0906F014.D 090623F.M

Thu Sep 07 07:18:17 2023

307 of 2035

Data File : J:\GC21\DATA\090623\0906F014.D

Vial: 3

Acq On : 06 Sep 2023 1:22 pm

Operator: AA

Sample : DRO SVF04-62A 20/1.0

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

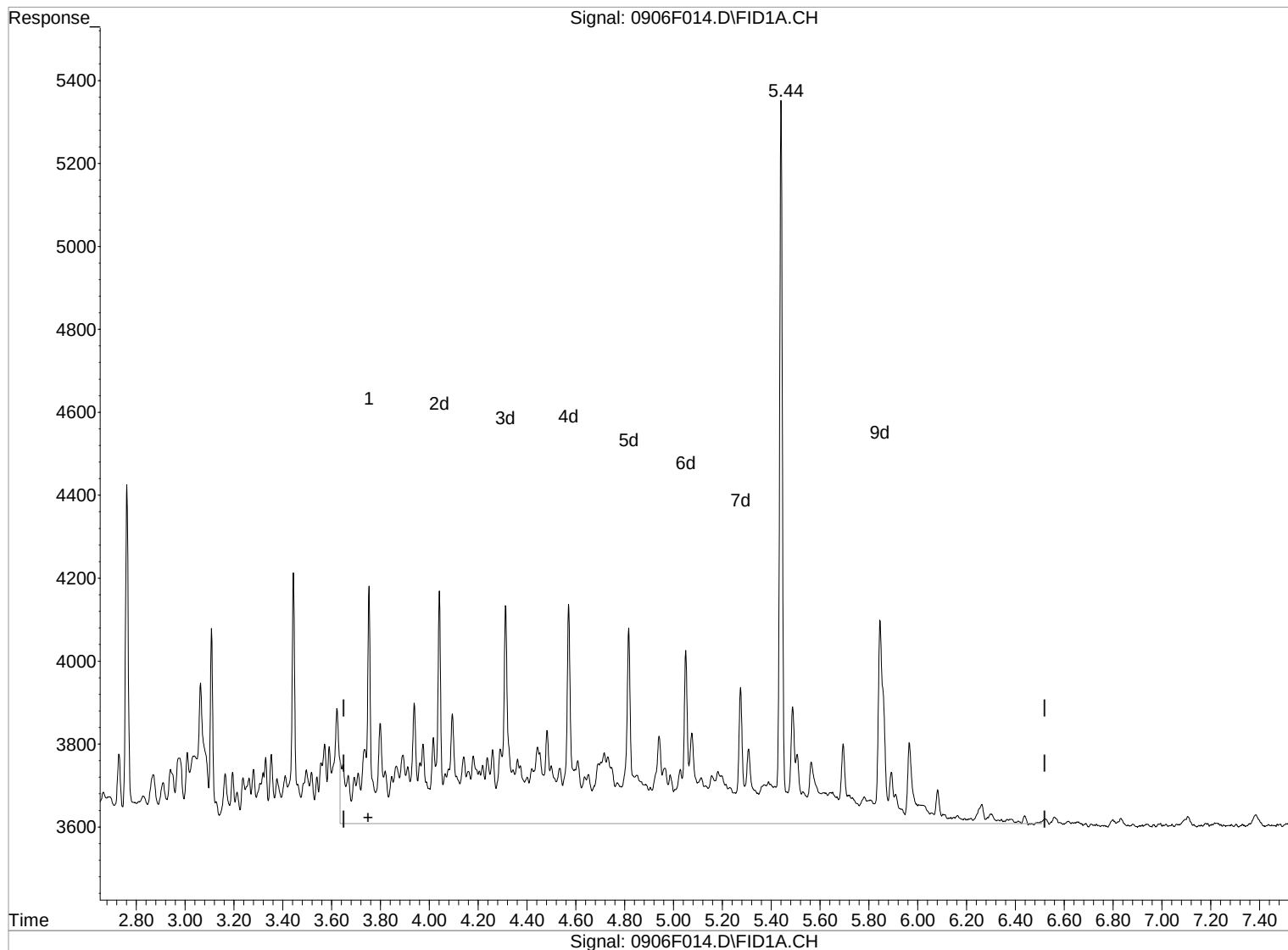
Quant Time: Sep 7 7:15 2023 Quant Results File: 090623F.RES

Method : J:\GC21\METHODS\090623F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Wed Sep 06 06:47:48 2023

Response via : Multiple Level Calibration



(8) C12-C25ex DRO [NWTPH] (H)

Manual Integration:

3.75min 20.980ppm

After

response 18544

Baseline/Shoulder

09/07/23

(+) = Expected Retention Time

0906F014.D 090623F.M Thu Sep 07 07:19:00 2023

308 of 2035

Data File : J:\GC21\DATA\090623\0906F015.D Vial: 4
 Acq On : 06 Sep 2023 1:44 pm Operator: AA
 Sample : DRO SVF04-61L 50/2.5 Inst : GC21
 Misc : Multiplr: 1.00
 IntFile : rteint.p
 Quant Time: Sep 07 07:15:39 2023 Quant Results File: 090623F.RES

Quant Method : J:\GC21\METHODS\090623F.M (RTE Integrator)
 Title : 8015/NWTPH/AK SVF MJ257 KC2000628
 Last Update : Wed Sep 06 06:47:48 2023
 Response via : Initial Calibration
 DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL
 Signal Phase : ZB-1
 Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
1) S 4-Bromofluorobenzene	2.76	1271	2.204 ppm
Spiked Amount 50.000	Recovery	=	4.41%
2) S o-Terphenyl	5.44	2742	2.239 ppm
Spiked Amount 50.000	Recovery	=	4.48%
3) S n-Triacontane	7.57	2349	2.230 ppm
Spiked Amount 50.000	Recovery	=	4.46%
Target Compounds			
6) H C10-C25ex DRO [AK102]	3.11	50767	47.546 ppm
7) H C10-C28in DRO [8015]	3.21	57855	51.799 ppm
8) H C12-C25ex DRO [NWTPH]	3.75	40640	45.980 ppm

Data File : J:\GC21\DATA\090623\0906F015.D

Vial: 4

Acq On : 06 Sep 2023 1:44 pm

Operator: AA

Sample : DR0 SVF04-61L 50/2.5

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Sep 7 7:21 2023 Quant Results File: 090623F.RES

Quant Method : J:\GC21\METHODS\090623F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Wed Sep 06 06:47:48 2023

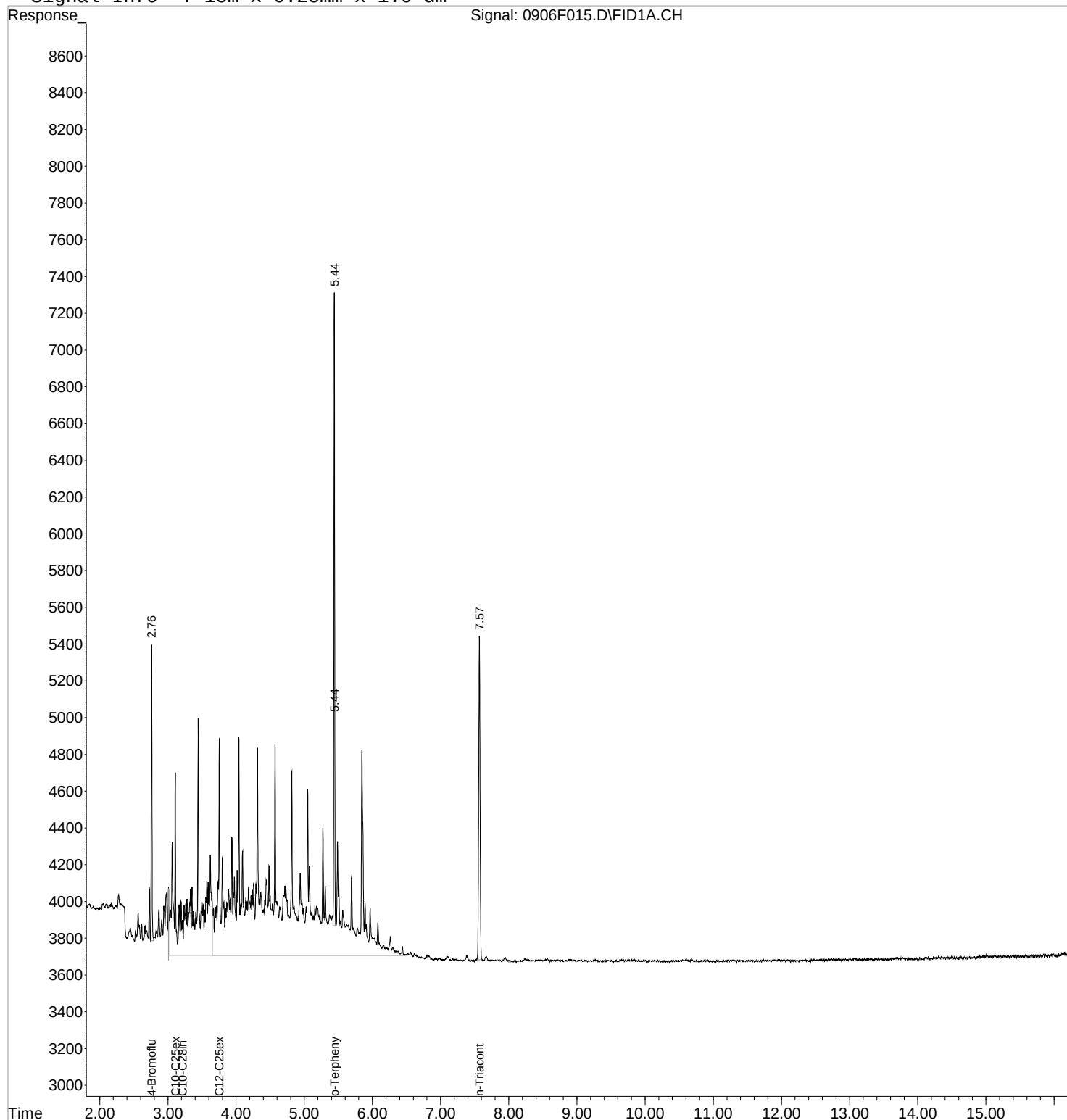
Response via : Single Level Calibration

DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Data File : J:\GC21\DATA\090623\0906F015.D

Acq On : 06 Sep 2023 1:44 pm

Sample : DRO SVF04-61L 50/2.5

Misc :

IntFile : rteint.p

Quant Time: Sep 7 7:15 2023 Quant Results File: 090623F.RES

Vial: 4

Operator: AA

Inst : GC21

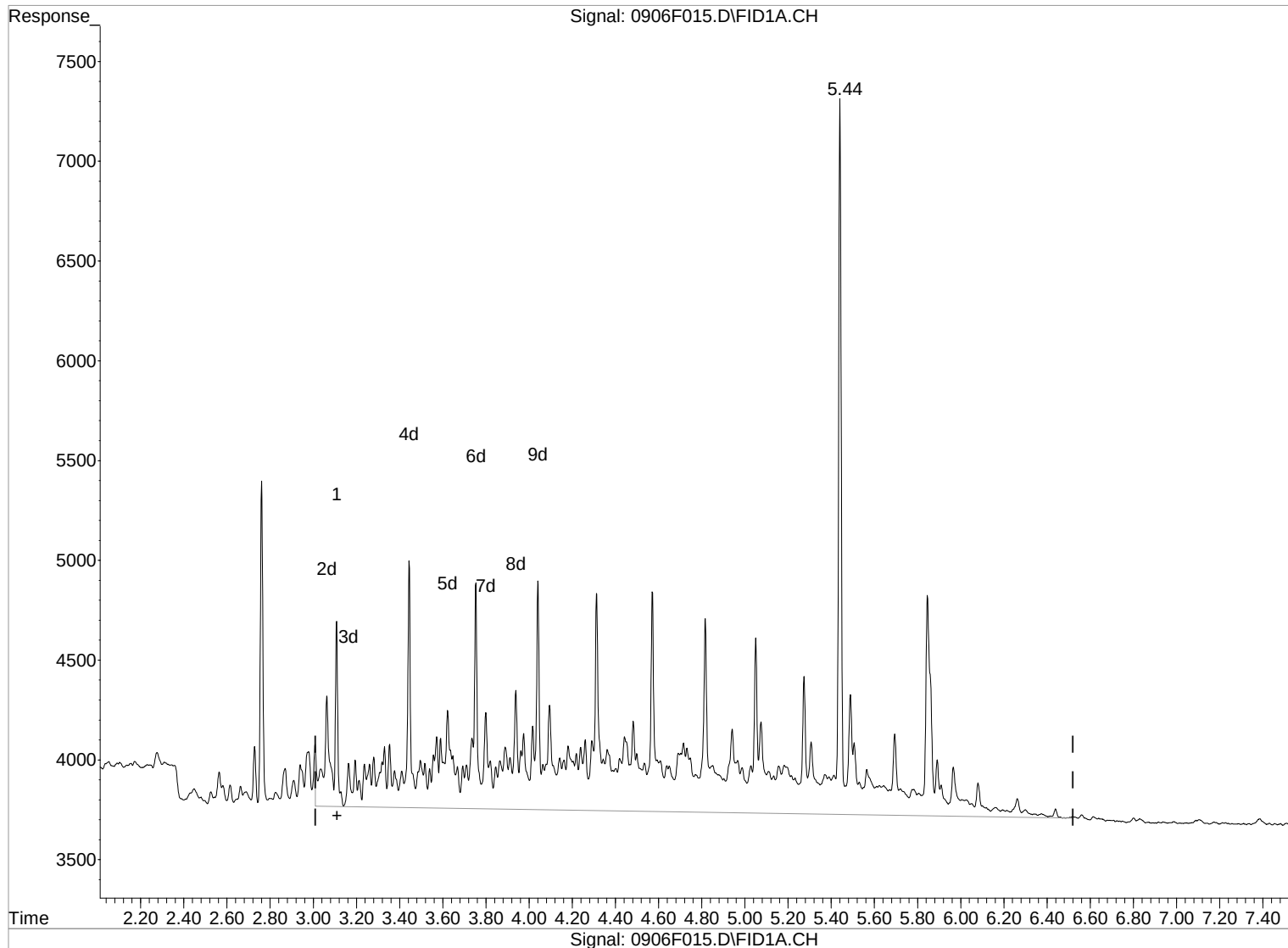
Multiplr: 1.00

Method : J:\GC21\METHODS\090623F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Thu Sep 07 07:20:12 2023

Response via : Multiple Level Calibration



(6) C10-C25ex DRO [AK102] (H)

Manual Integration:

3.11min 41.441ppm

Before

response 44248

09/07/23

(+) = Expected Retention Time

0906F015.D 090623F.M Thu Sep 07 07:20:30 2023

311 of 2035

Data File : J:\GC21\DATA\090623\0906F015.D

Acq On : 06 Sep 2023 1:44 pm

Sample : DRO SVF04-61L 50/2.5

Misc :

IntFile : rteint.p

Quant Time: Sep 7 7:15 2023 Quant Results File: 090623F.RES

Vial: 4

Operator: AA

Inst : GC21

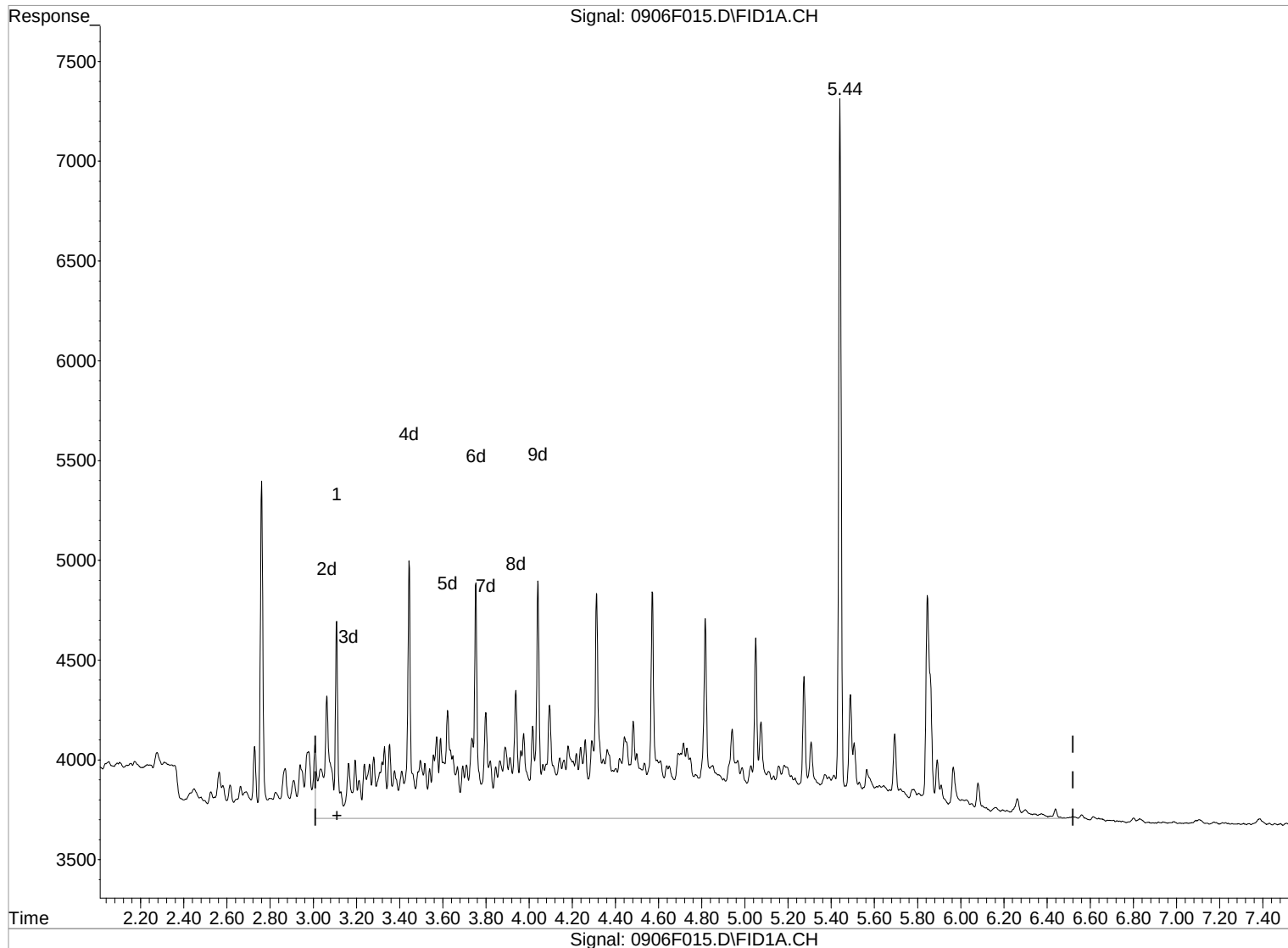
Multiplr: 1.00

Method : J:\GC21\METHODS\090623F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Thu Sep 07 07:20:12 2023

Response via : Multiple Level Calibration



(6) C10-C25ex DRO [AK102] (H)

3.11min 47.546ppm

response 50767

Manual Integration:

After

Baseline/Shoulder

09/07/23

(+) = Expected Retention Time

0906F015.D 090623F.M Thu Sep 07 07:20:59 2023

312 of 2035

Quantitation Report (Qedit)

1st *AA* 09/08/232nd *SW* 09/08/23

Data File : J:\GC21\DATA\090623\0906F015.D

Vial: 4

Acq On : 06 Sep 2023 1:44 pm

Operator: AA

Sample : DRO SVF04-61L 50/2.5

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

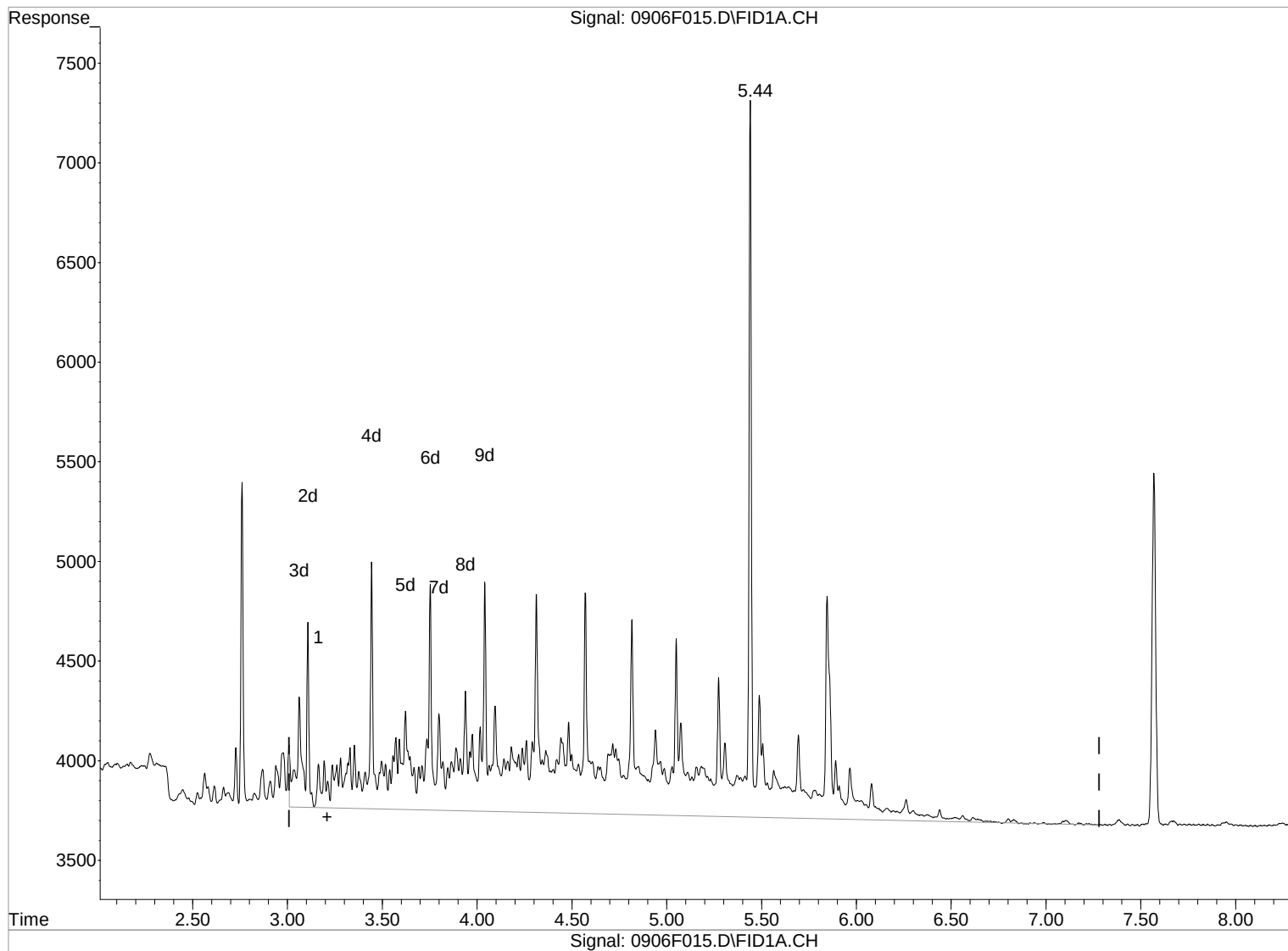
Quant Time: Sep 7 7:15 2023 Quant Results File: 090623F.RES

Method : J:\GC21\METHODS\090623F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Thu Sep 07 07:20:12 2023

Response via : Multiple Level Calibration



(7) C10-C28in DRO [8015] (H)

Manual Integration:

3.21min 41.180ppm

Before

response 45995

09/07/23

(+) = Expected Retention Time

0906F015.D 090623F.M Thu Sep 07 07:21:03 2023

313 of 2035

Data File : J:\GC21\DATA\090623\0906F015.D

Vial: 4

Acq On : 06 Sep 2023 1:44 pm

Operator: AA

Sample : DRO SVF04-61L 50/2.5

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

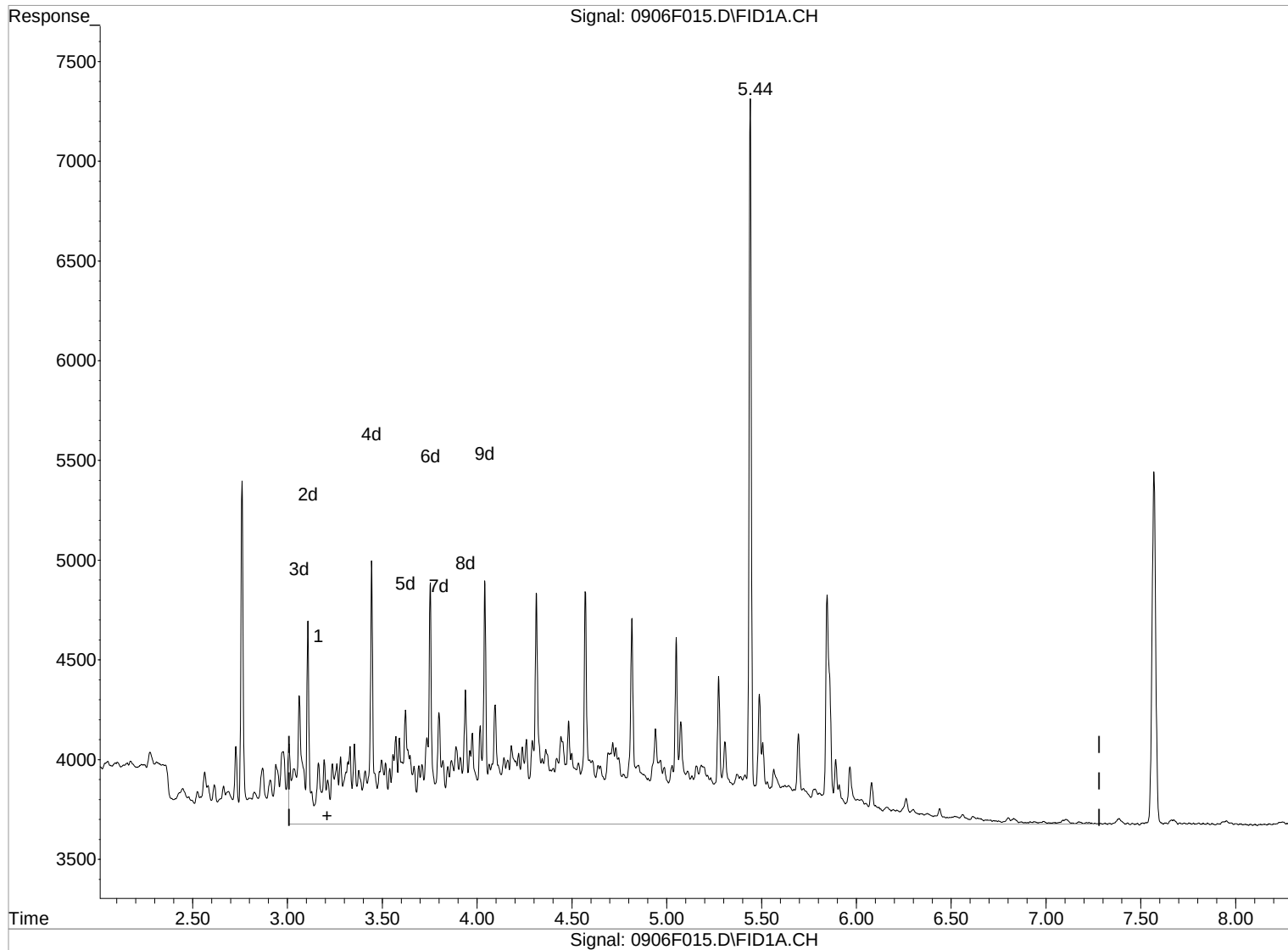
Quant Time: Sep 7 7:15 2023 Quant Results File: 090623F.RES

Method : J:\GC21\METHODS\090623F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Thu Sep 07 07:20:12 2023

Response via : Multiple Level Calibration



(7) C10-C28in DRO [8015] (H)

Manual Integration:

3.21min 51.799ppm

After

response 57855

Baseline/Shoulder

09/07/23

(+) = Expected Retention Time

0906F015.D 090623F.M

Thu Sep 07 07:21:23 2023

314 of 2035

Data File : J:\GC21\DATA\090623\0906F015.D

Vial: 4

Acq On : 06 Sep 2023 1:44 pm

Operator: AA

Sample : DRO SVF04-61L 50/2.5

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

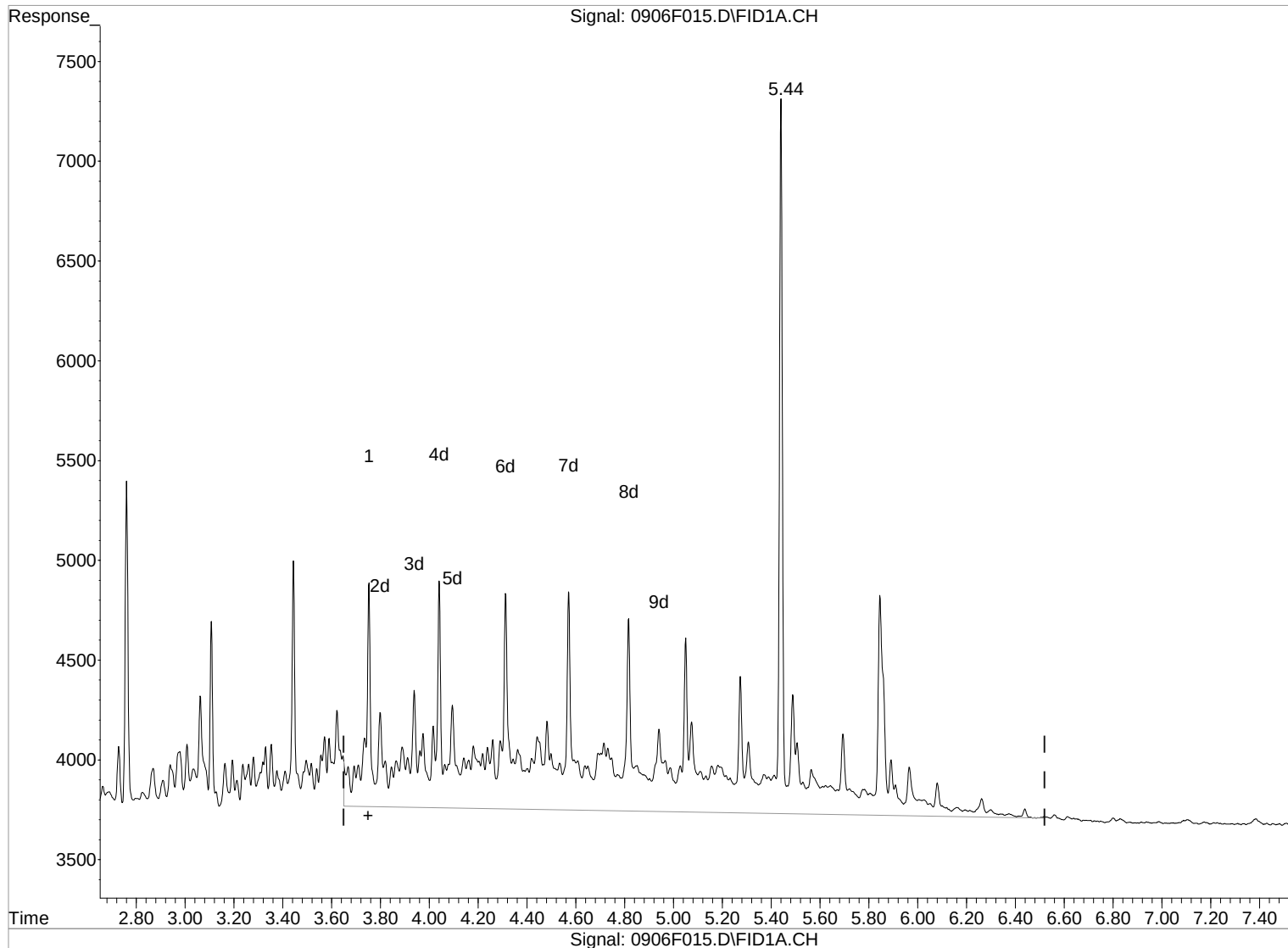
Quant Time: Sep 7 7:15 2023 Quant Results File: 090623F.RES

Method : J:\GC21\METHODS\090623F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Thu Sep 07 07:20:12 2023

Response via : Multiple Level Calibration



(8) C12-C25ex DRO [NWTPH] (H)

Manual Integration:

3.75min 39.946ppm

Before

response 35307

09/07/23

(+) = Expected Retention Time

0906F015.D 090623F.M

Thu Sep 07 07:21:26 2023

315 of 2035

Data File : J:\GC21\DATA\090623\0906F015.D

Vial: 4

Acq On : 06 Sep 2023 1:44 pm

Operator: AA

Sample : DRO SVF04-61L 50/2.5

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

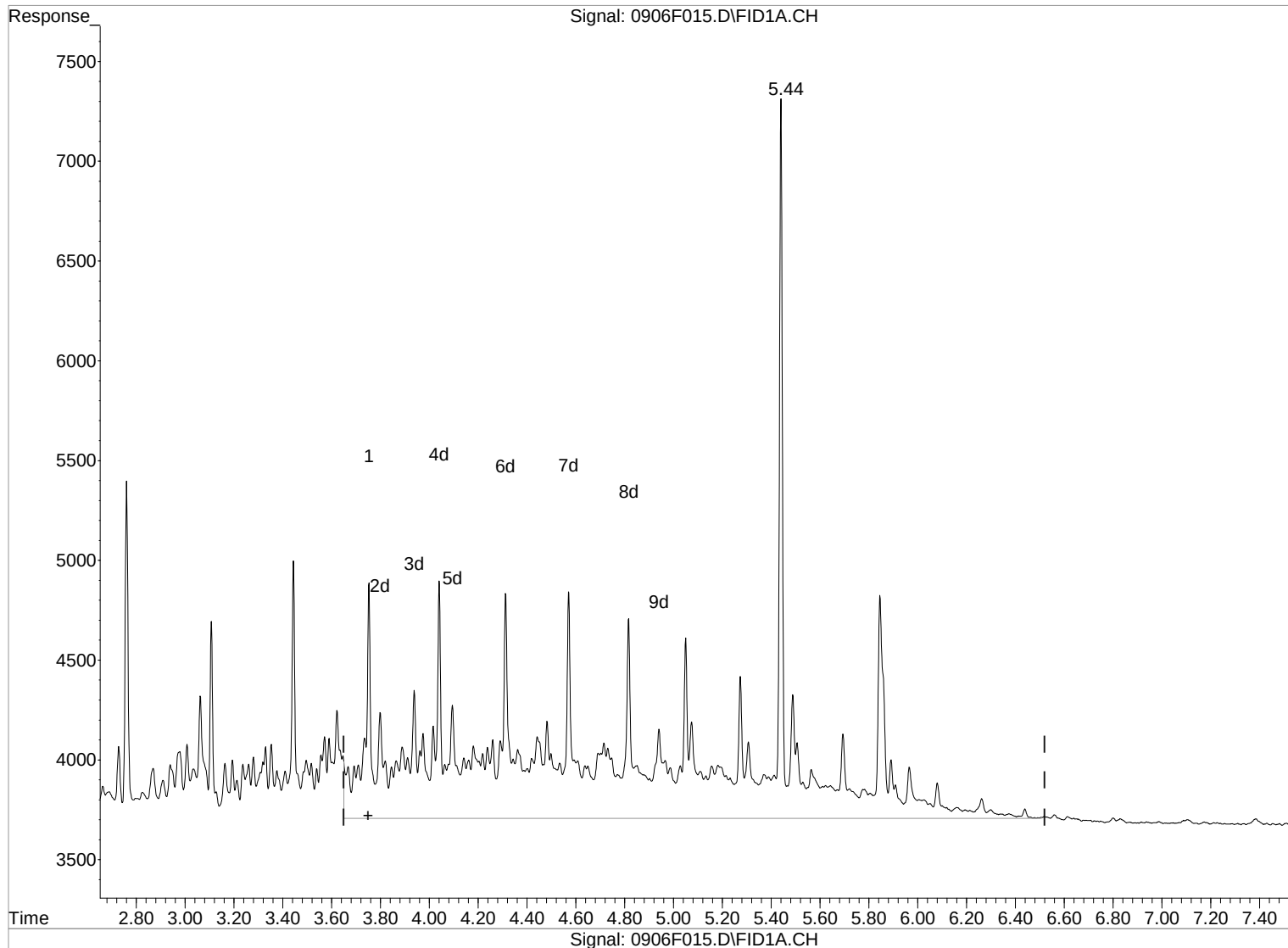
Quant Time: Sep 7 7:15 2023 Quant Results File: 090623F.RES

Method : J:\GC21\METHODS\090623F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Thu Sep 07 07:20:12 2023

Response via : Multiple Level Calibration



(8) C12-C25ex DRO [NWTPH] (H)

Manual Integration:

3.75min 45.980ppm

After

response 40640

Baseline/Shoulder

09/07/23

(+) = Expected Retention Time

0906F015.D 090623F.M Thu Sep 07 07:21:41 2023

316 of 2035

Data File : J:\GC21\DATA\090623\0906F016.D Vial: 5
 Acq On : 06 Sep 2023 2:05 pm Operator: AA
 Sample : DRO SVF04-61K 200/10 Inst : GC21
 Misc : Multiplr: 1.00
 IntFile : rteint.p
 Quant Time: Sep 07 07:15:40 2023 Quant Results File: 090623F.RES

Quant Method : J:\GC21\METHODS\090623F.M (RTE Integrator)
 Title : 8015/NWTPH/AK SVF MJ257 KC2000628
 Last Update : Wed Sep 06 06:47:48 2023
 Response via : Initial Calibration
 DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL
 Signal Phase : ZB-1
 Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
1) S 4-Bromofluorobenzene	2.76	5096	8.835 ppm
Spiked Amount 50.000	Recovery	=	17.67%
2) S o-Terphenyl	5.44	10825	8.840 ppm
Spiked Amount 50.000	Recovery	=	17.68%
3) S n-Triacontane	7.57	9397	8.922 ppm
Spiked Amount 50.000	Recovery	=	17.84%
Target Compounds			
6) H C10-C25ex DRO [AK102]	3.11	183675	172.022 ppm
7) H C10-C28in DRO [8015]	3.21	192293	172.165 ppm
8) H C12-C25ex DRO [NWTPH]	3.75	152020	171.993 ppm

Data File : J:\GC21\DATA\090623\0906F016.D

Vial: 5

Acq On : 06 Sep 2023 2:05 pm

Operator: AA

Sample : DRO SVF04-61K 200/10

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Sep 7 7:22 2023 Quant Results File: 090623F.RES

Quant Method : J:\GC21\METHODS\090623F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Wed Sep 06 06:47:48 2023

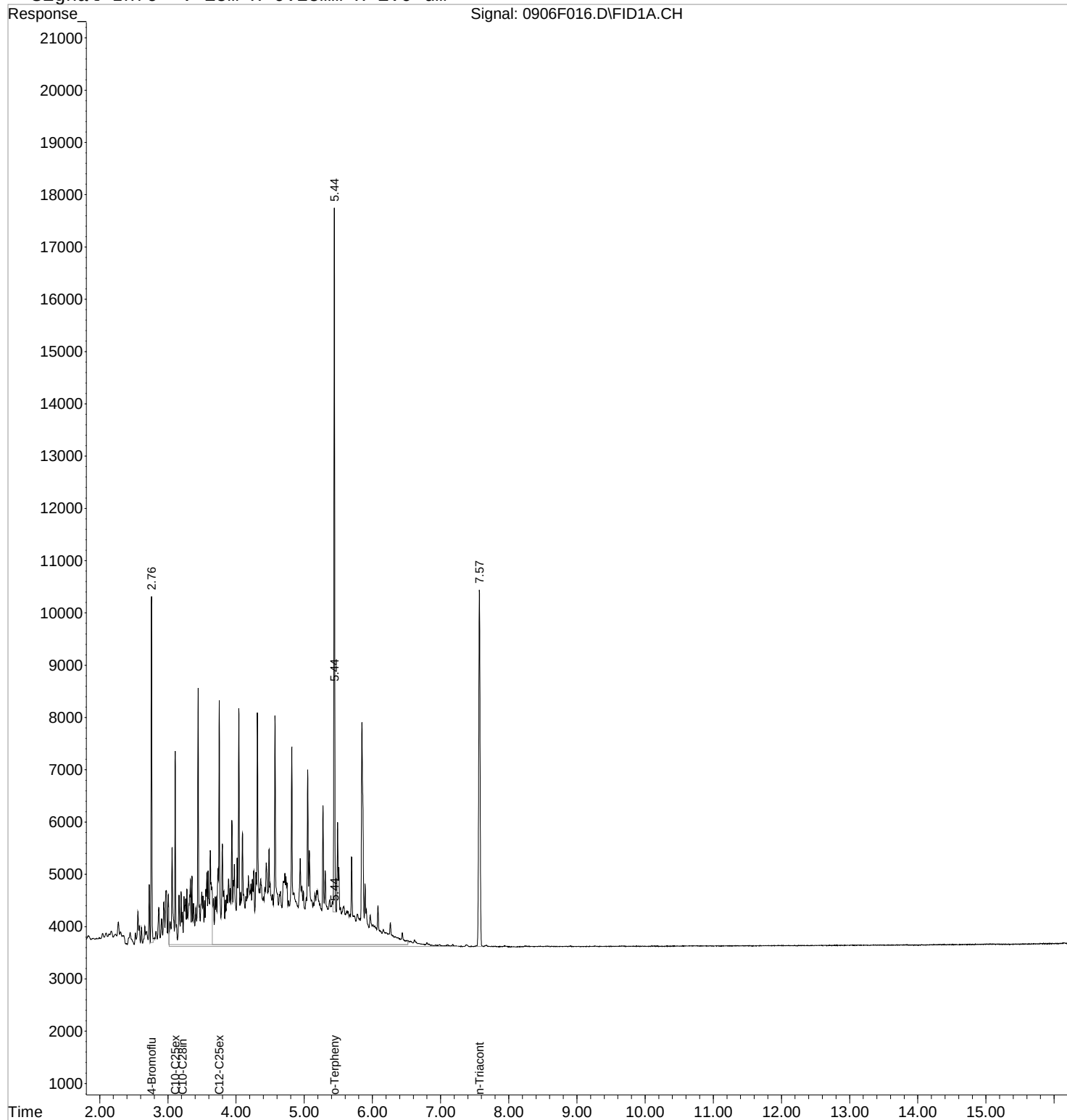
Response via : Single Level Calibration

DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Data File : J:\GC21\DATA\090623\0906F016.D

Vial: 5

Acq On : 06 Sep 2023 2:05 pm

Operator: AA

Sample : DRO SVF04-61K 200/10

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

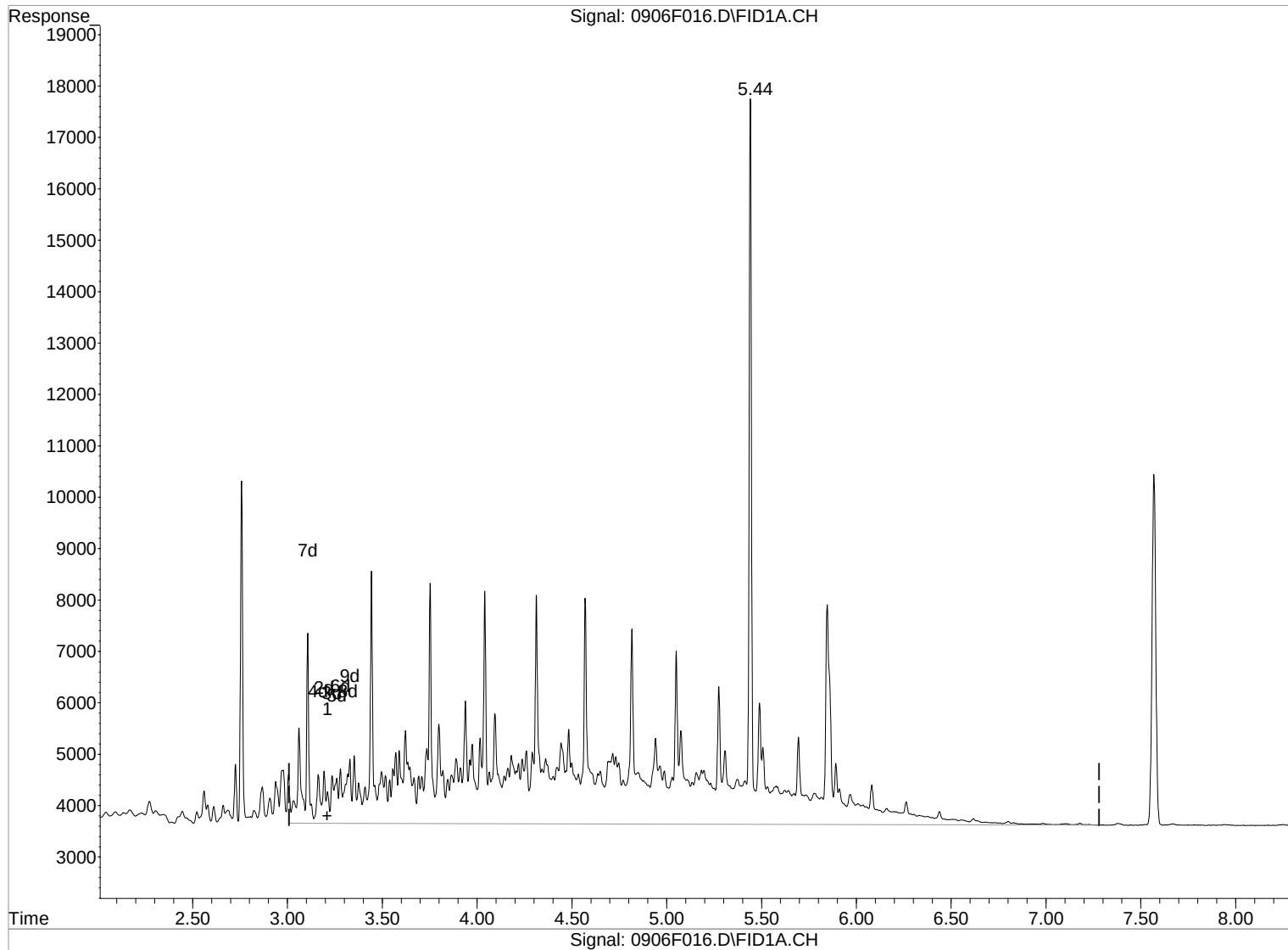
Quant Time: Sep 7 7:15 2023 Quant Results File: 090623F.RES

Method : J:\GC21\METHODS\090623F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Thu Sep 07 07:21:50 2023

Response via : Multiple Level Calibration



(7) C10-C28in DRO [8015] (H)

Manual Integration:

3.21min 168.642ppm

Before

response 188359

09/07/23

(+) = Expected Retention Time

0906F016.D 090623F.M

Thu Sep 07 07:22:09 2023

319 of 2035

Quantitation Report (Qedit)

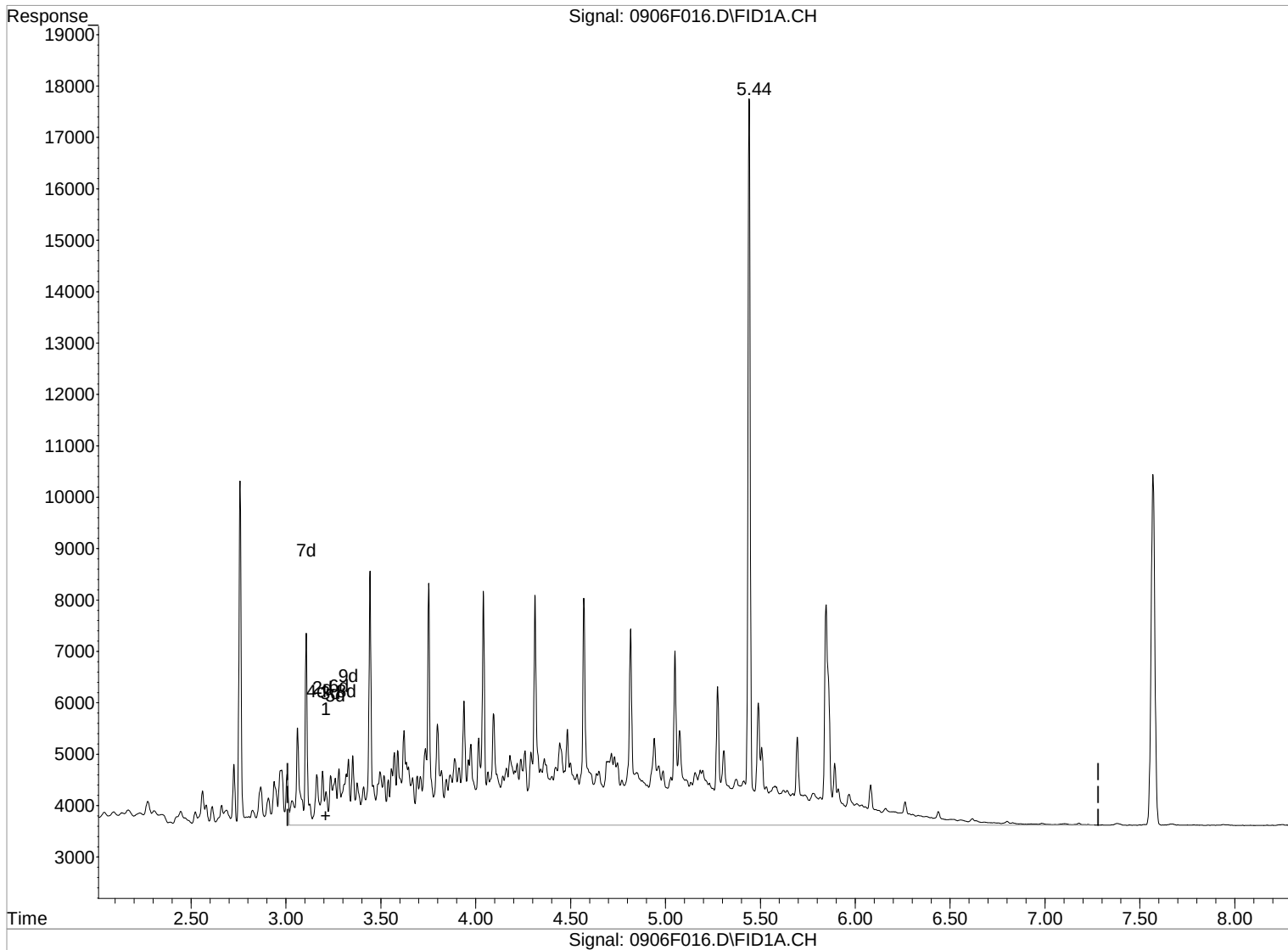
1st **AA** 09/08/23
 2nd *SW* 09/08/23

Data File : J:\GC21\DATA\090623\0906F016.D
 Acq On : 06 Sep 2023 2:05 pm
 Sample : DRO SVF04-61K 200/10
 Misc :
 IntFile : rteint.p
 Quant Time: Sep 7 7:15 2023

Vial: 5
 Operator: AA
 Inst : GC21
 Multiplr: 1.00

Quant Results File: 090623F.RES

Method : J:\GC21\METHODS\090623F.M (RTE Integrator)
 Title : 8015/NWTPH/AK SVF MJ257 KC2000628
 Last Update : Thu Sep 07 07:21:50 2023
 Response via : Multiple Level Calibration



(7) C10-C28in DRO [8015] (H)

3.21min 172.165ppm

response 192293

Manual Integration:

After

Baseline/Shoulder

09/07/23

(+) = Expected Retention Time

0906F016.D 090623F.M Thu Sep 07 07:22:27 2023

Data File : J:\GC21\DATA\090623\0906F017.D Vial: 6
 Acq On : 06 Sep 2023 2:27 pm Operator: AA
 Sample : DRO SVF04-61J 500/25 Inst : GC21
 Misc : Multiplr: 1.00
 IntFile : rteint.p
 Quant Time: Sep 07 07:15:42 2023 Quant Results File: 090623F.RES

Quant Method : J:\GC21\METHODS\090623F.M (RTE Integrator)
 Title : 8015/NWTPH/AK SVF MJ257 KC2000628
 Last Update : Wed Sep 06 06:47:48 2023
 Response via : Initial Calibration
 DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL
 Signal Phase : ZB-1
 Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
1) S 4-Bromofluorobenzene	2.76	12321	21.362 ppm
Spiked Amount 50.000	Recovery	=	42.72%
2) S o-Terphenyl	5.44	26558	21.689 ppm
Spiked Amount 50.000	Recovery	=	43.38%
3) S n-Triacontane	7.57	22825	21.672 ppm
Spiked Amount 50.000	Recovery	=	43.34%
Target Compounds			
6) H C10-C25ex DRO [AK102]	3.11	461856	432.553 ppm
7) H C10-C28in DRO [8015]	3.21	479838	429.611 ppm
8) H C12-C25ex DRO [NWTPH]	3.75	383288	433.647 ppm

Data File : J:\GC21\DATA\090623\0906F017.D

Vial: 6

Acq On : 06 Sep 2023 2:27 pm

Operator: AA

Sample : DR0 SVF04-61J 500/25

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Sep 7 7:23 2023 Quant Results File: 090623F.RES

Quant Method : J:\GC21\METHODS\090623F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Wed Sep 06 06:47:48 2023

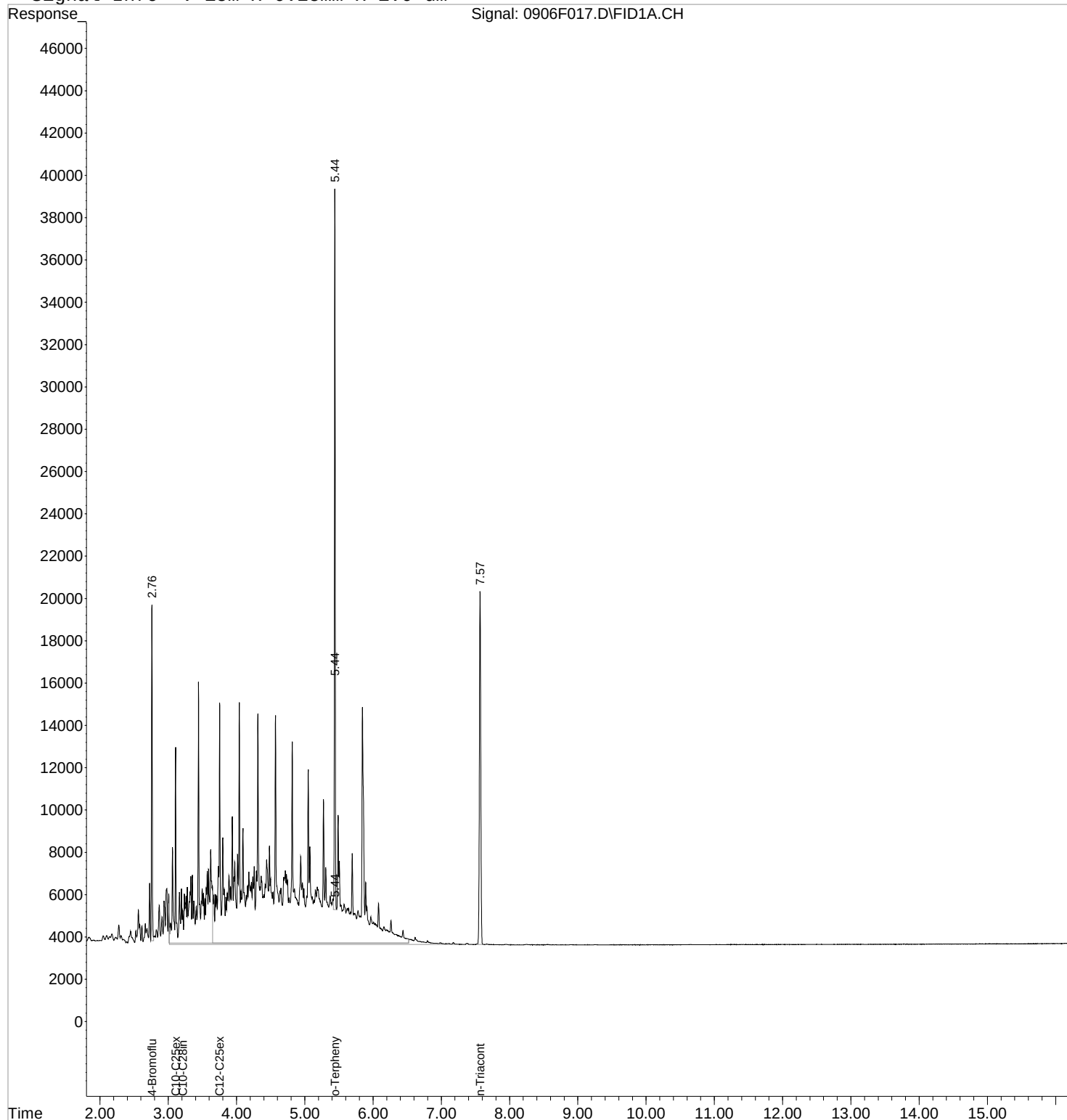
Response via : Single Level Calibration

DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Data File : J:\GC21\DATA\090623\0906F017.D

Vial: 6

Acq On : 06 Sep 2023 2:27 pm

Operator: AA

Sample : DRO SVF04-61J 500/25

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

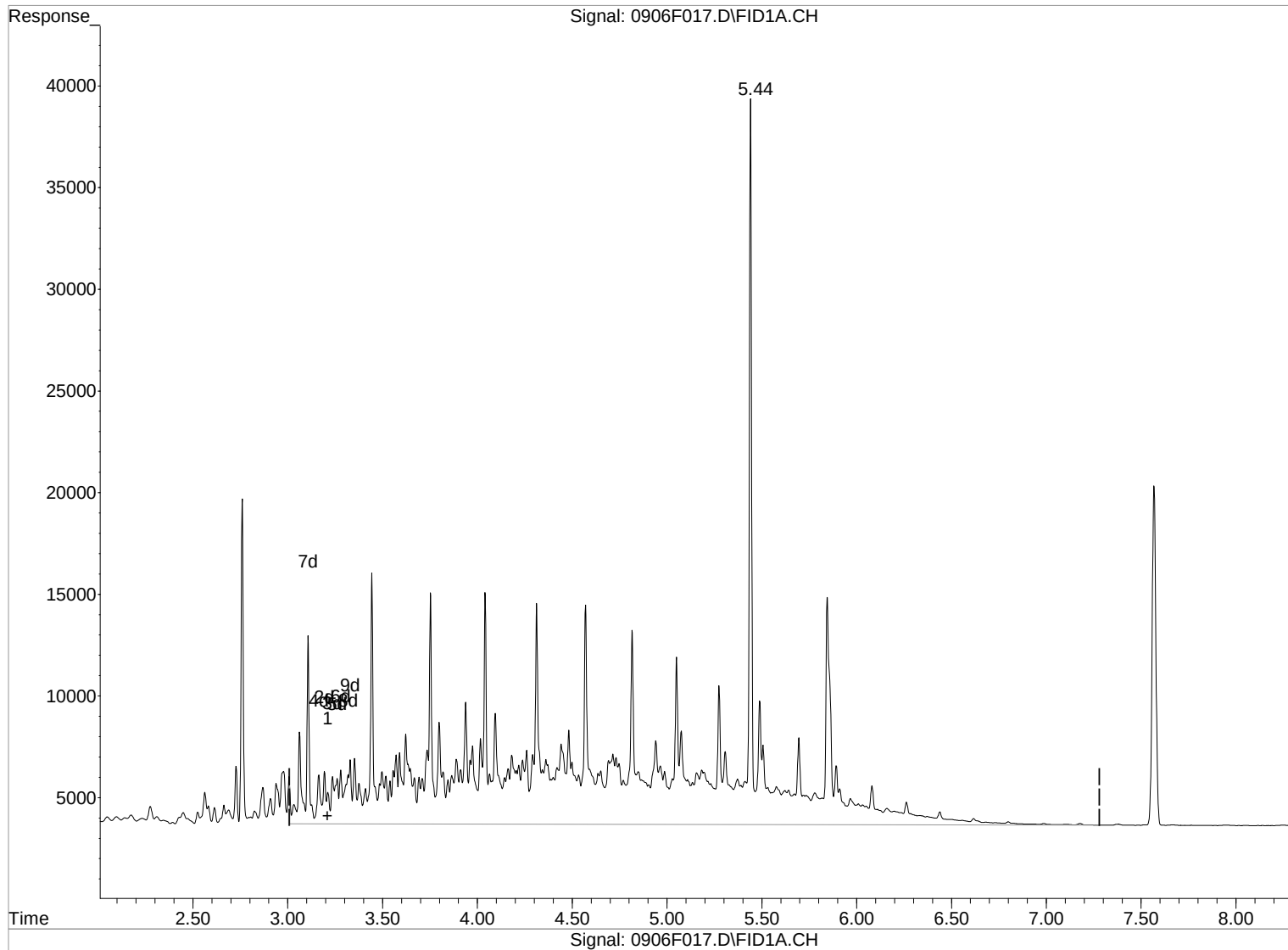
Quant Time: Sep 7 7:15 2023 Quant Results File: 090623F.RES

Method : J:\GC21\METHODS\090623F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Thu Sep 07 07:22:38 2023

Response via : Multiple Level Calibration



(7) C10-C28in DRO [8015] (H)

Manual Integration:

3.21min 422.126ppm

Before

response 471478

09/07/23

(+) = Expected Retention Time

0906F017.D 090623F.M Thu Sep 07 07:22:38 2023

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Quantitation Report (Qedit)

1st *AA* 09/08/232nd *SW* 09/08/23

Data File : J:\GC21\DATA\090623\0906F017.D

Vial: 6

Acq On : 06 Sep 2023 2:27 pm

Operator: AA

Sample : DRO SVF04-61J 500/25

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

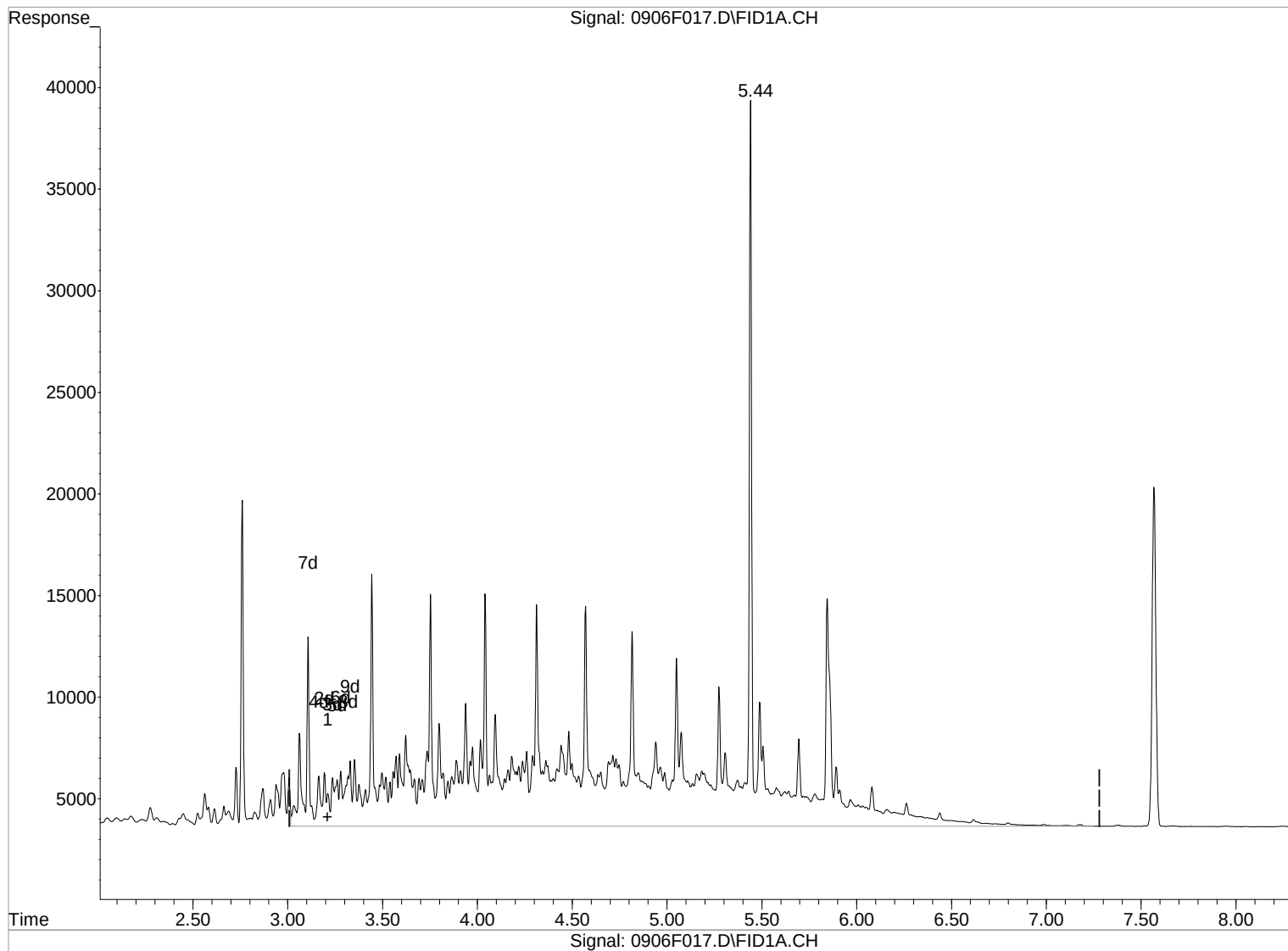
Quant Time: Sep 7 7:15 2023 Quant Results File: 090623F.RES

Method : J:\GC21\METHODS\090623F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Thu Sep 07 07:22:38 2023

Response via : Multiple Level Calibration



(7) C10-C28in DRO [8015] (H)

Manual Integration:

3.21min 429.611ppm

After

response 479838

Baseline/Shoulder

09/07/23

(+) = Expected Retention Time

0906F017.D 090623F.M

Thu Sep 07 07:23:14 2023

324 of 2035

Data File : J:\GC21\DATA\090623\0906F018.D Vial: 7
 Acq On : 06 Sep 2023 2:48 pm Operator: AA
 Sample : DRO SVF04-61I 2000/100 Inst : GC21
 Misc : Multiplr: 1.00
 IntFile : rteint.p
 Quant Time: Sep 07 07:15:43 2023 Quant Results File: 090623F.RES

Quant Method : J:\GC21\METHODS\090623F.M (RTE Integrator)
 Title : 8015/NWTPH/AK SVF MJ257 KC2000628
 Last Update : Wed Sep 06 06:47:48 2023
 Response via : Initial Calibration
 DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL
 Signal Phase : ZB-1
 Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

1) S 4-Bromofluorobenzene	2.76	48731	84.489 ppm
Spiked Amount 50.000	Recovery	=	168.98%
2) S o-Terphenyl	5.44	104864	85.639 ppm
Spiked Amount 50.000	Recovery	=	171.28%
3) S n-Triacontane	7.57	90767	86.180 ppm
Spiked Amount 50.000	Recovery	=	172.36%

Target Compounds

6) H C10-C25ex DRO [AK102]	3.11	1834311	1717.931 ppm
7) H C10-C28in DRO [8015]	3.21	1851606	1657.788 ppm
8) H C12-C25ex DRO [NWTPH]	3.75	1523643	1723.829 ppm

Data File : J:\GC21\DATA\090623\0906F018.D

Vial: 7

Acq On : 06 Sep 2023 2:48 pm

Operator: AA

Sample : DRO SVF04-61I 2000/100

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Sep 7 7:23 2023 Quant Results File: 090623F.RES

Quant Method : J:\GC21\METHODS\090623F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Wed Sep 06 06:47:48 2023

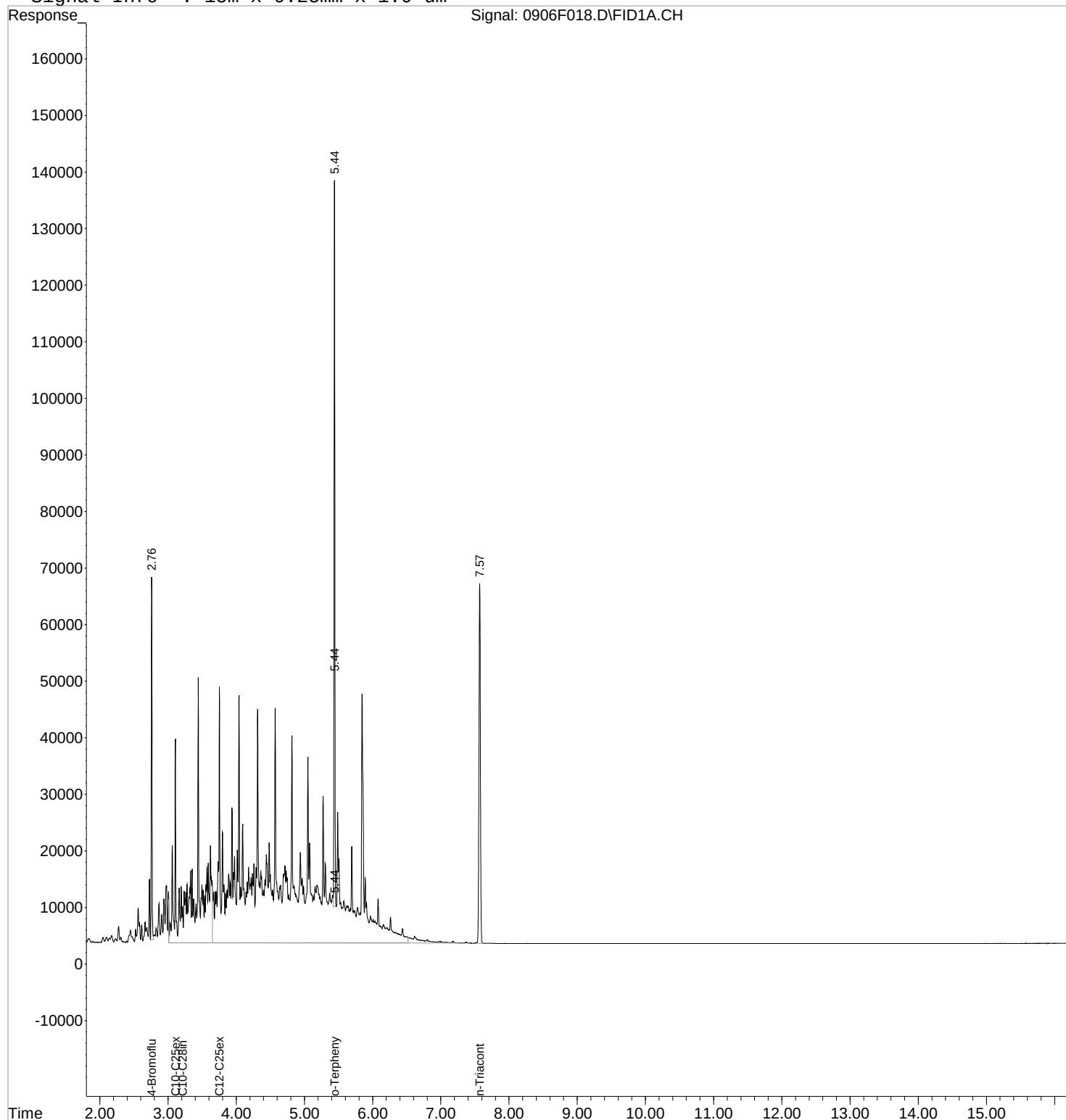
Response via : Single Level Calibration

DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Data File : J:\GC21\DATA\090623\0906F019.D Vial: 8
 Acq On : 06 Sep 2023 3:10 pm Operator: AA
 Sample : DRO SVF04-61H 5000/250 Inst : GC21
 Misc : Multiplr: 1.00
 IntFile : rteint.p
 Quant Time: Sep 07 07:15:45 2023 Quant Results File: 090623F.RES

Quant Method : J:\GC21\METHODS\090623F.M (RTE Integrator)
 Title : 8015/NWTPH/AK SVF MJ257 KC2000628
 Last Update : Wed Sep 06 06:47:48 2023
 Response via : Initial Calibration
 DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL
 Signal Phase : ZB-1
 Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

1) S 4-Bromofluorobenzene	2.76	139976	242.688 ppm
Spiked Amount 50.000	Recovery	=	485.38%
2) S o-Terphenyl	5.44	295735	241.516 ppm
Spiked Amount 50.000	Recovery	=	483.03%
3) S n-Triacontane	7.57	254010	241.174 ppm
Spiked Amount 50.000	Recovery	=	482.35%

Target Compounds

6) H C10-C25ex DRO [AK102]	3.11	5334395	4995.948 ppm
7) H C10-C28in DRO [8015]	3.21	5381521	4818.208 ppm
8) H C12-C25ex DRO [NWTPH]	3.75	4415868	4996.054 ppm

Data File : J:\GC21\DATA\090623\0906F019.D

Vial: 8

Acq On : 06 Sep 2023 3:10 pm

Operator: AA

Sample : DR0 SVF04-61H 5000/250

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Sep 7 7:24 2023 Quant Results File: 090623F.RES

Quant Method : J:\GC21\METHODS\090623F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Wed Sep 06 06:47:48 2023

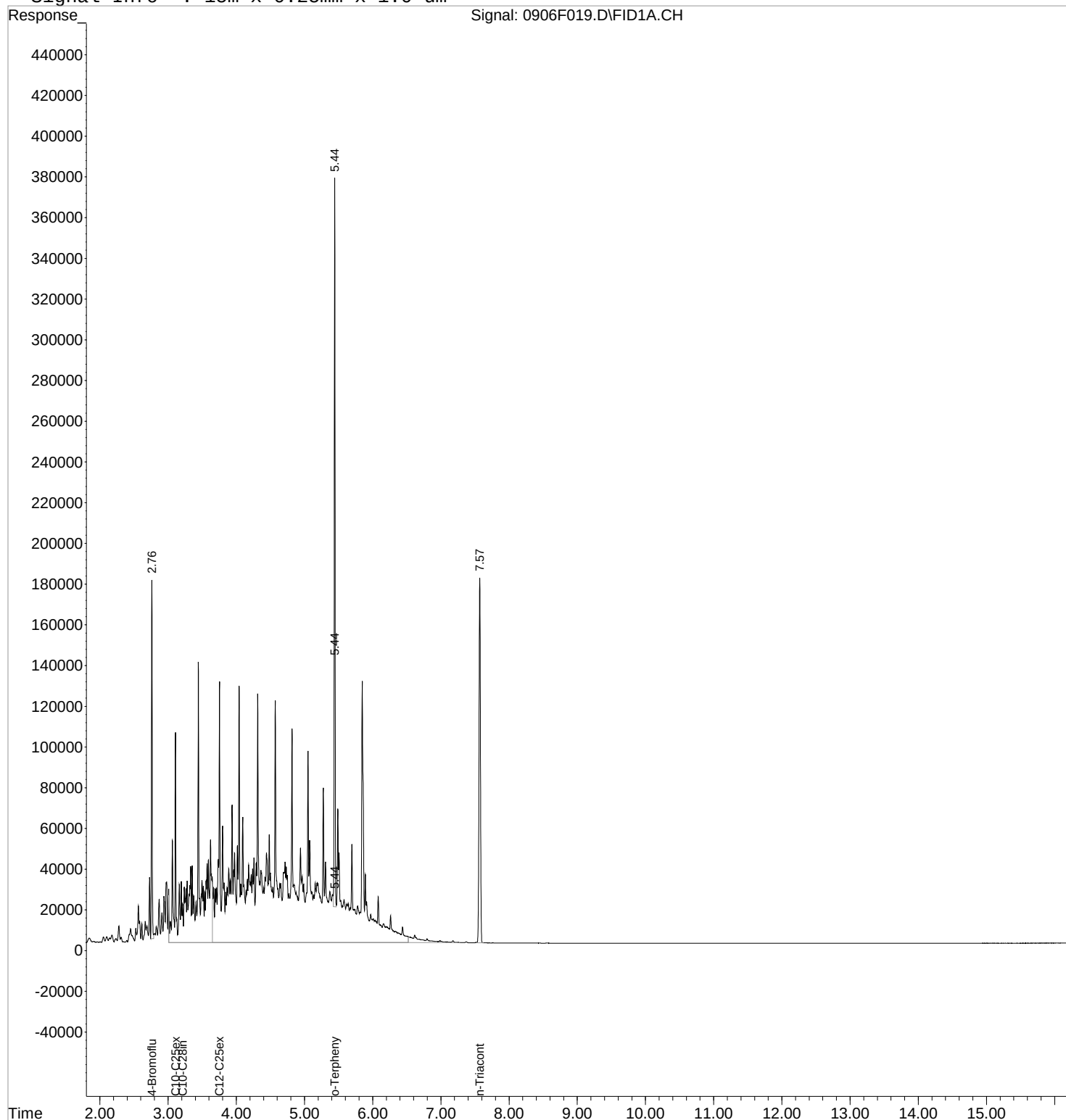
Response via : Single Level Calibration

DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Data File : J:\GC21\DATA\090623\0906F020.D Vial: 9
Acq On : 06 Sep 2023 3:31 pm Operator: AA
Sample : DR0 SVF04-61G 20K Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Sep 07 07:15:47 2023 Quant Results File: 090623F.RES

Quant Method : J:\GC21\METHODS\090623F.M (RTE Integrator)
Title : 8015/NWTPH/AK SVF MJ257 KC2000628
Last Update : Wed Sep 06 06:47:48 2023
Response via : Initial Calibration
DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL
Signal Phase : ZB-1
Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

Target Compounds

6) H	C10-C25ex DR0 [AK102]	3.11	16823339	15755.961	ppm
7) H	C10-C28in DR0 [8015]	3.21	16975671	15198.736	ppm
8) H	C12-C25ex DR0 [NWTPH]	3.75	13941544	15773.277	ppm

Data File : J:\GC21\DATA\090623\0906F020.D

Vial: 9

Acq On : 06 Sep 2023 3:31 pm

Operator: AA

Sample : DR0 SVF04-61G 20K

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Sep 7 7:24 2023 Quant Results File: 090623F.RES

Quant Method : J:\GC21\METHODS\090623F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Wed Sep 06 06:47:48 2023

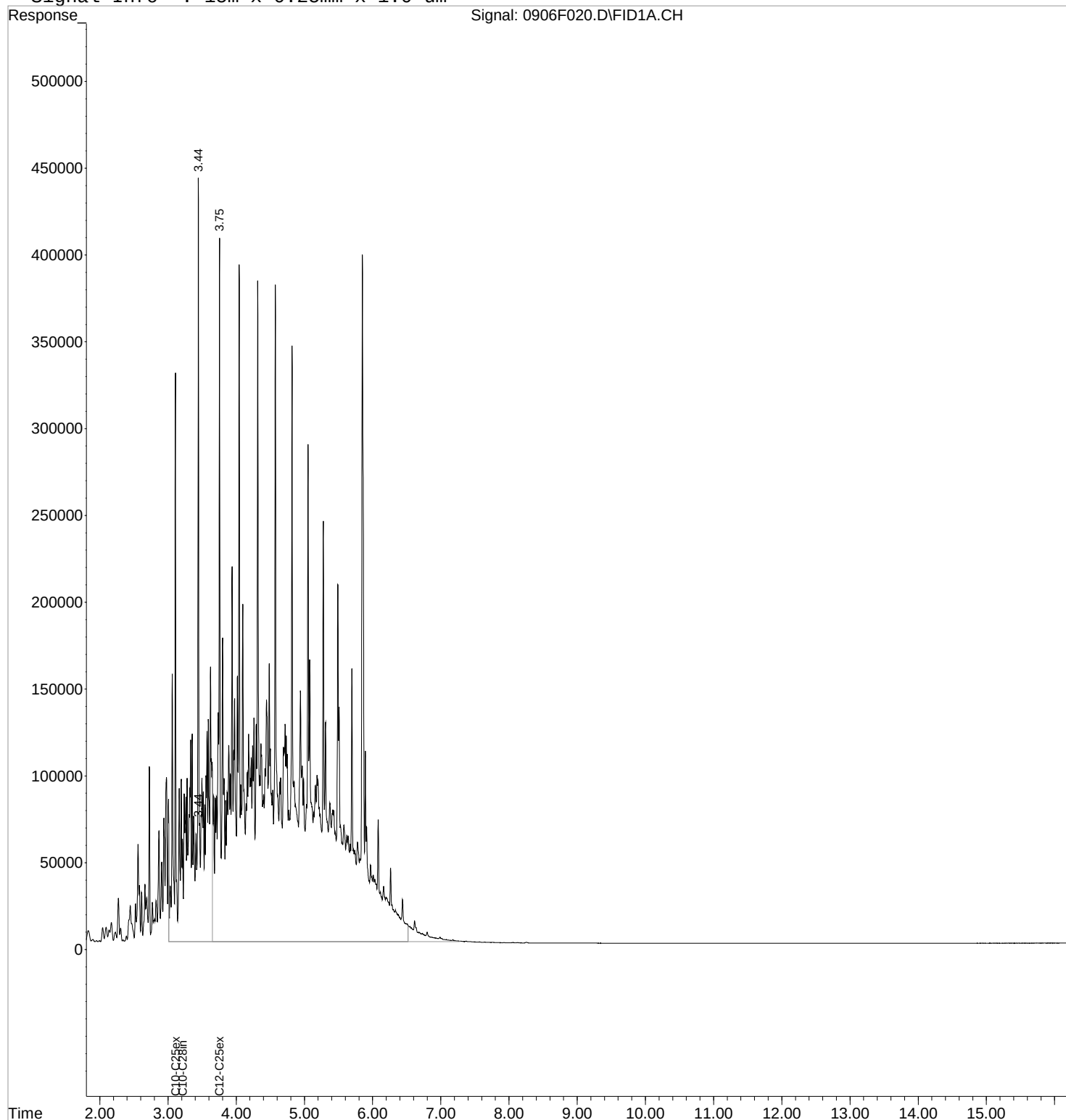
Response via : Single Level Calibration

DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Data File : J:\GC21\DATA\090623\0906F021.D Vial: 10
Acq On : 06 Sep 2023 3:53 pm Operator: AA
Sample : DR0 SVF04-61F 50K Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Sep 07 07:15:49 2023 Quant Results File: 090623F.RES

Quant Method : J:\GC21\METHODS\090623F.M (RTE Integrator)
Title : 8015/NWTPH/AK SVF MJ257 KC2000628
Last Update : Wed Sep 06 06:47:48 2023
Response via : Initial Calibration
DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL
Signal Phase : ZB-1
Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

Target Compounds

6) H	C10-C25ex DR0 [AK102]	3.11	44291332	41481.212	ppm
7) H	C10-C28in DR0 [8015]	3.21	44759448	40074.235	ppm
8) H	C12-C25ex DR0 [NWTPH]	3.75	36834436	41673.989	ppm

Data File : J:\GC21\DATA\090623\0906F021.D

Vial: 10

Acq On : 06 Sep 2023 3:53 pm

Operator: AA

Sample : DR0 SVF04-61F 50K

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Sep 7 7:24 2023 Quant Results File: 090623F.RES

Quant Method : J:\GC21\METHODS\090623F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Wed Sep 06 06:47:48 2023

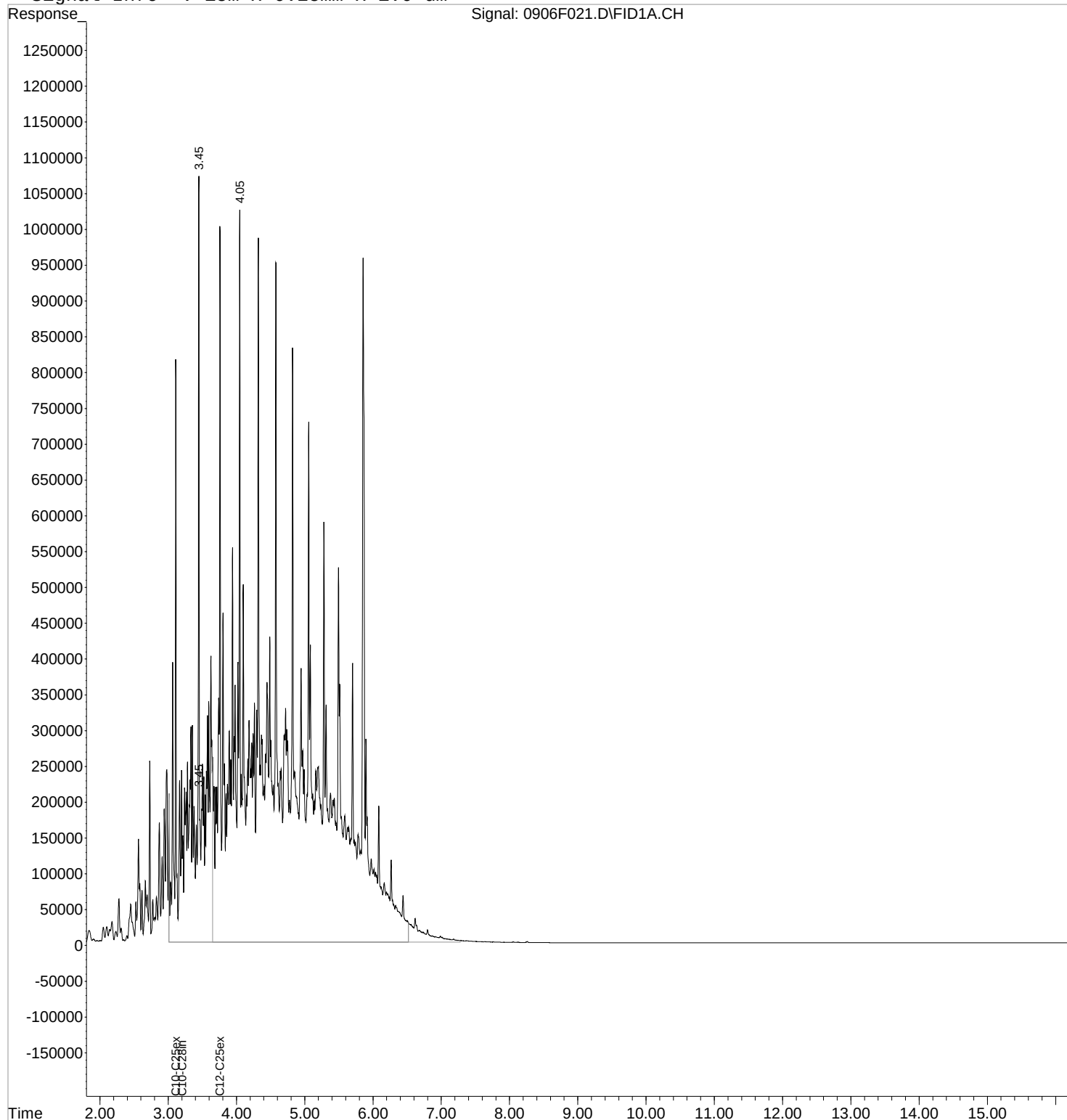
Response via : Single Level Calibration

DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Data File : J:\GC21\DATA\090623\0906F024.D Vial: 1
Acq On : 06 Sep 2023 4:57 pm Operator: AA
Sample : IB Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Sep 07 14:30:19 2023 Quant Results File: 090623F.RES

Quant Method : J:\GC21\METHODS\090623F.M (RTE Integrator)
Title : 8015/NWTPH/AK SVF MJ257 KC2000628
Last Update : Thu Sep 07 07:26:08 2023
Response via : Initial Calibration
DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL
Signal Phase : ZB-1
Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

Target Compounds

6)	H	C10-C25ex DRO [AK102]	3.11	8290	8.553 ppm
7)	H	C10-C28in DRO [8015]	3.21	9820	9.683 ppm
8)	H	C12-C25ex DRO [NWTPH]	3.75	6851	8.637 ppm
10)	H	C25-C36in RRO [NWTPH]	6.62	4870	7.329 ppm
11)	H	C25-C36in RRO [AK103]	6.72	4870	8.000 ppm

Data File : J:\GC21\DATA\090623\0906F024.D

Vial: 1

Acq On : 06 Sep 2023 4:57 pm

Operator: AA

Sample : IB

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Sep 7 14:30 2023 Quant Results File: 090623F.RES

Quant Method : J:\GC21\METHODS\090623F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Thu Sep 07 07:26:08 2023

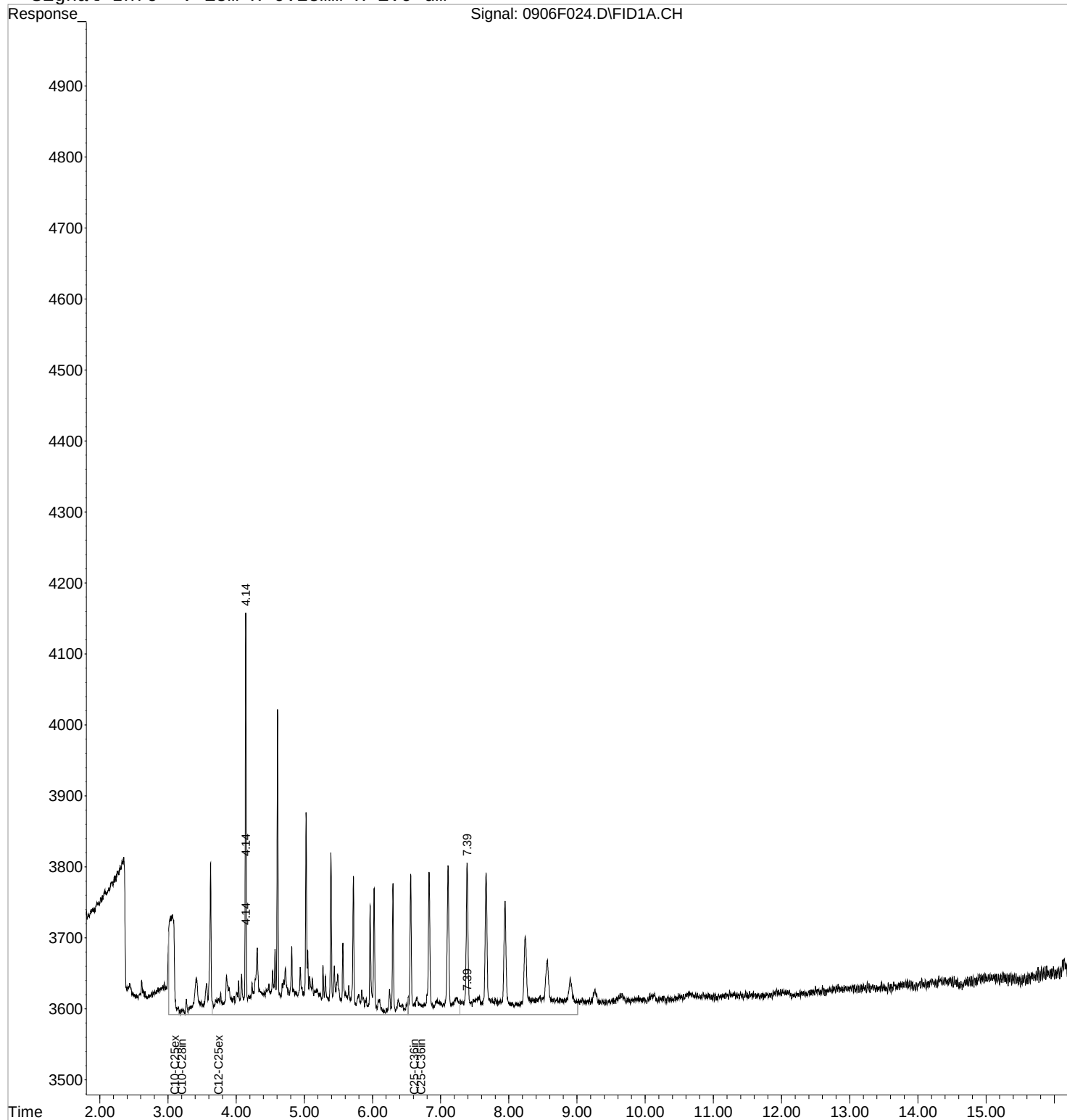
Response via : Single Level Calibration

DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Data File : J:\GC21\DATA\090623\0906F025.D Vial: 11
Acq On : 06 Sep 2023 5:19 pm Operator: AA
Sample : DR0 SVF04-62B ICV@1000 Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Sep 07 07:26:42 2023 Quant Results File: 090623F.RES

Quant Method : J:\GC21\METHODS\090623F.M (RTE Integrator)
Title : 8015/NWTPH/AK SVF MJ257 KC2000628
Last Update : Thu Sep 07 07:26:08 2023
Response via : Initial Calibration
DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL
Signal Phase : ZB-1
Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

Target Compounds

6) H	C10-C25ex DR0 [AK102]	3.11	958243	988.605 ppm
7) H	C10-C28in DR0 [8015]	3.21	969443	955.932 ppm
8) H	C12-C25ex DR0 [NWTPH]	3.75	853798	1076.425 ppm

Data File : J:\GC21\DATA\090623\0906F025.D

Vial: 11

Acq On : 06 Sep 2023 5:19 pm

Operator: AA

Sample : DR0 SVF04-62B ICV@1000

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Sep 7 7:27 2023 Quant Results File: 090623F.RES

Quant Method : J:\GC21\METHODS\090623F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Thu Sep 07 07:26:08 2023

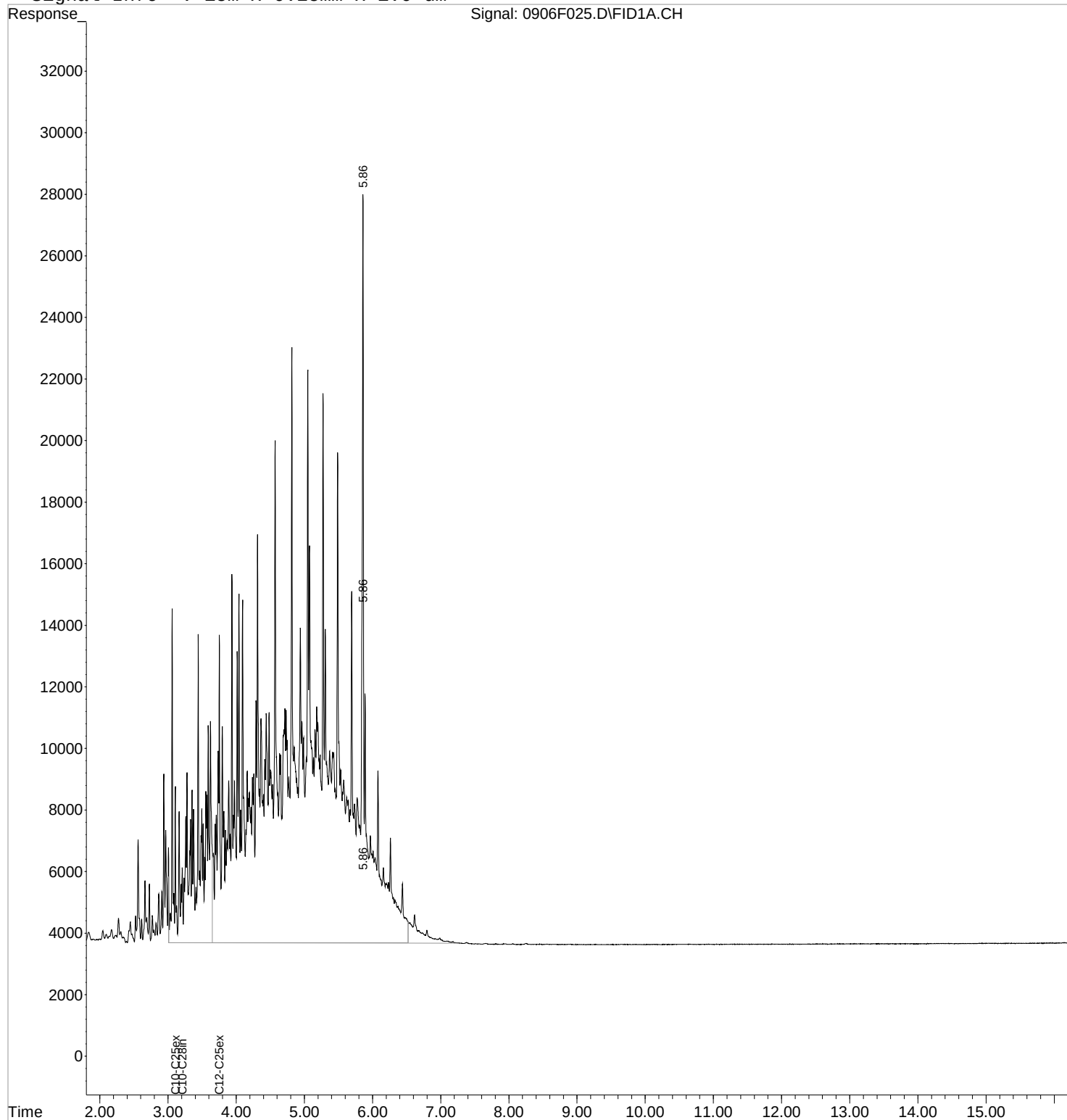
Response via : Single Level Calibration

DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Data File : J:\GC21\DATA\090723\0907F002.D Vial: 1
Acq On : 07 Sep 2023 10:57 am Operator: AA
Sample : IB Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Sep 07 14:21:38 2023 Quant Results File: 090723F.RES

Quant Method : J:\GC21\METHODS\090723F.M (RTE Integrator)
Title : 8015/NWTPH/AK SVF MJ257 KC2000628
Last Update : Thu Sep 07 13:35:15 2023
Response via : Initial Calibration
DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL
Signal Phase : ZB-1
Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

Target Compounds

6)	H	C10-C25ex DRO [AK102]	3.11	22075	22.774 ppm
7)	H	C10-C28in DRO [8015]	3.21	28154	27.762 ppm
8)	H	C12-C25ex DRO [NWTPH]	3.75	18271	23.035 ppm
10)	H	C25-C36in RRO [NWTPH]	6.61	5346	9.423 ppm
11)	H	C25-C36in RRO [AK103]	6.71	21369	35.102 ppm

Data File : J:\GC21\DATA\090723\0907F002.D

Vial: 1

Acq On : 07 Sep 2023 10:57 am

Operator: AA

Sample : IB

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Sep 7 14:22 2023 Quant Results File: 090723F.RES

Quant Method : J:\GC21\METHODS\090723F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Thu Sep 07 13:35:15 2023

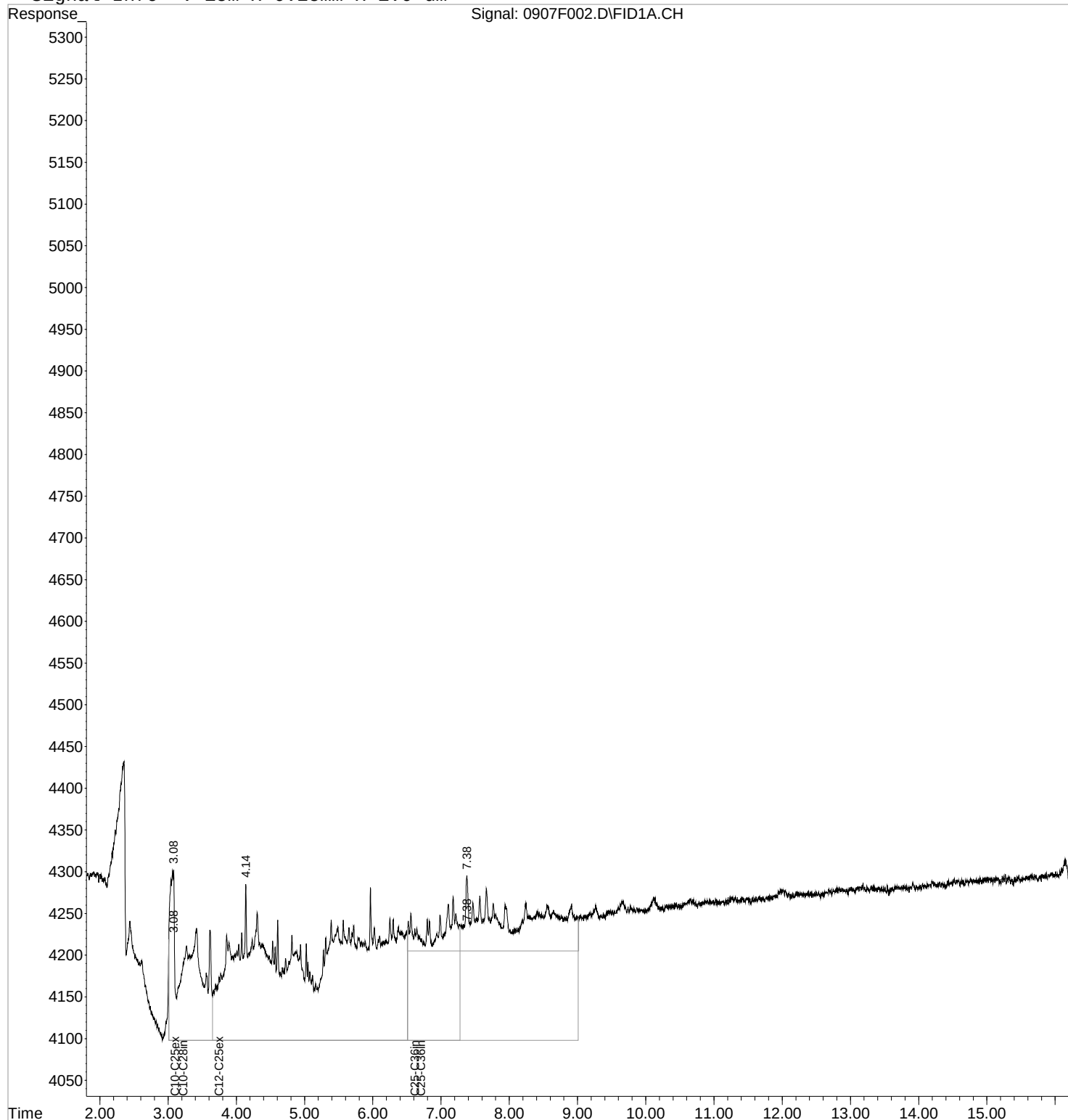
Response via : Single Level Calibration

DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Data File : J:\GC21\DATA\090723\0907F002.D

Acq On : 07 Sep 2023 10:57 am

Sample : IB

Misc :

IntFile : rteint.p

Quant Time: Sep 7 14:21 2023 Quant Results File: 090723F.RES

Vial: 1

Operator: AA

Inst : GC21

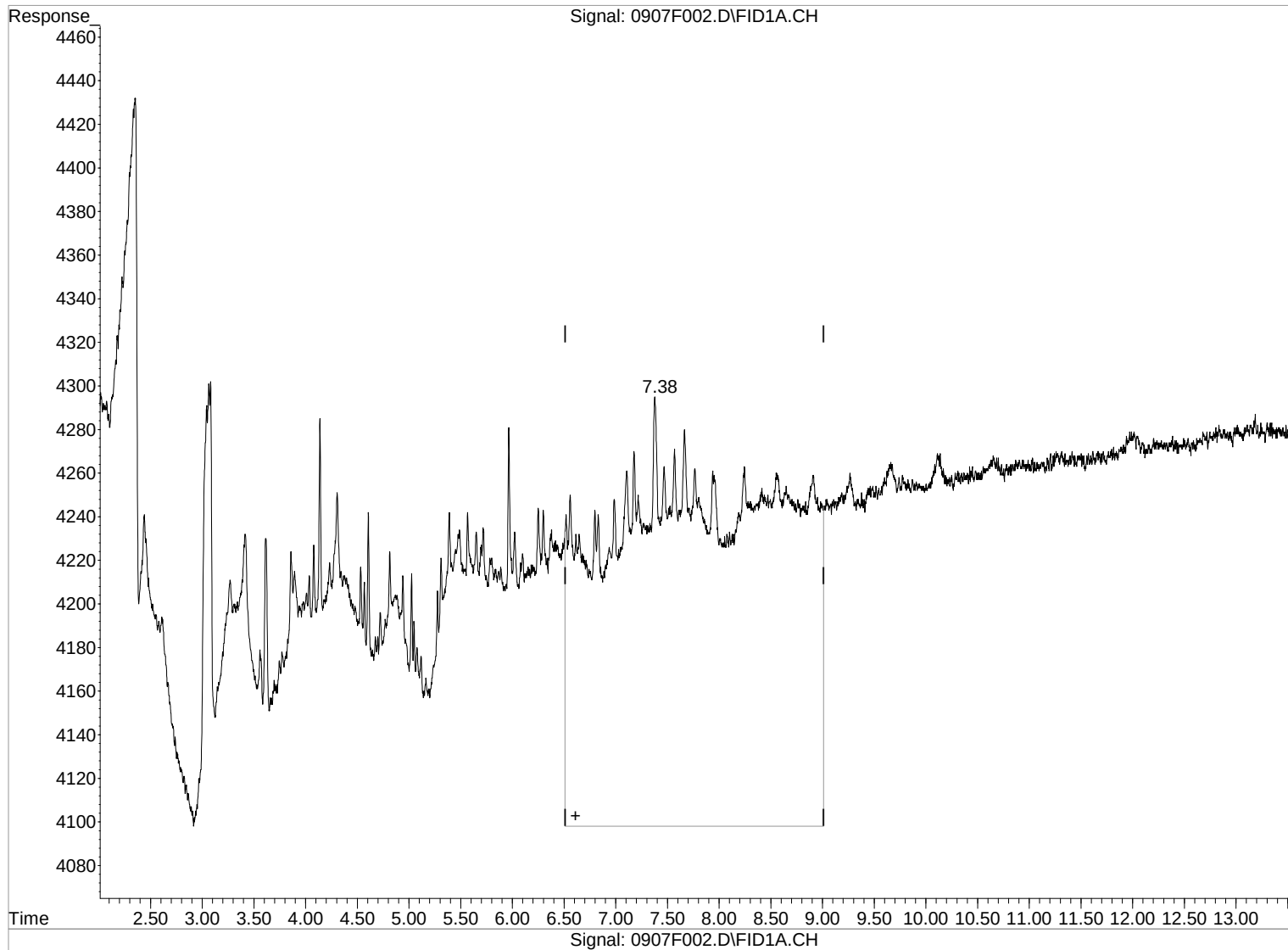
Multiplr: 1.00

Method : J:\GC21\METHODS\090723F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Thu Sep 07 13:35:15 2023

Response via : Multiple Level Calibration



(10) C25-C36in RRO [NWTPH] (H)

Manual Integration:

6.61min 37.664ppm

Before

response 21369

09/07/23

(+) = Expected Retention Time

0907F002.D 090723F.M Thu Sep 07 14:22:25 2023

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Data File : J:\GC21\DATA\090723\0907F002.D

Acq On : 07 Sep 2023 10:57 am

Sample : IB

Misc :

IntFile : rteint.p

Quant Time: Sep 7 14:21 2023 Quant Results File: 090723F.RES

Vial: 1

Operator: AA

Inst : GC21

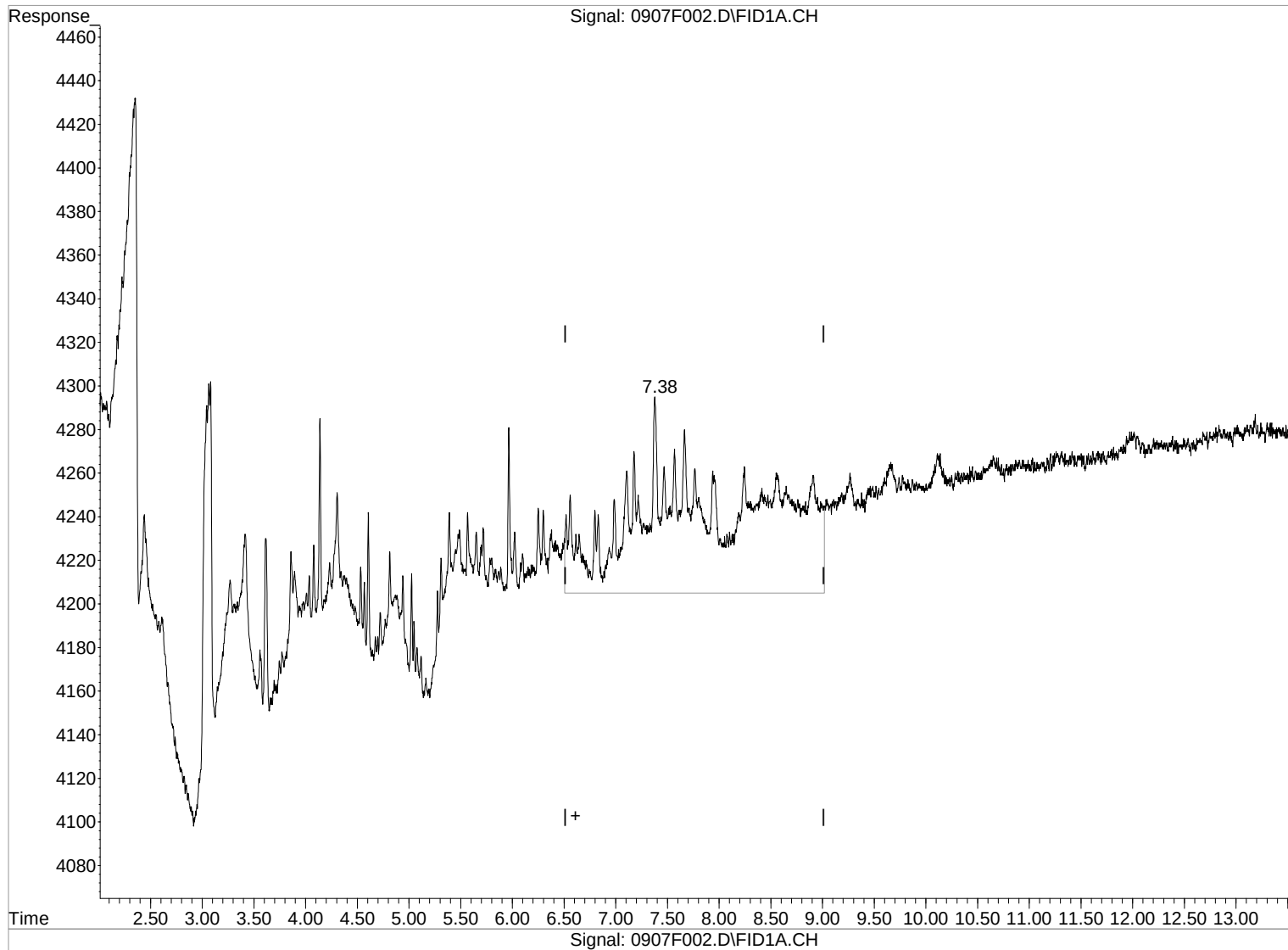
Multiplr: 1.00

Method : J:\GC21\METHODS\090723F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Thu Sep 07 13:35:15 2023

Response via : Multiple Level Calibration



(10) C25-C36in RRO [NWTPH] (H)

6.61min 9.423ppm

response 5346

Manual Integration:

After

Baseline/Shoulder

09/07/23

(+) = Expected Retention Time

0907F002.D 090723F.M Thu Sep 07 14:22:42 2023

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Data File : J:\GC21\DATA\090723\0907F003.D Vial: 2
Acq On : 07 Sep 2023 11:19 am Operator: AA
Sample : RRO SVF04-63A 50 Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Sep 07 13:31:46 2023 Quant Results File: 090723F.RES

Quant Method : J:\GC21\METHODS\090723F.M (RTE Integrator)
Title : 8015/NWTPH/AK SVF MJ257 KC2000628
Last Update : Thu Sep 07 13:31:21 2023
Response via : Initial Calibration
DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL
Signal Phase : ZB-1
Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

Target Compounds

10) H C25-C36in RRO [NWTPH]	6.61	26477	39.845 ppm
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Data File : J:\GC21\DATA\090723\0907F003.D

Vial: 2

Acq On : 07 Sep 2023 11:19 am

Operator: AA

Sample : RR0 SVF04-63A 50

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Sep 7 13:32 2023 Quant Results File: 090723F.RES

Quant Method : J:\GC21\METHODS\090723F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Thu Sep 07 13:31:21 2023

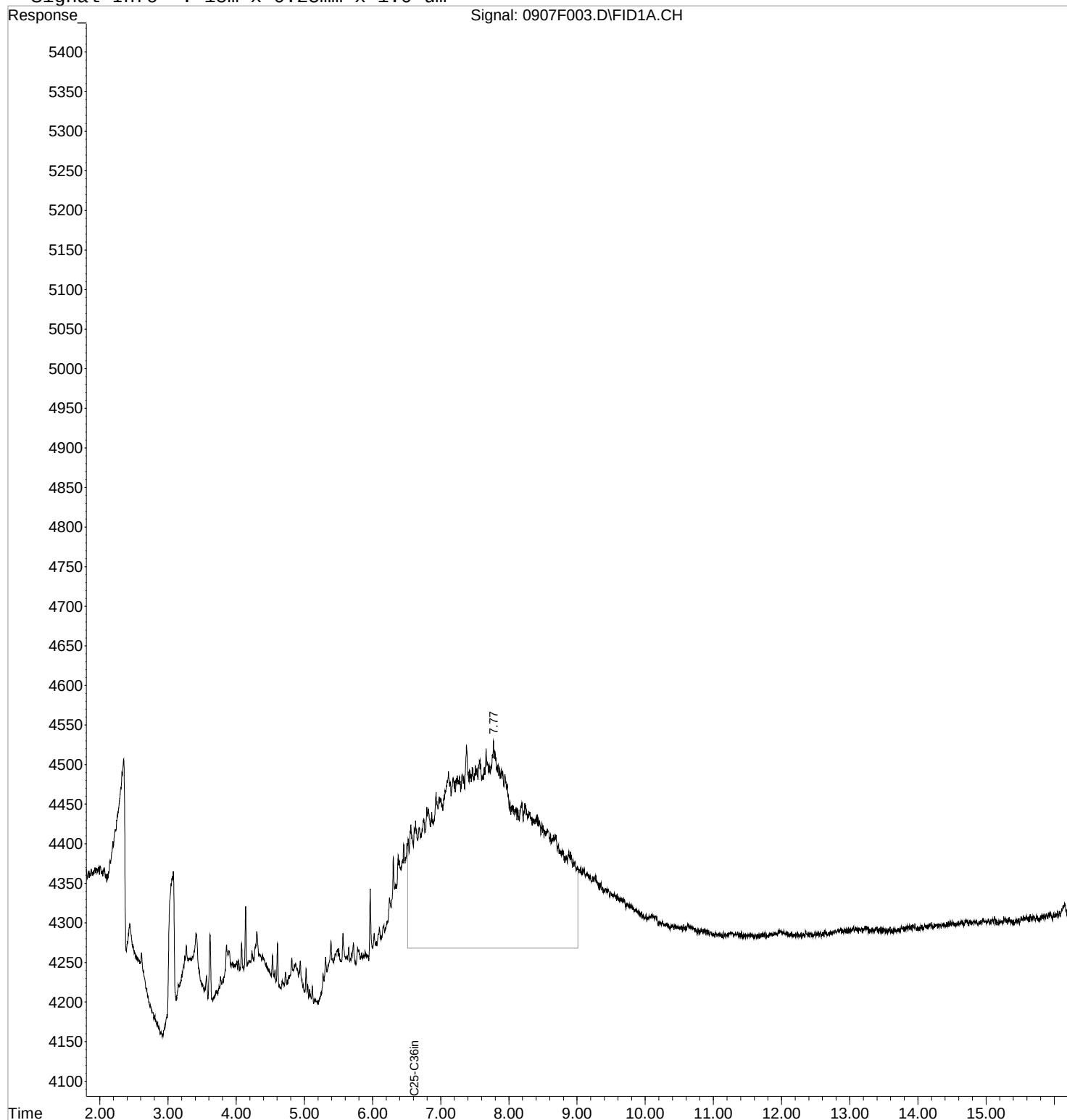
Response via : Single Level Calibration

DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Quantitation Report (Qedit)

1st *AA* 09/08/232nd *SW* 09/08/23

Data File : J:\GC21\DATA\090723\0907F003.D

Acq On : 07 Sep 2023 11:19 am

Sample : RRO SVF04-63A 50

Misc :

IntFile : rteint.p

Quant Time: Sep 7 13:31 2023 Quant Results File: 090723F.RES

Vial: 2

Operator: AA

Inst : GC21

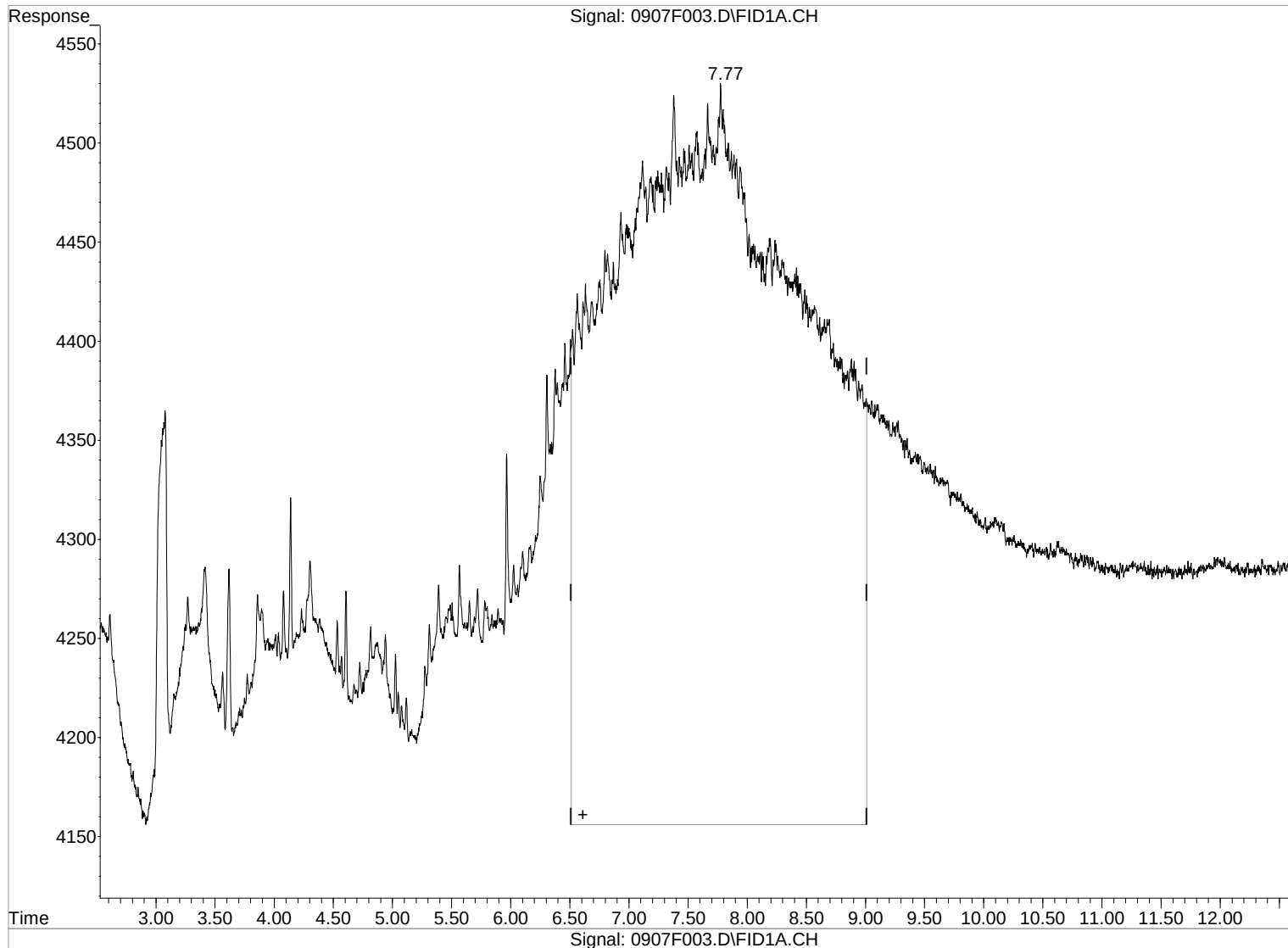
Multiplr: 1.00

Method : J:\GC21\METHODS\090723F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Thu Sep 07 13:31:21 2023

Response via : Multiple Level Calibration



(10) C25-C36in RRO [NWTPH] (H)

Manual Integration:

6.61min 65.150ppm

Before

response 43292

09/07/23

(+) = Expected Retention Time

0907F003.D 090723F.M Thu Sep 07 13:32:23 2023

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Quantitation Report (Qedit)

1st AA 09/08/23

2nd *Sw* 09/08/23

Data File : J:\GC21\DATA\090723\0907F003.D

Acq On : 07 Sep 2023 11:19 am

Sample : RRO SVF04-63A 50

Misc :

IntFile : rteint.p

Quant Time: Sep 7 13:31 2023 Quant Results File: 090723F.RES

Vial: 2

Operator: AA

Inst : GC21

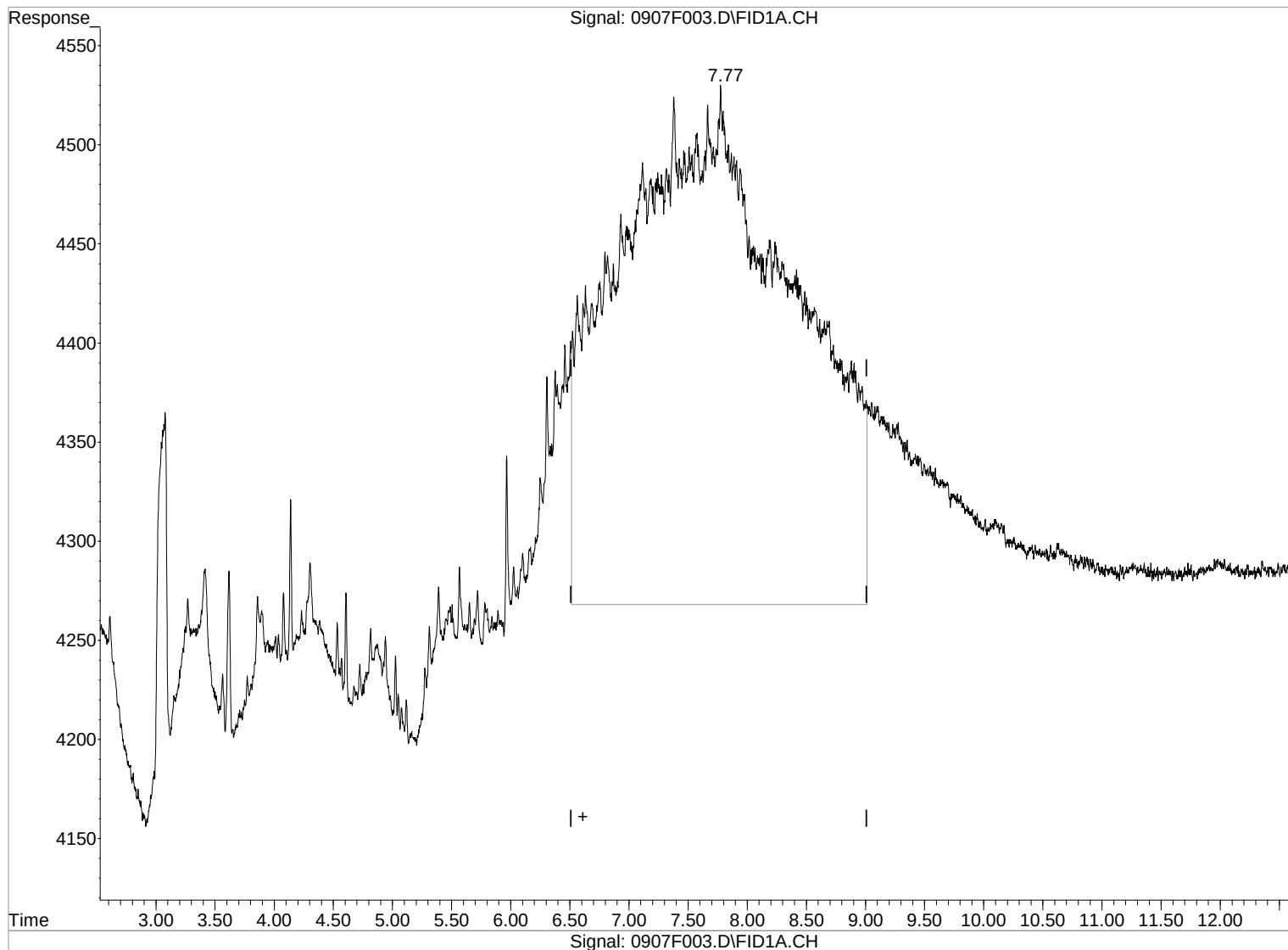
Multiplr: 1.00

Method : J:\GC21\METHODS\090723F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Thu Sep 07 13:31:21 2023

Response via : Multiple Level Calibration



(10) C25-C36in RRO [NWTPH] (H)

6.61min 39.845ppm

response 26477

Manual Integration:

After

Baseline/Shoulder

09/07/23

(+) = Expected Retention Time

0907F003.D 090723F.M Thu Sep 07 13:32:30 2023

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Data File : J:\GC21\DATA\090723\0907F004.D Vial: 3
Acq On : 07 Sep 2023 11:40 am Operator: AA
Sample : RRO SVF04-62M 200 Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Sep 07 13:31:47 2023 Quant Results File: 090723F.RES

Quant Method : J:\GC21\METHODS\090723F.M (RTE Integrator)
Title : 8015/NWTPH/AK SVF MJ257 KC2000628
Last Update : Thu Sep 07 13:31:21 2023
Response via : Initial Calibration
DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL
Signal Phase : ZB-1
Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

Target Compounds

10) H C25-C36in RRO [NWTPH]	6.61	106505	160.279 ppm
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Data File : J:\GC21\DATA\090723\0907F004.D

Vial: 3

Acq On : 07 Sep 2023 11:40 am

Operator: AA

Sample : RRO SVF04-62M 200

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Sep 7 13:33 2023 Quant Results File: 090723F.RES

Quant Method : J:\GC21\METHODS\090723F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Thu Sep 07 13:31:21 2023

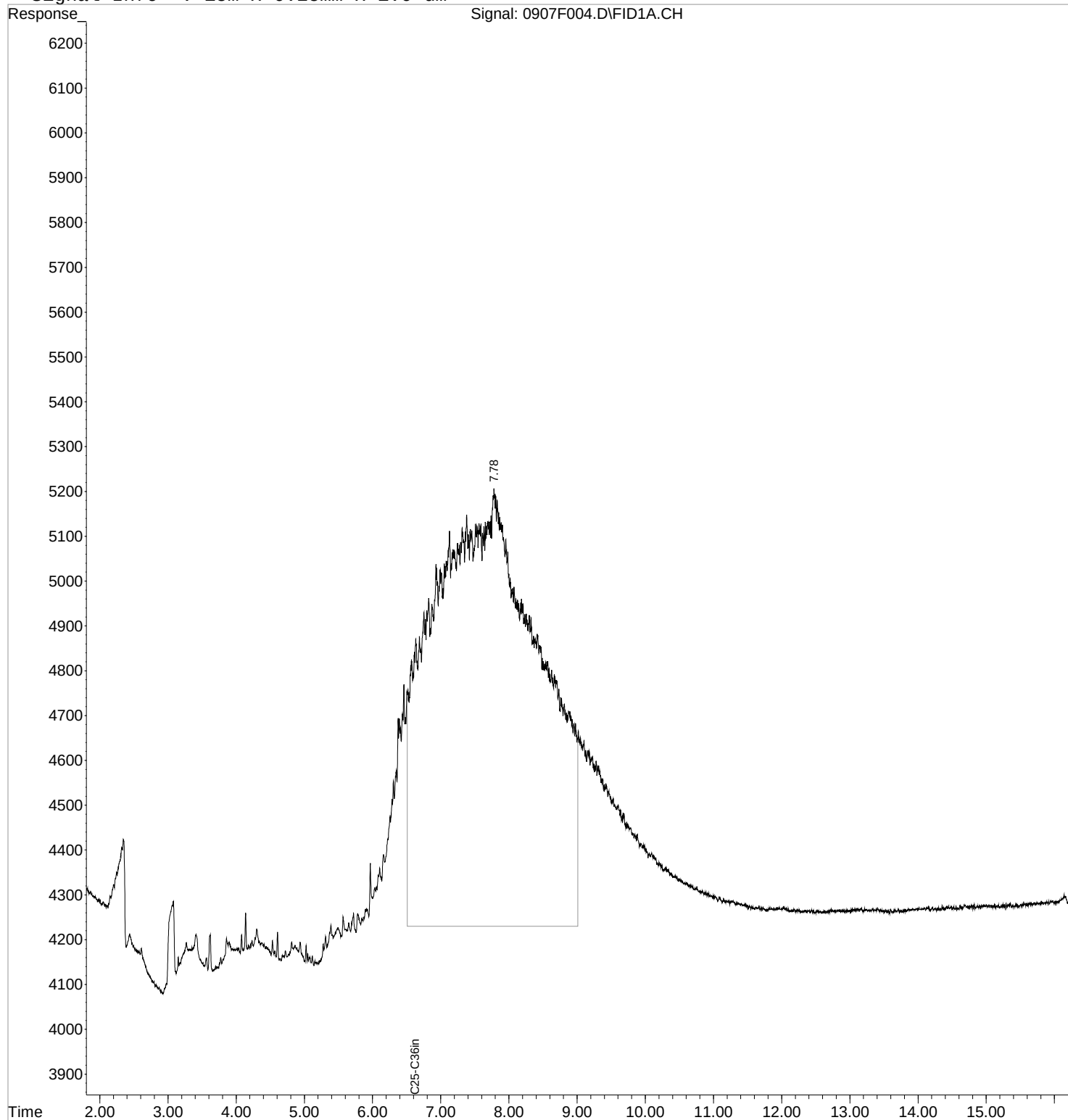
Response via : Single Level Calibration

DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Data File : J:\GC21\DATA\090723\0907F004.D

Vial: 3

Acq On : 07 Sep 2023 11:40 am

Operator: AA

Sample : RRO SVF04-62M 200

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

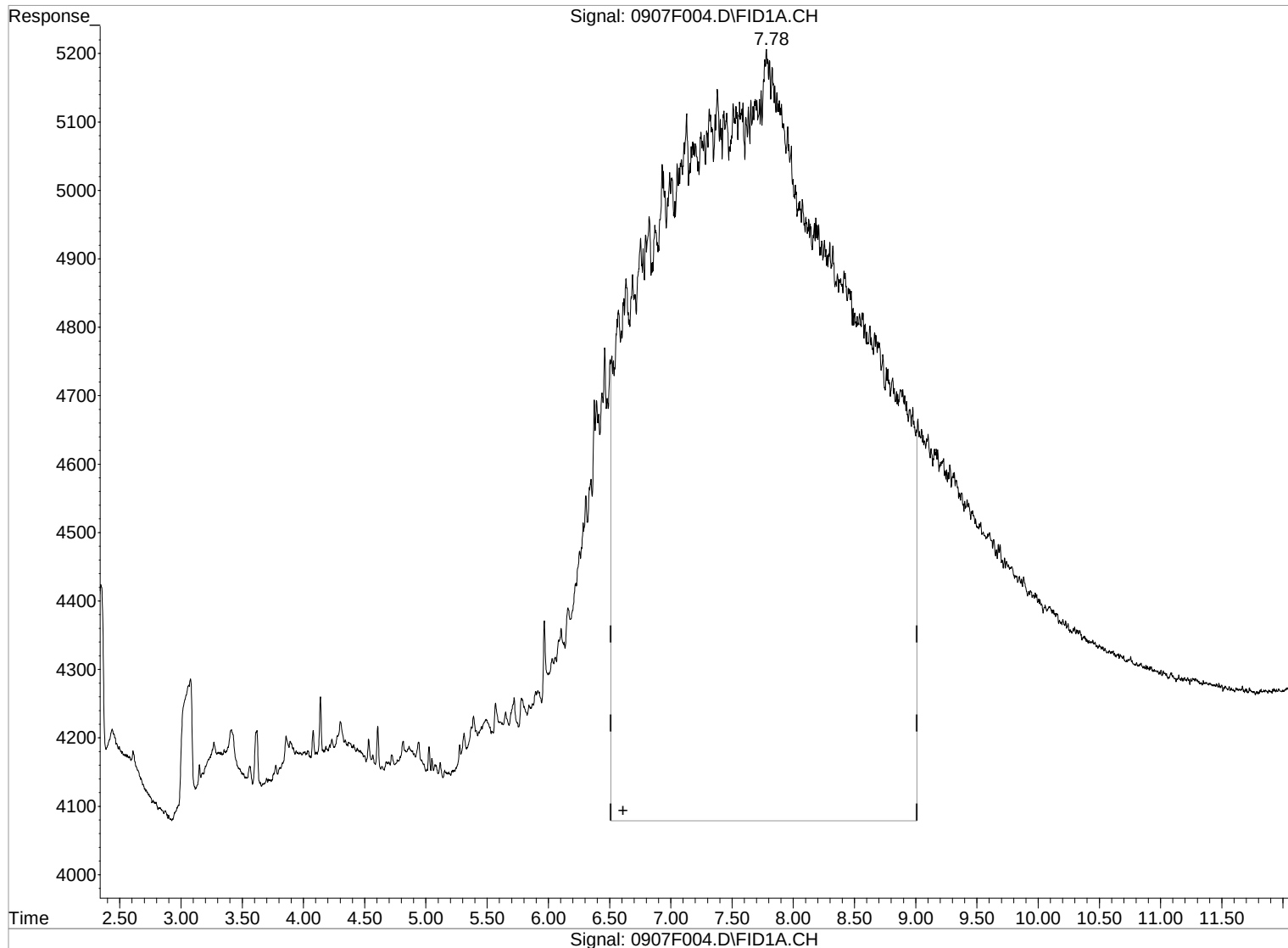
Quant Time: Sep 7 13:31 2023 Quant Results File: 090723F.RES

Method : J:\GC21\METHODS\090723F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Thu Sep 07 13:32:48 2023

Response via : Multiple Level Calibration



(10) C25-C36in RRO [NWTPH] (H)

Manual Integration:

6.61min 194.365ppm

Before

response 129155

09/07/23

(+) = Expected Retention Time

0907F004.D 090723F.M Thu Sep 07 13:33:10 2023

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Data File : J:\GC21\DATA\090723\0907F004.D

Vial: 3

Acq On : 07 Sep 2023 11:40 am

Operator: AA

Sample : RRO SVF04-62M 200

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

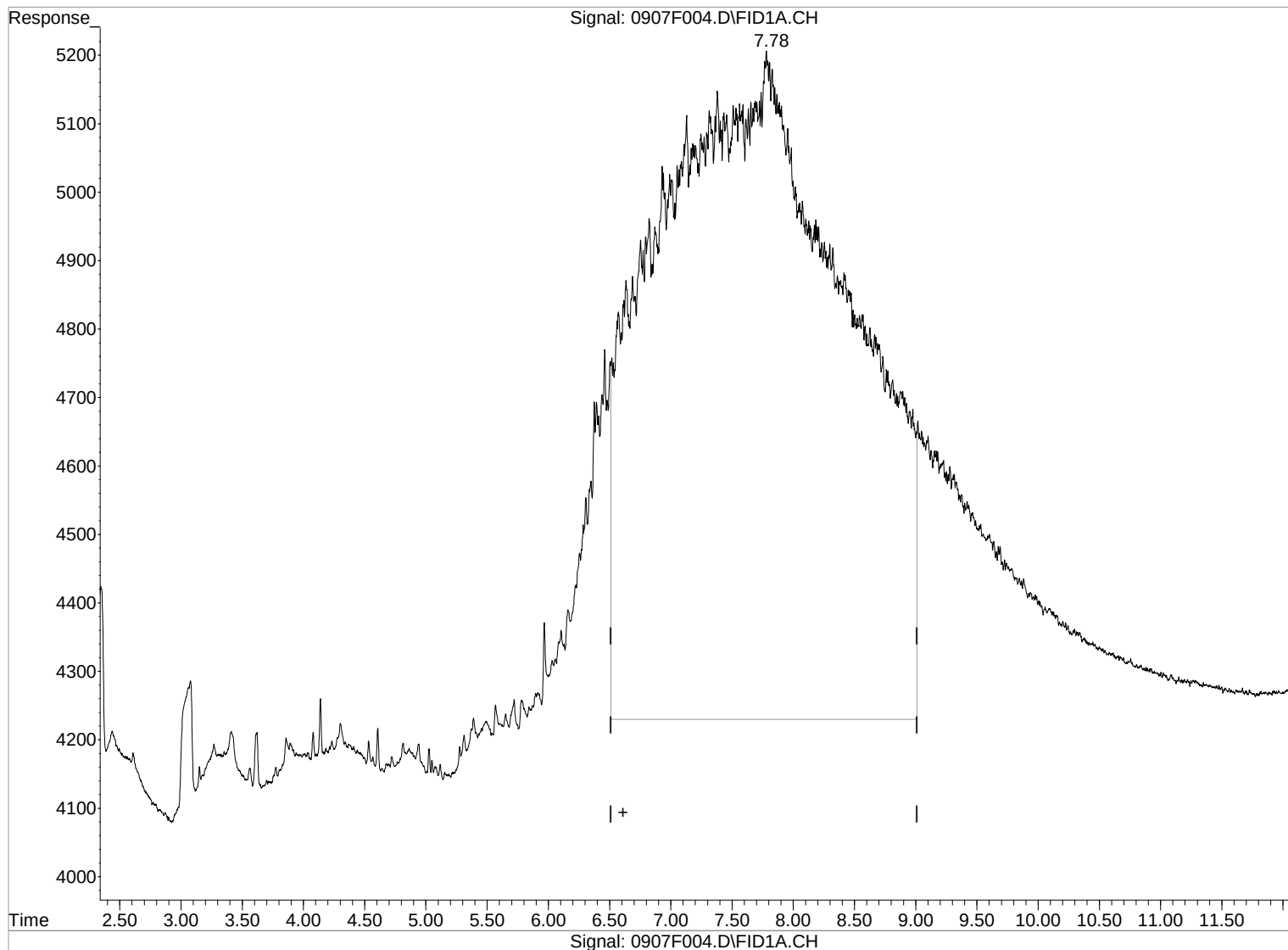
Quant Time: Sep 7 13:31 2023 Quant Results File: 090723F.RES

Method : J:\GC21\METHODS\090723F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Thu Sep 07 13:32:48 2023

Response via : Multiple Level Calibration



(10) C25-C36in RRO [NWTPH] (H)

Manual Integration:

6.61min 160.279ppm

After

response 106505

Baseline/Shoulder

09/07/23

(+) = Expected Retention Time

0907F004.D 090723F.M Thu Sep 07 13:33:24 2023

348 of 2035

Data File : J:\GC21\DATA\090723\0907F005.D Vial: 4
Acq On : 07 Sep 2023 12:02 pm Operator: AA
Sample : RRO SVF04-62L 500 Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Sep 07 13:31:49 2023 Quant Results File: 090723F.RES

Quant Method : J:\GC21\METHODS\090723F.M (RTE Integrator)
Title : 8015/NWTPH/AK SVF MJ257 KC2000628
Last Update : Thu Sep 07 13:31:21 2023
Response via : Initial Calibration
DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL
Signal Phase : ZB-1
Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

Target Compounds

10) H C25-C36in RRO [NWTPH]	6.61	315132	474.240 ppm
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Data File : J:\GC21\DATA\090723\0907F005.D

Vial: 4

Acq On : 07 Sep 2023 12:02 pm

Operator: AA

Sample : RR0 SVF04-62L 500

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Sep 7 13:34 2023 Quant Results File: 090723F.RES

Quant Method : J:\GC21\METHODS\090723F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Thu Sep 07 13:31:21 2023

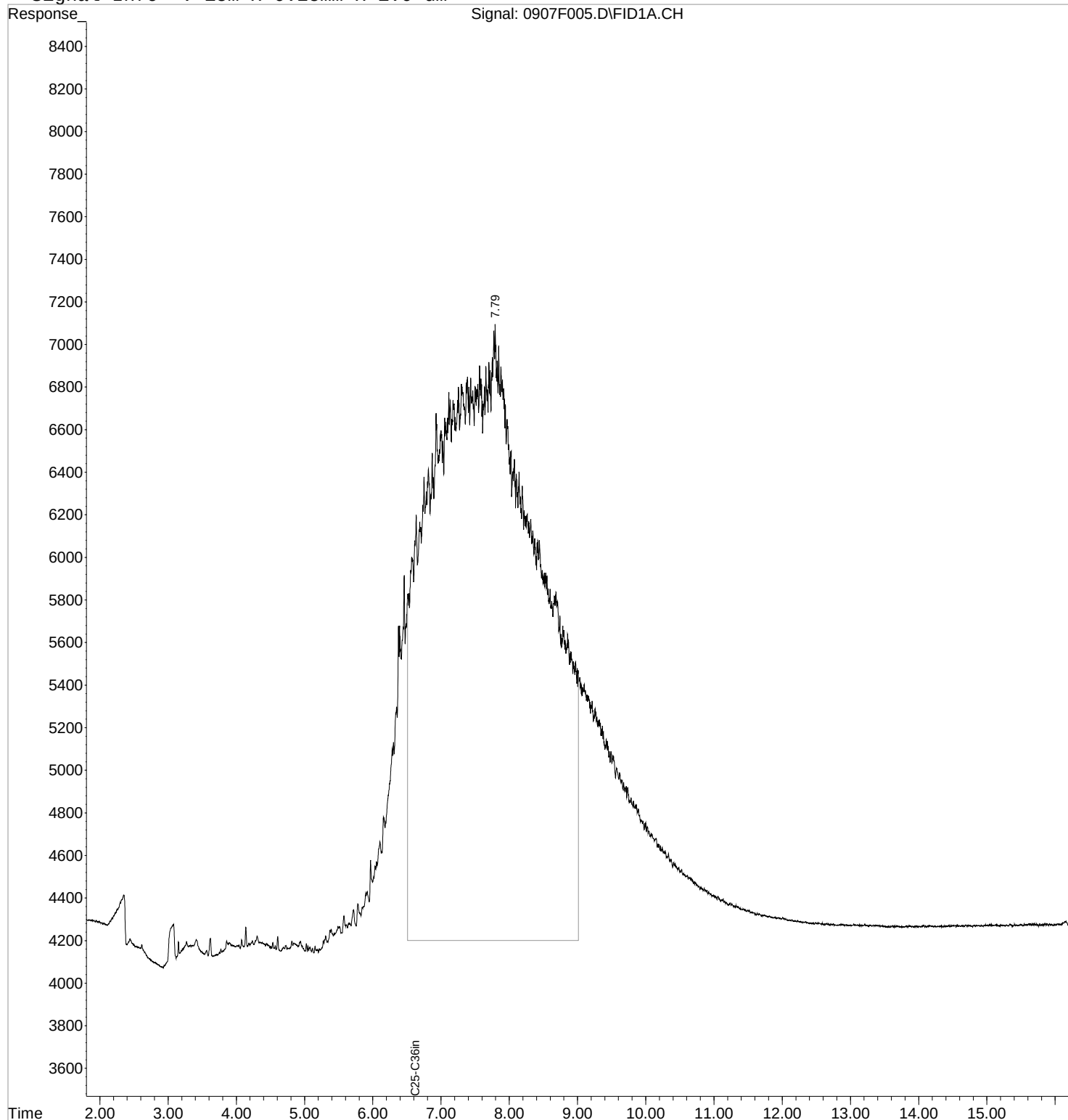
Response via : Single Level Calibration

DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Data File : J:\GC21\DATA\090723\0907F005.D

Vial: 4

Acq On : 07 Sep 2023 12:02 pm

Operator: AA

Sample : RRO SVF04-62L 500

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

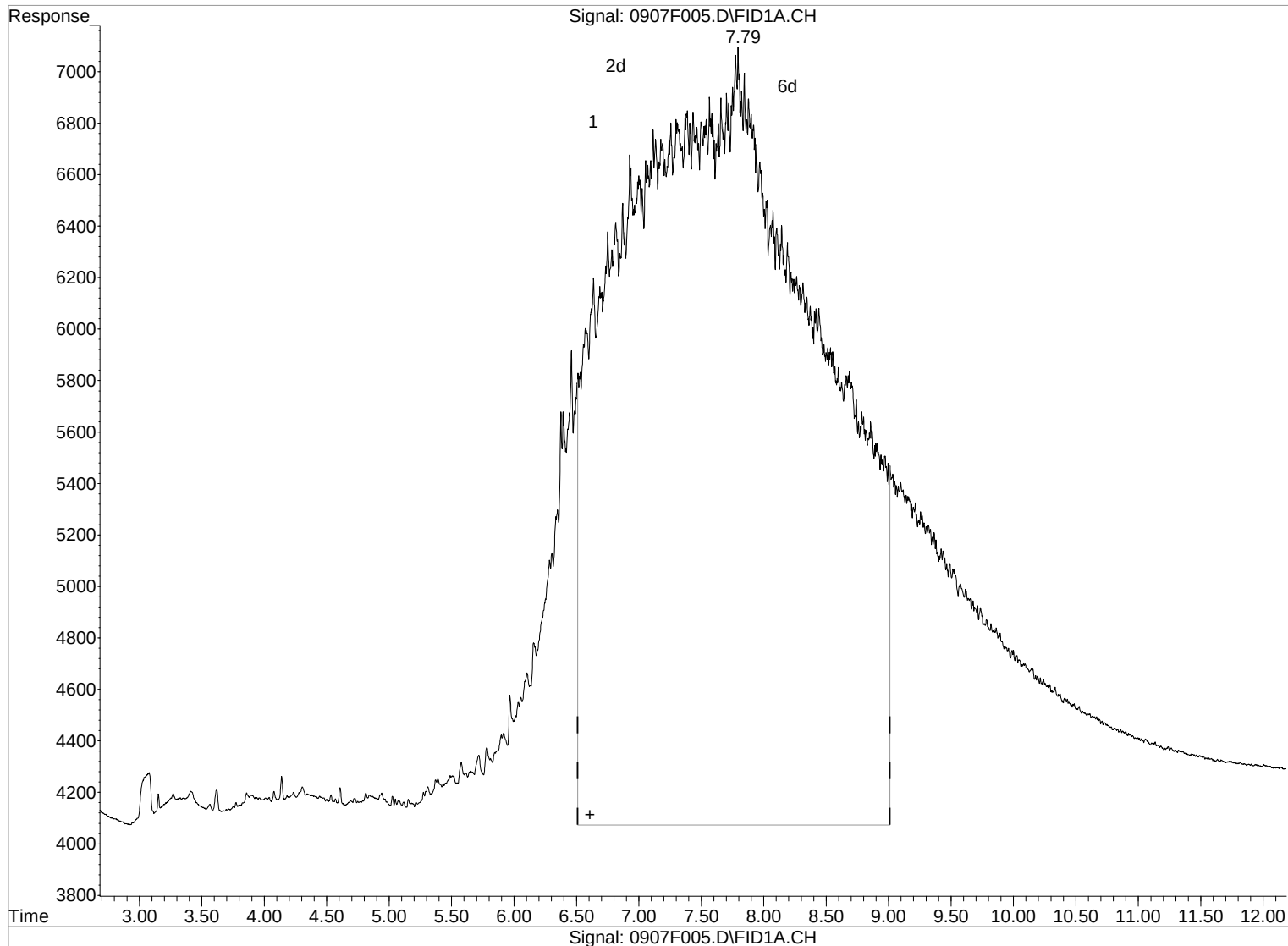
Quant Time: Sep 7 13:31 2023 Quant Results File: 090723F.RES

Method : J:\GC21\METHODS\090723F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Thu Sep 07 13:33:30 2023

Response via : Multiple Level Calibration



(10) C25-C36in RRO [NWTPH] (H)

Manual Integration:

6.61min 502.755ppm

Before

response 334080

09/07/23

(+) = Expected Retention Time

0907F005.D 090723F.M Thu Sep 07 13:33:52 2023

351 of 2035

Data File : J:\GC21\DATA\090723\0907F005.D

Vial: 4

Acq On : 07 Sep 2023 12:02 pm

Operator: AA

Sample : RRO SVF04-62L 500

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

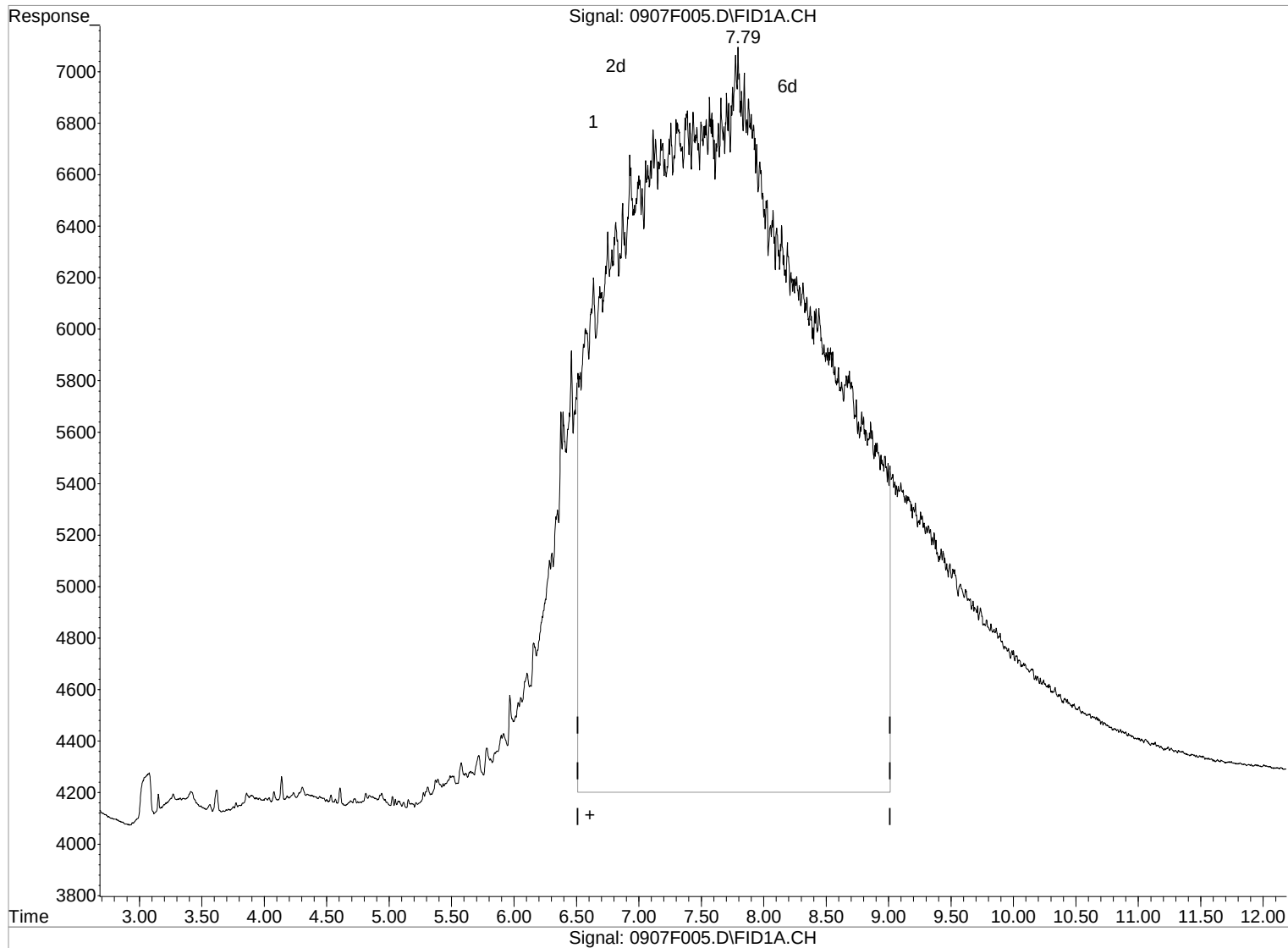
Quant Time: Sep 7 13:31 2023 Quant Results File: 090723F.RES

Method : J:\GC21\METHODS\090723F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Thu Sep 07 13:33:30 2023

Response via : Multiple Level Calibration



(10) C25-C36in RRO [NWTPH] (H)

Manual Integration:

6.61min 474.240ppm

After

response 315132

Baseline/Shoulder

09/07/23

(+) = Expected Retention Time

0907F005.D 090723F.M Thu Sep 07 13:34:03 2023

352 of 2035

Data File : J:\GC21\DATA\090723\0907F006.D Vial: 5
Acq On : 07 Sep 2023 12:23 pm Operator: AA
Sample : RRO SVF04-62K 2000 Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Sep 07 13:31:50 2023 Quant Results File: 090723F.RES

Quant Method : J:\GC21\METHODS\090723F.M (RTE Integrator)
Title : 8015/NWTPH/AK SVF MJ257 KC2000628
Last Update : Thu Sep 07 13:31:21 2023
Response via : Initial Calibration
DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL
Signal Phase : ZB-1
Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

Target Compounds

10) H C25-C36in RRO [NWTPH]	6.61	1213069	1825.541 ppm
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Data File : J:\GC21\DATA\090723\0907F006.D

Vial: 5

Acq On : 07 Sep 2023 12:23 pm

Operator: AA

Sample : RRO SVF04-62K 2000

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Sep 7 13:34 2023 Quant Results File: 090723F.RES

Quant Method : J:\GC21\METHODS\090723F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Thu Sep 07 13:31:21 2023

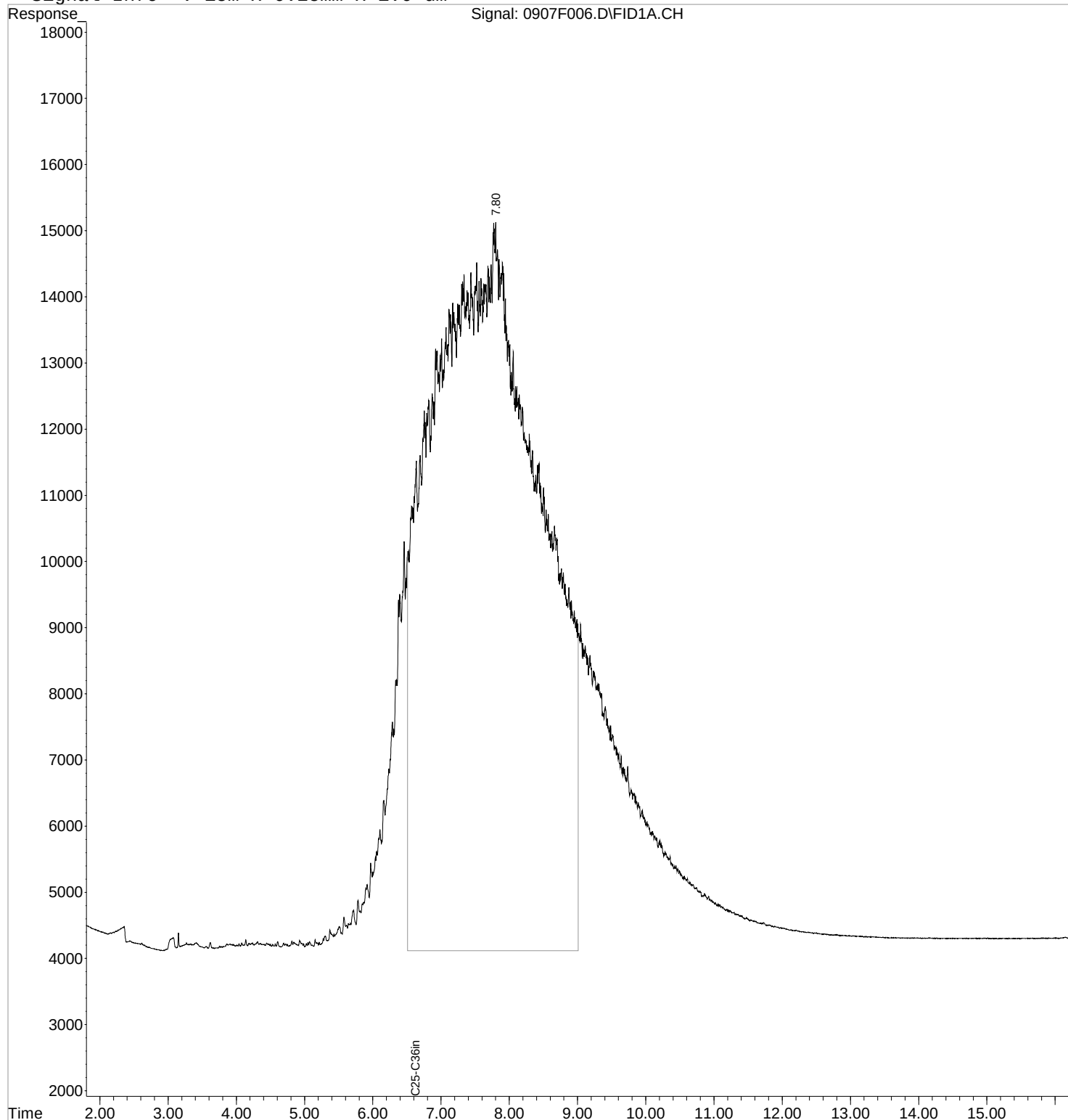
Response via : Single Level Calibration

DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Data File : J:\GC21\DATA\090723\0907F007.D Vial: 6
Acq On : 07 Sep 2023 12:45 pm Operator: AA
Sample : RRO SVF04-62J 5000 Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Sep 07 13:31:52 2023 Quant Results File: 090723F.RES

Quant Method : J:\GC21\METHODS\090723F.M (RTE Integrator)
Title : 8015/NWTPH/AK SVF MJ257 KC2000628
Last Update : Thu Sep 07 13:31:21 2023
Response via : Initial Calibration
DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL
Signal Phase : ZB-1
Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

Target Compounds

10) H C25-C36in RRO [NWTPH]	6.61	2689624	4047.600 ppm
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Data File : J:\GC21\DATA\090723\0907F007.D

Vial: 6

Acq On : 07 Sep 2023 12:45 pm

Operator: AA

Sample : RRO SVF04-62J 5000

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Sep 7 13:35 2023 Quant Results File: 090723F.RES

Quant Method : J:\GC21\METHODS\090723F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Thu Sep 07 13:31:21 2023

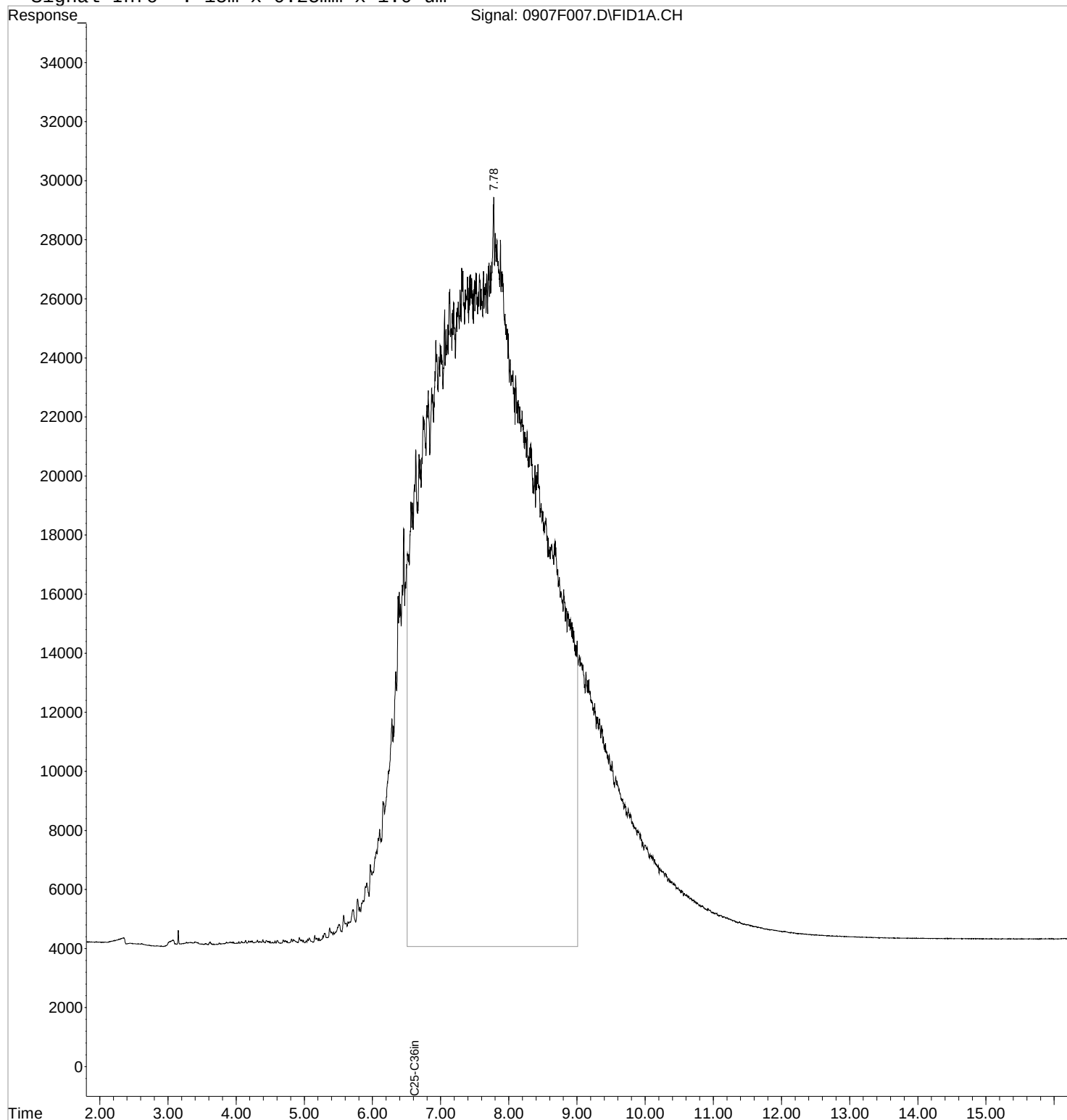
Response via : Single Level Calibration

DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Data File : J:\GC21\DATA\090723\0907F009.D Vial: 1
Acq On : 07 Sep 2023 1:28 pm Operator: AA
Sample : IB Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Sep 07 14:21:39 2023 Quant Results File: 090723F.RES

Quant Method : J:\GC21\METHODS\090723F.M (RTE Integrator)
Title : 8015/NWTPH/AK SVF MJ257 KC2000628
Last Update : Thu Sep 07 13:35:15 2023
Response via : Initial Calibration
DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL
Signal Phase : ZB-1
Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
Target Compounds			
6) H C10-C25ex DRO [AK102]	3.11	22322	23.029 ppm
7) H C10-C28in DRO [8015]	3.21	28514	28.117 ppm
8) H C12-C25ex DRO [NWTPH]	3.75	18399	23.197 ppm
10) H C25-C36in RRO [NWTPH]	6.61	6737	11.874 ppm
11) H C25-C36in RRO [AK103]	6.71	22300	36.632 ppm

Data File : J:\GC21\DATA\090723\0907F009.D

Vial: 1

Acq On : 07 Sep 2023 1:28 pm

Operator: AA

Sample : IB

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Sep 7 14:22 2023 Quant Results File: 090723F.RES

Quant Method : J:\GC21\METHODS\090723F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Thu Sep 07 13:35:15 2023

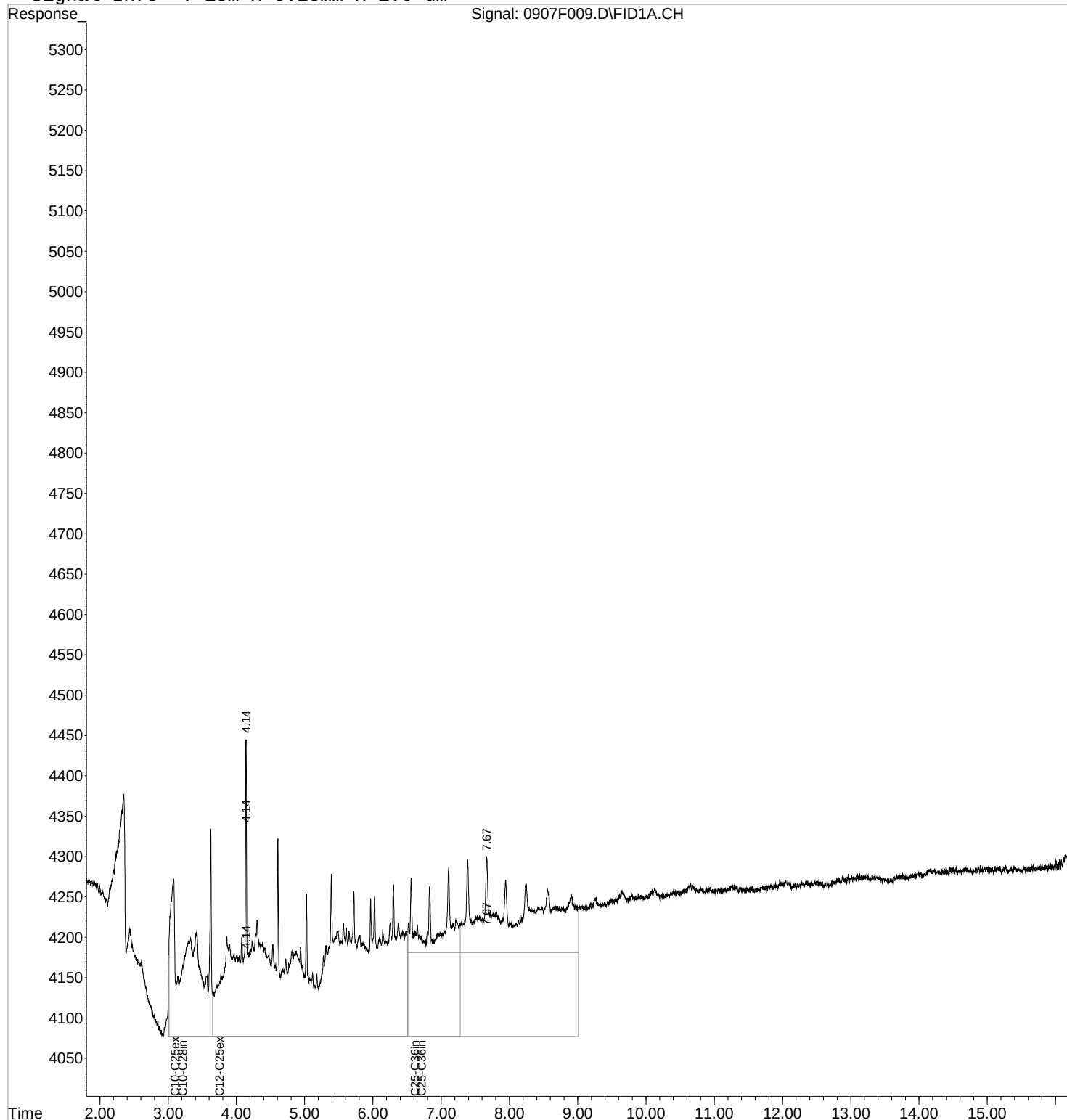
Response via : Single Level Calibration

DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Data File : J:\GC21\DATA\090723\0907F009.D

Acq On : 07 Sep 2023 1:28 pm

Sample : IB

Misc :

IntFile : rteint.p

Quant Time: Sep 7 14:21 2023 Quant Results File: 090723F.RES

Vial: 1

Operator: AA

Inst : GC21

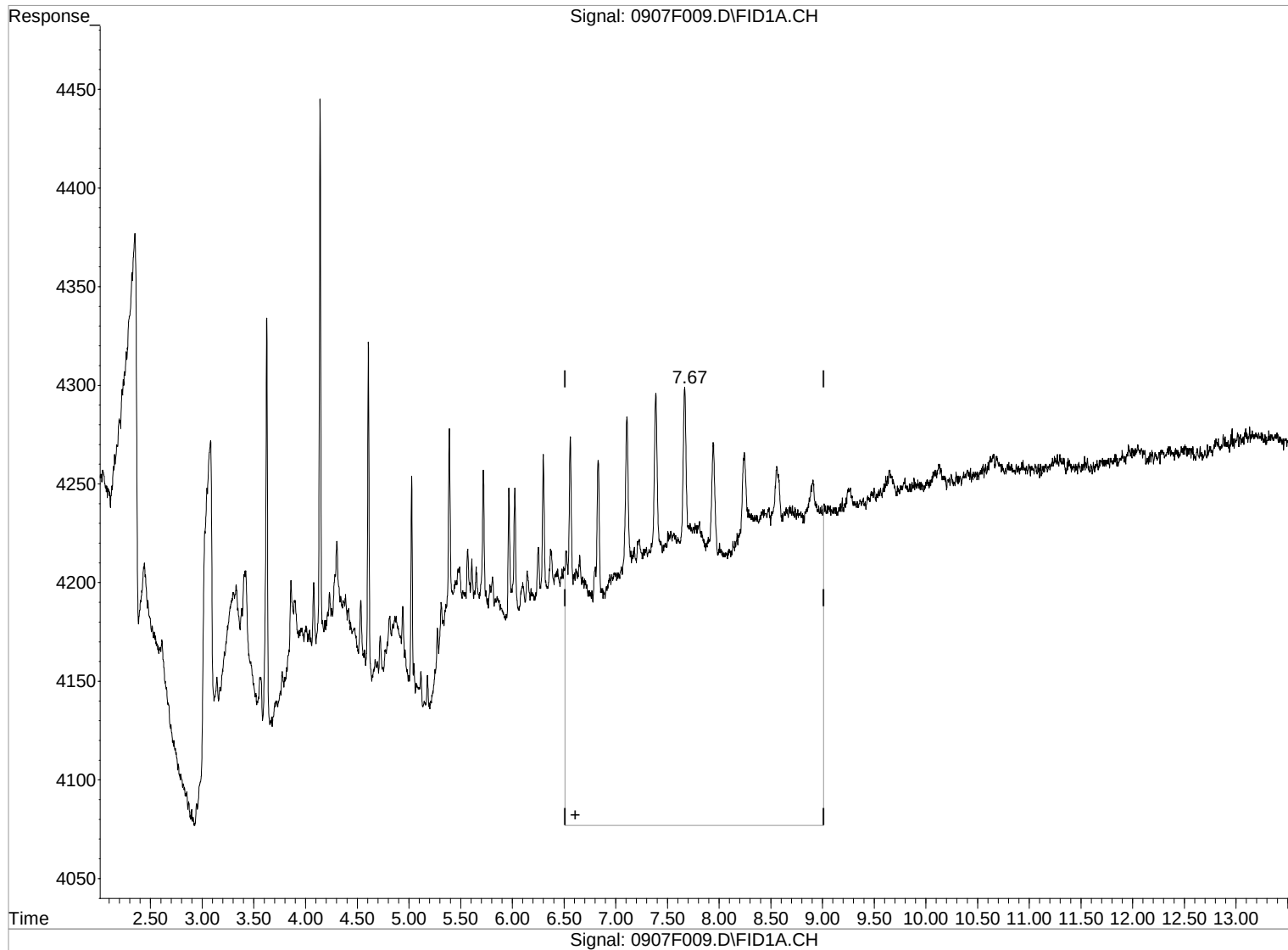
Multiplr: 1.00

Method : J:\GC21\METHODS\090723F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Thu Sep 07 13:35:15 2023

Response via : Multiple Level Calibration



(10) C25-C36in RRO [NWTPH] (H)

6.61min 39.305ppm

response 22300

Manual Integration:

Before

09/07/23

(+) = Expected Retention Time

0907F009.D 090723F.M Thu Sep 07 14:22:12 2023

359 of 2035

Data File : J:\GC21\DATA\090723\0907F009.D

Acq On : 07 Sep 2023 1:28 pm

Sample : IB

Misc :

IntFile : rteint.p

Quant Time: Sep 7 14:21 2023 Quant Results File: 090723F.RES

Vial: 1

Operator: AA

Inst : GC21

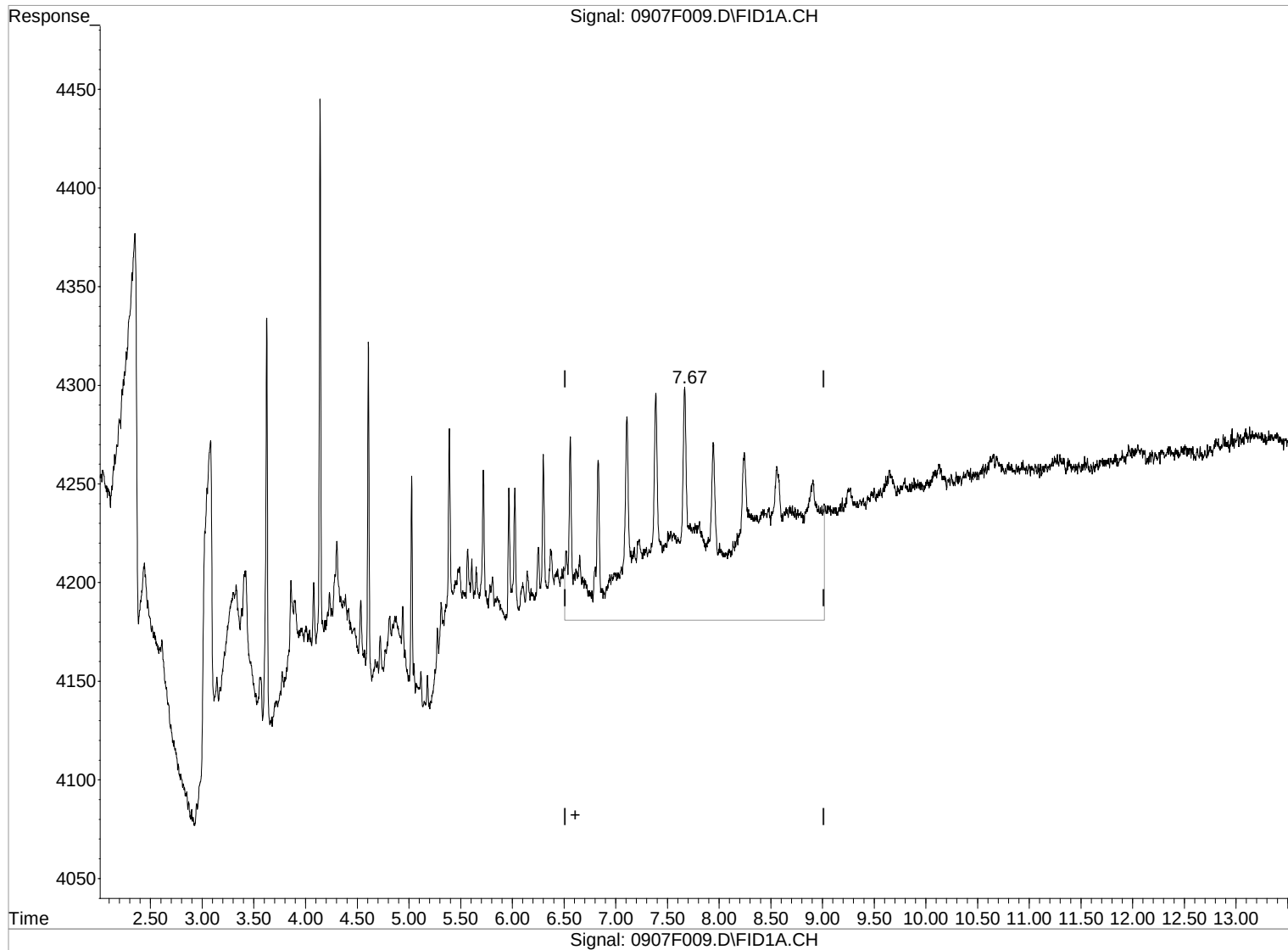
Multiplr: 1.00

Method : J:\GC21\METHODS\090723F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Thu Sep 07 13:35:15 2023

Response via : Multiple Level Calibration



(10) C25-C36in RRO [NWTPH] (H)

6.61min 11.874ppm

response 6737

Manual Integration:

After

Baseline/Shoulder

09/07/23

(+) = Expected Retention Time

0907F009.D 090723F.M Thu Sep 07 14:22:20 2023

360 of 2035

Data File : J:\GC21\DATA\090723\0907F010.D Vial: 7
Acq On : 07 Sep 2023 1:50 pm Operator: AA
Sample : RRO SVF04-63B ICV@1000 Inst : GC21
Misc : Multiplr: 1.00
IntFile : rteint.p
Quant Time: Sep 07 14:19:36 2023 Quant Results File: 090723F.RES

Quant Method : J:\GC21\METHODS\090723F.M (RTE Integrator)
Title : 8015/NWTPH/AK SVF MJ257 KC2000628
Last Update : Thu Sep 07 13:35:15 2023
Response via : Initial Calibration
DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL
Signal Phase : ZB-1
Signal Info : 15m x 0.25mm x 1.0 um

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

Target Compounds

10) H C25-C36in RRO [NWTPH]	6.61	507751	894.940 ppm
-----------------------------	------	--------	-------------

Data File : J:\GC21\DATA\090723\0907F010.D

Vial: 7

Acq On : 07 Sep 2023 1:50 pm

Operator: AA

Sample : RR0 SVF04-63B ICV@1000

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

Quant Time: Sep 7 14:20 2023 Quant Results File: 090723F.RES

Quant Method : J:\GC21\METHODS\090723F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Thu Sep 07 13:35:15 2023

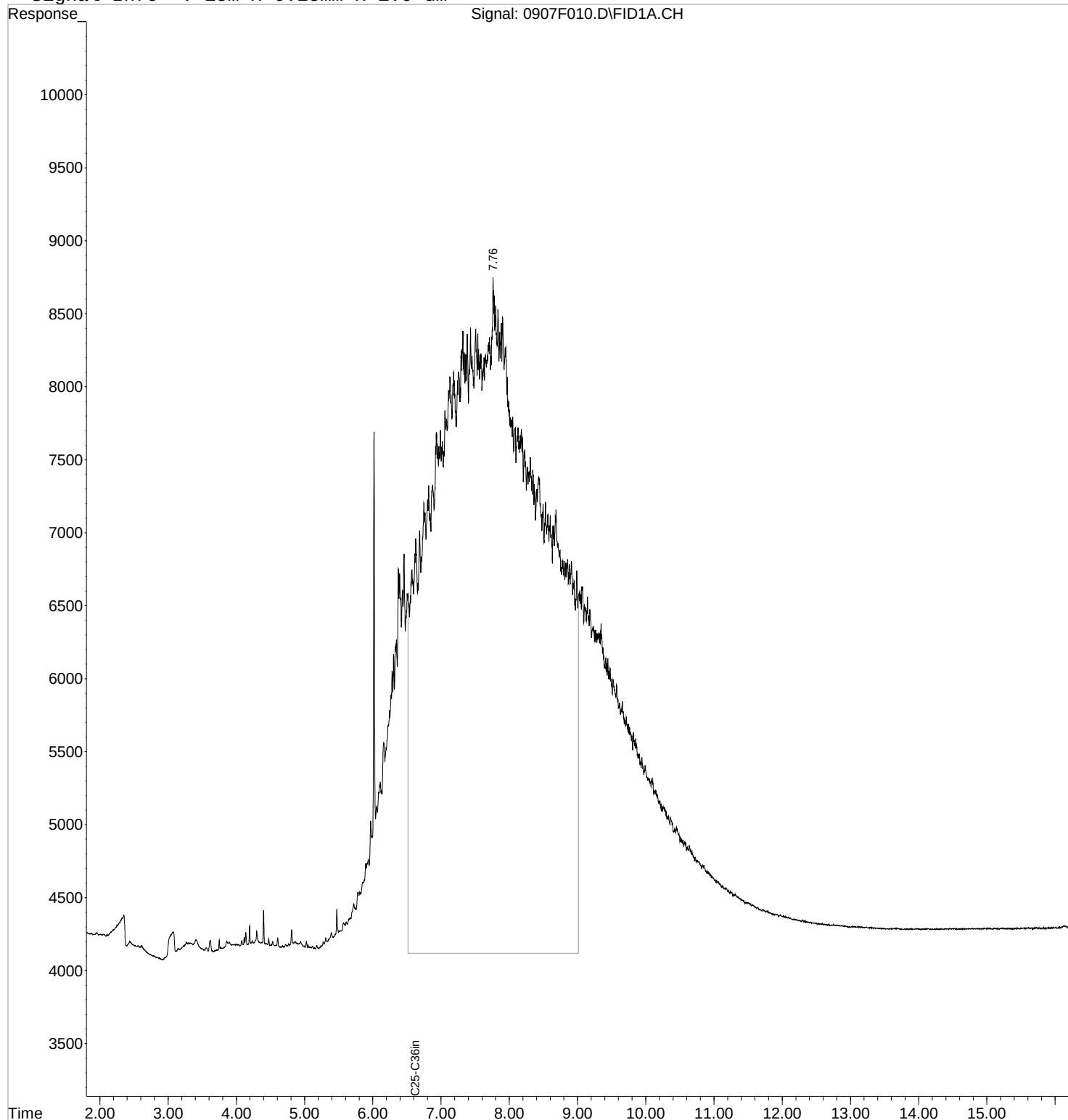
Response via : Single Level Calibration

DataAcq Meth : SVF_FX32.M

Volume Inj. : 1 uL

Signal Phase : ZB-1

Signal Info : 15m x 0.25mm x 1.0 um



Data File : J:\GC21\DATA\090723\0907F010.D

Vial: 7

Acq On : 07 Sep 2023 1:50 pm

Operator: AA

Sample : RRO SVF04-63B ICV@1000

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

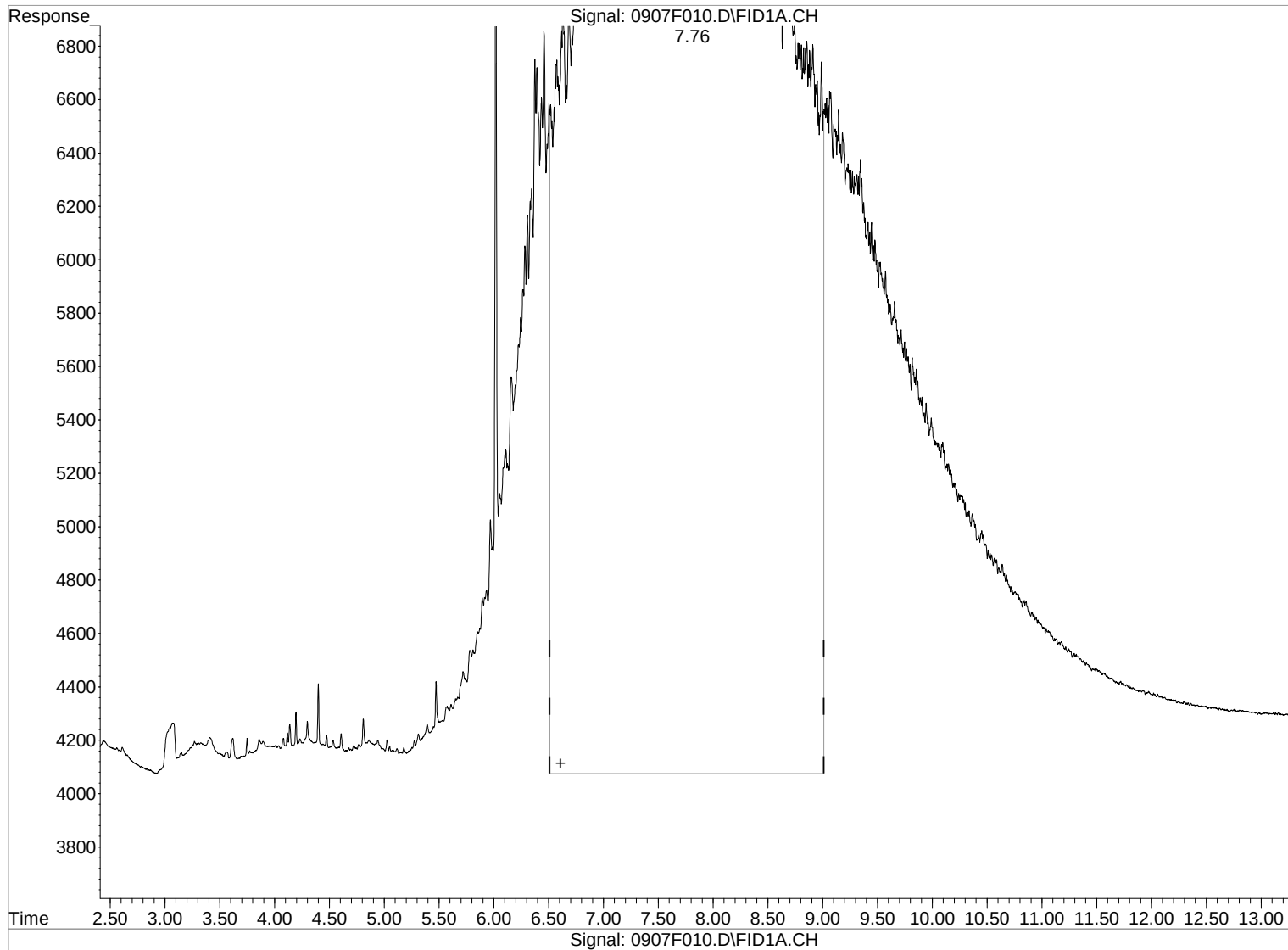
Quant Time: Sep 7 14:19 2023 Quant Results File: 090723F.RES

Method : J:\GC21\METHODS\090723F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Thu Sep 07 13:35:15 2023

Response via : Multiple Level Calibration



(10) C25-C36in RRO [NWTPH] (H)

Manual Integration:

6.61min 906.832ppm

Before

response 514498

09/07/23

(+) = Expected Retention Time

0907F010.D 090723F.M Thu Sep 07 14:20:06 2023

363 of 2035

Data File : J:\GC21\DATA\090723\0907F010.D

Vial: 7

Acq On : 07 Sep 2023 1:50 pm

Operator: AA

Sample : RRO SVF04-63B ICV@1000

Inst : GC21

Misc :

Multiplr: 1.00

IntFile : rteint.p

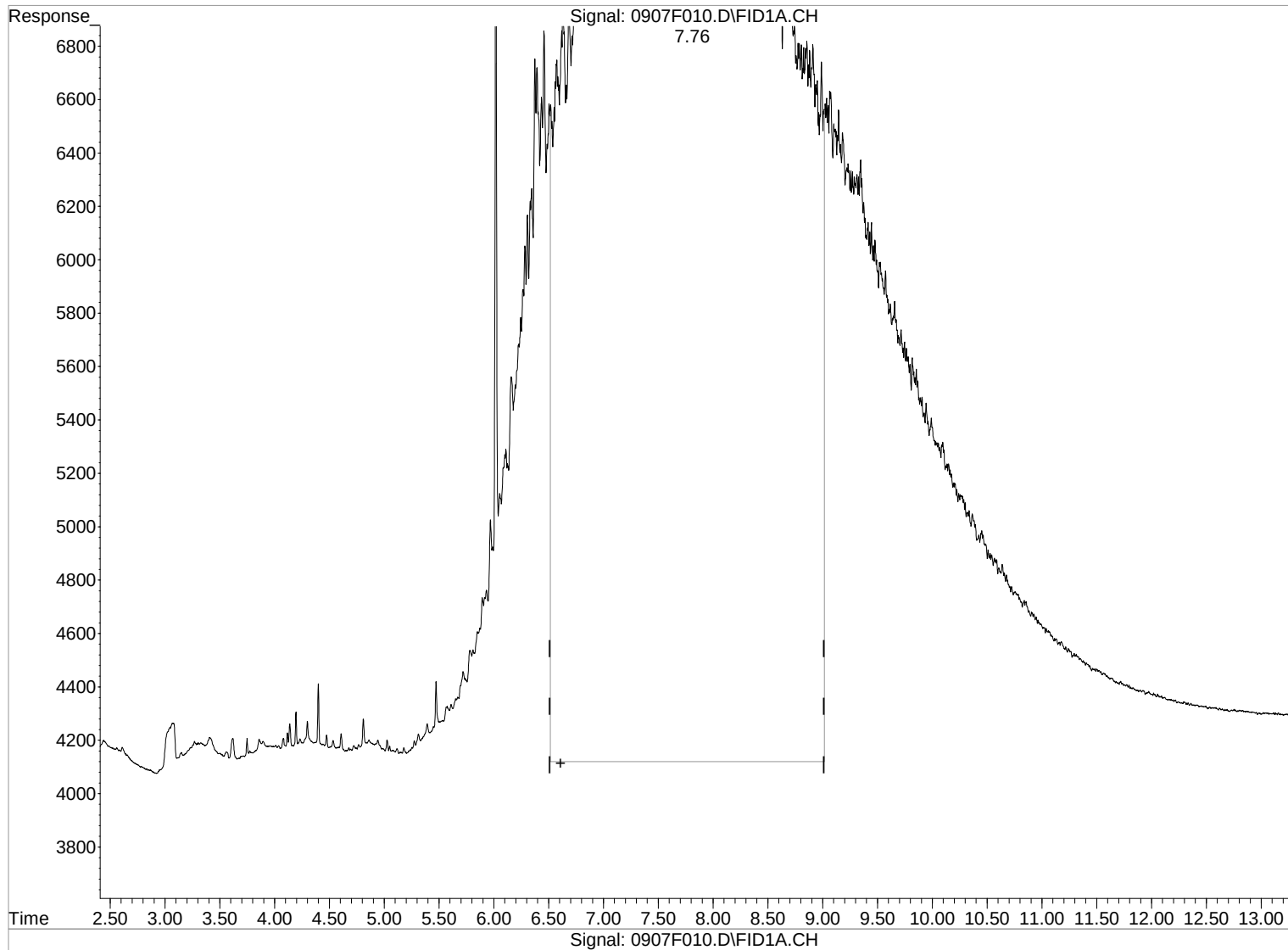
Quant Time: Sep 7 14:19 2023 Quant Results File: 090723F.RES

Method : J:\GC21\METHODS\090723F.M (RTE Integrator)

Title : 8015/NWTPH/AK SVF MJ257 KC2000628

Last Update : Thu Sep 07 13:35:15 2023

Response via : Multiple Level Calibration



(10) C25-C36in RRO [NWTPH] (H)

Manual Integration:

6.61min 894.940ppm

After

response 507751

Baseline/Shoulder

09/07/23

(+) = Expected Retention Time

0907F010.D 090723F.M Thu Sep 07 14:20:15 2023

364 of 2035

Run ID (NWTPH): 828340

Run ID (NWTPH-SGT): 828342

Call ID (Both): KC2300522

Starting sequence Wed Dec 27 13:35:17 2023

Instrument Name: GC21

Sequence File: C:\GC21\SEQUENCE\122723F.sequence.xml

Comment:

Operator: AA

Data Path: C:\GC21\DATA\122723F\

Line	Type	Vials	DataFile	Sample Name
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Acquisition Method Path: C:\GC21\METHODS\

Acquisition Method File: SVF_FX32.M

12)	Sample	91	1227012	ALIPHATIC MARKER
13)	Sample	96	1227013	SVF04-71H DRO CCV 1000/50 OK
14)	Sample	97	1227014	SVF04-72E RRO CCV 1000 OK
15)	Sample	100	1227015	IB
16)	Sample	100	1227016	IB OK
17)	Sample	1	1227017	K2313947-002-RR H10
18)	Sample	2	1227018	Report 020 only — K2313878-001-10X Y10 10x dilution
19)	Sample	3	1227019	K2313878-002-10X Y10 10x dilution
20)	Sample	4	1227020	K2313878-003 Y10
21)	Sample	5	1227021	K2313878-004-10X Y10 10x dilution
22)	Sample	6	1227022	KQ2322342-01-MB
23)	Sample	7	1227023	KQ2322342-02-LCS
24)	Sample	8	1227024	KQ2322342-03-DLCS
25)	Sample	9	1227025	K2314229-001 Y10
26)	Sample	10	1227026	KQ2322265-01-MB
27)	Sample	11	1227027	KQ2322265-02-LCS
28)	Sample	12	1227028	KQ2322265-03-DLCS
29)	Sample	13	1227029	K2314281-001 Y1L -swartail ReX
30)	Sample	14	1227030	K2314281-002 H10
31)	Sample	15	1227031	KQ2322297-02-MB
32)	Sample	16	1227032	KQ2322297-03-LCS ← LSwartail ReX
33)	Sample	17	1227033	K2314283-001 H10
34)	Sample	18	1227034	K2314283-001-DUP
35)	Sample	19	1227035	K2314283-002 Y1L
36)	Sample	96	1227036	SVF04-71H DRO CCV 1000/50 OK
37)	Sample	97	1227037	SVF04-72E RRO CCV 1000 OK
38)	Sample	100	1227038	IB OK
39)	Sample	20	1227039	KQ2322360-01-MB
40)	Sample	21	1227040	KQ2322360-02-LCS
41)	Sample	22	1227041	KQ2322360-03-DLCS
42)	Sample	23	1227042	K2313894-002 RE Y1L
43)	Sample	24	1227043	K2313894-003 RE Y1L
44)	Sample	25	1227044	K2313894-004 RE H10
45)	Sample	26	1227045	K2313894-006 RE H10
46)	Sample	27	1227046	K2313939-002 RE Y1L
47)	Sample	28	1227047	K2313939-002 DUP
48)	Sample	29	1227048	K2313939-003 RE Y1L
49)	Sample	96	1227049	SVF04-71H DRO CCV 1000/50 OK

50) Sample 97 1227050
51) Sample 100 1227051

SVF04-72E RRO CCV 1000 OK
IB OK

Sequence completed Thu Dec 28 03:55:46 2023

C:\GC21\DATA\122723F\2023 Dec 27 1335 Sequence Log .LOG



Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM 5.4

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Preparation Information Benchsheet

Prep Run#: 431421

Team: Organic LC/IBUSICK

Number of Copies to make: 5

Prep Workflow: OLCPFAS_SHK1633

Prep Method: Method

Status: Prepped

Prep Date/Time: 12/22/23 10:41

#	Lab Code	Client ID	B#	Method /Test	pH	Matrix	Amt. Ext.	Final Vol	Sample Description
1	K2314273-004	CHPZ04610B-O1223	.01	1633/PEAS_DOD5.4		Soil	5.054g	5.00mL	TRICKMAN K-BALANCE-55
2	K2314273-005	CHPZ04610A-O1223	.01	1633/PEAS_DOD5.4		Soil	5.147g	5.00mL	TRICKMAN K-BALANCE-55
3	K2314283-001	TA-01-S	.02	1633/PEAS_DOD5.4		Soil	6.878g	5.00mL	TRICKMAN K-BALANCE-55
4	K2314283-002	TA-02-S	.02	1633/PEAS_DOD5.4		Soil	5.862g	5.00mL	TRICKMAN K-BALANCE-55
5	K2314432-001	VGAC-W4	.01	1633/PEAS_DOD5.4		Solid	5.048g	5.00mL	JARTHUR K-Balance-50
6	K2314505-001	CHPZ04606B-O1223	.01	1633/PEAS_DOD5.4		Soil	5.427g	5.00mL	TRICKMAN K-BALANCE-55
7	KQ2400355-04	K2314505-001 MS	.01	1633/PEAS_DOD5.4		Solid	5.429g	5.00mL	TRICKMAN K-BALANCE-55
8	KQ2400355-05	K2314505-001 DMS	.01	1633/PEAS_DOD5.4		Solid	5.419g	5.00mL	TRICKMAN K-BALANCE-55
9	K2314505-002	CHPZ04606A-O1223	.01	1633/PEAS_DOD5.4		Soil	5.376g	5.00mL	TRICKMAN K-BALANCE-55
10	K2314505-003	CHPZ04612B-O1223	.01	1633/PEAS_DOD5.4		Soil	5.151g	5.00mL	TRICKMAN K-BALANCE-55
11	K2314505-004	CHPZ04612A-O1223	.01	1633/PEAS_DOD5.4		Soil	5.612g	5.00mL	TRICKMAN K-BALANCE-55
12	K2314546-001	Batch 2	.01	1633/PEAS_DOD5.4		Soil	5.624g	5.00mL	TRICKMAN K-BALANCE-55
13	KQ2400355-01	LCS		1633/PEAS_DOD5.4		Solid	5g	5.00mL	
14	KQ2400355-02	LCS_LL		1633/PEAS_DOD5.4		Solid	5g	5.00mL	
15	KQ2400355-03	MB		1633/PEAS_DOD5.4		Solid	5g	5.00mL	

Spiking Solutions

Name:	1633 No FTCA spike 200ng/mL	Inventory ID	231930	Logbook Ref:	23-OLC-04-02A	Expires On:	06/28/2024
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KQ2400355-01	125.00µL	KQ2400355-02	25.00µL	KQ2400355-04	125.00µL	KQ2400355-05	125.00µL
Name:	1633 FTCA only spike 5000ng/mL	Inventory ID	232518	Logbook Ref:	23-OLC-03-76B	Expires On:	05/21/2024

KQ2400355-01	50.00µL	KQ2400355-02	20.00µL	KQ2400355-04	50.00µL	KQ2400355-05	50.00µL
Name:	1633 EIS (working standard)	Inventory ID	233090	Logbook Ref:	23-OLC-03-99A	Expires On:	06/22/2024

K2314273-004	50.00µL	K2314273-005	50.00µL	K2314283-001	50.00µL	K2314283-002	50.00µL	K2314432-001	50.00µL	K2314505-001	50.00µL
K2314505-002	50.00µL	K2314505-003	50.00µL	K2314505-004	50.00µL	K2314546-001	50.00µL	KQ2400355-01	50.00µL	KQ2400355-02	50.00µL
KQ2400355-03	50.00µL	KQ2400355-04	50.00µL	KQ2400355-05	50.00µL						
Name:	1633 NIS (working solution)	Inventory ID	233091	Logbook Ref:	23-OLC-04-05A	Expires On:	07/02/2024				

K2314273-004	50.00µL	K2314273-005	50.00µL	K2314283-001	50.00µL	K2314432-001	50.00µL	K2314505-001	50.00µL
K2314505-002	50.00µL	K2314505-003	50.00µL	K2314505-004	50.00µL	KQ2400355-01	50.00µL	KQ2400355-02	50.00µL
KQ2400355-03	50.00µL	KQ2400355-04	50.00µL	KQ2400355-05	50.00µL				

Preparation Information Benchsheet

Prep Run#: 431421
Team: Organic LC/JBUSICK

Prep Workflow: OLCPFAS_SHK1633
Prep Method: Method

Status: Prepped
Prep Date/Time: 12/22/23 10:41

Preparation Steps

Step:	Weigh	Step:	Extraction	Step:	Carbon Clean	Step:	Exchange	Step:	WAX-SPE Clean
Started:	12/22/23 10:41	Started:	1/9/24 13:09	Started:	1/9/24 16:15	Started:	1/10/24 10:30	Started:	1/10/24 15:47
Finished:	1/9/24 12:39	Finished:	1/9/24 16:15	Finished:	1/9/24 16:54	Finished:	1/10/24 14:16	Finished:	1/10/24 18:38
By:	JBUSICK	By:	JBUSICK	By:	JBUSICK	By:	JBUSICK	By:	JBUSICK
Comments		Comments		Comments		Comments		Comments	
Step:	Final Volume								
Started:	1/10/24 18:38								
Finished:	1/11/24 09:43								
By:	JBUSICK								
Comments									

Comments:

Reviewed By: Date: 1/23/24

Chain of Custody

Relinquished By:	<u> </u>	Date:	<u>1.11.24</u>	Extracts Examined ☒ Yes ☐ No
Received By:	<u> </u>	Date:	<u>1/19/24</u>	

Preparation Information Benchsheet

Prep Run#: 431421

Team: Organic LC/IBUSICK

Prep Workflow: OLCPFAS_SHK1633
Prep Method: Method

Status: Draft
Prep Date/Time: 12/15/23 07:50 AM

Number of Copies to make: 5

#	Lab Code	Client ID	B#	Method / Test	Matrix	Amt. Ext.	pH	Int. Vol	Final Vol	Spurr Amt Spurr Amt	Spurr Amt Spurr Amt
1	K2314273-004	CHPZ04610B-01223	.01	1633 / PFAS_DOD5.4	Soil	5.054 g	6.5	NA	5 mL	7	50 µL
2	K2314273-005	CHPZ04610A-01223	.01	1633 / PFAS_DOD5.4	Soil	5.147 g	6.5	1		7	
3	K2314283-001	TA-01-S	.02	1633 / PFAS_DOD5.4	Soil	6.878 g	6.5	1		7	
4	K2314283-002	TA-02-S	.02	1633 / PFAS_DOD5.4	Soil	5.802 g	6.5	1		7	
5	K2314432-001	VGAC-W4	.01	1633 / PFAS_DOD5.4	Solid	5.040 g	7.0	1		7	
6	K2314505-001	CHPZ04606B-01223	.01	1633 / PFAS_DOD5.4	Soil	5.427 g	6.0	1		7	
7	KQ2400355-04	K2314505-001 MS	.01	1633 / PFAS_DOD5.4	Solid	5.429 g	7.0	1		7	
8	KQ2400355-05	K2314505-001 DMS	.01	1633 / PFAS_DOD5.4	Solid	5.419 g	7.0	1		7	
9	K2314505-002	CHPZ04606A-01223	.01	1633 / PFAS_DOD5.4	Soil	5.376 g	6.0	1		7	
10	K2314505-003	CHPZ04612B-01223	.01	1633 / PFAS_DOD5.4	Soil	5.151 g	7.0	1		7	
11	K2314505-004	CHPZ04612A-01223	.01	1633 / PFAS_DOD5.4	Soil	5.612 g	6.5	1		7	
12	K2314546-001	Batch 2	.01	1633 / PFAS_DOD5.4	Soil	5.624 g	6.0	1		7	
13	KQ2400355-01	LCS		1633 / PFAS_DOD5.4	Solid	5.9	6.0	1		7	
14	KQ2400355-02	LCS_IL		1633 / PFAS_DOD5.4	Solid		6.0	1		7	
15	KQ2400355-03	MB		1633 / PFAS_DOD5.4	Solid		6.0	1		7	

① Sample bubbled when solvent 0.3% NH₄OH in MeOH was added
② 1% NH₄OH in MeOH 23-OLC-04-08C was used for conditioning 23-OLC-04-10D was used for final rinse

Comments: * Multiple Weigh dates

23-OLC-04-02A xP 6-28-24 NO FTCA

23-OLC-03-76B xP 5-21-24 FTCA ONLY

Spurr ID: FLS 23-OLC-03-99A xP 6-22-24

Witnessed By:

Spurr ID: FLS 23-OLC-03-99A xP 6-22-24

Analyst:

Assisted By:

Pre-Prep Information Benchsheet

Prep Run #: 431803

Container Lot No: P7619096

Prep Due Date: Dec-26-2023

#	Lab Code	Bottle	Test Name	Weight	Sample Comments	Test Comments
1	K2314273-004	.01	PFAS_DOD5.4: 1633/	5.054g		TRICKMAN K-BALANCE-55
2	K2314273-004 MS	.01	PFAS_DOD5.4: 1633/	5.051g		TRICKMAN K-BALANCE-55
3	K2314273-004 DMS	.01	PFAS_DOD5.4: 1633/	5.048g		TRICKMAN K-BALANCE-55
4	K2314273-005	.01	PFAS_DOD5.4: 1633/	5.147g		TRICKMAN K-BALANCE-55
5	K2314283-001	.01	PFAS_DOD5.4: 1633/	6.878g		TRICKMAN K-BALANCE-55
6	K2314283-002	.01	PFAS_DOD5.4: 1633/	5.862g		TRICKMAN K-BALANCE-55

* in extractions Evidae

Relinquished By: <i>TC</i>	Date/Time: <i>12-23-23 10:41</i>	Received By: <i>JSuade</i>	Date/Time: <i>12-29-23 12:00 PM</i>
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Pre-Prep Information Benchsheet

Prep Run #: 431803

Container Lot No: P7619096

Prep Due Date: Dec-26-2023

#	Lab Code	Bottle	Test Name	Weight	Sample Comments	Test Comments
1	K2314273-004	.01	PFAS_DOD5.4 : 1633/	5.054g		TRICKMAN K-BALANCE-55
2	K2314273-004 MS	.01	PFAS_DOD5.4 : 1633/	5.051g		TRICKMAN K-BALANCE-55
3	K2314273-004 DMS	.01	PFAS_DOD5.4 : 1633/	5.048g		TRICKMAN K-BALANCE-55
4	K2314273-005	.01	PFAS_DOD5.4 : 1633/	5.147g		TRICKMAN K-BALANCE-55
5	K2314283-001	.01	PFAS_DOD5.4 : 1633/	6.878g		TRICKMAN K-BALANCE-55
6	K2314283-002	.01	PFAS_DOD5.4 : 1633/	5.862g		TRICKMAN K-BALANCE-55

* in extractions Evidae

Relinquished By: <i>TC</i>	Date/Time: <i>12-23-23</i>	Received By: <i>gbluick</i>	Date/Time: <i>1-9-24 12:00 pm</i>
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Pre-Prep Information Benchsheet

Prep Run #: NA

Container Lot No: P7631713

Prep Due Date:

#	Lab Code	Bottle	Test Name	Weight	Sample Comments	Test Comments
1	K2314432-001	01	PFAS_DOD5.4 : 1633/OLCPFAS_SHK1633	5.048g		JARTHUR K-Balance-50

EXT FRIDGE in
12.24.23

SA

12.29.23 1000

Relinquished By:	Date/Time:	Received By:	Date/Time:
		<i>gbrack</i>	12-29-23 12:00 pm

Pre-Prep Information Benchsheet

Prep Run #: 432069

Container Lot No: P7619096

Prep Due Date: Dec-29-2023

#	Lab Code	Bottle	Test Name	Weight	Sample Comments	Test Comments
1	K2314432-001	.01	PFAS_DOD5.4 : 1633/	5.048g		JARTHUR K-BALANCE-50
2	K2314505-001	.01	PFAS_DOD5.4 : 1633/	5.427g		TRICKMAN K-BALANCE-55
3	K2314505-001 MS	.01	PFAS_DOD5.4 : 1633/	5.429g		TRICKMAN K-BALANCE-55
4	K2314505-001 DMS	.01	PFAS_DOD5.4 : 1633/	5.419g		TRICKMAN K-BALANCE-55
5	K2314505-002	.01	PFAS_DOD5.4 : 1633/	5.376g		TRICKMAN K-BALANCE-55
6	K2314505-003	.01	PFAS_DOD5.4 : 1633/	5.151g		TRICKMAN K-BALANCE-55
7	K2314505-004	.01	PFAS_DOD5.4 : 1633/	5.612g		TRICKMAN K-BALANCE-55

* in extractions residue

Relinquished By: <i>N</i>	Date/Time: <i>12:29</i>	Received By: <i>gblack</i>	Date/Time: <i>12:00 P</i>
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Pre-Prep Information Benchsheet

Prep Run #: 432124

Container Lot No: P7619096

Prep Due Date: Jan-04-2024

#	Lab Code	Bottle	Test Name	Weight	Sample Comments	Test Comments
1	K2314546-001	.01	PFAS_DOD5.4 : 1633/	5.624g		TRICKMAN K-BALANCE-55
2	K2314546-001 MS	.01	PFAS_DOD5.4 : 1633/	5.623g		TRICKMAN K-BALANCE-55
3	K2314546-001 DMS	.01	PFAS_DOD5.4 : 1633/	5.623g		TRICKMAN K-BALANCE-55
	KQ2400060-02					

*in extraction bottle

Relinquished By: 	Date/Time: 1-3-24 01:34	Received By: 	Date/Time: 1-4-24 12:00 pm
--	-------------------------	--	----------------------------

Sample name	Sample mass (g)	% Solids	% moisture	Water added initially (step 4) mL	Water added in dilution (step 13) mL	Water content mL	Concentrated volume (mL)
K2314283-001	6.878	72.700	27.30		4	5.878	12-15 mL
K2314283-002	5.862	85.300	14.70		5	5.862	12-15 mL
K2134273-004	5.054	97.100	2.90		5	5.147	12-15 mL
K2314273-005	5.147	93.100	6.90		5	5.355	12-15 mL
K2314432-001	5.048	98.800	1.20		5	5.061	12-15 mL
K2314505-001	5.427	92.200	7.80		5	5.423	12-15 mL
K2314505-001 MS	5.429	92.200	7.80		5	5.423	12-15 mL
K2314505-001 DMS	5.419	92.200	7.80		5	5.423	12-15 mL
K2314505-002	5.376	92.900	7.10		5	5.382	12-15 mL
K2314505-003	5.151	97.100	2.90		5	5.149	12-15 mL
K2314505-004	5.612	89.200	10.80		5	5.606	12-15 mL
K2314546-001	5.624	88.900	11.10		5	5.624	12-15 mL

Additional prep information for 1633 PFAS Compounds in solids by HPLC/MS/MS:

Service Request: K2314283, K2314546, K2314273, K2314283, K2314432, K2314505

Workgroup: KQ2400355

Prep Run: 431421

50 mL Falcon Tubes: 14923004

Matrix sand: 216016

200 µL pipette tips: 50155728

0.3% NH₄OH in MeOH: 23-OLC-04-02G

10 mL glass pipette: 0110812023

5 mL glass pipette: BF12G

Culture Tubes: _____

Envi-Carb: 161954

Reagent Water: 63172

1 mL glass pipettes: _____

pH Paper: 6211051

1% NH₄OH in MeOH: 23-OLC-04-08C

Silanized Glass Wool: 116022999

0.3M Acetic Acid: 23-OLC-04-08I

SPE Cartridge: S322-0047

1:1 0.1M acetic acid/MeOH: 23-OLC-04-09J

Concentrated Acetic Acid: MKCS1513

Equilibration: 1-9-24 12:39 pm JB

Shake 1: 1-9-24 01:33 pm JB

Shake 2: 1-9-24 02:56 pm JB

Comments/Observations: _____

Centrifuge ID: K-Centrifuge-01

Centrifuge 1: 1-9-24 02:15 pm JB

Centrifuge 2: 1-9-24 03:32 pm JB

Centrifuge 3: 1-9-24 04:15 pm JB

Centrifuge 4: 1-9-24 04:54 pm JB

Extraction date: 01-10-24 ⁰¹⁻¹¹⁻²⁴

Concentration start: 1-10-24 10:30 am JB

Concentration end: 1-10-24 02:16 pm JB

Extraction (manifold) start: 1-10-24 03:47 pm JB

Extraction (manifold) end: 1-10-24 06:38 pm JB

NIS: 23-OLC-04-05 A

Falcon tubes: 20623009

Nylon Filter: 220744103

Filter body: 2215955

Poly vials: 436023278U6

Poly caps: 207331

Extract Storage: Ariel

1000 µL pipette tips: 501642656

Completed: 1-11-24 09:43 am JB

Bench Sheet Review Check List

- ☒ Hold Times Met (if no, Reason: _____)
- ☒ Prep date, dept., method, product code correct in stealth
- ☒ Spike Information correct
- ☒ Weights/Volumes and units correct on raw and final bench sheets
- ☒ Sample IDs have been checked—Bottle numbers appended if required
- ☒ Names present for: Started by, Completed by, relinquished by, and witnessed by.
- ☒ Training has been circled
- ☒ Extract Storage recorded
- ☒ Additional Prep Sheet completely filled out (NA or line out Blanks)
- ☒ All clean-ups have been noted on additional prep sheet
- ☒ Signed service request with Form V, if applicable, has been attached

Validation Report

1st PS 01/23/24
2nd UA 01/23/24

Data File: J:\LCMS08\Data\240119_1633_B1\240119_030
Lab ID: K2314283-001
RunType: N/A
Matrix: Soil

Date Acquired: 1/19/24 23:03
Batch ID: 830171
Analysis Method: 1633/PFAS_DOD5.4

Validations

Validation Categories	Pass	Fail
Preparation Hold Time	X	
Analytical Hold Time	X	
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery	X	
Continuing Calibration Recovery (Closing)	X	
Lab Control Sample Recovery	X	
Method Blank	X	
Method Blank Surrogates	X	
Internal Standards	X	
Surrogates	X	
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	

Primary Review: _____

Secondary Review: _____

Quantitation Report

1st *PS* 01/23/24
2nd *UA* 01/23/24

Data File:	J:\LCMS08\Data\240119_1633_B1\240119_030	Instrument:	K-LCMS-08
Acqu Date:	1/19/24 23:03	Vial:	24
Run Type:	N/A	Dilution:	1
Lab ID:	K2314283-001	Raw Units:	ng/mL

Bottle ID:	K2314283-001.02	Tier:	IV	Matrix:	Soil
Prod Code:	PFAS_DOD5.4	Collect Date:	12/20/23	Receive Date:	12/20/23

Analysis Lot:	830171	Prep Lot:	431421	Report Group:	K2314283
Analysis	1633	Prep Method:	Method		
		Prep Date:	12/22/23		

Title:	Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM	Calibration ID:	KC2400027
		Report List ID:	24615

Internal Standard Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Area Criteria
18O2-PFHxS	7.089	+0.02	174182	2.5000	OK
13C4-PFOS	8.825	+0.02	198172	2.5000	OK
13C3-PFBA	1.448	+0.04	433563	5.0000	OK
13C2-PFHxA	4.984	+0.03	485230	2.5000	OK
13C4-PFOA	7.113	+0.02	34780	2.5000	OK
13C5-PFNA	7.961	+0.02	235884	1.2500	OK
13C2-PFDA	8.727	+0.02	158277	1.2500	OK

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
13C3-PFBS	4.653	+0.03	201876	2.0423	82	20 - 150	Y
13C3-PFHxS	7.089	+0.02	157137	2.1018	84	20 - 150	Y
13C8-PFOS	8.824	+0.02	61484	1.8603	74	20 - 150	Y
13C4-PFBA	1.447	+0.04	824102	8.5039	85	20 - 150	Y
13C5-PFPeA	3.507	+0.04	87949	4.0155	80	20 - 150	Y
13C5-PFHxA	4.984	+0.03	409321	2.0016	80	20 - 150	Y
13C4-PFHpA	6.159	+0.02	390312	2.1084	84	20 - 150	Y
13C8-PFOA	7.113	+0.02	392227	2.0177	81	20 - 150	Y
13C9-PFNA	7.961	+0.02	179184	0.9702	78	20 - 150	Y
13C6-PFDA	8.726	+0.02	140232	1.1013	88	20 - 150	Y
13C7-PFUnDA	9.449	+0.02	162161	1.0676	85	20 - 150	Y
13C2-PFDoDA	10.137	+0.02	168741	0.9670	77	20 - 150	Y
13C2-PFTeDA	11.428	+0.02	71474	0.9486	76	20 - 150	Y
13C8-FOSA	11.153	+0.01	151617	1.8022	72	20 - 150	Y
D3-MeFOSA	13.687	+0.00	30030	1.7725	71	20 - 150	Y
D5-EtFOSA	14.363	+0.00	36069	1.5990	64	20 - 150	Y
D7-MeFOSE	13.380	+0.01	415823	20.0480	80	20 - 150	Y
D9-EtFOSE	14.008	+0.00	421616	20.0140	80	20 - 150	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 1/23/24 14:28

\\alprews001\starlims\LIMSReps\QuantValidation.rpt

			1st	PS	01/23/24
Data File:	J:\LCMS08\Data\240119_1633_B1\240119_030	Instrument:	K-LCMS08	2nd	01/23/24
Acqu Date:	1/19/24 23:03	Vial:	24	UA	
Run Type:	N/A	Dilution:	1		
Lab ID:	K2314283-001	Raw Units:	ng/mL		

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
D3-MeFOSAA	8.862	+0.02	137610	4.0009	80	20 - 150	Y
D5-EtFOSAA	9.195	+0.03	159126	3.8671	77	20 - 150	Y
13C2-4:2 FTS	4.666	+0.03	124590	5.1978	104	20 - 150	Y
13C2-6:2 FTS	6.796	+0.02	119772	5.2832	106	20 - 150	Y
13C2-8:2 FTS	8.416	+0.02	99821	5.3602	107	20 - 150	Y
13C3-HFPO-DA	5.457	+0.02	419264	8.8266	88	20 - 150	Y

Target Compounds

Target Compounds			Final Conc.Units: ng/g				
Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Perfluorobutane sulfonic acid (PFBS)	0		0	0	0	U	Y
Perfluoropentane sulfonic acid (PFPeS)	0		0	0	0	U	Y
Perfluorohexane sulfonic acid (PFHxS)	7.094	+0.02	1321	-0.0016	0	U	Y
Perfluoroheptane sulfonic acid (PFHpS)	0		0	0	0	U	Y
Perfluorooctane sulfonic acid (PFOS)	8.827	+0.02	2773	0.0434	0.043	U	Y
Perfluorononane sulfonic acid (PFNS)	0		0	0	0	U	Y
Perfluorodecane sulfonic acid (PFDS)	0		0	0	0	U	Y
Perfluorododecane sulfonic acid (PFDoS)	0		0	0	0	U	Y
Perfluorobutanoic acid (PFBA)	1.442	+0.03	1715	0.0242	0.024	U	Y
Perfluoropentanoic acid (PFPeA)	3.514	+0.04	1489	0.0131	0.013	U	Y
Perfluorohexanoic acid (PFHxA)	4.986	+0.03	2766	0.0119	0.012	U	Y
Perfluoroheptanoic acid (PFHpA)	6.144	+0.00	5458	-0.0010	0	U	Y
Perfluorooctanoic acid (PFOA)	7.115	+0.02	41133	0.3626	0.36	J	Y
Perfluorononanoic acid (PFNA)	7.960	+0.02	3145	0.0000	0	U	Y
Perfluorodecanoic acid (PFDA)	8.727	+0.02	5898	0.0187	0.019	U	Y
Perfluoroundecanoic acid (PFUnDA)	9.449	+0.02	2976	-0.0044	0	U	Y
Perfluorododecanoic acid (PFDOA)	10.133	+0.01	2143	-0.0103	0	U	Y
Perfluorotridecanoic acid (PFTrDA)	10.792	+0.02	3286	0.0016	0.0016	U	Y
Perfluorotetradecanoic acid (PFTDA)	11.429	+0.02	2452	0.0041	0.0041	U	Y
Perfluorooctane sulfonamide (PFOSAm)	11.144	+0.01	323	0.0065	0.0065	U	Y
N-Methylperfluorooctane sulfonamide (MeFOSA)	0		0	0	0	U	Y
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	0		0	0	0	U	Y
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	0		0	0	0	U	Y
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	0		0	0	0	U	Y
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	8.861	+0.01	104	0.0028	0.0028	U	Y

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D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

			1st	01/23/24
Data File:	J:\LCMS08\Data\240119_1633_B1\240119_030	Instrument:	K-LCMS08	01/23/24
Acqu Date:	1/19/24 23:03	Vial:	24	
Run Type:	N/A	Dilution:	1	
Lab ID:	K2314283-001	Raw Units:	ng/mL	

Target Compounds			Final Conc.Units: ng/g				
Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	0		0	0	0	U	Y
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	0		0	0	0	U	Y
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	6.791	+0.01	1060	0.0194	0.019	U	Y
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	0		0	0	0	U	Y
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	0		0	0	0	U	Y
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	0		0	0	0	U	Y
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	0		0	0	0	U	Y
Perfluoro(2-ethoxyethane) sulfonic acid (PFEESA)	0		0	0	0	U	Y
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	0		0	0	0	U	Y
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	0		0	0	0	U	Y
Perfluoro-3-methoxypropanoic acid (PFMPA)	2.403	-0.01	115	0.0020	0.0020	U	Y
Perfluoro-4-methoxybutanoic acid (PFMBA)	4.034	+0.03	18	0.0002	0.00020	U	Y
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	0		0	0	0	U	Y
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	4.841	+0.03	564	0.0062	0.0062	U	Y
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	0		0	0	0	U	Y

Prep Amount:	6.878 g	Dilution:	1
Prep Final Amount:	5.00 mL	Basis Factor:	72.70

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution



240119_030

Sample ID: K2314283-001
Date Acquired: 1/19/2024 11:03:00 PM
Acquired by: System Administrator
Data File: 240119_030
Vial: 12 | Inj. Volume: 10.0000uL | Tray: 2

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	824102	----	----	----	----	----	----	----
13C4-PFBA_IS	216.80>171.90	----	824102	----	----	----	----	----	----	----
13C3-PFBA_IS	216.00>172.00	----	433563	----	----	----	----	----	----	----
PFBA	212.80>169.05	----	1715	----	----	----	----	----	----	----
PFMPA	229.00>84.90	----	115	----	----	----	----	----	----	----
3_3 FTCA	241.00>177.10	241.00>117.00	----	0	0.00	141.17	0	0.00	143.25	----
13C5-PFPeA	268.30>223.00	----	87949	----	----	----	----	----	----	----
13C5-PFPeA_IS	268.30>223.00	----	87949	----	----	----	----	----	----	----
PFPeA	263.00>219.00	----	1489	----	----	----	----	----	----	----
PFMBA	279.00>84.95	----	18	----	----	----	----	----	----	----
13C2-4_2 FTS	329.10>80.90	----	124590	----	----	----	----	----	----	----
13C2-4_2 FTS_IS	329.10>80.90	----	124590	----	----	----	----	----	----	----
4_2 FTS	327.10>307.00	327.10>80.90	----	0	0.00	29.06	0	0.00	31.50	----
13C3-PFBS_IS	302.10>79.90	----	201876	----	----	----	----	----	----	----
PFBS	298.70>79.90	298.70>98.80	----	0	0.00	46.72	0	0.00	48.74	----
13C3-PFBS	302.10>79.90	----	201876	----	----	----	----	----	----	----
NFDHA	295.00>201.00	295.00>84.90	564	277	49.20	40.25	277	49.20	36.97	----
13C5-PFHxA	318.00>273.00	----	409321	----	----	----	----	----	----	----
13C5-PFHxA_IS	318.00>273.00	----	409321	----	----	----	----	----	----	----
13C2-PFHxA_IS	315.10>270.00	----	485230	----	----	----	----	----	----	----
PFHxA	313.00>269.00	----	2766	----	----	----	----	----	----	----
PFEESA	314.80>135.00	314.80>82.90	----	0	0.00	6.11	0	0.00	5.81	----
13C3-HFPO-DA	286.90>168.90	----	419264	----	----	----	----	----	----	----
13C3-HFPO-DA_IS	286.90>168.90	----	419264	----	----	----	----	----	----	----
HFPO-DA	284.90>168.90	284.90>184.90	----	0	0.00	65.61	0	0.00	64.39	----
5_3 FTCA	341.00>237.05	341.00>217.00	----	0	0.00	158.86	0	0.00	159.75	----
PFPeS	349.10>79.90	349.10>98.80	----	0	0.00	55.80	0	0.00	54.52	----
13C4-PFHpA	367.10>322.00	----	390312	----	----	----	----	----	----	----
13C4-PFHpA_IS	367.10>322.00	----	390312	----	----	----	----	----	----	----
PFHpA	363.10>319.00	363.10>169.00	5458	1425	26.10	21.50	1425	26.10	23.22	----
DONA	376.90>250.90	376.90>84.80	----	0	0.00	29.66	0	0.00	29.43	----
13C2-6_2 FTS_IS	429.10>80.90	----	119772	----	----	----	----	----	----	----
13C2-6_2 FTS	429.10>80.90	----	119772	----	----	----	----	----	----	----
6_2 FTS	427.10>407.00	427.10>80.90	1060	289	27.32	41.15	289	27.32	43.09	----
13C4-PFOA_IS	417.10>172.00	----	34780	----	----	----	----	----	----	----
13C8-PFOA_IS	421.10>376.00	----	392227	----	----	----	----	----	----	----

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240119_030 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	392227	----	----	----	----	----	----	----
PFOA	413.00>369.00	413.00>169.00	41133	11036	26.83	31.89	11036	26.83	30.51	
13C3-PFHxS	402.10>79.90	----	157137	----	----	----	----	----	----	----
13C3-PFHxS_IS	402.10>79.90	----	157137	----	----	----	----	----	----	----
PFHxS	398.70>79.90	398.70>98.90	1321	589	44.55	56.62	589	44.55	57.27	
18O2-PFHxS_IS	403.00>83.90	----	174182	----	----	----	----	----	----	----
13C9-PFNA_IS	472.10>427.00	----	179184	----	----	----	----	----	----	----
13C9-PFNA	472.10>427.00	----	179184	----	----	----	----	----	----	----
13C5-PFNA_IS	468.00>423.00	----	235884	----	----	----	----	----	----	----
PFNA	463.00>419.00	463.00>219.00	3145	807	25.65	23.17	807	25.65	23.01	
PFHpS	449.00>79.90	449.00>98.80	----	0	0.00	56.96	0	0.00	58.58	
7_3 FTCA	441.00>317.00	441.00>336.90	----	0	0.00	117.47	0	0.00	117.17	
13C2-8_2-FTS	529.10>80.90	----	99821	----	----	----	----	----	----	----
13C2-8_2-FTS_IS	529.10>80.90	----	99821	----	----	----	----	----	----	----
8_2 FTS	527.10>506.95	527.10>80.80	----	0	0.00	49.59	0	0.00	43.30	
13C6-PFDA_IS	519.10>474.10	----	140232	----	----	----	----	----	----	----
13C6-PFDA	519.10>474.10	----	140232	----	----	----	----	----	----	----
13C2-PFDA_IS	515.10>470.10	----	158277	----	----	----	----	----	----	----
PFDA	512.90>469.00	512.90>219.00	5898	822	13.93	19.00	822	13.93	19.26	
D3-NMeFOSAA_IS	573.20>419.00	----	137610	----	----	----	----	----	----	----
D3-NMeFOSAA	573.20>419.00	----	137610	----	----	----	----	----	----	----
13C8-PFOS_IS	507.10>98.90	----	61484	----	----	----	----	----	----	----
13C8-PFOS	507.10>98.90	----	61484	----	----	----	----	----	----	----
13C4-PFOS_IS	502.80>79.90	----	198172	----	----	----	----	----	----	----
PFOS	498.90>79.90	498.90>98.80	2773	2530	91.22	52.47	2530	91.22	47.25	IRr
NMeFOSAA	570.10>419.00	570.10>483.00	104	85	80.93	55.15	85	80.93	62.10	
D5-NEtFOSAA_IS	589.20>419.00	----	159126	----	----	----	----	----	----	----
D5-NEtFOSAA	589.20>419.00	----	159126	----	----	----	----	----	----	----
NEtFOSAA	584.20>419.10	584.20>526.00	----	0	0.00	81.95	0	0.00	86.05	
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	----	0	0.00	32.76	0	0.00	31.74	
PFUnDA	563.10>519.00	563.10>269.10	2976	268	8.99	13.12	268	8.99	13.26	
13C7-PFUnDA_IS	570.00>525.10	----	162161	----	----	----	----	----	----	----
13C7-PFUnDA	570.00>525.10	----	162161	----	----	----	----	----	----	----
PFNS	548.80>79.90	548.80>98.80	----	0	0.00	65.22	0	0.00	62.49	
10_2 FTS	626.80>607.05	626.80>81.00	----	0	0.00	37.13	0	0.00	35.81	
13C2-PFDOA_IS	615.10>570.00	----	168741	----	----	----	----	----	----	----
13C2-PFDOA	615.10>570.00	----	168741	----	----	----	----	----	----	----
PFDOA	613.10>569.00	613.10>319.00	2143	182	8.50	11.29	182	8.49	10.90	
PFDS	599.00>79.90	599.00>98.80	----	0	0.00	60.18	0	0.00	61.11	
PFTrDA	663.00>619.00	663.00>168.90	3286	467	14.20	17.64	467	14.20	18.20	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240119_030 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	----	0	0.00	36.44	0	0.00	34.95	
PFOSAm	498.10>77.90	----	323	----	----	----	----	----	----	
13C8-PFOSAm	506.10>77.80	----	151617	----	----	----	----	----	----	
13C8-PFOSAm_IS	506.10>77.80	----	151617	----	----	----	----	----	----	
PFTDA	713.10>669.00	713.10>168.90	2452	461	18.80	22.96	461	18.80	22.68	
13C2-PFTDA	715.20>670.00	----	71474	----	----	----	----	----	----	
13C2-PFTDA_IS	715.20>670.00	----	71474	----	----	----	----	----	----	
PFDoS	699.10>79.90	699.10>98.80	----	0	0.00	67.40	0	0.00	65.24	
D7-MeFOSE_IS	623.20>58.90	----	415823	----	----	----	----	----	----	
D7-MeFOSE	623.20>58.90	----	415823	----	----	----	----	----	----	
MeFOSE	616.10>59.00	----	----	----	----	----	----	----	----	
13C2-PFHxDA_IS	815.00>770.05	----	248688	----	----	----	----	----	----	
13C2-PFHxDA	815.00>770.05	----	248688	----	----	----	----	----	----	
PFHxDA	813.00>768.95	813.00>218.95	2971	311	10.47	13.90	311	10.47	14.51	
D3-MeFOSA	515.00>219.00	----	30030	----	----	----	----	----	----	
D3-MeFOSA_IS	515.00>219.00	----	30030	----	----	----	----	----	----	
MeFOSA	511.90>219.00	511.90>169.00	----	0	0.00	140.79	0	0.00	142.62	
D9-EtFOSE_IS	639.20>58.90	----	421616	----	----	----	----	----	----	
D9-EtFOSE	639.20>58.90	----	421616	----	----	----	----	----	----	
EtFOSE	630.00>59.00	----	----	----	----	----	----	----	----	
D5-EtFOSAm	531.10>219.00	----	36069	----	----	----	----	----	----	
D5-EtFOSAm_IS	531.10>219.00	----	36069	----	----	----	----	----	----	
EtFOSAm	526.00>219.00	526.00>169.00	----	0	0.00	163.90	0	0.00	146.41	
PFODA	913.00>868.65	913.00>169.00	1430	200	14.01	27.03	200	14.01	23.98	

Flag ID key: IRr: Ion Ratio (Relative)



240119_030

Sample ID: K2314283-001
Date Acquired: 1/19/2024 11:03:00 PM
Acquired by: System Administrator
Data File: 240119_030
Vial: 12 | Inj. Volume: 10.0000uL | Tray: 2

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.447	0.039	-0.001	824102	433563	13C3-PFBA_IS	8.5039	ng/mL	
13C4-PFBA_IS	Auto	1.447	0.039	----	824102	824102	----	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.448	0.040	----	433563	433563	----	5.0000	ng/mL	
PFBA	M	1.442	0.033	-0.005	1715	824102	13C4-PFBA_IS	0.0242	ng/mL	
PFMPA	M	2.403	-0.018	-1.104	115	87949	13C5-PFPeA_IS	0.0020	ng/mL	
3_3 FTCA	ND(W/B)	----	----	----	----	87949	13C5-PFPeA_IS	----	ng/mL	
13C5-PFPeA	Auto	3.507	0.028	-1.477	87949	485230	13C2-PFHxA_IS	4.0155	ng/mL	
13C5-PFPeA_IS	Auto	3.507	0.028	----	87949	87949	----	5.0000	ng/mL	
PFPeA	M	3.514	0.032	0.007	1489	87949	13C5-PFPeA_IS	0.0131	ng/mL	
PFMBA	M	4.034	0.029	0.527	18	87949	13C5-PFPeA_IS	0.0002	ng/mL	
13C2-4_2 FTS	Auto	4.666	0.020	-2.423	124590	174182	18O2-PFHxS_IS	5.1978	ng/mL	
13C2-4_2 FTS_IS	Auto	4.666	0.020	----	124590	124590	----	5.0000	ng/mL	
4_2 FTS	ND(W/B)	----	----	----	----	124590	13C2-4_2 FTS_IS	----	ng/mL	
13C3-PFBS_IS	Auto	4.653	0.025	----	201876	201876	----	2.5000	ng/mL	
PFBS	ND(W/B)	----	----	----	----	201876	13C3-PFBS_IS	----	ng/mL	
13C3-PFBS	Auto	4.653	0.025	-2.436	201876	174182	18O2-PFHxS_IS	2.0423	ng/mL	
NFDHA	M	4.841	0.021	-0.143	564	409321	13C5-PFHxA_IS	0.0062	ng/mL	
13C5-PFHxA	Auto	4.984	0.021	0.000	409321	485230	13C2-PFHxA_IS	2.0016	ng/mL	
13C5-PFHxA_IS	Auto	4.984	0.021	----	409321	409321	----	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	4.984	0.021	----	485230	485230	----	2.5000	ng/mL	
PFHxA	M	4.986	0.021	0.002	2766	409321	13C5-PFHxA_IS	0.0119	ng/mL	
PFEESA	ND(W/B)	----	----	----	----	409321	13C5-PFHxA_IS	----	ng/mL	
13C3-HFPO-DA	Auto	5.457	0.018	0.473	419264	485230	13C2-PFHxA_IS	8.8266	ng/mL	
13C3-HFPO-DA_IS	Auto	5.457	0.018	----	419264	419264	----	10.0000	ng/mL	
HFPO-DA	ND(W/B)	----	----	----	----	419264	13C3-HFPO-DA_IS	----	ng/mL	
5_3 FTCA	ND(W/B)	----	----	----	----	409321	13C5-PFHxA_IS	----	ng/mL	
PFPeS	ND(W/B)	----	----	----	----	157137	13C3-PFHxS_IS	----	ng/mL	
13C4-PFHpA	Auto	6.159	0.016	1.175	390312	485230	13C2-PFHxA_IS	2.1084	ng/mL	
13C4-PFHpA_IS	Auto	6.159	0.016	----	390312	390312	----	2.5000	ng/mL	
PFHpA	M	6.144	0.000	-0.015	5458	390312	13C4-PFHpA_IS	-0.0010	ng/mL	
DONA	ND(W/B)	----	----	----	----	419264	13C3-HFPO-DA_IS	----	ng/mL	
13C2-6_2 FTS_IS	Auto	6.796	0.012	----	119772	119772	----	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.796	0.012	-0.293	119772	174182	18O2-PFHxS_IS	5.2832	ng/mL	
6_2 FTS	M	6.791	0.008	-0.005	1060	119772	13C2-6_2 FTS_IS	0.0194	ng/mL	
13C4-PFOA_IS	Auto	7.113	0.014	----	34780	34780	----	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.113	0.013	----	392227	392227	----	2.5000	ng/mL	
13C8-PFOA	Auto	7.113	0.013	0.000	392227	34780	13C4-PFOA_IS	2.0177	ng/mL	
PFOA	M	7.115	0.013	0.002	41133	392227	13C8-PFOA_IS	0.3626	ng/mL	
13C3-PFHxS	Auto	7.089	0.015	0.000	157137	174182	18O2-PFHxS_IS	2.1018	ng/mL	
13C3-PFHxS_IS	Auto	7.089	0.015	----	157137	157137	----	2.5000	ng/mL	
PFHxS	M	7.094	0.020	0.005	1321	157137	13C3-PFHxS_IS	-0.0016	ng/mL	
18O2-PFHxS_IS	Auto	7.089	0.014	----	174182	174182	----	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.961	0.012	----	179184	179184	----	1.2500	ng/mL	
13C9-PFNA	Auto	7.961	0.012	0.000	179184	235884	13C5-PFNA_IS	0.9702	ng/mL	
13C5-PFNA_IS	Auto	7.961	0.012	----	235884	235884	----	1.2500	ng/mL	
PFNA	M	7.960	0.010	-0.001	3145	179184	13C9-PFNA_IS	0.0000	ng/mL	
PFHpS	ND(W/B)	----	----	----	----	61484	13C8-PFOS_IS	----	ng/mL	
7_3 FTCA	ND(W/B)	----	----	----	----	409321	13C5-PFHxA_IS	----	ng/mL	
13C2-8_2-FTS	Auto	8.416	0.012	1.327	99821	174182	18O2-PFHxS_IS	5.3602	ng/mL	
13C2-8_2-FTS_IS	Auto	8.416	0.012	----	99821	99821	----	5.0000	ng/mL	
8_2 FTS	ND(W/B)	----	----	----	----	99821	13C2-8_2-FTS_IS	----	ng/mL	
13C6-PFDA_IS	Auto	8.726	0.012	----	140232	140232	----	1.2500	ng/mL	
13C6-PFDA	Auto	8.726	0.012	-0.001	140232	158277	13C2-PFDA_IS	1.1013	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_030 (continued)

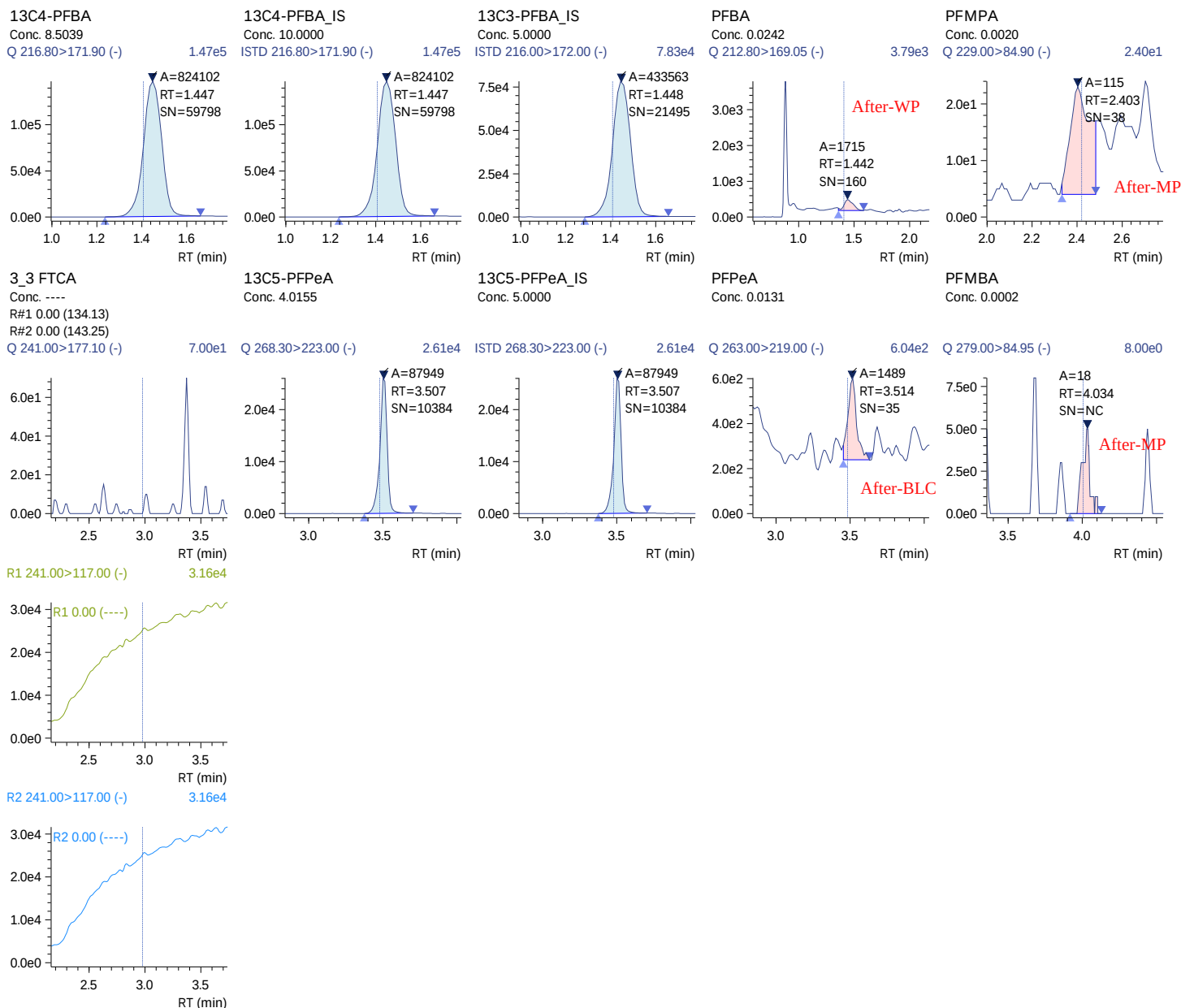
(Table continued from previous page)

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C2-PFDA_IS	Auto	8.727	0.012	----	158277	158277	----	1.2500	ng/mL	
PFDA	M	8.727	0.011	0.001	5898	140232	13C6-PFDA_IS	0.0187	ng/mL	
D3-NMeFOSAA_IS	Auto	8.862	0.014	----	137610	137610	----	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.862	0.014	0.037	137610	198172	13C4-PFOS_IS	4.0009	ng/mL	
13C8-PFOS_IS	Auto	8.824	0.013	----	61484	61484	----	2.5000	ng/mL	
13C8-PFOS	Auto	8.824	0.013	-0.001	61484	198172	13C4-PFOS_IS	1.8603	ng/mL	
13C4-PFOS_IS	Auto	8.825	0.014	----	198172	198172	----	2.5000	ng/mL	
PFOS	M	8.827	0.014	0.003	2773	61484	13C8-PFOS_IS	0.0434	ng/mL	IRr
NMeFOSAA	M	8.861	0.008	-0.001	104	137610	D3-NMeFOSAA_IS	0.0028	ng/mL	
D5-NetFOSAA_IS	Auto	9.195	0.017	----	159126	159126	----	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.195	0.017	0.370	159126	198172	13C4-PFOS_IS	3.8671	ng/mL	
NetFOSAA	ND(W/B)	----	----	----	----	159126	D5-NetFOSAA_IS	----	ng/mL	
9-CI-PF3ONS	ND(W/B)	----	----	----	----	419264	13C3-HFPO-DA_IS	----	ng/mL	
PFUnDA	M	9.449	0.009	0.000	2976	162161	13C7-PFUnDA_IS	-0.0044	ng/mL	
13C7-PFUnDA_IS	Auto	9.449	0.011	----	162161	162161	----	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.449	0.011	0.722	162161	158277	13C2-PFDA_IS	1.0676	ng/mL	
PFNS	ND(W/B)	----	----	----	----	61484	13C8-PFOS_IS	----	ng/mL	
10_2 FTS	ND(W/B)	----	----	----	----	99821	13C2-8_2-FTS_IS	----	ng/mL	
13C2-PFDOA_IS	Auto	10.137	0.010	----	168741	168741	----	1.2500	ng/mL	
13C2-PFDOA	Auto	10.137	0.010	1.410	168741	158277	13C2-PFDA_IS	0.9670	ng/mL	
PFDOA	M	10.133	0.005	-0.004	2143	168741	13C2-PFDOA_IS	-0.0103	ng/mL	
PFDS	ND(W/B)	----	----	----	----	61484	13C8-PFOS_IS	----	ng/mL	
PFTDA	M	10.792	0.006	-0.636	3286	71474	13C2-PFTDA_IS	0.0016	ng/mL	
11-CI-PF3OUdS	ND(W/B)	----	----	----	----	419264	13C3-HFPO-DA_IS	----	ng/mL	
PFOSAm	M	11.144	0.001	-0.009	323	151617	13C8-PFOSAm_IS	0.0065	ng/mL	
13C8-PFOSAm	Auto	11.153	0.010	2.328	151617	198172	13C4-PFOS_IS	1.8022	ng/mL	
13C8-PFOSAm_IS	Auto	11.153	0.010	----	151617	151617	----	2.5000	ng/mL	
PFTDA	M	11.429	0.009	0.001	2452	71474	13C2-PFTDA_IS	0.0041	ng/mL	
13C2-PFTDA	Auto	11.428	0.009	2.701	71474	158277	13C2-PFDA_IS	0.9486	ng/mL	
13C2-PFTDA_IS	Auto	11.428	0.009	----	71474	71474	----	1.2500	ng/mL	
PFDoS	ND(W/B)	----	----	----	----	61484	13C8-PFOS_IS	----	ng/mL	
D7-MeFOSE_IS	Auto	13.380	-0.001	----	415823	415823	----	25.0000	ng/mL	
D7-MeFOSE	Auto	13.380	-0.001	4.555	415823	198172	13C4-PFOS_IS	20.0480	ng/mL	
MeFOSE	ND(W/B)	----	----	----	----	415823	D7-MeFOSE_IS	----	ng/mL	
13C2-PFHxDA_IS	Auto	12.644	0.008	----	248688	248688	----	2.5000	ng/mL	
13C2-PFHxDA	Auto	12.644	0.008	3.917	248688	158277	13C2-PFDA_IS	1.6915	ng/mL	
PFHxDA	M	12.648	0.011	0.004	2971	248688	13C2-PFHxDA_IS	0.0013	ng/mL	
D3-MeFOSA	Auto	13.687	0.000	4.862	30030	198172	13C4-PFOS_IS	1.7725	ng/mL	
D3-MeFOSA_IS	Auto	13.687	0.000	----	30030	30030	----	2.5000	ng/mL	
MeFOSA	ND(W/B)	----	----	----	----	30030	D3-MeFOSA_IS	----	ng/mL	
D9-EtFOSE_IS	Auto	14.008	-0.001	----	421616	421616	----	25.0000	ng/mL	
D9-EtFOSE	Auto	14.008	-0.001	5.183	421616	198172	13C4-PFOS_IS	20.0140	ng/mL	
EtFOSE	ND(W/B)	----	----	----	----	421616	D9-EtFOSE_IS	----	ng/mL	
D5-EtFOSAm	Auto	14.363	-0.002	5.538	36069	198172	13C4-PFOS_IS	1.5990	ng/mL	
D5-EtFOSAm_IS	Auto	14.363	-0.002	----	36069	36069	----	2.5000	ng/mL	
EtFOSAm	ND(W/B)	----	----	----	----	36069	D5-EtFOSAm_IS	----	ng/mL	
PFODA	M	13.783	0.009	1.139	1430	248688	13C2-PFHxDA_IS	0.0254	ng/mL	IRr

Flag ID key: IRr: Ion Ratio (Relative)



240119_030 (continued)





240119_030 (continued)

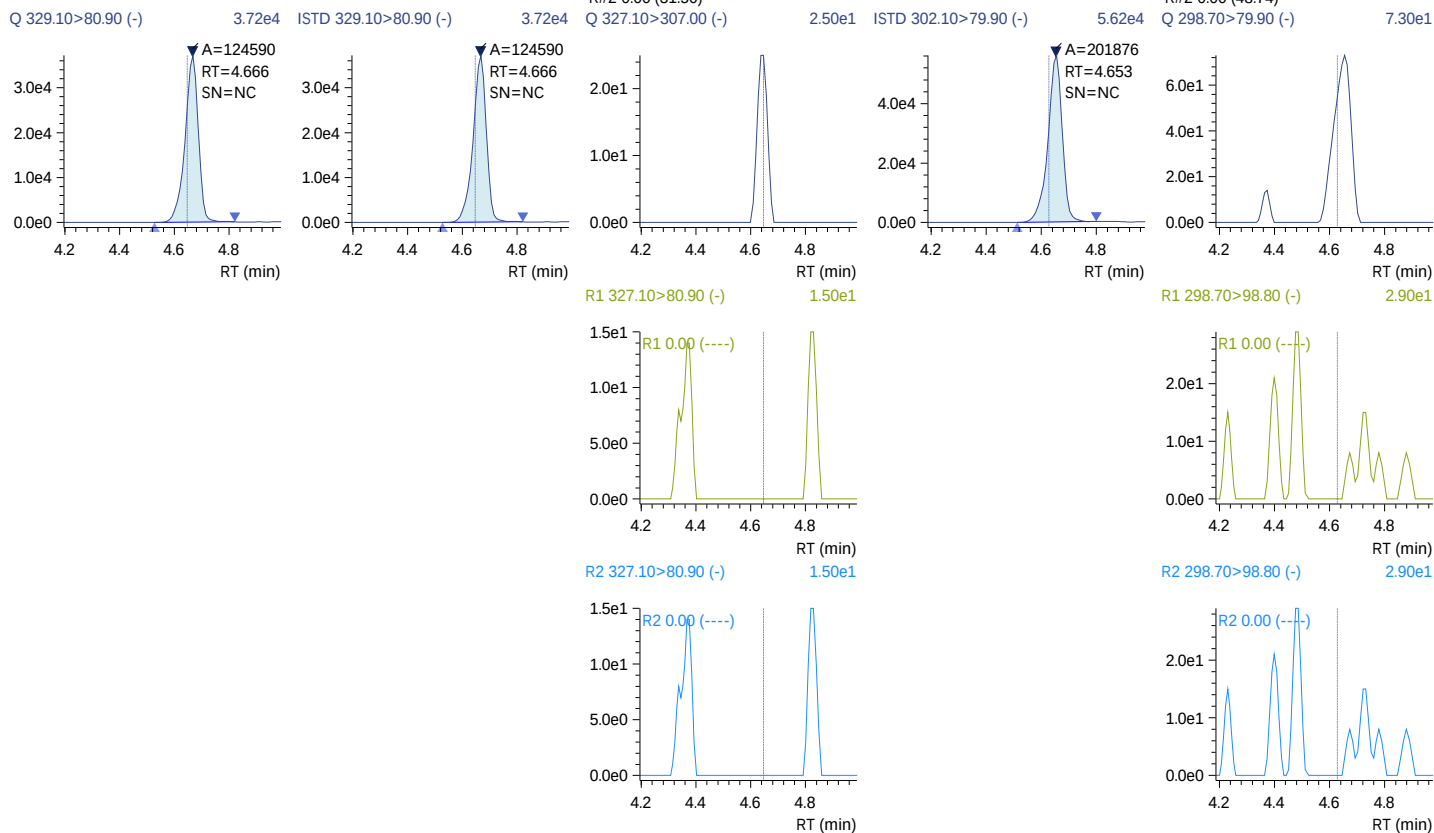
13C2-4_2 FTS
Conc. 5.1978

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. ----
R#1 0.00 (34.14)
R#2 0.00 (31.50)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. ----
R#1 0.00 (47.53)
R#2 0.00 (48.74)



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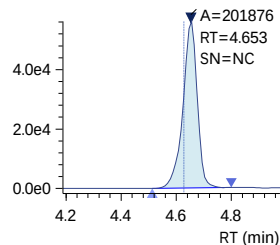
SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_030 (continued)

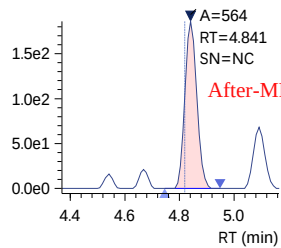
13C3-PFBS
Conc. 2.0423

Q 302.10>79.90 (-)

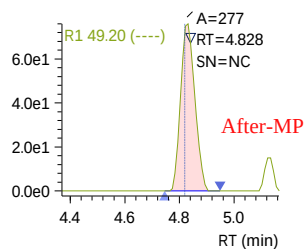


NFDHA
Conc. 0.0062
R#1 49.20 (37.88)
R#2 49.20 (36.97)

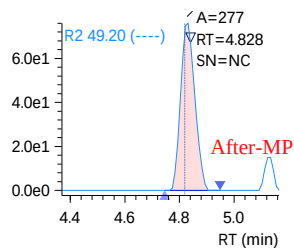
Q 295.00>201.00 (-)



R1 295.00>84.90 (-)

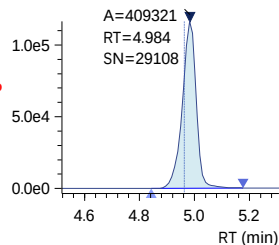


R2 295.00>84.90 (-)



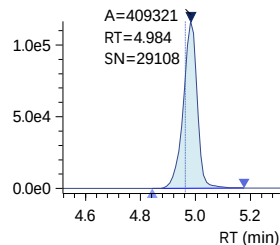
13C5-PFHxA
Conc. 2.0016

Q 318.00>273.00 (-)



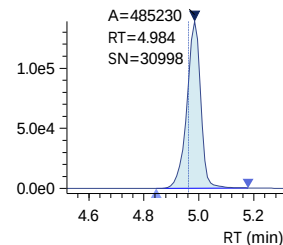
13C5-PFHxA_IS
Conc. 2.5000

ISTD 318.00>273.00 (-)



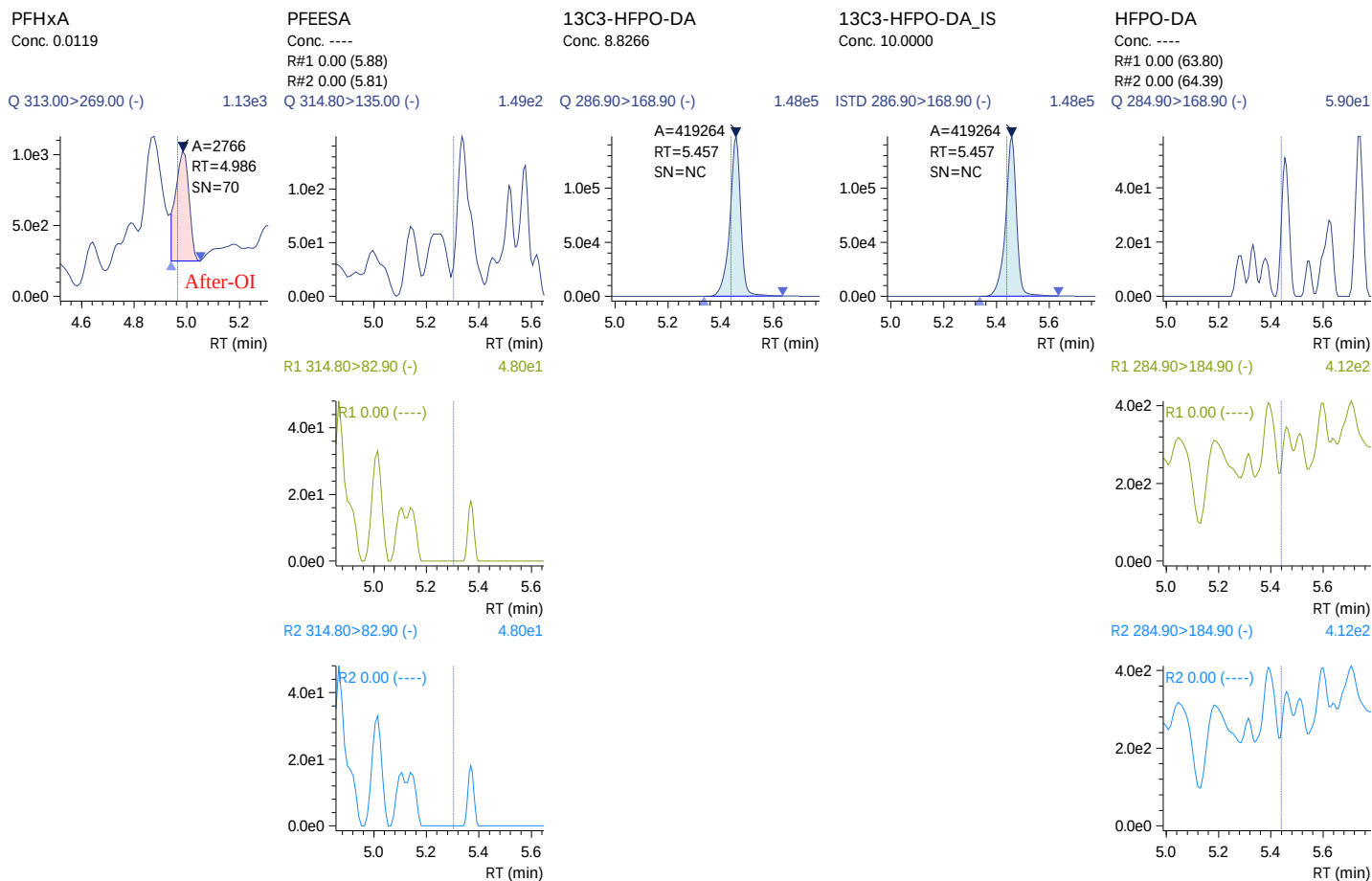
13C2-PFHxA_IS
Conc. 2.5000

ISTD 315.10>270.00 (-)





240119_030 (continued)

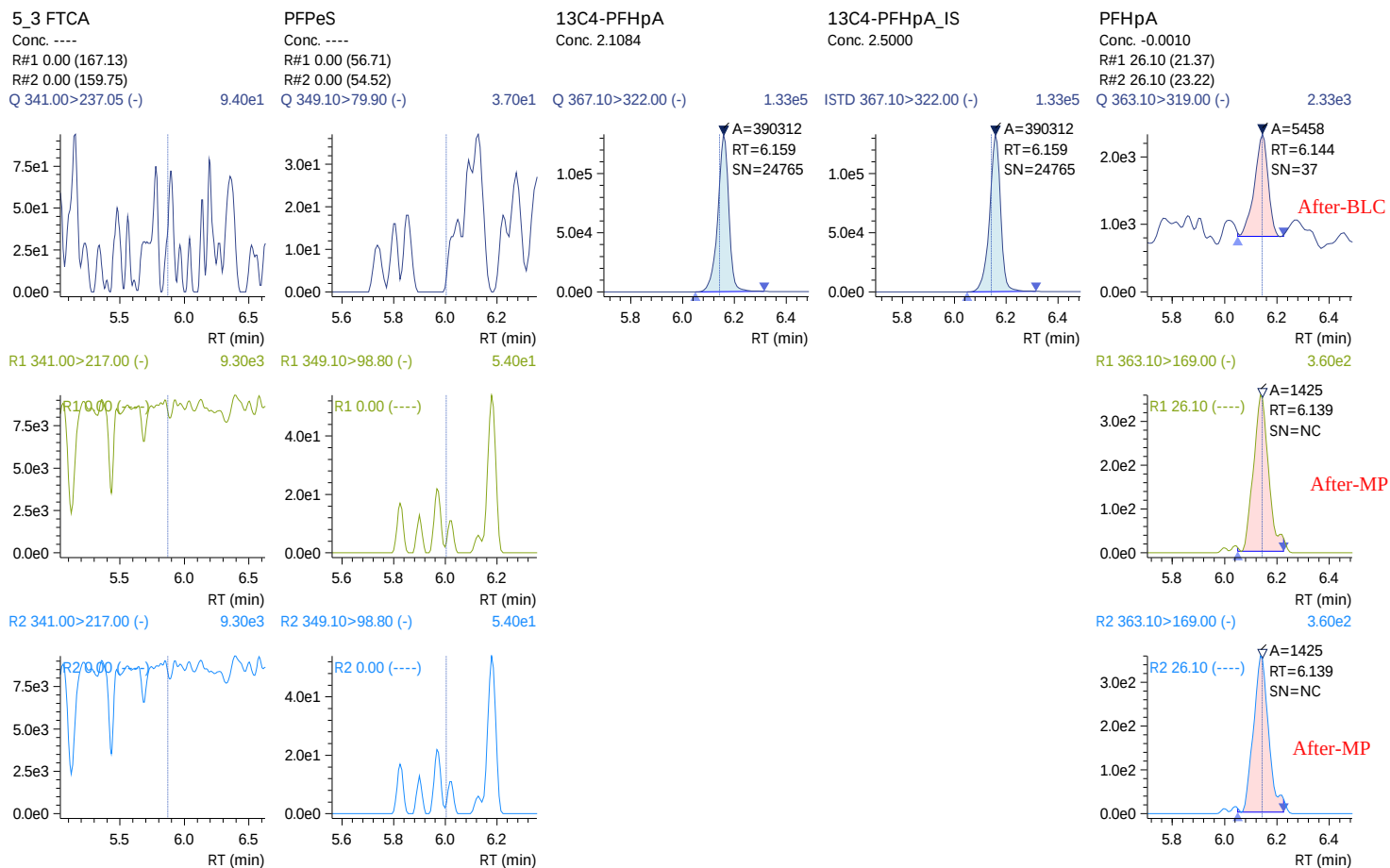


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.

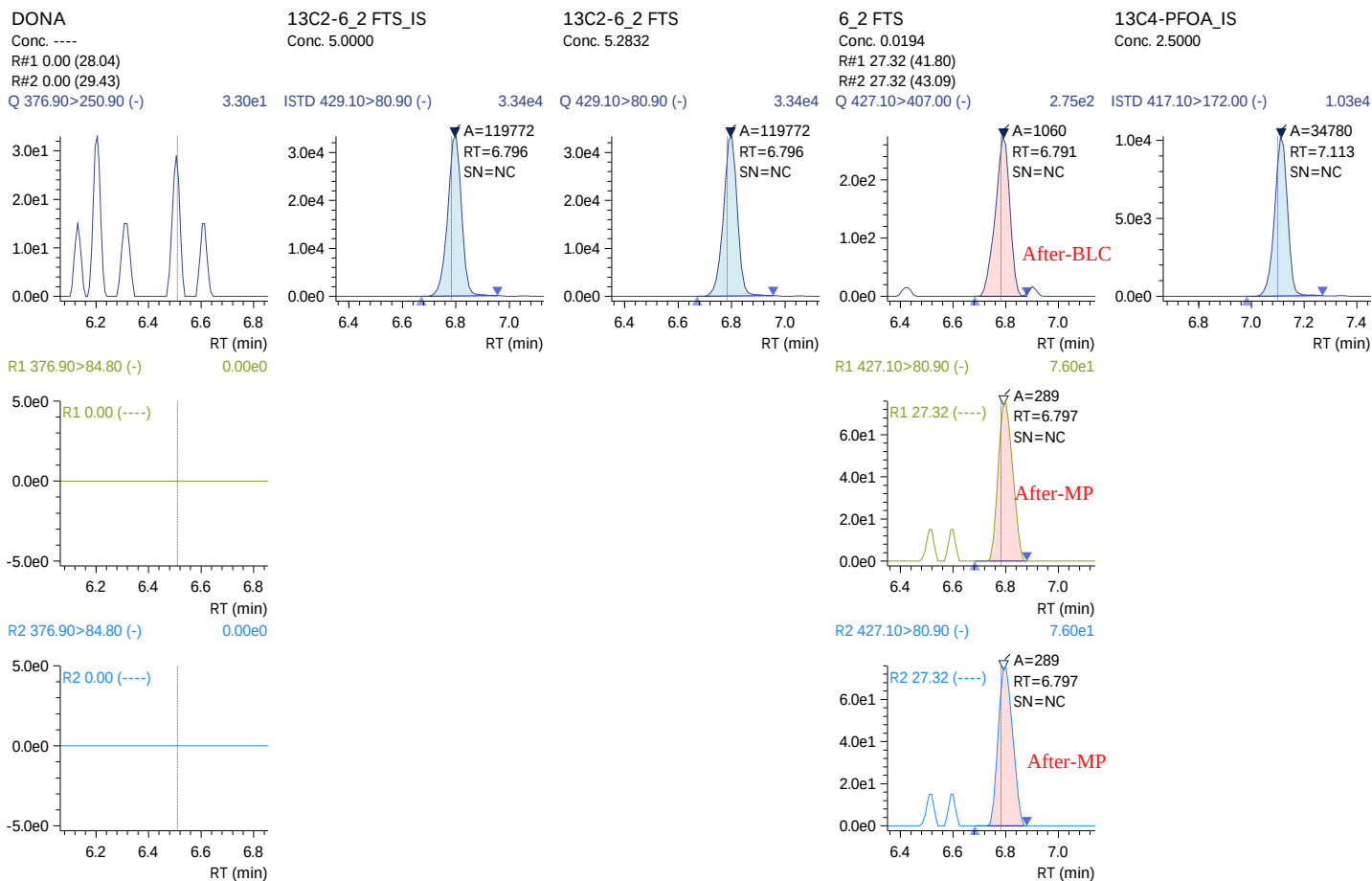


240119_030 (continued)





240119_030 (continued)





240119_030 (continued)

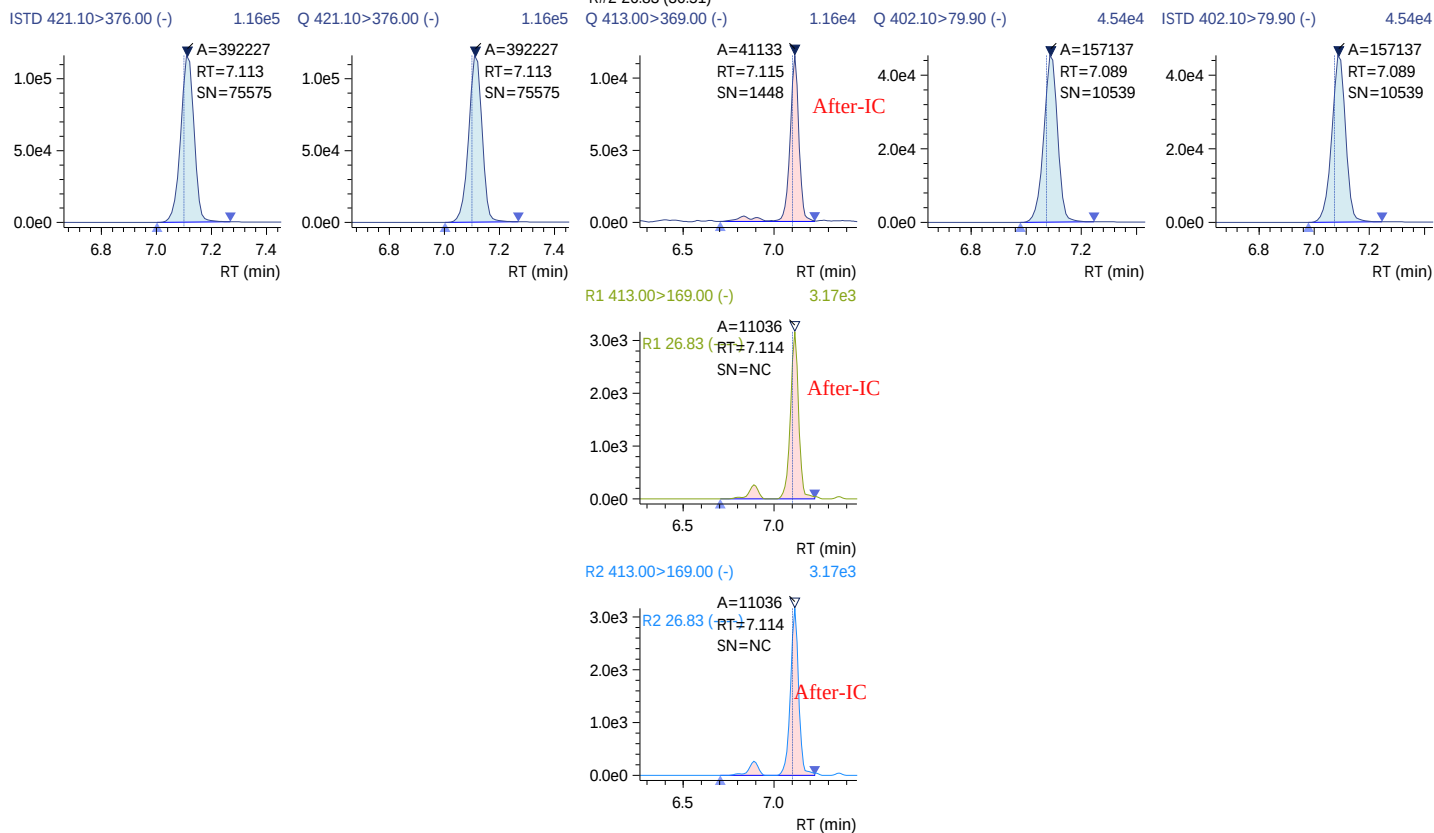
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.0177

PFOA
Conc. 0.3626
R#1 26.83 (29.05)
R#2 26.83 (30.51)

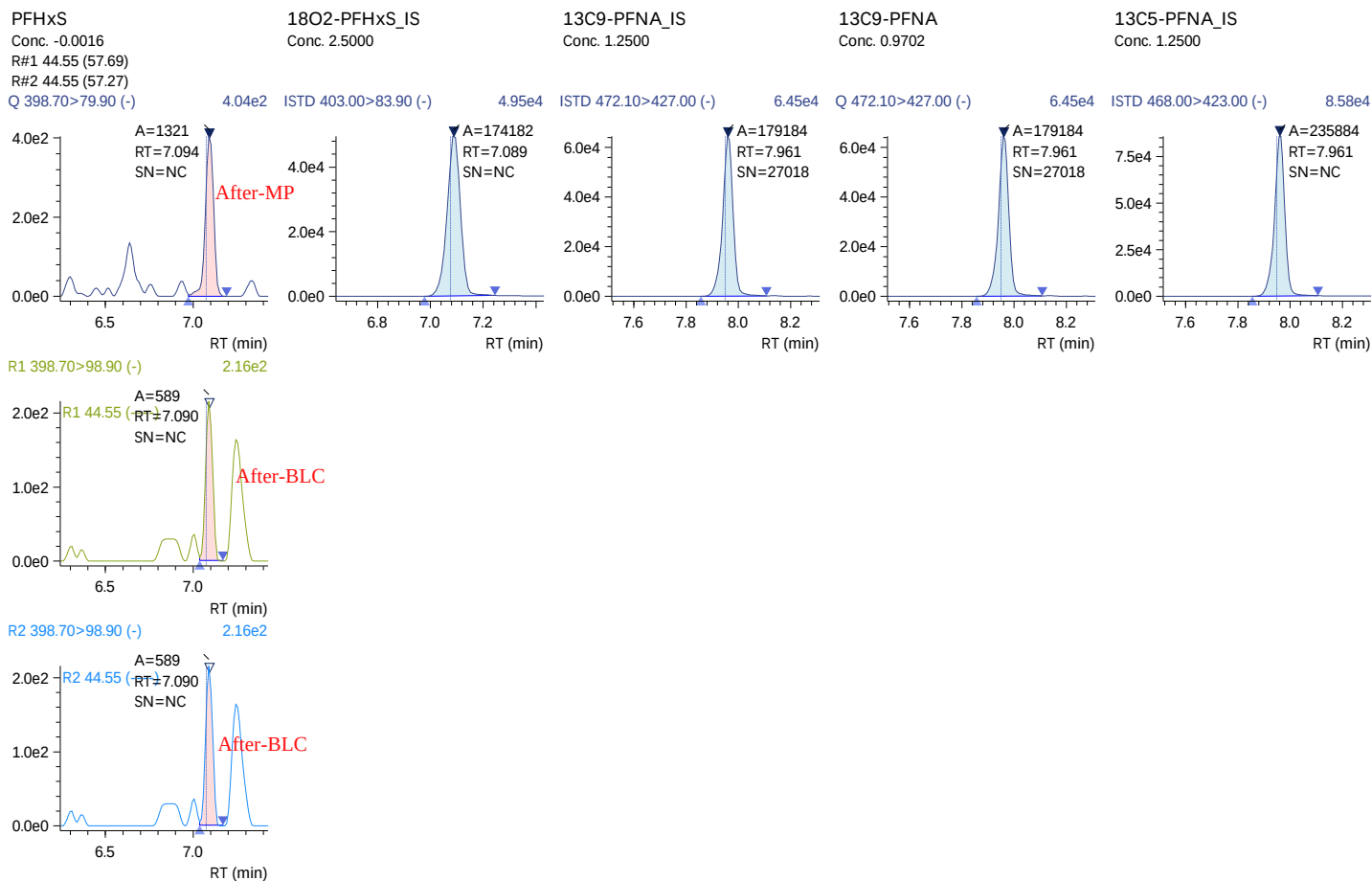
13C3-PFHxS
Conc. 2.1018

13C3-PFHxS_IS
Conc. 2.5000





240119_030 (continued)

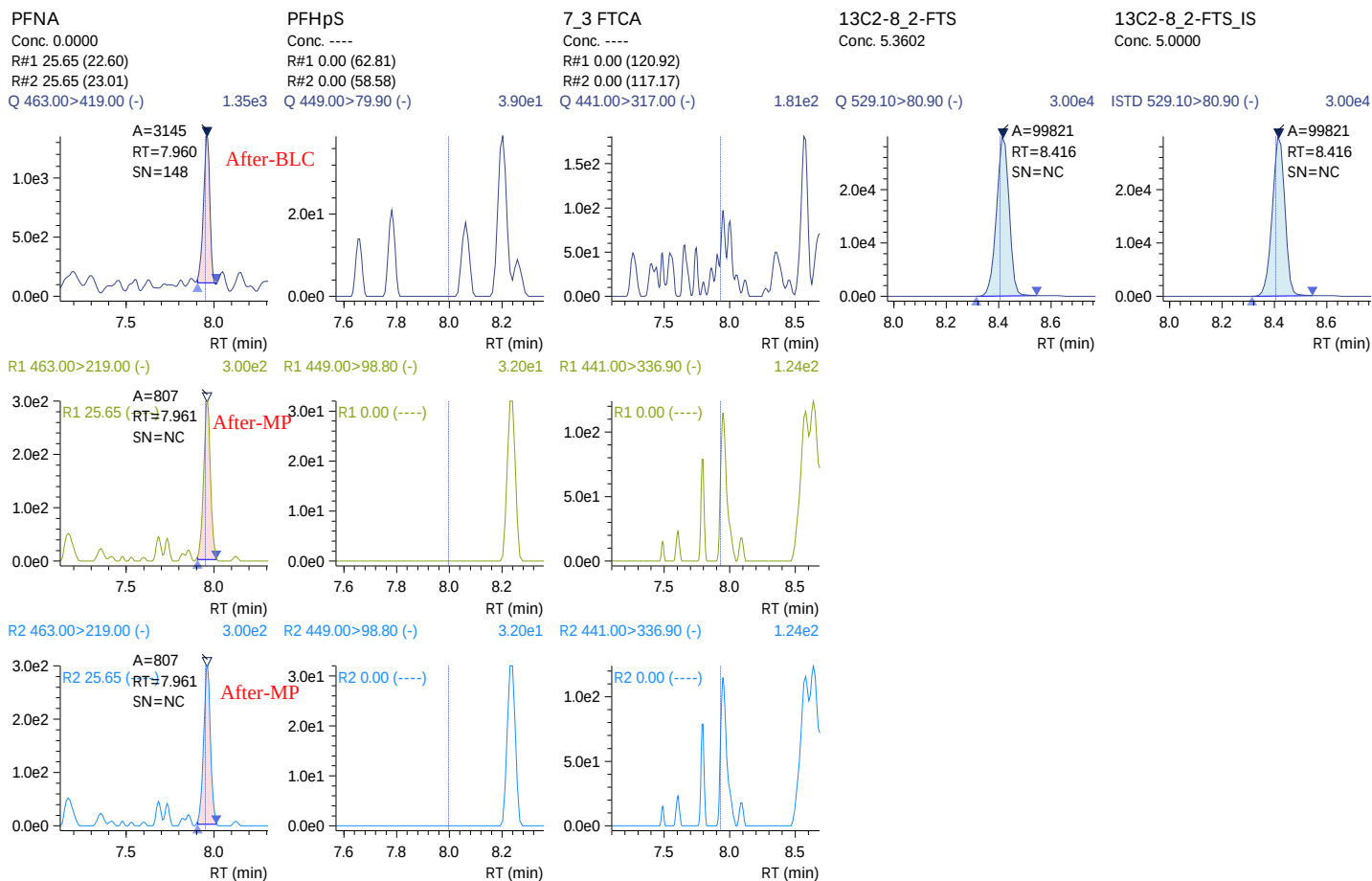


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_030 (continued)

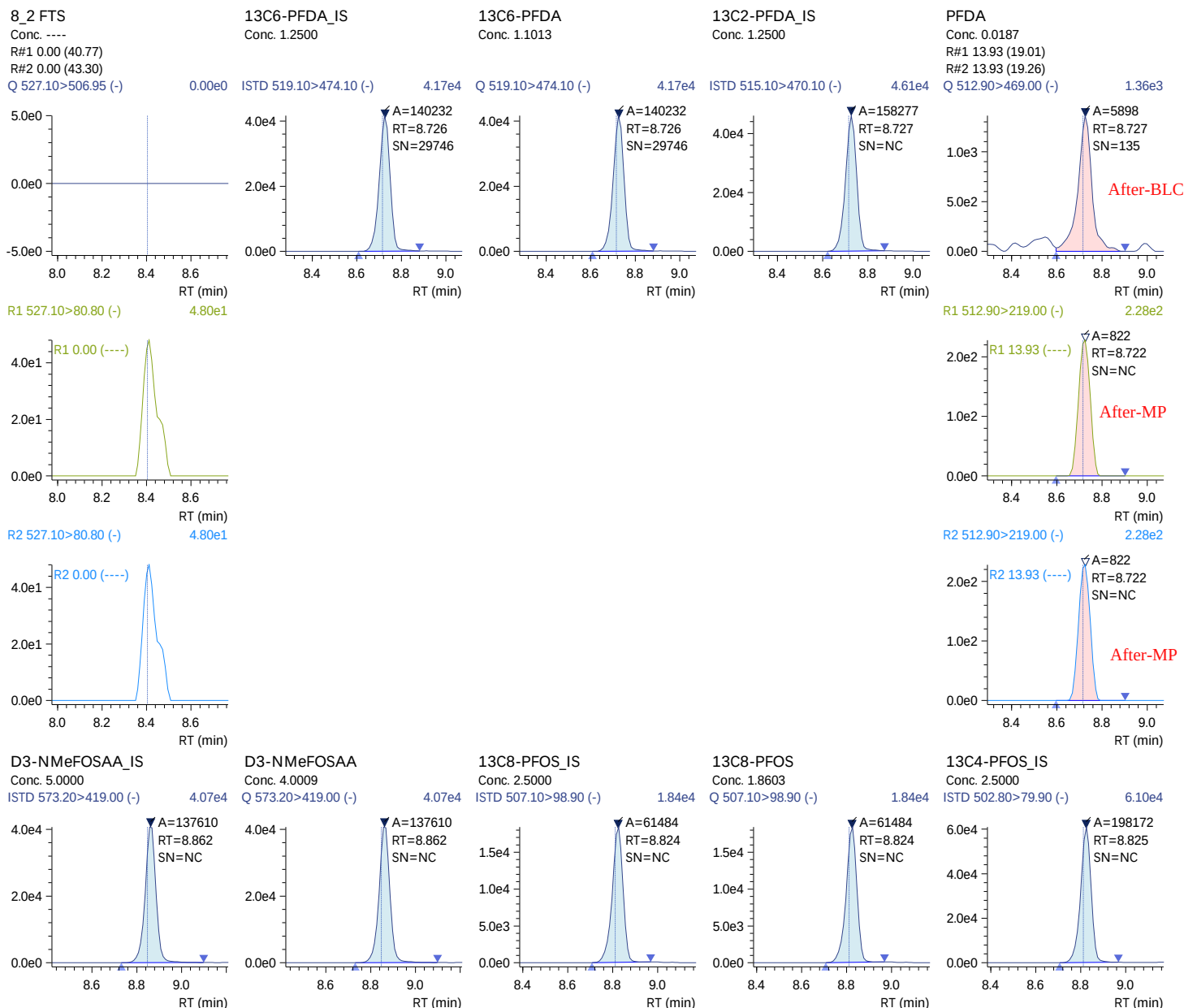


J:\LCMS08\Data\240119_1633_B1\240119_1633_B1.dampl

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_030 (continued)

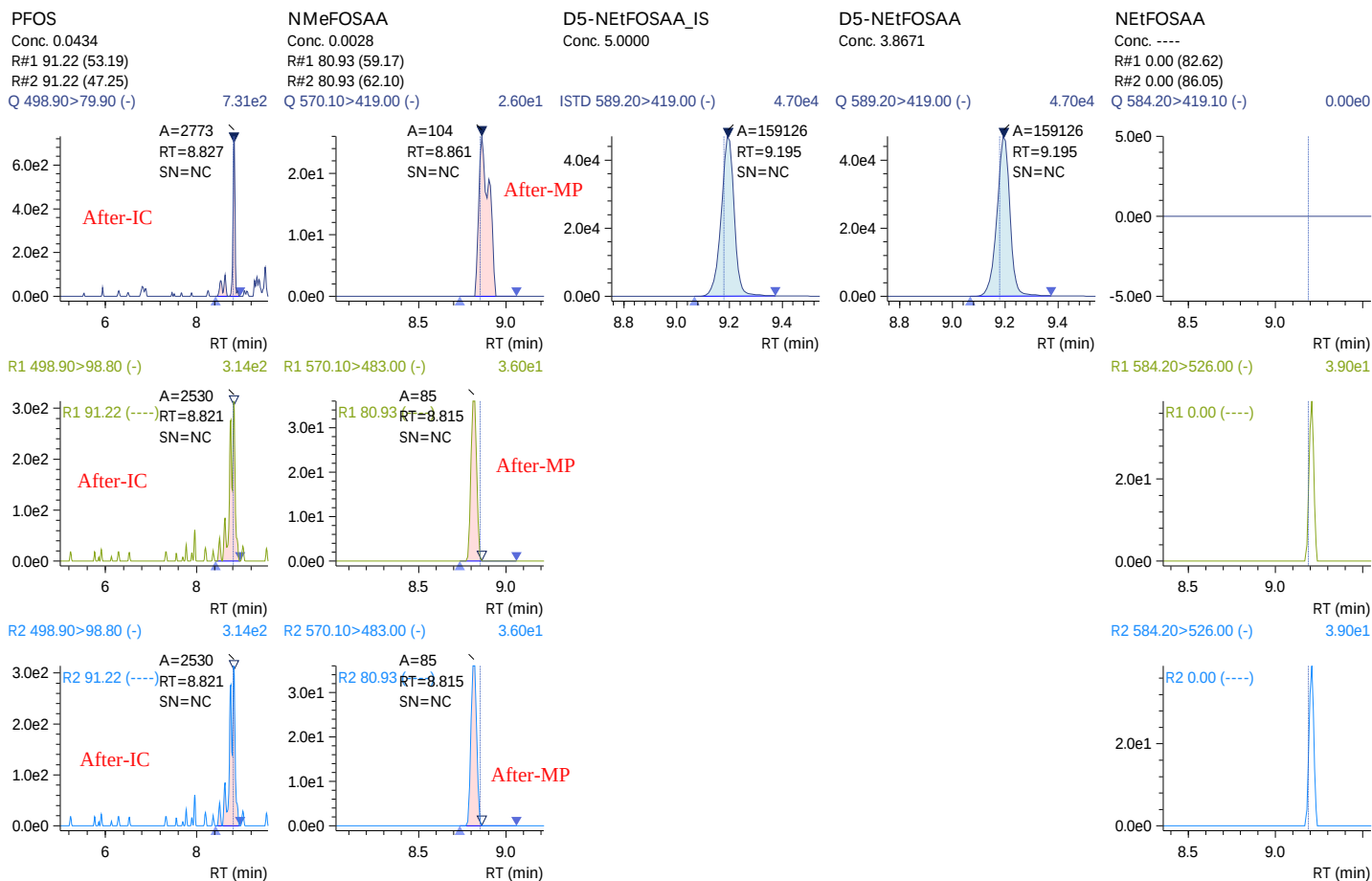


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_030 (continued)





240119_030 (continued)

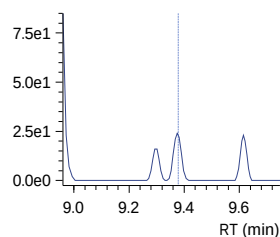
9-Cl-PF3ONS

Conc. ----

R#1 0.00 (31.76)

R#2 0.00 (31.74)

Q 530.80>351.00 (-)



R1 532.80>353.00 (-)

8.20e1

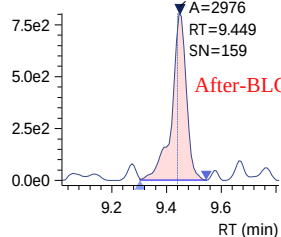
PFUnDA

Conc. -0.0044

R#1 8.99 (12.31)

R#2 8.99 (13.26)

Q 563.10>519.00 (-)



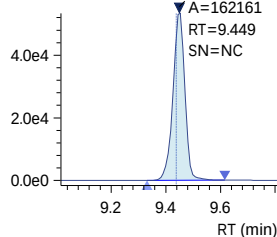
R1 563.10>269.10 (-)

1.13e2

13C7-PFUnDA_IS

Conc. 1.2500

ISTD 570.00>525.10 (-)

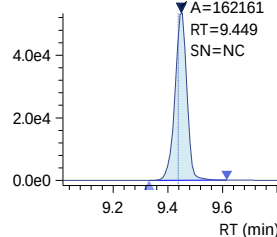


5.34e4

13C7-PFUnDA

Conc. 1.0676

Q 570.00>525.10 (-)



5.34e4

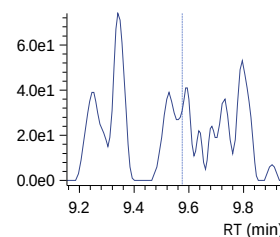
PFNS

Conc. ----

R#1 0.00 (63.31)

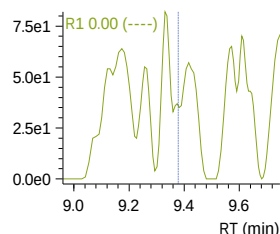
R#2 0.00 (62.49)

Q 548.80>79.90 (-)



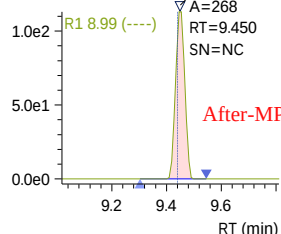
R1 548.80>98.80 (-)

1.30e1



R2 532.80>353.00 (-)

8.20e1



R1 563.10>269.10 (-)

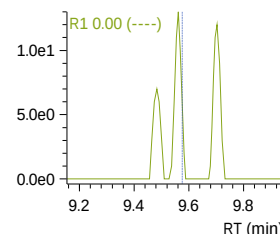
1.13e2



5.34e4

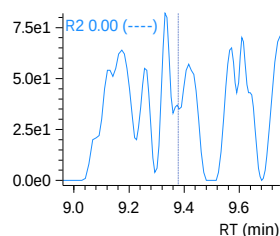


5.34e4



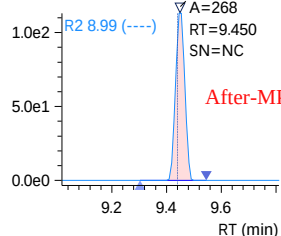
R2 548.80>98.80 (-)

1.30e1



R2 532.80>353.00 (-)

8.20e1



R1 563.10>269.10 (-)

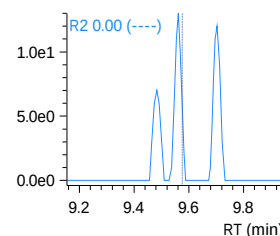
1.13e2



5.34e4



5.34e4

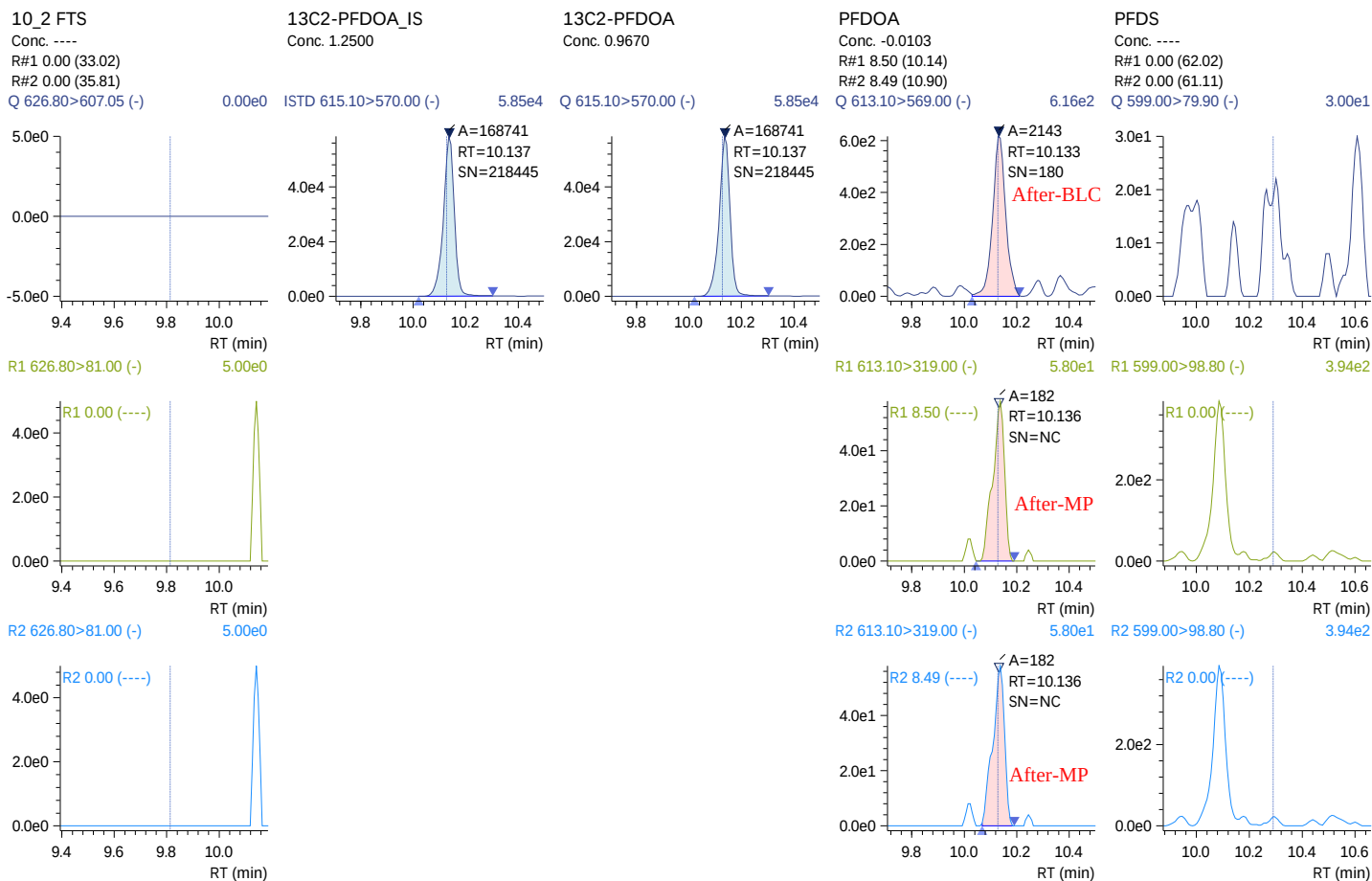


R2 548.80>98.80 (-)

1.30e1



240119_030 (continued)

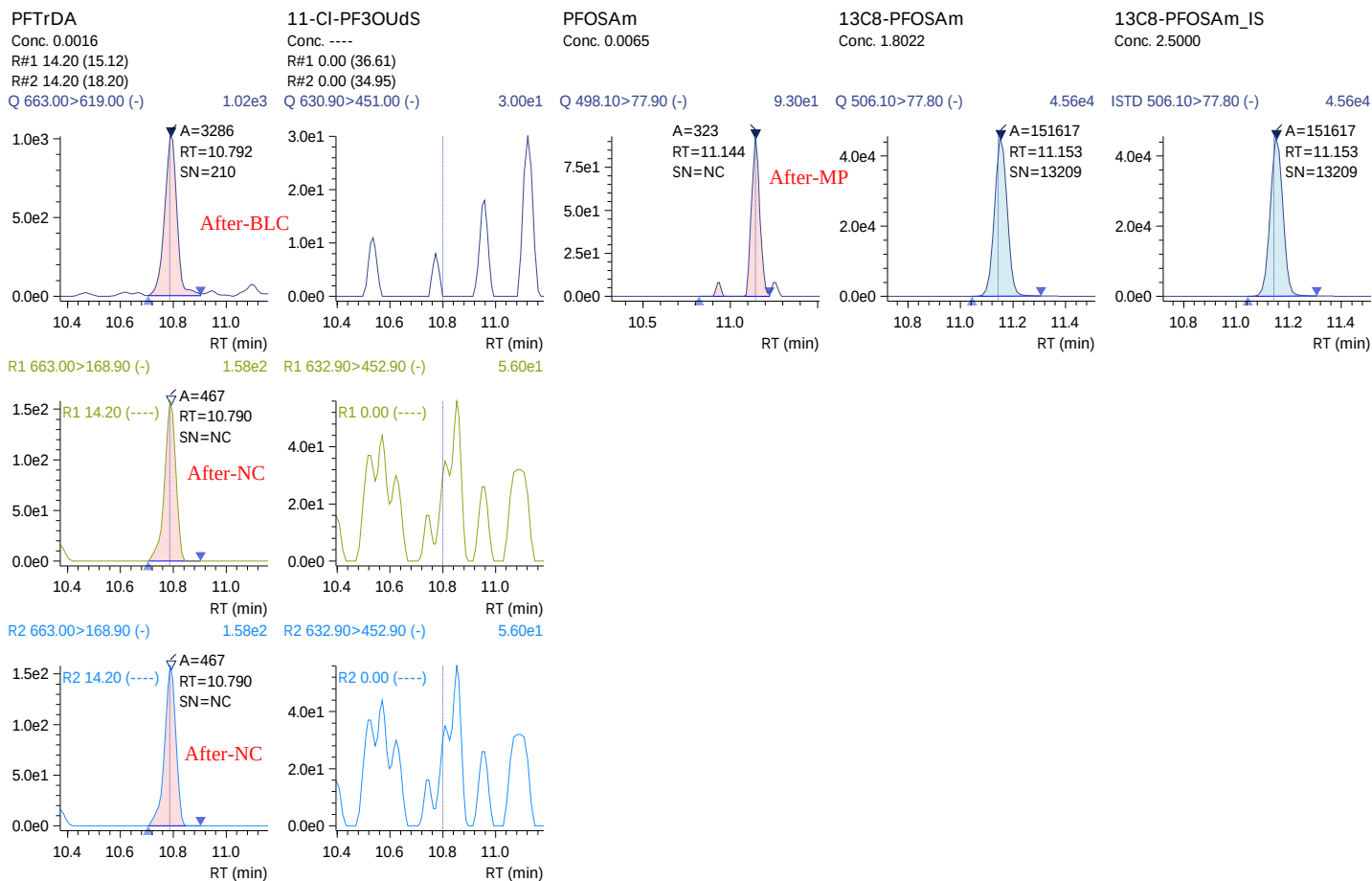


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_030 (continued)

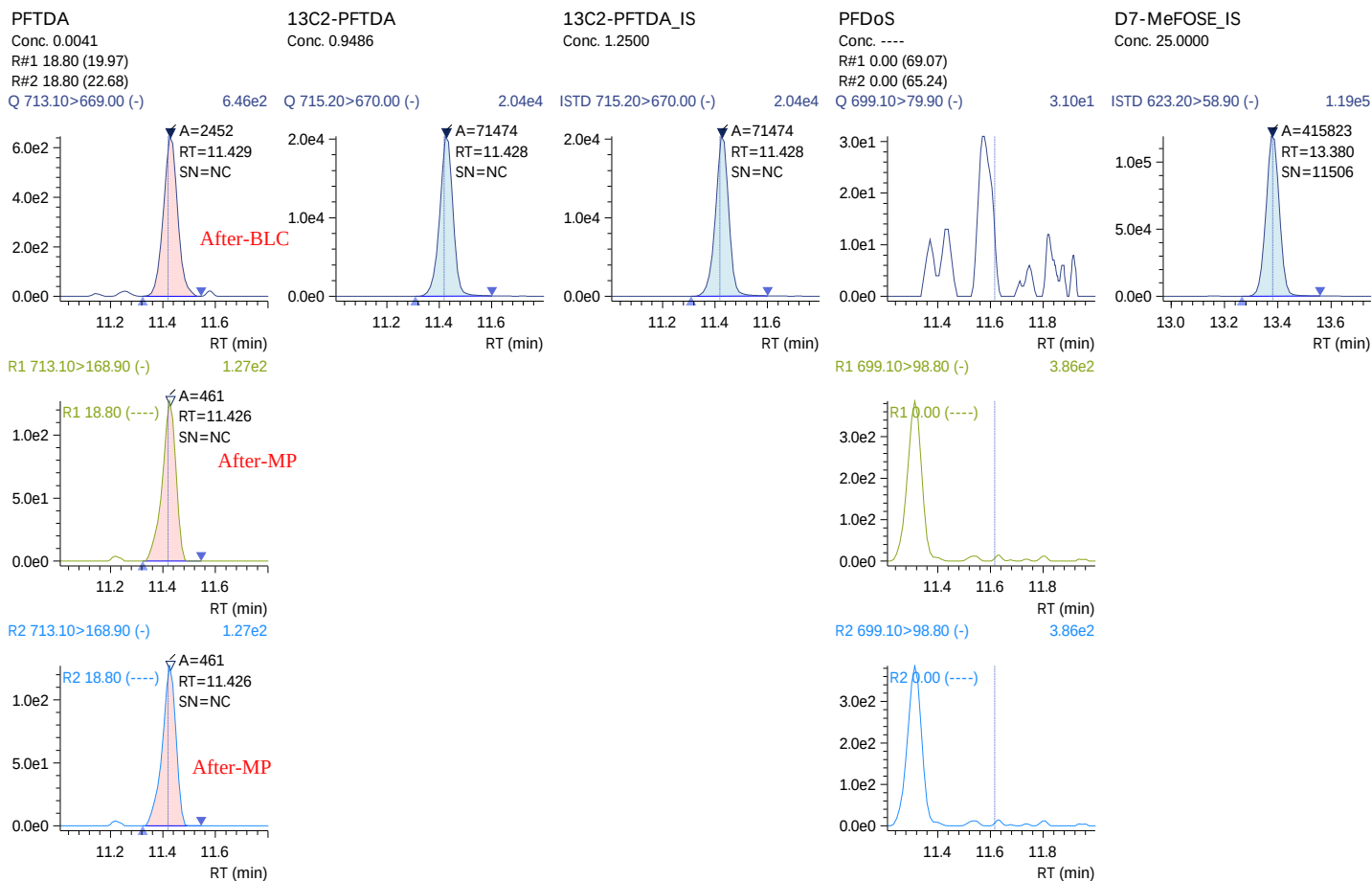


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_030 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_030 (continued)

D7-MeFOSE
Conc. 20.0480

MeFOSE
Conc. ----

13C2-PFHXA_IS
Conc. 2.5000

13C2-PFHXA
Conc. 1.6915

PFHXA
Conc. 0.0013

Q 623.20>58.90 (-)

1.19e5

Q 616.10>59.00 (-)

1.06e2

ISTD 815.00>770.05 (-)

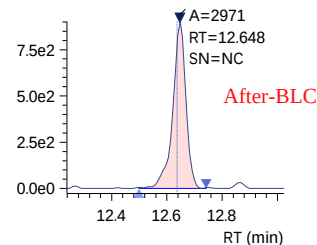
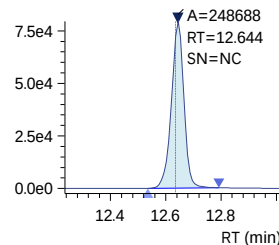
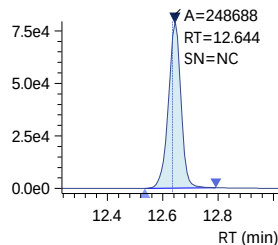
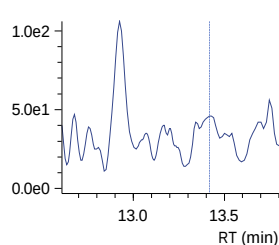
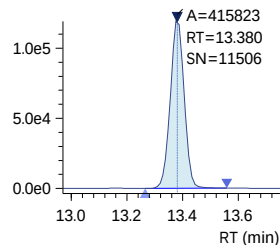
7.95e4

Q 815.00>770.05 (-)

7.95e4

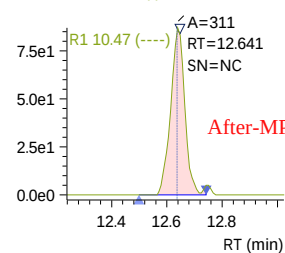
Q 813.00>768.95 (-)

9.03e2



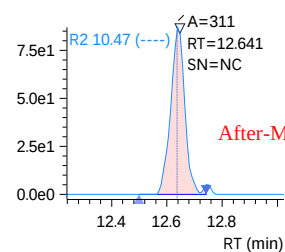
R1 813.00>218.95 (-)

8.70e1



R2 813.00>218.95 (-)

8.70e1





240119_030 (continued)

D3-MeFOSA
Conc. 1.7725

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. ----
R#1 0.00 (149.05)
R#2 0.00 (142.62)

D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 20.0140

Q 515.00>219.00 (-)

8.63e3

ISTD 515.00>219.00 (-)

8.63e3

Q 511.90>219.00 (-)

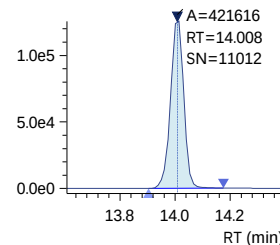
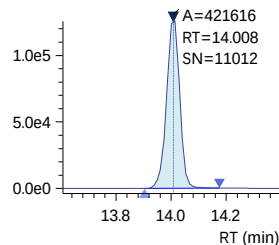
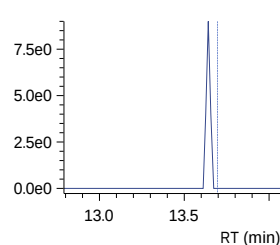
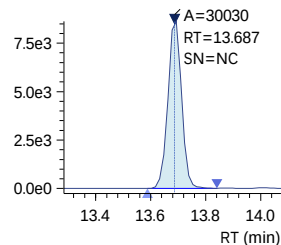
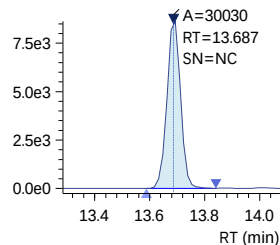
9.00e0

ISTD 639.20>58.90 (-)

1.26e5

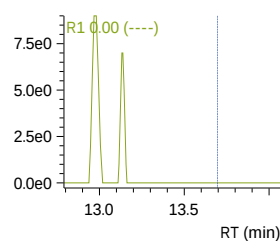
Q 639.20>58.90 (-)

1.26e5



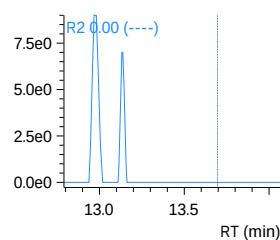
R1 511.90>169.00 (-)

9.00e0



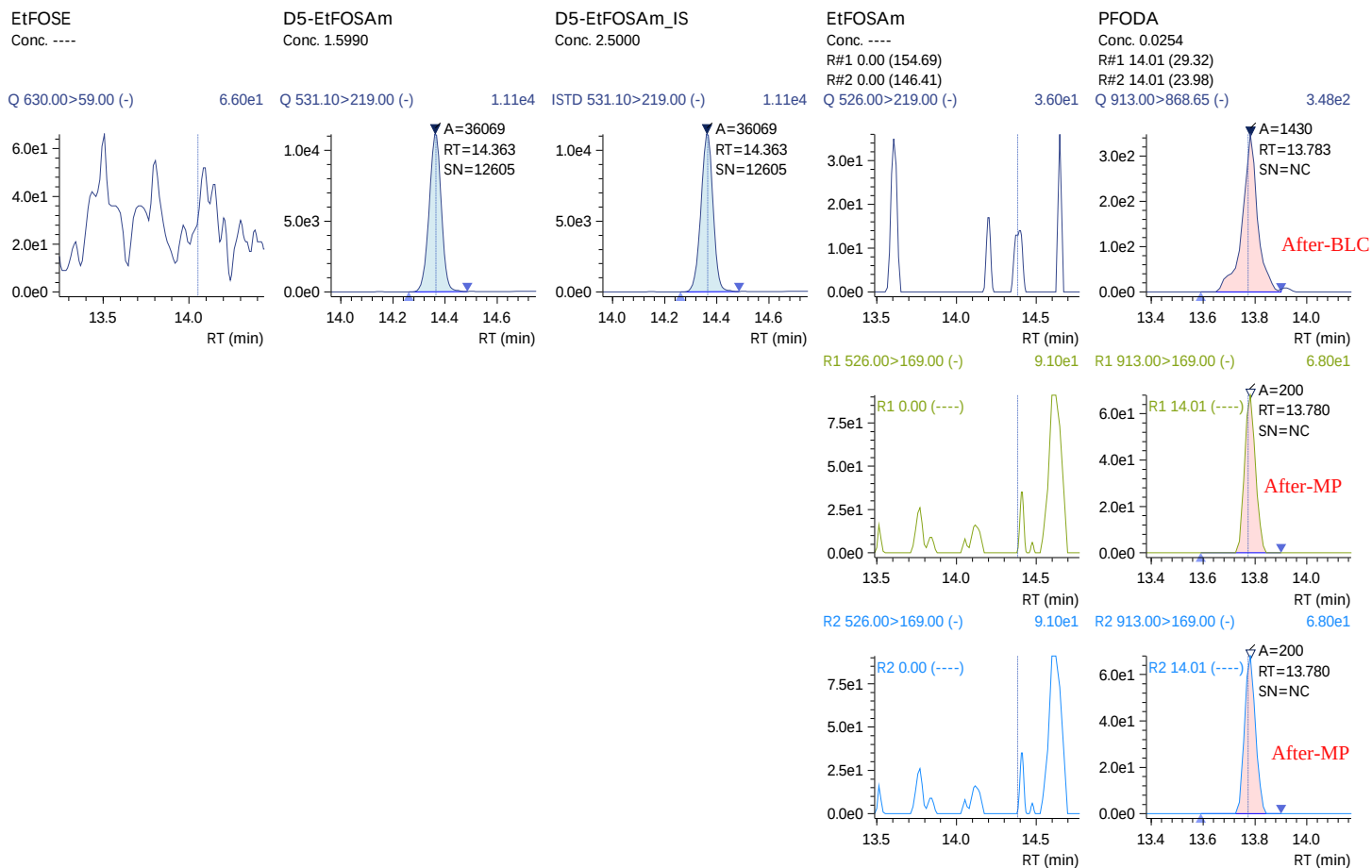
R2 511.90>169.00 (-)

9.00e0





240119_030 (continued)



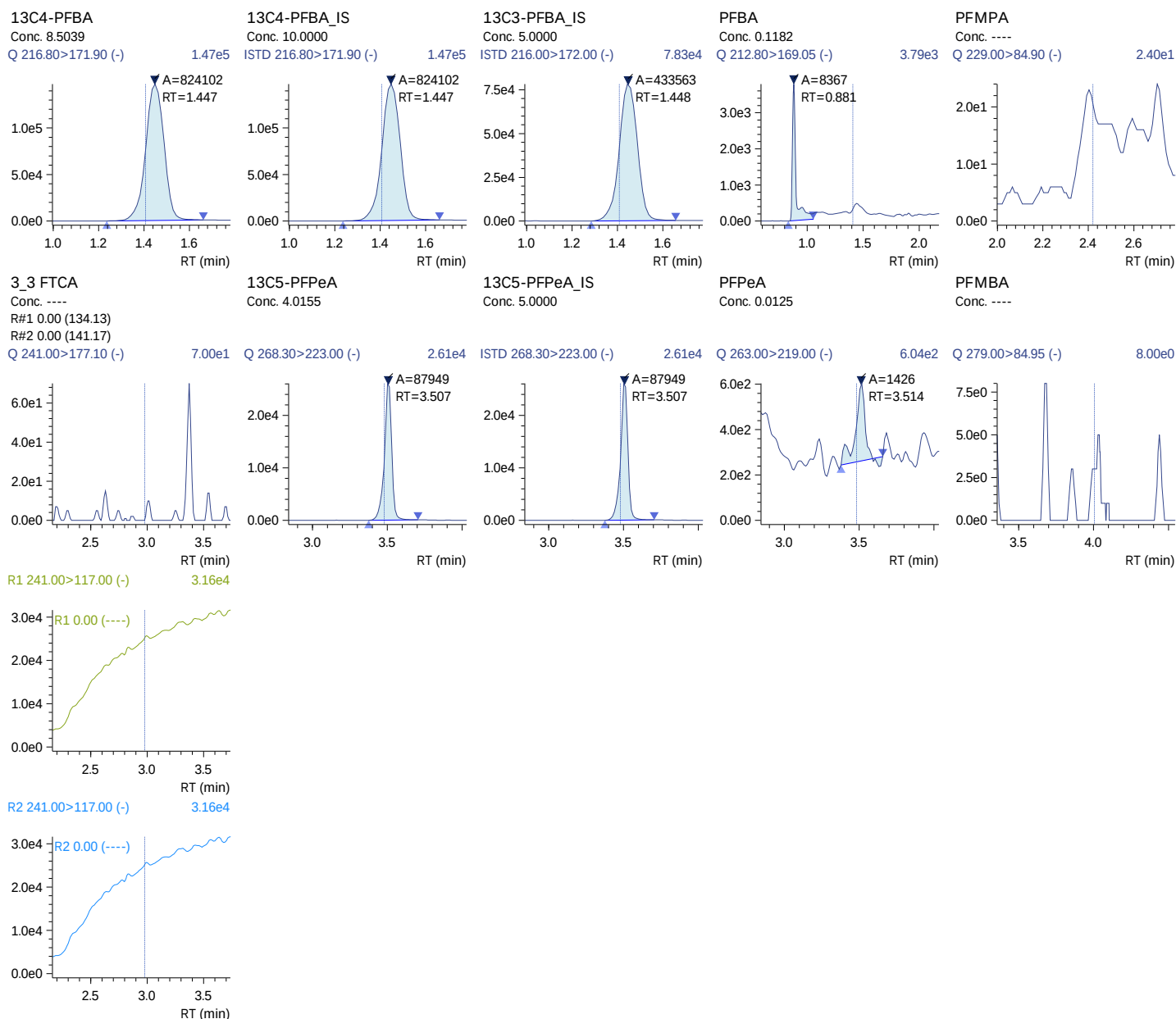
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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_030

Sample ID: K2314283-001
Date Acquired: 1/19/2024 11:03:00 PM
Acquired by: System Administrator
Data File: 240119_030
Vial: 12 | Inj. Volume: 10.0000uL | Tray: 2





240119_030 (continued)

13C2-4_2 FTS
 Conc. 5.1978

13C2-4_2 FTS_IS
 Conc. 5.0000

4_2 FTS
 Conc. ----
 R#1 0.00 (34.14)
 R#2 0.00 (29.06)

13C3-PFBS_IS
 Conc. 2.5000

PFBS
 Conc. ----
 R#1 0.00 (47.53)
 R#2 0.00 (46.72)

Q 329.10>80.90 (-)

3.72e4

ISTD 329.10>80.90 (-)

3.72e4

Q 327.10>307.00 (-)

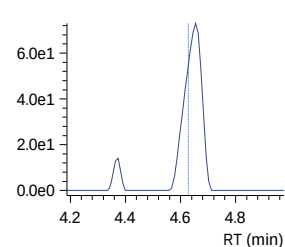
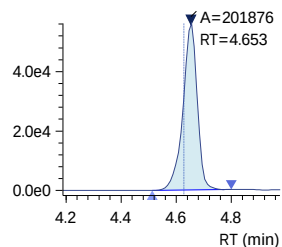
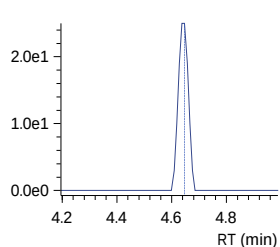
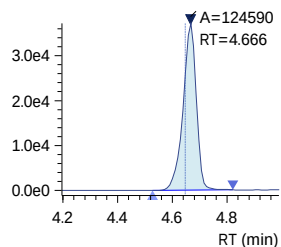
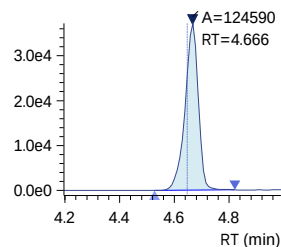
2.50e1

ISTD 302.10>79.90 (-)

5.62e4

Q 298.70>79.90 (-)

7.30e1

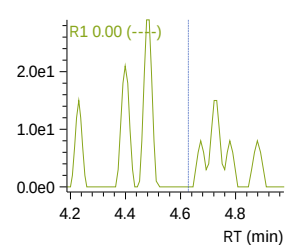
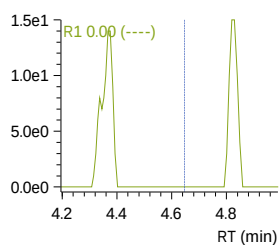


R1 327.10>80.90 (-)

1.50e1

R1 298.70>98.80 (-)

2.90e1

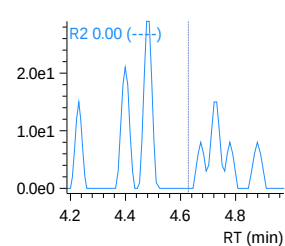
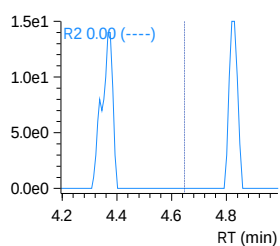


R2 327.10>80.90 (-)

1.50e1

R2 298.70>98.80 (-)

2.90e1





240119_030 (continued)

13C3-PFBS
Conc. 2.0423

NFDHA
Conc. ----
R#1 0.00 (37.88)
R#2 0.00 (40.25)

13C5-PFHxA
Conc. 2.0016

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

Q 302.10>79.90 (-)

5.62e4

Q 295.00>201.00 (-)

1.86e2

Q 318.00>273.00 (-)

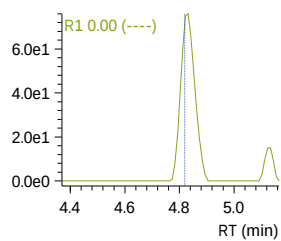
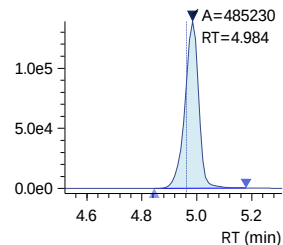
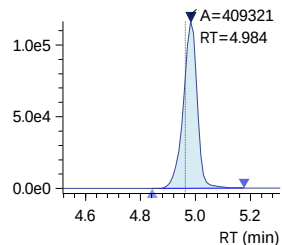
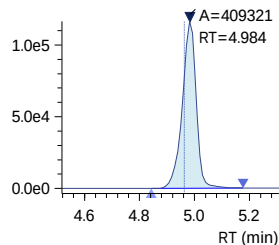
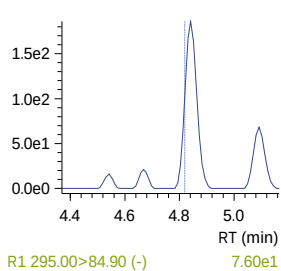
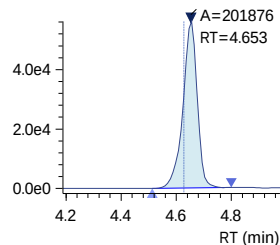
1.16e5

ISTD 318.00>273.00 (-)

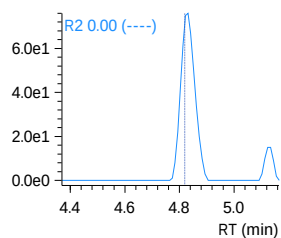
1.16e5

ISTD 315.10>270.00 (-)

1.39e5



R2 295.00>84.90 (-)





240119_030 (continued)

PFHxA
 Conc. 0.0541

PFEESA
 Conc. ----
 R#1 0.00 (5.88)
 R#2 0.00 (6.11)

13C3-HFPO-DA
 Conc. 8.8266

13C3-HFPO-DA_IS
 Conc. 10.0000

HFPO-DA
 Conc. ----
 R#1 0.00 (63.80)
 R#2 0.00 (65.61)

Q 313.00>269.00 (-)

1.13e3

Q 314.80>135.00 (-)

1.49e2

Q 286.90>168.90 (-)

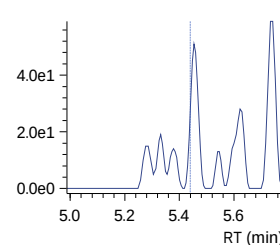
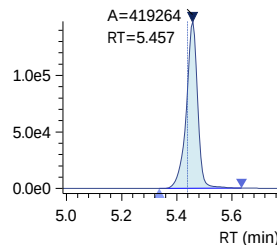
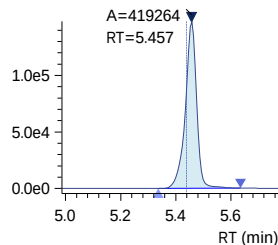
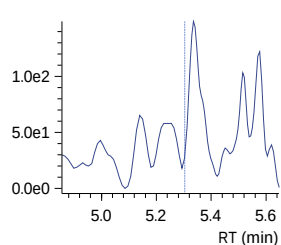
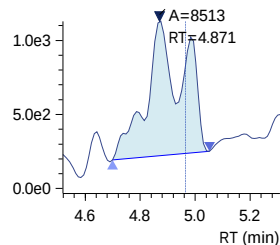
1.48e5

ISTD 286.90>168.90 (-)

1.48e5

Q 284.90>168.90 (-)

5.90e1

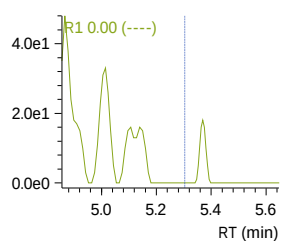


R1 314.80>82.90 (-)

4.80e1

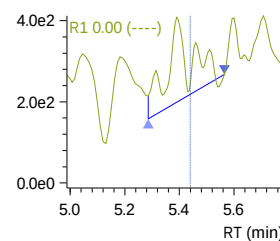
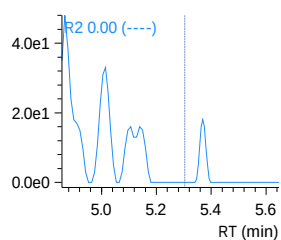
R1 284.90>184.90 (-)

4.12e2



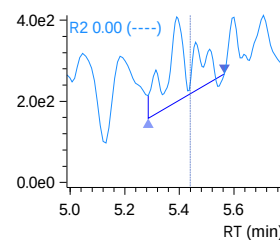
R2 314.80>82.90 (-)

4.80e1



R2 284.90>184.90 (-)

4.12e2





240119_030 (continued)

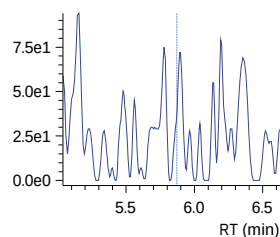
5_3 FTCA

Conc. ----

R#1 0.00 (167.13)

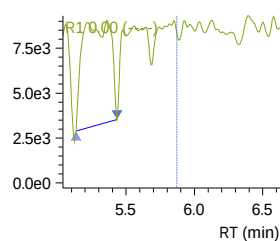
R#2 0.00 (158.86)

Q 341.00>237.05 (-)



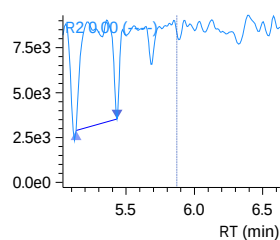
R1 341.00>217.00 (-)

9.30e3



R2 341.00>217.00 (-)

9.30e3



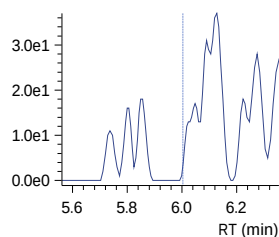
PFPeS

Conc. ----

R#1 0.00 (56.71)

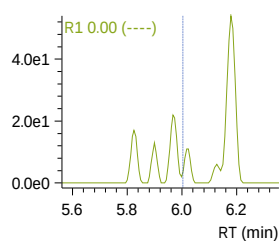
R#2 0.00 (55.80)

Q 349.10>79.90 (-)



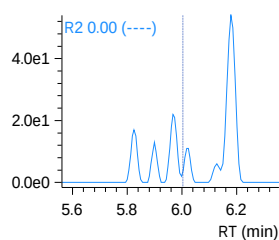
R1 349.10>98.80 (-)

5.40e1



R2 349.10>98.80 (-)

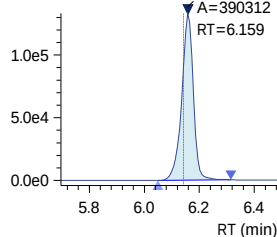
5.40e1



13C4-PFHpa

Conc. 2.1084

Q 367.10>322.00 (-)



1.33e5

Q 367.10>322.00 (-)

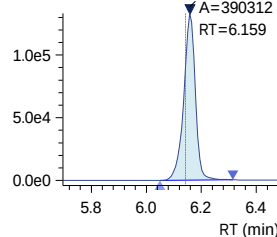
1.33e5



13C4-PFHpa_IS

Conc. 2.5000

ISTD 367.10>322.00 (-)



1.33e5

ISTD 367.10>322.00 (-)

1.33e5



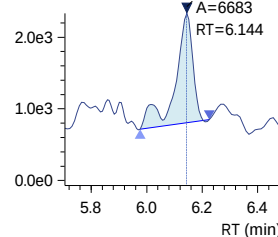
PFHpA

Conc. 0.0065

R#1 0.00 (21.37)

R#2 0.00 (21.50)

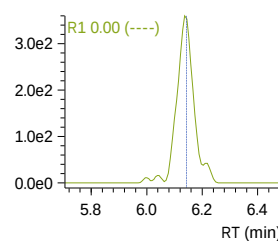
Q 363.10>319.00 (-)



2.33e3

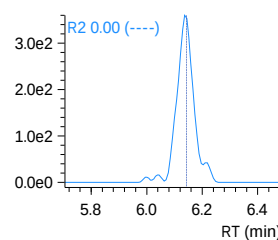
R1 363.10>169.00 (-)

3.60e2



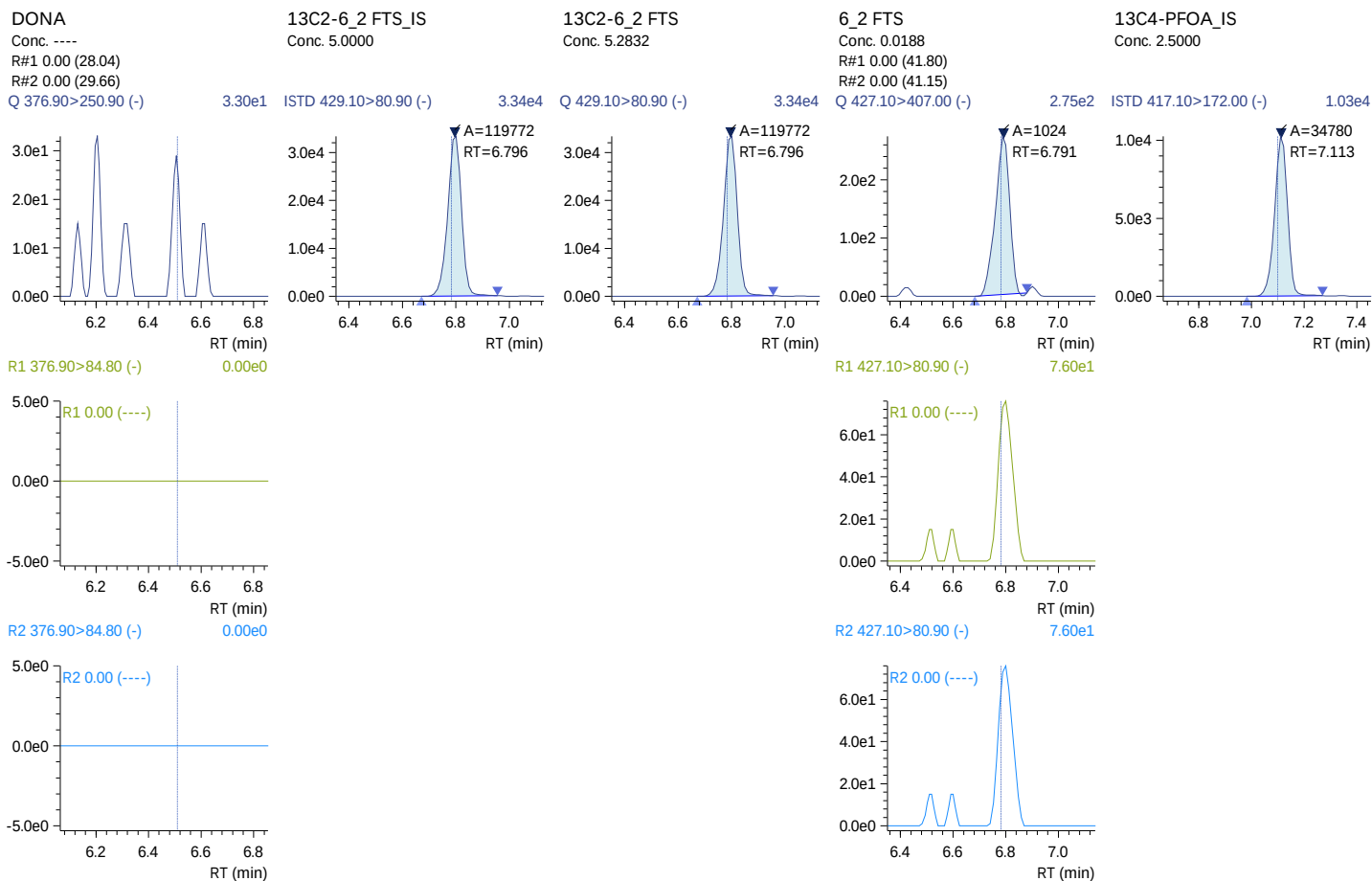
R2 363.10>169.00 (-)

3.60e2





240119_030 (continued)





240119_030 (continued)

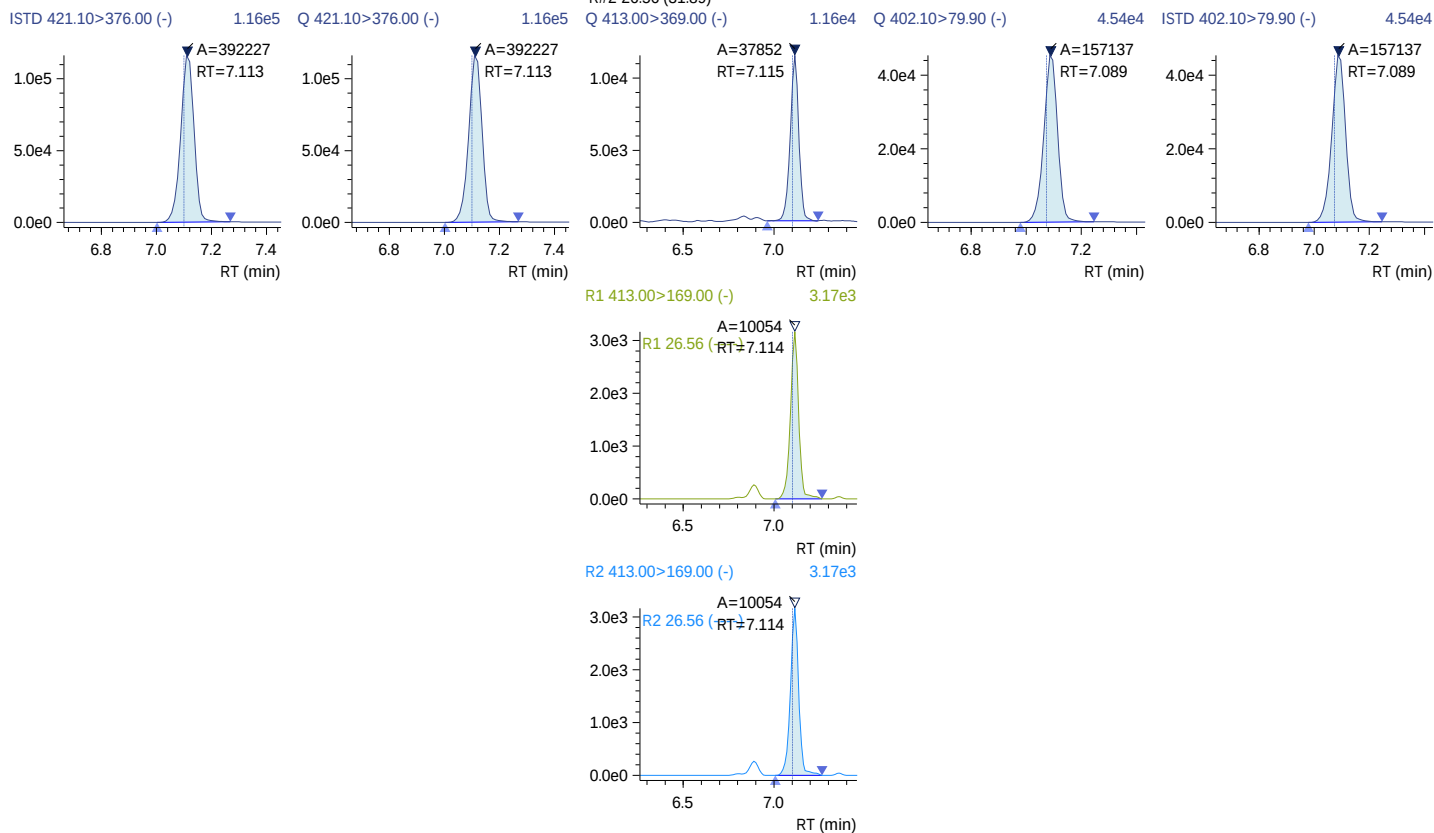
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.0177

PFOA
Conc. 0.3302
R#1 26.56 (29.05)
R#2 26.56 (31.89)

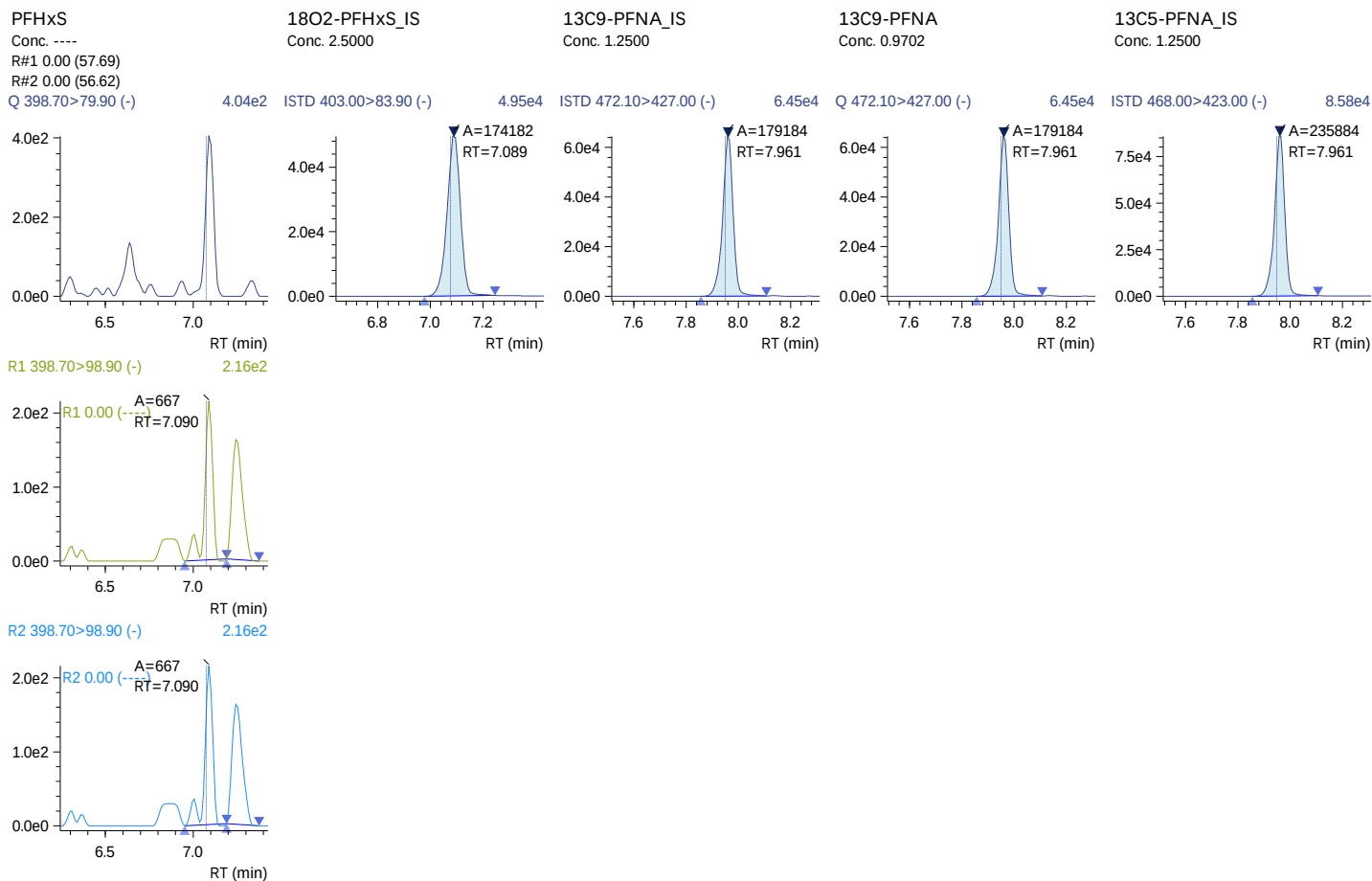
13C3-PFHxS
Conc. 2.1018

13C3-PFHxS_IS
Conc. 2.5000



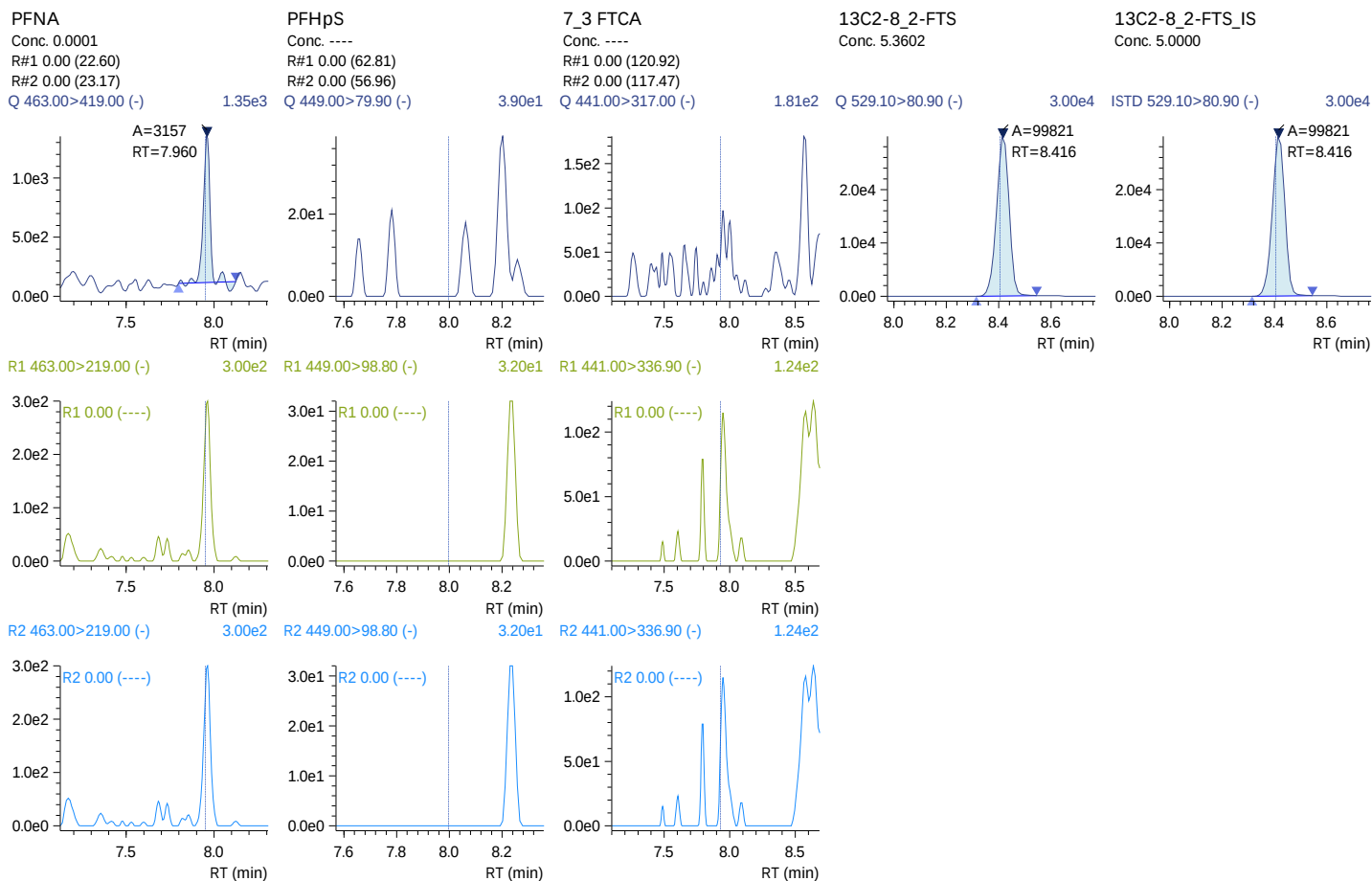


240119_030 (continued)



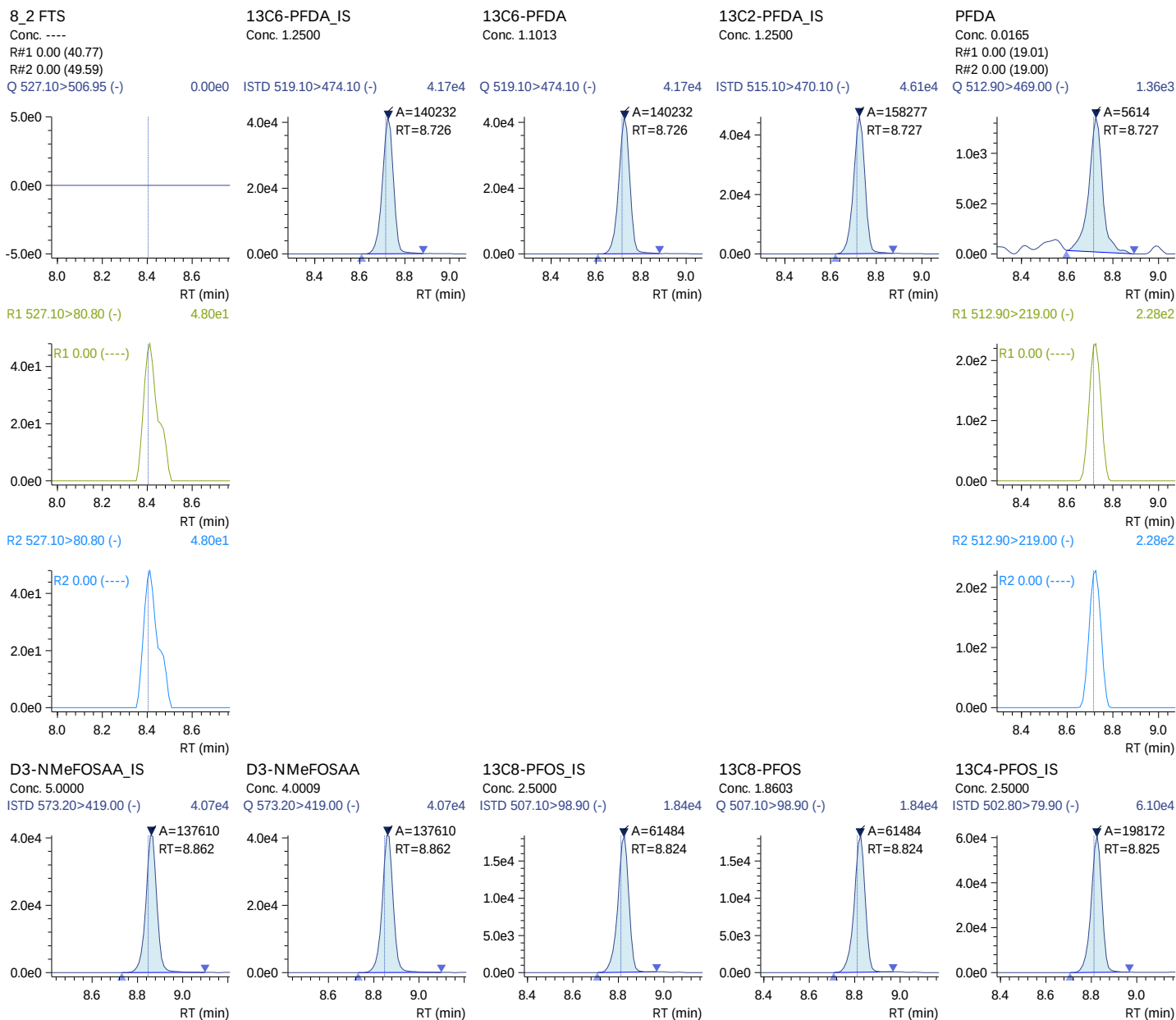


240119_030 (continued)



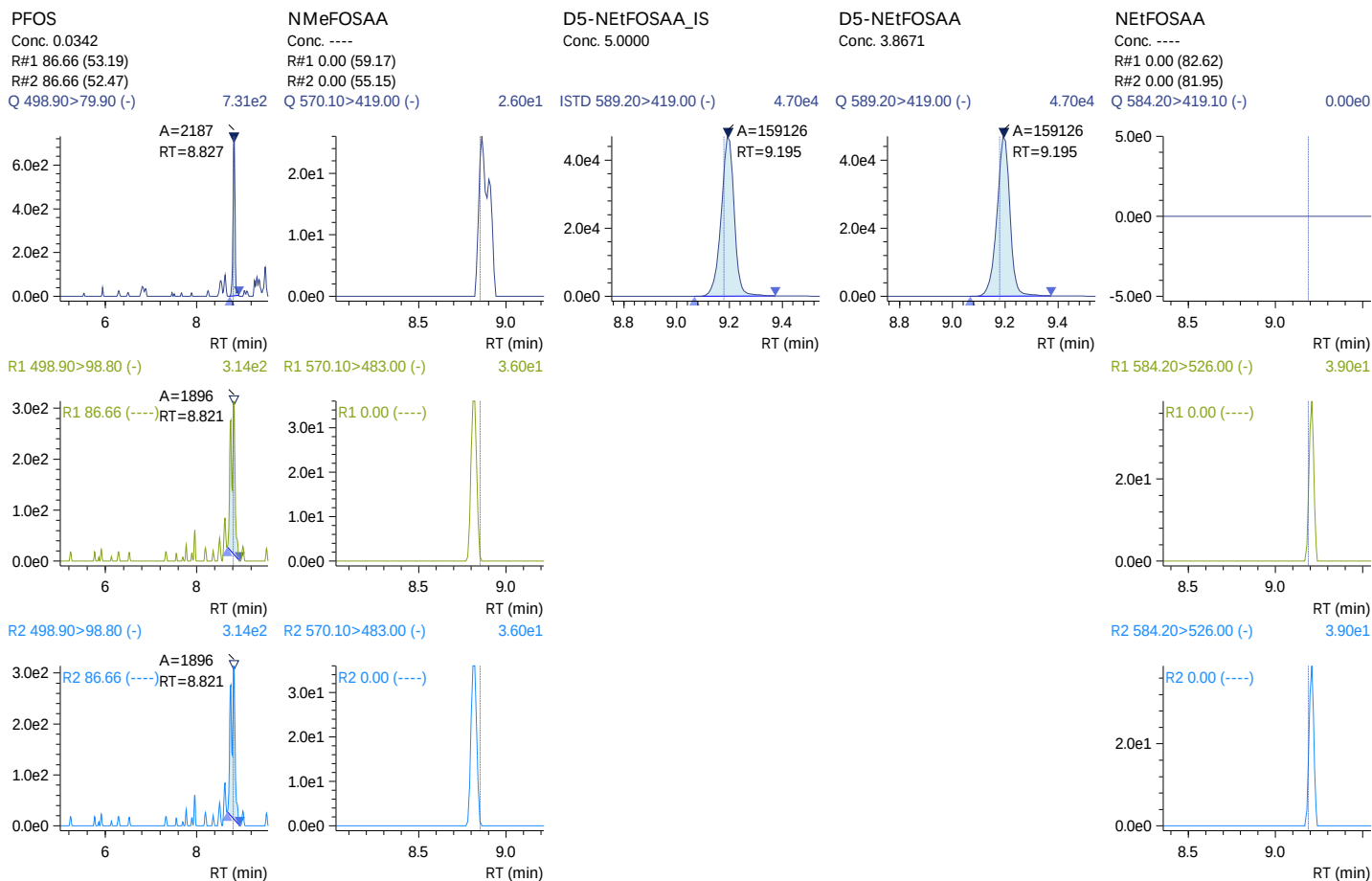


240119_030 (continued)





240119_030 (continued)





240119_030 (continued)

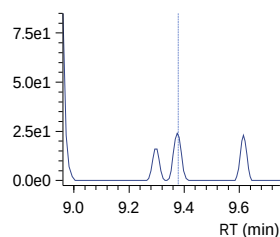
9-Cl-PF3ONS

Conc. ----

R#1 0.00 (31.76)

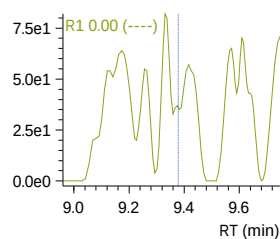
R#2 0.00 (32.76)

Q 530.80>351.00 (-)



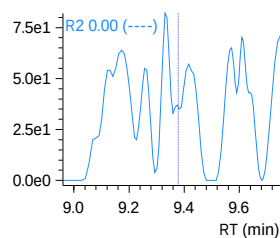
R1 532.80>353.00 (-)

8.20e1



R2 532.80>353.00 (-)

8.20e1



RT (min)

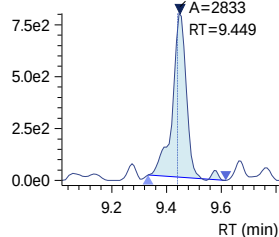
PFUnDA

Conc. -0.0056

R#1 0.00 (12.31)

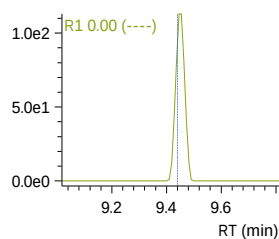
R#2 0.00 (13.12)

Q 563.10>519.00 (-)



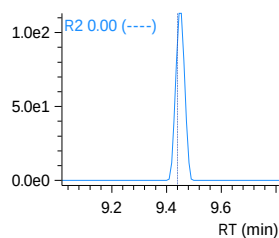
R1 563.10>269.10 (-)

1.13e2



R2 563.10>269.10 (-)

1.13e2

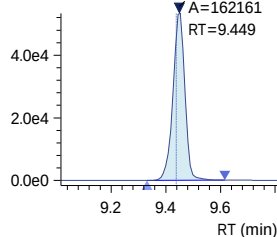


RT (min)

13C7-PFUnDA_IS

Conc. 1.2500

ISTD 570.00>525.10 (-)



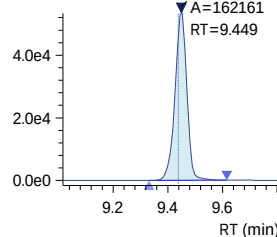
5.34e4

RT (min)

13C7-PFUnDA

Conc. 1.0676

Q 570.00>525.10 (-)



5.34e4

RT (min)

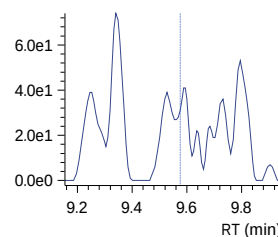
PFNS

Conc. ----

R#1 0.00 (63.31)

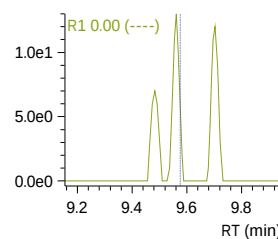
R#2 0.00 (65.22)

Q 548.80>79.90 (-)



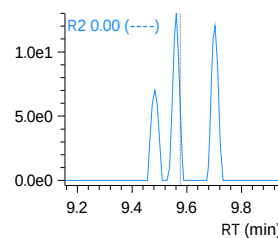
R1 548.80>98.80 (-)

1.30e1



R2 548.80>98.80 (-)

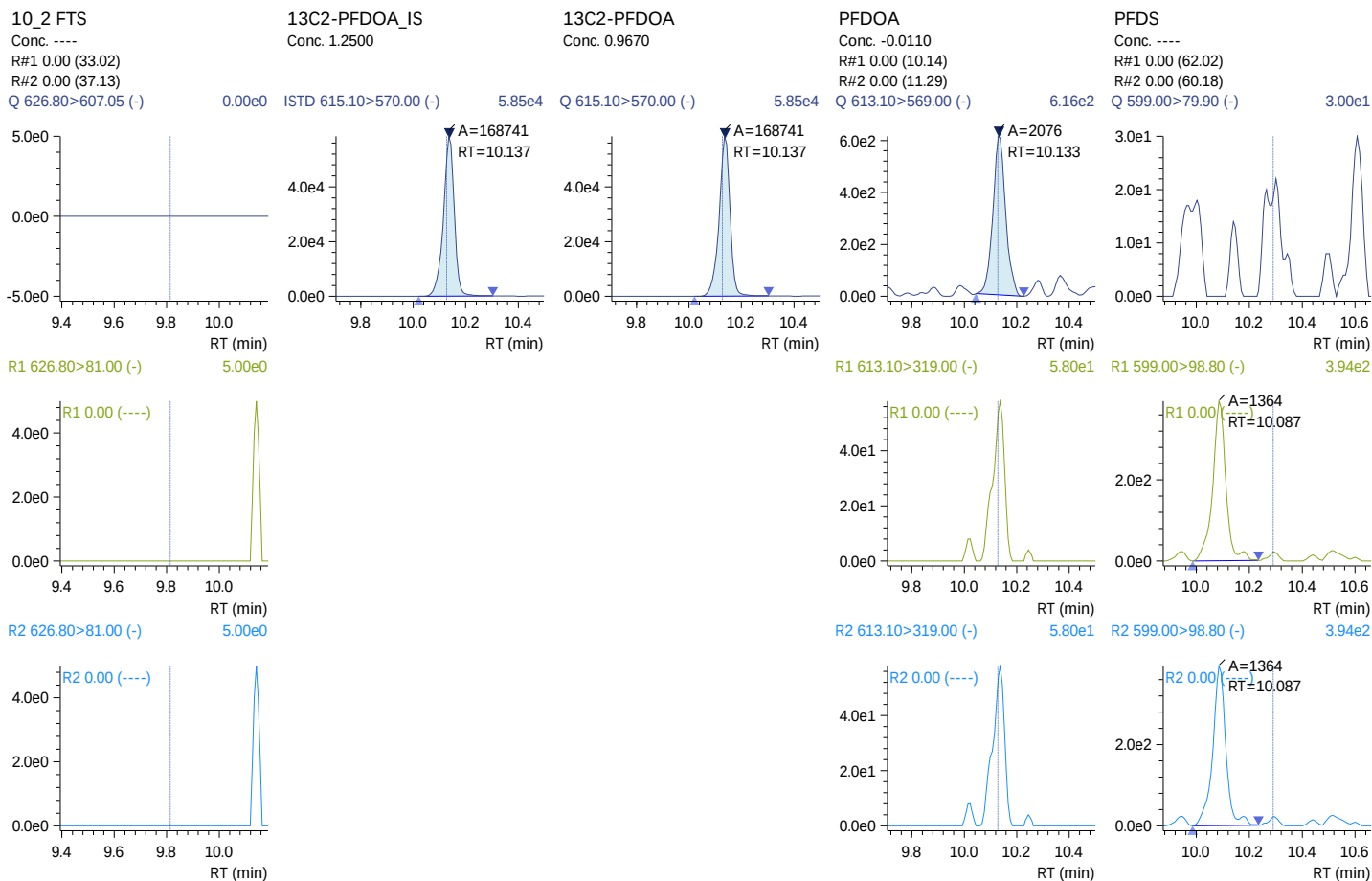
1.30e1



RT (min)

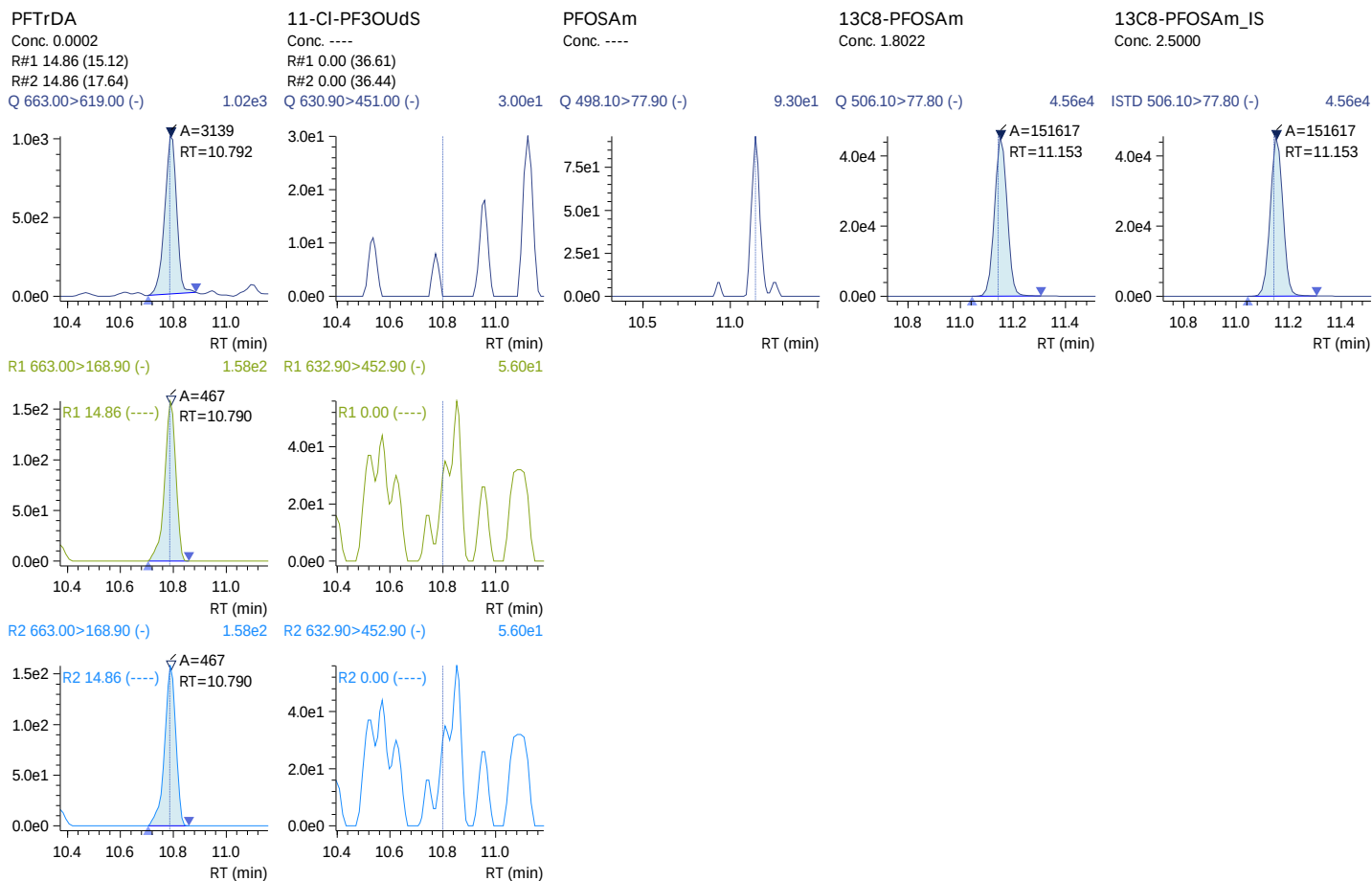


240119_030 (continued)



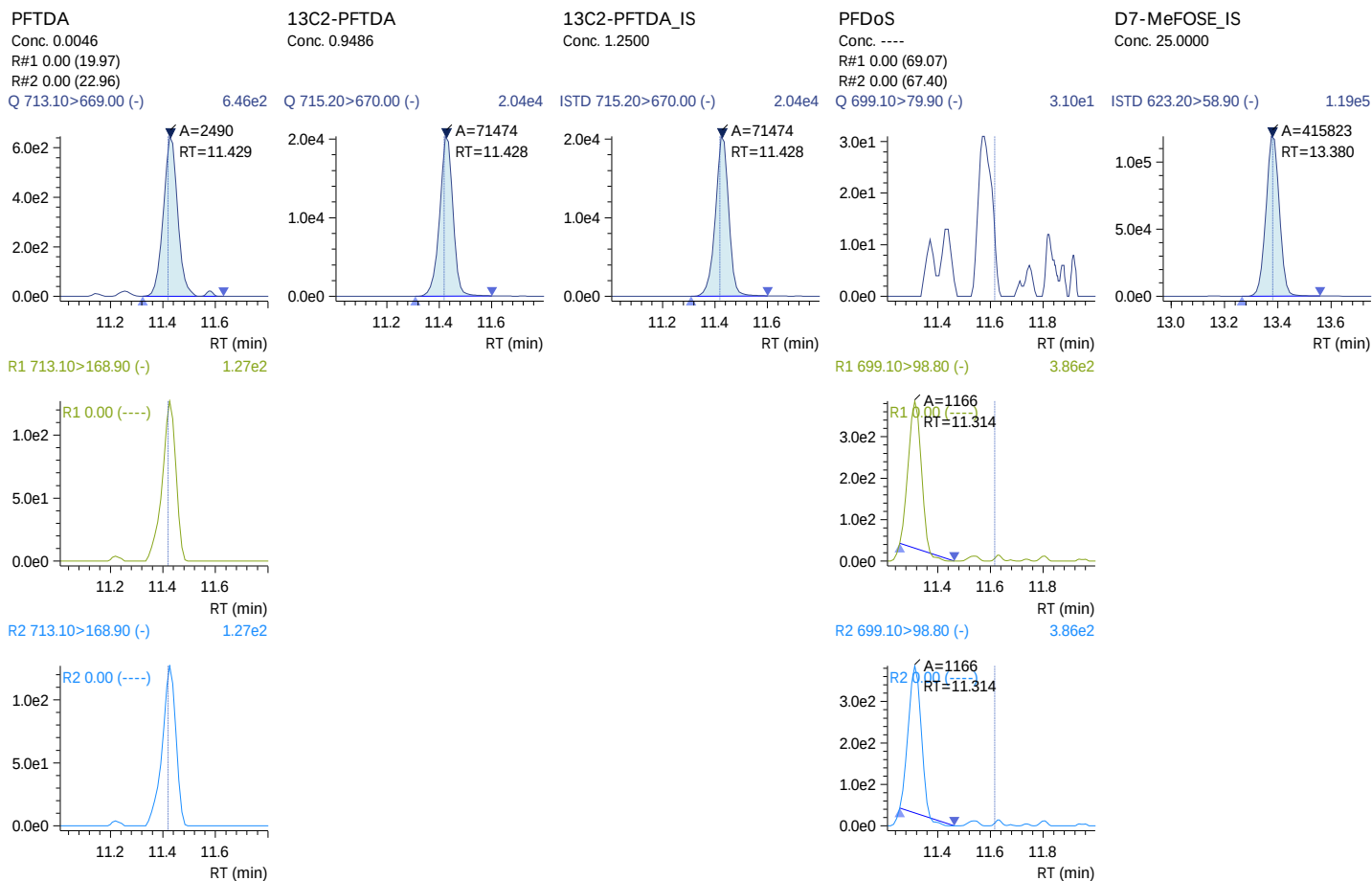


240119_030 (continued)





240119_030 (continued)





240119_030 (continued)

D7-MeFOSE
 Conc. 20.0480

MeFOSE
 Conc. ----

13C2-PFHDA-IS
 Conc. 2.5000

13C2-PFHDA
 Conc. 1.6915

PFHXDA

Conc. 0.0011
 R#1 0.00 (11.64)
 R#2 0.00 (13.90)

Q 623.20>58.90 (-)

1.19e5

Q 616.10>59.00 (-)

1.06e2

ISTD 815.00>770.05 (-)

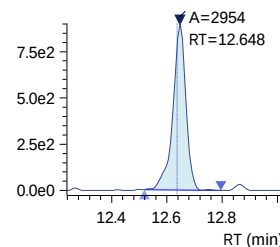
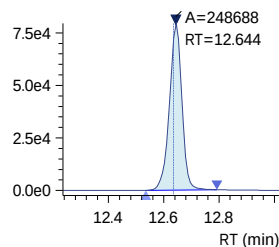
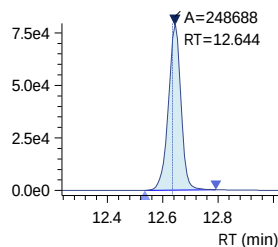
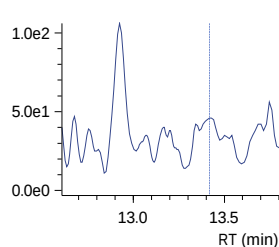
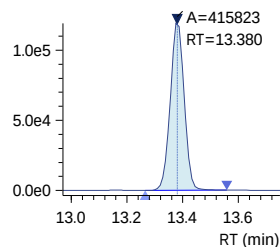
7.95e4

Q 815.00>770.05 (-)

7.95e4

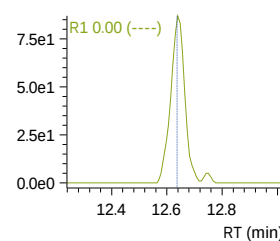
Q 813.00>768.95 (-)

9.03e2



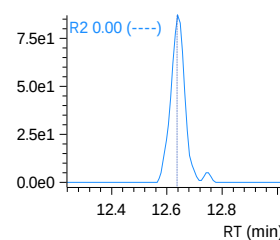
R1 813.00>218.95 (-)

8.70e1



R2 813.00>218.95 (-)

8.70e1





240119_030 (continued)

D3-MeFOSA
 Conc. 1.7725

D3-MeFOSA_IS
 Conc. 2.5000

MeFOSA
 Conc. ----
 R#1 0.00 (149.05)
 R#2 0.00 (140.79)

D9-EtFOSE_IS
 Conc. 25.0000

D9-EtFOSE
 Conc. 20.0140

Q 515.00>219.00 (-)

8.63e3

ISTD 515.00>219.00 (-)

8.63e3

Q 511.90>219.00 (-)

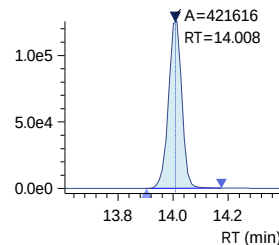
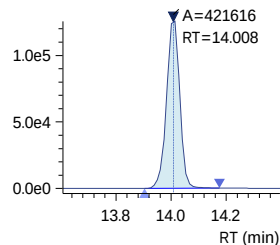
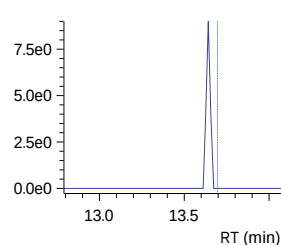
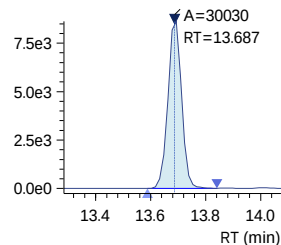
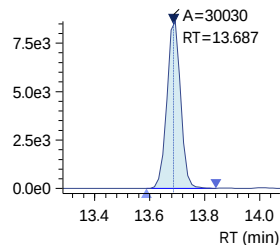
9.00e0

ISTD 639.20>58.90 (-)

1.26e5

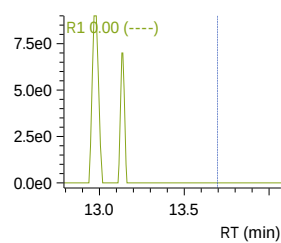
Q 639.20>58.90 (-)

1.26e5



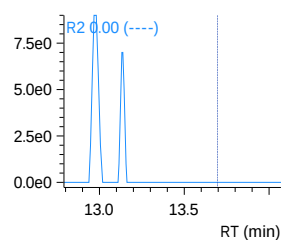
R1 511.90>169.00 (-)

9.00e0



R2 511.90>169.00 (-)

9.00e0





240119_030 (continued)

EtFOSE
Conc. ----

D5-EtFOSAm
Conc. 1.5990

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. ----

PFODA
Conc. 0.0258

Q 630.00>59.00 (-)

6.60e1

Q 531.10>219.00 (-)

1.11e4

ISTD 531.10>219.00 (-)

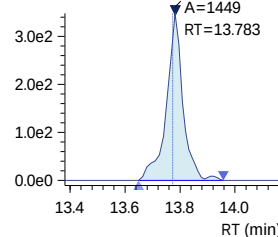
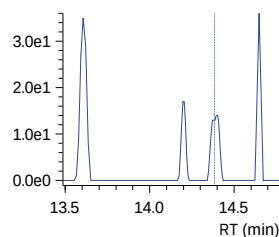
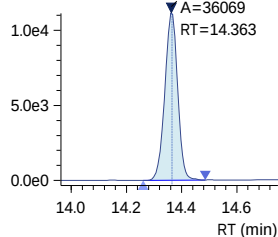
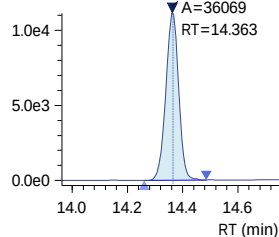
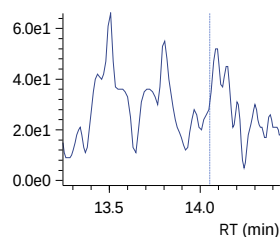
1.11e4

Q 526.00>219.00 (-)

3.60e1

Q 913.00>868.65 (-)

3.48e2

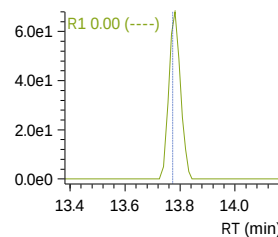
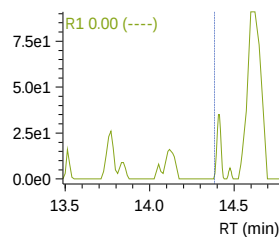


R1 526.00>169.00 (-)

9.10e1

R1 913.00>169.00 (-)

6.80e1

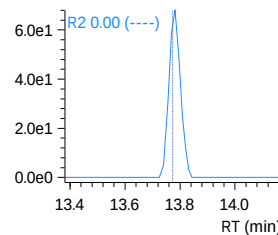
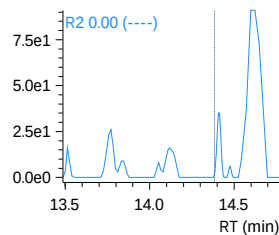


R2 526.00>169.00 (-)

9.10e1

R2 913.00>169.00 (-)

6.80e1



Validation Report

1st PS 01/23/24
2nd UA 01/23/24

Data File: J:\LCMS08\Data\240119_1633_B1\240119_031
Lab ID: K2314283-002
RunType: N/A
Matrix: Soil

Date Acquired: 1/19/24 23:26
Batch ID: 830171
Analysis Method: 1633/PFAS_DOD5.4

Validations

Validation Categories	Pass	Fail
Preparation Hold Time	X	
Analytical Hold Time	X	
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery	X	
Continuing Calibration Recovery (Closing)	X	
Lab Control Sample Recovery	X	
Method Blank	X	
Method Blank Surrogates	X	
Internal Standards	X	
Surrogates	X	
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	

Primary Review: _____

Secondary Review: _____

Quantitation Report

1st *PS* 01/23/24
2nd *UA* 01/23/24

Data File:	J:\LCMS08\Data\240119_1633_B1\240119_031	Instrument:	K-LCMS-08
Acqu Date:	1/19/24 23:26	Vial:	25
Run Type:	N/A	Dilution:	1
Lab ID:	K2314283-002	Raw Units:	ng/mL

Bottle ID:	K2314283-002.02	Tier:	IV	Matrix:	Soil
Prod Code:	PFAS_DOD5.4	Collect Date:	12/20/23	Receive Date:	12/20/23

Analysis Lot:	830171	Prep Lot:	431421	Report Group:	K2314283
Analysis	1633	Prep Method:	Method		
		Prep Date:	12/22/23		

Title:	Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM	Calibration ID:	KC2400027
		Report List ID:	24615

Internal Standard Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Area Criteria
18O2-PFHxS	7.089	+0.02	211178	2.5000	OK
13C4-PFOS	8.821	+0.02	250914	2.5000	OK
13C3-PFBA	1.447	+0.04	532461	5.0000	OK
13C2-PFHxA	4.987	+0.03	603272	2.5000	OK
13C4-PFOA	7.112	+0.02	40153	2.5000	OK
13C5-PFNA	7.959	+0.02	295304	1.2500	OK
13C2-PFDA	8.722	+0.01	201906	1.2500	OK

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
13C3-PFBS	4.657	+0.04	257476	2.1485	86	20 - 150	Y
13C3-PFHxS	7.089	+0.02	191308	2.1106	84	20 - 150	Y
13C8-PFOS	8.821	+0.02	81770	1.9541	78	20 - 150	Y
13C4-PFBA	1.445	+0.04	1031741	8.6690	87	20 - 150	Y
13C5-PFPeA	3.516	+0.04	103868	3.8144	76	20 - 150	Y
13C5-PFHxA	4.986	+0.03	534386	2.1018	84	20 - 150	Y
13C4-PFHpA	6.159	+0.02	483960	2.1027	84	20 - 150	Y
13C8-PFOA	7.112	+0.02	454197	2.0238	81	20 - 150	Y
13C9-PFNA	7.958	+0.02	223275	0.9656	77	20 - 150	Y
13C6-PFDA	8.722	+0.01	159888	0.9843	79	20 - 150	Y
13C7-PFUnDA	9.446	+0.02	197180	1.0176	81	20 - 150	Y
13C2-PFDoDA	10.133	+0.01	206288	0.9267	74	20 - 150	Y
13C2-PFTeDA	11.423	+0.02	78651	0.8183	65	20 - 150	Y
13C8-FOSA	11.150	+0.01	180370	1.6933	68	20 - 150	Y
D3-MeFOSA	13.683	0.00	35497	1.6548	66	20 - 150	Y
D5-EtFOSA	14.360		43590	1.5263	61	20 - 150	Y
D7-MeFOSE	13.374	0.00	488717	18.6095	74	20 - 150	Y
D9-EtFOSE	14.005		495776	18.5874	74	20 - 150	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 1/23/24 14:28

\\alprews001\starlims\LIMSReps\QuantValidation.rpt

			1st	PS	01/23/24
Data File:	J:\LCMS08\Data\240119_1633_B1\240119_031	Instrument:	K-LCMS08	UA	01/23/24
Acqu Date:	1/19/24 23:26	Vial:	25		
Run Type:	N/A	Dilution:	1		
Lab ID:	K2314283-002	Raw Units:	ng/mL		

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
D3-MeFOSAA	8.859	+0.02	178397	4.0965	82	20 - 150	Y
D5-EtFOSAA	9.191	+0.02	209494	4.0210	80	20 - 150	Y
13C2-4:2 FTS	4.669	+0.03	163803	5.6365	113	20 - 150	Y
13C2-6:2 FTS	6.796	+0.02	150088	5.4606	109	20 - 150	Y
13C2-8:2 FTS	8.411	+0.01	106331	4.7095	94	20 - 150	Y
13C3-HFPO-DA	5.458	+0.03	505668	8.5626	86	20 - 150	Y

Target Compounds

Final Conc.Units: ng/g							
Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Perfluorobutane sulfonic acid (PFBS)	0		0	0	0	U	Y
Perfluoropentane sulfonic acid (PFPeS)	0		0	0	0	U	Y
Perfluorohexane sulfonic acid (PFHxS)	7.083	+0.01	1276	-0.0053	0	U	Y
Perfluoroheptane sulfonic acid (PFHpS)	0		0	0	0	U	Y
Perfluorooctane sulfonic acid (PFOS)	8.819	+0.01	2061	0.0242	0.024	U	Y
Perfluorononane sulfonic acid (PFNS)	0		0	0	0	U	Y
Perfluorodecane sulfonic acid (PFDS)	0		0	0	0	U	Y
Perfluorododecane sulfonic acid (PFDoS)	0		0	0	0	U	Y
Perfluorobutanoic acid (PFBA)	1.440	+0.03	2416	0.0273	0.027	U	Y
Perfluoropentanoic acid (PFPeA)	3.514	+0.04	2789	0.0207	0.021	U	Y
Perfluorohexanoic acid (PFHxA)	4.983	+0.02	3276	0.0100	0.010	U	Y
Perfluoroheptanoic acid (PFHpA)	6.148	+0.01	7585	0.0030	0.0030	U	Y
Perfluorooctanoic acid (PFOA)	7.109	+0.01	5664	0.0046	0.0046	U	Y
Perfluorononanoic acid (PFNA)	7.959	+0.02	4039	0.0009	0.00090	U	Y
Perfluorodecanoic acid (PFDA)	8.719	+0.01	4093	0.0014	0.0014	U	Y
Perfluoroundecanoic acid (PFUnDA)	9.446	+0.01	2975	-0.0089	0	U	Y
Perfluorododecanoic acid (PFDOA)	10.133	+0.01	2636	-0.0101	0	U	Y
Perfluorotridecanoic acid (PFTTrDA)	10.786	+0.01	3087	-0.0031	0	U	Y
Perfluorotetradecanoic acid (PFTDA)	11.421	+0.01	2067	-0.0033	0	U	Y
Perfluorooctane sulfonamide (PFOSAm)	11.141	+0.00	282	0.0047	0.0047	U	Y
N-Methylperfluorooctane sulfonamide (MeFOSA)	0		0	0	0	U	Y
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	0		0	0	0	U	Y
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	0		0	0	0	U	Y
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	0		0	0	0	U	Y
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	0		0	0	0	U	Y

U: Undetected at or above MDL
 J: Analyte detected above MDL, but below MRL
 B: Hit above MRL also found in Method Blank
 E: Analyte concentration above high point of ICAL
 N: Presumptive evidence of compound

D: Result from dilution
 m: Manual integration performed
 d: Compound manually deleted
 NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
 #: Acceptance criteria not applicable
 ?: Insufficient information to determine acceptance
 e: Result >= MRL, but MRL less than low point of ICAL
 c: check for co-elution

			1st	PS	01/23/24
Data File:	J:\LCMS08\Data\240119_1633_B1\240119_031	Instrument:	K-LCMS08	2nd	01/23/24
Acqu Date:	1/19/24 23:26	Vial:	25	UA	
Run Type:	N/A	Dilution:	1		
Lab ID:	K2314283-002	Raw Units:	ng/mL		

Target Compounds			Final Conc.Units: ng/g				
Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	0		0	0	0	U	Y
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	0		0	0	0	U	Y
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	6.795	+0.02	913	0.0134	0.013	U	Y
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	0		0	0	0	U	Y
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	0		0	0	0	U	Y
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	0		0	0	0	U	Y
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	0		0	0	0	U	Y
Perfluoro(2-ethoxyethane) sulfonic acid (PFEESA)	0		0	0	0	U	Y
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	0		0	0	0	U	Y
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	0		0	0	0	U	Y
Perfluoro-3-methoxypropanoic acid (PFMPA)	2.473	+0.06	99	0.0015	0.0015	U	Y
Perfluoro-4-methoxybutanoic acid (PFMBA)	4.024	+0.02	35	0.0004	0.00040	U	Y
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	0		0	0	0	U	Y
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	4.839	+0.03	660	0.0056	0.0056	U	Y
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	0		0	0	0	U	Y

Prep Amount:	5.862 g	Dilution:	1
Prep Final Amount:	5.00 mL	Basis Factor:	85.30

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution



240119_031

Sample ID: K2314283-002
Date Acquired: 1/19/2024 11:26:16 PM
Acquired by: System Administrator
Data File: 240119_031
Vial: 13 | Inj. Volume: 10.0000uL | Tray: 2

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	1031741	----	----	----	----	----	----	----
13C4-PFBA_IS	216.80>171.90	----	1031741	----	----	----	----	----	----	----
13C3-PFBA_IS	216.00>172.00	----	532461	----	----	----	----	----	----	----
PFBA	212.80>169.05	----	2416	----	----	----	----	----	----	----
PFMPA	229.00>84.90	----	99	----	----	----	----	----	----	----
3_3 FTCA	241.00>177.10	241.00>117.00	----	0	0.00	141.17	0	0.00	143.25	----
13C5-PFPeA	268.30>223.00	----	103868	----	----	----	----	----	----	----
13C5-PFPeA_IS	268.30>223.00	----	103868	----	----	----	----	----	----	----
PFPeA	263.00>219.00	----	2789	----	----	----	----	----	----	----
PFMBA	279.00>84.95	----	35	----	----	----	----	----	----	----
13C2-4_2 FTS	329.10>80.90	----	163803	----	----	----	----	----	----	----
13C2-4_2 FTS_IS	329.10>80.90	----	163803	----	----	----	----	----	----	----
4_2 FTS	327.10>307.00	327.10>80.90	----	0	0.00	29.06	0	0.00	31.50	----
13C3-PFBS_IS	302.10>79.90	----	257476	----	----	----	----	----	----	----
PFBS	298.70>79.90	298.70>98.80	----	0	0.00	46.72	0	0.00	48.74	----
13C3-PFBS	302.10>79.90	----	257476	----	----	----	----	----	----	----
NFDHA	295.00>201.00	295.00>84.90	660	259	39.20	40.25	259	39.20	36.97	----
13C5-PFHxA	318.00>273.00	----	534386	----	----	----	----	----	----	----
13C5-PFHxA_IS	318.00>273.00	----	534386	----	----	----	----	----	----	----
13C2-PFHxA_IS	315.10>270.00	----	603272	----	----	----	----	----	----	----
PFHxA	313.00>269.00	----	3276	----	----	----	----	----	----	----
PFEESA	314.80>135.00	314.80>82.90	----	0	0.00	6.11	0	0.00	5.81	----
13C3-HFPO-DA	286.90>168.90	----	505668	----	----	----	----	----	----	----
13C3-HFPO-DA_IS	286.90>168.90	----	505668	----	----	----	----	----	----	----
HFPO-DA	284.90>168.90	284.90>184.90	----	0	0.00	65.61	0	0.00	64.39	----
5_3 FTCA	341.00>237.05	341.00>217.00	----	0	0.00	158.86	0	0.00	159.75	----
PFPeS	349.10>79.90	349.10>98.80	----	0	0.00	55.80	0	0.00	54.52	----
13C4-PFHpA	367.10>322.00	----	483960	----	----	----	----	----	----	----
13C4-PFHpA_IS	367.10>322.00	----	483960	----	----	----	----	----	----	----
PFHpA	363.10>319.00	363.10>169.00	7585	1623	21.40	21.50	1623	21.40	23.22	----
DONA	376.90>250.90	376.90>84.80	----	0	0.00	29.66	0	0.00	29.43	----
13C2-6_2 FTS_IS	429.10>80.90	----	150088	----	----	----	----	----	----	----
13C2-6_2 FTS	429.10>80.90	----	150088	----	----	----	----	----	----	----
6_2 FTS	427.10>407.00	427.10>80.90	913	413	45.23	41.15	413	45.23	43.09	----
13C4-PFOA_IS	417.10>172.00	----	40153	----	----	----	----	----	----	----
13C8-PFOA_IS	421.10>376.00	----	454197	----	----	----	----	----	----	----

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240119_031 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	454197	----	----	----	----	----	----	----
PFOA	413.00>369.00	413.00>169.00	5664	1242	21.92	31.89	1242	21.92	30.51	
13C3-PFHxS	402.10>79.90	----	191308	----	----	----	----	----	----	----
13C3-PFHxS_IS	402.10>79.90	----	191308	----	----	----	----	----	----	----
PFHxS	398.70>79.90	398.70>98.90	1276	657	51.51	56.62	658	51.61	57.27	
18O2-PFHxS_IS	403.00>83.90	----	211178	----	----	----	----	----	----	----
13C9-PFNA_IS	472.10>427.00	----	223275	----	----	----	----	----	----	----
13C9-PFNA	472.10>427.00	----	223275	----	----	----	----	----	----	----
13C5-PFNA_IS	468.00>423.00	----	295304	----	----	----	----	----	----	----
PFNA	463.00>419.00	463.00>219.00	4039	872	21.60	23.17	872	21.60	23.01	
PFHpS	449.00>79.90	449.00>98.80	----	0	0.00	56.96	0	0.00	58.58	
7_3 FTCA	441.00>317.00	441.00>336.90	----	0	0.00	117.47	0	0.00	117.17	
13C2-8_2-FTS	529.10>80.90	----	106331	----	----	----	----	----	----	----
13C2-8_2-FTS_IS	529.10>80.90	----	106331	----	----	----	----	----	----	----
8_2 FTS	527.10>506.95	527.10>80.80	----	0	0.00	49.59	0	0.00	43.30	
13C6-PFDA_IS	519.10>474.10	----	159888	----	----	----	----	----	----	----
13C6-PFDA	519.10>474.10	----	159888	----	----	----	----	----	----	----
13C2-PFDA_IS	515.10>470.10	----	201906	----	----	----	----	----	----	----
PFDA	512.90>469.00	512.90>219.00	4093	971	23.73	19.00	971	23.73	19.26	
D3-NMeFOSAA_IS	573.20>419.00	----	178397	----	----	----	----	----	----	----
D3-NMeFOSAA	573.20>419.00	----	178397	----	----	----	----	----	----	----
13C8-PFOS_IS	507.10>98.90	----	81770	----	----	----	----	----	----	----
13C8-PFOS	507.10>98.90	----	81770	----	----	----	----	----	----	----
13C4-PFOS_IS	502.80>79.90	----	250914	----	----	----	----	----	----	----
PFOS	498.90>79.90	498.90>98.80	2061	1343	65.17	52.47	1343	65.17	47.25	
NMeFOSAA	570.10>419.00	570.10>483.00	----	0	0.00	55.15	0	0.00	62.10	
D5-NEtFOSAA_IS	589.20>419.00	----	209494	----	----	----	----	----	----	----
D5-NEtFOSAA	589.20>419.00	----	209494	----	----	----	----	----	----	----
NEtFOSAA	584.20>419.10	584.20>526.00	----	0	0.00	81.95	0	0.00	86.05	
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	----	0	0.00	32.76	0	0.00	31.74	
PFUnDA	563.10>519.00	563.10>269.10	2975	418	14.05	13.12	418	14.05	13.26	
13C7-PFUnDA_IS	570.00>525.10	----	197180	----	----	----	----	----	----	----
13C7-PFUnDA	570.00>525.10	----	197180	----	----	----	----	----	----	----
PFNS	548.80>79.90	548.80>98.80	----	0	0.00	65.22	0	0.00	62.49	
10_2 FTS	626.80>607.05	626.80>81.00	----	0	0.00	37.13	0	0.00	35.81	
13C2-PFDOA_IS	615.10>570.00	----	206288	----	----	----	----	----	----	----
13C2-PFDOA	615.10>570.00	----	206288	----	----	----	----	----	----	----
PFDOA	613.10>569.00	613.10>319.00	2636	215	8.17	11.29	215	8.17	10.90	
PFDS	599.00>79.90	599.00>98.80	----	0	0.00	60.18	0	0.00	61.11	
PFTrDA	663.00>619.00	663.00>168.90	3087	535	17.33	17.64	535	17.33	18.20	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240119_031 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	----	0	0.00	36.44	0	0.00	34.95	
PFOSAm	498.10>77.90	----	282	----	----	----	----	----	----	
13C8-PFOSAm	506.10>77.80	----	180370	----	----	----	----	----	----	
13C8-PFOSAm_IS	506.10>77.80	----	180370	----	----	----	----	----	----	
PFTDA	713.10>669.00	713.10>168.90	2067	482	23.30	22.96	482	23.30	22.68	
13C2-PFTDA	715.20>670.00	----	78651	----	----	----	----	----	----	
13C2-PFTDA_IS	715.20>670.00	----	78651	----	----	----	----	----	----	
PFDoS	699.10>79.90	699.10>98.80	----	0	0.00	67.40	0	0.00	65.24	
D7-MeFOSE_IS	623.20>58.90	----	488717	----	----	----	----	----	----	
D7-MeFOSE	623.20>58.90	----	488717	----	----	----	----	----	----	
MeFOSE	616.10>59.00	----	----	----	----	----	----	----	----	
13C2-PFHxDA_IS	815.00>770.05	----	319423	----	----	----	----	----	----	
13C2-PFHxDA	815.00>770.05	----	319423	----	----	----	----	----	----	
PFHxDA	813.00>768.95	813.00>218.95	2773	252	9.08	13.90	252	9.08	14.51	
D3-MeFOSA	515.00>219.00	----	35497	----	----	----	----	----	----	
D3-MeFOSA_IS	515.00>219.00	----	35497	----	----	----	----	----	----	
MeFOSA	511.90>219.00	511.90>169.00	----	0	0.00	140.79	0	0.00	142.62	
D9-EtFOSE_IS	639.20>58.90	----	495776	----	----	----	----	----	----	
D9-EtFOSE	639.20>58.90	----	495776	----	----	----	----	----	----	
EtFOSE	630.00>59.00	----	----	----	----	----	----	----	----	
D5-EtFOSAm	531.10>219.00	----	43590	----	----	----	----	----	----	
D5-EtFOSAm_IS	531.10>219.00	----	43590	----	----	----	----	----	----	
EtFOSAm	526.00>219.00	526.00>169.00	----	0	0.00	163.90	0	0.00	146.41	
PFODA	913.00>868.65	913.00>169.00	1104	395	35.77	27.03	395	35.77	23.98	



240119_031

Sample ID: K2314283-002
Date Acquired: 1/19/2024 11:26:16 PM
Acquired by: System Administrator
Data File: 240119_031
Vial: 13 | Inj. Volume: 10.0000uL | Tray: 2

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.445	0.037	-0.002	1031741	532461	13C3-PFBA_IS	8.6690	ng/mL	
13C4-PFBA_IS	Auto	1.445	0.037	----	1031741	1031741	----	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.447	0.039	----	532461	532461	----	5.0000	ng/mL	
PFBA	M	1.440	0.031	-0.005	2416	1031741	13C4-PFBA_IS	0.0273	ng/mL	
PFMPA	M	2.473	0.052	-1.043	99	103868	13C5-PFPeA_IS	0.0015	ng/mL	
3_3 FTCA	ND(W/B)	----	----	----	----	103868	13C5-PFPeA_IS	----	ng/mL	
13C5-PFPeA	Auto	3.516	0.037	-1.471	103868	603272	13C2-PFHxA_IS	3.8144	ng/mL	
13C5-PFPeA_IS	Auto	3.516	0.037	----	103868	103868	----	5.0000	ng/mL	
PFPeA	M	3.514	0.032	-0.002	2789	103868	13C5-PFPeA_IS	0.0207	ng/mL	
PFMBA	M	4.024	0.019	0.508	35	103868	13C5-PFPeA_IS	0.0004	ng/mL	
13C2-4_2 FTS	Auto	4.669	0.023	-2.419	163803	211178	18O2-PFHxS_IS	5.6365	ng/mL	
13C2-4_2 FTS_IS	Auto	4.669	0.023	----	163803	163803	----	5.0000	ng/mL	
4_2 FTS	ND(W/B)	----	----	----	----	163803	13C2-4_2 FTS_IS	----	ng/mL	
13C3-PFBS_IS	Auto	4.657	0.029	----	257476	257476	----	2.5000	ng/mL	
PFBS	ND(W/B)	----	----	----	----	257476	13C3-PFBS_IS	----	ng/mL	
13C3-PFBS	Auto	4.657	0.029	-2.431	257476	211178	18O2-PFHxS_IS	2.1485	ng/mL	
NFDHA	M	4.839	0.019	-0.147	660	534386	13C5-PFHxA_IS	0.0056	ng/mL	
13C5-PFHxA	Auto	4.986	0.023	-0.001	534386	603272	13C2-PFHxA_IS	2.1018	ng/mL	
13C5-PFHxA_IS	Auto	4.986	0.023	----	534386	534386	----	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	4.987	0.024	----	603272	603272	----	2.5000	ng/mL	
PFHxA	M	4.983	0.018	-0.003	3276	534386	13C5-PFHxA_IS	0.0100	ng/mL	
PFEESA	ND(W/B)	----	----	----	----	534386	13C5-PFHxA_IS	----	ng/mL	
13C3-HFPO-DA	Auto	5.458	0.019	0.471	505668	603272	13C2-PFHxA_IS	8.5626	ng/mL	
13C3-HFPO-DA_IS	Auto	5.458	0.019	----	505668	505668	----	10.0000	ng/mL	
HFPO-DA	ND(W/B)	----	----	----	----	505668	13C3-HFPO-DA_IS	----	ng/mL	
5_3 FTCA	ND(W/B)	----	----	----	----	534386	13C5-PFHxA_IS	----	ng/mL	
PFPeS	ND(W/B)	----	----	----	----	191308	13C3-PFHxS_IS	----	ng/mL	
13C4-PFHpA	Auto	6.159	0.016	1.172	483960	603272	13C2-PFHxA_IS	2.1027	ng/mL	
13C4-PFHpA_IS	Auto	6.159	0.016	----	483960	483960	----	2.5000	ng/mL	
PFHpA	M	6.148	0.004	-0.011	7585	483960	13C4-PFHpA_IS	0.0030	ng/mL	
DONA	ND(W/B)	----	----	----	----	505668	13C3-HFPO-DA_IS	----	ng/mL	
13C2-6_2 FTS_IS	Auto	6.796	0.012	----	150088	150088	----	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.796	0.012	-0.292	150088	211178	18O2-PFHxS_IS	5.4606	ng/mL	
6_2 FTS	M	6.795	0.012	-0.001	913	150088	13C2-6_2 FTS_IS	0.0134	ng/mL	
13C4-PFOA_IS	Auto	7.112	0.013	----	40153	40153	----	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.112	0.012	----	454197	454197	----	2.5000	ng/mL	
13C8-PFOA	Auto	7.112	0.012	0.000	454197	40153	13C4-PFOA_IS	2.0238	ng/mL	
PFOA	M	7.109	0.007	-0.003	5664	454197	13C8-PFOA_IS	0.0046	ng/mL	
13C3-PFHxS	Auto	7.089	0.015	0.001	191308	211178	18O2-PFHxS_IS	2.1106	ng/mL	
13C3-PFHxS_IS	Auto	7.089	0.015	----	191308	191308	----	2.5000	ng/mL	
PFHxS	MI R1 R2	7.083	0.009	-0.006	1276	191308	13C3-PFHxS_IS	-0.0053	ng/mL	
18O2-PFHxS_IS	Auto	7.089	0.013	----	211178	211178	----	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.958	0.009	----	223275	223275	----	1.2500	ng/mL	
13C9-PFNA	Auto	7.958	0.009	-0.001	223275	295304	13C5-PFNA_IS	0.9656	ng/mL	
13C5-PFNA_IS	Auto	7.959	0.010	----	295304	295304	----	1.2500	ng/mL	
PFNA	M	7.959	0.009	0.001	4039	223275	13C9-PFNA_IS	0.0009	ng/mL	
PFHpS	ND(W/B)	----	----	----	----	81770	13C8-PFOS_IS	----	ng/mL	
7_3 FTCA	ND(W/B)	----	----	----	----	534386	13C5-PFHxA_IS	----	ng/mL	
13C2-8_2-FTS	Auto	8.411	0.007	1.323	106331	211178	18O2-PFHxS_IS	4.7095	ng/mL	
13C2-8_2-FTS_IS	Auto	8.411	0.007	----	106331	106331	----	5.0000	ng/mL	
8_2 FTS	ND(W/B)	----	----	----	----	106331	13C2-8_2-FTS_IS	----	ng/mL	
13C6-PFDA_IS	Auto	8.722	0.008	----	159888	159888	----	1.2500	ng/mL	
13C6-PFDA	Auto	8.722	0.008	0.000	159888	201906	13C2-PFDA_IS	0.9843	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_031 (continued)

(Table continued from previous page)

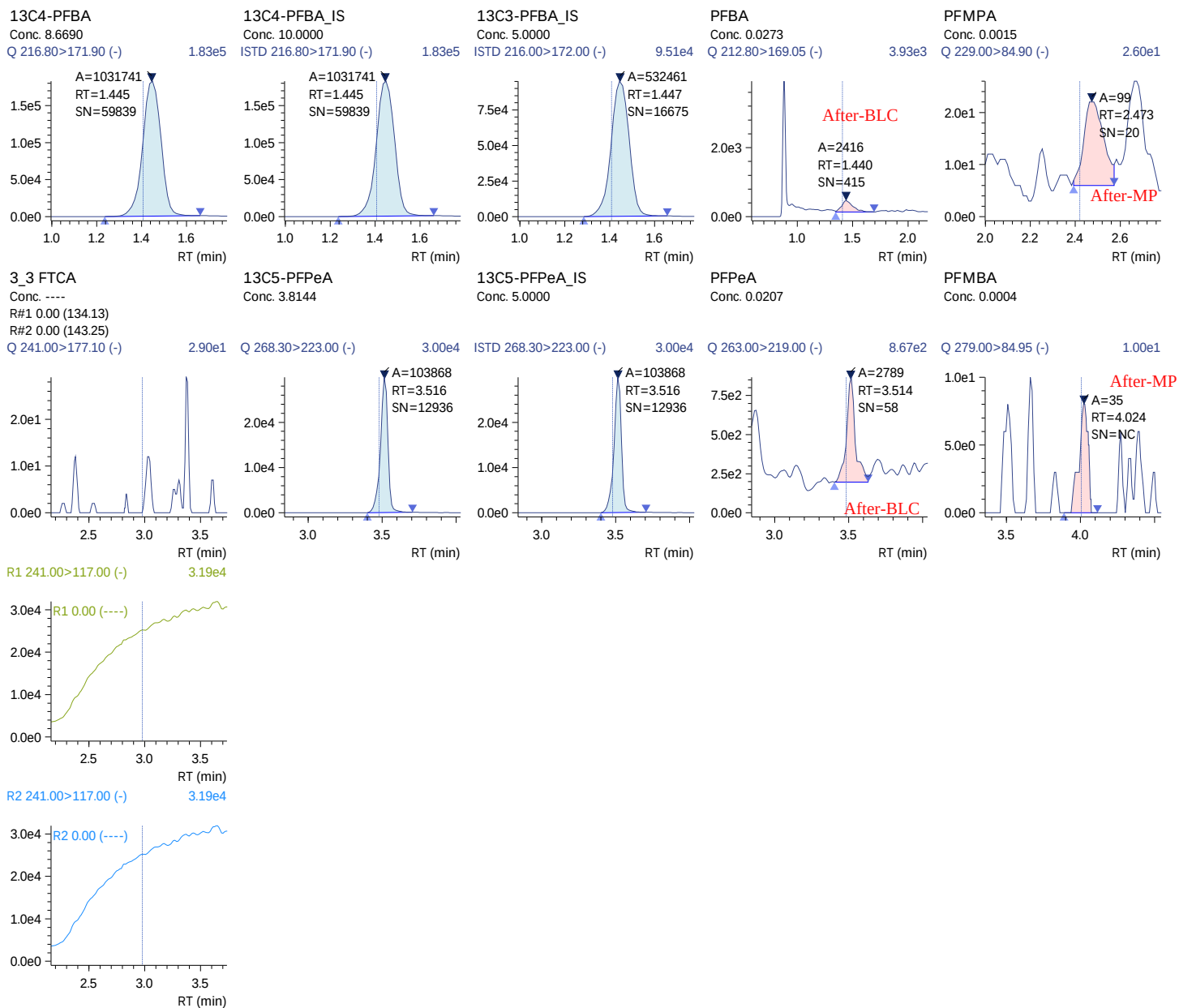
Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C2-PFDA_IS	Auto	8.722	0.007	----	201906	201906	----	1.2500	ng/mL	
PFDA	M	8.719	0.003	-0.003	4093	159888	13C6-PFDA_IS	0.0014	ng/mL	
D3-NMeFOSAA_IS	Auto	8.859	0.011	----	178397	178397	----	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.859	0.011	0.038	178397	250914	13C4-PFOS_IS	4.0965	ng/mL	
13C8-PFOS_IS	Auto	8.821	0.010	----	81770	81770	----	2.5000	ng/mL	
13C8-PFOS	Auto	8.821	0.010	0.000	81770	250914	13C4-PFOS_IS	1.9541	ng/mL	
13C4-PFOS_IS	Auto	8.821	0.010	----	250914	250914	----	2.5000	ng/mL	
PFOS	M	8.819	0.006	-0.002	2061	81770	13C8-PFOS_IS	0.0242	ng/mL	
NMeFOSAA	ND(W/B)	----	----	----	----	178397	D3-NMeFOSAA_IS	----	ng/mL	
D5-NetFOSAA_IS	Auto	9.191	0.013	----	209494	209494	----	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.191	0.013	0.370	209494	250914	13C4-PFOS_IS	4.0210	ng/mL	
NetFOSAA	ND(W/B)	----	----	----	----	209494	D5-NetFOSAA_IS	----	ng/mL	
9-CI-PF3ONS	ND(W/B)	----	----	----	----	505668	13C3-HFPO-DA_IS	----	ng/mL	
PFUnDA	M	9.446	0.006	0.000	2975	197180	13C7-PFUnDA_IS	-0.0089	ng/mL	
13C7-PFUnDA_IS	Auto	9.446	0.008	----	197180	197180	----	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.446	0.008	0.724	197180	201906	13C2-PFDA_IS	1.0176	ng/mL	
PFNS	ND(W/B)	----	----	----	----	81770	13C8-PFOS_IS	----	ng/mL	
10_2_FTS	ND(W/B)	----	----	----	----	106331	13C2-8_2-FTS_IS	----	ng/mL	
13C2-PFDOA_IS	Auto	10.133	0.006	----	206288	206288	----	1.2500	ng/mL	
13C2-PFDOA	Auto	10.133	0.006	1.411	206288	201906	13C2-PFDA_IS	0.9267	ng/mL	
PFDOA	M	10.133	0.005	0.000	2636	206288	13C2-PFDOA_IS	-0.0101	ng/mL	
PFDS	ND(W/B)	----	----	----	----	81770	13C8-PFOS_IS	----	ng/mL	
PFTDA	Auto	10.786	0.000	-0.637	3087	78651	13C2-PFTDA_IS	-0.0031	ng/mL	
11-CI-PF3OUdS	ND(W/B)	----	----	----	----	505668	13C3-HFPO-DA_IS	----	ng/mL	
PFOSAm	M	11.141	-0.002	-0.009	282	180370	13C8-PFOSAm_IS	0.0047	ng/mL	
13C8-PFOSAm	Auto	11.150	0.007	2.329	180370	250914	13C4-PFOS_IS	1.6933	ng/mL	
13C8-PFOSAm_IS	Auto	11.150	0.007	----	180370	180370	----	2.5000	ng/mL	
PFTDA	M	11.421	0.001	-0.002	2067	78651	13C2-PFTDA_IS	-0.0033	ng/mL	
13C2-PFTDA	Auto	11.423	0.004	2.701	78651	201906	13C2-PFDA_IS	0.8183	ng/mL	
13C2-PFTDA_IS	Auto	11.423	0.004	----	78651	78651	----	1.2500	ng/mL	
PFDoS	ND(W/B)	----	----	----	----	81770	13C8-PFOS_IS	----	ng/mL	
D7-MeFOSE_IS	Auto	13.374	-0.007	----	488717	488717	----	25.0000	ng/mL	
D7-MeFOSE	Auto	13.374	-0.007	4.553	488717	250914	13C4-PFOS_IS	18.6095	ng/mL	
MeFOSE	ND(W/B)	----	----	----	----	488717	D7-MeFOSE_IS	----	ng/mL	
13C2-PFHXA_IS	Auto	12.639	0.003	----	319423	319423	----	2.5000	ng/mL	
13C2-PFHXA	Auto	12.639	0.003	3.917	319423	201906	13C2-PFDA_IS	1.7032	ng/mL	
PFHXA	M	12.641	0.004	0.002	2773	319423	13C2-PFHXA_IS	-0.0067	ng/mL	
D3-MeFOSA	Auto	13.683	-0.004	4.862	35497	250914	13C4-PFOS_IS	1.6548	ng/mL	
D3-MeFOSA_IS	Auto	13.683	-0.004	----	35497	35497	----	2.5000	ng/mL	
MeFOSA	ND(W/B)	----	----	----	----	35497	D3-MeFOSA_IS	----	ng/mL	
D9-EtFOSE_IS	Auto	14.005	-0.004	----	495776	495776	----	25.0000	ng/mL	
D9-EtFOSE	Auto	14.005	-0.004	5.184	495776	250914	13C4-PFOS_IS	18.5874	ng/mL	
EtFOSE	ND(W/B)	----	----	----	----	495776	D9-EtFOSE_IS	----	ng/mL	
D5-EtFOSAm	Auto	14.360	-0.005	5.539	43590	250914	13C4-PFOS_IS	1.5263	ng/mL	
D5-EtFOSAm_IS	Auto	14.360	-0.005	----	43590	43590	----	2.5000	ng/mL	
EtFOSAm	ND(W/B)	----	----	----	----	43590	D5-EtFOSAm_IS	----	ng/mL	
PFODA	M	13.773	-0.001	1.134	1104	319423	13C2-PFHXA_IS	0.0153	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_031 (continued)





240119_031 (continued)

13C2-4_2 FTS
Conc. 5.6365

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. ----
R#1 0.00 (34.14)
R#2 0.00 (31.50)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. ----
R#1 0.00 (47.53)
R#2 0.00 (48.74)

Q 329.10>80.90 (-)

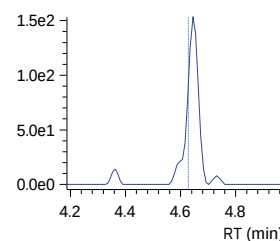
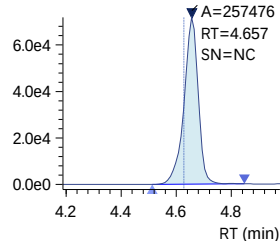
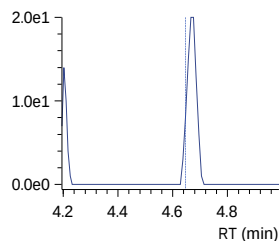
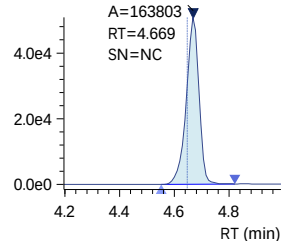
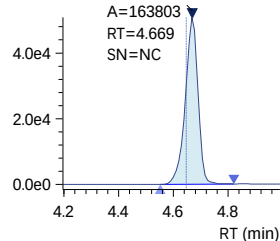
5.09e4 ISTD 329.10>80.90 (-)

5.09e4 Q 327.10>307.00 (-)

2.00e1 ISTD 302.10>79.90 (-)

7.19e4 Q 298.70>79.90 (-)

1.53e2

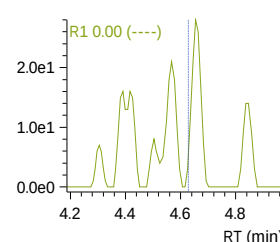
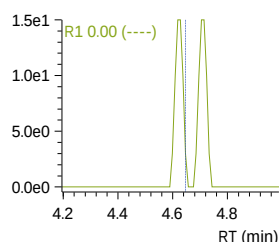


R1 327.10>80.90 (-)

1.50e1

R1 298.70>98.80 (-)

2.80e1

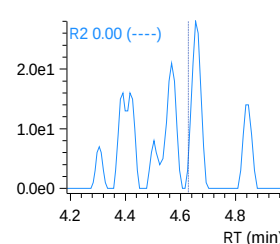
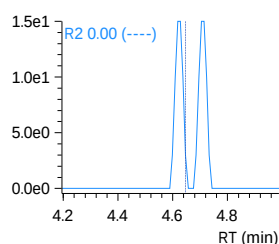


R2 327.10>80.90 (-)

1.50e1

R2 298.70>98.80 (-)

2.80e1





240119_031 (continued)

13C3-PFBS
Conc. 2.1485

NFDHA
Conc. 0.0056
R#1 39.20 (37.88)
R#2 39.20 (36.97)

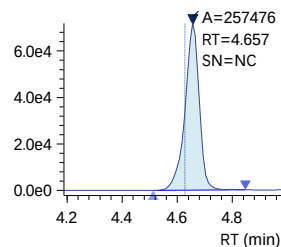
13C5-PFHxA
Conc. 2.1018

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

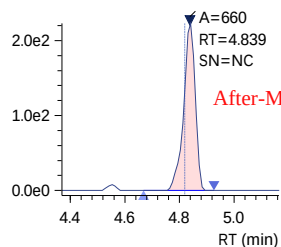
Q 302.10>79.90 (-)

7.19e4



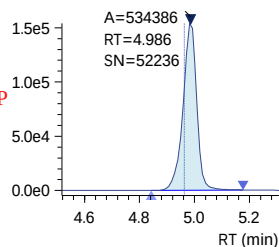
Q 295.00>201.00 (-)

2.23e2



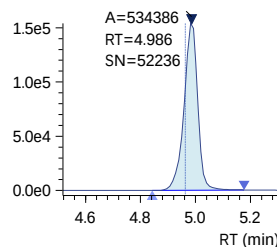
Q 318.00>273.00 (-)

1.54e5



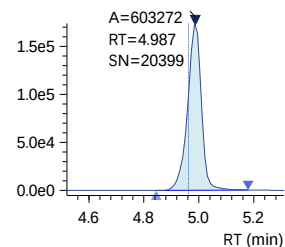
ISTD 318.00>273.00 (-)

1.54e5



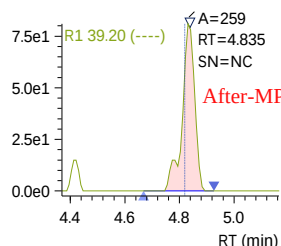
ISTD 315.10>270.00 (-)

1.74e5



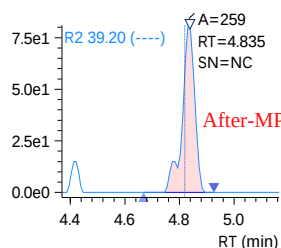
R1 295.00>84.90 (-)

8.10e1



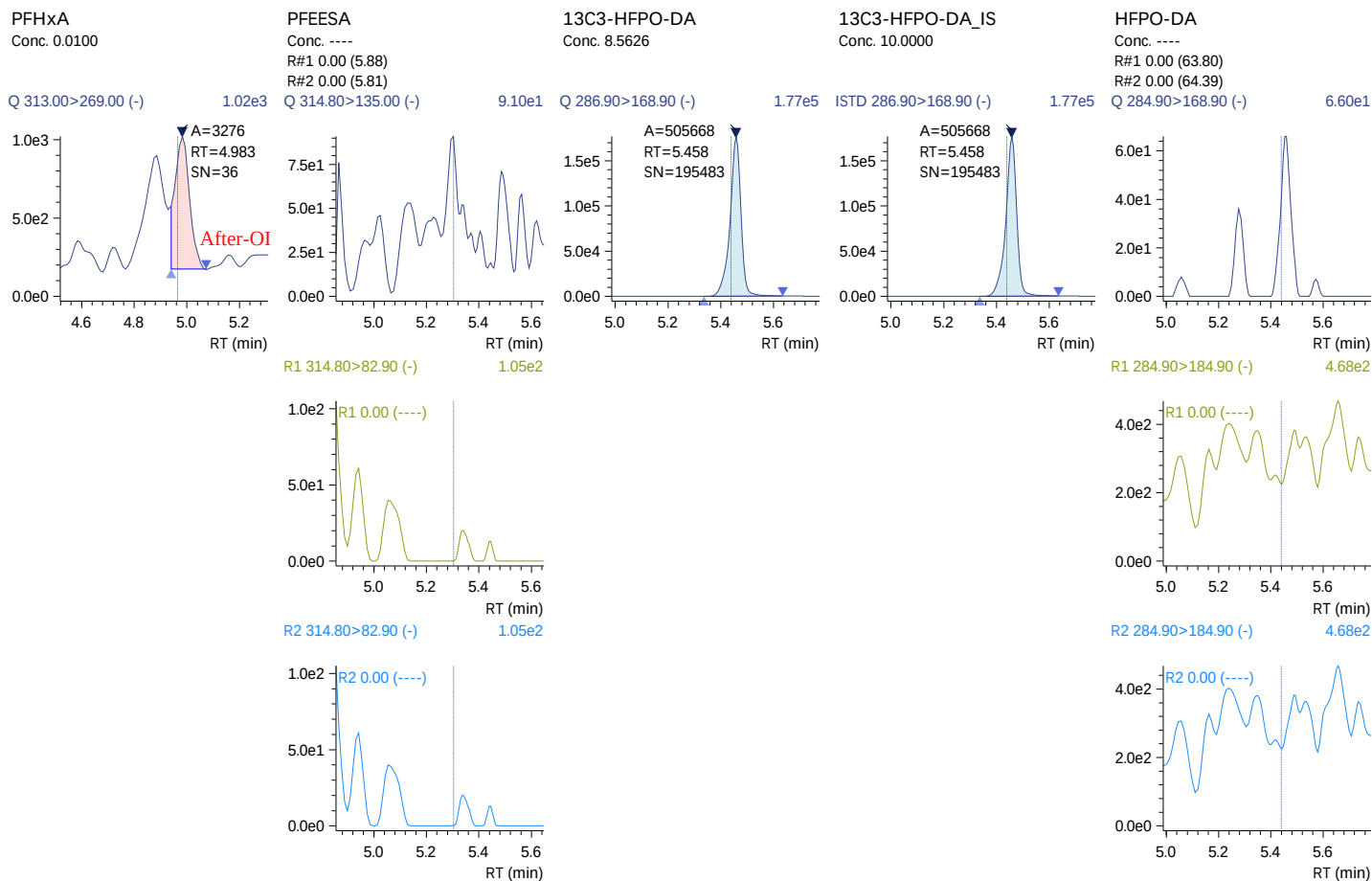
R2 295.00>84.90 (-)

8.10e1



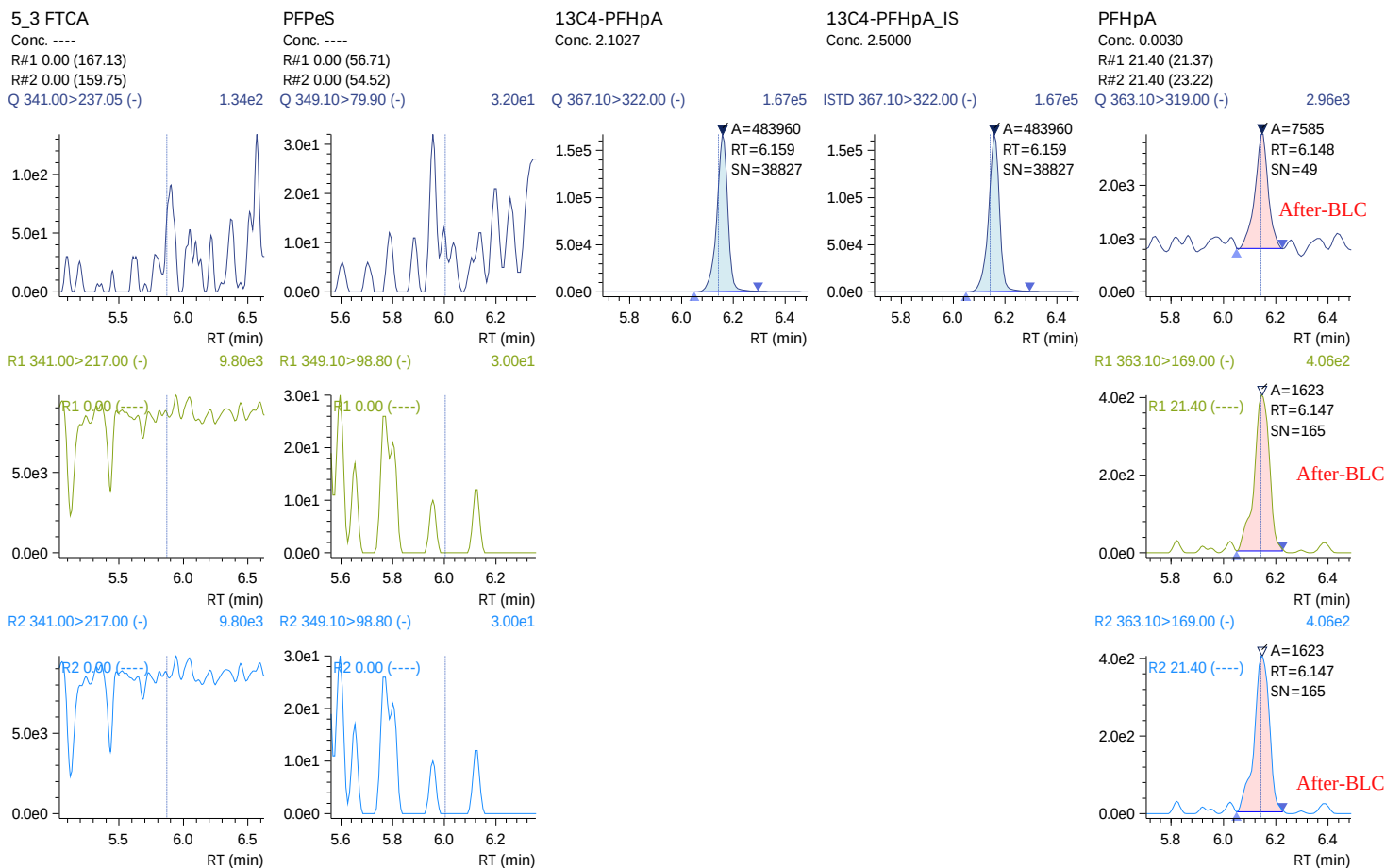


240119_031 (continued)





240119_031 (continued)

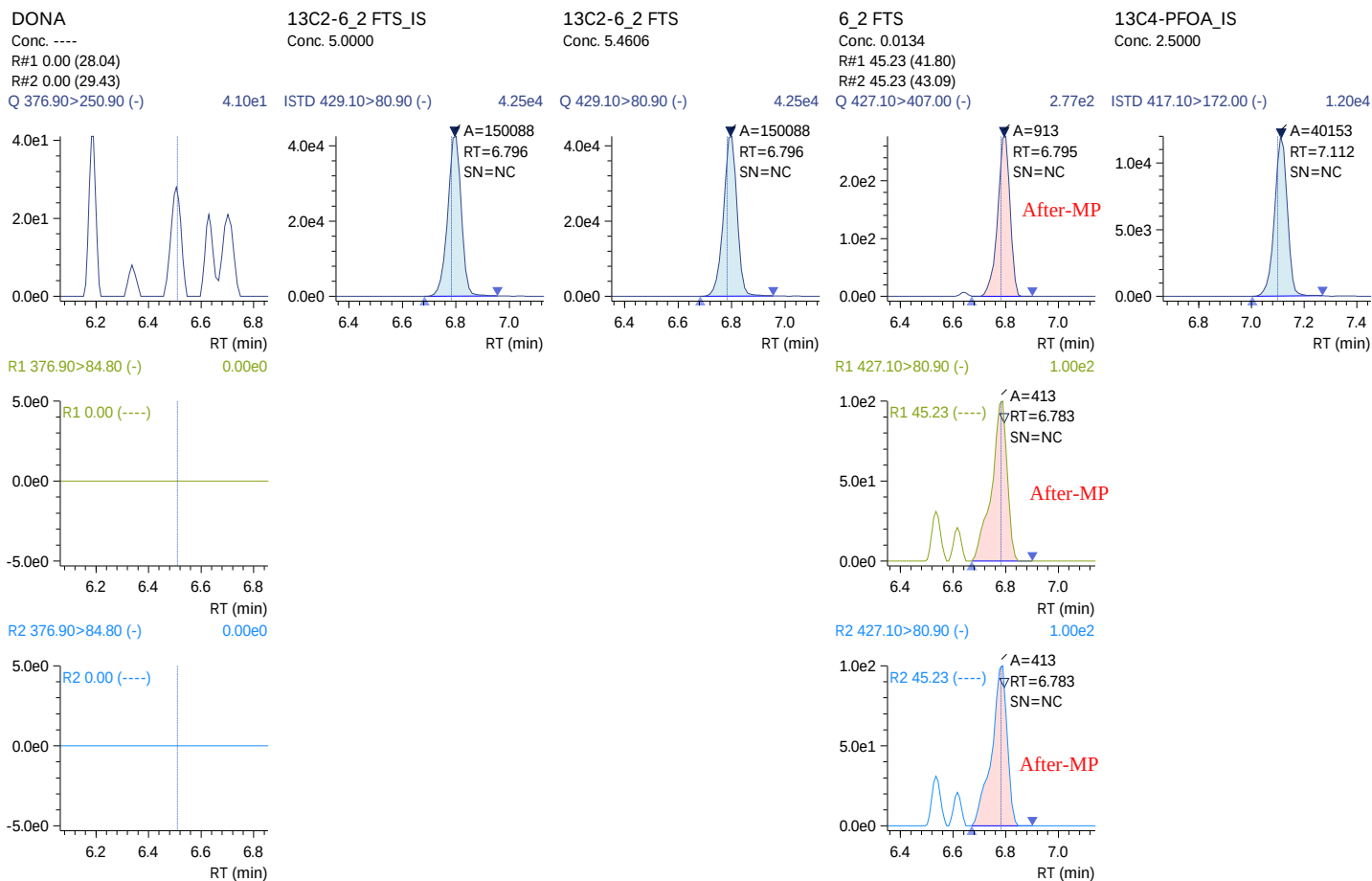


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_031 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_031 (continued)

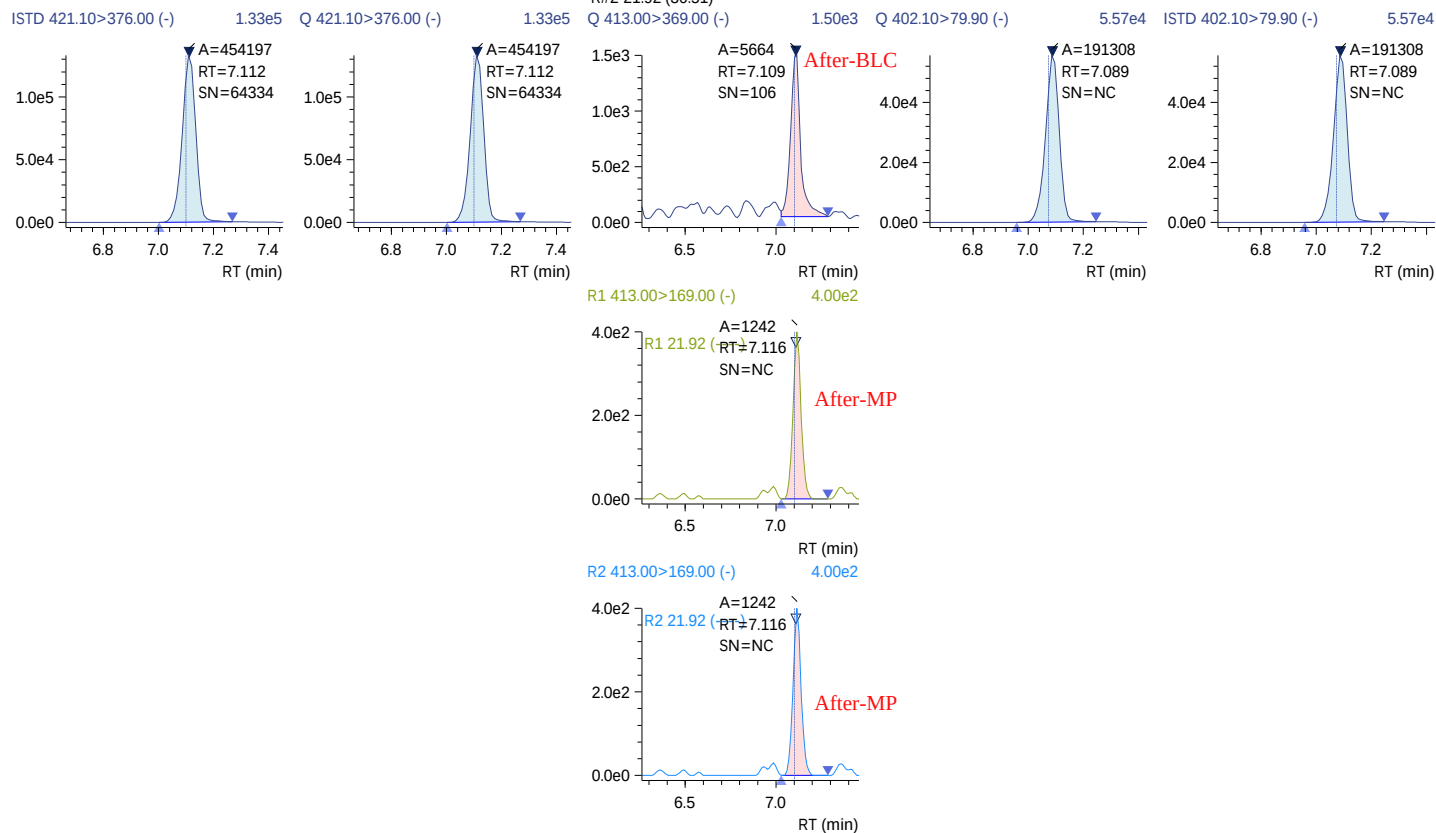
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.0238

PFOA
Conc. 0.0046
R#1 21.92 (29.05)
R#2 21.92 (30.51)

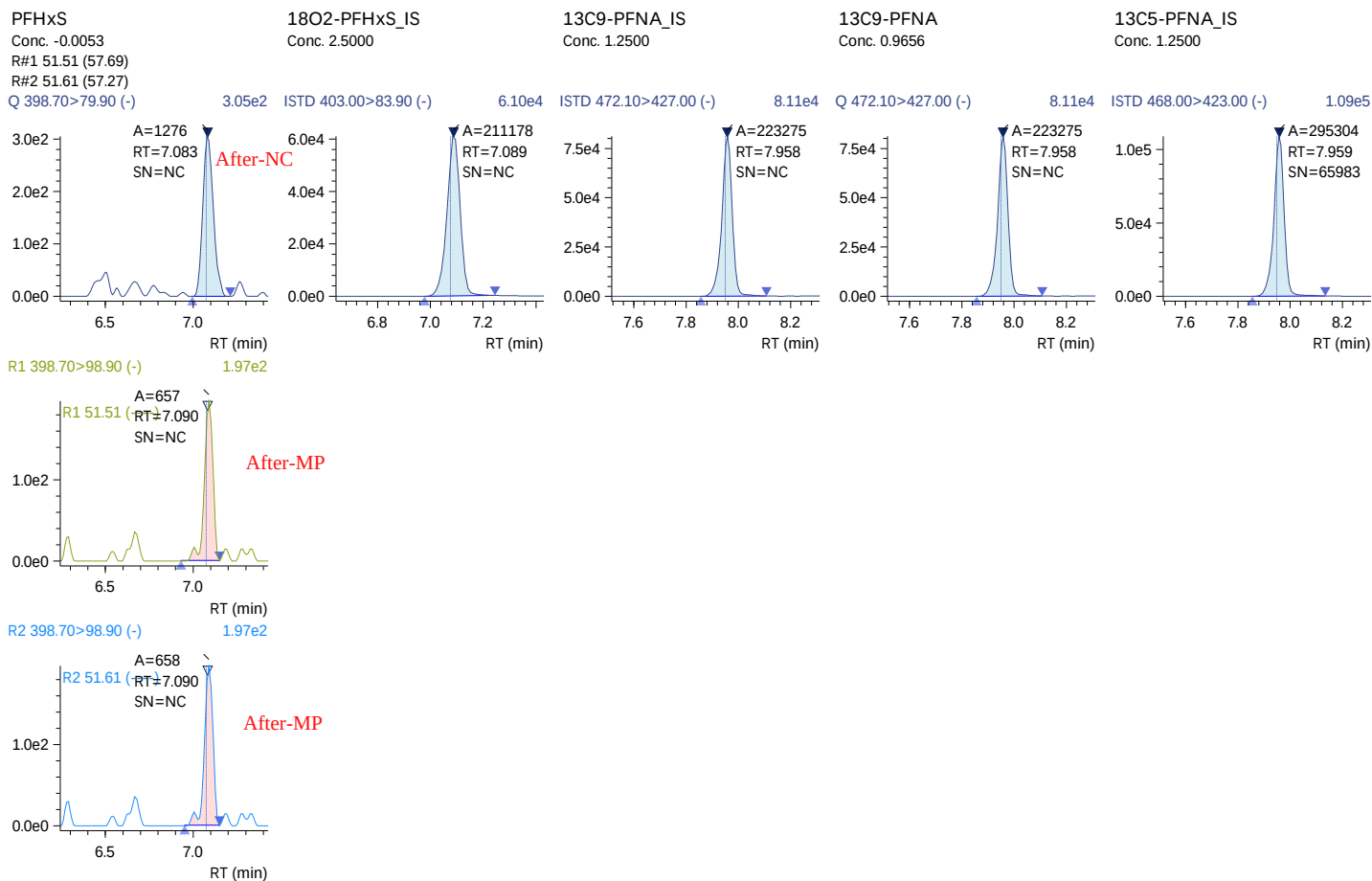
13C3-PFHxS
Conc. 2.1106

13C3-PFHxS_IS
Conc. 2.5000





240119_031 (continued)

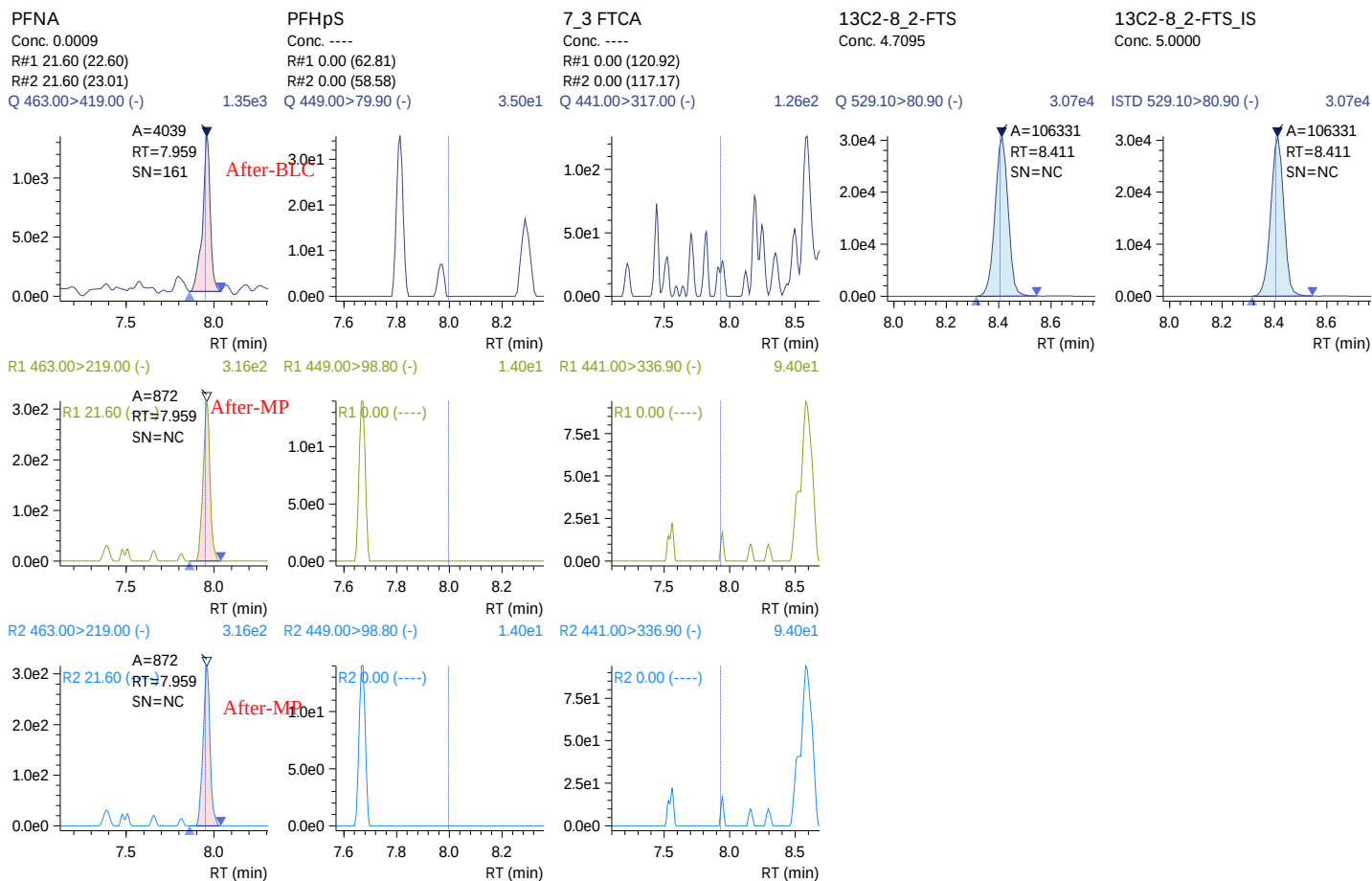


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_031 (continued)

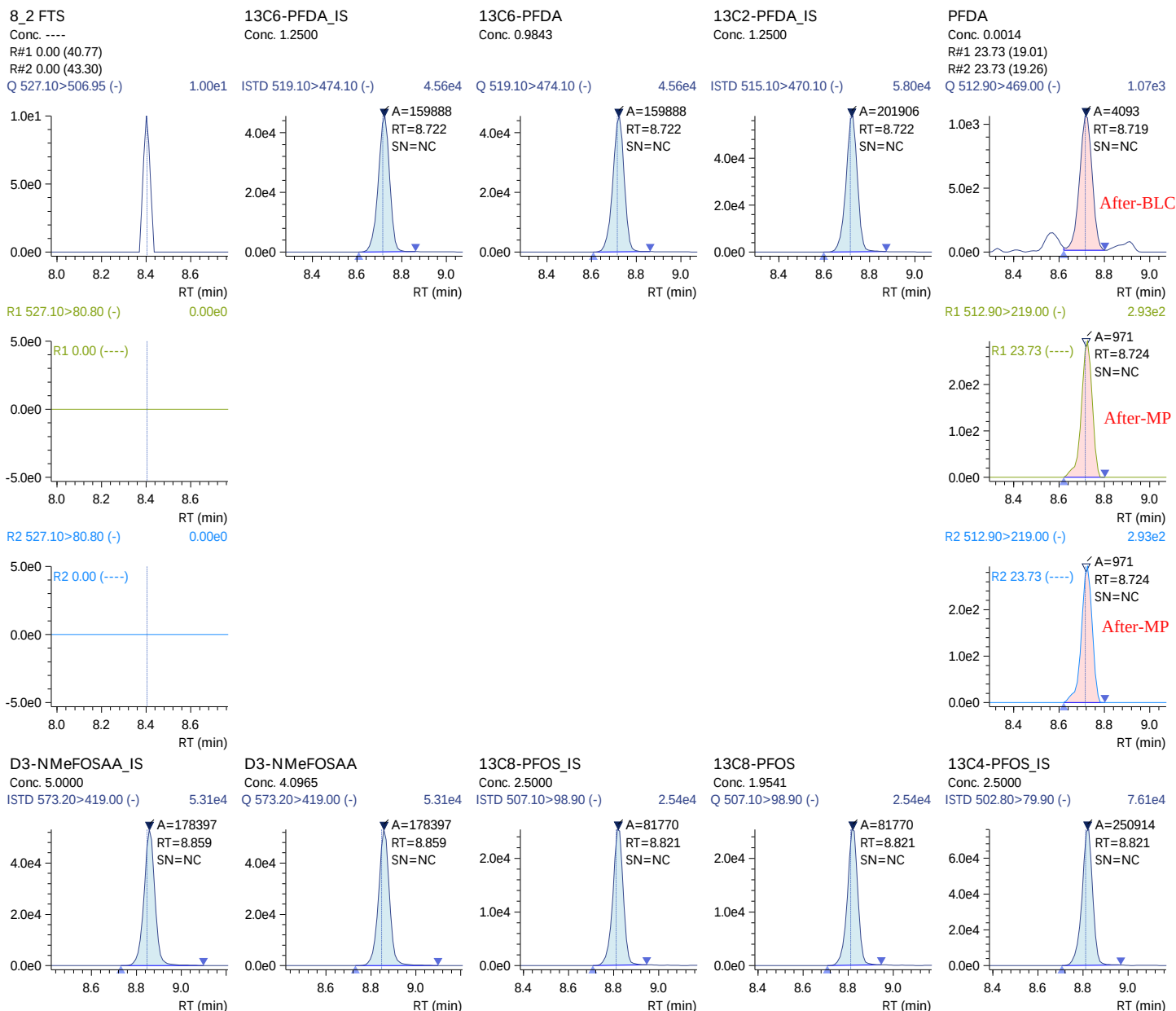


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_031 (continued)

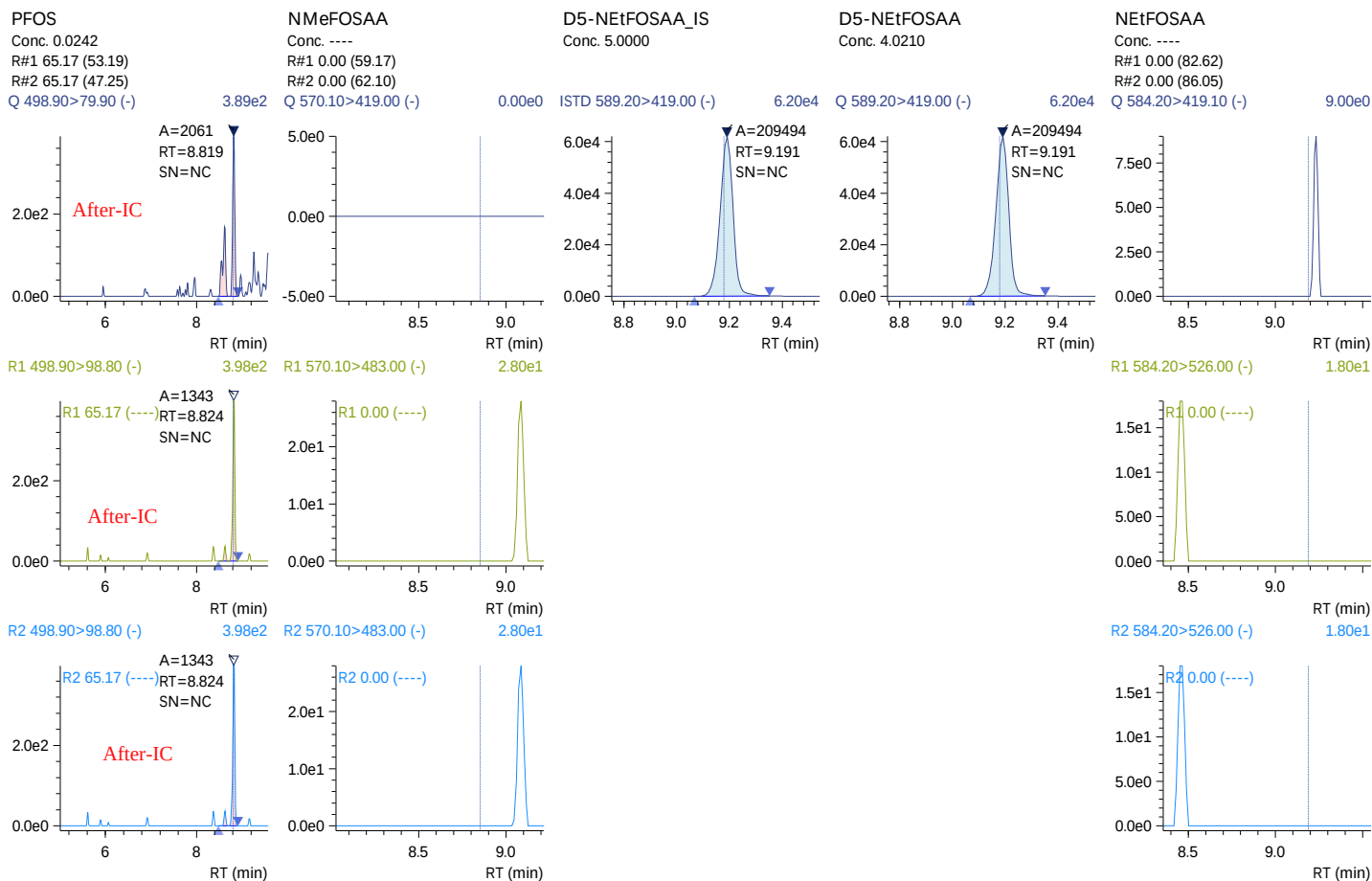


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_031 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_031 (continued)

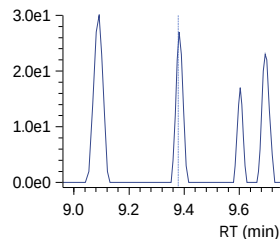
9-Cl-PF3ONS

Conc. ----

R#1 0.00 (31.76)

R#2 0.00 (31.74)

Q 530.80>351.00 (-)



R1 532.80>353.00 (-)

1.15e2

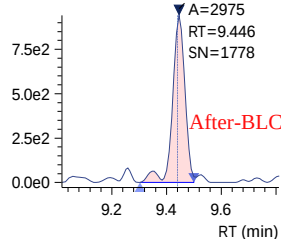
PFUnDA

Conc. -0.0089

R#1 14.05 (12.31)

R#2 14.05 (13.26)

Q 563.10>519.00 (-)



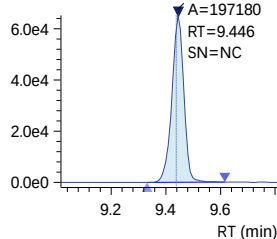
R1 563.10>269.10 (-)

1.31e2

13C7-PFUnDA_IS

Conc. 1.2500

ISTD 570.00>525.10 (-)

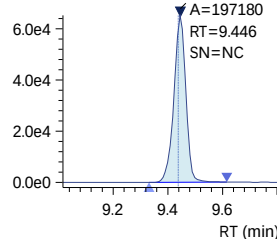


6.52e4

13C7-PFUnDA

Conc. 1.0176

Q 570.00>525.10 (-)



6.52e4

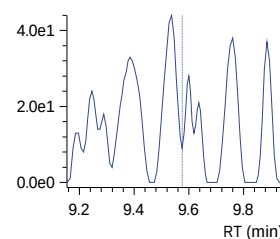
PFNS

Conc. ----

R#1 0.00 (63.31)

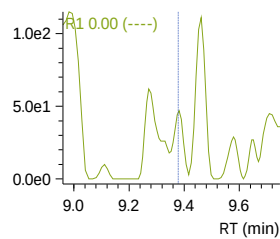
R#2 0.00 (62.49)

Q 548.80>79.90 (-)



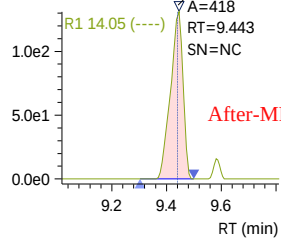
R1 548.80>98.80 (-)

3.70e1



R2 532.80>353.00 (-)

1.15e2



R2 563.10>269.10 (-)

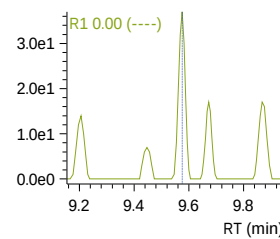
1.31e2



6.52e4

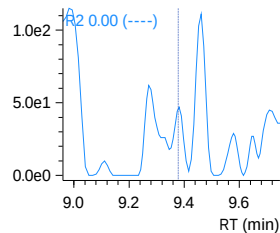


6.52e4



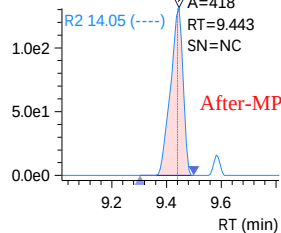
R2 548.80>98.80 (-)

3.70e1



R2 532.80>353.00 (-)

1.15e2



R2 563.10>269.10 (-)

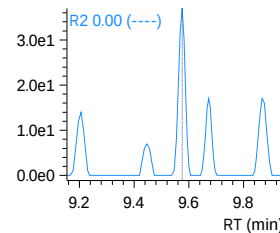
1.31e2



6.52e4



6.52e4

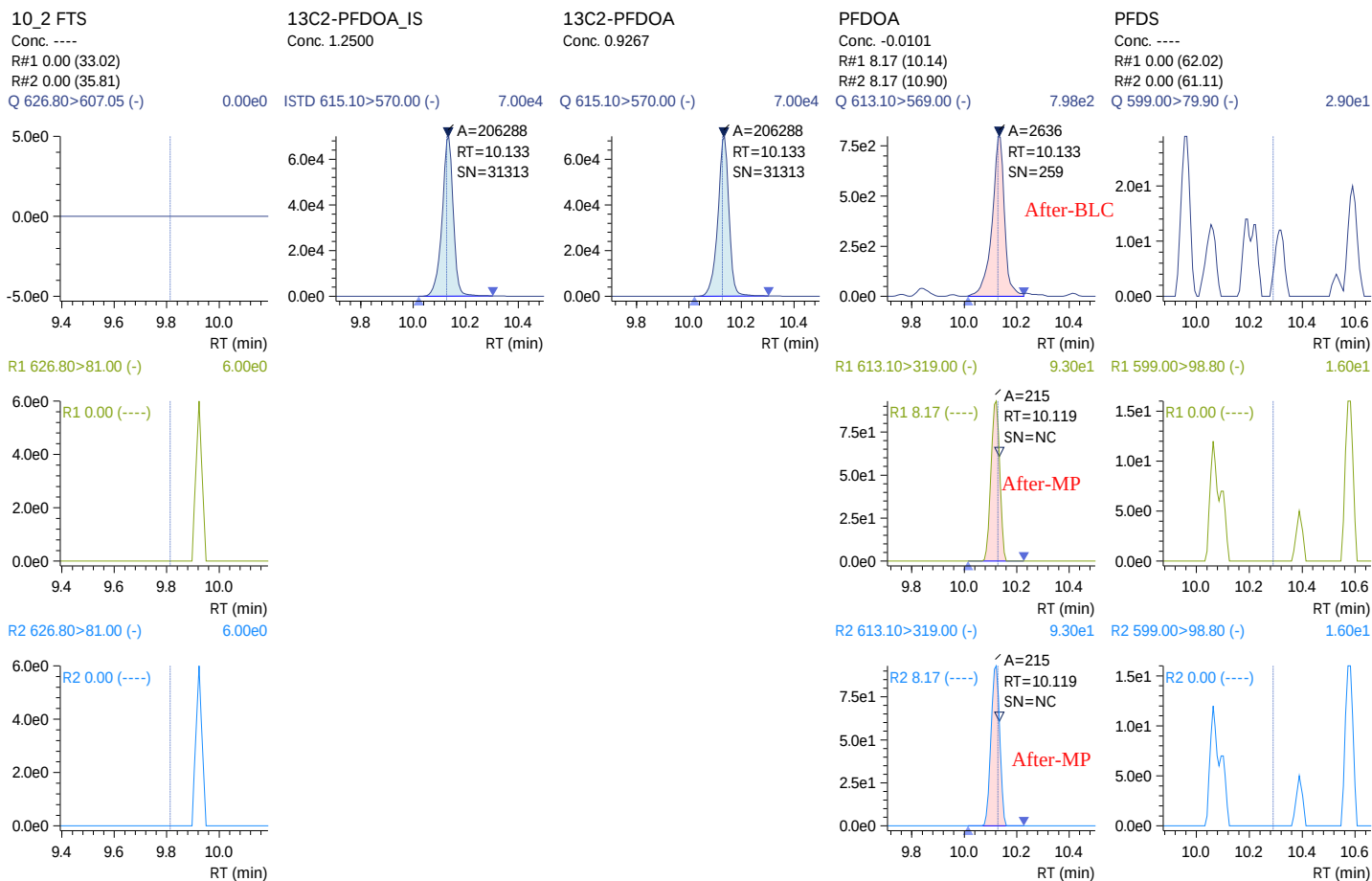


R2 548.80>98.80 (-)

3.70e1



240119_031 (continued)

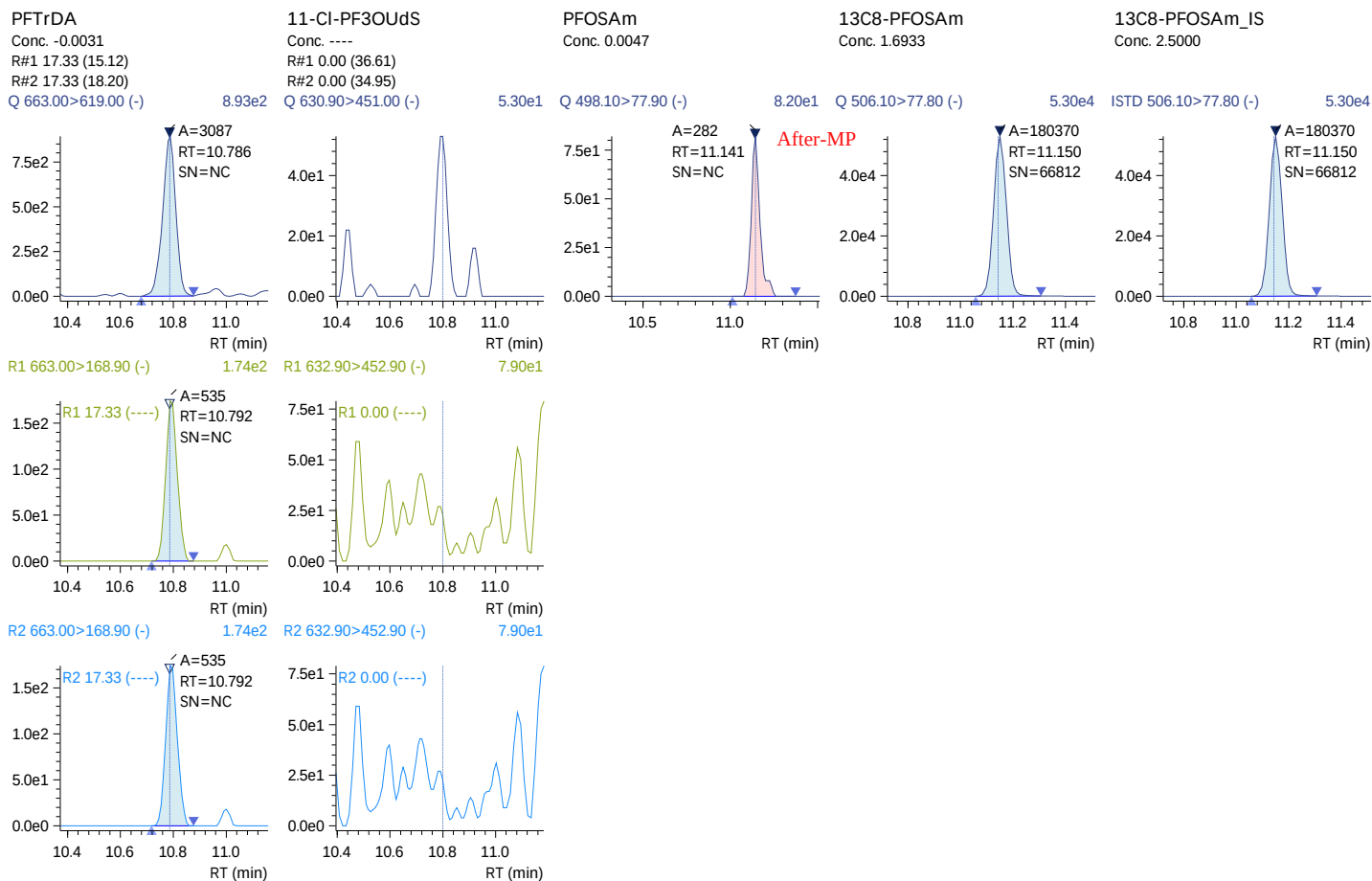


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.

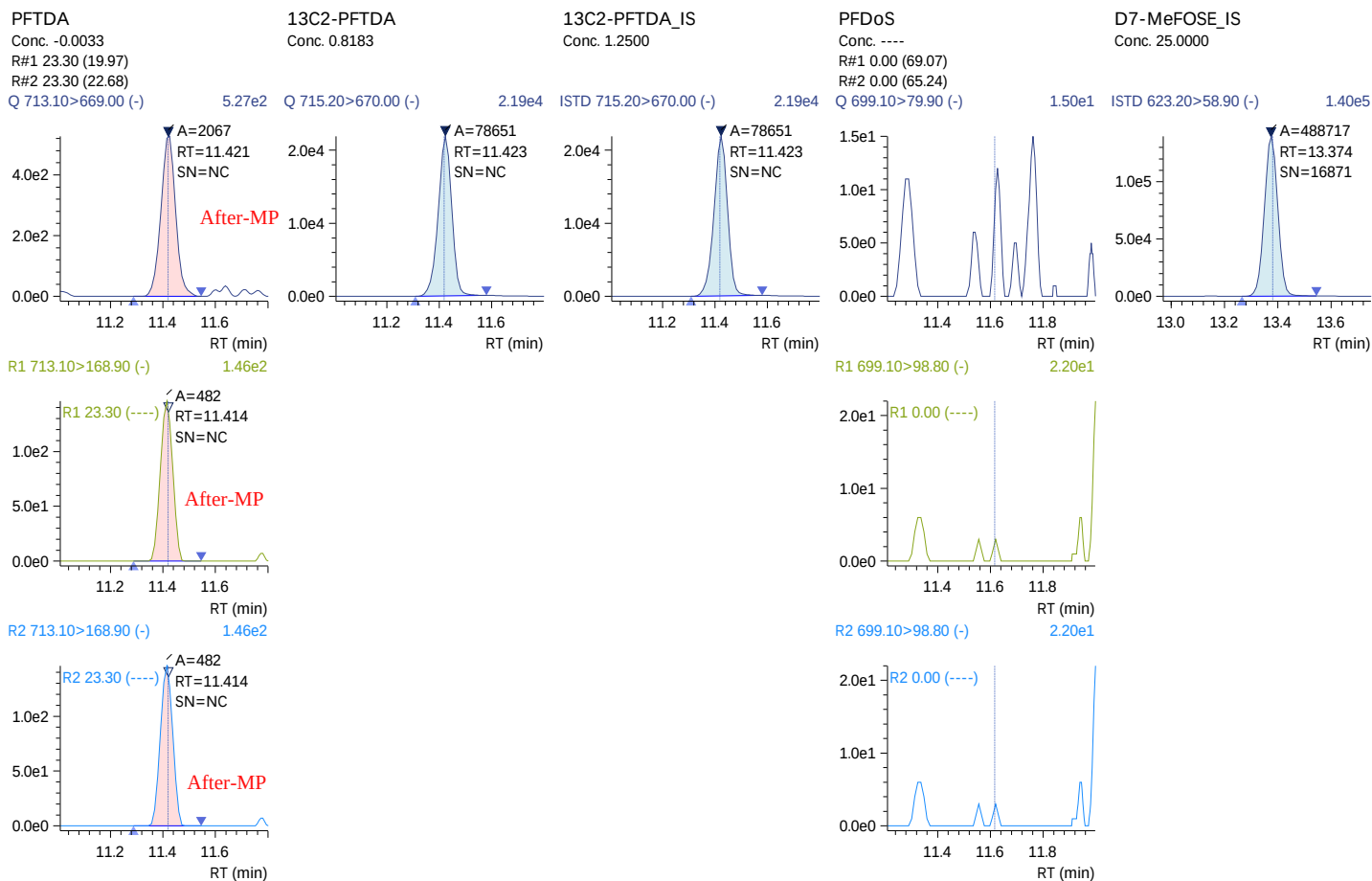


240119_031 (continued)





240119_031 (continued)





240119_031 (continued)

D7-MeFOSE
Conc. 18.6095

MeFOSE
Conc. ----

13C2-PFHXA_IS
Conc. 2.5000

13C2-PFHXA
Conc. 1.7032

PFHXA

Conc. -0.0067
R#1 9.08 (11.64)
R#2 9.08 (14.51)

Q 623.20>58.90 (-)

1.40e5

Q 616.10>59.00 (-)

5.40e1

ISTD 815.00>770.05 (-)

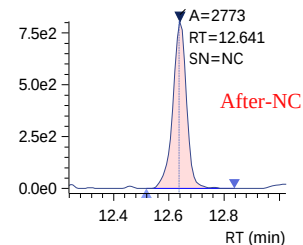
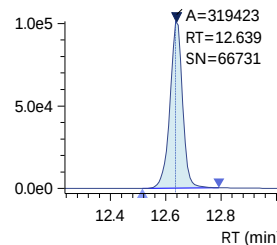
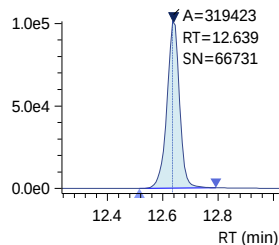
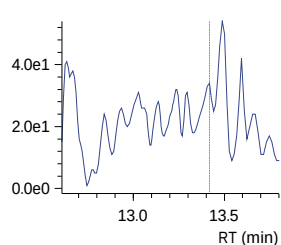
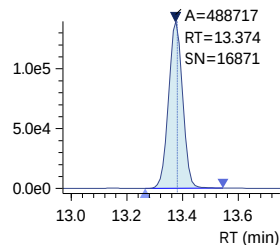
1.01e5

Q 815.00>770.05 (-)

1.01e5

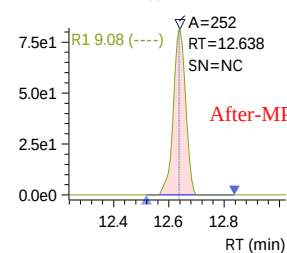
Q 813.00>768.95 (-)

8.06e2



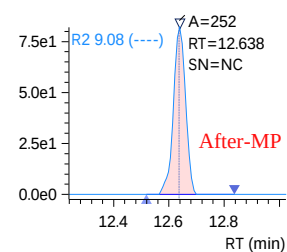
R1 813.00>218.95 (-)

8.20e1



R2 813.00>218.95 (-)

8.20e1





240119_031 (continued)

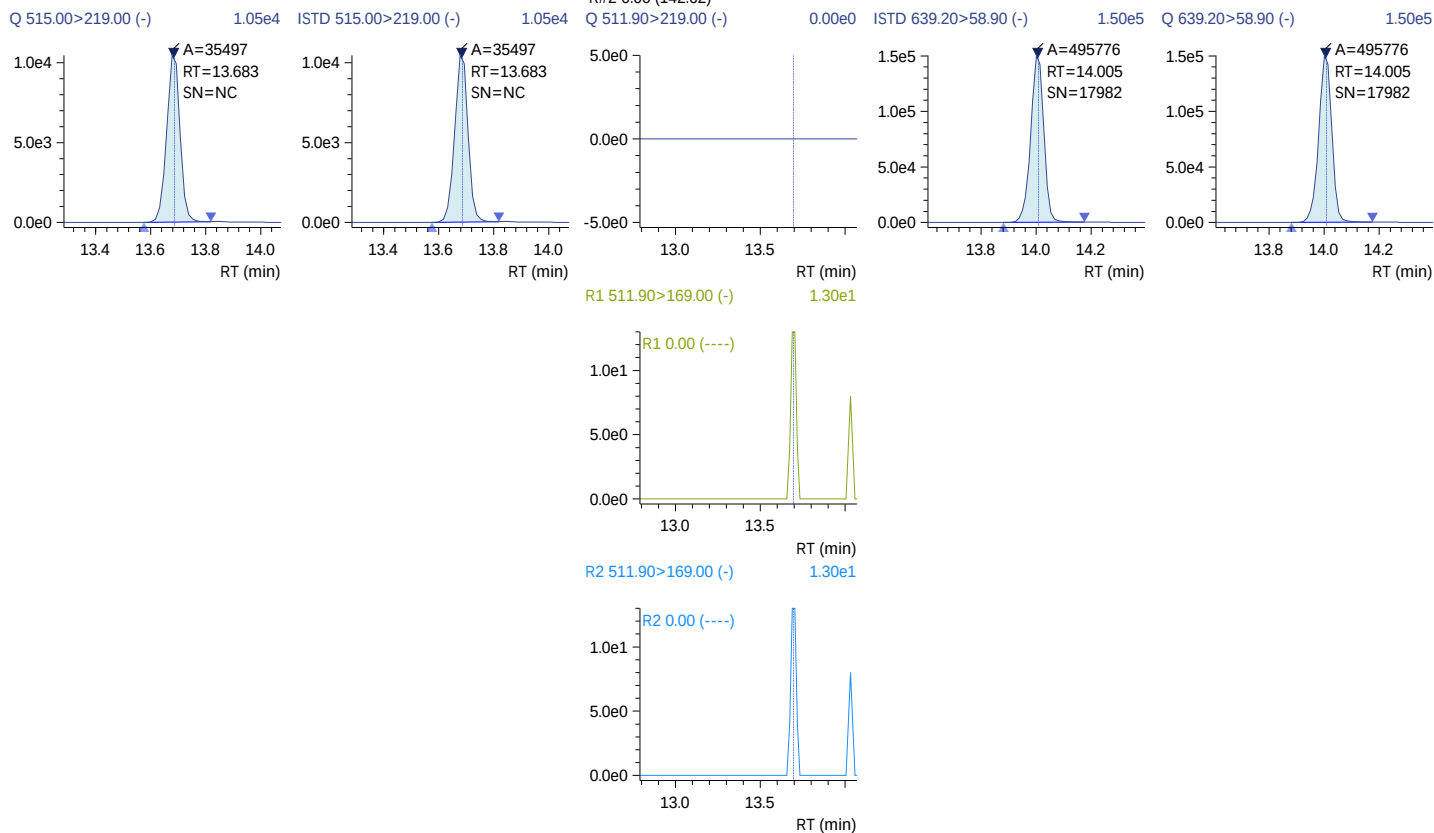
D3-MeFOSA
Conc. 1.6548

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. ----
R#1 0.00 (149.05)
R#2 0.00 (142.62)

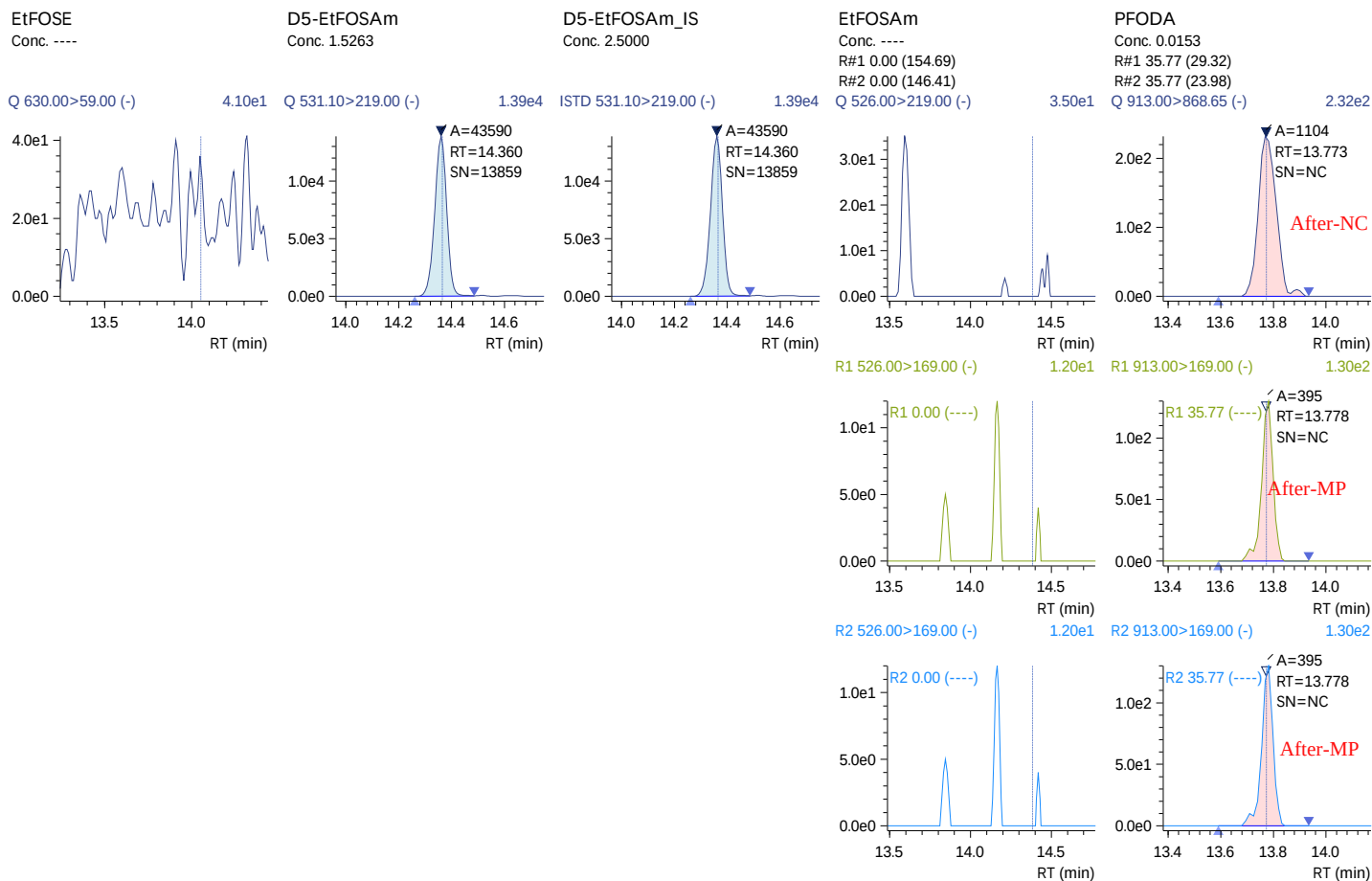
D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 18.5874





240119_031 (continued)



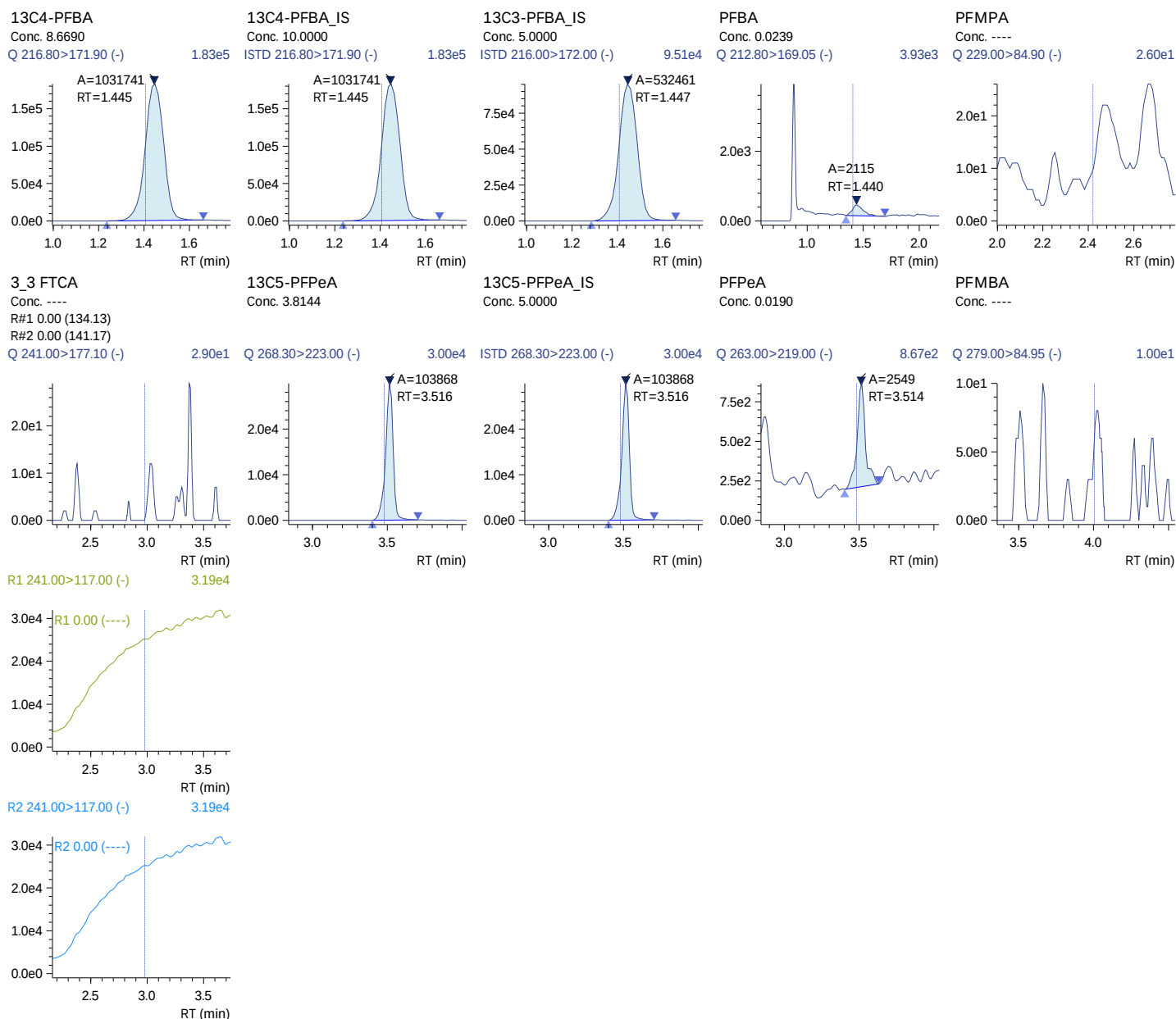
J:\LCMS08\Data\240119_1633_B1\240119_1633_B1.dampl

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_031

Sample ID: K2314283-002
Date Acquired: 1/19/2024 11:26:16 PM
Acquired by: System Administrator
Data File: 240119_031
Vial: 13 | Inj. Volume: 10.0000uL | Tray: 2





240119_031 (continued)

13C2-4_2 FTS
 Conc. 5.6365

13C2-4_2 FTS_IS
 Conc. 5.0000

4_2 FTS
 Conc. ----
 R#1 0.00 (34.14)
 R#2 0.00 (29.06)

13C3-PFBS_IS
 Conc. 2.5000

PFBS
 Conc. ----
 R#1 0.00 (47.53)
 R#2 0.00 (46.72)

Q 329.10>80.90 (-)

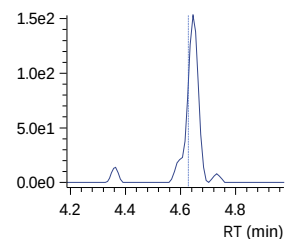
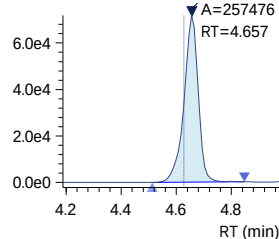
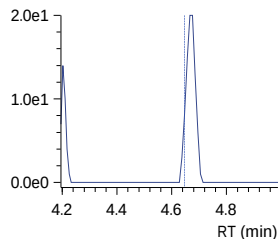
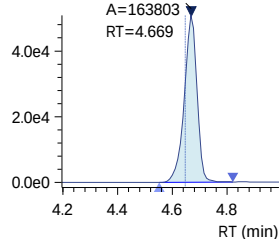
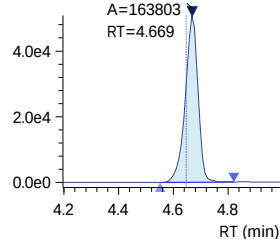
5.09e4 ISTD 329.10>80.90 (-)

5.09e4 Q 327.10>307.00 (-)

2.00e1 ISTD 302.10>79.90 (-)

7.19e4 Q 298.70>79.90 (-)

1.53e2

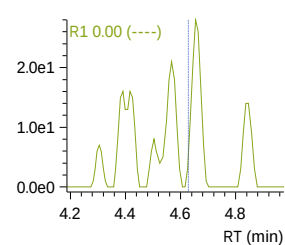
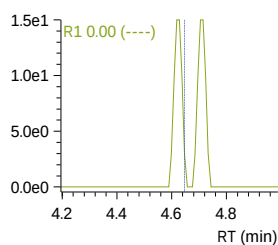


R1 327.10>80.90 (-)

1.50e1

R1 298.70>98.80 (-)

2.80e1

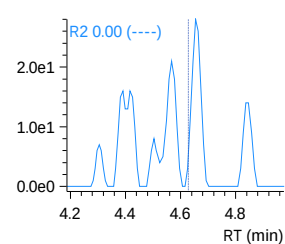
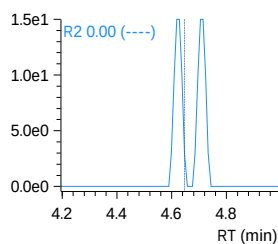


R2 327.10>80.90 (-)

1.50e1

R2 298.70>98.80 (-)

2.80e1





240119_031 (continued)

13C3-PFBS
Conc. 2.1485

NFDHA
Conc. ----
R#1 0.00 (37.88)
R#2 0.00 (40.25)

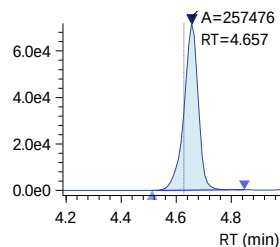
13C5-PFHxA
Conc. 2.1018

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

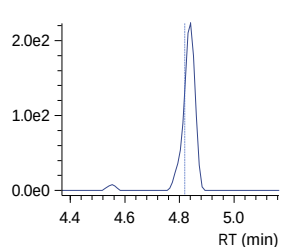
Q 302.10>79.90 (-)

7.19e4



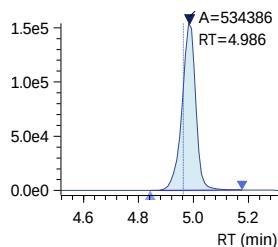
Q 295.00>201.00 (-)

2.23e2



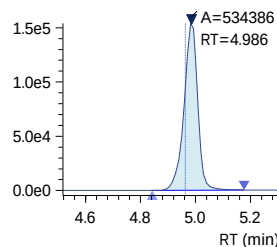
Q 318.00>273.00 (-)

1.54e5



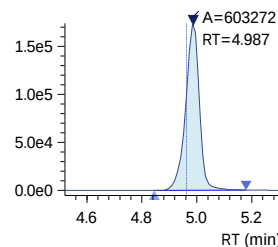
ISTD 318.00>273.00 (-)

1.54e5



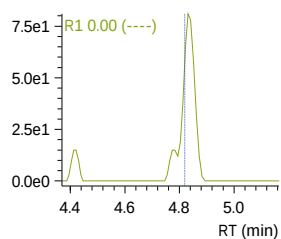
ISTD 315.10>270.00 (-)

1.74e5



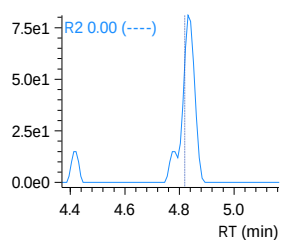
R1 295.00>84.90 (-)

8.10e1



R2 295.00>84.90 (-)

8.10e1





240119_031 (continued)

PFHxA
Conc. 0.0324

PFEESA
Conc. ----
R#1 0.00 (5.88)
R#2 0.00 (6.11)

13C3-HFPO-DA
Conc. 8.5626

13C3-HFPO-DA_IS
Conc. 10.0000

HFPO-DA
Conc. ----
R#1 0.00 (63.80)
R#2 0.00 (65.61)

Q 313.00>269.00 (-)

1.02e3

Q 314.80>135.00 (-)

9.10e1

Q 286.90>168.90 (-)

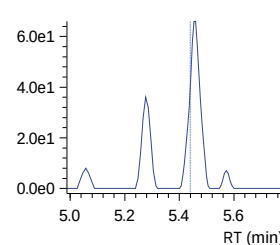
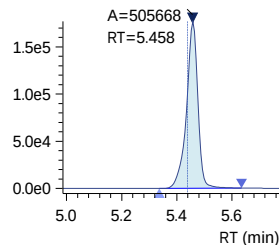
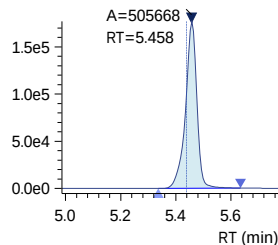
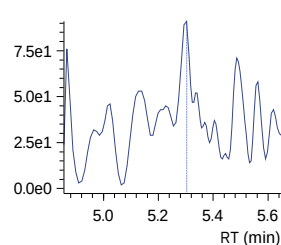
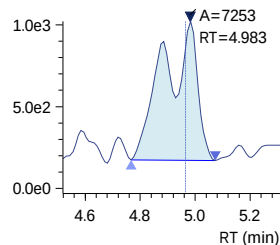
1.77e5

ISTD 286.90>168.90 (-)

1.77e5

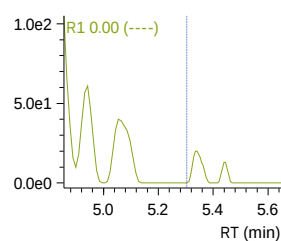
Q 284.90>168.90 (-)

6.60e1



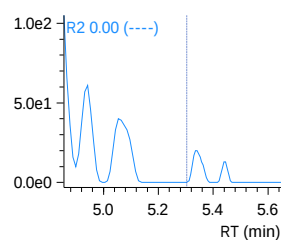
R1 314.80>82.90 (-)

1.05e2



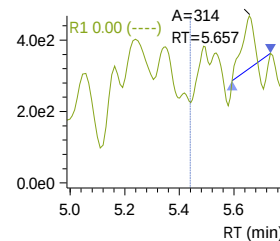
R2 314.80>82.90 (-)

1.05e2



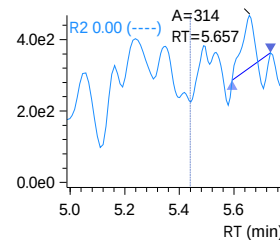
R1 284.90>184.90 (-)

4.68e2



R2 284.90>184.90 (-)

4.68e2





240119_031 (continued)

5_3 FTCA

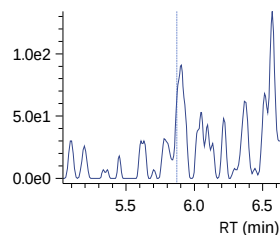
Conc. ----

R#1 0.00 (167.13)

R#2 0.00 (158.86)

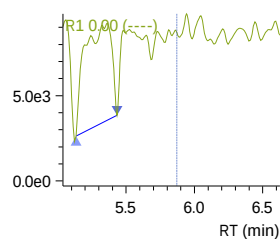
Q 341.00>237.05 (-)

1.34e2



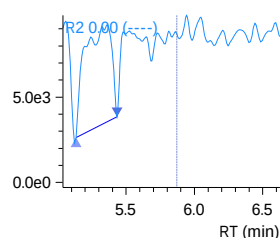
R1 341.00>217.00 (-)

9.80e3



R2 341.00>217.00 (-)

9.80e3



PFPeS

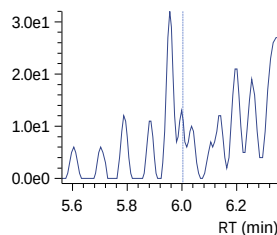
Conc. ----

R#1 0.00 (56.71)

R#2 0.00 (55.80)

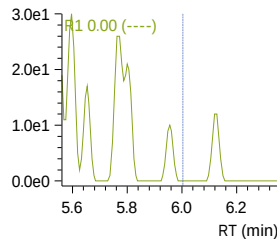
Q 349.10>79.90 (-)

3.20e1



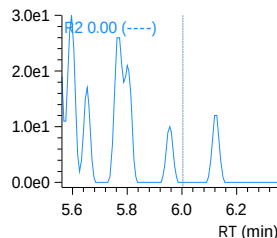
R1 349.10>98.80 (-)

3.00e1



R2 349.10>98.80 (-)

3.00e1

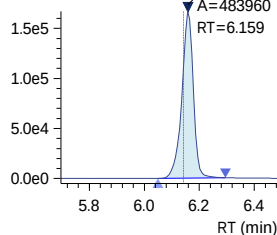


13C4-PFHpA

Conc. 2.1027

Q 367.10>322.00 (-)

1.67e5

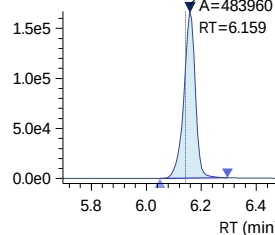


13C4-PFHpA_IS

Conc. 2.5000

ISTD 367.10>322.00 (-)

1.67e5



PFHpA

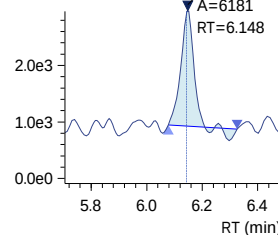
Conc. -0.0040

R#1 27.77 (21.37)

R#2 27.77 (21.50)

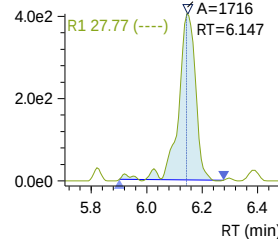
Q 363.10>319.00 (-)

2.96e3



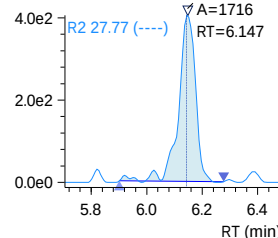
R1 363.10>169.00 (-)

4.06e2



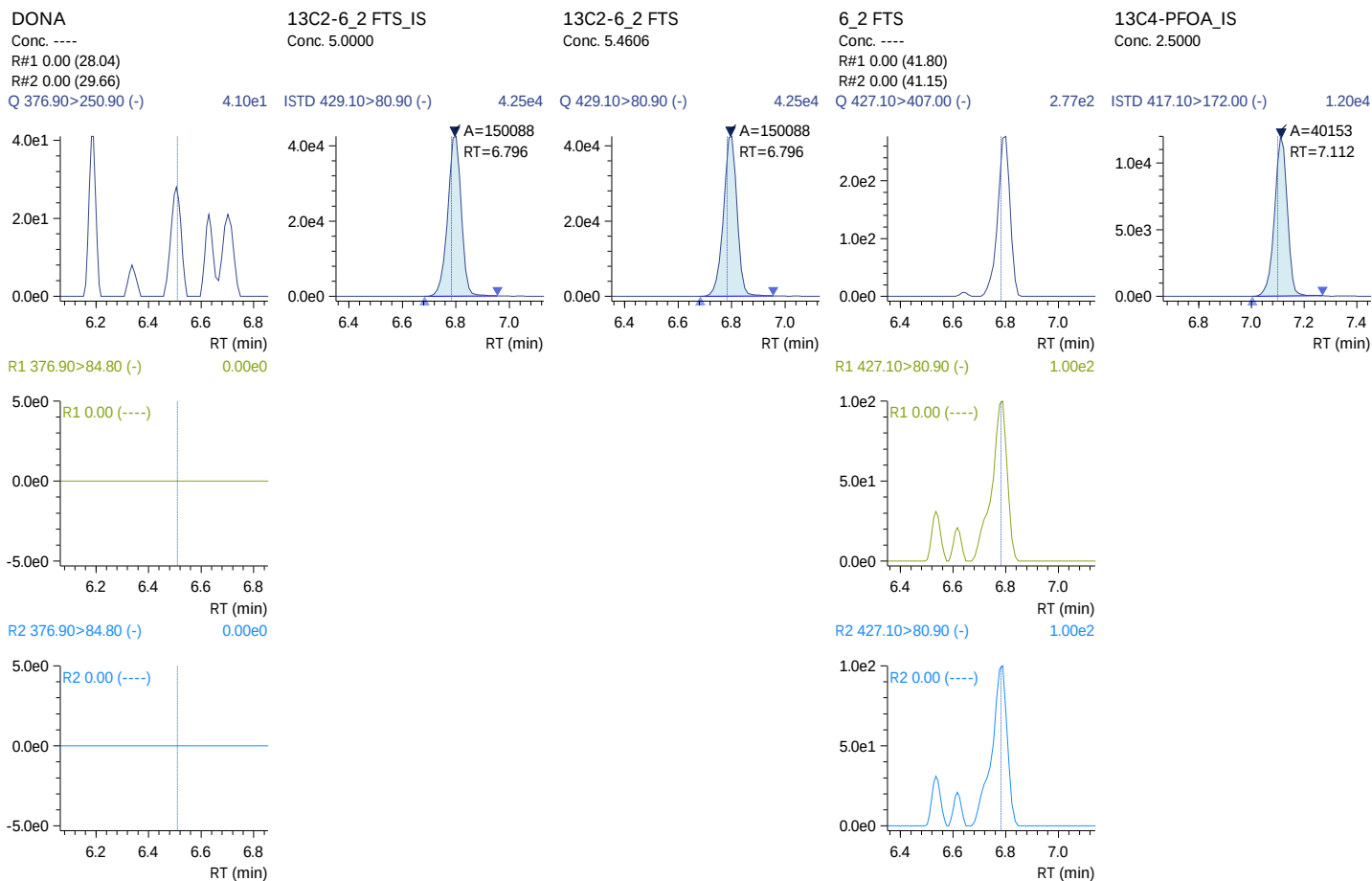
R2 363.10>169.00 (-)

4.06e2





240119_031 (continued)





240119_031 (continued)

13C8-PFOA_IS
 Conc. 2.5000

13C8-PFOA
 Conc. 2.0238

PFOA
 Conc. 0.0014
 R#1 0.00 (29.05)
 R#2 0.00 (31.89)

13C3-PFHxS
 Conc. 2.1106

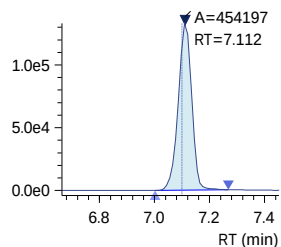
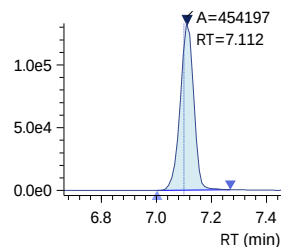
13C3-PFHxS_IS
 Conc. 2.5000

ISTD 421.10>376.00 (-)

1.33e5

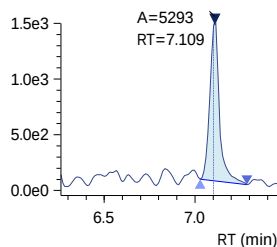
Q 421.10>376.00 (-)

1.33e5



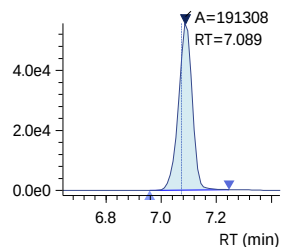
Q 413.00>369.00 (-)

1.50e3



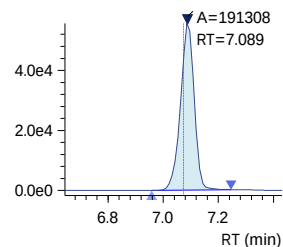
Q 402.10>79.90 (-)

5.57e4



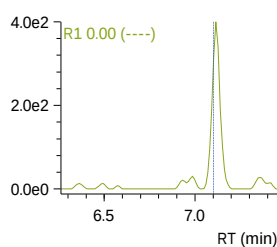
ISTD 402.10>79.90 (-)

5.57e4



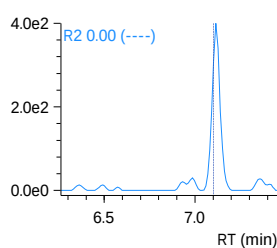
R1 413.00>169.00 (-)

4.00e2



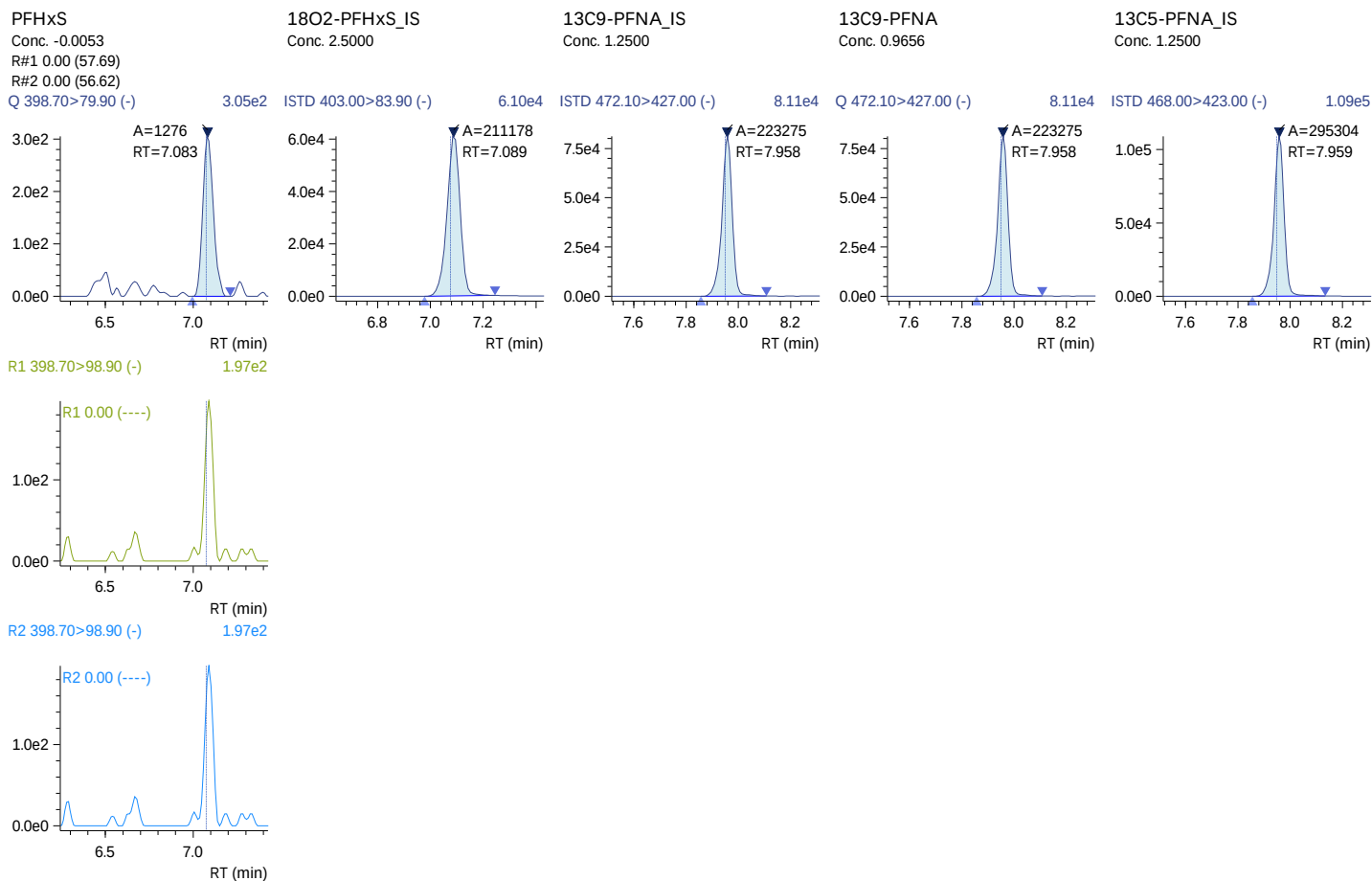
R2 413.00>169.00 (-)

4.00e2



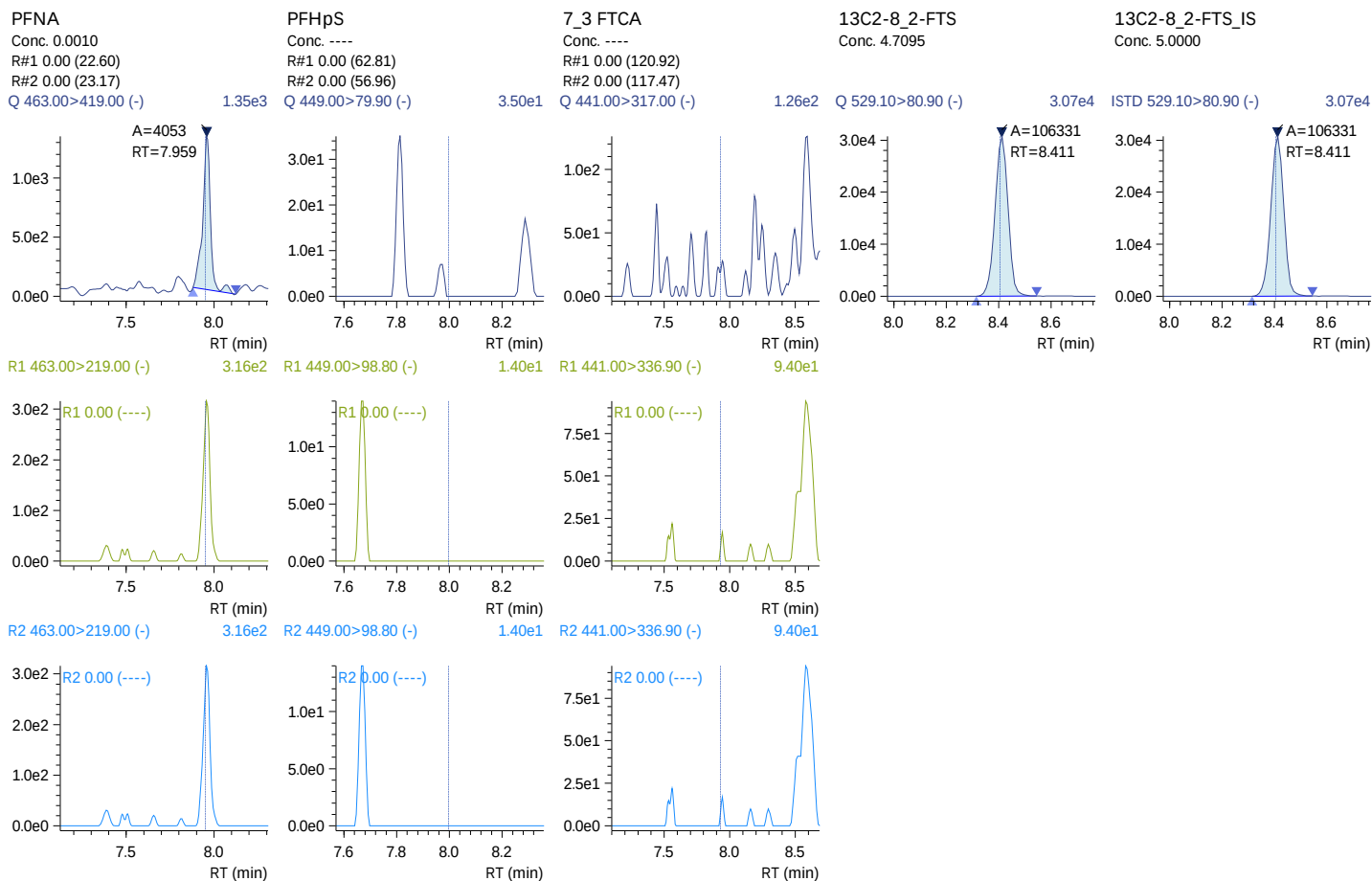


240119_031 (continued)



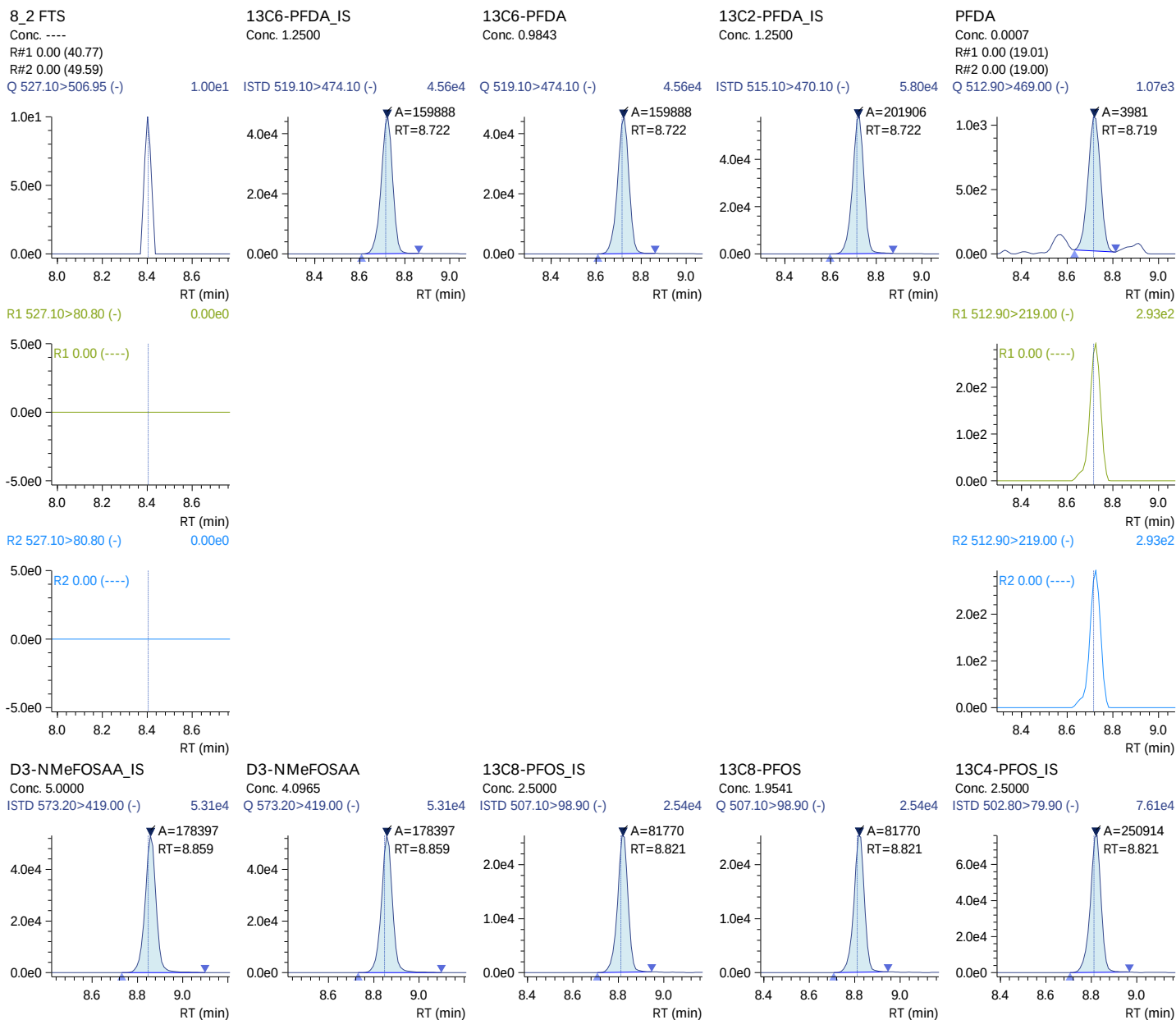


240119_031 (continued)



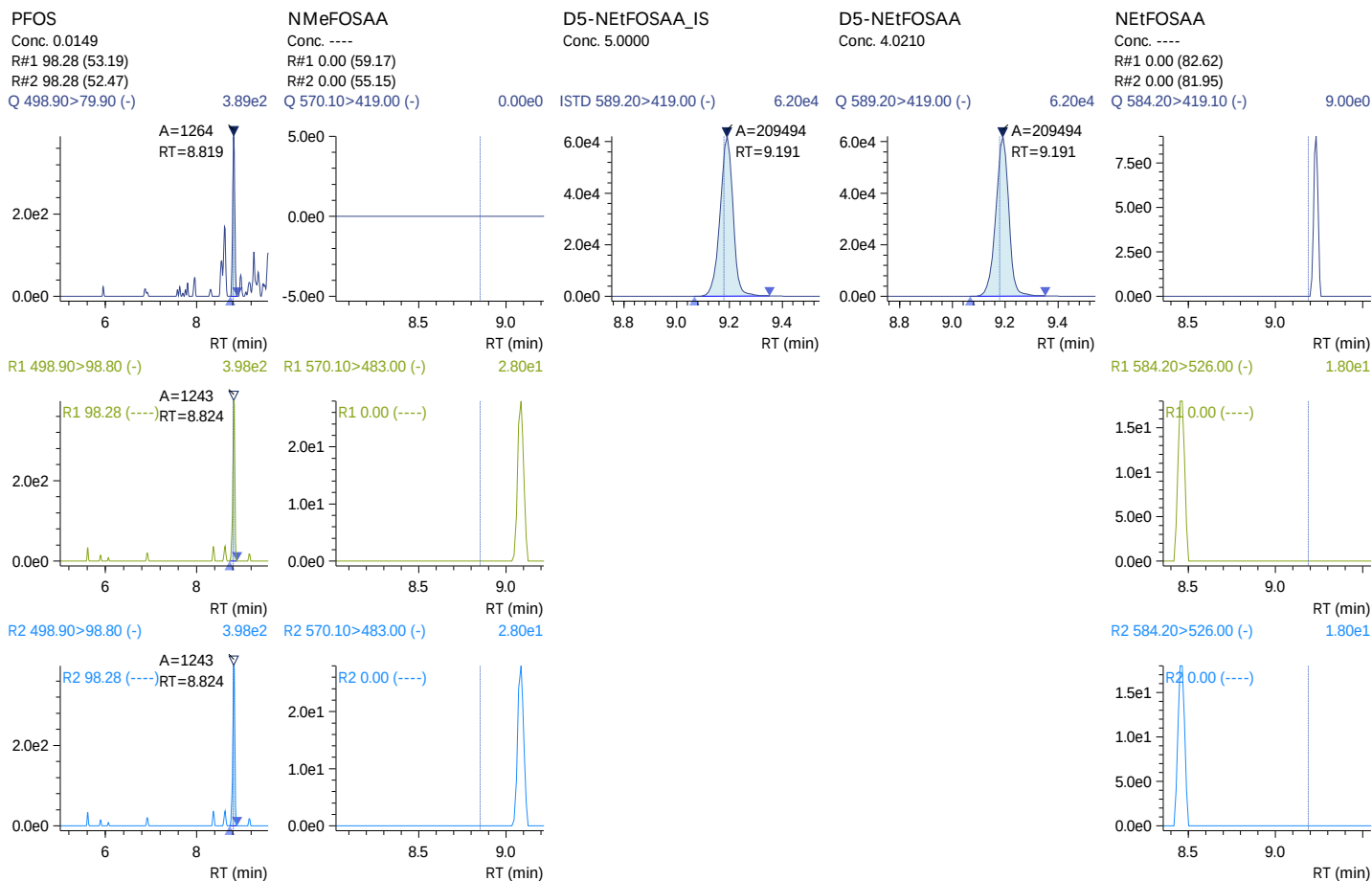


240119_031 (continued)





240119_031 (continued)





240119_031 (continued)

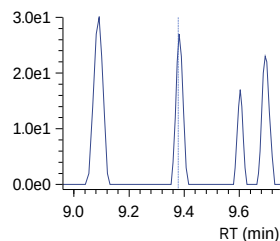
9-Cl-PF3ONS

Conc. ----

R#1 0.00 (31.76)

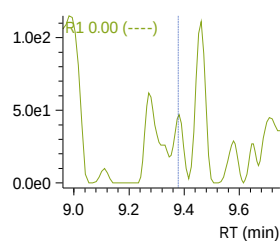
R#2 0.00 (32.76)

Q 530.80>351.00 (-)



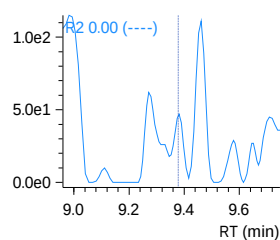
R1 532.80>353.00 (-)

1.15e2



R2 532.80>353.00 (-)

1.15e2



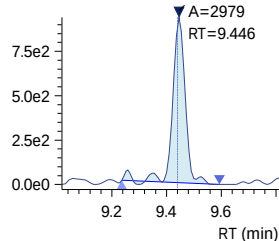
PFUnDA

Conc. -0.0088

R#1 0.00 (12.31)

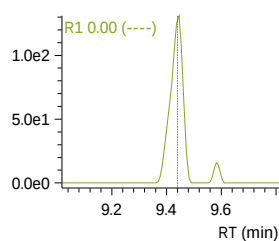
R#2 0.00 (13.12)

Q 563.10>519.00 (-)



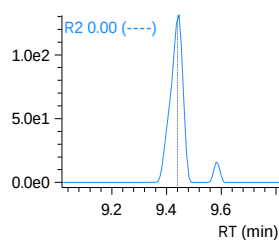
R1 563.10>269.10 (-)

1.31e2



R2 563.10>269.10 (-)

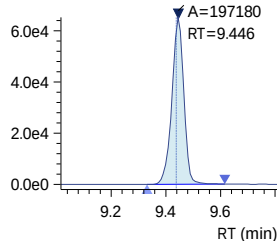
1.31e2



13C7-PFUnDA_IS

Conc. 1.2500

ISTD 570.00>525.10 (-)



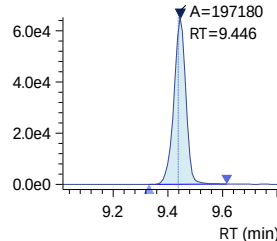
6.52e4



13C7-PFUnDA

Conc. 1.0176

Q 570.00>525.10 (-)



6.52e4



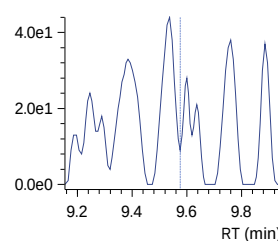
PFNS

Conc. ----

R#1 0.00 (63.31)

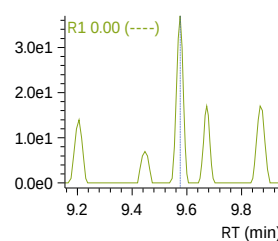
R#2 0.00 (65.22)

Q 548.80>79.90 (-)



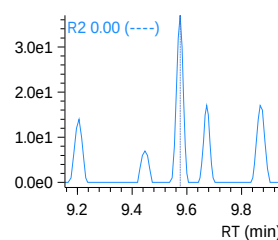
R1 548.80>98.80 (-)

3.70e1



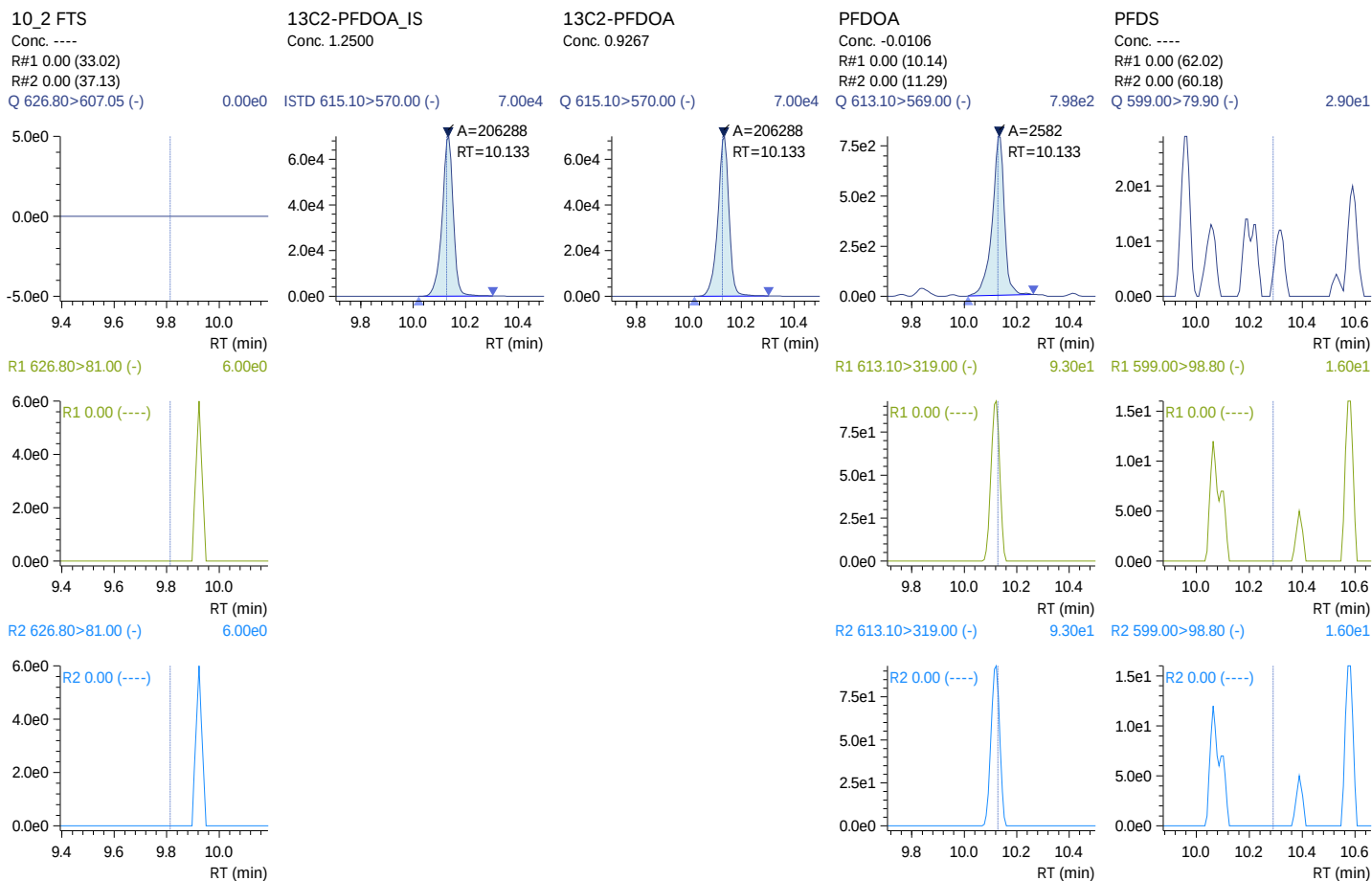
R2 548.80>98.80 (-)

3.70e1



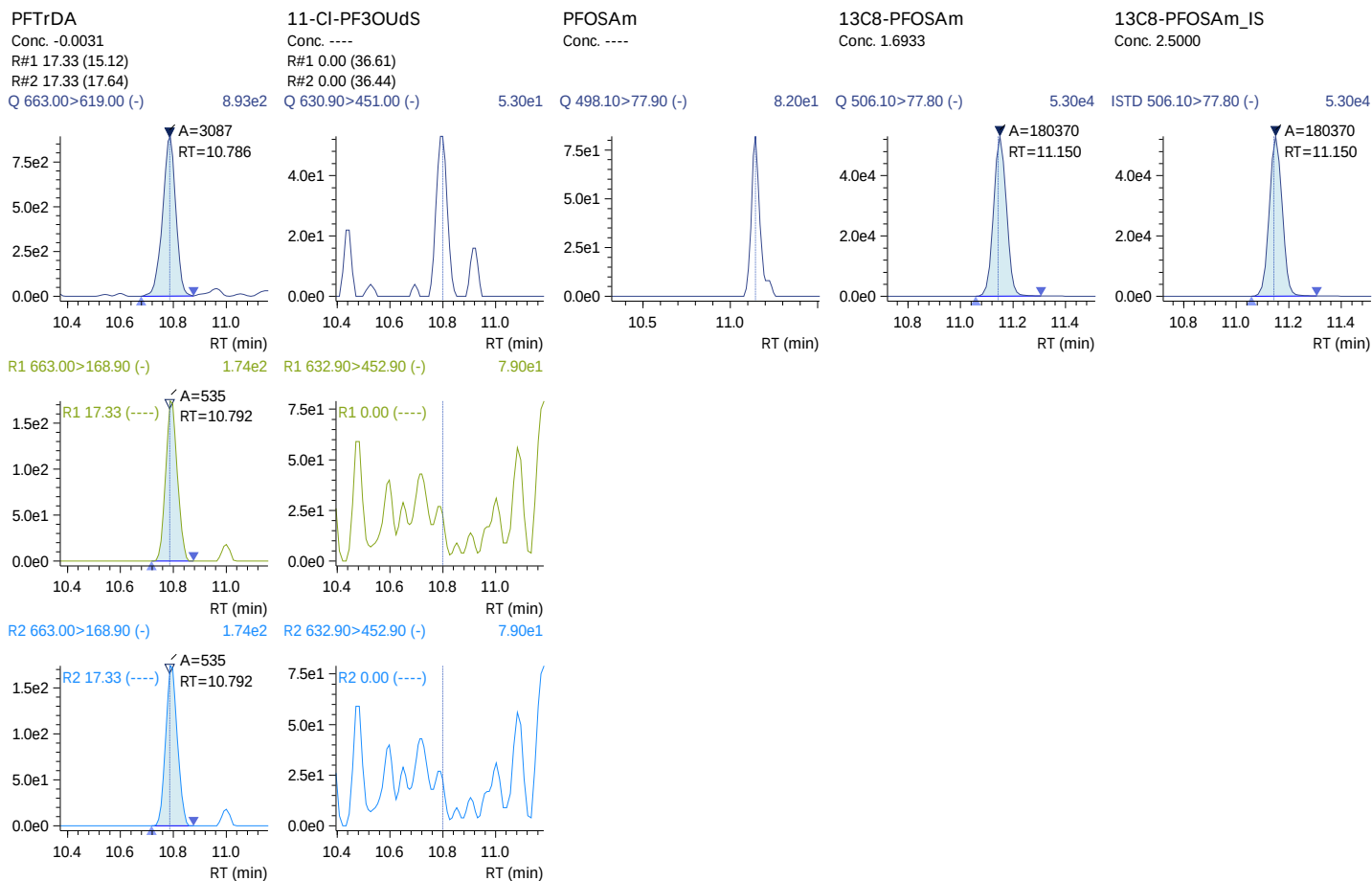


240119_031 (continued)



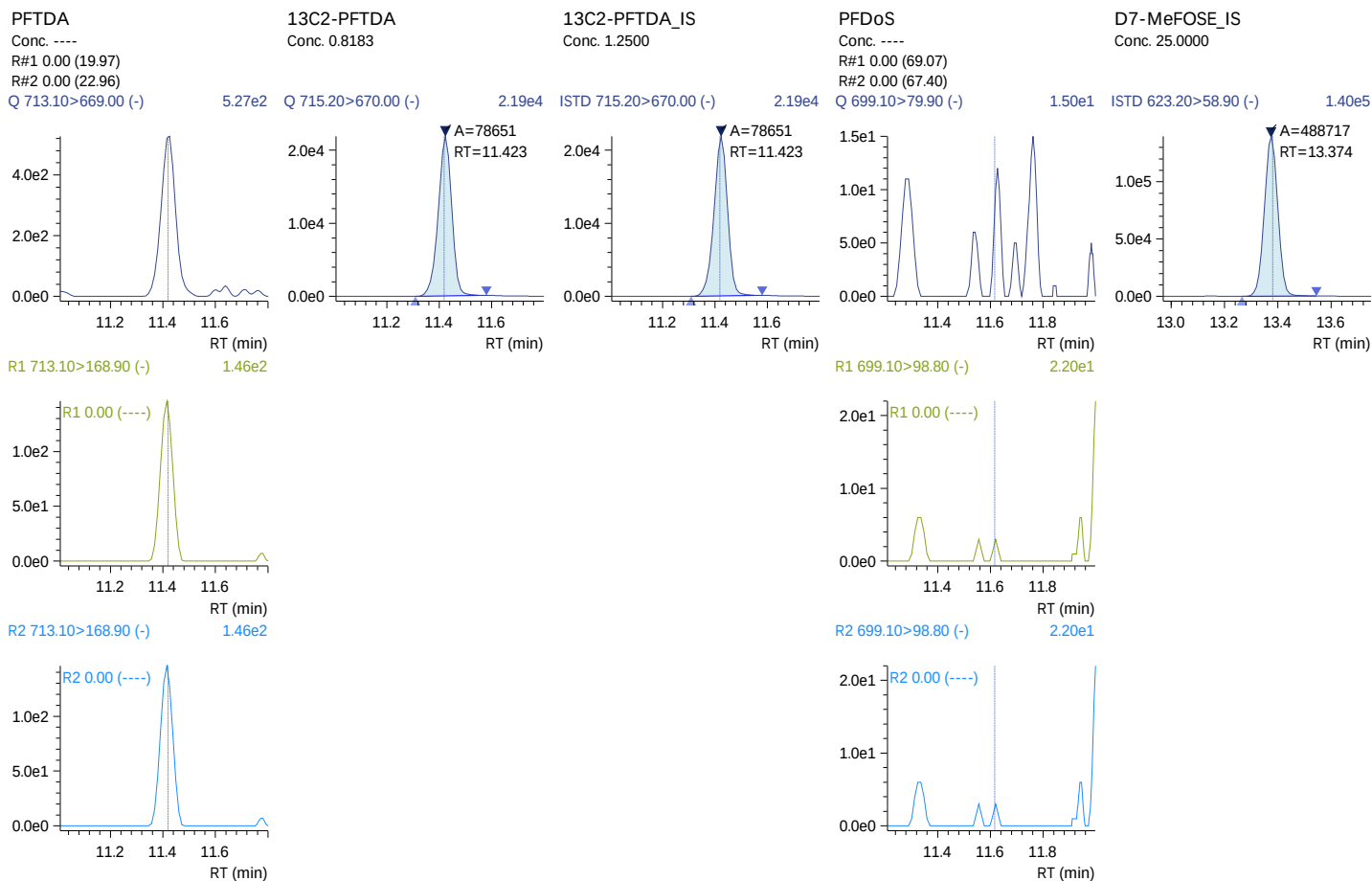


240119_031 (continued)





240119_031 (continued)





240119_031 (continued)

D7-MeFOSE
 Conc. 18.6095

MeFOSE
 Conc. ----

13C2-PFHxDA_IS
 Conc. 2.5000

13C2-PFHxDA
 Conc. 1.7032

PFHxDA

Conc. -0.0067
 R#1 0.00 (11.64)
 R#2 0.00 (13.90)

Q 623.20>58.90 (-)

1.40e5

Q 616.10>59.00 (-)

5.40e1

ISTD 815.00>770.05 (-)

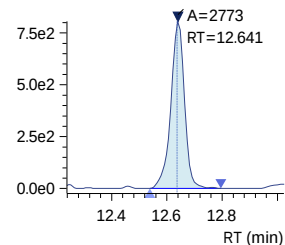
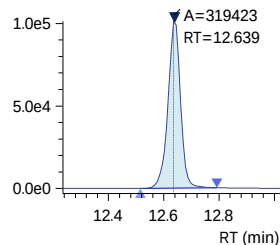
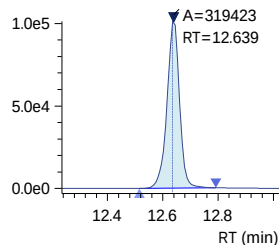
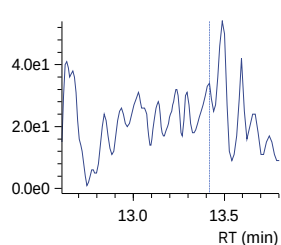
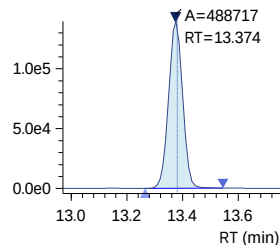
1.01e5

Q 815.00>770.05 (-)

1.01e5

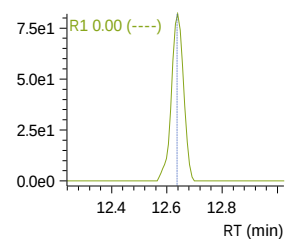
Q 813.00>768.95 (-)

8.06e2



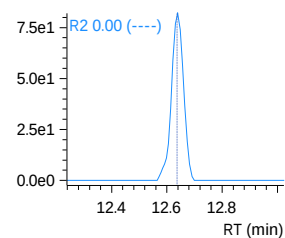
R1 813.00>218.95 (-)

8.20e1



R2 813.00>218.95 (-)

8.20e1





240119_031 (continued)

D3-MeFOSA
 Conc. 1.6548

D3-MeFOSA_IS
 Conc. 2.5000

MeFOSA
 Conc. ----
 R#1 0.00 (149.05)
 R#2 0.00 (140.79)

D9-EtFOSE_IS
 Conc. 25.0000

D9-EtFOSE
 Conc. 18.5874

Q 515.00>219.00 (-)

1.05e4

ISTD 515.00>219.00 (-)

1.05e4

Q 511.90>219.00 (-)

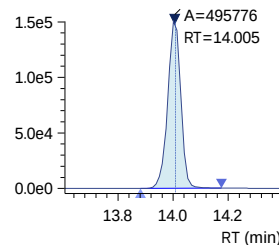
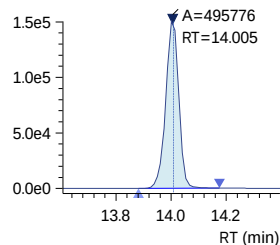
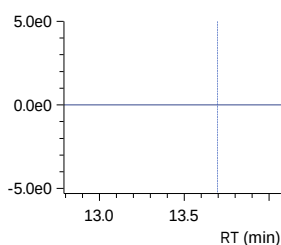
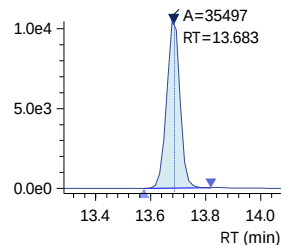
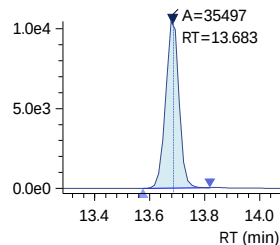
0.00e0

ISTD 639.20>58.90 (-)

1.50e5

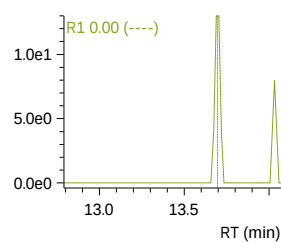
Q 639.20>58.90 (-)

1.50e5



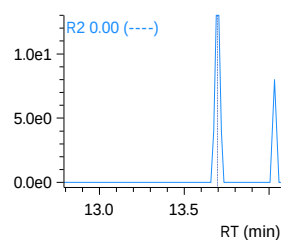
R1 511.90>169.00 (-)

1.30e1



R2 511.90>169.00 (-)

1.30e1





240119_031 (continued)

EtFOSE
 Conc. ----

D5-EtFOSAm
 Conc. 1.5263

D5-EtFOSAm_IS
 Conc. 2.5000

EtFOSAm
 Conc. ----

PFODA
 Conc. 0.0153

Q 630.00>59.00 (-)

4.10e1

Q 531.10>219.00 (-)

1.39e4

ISTD 531.10>219.00 (-)

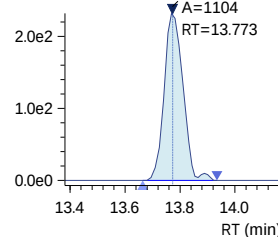
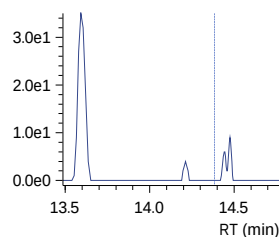
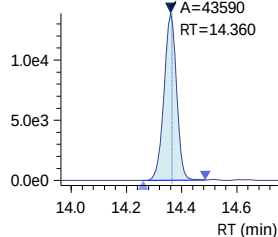
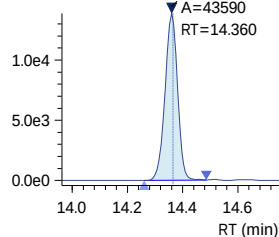
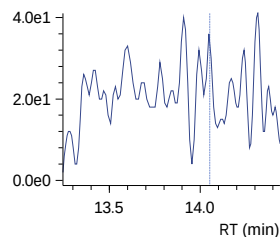
1.39e4

Q 526.00>219.00 (-)

3.50e1

Q 913.00>868.65 (-)

2.32e2

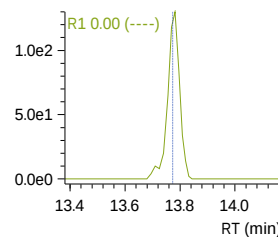
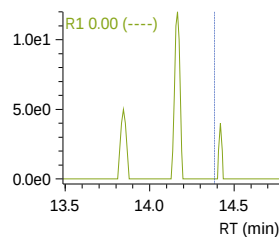


R1 526.00>169.00 (-)

1.20e1

R1 913.00>169.00 (-)

1.30e2

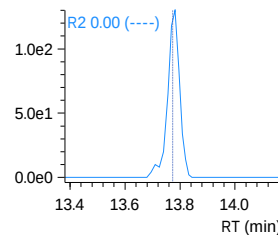
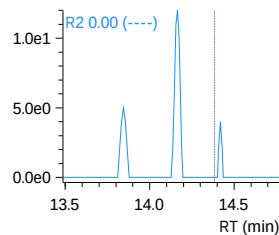


R2 526.00>169.00 (-)

1.20e1

R2 913.00>169.00 (-)

1.30e2



Validation Report

1st PS 01/23/24
2nd UA 01/23/24

Data File: J:\LCMS08\Data\240119_1633_B1\240119_025
Lab ID: KQ2400355-03
RunType: MB
Matrix: Soil

Date Acquired: 1/19/24 21:06
Batch ID: 830171
Analysis Method: 1633/PFAS_DOD5.4

Validations

Validation Categories	Pass	Fail
Analytical Hold Time	X	
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery	X	
Continuing Calibration Recovery (Closing)	X	
Internal Standards	X	
Surrogates	X	
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	

Primary Review: _____

Secondary Review: _____

Quantitation Report

1st *PS* 01/23/24
2nd *UA* 01/23/24

Data File:	J:\LCMS08\Data\240119_1633_B1\240119_025	Instrument:	K-LCMS-08
Acqu Date:	1/19/24 21:06	Vial:	38
Run Type:	MB	Dilution:	1
Lab ID:	KQ2400355-03	Raw Units:	ng/mL

Bottle ID:		Tier:	IV	Matrix:	Soil
Prod Code:	PFAS_DOD5.4	Collect Date:	12/20/23	Receive Date:	12/28/23

Analysis Lot:	830171	Prep Lot:	431421	Report Group:	KQ2400355
Analysis	1633	Prep Method:	Method		
		Prep Date:	12/22/23		

Title:	Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM	Calibration ID:	KC2400027
		Report List ID:	24615

Internal Standard Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Area Criteria
18O2-PFHxS	7.086	+0.02	158444	2.5000	OK
13C4-PFOS	8.820	+0.01	192888	2.5000	OK
13C3-PFBA	1.442	+0.04	417827	5.0000	OK
13C2-PFHxA	4.976	+0.02	458116	2.5000	OK
13C4-PFOA	7.108	+0.01	29424	2.5000	OK
13C5-PFNA	7.957	+0.01	228229	1.2500	OK
13C2-PFDA	8.721	+0.01	159784	1.2500	OK

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
13C3-PFBS	4.645	+0.02	233533	2.5972	104	20 - 150	Y
13C3-PFHxS	7.086	+0.02	169910	2.4984	100	20 - 150	Y
13C8-PFOS	8.820	+0.02	80238	2.4943	100	20 - 150	Y
13C4-PFBA	1.442	+0.04	990090	10.6014	106	20 - 150	Y
13C5-PFPeA	3.497	+0.03	103269	4.9940	100	20 - 150	Y
13C5-PFHxA	4.976	+0.02	505069	2.6159	105	20 - 150	Y
13C4-PFHpA	6.153	+0.02	485675	2.7788	111	20 - 150	Y
13C8-PFOA	7.108	+0.01	425142	2.5851	103	20 - 150	Y
13C9-PFNA	7.956	+0.01	226710	1.2687	101	20 - 150	Y
13C6-PFDA	8.721	+0.01	163196	1.2695	102	20 - 150	Y
13C7-PFUnDA	9.445	+0.01	196090	1.2788	102	20 - 150	Y
13C2-PFDoDA	10.133	+0.01	204148	1.1588	93	20 - 150	Y
13C2-PFTeDA	11.425	+0.02	82790	1.0885	87	20 - 150	Y
13C8-FOSA	11.143	+0.00	179422	2.1912	88	20 - 150	Y
D3-MeFOSA	13.686	+0.00	32356	1.9621	78	20 - 150	Y
D5-EtFOSA	14.361	+0.00	39799	1.8128	73	20 - 150	Y
D7-MeFOSE	13.378	+0.00	467668	23.1653	93	20 - 150	Y
D9-EtFOSE	14.006	+0.00	480049	23.4121	94	20 - 150	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 1/23/24 14:28

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			1st	PS	01/23/24
Data File:	J:\LCMS08\Data\240119_1633_B1\240119_025	Instrument:	K-LCMS08	2nd	01/23/24
Acqu Date:	1/19/24 21:06	Vial:	38	UA	
Run Type:	MB	Dilution:	1		
Lab ID:	KQ2400355-03	Raw Units:	ng/mL		

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
D3-MeFOSAA	8.853	+0.01	192768	5.7582	115	20 - 150	Y
D5-EtFOSAA	9.184	+0.01	210128	5.2465	105	20 - 150	Y
13C2-4:2 FTS	4.659	+0.02	144807	6.6413	133	20 - 150	Y
13C2-6:2 FTS	6.793	+0.01	148384	7.1953	144	20 - 150	Y
13C2-8:2 FTS	8.412	+0.01	108857	6.4260	129	20 - 150	Y
13C3-HFPO-DA	5.451	+0.02	513121	11.4420	114	20 - 150	Y

Target Compounds

Parameter Name	RT		Response	Solution	Final	Q	Rpt?
	RT	Dev		Conc	Conc		
Perfluorobutane sulfonic acid (PFBS)	0		0	0	0	U	Y
Perfluoropentane sulfonic acid (PFPeS)	0		0	0	0	U	Y
Perfluorohexane sulfonic acid (PFHxS)	7.082	+0.01	865	-0.0085	0	U	Y
Perfluoroheptane sulfonic acid (PFHpS)	0		0	0	0	U	Y
Perfluorooctane sulfonic acid (PFOS)	8.819	+0.01	545	0.0065	0.0065	U	Y
Perfluorononane sulfonic acid (PFNS)	0		0	0	0	U	Y
Perfluorodecane sulfonic acid (PFDS)	10.284	+0.00	71	-0.0049	0	U	Y
Perfluorododecane sulfonic acid (PFDoS)	11.623	+0.02	30	0.0009	0.00090	U	Y
Perfluorobutanoic acid (PFBA)	1.458	+0.05	1358	0.0160	0.016	U	Y
Perfluoropentanoic acid (PFPeA)	3.500	+0.03	1321	0.0099	0.0099	U	Y
Perfluorohexanoic acid (PFHxA)	4.974	+0.02	2288	0.0052	0.0052	U	Y
Perfluoroheptanoic acid (PFHpA)	6.136	0.00	3831	-0.0157	0	U	Y
Perfluorooctanoic acid (PFOA)	7.109	+0.01	4733	-0.0006	0	U	Y
Perfluorononanoic acid (PFNA)	7.952	+0.01	3440	-0.0042	0	U	Y
Perfluorodecanoic acid (PFDA)	8.722	+0.01	4135	0.0011	0.0011	U	Y
Perfluoroundecanoic acid (PFUnDA)	9.444	+0.01	3802	-0.0029	0	U	Y
Perfluorododecanoic acid (PFDOA)	10.134	+0.02	2806	-0.0084	0	U	Y
Perfluorotridecanoic acid (PFTTrDA)	10.792	+0.02	2928	-0.0059	0	U	Y
Perfluorotetradecanoic acid (PFTDA)	11.429	+0.02	2315	-0.0018	0	U	Y
Perfluorooctane sulfonamide (PFOSAm)	11.143	+0.01	238	0.0040	0.0040	U	Y
N-Methylperfluorooctane sulfonamide (MeFOSA)	0		0	0	0	U	Y
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	0		0	0	0	U	Y
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	13.369	-0.04	112	0.0065	0.0065	U	Y
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	14.068	+0.02	635	0.0251	0.025	U	Y
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	0		0	0	0	U	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound
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D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

			1st	PS	01/23/24
Data File:	J:\LCMS08\Data\240119_1633_B1\240119_025	Instrument:	K-LCMS08	2nd	01/23/24
Acqu Date:	1/19/24 21:06	Vial:	38	UA	
Run Type:	MB	Dilution:	1		
Lab ID:	KQ2400355-03	Raw Units:	ng/mL		

Target Compounds			Final Conc.Units: ng/g				
Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	0		0	0	0	U	Y
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	0		0	0	0	U	Y
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	6.784	+0.01	1182	0.0175	0.018	U	Y
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	0		0	0	0	U	Y
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	0		0	0	0	U	Y
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	0		0	0	0	U	Y
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	0		0	0	0	U	Y
Perfluoro(2-ethoxyethane) sulfonic acid (PFEESA)	0		0	0	0	U	Y
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	0		0	0	0	U	Y
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	0		0	0	0	U	Y
Perfluoro-3-methoxypropanoic acid (PFMPA)	0		0	0	0	U	Y
Perfluoro-4-methoxybutanoic acid (PFMBA)	4.027	+0.03	21	0.0002	0.00020	U	Y
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	0		0	0	0	U	Y
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	4.842	+0.03	809	0.0072	0.0072	U	Y
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	0		0	0	0	U	Y

Prep Amount:	5 g	Dilution:	1
Prep Final Amount:	5.00 mL	Basis Factor:	100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution



240119_025

Sample ID: KQ2400355-03
Date Acquired: 1/19/2024 9:06:43 PM
Acquired by: System Administrator
Data File: 240119_025
Vial: 7 | Inj. Volume: 10.0000uL | Tray: 2

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	990090	----	----	----	----	----	----	----
13C4-PFBA_IS	216.80>171.90	----	990090	----	----	----	----	----	----	----
13C3-PFBA_IS	216.00>172.00	----	417827	----	----	----	----	----	----	----
PFBA	212.80>169.05	----	1358	----	----	----	----	----	----	----
PFMPA	229.00>84.90	----	----	----	----	----	----	----	----	----
3_3 FTCA	241.00>177.10	241.00>117.00	----	0	0.00	141.17	0	0.00	143.25	
13C5-PFPeA	268.30>223.00	----	103269	----	----	----	----	----	----	----
13C5-PFPeA_IS	268.30>223.00	----	103269	----	----	----	----	----	----	----
PFPeA	263.00>219.00	----	1321	----	----	----	----	----	----	----
PFMBA	279.00>84.95	----	21	----	----	----	----	----	----	----
13C2-4_2 FTS	329.10>80.90	----	144807	----	----	----	----	----	----	----
13C2-4_2 FTS_IS	329.10>80.90	----	144807	----	----	----	----	----	----	----
4_2 FTS	327.10>307.00	327.10>80.90	----	0	0.00	29.06	0	0.00	31.50	
13C3-PFBS_IS	302.10>79.90	----	233533	----	----	----	----	----	----	----
PFBS	298.70>79.90	298.70>98.80	----	0	0.00	46.72	0	0.00	48.74	
13C3-PFBS	302.10>79.90	----	233533	----	----	----	----	----	----	----
NFDHA	295.00>201.00	295.00>84.90	809	138	17.11	40.25	138	17.11	36.97	IRr
13C5-PFHxA	318.00>273.00	----	505069	----	----	----	----	----	----	----
13C5-PFHxA_IS	318.00>273.00	----	505069	----	----	----	----	----	----	----
13C2-PFHxA_IS	315.10>270.00	----	458116	----	----	----	----	----	----	----
PFHxA	313.00>269.00	----	2288	----	----	----	----	----	----	----
PFEESA	314.80>135.00	314.80>82.90	----	0	0.00	6.11	0	0.00	5.81	
13C3-HFPO-DA	286.90>168.90	----	513121	----	----	----	----	----	----	----
13C3-HFPO-DA_IS	286.90>168.90	----	513121	----	----	----	----	----	----	----
HFPO-DA	284.90>168.90	284.90>184.90	----	0	0.00	65.61	0	0.00	64.39	
5_3 FTCA	341.00>237.05	341.00>217.00	----	0	0.00	158.86	0	0.00	159.75	
PFPeS	349.10>79.90	349.10>98.80	----	0	0.00	55.80	0	0.00	54.52	
13C4-PFHpA	367.10>322.00	----	485675	----	----	----	----	----	----	----
13C4-PFHpA_IS	367.10>322.00	----	485675	----	----	----	----	----	----	----
PFHpA	363.10>319.00	363.10>169.00	3831	1005	26.23	21.50	1005	26.23	23.22	
DONA	376.90>250.90	376.90>84.80	----	0	0.00	29.66	0	0.00	29.43	
13C2-6_2 FTS_IS	429.10>80.90	----	148384	----	----	----	----	----	----	----
13C2-6_2 FTS	429.10>80.90	----	148384	----	----	----	----	----	----	----
6_2 FTS	427.10>407.00	427.10>80.90	1182	657	55.54	41.15	657	55.54	43.09	
13C4-PFOA_IS	417.10>172.00	----	29424	----	----	----	----	----	----	----
13C8-PFOA_IS	421.10>376.00	----	425142	----	----	----	----	----	----	----

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240119_025 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	425142	----	----	----	----	----	----	----
PFOA	413.00>369.00	413.00>169.00	4733	1547	32.69	31.89	1547	32.69	30.51	
13C3-PFHxS	402.10>79.90	----	169910	----	----	----	----	----	----	----
13C3-PFHxS_IS	402.10>79.90	----	169910	----	----	----	----	----	----	----
PFHxS	398.70>79.90	398.70>98.90	865	470	54.34	56.62	470	54.34	57.27	
18O2-PFHxS_IS	403.00>83.90	----	158444	----	----	----	----	----	----	----
13C9-PFNA_IS	472.10>427.00	----	226710	----	----	----	----	----	----	----
13C9-PFNA	472.10>427.00	----	226710	----	----	----	----	----	----	----
13C5-PFNA_IS	468.00>423.00	----	228229	----	----	----	----	----	----	----
PFNA	463.00>419.00	463.00>219.00	3440	624	18.14	23.17	624	18.14	23.01	
PFHpS	449.00>79.90	449.00>98.80	----	0	0.00	56.96	0	0.00	58.58	
7_3 FTCA	441.00>317.00	441.00>336.90	----	0	0.00	117.47	0	0.00	117.17	
13C2-8_2-FTS	529.10>80.90	----	108857	----	----	----	----	----	----	----
13C2-8_2-FTS_IS	529.10>80.90	----	108857	----	----	----	----	----	----	----
8_2 FTS	527.10>506.95	527.10>80.80	----	0	0.00	49.59	0	0.00	43.30	
13C6-PFDA_IS	519.10>474.10	----	163196	----	----	----	----	----	----	----
13C6-PFDA	519.10>474.10	----	163196	----	----	----	----	----	----	----
13C2-PFDA_IS	515.10>470.10	----	159784	----	----	----	----	----	----	----
PFDA	512.90>469.00	512.90>219.00	4135	657	15.88	19.00	657	15.88	19.26	
D3-NMeFOSAA_IS	573.20>419.00	----	192768	----	----	----	----	----	----	----
D3-NMeFOSAA	573.20>419.00	----	192768	----	----	----	----	----	----	----
13C8-PFOS_IS	507.10>98.90	----	80238	----	----	----	----	----	----	----
13C8-PFOS	507.10>98.90	----	80238	----	----	----	----	----	----	----
13C4-PFOS_IS	502.80>79.90	----	192888	----	----	----	----	----	----	----
PFOS	498.90>79.90	498.90>98.80	545	329	60.27	52.47	329	60.27	47.25	
NMeFOSAA	570.10>419.00	570.10>483.00	----	0	0.00	55.15	0	0.00	62.10	
D5-NEtFOSAA_IS	589.20>419.00	----	210128	----	----	----	----	----	----	----
D5-NEtFOSAA	589.20>419.00	----	210128	----	----	----	----	----	----	----
NEtFOSAA	584.20>419.10	584.20>526.00	----	0	0.00	81.95	0	0.00	86.05	
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	----	0	0.00	32.76	0	0.00	31.74	
PFUnDA	563.10>519.00	563.10>269.10	3802	441	11.59	13.12	441	11.59	13.26	
13C7-PFUnDA_IS	570.00>525.10	----	196090	----	----	----	----	----	----	----
13C7-PFUnDA	570.00>525.10	----	196090	----	----	----	----	----	----	----
PFNS	548.80>79.90	548.80>98.80	----	0	0.00	65.22	0	0.00	62.49	
10_2 FTS	626.80>607.05	626.80>81.00	----	0	0.00	37.13	0	0.00	35.81	
13C2-PFDOA_IS	615.10>570.00	----	204148	----	----	----	----	----	----	----
13C2-PFDOA	615.10>570.00	----	204148	----	----	----	----	----	----	----
PFDOA	613.10>569.00	613.10>319.00	2806	382	13.60	11.29	382	13.60	10.90	
PFDS	599.00>79.90	599.00>98.80	71	62	86.65	60.18	62	86.65	61.11	
PFTrDA	663.00>619.00	663.00>168.90	2928	469	16.02	17.64	469	16.02	18.20	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240119_025 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	----	0	0.00	36.44	0	0.00	34.95	
PFOSAm	498.10>77.90	----	238	----	----	----	----	----	----	
13C8-PFOSAm	506.10>77.80	----	179422	----	----	----	----	----	----	
13C8-PFOSAm_IS	506.10>77.80	----	179422	----	----	----	----	----	----	
PFTDA	713.10>669.00	713.10>168.90	2315	398	17.20	22.96	398	17.20	22.68	
13C2-PFTDA	715.20>670.00	----	82790	----	----	----	----	----	----	
13C2-PFTDA_IS	715.20>670.00	----	82790	----	----	----	----	----	----	
PFDoS	699.10>79.90	699.10>98.80	30	14	44.76	67.40	14	44.76	65.24	
D7-MeFOSE_IS	623.20>58.90	----	467668	----	----	----	----	----	----	
D7-MeFOSE	623.20>58.90	----	467668	----	----	----	----	----	----	
MeFOSE	616.10>59.00	----	112	----	----	----	----	----	----	
13C2-PFHxDA_IS	815.00>770.05	----	281592	----	----	----	----	----	----	
13C2-PFHxDA	815.00>770.05	----	281592	----	----	----	----	----	----	
PFHxDA	813.00>768.95	813.00>218.95	3243	395	12.18	13.90	395	12.18	14.51	
D3-MeFOSA	515.00>219.00	----	32356	----	----	----	----	----	----	
D3-MeFOSA_IS	515.00>219.00	----	32356	----	----	----	----	----	----	
MeFOSA	511.90>219.00	511.90>169.00	----	0	0.00	140.79	0	0.00	142.62	
D9-EtFOSE_IS	639.20>58.90	----	480049	----	----	----	----	----	----	
D9-EtFOSE	639.20>58.90	----	480049	----	----	----	----	----	----	
EtFOSE	630.00>59.00	----	635	----	----	----	----	----	----	
D5-EtFOSAm	531.10>219.00	----	39799	----	----	----	----	----	----	
D5-EtFOSAm_IS	531.10>219.00	----	39799	----	----	----	----	----	----	
EtFOSAm	526.00>219.00	526.00>169.00	----	0	0.00	163.90	0	0.00	146.41	
PFODA	913.00>868.65	913.00>169.00	891	102	11.45	27.03	102	11.45	23.98	IRr

Flag ID key: IRr: Ion Ratio (Relative)



240119_025

Sample ID: KQ2400355-03
Date Acquired: 1/19/2024 9:06:43 PM
Acquired by: System Administrator
Data File: 240119_025
Vial: 7 | Inj. Volume: 10.0000uL | Tray: 2

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.442	0.034	0.000	990090	417827	13C3-PFBA_IS	10.6014	ng/mL	
13C4-PFBA_IS	Auto	1.442	0.034	----	990090	990090	----	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.442	0.034	----	417827	417827	----	5.0000	ng/mL	
PFBA	M	1.458	0.049	0.016	1358	990090	13C4-PFBA_IS	0.0160	ng/mL	
PFMPA	ND(W/B)	----	----	----	----	103269	13C5-PFPeA_IS	----	ng/mL	
3_3 FTCA	ND(W/B)	----	----	----	----	103269	13C5-PFPeA_IS	----	ng/mL	
13C5-PFPeA	Auto	3.497	0.018	-1.479	103269	458116	13C2-PFHxA_IS	4.9940	ng/mL	
13C5-PFPeA_IS	Auto	3.497	0.018	----	103269	103269	----	5.0000	ng/mL	
PFPeA	M	3.500	0.018	0.003	1321	103269	13C5-PFPeA_IS	0.0099	ng/mL	
PFMBA	M	4.027	0.022	0.530	21	103269	13C5-PFPeA_IS	0.0002	ng/mL	
13C2-4_2 FTS	Auto	4.659	0.013	-2.427	144807	158444	18O2-PFHxS_IS	6.6413	ng/mL	
13C2-4_2 FTS_IS	Auto	4.659	0.013	----	144807	144807	----	5.0000	ng/mL	
4_2 FTS	ND(W/B)	----	----	----	----	144807	13C2-4_2 FTS_IS	----	ng/mL	
13C3-PFBS_IS	Auto	4.645	0.017	----	233533	233533	----	2.5000	ng/mL	
PFBS	ND(W/B)	----	----	----	----	233533	13C3-PFBS_IS	----	ng/mL	
13C3-PFBS	Auto	4.645	0.017	-2.441	233533	158444	18O2-PFHxS_IS	2.5972	ng/mL	
NFDHA	M	4.842	0.022	-0.134	809	505069	13C5-PFHxA_IS	0.0072	ng/mL	IRr
13C5-PFHxA	Auto	4.976	0.013	0.000	505069	458116	13C2-PFHxA_IS	2.6159	ng/mL	
13C5-PFHxA_IS	Auto	4.976	0.013	----	505069	505069	----	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	4.976	0.013	----	458116	458116	----	2.5000	ng/mL	
PFHxA	M	4.974	0.009	-0.002	2288	505069	13C5-PFHxA_IS	0.0052	ng/mL	
PFEESA	ND(W/B)	----	----	----	----	505069	13C5-PFHxA_IS	----	ng/mL	
13C3-HFPO-DA	Auto	5.451	0.012	0.475	513121	458116	13C2-PFHxA_IS	11.4420	ng/mL	
13C3-HFPO-DA_IS	Auto	5.451	0.012	----	513121	513121	----	10.0000	ng/mL	
HFPO-DA	ND(W/B)	----	----	----	----	513121	13C3-HFPO-DA_IS	----	ng/mL	
5_3 FTCA	ND(W/B)	----	----	----	----	505069	13C5-PFHxA_IS	----	ng/mL	
PFPeS	ND(W/B)	----	----	----	----	169910	13C3-PFHxS_IS	----	ng/mL	
13C4-PFHpA	Auto	6.153	0.010	1.177	485675	458116	13C2-PFHxA_IS	2.7788	ng/mL	
13C4-PFHpA_IS	Auto	6.153	0.010	----	485675	485675	----	2.5000	ng/mL	
PFHpA	M	6.136	-0.008	-0.017	3831	485675	13C4-PFHpA_IS	-0.0157	ng/mL	
DONA	ND(W/B)	----	----	----	----	513121	13C3-HFPO-DA_IS	----	ng/mL	
13C2-6_2 FTS_IS	Auto	6.793	0.009	----	148384	148384	----	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.793	0.009	-0.293	148384	158444	18O2-PFHxS_IS	7.1953	ng/mL	
6_2 FTS	M	6.784	0.001	-0.009	1182	148384	13C2-6_2 FTS_IS	0.0175	ng/mL	
13C4-PFOA_IS	Auto	7.108	0.009	----	29424	29424	----	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.108	0.008	----	425142	425142	----	2.5000	ng/mL	
13C8-PFOA	Auto	7.108	0.008	0.000	425142	29424	13C4-PFOA_IS	2.5851	ng/mL	
PFOA	Auto	7.109	0.007	0.001	4733	425142	13C8-PFOA_IS	-0.0006	ng/mL	
13C3-PFHxS	Auto	7.086	0.012	0.000	169910	158444	18O2-PFHxS_IS	2.4984	ng/mL	
13C3-PFHxS_IS	Auto	7.086	0.012	----	169910	169910	----	2.5000	ng/mL	
PFHxS	M	7.082	0.008	-0.004	865	169910	13C3-PFHxS_IS	-0.0085	ng/mL	
18O2-PFHxS_IS	Auto	7.086	0.011	----	158444	158444	----	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.956	0.007	----	226710	226710	----	1.2500	ng/mL	
13C9-PFNA	Auto	7.956	0.007	-0.001	226710	228229	13C5-PFNA_IS	1.2687	ng/mL	
13C5-PFNA_IS	Auto	7.957	0.008	----	228229	228229	----	1.2500	ng/mL	
PFNA	M	7.952	0.002	-0.004	3440	226710	13C9-PFNA_IS	-0.0042	ng/mL	
PFHpS	ND(W/B)	----	----	----	----	80238	13C8-PFOS_IS	----	ng/mL	
7_3 FTCA	ND(W/B)	----	----	----	----	505069	13C5-PFHxA_IS	----	ng/mL	
13C2-8_2-FTS	Auto	8.412	0.008	1.326	108857	158444	18O2-PFHxS_IS	6.4260	ng/mL	
13C2-8_2-FTS_IS	Auto	8.412	0.008	----	108857	108857	----	5.0000	ng/mL	
8_2 FTS	ND(W/B)	----	----	----	----	108857	13C2-8_2-FTS_IS	----	ng/mL	
13C6-PFDA_IS	Auto	8.721	0.007	----	163196	163196	----	1.2500	ng/mL	
13C6-PFDA	Auto	8.721	0.007	0.000	163196	159784	13C2-PFDA_IS	1.2695	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_025 (continued)

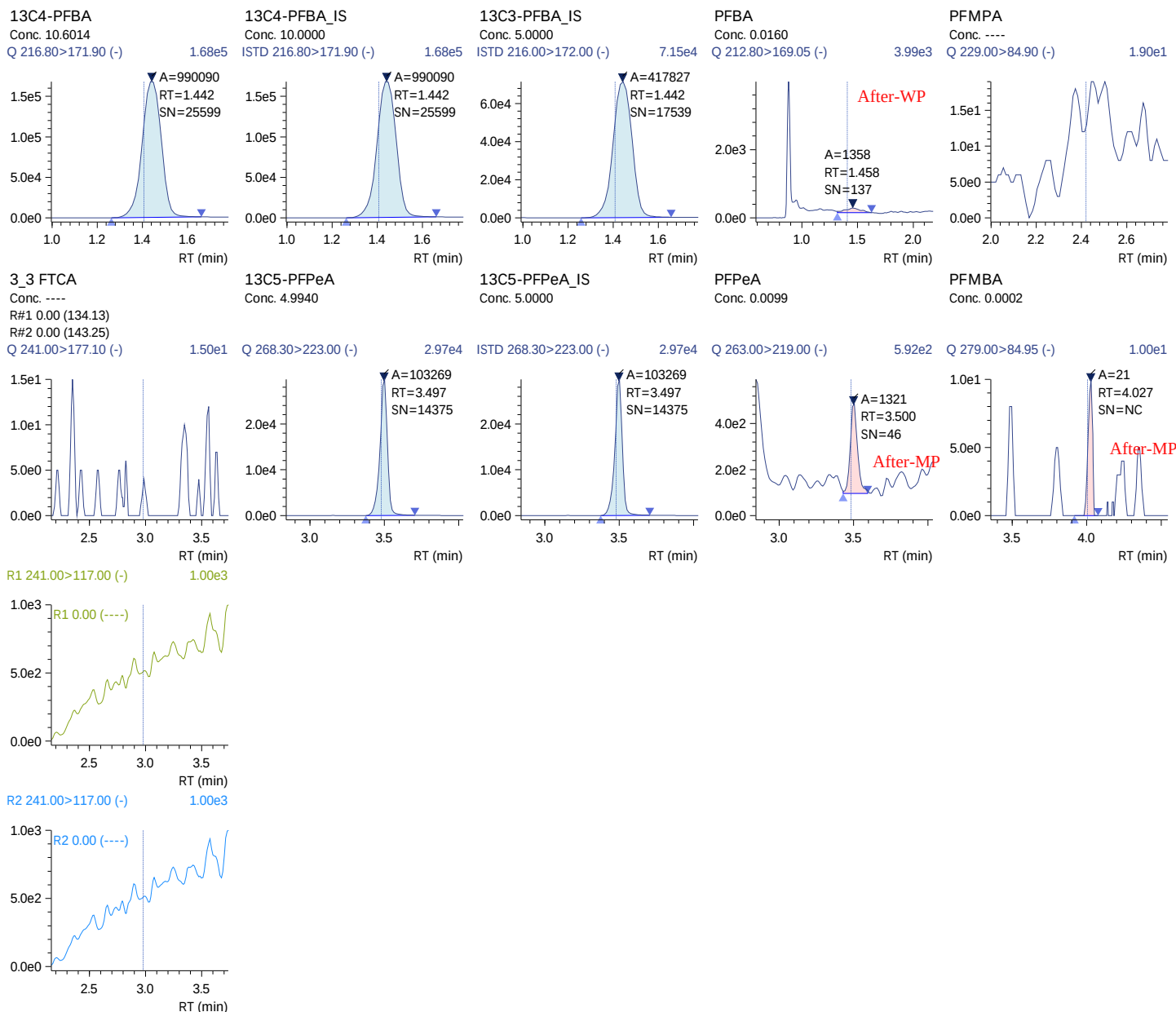
(Table continued from previous page)

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C2-PFDA_IS	Auto	8.721	0.006	----	159784	159784	----	1.2500	ng/mL	
PFDA	M	8.722	0.006	0.001	4135	163196	13C6-PFDA_IS	0.0011	ng/mL	
D3-NMeFOSAA_IS	Auto	8.853	0.005	----	192768	192768	----	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.853	0.005	0.033	192768	192888	13C4-PFOS_IS	5.7582	ng/mL	
13C8-PFOS_IS	Auto	8.820	0.009	----	80238	80238	----	2.5000	ng/mL	
13C8-PFOS	Auto	8.820	0.009	0.000	80238	192888	13C4-PFOS_IS	2.4943	ng/mL	
13C4-PFOS_IS	Auto	8.820	0.009	----	192888	192888	----	2.5000	ng/mL	
PFOS	M	8.819	0.006	-0.001	545	80238	13C8-PFOS_IS	0.0065	ng/mL	
NMeFOSAA	ND(W/B)	----	----	----	----	192768	D3-NMeFOSAA_IS	----	ng/mL	
D5-NetFOSAA_IS	Auto	9.184	0.006	----	210128	210128	----	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.184	0.006	0.364	210128	192888	13C4-PFOS_IS	5.2465	ng/mL	
NetFOSAA	ND(W/B)	----	----	----	----	210128	D5-NetFOSAA_IS	----	ng/mL	
9-CI-PF3ONS	ND(W/B)	----	----	----	----	513121	13C3-HFPO-DA_IS	----	ng/mL	
PFUnDA	M	9.444	0.004	-0.001	3802	196090	13C7-PFUnDA_IS	-0.0029	ng/mL	
13C7-PFUnDA_IS	Auto	9.445	0.007	----	196090	196090	----	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.445	0.007	0.724	196090	159784	13C2-PFDA_IS	1.2788	ng/mL	
PFNS	ND(W/B)	----	----	----	----	80238	13C8-PFOS_IS	----	ng/mL	
10_2_FTS	ND(W/B)	----	----	----	----	108857	13C2-8_2-FTS_IS	----	ng/mL	
13C2-PFDOA_IS	Auto	10.133	0.006	----	204148	204148	----	1.2500	ng/mL	
13C2-PFDOA	Auto	10.133	0.006	1.412	204148	159784	13C2-PFDA_IS	1.1588	ng/mL	
PFDOA	M	10.134	0.006	0.001	2806	204148	13C2-PFDOA_IS	-0.0084	ng/mL	
PFDS	M	10.284	-0.006	1.464	71	80238	13C8-PFOS_IS	-0.0049	ng/mL	
PFTDA	Auto	10.792	0.006	-0.633	2928	82790	13C2-PFTDA_IS	-0.0059	ng/mL	
11-CI-PF3OUdS	ND(W/B)	----	----	----	----	513121	13C3-HFPO-DA_IS	----	ng/mL	
PFOSAm	M	11.143	0.000	0.000	238	179422	13C8-PFOSAm_IS	0.0040	ng/mL	
13C8-PFOSAm	Auto	11.143	0.000	2.323	179422	192888	13C4-PFOS_IS	2.1912	ng/mL	
13C8-PFOSAm_IS	Auto	11.143	0.000	----	179422	179422	----	2.5000	ng/mL	
PFTDA	M	11.429	0.009	0.004	2315	82790	13C2-PFTDA_IS	-0.0018	ng/mL	
13C2-PFTDA	Auto	11.425	0.006	2.704	82790	159784	13C2-PFDA_IS	1.0885	ng/mL	
13C2-PFTDA_IS	Auto	11.425	0.006	----	82790	82790	----	1.2500	ng/mL	
PFDoS	M	11.623	0.007	2.803	30	80238	13C8-PFOS_IS	0.0009	ng/mL	
D7-MeFOSE_IS	Auto	13.378	-0.003	----	467668	467668	----	25.0000	ng/mL	
D7-MeFOSE	Auto	13.378	-0.003	4.558	467668	192888	13C4-PFOS_IS	23.1653	ng/mL	
MeFOSE	M	13.369	-0.049	-0.009	112	467668	D7-MeFOSE_IS	0.0065	ng/mL	
13C2-PFHXDA_IS	Auto	12.642	0.006	----	281592	281592	----	2.5000	ng/mL	
13C2-PFHXDA	Auto	12.642	0.006	3.921	281592	159784	13C2-PFDA_IS	1.8973	ng/mL	
PFHXDA	M	12.647	0.010	0.005	3243	281592	13C2-PFHXDA_IS	0.0002	ng/mL	
D3-MeFOSA	Auto	13.686	-0.001	4.866	32356	192888	13C4-PFOS_IS	1.9621	ng/mL	
D3-MeFOSA_IS	Auto	13.686	-0.001	----	32356	32356	----	2.5000	ng/mL	
MeFOSA	ND(W/B)	----	----	----	----	32356	D3-MeFOSA_IS	----	ng/mL	
D9-EtFOSE_IS	Auto	14.006	-0.003	----	480049	480049	----	25.0000	ng/mL	
D9-EtFOSE	Auto	14.006	-0.003	5.186	480049	192888	13C4-PFOS_IS	23.4121	ng/mL	
EtFOSE	M	14.068	0.016	0.062	635	480049	D9-EtFOSE_IS	0.0251	ng/mL	
D5-EtFOSAm	Auto	14.361	-0.004	5.541	39799	192888	13C4-PFOS_IS	1.8128	ng/mL	
D5-EtFOSAm_IS	Auto	14.361	-0.004	----	39799	39799	----	2.5000	ng/mL	
EtFOSAm	ND(W/B)	----	----	----	----	39799	D5-EtFOSAm_IS	----	ng/mL	
PFODA	M	13.784	0.010	1.142	891	281592	13C2-PFHXDA_IS	0.0140	ng/mL	IRr

Flag ID key: IRr: Ion Ratio (Relative)



240119_025 (continued)





240119_025 (continued)

13C2-4_2 FTS
Conc. 6.6413

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. ----
R#1 0.00 (34.14)
R#2 0.00 (31.50)

13C3-PFBS_IS
Conc. 2.5000

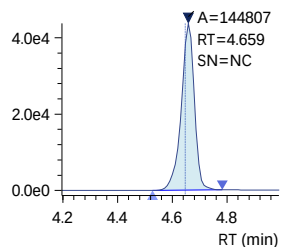
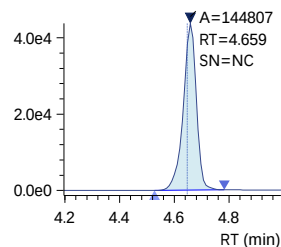
PFBS
Conc. ----
R#1 0.00 (47.53)
R#2 0.00 (48.74)

Q 329.10>80.90 (-)

4.38e4

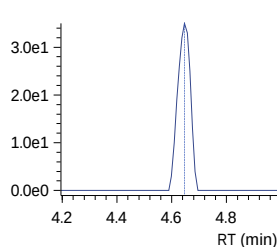
ISTD 329.10>80.90 (-)

4.38e4



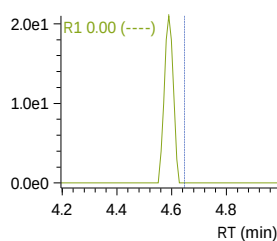
Q 327.10>307.00 (-)

3.50e1



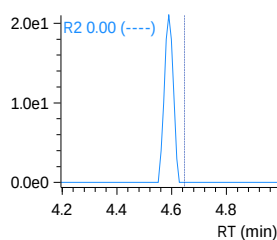
R1 327.10>80.90 (-)

2.10e1



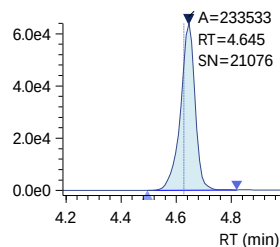
R2 327.10>80.90 (-)

2.10e1



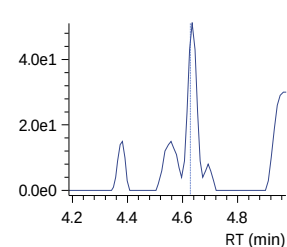
ISTD 302.10>79.90 (-)

6.40e4



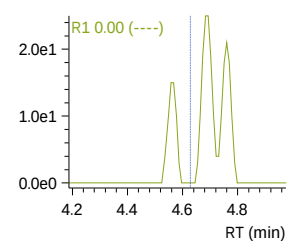
Q 298.70>79.90 (-)

5.10e1



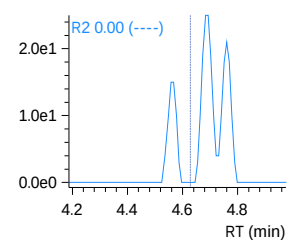
R1 298.70>98.80 (-)

2.50e1



R2 298.70>98.80 (-)

2.50e1





240119_025 (continued)

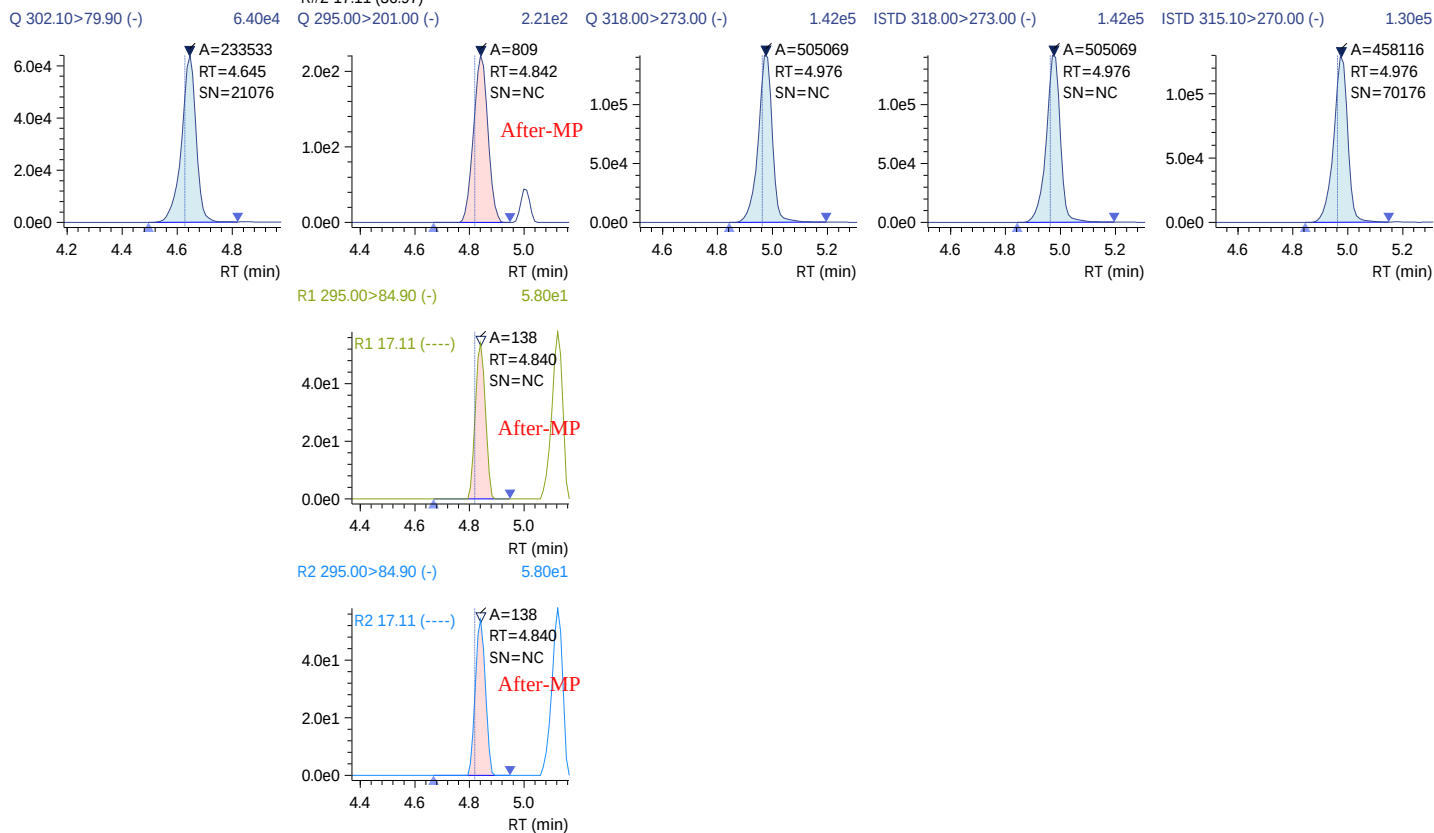
13C3-PFBS
Conc. 2.5972

NFDHA
Conc. 0.0072
R#1 17.11 (37.88)
R#2 17.11 (36.97)

13C5-PFHxA
Conc. 2.6159

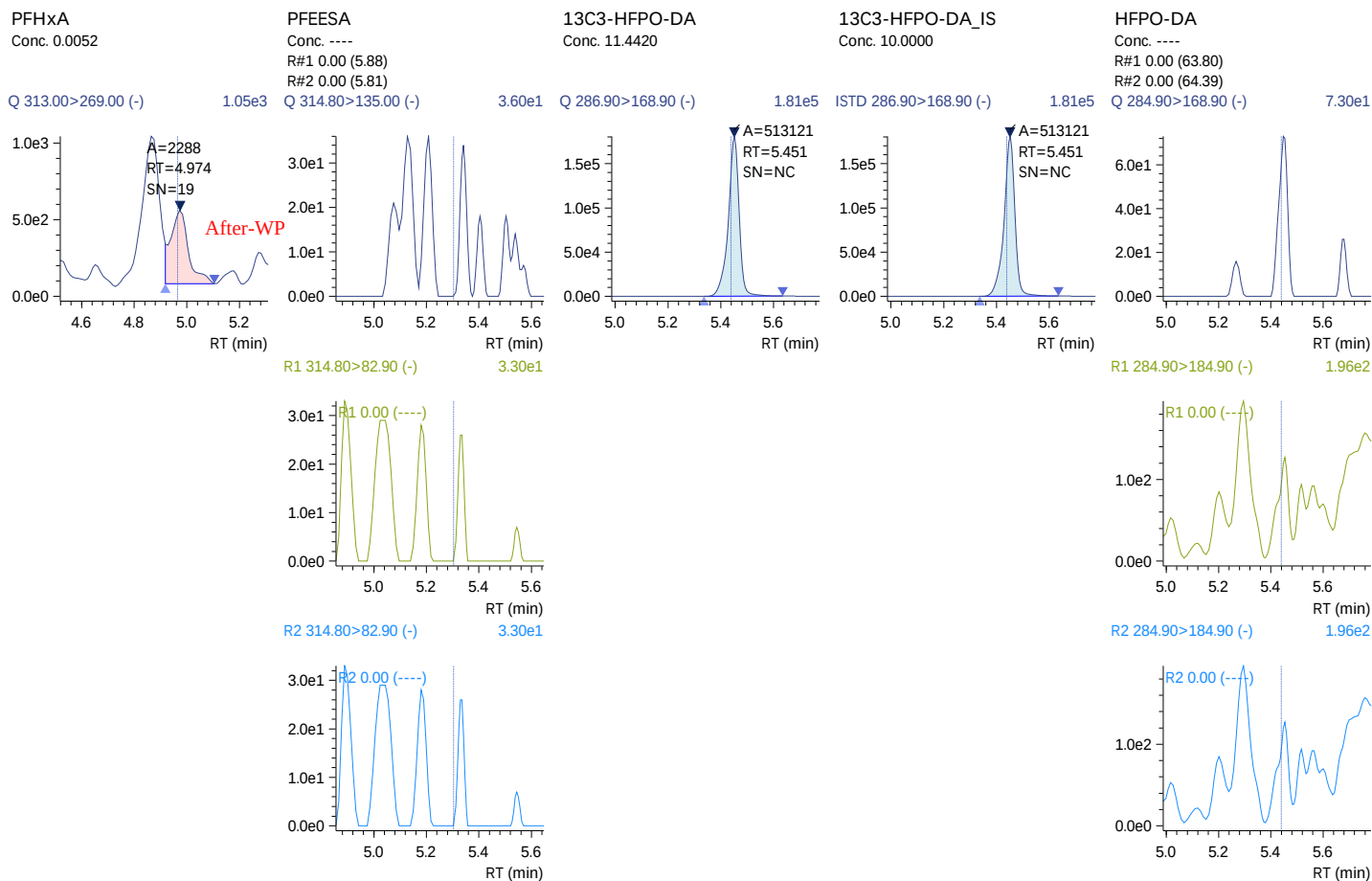
13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000



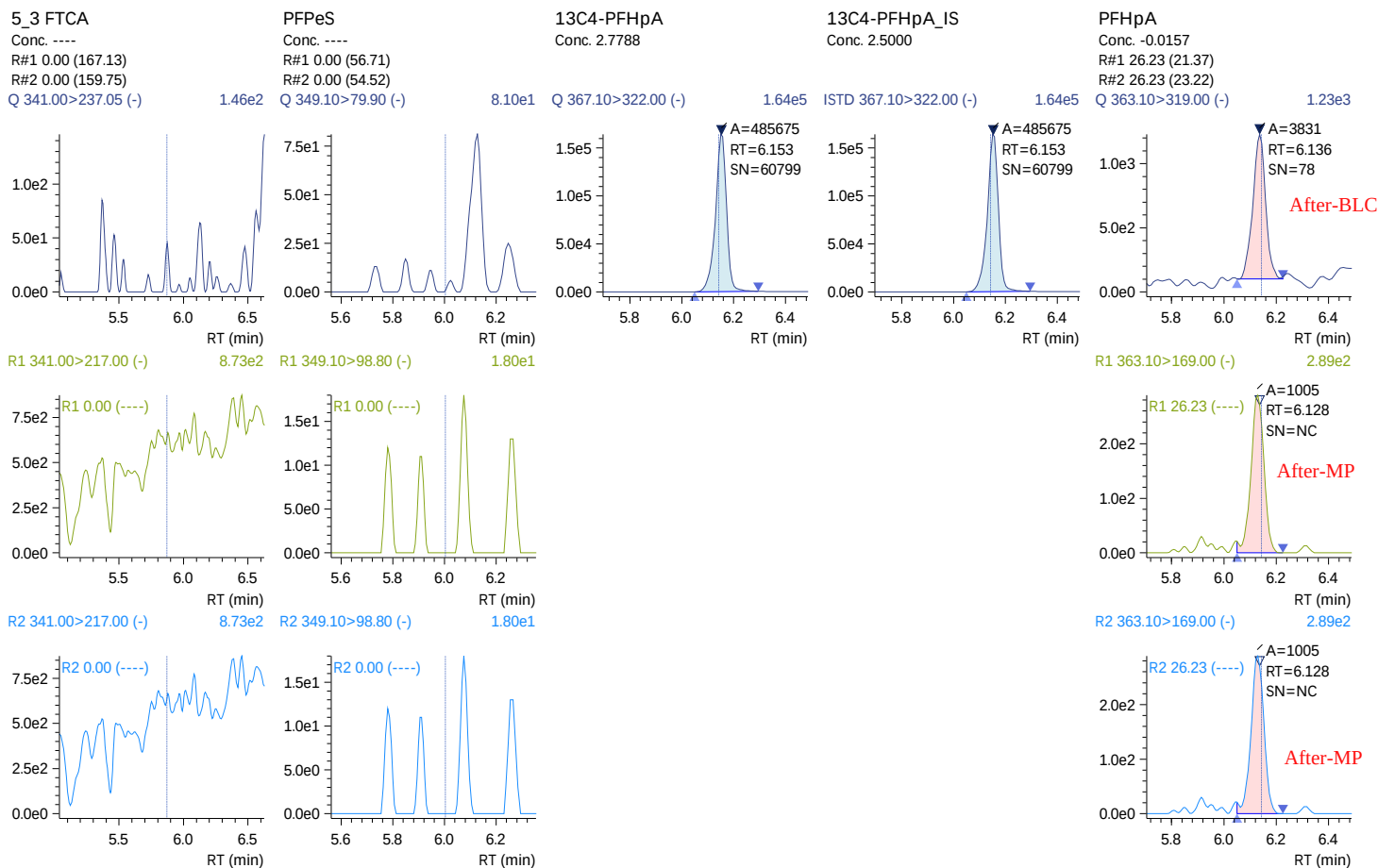


240119_025 (continued)





240119_025 (continued)

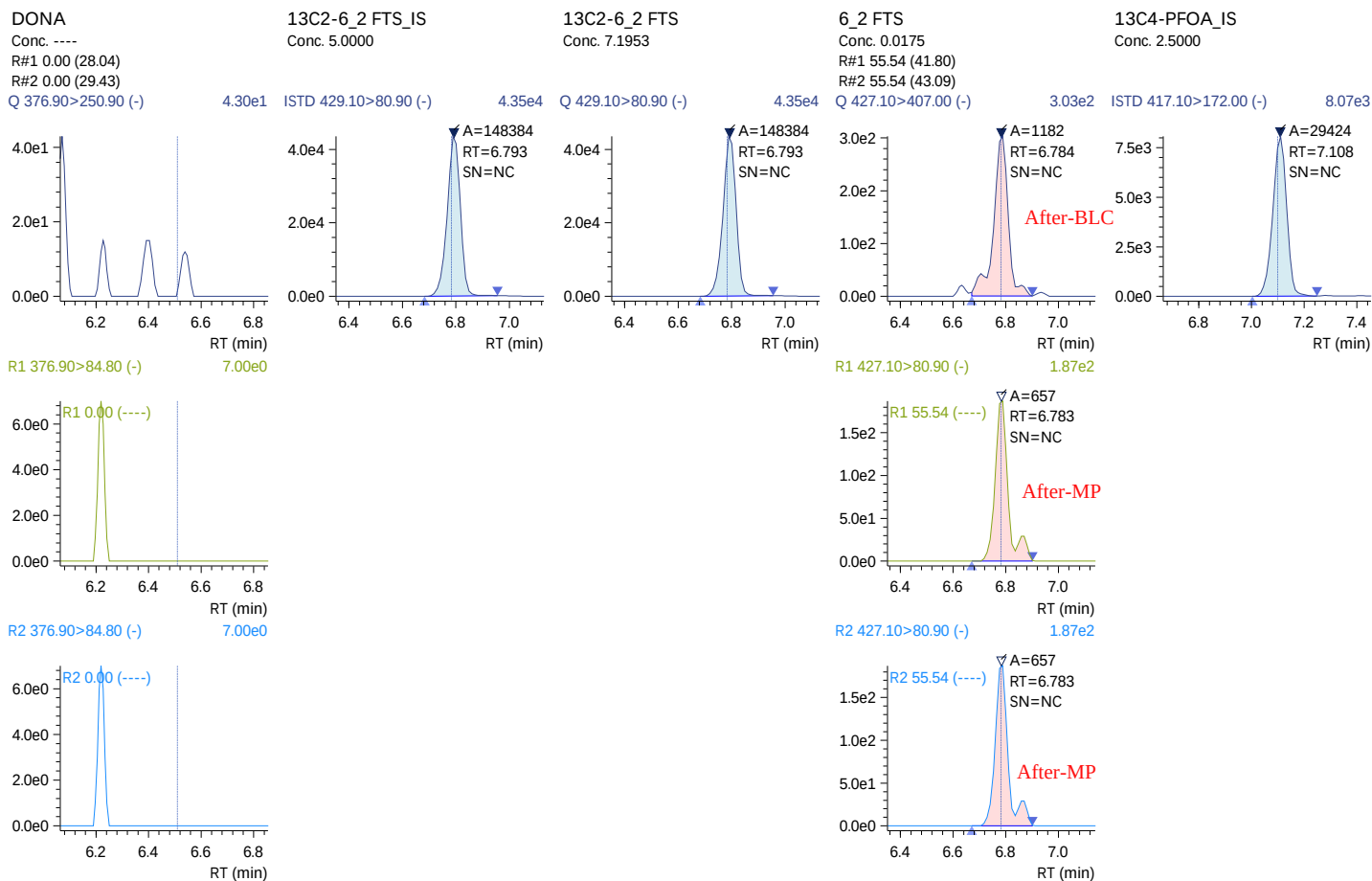


J:\LCMS08\Data\240119_1633_B1\240119_1633_B1.dampl

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_025 (continued)



J:\LCMS08\Data\240119_1633_B1\240119_1633_B1.dampl

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_025 (continued)

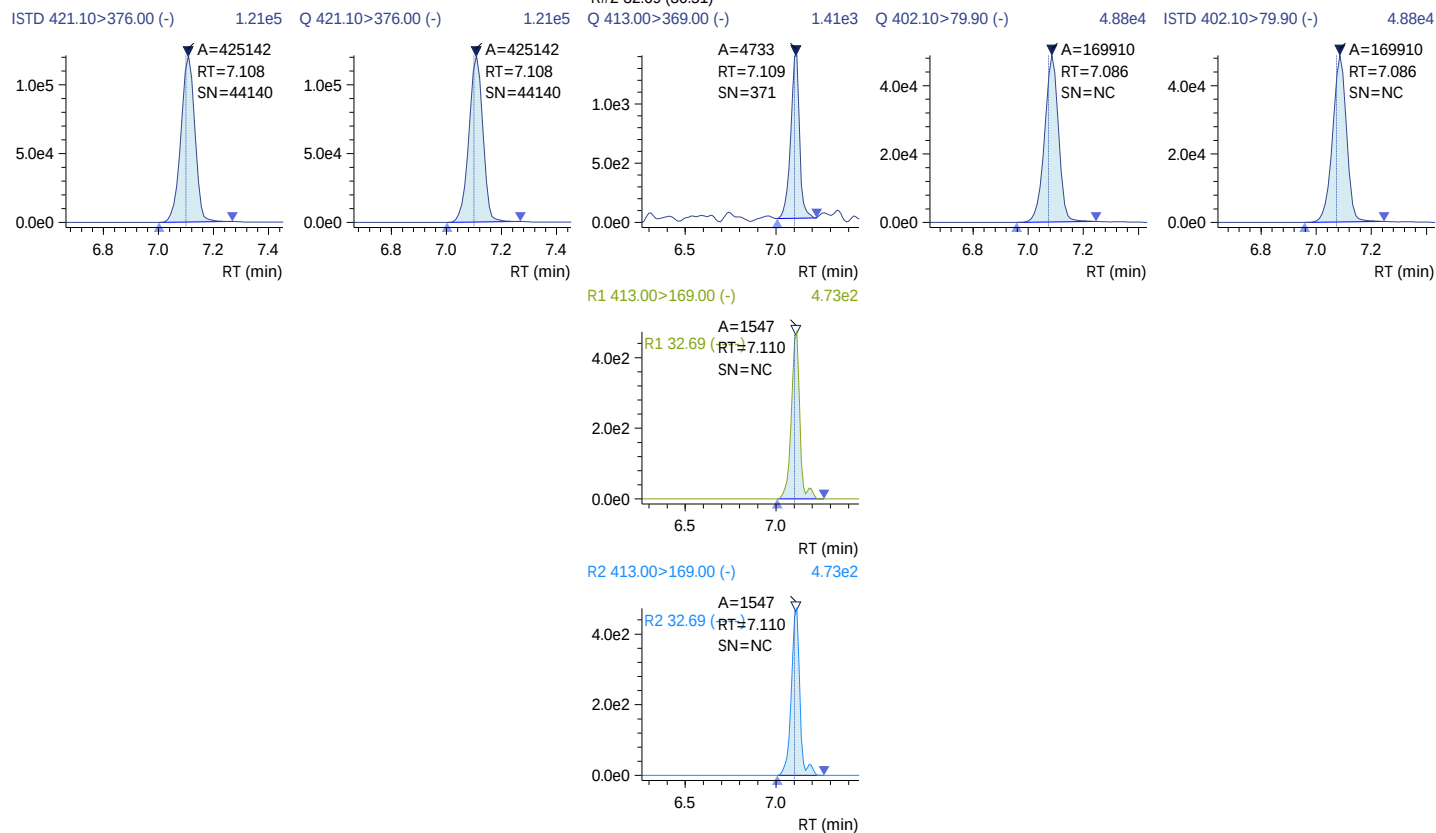
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.5851

PFOA
Conc. -0.0006
R#1 32.69 (29.05)
R#2 32.69 (30.51)

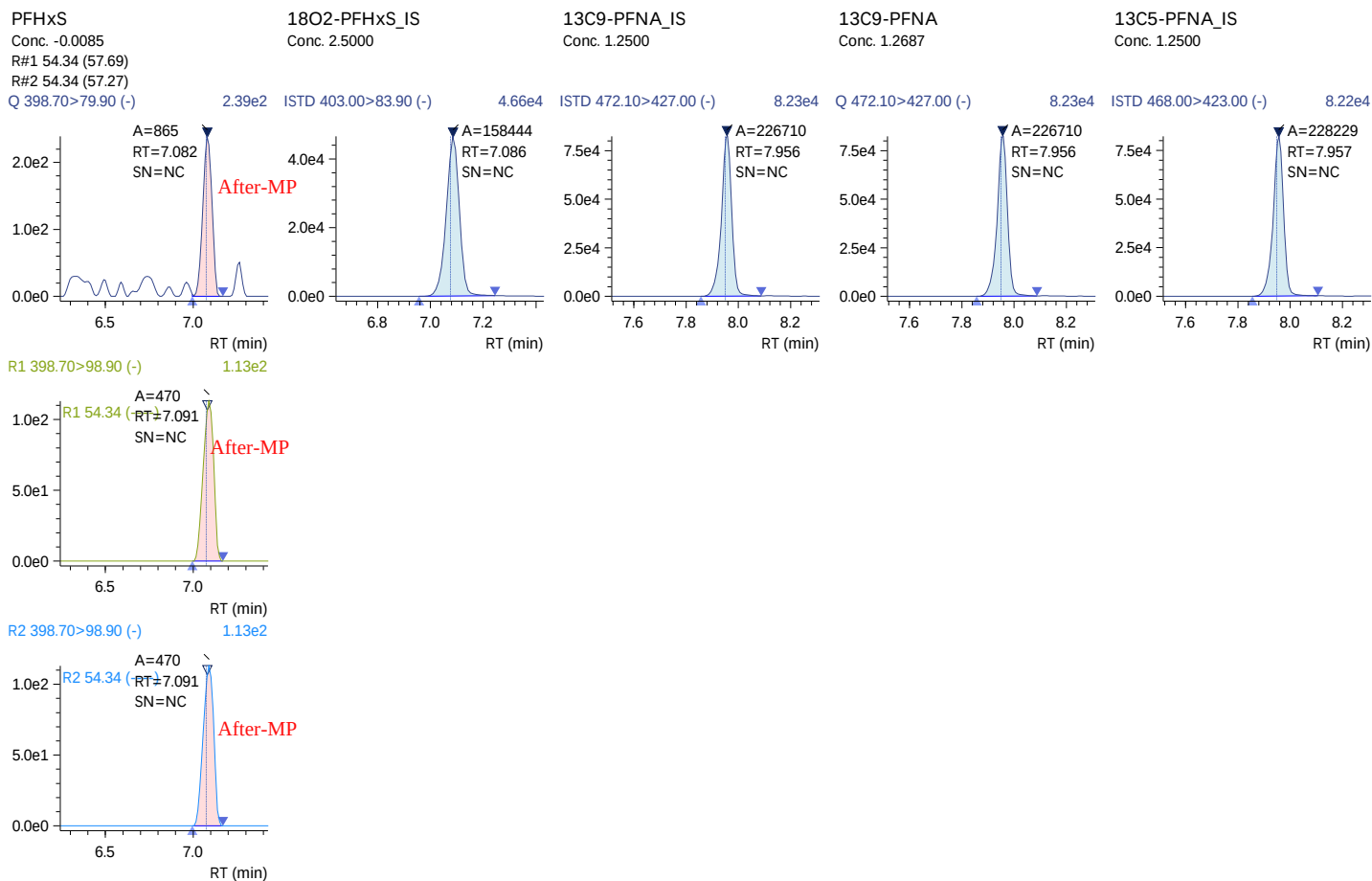
13C3-PFHxS
Conc. 2.4984

13C3-PFHxS_IS
Conc. 2.5000





240119_025 (continued)

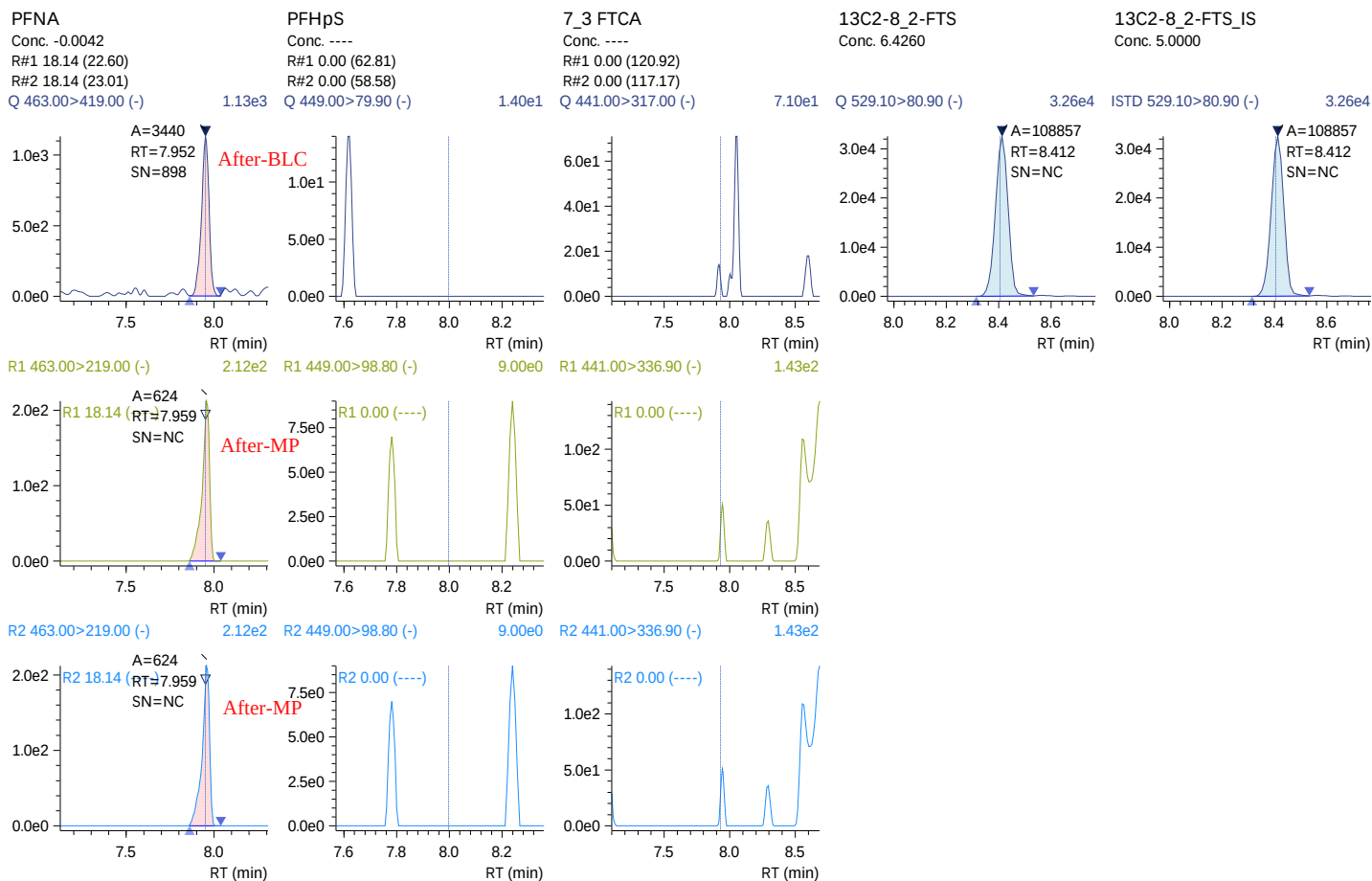


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_025 (continued)

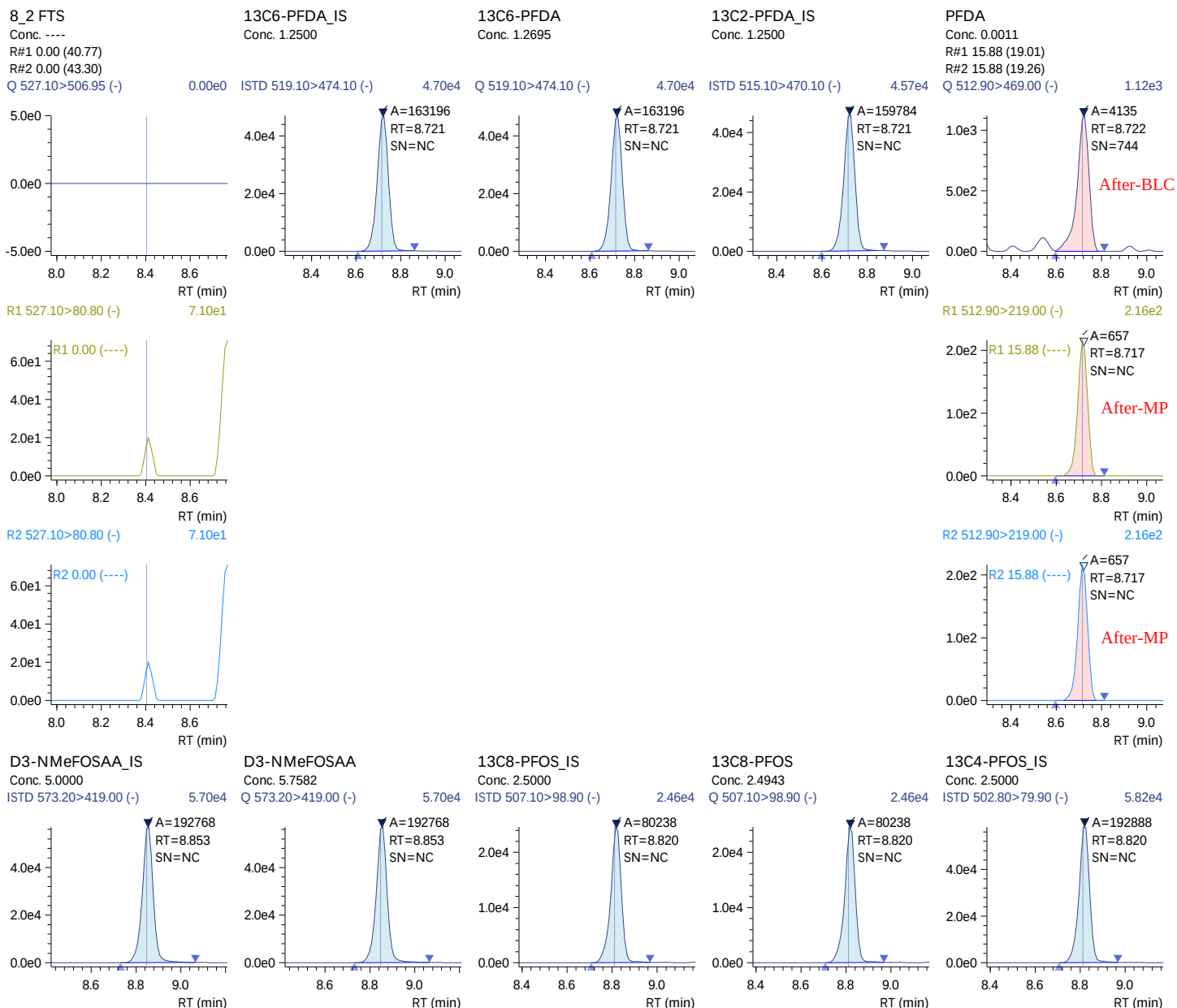


J:\LCMS08\Data\240119_1633_B1\240119_1633_B1.dampl

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_025 (continued)

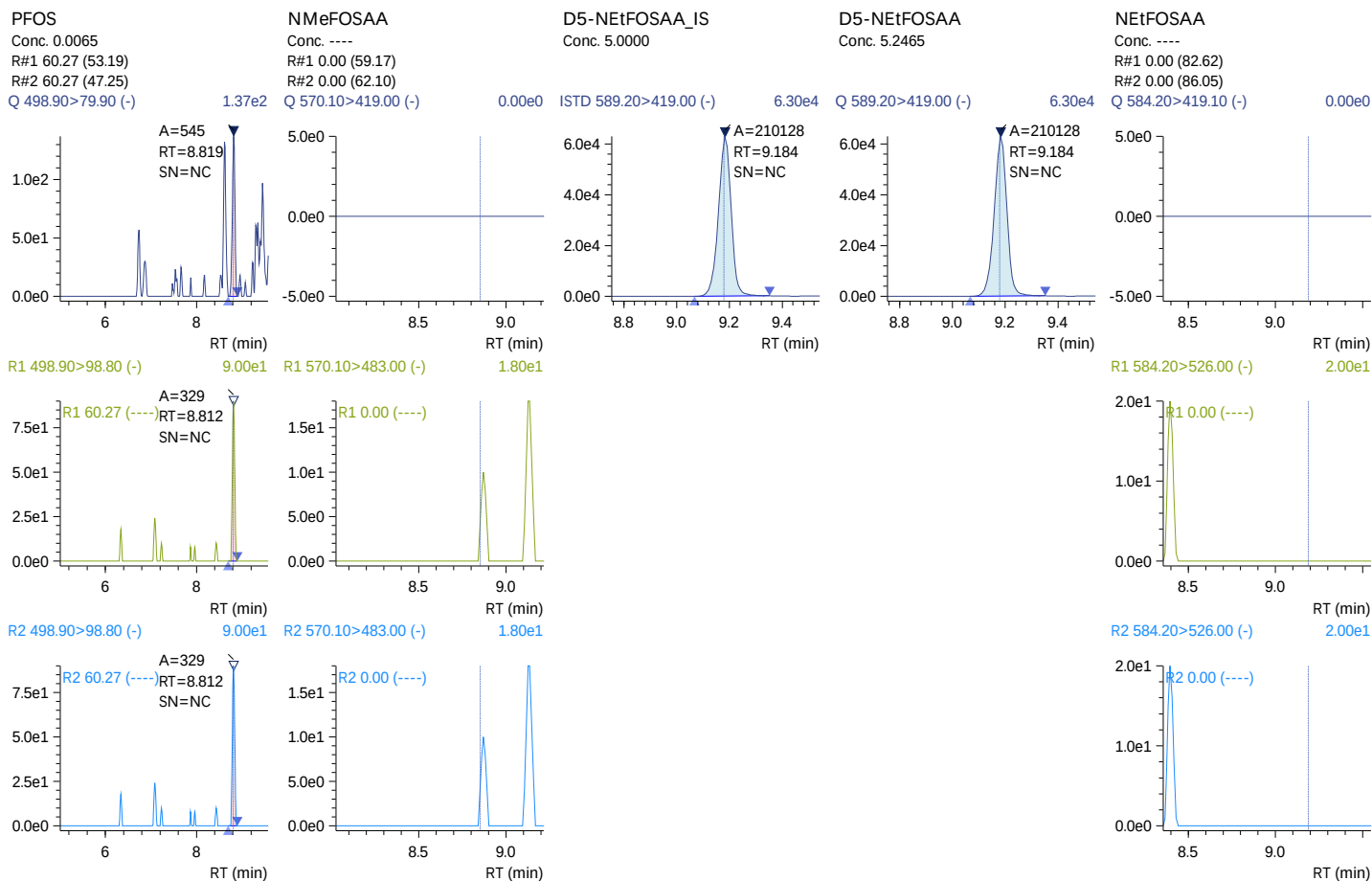


J:\LCMS08\Data\240119_1633_B1\240119_1633_B1.dampl

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_025 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_025 (continued)

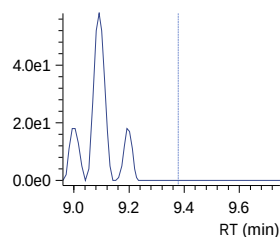
9-Cl-PF3ONS

Conc. ----

R#1 0.00 (31.76)

R#2 0.00 (31.74)

Q 530.80>351.00 (-)



R1 532.80>353.00 (-)

8.70e1

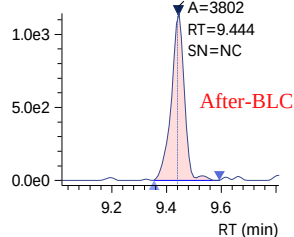
PFUnDA

Conc. -0.0029

R#1 11.59 (12.31)

R#2 11.59 (13.26)

Q 563.10>519.00 (-)



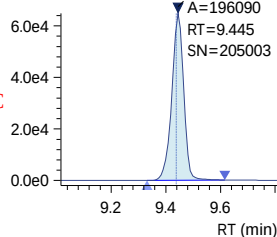
R1 563.10>269.10 (-)

1.58e2

13C7-PFUnDA_IS

Conc. 1.2500

ISTD 570.00>525.10 (-)



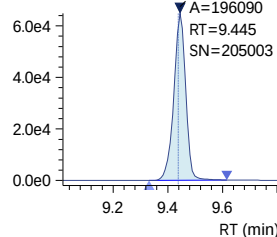
Q 570.00>525.10 (-)

6.49e4

13C7-PFUnDA

Conc. 1.2788

Q 570.00>525.10 (-)



Q 570.00>525.10 (-)

6.49e4

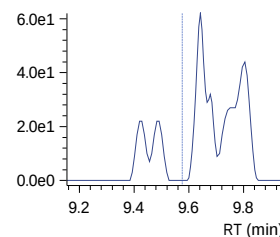
PFNS

Conc. ----

R#1 0.00 (63.31)

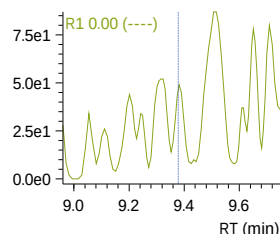
R#2 0.00 (62.49)

Q 548.80>79.90 (-)



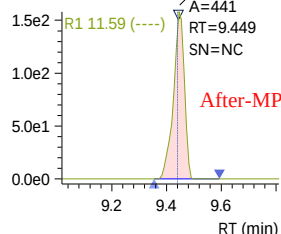
R1 548.80>98.80 (-)

1.90e1



R2 532.80>353.00 (-)

8.70e1



R2 563.10>269.10 (-)

1.58e2



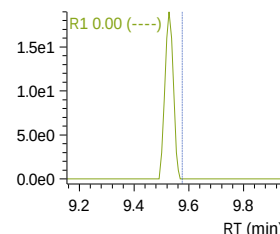
Q 570.00>525.10 (-)

6.49e4



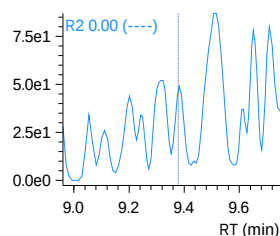
Q 570.00>525.10 (-)

6.49e4



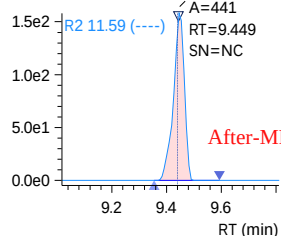
R2 548.80>98.80 (-)

1.90e1



R2 532.80>353.00 (-)

8.70e1



R2 563.10>269.10 (-)

1.58e2



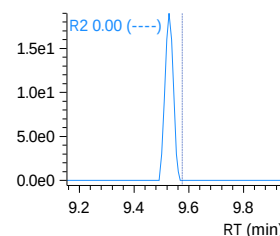
Q 570.00>525.10 (-)

6.49e4



Q 570.00>525.10 (-)

6.49e4

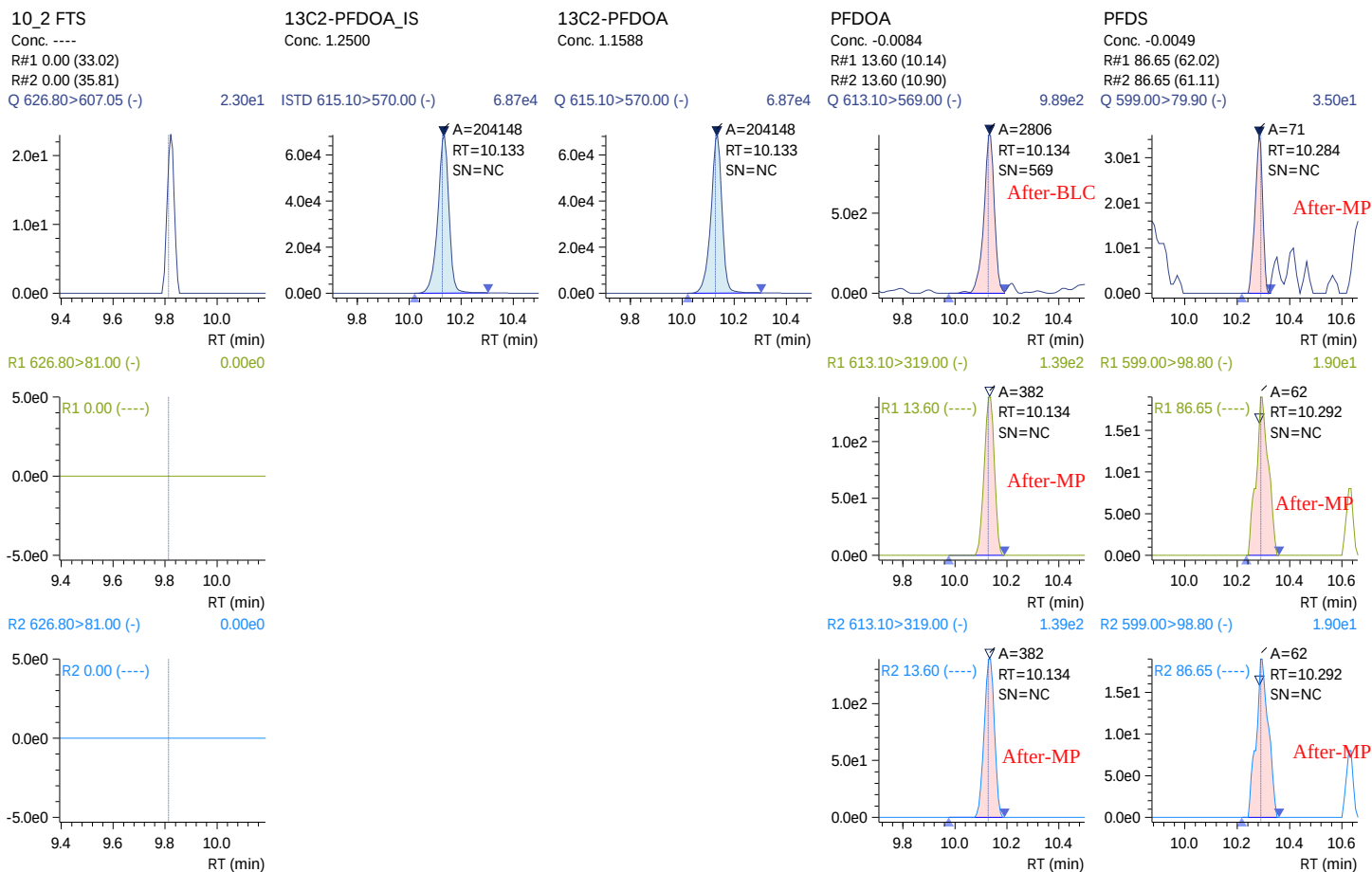


R2 548.80>98.80 (-)

1.90e1



240119_025 (continued)

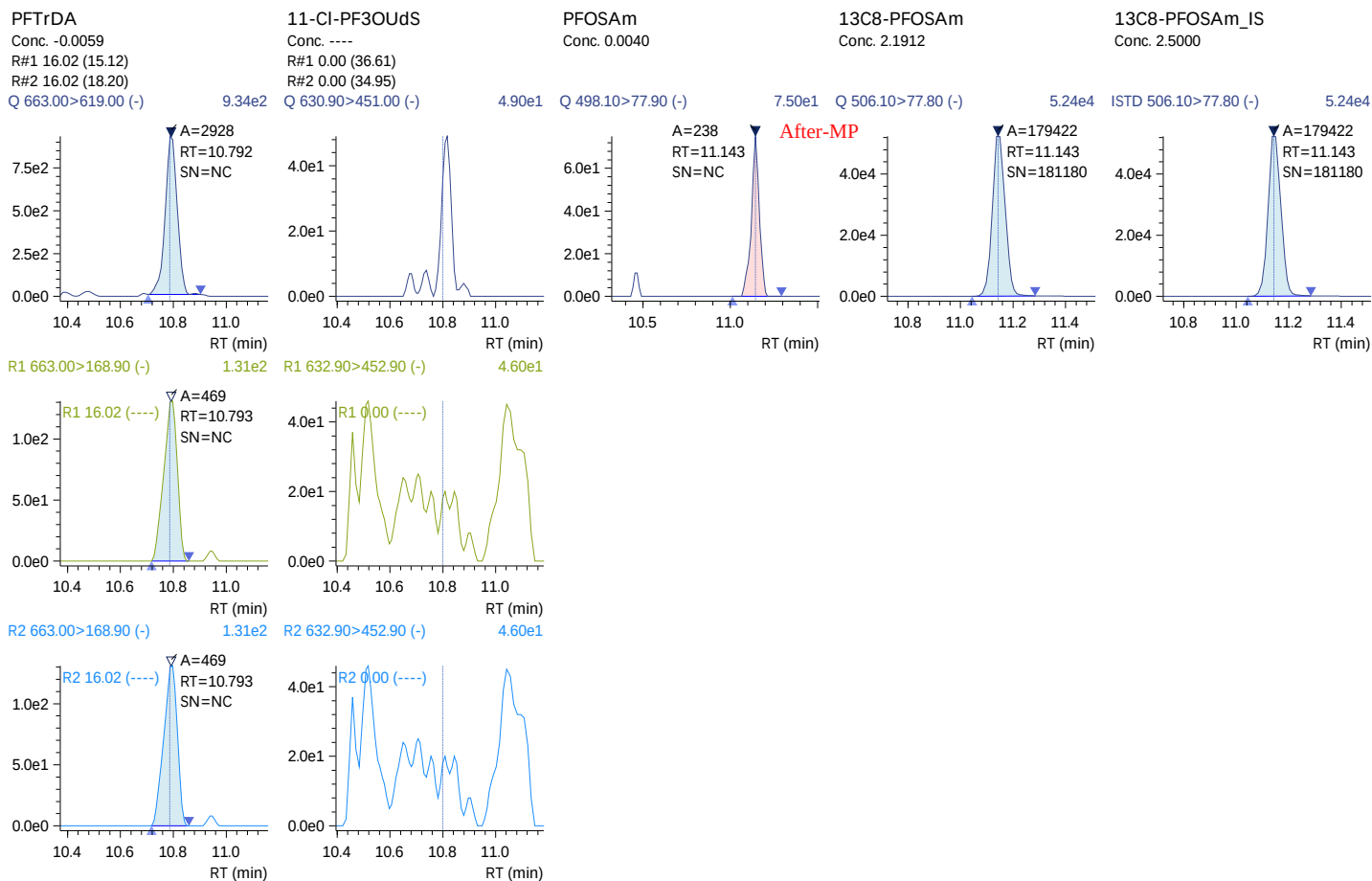


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_025 (continued)

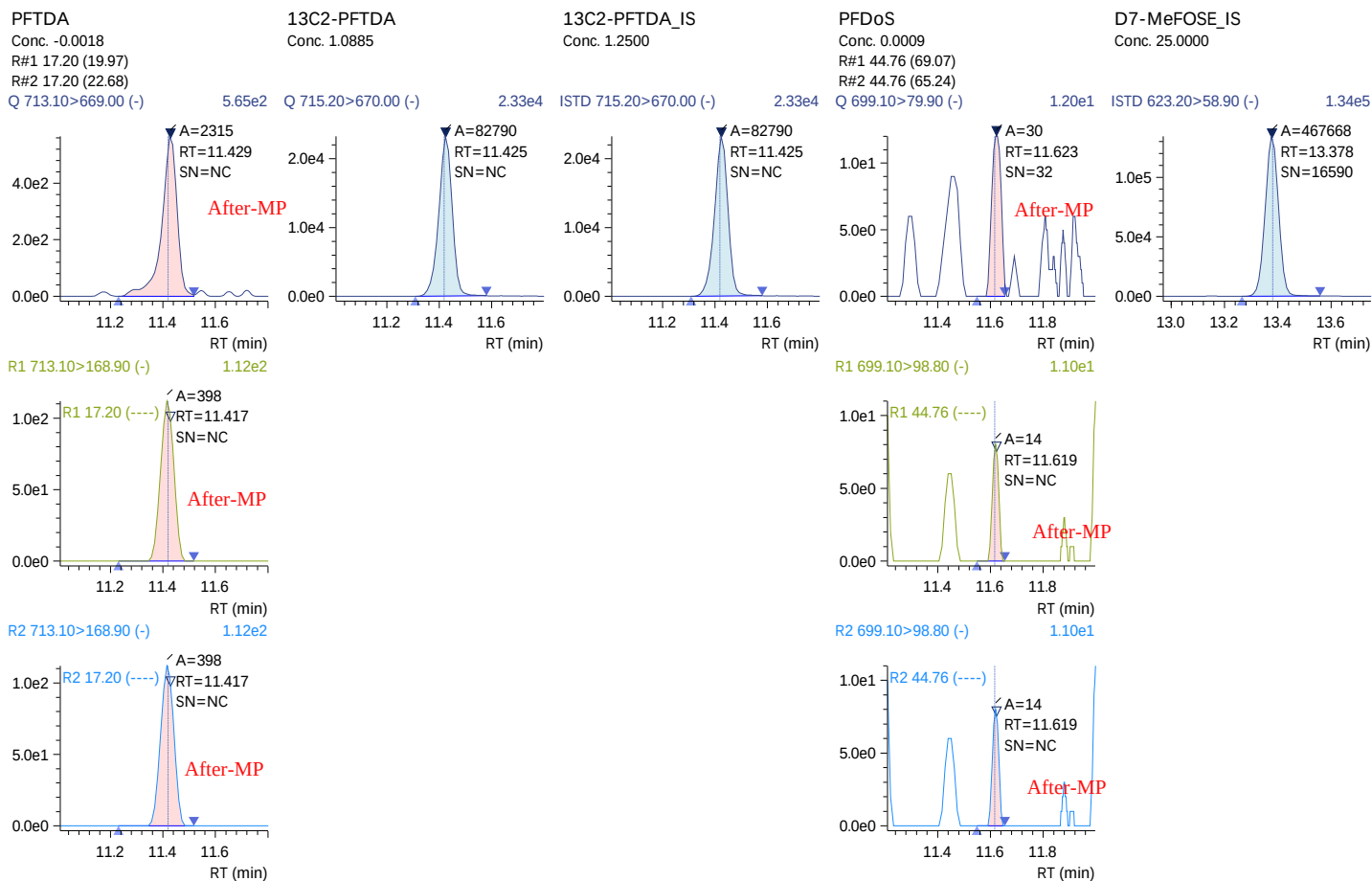


J:\LCMS08\Data\240119_1633_B1\240119_1633_B1.dampl

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_025 (continued)



J:\LCMS08\Data\240119_1633_B1\240119_1633_B1.dampl

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_025 (continued)

D7-MeFOSE
Conc. 23.1653

MeFOSE
Conc. 0.0065

13C2-PFHXA_IS
Conc. 2.5000

13C2-PFHXA
Conc. 1.8973

PFHXA

Conc. 0.0002
R#1 12.18 (11.64)
R#2 12.18 (14.51)

Q 623.20>58.90 (-)

1.34e5

Q 616.10>59.00 (-)

5.40e1

ISTD 815.00>770.05 (-)

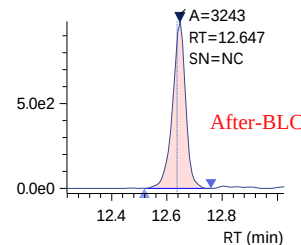
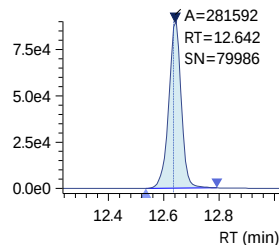
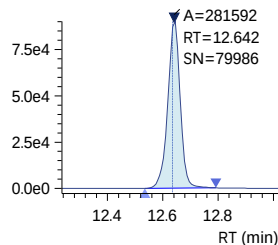
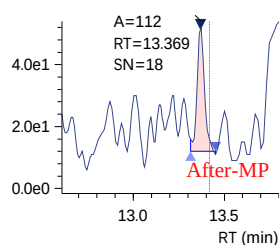
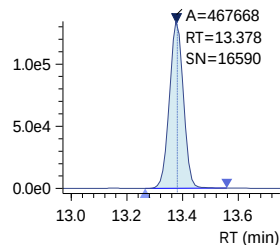
9.02e4

Q 815.00>770.05 (-)

9.02e4

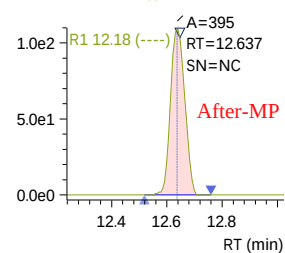
Q 813.00>768.95 (-)

9.85e2



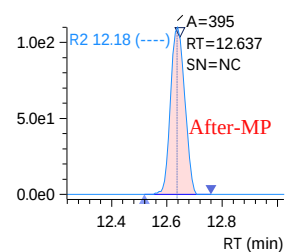
R1 813.00>218.95 (-)

1.10e2



R2 813.00>218.95 (-)

1.10e2





240119_025 (continued)

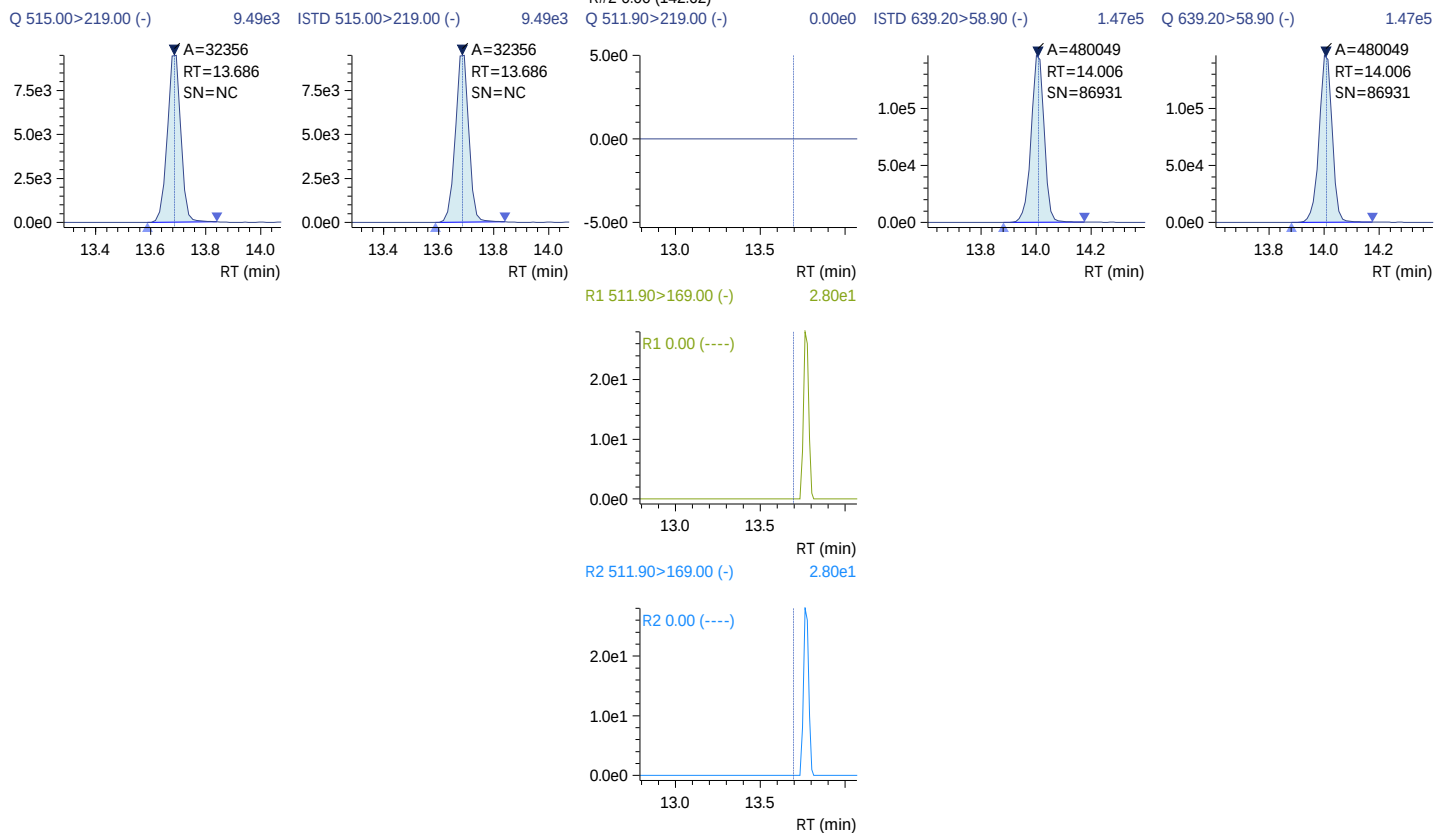
D3-MeFOSA
Conc. 1.9621

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. ----
R#1 0.00 (149.05)
R#2 0.00 (142.62)

D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 23.4121





240119_025 (continued)

EtFOSE
Conc. 0.0251

D5-EtFOSAm
Conc. 1.8128

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. ----

PFODA

Conc. 0.0140

Q 630.00>59.00 (-)

5.40e1 Q 531.10>219.00 (-)

1.26e4

ISTD 531.10>219.00 (-)

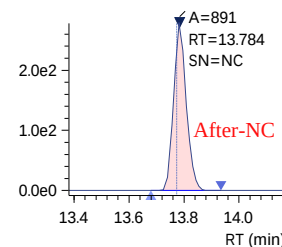
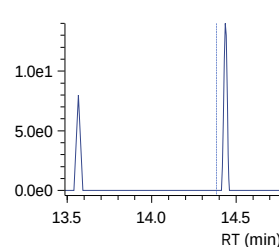
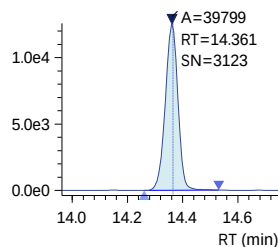
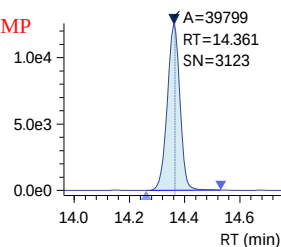
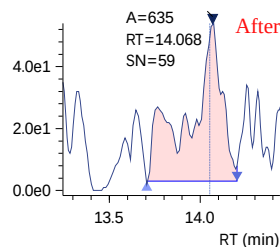
1.26e4

Q 526.00>219.00 (-)

1.40e1

Q 913.00>868.65 (-)

2.78e2

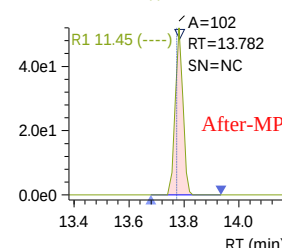
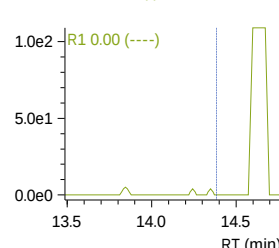


R1 526.00>169.00 (-)

1.09e2

R1 913.00>169.00 (-)

5.20e1

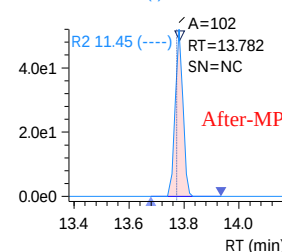
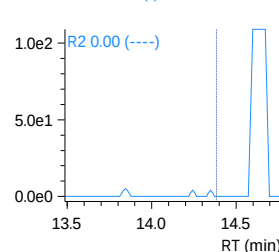


R2 526.00>169.00 (-)

1.09e2

R2 913.00>169.00 (-)

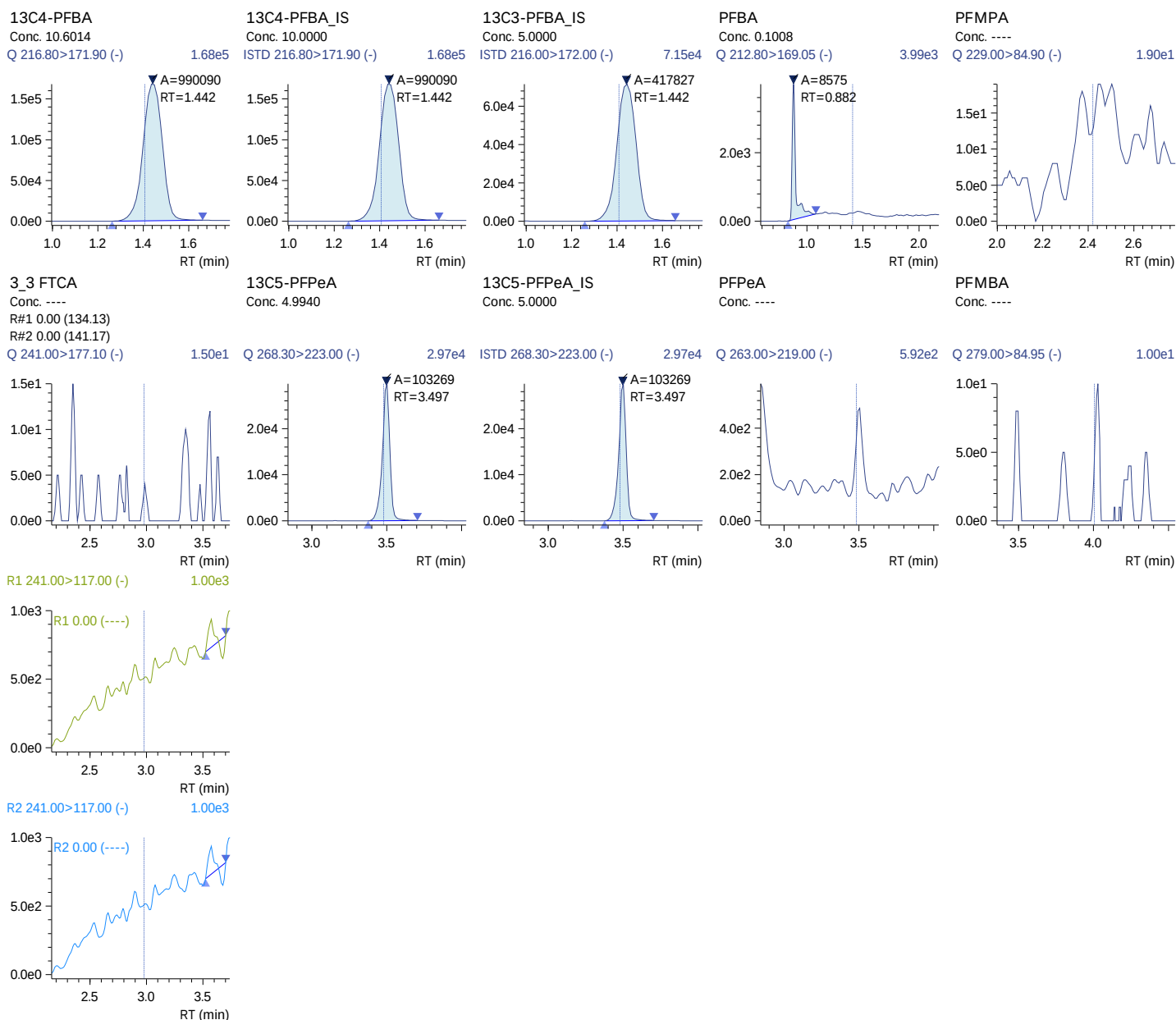
5.20e1





240119_025

Sample ID: KQ2400355-03
Date Acquired: 1/19/2024 9:06:43 PM
Acquired by: System Administrator
Data File: 240119_025
Vial: 7 | Inj. Volume: 10.0000uL | Tray: 2





240119_025 (continued)

13C2-4_2 FTS
Conc. 6.6413

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. ----
R#1 0.00 (34.14)
R#2 0.00 (29.06)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. ----
R#1 0.00 (47.53)
R#2 0.00 (46.72)

Q 329.10>80.90 (-)

4.38e4

ISTD 329.10>80.90 (-)

4.38e4

Q 327.10>307.00 (-)

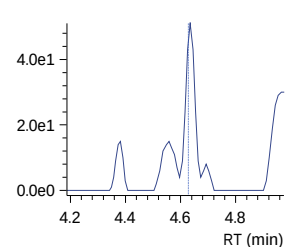
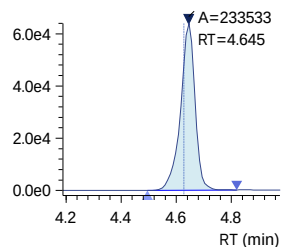
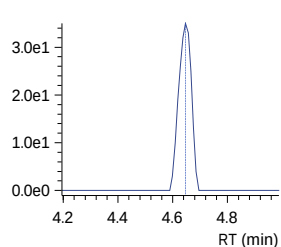
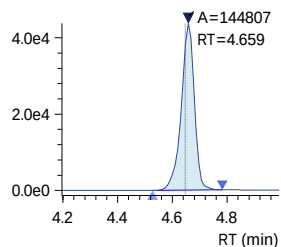
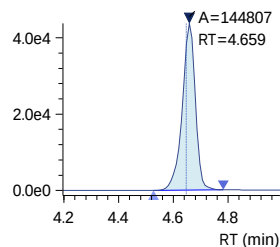
3.50e1

ISTD 302.10>79.90 (-)

6.40e4

Q 298.70>79.90 (-)

5.10e1

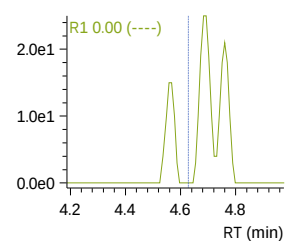
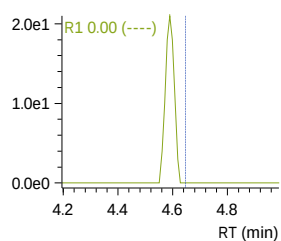


R1 327.10>80.90 (-)

2.10e1

R1 298.70>98.80 (-)

2.50e1

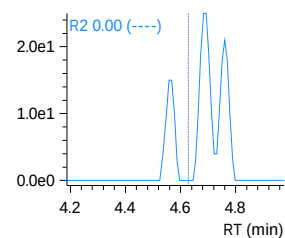
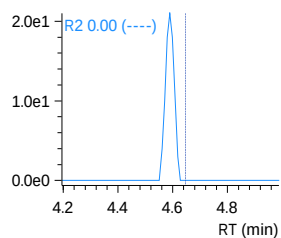


R2 327.10>80.90 (-)

2.10e1

R2 298.70>98.80 (-)

2.50e1





240119_025 (continued)

13C3-PFBS
 Conc. 2.5972

NFDHA
 Conc. ----
 R#1 0.00 (37.88)
 R#2 0.00 (40.25)

13C5-PFHxA
 Conc. 2.6159

13C5-PFHxA_IS
 Conc. 2.5000

13C2-PFHxA_IS
 Conc. 2.5000

Q 302.10>79.90 (-)

6.40e4

Q 295.00>201.00 (-)

2.21e2

Q 318.00>273.00 (-)

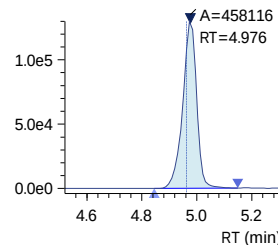
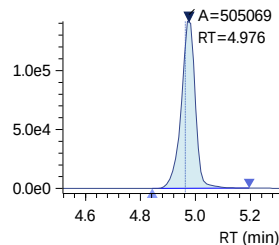
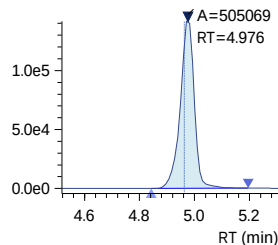
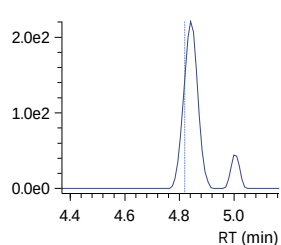
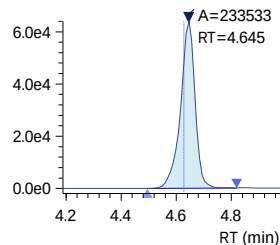
1.42e5

ISTD 318.00>273.00 (-)

1.42e5

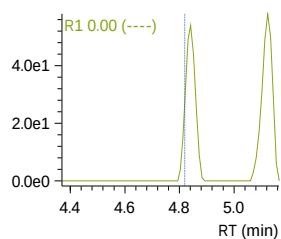
ISTD 315.10>270.00 (-)

1.30e5



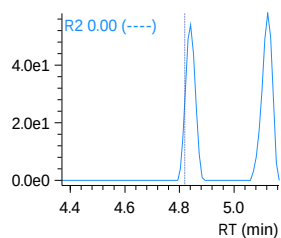
R1 295.00>84.90 (-)

5.80e1



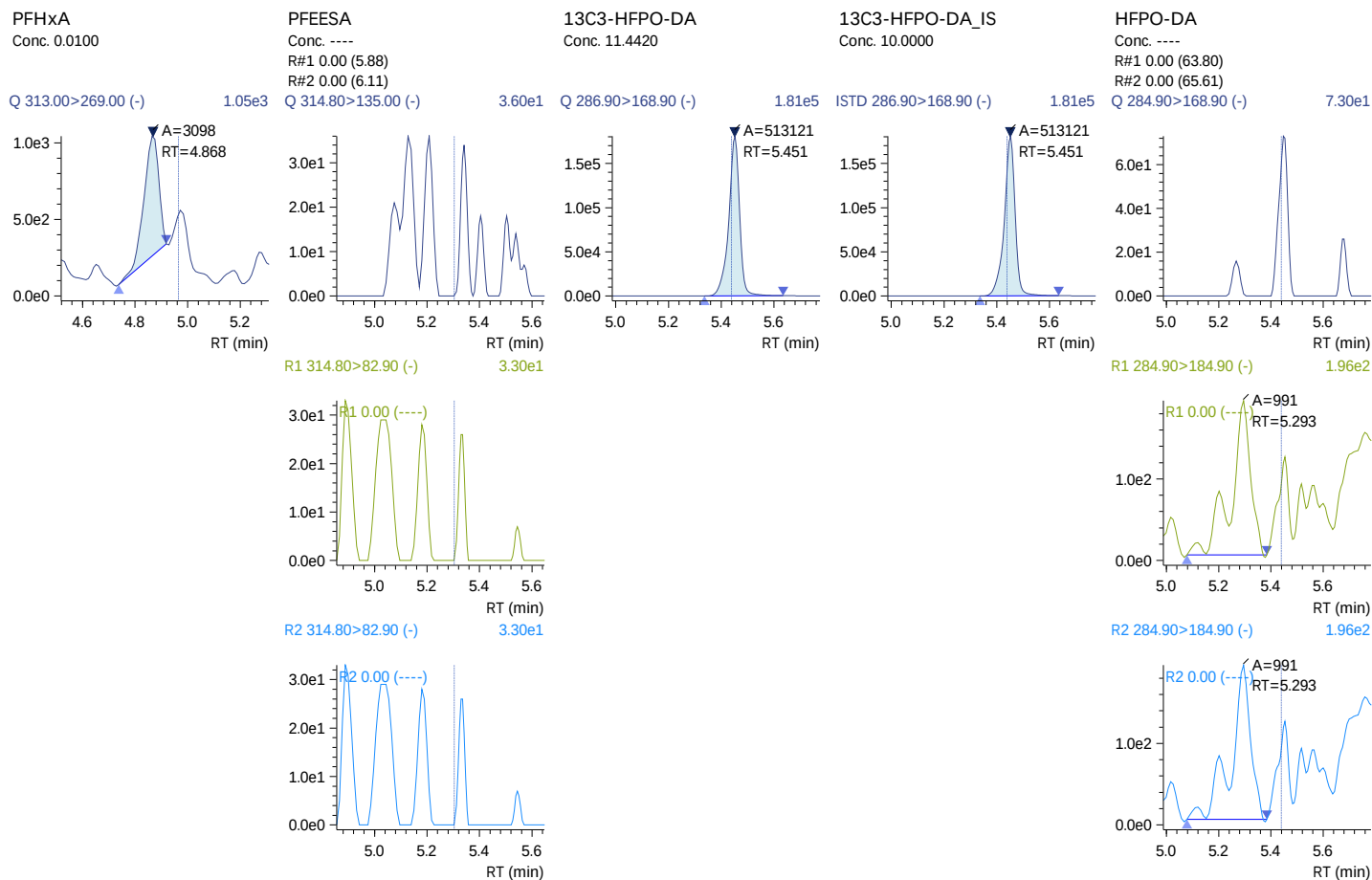
R2 295.00>84.90 (-)

5.80e1





240119_025 (continued)





240119_025 (continued)

5_3 FTCA

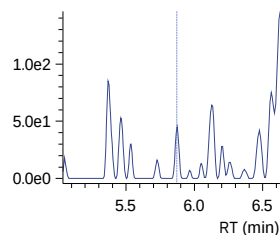
Conc. ----

R#1 0.00 (167.13)

R#2 0.00 (158.86)

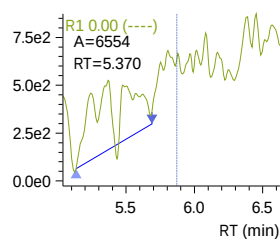
Q 341.00>237.05 (-)

1.46e2



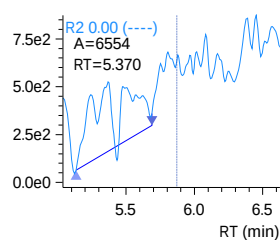
R1 341.00>217.00 (-)

8.73e2



R2 341.00>217.00 (-)

8.73e2



PFPeS

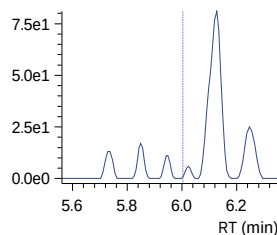
Conc. ----

R#1 0.00 (56.71)

R#2 0.00 (55.80)

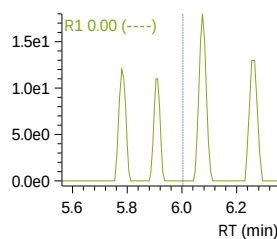
Q 349.10>79.90 (-)

8.10e1



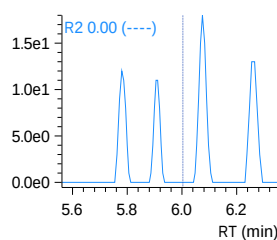
R1 349.10>98.80 (-)

1.80e1



R2 349.10>98.80 (-)

1.80e1

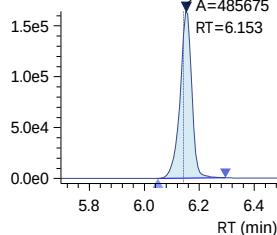


13C4-PFHpa

Conc. 2.7788

Q 367.10>322.00 (-)

1.64e5

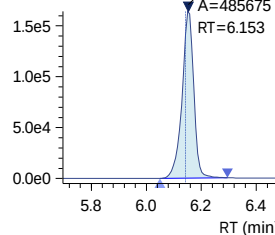


13C4-PFHpa_IS

Conc. 2.5000

ISTD 367.10>322.00 (-)

1.64e5



PFHpA

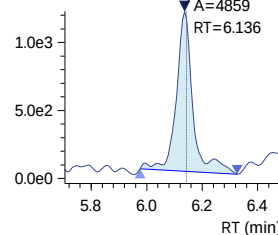
Conc. -0.0106

R#1 0.00 (21.37)

R#2 0.00 (21.50)

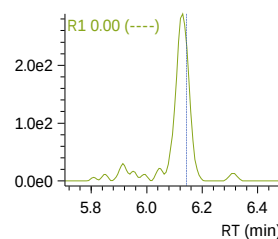
Q 363.10>319.00 (-)

1.23e3



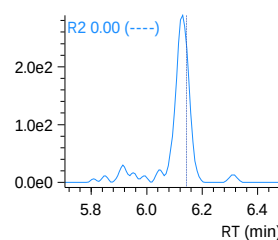
R1 363.10>169.00 (-)

2.89e2



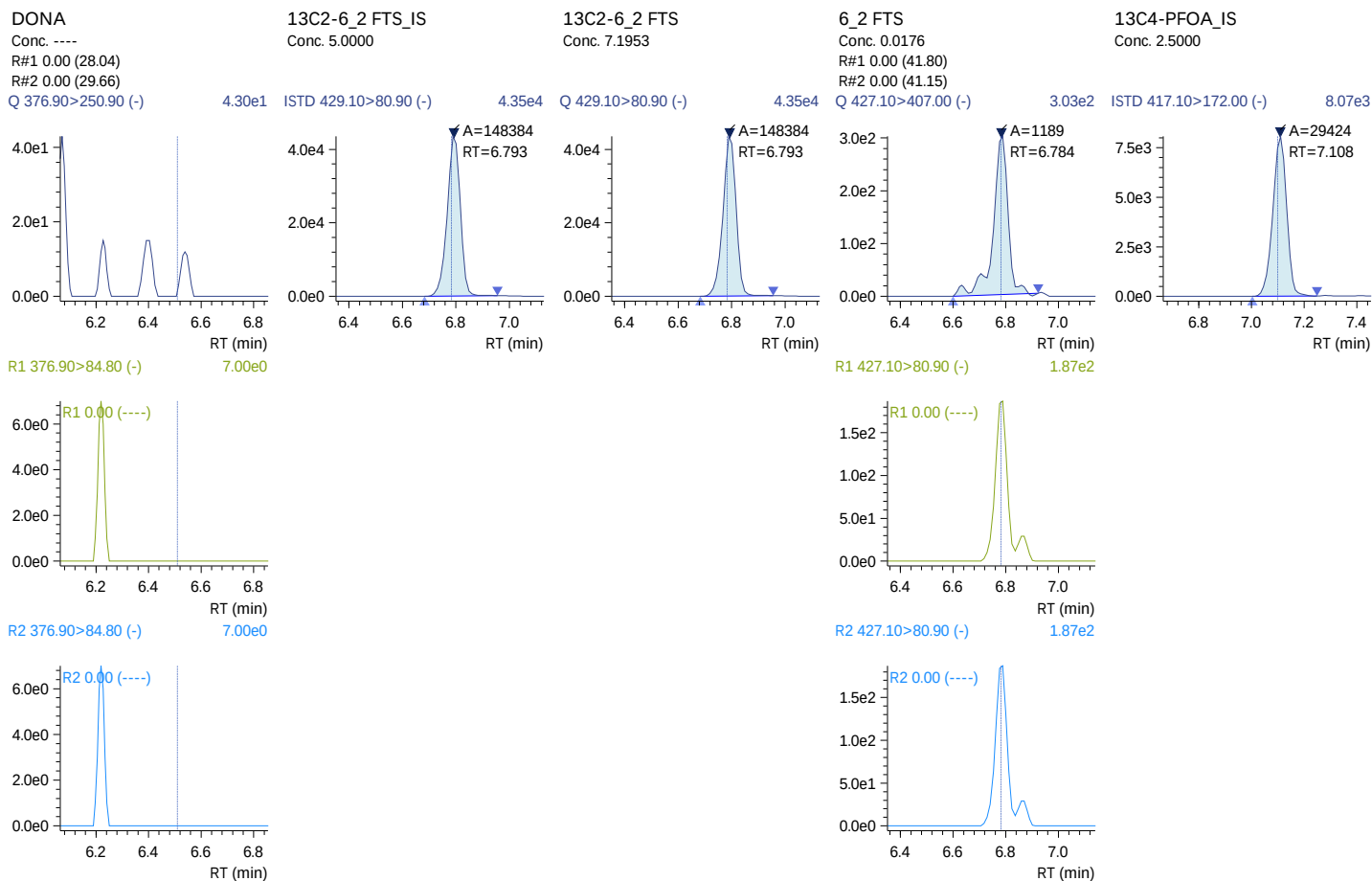
R2 363.10>169.00 (-)

2.89e2





240119_025 (continued)





240119_025 (continued)

13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.5851

PFOA
Conc. -0.0006
R#1 32.69 (29.05)
R#2 32.69 (31.89)

13C3-PFHxS
Conc. 2.4984

13C3-PFHxS_IS
Conc. 2.5000

ISTD 421.10>376.00 (-)

1.21e5

Q 421.10>376.00 (-)

1.21e5

Q 413.00>369.00 (-)

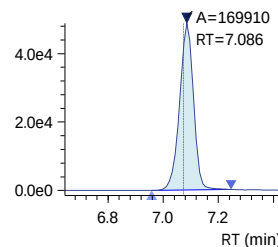
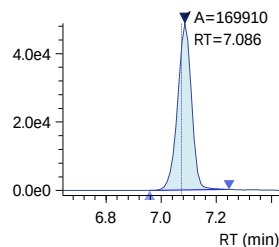
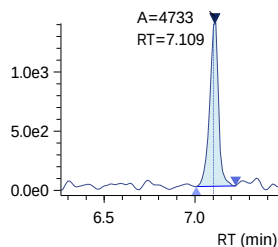
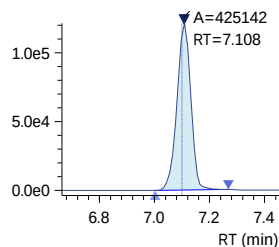
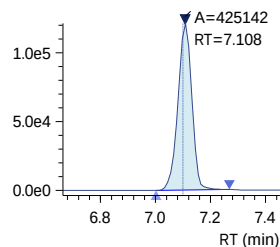
1.41e3

Q 402.10>79.90 (-)

4.88e4

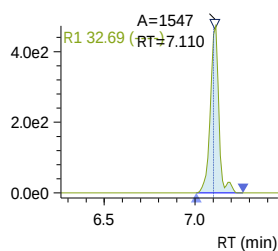
ISTD 402.10>79.90 (-)

4.88e4



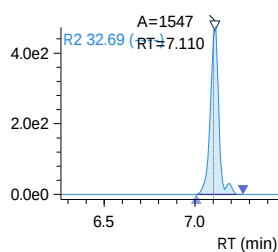
R1 413.00>169.00 (-)

4.73e2



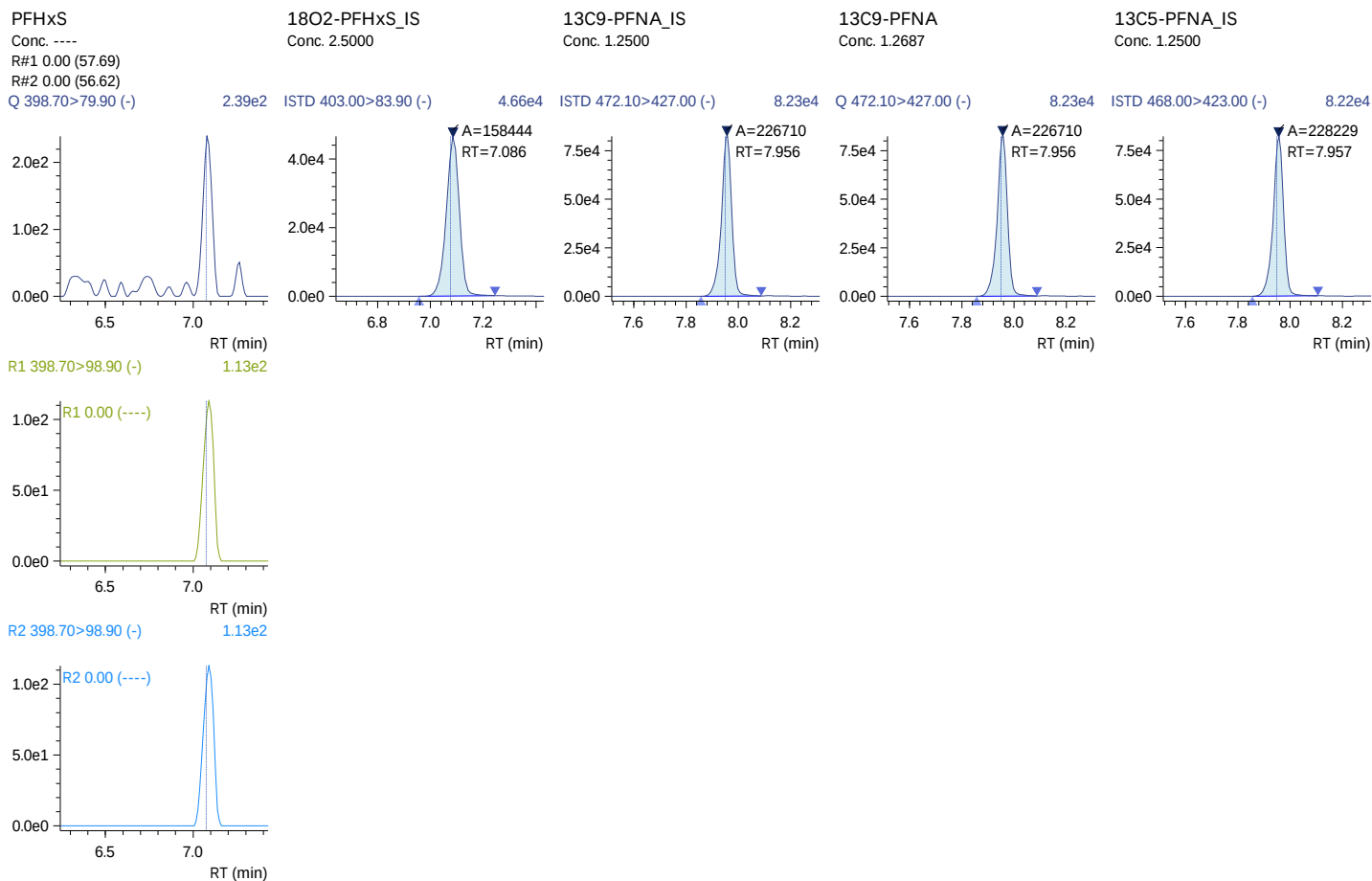
R2 413.00>169.00 (-)

4.73e2



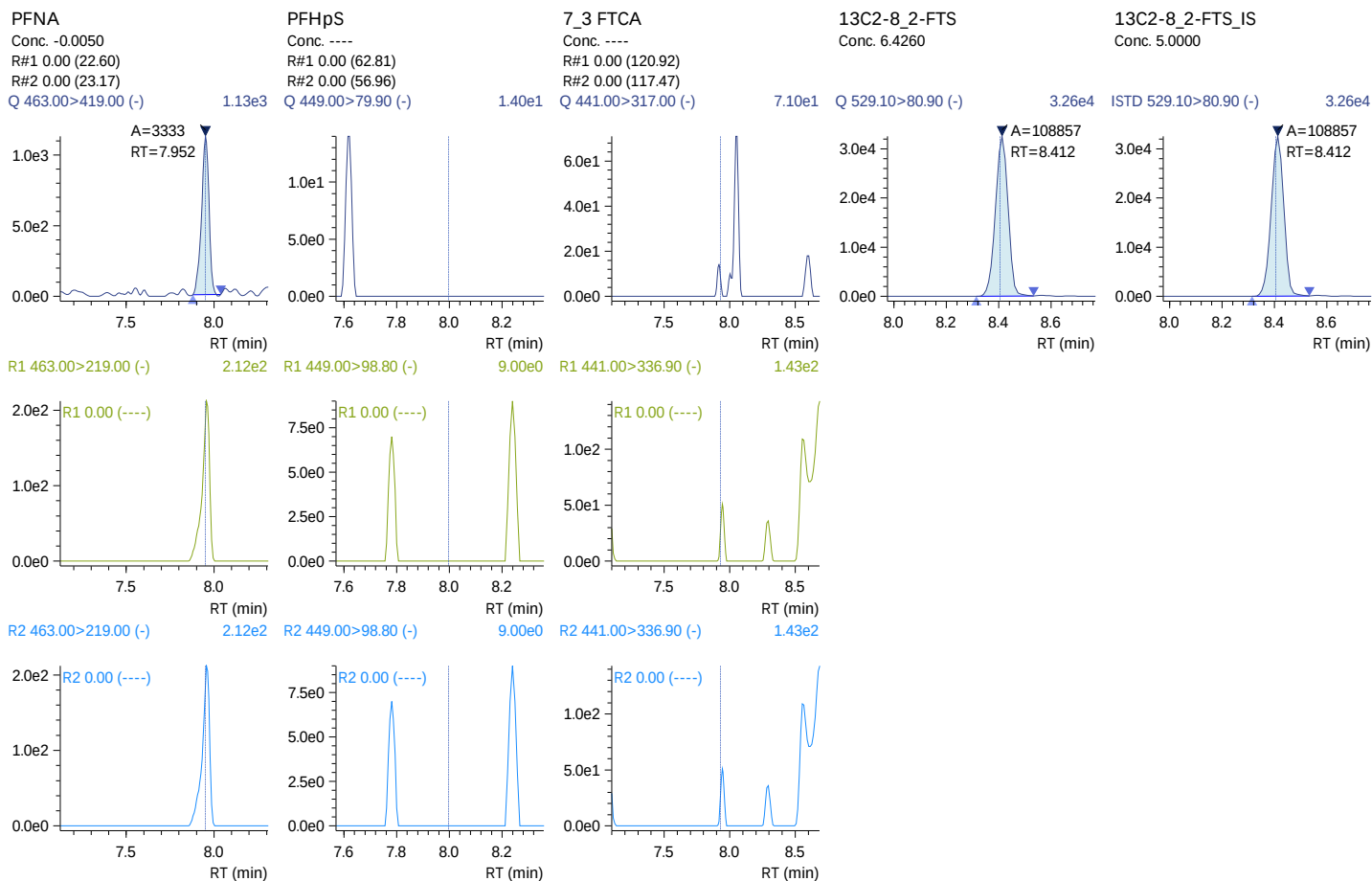


240119_025 (continued)



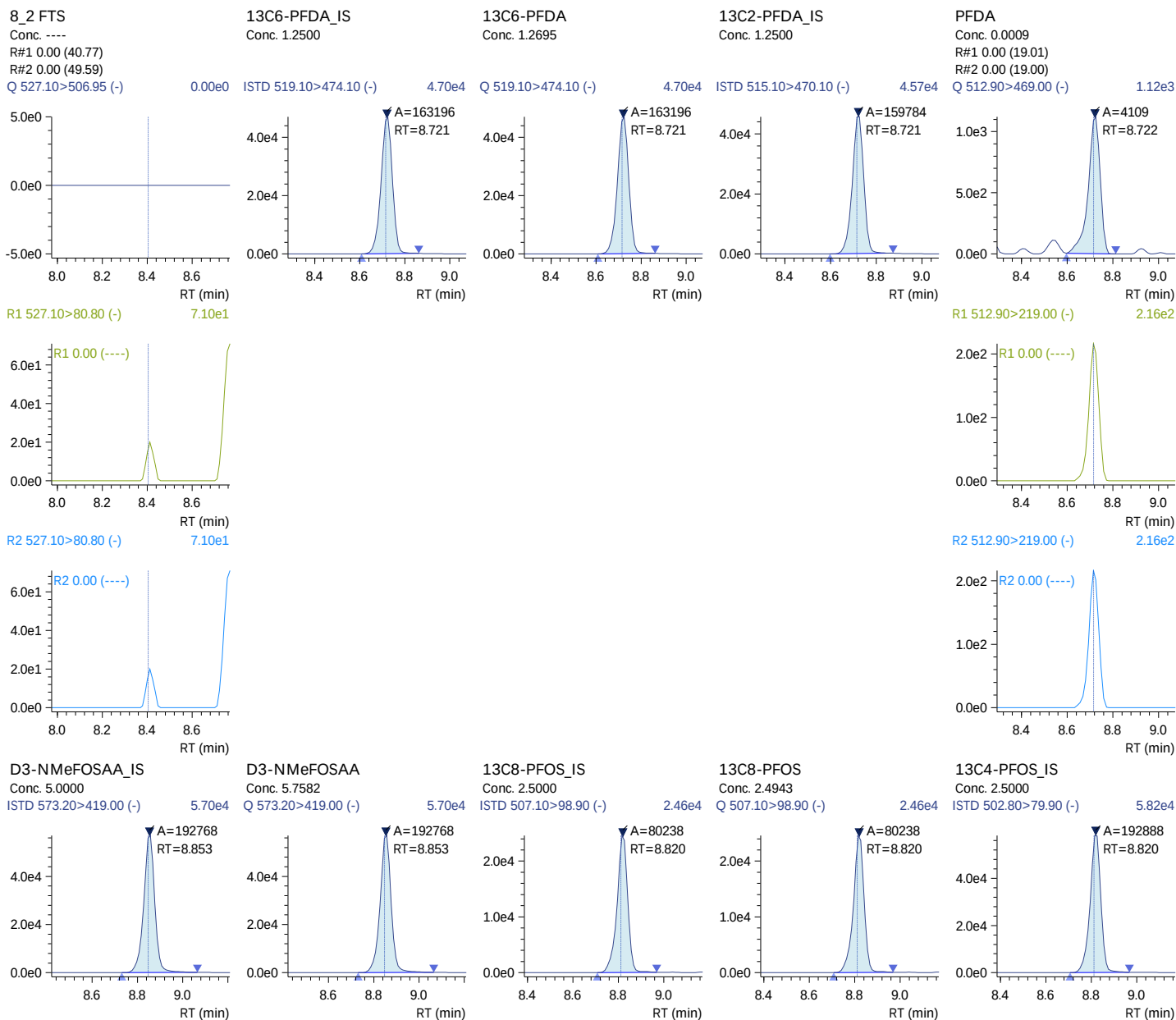


240119_025 (continued)



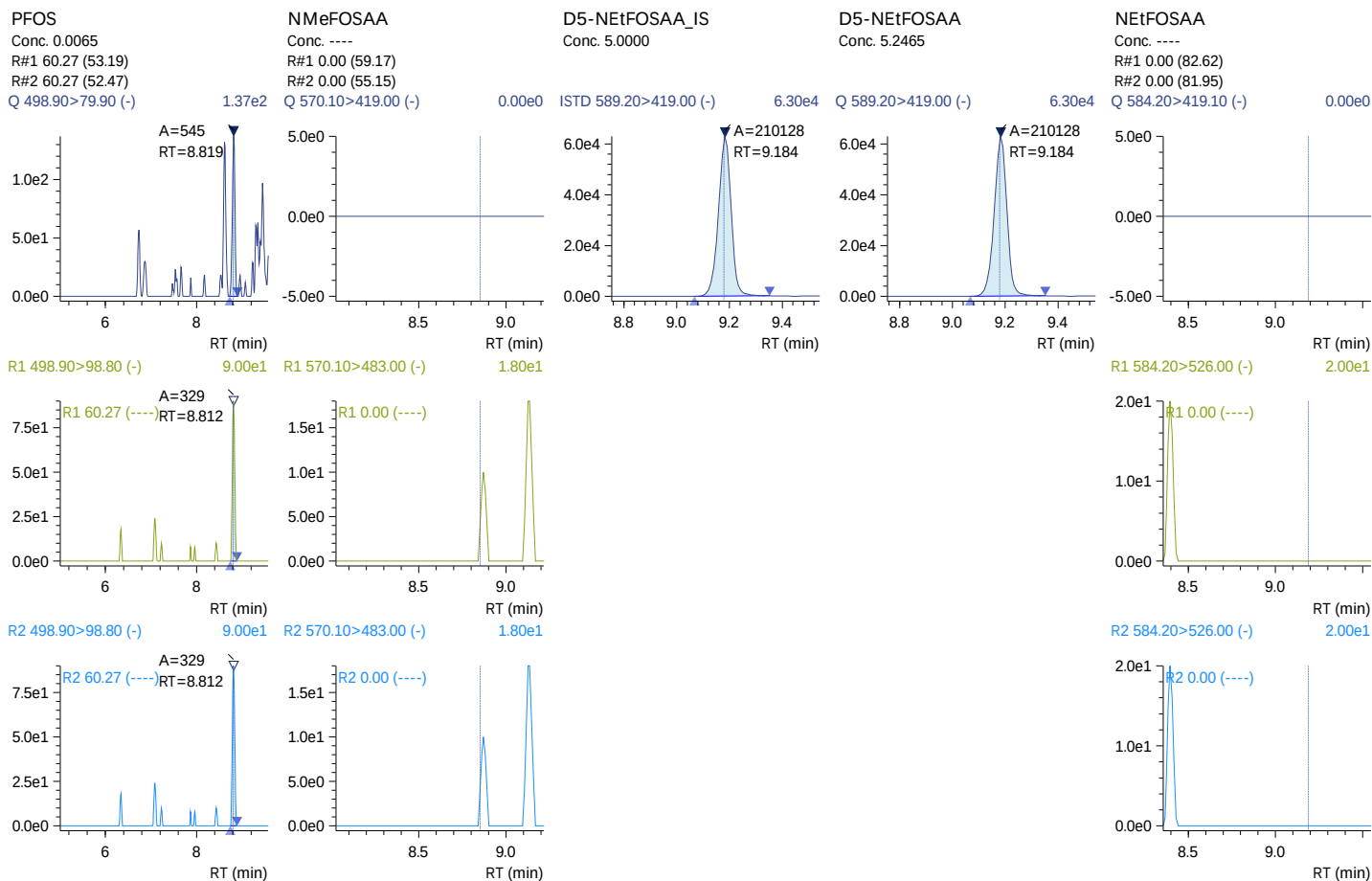


240119_025 (continued)





240119_025 (continued)





240119_025 (continued)

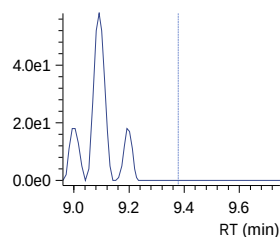
9-Cl-PF3ONS

Conc. ----

R#1 0.00 (31.76)

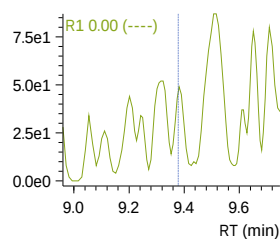
R#2 0.00 (32.76)

Q 530.80>351.00 (-)



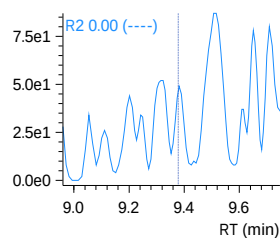
R1 532.80>353.00 (-)

8.70e1



R2 532.80>353.00 (-)

8.70e1



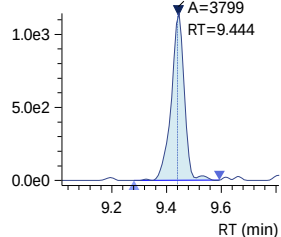
PFUnDA

Conc. -0.0030

R#1 0.00 (12.31)

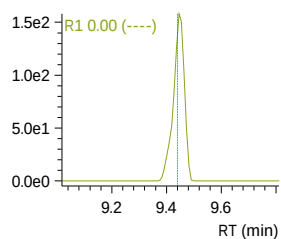
R#2 0.00 (13.12)

Q 563.10>519.00 (-)



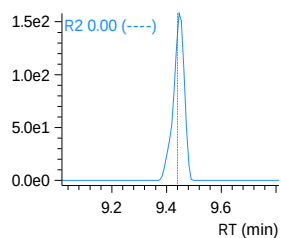
R1 563.10>269.10 (-)

1.58e2



R2 563.10>269.10 (-)

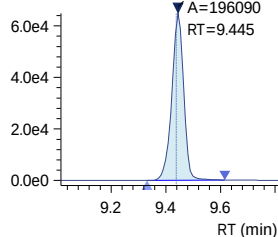
1.58e2



13C7-PFUnDA_IS

Conc. 1.2500

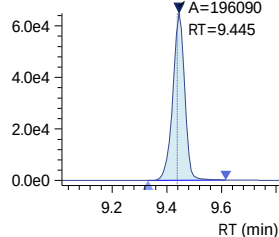
ISTD 570.00>525.10 (-)



13C7-PFUnDA

Conc. 1.2788

Q 570.00>525.10 (-)



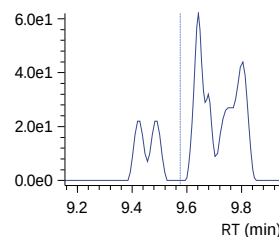
PFNS

Conc. ----

R#1 0.00 (63.31)

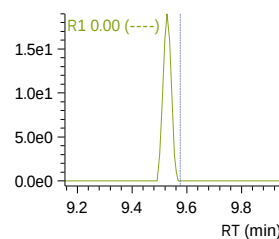
R#2 0.00 (65.22)

Q 548.80>79.90 (-)



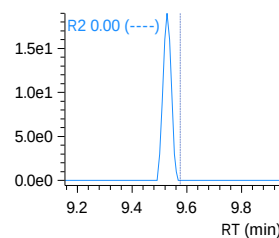
R1 548.80>98.80 (-)

1.90e1



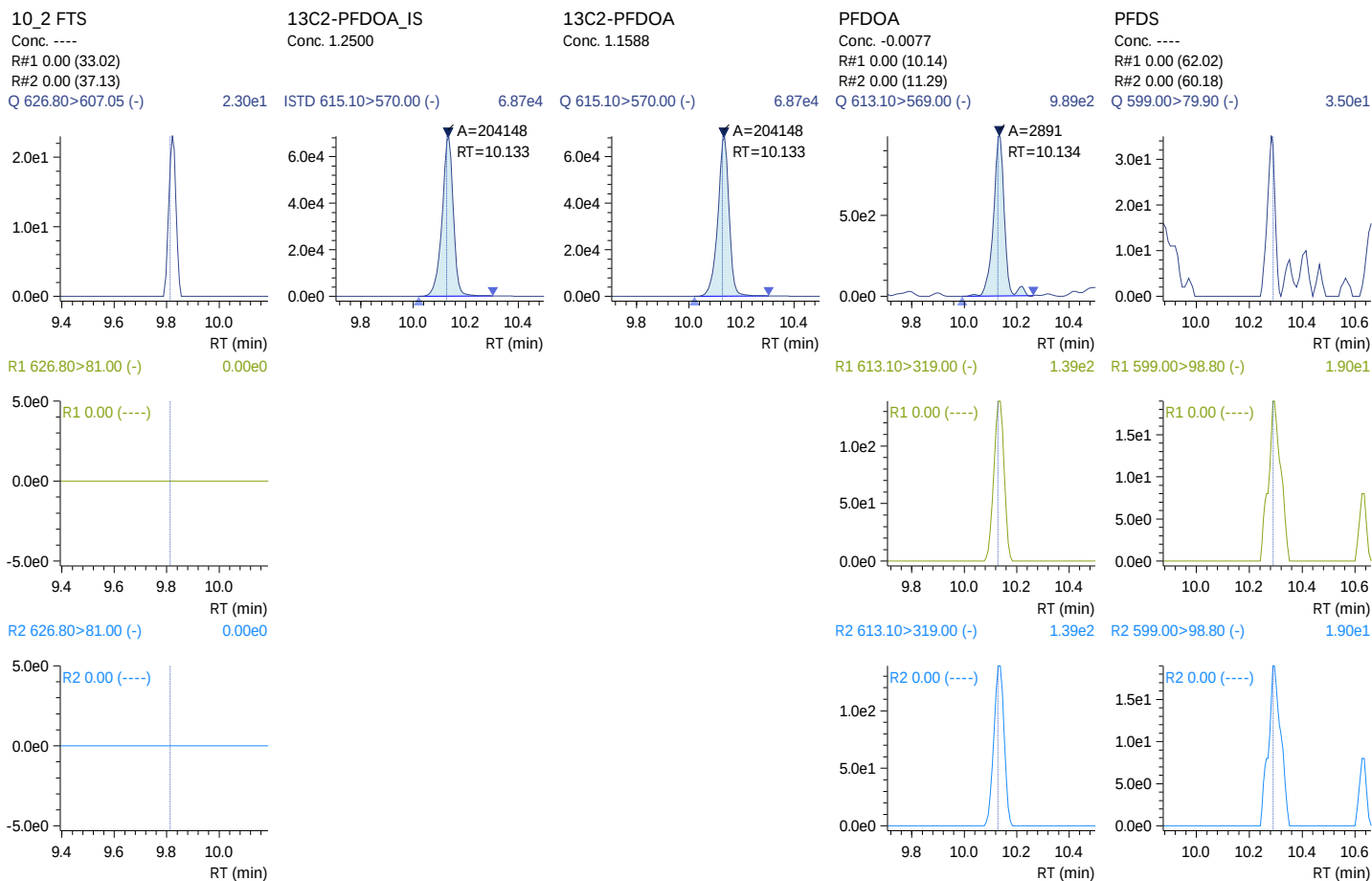
R2 548.80>98.80 (-)

1.90e1



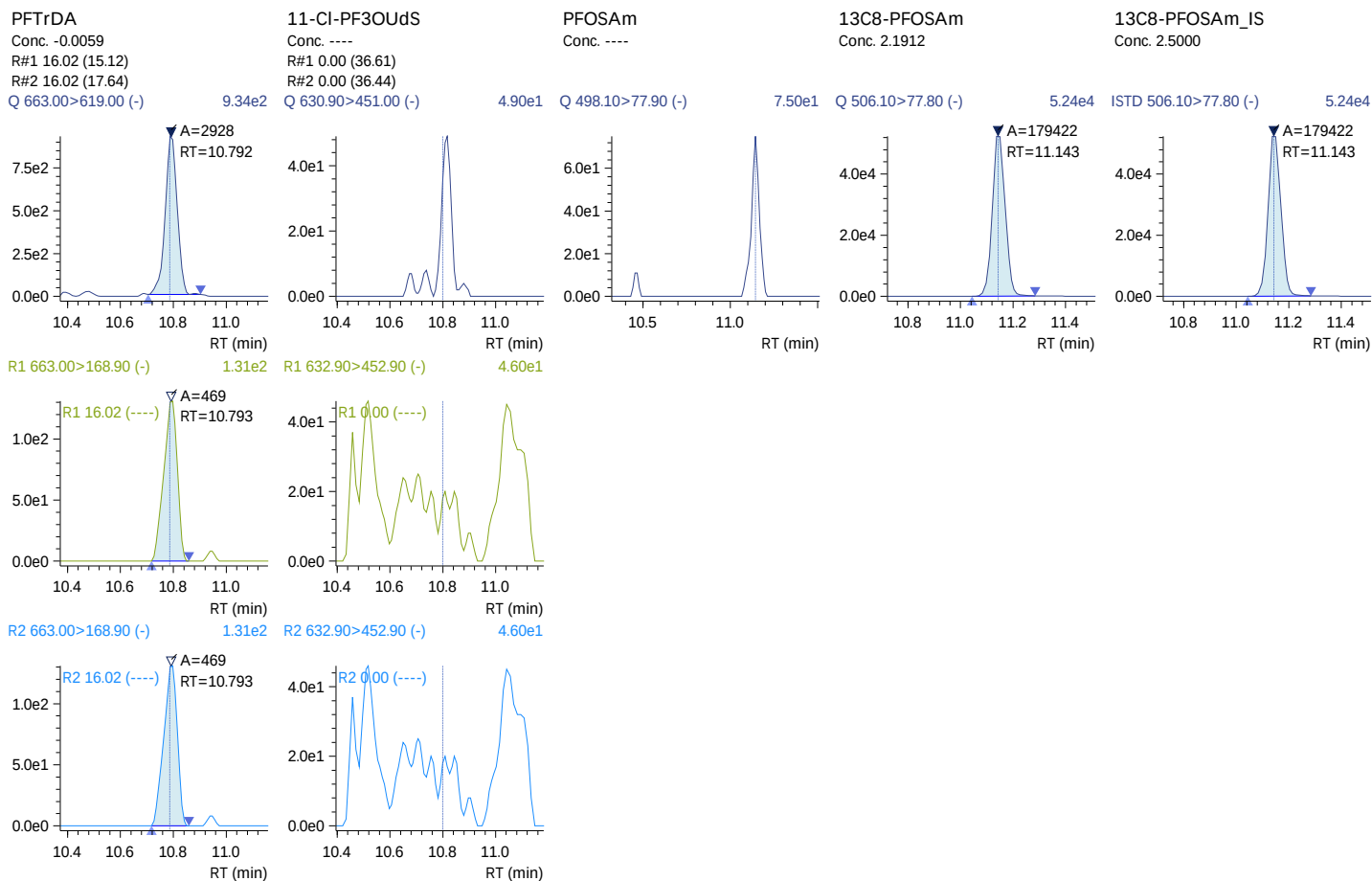


240119_025 (continued)



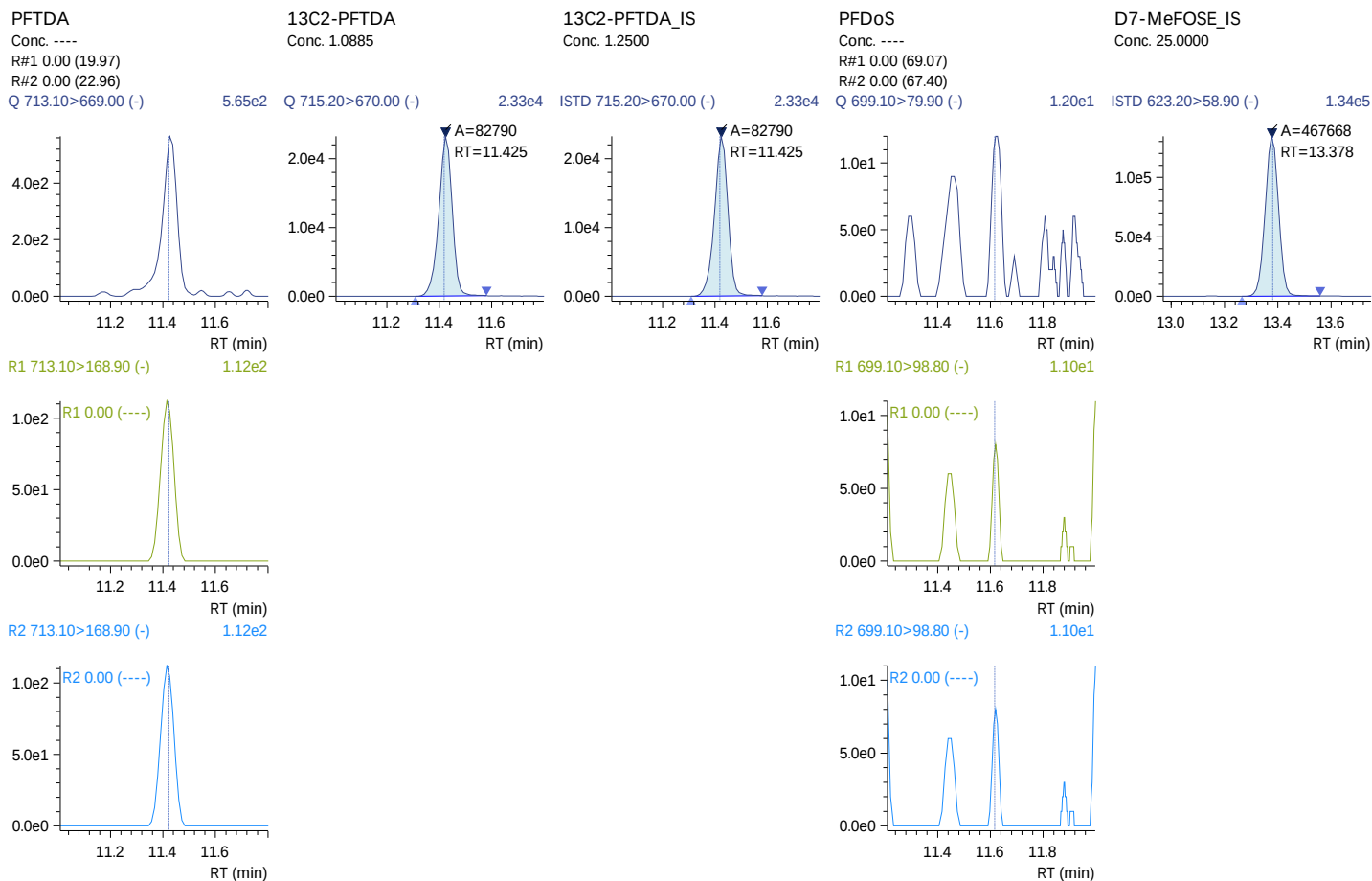


240119_025 (continued)





240119_025 (continued)





240119_025 (continued)

D7-MeFOSE
Conc. 23.1653

MeFOSE
Conc. ----

13C2-PFHxDA_IS
Conc. 2.5000

13C2-PFHxDA
Conc. 1.8973

PFHxDA
Conc. 0.0001
R#1 0.00 (11.64)
R#2 0.00 (13.90)

Q 623.20>58.90 (-)

1.34e5

Q 616.10>59.00 (-)

5.40e1

ISTD 815.00>770.05 (-)

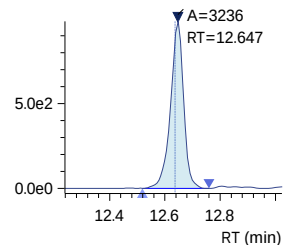
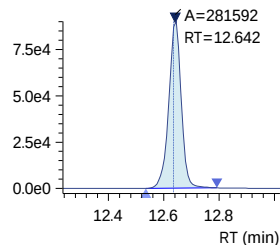
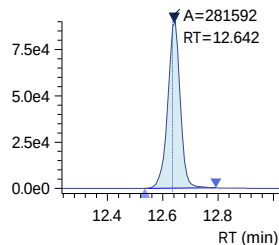
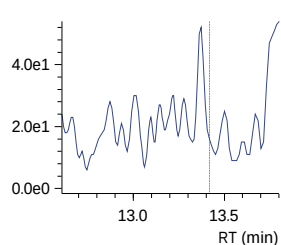
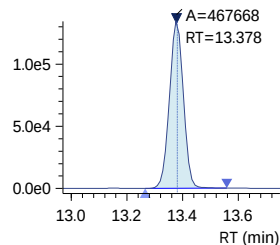
9.02e4

Q 815.00>770.05 (-)

9.02e4

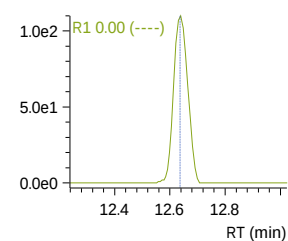
Q 813.00>768.95 (-)

9.85e2



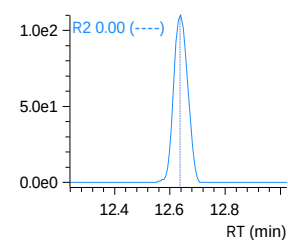
R1 813.00>218.95 (-)

1.10e2



R2 813.00>218.95 (-)

1.10e2





240119_025 (continued)

D3-MeFOSA
Conc. 1.9621

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. ----
R#1 0.00 (149.05)
R#2 0.00 (140.79)

D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 23.4121

Q 515.00>219.00 (-)

9.49e3

ISTD 515.00>219.00 (-)

9.49e3

Q 511.90>219.00 (-)

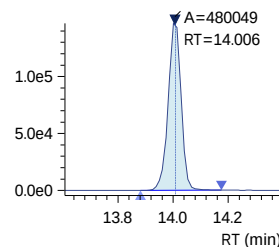
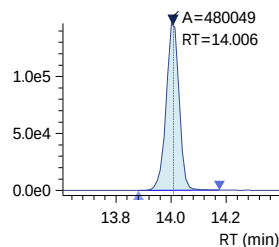
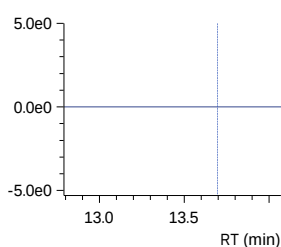
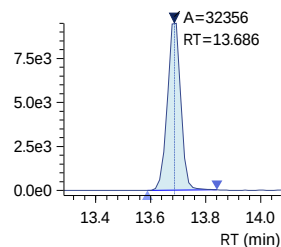
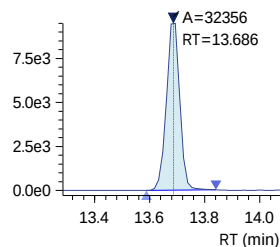
0.00e0

ISTD 639.20>58.90 (-)

1.47e5

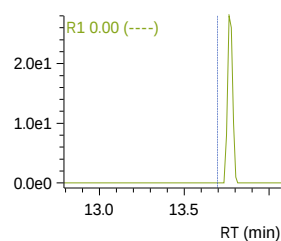
Q 639.20>58.90 (-)

1.47e5



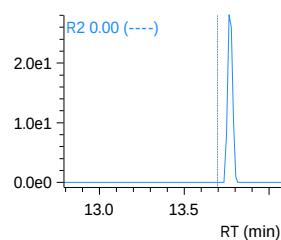
R1 511.90>169.00 (-)

2.80e1



R2 511.90>169.00 (-)

2.80e1





240119_025 (continued)

EtFOSE
 Conc. ----

D5-EtFOSAm
 Conc. 1.8128

D5-EtFOSAm_IS
 Conc. 2.5000

EtFOSAm
 Conc. ----

PFODA
 Conc. 0.0140

Q 630.00>59.00 (-)

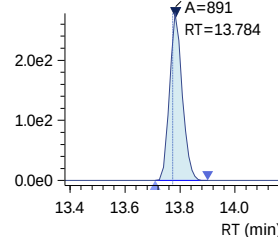
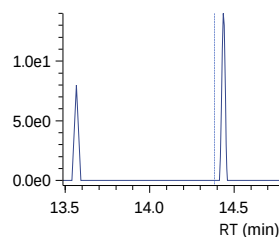
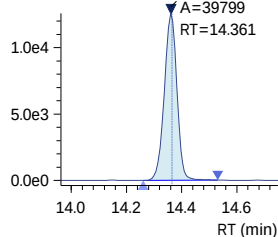
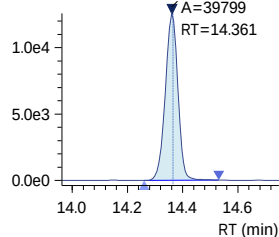
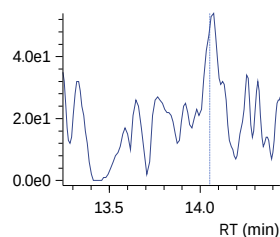
5.40e1 Q 531.10>219.00 (-)

1.26e4 ISTD 531.10>219.00 (-)

1.26e4 Q 526.00>219.00 (-)

1.40e1 Q 913.00>868.65 (-)

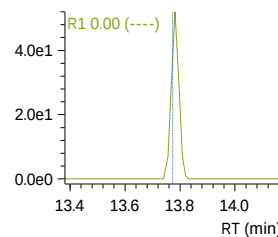
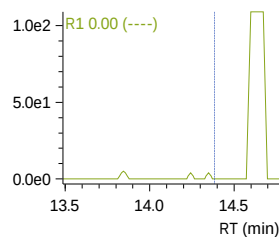
2.78e2



R1 526.00>169.00 (-)

1.09e2 R1 913.00>169.00 (-)

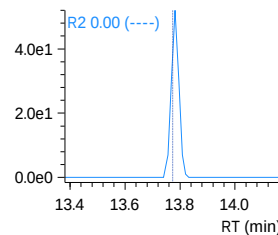
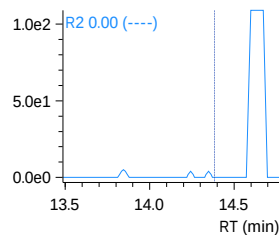
5.20e1



R2 526.00>169.00 (-)

1.09e2 R2 913.00>169.00 (-)

5.20e1



Validation Report

1st PS 01/23/24
2nd UA 01/23/24

Data File: J:\LCMS08\Data\240119_1633_B1\240119_026
Lab ID: KQ2400355-01
RunType: LCS
Matrix: Soil

Date Acquired: 1/19/24 21:29
Batch ID: 830171
Analysis Method: 1633/PFAS_DOD5.4

Validations

Validation Categories	Pass	Fail
Analytical Hold Time	X	
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery	X	
Continuing Calibration Recovery (Closing)	X	
Internal Standards	X	
Surrogates	X	
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	

Primary Review: _____

Secondary Review: _____

Quantitation Report

1st *PS* 01/23/24
2nd *UA* 01/23/24

Data File:	J:\LCMS08\Data\240119_1633_B1\240119_026	Instrument:	K-LCMS-08
Acqu Date:	1/19/24 21:29	Vial:	36
Run Type:	LCS	Dilution:	1
Lab ID:	KQ2400355-01	Raw Units:	ng/mL

Bottle ID:		Tier:	IV	Matrix:	Soil
Prod Code:	PFAS_DOD5.4	Collect Date:	12/20/23	Receive Date:	12/28/23

Analysis Lot:	830171	Prep Lot:	431421	Report Group:	KQ2400355
Analysis	1633	Prep Method:	Method		
		Prep Date:	12/22/23		

Title:	Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM	Calibration ID:	KC2400027
		Report List ID:	24615

Internal Standard Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Area Criteria
18O2-PFHxS	7.086	+0.02	235818	2.5000	OK
13C4-PFOS	8.821	+0.02	269158	2.5000	OK
13C3-PFBA	1.457	+0.05	611232	5.0000	OK
13C2-PFHxA	4.978	+0.02	668626	2.5000	OK
13C4-PFOA	7.108	+0.01	40008	2.5000	OK
13C5-PFNA	7.957	+0.01	322765	1.2500	OK
13C2-PFDA	8.722	+0.01	220491	1.2500	OK

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
13C3-PFBS	4.648	+0.03	257277	1.9225	77	20 - 150	Y
13C3-PFHxS	7.086	+0.02	196542	1.9417	78	20 - 150	Y
13C8-PFOS	8.820	+0.02	85011	1.8938	76	20 - 150	Y
13C4-PFBA	1.456	+0.05	1116713	8.1738	82	20 - 150	Y
13C5-PFPeA	3.502	+0.03	112562	3.7296	75	20 - 150	Y
13C5-PFHxA	4.978	+0.02	548873	1.9478	78	20 - 150	Y
13C4-PFHpA	6.154	+0.02	509892	1.9988	80	20 - 150	Y
13C8-PFOA	7.108	+0.01	447382	2.0007	80	20 - 150	Y
13C9-PFNA	7.957	+0.01	239296	0.9469	76	20 - 150	Y
13C6-PFDA	8.722	+0.01	173392	0.9775	78	20 - 150	Y
13C7-PFUnDA	9.446	+0.02	206685	0.9768	78	20 - 150	Y
13C2-PFDoDA	10.133	+0.01	210688	0.8667	69	20 - 150	Y
13C2-PFTeDA	11.426	+0.02	76128	0.7253	58	20 - 150	Y
13C8-FOSA	11.142	+0.00	196225	1.7173	69	20 - 150	Y
D3-MeFOSA	13.683	0.00	34011	1.4781	59	20 - 150	Y
D5-EtFOSA	14.358	0.00	41240	1.3461	54	20 - 150	Y
D7-MeFOSE	13.374	0.00	459203	16.3005	65	20 - 150	Y
D9-EtFOSE	14.003	0.00	435993	15.2381	61	20 - 150	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 1/23/24 14:28

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			1st	PS	01/23/24
Data File:	J:\LCMS08\Data\240119_1633_B1\240119_026	Instrument:	K-LCMS08	UA	01/23/24
Acqu Date:	1/19/24 21:29	Vial:	36		
Run Type:	LCS	Dilution:	1		
Lab ID:	KQ2400355-01	Raw Units:	ng/mL		

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
D3-MeFOSAA	8.855	+0.01	191379	4.0968	82	20 - 150	Y
D5-EtFOSAA	9.185	+0.02	231340	4.1393	83	20 - 150	Y
13C2-4:2 FTS	4.660	+0.02	165967	5.1143	102	20 - 150	Y
13C2-6:2 FTS	6.793	+0.01	157146	5.1200	102	20 - 150	Y
13C2-8:2 FTS	8.411	+0.01	112361	4.4566	89	20 - 150	Y
13C3-HFPO-DA	5.452	+0.02	545505	8.3343	83	20 - 150	Y

Target Compounds

Final Conc.Units: ng/g						
Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Rpt?
Perfluorobutane sulfonic acid (PFBS)	4.648	+0.03	566611	4.3025	4.30	Y
Perfluoropentane sulfonic acid (PFPeS)	6.018	+0.02	489881	4.7463	4.75	Y
Perfluorohexane sulfonic acid (PFHxS)	7.085	+0.02	419465	4.4274	4.43	Y
Perfluoroheptane sulfonic acid (PFHpS)	8.005	+0.02	339122	5.1108	5.11	Y
Perfluorooctane sulfonic acid (PFOS)	8.823	+0.02	407299	4.6064	4.61	Y
Perfluorononane sulfonic acid (PFNS)	9.585	+0.02	316260	4.8963	4.90	Y
Perfluorodecane sulfonic acid (PFDS)	10.296	+0.02	268203	4.7712	4.77	Y
Perfluorododecane sulfonic acid (PFDoS)	11.623	+0.02	129193	3.7894	3.79	Y
Perfluorobutanoic acid (PFBA)	1.458	+0.05	487226	5.0780	5.08	Y
Perfluoropentanoic acid (PFPeA)	3.506	+0.03	768153	5.2688	5.27	Y
Perfluorohexanoic acid (PFHxA)	4.979	+0.02	949207	5.1873	5.19	Y
Perfluoroheptanoic acid (PFHpA)	6.156	+0.02	1093375	5.1357	5.14	Y
Perfluorooctanoic acid (PFOA)	7.111	+0.01	666983	5.7328	5.73	Y
Perfluorononanoic acid (PFNA)	7.958	+0.01	720040	5.2562	5.26	Y
Perfluorodecanoic acid (PFDA)	8.723	+0.01	797028	4.7971	4.80	Y
Perfluoroundecanoic acid (PFUnDA)	9.447	+0.01	758637	5.0396	5.04	Y
Perfluorododecanoic acid (PFDOA)	10.134	+0.02	656823	5.5100	5.51	Y
Perfluorotridecanoic acid (PFTTrDA)	10.792	+0.02	648099	6.0036	6.00	Y
Perfluorotetradecanoic acid (PFTDA)	11.427	+0.02	457124	5.5603	5.56	Y
Perfluorooctane sulfonamide (PFOSAm)	11.142	+0.01	335370	5.1853	5.19	Y
N-Methylperfluorooctane sulfonamide (MeFOSA)	13.691	0.00	103078	4.2043	4.20	Y
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	14.376	0.00	115586	4.8144	4.81	Y
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	13.412		87971	5.2164	5.22	Y
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	14.045	0.00	119709	5.2185	5.22	Y
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	8.861	+0.01	293387	5.6499	5.65	Y

		1st	PS	01/23/24
Data File:	J:\LCMS08\Data\240119_1633_B1\240119_026	Instrument:	K-LCMS08	01/23/24
Acqu Date:	1/19/24 21:29	Vial:	36	
Run Type:	LCS	Dilution:	1	
Lab ID:	KQ2400355-01	Raw Units:	ng/mL	

<i>Target Compounds</i>		Final Conc.Units: ng/g				
Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q Rpt?
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	9.195	+0.01	174036	5.6328	5.63	Y
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	4.660	+0.02	401601	4.9197	4.92	Y
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	6.793	+0.01	354531	4.9544	4.95	Y
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	8.411	+0.01	257727	5.3379	5.34	Y
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	3.009	+0.03	139521	55.8966	55.9	Y
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	5.880	+0.01	725477	51.1000	51.1	Y
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	7.934	+0.01	992085	52.3445	52.3	Y
Perfluoro(2-ethoxyethane) sulfonic acid (PFEESA)	5.322	+0.03	2639157	4.2929	4.29	Y
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	9.385	+0.02	1755860	3.9043	3.90	Y
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	10.806	+0.02	1214219	3.9961	4.00	Y
Perfluoro-3-methoxypropanoic acid (PFMPA)	2.461	+0.04	421356	5.7922	5.79	Y
Perfluoro-4-methoxybutanoic acid (PFMBA)	4.029	+0.03	614228	5.9600	5.96	Y
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	5.453	+0.02	312930	5.1941	5.19	Y
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	4.835	+0.02	691003	5.6743	5.67	Y
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	6.520	+0.02	1757199	4.1561	4.16	Y

Prep Amount:	5 g	Dilution:	1
Prep Final Amount:	5.00 mL	Basis Factor:	100.00



240119_026

Sample ID: KQ2400355-01
Date Acquired: 1/19/2024 9:29:58 PM
Acquired by: System Administrator
Data File: 240119_026
Vial: 8 | Inj. Volume: 10.0000uL | Tray: 2

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	1116713	----	----	----	----	----	----	----
13C4-PFBA_IS	216.80>171.90	----	1116713	----	----	----	----	----	----	----
13C3-PFBA_IS	216.00>172.00	----	611232	----	----	----	----	----	----	----
PFBA	212.80>169.05	----	487226	----	----	----	----	----	----	----
PFMPA	229.00>84.90	----	421356	----	----	----	----	----	----	----
3_3 FTCA	241.00>177.10	241.00>117.00	139521	201174	144.19	141.17	201174	144.19	143.25	
13C5-PFPeA	268.30>223.00	----	112562	----	----	----	----	----	----	----
13C5-PFPeA_IS	268.30>223.00	----	112562	----	----	----	----	----	----	----
PFPeA	263.00>219.00	----	768153	----	----	----	----	----	----	----
PFMBA	279.00>84.95	----	614228	----	----	----	----	----	----	----
13C2-4_2 FTS	329.10>80.90	----	165967	----	----	----	----	----	----	----
13C2-4_2 FTS_IS	329.10>80.90	----	165967	----	----	----	----	----	----	----
4_2 FTS	327.10>307.00	327.10>80.90	401601	120027	29.89	29.06	120027	29.89	31.50	
13C3-PFBS_IS	302.10>79.90	----	257277	----	----	----	----	----	----	----
PFBS	298.70>79.90	298.70>98.80	566611	265295	46.82	46.72	265295	46.82	48.74	
13C3-PFBS	302.10>79.90	----	257277	----	----	----	----	----	----	----
NFDHA	295.00>201.00	295.00>84.90	691003	254032	36.76	40.25	254032	36.76	36.97	
13C5-PFHxA	318.00>273.00	----	548873	----	----	----	----	----	----	----
13C5-PFHxA_IS	318.00>273.00	----	548873	----	----	----	----	----	----	----
13C2-PFHxA_IS	315.10>270.00	----	668626	----	----	----	----	----	----	----
PFHxA	313.00>269.00	----	949207	----	----	----	----	----	----	----
PFEESA	314.80>135.00	314.80>82.90	2639157	150836	5.72	6.11	150836	5.72	5.81	
13C3-HFPO-DA	286.90>168.90	----	545505	----	----	----	----	----	----	----
13C3-HFPO-DA_IS	286.90>168.90	----	545505	----	----	----	----	----	----	----
HFPO-DA	284.90>168.90	284.90>184.90	312930	196485	62.79	65.61	196485	62.79	64.39	
5_3 FTCA	341.00>237.05	341.00>217.00	725477	1140177	157.16	158.86	1140177	157.16	159.75	
PFPeS	349.10>79.90	349.10>98.80	489881	268898	54.89	55.80	268898	54.89	54.52	
13C4-PFHpA	367.10>322.00	----	509892	----	----	----	----	----	----	----
13C4-PFHpA_IS	367.10>322.00	----	509892	----	----	----	----	----	----	----
PFHpA	363.10>319.00	363.10>169.00	1093375	248838	22.76	21.50	248838	22.76	23.22	
DONA	376.90>250.90	376.90>84.80	1757199	497379	28.31	29.66	497379	28.31	29.43	
13C2-6_2 FTS_IS	429.10>80.90	----	157146	----	----	----	----	----	----	----
13C2-6_2 FTS	429.10>80.90	----	157146	----	----	----	----	----	----	----
6_2 FTS	427.10>407.00	427.10>80.90	354531	153544	43.31	41.15	153544	43.31	43.09	
13C4-PFOA_IS	417.10>172.00	----	40008	----	----	----	----	----	----	----
13C8-PFOA_IS	421.10>376.00	----	447382	----	----	----	----	----	----	----

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240119_026 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	447382	----	----	----	----	----	----	----
PFOA	413.00>369.00	413.00>169.00	666983	225234	33.77	31.89	225234	33.77	30.51	
13C3-PFHxS	402.10>79.90	----	196542	----	----	----	----	----	----	----
13C3-PFHxS_IS	402.10>79.90	----	196542	----	----	----	----	----	----	----
PFHxS	398.70>79.90	398.70>98.90	419465	236103	56.29	56.62	236103	56.29	57.27	
18O2-PFHxS_IS	403.00>83.90	----	235818	----	----	----	----	----	----	----
13C9-PFNA_IS	472.10>427.00	----	239296	----	----	----	----	----	----	----
13C9-PFNA	472.10>427.00	----	239296	----	----	----	----	----	----	----
13C5-PFNA_IS	468.00>423.00	----	322765	----	----	----	----	----	----	----
PFNA	463.00>419.00	463.00>219.00	720040	172737	23.99	23.17	172737	23.99	23.01	
PFHpS	449.00>79.90	449.00>98.80	339122	187600	55.32	56.96	187600	55.32	58.58	
7_3 FTCA	441.00>317.00	441.00>336.90	992085	1213539	122.32	117.47	1213539	122.32	117.17	
13C2-8_2-FTS	529.10>80.90	----	112361	----	----	----	----	----	----	----
13C2-8_2-FTS_IS	529.10>80.90	----	112361	----	----	----	----	----	----	----
8_2 FTS	527.10>506.95	527.10>80.80	257727	110397	42.84	49.59	110397	42.84	43.30	
13C6-PFDA_IS	519.10>474.10	----	173392	----	----	----	----	----	----	----
13C6-PFDA	519.10>474.10	----	173392	----	----	----	----	----	----	----
13C2-PFDA_IS	515.10>470.10	----	220491	----	----	----	----	----	----	----
PFDA	512.90>469.00	512.90>219.00	797028	152348	19.11	19.00	152348	19.11	19.26	
D3-NMeFOSAA_IS	573.20>419.00	----	191379	----	----	----	----	----	----	----
D3-NMeFOSAA	573.20>419.00	----	191379	----	----	----	----	----	----	----
13C8-PFOS_IS	507.10>98.90	----	85011	----	----	----	----	----	----	----
13C8-PFOS	507.10>98.90	----	85011	----	----	----	----	----	----	----
13C4-PFOS_IS	502.80>79.90	----	269158	----	----	----	----	----	----	----
PFOS	498.90>79.90	498.90>98.80	407299	197951	48.60	52.47	197951	48.60	47.25	
NMeFOSAA	570.10>419.00	570.10>483.00	293387	171523	58.46	55.15	171523	58.46	62.10	
D5-NeFOSAA_IS	589.20>419.00	----	231340	----	----	----	----	----	----	----
D5-NeFOSAA	589.20>419.00	----	231340	----	----	----	----	----	----	----
NeFOSAA	584.20>419.10	584.20>526.00	174036	144064	82.78	81.95	144064	82.78	86.05	
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	1755860	564236	32.13	32.76	564236	32.13	31.74	
PFUnDA	563.10>519.00	563.10>269.10	758637	103769	13.68	13.12	103769	13.68	13.26	
13C7-PFUnDA_IS	570.00>525.10	----	206685	----	----	----	----	----	----	----
13C7-PFUnDA	570.00>525.10	----	206685	----	----	----	----	----	----	----
PFNS	548.80>79.90	548.80>98.80	316260	196450	62.12	65.22	196450	62.12	62.49	
10_2 FTS	626.80>607.05	626.80>81.00	229593	82141	35.78	37.13	82141	35.78	35.81	
13C2-PFDOA_IS	615.10>570.00	----	210688	----	----	----	----	----	----	----
13C2-PFDOA	615.10>570.00	----	210688	----	----	----	----	----	----	----
PFDOA	613.10>569.00	613.10>319.00	656823	70401	10.72	11.29	70401	10.72	10.90	
PFDS	599.00>79.90	599.00>98.80	268203	159828	59.59	60.18	159828	59.59	61.11	
PFTrDA	663.00>619.00	663.00>168.90	648099	118745	18.32	17.64	118745	18.32	18.20	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240119_026 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	1214219	440677	36.29	36.44	440677	36.29	34.95	
PFOSAm	498.10>77.90	----	335370	----	----	----	----	----	----	
13C8-PFOSAm	506.10>77.80	----	196225	----	----	----	----	----	----	
13C8-PFOSAm_IS	506.10>77.80	----	196225	----	----	----	----	----	----	
PFTDA	713.10>669.00	713.10>168.90	457124	92765	20.29	22.96	92765	20.29	22.68	
13C2-PFTDA	715.20>670.00	----	76128	----	----	----	----	----	----	
13C2-PFTDA_IS	715.20>670.00	----	76128	----	----	----	----	----	----	
PFDoS	699.10>79.90	699.10>98.80	129193	89010	68.90	67.40	89010	68.90	65.24	
D7-MeFOSE_IS	623.20>58.90	----	459203	----	----	----	----	----	----	
D7-MeFOSE	623.20>58.90	----	459203	----	----	----	----	----	----	
MeFOSE	616.10>59.00	----	87971	----	----	----	----	----	----	
13C2-PFHxDA_IS	815.00>770.05	----	271898	----	----	----	----	----	----	
13C2-PFHxDA	815.00>770.05	----	271898	----	----	----	----	----	----	
PFHxDA	813.00>768.95	813.00>218.95	577903	81419	14.09	13.90	81419	14.09	14.51	
D3-MeFOSA	515.00>219.00	----	34011	----	----	----	----	----	----	
D3-MeFOSA_IS	515.00>219.00	----	34011	----	----	----	----	----	----	
MeFOSA	511.90>219.00	511.90>169.00	103078	126472	122.70	140.79	126472	122.70	142.62	
D9-EtFOSE_IS	639.20>58.90	----	435993	----	----	----	----	----	----	
D9-EtFOSE	639.20>58.90	----	435993	----	----	----	----	----	----	
EtFOSE	630.00>59.00	----	119709	----	----	----	----	----	----	
D5-EtFOSAm	531.10>219.00	----	41240	----	----	----	----	----	----	
D5-EtFOSAm_IS	531.10>219.00	----	41240	----	----	----	----	----	----	
EtFOSAm	526.00>219.00	526.00>169.00	115586	140013	121.13	163.90	140013	121.13	146.41	
PFODA	913.00>868.65	913.00>169.00	318089	89477	28.13	27.03	89477	28.13	23.98	



240119_026

Sample ID: KQ2400355-01
Date Acquired: 1/19/2024 9:29:58 PM
Acquired by: System Administrator
Data File: 240119_026
Vial: 8 | Inj. Volume: 10.0000uL | Tray: 2

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.456	0.048	-0.001	1116713	611232	13C3-PFBA_IS	8.1738	ng/mL	
13C4-PFBA_IS	Auto	1.456	0.048	----	1116713	1116713	----	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.457	0.049	----	611232	611232	----	5.0000	ng/mL	
PFBA	Auto	1.458	0.049	0.002	487226	1116713	13C4-PFBA_IS	5.0780	ng/mL	
PFMPA	Auto	2.461	0.040	-1.041	421356	112562	13C5-PFPeA_IS	5.7922	ng/mL	
3_3 FTCA	Auto	3.009	0.029	-0.493	139521	112562	13C5-PFPeA_IS	55.8966	ng/mL	
13C5-PFPeA	Auto	3.502	0.023	-1.476	112562	668626	13C2-PFHxA_IS	3.7296	ng/mL	
13C5-PFPeA_IS	Auto	3.502	0.023	----	112562	112562	----	5.0000	ng/mL	
PFPeA	Auto	3.506	0.024	0.004	768153	112562	13C5-PFPeA_IS	5.2688	ng/mL	
PFMBA	Auto	4.029	0.024	0.527	614228	112562	13C5-PFPeA_IS	5.9600	ng/mL	
13C2-4_2 FTS	Auto	4.660	0.014	-2.426	165967	235818	18O2-PFHxS_IS	5.1143	ng/mL	
13C2-4_2 FTS_IS	Auto	4.660	0.014	----	165967	165967	----	5.0000	ng/mL	
4_2 FTS	Auto	4.660	0.013	0.000	401601	165967	13C2-4_2 FTS_IS	4.9197	ng/mL	
13C3-PFBS_IS	Auto	4.648	0.020	----	257277	257277	----	2.5000	ng/mL	
PFBS	Auto	4.648	0.020	0.000	566611	257277	13C3-PFBS_IS	4.3025	ng/mL	
13C3-PFBS	Auto	4.648	0.020	-2.438	257277	235818	18O2-PFHxS_IS	1.9225	ng/mL	
NFDHA	Auto	4.835	0.015	-0.143	691003	548873	13C5-PFHxA_IS	5.6743	ng/mL	
13C5-PFHxA	Auto	4.978	0.015	0.000	548873	668626	13C2-PFHxA_IS	1.9478	ng/mL	
13C5-PFHxA_IS	Auto	4.978	0.015	----	548873	548873	----	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	4.978	0.015	----	668626	668626	----	2.5000	ng/mL	
PFHxA	Auto	4.979	0.014	0.001	949207	548873	13C5-PFHxA_IS	5.1873	ng/mL	
PFEESA	Auto	5.322	0.018	0.344	2639157	548873	13C5-PFHxA_IS	4.2929	ng/mL	
13C3-HFPO-DA	Auto	5.452	0.013	0.474	545505	668626	13C2-PFHxA_IS	8.3343	ng/mL	
13C3-HFPO-DA_IS	Auto	5.452	0.013	----	545505	545505	----	10.0000	ng/mL	
HFPO-DA	Auto	5.453	0.013	0.001	312930	545505	13C3-HFPO-DA_IS	5.1941	ng/mL	
5_3 FTCA	Auto	5.880	0.009	0.902	725477	548873	13C5-PFHxA_IS	51.1000	ng/mL	
PFPeS	Auto	6.018	0.015	-1.068	489881	196542	13C3-PFHxS_IS	4.7463	ng/mL	
13C4-PFHpA	Auto	6.154	0.011	1.176	509892	668626	13C2-PFHxA_IS	1.9988	ng/mL	
13C4-PFHpA_IS	Auto	6.154	0.011	----	509892	509892	----	2.5000	ng/mL	
PFHpA	Auto	6.156	0.012	0.002	1093375	509892	13C4-PFHpA_IS	5.1357	ng/mL	
DONA	Auto	6.520	0.011	1.068	1757199	545505	13C3-HFPO-DA_IS	4.1561	ng/mL	
13C2-6_2 FTS_IS	Auto	6.793	0.009	----	157146	157146	----	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.793	0.009	-0.293	157146	235818	18O2-PFHxS_IS	5.1200	ng/mL	
6_2 FTS	Auto	6.793	0.010	0.000	354531	157146	13C2-6_2 FTS_IS	4.9544	ng/mL	
13C4-PFOA_IS	Auto	7.108	0.009	----	40008	40008	----	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.108	0.008	----	447382	447382	----	2.5000	ng/mL	
13C8-PFOA	Auto	7.108	0.008	0.000	447382	40008	13C4-PFOA_IS	2.0007	ng/mL	
PFOA	Auto	7.111	0.009	0.003	666983	447382	13C8-PFOA_IS	5.7328	ng/mL	
13C3-PFHxS	Auto	7.086	0.012	0.000	196542	235818	18O2-PFHxS_IS	1.9417	ng/mL	
13C3-PFHxS_IS	Auto	7.086	0.012	----	196542	196542	----	2.5000	ng/mL	
PFHxS	M	7.085	0.011	-0.001	419465	196542	13C3-PFHxS_IS	4.4274	ng/mL	
18O2-PFHxS_IS	Auto	7.086	0.011	----	235818	235818	----	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.957	0.008	----	239296	239296	----	1.2500	ng/mL	
13C9-PFNA	Auto	7.957	0.008	0.000	239296	322765	13C5-PFNA_IS	0.9469	ng/mL	
13C5-PFNA_IS	Auto	7.957	0.008	----	322765	322765	----	1.2500	ng/mL	
PFNA	Auto	7.958	0.008	0.001	720040	239296	13C9-PFNA_IS	5.2562	ng/mL	
PFHpS	Auto	8.005	0.009	-0.815	339122	85011	13C8-PFOS_IS	5.1108	ng/mL	
7_3 FTCA	Auto	7.934	0.005	2.956	992085	548873	13C5-PFHxA_IS	52.3445	ng/mL	
13C2-8_2-FTS	Auto	8.411	0.007	1.325	112361	235818	18O2-PFHxS_IS	4.4566	ng/mL	
13C2-8_2-FTS_IS	Auto	8.411	0.007	----	112361	112361	----	5.0000	ng/mL	
8_2 FTS	Auto	8.411	0.007	0.000	257727	112361	13C2-8_2-FTS_IS	5.3379	ng/mL	
13C6-PFDA_IS	Auto	8.722	0.008	----	173392	173392	----	1.2500	ng/mL	
13C6-PFDA	Auto	8.722	0.008	0.000	173392	220491	13C2-PFDA_IS	0.9775	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_026 (continued)

(Table continued from previous page)

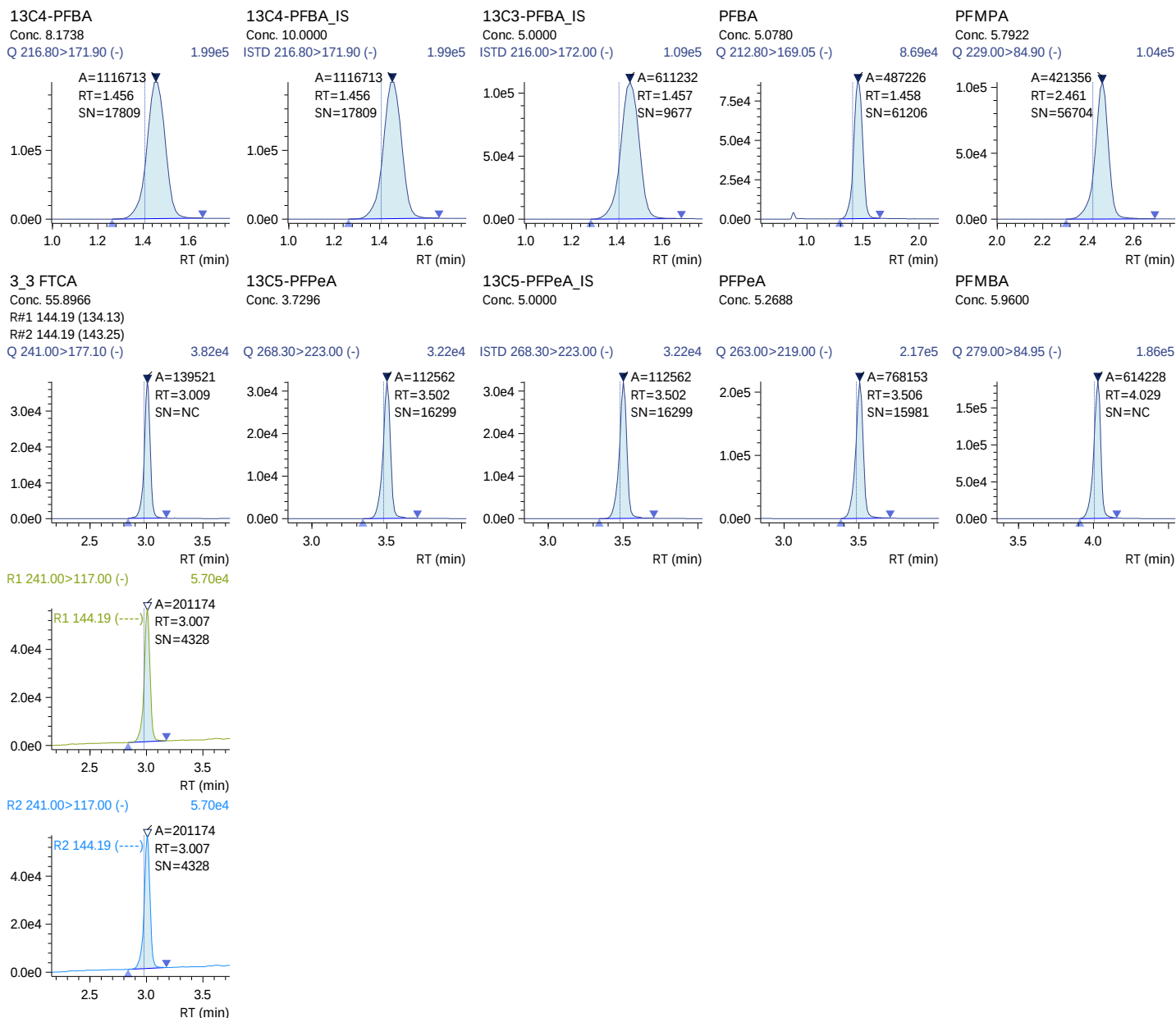
Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C2-PFDA_IS	Auto	8.722	0.007	----	220491	220491	----	1.2500	ng/mL	
PFDA	Auto	8.723	0.007	0.001	797028	173392	13C6-PFDA_IS	4.7971	ng/mL	
D3-NMeFOSAA_IS	Auto	8.855	0.007	----	191379	191379	----	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.855	0.007	0.034	191379	269158	13C4-PFOS_IS	4.0968	ng/mL	
13C8-PFOS_IS	Auto	8.820	0.009	----	85011	85011	----	2.5000	ng/mL	
13C8-PFOS	Auto	8.820	0.009	-0.001	85011	269158	13C4-PFOS_IS	1.8938	ng/mL	
13C4-PFOS_IS	Auto	8.821	0.010	----	269158	269158	----	2.5000	ng/mL	
PFOS	M	8.823	0.010	0.003	407299	85011	13C8-PFOS_IS	4.6064	ng/mL	
NMeFOSAA	M	8.861	0.008	0.006	293387	191379	D3-NMeFOSAA_IS	5.6499	ng/mL	
D5-NetFOSAA_IS	Auto	9.185	0.007	----	231340	231340	----	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.185	0.007	0.364	231340	269158	13C4-PFOS_IS	4.1393	ng/mL	
NetFOSAA	M	9.195	0.006	0.010	174036	231340	D5-NetFOSAA_IS	5.6328	ng/mL	
9-CI-PF3ONS	Auto	9.385	0.007	3.933	1755860	545505	13C3-HFPO-DA_IS	3.9043	ng/mL	
PFUnDA	Auto	9.447	0.007	0.001	758637	206685	13C7-PFUnDA_IS	5.0396	ng/mL	
13C7-PFUnDA_IS	Auto	9.446	0.008	----	206685	206685	----	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.446	0.008	0.724	206685	220491	13C2-PFDA_IS	0.9768	ng/mL	
PFNS	Auto	9.585	0.009	0.765	316260	85011	13C8-PFOS_IS	4.8963	ng/mL	
10_2_FTS	Auto	9.820	0.007	1.409	229593	112361	13C2-8_2-FTS_IS	3.9083	ng/mL	
13C2-PFDOA_IS	Auto	10.133	0.006	----	210688	210688	----	1.2500	ng/mL	
13C2-PFDOA	Auto	10.133	0.006	1.411	210688	220491	13C2-PFDA_IS	0.8667	ng/mL	
PFDOA	Auto	10.134	0.006	0.001	656823	210688	13C2-PFDOA_IS	5.5100	ng/mL	
PFDS	Auto	10.296	0.006	1.476	268203	85011	13C8-PFOS_IS	4.7712	ng/mL	
PFTDA	Auto	10.792	0.006	-0.634	648099	76128	13C2-PFTDA_IS	6.0036	ng/mL	
11-CI-PF3OUdS	Auto	10.806	0.007	5.354	1214219	545505	13C3-HFPO-DA_IS	3.9961	ng/mL	
PFOSAm	Auto	11.142	-0.001	0.000	335370	196225	13C8-PFOSAm_IS	5.1853	ng/mL	
13C8-PFOSAm	Auto	11.142	-0.001	2.321	196225	269158	13C4-PFOS_IS	1.7173	ng/mL	
13C8-PFOSAm_IS	Auto	11.142	-0.001	----	196225	196225	----	2.5000	ng/mL	
PFTDA	Auto	11.427	0.007	0.001	457124	76128	13C2-PFTDA_IS	5.5603	ng/mL	
13C2-PFTDA	Auto	11.426	0.007	2.704	76128	220491	13C2-PFDA_IS	0.7253	ng/mL	
13C2-PFTDA_IS	Auto	11.426	0.007	----	76128	76128	----	1.2500	ng/mL	
PFDoS	Auto	11.623	0.007	2.803	129193	85011	13C8-PFOS_IS	3.7894	ng/mL	
D7-MeFOSE_IS	Auto	13.374	-0.007	----	459203	459203	----	25.0000	ng/mL	
D7-MeFOSE	Auto	13.374	-0.007	4.553	459203	269158	13C4-PFOS_IS	16.3005	ng/mL	
MeFOSE	Auto	13.412	-0.006	0.038	87971	459203	D7-MeFOSE_IS	5.2164	ng/mL	
13C2-PFHxDA_IS	Auto	12.640	0.004	----	271898	271898	----	2.5000	ng/mL	
13C2-PFHxDA	Auto	12.640	0.004	3.918	271898	220491	13C2-PFDA_IS	1.3276	ng/mL	
PFHxDA	Auto	12.642	0.005	0.002	577903	271898	13C2-PFHxDA_IS	5.1560	ng/mL	
D3-MeFOSA	Auto	13.683	-0.004	4.862	34011	269158	13C4-PFOS_IS	1.4781	ng/mL	
D3-MeFOSA_IS	Auto	13.683	-0.004	----	34011	34011	----	2.5000	ng/mL	
MeFOSA	Auto	13.691	-0.005	0.008	103078	34011	D3-MeFOSA_IS	4.2043	ng/mL	
D9-EtFOSE_IS	Auto	14.003	-0.006	----	435993	435993	----	25.0000	ng/mL	
D9-EtFOSE	Auto	14.003	-0.006	5.182	435993	269158	13C4-PFOS_IS	15.2381	ng/mL	
EtFOSE	Auto	14.045	-0.007	0.042	119709	435993	D9-EtFOSE_IS	5.2185	ng/mL	
D5-EtFOSAm	Auto	14.358	-0.007	5.537	41240	269158	13C4-PFOS_IS	1.3461	ng/mL	
D5-EtFOSAm_IS	Auto	14.358	-0.007	----	41240	41240	----	2.5000	ng/mL	
EtFOSAm	Auto	14.376	-0.006	0.018	115586	41240	D5-EtFOSAm_IS	4.8144	ng/mL	
PFODA	Auto	13.776	0.002	1.136	318089	271898	13C2-PFHxDA_IS	5.1734	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_026 (continued)





240119_026 (continued)

13C2-4_2 FTS
Conc. 5.1143

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. 4.9197
R#1 29.89 (34.14)
R#2 29.89 (31.50)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 4.3025
R#1 46.82 (47.53)
R#2 46.82 (48.74)

Q 329.10>80.90 (-)

5.12e4

ISTD 329.10>80.90 (-)

5.12e4

Q 327.10>307.00 (-)

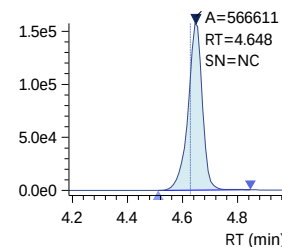
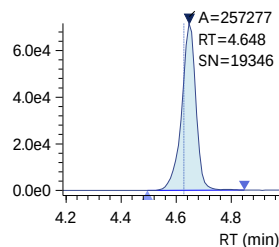
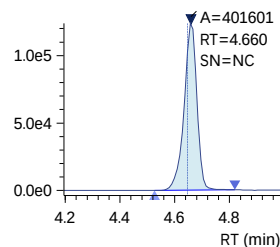
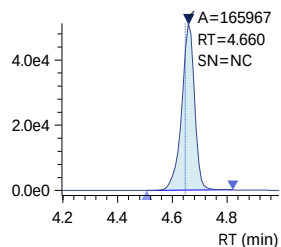
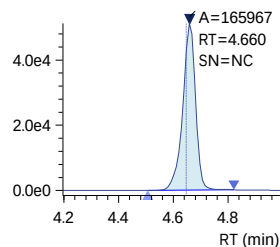
1.24e5

ISTD 302.10>79.90 (-)

7.17e4

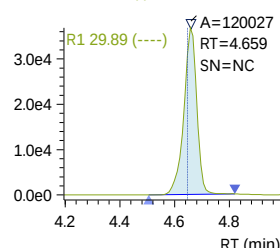
Q 298.70>79.90 (-)

1.57e5



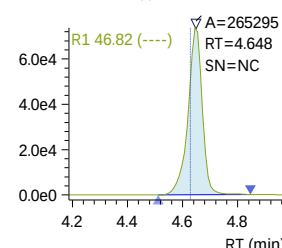
R1 327.10>80.90 (-)

3.69e4



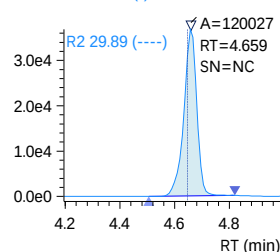
R1 298.70>98.80 (-)

7.38e4



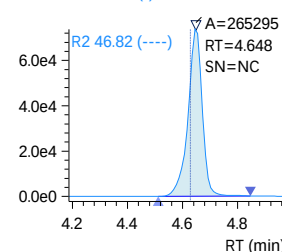
R2 327.10>80.90 (-)

3.69e4



R2 298.70>98.80 (-)

7.38e4





240119_026 (continued)

13C3-PFBS
Conc. 1.9225

NFDHA
Conc. 5.6743
R#1 36.76 (37.88)
R#2 36.76 (36.97)

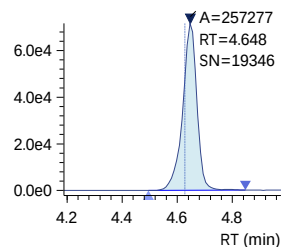
13C5-PFHxA
Conc. 1.9478

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

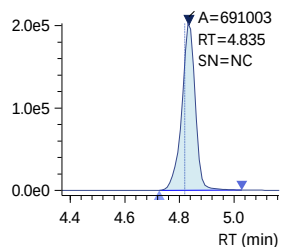
Q 302.10>79.90 (-)

7.17e4



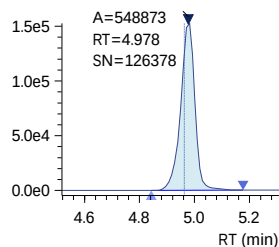
Q 295.00>201.00 (-)

2.03e5



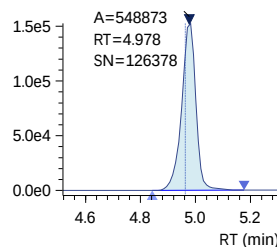
Q 318.00>273.00 (-)

1.53e5



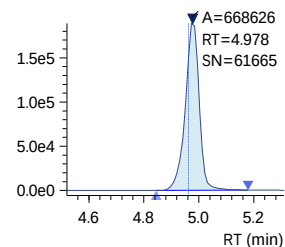
ISTD 318.00>273.00 (-)

1.53e5



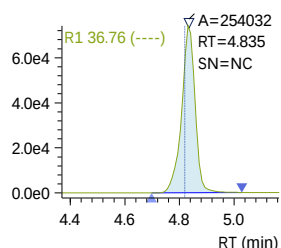
ISTD 315.10>270.00 (-)

1.89e5



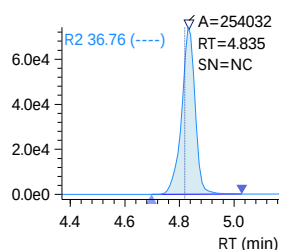
R1 295.00>84.90 (-)

7.42e4



R2 295.00>84.90 (-)

7.42e4

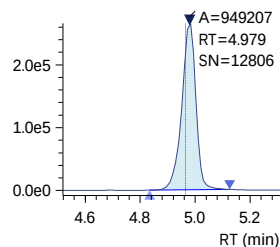




240119_026 (continued)

PFHxA
Conc. 5.1873

Q 313.00>269.00 (-)

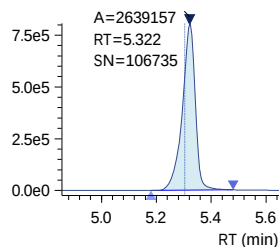


PFEESA
Conc. 4.2929

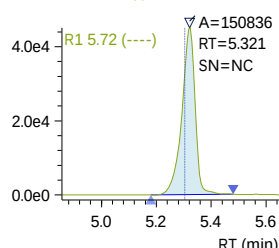
R#1 5.72 (5.88)

R#2 5.72 (5.81)

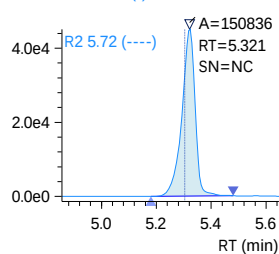
Q 314.80>135.00 (-)



R1 314.80>82.90 (-)

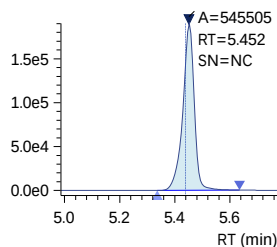


R2 314.80>82.90 (-)



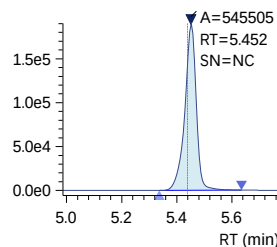
13C3-HFPO-DA
Conc. 8.3343

Q 286.90>168.90 (-)



13C3-HFPO-DA_IS
Conc. 10.0000

ISTD 286.90>168.90 (-)

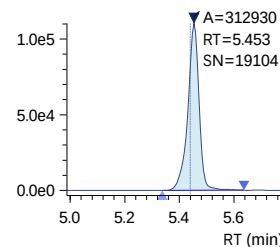


HFPO-DA
Conc. 5.1941

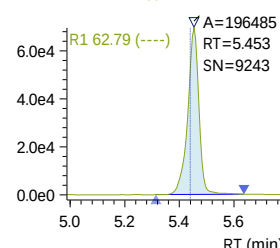
R#1 62.79 (63.80)

R#2 62.79 (64.39)

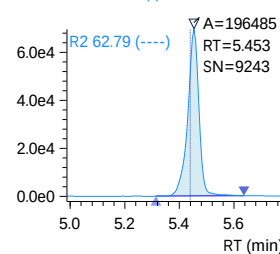
Q 284.90>168.90 (-)



R1 284.90>184.90 (-)

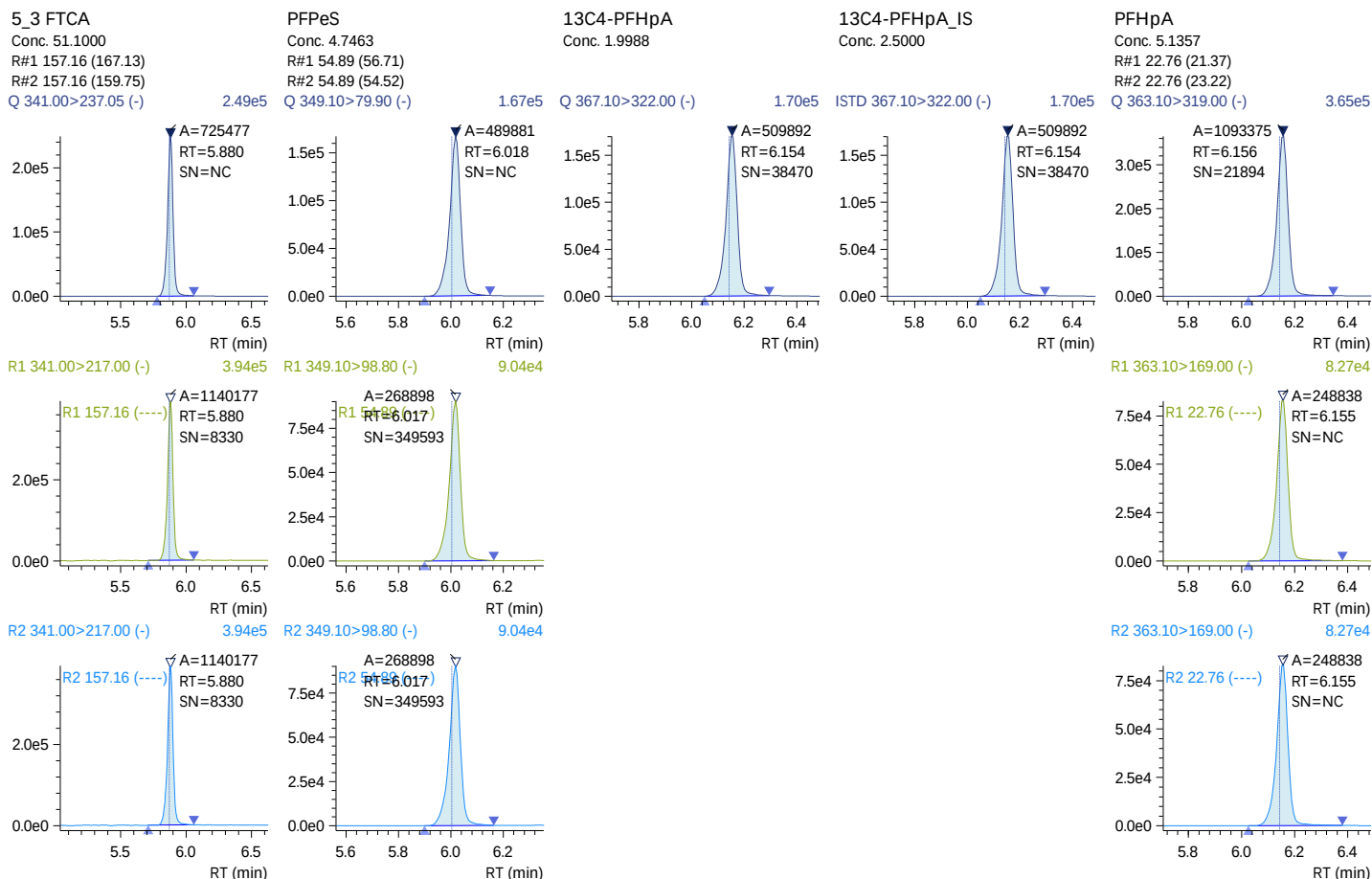


R2 284.90>184.90 (-)



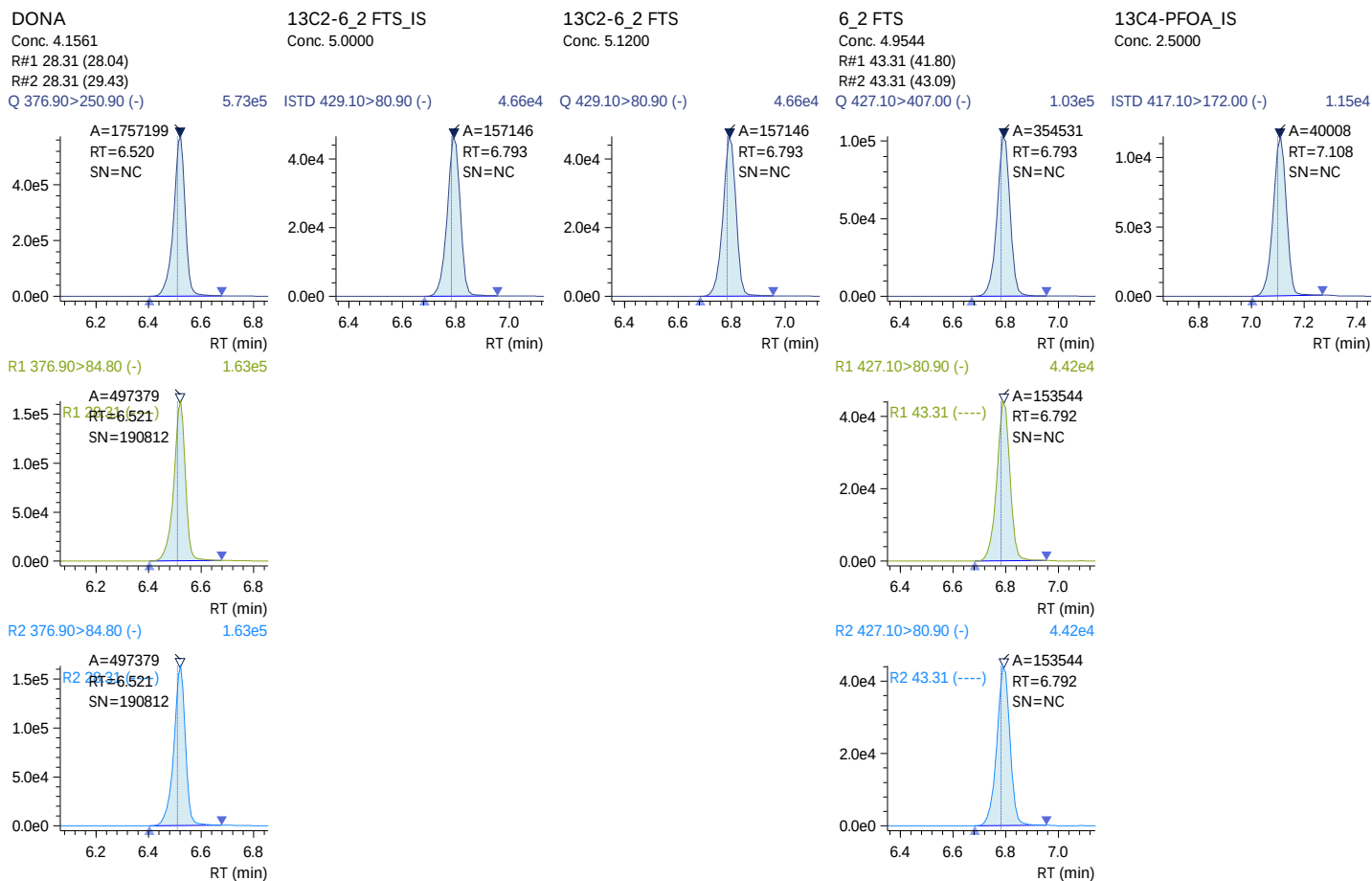


240119_026 (continued)





240119_026 (continued)





240119_026 (continued)

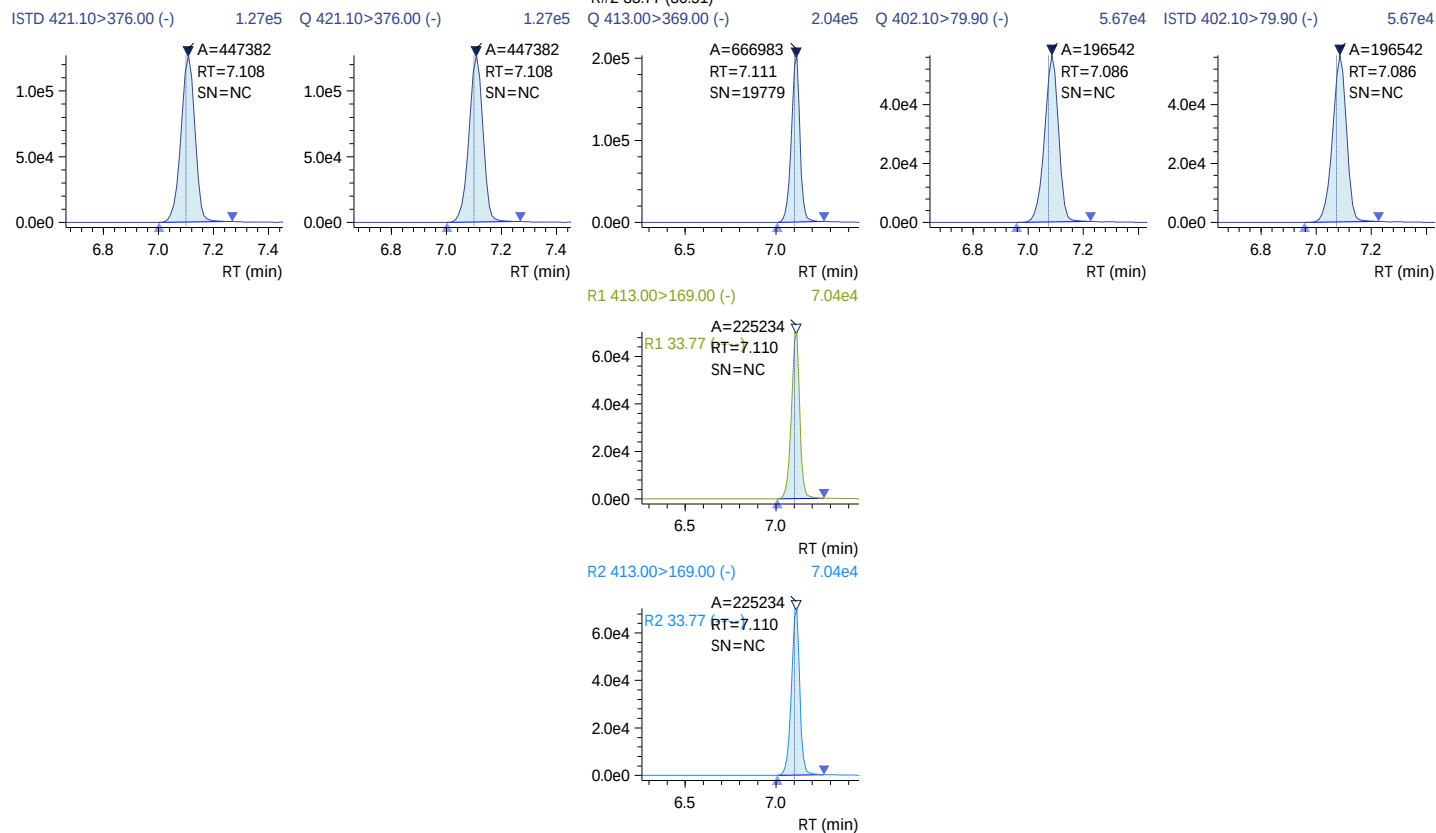
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.0007

PFOA
Conc. 5.7328
R#1 33.77 (29.05)
R#2 33.77 (30.51)

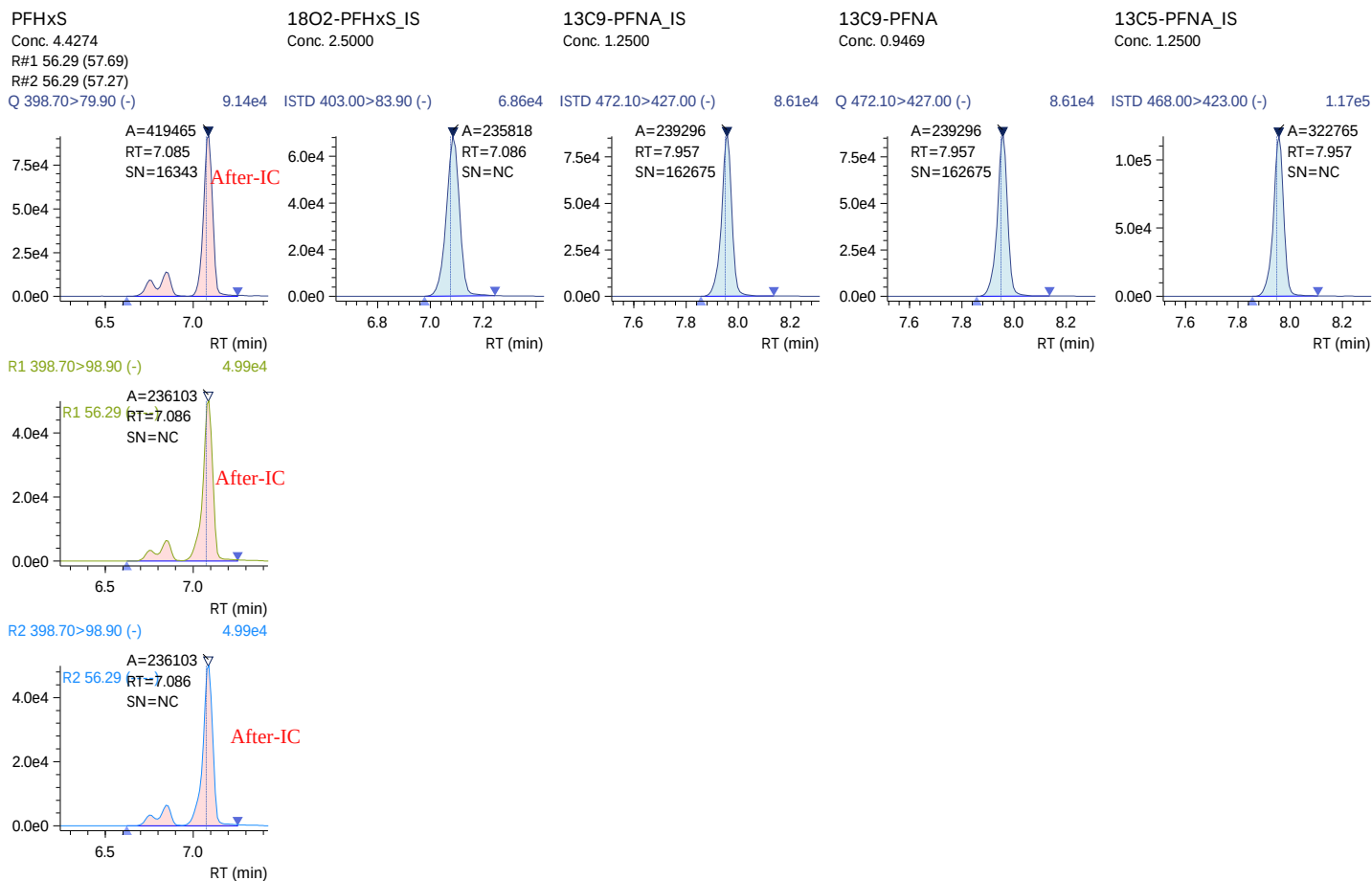
13C3-PFHxS
Conc. 1.9417

13C3-PFHxS_IS
Conc. 2.5000





240119_026 (continued)

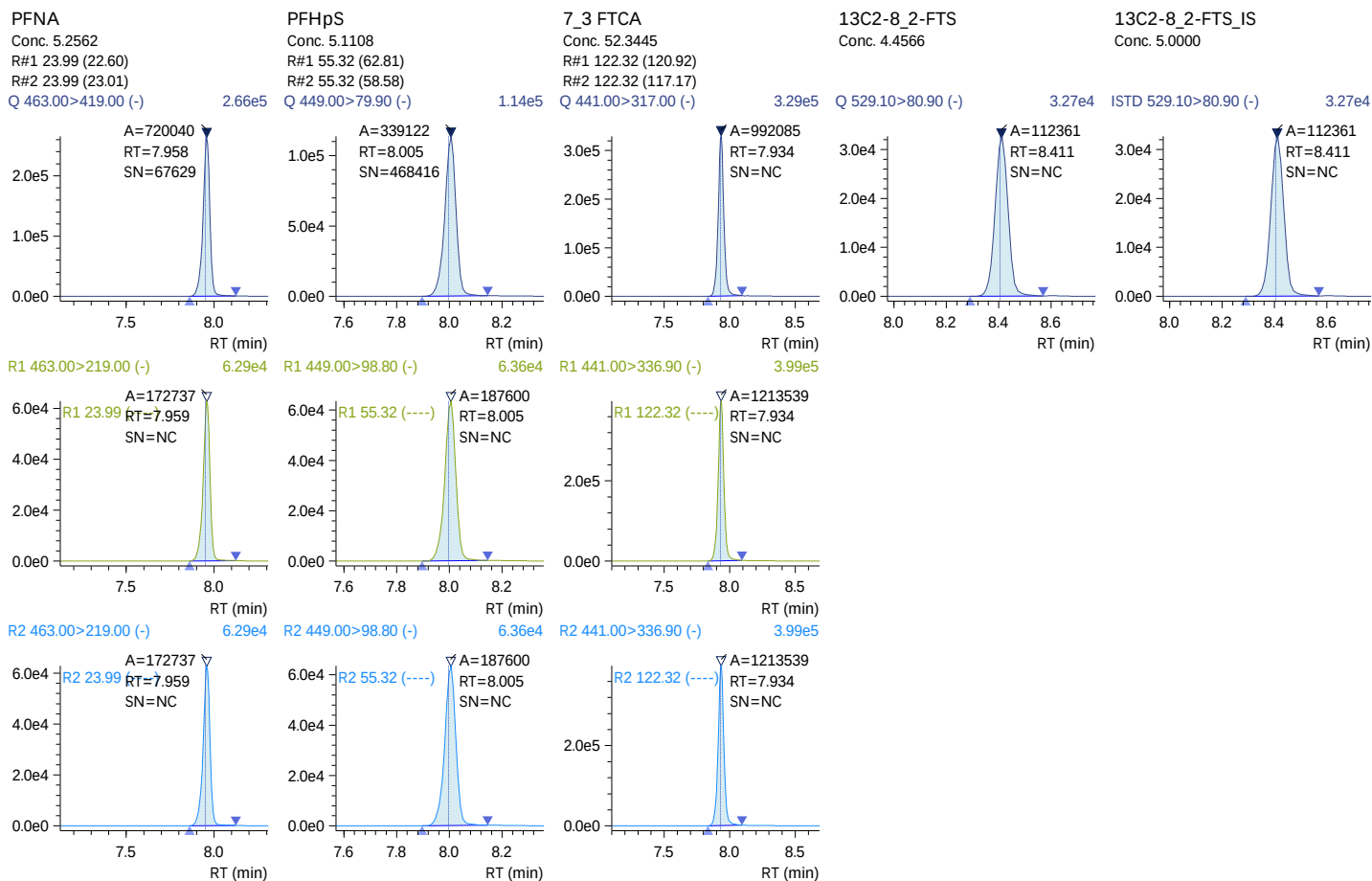


J:\LCMS08\Data\240119_1633_B1\240119_1633_B1.dampl

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_026 (continued)

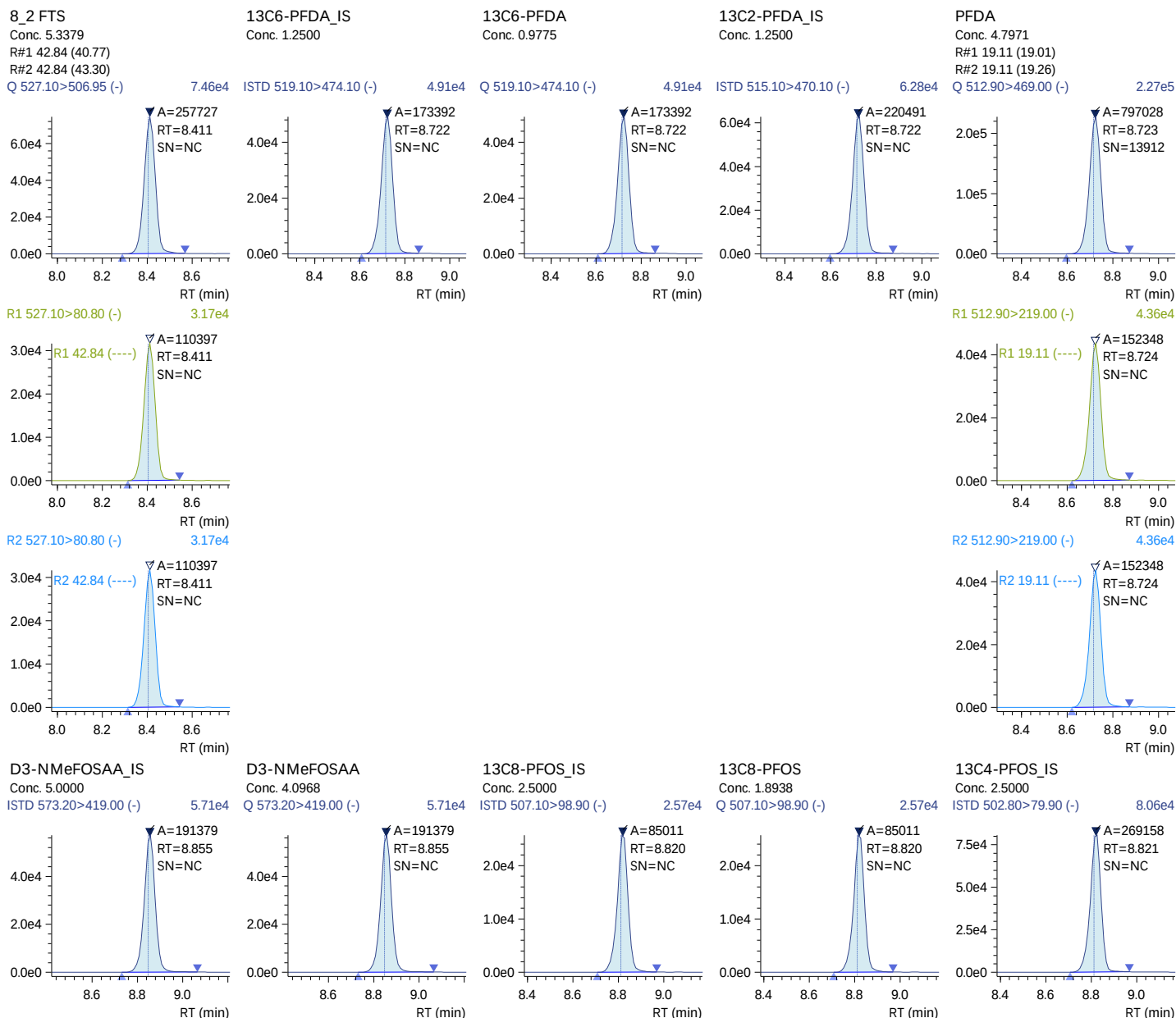


J:\LCMS08\Data\240119_1633_B1\240119_1633_B1.dampl

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.

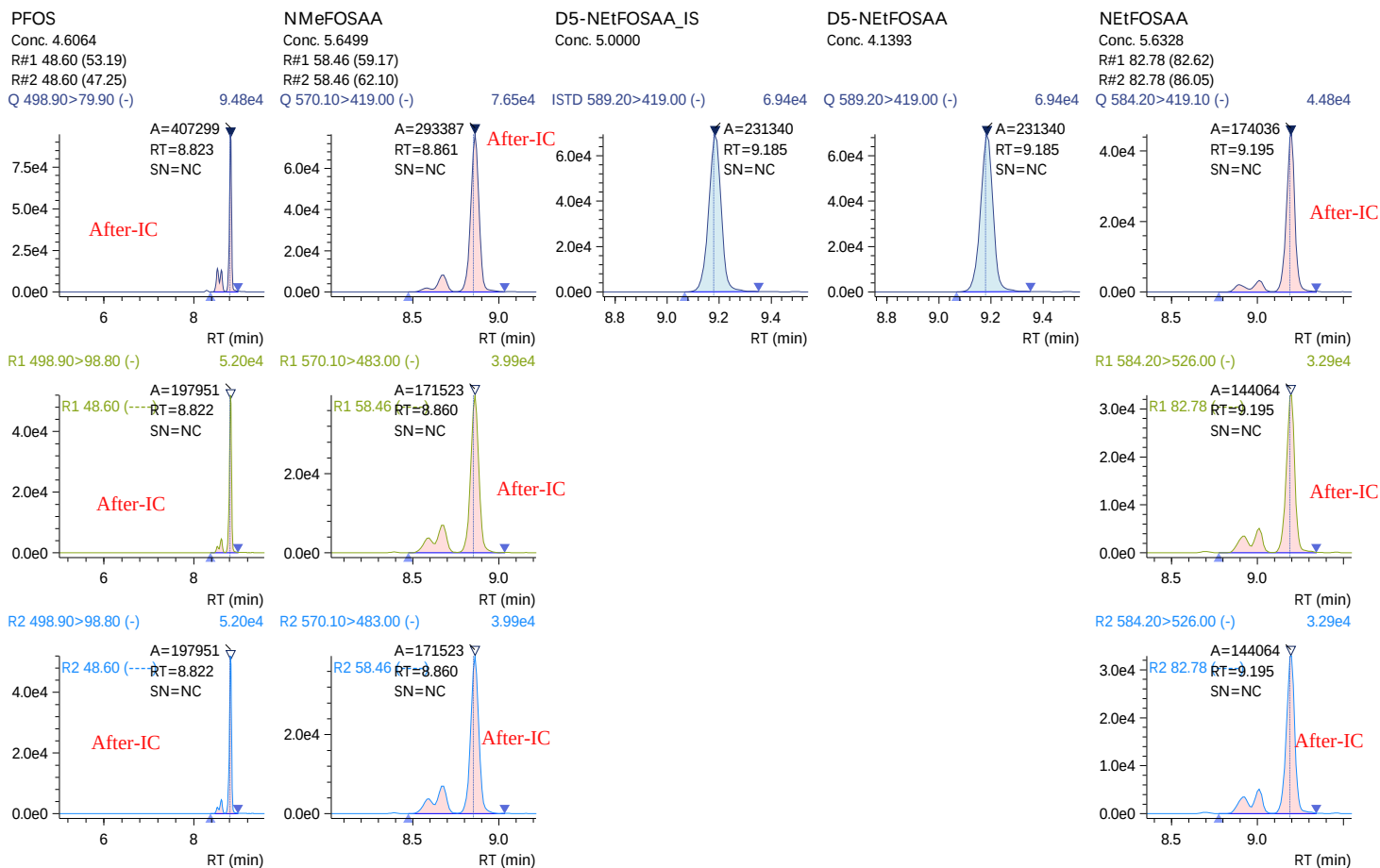


240119_026 (continued)





240119_026 (continued)



J:\LCMS08\Data\240119_1633_B1\240119_1633_B1.dampl

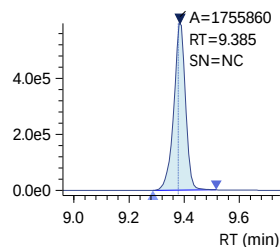
SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



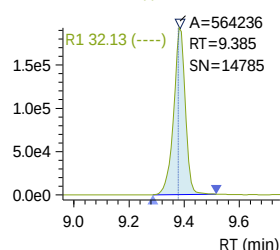
240119_026 (continued)

9-Cl-PF3ONS

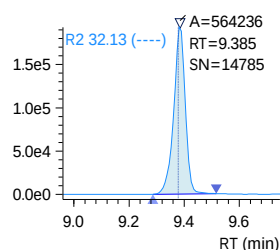
Conc. 3.9043
R#1 32.13 (31.76)
R#2 32.13 (31.74)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-) 1.93e5

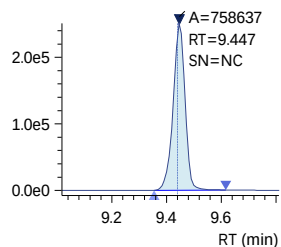


R2 532.80>353.00 (-) 1.93e5

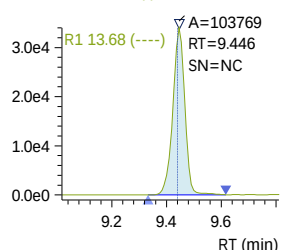


PFUnDA

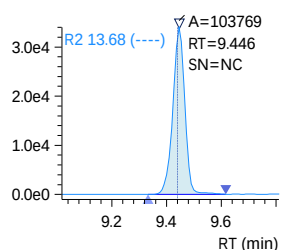
Conc. 5.0396
R#1 13.68 (12.31)
R#2 13.68 (13.26)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-) 3.40e4

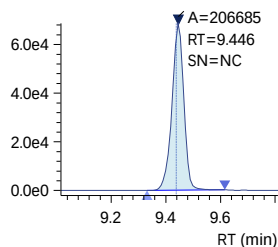


R2 563.10>269.10 (-) 3.40e4



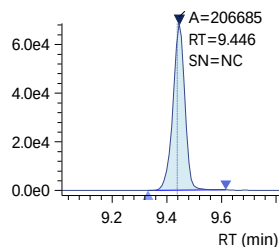
13C7-PFUnDA_IS

Conc. 1.2500
ISTD 570.00>525.10 (-)



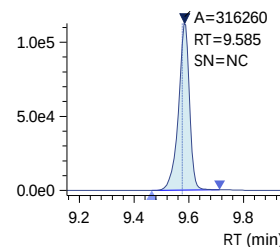
13C7-PFUnDA

Conc. 0.9768
Q 570.00>525.10 (-)

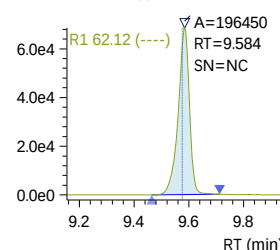


PFNS

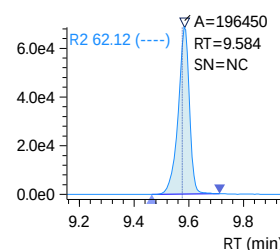
Conc. 4.8963
R#1 62.12 (63.31)
R#2 62.12 (62.49)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-) 6.86e4

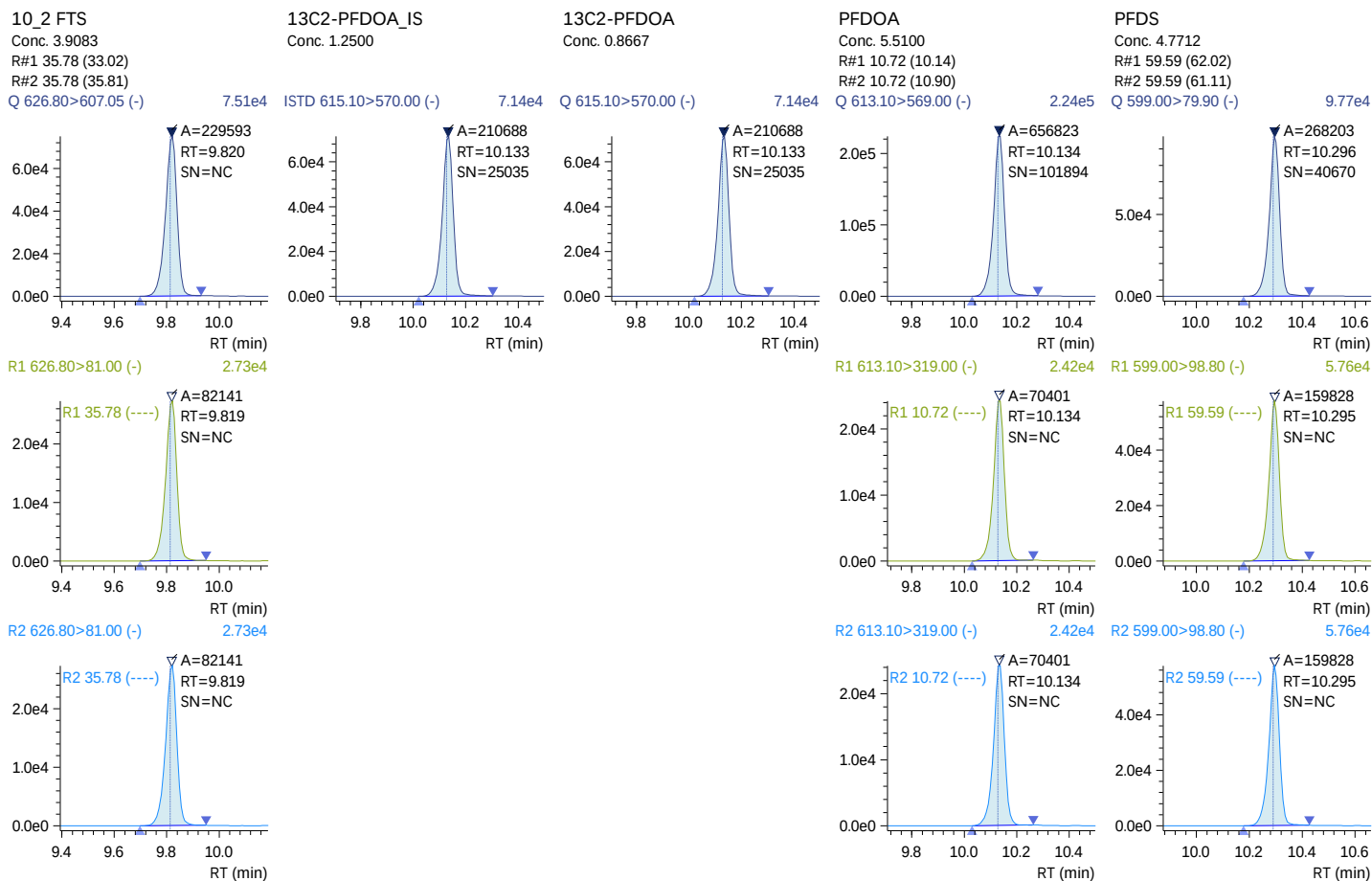


R2 548.80>98.80 (-) 6.86e4



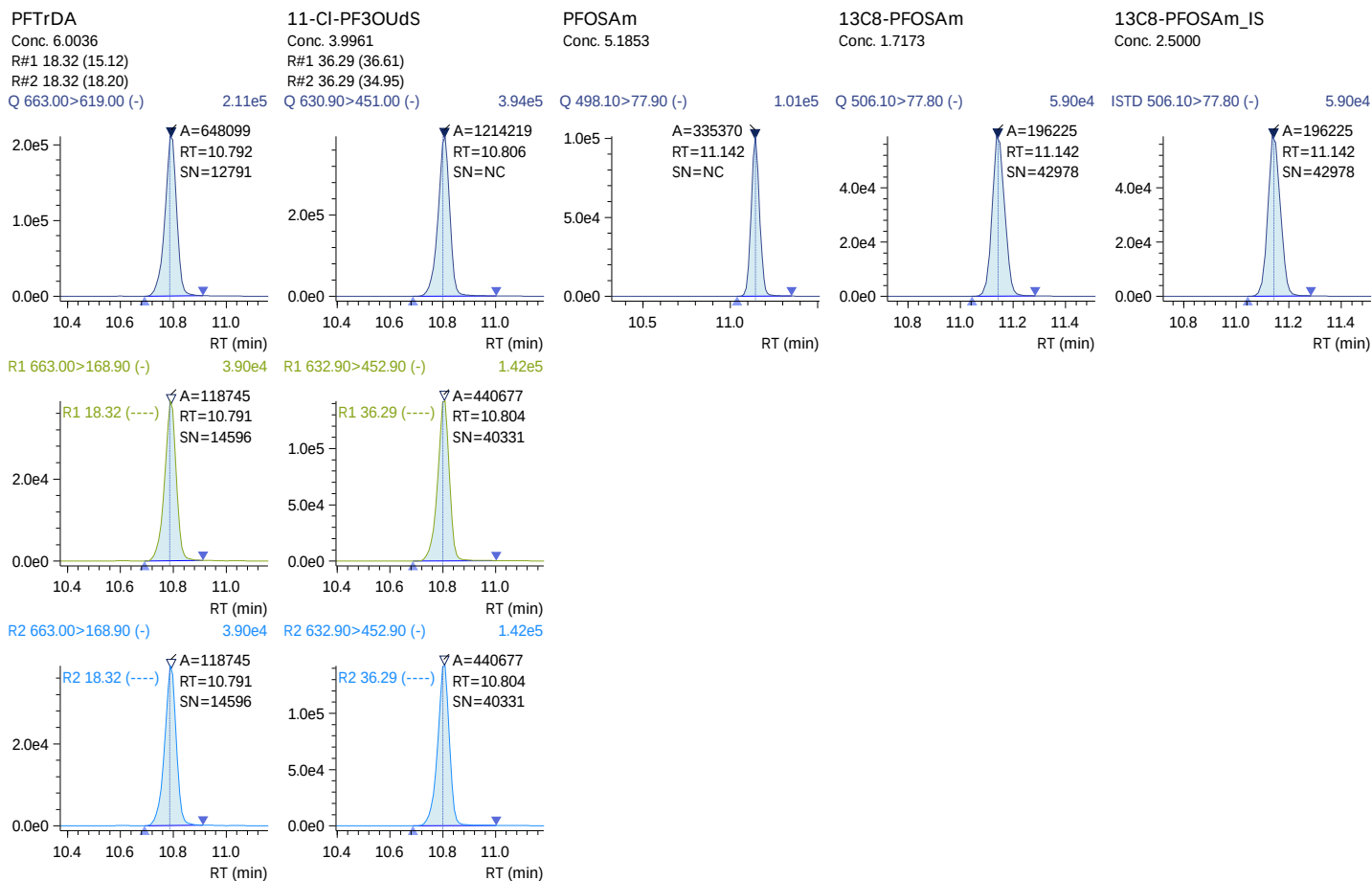


240119_026 (continued)



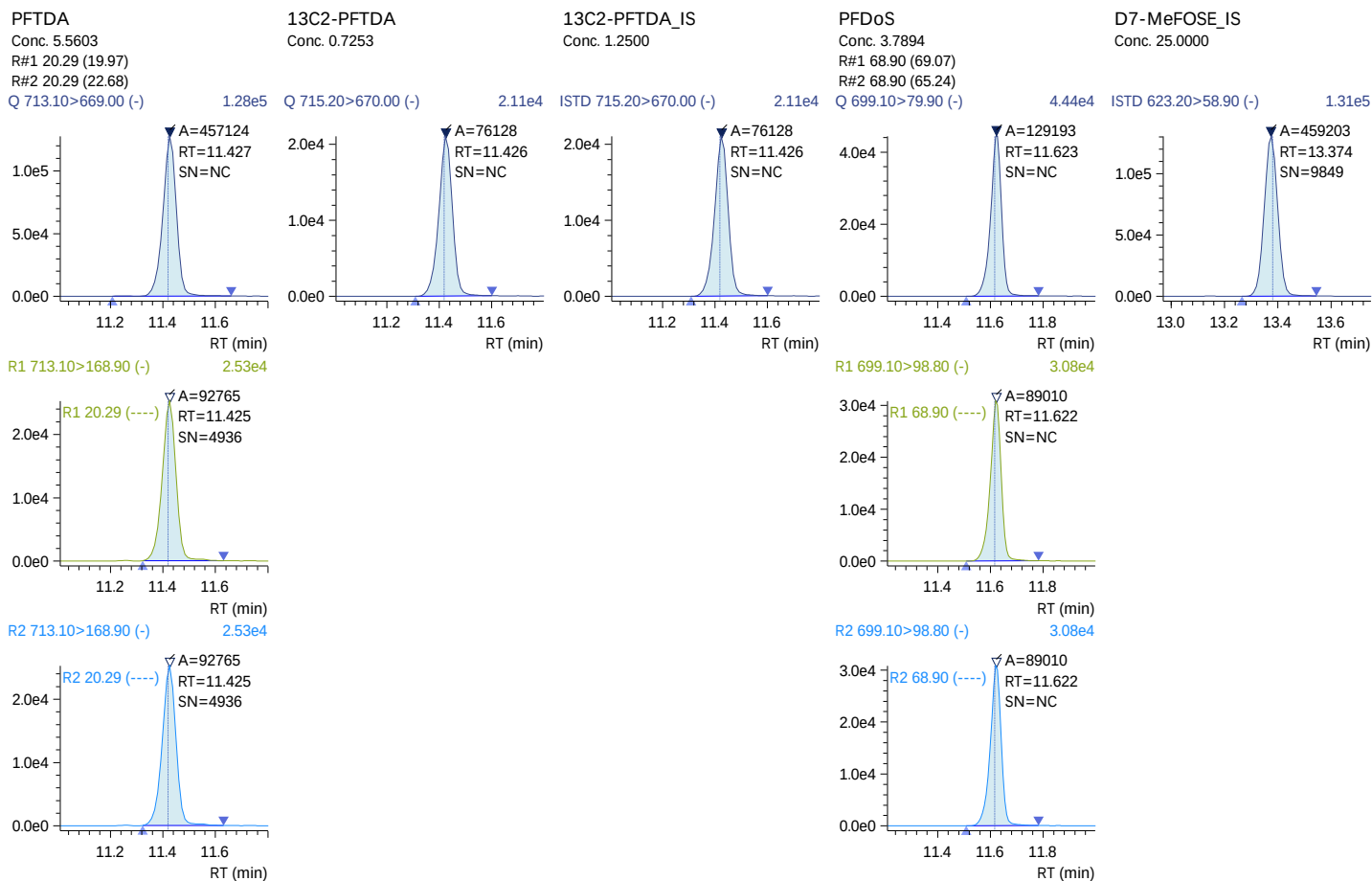


240119_026 (continued)





240119_026 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_026 (continued)

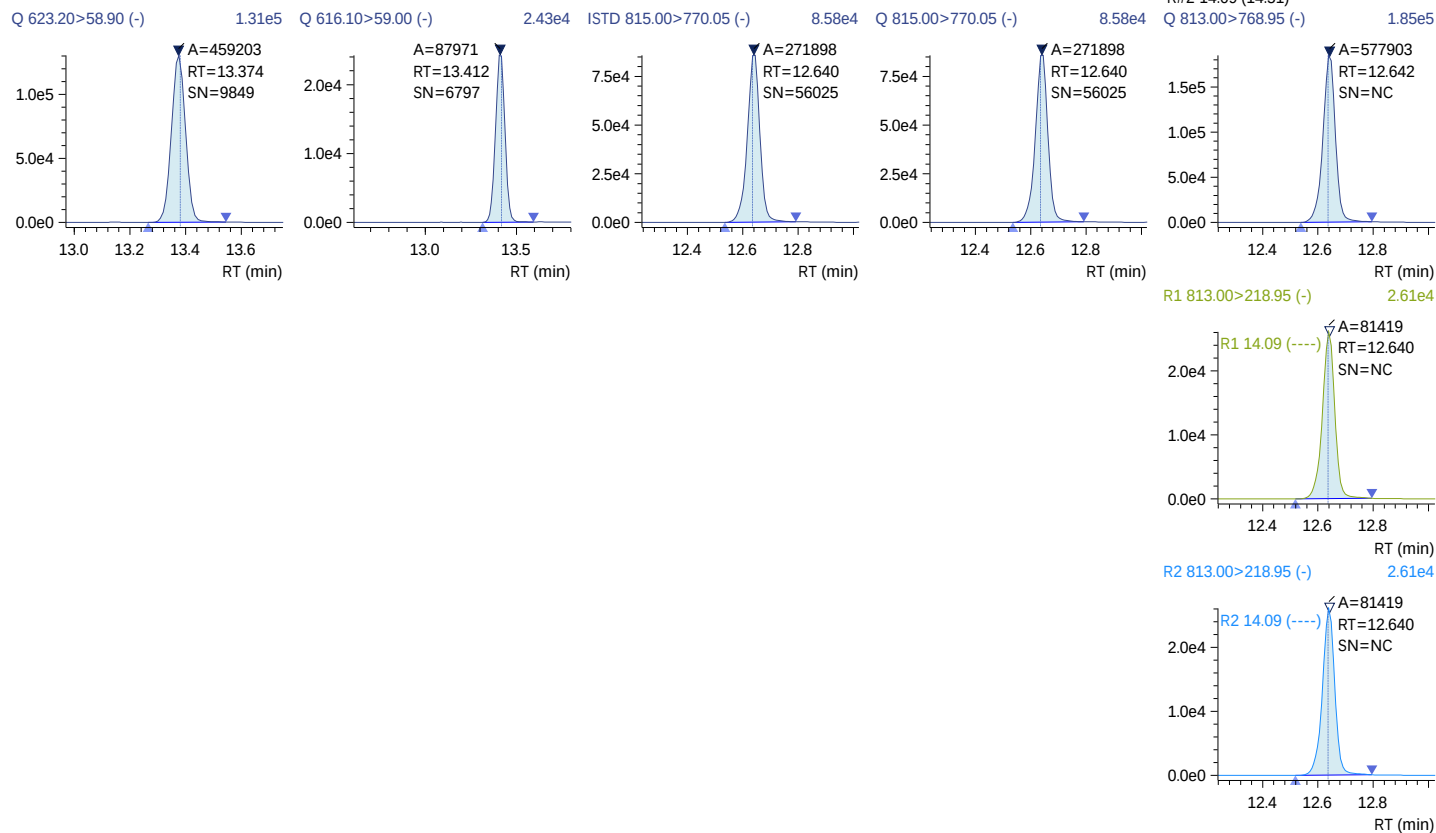
D7-MeFOSE
Conc. 16.3005

MeFOSE
Conc. 5.2164

13C2-PFHXA_IS
Conc. 2.5000

13C2-PFHXA
Conc. 1.3276

PFHXA
Conc. 5.1560
R#1 14.09 (11.64)
R#2 14.09 (14.51)





240119_026 (continued)

D3-MeFOSA
Conc. 1.4781

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. 4.2043
R#1 122.70 (149.05)
R#2 122.70 (142.62)

D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 15.2381

Q 515.00>219.00 (-)

9.88e3 ISTD 515.00>219.00 (-)

9.88e3

Q 511.90>219.00 (-)

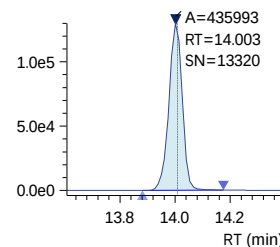
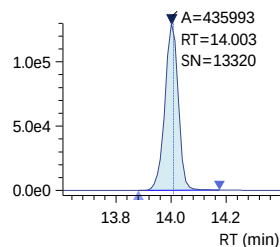
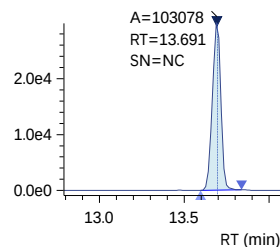
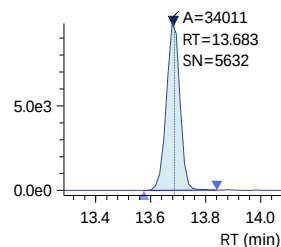
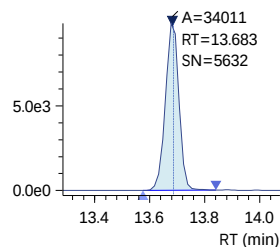
2.99e4

ISTD 639.20>58.90 (-)

1.30e5

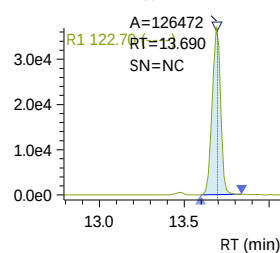
Q 639.20>58.90 (-)

1.30e5



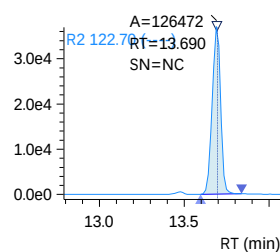
R1 511.90>169.00 (-)

3.70e4



R2 511.90>169.00 (-)

3.70e4





240119_026 (continued)

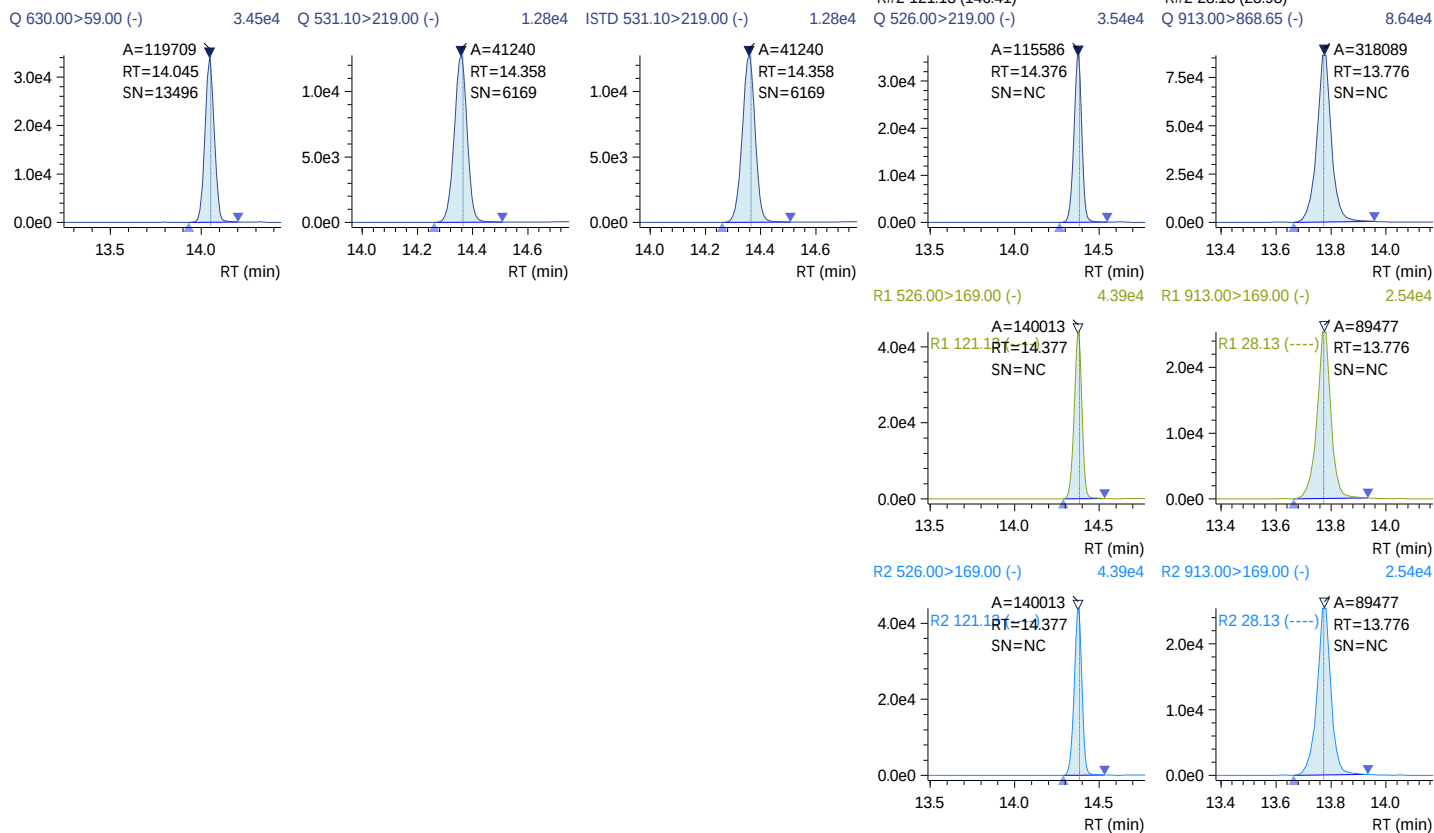
EtFOSE
Conc. 5.2185

D5-EtFOSAm
Conc. 1.3461

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. 4.8144
R#1 121.13 (154.69)
R#2 121.13 (146.41)

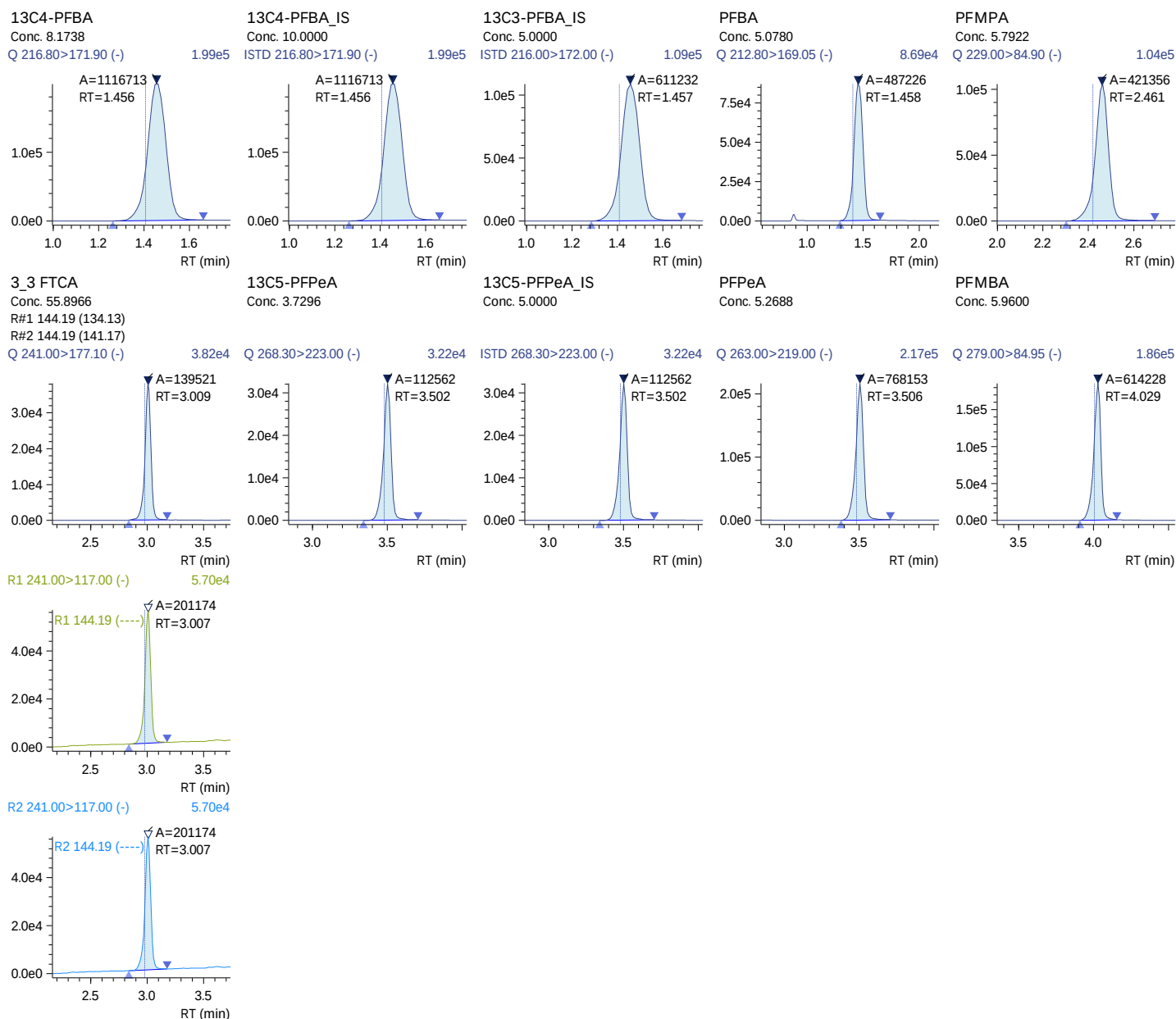
PFODA
Conc. 5.1734
R#1 28.13 (29.32)
R#2 28.13 (23.98)





240119_026

Sample ID: KQ2400355-01
Date Acquired: 1/19/2024 9:29:58 PM
Acquired by: System Administrator
Data File: 240119_026
Vial: 8 | Inj. Volume: 10.0000uL | Tray: 2





240119_026 (continued)

13C2-4_2 FTS
Conc. 5.1143

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. 4.9197
R#1 29.89 (34.14)
R#2 29.89 (29.06)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 4.3025
R#1 46.82 (47.53)
R#2 46.82 (46.72)

Q 329.10>80.90 (-)

5.12e4

ISTD 329.10>80.90 (-)

5.12e4

Q 327.10>307.00 (-)

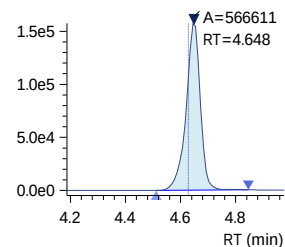
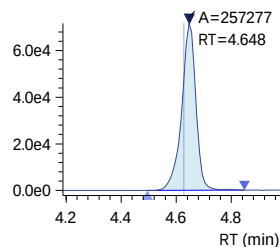
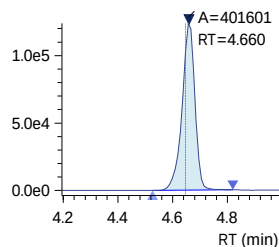
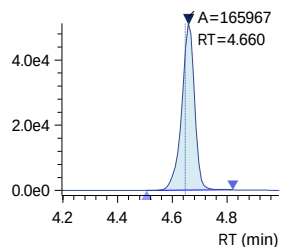
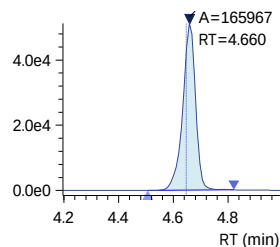
1.24e5

ISTD 302.10>79.90 (-)

7.17e4

Q 298.70>79.90 (-)

1.57e5

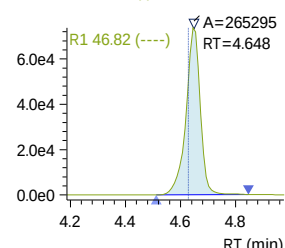
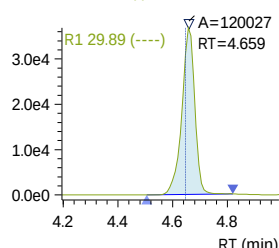


R1 327.10>80.90 (-)

3.69e4

R1 298.70>98.80 (-)

7.38e4

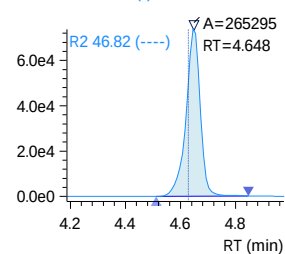
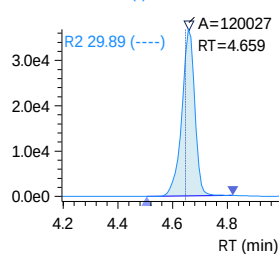


R2 327.10>80.90 (-)

3.69e4

R2 298.70>98.80 (-)

7.38e4

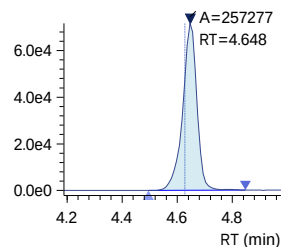




240119_026 (continued)

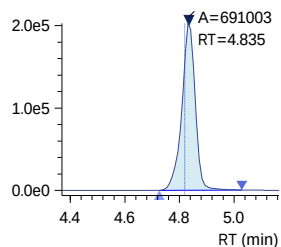
13C3-PFBS
Conc. 1.9225

Q 302.10>79.90 (-)

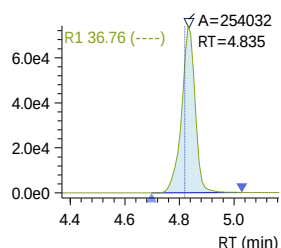


NFDHA
Conc. 5.6743
R#1 36.76 (37.88)
R#2 36.76 (40.25)

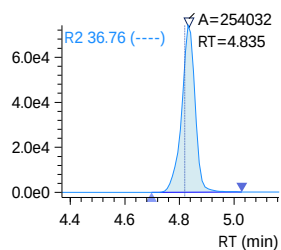
Q 295.00>201.00 (-)



R1 295.00>84.90 (-)

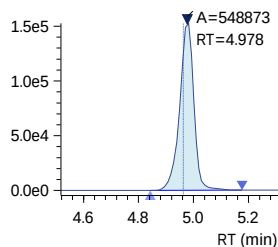


R2 295.00>84.90 (-)



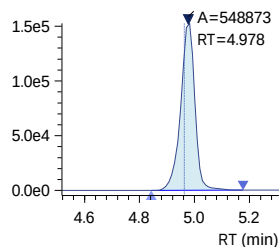
13C5-PFHxA
Conc. 1.9478

Q 318.00>273.00 (-)



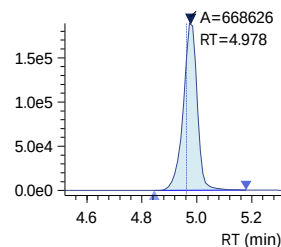
13C5-PFHxA_IS
Conc. 2.5000

ISTD 318.00>273.00 (-)



13C2-PFHxA_IS
Conc. 2.5000

ISTD 315.10>270.00 (-)

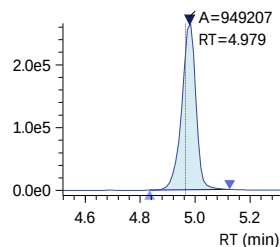




240119_026 (continued)

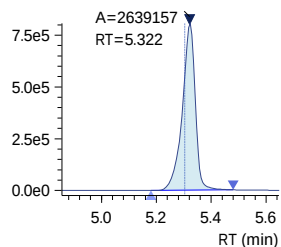
PFHxA
Conc. 5.1873

Q 313.00>269.00 (-)

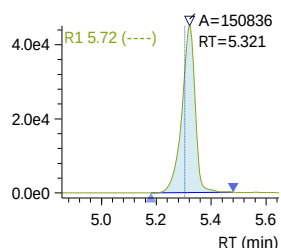


PFEESA
Conc. 4.2929
R#1 5.72 (5.88)
R#2 5.72 (6.11)

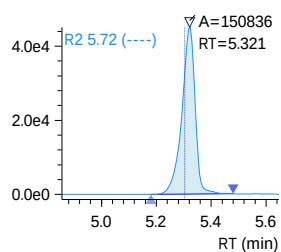
Q 314.80>135.00 (-)



R1 314.80>82.90 (-)

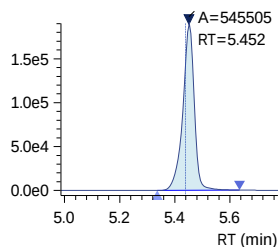


R2 314.80>82.90 (-)



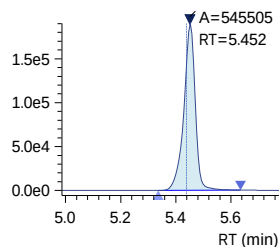
13C3-HFPO-DA
Conc. 8.3343

Q 286.90>168.90 (-)



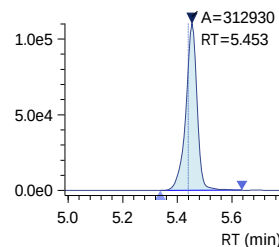
13C3-HFPO-DA_IS
Conc. 10.0000

ISTD 286.90>168.90 (-)

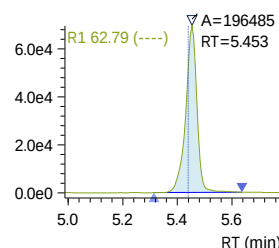


HFPO-DA
Conc. 5.1941
R#1 62.79 (63.80)
R#2 62.79 (65.61)

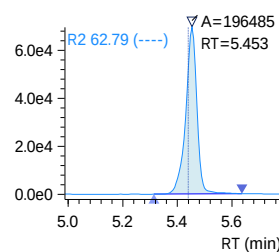
Q 284.90>168.90 (-)



R1 284.90>184.90 (-)

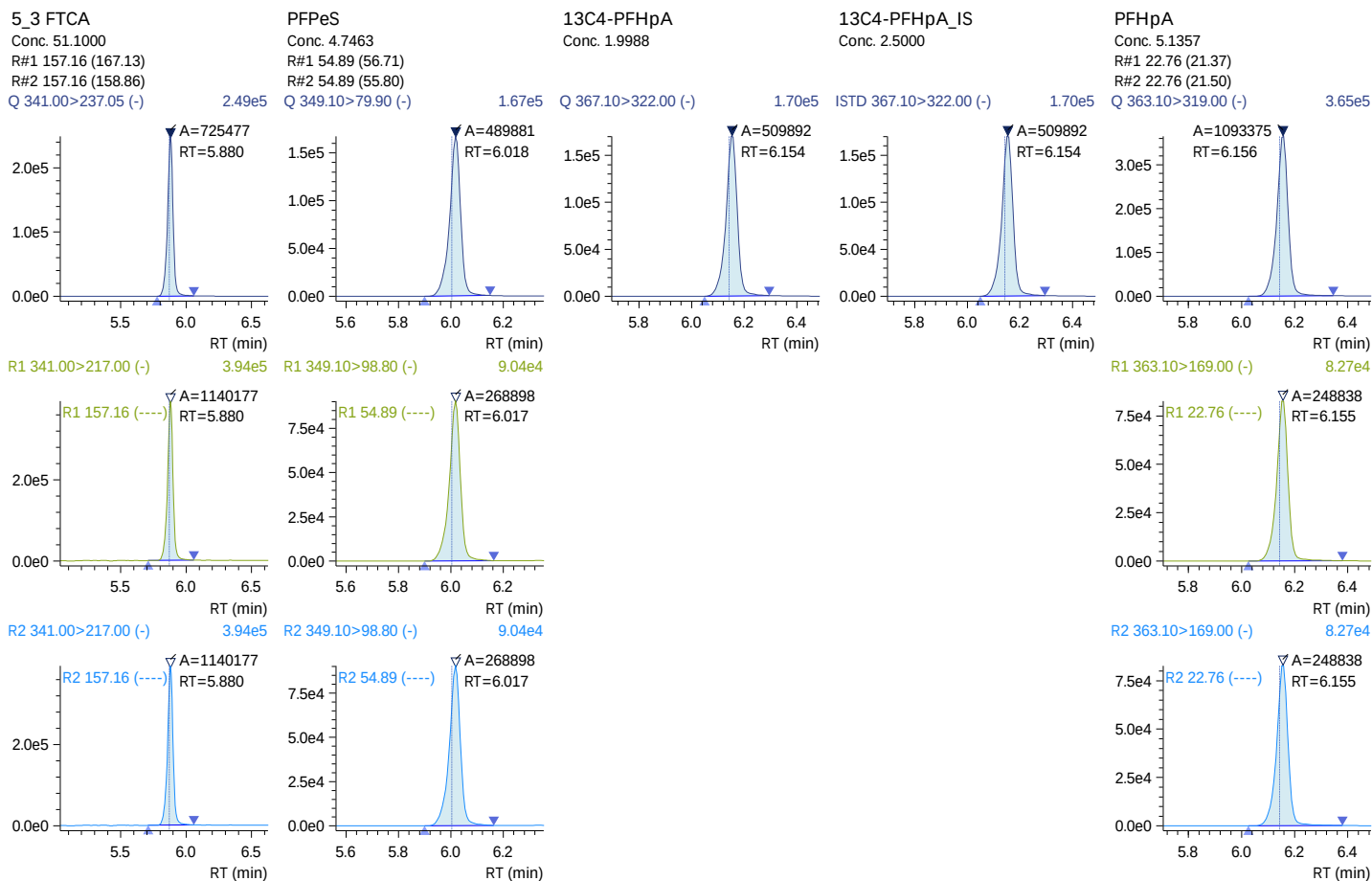


R2 284.90>184.90 (-)



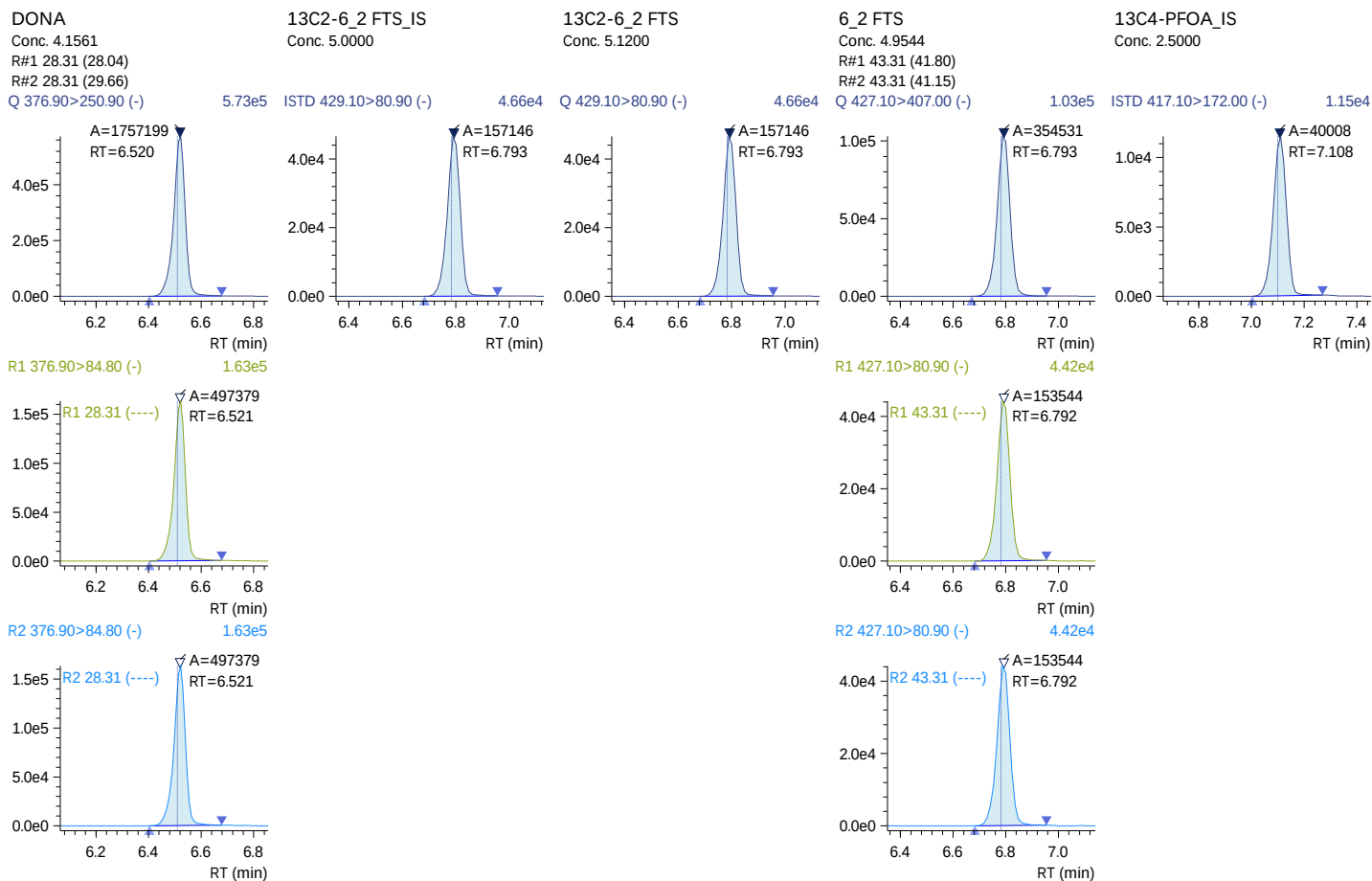


240119_026 (continued)





240119_026 (continued)





240119_026 (continued)

13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.0007

PFOA
Conc. 5.7328
R#1 33.77 (29.05)
R#2 33.77 (31.89)

13C3-PFHxS
Conc. 1.9417

13C3-PFHxS_IS
Conc. 2.5000

ISTD 421.10>376.00 (-)

1.27e5

Q 421.10>376.00 (-)

1.27e5

Q 413.00>369.00 (-)

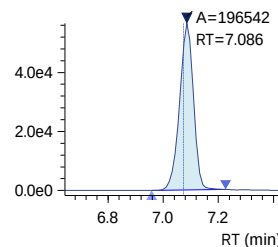
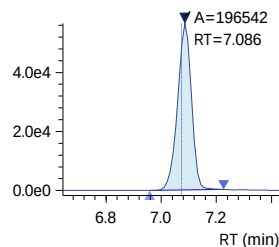
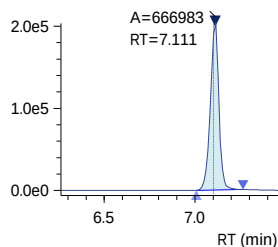
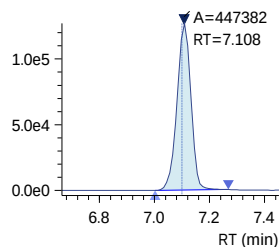
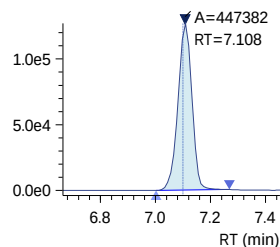
2.04e5

Q 402.10>79.90 (-)

5.67e4

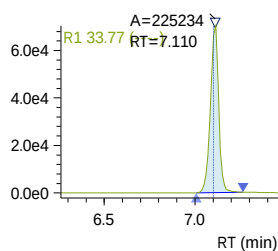
ISTD 402.10>79.90 (-)

5.67e4



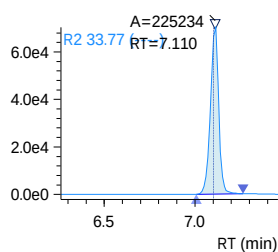
R1 413.00>169.00 (-)

7.04e4



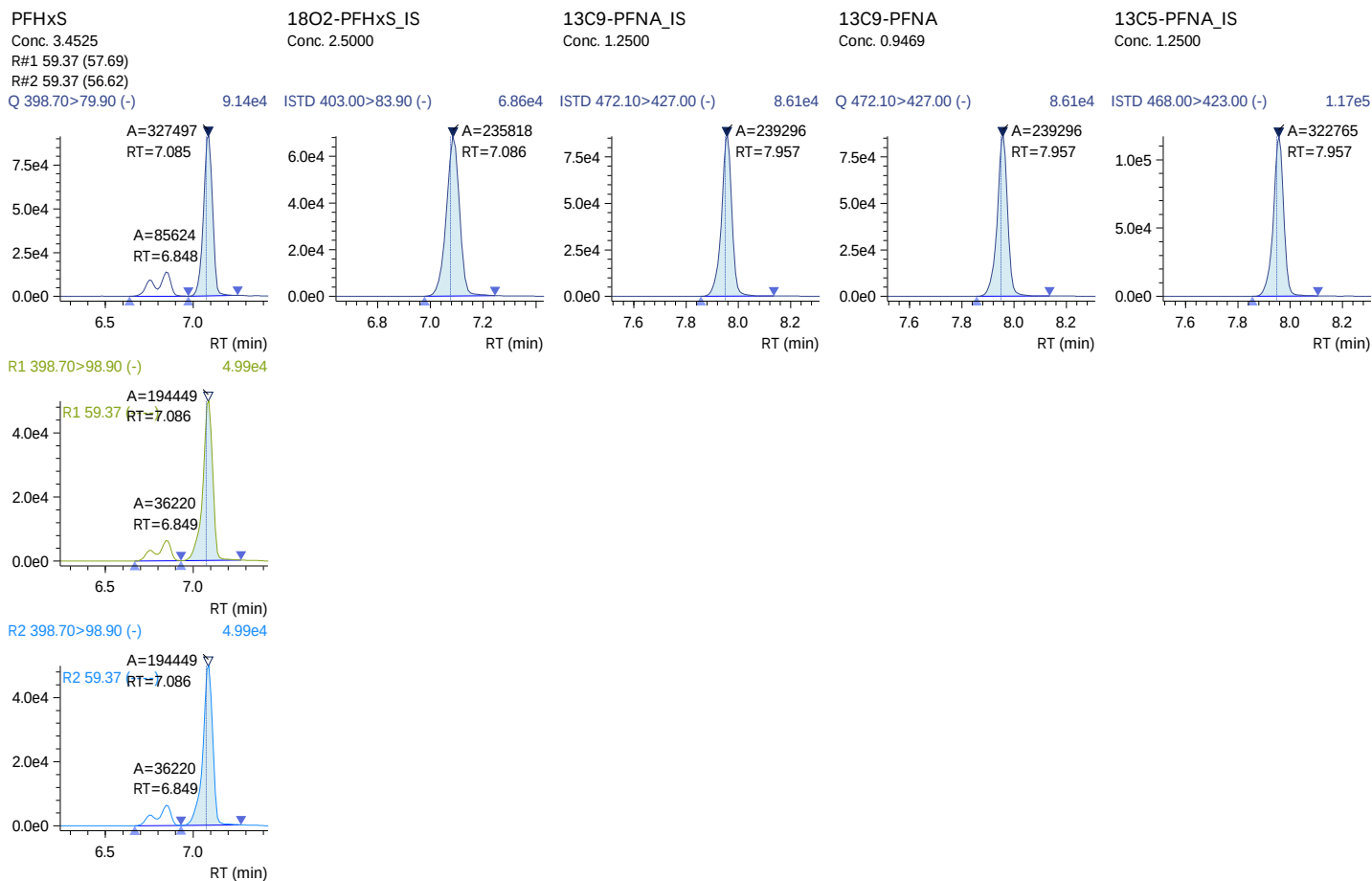
R2 413.00>169.00 (-)

7.04e4



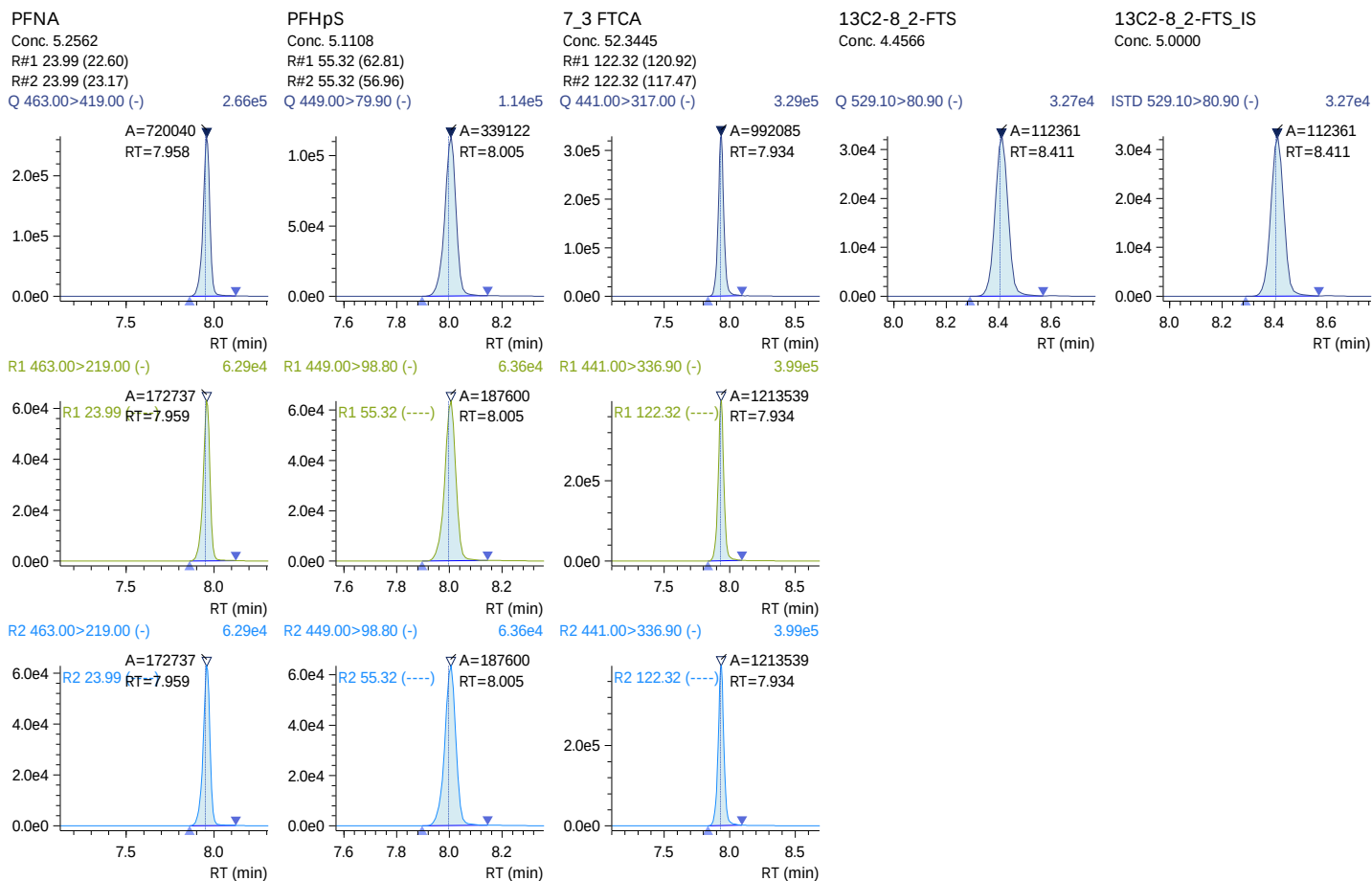


240119_026 (continued)



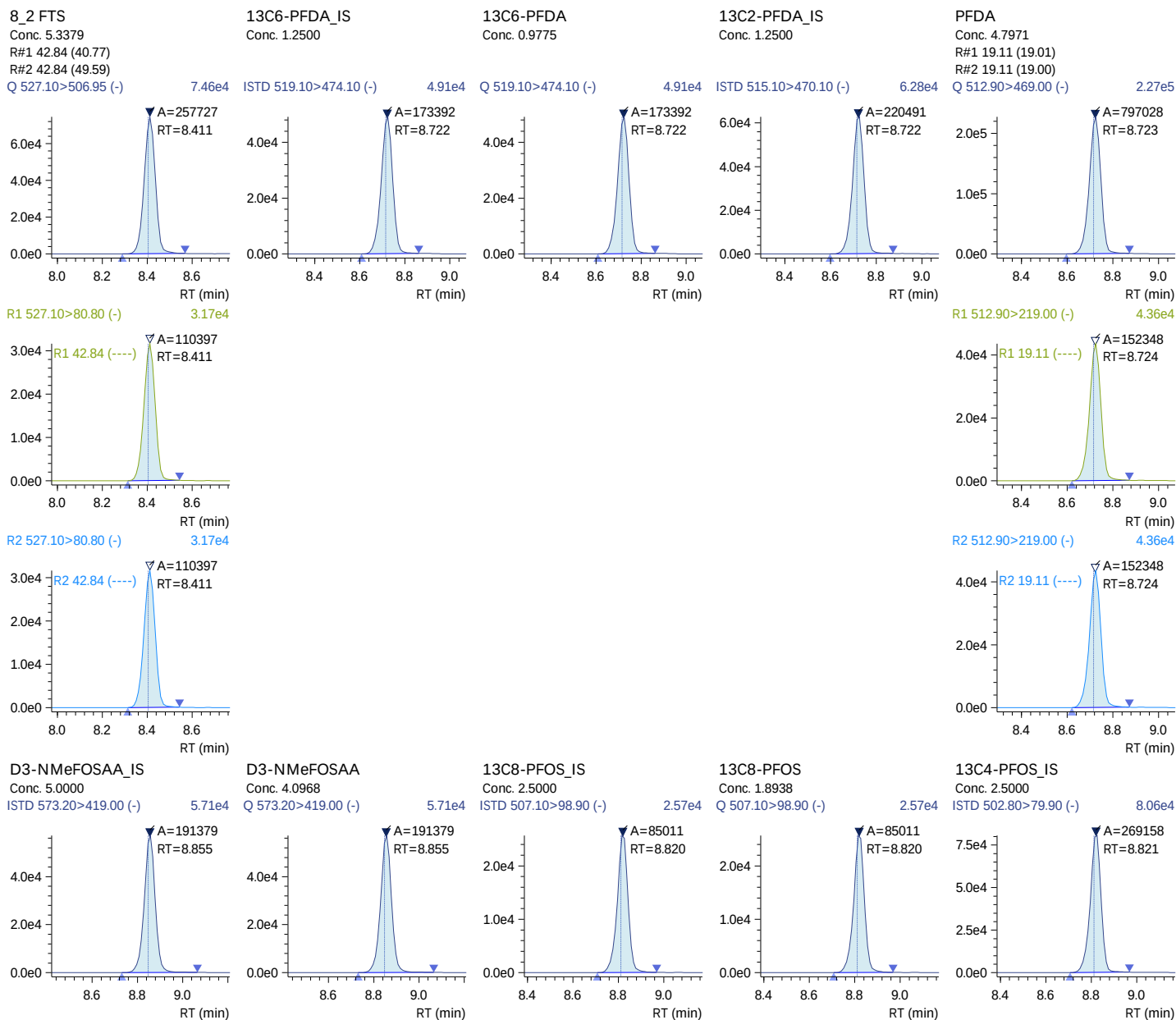


240119_026 (continued)



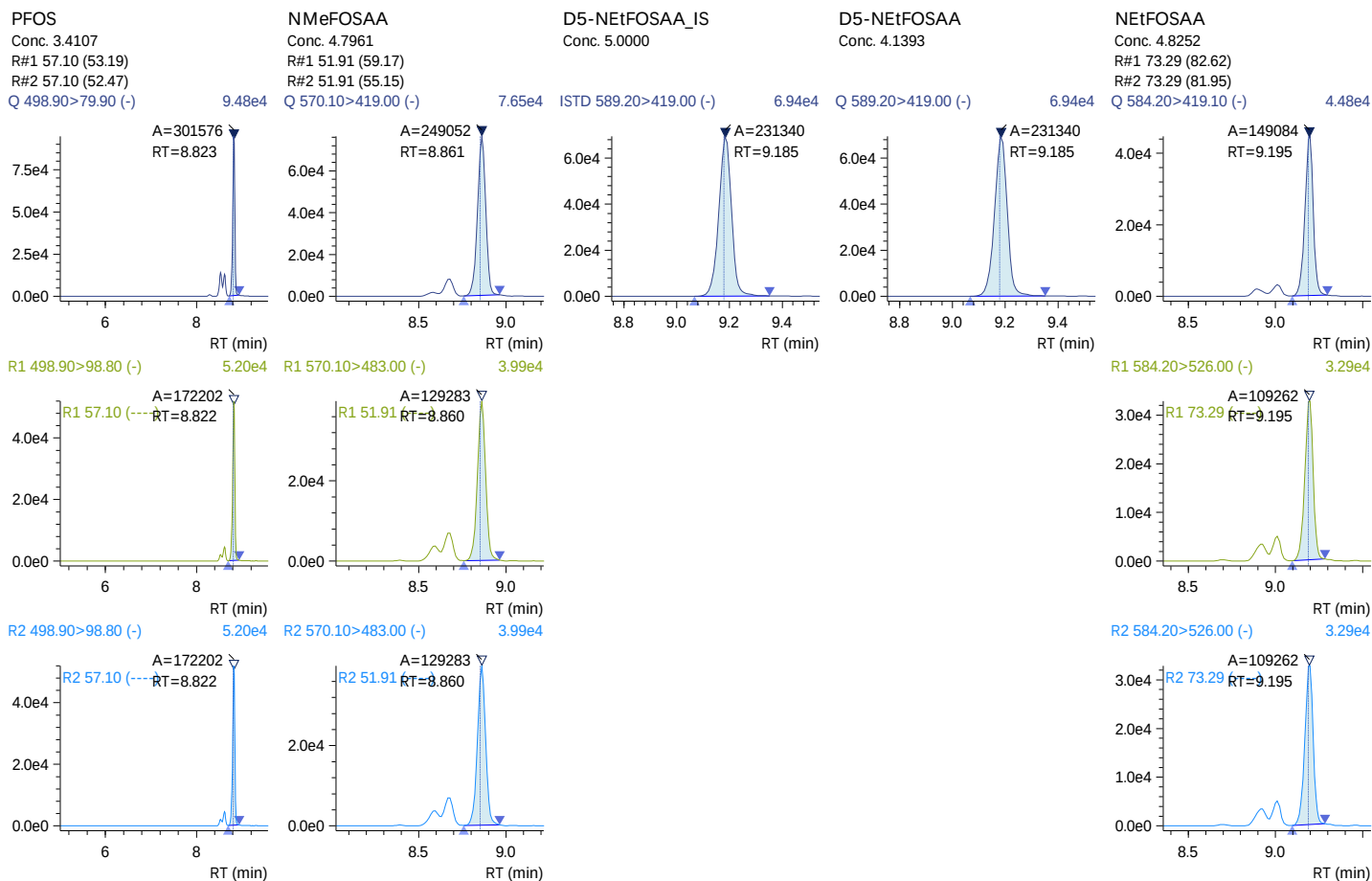


240119_026 (continued)





240119_026 (continued)

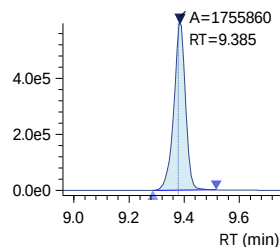




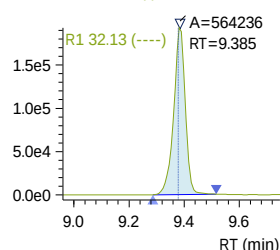
240119_026 (continued)

9-Cl-PF3ONS

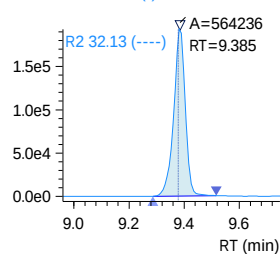
Conc. 3.9043
R#1 32.13 (31.76)
R#2 32.13 (32.76)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-) 1.93e5

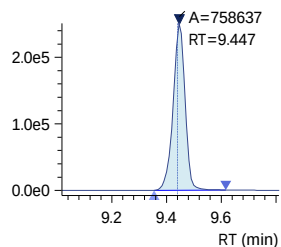


R2 532.80>353.00 (-) 1.93e5

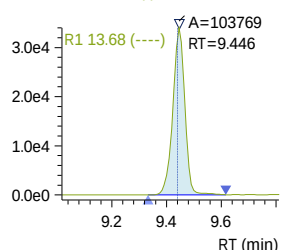


PFUnDA

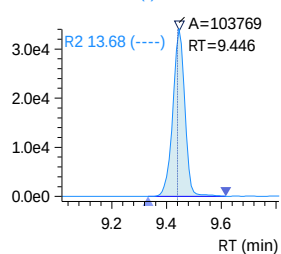
Conc. 5.0396
R#1 13.68 (12.31)
R#2 13.68 (13.12)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-) 3.40e4

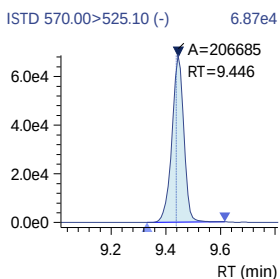


R2 563.10>269.10 (-) 3.40e4



13C7-PFUnDA_IS

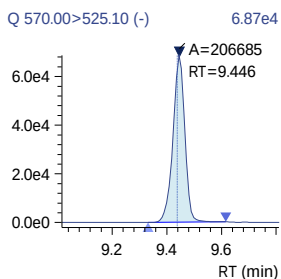
Conc. 1.2500



ISTD 570.00>525.10 (-) 6.87e4

13C7-PFUnDA

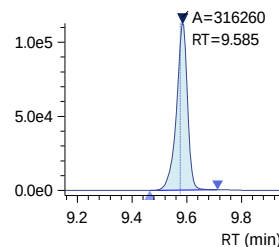
Conc. 0.9768



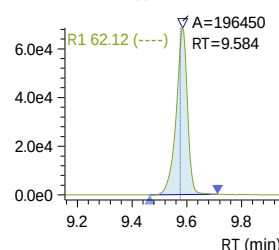
Q 570.00>525.10 (-) 6.87e4

PFNS

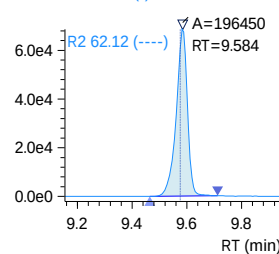
Conc. 4.8963
R#1 62.12 (63.31)
R#2 62.12 (65.22)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-) 6.86e4



R2 548.80>98.80 (-) 6.86e4





240119_026 (continued)

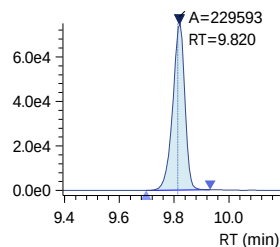
10_2 FTS

Conc. 3.9083

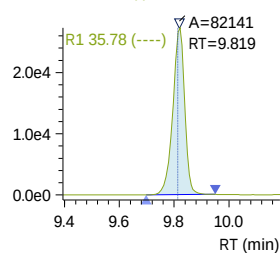
R#1 35.78 (33.02)

R#2 35.78 (37.13)

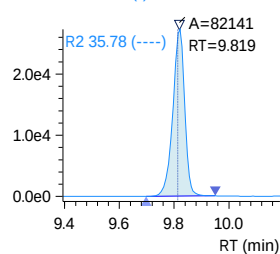
Q 626.80>607.05 (-)



R1 626.80>81.00 (-)



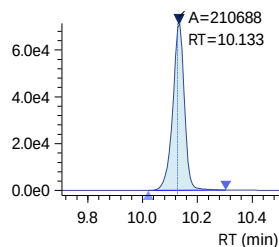
R2 626.80>81.00 (-)



13C2-PFDOA_IS

Conc. 1.2500

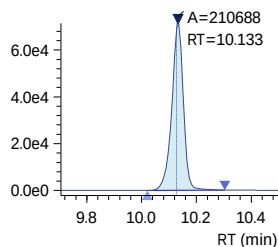
ISTD 615.10>570.00 (-)



13C2-PFDOA

Conc. 0.8667

Q 615.10>570.00 (-)



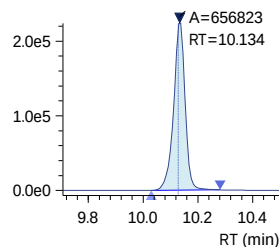
PFDOA

Conc. 5.5100

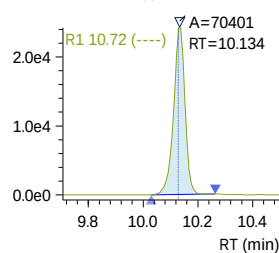
R#1 10.72 (10.14)

R#2 10.72 (11.29)

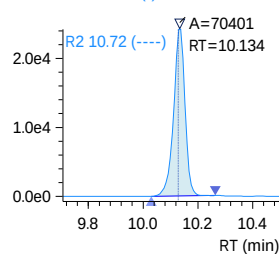
Q 613.10>569.00 (-)



R1 613.10>319.00 (-)



R2 613.10>319.00 (-)



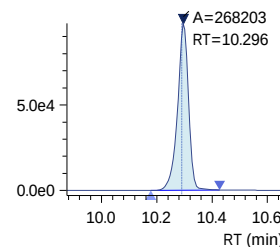
PFDS

Conc. 4.7712

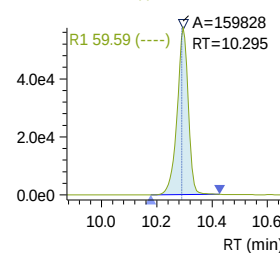
R#1 59.59 (62.02)

R#2 59.59 (60.18)

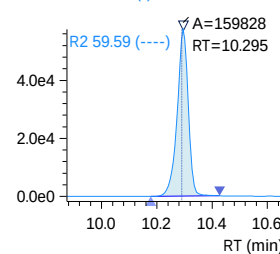
Q 599.00>79.90 (-)



R1 599.00>98.80 (-)



R2 599.00>98.80 (-)

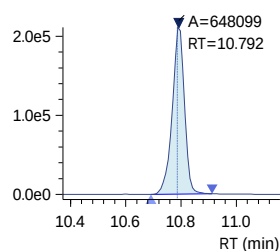




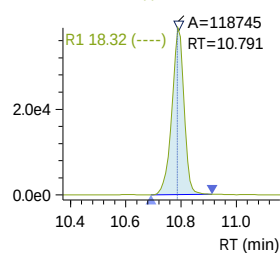
240119_026 (continued)

PFTTrDA

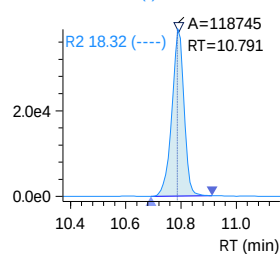
Conc. 6.0036
R#1 18.32 (15.12)
R#2 18.32 (17.64)
Q 663.00>619.00 (-)



R1 663.00>168.90 (-) 3.90e4

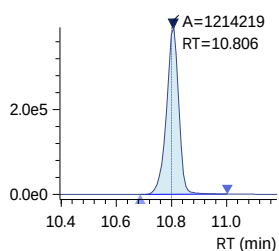


R2 663.00>168.90 (-) 3.90e4

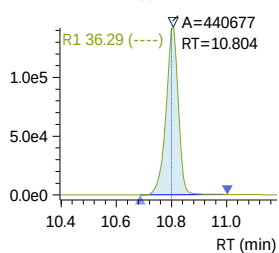


11-Cl-PF3OUdS

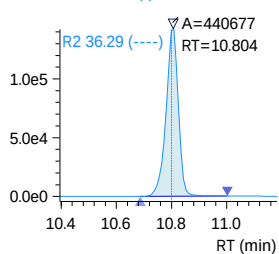
Conc. 3.9961
R#1 36.29 (36.61)
R#2 36.29 (36.44)
Q 630.90>451.00 (-)



R1 632.90>452.90 (-) 1.42e5



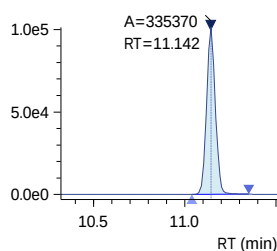
R2 632.90>452.90 (-) 1.42e5



PFOSAm

Conc. 5.1853

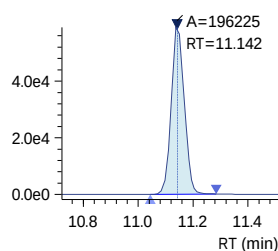
Q 498.10>77.90 (-)



13C8-PFOSAm

Conc. 1.7173

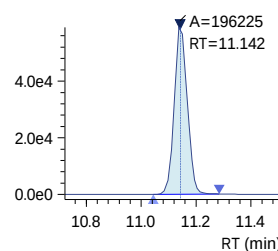
Q 506.10>77.80 (-)



13C8-PFOSAm_IS

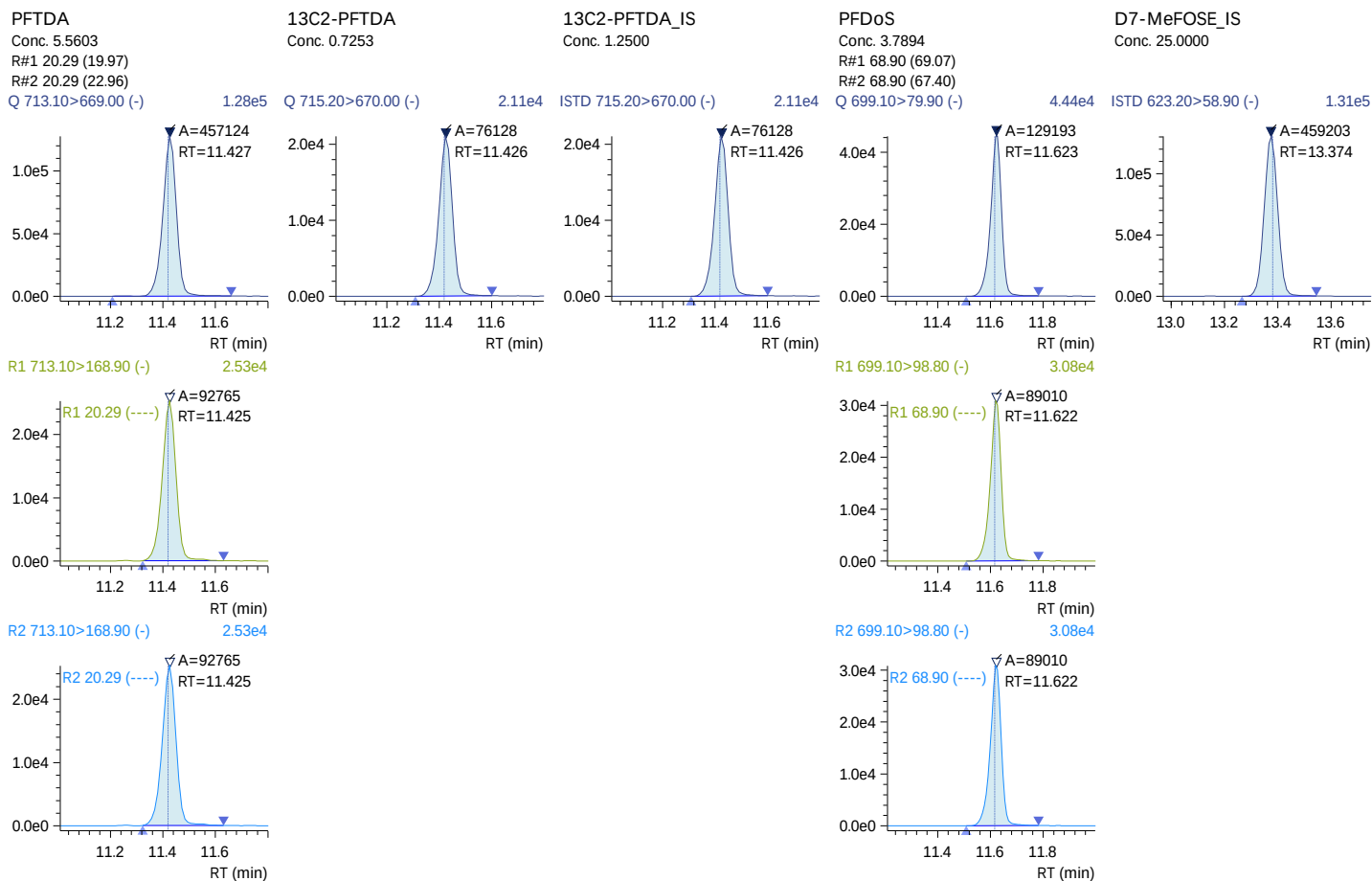
Conc. 2.5000

ISTD 506.10>77.80 (-)





240119_026 (continued)





240119_026 (continued)

D7-MeFOSE
 Conc. 16.3005

MeFOSE
 Conc. 5.2164

¹³C2-PFHDA-IS
 Conc. 2.5000

¹³C2-PFHDA
 Conc. 1.3276

PFHXDA

Conc. 5.1560
 R#1 14.09 (11.64)
 R#2 14.09 (13.90)

Q 623.20>58.90 (-)

1.31e5

Q 616.10>59.00 (-)

2.43e4

ISTD 815.00>770.05 (-)

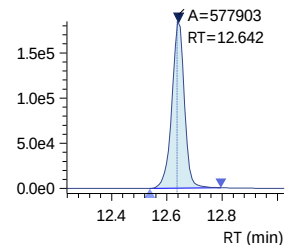
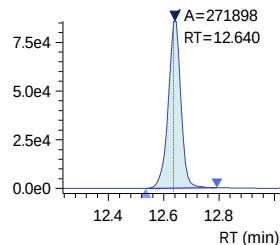
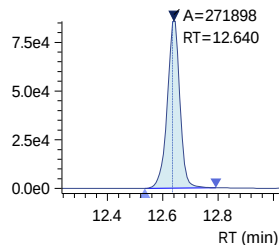
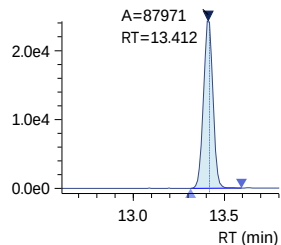
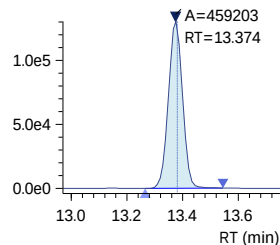
8.58e4

Q 815.00>770.05 (-)

8.58e4

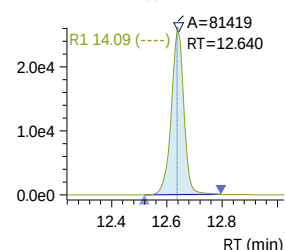
Q 813.00>768.95 (-)

1.85e5



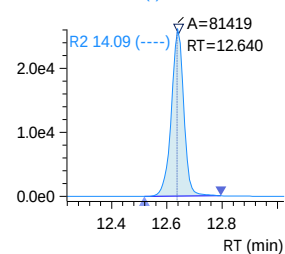
R1 813.00>218.95 (-)

2.61e4



R2 813.00>218.95 (-)

2.61e4





240119_026 (continued)

D3-MeFOSA
Conc. 1.4781

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. 4.2043
R#1 122.70 (149.05)
R#2 122.70 (140.79)

D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 15.2381

Q 515.00>219.00 (-)

9.88e3

ISTD 515.00>219.00 (-)

9.88e3

Q 511.90>219.00 (-)

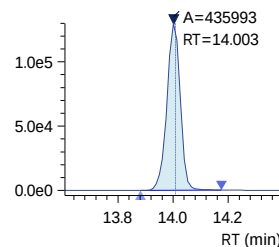
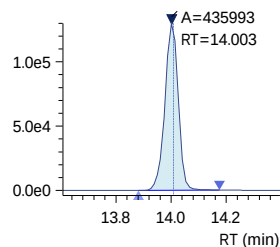
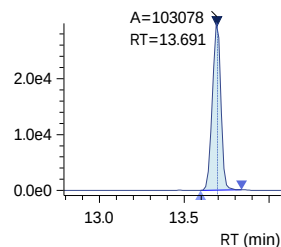
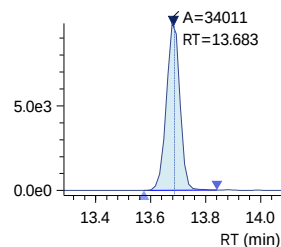
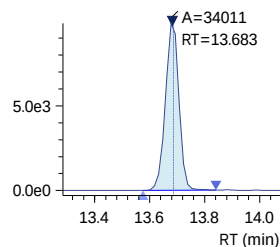
2.99e4

ISTD 639.20>58.90 (-)

1.30e5

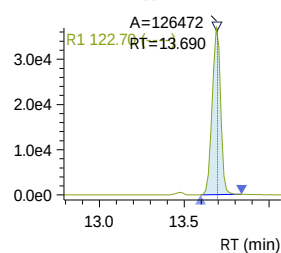
Q 639.20>58.90 (-)

1.30e5



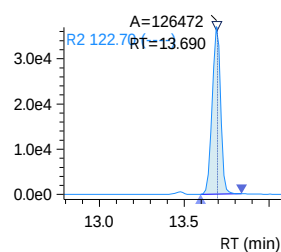
R1 511.90>169.00 (-)

3.70e4



R2 511.90>169.00 (-)

3.70e4





240119_026 (continued)

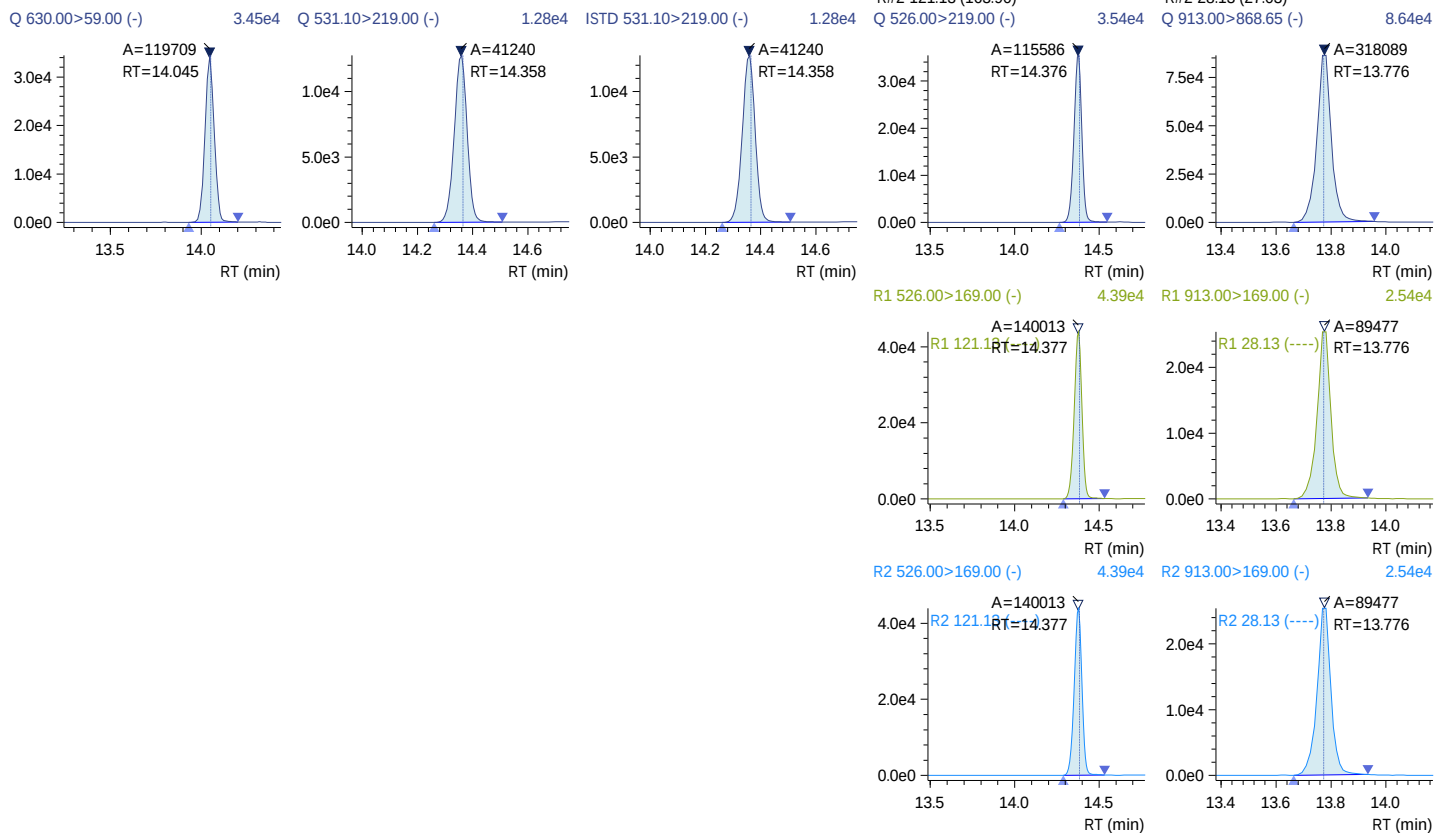
EtFOSE
Conc. 5.2185

D5-EtFOSAm
Conc. 1.3461

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. 4.8144
R#1 121.13 (154.69)
R#2 121.13 (163.90)

PFODA
Conc. 5.1734
R#1 28.13 (29.32)
R#2 28.13 (27.03)



Validation Report

1st PS 01/23/24
2nd UA 01/23/24

Data File: J:\LCMS08\Data\240119_1633_B1\240119_022
Lab ID: KQ2400951-10
RunType: CCB
Matrix: Soil

Date Acquired: 1/19/24 19:56
Batch ID: 830171
Analysis Method: 1633/PFAS_DOD5.4

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery	X	
Continuing Calibration Recovery (Closing)	X	
Internal Standards	X	
Surrogates	X	
Above Highest ICAL Level	X	

Primary Review: _____

Secondary Review: _____

Quantitation Report

1st *PS* 01/23/24
2nd *UA* 01/23/24

Data File:	J:\LCMS08\Data\240119_1633_B1\240119_022	Instrument:	K-LCMS-08
Acqu Date:	1/19/24 19:56	Vial:	19
Run Type:	CCB	Dilution:	1
Lab ID:	KQ2400951-10	Raw Units:	ng/mL

Bottle ID:		Tier:	IV	Matrix:	Soil
Prod Code:	PFAS_DOD5.4	Collect Date:	12/13/23	Receive Date:	12/20/23

Analysis Lot:	830171	Prep Lot:		Report Group:	KQ2400951
Analysis	1633	Prep Method:			
		Prep Date:			

Title:	Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM	Calibration ID:	KC2400027
		Report List ID:	24615

Internal Standard Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Area Criteria
18O2-PFHxS	7.069		213201	2.5000	OK
13C4-PFOS	8.806		256900	2.5000	OK
13C3-PFBA	1.400	-0.01	565454	5.0000	OK
13C2-PFHxA	4.958	+0.00	562672	2.5000	OK
13C4-PFOA	7.094		43985	2.5000	OK
13C5-PFNA	7.944	+0.00	297718	1.2500	OK
13C2-PFDA	8.708	0.00	221823	1.2500	OK

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
13C3-PFBS	4.621		311549	2.5750	103	20 - 150	Y
13C3-PFHxS	7.069		235227	2.5705	103	20 - 150	Y
13C8-PFOS	8.804	0.00	98039	2.2883	92	20 - 150	Y
13C4-PFBA	1.400	-0.01	1269166	10.0417	100	20 - 150	Y
13C5-PFPeA	3.472		128635	5.0647	101	20 - 150	Y
13C5-PFHxA	4.957	+0.00	580127	2.4464	98	20 - 150	Y
13C4-PFHpA	6.139	+0.00	614941	2.8646	115	20 - 150	Y
13C8-PFOA	7.094		602775	2.4518	98	20 - 150	Y
13C9-PFNA	7.944	+0.00	302325	1.2969	104	20 - 150	Y
13C6-PFDA	8.707	0.00	230790	1.2932	103	20 - 150	Y
13C7-PFUnDA	9.432	+0.00	254322	1.1947	96	20 - 150	Y
13C2-PFDoDA	10.120	+0.00	277677	1.1354	91	20 - 150	Y
13C2-PFTeDA	11.411	+0.00	116056	1.0991	88	20 - 150	Y
13C8-FOSA	11.142	+0.00	268846	2.4652	99	20 - 150	Y
D3-MeFOSA	13.687	+0.00	54221	2.4688	99	20 - 150	Y
D5-EtFOSA	14.366	+0.01	74714	2.5551	102	20 - 150	Y
D7-MeFOSE	13.381	+0.01	720206	26.7853	107	20 - 150	Y
D9-EtFOSE	14.009	+0.00	701896	25.7020	103	20 - 150	Y

			1st	PS	01/23/24
Data File:	J:\LCMS08\Data\240119_1633_B1\240119_022	Instrument:	K-LCMS08	2nd	01/23/24
Acqu Date:	1/19/24 19:56	Vial:	19	UA	
Run Type:	CCB	Dilution:	1		
Lab ID:	KQ2400951-10	Raw Units:	ng/mL		

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
D3-MeFOSAA	8.842		278188	6.2392	125	20 - 150	Y
D5-EtFOSAA	9.172	+0.00	290945	5.4543	109	20 - 150	Y
13C2-4:2 FTS	4.642	+0.00	202529	6.9030	138	20 - 150	Y
13C2-6:2 FTS	6.780		186800	6.7317	135	20 - 150	Y
13C2-8:2 FTS	8.399	0.00	143632	6.3012	126	20 - 150	Y
13C3-HFPO-DA	5.434	+0.00	626911	11.3817	114	20 - 150	Y

Target Compounds

Final Conc.Units: ng/g

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Perfluorobutane sulfonic acid (PFBS)	4.630	+0.01	185	0.0012	0.0012	U	Y
Perfluoropentane sulfonic acid (PFPeS)	5.989	-0.01	77	0.0006	0.00060	U	Y
Perfluorohexane sulfonic acid (PFHxS)	7.064	-0.01	877	-0.0114	0	U	Y
Perfluoroheptane sulfonic acid (PFHpS)	0		0	0	0	U	Y
Perfluorooctane sulfonic acid (PFOS)	8.803	0.00	240	0.0024	0.0024	U	Y
Perfluorononane sulfonic acid (PFNS)	0		0	0	0	U	Y
Perfluorodecane sulfonic acid (PFDS)	0		0	0	0	U	Y
Perfluorododecane sulfonic acid (PFDoS)	11.612	+0.01	14	0.0003	0.00030	U	Y
Perfluorobutanoic acid (PFBA)	1.413	+0.01	1383	0.0127	0.013	U	Y
Perfluoropentanoic acid (PFPeA)	3.477	+0.00	1326	0.0080	0.0080	U	Y
Perfluorohexanoic acid (PFHxA)	4.963	+0.01	2320	0.0036	0.0036	U	Y
Perfluoroheptanoic acid (PFHpA)	6.121	-0.02	4657	-0.0165	0	U	Y
Perfluorooctanoic acid (PFOA)	7.093	0.00	4318	-0.0160	0	U	Y
Perfluorononanoic acid (PFNA)	7.940	0.00	3930	-0.0080	0	U	Y
Perfluorodecanoic acid (PFDA)	8.706	0.00	3218	-0.0108	0	U	Y
Perfluoroundecanoic acid (PFUnDA)	9.430	0.00	3795	-0.0091	0	U	Y
Perfluorododecanoic acid (PFDOA)	10.119		2658	-0.0158	0	U	Y
Perfluorotridecanoic acid (PFTTrDA)	10.780	+0.00	2848	-0.0136	0	U	Y
Perfluorotetradecanoic acid (PFTDA)	11.413	+0.00	2631	-0.0067	0	U	Y
Perfluorooctane sulfonamide (PFOSAm)	11.161	+0.02	338	0.0038	0.0038	U	Y
N-Methylperfluorooctane sulfonamide (MeFOSA)	0		0	0	0	U	Y
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	0		0	0	0	U	Y
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	0		0	0	0	U	Y
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	0		0	0	0	U	Y
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	0		0	0	0	U	Y

			1st	PS	01/23/24
Data File:	J:\LCMS08\Data\240119_1633_B1\240119_022	Instrument:	K-LCMS08	UA	01/23/24
Acqu Date:	1/19/24 19:56	Vial:	19		
Run Type:	CCB	Dilution:	1		
Lab ID:	KQ2400951-10	Raw Units:	ng/mL		

Target Compounds			Final Conc.Units: ng/g				
Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	0		0	0	0	U	Y
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	4.637	0.00	166	0.0017	0.0017	U	Y
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	6.779		1226	0.0144	0.014	U	Y
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	0		0	0	0	U	Y
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	2.983	+0.01	218	0.0762	0.076	U	Y
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	5.866		333	0.0222	0.022	U	Y
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	7.931	+0.01	866	0.0432	0.043	U	Y
Perfluoro(2-ethoxyethane) sulfonic acid (PFEESA)	0		0	0	0	U	Y
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	0		0	0	0	U	Y
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	10.790	+0.00	189	-0.0165	0	U	Y
Perfluoro-3-methoxypropanoic acid (PFMPA)	2.428	+0.01	115	0.0014	0.0014	U	Y
Perfluoro-4-methoxybutanoic acid (PFMBA)	4.000	+0.00	72	0.0006	0.00060	U	Y
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	5.439	+0.00	28	0.0004	0.00040	U	Y
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	4.814		748	0.0058	0.0058	U	Y
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	0		0	0	0	U	Y



240119_022

Sample ID: 1633 CCB
Date Acquired: 1/19/2024 7:56:55 PM
Acquired by: System Administrator
Data File: 240119_022
Vial: 54 | Inj. Volume: 10.0000uL | Tray: 1

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	1269166	----	----	----	----	----	----	
13C4-PFBA_IS	216.80>171.90	----	1269166	----	----	----	----	----	----	
13C3-PFBA_IS	216.00>172.00	----	565454	----	----	----	----	----	----	
PFBA	212.80>169.05	----	1383	----	----	----	----	----	----	
PFMPA	229.00>84.90	----	115	----	----	----	----	----	----	
3_3 FTCA	241.00>177.10	241.00>117.00	218	513	235.72	141.17	513	235.72	143.25	IRr
13C5-PFPeA	268.30>223.00	----	128635	----	----	----	----	----	----	
13C5-PFPeA_IS	268.30>223.00	----	128635	----	----	----	----	----	----	
PFPeA	263.00>219.00	----	1326	----	----	----	----	----	----	
PFMBA	279.00>84.95	----	72	----	----	----	----	----	----	
13C2-4_2 FTS	329.10>80.90	----	202529	----	----	----	----	----	----	
13C2-4_2 FTS_IS	329.10>80.90	----	202529	----	----	----	----	----	----	
4_2 FTS	327.10>307.00	327.10>80.90	166	15	9.00	29.06	15	9.00	31.50	IRr
13C3-PFBS_IS	302.10>79.90	----	311549	----	----	----	----	----	----	
PFBS	298.70>79.90	298.70>98.80	185	166	89.86	46.72	166	89.86	48.74	IRr
13C3-PFBS	302.10>79.90	----	311549	----	----	----	----	----	----	
NFDHA	295.00>201.00	295.00>84.90	748	220	29.45	40.25	220	29.45	36.97	
13C5-PFHxA	318.00>273.00	----	580127	----	----	----	----	----	----	
13C5-PFHxA_IS	318.00>273.00	----	580127	----	----	----	----	----	----	
13C2-PFHxA_IS	315.10>270.00	----	562672	----	----	----	----	----	----	
PFHxA	313.00>269.00	----	2320	----	----	----	----	----	----	
PFEESA	314.80>135.00	314.80>82.90	----	0	0.00	6.11	0	0.00	5.81	
13C3-HFPO-DA	286.90>168.90	----	626911	----	----	----	----	----	----	
13C3-HFPO-DA_IS	286.90>168.90	----	626911	----	----	----	----	----	----	
HFPO-DA	284.90>168.90	284.90>184.90	28	335	1180.37	65.61	335	1180.37	64.39	IRr
5_3 FTCA	341.00>237.05	341.00>217.00	333	1100	330.26	158.86	1100	330.26	159.75	IRr
PFPeS	349.10>79.90	349.10>98.80	77	28	36.54	55.80	28	36.54	54.52	
13C4-PFHpA	367.10>322.00	----	614941	----	----	----	----	----	----	
13C4-PFHpA_IS	367.10>322.00	----	614941	----	----	----	----	----	----	
PFHpA	363.10>319.00	363.10>169.00	4657	1181	25.35	21.50	1181	25.35	23.22	
DONA	376.90>250.90	376.90>84.80	----	0	0.00	29.66	0	0.00	29.43	
13C2-6_2 FTS_IS	429.10>80.90	----	186800	----	----	----	----	----	----	
13C2-6_2 FTS	429.10>80.90	----	186800	----	----	----	----	----	----	
6_2 FTS	427.10>407.00	427.10>80.90	1226	473	38.57	41.15	473	38.57	43.09	
13C4-PFOA_IS	417.10>172.00	----	43985	----	----	----	----	----	----	
13C8-PFOA_IS	421.10>376.00	----	602775	----	----	----	----	----	----	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240119_022 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	602775	----	----	----	----	----	----	----
PFOA	413.00>369.00	413.00>169.00	4318	1363	31.58	31.89	1363	31.58	30.51	
13C3-PFHxS	402.10>79.90	----	235227	----	----	----	----	----	----	----
13C3-PFHxS_IS	402.10>79.90	----	235227	----	----	----	----	----	----	----
PFHxS	398.70>79.90	398.70>98.90	877	520	59.36	56.62	520	59.36	57.27	
18O2-PFHxS_IS	403.00>83.90	----	213201	----	----	----	----	----	----	----
13C9-PFNA_IS	472.10>427.00	----	302325	----	----	----	----	----	----	----
13C9-PFNA	472.10>427.00	----	302325	----	----	----	----	----	----	----
13C5-PFNA_IS	468.00>423.00	----	297718	----	----	----	----	----	----	----
PFNA	463.00>419.00	463.00>219.00	3930	500	12.73	23.17	500	12.73	23.01	
PFHpS	449.00>79.90	449.00>98.80	----	0	0.00	56.96	0	0.00	58.58	
7_3 FTCA	441.00>317.00	441.00>336.90	866	856	98.78	117.47	856	98.78	117.17	
13C2-8_2-FTS	529.10>80.90	----	143632	----	----	----	----	----	----	----
13C2-8_2-FTS_IS	529.10>80.90	----	143632	----	----	----	----	----	----	----
8_2 FTS	527.10>506.95	527.10>80.80	----	0	0.00	49.59	0	0.00	43.30	
13C6-PFDA_IS	519.10>474.10	----	230790	----	----	----	----	----	----	----
13C6-PFDA	519.10>474.10	----	230790	----	----	----	----	----	----	----
13C2-PFDA_IS	515.10>470.10	----	221823	----	----	----	----	----	----	----
PFDA	512.90>469.00	512.90>219.00	3218	772	23.99	19.00	772	23.99	19.26	
D3-NMeFOSAA_IS	573.20>419.00	----	278188	----	----	----	----	----	----	----
D3-NMeFOSAA	573.20>419.00	----	278188	----	----	----	----	----	----	----
13C8-PFOS_IS	507.10>98.90	----	98039	----	----	----	----	----	----	----
13C8-PFOS	507.10>98.90	----	98039	----	----	----	----	----	----	----
13C4-PFOS_IS	502.80>79.90	----	256900	----	----	----	----	----	----	----
PFOS	498.90>79.90	498.90>98.80	240	106	44.25	52.47	106	44.25	47.25	
NMeFOSAA	570.10>419.00	570.10>483.00	----	0	0.00	55.15	0	0.00	62.10	
D5-NEtFOSAA_IS	589.20>419.00	----	290945	----	----	----	----	----	----	----
D5-NEtFOSAA	589.20>419.00	----	290945	----	----	----	----	----	----	----
NEtFOSAA	584.20>419.10	584.20>526.00	----	0	0.00	81.95	0	0.00	86.05	
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	----	0	0.00	32.76	0	0.00	31.74	
PFUnDA	563.10>519.00	563.10>269.10	3795	287	7.57	13.12	287	7.57	13.26	
13C7-PFUnDA_IS	570.00>525.10	----	254322	----	----	----	----	----	----	----
13C7-PFUnDA	570.00>525.10	----	254322	----	----	----	----	----	----	----
PFNS	548.80>79.90	548.80>98.80	----	0	0.00	65.22	0	0.00	62.49	
10_2 FTS	626.80>607.05	626.80>81.00	97	9	9.73	37.13	9	9.73	35.81	IRr
13C2-PFDOA_IS	615.10>570.00	----	277677	----	----	----	----	----	----	----
13C2-PFDOA	615.10>570.00	----	277677	----	----	----	----	----	----	----
PFDOA	613.10>569.00	613.10>319.00	2658	263	9.88	11.29	263	9.88	10.90	
PFDS	599.00>79.90	599.00>98.80	----	0	0.00	60.18	0	0.00	61.11	
PFTrDA	663.00>619.00	663.00>168.90	2848	735	25.83	17.64	735	25.83	18.20	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240119_022 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	189	189	100.28	36.44	189	100.28	34.95	IRr
PFOSAm	498.10>77.90	----	338	----	----	----	----	----	----	
13C8-PFOSAm	506.10>77.80	----	268846	----	----	----	----	----	----	
13C8-PFOSAm_IS	506.10>77.80	----	268846	----	----	----	----	----	----	
PFTDA	713.10>669.00	713.10>168.90	2631	341	12.96	22.96	341	12.96	22.68	
13C2-PFTDA	715.20>670.00	----	116056	----	----	----	----	----	----	
13C2-PFTDA_IS	715.20>670.00	----	116056	----	----	----	----	----	----	
PFDoS	699.10>79.90	699.10>98.80	14	8	56.25	67.40	8	56.25	65.24	
D7-MeFOSE_IS	623.20>58.90	----	720206	----	----	----	----	----	----	
D7-MeFOSE	623.20>58.90	----	720206	----	----	----	----	----	----	
MeFOSE	616.10>59.00	----	----	----	----	----	----	----	----	
13C2-PFHxDA_IS	815.00>770.05	----	471918	----	----	----	----	----	----	
13C2-PFHxDA	815.00>770.05	----	471918	----	----	----	----	----	----	
PFHxDA	813.00>768.95	813.00>218.95	3640	594	16.32	13.90	594	16.32	14.51	
D3-MeFOSA	515.00>219.00	----	54221	----	----	----	----	----	----	
D3-MeFOSA_IS	515.00>219.00	----	54221	----	----	----	----	----	----	
MeFOSA	511.90>219.00	511.90>169.00	----	0	0.00	140.79	0	0.00	142.62	
D9-EtFOSE_IS	639.20>58.90	----	701896	----	----	----	----	----	----	
D9-EtFOSE	639.20>58.90	----	701896	----	----	----	----	----	----	
EtFOSE	630.00>59.00	----	----	----	----	----	----	----	----	
D5-EtFOSAm	531.10>219.00	----	74714	----	----	----	----	----	----	
D5-EtFOSAm_IS	531.10>219.00	----	74714	----	----	----	----	----	----	
EtFOSAm	526.00>219.00	526.00>169.00	----	0	0.00	163.90	0	0.00	146.41	
PFODA	913.00>868.65	913.00>169.00	1445	402	27.81	27.03	402	27.81	23.98	

Flag ID key: IRr: Ion Ratio (Relative)



240119_022

Sample ID: 1633 CCB
Date Acquired: 1/19/2024 7:56:55 PM
Acquired by: System Administrator
Data File: 240119_022
Vial: 54 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.400	-0.008	0.000	1269166	565454	13C3-PFBA_IS	10.0417	ng/mL	
13C4-PFBA_IS	Auto	1.400	-0.008	----	1269166	1269166	----	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.400	-0.008	----	565454	565454	----	5.0000	ng/mL	
PFBA	M	1.413	0.004	0.013	1383	1269166	13C4-PFBA_IS	0.0127	ng/mL	
PFMPA	M	2.428	0.007	-1.044	115	128635	13C5-PFPeA_IS	0.0014	ng/mL	
3_3 FTCA	M	2.983	0.003	-0.489	218	128635	13C5-PFPeA_IS	0.0762	ng/mL	IRr
13C5-PFPeA	Auto	3.472	-0.007	-1.486	128635	562672	13C2-PFHxA_IS	5.0647	ng/mL	
13C5-PFPeA_IS	Auto	3.472	-0.007	----	128635	128635	----	5.0000	ng/mL	
PFPeA	M	3.477	-0.005	0.005	1326	128635	13C5-PFPeA_IS	0.0080	ng/mL	
PFMBA	M	4.000	-0.005	0.528	72	128635	13C5-PFPeA_IS	0.0006	ng/mL	
13C2-4_2 FTS	Auto	4.642	-0.004	-2.427	202529	213201	18O2-PFHxS_IS	6.9030	ng/mL	
13C2-4_2 FTS_IS	Auto	4.642	-0.004	----	202529	202529	----	5.0000	ng/mL	
4_2 FTS	M	4.637	-0.010	-0.005	166	202529	13C2-4_2 FTS_IS	0.0017	ng/mL	IRr
13C3-PFBS_IS	Auto	4.621	-0.007	----	311549	311549	----	2.5000	ng/mL	
PFBS	M	4.630	0.002	0.009	185	311549	13C3-PFBS_IS	0.0012	ng/mL	IRr
13C3-PFBS	Auto	4.621	-0.007	-2.448	311549	213201	18O2-PFHxS_IS	2.5750	ng/mL	
NFDHA	M	4.814	-0.006	-0.143	748	580127	13C5-PFHxA_IS	0.0058	ng/mL	
13C5-PFHxA	Auto	4.957	-0.006	-0.001	580127	562672	13C2-PFHxA_IS	2.4464	ng/mL	
13C5-PFHxA_IS	Auto	4.957	-0.006	----	580127	580127	----	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	4.958	-0.005	----	562672	562672	----	2.5000	ng/mL	
PFHxA	M	4.963	-0.002	0.006	2320	580127	13C5-PFHxA_IS	0.0036	ng/mL	
PFEESA	ND(W/B)	----	----	----	----	580127	13C5-PFHxA_IS	----	ng/mL	
13C3-HFPO-DA	Auto	5.434	-0.005	0.476	626911	562672	13C2-PFHxS_IS	11.3817	ng/mL	
13C3-HFPO-DA_IS	Auto	5.434	-0.005	----	626911	626911	----	10.0000	ng/mL	
HFPO-DA	M	5.439	-0.001	0.005	28	626911	13C3-HFPO-DA_IS	0.0004	ng/mL	IRr
5_3 FTCA	M	5.866	-0.005	0.909	333	580127	13C5-PFHxA_IS	0.0222	ng/mL	IRr
PFPeS	M	5.989	-0.014	-1.080	77	235227	13C3-PFHxS_IS	0.0006	ng/mL	
13C4-PFHpA	Auto	6.139	-0.004	1.181	614941	562672	13C2-PFHxA_IS	2.8646	ng/mL	
13C4-PFHpA_IS	Auto	6.139	-0.004	----	614941	614941	----	2.5000	ng/mL	
PFHpA	M	6.121	-0.023	-0.018	4657	614941	13C4-PFHpA_IS	-0.0165	ng/mL	
DONA	ND(W/B)	----	----	----	----	626911	13C3-HFPO-DA_IS	----	ng/mL	
13C2-6_2 FTS_IS	Auto	6.780	-0.004	----	186800	186800	----	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.780	-0.004	-0.289	186800	213201	18O2-PFHxS_IS	6.7317	ng/mL	
6_2 FTS	M	6.779	-0.004	-0.001	1226	186800	13C2-6_2 FTS_IS	0.0144	ng/mL	
13C4-PFOA_IS	Auto	7.094	-0.005	----	43985	43985	----	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.094	-0.006	----	602775	602775	----	2.5000	ng/mL	
13C8-PFOA	Auto	7.094	-0.006	0.000	602775	43985	13C4-PFOA_IS	2.4518	ng/mL	
PFOA	Auto	7.093	-0.009	-0.001	4318	602775	13C8-PFOA_IS	-0.0160	ng/mL	
13C3-PFHxS	Auto	7.069	-0.005	0.000	235227	213201	18O2-PFHxS_IS	2.5705	ng/mL	
13C3-PFHxS_IS	Auto	7.069	-0.005	----	235227	235227	----	2.5000	ng/mL	
PFHxS	M	7.064	-0.010	-0.005	877	235227	13C3-PFHxS_IS	-0.0114	ng/mL	
18O2-PFHxS_IS	Auto	7.069	-0.006	----	213201	213201	----	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.944	-0.005	----	302325	302325	----	1.2500	ng/mL	
13C9-PFNA	Auto	7.944	-0.005	0.000	302325	297718	13C5-PFNA_IS	1.2969	ng/mL	
13C5-PFNA_IS	Auto	7.944	-0.005	----	297718	297718	----	1.2500	ng/mL	
PFNA	M	7.940	-0.010	-0.004	3930	302325	13C9-PFNA_IS	-0.0080	ng/mL	
PFHpS	ND(W/B)	----	----	----	----	98039	13C8-PFOS_IS	----	ng/mL	
7_3 FTCA	M	7.931	0.002	2.974	866	580127	13C5-PFHxA_IS	0.0432	ng/mL	
13C2-8_2-FTS	Auto	8.399	-0.005	1.330	143632	213201	18O2-PFHxS_IS	6.3012	ng/mL	
13C2-8_2-FTS_IS	Auto	8.399	-0.005	----	143632	143632	----	5.0000	ng/mL	
8_2 FTS	ND(W/B)	----	----	----	----	143632	13C2-8_2-FTS_IS	----	ng/mL	
13C6-PFDA_IS	Auto	8.707	-0.007	----	230790	230790	----	1.2500	ng/mL	
13C6-PFDA	Auto	8.707	-0.007	-0.001	230790	221823	13C2-PFDA_IS	1.2932	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_022 (continued)

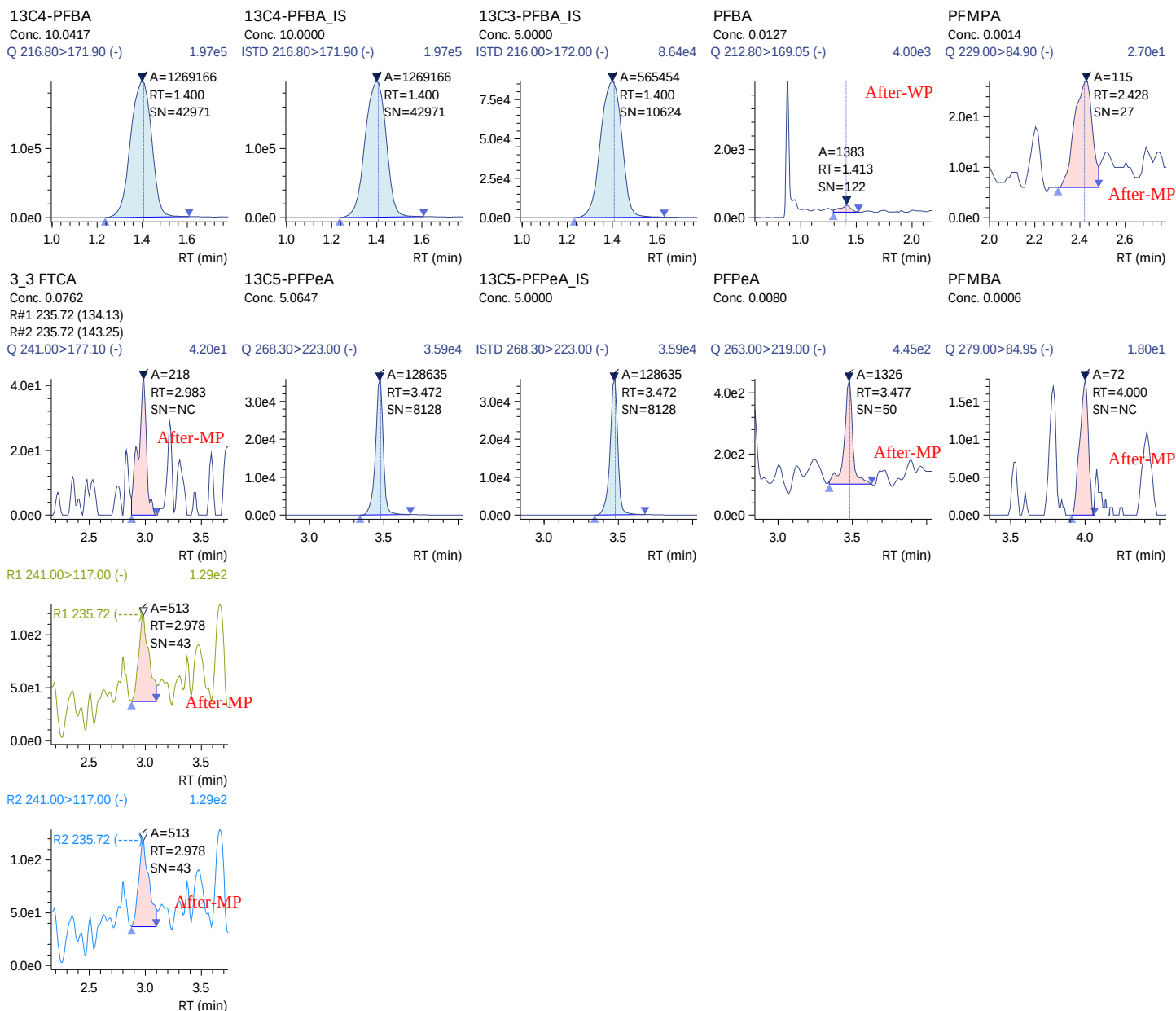
(Table continued from previous page)

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C2-PFDA_IS	Auto	8.708	-0.007	----	221823	221823	----	1.2500	ng/mL	
PFDA	MI R1 R2	8.706	-0.010	-0.001	3218	230790	13C6-PFDA_IS	-0.0108	ng/mL	
D3-NMeFOSAA_IS	Auto	8.842	-0.006	----	278188	278188	----	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.842	-0.006	0.036	278188	256900	13C4-PFOS_IS	6.2392	ng/mL	
13C8-PFOS_IS	Auto	8.804	-0.007	----	98039	98039	----	2.5000	ng/mL	
13C8-PFOS	Auto	8.804	-0.007	-0.002	98039	256900	13C4-PFOS_IS	2.2883	ng/mL	
13C4-PFOS_IS	Auto	8.806	-0.005	----	256900	256900	----	2.5000	ng/mL	
PFOS	M	8.803	-0.010	-0.001	240	98039	13C8-PFOS_IS	0.0024	ng/mL	
NMeFOSAA	ND(W/B)	----	----	----	----	278188	D3-NMeFOSAA_IS	----	ng/mL	
D5-NetFOSAA_IS	Auto	9.172	-0.006	----	290945	290945	----	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.172	-0.006	0.366	290945	256900	13C4-PFOS_IS	5.4543	ng/mL	
NetFOSAA	ND(W/B)	----	----	----	----	290945	D5-NetFOSAA_IS	----	ng/mL	
9-CI-PF3ONS	ND(W/B)	----	----	----	----	626911	13C3-HFPO-DA_IS	----	ng/mL	
PFUnDA	M	9.430	-0.010	-0.002	3795	254322	13C7-PFUnDA_IS	-0.0091	ng/mL	
13C7-PFUnDA_IS	Auto	9.432	-0.006	----	254322	254322	----	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.432	-0.006	0.724	254322	221823	13C2-PFDA_IS	1.1947	ng/mL	
PFNS	ND(W/B)	----	----	----	----	98039	13C8-PFOS_IS	----	ng/mL	
10_2_FTS	M	9.810	-0.003	1.411	97	143632	13C2-8_2-FTS_IS	0.0013	ng/mL	IRr
13C2-PFDOA_IS	Auto	10.120	-0.007	----	277677	277677	----	1.2500	ng/mL	
13C2-PFDOA	Auto	10.120	-0.007	1.412	277677	221823	13C2-PFDA_IS	1.1354	ng/mL	
PFDOA	M	10.119	-0.009	-0.001	2658	277677	13C2-PFDOA_IS	-0.0158	ng/mL	
PFDS	ND(W/B)	----	----	----	----	98039	13C8-PFOS_IS	----	ng/mL	
PFTDA	M	10.780	-0.006	-0.631	2848	116056	13C2-PFTDA_IS	-0.0136	ng/mL	IRr
11-CI-PF3OUdS	M	10.790	-0.009	5.356	189	626911	13C3-HFPO-DA_IS	-0.0165	ng/mL	IRr
PFOSAm	M	11.161	0.017	0.018	338	268846	13C8-PFOSAm_IS	0.0038	ng/mL	
13C8-PFOSAm	Auto	11.142	-0.001	2.336	268846	256900	13C4-PFOS_IS	2.4652	ng/mL	
13C8-PFOSAm_IS	Auto	11.142	-0.001	----	268846	268846	----	2.5000	ng/mL	
PFTDA	M	11.413	-0.007	0.002	2631	116056	13C2-PFTDA_IS	-0.0067	ng/mL	
13C2-PFTDA	Auto	11.411	-0.008	2.703	116056	221823	13C2-PFDA_IS	1.0991	ng/mL	
13C2-PFTDA_IS	Auto	11.411	-0.008	----	116056	116056	----	1.2500	ng/mL	
PFDoS	M	11.612	-0.004	2.808	14	98039	13C8-PFOS_IS	0.0003	ng/mL	
D7-MeFOSE_IS	Auto	13.381	0.000	----	720206	720206	----	25.0000	ng/mL	
D7-MeFOSE	Auto	13.381	0.000	4.575	720206	256900	13C4-PFOS_IS	26.7853	ng/mL	
MeFOSE	ND(W/B)	----	----	----	----	720206	D7-MeFOSE_IS	----	ng/mL	
13C2-PFHxDA_IS	Auto	12.630	-0.006	----	471918	471918	----	2.5000	ng/mL	
13C2-PFHxDA	Auto	12.630	-0.006	3.922	471918	221823	13C2-PFDA_IS	2.2903	ng/mL	
PFHxDA	M	12.630	-0.007	0.000	3640	471918	13C2-PFHxDA_IS	-0.0091	ng/mL	
D3-MeFOSA	Auto	13.687	0.000	4.881	54221	256900	13C4-PFOS_IS	2.4688	ng/mL	
D3-MeFOSA_IS	Auto	13.687	0.000	----	54221	54221	----	2.5000	ng/mL	
MeFOSA	ND(W/B)	----	----	----	----	54221	D3-MeFOSA_IS	----	ng/mL	
D9-EtFOSE_IS	Auto	14.009	0.000	----	701896	701896	----	25.0000	ng/mL	
D9-EtFOSE	Auto	14.009	0.000	5.203	701896	256900	13C4-PFOS_IS	25.7020	ng/mL	
EtFOSE	ND(W/B)	----	----	----	----	701896	D9-EtFOSE_IS	----	ng/mL	
D5-EtFOSAm	Auto	14.366	0.001	5.560	74714	256900	13C4-PFOS_IS	2.5551	ng/mL	
D5-EtFOSAm_IS	Auto	14.366	0.001	----	74714	74714	----	2.5000	ng/mL	
EtFOSAm	ND(W/B)	----	----	----	----	74714	D5-EtFOSAm_IS	----	ng/mL	
PFODA	M	13.767	-0.007	1.137	1445	471918	13C2-PFHxDA_IS	0.0135	ng/mL	

Flag ID key: IRr: Ion Ratio (Relative)



240119_022 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_022 (continued)

13C2-4_2 FTS
Conc. 6.9030

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. 0.0017
R#1 9.00 (34.14)
R#2 9.00 (31.50)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 0.0012
R#1 89.86 (47.53)
R#2 89.86 (48.74)

Q 329.10>80.90 (-)

6.24e4

ISTD 329.10>80.90 (-)

6.24e4

Q 327.10>307.00 (-)

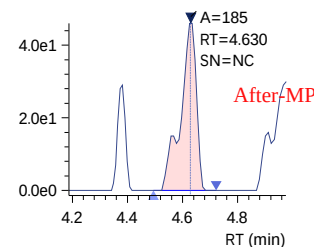
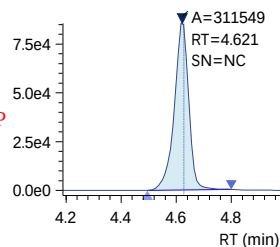
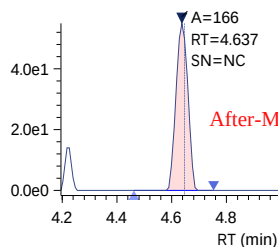
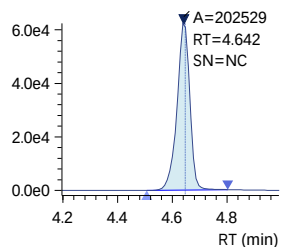
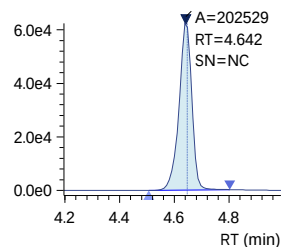
5.50e1

ISTD 302.10>79.90 (-)

8.56e4

Q 298.70>79.90 (-)

4.60e1

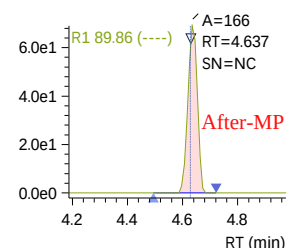
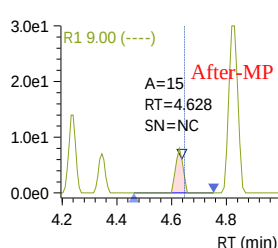


R1 327.10>80.90 (-)

3.00e1

R1 298.70>98.80 (-)

6.90e1

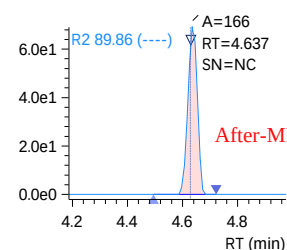
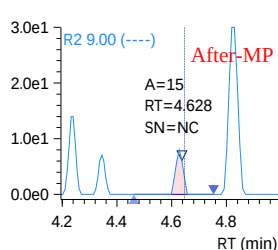


R2 327.10>80.90 (-)

3.00e1

R2 298.70>98.80 (-)

6.90e1





240119_022 (continued)

13C3-PFBS
Conc. 2.5750

NFDHA
Conc. 0.0058
R#1 29.45 (37.88)
R#2 29.45 (36.97)

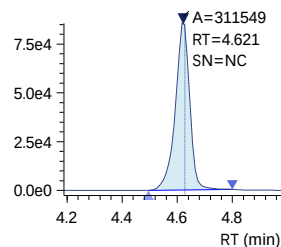
13C5-PFHxA
Conc. 2.4464

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

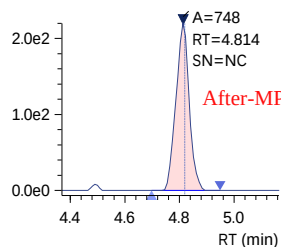
Q 302.10>79.90 (-)

8.56e4



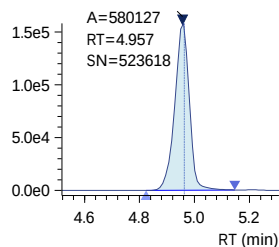
Q 295.00>201.00 (-)

2.20e2



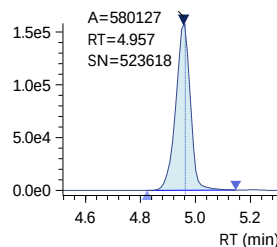
Q 318.00>273.00 (-)

1.58e5



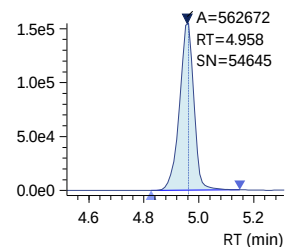
ISTD 318.00>273.00 (-)

1.58e5



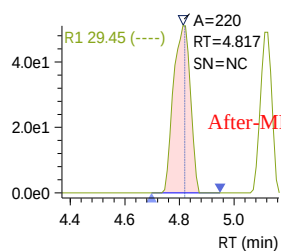
ISTD 315.10>270.00 (-)

1.55e5



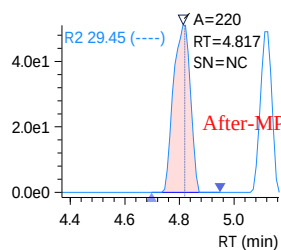
R1 295.00>84.90 (-)

5.10e1



R2 295.00>84.90 (-)

5.10e1





240119_022 (continued)

PFHxA
Conc. 0.0036

PFEESA
Conc. ----

13C3-HFPO-DA
Conc. 11.3817

13C3-HFPO-DA_IS
Conc. 10.0000

HFPO-DA
Conc. 0.0004

Q 313.00>269.00 (-)

1.13e3

Q 314.80>135.00 (-)

6.80e1

Q 286.90>168.90 (-)

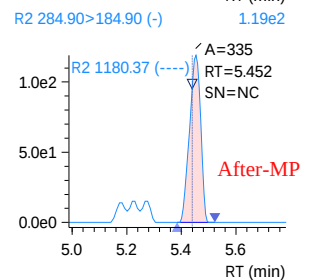
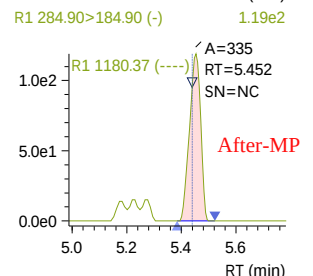
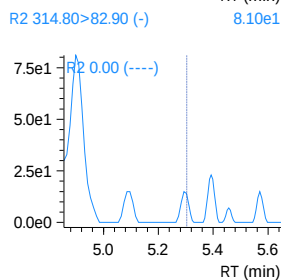
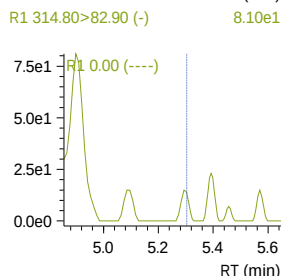
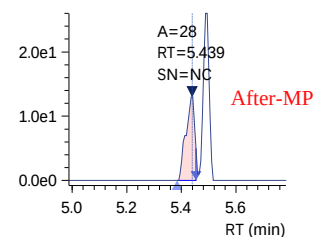
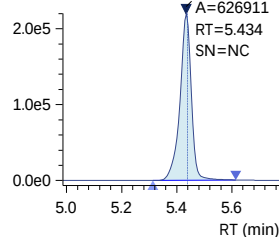
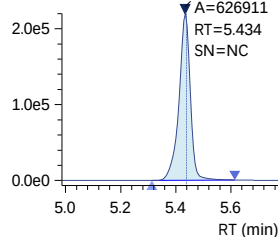
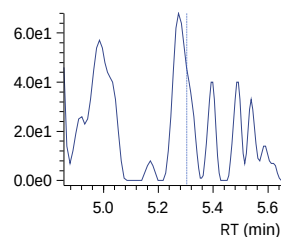
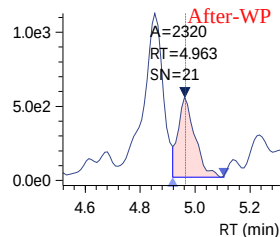
2.20e5

ISTD 286.90>168.90 (-)

2.20e5

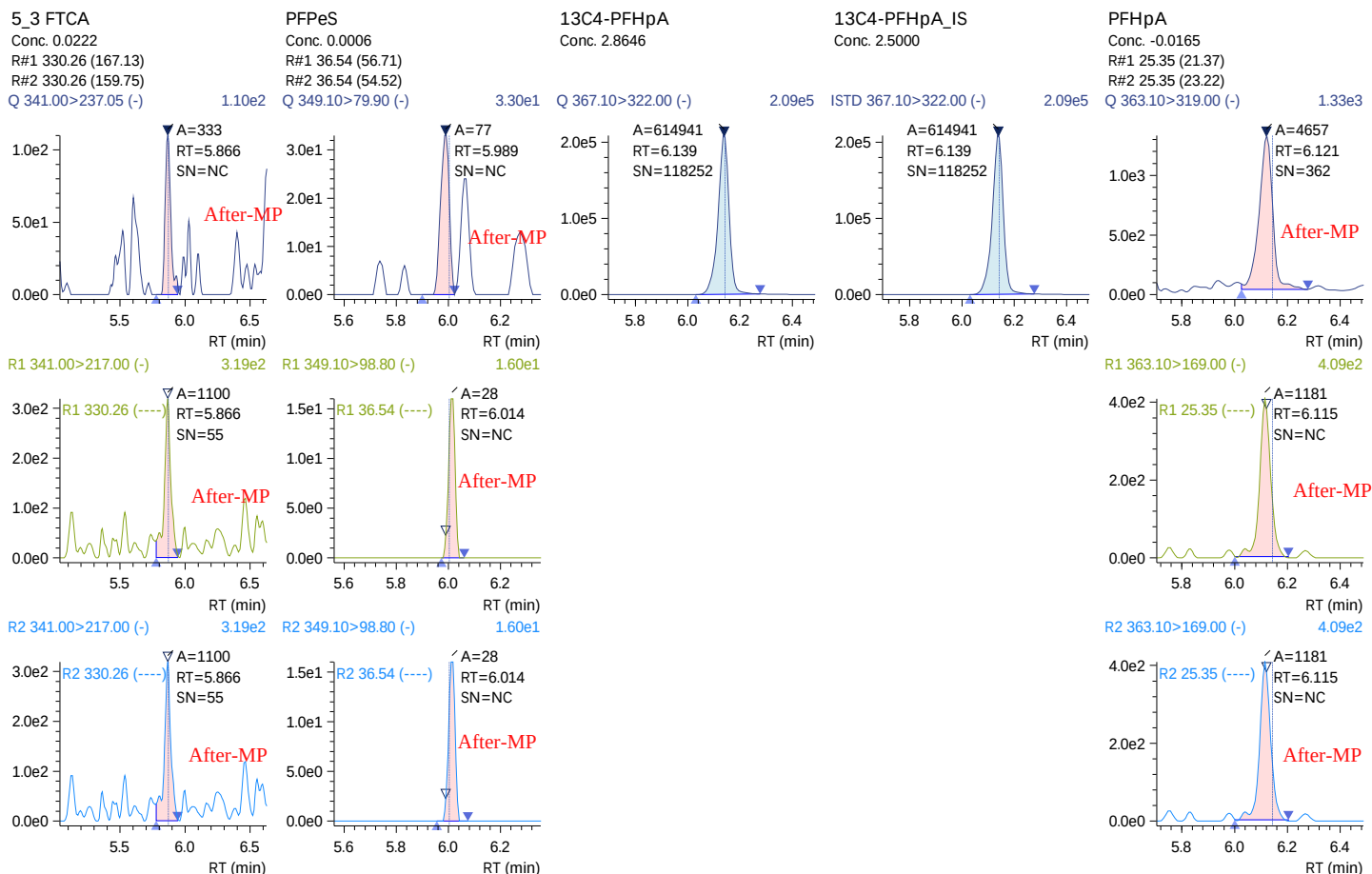
Q 284.90>168.90 (-)

2.60e1





240119_022 (continued)

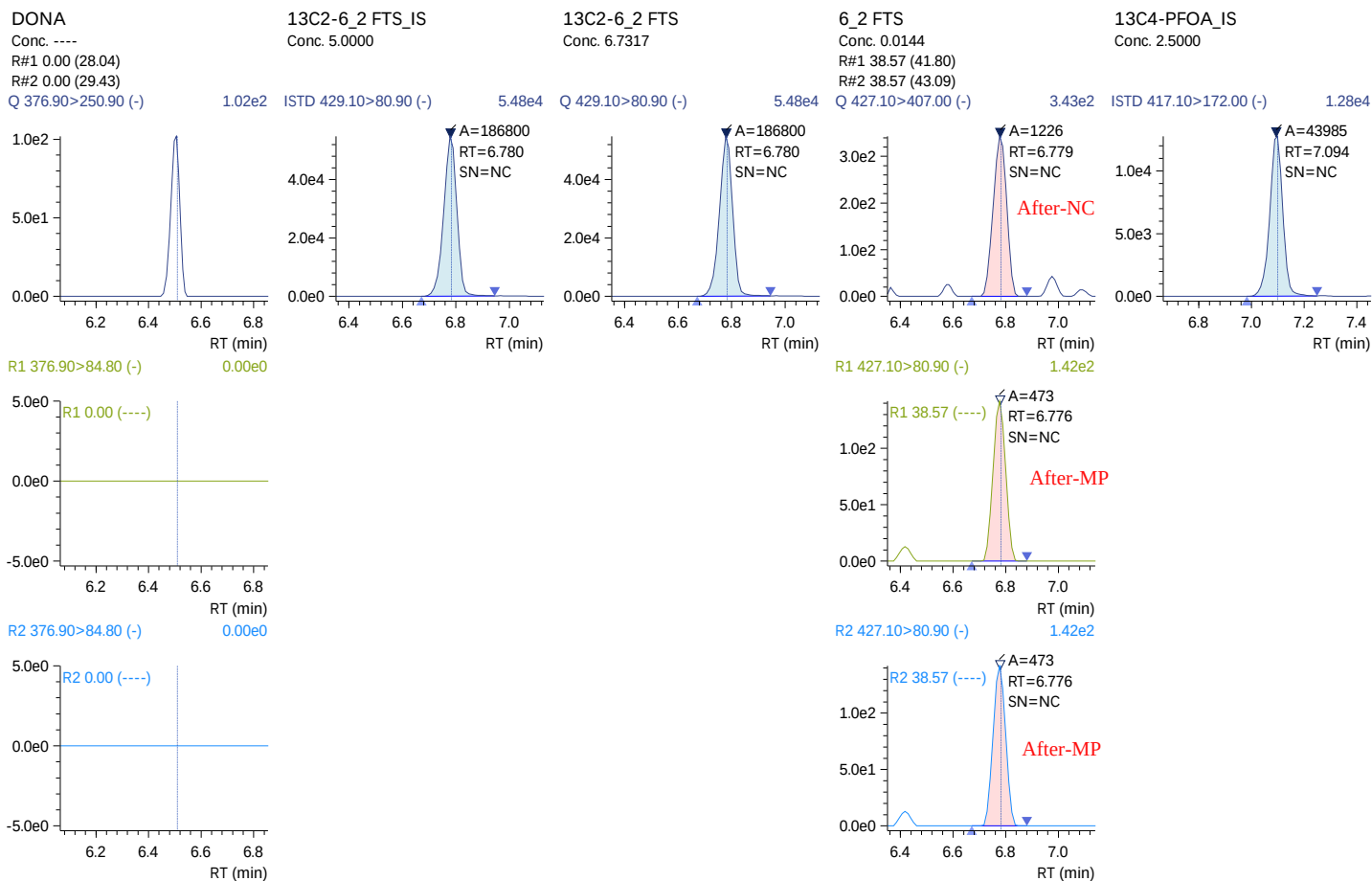


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_022 (continued)





240119_022 (continued)

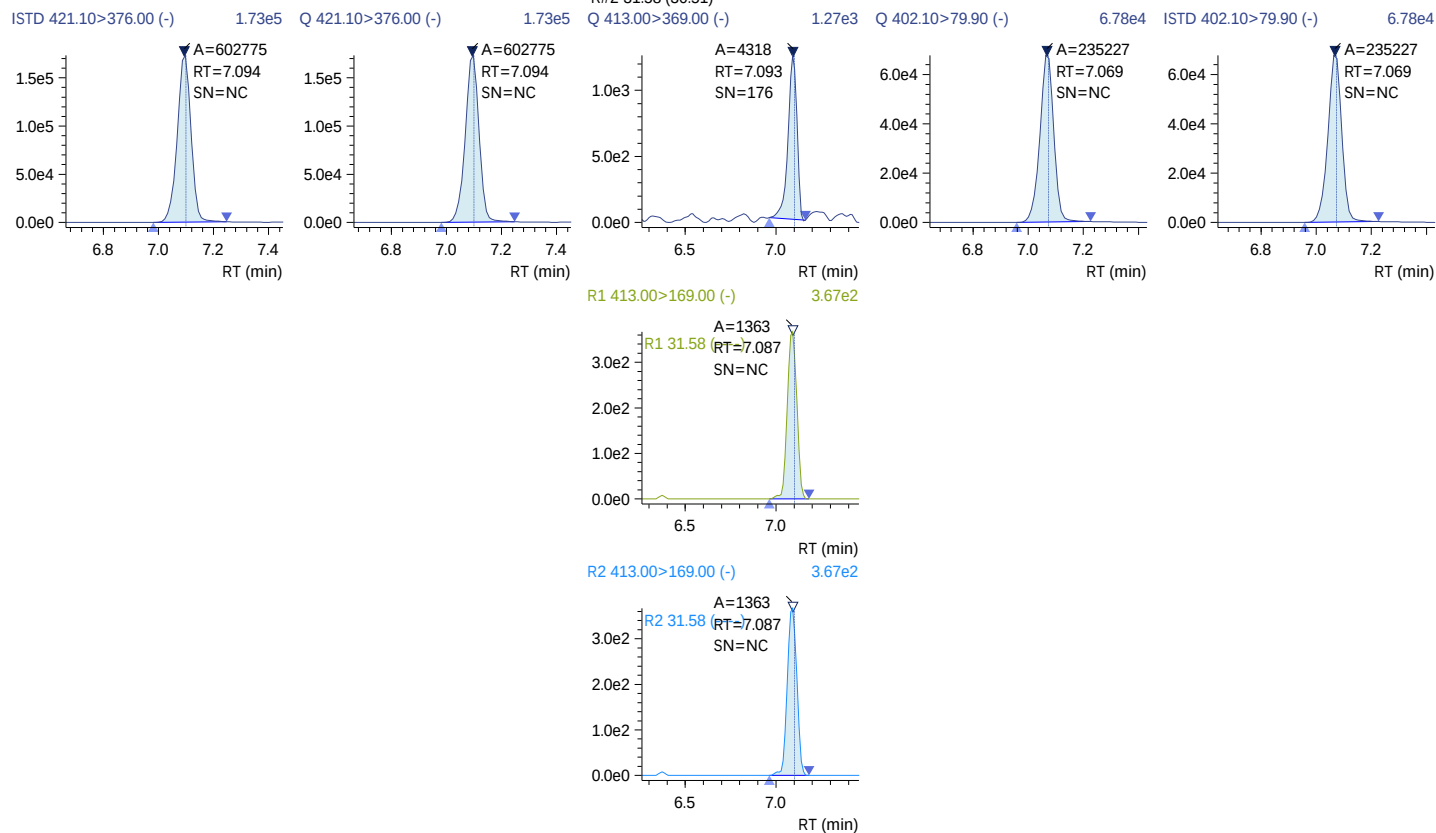
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.4518

PFOA
Conc. -0.0160
R#1 31.58 (29.05)
R#2 31.58 (30.51)

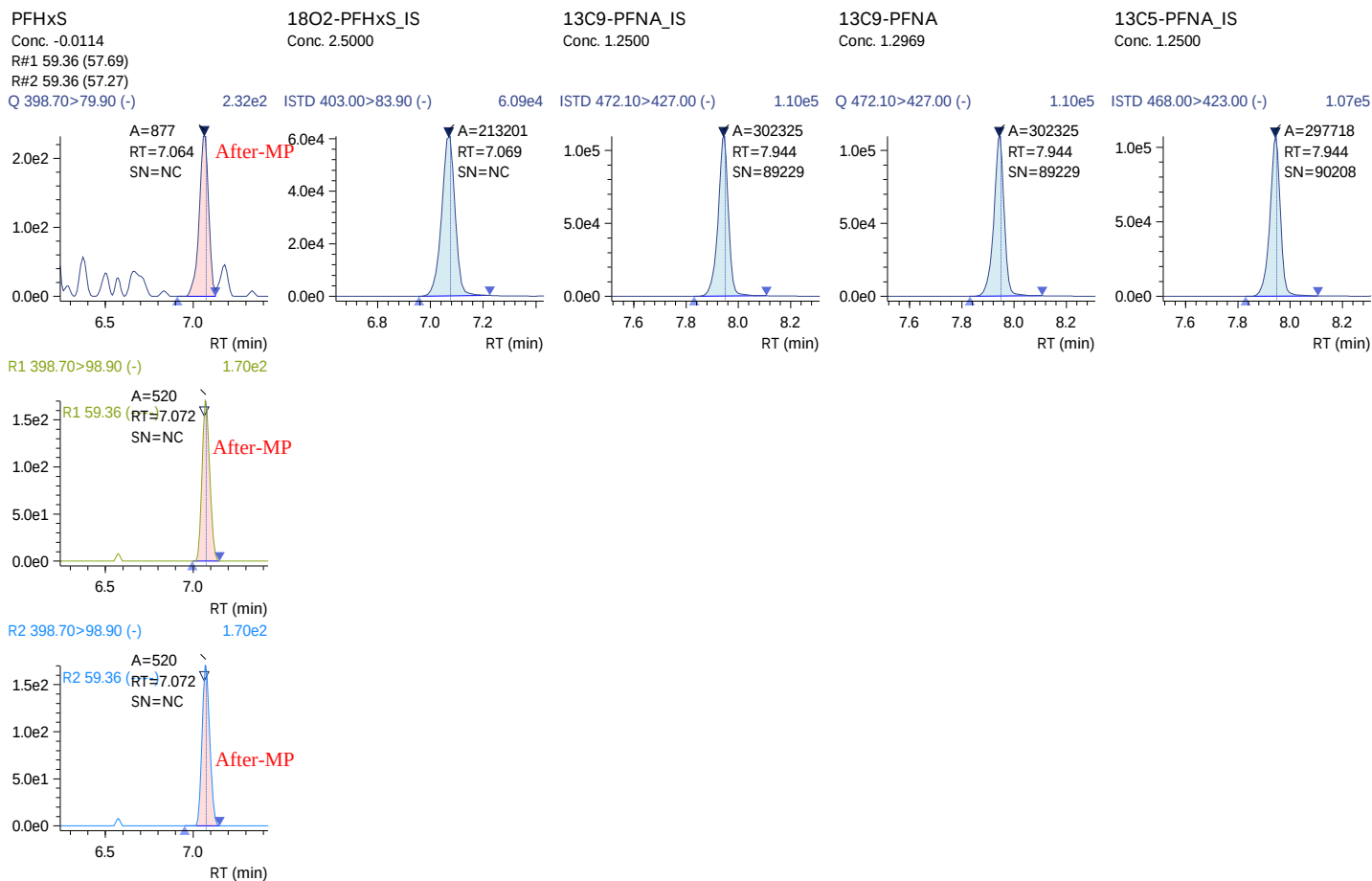
13C3-PFHxS
Conc. 2.5705

13C3-PFHxS_IS
Conc. 2.5000





240119_022 (continued)

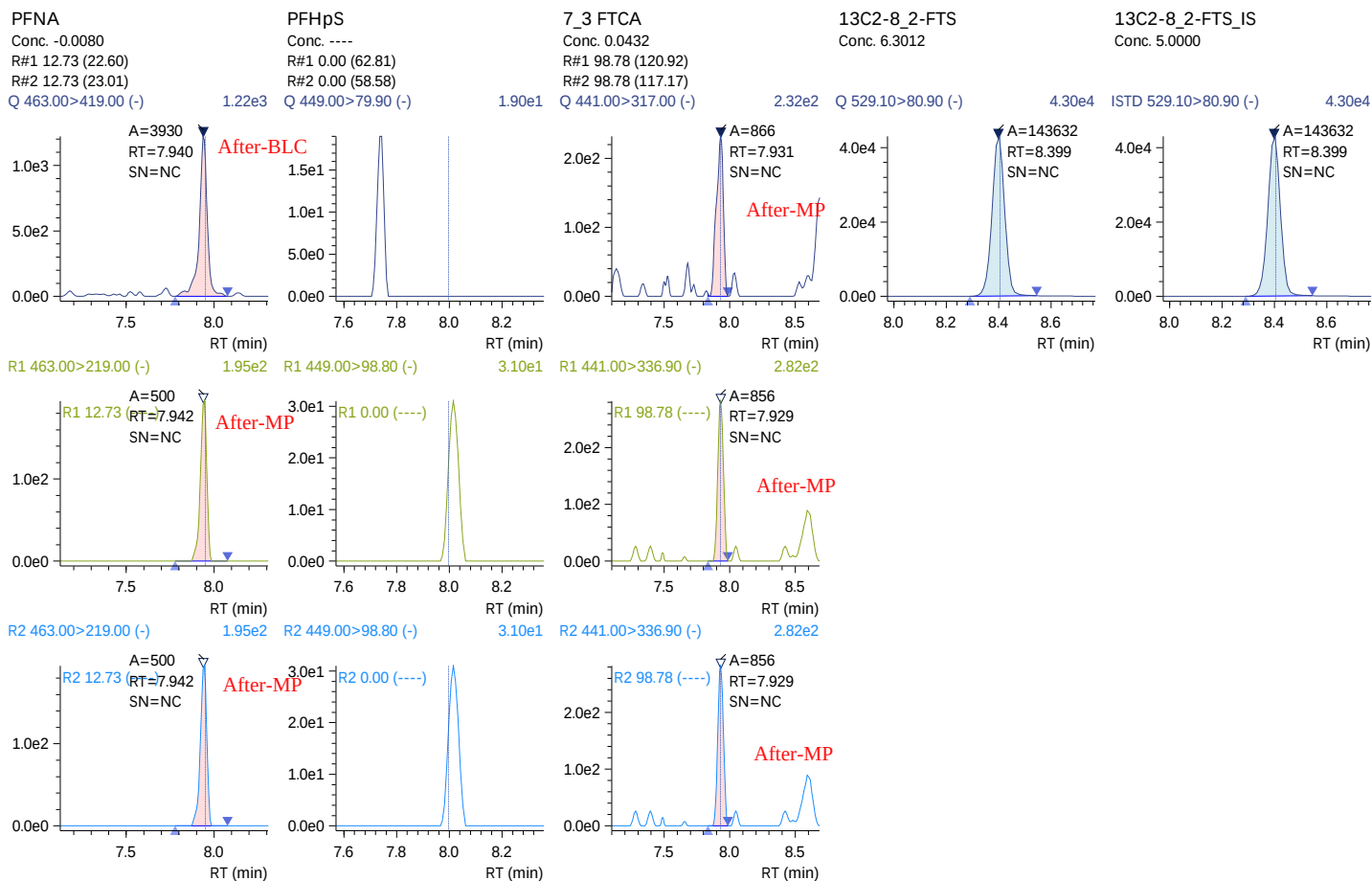


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_022 (continued)

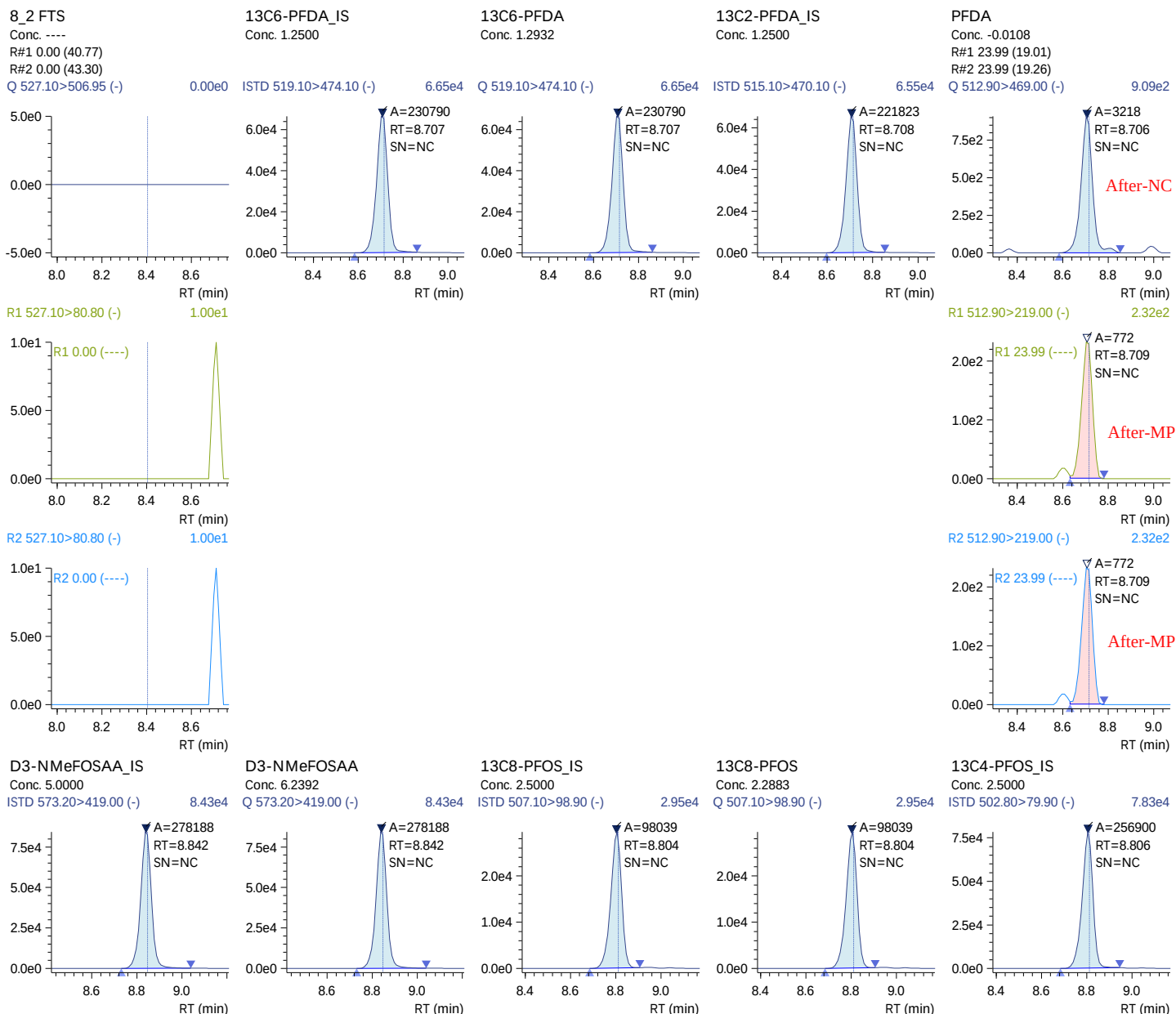


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_022 (continued)

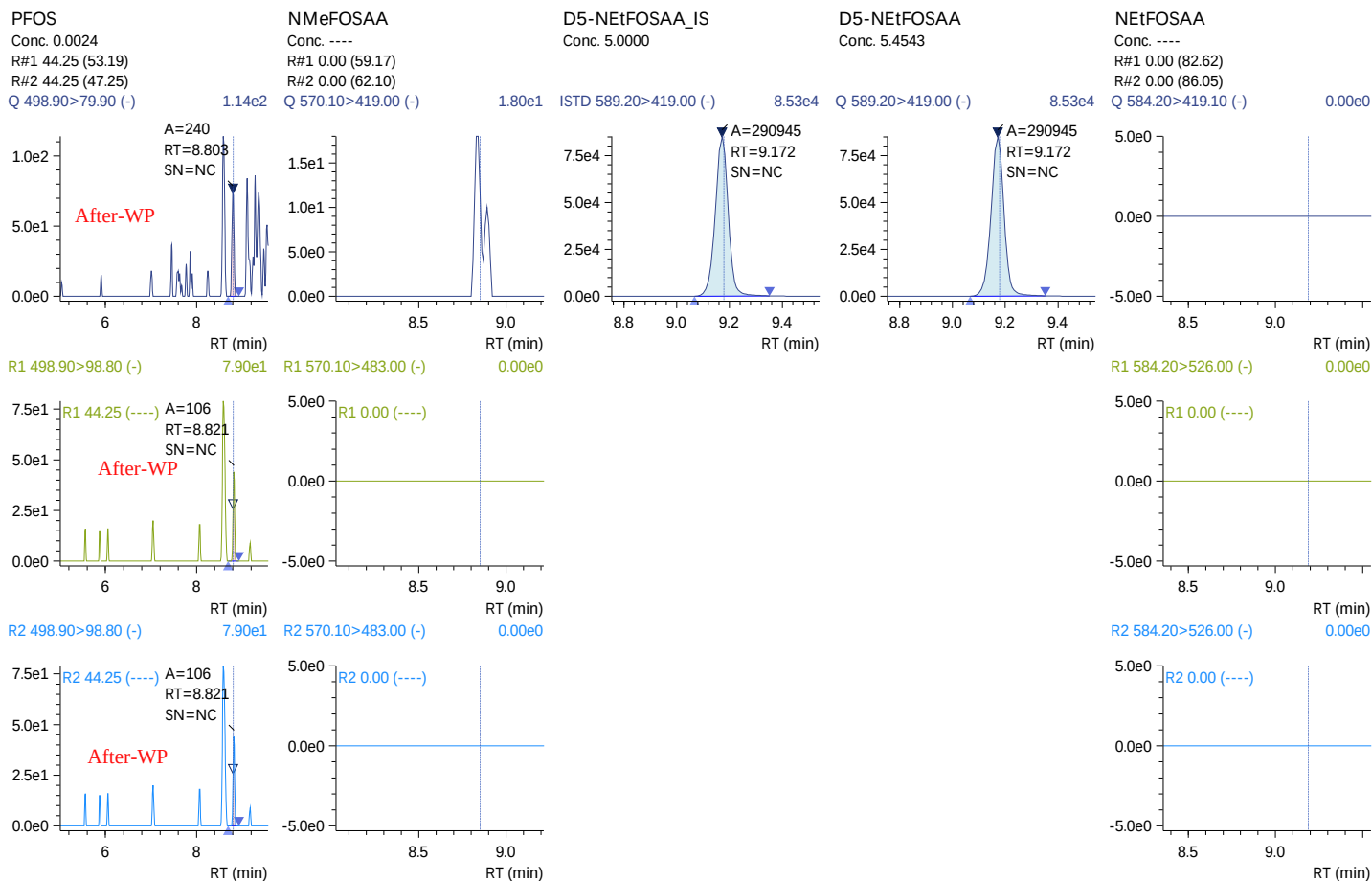


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_022 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_022 (continued)

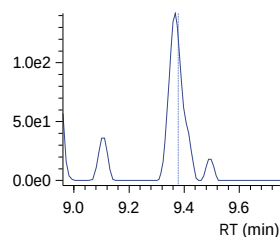
9-Cl-PF3ONS

Conc. ----

R#1 0.00 (31.76)

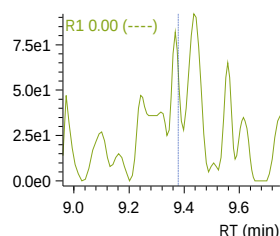
R#2 0.00 (31.74)

Q 530.80>351.00 (-)



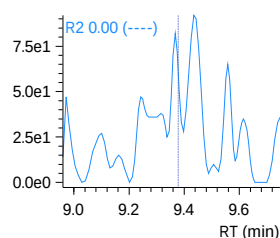
R1 532.80>353.00 (-)

9.20e1



R2 532.80>353.00 (-)

9.20e1



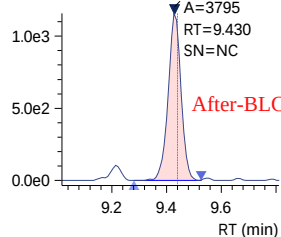
PFUnDA

Conc. -0.0091

R#1 7.57 (12.31)

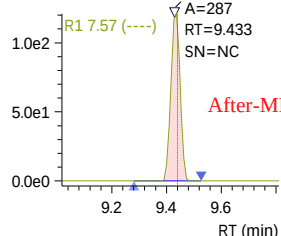
R#2 7.57 (13.26)

Q 563.10>519.00 (-)



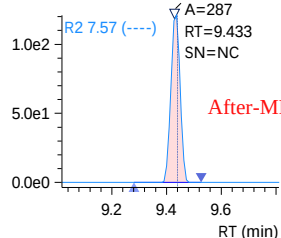
R1 563.10>269.10 (-)

1.21e2



R2 563.10>269.10 (-)

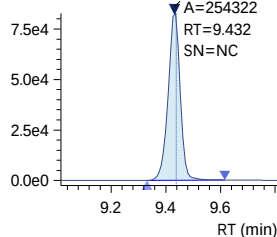
1.21e2



13C7-PFUnDA_IS

Conc. 1.2500

ISTD 570.00>525.10 (-)



8.28e4



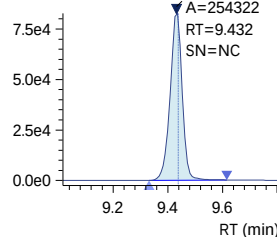
8.28e4



13C7-PFUnDA

Conc. 1.1947

Q 570.00>525.10 (-)



8.28e4



8.28e4



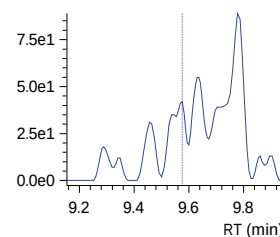
PFNS

Conc. ----

R#1 0.00 (63.31)

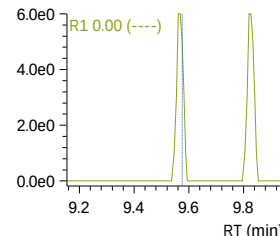
R#2 0.00 (62.49)

Q 548.80>79.90 (-)



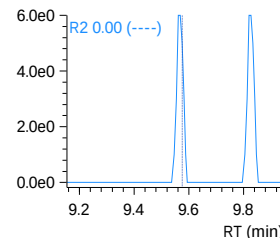
R1 548.80>98.80 (-)

6.00e0



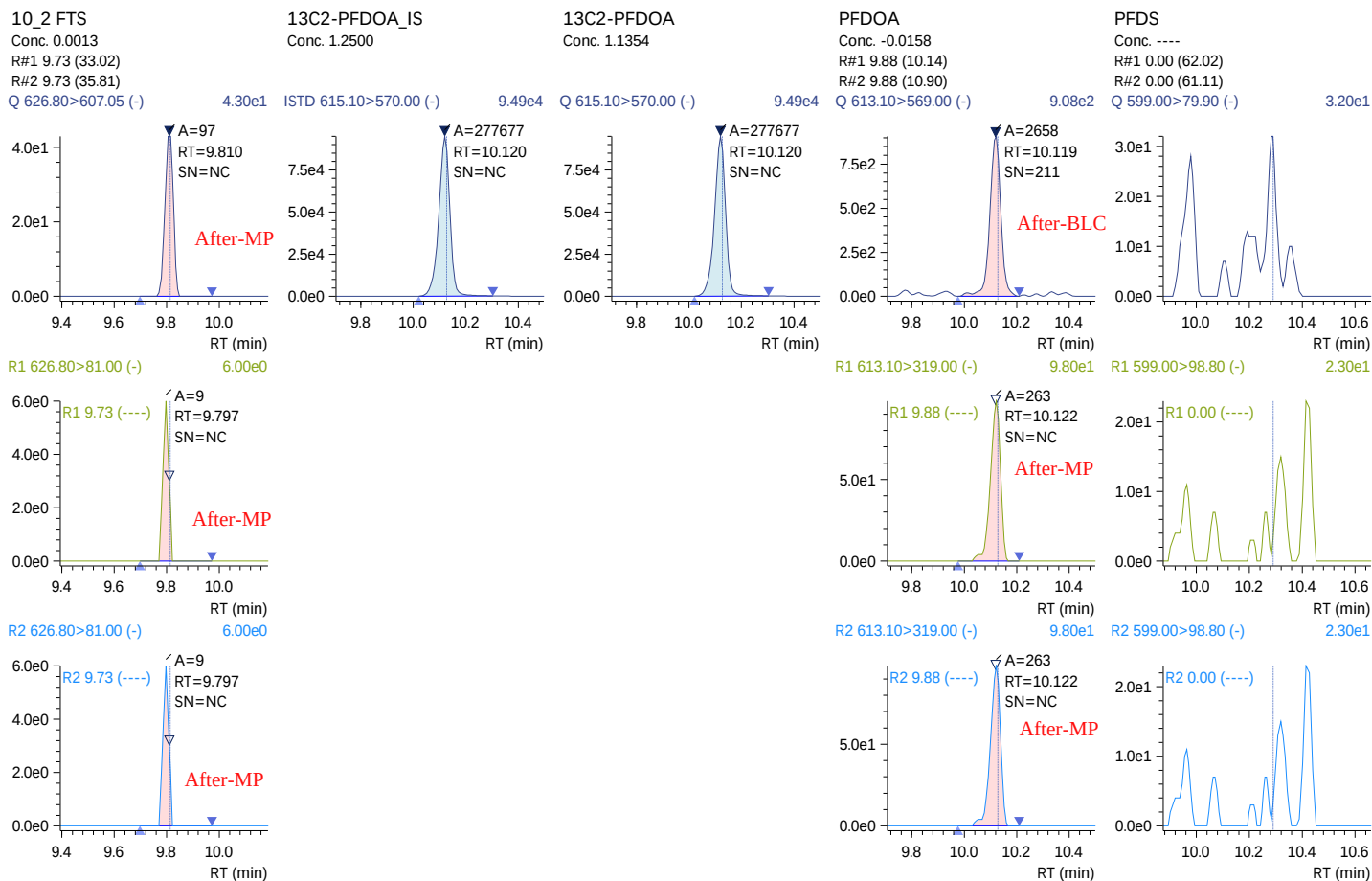
R2 548.80>98.80 (-)

6.00e0





240119_022 (continued)

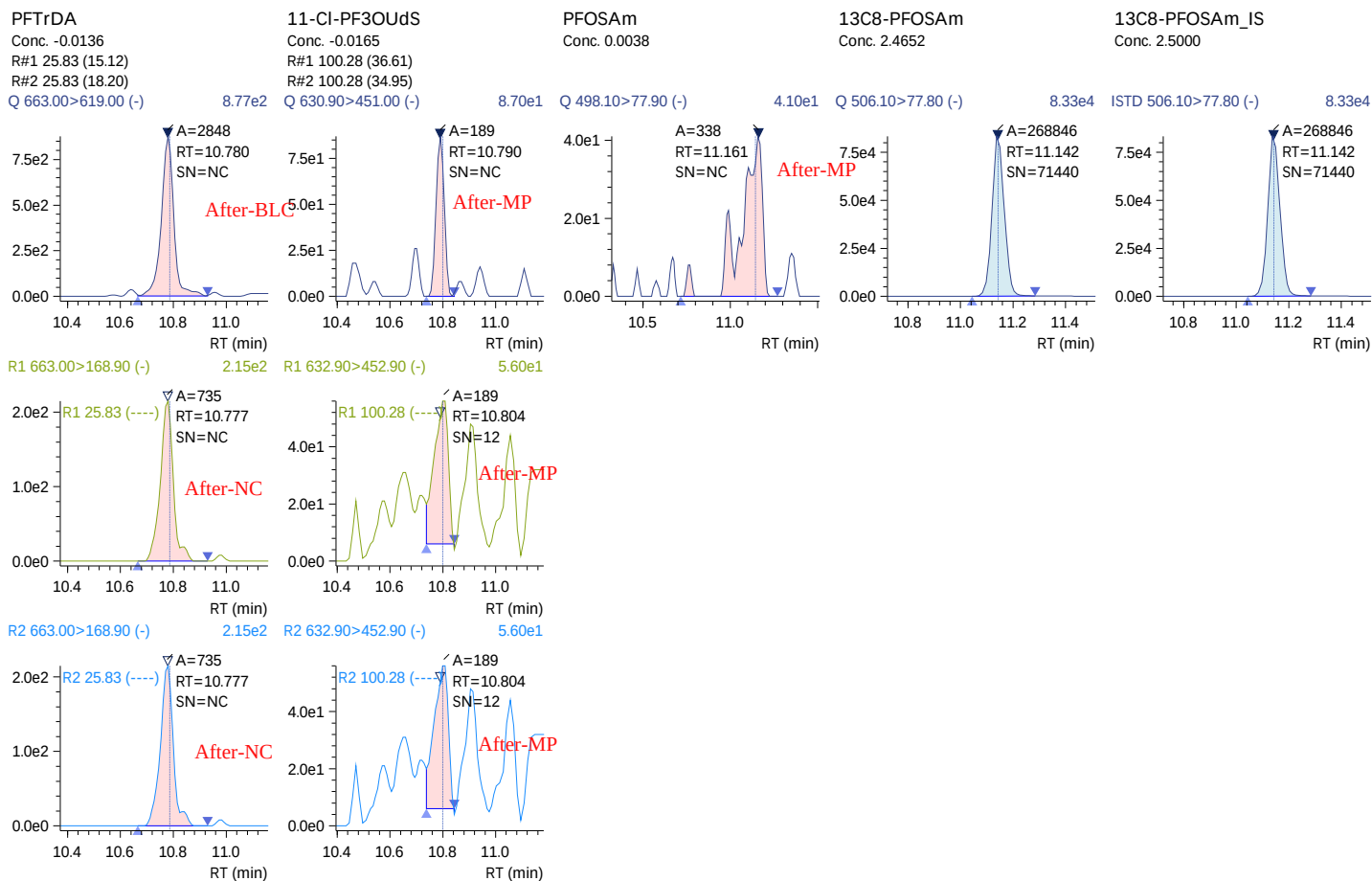


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.

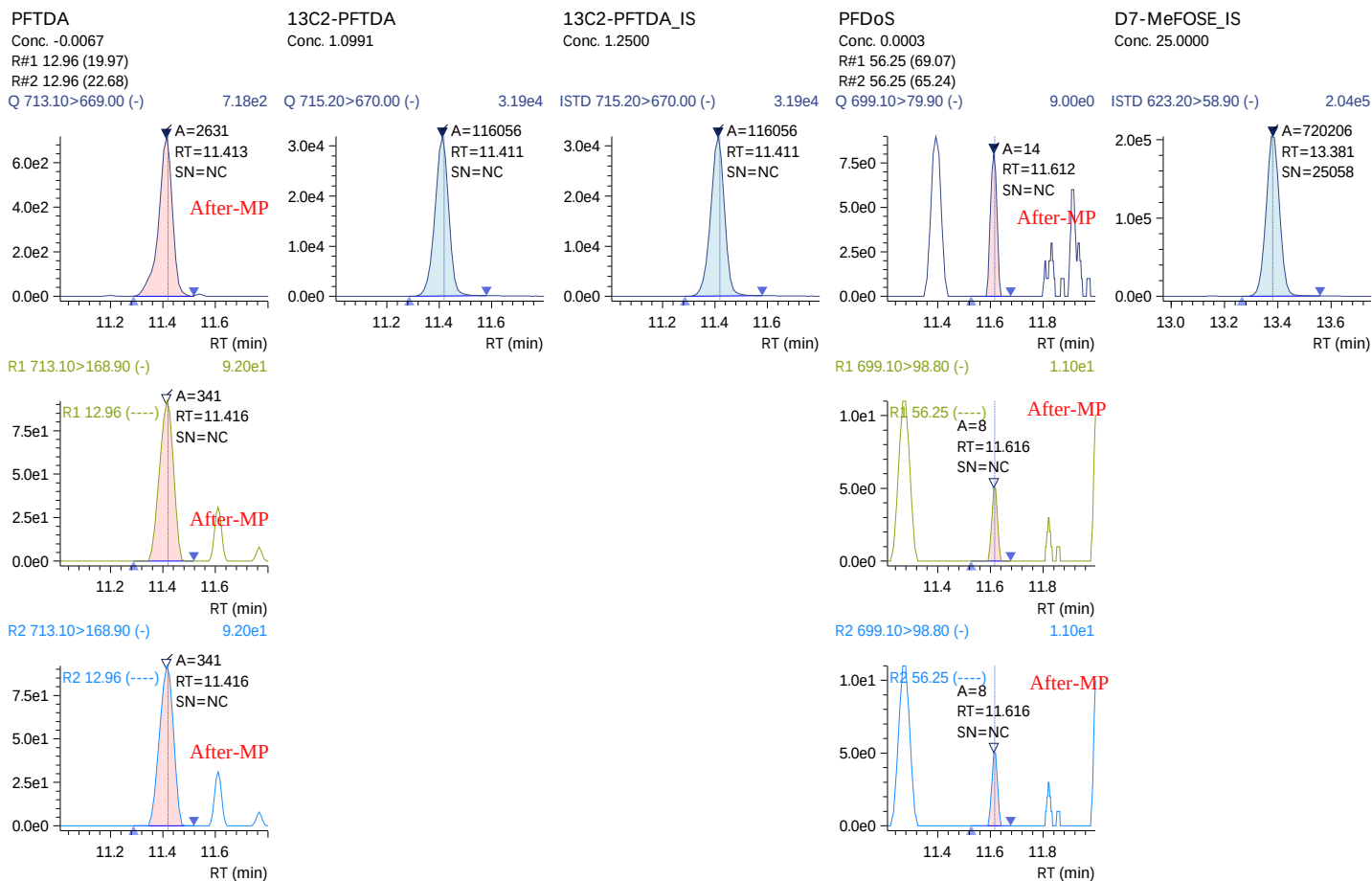


240119_022 (continued)





240119_022 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_022 (continued)

D7-MeFOSE
Conc. 26.7853

MeFOSE
Conc. ----

13C2-PFHXA_IS
Conc. 2.5000

13C2-PFHXA
Conc. 2.2903

PFHXA

Conc. -0.0091
R#1 16.32 (11.64)
R#2 16.32 (14.51)

Q 623.20>58.90 (-)

2.04e5

Q 616.10>59.00 (-)

3.80e1

ISTD 815.00>770.05 (-)

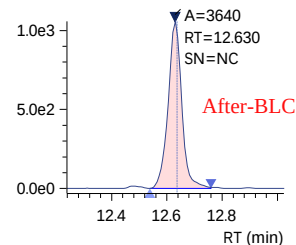
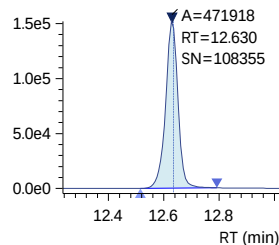
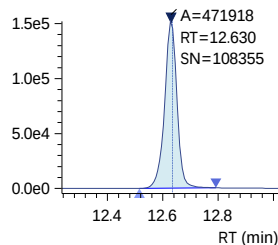
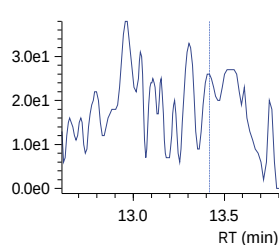
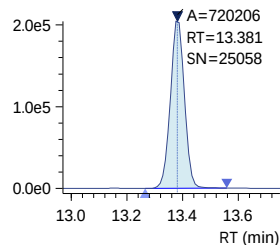
1.52e5

Q 815.00>770.05 (-)

1.52e5

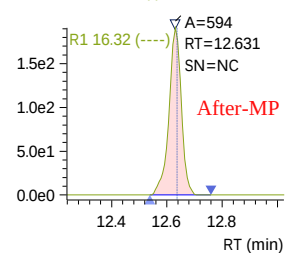
Q 813.00>768.95 (-)

1.06e3



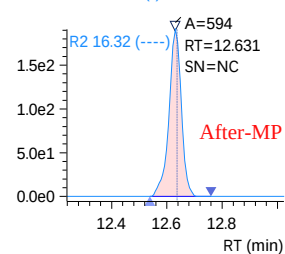
R1 813.00>218.95 (-)

1.91e2



R2 813.00>218.95 (-)

1.91e2





240119_022 (continued)

D3-MeFOSA
Conc. 2.4688

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. ----
R#1 0.00 (149.05)
R#2 0.00 (142.62)

D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 25.7020

Q 515.00>219.00 (-)

1.56e4

ISTD 515.00>219.00 (-)

1.56e4

Q 511.90>219.00 (-)

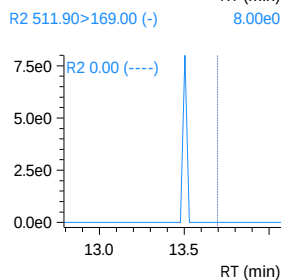
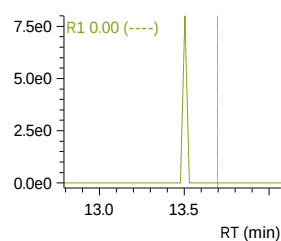
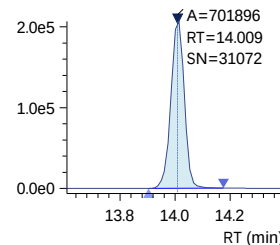
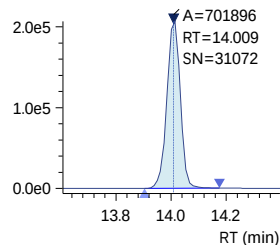
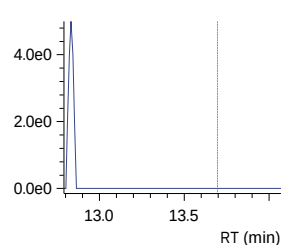
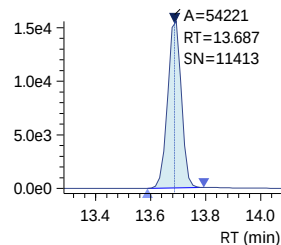
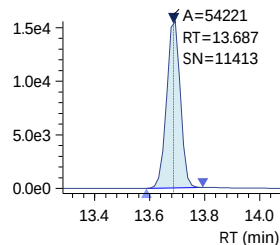
5.00e0

ISTD 639.20>58.90 (-)

2.07e5

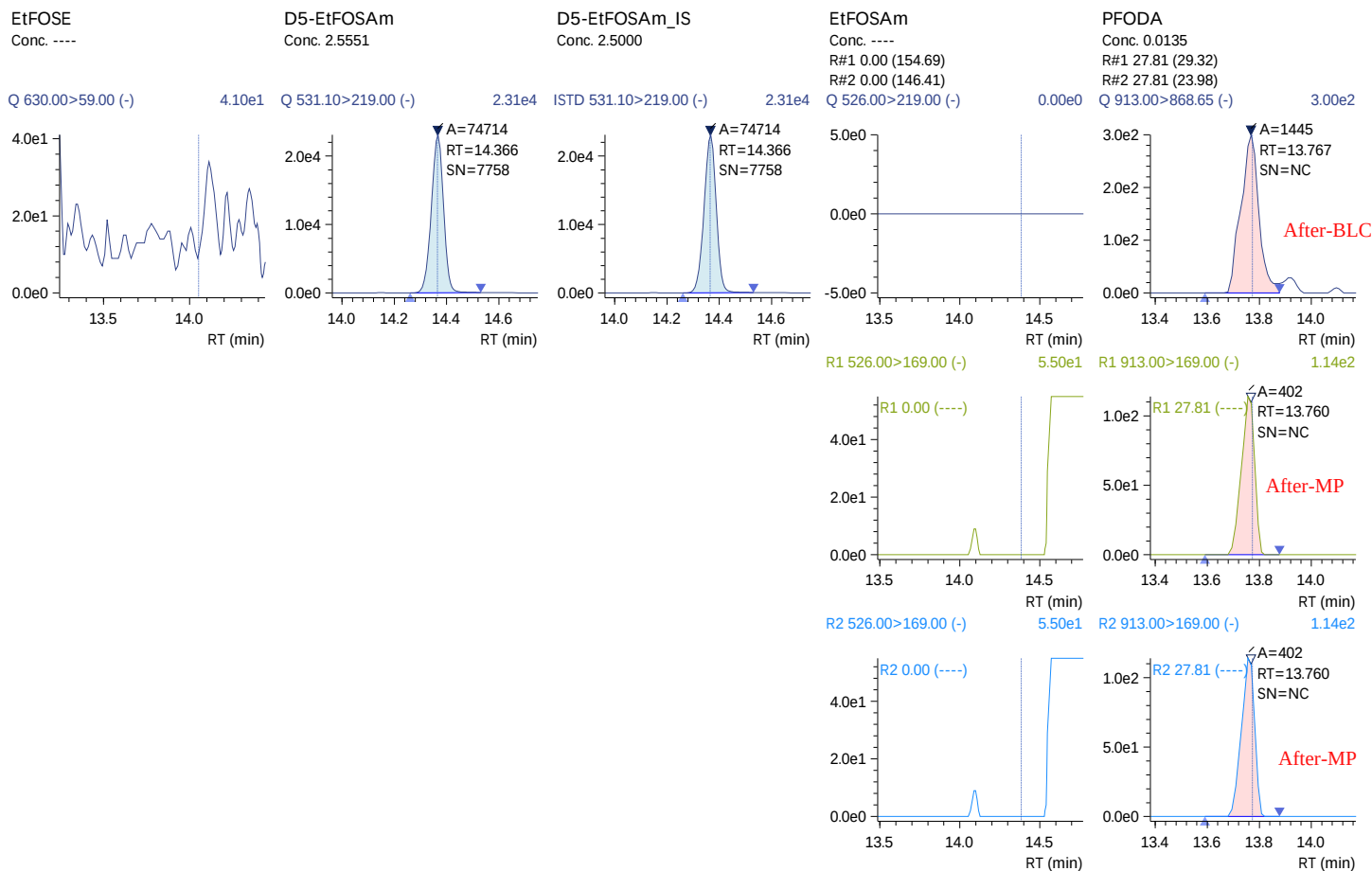
Q 639.20>58.90 (-)

2.07e5





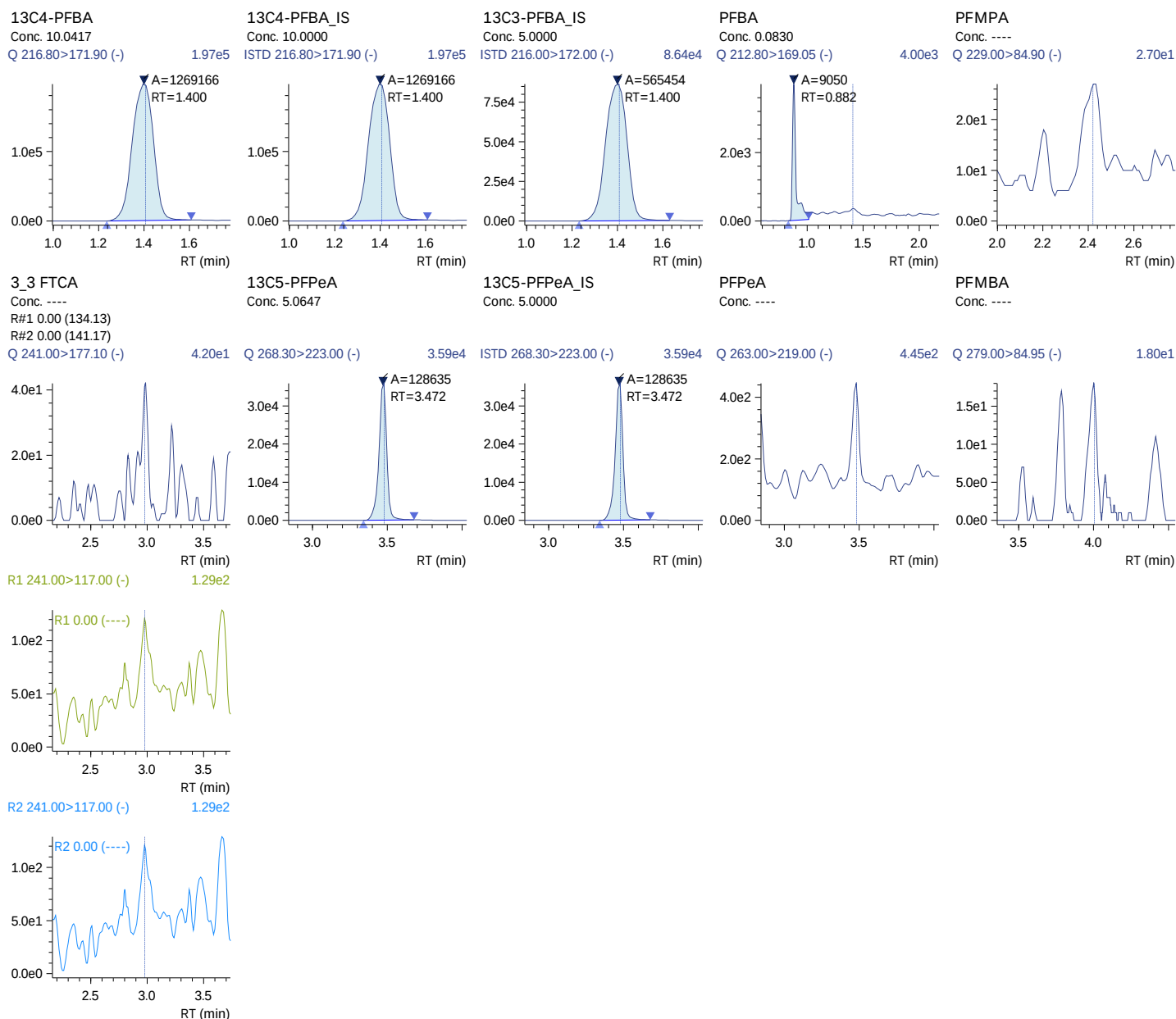
240119_022 (continued)





240119_022

Sample ID: 1633 CCB
Date Acquired: 1/19/2024 7:56:55 PM
Acquired by: System Administrator
Data File: 240119_022
Vial: 54 | Inj. Volume: 10.0000uL | Tray: 1





240119_022 (continued)

13C2-4_2 FTS
Conc. 6.9030

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. ----
R#1 0.00 (34.14)
R#2 0.00 (29.06)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. ----
R#1 0.00 (47.53)
R#2 0.00 (46.72)

Q 329.10>80.90 (-)

6.24e4

ISTD 329.10>80.90 (-)

6.24e4

Q 327.10>307.00 (-)

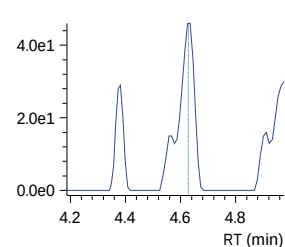
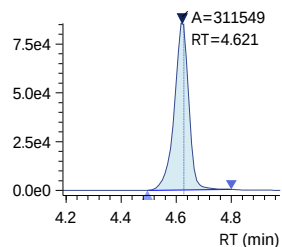
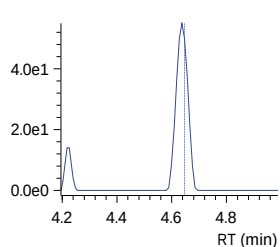
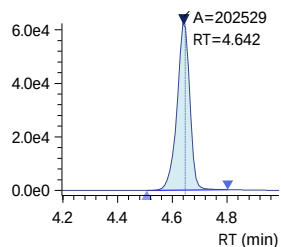
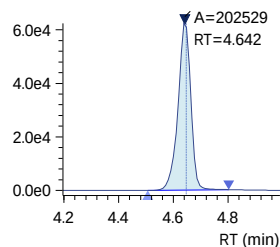
5.50e1

ISTD 302.10>79.90 (-)

8.56e4

Q 298.70>79.90 (-)

4.60e1

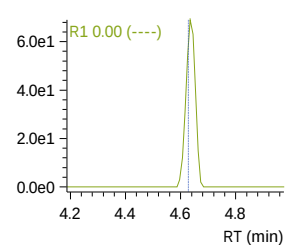
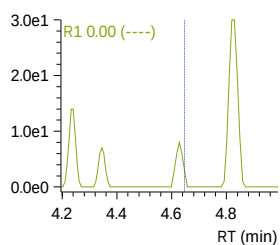


R1 327.10>80.90 (-)

3.00e1

R1 298.70>98.80 (-)

6.90e1

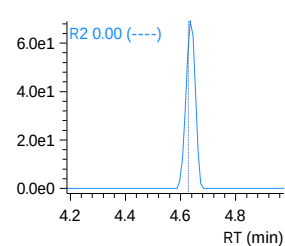
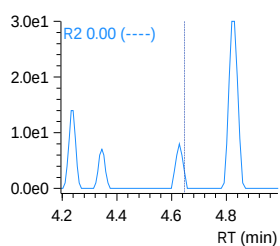


R2 327.10>80.90 (-)

3.00e1

R2 298.70>98.80 (-)

6.90e1





240119_022 (continued)

13C3-PFBS
Conc. 2.5750

NFDHA
Conc. ----
R#1 0.00 (37.88)
R#2 0.00 (40.25)

13C5-PFHxA
Conc. 2.4464

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

Q 302.10>79.90 (-)

8.56e4

Q 295.00>201.00 (-)

2.20e2

Q 318.00>273.00 (-)

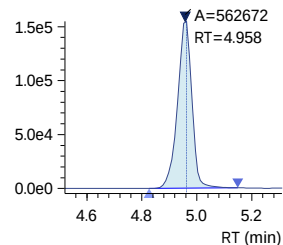
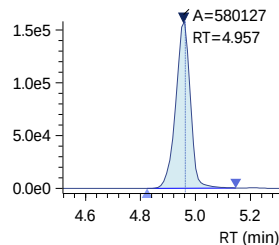
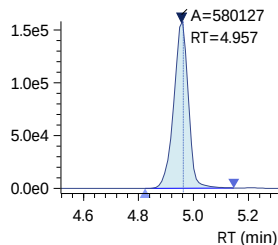
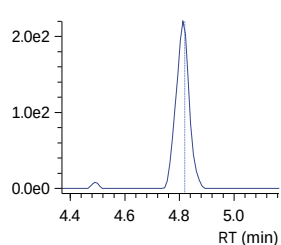
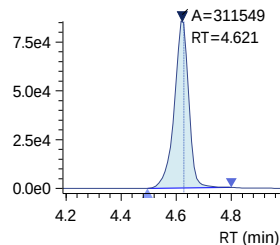
1.58e5

ISTD 318.00>273.00 (-)

1.58e5

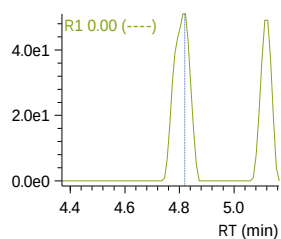
ISTD 315.10>270.00 (-)

1.55e5



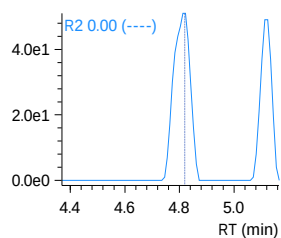
R1 295.00>84.90 (-)

5.10e1



R2 295.00>84.90 (-)

5.10e1





240119_022 (continued)

PFHxA
 Conc. 0.0172

PFEESA
 Conc. ----
 R#1 0.00 (5.88)
 R#2 0.00 (6.11)

13C3-HFPO-DA
 Conc. 11.3817

13C3-HFPO-DA_IS
 Conc. 10.0000

HFPO-DA
 Conc. ----
 R#1 0.00 (63.80)
 R#2 0.00 (65.61)

Q 313.00>269.00 (-)

1.13e3

Q 314.80>135.00 (-)

6.80e1

Q 286.90>168.90 (-)

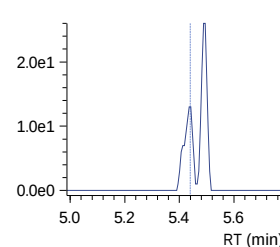
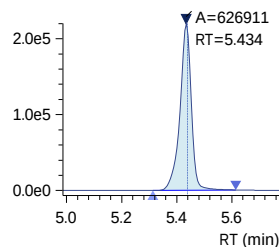
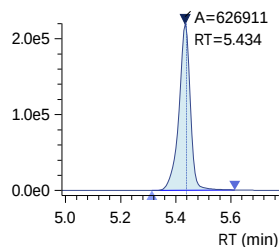
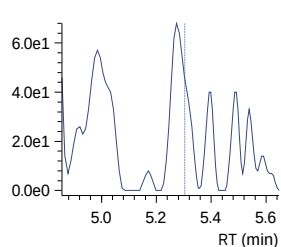
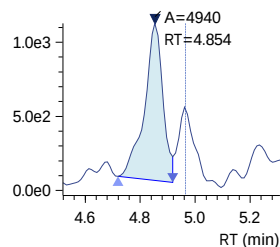
2.20e5

ISTD 286.90>168.90 (-)

2.20e5

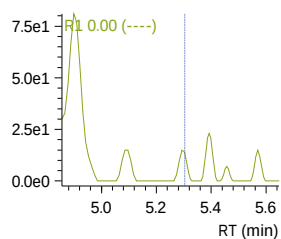
Q 284.90>168.90 (-)

2.60e1



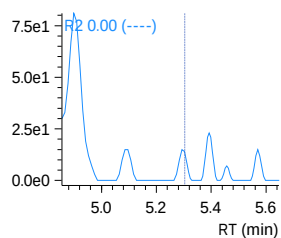
R1 314.80>82.90 (-)

8.10e1



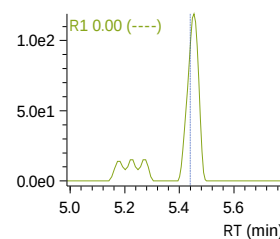
R2 314.80>82.90 (-)

8.10e1



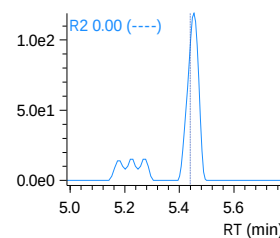
R1 284.90>184.90 (-)

1.19e2



R2 284.90>184.90 (-)

1.19e2



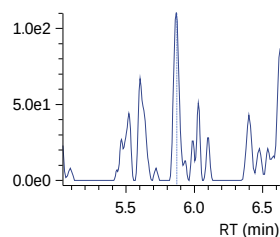


240119_022 (continued)

5_3 FTCA

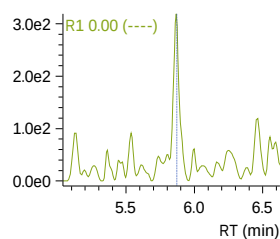
Conc. ----
R#1 0.00 (167.13)
R#2 0.00 (158.86)
Q 341.00>237.05 (-)

1.10e2



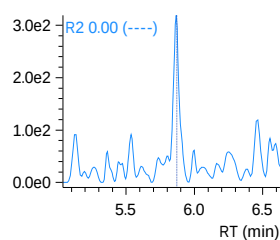
R1 341.00>217.00 (-)

3.19e2



R2 341.00>217.00 (-)

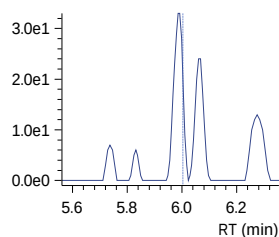
3.19e2



PFPeS

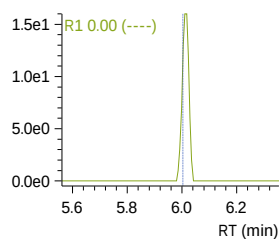
Conc. ----
R#1 0.00 (56.71)
R#2 0.00 (55.80)
Q 349.10>79.90 (-)

3.30e1



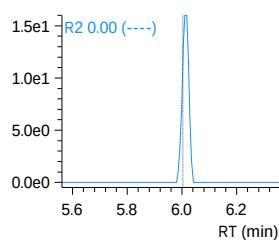
R1 349.10>98.80 (-)

1.60e1



R2 349.10>98.80 (-)

1.60e1

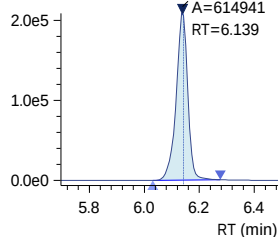


13C4-PFHpa

Conc. 2.8646

Q 367.10>322.00 (-)

2.09e5

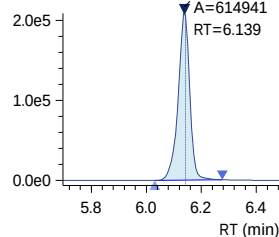


13C4-PFHpa_IS

Conc. 2.5000

ISTD 367.10>322.00 (-)

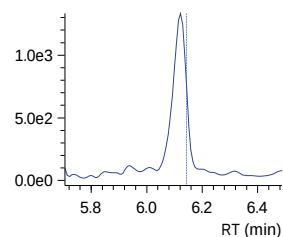
2.09e5



PFHpA

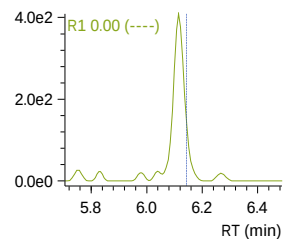
Conc. ----
R#1 0.00 (21.37)
R#2 0.00 (21.50)
Q 363.10>319.00 (-)

1.33e3



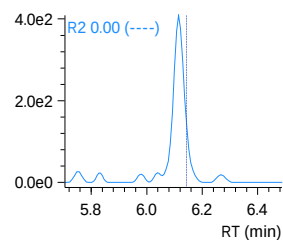
R1 363.10>169.00 (-)

4.09e2



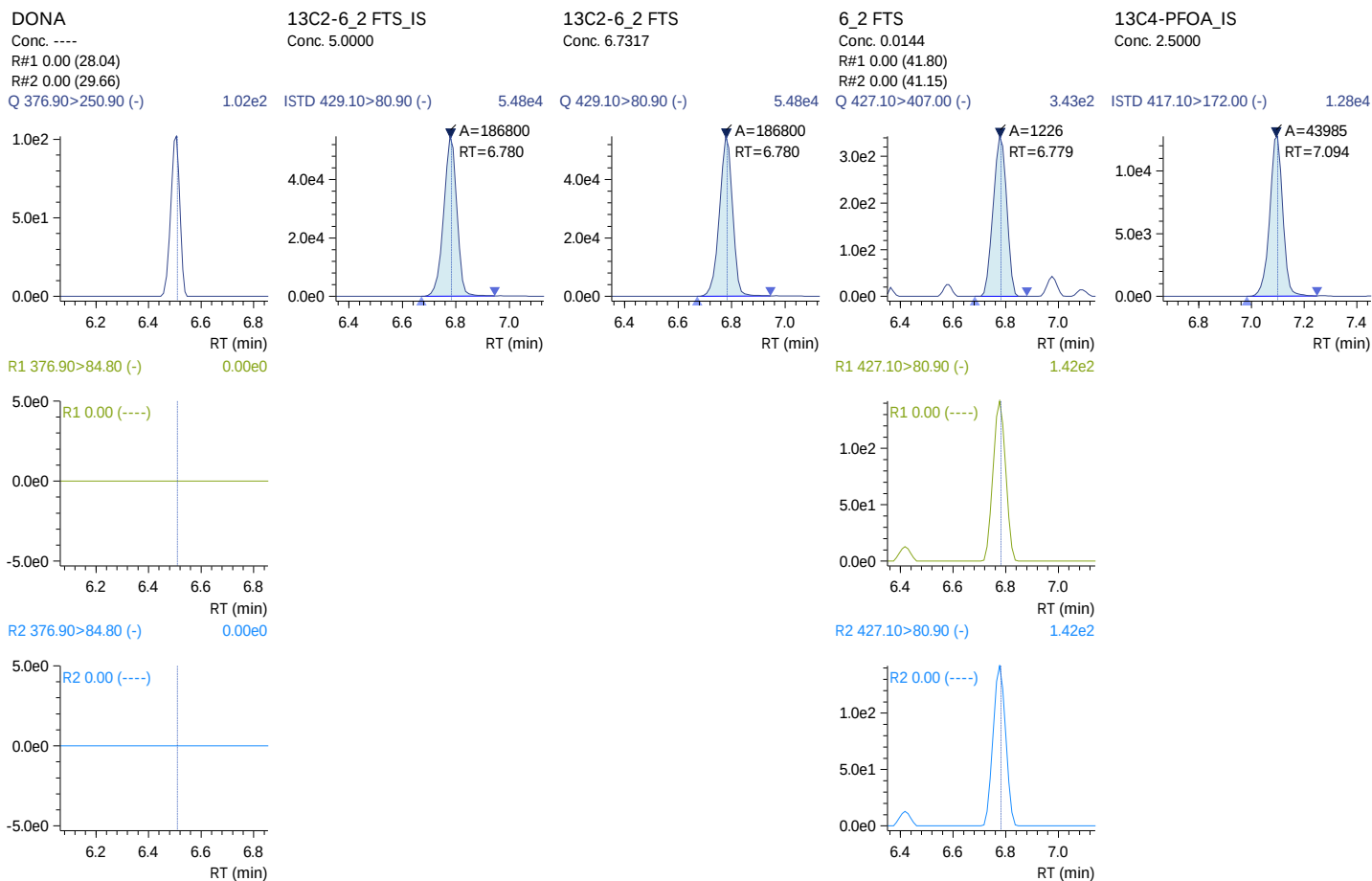
R2 363.10>169.00 (-)

4.09e2





240119_022 (continued)





240119_022 (continued)

13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.4518

PFOA
Conc. -0.0160
R#1 31.58 (29.05)
R#2 31.58 (31.89)

13C3-PFHxS
Conc. 2.5705

13C3-PFHxS_IS
Conc. 2.5000

ISTD 421.10>376.00 (-)

1.73e5

Q 421.10>376.00 (-)

1.73e5

Q 413.00>369.00 (-)

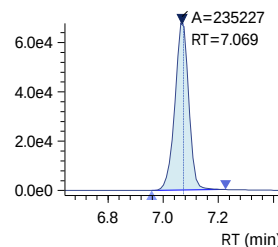
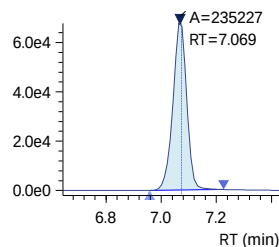
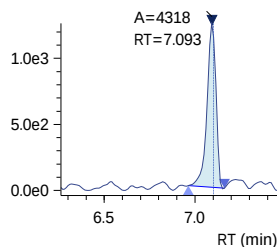
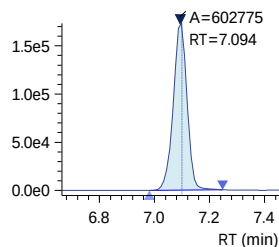
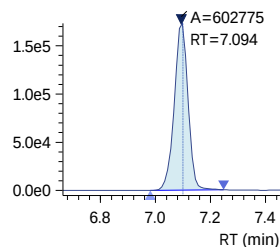
1.27e3

Q 402.10>79.90 (-)

6.78e4

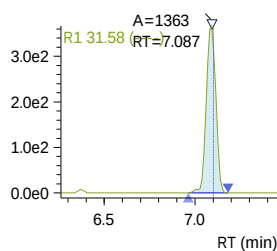
ISTD 402.10>79.90 (-)

6.78e4



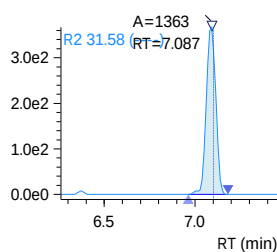
R1 413.00>169.00 (-)

3.67e2



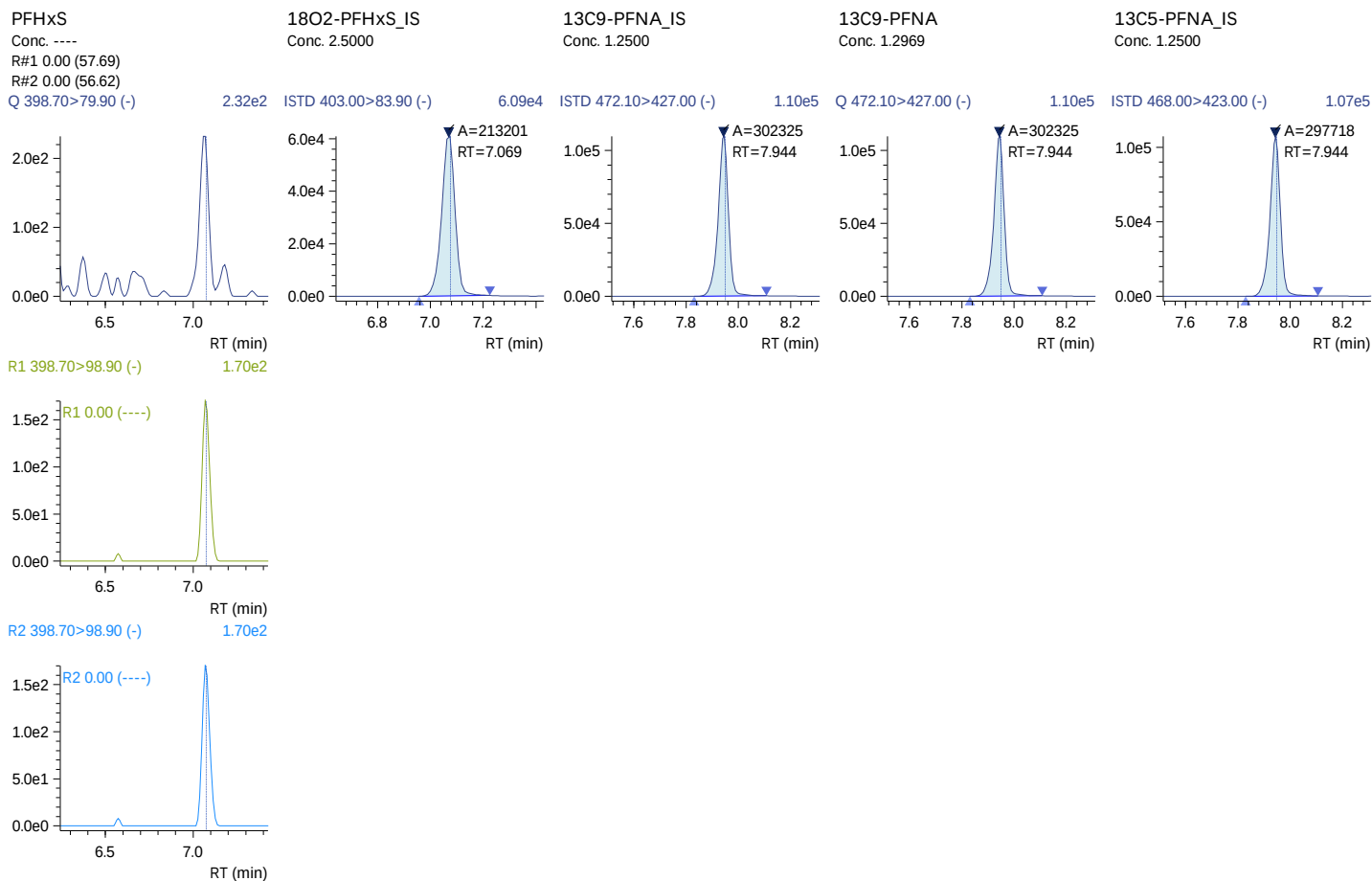
R2 413.00>169.00 (-)

3.67e2



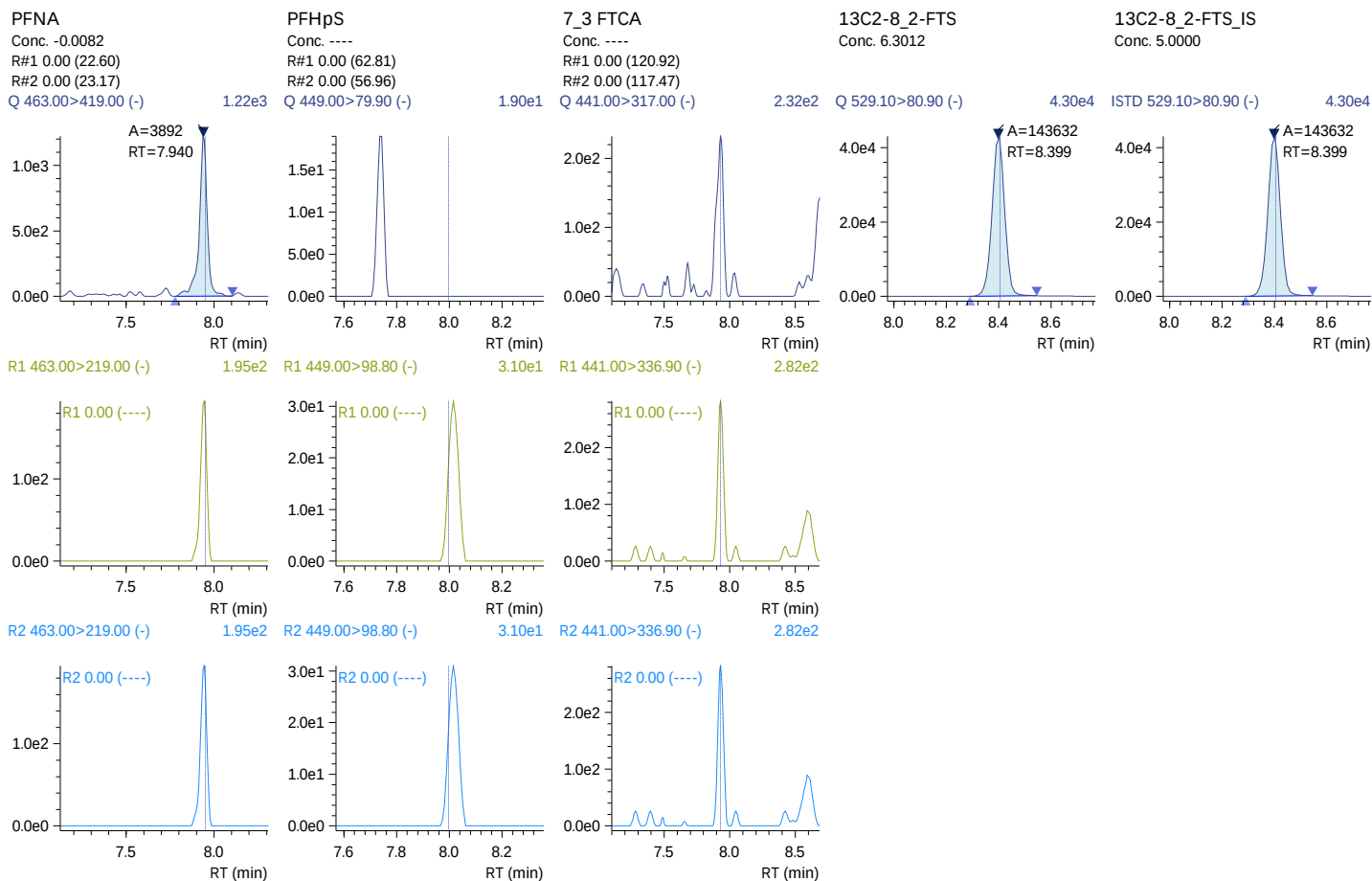


240119_022 (continued)



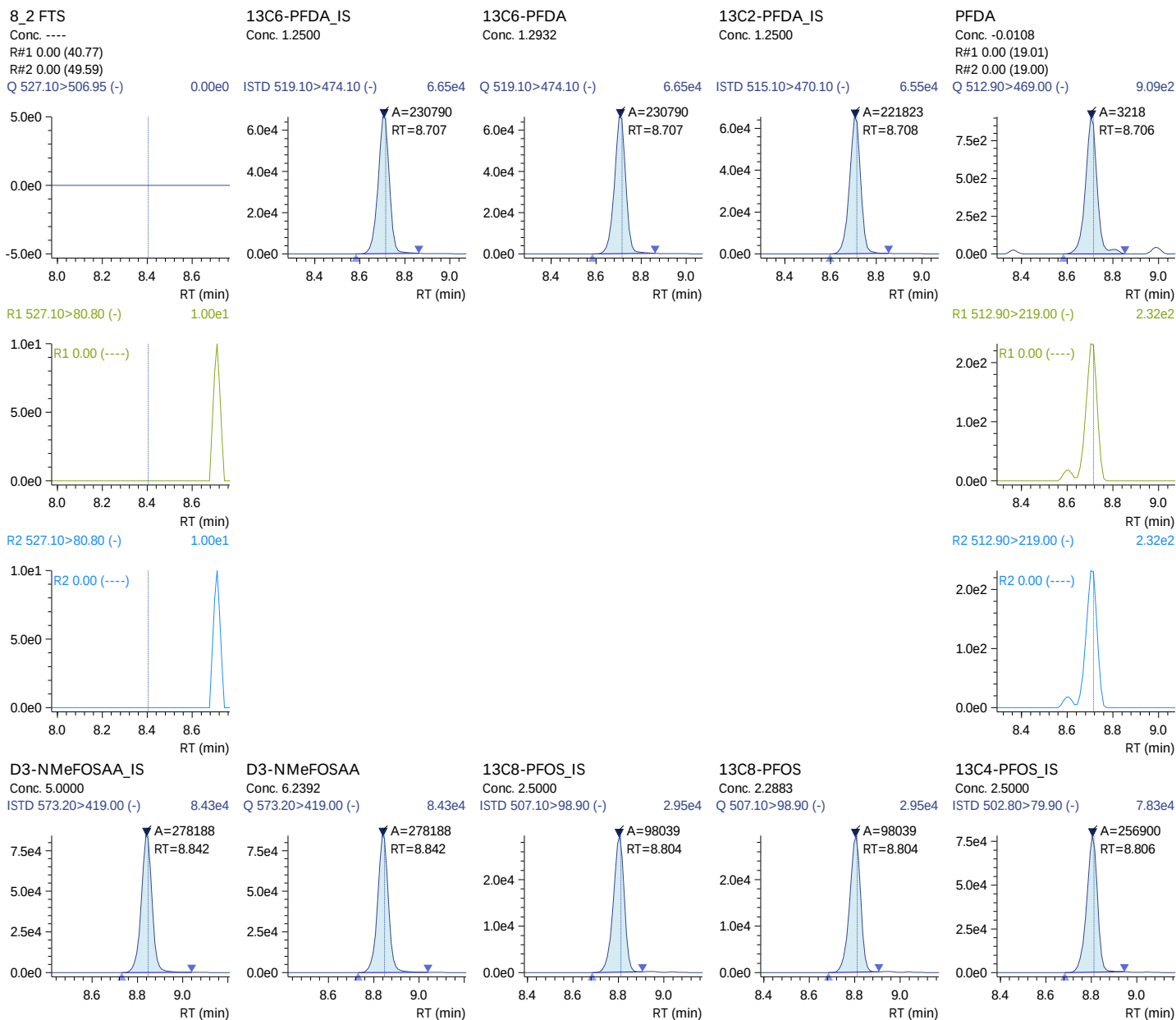


240119_022 (continued)



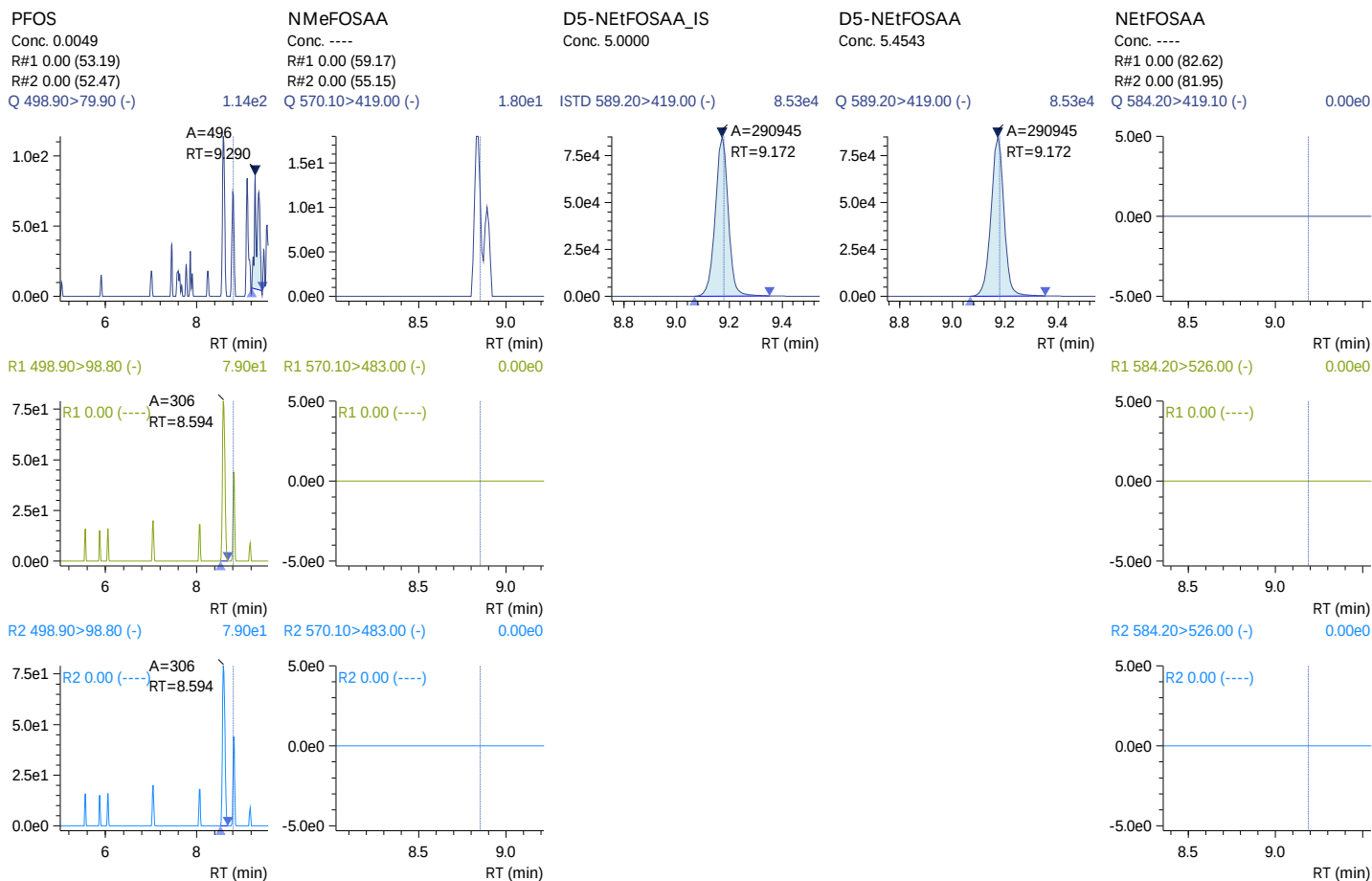


240119_022 (continued)





240119_022 (continued)





240119_022 (continued)

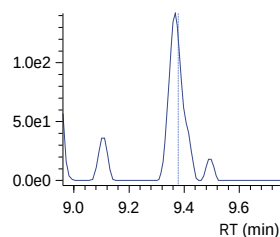
9-Cl-PF3ONS

Conc. ----

R#1 0.00 (31.76)

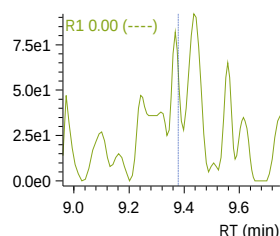
R#2 0.00 (32.76)

Q 530.80>351.00 (-)



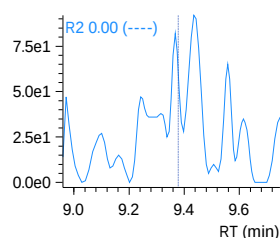
R1 532.80>353.00 (-)

9.20e1



R2 532.80>353.00 (-)

9.20e1



RT (min)

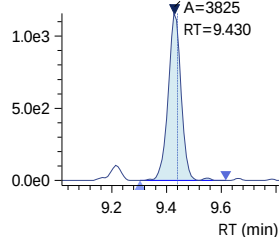
PFUnDA

Conc. -0.0089

R#1 0.00 (12.31)

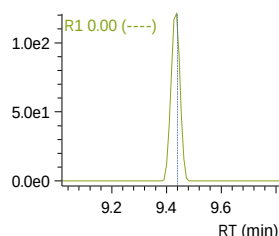
R#2 0.00 (13.12)

Q 563.10>519.00 (-)



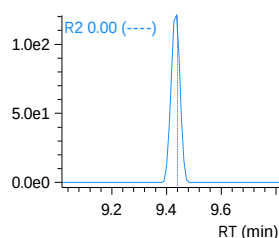
R1 563.10>269.10 (-)

1.21e2



R2 563.10>269.10 (-)

1.21e2

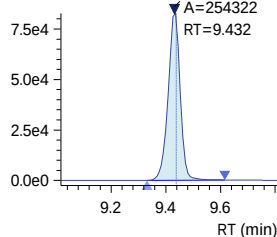


RT (min)

13C7-PFUnDA_IS

Conc. 1.2500

ISTD 570.00>525.10 (-)



8.28e4



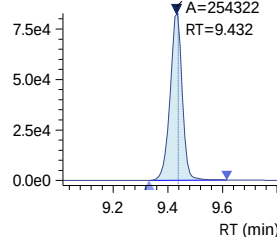
8.28e4



13C7-PFUnDA

Conc. 1.1947

Q 570.00>525.10 (-)



8.28e4



8.28e4



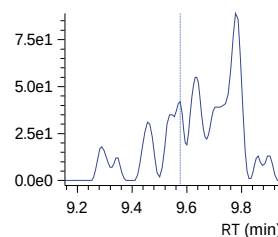
PFNS

Conc. ----

R#1 0.00 (63.31)

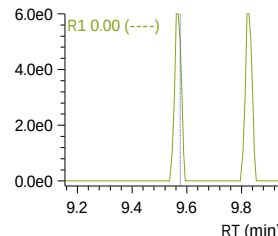
R#2 0.00 (65.22)

Q 548.80>79.90 (-)



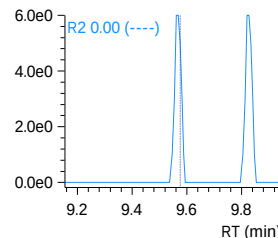
R1 548.80>98.80 (-)

6.00e0



R2 548.80>98.80 (-)

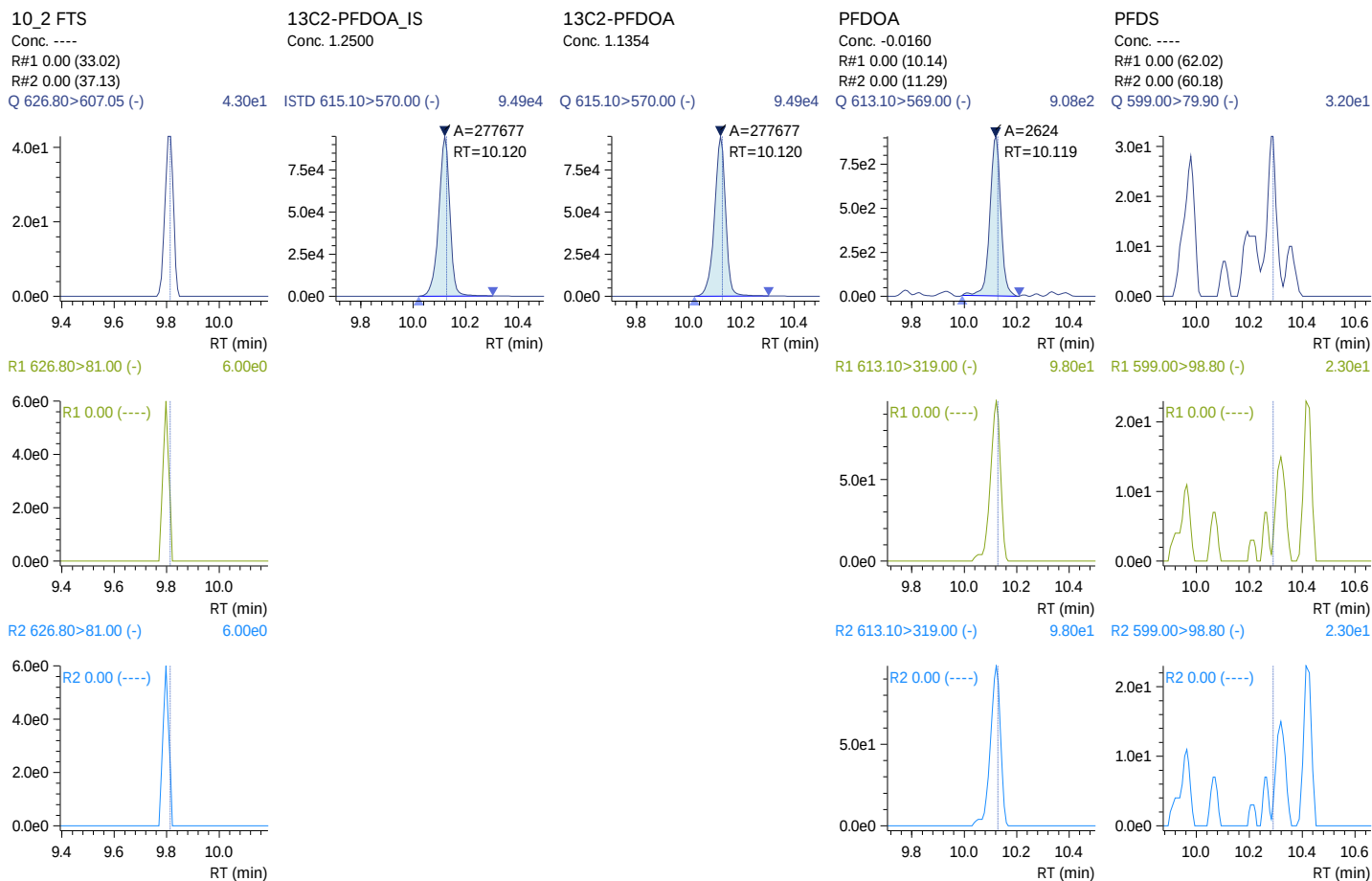
6.00e0



RT (min)

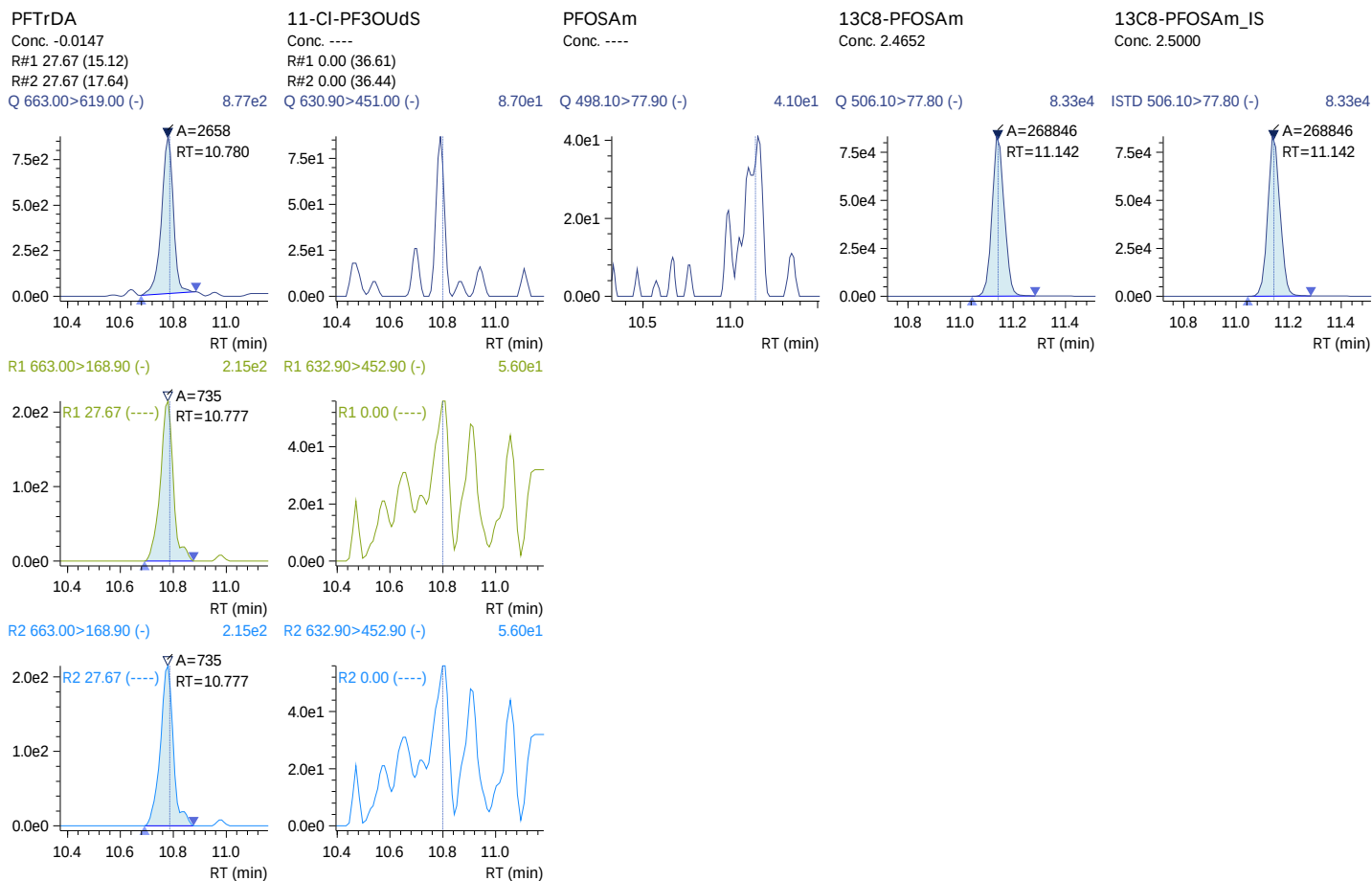


240119_022 (continued)



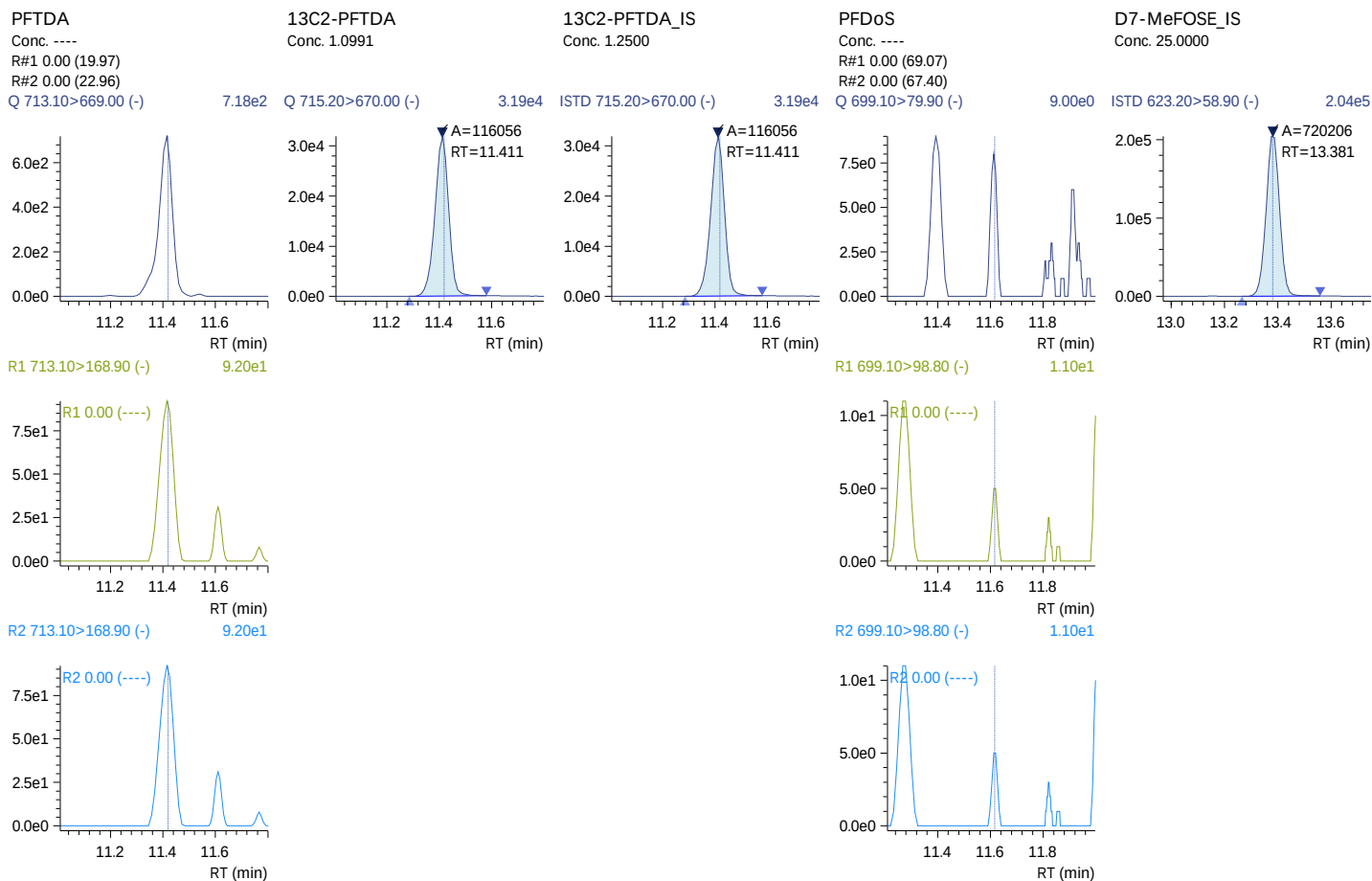


240119_022 (continued)





240119_022 (continued)





240119_022 (continued)

D7-MeFOSE
 Conc. 26.7853

MeFOSE
 Conc. ----

13C2-PFHxDA_IS
 Conc. 2.5000

13C2-PFHxDA
 Conc. 2.2903

PFHxDA

Conc. -0.0093
 R#1 0.00 (11.64)
 R#2 0.00 (13.90)

Q 623.20>58.90 (-)

2.04e5

Q 616.10>59.00 (-)

3.80e1

ISTD 815.00>770.05 (-)

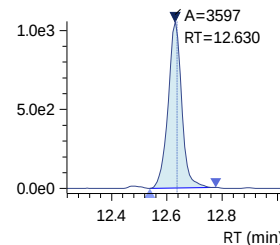
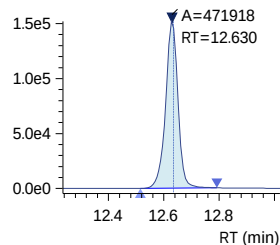
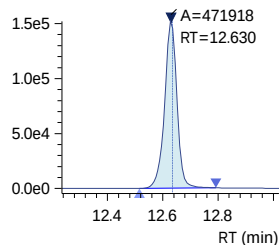
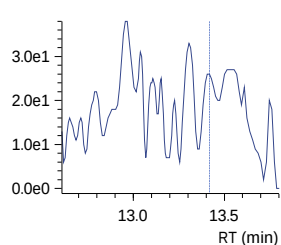
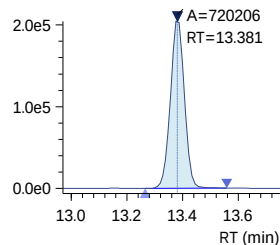
1.52e5

Q 815.00>770.05 (-)

1.52e5

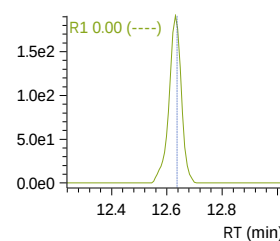
Q 813.00>768.95 (-)

1.06e3



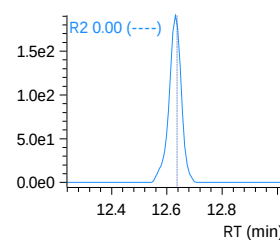
R1 813.00>218.95 (-)

1.91e2



R2 813.00>218.95 (-)

1.91e2





240119_022 (continued)

D3-MeFOSA
 Conc. 2.4688

D3-MeFOSA_IS
 Conc. 2.5000

MeFOSA
 Conc. ----
 R#1 0.00 (149.05)
 R#2 0.00 (140.79)

D9-EtFOSE_IS
 Conc. 25.0000

D9-EtFOSE
 Conc. 25.7020

Q 515.00>219.00 (-)

1.56e4

ISTD 515.00>219.00 (-)

1.56e4

Q 511.90>219.00 (-)

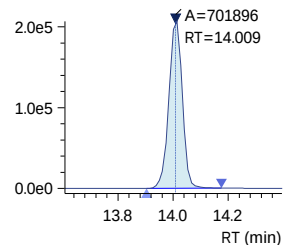
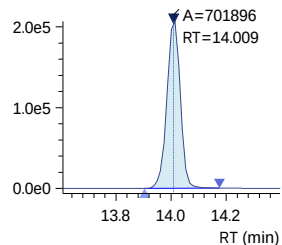
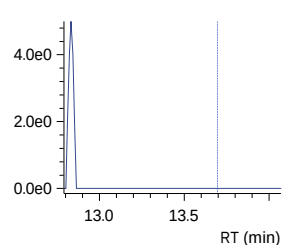
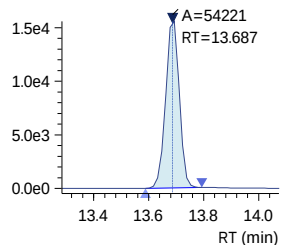
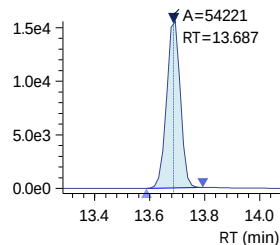
5.00e0

ISTD 639.20>58.90 (-)

2.07e5

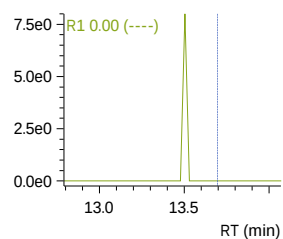
Q 639.20>58.90 (-)

2.07e5



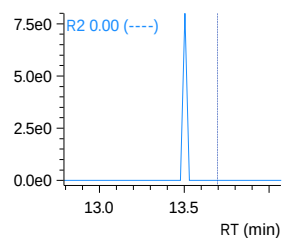
R1 511.90>169.00 (-)

8.00e0



R2 511.90>169.00 (-)

8.00e0





240119_022 (continued)

EtFOSE
Conc. ----

D5-EtFOSAm
Conc. 2.5551

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. ----

PFODA
Conc. 0.0125

Q 630.00>59.00 (-)

4.10e1

Q 531.10>219.00 (-)

2.31e4

ISTD 531.10>219.00 (-)

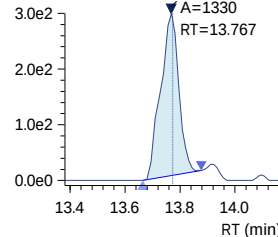
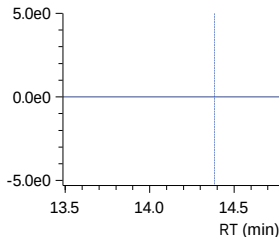
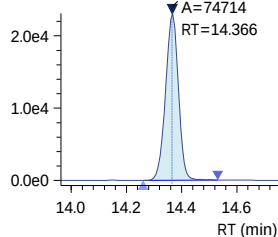
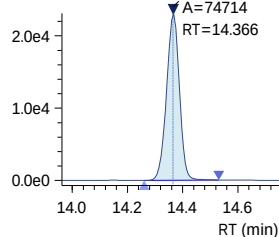
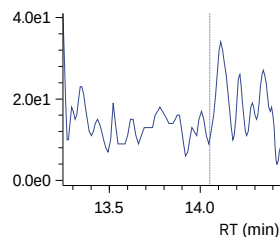
2.31e4

Q 526.00>219.00 (-)

0.00e0

Q 913.00>868.65 (-)

3.00e2

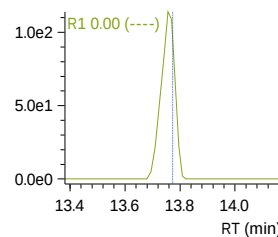
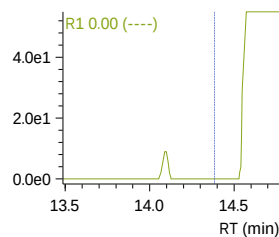


R1 526.00>169.00 (-)

5.50e1

R1 913.00>169.00 (-)

1.14e2

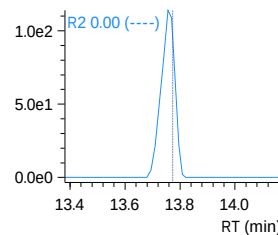
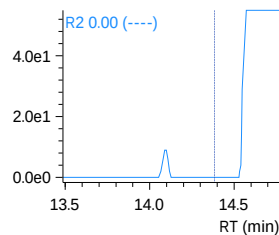


R2 526.00>169.00 (-)

5.50e1

R2 913.00>169.00 (-)

1.14e2



Validation Report

1st PS 01/23/24
2nd UA 01/23/24

Data File: J:\LCMS08\Data\240119_1633_B1\240119_037
Lab ID: KQ2400951-12
RunType: CCB
Matrix: Soil

Date Acquired: 1/20/24 01:45
Batch ID: 830171
Analysis Method: 1633/PFAS_DOD5.4

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery	X	
Continuing Calibration Recovery (Closing)		X
Internal Standards	X	
Surrogates	X	
Above Highest ICAL Level	X	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Continuing Calibration Recovery (Closing)	13C2-6:2 FTS	134	70	130	native in control

Primary Review: _____

Secondary Review: _____

Quantitation Report

1st *PS* 01/23/24
2nd *UA* 01/23/24

Data File:	J:\LCMS08\Data\240119_1633_B1\240119_037	Instrument:	K-LCMS-08
Acqu Date:	1/20/24 01:45	Vial:	31
Run Type:	CCB	Dilution:	1
Lab ID:	KQ2400951-12	Raw Units:	ng/mL

Bottle ID:		Tier:	IV	Matrix:	Soil
Prod Code:	PFAS_DOD5.4	Collect Date:	12/20/23	Receive Date:	12/28/23

Analysis Lot:	830171	Prep Lot:		Report Group:	KQ2400951
Analysis	1633	Prep Method:			
		Prep Date:			

Title:	Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM	Calibration ID:	KC2400027
		Report List ID:	24615

Internal Standard Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Area Criteria
18O2-PFHxS	7.068	-0.01	216791	2.5000	OK
13C4-PFOS	8.803	-0.01	236128	2.5000	OK
13C3-PFBA	1.400	-0.01	517244	5.0000	OK
13C2-PFHxA	4.960	-0.01	526523	2.5000	OK
13C4-PFOA	7.093	-0.01	39492	2.5000	OK
13C5-PFNA	7.941	-0.01	311633	1.2500	OK
13C2-PFDA	8.706	-0.01	212523	1.2500	OK

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
13C3-PFBS	4.626	-0.01	308587	2.5083	100	20 - 150	Y
13C3-PFHxS	7.068	-0.01	239421	2.5730	103	20 - 150	Y
13C8-PFOS	8.802	-0.01	97637	2.4794	99	20 - 150	Y
13C4-PFBA	1.401	-0.01	1222782	10.5765	106	20 - 150	Y
13C5-PFPeA	3.481	0.00	122823	5.1679	103	20 - 150	Y
13C5-PFHxA	4.960	-0.01	557660	2.5131	101	20 - 150	Y
13C4-PFHpA	6.138	-0.01	594520	2.9596	118	20 - 150	Y
13C8-PFOA	7.092	-0.01	581256	2.6333	105	20 - 150	Y
13C9-PFNA	7.941	-0.01	294255	1.2059	96	20 - 150	Y
13C6-PFDA	8.706	-0.01	231879	1.3562	108	20 - 150	Y
13C7-PFUnDA	9.429	-0.01	271148	1.3294	106	20 - 150	Y
13C2-PFDoDA	10.116	-0.01	285697	1.2193	98	20 - 150	Y
13C2-PFTeDA	11.406	-0.01	126450	1.2499	100	20 - 150	Y
13C8-FOSA	11.141	-0.01	241678	2.4110	96	20 - 150	Y
D3-MeFOSA	13.681	0.00	52372	2.5944	104	20 - 150	Y
D5-EtFOSA	14.355	-0.01	75272	2.8007	112	20 - 150	Y
D7-MeFOSE	13.371	0.00	712419	28.8266	115	20 - 150	Y
D9-EtFOSE	14.000	-0.01	697772	27.7987	111	20 - 150	Y

			1st	PS	01/23/24
Data File:	J:\LCMS08\Data\240119_1633_B1\240119_037	Instrument:	K-LCMS08	2nd	01/23/24
Acqu Date:	1/20/24 01:45	Vial:	31	UA	
Run Type:	CCB	Dilution:	1		
Lab ID:	KQ2400951-12	Raw Units:	ng/mL		

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
D3-MeFOSAA	8.843	-0.01	249784	6.0950	122	20 - 150	Y
D5-EtFOSAA	9.175	-0.01	275832	5.6258	113	20 - 150	Y
13C2-4:2 FTS	4.645	-0.01	193215	6.4765	130	20 - 150	Y
13C2-6:2 FTS	6.779	-0.01	174181	6.1730	123	20 - 150	Y
13C2-8:2 FTS	8.396	-0.01	154769	6.6773	134	20 - 150	Y
13C3-HFPO-DA	5.435	-0.01	603497	11.7088	117	20 - 150	Y

Target Compounds

Final Conc.Units: ng/g

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Perfluorobutane sulfonic acid (PFBS)	4.621	-0.01	107	0.0007	0.00070	U	Y
Perfluoropentane sulfonic acid (PFPeS)	0		0	0	0	U	Y
Perfluorohexane sulfonic acid (PFHxS)	7.065	-0.01	1370	-0.0072	0	U	Y
Perfluoroheptane sulfonic acid (PFHpS)	8.002	+0.01	31	0.0004	0.00040	U	Y
Perfluorooctane sulfonic acid (PFOS)	8.795	-0.02	316	0.0031	0.0031	U	Y
Perfluorononane sulfonic acid (PFNS)	0		0	0	0	U	Y
Perfluorodecane sulfonic acid (PFDS)	0		0	0	0	U	Y
Perfluorododecane sulfonic acid (PFDoS)	0		0	0	0	U	Y
Perfluorobutanoic acid (PFBA)	1.425	+0.01	907	0.0086	0.0086	U	Y
Perfluoropentanoic acid (PFPeA)	3.486		3096	0.0195	0.020	U	Y
Perfluorohexanoic acid (PFHxA)	4.962	-0.01	1091	-0.0025	0	U	Y
Perfluoroheptanoic acid (PFHpA)	6.119	-0.03	6644	-0.0078	0	U	Y
Perfluorooctanoic acid (PFOA)	7.091	-0.02	5381	-0.0079	0	U	Y
Perfluorononanoic acid (PFNA)	7.943	-0.01	4753	-0.0025	0	U	Y
Perfluorodecanoic acid (PFDA)	8.706	-0.01	4236	-0.0063	0	U	Y
Perfluoroundecanoic acid (PFUnDA)	9.430	-0.01	3243	-0.0132	0	U	Y
Perfluorododecanoic acid (PFDOA)	10.117	-0.01	2828	-0.0152	0	U	Y
Perfluorotridecanoic acid (PFTTrDA)	10.772	-0.01	3709	-0.0102	0	U	Y
Perfluorotetradecanoic acid (PFTDA)	11.406	-0.01	2738	-0.0076	0	U	Y
Perfluorooctane sulfonamide (PFOSAm)	11.140	-0.01	413	0.0052	0.0052	U	Y
N-Methylperfluorooctane sulfonamide (MeFOSA)	0		0	0	0	U	Y
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	0		0	0	0	U	Y
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	0		0	0	0	U	Y
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	0		0	0	0	U	Y
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	0		0	0	0	U	Y

			1st	PS	01/23/24
Data File:	J:\LCMS08\Data\240119_1633_B1\240119_037	Instrument:	K-LCMS08	2nd	01/23/24
Acqu Date:	1/20/24 01:45	Vial:	31	UA	
Run Type:	CCB	Dilution:	1		
Lab ID:	KQ2400951-12	Raw Units:	ng/mL		

Target Compounds			Final Conc.Units: ng/g				
Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	0		0	0	0	U	Y
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	4.629	-0.02	218	0.0023	0.0023	U	Y
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	6.773	-0.01	816	0.0103	0.010	U	Y
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	8.396	-0.01	91	0.0014	0.0014	U	Y
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	0		0	0	0	U	Y
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	0		0	0	0	U	Y
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	7.935	0.00	972	0.0505	0.051	U	Y
Perfluoro(2-ethoxyethane) sulfonic acid (PFEESA)	0		0	0	0	U	Y
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	0		0	0	0	U	Y
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	10.785	-0.01	130	-0.0167	0	U	Y
Perfluoro-3-methoxypropanoic acid (PFMPA)	2.426	+0.00	87	0.0011	0.0011	U	Y
Perfluoro-4-methoxybutanoic acid (PFMBA)	4.006	0.00	95	0.0008	0.00080	U	Y
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	0		0	0	0	U	Y
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	4.814	-0.01	999	0.0081	0.0081	U	Y
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	0		0	0	0	U	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution



240119_037

Sample ID: 1633 CCB
Date Acquired: 1/20/2024 1:45:49 AM
Acquired by: System Administrator
Data File: 240119_037
Vial: 54 | Inj. Volume: 10.0000uL | Tray: 1

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	1222782	----	----	----	----	----	----	
13C4-PFBA_IS	216.80>171.90	----	1222782	----	----	----	----	----	----	
13C3-PFBA_IS	216.00>172.00	----	517244	----	----	----	----	----	----	
PFBA	212.80>169.05	----	907	----	----	----	----	----	----	
PFMPA	229.00>84.90	----	87	----	----	----	----	----	----	
3_3 FTCA	241.00>177.10	241.00>117.00	----	0	0.00	141.17	0	0.00	143.25	
13C5-PFPeA	268.30>223.00	----	122823	----	----	----	----	----	----	
13C5-PFPeA_IS	268.30>223.00	----	122823	----	----	----	----	----	----	
PFPeA	263.00>219.00	----	3096	----	----	----	----	----	----	
PFMBA	279.00>84.95	----	95	----	----	----	----	----	----	
13C2-4_2 FTS	329.10>80.90	----	193215	----	----	----	----	----	----	
13C2-4_2 FTS_IS	329.10>80.90	----	193215	----	----	----	----	----	----	
4_2 FTS	327.10>307.00	327.10>80.90	218	51	23.55	29.06	51	23.55	31.50	
13C3-PFBS_IS	302.10>79.90	----	308587	----	----	----	----	----	----	
PFBS	298.70>79.90	298.70>98.80	107	48	44.87	46.72	48	44.87	48.74	
13C3-PFBS	302.10>79.90	----	308587	----	----	----	----	----	----	
NFDHA	295.00>201.00	295.00>84.90	999	306	30.58	40.25	306	30.58	36.97	
13C5-PFHxA	318.00>273.00	----	557660	----	----	----	----	----	----	
13C5-PFHxA_IS	318.00>273.00	----	557660	----	----	----	----	----	----	
13C2-PFHxA_IS	315.10>270.00	----	526523	----	----	----	----	----	----	
PFHxA	313.00>269.00	----	1091	----	----	----	----	----	----	
PFEESA	314.80>135.00	314.80>82.90	----	0	0.00	6.11	0	0.00	5.81	
13C3-HFPO-DA	286.90>168.90	----	603497	----	----	----	----	----	----	
13C3-HFPO-DA_IS	286.90>168.90	----	603497	----	----	----	----	----	----	
HFPO-DA	284.90>168.90	284.90>184.90	----	0	0.00	65.61	0	0.00	64.39	
5_3 FTCA	341.00>237.05	341.00>217.00	----	0	0.00	158.86	0	0.00	159.75	
PFPeS	349.10>79.90	349.10>98.80	----	0	0.00	55.80	0	0.00	54.52	
13C4-PFHpA	367.10>322.00	----	594520	----	----	----	----	----	----	
13C4-PFHpA_IS	367.10>322.00	----	594520	----	----	----	----	----	----	
PFHpA	363.10>319.00	363.10>169.00	6644	1437	21.64	21.50	1437	21.64	23.22	
DONA	376.90>250.90	376.90>84.80	----	0	0.00	29.66	0	0.00	29.43	
13C2-6_2 FTS_IS	429.10>80.90	----	174181	----	----	----	----	----	----	
13C2-6_2 FTS	429.10>80.90	----	174181	----	----	----	----	----	----	
6_2 FTS	427.10>407.00	427.10>80.90	816	741	90.83	41.15	741	90.83	43.09	IRr
13C4-PFOA_IS	417.10>172.00	----	39492	----	----	----	----	----	----	
13C8-PFOA_IS	421.10>376.00	----	581256	----	----	----	----	----	----	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240119_037 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	581256	----	----	----	----	----	----	----
PFOA	413.00>369.00	413.00>169.00	5381	1006	18.69	31.89	1006	18.69	30.51	
13C3-PFHxS	402.10>79.90	----	239421	----	----	----	----	----	----	----
13C3-PFHxS_IS	402.10>79.90	----	239421	----	----	----	----	----	----	----
PFHxS	398.70>79.90	398.70>98.90	1370	546	39.89	56.62	546	39.89	57.27	
18O2-PFHxS_IS	403.00>83.90	----	216791	----	----	----	----	----	----	----
13C9-PFNA_IS	472.10>427.00	----	294255	----	----	----	----	----	----	----
13C9-PFNA	472.10>427.00	----	294255	----	----	----	----	----	----	----
13C5-PFNA_IS	468.00>423.00	----	311633	----	----	----	----	----	----	----
PFNA	463.00>419.00	463.00>219.00	4753	733	15.43	23.17	733	15.43	23.01	
PFHpS	449.00>79.90	449.00>98.80	31	26	83.67	56.96	26	83.67	58.58	
7_3 FTCA	441.00>317.00	441.00>336.90	972	539	55.42	117.47	539	55.42	117.17	IRr
13C2-8_2-FTS	529.10>80.90	----	154769	----	----	----	----	----	----	----
13C2-8_2-FTS_IS	529.10>80.90	----	154769	----	----	----	----	----	----	----
8_2 FTS	527.10>506.95	527.10>80.80	91	46	50.17	49.59	46	50.17	43.30	
13C6-PFDA_IS	519.10>474.10	----	231879	----	----	----	----	----	----	----
13C6-PFDA	519.10>474.10	----	231879	----	----	----	----	----	----	----
13C2-PFDA_IS	515.10>470.10	----	212523	----	----	----	----	----	----	----
PFDA	512.90>469.00	512.90>219.00	4236	598	14.12	19.00	598	14.12	19.26	
D3-NMeFOSAA_IS	573.20>419.00	----	249784	----	----	----	----	----	----	----
D3-NMeFOSAA	573.20>419.00	----	249784	----	----	----	----	----	----	----
13C8-PFOS_IS	507.10>98.90	----	97637	----	----	----	----	----	----	----
13C8-PFOS	507.10>98.90	----	97637	----	----	----	----	----	----	----
13C4-PFOS_IS	502.80>79.90	----	236128	----	----	----	----	----	----	----
PFOS	498.90>79.90	498.90>98.80	316	270	85.57	52.47	270	85.57	47.25	IRr
NMeFOSAA	570.10>419.00	570.10>483.00	----	0	0.00	55.15	0	0.00	62.10	
D5-NEtFOSAA_IS	589.20>419.00	----	275832	----	----	----	----	----	----	----
D5-NEtFOSAA	589.20>419.00	----	275832	----	----	----	----	----	----	----
NEtFOSAA	584.20>419.10	584.20>526.00	----	0	0.00	81.95	0	0.00	86.05	
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	----	0	0.00	32.76	0	0.00	31.74	
PFUnDA	563.10>519.00	563.10>269.10	3243	449	13.86	13.12	449	13.86	13.26	
13C7-PFUnDA_IS	570.00>525.10	----	271148	----	----	----	----	----	----	----
13C7-PFUnDA	570.00>525.10	----	271148	----	----	----	----	----	----	----
PFNS	548.80>79.90	548.80>98.80	----	0	0.00	65.22	0	0.00	62.49	
10_2 FTS	626.80>607.05	626.80>81.00	----	0	0.00	37.13	0	0.00	35.81	
13C2-PFDOA_IS	615.10>570.00	----	285697	----	----	----	----	----	----	----
13C2-PFDOA	615.10>570.00	----	285697	----	----	----	----	----	----	----
PFDOA	613.10>569.00	613.10>319.00	2828	215	7.60	11.29	215	7.60	10.90	
PFDS	599.00>79.90	599.00>98.80	----	0	0.00	60.18	0	0.00	61.11	
PFTrDA	663.00>619.00	663.00>168.90	3709	411	11.07	17.64	411	11.07	18.20	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240119_037 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	130	253	194.17	36.44	253	194.17	34.95	IRr
PFOSAm	498.10>77.90	----	413	----	----	----	----	----	----	----
13C8-PFOSAm	506.10>77.80	----	241678	----	----	----	----	----	----	----
13C8-PFOSAm_IS	506.10>77.80	----	241678	----	----	----	----	----	----	----
PFTDA	713.10>669.00	713.10>168.90	2738	417	15.22	22.96	417	15.22	22.68	----
13C2-PFTDA	715.20>670.00	----	126450	----	----	----	----	----	----	----
13C2-PFTDA_IS	715.20>670.00	----	126450	----	----	----	----	----	----	----
PFDoS	699.10>79.90	699.10>98.80	----	0	0.00	67.40	0	0.00	65.24	----
D7-MeFOSE_IS	623.20>58.90	----	712419	----	----	----	----	----	----	----
D7-MeFOSE	623.20>58.90	----	712419	----	----	----	----	----	----	----
MeFOSE	616.10>59.00	----	----	----	----	----	----	----	----	----
13C2-PFHxDA_IS	815.00>770.05	----	474765	----	----	----	----	----	----	----
13C2-PFHxDA	815.00>770.05	----	474765	----	----	----	----	----	----	----
PFHxDA	813.00>768.95	813.00>218.95	4008	441	11.02	13.90	441	11.02	14.51	----
D3-MeFOSA	515.00>219.00	----	52372	----	----	----	----	----	----	----
D3-MeFOSA_IS	515.00>219.00	----	52372	----	----	----	----	----	----	----
MeFOSA	511.90>219.00	511.90>169.00	----	0	0.00	140.79	0	0.00	142.62	----
D9-EtFOSE_IS	639.20>58.90	----	697772	----	----	----	----	----	----	----
D9-EtFOSE	639.20>58.90	----	697772	----	----	----	----	----	----	----
EtFOSE	630.00>59.00	----	----	----	----	----	----	----	----	----
D5-EtFOSAm	531.10>219.00	----	75272	----	----	----	----	----	----	----
D5-EtFOSAm_IS	531.10>219.00	----	75272	----	----	----	----	----	----	----
EtFOSAm	526.00>219.00	526.00>169.00	----	0	0.00	163.90	0	0.00	146.41	----
PFODA	913.00>868.65	913.00>169.00	2083	340	16.33	27.03	340	16.33	23.98	----

Flag ID key: IRr: Ion Ratio (Relative)



240119_037

Sample ID: 1633 CCB
Date Acquired: 1/20/2024 1:45:49 AM
Acquired by: System Administrator
Data File: 240119_037
Vial: 54 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.401	-0.007	0.001	1222782	517244	13C3-PFBA_IS	10.5765	ng/mL	
13C4-PFBA_IS	Auto	1.401	-0.007	----	1222782	1222782	----	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.400	-0.008	----	517244	517244	----	5.0000	ng/mL	
PFBA	M	1.425	0.016	0.024	907	1222782	13C4-PFBA_IS	0.0086	ng/mL	
PFMPA	M	2.426	0.005	-1.055	87	122823	13C5-PFPeA_IS	0.0011	ng/mL	
3_3 FTCA	ND(W/B)	----	----	----	----	122823	13C5-PFPeA_IS	----	ng/mL	
13C5-PFPeA	Auto	3.481	0.002	-1.479	122823	526523	13C2-PFHxA_IS	5.1679	ng/mL	
13C5-PFPeA_IS	Auto	3.481	0.002	----	122823	122823	----	5.0000	ng/mL	
PFPeA	M	3.486	0.004	0.005	3096	122823	13C5-PFPeA_IS	0.0195	ng/mL	
PFMBA	M	4.006	0.001	0.525	95	122823	13C5-PFPeA_IS	0.0008	ng/mL	
13C2-4_2 FTS	Auto	4.645	-0.001	-2.423	193215	216791	18O2-PFHxS_IS	6.4765	ng/mL	
13C2-4_2 FTS_IS	Auto	4.645	-0.001	----	193215	193215	----	5.0000	ng/mL	
4_2 FTS	M	4.629	-0.018	-0.016	218	193215	13C2-4_2 FTS_IS	0.0023	ng/mL	
13C3-PFBS_IS	Auto	4.626	-0.002	----	308587	308587	----	2.5000	ng/mL	
PFBS	M	4.621	-0.007	-0.005	107	308587	13C3-PFBS_IS	0.0007	ng/mL	
13C3-PFBS	Auto	4.626	-0.002	-2.442	308587	216791	18O2-PFHxS_IS	2.5083	ng/mL	
NFDHA	M	4.814	-0.006	-0.146	999	557660	13C5-PFHxA_IS	0.0081	ng/mL	
13C5-PFHxA	Auto	4.960	-0.003	0.000	557660	526523	13C2-PFHxA_IS	2.5131	ng/mL	
13C5-PFHxA_IS	Auto	4.960	-0.003	----	557660	557660	----	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	4.960	-0.003	----	526523	526523	----	2.5000	ng/mL	
PFHxA	M	4.962	-0.003	0.002	1091	557660	13C5-PFHxA_IS	-0.0025	ng/mL	
PFEESA	ND(W/B)	----	----	----	----	557660	13C5-PFHxA_IS	----	ng/mL	
13C3-HFPO-DA	Auto	5.435	-0.004	0.475	603497	526523	13C2-PFHxA_IS	11.7088	ng/mL	
13C3-HFPO-DA_IS	Auto	5.435	-0.004	----	603497	603497	----	10.0000	ng/mL	
HFPO-DA	ND(W/B)	----	----	----	----	603497	13C3-HFPO-DA_IS	----	ng/mL	
5_3 FTCA	ND(W/B)	----	----	----	----	557660	13C5-PFHxA_IS	----	ng/mL	
PFPeS	ND(W/B)	----	----	----	----	239421	13C3-PFHxS_IS	----	ng/mL	
13C4-PFHpA	Auto	6.138	-0.005	1.178	594520	526523	13C2-PFHxA_IS	2.9596	ng/mL	
13C4-PFHpA_IS	Auto	6.138	-0.005	----	594520	594520	----	2.5000	ng/mL	
PFHpA	M	6.119	-0.025	-0.019	6644	594520	13C4-PFHpA_IS	-0.0078	ng/mL	
DONA	ND(W/B)	----	----	----	----	603497	13C3-HFPO-DA_IS	----	ng/mL	
13C2-6_2 FTS_IS	Auto	6.779	-0.005	----	174181	174181	----	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.779	-0.005	-0.289	174181	216791	18O2-PFHxS_IS	6.1730	ng/mL	
6_2 FTS	M	6.773	-0.010	-0.006	816	174181	13C2-6_2 FTS_IS	0.0103	ng/mL	IRr
13C4-PFOA_IS	Auto	7.093	-0.006	----	39492	39492	----	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.092	-0.008	----	581256	581256	----	2.5000	ng/mL	
13C8-PFOA	Auto	7.092	-0.008	-0.001	581256	39492	13C4-PFOA_IS	2.6333	ng/mL	
PFOA	M	7.091	-0.011	-0.001	5381	581256	13C8-PFOA_IS	-0.0079	ng/mL	
13C3-PFHxS	Auto	7.068	-0.006	0.000	239421	216791	18O2-PFHxS_IS	2.5730	ng/mL	
13C3-PFHxS_IS	Auto	7.068	-0.006	----	239421	239421	----	2.5000	ng/mL	
PFHxS	M	7.065	-0.009	-0.003	1370	239421	13C3-PFHxS_IS	-0.0072	ng/mL	
18O2-PFHxS_IS	Auto	7.068	-0.007	----	216791	216791	----	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.941	-0.008	----	294255	294255	----	1.2500	ng/mL	
13C9-PFNA	Auto	7.941	-0.008	0.000	294255	311633	13C5-PFNA_IS	1.2059	ng/mL	
13C5-PFNA_IS	Auto	7.941	-0.008	----	311633	311633	----	1.2500	ng/mL	
PFNA	M	7.943	-0.007	0.002	4753	294255	13C9-PFNA_IS	-0.0025	ng/mL	
PFHpS	M	8.002	0.006	-0.800	31	97637	13C8-PFOS_IS	0.0004	ng/mL	
7_3 FTCA	M	7.935	0.006	2.975	972	557660	13C5-PFHxA_IS	0.0505	ng/mL	IRr
13C2-8_2-FTS	Auto	8.396	-0.008	1.328	154769	216791	18O2-PFHxS_IS	6.6773	ng/mL	
13C2-8_2-FTS_IS	Auto	8.396	-0.008	----	154769	154769	----	5.0000	ng/mL	
8_2 FTS	M	8.396	-0.008	0.000	91	154769	13C2-8_2-FTS_IS	0.0014	ng/mL	
13C6-PFDA_IS	Auto	8.706	-0.008	----	231879	231879	----	1.2500	ng/mL	
13C6-PFDA	Auto	8.706	-0.008	0.000	231879	212523	13C2-PFDA_IS	1.3562	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_037 (continued)

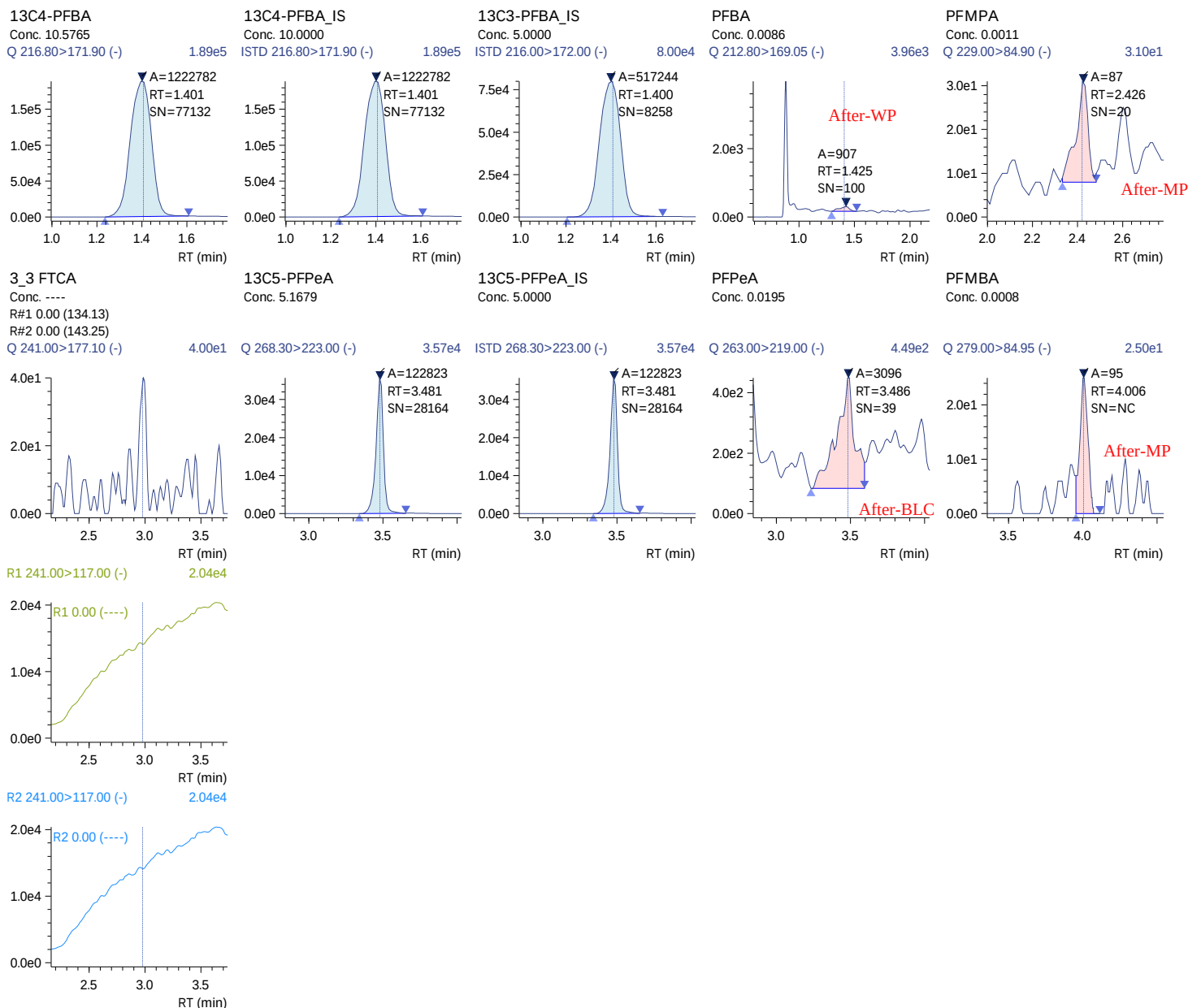
(Table continued from previous page)

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C2-PFDA_IS	Auto	8.706	-0.009	----	212523	212523	----	1.2500	ng/mL	
PFDA	M	8.706	-0.010	0.000	4236	231879	13C6-PFDA_IS	-0.0063	ng/mL	
D3-NMeFOSAA_IS	Auto	8.843	-0.005	----	249784	249784	----	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.843	-0.005	0.040	249784	236128	13C4-PFOS_IS	6.0950	ng/mL	
13C8-PFOS_IS	Auto	8.802	-0.009	----	97637	97637	----	2.5000	ng/mL	
13C8-PFOS	Auto	8.802	-0.009	-0.001	97637	236128	13C4-PFOS_IS	2.4794	ng/mL	
13C4-PFOS_IS	Auto	8.803	-0.008	----	236128	236128	----	2.5000	ng/mL	
PFOS	M	8.795	-0.018	-0.007	316	97637	13C8-PFOS_IS	0.0031	ng/mL	IRr
NMeFOSAA	ND(W/B)	----	----	----	----	249784	D3-NMeFOSAA_IS	----	ng/mL	
D5-NetFOSAA_IS	Auto	9.175	-0.003	----	275832	275832	----	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.175	-0.003	0.372	275832	236128	13C4-PFOS_IS	5.6258	ng/mL	
NetFOSAA	ND(W/B)	----	----	----	----	275832	D5-NetFOSAA_IS	----	ng/mL	
9-CI-PF3ONS	ND(W/B)	----	----	----	----	603497	13C3-HFPO-DA_IS	----	ng/mL	
PFUnDA	M	9.430	-0.010	0.001	3243	271148	13C7-PFUnDA_IS	-0.0132	ng/mL	
13C7-PFUnDA_IS	Auto	9.429	-0.009	----	271148	271148	----	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.429	-0.009	0.723	271148	212523	13C2-PFDA_IS	1.3294	ng/mL	
PFNS	ND(W/B)	----	----	----	----	97637	13C8-PFOS_IS	----	ng/mL	
10_2_FTS	ND(W/B)	----	----	----	----	154769	13C2-8_2-FTS_IS	----	ng/mL	
13C2-PFDOA_IS	Auto	10.116	-0.011	----	285697	285697	----	1.2500	ng/mL	
13C2-PFDOA	Auto	10.116	-0.011	1.410	285697	212523	13C2-PFDA_IS	1.2193	ng/mL	
PFDOA	M	10.117	-0.011	0.001	2828	285697	13C2-PFDOA_IS	-0.0152	ng/mL	
PFDS	ND(W/B)	----	----	----	----	97637	13C8-PFOS_IS	----	ng/mL	
PFTDA	M	10.772	-0.014	-0.634	3709	126450	13C2-PFTDA_IS	-0.0102	ng/mL	
11-CI-PF3OUdS	M	10.785	-0.014	5.350	130	603497	13C3-HFPO-DA_IS	-0.0167	ng/mL	IRr
PFOSAm	M	11.140	-0.003	-0.001	413	241678	13C8-PFOSAm_IS	0.0052	ng/mL	
13C8-PFOSAm	Auto	11.141	-0.002	2.338	241678	236128	13C4-PFOS_IS	2.4110	ng/mL	
13C8-PFOSAm_IS	Auto	11.141	-0.002	----	241678	241678	----	2.5000	ng/mL	
PFTDA	M	11.406	-0.014	0.000	2738	126450	13C2-PFTDA_IS	-0.0076	ng/mL	
13C2-PFTDA	Auto	11.406	-0.013	2.700	126450	212523	13C2-PFDA_IS	1.2499	ng/mL	
13C2-PFTDA_IS	Auto	11.406	-0.013	----	126450	126450	----	1.2500	ng/mL	
PFDoS	ND(W/B)	----	----	----	----	97637	13C8-PFOS_IS	----	ng/mL	
D7-MeFOSE_IS	Auto	13.371	-0.010	----	712419	712419	----	25.0000	ng/mL	
D7-MeFOSE	Auto	13.371	-0.010	4.568	712419	236128	13C4-PFOS_IS	28.8266	ng/mL	
MeFOSE	ND(W/B)	----	----	----	----	712419	D7-MeFOSE_IS	----	ng/mL	
13C2-PFHxDA_IS	Auto	12.624	-0.012	----	474765	474765	----	2.5000	ng/mL	
13C2-PFHxDA	Auto	12.624	-0.012	3.918	474765	212523	13C2-PFDA_IS	2.4050	ng/mL	
PFHxDA	M	12.624	-0.013	0.000	4008	474765	13C2-PFHxDA_IS	-0.0073	ng/mL	
D3-MeFOSA	Auto	13.681	-0.006	4.878	52372	236128	13C4-PFOS_IS	2.5944	ng/mL	
D3-MeFOSA_IS	Auto	13.681	-0.006	----	52372	52372	----	2.5000	ng/mL	
MeFOSA	ND(W/B)	----	----	----	----	52372	D3-MeFOSA_IS	----	ng/mL	
D9-EtFOSE_IS	Auto	14.000	-0.009	----	697772	697772	----	25.0000	ng/mL	
D9-EtFOSE	Auto	14.000	-0.009	5.197	697772	236128	13C4-PFOS_IS	27.7987	ng/mL	
EtFOSE	ND(W/B)	----	----	----	----	697772	D9-EtFOSE_IS	----	ng/mL	
D5-EtFOSAm	Auto	14.355	-0.010	5.552	75272	236128	13C4-PFOS_IS	2.8007	ng/mL	
D5-EtFOSAm_IS	Auto	14.355	-0.010	----	75272	75272	----	2.5000	ng/mL	
EtFOSAm	ND(W/B)	----	----	----	----	75272	D5-EtFOSAm_IS	----	ng/mL	
PFODA	M	13.766	-0.008	1.142	2083	474765	13C2-PFHxDA_IS	0.0194	ng/mL	

Flag ID key: IRr: Ion Ratio (Relative)



240119_037 (continued)





240119_037 (continued)

13C2-4_2 FTS
Conc. 6.4765

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. 0.0023
R#1 23.55 (34.14)
R#2 23.55 (31.50)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 0.0007
R#1 44.87 (47.53)
R#2 44.87 (48.74)

Q 329.10>80.90 (-)

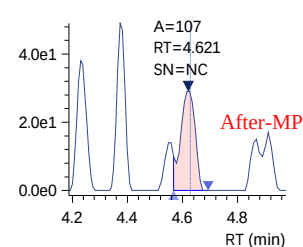
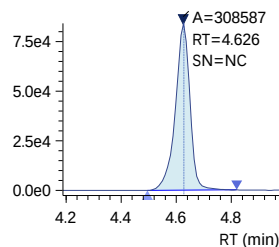
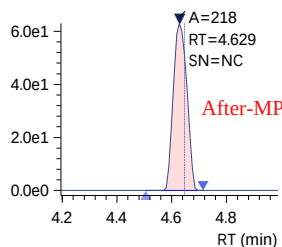
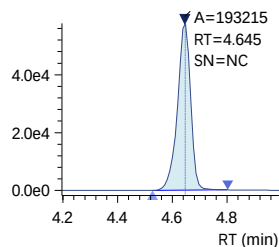
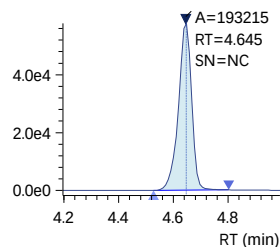
5.78e4 ISTD 329.10>80.90 (-)

5.78e4 Q 327.10>307.00 (-)

6.30e1 ISTD 302.10>79.90 (-)

8.42e4 Q 298.70>79.90 (-)

4.90e1

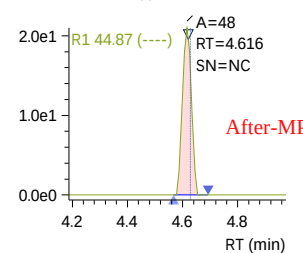
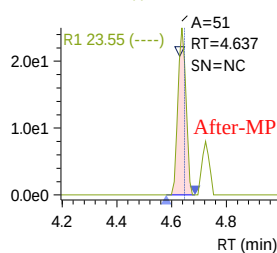


R1 327.10>80.90 (-)

2.50e1

R1 298.70>98.80 (-)

2.10e1

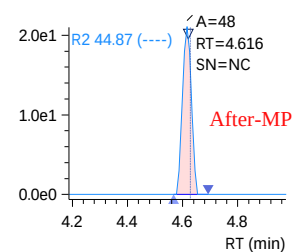
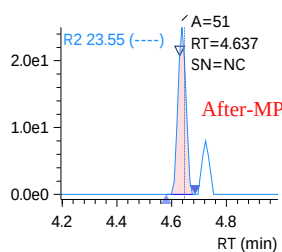


R2 327.10>80.90 (-)

2.50e1

R2 298.70>98.80 (-)

2.10e1





240119_037 (continued)

13C3-PFBS
Conc. 2.5083

NFDHA
Conc. 0.0081
R#1 30.58 (37.88)
R#2 30.58 (36.97)

13C5-PFHxA
Conc. 2.5131

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

Q 302.10>79.90 (-)

8.42e4

Q 295.00>201.00 (-)

2.87e2

Q 318.00>273.00 (-)

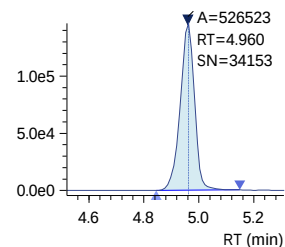
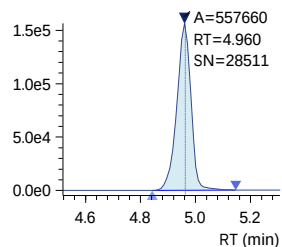
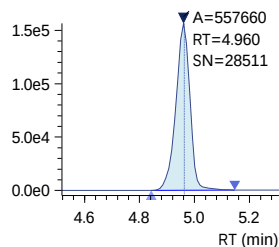
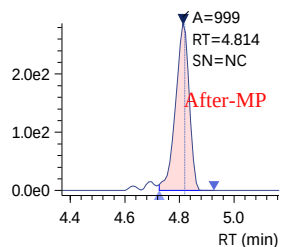
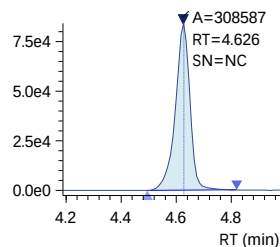
1.56e5

ISTD 318.00>273.00 (-)

1.56e5

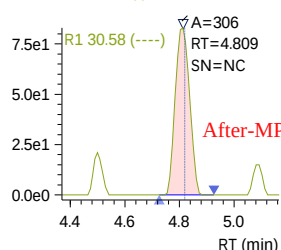
ISTD 315.10>270.00 (-)

1.46e5



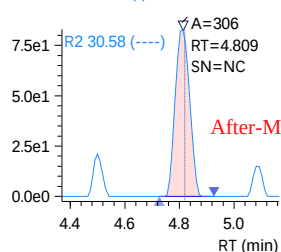
R1 295.00>84.90 (-)

8.30e1



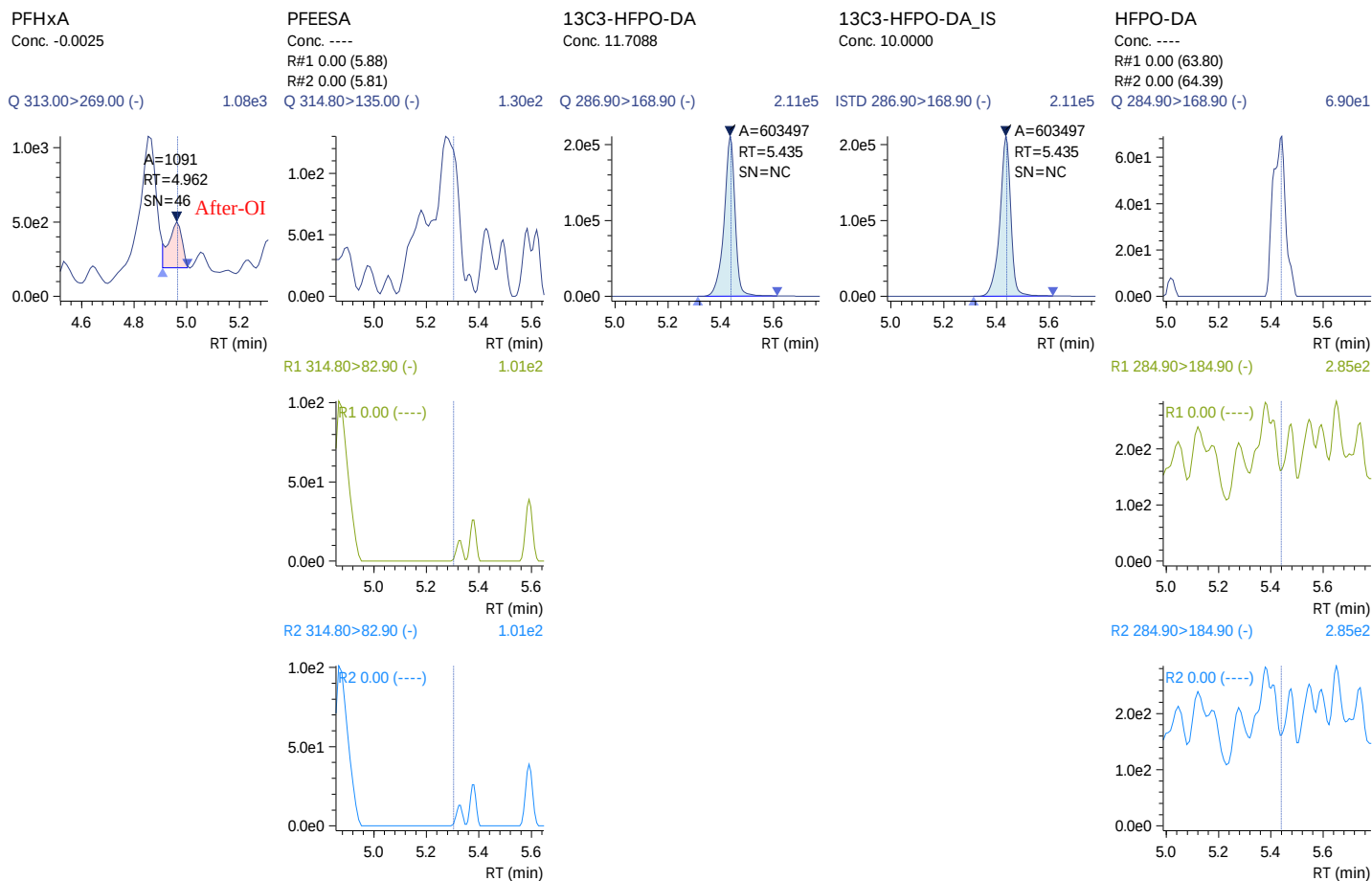
R2 295.00>84.90 (-)

8.30e1





240119_037 (continued)

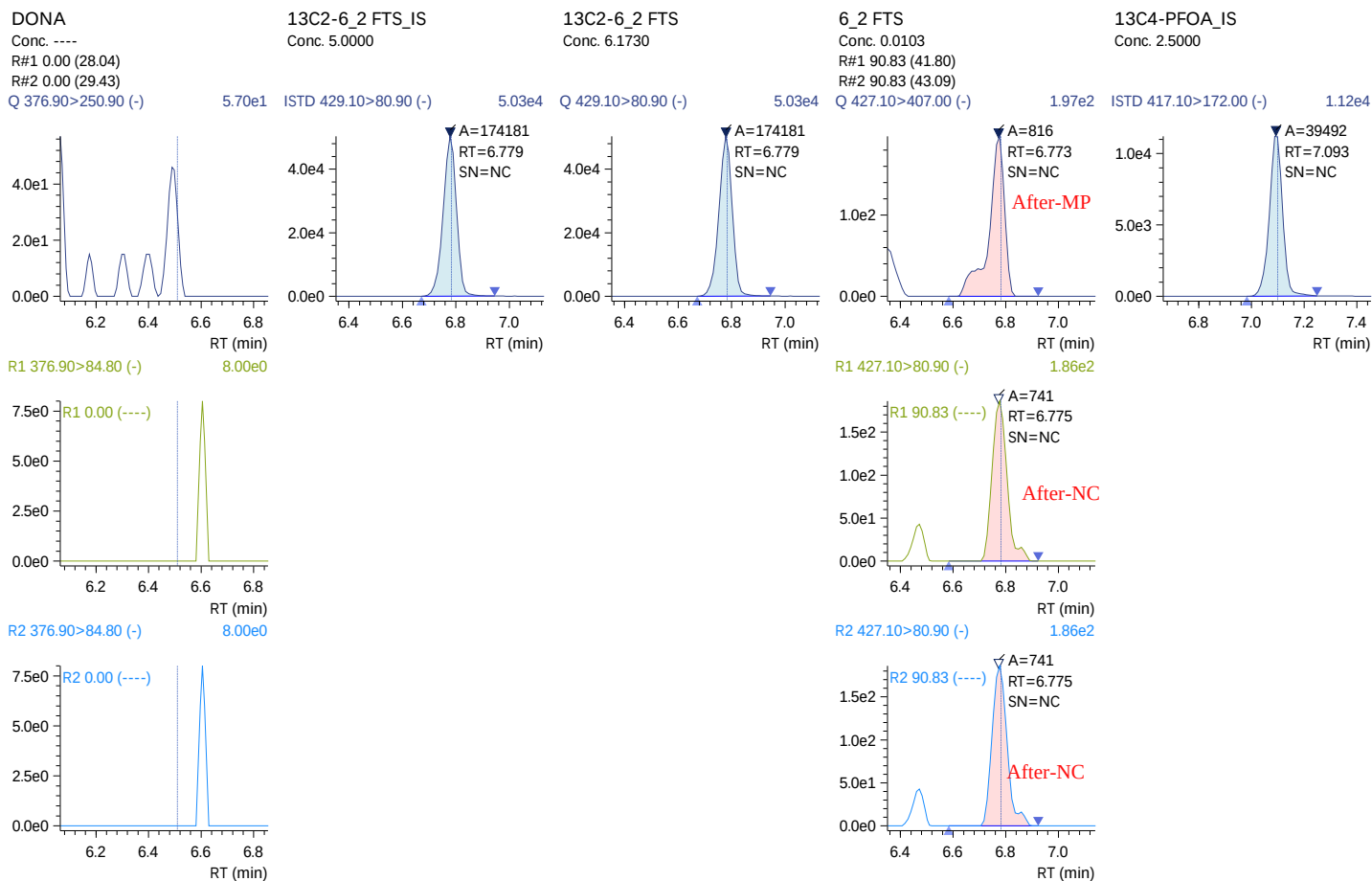


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_037 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_037 (continued)

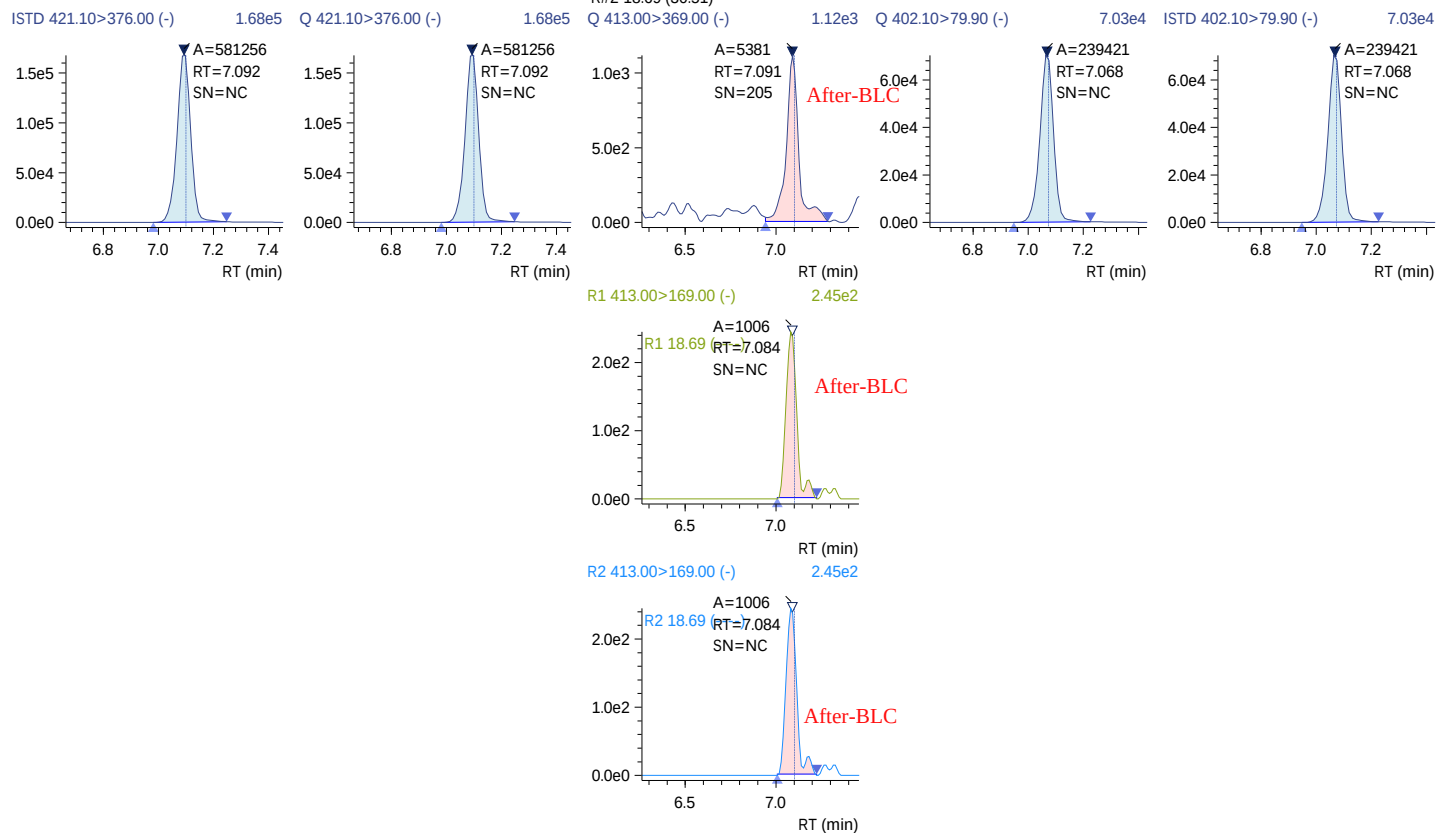
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.6333

PFOA
Conc. -0.0079
R#1 18.69 (29.05)
R#2 18.69 (30.51)

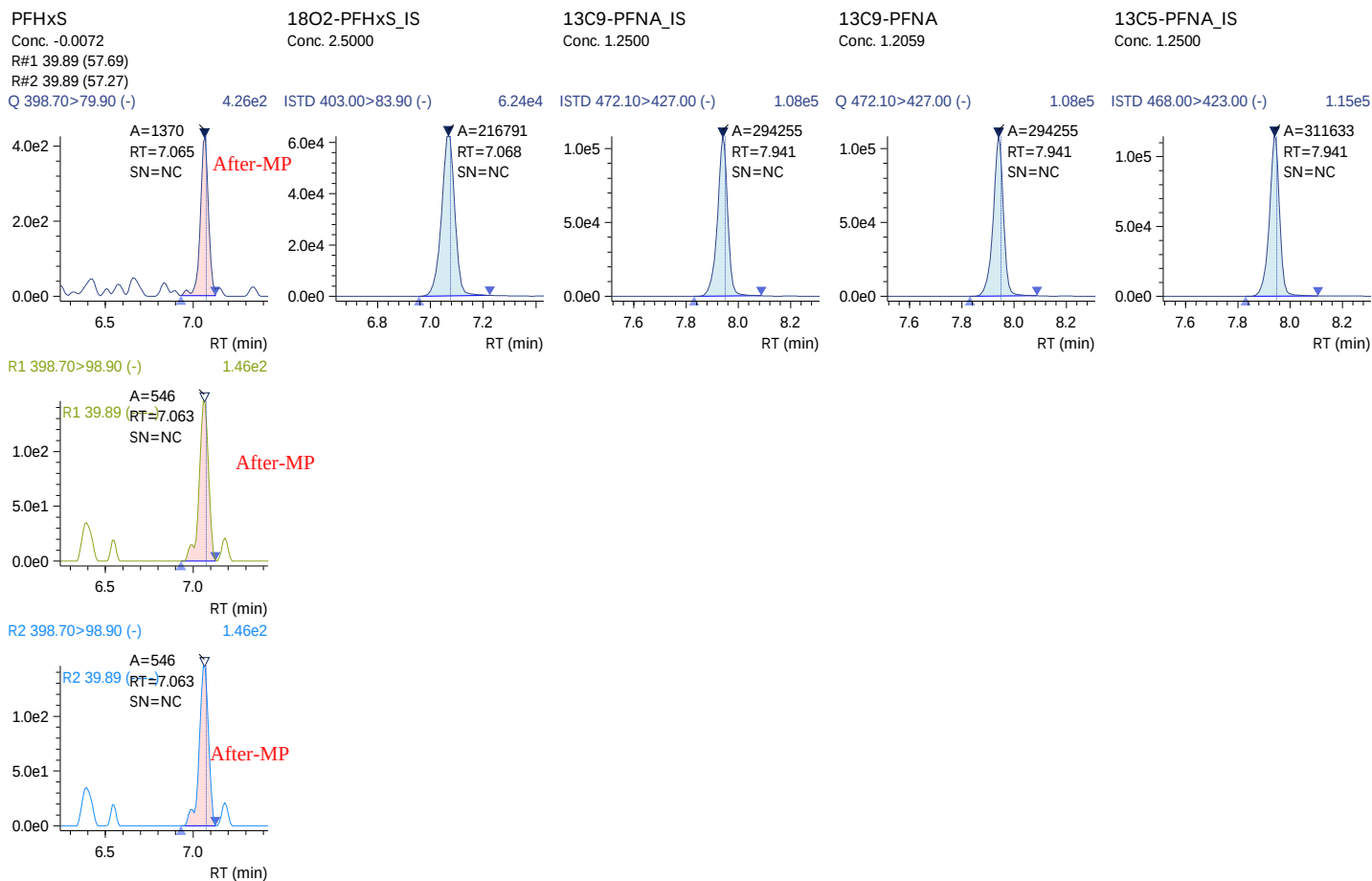
13C3-PFHxS
Conc. 2.5730

13C3-PFHxS_IS
Conc. 2.5000





240119_037 (continued)

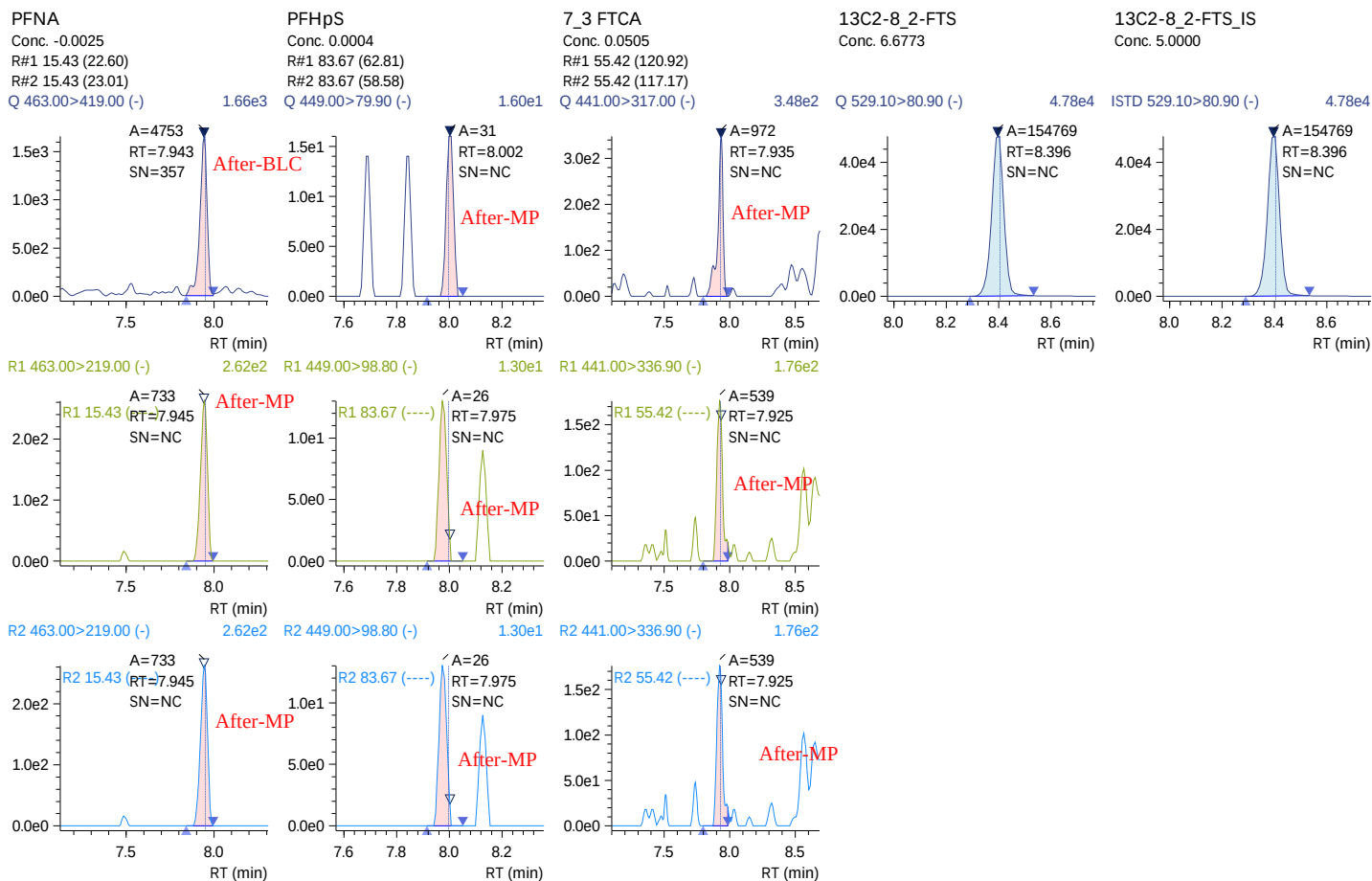


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_037 (continued)

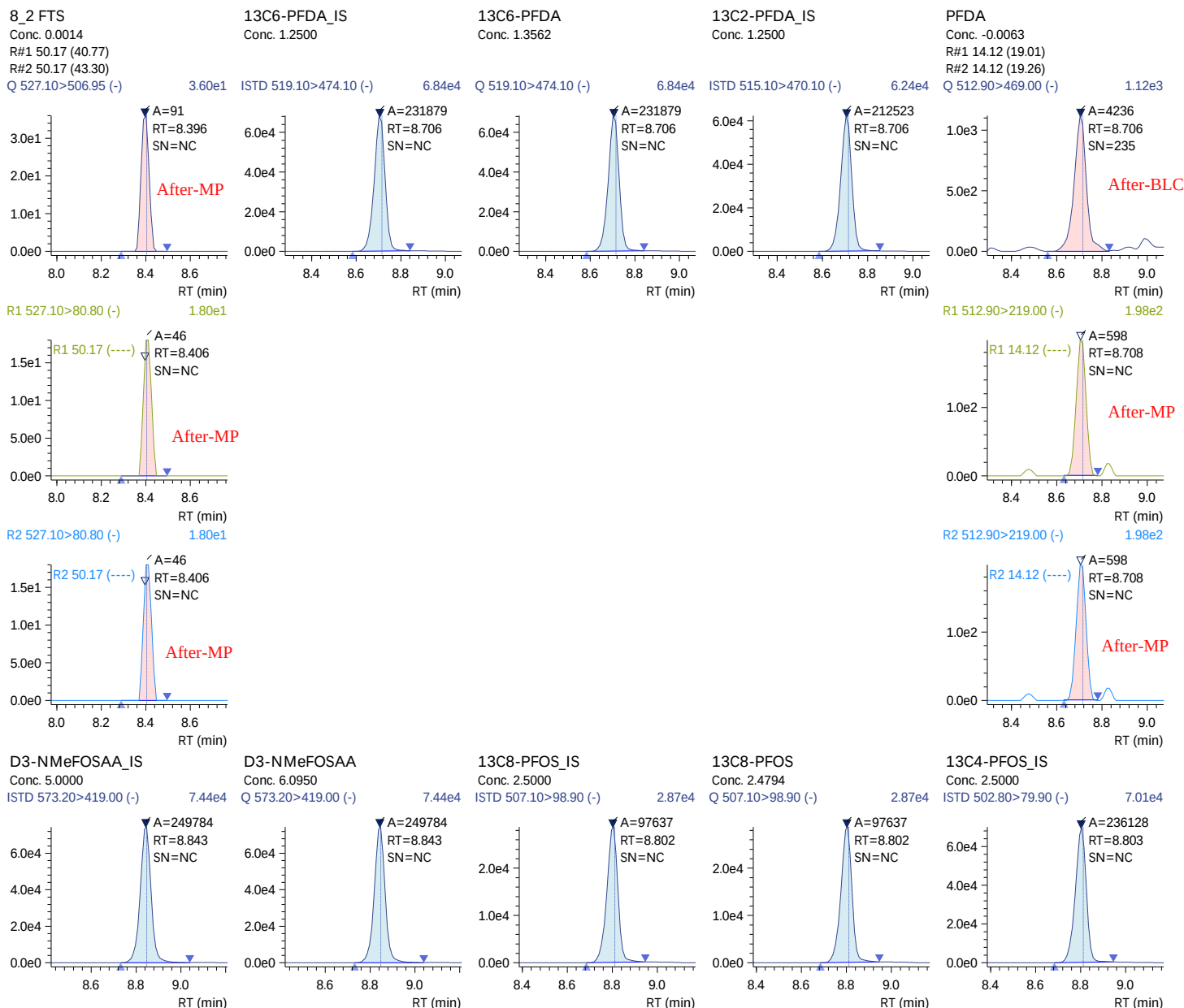


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_037 (continued)

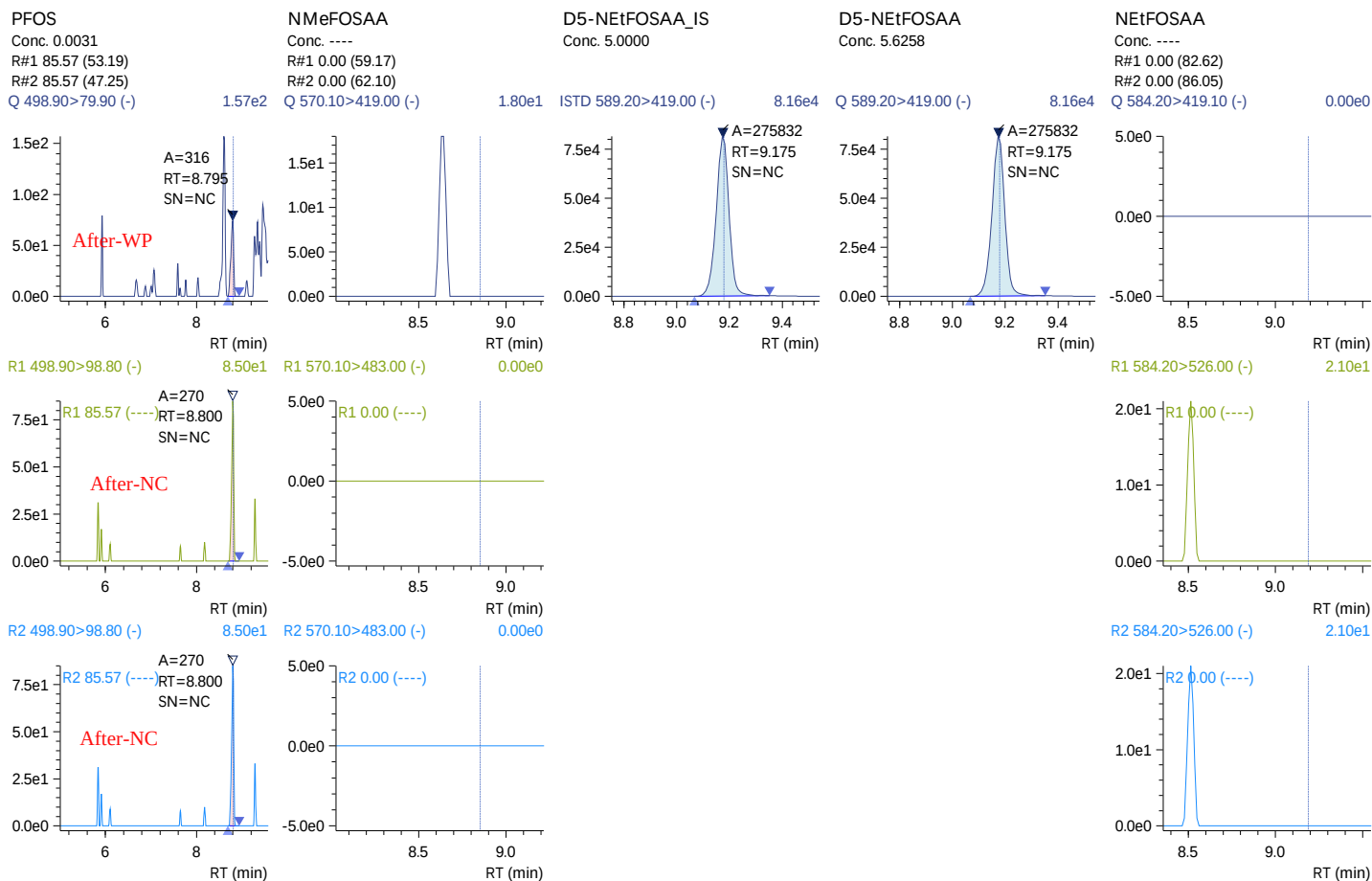


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_037 (continued)



J:\LCMS08\Data\240119_1633_B1\240119_1633_B1.dampl

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_037 (continued)

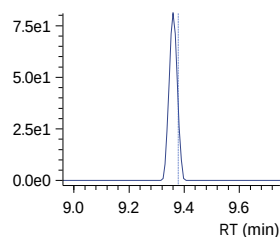
9-Cl-PF3ONS

Conc. ----

R#1 0.00 (31.76)

R#2 0.00 (31.74)

Q 530.80>351.00 (-)



R1 532.80>353.00 (-)

8.10e1

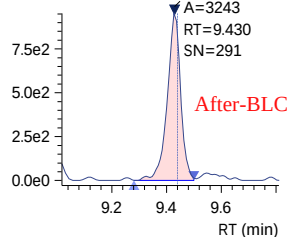
PFUnDA

Conc. -0.0132

R#1 13.86 (12.31)

R#2 13.86 (13.26)

Q 563.10>519.00 (-)

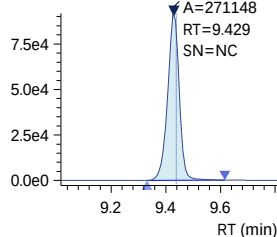


R1 563.10>269.10 (-)

9.53e2

13C7-PFUnDA_IS

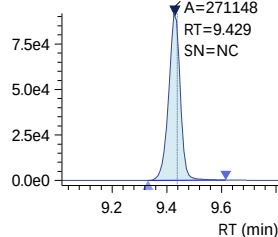
Conc. 1.2500



9.18e4

13C7-PFUnDA

Conc. 1.3294



9.18e4

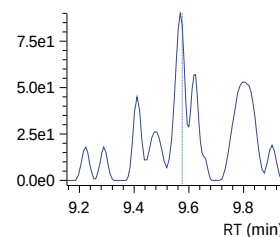
PFNS

Conc. ----

R#1 0.00 (63.31)

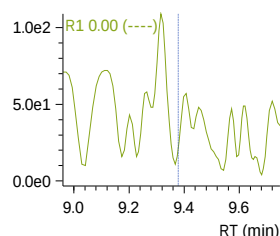
R#2 0.00 (62.49)

Q 548.80>79.90 (-)



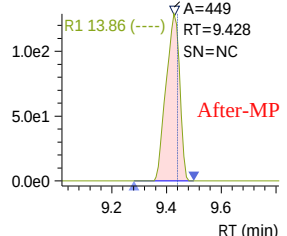
R1 548.80>98.80 (-)

9.00e1



R2 532.80>353.00 (-)

1.09e2



R1 563.10>269.10 (-)

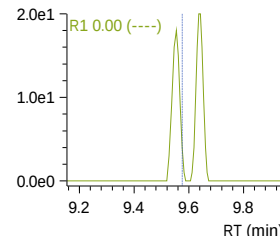
1.29e2



1.29e2

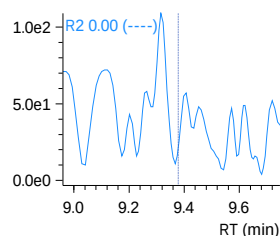


2.00e1



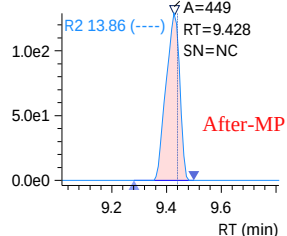
R2 548.80>98.80 (-)

2.00e1



R2 532.80>353.00 (-)

1.09e2



R1 563.10>269.10 (-)

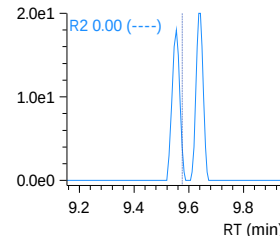
1.29e2



1.29e2



2.00e1

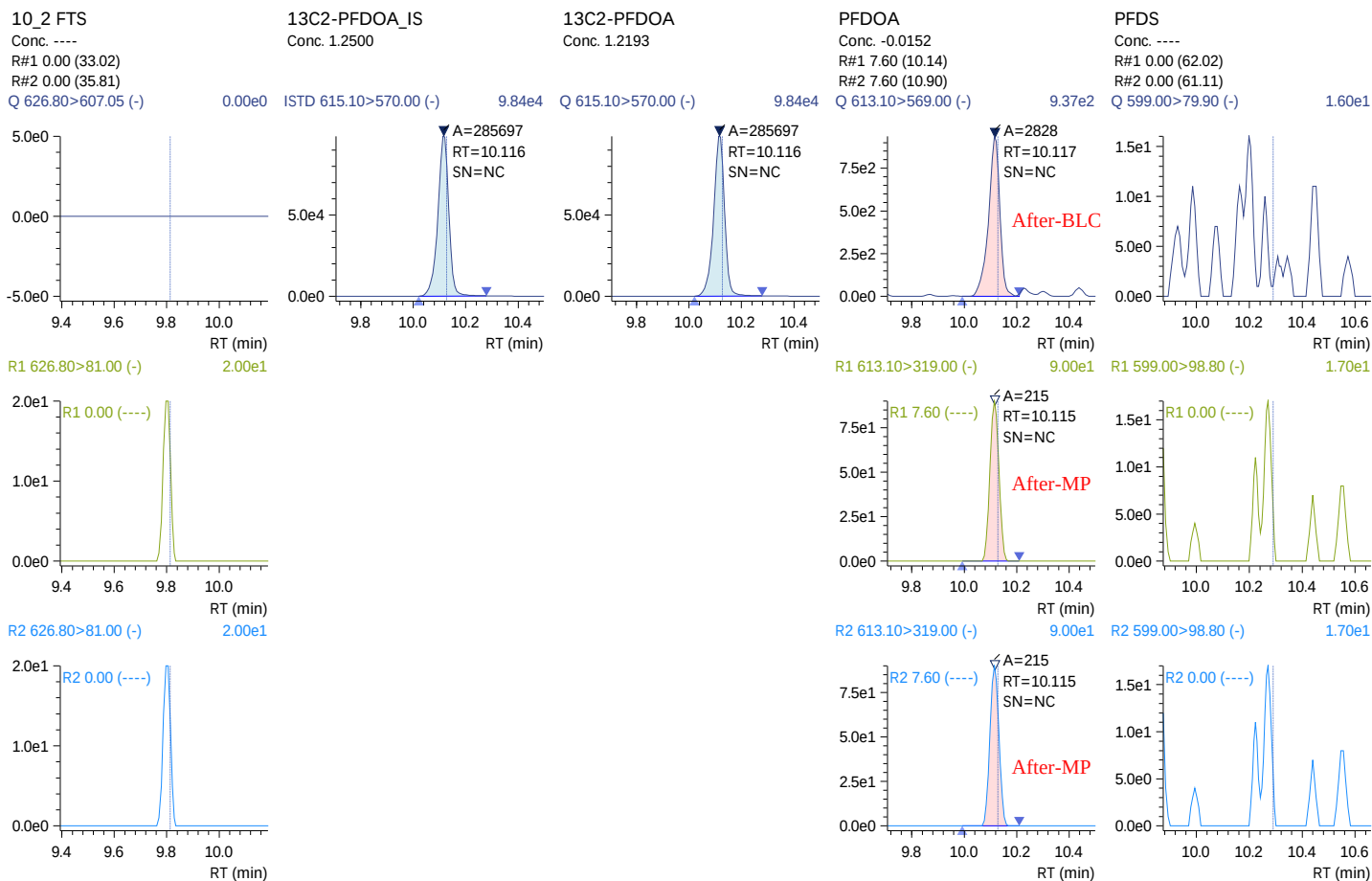


R2 548.80>98.80 (-)

2.00e1



240119_037 (continued)

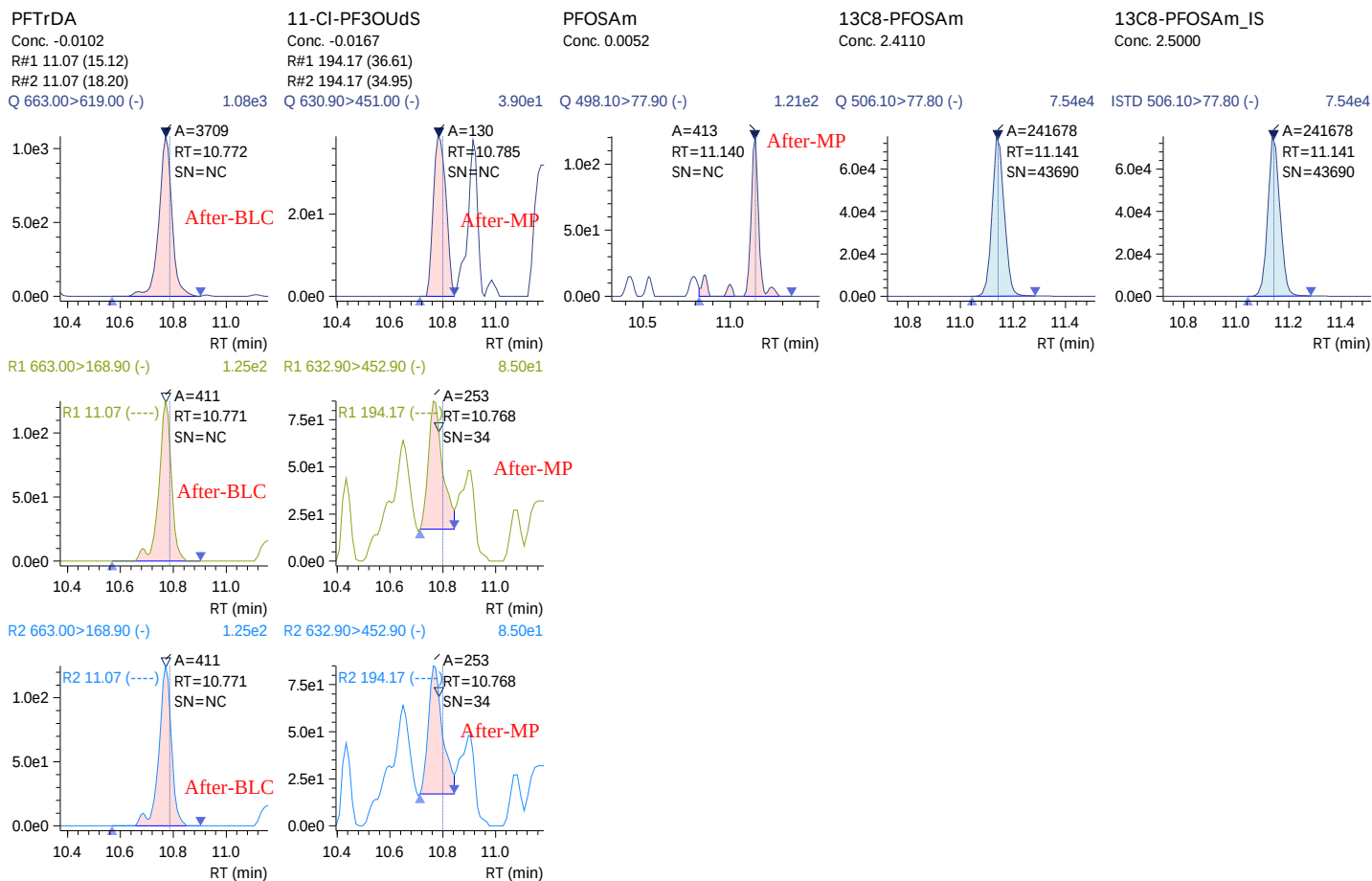


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_037 (continued)

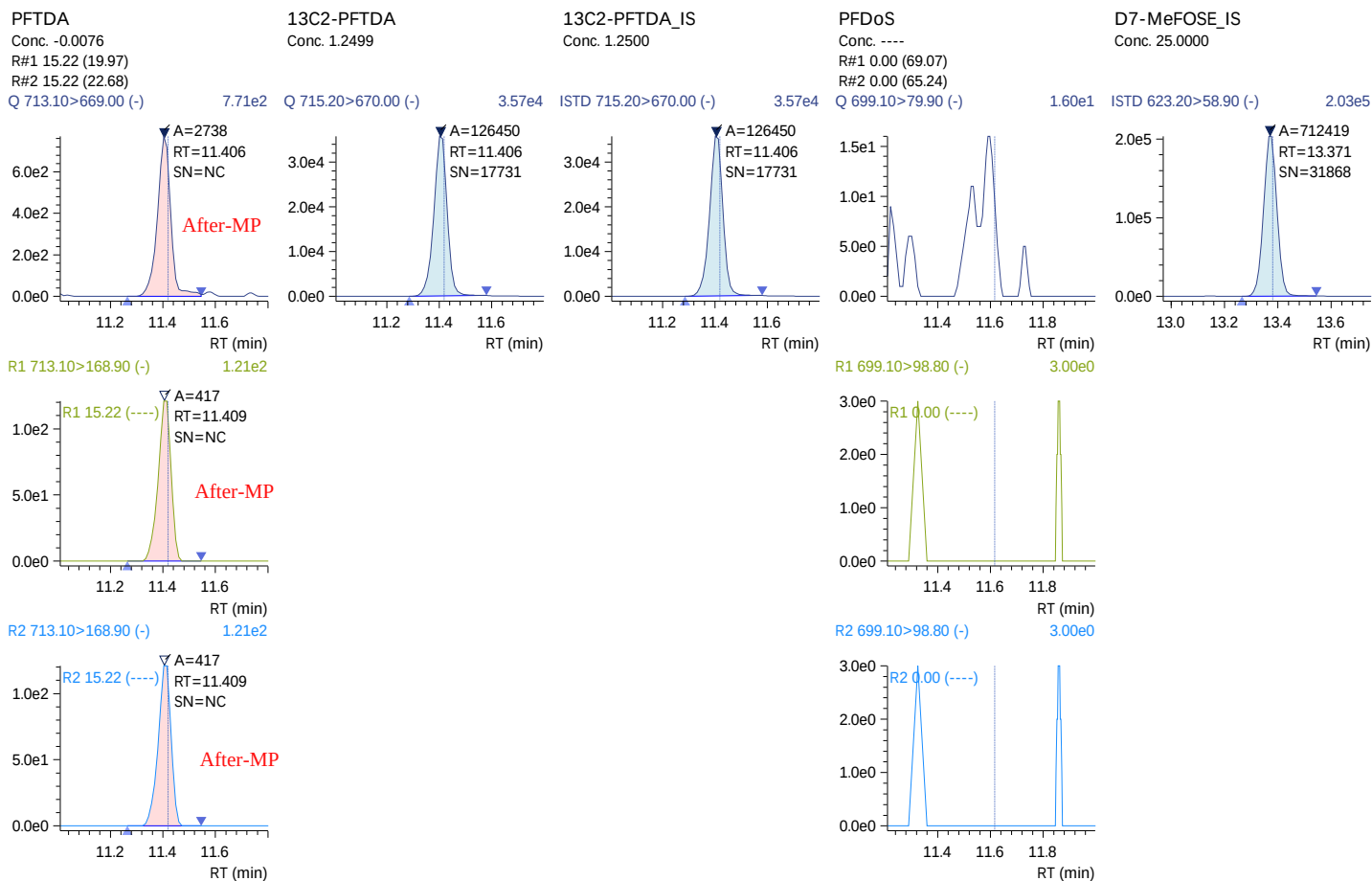


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_037 (continued)





240119_037 (continued)

D7-MeFOSE
Conc. 28.8266

MeFOSE
Conc. ----

13C2-PFHXA_IS
Conc. 2.5000

13C2-PFHXA
Conc. 2.4050

PFHXA

Conc. -0.0073
R#1 11.02 (11.64)
R#2 11.02 (14.51)

Q 623.20>58.90 (-)

2.03e5

Q 616.10>59.00 (-)

4.70e1

ISTD 815.00>770.05 (-)

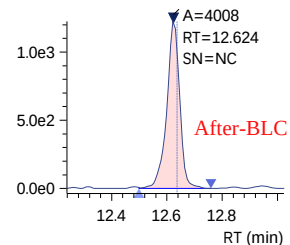
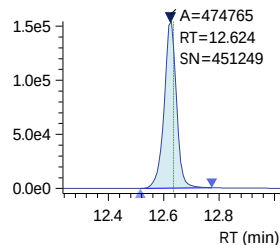
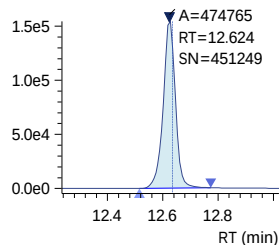
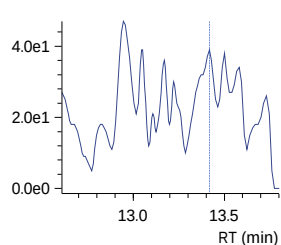
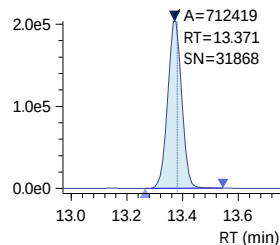
1.54e5

Q 815.00>770.05 (-)

1.54e5

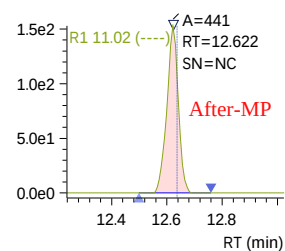
Q 813.00>768.95 (-)

1.23e3



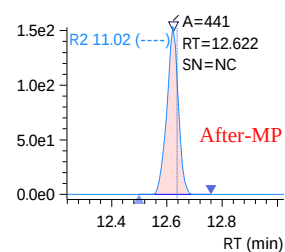
R1 813.00>218.95 (-)

1.53e2



R2 813.00>218.95 (-)

1.53e2





240119_037 (continued)

D3-MeFOSA
Conc. 2.5944

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. ----
R#1 0.00 (149.05)
R#2 0.00 (142.62)

D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 27.7987

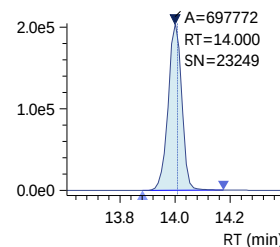
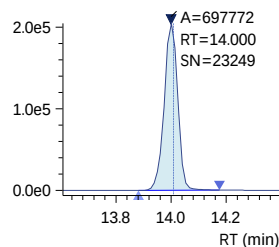
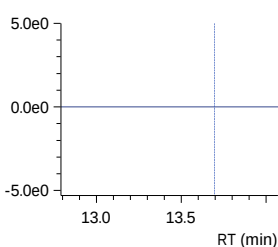
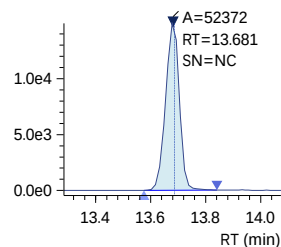
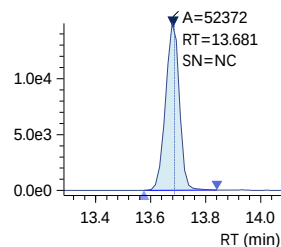
Q 515.00>219.00 (-)

1.50e4 ISTD 515.00>219.00 (-)

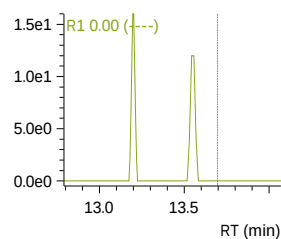
1.50e4 Q 511.90>219.00 (-)

0.00e0 ISTD 639.20>58.90 (-)

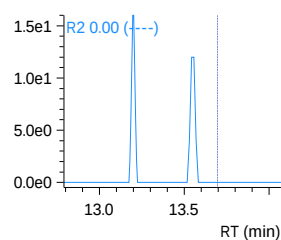
2.05e5 Q 639.20>58.90 (-)



R1 511.90>169.00 (-) 1.60e1

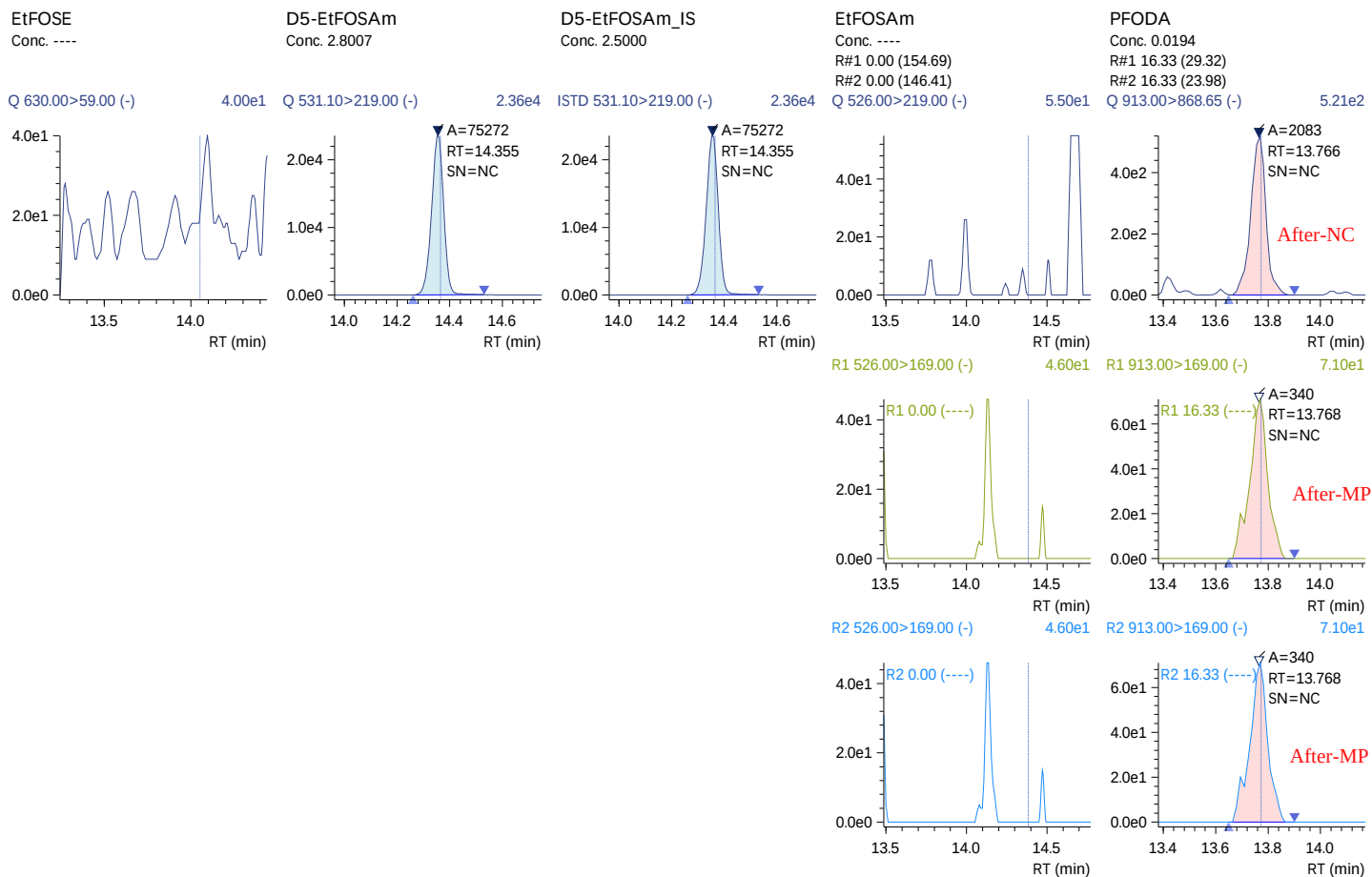


R2 511.90>169.00 (-) 1.60e1





240119_037 (continued)



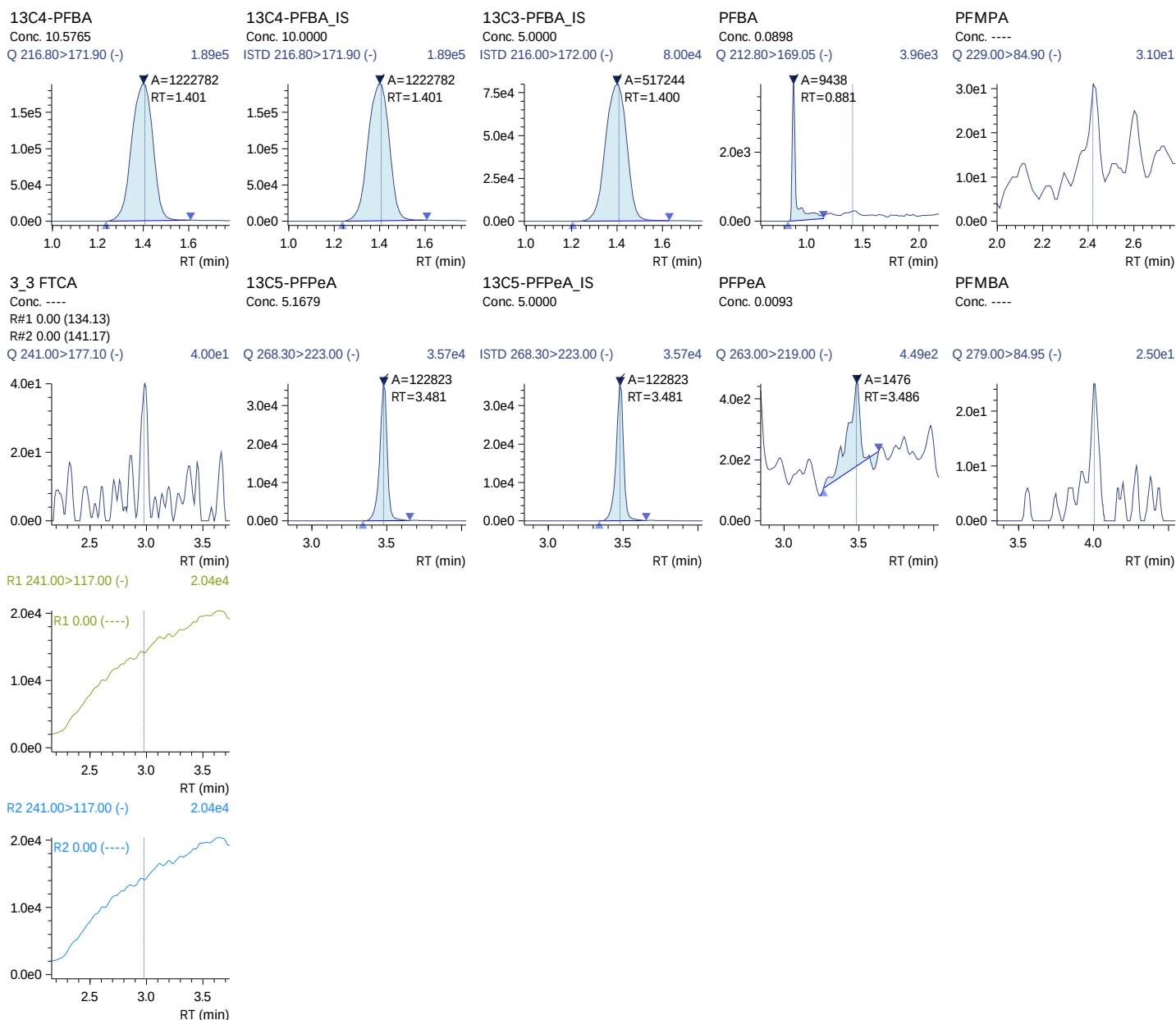
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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_037

Sample ID: 1633 CCB
Date Acquired: 1/20/2024 1:45:49 AM
Acquired by: System Administrator
Data File: 240119_037
Vial: 54 | Inj. Volume: 10.0000uL | Tray: 1





240119_037 (continued)

13C2-4_2 FTS
Conc. 6.4765

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. ----
R#1 0.00 (34.14)
R#2 0.00 (29.06)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. ----
R#1 0.00 (47.53)
R#2 0.00 (46.72)

Q 329.10>80.90 (-)

5.78e4

ISTD 329.10>80.90 (-)

5.78e4

Q 327.10>307.00 (-)

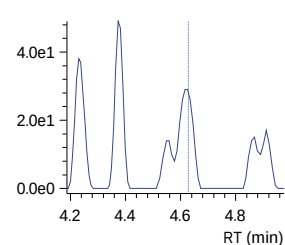
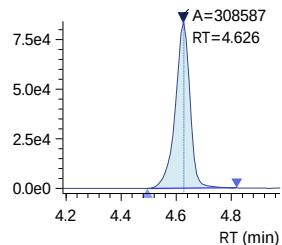
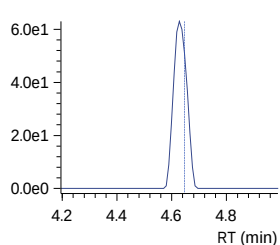
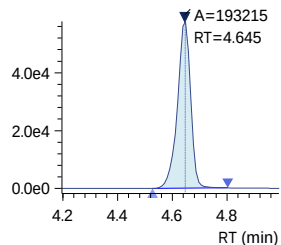
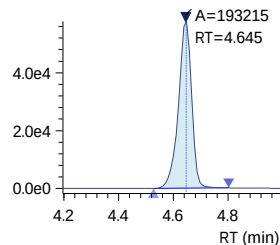
6.30e1

ISTD 302.10>79.90 (-)

8.42e4

Q 298.70>79.90 (-)

4.90e1

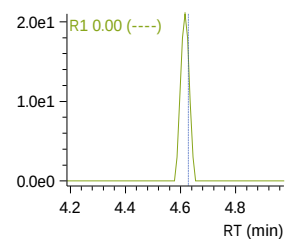
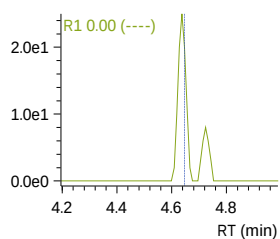


R1 327.10>80.90 (-)

2.50e1

R1 298.70>98.80 (-)

2.10e1

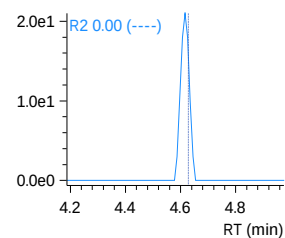
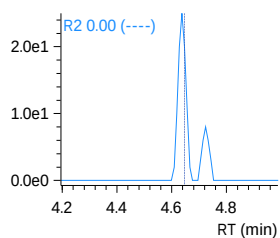


R2 327.10>80.90 (-)

2.50e1

R2 298.70>98.80 (-)

2.10e1





240119_037 (continued)

13C3-PFBS
Conc. 2.5083

NFDHA
Conc. ----
R#1 0.00 (37.88)
R#2 0.00 (40.25)

13C5-PFHxA
Conc. 2.5131

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

Q 302.10>79.90 (-)

8.42e4

Q 295.00>201.00 (-)

2.87e2

Q 318.00>273.00 (-)

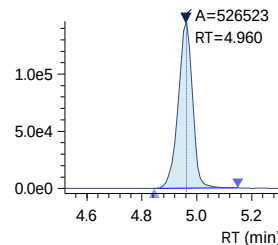
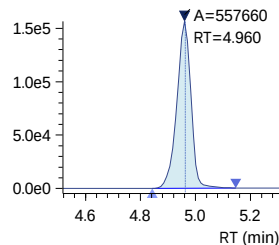
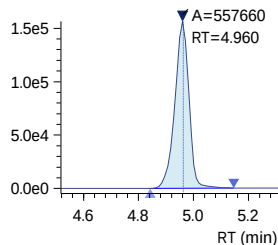
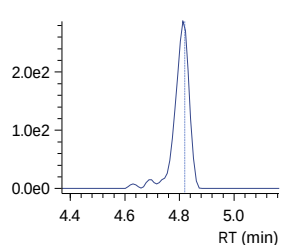
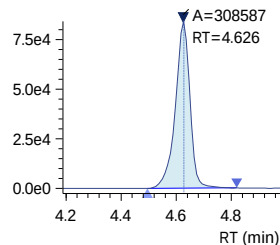
1.56e5

ISTD 318.00>273.00 (-)

1.56e5

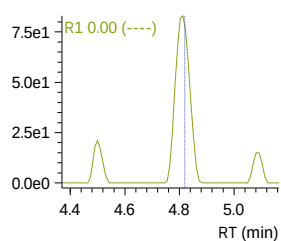
ISTD 315.10>270.00 (-)

1.46e5



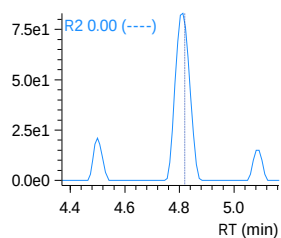
R1 295.00>84.90 (-)

8.30e1



R2 295.00>84.90 (-)

8.30e1





240119_037 (continued)

PFHxA
Conc. 0.0197

PFEESA
Conc. ----
R#1 0.00 (5.88)
R#2 0.00 (6.11)

13C3-HFPO-DA
Conc. 11.7088

13C3-HFPO-DA_IS
Conc. 10.0000

HFPO-DA
Conc. ----
R#1 0.00 (63.80)
R#2 0.00 (65.61)

Q 313.00>269.00 (-)

1.08e3

Q 314.80>135.00 (-)

1.30e2

Q 286.90>168.90 (-)

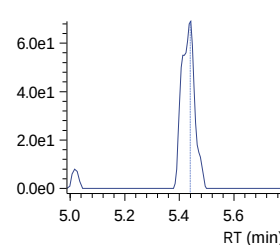
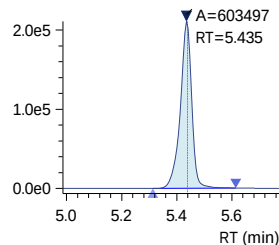
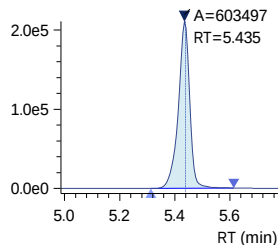
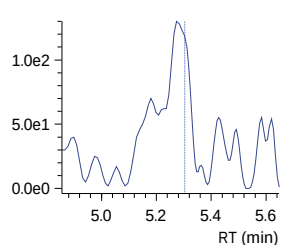
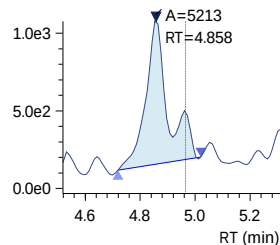
2.11e5

ISTD 286.90>168.90 (-)

2.11e5

Q 284.90>168.90 (-)

6.90e1

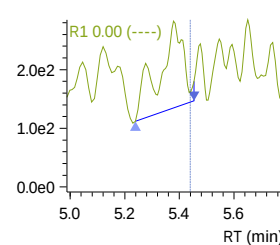
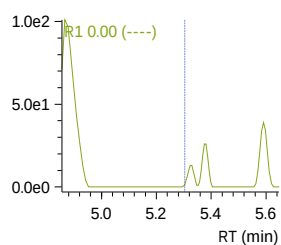


R1 314.80>82.90 (-)

1.01e2

R1 284.90>184.90 (-)

2.85e2

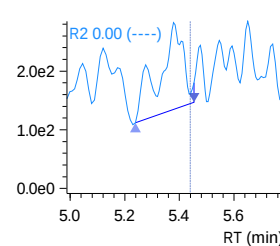
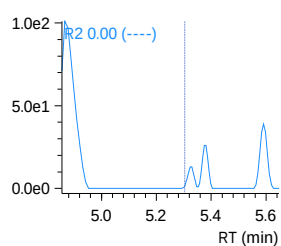


R2 314.80>82.90 (-)

1.01e2

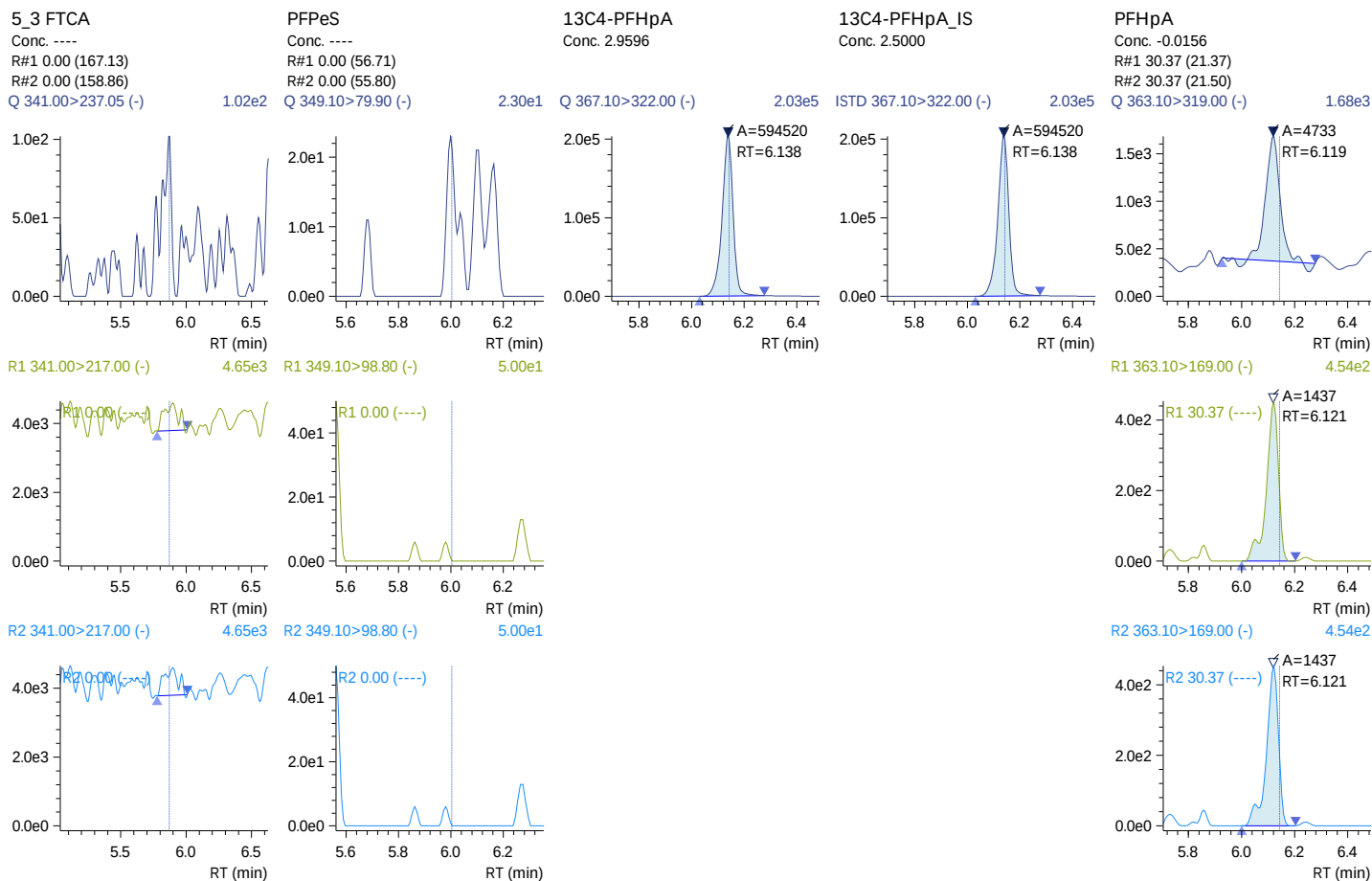
R2 284.90>184.90 (-)

2.85e2



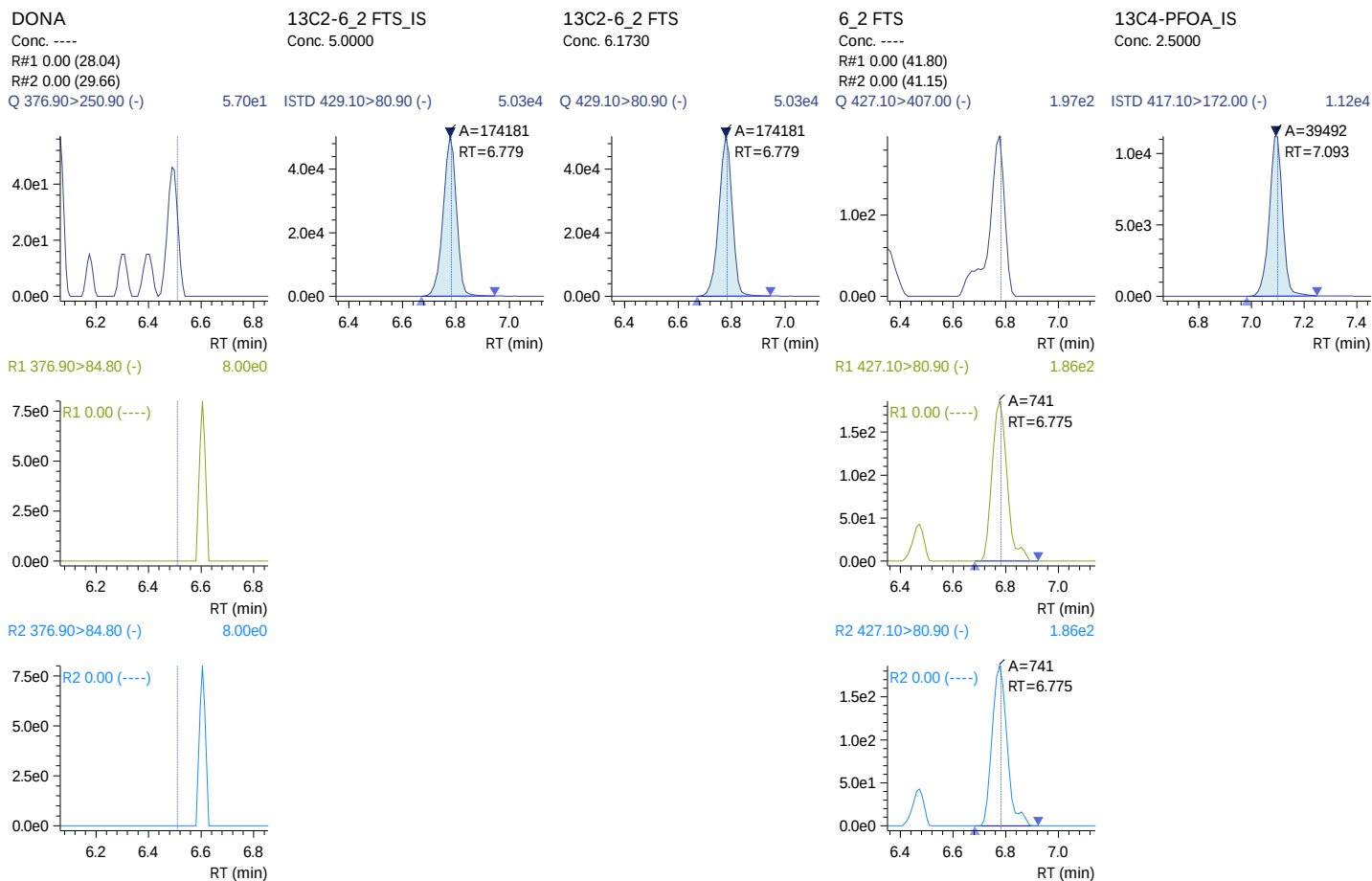


240119_037 (continued)





240119_037 (continued)





240119_037 (continued)

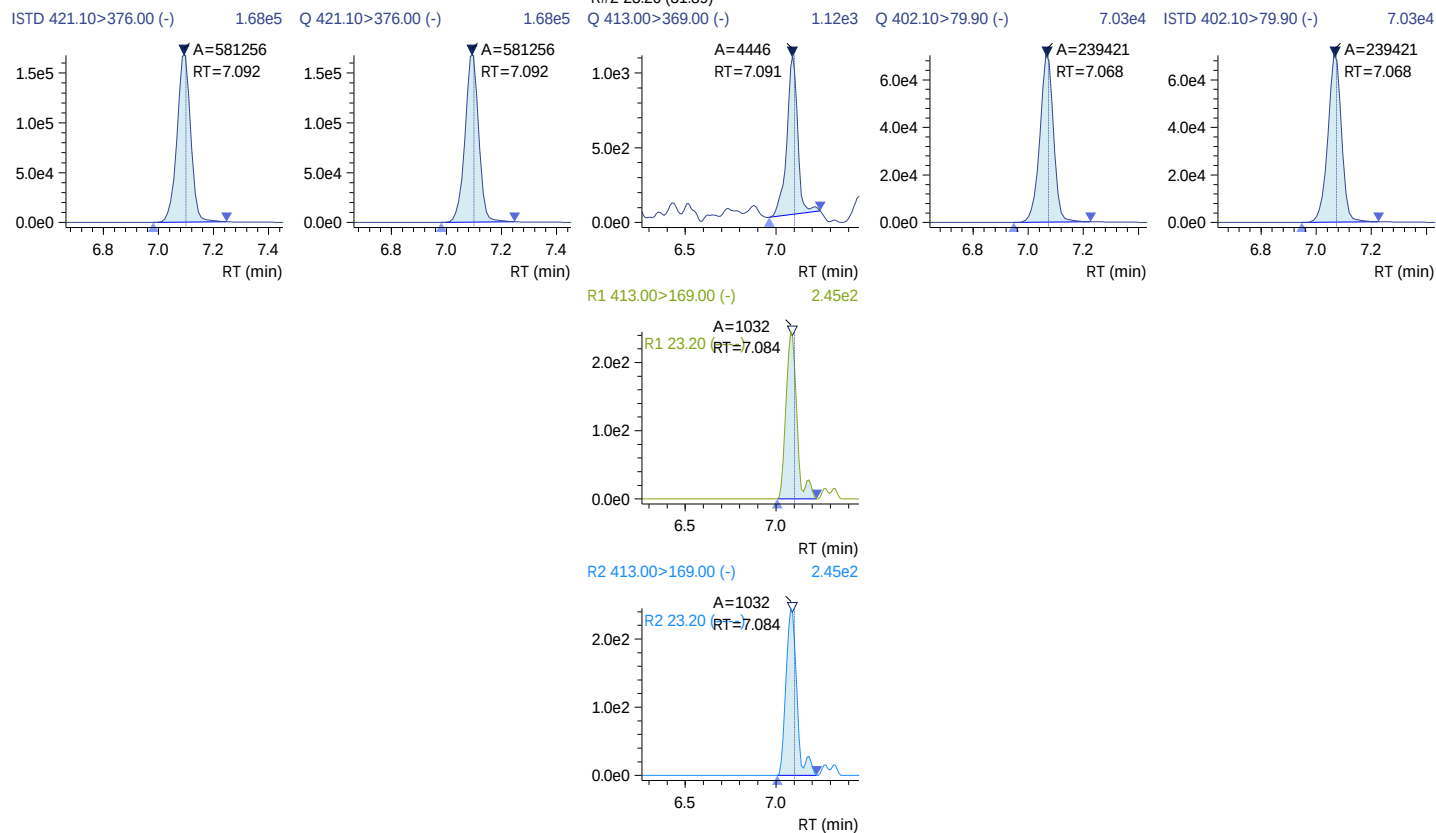
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.6333

PFOA
Conc. -0.0141
R#1 23.20 (29.05)
R#2 23.20 (31.89)

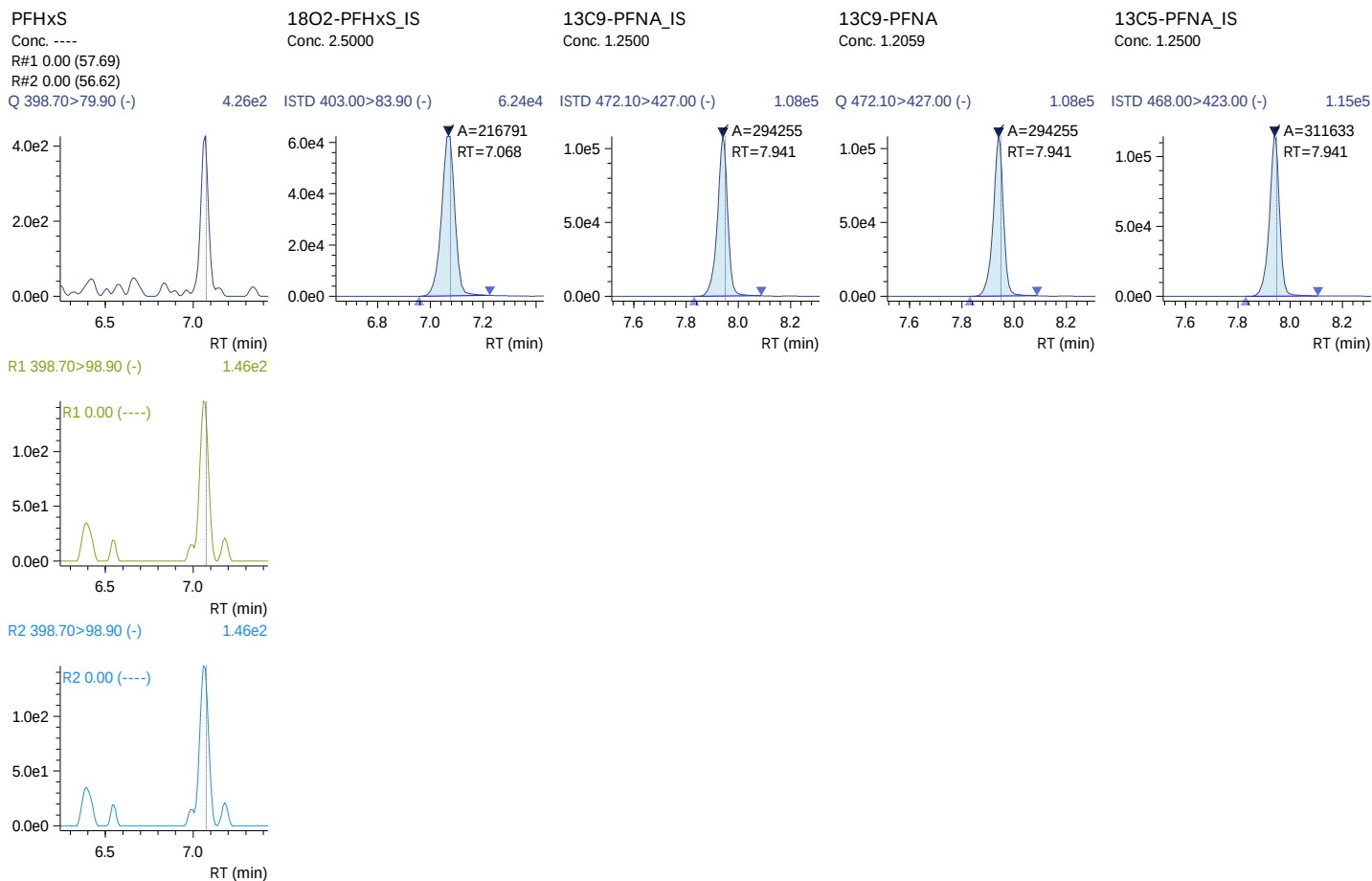
13C3-PFHxS
Conc. 2.5730

13C3-PFHxS_IS
Conc. 2.5000



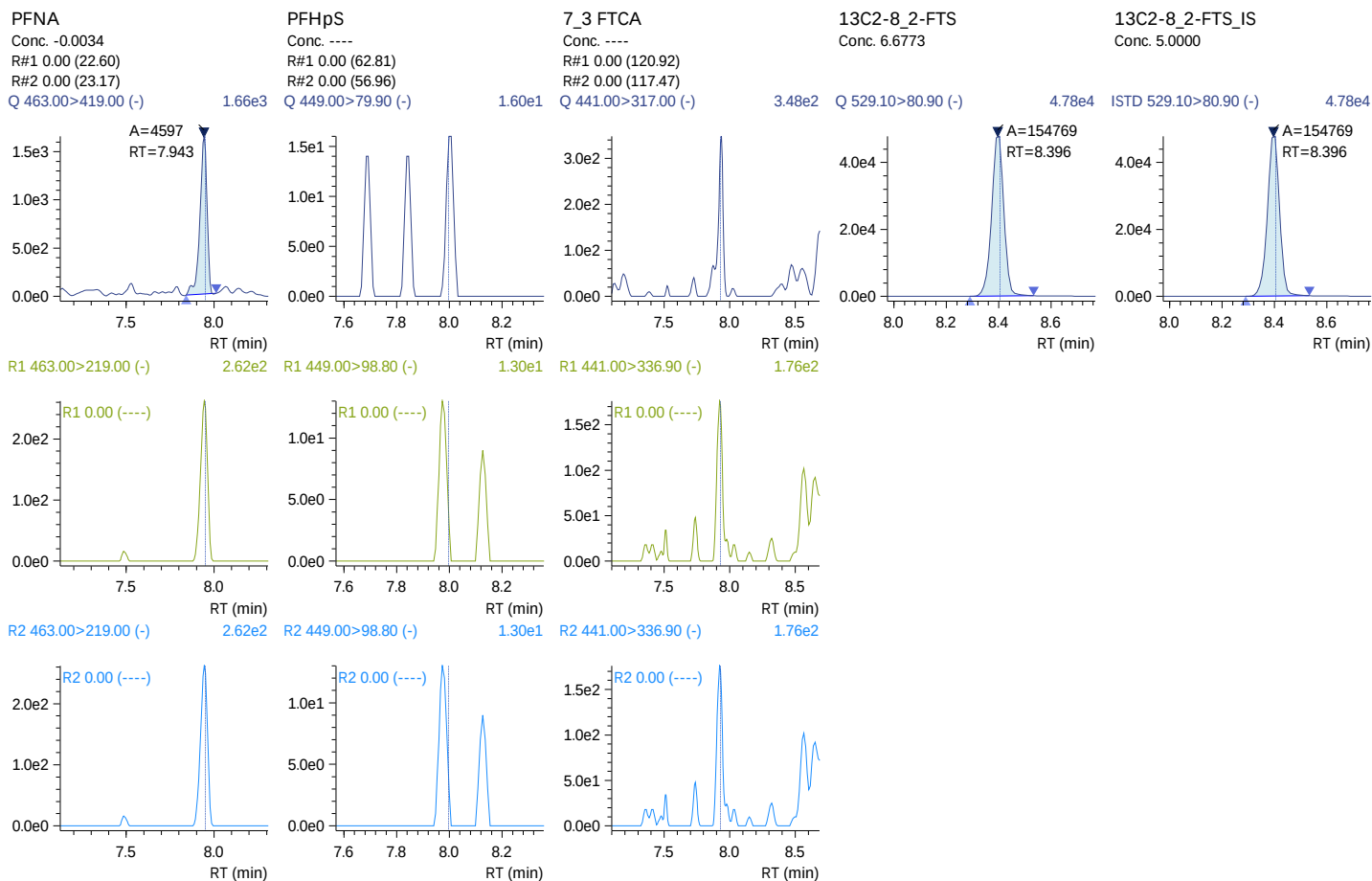


240119_037 (continued)



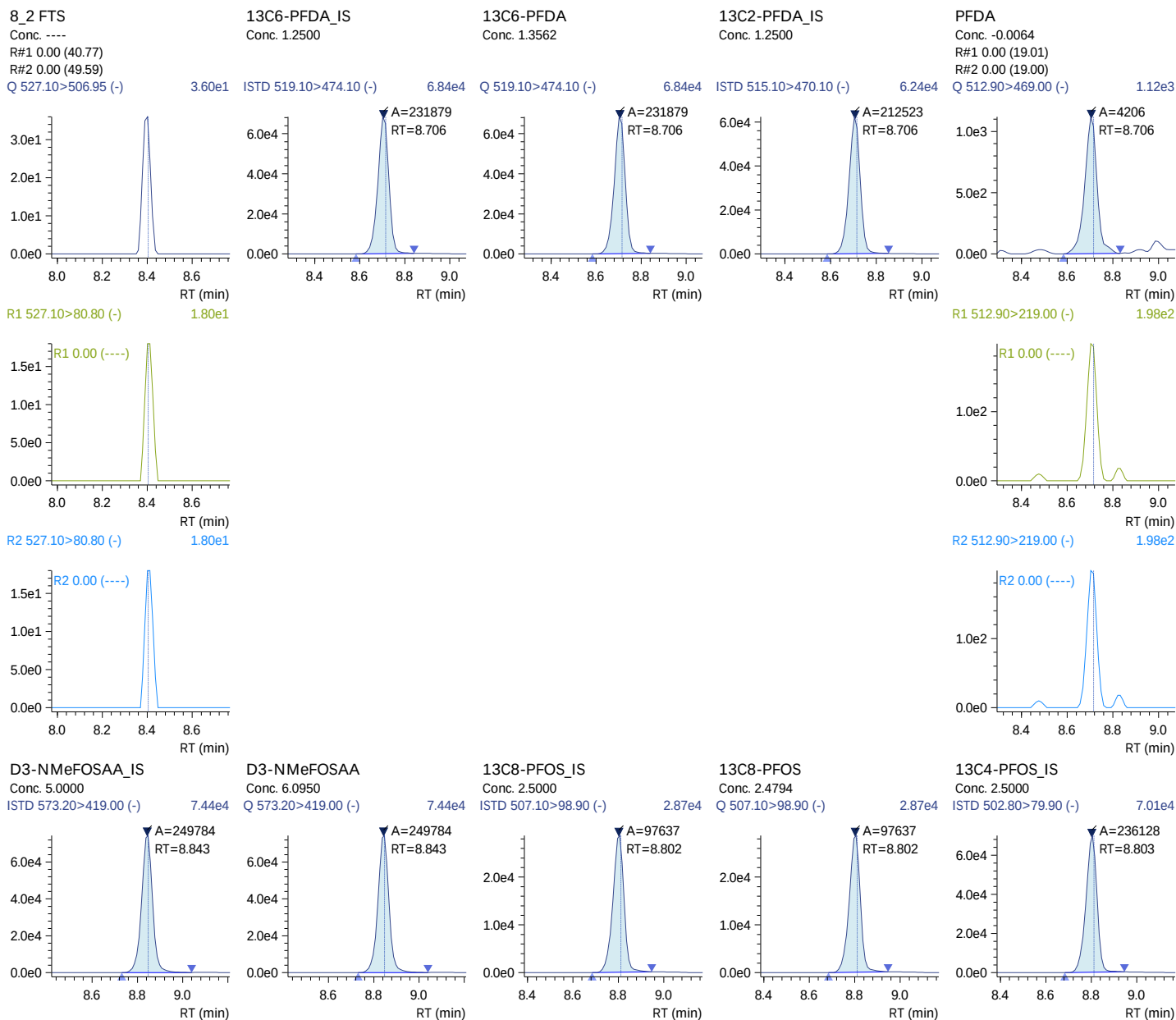


240119_037 (continued)



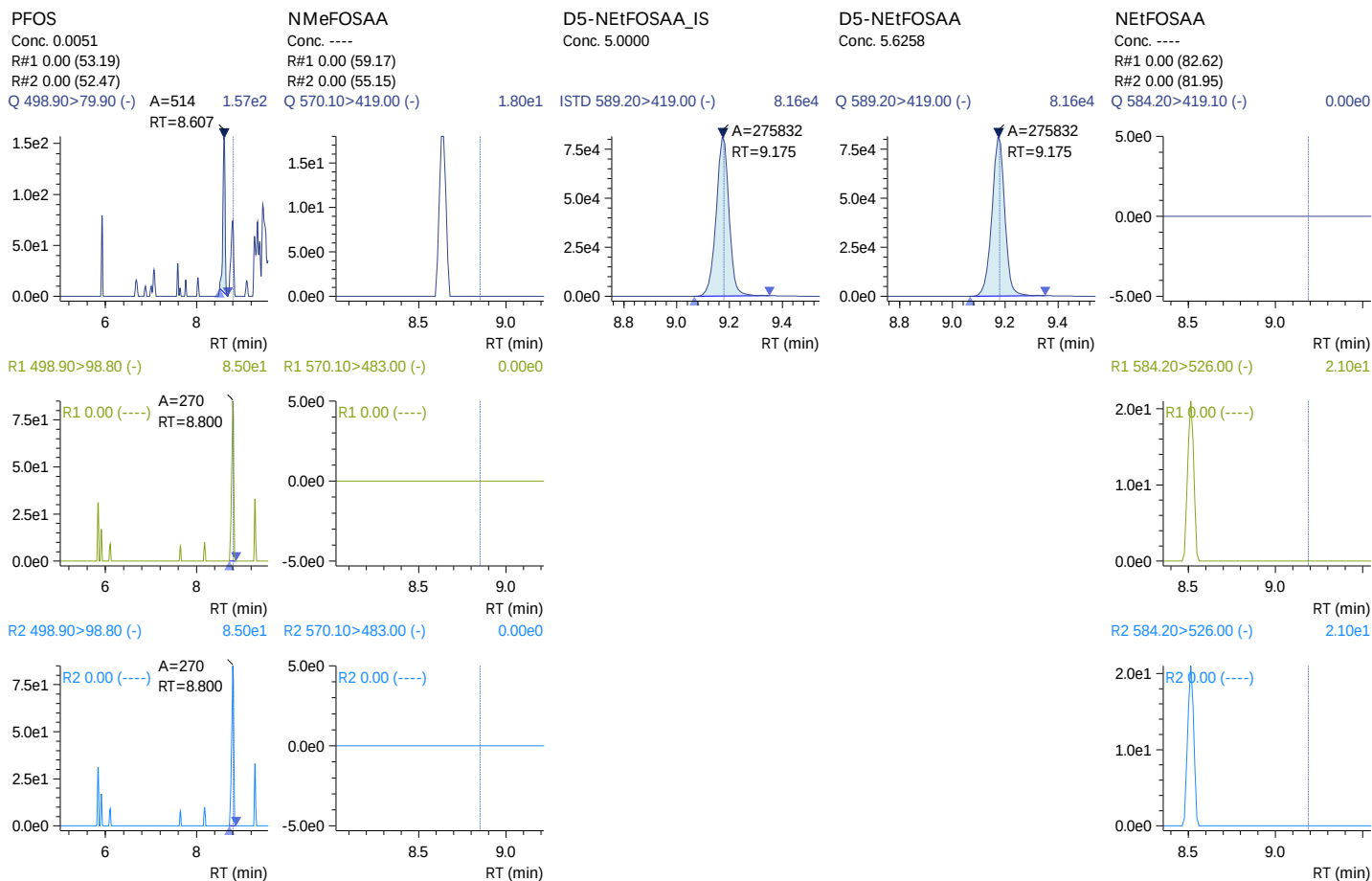


240119_037 (continued)





240119_037 (continued)





240119_037 (continued)

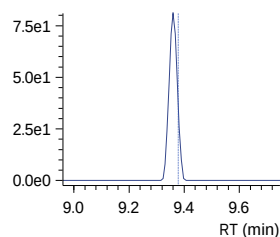
9-Cl-PF3ONS

Conc. ----

R#1 0.00 (31.76)

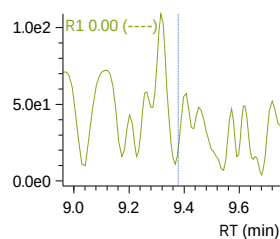
R#2 0.00 (32.76)

Q 530.80>351.00 (-)



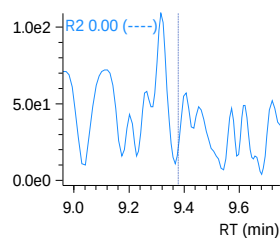
R1 532.80>353.00 (-)

1.09e2



R2 532.80>353.00 (-)

1.09e2



RT (min)

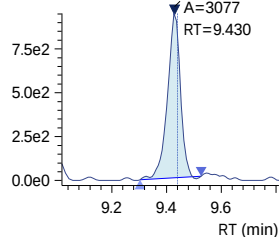
PFUnDA

Conc. -0.0140

R#1 0.00 (12.31)

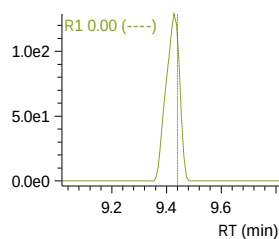
R#2 0.00 (13.12)

Q 563.10>519.00 (-)



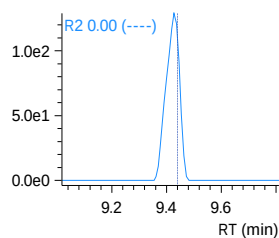
R1 563.10>269.10 (-)

1.29e2



R2 563.10>269.10 (-)

1.29e2

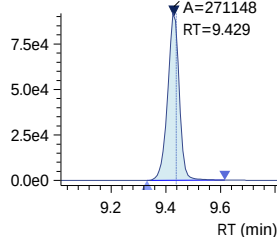


RT (min)

13C7-PFUnDA_IS

Conc. 1.2500

ISTD 570.00>525.10 (-)



A=271148
RT=9.429



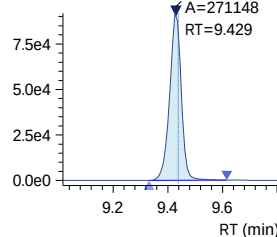
A=271148
RT=9.429



13C7-PFUnDA

Conc. 1.3294

Q 570.00>525.10 (-)



A=271148
RT=9.429



A=271148
RT=9.429



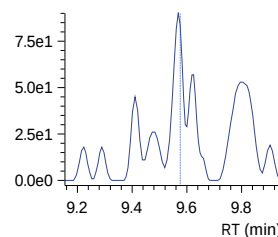
PFNS

Conc. ----

R#1 0.00 (63.31)

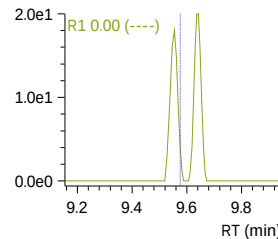
R#2 0.00 (65.22)

Q 548.80>79.90 (-)



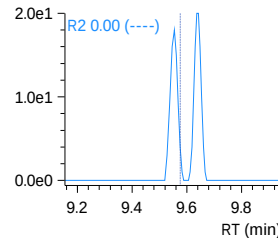
R1 548.80>98.80 (-)

2.00e1



R2 548.80>98.80 (-)

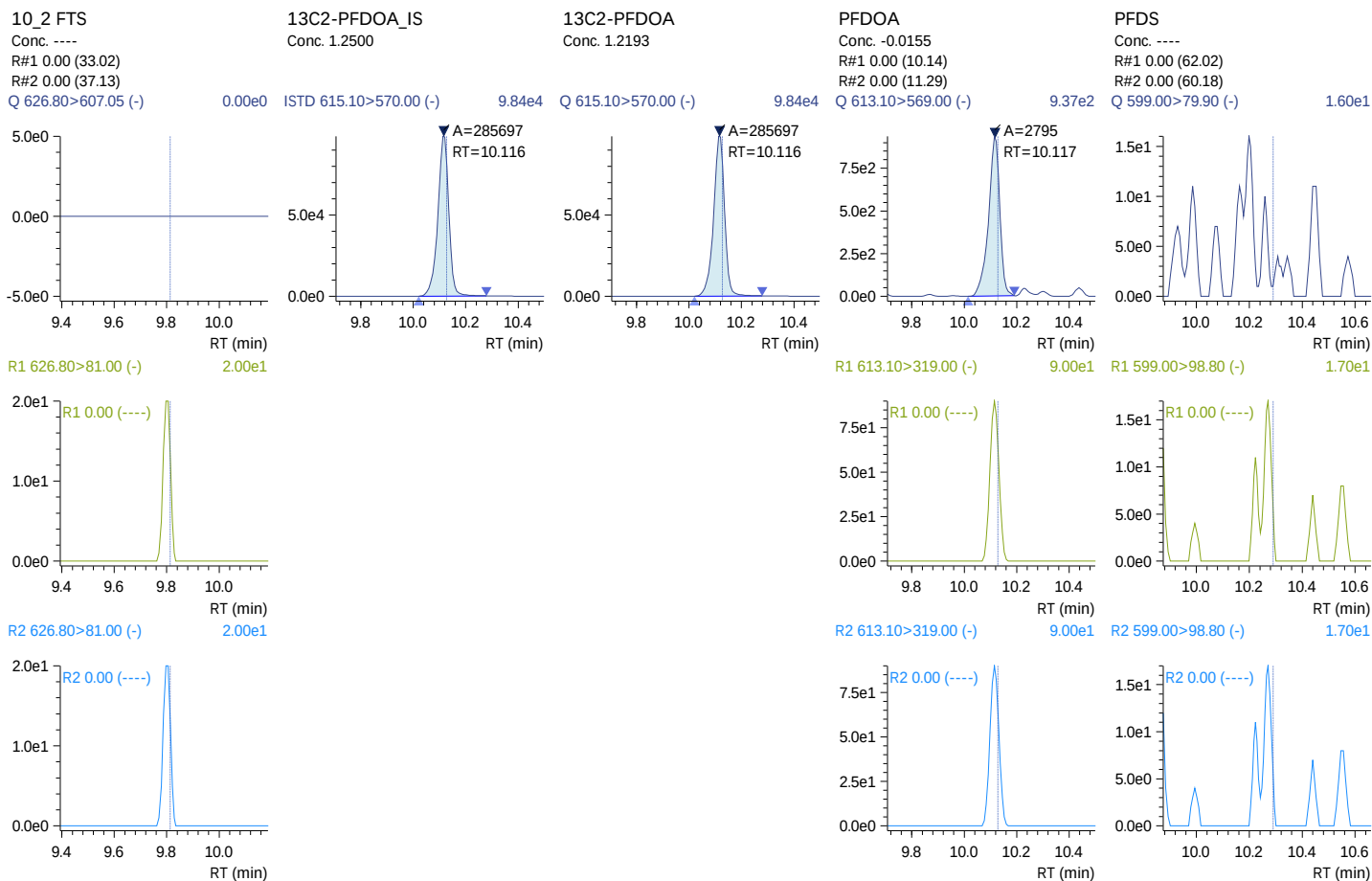
2.00e1



RT (min)

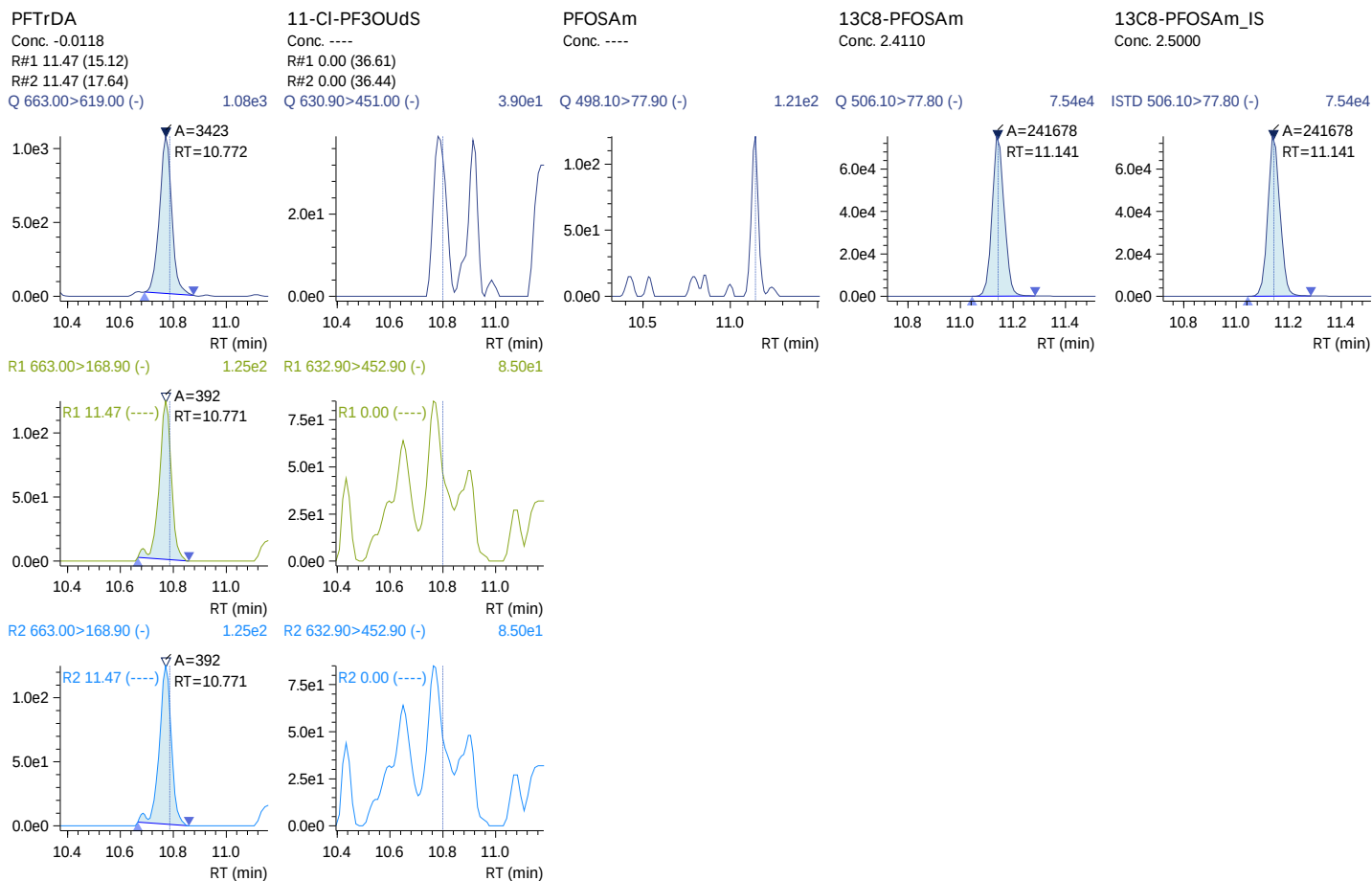


240119_037 (continued)



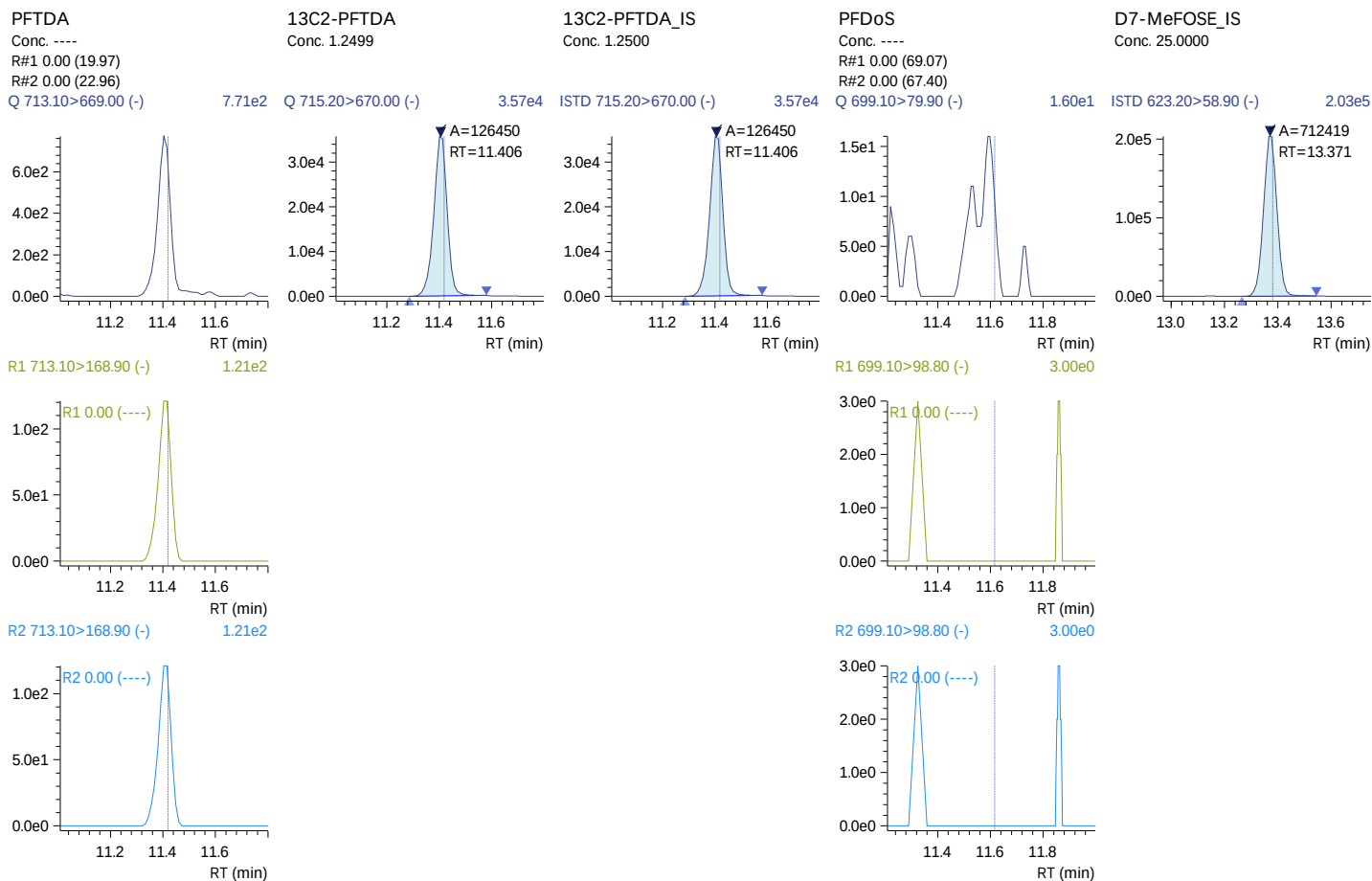


240119_037 (continued)





240119_037 (continued)





240119_037 (continued)

D7-MeFOSE
 Conc. 28.8266

MeFOSE
 Conc. ----

13C2-PFHxDA_IS
 Conc. 2.5000

13C2-PFHxDA
 Conc. 2.4050

PFHxDA

Conc. -0.0076
 R#1 0.00 (11.64)
 R#2 0.00 (13.90)

Q 623.20>58.90 (-)

2.03e5

Q 616.10>59.00 (-)

4.70e1

ISTD 815.00>770.05 (-)

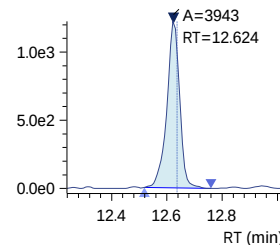
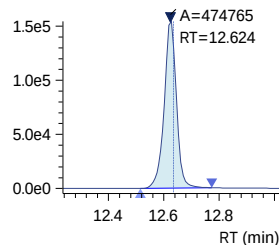
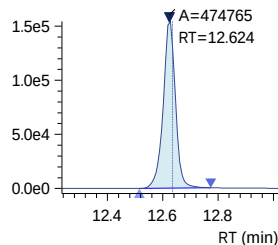
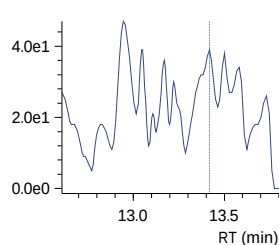
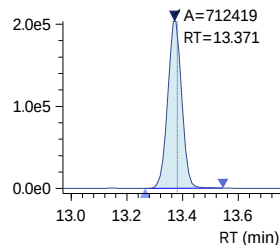
1.54e5

Q 815.00>770.05 (-)

1.54e5

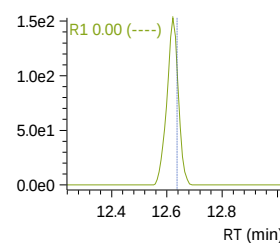
Q 813.00>768.95 (-)

1.23e3



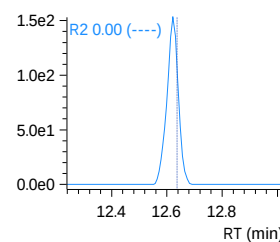
R1 813.00>218.95 (-)

1.53e2



R2 813.00>218.95 (-)

1.53e2





240119_037 (continued)

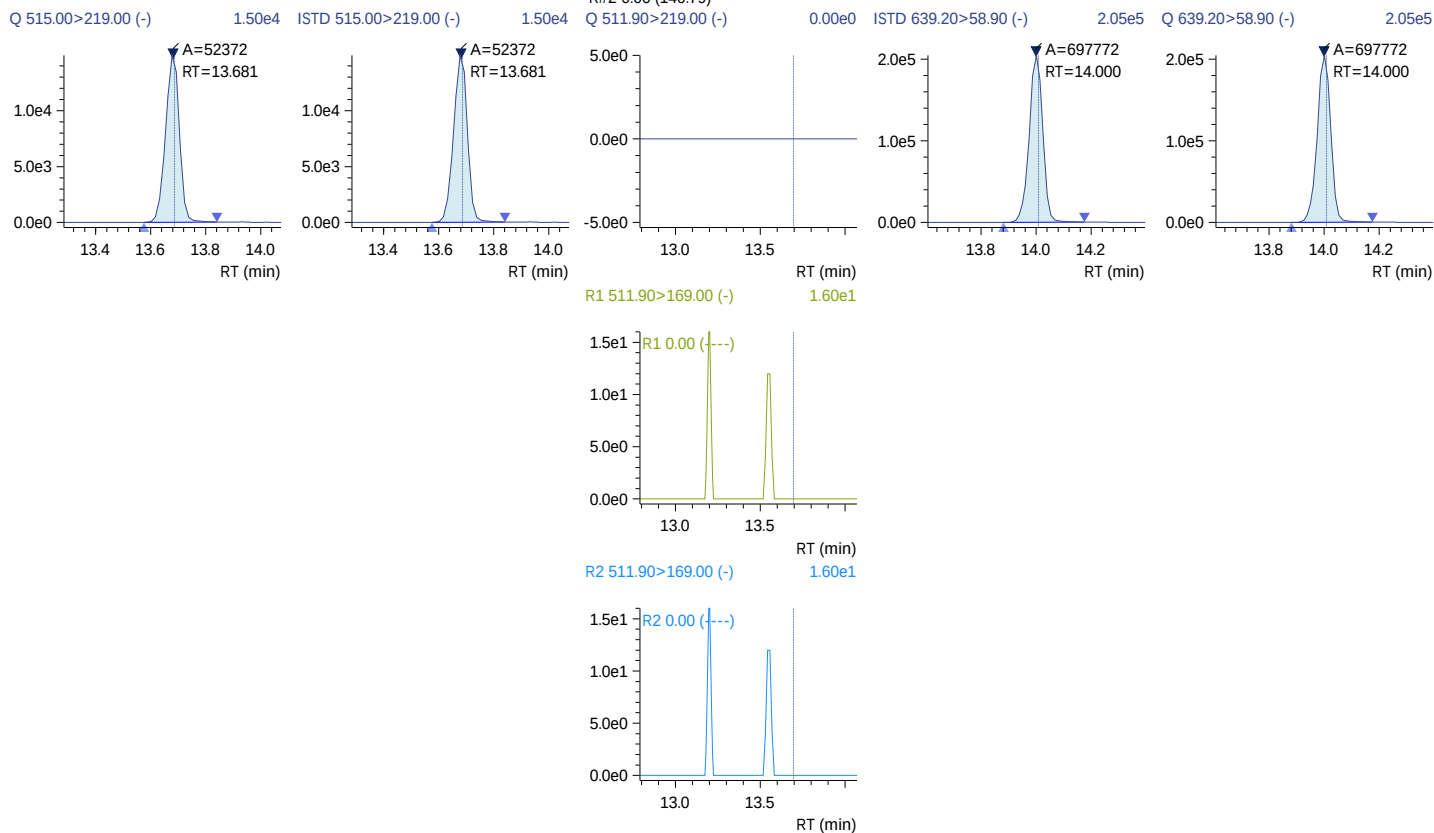
D3-MeFOSA
 Conc. 2.5944

D3-MeFOSA_IS
 Conc. 2.5000

MeFOSA
 Conc. ----
 R#1 0.00 (149.05)
 R#2 0.00 (140.79)

D9-EtFOSE_IS
 Conc. 25.0000

D9-EtFOSE
 Conc. 27.7987





240119_037 (continued)

EtFOSE
Conc. ----

D5-EtFOSAm
Conc. 2.8007

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. ----

PFODA
Conc. 0.0194

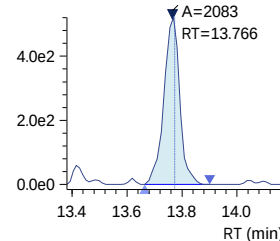
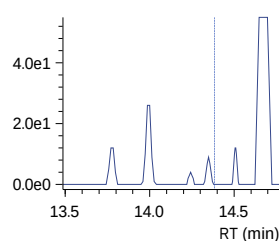
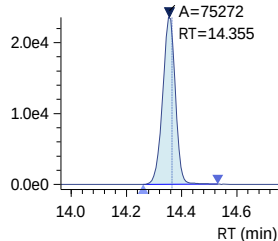
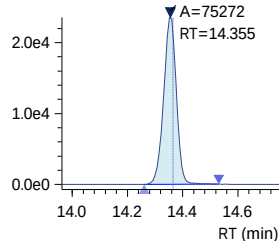
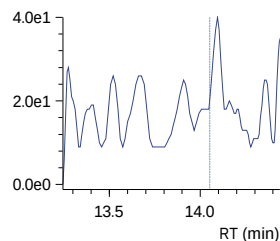
Q 630.00>59.00 (-)

Q 531.10>219.00 (-)

ISTD 531.10>219.00 (-)

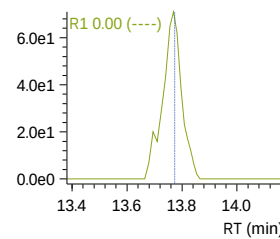
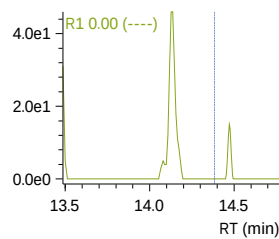
Q 526.00>219.00 (-)

Q 913.00>868.65 (-)



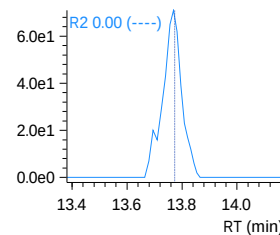
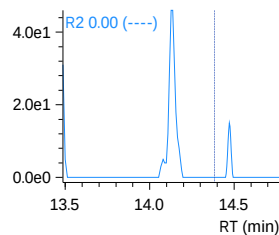
R1 526.00>169.00 (-)

R1 913.00>169.00 (-)



R2 526.00>169.00 (-)

R2 913.00>169.00 (-)



Validation Report

1st PS 01/23/24
2nd UA 01/23/24

Data File: J:\LCMS08\Data\240119_1633_B1\240119_052
Lab ID: KQ2400951-13
RunType: CCB
Matrix: Soil

Date Acquired: 1/20/24 07:34
Batch ID: 830171
Analysis Method: 1633/PFAS_DOD5.4

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery		X
Continuing Calibration Recovery (Closing)	X	
Internal Standards	X	
Surrogates	X	
Above Highest ICAL Level	X	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Continuing Calibration Recovery	13C2-6:2 FTS	134	70	130	native in control

Primary Review: _____

Secondary Review: _____

Quantitation Report

1st *PS* 01/23/24
2nd *UA* 01/23/24

Data File:	J:\LCMS08\Data\240119_1633_B1\240119_052	Instrument:	K-LCMS-08
Acqu Date:	1/20/24 07:34	Vial:	46
Run Type:	CCB	Dilution:	1
Lab ID:	KQ2400951-13	Raw Units:	ng/mL

Bottle ID:		Tier:	IV	Matrix:	Soil
Prod Code:	PFAS_DOD5.4	Collect Date:	11/28/23	Receive Date:	11/29/23

Analysis Lot:	830171	Prep Lot:		Report Group:	KQ2400951
Analysis	1633	Prep Method:			
		Prep Date:			

Title:	Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM	Calibration ID:	KC2400027
		Report List ID:	24615

Internal Standard Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Area Criteria
18O2-PFHxS	7.070	0.00	214508	2.5000	OK
13C4-PFOS	8.802	0.00	255055	2.5000	OK
13C3-PFBA	1.401	-0.01	543758	5.0000	OK
13C2-PFHxA	4.961	0.00	527282	2.5000	OK
13C4-PFOA	7.094	0.00	40244	2.5000	OK
13C5-PFNA	7.942	0.00	305563	1.2500	OK
13C2-PFDA	8.705	0.00	202805	1.2500	OK

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
13C3-PFBS	4.625	0.00	301227	2.4745	99	20 - 150	Y
13C3-PFHxS	7.069	0.00	237451	2.5790	103	20 - 150	Y
13C8-PFOS	8.801	0.00	99298	2.3344	93	20 - 150	Y
13C4-PFBA	1.401	-0.01	1267520	10.4289	104	20 - 150	Y
13C5-PFPeA	3.476	0.00	121160	5.0906	102	20 - 150	Y
13C5-PFHxA	4.960	0.00	563019	2.5336	101	20 - 150	Y
13C4-PFHpA	6.139	0.00	600807	2.9866	119	20 - 150	Y
13C8-PFOA	7.093	0.00	581169	2.5837	103	20 - 150	Y
13C9-PFNA	7.942	0.00	299519	1.2519	100	20 - 150	Y
13C6-PFDA	8.705	0.00	229285	1.4053	112	20 - 150	Y
13C7-PFUnDA	9.428	0.00	262436	1.3484	108	20 - 150	Y
13C2-PFDoDA	10.116	0.00	278997	1.2478	100	20 - 150	Y
13C2-PFTeDA	11.405	0.00	123901	1.2834	103	20 - 150	Y
13C8-FOSA	11.144	+0.00	226384	2.0908	84	20 - 150	Y
D3-MeFOSA	13.680	+0.00	50403	2.3116	92	20 - 150	Y
D5-EtFOSA	14.355		70449	2.4267	97	20 - 150	Y
D7-MeFOSE	13.370	+0.00	697752	26.1379	105	20 - 150	Y
D9-EtFOSE	13.999		666310	24.5754	98	20 - 150	Y

			1st	PS	01/23/24
Data File:	J:\LCMS08\Data\240119_1633_B1\240119_052	Instrument:	K-LCMS08	2nd	01/23/24
Acqu Date:	1/20/24 07:34	Vial:	46	UA	
Run Type:	CCB	Dilution:	1		
Lab ID:	KQ2400951-13	Raw Units:	ng/mL		

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
D3-MeFOSAA	8.841	0.00	250029	5.6482	113	20 - 150	Y
D5-EtFOSAA	9.172	0.00	272465	5.1448	103	20 - 150	Y
13C2-4:2 FTS	4.644	0.00	189343	6.4143	128	20 - 150	Y
13C2-6:2 FTS	6.779	0.00	182350	6.5313	131	20 - 150	Y
13C2-8:2 FTS	8.396	0.00	142886	6.2303	125	20 - 150	Y
13C3-HFPO-DA	5.436	0.00	595770	11.5423	115	20 - 150	Y

Target Compounds

Final Conc.Units: ng/g

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Perfluorobutane sulfonic acid (PFBS)	0		0	0	0	U	Y
Perfluoropentane sulfonic acid (PFPeS)	0		0	0	0	U	Y
Perfluorohexane sulfonic acid (PFHxS)	7.069	0.00	1266	-0.0080	0	U	Y
Perfluoroheptane sulfonic acid (PFHpS)	0		0	0	0	U	Y
Perfluorooctane sulfonic acid (PFOS)	8.807	+0.00	351	0.0034	0.0034	U	Y
Perfluorononane sulfonic acid (PFNS)	0		0	0	0	U	Y
Perfluorodecane sulfonic acid (PFDS)	0		0	0	0	U	Y
Perfluorododecane sulfonic acid (PFDoS)	0		0	0	0	U	Y
Perfluorobutanoic acid (PFBA)	1.418	+0.01	789	0.0072	0.0072	U	Y
Perfluoropentanoic acid (PFPeA)	3.480	0.00	1442	0.0092	0.0092	U	Y
Perfluorohexanoic acid (PFHxA)	4.962	0.00	1773	0.0011	0.0011	U	Y
Perfluoroheptanoic acid (PFHpA)	6.121	-0.02	5793	-0.0115	0	U	Y
Perfluorooctanoic acid (PFOA)	7.092	-0.01	4389	-0.0145	0	U	Y
Perfluorononanoic acid (PFNA)	7.938	-0.01	3846	-0.0083	0	U	Y
Perfluorodecanoic acid (PFDA)	8.706	0.00	4866	-0.0032	0	U	Y
Perfluoroundecanoic acid (PFUnDA)	9.430	0.00	2719	-0.0154	0	U	Y
Perfluorododecanoic acid (PFDOA)	10.116	0.00	2888	-0.0144	0	U	Y
Perfluorotridecanoic acid (PFTTrDA)	10.774	0.00	3353	-0.0118	0	U	Y
Perfluorotetradecanoic acid (PFTDA)	11.404	0.00	3201	-0.0038	0	U	Y
Perfluorooctane sulfonamide (PFOSAm)	11.139	0.00	313	0.0042	0.0042	U	Y
N-Methylperfluorooctane sulfonamide (MeFOSA)	0		0	0	0	U	Y
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	0		0	0	0	U	Y
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	0		0	0	0	U	Y
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	0		0	0	0	U	Y
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	0		0	0	0	U	Y

			1st	PS	01/23/24
Data File:	J:\LCMS08\Data\240119_1633_B1\240119_052	Instrument:	K-LCMS08	UA	01/23/24
Acqu Date:	1/20/24 07:34	Vial:	46		
Run Type:	CCB	Dilution:	1		
Lab ID:	KQ2400951-13	Raw Units:	ng/mL		

Target Compounds			Final Conc.Units: ng/g				
Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	0		0	0	0	U	Y
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	4.630	-0.02	116	0.0012	0.0012	U	Y
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	6.774	-0.01	914	0.0110	0.011	U	Y
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	0		0	0	0	U	Y
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	0		0	0	0	U	Y
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	0		0	0	0	U	Y
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	7.930	0.00	736	0.0378	0.038	U	Y
Perfluoro(2-ethoxyethane) sulfonic acid (PFEEESA)	5.300	0.00	1040	0.0016	0.0016	U	Y
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	0		0	0	0	U	Y
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	0		0	0	0	U	Y
Perfluoro-3-methoxypropanoic acid (PFMPA)	0		0	0	0	U	Y
Perfluoro-4-methoxybutanoic acid (PFMBA)	3.996	-0.01	93	0.0008	0.00080	U	Y
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	0		0	0	0	U	Y
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	4.821	+0.00	855	0.0068	0.0068	U	Y
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	0		0	0	0	U	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution



240119_052

Sample ID: 1633 CCB
Date Acquired: 1/20/2024 7:34:43 AM
Acquired by: System Administrator
Data File: 240119_052
Vial: 54 | Inj. Volume: 10.0000uL | Tray: 1

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	1267520	----	----	----	----	----	----	
13C4-PFBA_IS	216.80>171.90	----	1267520	----	----	----	----	----	----	
13C3-PFBA_IS	216.00>172.00	----	543758	----	----	----	----	----	----	
PFBA	212.80>169.05	----	789	----	----	----	----	----	----	
PFMPA	229.00>84.90	----	----	----	----	----	----	----	----	
3_3 FTCA	241.00>177.10	241.00>117.00	----	0	0.00	141.17	0	0.00	143.25	
13C5-PFPeA	268.30>223.00	----	121160	----	----	----	----	----	----	
13C5-PFPeA_IS	268.30>223.00	----	121160	----	----	----	----	----	----	
PFPeA	263.00>219.00	----	1442	----	----	----	----	----	----	
PFMBA	279.00>84.95	----	93	----	----	----	----	----	----	
13C2-4_2 FTS	329.10>80.90	----	189343	----	----	----	----	----	----	
13C2-4_2 FTS_IS	329.10>80.90	----	189343	----	----	----	----	----	----	
4_2 FTS	327.10>307.00	327.10>80.90	116	82	70.30	29.06	82	70.30	31.50	IRr
13C3-PFBS_IS	302.10>79.90	----	301227	----	----	----	----	----	----	
PFBS	298.70>79.90	298.70>98.80	----	0	0.00	46.72	0	0.00	48.74	
13C3-PFBS	302.10>79.90	----	301227	----	----	----	----	----	----	
NFDHA	295.00>201.00	295.00>84.90	855	237	27.77	40.25	237	27.77	36.97	
13C5-PFHxA	318.00>273.00	----	563019	----	----	----	----	----	----	
13C5-PFHxA_IS	318.00>273.00	----	563019	----	----	----	----	----	----	
13C2-PFHxA_IS	315.10>270.00	----	527282	----	----	----	----	----	----	
PFHxA	313.00>269.00	----	1773	----	----	----	----	----	----	
PFEESA	314.80>135.00	314.80>82.90	1040	47	4.50	6.11	47	4.50	5.81	
13C3-HFPO-DA	286.90>168.90	----	595770	----	----	----	----	----	----	
13C3-HFPO-DA_IS	286.90>168.90	----	595770	----	----	----	----	----	----	
HFPO-DA	284.90>168.90	284.90>184.90	----	0	0.00	65.61	0	0.00	64.39	
5_3 FTCA	341.00>237.05	341.00>217.00	----	0	0.00	158.86	0	0.00	159.75	
PFPeS	349.10>79.90	349.10>98.80	----	0	0.00	55.80	0	0.00	54.52	
13C4-PFHpA	367.10>322.00	----	600807	----	----	----	----	----	----	
13C4-PFHpA_IS	367.10>322.00	----	600807	----	----	----	----	----	----	
PFHpA	363.10>319.00	363.10>169.00	5793	1159	20.01	21.50	1159	20.01	23.22	
DONA	376.90>250.90	376.90>84.80	----	0	0.00	29.66	0	0.00	29.43	
13C2-6_2 FTS_IS	429.10>80.90	----	182350	----	----	----	----	----	----	
13C2-6_2 FTS	429.10>80.90	----	182350	----	----	----	----	----	----	
6_2 FTS	427.10>407.00	427.10>80.90	914	81	8.83	41.15	81	8.83	43.09	IRr
13C4-PFOA_IS	417.10>172.00	----	40244	----	----	----	----	----	----	
13C8-PFOA_IS	421.10>376.00	----	581169	----	----	----	----	----	----	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240119_052 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	581169	----	----	----	----	----	----	----
PFOA	413.00>369.00	413.00>169.00	4389	1028	23.43	31.89	1028	23.43	30.51	
13C3-PFHxS	402.10>79.90	----	237451	----	----	----	----	----	----	----
13C3-PFHxS_IS	402.10>79.90	----	237451	----	----	----	----	----	----	----
PFHxS	398.70>79.90	398.70>98.90	1266	304	23.98	56.62	304	23.98	57.27	IRr
18O2-PFHxS_IS	403.00>83.90	----	214508	----	----	----	----	----	----	----
13C9-PFNA_IS	472.10>427.00	----	299519	----	----	----	----	----	----	----
13C9-PFNA	472.10>427.00	----	299519	----	----	----	----	----	----	----
13C5-PFNA_IS	468.00>423.00	----	305563	----	----	----	----	----	----	----
PFNA	463.00>419.00	463.00>219.00	3846	801	20.82	23.17	801	20.82	23.01	
PFHpS	449.00>79.90	449.00>98.80	----	0	0.00	56.96	0	0.00	58.58	
7_3 FTCA	441.00>317.00	441.00>336.90	736	976	132.73	117.47	976	132.73	117.17	
13C2-8_2-FTS	529.10>80.90	----	142886	----	----	----	----	----	----	----
13C2-8_2-FTS_IS	529.10>80.90	----	142886	----	----	----	----	----	----	----
8_2 FTS	527.10>506.95	527.10>80.80	----	0	0.00	49.59	0	0.00	43.30	
13C6-PFDA_IS	519.10>474.10	----	229285	----	----	----	----	----	----	----
13C6-PFDA	519.10>474.10	----	229285	----	----	----	----	----	----	----
13C2-PFDA_IS	515.10>470.10	----	202805	----	----	----	----	----	----	----
PFDA	512.90>469.00	512.90>219.00	4866	661	13.58	19.00	661	13.58	19.26	
D3-NMeFOSAA_IS	573.20>419.00	----	250029	----	----	----	----	----	----	----
D3-NMeFOSAA	573.20>419.00	----	250029	----	----	----	----	----	----	----
13C8-PFOS_IS	507.10>98.90	----	99298	----	----	----	----	----	----	----
13C8-PFOS	507.10>98.90	----	99298	----	----	----	----	----	----	----
13C4-PFOS_IS	502.80>79.90	----	255055	----	----	----	----	----	----	----
PFOS	498.90>79.90	498.90>98.80	351	108	30.67	52.47	108	30.67	47.25	
NMeFOSAA	570.10>419.00	570.10>483.00	----	0	0.00	55.15	0	0.00	62.10	
D5-NEtFOSAA_IS	589.20>419.00	----	272465	----	----	----	----	----	----	----
D5-NEtFOSAA	589.20>419.00	----	272465	----	----	----	----	----	----	----
NEtFOSAA	584.20>419.10	584.20>526.00	----	0	0.00	81.95	0	0.00	86.05	
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	----	0	0.00	32.76	0	0.00	31.74	
PFUnDA	563.10>519.00	563.10>269.10	2719	836	30.73	13.12	836	30.73	13.26	IRr
13C7-PFUnDA_IS	570.00>525.10	----	262436	----	----	----	----	----	----	----
13C7-PFUnDA	570.00>525.10	----	262436	----	----	----	----	----	----	----
PFNS	548.80>79.90	548.80>98.80	----	0	0.00	65.22	0	0.00	62.49	
10_2 FTS	626.80>607.05	626.80>81.00	----	0	0.00	37.13	0	0.00	35.81	
13C2-PFDOA_IS	615.10>570.00	----	278997	----	----	----	----	----	----	----
13C2-PFDOA	615.10>570.00	----	278997	----	----	----	----	----	----	----
PFDOA	613.10>569.00	613.10>319.00	2888	115	3.97	11.29	115	3.97	10.90	IRr
PFDS	599.00>79.90	599.00>98.80	----	0	0.00	60.18	0	0.00	61.11	
PFTrDA	663.00>619.00	663.00>168.90	3353	539	16.08	17.64	539	16.08	18.20	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240119_052 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	----	0	0.00	36.44	0	0.00	34.95	
PFOSAm	498.10>77.90	----	313	----	----	----	----	----	----	
13C8-PFOSAm	506.10>77.80	----	226384	----	----	----	----	----	----	
13C8-PFOSAm_IS	506.10>77.80	----	226384	----	----	----	----	----	----	
PFTDA	713.10>669.00	713.10>168.90	3201	420	13.11	22.96	420	13.11	22.68	
13C2-PFTDA	715.20>670.00	----	123901	----	----	----	----	----	----	
13C2-PFTDA_IS	715.20>670.00	----	123901	----	----	----	----	----	----	
PFDoS	699.10>79.90	699.10>98.80	----	0	0.00	67.40	0	0.00	65.24	
D7-MeFOSE_IS	623.20>58.90	----	697752	----	----	----	----	----	----	
D7-MeFOSE	623.20>58.90	----	697752	----	----	----	----	----	----	
MeFOSE	616.10>59.00	----	----	----	----	----	----	----	----	
13C2-PFHxDA_IS	815.00>770.05	----	458948	----	----	----	----	----	----	
13C2-PFHxDA	815.00>770.05	----	458948	----	----	----	----	----	----	
PFHxDA	813.00>768.95	813.00>218.95	3267	463	14.16	13.90	463	14.16	14.51	
D3-MeFOSA	515.00>219.00	----	50403	----	----	----	----	----	----	
D3-MeFOSA_IS	515.00>219.00	----	50403	----	----	----	----	----	----	
MeFOSA	511.90>219.00	511.90>169.00	----	0	0.00	140.79	0	0.00	142.62	
D9-EtFOSE_IS	639.20>58.90	----	666310	----	----	----	----	----	----	
D9-EtFOSE	639.20>58.90	----	666310	----	----	----	----	----	----	
EtFOSE	630.00>59.00	----	----	----	----	----	----	----	----	
D5-EtFOSAm	531.10>219.00	----	70449	----	----	----	----	----	----	
D5-EtFOSAm_IS	531.10>219.00	----	70449	----	----	----	----	----	----	
EtFOSAm	526.00>219.00	526.00>169.00	----	0	0.00	163.90	0	0.00	146.41	
PFODA	913.00>868.65	913.00>169.00	2039	548	26.87	27.03	548	26.87	23.98	

Flag ID key: IRr: Ion Ratio (Relative)



240119_052

Sample ID: 1633 CCB
Date Acquired: 1/20/2024 7:34:43 AM
Acquired by: System Administrator
Data File: 240119_052
Vial: 54 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.401	-0.007	0.000	1267520	543758	13C3-PFBA_IS	10.4289	ng/mL	
13C4-PFBA_IS	Auto	1.401	-0.007	----	1267520	1267520	----	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.401	-0.007	----	543758	543758	----	5.0000	ng/mL	
PFBA	M	1.418	0.009	0.017	789	1267520	13C4-PFBA_IS	0.0072	ng/mL	
PFMPA	ND(W/B)	----	----	----	----	121160	13C5-PFPeA_IS	----	ng/mL	
3_3 FTCA	ND(W/B)	----	----	----	----	121160	13C5-PFPeA_IS	----	ng/mL	
13C5-PFPeA	Auto	3.476	-0.003	-1.485	121160	527282	13C2-PFHxA_IS	5.0906	ng/mL	
13C5-PFPeA_IS	Auto	3.476	-0.003	----	121160	121160	----	5.0000	ng/mL	
PFPeA	M	3.480	-0.002	0.004	1442	121160	13C5-PFPeA_IS	0.0092	ng/mL	
PFMBA	M	3.996	-0.009	0.520	93	121160	13C5-PFPeA_IS	0.0008	ng/mL	
13C2-4_2 FTS	Auto	4.644	-0.002	-2.426	189343	214508	18O2-PFHxS_IS	6.4143	ng/mL	
13C2-4_2 FTS_IS	Auto	4.644	-0.002	----	189343	189343	----	5.0000	ng/mL	
4_2 FTS	M	4.630	-0.017	-0.014	116	189343	13C2-4_2 FTS_IS	0.0012	ng/mL	IRr
13C3-PFBS_IS	Auto	4.625	-0.003	----	301227	301227	----	2.5000	ng/mL	
PFBS	ND(W/B)	----	----	----	----	301227	13C3-PFBS_IS	----	ng/mL	
13C3-PFBS	Auto	4.625	-0.003	-2.445	301227	214508	18O2-PFHxS_IS	2.4745	ng/mL	
NFDHA	M	4.821	0.001	-0.139	855	563019	13C5-PFHxA_IS	0.0068	ng/mL	
13C5-PFHxA	Auto	4.960	-0.003	-0.001	563019	527282	13C2-PFHxA_IS	2.5336	ng/mL	
13C5-PFHxA_IS	Auto	4.960	-0.003	----	563019	563019	----	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	4.961	-0.002	----	527282	527282	----	2.5000	ng/mL	
PFHxA	M	4.962	-0.003	0.002	1773	563019	13C5-PFHxA_IS	0.0011	ng/mL	
PFEESA	M	5.300	-0.004	0.340	1040	563019	13C5-PFHxA_IS	0.0016	ng/mL	
13C3-HFPO-DA	Auto	5.436	-0.003	0.475	595770	527282	13C2-PFHxA_IS	11.5423	ng/mL	
13C3-HFPO-DA_IS	Auto	5.436	-0.003	----	595770	595770	----	10.0000	ng/mL	
HFPO-DA	ND(W/B)	----	----	----	----	595770	13C3-HFPO-DA_IS	----	ng/mL	
5_3 FTCA	ND(W/B)	----	----	----	----	563019	13C5-PFHxA_IS	----	ng/mL	
PFPeS	ND(W/B)	----	----	----	----	237451	13C3-PFHxS_IS	----	ng/mL	
13C4-PFHpA	Auto	6.139	-0.004	1.178	600807	527282	13C2-PFHxA_IS	2.9866	ng/mL	
13C4-PFHpA_IS	Auto	6.139	-0.004	----	600807	600807	----	2.5000	ng/mL	
PFHpA	M	6.121	-0.023	-0.018	5793	600807	13C4-PFHpA_IS	-0.0115	ng/mL	
DONA	ND(W/B)	----	----	----	----	595770	13C3-HFPO-DA_IS	----	ng/mL	
13C2-6_2 FTS_IS	Auto	6.779	-0.005	----	182350	182350	----	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.779	-0.005	-0.291	182350	214508	18O2-PFHxS_IS	6.5313	ng/mL	
6_2 FTS	MI R1 R2	6.774	-0.009	-0.005	914	182350	13C2-6_2 FTS_IS	0.0110	ng/mL	IRr
13C4-PFOA_IS	Auto	7.094	-0.005	----	40244	40244	----	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.093	-0.007	----	581169	581169	----	2.5000	ng/mL	
13C8-PFOA	Auto	7.093	-0.007	-0.001	581169	40244	13C4-PFOA_IS	2.5837	ng/mL	
PFOA	M	7.092	-0.010	-0.001	4389	581169	13C8-PFOA_IS	-0.0145	ng/mL	
13C3-PFHxS	Auto	7.069	-0.005	-0.001	237451	214508	18O2-PFHxS_IS	2.5790	ng/mL	
13C3-PFHxS_IS	Auto	7.069	-0.005	----	237451	237451	----	2.5000	ng/mL	
PFHxS	M	7.069	-0.005	0.000	1266	237451	13C3-PFHxS_IS	-0.0080	ng/mL	IRr
18O2-PFHxS_IS	Auto	7.070	-0.005	----	214508	214508	----	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.942	-0.007	----	299519	299519	----	1.2500	ng/mL	
13C9-PFNA	Auto	7.942	-0.007	0.000	299519	305563	13C5-PFNA_IS	1.2519	ng/mL	
13C5-PFNA_IS	Auto	7.942	-0.007	----	305563	305563	----	1.2500	ng/mL	
PFNA	M	7.938	-0.012	-0.004	3846	299519	13C9-PFNA_IS	-0.0083	ng/mL	
PFHpS	ND(W/B)	----	----	----	----	99298	13C8-PFOS_IS	----	ng/mL	
7_3 FTCA	M	7.930	0.001	2.970	736	563019	13C5-PFHxA_IS	0.0378	ng/mL	
13C2-8_2-FTS	Auto	8.396	-0.008	1.326	142886	214508	18O2-PFHxS_IS	6.2303	ng/mL	
13C2-8_2-FTS_IS	Auto	8.396	-0.008	----	142886	142886	----	5.0000	ng/mL	
8_2 FTS	ND(W/B)	----	----	----	----	142886	13C2-8_2-FTS_IS	----	ng/mL	
13C6-PFDA_IS	Auto	8.705	-0.009	----	229285	229285	----	1.2500	ng/mL	
13C6-PFDA	Auto	8.705	-0.009	0.000	229285	202805	13C2-PFDA_IS	1.4053	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_052 (continued)

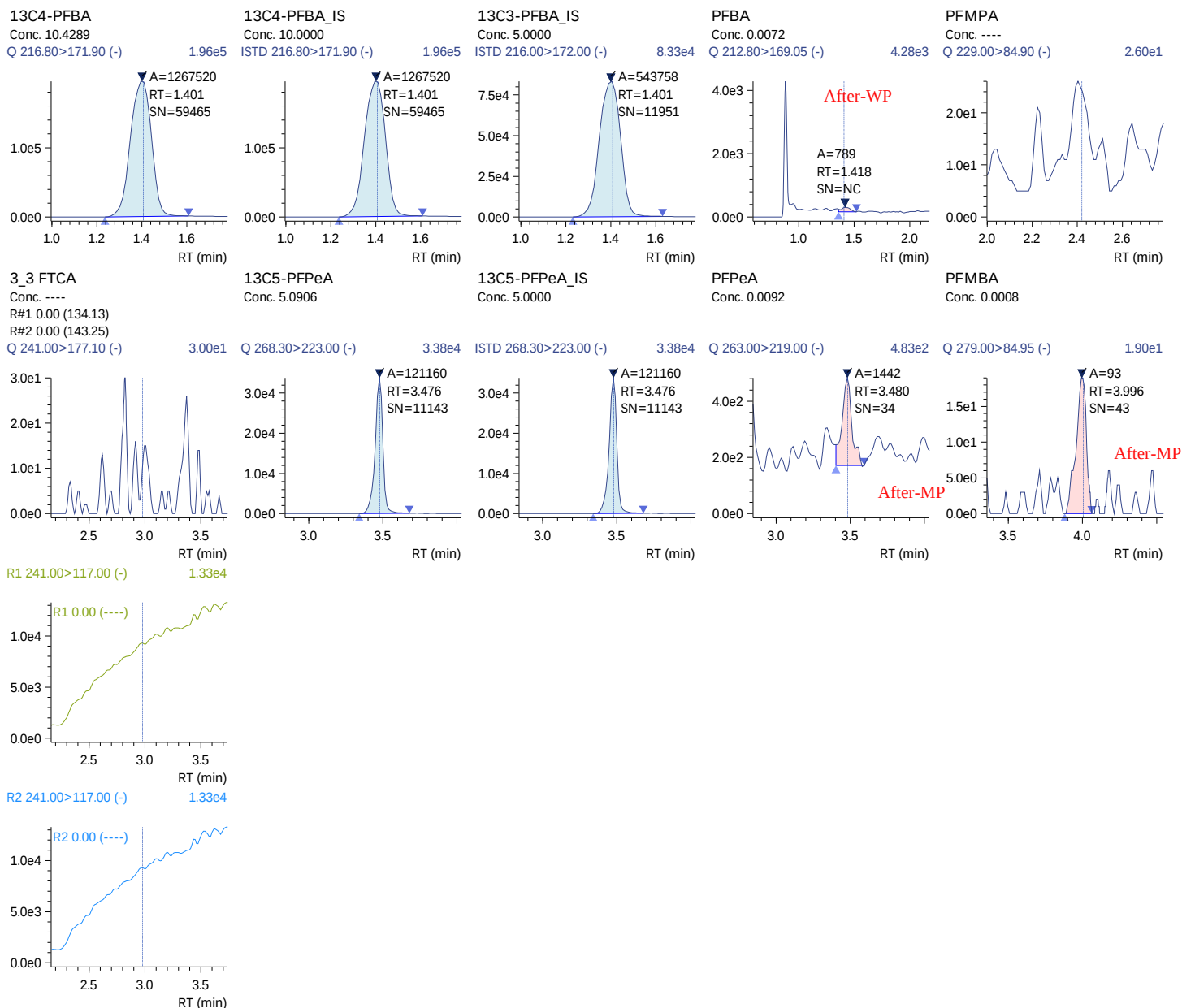
(Table continued from previous page)

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C2-PFDA_IS	Auto	8.705	-0.010	----	202805	202805	----	1.2500	ng/mL	
PFDA	M	8.706	-0.010	0.001	4866	229285	13C6-PFDA_IS	-0.0032	ng/mL	
D3-NMeFOSAA_IS	Auto	8.841	-0.007	----	250029	250029	----	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.841	-0.007	0.039	250029	255055	13C4-PFOS_IS	5.6482	ng/mL	
13C8-PFOS_IS	Auto	8.801	-0.010	----	99298	99298	----	2.5000	ng/mL	
13C8-PFOS	Auto	8.801	-0.010	-0.001	99298	255055	13C4-PFOS_IS	2.3344	ng/mL	
13C4-PFOS_IS	Auto	8.802	-0.009	----	255055	255055	----	2.5000	ng/mL	
PFOS	M	8.807	-0.006	0.006	351	99298	13C8-PFOS_IS	0.0034	ng/mL	
NMeFOSAA	ND(W/B)	----	----	----	----	250029	D3-NMeFOSAA_IS	----	ng/mL	
D5-NetFOSAA_IS	Auto	9.172	-0.006	----	272465	272465	----	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.172	-0.006	0.370	272465	255055	13C4-PFOS_IS	5.1448	ng/mL	
NetFOSAA	ND(W/B)	----	----	----	----	272465	D5-NetFOSAA_IS	----	ng/mL	
9-CI-PF3ONS	ND(W/B)	----	----	----	----	595770	13C3-HFPO-DA_IS	----	ng/mL	
PFUnDA	M	9.430	-0.010	0.002	2719	262436	13C7-PFUnDA_IS	-0.0154	ng/mL	IRr
13C7-PFUnDA_IS	Auto	9.428	-0.010	----	262436	262436	----	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.428	-0.010	0.723	262436	202805	13C2-PFDA_IS	1.3484	ng/mL	
PFNS	ND(W/B)	----	----	----	----	99298	13C8-PFOS_IS	----	ng/mL	
10_2_FTS	ND(W/B)	----	----	----	----	142886	13C2-8_2-FTS_IS	----	ng/mL	
13C2-PFDOA_IS	Auto	10.116	-0.011	----	278997	278997	----	1.2500	ng/mL	
13C2-PFDOA	Auto	10.116	-0.011	1.411	278997	202805	13C2-PFDA_IS	1.2478	ng/mL	
PFDOA	M	10.116	-0.012	0.000	2888	278997	13C2-PFDOA_IS	-0.0144	ng/mL	IRr
PFDS	ND(W/B)	----	----	----	----	99298	13C8-PFOS_IS	----	ng/mL	
PFTDA	Auto	10.774	-0.012	-0.631	3353	123901	13C2-PFTDA_IS	-0.0118	ng/mL	
11-CI-PF3OUdS	ND(W/B)	----	----	----	----	595770	13C3-HFPO-DA_IS	----	ng/mL	
PFOSAm	M	11.139	-0.004	-0.005	313	226384	13C8-PFOSAm_IS	0.0042	ng/mL	
13C8-PFOSAm	Auto	11.144	0.001	2.342	226384	255055	13C4-PFOS_IS	2.0908	ng/mL	
13C8-PFOSAm_IS	Auto	11.144	0.001	----	226384	226384	----	2.5000	ng/mL	
PFTDA	M	11.404	-0.016	-0.001	3201	123901	13C2-PFTDA_IS	-0.0038	ng/mL	
13C2-PFTDA	Auto	11.405	-0.014	2.700	123901	202805	13C2-PFDA_IS	1.2834	ng/mL	
13C2-PFTDA_IS	Auto	11.405	-0.014	----	123901	123901	----	1.2500	ng/mL	
PFDoS	ND(W/B)	----	----	----	----	99298	13C8-PFOS_IS	----	ng/mL	
D7-MeFOSE_IS	Auto	13.370	-0.011	----	697752	697752	----	25.0000	ng/mL	
D7-MeFOSE	Auto	13.370	-0.011	4.568	697752	255055	13C4-PFOS_IS	26.1379	ng/mL	
MeFOSE	ND(W/B)	----	----	----	----	697752	D7-MeFOSE_IS	----	ng/mL	
13C2-PFHxDA_IS	Auto	12.622	-0.014	----	458948	458948	----	2.5000	ng/mL	
13C2-PFHxDA	Auto	12.622	-0.014	3.917	458948	202805	13C2-PFDA_IS	2.4363	ng/mL	
PFHxDA	M	12.624	-0.013	0.002	3267	458948	13C2-PFHxDA_IS	-0.0105	ng/mL	
D3-MeFOSA	Auto	13.680	-0.007	4.878	50403	255055	13C4-PFOS_IS	2.3116	ng/mL	
D3-MeFOSA_IS	Auto	13.680	-0.007	----	50403	50403	----	2.5000	ng/mL	
MeFOSA	ND(W/B)	----	----	----	----	50403	D3-MeFOSA_IS	----	ng/mL	
D9-EtFOSE_IS	Auto	13.999	-0.010	----	666310	666310	----	25.0000	ng/mL	
D9-EtFOSE	Auto	13.999	-0.010	5.197	666310	255055	13C4-PFOS_IS	24.5754	ng/mL	
EtFOSE	ND(W/B)	----	----	----	----	666310	D9-EtFOSE_IS	----	ng/mL	
D5-EtFOSAm	Auto	14.355	-0.010	5.553	70449	255055	13C4-PFOS_IS	2.4267	ng/mL	
D5-EtFOSAm_IS	Auto	14.355	-0.010	----	70449	70449	----	2.5000	ng/mL	
EtFOSAm	ND(W/B)	----	----	----	----	70449	D5-EtFOSAm_IS	----	ng/mL	
PFODA	M	13.760	-0.014	1.138	2039	458948	13C2-PFHxDA_IS	0.0196	ng/mL	

Flag ID key: IRr: Ion Ratio (Relative)



240119_052 (continued)





240119_052 (continued)

13C2-4_2 FTS
Conc. 6.4143

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. 0.0012
R#1 70.30 (34.14)
R#2 70.30 (31.50)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. ----
R#1 0.00 (47.53)
R#2 0.00 (48.74)

Q 329.10>80.90 (-)

5.75e4

ISTD 329.10>80.90 (-)

5.75e4

Q 327.10>307.00 (-)

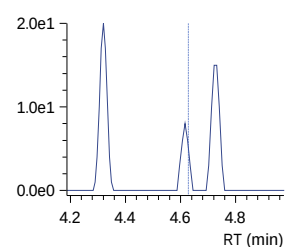
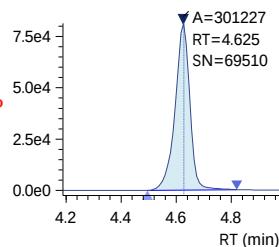
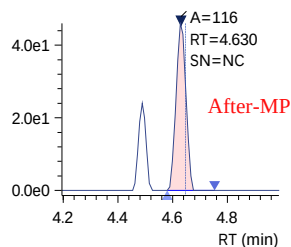
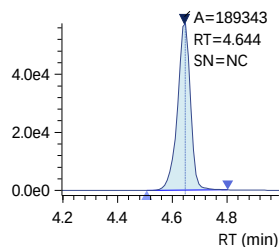
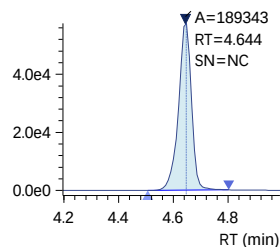
4.60e1

ISTD 302.10>79.90 (-)

8.14e4

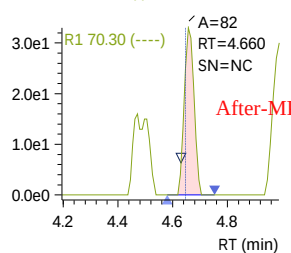
Q 298.70>79.90 (-)

2.00e1



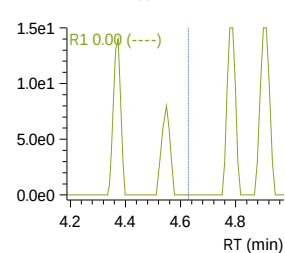
R1 327.10>80.90 (-)

3.30e1



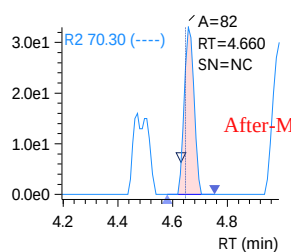
R1 298.70>98.80 (-)

1.50e1



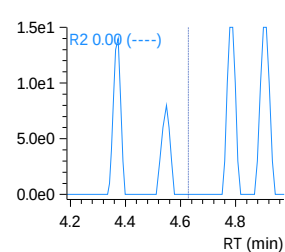
R2 327.10>80.90 (-)

3.30e1



R2 298.70>98.80 (-)

1.50e1





240119_052 (continued)

13C3-PFBS
Conc. 2.4745

NFDHA
Conc. 0.0068
R#1 27.77 (37.88)
R#2 27.77 (36.97)

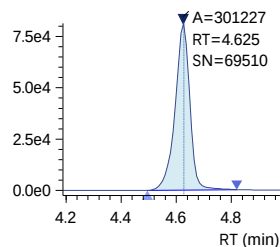
13C5-PFHxA
Conc. 2.5336

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

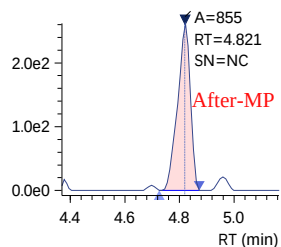
Q 302.10>79.90 (-)

8.14e4



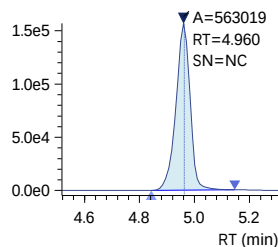
Q 295.00>201.00 (-)

2.62e2



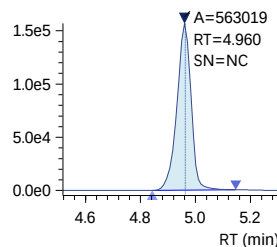
Q 318.00>273.00 (-)

1.57e5



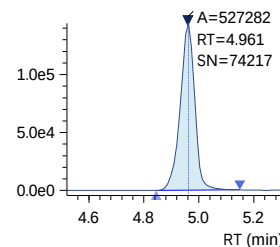
ISTD 318.00>273.00 (-)

1.57e5



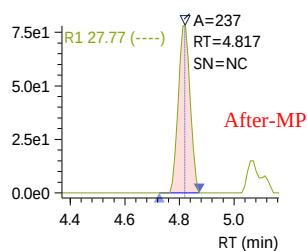
ISTD 315.10>270.00 (-)

1.44e5



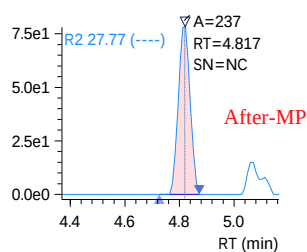
R1 295.00>84.90 (-)

7.80e1



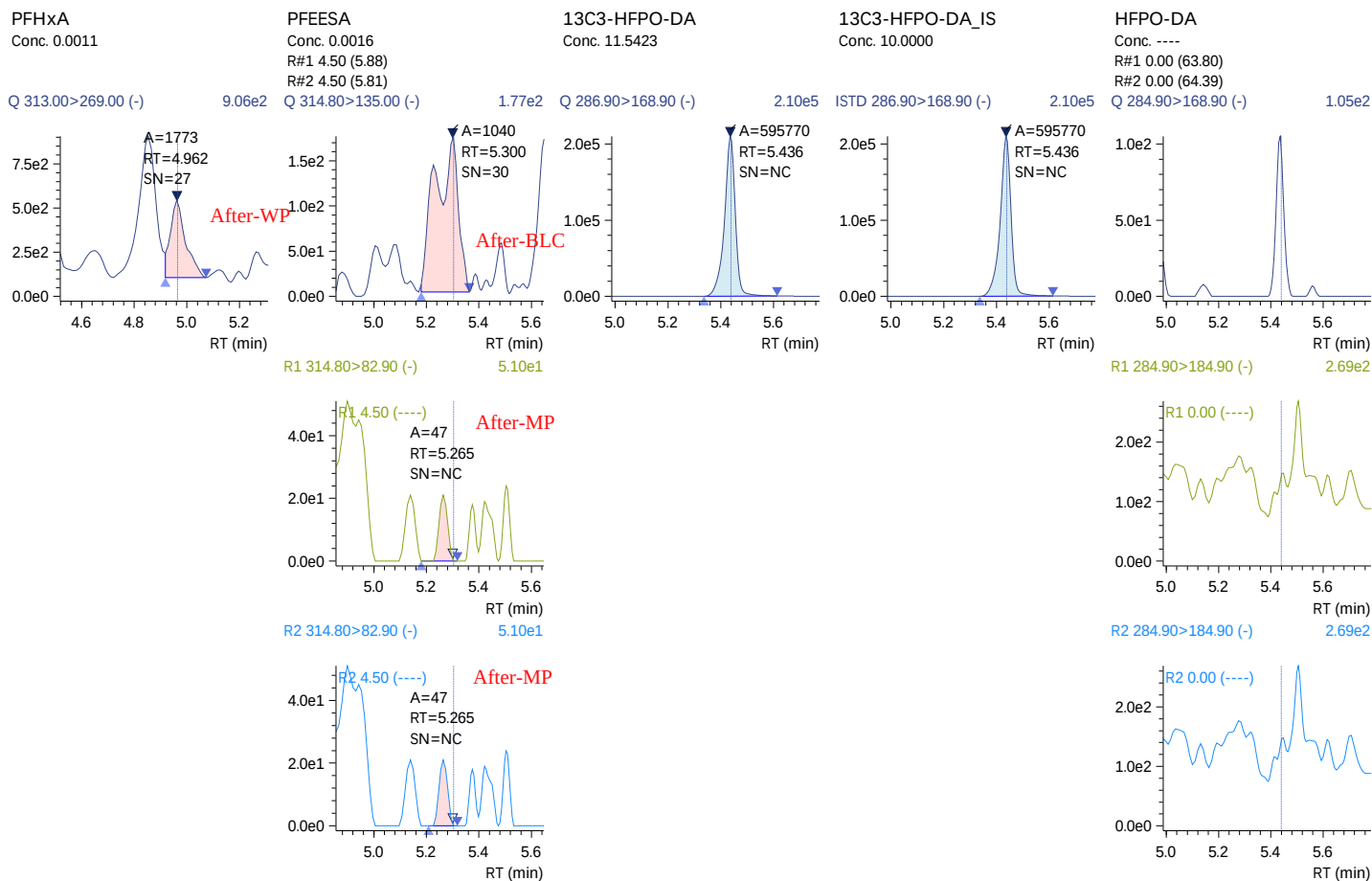
R2 295.00>84.90 (-)

7.80e1



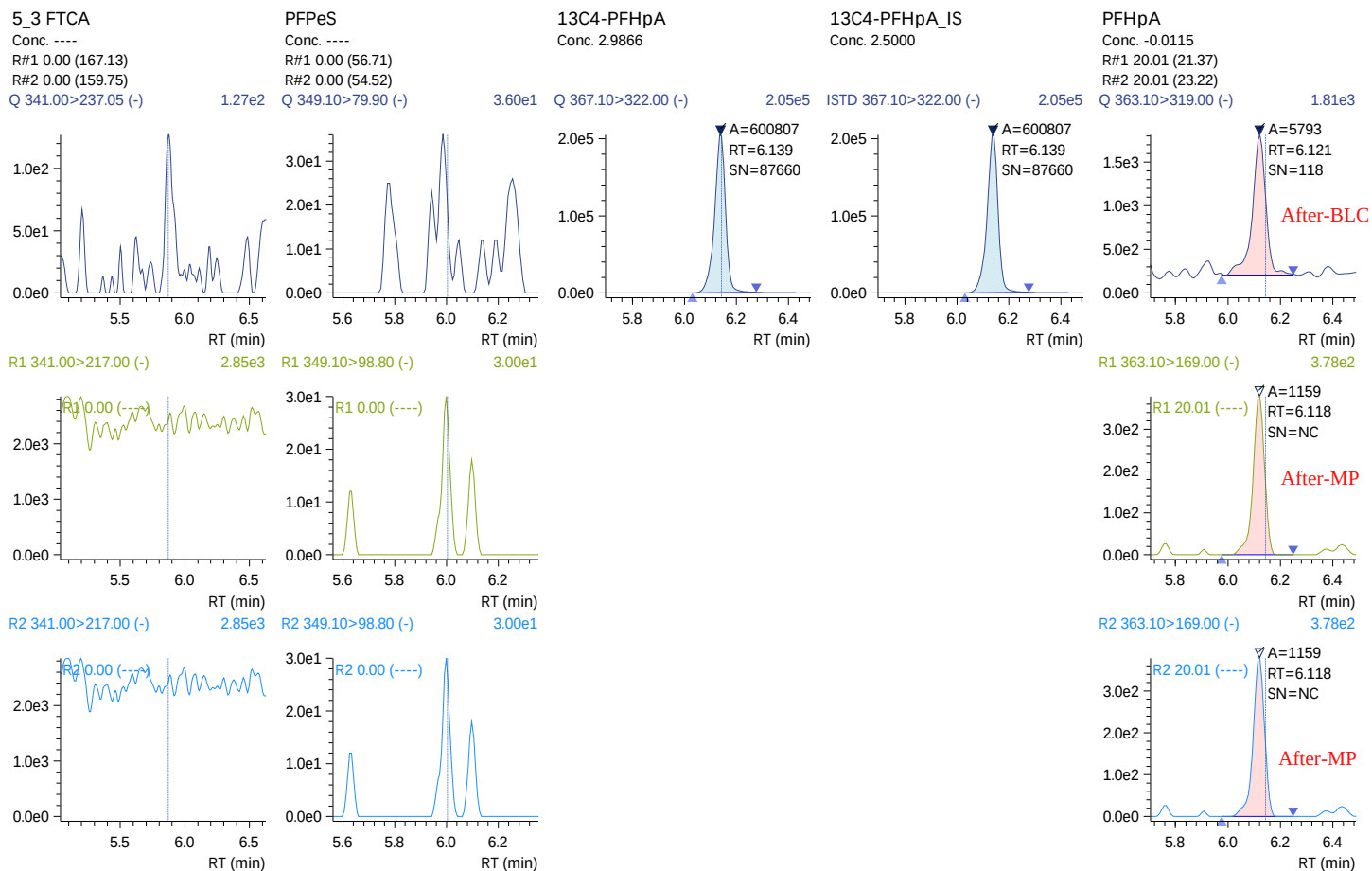


240119_052 (continued)





240119_052 (continued)

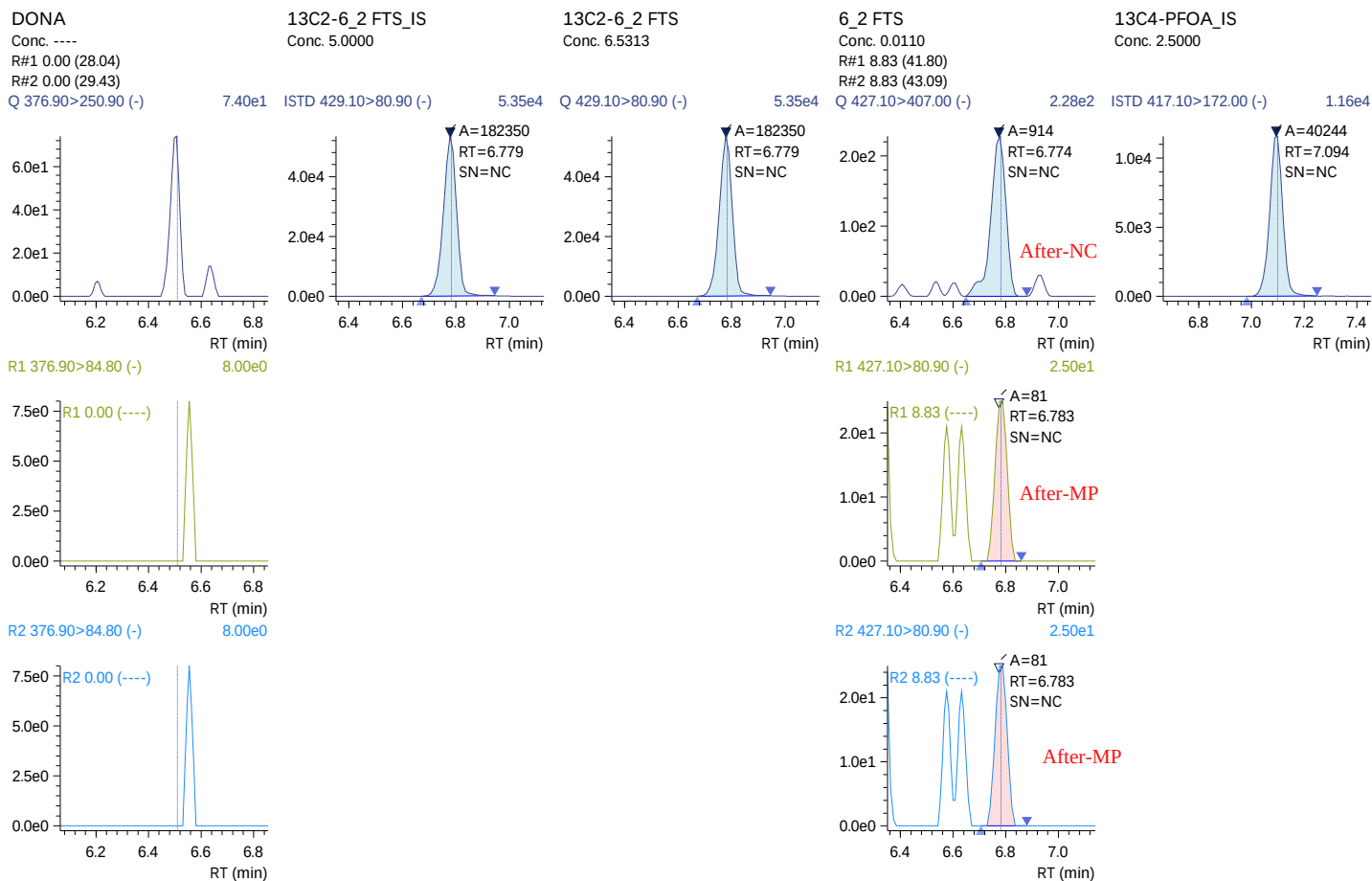


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_052 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_052 (continued)

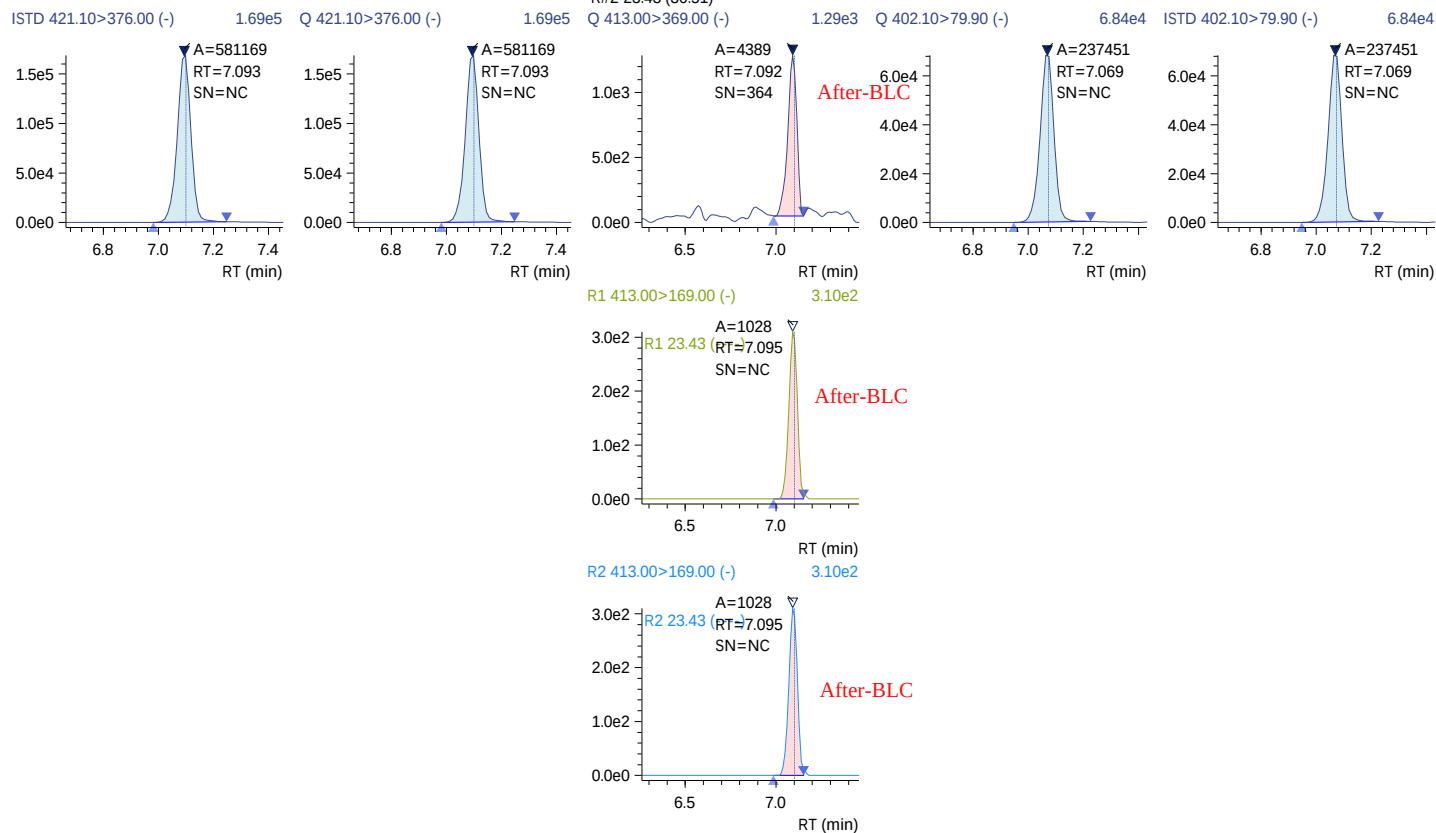
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.5837

PFOA
Conc. -0.0145
R#1 23.43 (29.05)
R#2 23.43 (30.51)

13C3-PFHxS
Conc. 2.5790

13C3-PFHxS_IS
Conc. 2.5000

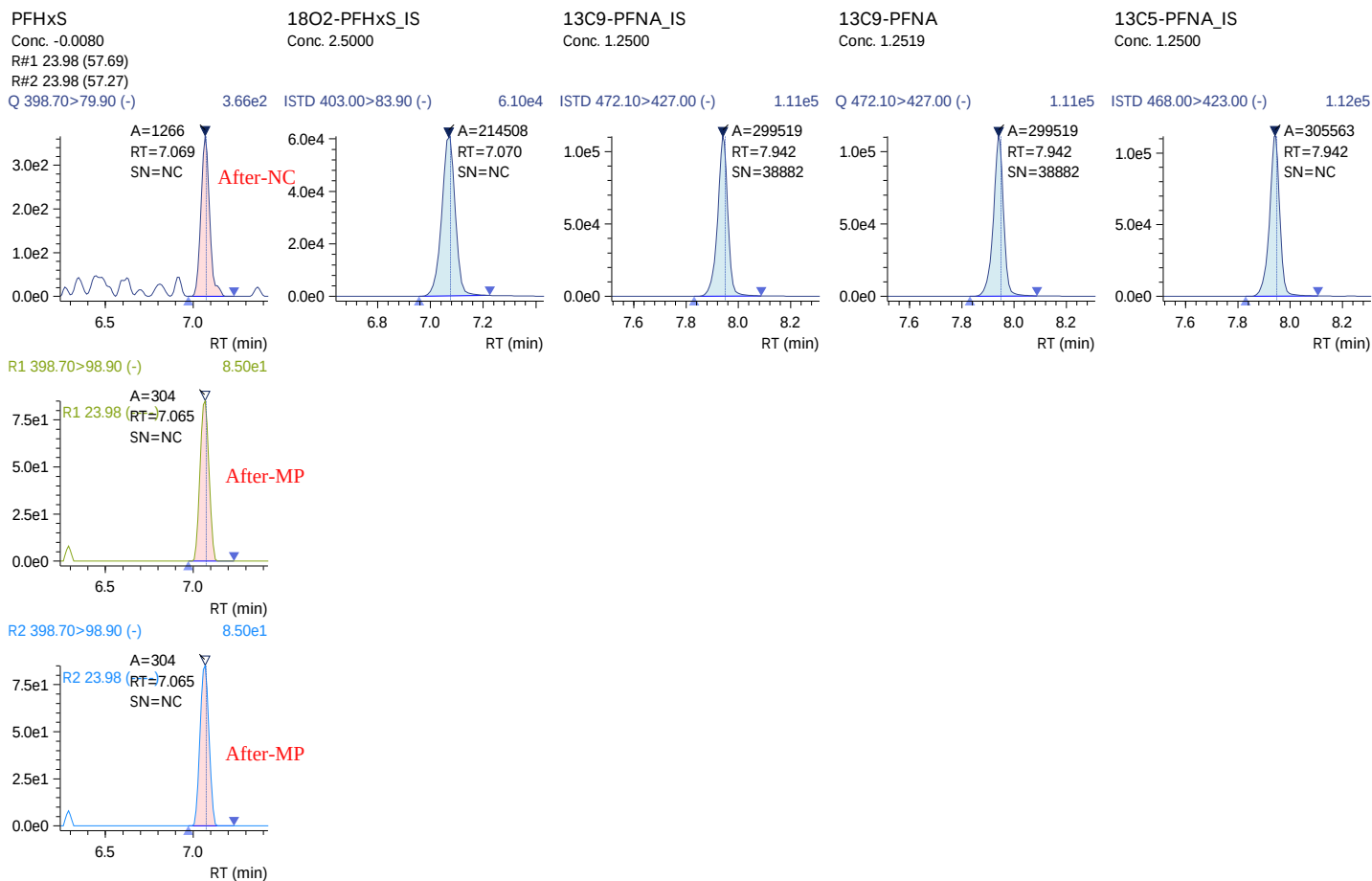


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.

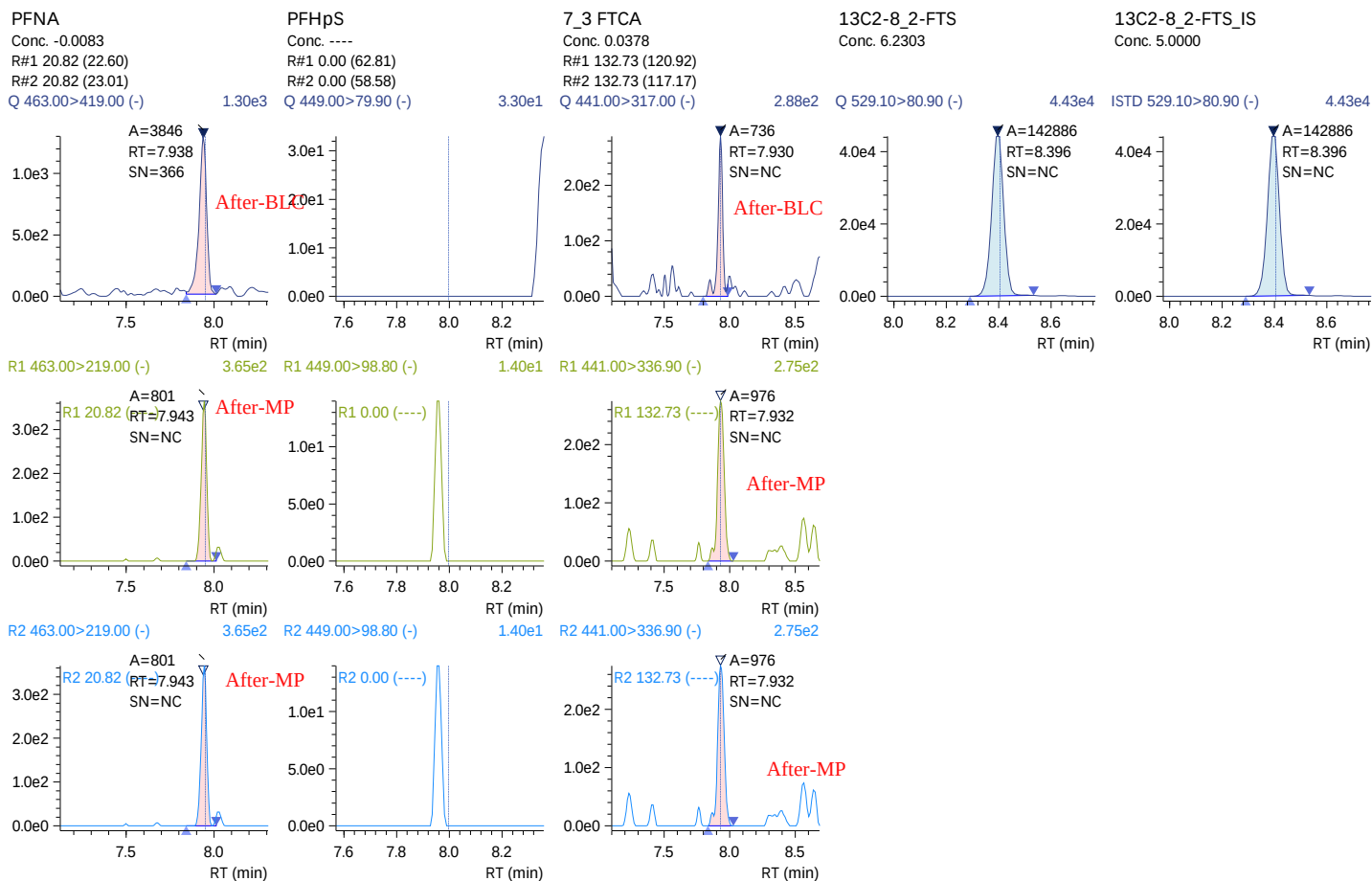


240119_052 (continued)





240119_052 (continued)

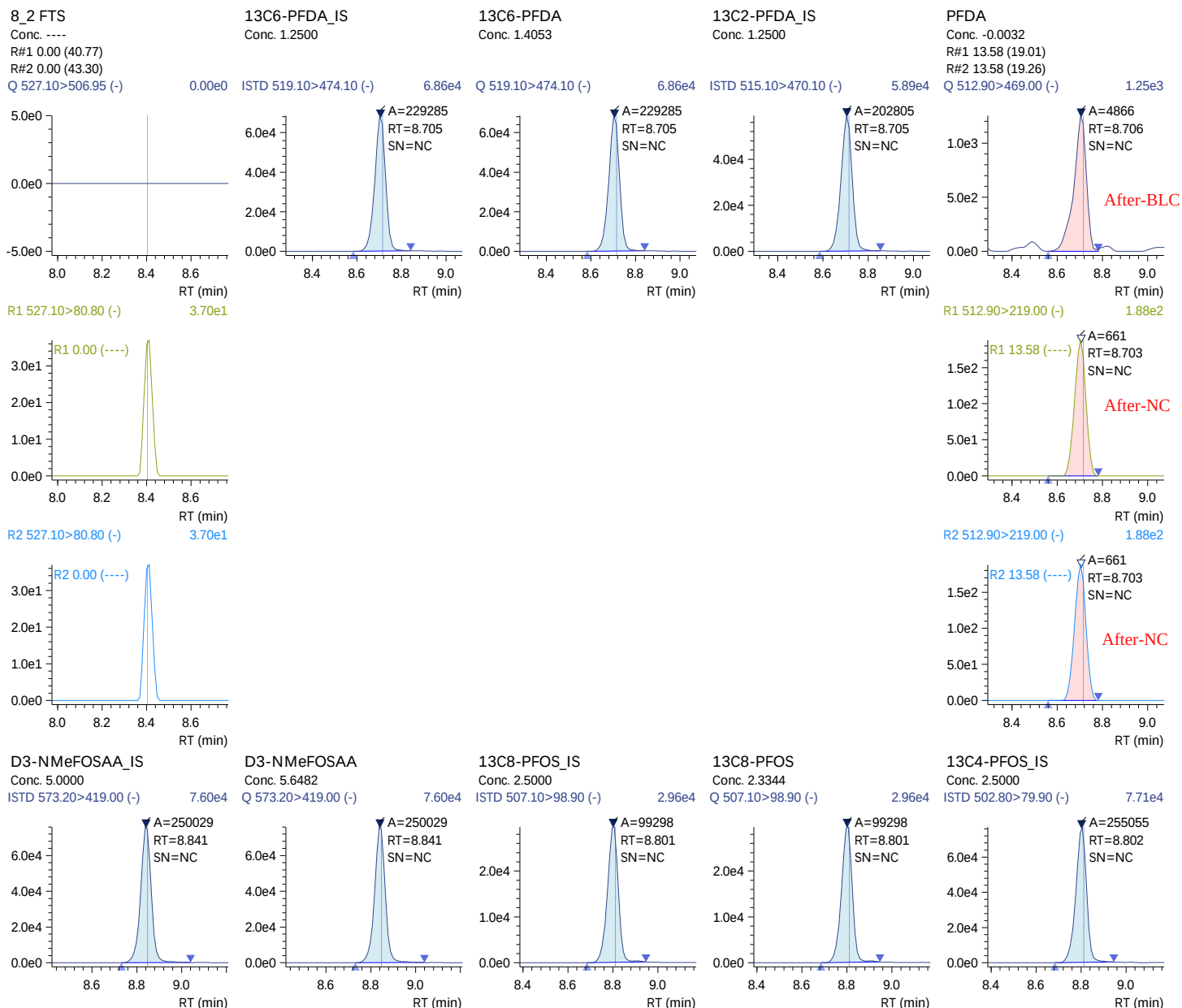


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_052 (continued)

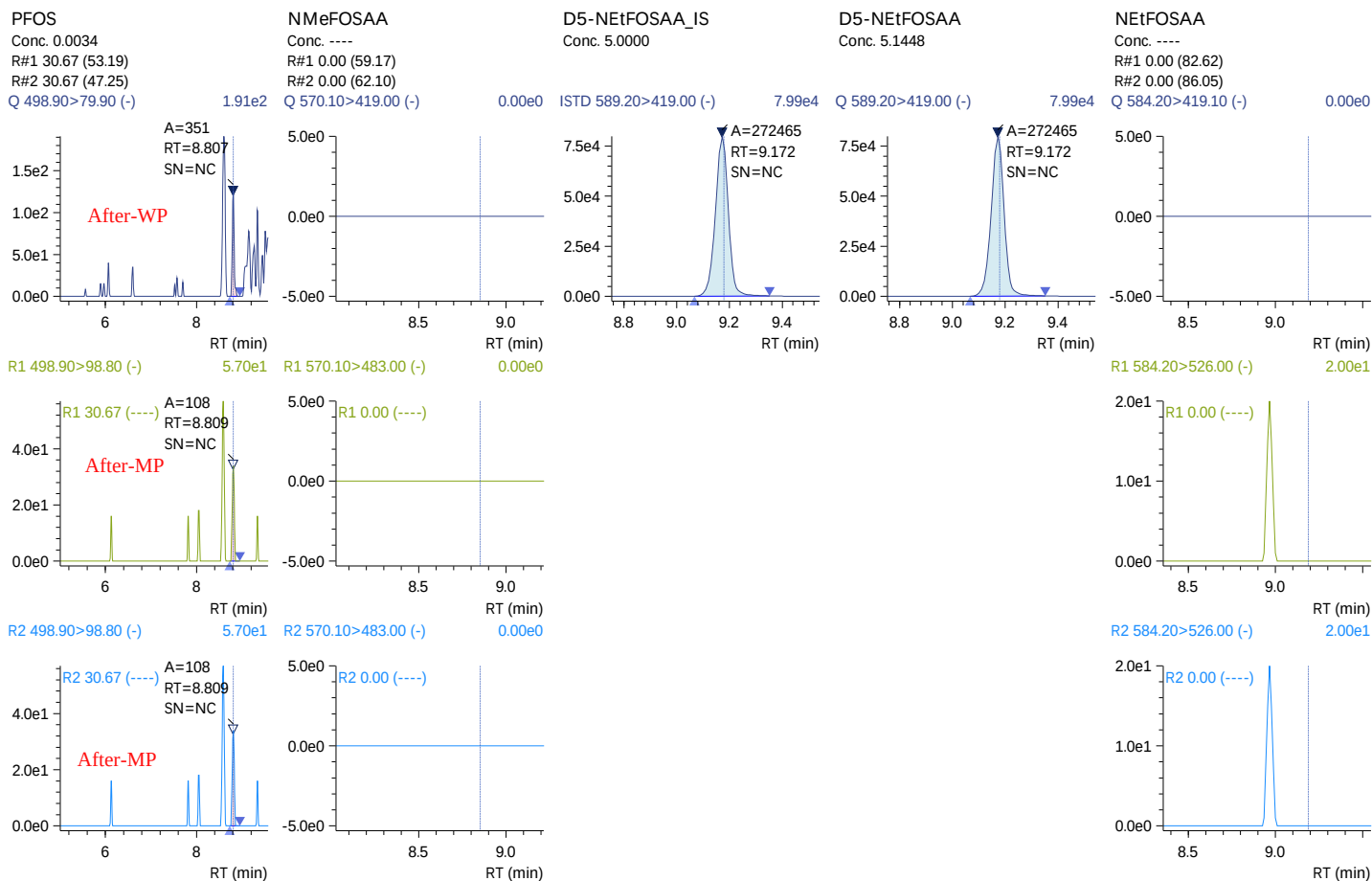


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_052 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_052 (continued)

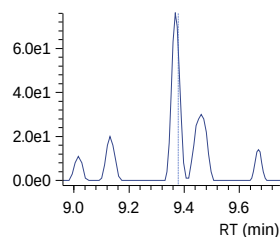
9-Cl-PF3ONS

Conc. ----

R#1 0.00 (31.76)

R#2 0.00 (31.74)

Q 530.80>351.00 (-)



R1 532.80>353.00 (-)

1.23e2

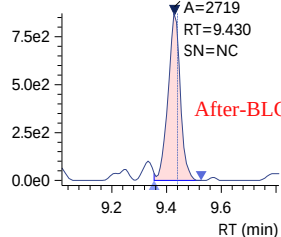
PFUnDA

Conc. -0.0154

R#1 30.73 (12.31)

R#2 30.73 (13.26)

Q 563.10>519.00 (-)



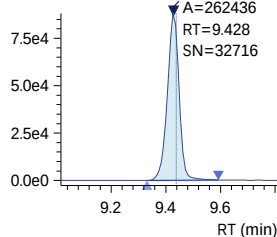
R1 563.10>269.10 (-)

2.59e2

13C7-PFUnDA_IS

Conc. 1.2500

ISTD 570.00>525.10 (-)

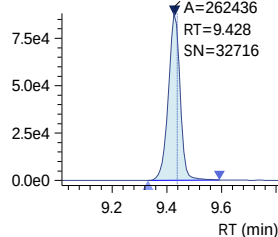


8.82e4

13C7-PFUnDA

Conc. 1.3484

Q 570.00>525.10 (-)



8.82e4

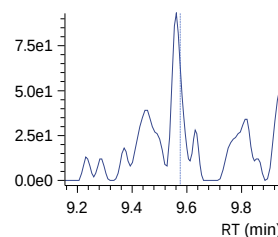
PFNS

Conc. ----

R#1 0.00 (63.31)

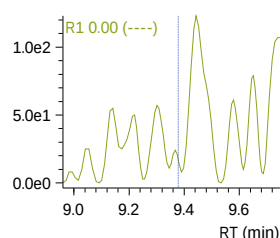
R#2 0.00 (62.49)

Q 548.80>79.90 (-)



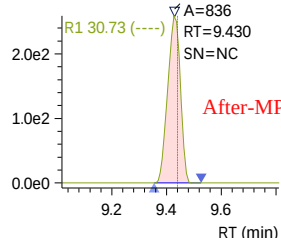
R1 548.80>98.80 (-)

2.80e1



R2 532.80>353.00 (-)

1.23e2



R2 563.10>269.10 (-)

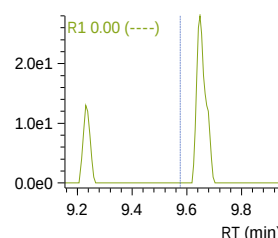
2.59e2



8.82e4

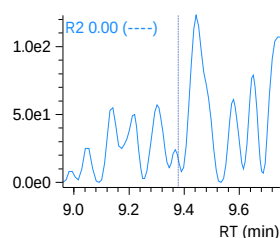


8.82e4



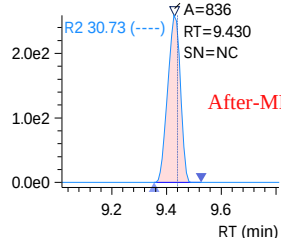
R2 548.80>98.80 (-)

2.80e1



R2 532.80>353.00 (-)

1.23e2



R2 563.10>269.10 (-)

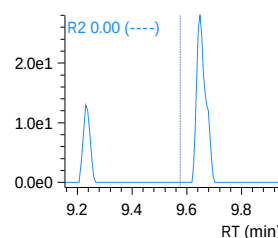
2.59e2



8.82e4



8.82e4

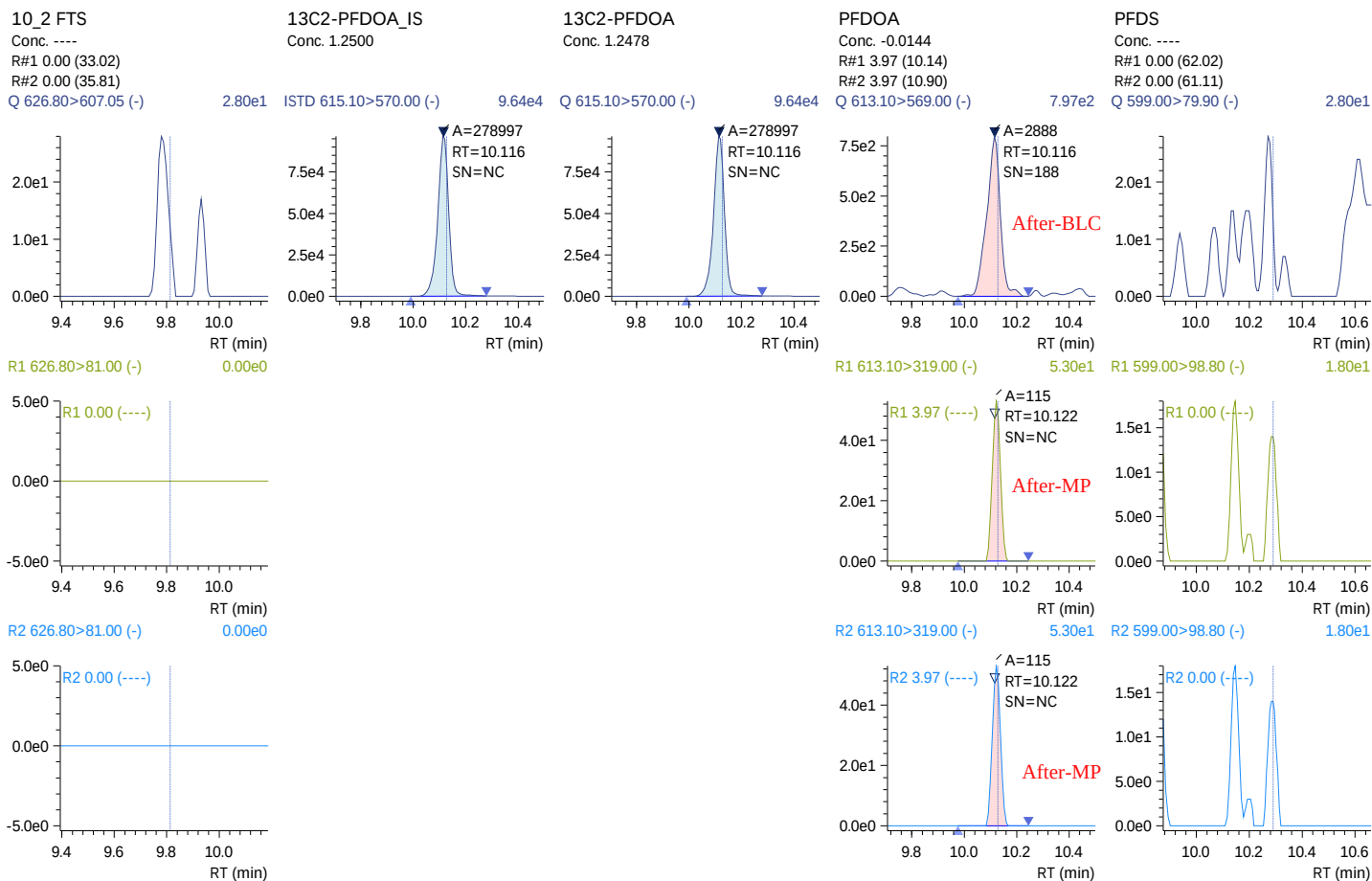


R2 548.80>98.80 (-)

2.80e1



240119_052 (continued)

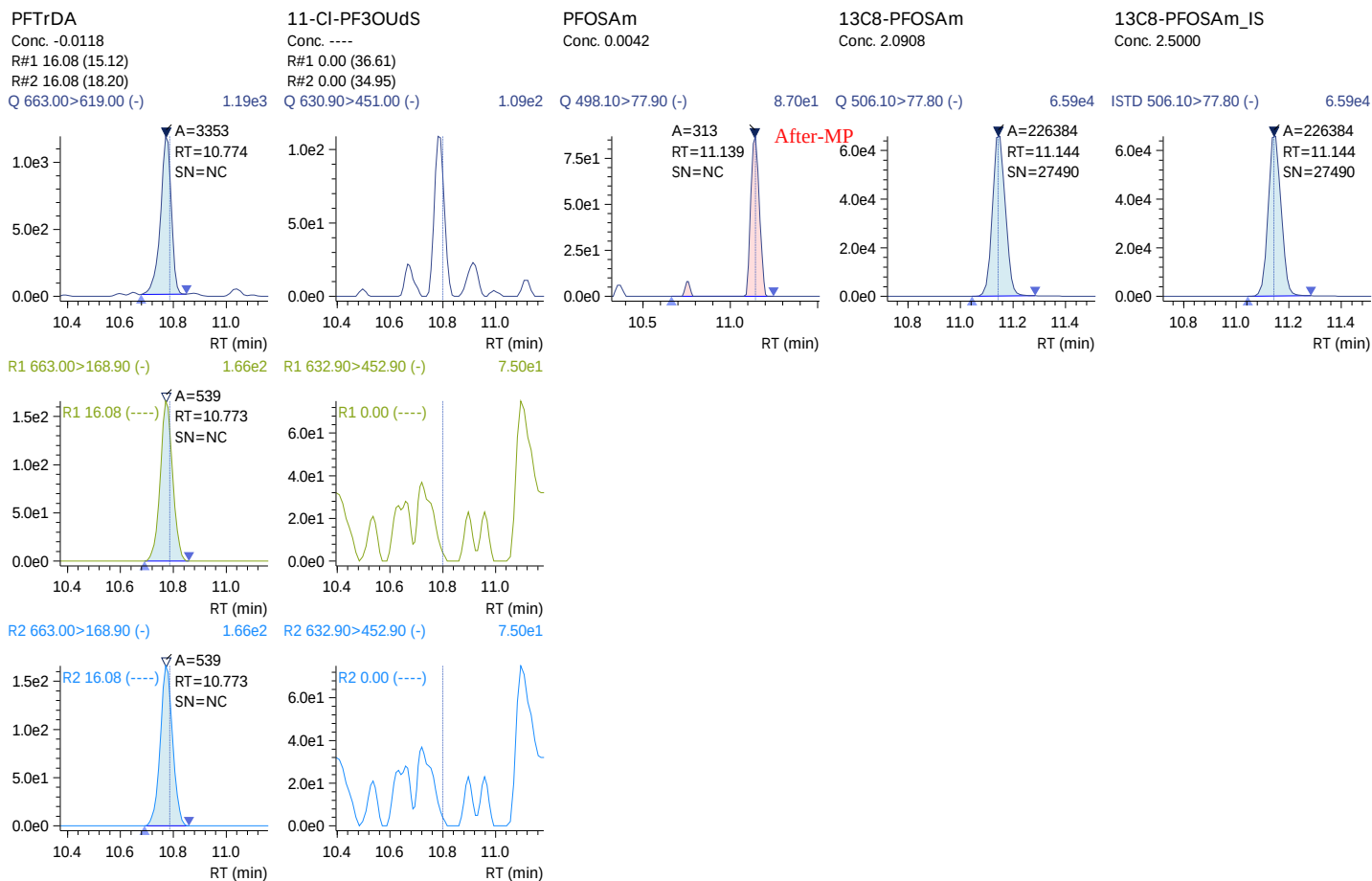


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_052 (continued)

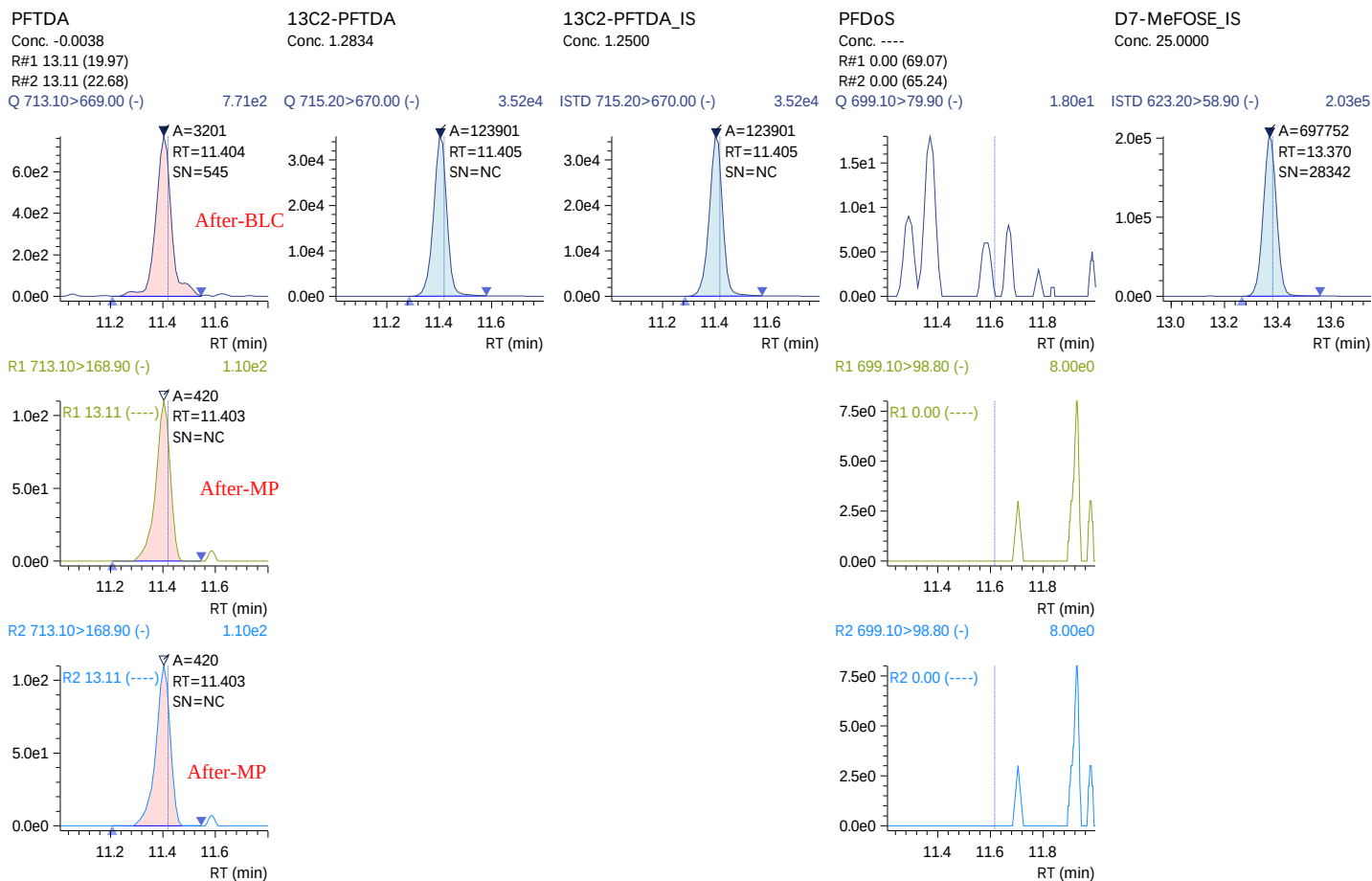


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_052 (continued)





240119_052 (continued)

D7-MeFOSE
Conc. 26.1379

MeFOSE
Conc. ----

13C2-PFHXA_IS
Conc. 2.5000

13C2-PFHXA
Conc. 2.4363

PFHXA

Conc. -0.0105
R#1 14.16 (11.64)
R#2 14.16 (14.51)

Q 623.20>58.90 (-)

2.03e5

Q 616.10>59.00 (-)

7.20e1

ISTD 815.00>770.05 (-)

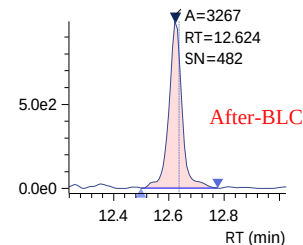
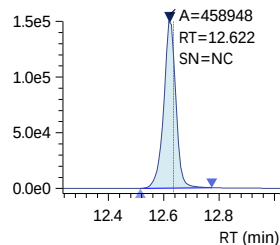
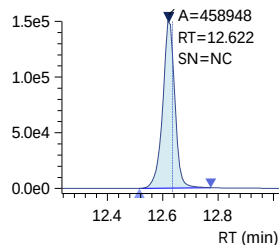
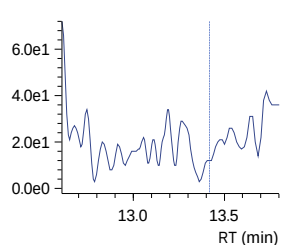
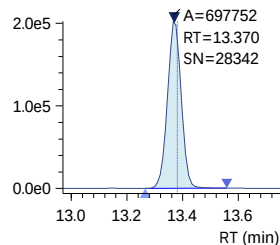
1.50e5

Q 815.00>770.05 (-)

1.50e5

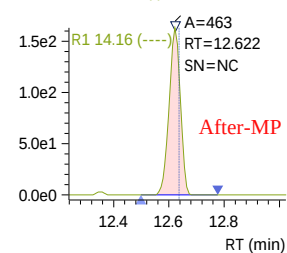
Q 813.00>768.95 (-)

9.94e2



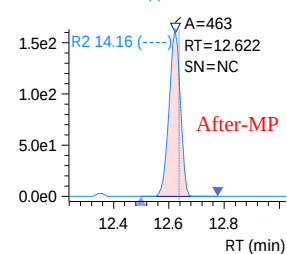
R1 813.00>218.95 (-)

1.63e2



R2 813.00>218.95 (-)

1.63e2





240119_052 (continued)

D3-MeFOSA
Conc. 2.3116

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. ----
R#1 0.00 (149.05)
R#2 0.00 (142.62)

D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 24.5754

Q 515.00>219.00 (-)

1.42e4

ISTD 515.00>219.00 (-)

1.42e4

Q 511.90>219.00 (-)

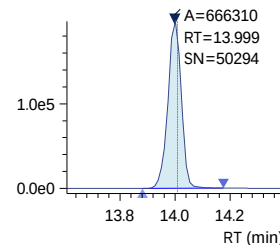
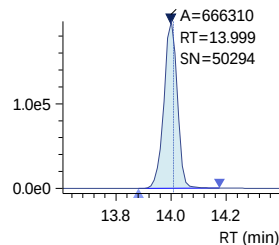
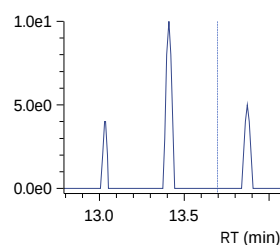
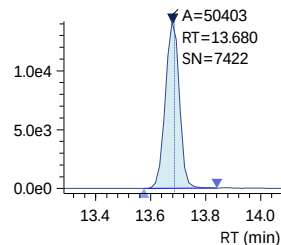
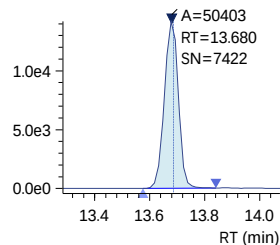
1.00e1

ISTD 639.20>58.90 (-)

1.97e5

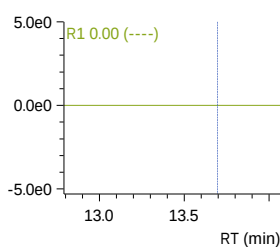
Q 639.20>58.90 (-)

1.97e5



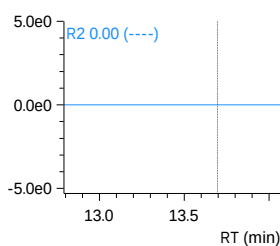
R1 511.90>169.00 (-)

0.00e0



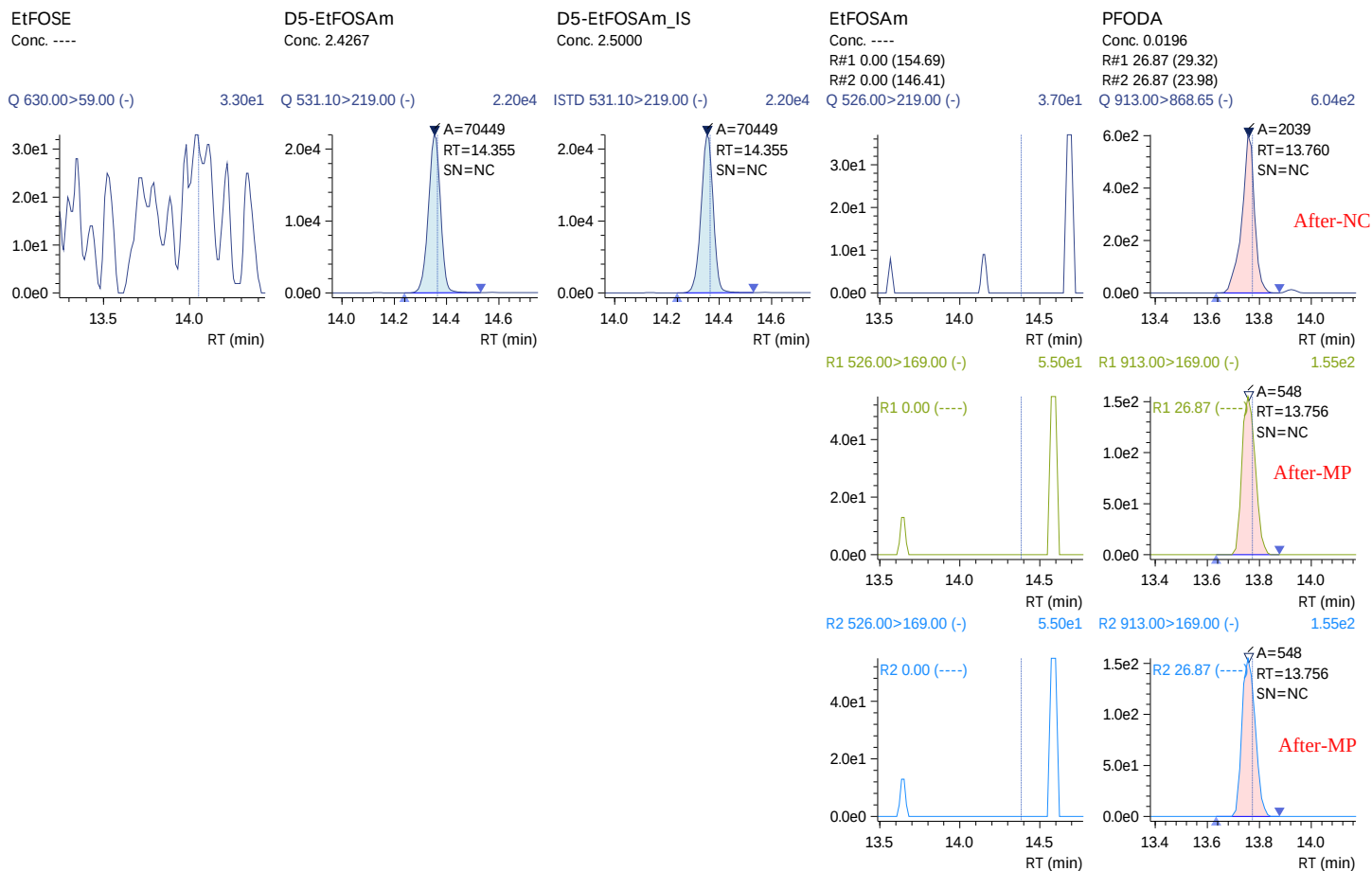
R2 511.90>169.00 (-)

0.00e0





240119_052 (continued)



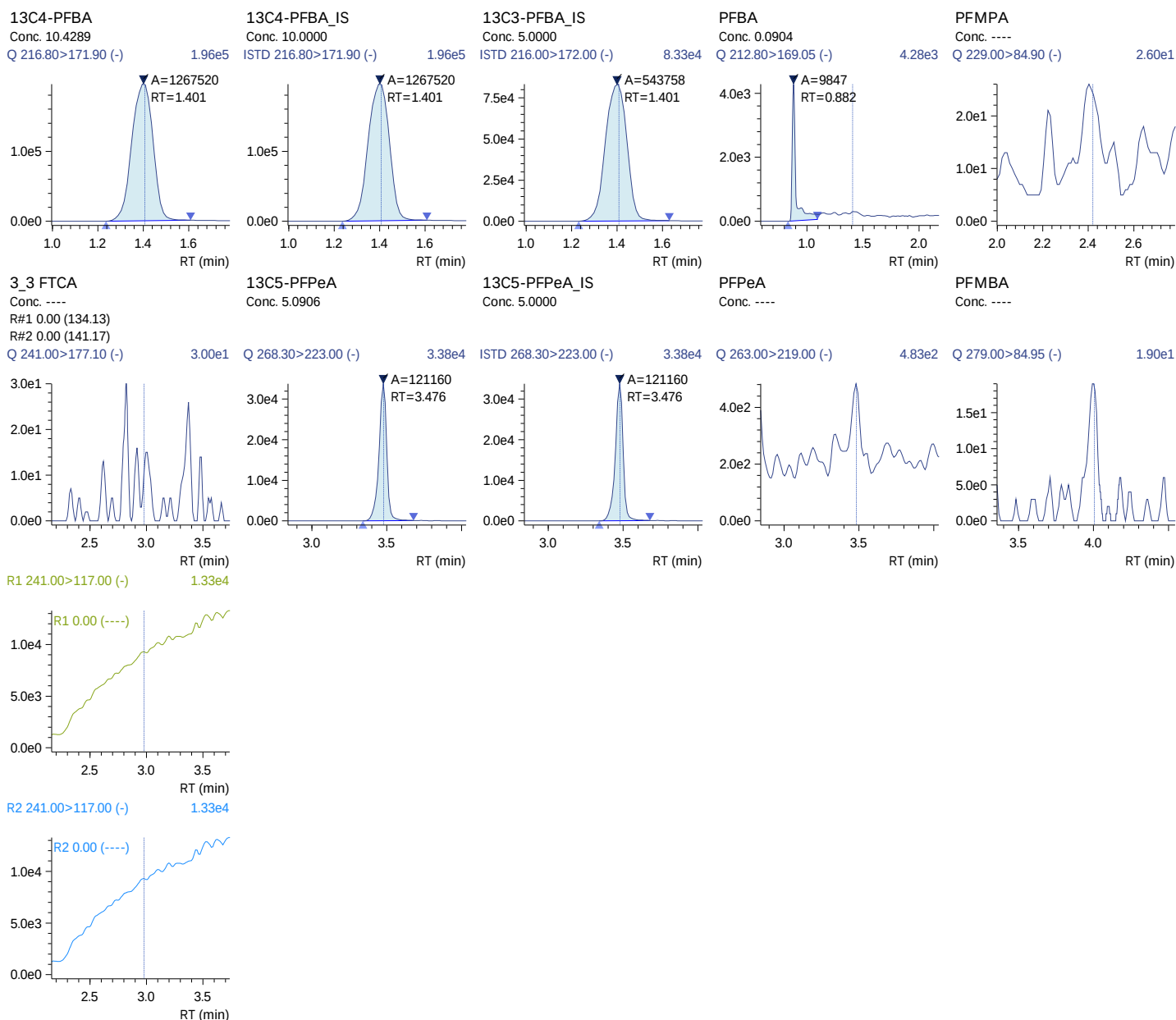
J:\LCMS08\Data\240119_1633_B1\240119_1633_B1.dampl

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_052

Sample ID: 1633 CCB
Date Acquired: 1/20/2024 7:34:43 AM
Acquired by: System Administrator
Data File: 240119_052
Vial: 54 | Inj. Volume: 10.0000uL | Tray: 1





240119_052 (continued)

13C2-4_2 FTS
 Conc. 6.4143

13C2-4_2 FTS_IS
 Conc. 5.0000

4_2 FTS
 Conc. ----
 R#1 0.00 (34.14)
 R#2 0.00 (29.06)

13C3-PFBS_IS
 Conc. 2.5000

PFBS
 Conc. ----
 R#1 0.00 (47.53)
 R#2 0.00 (46.72)

Q 329.10>80.90 (-)

5.75e4

ISTD 329.10>80.90 (-)

5.75e4

Q 327.10>307.00 (-)

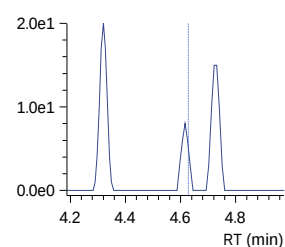
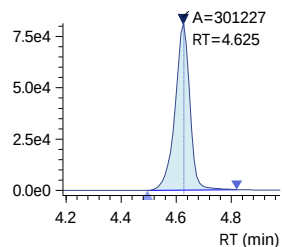
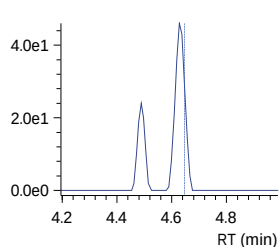
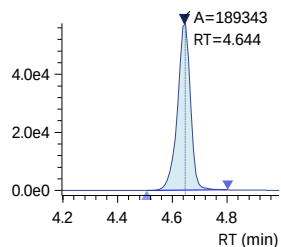
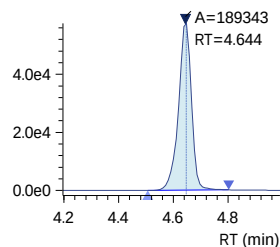
4.60e1

ISTD 302.10>79.90 (-)

8.14e4

Q 298.70>79.90 (-)

2.00e1

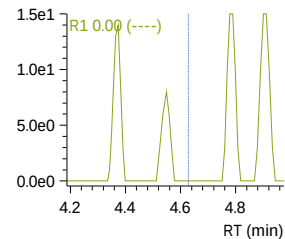
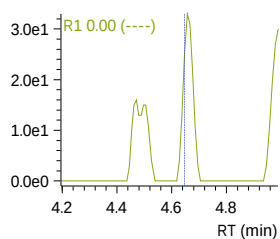


R1 327.10>80.90 (-)

3.30e1

R1 298.70>98.80 (-)

1.50e1

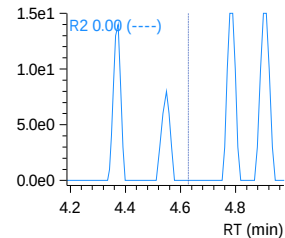
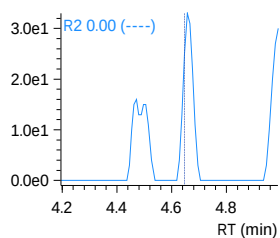


R2 327.10>80.90 (-)

3.30e1

R2 298.70>98.80 (-)

1.50e1





240119_052 (continued)

13C3-PFBS
 Conc. 2.4745

NFDHA
 Conc. ----
 R#1 0.00 (37.88)
 R#2 0.00 (40.25)

13C5-PFHxA
 Conc. 2.5336

13C5-PFHxA_IS
 Conc. 2.5000

13C2-PFHxA_IS
 Conc. 2.5000

Q 302.10>79.90 (-)

8.14e4

Q 295.00>201.00 (-)

2.62e2

Q 318.00>273.00 (-)

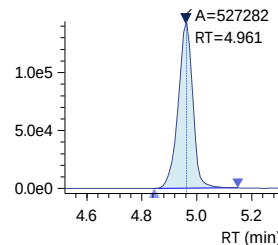
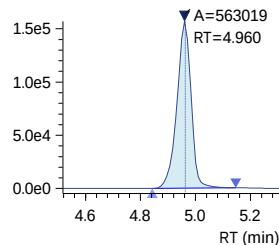
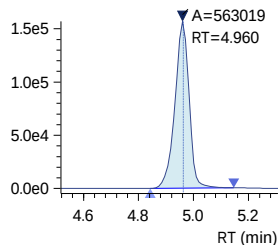
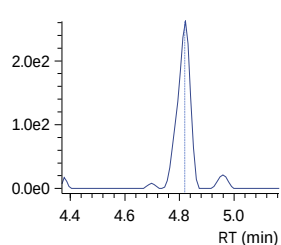
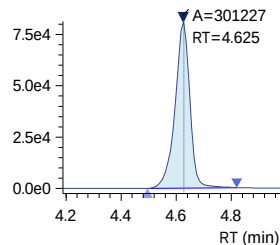
1.57e5

ISTD 318.00>273.00 (-)

1.57e5

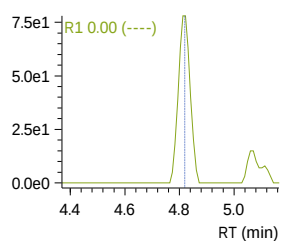
ISTD 315.10>270.00 (-)

1.44e5



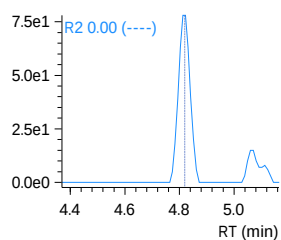
R1 295.00>84.90 (-)

7.80e1



R2 295.00>84.90 (-)

7.80e1





240119_052 (continued)

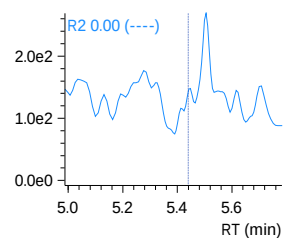
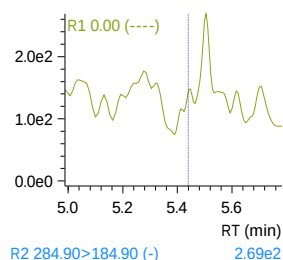
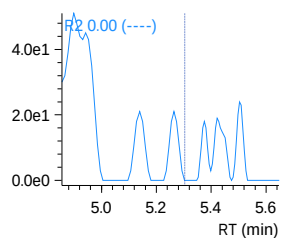
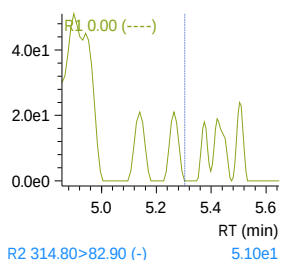
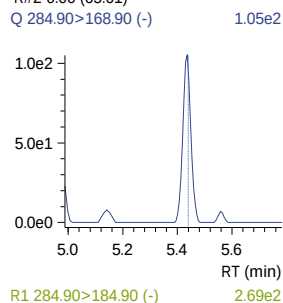
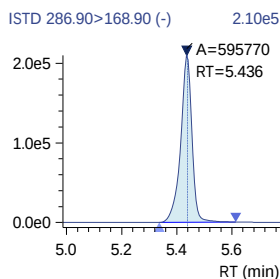
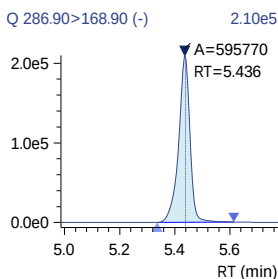
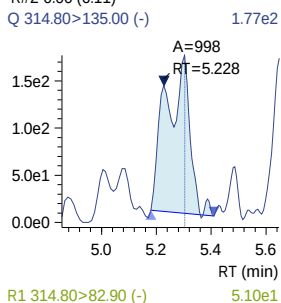
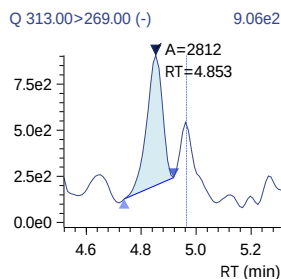
PFHxA
Conc. 0.0066

PFEESA
Conc. 0.0016
R#1 0.00 (5.88)
R#2 0.00 (6.11)

13C3-HFPO-DA
Conc. 11.5423

13C3-HFPO-DA_IS
Conc. 10.0000

HFPO-DA
Conc. ----
R#1 0.00 (63.80)
R#2 0.00 (65.61)





240119_052 (continued)

5_3 FTCA

Conc. ----

R#1 0.00 (167.13)

R#2 0.00 (158.86)

Q 341.00>237.05 (-)

1.27e2

PFPeS

Conc. ----

R#1 0.00 (56.71)

R#2 0.00 (55.80)

Q 349.10>79.90 (-)

3.60e1

13C4-PFHpa

Conc. 2.9866

Q 367.10>322.00 (-)

2.05e5

13C4-PFHpa_IS

Conc. 2.5000

ISTD 367.10>322.00 (-)

2.05e5

PFHpA

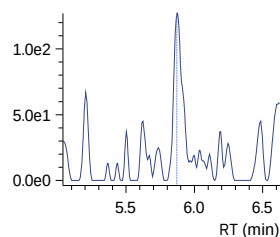
Conc. -0.0119

R#1 0.00 (21.37)

R#2 0.00 (21.50)

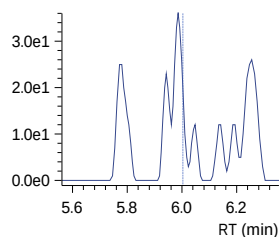
Q 363.10>319.00 (-)

1.81e3



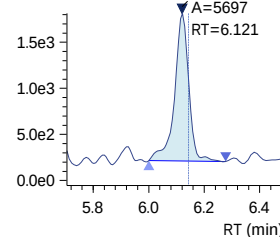
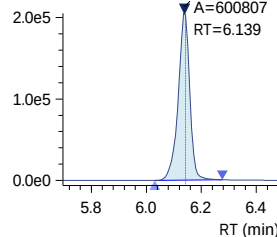
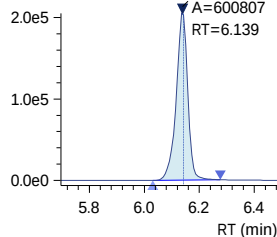
R1 341.00>217.00 (-)

2.85e3



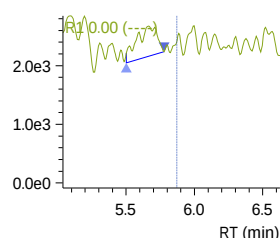
R1 349.10>98.80 (-)

3.00e1



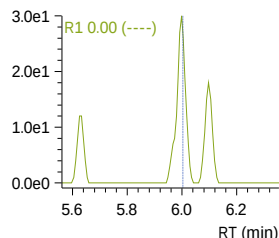
R1 363.10>169.00 (-)

3.78e2



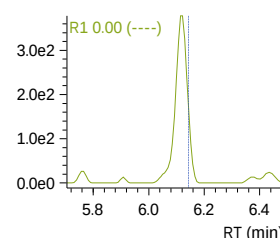
R2 341.00>217.00 (-)

2.85e3



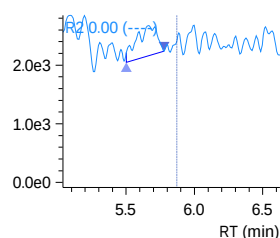
R2 349.10>98.80 (-)

3.00e1



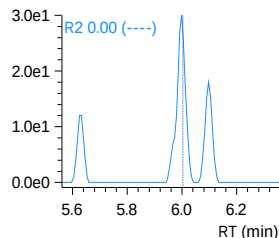
R2 363.10>169.00 (-)

3.78e2



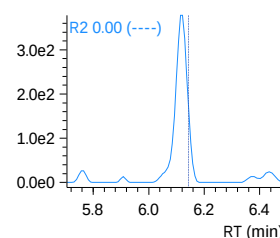
R2 341.00>217.00 (-)

2.85e3



R2 349.10>98.80 (-)

3.00e1

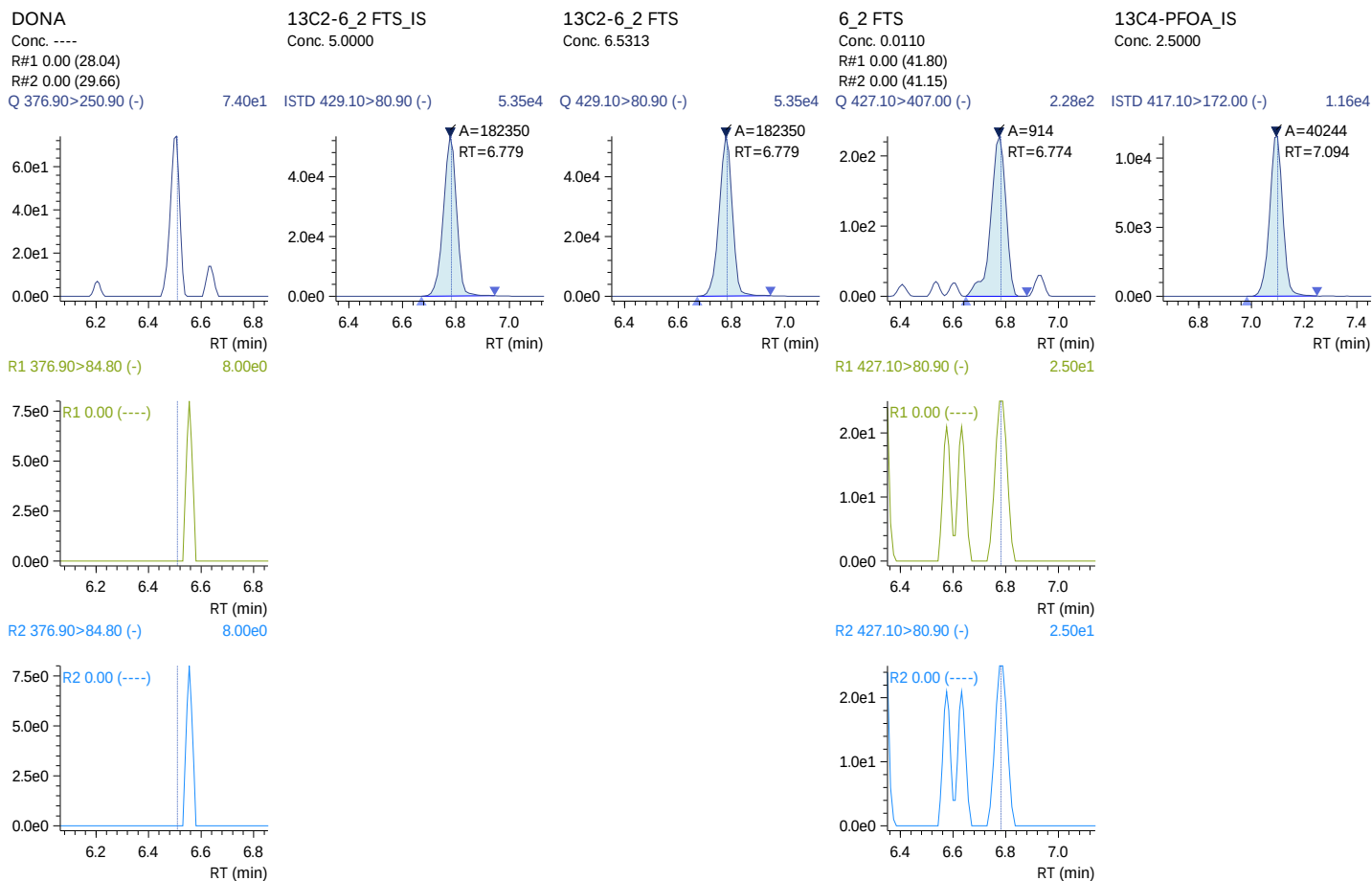


R2 363.10>169.00 (-)

3.78e2



240119_052 (continued)





240119_052 (continued)

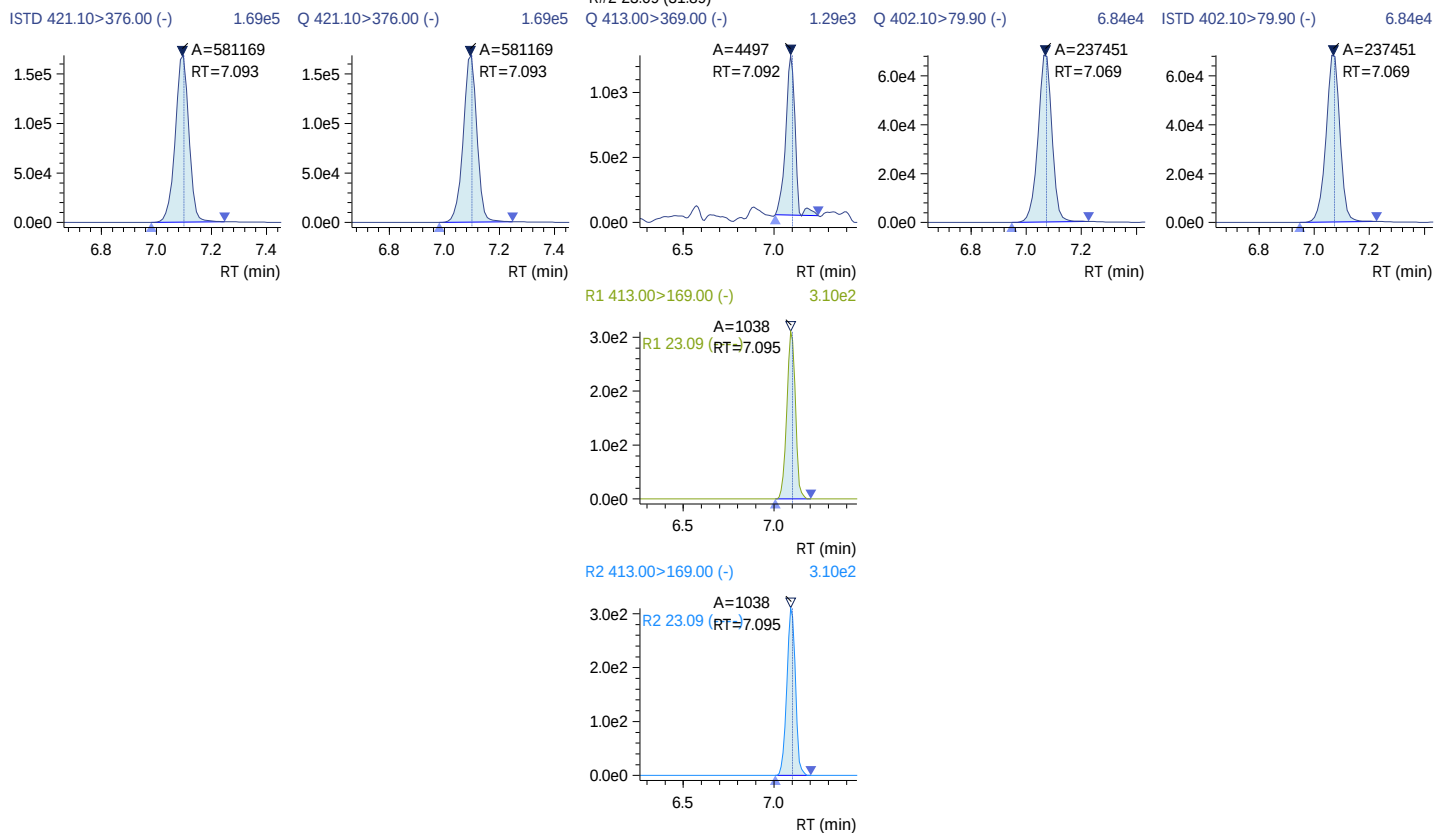
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.5837

PFOA
Conc. -0.0138
R#1 23.09 (29.05)
R#2 23.09 (31.89)

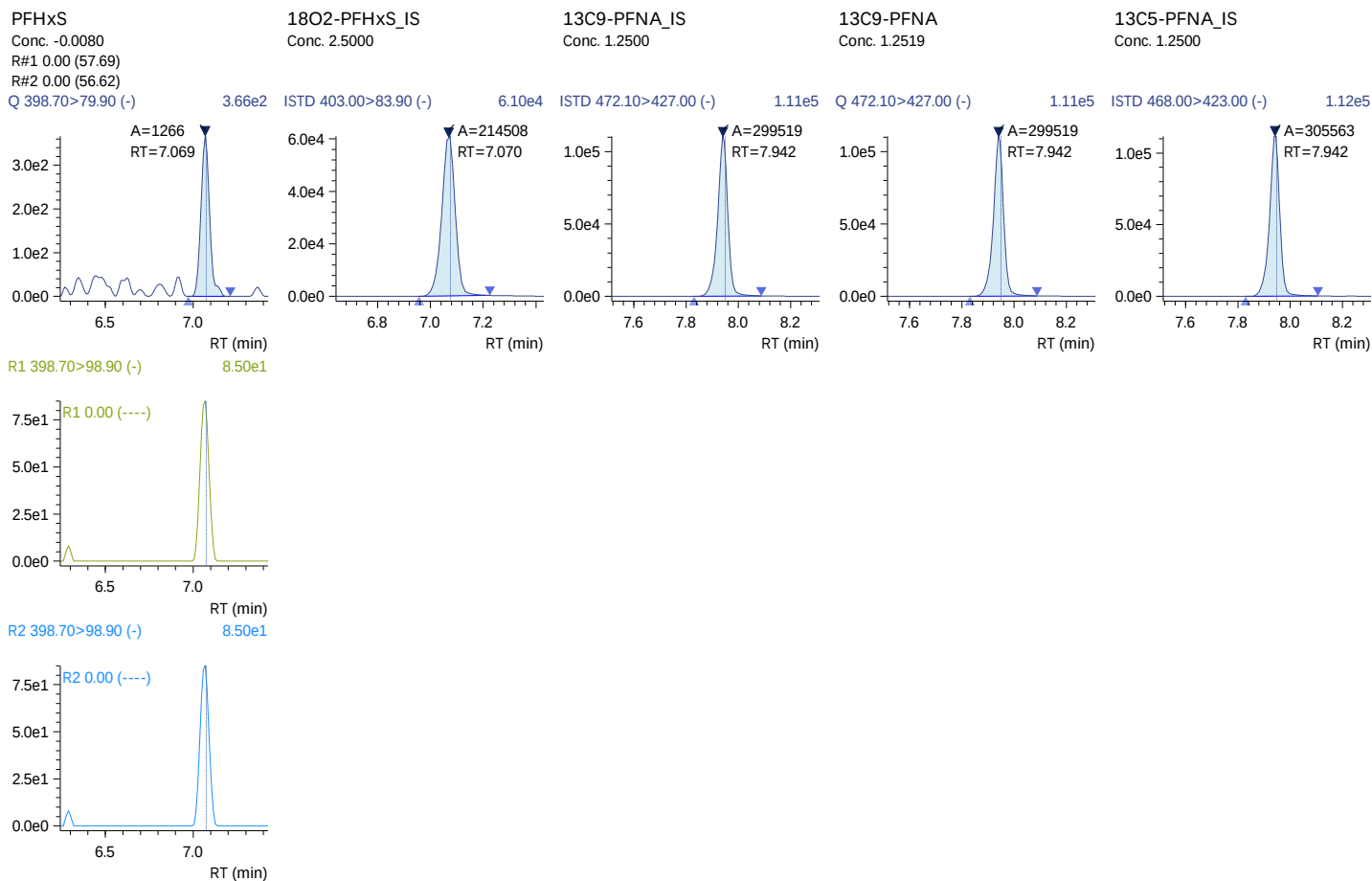
13C3-PFHxS
Conc. 2.5790

13C3-PFHxS_IS
Conc. 2.5000



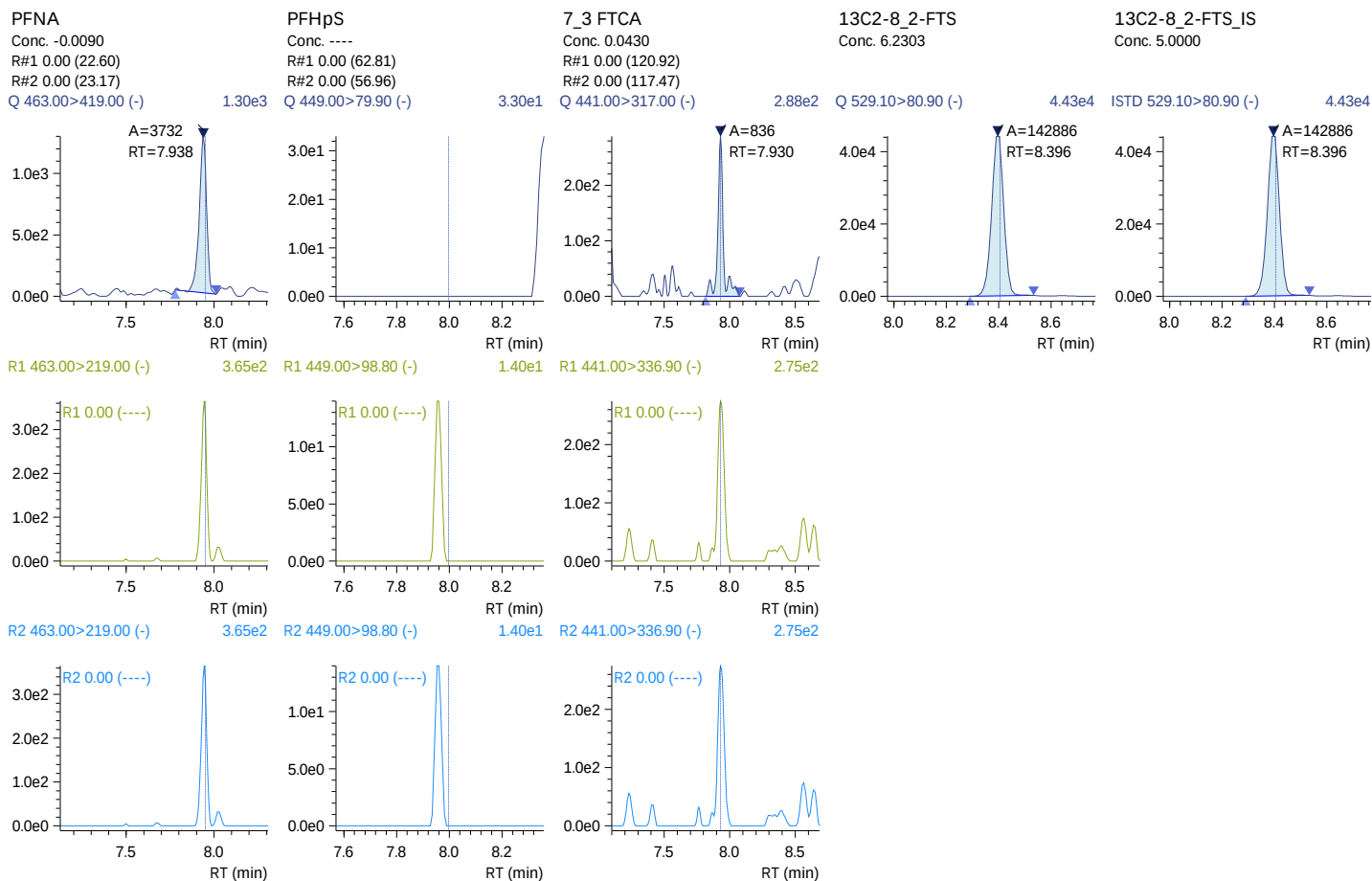


240119_052 (continued)



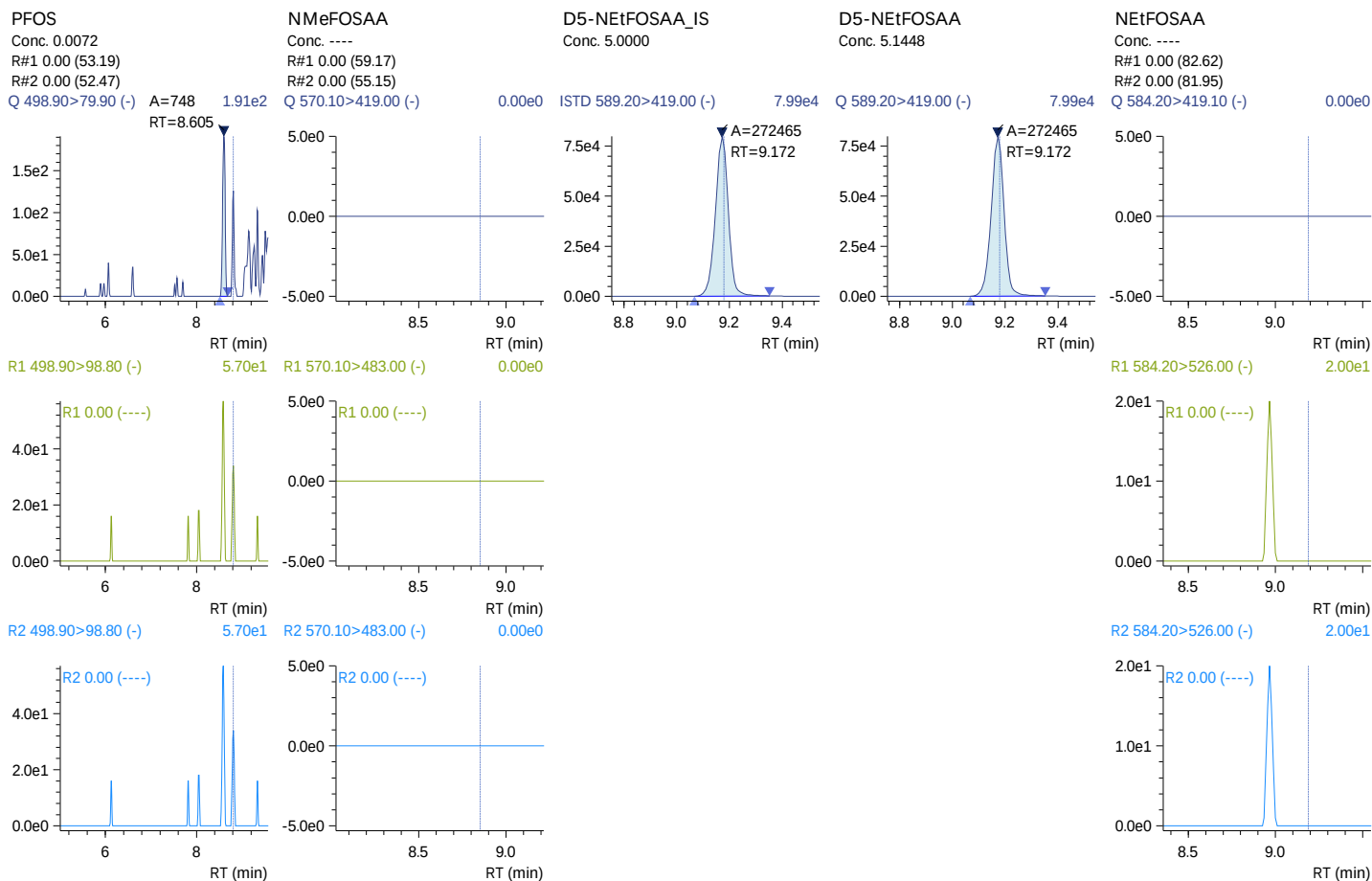


240119_052 (continued)





240119_052 (continued)





240119_052 (continued)

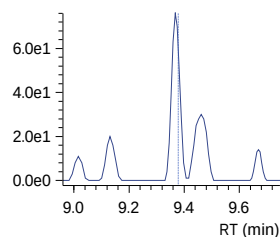
9-Cl-PF3ONS

Conc. ----

R#1 0.00 (31.76)

R#2 0.00 (32.76)

Q 530.80>351.00 (-)



R1 532.80>353.00 (-)

1.23e2

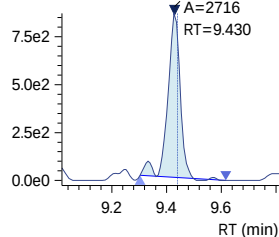
PFUnDA

Conc. -0.0154

R#1 0.00 (12.31)

R#2 0.00 (13.12)

Q 563.10>519.00 (-)



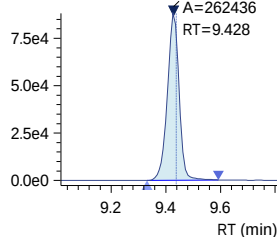
R1 563.10>269.10 (-)

2.59e2

13C7-PFUnDA_IS

Conc. 1.2500

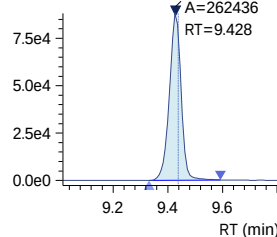
ISTD 570.00>525.10 (-)



13C7-PFUnDA

Conc. 1.3484

Q 570.00>525.10 (-)



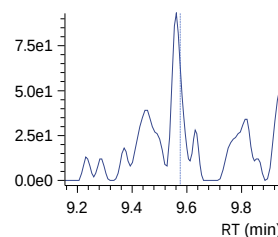
PFNS

Conc. ----

R#1 0.00 (63.31)

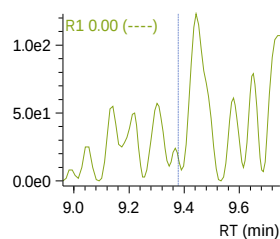
R#2 0.00 (65.22)

Q 548.80>79.90 (-)



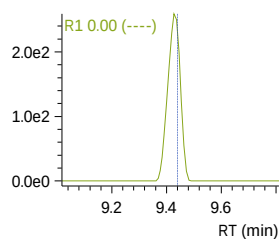
R1 548.80>98.80 (-)

2.80e1



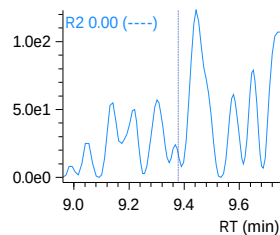
R2 532.80>353.00 (-)

1.23e2

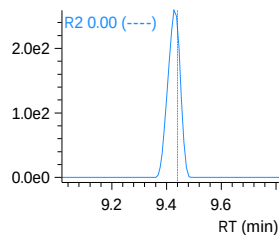


R2 563.10>269.10 (-)

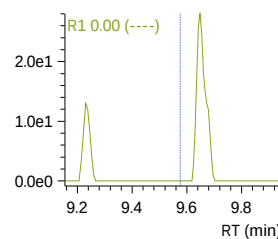
2.59e2



R2 0.00 (-)

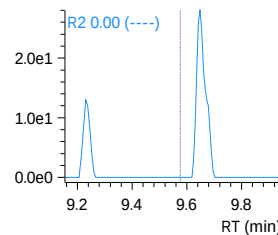


R2 0.00 (-)



R2 548.80>98.80 (-)

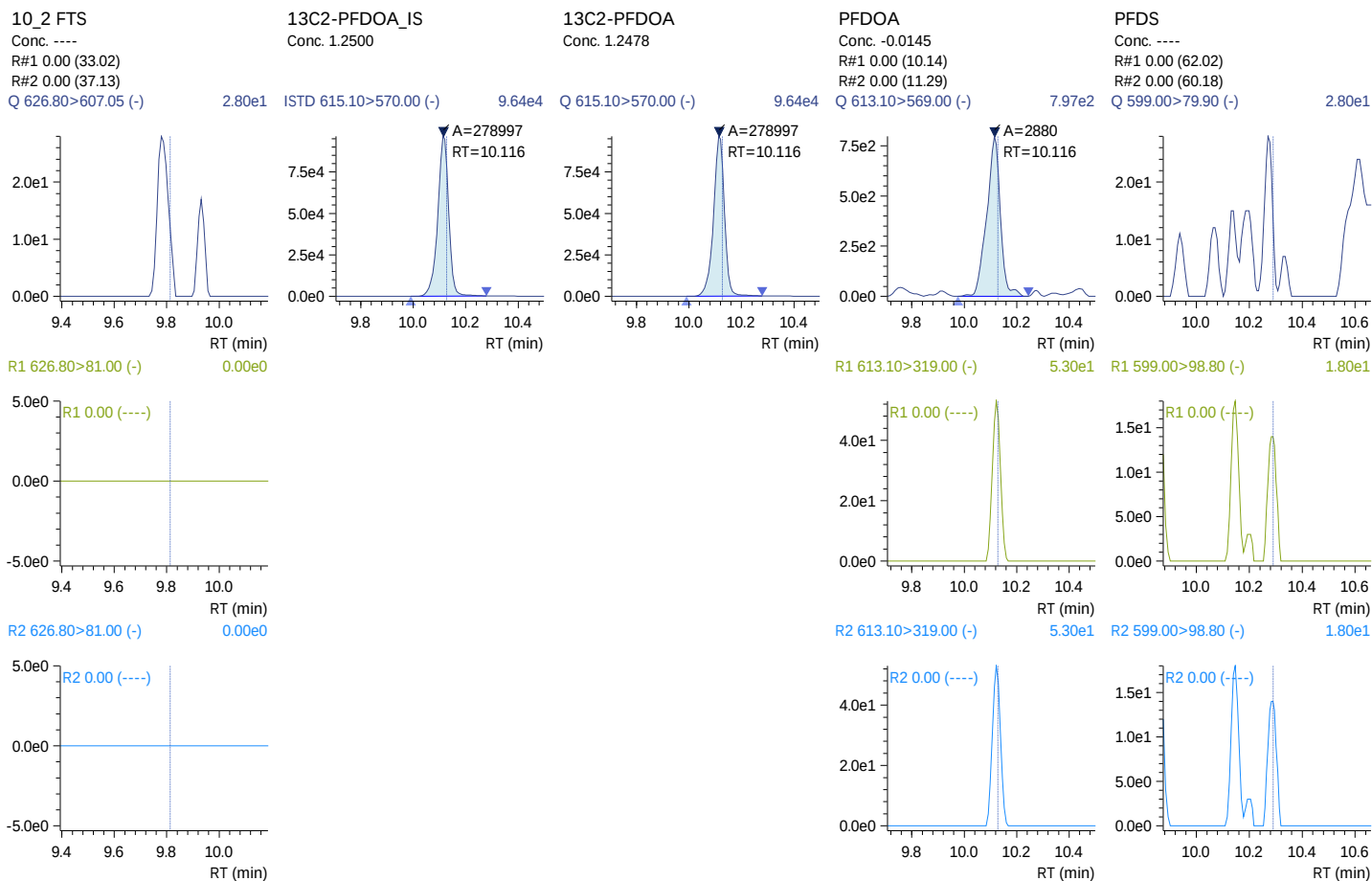
2.80e1



R2 0.00 (-)

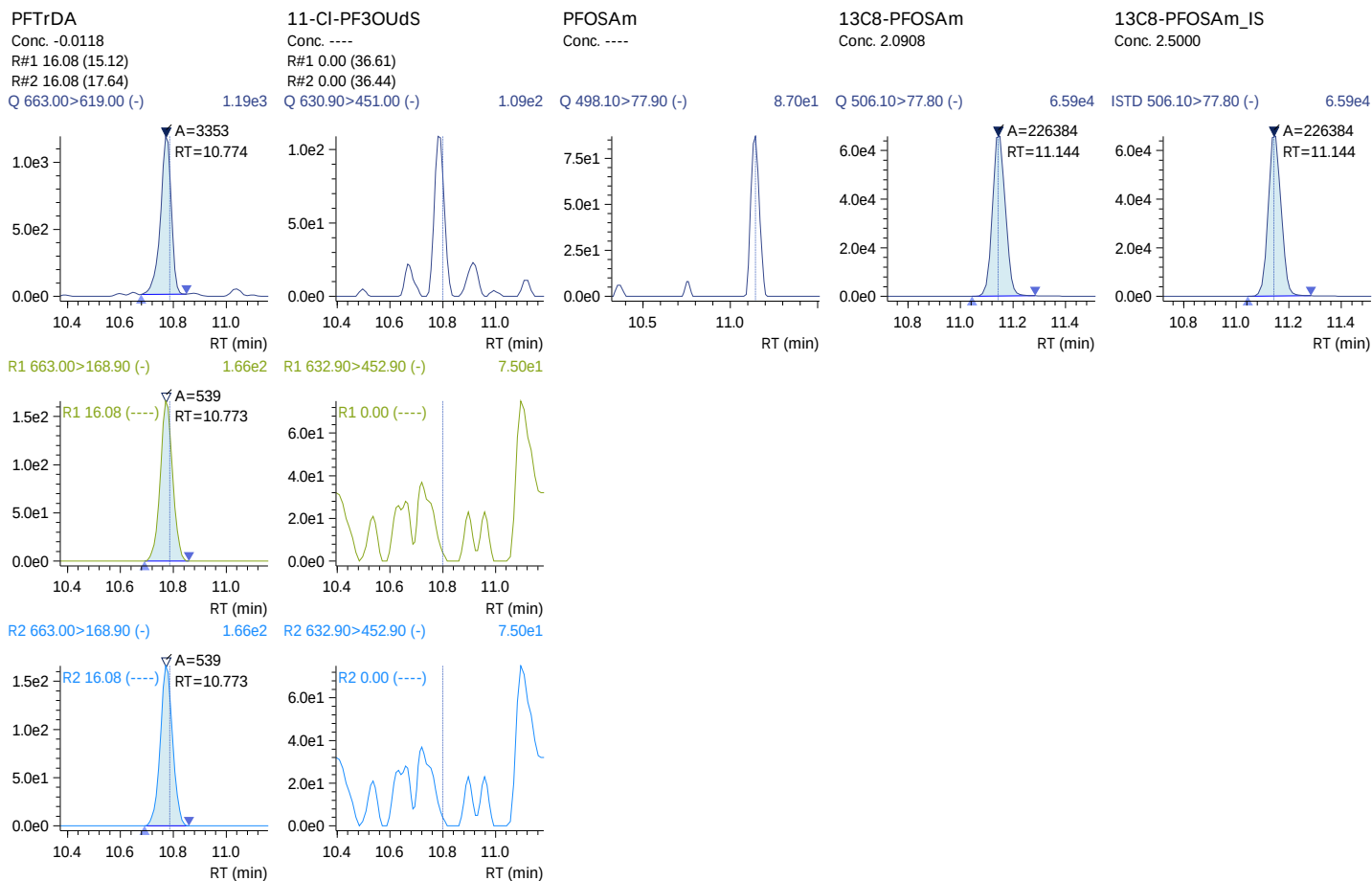


240119_052 (continued)



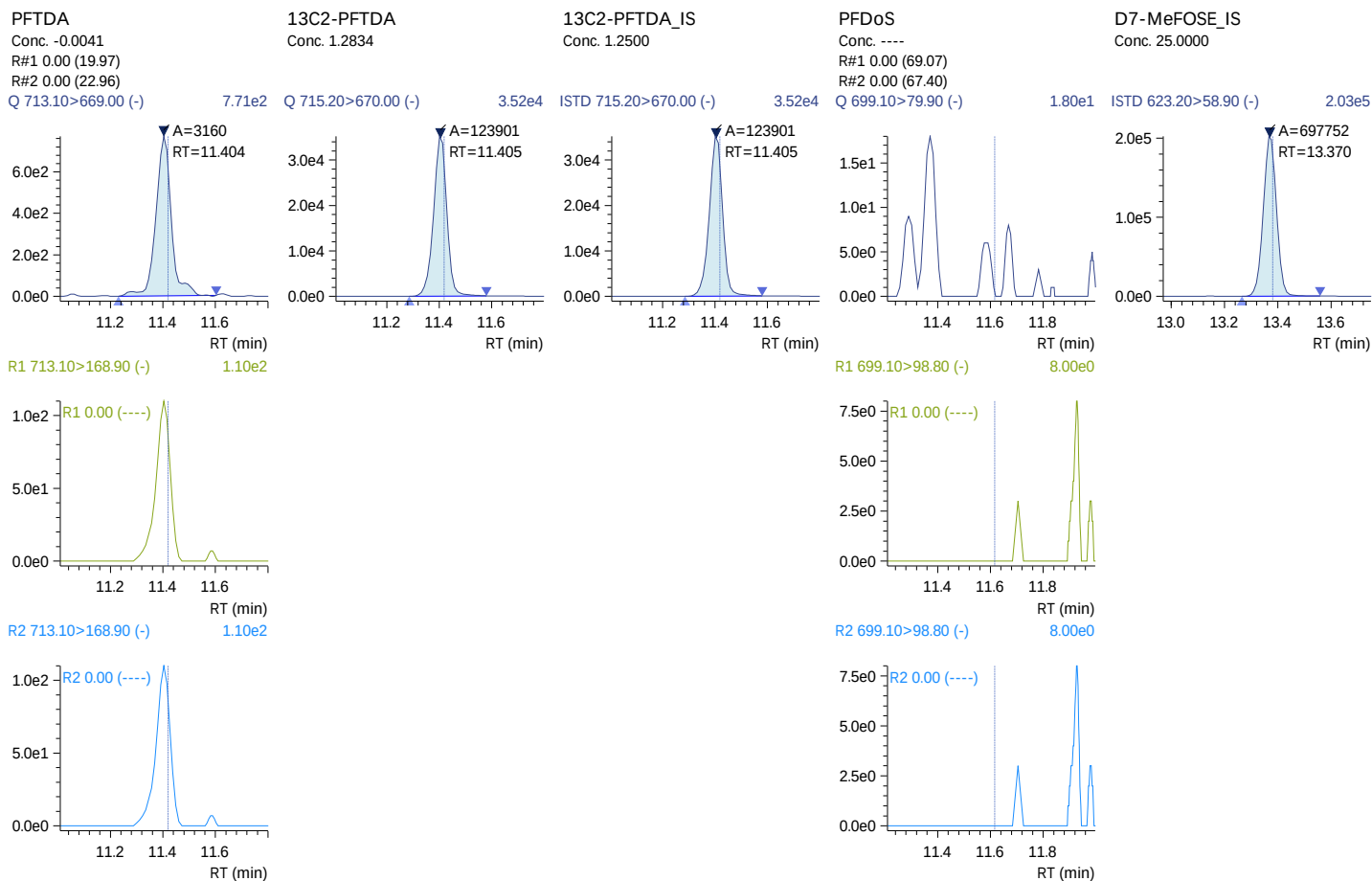


240119_052 (continued)





240119_052 (continued)





240119_052 (continued)

D7-MeFOSE
 Conc. 26.1379

MeFOSE
 Conc. ----

13C2-PFHXA_IS
 Conc. 2.5000

13C2-PFHXA
 Conc. 2.4363

PFHXA
 Conc. -0.0110
 R#1 0.00 (11.64)
 R#2 0.00 (13.90)

Q 623.20>58.90 (-)

2.03e5

Q 616.10>59.00 (-)

7.20e1

ISTD 815.00>770.05 (-)

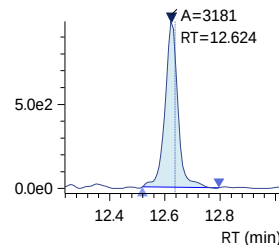
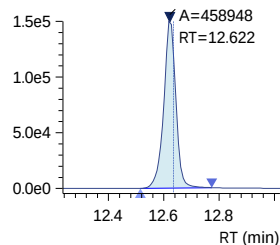
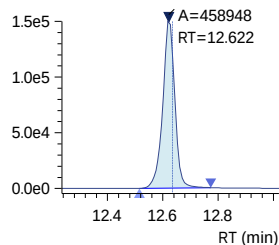
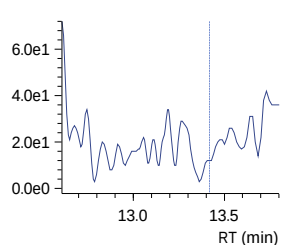
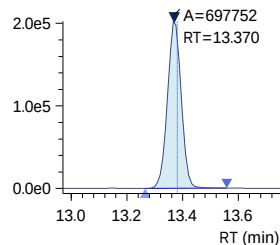
1.50e5

Q 815.00>770.05 (-)

1.50e5

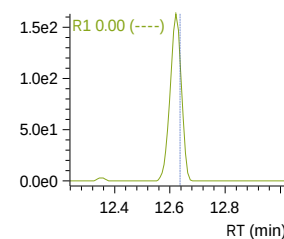
Q 813.00>768.95 (-)

9.94e2



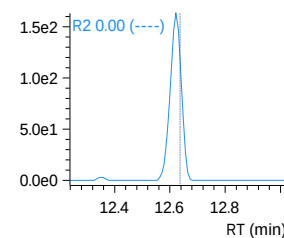
R1 813.00>218.95 (-)

1.63e2



R2 813.00>218.95 (-)

1.63e2





240119_052 (continued)

D3-MeFOSA
 Conc. 2.3116

D3-MeFOSA_IS
 Conc. 2.5000

MeFOSA
 Conc. ----
 R#1 0.00 (149.05)
 R#2 0.00 (140.79)

D9-EtFOSE_IS
 Conc. 25.0000

D9-EtFOSE
 Conc. 24.5754

Q 515.00>219.00 (-)

1.42e4

ISTD 515.00>219.00 (-)

1.42e4

Q 511.90>219.00 (-)

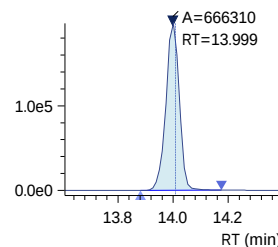
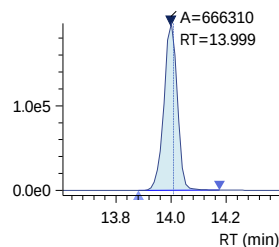
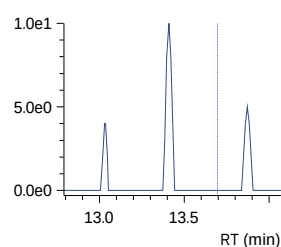
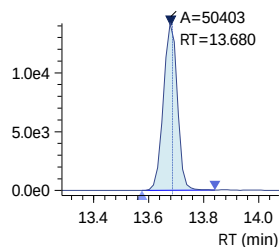
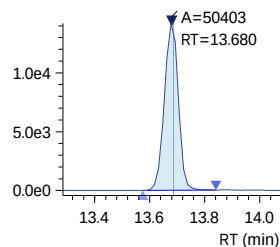
1.00e1

ISTD 639.20>58.90 (-)

1.97e5

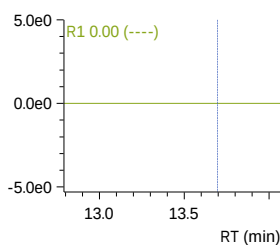
Q 639.20>58.90 (-)

1.97e5



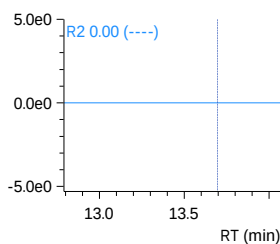
R1 511.90>169.00 (-)

0.00e0



R2 511.90>169.00 (-)

0.00e0





240119_052 (continued)

EtFOSE
Conc. ----

D5-EtFOSAm
Conc. 2.4267

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. ----

PFODA
Conc. 0.0196

Q 630.00>59.00 (-)

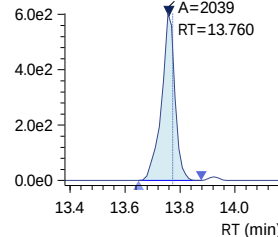
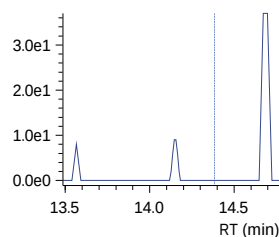
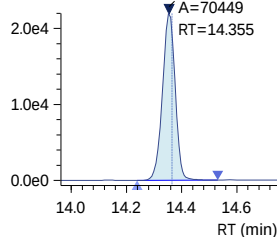
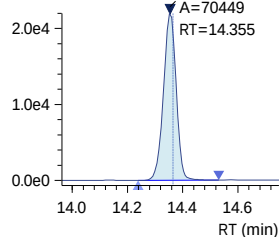
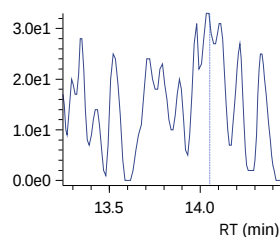
3.30e1 Q 531.10>219.00 (-)

2.20e4 ISTD 531.10>219.00 (-)

2.20e4 Q 526.00>219.00 (-)

3.70e1 Q 913.00>868.65 (-)

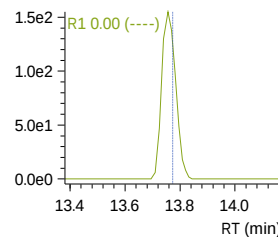
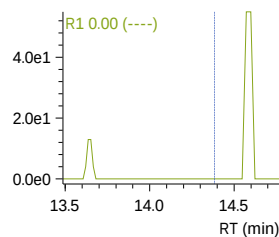
6.04e2



R1 526.00>169.00 (-)

5.50e1 R1 913.00>169.00 (-)

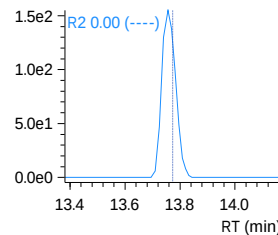
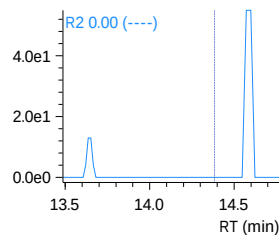
1.55e2



R2 526.00>169.00 (-)

5.50e1 R2 913.00>169.00 (-)

1.55e2



Validation Report

1st PS 01/23/24
2nd UA 01/23/24

Data File: J:\LCMS08\Data\240119_1633_B1\240119_067
Lab ID: KQ2400951-15
RunType: CCB
Matrix: Soil

Date Acquired: 1/20/24 13:23
Batch ID: 830171
Analysis Method: 1633/PFAS_DOD5.4

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery	X	
Internal Standards	X	
Surrogates	X	
Above Highest ICAL Level	X	

Primary Review: _____

Secondary Review: _____

Quantitation Report

1st *PS* 01/23/24
2nd *JA* 01/23/24

Data File:	J:\LCMS08\Data\240119_1633_B1\240119_067	Instrument:	K-LCMS-08
Acqu Date:	1/20/24 13:23	Vial:	58
Run Type:	CCB	Dilution:	1
Lab ID:	KQ2400951-15	Raw Units:	ng/mL

Bottle ID:		Tier:	IV	Matrix:	Soil
Prod Code:	PFAS_DOD5.4	Collect Date:	12/6/23	Receive Date:	12/13/23

Analysis Lot:	830171	Prep Lot:		Report Group:	KQ2400951
Analysis	1633	Prep Method:			
		Prep Date:			

Title:	Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM	Calibration ID:	KC2400027
		Report List ID:	24615

Internal Standard Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Area Criteria
18O2-PFHxS	7.072	-0.02	202129	2.5000	OK
13C4-PFOS	8.803	-0.02	237771	2.5000	OK
13C3-PFBA	1.403	-0.01	558028	5.0000	OK
13C2-PFHxA	4.963	-0.02	540537	2.5000	OK
13C4-PFOA	7.095	-0.02	40858	2.5000	OK
13C5-PFNA	7.943	-0.01	289532	1.2500	OK
13C2-PFDA	8.706	-0.02	204274	1.2500	OK

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
13C3-PFBS	4.628	-0.02	308833	2.6924	108	20 - 150	Y
13C3-PFHxS	7.072	-0.02	223329	2.5741	103	20 - 150	Y
13C8-PFOS	8.803	-0.02	95898	2.4184	97	20 - 150	Y
13C4-PFBA	1.404	-0.01	1297123	10.3995	104	20 - 150	Y
13C5-PFPeA	3.479	-0.02	128757	5.2771	106	20 - 150	Y
13C5-PFHxA	4.962	-0.02	588290	2.5824	103	20 - 150	Y
13C4-PFHpA	6.141	-0.02	580699	2.8158	113	20 - 150	Y
13C8-PFOA	7.095	-0.02	547671	2.3982	96	20 - 150	Y
13C9-PFNA	7.943	-0.01	287278	1.2672	101	20 - 150	Y
13C6-PFDA	8.706	-0.02	229485	1.3964	112	20 - 150	Y
13C7-PFUnDA	9.428	-0.01	249404	1.2722	102	20 - 150	Y
13C2-PFDoDA	10.114	-0.02	269848	1.1982	96	20 - 150	Y
13C2-PFTeDA	11.403	-0.02	110063	1.1319	91	20 - 150	Y
13C8-FOSA	11.145	-0.01	225751	2.2365	89	20 - 150	Y
D3-MeFOSA	13.676	-0.01	48205	2.3715	95	20 - 150	Y
D5-EtFOSA	14.352	-0.01	69883	2.5822	103	20 - 150	Y
D7-MeFOSE	13.368	-0.01	693373	27.8621	111	20 - 150	Y
D9-EtFOSE	13.997	-0.01	671388	26.5628	106	20 - 150	Y

			1st	PS	01/23/24
Data File:	J:\LCMS08\Data\240119_1633_B1\240119_067	Instrument:	K-LCMS08	2nd	01/23/24
Acqu Date:	1/20/24 13:23	Vial:	58	UA	
Run Type:	CCB	Dilution:	1		
Lab ID:	KQ2400951-15	Raw Units:	ng/mL		

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
D3-MeFOSAA	8.841	-0.02	244255	5.9189	118	20 - 150	Y
D5-EtFOSAA	9.170	-0.02	273246	5.5346	111	20 - 150	Y
13C2-4:2 FTS	4.646	-0.02	173025	6.2204	124	20 - 150	Y
13C2-6:2 FTS	6.781	-0.02	173702	6.6026	132	20 - 150	Y
13C2-8:2 FTS	8.397	-0.01	138164	6.3933	128	20 - 150	Y
13C3-HFPO-DA	5.438	-0.02	614459	11.6124	116	20 - 150	Y

Target Compounds

Final Conc.Units: ng/g

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Perfluorobutane sulfonic acid (PFBS)	4.625	-0.02	15	0.0001	0.00010	U	Y
Perfluoropentane sulfonic acid (PFPeS)	6.009	-0.01	86	0.0007	0.00070	U	Y
Perfluorohexane sulfonic acid (PFHxS)	7.070	-0.02	1068	-0.0092	0	U	Y
Perfluoroheptane sulfonic acid (PFHpS)	0		0	0	0	U	Y
Perfluorooctane sulfonic acid (PFOS)	8.809	-0.01	266	0.0027	0.0027	U	Y
Perfluorononane sulfonic acid (PFNS)	9.580	0.00	74	0.0010	0.0010	U	Y
Perfluorodecane sulfonic acid (PFDS)	0		0	0	0	U	Y
Perfluorododecane sulfonic acid (PFDoS)	0		0	0	0	U	Y
Perfluorobutanoic acid (PFBA)	1.432	+0.02	779	0.0070	0.0070	U	Y
Perfluoropentanoic acid (PFPeA)	3.483	-0.02	1739	0.0104	0.010	U	Y
Perfluorohexanoic acid (PFHxA)	4.956	-0.03	2027	0.0020	0.0020	U	Y
Perfluoroheptanoic acid (PFHpA)	6.124	-0.04	6324	-0.0085	0	U	Y
Perfluorooctanoic acid (PFOA)	7.093	-0.02	4420	-0.0125	0	U	Y
Perfluorononanoic acid (PFNA)	7.943	-0.02	4581	-0.0028	0	U	Y
Perfluorodecanoic acid (PFDA)	8.701	-0.02	3957	-0.0074	0	U	Y
Perfluoroundecanoic acid (PFUnDA)	9.426	-0.02	3512	-0.0103	0	U	Y
Perfluorododecanoic acid (PFDOA)	10.111	-0.02	2459	-0.0166	0	U	Y
Perfluorotridecanoic acid (PFTTrDA)	10.768	-0.02	3013	-0.0116	0	U	Y
Perfluorotetradecanoic acid (PFTDA)	11.405	-0.02	2499	-0.0067	0	U	Y
Perfluorooctane sulfonamide (PFOSAm)	11.154	0.00	226	0.0030	0.0030	U	Y
N-Methylperfluorooctane sulfonamide (MeFOSA)	0		0	0	0	U	Y
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	0		0	0	0	U	Y
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	0		0	0	0	U	Y
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	0		0	0	0	U	Y
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	0		0	0	0	U	Y

			1st	PS	01/23/24
Data File:	J:\LCMS08\Data\240119_1633_B1\240119_067	Instrument:	K-LCMS08	UA	01/23/24
Acqu Date:	1/20/24 13:23	Vial:	58		
Run Type:	CCB	Dilution:	1		
Lab ID:	KQ2400951-15	Raw Units:	ng/mL		

Target Compounds

Final Conc.Units: ng/g

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	0		0	0	0	U	Y
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	4.636	-0.03	183	0.0021	0.0021	U	Y
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	6.778	-0.02	1187	0.0150	0.015	U	Y
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	8.395	-0.02	44	0.0007	0.00070	U	Y
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	0		0	0	0	U	Y
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	0		0	0	0	U	Y
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	7.925	-0.02	803	0.0395	0.040	U	Y
Perfluoro(2-ethoxyethane) sulfonic acid (PFEEESA)	0		0	0	0	U	Y
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	0		0	0	0	U	Y
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	0		0	0	0	U	Y
Perfluoro-3-methoxypropanoic acid (PFMPA)	0		0	0	0	U	Y
Perfluoro-4-methoxybutanoic acid (PFMBA)	4.015	-0.01	55	0.0005	0.00050	U	Y
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	0		0	0	0	U	Y
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	4.825	-0.01	947	0.0073	0.0073	U	Y
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	0		0	0	0	U	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 1/23/24 14:28

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240119_067

Sample ID: 1633 CCB
Date Acquired: 1/20/2024 1:23:38 PM
Acquired by: System Administrator
Data File: 240119_067
Vial: 54 | Inj. Volume: 10.0000uL | Tray: 1

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	1297123	----	----	----	----	----	----	
13C4-PFBA_IS	216.80>171.90	----	1297123	----	----	----	----	----	----	
13C3-PFBA_IS	216.00>172.00	----	558028	----	----	----	----	----	----	
PFBA	212.80>169.05	----	779	----	----	----	----	----	----	
PFMPA	229.00>84.90	----	----	----	----	----	----	----	----	
3_3 FTCA	241.00>177.10	241.00>117.00	----	0	0.00	141.17	0	0.00	143.25	
13C5-PFPeA	268.30>223.00	----	128757	----	----	----	----	----	----	
13C5-PFPeA_IS	268.30>223.00	----	128757	----	----	----	----	----	----	
PFPeA	263.00>219.00	----	1739	----	----	----	----	----	----	
PFMBA	279.00>84.95	----	55	----	----	----	----	----	----	
13C2-4_2 FTS	329.10>80.90	----	173025	----	----	----	----	----	----	
13C2-4_2 FTS_IS	329.10>80.90	----	173025	----	----	----	----	----	----	
4_2 FTS	327.10>307.00	327.10>80.90	183	32	17.67	29.06	32	17.67	31.50	
13C3-PFBS_IS	302.10>79.90	----	308833	----	----	----	----	----	----	
PFBS	298.70>79.90	298.70>98.80	15	15	100.00	46.72	15	100.00	48.74	IRr
13C3-PFBS	302.10>79.90	----	308833	----	----	----	----	----	----	
NFDHA	295.00>201.00	295.00>84.90	947	412	43.46	40.25	412	43.46	36.97	
13C5-PFHxA	318.00>273.00	----	588290	----	----	----	----	----	----	
13C5-PFHxA_IS	318.00>273.00	----	588290	----	----	----	----	----	----	
13C2-PFHxA_IS	315.10>270.00	----	540537	----	----	----	----	----	----	
PFHxA	313.00>269.00	----	2027	----	----	----	----	----	----	
PFEESA	314.80>135.00	314.80>82.90	----	0	0.00	6.11	0	0.00	5.81	
13C3-HFPO-DA	286.90>168.90	----	614459	----	----	----	----	----	----	
13C3-HFPO-DA_IS	286.90>168.90	----	614459	----	----	----	----	----	----	
HFPO-DA	284.90>168.90	284.90>184.90	----	0	0.00	65.61	0	0.00	64.39	
5_3 FTCA	341.00>237.05	341.00>217.00	----	0	0.00	158.86	0	0.00	159.75	
PFPeS	349.10>79.90	349.10>98.80	86	28	32.61	55.80	28	32.61	54.52	
13C4-PFHpA	367.10>322.00	----	580699	----	----	----	----	----	----	
13C4-PFHpA_IS	367.10>322.00	----	580699	----	----	----	----	----	----	
PFHpA	363.10>319.00	363.10>169.00	6324	1186	18.76	21.50	1186	18.76	23.22	
DONA	376.90>250.90	376.90>84.80	----	0	0.00	29.66	0	0.00	29.43	
13C2-6_2 FTS_IS	429.10>80.90	----	173702	----	----	----	----	----	----	
13C2-6_2 FTS	429.10>80.90	----	173702	----	----	----	----	----	----	
6_2 FTS	427.10>407.00	427.10>80.90	1187	476	40.15	41.15	469	39.53	43.09	
13C4-PFOA_IS	417.10>172.00	----	40858	----	----	----	----	----	----	
13C8-PFOA_IS	421.10>376.00	----	547671	----	----	----	----	----	----	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240119_067 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	547671	----	----	----	----	----	----	----
PFOA	413.00>369.00	413.00>169.00	4420	1164	26.34	31.89	1164	26.34	30.51	
13C3-PFHxS	402.10>79.90	----	223329	----	----	----	----	----	----	----
13C3-PFHxS_IS	402.10>79.90	----	223329	----	----	----	----	----	----	----
PFHxS	398.70>79.90	398.70>98.90	1068	542	50.78	56.62	542	50.78	57.27	
18O2-PFHxS_IS	403.00>83.90	----	202129	----	----	----	----	----	----	----
13C9-PFNA_IS	472.10>427.00	----	287278	----	----	----	----	----	----	----
13C9-PFNA	472.10>427.00	----	287278	----	----	----	----	----	----	----
13C5-PFNA_IS	468.00>423.00	----	289532	----	----	----	----	----	----	----
PFNA	463.00>419.00	463.00>219.00	4581	931	20.33	23.17	931	20.33	23.01	
PFHpS	449.00>79.90	449.00>98.80	----	0	0.00	56.96	0	0.00	58.58	
7_3 FTCA	441.00>317.00	441.00>336.90	803	1164	144.93	117.47	1164	144.93	117.17	
13C2-8_2-FTS	529.10>80.90	----	138164	----	----	----	----	----	----	----
13C2-8_2-FTS_IS	529.10>80.90	----	138164	----	----	----	----	----	----	----
8_2 FTS	527.10>506.95	527.10>80.80	44	110	250.65	49.59	110	250.65	43.30	IRr
13C6-PFDA_IS	519.10>474.10	----	229485	----	----	----	----	----	----	----
13C6-PFDA	519.10>474.10	----	229485	----	----	----	----	----	----	----
13C2-PFDA_IS	515.10>470.10	----	204274	----	----	----	----	----	----	----
PFDA	512.90>469.00	512.90>219.00	3957	760	19.20	19.00	760	19.20	19.26	
D3-NMeFOSAA_IS	573.20>419.00	----	244255	----	----	----	----	----	----	----
D3-NMeFOSAA	573.20>419.00	----	244255	----	----	----	----	----	----	----
13C8-PFOS_IS	507.10>98.90	----	95898	----	----	----	----	----	----	----
13C8-PFOS	507.10>98.90	----	95898	----	----	----	----	----	----	----
13C4-PFOS_IS	502.80>79.90	----	237771	----	----	----	----	----	----	----
PFOS	498.90>79.90	498.90>98.80	266	176	66.37	52.47	176	66.37	47.25	
NMeFOSAA	570.10>419.00	570.10>483.00	----	0	0.00	55.15	0	0.00	62.10	
D5-NetFOSAA_IS	589.20>419.00	----	273246	----	----	----	----	----	----	----
D5-NetFOSAA	589.20>419.00	----	273246	----	----	----	----	----	----	----
NetFOSAA	584.20>419.10	584.20>526.00	----	0	0.00	81.95	0	0.00	86.05	
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	----	0	0.00	32.76	0	0.00	31.74	
PFUnDA	563.10>519.00	563.10>269.10	3512	538	15.31	13.12	538	15.31	13.26	
13C7-PFUnDA_IS	570.00>525.10	----	249404	----	----	----	----	----	----	----
13C7-PFUnDA	570.00>525.10	----	249404	----	----	----	----	----	----	----
PFNS	548.80>79.90	548.80>98.80	74	9	12.73	65.22	9	12.73	62.49	IRr
10_2 FTS	626.80>607.05	626.80>81.00	----	0	0.00	37.13	0	0.00	35.81	
13C2-PFDOA_IS	615.10>570.00	----	269848	----	----	----	----	----	----	----
13C2-PFDOA	615.10>570.00	----	269848	----	----	----	----	----	----	----
PFDOA	613.10>569.00	613.10>319.00	2459	232	9.42	11.29	232	9.42	10.90	
PFDS	599.00>79.90	599.00>98.80	----	0	0.00	60.18	0	0.00	61.11	
PFTrDA	663.00>619.00	663.00>168.90	3013	427	14.17	17.64	427	14.17	18.20	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240119_067 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	----	0	0.00	36.44	0	0.00	34.95	
PFOSAm	498.10>77.90	----	226	----	----	----	----	----	----	
13C8-PFOSAm	506.10>77.80	----	225751	----	----	----	----	----	----	
13C8-PFOSAm_IS	506.10>77.80	----	225751	----	----	----	----	----	----	
PFTDA	713.10>669.00	713.10>168.90	2499	483	19.33	22.96	483	19.33	22.68	
13C2-PFTDA	715.20>670.00	----	110063	----	----	----	----	----	----	
13C2-PFTDA_IS	715.20>670.00	----	110063	----	----	----	----	----	----	
PFDoS	699.10>79.90	699.10>98.80	----	0	0.00	67.40	0	0.00	65.24	
D7-MeFOSE_IS	623.20>58.90	----	693373	----	----	----	----	----	----	
D7-MeFOSE	623.20>58.90	----	693373	----	----	----	----	----	----	
MeFOSE	616.10>59.00	----	----	----	----	----	----	----	----	
13C2-PFHxDA_IS	815.00>770.05	----	437005	----	----	----	----	----	----	
13C2-PFHxDA	815.00>770.05	----	437005	----	----	----	----	----	----	
PFHxDA	813.00>768.95	813.00>218.95	2781	390	14.02	13.90	390	14.02	14.51	
D3-MeFOSA	515.00>219.00	----	48205	----	----	----	----	----	----	
D3-MeFOSA_IS	515.00>219.00	----	48205	----	----	----	----	----	----	
MeFOSA	511.90>219.00	511.90>169.00	----	0	0.00	140.79	0	0.00	142.62	
D9-EtFOSE_IS	639.20>58.90	----	671388	----	----	----	----	----	----	
D9-EtFOSE	639.20>58.90	----	671388	----	----	----	----	----	----	
EtFOSE	630.00>59.00	----	----	----	----	----	----	----	----	
D5-EtFOSAm	531.10>219.00	----	69883	----	----	----	----	----	----	
D5-EtFOSAm_IS	531.10>219.00	----	69883	----	----	----	----	----	----	
EtFOSAm	526.00>219.00	526.00>169.00	----	0	0.00	163.90	0	0.00	146.41	
PFODA	913.00>868.65	913.00>169.00	1845	697	37.80	27.03	697	37.80	23.98	IRr

Flag ID key: IRr: Ion Ratio (Relative)



240119_067

Sample ID: 1633 CCB
Date Acquired: 1/20/2024 1:23:38 PM
Acquired by: System Administrator
Data File: 240119_067
Vial: 54 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.404	-0.004	0.001	1297123	558028	13C3-PFBA_IS	10.3995	ng/mL	
13C4-PFBA_IS	Auto	1.404	-0.004	----	1297123	1297123	----	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.403	-0.005	----	558028	558028	----	5.0000	ng/mL	
PFBA	M	1.432	0.023	0.028	779	1297123	13C4-PFBA_IS	0.0070	ng/mL	
PFMPA	ND(W/B)	----	----	----	----	128757	13C5-PFPeA_IS	----	ng/mL	
3_3 FTCA	ND(W/B)	----	----	----	----	128757	13C5-PFPeA_IS	----	ng/mL	
13C5-PFPeA	Auto	3.479	0.000	-1.484	128757	540537	13C2-PFHxA_IS	5.2771	ng/mL	
13C5-PFPeA_IS	Auto	3.479	0.000	----	128757	128757	----	5.0000	ng/mL	
PFPeA	M	3.483	0.001	0.004	1739	128757	13C5-PFPeA_IS	0.0104	ng/mL	
PFMBA	M	4.015	0.010	0.536	55	128757	13C5-PFPeA_IS	0.0005	ng/mL	
13C2-4_2 FTS	Auto	4.646	0.000	-2.426	173025	202129	18O2-PFHxS_IS	6.2204	ng/mL	
13C2-4_2 FTS_IS	Auto	4.646	0.000	----	173025	173025	----	5.0000	ng/mL	
4_2 FTS	M	4.636	-0.011	-0.010	183	173025	13C2-4_2 FTS_IS	0.0021	ng/mL	
13C3-PFBS_IS	Auto	4.628	0.000	----	308833	308833	----	2.5000	ng/mL	
PFBS	M	4.625	-0.003	-0.003	15	308833	13C3-PFBS_IS	0.0001	ng/mL	IRr
13C3-PFBS	Auto	4.628	0.000	-2.444	308833	202129	18O2-PFHxS_IS	2.6924	ng/mL	
NFDHA	M	4.825	0.005	-0.137	947	588290	13C5-PFHxA_IS	0.0073	ng/mL	
13C5-PFHxA	Auto	4.962	-0.001	-0.001	588290	540537	13C2-PFHxA_IS	2.5824	ng/mL	
13C5-PFHxA_IS	Auto	4.962	-0.001	----	588290	588290	----	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	4.963	0.000	----	540537	540537	----	2.5000	ng/mL	
PFHxA	M	4.956	-0.009	-0.006	2027	588290	13C5-PFHxA_IS	0.0020	ng/mL	
PFEESA	ND(W/B)	----	----	----	----	588290	13C5-PFHxA_IS	----	ng/mL	
13C3-HFPO-DA	Auto	5.438	-0.001	0.475	614459	540537	13C2-PFHxA_IS	11.6124	ng/mL	
13C3-HFPO-DA_IS	Auto	5.438	-0.001	----	614459	614459	----	10.0000	ng/mL	
HFPO-DA	ND(W/B)	----	----	----	----	614459	13C3-HFPO-DA_IS	----	ng/mL	
5_3 FTCA	ND(W/B)	----	----	----	----	588290	13C5-PFHxA_IS	----	ng/mL	
PFPeS	M	6.009	0.006	-1.063	86	223329	13C3-PFHxS_IS	0.0007	ng/mL	
13C4-PFHpA	Auto	6.141	-0.002	1.178	580699	540537	13C2-PFHxA_IS	2.8158	ng/mL	
13C4-PFHpA_IS	Auto	6.141	-0.002	----	580699	580699	----	2.5000	ng/mL	
PFHpA	M	6.124	-0.020	-0.017	6324	580699	13C4-PFHpA_IS	-0.0085	ng/mL	
DONA	ND(W/B)	----	----	----	----	614459	13C3-HFPO-DA_IS	----	ng/mL	
13C2-6_2 FTS_IS	Auto	6.781	-0.003	----	173702	173702	----	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.781	-0.003	-0.291	173702	202129	18O2-PFHxS_IS	6.6026	ng/mL	
6_2 FTS	M	6.778	-0.005	-0.003	1187	173702	13C2-6_2 FTS_IS	0.0150	ng/mL	
13C4-PFOA_IS	Auto	7.095	-0.004	----	40858	40858	----	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.095	-0.005	----	547671	547671	----	2.5000	ng/mL	
13C8-PFOA	Auto	7.095	-0.005	0.000	547671	40858	13C4-PFOA_IS	2.3982	ng/mL	
PFOA	M	7.093	-0.009	-0.002	4420	547671	13C8-PFOA_IS	-0.0125	ng/mL	
13C3-PFHxS	Auto	7.072	-0.002	0.000	223329	202129	18O2-PFHxS_IS	2.5741	ng/mL	
13C3-PFHxS_IS	Auto	7.072	-0.002	----	223329	223329	----	2.5000	ng/mL	
PFHxS	M	7.070	-0.004	-0.002	1068	223329	13C3-PFHxS_IS	-0.0092	ng/mL	
18O2-PFHxS_IS	Auto	7.072	-0.003	----	202129	202129	----	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.943	-0.006	----	287278	287278	----	1.2500	ng/mL	
13C9-PFNA	Auto	7.943	-0.006	0.000	287278	289532	13C5-PFNA_IS	1.2672	ng/mL	
13C5-PFNA_IS	Auto	7.943	-0.006	----	289532	289532	----	1.2500	ng/mL	
PFNA	M	7.943	-0.007	0.000	4581	287278	13C9-PFNA_IS	-0.0028	ng/mL	
PFHpS	ND(W/B)	----	----	----	----	95898	13C8-PFOS_IS	----	ng/mL	
7_3 FTCA	M	7.925	-0.004	2.963	803	588290	13C5-PFHxA_IS	0.0395	ng/mL	
13C2-8_2-FTS	Auto	8.397	-0.007	1.325	138164	202129	18O2-PFHxS_IS	6.3933	ng/mL	
13C2-8_2-FTS_IS	Auto	8.397	-0.007	----	138164	138164	----	5.0000	ng/mL	
8_2 FTS	M	8.395	-0.009	-0.002	44	138164	13C2-8_2-FTS_IS	0.0007	ng/mL	IRr
13C6-PFDA_IS	Auto	8.706	-0.008	----	229485	229485	----	1.2500	ng/mL	
13C6-PFDA	Auto	8.706	-0.008	0.000	229485	204274	13C2-PFDA_IS	1.3964	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_067 (continued)

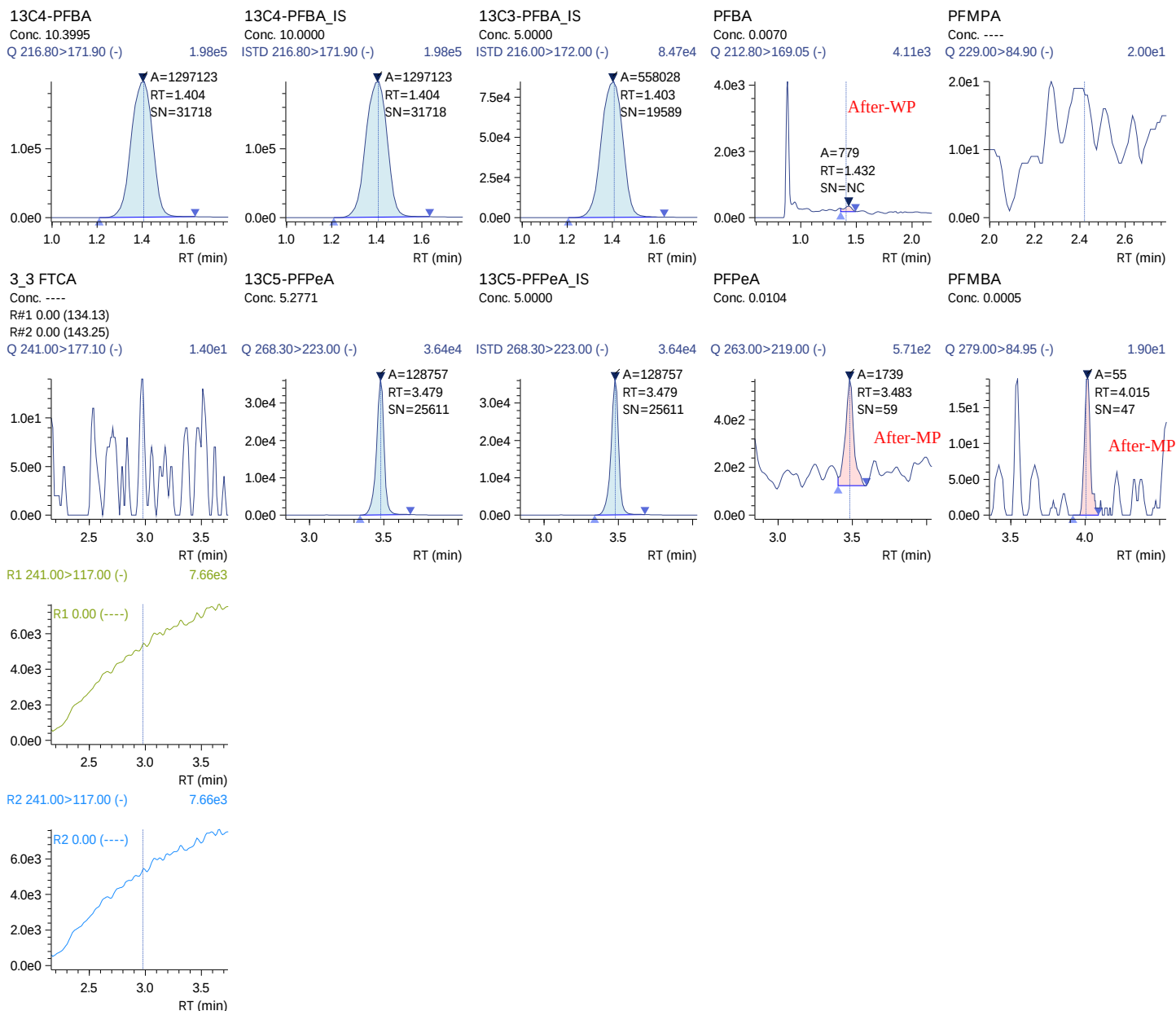
(Table continued from previous page)

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C2-PFDA_IS	Auto	8.706	-0.009	----	204274	204274	----	1.2500	ng/mL	
PFDA	Auto	8.701	-0.015	-0.005	3957	229485	13C6-PFDA_IS	-0.0074	ng/mL	
D3-NMeFOSAA_IS	Auto	8.841	-0.007	----	244255	244255	----	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.841	-0.007	0.038	244255	237771	13C4-PFOS_IS	5.9189	ng/mL	
13C8-PFOS_IS	Auto	8.803	-0.008	----	95898	95898	----	2.5000	ng/mL	
13C8-PFOS	Auto	8.803	-0.008	0.000	95898	237771	13C4-PFOS_IS	2.4184	ng/mL	
13C4-PFOS_IS	Auto	8.803	-0.008	----	237771	237771	----	2.5000	ng/mL	
PFOS	M	8.809	-0.004	0.006	266	95898	13C8-PFOS_IS	0.0027	ng/mL	
NMeFOSAA	ND(W/B)	----	----	----	----	244255	D3-NMeFOSAA_IS	----	ng/mL	
D5-NetFOSAA_IS	Auto	9.170	-0.008	----	273246	273246	----	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.170	-0.008	0.367	273246	237771	13C4-PFOS_IS	5.5346	ng/mL	
NetFOSAA	ND(W/B)	----	----	----	----	273246	D5-NetFOSAA_IS	----	ng/mL	
9-CI-PF3ONS	ND(W/B)	----	----	----	----	614459	13C3-HFPO-DA_IS	----	ng/mL	
PFUnDA	M	9.426	-0.014	-0.002	3512	249404	13C7-PFUnDA_IS	-0.0103	ng/mL	
13C7-PFUnDA_IS	Auto	9.428	-0.010	----	249404	249404	----	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.428	-0.010	0.722	249404	204274	13C2-PFDA_IS	1.2722	ng/mL	
PFNS	M	9.580	0.004	0.777	74	95898	13C8-PFOS_IS	0.0010	ng/mL	IRr
10_2 FTS	ND(W/B)	----	----	----	----	138164	13C2-8_2-FTS_IS	----	ng/mL	
13C2-PFDOA_IS	Auto	10.114	-0.013	----	269848	269848	----	1.2500	ng/mL	
13C2-PFDOA	Auto	10.114	-0.013	1.408	269848	204274	13C2-PFDA_IS	1.1982	ng/mL	
PFDOA	M	10.111	-0.017	-0.003	2459	269848	13C2-PFDOA_IS	-0.0166	ng/mL	
PFDS	ND(W/B)	----	----	----	----	95898	13C8-PFOS_IS	----	ng/mL	
PFTDA	Auto	10.768	-0.018	-0.635	3013	110063	13C2-PFTDA_IS	-0.0116	ng/mL	
11-CI-PF3OUdS	ND(W/B)	----	----	----	----	614459	13C3-HFPO-DA_IS	----	ng/mL	
PFOSAm	M	11.154	0.011	0.009	226	225751	13C8-PFOSAm_IS	0.0030	ng/mL	
13C8-PFOSAm	Auto	11.145	0.002	2.342	225751	237771	13C4-PFOS_IS	2.2365	ng/mL	
13C8-PFOSAm_IS	Auto	11.145	0.002	----	225751	225751	----	2.5000	ng/mL	
PFTDA	M	11.405	-0.015	0.002	2499	110063	13C2-PFTDA_IS	-0.0067	ng/mL	
13C2-PFTDA	Auto	11.403	-0.016	2.697	110063	204274	13C2-PFDA_IS	1.1319	ng/mL	
13C2-PFTDA_IS	Auto	11.403	-0.016	----	110063	110063	----	1.2500	ng/mL	
PFDoS	ND(W/B)	----	----	----	----	95898	13C8-PFOS_IS	----	ng/mL	
D7-MeFOSE_IS	Auto	13.368	-0.013	----	693373	693373	----	25.0000	ng/mL	
D7-MeFOSE	Auto	13.368	-0.013	4.565	693373	237771	13C4-PFOS_IS	27.8621	ng/mL	
MeFOSE	ND(W/B)	----	----	----	----	693373	D7-MeFOSE_IS	----	ng/mL	
13C2-PFHxDA_IS	Auto	12.621	-0.015	----	437005	437005	----	2.5000	ng/mL	
13C2-PFHxDA	Auto	12.621	-0.015	3.915	437005	204274	13C2-PFDA_IS	2.3031	ng/mL	
PFHxDA	M	12.621	-0.016	0.000	2781	437005	13C2-PFHxDA_IS	-0.0124	ng/mL	
D3-MeFOSA	Auto	13.676	-0.011	4.873	48205	237771	13C4-PFOS_IS	2.3715	ng/mL	
D3-MeFOSA_IS	Auto	13.676	-0.011	----	48205	48205	----	2.5000	ng/mL	
MeFOSA	ND(W/B)	----	----	----	----	48205	D3-MeFOSA_IS	----	ng/mL	
D9-EtFOSE_IS	Auto	13.997	-0.012	----	671388	671388	----	25.0000	ng/mL	
D9-EtFOSE	Auto	13.997	-0.012	5.194	671388	237771	13C4-PFOS_IS	26.5628	ng/mL	
EtFOSE	ND(W/B)	----	----	----	----	671388	D9-EtFOSE_IS	----	ng/mL	
D5-EtFOSAm	Auto	14.352	-0.013	5.549	69883	237771	13C4-PFOS_IS	2.5822	ng/mL	
D5-EtFOSAm_IS	Auto	14.352	-0.013	----	69883	69883	----	2.5000	ng/mL	
EtFOSAm	ND(W/B)	----	----	----	----	69883	D5-EtFOSAm_IS	----	ng/mL	
PFODA	M	13.759	-0.015	1.138	1845	437005	13C2-PFHxDA_IS	0.0187	ng/mL	IRr

Flag ID key: IRr: Ion Ratio (Relative)



240119_067 (continued)





240119_067 (continued)

13C2-4_2 FTS
Conc. 6.2204

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. 0.0021
R#1 17.67 (34.14)
R#2 17.67 (31.50)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 0.0001
R#1 100.00 (47.53)
R#2 100.00 (48.74)

Q 329.10>80.90 (-)

5.17e4

ISTD 329.10>80.90 (-)

5.17e4

Q 327.10>307.00 (-)

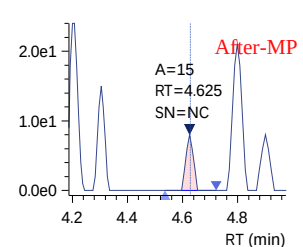
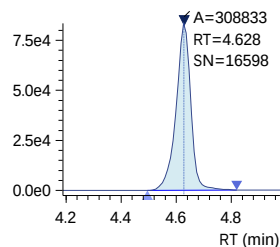
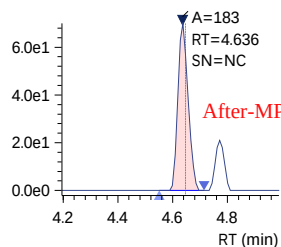
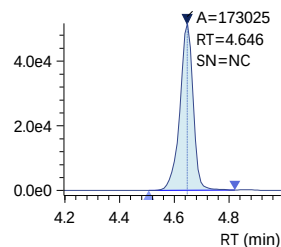
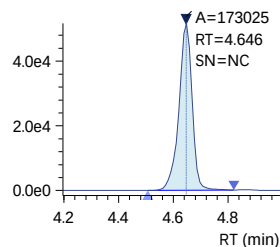
7.00e1

ISTD 302.10>79.90 (-)

8.35e4

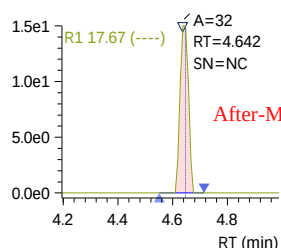
Q 298.70>79.90 (-)

2.40e1



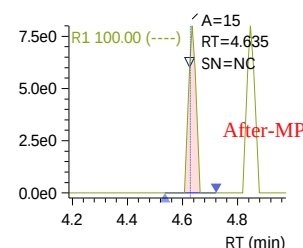
R1 327.10>80.90 (-)

1.50e1



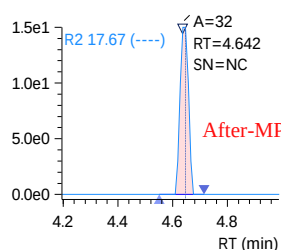
R1 298.70>98.80 (-)

8.00e0



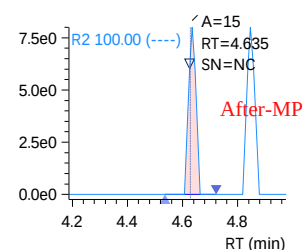
R2 327.10>80.90 (-)

1.50e1



R2 298.70>98.80 (-)

8.00e0





240119_067 (continued)

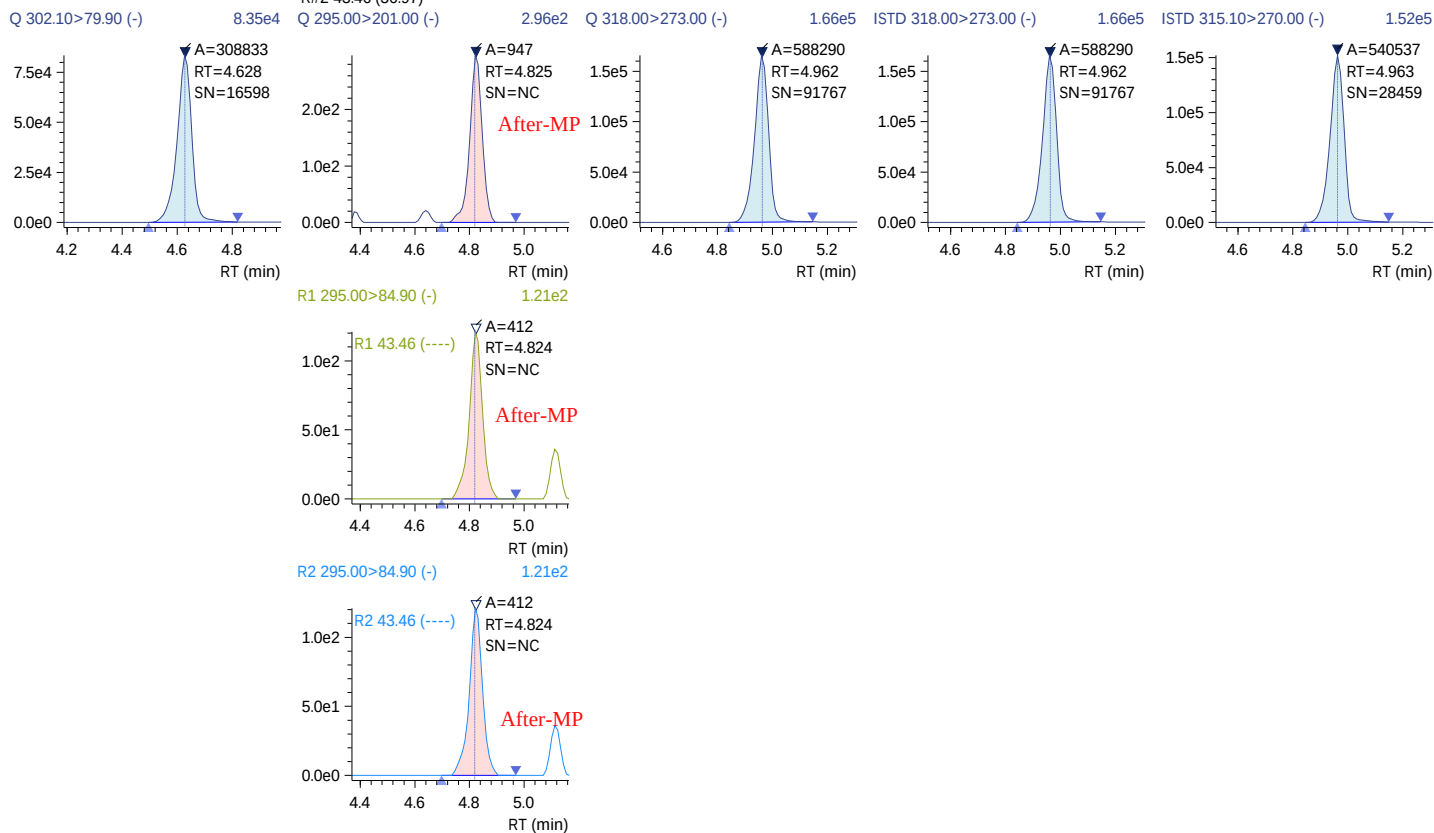
13C3-PFBS
Conc. 2.6924

NFDHA
Conc. 0.0073
R#1 43.46 (37.88)
R#2 43.46 (36.97)

13C5-PFHxA
Conc. 2.5824

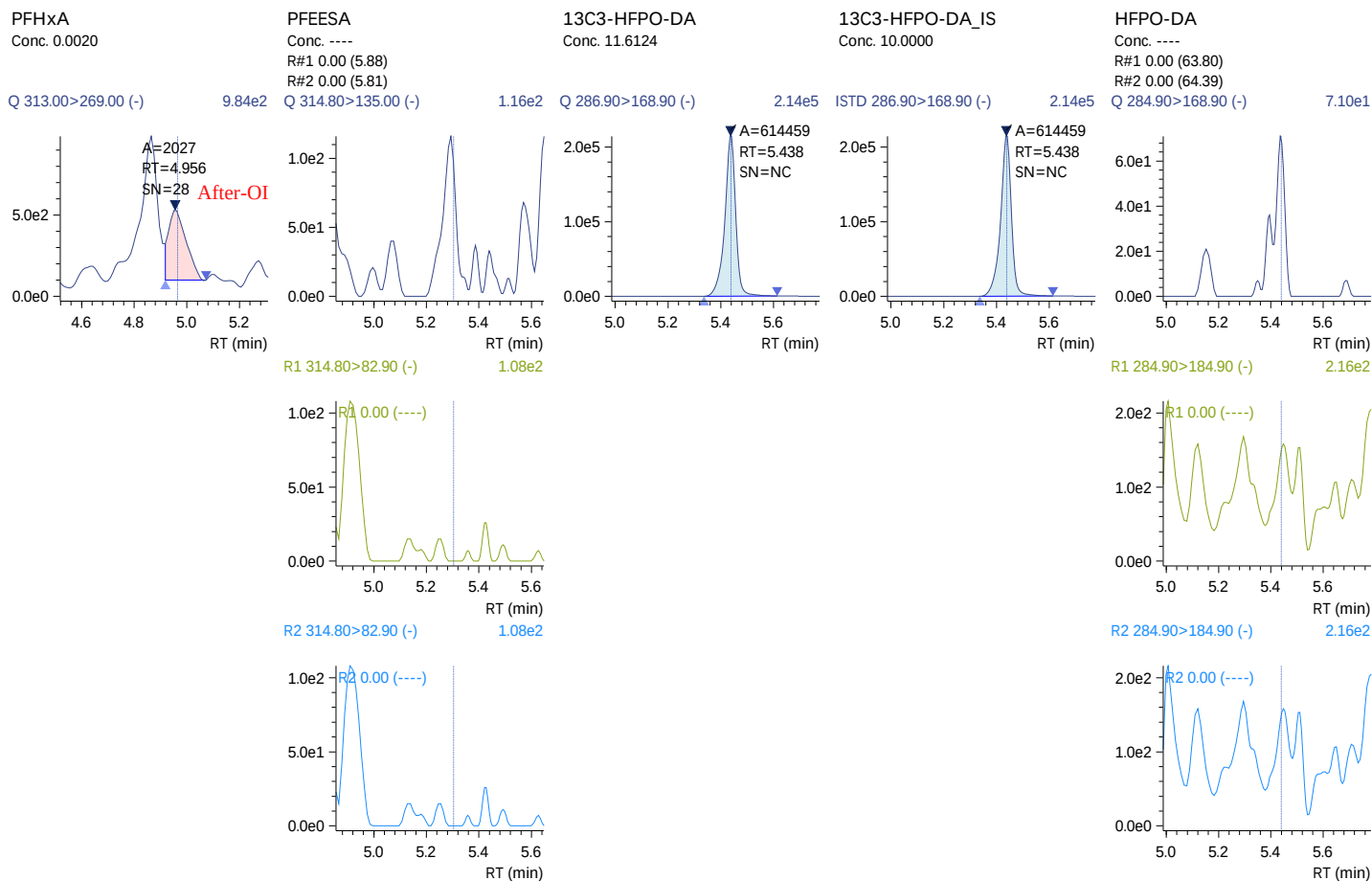
13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000





240119_067 (continued)

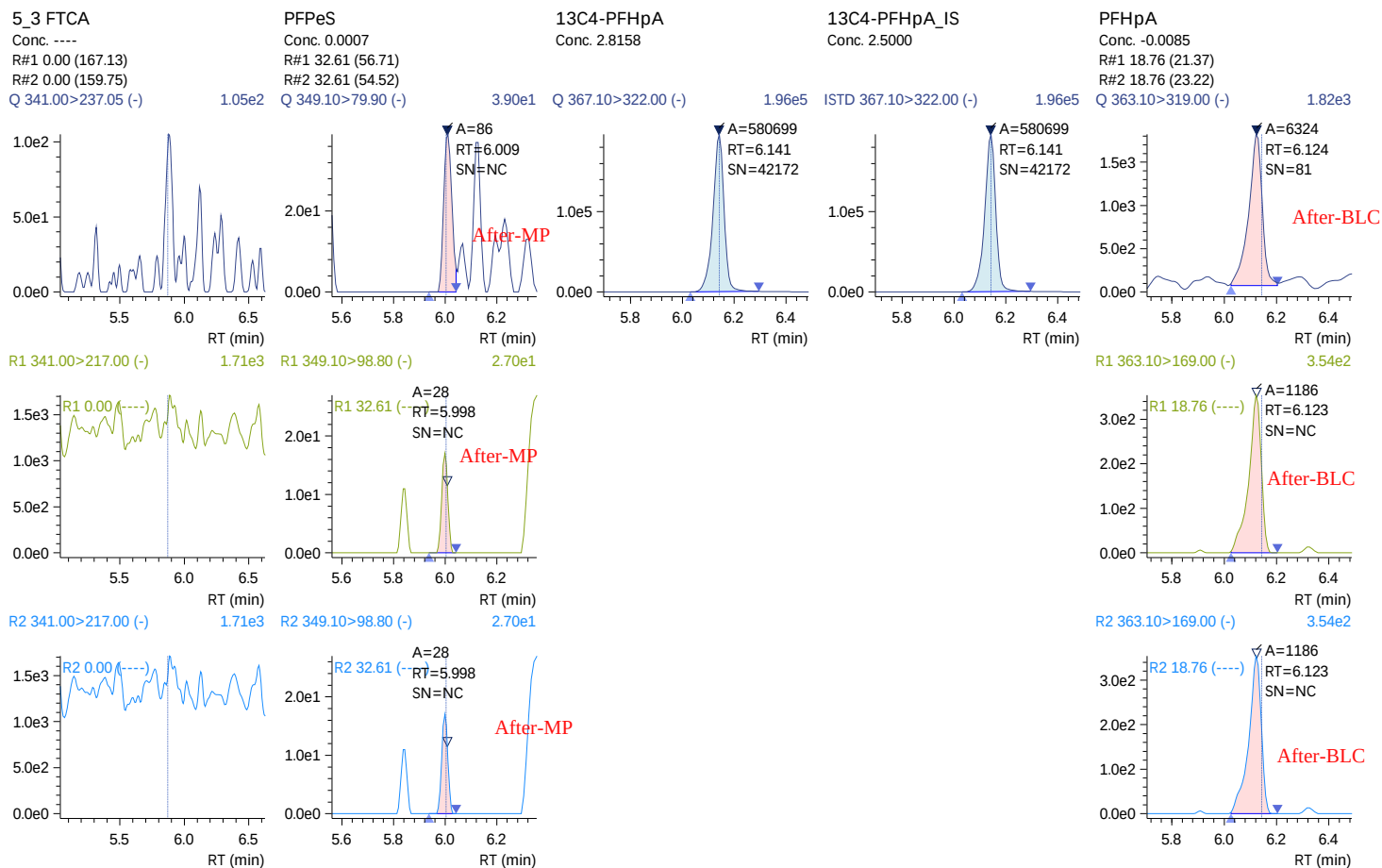


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_067 (continued)

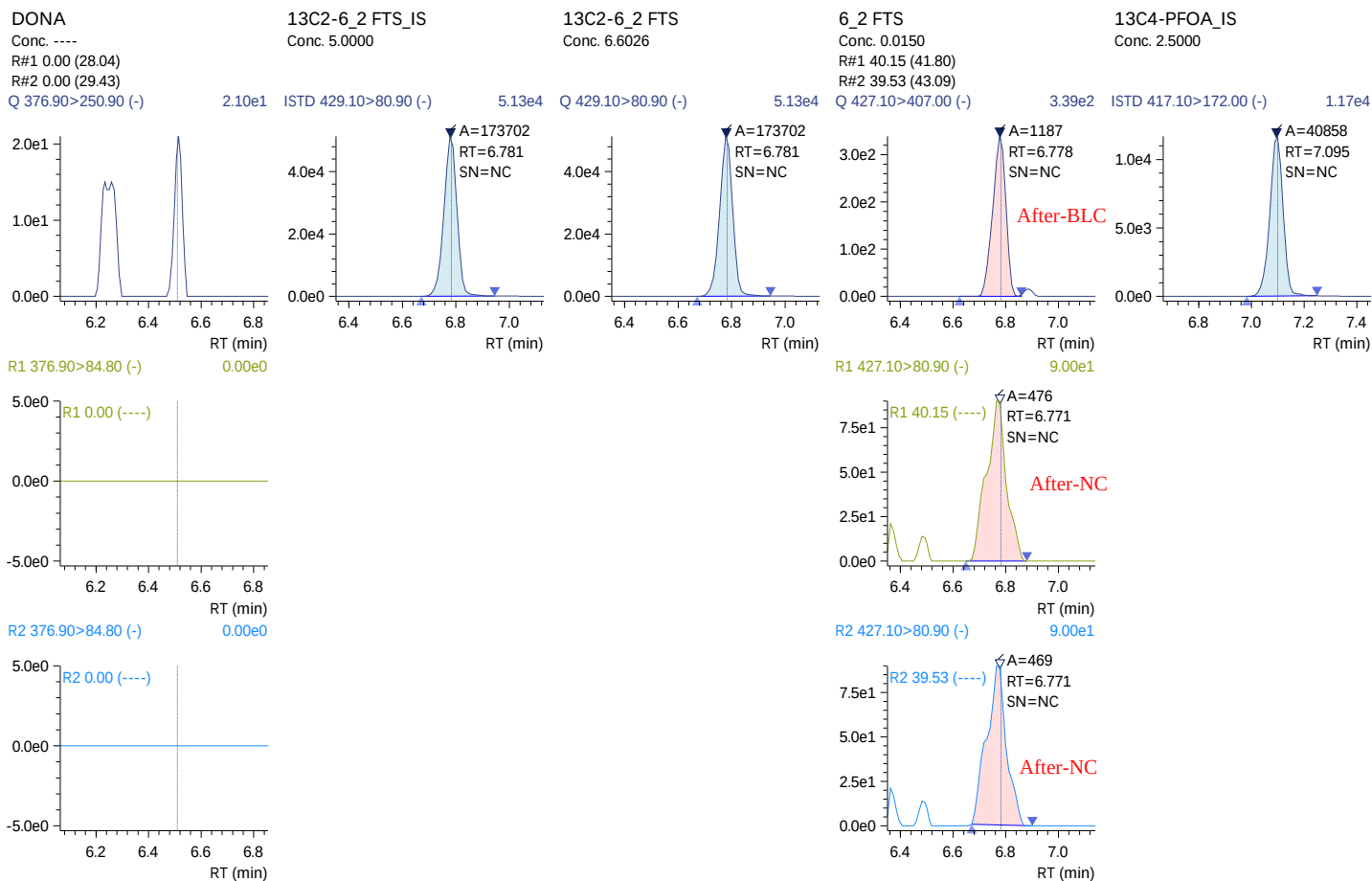


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_067 (continued)





240119_067 (continued)

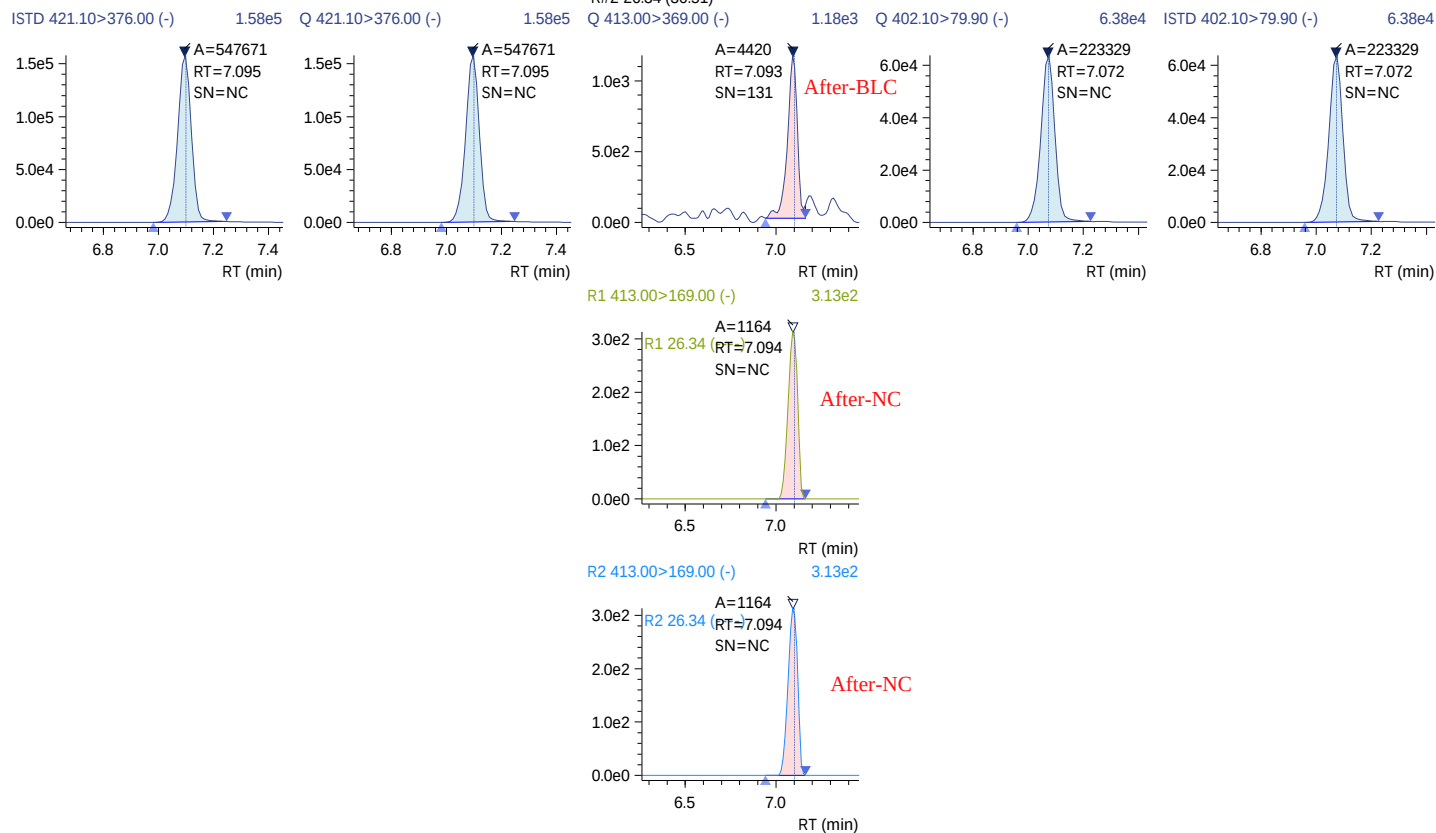
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.3982

PFOA
Conc. -0.0125
R#1 26.34 (29.05)
R#2 26.34 (30.51)

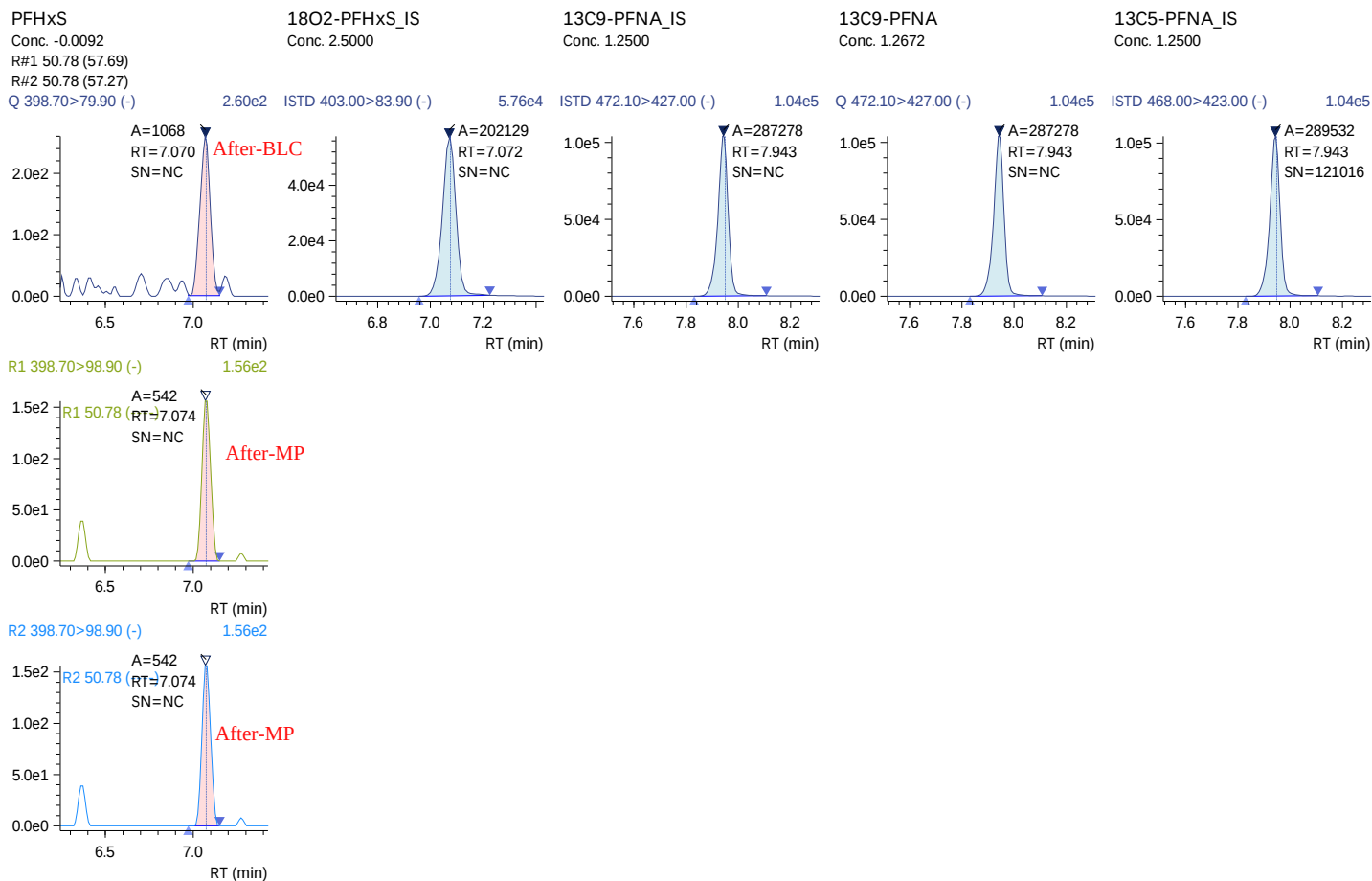
13C3-PFHxS
Conc. 2.5741

13C3-PFHxS_IS
Conc. 2.5000



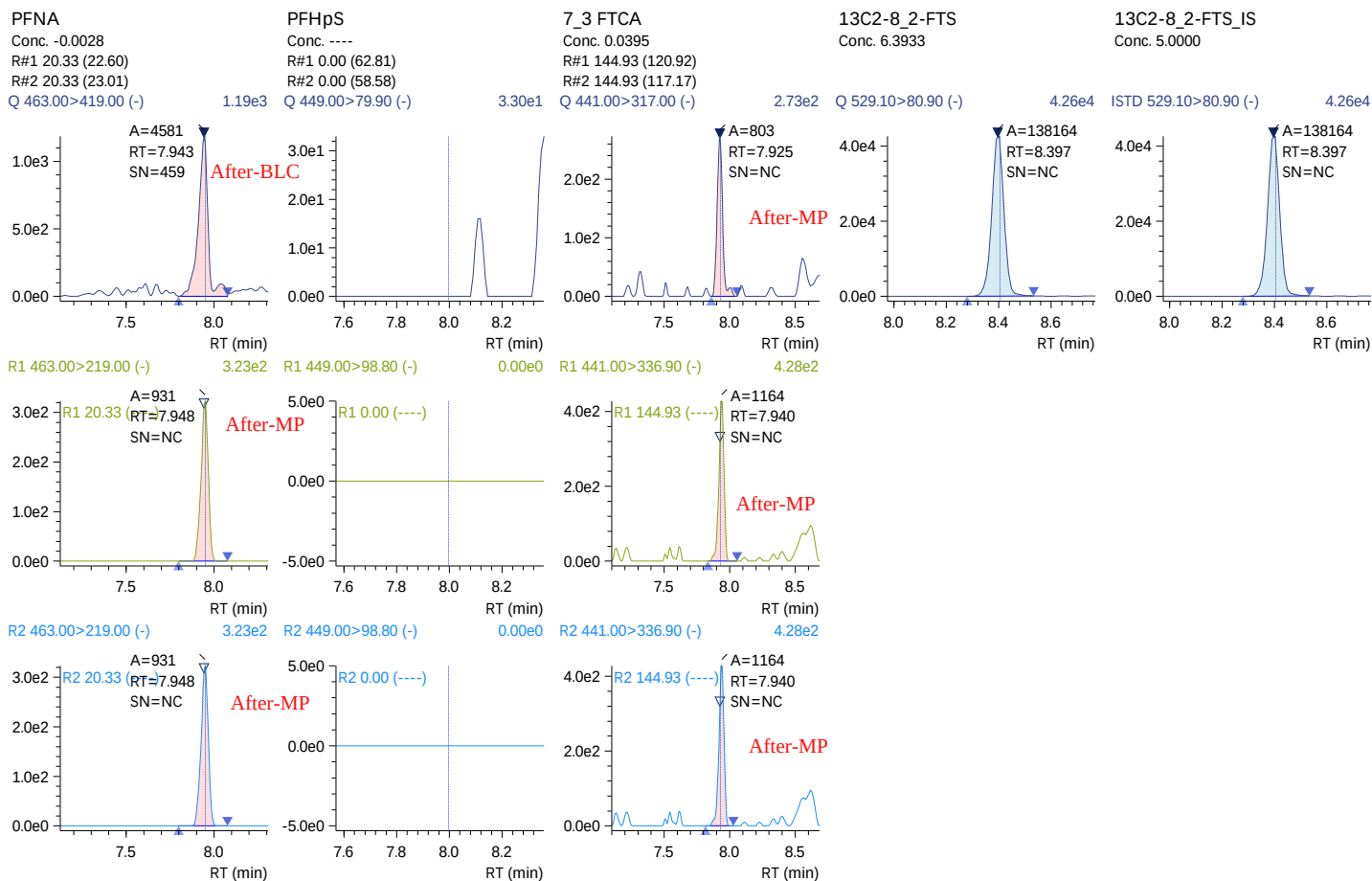


240119_067 (continued)





240119_067 (continued)

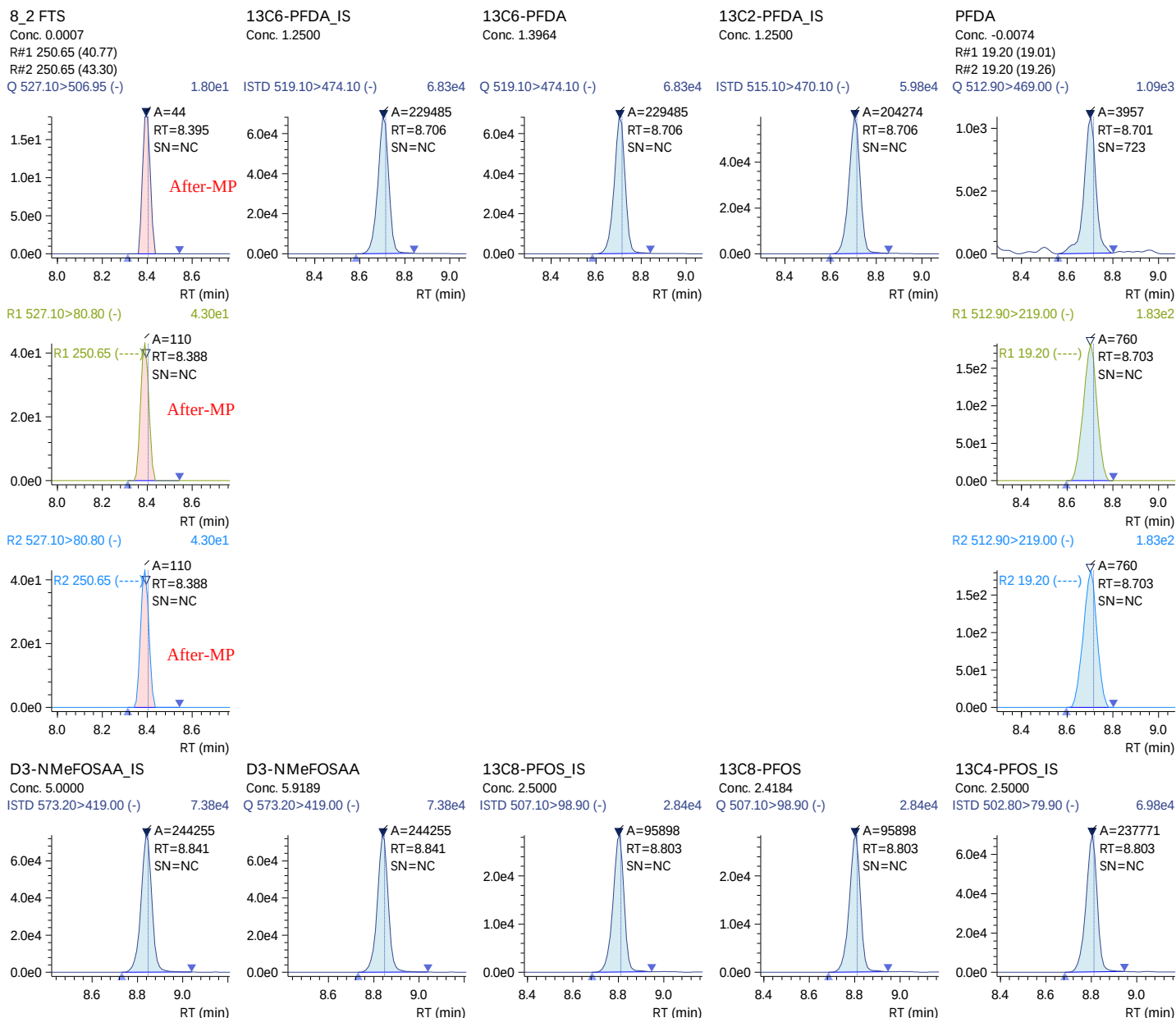


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_067 (continued)

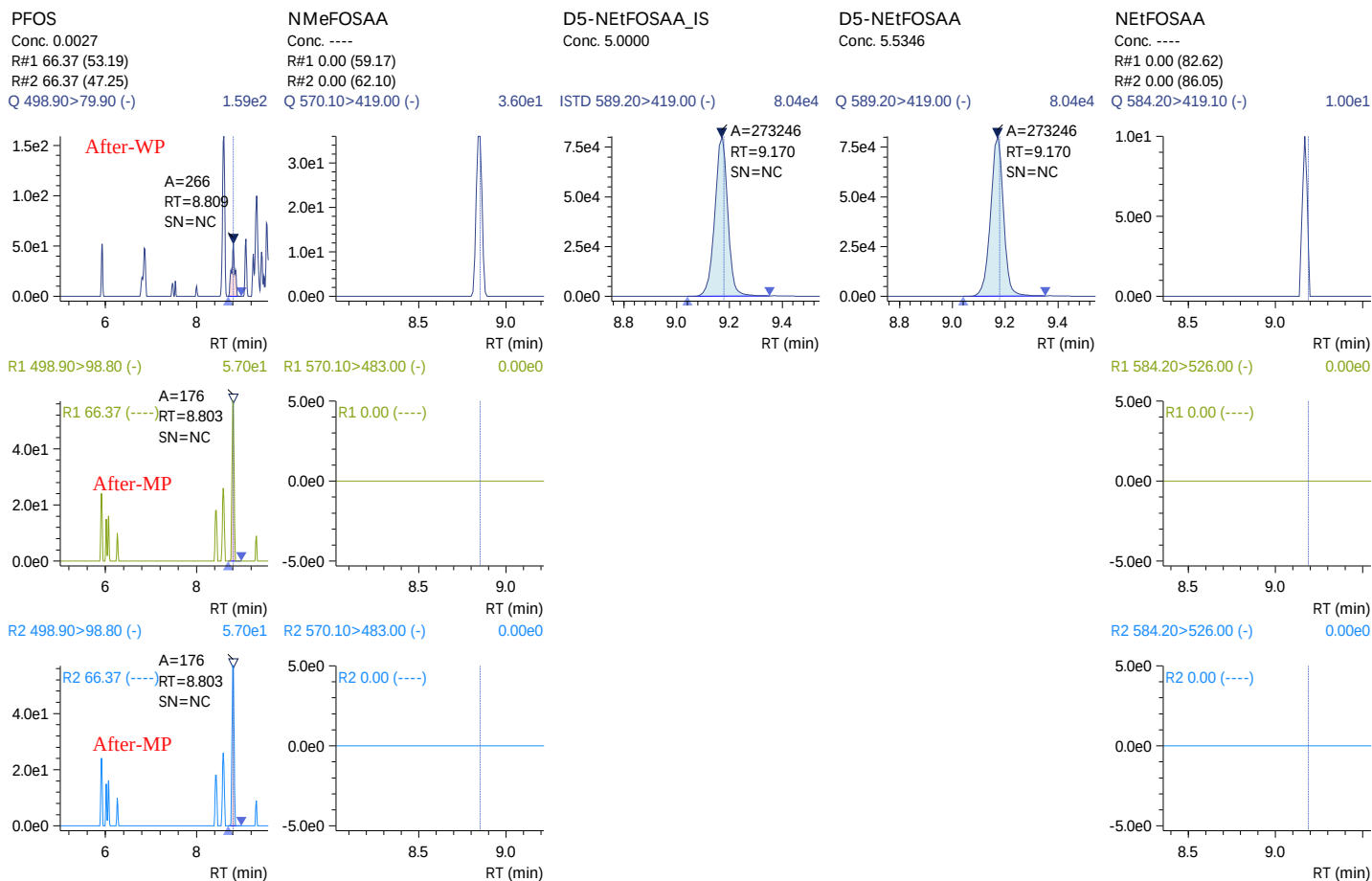


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_067 (continued)





240119_067 (continued)

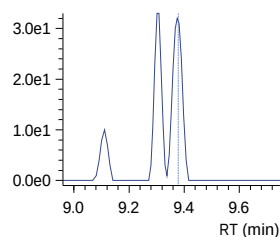
9-Cl-PF3ONS

Conc. ----

R#1 0.00 (31.76)

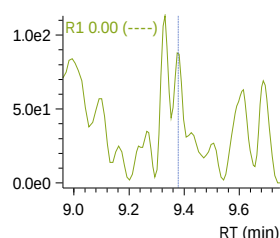
R#2 0.00 (31.74)

Q 530.80>351.00 (-)



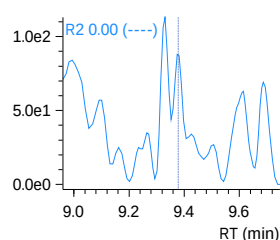
R1 532.80>353.00 (-)

1.13e2



R2 532.80>353.00 (-)

1.13e2



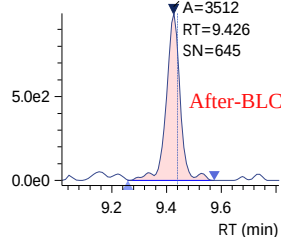
PFUnDA

Conc. -0.0103

R#1 15.31 (12.31)

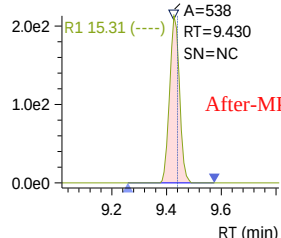
R#2 15.31 (13.26)

Q 563.10>519.00 (-)



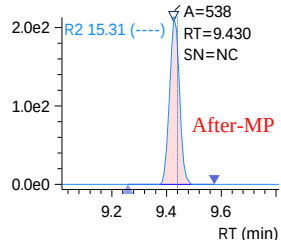
R1 563.10>269.10 (-)

2.13e2



R2 563.10>269.10 (-)

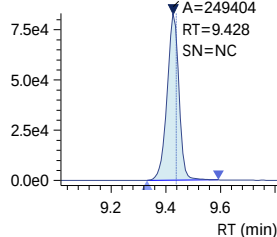
2.13e2



13C7-PFUnDA_IS

Conc. 1.2500

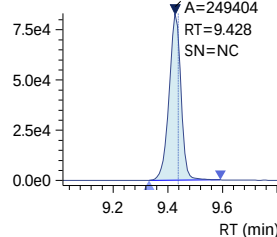
ISTD 570.00>525.10 (-)



13C7-PFUnDA

Conc. 1.2722

Q 570.00>525.10 (-)



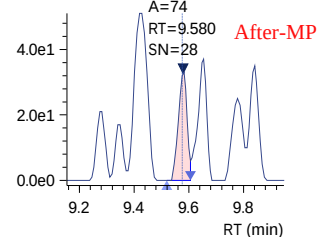
PFNS

Conc. 0.0010

R#1 12.73 (63.31)

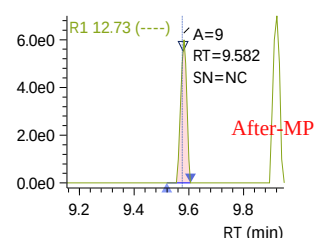
R#2 12.73 (62.49)

Q 548.80>79.90 (-)



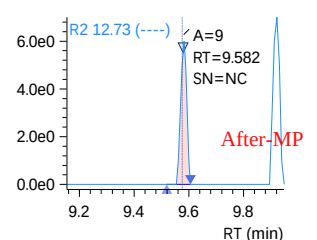
R1 548.80>98.80 (-)

7.00e0



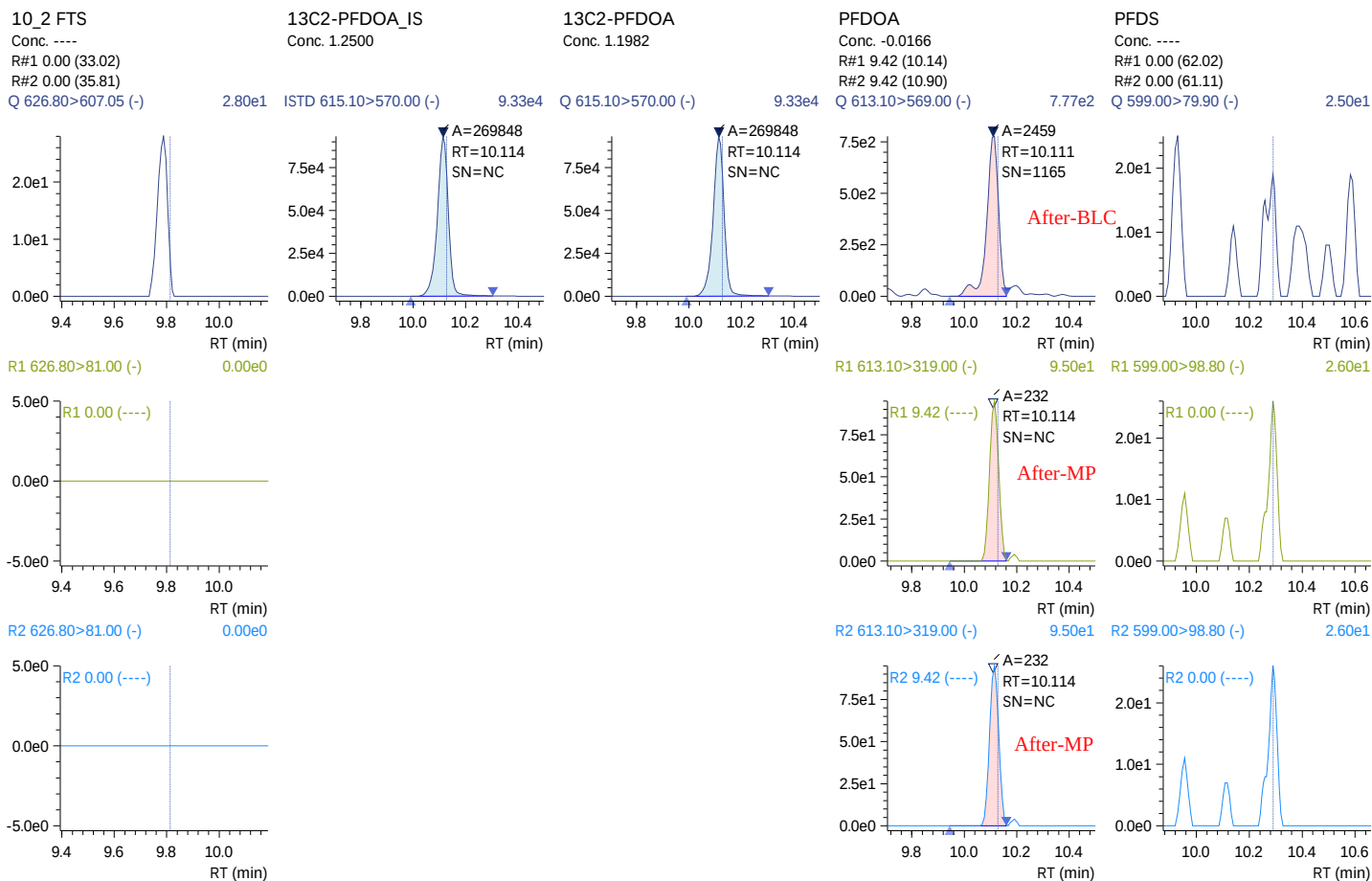
R2 548.80>98.80 (-)

7.00e0





240119_067 (continued)

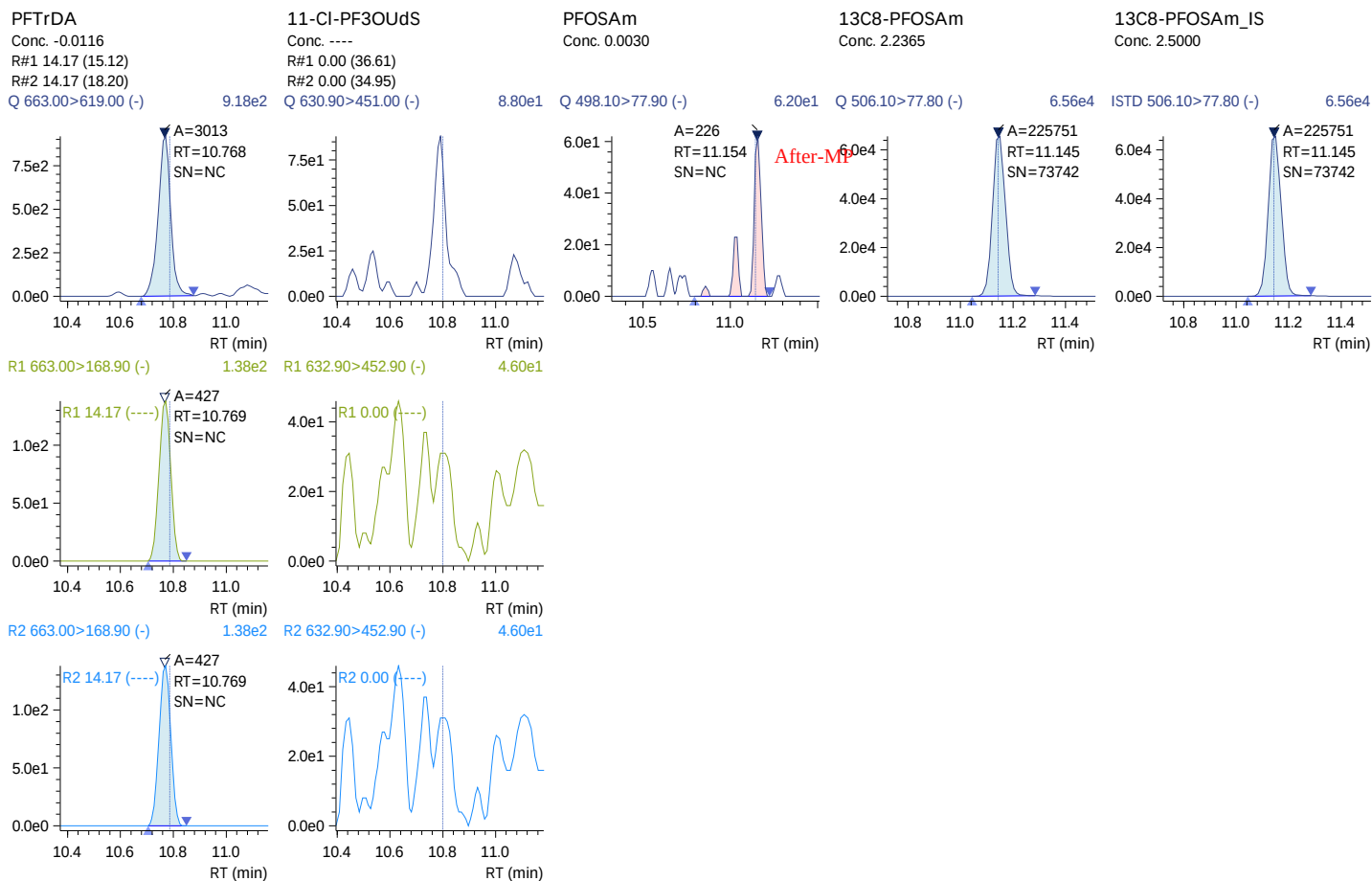


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_067 (continued)

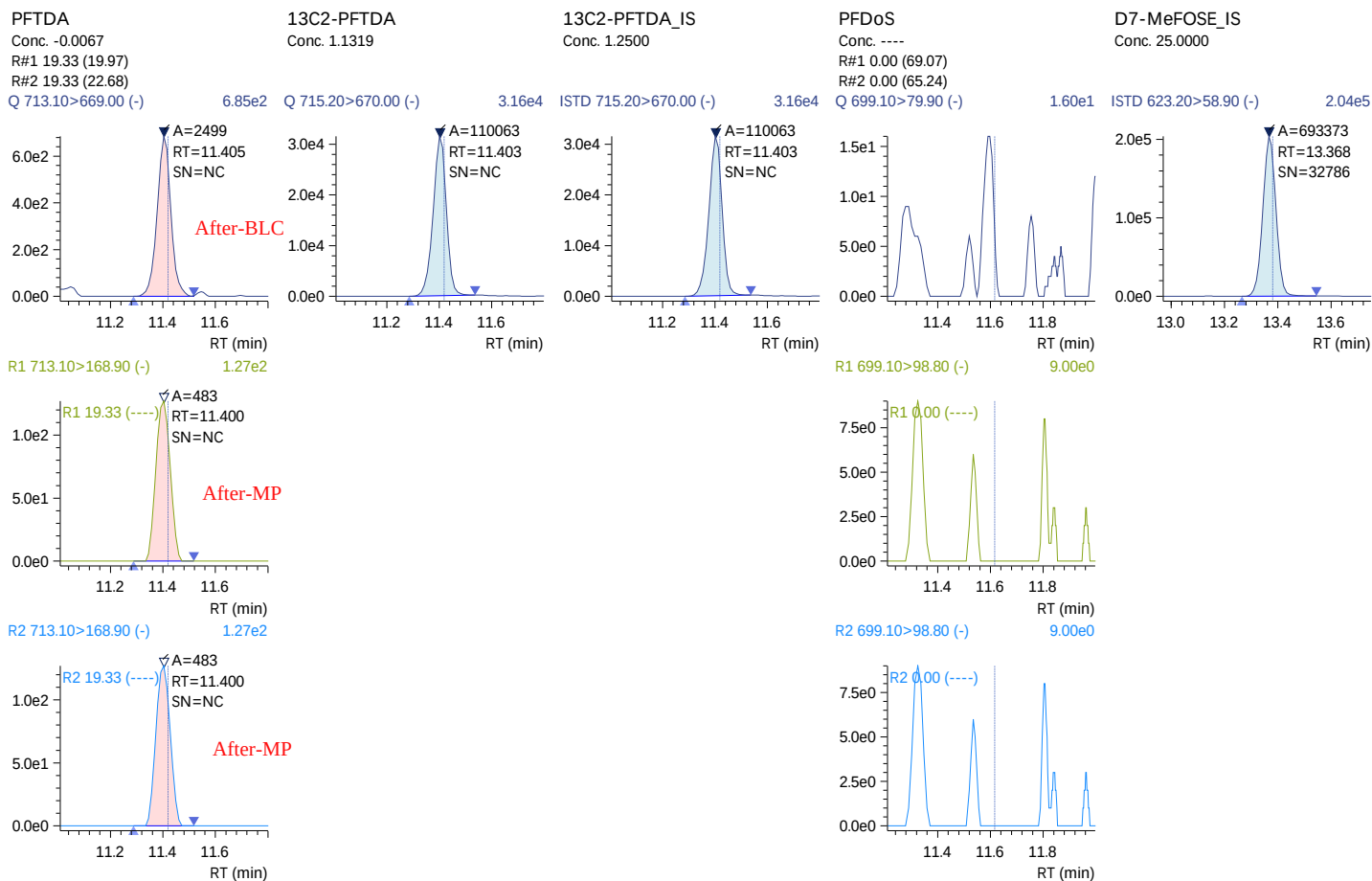


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_067 (continued)





240119_067 (continued)

D7-MeFOSE
Conc. 27.8621

MeFOSE
Conc. ----

13C2-PFHXA_IS
Conc. 2.5000

13C2-PFHXA
Conc. 2.3031

PFHXA
Conc. -0.0124
R#1 14.02 (11.64)
R#2 14.02 (14.51)

Q 623.20>58.90 (-)

2.04e5

Q 616.10>59.00 (-)

4.10e1

ISTD 815.00>770.05 (-)

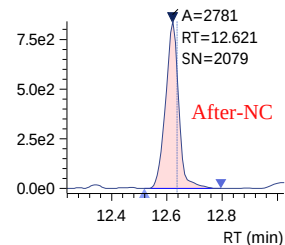
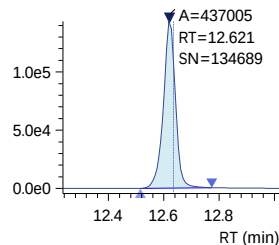
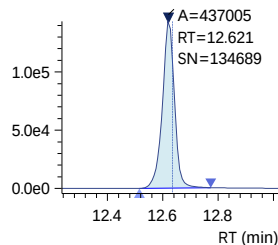
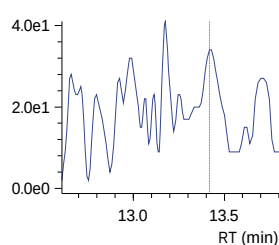
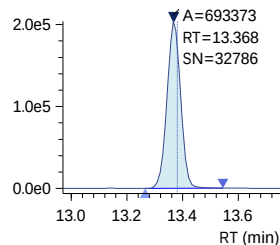
1.43e5

Q 815.00>770.05 (-)

1.43e5

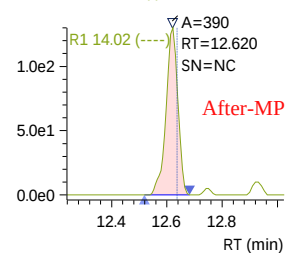
Q 813.00>768.95 (-)

8.41e2



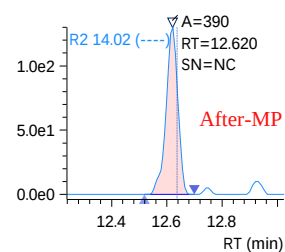
R1 813.00>218.95 (-)

1.30e2



R2 813.00>218.95 (-)

1.30e2





240119_067 (continued)

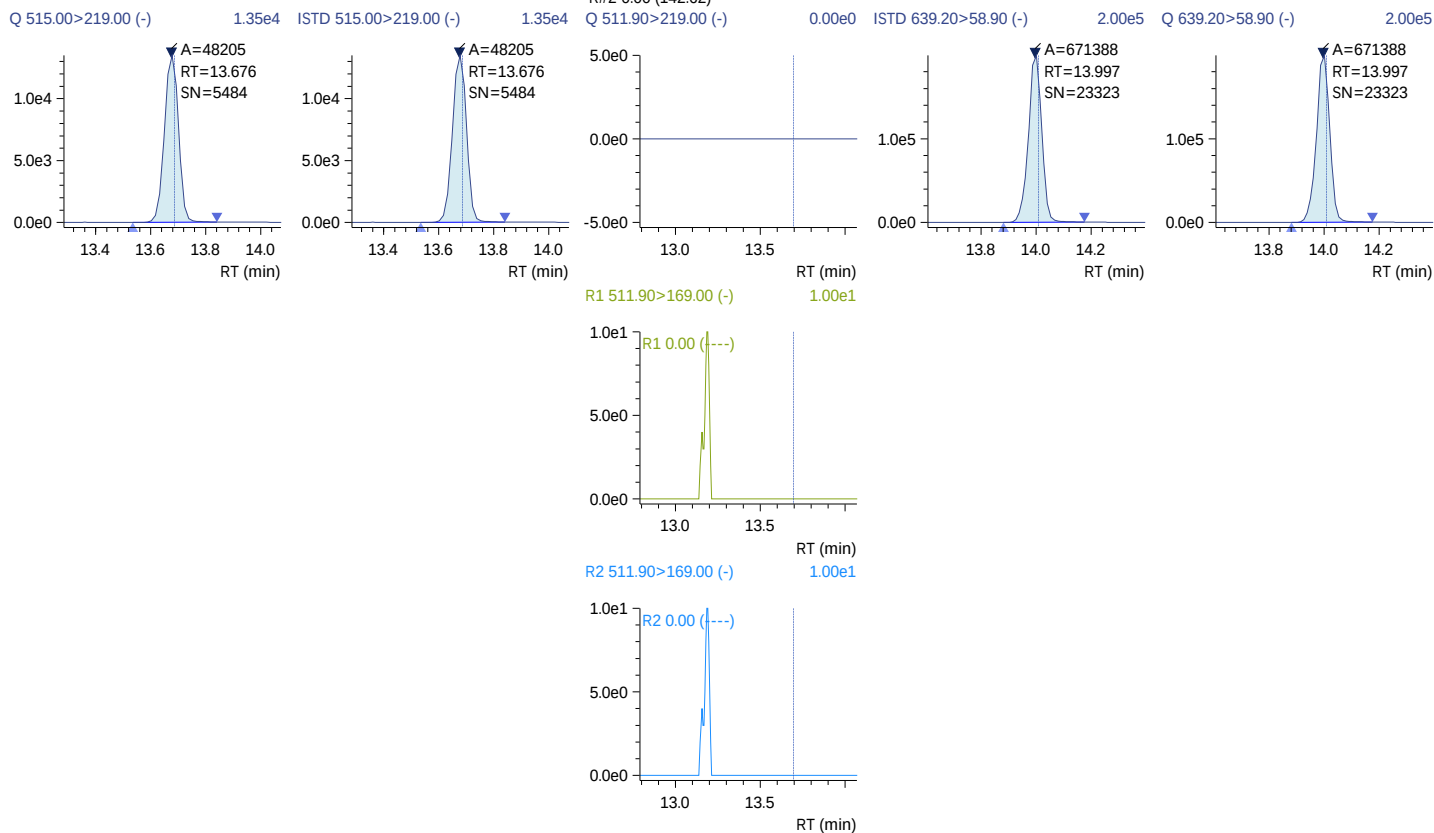
D3-MeFOSA
Conc. 2.3715

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. ----
R#1 0.00 (149.05)
R#2 0.00 (142.62)

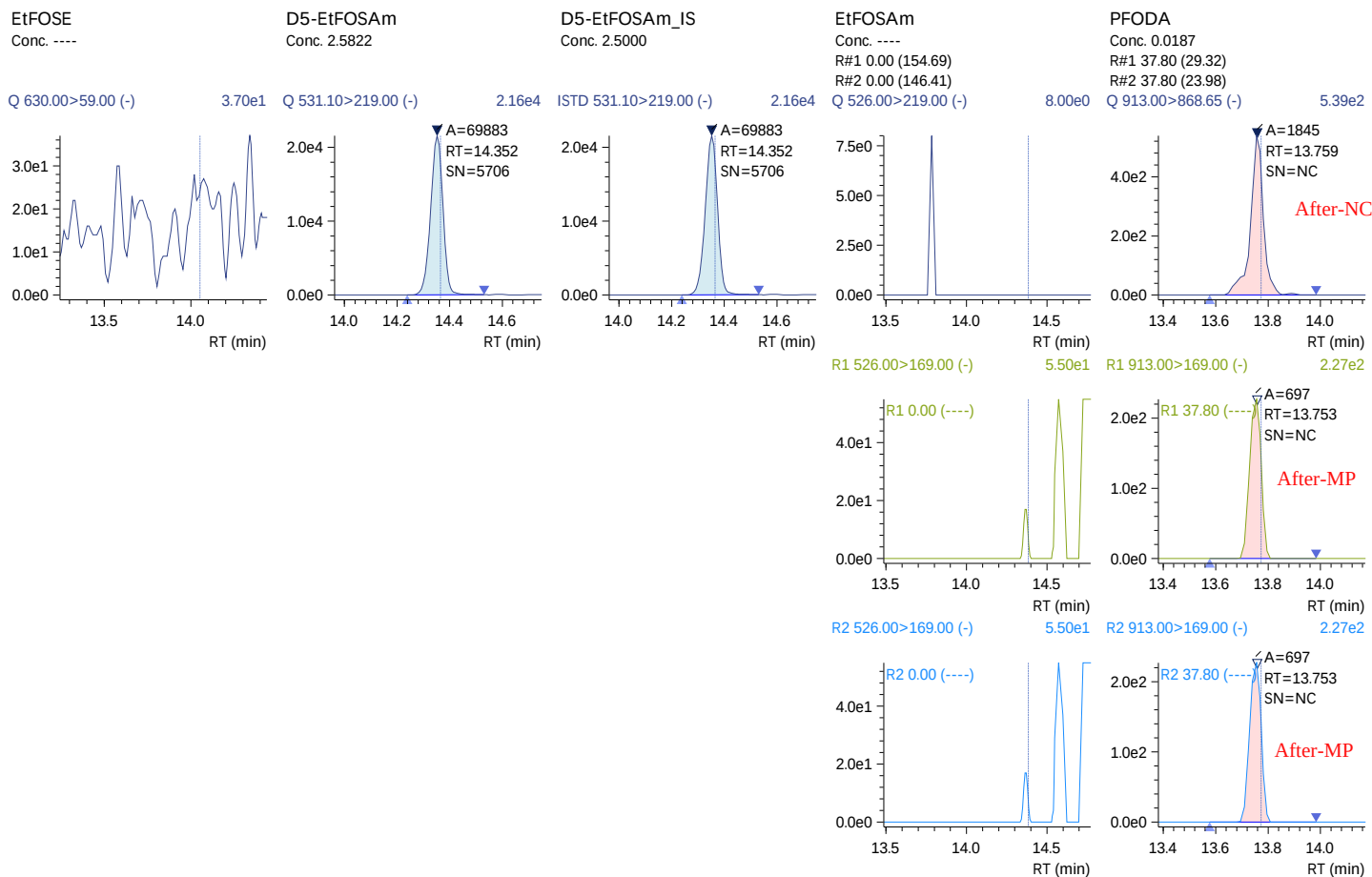
D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 26.5628





240119_067 (continued)



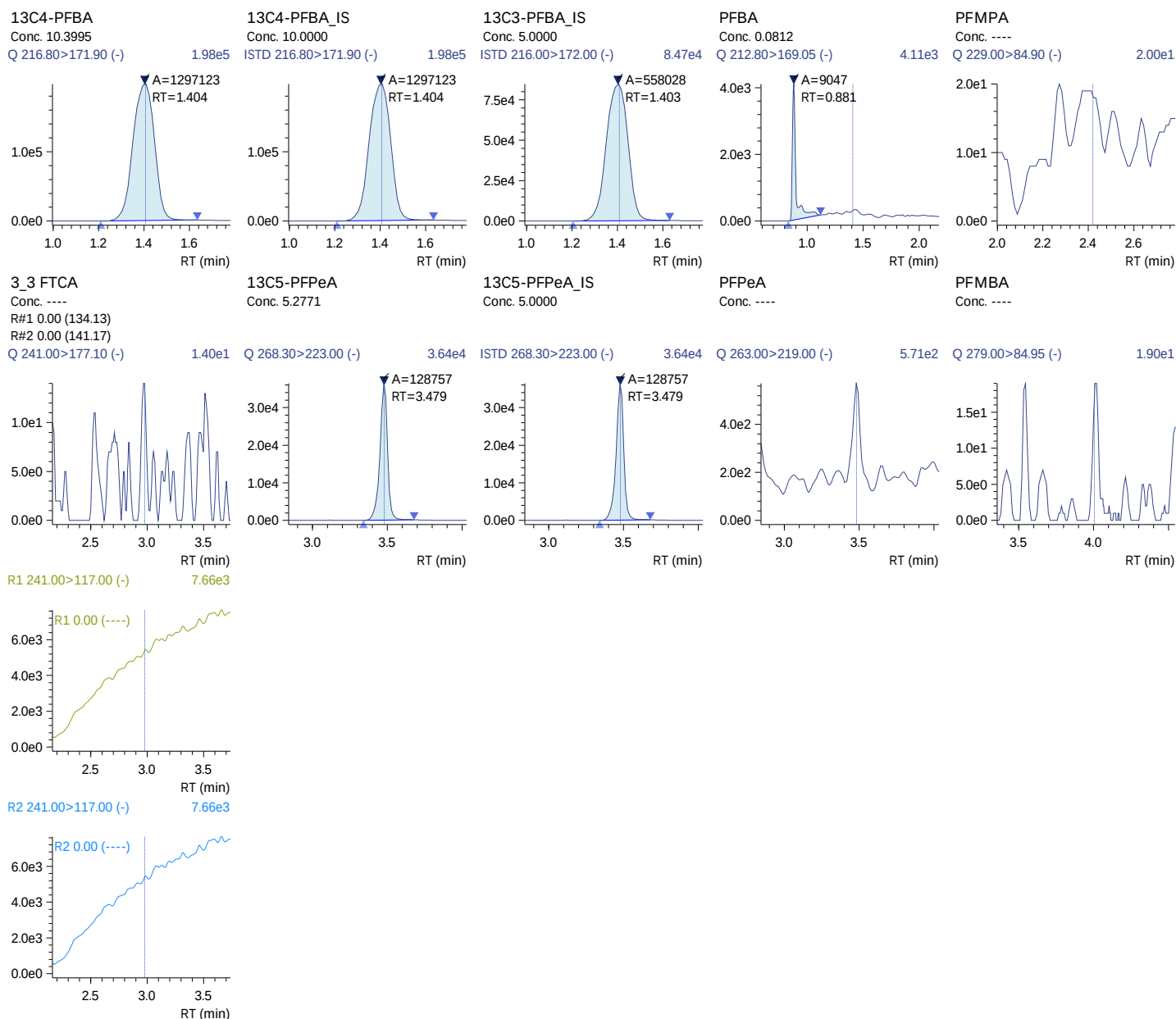
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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_067

Sample ID: 1633 CCB
Date Acquired: 1/20/2024 1:23:38 PM
Acquired by: System Administrator
Data File: 240119_067
Vial: 54 | Inj. Volume: 10.0000uL | Tray: 1





240119_067 (continued)

13C2-4_2 FTS
Conc. 6.2204

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. ----
R#1 0.00 (34.14)
R#2 0.00 (29.06)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. ----
R#1 0.00 (47.53)
R#2 0.00 (46.72)

Q 329.10>80.90 (-)

5.17e4

ISTD 329.10>80.90 (-)

5.17e4

Q 327.10>307.00 (-)

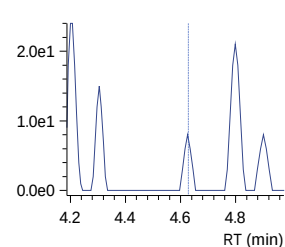
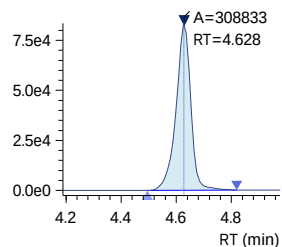
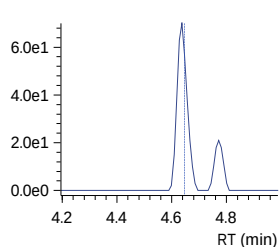
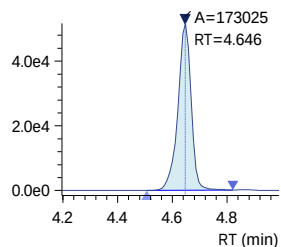
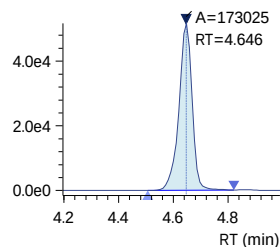
7.00e1

ISTD 302.10>79.90 (-)

8.35e4

Q 298.70>79.90 (-)

2.40e1

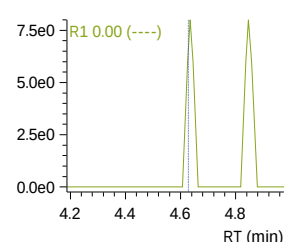
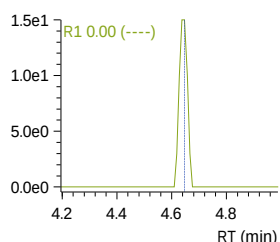


R1 327.10>80.90 (-)

1.50e1

R1 298.70>98.80 (-)

8.00e0

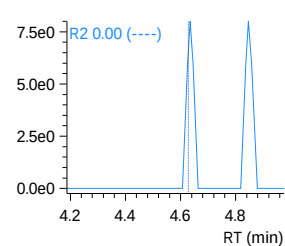
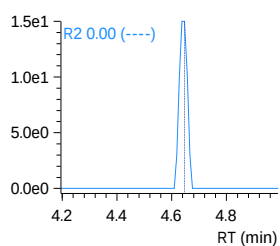


R2 327.10>80.90 (-)

1.50e1

R2 298.70>98.80 (-)

8.00e0





240119_067 (continued)

13C3-PFBS
Conc. 2.6924

NFDHA
Conc. ----
R#1 0.00 (37.88)
R#2 0.00 (40.25)

13C5-PFHxA
Conc. 2.5824

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

Q 302.10>79.90 (-)

8.35e4

Q 295.00>201.00 (-)

2.96e2

Q 318.00>273.00 (-)

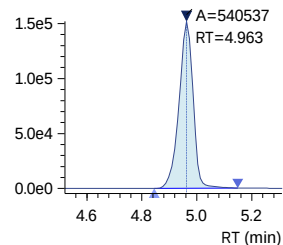
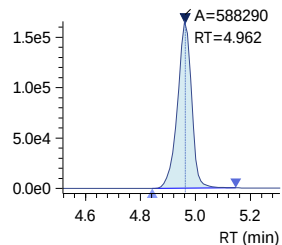
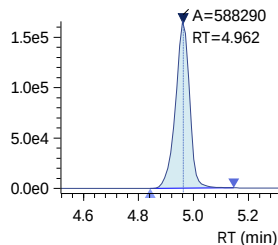
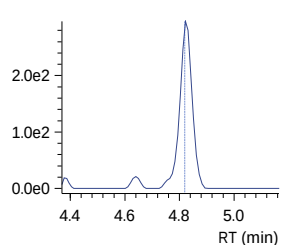
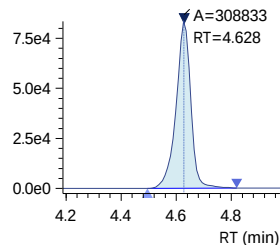
1.66e5

ISTD 318.00>273.00 (-)

1.66e5

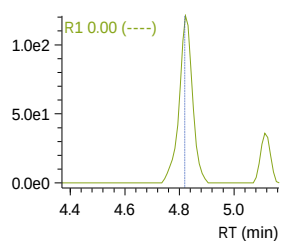
ISTD 315.10>270.00 (-)

1.52e5



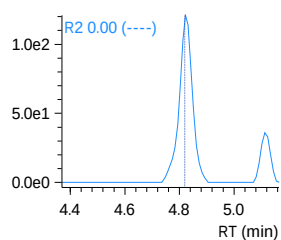
R1 295.00>84.90 (-)

1.21e2



R2 295.00>84.90 (-)

1.21e2





240119_067 (continued)

PFHxA
 Conc. 0.0207

PFEESA
 Conc. ----
 R#1 0.00 (5.88)
 R#2 0.00 (6.11)

13C3-HFPO-DA
 Conc. 11.6124

13C3-HFPO-DA_IS
 Conc. 10.0000

HFPO-DA
 Conc. ----

R#1 0.00 (63.80)
 R#2 0.00 (65.61)

Q 313.00>269.00 (-)

9.84e2

Q 314.80>135.00 (-)

1.16e2

Q 286.90>168.90 (-)

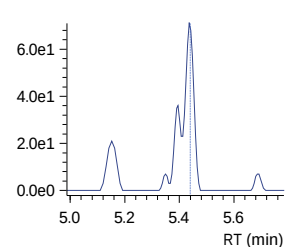
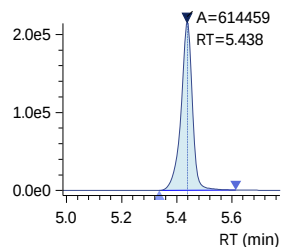
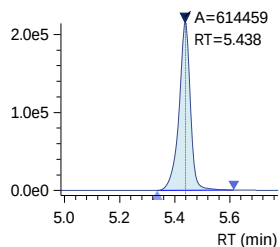
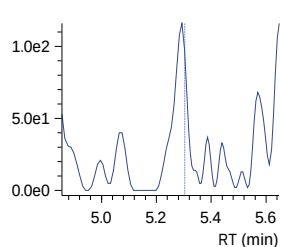
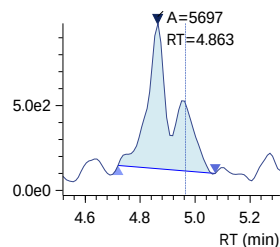
2.14e5

ISTD 286.90>168.90 (-)

2.14e5

Q 284.90>168.90 (-)

7.10e1

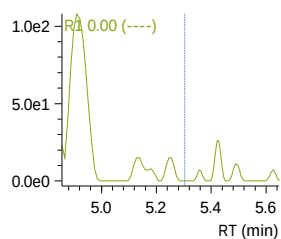


R1 314.80>82.90 (-)

1.08e2

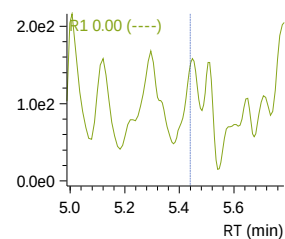
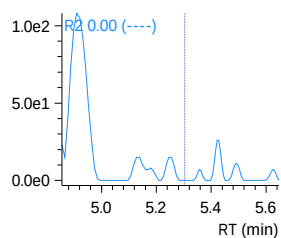
R1 284.90>184.90 (-)

2.16e2



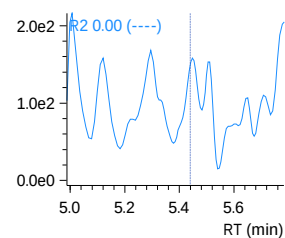
R2 314.80>82.90 (-)

1.08e2



R2 284.90>184.90 (-)

2.16e2





240119_067 (continued)

5_3 FTCA

Conc. ----

R#1 0.00 (167.13)

R#2 0.00 (158.86)

Q 341.00>237.05 (-)

1.05e2

PFPeS

Conc. ----

R#1 0.00 (56.71)

R#2 0.00 (55.80)

Q 349.10>79.90 (-)

3.90e1

13C4-PFHpA

Conc. 2.8158

Q 367.10>322.00 (-)

1.96e5

13C4-PFHpA_IS

Conc. 2.5000

ISTD 367.10>322.00 (-)

1.96e5

PFHpA

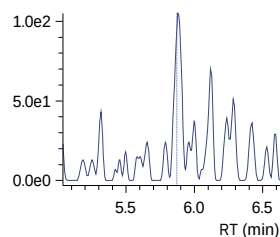
Conc. -0.0099

R#1 19.85 (21.37)

R#2 19.85 (21.50)

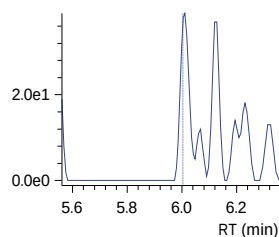
Q 363.10>319.00 (-)

1.82e3



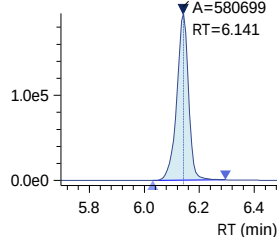
R1 341.00>217.00 (-)

1.71e3



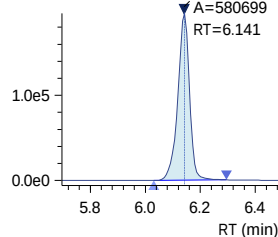
R1 349.10>98.80 (-)

2.70e1



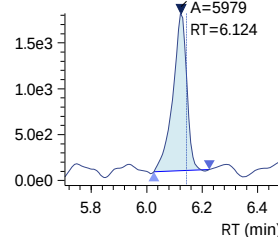
Q 367.10>322.00 (-)

1.96e5



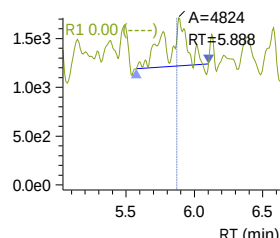
ISTD 367.10>322.00 (-)

1.96e5



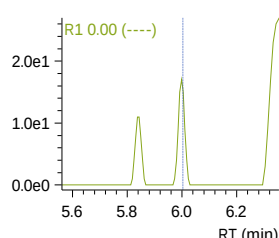
Q 363.10>319.00 (-)

1.82e3



R2 341.00>217.00 (-)

1.71e3



R2 349.10>98.80 (-)

2.70e1



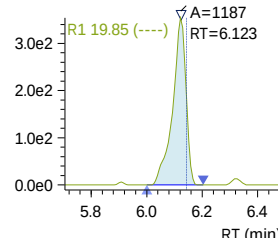
Q 367.10>322.00 (-)

1.96e5



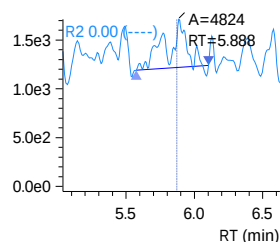
ISTD 367.10>322.00 (-)

1.96e5



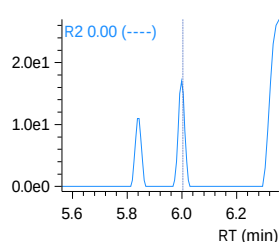
Q 363.10>319.00 (-)

3.54e2



R2 341.00>217.00 (-)

1.71e3



R2 349.10>98.80 (-)

2.70e1



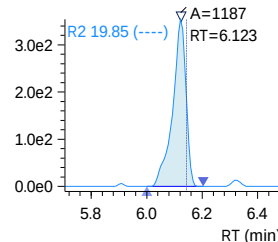
Q 367.10>322.00 (-)

1.96e5



ISTD 367.10>322.00 (-)

1.96e5

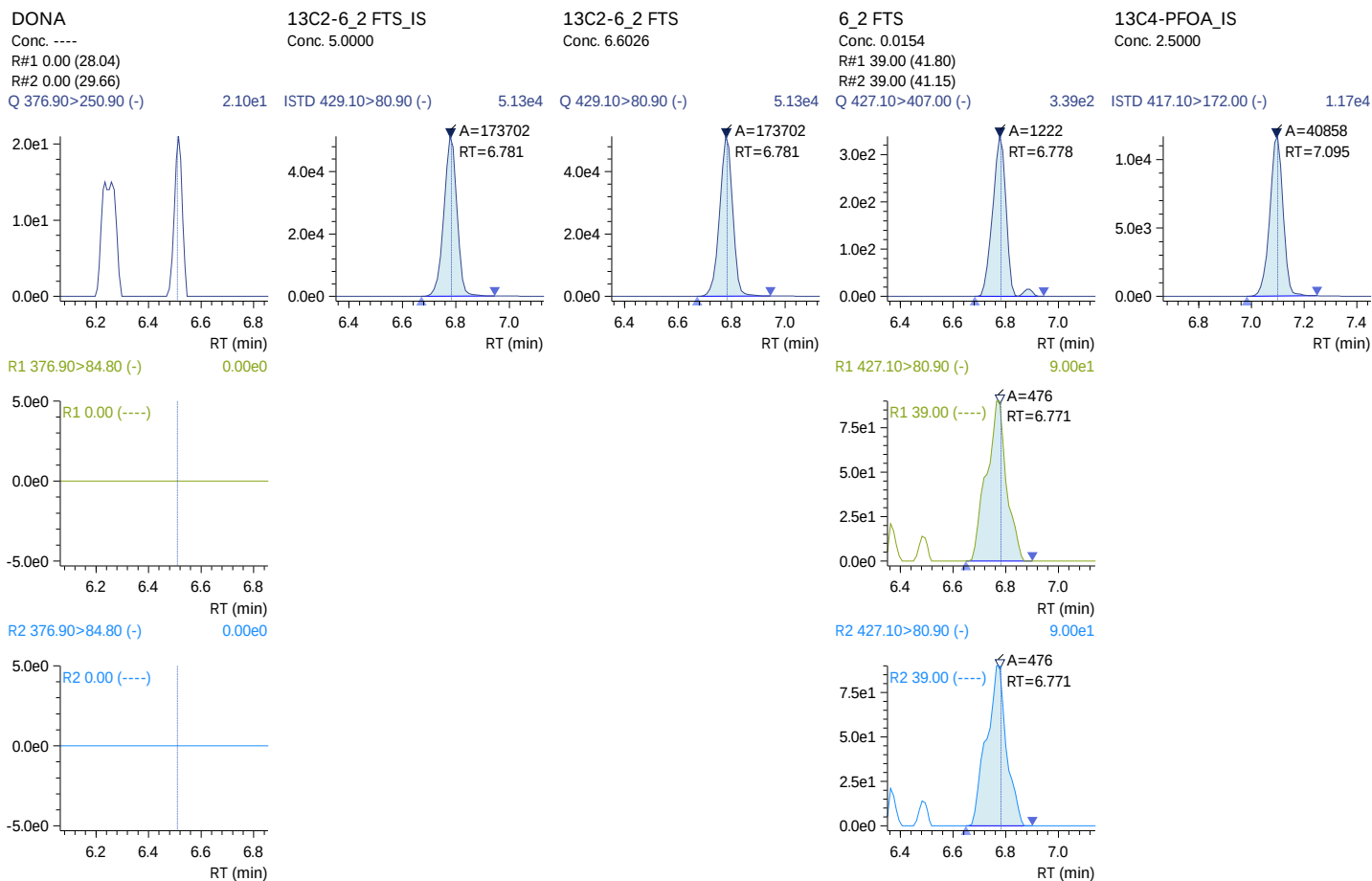


Q 363.10>319.00 (-)

3.54e2



240119_067 (continued)





240119_067 (continued)

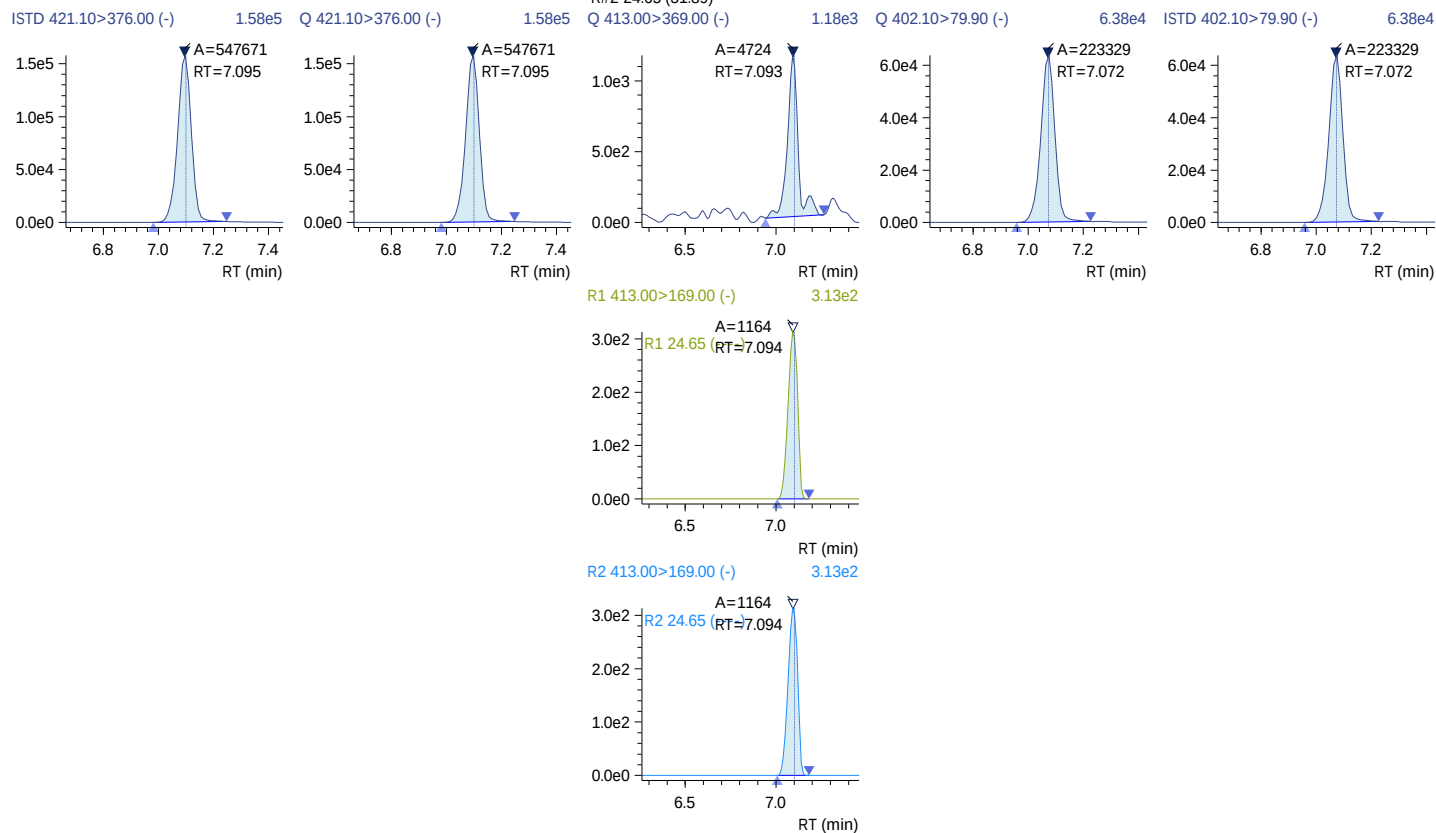
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.3982

PFOA
Conc. -0.0103
R#1 24.65 (29.05)
R#2 24.65 (31.89)

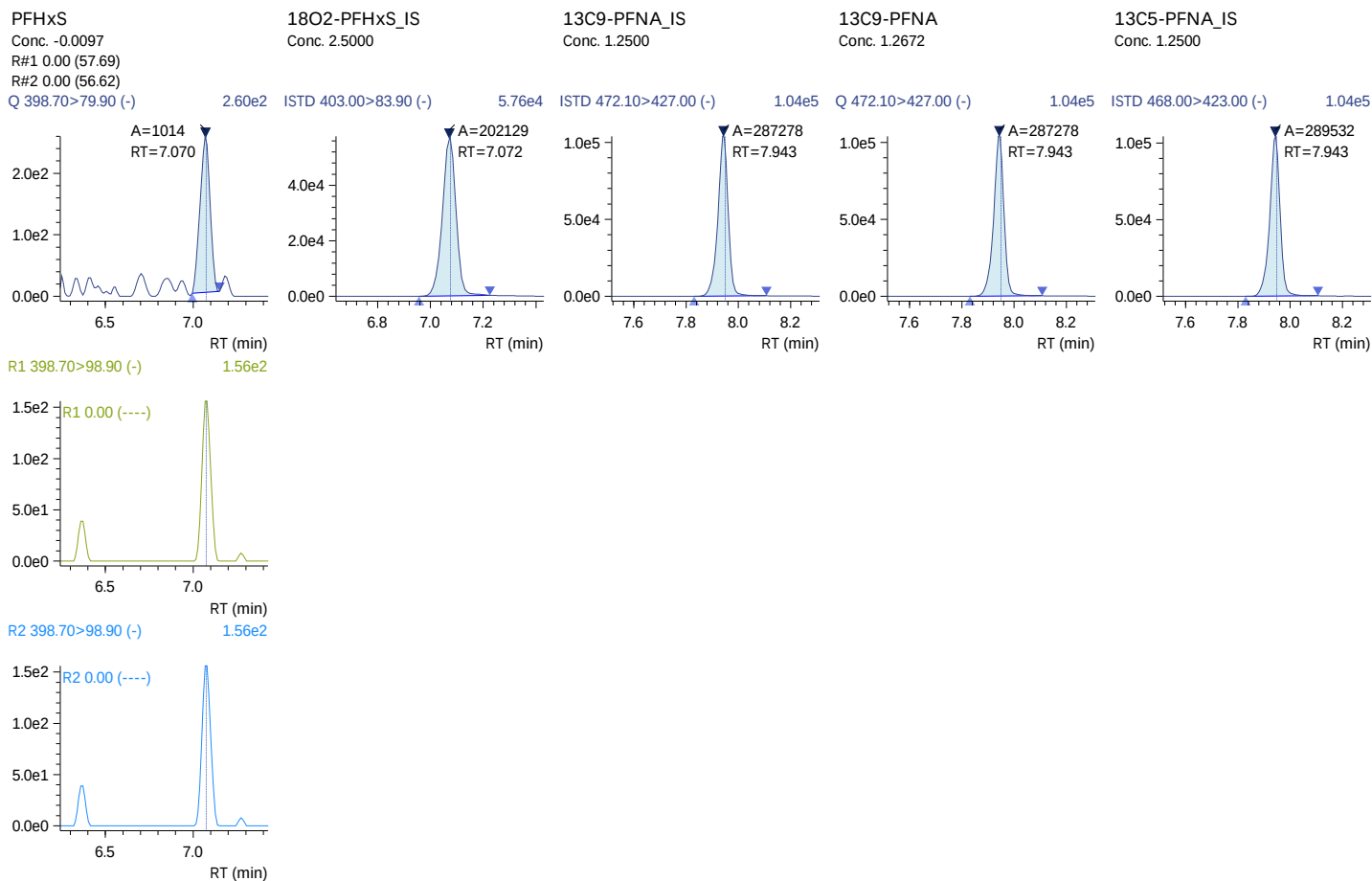
13C3-PFHxS
Conc. 2.5741

13C3-PFHxS_IS
Conc. 2.5000



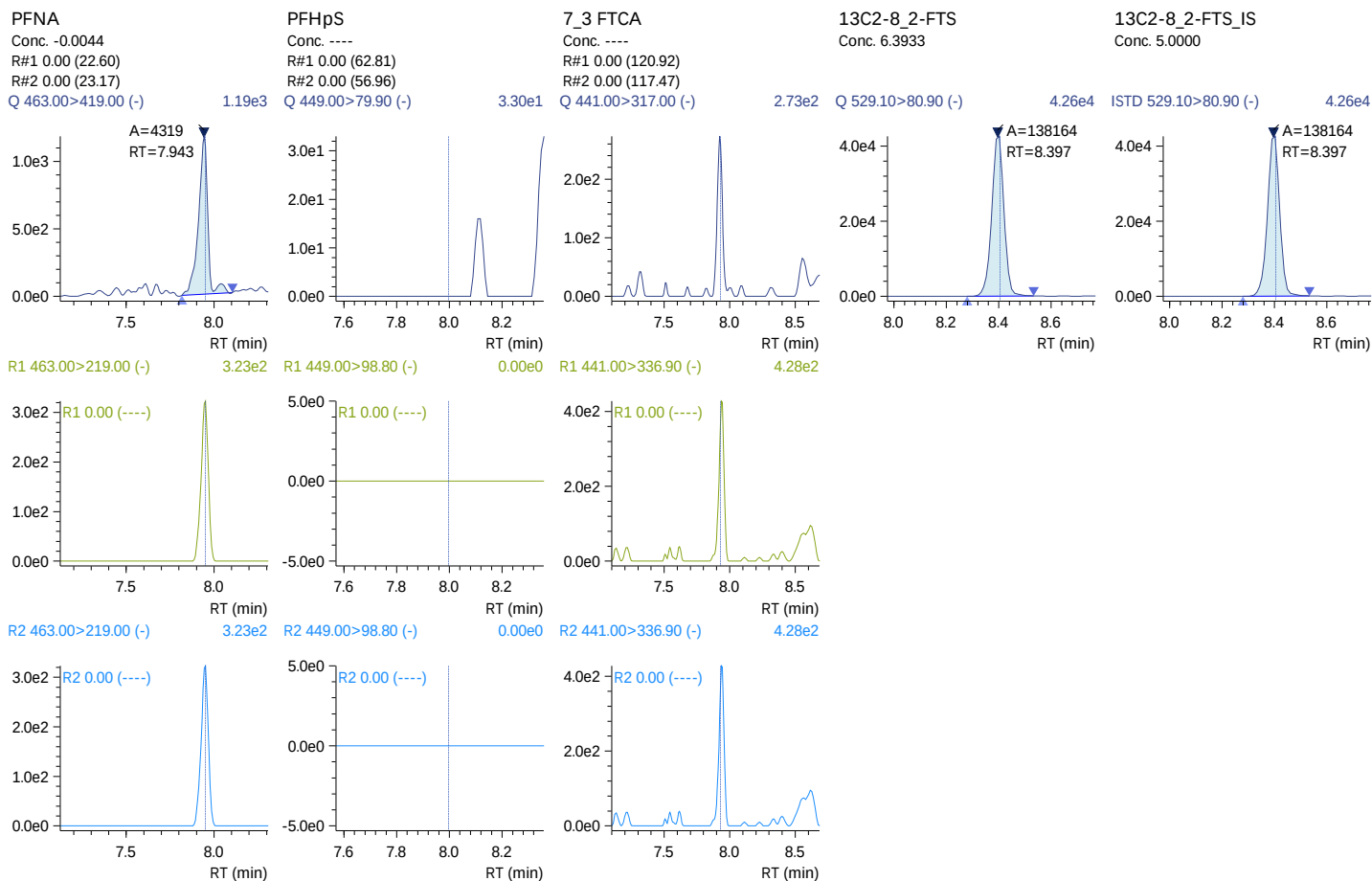


240119_067 (continued)



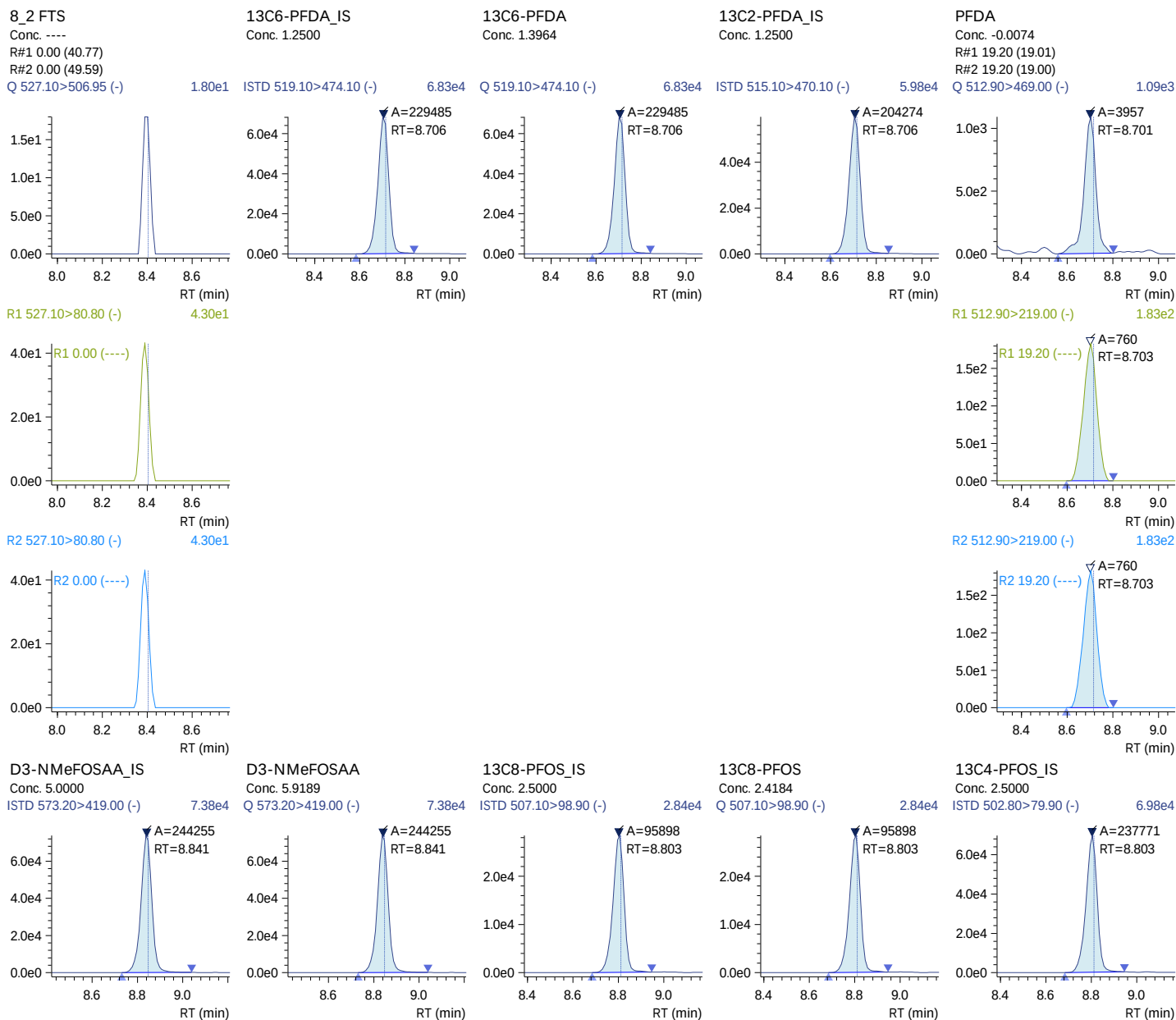


240119_067 (continued)



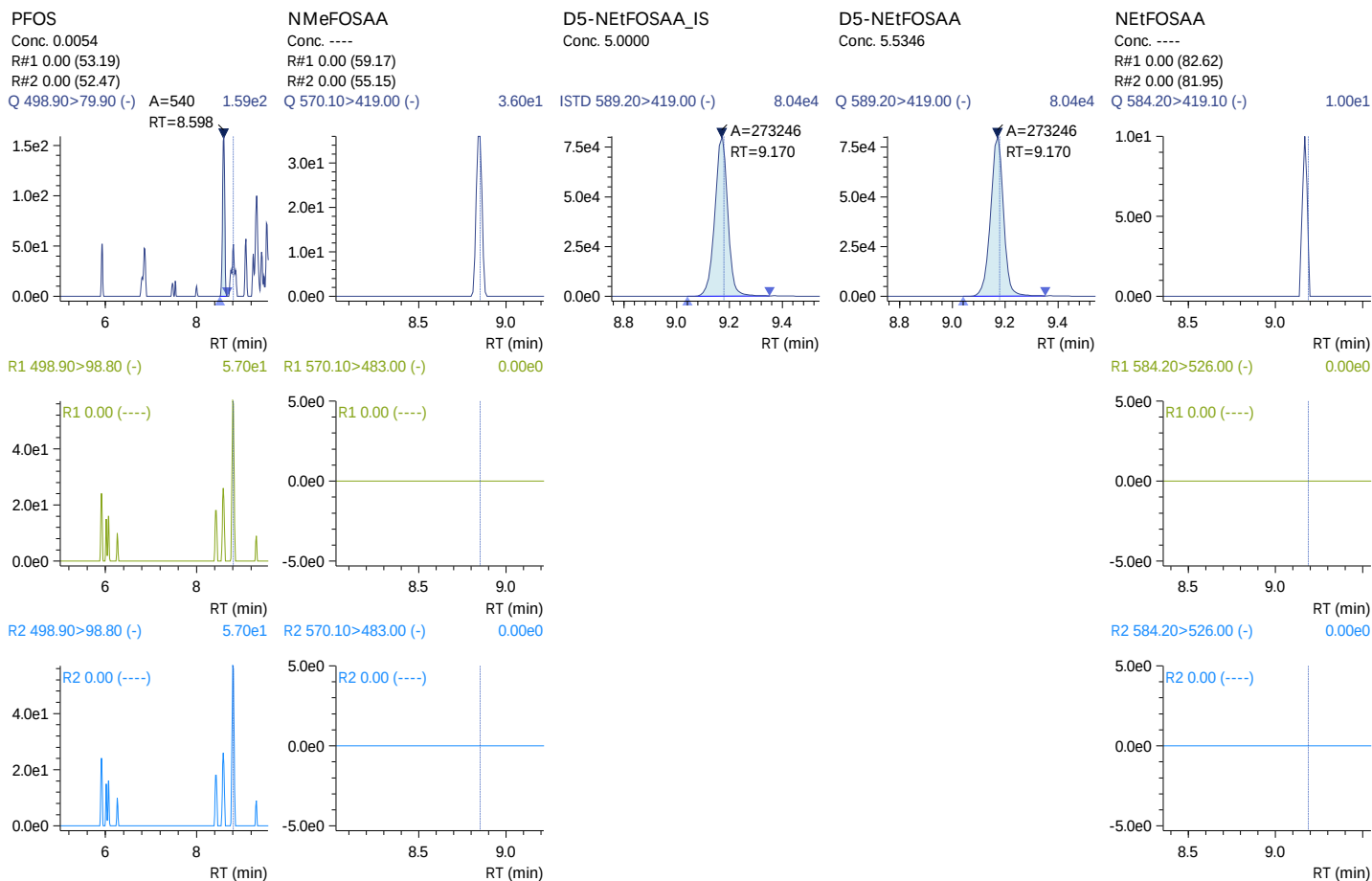


240119_067 (continued)





240119_067 (continued)





240119_067 (continued)

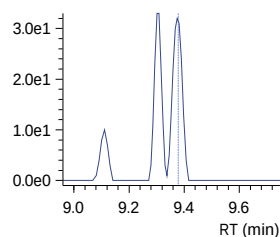
9-Cl-PF3ONS

Conc. ----

R#1 0.00 (31.76)

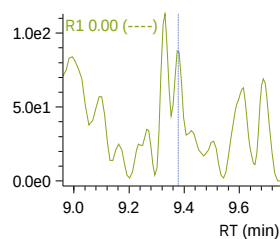
R#2 0.00 (32.76)

Q 530.80>351.00 (-)



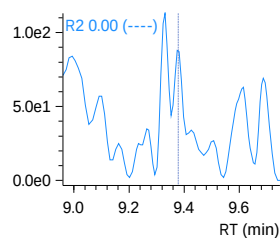
R1 532.80>353.00 (-)

1.13e2



R2 532.80>353.00 (-)

1.13e2



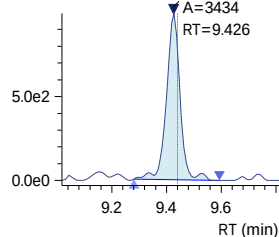
PFUnDA

Conc. -0.0107

R#1 0.00 (12.31)

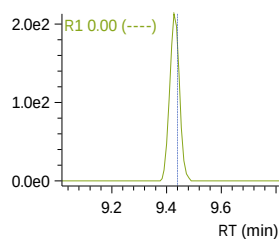
R#2 0.00 (13.12)

Q 563.10>519.00 (-)



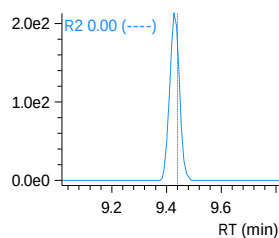
R1 563.10>269.10 (-)

2.13e2



R2 563.10>269.10 (-)

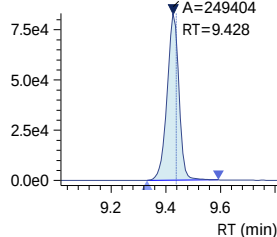
2.13e2



13C7-PFUnDA_IS

Conc. 1.2500

ISTD 570.00>525.10 (-)



8.32e4

Q 570.00>525.10 (-)

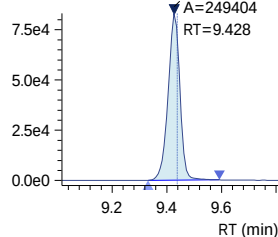
8.32e4



13C7-PFUnDA

Conc. 1.2722

Q 570.00>525.10 (-)



8.32e4

Q 570.00>525.10 (-)

8.32e4



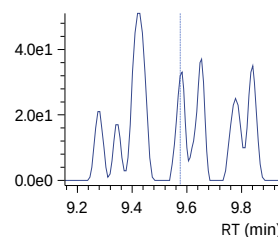
PFNS

Conc. ----

R#1 0.00 (63.31)

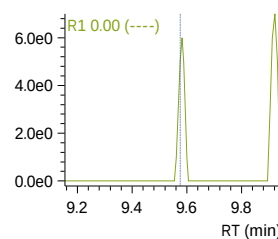
R#2 0.00 (65.22)

Q 548.80>79.90 (-)



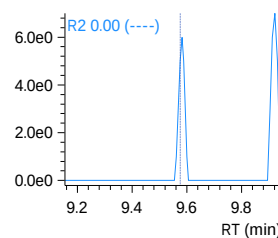
R1 548.80>98.80 (-)

7.00e0



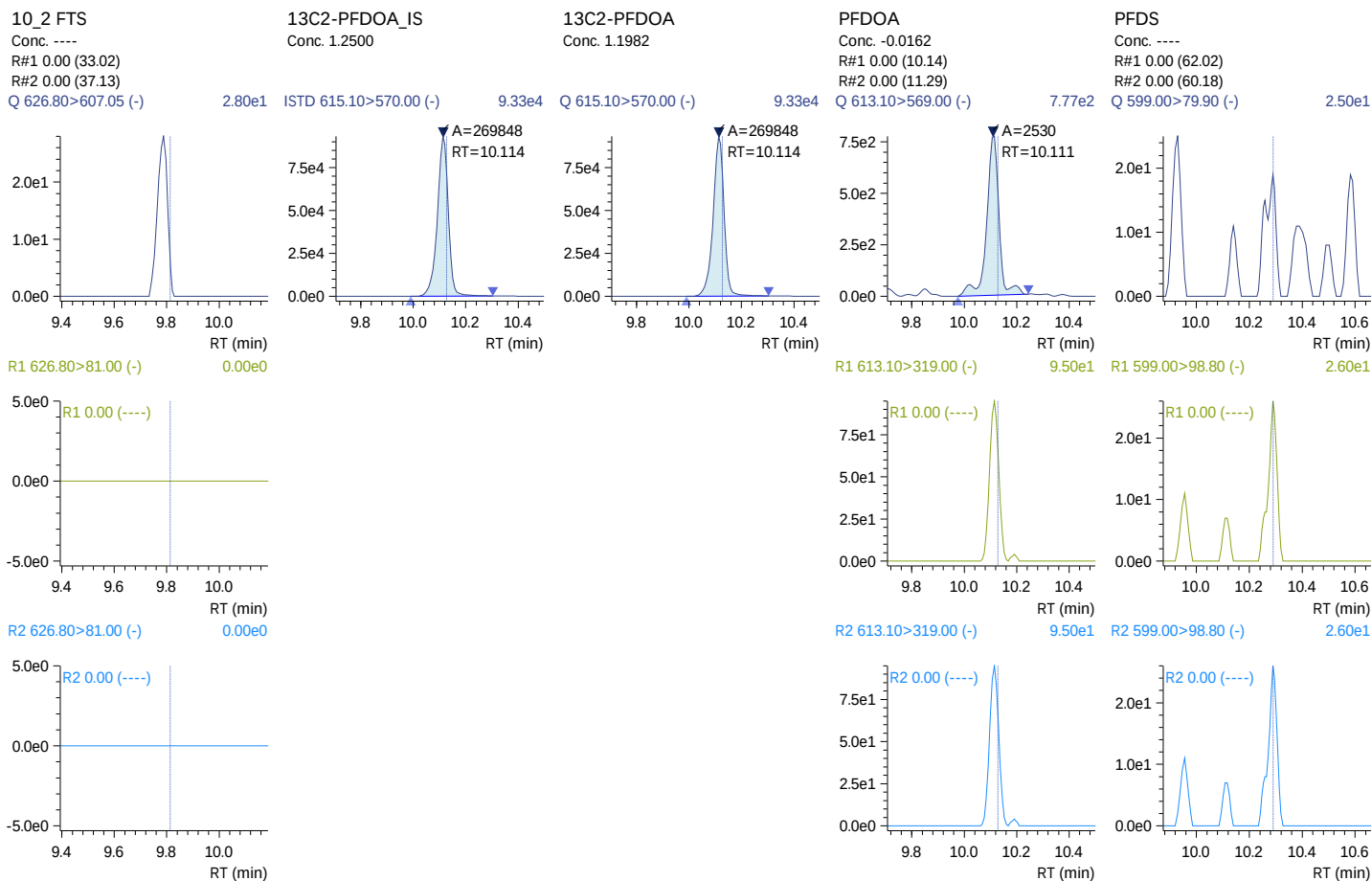
R2 548.80>98.80 (-)

7.00e0



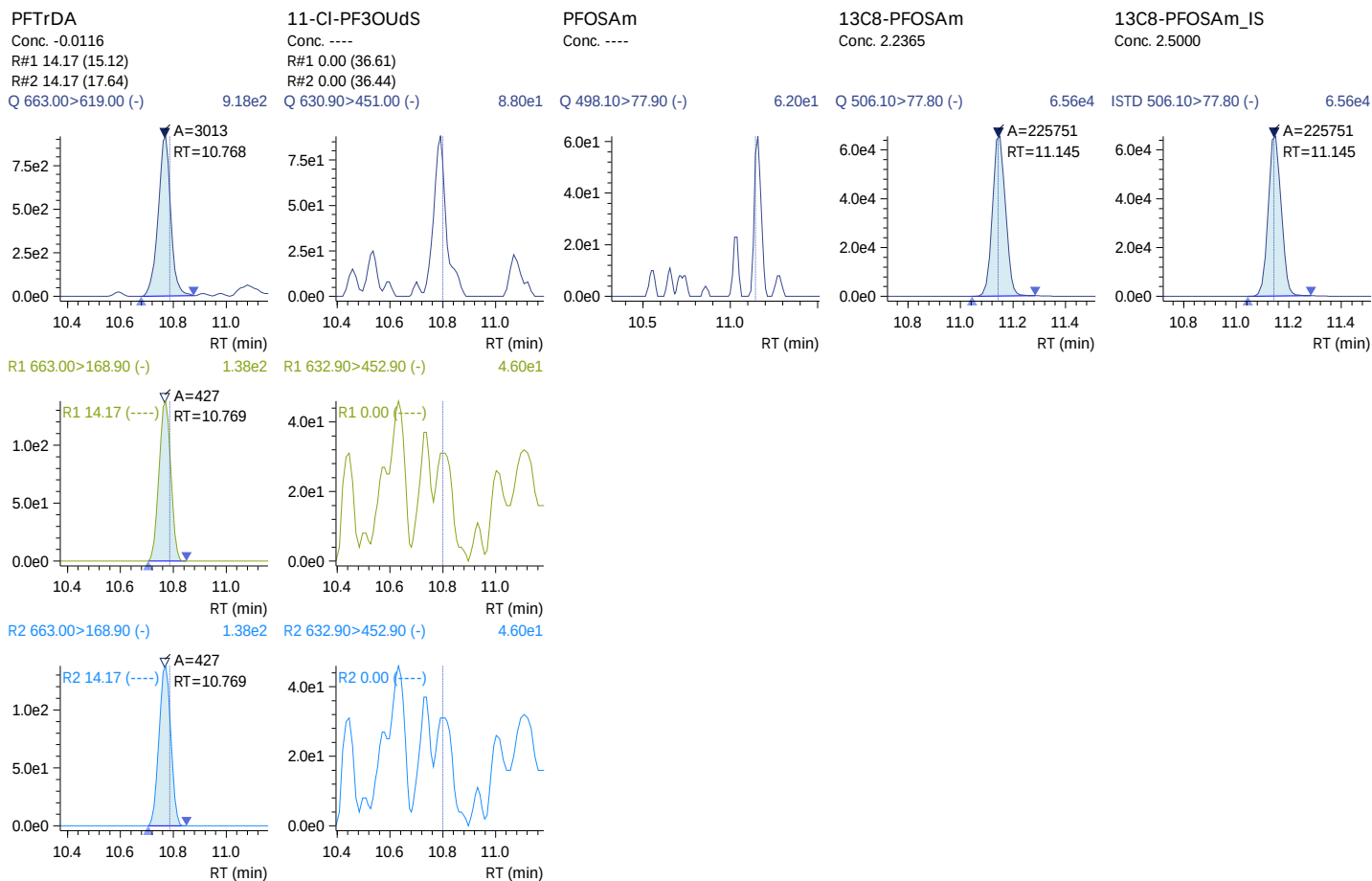


240119_067 (continued)



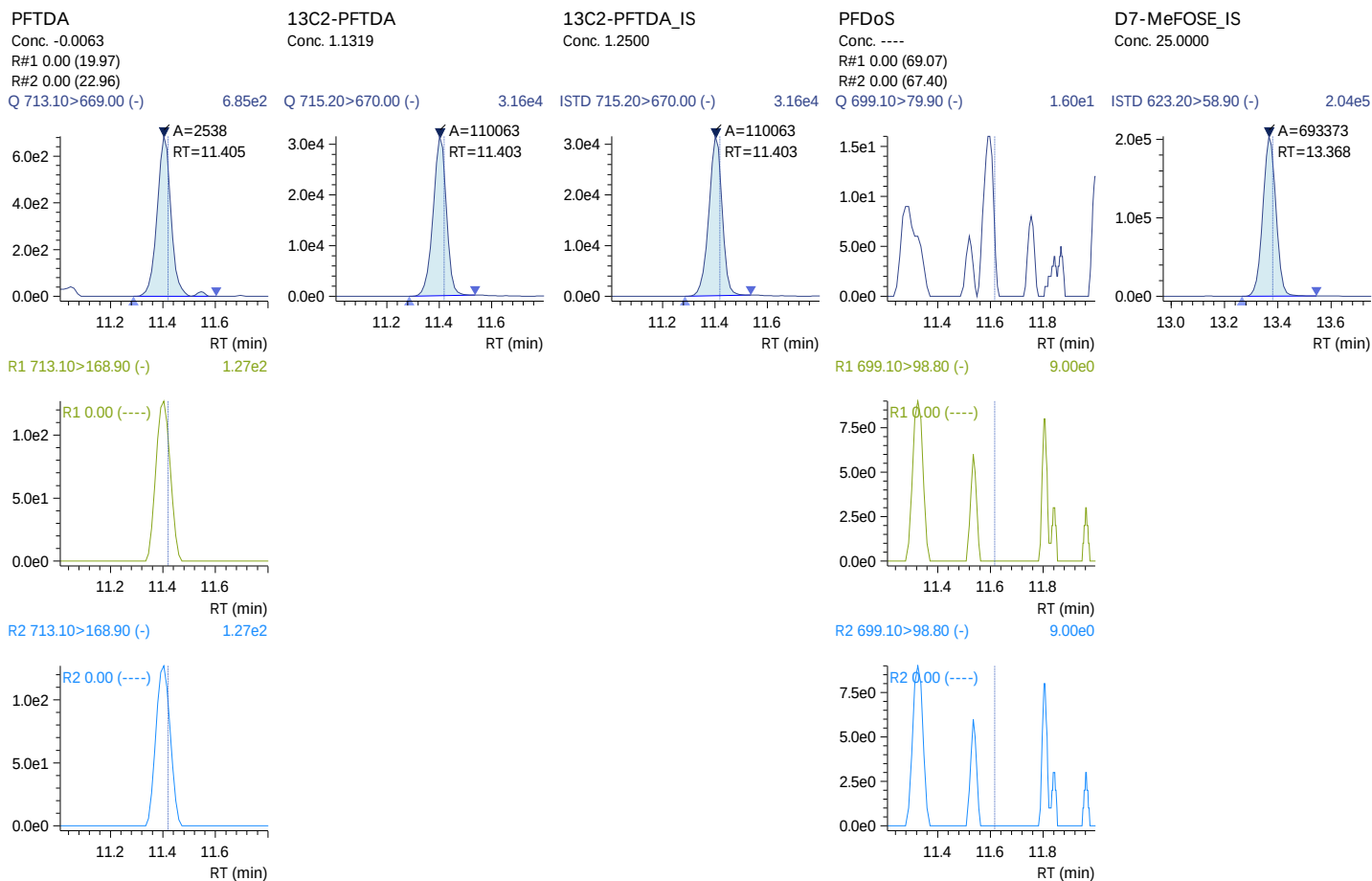


240119_067 (continued)





240119_067 (continued)





240119_067 (continued)

D7-MeFOSE
 Conc. 27.8621

MeFOSE
 Conc. ----

¹³C2-PFHxDA_IS
 Conc. 2.5000

¹³C2-PFHxDA
 Conc. 2.3031

PFHxDA
 Conc. -0.0124
 R#1 0.00 (11.64)
 R#2 0.00 (13.90)

Q 623.20>58.90 (-)

2.04e5

Q 616.10>59.00 (-)

4.10e1

ISTD 815.00>770.05 (-)

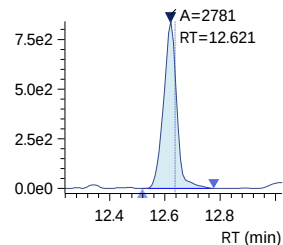
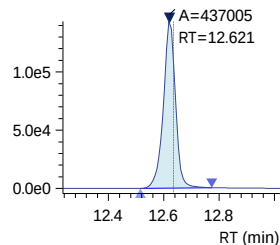
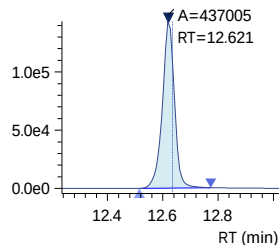
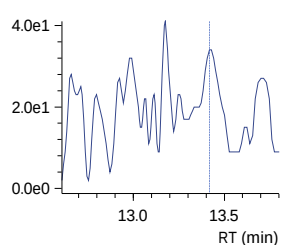
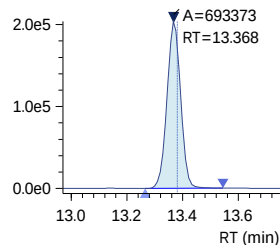
1.43e5

Q 815.00>770.05 (-)

1.43e5

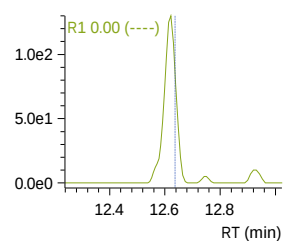
Q 813.00>768.95 (-)

8.41e2



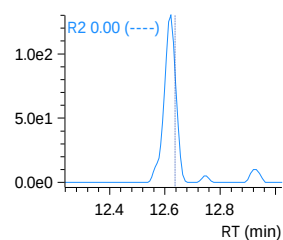
R1 813.00>218.95 (-)

1.30e2



R2 813.00>218.95 (-)

1.30e2





240119_067 (continued)

D3-MeFOSA
 Conc. 2.3715

D3-MeFOSA_IS
 Conc. 2.5000

MeFOSA
 Conc. ----
 R#1 0.00 (149.05)
 R#2 0.00 (140.79)

D9-EtFOSE_IS
 Conc. 25.0000

D9-EtFOSE
 Conc. 26.5628

Q 515.00>219.00 (-)

1.35e4

ISTD 515.00>219.00 (-)

1.35e4

Q 511.90>219.00 (-)

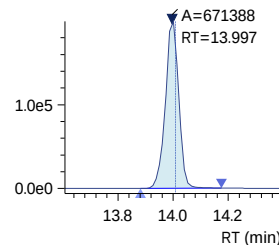
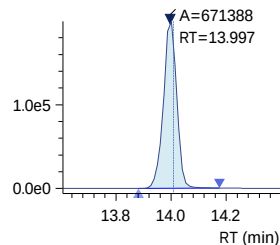
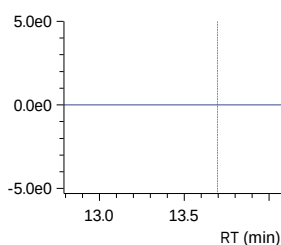
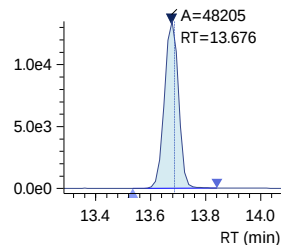
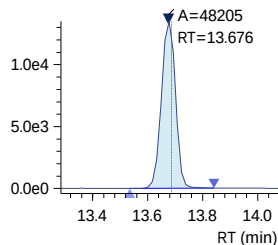
0.00e0

ISTD 639.20>58.90 (-)

2.00e5

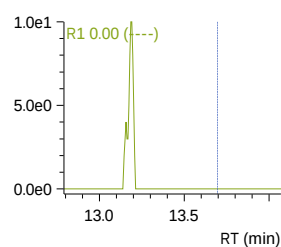
Q 639.20>58.90 (-)

2.00e5



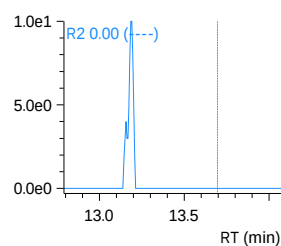
R1 511.90>169.00 (-)

1.00e1



R2 511.90>169.00 (-)

1.00e1





240119_067 (continued)

EtFOSE
Conc. ----

D5-EtFOSAm
Conc. 2.5822

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. ----

PFODA
Conc. 0.0187

Q 630.00>59.00 (-)

3.70e1

Q 531.10>219.00 (-)

2.16e4

ISTD 531.10>219.00 (-)

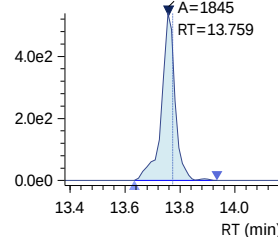
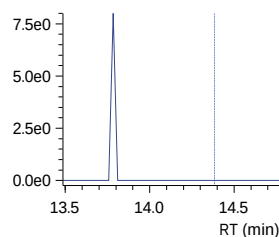
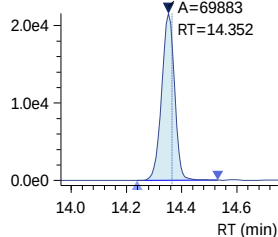
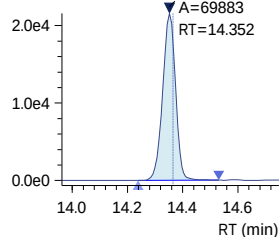
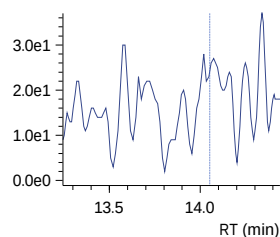
2.16e4

Q 526.00>219.00 (-)

8.00e0

Q 913.00>868.65 (-)

5.39e2

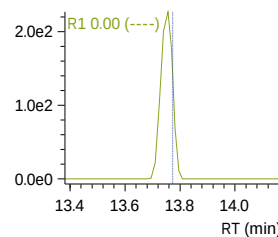
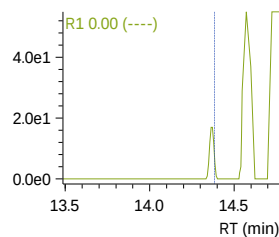


R1 526.00>169.00 (-)

5.50e1

R1 913.00>169.00 (-)

2.27e2

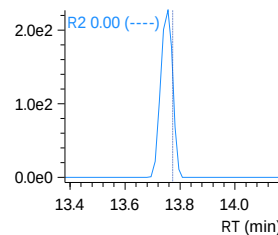
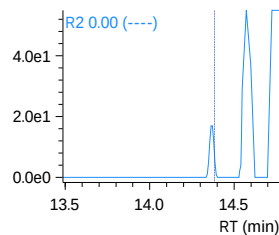


R2 526.00>169.00 (-)

5.50e1

R2 913.00>169.00 (-)

2.27e2



Validation Report

1st PS 01/23/24
2nd UA 01/23/24

Data File: J:\LCMS08\Data\240119_1633_B1\240119_006
Lab ID: KQ2400951-18
RunType: CCB
Matrix: Soil

Date Acquired: 1/19/24 13:44
Batch ID: 830171
Analysis Method: 1633/PFAS_DOD5.4

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery (Closing)		X
Internal Standards	X	
Surrogates		X
Above Highest ICAL Level	X	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Continuing Calibration Recovery (Closing)	13C2-6:2 FTS	134	70	130	native in control
	13C2-4:2 FTS	139	70	130	native in control
Surrogates	13C2-4:2 FTS	154	20	150	native in control

Primary Review: _____

Secondary Review: _____

Validation Report

1st PS 01/23/24
2nd UA 01/23/24

Data File: J:\LCMS08\Data\240119_1633_B1\240119_006
Lab ID: KQ2400951-02
RunType: CCB
Matrix: Water

Date Acquired: 1/19/24 13:44
Batch ID: 830171
Analysis Method: 1633/PFAS_DOD5.4

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery (Closing)		X
Internal Standards	X	
Surrogates	X	
Above Highest ICAL Level	X	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Continuing Calibration Recovery (Closing)	13C2-4:2 FTS	142	70	130	native in control
	13C2-6:2 FTS	150	70	130	
	13C2-8:2 FTS	133	70	130	

Primary Review: _____

Secondary Review: _____

Quantitation Report

1st *PS* 01/23/24
2nd *UA* 01/23/24

Data File:	J:\LCMS08\Data\240119_1633_B1\240119_006	Instrument:	K-LCMS-08
Acqu Date:	1/19/24 13:44	Vial:	13
Run Type:	CCB	Dilution:	1
Lab ID:	KQ2400951-18	Raw Units:	ng/mL

Bottle ID:		Tier:	IV	Matrix:	Soil
Prod Code:	PFAS_DOD5.4	Collect Date:	11/13/23	Receive Date:	11/14/23

Analysis Lot:	830171	Prep Lot:		Report Group:	KQ2400951
Analysis	1633	Prep Method:			
		Prep Date:			

Title:	Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM	Calibration ID:	KC2400027
		Report List ID:	24615

Internal Standard Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Area Criteria
18O2-PFHxS	7.083		207598	2.5000	OK
13C4-PFOS	8.819		274218	2.5000	OK
13C3-PFBA	1.410		570373	5.0000	OK
13C2-PFHxA	4.970		573354	2.5000	OK
13C4-PFOA	7.107		43786	2.5000	OK
13C5-PFNA	7.957		312046	1.2500	OK
13C2-PFDA	8.721		220651	1.2500	OK

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
13C3-PFBS	4.634		317550	2.6954	108	20 - 150	Y
13C3-PFHxS	7.082		236407	2.6531	106	20 - 150	Y
13C8-PFOS	8.819		112690	2.4641	99	20 - 150	Y
13C4-PFBA	1.409		1237058	9.7033	97	20 - 150	Y
13C5-PFPeA	3.486		144956	5.6010	112	20 - 150	Y
13C5-PFHxA	4.969		610019	2.5245	101	20 - 150	Y
13C4-PFHpA	6.151		598018	2.7338	109	20 - 150	Y
13C8-PFOA	7.106		565088	2.3090	92	20 - 150	Y
13C9-PFNA	7.956		295180	1.2081	97	20 - 150	Y
13C6-PFDA	8.721		217438	1.2249	98	20 - 150	Y
13C7-PFUnDA	9.446		261828	1.2365	99	20 - 150	Y
13C2-PFDoDA	10.135		289366	1.1895	95	20 - 150	Y
13C2-PFTeDA	11.427		132910	1.2654	101	20 - 150	Y
13C8-FOSA	11.145		260782	2.2402	90	20 - 150	Y
D3-MeFOSA	13.688		55929	2.3858	95	20 - 150	Y
D5-EtFOSA	14.367		69910	2.2398	90	20 - 150	Y
D7-MeFOSE	13.382		658007	22.9265	92	20 - 150	Y
D9-EtFOSE	14.011		646345	22.1731	89	20 - 150	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 1/23/24 14:28

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			1st	PS	01/23/24
Data File:	J:\LCMS08\Data\240119_1633_B1\240119_006	Instrument:	K-LCMS08	2nd	01/23/24
Acqu Date:	1/19/24 13:44	Vial:	13	UA	
Run Type:	CCB	Dilution:	1		
Lab ID:	KQ2400951-18	Raw Units:	ng/mL		

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
D3-MeFOSAA	8.854		301235	6.3294	127	20 - 150	Y
D5-EtFOSAA	9.184		362002	6.3577	127	20 - 150	Y
13C2-4:2 FTS	4.653		219684	7.6898	154 *	20 - 150	Y
13C2-6:2 FTS	6.792		194662	7.2044	144	20 - 150	Y
13C2-8:2 FTS	8.411		149585	6.7395	135	20 - 150	Y
13C3-HFPO-DA	5.446		615651	10.9690	110	20 - 150	Y

Target Compounds

Final Conc.Units: ng/g							
Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Perfluorobutane sulfonic acid (PFBS)	4.638		117	0.0007	0.00070	U	Y
Perfluoropentane sulfonic acid (PFPeS)	6.009		125	0.0010	0.0010	U	Y
Perfluorohexane sulfonic acid (PFHxS)	7.087		1120	-0.0093	0	U	Y
Perfluoroheptane sulfonic acid (PFHpS)	0		0	0	0	U	Y
Perfluorooctane sulfonic acid (PFOS)	8.831		257	0.0022	0.0022	U	Y
Perfluorononane sulfonic acid (PFNS)	0		0	0	0	U	Y
Perfluorodecane sulfonic acid (PFDS)	10.276		66	-0.0054	0	U	Y
Perfluorododecane sulfonic acid (PFDoS)	0		0	0	0	U	Y
Perfluorobutanoic acid (PFBA)	1.439		1687	0.0159	0.016	U	Y
Perfluoropentanoic acid (PFPeA)	3.482		1804	0.0096	0.0096	U	Y
Perfluorohexanoic acid (PFHxA)	4.965		1146	-0.0027	0	U	Y
Perfluoroheptanoic acid (PFHpA)	6.130		5026	-0.0145	0	U	Y
Perfluorooctanoic acid (PFOA)	7.109		4670	-0.0117	0	U	Y
Perfluorononanoic acid (PFNA)	7.955		4399	-0.0047	0	U	Y
Perfluorodecanoic acid (PFDA)	8.721		5264	-0.0001	0	U	Y
Perfluoroundecanoic acid (PFUnDA)	9.449		2955	-0.0141	0	U	Y
Perfluorododecanoic acid (PFDOA)	10.137		3061	-0.0140	0	U	Y
Perfluorotridecanoic acid (PFTrDA)	10.794		3586	-0.0118	0	U	Y
Perfluorotetradecanoic acid (PFTDA)	11.426		2961	-0.0071	0	U	Y
Perfluorooctane sulfonamide (PFOSAm)	11.142		487	0.0057	0.0057	U	Y
N-Methylperfluorooctane sulfonamide (MeFOSA)	0		0	0	0	U	Y
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	0		0	0	0	U	Y
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	0		0	0	0	U	Y
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	0		0	0	0	U	Y
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	0		0	0	0	U	Y

U: Undetected at or above MDL

J: Analyte detected above MDL, but below MRL

B: Hit above MRL also found in Method Blank

E: Analyte concentration above high point of ICAL

N: Presumptive evidence of compound

D: Result from dilution

m: Manual integration performed

d: Compound manually deleted

NR: Analyte not reported from this analysis

*: Result fails acceptance criteria

#: Acceptance criteria not applicable

?: Insufficient information to determine acceptance

e: Result >= MRL, but MRL less than low point of ICAL

c: check for co-elution

Printed: 1/23/24 14:28

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			1st	PS	01/23/24
Data File:	J:\LCMS08\Data\240119_1633_B1\240119_006	Instrument:	K-LCMS08	UA	01/23/24
Acqu Date:	1/19/24 13:44	Vial:	13		
Run Type:	CCB	Dilution:	1		
Lab ID:	KQ2400951-18	Raw Units:	ng/mL		

<i>Target Compounds</i>			Final Conc.Units: ng/g				
Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	0		0	0	0	U	Y
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	4.658		135	0.0013	0.0013	U	Y
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	6.790		1185	0.0134	0.013	U	Y
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	8.406		46	0.0007	0.00070	U	Y
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	0		0	0	0	U	Y
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	5.876		437	0.0277	0.028	U	Y
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	7.939		859	0.0408	0.041	U	Y
Perfluoro(2-ethoxyethane) sulfonic acid (PFEESA)	0		0	0	0	U	Y
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	0		0	0	0	U	Y
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	0		0	0	0	U	Y
Perfluoro-3-methoxypropanoic acid (PFMPA)	2.423		80	0.0009	0.00090	U	Y
Perfluoro-4-methoxybutanoic acid (PFMBA)	4.008		133	0.0010	0.0010	U	Y
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	5.450		129	0.0019	0.0019	U	Y
Nonafluoro-3,6-dioxahexanoic acid (NFDHA)	4.834		1433	0.0106	0.011	U	Y
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	0		0	0	0	U	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report

1st *PS* 01/23/24
2nd *UA* 01/23/24

Data File:	J:\LCMS08\Data\240119_1633_B1\240119_006	Instrument:	K-LCMS-08
Acqu Date:	1/19/24 13:44	Vial:	2
Run Type:	CCB	Dilution:	1
Lab ID:	KQ2400951-02	Raw Units:	ng/mL

Bottle ID:		Tier:	IV	Matrix:	Water
Prod Code:	PFAS_DOD5.4	Collect Date:	11/8/23	Receive Date:	11/10/23

Analysis Lot:	830171	Prep Lot:		Report Group:	KQ2400951
Analysis	1633	Prep Method:			
		Prep Date:			

Title:	Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM	Calibration ID:	KC2400027
		Report List ID:	24615

Internal Standard Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Area Criteria
18O2-PFHxS	7.083		207598	2.5000	OK
13C4-PFOS	8.819		274218	2.5000	OK
13C3-PFBA	1.410		570373	5.0000	OK
13C2-PFHxA	4.970		573354	2.5000	OK
13C4-PFOA	7.107		43786	2.5000	OK
13C5-PFNA	7.957		312046	1.2500	OK
13C2-PFDA	8.721		220651	1.2500	OK

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
13C3-PFBS	4.634		317550	2.6954	108	40 - 135	Y
13C3-PFHxS	7.082		236407	2.6531	106	40 - 130	Y
13C8-PFOS	8.819		112690	2.4641	99	40 - 130	Y
13C4-PFBA	1.409		1237058	9.7033	97	5 - 130	Y
13C5-PFPeA	3.486		144956	5.6010	112	40 - 130	Y
13C5-PFHxA	4.969		610019	2.5245	101	40 - 130	Y
13C4-PFHpA	6.151		598018	2.7338	109	40 - 130	Y
13C8-PFOA	7.106		565088	2.3090	92	40 - 130	Y
13C9-PFNA	7.956		295180	1.2081	97	40 - 130	Y
13C6-PFDA	8.721		217438	1.2249	98	40 - 130	Y
13C7-PFUnDA	9.446		261828	1.2365	99	30 - 130	Y
13C2-PFDoDA	10.135		289366	1.1895	95	10 - 130	Y
13C2-PFTeDA	11.427		132910	1.2654	101	10 - 130	Y
13C8-FOSA	11.145		260782	2.2402	90	40 - 130	Y
D3-MeFOSA	13.688		55929	2.3858	95	10 - 130	Y
D5-EtFOSA	14.367		69910	2.2398	90	10 - 130	Y
D7-MeFOSE	13.382		658007	22.9265	92	10 - 130	Y
D9-EtFOSE	14.011		646345	22.1731	89	10 - 130	Y

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E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 1/23/24 14:28

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			1st	PS	01/23/24
Data File:	J:\LCMS08\Data\240119_1633_B1\240119_006	Instrument:	K-LCMS08	2nd	01/23/24
Acqu Date:	1/19/24 13:44	Vial:	2	UA	
Run Type:	CCB	Dilution:	1		
Lab ID:	KQ2400951-02	Raw Units:	ng/mL		

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
D3-MeFOSAA	8.854		301235	6.3294	127	40 - 170	Y
D5-EtFOSAA	9.184		362002	6.3577	127	25 - 135	Y
13C2-4:2 FTS	4.653		219684	7.6898	154	40 - 200	Y
13C2-6:2 FTS	6.792		194662	7.2044	144	40 - 200	Y
13C2-8:2 FTS	8.411		149585	6.7395	135	40 - 300	Y
13C3-HFPO-DA	5.446		615651	10.9690	110	40 - 130	Y

Target Compounds

Final Conc.Units: ng/L							
Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Perfluorobutane sulfonic acid (PFBS)	4.638		117	0.0007	0.014	U	Y
Perfluoropentane sulfonic acid (PFPeS)	6.009		125	0.0010	0.020	U	Y
Perfluorohexane sulfonic acid (PFHxS)	7.087		1120	-0.0093	0	U	Y
Perfluoroheptane sulfonic acid (PFHpS)	0		0	0	0	U	Y
Perfluorooctane sulfonic acid (PFOS)	8.831		257	0.0022	0.044	U	Y
Perfluorononane sulfonic acid (PFNS)	0		0	0	0	U	Y
Perfluorodecane sulfonic acid (PFDS)	10.276		66	-0.0054	0	U	Y
Perfluorododecane sulfonic acid (PFDoS)	0		0	0	0	U	Y
Perfluorobutanoic acid (PFBA)	1.439		1687	0.0159	0.32	U	Y
Perfluoropentanoic acid (PFPeA)	3.482		1804	0.0096	0.19	U	Y
Perfluorohexanoic acid (PFHxA)	4.965		1146	-0.0027	0	U	Y
Perfluoroheptanoic acid (PFHpA)	6.130		5026	-0.0145	0	U	Y
Perfluorooctanoic acid (PFOA)	7.109		4670	-0.0117	0	U	Y
Perfluorononanoic acid (PFNA)	7.955		4399	-0.0047	0	U	Y
Perfluorodecanoic acid (PFDA)	8.721		5264	-0.0001	0	U	Y
Perfluoroundecanoic acid (PFUnDA)	9.449		2955	-0.0141	0	U	Y
Perfluorododecanoic acid (PFDOA)	10.137		3061	-0.0140	0	U	Y
Perfluorotridecanoic acid (PFTrDA)	10.794		3586	-0.0118	0	U	Y
Perfluorotetradecanoic acid (PFTDA)	11.426		2961	-0.0071	0	U	Y
Perfluorooctane sulfonamide (PFOSAm)	11.142		487	0.0057	0.11	U	Y
N-Methylperfluorooctane sulfonamide (MeFOSA)	0		0	0	0	U	Y
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	0		0	0	0	U	Y
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	0		0	0	0	U	Y
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	0		0	0	0	U	Y
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	0		0	0	0	U	Y

U: Undetected at or above MDL

J: Analyte detected above MDL, but below MRL

B: Hit above MRL also found in Method Blank

E: Analyte concentration above high point of ICAL

N: Presumptive evidence of compound

D: Result from dilution

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d: Compound manually deleted

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?: Insufficient information to determine acceptance

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c: check for co-elution

Printed: 1/23/24 14:28

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			1st	01/23/24
Data File:	J:\LCMS08\Data\240119_1633_B1\240119_006	Instrument:	K-LCMS08	01/23/24
Acqu Date:	1/19/24 13:44	Vial:	2	
Run Type:	CCB	Dilution:	1	
Lab ID:	KQ2400951-02	Raw Units:	ng/mL	

Target Compounds			Final Conc.Units: ng/L				
Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	0		0	0	0	U	Y
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	4.658		135	0.0013	0.026	U	Y
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	6.790		1185	0.0134	0.27	U	Y
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	8.406		46	0.0007	0.014	U	Y
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	0		0	0	0	U	Y
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	5.876		437	0.0277	0.55	U	Y
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	7.939		859	0.0408	0.82	U	Y
Perfluoro(2-ethoxyethane) sulfonic acid (PFEESA)	0		0	0	0	U	Y
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	0		0	0	0	U	Y
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	0		0	0	0	U	Y
Perfluoro-3-methoxypropanoic acid (PFMPA)	2.423		80	0.0009	0.018	U	Y
Perfluoro-4-methoxybutanoic acid (PFMBA)	4.008		133	0.0010	0.020	U	Y
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	5.450		129	0.0019	0.038	U	Y
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	4.834		1433	0.0106	0.21	U	Y
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	0		0	0	0	U	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution



240119_006

Sample ID: 1633 CCB
Date Acquired: 1/19/2024 1:44:48 PM
Acquired by: System Administrator
Data File: 240119_006
Vial: 54 | Inj. Volume: 10.0000uL | Tray: 1

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	1237058	----	----	----	----	----	----	
13C4-PFBA_IS	216.80>171.90	----	1237058	----	----	----	----	----	----	
13C3-PFBA_IS	216.00>172.00	----	570373	----	----	----	----	----	----	
PFBA	212.80>169.05	----	1687	----	----	----	----	----	----	
PFMPA	229.00>84.90	----	80	----	----	----	----	----	----	
3_3 FTCA	241.00>177.10	241.00>117.00	----	0	0.00	141.17	0	0.00	143.25	
13C5-PFPeA	268.30>223.00	----	144956	----	----	----	----	----	----	
13C5-PFPeA_IS	268.30>223.00	----	144956	----	----	----	----	----	----	
PFPeA	263.00>219.00	----	1804	----	----	----	----	----	----	
PFMBA	279.00>84.95	----	133	----	----	----	----	----	----	
13C2-4_2 FTS	329.10>80.90	----	219684	----	----	----	----	----	----	
13C2-4_2 FTS_IS	329.10>80.90	----	219684	----	----	----	----	----	----	
4_2 FTS	327.10>307.00	327.10>80.90	135	100	74.04	29.06	100	74.04	31.50	IRr
13C3-PFBS_IS	302.10>79.90	----	317550	----	----	----	----	----	----	
PFBS	298.70>79.90	298.70>98.80	117	15	12.81	46.72	15	12.81	48.74	IRr
13C3-PFBS	302.10>79.90	----	317550	----	----	----	----	----	----	
NFDHA	295.00>201.00	295.00>84.90	1433	427	29.81	40.25	427	29.81	36.97	
13C5-PFHxA	318.00>273.00	----	610019	----	----	----	----	----	----	
13C5-PFHxA_IS	318.00>273.00	----	610019	----	----	----	----	----	----	
13C2-PFHxA_IS	315.10>270.00	----	573354	----	----	----	----	----	----	
PFHxA	313.00>269.00	----	1146	----	----	----	----	----	----	
PFEESA	314.80>135.00	314.80>82.90	----	0	0.00	6.11	0	0.00	5.81	
13C3-HFPO-DA	286.90>168.90	----	615651	----	----	----	----	----	----	
13C3-HFPO-DA_IS	286.90>168.90	----	615651	----	----	----	----	----	----	
HFPO-DA	284.90>168.90	284.90>184.90	129	81	62.48	65.61	81	62.48	64.39	
5_3 FTCA	341.00>237.05	341.00>217.00	437	965	220.58	158.86	965	220.58	159.75	
PFPeS	349.10>79.90	349.10>98.80	125	18	14.24	55.80	18	14.24	54.52	IRr
13C4-PFHpA	367.10>322.00	----	598018	----	----	----	----	----	----	
13C4-PFHpA_IS	367.10>322.00	----	598018	----	----	----	----	----	----	
PFHpA	363.10>319.00	363.10>169.00	5026	1372	27.29	21.50	1372	27.29	23.22	
DONA	376.90>250.90	376.90>84.80	----	0	0.00	29.66	0	0.00	29.43	
13C2-6_2 FTS_IS	429.10>80.90	----	194662	----	----	----	----	----	----	
13C2-6_2 FTS	429.10>80.90	----	194662	----	----	----	----	----	----	
6_2 FTS	427.10>407.00	427.10>80.90	1185	434	36.64	41.15	434	36.64	43.09	
13C4-PFOA_IS	417.10>172.00	----	43786	----	----	----	----	----	----	
13C8-PFOA_IS	421.10>376.00	----	565088	----	----	----	----	----	----	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240119_006 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	565088	----	----	----	----	----	----	----
PFOA	413.00>369.00	413.00>169.00	4670	1309	28.03	31.89	1309	28.03	30.51	
13C3-PFHxS	402.10>79.90	----	236407	----	----	----	----	----	----	----
13C3-PFHxS_IS	402.10>79.90	----	236407	----	----	----	----	----	----	----
PFHxS	398.70>79.90	398.70>98.90	1120	874	78.01	56.62	874	78.01	57.27	
18O2-PFHxS_IS	403.00>83.90	----	207598	----	----	----	----	----	----	----
13C9-PFNA_IS	472.10>427.00	----	295180	----	----	----	----	----	----	----
13C9-PFNA	472.10>427.00	----	295180	----	----	----	----	----	----	----
13C5-PFNA_IS	468.00>423.00	----	312046	----	----	----	----	----	----	----
PFNA	463.00>419.00	463.00>219.00	4399	917	20.84	23.17	917	20.84	23.01	
PFHpS	449.00>79.90	449.00>98.80	----	0	0.00	56.96	0	0.00	58.58	
7_3 FTCA	441.00>317.00	441.00>336.90	859	1290	150.12	117.47	1290	150.12	117.17	
13C2-8_2-FTS	529.10>80.90	----	149585	----	----	----	----	----	----	----
13C2-8_2-FTS_IS	529.10>80.90	----	149585	----	----	----	----	----	----	----
8_2 FTS	527.10>506.95	527.10>80.80	46	97	213.25	49.59	97	213.25	43.30	IRr
13C6-PFDA_IS	519.10>474.10	----	217438	----	----	----	----	----	----	----
13C6-PFDA	519.10>474.10	----	217438	----	----	----	----	----	----	----
13C2-PFDA_IS	515.10>470.10	----	220651	----	----	----	----	----	----	----
PFDA	512.90>469.00	512.90>219.00	5264	633	12.03	19.00	633	12.03	19.26	
D3-NMeFOSAA_IS	573.20>419.00	----	301235	----	----	----	----	----	----	----
D3-NMeFOSAA	573.20>419.00	----	301235	----	----	----	----	----	----	----
13C8-PFOS_IS	507.10>98.90	----	112690	----	----	----	----	----	----	----
13C8-PFOS	507.10>98.90	----	112690	----	----	----	----	----	----	----
13C4-PFOS_IS	502.80>79.90	----	274218	----	----	----	----	----	----	----
PFOS	498.90>79.90	498.90>98.80	257	234	90.88	52.47	234	90.88	47.25	IRr
NMeFOSAA	570.10>419.00	570.10>483.00	----	0	0.00	55.15	0	0.00	62.10	
D5-NEtFOSAA_IS	589.20>419.00	----	362002	----	----	----	----	----	----	----
D5-NEtFOSAA	589.20>419.00	----	362002	----	----	----	----	----	----	----
NEtFOSAA	584.20>419.10	584.20>526.00	----	0	0.00	81.95	0	0.00	86.05	
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	----	0	0.00	32.76	0	0.00	31.74	
PFUnDA	563.10>519.00	563.10>269.10	2955	226	7.64	13.12	226	7.64	13.26	
13C7-PFUnDA_IS	570.00>525.10	----	261828	----	----	----	----	----	----	----
13C7-PFUnDA	570.00>525.10	----	261828	----	----	----	----	----	----	----
PFNS	548.80>79.90	548.80>98.80	----	0	0.00	65.22	0	0.00	62.49	
10_2 FTS	626.80>607.05	626.80>81.00	----	0	0.00	37.13	0	0.00	35.81	
13C2-PFDOA_IS	615.10>570.00	----	289366	----	----	----	----	----	----	----
13C2-PFDOA	615.10>570.00	----	289366	----	----	----	----	----	----	----
PFDOA	613.10>569.00	613.10>319.00	3061	190	6.19	11.29	190	6.19	10.90	
PFDS	599.00>79.90	599.00>98.80	66	34	51.12	60.18	34	51.12	61.11	
PFTrDA	663.00>619.00	663.00>168.90	3586	543	15.14	17.64	543	15.14	18.20	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240119_006 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	----	0	0.00	36.44	0	0.00	34.95	
PFOSAm	498.10>77.90	----	487	----	----	----	----	----	----	
13C8-PFOSAm	506.10>77.80	----	260782	----	----	----	----	----	----	
13C8-PFOSAm_IS	506.10>77.80	----	260782	----	----	----	----	----	----	
PFTDA	713.10>669.00	713.10>168.90	2961	578	19.52	22.96	578	19.52	22.68	
13C2-PFTDA	715.20>670.00	----	132910	----	----	----	----	----	----	
13C2-PFTDA_IS	715.20>670.00	----	132910	----	----	----	----	----	----	
PFDoS	699.10>79.90	699.10>98.80	----	0	0.00	67.40	0	0.00	65.24	
D7-MeFOSE_IS	623.20>58.90	----	658007	----	----	----	----	----	----	
D7-MeFOSE	623.20>58.90	----	658007	----	----	----	----	----	----	
MeFOSE	616.10>59.00	----	----	----	----	----	----	----	----	
13C2-PFHxDA_IS	815.00>770.05	----	469234	----	----	----	----	----	----	
13C2-PFHxDA	815.00>770.05	----	469234	----	----	----	----	----	----	
PFHxDA	813.00>768.95	813.00>218.95	3947	464	11.76	13.90	464	11.76	14.51	
D3-MeFOSA	515.00>219.00	----	55929	----	----	----	----	----	----	
D3-MeFOSA_IS	515.00>219.00	----	55929	----	----	----	----	----	----	
MeFOSA	511.90>219.00	511.90>169.00	----	0	0.00	140.79	0	0.00	142.62	
D9-EtFOSE_IS	639.20>58.90	----	646345	----	----	----	----	----	----	
D9-EtFOSE	639.20>58.90	----	646345	----	----	----	----	----	----	
EtFOSE	630.00>59.00	----	----	----	----	----	----	----	----	
D5-EtFOSAm	531.10>219.00	----	69910	----	----	----	----	----	----	
D5-EtFOSAm_IS	531.10>219.00	----	69910	----	----	----	----	----	----	
EtFOSAm	526.00>219.00	526.00>169.00	----	0	0.00	163.90	0	0.00	146.41	
PFODA	913.00>868.65	913.00>169.00	1136	300	26.42	27.03	300	26.42	23.98	

Flag ID key: IRr: Ion Ratio (Relative)



240119_006

Sample ID: 1633 CCB
Date Acquired: 1/19/2024 1:44:48 PM
Acquired by: System Administrator
Data File: 240119_006
Vial: 54 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.409	0.001	-0.001	1237058	570373	13C3-PFBA_IS	9.7033	ng/mL	
13C4-PFBA_IS	Auto	1.409	0.001	----	1237058	1237058	----	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.410	0.002	----	570373	570373	----	5.0000	ng/mL	
PFBA	M	1.439	0.030	0.030	1687	1237058	13C4-PFBA_IS	0.0159	ng/mL	
PFMPA	M	2.423	0.002	-1.063	80	144956	13C5-PFPeA_IS	0.0009	ng/mL	
3_3 FTCA	ND(W/B)	----	----	----	----	144956	13C5-PFPeA_IS	----	ng/mL	
13C5-PFPeA	Auto	3.486	0.007	-1.484	144956	573354	13C2-PFHxA_IS	5.6010	ng/mL	
13C5-PFPeA_IS	Auto	3.486	0.007	----	144956	144956	----	5.0000	ng/mL	
PFPeA	M	3.482	0.000	-0.004	1804	144956	13C5-PFPeA_IS	0.0096	ng/mL	
PFMBA	M	4.008	0.003	0.522	133	144956	13C5-PFPeA_IS	0.0010	ng/mL	
13C2-4_2 FTS	Auto	4.653	0.007	-2.430	219684	207598	18O2-PFHxS_IS	7.6898	ng/mL	
13C2-4_2 FTS_IS	Auto	4.653	0.007	----	219684	219684	----	5.0000	ng/mL	
4_2 FTS	M	4.658	0.011	0.005	135	219684	13C2-4_2 FTS_IS	0.0013	ng/mL	IRr
13C3-PFBS_IS	Auto	4.634	0.006	----	317550	317550	----	2.5000	ng/mL	
PFBS	M	4.638	0.010	0.004	117	317550	13C3-PFBS_IS	0.0007	ng/mL	IRr
13C3-PFBS	Auto	4.634	0.006	-2.449	317550	207598	18O2-PFHxS_IS	2.6954	ng/mL	
NFDHA	M	4.834	0.014	-0.135	1433	610019	13C5-PFHxA_IS	0.0106	ng/mL	
13C5-PFHxA	Auto	4.969	0.006	-0.001	610019	573354	13C2-PFHxA_IS	2.5245	ng/mL	
13C5-PFHxA_IS	Auto	4.969	0.006	----	610019	610019	----	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	4.970	0.007	----	573354	573354	----	2.5000	ng/mL	
PFHxA	M	4.965	0.000	-0.004	1146	610019	13C5-PFHxA_IS	-0.0027	ng/mL	
PFEESA	ND(W/B)	----	----	----	----	610019	13C5-PFHxA_IS	----	ng/mL	
13C3-HFPO-DA	Auto	5.446	0.007	0.476	615651	573354	13C2-PFHxA_IS	10.9690	ng/mL	
13C3-HFPO-DA_IS	Auto	5.446	0.007	----	615651	615651	----	10.0000	ng/mL	
HFPO-DA	M	5.450	0.010	0.004	129	615651	13C3-HFPO-DA_IS	0.0019	ng/mL	
5_3 FTCA	M	5.876	0.005	0.907	437	610019	13C5-PFHxA_IS	0.0277	ng/mL	
PFPeS	M	6.009	0.006	-1.073	125	236407	13C3-PFHxS_IS	0.0010	ng/mL	IRr
13C4-PFHpA	Auto	6.151	0.008	1.181	598018	573354	13C2-PFHxA_IS	2.7338	ng/mL	
13C4-PFHpA_IS	Auto	6.151	0.008	----	598018	598018	----	2.5000	ng/mL	
PFHpA	Auto	6.130	-0.014	-0.021	5026	598018	13C4-PFHpA_IS	-0.0145	ng/mL	
DONA	ND(W/B)	----	----	----	----	615651	13C3-HFPO-DA_IS	----	ng/mL	
13C2-6_2 FTS_IS	Auto	6.792	0.008	----	194662	194662	----	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.792	0.008	-0.291	194662	207598	18O2-PFHxS_IS	7.2044	ng/mL	
6_2 FTS	M	6.790	0.007	-0.002	1185	194662	13C2-6_2 FTS_IS	0.0134	ng/mL	
13C4-PFOA_IS	Auto	7.107	0.008	----	43786	43786	----	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.106	0.006	----	565088	565088	----	2.5000	ng/mL	
13C8-PFOA	Auto	7.106	0.006	-0.001	565088	43786	13C4-PFOA_IS	2.3090	ng/mL	
PFOA	Auto	7.109	0.007	0.003	4670	565088	13C8-PFOA_IS	-0.0117	ng/mL	
13C3-PFHxS	Auto	7.082	0.008	-0.001	236407	207598	18O2-PFHxS_IS	2.6531	ng/mL	
13C3-PFHxS_IS	Auto	7.082	0.008	----	236407	236407	----	2.5000	ng/mL	
PFHxS	M	7.087	0.013	0.005	1120	236407	13C3-PFHxS_IS	-0.0093	ng/mL	
18O2-PFHxS_IS	Auto	7.083	0.008	----	207598	207598	----	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.956	0.007	----	295180	295180	----	1.2500	ng/mL	
13C9-PFNA	Auto	7.956	0.007	-0.001	295180	312046	13C5-PFNA_IS	1.2081	ng/mL	
13C5-PFNA_IS	Auto	7.957	0.008	----	312046	312046	----	1.2500	ng/mL	
PFNA	M	7.955	0.005	-0.001	4399	295180	13C9-PFNA_IS	-0.0047	ng/mL	
PFHpS	ND(W/B)	----	----	----	----	112690	13C8-PFOS_IS	----	ng/mL	
7_3 FTCA	M	7.939	0.010	2.970	859	610019	13C5-PFHxA_IS	0.0408	ng/mL	
13C2-8_2-FTS	Auto	8.411	0.007	1.328	149585	207598	18O2-PFHxS_IS	6.7395	ng/mL	
13C2-8_2-FTS_IS	Auto	8.411	0.007	----	149585	149585	----	5.0000	ng/mL	
8_2 FTS	M	8.406	0.002	-0.005	46	149585	13C2-8_2-FTS_IS	0.0007	ng/mL	IRr
13C6-PFDA_IS	Auto	8.721	0.006	----	217438	217438	----	1.2500	ng/mL	
13C6-PFDA	Auto	8.721	0.006	-0.001	217438	220651	13C2-PFDA_IS	1.2249	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_006 (continued)

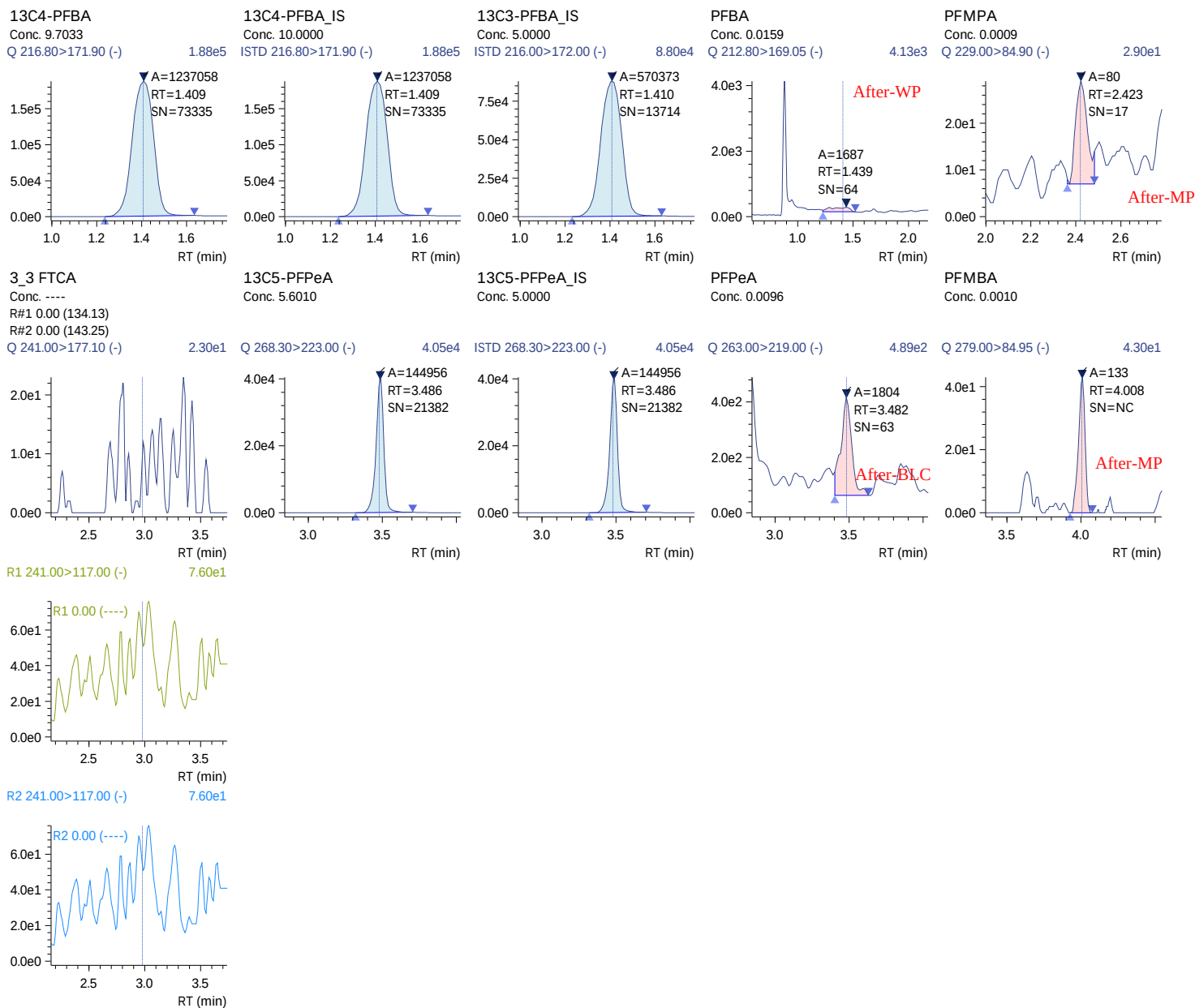
(Table continued from previous page)

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C2-PFDA_IS	Auto	8.721	0.006	----	220651	220651	----	1.2500	ng/mL	
PFDA	M	8.721	0.005	0.001	5264	217438	13C6-PFDA_IS	-0.0001	ng/mL	
D3-NMeFOSAA_IS	Auto	8.854	0.006	----	301235	301235	----	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.854	0.006	0.035	301235	274218	13C4-PFOS_IS	6.3294	ng/mL	
13C8-PFOS_IS	Auto	8.819	0.008	----	112690	112690	----	2.5000	ng/mL	
13C8-PFOS	Auto	8.819	0.008	0.000	112690	274218	13C4-PFOS_IS	2.4641	ng/mL	
13C4-PFOS_IS	Auto	8.819	0.008	----	274218	274218	----	2.5000	ng/mL	
PFOS	M	8.831	0.018	0.012	257	112690	13C8-PFOS_IS	0.0022	ng/mL	IRr
NMeFOSAA	ND(W/B)	----	----	----	----	301235	D3-NMeFOSAA_IS	----	ng/mL	
D5-NetFOSAA_IS	Auto	9.184	0.006	----	362002	362002	----	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.184	0.006	0.365	362002	274218	13C4-PFOS_IS	6.3577	ng/mL	
NetFOSAA	ND(W/B)	----	----	----	----	362002	D5-NetFOSAA_IS	----	ng/mL	
9-CI-PF3ONS	ND(W/B)	----	----	----	----	615651	13C3-HFPO-DA_IS	----	ng/mL	
PFUnDA	M	9.449	0.009	0.003	2955	261828	13C7-PFUnDA_IS	-0.0141	ng/mL	
13C7-PFUnDA_IS	Auto	9.446	0.008	----	261828	261828	----	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.446	0.008	0.725	261828	220651	13C2-PFDA_IS	1.2365	ng/mL	
PFNS	ND(W/B)	----	----	----	----	112690	13C8-PFOS_IS	----	ng/mL	
10_2 FTS	ND(W/B)	----	----	----	----	149585	13C2-8_2-FTS_IS	----	ng/mL	
13C2-PFDOA_IS	Auto	10.135	0.007	----	289366	289366	----	1.2500	ng/mL	
13C2-PFDOA	Auto	10.135	0.007	1.413	289366	220651	13C2-PFDA_IS	1.1895	ng/mL	
PFDOA	M	10.137	0.009	0.003	3061	289366	13C2-PFDOA_IS	-0.0140	ng/mL	
PFDS	M	10.276	-0.014	1.457	66	112690	13C8-PFOS_IS	-0.0054	ng/mL	
PFTDA	Auto	10.794	0.008	-0.633	3586	132910	13C2-PFTDA_IS	-0.0118	ng/mL	
11-CI-PF3OUdS	ND(W/B)	----	----	----	----	615651	13C3-HFPO-DA_IS	----	ng/mL	
PFOSAm	M	11.142	-0.001	-0.003	487	260782	13C8-PFOSAm_IS	0.0057	ng/mL	
13C8-PFOSAm	Auto	11.145	0.002	2.326	260782	274218	13C4-PFOS_IS	2.2402	ng/mL	
13C8-PFOSAm_IS	Auto	11.145	0.002	----	260782	260782	----	2.5000	ng/mL	
PFTDA	M	11.426	0.006	-0.001	2961	132910	13C2-PFTDA_IS	-0.0071	ng/mL	
13C2-PFTDA	Auto	11.427	0.008	2.706	132910	220651	13C2-PFDA_IS	1.2654	ng/mL	
13C2-PFTDA_IS	Auto	11.427	0.008	----	132910	132910	----	1.2500	ng/mL	
PFDoS	ND(W/B)	----	----	----	----	112690	13C8-PFOS_IS	----	ng/mL	
D7-MeFOSE_IS	Auto	13.382	0.001	----	658007	658007	----	25.0000	ng/mL	
D7-MeFOSE	Auto	13.382	0.001	4.563	658007	274218	13C4-PFOS_IS	22.9265	ng/mL	
MeFOSE	ND(W/B)	----	----	----	----	658007	D7-MeFOSE_IS	----	ng/mL	
13C2-PFHxDA_IS	Auto	12.645	0.009	----	469234	469234	----	2.5000	ng/mL	
13C2-PFHxDA	Auto	12.645	0.009	3.924	469234	220651	13C2-PFDA_IS	2.2894	ng/mL	
PFHxDA	M	12.645	0.008	0.000	3947	469234	13C2-PFHxDA_IS	-0.0074	ng/mL	
D3-MeFOSA	Auto	13.688	0.001	4.869	55929	274218	13C4-PFOS_IS	2.3858	ng/mL	
D3-MeFOSA_IS	Auto	13.688	0.001	----	55929	55929	----	2.5000	ng/mL	
MeFOSA	ND(W/B)	----	----	----	----	55929	D3-MeFOSA_IS	----	ng/mL	
D9-EtFOSE_IS	Auto	14.011	0.002	----	646345	646345	----	25.0000	ng/mL	
D9-EtFOSE	Auto	14.011	0.002	5.192	646345	274218	13C4-PFOS_IS	22.1731	ng/mL	
EtFOSE	ND(W/B)	----	----	----	----	646345	D9-EtFOSE_IS	----	ng/mL	
D5-EtFOSAm	Auto	14.367	0.002	5.548	69910	274218	13C4-PFOS_IS	2.2398	ng/mL	
D5-EtFOSAm_IS	Auto	14.367	0.002	----	69910	69910	----	2.5000	ng/mL	
EtFOSAm	ND(W/B)	----	----	----	----	69910	D5-EtFOSAm_IS	----	ng/mL	
PFODA	M	13.780	0.006	1.135	1136	469234	13C2-PFHxDA_IS	0.0107	ng/mL	

Flag ID key: IRr: Ion Ratio (Relative)



240119_006 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_006 (continued)

13C2-4_2 FTS
Conc. 7.6898

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. 0.0013
R#1 74.04 (34.14)
R#2 74.04 (31.50)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 0.0007
R#1 12.81 (47.53)
R#2 12.81 (48.74)

Q 329.10>80.90 (-)

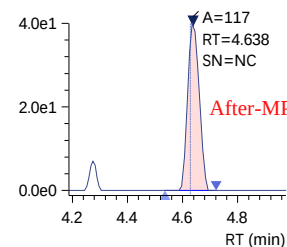
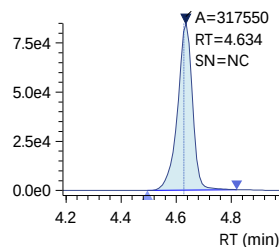
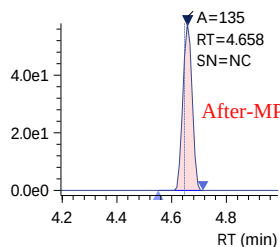
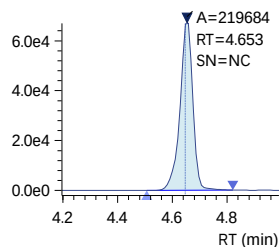
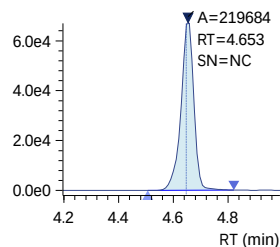
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6.70e4 Q 327.10>307.00 (-)

5.80e1 ISTD 302.10>79.90 (-)

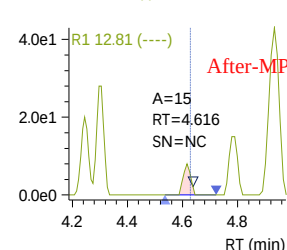
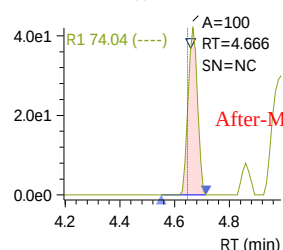
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4.00e1



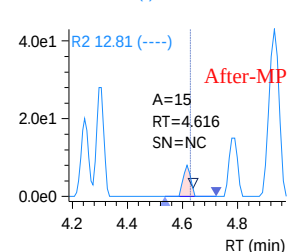
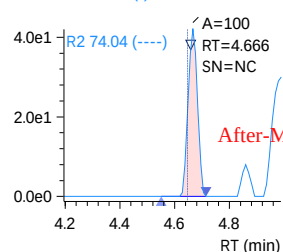
R1 327.10>80.90 (-) 4.20e1

R1 298.70>98.80 (-) 4.30e1



R2 327.10>80.90 (-) 4.20e1

R2 298.70>98.80 (-) 4.30e1





240119_006 (continued)

13C3-PFBS
Conc. 2.6954

NFDHA
Conc. 0.0106
R#1 29.81 (37.88)
R#2 29.81 (36.97)

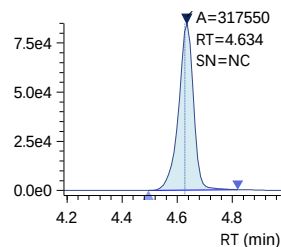
13C5-PFHxA
Conc. 2.5245

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

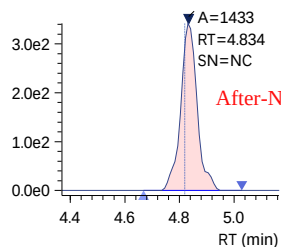
Q 302.10>79.90 (-)

8.50e4



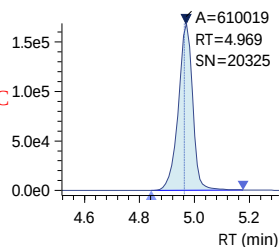
Q 295.00>201.00 (-)

3.42e2



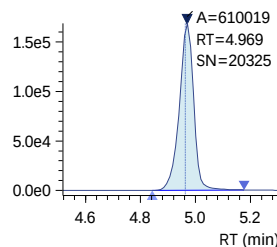
Q 318.00>273.00 (-)

1.69e5



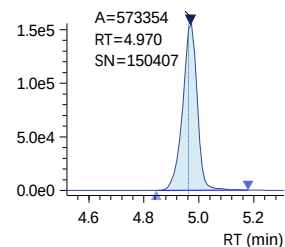
ISTD 318.00>273.00 (-)

1.69e5



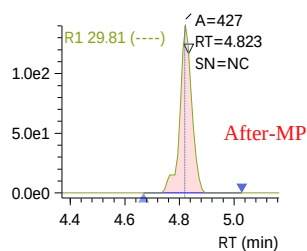
ISTD 315.10>270.00 (-)

1.56e5



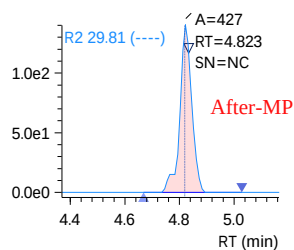
R1 295.00>84.90 (-)

1.40e2



R2 295.00>84.90 (-)

1.40e2



PFHxA
Conc. -0.0027

PFEESA
Conc. ----

13C3-HFPO-DA
Conc. 10.9690

13C3-HFPO-DA_IS
Conc. 10.0000

HFPO-DA
Conc. 0.0019



9.95e2

Q 314.80 > 135.00 (-)

1.20e2

Q 286.90 > 168.90 (-)

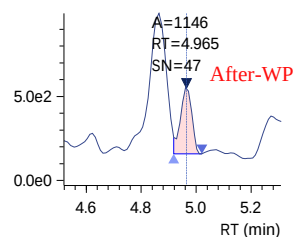
2.16e5

ISTD 286.90>168.90 (-)

2.16e5

Q 284.90 > 168.90 (-)

5.10e1



Chromatogram showing a single sharp peak at RT=5.446 min. The peak is labeled with A=615651 and SN=NC. The x-axis is RT (min) from 5.0 to 5.6, and the y-axis is intensity from 0.0e0 to 2.0e5.

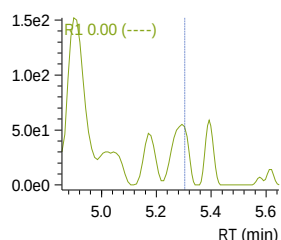
Chromatogram showing the effect of MP on the peak at RT=5.450 min. The peak is labeled with A=129, RT=5.450, and SN=NC. The peak is shaded red and labeled 'After-MP'.

R1 314.80>82.90 (-)

1.52e2

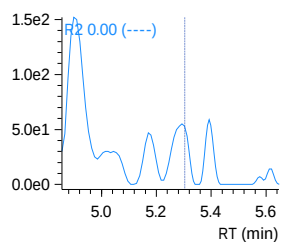
R1 284.90>184.90 (-)

6.00e1



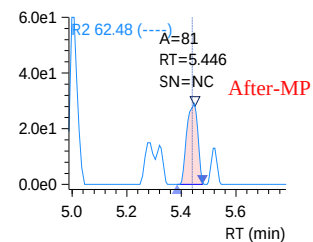
R2 314.80>82.90 (-)

1.52e2



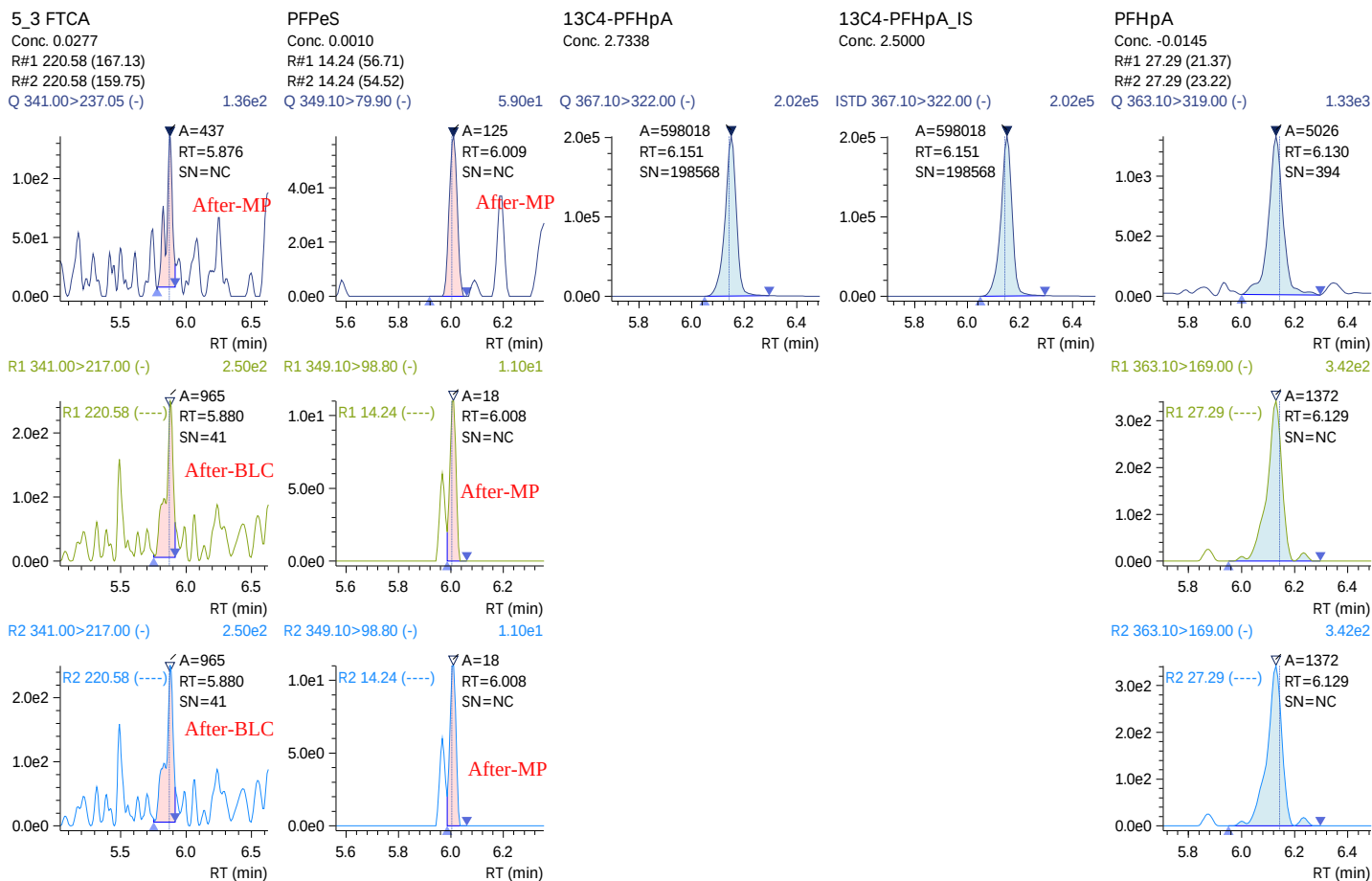
R2 284.90>184.90 (-)

6.00e1





240119_006 (continued)

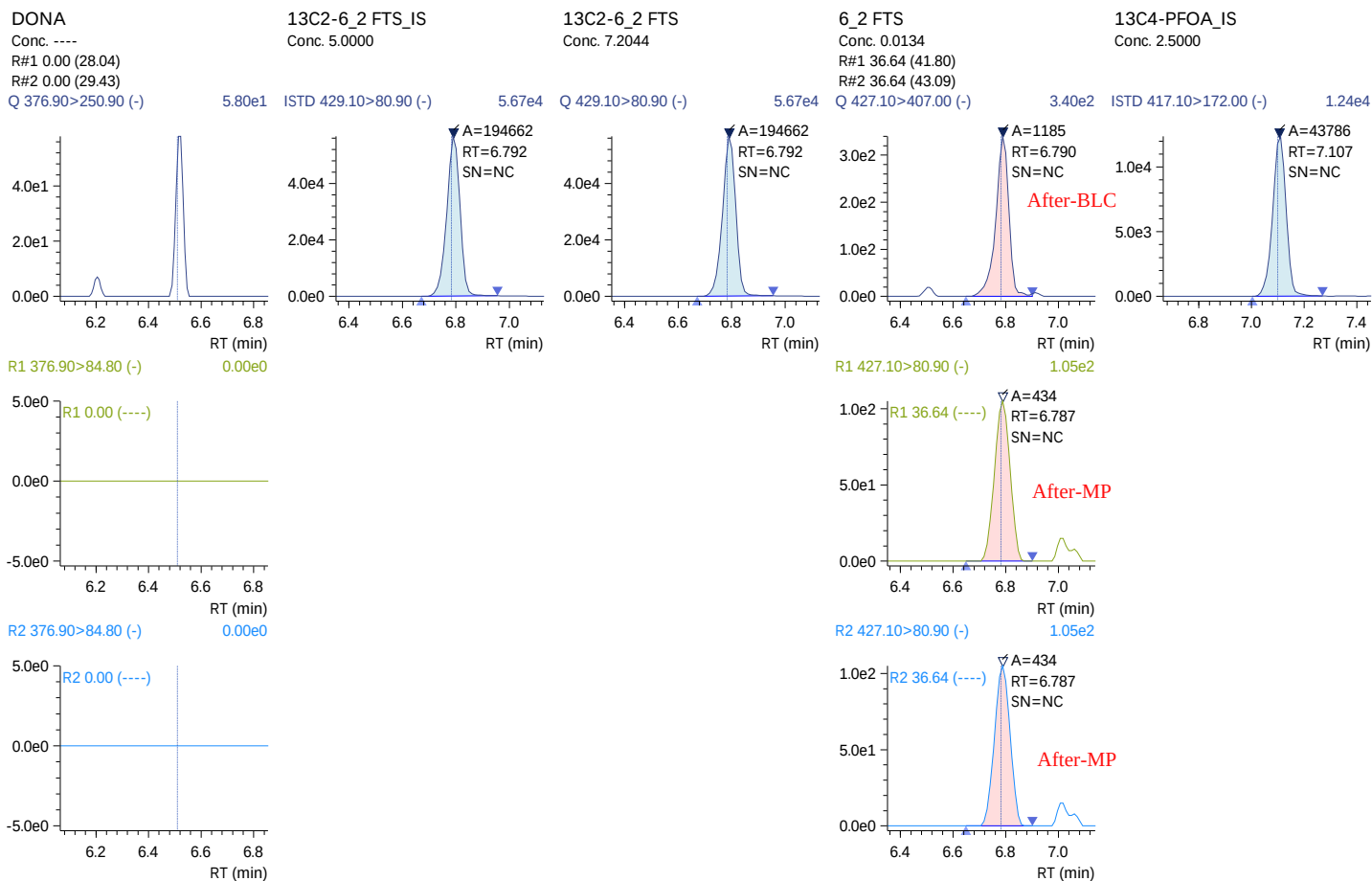


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_006 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_006 (continued)

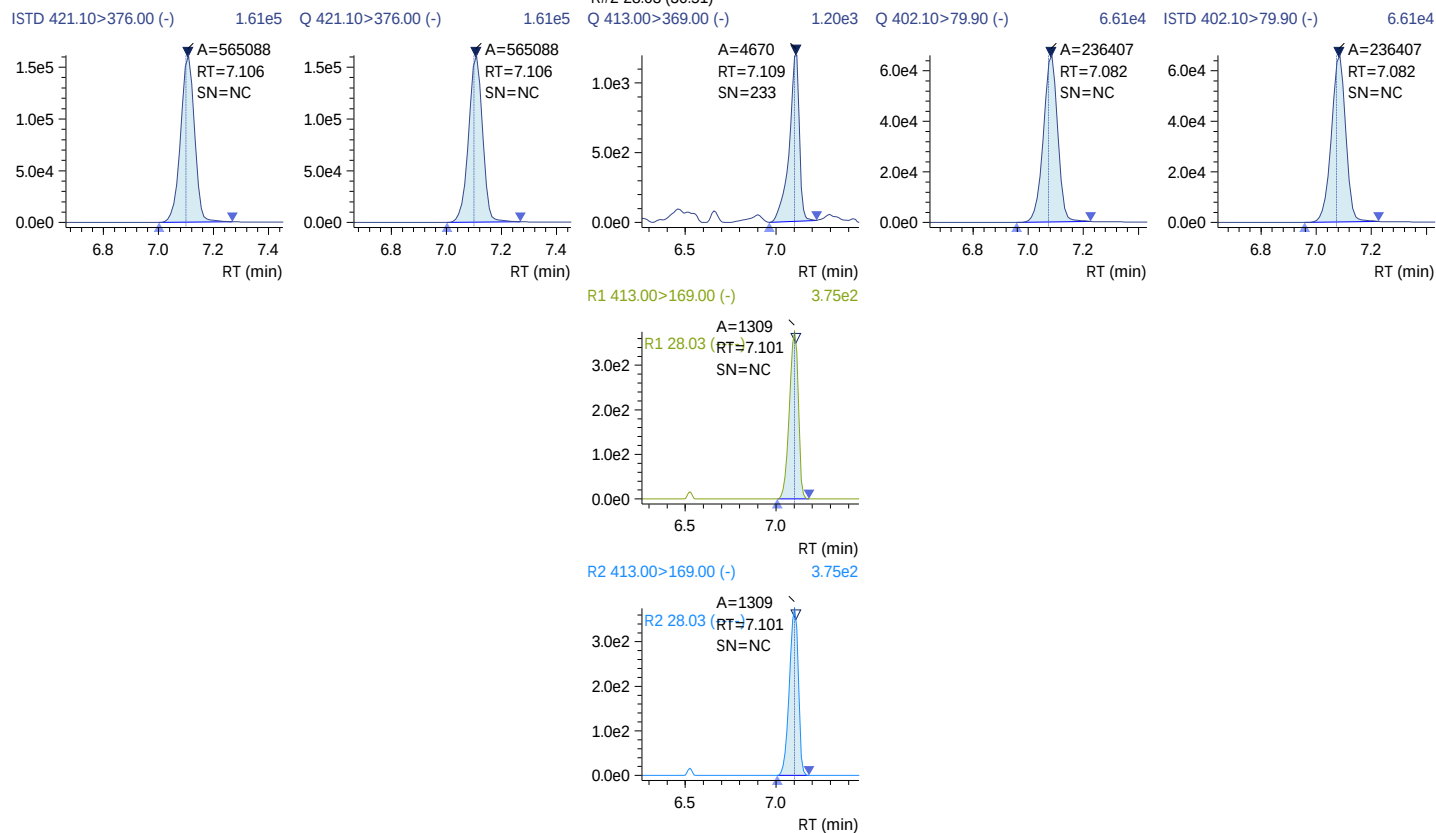
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.3090

PFOA
Conc. -0.0117
R#1 28.03 (29.05)
R#2 28.03 (30.51)

13C3-PFHxS
Conc. 2.6531

13C3-PFHxS_IS
Conc. 2.5000

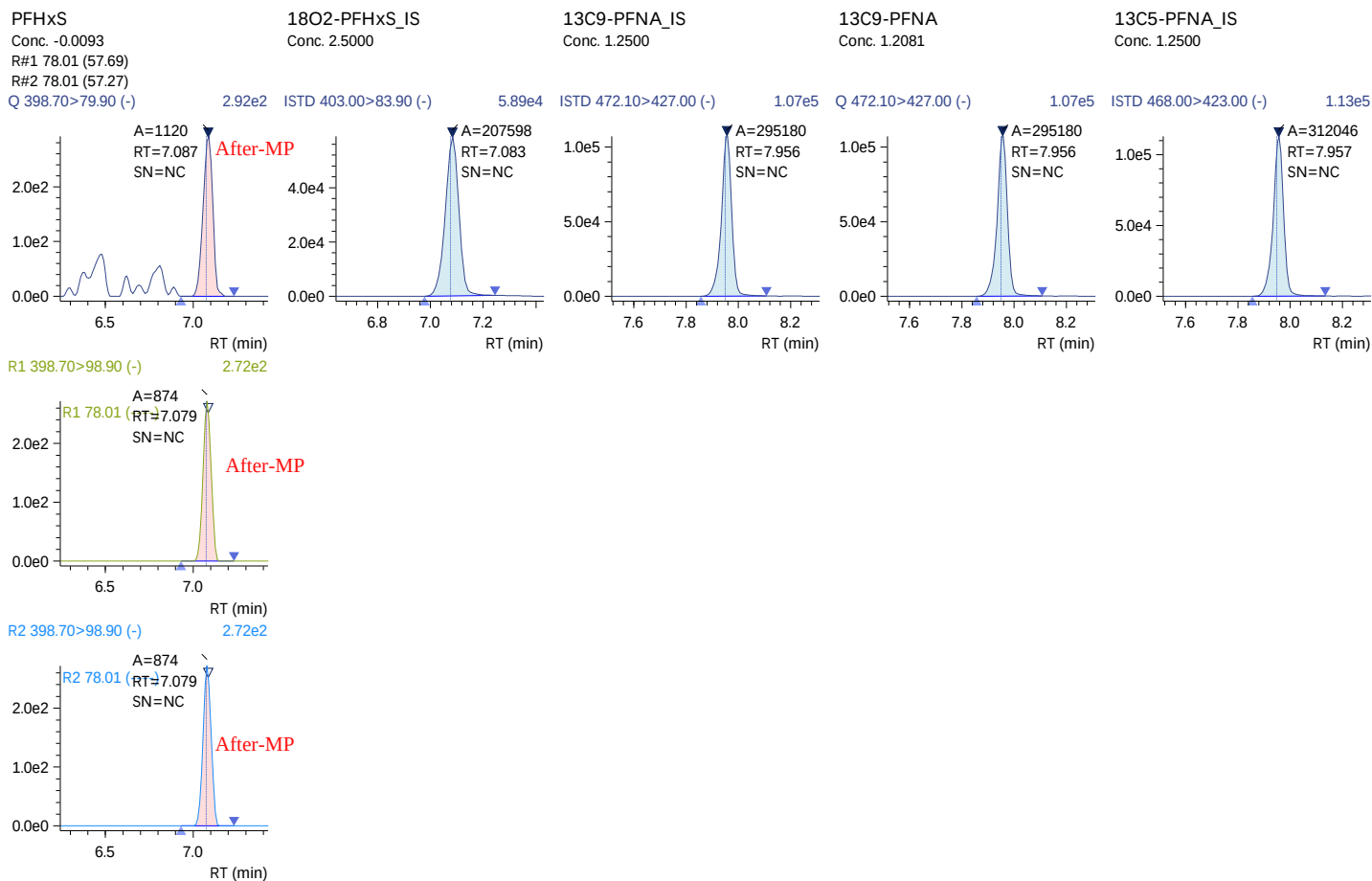


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.

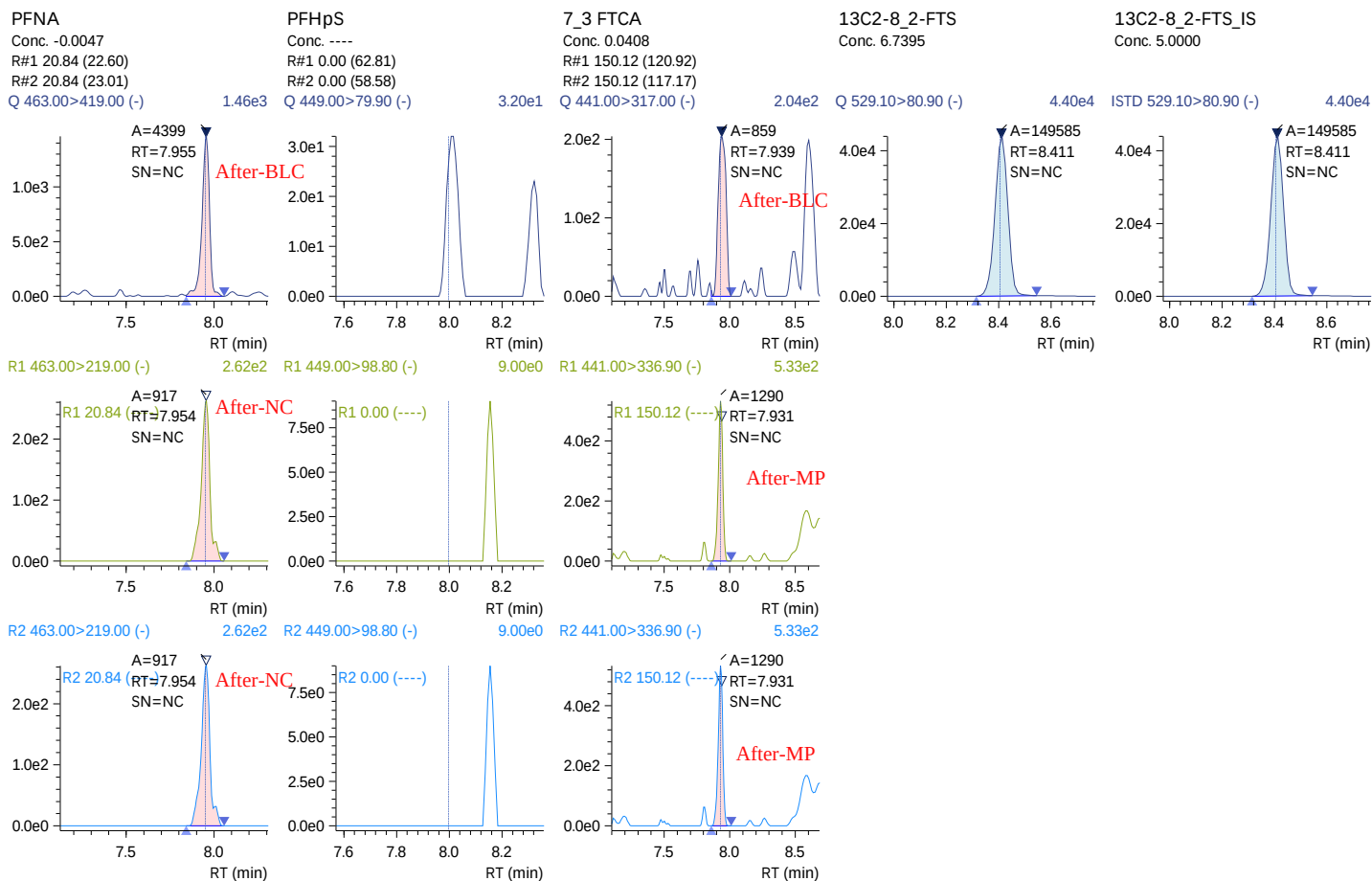


240119_006 (continued)





240119_006 (continued)

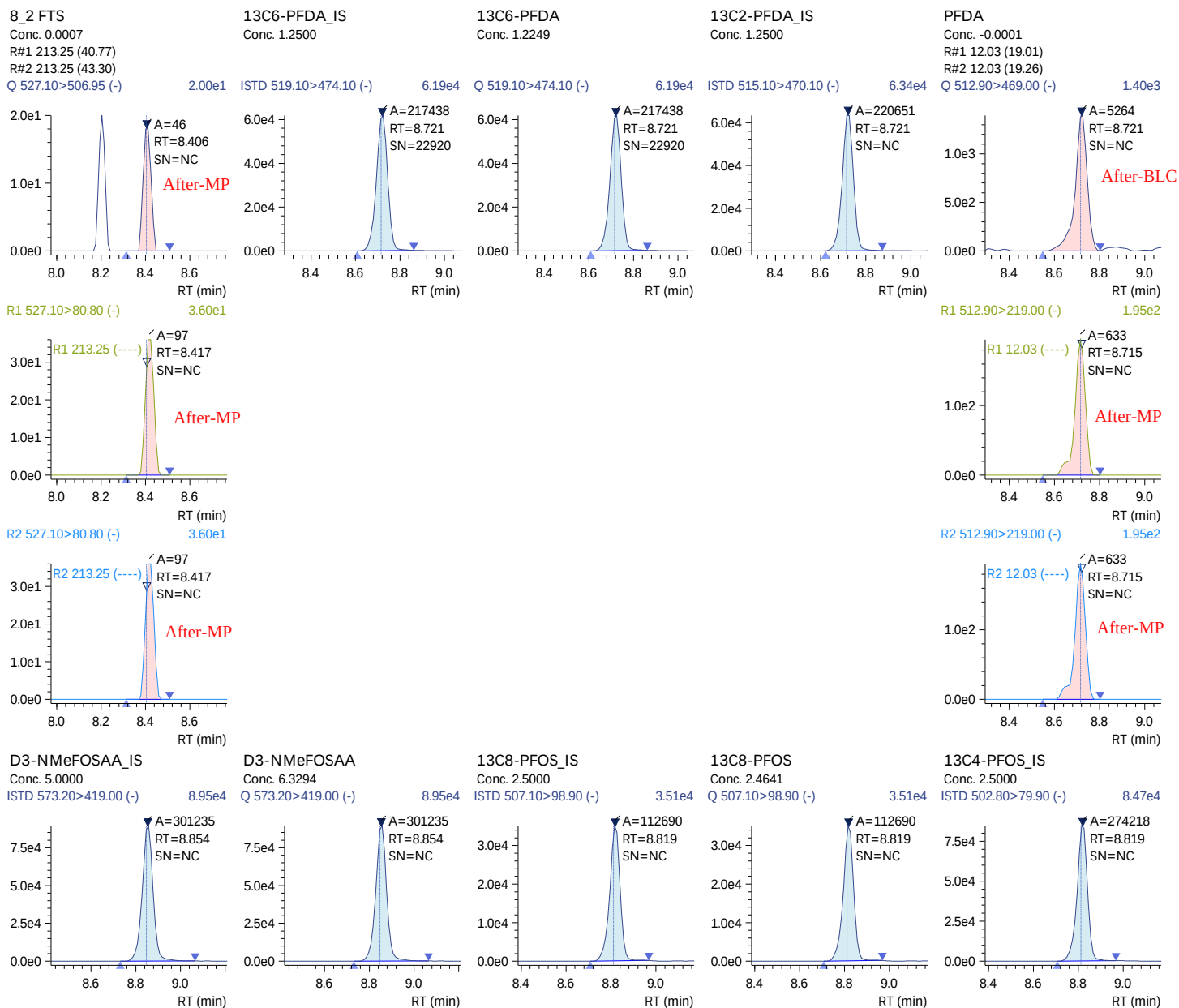


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_006 (continued)

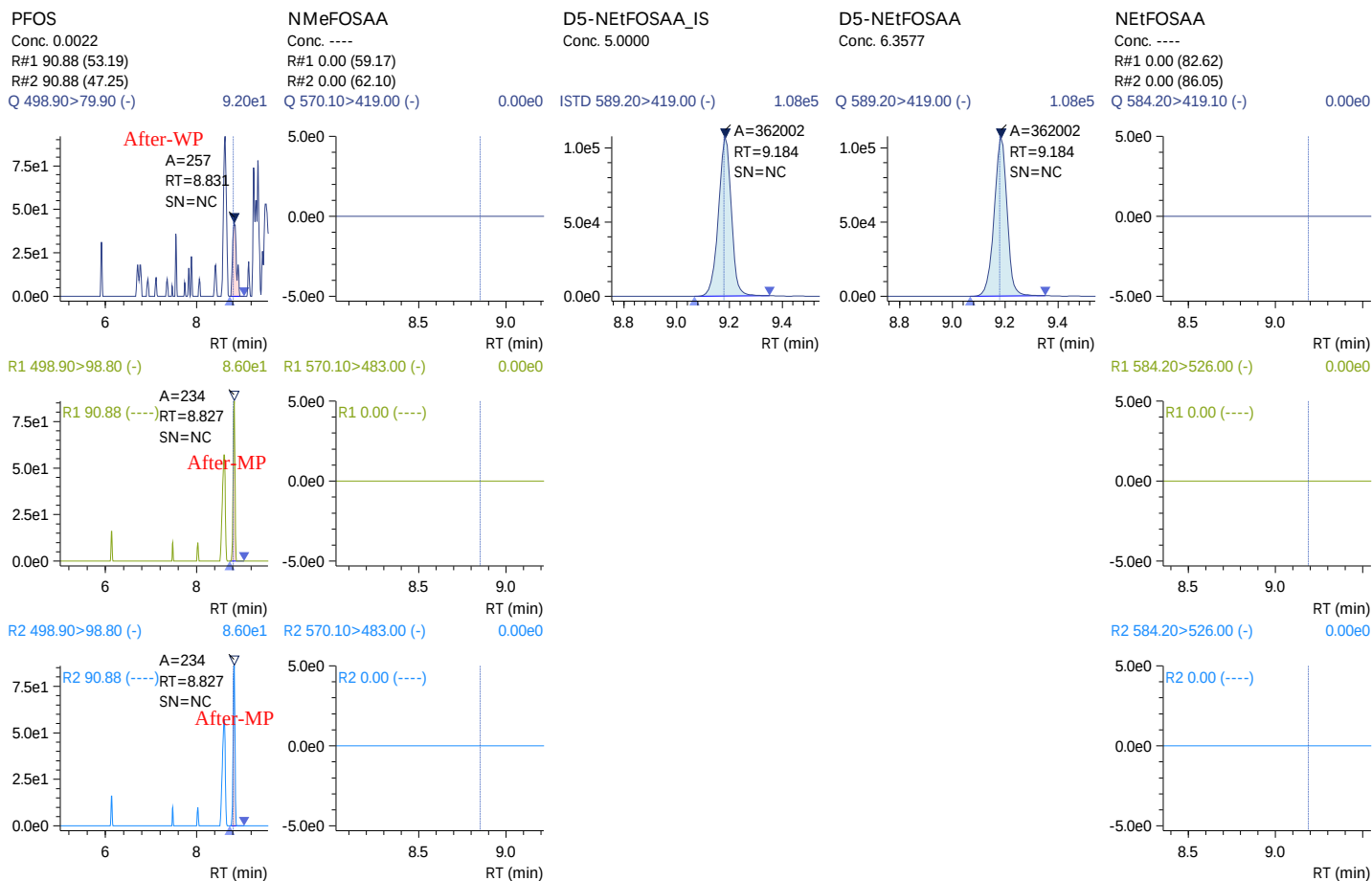


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_006 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_006 (continued)

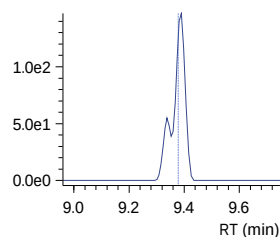
9-Cl-PF3ONS

Conc. ----

R#1 0.00 (31.76)

R#2 0.00 (31.74)

Q 530.80>351.00 (-)



R1 532.80>353.00 (-)

1.47e2

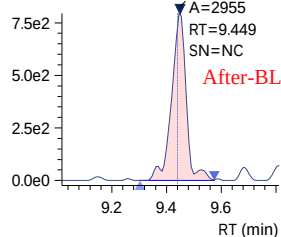
PFUnDA

Conc. -0.0141

R#1 7.64 (12.31)

R#2 7.64 (13.26)

Q 563.10>519.00 (-)



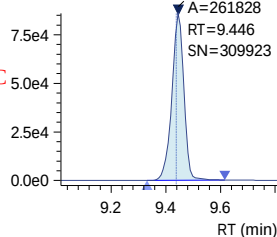
R1 563.10>269.10 (-)

7.95e2

13C7-PFUnDA_IS

Conc. 1.2500

ISTD 570.00>525.10 (-)

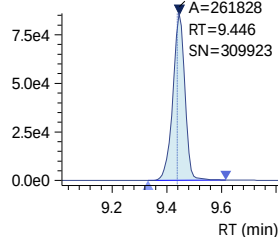


8.61e4

13C7-PFUnDA

Conc. 1.2365

Q 570.00>525.10 (-)



8.61e4

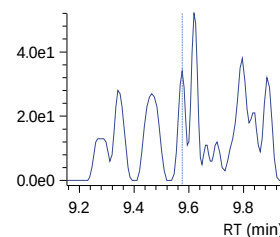
PFNS

Conc. ----

R#1 0.00 (63.31)

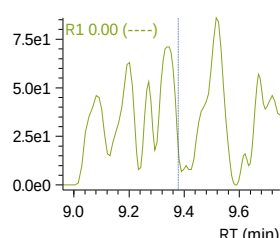
R#2 0.00 (62.49)

Q 548.80>79.90 (-)



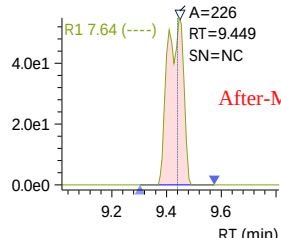
R1 548.80>98.80 (-)

5.20e1



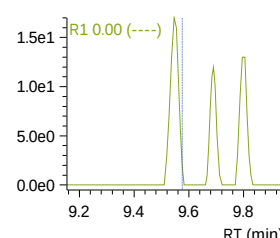
R2 532.80>353.00 (-)

8.60e1



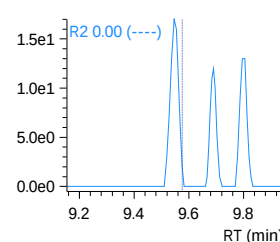
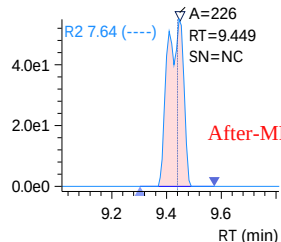
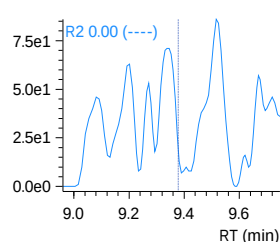
R2 563.10>269.10 (-)

5.50e1



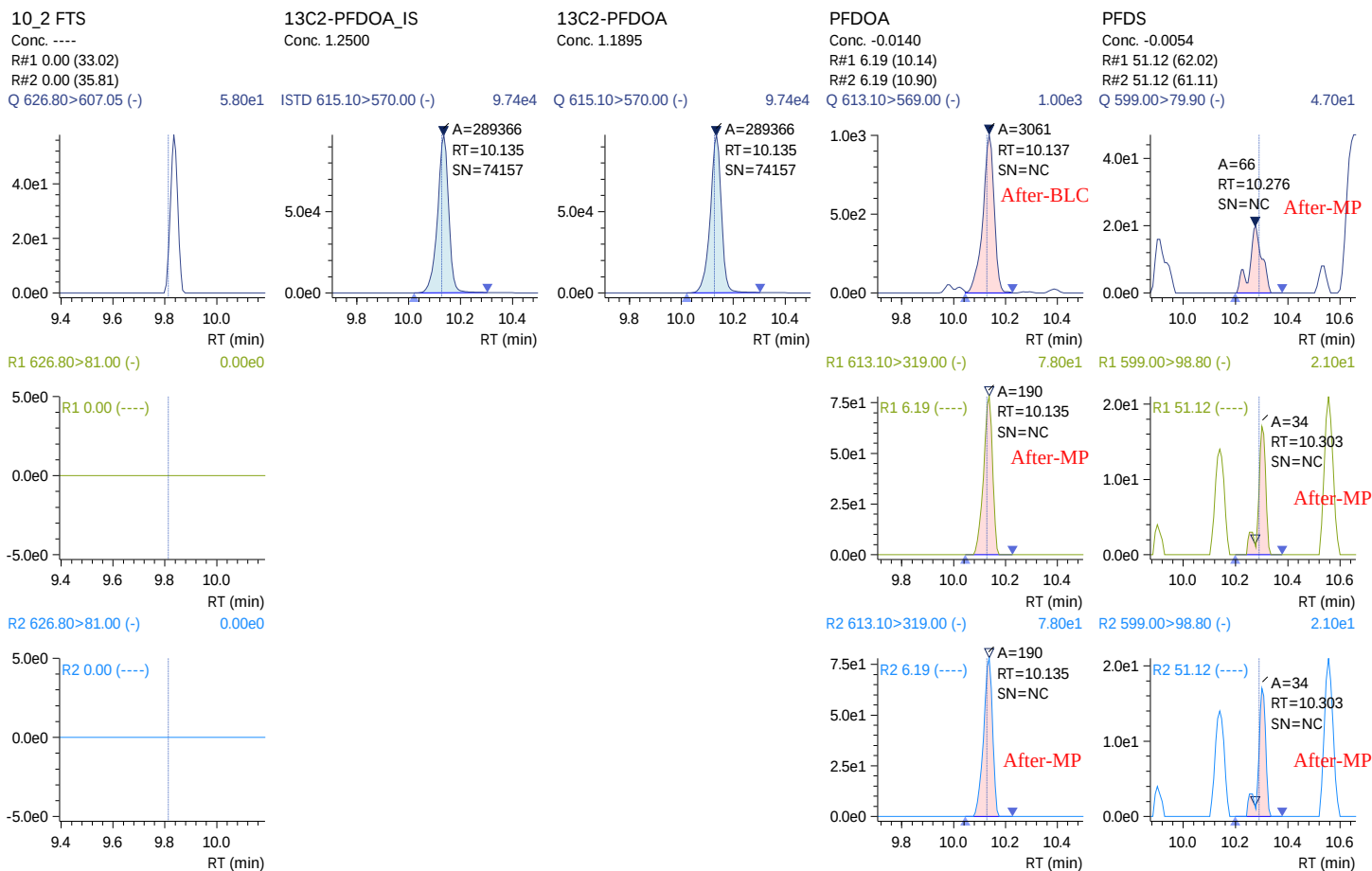
R2 548.80>98.80 (-)

1.70e1





240119_006 (continued)

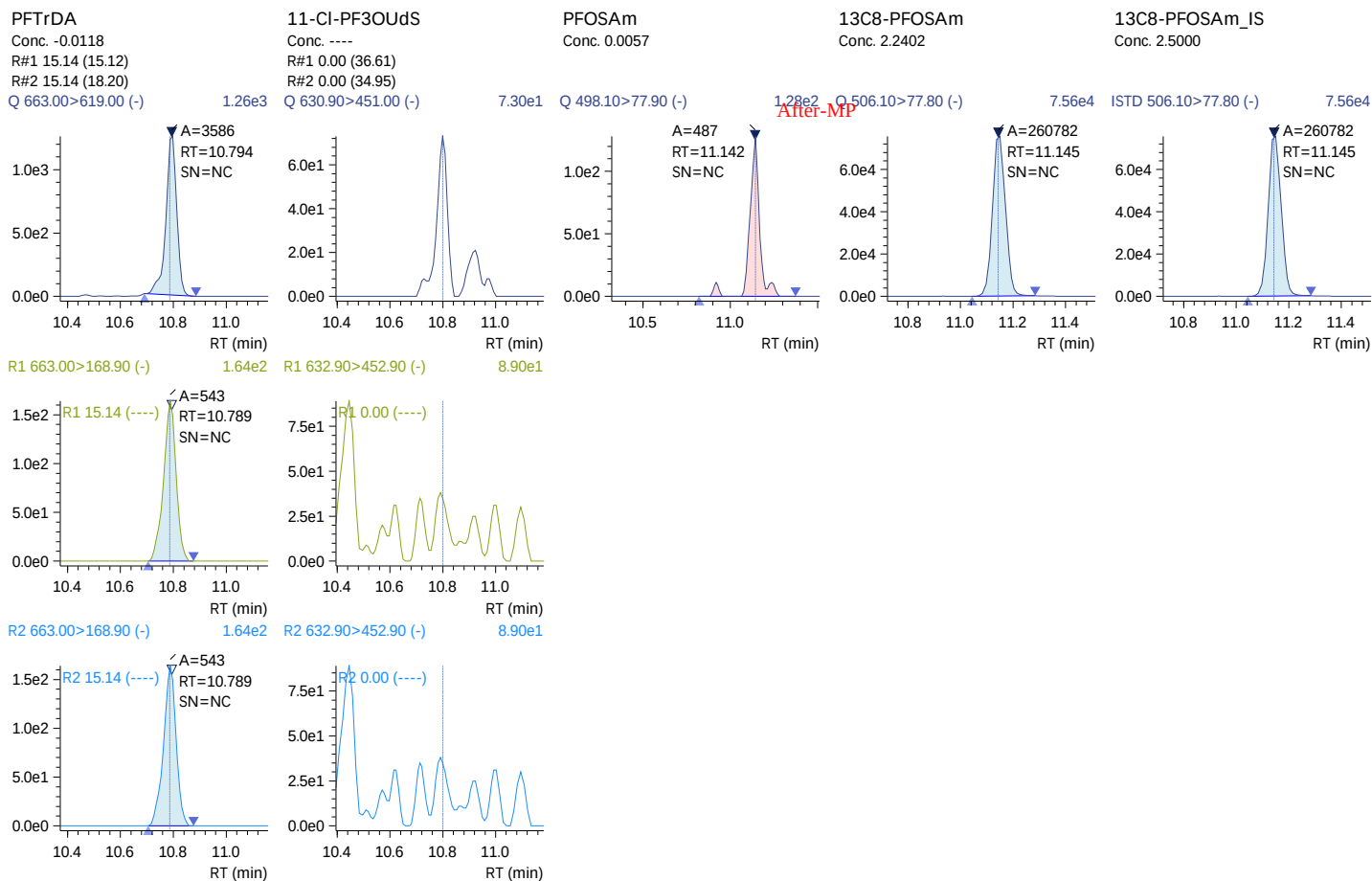


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_006 (continued)

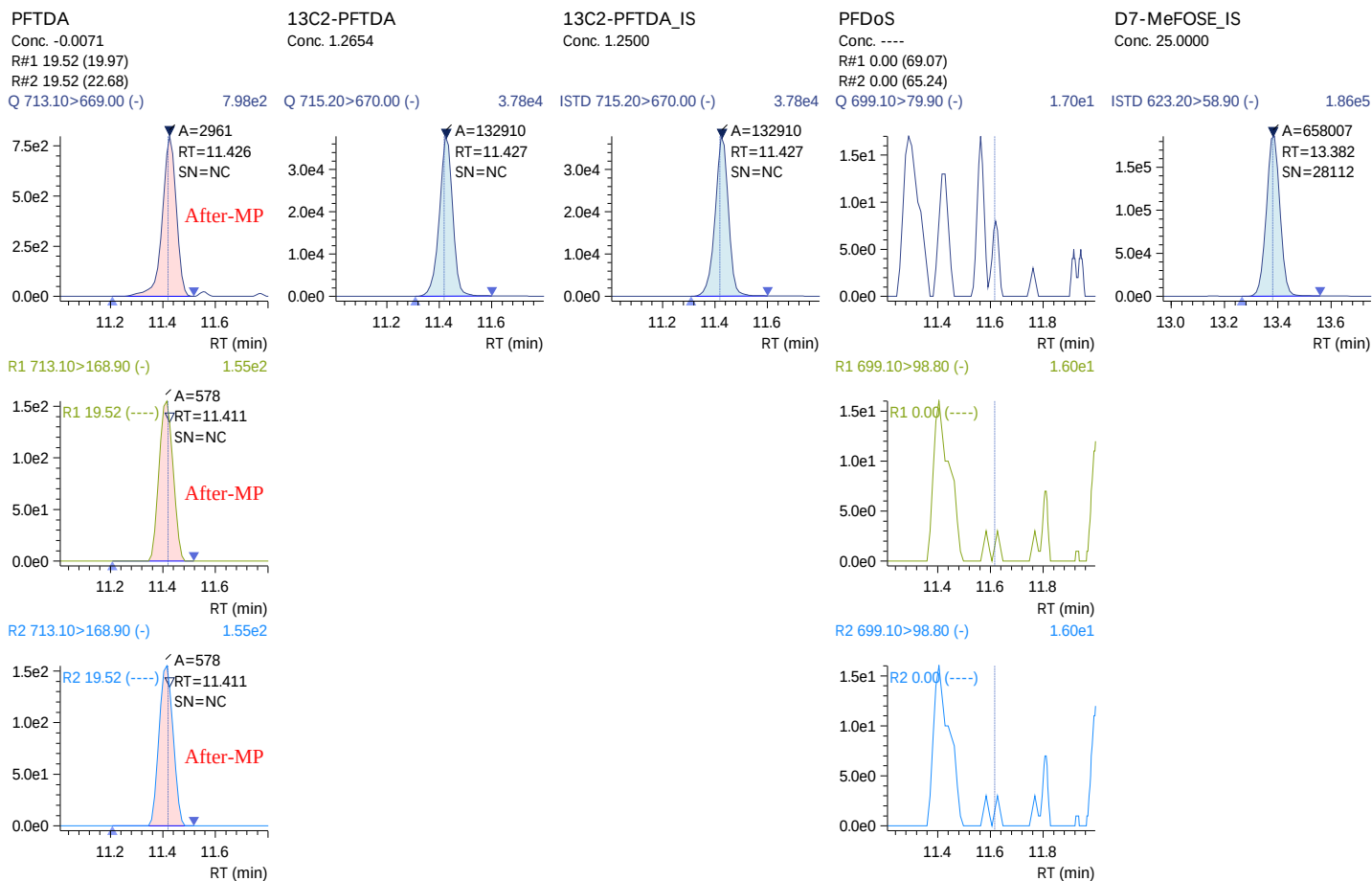


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_006 (continued)





240119_006 (continued)

D7-MeFOSE
Conc. 22.9265

MeFOSE
Conc. ----

13C2-PFHxDA_IS
Conc. 2.5000

13C2-PFHxDA
Conc. 2.2894

PFHxDA

Conc. -0.0074
R#1 11.76 (11.64)
R#2 11.76 (14.51)

Q 623.20>58.90 (-)

1.86e5

Q 616.10>59.00 (-)

4.90e1

ISTD 815.00>770.05 (-)

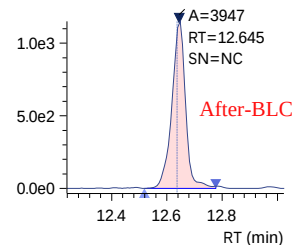
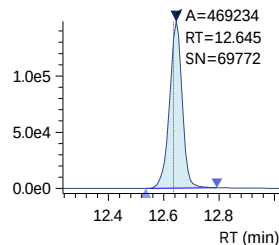
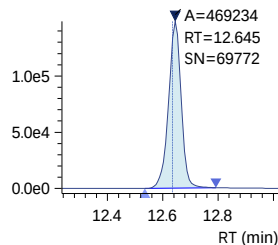
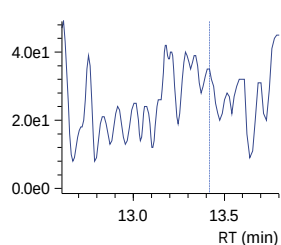
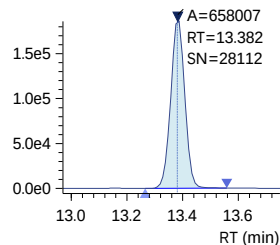
1.49e5

Q 815.00>770.05 (-)

1.49e5

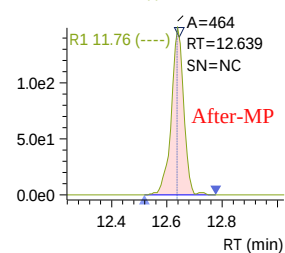
Q 813.00>768.95 (-)

1.15e3



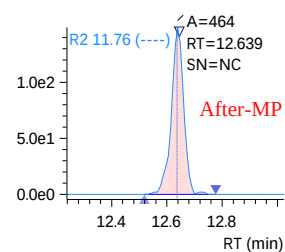
R1 813.00>218.95 (-)

1.49e2



R2 813.00>218.95 (-)

1.49e2





240119_006 (continued)

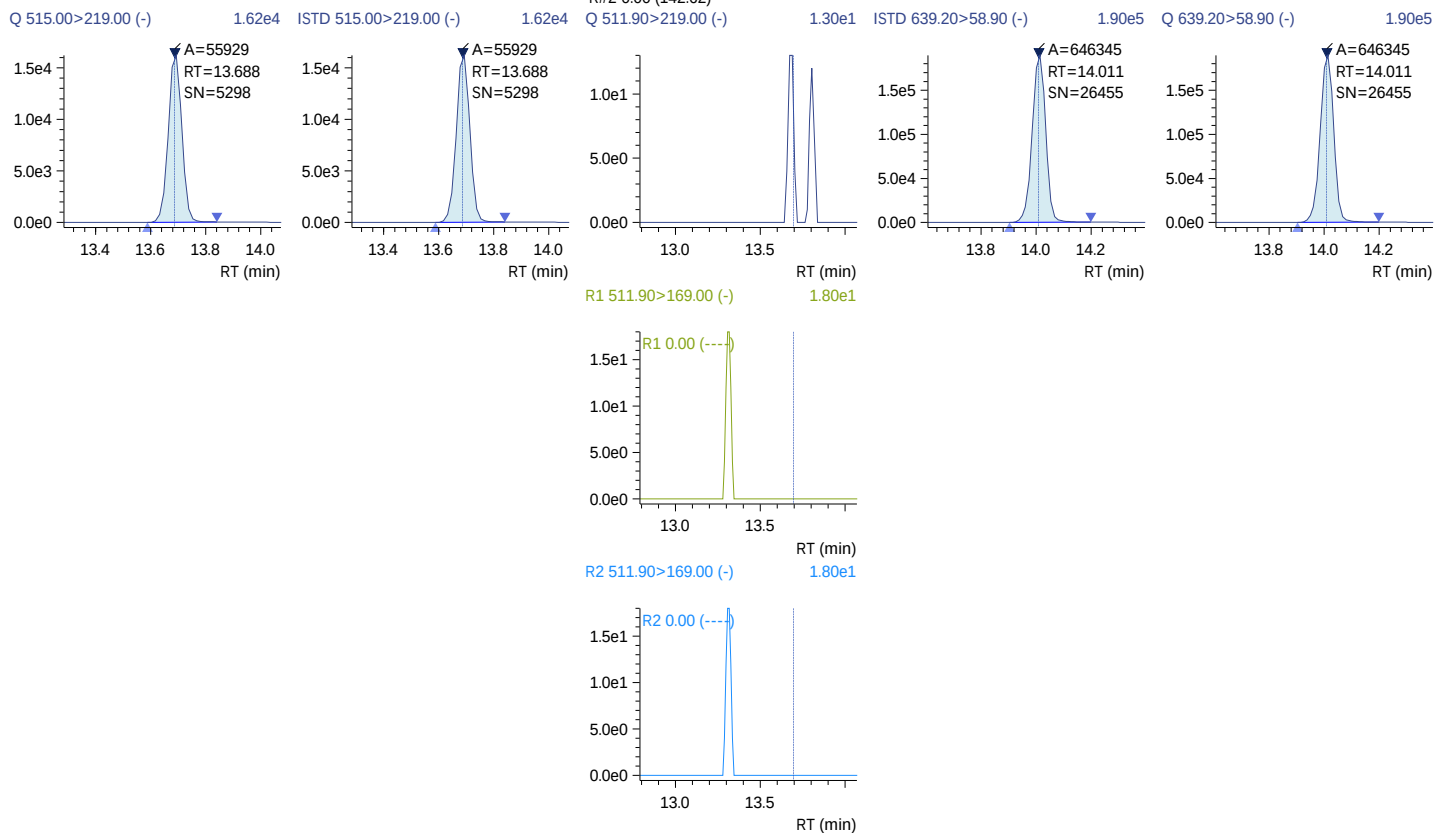
D3-MeFOSA
Conc. 2.3858

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. ----
R#1 0.00 (149.05)
R#2 0.00 (142.62)

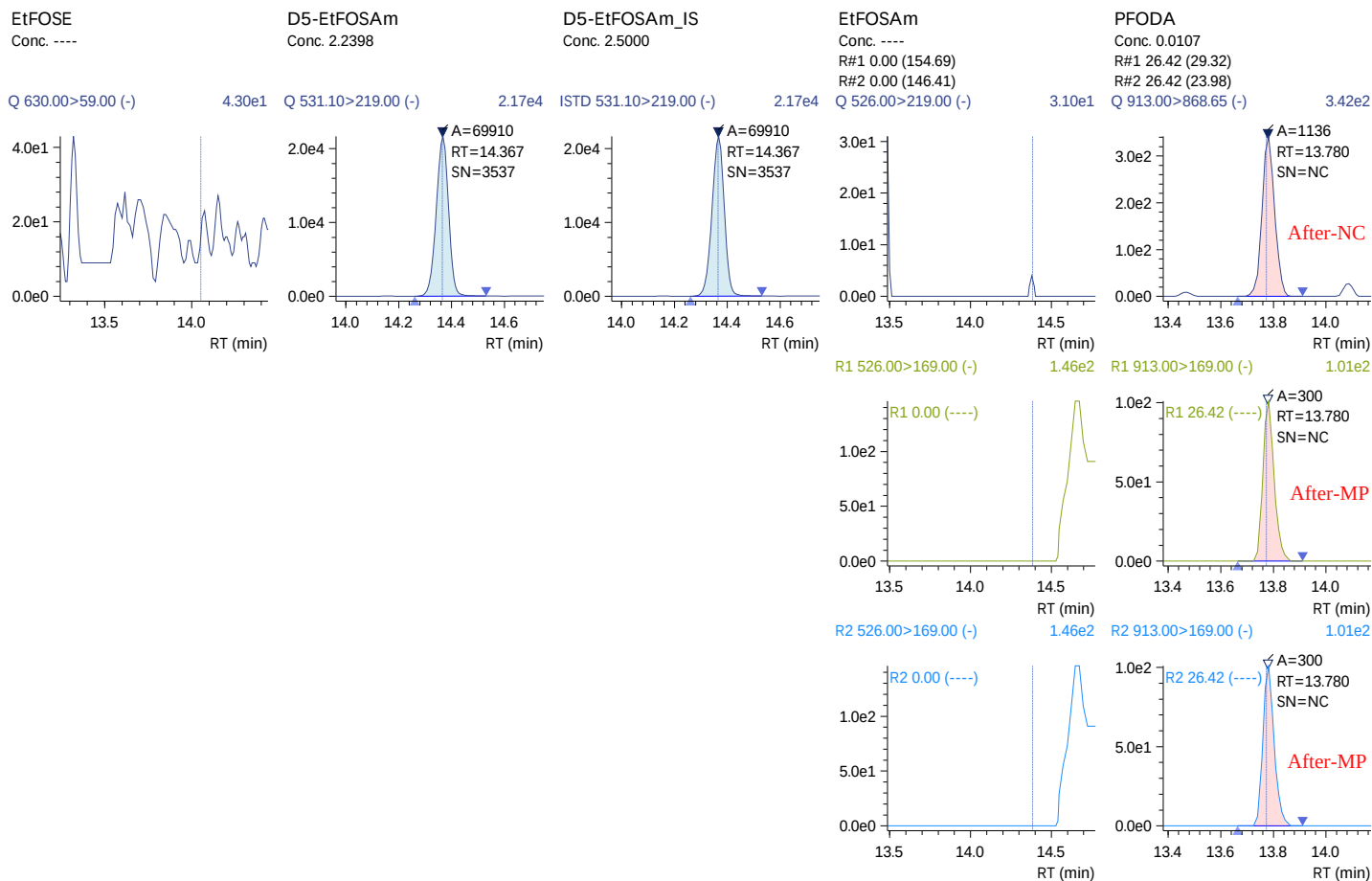
D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 22.1731





240119_006 (continued)



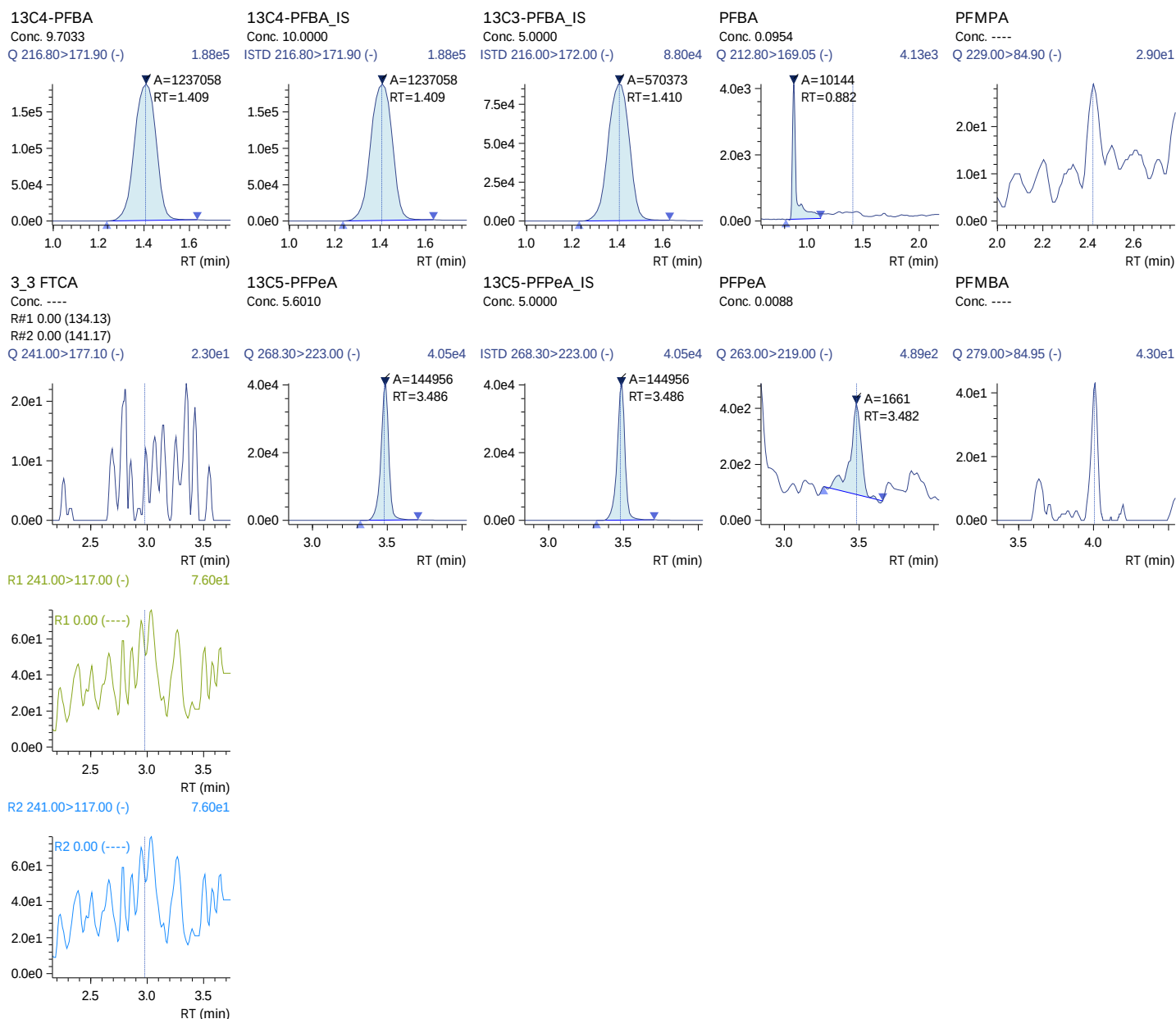
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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_006

Sample ID: 1633 CCB
Date Acquired: 1/19/2024 1:44:48 PM
Acquired by: System Administrator
Data File: 240119_006
Vial: 54 | Inj. Volume: 10.0000uL | Tray: 1





240119_006 (continued)

13C2-4_2 FTS
 Conc. 7.6898

13C2-4_2 FTS_IS
 Conc. 5.0000

4_2 FTS
 Conc. ----
 R#1 0.00 (34.14)
 R#2 0.00 (29.06)

13C3-PFBS_IS
 Conc. 2.5000

PFBS
 Conc. ----
 R#1 0.00 (47.53)
 R#2 0.00 (46.72)

Q 329.10>80.90 (-)

6.70e4

ISTD 329.10>80.90 (-)

6.70e4

Q 327.10>307.00 (-)

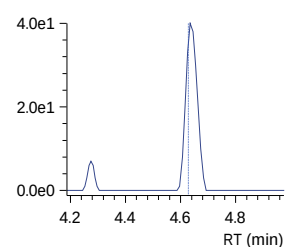
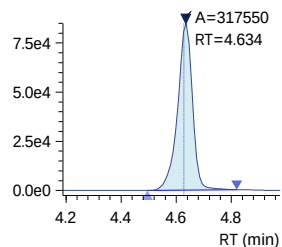
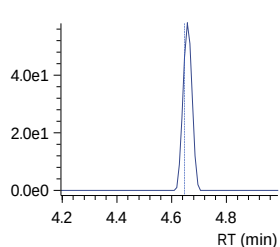
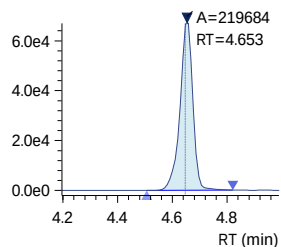
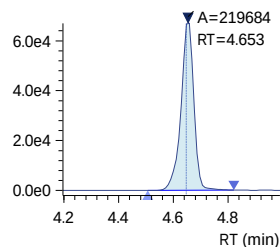
5.80e1

ISTD 302.10>79.90 (-)

8.50e4

Q 298.70>79.90 (-)

4.00e1

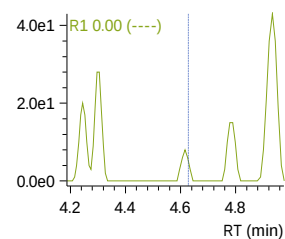
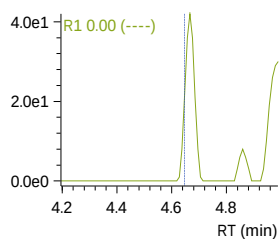


R1 327.10>80.90 (-)

4.20e1

R1 298.70>98.80 (-)

4.30e1

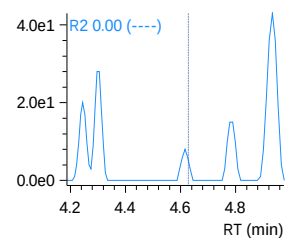
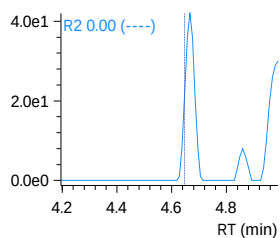


R2 327.10>80.90 (-)

4.20e1

R2 298.70>98.80 (-)

4.30e1





240119_006 (continued)

13C3-PFBS
Conc. 2.6954

NFDHA
Conc. 0.0106
R#1 0.00 (37.88)
R#2 0.00 (40.25)

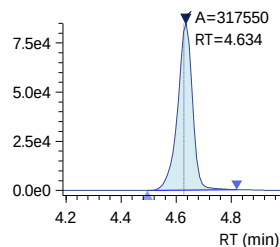
13C5-PFHxA
Conc. 2.5245

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

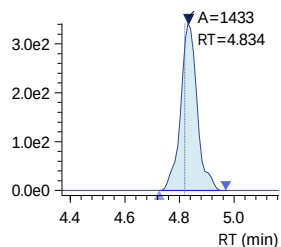
Q 302.10>79.90 (-)

8.50e4



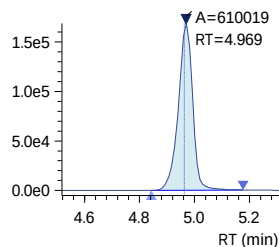
Q 295.00>201.00 (-)

3.42e2



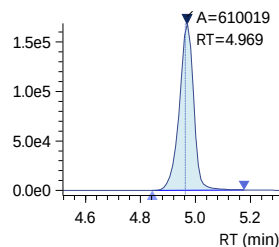
Q 318.00>273.00 (-)

1.69e5



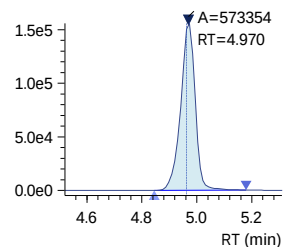
ISTD 318.00>273.00 (-)

1.69e5



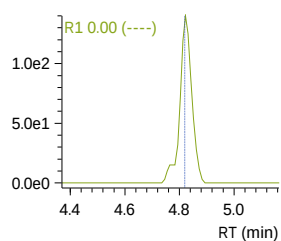
ISTD 315.10>270.00 (-)

1.56e5



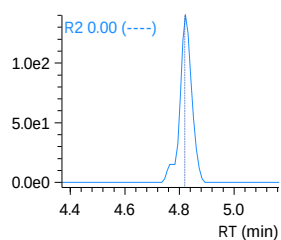
R1 295.00>84.90 (-)

1.40e2



R2 295.00>84.90 (-)

1.40e2





240119_006 (continued)

PFHxA
 Conc. 0.0070

PFEESA
 Conc. ----
 R#1 0.00 (5.88)
 R#2 0.00 (6.11)

13C3-HFPO-DA
 Conc. 10.9690

13C3-HFPO-DA_IS
 Conc. 10.0000

HFPO-DA
 Conc. ----

R#1 0.00 (63.80)
 R#2 0.00 (65.61)

Q 313.00>269.00 (-)

9.95e2

Q 314.80>135.00 (-)

1.20e2

Q 286.90>168.90 (-)

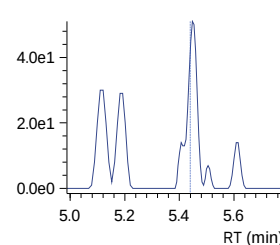
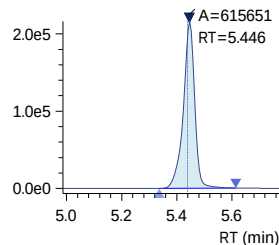
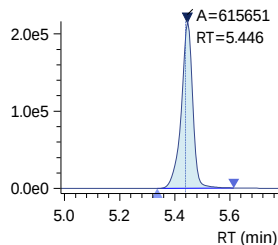
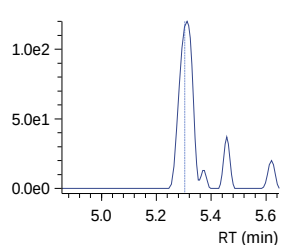
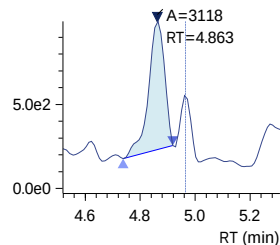
2.16e5

ISTD 286.90>168.90 (-)

2.16e5

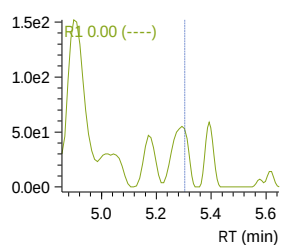
Q 284.90>168.90 (-)

5.10e1



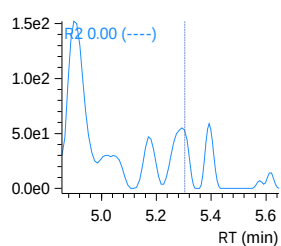
R1 314.80>82.90 (-)

1.52e2



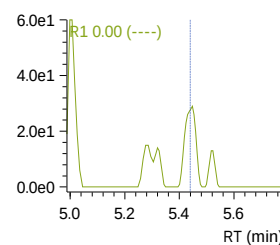
R2 314.80>82.90 (-)

1.52e2



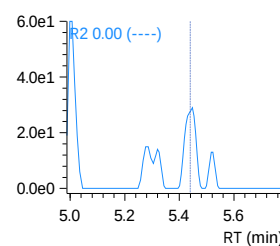
R1 284.90>184.90 (-)

6.00e1



R2 284.90>184.90 (-)

6.00e1





240119_006 (continued)

5_3 FTCA

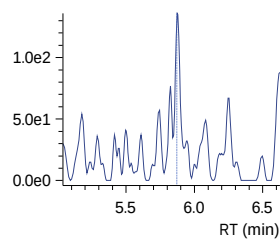
Conc. ----

R#1 0.00 (167.13)

R#2 0.00 (158.86)

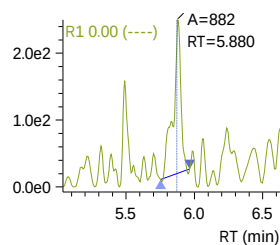
Q 341.00>237.05 (-)

1.36e2



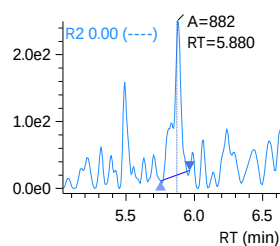
R1 341.00>217.00 (-)

2.50e2



R2 341.00>217.00 (-)

2.50e2



PFPeS

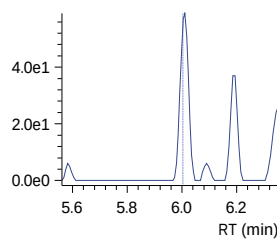
Conc. ----

R#1 0.00 (56.71)

R#2 0.00 (55.80)

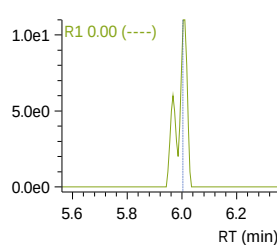
Q 349.10>79.90 (-)

5.90e1



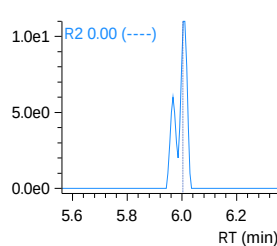
R1 349.10>98.80 (-)

1.10e1



R2 349.10>98.80 (-)

1.10e1

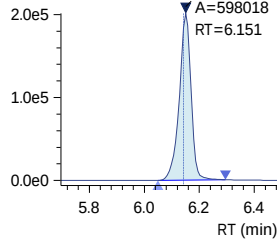


13C4-PFHpA

Conc. 2.7338

Q 367.10>322.00 (-)

2.02e5

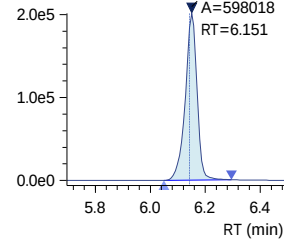


13C4-PFHpA_IS

Conc. 2.5000

ISTD 367.10>322.00 (-)

2.02e5



PFHpA

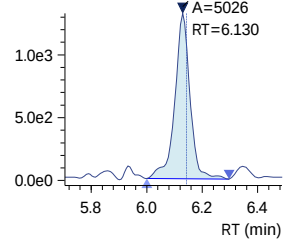
Conc. -0.0145

R#1 27.29 (21.37)

R#2 27.29 (21.50)

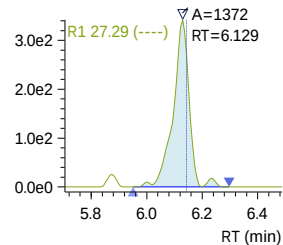
Q 363.10>319.00 (-)

1.33e3



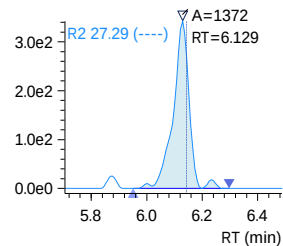
R1 363.10>169.00 (-)

3.42e2



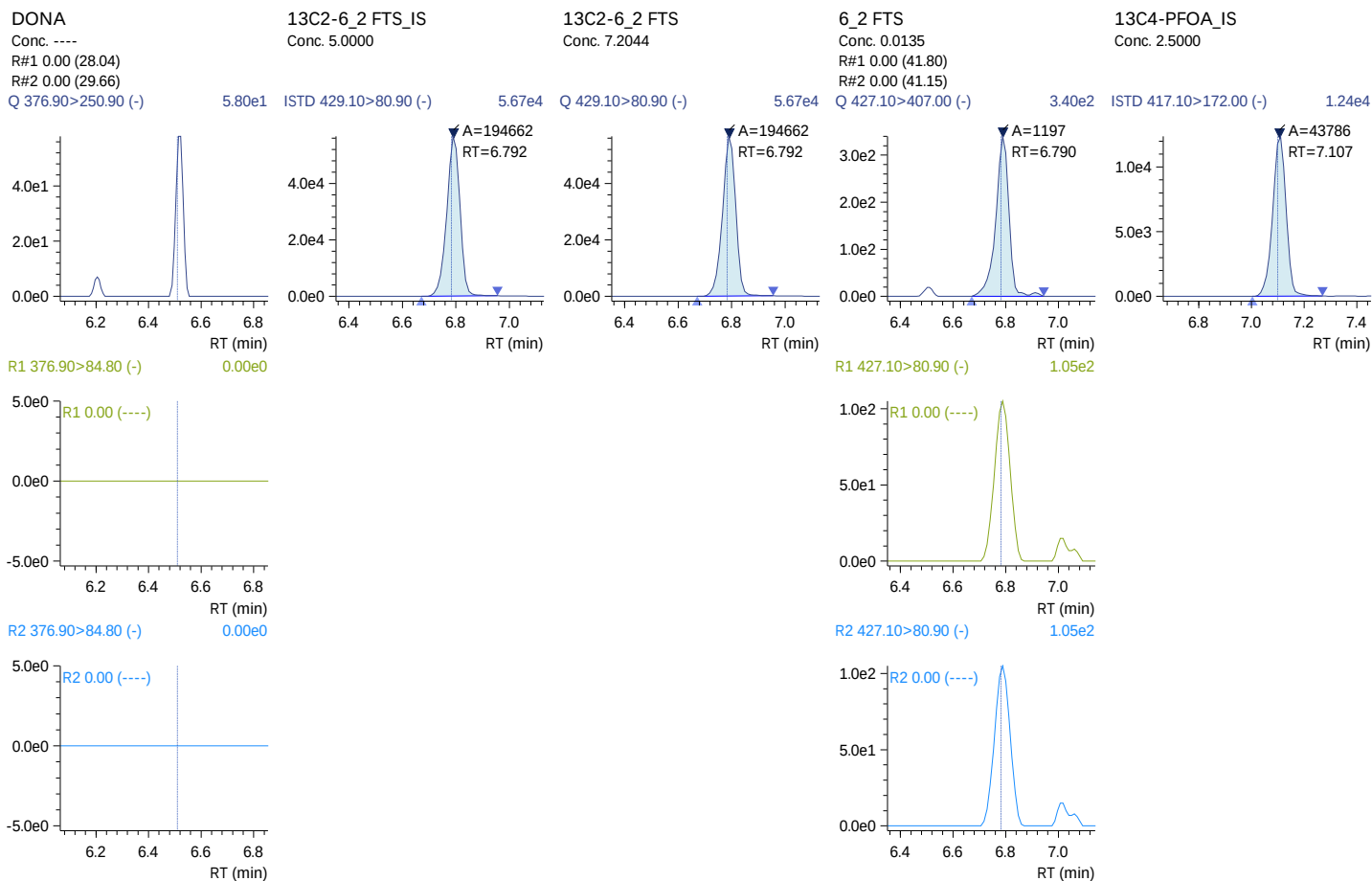
R2 363.10>169.00 (-)

3.42e2





240119_006 (continued)





240119_006 (continued)

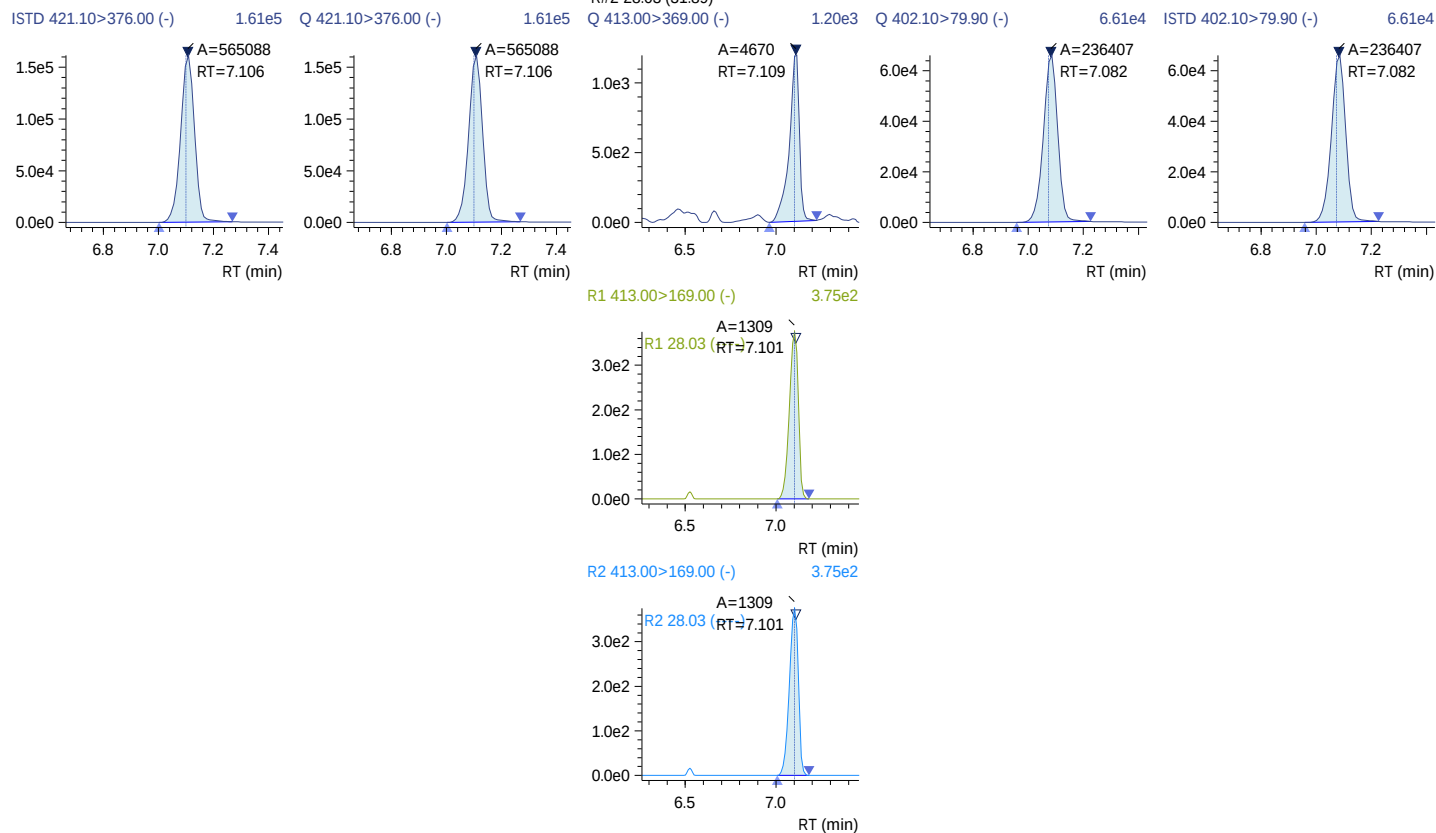
13C8-PFOA_IS
 Conc. 2.5000

13C8-PFOA
 Conc. 2.3090

PFOA
 Conc. -0.0117
 R#1 28.03 (29.05)
 R#2 28.03 (31.89)

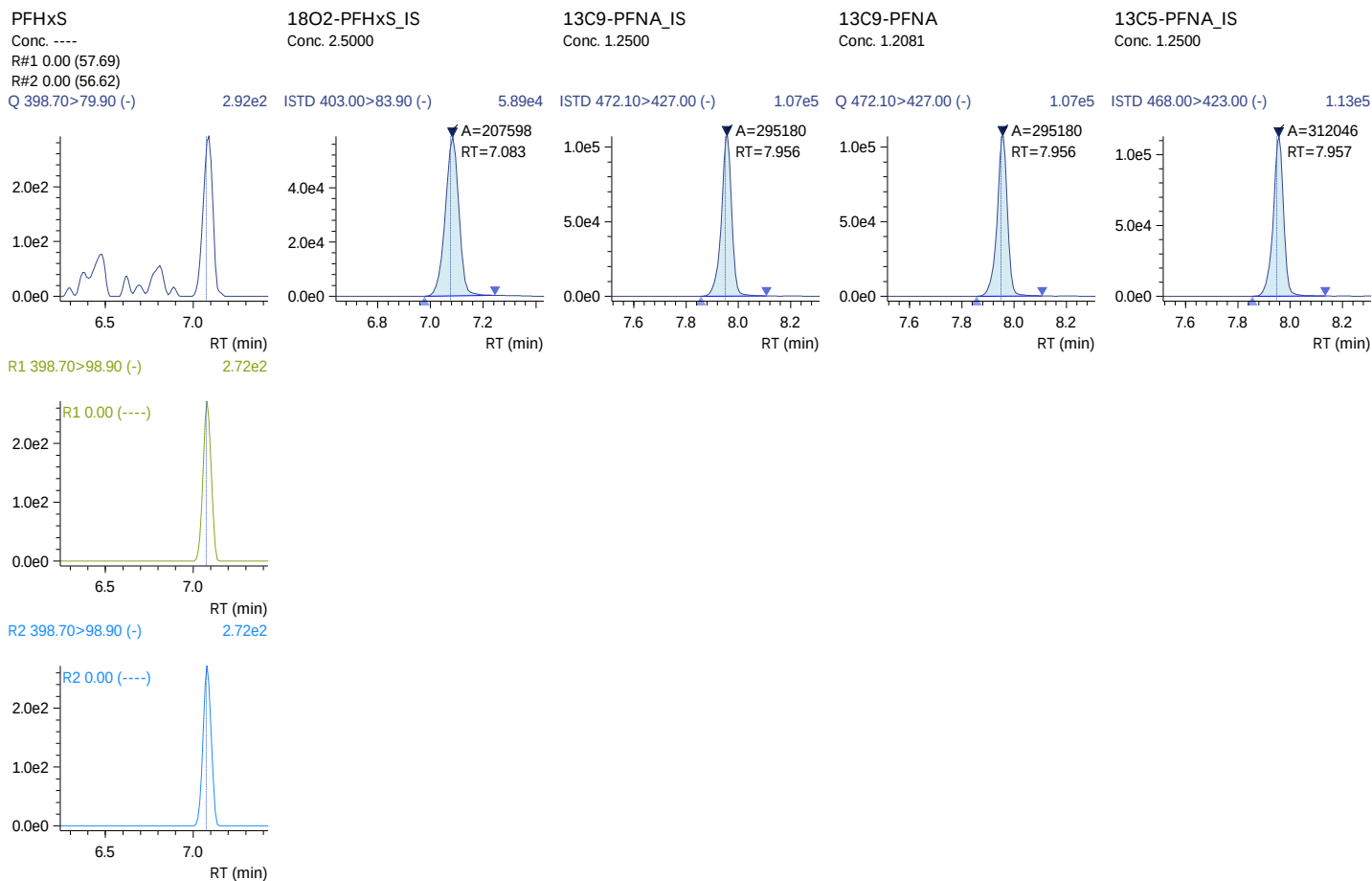
13C3-PFHxS
 Conc. 2.6531

13C3-PFHxS_IS
 Conc. 2.5000



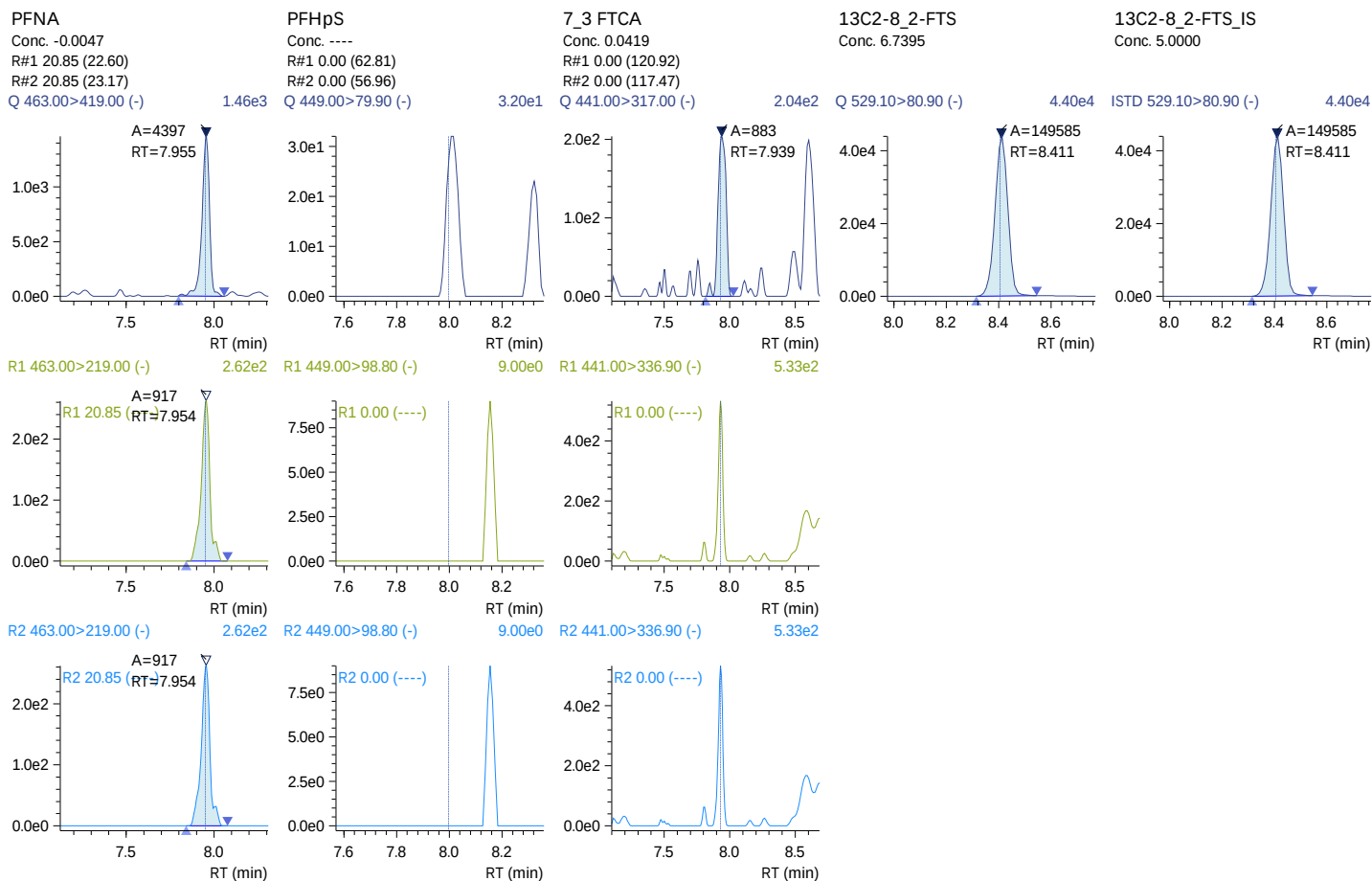


240119_006 (continued)



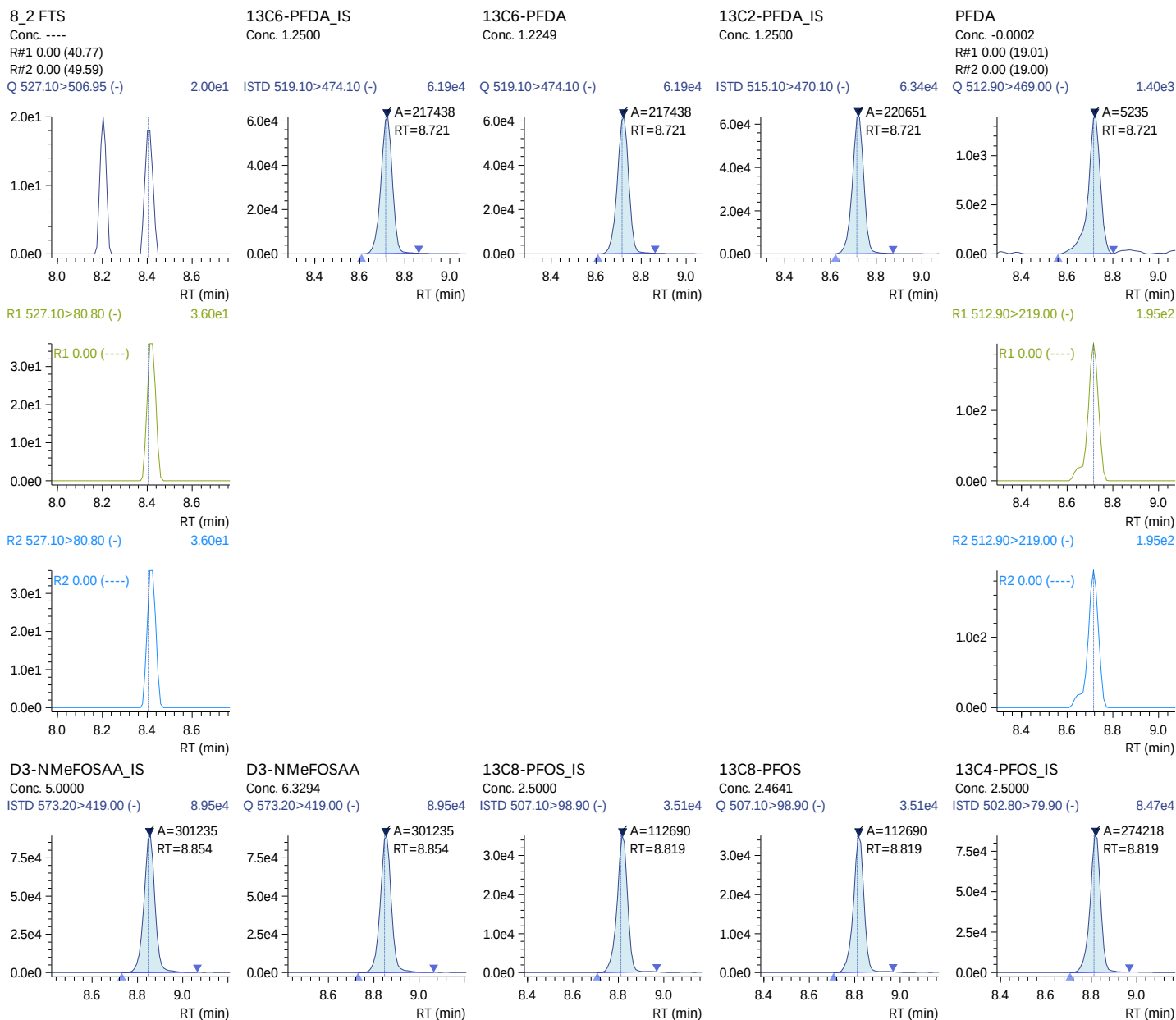


240119_006 (continued)



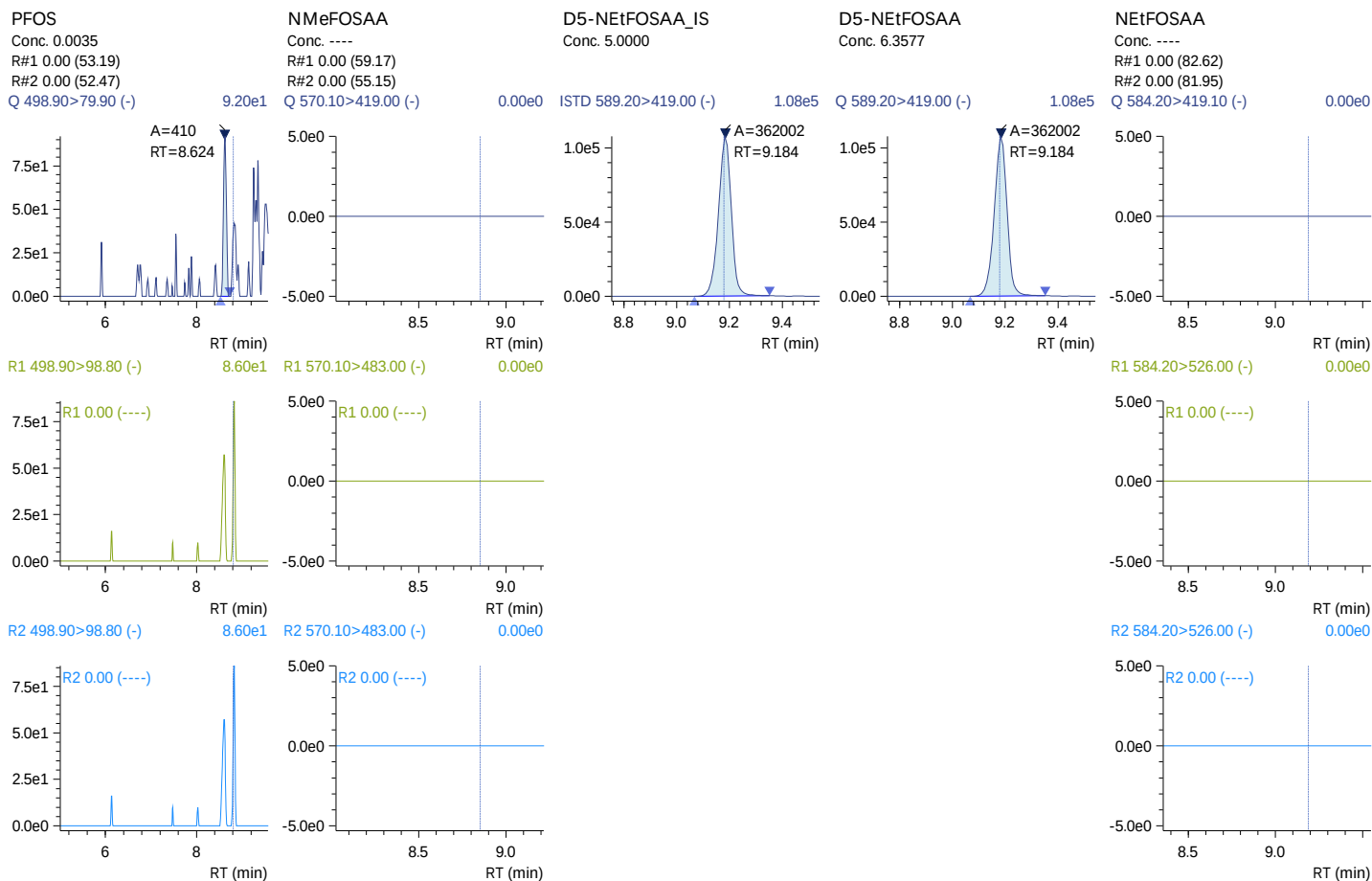


240119_006 (continued)





240119_006 (continued)





240119_006 (continued)

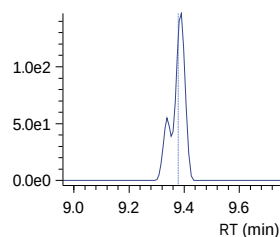
9-Cl-PF3ONS

Conc. ----

R#1 0.00 (31.76)

R#2 0.00 (32.76)

Q 530.80>351.00 (-)



R1 532.80>353.00 (-)

1.47e2

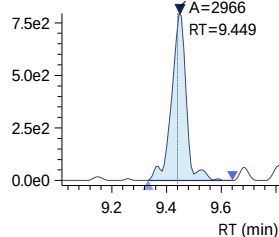
PFUnDA

Conc. -0.0141

R#1 0.00 (12.31)

R#2 0.00 (13.12)

Q 563.10>519.00 (-)



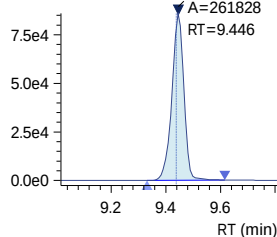
R1 563.10>269.10 (-)

7.95e2

13C7-PFUnDA_IS

Conc. 1.2500

ISTD 570.00>525.10 (-)

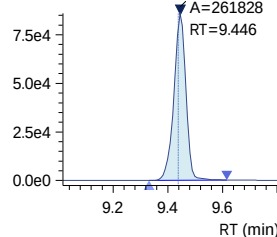


5.50e1

13C7-PFUnDA

Conc. 1.2365

Q 570.00>525.10 (-)



8.61e4

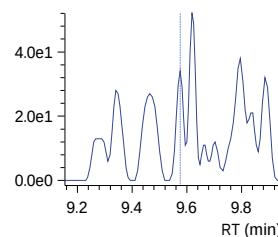
PFNS

Conc. ----

R#1 0.00 (63.31)

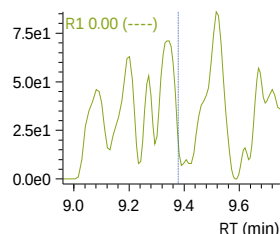
R#2 0.00 (65.22)

Q 548.80>79.90 (-)



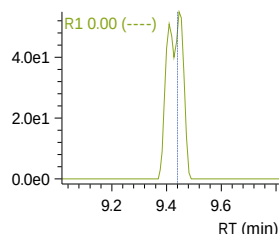
R1 548.80>98.80 (-)

5.20e1



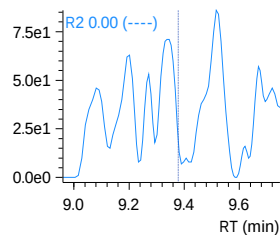
R2 532.80>353.00 (-)

8.60e1

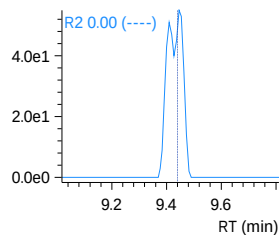


R2 563.10>269.10 (-)

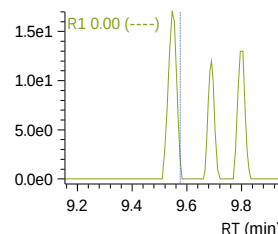
5.50e1



R2 0.00 (----)

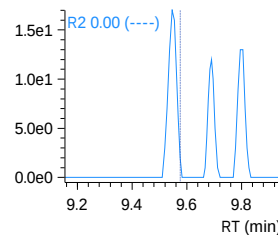


R2 0.00 (----)



R2 548.80>98.80 (-)

1.70e1



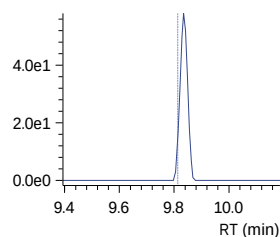
R2 0.00 (----)



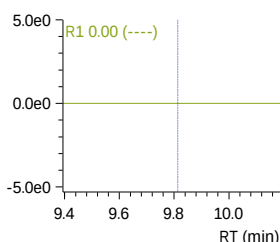
240119_006 (continued)

10_2 FTS
Conc. ----

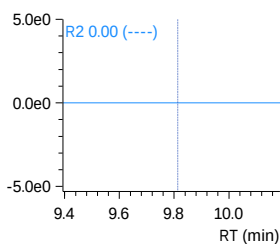
R#1 0.00 (33.02)
R#2 0.00 (37.13)
Q 626.80>607.05 (-)



R1 626.80>81.00 (-) 0.00e0

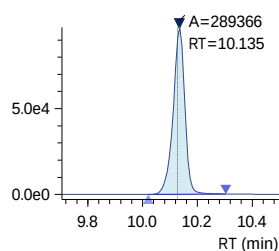


R2 626.80>81.00 (-) 0.00e0



13C2-PFDOA_IS
Conc. 1.2500

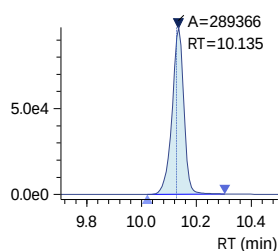
ISTD 615.10>570.00 (-)



Q 615.10>570.00 (-) 9.74e4

13C2-PFDOA
Conc. 1.1895

Q 615.10>570.00 (-)

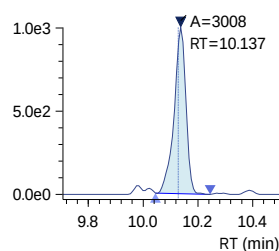


Q 615.10>570.00 (-) 9.74e4

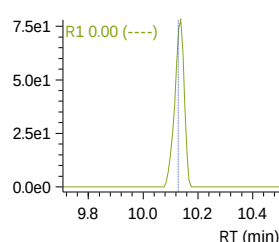
PFDOA

Conc. -0.0144
R#1 0.00 (10.14)
R#2 0.00 (11.29)

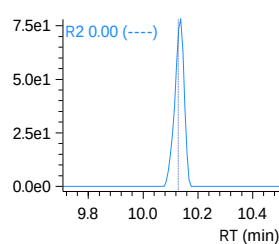
Q 613.10>569.00 (-)



R1 613.10>319.00 (-) 7.80e1



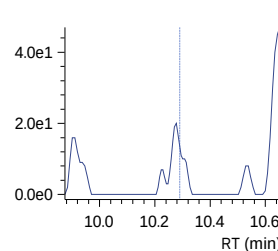
R2 613.10>319.00 (-) 7.80e1



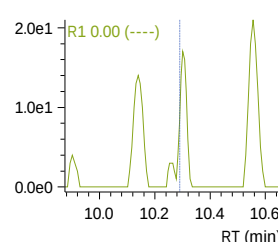
PFDS

Conc. ----
R#1 0.00 (62.02)
R#2 0.00 (60.18)

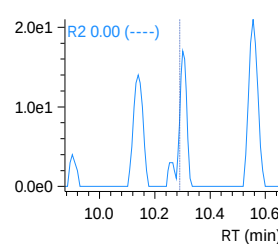
Q 599.00>79.90 (-)



R1 599.00>98.80 (-) 2.10e1

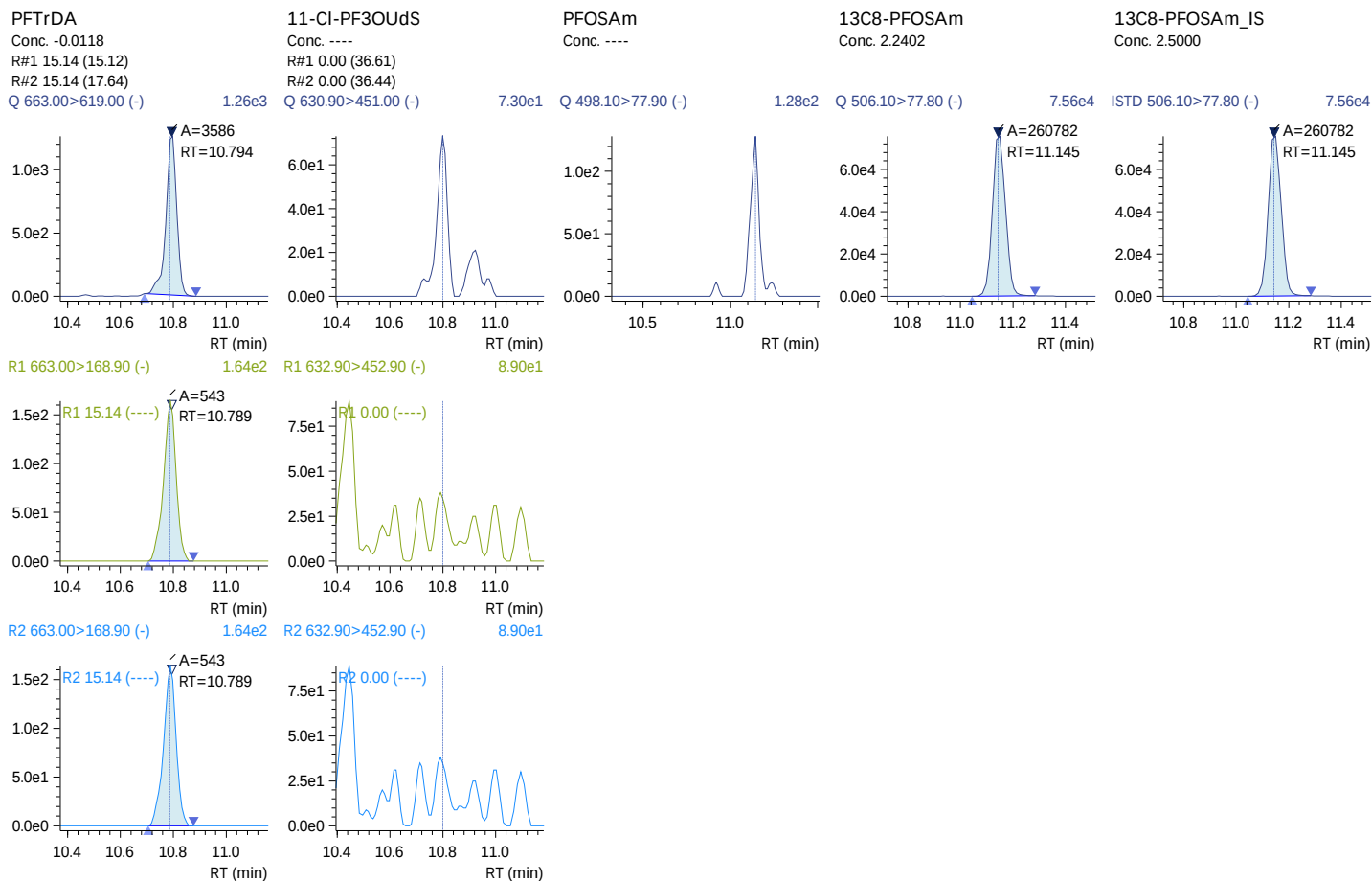


R2 599.00>98.80 (-) 2.10e1



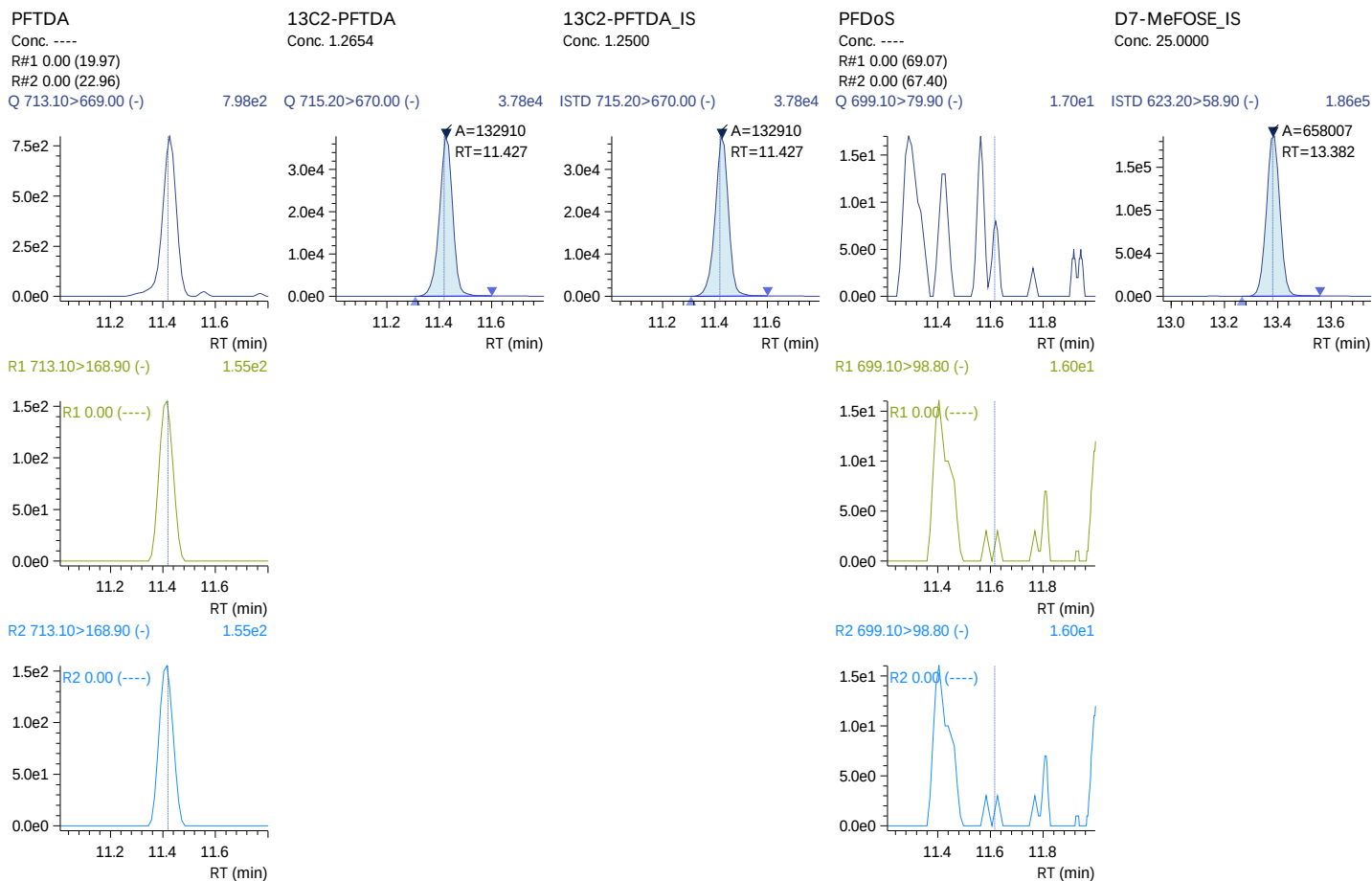


240119_006 (continued)





240119_006 (continued)





240119_006 (continued)

D7-MeFOSE
 Conc. 22.9265

MeFOSE
 Conc. ----

¹³C2-PFHxDA_IS
 Conc. 2.5000

¹³C2-PFHxDA
 Conc. 2.2894

PFHxDA
 Conc. -0.0078
 R#1 0.00 (11.64)
 R#2 0.00 (13.90)

Q 623.20>58.90 (-)

1.86e5

Q 616.10>59.00 (-)

4.90e1

ISTD 815.00>770.05 (-)

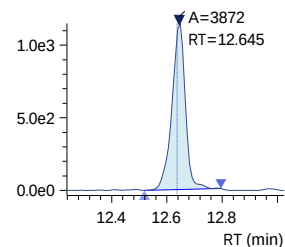
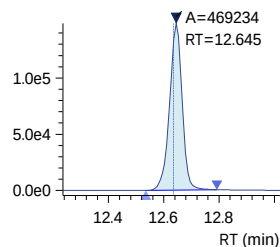
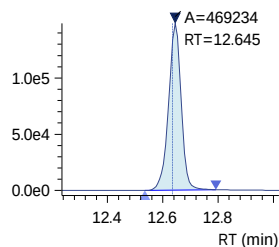
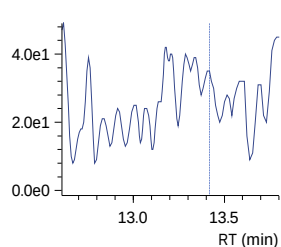
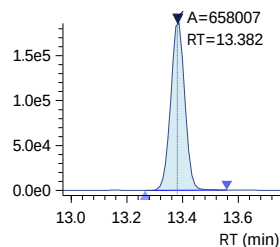
1.49e5

Q 815.00>770.05 (-)

1.49e5

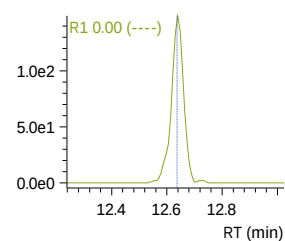
Q 813.00>768.95 (-)

1.15e3



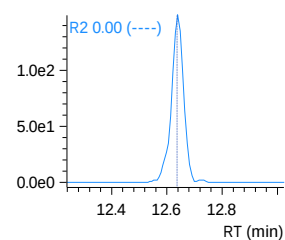
R1 813.00>218.95 (-)

1.49e2



R2 813.00>218.95 (-)

1.49e2





240119_006 (continued)

D3-MeFOSA
 Conc. 2.3858

D3-MeFOSA_IS
 Conc. 2.5000

MeFOSA
 Conc. ----
 R#1 0.00 (149.05)
 R#2 0.00 (140.79)

D9-EtFOSE_IS
 Conc. 25.0000

D9-EtFOSE
 Conc. 22.1731

Q 515.00>219.00 (-)

1.62e4

ISTD 515.00>219.00 (-)

1.62e4

Q 511.90>219.00 (-)

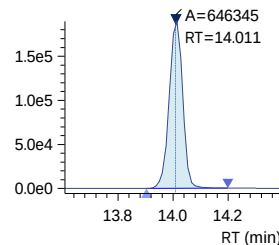
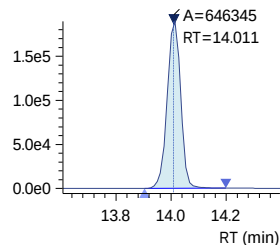
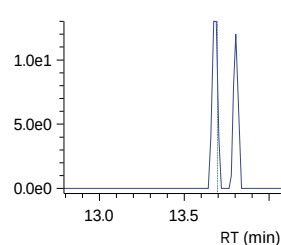
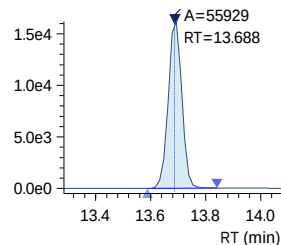
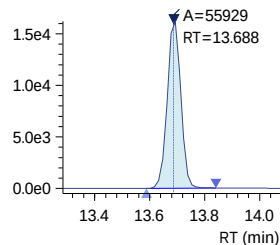
1.30e1

ISTD 639.20>58.90 (-)

1.90e5

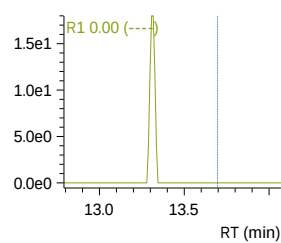
Q 639.20>58.90 (-)

1.90e5



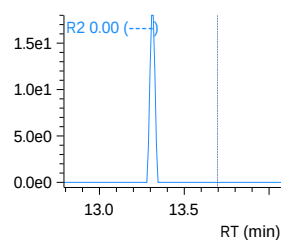
R1 511.90>169.00 (-)

1.80e1



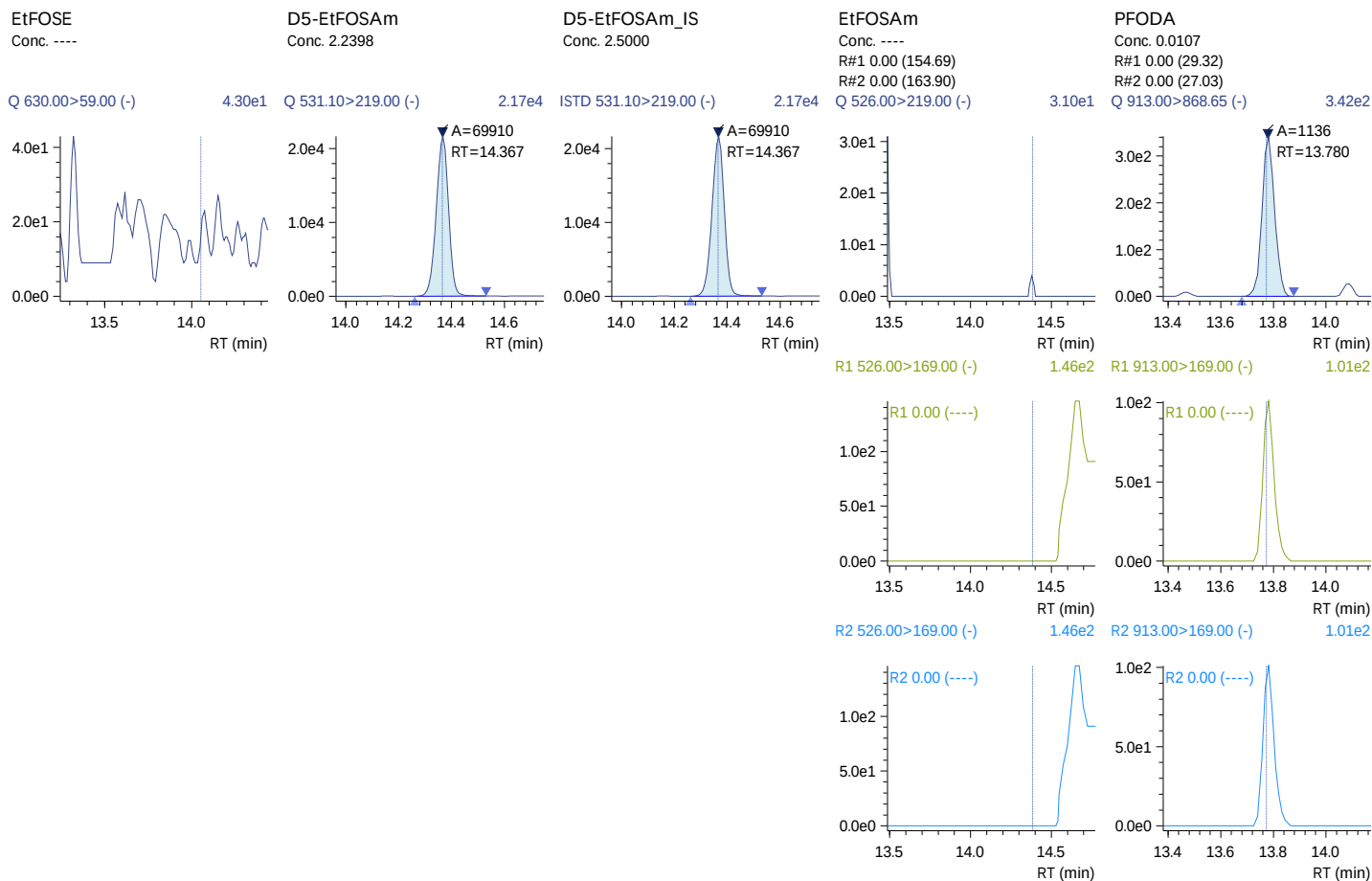
R2 511.90>169.00 (-)

1.80e1





240119_006 (continued)



Validation Report

1st PS 01/23/24
2nd UA 01/23/24

Data File: J:\LCMS08\Data\240119_1633_B1\240119_012
Lab ID: KQ2400951-22
RunType: CCB
Matrix: Soil

Date Acquired: 1/19/24 16:04
Batch ID: 830171
Analysis Method: 1633/PFAS_DOD5.4

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery		X
Continuing Calibration Recovery (Closing)	X	
Internal Standards	X	
Surrogates	X	
Above Highest ICAL Level	X	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Continuing Calibration Recovery	13C2-4:2 FTS	132	70	130	native in control
	13C2-6:2 FTS	142	70	130	native in control

Primary Review: _____

Secondary Review: _____

Validation Report

1st PS 01/23/24
2nd UA 01/23/24

Data File: J:\LCMS08\Data\240119_1633_B1\240119_012
Lab ID: KQ2400951-06
RunType: CCB
Matrix: Water

Date Acquired: 1/19/24 16:04
Batch ID: 830171
Analysis Method: 1633/PFAS_DOD5.4

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery		X
Continuing Calibration Recovery (Closing)	X	
Internal Standards	X	
Surrogates	X	
Above Highest ICAL Level	X	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Continuing Calibration Recovery	13C2-4:2 FTS	132	70	130	native in control

Primary Review: _____

Secondary Review: _____

Quantitation Report

1st *PS* 01/23/24
2nd *UA* 01/23/24

Data File:	J:\LCMS08\Data\240119_1633_B1\240119_012	Instrument:	K-LCMS-08
Acqu Date:	1/19/24 16:04	Vial:	17
Run Type:	CCB	Dilution:	1
Lab ID:	KQ2400951-22	Raw Units:	ng/mL

Bottle ID:		Tier:	IV	Matrix:	Soil
Prod Code:	PFAS_DOD5.4	Collect Date:	11/13/23	Receive Date:	11/14/23

Analysis Lot:	830171	Prep Lot:		Report Group:	KQ2400951
Analysis	1633	Prep Method:			
		Prep Date:			

Title:	Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM	Calibration ID:	KC2400027
		Report List ID:	24615

Internal Standard Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Area Criteria
18O2-PFHxS	7.063	-0.01	216206	2.5000	OK
13C4-PFOS	8.801	-0.01	264916	2.5000	OK
13C3-PFBA	1.400	-0.01	576781	5.0000	OK
13C2-PFHxA	4.948	-0.01	576658	2.5000	OK
13C4-PFOA	7.089	-0.01	46172	2.5000	OK
13C5-PFNA	7.939	-0.01	311185	1.2500	OK
13C2-PFDA	8.705	-0.01	212527	1.2500	OK

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
13C3-PFBS	4.612	-0.01	316806	2.5821	103	20 - 150	Y
13C3-PFHxS	7.062	-0.01	237461	2.5588	102	20 - 150	Y
13C8-PFOS	8.800	-0.01	112260	2.5409	102	20 - 150	Y
13C4-PFBA	1.399	0.00	1281236	9.9381	99	20 - 150	Y
13C5-PFPeA	3.467	-0.01	141977	5.4544	109	20 - 150	Y
13C5-PFHxA	4.948	-0.01	597007	2.4565	98	20 - 150	Y
13C4-PFHpA	6.130	-0.01	609256	2.7693	111	20 - 150	Y
13C8-PFOA	7.088	-0.01	642362	2.4891	100	20 - 150	Y
13C9-PFNA	7.938	-0.01	295449	1.2126	97	20 - 150	Y
13C6-PFDA	8.704	-0.01	216350	1.2653	101	20 - 150	Y
13C7-PFUnDA	9.428	-0.01	262349	1.2863	103	20 - 150	Y
13C2-PFDoDA	10.117	-0.01	293890	1.2542	100	20 - 150	Y
13C2-PFTeDA	11.410	-0.01	123086	1.2166	97	20 - 150	Y
13C8-FOSA	11.139	0.00	272189	2.4203	97	20 - 150	Y
D3-MeFOSA	13.685	0.00	61460	2.7137	109	20 - 150	Y
D5-EtFOSA	14.362	0.00	75354	2.4990	100	20 - 150	Y
D7-MeFOSE	13.377	0.00	696611	25.1239	100	20 - 150	Y
D9-EtFOSE	14.006	0.00	743623	26.4060	106	20 - 150	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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			1st	PS	01/23/24
Data File:	J:\LCMS08\Data\240119_1633_B1\240119_012	Instrument:	K-LCMS08	2nd	01/23/24
Acqu Date:	1/19/24 16:04	Vial:	17	UA	
Run Type:	CCB	Dilution:	1		
Lab ID:	KQ2400951-22	Raw Units:	ng/mL		

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
D3-MeFOSAA	8.838	-0.01	281455	6.1214	122	20 - 150	Y
D5-EtFOSAA	9.167	-0.01	339825	6.1778	124	20 - 150	Y
13C2-4:2 FTS	4.633	-0.01	206104	6.9272	139	20 - 150	Y
13C2-6:2 FTS	6.772	-0.01	180101	6.4001	128	20 - 150	Y
13C2-8:2 FTS	8.395	-0.01	166951	7.2224	144	20 - 150	Y
13C3-HFPO-DA	5.425	-0.01	645777	11.4398	114	20 - 150	Y

Target Compounds

Final Conc.Units: ng/g

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Perfluorobutane sulfonic acid (PFBS)	4.620	0.00	218	0.0013	0.0013	U	Y
Perfluoropentane sulfonic acid (PFPeS)	6.000		233	0.0019	0.0019	U	Y
Perfluorohexane sulfonic acid (PFHxS)	7.061	-0.01	911	-0.0112	0	U	Y
Perfluoroheptane sulfonic acid (PFHpS)	0		0	0	0	U	Y
Perfluorooctane sulfonic acid (PFOS)	8.802	-0.01	446	0.0038	0.0038	U	Y
Perfluorononane sulfonic acid (PFNS)	0		0	0	0	U	Y
Perfluorodecane sulfonic acid (PFDS)	0		0	0	0	U	Y
Perfluorododecane sulfonic acid (PFDoS)	0		0	0	0	U	Y
Perfluorobutanoic acid (PFBA)	1.410	+0.00	697	0.0063	0.0063	U	Y
Perfluoropentanoic acid (PFPeA)	3.465	-0.01	1172	0.0064	0.0064	U	Y
Perfluorohexanoic acid (PFHxA)	4.945	-0.02	1239	-0.0021	0	U	Y
Perfluoroheptanoic acid (PFHpA)	6.112	-0.03	5415	-0.0133	0	U	Y
Perfluorooctanoic acid (PFOA)	7.086	-0.01	4666	-0.0156	0	U	Y
Perfluorononanoic acid (PFNA)	7.935	-0.01	4020	-0.0069	0	U	Y
Perfluorodecanoic acid (PFDA)	8.703	-0.01	3753	-0.0073	0	U	Y
Perfluoroundecanoic acid (PFUnDA)	9.430	-0.01	2873	-0.0146	0	U	Y
Perfluorododecanoic acid (PFDOA)	10.118	-0.01	2838	-0.0157	0	U	Y
Perfluorotridecanoic acid (PFTrDA)	10.775	-0.01	3502	-0.0108	0	U	Y
Perfluorotetradecanoic acid (PFTDA)	11.409	-0.01	2730	-0.0072	0	U	Y
Perfluorooctane sulfonamide (PFOSAm)	11.141	+0.00	431	0.0048	0.0048	U	Y
N-Methylperfluorooctane sulfonamide (MeFOSA)	0		0	0	0	U	Y
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	0		0	0	0	U	Y
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	13.417		677	0.0264	0.026	U	Y
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	0		0	0	0	U	Y
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	8.820	-0.03	62	0.0008	0.00080	U	Y

U: Undetected at or above MDL

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E: Analyte concentration above high point of ICAL

N: Presumptive evidence of compound

D: Result from dilution

m: Manual integration performed

d: Compound manually deleted

NR: Analyte not reported from this analysis

*: Result fails acceptance criteria

#: Acceptance criteria not applicable

?: Insufficient information to determine acceptance

e: Result >= MRL, but MRL less than low point of ICAL

c: check for co-elution

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			1st	01/23/24
Data File:	J:\LCMS08\Data\240119_1633_B1\240119_012	Instrument:	K-LCMS08	01/23/24
Acqu Date:	1/19/24 16:04	Vial:	17	
Run Type:	CCB	Dilution:	1	
Lab ID:	KQ2400951-22	Raw Units:	ng/mL	

Target Compounds			Final Conc.Units: ng/g				
Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	0		0	0	0	U	Y
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	0		0	0	0	U	Y
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	6.770	-0.01	872	0.0106	0.011	U	Y
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	0		0	0	0	U	Y
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	0		0	0	0	U	Y
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	5.861	-0.01	347	0.0225	0.023	U	Y
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	7.917	-0.01	699	0.0339	0.034	U	Y
Perfluoro(2-ethoxyethane) sulfonic acid (PFEEESA)	0		0	0	0	U	Y
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	9.375	0.00	404	0.0008	0.00080	U	Y
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	0		0	0	0	U	Y
Perfluoro-3-methoxypropanoic acid (PFMPA)	0		0	0	0	U	Y
Perfluoro-4-methoxybutanoic acid (PFMBA)	3.993	-0.01	106	0.0008	0.00080	U	Y
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	0		0	0	0	U	Y
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	4.801	-0.01	649	0.0049	0.0049	U	Y
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	0		0	0	0	U	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report

1st *PS* 01/23/24
2nd *UA* 01/23/24

Data File:	J:\LCMS08\Data\240119_1633_B1\240119_012	Instrument:	K-LCMS-08
Acqu Date:	1/19/24 16:04	Vial:	6
Run Type:	CCB	Dilution:	1
Lab ID:	KQ2400951-06	Raw Units:	ng/mL

Bottle ID:		Tier:	IV	Matrix:	Water
Prod Code:	PFAS_DOD5.4	Collect Date:	11/8/23	Receive Date:	11/10/23

Analysis Lot:	830171	Prep Lot:		Report Group:	KQ2400951
Analysis	1633	Prep Method:			
		Prep Date:			

Title:	Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM	Calibration ID:	KC2400027
		Report List ID:	24615

Internal Standard Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Area Criteria
18O2-PFHxS	7.063	-0.01	216206	2.5000	OK
13C4-PFOS	8.801	-0.01	264916	2.5000	OK
13C3-PFBA	1.400	-0.01	576781	5.0000	OK
13C2-PFHxA	4.948	-0.01	576658	2.5000	OK
13C4-PFOA	7.089	-0.01	46172	2.5000	OK
13C5-PFNA	7.939	-0.01	311185	1.2500	OK
13C2-PFDA	8.705	-0.01	212527	1.2500	OK

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
13C3-PFBS	4.612	-0.02	316806	2.5821	103	40 - 135	Y
13C3-PFHxS	7.062	-0.01	237461	2.5588	102	40 - 130	Y
13C8-PFOS	8.800	-0.01	112260	2.5409	102	40 - 130	Y
13C4-PFBA	1.399	-0.01	1281236	9.9381	99	5 - 130	Y
13C5-PFPeA	3.467	-0.01	141977	5.4544	109	40 - 130	Y
13C5-PFHxA	4.948	-0.01	597007	2.4565	98	40 - 130	Y
13C4-PFHpA	6.130	-0.01	609256	2.7693	111	40 - 130	Y
13C8-PFOA	7.088	-0.01	642362	2.4891	100	40 - 130	Y
13C9-PFNA	7.938	-0.01	295449	1.2126	97	40 - 130	Y
13C6-PFDA	8.704	-0.01	216350	1.2653	101	40 - 130	Y
13C7-PFUnDA	9.428	-0.01	262349	1.2863	103	30 - 130	Y
13C2-PFDoDA	10.117	-0.01	293890	1.2542	100	10 - 130	Y
13C2-PFTeDA	11.410	-0.01	123086	1.2166	97	10 - 130	Y
13C8-FOSA	11.139	0.00	272189	2.4203	97	40 - 130	Y
D3-MeFOSA	13.685	0.00	61460	2.7137	109	10 - 130	Y
D5-EtFOSA	14.362	0.00	75354	2.4990	100	10 - 130	Y
D7-MeFOSE	13.377	0.00	696611	25.1239	100	10 - 130	Y
D9-EtFOSE	14.006	0.00	743623	26.4060	106	10 - 130	Y

U: Undetected at or above MDL
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c: check for co-elution

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			1st	PS	01/23/24
Data File:	J:\LCMS08\Data\240119_1633_B1\240119_012	Instrument:	K-LCMS08	2nd	01/23/24
Acqu Date:	1/19/24 16:04	Vial:	6	UA	
Run Type:	CCB	Dilution:	1		
Lab ID:	KQ2400951-06	Raw Units:	ng/mL		

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
D3-MeFOSAA	8.838	-0.01	281455	6.1214	122	40 - 170	Y
D5-EtFOSAA	9.167	-0.01	339825	6.1778	124	25 - 135	Y
13C2-4:2 FTS	4.633	-0.01	206104	6.9272	139	40 - 200	Y
13C2-6:2 FTS	6.772	-0.01	180101	6.4001	128	40 - 200	Y
13C2-8:2 FTS	8.395	-0.01	166951	7.2224	144	40 - 300	Y
13C3-HFPO-DA	5.425	-0.01	645777	11.4398	114	40 - 130	Y

Target Compounds

Final Conc.Units: ng/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Perfluorobutane sulfonic acid (PFBS)	4.620	-0.01	218	0.0013	0.026	U	Y
Perfluoropentane sulfonic acid (PFPeS)	6.000	0.00	233	0.0019	0.038	U	Y
Perfluorohexane sulfonic acid (PFHxS)	7.061	-0.01	911	-0.0112	0	U	Y
Perfluoroheptane sulfonic acid (PFHpS)	0		0	0	0	U	Y
Perfluorooctane sulfonic acid (PFOS)	8.802	-0.01	446	0.0038	0.076	U	Y
Perfluorononane sulfonic acid (PFNS)	0		0	0	0	U	Y
Perfluorodecane sulfonic acid (PFDS)	0		0	0	0	U	Y
Perfluorododecane sulfonic acid (PFDoS)	0		0	0	0	U	Y
Perfluorobutanoic acid (PFBA)	1.410	+0.00	697	0.0063	0.13	U	Y
Perfluoropentanoic acid (PFPeA)	3.465	-0.02	1172	0.0064	0.13	U	Y
Perfluorohexanoic acid (PFHxA)	4.945	-0.02	1239	-0.0021	0	U	Y
Perfluoroheptanoic acid (PFHpA)	6.112	-0.03	5415	-0.0133	0	U	Y
Perfluorooctanoic acid (PFOA)	7.086	-0.02	4666	-0.0156	0	U	Y
Perfluorononanoic acid (PFNA)	7.935	-0.02	4020	-0.0069	0	U	Y
Perfluorodecanoic acid (PFDA)	8.703	-0.01	3753	-0.0073	0	U	Y
Perfluoroundecanoic acid (PFUnDA)	9.430	-0.01	2873	-0.0146	0	U	Y
Perfluorododecanoic acid (PFDOA)	10.118	-0.01	2838	-0.0157	0	U	Y
Perfluorotridecanoic acid (PFTrDA)	10.775	-0.01	3502	-0.0108	0	U	Y
Perfluorotetradecanoic acid (PFTDA)	11.409	-0.01	2730	-0.0072	0	U	Y
Perfluorooctane sulfonamide (PFOSAm)	11.141	0.00	431	0.0048	0.096	U	Y
N-Methylperfluorooctane sulfonamide (MeFOSA)	0		0	0	0	U	Y
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	0		0	0	0	U	Y
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	13.417	0.00	677	0.0264	0.53	U	Y
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	0		0	0	0	U	Y
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	8.820	-0.03	62	0.0008	0.016	U	Y

U: Undetected at or above MDL

J: Analyte detected above MDL, but below MRL

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NR: Analyte not reported from this analysis

*: Result fails acceptance criteria

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e: Result >= MRL, but MRL less than low point of ICAL

c: check for co-elution

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			1st	PS	01/23/24
Data File:	J:\LCMS08\Data\240119_1633_B1\240119_012	Instrument:	K-LCMS08	2nd	01/23/24
Acqu Date:	1/19/24 16:04	Vial:	6	UA	
Run Type:	CCB	Dilution:	1		
Lab ID:	KQ2400951-06	Raw Units:	ng/mL		

Target Compounds

Final Conc.Units: ng/L

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	0		0	0	0	U	Y
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	0		0	0	0	U	Y
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	6.770	-0.01	872	0.0106	0.21	U	Y
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	0		0	0	0	U	Y
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	0		0	0	0	U	Y
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	5.861	-0.01	347	0.0225	0.45	U	Y
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	7.917	-0.01	699	0.0339	0.68	U	Y
Perfluoro(2-ethoxyethane) sulfonic acid (PFEEESA)	0		0	0	0	U	Y
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	9.375	0.00	404	0.0008	0.016	U	Y
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	0		0	0	0	U	Y
Perfluoro-3-methoxypropanoic acid (PFMPA)	0		0	0	0	U	Y
Perfluoro-4-methoxybutanoic acid (PFMBA)	3.993	-0.01	106	0.0008	0.016	U	Y
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	0		0	0	0	U	Y
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	4.801	-0.02	649	0.0049	0.098	U	Y
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	0		0	0	0	U	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

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m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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240119_012

Sample ID: 1633 CCB
Date Acquired: 1/19/2024 4:04:20 PM
Acquired by: System Administrator
Data File: 240119_012
Vial: 54 | Inj. Volume: 10.0000uL | Tray: 1

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	1281236	----	----	----	----	----	----	
13C4-PFBA_IS	216.80>171.90	----	1281236	----	----	----	----	----	----	
13C3-PFBA_IS	216.00>172.00	----	576781	----	----	----	----	----	----	
PFBA	212.80>169.05	----	697	----	----	----	----	----	----	
PFMPA	229.00>84.90	----	----	----	----	----	----	----	----	
3_3 FTCA	241.00>177.10	241.00>117.00	----	0	0.00	141.17	0	0.00	143.25	
13C5-PFPeA	268.30>223.00	----	141977	----	----	----	----	----	----	
13C5-PFPeA_IS	268.30>223.00	----	141977	----	----	----	----	----	----	
PFPeA	263.00>219.00	----	1172	----	----	----	----	----	----	
PFMBA	279.00>84.95	----	106	----	----	----	----	----	----	
13C2-4_2 FTS	329.10>80.90	----	206104	----	----	----	----	----	----	
13C2-4_2 FTS_IS	329.10>80.90	----	206104	----	----	----	----	----	----	
4_2 FTS	327.10>307.00	327.10>80.90	----	0	0.00	29.06	0	0.00	31.50	
13C3-PFBS_IS	302.10>79.90	----	316806	----	----	----	----	----	----	
PFBS	298.70>79.90	298.70>98.80	218	130	59.79	46.72	130	59.79	48.74	
13C3-PFBS	302.10>79.90	----	316806	----	----	----	----	----	----	
NFDHA	295.00>201.00	295.00>84.90	649	373	57.58	40.25	373	57.58	36.97	IRr
13C5-PFHxA	318.00>273.00	----	597007	----	----	----	----	----	----	
13C5-PFHxA_IS	318.00>273.00	----	597007	----	----	----	----	----	----	
13C2-PFHxA_IS	315.10>270.00	----	576658	----	----	----	----	----	----	
PFHxA	313.00>269.00	----	1239	----	----	----	----	----	----	
PFEESA	314.80>135.00	314.80>82.90	----	0	0.00	6.11	0	0.00	5.81	
13C3-HFPO-DA	286.90>168.90	----	645777	----	----	----	----	----	----	
13C3-HFPO-DA_IS	286.90>168.90	----	645777	----	----	----	----	----	----	
HFPO-DA	284.90>168.90	284.90>184.90	----	0	0.00	65.61	0	0.00	64.39	
5_3 FTCA	341.00>237.05	341.00>217.00	347	633	182.31	158.86	633	182.31	159.75	
PFPeS	349.10>79.90	349.10>98.80	233	88	37.92	55.80	88	37.92	54.52	
13C4-PFHpA	367.10>322.00	----	609256	----	----	----	----	----	----	
13C4-PFHpA_IS	367.10>322.00	----	609256	----	----	----	----	----	----	
PFHpA	363.10>319.00	363.10>169.00	5415	1325	24.46	21.50	1325	24.46	23.22	
DONA	376.90>250.90	376.90>84.80	----	0	0.00	29.66	0	0.00	29.43	
13C2-6_2 FTS_IS	429.10>80.90	----	180101	----	----	----	----	----	----	
13C2-6_2 FTS	429.10>80.90	----	180101	----	----	----	----	----	----	
6_2 FTS	427.10>407.00	427.10>80.90	872	846	97.06	41.15	846	97.06	43.09	IRr
13C4-PFOA_IS	417.10>172.00	----	46172	----	----	----	----	----	----	
13C8-PFOA_IS	421.10>376.00	----	642362	----	----	----	----	----	----	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240119_012 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	642362	----	----	----	----	----	----	----
PFOA	413.00>369.00	413.00>169.00	4666	1330	28.51	31.89	1330	28.51	30.51	
13C3-PFHxS	402.10>79.90	----	237461	----	----	----	----	----	----	----
13C3-PFHxS_IS	402.10>79.90	----	237461	----	----	----	----	----	----	----
PFHxS	398.70>79.90	398.70>98.90	911	488	53.54	56.62	488	53.54	57.27	
18O2-PFHxS_IS	403.00>83.90	----	216206	----	----	----	----	----	----	----
13C9-PFNA_IS	472.10>427.00	----	295449	----	----	----	----	----	----	----
13C9-PFNA	472.10>427.00	----	295449	----	----	----	----	----	----	----
13C5-PFNA_IS	468.00>423.00	----	311185	----	----	----	----	----	----	----
PFNA	463.00>419.00	463.00>219.00	4020	499	12.42	23.17	499	12.42	23.01	
PFHpS	449.00>79.90	449.00>98.80	----	0	0.00	56.96	0	0.00	58.58	
7_3 FTCA	441.00>317.00	441.00>336.90	699	904	129.34	117.47	906	129.64	117.17	
13C2-8_2-FTS	529.10>80.90	----	166951	----	----	----	----	----	----	----
13C2-8_2-FTS_IS	529.10>80.90	----	166951	----	----	----	----	----	----	----
8_2 FTS	527.10>506.95	527.10>80.80	----	0	0.00	49.59	0	0.00	43.30	
13C6-PFDA_IS	519.10>474.10	----	216350	----	----	----	----	----	----	----
13C6-PFDA	519.10>474.10	----	216350	----	----	----	----	----	----	----
13C2-PFDA_IS	515.10>470.10	----	212527	----	----	----	----	----	----	----
PFDA	512.90>469.00	512.90>219.00	3753	464	12.38	19.00	464	12.38	19.26	
D3-NMeFOSAA_IS	573.20>419.00	----	281455	----	----	----	----	----	----	----
D3-NMeFOSAA	573.20>419.00	----	281455	----	----	----	----	----	----	----
13C8-PFOS_IS	507.10>98.90	----	112260	----	----	----	----	----	----	----
13C8-PFOS	507.10>98.90	----	112260	----	----	----	----	----	----	----
13C4-PFOS_IS	502.80>79.90	----	264916	----	----	----	----	----	----	----
PFOS	498.90>79.90	498.90>98.80	446	286	64.15	52.47	286	64.15	47.25	
NMeFOSAA	570.10>419.00	570.10>483.00	62	42	68.63	55.15	42	68.63	62.10	
D5-NetFOSAA_IS	589.20>419.00	----	339825	----	----	----	----	----	----	----
D5-NetFOSAA	589.20>419.00	----	339825	----	----	----	----	----	----	----
NetFOSAA	584.20>419.10	584.20>526.00	----	0	0.00	81.95	0	0.00	86.05	
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	404	677	167.56	32.76	677	167.56	31.74	IRr
PFUnDA	563.10>519.00	563.10>269.10	2873	345	12.01	13.12	345	12.01	13.26	
13C7-PFUnDA_IS	570.00>525.10	----	262349	----	----	----	----	----	----	----
13C7-PFUnDA	570.00>525.10	----	262349	----	----	----	----	----	----	----
PFNS	548.80>79.90	548.80>98.80	----	0	0.00	65.22	0	0.00	62.49	
10_2 FTS	626.80>607.05	626.80>81.00	----	0	0.00	37.13	0	0.00	35.81	
13C2-PFDOA_IS	615.10>570.00	----	293890	----	----	----	----	----	----	----
13C2-PFDOA	615.10>570.00	----	293890	----	----	----	----	----	----	----
PFDOA	613.10>569.00	613.10>319.00	2838	184	6.47	11.29	184	6.47	10.90	
PFDS	599.00>79.90	599.00>98.80	----	0	0.00	60.18	0	0.00	61.11	
PFTrDA	663.00>619.00	663.00>168.90	3502	642	18.33	17.64	642	18.33	18.20	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240119_012 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	----	0	0.00	36.44	0	0.00	34.95	
PFOSAm	498.10>77.90	----	431	----	----	----	----	----	----	
13C8-PFOSAm	506.10>77.80	----	272189	----	----	----	----	----	----	
13C8-PFOSAm_IS	506.10>77.80	----	272189	----	----	----	----	----	----	
PFTDA	713.10>669.00	713.10>168.90	2730	472	17.29	22.96	472	17.29	22.68	
13C2-PFTDA	715.20>670.00	----	123086	----	----	----	----	----	----	
13C2-PFTDA_IS	715.20>670.00	----	123086	----	----	----	----	----	----	
PFDoS	699.10>79.90	699.10>98.80	----	0	0.00	67.40	0	0.00	65.24	
D7-MeFOSE_IS	623.20>58.90	----	696611	----	----	----	----	----	----	
D7-MeFOSE	623.20>58.90	----	696611	----	----	----	----	----	----	
MeFOSE	616.10>59.00	----	677	----	----	----	----	----	----	
13C2-PFHxDA_IS	815.00>770.05	----	473777	----	----	----	----	----	----	
13C2-PFHxDA	815.00>770.05	----	473777	----	----	----	----	----	----	
PFHxDA	813.00>768.95	813.00>218.95	3450	504	14.62	13.90	504	14.62	14.51	
D3-MeFOSA	515.00>219.00	----	61460	----	----	----	----	----	----	
D3-MeFOSA_IS	515.00>219.00	----	61460	----	----	----	----	----	----	
MeFOSA	511.90>219.00	511.90>169.00	----	0	0.00	140.79	0	0.00	142.62	
D9-EtFOSE_IS	639.20>58.90	----	743623	----	----	----	----	----	----	
D9-EtFOSE	639.20>58.90	----	743623	----	----	----	----	----	----	
EtFOSE	630.00>59.00	----	----	----	----	----	----	----	----	
D5-EtFOSAm	531.10>219.00	----	75354	----	----	----	----	----	----	
D5-EtFOSAm_IS	531.10>219.00	----	75354	----	----	----	----	----	----	
EtFOSAm	526.00>219.00	526.00>169.00	----	0	0.00	163.90	0	0.00	146.41	
PFODA	913.00>868.65	913.00>169.00	1422	453	31.87	27.03	453	31.87	23.98	

Flag ID key: IRr: Ion Ratio (Relative)



240119_012

Sample ID: 1633 CCB
Date Acquired: 1/19/2024 4:04:20 PM
Acquired by: System Administrator
Data File: 240119_012
Vial: 54 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.399	-0.009	-0.001	1281236	576781	13C3-PFBA_IS	9.9381	ng/mL	
13C4-PFBA_IS	Auto	1.399	-0.009	----	1281236	1281236	----	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.400	-0.008	----	576781	576781	----	5.0000	ng/mL	
PFBA	M	1.410	0.001	0.011	697	1281236	13C4-PFBA_IS	0.0063	ng/mL	
PFMPA	ND(W/B)	----	----	----	----	141977	13C5-PFPeA_IS	----	ng/mL	
3_3 FTCA	ND(W/B)	----	----	----	----	141977	13C5-PFPeA_IS	----	ng/mL	
13C5-PFPeA	Auto	3.467	-0.012	-1.481	141977	576658	13C2-PFHxA_IS	5.4544	ng/mL	
13C5-PFPeA_IS	Auto	3.467	-0.012	----	141977	141977	----	5.0000	ng/mL	
PFPeA	Auto	3.465	-0.017	-0.002	1172	141977	13C5-PFPeA_IS	0.0064	ng/mL	
PFMBA	M	3.993	-0.012	0.526	106	141977	13C5-PFPeA_IS	0.0008	ng/mL	
13C2-4_2 FTS	Auto	4.633	-0.013	-2.430	206104	216206	18O2-PFHxS_IS	6.9272	ng/mL	
13C2-4_2 FTS_IS	Auto	4.633	-0.013	----	206104	206104	----	5.0000	ng/mL	
4_2 FTS	ND(W/B)	----	----	----	----	206104	13C2-4_2 FTS_IS	----	ng/mL	
13C3-PFBS_IS	Auto	4.612	-0.016	----	316806	316806	----	2.5000	ng/mL	
PFBS	M	4.620	-0.008	0.008	218	316806	13C3-PFBS_IS	0.0013	ng/mL	
13C3-PFBS	Auto	4.612	-0.016	-2.451	316806	216206	18O2-PFHxS_IS	2.5821	ng/mL	
NFDHA	M	4.801	-0.019	-0.147	649	597007	13C5-PFHxA_IS	0.0049	ng/mL	IRr
13C5-PFHxA	Auto	4.948	-0.015	0.000	597007	576658	13C2-PFHxA_IS	2.4565	ng/mL	
13C5-PFHxA_IS	Auto	4.948	-0.015	----	597007	597007	----	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	4.948	-0.015	----	576658	576658	----	2.5000	ng/mL	
PFHxA	M	4.945	-0.020	-0.003	1239	597007	13C5-PFHxA_IS	-0.0021	ng/mL	
PFEESA	ND(W/B)	----	----	----	----	597007	13C5-PFHxA_IS	----	ng/mL	
13C3-HFPO-DA	Auto	5.425	-0.014	0.477	645777	576658	13C2-PFHxA_IS	11.4398	ng/mL	
13C3-HFPO-DA_IS	Auto	5.425	-0.014	----	645777	645777	----	10.0000	ng/mL	
HFPO-DA	ND(W/B)	----	----	----	----	645777	13C3-HFPO-DA_IS	----	ng/mL	
5_3 FTCA	M	5.861	-0.010	0.913	347	597007	13C5-PFHxA_IS	0.0225	ng/mL	
PFPeS	M	6.000	-0.003	-1.062	233	237461	13C3-PFHxS_IS	0.0019	ng/mL	
13C4-PFHpA	Auto	6.130	-0.013	1.182	609256	576658	13C2-PFHxA_IS	2.7693	ng/mL	
13C4-PFHpA_IS	Auto	6.130	-0.013	----	609256	609256	----	2.5000	ng/mL	
PFHpA	M	6.112	-0.032	-0.018	5415	609256	13C4-PFHpA_IS	-0.0133	ng/mL	
DONA	ND(W/B)	----	----	----	----	645777	13C3-HFPO-DA_IS	----	ng/mL	
13C2-6_2 FTS_IS	Auto	6.772	-0.012	----	180101	180101	----	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.772	-0.012	-0.291	180101	216206	18O2-PFHxS_IS	6.4001	ng/mL	
6_2 FTS	M	6.770	-0.013	-0.002	872	180101	13C2-6_2 FTS_IS	0.0106	ng/mL	IRr
13C4-PFOA_IS	Auto	7.089	-0.010	----	46172	46172	----	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.088	-0.012	----	642362	642362	----	2.5000	ng/mL	
13C8-PFOA	Auto	7.088	-0.012	-0.001	642362	46172	13C4-PFOA_IS	2.4891	ng/mL	
PFOA	M	7.086	-0.016	-0.002	4666	642362	13C8-PFOA_IS	-0.0156	ng/mL	
13C3-PFHxS	Auto	7.062	-0.012	-0.001	237461	216206	18O2-PFHxS_IS	2.5588	ng/mL	
13C3-PFHxS_IS	Auto	7.062	-0.012	----	237461	237461	----	2.5000	ng/mL	
PFHxS	M	7.061	-0.013	-0.001	911	237461	13C3-PFHxS_IS	-0.0112	ng/mL	
18O2-PFHxS_IS	Auto	7.063	-0.012	----	216206	216206	----	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.938	-0.011	----	295449	295449	----	1.2500	ng/mL	
13C9-PFNA	Auto	7.938	-0.011	-0.001	295449	311185	13C5-PFNA_IS	1.2126	ng/mL	
13C5-PFNA_IS	Auto	7.939	-0.010	----	311185	311185	----	1.2500	ng/mL	
PFNA	M	7.935	-0.015	-0.003	4020	295449	13C9-PFNA_IS	-0.0069	ng/mL	
PFHpS	ND(W/B)	----	----	----	----	112260	13C8-PFOS_IS	----	ng/mL	
7_3 FTCA	MI R1 R2	7.917	-0.012	2.969	699	597007	13C5-PFHxA_IS	0.0339	ng/mL	
13C2-8_2-FTS	Auto	8.395	-0.009	1.332	166951	216206	18O2-PFHxS_IS	7.2224	ng/mL	
13C2-8_2-FTS_IS	Auto	8.395	-0.009	----	166951	166951	----	5.0000	ng/mL	
8_2 FTS	ND(W/B)	----	----	----	----	166951	13C2-8_2-FTS_IS	----	ng/mL	
13C6-PFDA_IS	Auto	8.704	-0.010	----	216350	216350	----	1.2500	ng/mL	
13C6-PFDA	Auto	8.704	-0.010	-0.001	216350	212527	13C2-PFDA_IS	1.2653	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_012 (continued)

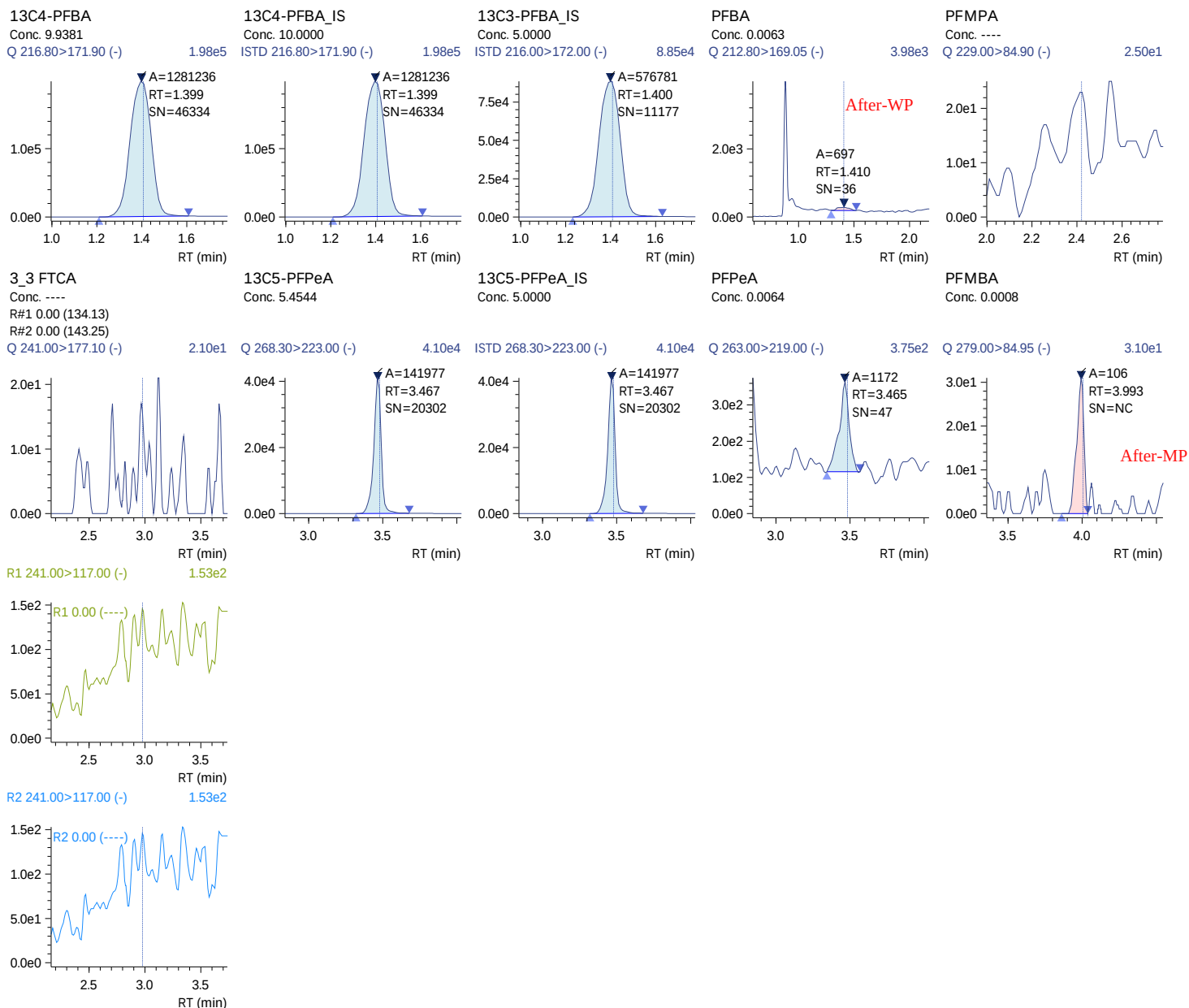
(Table continued from previous page)

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C2-PFDA_IS	Auto	8.705	-0.010	----	212527	212527	----	1.2500	ng/mL	
PFDA	M	8.703	-0.013	-0.001	3753	216350	13C6-PFDA_IS	-0.0073	ng/mL	
D3-NMeFOSAA_IS	Auto	8.838	-0.010	----	281455	281455	----	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.838	-0.010	0.037	281455	264916	13C4-PFOS_IS	6.1214	ng/mL	
13C8-PFOS_IS	Auto	8.800	-0.011	----	112260	112260	----	2.5000	ng/mL	
13C8-PFOS	Auto	8.800	-0.011	-0.001	112260	264916	13C4-PFOS_IS	2.5409	ng/mL	
13C4-PFOS_IS	Auto	8.801	-0.010	----	264916	264916	----	2.5000	ng/mL	
PFOS	M	8.802	-0.011	0.002	446	112260	13C8-PFOS_IS	0.0038	ng/mL	
NMeFOSAA	M	8.820	-0.033	-0.018	62	281455	D3-NMeFOSAA_IS	0.0008	ng/mL	
D5-NetFOSAA_IS	Auto	9.167	-0.011	----	339825	339825	----	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.167	-0.011	0.366	339825	264916	13C4-PFOS_IS	6.1778	ng/mL	
NetFOSAA	ND(W/B)	----	----	----	----	339825	D5-NetFOSAA_IS	----	ng/mL	
9-CI-PF3ONS	M	9.375	-0.003	3.950	404	645777	13C3-HFPO-DA_IS	0.0008	ng/mL	IRr
PFUnDA	M	9.430	-0.010	0.002	2873	262349	13C7-PFUnDA_IS	-0.0146	ng/mL	
13C7-PFUnDA_IS	Auto	9.428	-0.010	----	262349	262349	----	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.428	-0.010	0.723	262349	212527	13C2-PFDA_IS	1.2863	ng/mL	
PFNS	ND(W/B)	----	----	----	----	112260	13C8-PFOS_IS	----	ng/mL	
10_2_FTS	ND(W/B)	----	----	----	----	166951	13C2-8_2-FTS_IS	----	ng/mL	
13C2-PFDOA_IS	Auto	10.117	-0.010	----	293890	293890	----	1.2500	ng/mL	
13C2-PFDOA	Auto	10.117	-0.010	1.412	293890	212527	13C2-PFDA_IS	1.2542	ng/mL	
PFDOA	M	10.118	-0.010	0.001	2838	293890	13C2-PFDOA_IS	-0.0157	ng/mL	
PFDS	ND(W/B)	----	----	----	----	112260	13C8-PFOS_IS	----	ng/mL	
PFTDA	M	10.775	-0.011	-0.635	3502	123086	13C2-PFTDA_IS	-0.0108	ng/mL	
11-CI-PF3OUdS	ND(W/B)	----	----	----	----	645777	13C3-HFPO-DA_IS	----	ng/mL	
PFOSAm	M	11.141	-0.002	0.002	431	272189	13C8-PFOSAm_IS	0.0048	ng/mL	
13C8-PFOSAm	Auto	11.139	-0.004	2.338	272189	264916	13C4-PFOS_IS	2.4203	ng/mL	
13C8-PFOSAm_IS	Auto	11.139	-0.004	----	272189	272189	----	2.5000	ng/mL	
PFTDA	M	11.409	-0.011	-0.001	2730	123086	13C2-PFTDA_IS	-0.0072	ng/mL	
13C2-PFTDA	Auto	11.410	-0.009	2.705	123086	212527	13C2-PFDA_IS	1.2166	ng/mL	
13C2-PFTDA_IS	Auto	11.410	-0.009	----	123086	123086	----	1.2500	ng/mL	
PFDoS	ND(W/B)	----	----	----	----	112260	13C8-PFOS_IS	----	ng/mL	
D7-MeFOSE_IS	Auto	13.377	-0.004	----	696611	696611	----	25.0000	ng/mL	
D7-MeFOSE	Auto	13.377	-0.004	4.576	696611	264916	13C4-PFOS_IS	25.1239	ng/mL	
MeFOSE	M	13.417	-0.001	0.040	677	696611	D7-MeFOSE_IS	0.0264	ng/mL	
13C2-PFHxDA_IS	Auto	12.627	-0.009	----	473777	473777	----	2.5000	ng/mL	
13C2-PFHxDA	Auto	12.627	-0.009	3.922	473777	212527	13C2-PFDA_IS	2.3999	ng/mL	
PFHxDA	M	12.627	-0.010	0.000	3450	473777	13C2-PFHxDA_IS	-0.0101	ng/mL	
D3-MeFOSA	Auto	13.685	-0.002	4.884	61460	264916	13C4-PFOS_IS	2.7137	ng/mL	
D3-MeFOSA_IS	Auto	13.685	-0.002	----	61460	61460	----	2.5000	ng/mL	
MeFOSA	ND(W/B)	----	----	----	----	61460	D3-MeFOSA_IS	----	ng/mL	
D9-EtFOSE_IS	Auto	14.006	-0.003	----	743623	743623	----	25.0000	ng/mL	
D9-EtFOSE	Auto	14.006	-0.003	5.205	743623	264916	13C4-PFOS_IS	26.4060	ng/mL	
EtFOSE	ND(W/B)	----	----	----	----	743623	D9-EtFOSE_IS	----	ng/mL	
D5-EtFOSAm	Auto	14.362	-0.003	5.561	75354	264916	13C4-PFOS_IS	2.4990	ng/mL	
D5-EtFOSAm_IS	Auto	14.362	-0.003	----	75354	75354	----	2.5000	ng/mL	
EtFOSAm	ND(W/B)	----	----	----	----	75354	D5-EtFOSAm_IS	----	ng/mL	
PFODA	M	13.770	-0.004	1.143	1422	473777	13C2-PFHxDA_IS	0.0133	ng/mL	

Flag ID key: IRr: Ion Ratio (Relative)



240119_012 (continued)





240119_012 (continued)

13C2-4_2 FTS
Conc. 6.9272

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. ----
R#1 0.00 (34.14)
R#2 0.00 (31.50)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 0.0013
R#1 59.79 (47.53)
R#2 59.79 (48.74)

Q 329.10>80.90 (-)

6.26e4

ISTD 329.10>80.90 (-)

6.26e4

Q 327.10>307.00 (-)

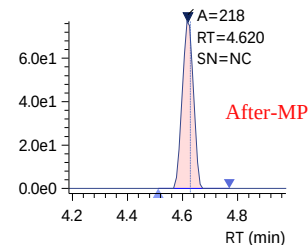
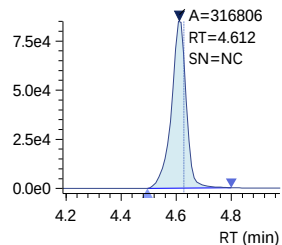
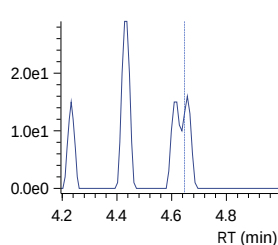
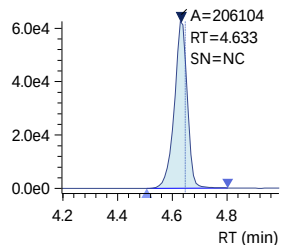
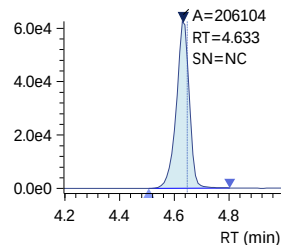
2.90e1

ISTD 302.10>79.90 (-)

8.50e4

Q 298.70>79.90 (-)

7.70e1

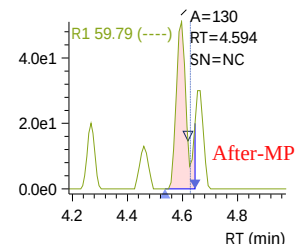
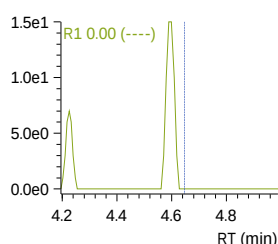


R1 327.10>80.90 (-)

1.50e1

R1 298.70>98.80 (-)

5.10e1

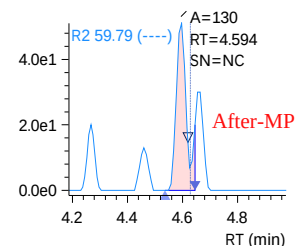
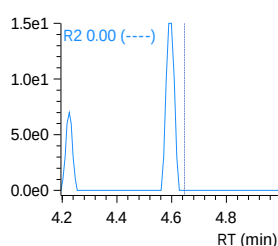


R2 327.10>80.90 (-)

1.50e1

R2 298.70>98.80 (-)

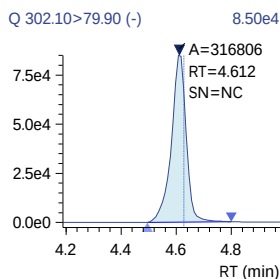
5.10e1





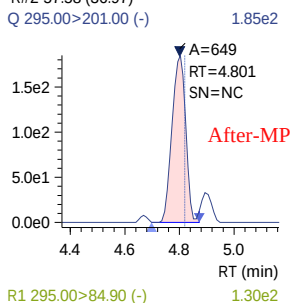
240119_012 (continued)

13C3-PFBS
Conc. 2.5821

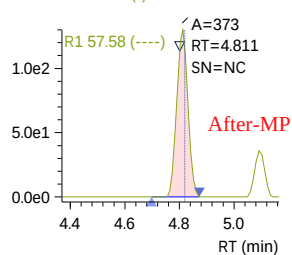


NFDHA
Conc. 0.0049

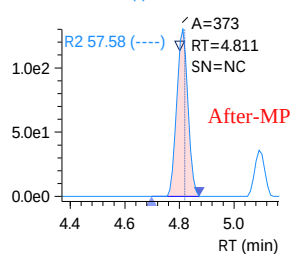
R#1 57.58 (37.88)
R#2 57.58 (36.97)



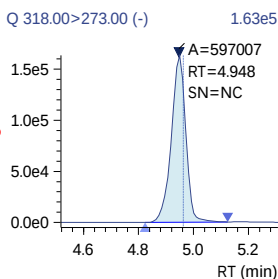
R1 295.00>84.90 (-) 1.30e2



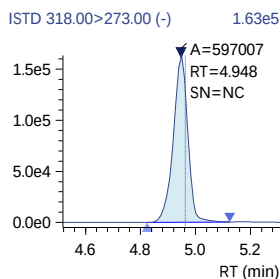
R2 295.00>84.90 (-) 1.30e2



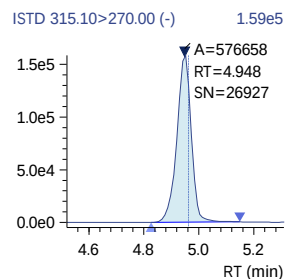
13C5-PFHxA
Conc. 2.4565



13C5-PFHxA_IS
Conc. 2.5000

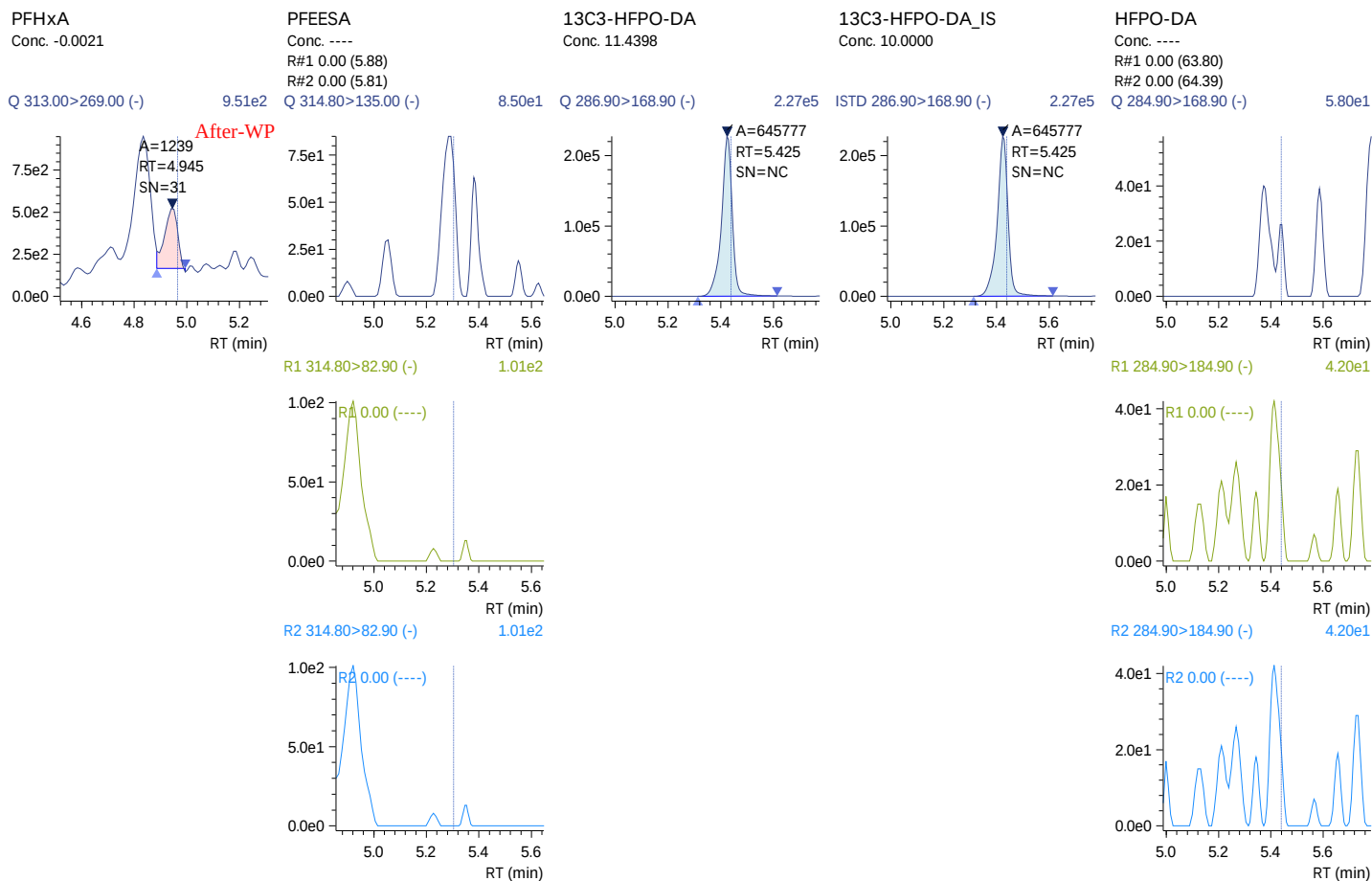


13C2-PFHxA_IS
Conc. 2.5000





240119_012 (continued)

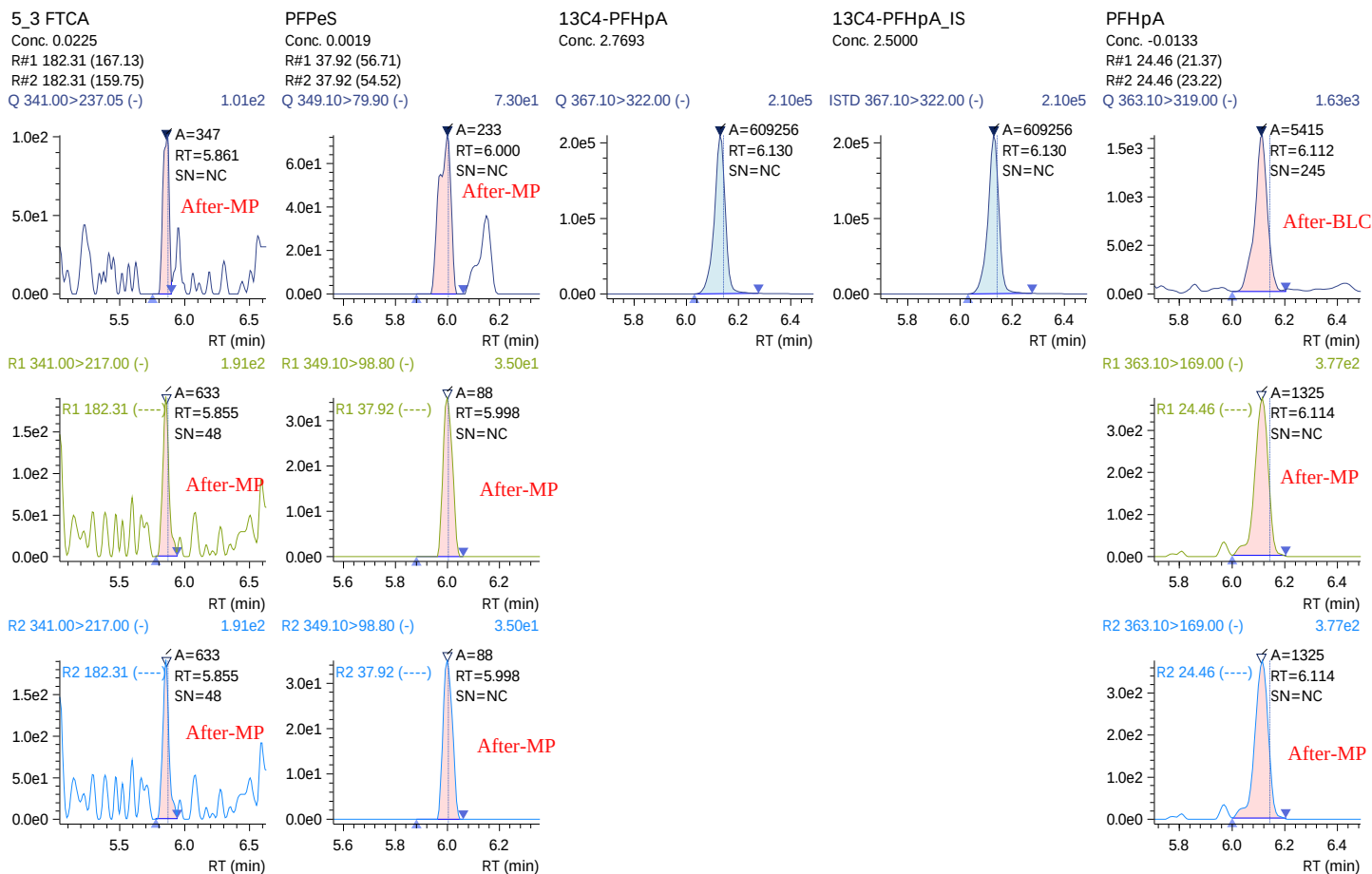


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_012 (continued)

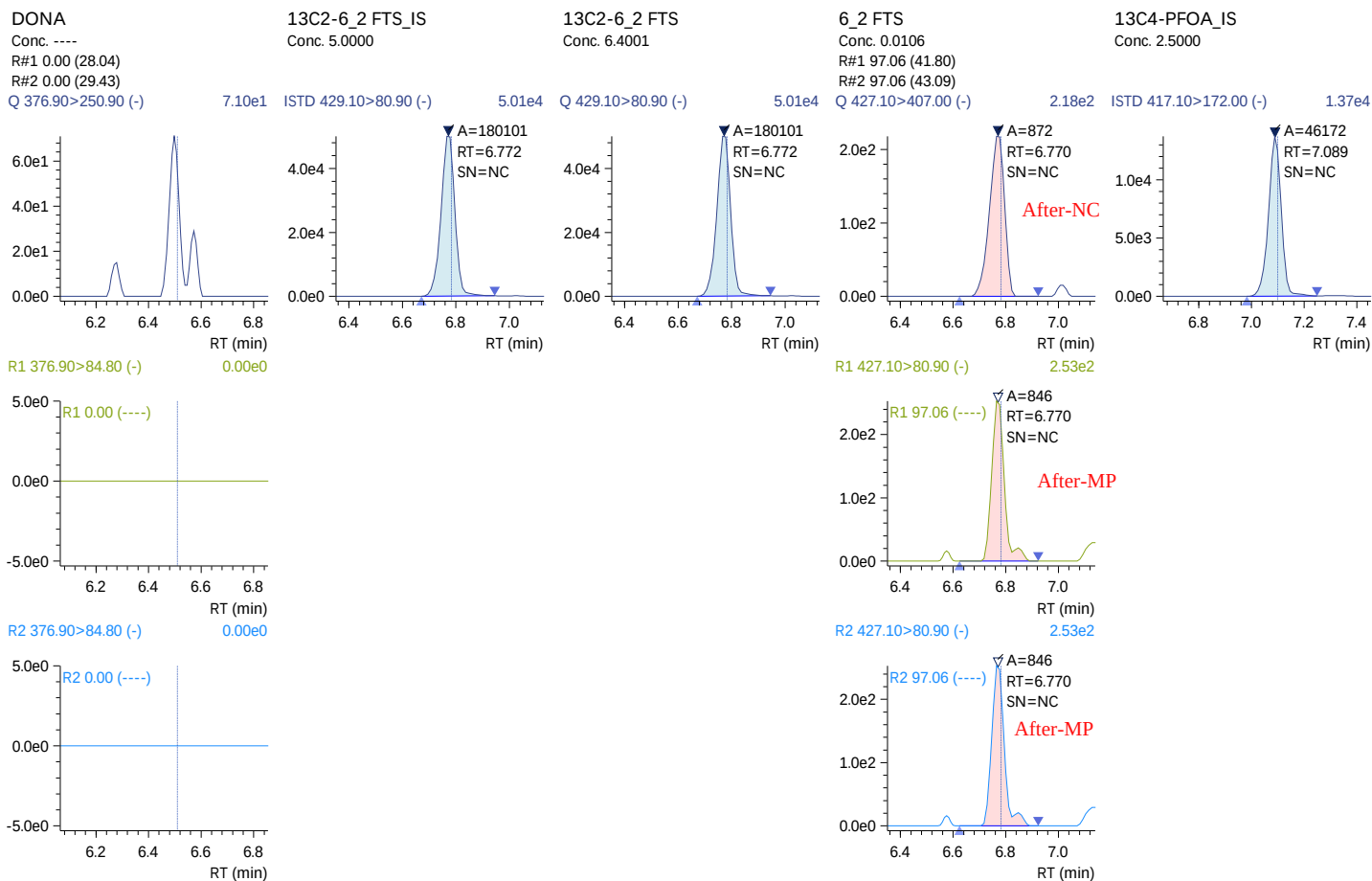


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_012 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_012 (continued)

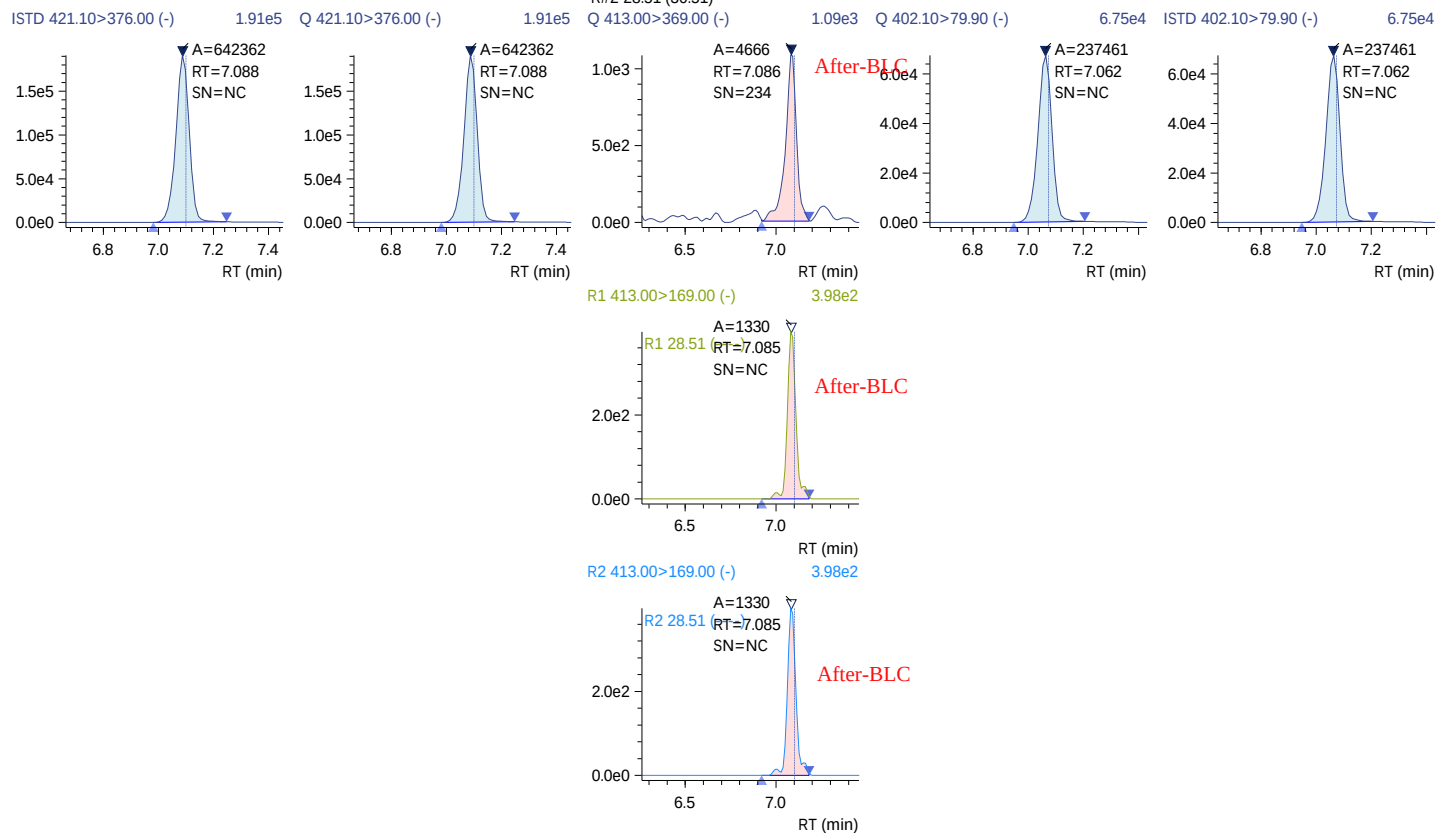
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.4891

PFOA
Conc. -0.0156
R#1 28.51 (29.05)
R#2 28.51 (30.51)

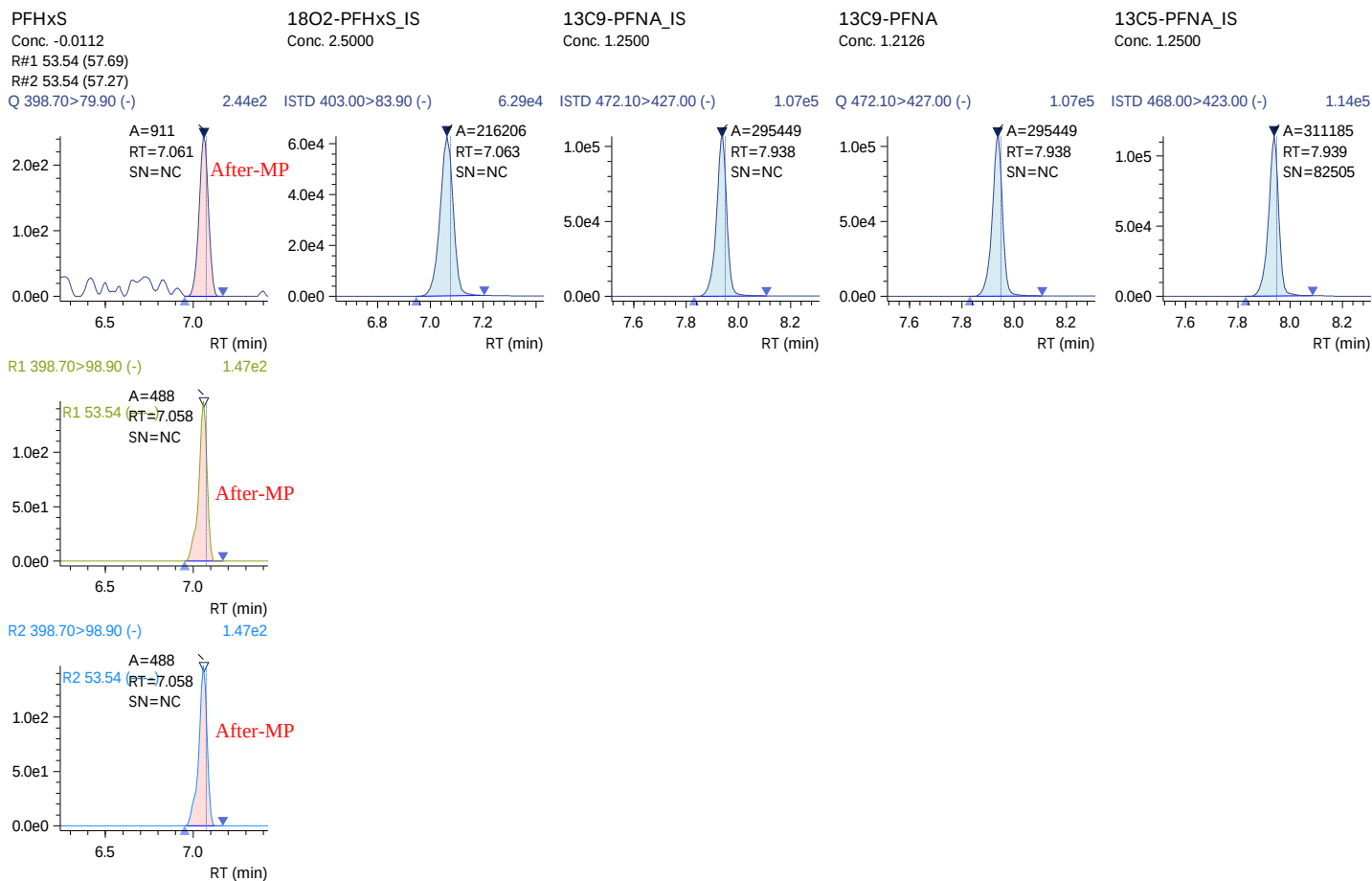
13C3-PFHxS
Conc. 2.5588

13C3-PFHxS_IS
Conc. 2.5000



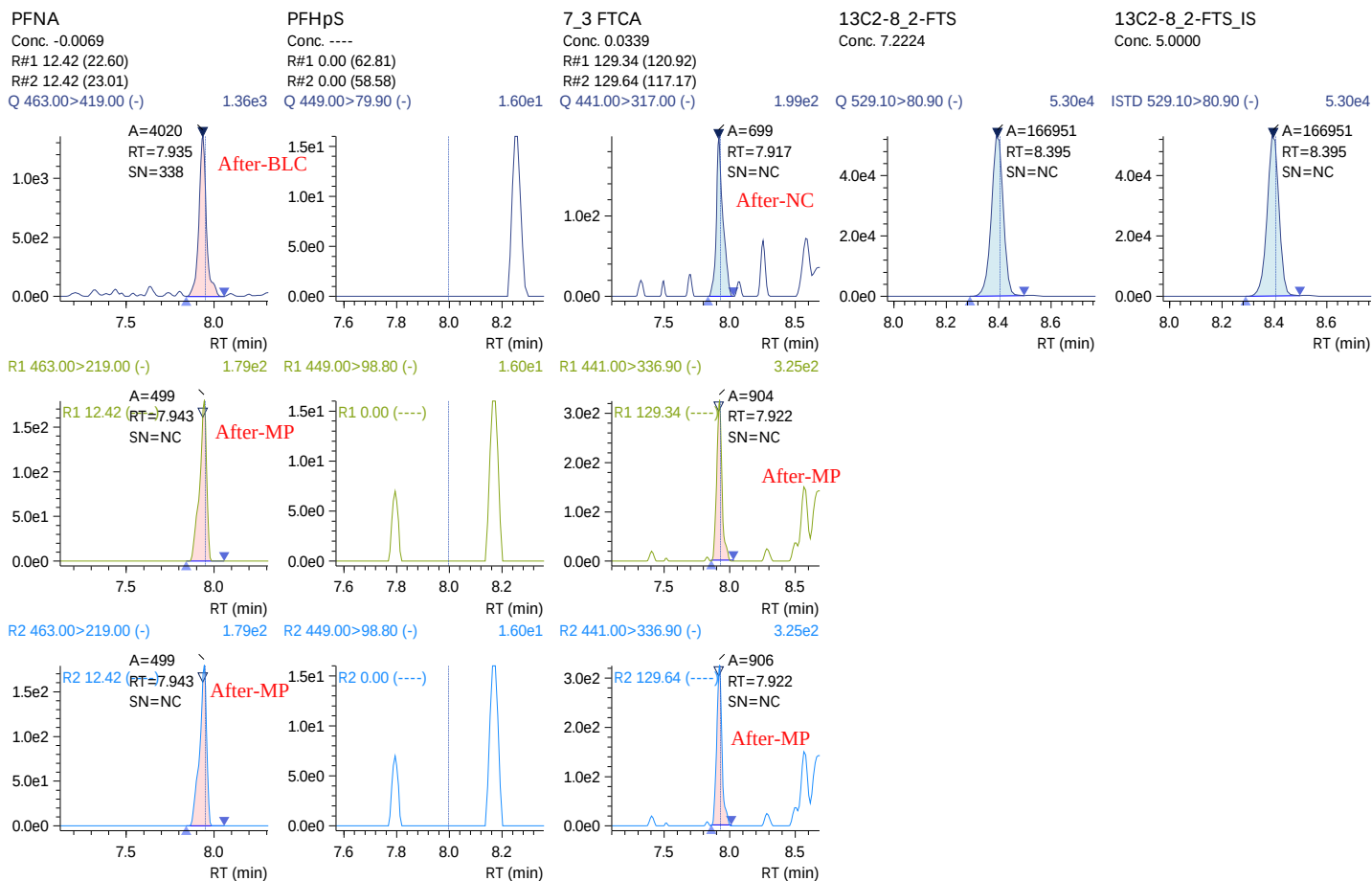


240119_012 (continued)





240119_012 (continued)

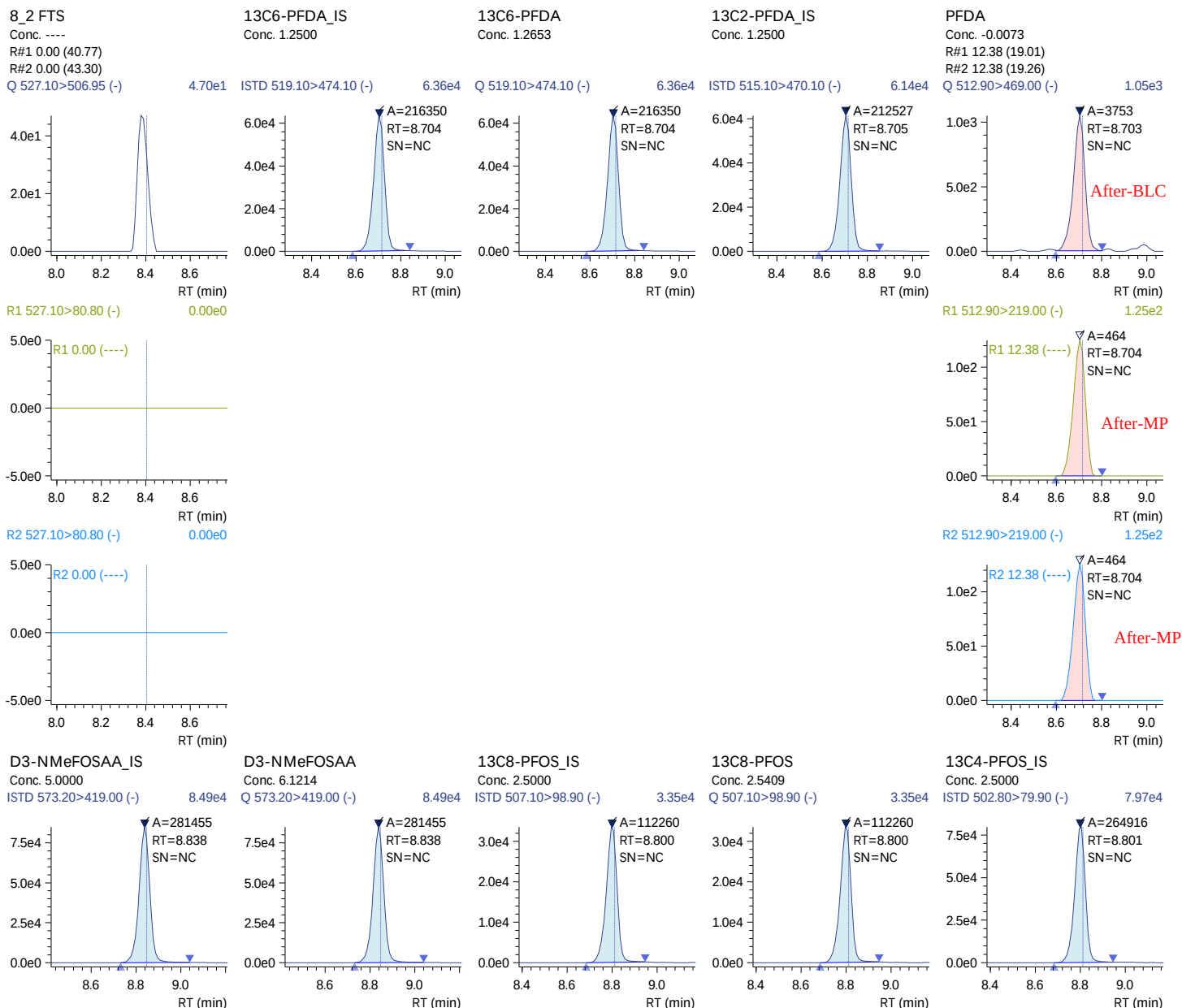


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_012 (continued)

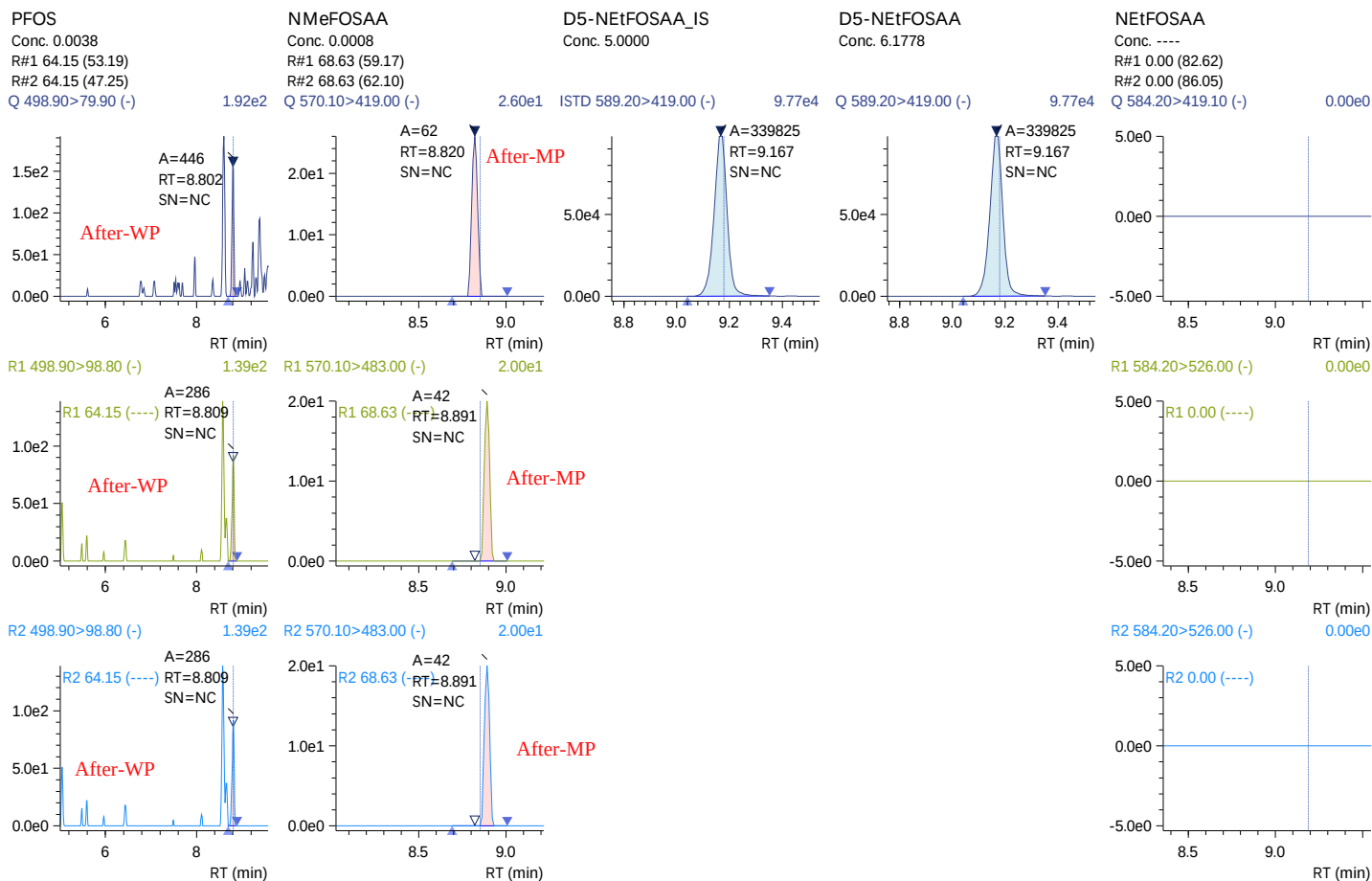


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_012 (continued)



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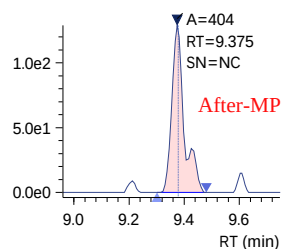
SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



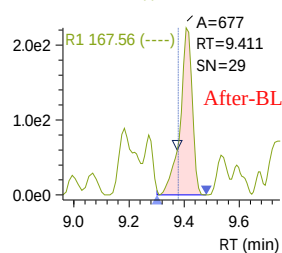
240119_012 (continued)

9-CI-PF3ONS

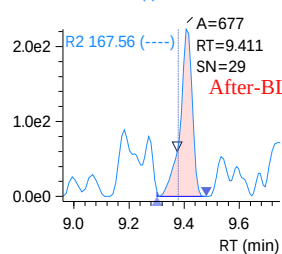
Conc. 0.0008
R#1 167.56 (31.76)
R#2 167.56 (31.74)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-) 2.23e2

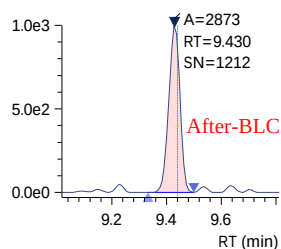


R2 532.80>353.00 (-) 2.23e2

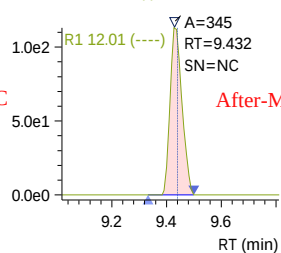


PFUnDA

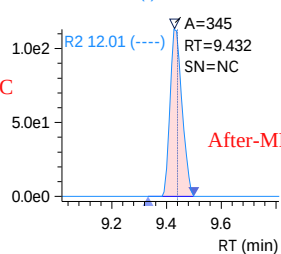
Conc. -0.0146
R#1 12.01 (12.31)
R#2 12.01 (13.26)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-) 1.13e2

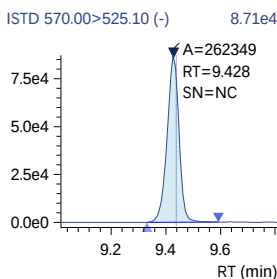


R2 563.10>269.10 (-) 1.13e2



13C7-PFUnDA_IS

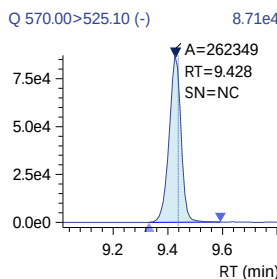
Conc. 1.2500



ISTD 570.00>525.10 (-) 8.71e4

13C7-PFUnDA

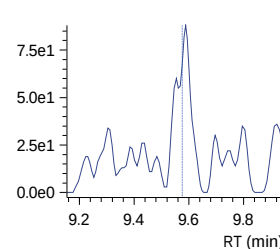
Conc. 1.2863



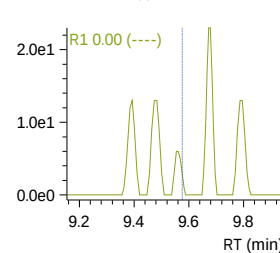
Q 570.00>525.10 (-) 8.71e4

PFNS

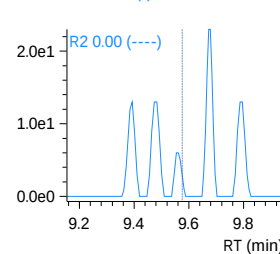
Conc. ----
R#1 0.00 (63.31)
R#2 0.00 (62.49)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-) 2.30e1

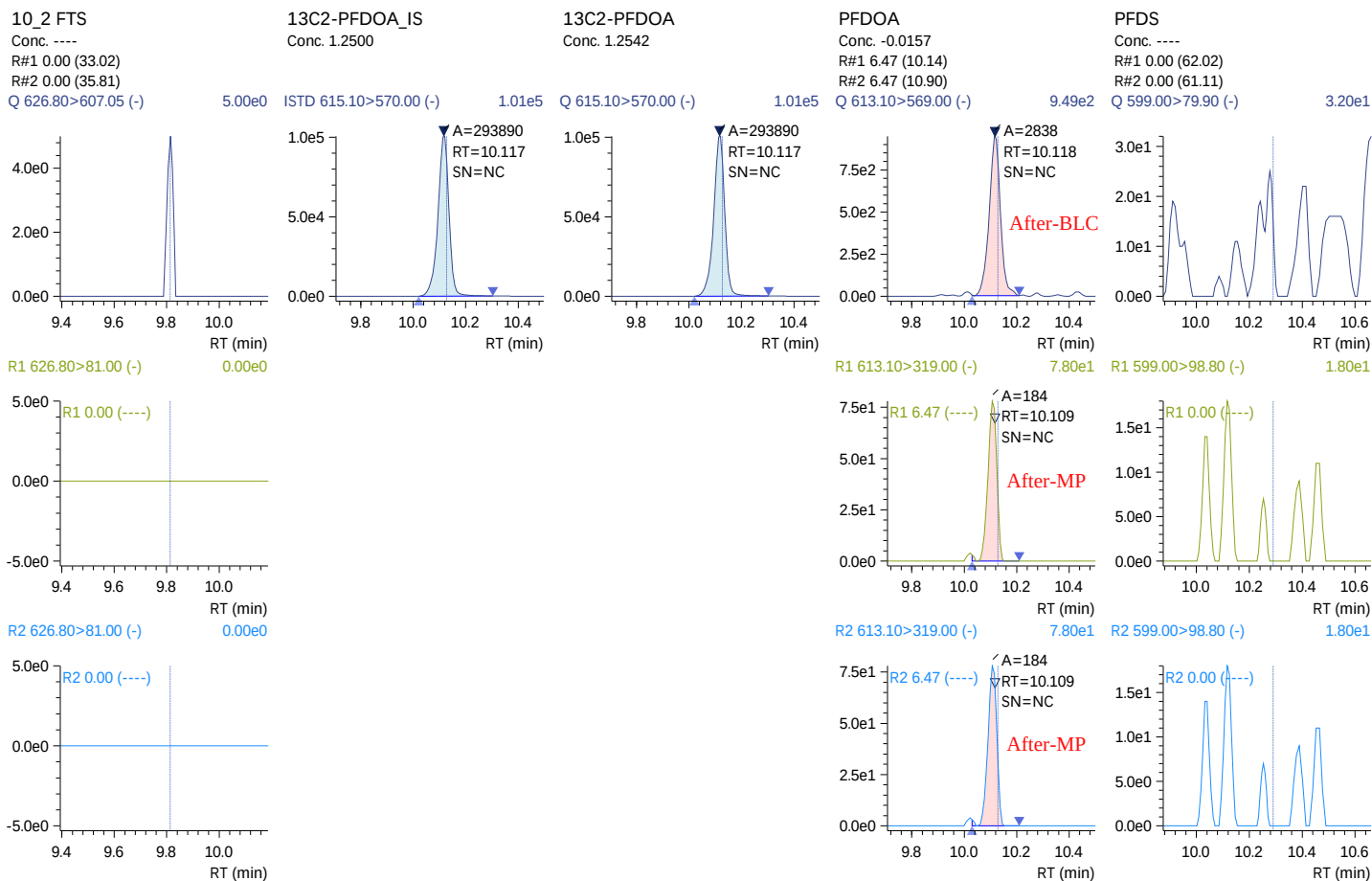


R2 548.80>98.80 (-) 2.30e1





240119_012 (continued)

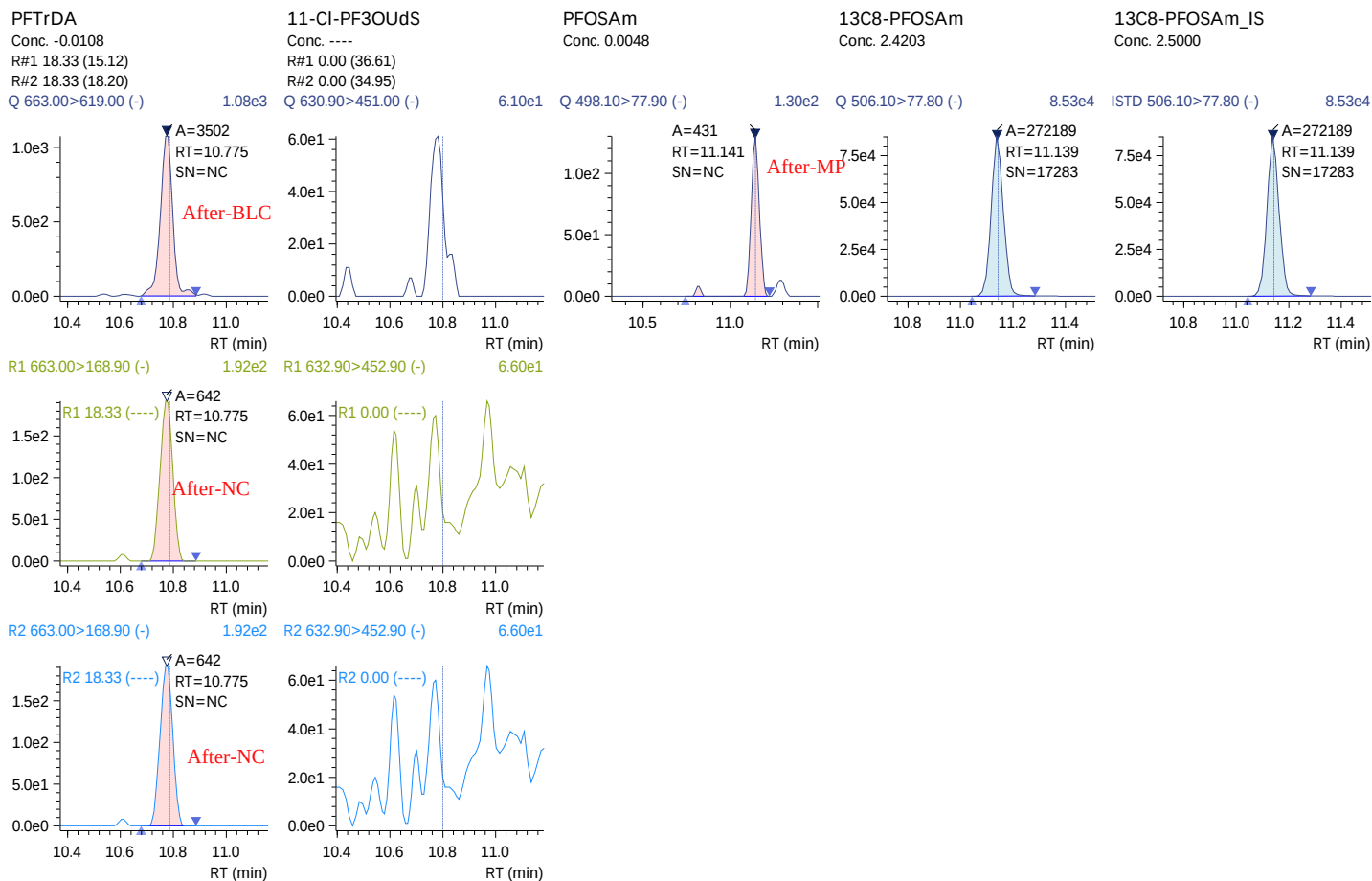


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_012 (continued)

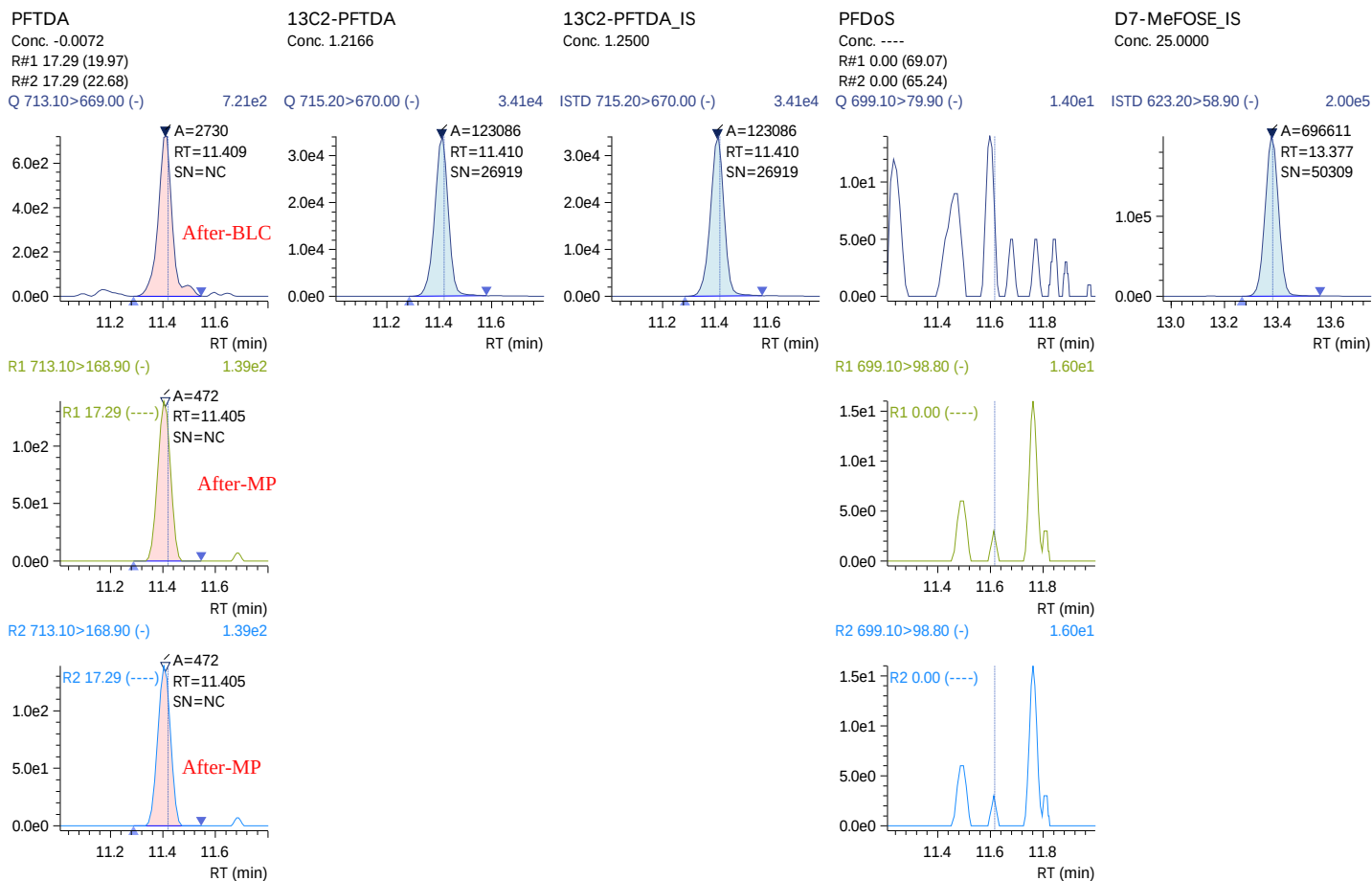


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_012 (continued)





240119_012 (continued)

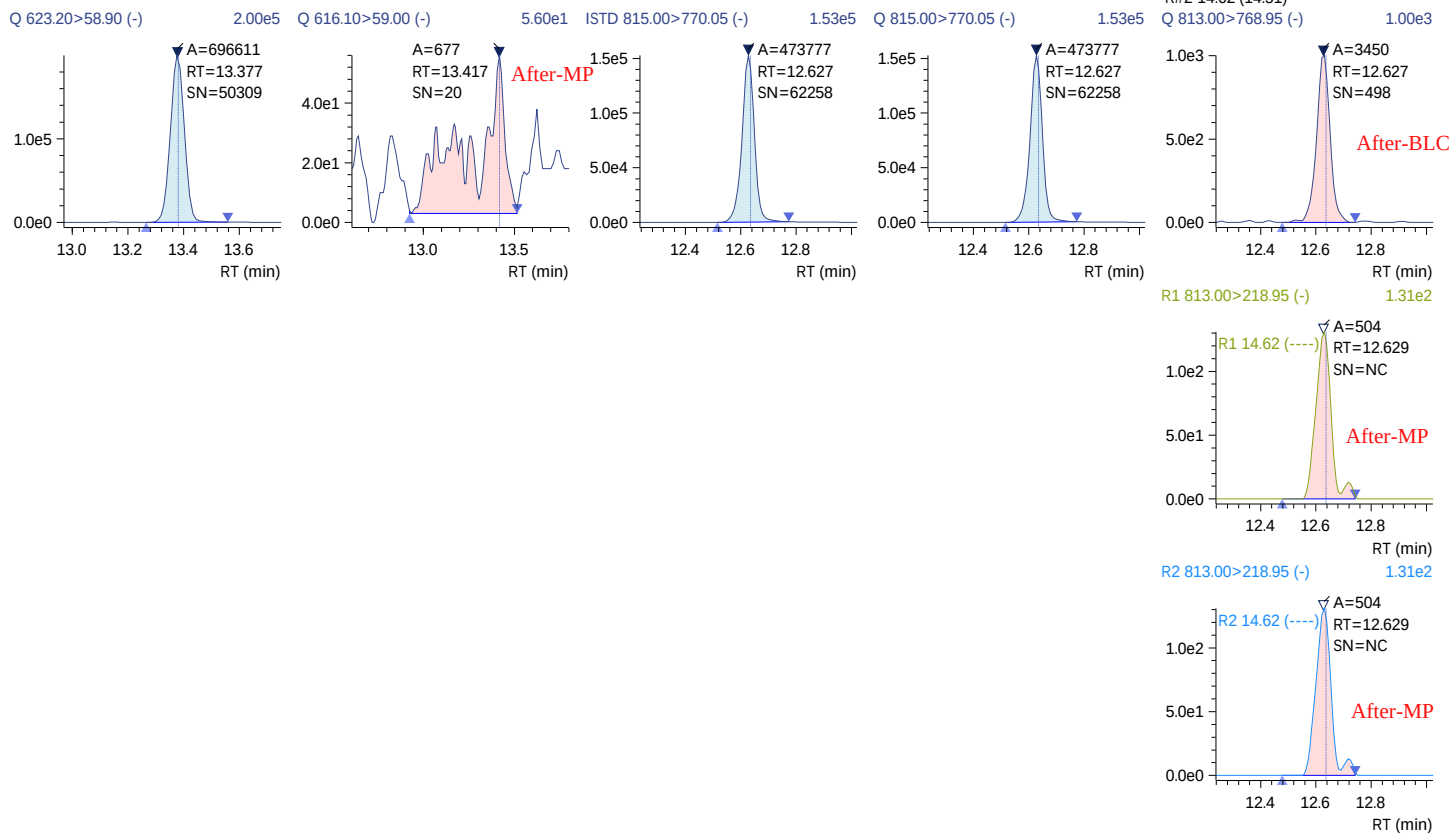
D7-MeFOSE
Conc. 25.1239

MeFOSE
Conc. 0.0264

13C2-PFHXA_IS
Conc. 2.5000

13C2-PFHXA
Conc. 2.3999

PFHXA
Conc. -0.0101
R#1 14.62 (11.64)
R#2 14.62 (14.51)





240119_012 (continued)

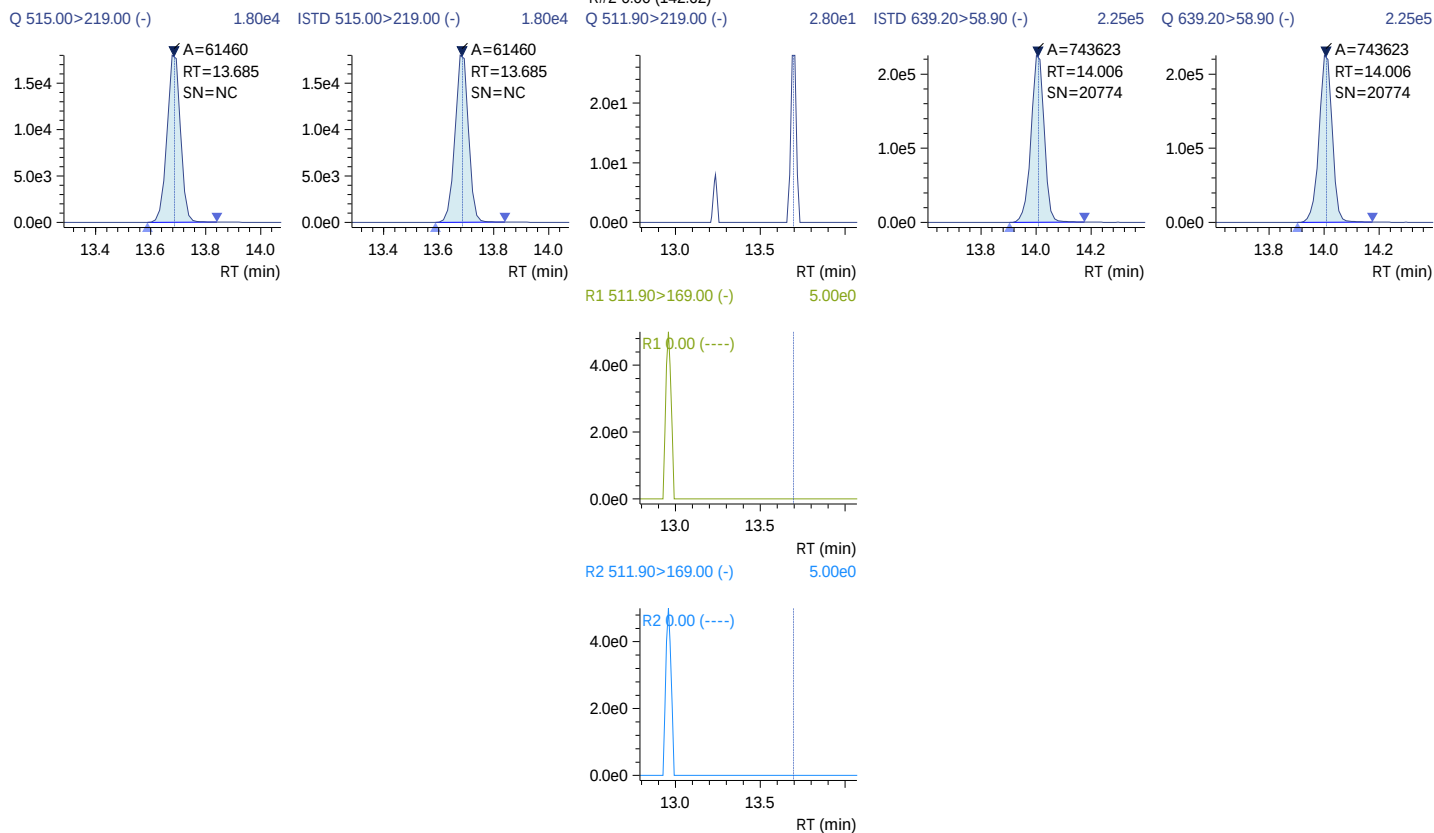
D3-MeFOSA
Conc. 2.7137

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. ----
R#1 0.00 (149.05)
R#2 0.00 (142.62)

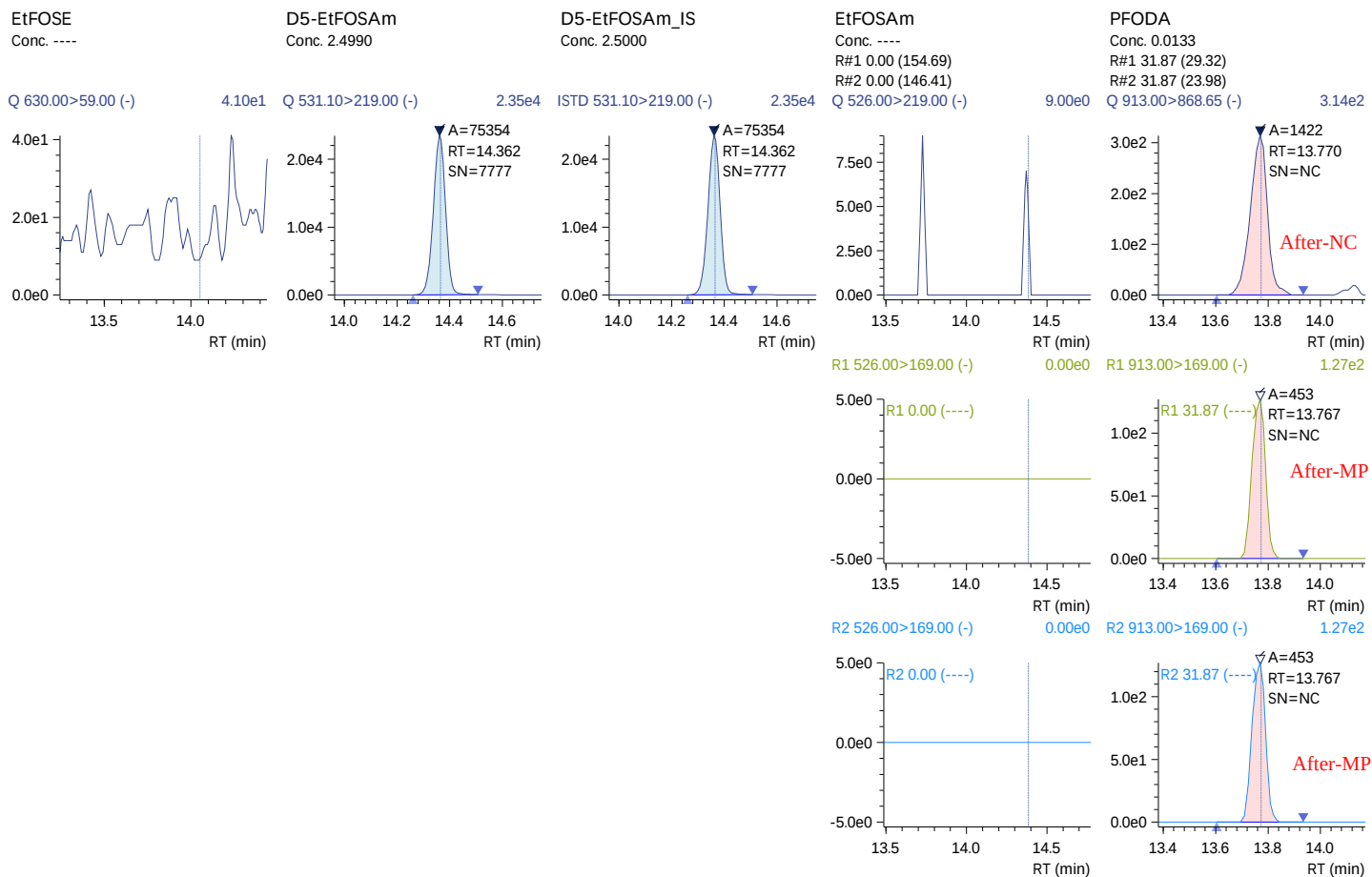
D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 26.4060





240119_012 (continued)



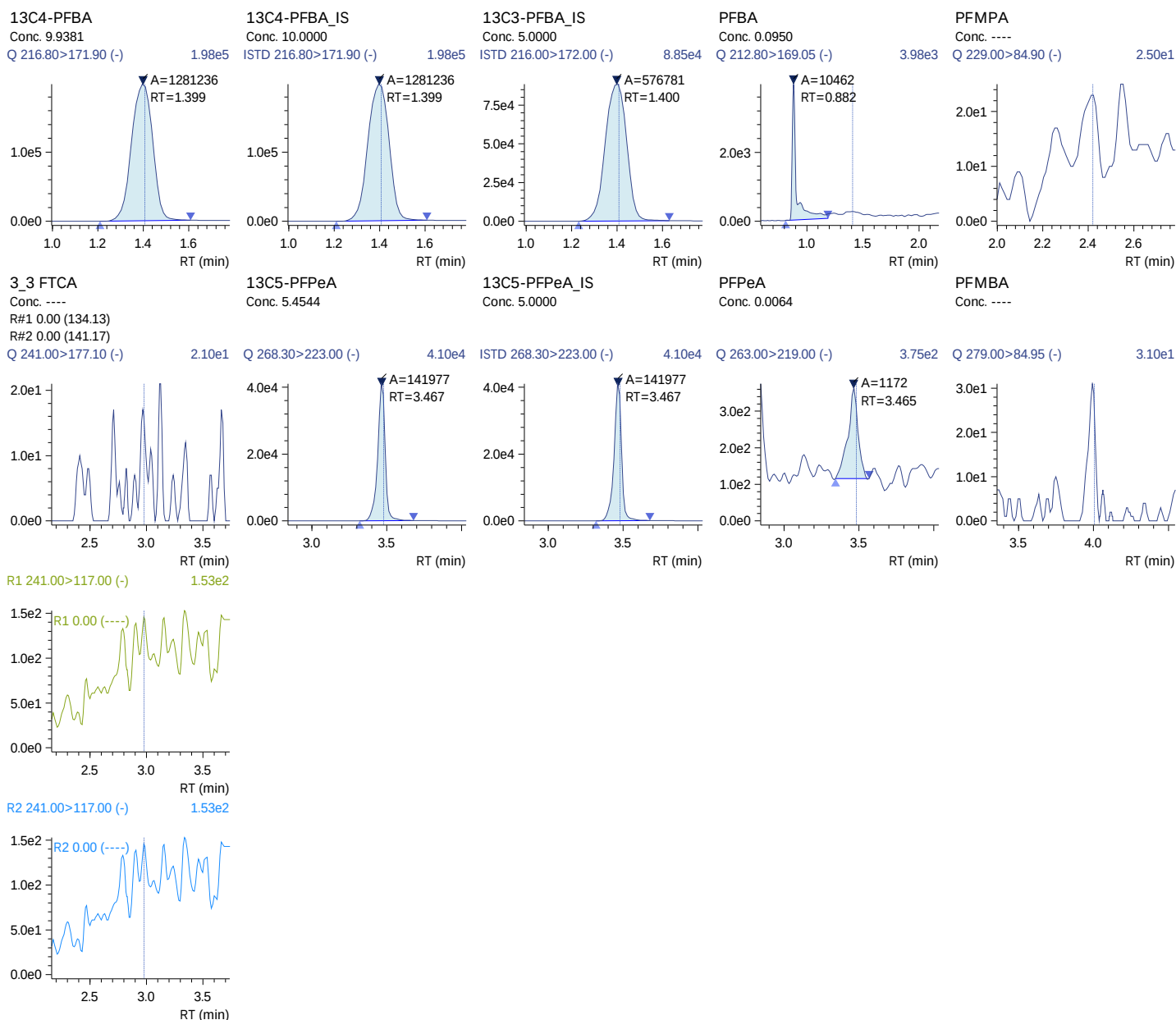
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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_012

Sample ID: 1633 CCB
Date Acquired: 1/19/2024 4:04:20 PM
Acquired by: System Administrator
Data File: 240119_012
Vial: 54 | Inj. Volume: 10.0000uL | Tray: 1





240119_012 (continued)

13C2-4_2 FTS
 Conc. 6.9272

13C2-4_2 FTS_IS
 Conc. 5.0000

4_2 FTS
 Conc. ----
 R#1 0.00 (34.14)
 R#2 0.00 (29.06)

13C3-PFBS_IS
 Conc. 2.5000

PFBS
 Conc. ----
 R#1 0.00 (47.53)
 R#2 0.00 (46.72)

Q 329.10>80.90 (-)

6.26e4

ISTD 329.10>80.90 (-)

6.26e4

Q 327.10>307.00 (-)

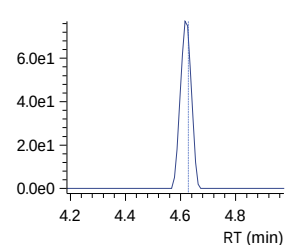
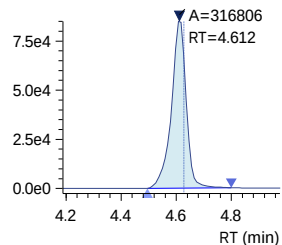
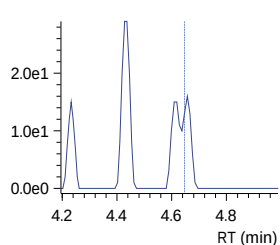
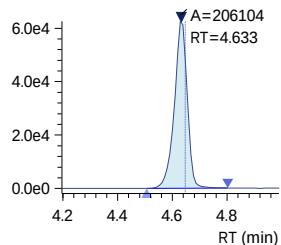
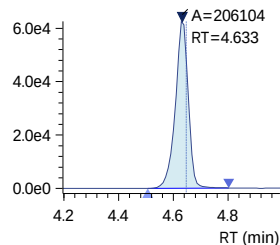
2.90e1

ISTD 302.10>79.90 (-)

8.50e4

Q 298.70>79.90 (-)

7.70e1

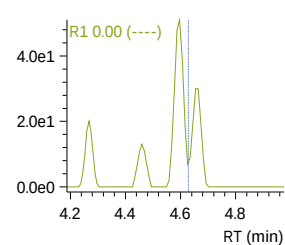
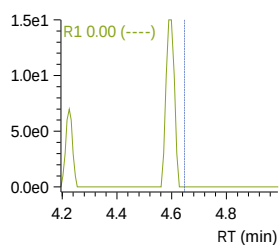


R1 327.10>80.90 (-)

1.50e1

R1 298.70>98.80 (-)

5.10e1

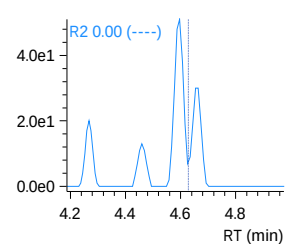
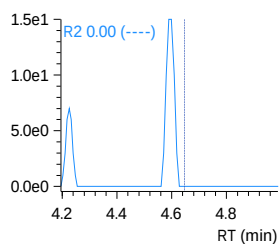


R2 327.10>80.90 (-)

1.50e1

R2 298.70>98.80 (-)

5.10e1





240119_012 (continued)

13C3-PFBS
Conc. 2.5821

NFDHA
Conc. ----
R#1 0.00 (37.88)
R#2 0.00 (40.25)

13C5-PFHxA
Conc. 2.4565

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

Q 302.10>79.90 (-)

8.50e4

Q 295.00>201.00 (-)

1.85e2

Q 318.00>273.00 (-)

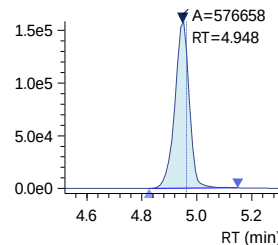
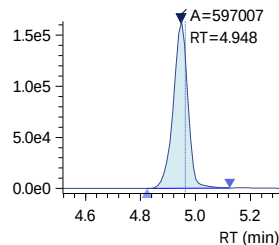
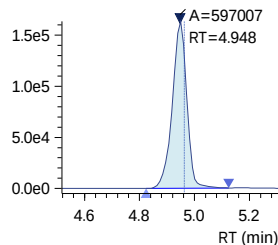
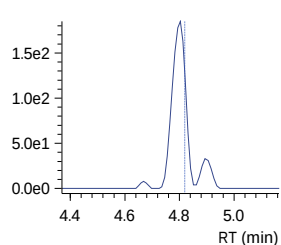
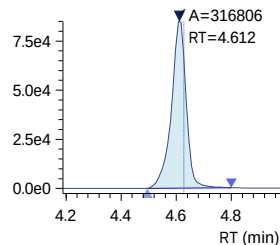
1.63e5

ISTD 318.00>273.00 (-)

1.63e5

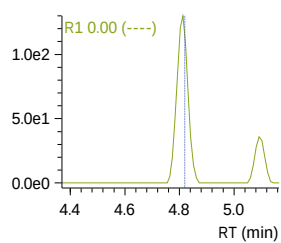
ISTD 315.10>270.00 (-)

1.59e5



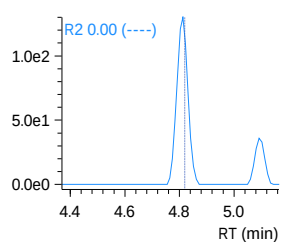
R1 295.00>84.90 (-)

1.30e2



R2 295.00>84.90 (-)

1.30e2

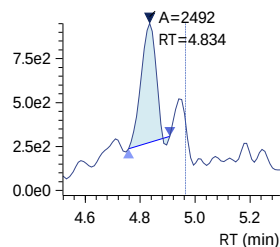




240119_012 (continued)

PFHxA
Conc. 0.0042

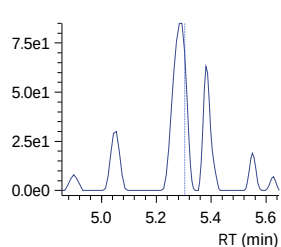
Q 313.00>269.00 (-)



PFEESA
Conc. ----

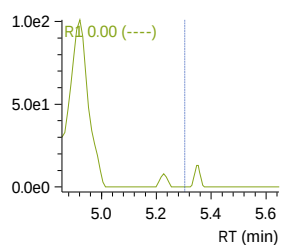
R#1 0.00 (5.88)
R#2 0.00 (6.11)

Q 314.80>135.00 (-)



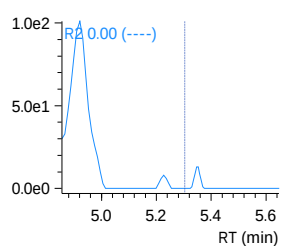
R1 314.80>82.90 (-)

1.01e2



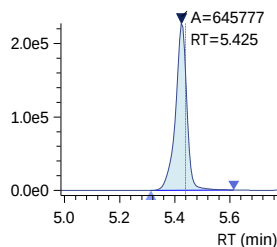
R2 314.80>82.90 (-)

1.01e2



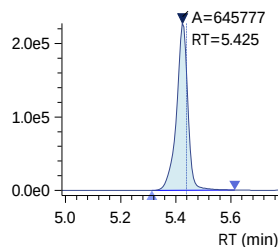
13C3-HFPO-DA
Conc. 11.4398

Q 286.90>168.90 (-)



13C3-HFPO-DA_IS
Conc. 10.0000

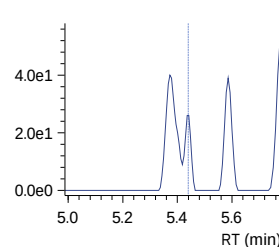
ISTD 286.90>168.90 (-)



HFPO-DA
Conc. ----

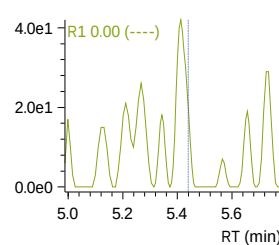
R#1 0.00 (63.80)
R#2 0.00 (65.61)

Q 284.90>168.90 (-)



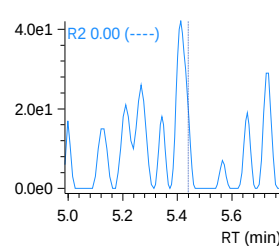
R1 284.90>184.90 (-)

4.20e1



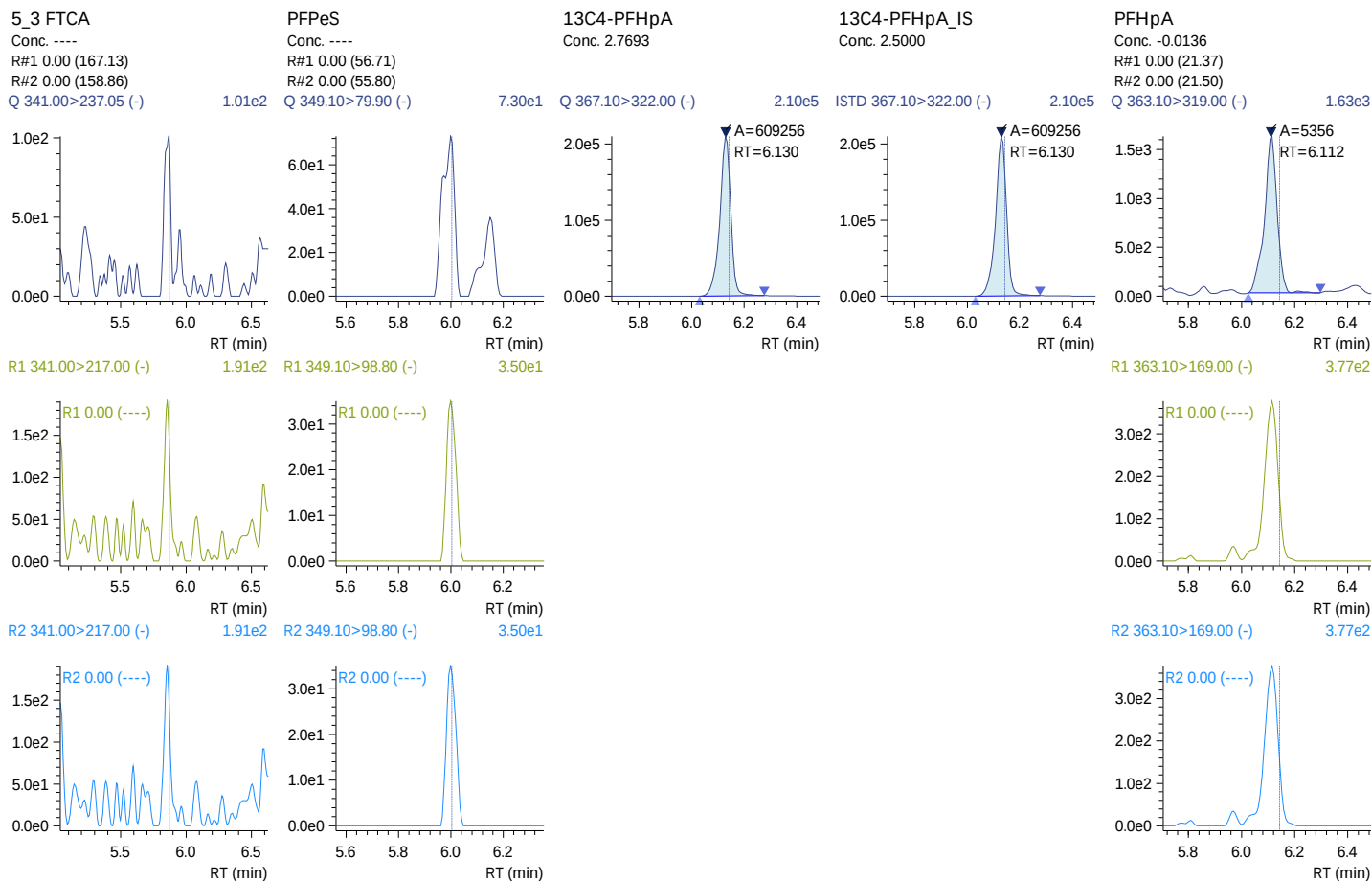
R2 284.90>184.90 (-)

4.20e1



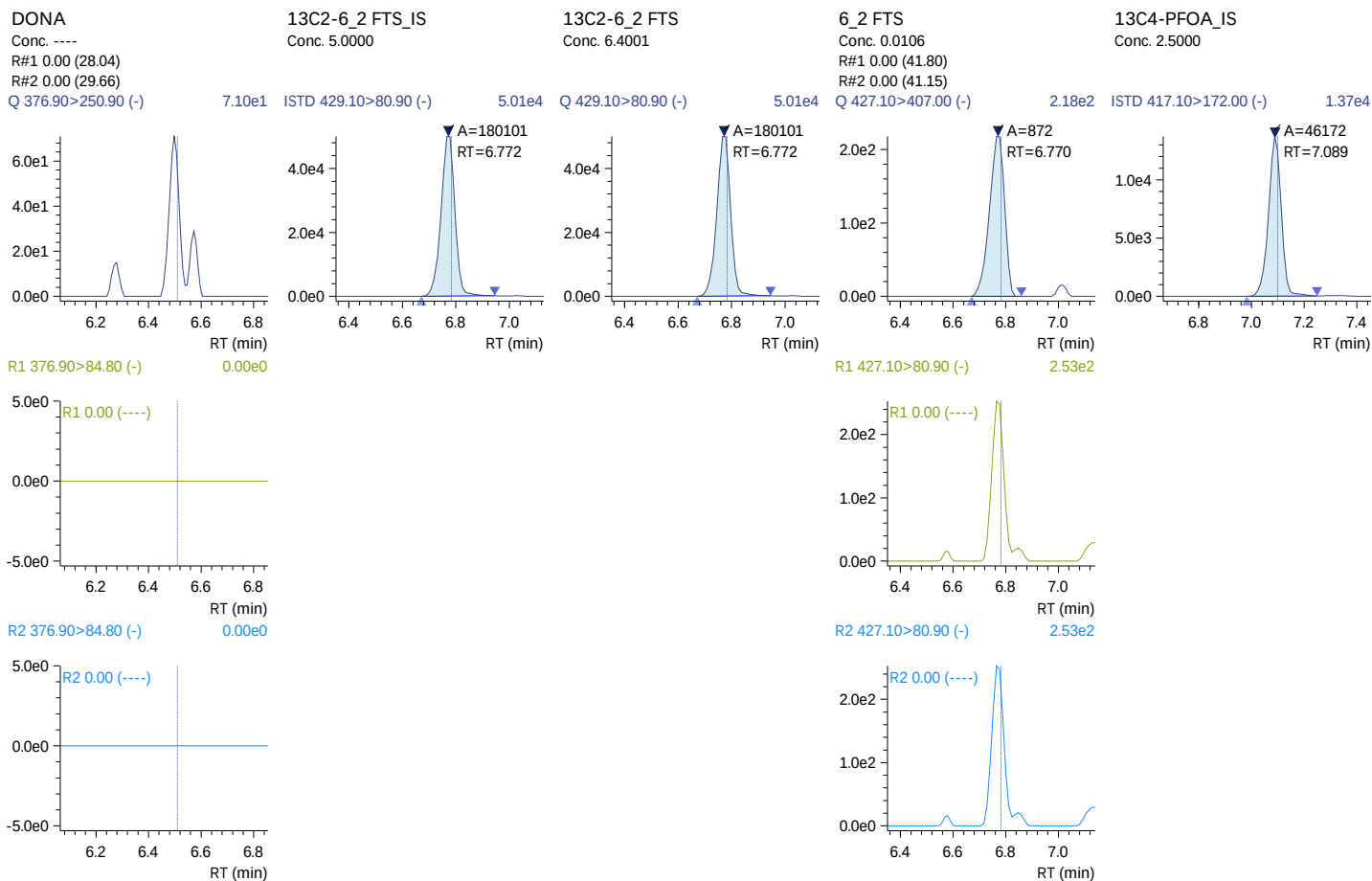


240119_012 (continued)





240119_012 (continued)





240119_012 (continued)

13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.4891

PFOA
Conc. -0.0168
R#1 29.90 (29.05)
R#2 29.90 (31.89)

13C3-PFHxS
Conc. 2.5588

13C3-PFHxS_IS
Conc. 2.5000

ISTD 421.10>376.00 (-)

1.91e5

Q 421.10>376.00 (-)

1.91e5

Q 413.00>369.00 (-)

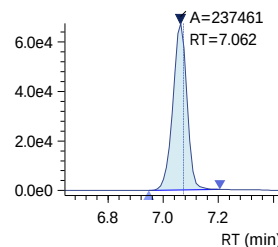
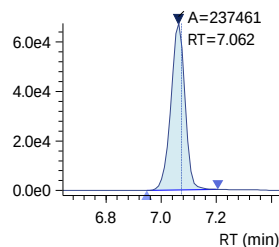
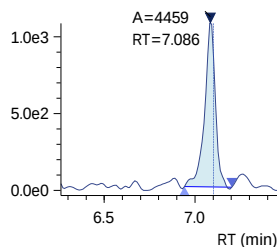
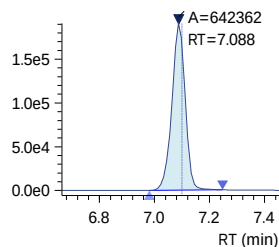
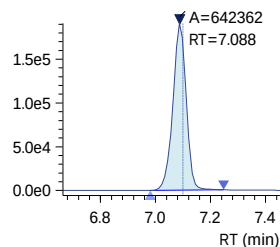
1.09e3

Q 402.10>79.90 (-)

6.75e4

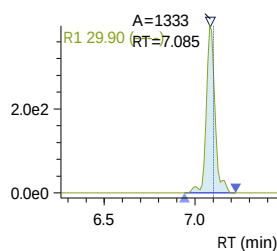
ISTD 402.10>79.90 (-)

6.75e4



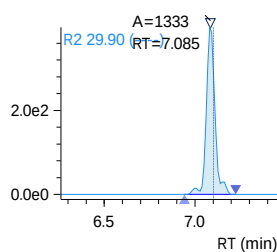
R1 413.00>169.00 (-)

3.98e2



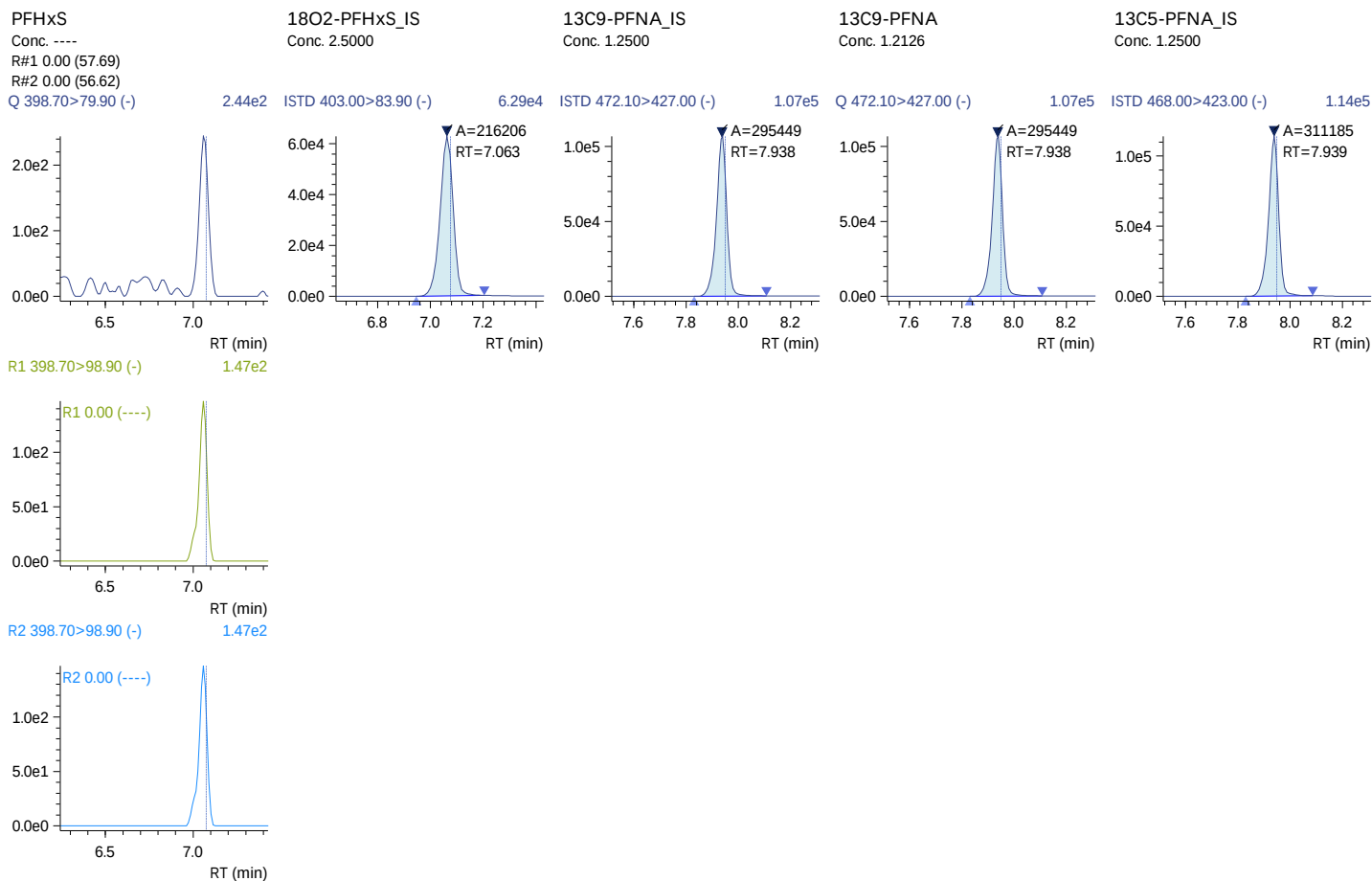
R2 413.00>169.00 (-)

3.98e2



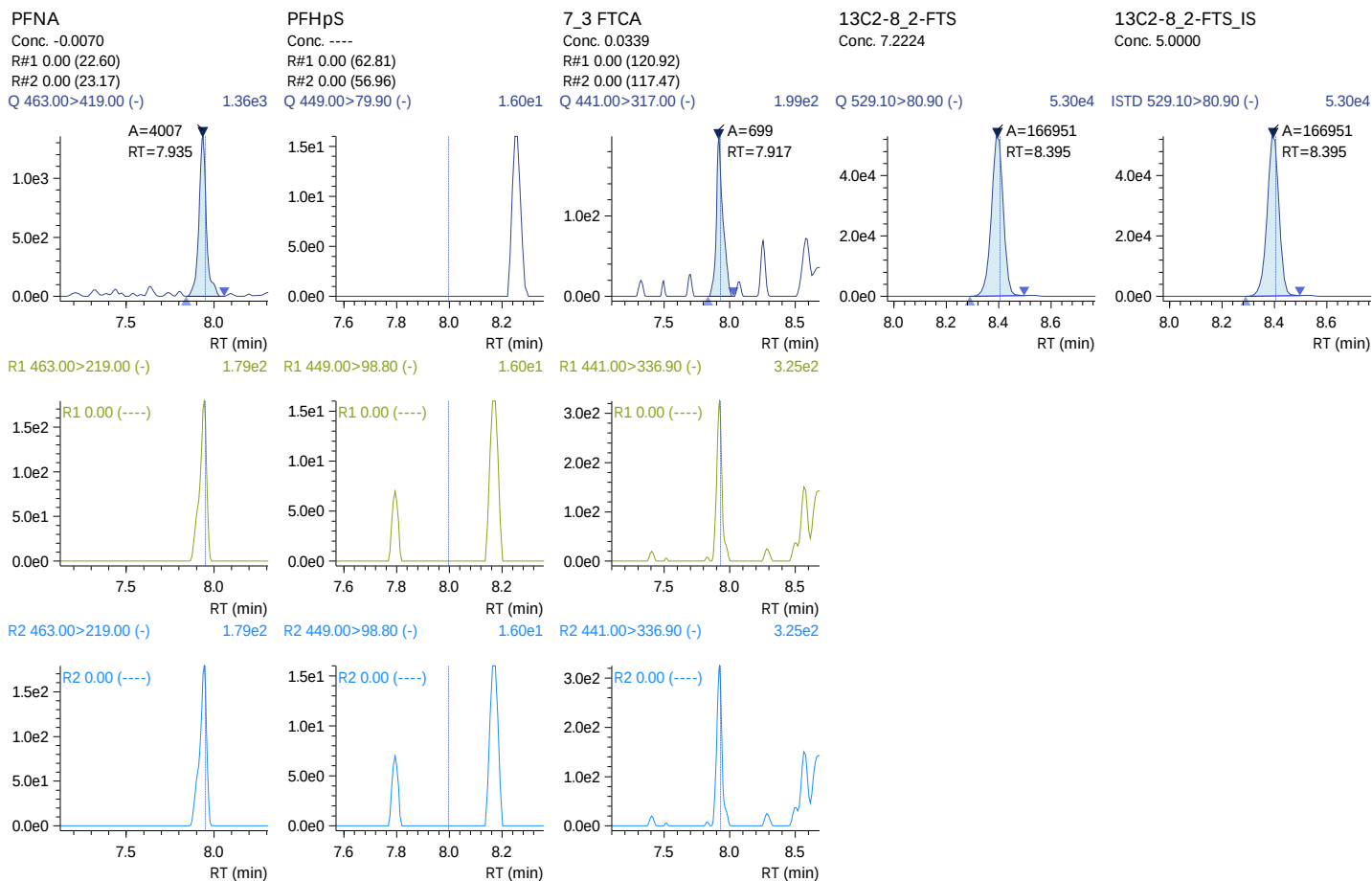


240119_012 (continued)





240119_012 (continued)

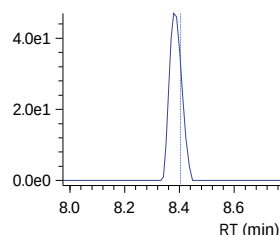




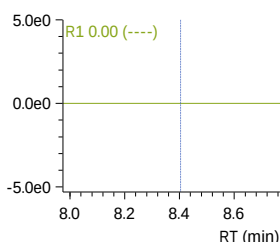
240119_012 (continued)

8_2_FTS
Conc. ----

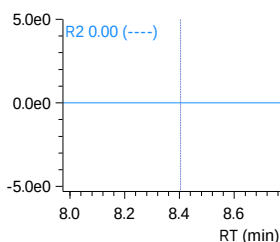
R#1 0.00 (40.77)
R#2 0.00 (49.59)
Q 527.10>506.95 (-)



R1 527.10>80.80 (-) 0.00e0

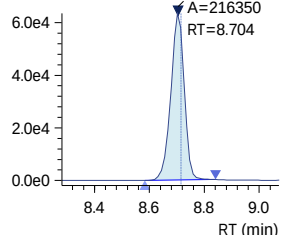


R2 527.10>80.80 (-) 0.00e0



13C6-PFDA_IS
Conc. 1.2500

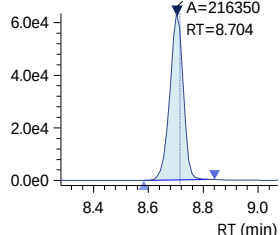
ISTD 519.10>474.10 (-) 6.36e4



A=216350
RT=8.704

13C6-PFDA
Conc. 1.2653

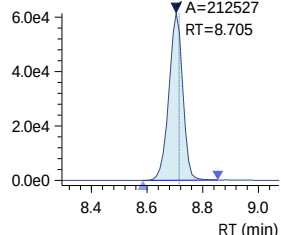
Q 519.10>474.10 (-) 6.36e4



A=216350
RT=8.704

13C2-PFDA_IS
Conc. 1.2500

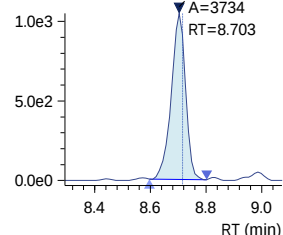
ISTD 515.10>470.10 (-) 6.14e4



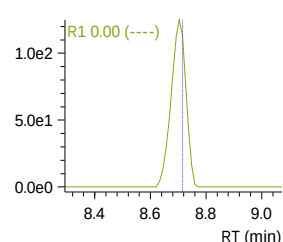
A=212527
RT=8.705

PFDA
Conc. -0.0074

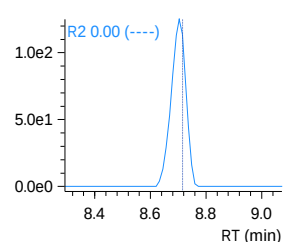
R#1 0.00 (19.01)
R#2 0.00 (19.00)
Q 512.90>469.00 (-) 1.05e3



A=3734
RT=8.703

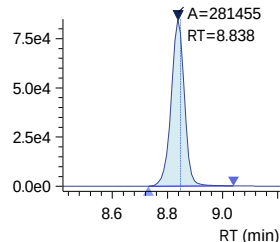


R2 512.90>219.00 (-) 1.25e2



D3-NMeFOSAA_IS
Conc. 5.0000

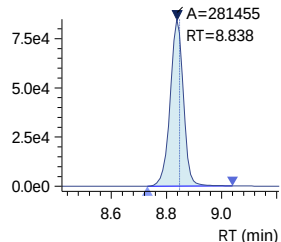
ISTD 573.20>419.00 (-) 8.49e4



A=281455
RT=8.838

D3-NMeFOSAA
Conc. 6.1214

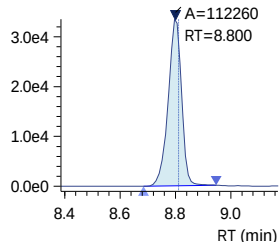
Q 573.20>419.00 (-) 8.49e4



A=281455
RT=8.838

13C8-PFOS_IS
Conc. 2.5000

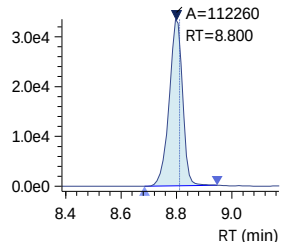
ISTD 507.10>98.90 (-) 3.35e4



A=112260
RT=8.800

13C8-PFOS
Conc. 2.5409

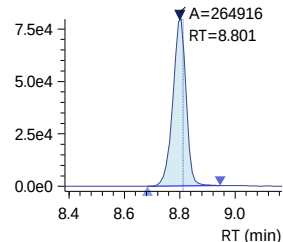
Q 507.10>98.90 (-) 3.35e4



A=112260
RT=8.800

13C4-PFOS_IS
Conc. 2.5000

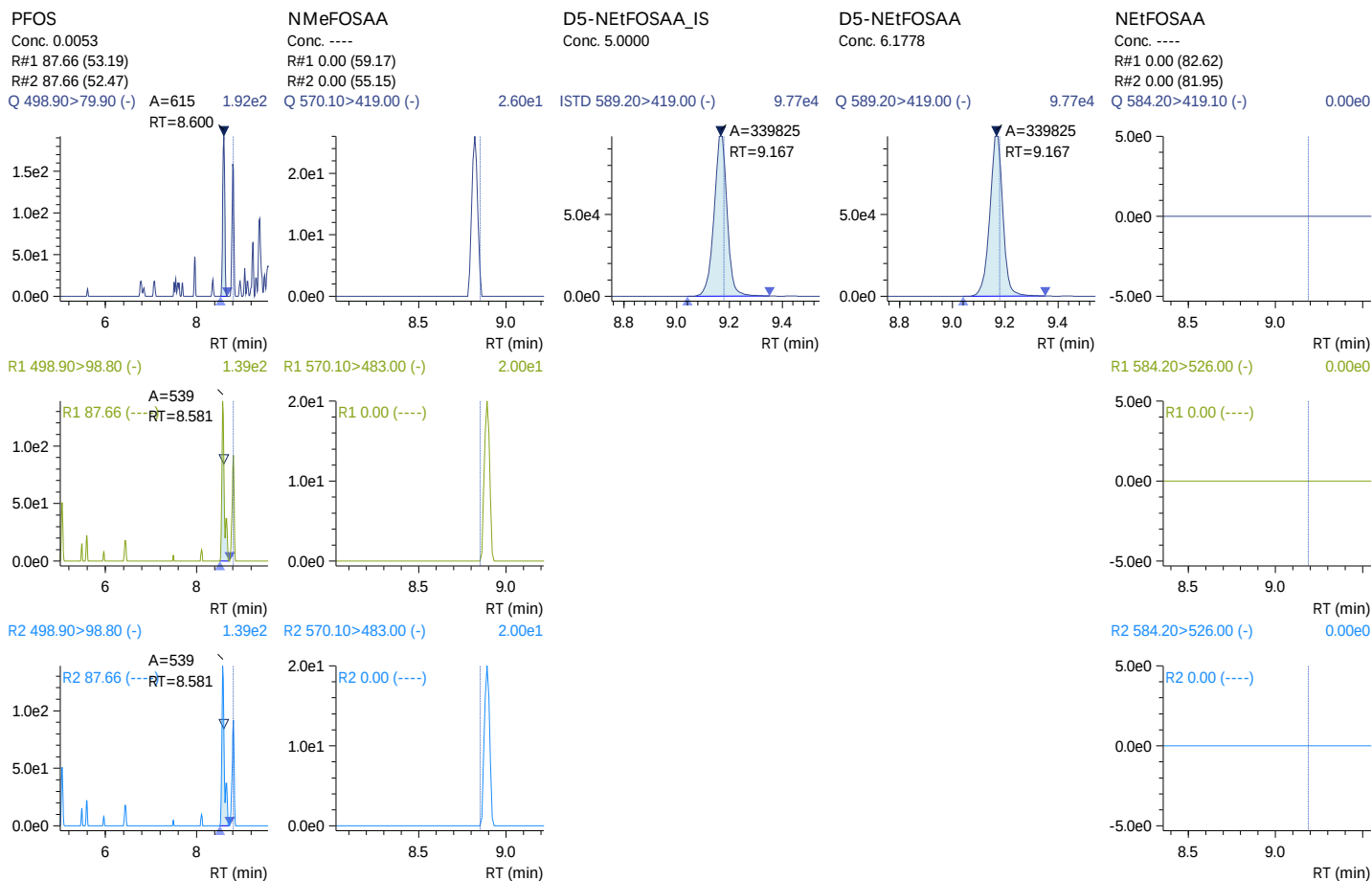
ISTD 502.80>79.90 (-) 7.97e4



A=264916
RT=8.801



240119_012 (continued)





240119_012 (continued)

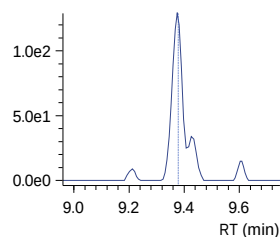
9-Cl-PF3ONS

Conc. ----

R#1 0.00 (31.76)

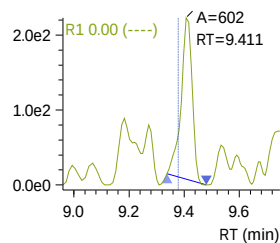
R#2 0.00 (32.76)

Q 530.80>351.00 (-)



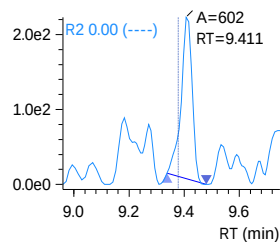
R1 532.80>353.00 (-)

2.23e2



R2 532.80>353.00 (-)

2.23e2



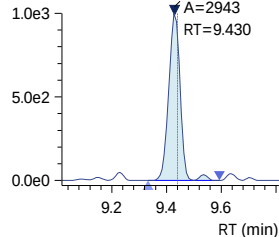
PFUnDA

Conc. -0.0142

R#1 0.00 (12.31)

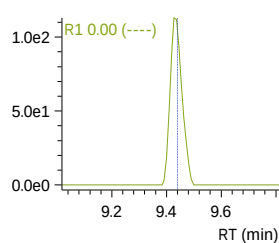
R#2 0.00 (13.12)

Q 563.10>519.00 (-)



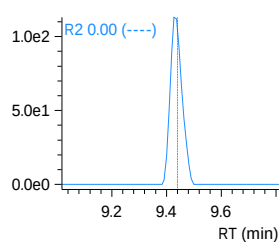
R1 563.10>269.10 (-)

1.13e2



R2 563.10>269.10 (-)

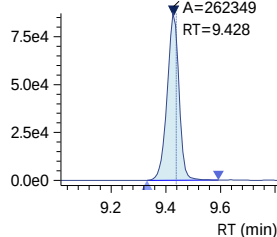
1.13e2



13C7-PFUnDA_IS

Conc. 1.2500

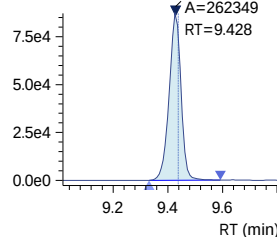
ISTD 570.00>525.10 (-)



13C7-PFUnDA

Conc. 1.2863

Q 570.00>525.10 (-)



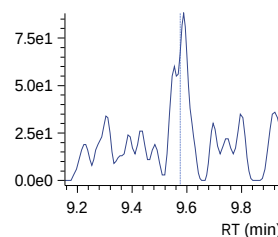
PFNS

Conc. ----

R#1 0.00 (63.31)

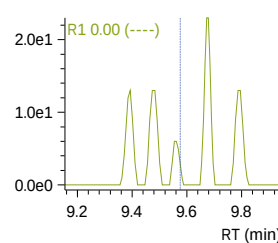
R#2 0.00 (65.22)

Q 548.80>79.90 (-)



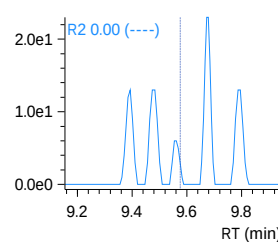
R1 548.80>98.80 (-)

2.30e1



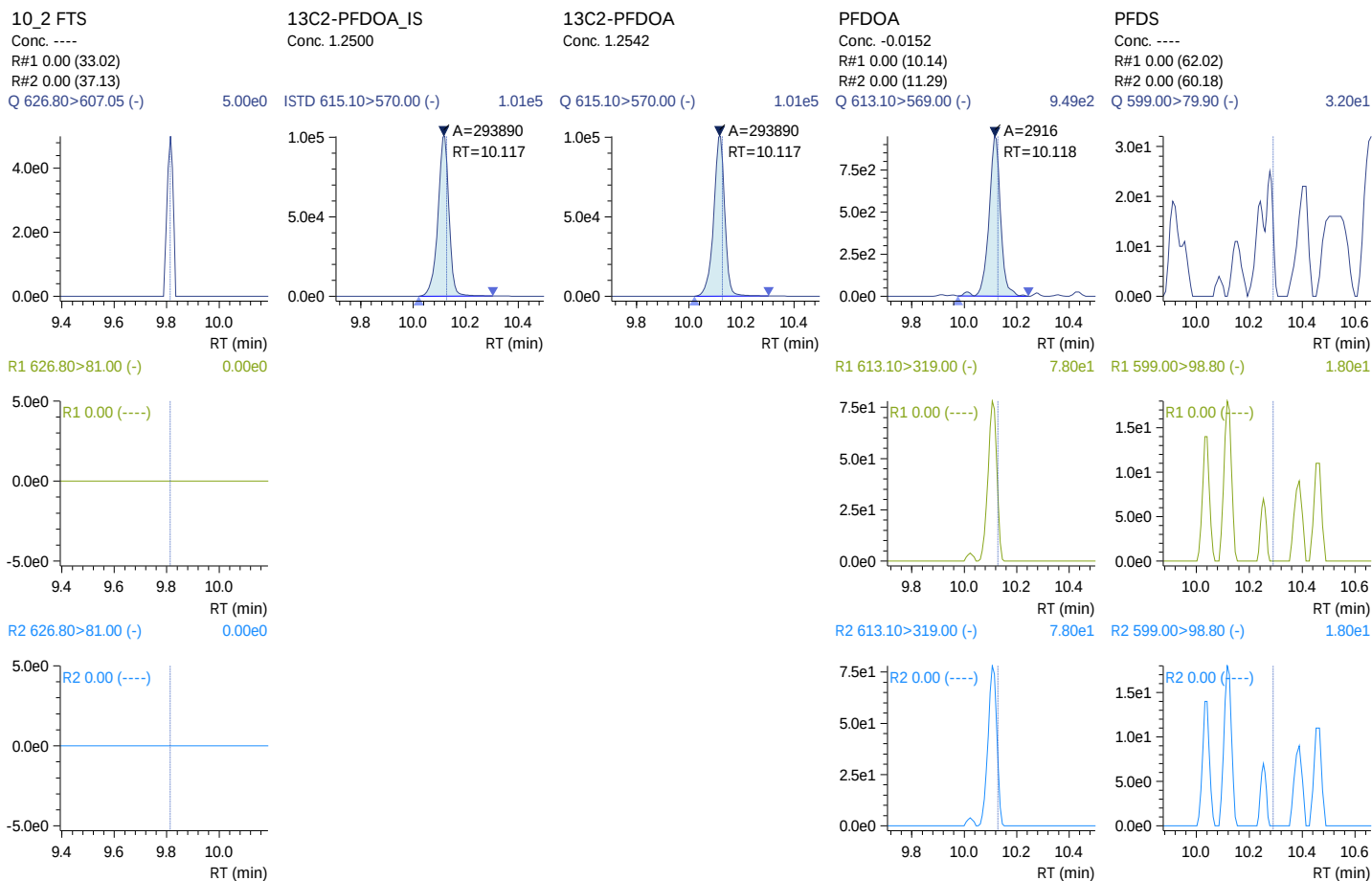
R2 548.80>98.80 (-)

2.30e1



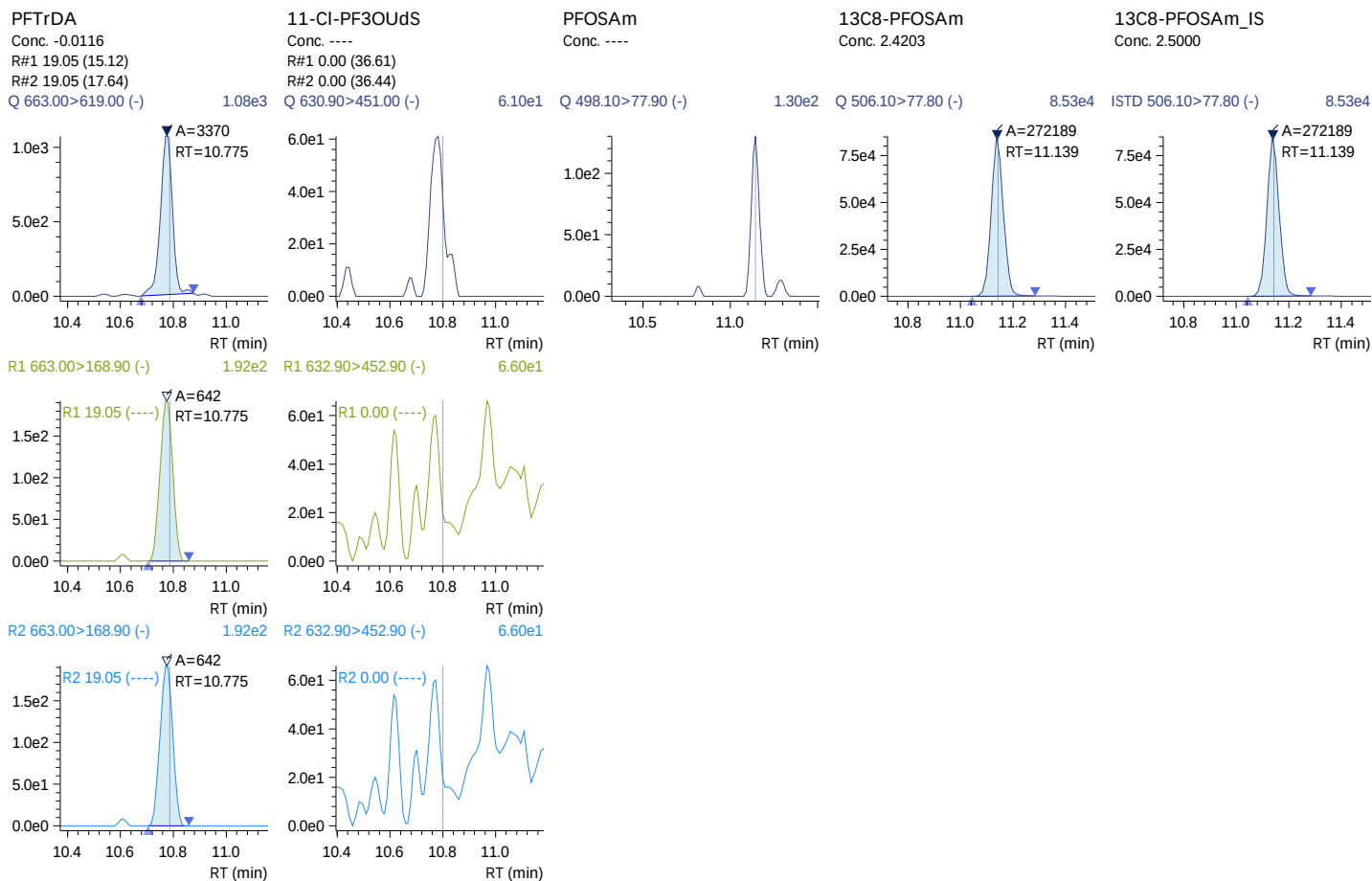


240119_012 (continued)



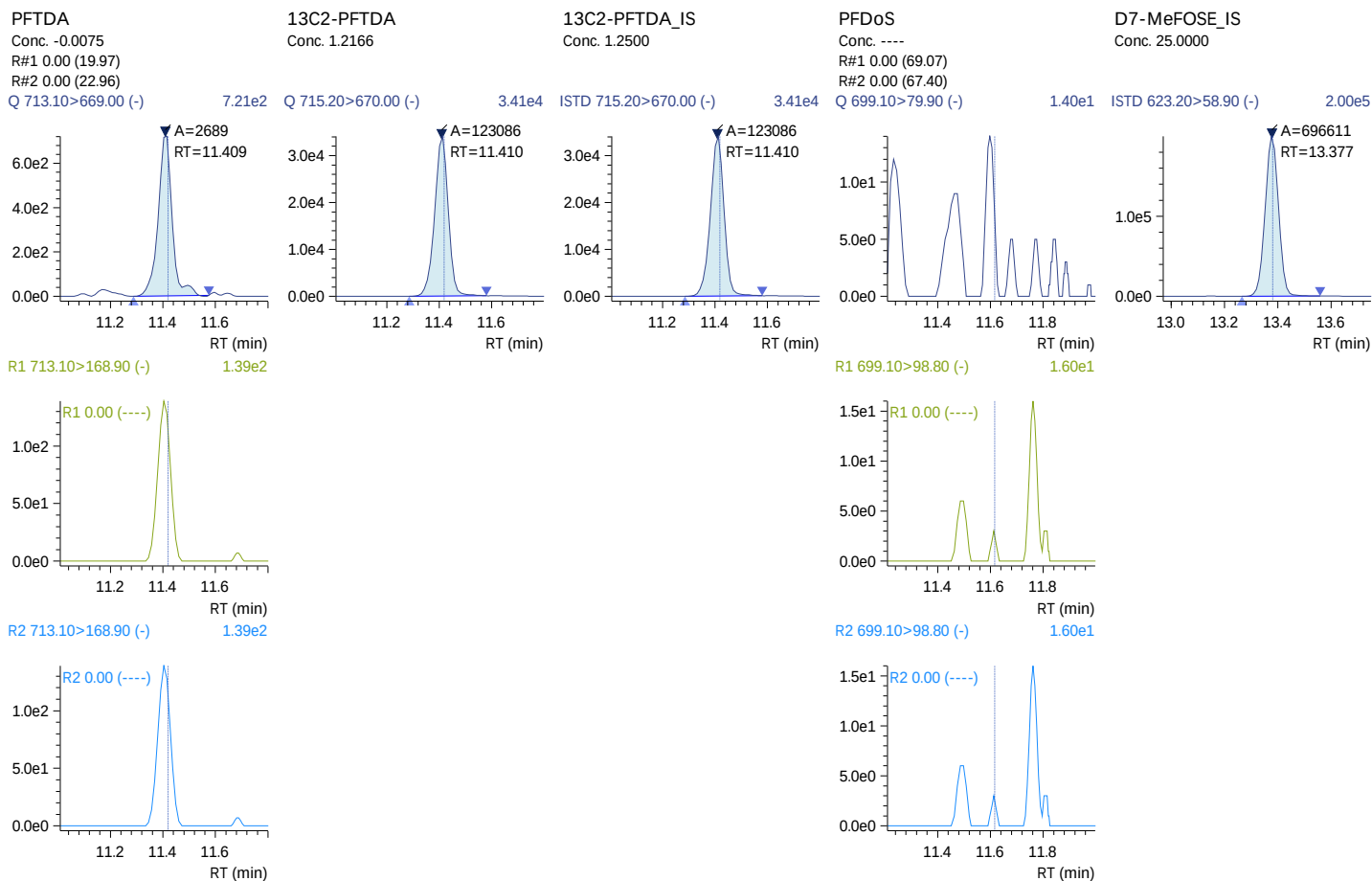


240119_012 (continued)





240119_012 (continued)





240119_012 (continued)

D7-MeFOSE
 Conc. 25.1239

MeFOSE
 Conc. ----

13C2-PFHDA_IS
 Conc. 2.5000

13C2-PFHDA
 Conc. 2.3999

PFHDA

Conc. -0.0102
 R#1 0.00 (11.64)
 R#2 0.00 (13.90)

Q 623.20>58.90 (-)

2.00e5

Q 616.10>59.00 (-)

5.60e1

ISTD 815.00>770.05 (-)

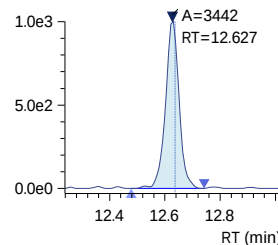
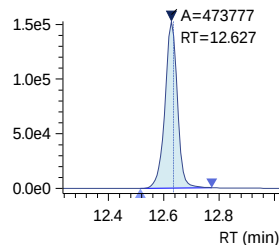
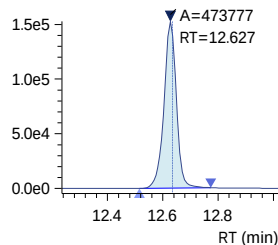
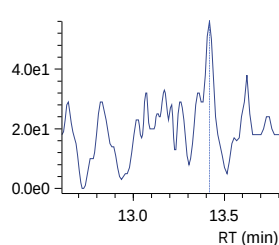
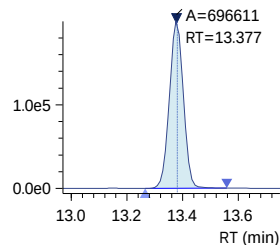
1.53e5

Q 815.00>770.05 (-)

1.53e5

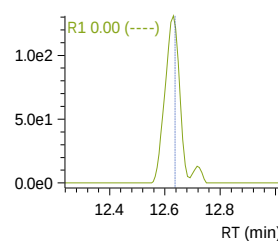
Q 813.00>768.95 (-)

1.00e3



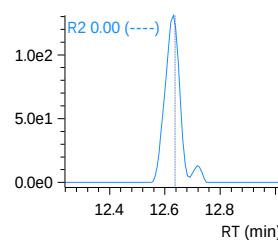
R1 813.00>218.95 (-)

1.31e2



R2 813.00>218.95 (-)

1.31e2





240119_012 (continued)

D3-MeFOSA
 Conc. 2.7137

D3-MeFOSA_IS
 Conc. 2.5000

MeFOSA
 Conc. ----
 R#1 0.00 (149.05)
 R#2 0.00 (140.79)

D9-EtFOSE_IS
 Conc. 25.0000

D9-EtFOSE
 Conc. 26.4060

Q 515.00>219.00 (-)

1.80e4

ISTD 515.00>219.00 (-)

1.80e4

Q 511.90>219.00 (-)

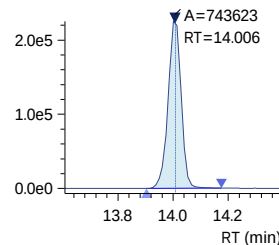
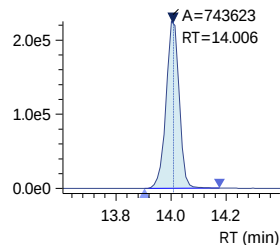
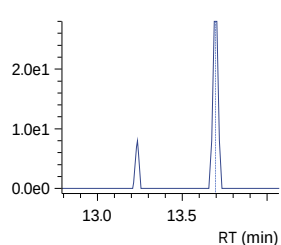
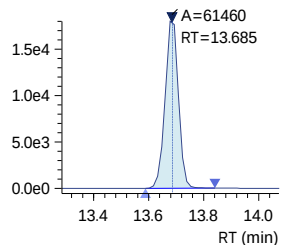
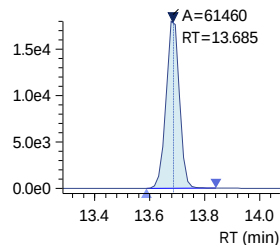
2.80e1

ISTD 639.20>58.90 (-)

2.25e5

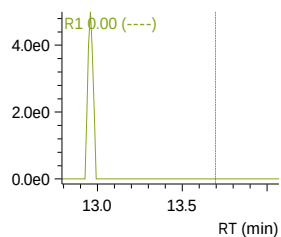
Q 639.20>58.90 (-)

2.25e5



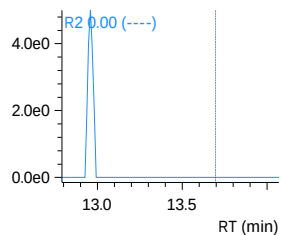
R1 511.90>169.00 (-)

5.00e0



R2 511.90>169.00 (-)

5.00e0





240119_012 (continued)

EtFOSE
Conc. ----

D5-EtFOSAm
Conc. 2.4990

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. ----

PFODA
Conc. 0.0133

Q 630.00>59.00 (-)

4.10e1

Q 531.10>219.00 (-)

2.35e4

ISTD 531.10>219.00 (-)

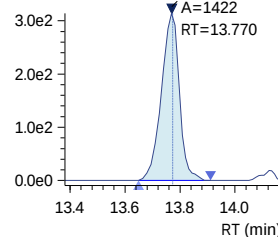
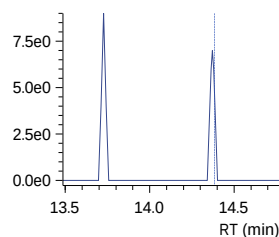
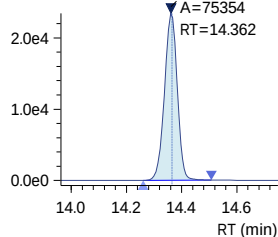
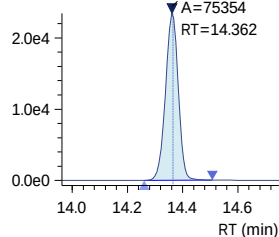
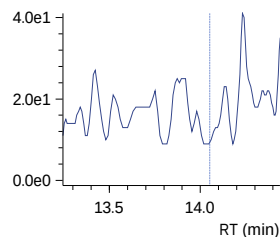
2.35e4

Q 526.00>219.00 (-)

9.00e0

Q 913.00>868.65 (-)

3.14e2

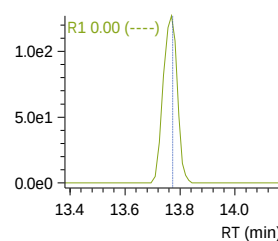
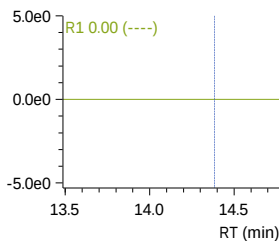


R1 526.00>169.00 (-)

0.00e0

R1 913.00>169.00 (-)

1.27e2

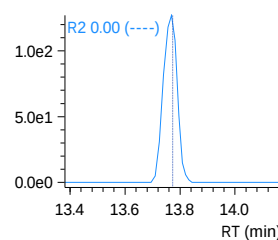
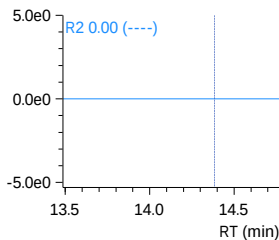


R2 526.00>169.00 (-)

0.00e0

R2 913.00>169.00 (-)

1.27e2



Validation Report

1st PS 01/23/24
2nd UA 01/23/24

Data File: J:\LCMS08\Data\240119_1633_B1\240119_021
Lab ID: KQ2400951-09
RunType: CCV
Matrix: Soil

Date Acquired: 1/19/24 19:33
Batch ID: 830171
Analysis Method: 1633/PFAS_DOD5.4

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Internal Standards	X	

Primary Review: _____

Secondary Review: _____

Quantitation Report

1st *PS* 01/23/24
2nd *UA* 01/23/24

Data File:	J:\LCMS08\Data\240119_1633_B1\240119_021	Instrument:	K-LCMS-08
Acqu Date:	1/19/24 19:33	Vial:	18
Run Type:	CCV	Dilution:	1
Lab ID:	KQ2400951-09	Raw Units:	ng/mL

Bottle ID:		Tier:	IV	Matrix:	Soil
Prod Code:	PFAS_DOD5.4	Collect Date:	12/13/23	Receive Date:	12/20/23

Analysis Lot:	830171	Prep Lot:		Report Group:	KQ2400951
Analysis	1633	Prep Method:			
		Prep Date:			

Title:	Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM	Calibration ID:	KC2400027
		Report List ID:	24615

Internal Standard Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Area Criteria
18O2-PFHxS	7.069		222127	2.5000	OK
13C4-PFOS	8.806		260638	2.5000	OK
13C3-PFBA	1.407		581918	5.0000	OK
13C2-PFHxA	4.956		607514	2.5000	OK
13C4-PFOA	7.094		44831	2.5000	OK
13C5-PFNA	7.943		303868	1.2500	OK
13C2-PFDA	8.709		217993	1.2500	OK

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Rpt?
13C3-PFBS	4.621		308178	2.4448	Y
13C3-PFHxS	7.069		256395	2.6892	Y
13C8-PFOS	8.805		97210	2.2364	Y
13C4-PFBA	1.405		1286544	9.8912	Y
13C5-PFPeA	3.472		131199	4.7844	Y
13C5-PFHxA	4.956		600755	2.3464	Y
13C4-PFHpA	6.138		614144	2.6497	Y
13C8-PFOA	7.094		597690	2.3853	Y
13C9-PFNA	7.943		300732	1.2640	Y
13C6-PFDA	8.708		234525	1.3372	Y
13C7-PFUnDA	9.431		271805	1.2992	Y
13C2-PFDoDA	10.118		291845	1.2143	Y
13C2-PFTeDA	11.407		125242	1.2069	Y
13C8-FOSA	11.139		265744	2.4018	Y
D3-MeFOSA	13.684		59746	2.6814	Y
D5-EtFOSA	14.360		72733	2.4517	Y
D7-MeFOSE	13.375		694173	25.4469	Y
D9-EtFOSE	14.005		738292	26.6471	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 1/23/24 14:28

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		1st	PS	01/23/24
Data File:	J:\LCMS08\Data\240119_1633_B1\240119_021	Instrument:	K-LCMS08	01/23/24
Acqu Date:	1/19/24 19:33	Vial:	18	
Run Type:	CCV	Dilution:	1	
Lab ID:	KQ2400951-09	Raw Units:	ng/mL	

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Rpt?
D3-MeFOSAA	8.842		277857	6.1424	Y
D5-EtFOSAA	9.170		302692	5.5931	Y
13C2-4:2 FTS	4.641		183860	6.0149	Y
13C2-6:2 FTS	6.780		186611	6.4547	Y
13C2-8:2 FTS	8.400		139182	5.8606	Y
13C3-HFPO-DA	5.433		628723	10.5720	Y

Target Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Rpt?
Perfluorobutane sulfonic acid (PFBS)	4.622		643423	4.0788	Y
Perfluoropentane sulfonic acid (PFPeS)	5.998		544734	4.0458	Y
Perfluorohexane sulfonic acid (PFHxS)	7.070		511240	4.1351	Y
Perfluoroheptane sulfonic acid (PFHpS)	7.990		365649	4.8191	Y
Perfluorooctane sulfonic acid (PFOS)	8.806		461824	4.5676	Y
Perfluorononane sulfonic acid (PFNS)	9.567		360921	4.8866	Y
Perfluorodecane sulfonic acid (PFDS)	10.280		332061	5.1664	Y
Perfluorododecane sulfonic acid (PFDoS)	11.605		181707	4.6610	Y
Perfluorobutanoic acid (PFBA)	1.408		535119	4.8410	Y
Perfluoropentanoic acid (PFPeA)	3.475		847163	4.9853	Y
Perfluorohexanoic acid (PFHxA)	4.958		980282	4.8940	Y
Perfluoroheptanoic acid (PFHpA)	6.140		1235055	4.8143	Y
Perfluorooctanoic acid (PFOA)	7.097		843742	5.4260	Y
Perfluorononanoic acid (PFNA)	7.944		852209	4.9483	Y
Perfluorodecanoic acid (PFDA)	8.709		1001845	4.4562	Y
Perfluoroundecanoic acid (PFUnDA)	9.432		925408	4.6725	Y
Perfluorododecanoic acid (PFDOA)	10.119		789626	4.7777	Y
Perfluorotridecanoic acid (PFTTrDA)	10.776		876489	4.9298	Y
Perfluorotetradecanoic acid (PFTDA)	11.409		699305	5.1685	Y
Perfluorooctane sulfonamide (PFOSAm)	11.137		893116	10.1965	Y
N-Methylperfluorooctane sulfonamide (MeFOSA)	13.692		197664	4.5895	Y
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	14.378		211495	4.9948	Y
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	13.412		123859	4.8585	Y
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	14.048		174224	4.4851	Y
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	8.847		364991	4.8412	Y

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D: Result from dilution
 m: Manual integration performed
 d: Compound manually deleted
 NR: Analyte not reported from this analysis

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 ?: Insufficient information to determine acceptance
 e: Result >= MRL, but MRL less than low point of ICAL
 c: check for co-elution

		1st	PS	01/23/24
Data File:	J:\LCMS08\Data\240119_1633_B1\240119_021	Instrument:	K-LCMS08	01/23/24
Acqu Date:	1/19/24 19:33	Vial:	18	
Run Type:	CCV	Dilution:	1	
Lab ID:	KQ2400951-09	Raw Units:	ng/mL	

Target Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Rpt?
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	9.181		215373	5.3276	Y
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	4.641		446665	4.9392	Y
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	6.779		369136	4.3441	Y
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	8.399		287022	4.7991	Y
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	2.975		160795	55.2690	Y
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	5.866		860501	55.3762	Y
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	7.923		1274912	61.4578	Y
Perfluoro(2-ethoxyethane) sulfonic acid (PFEEESA)	5.296		2819817	4.1906	Y
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	9.370		2252163	4.3450	Y
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	10.789		1529179	4.3681	Y
Perfluoro-3-methoxypropanoic acid (PFMPA)	2.417		462077	5.4497	Y
Perfluoro-4-methoxybutanoic acid (PFMBA)	3.999		564808	4.7020	Y
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	5.435		336430	4.8450	Y
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	4.814		718828	5.3931	Y
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	6.505		2001300	4.1069	Y

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?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
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240119_021

Sample ID: 1633 ICAL 5.0PPB
Date Acquired: 1/19/2024 7:33:41 PM
Acquired by: System Administrator
Data File: 240119_021
Vial: 6 | Inj. Volume: 10.0000uL | Tray: 1

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	1286544	----	----	----	----	----	----	
13C4-PFBA_IS	216.80>171.90	----	1286544	----	----	----	----	----	----	
13C3-PFBA_IS	216.00>172.00	----	581918	----	----	----	----	----	----	
PFBA	212.80>169.05	----	535119	----	----	----	----	----	----	
PFMPA	229.00>84.90	----	462077	----	----	----	----	----	----	
3_3 FTCA	241.00>177.10	241.00>117.00	160795	232352	144.50	141.17	232352	144.50	143.25	
13C5-PFPeA	268.30>223.00	----	131199	----	----	----	----	----	----	
13C5-PFPeA_IS	268.30>223.00	----	131199	----	----	----	----	----	----	
PFPeA	263.00>219.00	----	847163	----	----	----	----	----	----	
PFMBA	279.00>84.95	----	564808	----	----	----	----	----	----	
13C2-4_2 FTS	329.10>80.90	----	183860	----	----	----	----	----	----	
13C2-4_2 FTS_IS	329.10>80.90	----	183860	----	----	----	----	----	----	
4_2 FTS	327.10>307.00	327.10>80.90	446665	136221	30.50	29.06	136221	30.50	31.50	
13C3-PFBS_IS	302.10>79.90	----	308178	----	----	----	----	----	----	
PFBS	298.70>79.90	298.70>98.80	643423	311660	48.44	46.72	311660	48.44	48.74	
13C3-PFBS	302.10>79.90	----	308178	----	----	----	----	----	----	
NFDHA	295.00>201.00	295.00>84.90	718828	266739	37.11	40.25	266739	37.11	36.97	
13C5-PFHxA	318.00>273.00	----	600755	----	----	----	----	----	----	
13C5-PFHxA_IS	318.00>273.00	----	600755	----	----	----	----	----	----	
13C2-PFHxA_IS	315.10>270.00	----	607514	----	----	----	----	----	----	
PFHxA	313.00>269.00	----	980282	----	----	----	----	----	----	
PFEESA	314.80>135.00	314.80>82.90	2819817	163686	5.81	6.11	163686	5.81	5.81	
13C3-HFPO-DA	286.90>168.90	----	628723	----	----	----	----	----	----	
13C3-HFPO-DA_IS	286.90>168.90	----	628723	----	----	----	----	----	----	
HFPO-DA	284.90>168.90	284.90>184.90	336430	217771	64.73	65.61	217771	64.73	64.39	
5_3 FTCA	341.00>237.05	341.00>217.00	860501	1365649	158.70	158.86	1365649	158.70	159.75	
PFPeS	349.10>79.90	349.10>98.80	544734	297257	54.57	55.80	297257	54.57	54.52	
13C4-PFHpA	367.10>322.00	----	614144	----	----	----	----	----	----	
13C4-PFHpA_IS	367.10>322.00	----	614144	----	----	----	----	----	----	
PFHpA	363.10>319.00	363.10>169.00	1235055	275626	22.32	21.50	275626	22.32	23.22	
DONA	376.90>250.90	376.90>84.80	2001300	604408	30.20	29.66	604408	30.20	29.43	
13C2-6_2 FTS_IS	429.10>80.90	----	186611	----	----	----	----	----	----	
13C2-6_2 FTS	429.10>80.90	----	186611	----	----	----	----	----	----	
6_2 FTS	427.10>407.00	427.10>80.90	369136	177013	47.95	41.15	177013	47.95	43.09	
13C4-PFOA_IS	417.10>172.00	----	44831	----	----	----	----	----	----	
13C8-PFOA_IS	421.10>376.00	----	597690	----	----	----	----	----	----	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240119_021 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	597690	----	----	----	----	----	----	----
PFOA	413.00>369.00	413.00>169.00	843742	269512	31.94	31.89	269512	31.94	30.51	
13C3-PFHxS	402.10>79.90	----	256395	----	----	----	----	----	----	----
13C3-PFHxS_IS	402.10>79.90	----	256395	----	----	----	----	----	----	----
PFHxS	398.70>79.90	398.70>98.90	511240	300506	58.78	56.62	300506	58.78	57.27	
18O2-PFHxS_IS	403.00>83.90	----	222127	----	----	----	----	----	----	----
13C9-PFNA_IS	472.10>427.00	----	300732	----	----	----	----	----	----	----
13C9-PFNA	472.10>427.00	----	300732	----	----	----	----	----	----	----
13C5-PFNA_IS	468.00>423.00	----	303868	----	----	----	----	----	----	----
PFNA	463.00>419.00	463.00>219.00	852209	190623	22.37	23.17	190623	22.37	23.01	
PFHpS	449.00>79.90	449.00>98.80	365649	214724	58.72	56.96	214724	58.72	58.58	
7_3 FTCA	441.00>317.00	441.00>336.90	1274912	1560607	122.41	117.47	1560607	122.41	117.17	
13C2-8_2-FTS	529.10>80.90	----	139182	----	----	----	----	----	----	----
13C2-8_2-FTS_IS	529.10>80.90	----	139182	----	----	----	----	----	----	----
8_2 FTS	527.10>506.95	527.10>80.80	287022	133382	46.47	49.59	133382	46.47	43.30	
13C6-PFDA_IS	519.10>474.10	----	234525	----	----	----	----	----	----	----
13C6-PFDA	519.10>474.10	----	234525	----	----	----	----	----	----	----
13C2-PFDA_IS	515.10>470.10	----	217993	----	----	----	----	----	----	----
PFDA	512.90>469.00	512.90>219.00	1001845	193118	19.28	19.00	193118	19.28	19.26	
D3-NMeFOSAA_IS	573.20>419.00	----	277857	----	----	----	----	----	----	----
D3-NMeFOSAA	573.20>419.00	----	277857	----	----	----	----	----	----	----
13C8-PFOS_IS	507.10>98.90	----	97210	----	----	----	----	----	----	----
13C8-PFOS	507.10>98.90	----	97210	----	----	----	----	----	----	----
13C4-PFOS_IS	502.80>79.90	----	260638	----	----	----	----	----	----	----
PFOS	498.90>79.90	498.90>98.80	461824	230121	49.83	52.47	230121	49.83	47.25	
NMeFOSAA	570.10>419.00	570.10>483.00	364991	217133	59.49	55.15	217133	59.49	62.10	
D5-NetFOSAA_IS	589.20>419.00	----	302692	----	----	----	----	----	----	----
D5-NetFOSAA	589.20>419.00	----	302692	----	----	----	----	----	----	----
NetFOSAA	584.20>419.10	584.20>526.00	215373	175605	81.54	81.95	175605	81.54	86.05	
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	2252163	714981	31.75	32.76	714981	31.75	31.74	
PFUnDA	563.10>519.00	563.10>269.10	925408	119140	12.87	13.12	119140	12.87	13.26	
13C7-PFUnDA_IS	570.00>525.10	----	271805	----	----	----	----	----	----	----
13C7-PFUnDA	570.00>525.10	----	271805	----	----	----	----	----	----	----
PFNS	548.80>79.90	548.80>98.80	360921	231240	64.07	65.22	231240	64.07	62.49	
10_2 FTS	626.80>607.05	626.80>81.00	312252	114158	36.56	37.13	114158	36.56	35.81	
13C2-PFDOA_IS	615.10>570.00	----	291845	----	----	----	----	----	----	----
13C2-PFDOA	615.10>570.00	----	291845	----	----	----	----	----	----	----
PFDOA	613.10>569.00	613.10>319.00	789626	86414	10.94	11.29	86414	10.94	10.90	
PFDS	599.00>79.90	599.00>98.80	332061	199843	60.18	60.18	199843	60.18	61.11	
PFTrDA	663.00>619.00	663.00>168.90	876489	160429	18.30	17.64	160429	18.30	18.20	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240119_021 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	1529179	542073	35.45	36.44	542073	35.45	34.95	
PFOSAm	498.10>77.90	----	893116	----	----	----	----	----	----	
13C8-PFOSAm	506.10>77.80	----	265744	----	----	----	----	----	----	
13C8-PFOSAm_IS	506.10>77.80	----	265744	----	----	----	----	----	----	
PFTDA	713.10>669.00	713.10>168.90	699305	167588	23.97	22.96	167588	23.97	22.68	
13C2-PFTDA	715.20>670.00	----	125242	----	----	----	----	----	----	
13C2-PFTDA_IS	715.20>670.00	----	125242	----	----	----	----	----	----	
PFDoS	699.10>79.90	699.10>98.80	181707	124894	68.73	67.40	124894	68.73	65.24	
D7-MeFOSE_IS	623.20>58.90	----	694173	----	----	----	----	----	----	
D7-MeFOSE	623.20>58.90	----	694173	----	----	----	----	----	----	
MeFOSE	616.10>59.00	----	123859	----	----	----	----	----	----	
13C2-PFHxDA_IS	815.00>770.05	----	464022	----	----	----	----	----	----	
13C2-PFHxDA	815.00>770.05	----	464022	----	----	----	----	----	----	
PFHxDA	813.00>768.95	813.00>218.95	950556	136227	14.33	13.90	136227	14.33	14.51	
D3-MeFOSA	515.00>219.00	----	59746	----	----	----	----	----	----	
D3-MeFOSA_IS	515.00>219.00	----	59746	----	----	----	----	----	----	
MeFOSA	511.90>219.00	511.90>169.00	197664	288326	145.87	140.79	288326	145.87	142.62	
D9-EtFOSE_IS	639.20>58.90	----	738292	----	----	----	----	----	----	
D9-EtFOSE	639.20>58.90	----	738292	----	----	----	----	----	----	
EtFOSE	630.00>59.00	----	174224	----	----	----	----	----	----	
D5-EtFOSAm	531.10>219.00	----	72733	----	----	----	----	----	----	
D5-EtFOSAm_IS	531.10>219.00	----	72733	----	----	----	----	----	----	
EtFOSAm	526.00>219.00	526.00>169.00	211495	320806	151.68	163.90	320806	151.68	146.41	
PFODA	913.00>868.65	913.00>169.00	484803	126556	26.11	27.03	126556	26.11	23.98	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
 IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240119_021

Sample ID: 1633 ICAL 5.0PPB
Date Acquired: 1/19/2024 7:33:41 PM
Acquired by: System Administrator
Data File: 240119_021
Vial: 6 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.405	-0.003	-0.002	1286544	581918	13C3-PFBA_IS	9.8912	ng/mL	
13C4-PFBA_IS	Auto	1.405	-0.003	----	1286544	1286544	----	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.407	-0.001	----	581918	581918	----	5.0000	ng/mL	
PFBA	Auto	1.408	-0.001	0.003	535119	1286544	13C4-PFBA_IS	4.8410	ng/mL	
PFMPA	Auto	2.417	-0.004	-1.055	462077	131199	13C5-PFPeA_IS	5.4497	ng/mL	
3_3 FTCA	Auto	2.975	-0.005	-0.497	160795	131199	13C5-PFPeA_IS	55.2690	ng/mL	
13C5-PFPeA	Auto	3.472	-0.007	-1.484	131199	607514	13C2-PFHxA_IS	4.7844	ng/mL	
13C5-PFPeA_IS	Auto	3.472	-0.007	----	131199	131199	----	5.0000	ng/mL	
PFPeA	Auto	3.475	-0.007	0.003	847163	131199	13C5-PFPeA_IS	4.9853	ng/mL	
PFMBA	Auto	3.999	-0.006	0.527	564808	131199	13C5-PFPeA_IS	4.7020	ng/mL	
13C2-4_2 FTS	Auto	4.641	-0.005	-2.428	183860	222127	18O2-PFHxS_IS	6.0149	ng/mL	
13C2-4_2 FTS_IS	Auto	4.641	-0.005	----	183860	183860	----	5.0000	ng/mL	
4_2 FTS	Auto	4.641	-0.006	0.000	446665	183860	13C2-4_2 FTS_IS	4.9392	ng/mL	
13C3-PFBS_IS	Auto	4.621	-0.007	----	308178	308178	----	2.5000	ng/mL	
PFBS	Auto	4.622	-0.006	0.001	643423	308178	13C3-PFBS_IS	4.0788	ng/mL	
13C3-PFBS	Auto	4.621	-0.007	-2.448	308178	222127	18O2-PFHxS_IS	2.4448	ng/mL	
NFDHA	Auto	4.814	-0.006	-0.142	718828	600755	13C5-PFHxA_IS	5.3931	ng/mL	
13C5-PFHxA	Auto	4.956	-0.007	0.000	600755	607514	13C2-PFHxA_IS	2.3464	ng/mL	
13C5-PFHxA_IS	Auto	4.956	-0.007	----	600755	600755	----	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	4.956	-0.007	----	607514	607514	----	2.5000	ng/mL	
PFHxA	Auto	4.958	-0.007	0.002	980282	600755	13C5-PFHxA_IS	4.8940	ng/mL	
PFEESA	Auto	5.296	-0.008	0.340	2819817	600755	13C5-PFHxA_IS	4.1906	ng/mL	
13C3-HFPO-DA	Auto	5.433	-0.006	0.477	628723	607514	13C2-PFHxA_IS	10.5720	ng/mL	
13C3-HFPO-DA_IS	Auto	5.433	-0.006	----	628723	628723	----	10.0000	ng/mL	
HFPO-DA	Auto	5.435	-0.005	0.002	336430	628723	13C3-HFPO-DA_IS	4.8450	ng/mL	
5_3 FTCA	Auto	5.866	-0.005	0.910	860501	600755	13C5-PFHxA_IS	55.3762	ng/mL	
PFPeS	Auto	5.998	-0.005	-1.071	544734	256395	13C3-PFHxS_IS	4.0458	ng/mL	
13C4-PFHpA	Auto	6.138	-0.005	1.182	614144	607514	13C2-PFHxA_IS	2.6497	ng/mL	
13C4-PFHpA_IS	Auto	6.138	-0.005	----	614144	614144	----	2.5000	ng/mL	
PFHpA	Auto	6.140	-0.004	0.002	1235055	614144	13C4-PFHpA_IS	4.8143	ng/mL	
DONA	Auto	6.505	-0.004	1.072	2001300	628723	13C3-HFPO-DA_IS	4.1069	ng/mL	
13C2-6_2 FTS_IS	Auto	6.780	-0.004	----	186611	186611	----	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.780	-0.004	-0.289	186611	222127	18O2-PFHxS_IS	6.4547	ng/mL	
6_2 FTS	Auto	6.779	-0.004	-0.001	369136	186611	13C2-6_2 FTS_IS	4.3441	ng/mL	
13C4-PFOA_IS	Auto	7.094	-0.005	----	44831	44831	----	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.094	-0.006	----	597690	597690	----	2.5000	ng/mL	
13C8-PFOA	Auto	7.094	-0.006	0.000	597690	44831	13C4-PFOA_IS	2.3853	ng/mL	
PFOA	Auto	7.097	-0.005	0.003	843742	597690	13C8-PFOA_IS	5.4260	ng/mL	
13C3-PFHxS	Auto	7.069	-0.005	0.000	256395	222127	18O2-PFHxS_IS	2.6892	ng/mL	
13C3-PFHxS_IS	Auto	7.069	-0.005	----	256395	256395	----	2.5000	ng/mL	
PFHxS	M	7.070	-0.004	0.001	511240	256395	13C3-PFHxS_IS	4.1351	ng/mL	
18O2-PFHxS_IS	Auto	7.069	-0.006	----	222127	222127	----	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.943	-0.006	----	300732	300732	----	1.2500	ng/mL	
13C9-PFNA	Auto	7.943	-0.006	0.000	300732	303868	13C5-PFNA_IS	1.2640	ng/mL	
13C5-PFNA_IS	Auto	7.943	-0.006	----	303868	303868	----	1.2500	ng/mL	
PFNA	Auto	7.944	-0.006	0.001	852209	300732	13C9-PFNA_IS	4.9483	ng/mL	
PFHpS	Auto	7.990	-0.006	-0.815	365649	97210	13C8-PFOS_IS	4.8191	ng/mL	
7_3 FTCA	Auto	7.923	-0.006	2.967	1274912	600755	13C5-PFHxA_IS	61.4578	ng/mL	
13C2-8_2-FTS	Auto	8.400	-0.004	1.331	139182	222127	18O2-PFHxS_IS	5.8606	ng/mL	
13C2-8_2-FTS_IS	Auto	8.400	-0.004	----	139182	139182	----	5.0000	ng/mL	
8_2 FTS	Auto	8.399	-0.005	-0.001	287022	139182	13C2-8_2-FTS_IS	4.7991	ng/mL	
13C6-PFDA_IS	Auto	8.708	-0.006	----	234525	234525	----	1.2500	ng/mL	
13C6-PFDA	Auto	8.708	-0.006	-0.001	234525	217993	13C2-PFDA_IS	1.3372	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_021 (continued)

(Table continued from previous page)

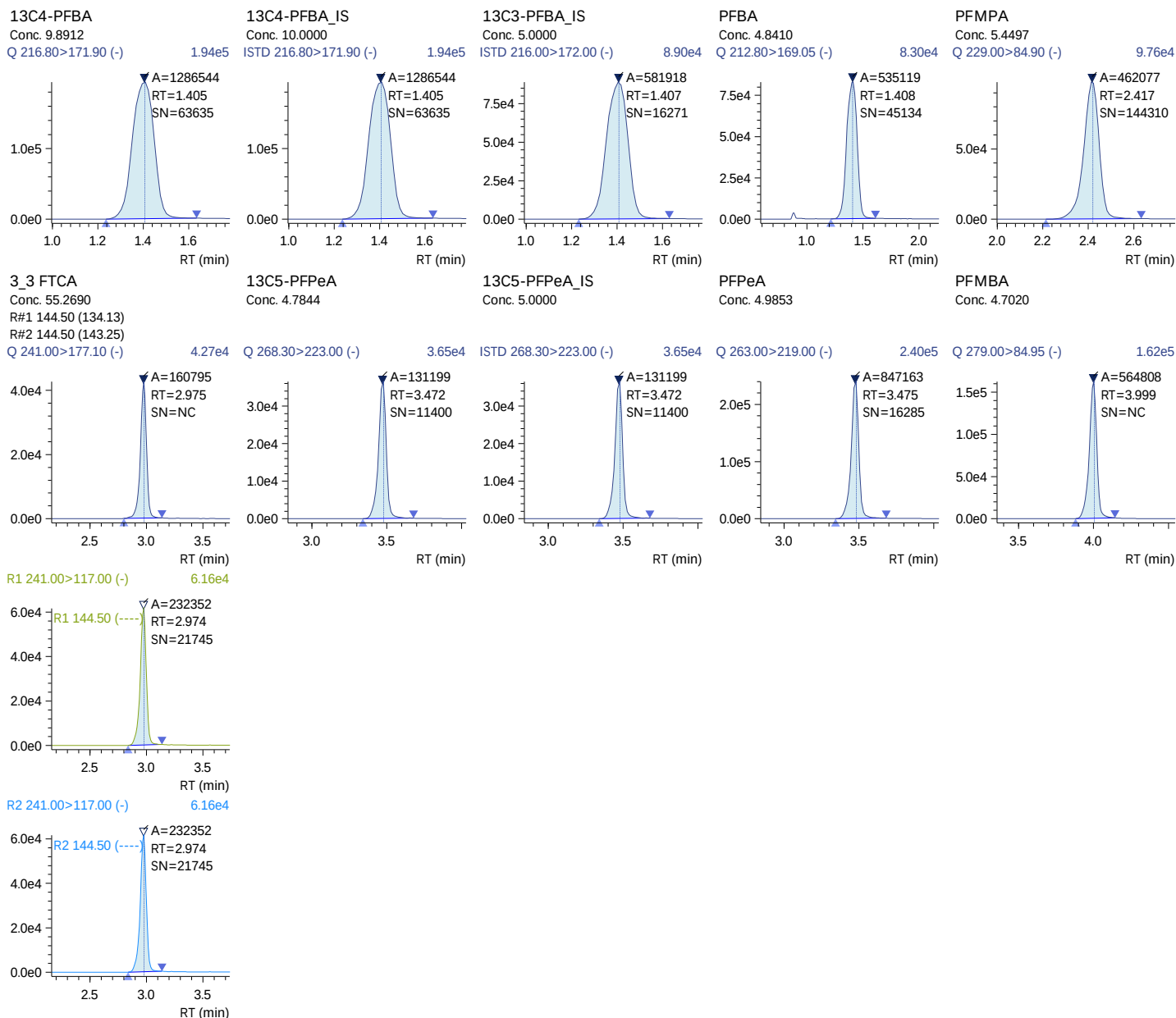
Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C2-PFDA_IS	Auto	8.709	-0.006	----	217993	217993	----	1.2500	ng/mL	
PFDA	Auto	8.709	-0.007	0.001	1001845	234525	13C6-PFDA_IS	4.4562	ng/mL	
D3-NMeFOSAA_IS	Auto	8.842	-0.006	----	277857	277857	----	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.842	-0.006	0.036	277857	260638	13C4-PFOS_IS	6.1424	ng/mL	
13C8-PFOS_IS	Auto	8.805	-0.006	----	97210	97210	----	2.5000	ng/mL	
13C8-PFOS	Auto	8.805	-0.006	-0.001	97210	260638	13C4-PFOS_IS	2.2364	ng/mL	
13C4-PFOS_IS	Auto	8.806	-0.005	----	260638	260638	----	2.5000	ng/mL	
PFOS	M	8.806	-0.007	0.001	461824	97210	13C8-PFOS_IS	4.5676	ng/mL	
NMeFOSAA	M	8.847	-0.006	0.005	364991	277857	D3-NMeFOSAA_IS	4.8412	ng/mL	
D5-NetFOSAA_IS	Auto	9.170	-0.008	----	302692	302692	----	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.170	-0.008	0.364	302692	260638	13C4-PFOS_IS	5.5931	ng/mL	
NetFOSAA	M	9.181	-0.008	0.011	215373	302692	D5-NetFOSAA_IS	5.3276	ng/mL	
9-CI-PF3ONS	Auto	9.370	-0.008	3.937	2252163	628723	13C3-HFPO-DA_IS	4.3450	ng/mL	
PFUnDA	Auto	9.432	-0.008	0.001	925408	271805	13C7-PFUnDA_IS	4.6725	ng/mL	
13C7-PFUnDA_IS	Auto	9.431	-0.007	----	271805	271805	----	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.431	-0.007	0.722	271805	217993	13C2-PFDA_IS	1.2992	ng/mL	
PFNS	Auto	9.567	-0.009	0.762	360921	97210	13C8-PFOS_IS	4.8866	ng/mL	
10_2_FTS	Auto	9.804	-0.009	1.404	312252	139182	13C2-8_2-FTS_IS	4.2911	ng/mL	
13C2-PFDOA_IS	Auto	10.118	-0.009	----	291845	291845	----	1.2500	ng/mL	
13C2-PFDOA	Auto	10.118	-0.009	1.409	291845	217993	13C2-PFDA_IS	1.2143	ng/mL	
PFDOA	Auto	10.119	-0.009	0.001	789626	291845	13C2-PFDOA_IS	4.7777	ng/mL	
PFDS	Auto	10.280	-0.010	1.475	332061	97210	13C8-PFOS_IS	5.1664	ng/mL	
PFTDA	Auto	10.776	-0.010	-0.631	876489	125242	13C2-PFTDA_IS	4.9298	ng/mL	
11-CI-PF3OUdS	Auto	10.789	-0.010	5.356	1529179	628723	13C3-HFPO-DA_IS	4.3681	ng/mL	
PFOSAm	M	11.137	-0.006	-0.002	893116	265744	13C8-PFOSAm_IS	10.1965	ng/mL	
13C8-PFOSAm	Auto	11.139	-0.004	2.333	265744	260638	13C4-PFOS_IS	2.4018	ng/mL	
13C8-PFOSAm_IS	Auto	11.139	-0.004	----	265744	265744	----	2.5000	ng/mL	
PFTDA	Auto	11.409	-0.011	0.002	699305	125242	13C2-PFTDA_IS	5.1685	ng/mL	
13C2-PFTDA	Auto	11.407	-0.012	2.698	125242	217993	13C2-PFDA_IS	1.2069	ng/mL	
13C2-PFTDA_IS	Auto	11.407	-0.012	----	125242	125242	----	1.2500	ng/mL	
PFDoS	Auto	11.605	-0.011	2.800	181707	97210	13C8-PFOS_IS	4.6610	ng/mL	
D7-MeFOSE_IS	Auto	13.375	-0.006	----	694173	694173	----	25.0000	ng/mL	
D7-MeFOSE	Auto	13.375	-0.006	4.569	694173	260638	13C4-PFOS_IS	25.4469	ng/mL	
MeFOSE	M	13.412	-0.006	0.037	123859	694173	D7-MeFOSE_IS	4.8585	ng/mL	
13C2-PFHxDA_IS	Auto	12.627	-0.009	----	464022	464022	----	2.5000	ng/mL	
13C2-PFHxDA	Auto	12.627	-0.009	3.918	464022	217993	13C2-PFDA_IS	2.2916	ng/mL	
PFHxDA	Auto	12.628	-0.009	0.001	950556	464022	13C2-PFHxDA_IS	4.9683	ng/mL	
D3-MeFOSA	Auto	13.684	-0.003	4.878	59746	260638	13C4-PFOS_IS	2.6814	ng/mL	
D3-MeFOSA_IS	Auto	13.684	-0.003	----	59746	59746	----	2.5000	ng/mL	
MeFOSA	M	13.692	-0.004	0.008	197664	59746	D3-MeFOSA_IS	4.5895	ng/mL	
D9-EtFOSE_IS	Auto	14.005	-0.004	----	738292	738292	----	25.0000	ng/mL	
D9-EtFOSE	Auto	14.005	-0.004	5.199	738292	260638	13C4-PFOS_IS	26.6471	ng/mL	
EtFOSE	M	14.048	-0.004	0.043	174224	738292	D9-EtFOSE_IS	4.4851	ng/mL	
D5-EtFOSAm	Auto	14.360	-0.005	5.554	72733	260638	13C4-PFOS_IS	2.4517	ng/mL	
D5-EtFOSAm_IS	Auto	14.360	-0.005	----	72733	72733	----	2.5000	ng/mL	
EtFOSAm	M	14.378	-0.004	0.018	211495	72733	D5-EtFOSAm_IS	4.9948	ng/mL	
PFODA	Auto	13.763	-0.011	1.136	484803	464022	13C2-PFHxDA_IS	4.6202	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_021 (continued)





240119_021 (continued)

13C2-4_2 FTS
Conc. 6.0149

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. 4.9392
R#1 30.50 (34.14)
R#2 30.50 (31.50)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 4.0788
R#1 48.44 (47.53)
R#2 48.44 (48.74)

Q 329.10>80.90 (-)

5.58e4

ISTD 329.10>80.90 (-)

5.58e4

Q 327.10>307.00 (-)

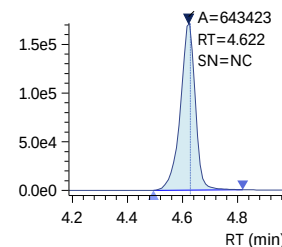
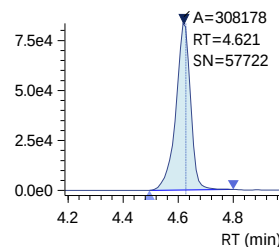
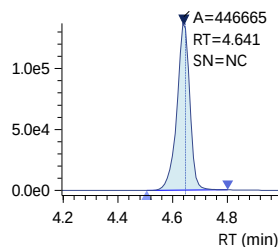
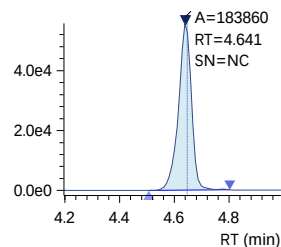
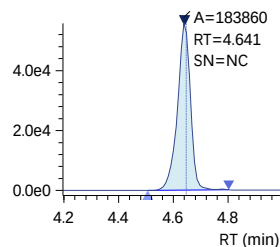
1.37e5

ISTD 302.10>79.90 (-)

8.36e4

Q 298.70>79.90 (-)

1.72e5

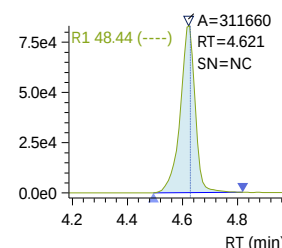
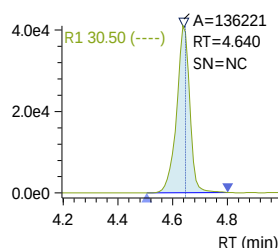


R1 327.10>80.90 (-)

4.11e4

R1 298.70>98.80 (-)

8.32e4

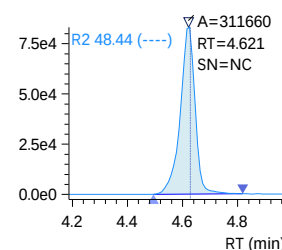
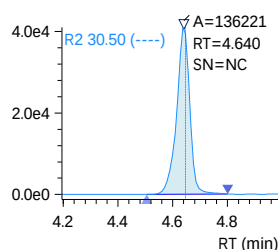


R2 327.10>80.90 (-)

4.11e4

R2 298.70>98.80 (-)

8.32e4





240119_021 (continued)

13C3-PFBS
Conc. 2.4448

NFDHA
Conc. 5.3931
R#1 37.11 (37.88)
R#2 37.11 (36.97)

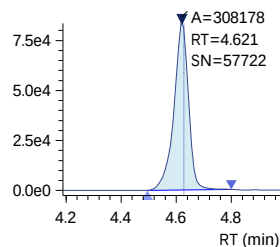
13C5-PFHxA
Conc. 2.3464

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

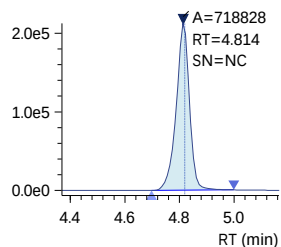
Q 302.10>79.90 (-)

8.36e4



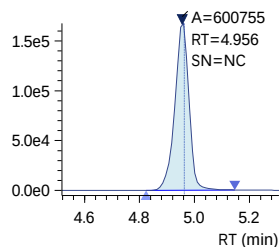
Q 295.00>201.00 (-)

2.13e5



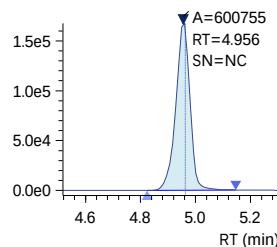
Q 318.00>273.00 (-)

1.68e5



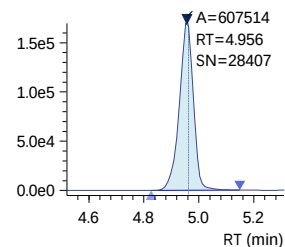
ISTD 318.00>273.00 (-)

1.68e5



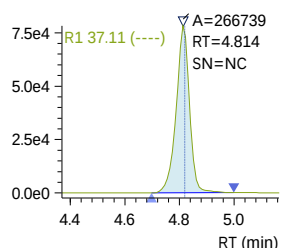
ISTD 315.10>270.00 (-)

1.70e5



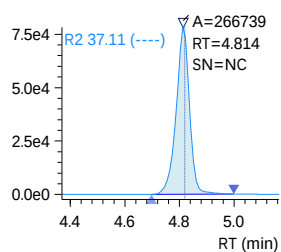
R1 295.00>84.90 (-)

7.83e4



R2 295.00>84.90 (-)

7.83e4





240119_021 (continued)

PFHxA
Conc. 4.8940

PFEESA
Conc. 4.1906

13C3-HFPO-DA
Conc. 10.5720

13C3-HFPO-DA_IS
Conc. 10.0000

HFPO-DA
Conc. 4.8450

Q 313.00>269.00 (-)

2.74e5

Q 314.80>135.00 (-)

8.11e5

Q 286.90>168.90 (-)

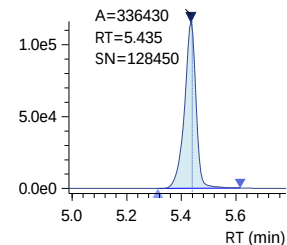
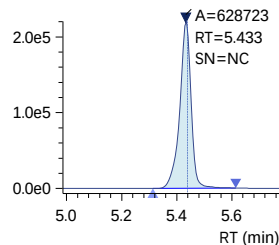
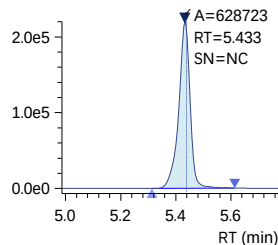
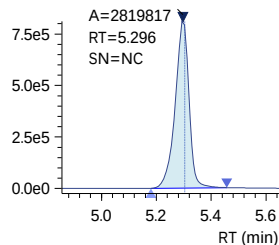
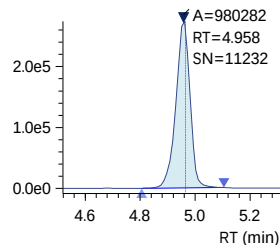
2.21e5

ISTD 286.90>168.90 (-)

2.21e5

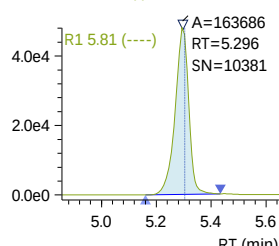
Q 284.90>168.90 (-)

1.16e5



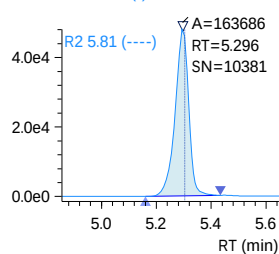
R1 314.80>82.90 (-)

4.81e4



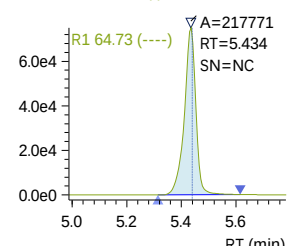
R2 314.80>82.90 (-)

4.81e4



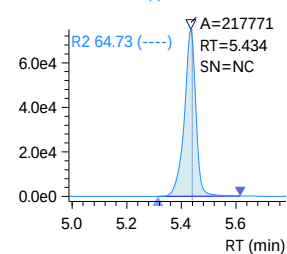
R1 284.90>184.90 (-)

7.50e4



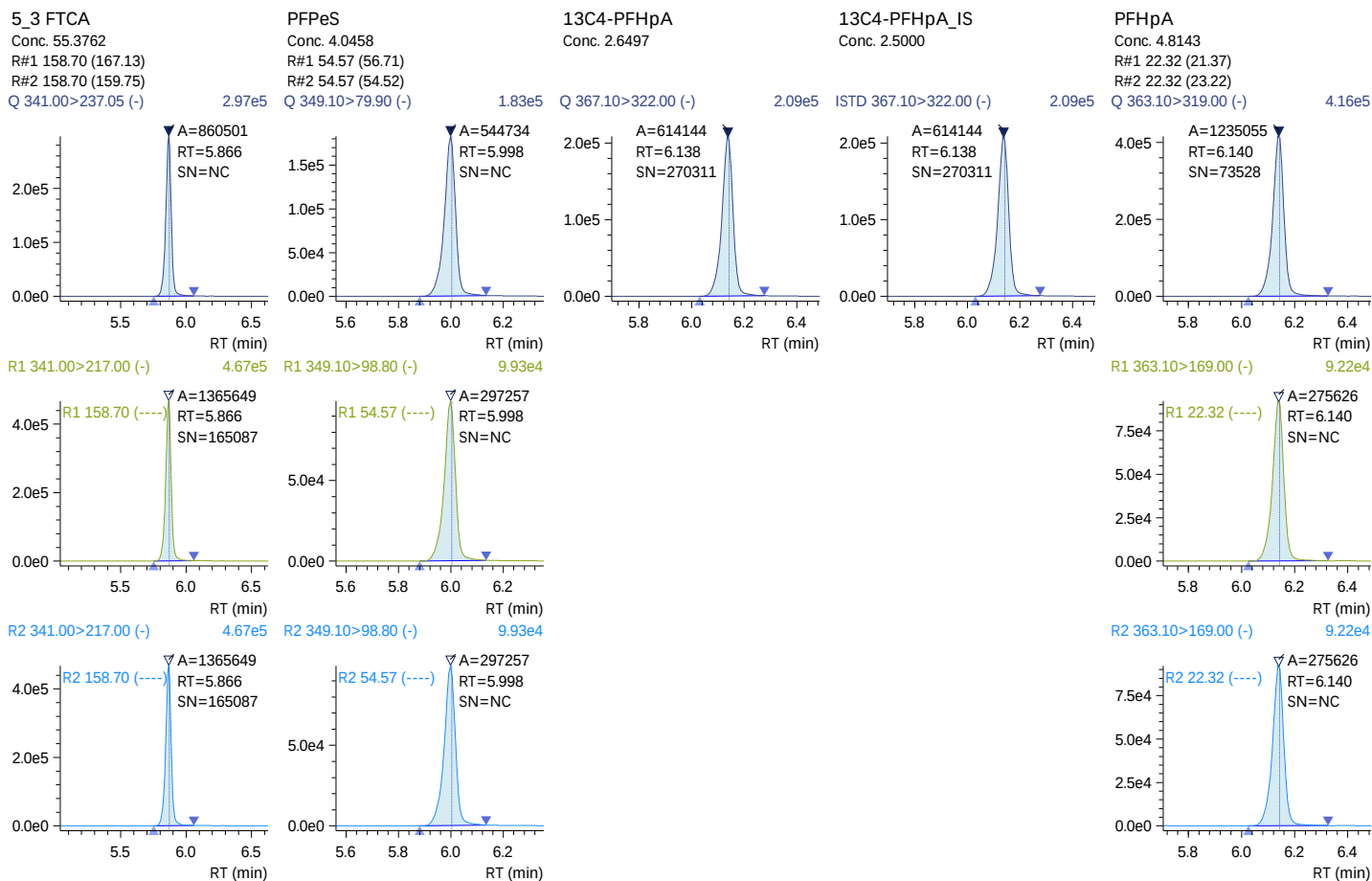
R2 284.90>184.90 (-)

7.50e4





240119_021 (continued)

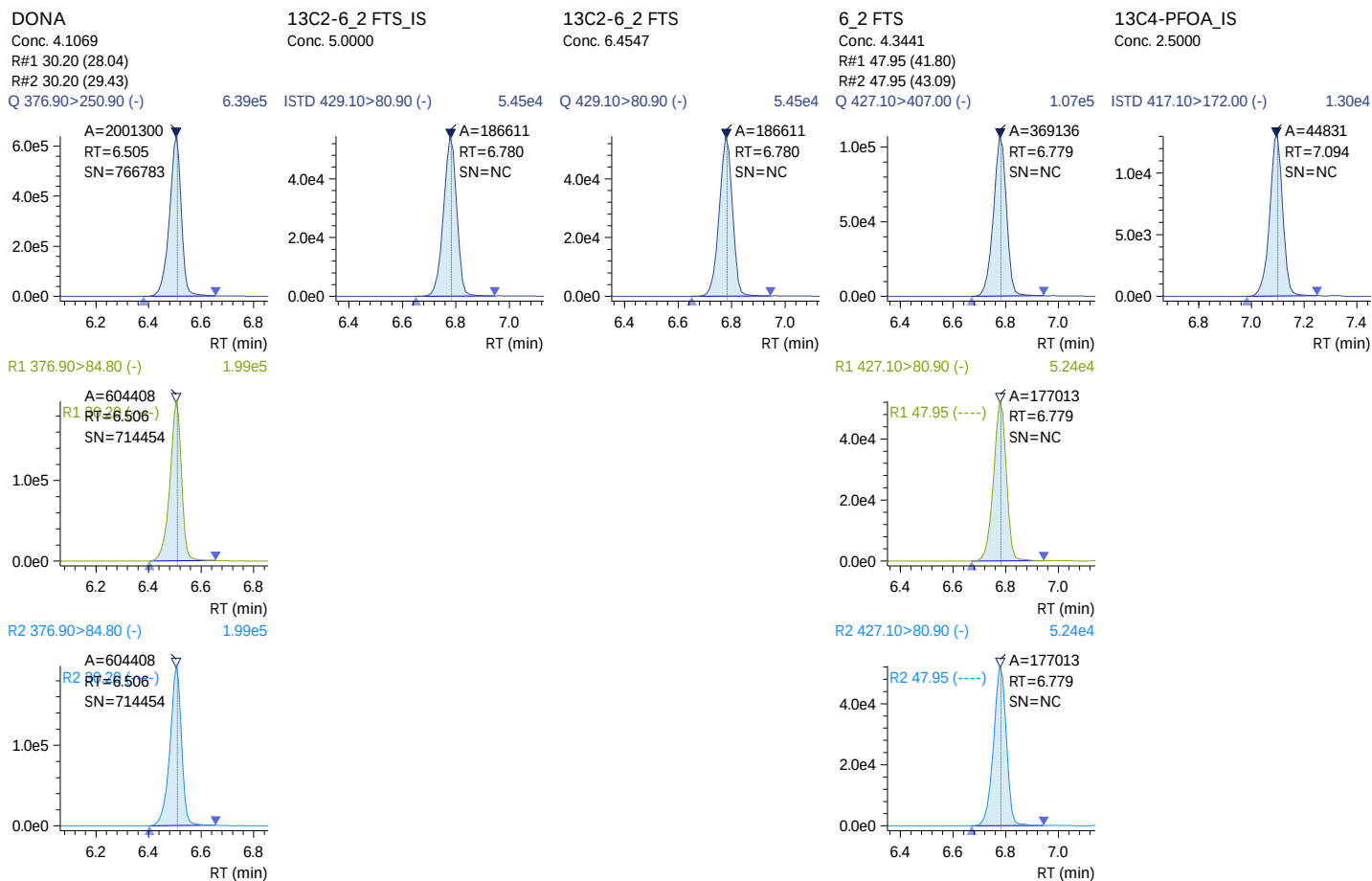


J:\LCMS08\Data\240119_1633_B1\240119_1633_B1.dampl

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_021 (continued)



J:\LCMS08\Data\240119_1633_B1\240119_1633_B1.dampl

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_021 (continued)

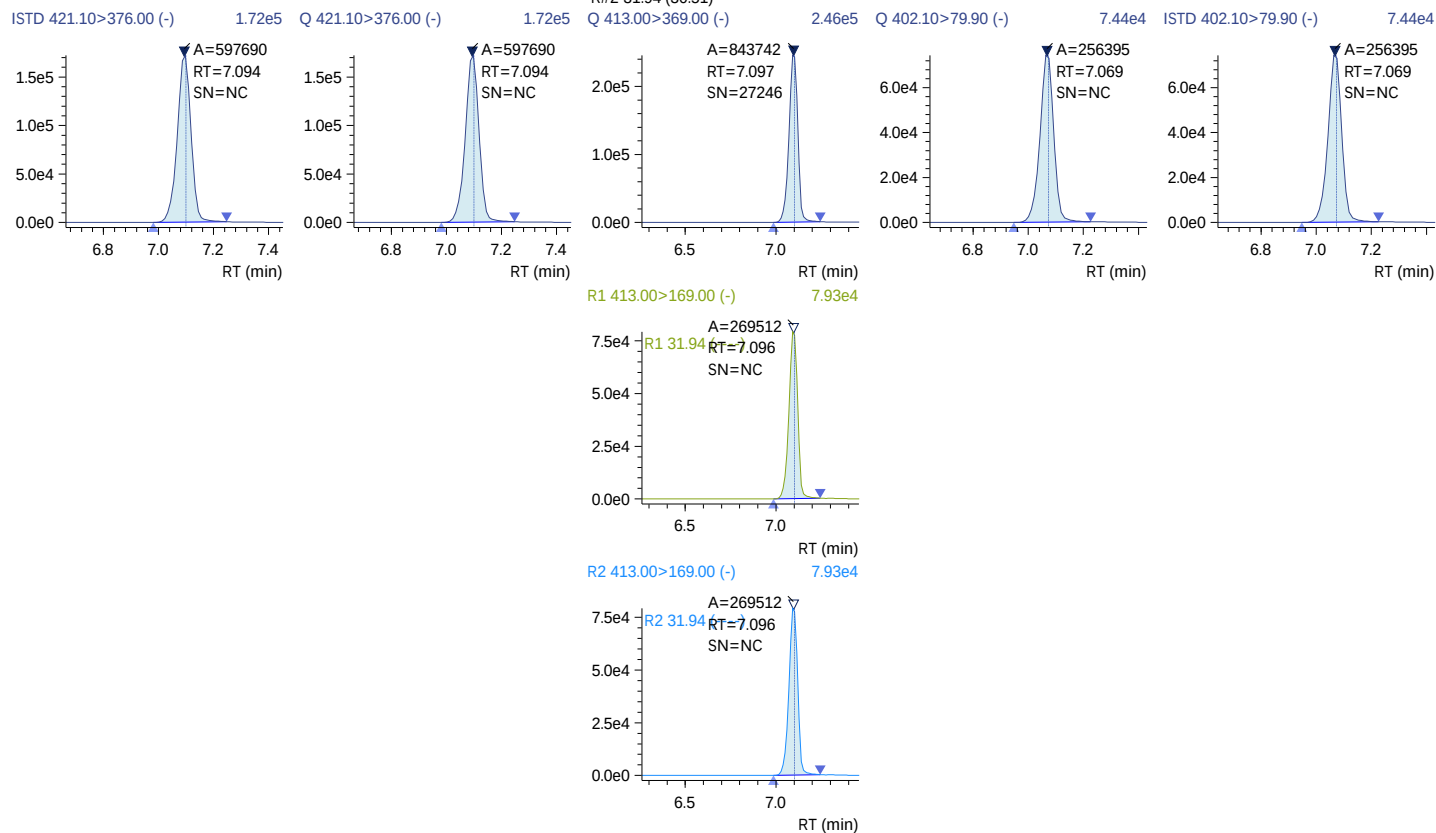
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.3853

PFOA
Conc. 5.4260
R#1 31.94 (29.05)
R#2 31.94 (30.51)

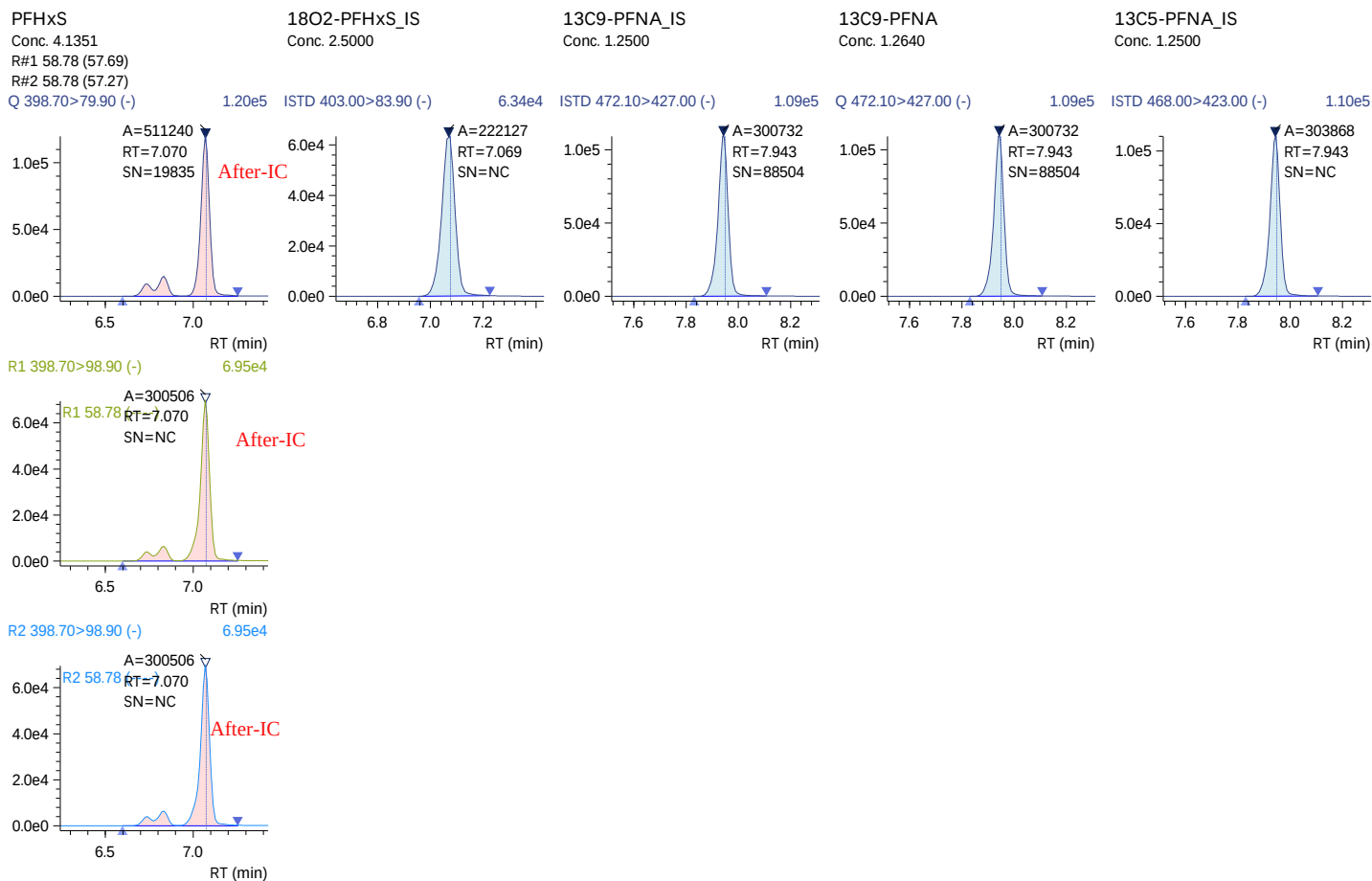
13C3-PFHxS
Conc. 2.6892

13C3-PFHxS_IS
Conc. 2.5000





240119_021 (continued)

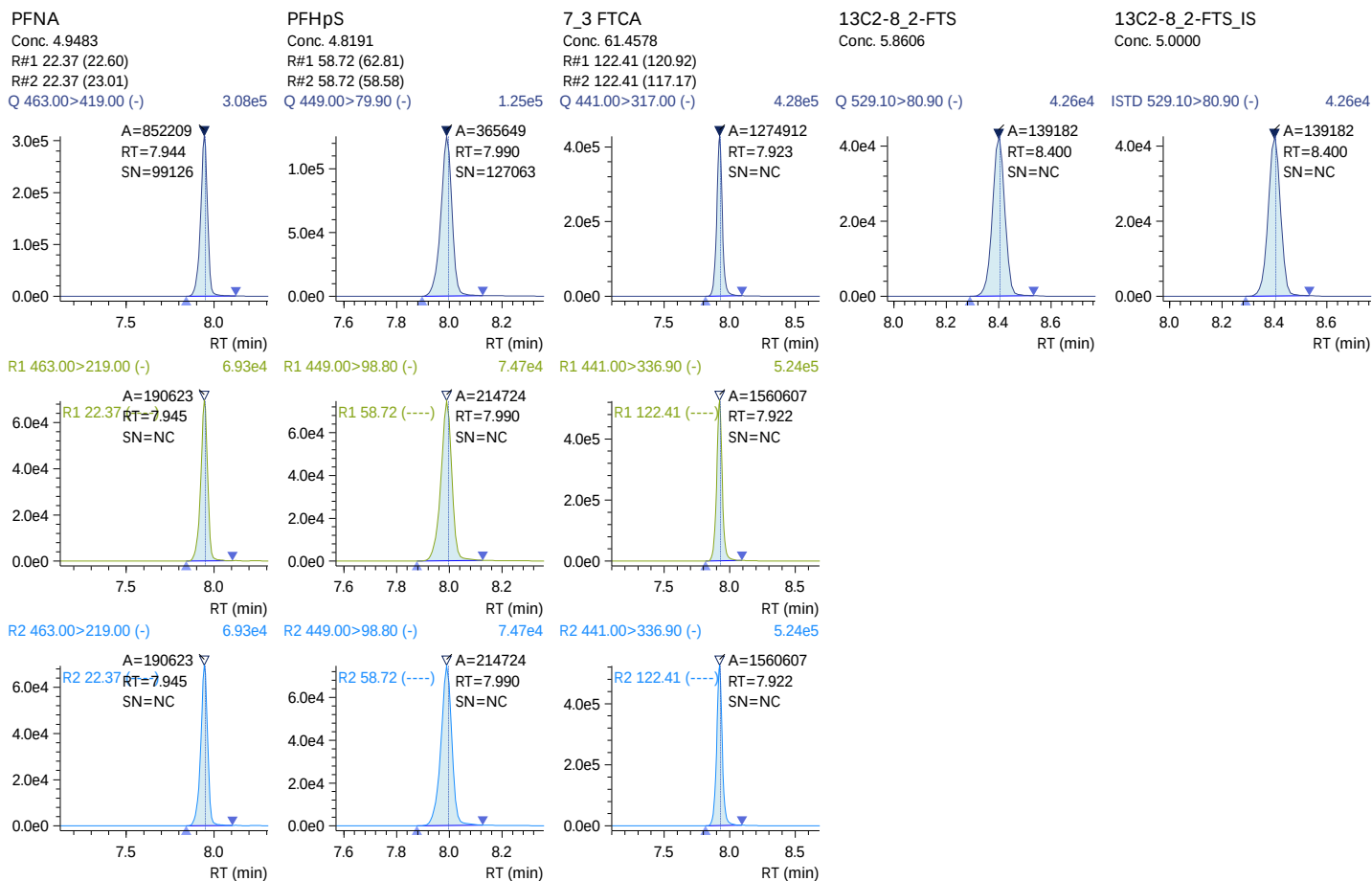


J:\LCMS08\Data\240119_1633_B1\240119_1633_B1.dampl

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_021 (continued)

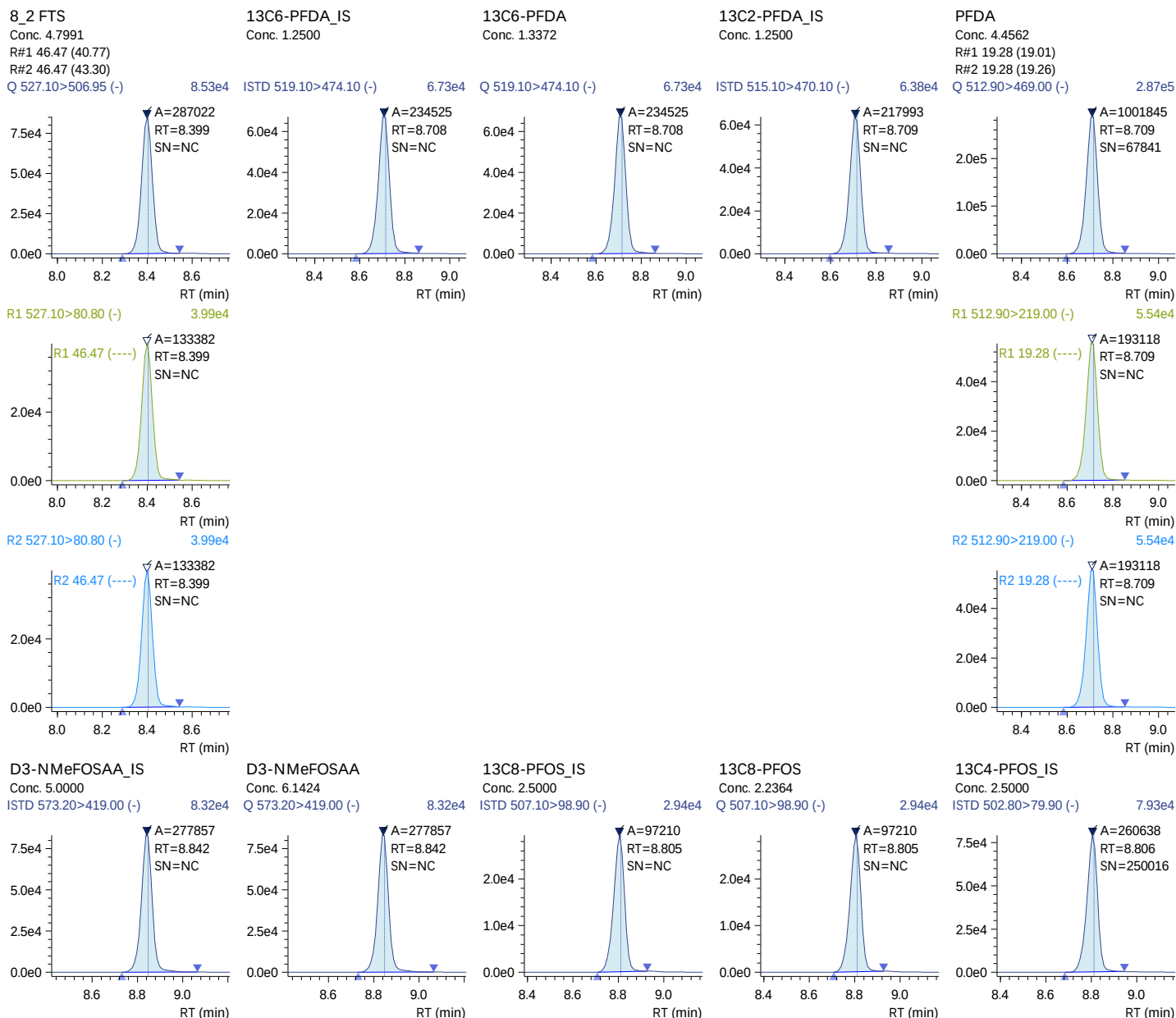


J:\LCMS08\Data\240119_1633_B1\240119_1633_B1.dampl

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_021 (continued)

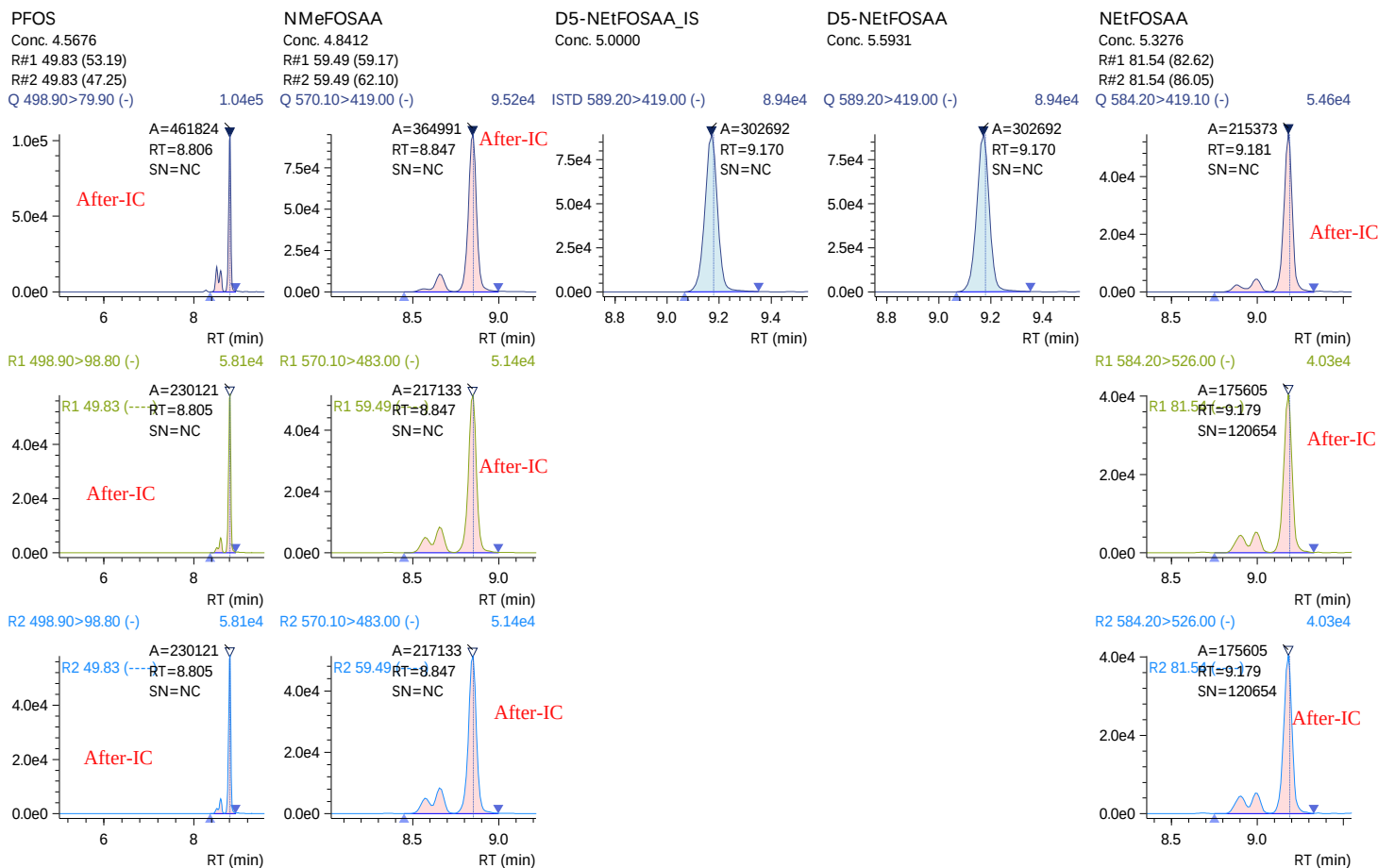


J:\LCMS08\Data\240119_1633_B1\240119_1633_B1.dampl

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_021 (continued)

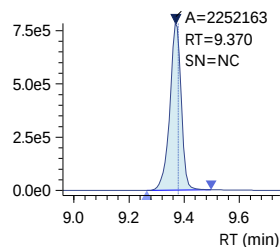




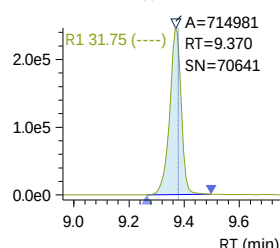
240119_021 (continued)

9-Cl-PF3ONS

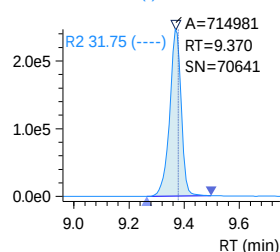
Conc. 4.3450
R#1 31.75 (31.76)
R#2 31.75 (31.74)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-)

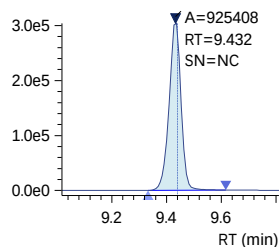


R2 532.80>353.00 (-)

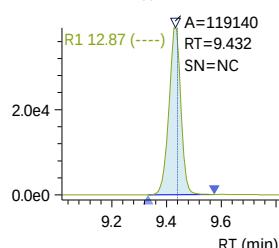


PFUnDA

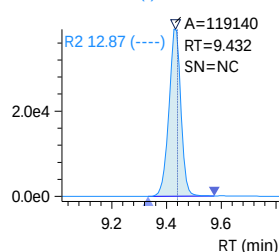
Conc. 4.6725
R#1 12.87 (12.31)
R#2 12.87 (13.26)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-)

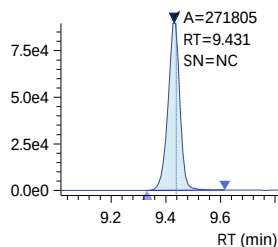


R2 563.10>269.10 (-)



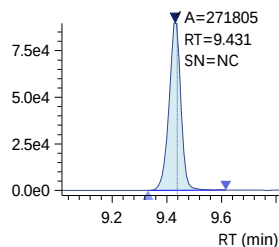
13C7-PFUnDA_IS

Conc. 1.2500
ISTD 570.00>525.10 (-)



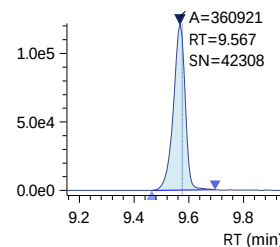
13C7-PFUnDA

Conc. 1.2992
Q 570.00>525.10 (-)

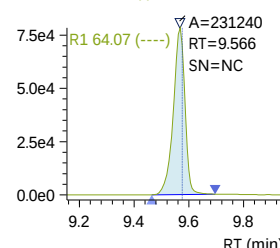


PFNS

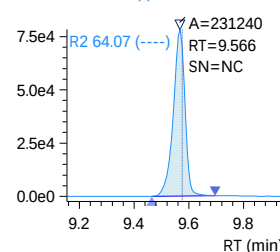
Conc. 4.8866
R#1 64.07 (63.31)
R#2 64.07 (62.49)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-)

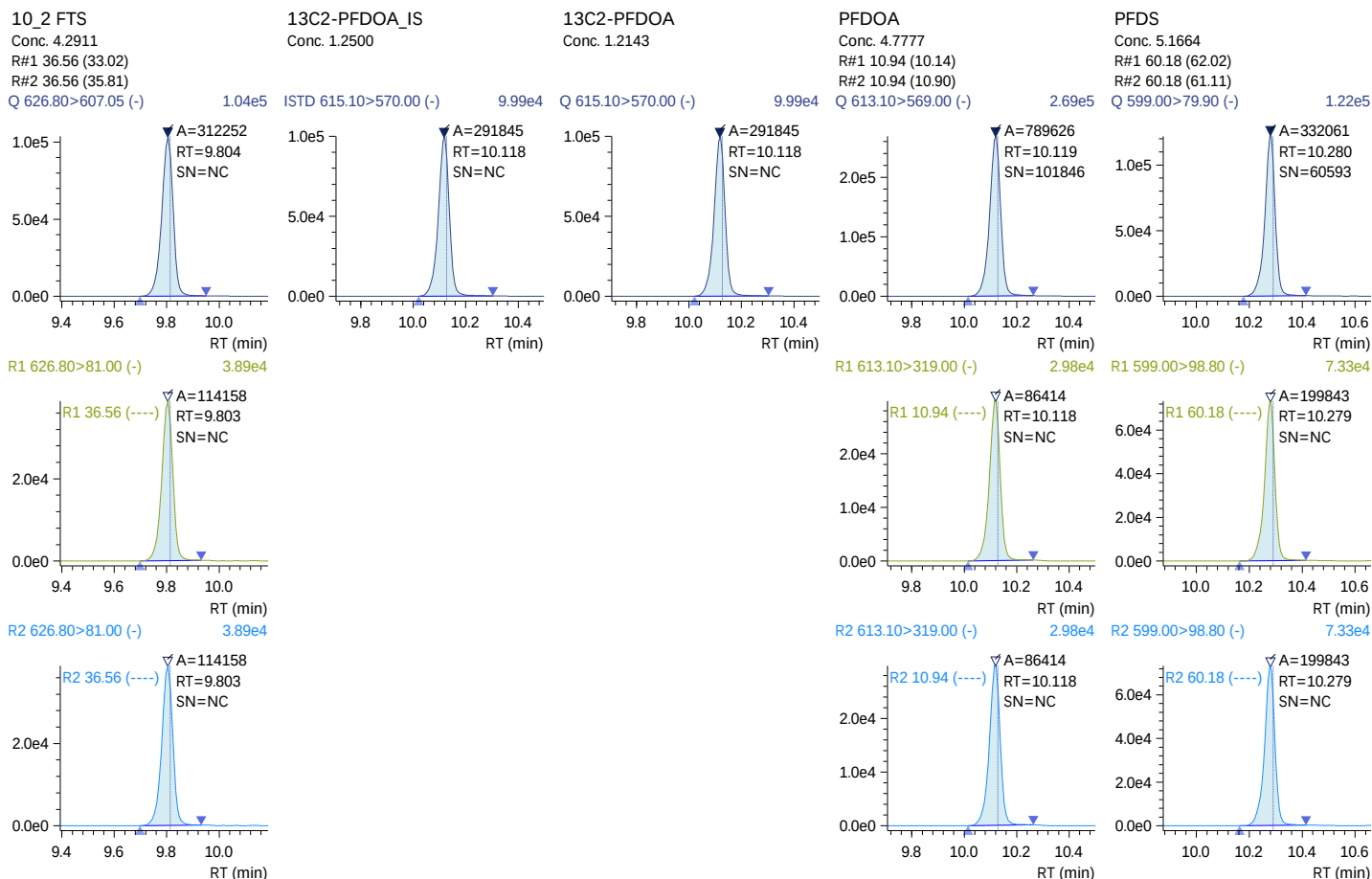


R2 548.80>98.80 (-)





240119_021 (continued)

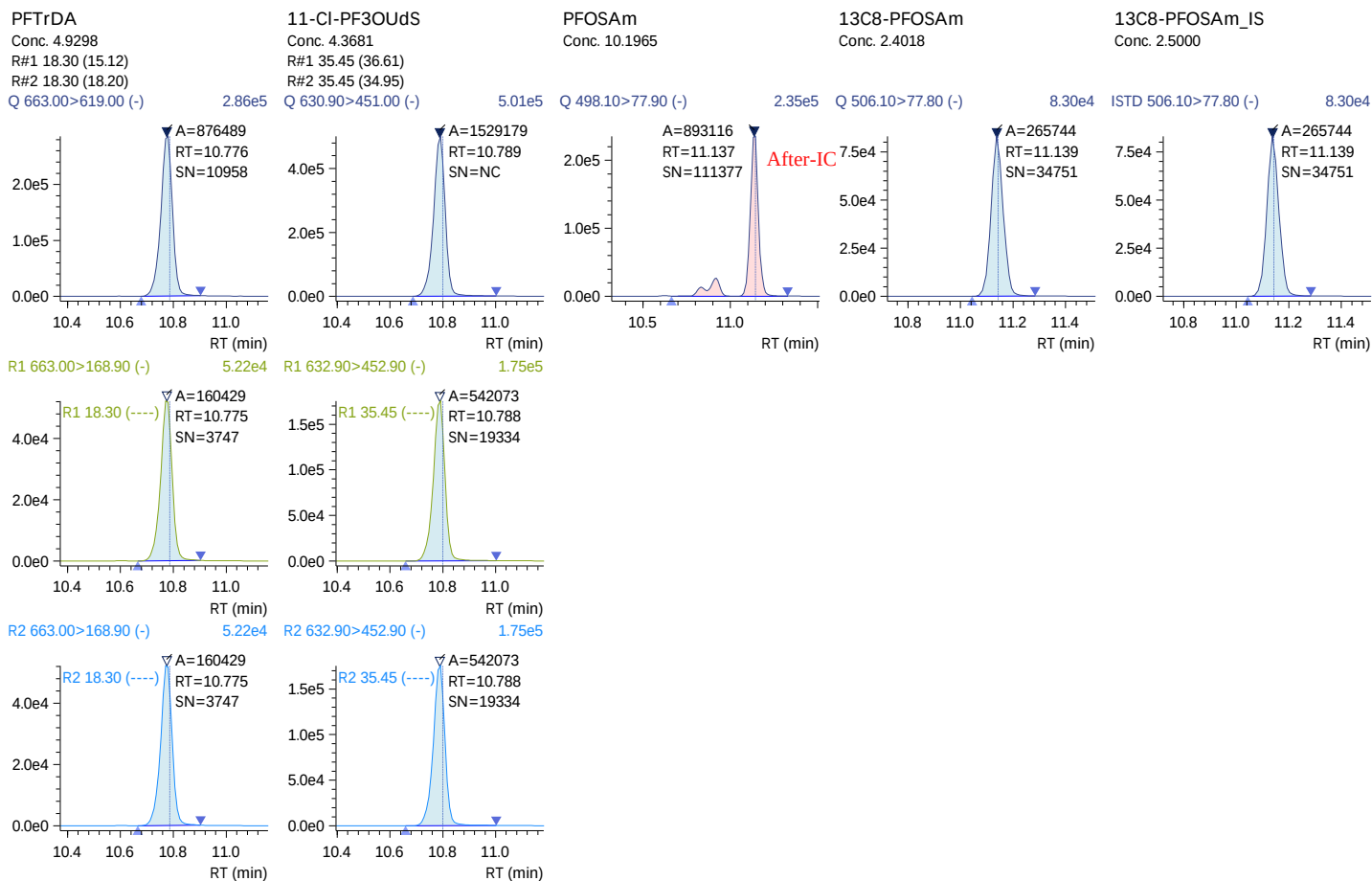


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.

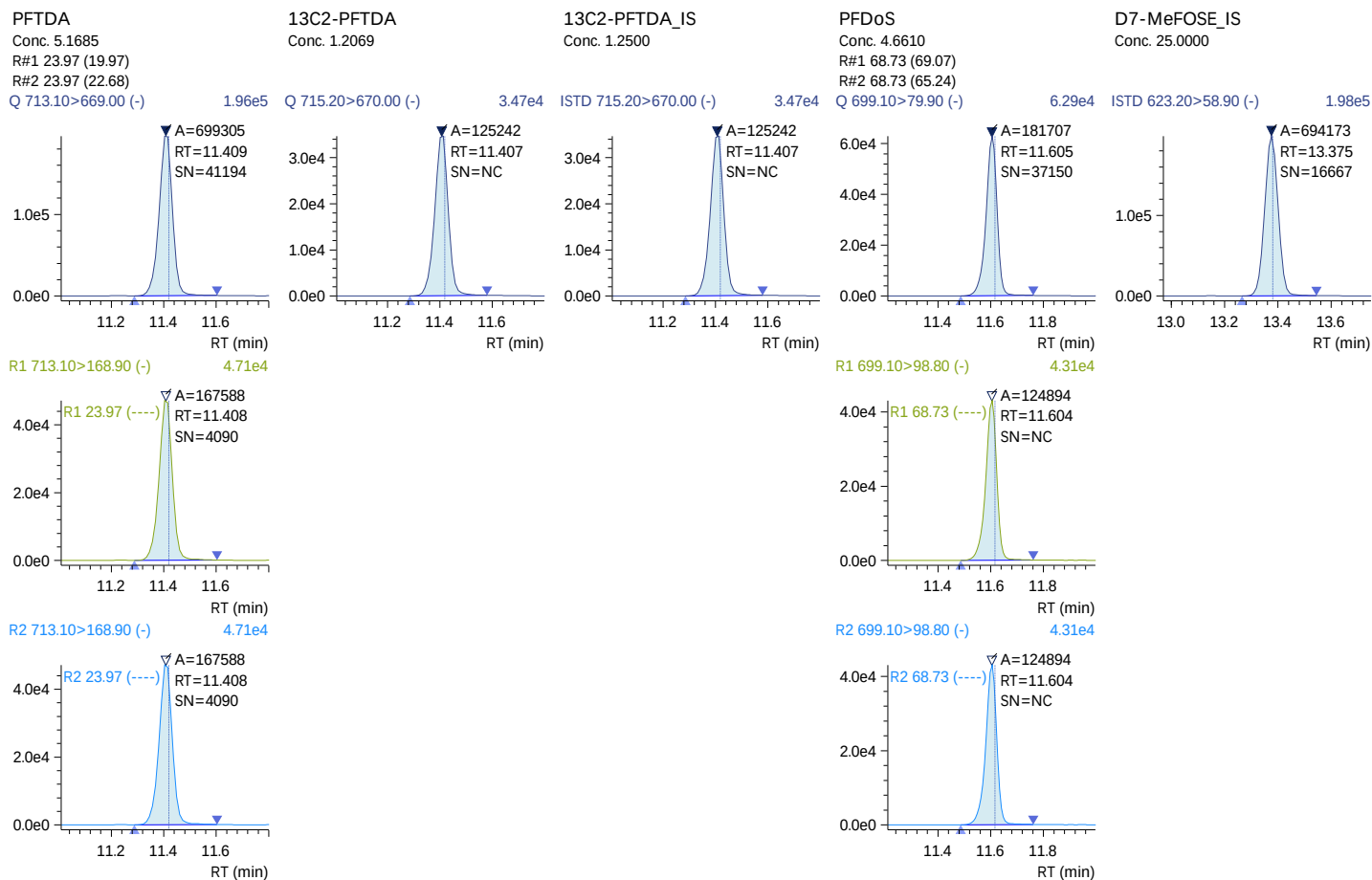


240119_021 (continued)





240119_021 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_021 (continued)

D7-MeFOSE
Conc. 25.4469

MeFOSE
Conc. 4.8585

13C2-PFHXA_IS
Conc. 2.5000

13C2-PFHXA
Conc. 2.2916

PFHXA

Conc. 4.9683
R#1 14.33 (11.64)
R#2 14.33 (14.51)

Q 623.20>58.90 (-)

1.98e5

Q 616.10>59.00 (-)

2.24e4

ISTD 815.00>770.05 (-)

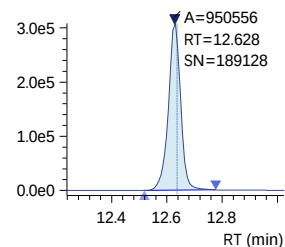
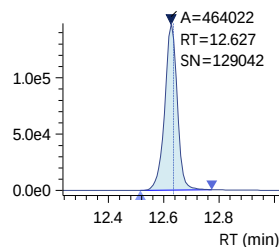
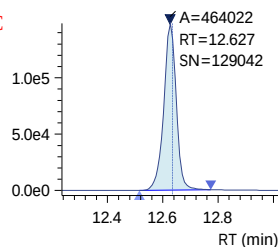
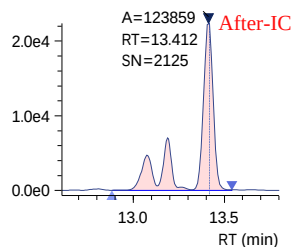
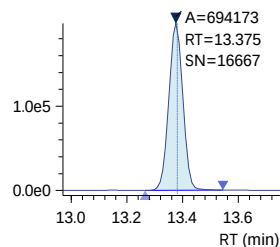
1.48e5

Q 815.00>770.05 (-)

1.48e5

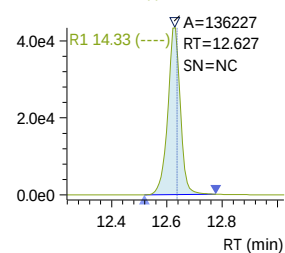
Q 813.00>768.95 (-)

3.08e5



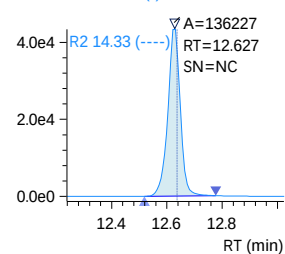
R1 813.00>218.95 (-)

4.34e4



R2 813.00>218.95 (-)

4.34e4





240119_021 (continued)

D3-MeFOSA
Conc. 2.6814

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. 4.5895
R#1 145.87 (149.05)
R#2 145.87 (142.62)

D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 26.6471

Q 515.00>219.00 (-)

1.77e4

ISTD 515.00>219.00 (-)

1.77e4

Q 511.90>219.00 (-)

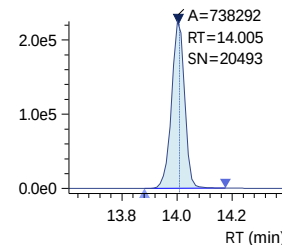
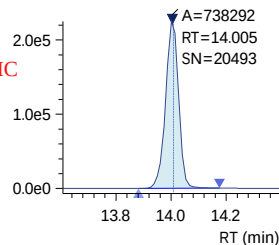
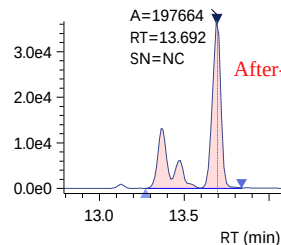
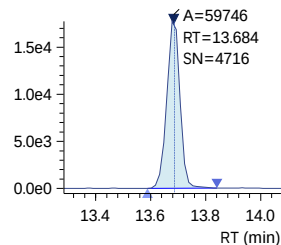
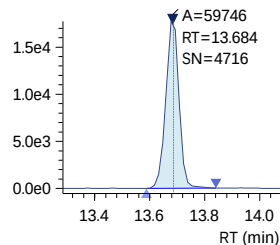
3.67e4

ISTD 639.20>58.90 (-)

2.25e5

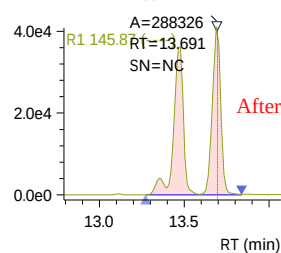
Q 639.20>58.90 (-)

2.25e5



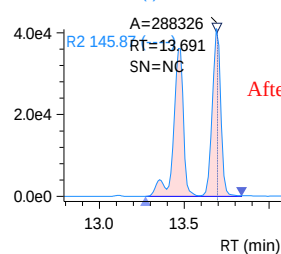
R1 511.90>169.00 (-)

4.08e4



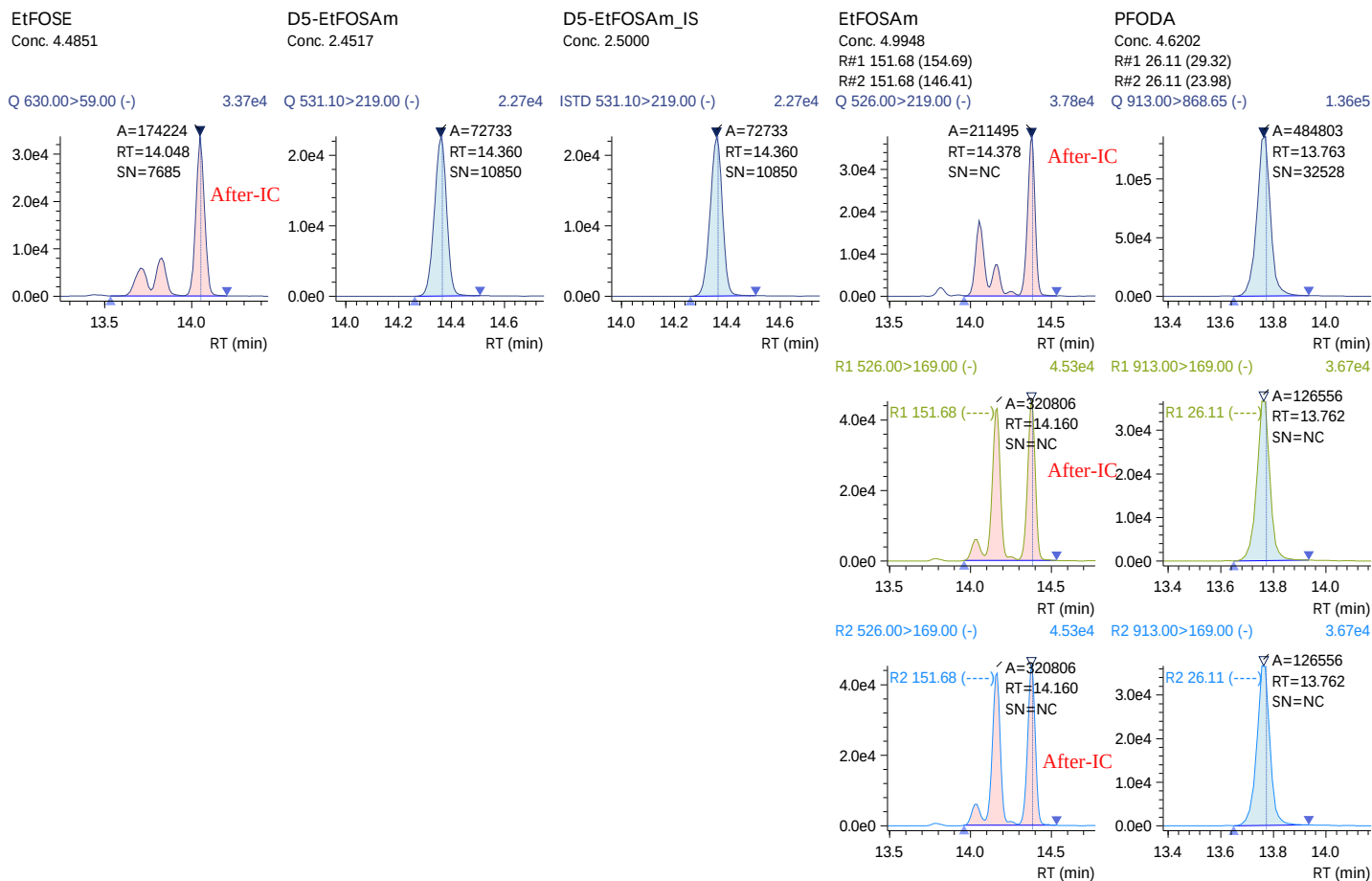
R2 511.90>169.00 (-)

4.08e4





240119_021 (continued)



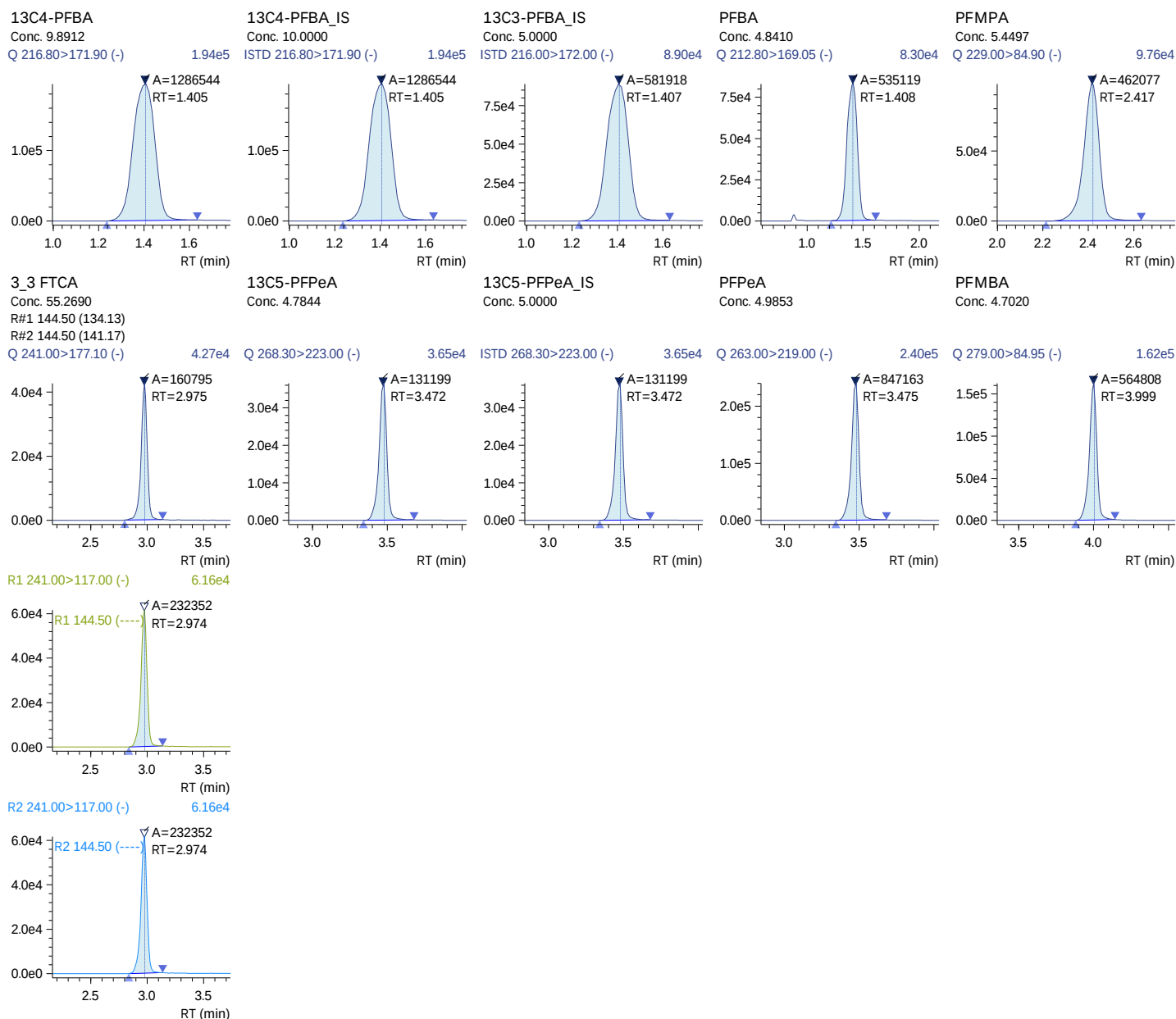
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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_021

Sample ID: 1633 ICAL 5.0PPB
Date Acquired: 1/19/2024 7:33:41 PM
Acquired by: System Administrator
Data File: 240119_021
Vial: 6 | Inj. Volume: 10.0000uL | Tray: 1





240119_021 (continued)

13C2-4_2 FTS
Conc. 6.0149

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. 4.9392
R#1 30.50 (34.14)
R#2 30.50 (29.06)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 4.0788
R#1 48.44 (47.53)
R#2 48.44 (46.72)

Q 329.10>80.90 (-)

5.58e4

ISTD 329.10>80.90 (-)

5.58e4

Q 327.10>307.00 (-)

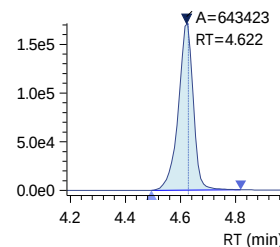
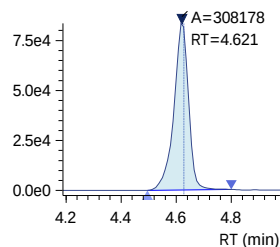
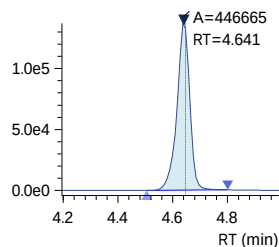
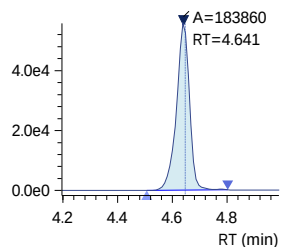
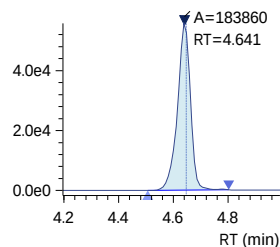
1.37e5

ISTD 302.10>79.90 (-)

8.36e4

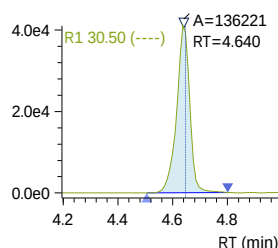
Q 298.70>79.90 (-)

1.72e5



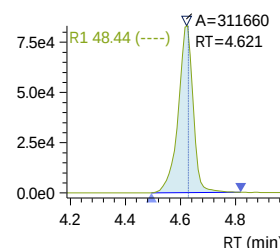
R1 327.10>80.90 (-)

4.11e4



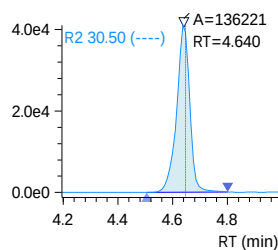
R1 298.70>98.80 (-)

8.32e4



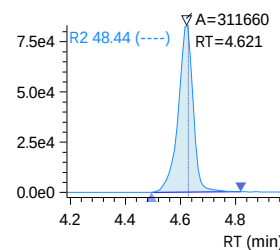
R2 327.10>80.90 (-)

4.11e4



R2 298.70>98.80 (-)

8.32e4





240119_021 (continued)

13C3-PFBS
Conc. 2.4448

NFDHA
Conc. 5.3931
R#1 37.11 (37.88)
R#2 37.11 (40.25)

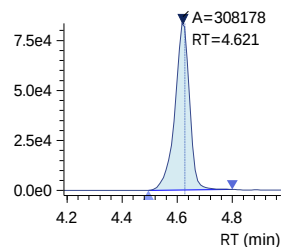
13C5-PFHxA
Conc. 2.3464

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

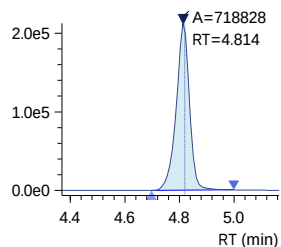
Q 302.10>79.90 (-)

8.36e4



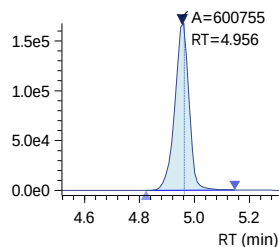
Q 295.00>201.00 (-)

2.13e5



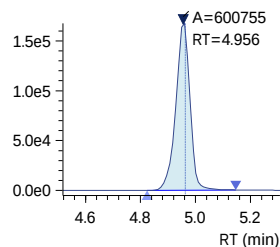
Q 318.00>273.00 (-)

1.68e5



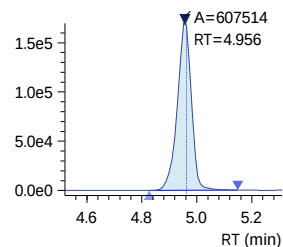
ISTD 318.00>273.00 (-)

1.68e5



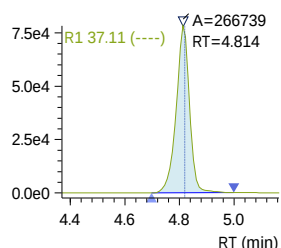
ISTD 315.10>270.00 (-)

1.70e5



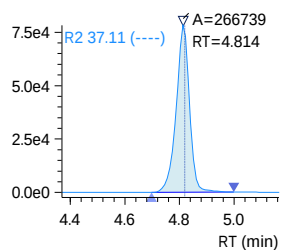
R1 295.00>84.90 (-)

7.83e4



R2 295.00>84.90 (-)

7.83e4





240119_021 (continued)

PFHxA
Conc. 4.8940

PFEESA
Conc. 4.1906
R#1 5.81 (5.88)
R#2 5.81 (6.11)

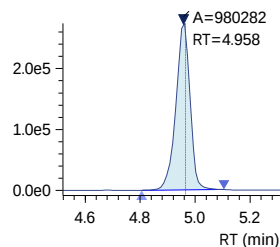
13C3-HFPO-DA
Conc. 10.5720

13C3-HFPO-DA_IS
Conc. 10.0000

HFPO-DA
Conc. 4.8450
R#1 64.73 (63.80)
R#2 64.73 (65.61)

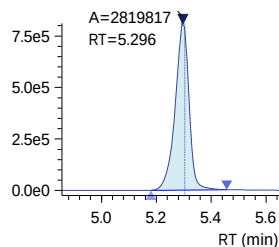
Q 313.00>269.00 (-)

2.74e5



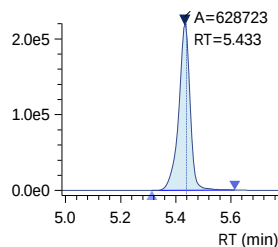
Q 314.80>135.00 (-)

8.11e5



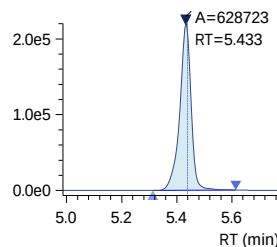
Q 286.90>168.90 (-)

2.21e5



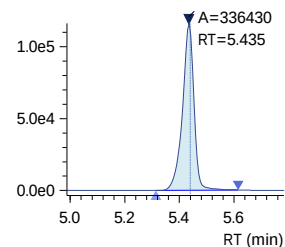
ISTD 286.90>168.90 (-)

2.21e5



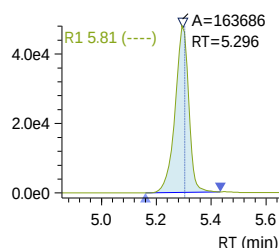
Q 284.90>168.90 (-)

1.16e5



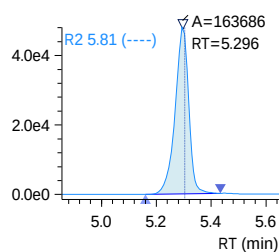
R1 314.80>82.90 (-)

4.81e4



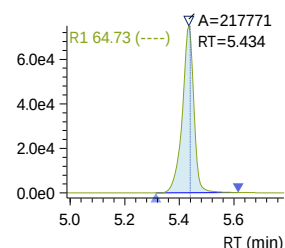
R2 314.80>82.90 (-)

4.81e4



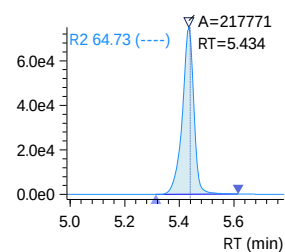
R1 284.90>184.90 (-)

7.50e4



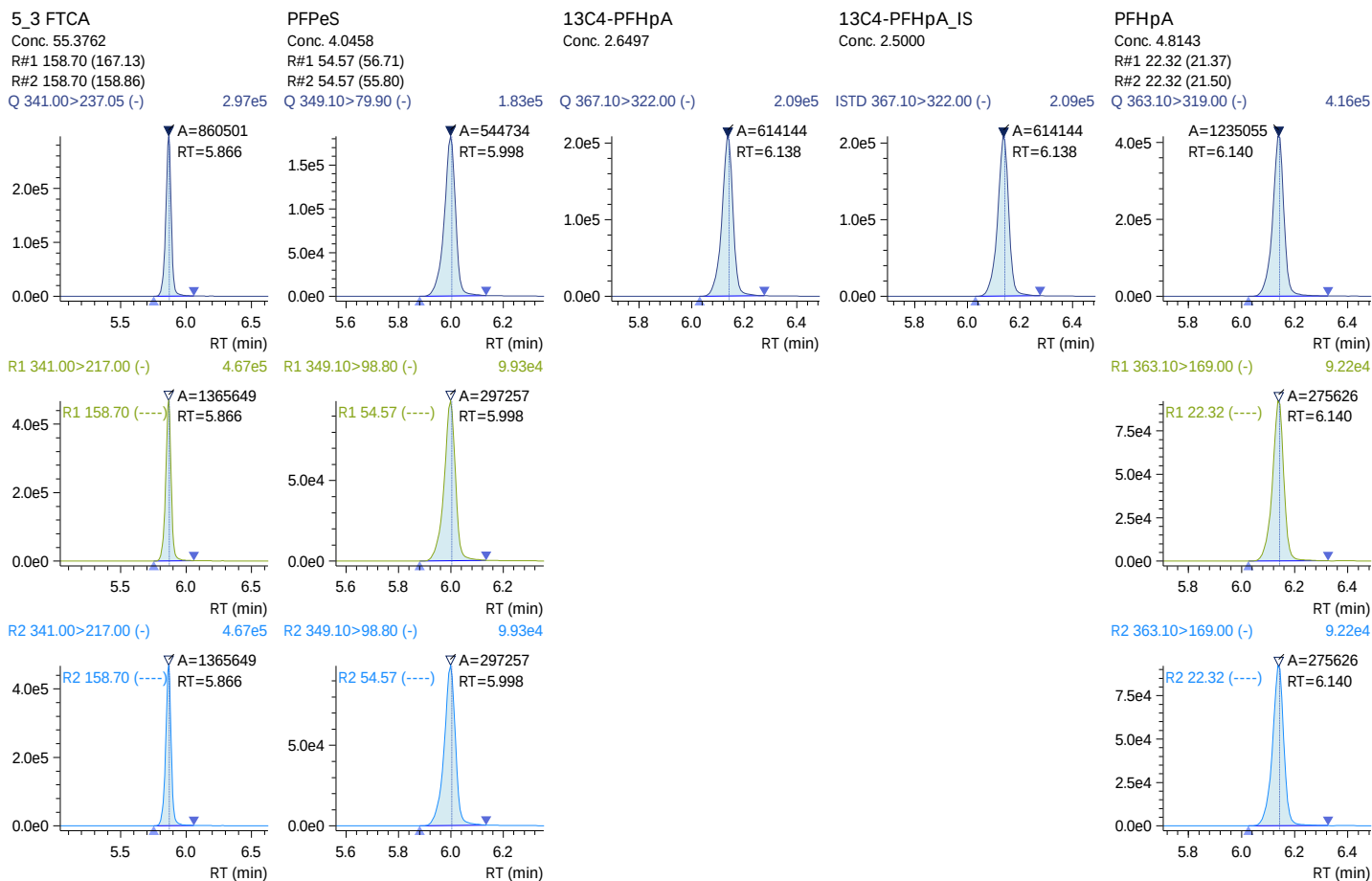
R2 284.90>184.90 (-)

7.50e4



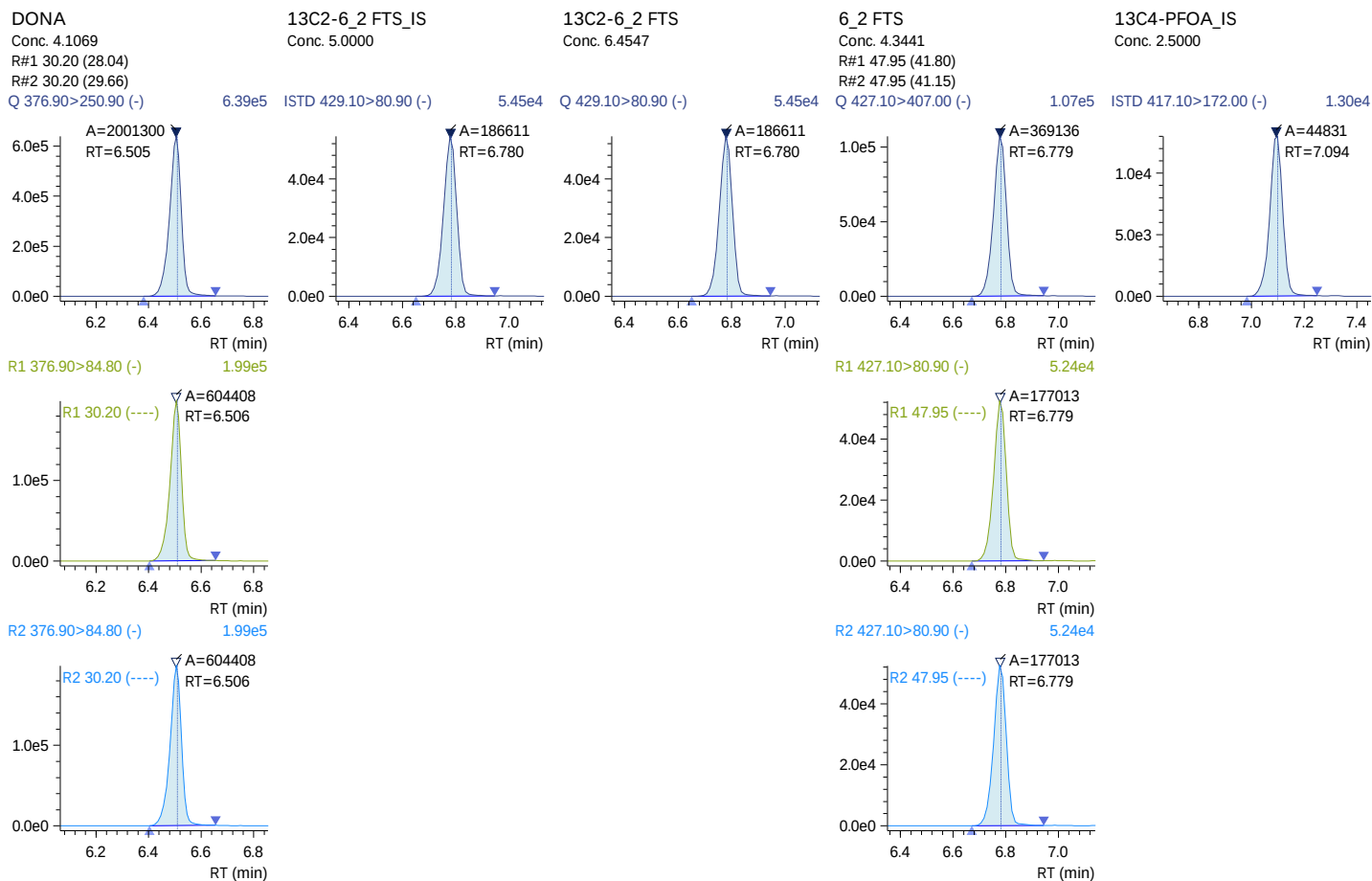


240119_021 (continued)





240119_021 (continued)





240119_021 (continued)

13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.3853

PFOA
Conc. 5.4260
R#1 31.94 (29.05)
R#2 31.94 (31.89)

13C3-PFHxS
Conc. 2.6892

13C3-PFHxS_IS
Conc. 2.5000

ISTD 421.10>376.00 (-)

1.72e5

Q 421.10>376.00 (-)

1.72e5

Q 413.00>369.00 (-)

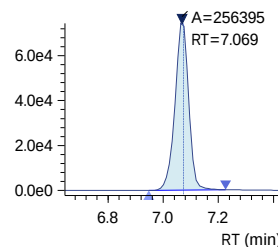
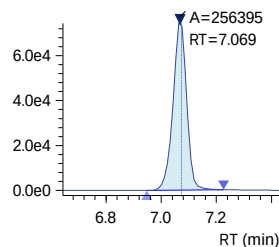
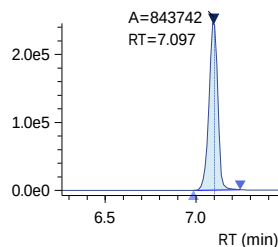
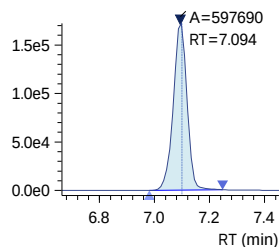
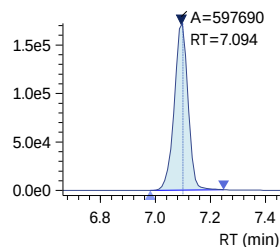
2.46e5

Q 402.10>79.90 (-)

7.44e4

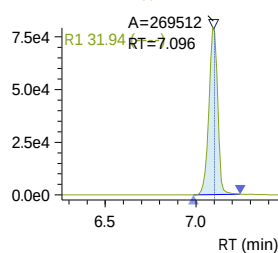
ISTD 402.10>79.90 (-)

7.44e4



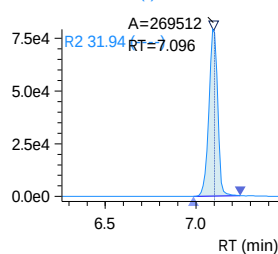
R1 413.00>169.00 (-)

7.93e4



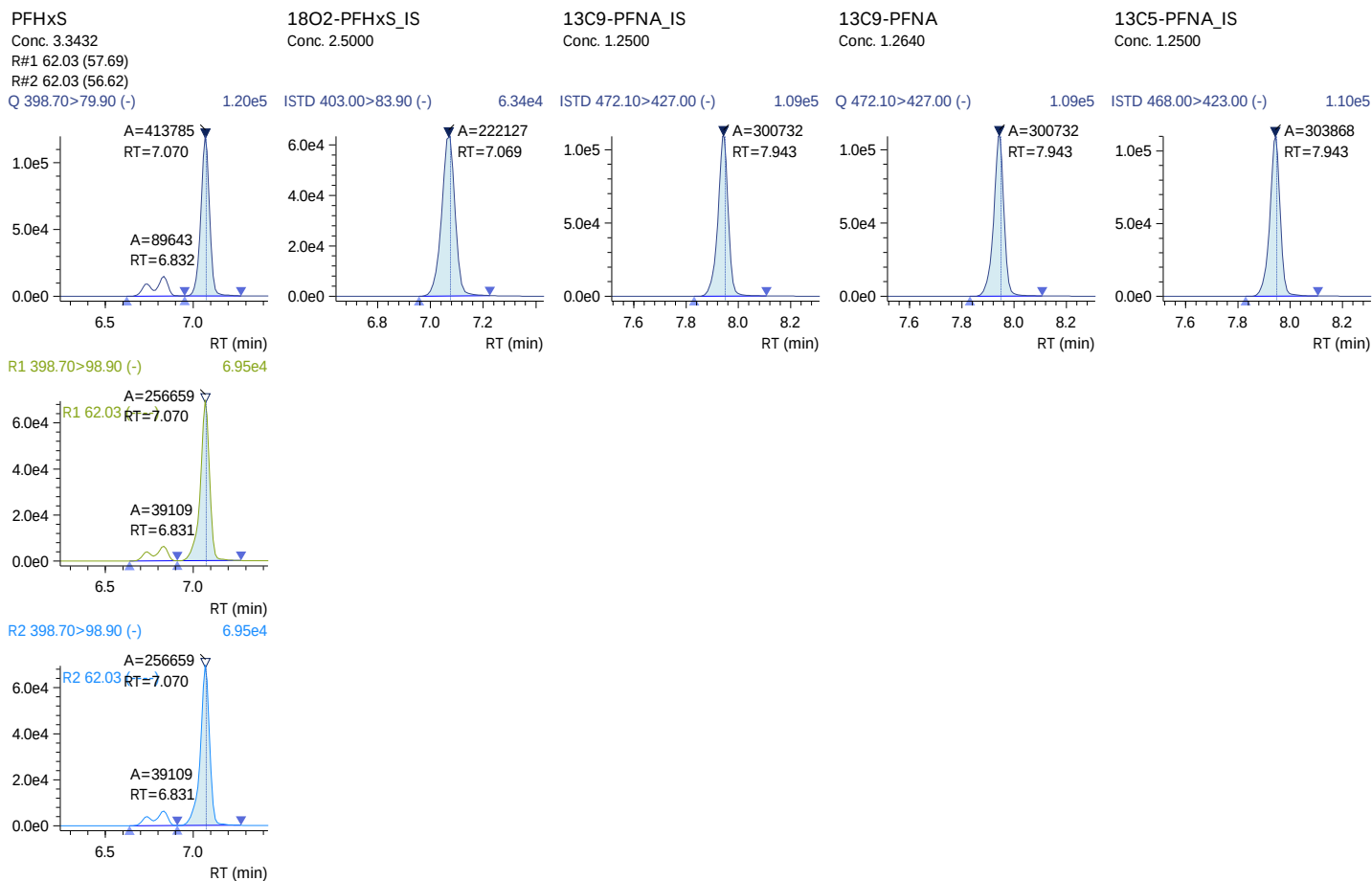
R2 413.00>169.00 (-)

7.93e4



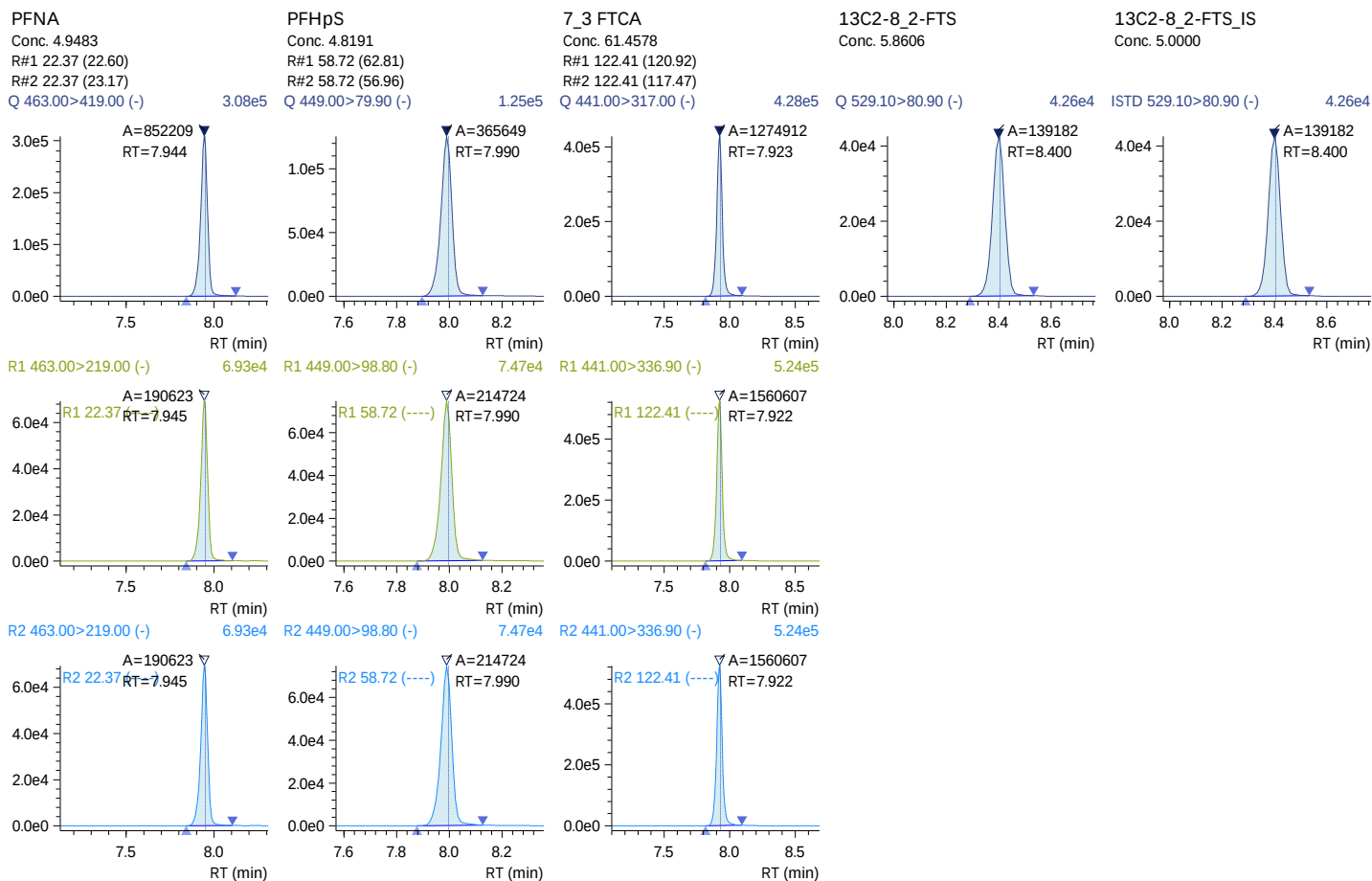


240119_021 (continued)



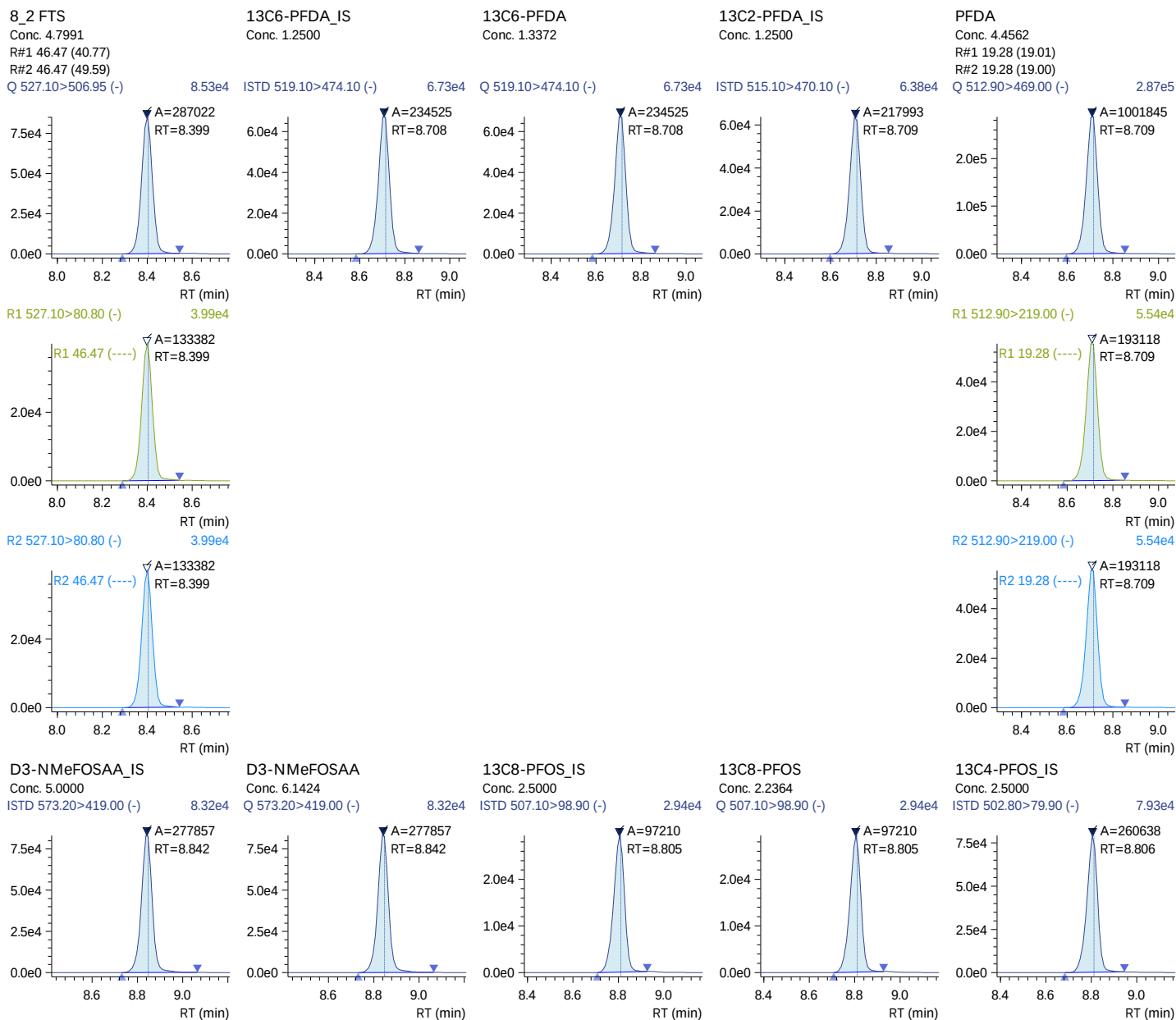


240119_021 (continued)



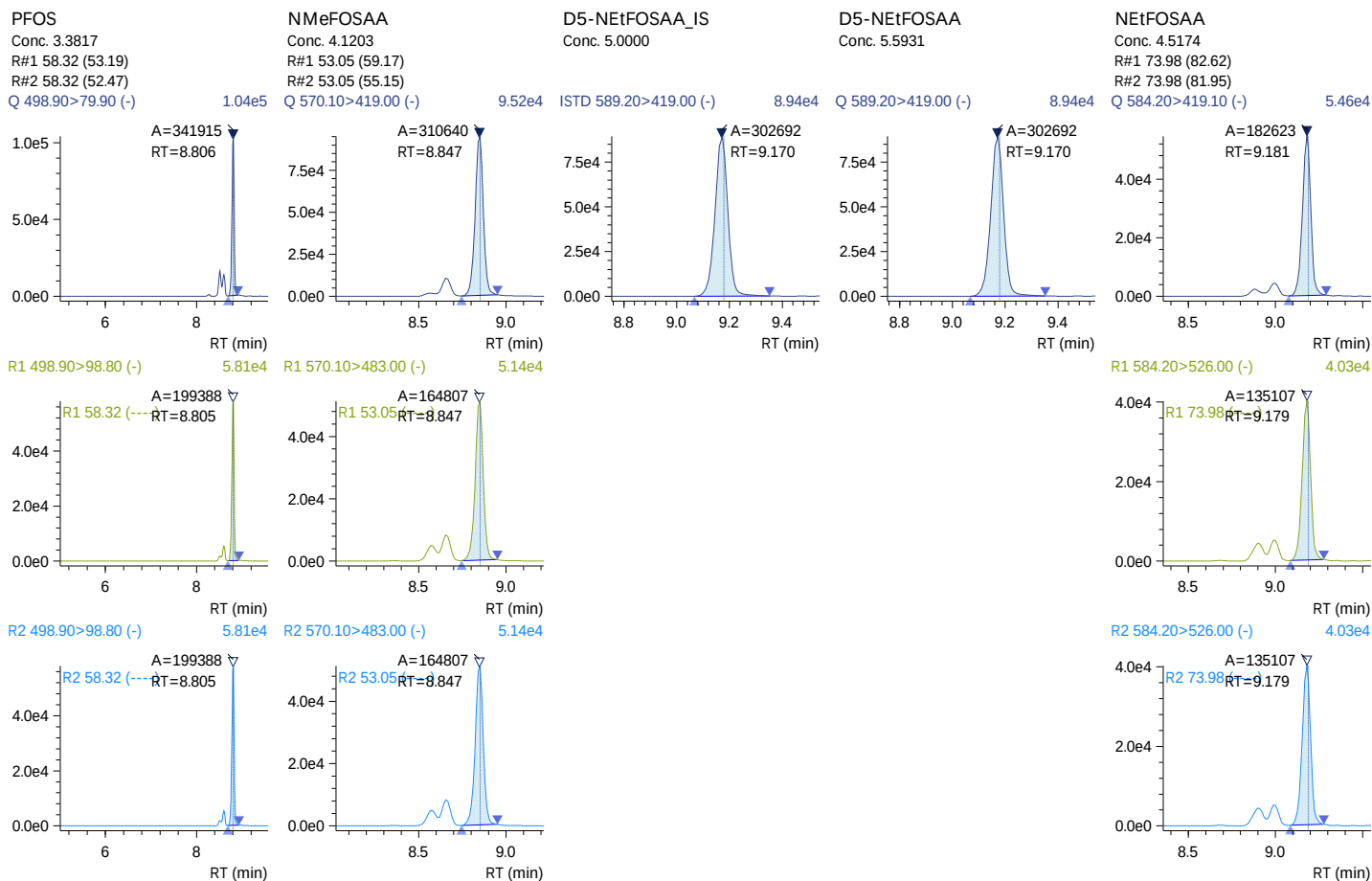


240119_021 (continued)





240119_021 (continued)

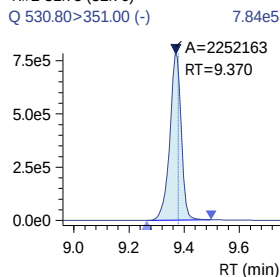




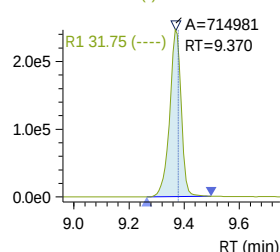
240119_021 (continued)

9-Cl-PF3ONS

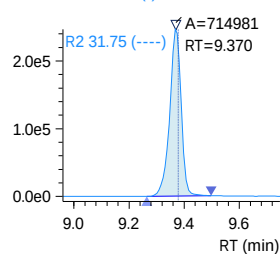
Conc. 4.3450
R#1 31.75 (31.76)
R#2 31.75 (32.76)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-)

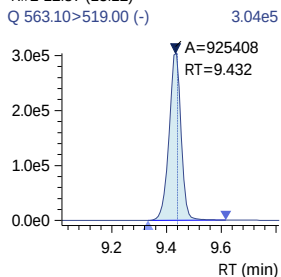


R2 532.80>353.00 (-)

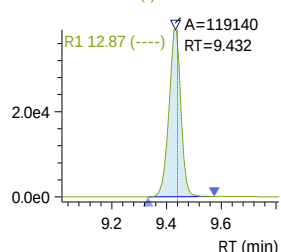


PFUnDA

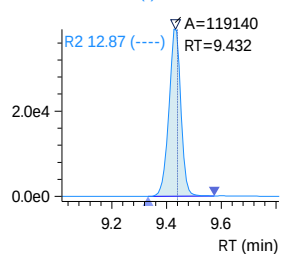
Conc. 4.6725
R#1 12.87 (12.31)
R#2 12.87 (13.12)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-)

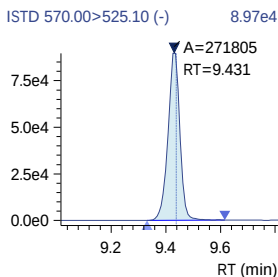


R2 563.10>269.10 (-)



13C7-PFUnDA_IS

Conc. 1.2500



ISTD 570.00>525.10 (-)

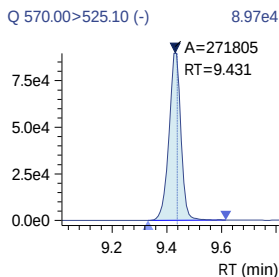


Q 570.00>525.10 (-)



13C7-PFUnDA

Conc. 1.2992



Q 570.00>525.10 (-)

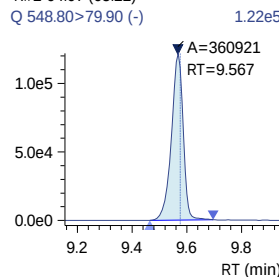


Q 570.00>525.10 (-)

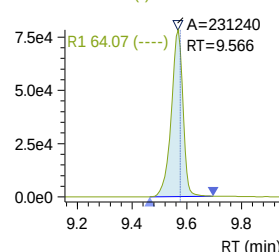


PFNS

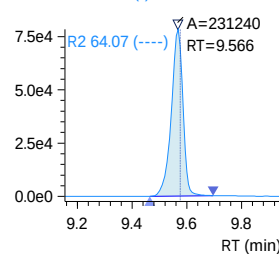
Conc. 4.8866
R#1 64.07 (63.31)
R#2 64.07 (65.22)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-)

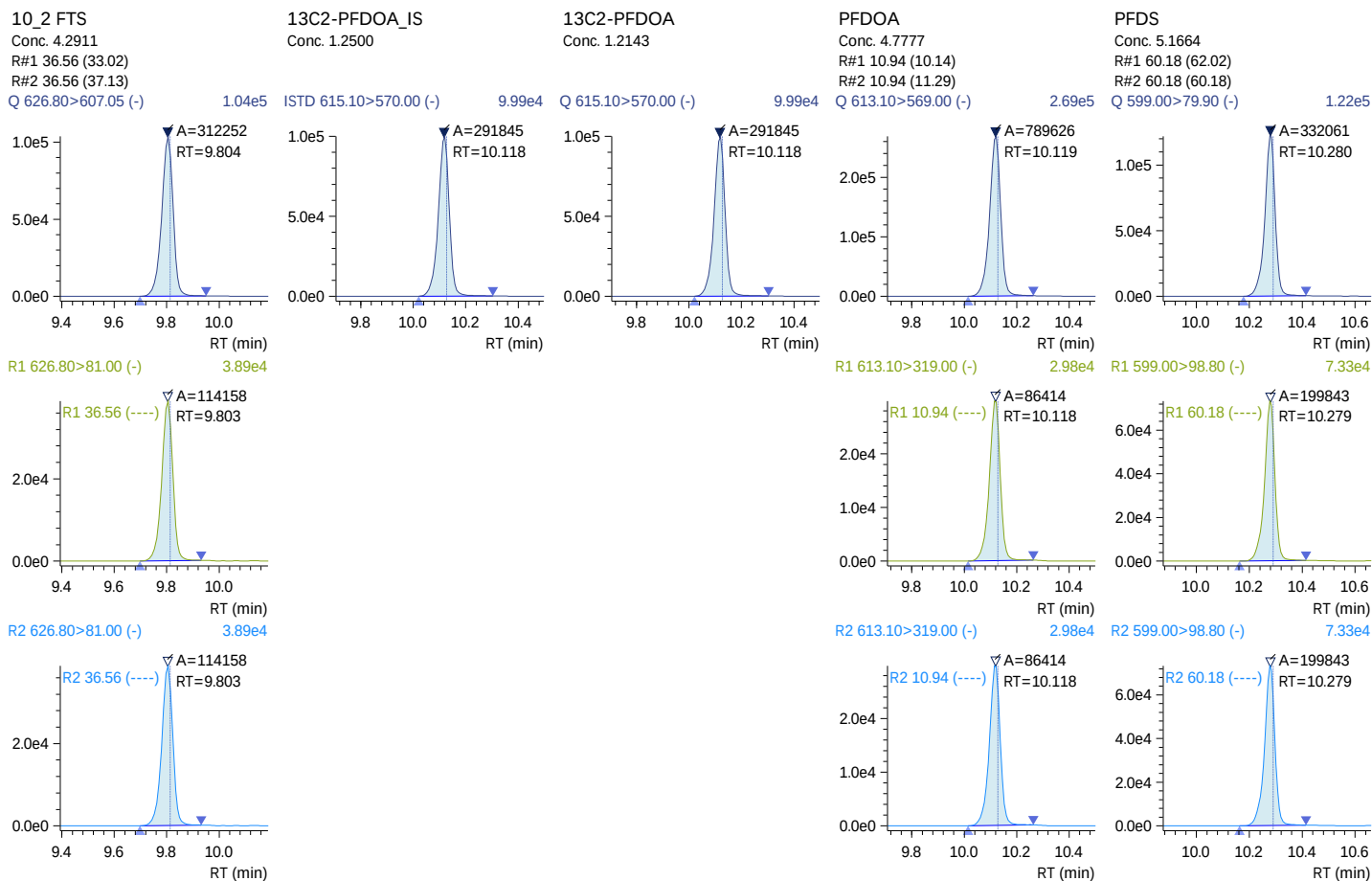


R2 548.80>98.80 (-)





240119_021 (continued)





240119_021 (continued)

PFTTrDA

Conc. 4.9298

R#1 18.30 (15.12)

R#2 18.30 (17.64)

Q 663.00>619.00 (-)

2.86e5

11-Cl-PF3OUdS

Conc. 4.3681

R#1 35.45 (36.61)

R#2 35.45 (36.44)

Q 630.90>451.00 (-)

5.01e5

PFOSAm

Conc. 8.5891

Q 498.10>77.90 (-)

2.35e5

13C8-PFOSAm

Conc. 2.4018

Q 506.10>77.80 (-)

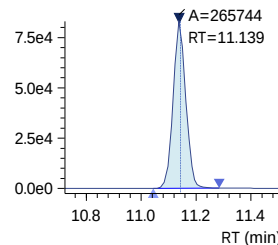
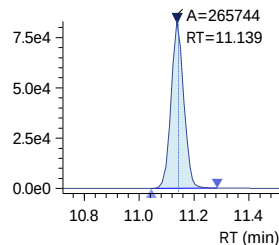
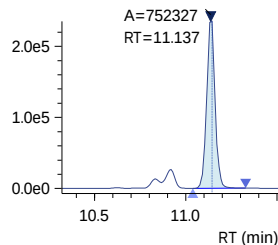
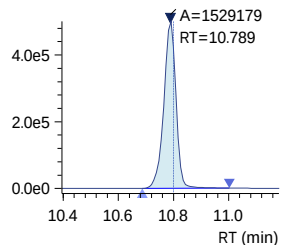
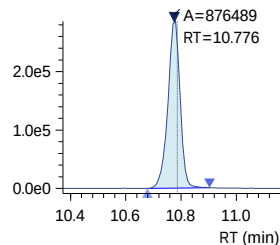
8.30e4

13C8-PFOSAm_IS

Conc. 2.5000

ISTD 506.10>77.80 (-)

8.30e4

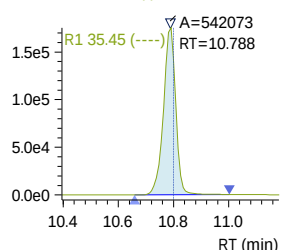
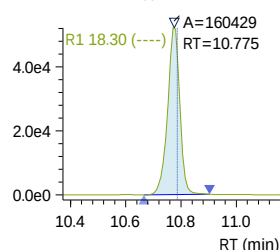


R1 663.00>168.90 (-)

5.22e4

R1 632.90>452.90 (-)

1.75e5

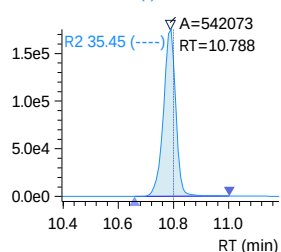
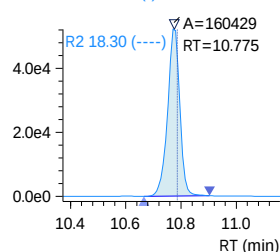


R2 663.00>168.90 (-)

5.22e4

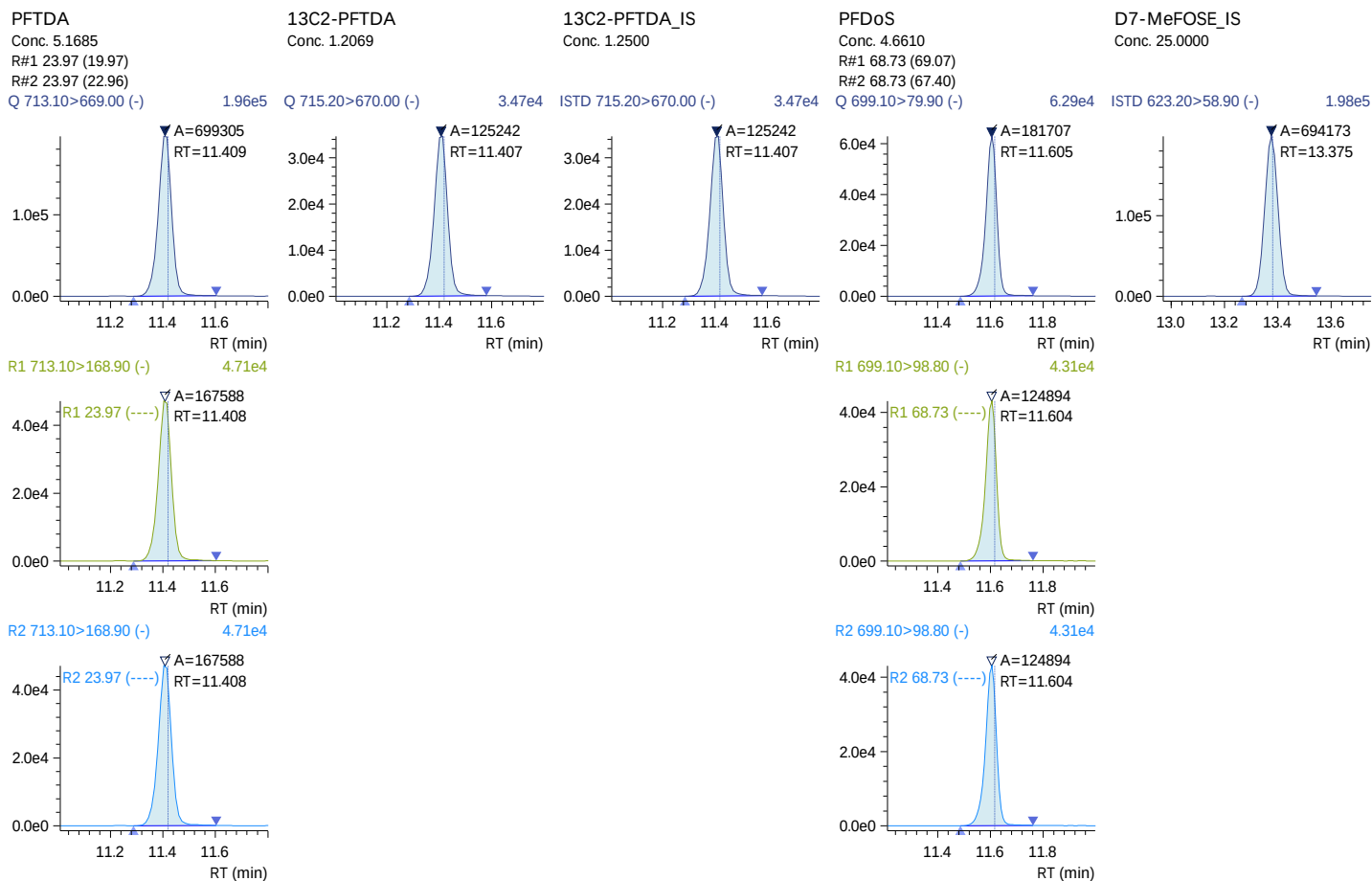
R2 632.90>452.90 (-)

1.75e5





240119_021 (continued)





240119_021 (continued)

D7-MeFOSE
Conc. 25.4469

MeFOSE
Conc. 3.1783

13C2-PFHXA_IS
Conc. 2.5000

13C2-PFHXA
Conc. 2.2916

PFHXA
Conc. 4.9683
R#1 14.33 (11.64)
R#2 14.33 (13.90)

Q 623.20>58.90 (-)

1.98e5

Q 616.10>59.00 (-)

2.24e4

ISTD 815.00>770.05 (-)

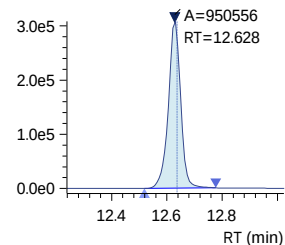
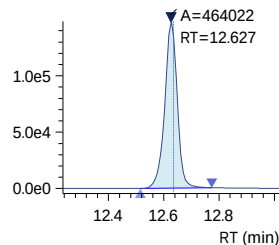
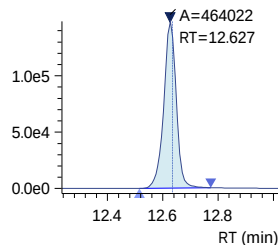
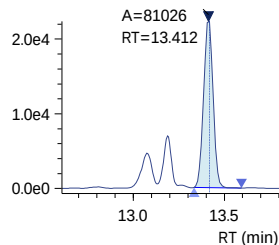
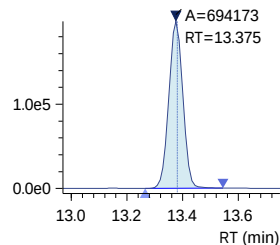
1.48e5

Q 815.00>770.05 (-)

1.48e5

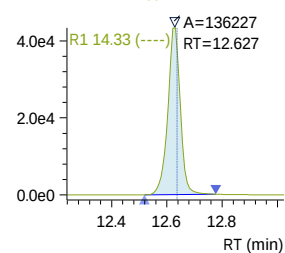
Q 813.00>768.95 (-)

3.08e5



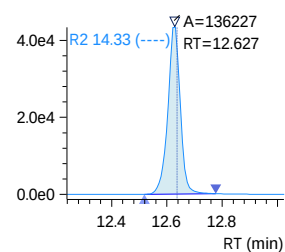
R1 813.00>218.95 (-)

4.34e4



R2 813.00>218.95 (-)

4.34e4





240119_021 (continued)

D3-MeFOSA
Conc. 2.6814

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. 2.9064
R#1 110.24 (149.05)
R#2 110.24 (140.79)

D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 26.6471

Q 515.00>219.00 (-)

1.77e4

ISTD 515.00>219.00 (-)

1.77e4

Q 511.90>219.00 (-)

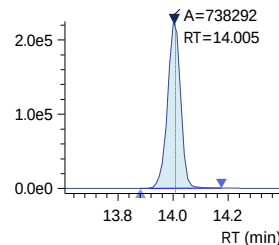
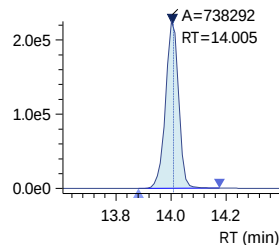
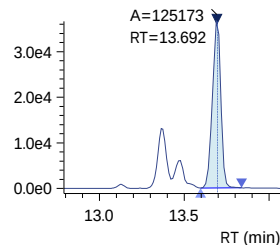
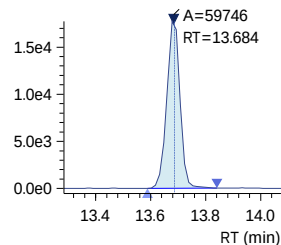
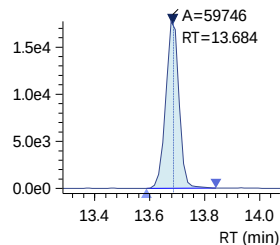
3.67e4

ISTD 639.20>58.90 (-)

2.25e5

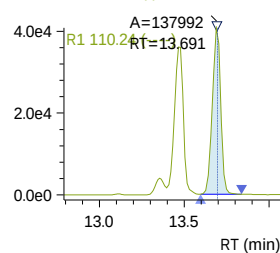
Q 639.20>58.90 (-)

2.25e5



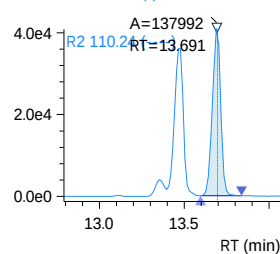
R1 511.90>169.00 (-)

4.08e4



R2 511.90>169.00 (-)

4.08e4





240119_021 (continued)

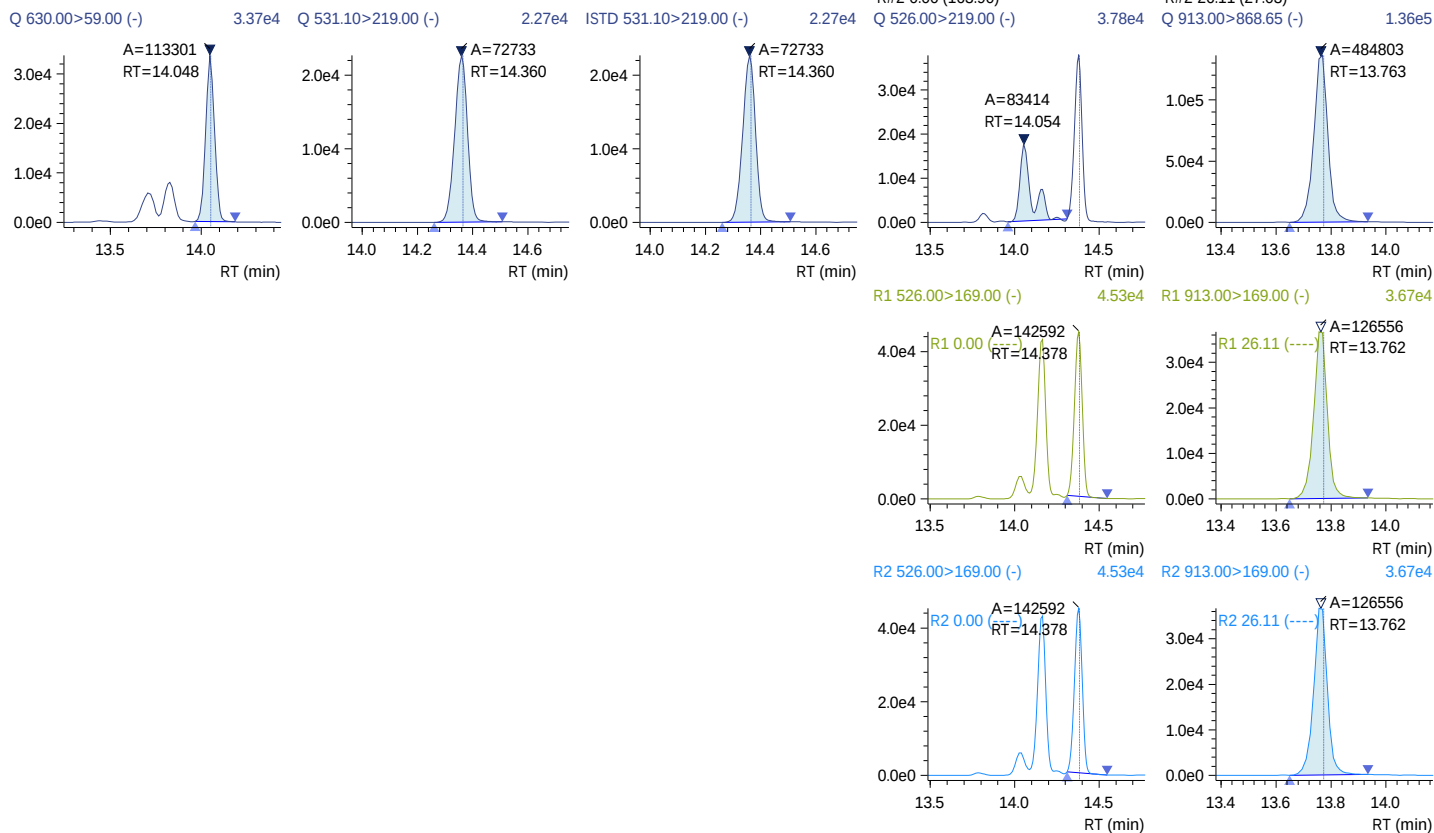
EtFOSE
Conc. 2.9168

D5-EtFOSAm
Conc. 2.4517

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. 1.9700
R#1 0.00 (154.69)
R#2 0.00 (163.90)

PFODA
Conc. 4.6202
R#1 26.11 (29.32)
R#2 26.11 (27.03)



Validation Report

1st PS 01/23/24
2nd UA 01/23/24

Data File: J:\LCMS08\Data\240119_1633_B1\240119_036
Lab ID: KQ2400951-11
RunType: CCV
Matrix: Soil

Date Acquired: 1/20/24 01:22
Batch ID: 830171
Analysis Method: 1633/PFAS_DOD5.4

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Internal Standards	X	

Primary Review: _____

Secondary Review: _____

Quantitation Report

1st *PS* 01/23/24
2nd *UA* 01/23/24

Data File:	J:\LCMS08\Data\240119_1633_B1\240119_036	Instrument:	K-LCMS-08
Acqu Date:	1/20/24 01:22	Vial:	30
Run Type:	CCV	Dilution:	1
Lab ID:	KQ2400951-11	Raw Units:	ng/mL

Bottle ID:		Tier:	IV	Matrix:	Soil
Prod Code:	PFAS_DOD5.4	Collect Date:	12/20/23	Receive Date:	12/28/23

Analysis Lot:	830171	Prep Lot:		Report Group:	KQ2400951
Analysis	1633	Prep Method:			
		Prep Date:			

Title:	Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM	Calibration ID:	KC2400027
		Report List ID:	24615

Internal Standard Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Area Criteria
18O2-PFHxS	7.077		224321	2.5000	OK
13C4-PFOS	8.813		250747	2.5000	OK
13C3-PFBA	1.411		542401	5.0000	OK
13C2-PFHxA	4.967		579560	2.5000	OK
13C4-PFOA	7.102		41855	2.5000	OK
13C5-PFNA	7.950		308747	1.2500	OK
13C2-PFDA	8.715		201826	1.2500	OK

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Rpt?
13C3-PFBS	4.632		313497	2.4626	Y
13C3-PFHxS	7.077		245697	2.5518	Y
13C8-PFOS	8.812		102105	2.4417	Y
13C4-PFBA	1.410		1246172	10.2789	Y
13C5-PFPeA	3.483		124878	4.7735	Y
13C5-PFHxA	4.966		582665	2.3855	Y
13C4-PFHpA	6.146		596578	2.6981	Y
13C8-PFOA	7.102		613241	2.6214	Y
13C9-PFNA	7.950		287166	1.1879	Y
13C6-PFDA	8.715		223784	1.3782	Y
13C7-PFUnDA	9.438		267814	1.3827	Y
13C2-PFDoDA	10.124		294744	1.3246	Y
13C2-PFTeDA	11.415		125337	1.3046	Y
13C8-FOSA	11.146		223326	2.0980	Y
D3-MeFOSA	13.684		57671	2.6903	Y
D5-EtFOSA	14.360		74289	2.6030	Y
D7-MeFOSE	13.376		705001	26.8633	Y
D9-EtFOSE	14.005		753740	28.2777	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 1/23/24 14:28

\\alprews001\starlims\LIMSReps\QuantValidation.rpt

			1st	PS	01/23/24
Data File:	J:\LCMS08\Data\240119_1633_B1\240119_036	Instrument:	K-LCMS08	2nd	01/23/24
Acqu Date:	1/20/24 01:22	Vial:	30	UA	
Run Type:	CCV	Dilution:	1		
Lab ID:	KQ2400951-11	Raw Units:	ng/mL		

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Rpt?
D3-MeFOSAA	8.852		253311	5.8207	Y
D5-EtFOSAA	9.184		281141	5.3998	Y
13C2-4:2 FTS	4.651		193083	6.2548	Y
13C2-6:2 FTS	6.786		165522	5.6693	Y
13C2-8:2 FTS	8.404		149101	6.2168	Y
13C3-HFPO-DA	5.442		602533	10.6203	Y

Target Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Rpt?
Perfluorobutane sulfonic acid (PFBS)	4.633		604696	3.7683	Y
Perfluoropentane sulfonic acid (PFPeS)	6.008		560119	4.3411	Y
Perfluorohexane sulfonic acid (PFHxS)	7.077		464486	3.9196	Y
Perfluoroheptane sulfonic acid (PFHpS)	7.997		377641	4.7385	Y
Perfluorooctane sulfonic acid (PFOS)	8.814		456554	4.2990	Y
Perfluorononane sulfonic acid (PFNS)	9.575		359805	4.6379	Y
Perfluorodecane sulfonic acid (PFDS)	10.286		316750	4.6913	Y
Perfluorododecane sulfonic acid (PFDoS)	11.612		168952	4.1260	Y
Perfluorobutanoic acid (PFBA)	1.413		516355	4.8225	Y
Perfluoropentanoic acid (PFPeA)	3.486		826734	5.1113	Y
Perfluorohexanoic acid (PFHxA)	4.968		942525	4.8515	Y
Perfluoroheptanoic acid (PFHpA)	6.148		1133988	4.5486	Y
Perfluorooctanoic acid (PFOA)	7.106		741063	4.6385	Y
Perfluorononanoic acid (PFNA)	7.951		820804	4.9914	Y
Perfluorodecanoic acid (PFDA)	8.717		956156	4.4571	Y
Perfluoroundecanoic acid (PFUnDA)	9.440		886435	4.5416	Y
Perfluorododecanoic acid (PFDOA)	10.126		781565	4.6818	Y
Perfluorotridecanoic acid (PFTTrDA)	10.781		847665	4.7630	Y
Perfluorotetradecanoic acid (PFTDA)	11.416		674625	4.9813	Y
Perfluorooctane sulfonamide (PFOSAm)	11.145		775540	10.5359	Y
N-Methylperfluorooctane sulfonamide (MeFOSA)	13.693		191618	4.6092	Y
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	14.377		204830	4.7361	Y
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	13.413		127343	4.9184	Y
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	14.048		177690	4.4806	Y
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	8.858		321391	4.6760	Y

U: Undetected at or above MDL
 J: Analyte detected above MDL, but below MRL
 B: Hit above MRL also found in Method Blank
 E: Analyte concentration above high point of ICAL
 N: Presumptive evidence of compound

D: Result from dilution
 m: Manual integration performed
 d: Compound manually deleted
 NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
 #: Acceptance criteria not applicable
 ?: Insufficient information to determine acceptance
 e: Result >= MRL, but MRL less than low point of ICAL
 c: check for co-elution

		1st	PS	01/23/24
Data File:	J:\LCMS08\Data\240119_1633_B1\240119_036	Instrument:	K-LCMS08	01/23/24
Acqu Date:	1/20/24 01:22	Vial:	30	
Run Type:	CCV	Dilution:	1	
Lab ID:	KQ2400951-11	Raw Units:	ng/mL	

Target Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Rpt?
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	9.194		208187	5.5446	Y
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	4.651		446218	4.6986	Y
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	6.787		342054	4.5382	Y
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	8.404		313568	4.8942	Y
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	2.987		148134	53.4944	Y
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	5.881		810025	53.7462	Y
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	7.938		1201983	59.7411	Y
Perfluoro(2-ethoxyethane) sulfonic acid (PFEEESA)	5.308		2949758	4.5198	Y
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	9.378		2155688	4.3396	Y
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	10.795		1538327	4.5861	Y
Perfluoro-3-methoxypropanoic acid (PFMPA)	2.425		412574	5.1121	Y
Perfluoro-4-methoxybutanoic acid (PFMBA)	4.010		530129	4.6367	Y
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	5.444		315231	4.7370	Y
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	4.825		677670	5.2421	Y
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	6.513		1780802	3.8132	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution



240119_036

Sample ID: 1633 ICAL 5.0PPB
Date Acquired: 1/20/2024 1:22:33 AM
Acquired by: System Administrator
Data File: 240119_036
Vial: 6 | Inj. Volume: 10.0000uL | Tray: 1

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	1246172	----	----	----	----	----	----	
13C4-PFBA_IS	216.80>171.90	----	1246172	----	----	----	----	----	----	
13C3-PFBA_IS	216.00>172.00	----	542401	----	----	----	----	----	----	
PFBA	212.80>169.05	----	516355	----	----	----	----	----	----	
PFMPA	229.00>84.90	----	412574	----	----	----	----	----	----	
3_3 FTCA	241.00>177.10	241.00>117.00	148134	213631	144.22	141.17	213631	144.22	143.25	
13C5-PFPeA	268.30>223.00	----	124878	----	----	----	----	----	----	
13C5-PFPeA_IS	268.30>223.00	----	124878	----	----	----	----	----	----	
PFPeA	263.00>219.00	----	826734	----	----	----	----	----	----	
PFMBA	279.00>84.95	----	530129	----	----	----	----	----	----	
13C2-4_2 FTS	329.10>80.90	----	193083	----	----	----	----	----	----	
13C2-4_2 FTS_IS	329.10>80.90	----	193083	----	----	----	----	----	----	
4_2 FTS	327.10>307.00	327.10>80.90	446218	140149	31.41	29.06	140149	31.41	31.50	
13C3-PFBS_IS	302.10>79.90	----	313497	----	----	----	----	----	----	
PFBS	298.70>79.90	298.70>98.80	604696	294052	48.63	46.72	294052	48.63	48.74	
13C3-PFBS	302.10>79.90	----	313497	----	----	----	----	----	----	
NFDHA	295.00>201.00	295.00>84.90	677670	245129	36.17	40.25	245129	36.17	36.97	
13C5-PFHxA	318.00>273.00	----	582665	----	----	----	----	----	----	
13C5-PFHxA_IS	318.00>273.00	----	582665	----	----	----	----	----	----	
13C2-PFHxA_IS	315.10>270.00	----	579560	----	----	----	----	----	----	
PFHxA	313.00>269.00	----	942525	----	----	----	----	----	----	
PFEESA	314.80>135.00	314.80>82.90	2949758	171012	5.80	6.11	171012	5.80	5.81	
13C3-HFPO-DA	286.90>168.90	----	602533	----	----	----	----	----	----	
13C3-HFPO-DA_IS	286.90>168.90	----	602533	----	----	----	----	----	----	
HFPO-DA	284.90>168.90	284.90>184.90	315231	203059	64.42	65.61	203059	64.42	64.39	
5_3 FTCA	341.00>237.05	341.00>217.00	810025	1256618	155.13	158.86	1256618	155.13	159.75	
PFPeS	349.10>79.90	349.10>98.80	560119	308615	55.10	55.80	308615	55.10	54.52	
13C4-PFHpA	367.10>322.00	----	596578	----	----	----	----	----	----	
13C4-PFHpA_IS	367.10>322.00	----	596578	----	----	----	----	----	----	
PFHpA	363.10>319.00	363.10>169.00	1133988	265186	23.39	21.50	265186	23.39	23.22	
DONA	376.90>250.90	376.90>84.80	1780802	512010	28.75	29.66	512010	28.75	29.43	
13C2-6_2 FTS_IS	429.10>80.90	----	165522	----	----	----	----	----	----	
13C2-6_2 FTS	429.10>80.90	----	165522	----	----	----	----	----	----	
6_2 FTS	427.10>407.00	427.10>80.90	342054	144703	42.30	41.15	144703	42.30	43.09	
13C4-PFOA_IS	417.10>172.00	----	41855	----	----	----	----	----	----	
13C8-PFOA_IS	421.10>376.00	----	613241	----	----	----	----	----	----	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240119_036 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	613241	----	----	----	----	----	----	----
PFOA	413.00>369.00	413.00>169.00	741063	238194	32.14	31.89	238194	32.14	30.51	
13C3-PFHxS	402.10>79.90	----	245697	----	----	----	----	----	----	----
13C3-PFHxS_IS	402.10>79.90	----	245697	----	----	----	----	----	----	----
PFHxS	398.70>79.90	398.70>98.90	464486	264475	56.94	56.62	264475	56.94	57.27	
18O2-PFHxS_IS	403.00>83.90	----	224321	----	----	----	----	----	----	----
13C9-PFNA_IS	472.10>427.00	----	287166	----	----	----	----	----	----	----
13C9-PFNA	472.10>427.00	----	287166	----	----	----	----	----	----	----
13C5-PFNA_IS	468.00>423.00	----	308747	----	----	----	----	----	----	----
PFNA	463.00>419.00	463.00>219.00	820804	196937	23.99	23.17	196937	23.99	23.01	
PFHpS	449.00>79.90	449.00>98.80	377641	212875	56.37	56.96	212875	56.37	58.58	
7_3 FTCA	441.00>317.00	441.00>336.90	1201983	1447743	120.45	117.47	1447743	120.45	117.17	
13C2-8_2-FTS	529.10>80.90	----	149101	----	----	----	----	----	----	----
13C2-8_2-FTS_IS	529.10>80.90	----	149101	----	----	----	----	----	----	----
8_2 FTS	527.10>506.95	527.10>80.80	313568	131950	42.08	49.59	131950	42.08	43.30	
13C6-PFDA_IS	519.10>474.10	----	223784	----	----	----	----	----	----	----
13C6-PFDA	519.10>474.10	----	223784	----	----	----	----	----	----	----
13C2-PFDA_IS	515.10>470.10	----	201826	----	----	----	----	----	----	----
PFDA	512.90>469.00	512.90>219.00	956156	181256	18.96	19.00	181256	18.96	19.26	
D3-NMeFOSAA_IS	573.20>419.00	----	253311	----	----	----	----	----	----	----
D3-NMeFOSAA	573.20>419.00	----	253311	----	----	----	----	----	----	----
13C8-PFOS_IS	507.10>98.90	----	102105	----	----	----	----	----	----	----
13C8-PFOS	507.10>98.90	----	102105	----	----	----	----	----	----	----
13C4-PFOS_IS	502.80>79.90	----	250747	----	----	----	----	----	----	----
PFOS	498.90>79.90	498.90>98.80	456554	225669	49.43	52.47	225669	49.43	47.25	
NMeFOSAA	570.10>419.00	570.10>483.00	321391	192935	60.03	55.15	192935	60.03	62.10	
D5-NetFOSAA_IS	589.20>419.00	----	281141	----	----	----	----	----	----	----
D5-NetFOSAA	589.20>419.00	----	281141	----	----	----	----	----	----	----
NetFOSAA	584.20>419.10	584.20>526.00	208187	176347	84.71	81.95	176347	84.71	86.05	
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	2155688	680457	31.57	32.76	680457	31.57	31.74	
PFUnDA	563.10>519.00	563.10>269.10	886435	126276	14.25	13.12	126276	14.25	13.26	
13C7-PFUnDA_IS	570.00>525.10	----	267814	----	----	----	----	----	----	----
13C7-PFUnDA	570.00>525.10	----	267814	----	----	----	----	----	----	----
PFNS	548.80>79.90	548.80>98.80	359805	225108	62.56	65.22	225108	62.56	62.49	
10_2 FTS	626.80>607.05	626.80>81.00	309843	107067	34.56	37.13	107067	34.56	35.81	
13C2-PFDOA_IS	615.10>570.00	----	294744	----	----	----	----	----	----	----
13C2-PFDOA	615.10>570.00	----	294744	----	----	----	----	----	----	----
PFDOA	613.10>569.00	613.10>319.00	781565	88588	11.34	11.29	88588	11.34	10.90	
PFDS	599.00>79.90	599.00>98.80	316750	192696	60.84	60.18	192696	60.84	61.11	
PFTDA	663.00>619.00	663.00>168.90	847665	154446	18.22	17.64	154446	18.22	18.20	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240119_036 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	1538327	538183	34.99	36.44	538183	34.99	34.95	
PFOSAm	498.10>77.90	----	775540	----	----	----	----	----	----	
13C8-PFOSAm	506.10>77.80	----	223326	----	----	----	----	----	----	
13C8-PFOSAm_IS	506.10>77.80	----	223326	----	----	----	----	----	----	
PFTDA	713.10>669.00	713.10>168.90	674625	146205	21.67	22.96	146205	21.67	22.68	
13C2-PFTDA	715.20>670.00	----	125337	----	----	----	----	----	----	
13C2-PFTDA_IS	715.20>670.00	----	125337	----	----	----	----	----	----	
PFDoS	699.10>79.90	699.10>98.80	168952	117290	69.42	67.40	117290	69.42	65.24	
D7-MeFOSE_IS	623.20>58.90	----	705001	----	----	----	----	----	----	
D7-MeFOSE	623.20>58.90	----	705001	----	----	----	----	----	----	
MeFOSE	616.10>59.00	----	127343	----	----	----	----	----	----	
13C2-PFHxDA_IS	815.00>770.05	----	460683	----	----	----	----	----	----	
13C2-PFHxDA	815.00>770.05	----	460683	----	----	----	----	----	----	
PFHxDA	813.00>768.95	813.00>218.95	967639	130792	13.52	13.90	130792	13.52	14.51	
D3-MeFOSA	515.00>219.00	----	57671	----	----	----	----	----	----	
D3-MeFOSA_IS	515.00>219.00	----	57671	----	----	----	----	----	----	
MeFOSA	511.90>219.00	511.90>169.00	191618	281826	147.08	140.79	281826	147.08	142.62	
D9-EtFOSE_IS	639.20>58.90	----	753740	----	----	----	----	----	----	
D9-EtFOSE	639.20>58.90	----	753740	----	----	----	----	----	----	
EtFOSE	630.00>59.00	----	177690	----	----	----	----	----	----	
D5-EtFOSAm	531.10>219.00	----	74289	----	----	----	----	----	----	
D5-EtFOSAm_IS	531.10>219.00	----	74289	----	----	----	----	----	----	
EtFOSAm	526.00>219.00	526.00>169.00	204830	312665	152.65	163.90	312665	152.65	146.41	
PFODA	913.00>868.65	913.00>169.00	503508	124717	24.77	27.03	124717	24.77	23.98	



240119_036

Sample ID: 1633 ICAL 5.0PPB
Date Acquired: 1/20/2024 1:22:33 AM
Acquired by: System Administrator
Data File: 240119_036
Vial: 6 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.410	0.002	-0.001	1246172	542401	13C3-PFBA_IS	10.2789	ng/mL	
13C4-PFBA_IS	Auto	1.410	0.002	----	1246172	1246172	----	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.411	0.003	----	542401	542401	----	5.0000	ng/mL	
PFBA	Auto	1.413	0.004	0.003	516355	1246172	13C4-PFBA_IS	4.8225	ng/mL	
PFMPA	Auto	2.425	0.004	-1.058	412574	124878	13C5-PFPeA_IS	5.1121	ng/mL	
3_3 FTCA	Auto	2.987	0.007	-0.496	148134	124878	13C5-PFPeA_IS	53.4944	ng/mL	
13C5-PFPeA	Auto	3.483	0.004	-1.484	124878	579560	13C2-PFHxA_IS	4.7735	ng/mL	
13C5-PFPeA_IS	Auto	3.483	0.004	----	124878	124878	----	5.0000	ng/mL	
PFPeA	Auto	3.486	0.004	0.003	826734	124878	13C5-PFPeA_IS	5.1113	ng/mL	
PFMBA	Auto	4.010	0.005	0.527	530129	124878	13C5-PFPeA_IS	4.6367	ng/mL	
13C2-4_2 FTS	Auto	4.651	0.005	-2.426	193083	224321	18O2-PFHxS_IS	6.2548	ng/mL	
13C2-4_2 FTS_IS	Auto	4.651	0.005	----	193083	193083	----	5.0000	ng/mL	
4_2 FTS	Auto	4.651	0.004	0.000	446218	193083	13C2-4_2 FTS_IS	4.6986	ng/mL	
13C3-PFBS_IS	Auto	4.632	0.004	----	313497	313497	----	2.5000	ng/mL	
PFBS	Auto	4.633	0.005	0.001	604696	313497	13C3-PFBS_IS	3.7683	ng/mL	
13C3-PFBS	Auto	4.632	0.004	-2.445	313497	224321	18O2-PFHxS_IS	2.4626	ng/mL	
NFDHA	Auto	4.825	0.005	-0.141	677670	582665	13C5-PFHxA_IS	5.2421	ng/mL	
13C5-PFHxA	Auto	4.966	0.003	-0.001	582665	579560	13C2-PFHxA_IS	2.3855	ng/mL	
13C5-PFHxA_IS	Auto	4.966	0.003	----	582665	582665	----	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	4.967	0.004	----	579560	579560	----	2.5000	ng/mL	
PFHxA	Auto	4.968	0.003	0.002	942525	582665	13C5-PFHxA_IS	4.8515	ng/mL	
PFEESA	Auto	5.308	0.004	0.342	2949758	582665	13C5-PFHxA_IS	4.5198	ng/mL	
13C3-HFPO-DA	Auto	5.442	0.003	0.475	602533	579560	13C2-PFHxA_IS	10.6203	ng/mL	
13C3-HFPO-DA_IS	Auto	5.442	0.003	----	602533	602533	----	10.0000	ng/mL	
HFPO-DA	Auto	5.444	0.004	0.002	315231	602533	13C3-HFPO-DA_IS	4.7370	ng/mL	
5_3 FTCA	Auto	5.881	0.010	0.915	810025	582665	13C5-PFHxA_IS	53.7462	ng/mL	
PFPeS	Auto	6.008	0.005	-1.069	560119	245697	13C3-PFHxS_IS	4.3411	ng/mL	
13C4-PFHpA	Auto	6.146	0.003	1.179	596578	579560	13C2-PFHxA_IS	2.6981	ng/mL	
13C4-PFHpA_IS	Auto	6.146	0.003	----	596578	596578	----	2.5000	ng/mL	
PFHpA	Auto	6.148	0.004	0.002	1133988	596578	13C4-PFHpA_IS	4.5486	ng/mL	
DONA	Auto	6.513	0.004	1.071	1780802	602533	13C3-HFPO-DA_IS	3.8132	ng/mL	
13C2-6_2 FTS_IS	Auto	6.786	0.002	----	165522	165522	----	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.786	0.002	-0.291	165522	224321	18O2-PFHxS_IS	5.6693	ng/mL	
6_2 FTS	Auto	6.787	0.004	0.001	342054	165522	13C2-6_2 FTS_IS	4.5382	ng/mL	
13C4-PFOA_IS	Auto	7.102	0.003	----	41855	41855	----	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.102	0.002	----	613241	613241	----	2.5000	ng/mL	
13C8-PFOA	Auto	7.102	0.002	0.000	613241	41855	13C4-PFOA_IS	2.6214	ng/mL	
PFOA	Auto	7.106	0.004	0.004	741063	613241	13C8-PFOA_IS	4.6385	ng/mL	
13C3-PFHxS	Auto	7.077	0.003	0.000	245697	224321	18O2-PFHxS_IS	2.5518	ng/mL	
13C3-PFHxS_IS	Auto	7.077	0.003	----	245697	245697	----	2.5000	ng/mL	
PFHxS	M	7.077	0.003	0.000	464486	245697	13C3-PFHxS_IS	3.9196	ng/mL	
18O2-PFHxS_IS	Auto	7.077	0.002	----	224321	224321	----	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.950	0.001	----	287166	287166	----	1.2500	ng/mL	
13C9-PFNA	Auto	7.950	0.001	0.000	287166	308747	13C5-PFNA_IS	1.1879	ng/mL	
13C5-PFNA_IS	Auto	7.950	0.001	----	308747	308747	----	1.2500	ng/mL	
PFNA	Auto	7.951	0.001	0.001	820804	287166	13C9-PFNA_IS	4.9914	ng/mL	
PFHpS	Auto	7.997	0.001	-0.815	377641	102105	13C8-PFOS_IS	4.7385	ng/mL	
7_3 FTCA	Auto	7.938	0.009	2.972	1201983	582665	13C5-PFHxA_IS	59.7411	ng/mL	
13C2-8_2-FTS	Auto	8.404	0.000	1.327	149101	224321	18O2-PFHxS_IS	6.2168	ng/mL	
13C2-8_2-FTS_IS	Auto	8.404	0.000	----	149101	149101	----	5.0000	ng/mL	
8_2 FTS	Auto	8.404	0.000	0.000	313568	149101	13C2-8_2-FTS_IS	4.8942	ng/mL	
13C6-PFDA_IS	Auto	8.715	0.001	----	223784	223784	----	1.2500	ng/mL	
13C6-PFDA	Auto	8.715	0.001	0.000	223784	201826	13C2-PFDA_IS	1.3782	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_036 (continued)

(Table continued from previous page)

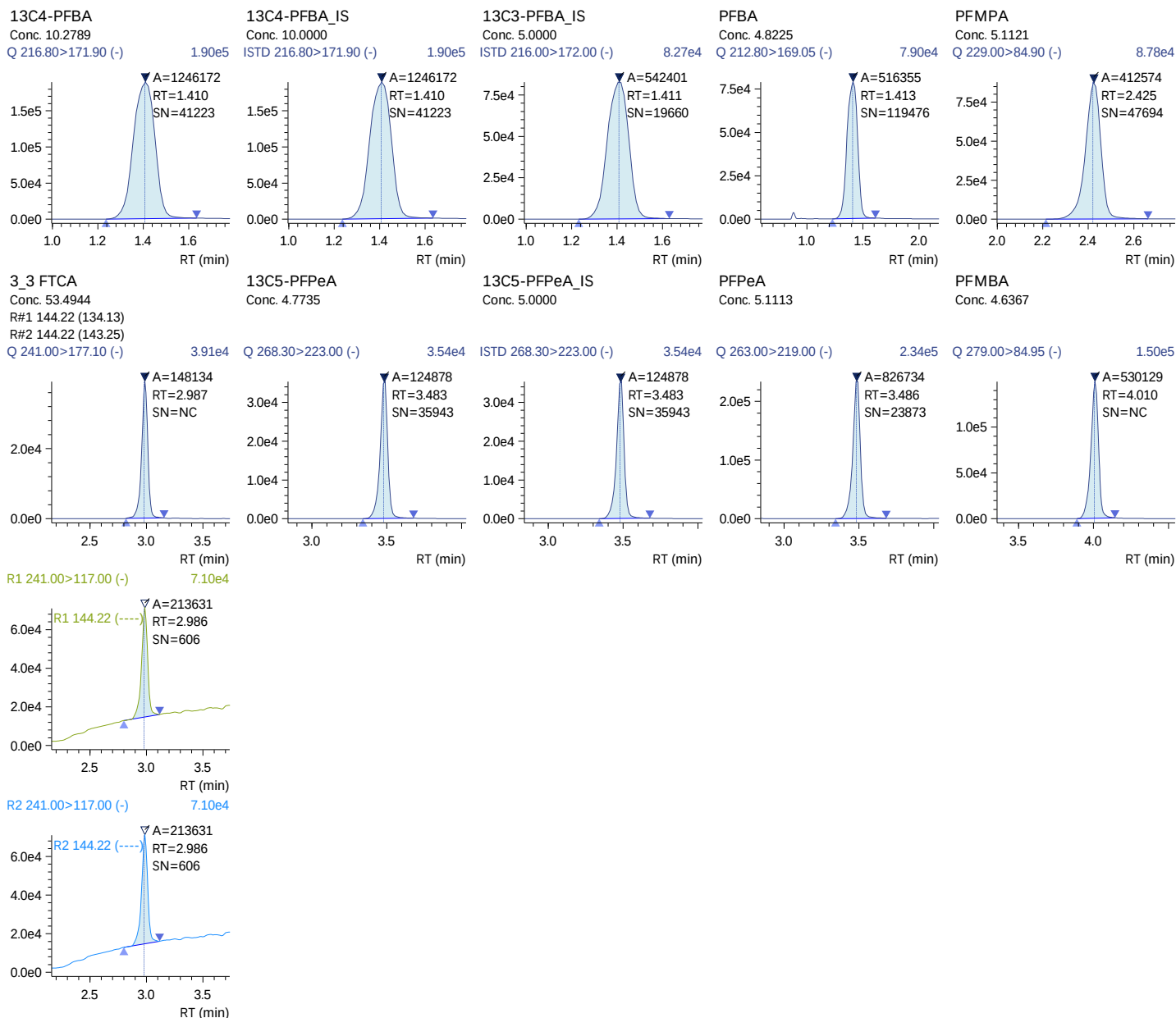
Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C2-PFDA_IS	Auto	8.715	0.000	----	201826	201826	----	1.2500	ng/mL	
PFDA	Auto	8.717	0.001	0.002	956156	223784	13C6-PFDA_IS	4.4571	ng/mL	
D3-NMeFOSAA_IS	Auto	8.852	0.004	----	253311	253311	----	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.852	0.004	0.039	253311	250747	13C4-PFOS_IS	5.8207	ng/mL	
13C8-PFOS_IS	Auto	8.812	0.001	----	102105	102105	----	2.5000	ng/mL	
13C8-PFOS	Auto	8.812	0.001	-0.001	102105	250747	13C4-PFOS_IS	2.4417	ng/mL	
13C4-PFOS_IS	Auto	8.813	0.002	----	250747	250747	----	2.5000	ng/mL	
PFOS	M	8.814	0.001	0.002	456554	102105	13C8-PFOS_IS	4.2990	ng/mL	
NMeFOSAA	M	8.858	0.005	0.006	321391	253311	D3-NMeFOSAA_IS	4.6760	ng/mL	
D5-NetFOSAA_IS	Auto	9.184	0.006	----	281141	281141	----	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.184	0.006	0.371	281141	250747	13C4-PFOS_IS	5.3998	ng/mL	
NetFOSAA	M	9.194	0.005	0.010	208187	281141	D5-NetFOSAA_IS	5.5446	ng/mL	
9-CI-PF3ONS	Auto	9.378	0.000	3.936	2155688	602533	13C3-HFPO-DA_IS	4.3396	ng/mL	
PFUnDA	Auto	9.440	0.000	0.002	886435	267814	13C7-PFUnDA_IS	4.5416	ng/mL	
13C7-PFUnDA_IS	Auto	9.438	0.000	----	267814	267814	----	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.438	0.000	0.723	267814	201826	13C2-PFDA_IS	1.3827	ng/mL	
PFNS	Auto	9.575	-0.001	0.763	359805	102105	13C8-PFOS_IS	4.6379	ng/mL	
10_2_FTS	Auto	9.811	-0.002	1.407	309843	149101	13C2-8_2-FTS_IS	3.9748	ng/mL	
13C2-PFDOA_IS	Auto	10.124	-0.003	----	294744	294744	----	1.2500	ng/mL	
13C2-PFDOA	Auto	10.124	-0.003	1.409	294744	201826	13C2-PFDA_IS	1.3246	ng/mL	
PFDOA	Auto	10.126	-0.002	0.002	781565	294744	13C2-PFDOA_IS	4.6818	ng/mL	
PFDS	Auto	10.286	-0.004	1.474	316750	102105	13C8-PFOS_IS	4.6913	ng/mL	
PFTDA	Auto	10.781	-0.005	-0.634	847665	125337	13C2-PFTDA_IS	4.7630	ng/mL	
11-CI-PF3OUdS	Auto	10.795	-0.004	5.353	1538327	602533	13C3-HFPO-DA_IS	4.5861	ng/mL	
PFOSAm	M	11.145	0.002	-0.001	775540	223326	13C8-PFOSAm_IS	10.5359	ng/mL	
13C8-PFOSAm	Auto	11.146	0.003	2.333	223326	250747	13C4-PFOS_IS	2.0980	ng/mL	
13C8-PFOSAm_IS	Auto	11.146	0.003	----	223326	223326	----	2.5000	ng/mL	
PFTDA	Auto	11.416	-0.004	0.001	674625	125337	13C2-PFTDA_IS	4.9813	ng/mL	
13C2-PFTDA	Auto	11.415	-0.004	2.700	125337	201826	13C2-PFDA_IS	1.3046	ng/mL	
13C2-PFTDA_IS	Auto	11.415	-0.004	----	125337	125337	----	1.2500	ng/mL	
PFDoS	Auto	11.612	-0.004	2.800	168952	102105	13C8-PFOS_IS	4.1260	ng/mL	
D7-MeFOSE_IS	Auto	13.376	-0.005	----	705001	705001	----	25.0000	ng/mL	
D7-MeFOSE	Auto	13.376	-0.005	4.563	705001	250747	13C4-PFOS_IS	26.8633	ng/mL	
MeFOSE	M	13.413	-0.005	0.037	127343	705001	D7-MeFOSE_IS	4.9184	ng/mL	
13C2-PFHxDA_IS	Auto	12.633	-0.003	----	460683	460683	----	2.5000	ng/mL	
13C2-PFHxDA	Auto	12.633	-0.003	3.918	460683	201826	13C2-PFDA_IS	2.4573	ng/mL	
PFHxDA	Auto	12.635	-0.002	0.002	967639	460683	13C2-PFHxDA_IS	5.0950	ng/mL	
D3-MeFOSA	Auto	13.684	-0.003	4.871	57671	250747	13C4-PFOS_IS	2.6903	ng/mL	
D3-MeFOSA_IS	Auto	13.684	-0.003	----	57671	57671	----	2.5000	ng/mL	
MeFOSA	M	13.693	-0.003	0.009	191618	57671	D3-MeFOSA_IS	4.6092	ng/mL	
D9-EtFOSE_IS	Auto	14.005	-0.004	----	753740	753740	----	25.0000	ng/mL	
D9-EtFOSE	Auto	14.005	-0.004	5.192	753740	250747	13C4-PFOS_IS	28.2777	ng/mL	
EtFOSE	M	14.048	-0.004	0.043	177690	753740	D9-EtFOSE_IS	4.4806	ng/mL	
D5-EtFOSAm	Auto	14.360	-0.005	5.547	74289	250747	13C4-PFOS_IS	2.6030	ng/mL	
D5-EtFOSAm_IS	Auto	14.360	-0.005	----	74289	74289	----	2.5000	ng/mL	
EtFOSAm	M	14.377	-0.005	0.017	204830	74289	D5-EtFOSAm_IS	4.7361	ng/mL	
PFODA	Auto	13.773	-0.001	1.140	503508	460683	13C2-PFHxDA_IS	4.8333	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_036 (continued)





240119_036 (continued)

13C2-4_2 FTS
Conc. 6.2548

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. 4.6986
R#1 31.41 (34.14)
R#2 31.41 (31.50)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 3.7683
R#1 48.63 (47.53)
R#2 48.63 (48.74)

Q 329.10>80.90 (-)

5.95e4

ISTD 329.10>80.90 (-)

5.95e4

Q 327.10>307.00 (-)

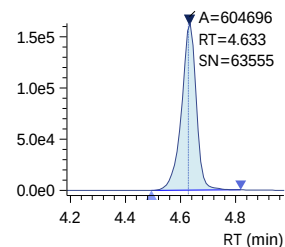
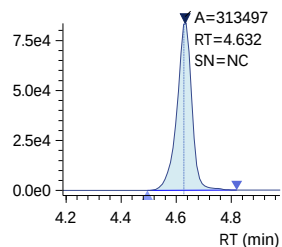
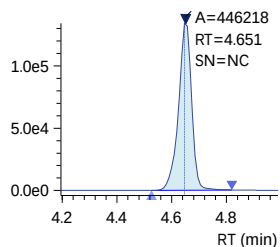
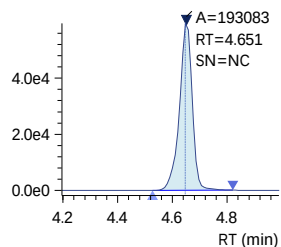
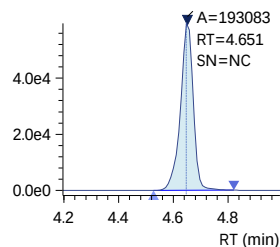
1.34e5

ISTD 302.10>79.90 (-)

8.36e4

Q 298.70>79.90 (-)

1.63e5

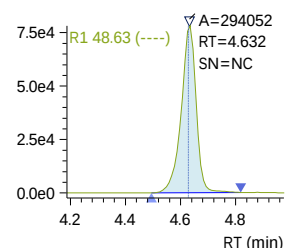
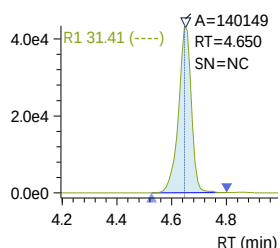


R1 327.10>80.90 (-)

4.34e4

R1 298.70>98.80 (-)

7.82e4

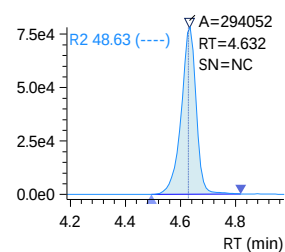
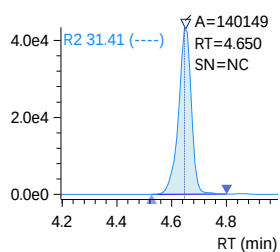


R2 327.10>80.90 (-)

4.34e4

R2 298.70>98.80 (-)

7.82e4





240119_036 (continued)

13C3-PFBS
Conc. 2.4626

NFDHA
Conc. 5.2421
R#1 36.17 (37.88)
R#2 36.17 (36.97)

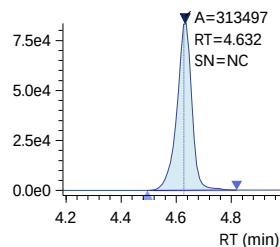
13C5-PFHxA
Conc. 2.3855

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

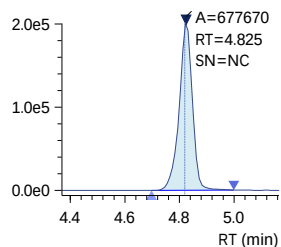
Q 302.10>79.90 (-)

8.36e4



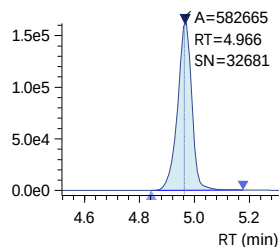
Q 295.00>201.00 (-)

2.01e5



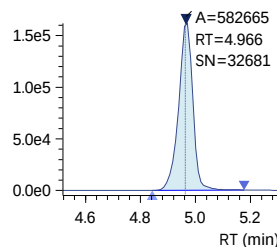
Q 318.00>273.00 (-)

1.62e5



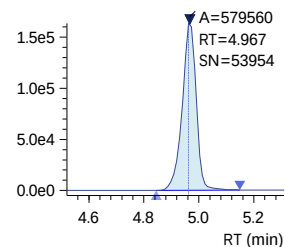
ISTD 318.00>273.00 (-)

1.62e5



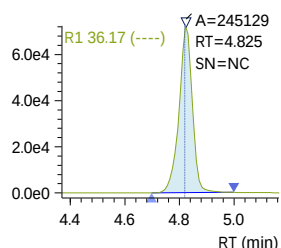
ISTD 315.10>270.00 (-)

1.64e5



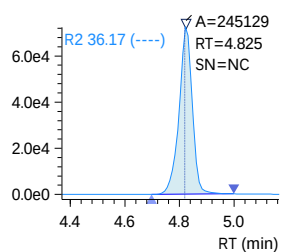
R1 295.00>84.90 (-)

7.24e4



R2 295.00>84.90 (-)

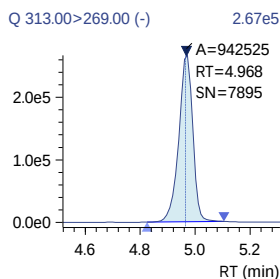
7.24e4





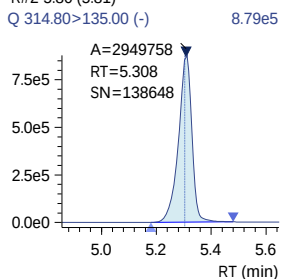
240119_036 (continued)

PFHxA
Conc. 4.8515

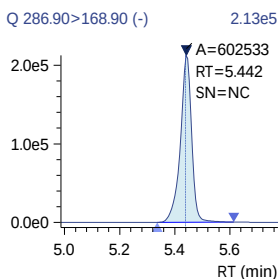


PFEESA
Conc. 4.5198

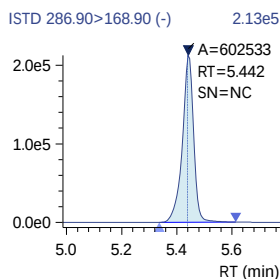
R#1 5.80 (5.88)
R#2 5.80 (5.81)



13C3-HFPO-DA
Conc. 10.6203

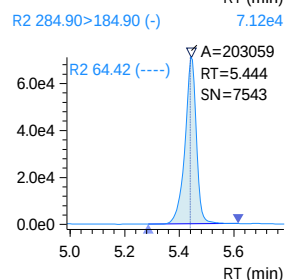
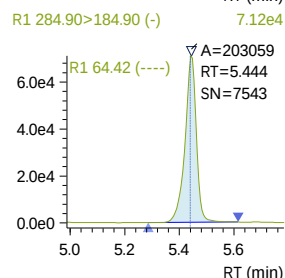
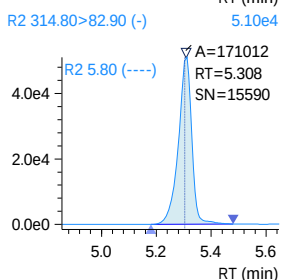
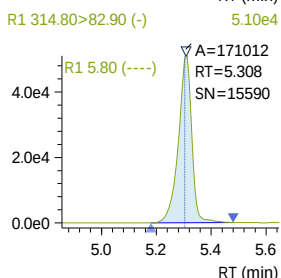
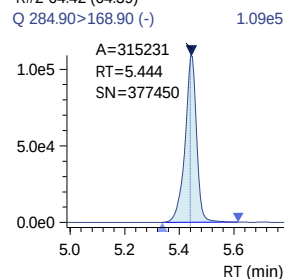


13C3-HFPO-DA_IS
Conc. 10.0000



HFPO-DA
Conc. 4.7370

R#1 64.42 (63.80)
R#2 64.42 (64.39)

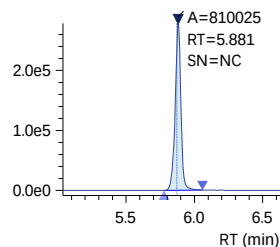




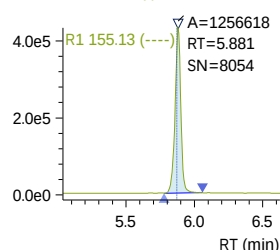
240119_036 (continued)

5_3 FTCA

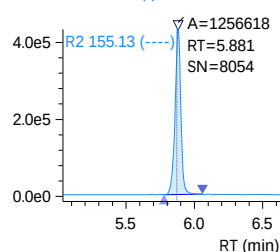
Conc. 53.7462
R#1 155.13 (167.13)
R#2 155.13 (159.75)
Q 341.00>237.05 (-)



R1 341.00>217.00 (-) 4.34e5

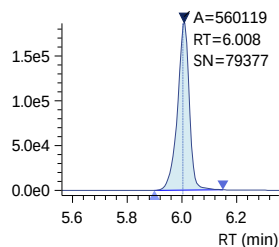


R2 341.00>217.00 (-) 4.34e5

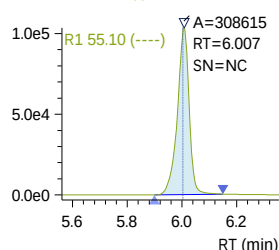


PFPeS

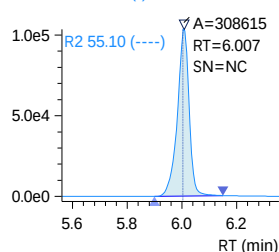
Conc. 4.3411
R#1 55.10 (56.71)
R#2 55.10 (54.52)
Q 349.10>79.90 (-)



R1 349.10>98.80 (-) 1.04e5

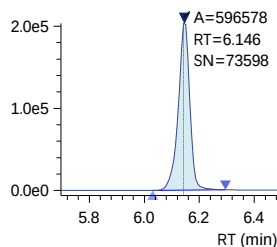


R2 349.10>98.80 (-) 1.04e5



13C4-PFHpA

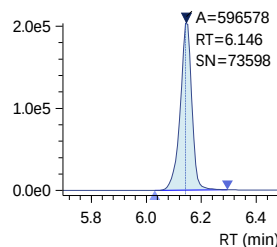
Conc. 2.6981
Q 367.10>322.00 (-)



Q 367.10>322.00 (-) 2.04e5

13C4-PFHpA_IS

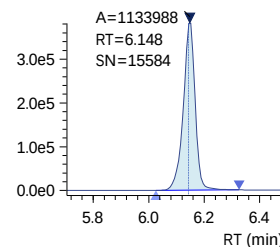
Conc. 2.5000
ISTD 367.10>322.00 (-)



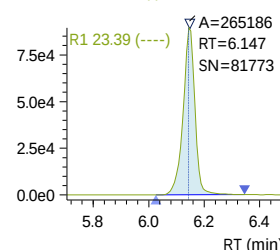
ISTD 367.10>322.00 (-) 2.04e5

PFHpA

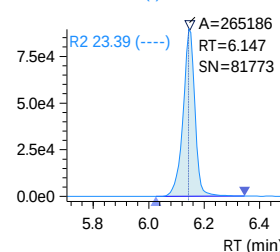
Conc. 4.5486
R#1 23.39 (21.37)
R#2 23.39 (23.22)
Q 363.10>319.00 (-)



R1 363.10>169.00 (-) 8.95e4

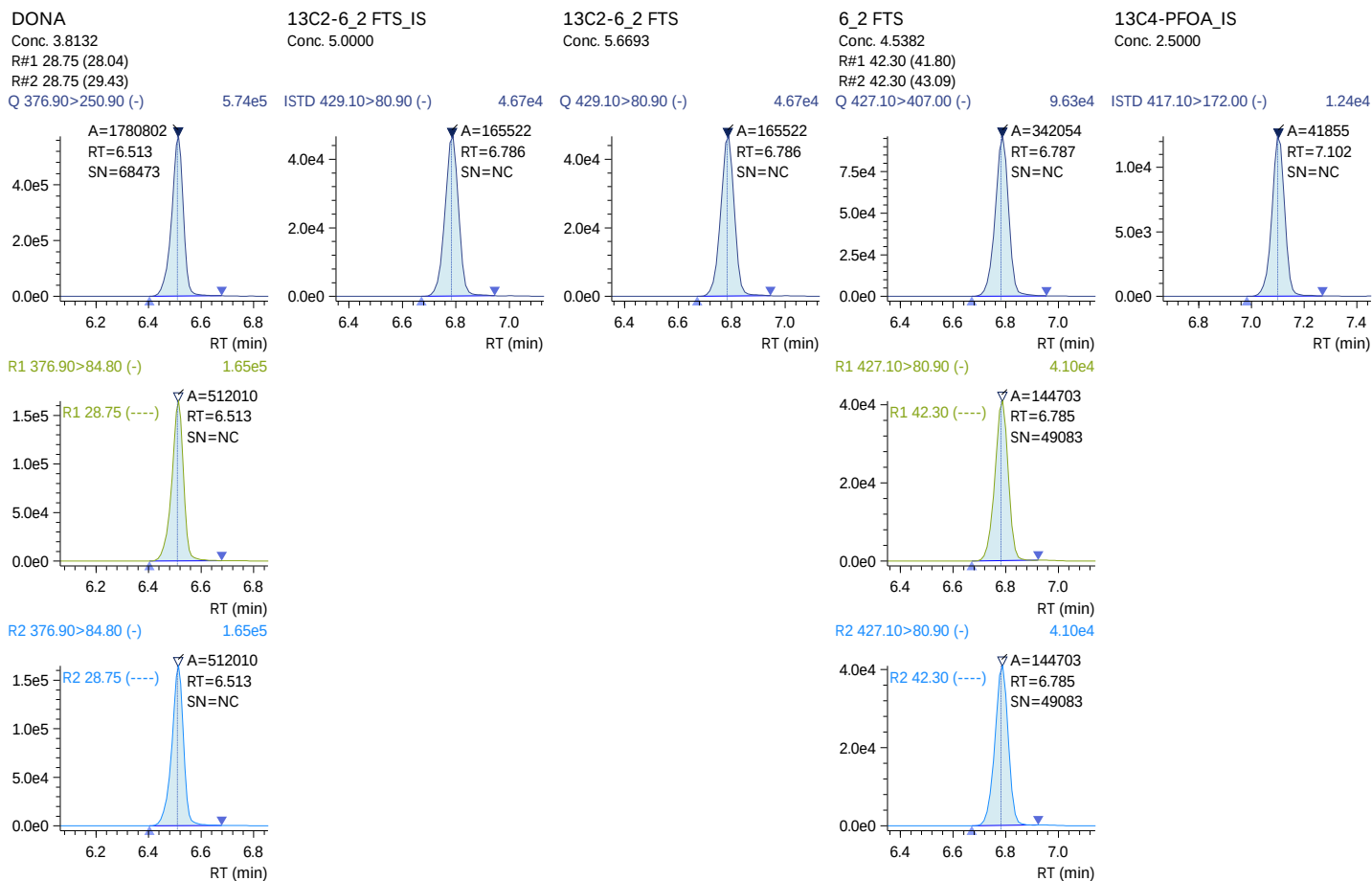


R2 363.10>169.00 (-) 8.95e4





240119_036 (continued)





240119_036 (continued)

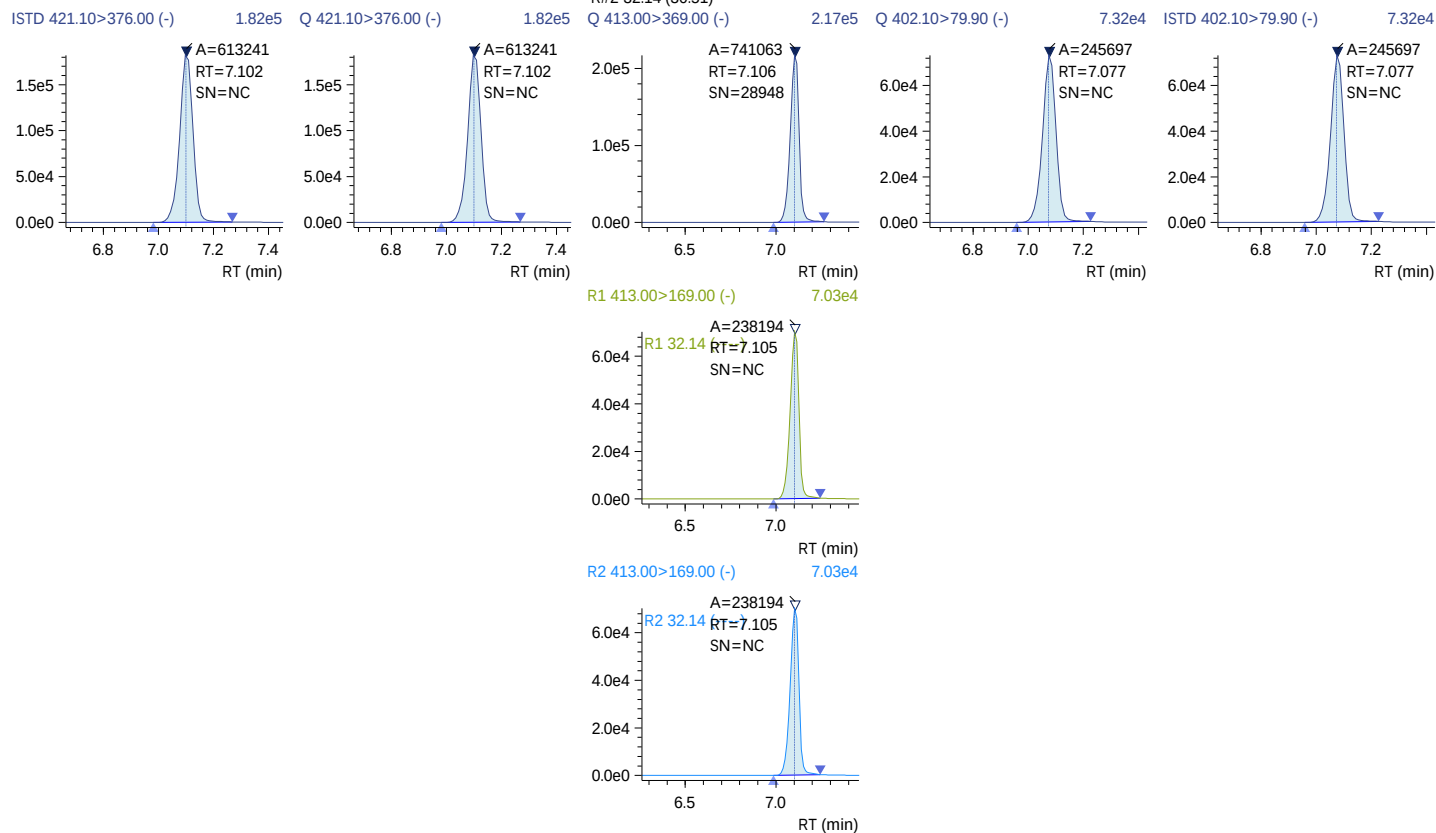
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.6214

PFOA
Conc. 4.6385
R#1 32.14 (29.05)
R#2 32.14 (30.51)

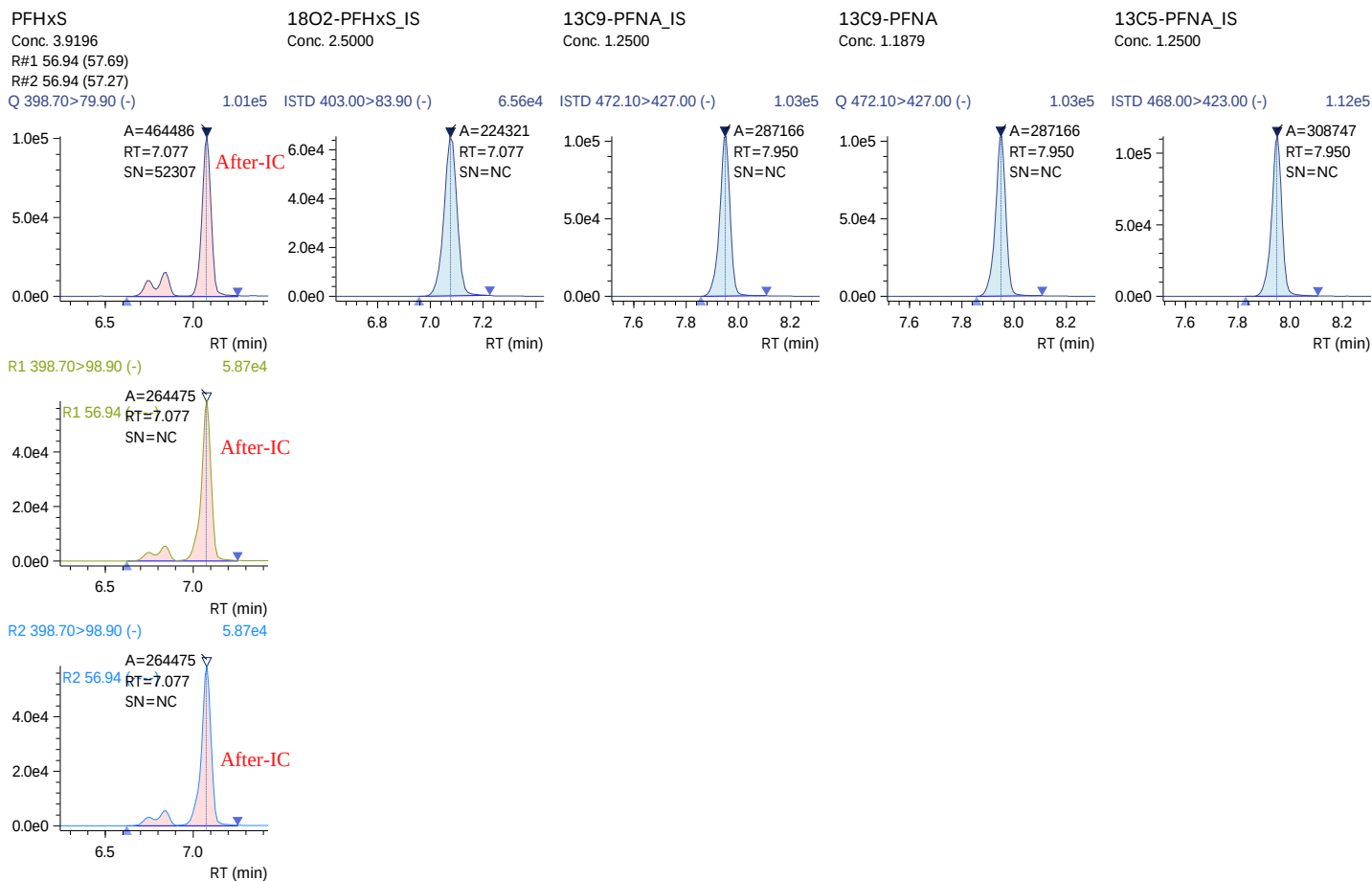
13C3-PFHxS
Conc. 2.5518

13C3-PFHxS_IS
Conc. 2.5000



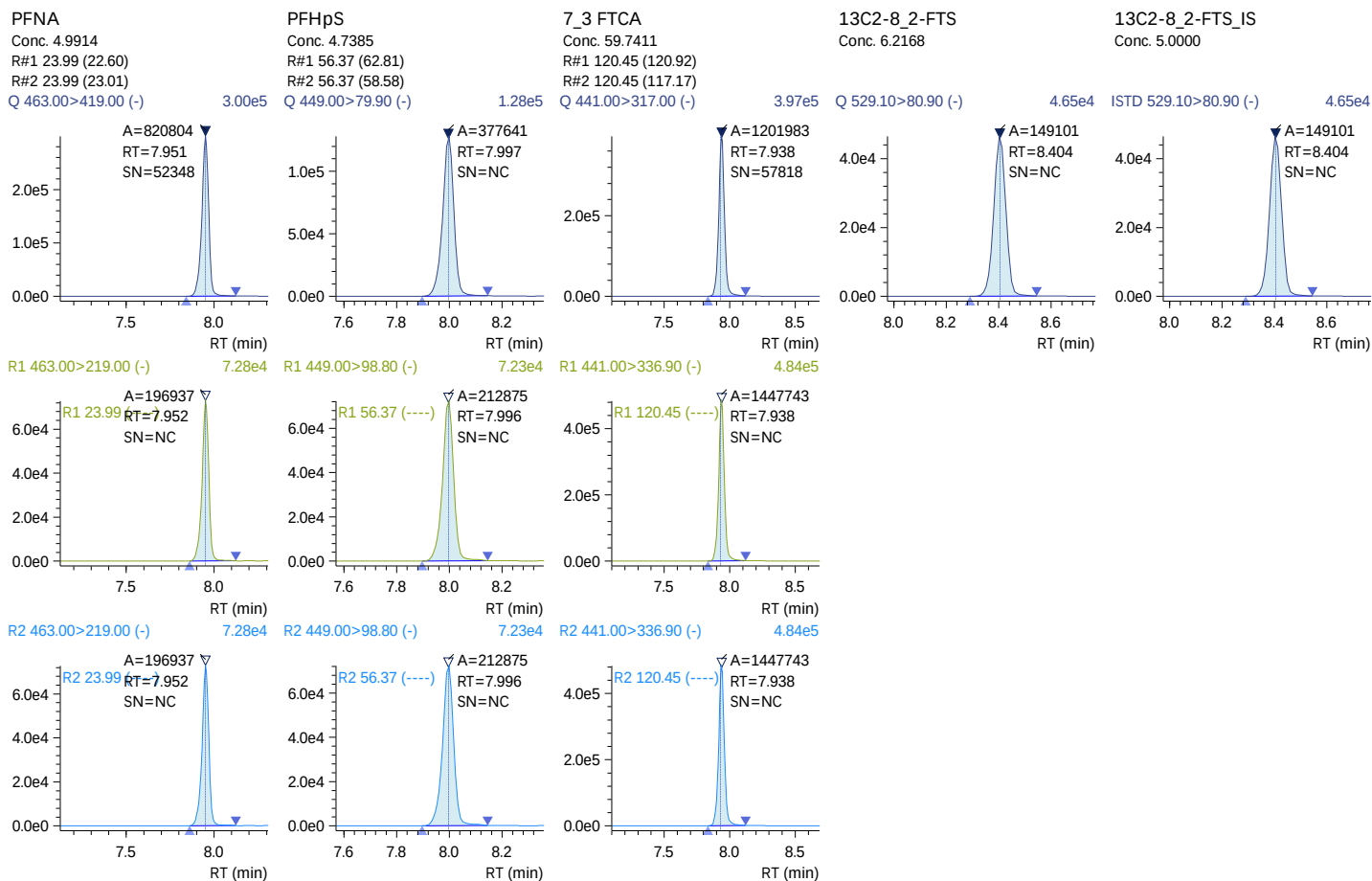


240119_036 (continued)





240119_036 (continued)

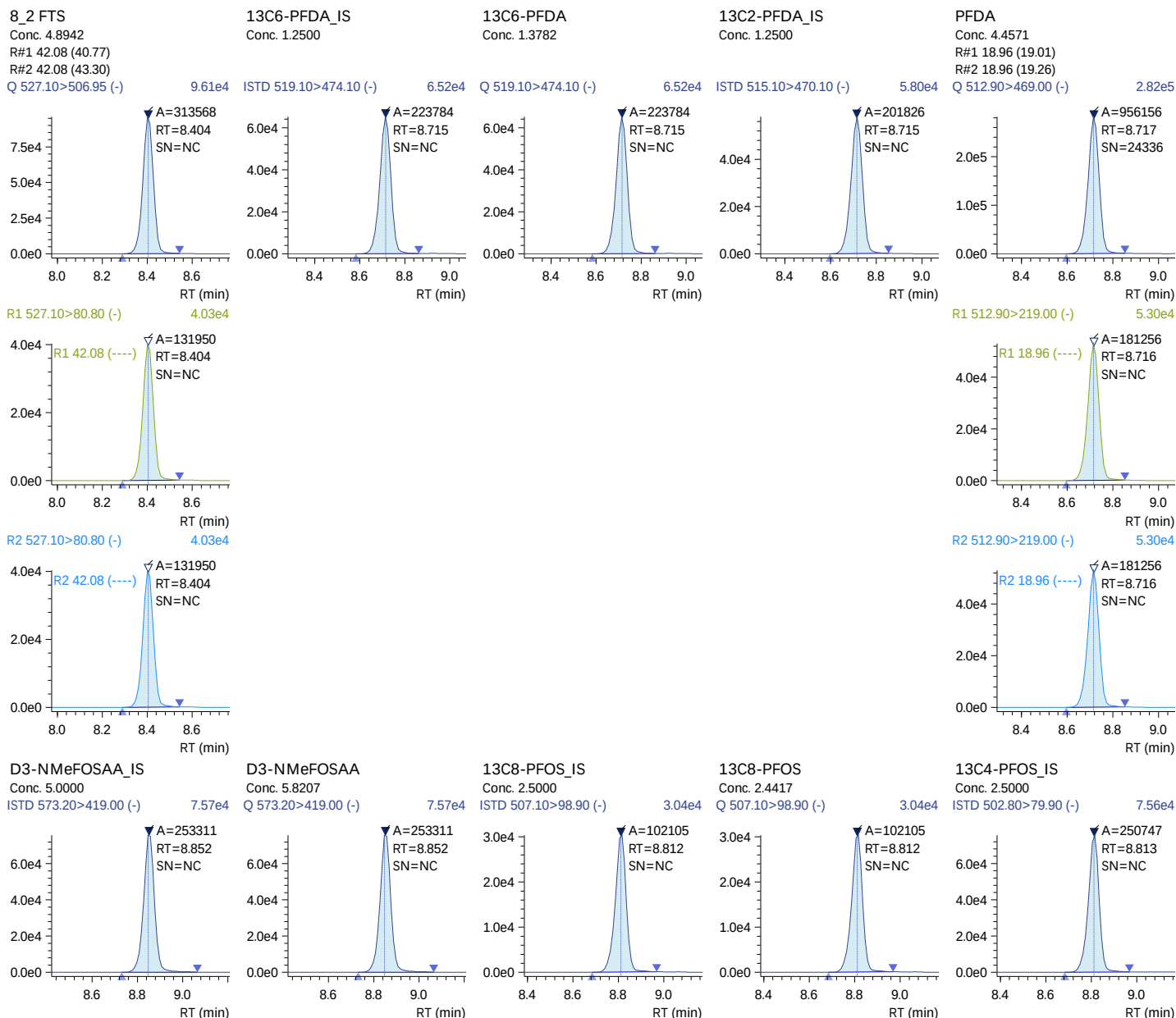


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_036 (continued)

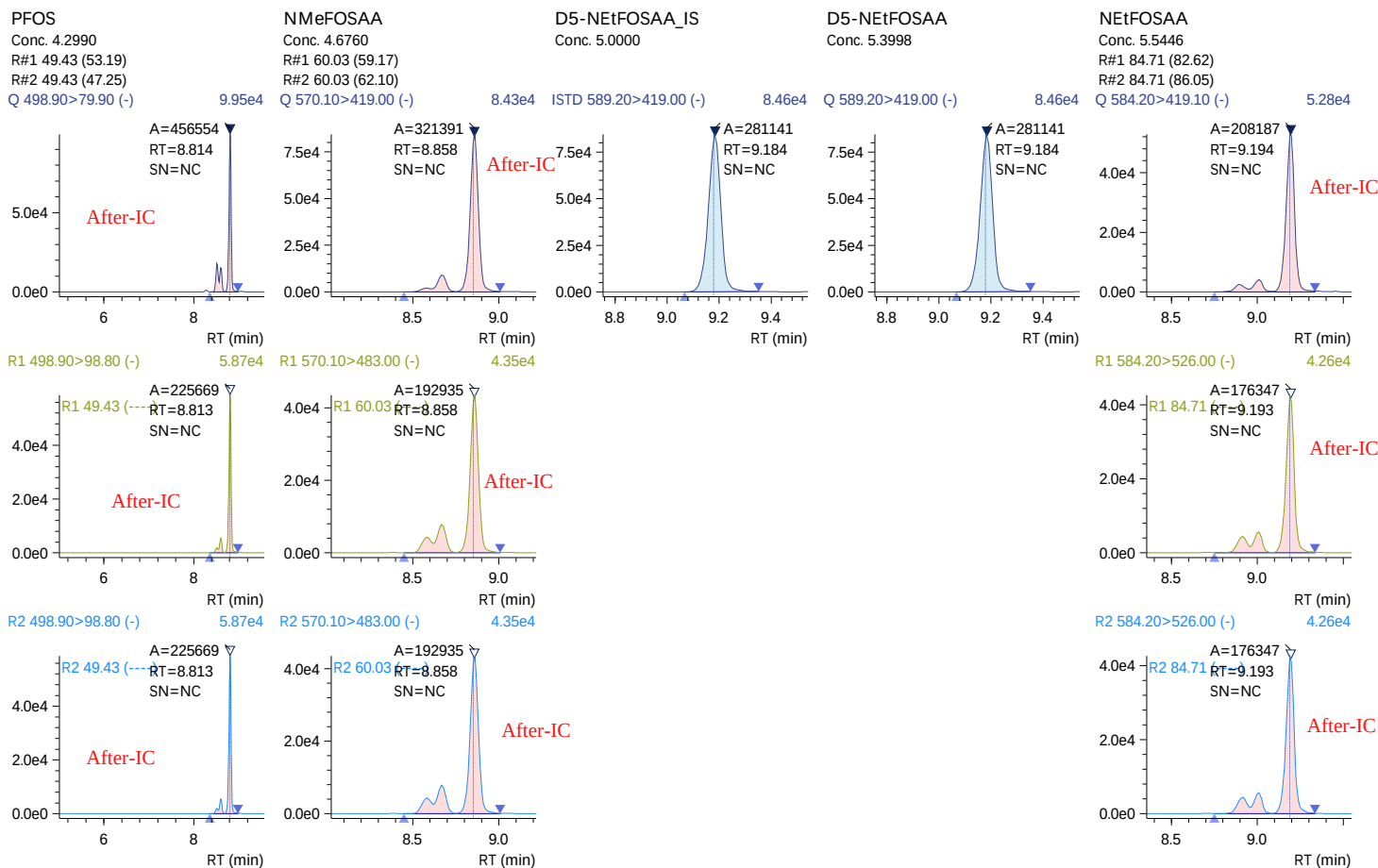


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_036 (continued)



J:\LCMS08\Data\240119_1633_B1\240119_1633_B1.dampl

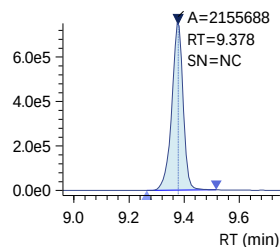
SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



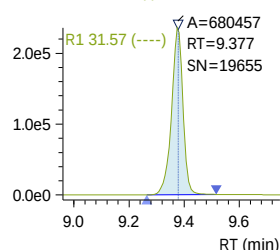
240119_036 (continued)

9-CI-PF3ONS

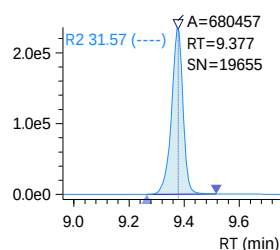
Conc. 4.3396
R#1 31.57 (31.76)
R#2 31.57 (31.74)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-) 2.36e5

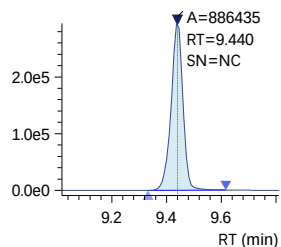


R2 532.80>353.00 (-) 2.36e5

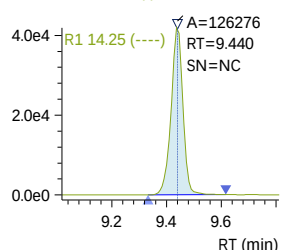


PFUnDA

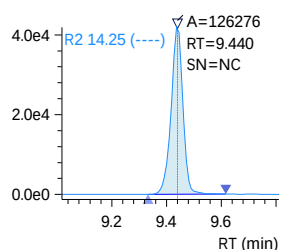
Conc. 4.5416
R#1 14.25 (12.31)
R#2 14.25 (13.26)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-) 4.19e4

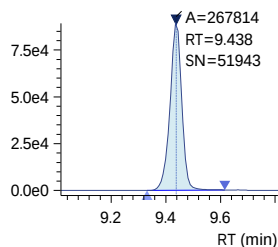


R2 563.10>269.10 (-) 4.19e4



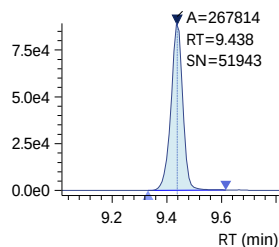
13C7-PFUnDA_IS

Conc. 1.2500
ISTD 570.00>525.10 (-)



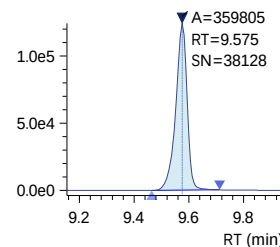
13C7-PFUnDA

Conc. 1.3827
Q 570.00>525.10 (-)

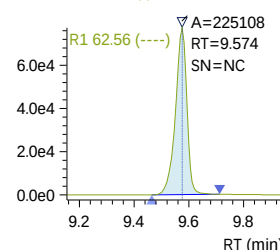


PFNS

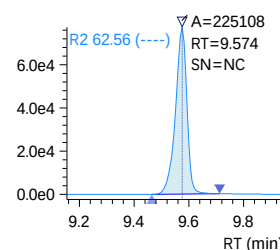
Conc. 4.6379
R#1 62.56 (63.31)
R#2 62.56 (62.49)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-) 7.73e4

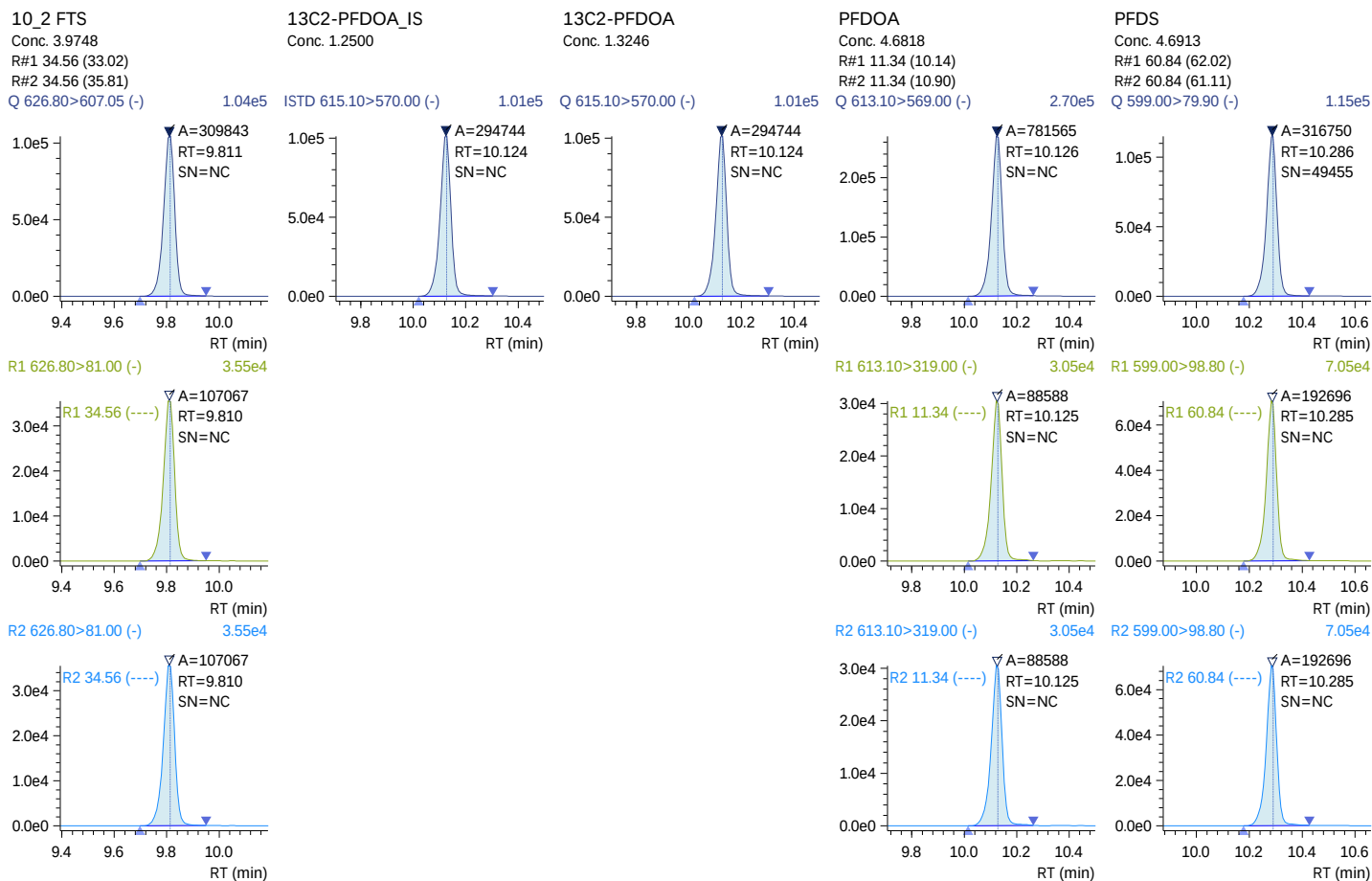


R2 548.80>98.80 (-) 7.73e4



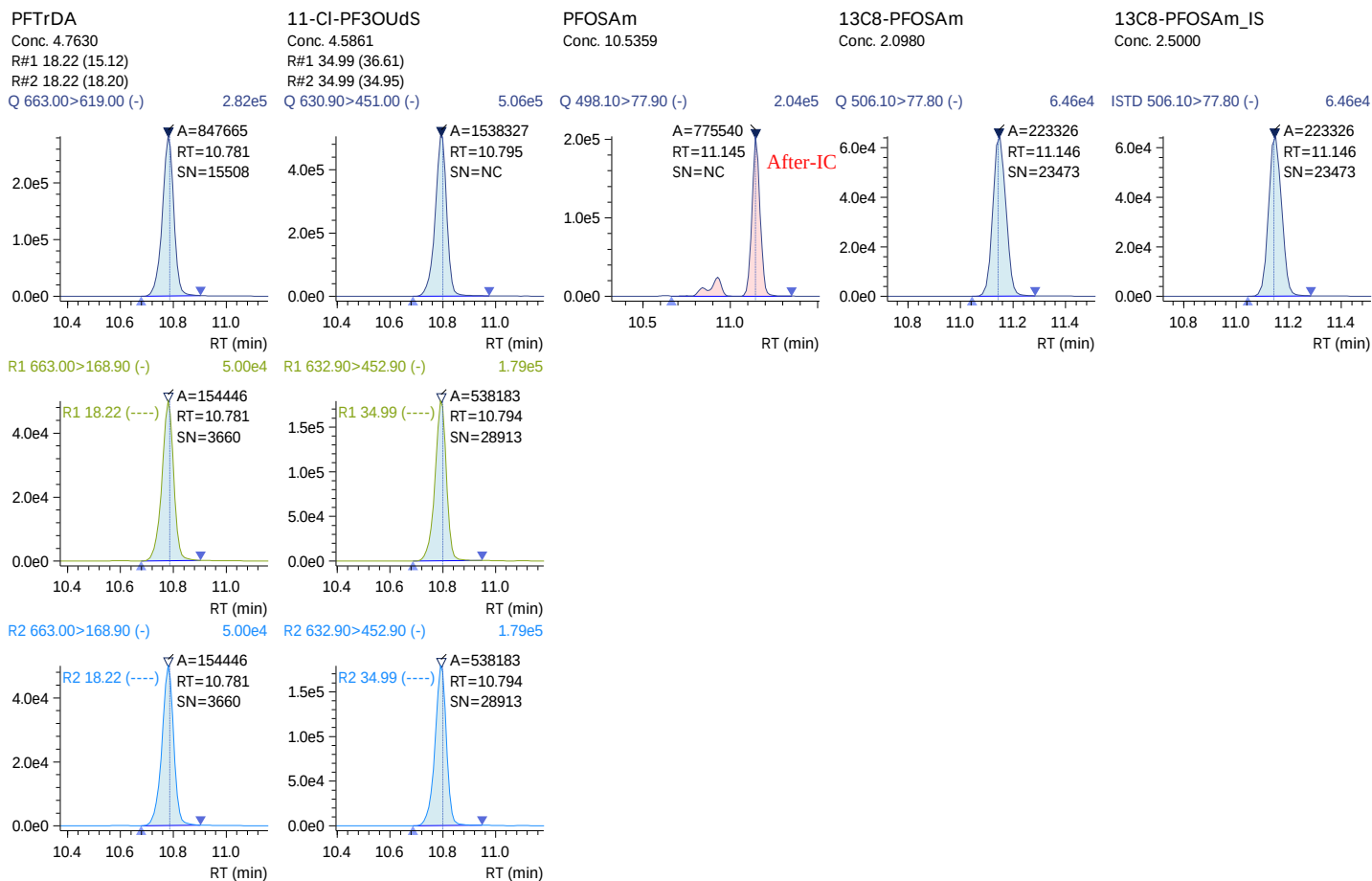


240119_036 (continued)



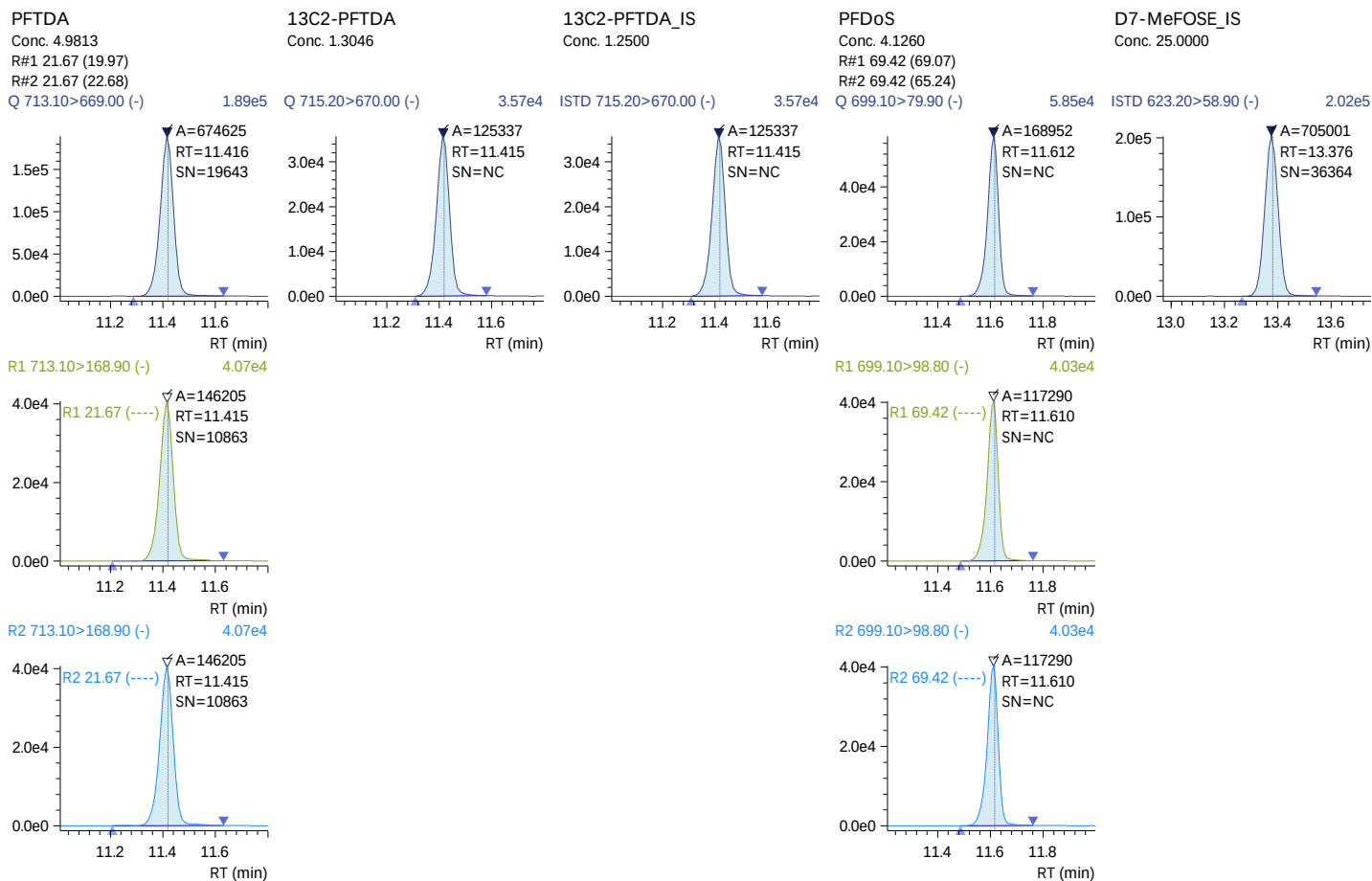


240119_036 (continued)





240119_036 (continued)



J:\LCMS08\Data\240119_1633_B1\240119_1633_B1.dampl

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_036 (continued)

D7-MeFOSE
Conc. 26.8633

MeFOSE
Conc. 4.9184

13C2-PFHXA_IS
Conc. 2.5000

13C2-PFHXA
Conc. 2.4573

PFHXA
Conc. 5.0950
R#1 13.52 (11.64)
R#2 13.52 (14.51)

Q 623.20>58.90 (-)

2.02e5

Q 616.10>59.00 (-)

2.30e4

ISTD 815.00>770.05 (-)

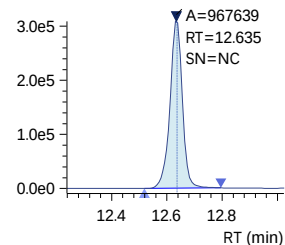
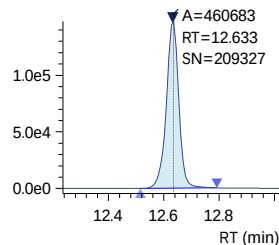
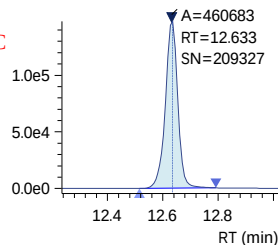
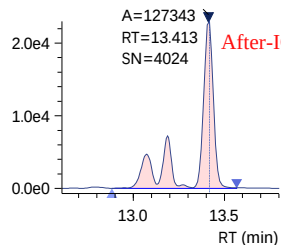
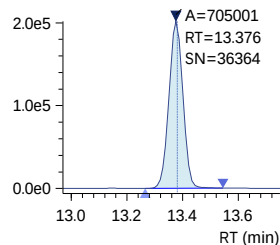
1.48e5

Q 815.00>770.05 (-)

1.48e5

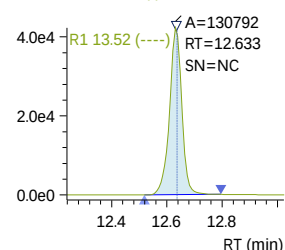
Q 813.00>768.95 (-)

3.09e5



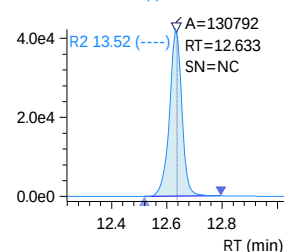
R1 813.00>218.95 (-)

4.23e4



R2 813.00>218.95 (-)

4.23e4





240119_036 (continued)

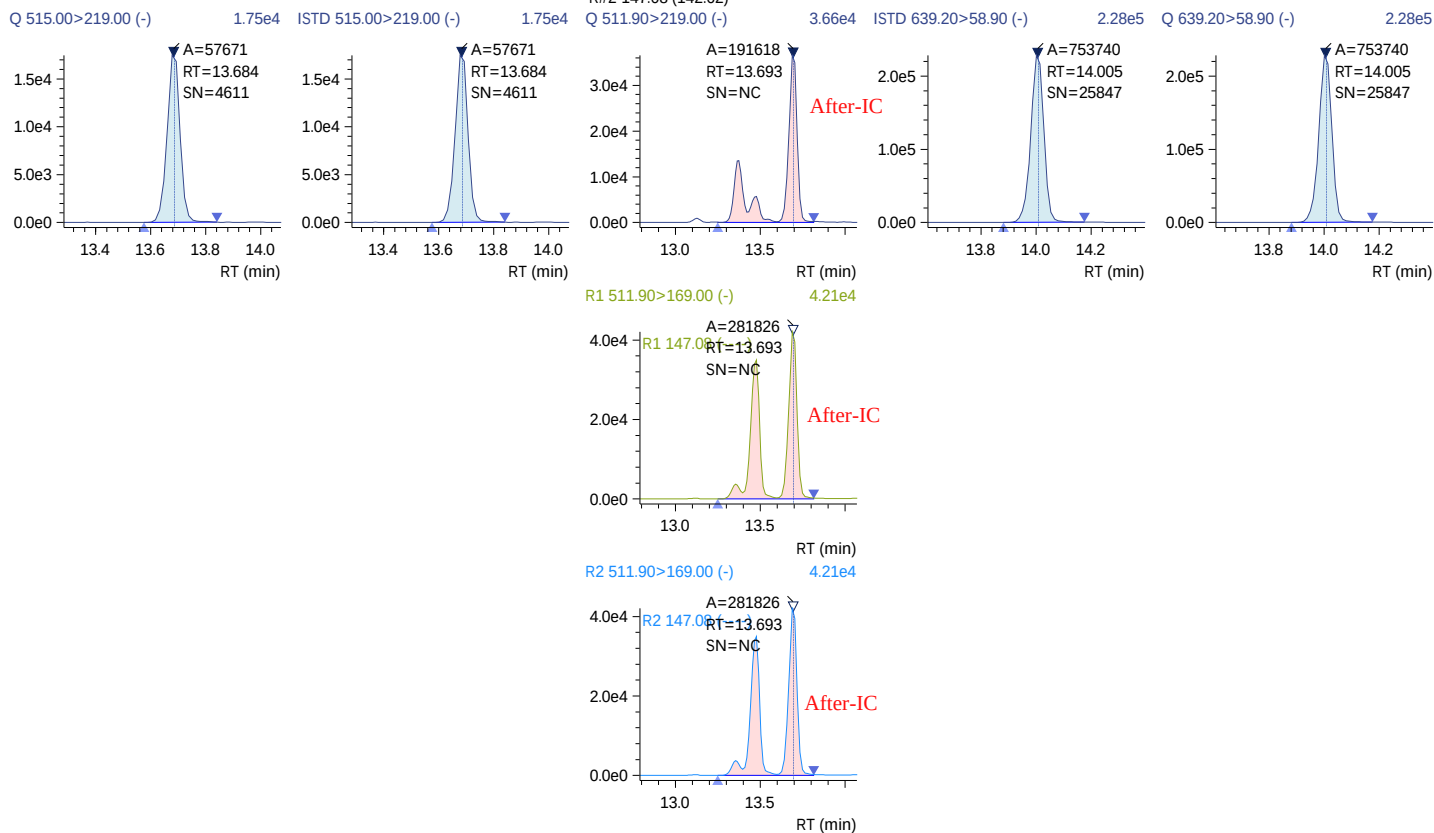
D3-MeFOSA
Conc. 2.6903

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. 4.6092
R#1 147.08 (149.05)
R#2 147.08 (142.62)

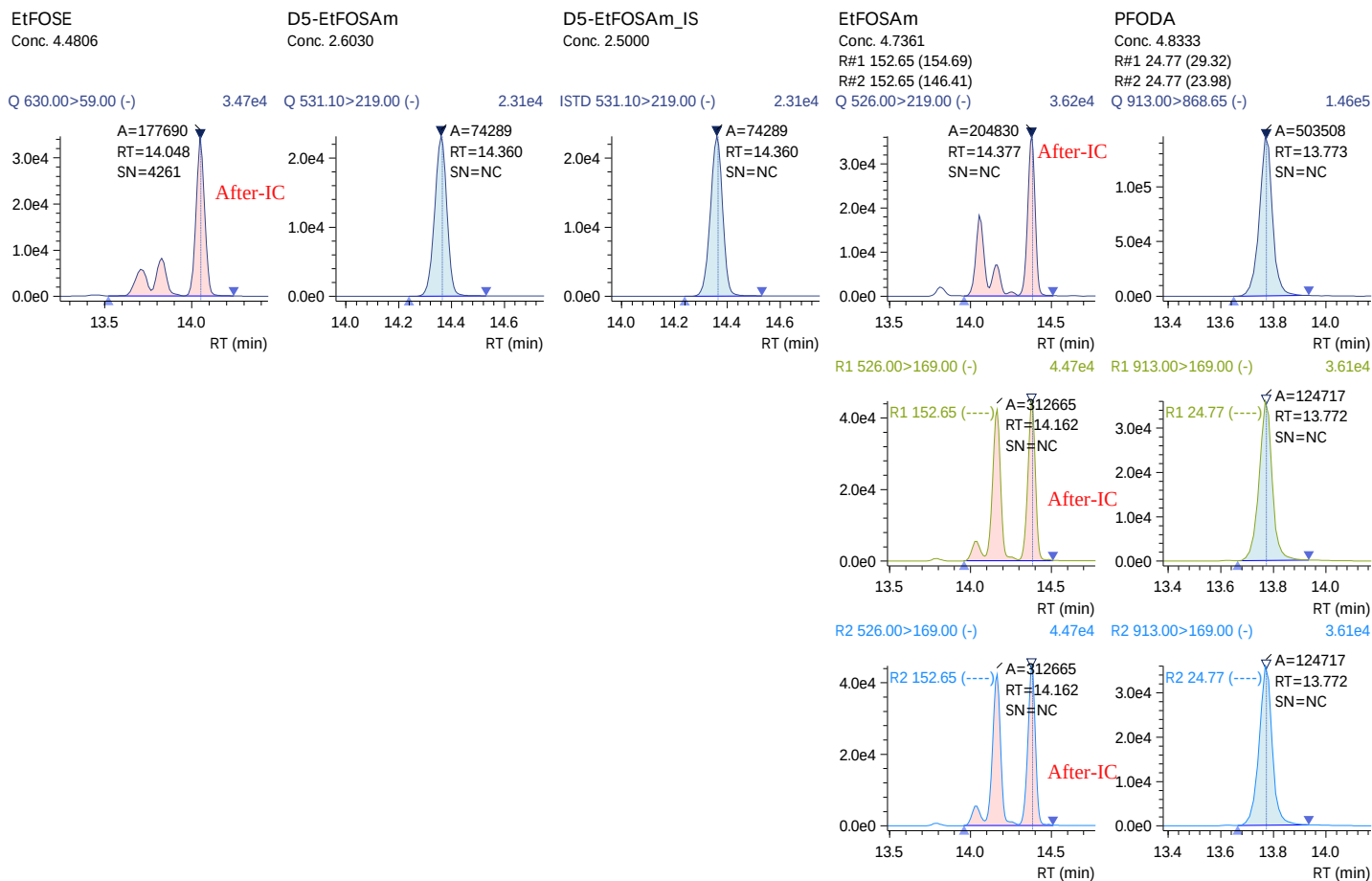
D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 28.2777





240119_036 (continued)



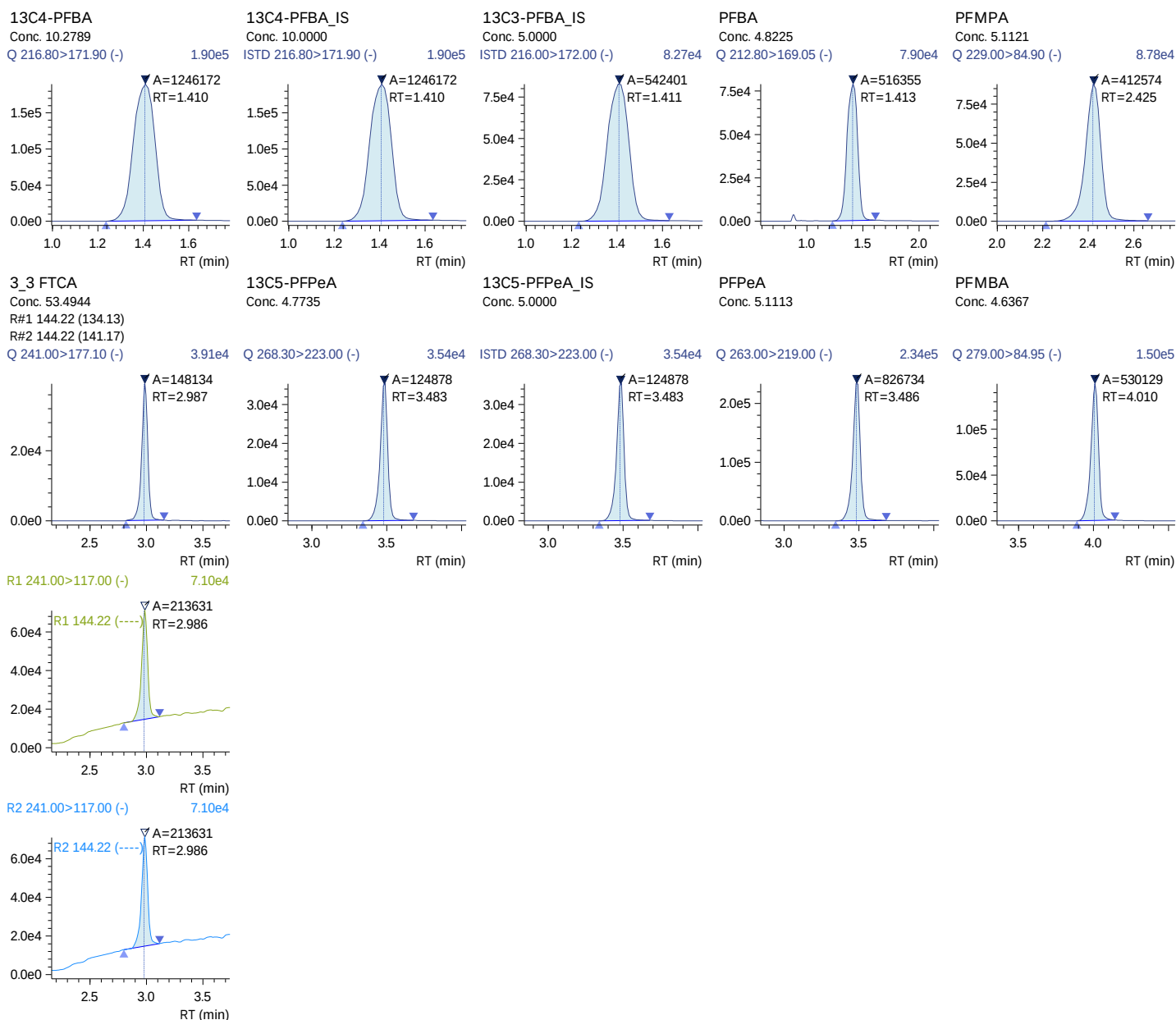
J:\LCMS08\Data\240119_1633_B1\240119_1633_B1.dampl

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_036

Sample ID: 1633 ICAL 5.0PPB
Date Acquired: 1/20/2024 1:22:33 AM
Acquired by: System Administrator
Data File: 240119_036
Vial: 6 | Inj. Volume: 10.0000uL | Tray: 1





240119_036 (continued)

13C2-4_2 FTS
Conc. 6.2548

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. 4.6986
R#1 31.41 (34.14)
R#2 31.41 (29.06)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 3.7683
R#1 48.63 (47.53)
R#2 48.63 (46.72)

Q 329.10>80.90 (-)

5.95e4

ISTD 329.10>80.90 (-)

5.95e4

Q 327.10>307.00 (-)

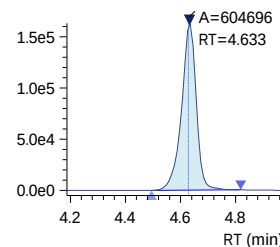
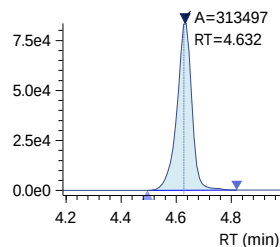
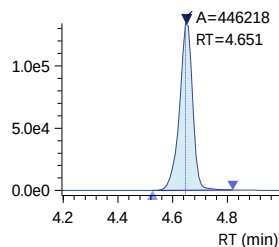
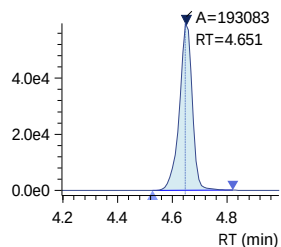
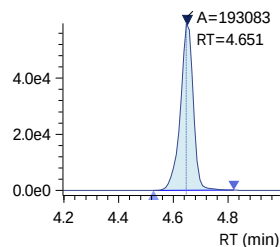
1.34e5

ISTD 302.10>79.90 (-)

8.36e4

Q 298.70>79.90 (-)

1.63e5

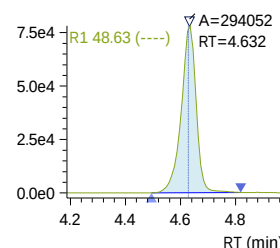
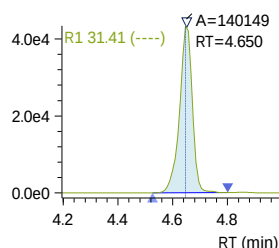


R1 327.10>80.90 (-)

4.34e4

R1 298.70>98.80 (-)

7.82e4

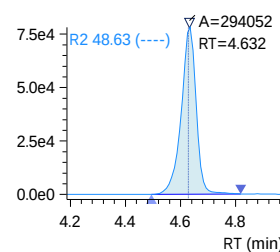
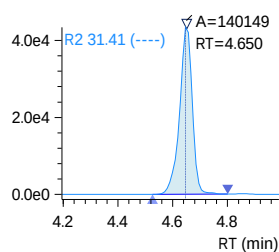


R2 327.10>80.90 (-)

4.34e4

R2 298.70>98.80 (-)

7.82e4





240119_036 (continued)

13C3-PFBS
 Conc. 2.4626

NFDHA
 Conc. 5.2421
 R#1 36.17 (37.88)
 R#2 36.17 (40.25)

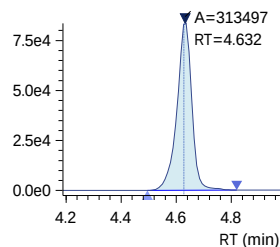
13C5-PFHxA
 Conc. 2.3855

13C5-PFHxA_IS
 Conc. 2.5000

13C2-PFHxA_IS
 Conc. 2.5000

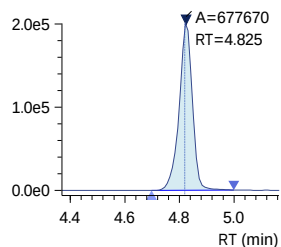
Q 302.10>79.90 (-)

8.36e4



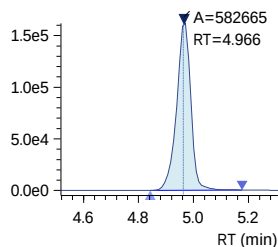
Q 295.00>201.00 (-)

2.01e5



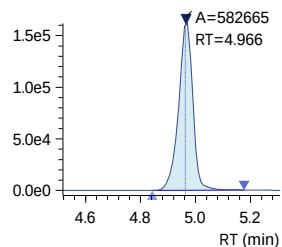
Q 318.00>273.00 (-)

1.62e5



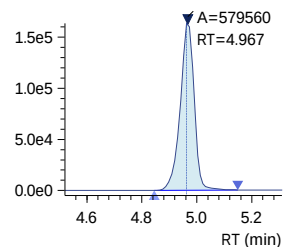
ISTD 318.00>273.00 (-)

1.62e5



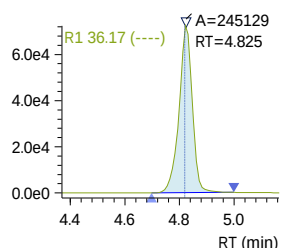
ISTD 315.10>270.00 (-)

1.64e5



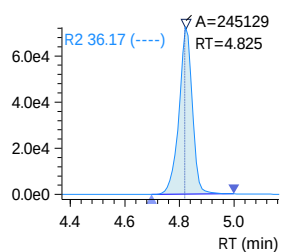
R1 295.00>84.90 (-)

7.24e4



R2 295.00>84.90 (-)

7.24e4

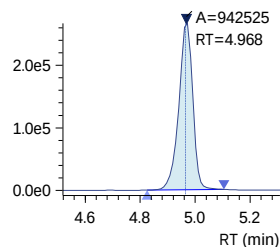




240119_036 (continued)

PFHxA
Conc. 4.8515

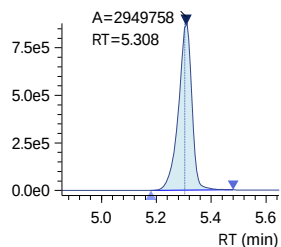
Q 313.00>269.00 (-) 2.67e5



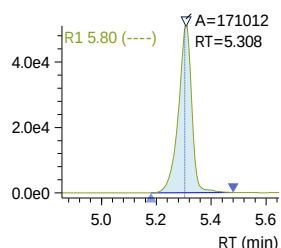
PFEESA
Conc. 4.5198

R#1 5.80 (5.88)
R#2 5.80 (6.11)

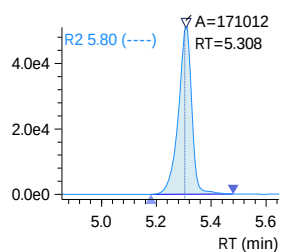
Q 314.80>135.00 (-) 8.79e5



R1 314.80>82.90 (-) 5.10e4

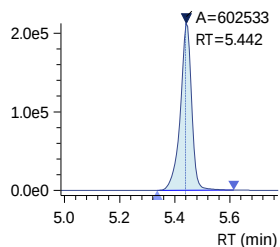


R2 314.80>82.90 (-) 5.10e4



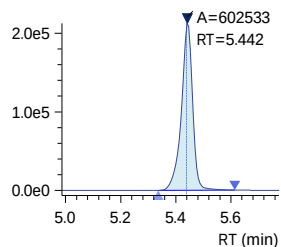
13C3-HFPO-DA
Conc. 10.6203

Q 286.90>168.90 (-) 2.13e5



13C3-HFPO-DA_IS
Conc. 10.0000

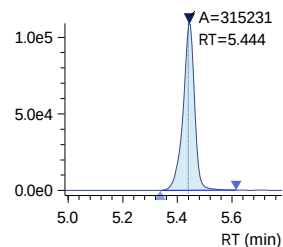
ISTD 286.90>168.90 (-) 2.13e5



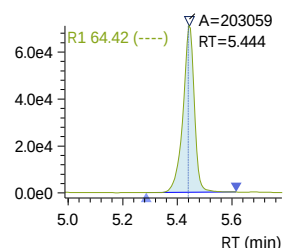
HFPO-DA
Conc. 4.7370

R#1 64.42 (63.80)
R#2 64.42 (65.61)

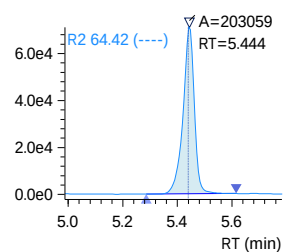
Q 284.90>168.90 (-) 1.09e5



R1 284.90>184.90 (-) 7.12e4



R2 284.90>184.90 (-) 7.12e4

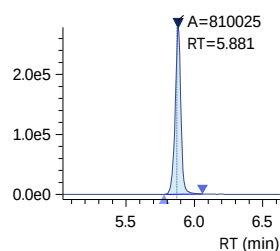




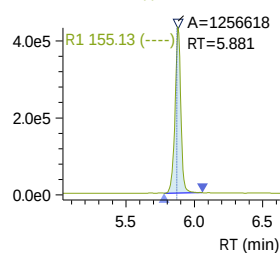
240119_036 (continued)

5_3 FTCA

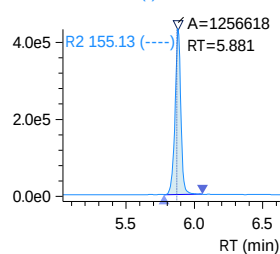
Conc. 53.7462
R#1 155.13 (167.13)
R#2 155.13 (158.86)
Q 341.00>237.05 (-)



R1 341.00>217.00 (-) 4.34e5

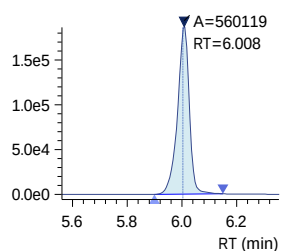


R2 341.00>217.00 (-) 4.34e5

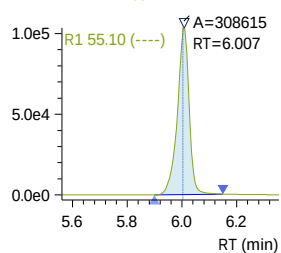


PFPeS

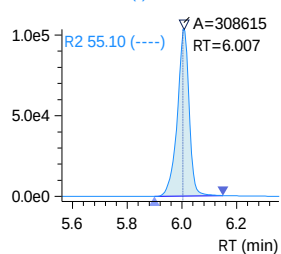
Conc. 4.3411
R#1 55.10 (56.71)
R#2 55.10 (55.80)
Q 349.10>79.90 (-)



R1 349.10>98.80 (-) 1.04e5

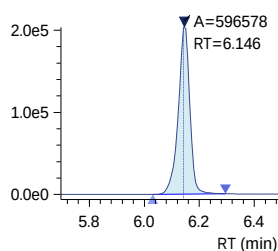


R2 349.10>98.80 (-) 1.04e5



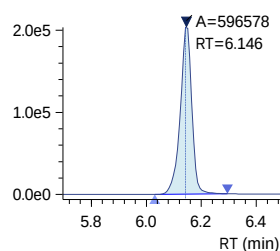
13C4-PFHpA

Conc. 2.6981
Q 367.10>322.00 (-)



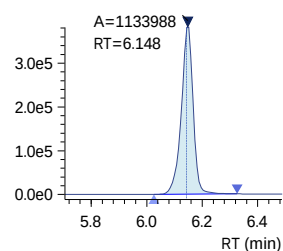
13C4-PFHpA_IS

Conc. 2.5000
ISTD 367.10>322.00 (-)

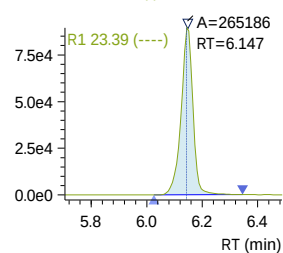


PFHpA

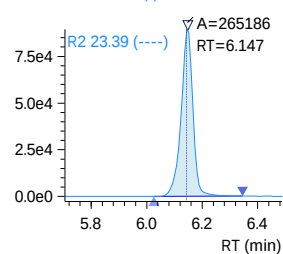
Conc. 4.5486
R#1 23.39 (21.37)
R#2 23.39 (21.50)
Q 363.10>319.00 (-)



R1 363.10>169.00 (-) 8.95e4

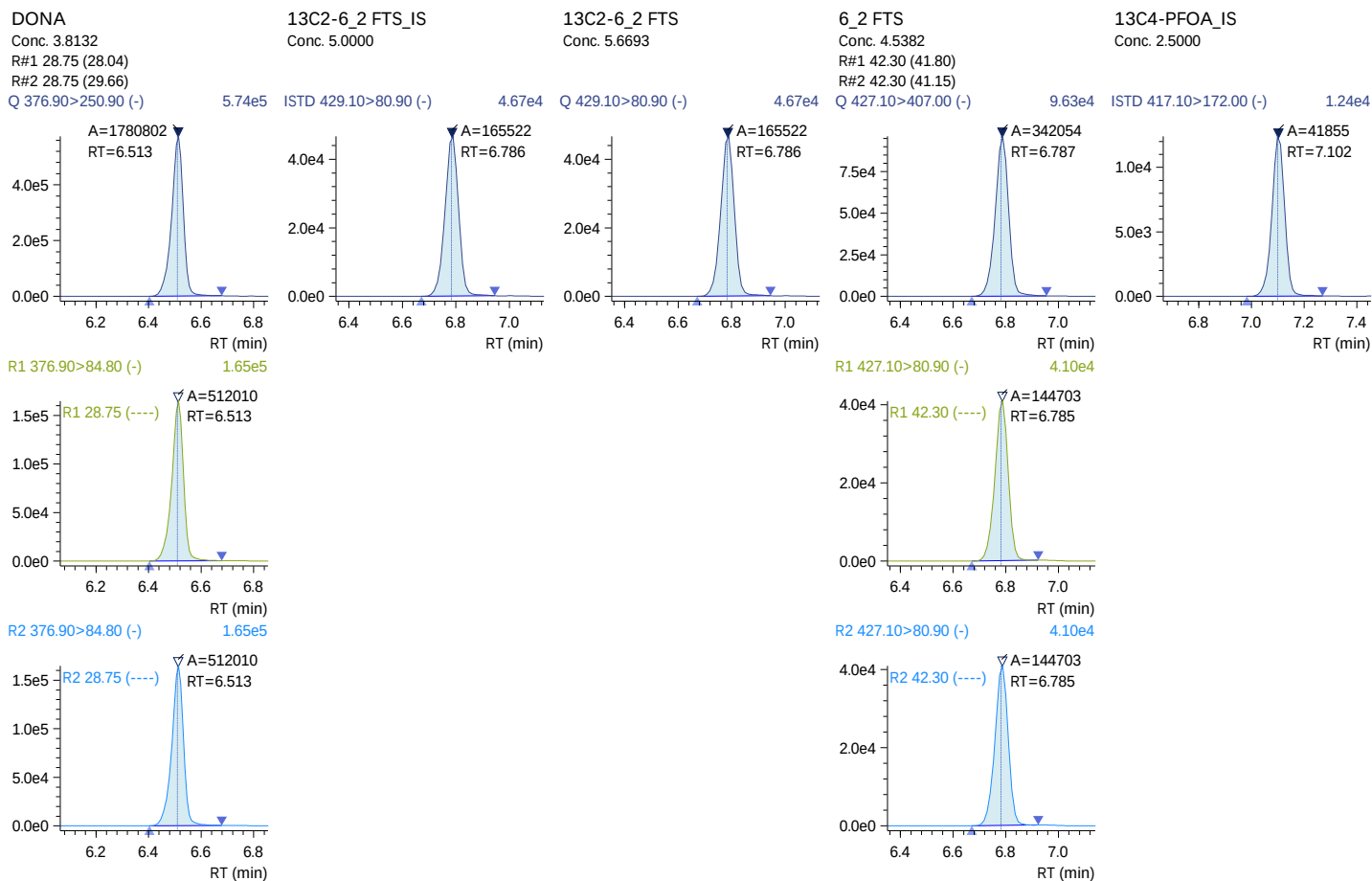


R2 363.10>169.00 (-) 8.95e4





240119_036 (continued)





240119_036 (continued)

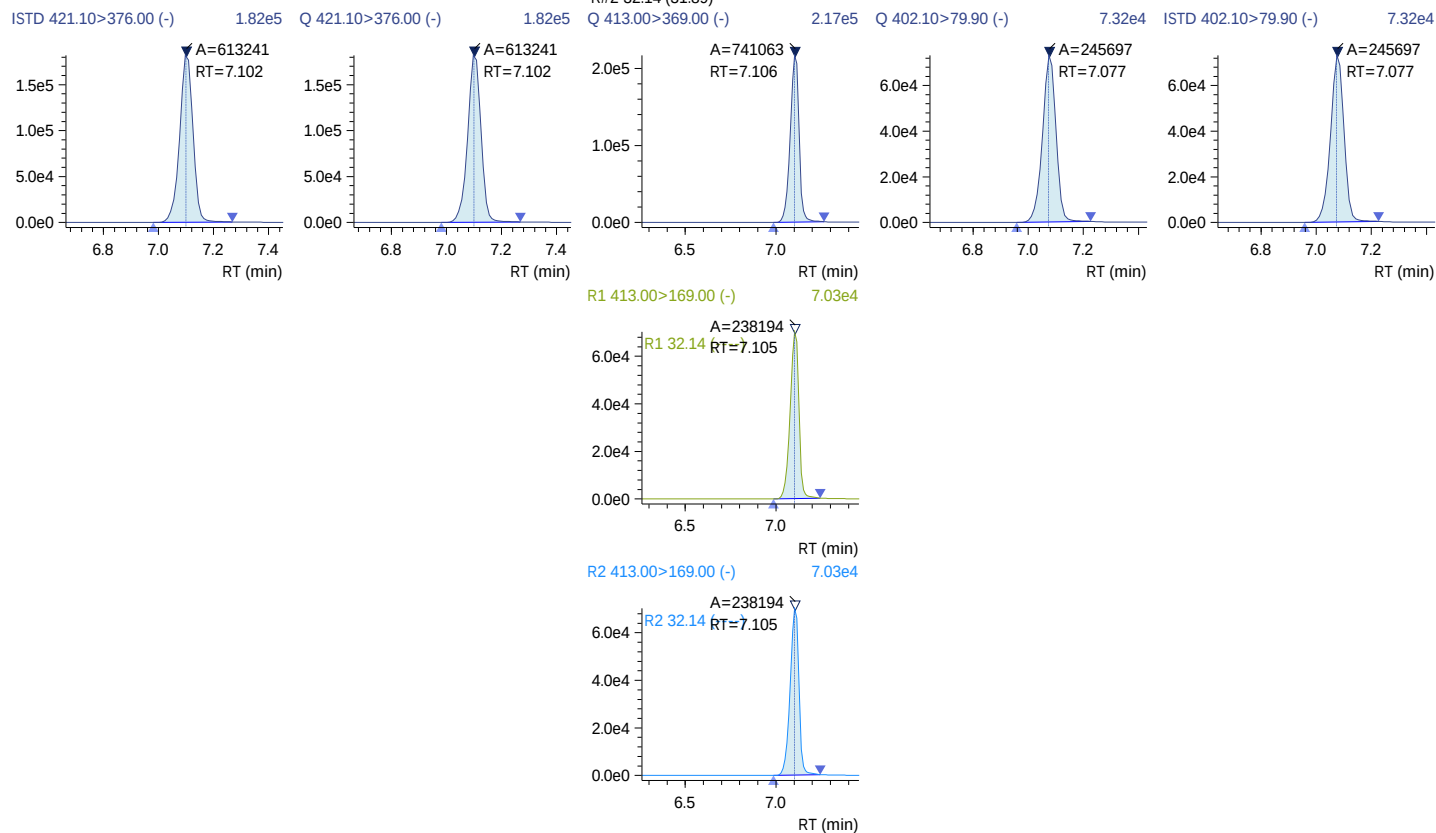
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.6214

PFOA
Conc. 4.6385
R#1 32.14 (29.05)
R#2 32.14 (31.89)

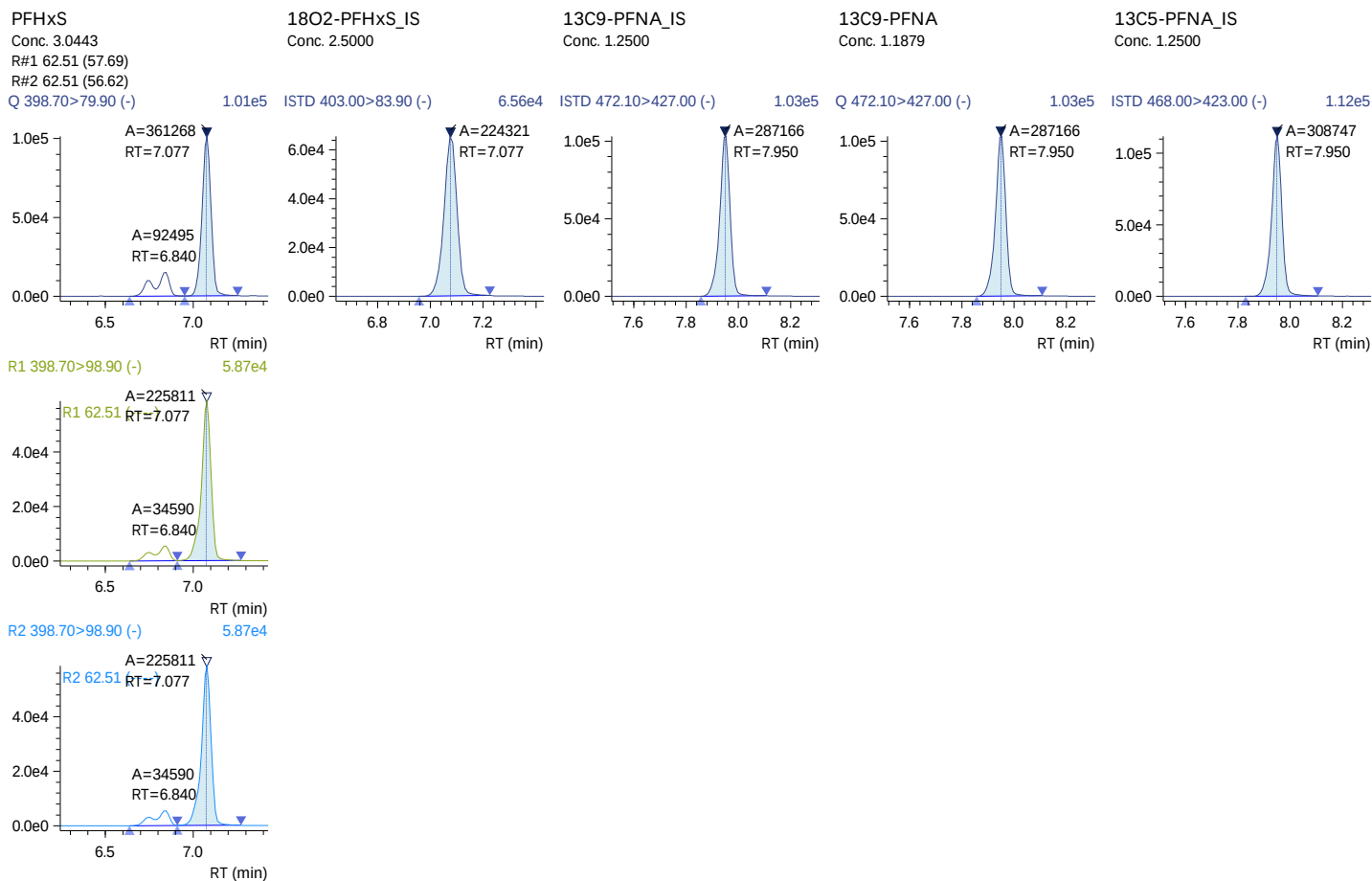
13C3-PFHxS
Conc. 2.5518

13C3-PFHxS_IS
Conc. 2.5000



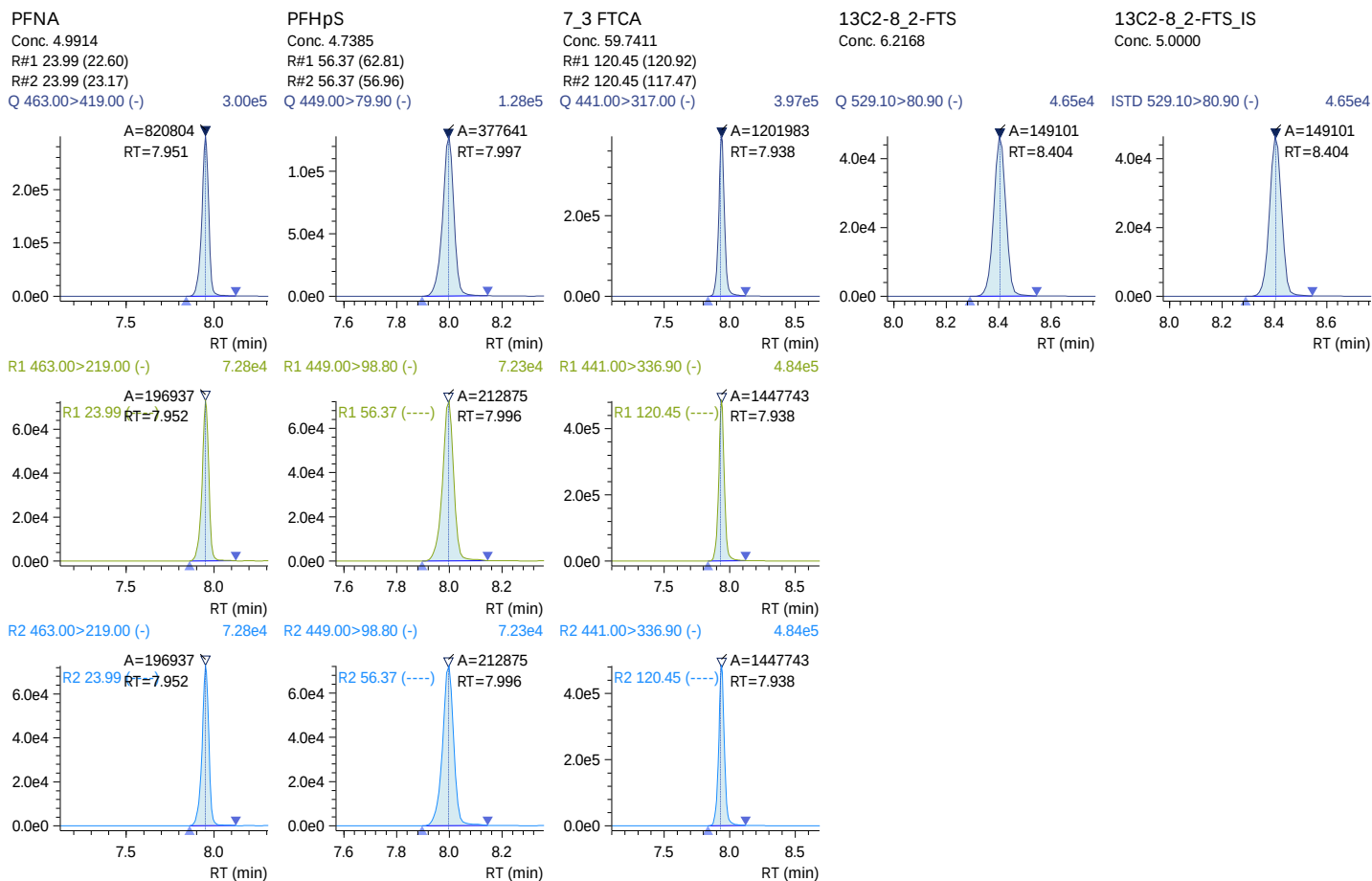


240119_036 (continued)



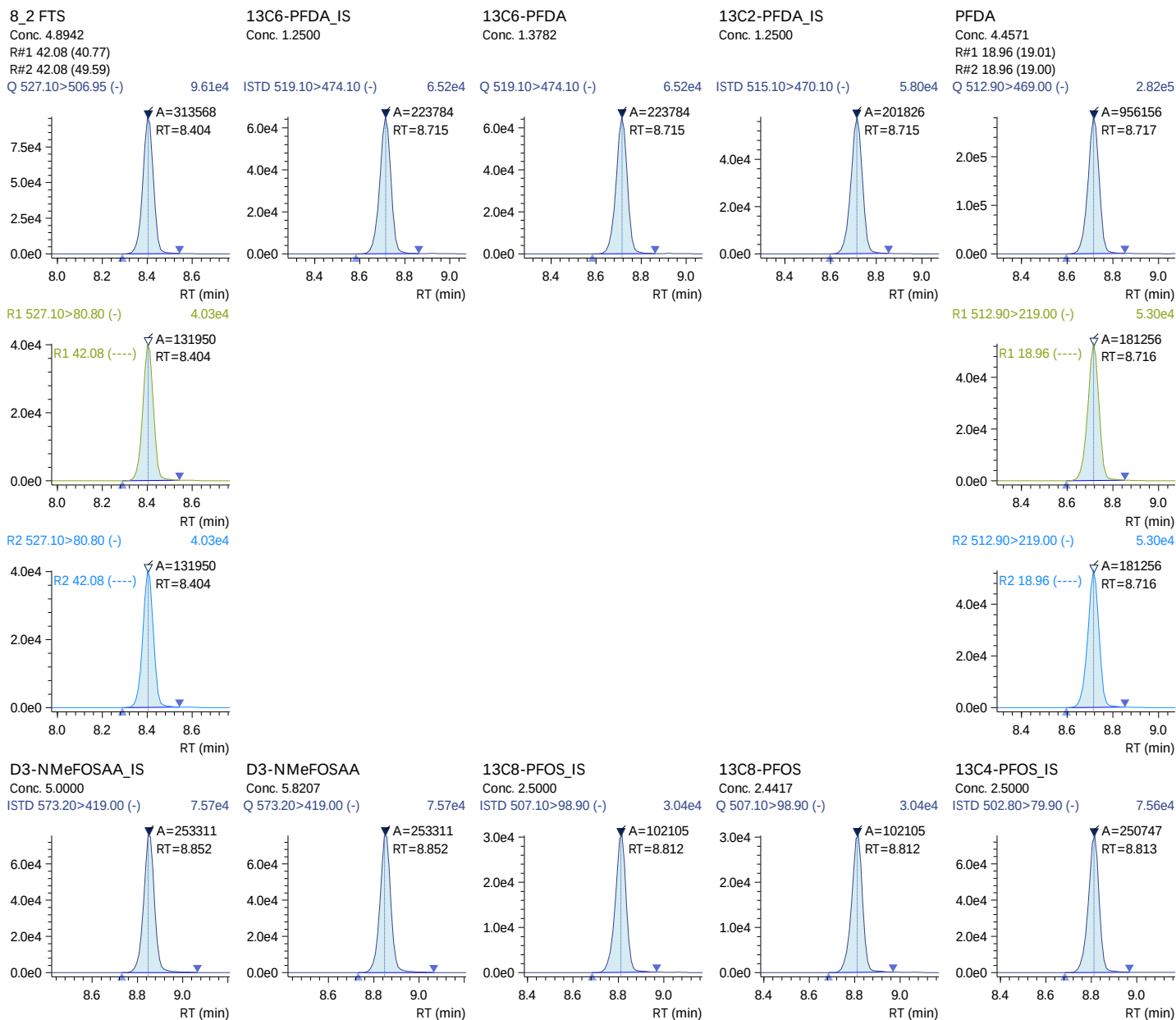


240119_036 (continued)



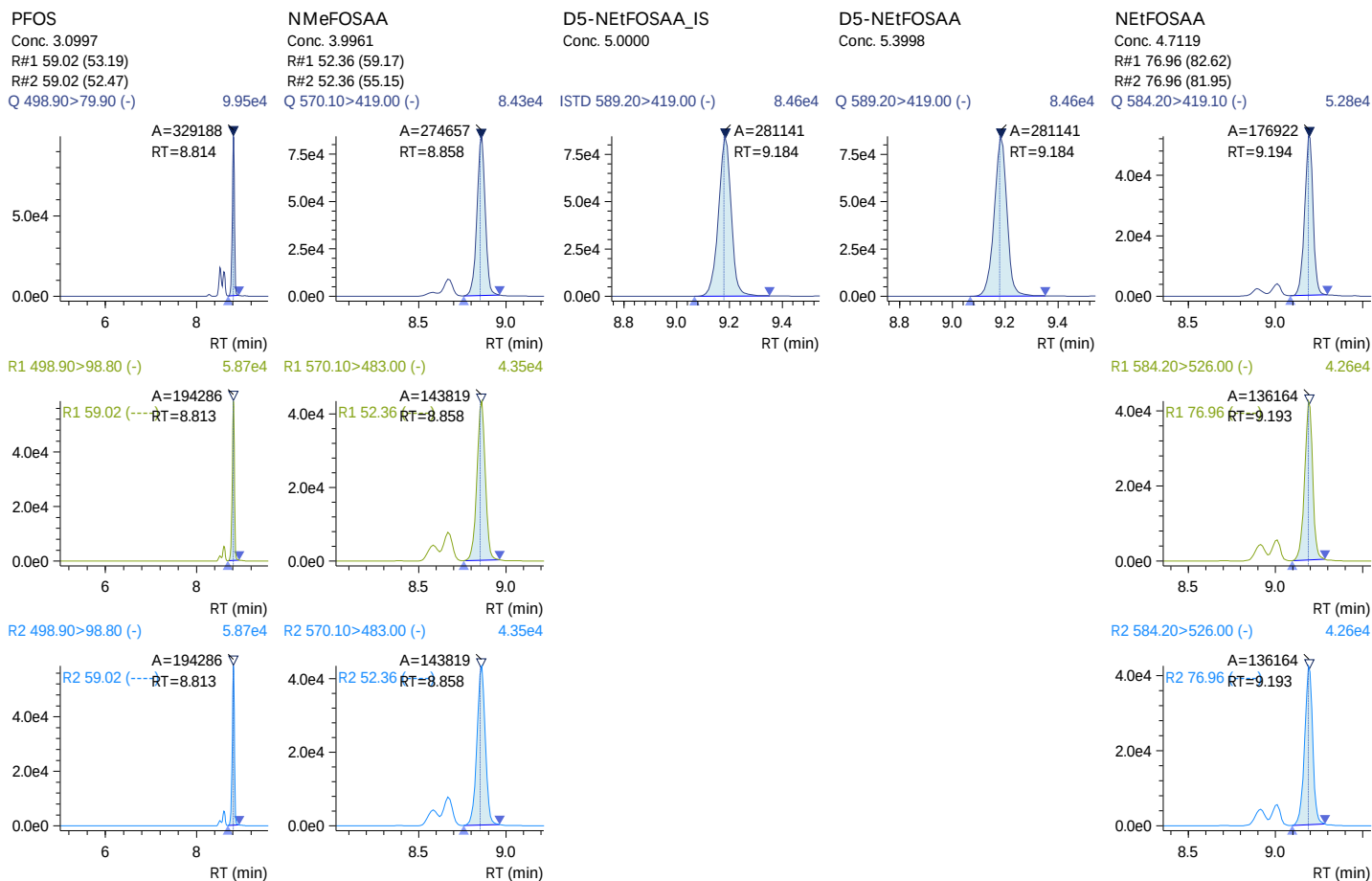


240119_036 (continued)





240119_036 (continued)

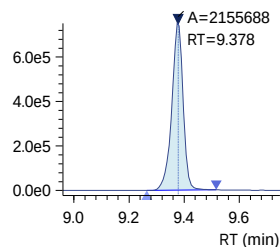




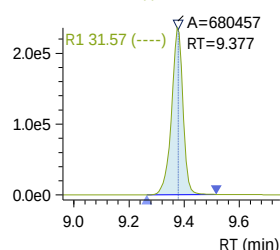
240119_036 (continued)

9-Cl-PF3ONS

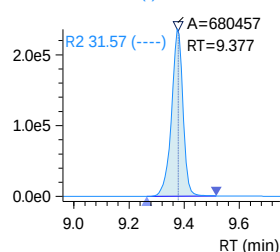
Conc. 4.3396
R#1 31.57 (31.76)
R#2 31.57 (32.76)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-) 2.36e5

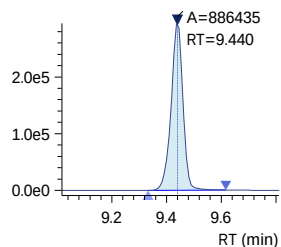


R2 532.80>353.00 (-) 2.36e5

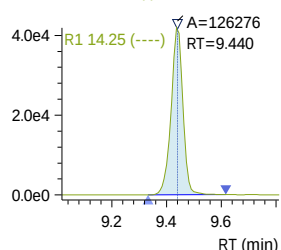


PFUnDA

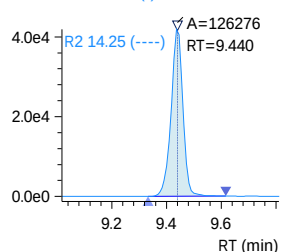
Conc. 4.5416
R#1 14.25 (12.31)
R#2 14.25 (13.12)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-) 4.19e4

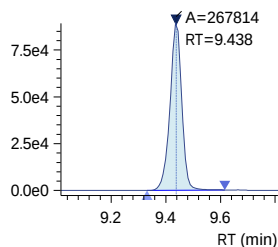


R2 563.10>269.10 (-) 4.19e4



13C7-PFUnDA_IS

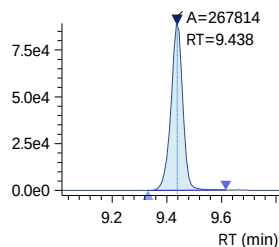
Conc. 1.2500
ISTD 570.00>525.10 (-)



8.92e4

13C7-PFUnDA

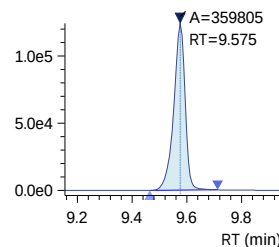
Conc. 1.3827
Q 570.00>525.10 (-)



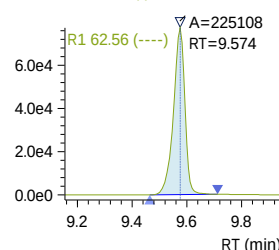
8.92e4

PFNS

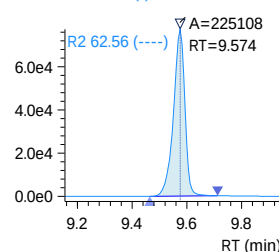
Conc. 4.6379
R#1 62.56 (63.31)
R#2 62.56 (65.22)
Q 548.80>79.90 (-)



1.24e5



R2 548.80>79.90 (-) 7.73e4





240119_036 (continued)

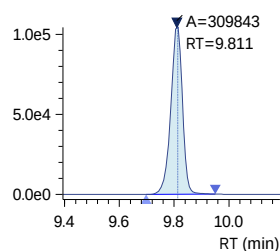
10_2_FTS

Conc. 3.9748

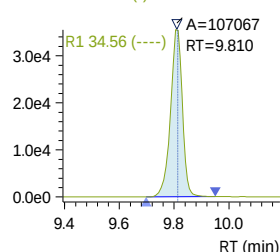
R#1 34.56 (33.02)

R#2 34.56 (37.13)

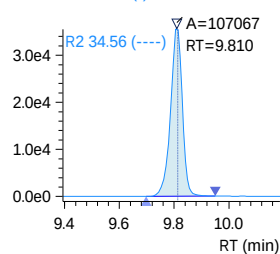
Q 626.80>607.05 (-)



R1 626.80>81.00 (-) 3.55e4



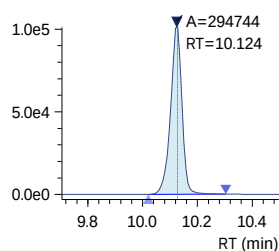
R2 626.80>81.00 (-) 3.55e4



13C2-PFDOA_IS

Conc. 1.2500

ISTD 615.10>570.00 (-)



Q 615.10>570.00 (-) 1.01e5



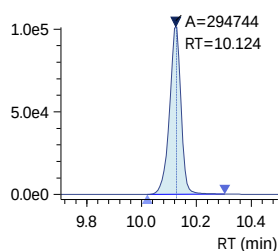
Q 615.10>570.00 (-) 1.01e5



13C2-PFDOA

Conc. 1.3246

Q 615.10>570.00 (-)



Q 615.10>570.00 (-) 1.01e5



Q 615.10>570.00 (-) 1.01e5



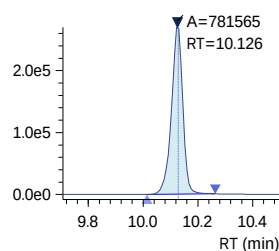
PFDOA

Conc. 4.6818

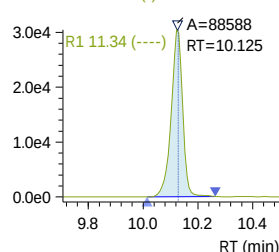
R#1 11.34 (10.14)

R#2 11.34 (11.29)

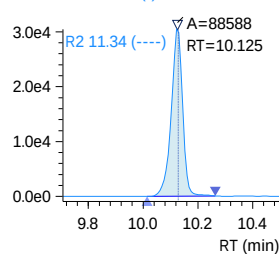
Q 613.10>569.00 (-)



R1 613.10>319.00 (-) 3.05e4



R2 613.10>319.00 (-) 3.05e4



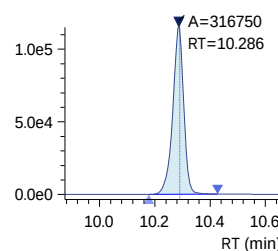
PFDS

Conc. 4.6913

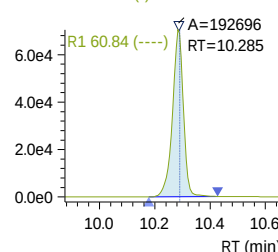
R#1 60.84 (62.02)

R#2 60.84 (60.18)

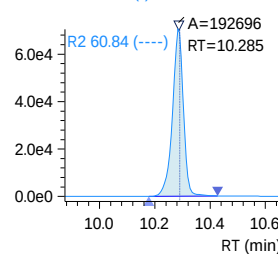
Q 599.00>79.90 (-)



R1 599.00>98.80 (-) 7.05e4



R2 599.00>98.80 (-) 7.05e4

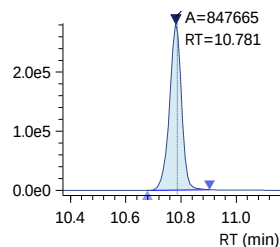




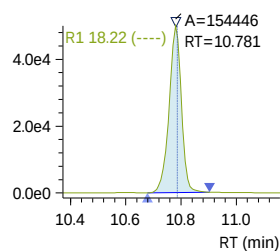
240119_036 (continued)

PFTrDA

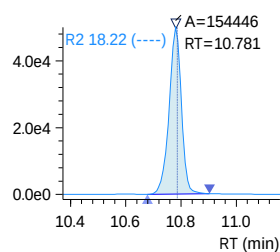
Conc. 4.7630
R#1 18.22 (15.12)
R#2 18.22 (17.64)
Q 663.00>619.00 (-)



R1 663.00>168.90 (-) 5.00e4

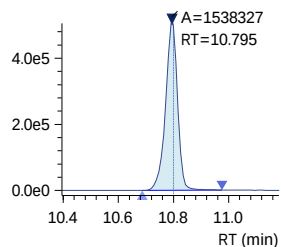


R2 663.00>168.90 (-) 5.00e4

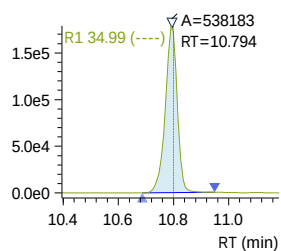


11-Cl-PF3OUdS

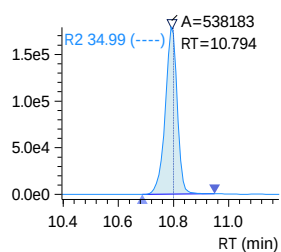
Conc. 4.5861
R#1 34.99 (36.61)
R#2 34.99 (36.44)
Q 630.90>451.00 (-)



R1 632.90>452.90 (-) 1.79e5



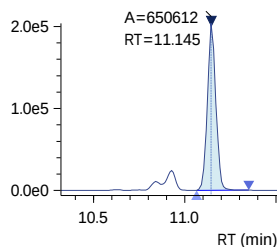
R2 632.90>452.90 (-) 1.79e5



PFOSAm

Conc. 8.8387

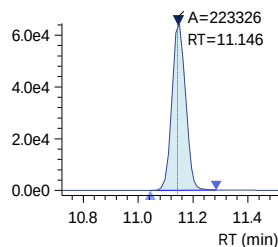
Q 498.10>77.90 (-)



13C8-PFOSAm

Conc. 2.0980

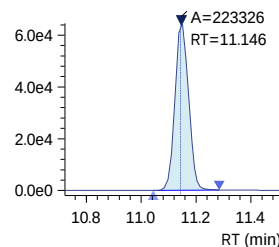
Q 506.10>77.80 (-)



13C8-PFOSAm_IS

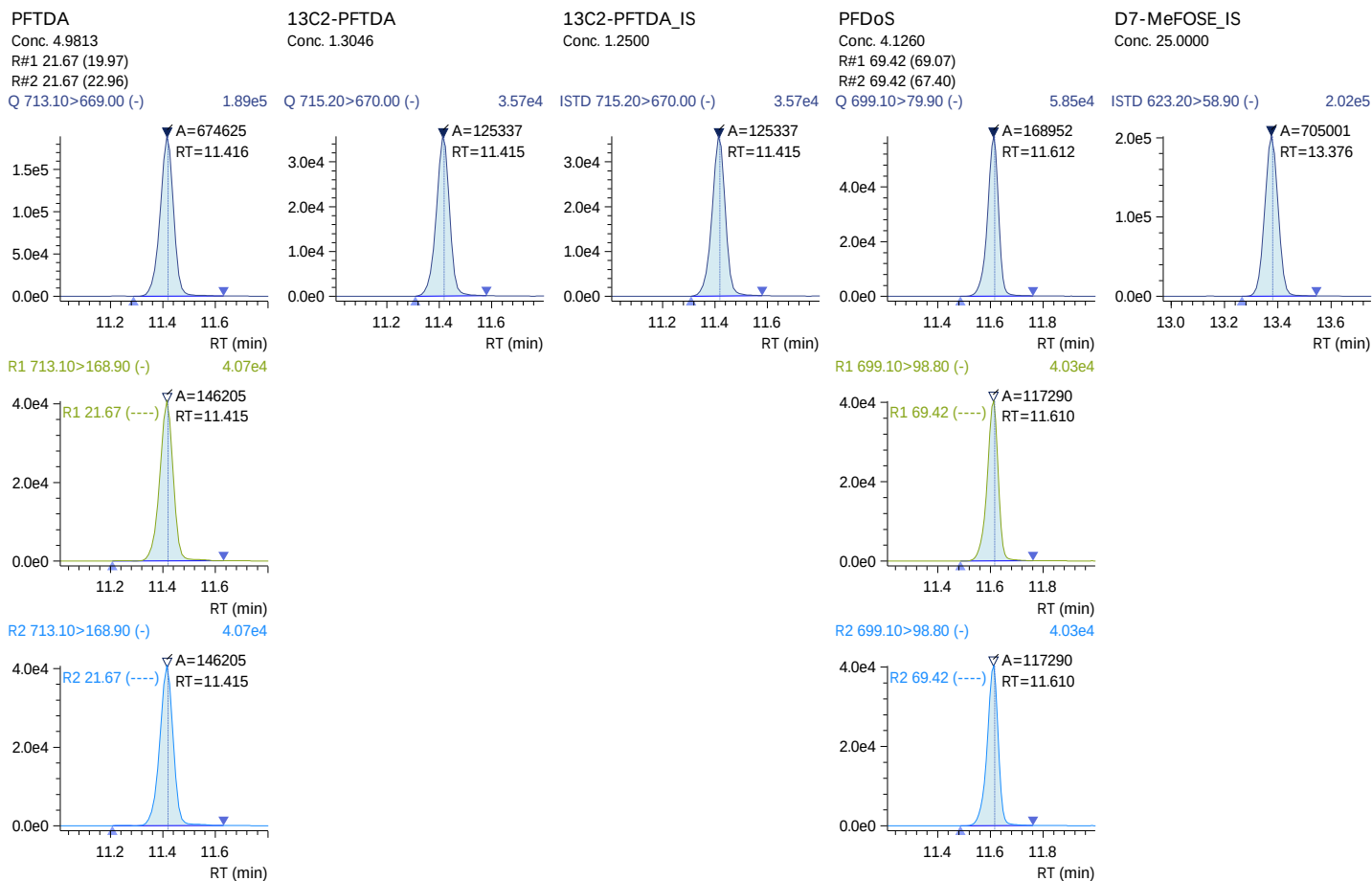
Conc. 2.5000

ISTD 506.10>77.80 (-)





240119_036 (continued)





240119_036 (continued)

D7-MeFOSE
Conc. 26.8633

MeFOSE
Conc. 3.1985

¹³C2-PFHxDA_IS
Conc. 2.5000

¹³C2-PFHxDA
Conc. 2.4573

PFHxDA
Conc. 5.0950
R#1 13.52 (11.64)
R#2 13.52 (13.90)

Q 623.20>58.90 (-)

2.02e5

Q 616.10>59.00 (-)

2.30e4

ISTD 815.00>770.05 (-)

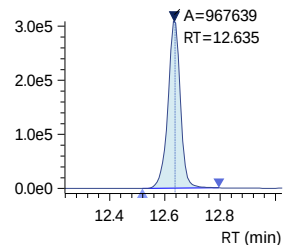
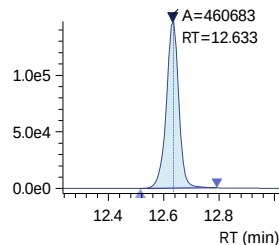
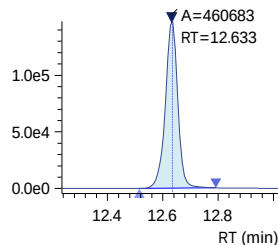
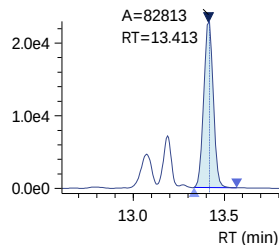
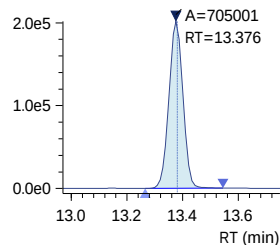
1.48e5

Q 815.00>770.05 (-)

1.48e5

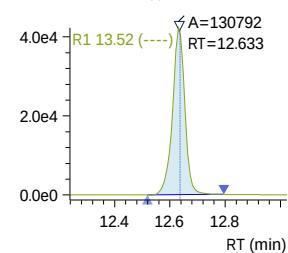
Q 813.00>768.95 (-)

3.09e5



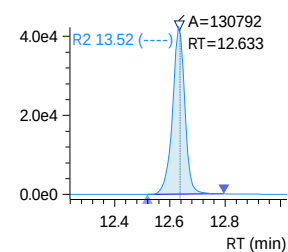
R1 813.00>218.95 (-)

4.23e4



R2 813.00>218.95 (-)

4.23e4





240119_036 (continued)

D3-MeFOSA
Conc. 2.6903

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. 2.8794
R#1 116.58 (149.05)
R#2 116.58 (140.79)

D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 28.2777

Q 515.00>219.00 (-)

1.75e4

ISTD 515.00>219.00 (-)

1.75e4

Q 511.90>219.00 (-)

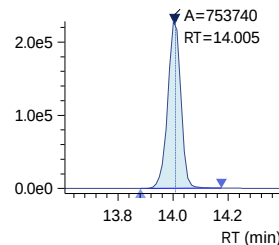
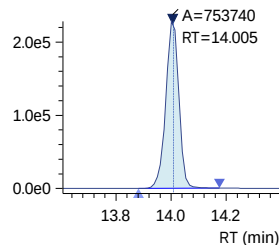
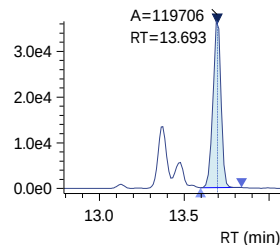
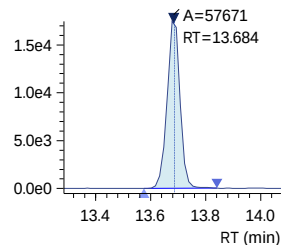
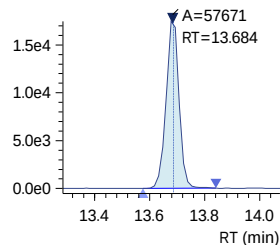
3.66e4

ISTD 639.20>58.90 (-)

2.28e5

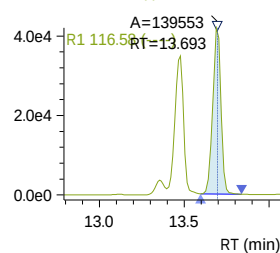
Q 639.20>58.90 (-)

2.28e5



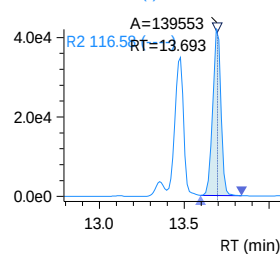
R1 511.90>169.00 (-)

4.21e4



R2 511.90>169.00 (-)

4.21e4





240119_036 (continued)

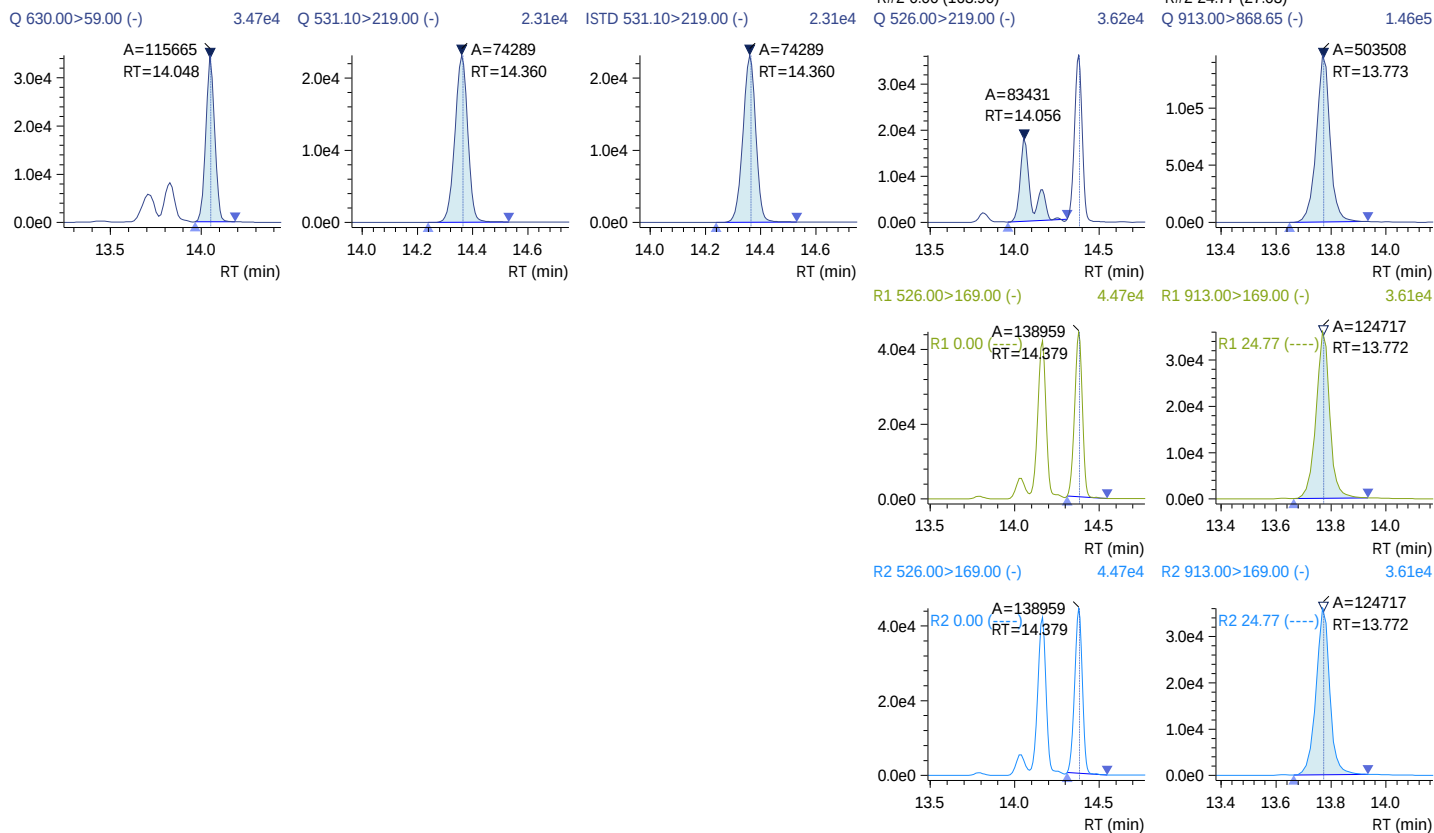
EtFOSE
Conc. 2.9166

D5-EtFOSAm
Conc. 2.6030

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. 1.9291
R#1 0.00 (154.69)
R#2 0.00 (163.90)

PFODA
Conc. 4.8333
R#1 24.77 (29.32)
R#2 24.77 (27.03)



Validation Report

1st PS 01/23/24
2nd UA 01/23/24

Data File: J:\LCMS08\Data\240119_1633_B1\240119_008
Lab ID: KQ2400951-19
RunType: LLCCV
Matrix: Soil

Date Acquired: 1/19/24 14:31
Batch ID: 830171
Analysis Method: 1633/PFAS_DOD5.4

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Internal Standards	X	

Primary Review: _____

Secondary Review: _____

Quantitation Report

1st *PS* 01/23/24
2nd *UA* 01/23/24

Data File:	J:\LCMS08\Data\240119_1633_B1\240119_008	Instrument:	K-LCMS-08
Acqu Date:	1/19/24 14:31	Vial:	14
Run Type:	LLCCV	Dilution:	1
Lab ID:	KQ2400951-19	Raw Units:	ng/mL

Bottle ID:		Tier:	IV	Matrix:	Soil
Prod Code:	PFAS_DOD5.4	Collect Date:	11/13/23	Receive Date:	11/14/23

Analysis Lot:	830171	Prep Lot:		Report Group:	KQ2400951
Analysis	1633	Prep Method:			
		Prep Date:			

Title:	Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM	Calibration ID:	KC2400027
		Report List ID:	24615

Internal Standard Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Area Criteria
18O2-PFHxS	7.070		230411	2.5000	OK
13C4-PFOS	8.808		289170	2.5000	OK
13C3-PFBA	1.409		602501	5.0000	OK
13C2-PFHxA	4.958		615711	2.5000	OK
13C4-PFOA	7.093		47699	2.5000	OK
13C5-PFNA	7.945		335130	1.2500	OK
13C2-PFDA	8.710		238566	1.2500	OK

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc		Rpt?
13C3-PFBS	4.622		331607	2.5361	20 - 150	Y
13C3-PFHxS	7.069		268711	2.7170	20 - 150	Y
13C8-PFOS	8.807		119418	2.4762	20 - 150	Y
13C4-PFBA	1.410		1341009	9.9577	20 - 150	Y
13C5-PFPeA	3.473		148610	5.3472	20 - 150	Y
13C5-PFHxA	4.957		638205	2.4594	20 - 150	Y
13C4-PFHpA	6.139		644715	2.7446	20 - 150	Y
13C8-PFOA	7.094		637104	2.3897	20 - 150	Y
13C9-PFNA	7.945		312851	1.1923	20 - 150	Y
13C6-PFDA	8.709		232769	1.2128	20 - 150	Y
13C7-PFUnDA	9.435		272588	1.1906	20 - 150	Y
13C2-PFDoDA	10.124		308339	1.1723	20 - 150	Y
13C2-PFTeDA	11.416		138122	1.2162	20 - 150	Y
13C8-FOSA	11.139		291699	2.3762	20 - 150	Y
D3-MeFOSA	13.685		63207	2.5568	20 - 150	Y
D5-EtFOSA	14.360		75980	2.3084	20 - 150	Y
D7-MeFOSE	13.378		712557	23.5434	20 - 150	Y
D9-EtFOSE	14.006		745067	24.2382	20 - 150	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 1/23/24 14:28

\\alprews001\starlims\LIMSReps\QuantValidation.rpt

			1st	PS	01/23/24
Data File:	J:\LCMS08\Data\240119_1633_B1\240119_008	Instrument:	K-LCMS08	UA	01/23/24
Acqu Date:	1/19/24 14:31	Vial:	14		
Run Type:	LLCCV	Dilution:	1		
Lab ID:	KQ2400951-19	Raw Units:	ng/mL		

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc		Rpt?
D3-MeFOSAA	8.843		313625	6.2490	20 - 150	Y
D5-EtFOSAA	9.173		365166	6.0817	20 - 150	Y
13C2-4:2 FTS	4.641		221019	6.9705	20 - 150	Y
13C2-6:2 FTS	6.780		200237	6.6770	20 - 150	Y
13C2-8:2 FTS	8.400		155610	6.3168	20 - 150	Y
13C3-HFPO-DA	5.434		660008	10.9504	20 - 150	Y

Target Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc		Rpt?
Perfluorobutane sulfonic acid (PFBS)	4.622		66661	0.3927		Y
Perfluoropentane sulfonic acid (PFPeS)	6.000		59271	0.4200		Y
Perfluorohexane sulfonic acid (PFHxS)	7.070		52613	0.3888		Y
Perfluoroheptane sulfonic acid (PFHpS)	7.992		40879	0.4386		Y
Perfluorooctane sulfonic acid (PFOS)	8.808		51421	0.4140		Y
Perfluorononane sulfonic acid (PFNS)	9.572		39185	0.4319		Y
Perfluorodecane sulfonic acid (PFDS)	10.286		35299	0.4414		Y
Perfluorododecane sulfonic acid (PFDoS)	11.613		19808	0.4136		Y
Perfluorobutanoic acid (PFBA)	1.410		52594	0.4565		Y
Perfluoropentanoic acid (PFPeA)	3.475		86570	0.4498		Y
Perfluorohexanoic acid (PFHxA)	4.959		100904	0.4666		Y
Perfluoroheptanoic acid (PFHpA)	6.140		131922	0.4586		Y
Perfluorooctanoic acid (PFOA)	7.096		93767	0.5265		Y
Perfluorononanoic acid (PFNA)	7.946		96979	0.5138		Y
Perfluorodecanoic acid (PFDA)	8.710		108399	0.4631		Y
Perfluoroundecanoic acid (PFUnDA)	9.437		98409	0.4689		Y
Perfluorododecanoic acid (PFDOA)	10.125		86413	0.4654		Y
Perfluorotridecanoic acid (PFTTrDA)	10.783		98501	0.4745		Y
Perfluorotetradecanoic acid (PFTDA)	11.418		77502	0.4944		Y
Perfluorooctane sulfonamide (PFOSAm)	11.138		92827	0.9655		Y
N-Methylperfluorooctane sulfonamide (MeFOSA)	13.694		19396	0.4257		Y
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	14.378		23509	0.5315		Y
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	13.415		12368	0.4726		Y
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	14.050		18311	0.4671		Y
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	8.849		35963	0.4226		Y

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#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

		1st	PS	01/23/24
Data File:	J:\LCMS08\Data\240119_1633_B1\240119_008	Instrument:	K-LCMS08	01/23/24
Acqu Date:	1/19/24 14:31	Vial:	14	
Run Type:	LLCCV	Dilution:	1	
Lab ID:	KQ2400951-19	Raw Units:	ng/mL	

Target Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Rpt?
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	9.183		23783	0.4877	Y
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	4.641		47760	0.4393	Y
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	6.780		45168	0.4954	Y
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	8.399		34438	0.5150	Y
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	2.976		43514	13.2044	Y
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	5.866		253393	15.3498	Y
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	7.923		351167	15.9348	Y
Perfluoro(2-ethoxyethane) sulfonic acid (PFEEESA)	5.298		295805	0.4138	Y
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	9.374		221630	0.4073	Y
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	10.796		166774	0.4385	Y
Perfluoro-3-methoxypropanoic acid (PFMPA)	2.419		47277	0.4923	Y
Perfluoro-4-methoxybutanoic acid (PFMBA)	3.999		57399	0.4219	Y
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	5.435		33924	0.4654	Y
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	4.816		73510	0.5192	Y
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	6.505		203820	0.3984	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution



240119_008

Sample ID: 1633 ICAL 0.50PPB
Date Acquired: 1/19/2024 2:31:19 PM
Acquired by: System Administrator
Data File: 240119_008
Vial: 4 | Inj. Volume: 10.0000uL | Tray: 1

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	1341009	----	----	----	----	----	----	
13C4-PFBA_IS	216.80>171.90	----	1341009	----	----	----	----	----	----	
13C3-PFBA_IS	216.00>172.00	----	602501	----	----	----	----	----	----	
PFBA	212.80>169.05	----	52594	----	----	----	----	----	----	
PFMPA	229.00>84.90	----	47277	----	----	----	----	----	----	
3_3 FTCA	241.00>177.10	241.00>117.00	43514	64030	147.15	141.17	64030	147.15	143.25	
13C5-PFPeA	268.30>223.00	----	148610	----	----	----	----	----	----	
13C5-PFPeA_IS	268.30>223.00	----	148610	----	----	----	----	----	----	
PFPeA	263.00>219.00	----	86570	----	----	----	----	----	----	
PFMBA	279.00>84.95	----	57399	----	----	----	----	----	----	
13C2-4_2 FTS	329.10>80.90	----	221019	----	----	----	----	----	----	AC
13C2-4_2 FTS_IS	329.10>80.90	----	221019	----	----	----	----	----	----	
4_2 FTS	327.10>307.00	327.10>80.90	47760	14169	29.67	29.06	14169	29.67	31.50	
13C3-PFBS_IS	302.10>79.90	----	331607	----	----	----	----	----	----	
PFBS	298.70>79.90	298.70>98.80	66661	30832	46.25	46.72	30832	46.25	48.74	
13C3-PFBS	302.10>79.90	----	331607	----	----	----	----	----	----	
NFDHA	295.00>201.00	295.00>84.90	73510	27487	37.39	40.25	27487	37.39	36.97	
13C5-PFHxA	318.00>273.00	----	638205	----	----	----	----	----	----	
13C5-PFHxA_IS	318.00>273.00	----	638205	----	----	----	----	----	----	
13C2-PFHxA_IS	315.10>270.00	----	615711	----	----	----	----	----	----	
PFHxA	313.00>269.00	----	100904	----	----	----	----	----	----	
PFEESA	314.80>135.00	314.80>82.90	295805	16026	5.42	6.11	16026	5.42	5.81	
13C3-HFPO-DA	286.90>168.90	----	660008	----	----	----	----	----	----	
13C3-HFPO-DA_IS	286.90>168.90	----	660008	----	----	----	----	----	----	
HFPO-DA	284.90>168.90	284.90>184.90	33924	21069	62.11	65.61	21069	62.11	64.39	
5_3 FTCA	341.00>237.05	341.00>217.00	253393	402526	158.85	158.86	402526	158.85	159.75	
PFPeS	349.10>79.90	349.10>98.80	59271	33073	55.80	55.80	33073	55.80	54.52	
13C4-PFHpA	367.10>322.00	----	644715	----	----	----	----	----	----	
13C4-PFHpA_IS	367.10>322.00	----	644715	----	----	----	----	----	----	
PFHpA	363.10>319.00	363.10>169.00	131922	29006	21.99	21.50	29006	21.99	23.22	
DONA	376.90>250.90	376.90>84.80	203820	61241	30.05	29.66	61241	30.05	29.43	
13C2-6_2 FTS_IS	429.10>80.90	----	200237	----	----	----	----	----	----	
13C2-6_2 FTS	429.10>80.90	----	200237	----	----	----	----	----	----	AC
6_2 FTS	427.10>407.00	427.10>80.90	45168	18830	41.69	41.15	18830	41.69	43.09	
13C4-PFOA_IS	417.10>172.00	----	47699	----	----	----	----	----	----	
13C8-PFOA_IS	421.10>376.00	----	637104	----	----	----	----	----	----	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240119_008 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	637104	----	----	----	----	----	----	----
PFOA	413.00>369.00	413.00>169.00	93767	28758	30.67	31.89	28758	30.67	30.51	
13C3-PFHxS	402.10>79.90	----	268711	----	----	----	----	----	----	----
13C3-PFHxS_IS	402.10>79.90	----	268711	----	----	----	----	----	----	----
PFHxS	398.70>79.90	398.70>98.90	52613	33825	64.29	56.62	33825	64.29	57.27	
18O2-PFHxS_IS	403.00>83.90	----	230411	----	----	----	----	----	----	----
13C9-PFNA_IS	472.10>427.00	----	312851	----	----	----	----	----	----	----
13C9-PFNA	472.10>427.00	----	312851	----	----	----	----	----	----	----
13C5-PFNA_IS	468.00>423.00	----	335130	----	----	----	----	----	----	----
PFNA	463.00>419.00	463.00>219.00	96979	23362	24.09	23.17	23362	24.09	23.01	
PFHpS	449.00>79.90	449.00>98.80	40879	22376	54.74	56.96	22376	54.74	58.58	
7_3 FTCA	441.00>317.00	441.00>336.90	351167	392531	111.78	117.47	392531	111.78	117.17	
13C2-8_2-FTS	529.10>80.90	----	155610	----	----	----	----	----	----	----
13C2-8_2-FTS_IS	529.10>80.90	----	155610	----	----	----	----	----	----	----
8_2 FTS	527.10>506.95	527.10>80.80	34438	13077	37.97	49.59	13077	37.97	43.30	
13C6-PFDA_IS	519.10>474.10	----	232769	----	----	----	----	----	----	----
13C6-PFDA	519.10>474.10	----	232769	----	----	----	----	----	----	----
13C2-PFDA_IS	515.10>470.10	----	238566	----	----	----	----	----	----	----
PFDA	512.90>469.00	512.90>219.00	108399	22266	20.54	19.00	22266	20.54	19.26	
D3-NMeFOSAA_IS	573.20>419.00	----	313625	----	----	----	----	----	----	----
D3-NMeFOSAA	573.20>419.00	----	313625	----	----	----	----	----	----	----
13C8-PFOS_IS	507.10>98.90	----	119418	----	----	----	----	----	----	----
13C8-PFOS	507.10>98.90	----	119418	----	----	----	----	----	----	----
13C4-PFOS_IS	502.80>79.90	----	289170	----	----	----	----	----	----	----
PFOS	498.90>79.90	498.90>98.80	51421	24989	48.60	52.47	24989	48.60	47.25	
NMeFOSAA	570.10>419.00	570.10>483.00	35963	23432	65.16	55.15	23432	65.16	62.10	
D5-NEtFOSAA_IS	589.20>419.00	----	365166	----	----	----	----	----	----	----
D5-NEtFOSAA	589.20>419.00	----	365166	----	----	----	----	----	----	----
NEtFOSAA	584.20>419.10	584.20>526.00	23783	19982	84.02	81.95	19982	84.02	86.05	
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	221630	67528	30.47	32.76	67528	30.47	31.74	
PFUnDA	563.10>519.00	563.10>269.10	98409	14387	14.62	13.12	14387	14.62	13.26	
13C7-PFUnDA_IS	570.00>525.10	----	272588	----	----	----	----	----	----	----
13C7-PFUnDA	570.00>525.10	----	272588	----	----	----	----	----	----	----
PFNS	548.80>79.90	548.80>98.80	39185	25564	65.24	65.22	25564	65.24	62.49	
10_2 FTS	626.80>607.05	626.80>81.00	36216	12342	34.08	37.13	12342	34.08	35.81	
13C2-PFDOA_IS	615.10>570.00	----	308339	----	----	----	----	----	----	----
13C2-PFDOA	615.10>570.00	----	308339	----	----	----	----	----	----	----
PFDOA	613.10>569.00	613.10>319.00	86413	9206	10.65	11.29	9206	10.65	10.90	
PFDS	599.00>79.90	599.00>98.80	35299	20965	59.39	60.18	20965	59.39	61.11	
PFTrDA	663.00>619.00	663.00>168.90	98501	17340	17.60	17.64	17340	17.60	18.20	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240119_008 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	166774	58977	35.36	36.44	58977	35.36	34.95	
PFOSAm	498.10>77.90	----	92827	----	----	----	----	----	----	
13C8-PFOSAm	506.10>77.80	----	291699	----	----	----	----	----	----	
13C8-PFOSAm_IS	506.10>77.80	----	291699	----	----	----	----	----	----	
PFTDA	713.10>669.00	713.10>168.90	77502	16730	21.59	22.96	16730	21.59	22.68	
13C2-PFTDA	715.20>670.00	----	138122	----	----	----	----	----	----	
13C2-PFTDA_IS	715.20>670.00	----	138122	----	----	----	----	----	----	
PFDoS	699.10>79.90	699.10>98.80	19808	13126	66.27	67.40	13126	66.27	65.24	
D7-MeFOSE_IS	623.20>58.90	----	712557	----	----	----	----	----	----	
D7-MeFOSE	623.20>58.90	----	712557	----	----	----	----	----	----	
MeFOSE	616.10>59.00	----	12368	----	----	----	----	----	----	
13C2-PFHxDA_IS	815.00>770.05	----	504419	----	----	----	----	----	----	
13C2-PFHxDA	815.00>770.05	----	504419	----	----	----	----	----	----	
PFHxDA	813.00>768.95	813.00>218.95	113497	16415	14.46	13.90	16415	14.46	14.51	
D3-MeFOSA	515.00>219.00	----	63207	----	----	----	----	----	----	
D3-MeFOSA_IS	515.00>219.00	----	63207	----	----	----	----	----	----	
MeFOSA	511.90>219.00	511.90>169.00	19396	29869	154.00	140.79	29869	154.00	142.62	
D9-EtFOSE_IS	639.20>58.90	----	745067	----	----	----	----	----	----	
D9-EtFOSE	639.20>58.90	----	745067	----	----	----	----	----	----	
EtFOSE	630.00>59.00	----	18311	----	----	----	----	----	----	
D5-EtFOSAm	531.10>219.00	----	75980	----	----	----	----	----	----	
D5-EtFOSAm_IS	531.10>219.00	----	75980	----	----	----	----	----	----	
EtFOSAm	526.00>219.00	526.00>169.00	23509	34767	147.89	163.90	34767	147.89	146.41	
PFODA	913.00>868.65	913.00>169.00	52890	14786	27.96	27.03	14786	27.96	23.98	

Flag ID key: AC: Accuracy%



240119_008

Sample ID: 1633 ICAL 0.50PPB
Date Acquired: 1/19/2024 2:31:19 PM
Acquired by: System Administrator
Data File: 240119_008
Vial: 4 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.410	0.002	0.001	1341009	602501	13C3-PFBA_IS	9.9577	ng/mL	
13C4-PFBA_IS	Auto	1.410	0.002	----	1341009	1341009	----	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.409	0.001	----	602501	602501	----	5.0000	ng/mL	
PFBA	Auto	1.410	0.001	0.000	52594	1341009	13C4-PFBA_IS	0.4565	ng/mL	
PFMPA	Auto	2.419	-0.002	-1.054	47277	148610	13C5-PFPeA_IS	0.4923	ng/mL	
3_3 FTCA	Auto	2.976	-0.004	-0.497	43514	148610	13C5-PFPeA_IS	13.2044	ng/mL	
13C5-PFPeA	Auto	3.473	-0.006	-1.485	148610	615711	13C2-PFHxA_IS	5.3472	ng/mL	
13C5-PFPeA_IS	Auto	3.473	-0.006	----	148610	148610	----	5.0000	ng/mL	
PFPeA	Auto	3.475	-0.007	0.002	86570	148610	13C5-PFPeA_IS	0.4498	ng/mL	
PFMBA	Auto	3.999	-0.006	0.526	57399	148610	13C5-PFPeA_IS	0.4219	ng/mL	
13C2-4_2 FTS	Auto	4.641	-0.005	-2.429	221019	230411	18O2-PFHxS_IS	6.9705	ng/mL	AC
13C2-4_2 FTS_IS	Auto	4.641	-0.005	----	221019	221019	----	5.0000	ng/mL	
4_2 FTS	Auto	4.641	-0.006	0.000	47760	221019	13C2-4_2 FTS_IS	0.4393	ng/mL	
13C3-PFBS_IS	Auto	4.622	-0.006	----	331607	331607	----	2.5000	ng/mL	
PFBS	Auto	4.622	-0.006	0.000	66661	331607	13C3-PFBS_IS	0.3927	ng/mL	
13C3-PFBS	Auto	4.622	-0.006	-2.448	331607	230411	18O2-PFHxS_IS	2.5361	ng/mL	
NFDHA	Auto	4.816	-0.004	-0.141	73510	638205	13C5-PFHxA_IS	0.5192	ng/mL	
13C5-PFHxA	Auto	4.957	-0.006	-0.001	638205	615711	13C2-PFHxA_IS	2.4594	ng/mL	
13C5-PFHxA_IS	Auto	4.957	-0.006	----	638205	638205	----	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	4.958	-0.005	----	615711	615711	----	2.5000	ng/mL	
PFHxA	M	4.959	-0.006	0.002	100904	638205	13C5-PFHxA_IS	0.4666	ng/mL	
PFEESA	Auto	5.298	-0.006	0.341	295805	638205	13C5-PFHxA_IS	0.4138	ng/mL	
13C3-HFPO-DA	Auto	5.434	-0.005	0.476	660008	615711	13C2-PFHxA_IS	10.9504	ng/mL	
13C3-HFPO-DA_IS	Auto	5.434	-0.005	----	660008	660008	----	10.0000	ng/mL	
HFPO-DA	Auto	5.435	-0.005	0.001	33924	660008	13C3-HFPO-DA_IS	0.4654	ng/mL	
5_3 FTCA	Auto	5.866	-0.005	0.909	253393	638205	13C5-PFHxA_IS	15.3498	ng/mL	
PFPeS	Auto	6.000	-0.003	-1.069	59271	268711	13C3-PFHxS_IS	0.4200	ng/mL	
13C4-PFHpA	Auto	6.139	-0.004	1.181	644715	615711	13C2-PFHxA_IS	2.7446	ng/mL	
13C4-PFHpA_IS	Auto	6.139	-0.004	----	644715	644715	----	2.5000	ng/mL	
PFHpA	Auto	6.140	-0.004	0.001	131922	644715	13C4-PFHpA_IS	0.4586	ng/mL	
DONA	Auto	6.505	-0.004	1.071	203820	660008	13C3-HFPO-DA_IS	0.3984	ng/mL	
13C2-6_2 FTS_IS	Auto	6.780	-0.004	----	200237	200237	----	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.780	-0.004	-0.290	200237	230411	18O2-PFHxS_IS	6.6770	ng/mL	AC
6_2 FTS	Auto	6.780	-0.003	0.000	45168	200237	13C2-6_2 FTS_IS	0.4954	ng/mL	
13C4-PFOA_IS	Auto	7.093	-0.006	----	47699	47699	----	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.094	-0.006	----	637104	637104	----	2.5000	ng/mL	
13C8-PFOA	Auto	7.094	-0.006	0.001	637104	47699	13C4-PFOA_IS	2.3897	ng/mL	
PFOA	Auto	7.096	-0.006	0.002	93767	637104	13C8-PFOA_IS	0.5265	ng/mL	
13C3-PFHxS	Auto	7.069	-0.005	-0.001	268711	230411	18O2-PFHxS_IS	2.7170	ng/mL	
13C3-PFHxS_IS	Auto	7.069	-0.005	----	268711	268711	----	2.5000	ng/mL	
PFHxS	M	7.070	-0.004	0.001	52613	268711	13C3-PFHxS_IS	0.3888	ng/mL	
18O2-PFHxS_IS	Auto	7.070	-0.005	----	230411	230411	----	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.945	-0.004	----	312851	312851	----	1.2500	ng/mL	
13C9-PFNA	Auto	7.945	-0.004	0.000	312851	335130	13C5-PFNA_IS	1.1923	ng/mL	
13C5-PFNA_IS	Auto	7.945	-0.004	----	335130	335130	----	1.2500	ng/mL	
PFNA	Auto	7.946	-0.004	0.001	96979	312851	13C9-PFNA_IS	0.5138	ng/mL	
PFHpS	Auto	7.992	-0.004	-0.815	40879	119418	13C8-PFOS_IS	0.4386	ng/mL	
7_3 FTCA	Auto	7.923	-0.006	2.966	351167	638205	13C5-PFHxA_IS	15.9348	ng/mL	
13C2-8_2-FTS	Auto	8.400	-0.004	1.330	155610	230411	18O2-PFHxS_IS	6.3168	ng/mL	
13C2-8_2-FTS_IS	Auto	8.400	-0.004	----	155610	155610	----	5.0000	ng/mL	
8_2 FTS	Auto	8.399	-0.005	-0.001	34438	155610	13C2-8_2-FTS_IS	0.5150	ng/mL	
13C6-PFDA_IS	Auto	8.709	-0.005	----	232769	232769	----	1.2500	ng/mL	
13C6-PFDA	Auto	8.709	-0.005	-0.001	232769	238566	13C2-PFDA_IS	1.2128	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_008 (continued)

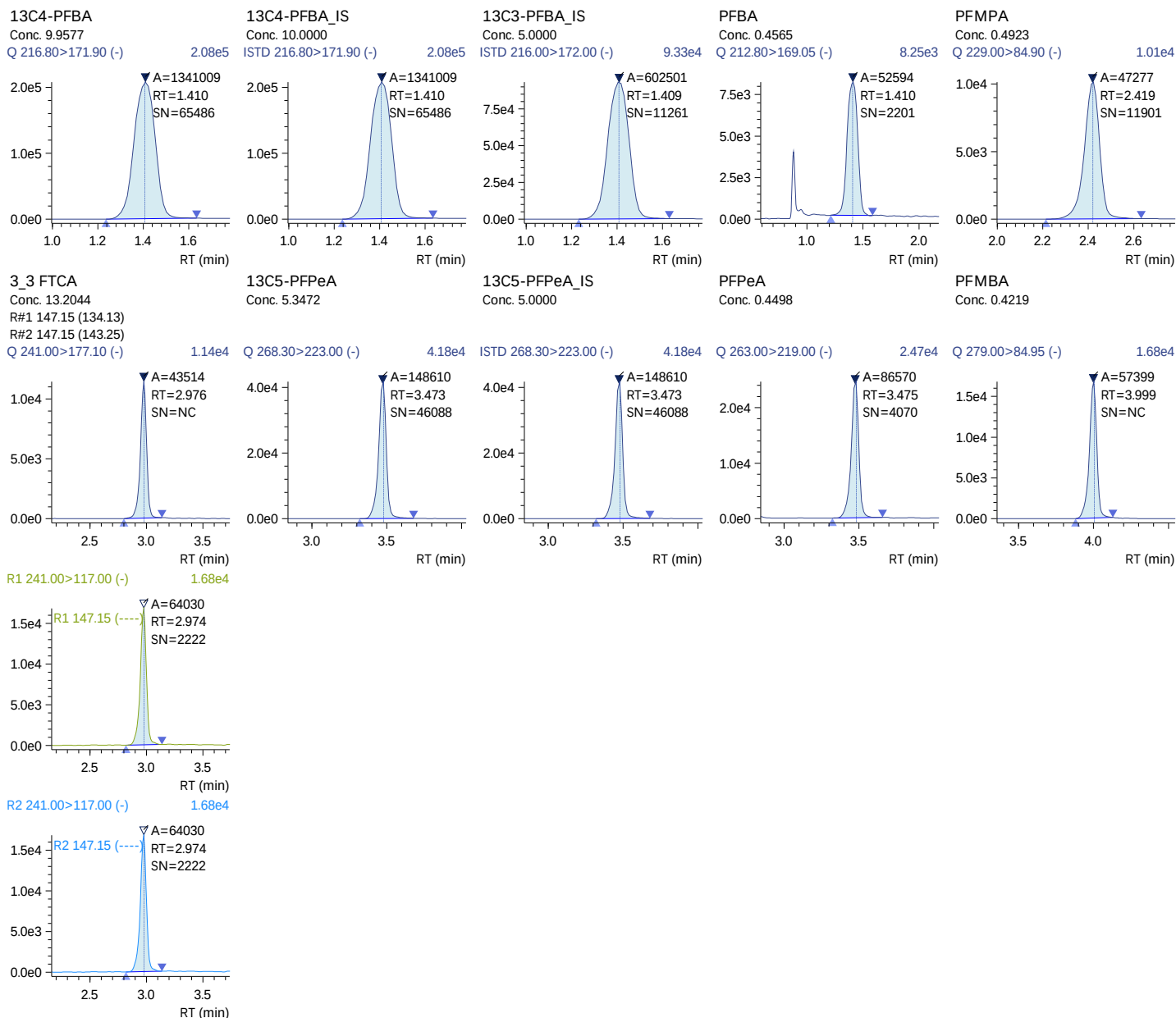
(Table continued from previous page)

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C2-PFDA_IS	Auto	8.710	-0.005	----	238566	238566	----	1.2500	ng/mL	
PFDA	Auto	8.710	-0.006	0.001	108399	232769	13C6-PFDA_IS	0.4631	ng/mL	
D3-NMeFOSAA_IS	Auto	8.843	-0.005	----	313625	313625	----	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.843	-0.005	0.035	313625	289170	13C4-PFOS_IS	6.2490	ng/mL	
13C8-PFOS_IS	Auto	8.807	-0.004	----	119418	119418	----	2.5000	ng/mL	
13C8-PFOS	Auto	8.807	-0.004	-0.001	119418	289170	13C4-PFOS_IS	2.4762	ng/mL	
13C4-PFOS_IS	Auto	8.808	-0.003	----	289170	289170	----	2.5000	ng/mL	
PFOS	M	8.808	-0.005	0.001	51421	119418	13C8-PFOS_IS	0.4140	ng/mL	
NMeFOSAA	M	8.849	-0.004	0.006	35963	313625	D3-NMeFOSAA_IS	0.4226	ng/mL	
D5-NetFOSAA_IS	Auto	9.173	-0.005	----	365166	365166	----	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.173	-0.005	0.365	365166	289170	13C4-PFOS_IS	6.0817	ng/mL	
NetFOSAA	M	9.183	-0.006	0.010	23783	365166	D5-NetFOSAA_IS	0.4877	ng/mL	
9-CI-PF3ONS	Auto	9.374	-0.004	3.940	221630	660008	13C3-HFPO-DA_IS	0.4073	ng/mL	
PFUnDA	Auto	9.437	-0.004	0.001	98409	272588	13C7-PFUnDA_IS	0.4689	ng/mL	
13C7-PFUnDA_IS	Auto	9.435	-0.003	----	272588	272588	----	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.435	-0.003	0.725	272588	238566	13C2-PFDA_IS	1.1906	ng/mL	
PFNS	Auto	9.572	-0.004	0.765	39185	119418	13C8-PFOS_IS	0.4319	ng/mL	
10_2_FTS	Auto	9.809	-0.004	1.409	36216	155610	13C2-8_2-FTS_IS	0.4452	ng/mL	
13C2-PFDOA_IS	Auto	10.124	-0.003	----	308339	308339	----	1.2500	ng/mL	
13C2-PFDOA	Auto	10.124	-0.003	1.414	308339	238566	13C2-PFDA_IS	1.1723	ng/mL	
PFDOA	Auto	10.125	-0.003	0.001	86413	308339	13C2-PFDOA_IS	0.4654	ng/mL	
PFDS	Auto	10.286	-0.004	1.479	35299	119418	13C8-PFOS_IS	0.4414	ng/mL	
PFTDA	Auto	10.783	-0.003	-0.633	98501	138122	13C2-PFTDA_IS	0.4745	ng/mL	
11-CI-PF3OUdS	Auto	10.796	-0.003	5.362	166774	660008	13C3-HFPO-DA_IS	0.4385	ng/mL	
PFOSAm	M	11.138	-0.005	-0.001	92827	291699	13C8-PFOSAm_IS	0.9655	ng/mL	
13C8-PFOSAm	Auto	11.139	-0.004	2.331	291699	289170	13C4-PFOS_IS	2.3762	ng/mL	
13C8-PFOSAm_IS	Auto	11.139	-0.004	----	291699	291699	----	2.5000	ng/mL	
PFTDA	Auto	11.418	-0.002	0.002	77502	138122	13C2-PFTDA_IS	0.4944	ng/mL	
13C2-PFTDA	Auto	11.416	-0.003	2.706	138122	238566	13C2-PFDA_IS	1.2162	ng/mL	
13C2-PFTDA_IS	Auto	11.416	-0.003	----	138122	138122	----	1.2500	ng/mL	
PFDoS	Auto	11.613	-0.003	2.806	19808	119418	13C8-PFOS_IS	0.4136	ng/mL	
D7-MeFOSE_IS	Auto	13.378	-0.003	----	712557	712557	----	25.0000	ng/mL	
D7-MeFOSE	Auto	13.378	-0.003	4.570	712557	289170	13C4-PFOS_IS	23.5434	ng/mL	
MeFOSE	M	13.415	-0.003	0.037	12368	712557	D7-MeFOSE_IS	0.4726	ng/mL	
13C2-PFHxDA_IS	Auto	12.634	-0.002	----	504419	504419	----	2.5000	ng/mL	
13C2-PFHxDA	Auto	12.634	-0.002	3.924	504419	238566	13C2-PFDA_IS	2.2763	ng/mL	
PFHxDA	Auto	12.635	-0.002	0.001	113497	504419	13C2-PFHxDA_IS	0.5209	ng/mL	
D3-MeFOSA	Auto	13.685	-0.002	4.877	63207	289170	13C4-PFOS_IS	2.5568	ng/mL	
D3-MeFOSA_IS	Auto	13.685	-0.002	----	63207	63207	----	2.5000	ng/mL	
MeFOSA	M	13.694	-0.002	0.009	19396	63207	D3-MeFOSA_IS	0.4257	ng/mL	
D9-EtFOSE_IS	Auto	14.006	-0.003	----	745067	745067	----	25.0000	ng/mL	
D9-EtFOSE	Auto	14.006	-0.003	5.198	745067	289170	13C4-PFOS_IS	24.2382	ng/mL	
EtFOSE	M	14.050	-0.002	0.044	18311	745067	D9-EtFOSE_IS	0.4671	ng/mL	
D5-EtFOSAm	Auto	14.360	-0.005	5.552	75980	289170	13C4-PFOS_IS	2.3084	ng/mL	
D5-EtFOSAm_IS	Auto	14.360	-0.005	----	75980	75980	----	2.5000	ng/mL	
EtFOSAm	M	14.378	-0.004	0.018	23509	75980	D5-EtFOSAm_IS	0.5315	ng/mL	
PFODA	Auto	13.774	0.000	1.140	52890	504419	13C2-PFHxDA_IS	0.4637	ng/mL	

Flag ID key: AC: Accuracy%



240119_008 (continued)





240119_008 (continued)

13C2-4_2 FTS
Conc. 6.9705

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. 0.4393
R#1 29.67 (34.14)
R#2 29.67 (31.50)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 0.3927
R#1 46.25 (47.53)
R#2 46.25 (48.74)

Q 329.10>80.90 (-)

6.77e4

ISTD 329.10>80.90 (-)

6.77e4

Q 327.10>307.00 (-)

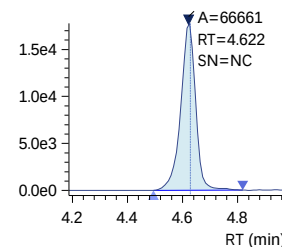
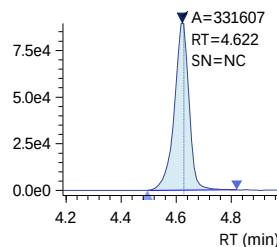
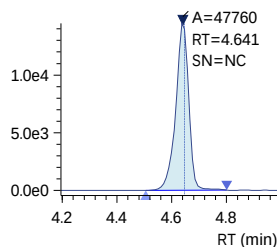
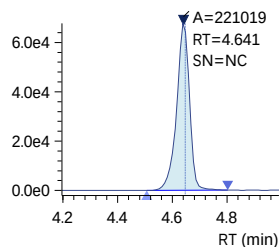
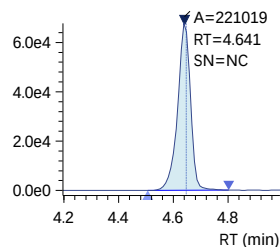
1.45e4

ISTD 302.10>79.90 (-)

8.95e4

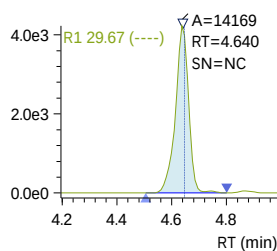
Q 298.70>79.90 (-)

1.78e4



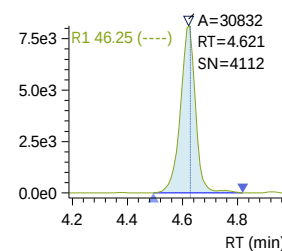
R1 327.10>80.90 (-)

4.23e3



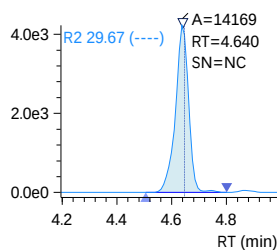
R1 298.70>98.80 (-)

8.13e3



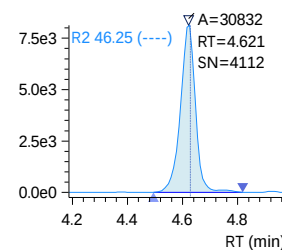
R2 327.10>80.90 (-)

4.23e3



R2 298.70>98.80 (-)

8.13e3





240119_008 (continued)

13C3-PFBS
Conc. 2.5361

NFDHA
Conc. 0.5192
R#1 37.39 (37.88)
R#2 37.39 (36.97)

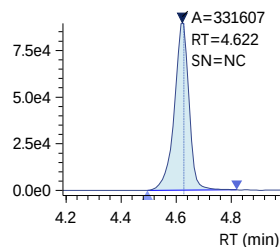
13C5-PFHxA
Conc. 2.4594

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

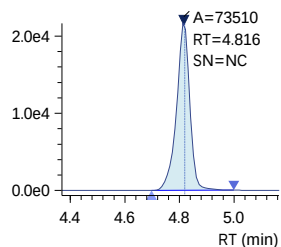
Q 302.10>79.90 (-)

8.95e4



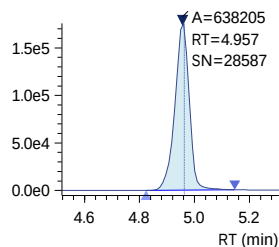
Q 295.00>201.00 (-)

2.17e4



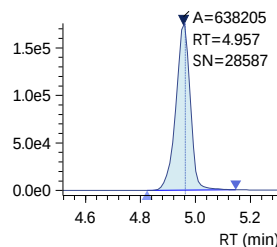
Q 318.00>273.00 (-)

1.76e5



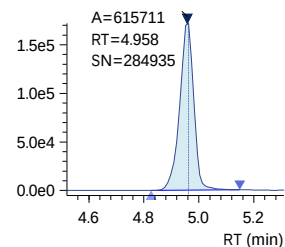
ISTD 318.00>273.00 (-)

1.76e5



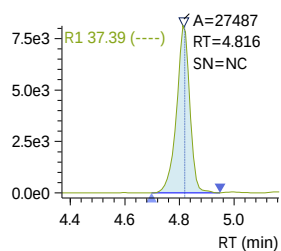
ISTD 315.10>270.00 (-)

1.72e5



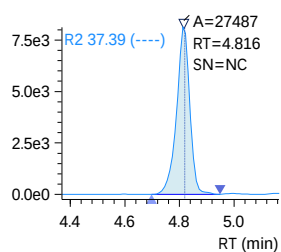
R1 295.00>84.90 (-)

8.12e3



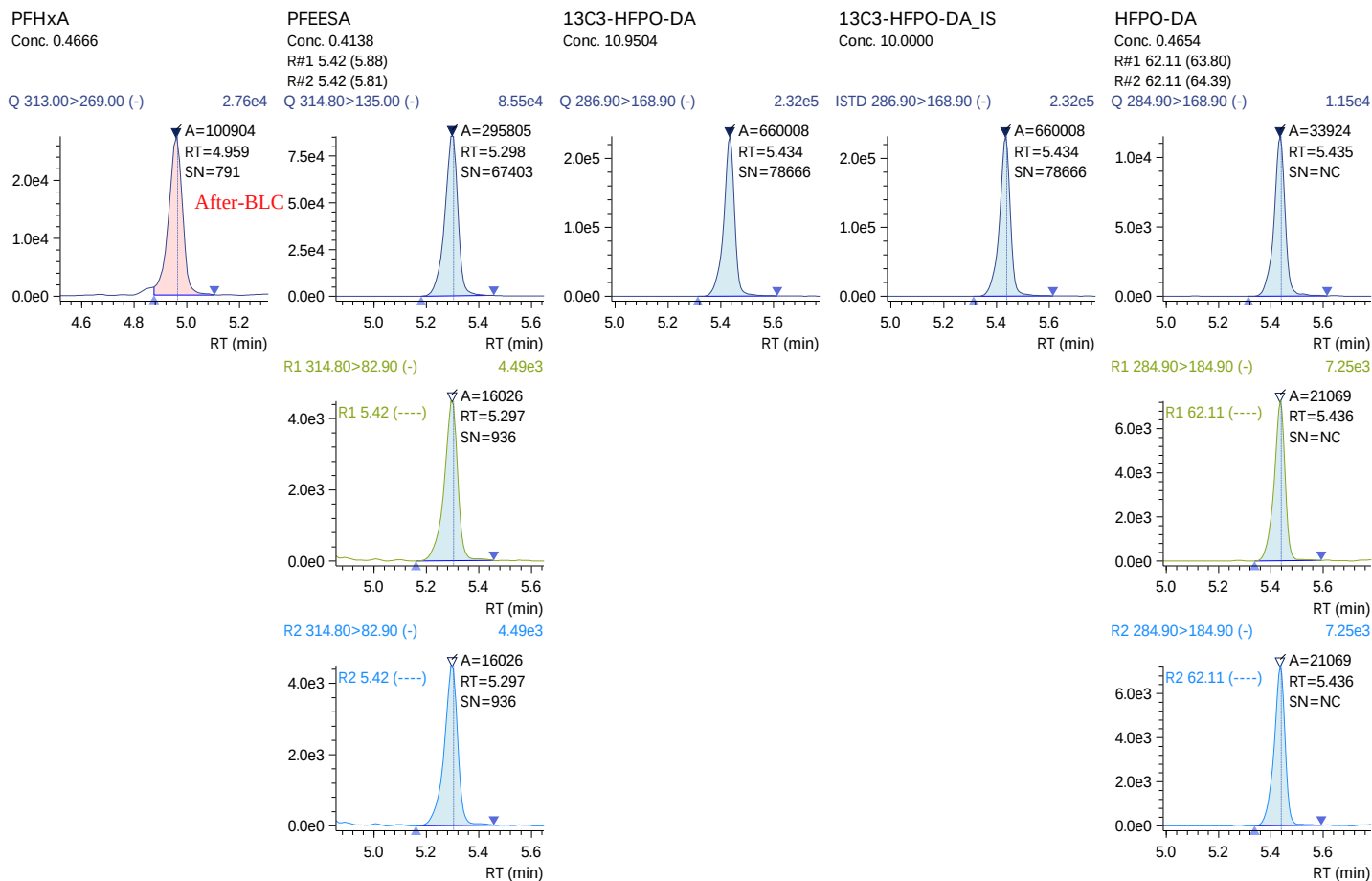
R2 295.00>84.90 (-)

8.12e3





240119_008 (continued)

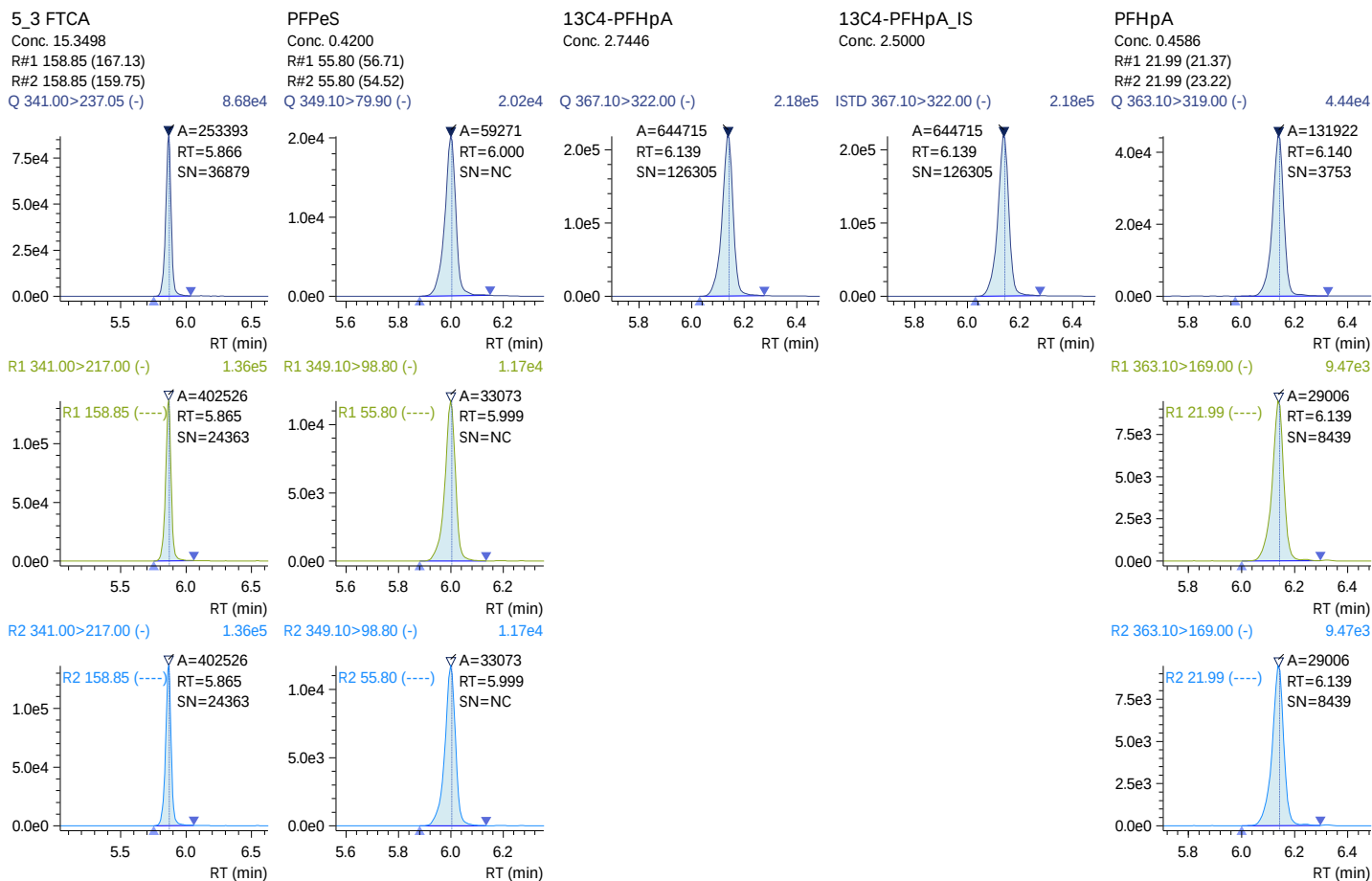


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_008 (continued)

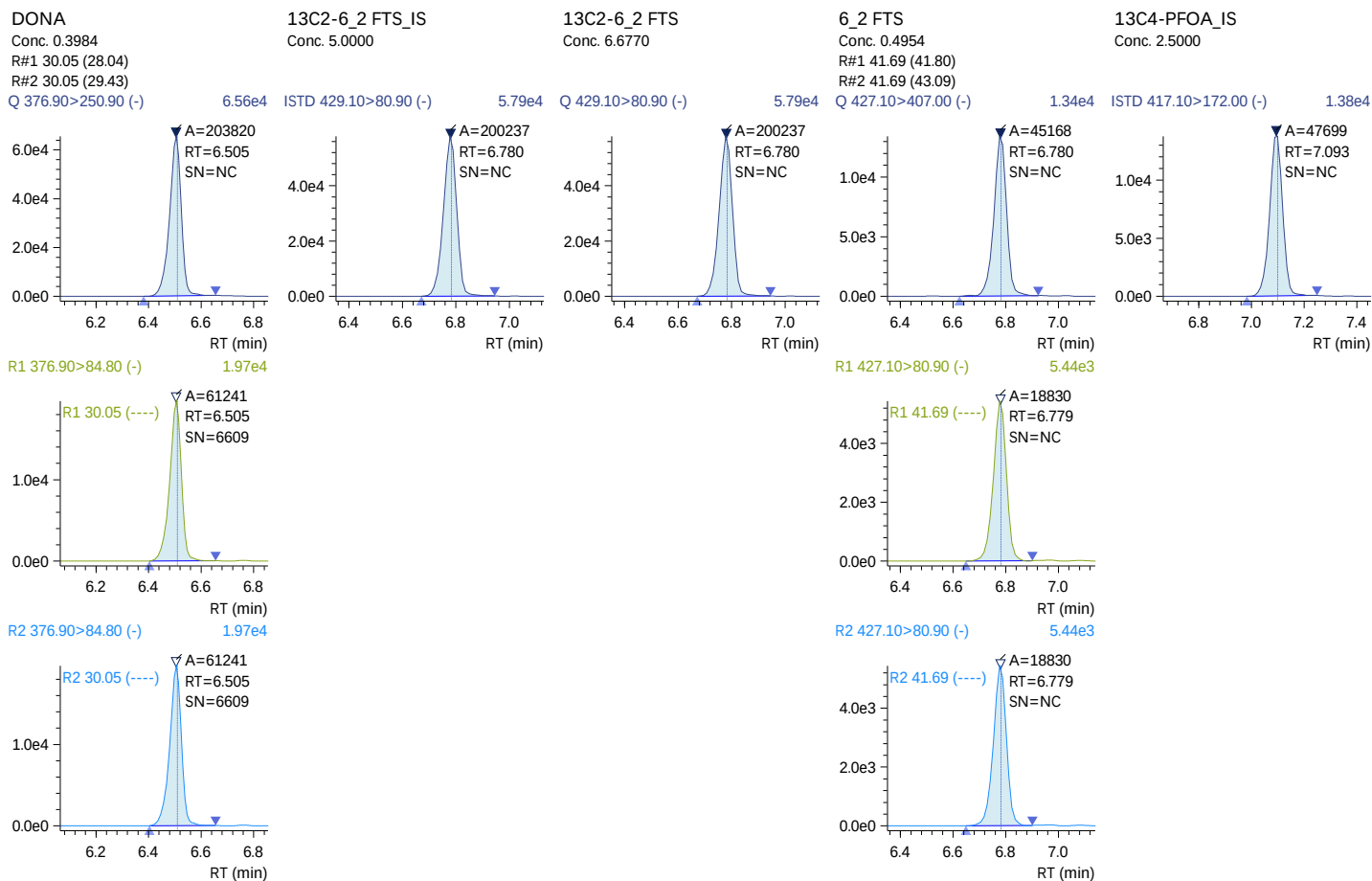


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_008 (continued)





240119_008 (continued)

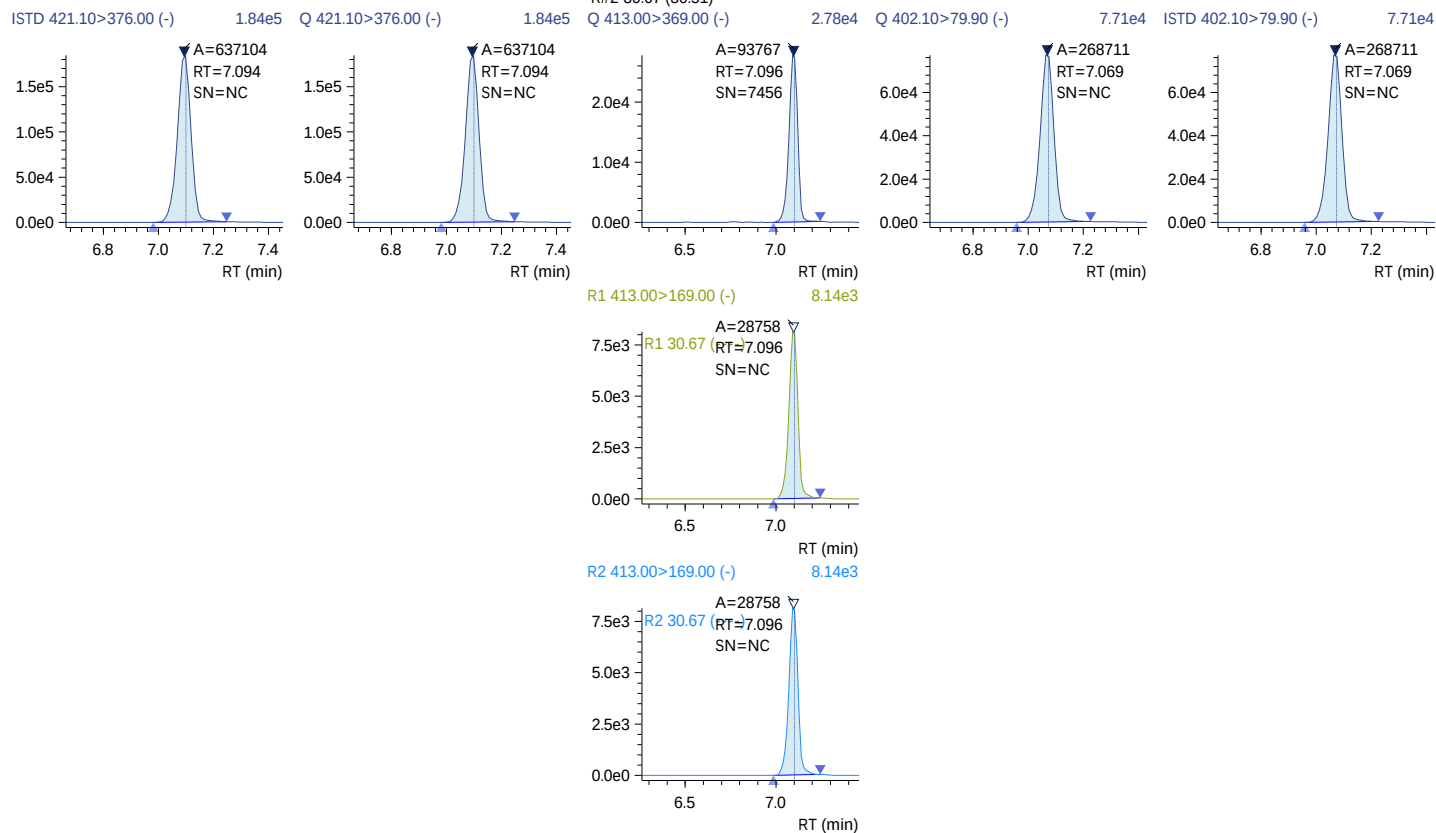
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.3897

PFOA
Conc. 0.5265
R#1 30.67 (29.05)
R#2 30.67 (30.51)

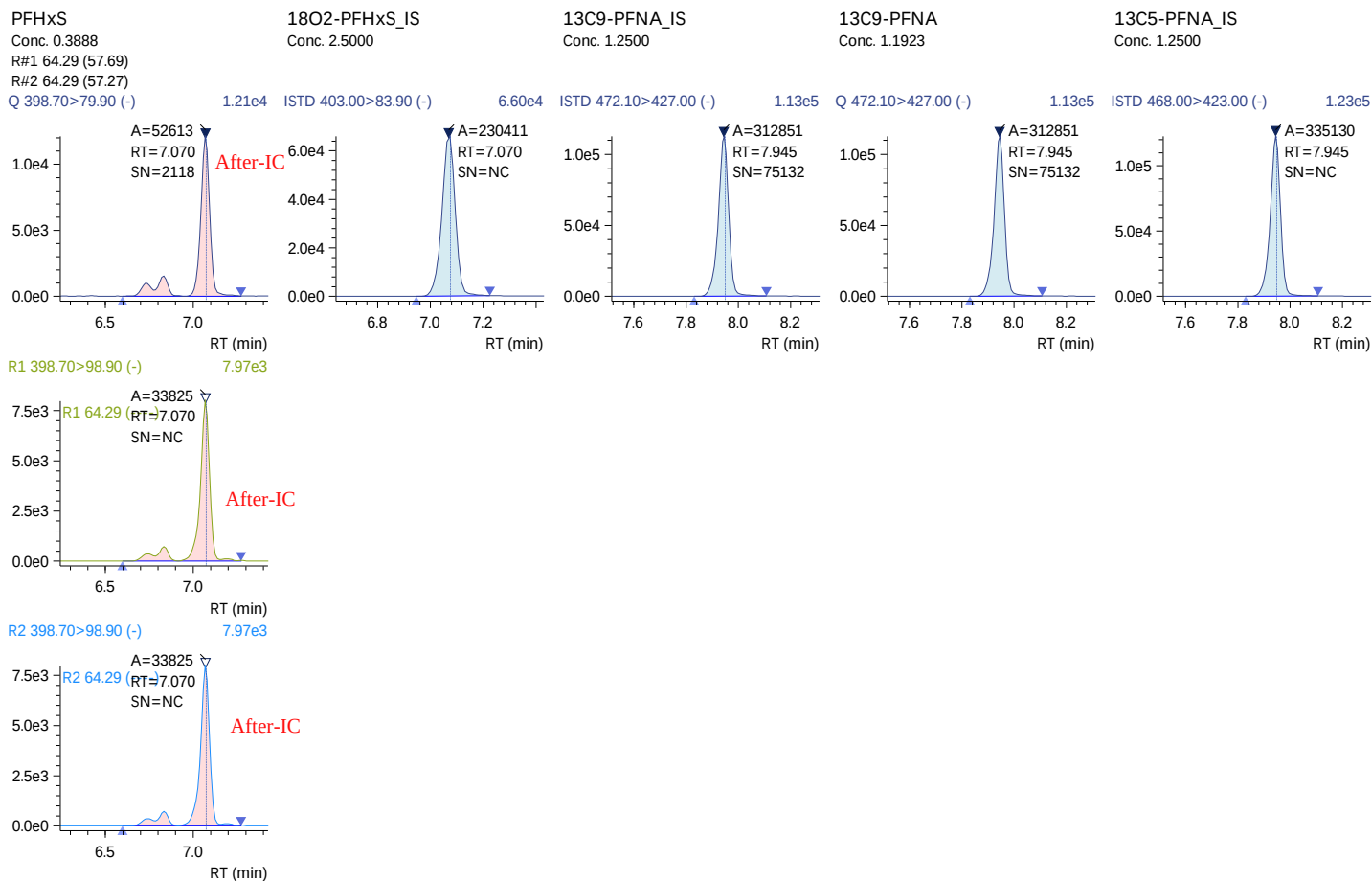
13C3-PFHxS
Conc. 2.7170

13C3-PFHxS_IS
Conc. 2.5000





240119_008 (continued)

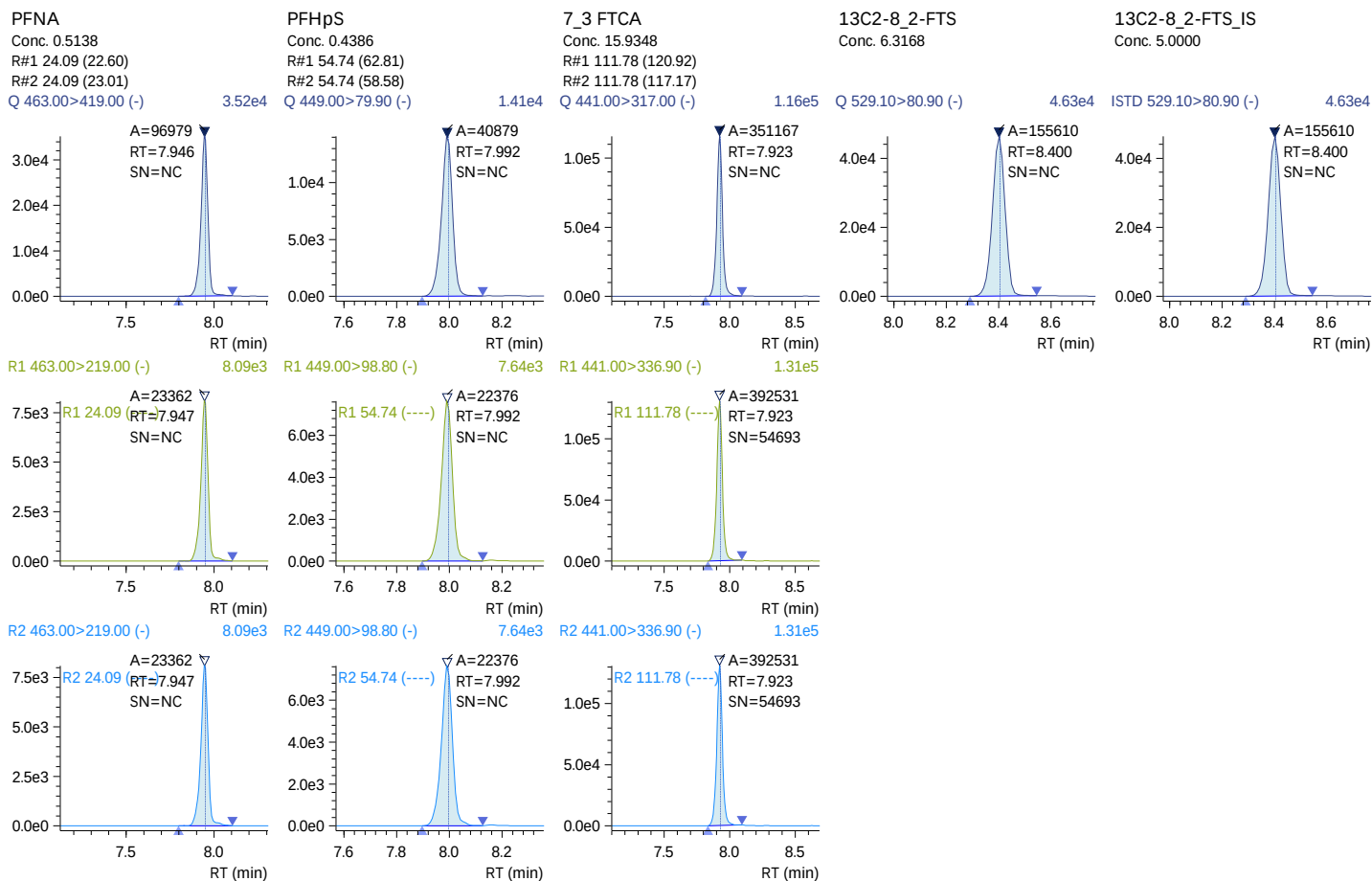


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_008 (continued)

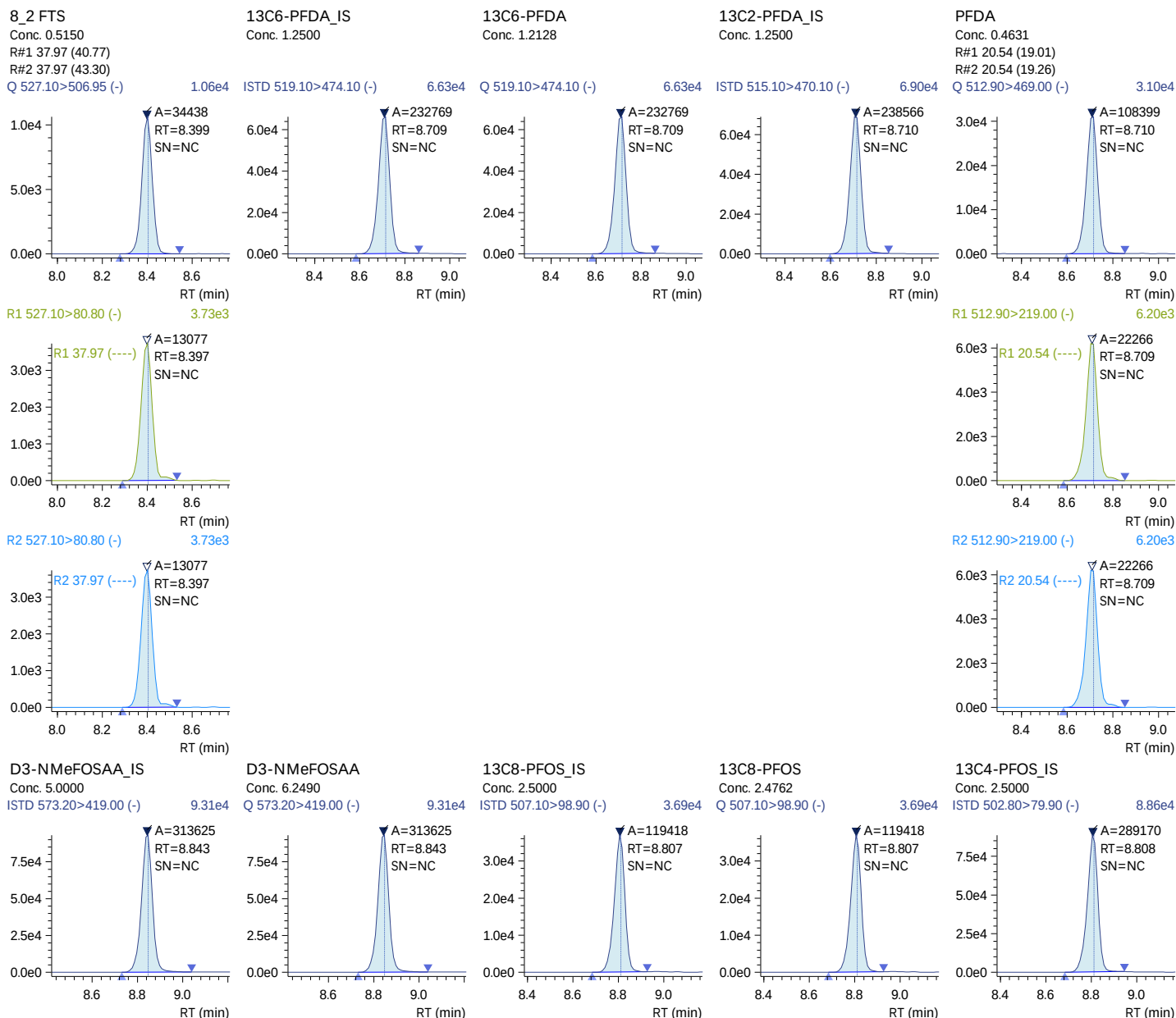


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_008 (continued)

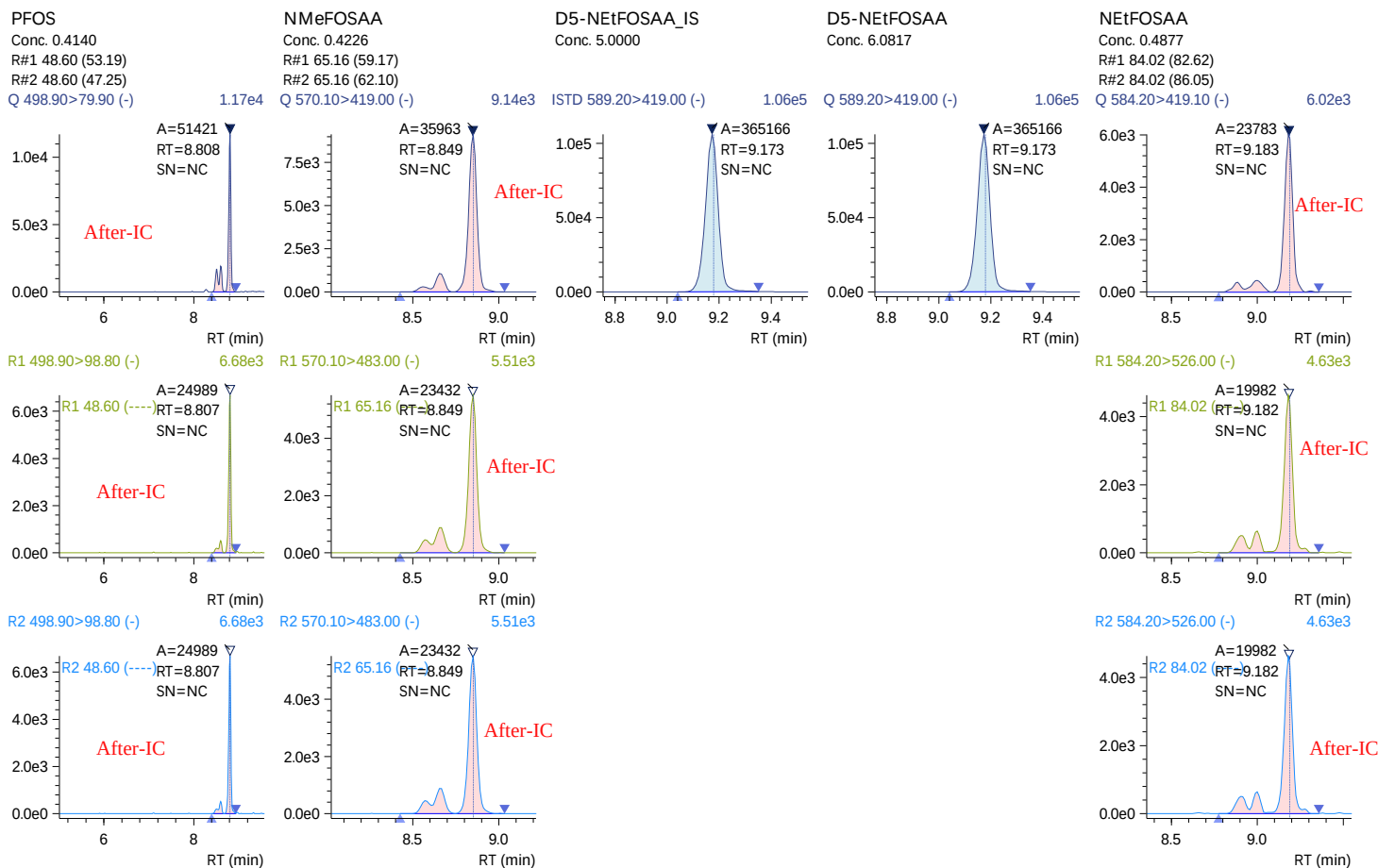


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_008 (continued)



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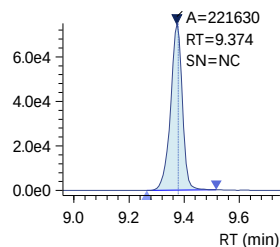
SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



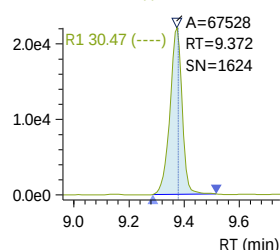
240119_008 (continued)

9-Cl-PF3ONS

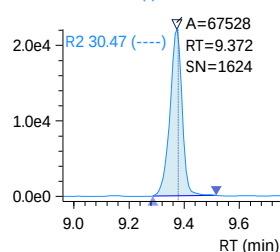
Conc. 0.4073
R#1 30.47 (31.76)
R#2 30.47 (31.74)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-) 2.21e4

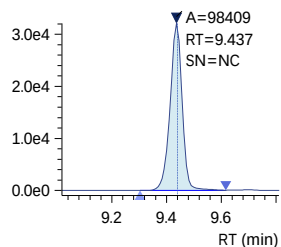


R2 532.80>353.00 (-) 2.21e4

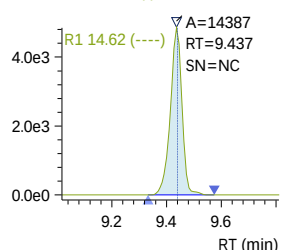


PFUnDA

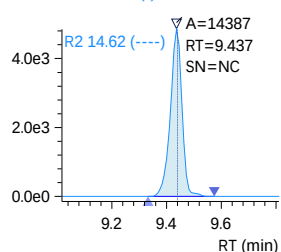
Conc. 0.4689
R#1 14.62 (12.31)
R#2 14.62 (13.26)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-) 4.85e3

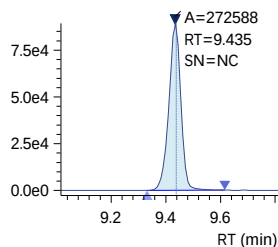


R2 563.10>269.10 (-) 4.85e3



13C7-PFUnDA_IS

Conc. 1.2500
ISTD 570.00>525.10 (-)



Q 570.00>525.10 (-) 8.93e4

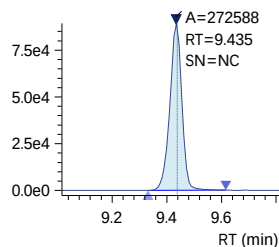


Q 570.00>525.10 (-) 8.93e4



13C7-PFUnDA

Conc. 1.1906
Q 570.00>525.10 (-)



Q 570.00>525.10 (-) 8.93e4

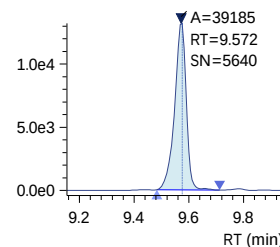


Q 570.00>525.10 (-) 8.93e4

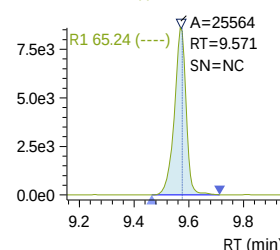


PFNS

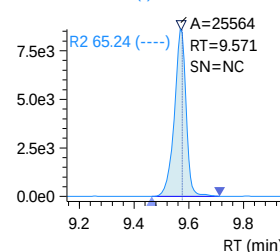
Conc. 0.4319
R#1 65.24 (63.31)
R#2 65.24 (62.49)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-) 8.61e3

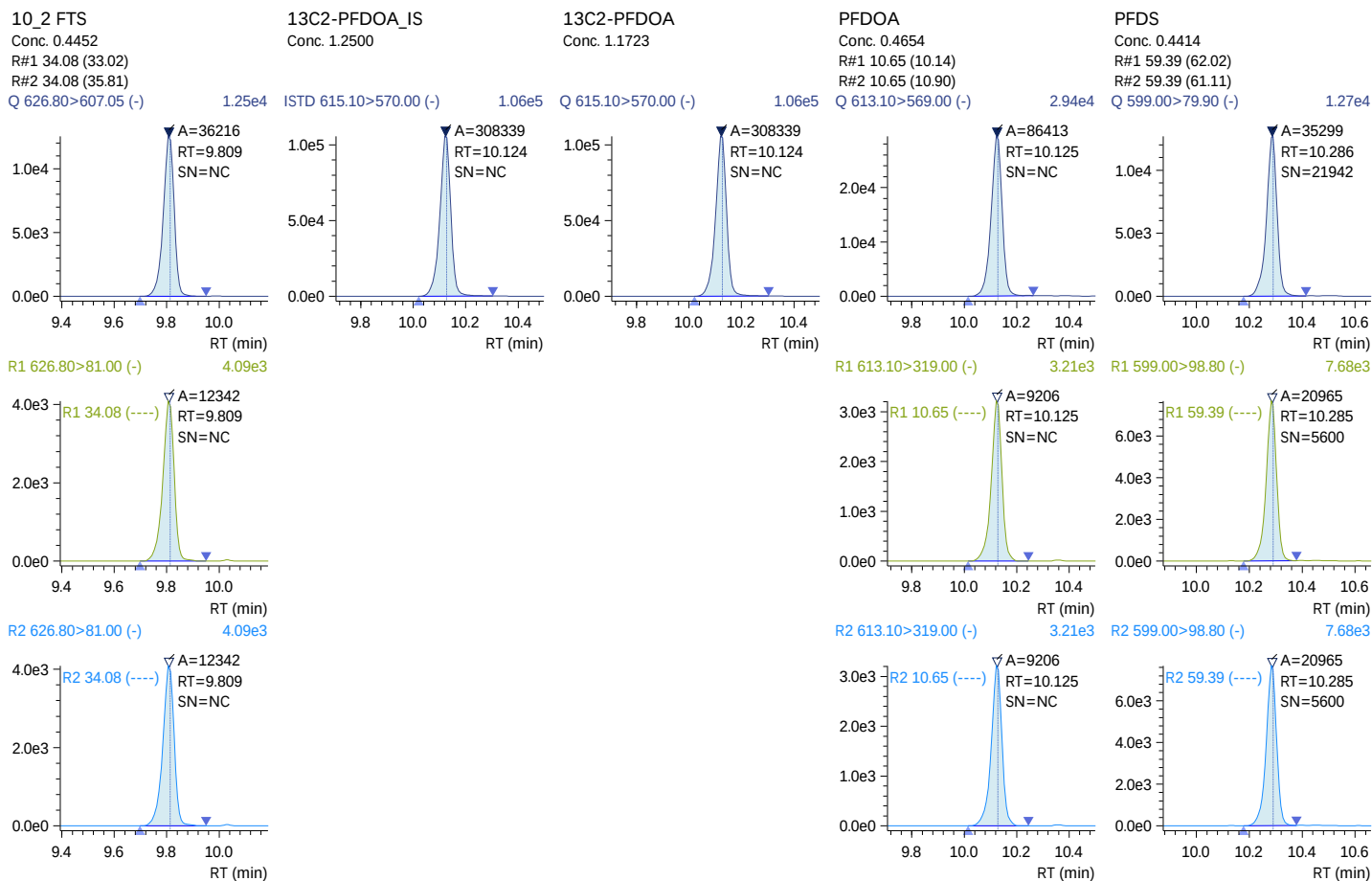


R2 548.80>98.80 (-) 8.61e3





240119_008 (continued)

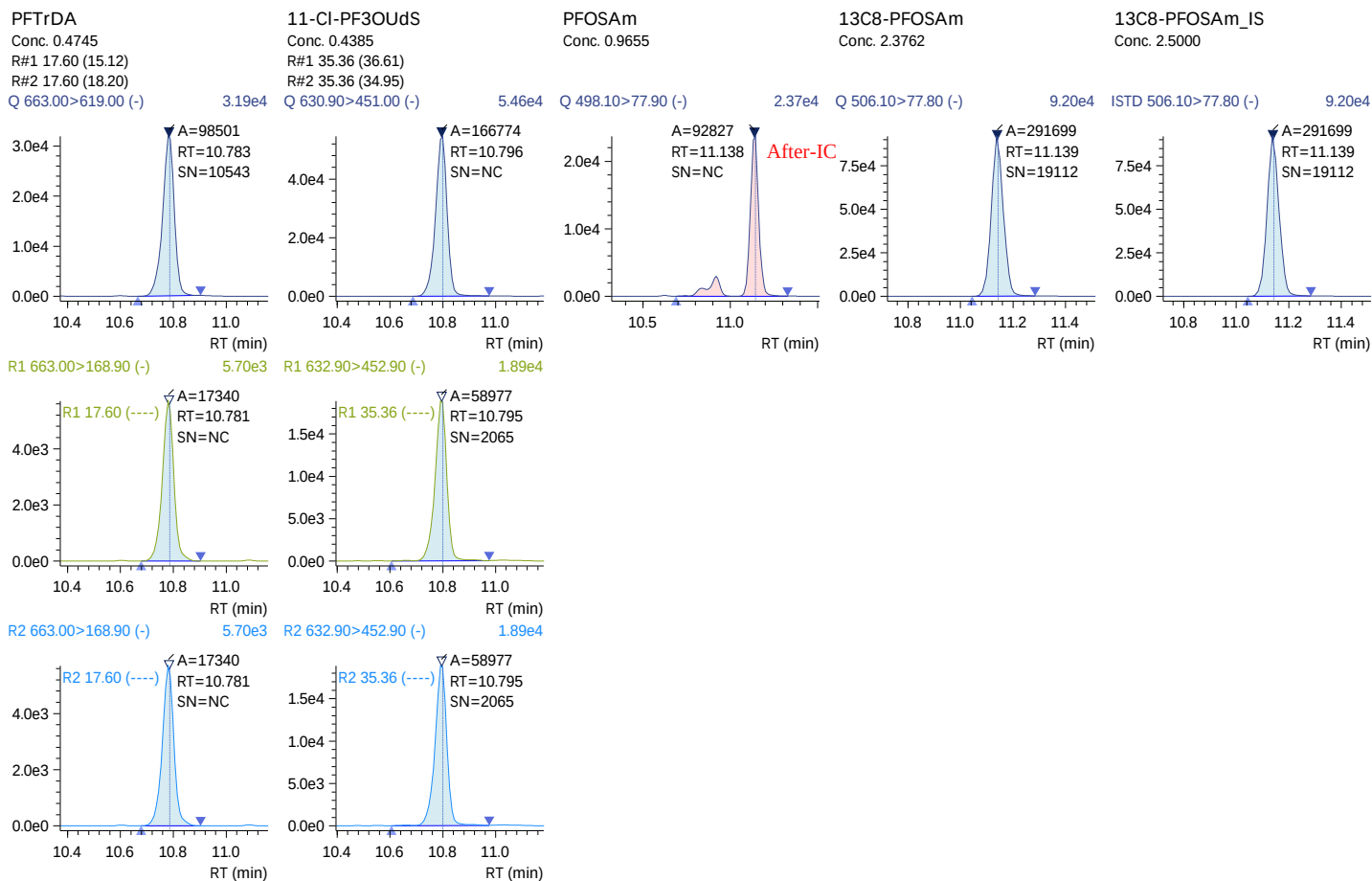


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.

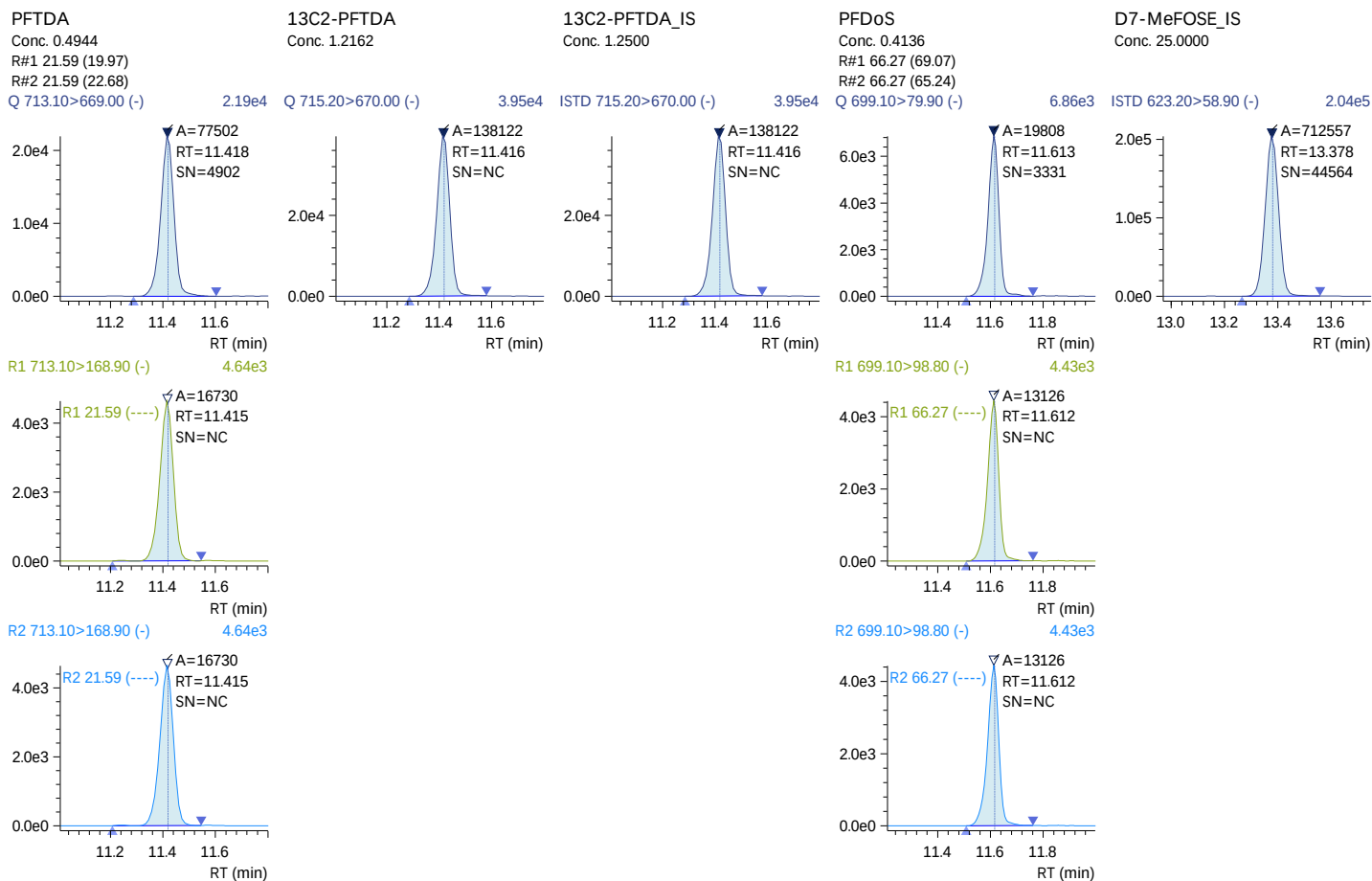


240119_008 (continued)





240119_008 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_008 (continued)

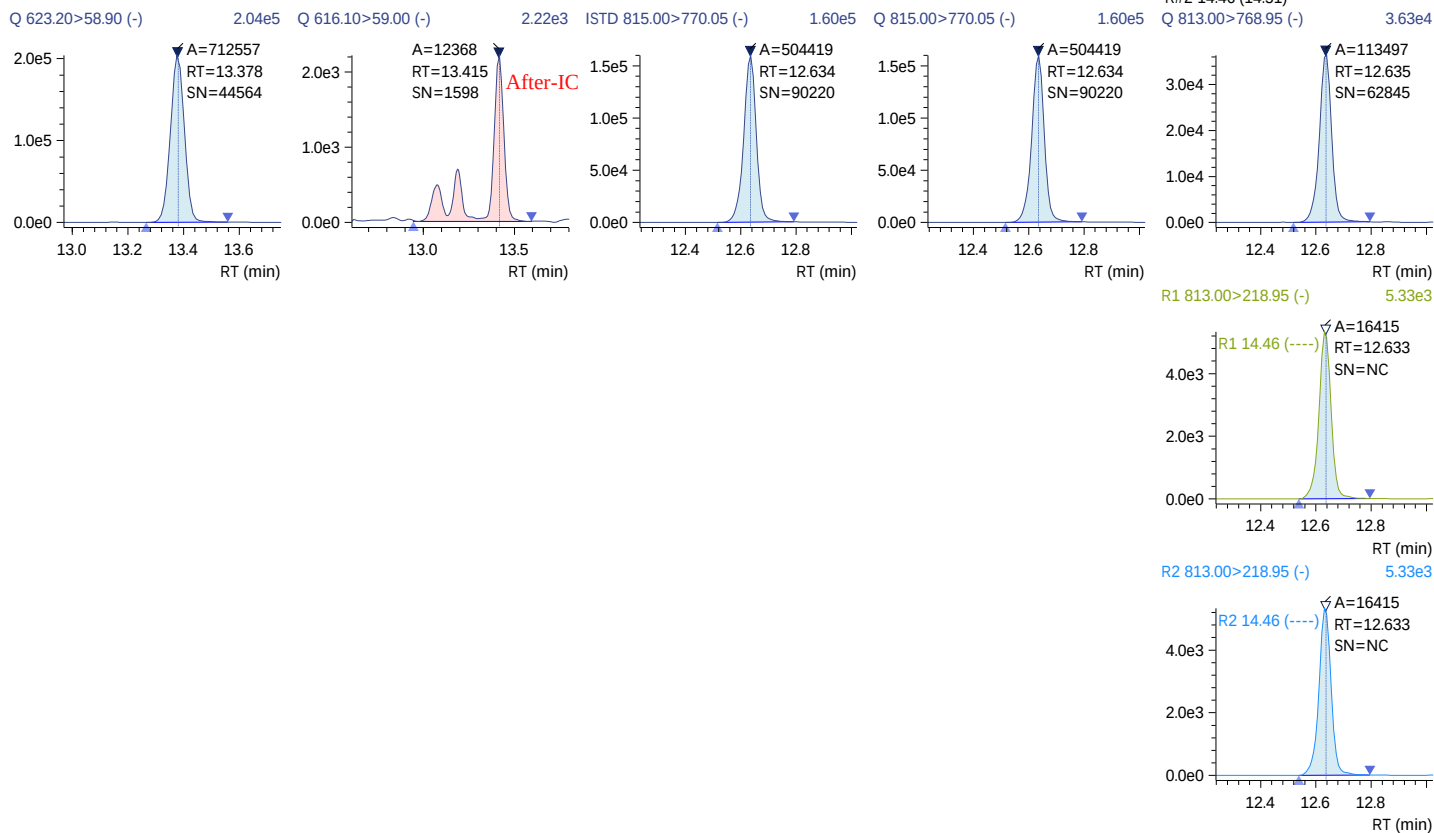
D7-MeFOSE
Conc. 23.5434

MeFOSE
Conc. 0.4726

13C2-PFHXA_IS
Conc. 2.5000

13C2-PFHXA
Conc. 2.2763

PFHXA
Conc. 0.5209
R#1 14.46 (11.64)
R#2 14.46 (14.51)





240119_008 (continued)

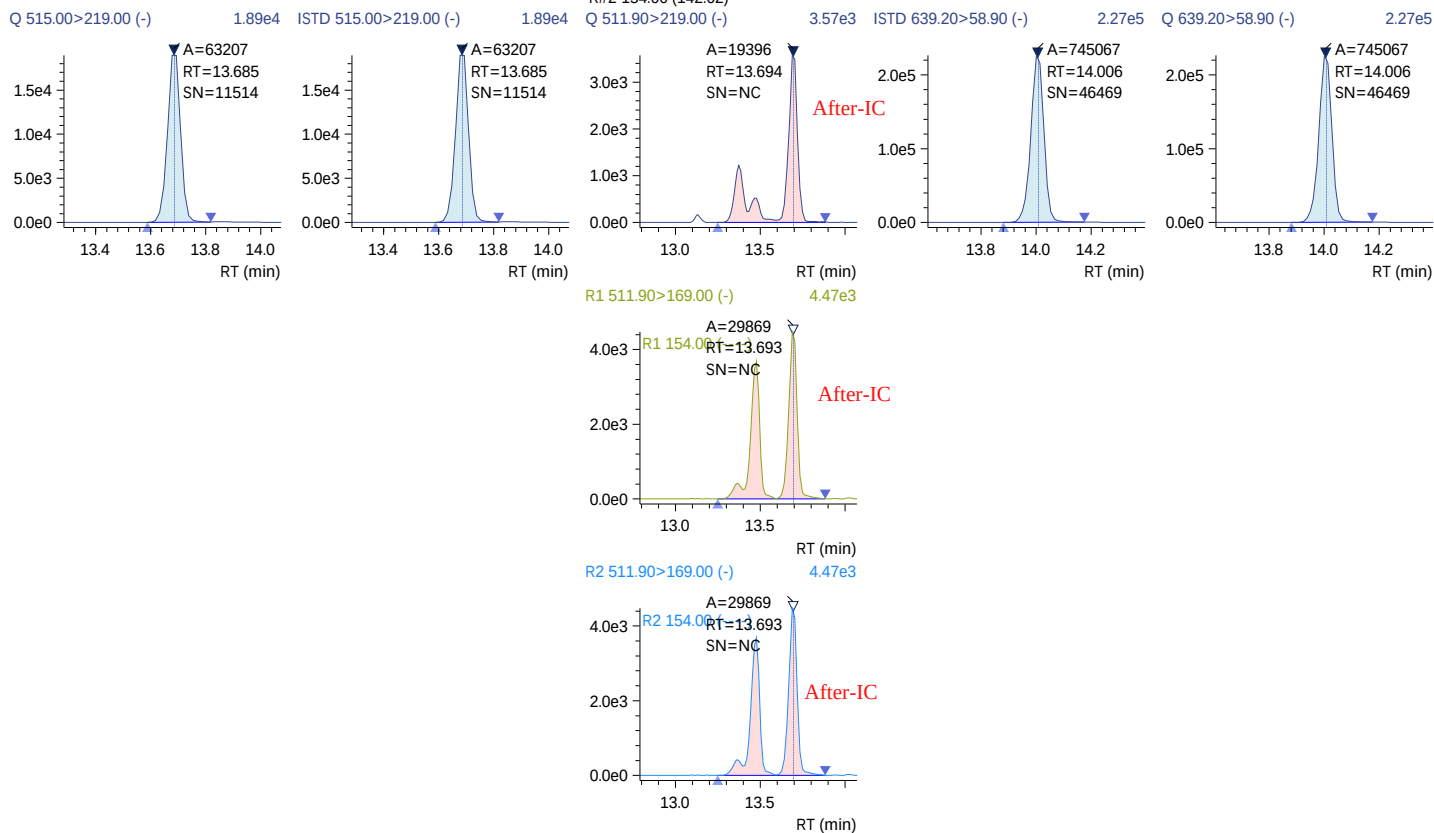
D3-MeFOSA
Conc. 2.5568

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. 0.4257
R#1 154.00 (149.05)
R#2 154.00 (142.62)

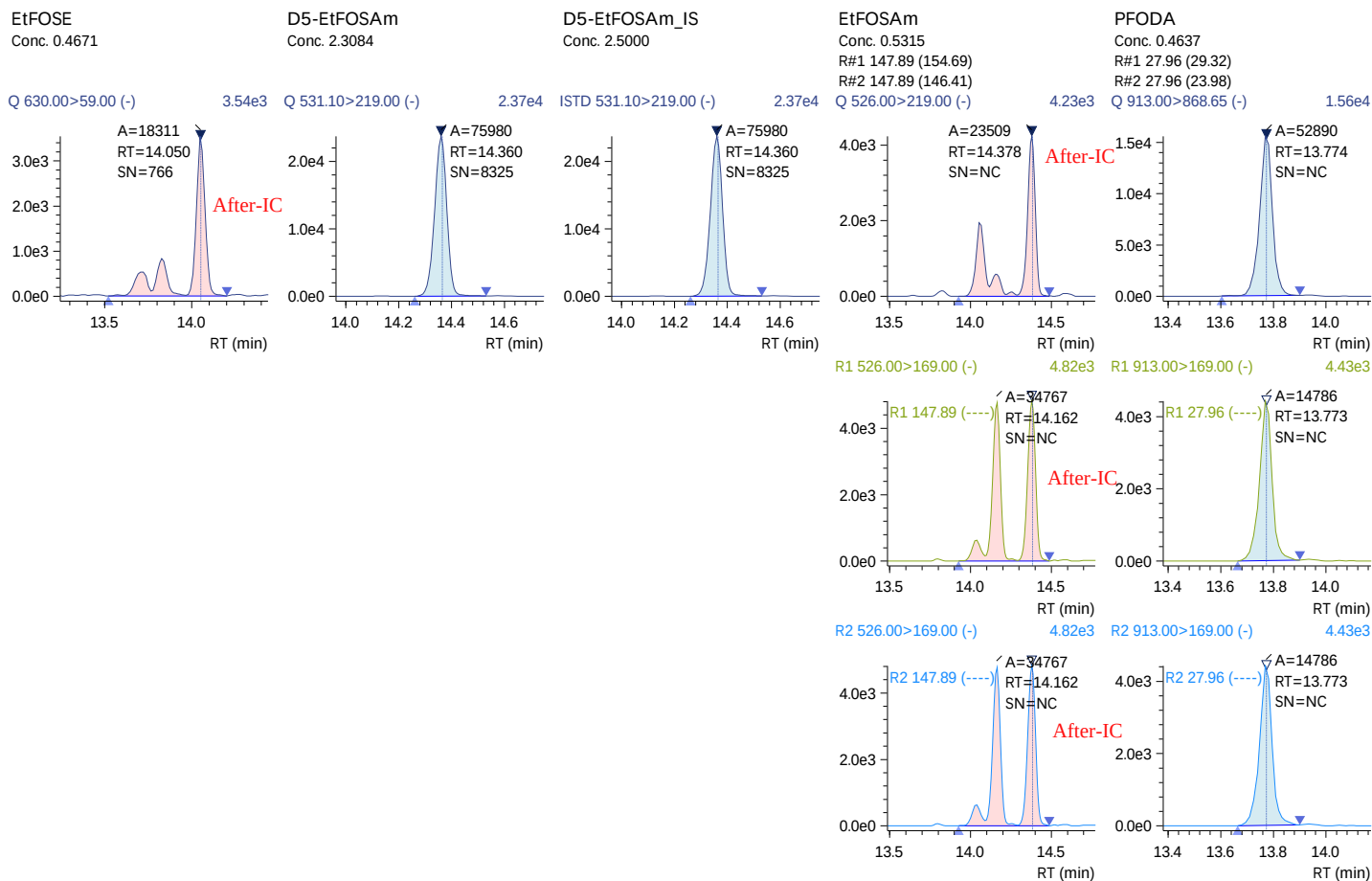
D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 24.2382





240119_008 (continued)



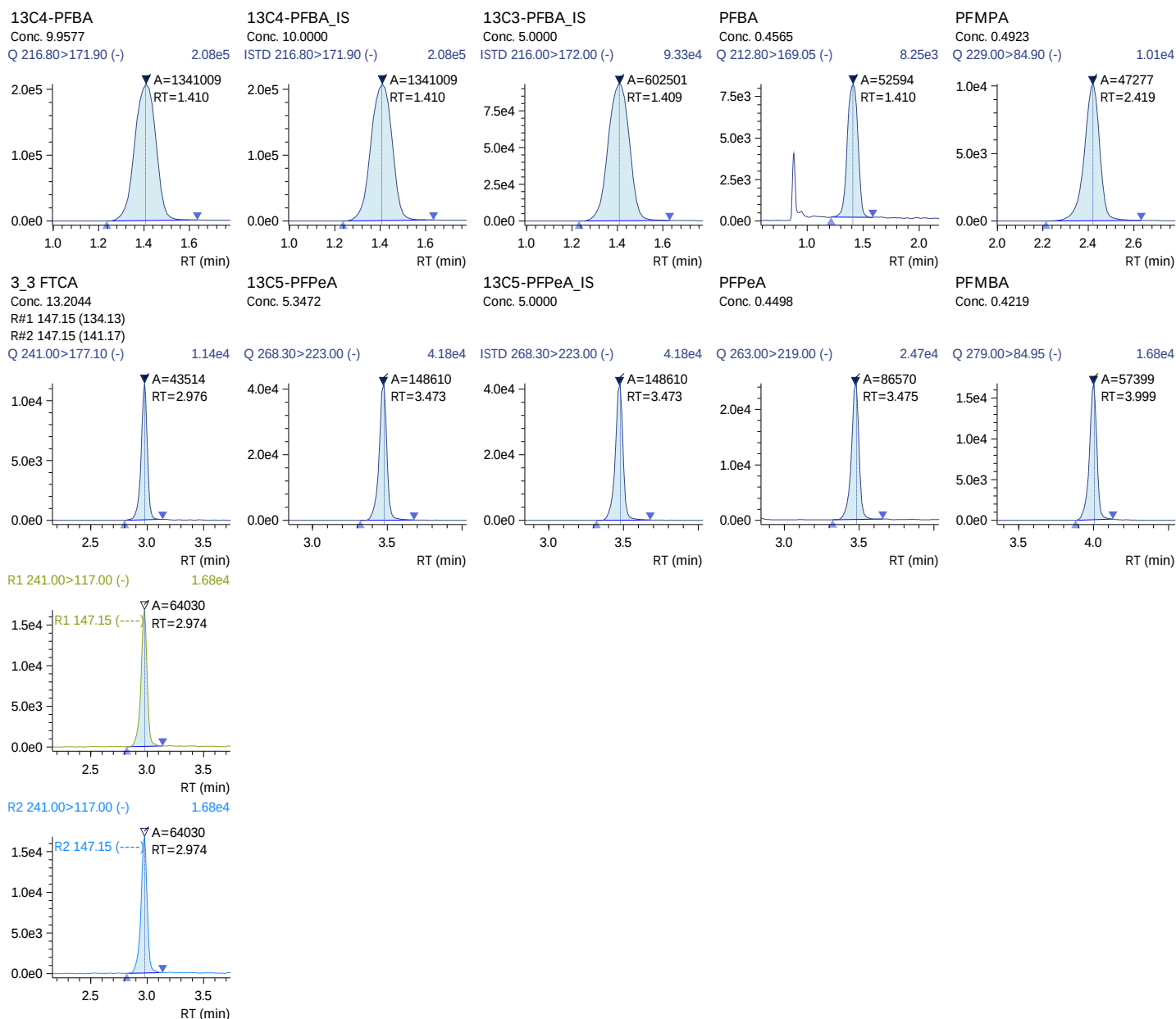
J:\LCMS08\Data\240119_1633_B1\240119_1633_B1.dampl

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_008

Sample ID: 1633 ICAL 0.50PPB
Date Acquired: 1/19/2024 2:31:19 PM
Acquired by: System Administrator
Data File: 240119_008
Vial: 4 | Inj. Volume: 10.0000uL | Tray: 1





240119_008 (continued)

13C2-4_2 FTS
Conc. 6.9705

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. 0.4393
R#1 29.67 (34.14)
R#2 29.67 (29.06)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 0.3927
R#1 46.25 (47.53)
R#2 46.25 (46.72)

Q 329.10>80.90 (-)

6.77e4

ISTD 329.10>80.90 (-)

6.77e4

Q 327.10>307.00 (-)

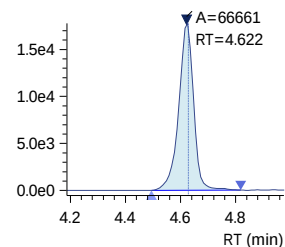
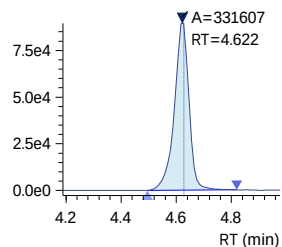
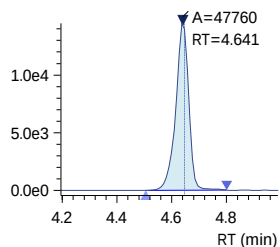
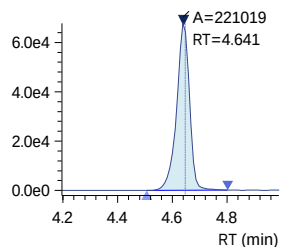
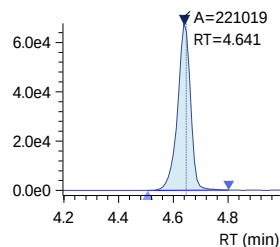
1.45e4

ISTD 302.10>79.90 (-)

8.95e4

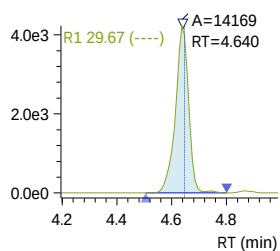
Q 298.70>79.90 (-)

1.78e4



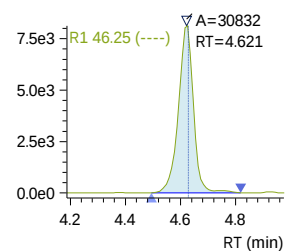
R1 327.10>80.90 (-)

4.23e3



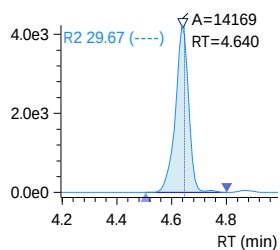
R1 298.70>98.80 (-)

8.13e3



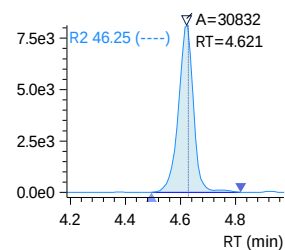
R2 327.10>80.90 (-)

4.23e3



R2 298.70>98.80 (-)

8.13e3





240119_008 (continued)

13C3-PFBS
Conc. 2.5361

NFDHA
Conc. 0.5192
R#1 37.39 (37.88)
R#2 37.39 (40.25)

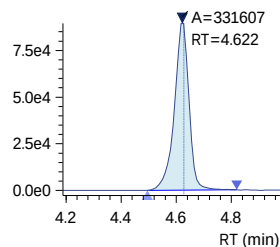
13C5-PFHxA
Conc. 2.4594

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

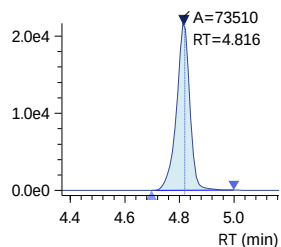
Q 302.10>79.90 (-)

8.95e4



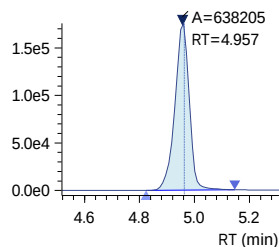
Q 295.00>201.00 (-)

2.17e4



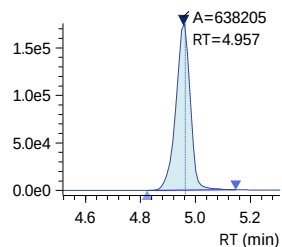
Q 318.00>273.00 (-)

1.76e5



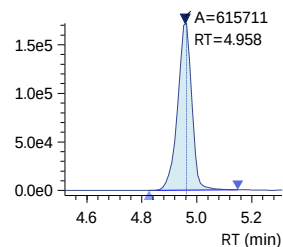
ISTD 318.00>273.00 (-)

1.76e5



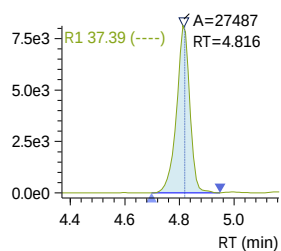
ISTD 315.10>270.00 (-)

1.72e5



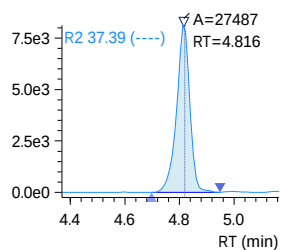
R1 295.00>84.90 (-)

8.12e3



R2 295.00>84.90 (-)

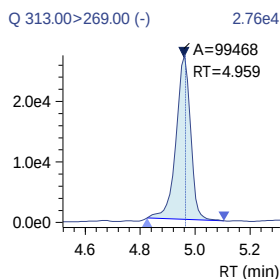
8.12e3





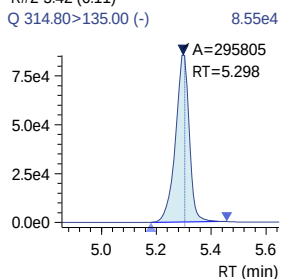
240119_008 (continued)

PFHxA
Conc. 0.4599

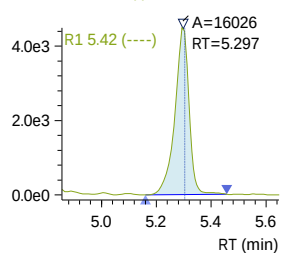


PFEESA
Conc. 0.4138

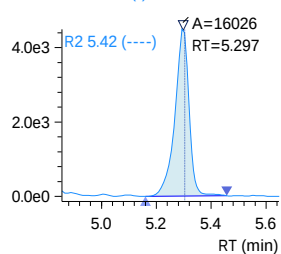
R#1 5.42 (5.88)
R#2 5.42 (6.11)



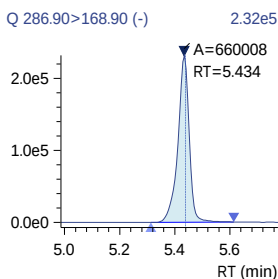
R1 314.80>82.90 (-) 4.49e3



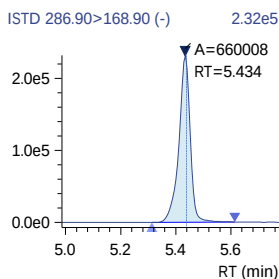
R2 314.80>82.90 (-) 4.49e3



13C3-HFPO-DA
Conc. 10.9504

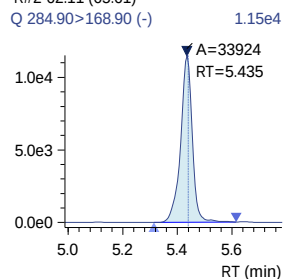


13C3-HFPO-DA_IS
Conc. 10.0000

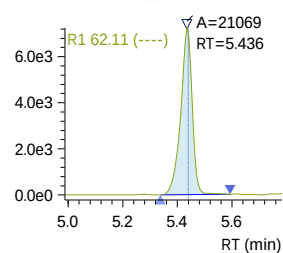


HFPO-DA
Conc. 0.4654

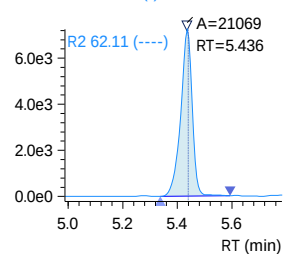
R#1 62.11 (63.80)
R#2 62.11 (65.61)



R1 284.90>184.90 (-) 7.25e3



R2 284.90>184.90 (-) 7.25e3

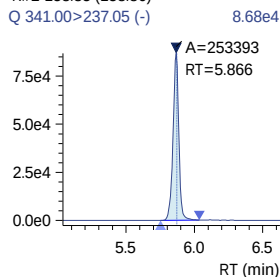




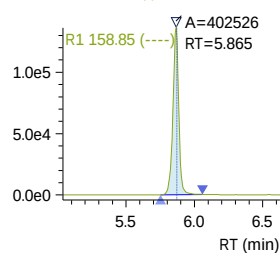
240119_008 (continued)

5_3 FTCA

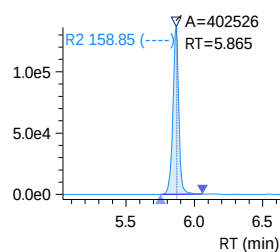
Conc. 15.3498
R#1 158.85 (167.13)
R#2 158.85 (158.86)
Q 341.00>237.05 (-)



R1 341.00>217.00 (-) 1.36e5

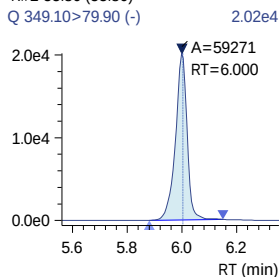


R2 341.00>217.00 (-) 1.36e5

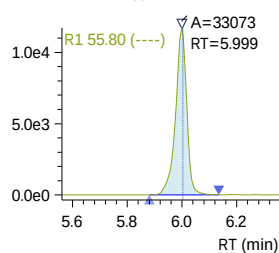


PFPeS

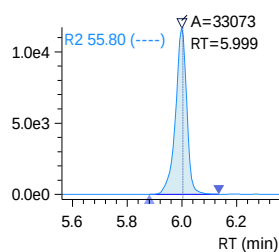
Conc. 0.4200
R#1 55.80 (56.71)
R#2 55.80 (55.80)
Q 349.10>79.90 (-)



R1 349.10>98.80 (-) 1.17e4

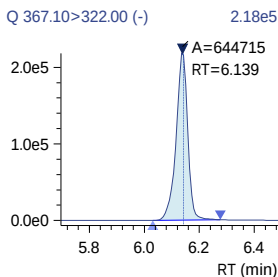


R2 349.10>98.80 (-) 1.17e4



13C4-PFHpA

Conc. 2.7446
Q 367.10>322.00 (-)



ISTD 367.10>322.00 (-) 2.18e5

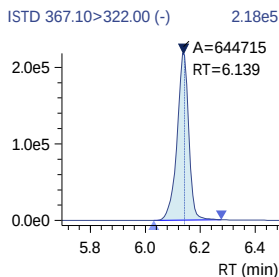


ISTD 367.10>322.00 (-) 2.18e5



13C4-PFHpA_IS

Conc. 2.5000
Q 363.10>319.00 (-)



R1 363.10>169.00 (-) 9.47e3

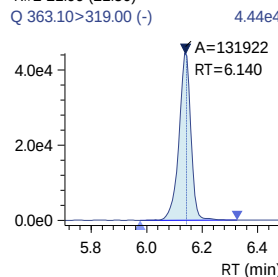


R2 363.10>169.00 (-) 9.47e3

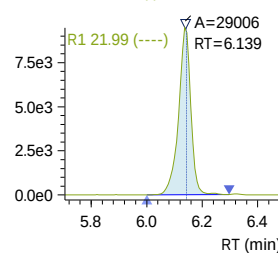


PFHpA

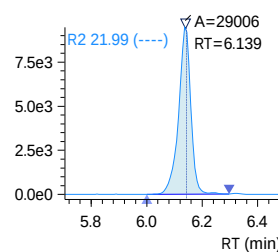
Conc. 0.4586
R#1 21.99 (21.37)
R#2 21.99 (21.50)
Q 363.10>319.00 (-)



R1 363.10>169.00 (-) 9.47e3

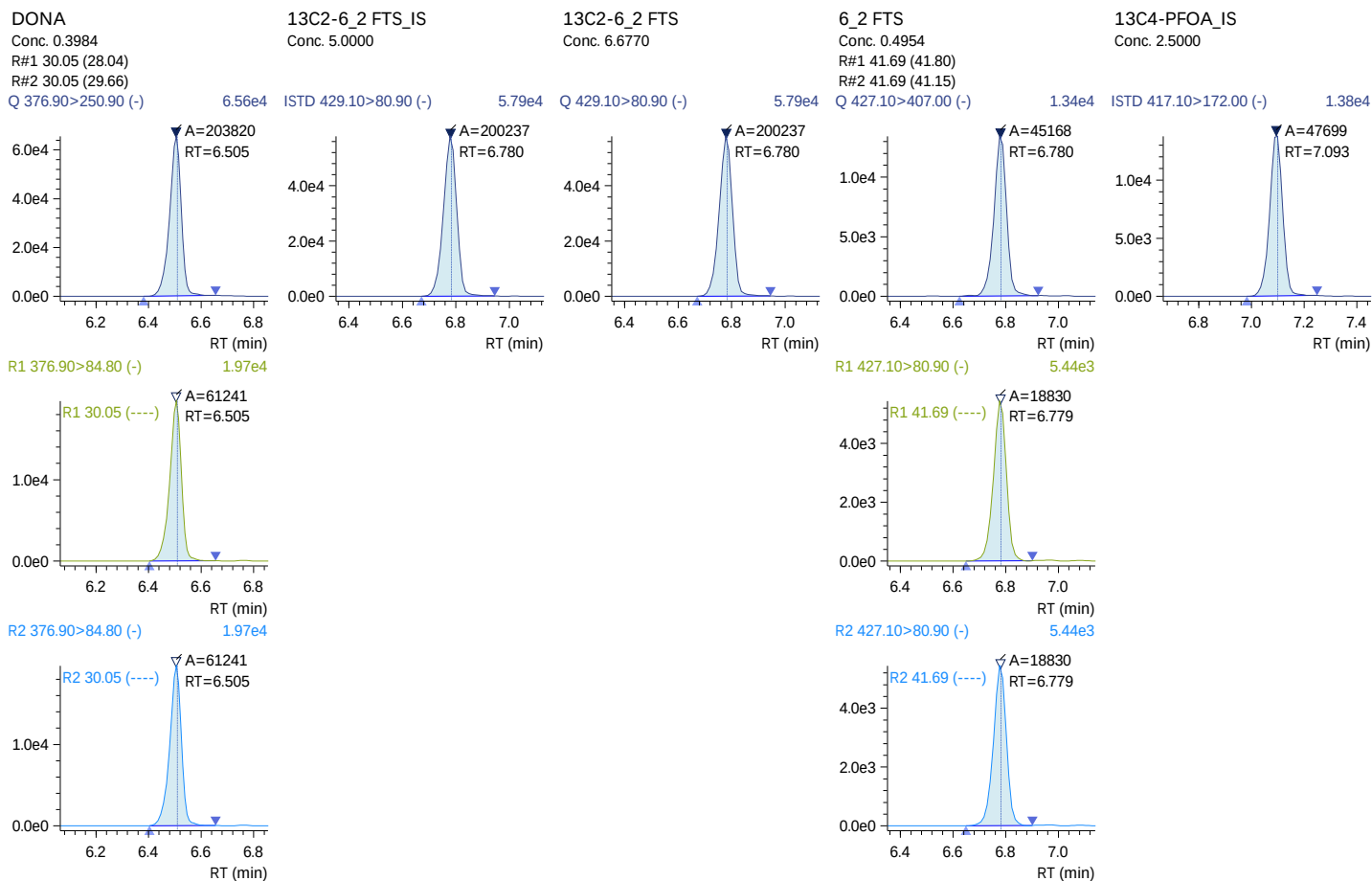


R2 363.10>169.00 (-) 9.47e3





240119_008 (continued)





240119_008 (continued)

13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.3897

PFOA
Conc. 0.5265
R#1 30.67 (29.05)
R#2 30.67 (31.89)

13C3-PFHxS
Conc. 2.7170

13C3-PFHxS_IS
Conc. 2.5000

ISTD 421.10>376.00 (-)

1.84e5

Q 421.10>376.00 (-)

1.84e5

Q 413.00>369.00 (-)

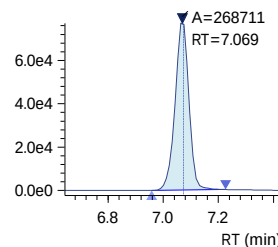
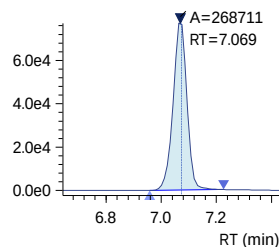
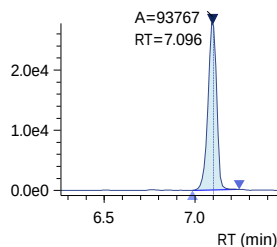
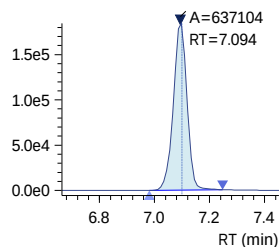
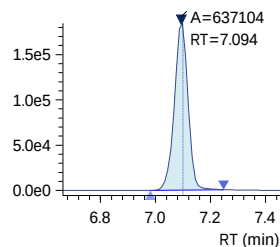
2.78e4

Q 402.10>79.90 (-)

7.71e4

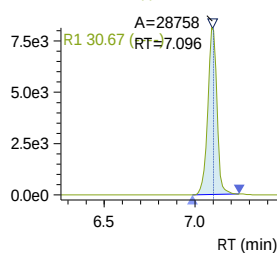
ISTD 402.10>79.90 (-)

7.71e4



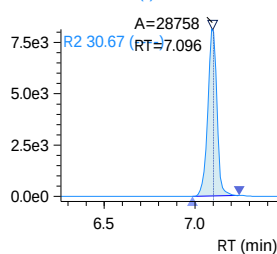
R1 413.00>169.00 (-)

8.14e3



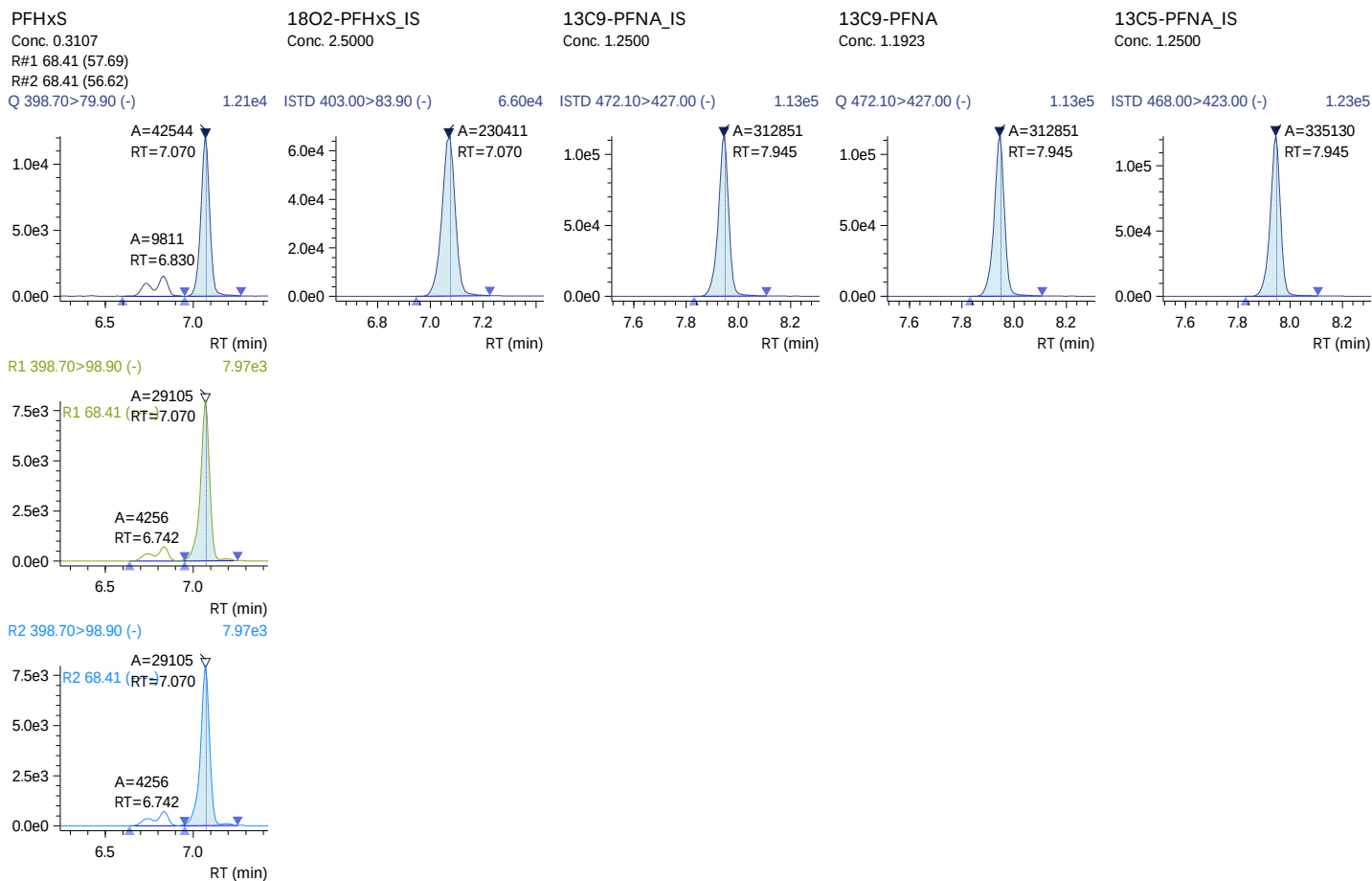
R2 413.00>169.00 (-)

8.14e3



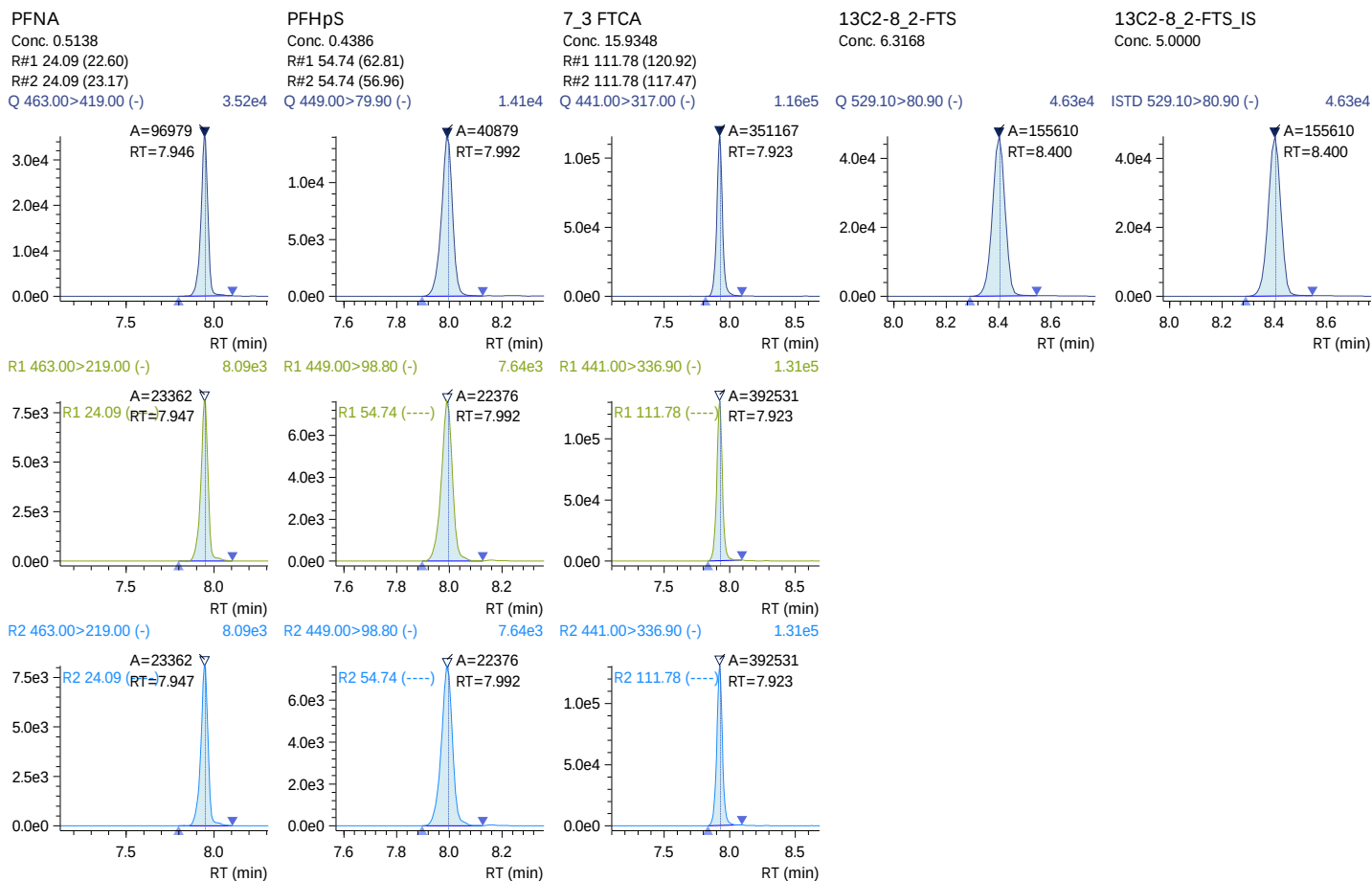


240119_008 (continued)



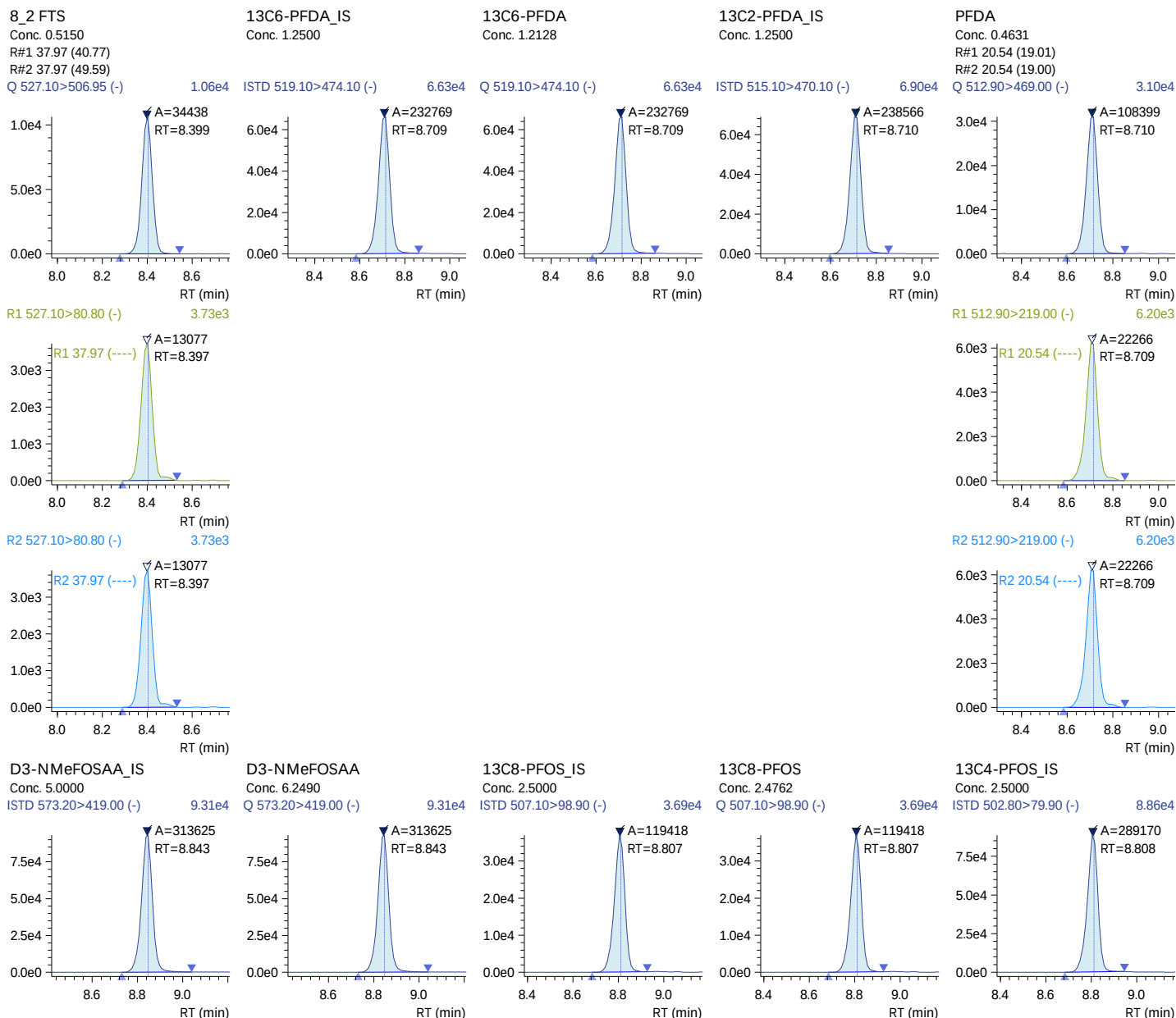


240119_008 (continued)



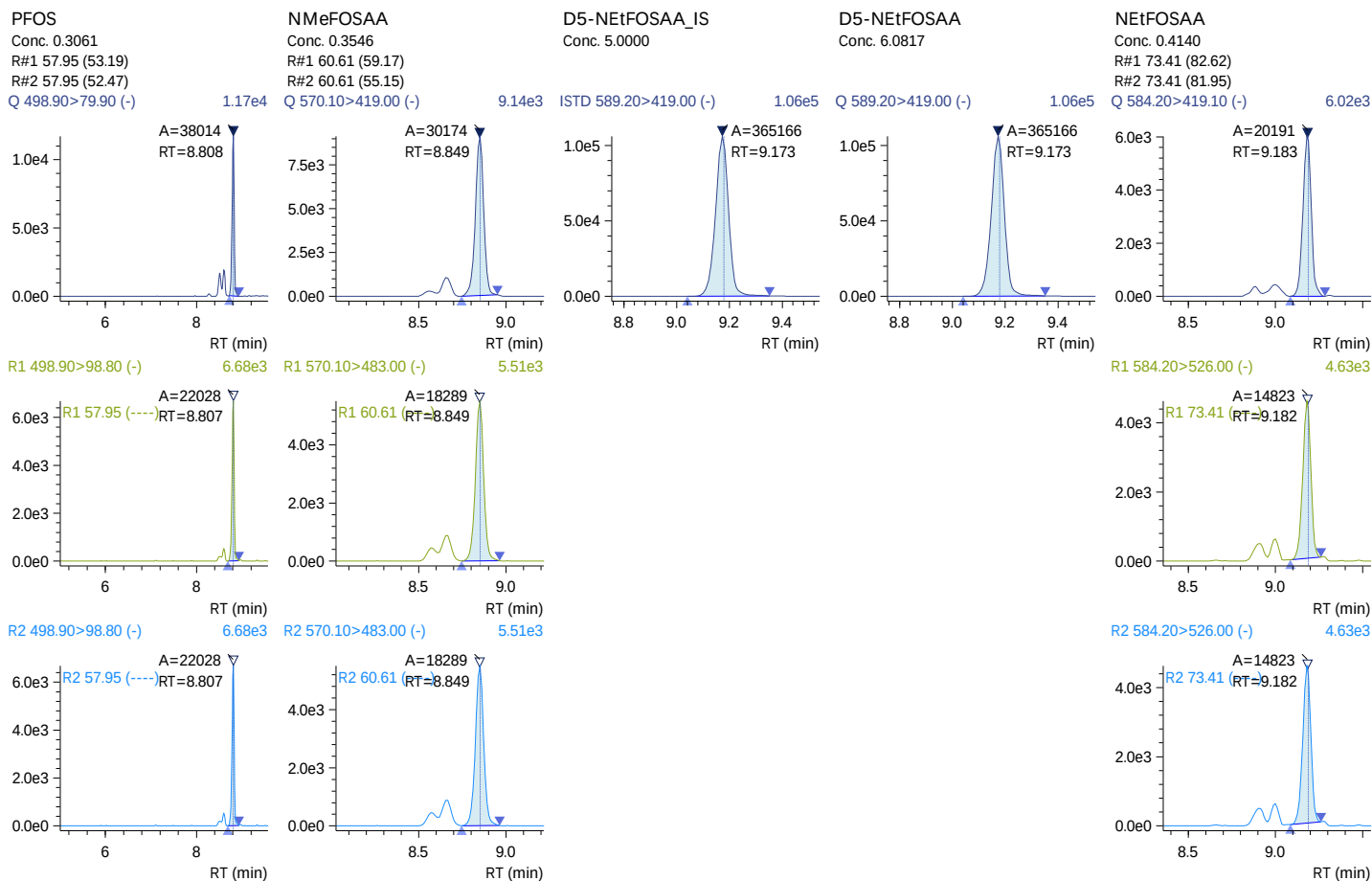


240119_008 (continued)





240119_008 (continued)

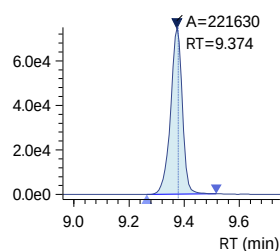




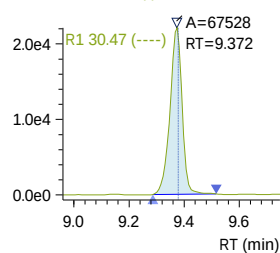
240119_008 (continued)

9-Cl-PF3ONS

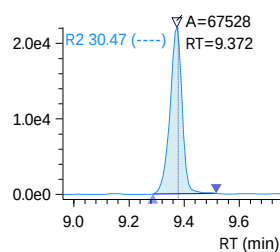
Conc. 0.4073
R#1 30.47 (31.76)
R#2 30.47 (32.76)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-)

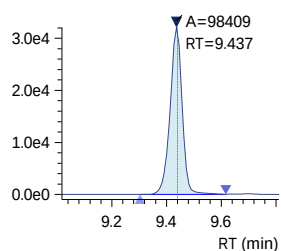


R2 532.80>353.00 (-)

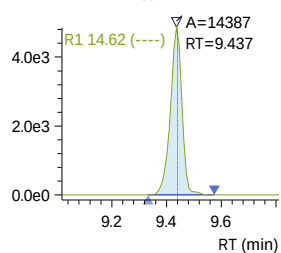


PFUnDA

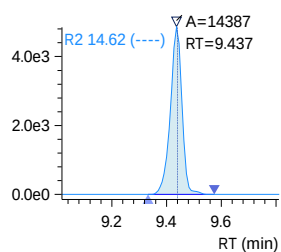
Conc. 0.4689
R#1 14.62 (12.31)
R#2 14.62 (13.12)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-)

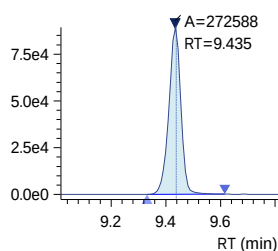


R2 563.10>269.10 (-)



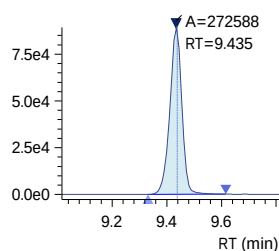
13C7-PFUnDA_IS

Conc. 1.2500
ISTD 570.00>525.10 (-)



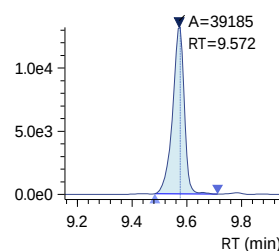
13C7-PFUnDA

Conc. 1.1906
Q 570.00>525.10 (-)

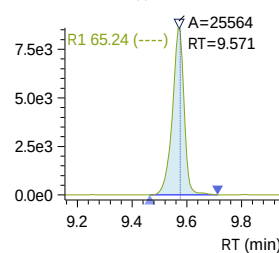


PFNS

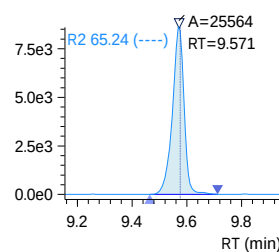
Conc. 0.4319
R#1 65.24 (63.31)
R#2 65.24 (65.22)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-)



R2 548.80>98.80 (-)





240119_008 (continued)

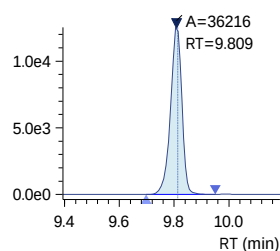
10_2 FTS

Conc. 0.4452

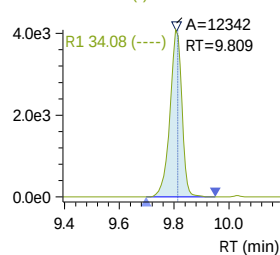
R#1 34.08 (33.02)

R#2 34.08 (37.13)

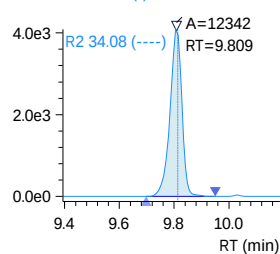
Q 626.80>607.05 (-)



R1 626.80>81.00 (-) 4.09e3



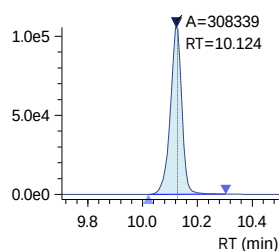
R2 626.80>81.00 (-) 4.09e3



13C2-PFDOA_IS

Conc. 1.2500

ISTD 615.10>570.00 (-)



Q 615.10>570.00 (-) 1.06e5



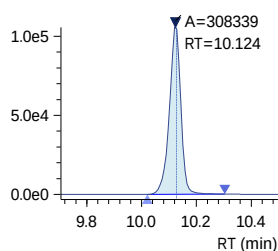
R1 615.10>570.00 (-) 1.06e5



13C2-PFDOA

Conc. 1.1723

Q 615.10>570.00 (-)



Q 615.10>570.00 (-) 1.06e5



R1 615.10>570.00 (-) 1.06e5



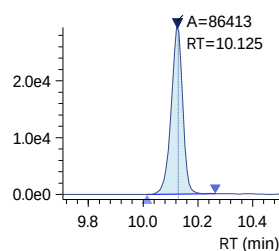
PFDOA

Conc. 0.4654

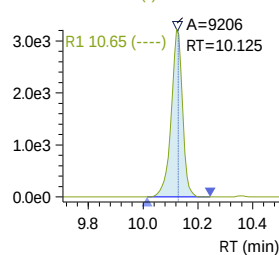
R#1 10.65 (10.14)

R#2 10.65 (11.29)

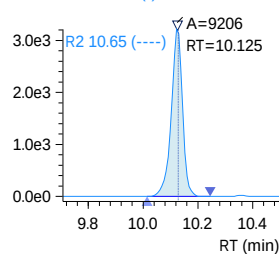
Q 613.10>569.00 (-)



R1 613.10>319.00 (-) 3.21e3



R2 613.10>319.00 (-) 3.21e3



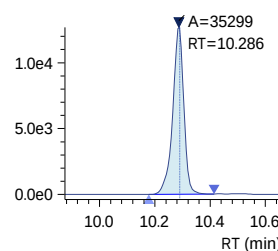
PFDS

Conc. 0.4414

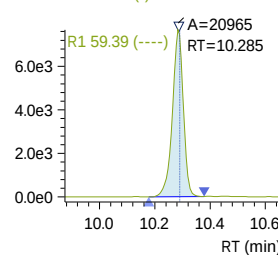
R#1 59.39 (62.02)

R#2 59.39 (60.18)

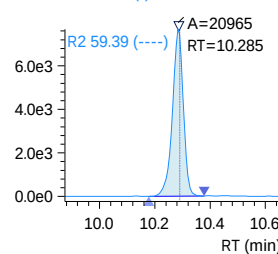
Q 599.00>79.90 (-)



R1 599.00>98.80 (-) 7.68e3



R2 599.00>98.80 (-) 7.68e3

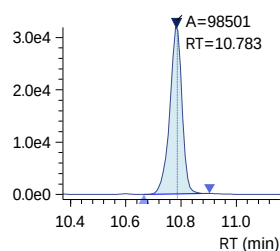




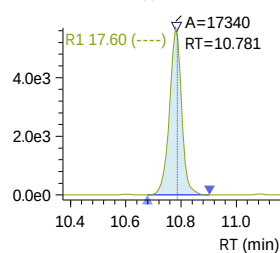
240119_008 (continued)

PFTTrDA

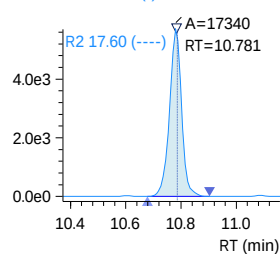
Conc. 0.4745
R#1 17.60 (15.12)
R#2 17.60 (17.64)
Q 663.00>619.00 (-)



R1 663.00>168.90 (-) 5.70e3

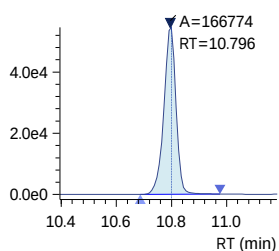


R2 663.00>168.90 (-) 5.70e3

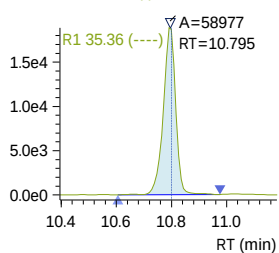


11-Cl-PF3OUdS

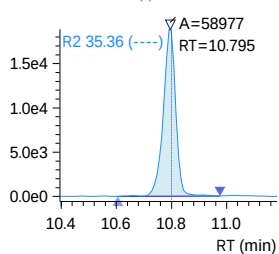
Conc. 0.4385
R#1 35.36 (36.61)
R#2 35.36 (36.44)
Q 630.90>451.00 (-)



R1 632.90>452.90 (-) 1.89e4



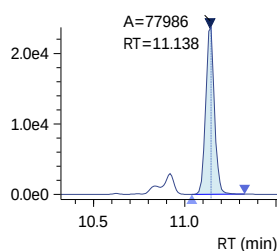
R2 632.90>452.90 (-) 1.89e4



PFOSAm

Conc. 0.8111

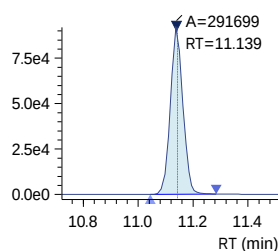
Q 498.10>77.90 (-)



13C8-PFOSAm

Conc. 2.3762

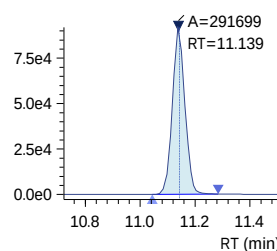
Q 506.10>77.80 (-)



13C8-PFOSAm_IS

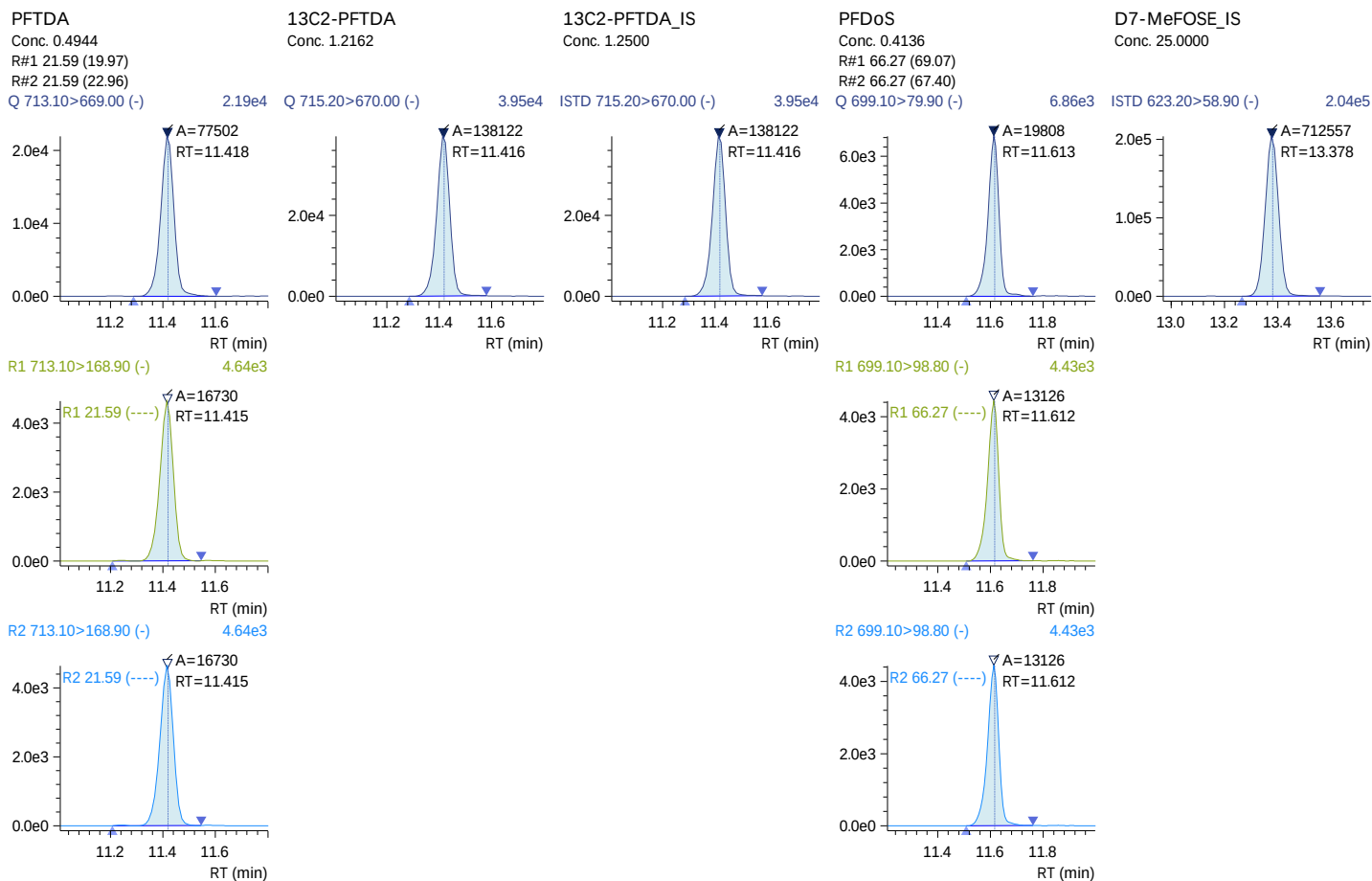
Conc. 2.5000

ISTD 506.10>77.80 (-)





240119_008 (continued)





240119_008 (continued)

D7-MeFOSE
 Conc. 23.5434

MeFOSE
 Conc. 0.3031

13C2-PFHXA_IS
 Conc. 2.5000

13C2-PFHXA
 Conc. 2.2763

PFHXA
 Conc. 0.5209
 R#1 14.46 (11.64)
 R#2 14.46 (13.90)

Q 623.20>58.90 (-)

2.04e5

Q 616.10>59.00 (-)

2.22e3

ISTD 815.00>770.05 (-)

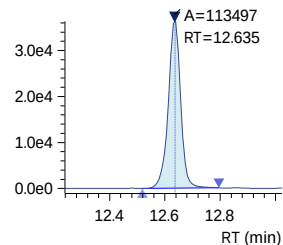
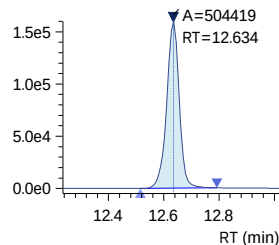
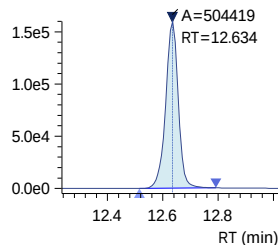
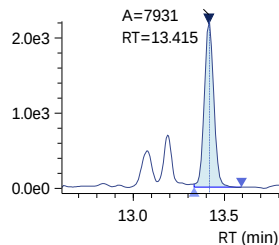
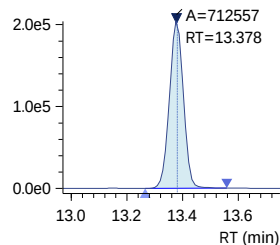
1.60e5

Q 815.00>770.05 (-)

1.60e5

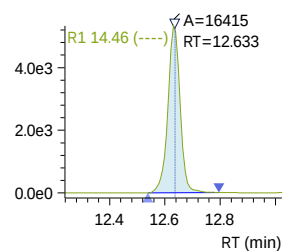
Q 813.00>768.95 (-)

3.63e4



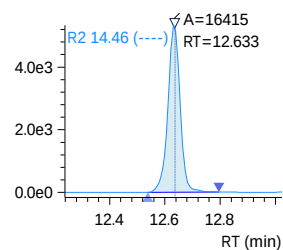
R1 813.00>218.95 (-)

5.33e3



R2 813.00>218.95 (-)

5.33e3





240119_008 (continued)

D3-MeFOSA
Conc. 2.5568

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. 0.2683
R#1 123.51 (149.05)
R#2 123.51 (140.79)

D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 24.2382

Q 515.00>219.00 (-)

1.89e4

ISTD 515.00>219.00 (-)

1.89e4

Q 511.90>219.00 (-)

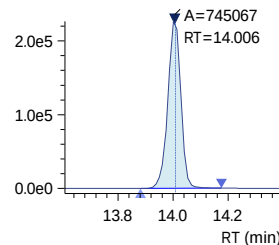
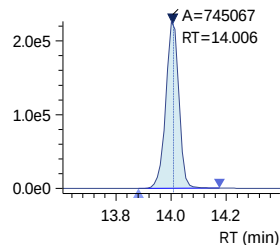
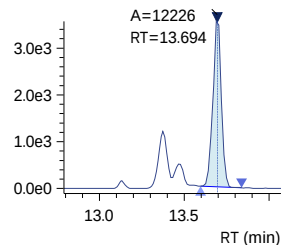
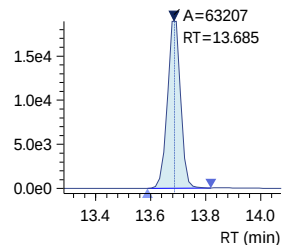
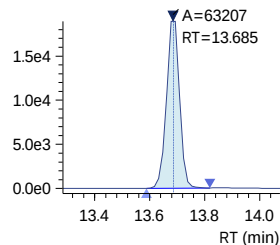
3.57e3

ISTD 639.20>58.90 (-)

2.27e5

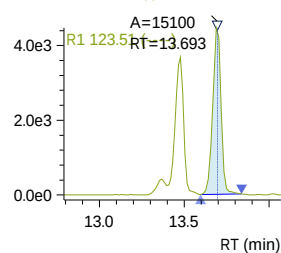
Q 639.20>58.90 (-)

2.27e5



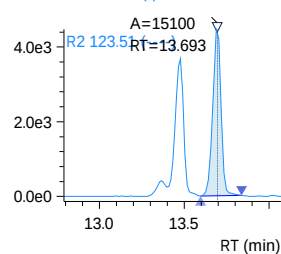
R1 511.90>169.00 (-)

4.47e3



R2 511.90>169.00 (-)

4.47e3





240119_008 (continued)

EtFOSE
Conc. 0.3049

D5-EtFOSAm
Conc. 2.3084

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. 0.1864
R#1 0.00 (154.69)
R#2 0.00 (163.90)

PFODA
Conc. 0.4637
R#1 27.96 (29.32)
R#2 27.96 (27.03)

Q 630.00>59.00 (-)

3.54e3

Q 531.10>219.00 (-)

2.37e4

ISTD 531.10>219.00 (-)

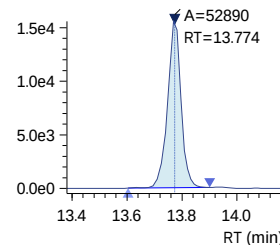
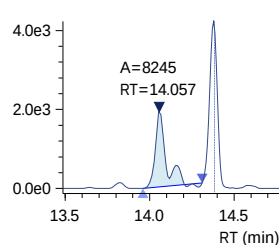
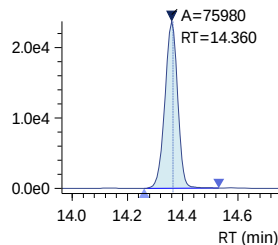
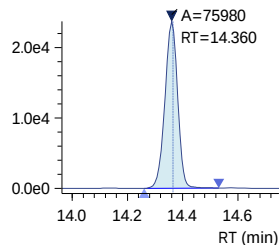
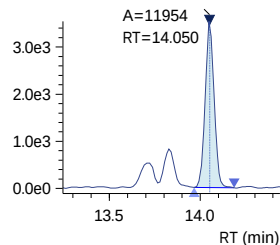
2.37e4

Q 526.00>219.00 (-)

4.23e3

Q 913.00>868.65 (-)

1.56e4

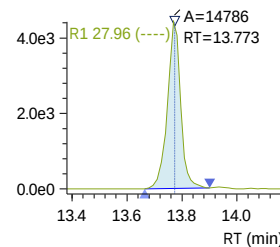
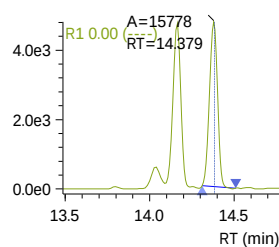


R1 526.00>169.00 (-)

4.82e3

R1 913.00>169.00 (-)

4.43e3

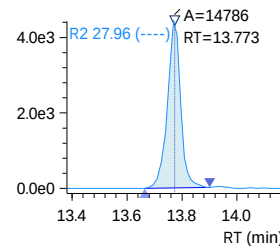
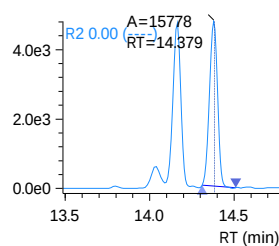


R2 526.00>169.00 (-)

4.82e3

R2 913.00>169.00 (-)

4.43e3



Validation Report

1st PS 01/23/24
2nd UA 01/23/24

Data File: J:\LCMS08\Data\240119_1633_B1\240119_027
Lab ID: KQ2400355-02
RunType: LCS_LL
Matrix: Soil

Date Acquired: 1/19/24 21:53
Batch ID: 830171
Analysis Method: 1633/PFAS_DOD5.4

Validations

Validation Categories	Pass	Fail
Analytical Hold Time	X	
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery	X	
Continuing Calibration Recovery (Closing)	X	
Internal Standards	X	
Surrogates	X	
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	

Primary Review: _____

Secondary Review: _____

Quantitation Report

1st *PS* 01/23/24
2nd *UA* 01/23/24

Data File:	J:\LCMS08\Data\240119_1633_B1\240119_027	Instrument:	K-LCMS-08
Acqu Date:	1/19/24 21:53	Vial:	37
Run Type:	LCS_LL	Dilution:	1
Lab ID:	KQ2400355-02	Raw Units:	ng/mL

Bottle ID:		Tier:	IV	Matrix:	Soil
Prod Code:	PFAS_DOD5.4	Collect Date:	12/20/23	Receive Date:	12/28/23

Analysis Lot:	830171	Prep Lot:	431421	Report Group:	KQ2400355
Analysis	1633	Prep Method:	Method		
		Prep Date:	12/22/23		

Title:	Per- and Polyfluoroalkyl Substances (PFAS) by LC/MS/MS Compliant with Table B-24 of DOD QSM	Calibration ID:	KC2400027
		Report List ID:	24615

Internal Standard Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Area Criteria
18O2-PFHxS	7.100	+0.03	213454	2.5000	OK
13C4-PFOS	8.834	+0.03	257490	2.5000	OK
13C3-PFBA	1.511	+0.10	597870	5.0000	OK
13C2-PFHxA	4.998	+0.04	666928	2.5000	OK
13C4-PFOA	7.123	+0.03	39176	2.5000	OK
13C5-PFNA	7.969	+0.03	294473	1.2500	OK
13C2-PFDA	8.734	+0.03	204933	1.2500	OK

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
13C3-PFBS	4.672	+0.05	241904	1.9970	80	20 - 150	Y
13C3-PFHxS	7.101	+0.03	187642	2.0480	82	20 - 150	Y
13C8-PFOS	8.834	+0.03	74700	1.7395	70	20 - 150	Y
13C4-PFBA	1.510	+0.11	1097663	8.2139	82	20 - 150	Y
13C5-PFPeA	3.531	+0.06	113220	3.7609	75	20 - 150	Y
13C5-PFHxA	4.998	+0.04	525371	1.8691	75	20 - 150	Y
13C4-PFHpA	6.170	+0.03	510234	2.0053	80	20 - 150	Y
13C8-PFOA	7.123	+0.03	469926	2.1461	86	20 - 150	Y
13C9-PFNA	7.969	+0.03	220778	0.9575	77	20 - 150	Y
13C6-PFDA	8.733	+0.03	163120	0.9894	79	20 - 150	Y
13C7-PFUnDA	9.457	+0.03	195620	0.9947	80	20 - 150	Y
13C2-PFDoDA	10.145	+0.03	205262	0.9085	73	20 - 150	Y
13C2-PFTeDA	11.435	+0.03	73928	0.7578	61	20 - 150	Y
13C8-FOSA	11.149	+0.01	179172	1.6391	66	20 - 150	Y
D3-MeFOSA	13.686	+0.00	35263	1.6019	64	20 - 150	Y
D5-EtFOSA	14.362	+0.00	44718	1.5258	61	20 - 150	Y
D7-MeFOSE	13.378	+0.00	452075	16.7747	67	20 - 150	Y
D9-EtFOSE	14.007	+0.00	459840	16.7998	67	20 - 150	Y

			1st	PS	01/23/24
Data File:	J:\LCMS08\Data\240119_1633_B1\240119_027	Instrument:	K-LCMS08	UA	01/23/24
Acqu Date:	1/19/24 21:53	Vial:	37		
Run Type:	LCS_LL	Dilution:	1		
Lab ID:	KQ2400355-02	Raw Units:	ng/mL		

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
D3-MeFOSAA	8.868	+0.03	182662	4.0873	82	20 - 150	Y
D5-EtFOSAA	9.199	+0.03	217166	4.0618	81	20 - 150	Y
13C2-4:2 FTS	4.680	+0.04	171492	5.8382	117	20 - 150	Y
13C2-6:2 FTS	6.806	+0.03	154752	5.5702	111	20 - 150	Y
13C2-8:2 FTS	8.422	+0.02	110878	4.8585	97	20 - 150	Y
13C3-HFPO-DA	5.469	+0.04	534353	8.1847	82	20 - 150	Y

Target Compounds

Final Conc.Units: ng/g

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Perfluorobutane sulfonic acid (PFBS)	4.672	+0.05	107646	0.8693	0.869		Y
Perfluoropentane sulfonic acid (PFPeS)	6.036	+0.04	95277	0.9669	0.967		Y
Perfluorohexane sulfonic acid (PFHxS)	7.102	+0.03	71891	0.7791	0.779		Y
Perfluoroheptane sulfonic acid (PFHpS)	8.018	+0.03	63851	1.0951	1.10		Y
Perfluorooctane sulfonic acid (PFOS)	8.835	+0.03	77856	1.0021	1.00		Y
Perfluorononane sulfonic acid (PFNS)	9.597	+0.03	58323	1.0276	1.03		Y
Perfluorodecane sulfonic acid (PFDS)	10.308	+0.03	50204	1.0115	1.01		Y
Perfluorododecane sulfonic acid (PFDoS)	11.633	+0.03	23845	0.7959	0.796		Y
Perfluorobutanoic acid (PFBA)	1.511	+0.10	96977	1.0283	1.03		Y
Perfluoropentanoic acid (PFPeA)	3.534	+0.06	154738	1.0552	1.06		Y
Perfluorohexanoic acid (PFHxA)	5.000	+0.04	187608	1.0645	1.06		Y
Perfluoroheptanoic acid (PFHpA)	6.172	+0.03	216804	0.9898	0.990		Y
Perfluorooctanoic acid (PFOA)	7.122	+0.03	123813	0.9771	0.977		Y
Perfluorononanoic acid (PFNA)	7.970	+0.03	129077	0.9964	0.996		Y
Perfluorodecanoic acid (PFDA)	8.735	+0.03	147347	0.9222	0.922		Y
Perfluoroundecanoic acid (PFUnDA)	9.460	+0.03	144667	0.9916	0.992		Y
Perfluorododecanoic acid (PFDOA)	10.146	+0.03	123062	1.0331	1.03		Y
Perfluorotridecanoic acid (PFTTrDA)	10.804	+0.03	128452	1.2007	1.20		Y
Perfluorotetradecanoic acid (PFTDA)	11.436	+0.03	86808	1.0650	1.07		Y
Perfluorooctane sulfonamide (PFOSAm)	11.146	+0.01	65963	1.1170	1.12		Y
N-Methylperfluorooctane sulfonamide (MeFOSA)	13.694	+0.00	24115	0.9486	0.949		Y
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	14.380	+0.00	23858	0.9164	0.916		Y
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	13.415	+0.00	16736	1.0080	1.01		Y
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	14.051	+0.00	24669	1.0196	1.02		Y
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	8.874	+0.03	55558	1.1210	1.12		Y

			1st	PS	01/23/24
Data File:	J:\LCMS08\Data\240119_1633_B1\240119_027	Instrument:	K-LCMS08	2nd	01/23/24
Acqu Date:	1/19/24 21:53	Vial:	37	UA	
Run Type:	LCS_LL	Dilution:	1		
Lab ID:	KQ2400355-02	Raw Units:	ng/mL		

<i>Target Compounds</i>		Final Conc.Units: ng/g				
Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q Rpt?
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	9.210	+0.03	29212	1.0072	1.01	Y
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	4.679	+0.04	79356	0.9408	0.941	Y
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	6.805	+0.03	59970	0.8510	0.851	Y
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	8.422	+0.02	46606	0.9782	0.978	Y
4,4,5,5,6,6,6-Heptafluorohexanoic acid (3:3 FTCA)	3.039	+0.06	51600	20.5525	20.6	Y
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	5.896	+0.03	260307	19.1553	19.2	Y
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	7.947	+0.02	356900	19.6732	19.7	Y
Perfluoro(2-ethoxyethane) sulfonic acid (PFEEESA)	5.343	+0.05	484640	0.8236	0.824	Y
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	9.398	+0.03	315245	0.7156	0.716	Y
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	10.818	+0.03	227413	0.7503	0.750	Y
Perfluoro-3-methoxypropanoic acid (PFMPA)	2.496	+0.08	82738	1.1307	1.13	Y
Perfluoro-4-methoxybutanoic acid (PFMBA)	4.057	+0.06	118139	1.1397	1.14	Y
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	5.470	+0.04	58471	0.9908	0.991	Y
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	4.856	+0.04	127329	1.0924	1.09	Y
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	6.535	+0.03	337206	0.8142	0.814	Y

Prep Amount:	5 g	Dilution:	1
Prep Final Amount:	5.00 mL	Basis Factor:	100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution



240119_027

Sample ID: KQ2400355-02
Date Acquired: 1/19/2024 9:53:13 PM
Acquired by: System Administrator
Data File: 240119_027
Vial: 9 | Inj. Volume: 10.0000uL | Tray: 2

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	1097663	----	----	----	----	----	----	
13C4-PFBA_IS	216.80>171.90	----	1097663	----	----	----	----	----	----	
13C3-PFBA_IS	216.00>172.00	----	597870	----	----	----	----	----	----	
PFBA	212.80>169.05	----	96977	----	----	----	----	----	----	
PFMPA	229.00>84.90	----	82738	----	----	----	----	----	----	
3_3 FTCA	241.00>177.10	241.00>117.00	51600	75121	145.58	141.17	75121	145.58	143.25	
13C5-PFPeA	268.30>223.00	----	113220	----	----	----	----	----	----	
13C5-PFPeA_IS	268.30>223.00	----	113220	----	----	----	----	----	----	
PFPeA	263.00>219.00	----	154738	----	----	----	----	----	----	
PFMBA	279.00>84.95	----	118139	----	----	----	----	----	----	
13C2-4_2 FTS	329.10>80.90	----	171492	----	----	----	----	----	----	
13C2-4_2 FTS_IS	329.10>80.90	----	171492	----	----	----	----	----	----	
4_2 FTS	327.10>307.00	327.10>80.90	79356	25619	32.28	29.06	25619	32.28	31.50	
13C3-PFBS_IS	302.10>79.90	----	241904	----	----	----	----	----	----	
PFBS	298.70>79.90	298.70>98.80	107646	50027	46.47	46.72	50027	46.47	48.74	
13C3-PFBS	302.10>79.90	----	241904	----	----	----	----	----	----	
NFDHA	295.00>201.00	295.00>84.90	127329	45009	35.35	40.25	45009	35.35	36.97	
13C5-PFHxA	318.00>273.00	----	525371	----	----	----	----	----	----	
13C5-PFHxA_IS	318.00>273.00	----	525371	----	----	----	----	----	----	
13C2-PFHxA_IS	315.10>270.00	----	666928	----	----	----	----	----	----	
PFHxA	313.00>269.00	----	187608	----	----	----	----	----	----	
PFEESA	314.80>135.00	314.80>82.90	484640	28466	5.87	6.11	28466	5.87	5.81	
13C3-HFPO-DA	286.90>168.90	----	534353	----	----	----	----	----	----	
13C3-HFPO-DA_IS	286.90>168.90	----	534353	----	----	----	----	----	----	
HFPO-DA	284.90>168.90	284.90>184.90	58471	37187	63.60	65.61	37187	63.60	64.39	
5_3 FTCA	341.00>237.05	341.00>217.00	260307	408806	157.05	158.86	408806	157.05	159.75	
PFPeS	349.10>79.90	349.10>98.80	95277	52972	55.60	55.80	52972	55.60	54.52	
13C4-PFHpA	367.10>322.00	----	510234	----	----	----	----	----	----	
13C4-PFHpA_IS	367.10>322.00	----	510234	----	----	----	----	----	----	
PFHpA	363.10>319.00	363.10>169.00	216804	49192	22.69	21.50	49192	22.69	23.22	
DONA	376.90>250.90	376.90>84.80	337206	99141	29.40	29.66	99141	29.40	29.43	
13C2-6_2 FTS_IS	429.10>80.90	----	154752	----	----	----	----	----	----	
13C2-6_2 FTS	429.10>80.90	----	154752	----	----	----	----	----	----	
6_2 FTS	427.10>407.00	427.10>80.90	59970	27369	45.64	41.15	27369	45.64	43.09	
13C4-PFOA_IS	417.10>172.00	----	39176	----	----	----	----	----	----	
13C8-PFOA_IS	421.10>376.00	----	469926	----	----	----	----	----	----	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240119_027 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	469926	----	----	----	----	----	----	----
PFOA	413.00>369.00	413.00>169.00	123813	43147	34.85	31.89	43147	34.85	30.51	
13C3-PFHxS	402.10>79.90	----	187642	----	----	----	----	----	----	----
13C3-PFHxS_IS	402.10>79.90	----	187642	----	----	----	----	----	----	----
PFHxS	398.70>79.90	398.70>98.90	71891	45746	63.63	56.62	45746	63.63	57.27	
18O2-PFHxS_IS	403.00>83.90	----	213454	----	----	----	----	----	----	----
13C9-PFNA_IS	472.10>427.00	----	220778	----	----	----	----	----	----	----
13C9-PFNA	472.10>427.00	----	220778	----	----	----	----	----	----	----
13C5-PFNA_IS	468.00>423.00	----	294473	----	----	----	----	----	----	----
PFNA	463.00>419.00	463.00>219.00	129077	30577	23.69	23.17	30577	23.69	23.01	
PFHpS	449.00>79.90	449.00>98.80	63851	34250	53.64	56.96	34250	53.64	58.58	
7_3 FTCA	441.00>317.00	441.00>336.90	356900	438824	122.95	117.47	438824	122.95	117.17	
13C2-8_2-FTS	529.10>80.90	----	110878	----	----	----	----	----	----	----
13C2-8_2-FTS_IS	529.10>80.90	----	110878	----	----	----	----	----	----	----
8_2 FTS	527.10>506.95	527.10>80.80	46606	22072	47.36	49.59	22072	47.36	43.30	
13C6-PFDA_IS	519.10>474.10	----	163120	----	----	----	----	----	----	----
13C6-PFDA	519.10>474.10	----	163120	----	----	----	----	----	----	----
13C2-PFDA_IS	515.10>470.10	----	204933	----	----	----	----	----	----	----
PFDA	512.90>469.00	512.90>219.00	147347	29519	20.03	19.00	29519	20.03	19.26	
D3-NMeFOSAA_IS	573.20>419.00	----	182662	----	----	----	----	----	----	----
D3-NMeFOSAA	573.20>419.00	----	182662	----	----	----	----	----	----	----
13C8-PFOS_IS	507.10>98.90	----	74700	----	----	----	----	----	----	----
13C8-PFOS	507.10>98.90	----	74700	----	----	----	----	----	----	----
13C4-PFOS_IS	502.80>79.90	----	257490	----	----	----	----	----	----	----
PFOS	498.90>79.90	498.90>98.80	77856	39551	50.80	52.47	39551	50.80	47.25	
NMeFOSAA	570.10>419.00	570.10>483.00	55558	33634	60.54	55.15	33634	60.54	62.10	
D5-NEtFOSAA_IS	589.20>419.00	----	217166	----	----	----	----	----	----	----
D5-NEtFOSAA	589.20>419.00	----	217166	----	----	----	----	----	----	----
NEtFOSAA	584.20>419.10	584.20>526.00	29212	27521	94.21	81.95	27521	94.21	86.05	
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	315245	103198	32.74	32.76	103198	32.74	31.74	
PFUnDA	563.10>519.00	563.10>269.10	144667	21811	15.08	13.12	21811	15.08	13.26	
13C7-PFUnDA_IS	570.00>525.10	----	195620	----	----	----	----	----	----	----
13C7-PFUnDA	570.00>525.10	----	195620	----	----	----	----	----	----	----
PFNS	548.80>79.90	548.80>98.80	58323	35836	61.44	65.22	35836	61.44	62.49	
10_2 FTS	626.80>607.05	626.80>81.00	45038	15924	35.36	37.13	15924	35.36	35.81	
13C2-PFDOA_IS	615.10>570.00	----	205262	----	----	----	----	----	----	----
13C2-PFDOA	615.10>570.00	----	205262	----	----	----	----	----	----	----
PFDOA	613.10>569.00	613.10>319.00	123062	12896	10.48	11.29	12896	10.48	10.90	
PFDS	599.00>79.90	599.00>98.80	50204	29392	58.54	60.18	29392	58.54	61.11	
PFTrDA	663.00>619.00	663.00>168.90	128452	23391	18.21	17.64	23391	18.21	18.20	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240119_027 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	227413	81206	35.71	36.44	81206	35.71	34.95	
PFOSAm	498.10>77.90	----	65963	----	----	----	----	----	----	
13C8-PFOSAm	506.10>77.80	----	179172	----	----	----	----	----	----	
13C8-PFOSAm_IS	506.10>77.80	----	179172	----	----	----	----	----	----	
PFTDA	713.10>669.00	713.10>168.90	86808	20030	23.07	22.96	20030	23.07	22.68	
13C2-PFTDA	715.20>670.00	----	73928	----	----	----	----	----	----	
13C2-PFTDA_IS	715.20>670.00	----	73928	----	----	----	----	----	----	
PFDoS	699.10>79.90	699.10>98.80	23845	15402	64.59	67.40	15402	64.59	65.24	
D7-MeFOSE_IS	623.20>58.90	----	452075	----	----	----	----	----	----	
D7-MeFOSE	623.20>58.90	----	452075	----	----	----	----	----	----	
MeFOSE	616.10>59.00	----	16736	----	----	----	----	----	----	
13C2-PFHxDA_IS	815.00>770.05	----	267085	----	----	----	----	----	----	
13C2-PFHxDA	815.00>770.05	----	267085	----	----	----	----	----	----	
PFHxDA	813.00>768.95	813.00>218.95	112684	17201	15.26	13.90	17201	15.26	14.51	
D3-MeFOSA	515.00>219.00	----	35263	----	----	----	----	----	----	
D3-MeFOSA_IS	515.00>219.00	----	35263	----	----	----	----	----	----	
MeFOSA	511.90>219.00	511.90>169.00	24115	26045	108.00	140.79	26045	108.00	142.62	
D9-EtFOSE_IS	639.20>58.90	----	459840	----	----	----	----	----	----	
D9-EtFOSE	639.20>58.90	----	459840	----	----	----	----	----	----	
EtFOSE	630.00>59.00	----	24669	----	----	----	----	----	----	
D5-EtFOSAm	531.10>219.00	----	44718	----	----	----	----	----	----	
D5-EtFOSAm_IS	531.10>219.00	----	44718	----	----	----	----	----	----	
EtFOSAm	526.00>219.00	526.00>169.00	23858	27604	115.70	163.90	27604	115.70	146.41	
PFODA	913.00>868.65	913.00>169.00	63842	15746	24.66	27.03	15746	24.66	23.98	



240119_027

Sample ID: KQ2400355-02
Date Acquired: 1/19/2024 9:53:13 PM
Acquired by: System Administrator
Data File: 240119_027
Vial: 9 | Inj. Volume: 10.0000uL | Tray: 2

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.510	0.102	-0.001	1097663	597870	13C3-PFBA_IS	8.2139	ng/mL	
13C4-PFBA_IS	Auto	1.510	0.102	----	1097663	1097663	----	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.511	0.103	----	597870	597870	----	5.0000	ng/mL	
PFBA	Auto	1.511	0.102	0.001	96977	1097663	13C4-PFBA_IS	1.0283	ng/mL	
PFMPA	Auto	2.496	0.075	-1.035	82738	113220	13C5-PFPeA_IS	1.1307	ng/mL	
3_3 FTCA	Auto	3.039	0.059	-0.492	51600	113220	13C5-PFPeA_IS	20.5525	ng/mL	
13C5-PFPeA	Auto	3.531	0.052	-1.467	113220	666928	13C2-PFHxA_IS	3.7609	ng/mL	
13C5-PFPeA_IS	Auto	3.531	0.052	----	113220	113220	----	5.0000	ng/mL	
PFPeA	Auto	3.534	0.052	0.003	154738	113220	13C5-PFPeA_IS	1.0552	ng/mL	
PFMBA	Auto	4.057	0.052	0.526	118139	113220	13C5-PFPeA_IS	1.1397	ng/mL	
13C2-4_2 FTS	Auto	4.680	0.034	-2.420	171492	213454	18O2-PFHxS_IS	5.8382	ng/mL	
13C2-4_2 FTS_IS	Auto	4.680	0.034	----	171492	171492	----	5.0000	ng/mL	
4_2 FTS	Auto	4.679	0.032	-0.001	79356	171492	13C2-4_2 FTS_IS	0.9408	ng/mL	
13C3-PFBS_IS	Auto	4.672	0.044	----	241904	241904	----	2.5000	ng/mL	
PFBS	Auto	4.672	0.044	0.000	107646	241904	13C3-PFBS_IS	0.8693	ng/mL	
13C3-PFBS	Auto	4.672	0.044	-2.428	241904	213454	18O2-PFHxS_IS	1.9970	ng/mL	
NFDHA	Auto	4.856	0.036	-0.142	127329	525371	13C5-PFHxA_IS	1.0924	ng/mL	
13C5-PFHxA	Auto	4.998	0.035	0.000	525371	666928	13C2-PFHxA_IS	1.8691	ng/mL	
13C5-PFHxA_IS	Auto	4.998	0.035	----	525371	525371	----	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	4.998	0.035	----	666928	666928	----	2.5000	ng/mL	
PFHxA	Auto	5.000	0.035	0.002	187608	525371	13C5-PFHxA_IS	1.0645	ng/mL	
PFEESA	Auto	5.343	0.039	0.345	484640	525371	13C5-PFHxA_IS	0.8236	ng/mL	
13C3-HFPO-DA	Auto	5.469	0.030	0.471	534353	666928	13C2-PFHxA_IS	8.1847	ng/mL	
13C3-HFPO-DA_IS	Auto	5.469	0.030	----	534353	534353	----	10.0000	ng/mL	
HFPO-DA	Auto	5.470	0.030	0.001	58471	534353	13C3-HFPO-DA_IS	0.9908	ng/mL	
5_3 FTCA	Auto	5.896	0.025	0.898	260307	525371	13C5-PFHxA_IS	19.1553	ng/mL	
PFPeS	Auto	6.036	0.033	-1.065	95277	187642	13C3-PFHxS_IS	0.9669	ng/mL	
13C4-PFHpA	Auto	6.170	0.027	1.172	510234	666928	13C2-PFHxA_IS	2.0053	ng/mL	
13C4-PFHpA_IS	Auto	6.170	0.027	----	510234	510234	----	2.5000	ng/mL	
PFHpA	Auto	6.172	0.028	0.002	216804	510234	13C4-PFHpA_IS	0.9898	ng/mL	
DONA	Auto	6.535	0.026	1.066	337206	534353	13C3-HFPO-DA_IS	0.8142	ng/mL	
13C2-6_2 FTS_IS	Auto	6.806	0.022	----	154752	154752	----	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.806	0.022	-0.294	154752	213454	18O2-PFHxS_IS	5.5702	ng/mL	
6_2 FTS	Auto	6.805	0.022	-0.001	59970	154752	13C2-6_2 FTS_IS	0.8510	ng/mL	
13C4-PFOA_IS	Auto	7.123	0.024	----	39176	39176	----	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.123	0.023	----	469926	469926	----	2.5000	ng/mL	
13C8-PFOA	Auto	7.123	0.023	0.000	469926	39176	13C4-PFOA_IS	2.1461	ng/mL	
PFOA	Auto	7.122	0.020	-0.001	123813	469926	13C8-PFOA_IS	0.9771	ng/mL	
13C3-PFHxS	Auto	7.101	0.027	0.001	187642	213454	18O2-PFHxS_IS	2.0480	ng/mL	
13C3-PFHxS_IS	Auto	7.101	0.027	----	187642	187642	----	2.5000	ng/mL	
PFHxS	M	7.102	0.028	0.001	71891	187642	13C3-PFHxS_IS	0.7791	ng/mL	
18O2-PFHxS_IS	Auto	7.100	0.025	----	213454	213454	----	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.969	0.020	----	220778	220778	----	1.2500	ng/mL	
13C9-PFNA	Auto	7.969	0.020	0.000	220778	294473	13C5-PFNA_IS	0.9575	ng/mL	
13C5-PFNA_IS	Auto	7.969	0.020	----	294473	294473	----	1.2500	ng/mL	
PFNA	Auto	7.970	0.020	0.001	129077	220778	13C9-PFNA_IS	0.9964	ng/mL	
PFHpS	Auto	8.018	0.022	-0.816	63851	74700	13C8-PFOS_IS	1.0951	ng/mL	
7_3 FTCA	Auto	7.947	0.018	2.949	356900	525371	13C5-PFHxA_IS	19.6732	ng/mL	
13C2-8_2-FTS	Auto	8.422	0.018	1.322	110878	213454	18O2-PFHxS_IS	4.8585	ng/mL	
13C2-8_2-FTS_IS	Auto	8.422	0.018	----	110878	110878	----	5.0000	ng/mL	
8_2 FTS	Auto	8.422	0.018	0.000	46606	110878	13C2-8_2-FTS_IS	0.9782	ng/mL	
13C6-PFDA_IS	Auto	8.733	0.019	----	163120	163120	----	1.2500	ng/mL	
13C6-PFDA	Auto	8.733	0.019	-0.001	163120	204933	13C2-PFDA_IS	0.9894	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_027 (continued)

(Table continued from previous page)

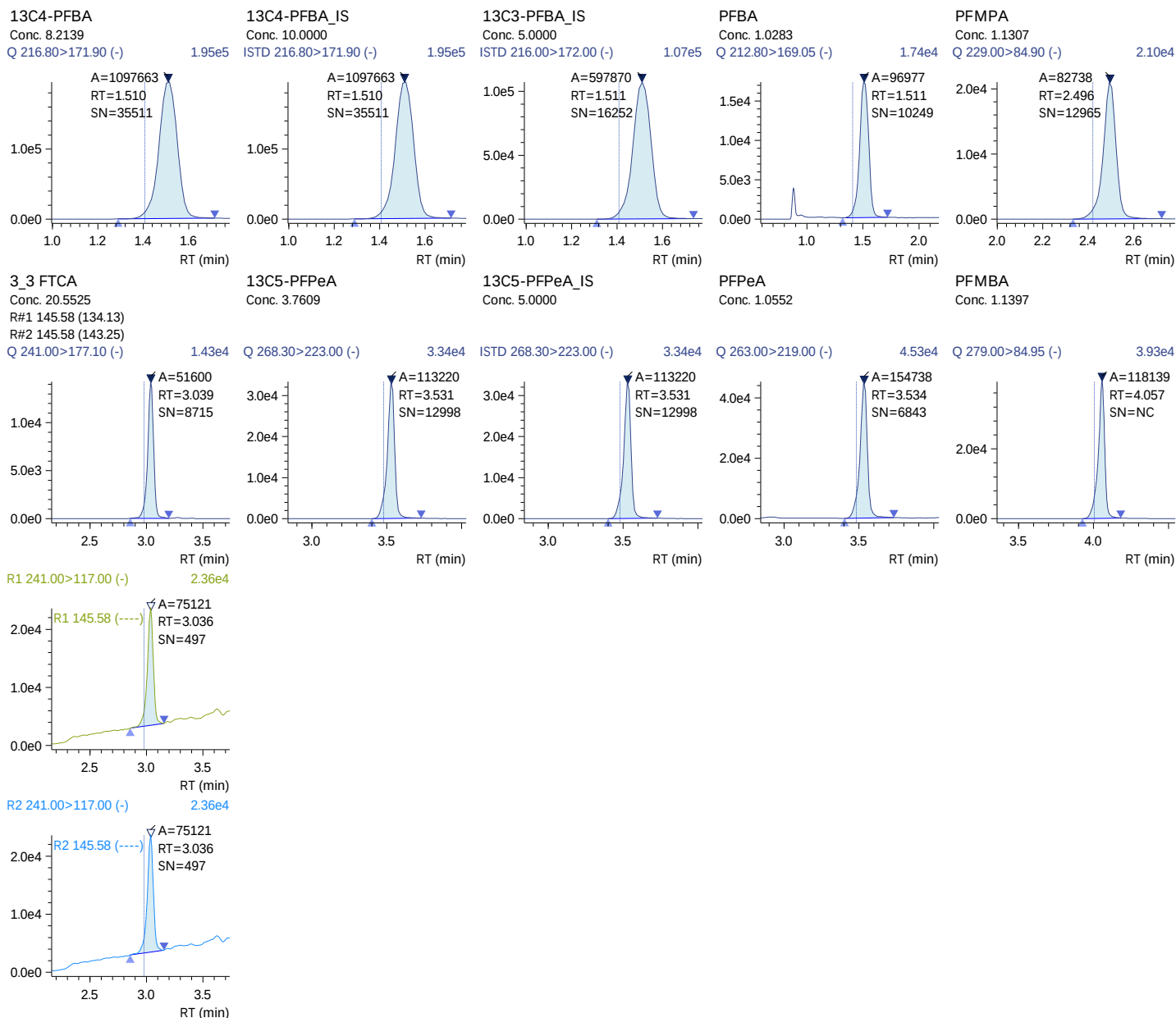
Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C2-PFDA_IS	Auto	8.734	0.019	----	204933	204933	----	1.2500	ng/mL	
PFDA	Auto	8.735	0.019	0.002	147347	163120	13C6-PFDA_IS	0.9222	ng/mL	
D3-NMeFOSAA_IS	Auto	8.868	0.020	----	182662	182662	----	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.868	0.020	0.034	182662	257490	13C4-PFOS_IS	4.0873	ng/mL	
13C8-PFOS_IS	Auto	8.834	0.023	----	74700	74700	----	2.5000	ng/mL	
13C8-PFOS	Auto	8.834	0.023	0.000	74700	257490	13C4-PFOS_IS	1.7395	ng/mL	
13C4-PFOS_IS	Auto	8.834	0.023	----	257490	257490	----	2.5000	ng/mL	
PFOS	M	8.835	0.022	0.001	77856	74700	13C8-PFOS_IS	1.0021	ng/mL	
NMeFOSAA	M	8.874	0.021	0.006	55558	182662	D3-NMeFOSAA_IS	1.1210	ng/mL	
D5-NetFOSAA_IS	Auto	9.199	0.021	----	217166	217166	----	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.199	0.021	0.365	217166	257490	13C4-PFOS_IS	4.0618	ng/mL	
NetFOSAA	M	9.210	0.021	0.011	29212	217166	D5-NetFOSAA_IS	1.0072	ng/mL	
9-CI-PF3ONS	Auto	9.398	0.020	3.929	315245	534353	13C3-HFPO-DA_IS	0.7156	ng/mL	
PFUnDA	Auto	9.460	0.020	0.003	144667	195620	13C7-PFUnDA_IS	0.9916	ng/mL	
13C7-PFUnDA_IS	Auto	9.457	0.019	----	195620	195620	----	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.457	0.019	0.723	195620	204933	13C2-PFDA_IS	0.9947	ng/mL	
PFNS	Auto	9.597	0.021	0.763	58323	74700	13C8-PFOS_IS	1.0276	ng/mL	
10_2_FTS	Auto	9.832	0.019	1.410	45038	110878	13C2-8_2-FTS_IS	0.7769	ng/mL	
13C2-PFDOA_IS	Auto	10.145	0.018	----	205262	205262	----	1.2500	ng/mL	
13C2-PFDOA	Auto	10.145	0.018	1.411	205262	204933	13C2-PFDA_IS	0.9085	ng/mL	
PFDOA	Auto	10.146	0.018	0.001	123062	205262	13C2-PFDOA_IS	1.0331	ng/mL	
PFDS	Auto	10.308	0.018	1.474	50204	74700	13C8-PFOS_IS	1.0115	ng/mL	
PFTDA	Auto	10.804	0.018	-0.630	128452	73928	13C2-PFTDA_IS	1.2007	ng/mL	
11-CI-PF3OUdS	Auto	10.818	0.019	5.349	227413	534353	13C3-HFPO-DA_IS	0.7503	ng/mL	
PFOSAm	Auto	11.146	0.003	-0.003	65963	179172	13C8-PFOSAm_IS	1.1170	ng/mL	
13C8-PFOSAm	Auto	11.149	0.006	2.315	179172	257490	13C4-PFOS_IS	1.6391	ng/mL	
13C8-PFOSAm_IS	Auto	11.149	0.006	----	179172	179172	----	2.5000	ng/mL	
PFTDA	Auto	11.436	0.016	0.002	86808	73928	13C2-PFTDA_IS	1.0650	ng/mL	
13C2-PFTDA	Auto	11.435	0.015	2.700	73928	204933	13C2-PFDA_IS	0.7578	ng/mL	
13C2-PFTDA_IS	Auto	11.435	0.015	----	73928	73928	----	1.2500	ng/mL	
PFDoS	Auto	11.633	0.017	2.799	23845	74700	13C8-PFOS_IS	0.7959	ng/mL	
D7-MeFOSE_IS	Auto	13.378	-0.003	----	452075	452075	----	25.0000	ng/mL	
D7-MeFOSE	Auto	13.378	-0.003	4.544	452075	257490	13C4-PFOS_IS	16.7747	ng/mL	
MeFOSE	Auto	13.415	-0.003	0.037	16736	452075	D7-MeFOSE_IS	1.0080	ng/mL	
13C2-PFHxDA_IS	Auto	12.652	0.016	----	267085	267085	----	2.5000	ng/mL	
13C2-PFHxDA	Auto	12.652	0.016	3.918	267085	204933	13C2-PFDA_IS	1.4031	ng/mL	
PFHxDA	Auto	12.654	0.017	0.002	112684	267085	13C2-PFHxDA_IS	1.0011	ng/mL	
D3-MeFOSA	Auto	13.686	-0.001	4.852	35263	257490	13C4-PFOS_IS	1.6019	ng/mL	
D3-MeFOSA_IS	Auto	13.686	-0.001	----	35263	35263	----	2.5000	ng/mL	
MeFOSA	Auto	13.694	-0.002	0.008	24115	35263	D3-MeFOSA_IS	0.9486	ng/mL	
D9-EtFOSE_IS	Auto	14.007	-0.002	----	459840	459840	----	25.0000	ng/mL	
D9-EtFOSE	Auto	14.007	-0.002	5.173	459840	257490	13C4-PFOS_IS	16.7998	ng/mL	
EtFOSE	Auto	14.051	-0.001	0.044	24669	459840	D9-EtFOSE_IS	1.0196	ng/mL	
D5-EtFOSAm	Auto	14.362	-0.003	5.528	44718	257490	13C4-PFOS_IS	1.5258	ng/mL	
D5-EtFOSAm_IS	Auto	14.362	-0.003	----	44718	44718	----	2.5000	ng/mL	
EtFOSAm	Auto	14.380	-0.002	0.018	23858	44718	D5-EtFOSAm_IS	0.9164	ng/mL	
PFODA	Auto	13.788	0.014	1.136	63842	267085	13C2-PFHxDA_IS	1.0570	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_027 (continued)





240119_027 (continued)

13C2-4_2 FTS
Conc. 5.8382

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. 0.9408
R#1 32.28 (34.14)
R#2 32.28 (31.50)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 0.8693
R#1 46.47 (47.53)
R#2 46.47 (48.74)

Q 329.10>80.90 (-)

5.41e4 ISTD 329.10>80.90 (-)

5.41e4 Q 327.10>307.00 (-)

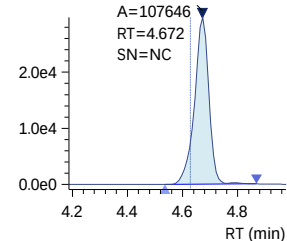
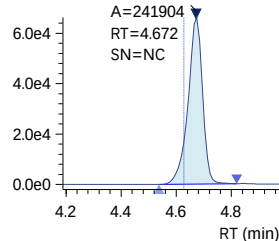
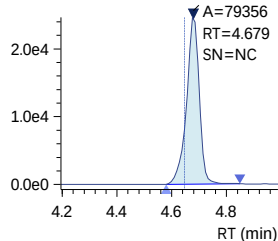
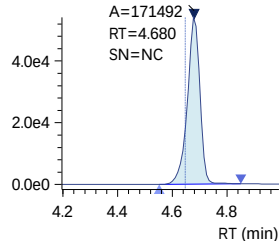
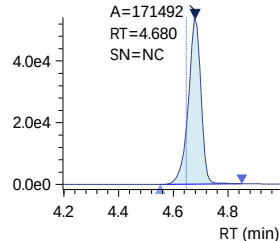
2.47e4

ISTD 302.10>79.90 (-)

6.63e4

Q 298.70>79.90 (-)

2.98e4

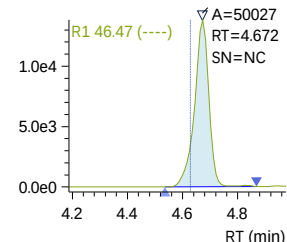
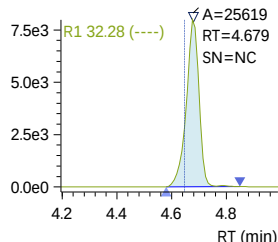


R1 327.10>80.90 (-)

7.98e3

R1 298.70>98.80 (-)

1.38e4

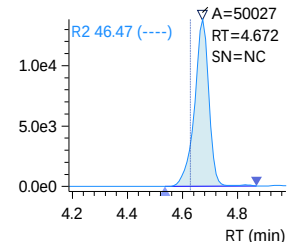
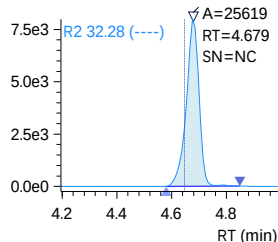


R2 327.10>80.90 (-)

7.98e3

R2 298.70>98.80 (-)

1.38e4





240119_027 (continued)

13C3-PFBS
Conc. 1.9970

NFDHA
Conc. 1.0924
R#1 35.35 (37.88)
R#2 35.35 (36.97)

13C5-PFHxA
Conc. 1.8691

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

Q 302.10>79.90 (-)

6.63e4

Q 295.00>201.00 (-)

3.66e4

Q 318.00>273.00 (-)

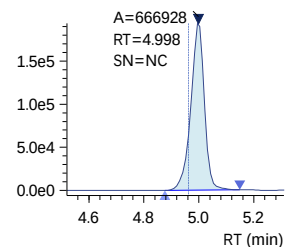
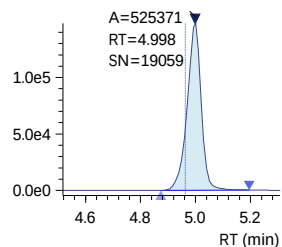
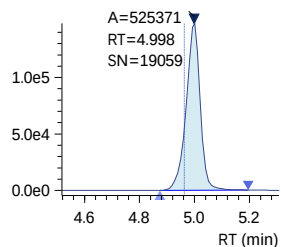
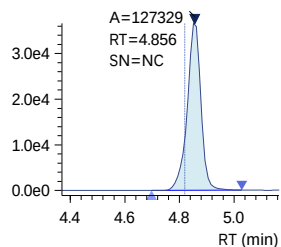
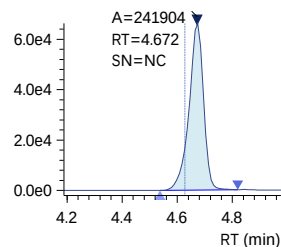
1.48e5

ISTD 318.00>273.00 (-)

1.48e5

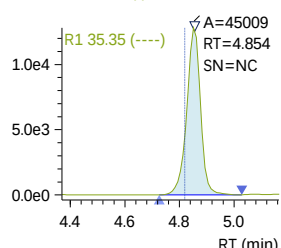
ISTD 315.10>270.00 (-)

1.94e5



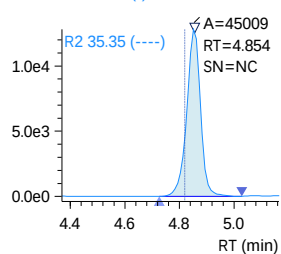
R1 295.00>84.90 (-)

1.28e4



R2 295.00>84.90 (-)

1.28e4

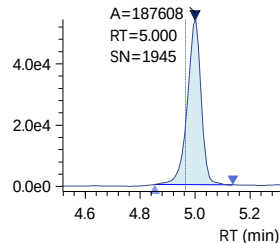




240119_027 (continued)

PFHxA
Conc. 1.0645

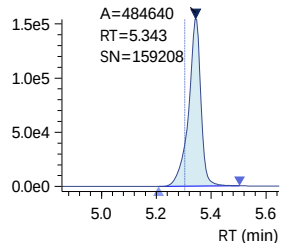
Q 313.00>269.00 (-)



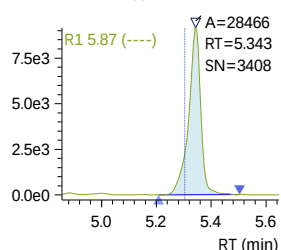
PFEESA
Conc. 0.8236

R#1 5.87 (5.88)
R#2 5.87 (5.81)

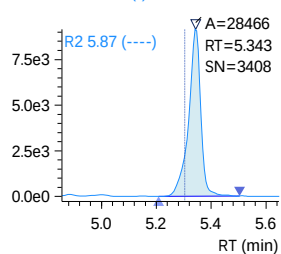
Q 314.80>135.00 (-)



R1 314.80>82.90 (-)

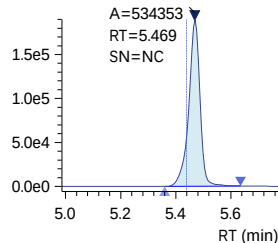


R2 314.80>82.90 (-)



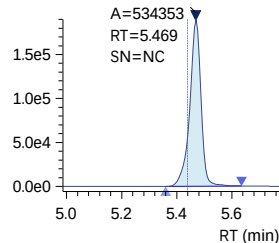
13C3-HFPO-DA
Conc. 8.1847

Q 286.90>168.90 (-)



13C3-HFPO-DA_IS
Conc. 10.0000

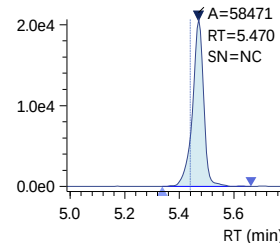
ISTD 286.90>168.90 (-)



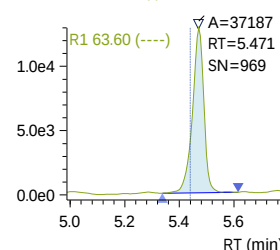
HFPO-DA
Conc. 0.9908

R#1 63.60 (63.80)
R#2 63.60 (64.39)

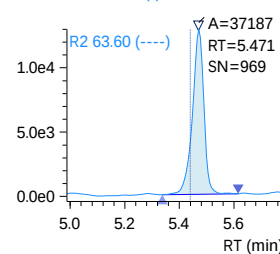
Q 284.90>168.90 (-)



R1 284.90>184.90 (-)

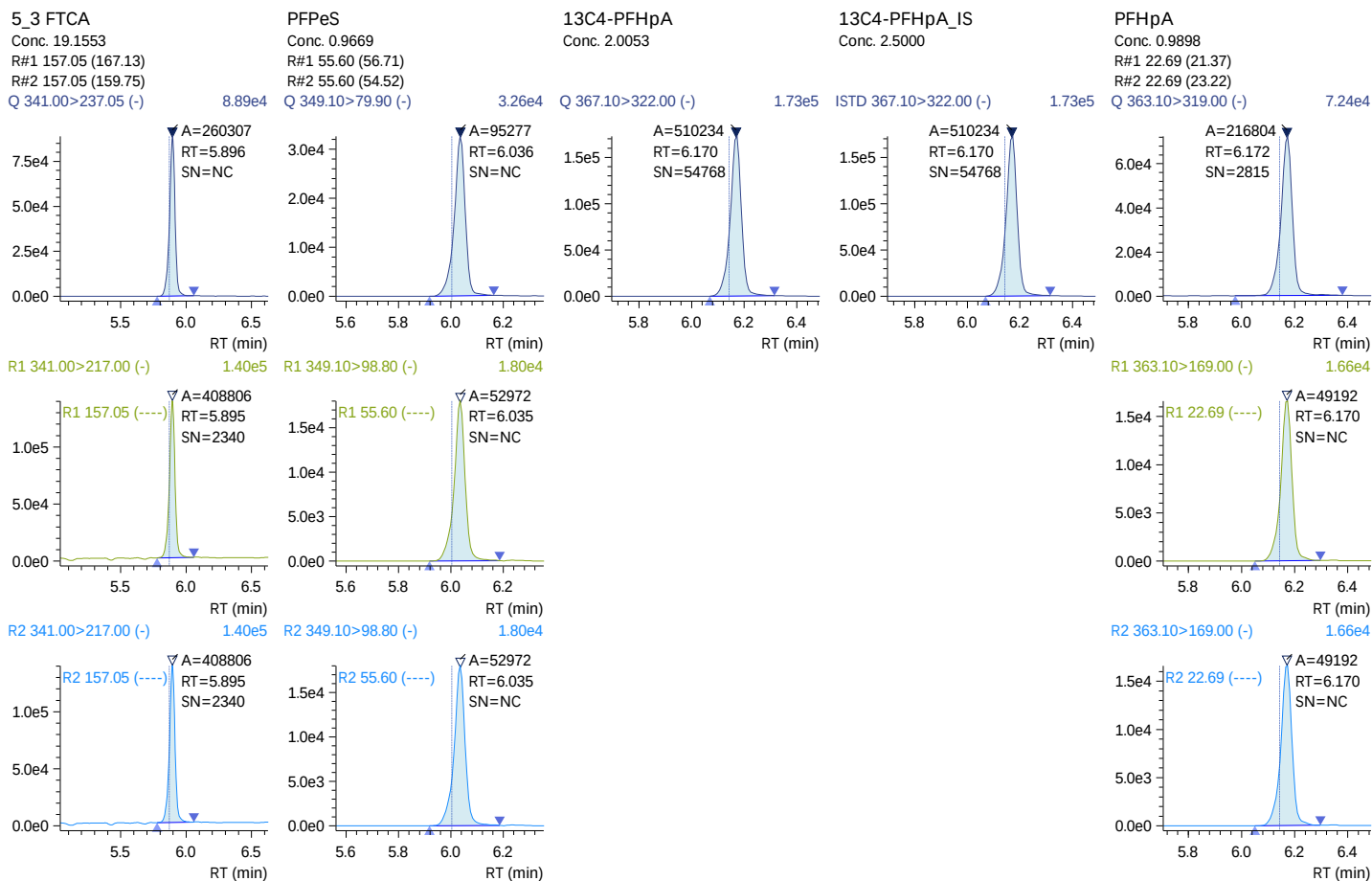


R2 284.90>184.90 (-)



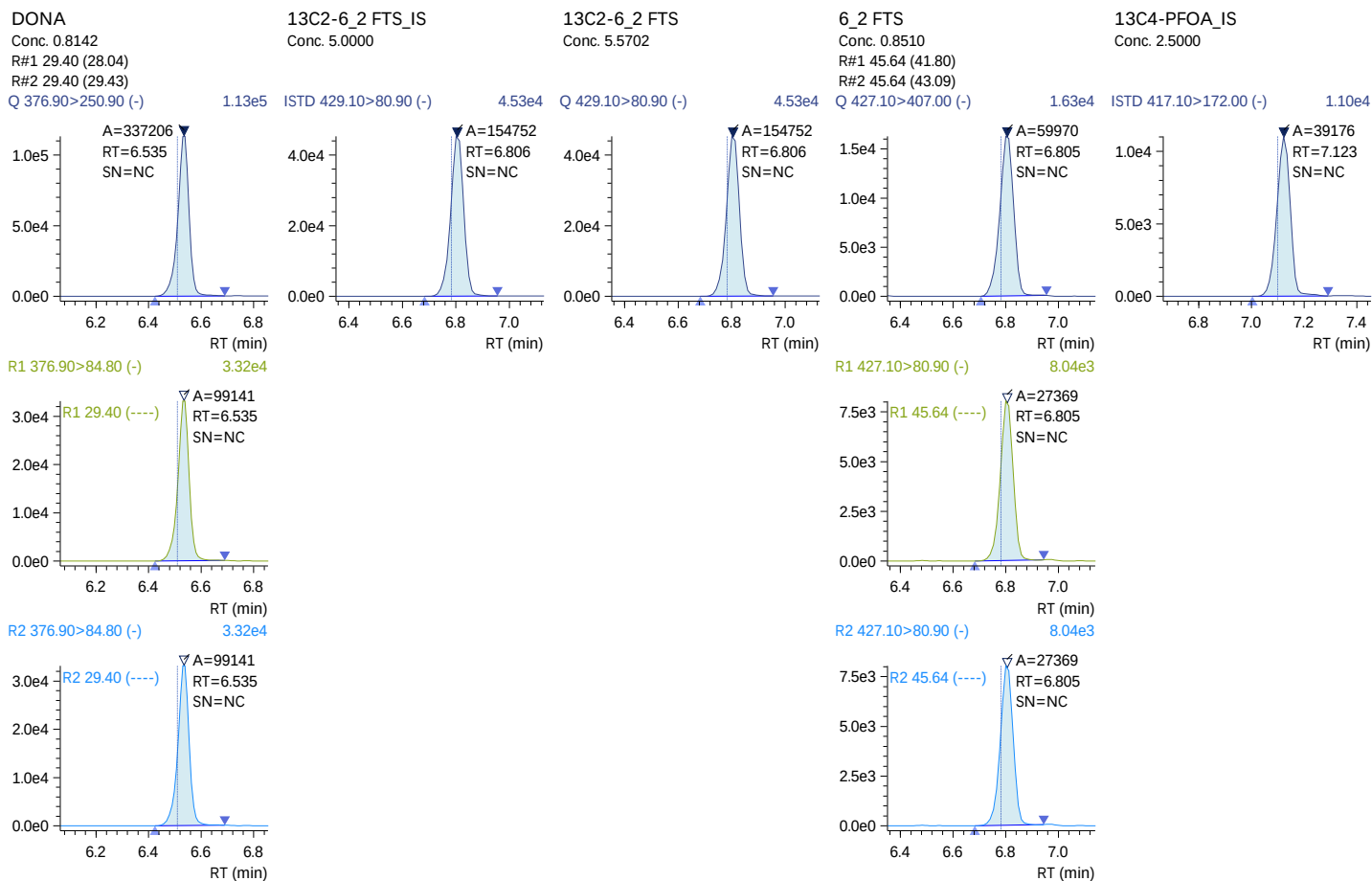


240119_027 (continued)





240119_027 (continued)





240119_027 (continued)

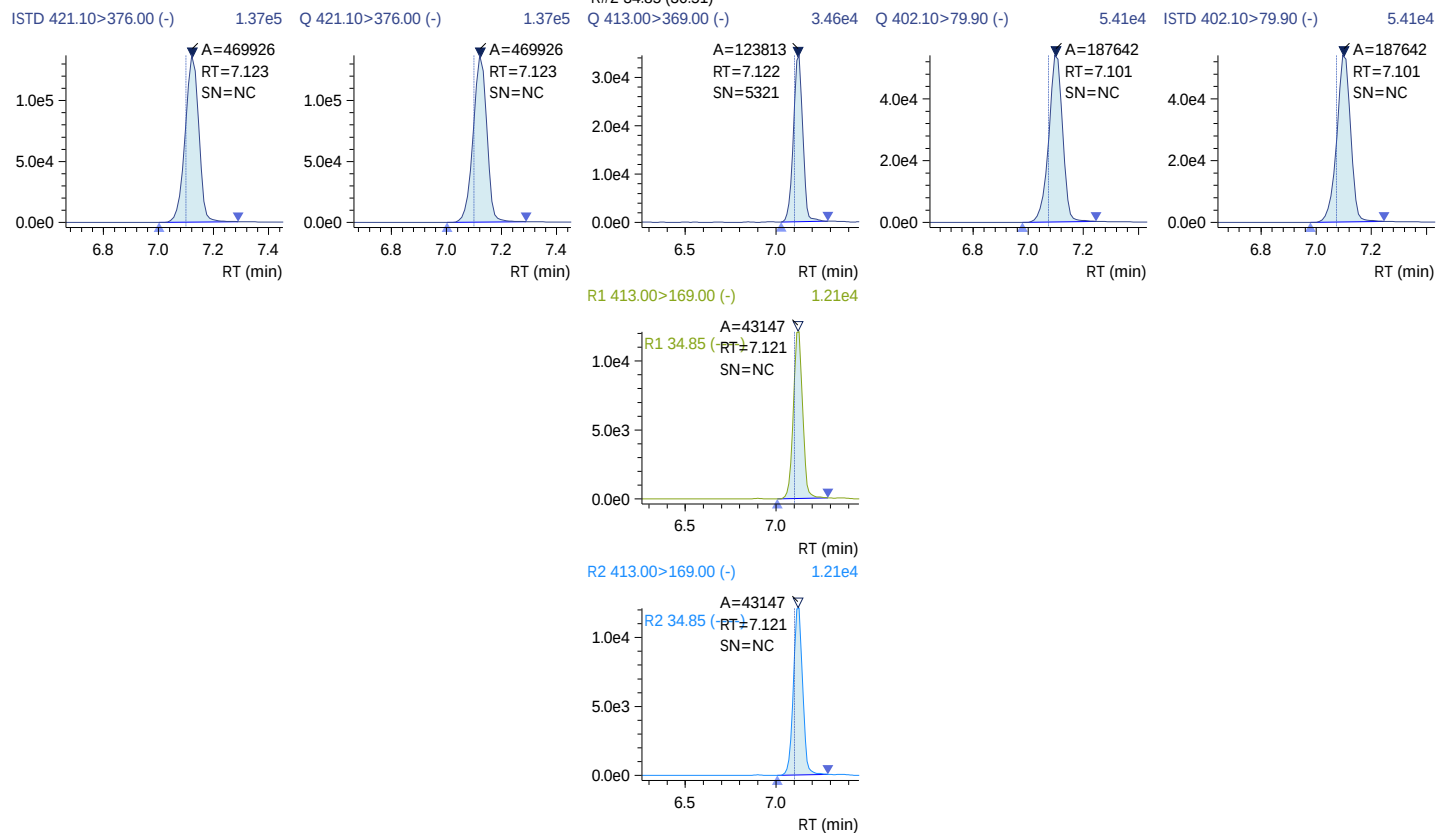
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.1461

PFOA
Conc. 0.9771
R#1 34.85 (29.05)
R#2 34.85 (30.51)

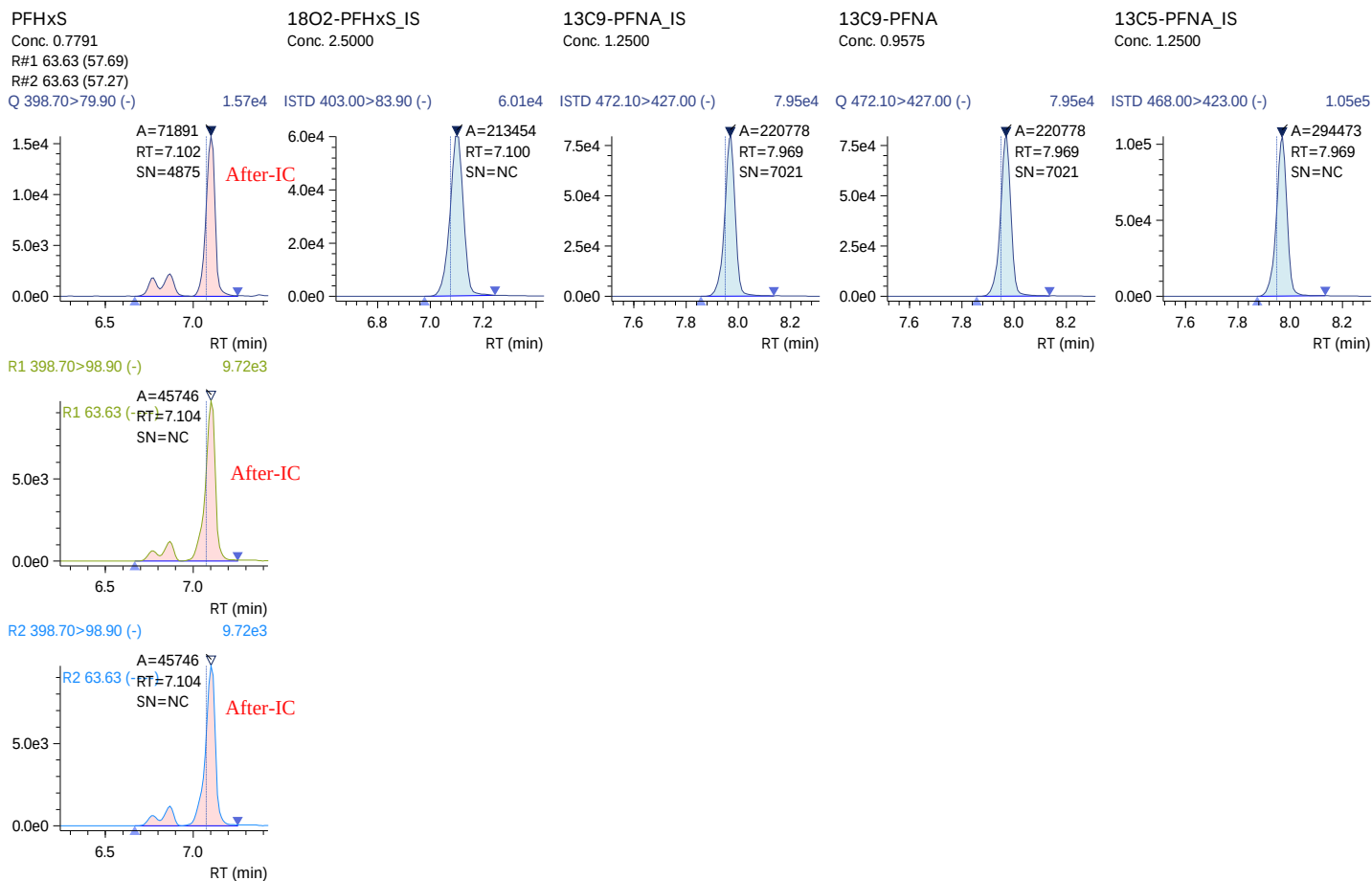
13C3-PFHxS
Conc. 2.0480

13C3-PFHxS_IS
Conc. 2.5000





240119_027 (continued)

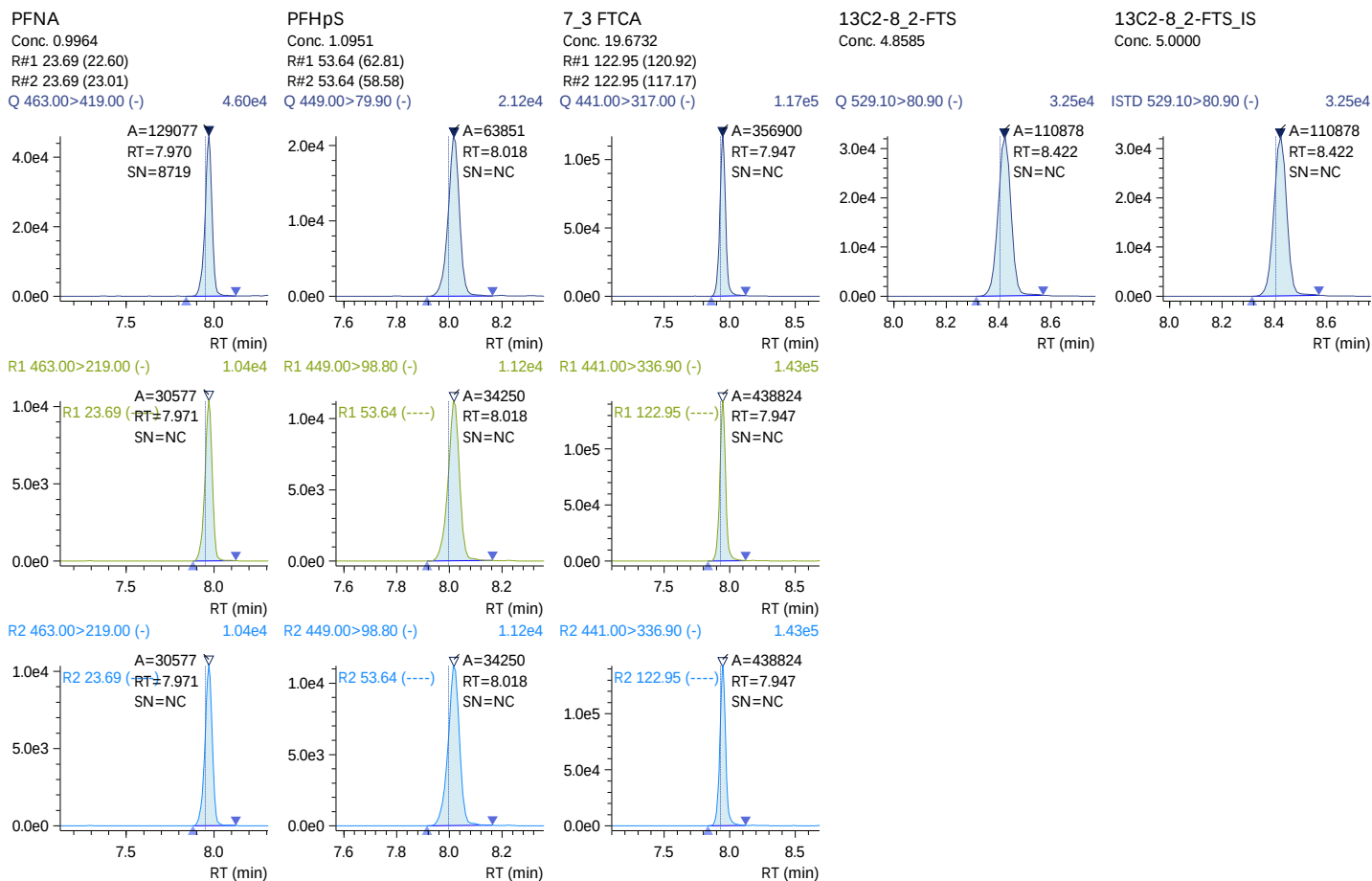


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_027 (continued)

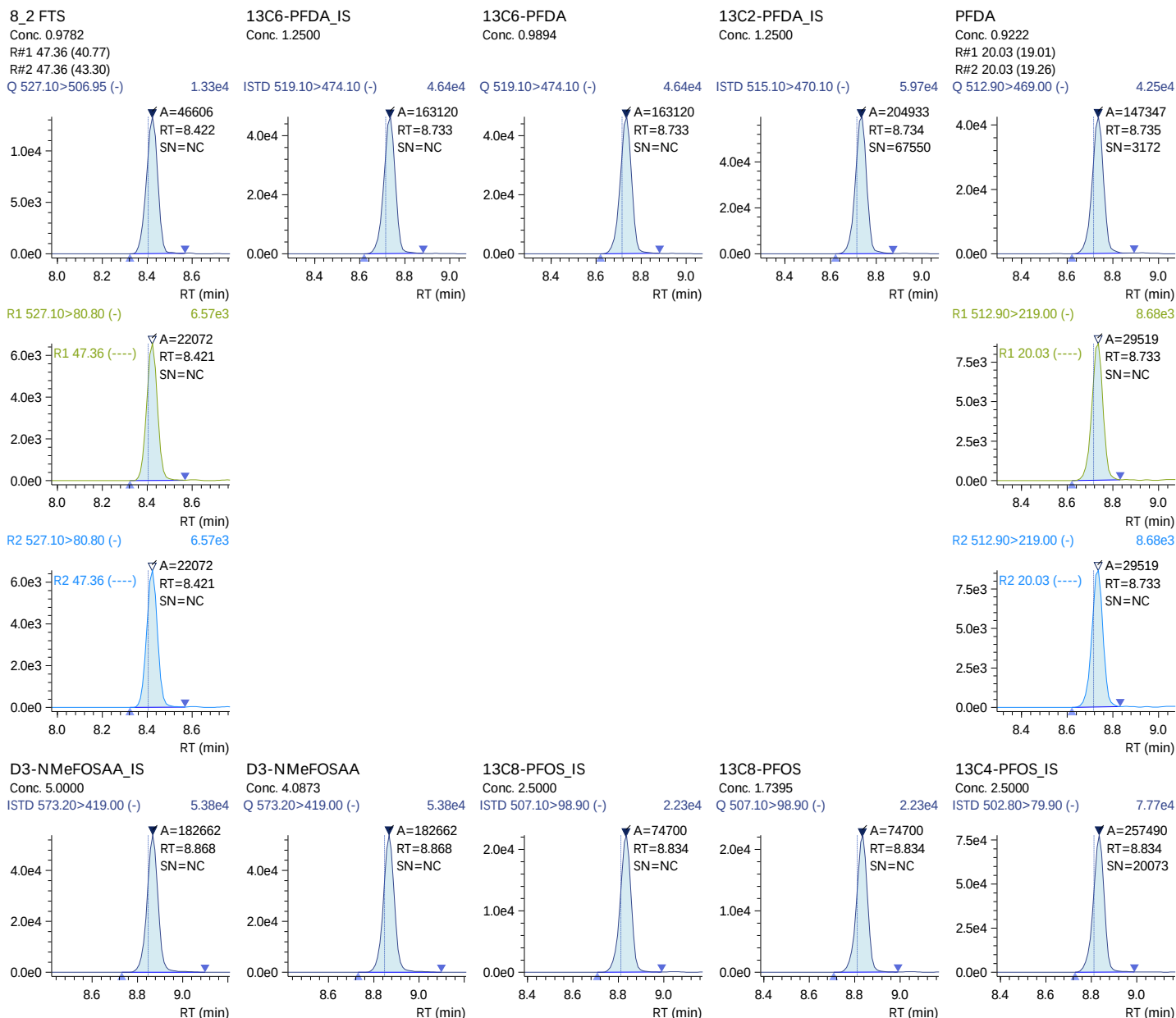


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_027 (continued)

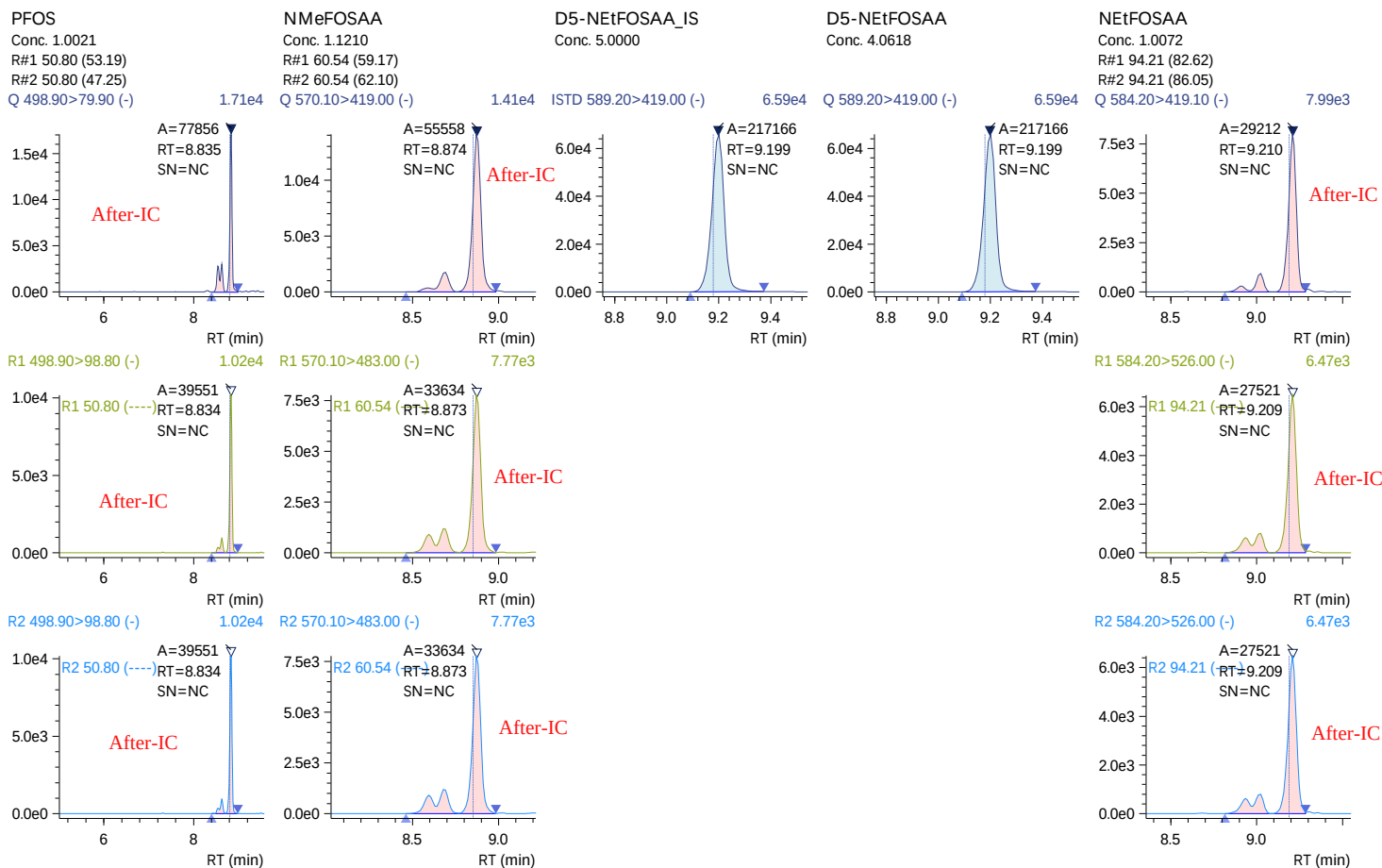


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_027 (continued)



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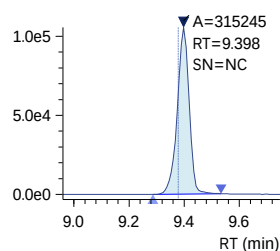
SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



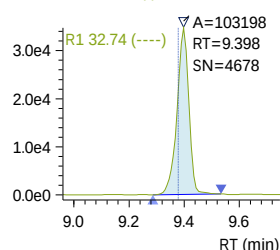
240119_027 (continued)

9-Cl-PF3ONS

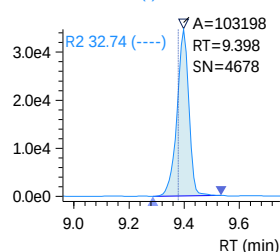
Conc. 0.7156
R#1 32.74 (31.76)
R#2 32.74 (31.74)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-) 3.47e4

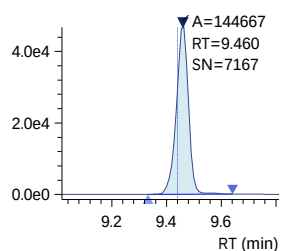


R2 532.80>353.00 (-) 3.47e4

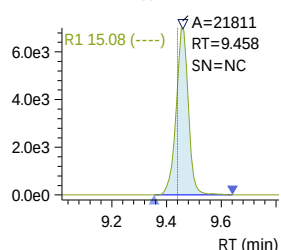


PFUnDA

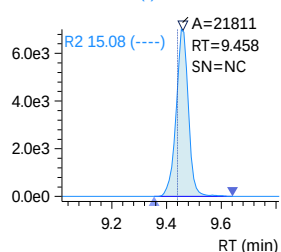
Conc. 0.9916
R#1 15.08 (12.31)
R#2 15.08 (13.26)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-) 7.01e3

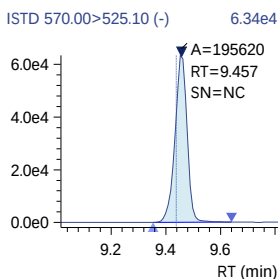


R2 563.10>269.10 (-) 7.01e3



13C7-PFUnDA_IS

Conc. 1.2500

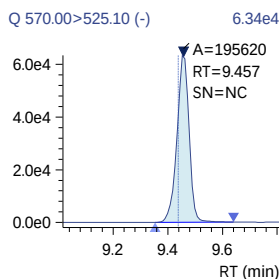


R1 570.00>525.10 (-) 6.34e4



13C7-PFUnDA

Conc. 0.9947

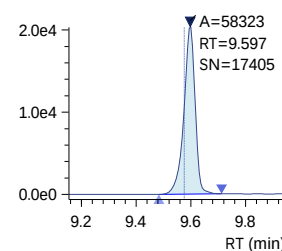


R1 570.00>525.10 (-) 6.34e4

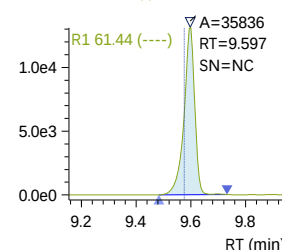


PFNS

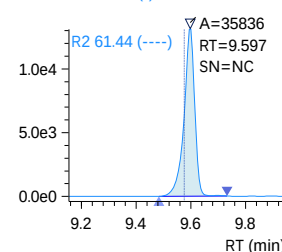
Conc. 1.0276
R#1 61.44 (63.31)
R#2 61.44 (62.49)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-) 1.31e4

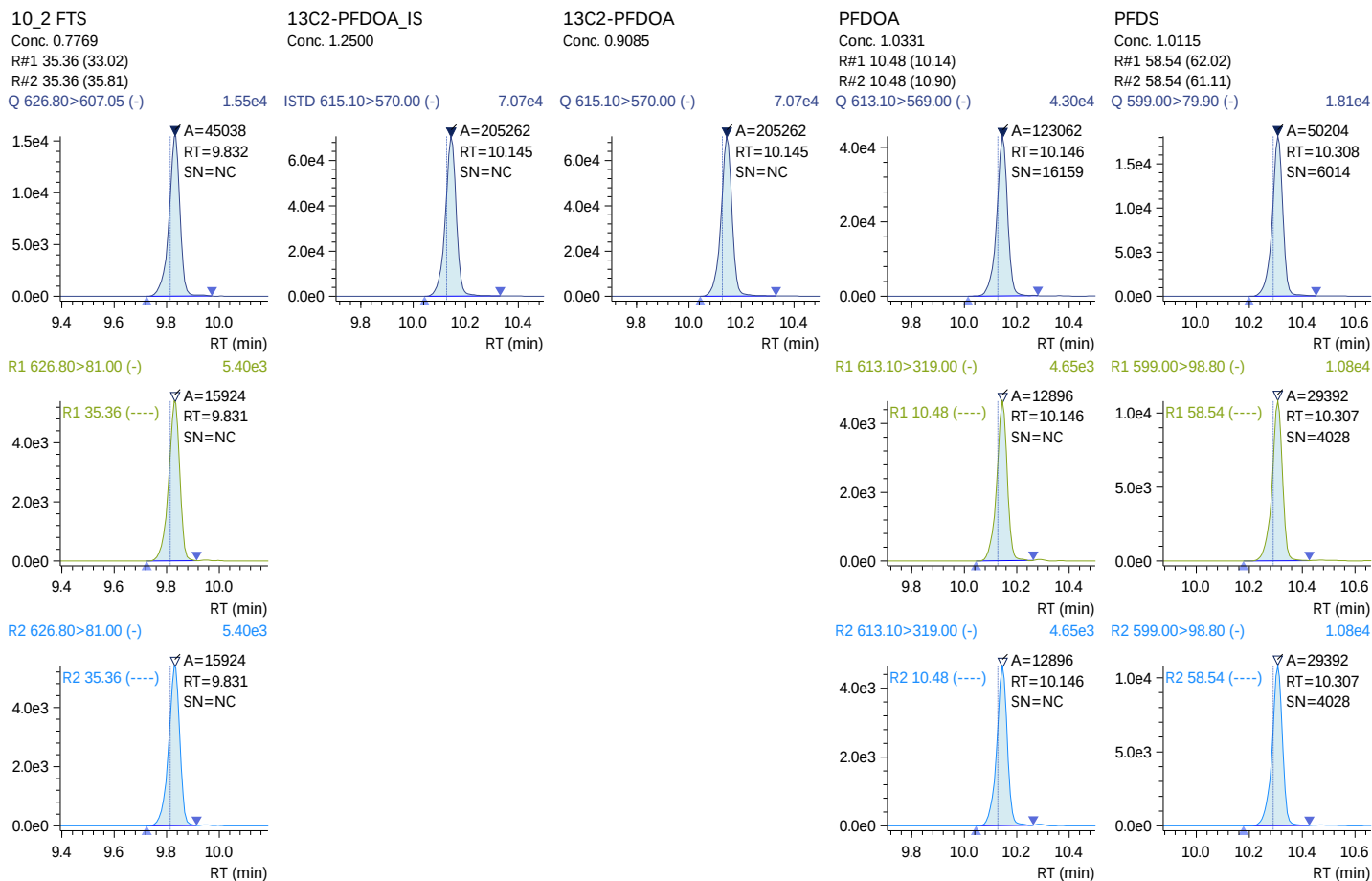


R2 548.80>98.80 (-) 1.31e4





240119_027 (continued)

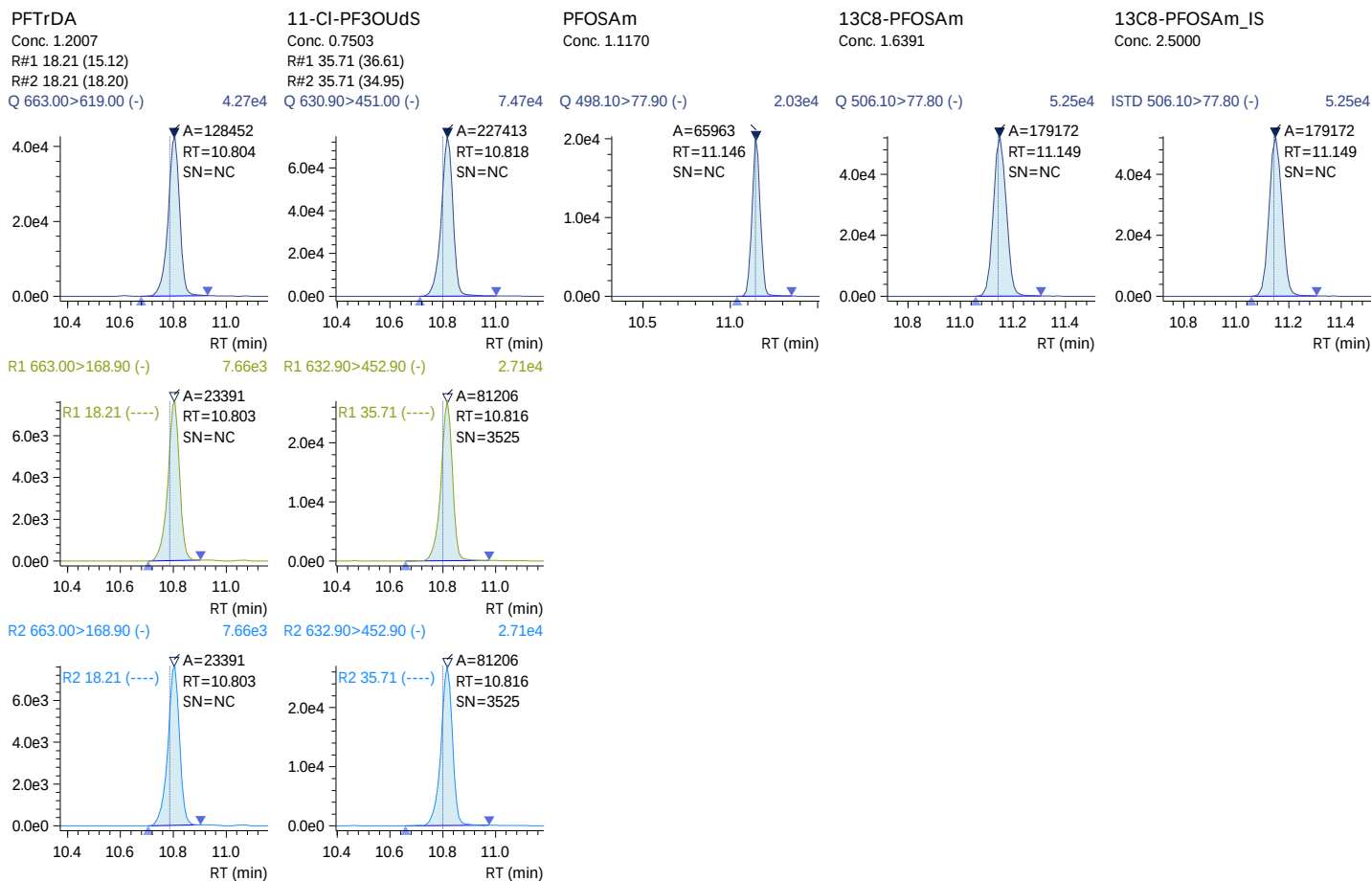


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_027 (continued)

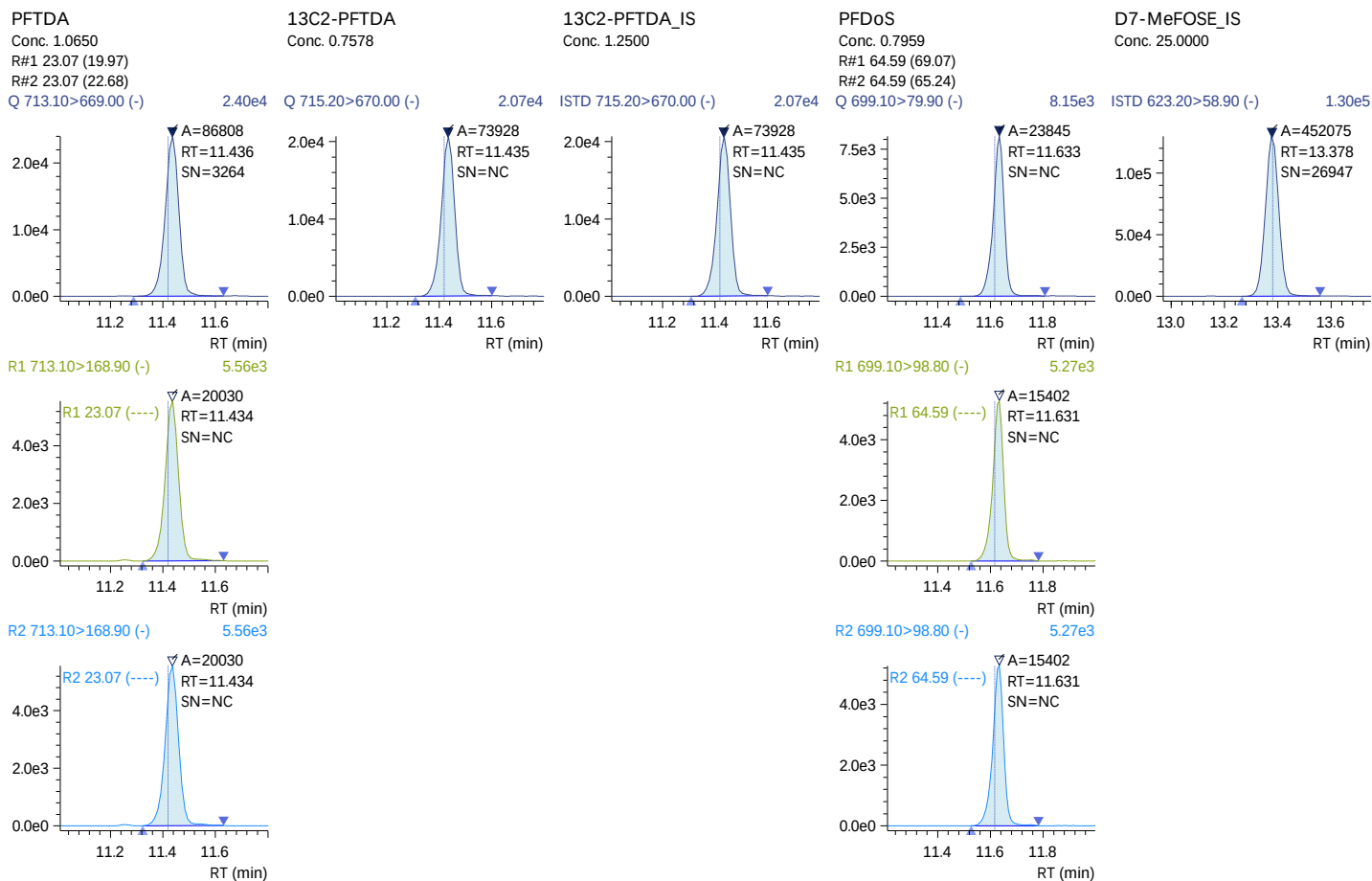


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_027 (continued)



J:\LCMS08\Data\240119_1633_B1\240119_1633_B1.dampl

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_027 (continued)

D7-MeFOSE
Conc. 16.7747

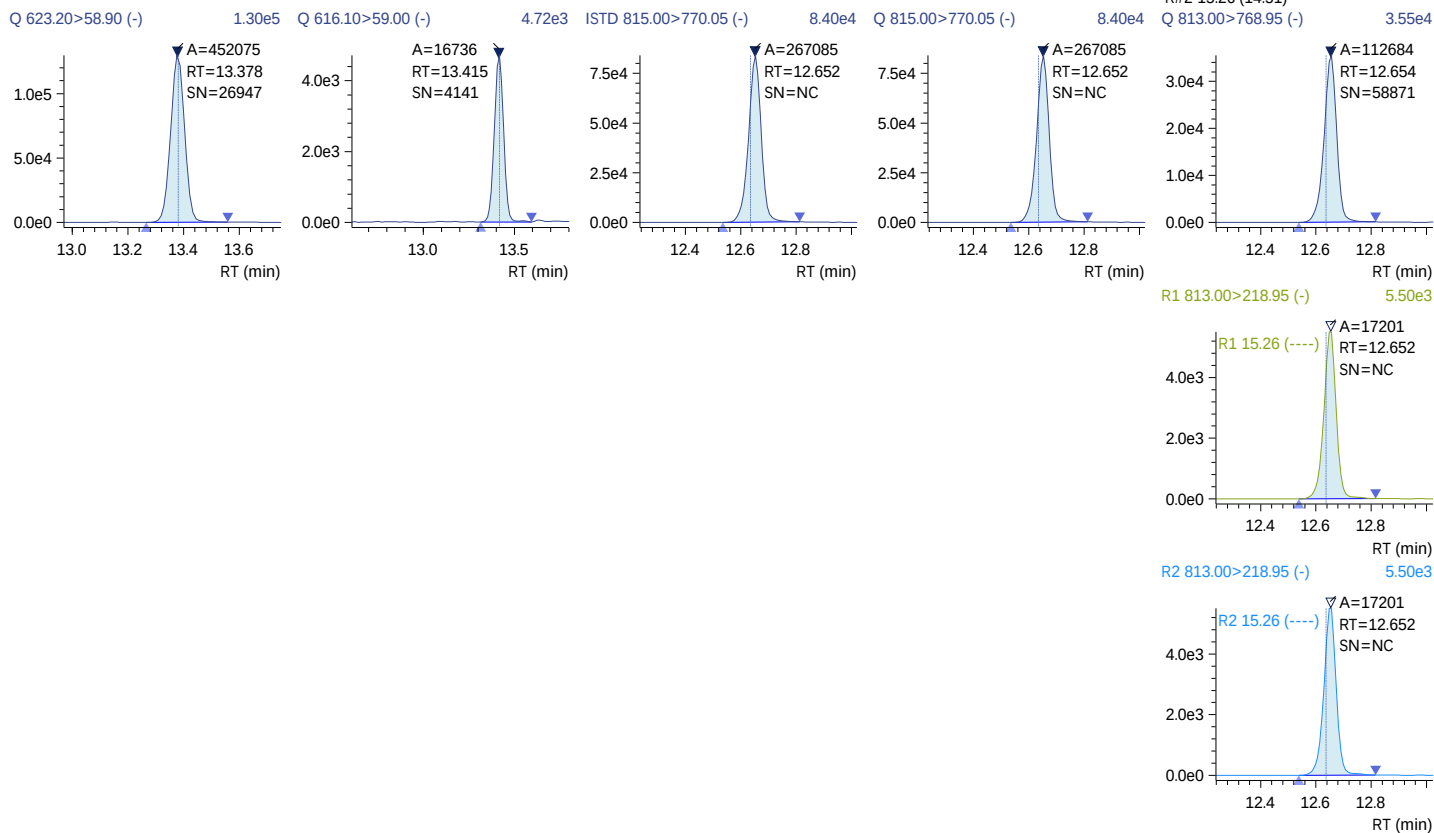
MeFOSE
Conc. 1.0080

13C2-PFHXA_IS
Conc. 2.5000

13C2-PFHXA
Conc. 1.4031

PFHXA

Conc. 1.0011
R#1 15.26 (11.64)
R#2 15.26 (14.51)





240119_027 (continued)

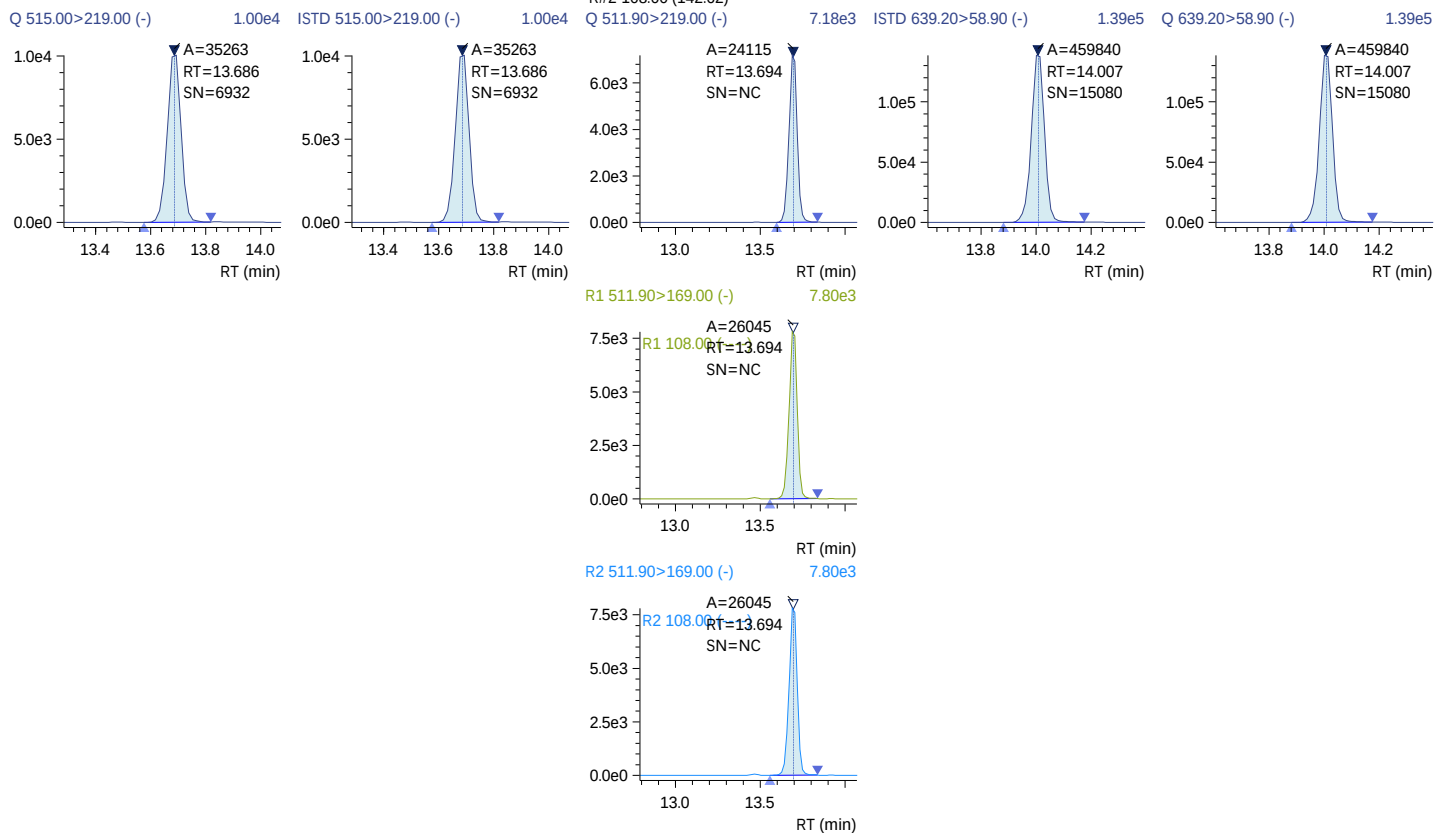
D3-MeFOSA
Conc. 1.6019

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. 0.9486
R#1 108.00 (149.05)
R#2 108.00 (142.62)

D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 16.7998





240119_027 (continued)

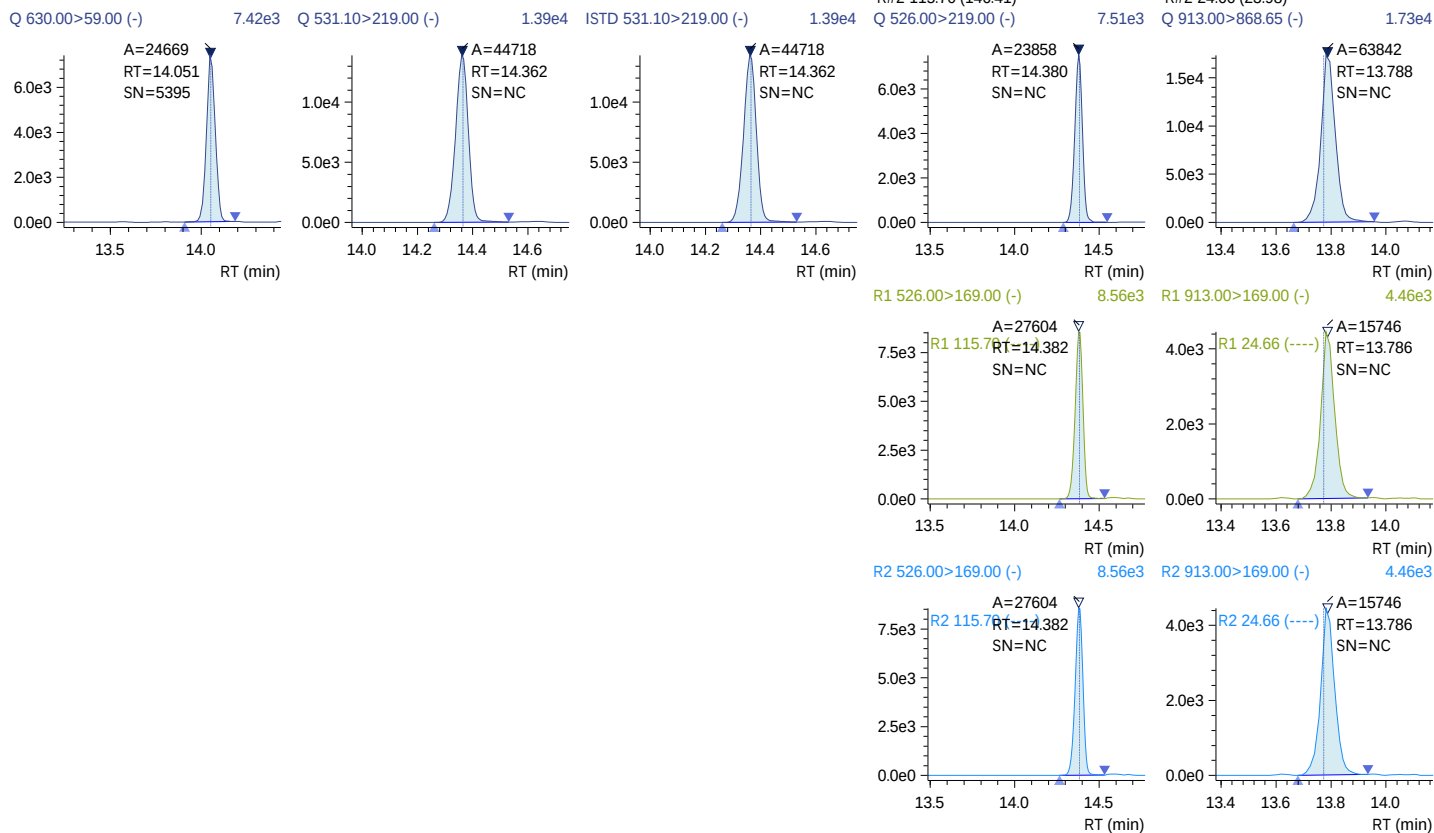
EtFOSE
Conc. 1.0196

D5-EtFOSAm
Conc. 1.5258

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. 0.9164
R#1 115.70 (154.69)
R#2 115.70 (146.41)

PFODA
Conc. 1.0570
R#1 24.66 (29.32)
R#2 24.66 (23.98)



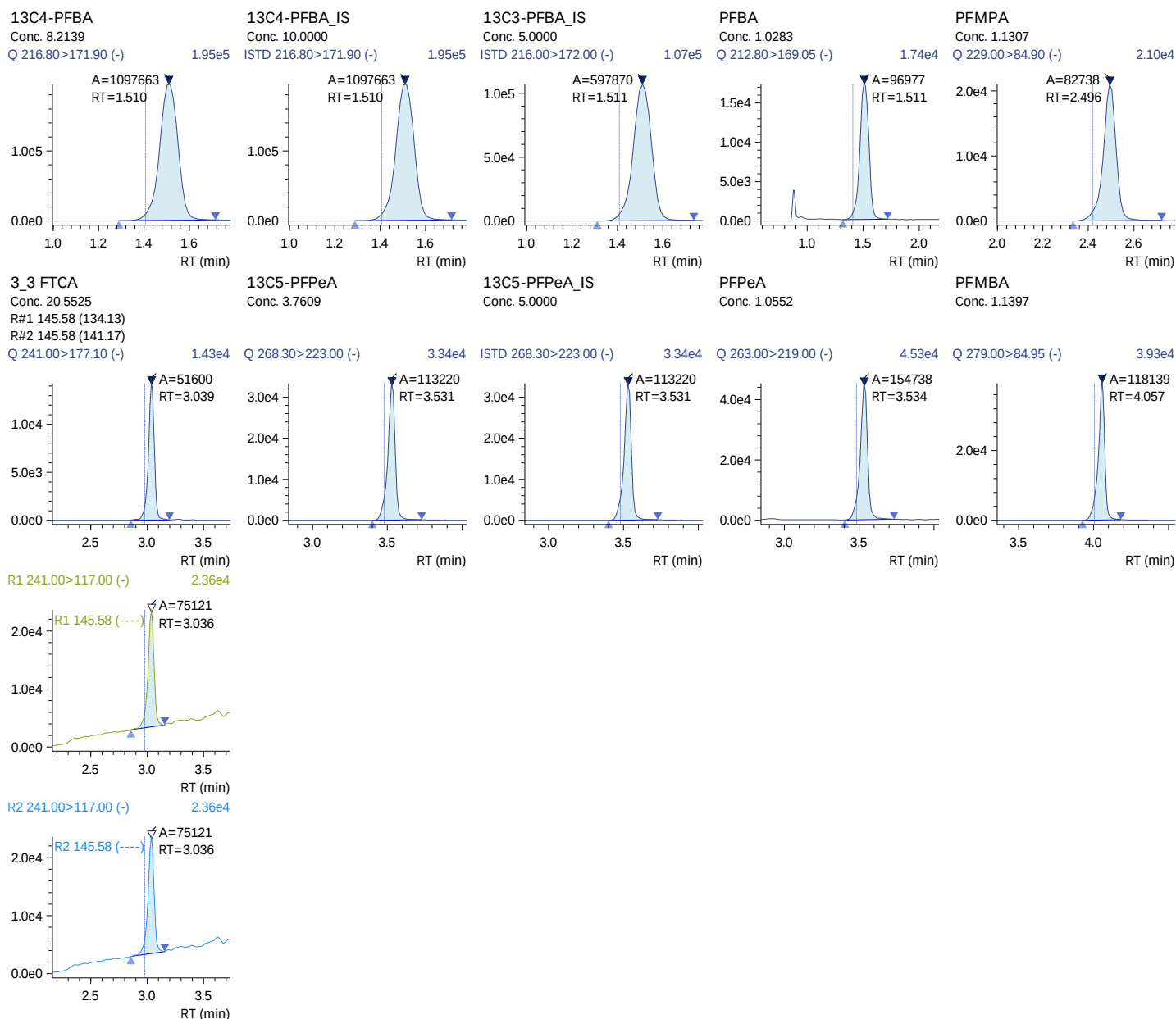
J:\LCMS08\Data\240119_1633_B1\240119_1633_B1.dampl

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_027

Sample ID: KQ2400355-02
Date Acquired: 1/19/2024 9:53:13 PM
Acquired by: System Administrator
Data File: 240119_027
Vial: 9 | Inj. Volume: 10.0000uL | Tray: 2





240119_027 (continued)

13C2-4_2 FTS
Conc. 5.8382

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. 0.9408
R#1 32.28 (34.14)
R#2 32.28 (29.06)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 0.8693
R#1 46.47 (47.53)
R#2 46.47 (46.72)

Q 329.10>80.90 (-)

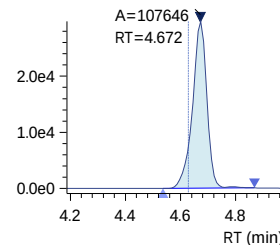
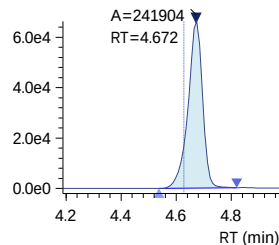
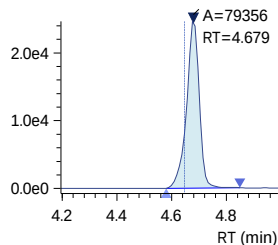
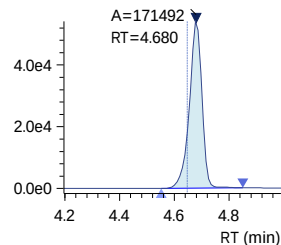
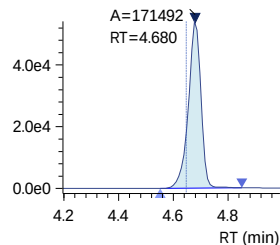
5.41e4 ISTD 329.10>80.90 (-)

5.41e4 Q 327.10>307.00 (-)

2.47e4 ISTD 302.10>79.90 (-)

6.63e4 Q 298.70>79.90 (-)

2.98e4

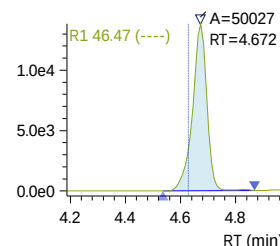
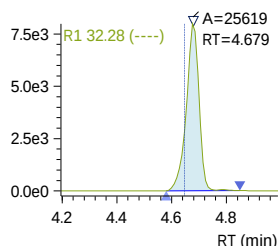


R1 327.10>80.90 (-)

7.98e3

R1 298.70>98.80 (-)

1.38e4

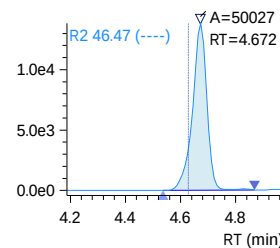
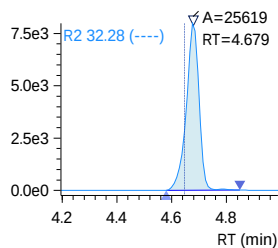


R2 327.10>80.90 (-)

7.98e3

R2 298.70>98.80 (-)

1.38e4





240119_027 (continued)

13C3-PFBS
 Conc. 1.9970

NFDHA
 Conc. 1.0924
 R#1 35.35 (37.88)
 R#2 35.35 (40.25)

13C5-PFHxA
 Conc. 1.8691

13C5-PFHxA_IS
 Conc. 2.5000

13C2-PFHxA_IS
 Conc. 2.5000

Q 302.10>79.90 (-)

6.63e4

Q 295.00>201.00 (-)

3.66e4

Q 318.00>273.00 (-)

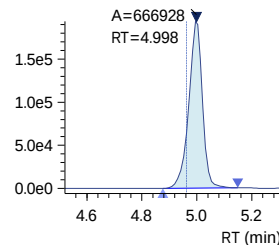
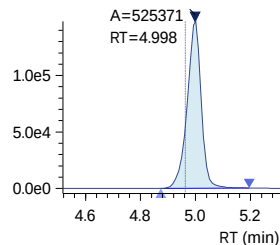
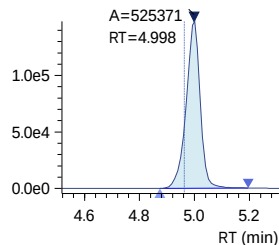
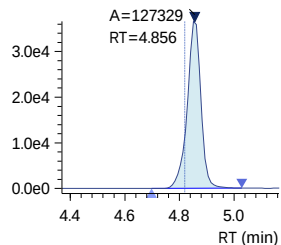
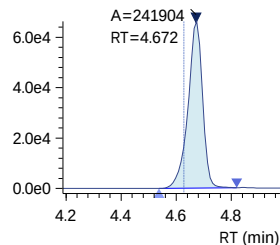
1.48e5

ISTD 318.00>273.00 (-)

1.48e5

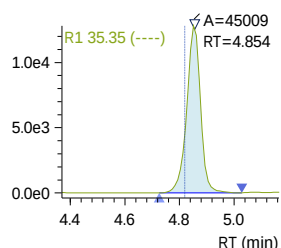
ISTD 315.10>270.00 (-)

1.94e5



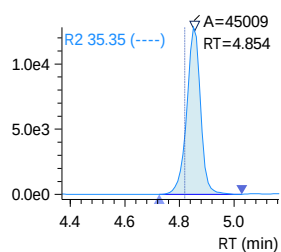
R1 295.00>84.90 (-)

1.28e4



R2 295.00>84.90 (-)

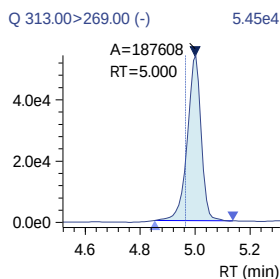
1.28e4



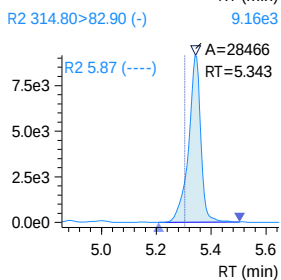
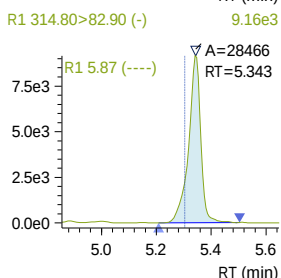
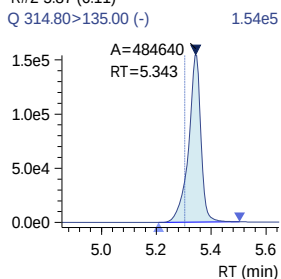


240119_027 (continued)

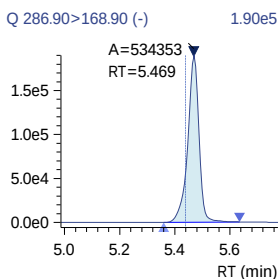
PFHxA
Conc. 1.0645



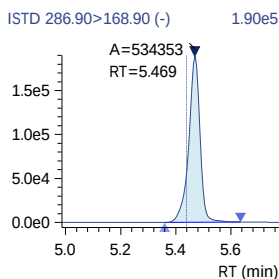
PFEESA
Conc. 0.8236
R#1 5.87 (5.88)
R#2 5.87 (6.11)



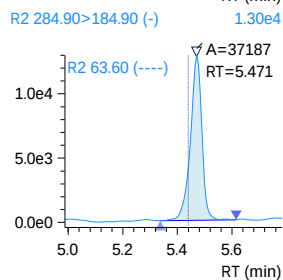
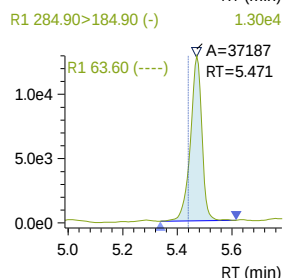
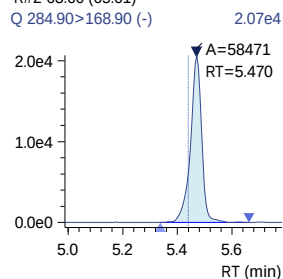
13C3-HFPO-DA
Conc. 8.1847



13C3-HFPO-DA_IS
Conc. 10.0000

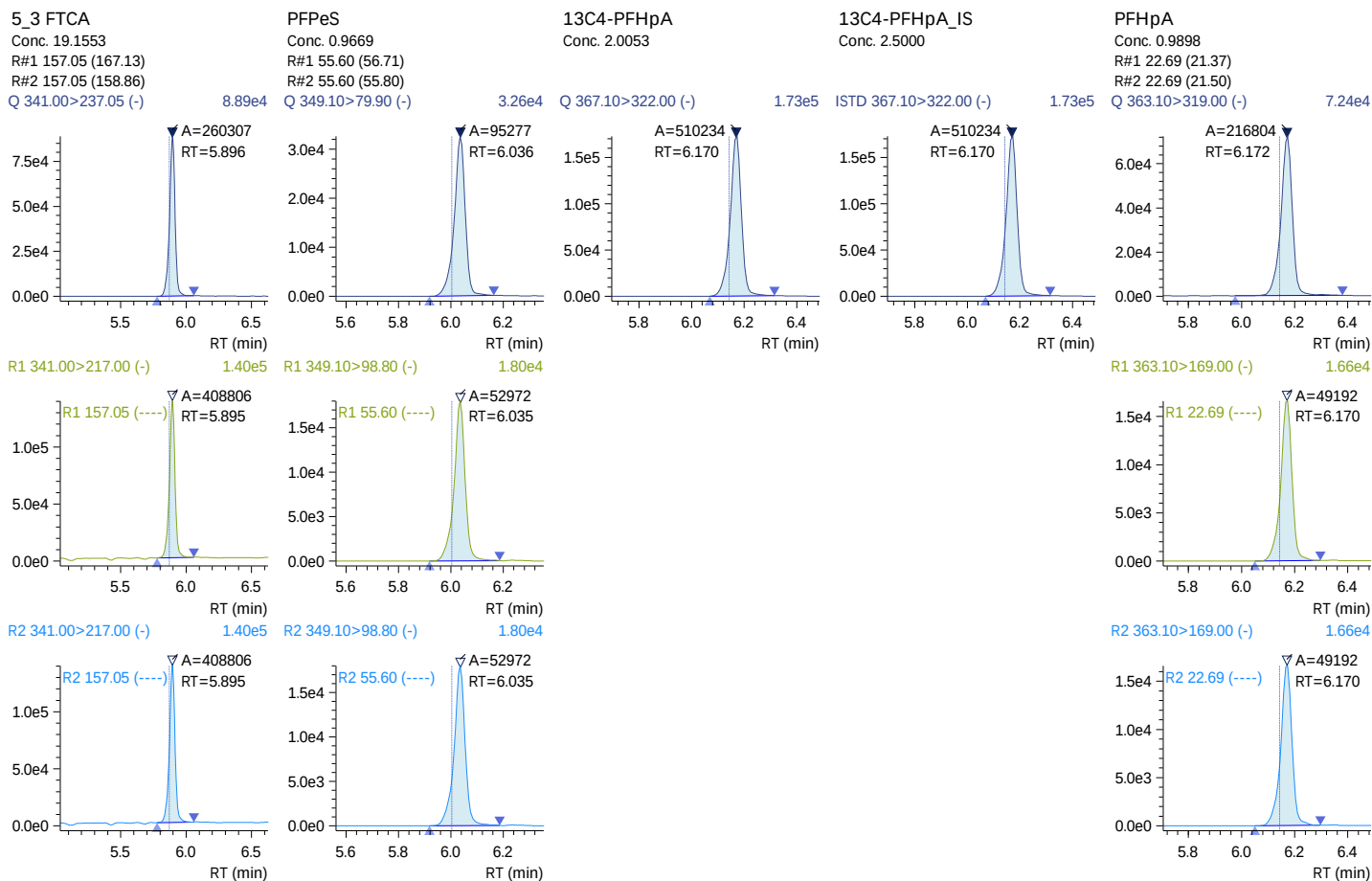


HFPO-DA
Conc. 0.9908
R#1 63.60 (63.80)
R#2 63.60 (65.61)



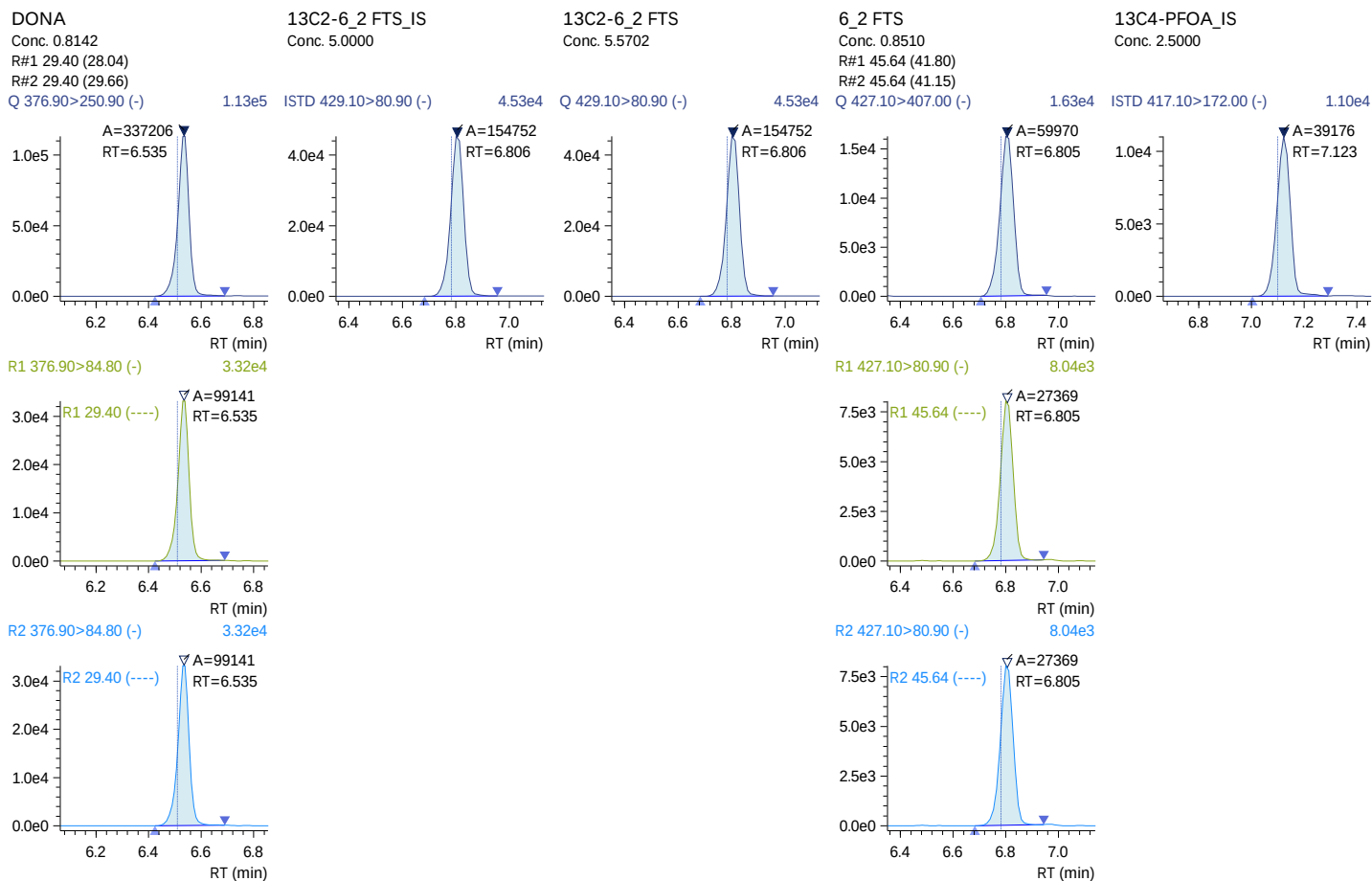


240119_027 (continued)





240119_027 (continued)





240119_027 (continued)

13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.1461

PFOA
Conc. 0.9771
R#1 34.85 (29.05)
R#2 34.85 (31.89)

13C3-PFHxS
Conc. 2.0480

13C3-PFHxS_IS
Conc. 2.5000

ISTD 421.10>376.00 (-)

1.37e5

Q 421.10>376.00 (-)

1.37e5

Q 413.00>369.00 (-)

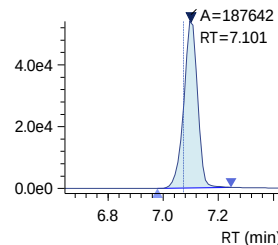
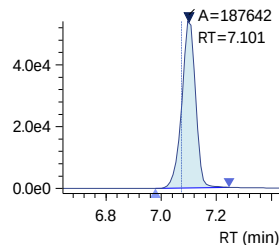
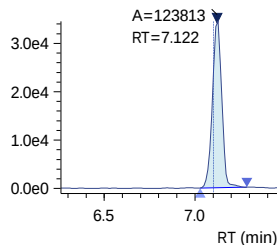
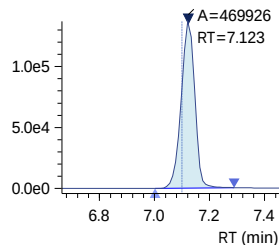
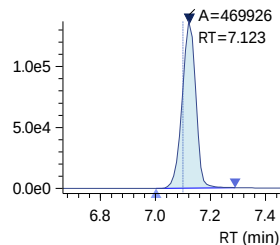
3.46e4

Q 402.10>79.90 (-)

5.41e4

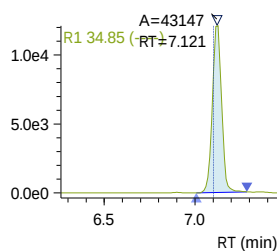
ISTD 402.10>79.90 (-)

5.41e4



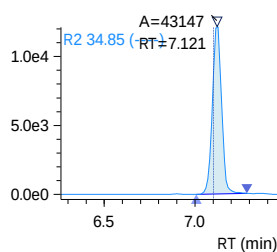
R1 413.00>169.00 (-)

1.21e4



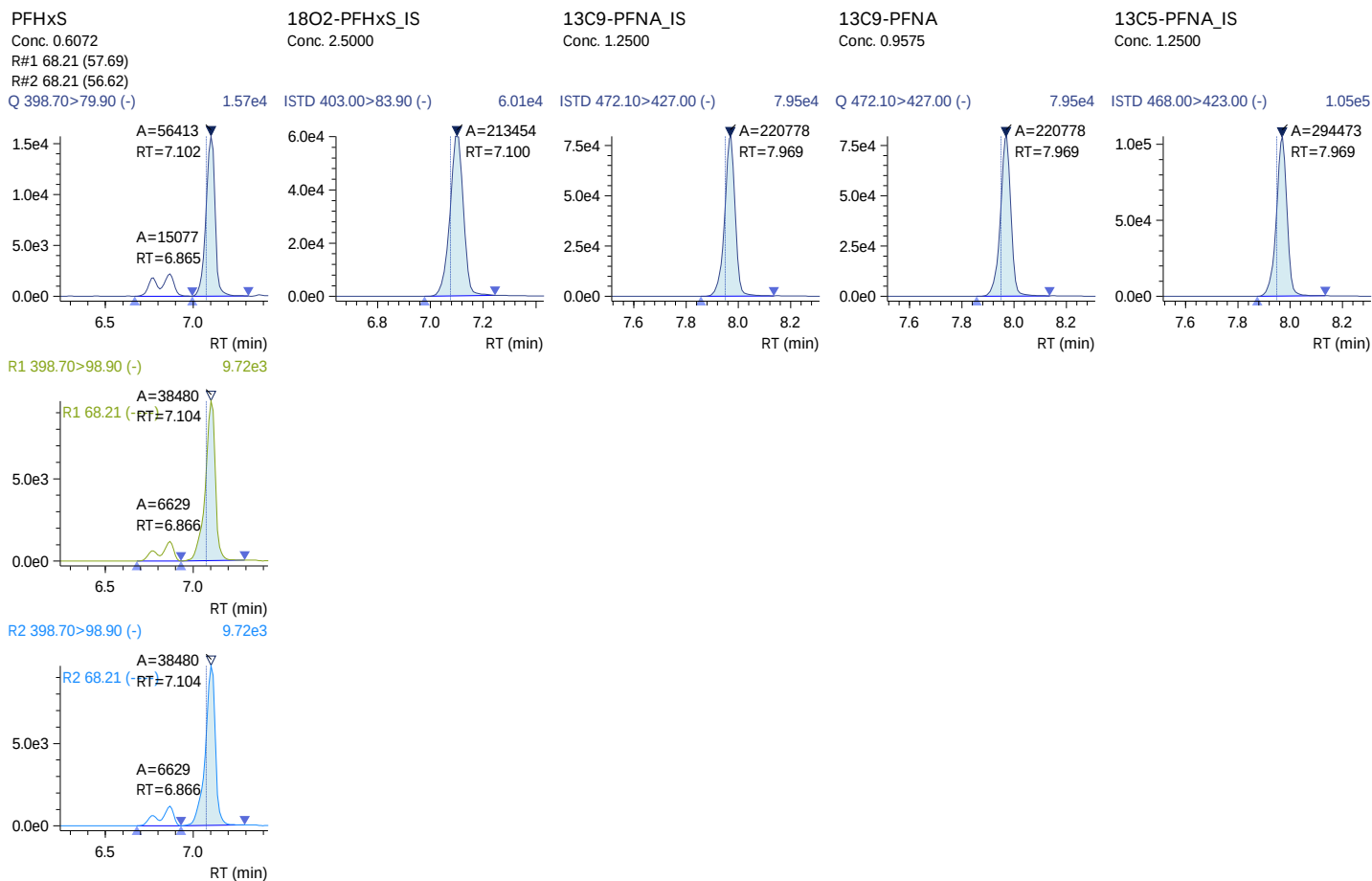
R2 413.00>169.00 (-)

1.21e4



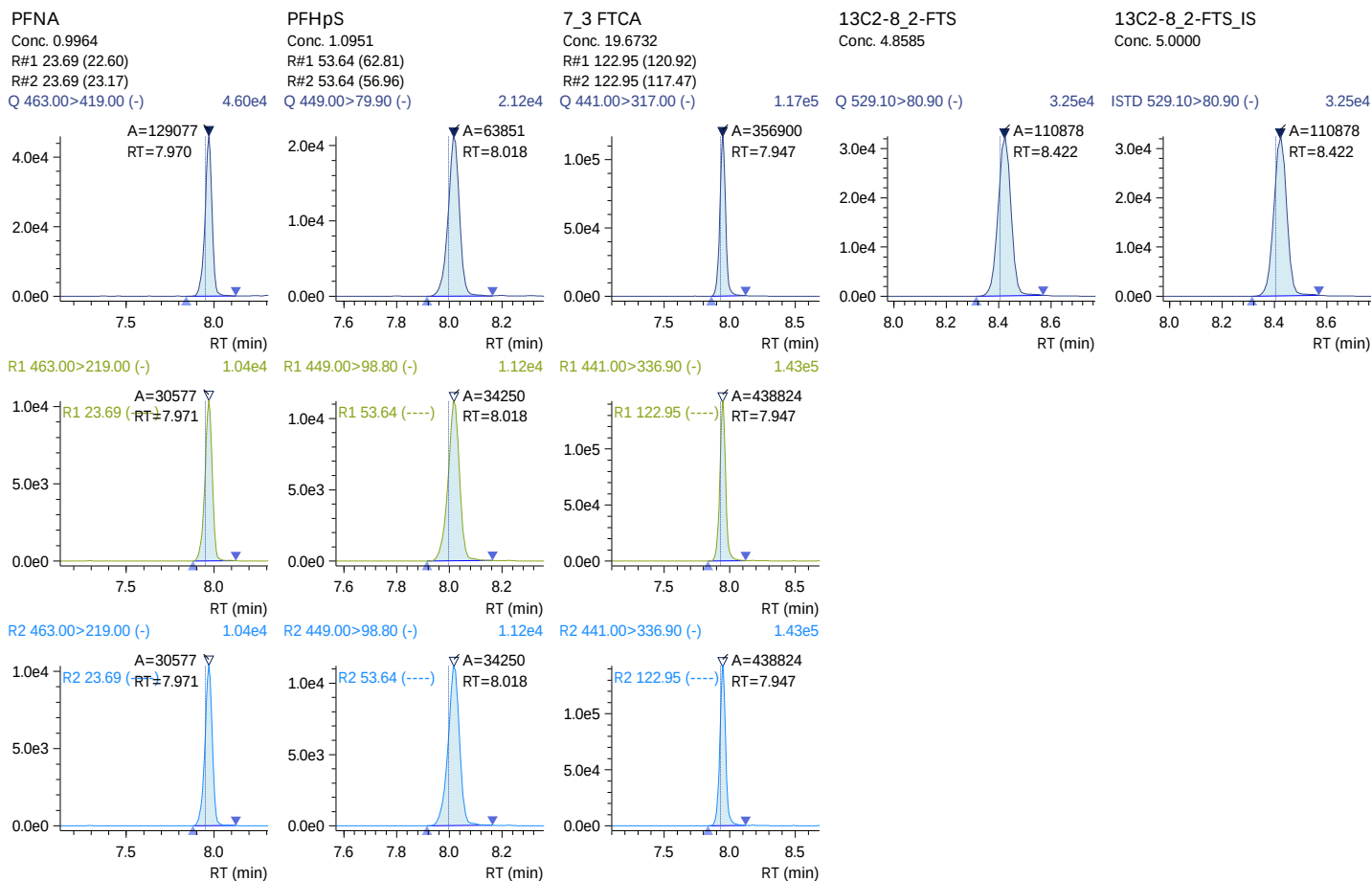


240119_027 (continued)



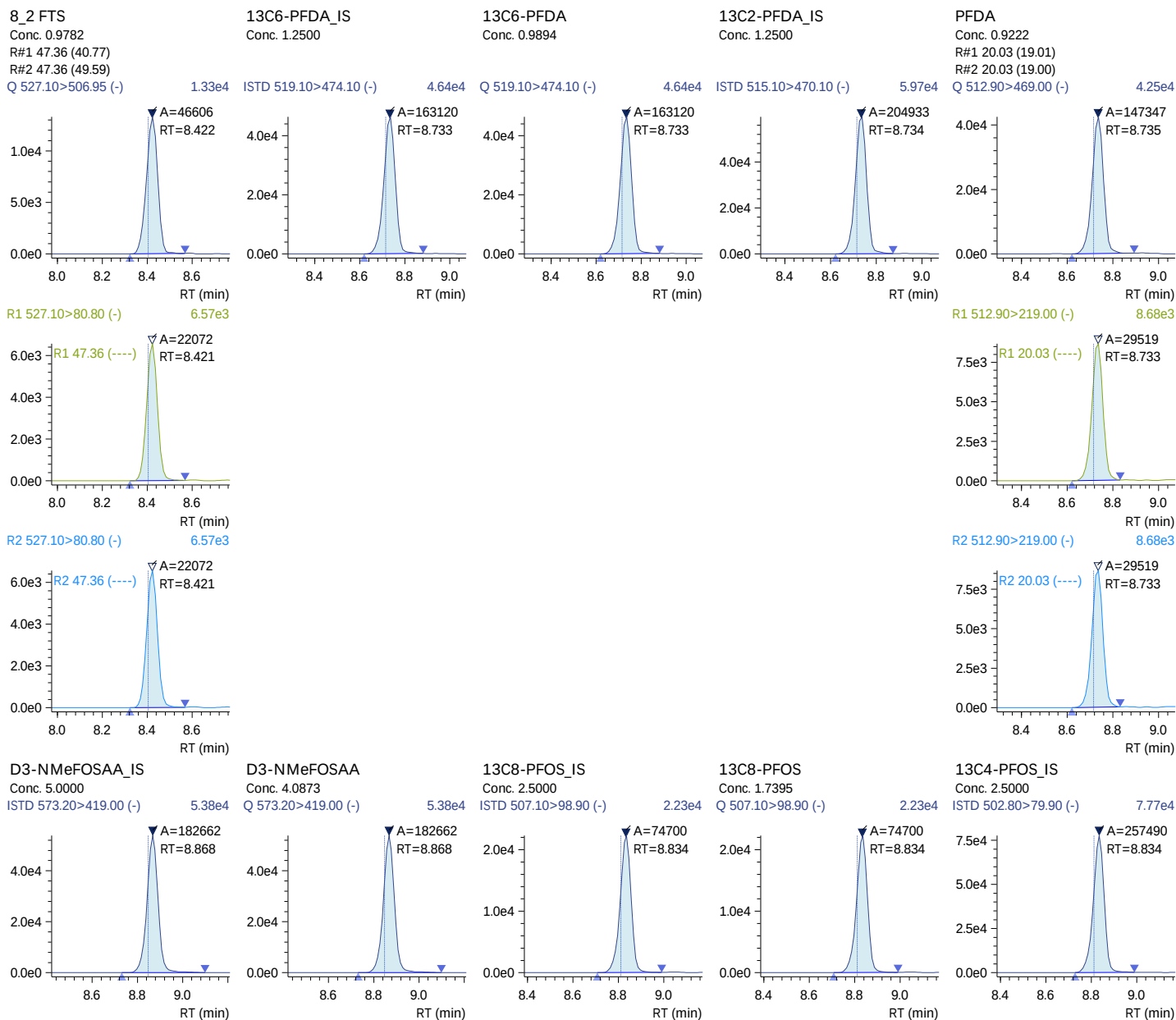


240119_027 (continued)



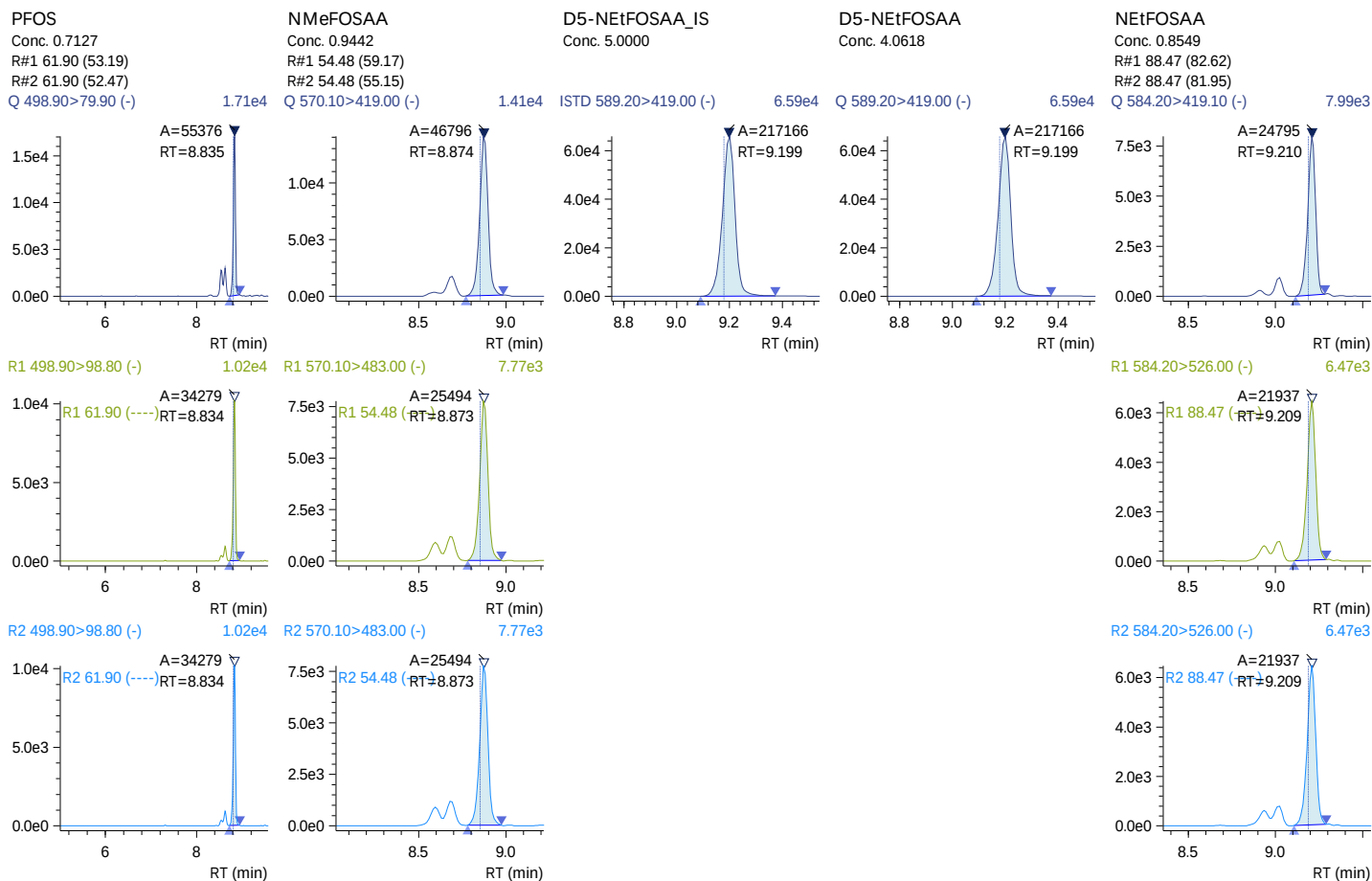


240119_027 (continued)





240119_027 (continued)

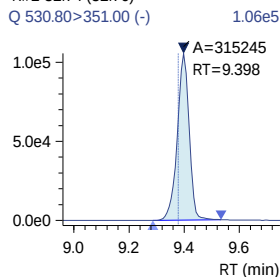




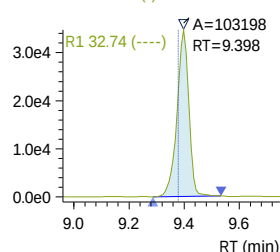
240119_027 (continued)

9-Cl-PF3ONS

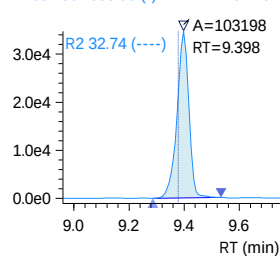
Conc. 0.7156
R#1 32.74 (31.76)
R#2 32.74 (32.76)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-)

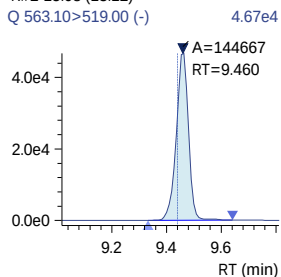


R2 532.80>353.00 (-)

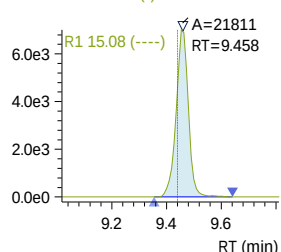


PFUnDA

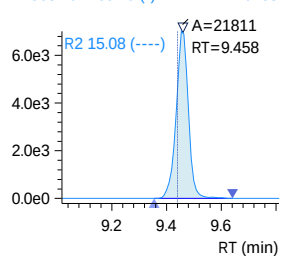
Conc. 0.9916
R#1 15.08 (12.31)
R#2 15.08 (13.12)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-)

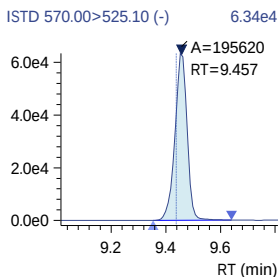


R2 563.10>269.10 (-)



13C7-PFUnDA_IS

Conc. 1.2500



ISTD 570.00>525.10 (-)

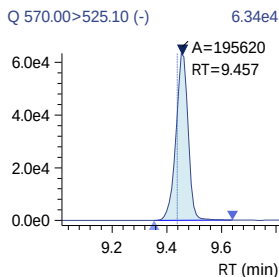


Q 570.00>525.10 (-)



13C7-PFUnDA

Conc. 0.9947



Q 570.00>525.10 (-)

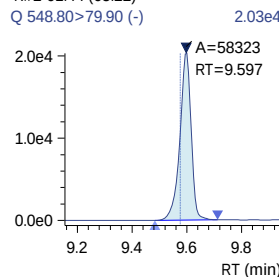


Q 570.00>525.10 (-)

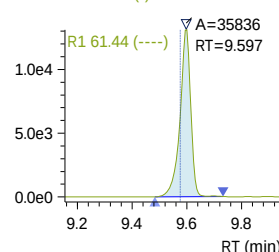


PFNS

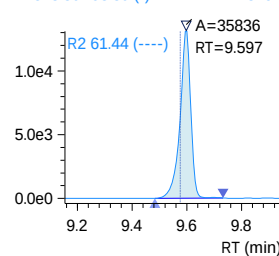
Conc. 1.0276
R#1 61.44 (63.31)
R#2 61.44 (65.22)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-)

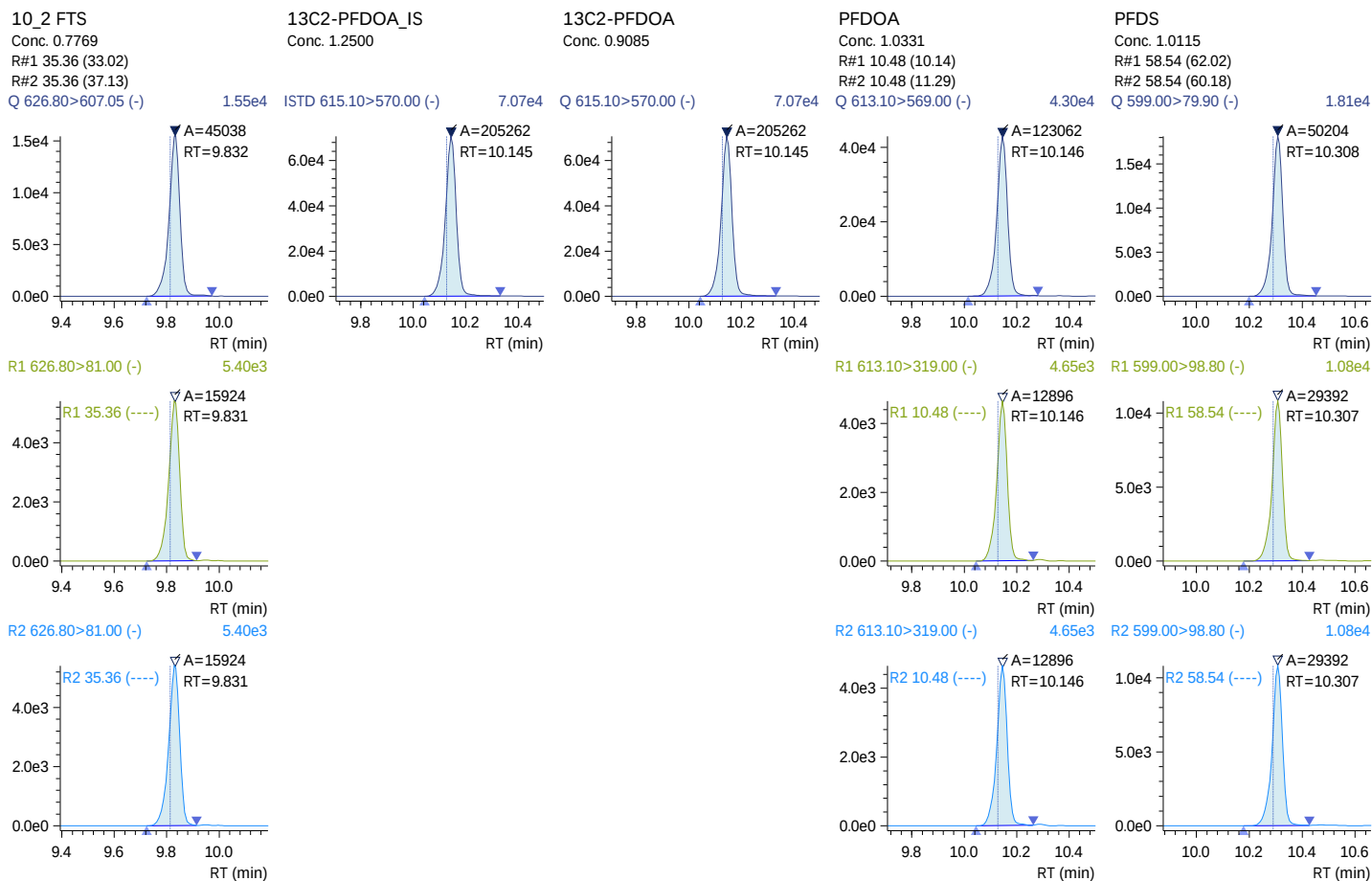


R2 548.80>98.80 (-)



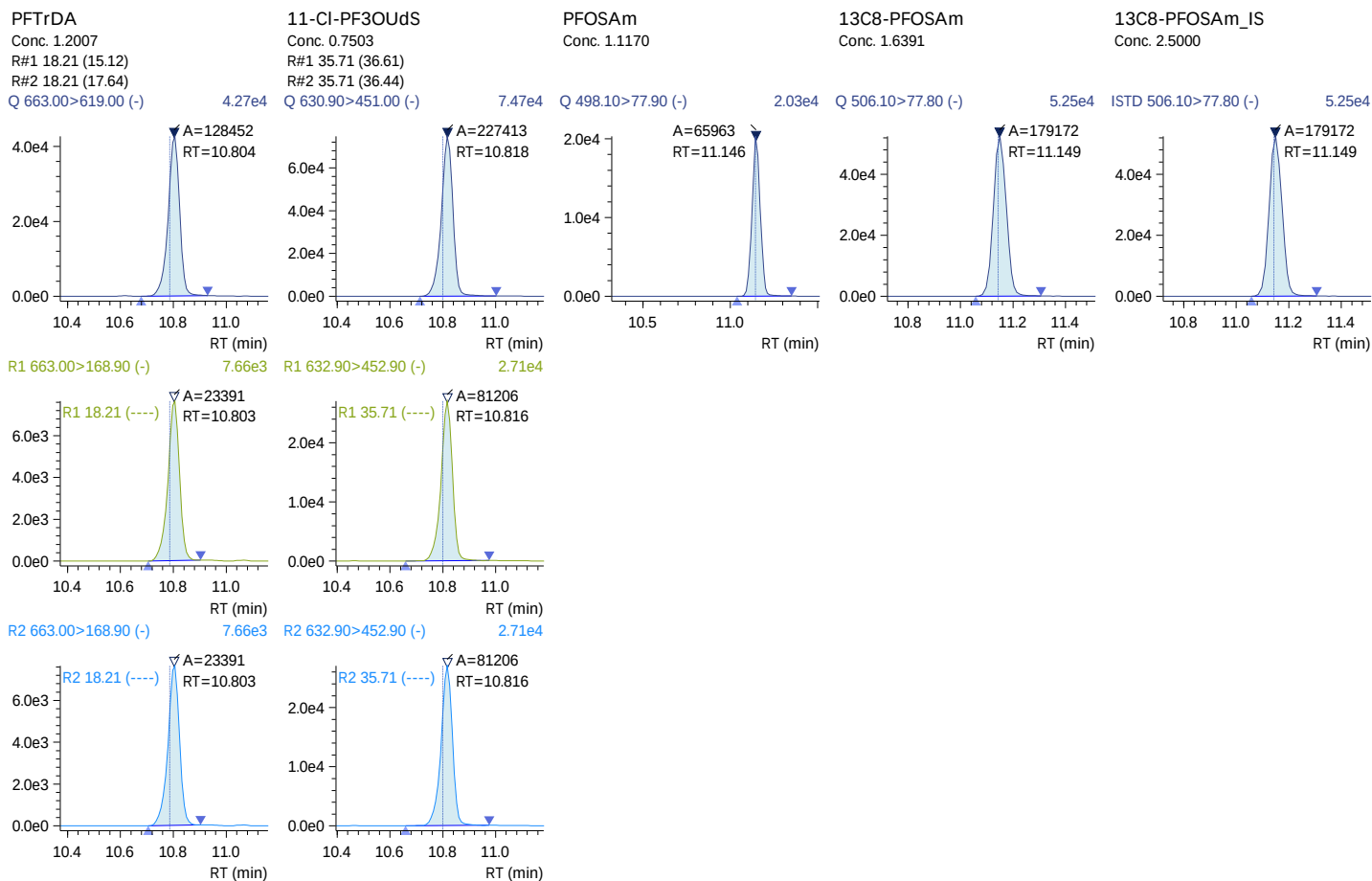


240119_027 (continued)



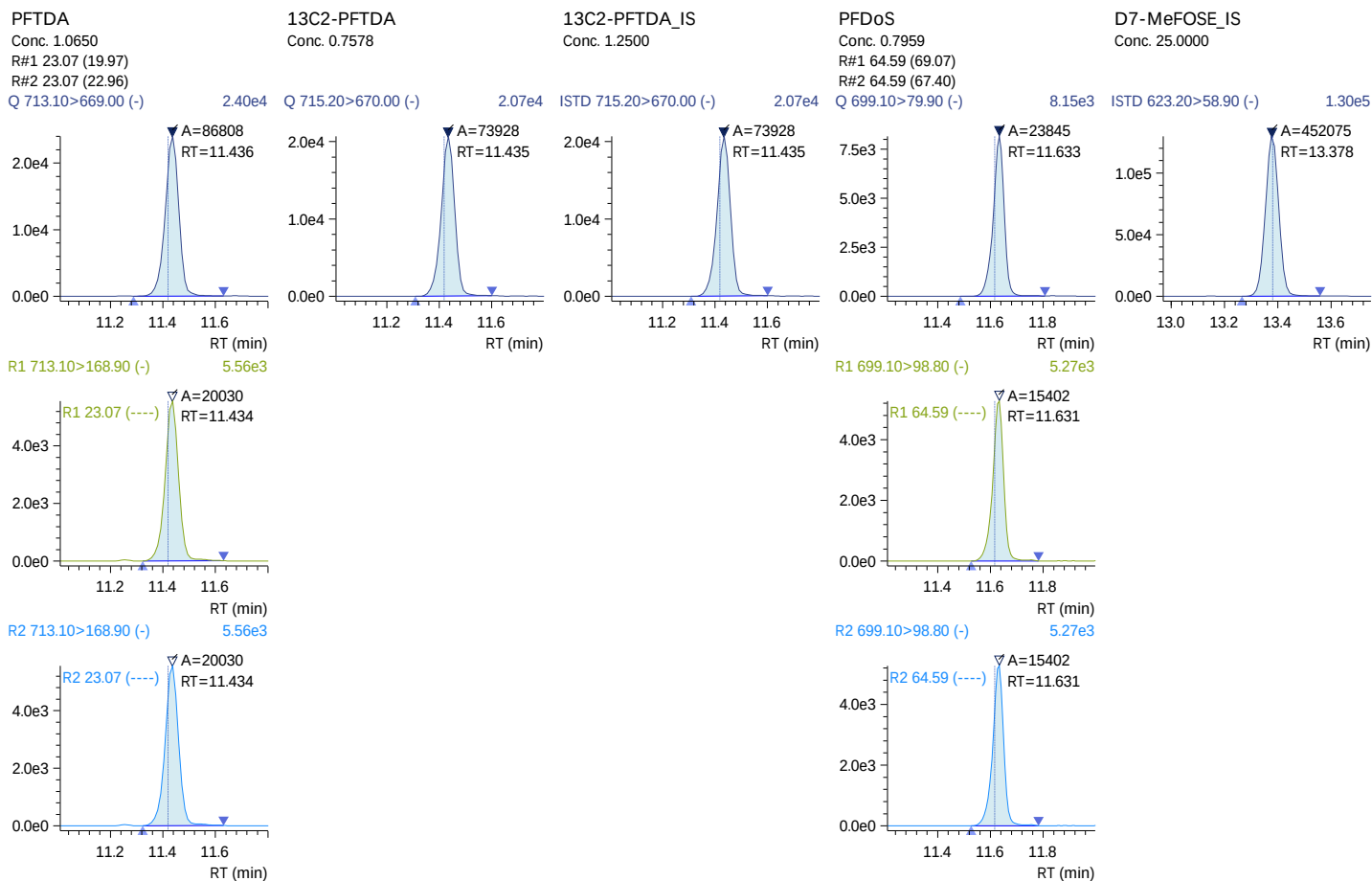


240119_027 (continued)





240119_027 (continued)





240119_027 (continued)

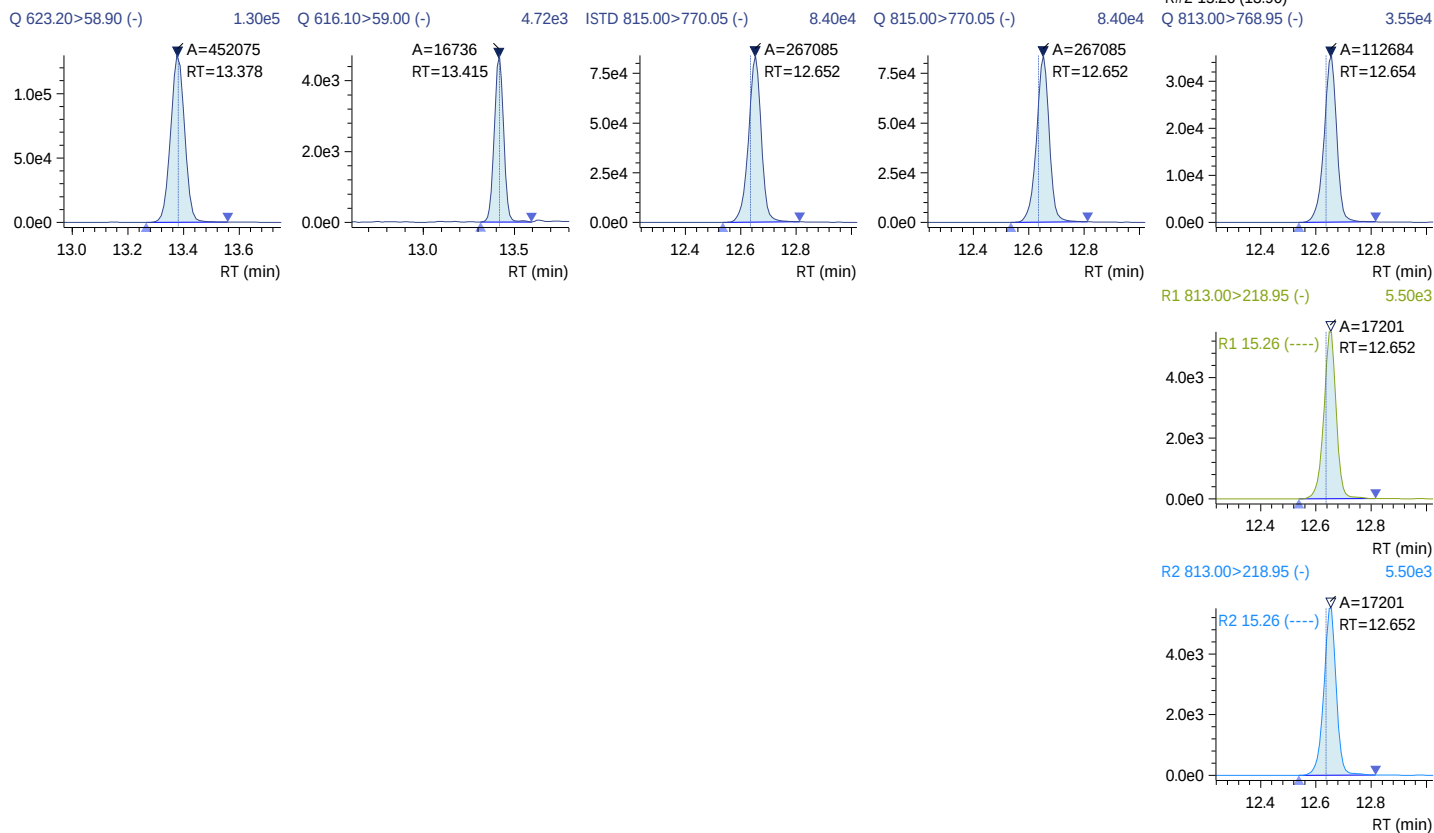
D7-MeFOSE
 Conc. 16.7747

MeFOSE
 Conc. 1.0080

13C2-PFHXA_IS
 Conc. 2.5000

13C2-PFHXA
 Conc. 1.4031

PFHXA
 Conc. 1.0011
 R#1 15.26 (11.64)
 R#2 15.26 (13.90)





240119_027 (continued)

D3-MeFOSA
Conc. 1.6019

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. 0.9486
R#1 108.00 (149.05)
R#2 108.00 (140.79)

D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 16.7998

Q 515.00>219.00 (-)

1.00e4

ISTD 515.00>219.00 (-)

1.00e4

Q 511.90>219.00 (-)

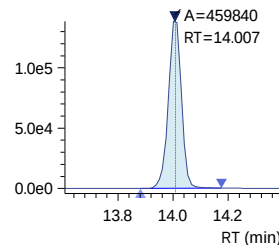
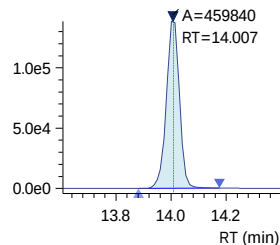
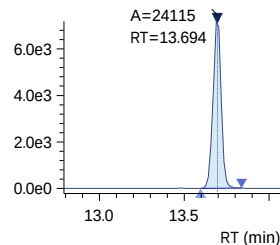
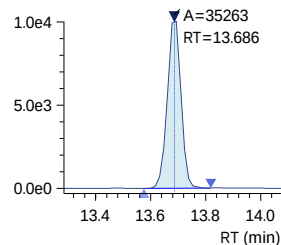
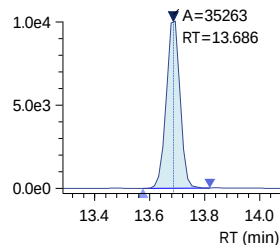
7.18e3

ISTD 639.20>58.90 (-)

1.39e5

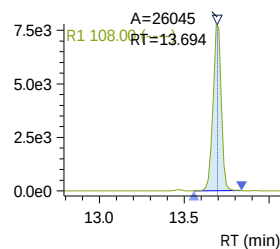
Q 639.20>58.90 (-)

1.39e5



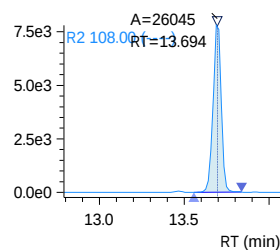
R1 511.90>169.00 (-)

7.80e3



R2 511.90>169.00 (-)

7.80e3





240119_027 (continued)

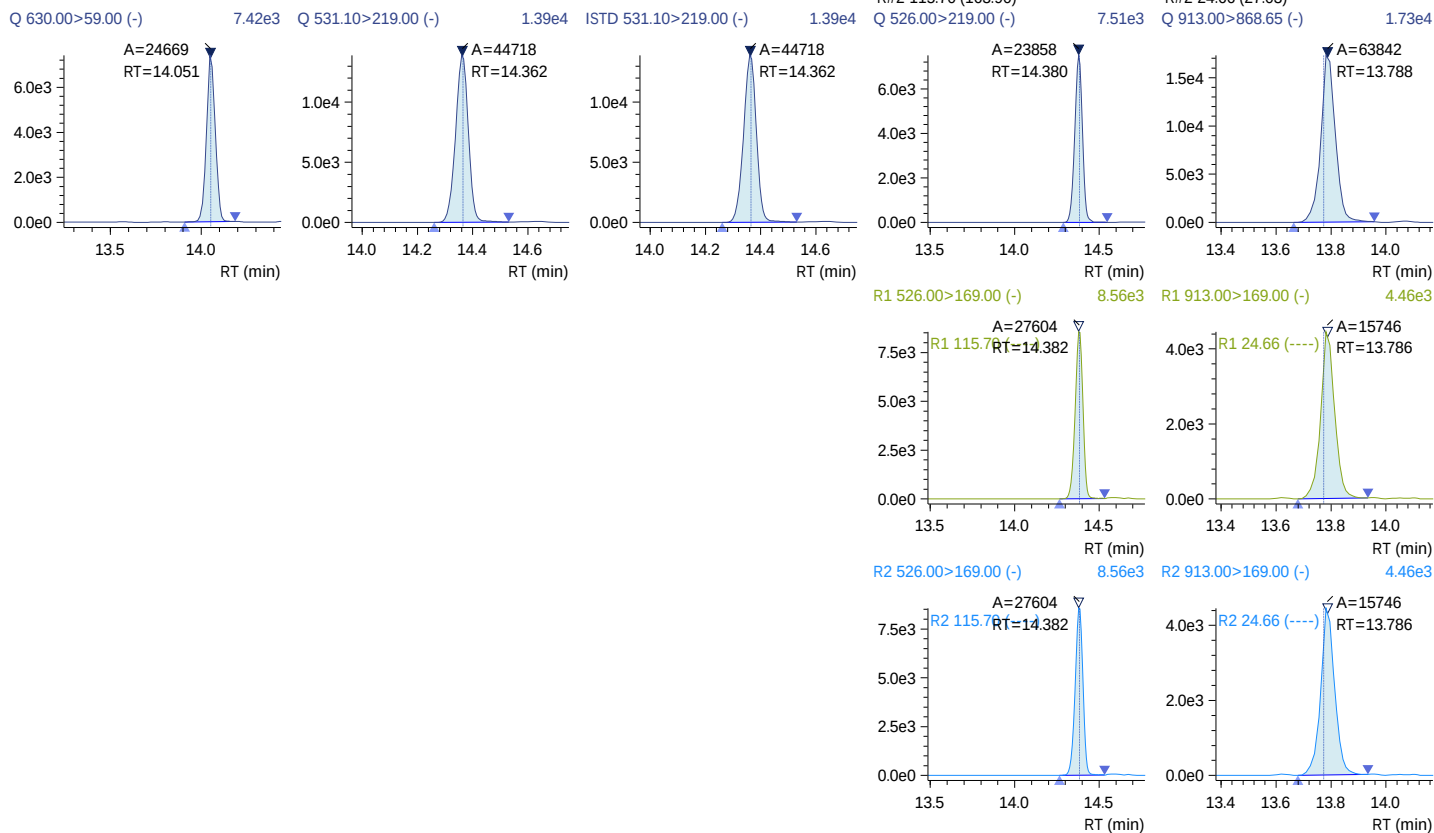
EtFOSE
Conc. 1.0196

D5-EtFOSAm
Conc. 1.5258

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. 0.9164
R#1 115.70 (154.69)
R#2 115.70 (163.90)

PFODA
Conc. 1.0570
R#1 24.66 (29.32)
R#2 24.66 (27.03)





Check PFOS

Insight Report
Quantitation/Integration
Printed 1/23/2024 13:16:25

240119_005

Sample ID: TDCA CHECK
Date Acquired: 1/19/2024 1:21:33 PM
Acquired by: System Administrator
Data File: 240119_005
Vial: 12 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C4-PFBA	ND(W/B)	----	----	----	----	----	13C3-PFBA_IS	ISTD Error	ng/mL	
13C4-PFBA_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
13C3-PFBA_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
PFBA	Auto	0.883	-0.526	----	9093	----	13C4-PFBA_IS	ISTD Error	ng/mL	RT
PFMPA	ND(W/B)	----	----	----	----	----	13C5-PFPeA_IS	ISTD Error	ng/mL	
3_3 FTCA	ND(W/B)	----	----	----	----	----	13C5-PFPeA_IS	ISTD Error	ng/mL	
13C5-PFPeA	ND(W/B)	----	----	----	----	----	13C2-PFHxA_IS	ISTD Error	ng/mL	
13C5-PFPeA_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
PFPeA	ND(W/B)	----	----	----	----	----	13C5-PFPeA_IS	ISTD Error	ng/mL	
PFMBA	ND(W/B)	----	----	----	----	----	13C5-PFPeA_IS	ISTD Error	ng/mL	
13C2-4_2 FTS	ND(W/B)	----	----	----	----	----	18O2-PFHxS_IS	ISTD Error	ng/mL	
13C2-4_2 FTS_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
4_2 FTS	ND(W/B)	----	----	----	----	----	13C2-4_2 FTS_IS	ISTD Error	ng/mL	
13C3-PFBS_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
PFBS	ND(W/B)	----	----	----	----	----	13C3-PFBS_IS	ISTD Error	ng/mL	
13C3-PFBS	ND(W/B)	----	----	----	----	----	18O2-PFHxS_IS	ISTD Error	ng/mL	
NFDHA	ND(W/B)	----	----	----	----	----	13C5-PFHxA_IS	ISTD Error	ng/mL	
13C5-PFHxA	ND(W/B)	----	----	----	----	----	13C2-PFHxA_IS	ISTD Error	ng/mL	
13C5-PFHxA_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
13C2-PFHxA_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
PFHxA	Auto	4.862	-0.103	----	4444	----	13C5-PFHxA_IS	ISTD Error	ng/mL	
PFEESA	ND(W/B)	----	----	----	----	----	13C5-PFHxA_IS	ISTD Error	ng/mL	
13C3-HFPO-DA	ND(W/B)	----	----	----	----	----	13C2-PFHxA_IS	ISTD Error	ng/mL	
13C3-HFPO-DA_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
HFPO-DA	ND(W/B)	----	----	----	----	----	13C3-HFPO-DA_IS	ISTD Error	ng/mL	
5_3 FTCA	ND(W/B)	----	----	----	----	----	13C5-PFHxA_IS	ISTD Error	ng/mL	
PFPeS	ND(W/B)	----	----	----	----	----	13C3-PFHxS_IS	ISTD Error	ng/mL	
13C4-PFHpA	ND(W/B)	----	----	----	----	----	13C2-PFHxA_IS	ISTD Error	ng/mL	
13C4-PFHpA_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
PFHpA	Auto	6.132	-0.012	----	5515	----	13C4-PFHpA_IS	ISTD Error	ng/mL	IRr
DONA	ND(W/B)	----	----	----	----	----	13C3-HFPO-DA_IS	ISTD Error	ng/mL	
13C2-6_2 FTS_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
13C2-6_2 FTS	ND(W/B)	----	----	----	----	----	18O2-PFHxS_IS	ISTD Error	ng/mL	
6_2 FTS	Auto	6.789	0.006	----	1278	----	13C2-6_2 FTS_IS	ISTD Error	ng/mL	
13C4-PFOA_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
13C8-PFOA_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
13C8-PFOA	ND(W/B)	----	----	----	----	----	13C4-PFOA_IS	ISTD Error	ng/mL	
PFOA	Auto	7.105	0.003	----	3722	----	13C8-PFOA_IS	ISTD Error	ng/mL	
13C3-PFHxS	ND(W/B)	----	----	----	----	----	18O2-PFHxS_IS	ISTD Error	ng/mL	
13C3-PFHxS_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
PFHxS	ND(W/B)	----	----	----	----	----	13C3-PFHxS_IS	ISTD Error	ng/mL	
18O2-PFHxS_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
13C9-PFNA_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
13C9-PFNA	ND(W/B)	----	----	----	----	----	13C5-PFNA_IS	ISTD Error	ng/mL	
13C5-PFNA_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
PFNA	Auto	7.958	0.008	----	3685	----	13C9-PFNA_IS	ISTD Error	ng/mL	IRr
PFHpS	ND(W/B)	----	----	----	----	----	13C8-PFOS_IS	ISTD Error	ng/mL	
7_3 FTCA	ND(W/B)	----	----	----	----	----	13C5-PFHxA_IS	ISTD Error	ng/mL	
13C2-8_2-FTS	ND(W/B)	----	----	----	----	----	18O2-PFHxS_IS	ISTD Error	ng/mL	
13C2-8_2-FTS_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
8_2 FTS	ND(W/B)	----	----	----	----	----	13C2-8_2-FTS_IS	ISTD Error	ng/mL	
13C6-PFDA_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
13C6-PFDA	ND(W/B)	----	----	----	----	----	13C2-PFDA_IS	ISTD Error	ng/mL	

J:\LCMS08\Data\240119_1633_B1\240119_1633_B1.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_005 (continued)

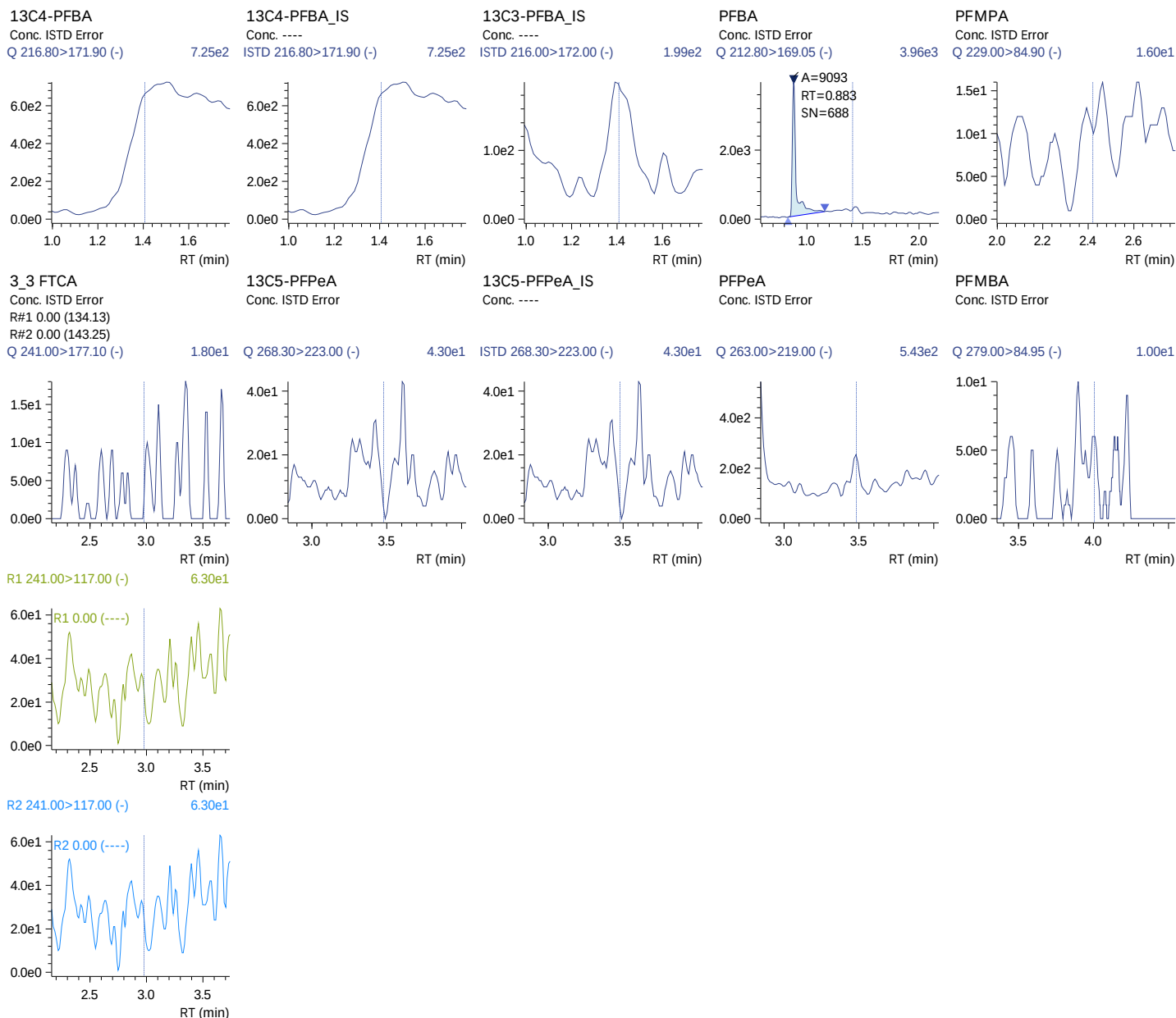
(Table continued from previous page)

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C2-PFDA_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
PFDA	Auto	8.724	0.008	----	2871	----	13C6-PFDA_IS	ISTD Error	ng/mL	IRr
D3-NMeFOSAA_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
D3-NMeFOSAA	ND(W/B)	----	----	----	----	2271	13C4-PFOS_IS	----	ng/mL	
13C8-PFOS_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
13C8-PFOS	ND(W/B)	----	----	----	----	2271	13C4-PFOS_IS	----	ng/mL	
13C4-PFOS_IS	Auto	8.825	0.014	----	2271	2271	----	2.5000	ng/mL	
PFOS	ND(W/B)	----	----	----	----	----	13C8-PFOS_IS	ISTD Error	ng/mL	
NMeFOSAA	ND(W/B)	----	----	----	----	----	D3-NMeFOSAA_IS	ISTD Error	ng/mL	
D5-NetFOSAA_IS	Auto	9.188	0.010	----	2363	2363	----	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.188	0.010	0.363	2363	2271	13C4-PFOS_IS	5.0126	ng/mL	
NetFOSAA	ND(W/B)	----	----	----	----	2363	D5-NetFOSAA_IS	----	ng/mL	
9-CI-PF3ONS	ND(W/B)	----	----	----	----	----	13C3-HFPO-DA_IS	ISTD Error	ng/mL	
PFUnDA	Auto	9.451	0.011	----	2753	----	13C7-PFUnDA_IS	ISTD Error	ng/mL	IRr
13C7-PFUnDA_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
13C7-PFUnDA	ND(W/B)	----	----	----	----	----	13C2-PFDA_IS	ISTD Error	ng/mL	
PFNS	ND(W/B)	----	----	----	----	----	13C8-PFOS_IS	ISTD Error	ng/mL	
10_2_FTS	ND(W/B)	----	----	----	----	----	13C2-8_2-FTS_IS	ISTD Error	ng/mL	
13C2-PFDOA_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
13C2-PFDOA	ND(W/B)	----	----	----	----	----	13C2-PFDA_IS	ISTD Error	ng/mL	
PFDOA	Auto	10.141	0.013	----	3010	----	13C2-PFDOA_IS	ISTD Error	ng/mL	IRr
PFDS	ND(W/B)	----	----	----	----	----	13C8-PFOS_IS	ISTD Error	ng/mL	
PFTDA	Auto	10.797	0.011	----	3527	----	13C2-PFTDA_IS	ISTD Error	ng/mL	
11-CI-PF3OUdS	ND(W/B)	----	----	----	----	----	13C3-HFPO-DA_IS	ISTD Error	ng/mL	
PFOSAm	ND(W/B)	----	----	----	----	----	13C8-PFOSAm_IS	ISTD Error	ng/mL	
13C8-PFOSAm	ND(W/B)	----	----	----	----	2271	13C4-PFOS_IS	----	ng/mL	
13C8-PFOSAm_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
PFTDA	Auto	11.432	0.012	----	2511	----	13C2-PFTDA_IS	ISTD Error	ng/mL	IRr
13C2-PFTDA	ND(W/B)	----	----	----	----	----	13C2-PFDA_IS	ISTD Error	ng/mL	
13C2-PFTDA_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
PFDoS	ND(W/B)	----	----	----	----	----	13C8-PFOS_IS	ISTD Error	ng/mL	
D7-MeFOSE_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
D7-MeFOSE	ND(W/B)	----	----	----	----	2271	13C4-PFOS_IS	----	ng/mL	
MeFOSE	ND(W/B)	----	----	----	----	----	D7-MeFOSE_IS	ISTD Error	ng/mL	
13C2-PFHXA_IS	Auto	12.650	0.014	----	2151	2151	----	2.5000	ng/mL	
13C2-PFHXA	Auto	12.650	0.014	----	2151	----	13C2-PFDA_IS	ISTD Error	ng/mL	
PFHXDA	Auto	12.648	0.011	-0.002	3445	2151	13C2-PFHXA_IS	3.8785	ng/mL	IRr
D3-MeFOSA	ND(W/B)	----	----	----	----	2271	13C4-PFOS_IS	----	ng/mL	
D3-MeFOSA_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
MeFOSA	ND(W/B)	----	----	----	----	----	D3-MeFOSA_IS	ISTD Error	ng/mL	
D9-EtFOSE_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
D9-EtFOSE	ND(W/B)	----	----	----	----	2271	13C4-PFOS_IS	----	ng/mL	
EtFOSE	ND(W/B)	----	----	----	----	----	D9-EtFOSE_IS	ISTD Error	ng/mL	
D5-EtFOSAm	ND(W/B)	----	----	----	----	2271	13C4-PFOS_IS	----	ng/mL	
D5-EtFOSAm_IS	ND(W/B)	----	----	----	----	----	----	----	ng/mL	
EtFOSAm	ND(W/B)	----	----	----	----	----	D5-EtFOSAm_IS	ISTD Error	ng/mL	
PFODA	Auto	13.787	0.013	1.137	1362	2151	13C2-PFHXA_IS	2.8010	ng/mL	IRr

Flag ID key: IRr: Ion Ratio (Relative), RT: RT Diff (Absolute)



240119_005 (continued)





240119_005 (continued)

13C2-4_2 FTS
Conc. ISTD Error

13C2-4_2 FTS_IS
Conc. ----

4_2 FTS
Conc. ISTD Error
R#1 0.00 (34.14)
R#2 0.00 (31.50)

13C3-PFBS_IS
Conc. ----

PFBS
Conc. ISTD Error
R#1 0.00 (47.53)
R#2 0.00 (48.74)

Q 329.10>80.90 (-)

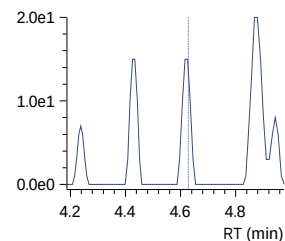
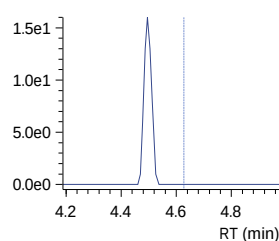
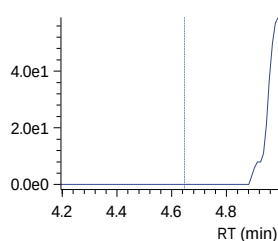
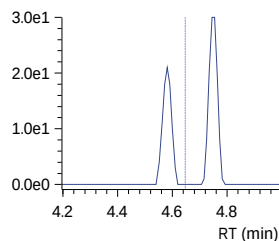
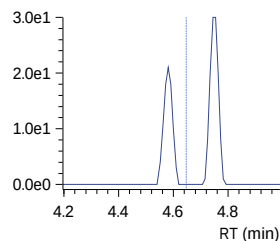
3.00e1 ISTD 329.10>80.90 (-)

3.00e1 Q 327.10>307.00 (-)

5.90e1 ISTD 302.10>79.90 (-)

1.60e1 Q 298.70>79.90 (-)

2.00e1

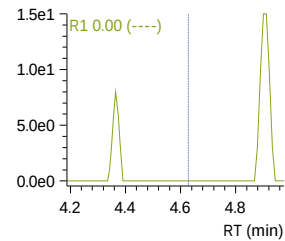
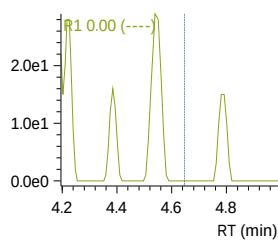


R1 327.10>80.90 (-)

2.90e1

R1 298.70>98.80 (-)

1.50e1

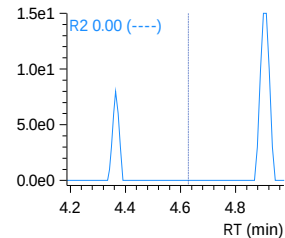
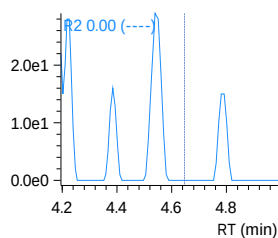


R2 327.10>80.90 (-)

2.90e1

R2 298.70>98.80 (-)

1.50e1

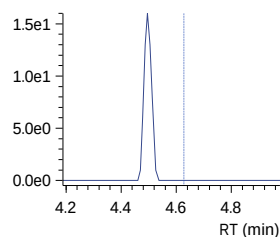




240119_005 (continued)

13C3-PFBS
Conc. ISTD Error

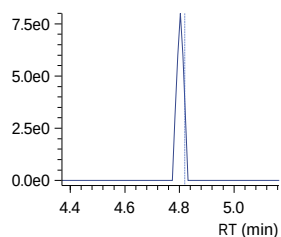
Q 302.10>79.90 (-)



1.60e1

NFDHA
Conc. ISTD Error
R#1 0.00 (37.88)
R#2 0.00 (36.97)

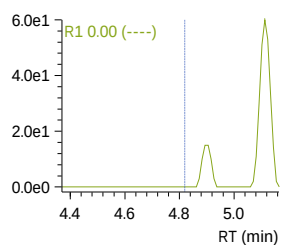
Q 295.00>201.00 (-)



8.00e0

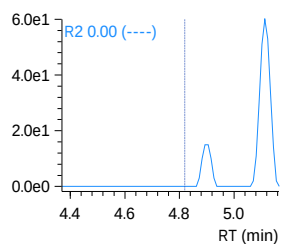
R1 295.00>84.90 (-)

6.00e1



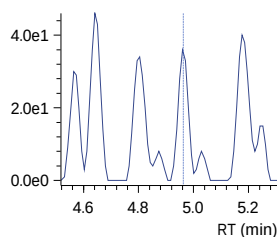
R2 295.00>84.90 (-)

6.00e1



13C5-PFHxA
Conc. ISTD Error

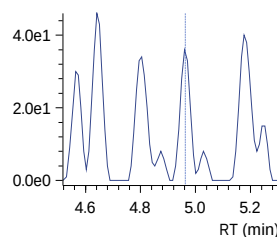
Q 318.00>273.00 (-)



4.60e1

13C5-PFHxA_IS
Conc. ----

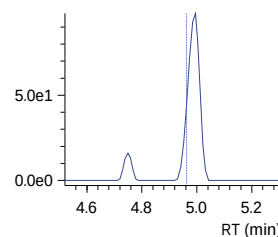
ISTD 318.00>273.00 (-)



4.60e1

13C2-PFHxA_IS
Conc. ----

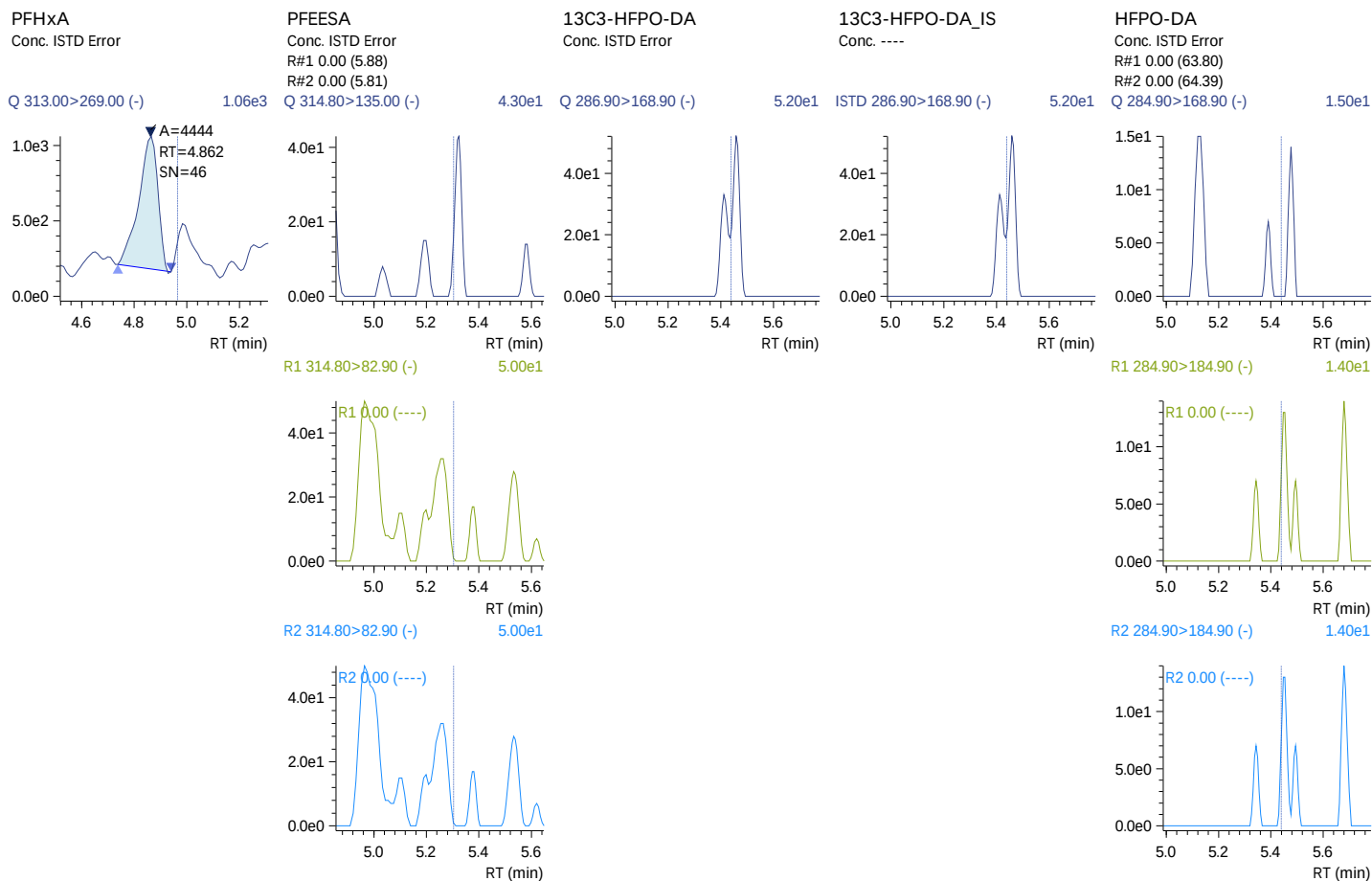
ISTD 315.10>270.00 (-)



9.80e1



240119_005 (continued)



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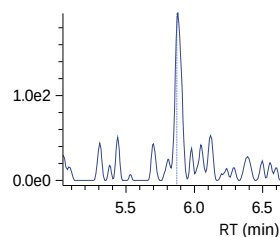
SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_005 (continued)

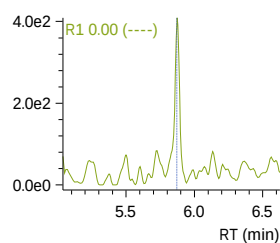
5_3 FTCA

Conc. ISTD Error
R#1 0.00 (167.13)
R#2 0.00 (159.75)
Q 341.00>237.05 (-)



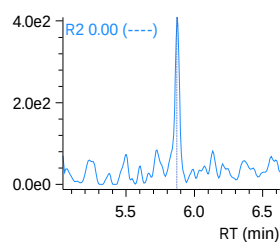
R1 341.00>217.00 (-)

4.09e2



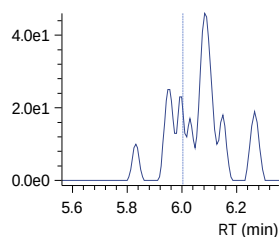
R2 341.00>217.00 (-)

4.09e2



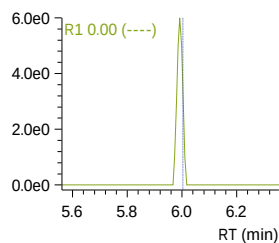
PFPeS

Conc. ISTD Error
R#1 0.00 (56.71)
R#2 0.00 (54.52)
Q 349.10>79.90 (-)



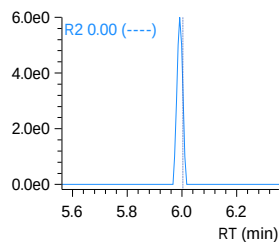
R1 349.10>98.80 (-)

6.00e0



R2 349.10>98.80 (-)

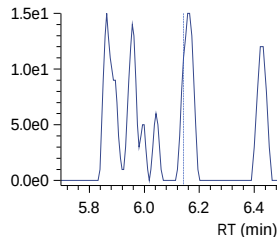
6.00e0



13C4-PFHpA

Conc. ISTD Error

Q 367.10>322.00 (-)

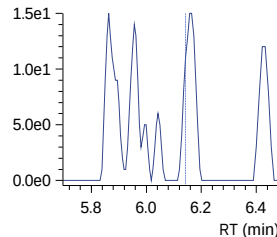


1.50e1

13C4-PFHpA_IS

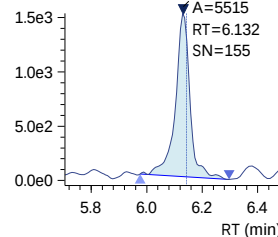
Conc. ----

ISTD 367.10>322.00 (-)



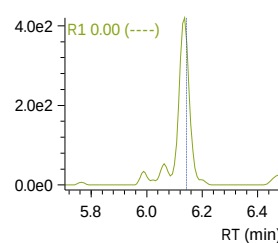
PFHpA

Conc. ISTD Error
R#1 0.00 (21.37)
R#2 0.00 (23.22)
Q 363.10>319.00 (-)



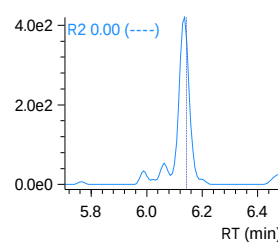
R1 363.10>169.00 (-)

1.54e3



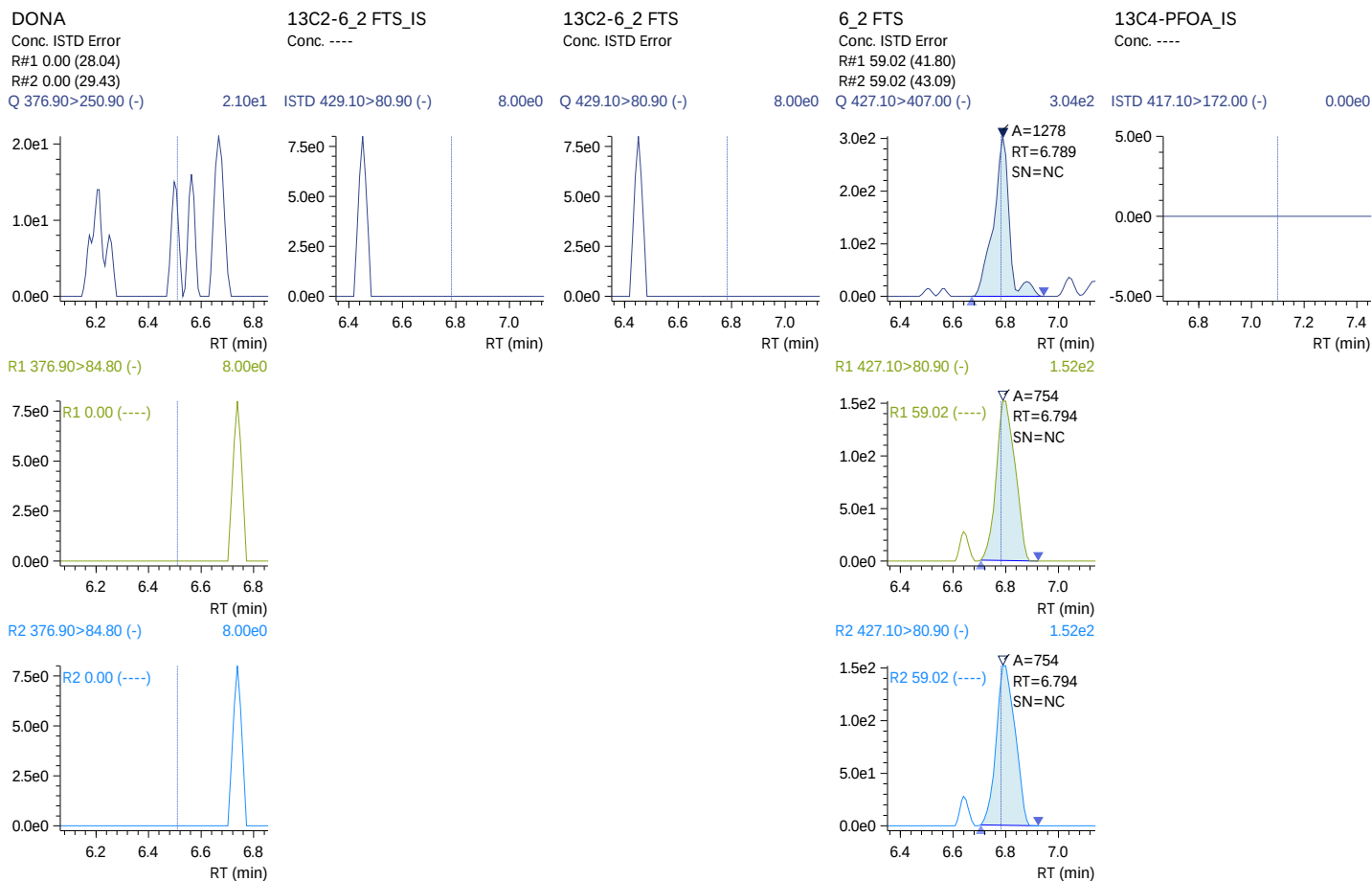
R2 363.10>169.00 (-)

4.20e2





240119_005 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_005 (continued)

13C8-PFOA_IS
Conc. ----

13C8-PFOA
Conc. ISTD Error

PFOA
Conc. ISTD Error
R#1 32.40 (29.05)
R#2 32.40 (30.51)

13C3-PFHxS
Conc. ISTD Error

13C3-PFHxS_IS
Conc. ----

ISTD 421.10>376.00 (-)

7.00e0

Q 421.10>376.00 (-)

7.00e0

Q 413.00>369.00 (-)

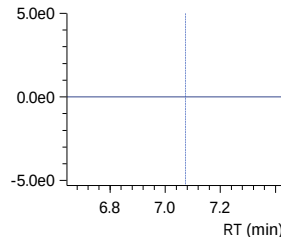
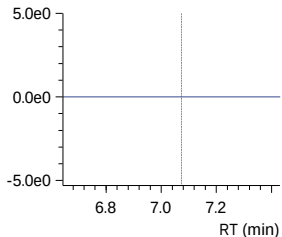
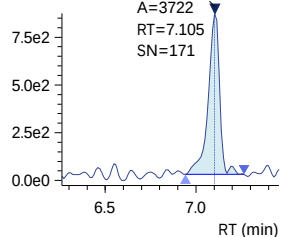
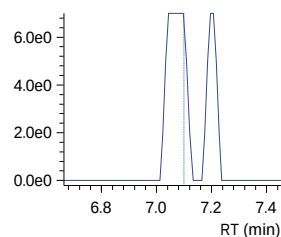
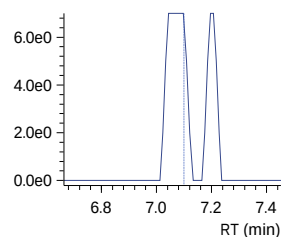
8.75e2

Q 402.10>79.90 (-)

0.00e0

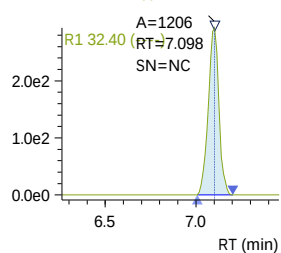
ISTD 402.10>79.90 (-)

0.00e0



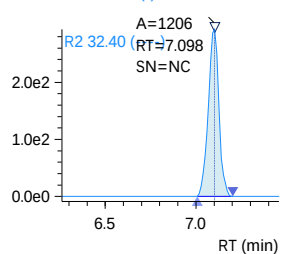
R1 413.00>169.00 (-)

2.93e2



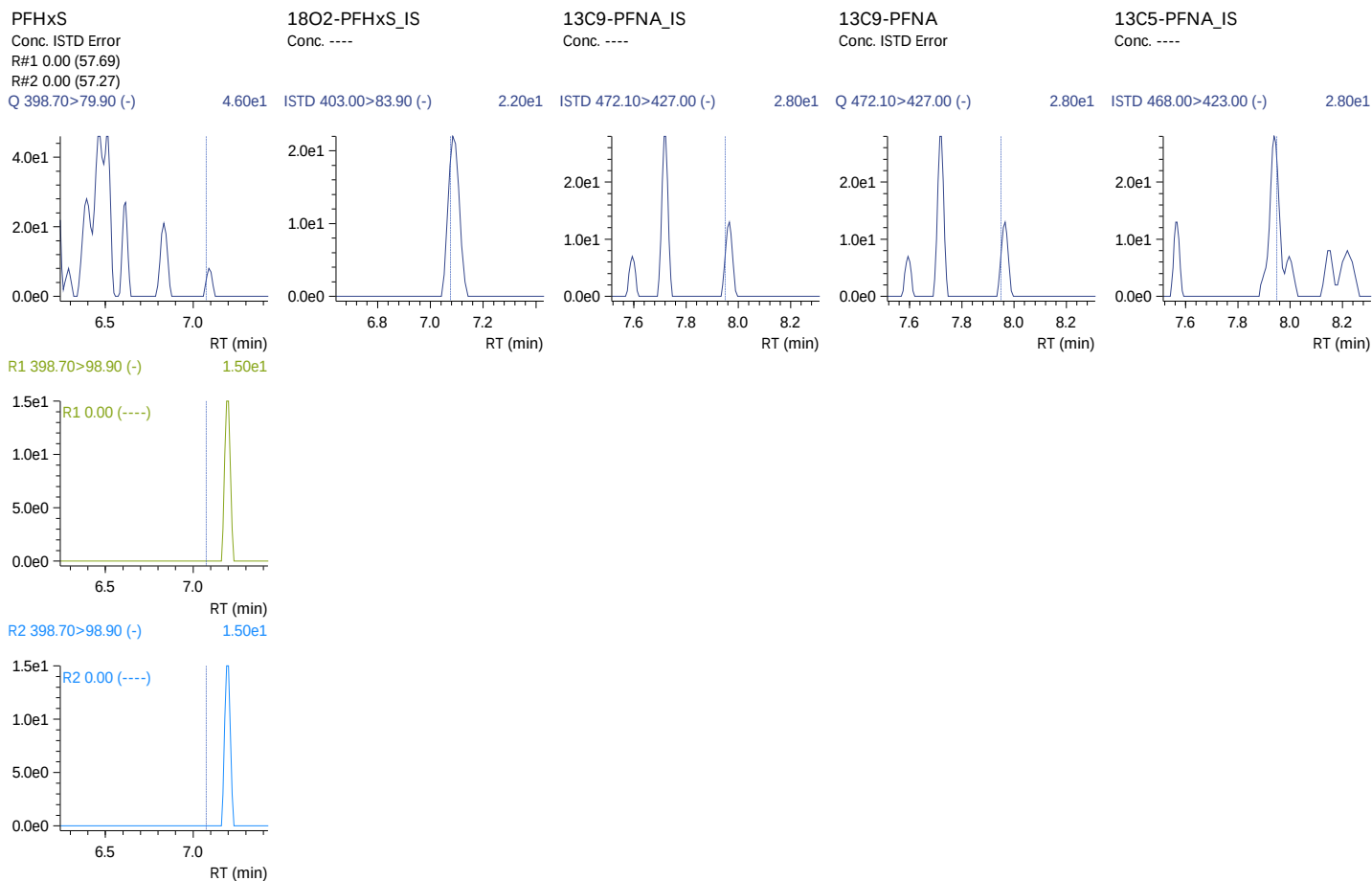
R2 413.00>169.00 (-)

2.93e2





240119_005 (continued)

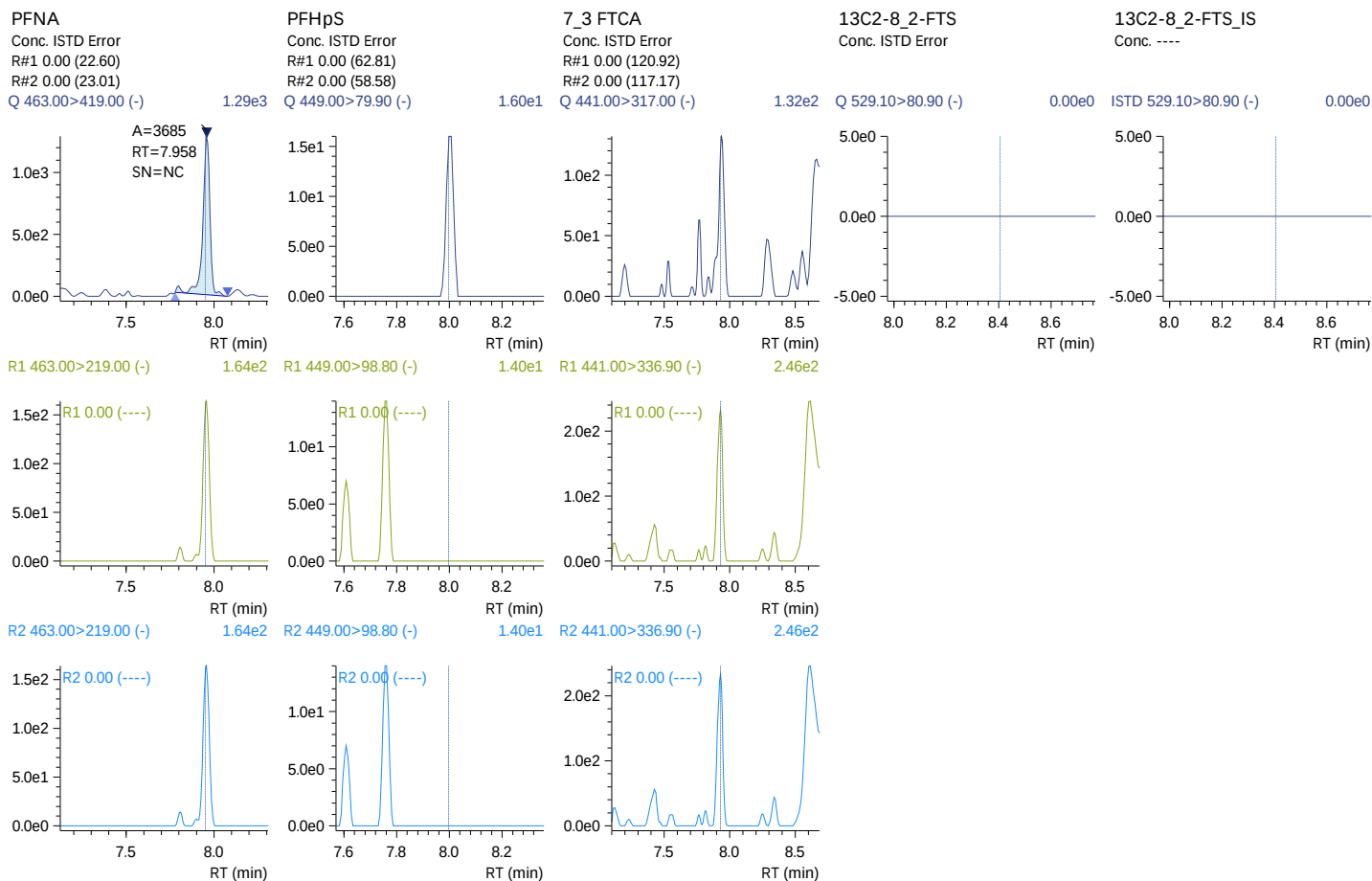


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.

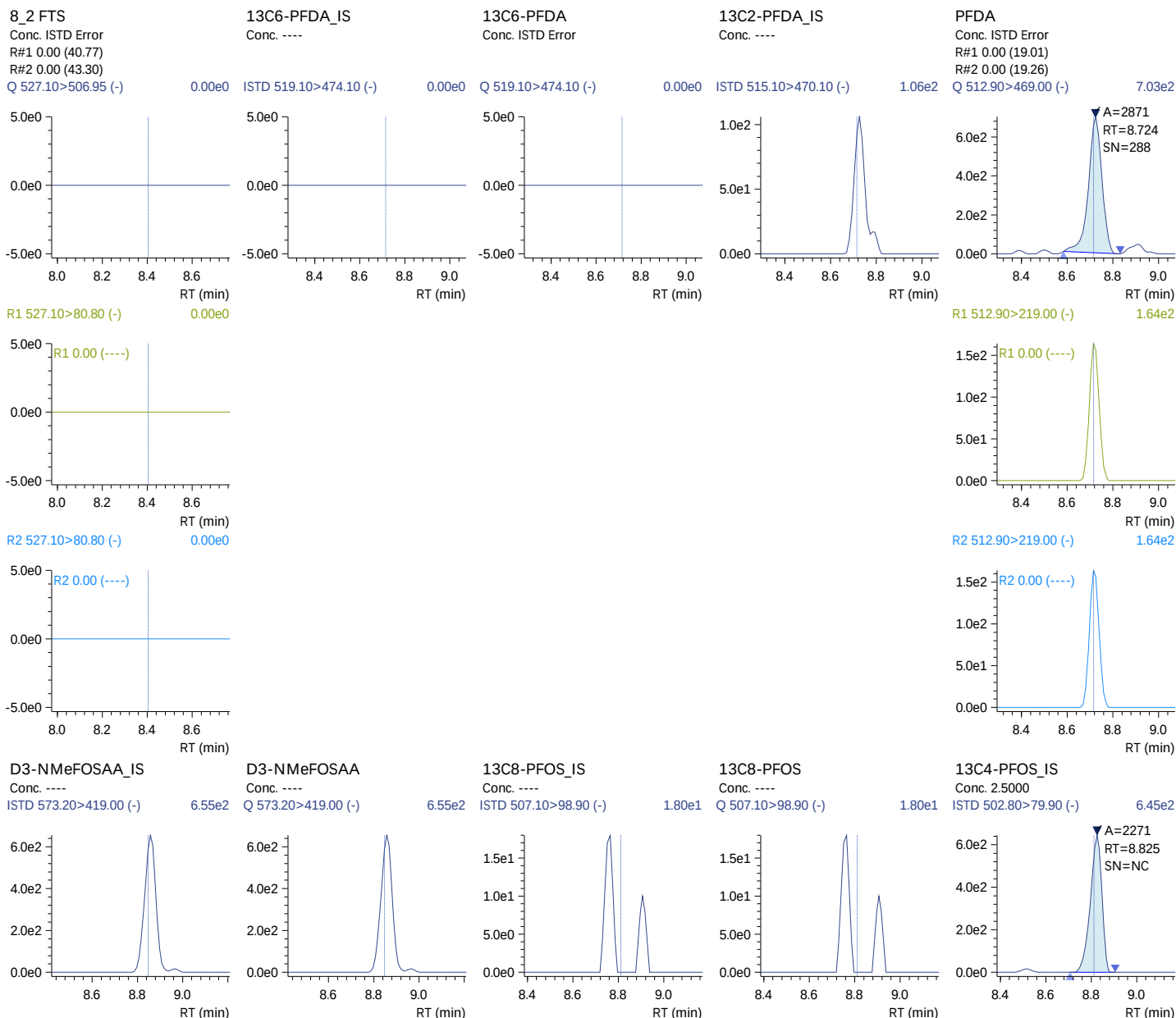


240119_005 (continued)



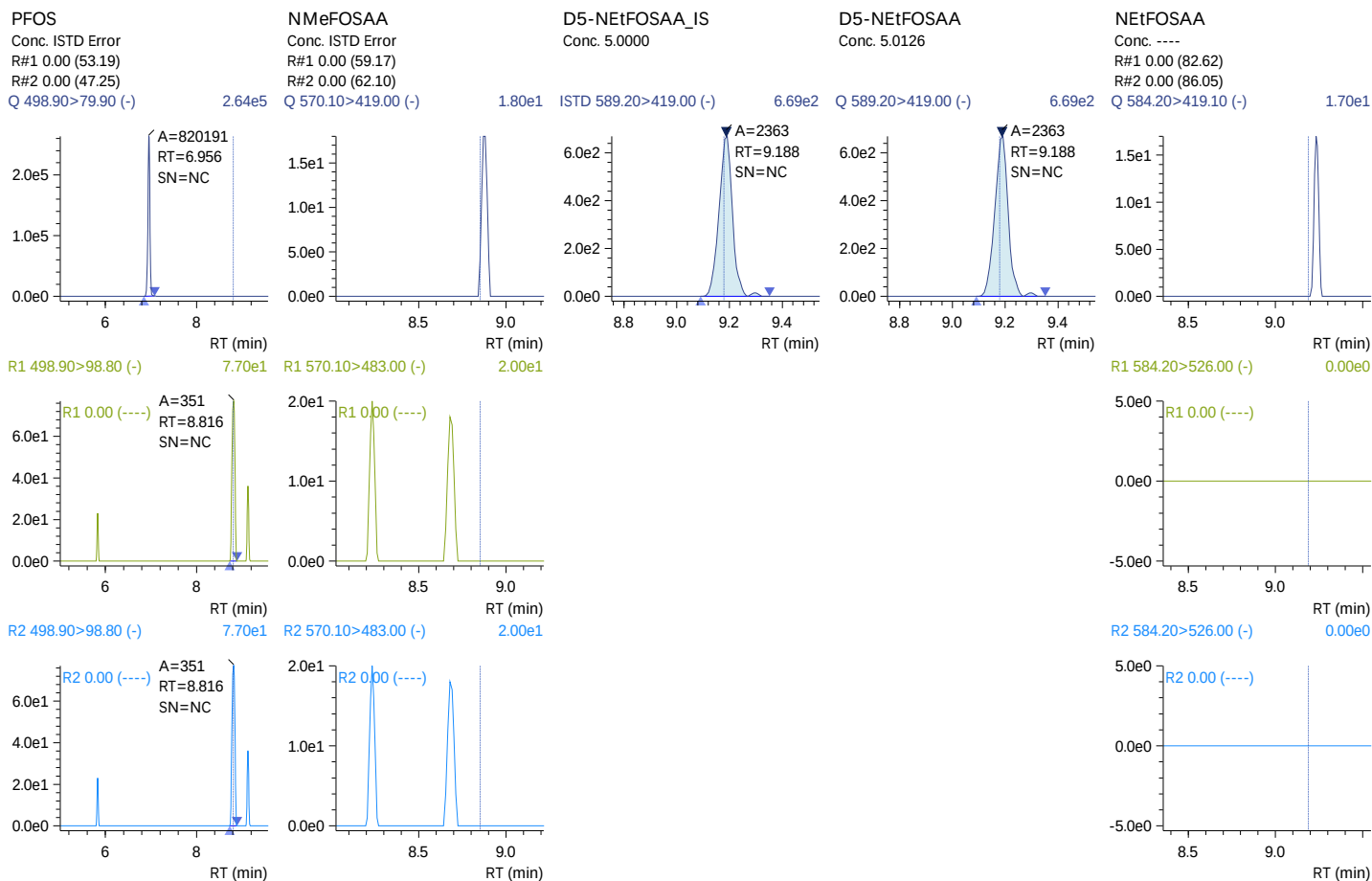


240119_005 (continued)





240119_005 (continued)



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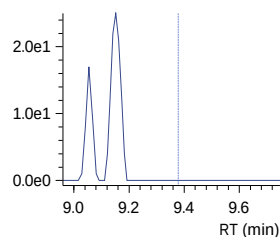
SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



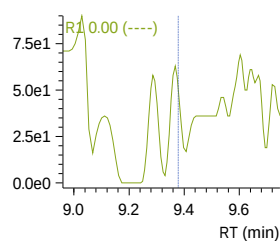
240119_005 (continued)

9-Cl-PF3ONS

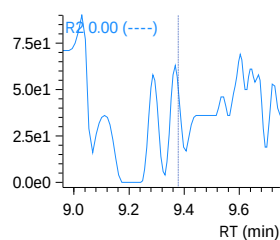
Conc. ISTD Error
R#1 0.00 (31.76)
R#2 0.00 (31.74)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-)

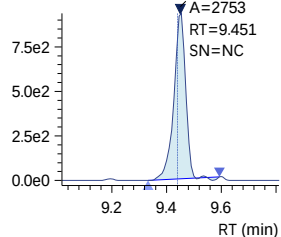


R2 532.80>353.00 (-)

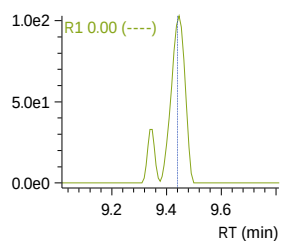


PFUnDA

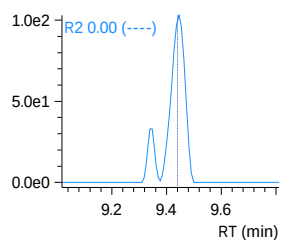
Conc. ISTD Error
R#1 0.00 (12.31)
R#2 0.00 (13.26)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-)



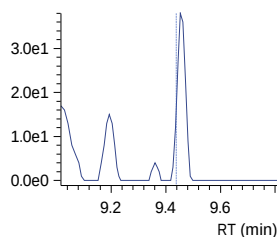
R2 563.10>269.10 (-)



13C7-PFUnDA_IS

Conc. ----

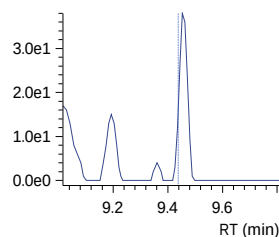
ISTD 570.00>525.10 (-)



13C7-PFUnDA

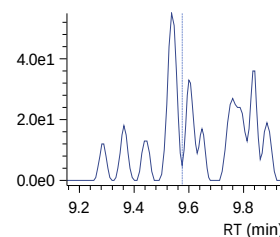
Conc. ISTD Error

Q 570.00>525.10 (-)

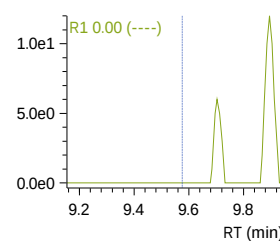


PFNS

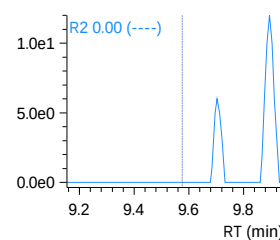
Conc. ISTD Error
R#1 0.00 (63.31)
R#2 0.00 (62.49)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-)

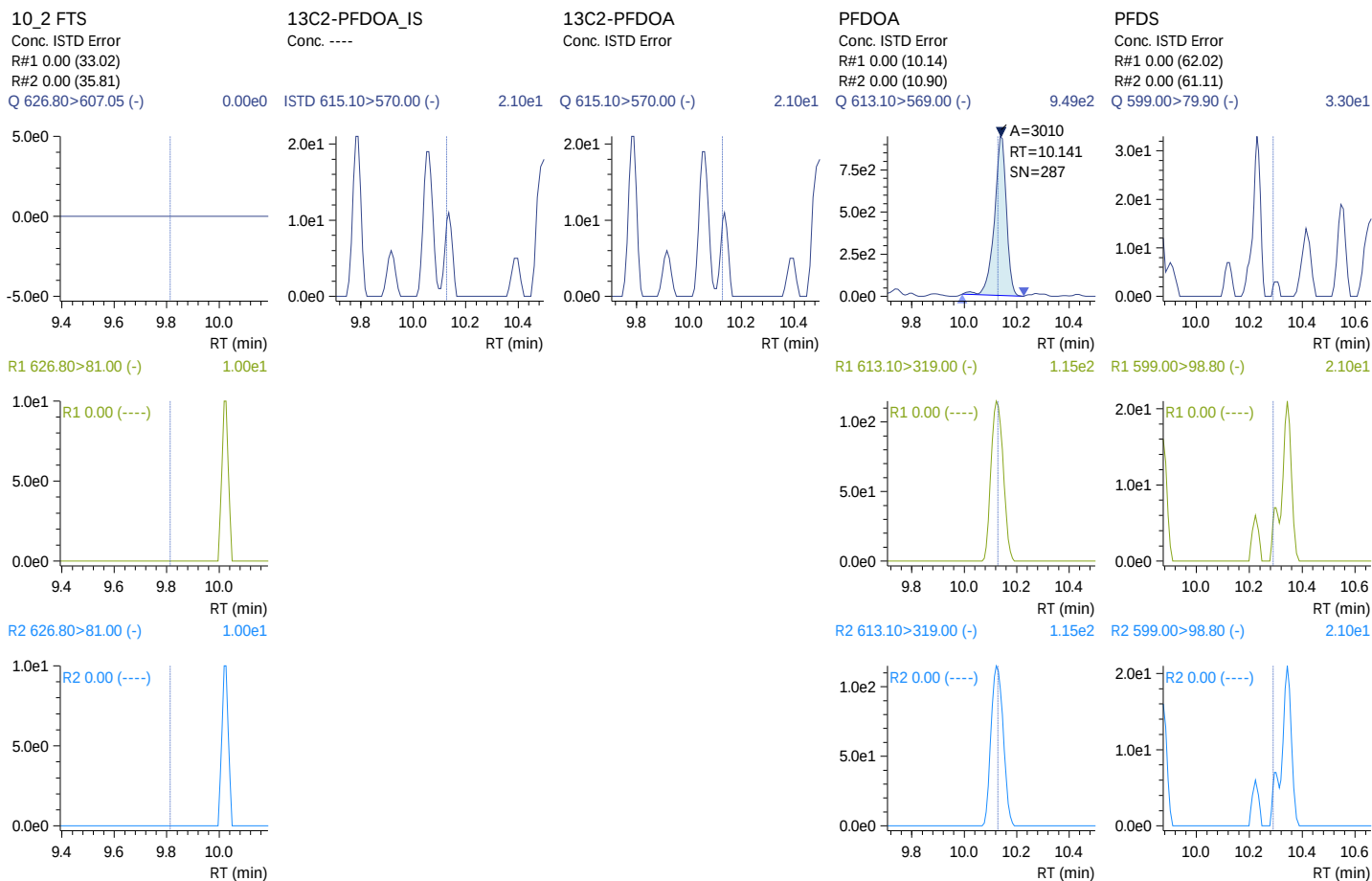


R2 548.80>98.80 (-)





240119_005 (continued)

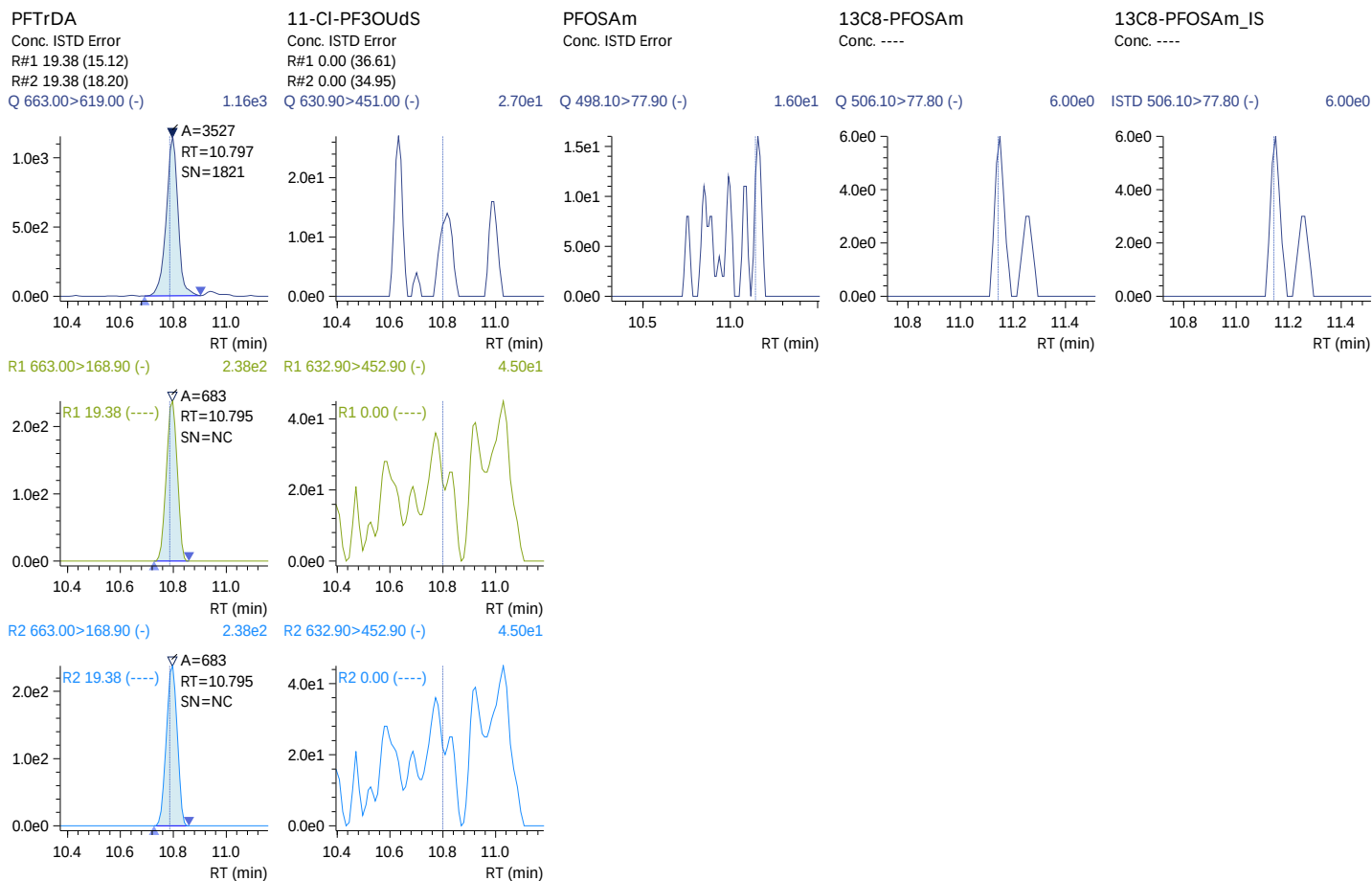


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.

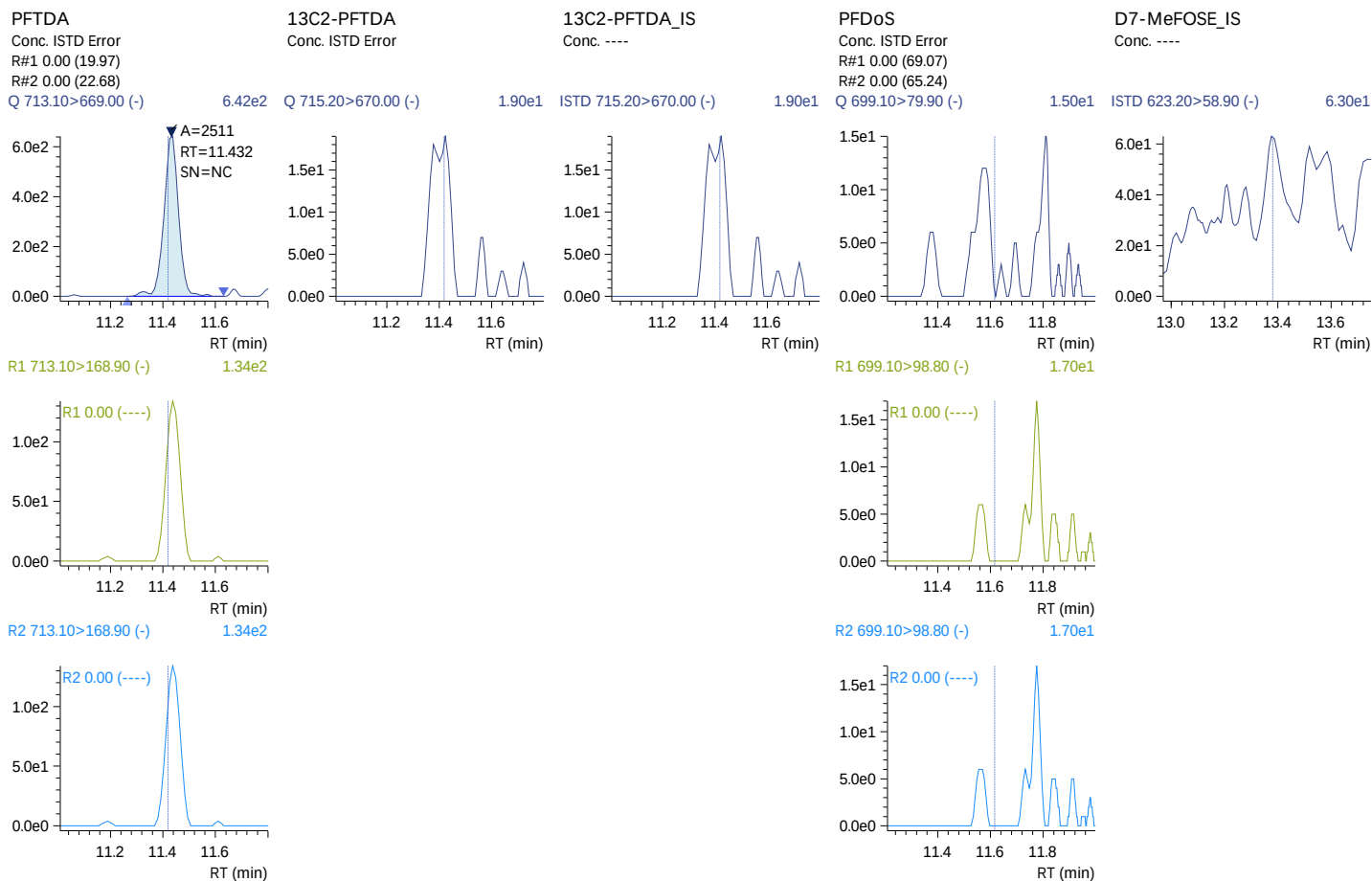


240119_005 (continued)





240119_005 (continued)



J:\LCMS08\Data\240119_1633_B1\240119_1633_B1.dampl

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_005 (continued)

D7-MeFOSE
Conc. ----

MeFOSE
Conc. ISTD Error

13C2-PFHDA_IS
Conc. 2.5000

13C2-PFHDA
Conc. ISTD Error

PFHXDA
Conc. 3.8785
R#1 0.00 (11.64)
R#2 0.00 (14.51)

Q 623.20>58.90 (-)

6.30e1

Q 616.10>59.00 (-)

4.70e1

ISTD 815.00>770.05 (-)

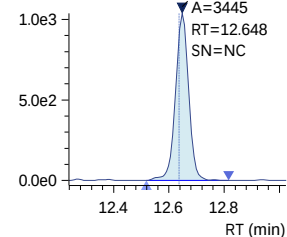
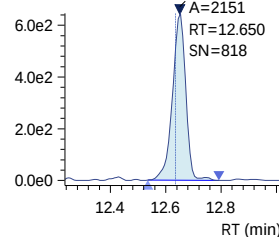
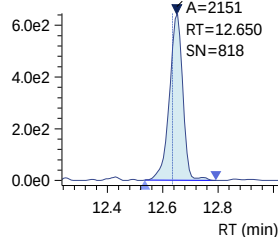
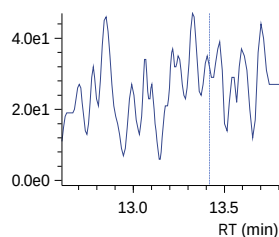
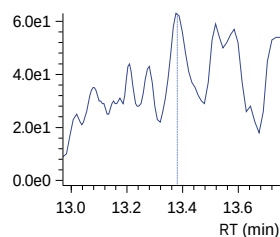
6.46e2

Q 815.00>770.05 (-)

6.46e2

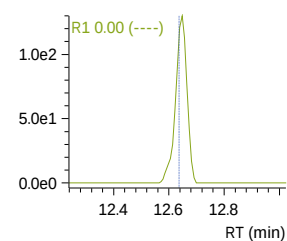
Q 813.00>768.95 (-)

1.04e3



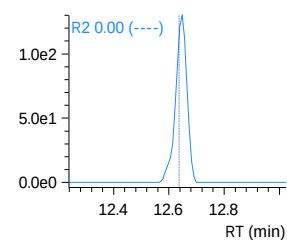
R1 813.00>218.95 (-)

1.30e2



R2 813.00>218.95 (-)

1.30e2





240119_005 (continued)

D3-MeFOSA
Conc. ----

D3-MeFOSA_IS
Conc. ----

MeFOSA
Conc. ISTD Error
R#1 0.00 (149.05)
R#2 0.00 (142.62)

D9-EtFOSE_IS
Conc. ----

D9-EtFOSE
Conc. ----

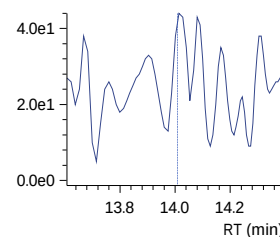
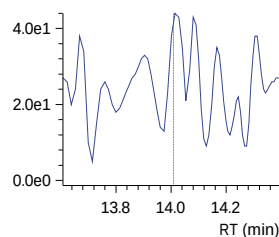
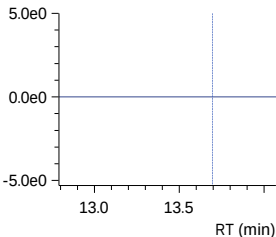
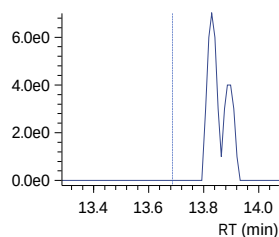
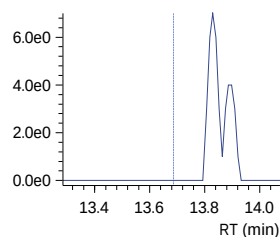
Q 515.00>219.00 (-)

7.00e0 ISTD 515.00>219.00 (-)

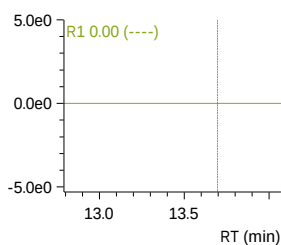
7.00e0 Q 511.90>219.00 (-)

0.00e0 ISTD 639.20>58.90 (-)

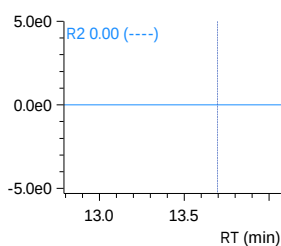
4.40e1 Q 639.20>58.90 (-)



R1 511.90>169.00 (-) 0.00e0

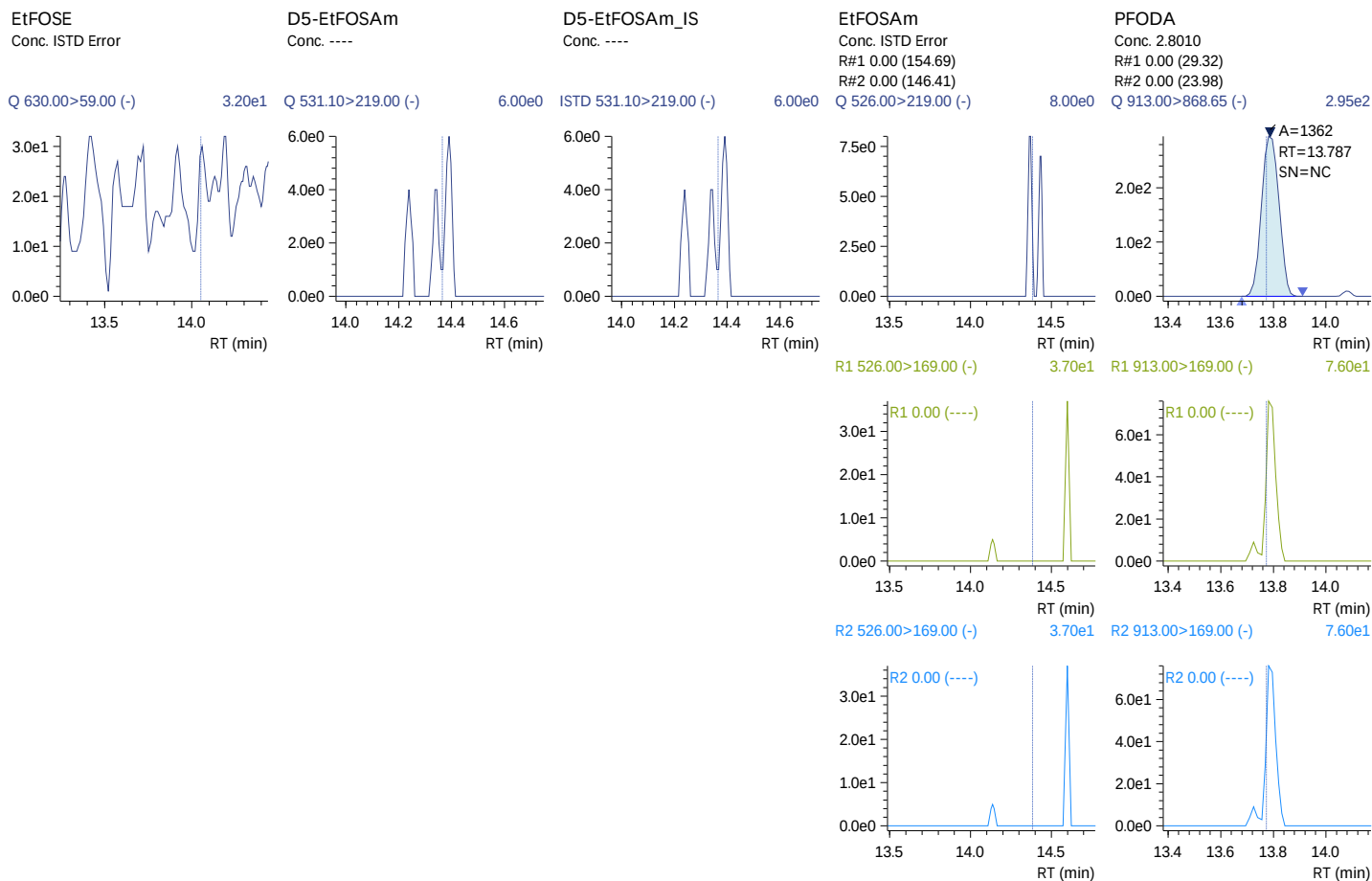


R2 511.90>169.00 (-) 0.00e0





240119_005 (continued)



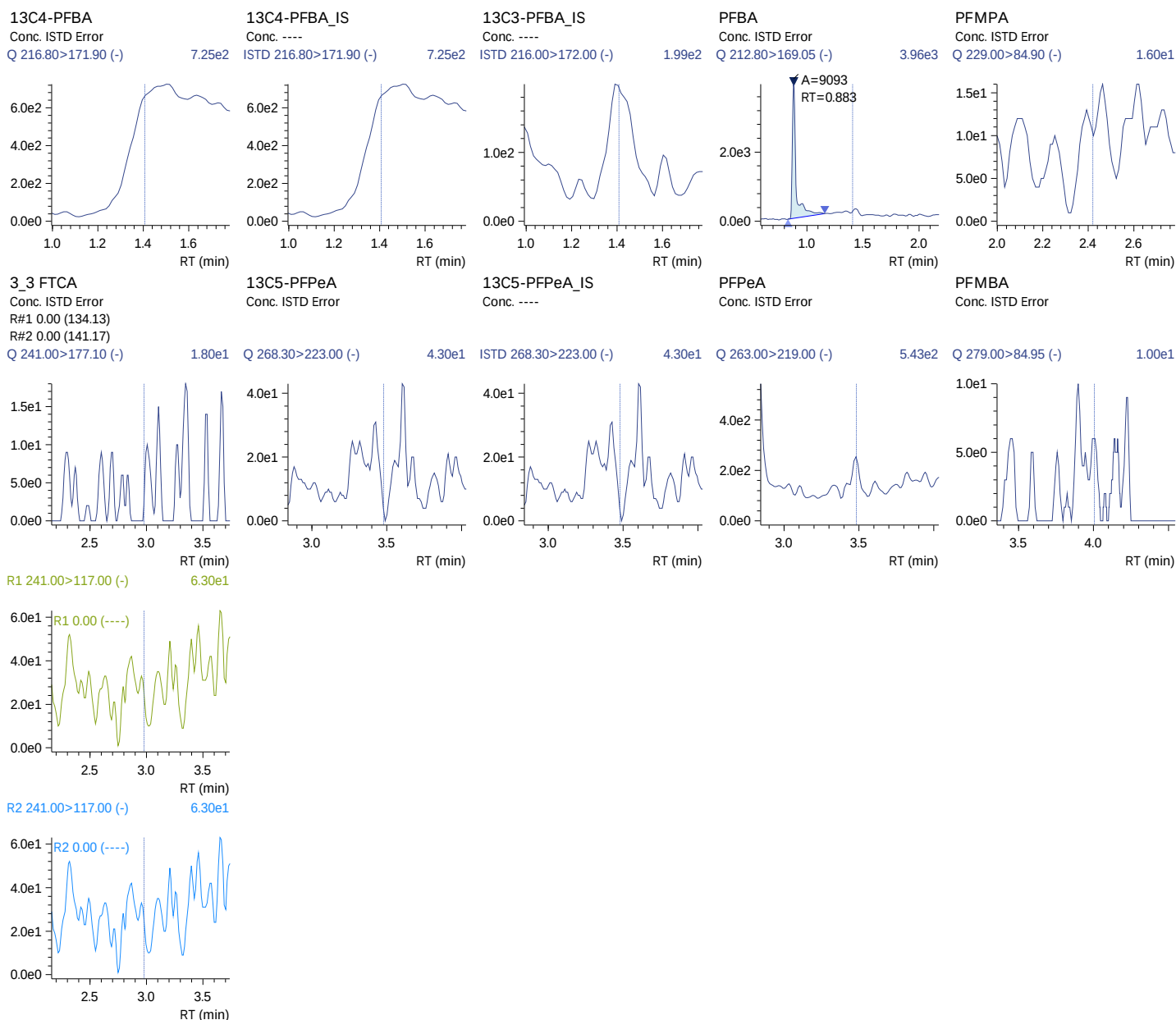
J:\LCMS08\Data\240119_1633_B1\240119_1633_B1.dampl

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_005

Sample ID: TDCA CHECK
Date Acquired: 1/19/2024 1:21:33 PM
Acquired by: System Administrator
Data File: 240119_005
Vial: 12 | Inj. Volume: 10.0000uL | Tray: 1





240119_005 (continued)

13C2-4_2 FTS
Conc. ISTD Error

13C2-4_2 FTS_IS
Conc. ----

4_2 FTS
Conc. ISTD Error
R#1 0.00 (34.14)
R#2 0.00 (29.06)

13C3-PFBS_IS
Conc. ----

PFBS
Conc. ISTD Error
R#1 0.00 (47.53)
R#2 0.00 (46.72)

Q 329.10>80.90 (-)

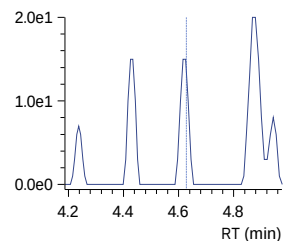
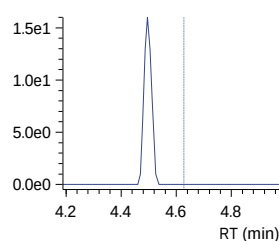
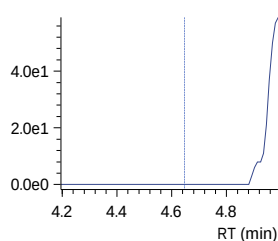
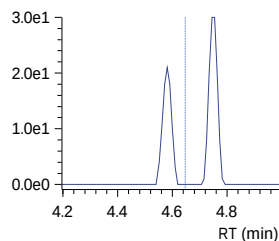
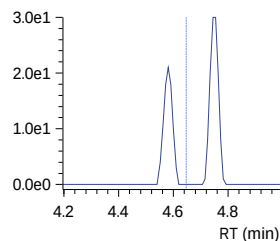
3.00e1 ISTD 329.10>80.90 (-)

3.00e1 Q 327.10>307.00 (-)

5.90e1 ISTD 302.10>79.90 (-)

1.60e1 Q 298.70>79.90 (-)

2.00e1

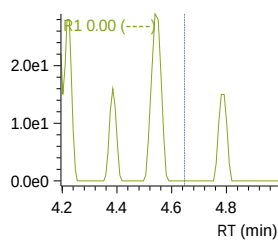


R1 327.10>80.90 (-)

2.90e1

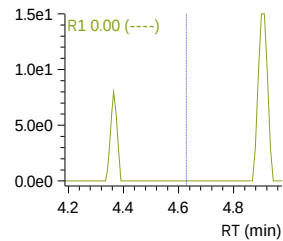
R1 298.70>98.80 (-)

1.50e1



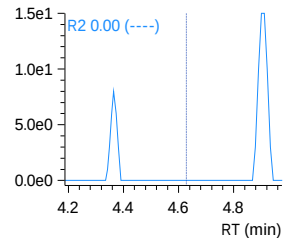
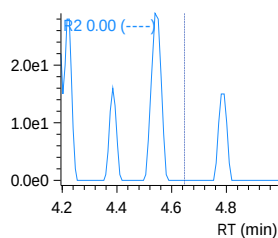
R2 327.10>80.90 (-)

2.90e1



R2 298.70>98.80 (-)

1.50e1





240119_005 (continued)

13C3-PFBS
Conc. ISTD Error

NFDHA
Conc. ISTD Error
R#1 0.00 (37.88)
R#2 0.00 (40.25)

13C5-PFHxA
Conc. ISTD Error

13C5-PFHxA_IS
Conc. ----

13C2-PFHxA_IS
Conc. ----

Q 302.10>79.90 (-)

1.60e1

Q 295.00>201.00 (-)

8.00e0

Q 318.00>273.00 (-)

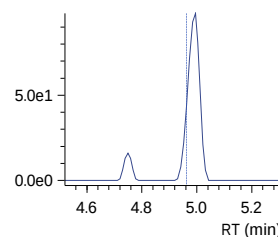
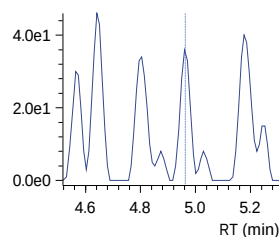
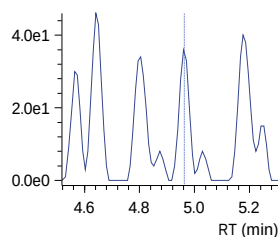
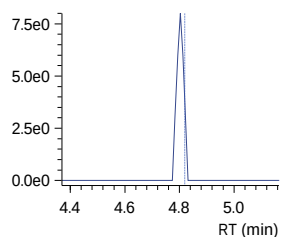
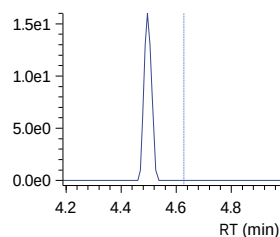
4.60e1

ISTD 318.00>273.00 (-)

4.60e1

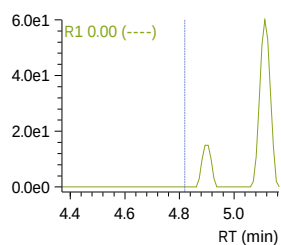
ISTD 315.10>270.00 (-)

9.80e1



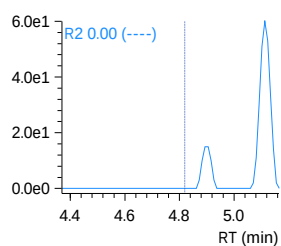
R1 295.00>84.90 (-)

6.00e1



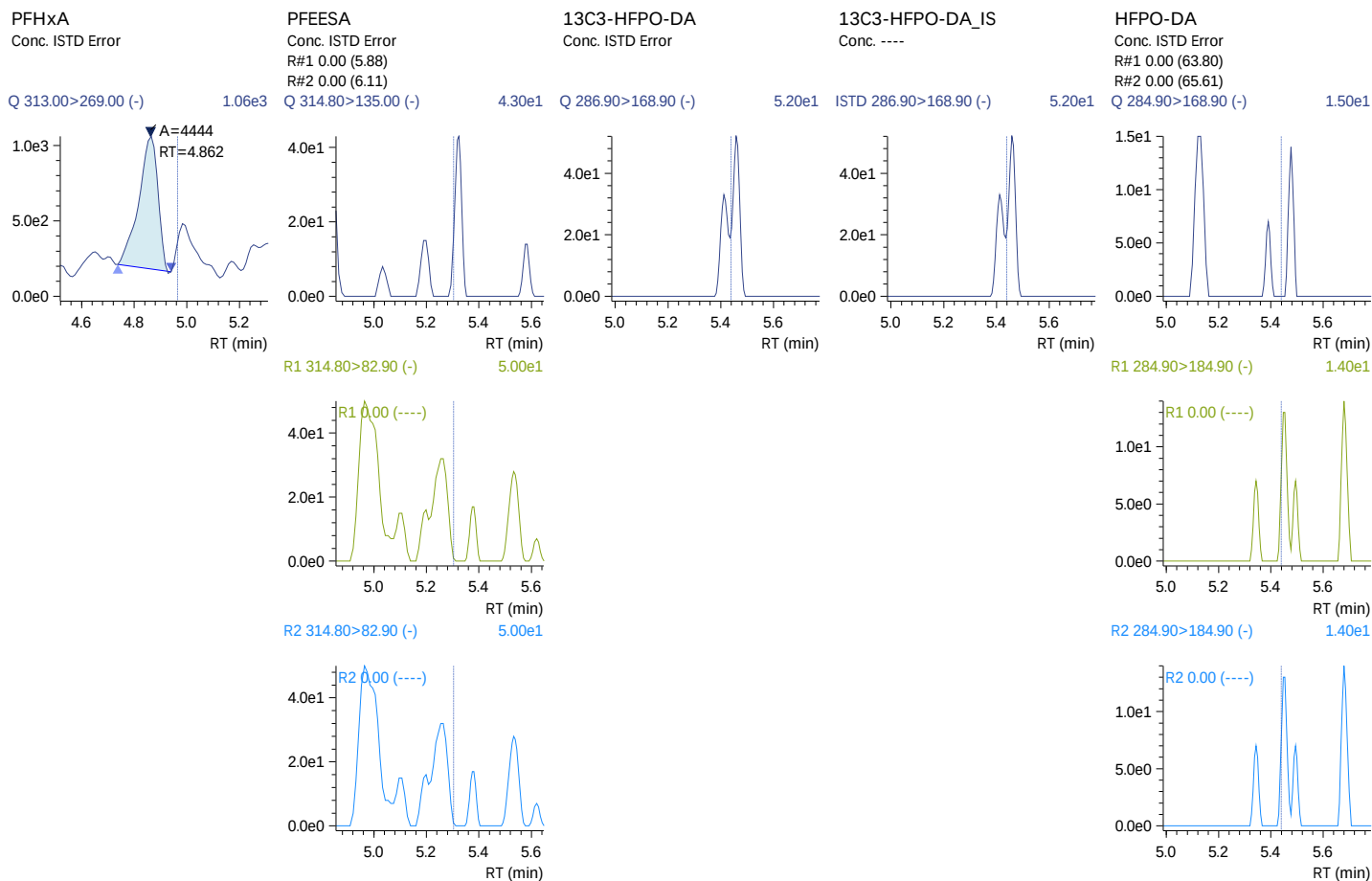
R2 295.00>84.90 (-)

6.00e1





240119_005 (continued)

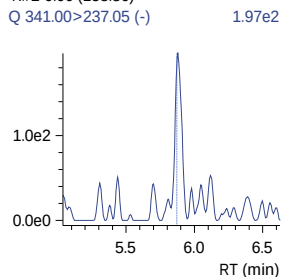




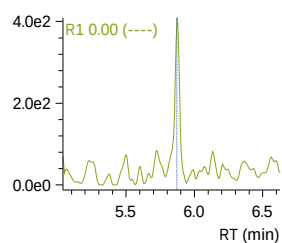
240119_005 (continued)

5_3 FTCA

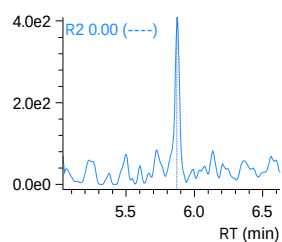
Conc. ISTD Error
R#1 0.00 (167.13)
R#2 0.00 (158.86)
Q 341.00>237.05 (-)



R1 341.00>217.00 (-) 4.09e2

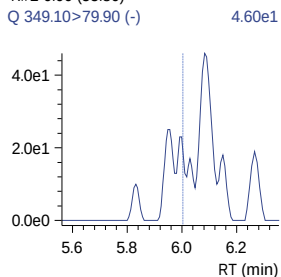


R2 341.00>217.00 (-) 4.09e2

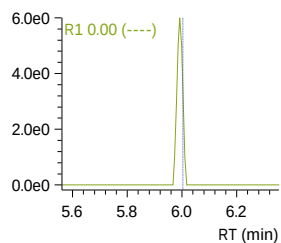


PFPeS

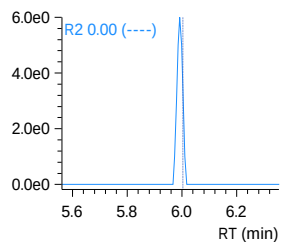
Conc. ISTD Error
R#1 0.00 (56.71)
R#2 0.00 (55.80)
Q 349.10>79.90 (-)



R1 349.10>98.80 (-) 6.00e0

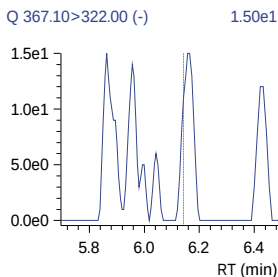


R2 349.10>98.80 (-) 6.00e0



13C4-PFHpA

Conc. ISTD Error
Q 367.10>322.00 (-)



R1 367.10>322.00 (-) 1.50e1

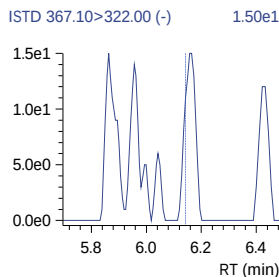


R2 367.10>322.00 (-) 1.50e1



13C4-PFHpA_IS

Conc. ----
ISTD 367.10>322.00 (-)



R1 367.10>322.00 (-) 1.50e1

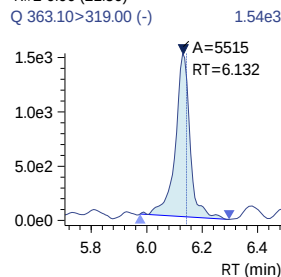


R2 367.10>322.00 (-) 1.50e1

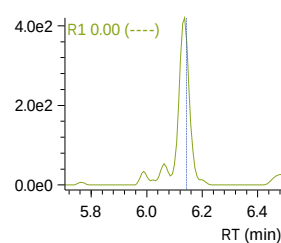


PFHpA

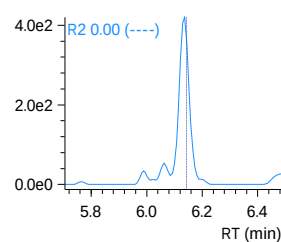
Conc. ISTD Error
R#1 0.00 (21.37)
R#2 0.00 (21.50)
Q 363.10>319.00 (-)



R1 363.10>169.00 (-) 4.20e2

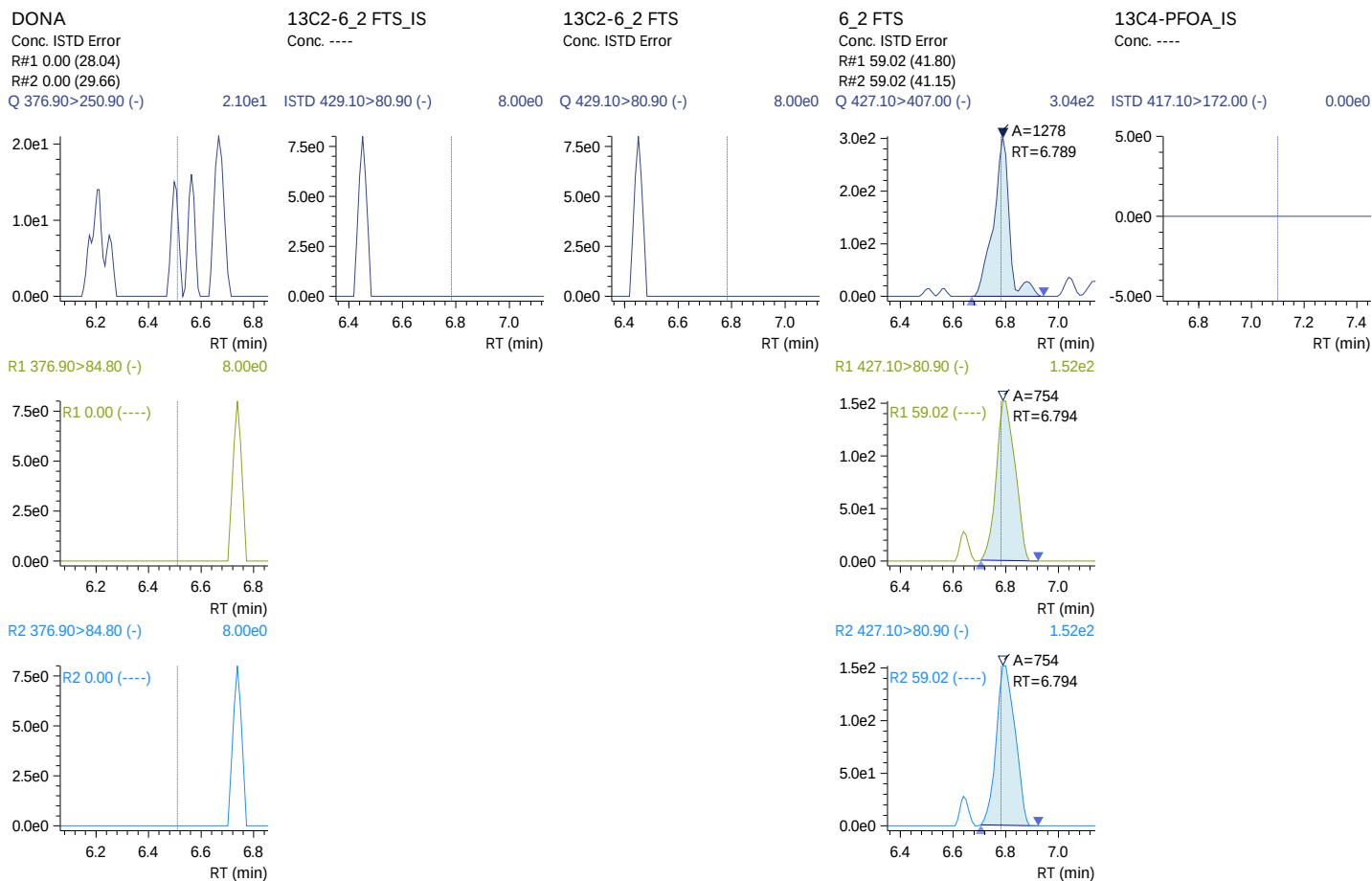


R2 363.10>169.00 (-) 4.20e2





240119_005 (continued)





240119_005 (continued)

13C8-PFOA_IS
Conc. ----

13C8-PFOA
Conc. ISTD Error

PFOA
Conc. ISTD Error
R#1 32.40 (29.05)
R#2 32.40 (31.89)

13C3-PFHxS
Conc. ISTD Error

13C3-PFHxS_IS
Conc. ----

ISTD 421.10>376.00 (-)

7.00e0

Q 421.10>376.00 (-)

7.00e0

Q 413.00>369.00 (-)

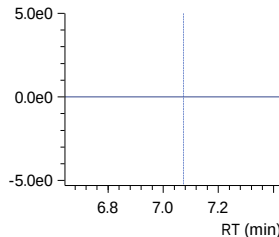
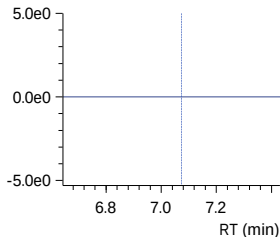
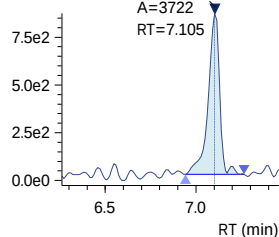
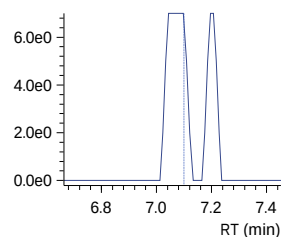
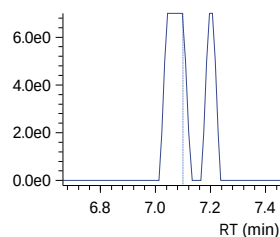
8.75e2

Q 402.10>79.90 (-)

0.00e0

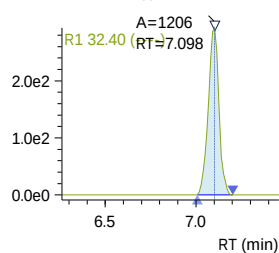
ISTD 402.10>79.90 (-)

0.00e0



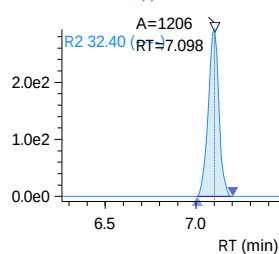
R1 413.00>169.00 (-)

2.93e2



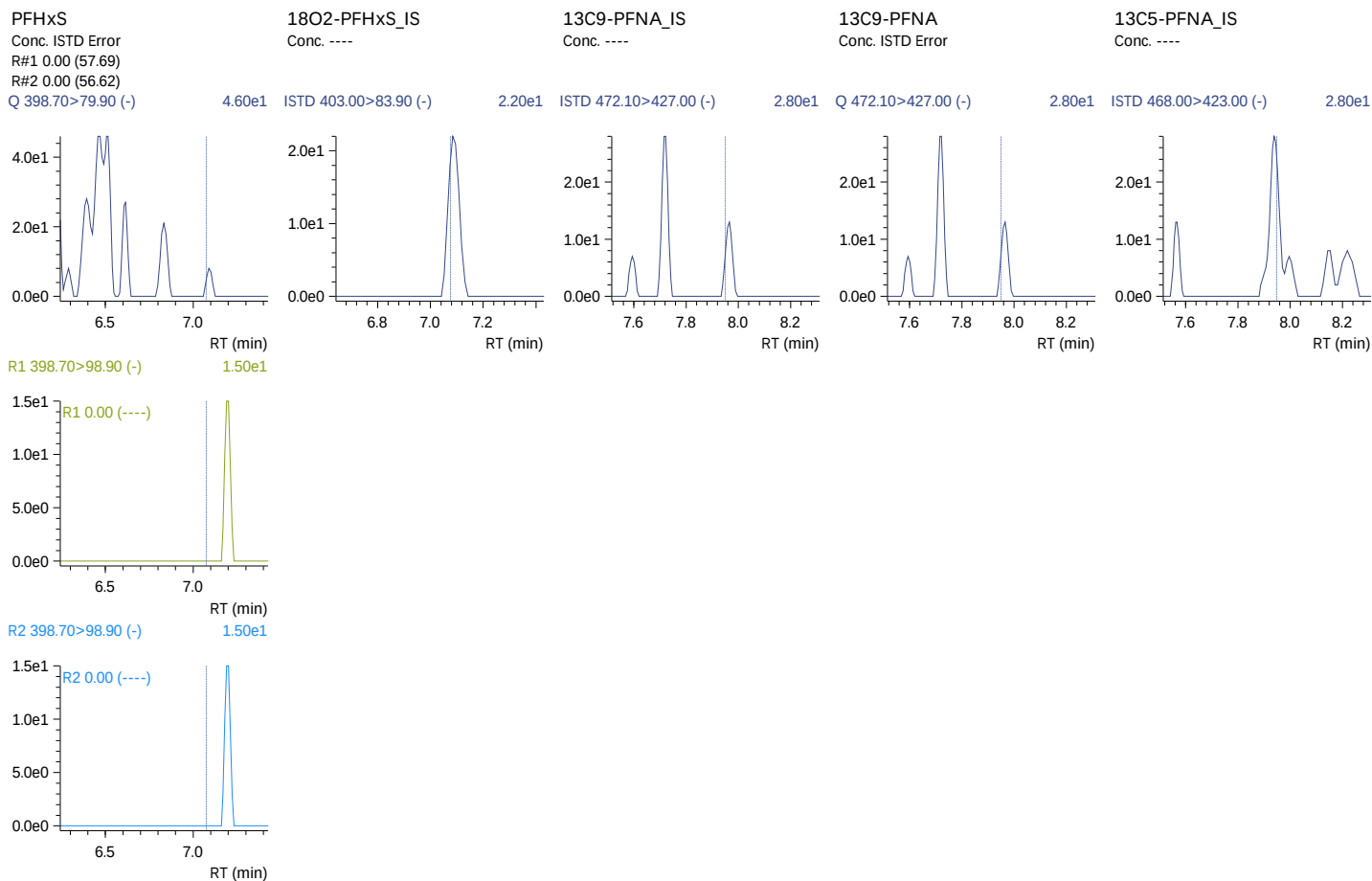
R2 413.00>169.00 (-)

2.93e2



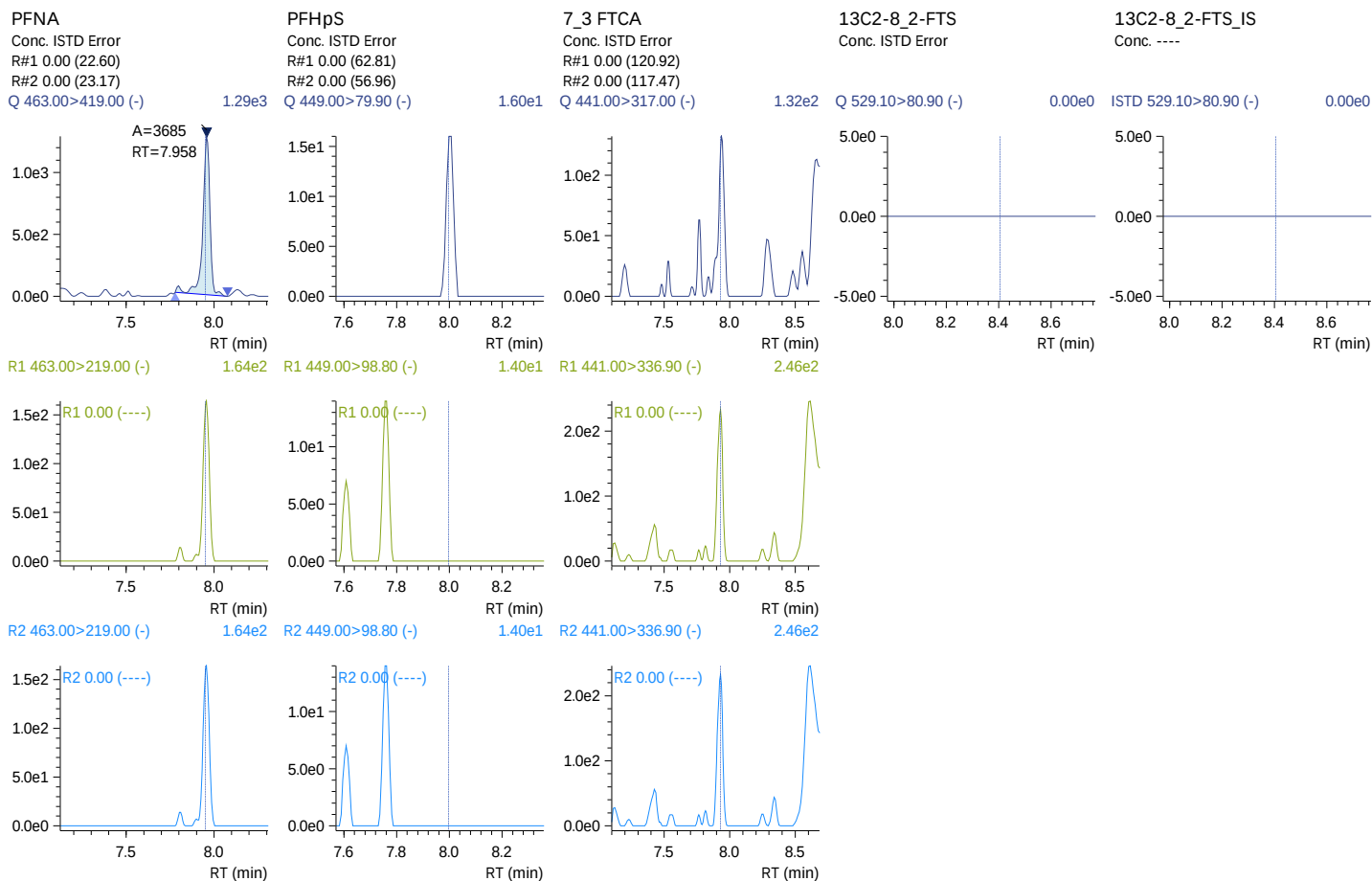


240119_005 (continued)



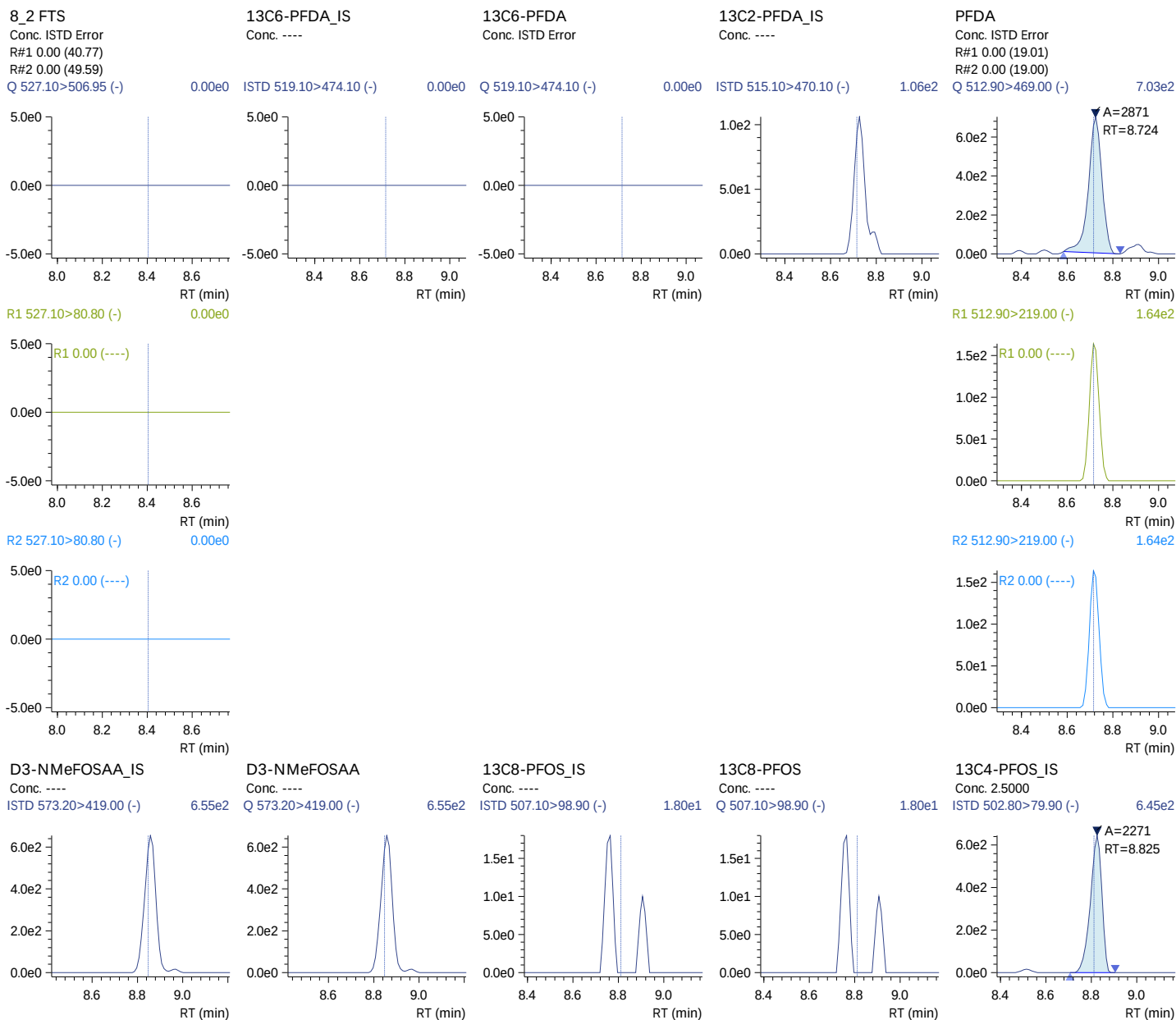


240119_005 (continued)



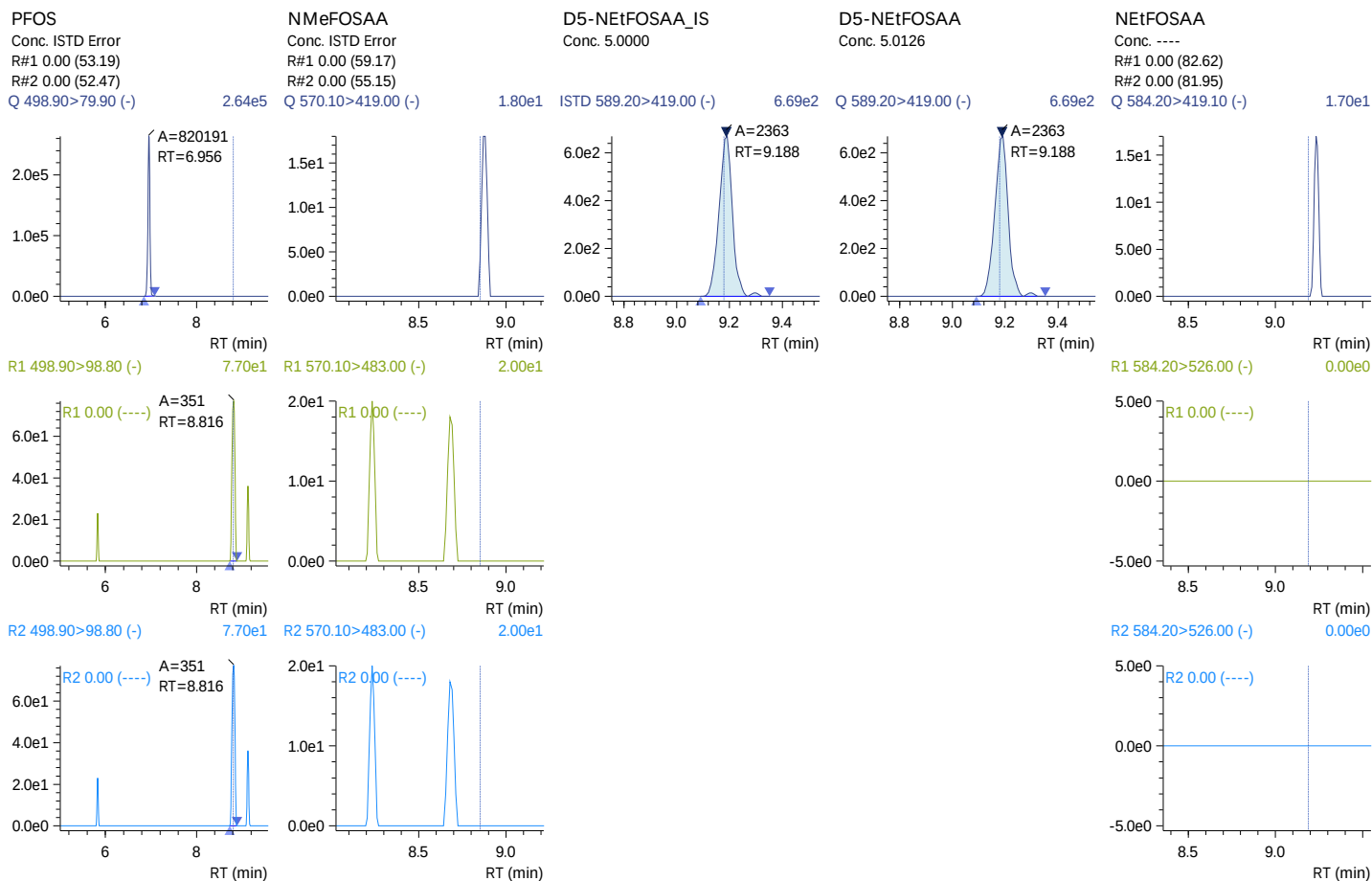


240119_005 (continued)





240119_005 (continued)

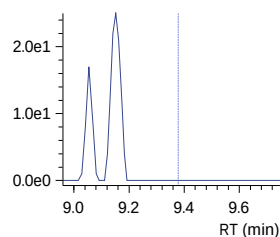




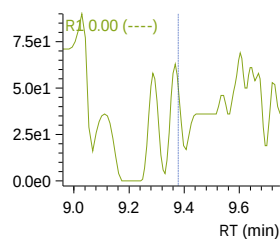
240119_005 (continued)

9-Cl-PF3ONS

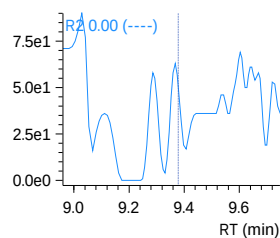
Conc. ISTD Error
R#1 0.00 (31.76)
R#2 0.00 (32.76)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-)

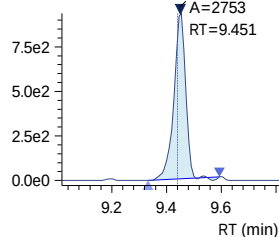


R2 532.80>353.00 (-)

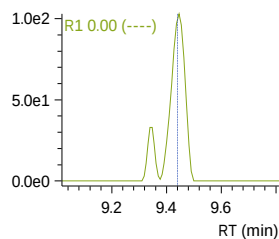


PFUnDA

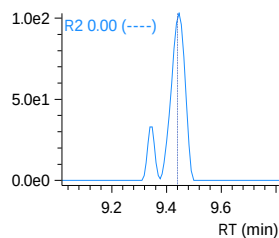
Conc. ISTD Error
R#1 0.00 (12.31)
R#2 0.00 (13.12)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-)



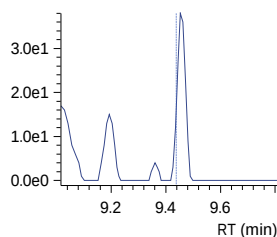
R2 563.10>269.10 (-)



13C7-PFUnDA_IS

Conc. ----

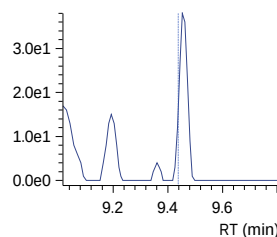
ISTD 570.00>525.10 (-)



13C7-PFUnDA

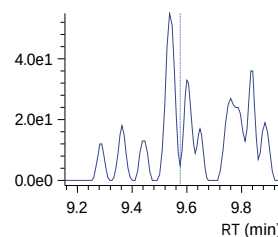
Conc. ISTD Error

Q 570.00>525.10 (-)

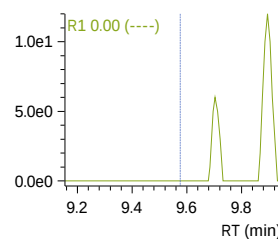


PFNS

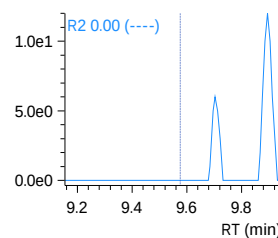
Conc. ISTD Error
R#1 0.00 (63.31)
R#2 0.00 (65.22)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-)

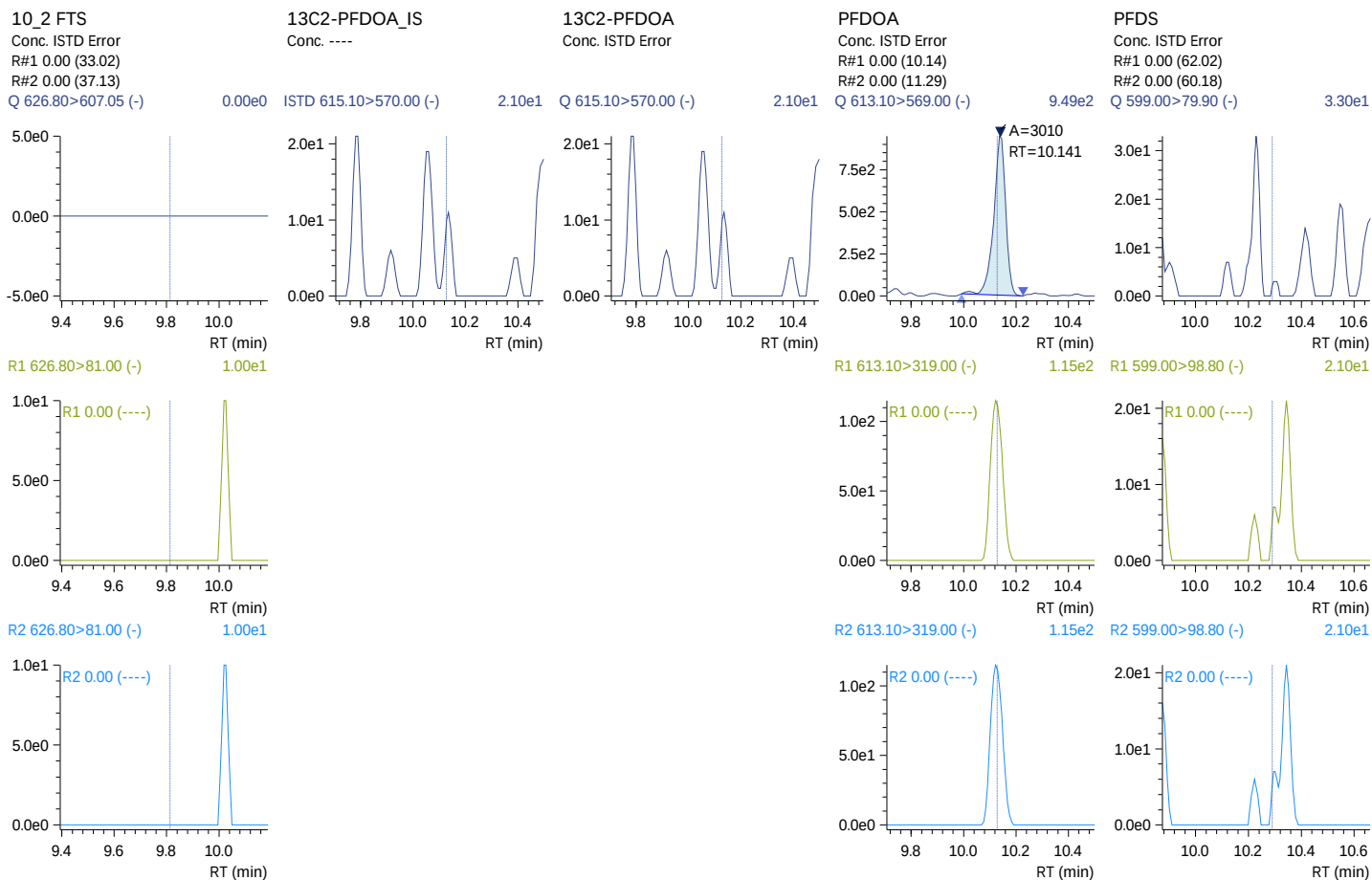


R2 548.80>98.80 (-)





240119_005 (continued)

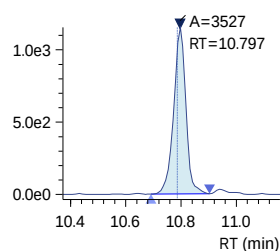




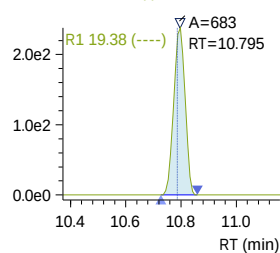
240119_005 (continued)

PFTrDA

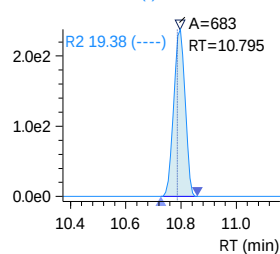
Conc. ISTD Error
 R#1 19.38 (15.12)
 R#2 19.38 (17.64)
 Q 663.00>619.00 (-)



R1 663.00>168.90 (-) 2.38e2

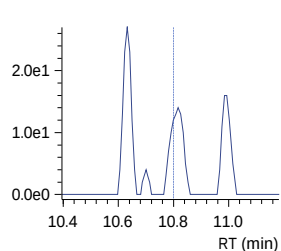


R2 663.00>168.90 (-) 2.38e2

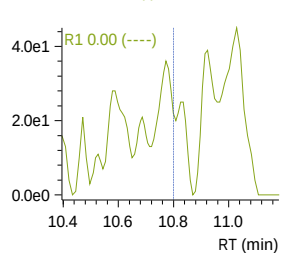


11-Cl-PF3OUdS

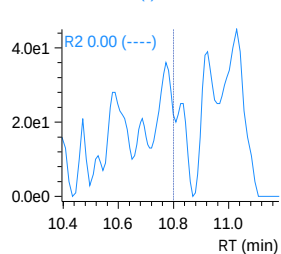
Conc. ISTD Error
 R#1 0.00 (36.61)
 R#2 0.00 (36.44)
 Q 630.90>451.00 (-)



R1 632.90>452.90 (-) 4.50e1



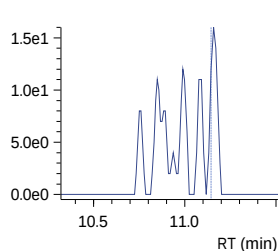
R2 632.90>452.90 (-) 4.50e1



PFOSAm

Conc. ISTD Error

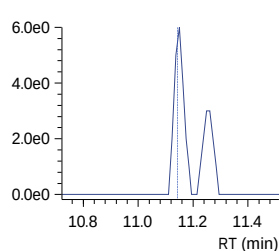
Q 498.10>77.90 (-)



13C8-PFOSAm

Conc. ----

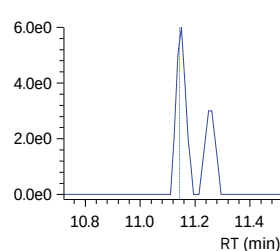
Q 506.10>77.80 (-)



13C8-PFOSAm_IS

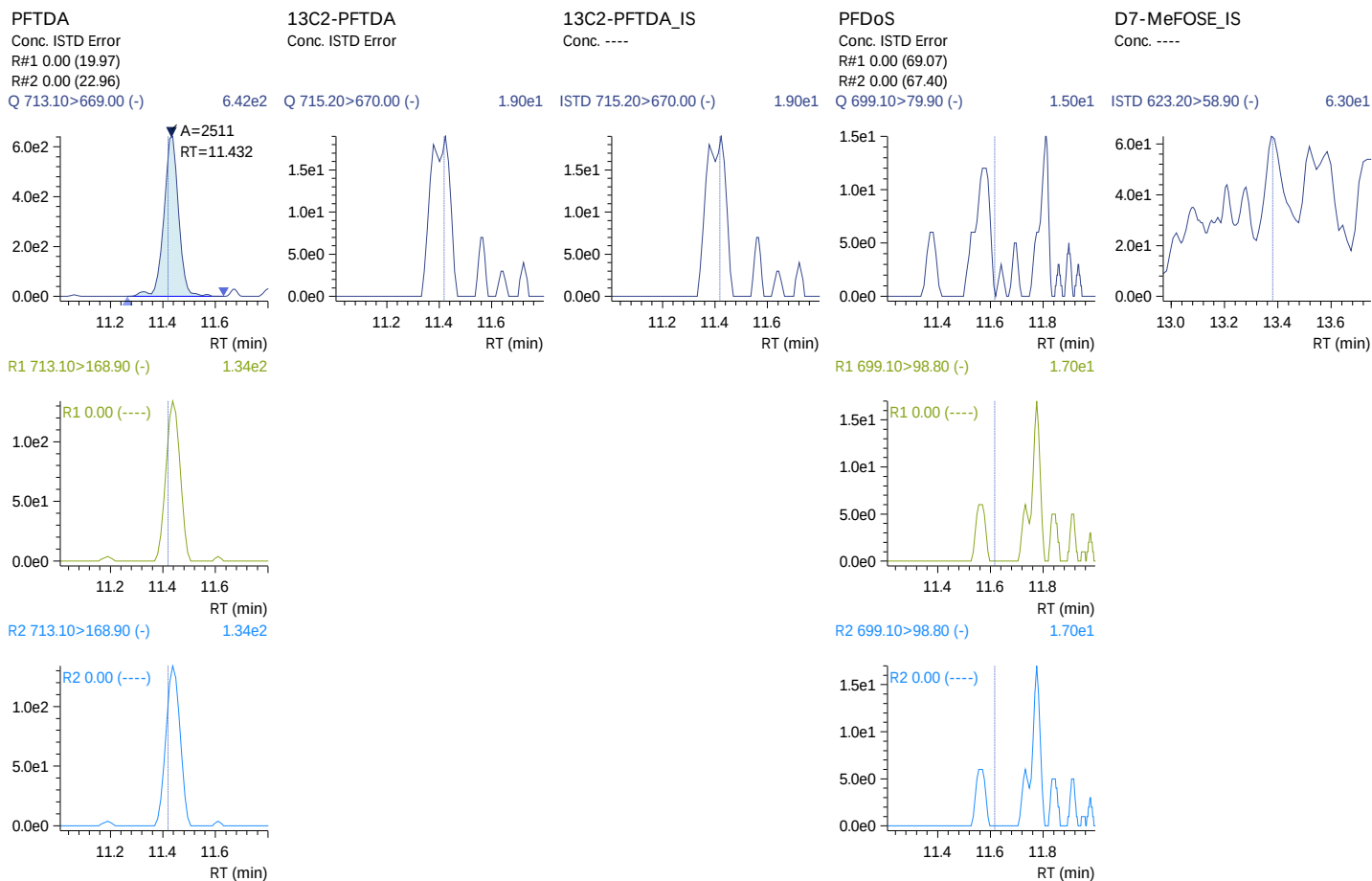
Conc. ----

ISTD 506.10>77.80 (-)





240119_005 (continued)





240119_005 (continued)

D7-MeFOSE
 Conc. ----

MeFOSE
 Conc. ISTD Error

13C2-PFHDA_IS
 Conc. 2.5000

13C2-PFHDA
 Conc. ISTD Error

PFHXDA
 Conc. 3.8785
 R#1 0.00 (11.64)
 R#2 0.00 (13.90)

Q 623.20>58.90 (-)

6.30e1

Q 616.10>59.00 (-)

4.70e1

ISTD 815.00>770.05 (-)

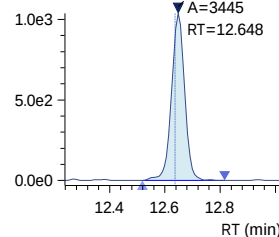
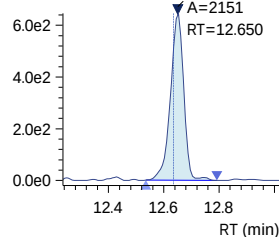
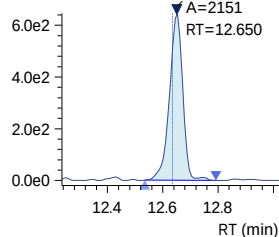
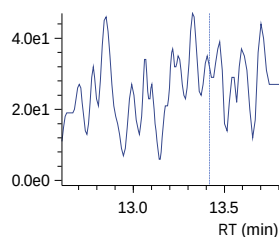
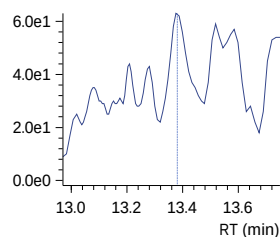
6.46e2

Q 815.00>770.05 (-)

6.46e2

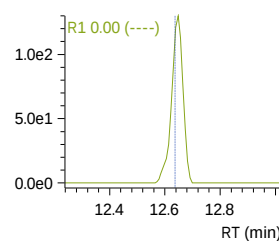
Q 813.00>768.95 (-)

1.04e3



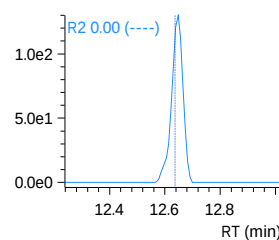
R1 813.00>218.95 (-)

1.30e2



R2 813.00>218.95 (-)

1.30e2





240119_005 (continued)

D3-MeFOSA
 Conc. ----

D3-MeFOSA_IS
 Conc. ----

MeFOSA
 Conc. ISTD Error
 R#1 0.00 (149.05)
 R#2 0.00 (140.79)

D9-EtFOSE_IS
 Conc. ----

D9-EtFOSE
 Conc. ----

Q 515.00>219.00 (-)

7.00e0

ISTD 515.00>219.00 (-)

7.00e0

Q 511.90>219.00 (-)

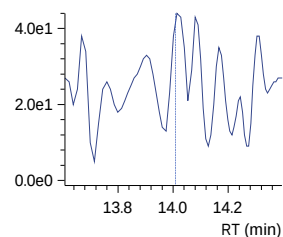
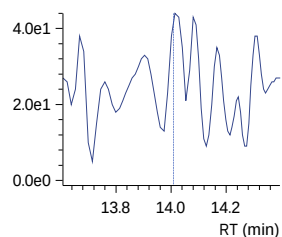
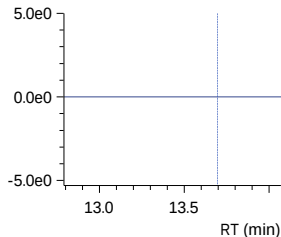
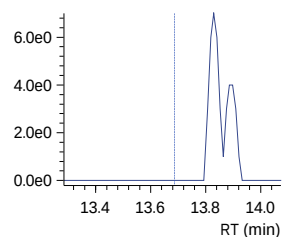
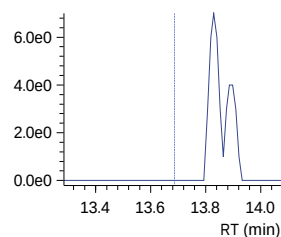
0.00e0

ISTD 639.20>58.90 (-)

4.40e1

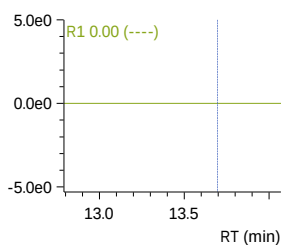
Q 639.20>58.90 (-)

4.40e1



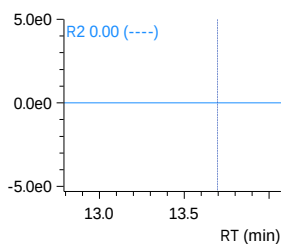
R1 511.90>169.00 (-)

0.00e0



R2 511.90>169.00 (-)

0.00e0





240119_005 (continued)

EtFOSE
Conc. ISTD Error

D5-EtFOSAm
Conc. ----

D5-EtFOSAm_IS
Conc. ----

EtFOSAm
Conc. ISTD Error
R#1 0.00 (154.69)
R#2 0.00 (163.90)

PFODA
Conc. 2.8010
R#1 0.00 (29.32)
R#2 0.00 (27.03)

Q 630.00>59.00 (-)

3.20e1

Q 531.10>219.00 (-)

6.00e0

ISTD 531.10>219.00 (-)

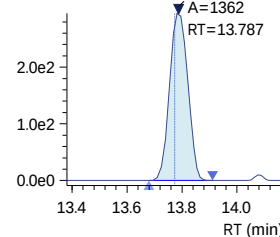
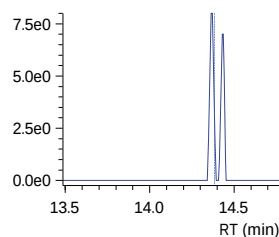
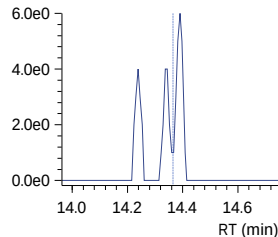
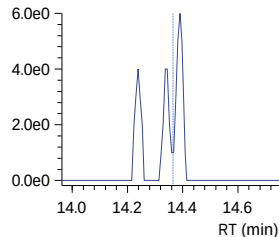
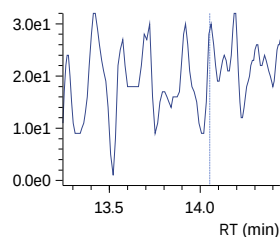
6.00e0

Q 526.00>219.00 (-)

8.00e0

Q 913.00>868.65 (-)

2.95e2

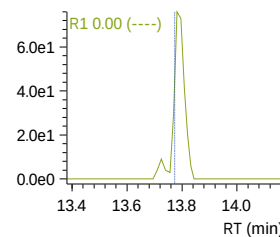
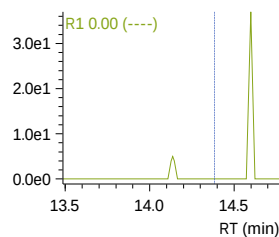


R1 526.00>169.00 (-)

3.70e1

R1 913.00>169.00 (-)

7.60e1

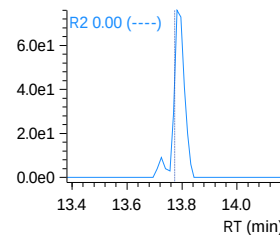
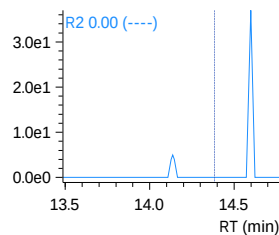


R2 526.00>169.00 (-)

3.70e1

R2 913.00>169.00 (-)

7.60e1





240119_011

Check PFOA and PFNA

Sample ID: 1633 QIS
Date Acquired: 1/19/2024 3:41:04 PM
Acquired by: System Administrator
Data File: 240119_011
Vial: 13 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.462	0.054	0.000	1330958	605394	13C3-PFBA_IS	9.8359	ng/mL	
13C4-PFBA_IS	Auto	1.462	0.054	----	1330958	1330958	----	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.462	0.054	----	605394	605394	----	5.0000	ng/mL	
PFBA	Auto	1.480	0.071	0.018	1080	1330958	13C4-PFBA_IS	0.0094	ng/mL	
PFMPA	ND(W/B)	----	----	----	----	144525	13C5-PFPeA_IS	----	ng/mL	
3_3 FTCA	ND(W/B)	----	----	----	----	144525	13C5-PFPeA_IS	----	ng/mL	
13C5-PFPeA	Auto	3.489	0.010	-1.474	144525	619888	13C2-PFHxA_IS	5.1651	ng/mL	
13C5-PFPeA_IS	Auto	3.489	0.010	----	144525	144525	----	5.0000	ng/mL	
PFPeA	ND(W/B)	----	----	----	----	144525	13C5-PFPeA_IS	----	ng/mL	
PFMBA	ND(W/B)	----	----	----	----	144525	13C5-PFPeA_IS	----	ng/mL	
13C2-4_2 FTS	Auto	4.647	0.001	-2.427	211370	228647	18O2-PFHxS_IS	6.7176	ng/mL	
13C2-4_2 FTS_IS	Auto	4.647	0.001	----	211370	211370	----	5.0000	ng/mL	
4_2 FTS	ND(W/B)	----	----	----	----	211370	13C2-4_2 FTS_IS	----	ng/mL	
13C3-PFBS_IS	Auto	4.630	0.002	----	332037	332037	----	2.5000	ng/mL	
PFBS	ND(W/B)	----	----	----	----	332037	13C3-PFBS_IS	----	ng/mL	
13C3-PFBS	Auto	4.630	0.002	-2.444	332037	228647	18O2-PFHxS_IS	2.5589	ng/mL	
NFDHA	ND(W/B)	----	----	----	----	667677	13C5-PFHxA_IS	----	ng/mL	
13C5-PFHxA	Auto	4.962	-0.001	-0.001	667677	619888	13C2-PFHxA_IS	2.5557	ng/mL	
13C5-PFHxA_IS	Auto	4.962	-0.001	----	667677	667677	----	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	4.963	0.000	----	619888	619888	----	2.5000	ng/mL	
PFHxA	Auto	4.860	-0.105	-0.102	4765	667677	13C5-PFHxA_IS	0.0131	ng/mL	RTi
PFEESA	ND(W/B)	----	----	----	----	667677	13C5-PFHxA_IS	----	ng/mL	
13C3-HFPO-DA	Auto	5.438	-0.001	0.475	665505	619888	13C2-PFHxA_IS	10.9672	ng/mL	
13C3-HFPO-DA_IS	Auto	5.438	-0.001	----	665505	665505	----	10.0000	ng/mL	
HFPO-DA	ND(W/B)	----	----	----	----	665505	13C3-HFPO-DA_IS	----	ng/mL	
5_3 FTCA	Auto	5.872	0.001	0.910	989	667677	13C5-PFHxA_IS	0.0573	ng/mL	
PFPeS	ND(W/B)	----	----	----	----	249877	13C3-PFHxS_IS	----	ng/mL	
13C4-PFHpA	Auto	6.142	-0.001	1.179	627827	619888	13C2-PFHxA_IS	2.6547	ng/mL	
13C4-PFHpA_IS	Auto	6.142	-0.001	----	627827	627827	----	2.5000	ng/mL	
PFHpA	Auto	6.128	-0.016	-0.014	8173	627827	13C4-PFHpA_IS	-0.0034	ng/mL	
DONA	ND(W/B)	----	----	----	----	665505	13C3-HFPO-DA_IS	----	ng/mL	
13C2-6_2 FTS_IS	Auto	6.782	-0.002	----	216618	216618	----	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.782	-0.002	-0.292	216618	228647	18O2-PFHxS_IS	7.2789	ng/mL	
6_2 FTS	Auto	6.780	-0.003	-0.002	1196	216618	13C2-6_2 FTS_IS	0.0121	ng/mL	IRr
13C4-PFOA_IS	Auto	7.099	0.000	----	46315	46315	----	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.098	-0.002	----	632833	632833	----	2.5000	ng/mL	
13C8-PFOA	Auto	7.098	-0.002	-0.001	632833	46315	13C4-PFOA_IS	2.4446	ng/mL	
PFOA	M	7.100	-0.002	0.002	143354	632833	13C8-PFOA_IS	0.8340	ng/mL	
13C3-PFHxS	Auto	7.073	-0.001	-0.001	249877	228647	18O2-PFHxS_IS	2.5461	ng/mL	
13C3-PFHxS_IS	Auto	7.073	-0.001	----	249877	249877	----	2.5000	ng/mL	
PFHxS	Auto	7.072	-0.002	-0.001	1658	249877	13C3-PFHxS_IS	-0.0053	ng/mL	IRr
18O2-PFHxS_IS	Auto	7.074	-0.001	----	228647	228647	----	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.949	0.000	----	316919	316919	----	1.2500	ng/mL	
13C9-PFNA	Auto	7.949	0.000	0.000	316919	327720	13C5-PFNA_IS	1.2351	ng/mL	
13C5-PFNA_IS	Auto	7.949	0.000	----	327720	327720	----	1.2500	ng/mL	
PFNA	M	7.686	-0.264	-0.263	514141	316919	13C9-PFNA_IS	2.8197	ng/mL	RTi
PFHpS	ND(W/B)	----	----	----	----	118663	13C8-PFOS_IS	----	ng/mL	
7_3 FTCA	ND(W/B)	----	----	----	----	667677	13C5-PFHxA_IS	----	ng/mL	
13C2-8_2-FTS	Auto	8.405	0.001	1.331	185031	228647	18O2-PFHxS_IS	7.5690	ng/mL	
13C2-8_2-FTS_IS	Auto	8.405	0.001	----	185031	185031	----	5.0000	ng/mL	
8_2 FTS	ND(W/B)	----	----	----	----	185031	13C2-8_2-FTS_IS	----	ng/mL	
13C6-PFDA_IS	Auto	8.714	0.000	----	233882	233882	----	1.2500	ng/mL	
13C6-PFDA	Auto	8.714	0.000	-0.001	233882	218271	13C2-PFDA_IS	1.3319	ng/mL	

J:\LCMS08\Data\240119_1633_B1\240119_1633_B1.dampl

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_011 (continued)

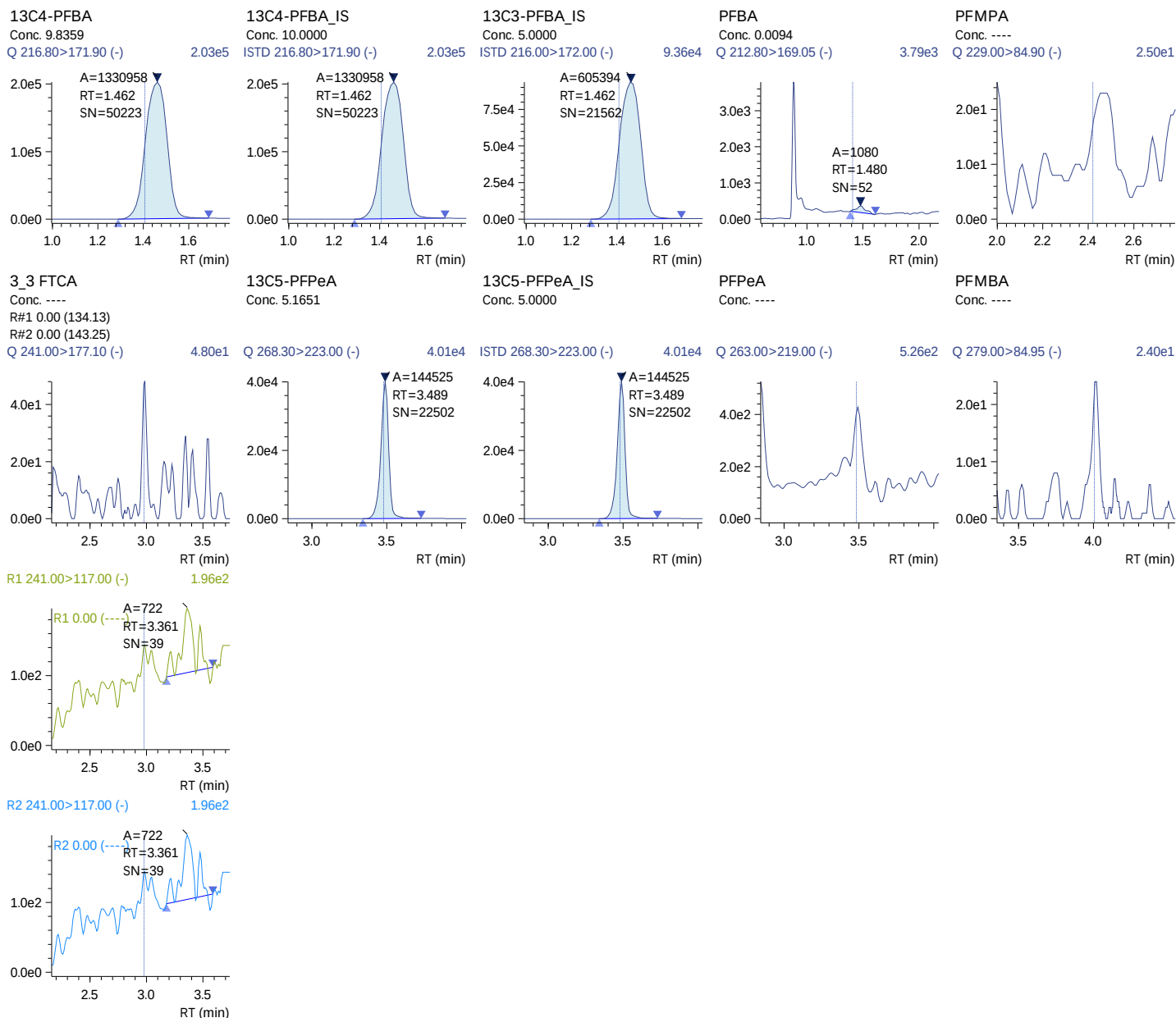
(Table continued from previous page)

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Conc.	Unit	Flag ID
13C2-PFDA_IS	Auto	8.715	0.000	----	218271	218271	----	1.2500	ng/mL	
PFDA	Auto	8.717	0.001	0.003	5193	233882	13C6-PFDA_IS	-0.0022	ng/mL	
D3-NMeFOSAA_IS	Auto	8.849	0.001	----	300893	300893	----	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.849	0.001	0.038	300893	276559	13C4-PFOS_IS	6.2687	ng/mL	
13C8-PFOS_IS	Auto	8.811	0.000	----	118663	118663	----	2.5000	ng/mL	
13C8-PFOS	Auto	8.811	0.000	0.000	118663	276559	13C4-PFOS_IS	2.5728	ng/mL	
13C4-PFOS_IS	Auto	8.811	0.000	----	276559	276559	----	2.5000	ng/mL	
PFOS	Auto	8.605	-0.208	-0.206	495	118663	13C8-PFOS_IS	0.0040	ng/mL	IRr, RTi
NMeFOSAA	ND(W/B)	----	----	----	----	300893	D3-NMeFOSAA_IS	----	ng/mL	
D5-NetFOSAA_IS	Auto	9.178	0.000	----	369529	369529	----	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.178	0.000	0.367	369529	276559	13C4-PFOS_IS	6.4350	ng/mL	
NetFOSAA	ND(W/B)	----	----	----	----	369529	D5-NetFOSAA_IS	----	ng/mL	
9-CI-PF3ONS	ND(W/B)	----	----	----	----	665505	13C3-HFPO-DA_IS	----	ng/mL	
PFUnDA	Auto	9.438	-0.002	-0.001	3602	282811	13C7-PFUnDA_IS	-0.0121	ng/mL	IRr
13C7-PFUnDA_IS	Auto	9.439	0.001	----	282811	282811	----	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.439	0.001	0.724	282811	218271	13C2-PFDA_IS	1.3501	ng/mL	
PFNS	ND(W/B)	----	----	----	----	118663	13C8-PFOS_IS	----	ng/mL	
10_2 FTS	ND(W/B)	----	----	----	----	185031	13C2-8_2-FTS_IS	----	ng/mL	
13C2-PFDOA_IS	Auto	10.128	0.001	----	305065	305065	----	1.2500	ng/mL	
13C2-PFDOA	Auto	10.128	0.001	1.413	305065	218271	13C2-PFDA_IS	1.2677	ng/mL	
PFDOA	Auto	10.125	-0.003	-0.003	2718	305065	13C2-PFDOA_IS	-0.0170	ng/mL	IRr
PFDS	ND(W/B)	----	----	----	----	118663	13C8-PFOS_IS	----	ng/mL	
PFTDA	Auto	10.784	-0.002	-0.634	2877	136515	13C2-PFTDA_IS	-0.0160	ng/mL	
11-CI-PF3OUdS	ND(W/B)	----	----	----	----	665505	13C3-HFPO-DA_IS	----	ng/mL	
PFOSAm	Auto	11.157	0.014	0.012	65673	280262	13C8-PFOSAm_IS	0.7109	ng/mL	
13C8-PFOSAm	Auto	11.145	0.002	2.334	280262	276559	13C4-PFOS_IS	2.3872	ng/mL	
13C8-PFOSAm_IS	Auto	11.145	0.002	----	280262	280262	----	2.5000	ng/mL	
PFTDA	ND(W/B)	----	----	----	----	136515	13C2-PFTDA_IS	----	ng/mL	
13C2-PFTDA	Auto	11.418	-0.001	2.703	136515	218271	13C2-PFDA_IS	1.3139	ng/mL	
13C2-PFTDA_IS	Auto	11.418	-0.001	----	136515	136515	----	1.2500	ng/mL	
PFDoS	ND(W/B)	----	----	----	----	118663	13C8-PFOS_IS	----	ng/mL	
D7-MeFOSE_IS	Auto	13.382	0.001	----	730517	730517	----	25.0000	ng/mL	
D7-MeFOSE	Auto	13.382	0.001	4.571	730517	276559	13C4-PFOS_IS	25.2376	ng/mL	
MeFOSE	Auto	13.420	0.002	0.038	18630	730517	D7-MeFOSE_IS	0.6944	ng/mL	
13C2-PFHxDA_IS	Auto	12.636	0.000	----	505344	505344	----	2.5000	ng/mL	
13C2-PFHxDA	Auto	12.636	0.000	3.921	505344	218271	13C2-PFDA_IS	2.4925	ng/mL	
PFHxDA	Auto	12.634	-0.003	-0.002	3427	505344	13C2-PFHxDA_IS	-0.0113	ng/mL	IRr
D3-MeFOSA	Auto	13.689	0.002	4.878	58720	276559	13C4-PFOS_IS	2.4836	ng/mL	
D3-MeFOSA_IS	Auto	13.689	0.002	----	58720	58720	----	2.5000	ng/mL	
MeFOSA	ND(W/B)	----	----	----	----	58720	D3-MeFOSA_IS	----	ng/mL	
D9-EtFOSE_IS	Auto	14.013	0.004	----	712007	712007	----	25.0000	ng/mL	
D9-EtFOSE	Auto	14.013	0.004	5.202	712007	276559	13C4-PFOS_IS	24.2189	ng/mL	
EtFOSE	Auto	14.058	0.006	0.045	26342	712007	D9-EtFOSE_IS	0.7032	ng/mL	
D5-EtFOSAm	Auto	14.369	0.004	5.558	77622	276559	13C4-PFOS_IS	2.4659	ng/mL	
D5-EtFOSAm_IS	Auto	14.369	0.004	----	77622	77622	----	2.5000	ng/mL	
EtFOSAm	ND(W/B)	----	----	----	----	77622	D5-EtFOSAm_IS	----	ng/mL	
PFODA	Auto	13.782	0.008	1.146	1852	505344	13C2-PFHxDA_IS	0.0162	ng/mL	IRr

Flag ID key: IRr: Ion Ratio (Relative), RTi: RT Diff (Absolute ISTD)



240119_011 (continued)





240119_011 (continued)

13C2-4_2 FTS
Conc. 6.7176

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. ----
R#1 0.00 (34.14)
R#2 0.00 (31.50)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. ----
R#1 0.00 (47.53)
R#2 0.00 (48.74)

Q 329.10>80.90 (-)

6.45e4

ISTD 329.10>80.90 (-)

6.45e4

Q 327.10>307.00 (-)

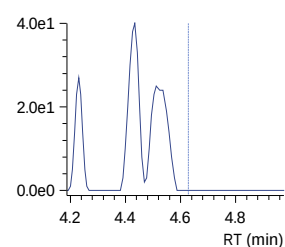
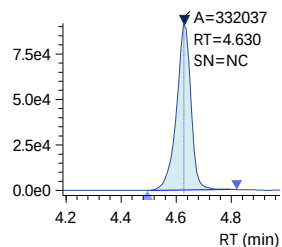
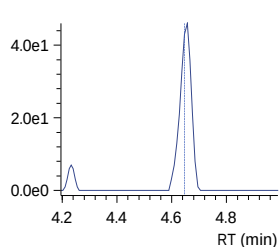
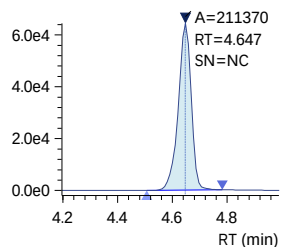
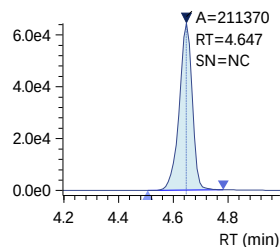
4.60e1

ISTD 302.10>79.90 (-)

9.18e4

Q 298.70>79.90 (-)

4.00e1

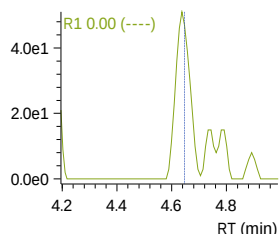


R1 327.10>80.90 (-)

5.10e1

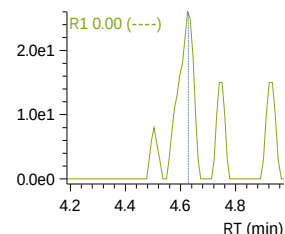
R1 298.70>98.80 (-)

2.60e1



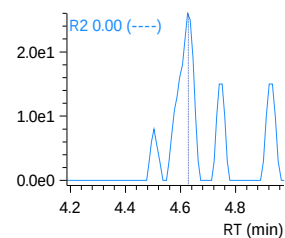
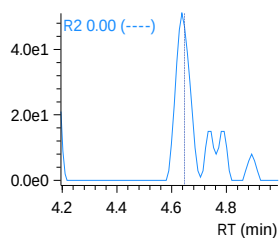
R2 327.10>80.90 (-)

5.10e1



R2 298.70>98.80 (-)

2.60e1





240119_011 (continued)

13C3-PFBS
Conc. 2.5589

NFDHA
Conc. ----
R#1 0.00 (37.88)
R#2 0.00 (36.97)

13C5-PFHxA
Conc. 2.5557

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

Q 302.10>79.90 (-)

9.18e4

Q 295.00>201.00 (-)

2.45e2

Q 318.00>273.00 (-)

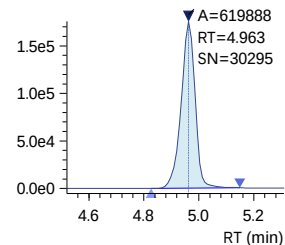
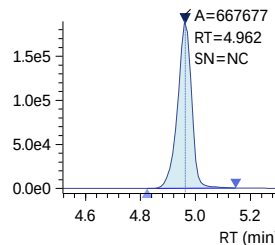
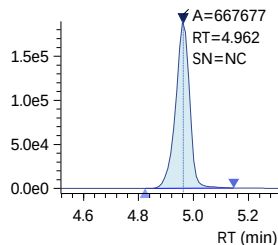
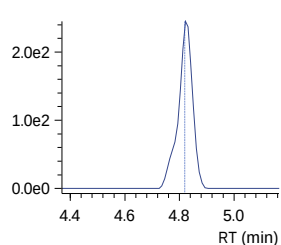
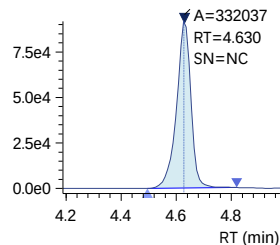
1.90e5

ISTD 318.00>273.00 (-)

1.90e5

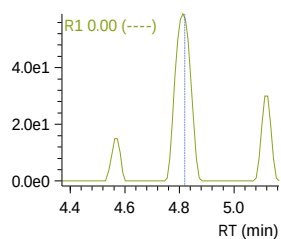
ISTD 315.10>270.00 (-)

1.76e5



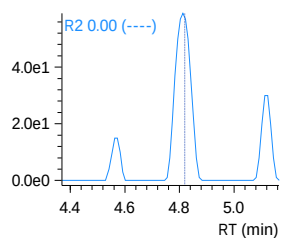
R1 295.00>84.90 (-)

5.90e1



R2 295.00>84.90 (-)

5.90e1





240119_011 (continued)

PFHxA
Conc. 0.0131

PFEESA
Conc. ----
R#1 0.00 (5.88)
R#2 0.00 (5.81)

13C3-HFPO-DA
Conc. 10.9672

13C3-HFPO-DA_IS
Conc. 10.0000

HFPO-DA
Conc. ----
R#1 0.00 (63.80)
R#2 0.00 (64.39)

Q 313.00>269.00 (-)

7.86e2

Q 314.80>135.00 (-)

5.80e1

Q 286.90>168.90 (-)

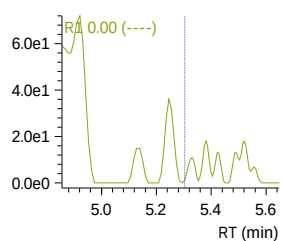
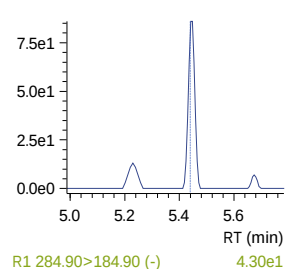
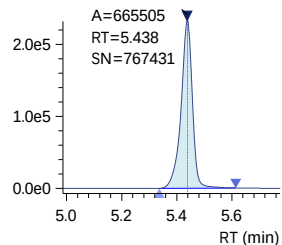
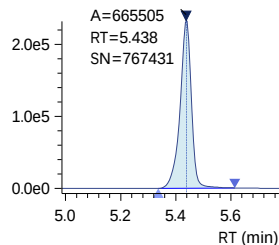
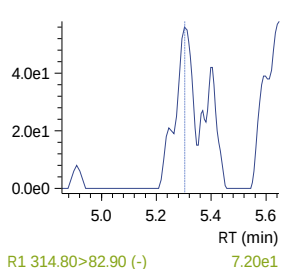
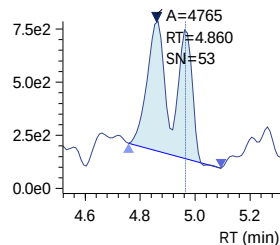
2.32e5

ISTD 286.90>168.90 (-)

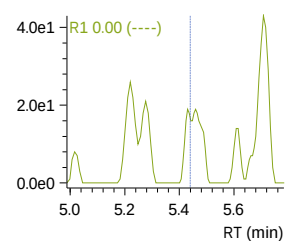
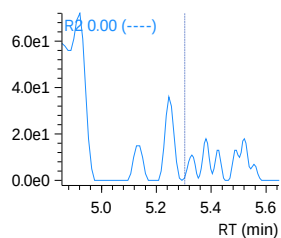
2.32e5

Q 284.90>168.90 (-)

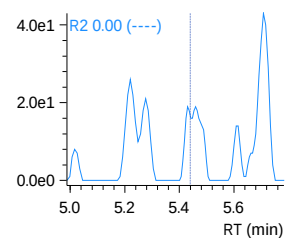
8.60e1



R2 314.80>82.90 (-)

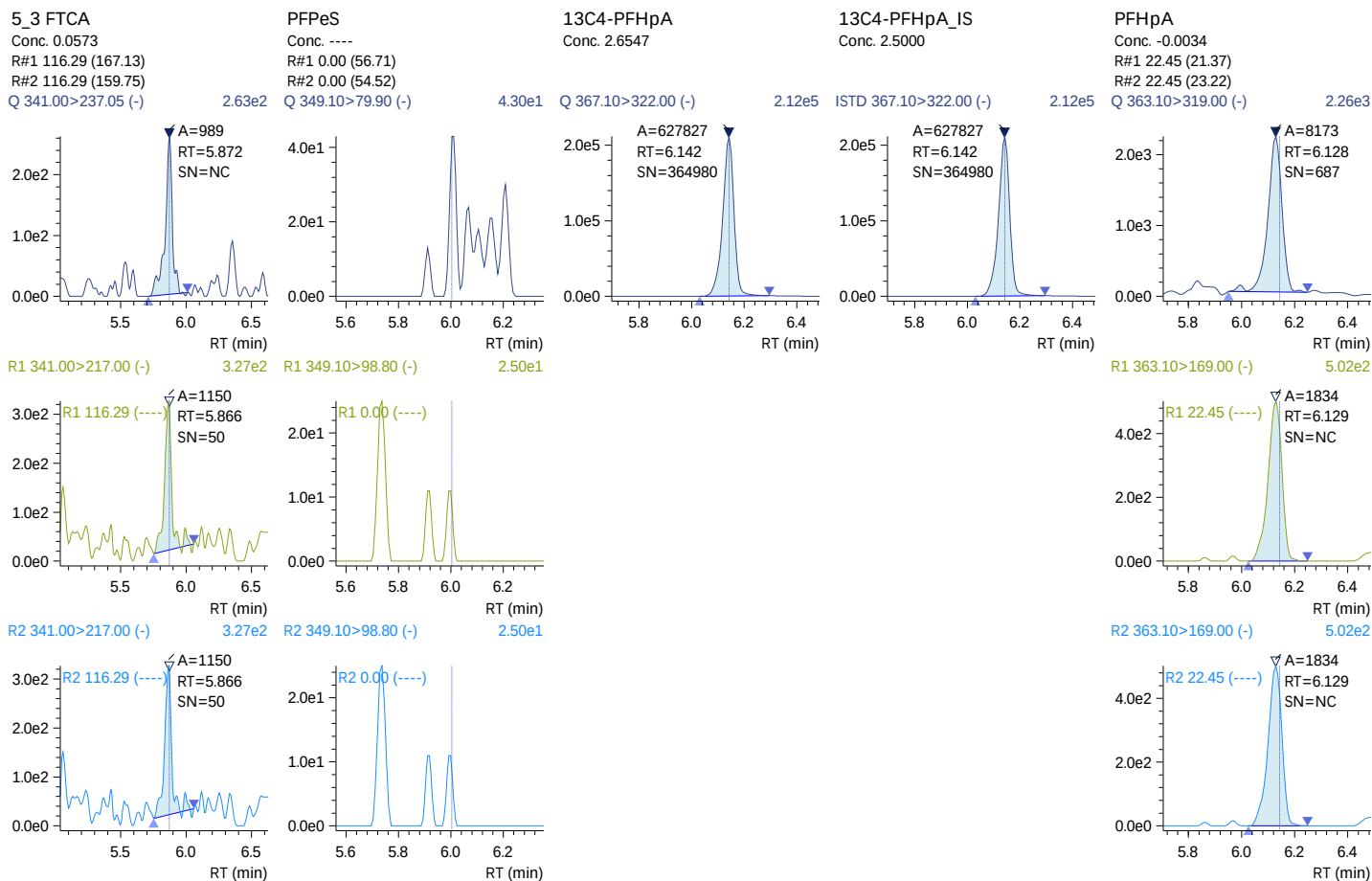


R2 284.90>184.90 (-)





240119_011 (continued)

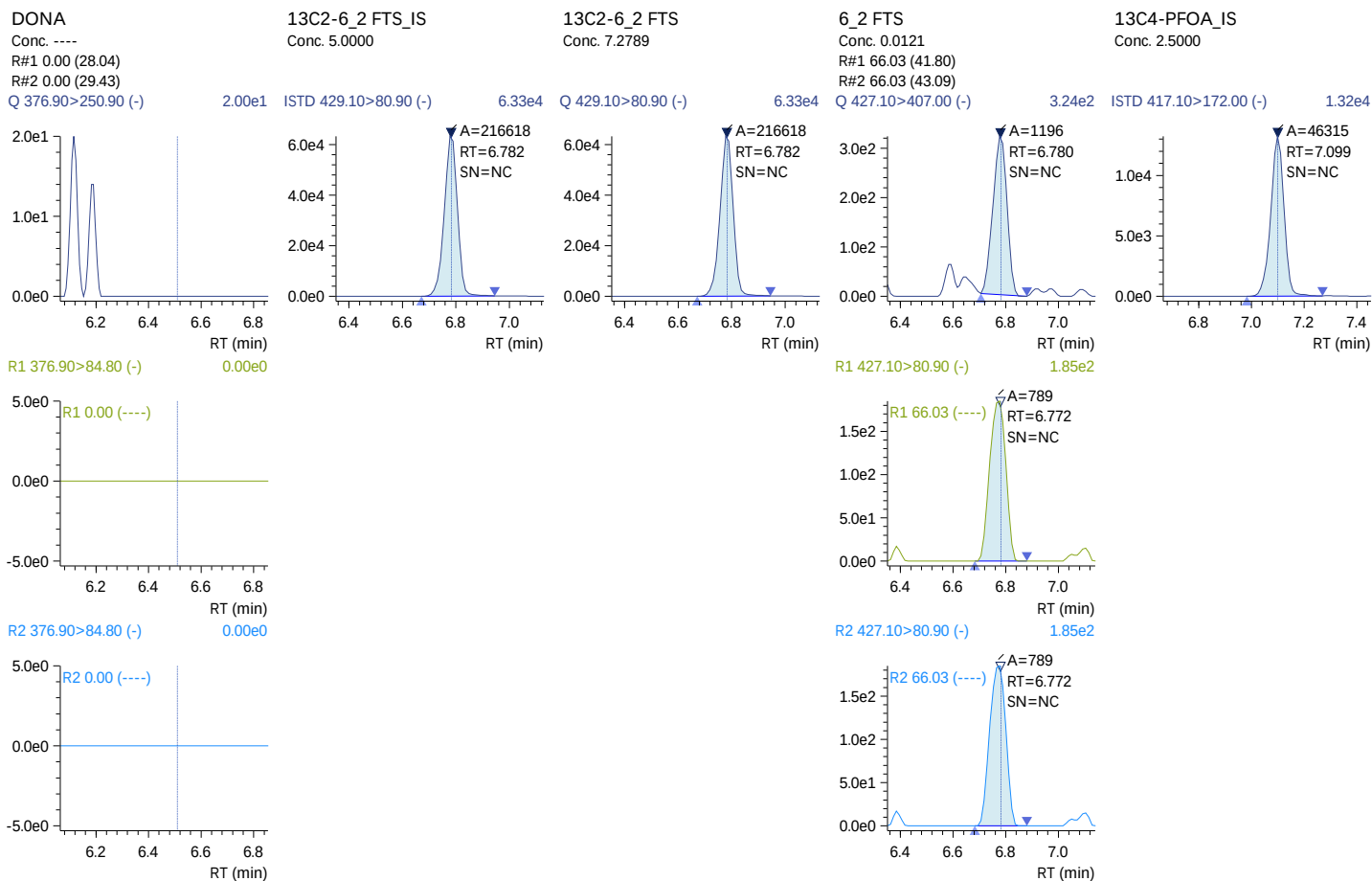


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_011 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_011 (continued)

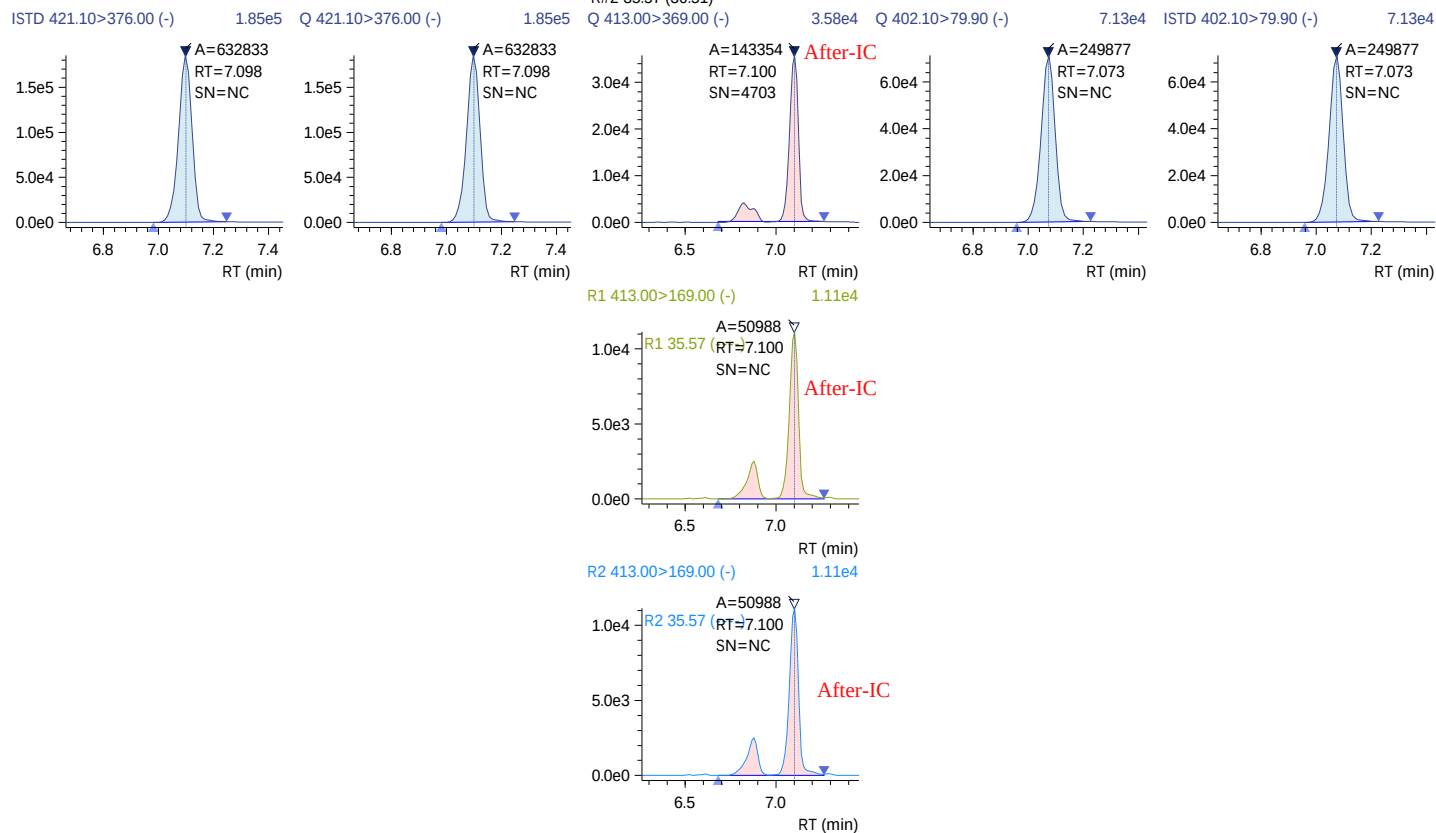
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.4446

PFOA
Conc. 0.8340
R#1 35.57 (29.05)
R#2 35.57 (30.51)

13C3-PFHxS
Conc. 2.5461

13C3-PFHxS_IS
Conc. 2.5000

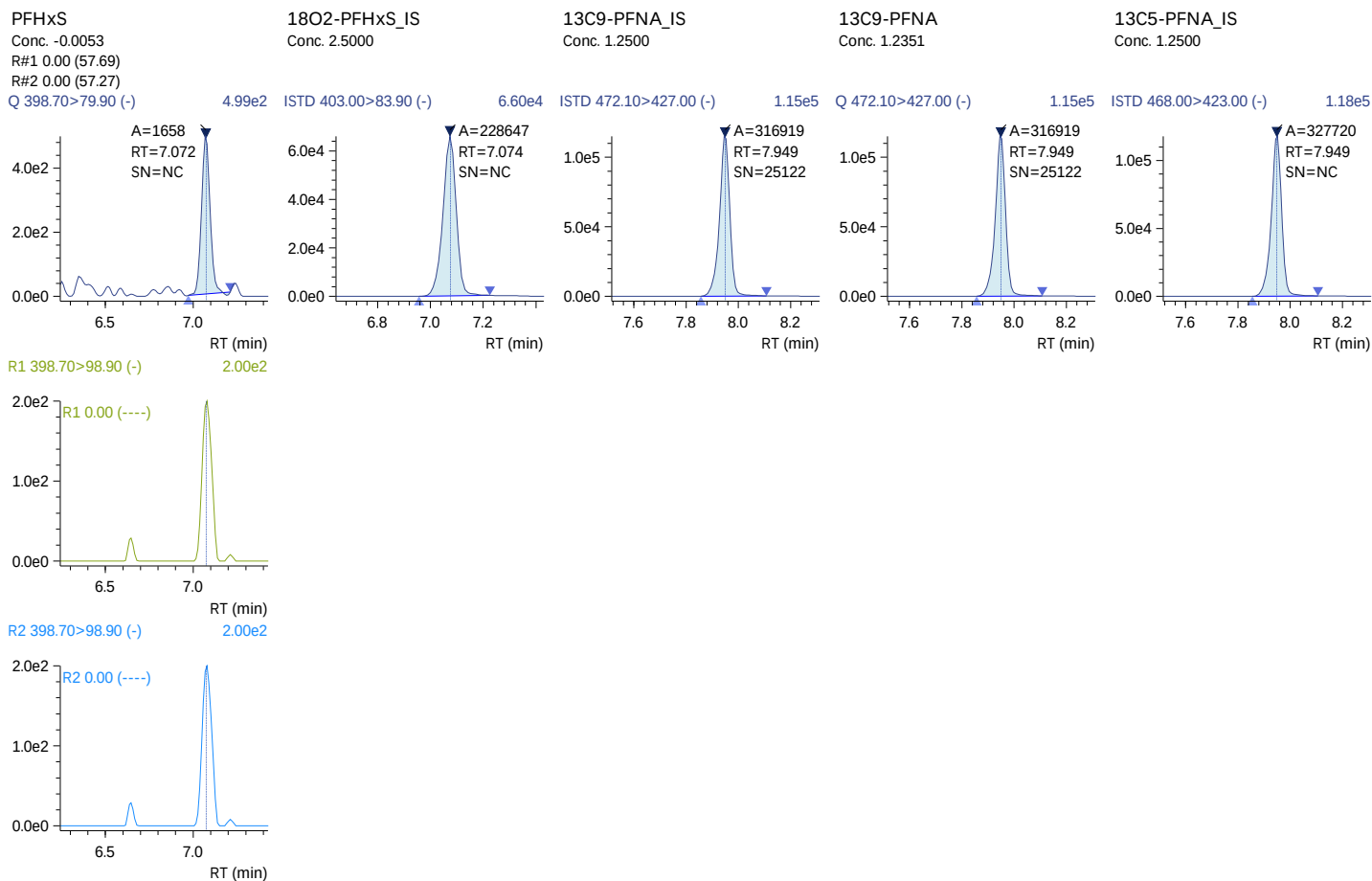


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
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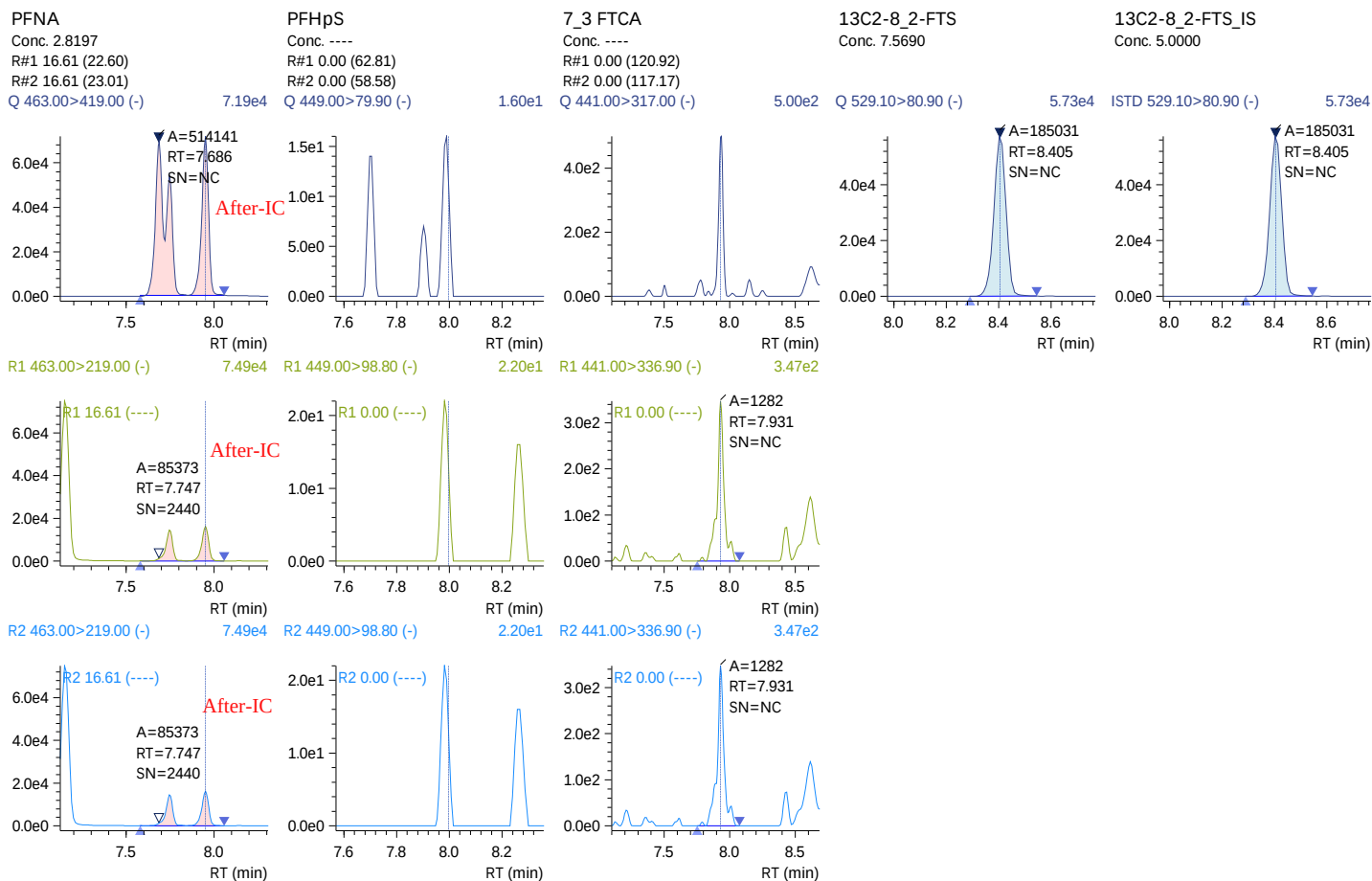


240119_011 (continued)





240119_011 (continued)

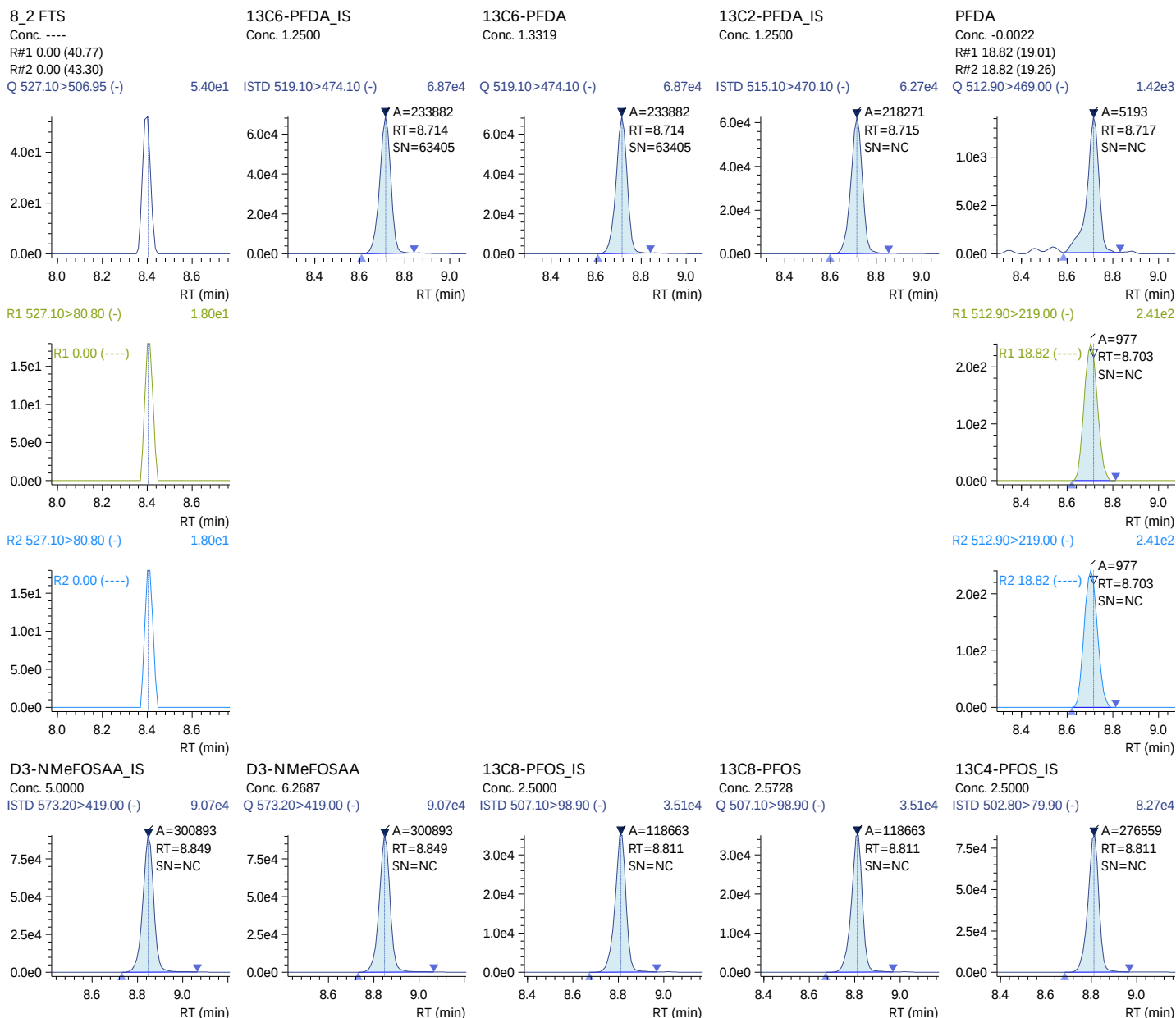


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_011 (continued)

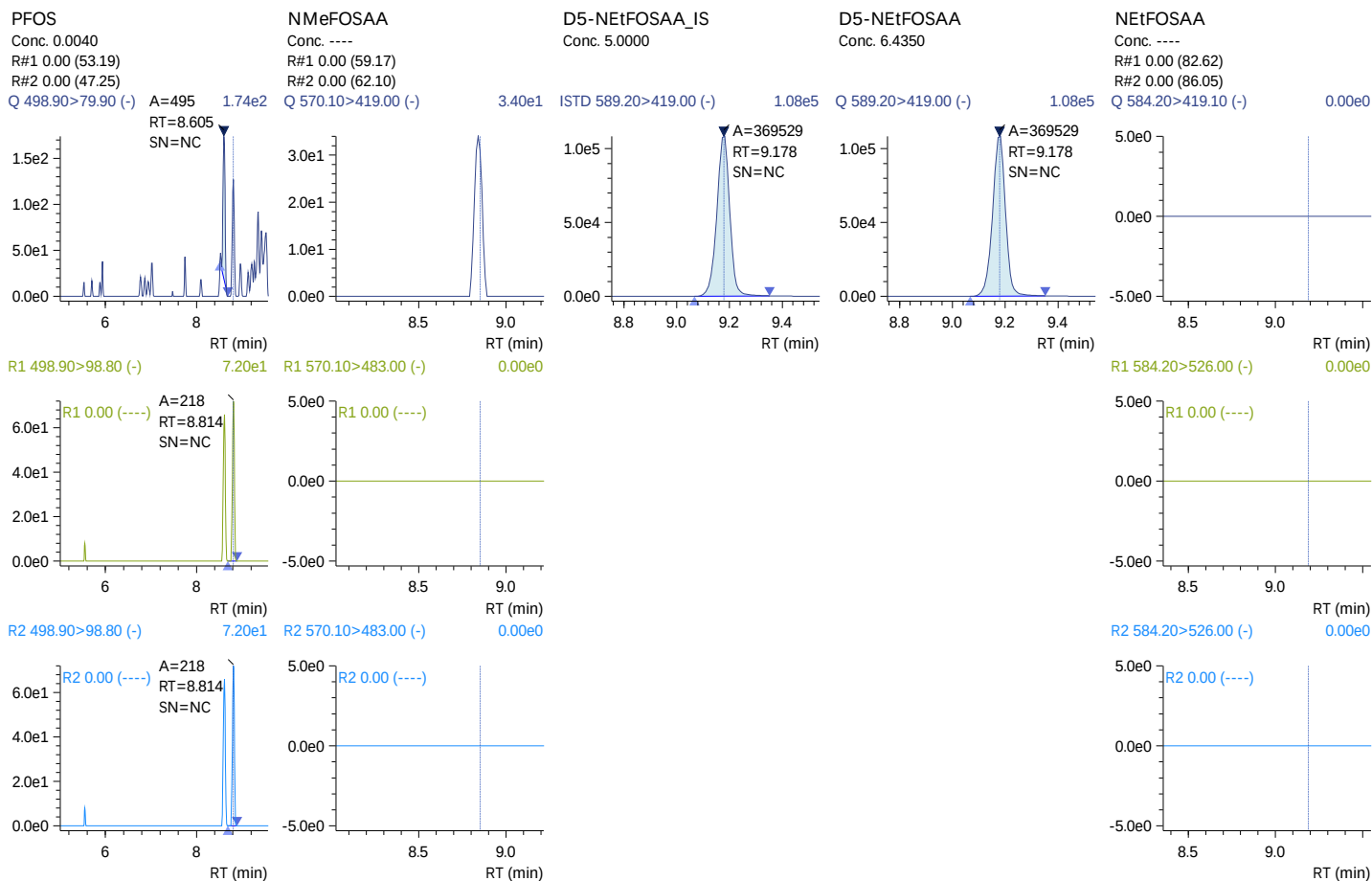


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_011 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_011 (continued)

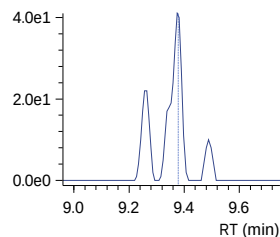
9-Cl-PF3ONS

Conc. ----

R#1 0.00 (31.76)

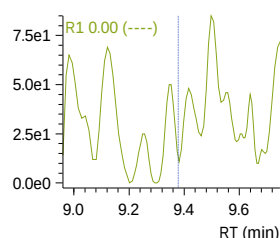
R#2 0.00 (31.74)

Q 530.80>351.00 (-)



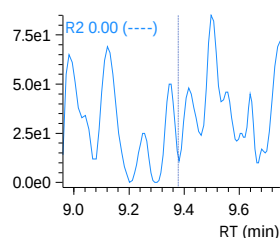
R1 532.80>353.00 (-)

8.50e1



R2 532.80>353.00 (-)

8.50e1



R1 563.10>269.10 (-)

7.00e1

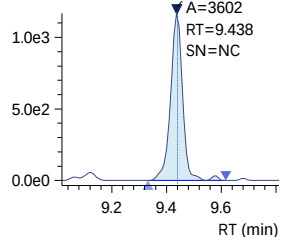
PFUnDA

Conc. -0.0121

R#1 0.00 (12.31)

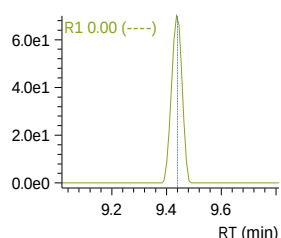
R#2 0.00 (13.26)

Q 563.10>519.00 (-)



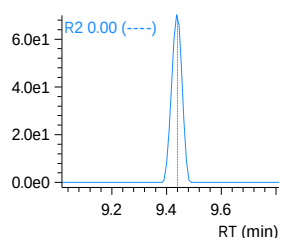
R1 563.10>269.10 (-)

7.00e1



R2 563.10>269.10 (-)

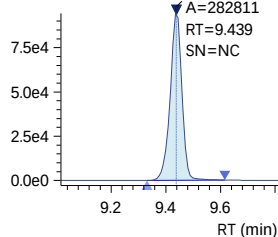
7.00e1



13C7-PFUnDA_IS

Conc. 1.2500

ISTD 570.00>525.10 (-)



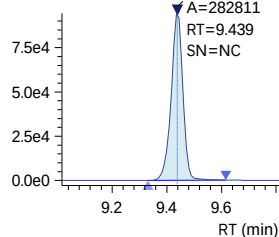
9.44e4



13C7-PFUnDA

Conc. 1.3501

Q 570.00>525.10 (-)



9.44e4



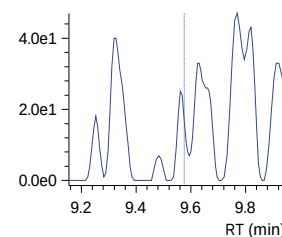
PFNS

Conc. ----

R#1 0.00 (63.31)

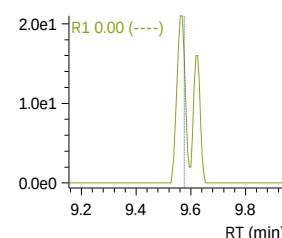
R#2 0.00 (62.49)

Q 548.80>79.90 (-)



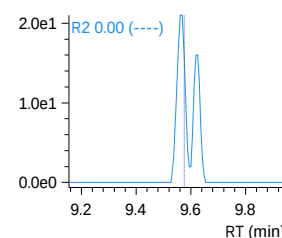
R1 548.80>98.80 (-)

2.10e1



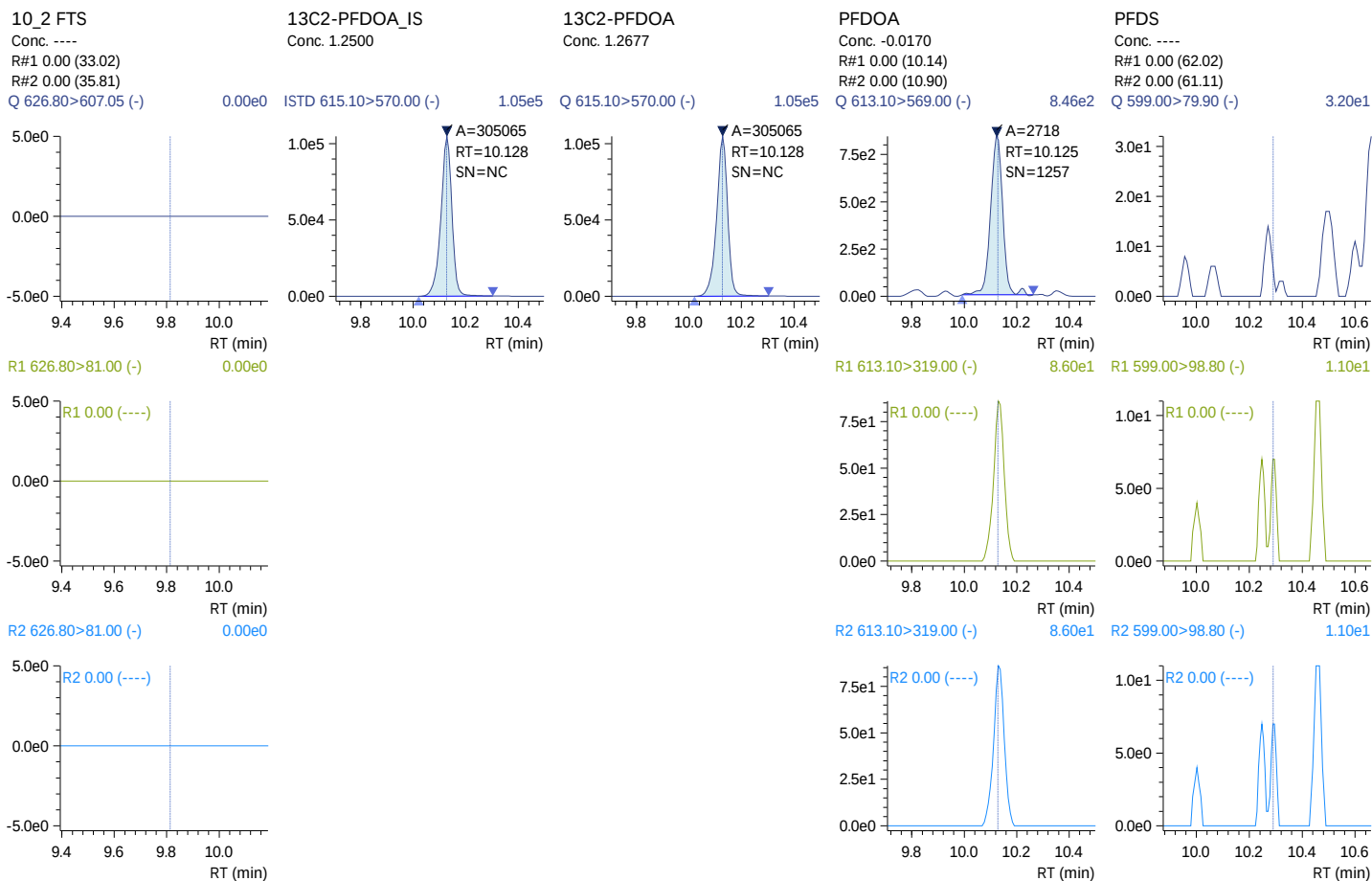
R2 548.80>98.80 (-)

2.10e1





240119_011 (continued)

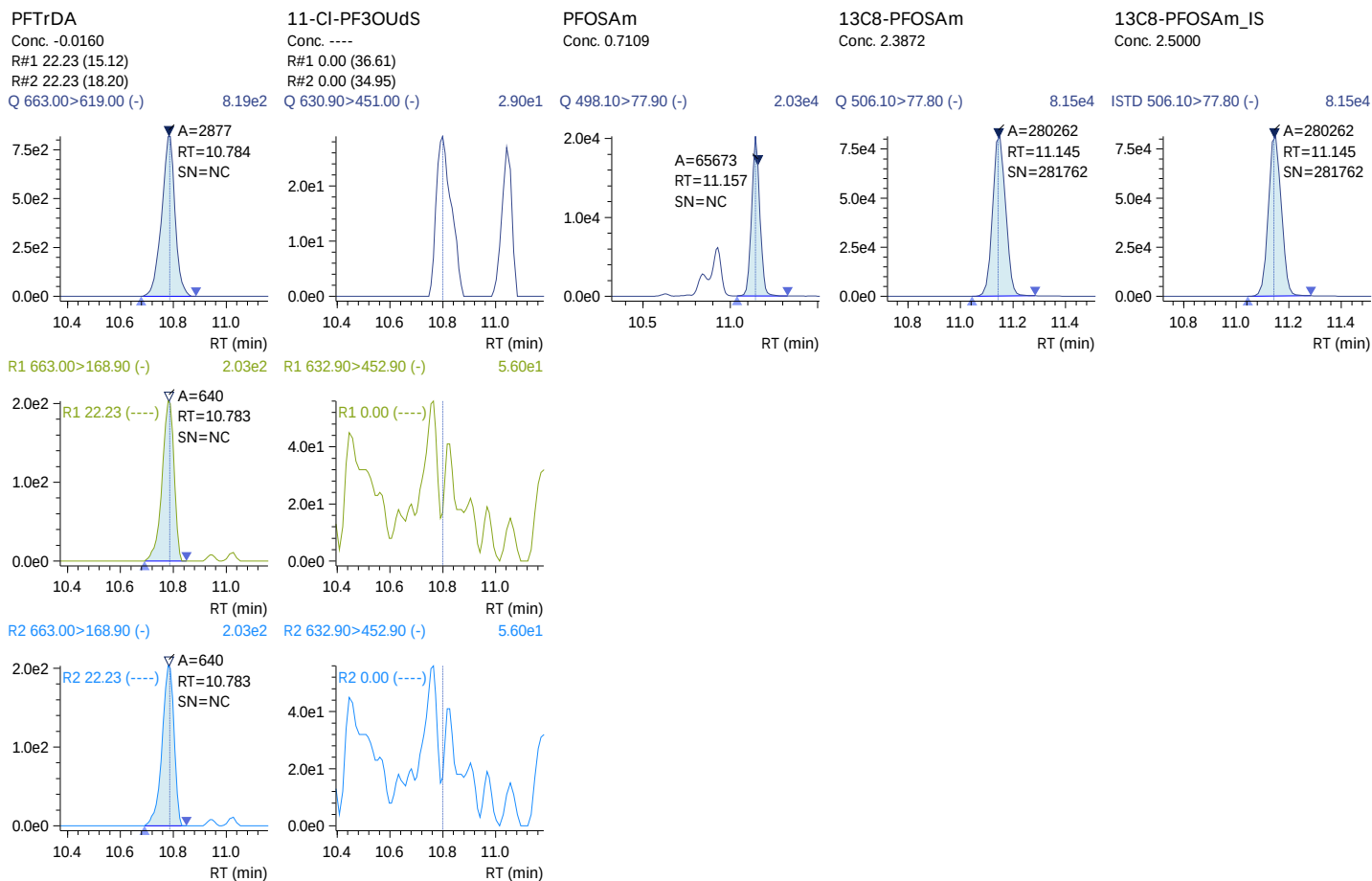


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_011 (continued)

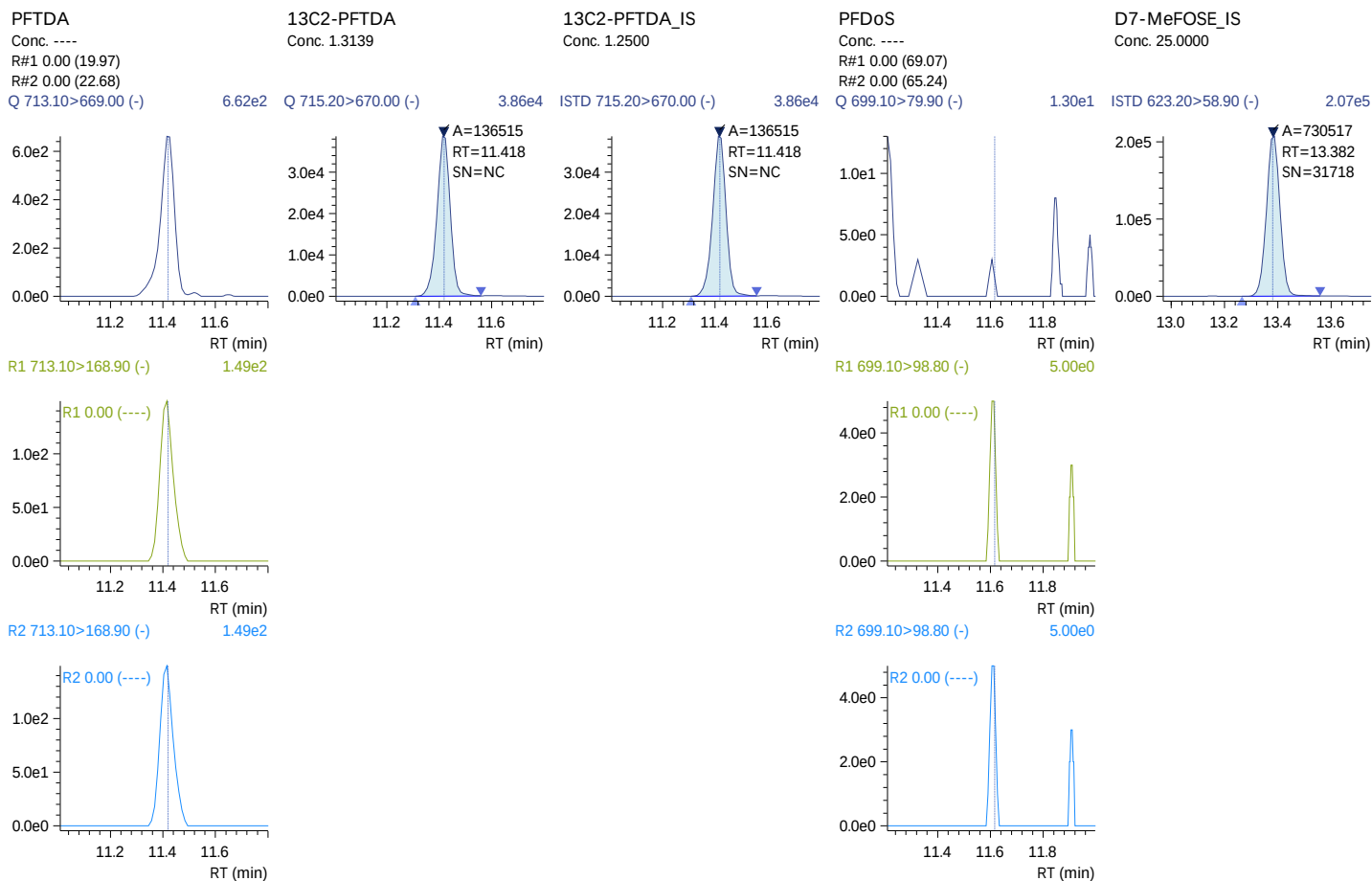


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_011 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240119_011 (continued)

D7-MeFOSE
Conc. 25.2376

MeFOSE
Conc. 0.6944

13C2-PFHXA_IS
Conc. 2.5000

13C2-PFHXA
Conc. 2.4925

PFHXA

Conc. -0.0113
R#1 0.00 (11.64)
R#2 0.00 (14.51)

Q 623.20>58.90 (-)

2.07e5

Q 616.10>59.00 (-)

5.27e3

ISTD 815.00>770.05 (-)

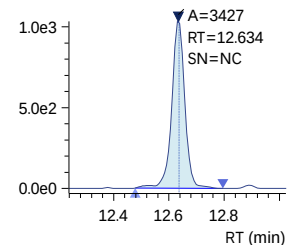
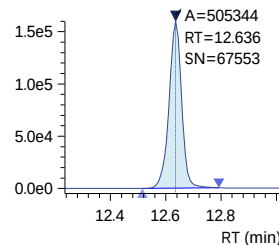
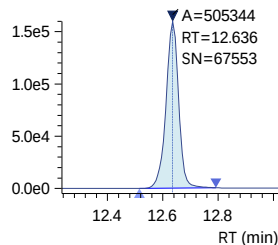
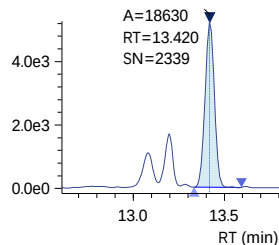
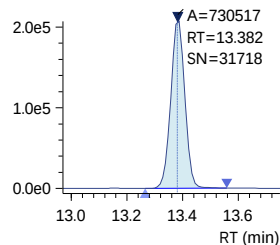
1.60e5

Q 815.00>770.05 (-)

1.60e5

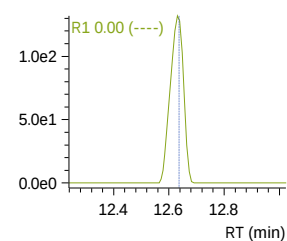
Q 813.00>768.95 (-)

1.03e3



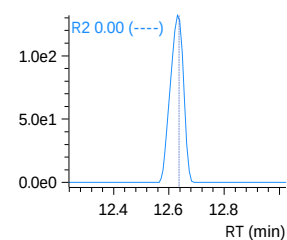
R1 813.00>218.95 (-)

1.32e2



R2 813.00>218.95 (-)

1.32e2





240119_011 (continued)

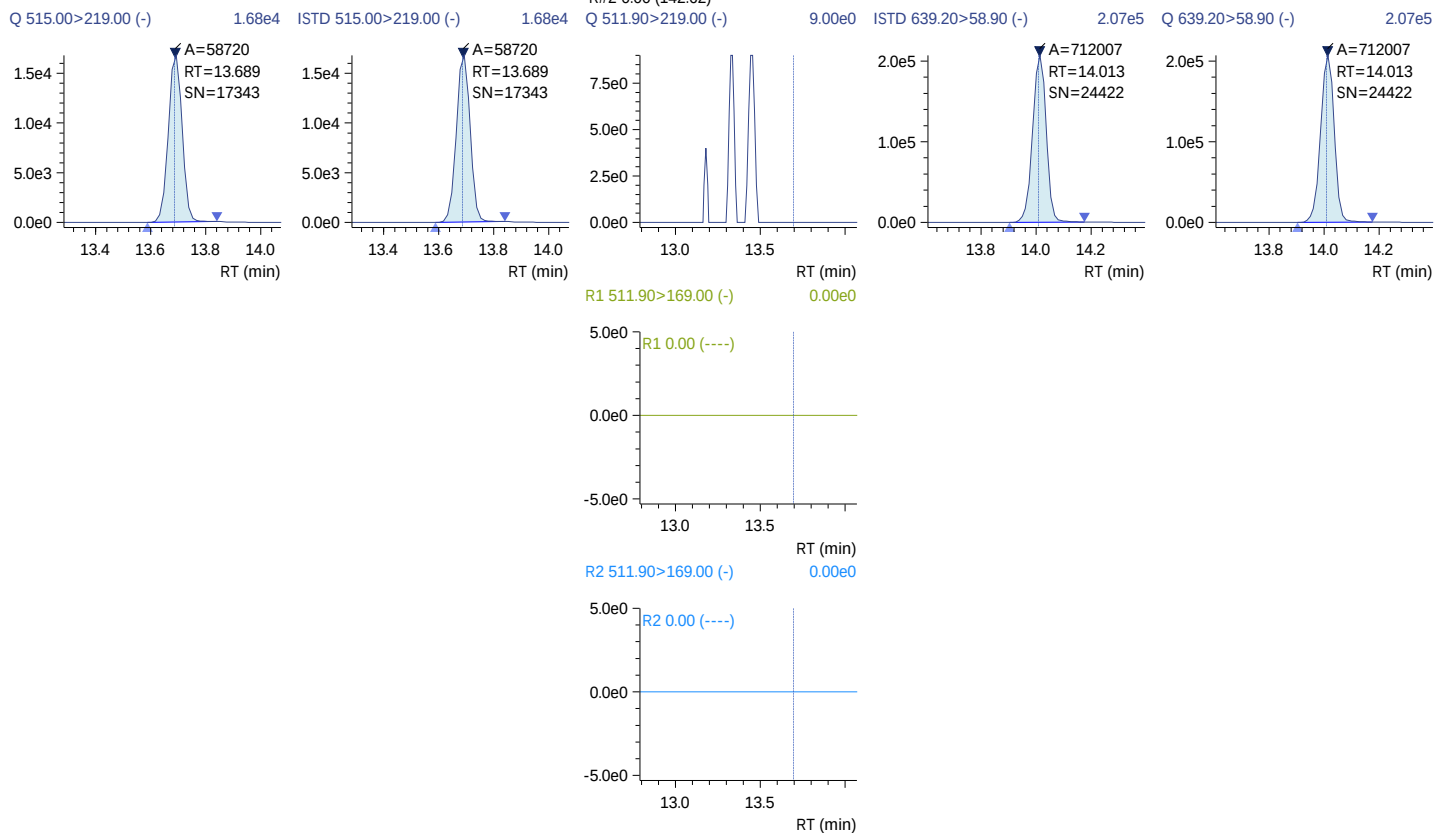
D3-MeFOSA
Conc. 2.4836

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. ----
R#1 0.00 (149.05)
R#2 0.00 (142.62)

D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 24.2189





240119_011 (continued)

EtFOSE
Conc. 0.7032

D5-EtFOSAm
Conc. 2.4659

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. ----

PFODA

Conc. 0.0162

R#1 0.00 (154.69)

R#2 0.00 (146.41)

R#2 0.00 (23.98)

Q 630.00>59.00 (-)

7.35e3

Q 531.10>219.00 (-)

2.43e4

ISTD 531.10>219.00 (-)

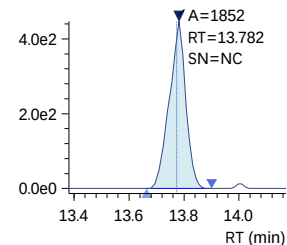
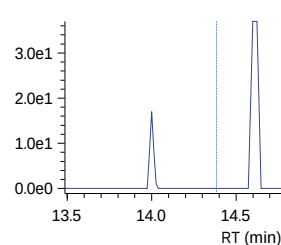
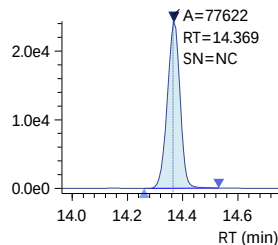
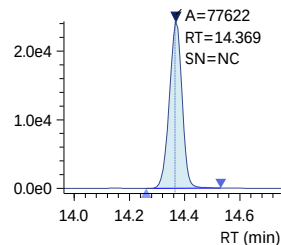
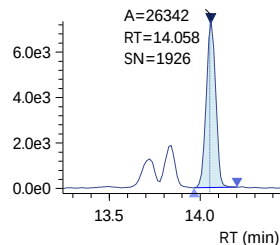
2.43e4

Q 526.00>219.00 (-)

3.70e1

Q 913.00>868.65 (-)

4.47e2

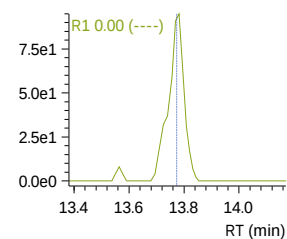
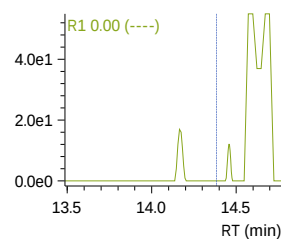


R1 526.00>169.00 (-)

5.50e1

R1 913.00>169.00 (-)

9.50e1

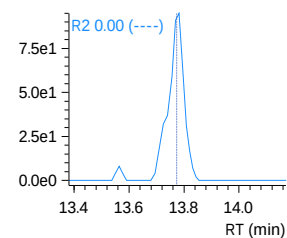
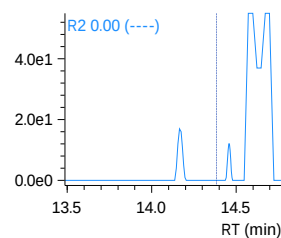


R2 526.00>169.00 (-)

5.50e1

R2 913.00>169.00 (-)

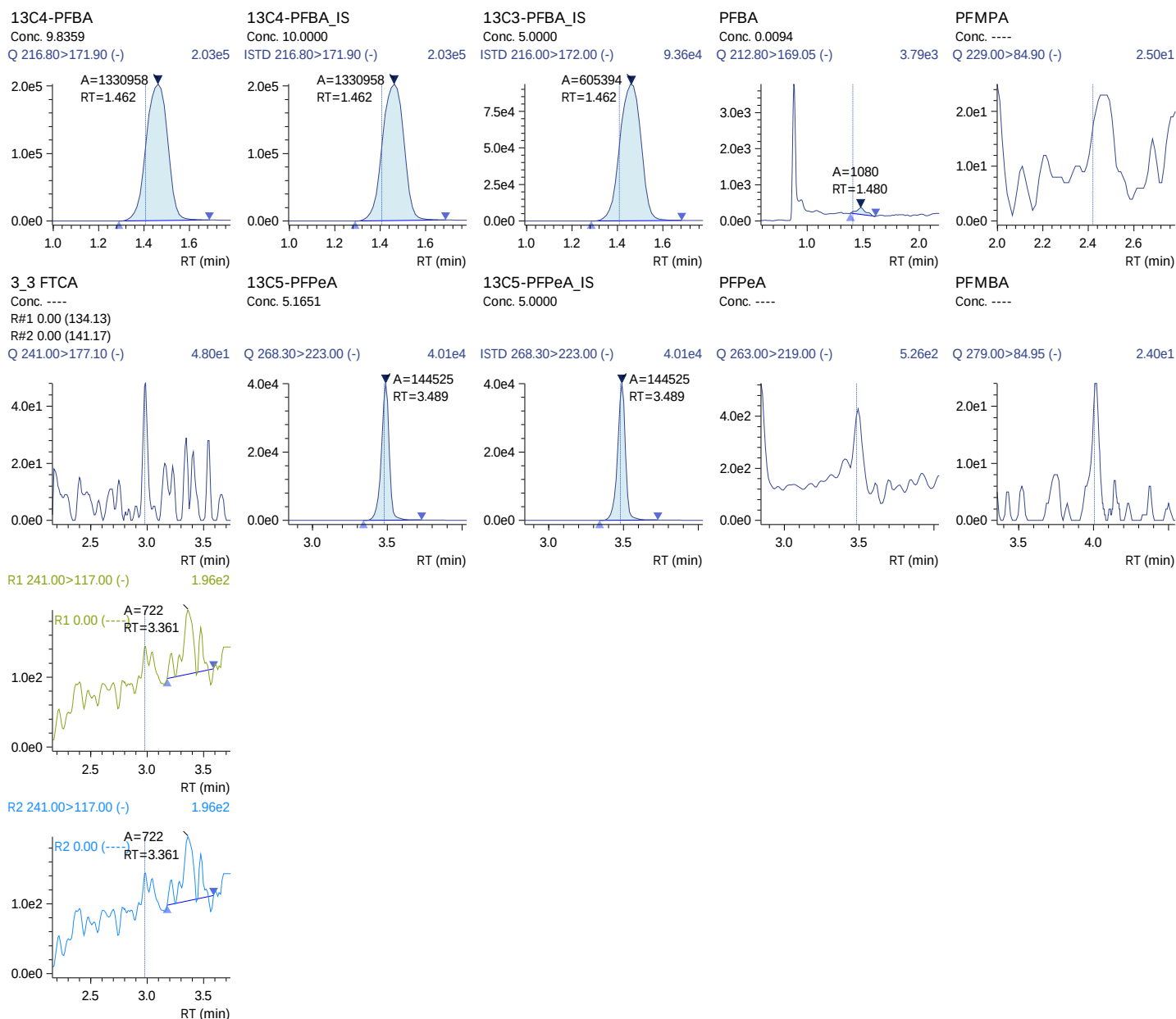
9.50e1





240119_011

Sample ID: 1633 QIS
Date Acquired: 1/19/2024 3:41:04 PM
Acquired by: System Administrator
Data File: 240119_011
Vial: 13 | Inj. Volume: 10.0000uL | Tray: 1





240119_011 (continued)

13C2-4_2 FTS
Conc. 6.7176

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. ----
R#1 0.00 (34.14)
R#2 0.00 (29.06)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. ----
R#1 0.00 (47.53)
R#2 0.00 (46.72)

Q 329.10>80.90 (-)

6.45e4

ISTD 329.10>80.90 (-)

6.45e4

Q 327.10>307.00 (-)

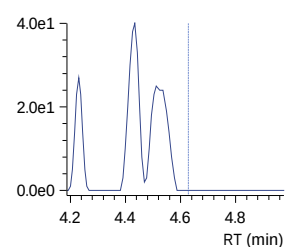
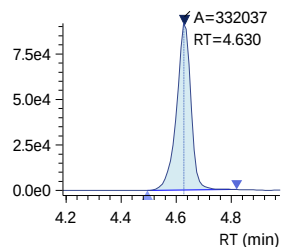
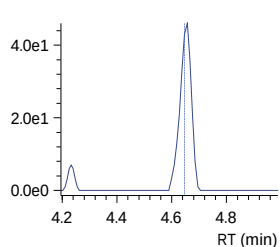
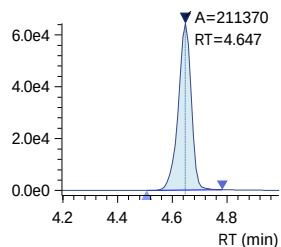
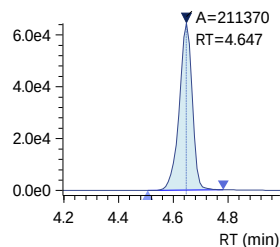
4.60e1

ISTD 302.10>79.90 (-)

9.18e4

Q 298.70>79.90 (-)

4.00e1

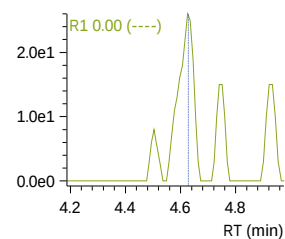
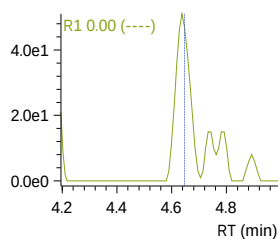


R1 327.10>80.90 (-)

5.10e1

R1 298.70>98.80 (-)

2.60e1

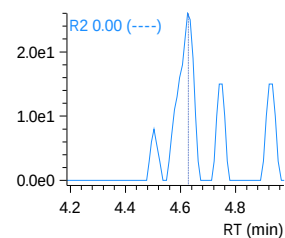
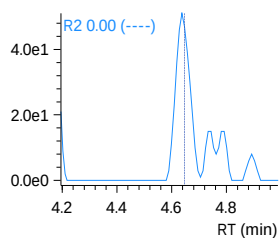


R2 327.10>80.90 (-)

5.10e1

R2 298.70>98.80 (-)

2.60e1





240119_011 (continued)

13C3-PFBS
Conc. 2.5589

NFDHA
Conc. ----
R#1 0.00 (37.88)
R#2 0.00 (40.25)

13C5-PFHxA
Conc. 2.5557

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

Q 302.10>79.90 (-)

9.18e4

Q 295.00>201.00 (-)

2.45e2

Q 318.00>273.00 (-)

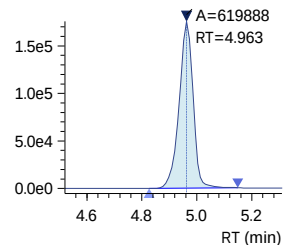
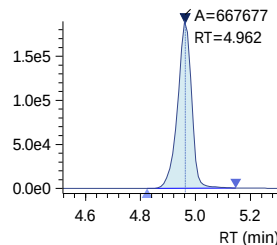
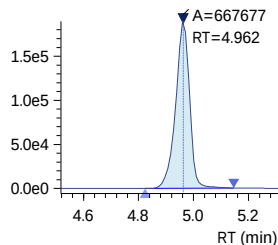
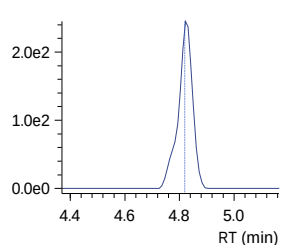
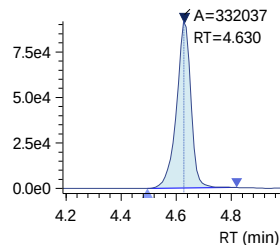
1.90e5

ISTD 318.00>273.00 (-)

1.90e5

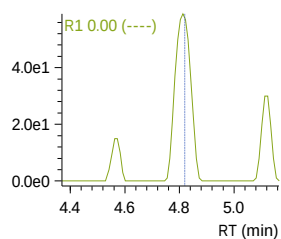
ISTD 315.10>270.00 (-)

1.76e5



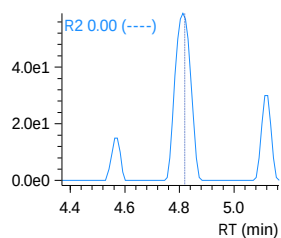
R1 295.00>84.90 (-)

5.90e1



R2 295.00>84.90 (-)

5.90e1





240119_011 (continued)

PFHxA
 Conc. 0.0131

PFEESA
 Conc. ----
 R#1 0.00 (5.88)
 R#2 0.00 (6.11)

13C3-HFPO-DA
 Conc. 10.9672

13C3-HFPO-DA_IS
 Conc. 10.0000

HFPO-DA
 Conc. ----
 R#1 0.00 (63.80)
 R#2 0.00 (65.61)

Q 313.00>269.00 (-)

7.86e2

Q 314.80>135.00 (-)

5.80e1

Q 286.90>168.90 (-)

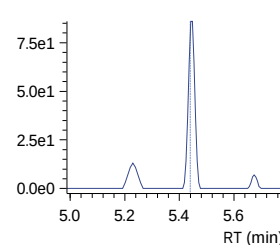
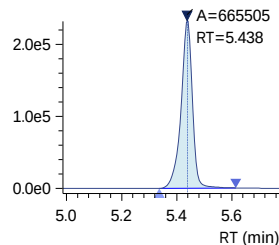
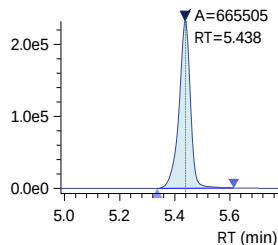
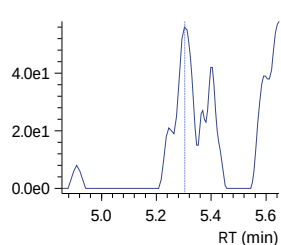
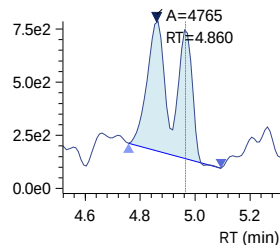
2.32e5

ISTD 286.90>168.90 (-)

2.32e5

Q 284.90>168.90 (-)

8.60e1

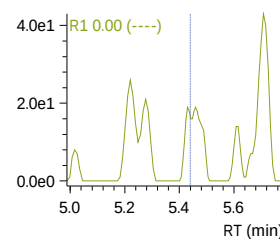
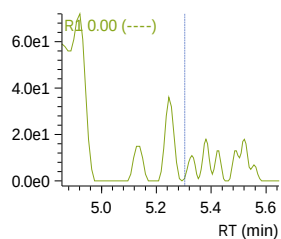


R1 314.80>82.90 (-)

7.20e1

R1 284.90>184.90 (-)

4.30e1

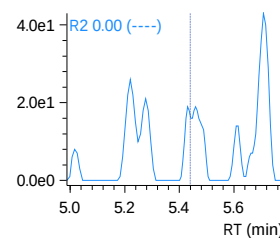
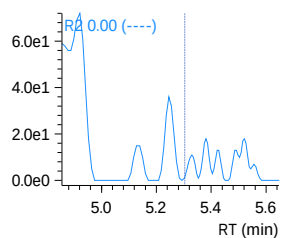


R2 314.80>82.90 (-)

7.20e1

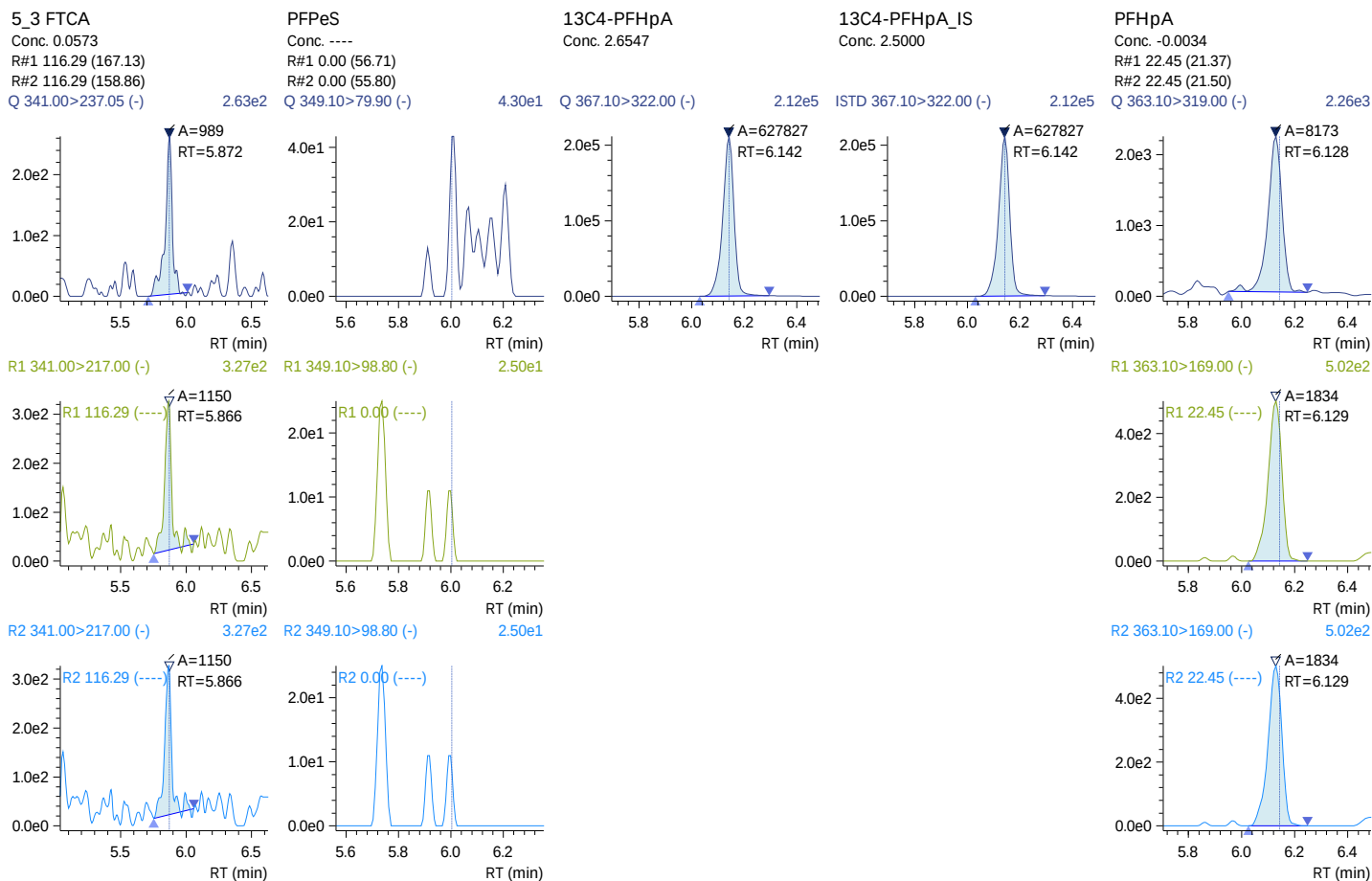
R2 284.90>184.90 (-)

4.30e1



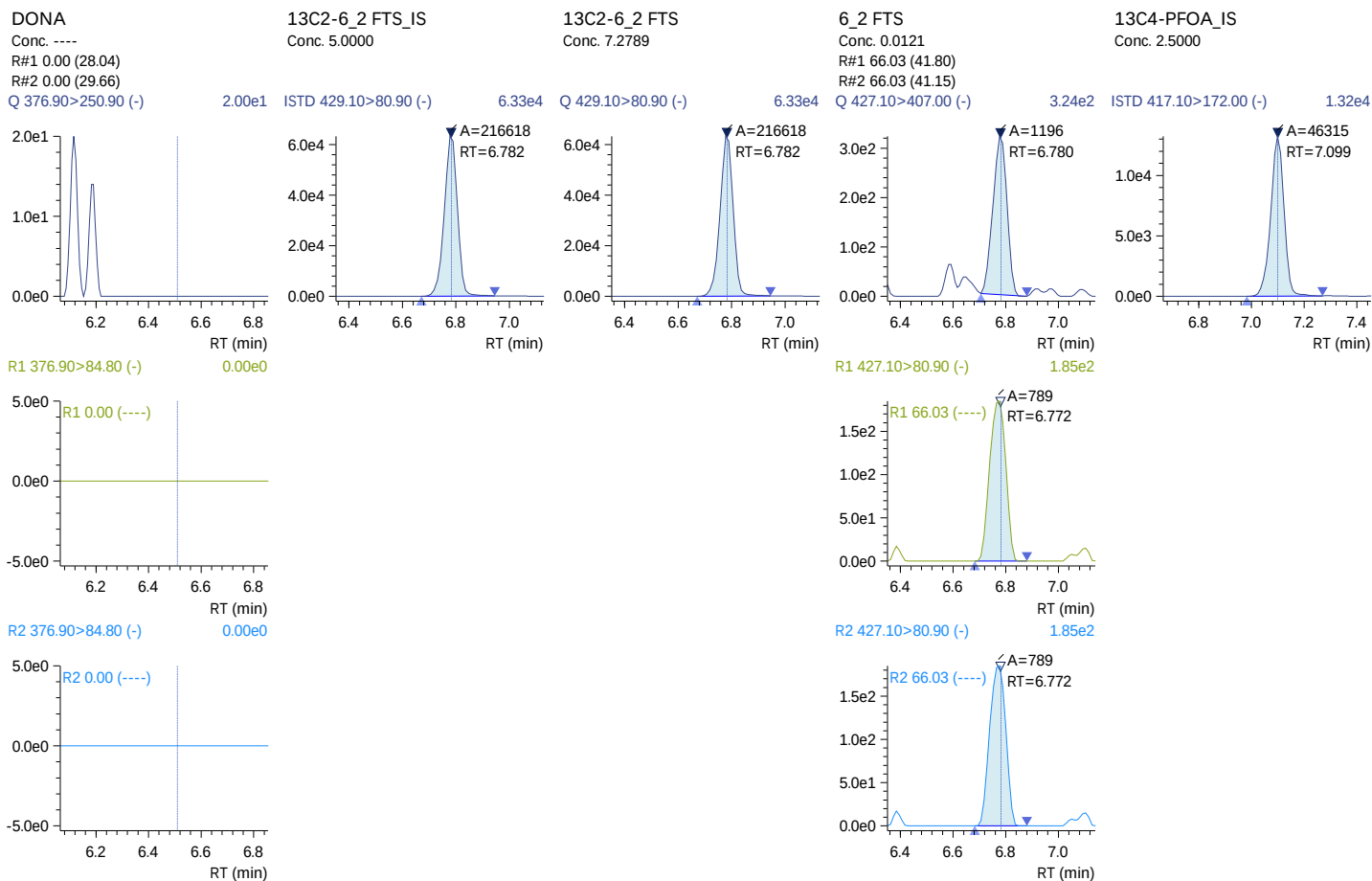


240119_011 (continued)





240119_011 (continued)





240119_011 (continued)

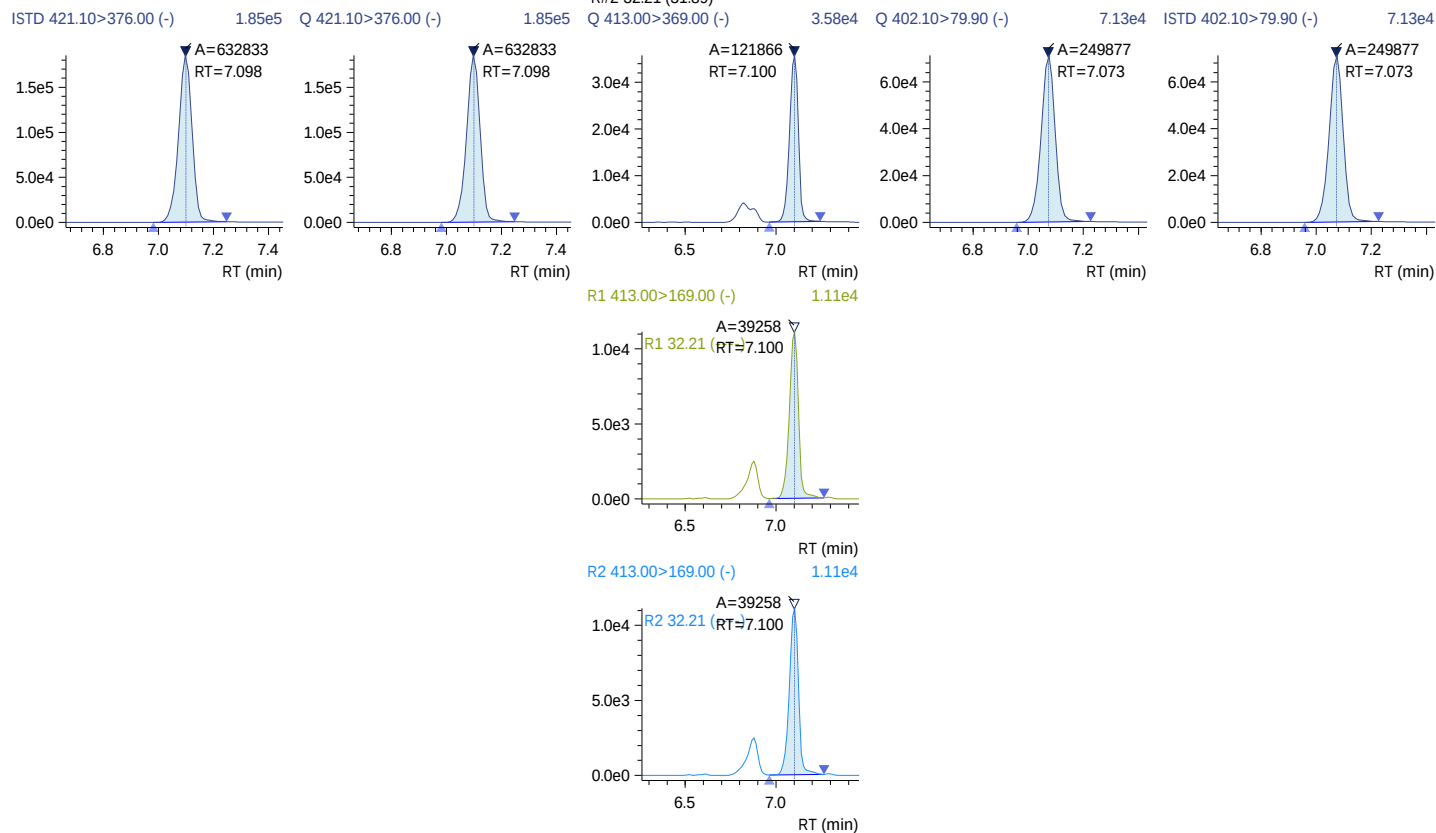
13C8-PFOA_IS
 Conc. 2.5000

13C8-PFOA
 Conc. 2.4446

PFOA
 Conc. 0.7024
 R#1 32.21 (29.05)
 R#2 32.21 (31.89)

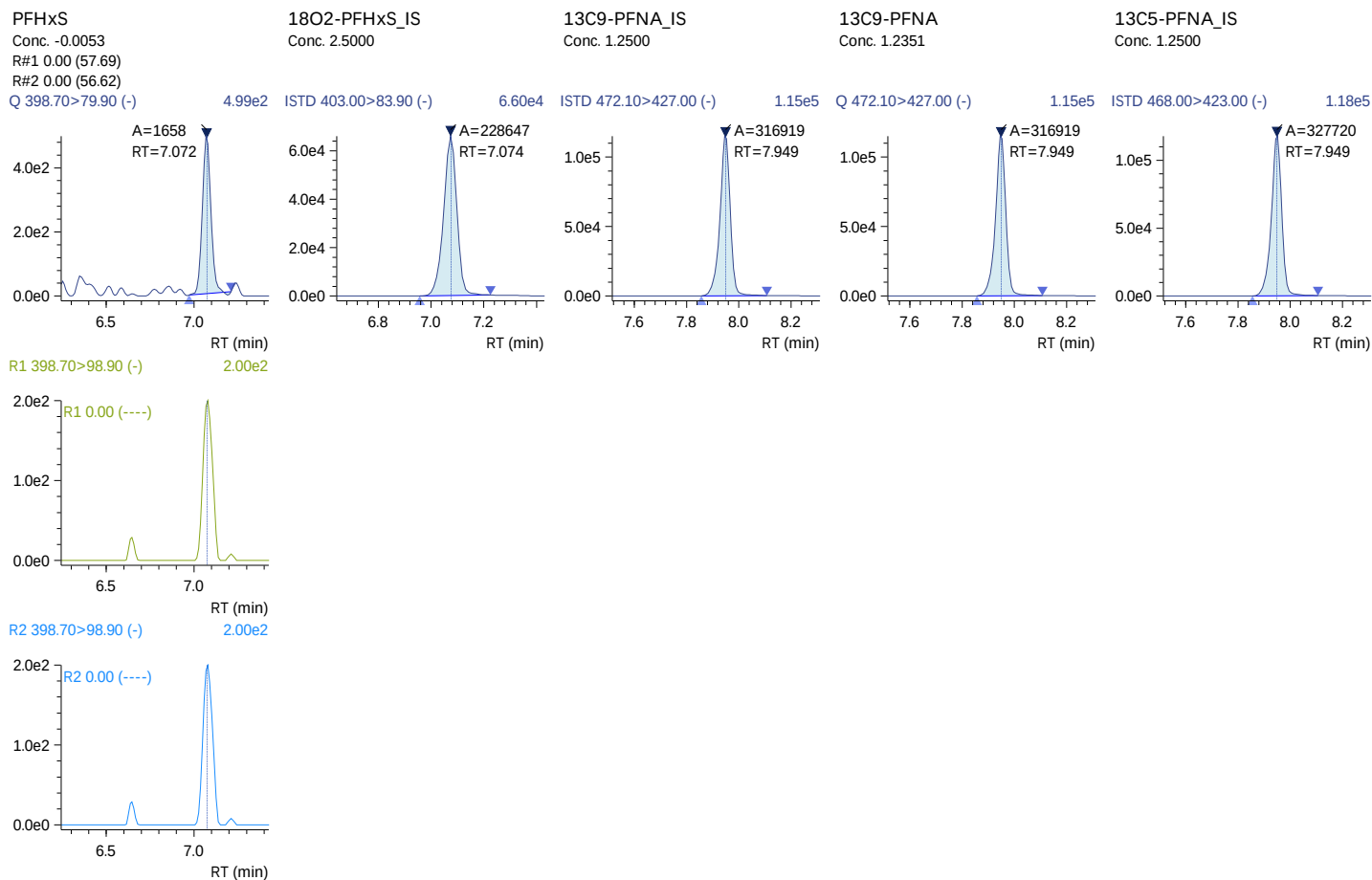
13C3-PFHxS
 Conc. 2.5461

13C3-PFHxS_IS
 Conc. 2.5000



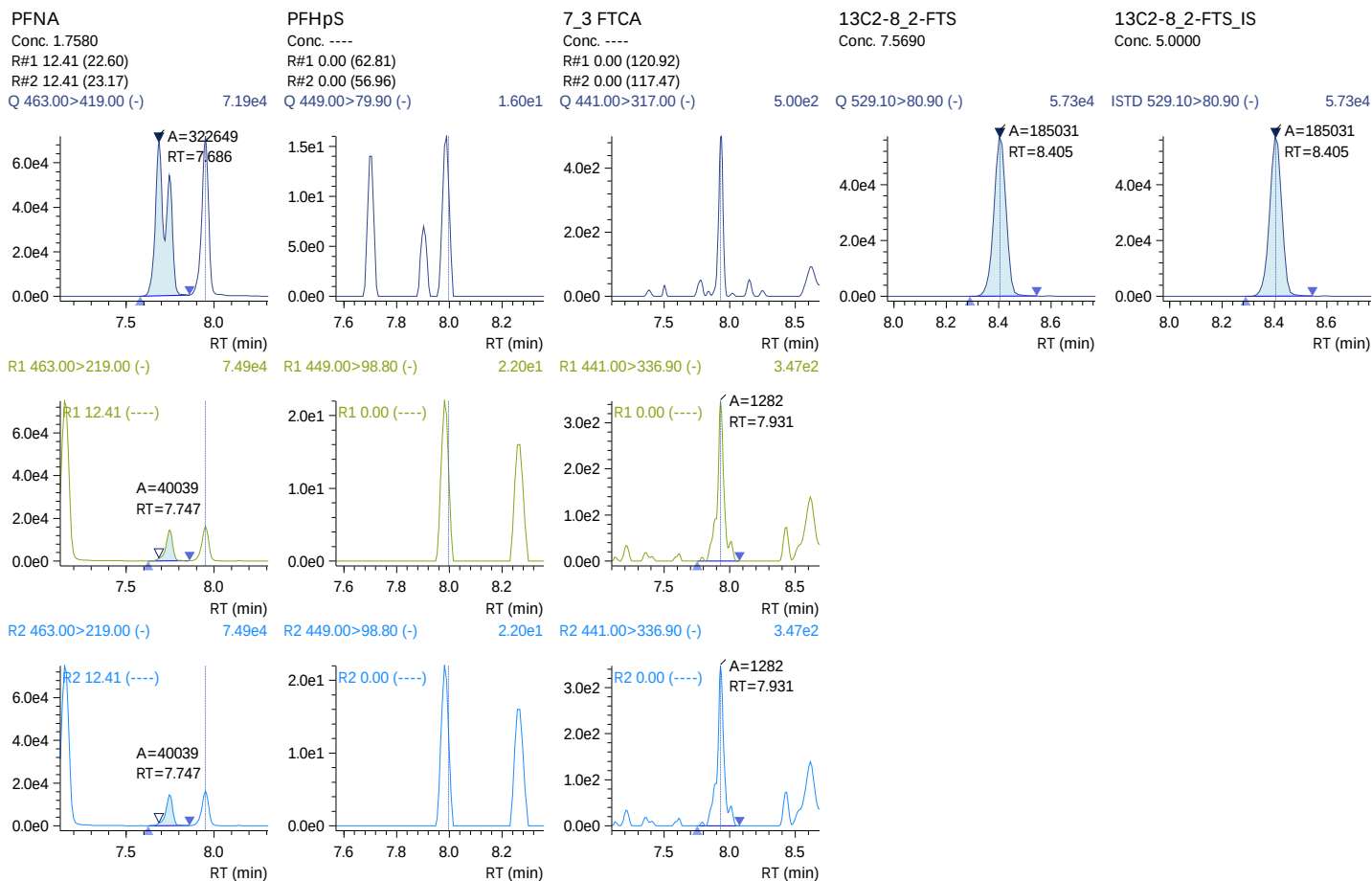


240119_011 (continued)



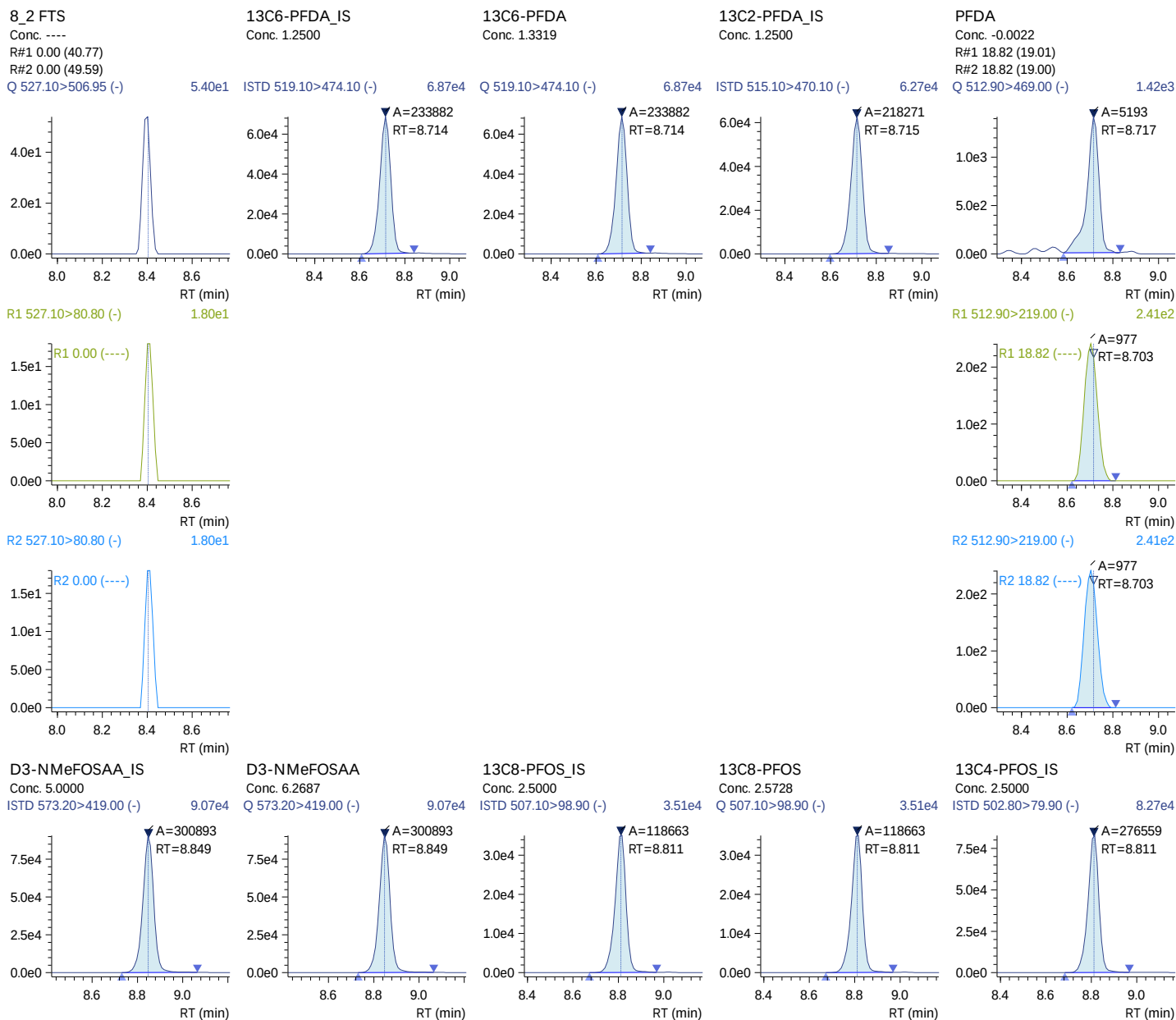


240119_011 (continued)



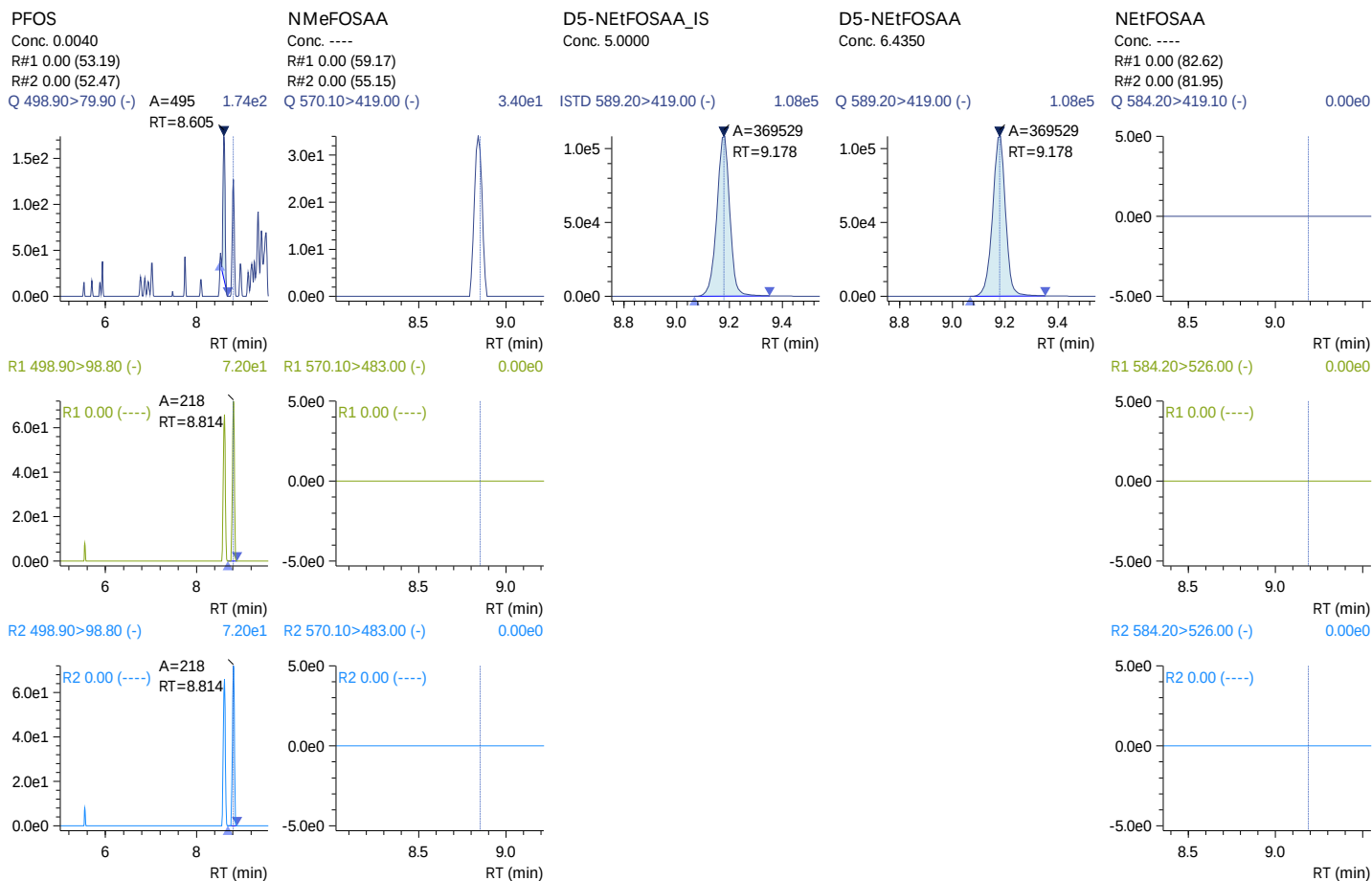


240119_011 (continued)





240119_011 (continued)





240119_011 (continued)

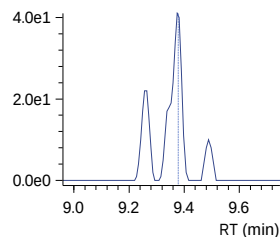
9-Cl-PF3ONS

Conc. ----

R#1 0.00 (31.76)

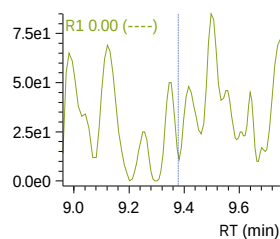
R#2 0.00 (32.76)

Q 530.80>351.00 (-)



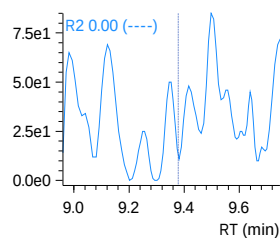
R1 532.80>353.00 (-)

8.50e1



R2 532.80>353.00 (-)

8.50e1



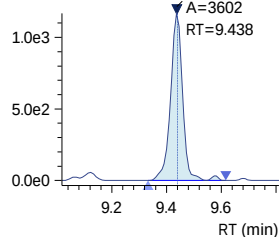
PFUnDA

Conc. -0.0121

R#1 0.00 (12.31)

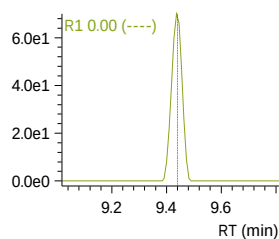
R#2 0.00 (13.12)

Q 563.10>519.00 (-)



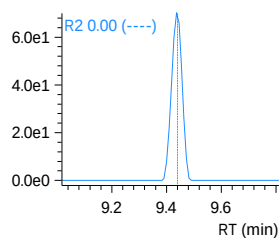
R1 563.10>269.10 (-)

7.00e1



R2 563.10>269.10 (-)

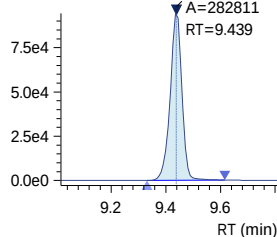
7.00e1



13C7-PFUnDA_IS

Conc. 1.2500

ISTD 570.00>525.10 (-)



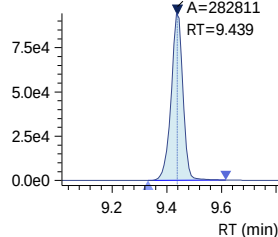
9.44e4



13C7-PFUnDA

Conc. 1.3501

Q 570.00>525.10 (-)



9.44e4



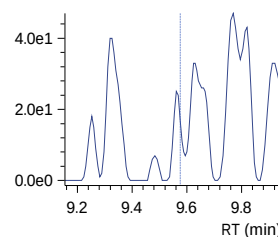
PFNS

Conc. ----

R#1 0.00 (63.31)

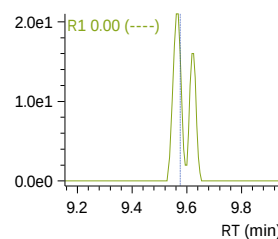
R#2 0.00 (65.22)

Q 548.80>79.90 (-)



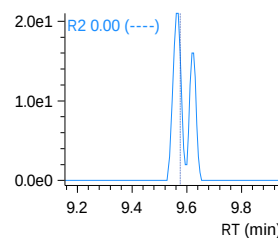
R1 548.80>98.80 (-)

2.10e1



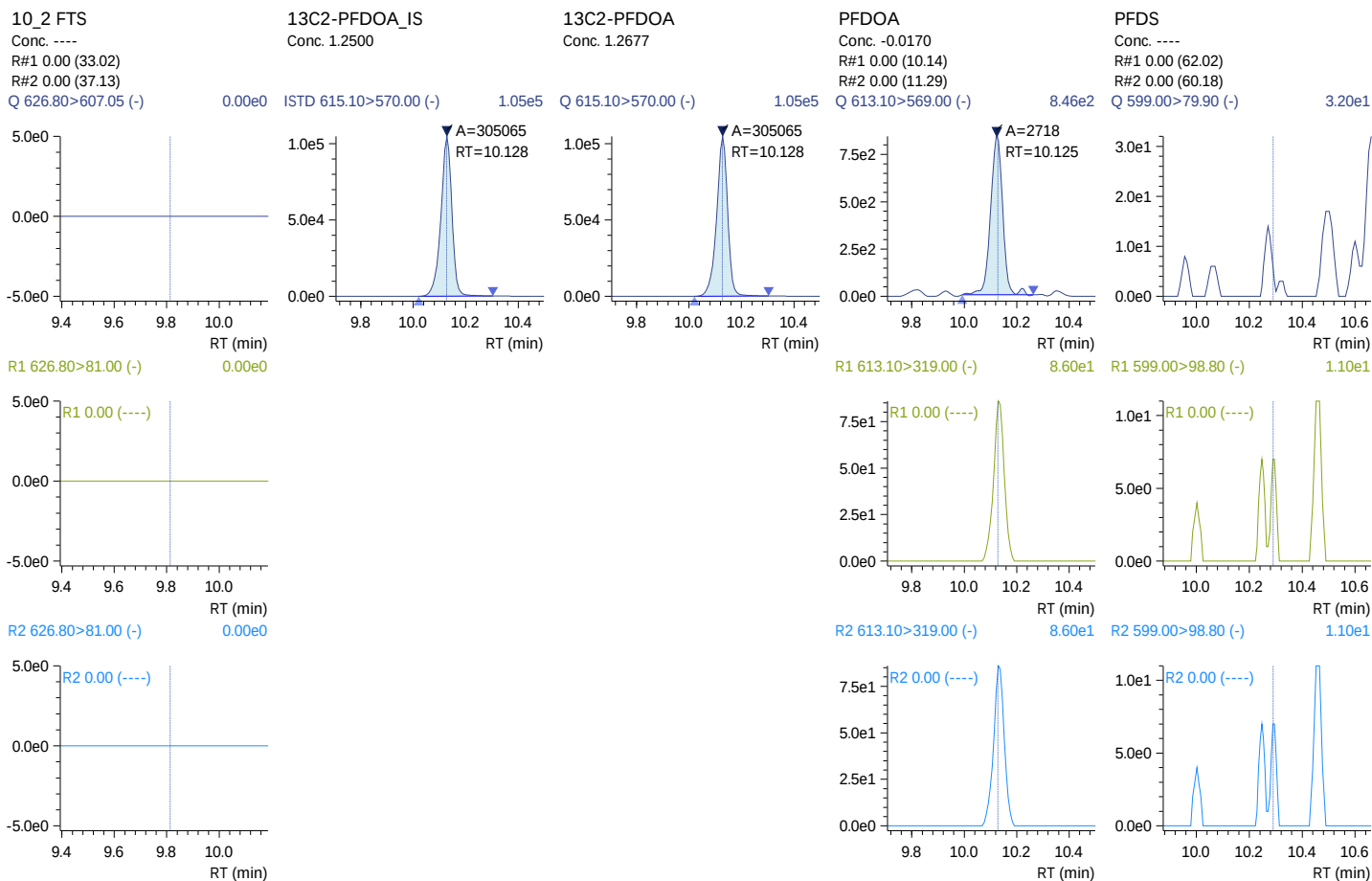
R2 548.80>98.80 (-)

2.10e1



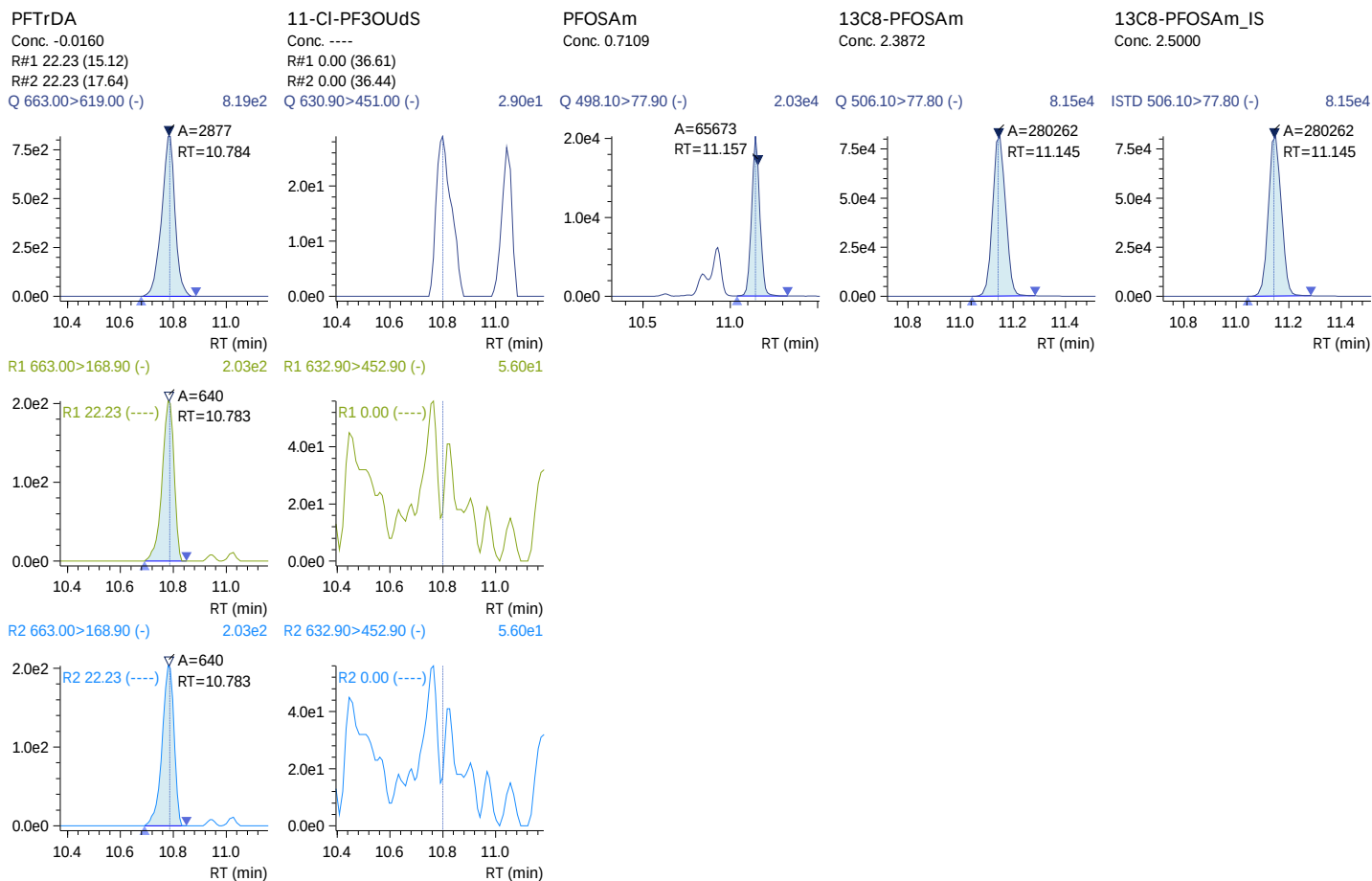


240119_011 (continued)



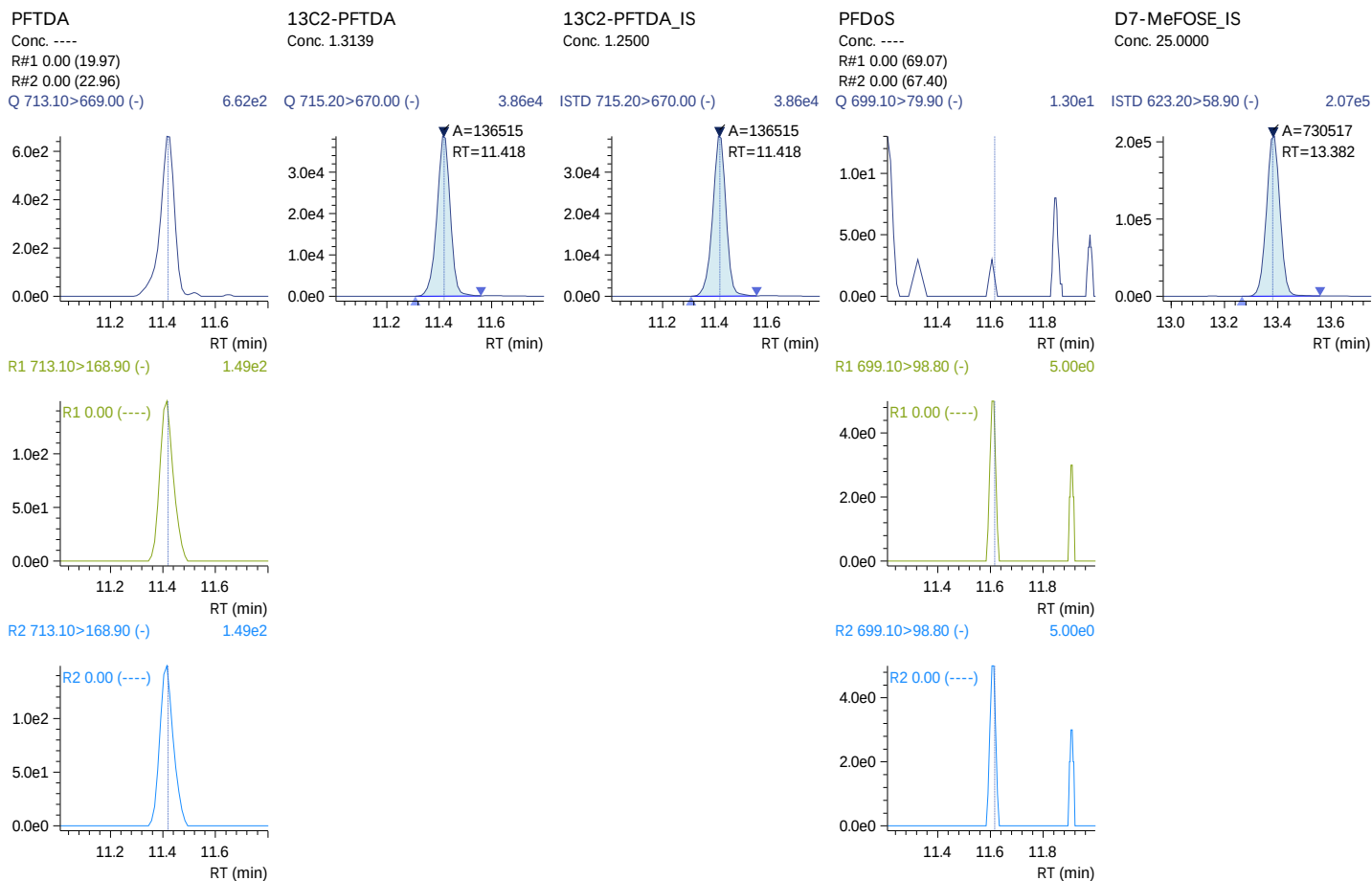


240119_011 (continued)





240119_011 (continued)





240119_011 (continued)

D7-MeFOSE
 Conc. 25.2376

MeFOSE
 Conc. 0.6944

13C2-PFHDA-IS
 Conc. 2.5000

13C2-PFHDA
 Conc. 2.4925

PFHDA
 Conc. -0.0113
 R#1 0.00 (11.64)
 R#2 0.00 (13.90)

Q 623.20>58.90 (-)

2.07e5

Q 616.10>59.00 (-)

5.27e3

ISTD 815.00>770.05 (-)

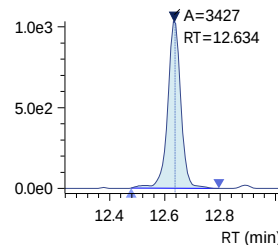
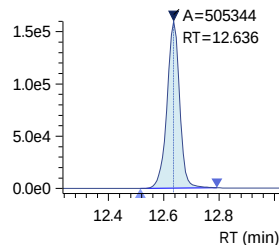
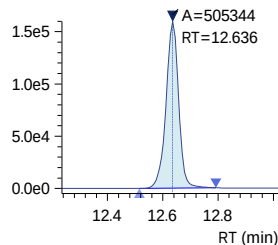
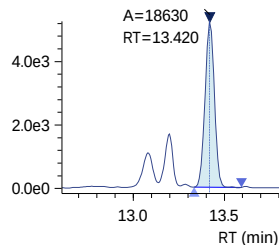
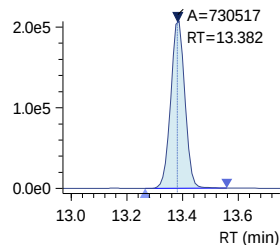
1.60e5

Q 815.00>770.05 (-)

1.60e5

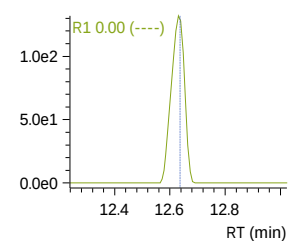
Q 813.00>768.95 (-)

1.03e3



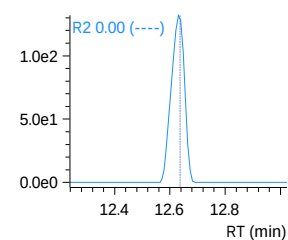
R1 813.00>218.95 (-)

1.32e2



R2 813.00>218.95 (-)

1.32e2





240119_011 (continued)

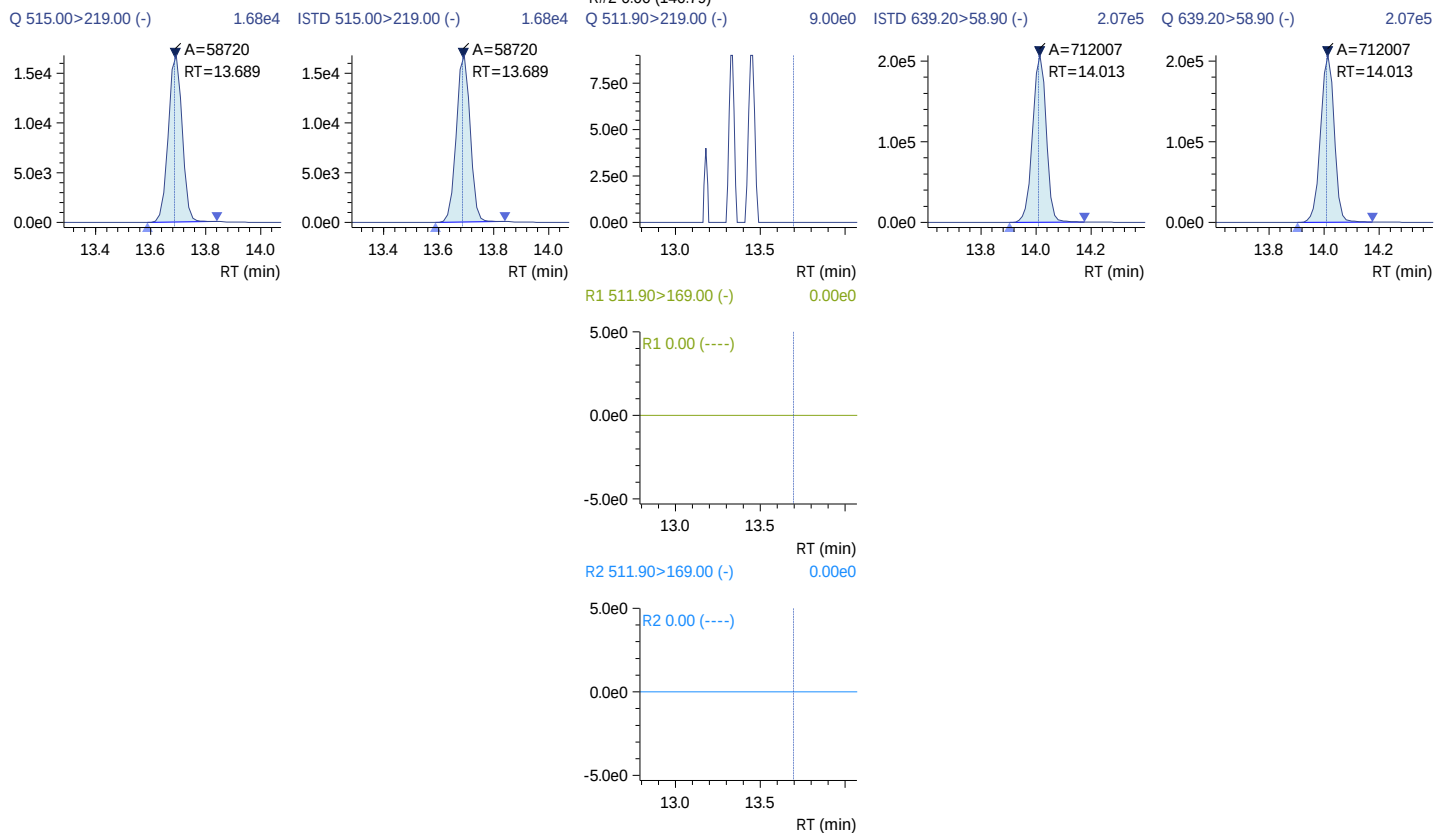
D3-MeFOSA
 Conc. 2.4836

D3-MeFOSA_IS
 Conc. 2.5000

MeFOSA
 Conc. ----
 R#1 0.00 (149.05)
 R#2 0.00 (140.79)

D9-EtFOSE_IS
 Conc. 25.0000

D9-EtFOSE
 Conc. 24.2189





240119_011 (continued)

EtFOSE
Conc. 0.7032

D5-EtFOSAm
Conc. 2.4659

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. ----

PFODA
Conc. 0.0162

Q 630.00>59.00 (-)

7.35e3

Q 531.10>219.00 (-)

2.43e4

ISTD 531.10>219.00 (-)

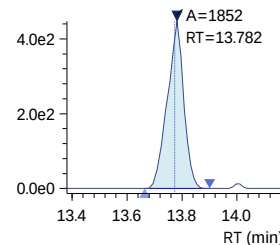
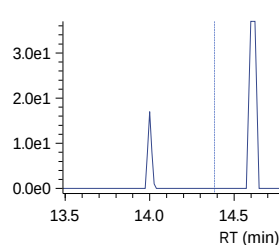
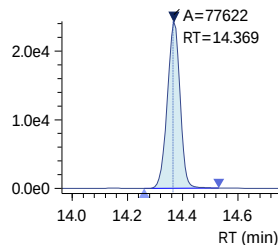
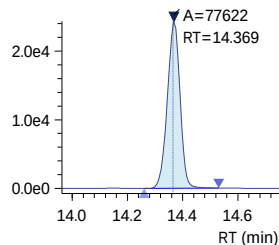
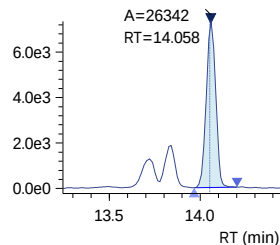
2.43e4

Q 526.00>219.00 (-)

3.70e1

Q 913.00>868.65 (-)

4.47e2

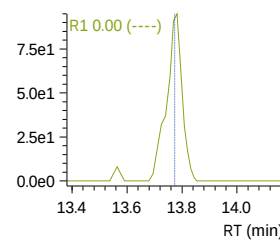
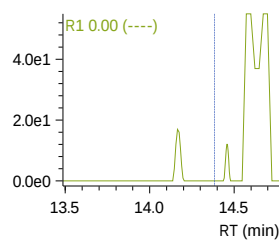


R1 526.00>169.00 (-)

5.50e1

R1 913.00>169.00 (-)

9.50e1

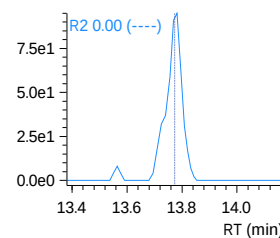
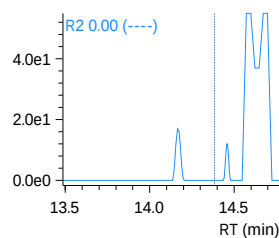


R2 526.00>169.00 (-)

5.50e1

R2 913.00>169.00 (-)

9.50e1



240118_1633_Curve



Environmental
Injection Log
LCMS08 - Shimadzu 8060

ICAL Date: 1/18/2024

Std. xp: 2/2/2024

ICAL ID: KC2400027

LIMS ID: NA

1st Review:

P. Salyards

2nd Review:

M. Sessions 1-23-24

Column:

Phenomenex EVO-C18 100X3.0 mm S/N: H23-138925

Mobile Phases

A: 2mM Ammonium Acetate in H2O:ACN 95%:5% 23-OLC-04-07D

B: ACN Lot #62120

	Sample Name	File Name	Acquisition Method	Dilution	R	
1	1633 CCB	23-OLC-04-06K	240118_005	1633_240111.lcm	1x	Widened the PFBA window due to a rerun that kept leaving the window. The new window now shows a large interference to the left of the PFBA peak that shrinks the peaks close to the baseline. These peaks can be hard to see without being zoomed in due to being scaled down
2	1633 ICAL 0.05PPB	23-OLC-04-06A	240118_006	1633_240111.lcm	1x	Dropped PFBA, 6:2 FTS, 7_3 FTCA, NMeFOSAA, MeFOSE, and EtFOSE. NMeFOSAA had ion ratio failure
3	1633 ICAL 0.1PPB	23-OLC-04-06B	240118_007	1633_240111.lcm	1x	
4	1633 ICAL 0.25PPB	23-OLC-04-06C	240118_008	1633_240111.lcm	1x	
5	1633 ICAL 0.50PPB	23-OLC-04-06D	240118_009	1633_240111.lcm	1x	
6	1633 ICAL 1.0PPB	23-OLC-04-06E	240118_010	1633_240111.lcm	1x	
7	1633 ICAL 5.0PPB	23-OLC-04-06F	240118_011	1633_240111.lcm	1x	
8	1633 ICAL 10.0PPB	23-OLC-04-06G	240118_012	1633_240111.lcm	1x	
9	1633 ICAL 15.0PPB	23-OLC-04-06H	240118_013	1633_240111.lcm	1x	
10	1633 ICAL 20.0PPB	23-OLC-04-06I	240118_014	1633_240111.lcm	1x	
11	1633 CCB	23-OLC-04-06K	240118_015	1633_240111.lcm	1x	
12	1633 ICV 1.0PPB	23-OLC-04-06L	240118_016	1633_240111.lcm	1x	
13	1633 FTCA ICV 1.0PPB	23-OLC-04-03D	240118_017	1633_240111.lcm	1x	Report FTCAs
14	TDCA CHECK	23-OLC-04-03E	240118_018	1633_240111.lcm	1x	Showed adequate separation from PFOS
15	1633 CCB	23-OLC-04-06K	240118_019	1633_240111.lcm	1x	
16	1633 QIS	23-OLC-04-06J	240118_020	1633_240111.lcm	1x	Showed isomers of both PFOA and PFNA

LC/MS/MS Tuning

Sample Information

Sample Type: PEG+PPG+Raffinose

Tuning Condition

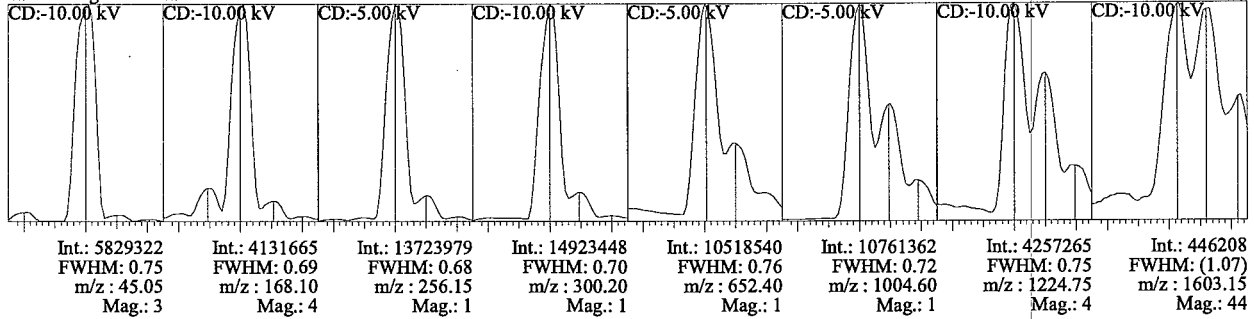
Detector Adjustment: On
 Resolution Adjustment: On
 FWHM of Spectrum: 0.70
 Sensitivity Adjustment: On
 Mass Calibration: On

Tuning Result

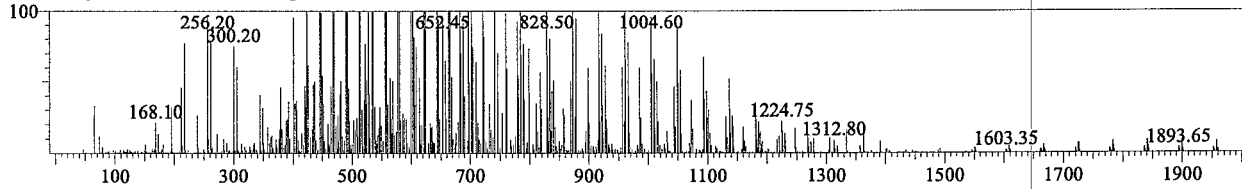
Model: LCMS-8060
 Serial Number: O11106070177US
 Interface: ESI
 Polarity: Positive
 Tuning Mode: Auto Tuning
 Tuning Date: 1/18/2024 11:19:10 AM
 Acquisition Mode: Q1 Scan(Use CID Gas)
 Nebulizing Gas Flow: 1.50(settings : 1.50) L/min

Drying Gas Flow: 0.00(settings : 10.00) L/min
 CID Gas Flow: 270(settings : 270) kPa
 Heating Gas Flow: 5.00(settings : 5.00) L/Min
 Interface Bias: +4.00 kV
 Interface Current: 2.44 uA
 Interface Temp.: 100(settings : 100) C
 DL Temp.: 249(settings : 250) C
 Heat Block Temp.: 399(settings : 400) C
 Q1 RF Gain: 4996
 Q1 RF Offset: 4990
 Q3 RF Gain: ---
 Q3 RF Offset: ---
 Q1 Post-rod Bias: -5.0 V
 CID CELL Exit Lens: -4.0 V
 Conversion Dynode: -10.00 kV
 Detector: -1.94(-1.94) kV
 Vacuum Pressure(QA): 1.6e+02 Pa
 Vacuum Pressure(QP): 2.3e-03 Pa

Tuning Profile



Scan Range: 2.00 - 2000.00 Scan Speed: 30 u/s Base Peak: 423.30 (20000000)



m/z(Target)	m/z(Actual)	Difference	Width	Intensity
45.05	45.05	0.00	0.75	5829322
168.10	168.10	0.00	0.69	4131665
256.15	256.20	0.05	0.68	13723979
300.20	300.20	0.00	0.70	14923448
652.40	652.45	0.05	0.76	10518540
1004.60	1004.60	0.00	0.72	10761362
1224.75	1224.75	0.00	0.75	4257265
1603.15	1603.35	0.20	(1.07)	446208

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Sample Information

Sample Type: PEG+PPG+Raffinose

Tuning Condition

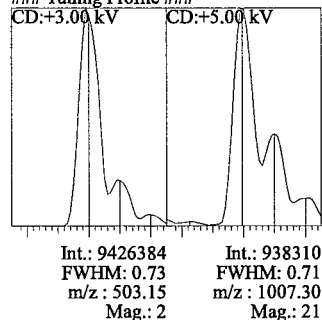
Detector Adjustment: On
 Resolution Adjustment: On
 FWHM of Spectrum: 0.70
 Sensitivity Adjustment: On
 Mass Calibration: On

Tuning Result

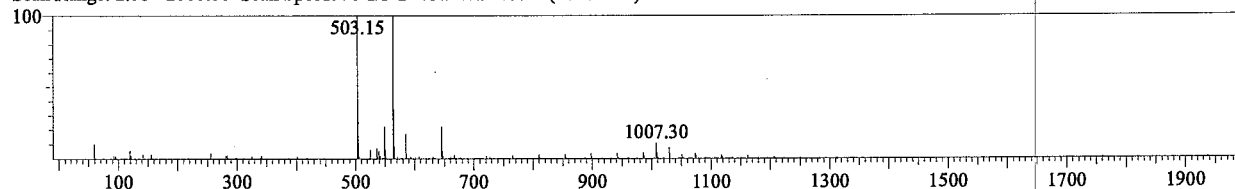
Model: LCMS-8060
 Serial Number: O11106070177US
 Interface: ESI
 Polarity: Negative
 Tuning Mode: Auto Tuning
 Tuning Date: 1/18/2024 11:24:23 AM
 Acquisition Mode: Q1 Scan(Use CID Gas)
 Nebulizing Gas Flow: 1.50(settings : 1.50) L/min

Drying Gas Flow: 0.00(settings : 10.00) L/min
 CID Gas Flow: 270(settings : 270) kPa
 Heating Gas Flow: 5.00(settings : 5.00) L/Min
 Interface Bias: -3.00 kV
 Interface Current: 1.39 uA
 Interface Temp.: 100(settings : 100) C
 DL Temp.: 250(settings : 250) C
 Heat Block Temp.: 399(settings : 400) C
 Q1 RF Gain: 5000
 Q1 RF Offset: 5000
 Q3 RF Gain: ---
 Q3 RF Offset: ---
 Q1 Post-rod Bias: 5.0 V
 CID CELL Exit Lens: 3.5 V
 Conversion Dynode: +10.00 kV
 Detector: -1.94(-1.94) kV
 Vacuum Pressure(QA): 1.6e+02 Pa
 Vacuum Pressure(QP): 2.3e-03 Pa

Tuning Profile



Scan Range: 2.00 - 2000.00 Scan Speed: 30 u/s Base Peak: 503.15 (20000000)



m/z(Target)	m/z(Actual)	Difference	Width	Intensity
503.15	503.15	0.00	0.73	9426384
1007.30	1007.30	0.00	0.71	938310

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Sample Information

Sample Type: PEG+PPG+Raffinose

Tuning Condition

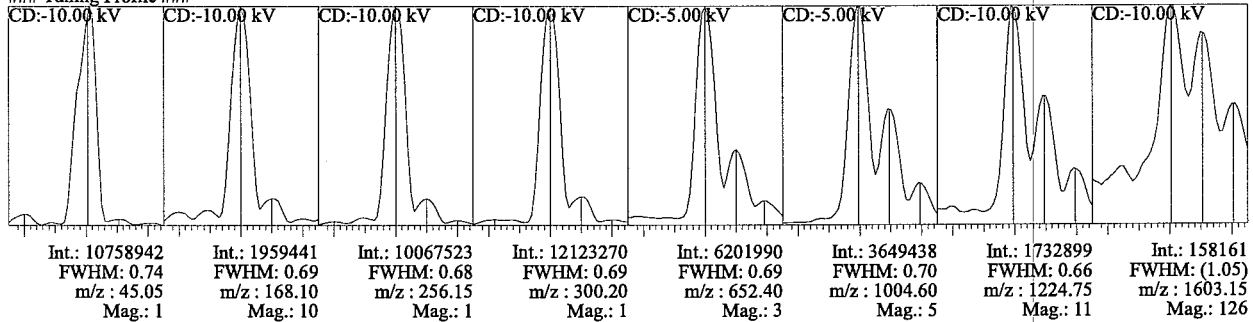
Detector Adjustment: On
 Resolution Adjustment: On
 FWHM of Spectrum: 0.70
 Sensitivity Adjustment: On
 Mass Calibration: On

Tuning Result

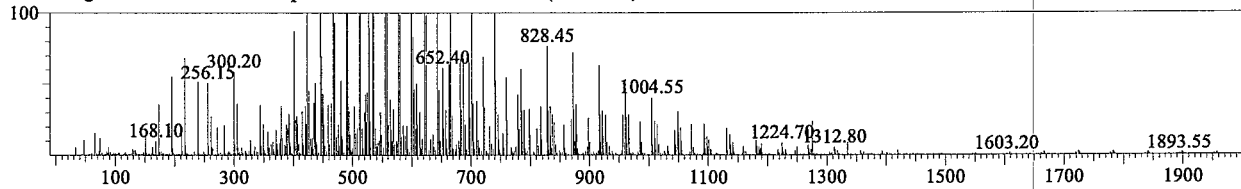
Model: LCMS-8060
 Serial Number: O11106070177US
 Interface: ESI
 Polarity: Positive
 Tuning Mode: Auto Tuning
 Tuning Date: 1/18/2024 11:27:46 AM
 Acquisition Mode: Q3 Scan(Use CID Gas)
 Nebulizing Gas Flow: 1.50(settings : 1.50) L/min

Drying Gas Flow: :0.00(settings : 10.00) L/min
 CID Gas Flow: :269(settings : 270) kPa
 Heating Gas Flow: :5.00(settings : 5.00) L/Min
 Interface Bias: :+4.00 kV
 Interface Current: :2.78 uA
 Interface Temp.: :100(settings : 100) C
 DL Temp.: :250(settings : 250) C
 Heat Block Temp.: :399(settings : 400) C
 Q1 RF Gain: :---
 Q1 RF Offset: :---
 Q3 RF Gain: :4997
 Q3 RF Offset: :4990
 Q1 Post-rod Bias: : -5.0 V
 CID CELL Exit Lens: : -4.0 V
 Conversion Dynode: : -10.00 kV
 Detector: : -1.94(-1.94) kV
 Vacuum Pressure(QA): :1.6e+02 Pa
 Vacuum Pressure(QP): :2.3e-03 Pa

Tuning Profile



Scan Range: 2.00 - 2000.00 Scan Speed: 30 u/s Base Peak: 423.35 (20000000)



m/z(Target)	m/z(Actual)	Difference	Width	Intensity
45.05	45.10	0.05	0.74	10758942
168.10	168.10	0.00	0.69	1959441
256.15	256.15	0.00	0.68	10067523
300.20	300.20	0.00	0.69	12123270
652.40	652.40	0.00	0.69	6201990
1004.60	1004.55	-0.05	0.70	3649438
1224.75	1224.70	-0.05	0.66	1732899
1603.15	1603.20	0.05	(1.05)	158161

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Sample Information

Sample Type: PEG+PPG+Raffinose

Tuning Condition

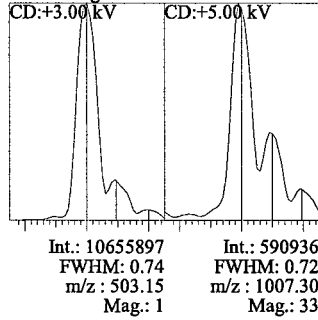
Detector Adjustment: On
 Resolution Adjustment: On
 FWHM of Spectrum: 0.70
 Sensitivity Adjustment: On
 Mass Calibration: On

Tuning Result

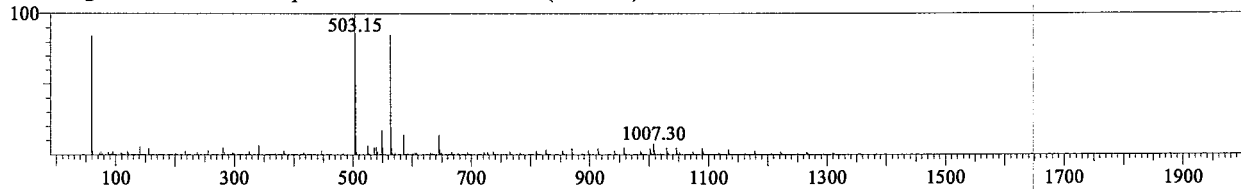
Model: LCMS-8060
 Serial Number: O11106070177US
 Interface: ESI
 Polarity: Negative
 Tuning Mode: Auto Tuning
 Tuning Date: 1/18/2024 11:31:05 AM
 Acquisition Mode: Q3 Scan(Use CID Gas)
 Nebulizing Gas Flow: 1.50(settings : 1.50) L/min

Drying Gas Flow: 0.00(settings : 10.00) L/min
 CID Gas Flow: 270(settings : 270) kPa
 Heating Gas Flow: 5.01(settings : 5.00) L/Min
 Interface Bias: -3.00 kV
 Interface Current: 1.56 uA
 Interface Temp.: 100(settings : 100) C
 DL Temp.: 250(settings : 250) C
 Heat Block Temp.: 400(settings : 400) C
 Q1 RF Gain: ---
 Q1 RF Offset: ---
 Q3 RF Gain: 5000
 Q3 RF Offset: 5000
 Q1 Post-rod Bias: 5.0 V
 CID CELL Exit Lens: 3.5 V
 Conversion Dynode: +10.00 kV
 Detector: -1.94(-1.94) kV
 Vacuum Pressure(QA): 1.6e+02 Pa
 Vacuum Pressure(QP): 2.3e-03 Pa

Tuning Profile



Scan Range: 2.00 - 2000.00 Scan Speed: 30 u/s Base Peak: 503.15 (20000000)



m/z(Target)	m/z(Actual)	Difference	Width	Intensity
503.15	503.15	0.00	0.74	10655897
1007.30	1007.30	0.00	0.72	590936

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Sample Information

Sample Type: PEG+PPG+Raffinose

Tuning Condition

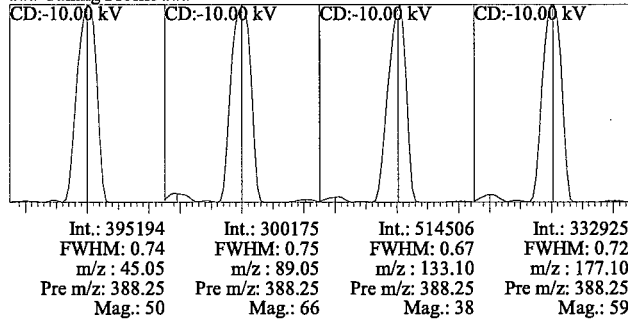
Detector Adjustment: On
 Resolution Adjustment: On
 FWHM of Spectrum: 0.70
 Sensitivity Adjustment: On
 Mass Calibration: On

Tuning Result

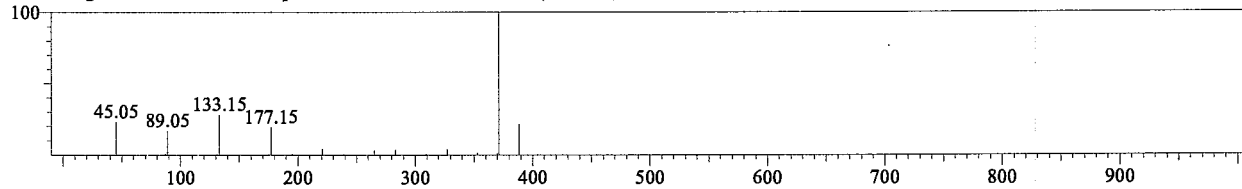
Model: LCMS-8060
 Serial Number: O11106070177US
 Interface: ESI
 Polarity: Positive
 Tuning Mode: Auto Tuning
 Tuning Date: 1/18/2024 11:34:57 AM
 Acquisition Mode: Product Ion Scan
 Nebulizing Gas Flow: 1.50(settings : 1.50) L/min

Drying Gas Flow: 0.00(settings : 10.00) L/min
 CID Gas Flow: 269(settings : 270) kPa
 Heating Gas Flow: 5.00(settings : 5.00) L/Min
 Interface Bias: +4.00 kV
 Interface Current: 3.38 uA
 Interface Temp.: 100(settings : 100) C
 DL Temp.: 250(settings : 250) C
 Heat Block Temp.: 399(settings : 400) C
 Q1 RF Gain: 4996
 Q1 RF Offset: 4990
 Q3 RF Gain: 4997
 Q3 RF Offset: 4991
 Q1 Post-rod Bias: -5.0 V
 CID CELL Exit Lens: -1.1 V
 Conversion Dynode: -10.00 kV
 Detector: -1.94(-1.94) kV
 Vacuum Pressure(QA): 1.6e+02 Pa
 Vacuum Pressure(QP): 2.3e-03 Pa

Tuning Profile



Scan Range: 2.00 - 438.25 Scan Speed: 30 u/s Base Peak: 371.30 (1805386) Pre m/z: 388.25



m/z(Target)	m/z(Actual)	Difference	Width	Intensity
388.25 > 45.05	45.05	0.00	0.74	395194
388.25 > 89.05	89.05	0.00	0.75	300175
388.25 > 133.10	133.15	0.05	0.67	514506
388.25 > 177.10	177.15	0.05	0.72	332925

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Sample Information

Sample Type: PEG+PPG+Raffinose

Tuning Condition

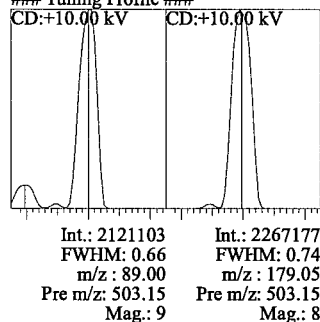
Detector Adjustment: On
 Resolution Adjustment: On
 FWHM of Spectrum: 0.70
 Sensitivity Adjustment: On
 Mass Calibration: On

Tuning Result

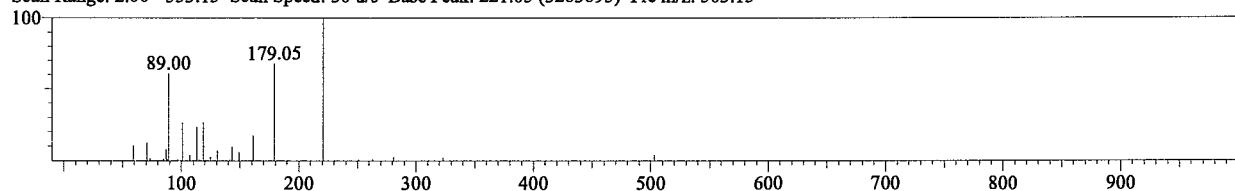
Model: LCMS-8060
 Serial Number: O11106070177US
 Interface: ESI
 Polarity: Negative
 Tuning Mode: Auto Tuning
 Tuning Date: 1/18/2024 11:34:57 AM
 Acquisition Mode: Product Ion Scan
 Nebulizing Gas Flow: 1.50(settings : 1.50) L/min

Drying Gas Flow: 0.00(settings : 10.00) L/min
 CID Gas Flow: 270(settings : 270) kPa
 Heating Gas Flow: 5.00(settings : 5.00) L/Min
 Interface Bias: -3.00 kV
 Interface Current: 19.01 uA
 Interface Temp.: 100(settings : 100) C
 DL Temp.: 249(settings : 250) C
 Heat Block Temp.: 399(settings : 400) C
 Q1 RF Gain: 5000
 Q1 RF Offset: 5000
 Q3 RF Gain: 5000
 Q3 RF Offset: 5007
 Q1 Post-rod Bias: 5.0 V
 CID CELL Exit Lens: 0.9 V
 Conversion Dynode: +10.00 kV
 Detector: -1.94(-1.94) kV
 Vacuum Pressure(QA): 1.6e+02 Pa
 Vacuum Pressure(QP): 2.3e-03 Pa

Tuning Profile



Scan Range: 2.00 - 553.15 Scan Speed: 30 u/s Base Peak: 221.05 (3263695) Pre m/z: 503.15



m/z(Target)	m/z(Actual)	Difference	Width	Intensity
503.15 > 89.00	89.00	0.00	0.66	2121103
503.15 > 179.05	179.05	0.00	0.74	2267177

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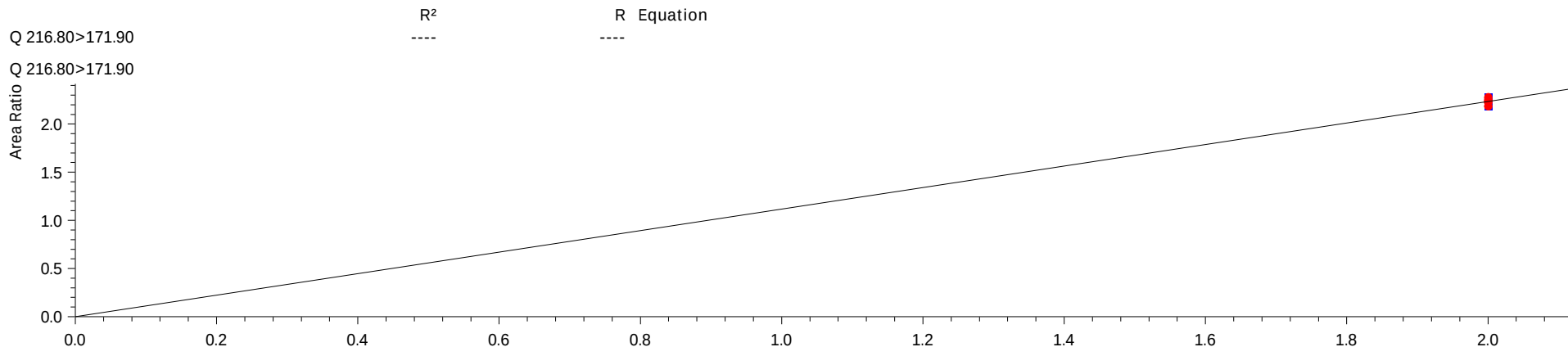
Compound: 13C4-PFBA

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2

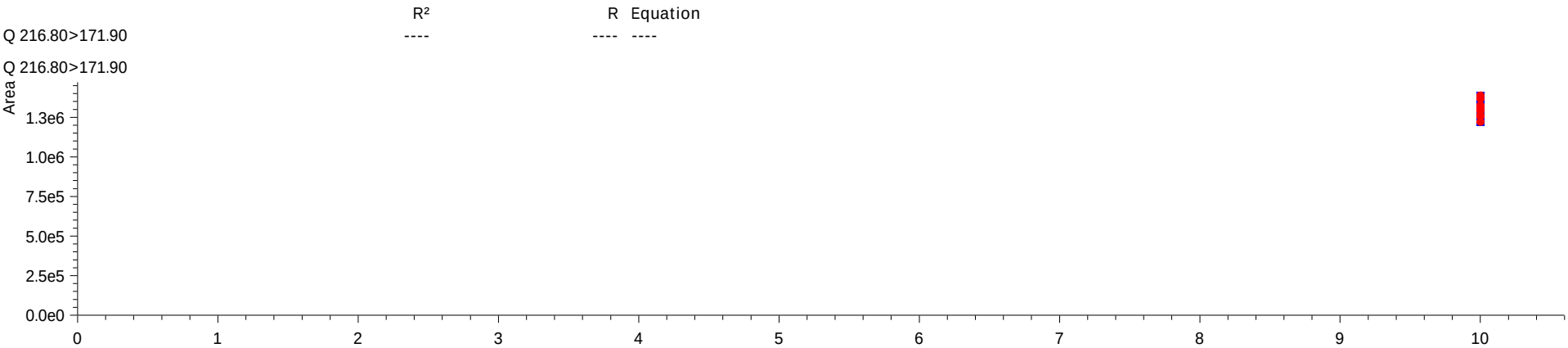


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☒	Auto	1308470	598299	10.0000	5.0000	1.093492	9.7844	-2.16	1.117591	1.455853	1.455853
240118_007	1633 ICAL 0.1PPB	☒	Auto	1323938	588848	10.0000	5.0000	1.124176	10.0589	0.59	1.117591	1.455853	1.455853
240118_008	1633 ICAL 0.25PPB	☒	Auto	1289139	579289	10.0000	5.0000	1.112692	9.9562	-0.44	1.117591	1.455853	1.455853
240118_009	1633 ICAL 0.50PPB	☒	Auto	1388027	617199	10.0000	5.0000	1.124456	10.0614	0.61	1.117591	1.455853	1.455853
240118_010	1633 ICAL 1.0PPB	☒	Auto	1369234	602847	10.0000	5.0000	1.135639	10.1615	1.61	1.117591	1.455853	1.455853
240118_011	1633 ICAL 5.0PPB	☒	Auto	1324886	590832	10.0000	5.0000	1.121204	10.0323	0.32	1.117591	1.455853	1.455853
240118_012	1633 ICAL 10.0PPB	☒	Auto	1260062	566334	10.0000	5.0000	1.112472	9.9542	-0.46	1.117591	1.455853	1.455853
240118_013	1633 ICAL 15.0PPB	☒	Auto	1223381	559080	10.0000	5.0000	1.094102	9.7898	-2.10	1.117591	1.455853	1.455853
240118_014	1633 ICAL 20.0PPB	☒	Auto	1258641	551996	10.0000	5.0000	1.140082	10.2013	2.01	1.117591	1.455853	1.455853
240118_016	1633 ICV 1.0PPB		Auto	1258661	566546	10.0000	5.0000	----	9.9394	-0.61	1.117591	1.455853	1.455853
240118_017	1633 FTCA ICV 1.0PPB		Auto	1330303	598500	10.0000	5.0000	----	9.9443	-0.56	1.117591	1.455853	1.455853



Compound: 13C4-PFBA_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 0

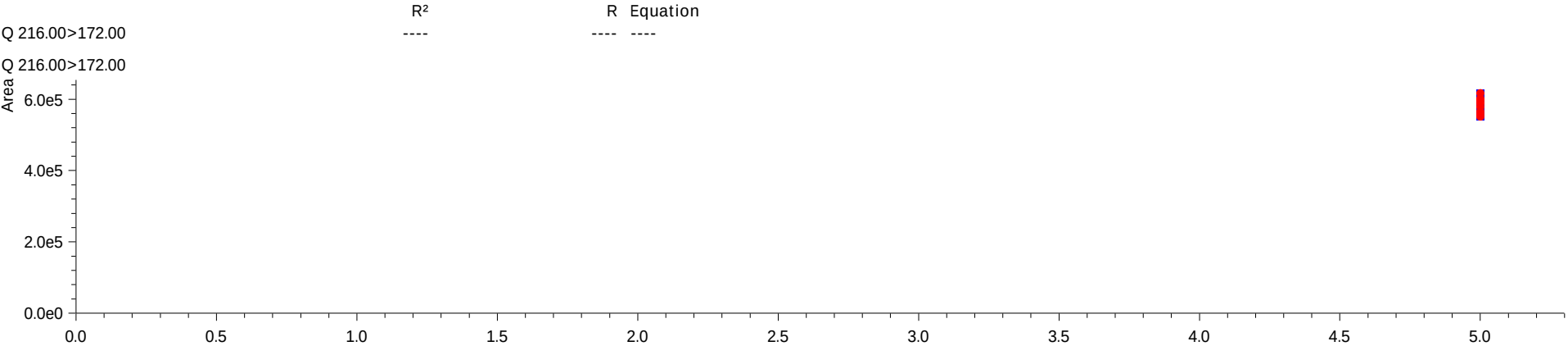


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☐	Auto	1308470	1308470	10.0000	10.0000	1.000000	10.0000	0.00	----	----	----
240118_007	1633 ICAL 0.1PPB	☐	Auto	1323938	1323938	10.0000	10.0000	1.000000	10.0000	0.00	----	----	----
240118_008	1633 ICAL 0.25PPB	☐	Auto	1289139	1289139	10.0000	10.0000	1.000000	10.0000	0.00	----	----	----
240118_009	1633 ICAL 0.50PPB	☐	Auto	1388027	1388027	10.0000	10.0000	1.000000	10.0000	0.00	----	----	----
240118_010	1633 ICAL 1.0PPB	☐	Auto	1369234	1369234	10.0000	10.0000	1.000000	10.0000	0.00	----	----	----
240118_011	1633 ICAL 5.0PPB	☐	Auto	1324886	1324886	10.0000	10.0000	1.000000	10.0000	0.00	----	----	----
240118_012	1633 ICAL 10.0PPB	☐	Auto	1260062	1260062	10.0000	10.0000	1.000000	10.0000	0.00	----	----	----
240118_013	1633 ICAL 15.0PPB	☐	Auto	1223381	1223381	10.0000	10.0000	1.000000	10.0000	0.00	----	----	----
240118_014	1633 ICAL 20.0PPB	☐	Auto	1258641	1258641	10.0000	10.0000	1.000000	10.0000	0.00	----	----	----
240118_016	1633 ICV 1.0PPB		Auto	1258661	1258661	10.0000	10.0000	----	10.0000	0.00	----	----	----
240118_017	1633 FTCA ICV 1.0PPB		Auto	1330303	1330303	10.0000	10.0000	----	10.0000	0.00	----	----	----



Compound: 13C3-PFBA_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 0

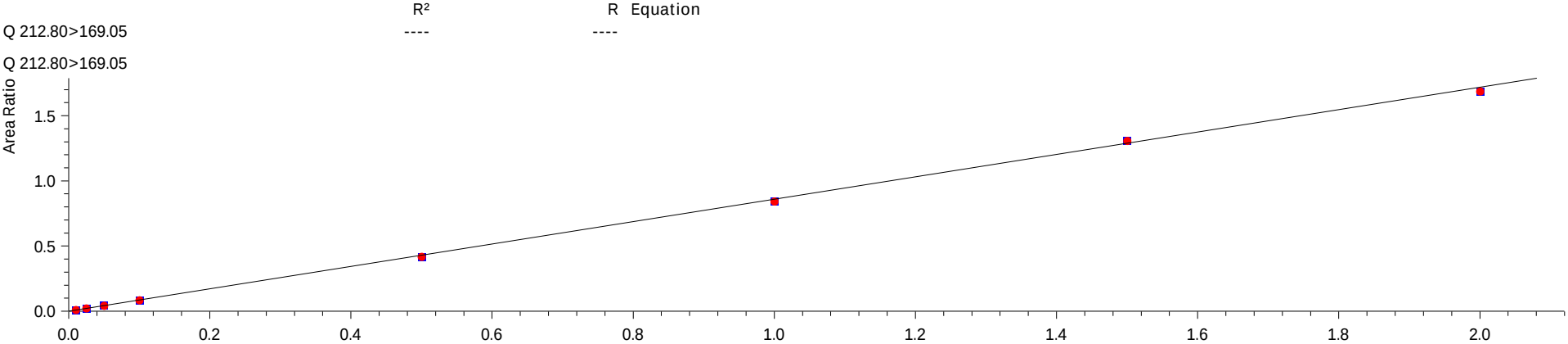


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)	Conc. (ng/mL)
240118_006	1633 ICAL 0.05PPB	☐	Auto	598299	598299	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----	
240118_007	1633 ICAL 0.1PPB	☐	Auto	588848	588848	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----	
240118_008	1633 ICAL 0.25PPB	☐	Auto	579289	579289	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----	
240118_009	1633 ICAL 0.50PPB	☐	Auto	617199	617199	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----	
240118_010	1633 ICAL 1.0PPB	☐	Auto	602847	602847	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----	
240118_011	1633 ICAL 5.0PPB	☐	Auto	590832	590832	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----	
240118_012	1633 ICAL 10.0PPB	☐	Auto	566334	566334	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----	
240118_013	1633 ICAL 15.0PPB	☐	Auto	559080	559080	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----	
240118_014	1633 ICAL 20.0PPB	☐	Auto	551996	551996	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----	
240118_016	1633 ICV 1.0PPB		Auto	566546	566546	5.0000	5.0000	----	5.0000	0.00	----	----	----	
240118_017	1633 FTCA ICV 1.0PPB		Auto	598500	598500	5.0000	5.0000	----	5.0000	0.00	----	----	----	



Compound: PFBA

Curve Fit: Mean RF | Weighting: 1/C | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 8
No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_007	1633 ICAL 0.1PPB	☒	Auto	12114	1323938	0.1000	10.0000	0.915001	0.1065	6.49	0.859199	3.558331	3.558330
240118_008	1633 ICAL 0.25PPB	☒	Auto	28706	1289139	0.2500	10.0000	0.890717	0.2592	3.67	0.859199	3.558331	3.558330
240118_009	1633 ICAL 0.50PPB	☒	Auto	57419	1388027	0.5000	10.0000	0.827346	0.4815	-3.71	0.859199	3.558331	3.558330
240118_010	1633 ICAL 1.0PPB	☒	Auto	116117	1369234	1.0000	10.0000	0.848044	0.9870	-1.30	0.859199	3.558331	3.558330
240118_011	1633 ICAL 5.0PPB	☒	Auto	553236	1324886	5.0000	10.0000	0.835145	4.8600	-2.80	0.859199	3.558331	3.558330
240118_012	1633 ICAL 10.0PPB	☒	Auto	1060864	1260062	10.0000	10.0000	0.841914	9.7988	-2.01	0.859199	3.558331	3.558330
240118_013	1633 ICAL 15.0PPB	☒	Auto	1600400	1223381	15.0000	10.0000	0.872119	15.2256	1.50	0.859199	3.558331	3.558330
240118_014	1633 ICAL 20.0PPB	☒	Auto	2122848	1258641	20.0000	10.0000	0.843310	19.6301	-1.85	0.859199	3.558331	3.558330
240118_016	1633 ICV 1.0PPB		Auto	107094	1258661	1.0000	10.0000	----	0.9903	-0.97	0.859199	3.558331	3.558330
240118_017	1633 FTCA ICV 1.0PPB		ND(W/B)	----	1330303	1.0000	10.0000	----	----	----	0.859199	3.558331	3.558330



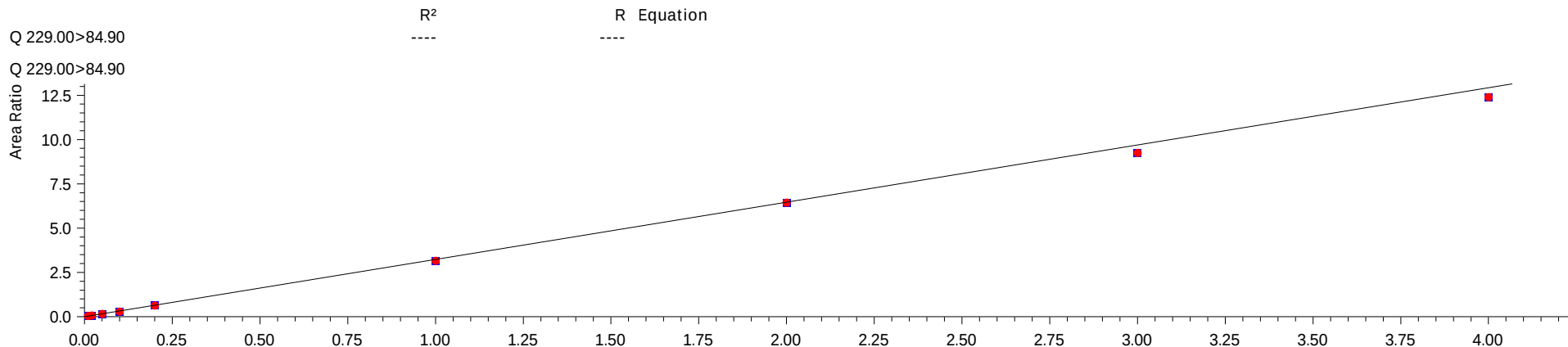
Compound: PFMPA

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☒	Auto	5804	152450	0.0500	5.0000	3.807423	0.0589	17.83	3.231349	7.461067	7.461066
240118_007	1633 ICAL 0.1PPB	☒	Auto	9475	141960	0.1000	5.0000	3.337278	0.1033	3.28	3.231349	7.461067	7.461066
240118_008	1633 ICAL 0.25PPB	☒	Auto	23024	141383	0.2500	5.0000	3.256983	0.2520	0.79	3.231349	7.461067	7.461066
240118_009	1633 ICAL 0.50PPB	☒	Auto	45603	153759	0.5000	5.0000	2.965853	0.4589	-8.22	3.231349	7.461067	7.461066
240118_010	1633 ICAL 1.0PPB	☒	Auto	92865	147694	1.0000	5.0000	3.143824	0.9729	-2.71	3.231349	7.461067	7.461066
240118_011	1633 ICAL 5.0PPB	☒	Auto	437210	138295	5.0000	5.0000	3.161418	4.8918	-2.16	3.231349	7.461067	7.461066
240118_012	1633 ICAL 10.0PPB	☒	Auto	827555	128399	10.0000	5.0000	3.222590	9.9729	-0.27	3.231349	7.461067	7.461066
240118_013	1633 ICAL 15.0PPB	☒	Auto	1224225	132195	15.0000	5.0000	3.086919	14.3296	-4.47	3.231349	7.461067	7.461066
240118_014	1633 ICAL 20.0PPB	☒	Auto	1617890	130481	20.0000	5.0000	3.099851	19.1861	-4.07	3.231349	7.461067	7.461066
240118_016	1633 ICV 1.0PPB		Auto	85041	131451	1.0000	5.0000	----	1.0010	0.10	3.231349	7.461067	7.461066
240118_017	1633 FTCA ICV 1.0PPB		ND(W/B)	----	145319	1.0000	5.0000	----	----	----	3.231349	7.461067	7.461066



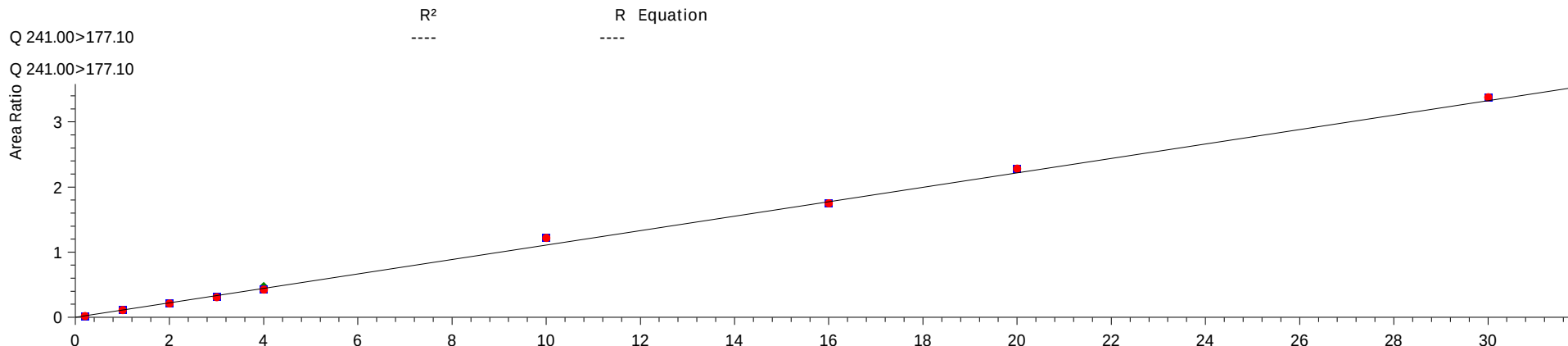
Compound: 3_3 FTCA

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc.Ratio
240118_006	1633 ICAL 0.05PPB	☒	Auto	3313	152450	1.0000	5.0000	0.108675	0.9802	-1.98	0.110874	4.948042	4.948042
240118_007	1633 ICAL 0.1PPB	☒	Auto	16133	141960	5.0000	5.0000	0.113641	5.1248	2.50	0.110874	4.948042	4.948042
240118_008	1633 ICAL 0.25PPB	☒	Auto	30420	141383	10.0000	5.0000	0.107579	9.7028	-2.97	0.110874	4.948042	4.948042
240118_009	1633 ICAL 0.50PPB	☒	Auto	47512	153759	15.0000	5.0000	0.103001	13.9348	-7.10	0.110874	4.948042	4.948042
240118_010	1633 ICAL 1.0PPB	☒	Auto	62978	147694	20.0000	5.0000	0.106602	19.2293	-3.85	0.110874	4.948042	4.948042
240118_011	1633 ICAL 5.0PPB	☒	Auto	168591	138295	50.0000	5.0000	0.121907	54.9751	9.95	0.110874	4.948042	4.948042
240118_012	1633 ICAL 10.0PPB	☒	Auto	225272	128399	80.0000	5.0000	0.109654	79.1196	-1.10	0.110874	4.948042	4.948042
240118_013	1633 ICAL 15.0PPB	☒	Auto	301852	132195	100.0000	5.0000	0.114169	102.9716	2.97	0.110874	4.948042	4.948042
240118_014	1633 ICAL 20.0PPB	☒	Auto	440929	130481	150.0000	5.0000	0.112642	152.3911	1.59	0.110874	4.948042	4.948042
240118_016	1633 ICV 1.0PPB		ND(W/B)	----	131451	20.0000	5.0000	----	----	----	0.110874	4.948042	4.948042
240118_017	1633 FTCA ICV 1.0PPB		M	70176	145319	20.0000	5.0000	----	21.7775	8.89	0.110874	4.948042	4.948042



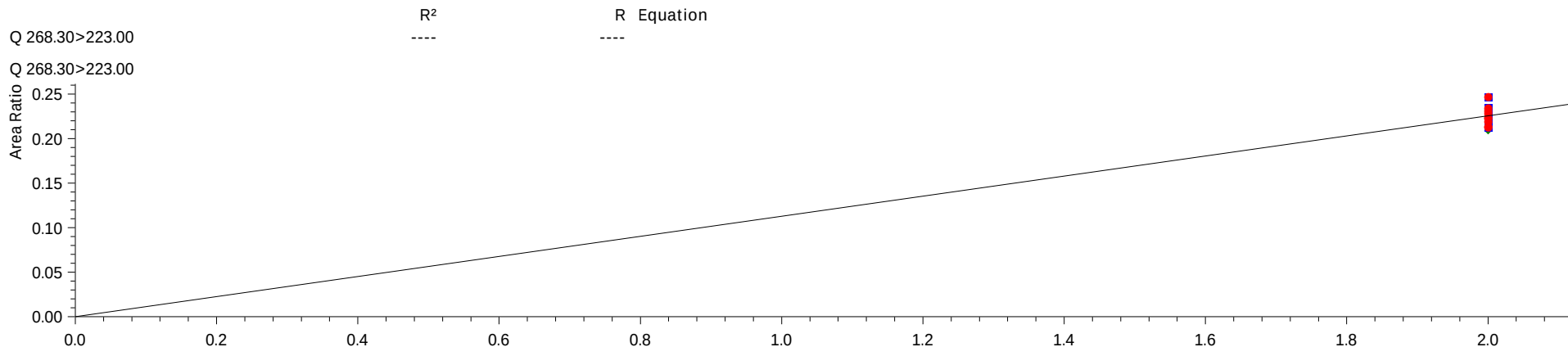
Compound: 13C5-PFPeA

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2

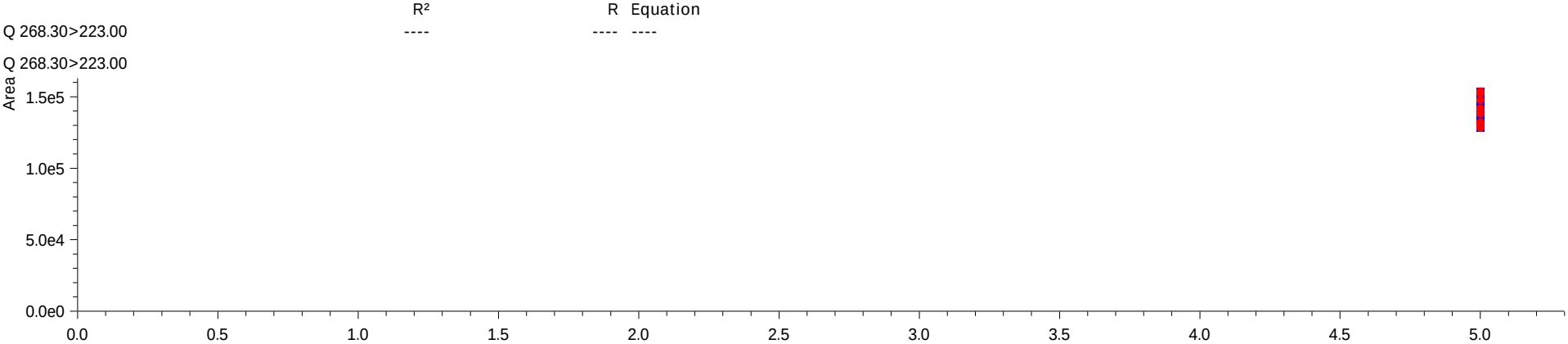


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☒	Auto	152450	618072	5.0000	2.5000	0.123327	5.4644	9.29	0.112846	4.770772	4.770772
240118_007	1633 ICAL 0.1PPB	☒	Auto	141960	664999	5.0000	2.5000	0.106737	4.7293	-5.41	0.112846	4.770772	4.770772
240118_008	1633 ICAL 0.25PPB	☒	Auto	141383	645671	5.0000	2.5000	0.109485	4.8511	-2.98	0.112846	4.770772	4.770772
240118_009	1633 ICAL 0.50PPB	☒	Auto	153759	656444	5.0000	2.5000	0.117115	5.1891	3.78	0.112846	4.770772	4.770772
240118_010	1633 ICAL 1.0PPB	☒	Auto	147694	663775	5.0000	2.5000	0.111253	4.9294	-1.41	0.112846	4.770772	4.770772
240118_011	1633 ICAL 5.0PPB	☒	Auto	138295	618889	5.0000	2.5000	0.111729	4.9505	-0.99	0.112846	4.770772	4.770772
240118_012	1633 ICAL 10.0PPB	☒	Auto	128399	603861	5.0000	2.5000	0.106315	4.7106	-5.79	0.112846	4.770772	4.770772
240118_013	1633 ICAL 15.0PPB	☒	Auto	132195	578981	5.0000	2.5000	0.114162	5.0583	1.17	0.112846	4.770772	4.770772
240118_014	1633 ICAL 20.0PPB	☒	Auto	130481	564879	5.0000	2.5000	0.115495	5.1173	2.35	0.112846	4.770772	4.770772
240118_016	1633 ICV 1.0PPB		Auto	131451	628403	5.0000	2.5000	----	4.6342	-7.32	0.112846	4.770772	4.770772
240118_017	1633 FTCA ICV 1.0PPB		Auto	145319	626058	5.0000	2.5000	----	5.1423	2.85	0.112846	4.770772	4.770772



Compound: 13C5-PFPeA_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 0





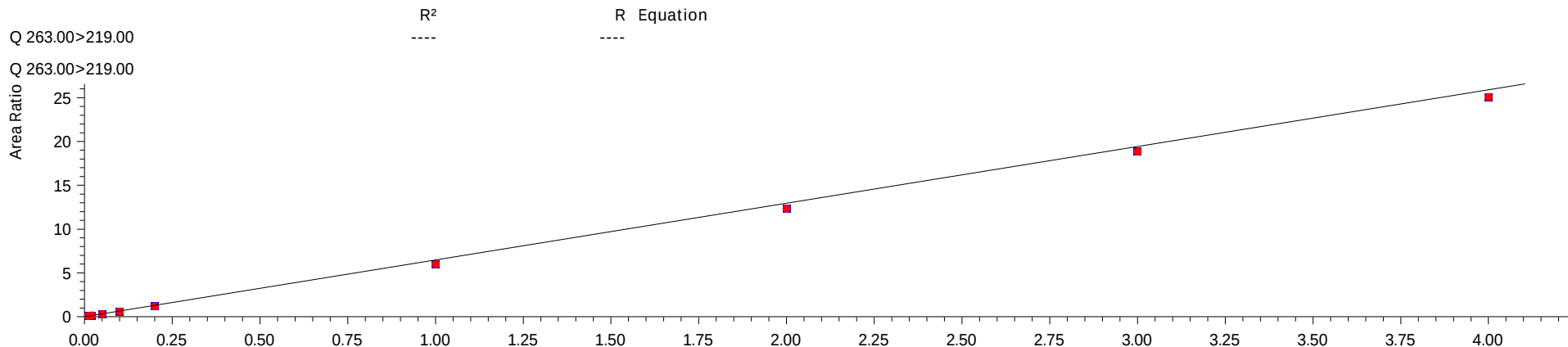
Compound: PFPeA

Curve Fit: Mean RF | Weighting: 1/C | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2

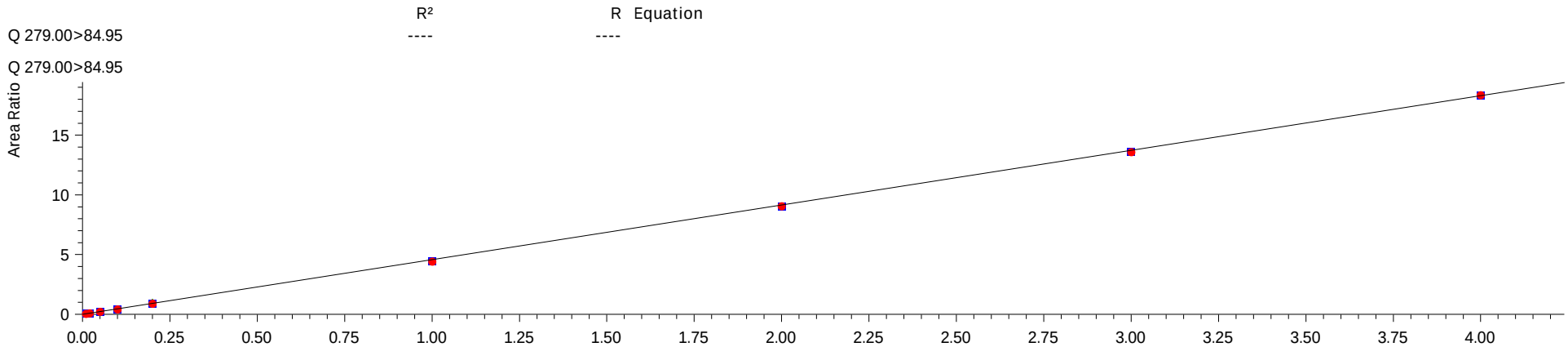


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☒	M	12644	152450	0.0500	5.0000	8.293917	0.0640	28.07	6.476134	11.644891	11.644890
240118_007	1633 ICAL 0.1PPB	☒	Auto	20016	141960	0.1000	5.0000	7.049858	0.1089	8.86	6.476134	11.644891	11.644890
240118_008	1633 ICAL 0.25PPB	☒	Auto	43873	141383	0.2500	5.0000	6.206226	0.2396	-4.17	6.476134	11.644891	11.644890
240118_009	1633 ICAL 0.50PPB	☒	Auto	92188	153759	0.5000	5.0000	5.995604	0.4629	-7.42	6.476134	11.644891	11.644890
240118_010	1633 ICAL 1.0PPB	☒	Auto	177078	147694	1.0000	5.0000	5.994754	0.9257	-7.43	6.476134	11.644891	11.644890
240118_011	1633 ICAL 5.0PPB	☒	Auto	832768	138295	5.0000	5.0000	6.021655	4.6491	-7.02	6.476134	11.644891	11.644890
240118_012	1633 ICAL 10.0PPB	☒	Auto	1583589	128399	10.0000	5.0000	6.166669	9.5221	-4.78	6.476134	11.644891	11.644890
240118_013	1633 ICAL 15.0PPB	☒	Auto	2493787	132195	15.0000	5.0000	6.288158	14.5646	-2.90	6.476134	11.644891	11.644890
240118_014	1633 ICAL 20.0PPB	☒	Auto	3271617	130481	20.0000	5.0000	6.268367	19.3584	-3.21	6.476134	11.644891	11.644890
240118_016	1633 ICV 1.0PPB		Auto	164731	131451	1.0000	5.0000	----	0.9675	-3.25	6.476134	11.644891	11.644890
240118_017	1633 FTCA ICV 1.0PPB		ND(W/B)	----	145319	1.0000	5.0000	----	----	----	6.476134	11.644891	11.644890



Compound: PFMBA

Curve Fit: Mean RF | Weighting: 1/C | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☒	Auto	7994	152450	0.0500	5.0000	5.243912	0.0573	14.55	4.577828	6.076337	6.076336
240118_007	1633 ICAL 0.1PPB	☒	Auto	13370	141960	0.1000	5.0000	4.708974	0.1029	2.86	4.577828	6.076337	6.076336
240118_008	1633 ICAL 0.25PPB	☒	Auto	31409	141383	0.2500	5.0000	4.443159	0.2426	-2.94	4.577828	6.076337	6.076336
240118_009	1633 ICAL 0.50PPB	☒	Auto	65533	153759	0.5000	5.0000	4.262043	0.4655	-6.90	4.577828	6.076337	6.076336
240118_010	1633 ICAL 1.0PPB	☒	Auto	132663	147694	1.0000	5.0000	4.491135	0.9811	-1.89	4.577828	6.076337	6.076336
240118_011	1633 ICAL 5.0PPB	☒	Auto	610219	138295	5.0000	5.0000	4.412430	4.8193	-3.61	4.577828	6.076337	6.076336
240118_012	1633 ICAL 10.0PPB	☒	Auto	1162269	128399	10.0000	5.0000	4.526004	9.8868	-1.13	4.577828	6.076337	6.076336
240118_013	1633 ICAL 15.0PPB	☒	Auto	1795086	132195	15.0000	5.0000	4.526364	14.8314	-1.12	4.577828	6.076337	6.076336
240118_014	1633 ICAL 20.0PPB	☒	Auto	2393773	130481	20.0000	5.0000	4.586431	20.0376	0.19	4.577828	6.076337	6.076336
240118_016	1633 ICV 1.0PPB		Auto	130341	131451	1.0000	5.0000	----	1.0830	8.30	4.577828	6.076337	6.076336
240118_017	1633 FTCA ICV 1.0PPB		ND(W/B)	----	145319	1.0000	5.0000	----	----	----	4.577828	6.076337	6.076336



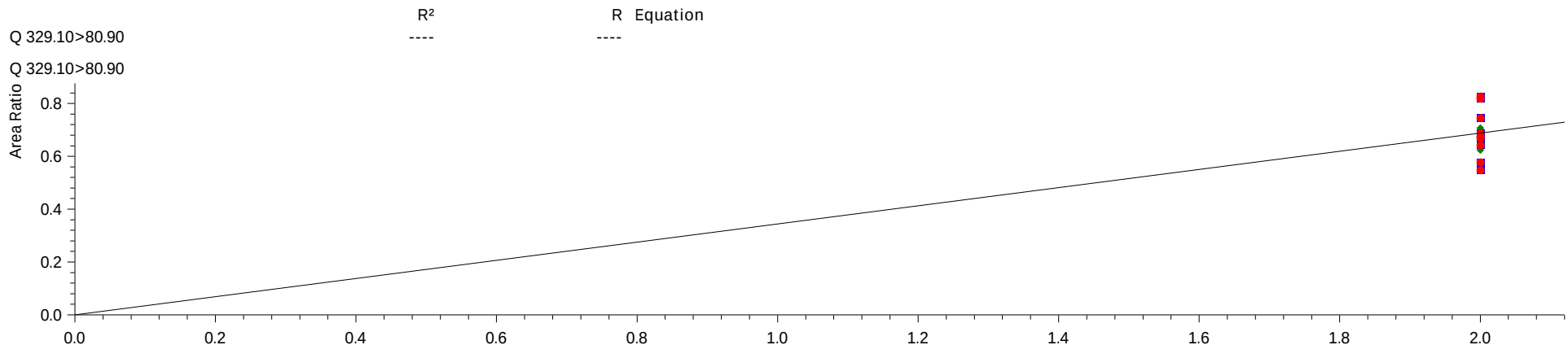
Compound: 13C2-4_2 FTS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2

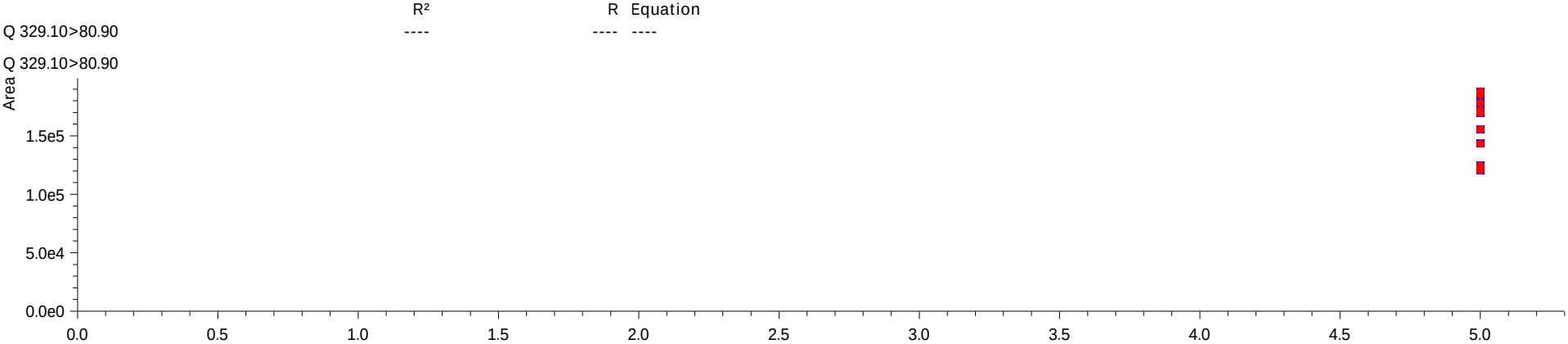


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☒	Auto	188057	229705	5.0000	2.5000	0.409345	5.9492	18.98	0.344033	13.968932	13.968932
240118_007	1633 ICAL 0.1PPB	☒	Auto	185513	224476	5.0000	2.5000	0.413215	6.0055	20.11	0.344033	13.968932	13.968932
240118_008	1633 ICAL 0.25PPB	☒	Auto	178483	239451	5.0000	2.5000	0.372692	5.4165	8.33	0.344033	13.968932	13.968932
240118_009	1633 ICAL 0.50PPB	☒	Auto	169678	251143	5.0000	2.5000	0.337813	4.9096	-1.81	0.344033	13.968932	13.968932
240118_010	1633 ICAL 1.0PPB	☒	Auto	171979	249998	5.0000	2.5000	0.343960	4.9989	-0.02	0.344033	13.968932	13.968932
240118_011	1633 ICAL 5.0PPB	☒	Auto	155760	232307	5.0000	2.5000	0.335247	4.8723	-2.55	0.344033	13.968932	13.968932
240118_012	1633 ICAL 10.0PPB	☒	Auto	143510	223258	5.0000	2.5000	0.321399	4.6710	-6.58	0.344033	13.968932	13.968932
240118_013	1633 ICAL 15.0PPB	☒	Auto	120797	220445	5.0000	2.5000	0.273984	3.9819	-20.36	0.344033	13.968932	13.968932
240118_014	1633 ICAL 20.0PPB	☒	Auto	124744	216087	5.0000	2.5000	0.288642	4.1950	-16.10	0.344033	13.968932	13.968932
240118_016	1633 ICV 1.0PPB		Auto	142829	202223	5.0000	2.5000	----	5.1325	2.65	0.344033	13.968932	13.968932
240118_017	1633 FTCA ICV 1.0PPB		Auto	145969	234067	5.0000	2.5000	----	4.5317	-9.37	0.344033	13.968932	13.968932



Compound: 13C2-4_2 FTS_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 0



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☐	Auto	188057	188057	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_007	1633 ICAL 0.1PPB	☐	Auto	185513	185513	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_008	1633 ICAL 0.25PPB	☐	Auto	178483	178483	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_009	1633 ICAL 0.50PPB	☐	Auto	169678	169678	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_010	1633 ICAL 1.0PPB	☐	Auto	171979	171979	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_011	1633 ICAL 5.0PPB	☐	Auto	155760	155760	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_012	1633 ICAL 10.0PPB	☐	Auto	143510	143510	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_013	1633 ICAL 15.0PPB	☐	Auto	120797	120797	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_014	1633 ICAL 20.0PPB	☐	Auto	124744	124744	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_016	1633 ICV 1.0PPB		Auto	142829	142829	5.0000	5.0000	----	5.0000	0.00	----	----	----
240118_017	1633 FTCA ICV 1.0PPB		Auto	145969	145969	5.0000	5.0000	----	5.0000	0.00	----	----	----



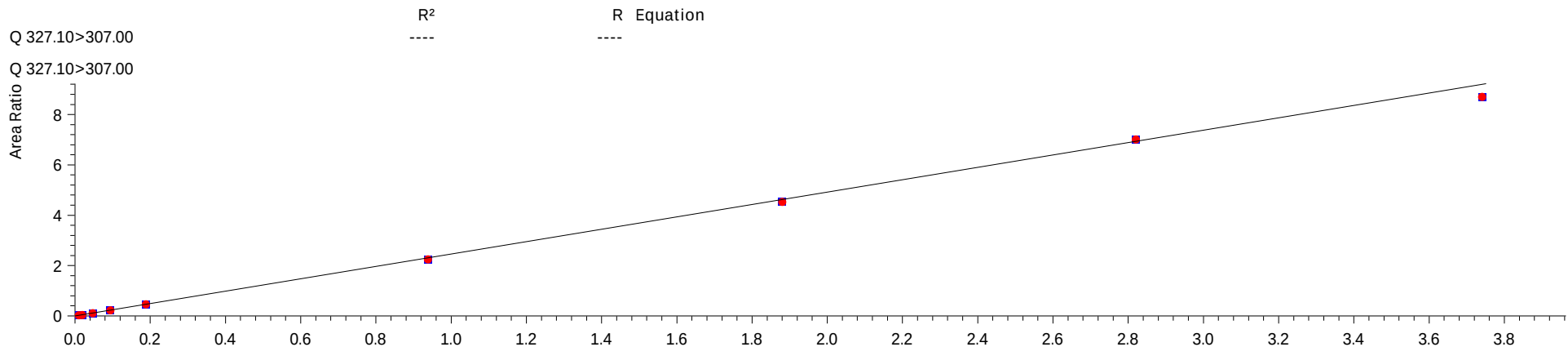
Compound: 4_2 FTS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2

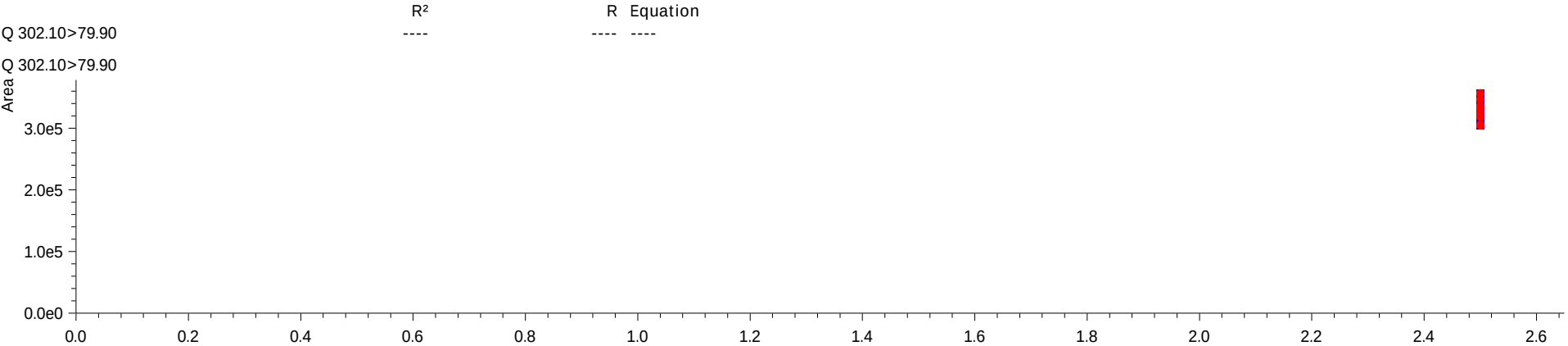


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☒	MI R1 R2	4993	188057	0.0469	5.0000	2.830402	0.0540	15.09	2.459263	6.086419	6.086418
240118_007	1633 ICAL 0.1PPB	☒	Auto	8314	185513	0.0940	5.0000	2.383833	0.0911	-3.07	2.459263	6.086419	6.086418
240118_008	1633 ICAL 0.25PPB	☒	Auto	19625	178483	0.2340	5.0000	2.349511	0.2236	-4.46	2.459263	6.086419	6.086418
240118_009	1633 ICAL 0.50PPB	☒	Auto	39193	169678	0.4690	5.0000	2.462506	0.4696	0.13	2.459263	6.086419	6.086418
240118_010	1633 ICAL 1.0PPB	☒	Auto	79974	171979	0.9400	5.0000	2.473536	0.9455	0.58	2.459263	6.086419	6.086418
240118_011	1633 ICAL 5.0PPB	☒	Auto	351191	155760	4.6900	5.0000	2.403720	4.5841	-2.26	2.459263	6.086419	6.086418
240118_012	1633 ICAL 10.0PPB	☒	Auto	651111	143510	9.4000	5.0000	2.413330	9.2244	-1.87	2.459263	6.086419	6.086418
240118_013	1633 ICAL 15.0PPB	☒	Auto	847984	120797	14.1000	5.0000	2.489336	14.2724	1.22	2.459263	6.086419	6.086418
240118_014	1633 ICAL 20.0PPB	☒	Auto	1085733	124744	18.7000	5.0000	2.327194	17.6958	-5.37	2.459263	6.086419	6.086418
240118_016	1633 ICV 1.0PPB		Auto	63477	142829	0.9400	5.0000	----	0.9036	-3.88	2.459263	6.086419	6.086418
240118_017	1633 FTCA ICV 1.0PPB		ND(W/B)	----	145969	0.9400	5.0000	----	----	----	2.459263	6.086419	6.086418



Compound: 13C3-PFBS_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 0



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc. (ng/mL)
													RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☐	Auto	336745	336745	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_007	1633 ICAL 0.1PPB	☐	Auto	333703	333703	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_008	1633 ICAL 0.25PPB	☐	Auto	324049	324049	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_009	1633 ICAL 0.50PPB	☐	Auto	356850	356850	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_010	1633 ICAL 1.0PPB	☐	Auto	347150	347150	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_011	1633 ICAL 5.0PPB	☐	Auto	331653	331653	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_012	1633 ICAL 10.0PPB	☐	Auto	305947	305947	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_013	1633 ICAL 15.0PPB	☐	Auto	304776	304776	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_014	1633 ICAL 20.0PPB	☐	Auto	318216	318216	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_016	1633 ICV 1.0PPB		Auto	312426	312426	2.5000	2.5000	----	2.5000	0.00	----	----	----
240118_017	1633 FTCA ICV 1.0PPB		Auto	344240	344240	2.5000	2.5000	----	2.5000	0.00	----	----	----



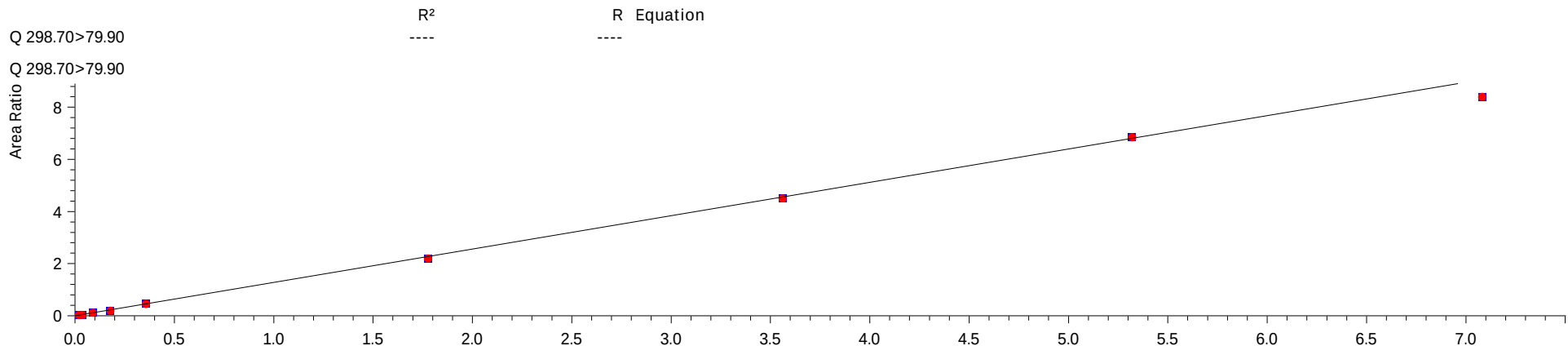
Compound: PFBS

Curve Fit: Mean RF | Weighting: 1/C | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc.Ratio
240118_006	1633 ICAL 0.05PPB	☒	Auto	8756	336745	0.0444	2.5000	1.463989	0.0508	14.40	1.279675	7.473316	7.473314
240118_007	1633 ICAL 0.1PPB	☒	Auto	14873	333703	0.0890	2.5000	1.251985	0.0871	-2.16	1.279675	7.473316	7.473314
240118_008	1633 ICAL 0.25PPB	☒	Auto	39554	324049	0.2210	2.5000	1.380795	0.2385	7.90	1.279675	7.473316	7.473314
240118_009	1633 ICAL 0.50PPB	☒	Auto	72727	356850	0.4440	2.5000	1.147537	0.3982	-10.33	1.279675	7.473316	7.473314
240118_010	1633 ICAL 1.0PPB	☒	Auto	159927	347150	0.8900	2.5000	1.294056	0.9000	1.12	1.279675	7.473316	7.473314
240118_011	1633 ICAL 5.0PPB	☒	Auto	730019	331653	4.4400	2.5000	1.239387	4.3002	-3.15	1.279675	7.473316	7.473314
240118_012	1633 ICAL 10.0PPB	☒	Auto	1378071	305947	8.9000	2.5000	1.265248	8.7997	-1.13	1.279675	7.473316	7.473314
240118_013	1633 ICAL 15.0PPB	☒	Auto	2087380	304776	13.3000	2.5000	1.287386	13.3801	0.60	1.279675	7.473316	7.473314
240118_014	1633 ICAL 20.0PPB	☒	Auto	2673582	318216	17.7000	2.5000	1.186693	16.4139	-7.27	1.279675	7.473316	7.473314
240118_016	1633 ICV 1.0PPB		Auto	138227	312426	0.8900	2.5000	----	0.8643	-2.88	1.279675	7.473316	7.473314
240118_017	1633 FTCA ICV 1.0PPB		ND(W/B)	----	344240	0.8900	2.5000	----	----	----	1.279675	7.473316	7.473314



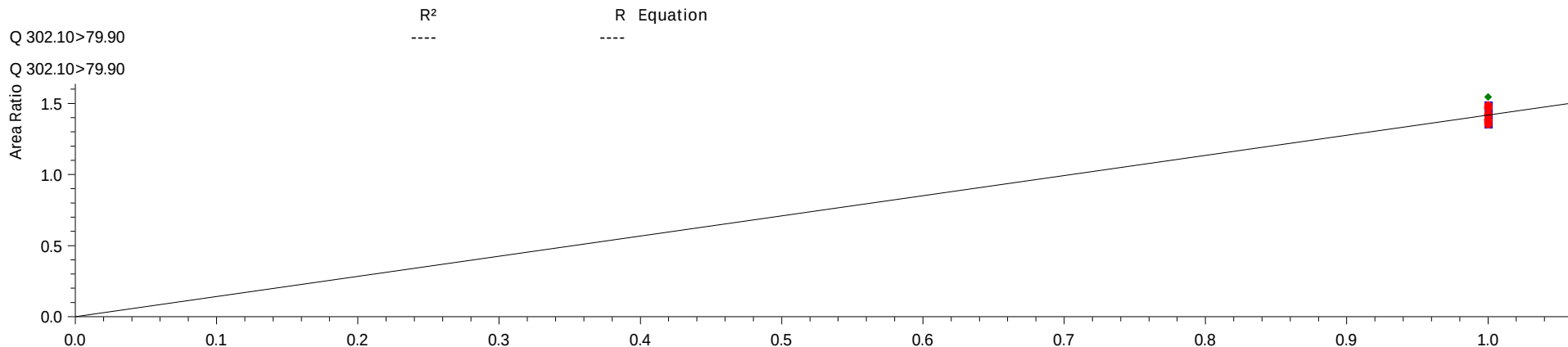
Compound: 13C3-PFBS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☒	Auto	336745	229705	2.5000	2.5000	1.465984	2.5833	3.33	1.418732	3.404430	3.404430
240118_007	1633 ICAL 0.1PPB	☒	Auto	333703	224476	2.5000	2.5000	1.486590	2.6196	4.78	1.418732	3.404430	3.404430
240118_008	1633 ICAL 0.25PPB	☒	Auto	324049	239451	2.5000	2.5000	1.353297	2.3847	-4.61	1.418732	3.404430	3.404430
240118_009	1633 ICAL 0.50PPB	☒	Auto	356850	251143	2.5000	2.5000	1.420906	2.5038	0.15	1.418732	3.404430	3.404430
240118_010	1633 ICAL 1.0PPB	☒	Auto	347150	249998	2.5000	2.5000	1.388612	2.4469	-2.12	1.418732	3.404430	3.404430
240118_011	1633 ICAL 5.0PPB	☒	Auto	331653	232307	2.5000	2.5000	1.427654	2.5157	0.63	1.418732	3.404430	3.404430
240118_012	1633 ICAL 10.0PPB	☒	Auto	305947	223258	2.5000	2.5000	1.370376	2.4148	-3.41	1.418732	3.404430	3.404430
240118_013	1633 ICAL 15.0PPB	☒	Auto	304776	220445	2.5000	2.5000	1.382549	2.4362	-2.55	1.418732	3.404430	3.404430
240118_014	1633 ICAL 20.0PPB	☒	Auto	318216	216087	2.5000	2.5000	1.472627	2.5950	3.80	1.418732	3.404430	3.404430
240118_016	1633 ICV 1.0PPB		Auto	312426	202223	2.5000	2.5000	----	2.7224	8.90	1.418732	3.404430	3.404430
240118_017	1633 FTCA ICV 1.0PPB		Auto	344240	234067	2.5000	2.5000	----	2.5916	3.66	1.418732	3.404430	3.404430



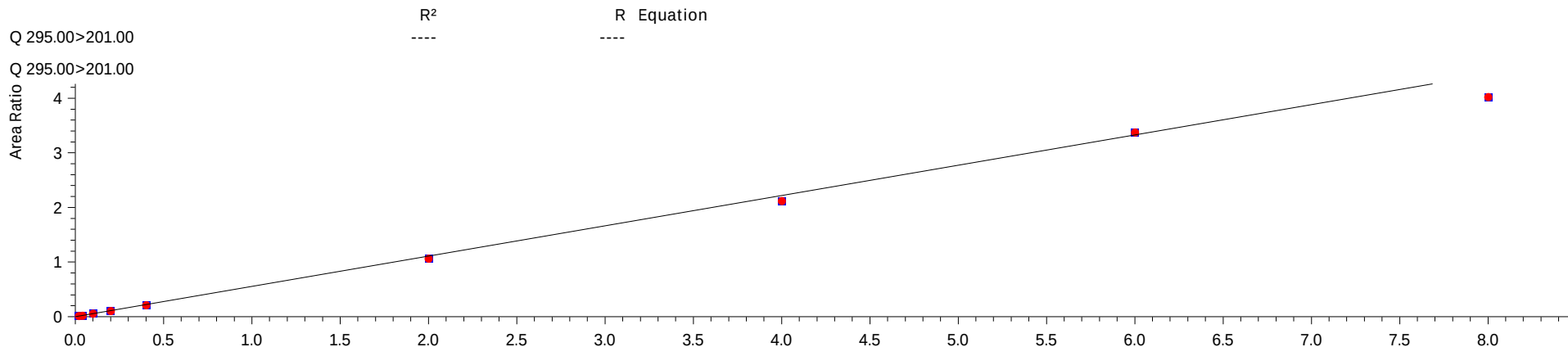
Compound: NFDHA

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc.Ratio
240118_006	1633 ICAL 0.05PPB	☒	Auto	9711	677503	0.0500	2.5000	0.716641	0.0646	29.20	0.554667	11.483686	11.483685
240118_007	1633 ICAL 0.1PPB	☒	Auto	14637	701158	0.1000	2.5000	0.521871	0.0941	-5.91	0.554667	11.483686	11.483685
240118_008	1633 ICAL 0.25PPB	☒	Auto	36786	651214	0.2500	2.5000	0.564880	0.2546	1.84	0.554667	11.483686	11.483685
240118_009	1633 ICAL 0.50PPB	☒	Auto	73337	687616	0.5000	2.5000	0.533269	0.4807	-3.86	0.554667	11.483686	11.483685
240118_010	1633 ICAL 1.0PPB	☒	Auto	146253	693968	1.0000	2.5000	0.526872	0.9499	-5.01	0.554667	11.483686	11.483685
240118_011	1633 ICAL 5.0PPB	☒	Auto	707390	663242	5.0000	2.5000	0.533282	4.8072	-3.86	0.554667	11.483686	11.483685
240118_012	1633 ICAL 10.0PPB	☒	Auto	1353187	638007	10.0000	2.5000	0.530240	9.5596	-4.40	0.554667	11.483686	11.483685
240118_013	1633 ICAL 15.0PPB	☒	Auto	1969096	583700	15.0000	2.5000	0.562246	15.2050	1.37	0.554667	11.483686	11.483685
240118_014	1633 ICAL 20.0PPB	☒	Auto	2485749	618096	20.0000	2.5000	0.502703	18.1263	-9.37	0.554667	11.483686	11.483685
240118_016	1633 ICV 1.0PPB		Auto	139473	659266	1.0000	2.5000	----	0.9535	-4.65	0.554667	11.483686	11.483685
240118_017	1633 FTCA ICV 1.0PPB		ND(W/B)	----	661898	1.0000	2.5000	----	----	----	0.554667	11.483686	11.483685



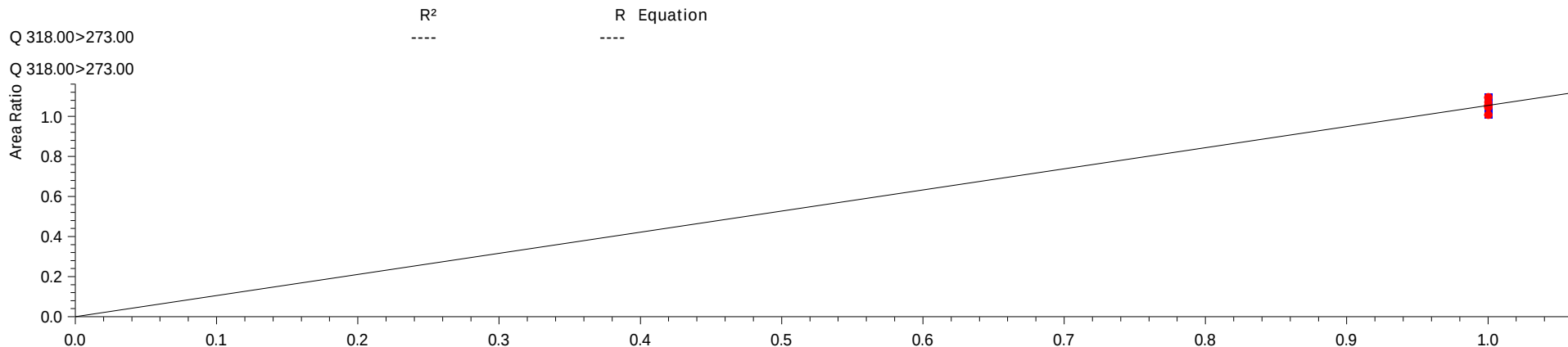
Compound: 13C5-PFHxA

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2

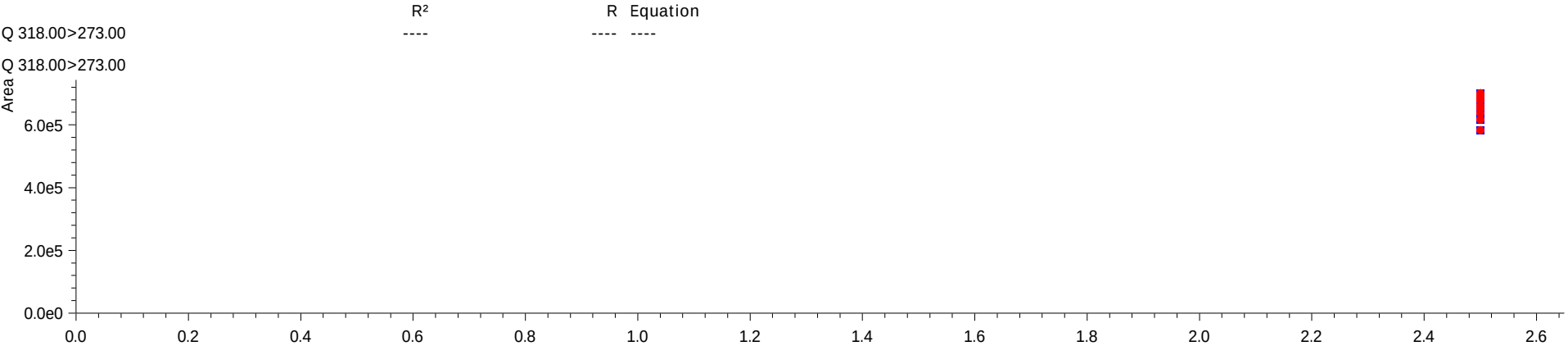


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc.Ratio
240118_006	1633 ICAL 0.05PPB	☒	Auto	677503	618072	2.5000	2.5000	1.096156	2.6009	4.04	1.053629	2.999631	2.999631
240118_007	1633 ICAL 0.1PPB	☒	Auto	701158	664999	2.5000	2.5000	1.054376	2.5018	0.07	1.053629	2.999631	2.999631
240118_008	1633 ICAL 0.25PPB	☒	Auto	651214	645671	2.5000	2.5000	1.008585	2.3931	-4.28	1.053629	2.999631	2.999631
240118_009	1633 ICAL 0.50PPB	☒	Auto	687616	656444	2.5000	2.5000	1.047486	2.4854	-0.58	1.053629	2.999631	2.999631
240118_010	1633 ICAL 1.0PPB	☒	Auto	693968	663775	2.5000	2.5000	1.045487	2.4807	-0.77	1.053629	2.999631	2.999631
240118_011	1633 ICAL 5.0PPB	☒	Auto	663242	618889	2.5000	2.5000	1.071665	2.5428	1.71	1.053629	2.999631	2.999631
240118_012	1633 ICAL 10.0PPB	☒	Auto	638007	603861	2.5000	2.5000	1.056546	2.5069	0.28	1.053629	2.999631	2.999631
240118_013	1633 ICAL 15.0PPB	☒	Auto	583700	578981	2.5000	2.5000	1.008150	2.3921	-4.32	1.053629	2.999631	2.999631
240118_014	1633 ICAL 20.0PPB	☒	Auto	618096	564879	2.5000	2.5000	1.094209	2.5963	3.85	1.053629	2.999631	2.999631
240118_016	1633 ICV 1.0PPB		Auto	659266	628403	2.5000	2.5000	----	2.4893	-0.43	1.053629	2.999631	2.999631
240118_017	1633 FTCA ICV 1.0PPB		Auto	661898	626058	2.5000	2.5000	----	2.5086	0.34	1.053629	2.999631	2.999631



Compound: 13C5-PFHxA_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 0

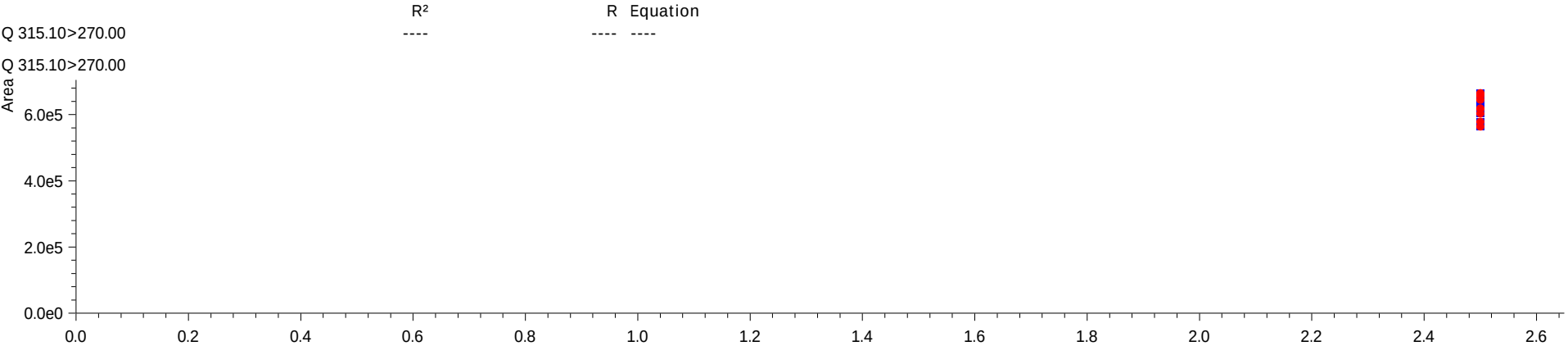


												Conc. (ng/mL)	
Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☐	Auto	677503	677503	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_007	1633 ICAL 0.1PPB	☐	Auto	701158	701158	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_008	1633 ICAL 0.25PPB	☐	Auto	651214	651214	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_009	1633 ICAL 0.50PPB	☐	Auto	687616	687616	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_010	1633 ICAL 1.0PPB	☐	Auto	693968	693968	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_011	1633 ICAL 5.0PPB	☐	Auto	663242	663242	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_012	1633 ICAL 10.0PPB	☐	Auto	638007	638007	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_013	1633 ICAL 15.0PPB	☐	Auto	583700	583700	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_014	1633 ICAL 20.0PPB	☐	Auto	618096	618096	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_016	1633 ICV 1.0PPB		Auto	659266	659266	2.5000	2.5000	----	2.5000	0.00	----	----	----
240118_017	1633 FTCA ICV 1.0PPB		Auto	661898	661898	2.5000	2.5000	----	2.5000	0.00	----	----	----



Compound: 13C2-PFHxA_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 0



													Conc. (ng/mL)
Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB		Auto	618072	618072	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_007	1633 ICAL 0.1PPB		Auto	664999	664999	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_008	1633 ICAL 0.25PPB		Auto	645671	645671	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_009	1633 ICAL 0.50PPB		Auto	656444	656444	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_010	1633 ICAL 1.0PPB		Auto	663775	663775	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_011	1633 ICAL 5.0PPB		Auto	618889	618889	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_012	1633 ICAL 10.0PPB		Auto	603861	603861	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_013	1633 ICAL 15.0PPB		Auto	578981	578981	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_014	1633 ICAL 20.0PPB		Auto	564879	564879	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_016	1633 ICV 1.0PPB		Auto	628403	628403	2.5000	2.5000	----	2.5000	0.00	----	----	----
240118_017	1633 FTCA ICV 1.0PPB		Auto	626058	626058	2.5000	2.5000	----	2.5000	0.00	----	----	----



Compound: PFHxA

Curve Fit: Linear | Weighting: 1/C | Zero: Not Forced

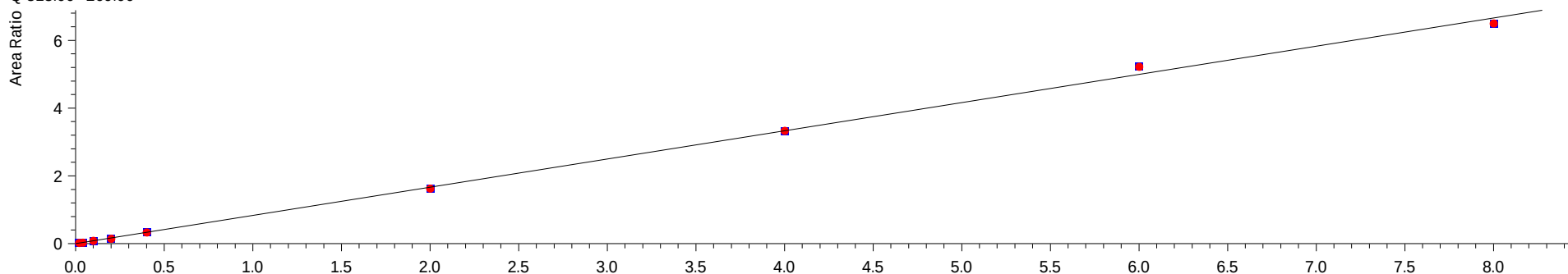
Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2

Q 313.00>269.00
R² 0.9987608
R Equation 0.9993802 $y = 0.8321249x + 0.002790879$

Q 313.00>269.00



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc.Ratio
240118_006	1633 ICAL 0.05PPB	☒	M	16225	677503	0.0500	2.5000	1.197417	0.0636	27.13	0.861132	15.351302	12.326799
240118_007	1633 ICAL 0.1PPB	☒	M	23282	701158	0.1000	2.5000	0.830110	0.0914	-8.63	0.861132	15.351302	12.326799
240118_008	1633 ICAL 0.25PPB	☒	M	54817	651214	0.2500	2.5000	0.841761	0.2445	-2.20	0.861132	15.351302	12.326799
240118_009	1633 ICAL 0.50PPB	☒	M	99630	687616	0.5000	2.5000	0.724456	0.4269	-14.62	0.861132	15.351302	12.326799
240118_010	1633 ICAL 1.0PPB	☒	Auto	229361	693968	1.0000	2.5000	0.826267	0.9846	-1.54	0.861132	15.351302	12.326799
240118_011	1633 ICAL 5.0PPB	☒	Auto	1080271	663242	5.0000	2.5000	0.814387	4.8850	-2.30	0.861132	15.351302	12.326799
240118_012	1633 ICAL 10.0PPB	☒	Auto	2124466	638007	10.0000	2.5000	0.832463	9.9957	-0.04	0.861132	15.351302	12.326799
240118_013	1633 ICAL 15.0PPB	☒	Auto	3050311	583700	15.0000	2.5000	0.870971	15.6919	4.61	0.861132	15.351302	12.326799
240118_014	1633 ICAL 20.0PPB	☒	Auto	4016916	618096	20.0000	2.5000	0.812357	19.5165	-2.42	0.861132	15.351302	12.326799
240118_016	1633 ICV 1.0PPB		Auto	220020	659266	1.0000	2.5000	----	0.9943	-0.57	0.861132	15.351302	12.326799
240118_017	1633 FTCA ICV 1.0PPB		ND(W/B)	----	661898	1.0000	2.5000	----	----	----	0.861132	15.351302	12.326799



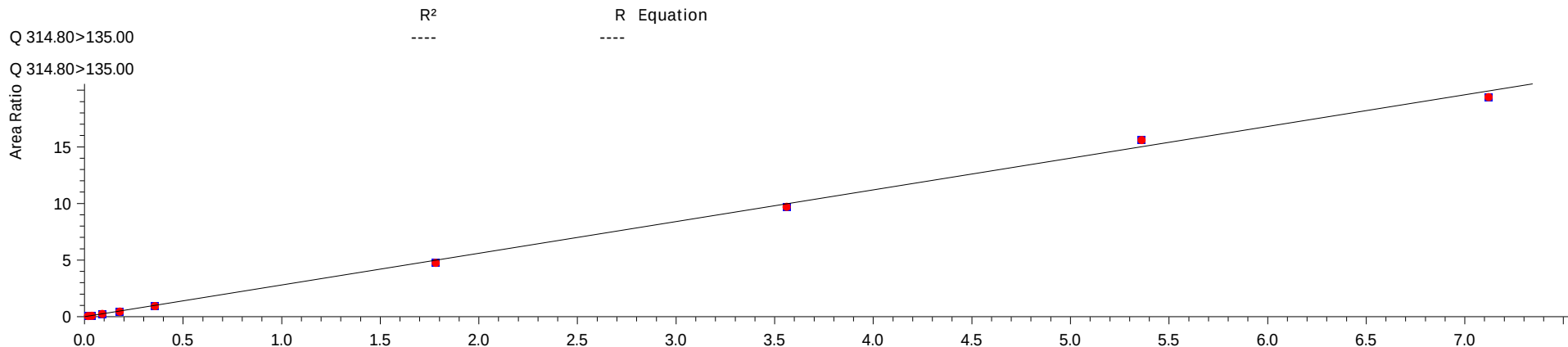
Compound: PFEESA

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc.Ratio
240118_006	1633 ICAL 0.05PPB	☒	MI R1 R2	41229	677503	0.0445	2.5000	3.418807	0.0543	22.09	2.800176	8.866358	8.866356
240118_007	1633 ICAL 0.1PPB	☒	Auto	66265	701158	0.0890	2.5000	2.654712	0.0844	-5.19	2.800176	8.866358	8.866356
240118_008	1633 ICAL 0.25PPB	☒	Auto	162206	651214	0.2230	2.5000	2.792404	0.2224	-0.28	2.800176	8.866358	8.866356
240118_009	1633 ICAL 0.50PPB	☒	Auto	318712	687616	0.4450	2.5000	2.603946	0.4138	-7.01	2.800176	8.866358	8.866356
240118_010	1633 ICAL 1.0PPB	☒	Auto	664025	693968	0.8900	2.5000	2.687789	0.8543	-4.01	2.800176	8.866358	8.866356
240118_011	1633 ICAL 5.0PPB	☒	Auto	3161183	663242	4.4500	2.5000	2.677673	4.2553	-4.37	2.800176	8.866358	8.866356
240118_012	1633 ICAL 10.0PPB	☒	Auto	6200515	638007	8.9000	2.5000	2.729937	8.6768	-2.51	2.800176	8.866358	8.866356
240118_013	1633 ICAL 15.0PPB	☒	Auto	9109371	583700	13.4000	2.5000	2.911617	13.9333	3.98	2.800176	8.866358	8.866356
240118_014	1633 ICAL 20.0PPB	☒	Auto	11990970	618096	17.8000	2.5000	2.724699	17.3202	-2.70	2.800176	8.866358	8.866356
240118_016	1633 ICV 1.0PPB		Auto	613751	659266	0.8900	2.5000	----	0.8312	-6.61	2.800176	8.866358	8.866356
240118_017	1633 FTCA ICV 1.0PPB		ND(W/B)	----	661898	0.8900	2.5000	----	----	----	2.800176	8.866358	8.866356



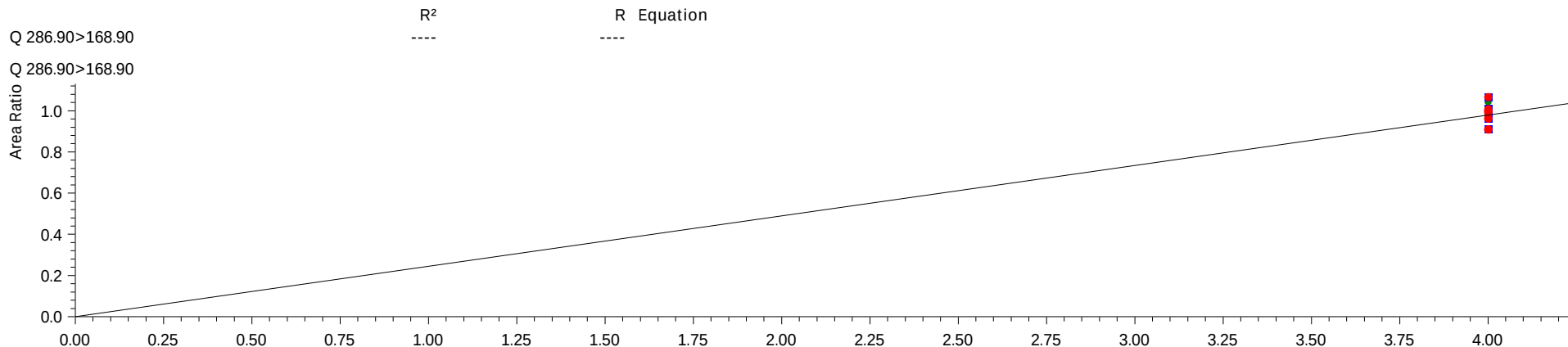
Compound: 13C3-HFPO-DA

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2

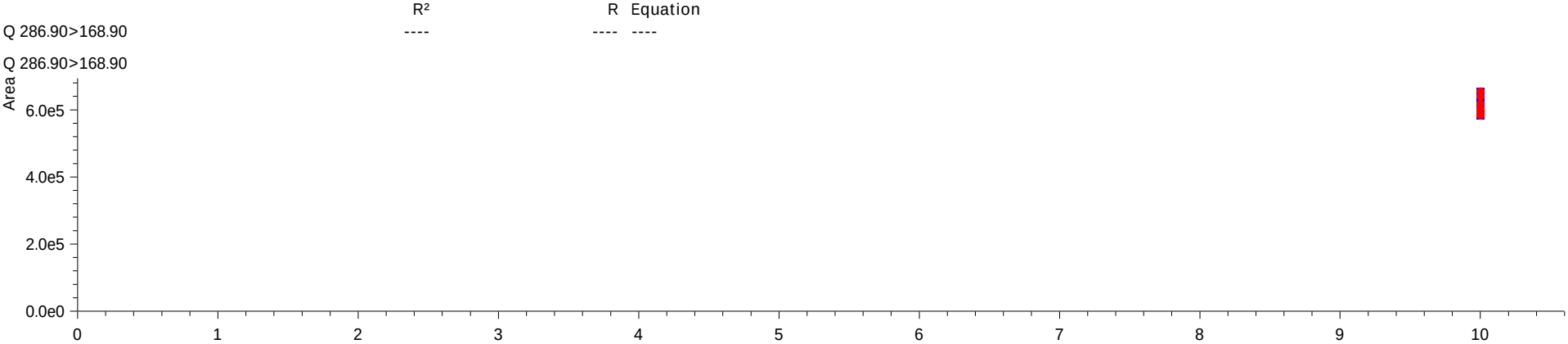


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc.Ratio
240118_006	1633 ICAL 0.05PPB	☒	Auto	595312	618072	10.0000	2.5000	0.240794	9.8392	-1.61	0.244728	5.021949	5.021949
240118_007	1633 ICAL 0.1PPB	☒	Auto	604622	664999	10.0000	2.5000	0.227302	9.2879	-7.12	0.244728	5.021949	5.021949
240118_008	1633 ICAL 0.25PPB	☒	Auto	588188	645671	10.0000	2.5000	0.227743	9.3059	-6.94	0.244728	5.021949	5.021949
240118_009	1633 ICAL 0.50PPB	☒	Auto	654919	656444	10.0000	2.5000	0.249419	10.1917	1.92	0.244728	5.021949	5.021949
240118_010	1633 ICAL 1.0PPB	☒	Auto	640534	663775	10.0000	2.5000	0.241247	9.8577	-1.42	0.244728	5.021949	5.021949
240118_011	1633 ICAL 5.0PPB	☒	Auto	618248	618889	10.0000	2.5000	0.249741	10.2048	2.05	0.244728	5.021949	5.021949
240118_012	1633 ICAL 10.0PPB	☒	Auto	598128	603861	10.0000	2.5000	0.247627	10.1184	1.18	0.244728	5.021949	5.021949
240118_013	1633 ICAL 15.0PPB	☒	Auto	583755	578981	10.0000	2.5000	0.252061	10.2996	3.00	0.244728	5.021949	5.021949
240118_014	1633 ICAL 20.0PPB	☒	Auto	602434	564879	10.0000	2.5000	0.266621	10.8946	8.95	0.244728	5.021949	5.021949
240118_016	1633 ICV 1.0PPB		Auto	617025	628403	10.0000	2.5000	----	10.0304	0.30	0.244728	5.021949	5.021949
240118_017	1633 FTCA ICV 1.0PPB		Auto	650567	626058	10.0000	2.5000	----	10.6153	6.15	0.244728	5.021949	5.021949



Compound: 13C3-HFPO-DA_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 0



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☐	Auto	595312	595312	10.0000	10.0000	1.000000	10.0000	0.00	----	----	----
240118_007	1633 ICAL 0.1PPB	☐	Auto	604622	604622	10.0000	10.0000	1.000000	10.0000	0.00	----	----	----
240118_008	1633 ICAL 0.25PPB	☐	Auto	588188	588188	10.0000	10.0000	1.000000	10.0000	0.00	----	----	----
240118_009	1633 ICAL 0.50PPB	☐	Auto	654919	654919	10.0000	10.0000	1.000000	10.0000	0.00	----	----	----
240118_010	1633 ICAL 1.0PPB	☐	Auto	640534	640534	10.0000	10.0000	1.000000	10.0000	0.00	----	----	----
240118_011	1633 ICAL 5.0PPB	☐	Auto	618248	618248	10.0000	10.0000	1.000000	10.0000	0.00	----	----	----
240118_012	1633 ICAL 10.0PPB	☐	Auto	598128	598128	10.0000	10.0000	1.000000	10.0000	0.00	----	----	----
240118_013	1633 ICAL 15.0PPB	☐	Auto	583755	583755	10.0000	10.0000	1.000000	10.0000	0.00	----	----	----
240118_014	1633 ICAL 20.0PPB	☐	Auto	602434	602434	10.0000	10.0000	1.000000	10.0000	0.00	----	----	----
240118_016	1633 ICV 1.0PPB		Auto	617025	617025	10.0000	10.0000	----	10.0000	0.00	----	----	----
240118_017	1633 FTCA ICV 1.0PPB		Auto	650567	650567	10.0000	10.0000	----	10.0000	0.00	----	----	----



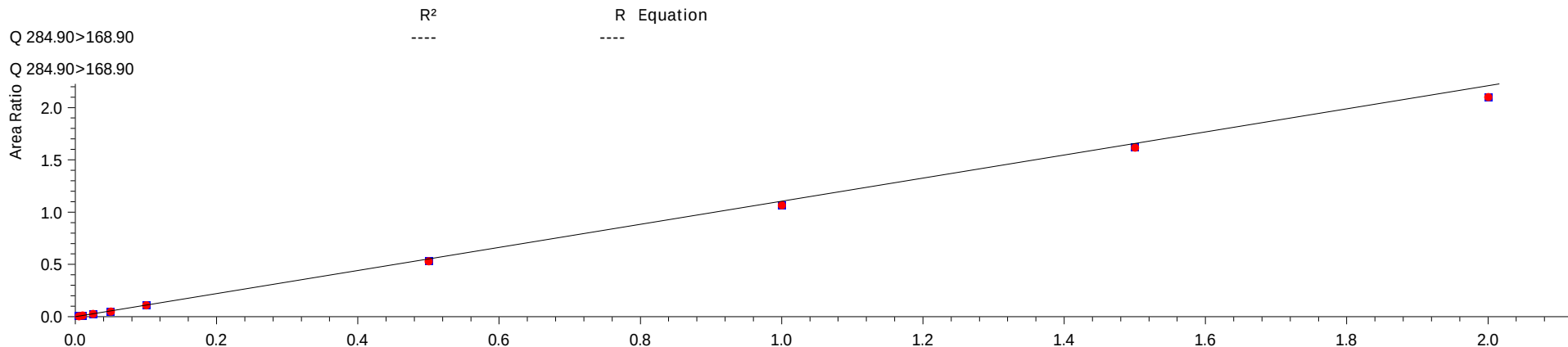
Compound: HFPO-DA

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☒	M	3643	595312	0.0500	10.0000	1.223791	0.0554	10.81	1.104438	6.722516	6.722515
240118_007	1633 ICAL 0.1PPB	☒	Auto	7258	604622	0.1000	10.0000	1.200355	0.1087	8.68	1.104438	6.722516	6.722515
240118_008	1633 ICAL 0.25PPB	☒	Auto	16861	588188	0.2500	10.0000	1.146621	0.2595	3.82	1.104438	6.722516	6.722515
240118_009	1633 ICAL 0.50PPB	☒	Auto	32544	654919	0.5000	10.0000	0.993843	0.4499	-10.01	1.104438	6.722516	6.722515
240118_010	1633 ICAL 1.0PPB	☒	Auto	71358	640534	1.0000	10.0000	1.114035	1.0087	0.87	1.104438	6.722516	6.722515
240118_011	1633 ICAL 5.0PPB	☒	Auto	328917	618248	5.0000	10.0000	1.064030	4.8171	-3.66	1.104438	6.722516	6.722515
240118_012	1633 ICAL 10.0PPB	☒	Auto	638442	598128	10.0000	10.0000	1.067400	9.6646	-3.35	1.104438	6.722516	6.722515
240118_013	1633 ICAL 15.0PPB	☒	Auto	945275	583755	15.0000	10.0000	1.079534	14.6618	-2.25	1.104438	6.722516	6.722515
240118_014	1633 ICAL 20.0PPB	☒	Auto	1265517	602434	20.0000	10.0000	1.050336	19.0203	-4.90	1.104438	6.722516	6.722515
240118_016	1633 ICV 1.0PPB		Auto	65078	617025	1.0000	10.0000	----	0.9550	-4.50	1.104438	6.722516	6.722515
240118_017	1633 FTCA ICV 1.0PPB		ND(W/B)	----	650567	1.0000	10.0000	----	----	----	1.104438	6.722516	6.722515



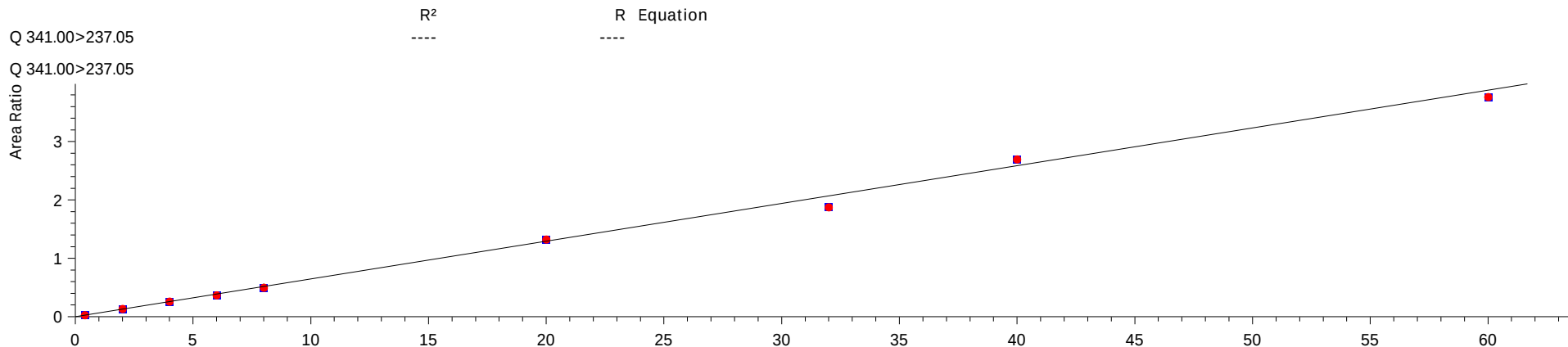
Compound: 5_3 FTCA

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2

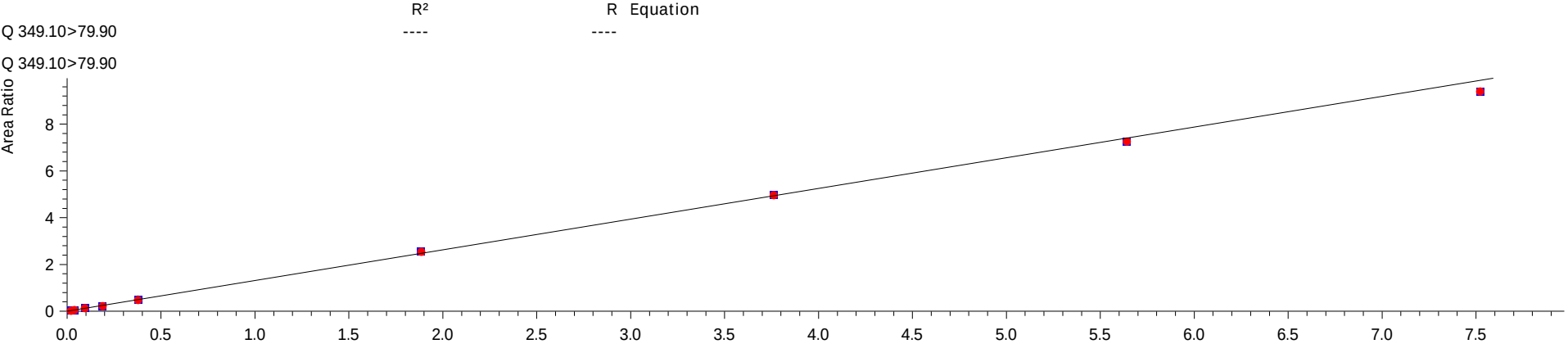


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☒	Auto	19665	677503	1.0000	2.5000	0.072566	1.1222	12.22	0.064665	6.240477	6.240477
240118_007	1633 ICAL 0.1PPB	☒	Auto	92840	701158	5.0000	2.5000	0.066205	5.1190	2.38	0.064665	6.240477	6.240477
240118_008	1633 ICAL 0.25PPB	☒	Auto	168370	651214	10.0000	2.5000	0.064637	9.9956	-0.04	0.064665	6.240477	6.240477
240118_009	1633 ICAL 0.50PPB	☒	Auto	254250	687616	15.0000	2.5000	0.061626	14.2950	-4.70	0.064665	6.240477	6.240477
240118_010	1633 ICAL 1.0PPB	☒	Auto	345149	693968	20.0000	2.5000	0.062170	19.2281	-3.86	0.064665	6.240477	6.240477
240118_011	1633 ICAL 5.0PPB	☒	Auto	876794	663242	50.0000	2.5000	0.066099	51.1086	2.22	0.064665	6.240477	6.240477
240118_012	1633 ICAL 10.0PPB	☒	Auto	1196348	638007	80.0000	2.5000	0.058598	72.4939	-9.38	0.064665	6.240477	6.240477
240118_013	1633 ICAL 15.0PPB	☒	Auto	1573075	583700	100.0000	2.5000	0.067375	104.1907	4.19	0.064665	6.240477	6.240477
240118_014	1633 ICAL 20.0PPB	☒	Auto	2325743	618096	150.0000	2.5000	0.062713	145.4705	-3.02	0.064665	6.240477	6.240477
240118_016	1633 ICV 1.0PPB		ND(W/B)	----	659266	20.0000	2.5000	----	----	----	0.064665	6.240477	6.240477
240118_017	1633 FTCA ICV 1.0PPB		Auto	331687	661898	20.0000	2.5000	----	19.3734	-3.13	0.064665	6.240477	6.240477



Compound: PFPeS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☒	Auto	7075	270206	0.0471	2.5000	1.389786	0.0499	5.86	1.312851	4.795379	4.795379
240118_007	1633 ICAL 0.1PPB	☒	Auto	12097	235487	0.0940	2.5000	1.366205	0.0978	4.06	1.312851	4.795379	4.795379
240118_008	1633 ICAL 0.25PPB	☒	Auto	32440	251448	0.2350	2.5000	1.372462	0.2457	4.54	1.312851	4.795379	4.795379
240118_009	1633 ICAL 0.50PPB	☒	Auto	61708	272575	0.4710	2.5000	1.201633	0.4311	-8.47	1.312851	4.795379	4.795379
240118_010	1633 ICAL 1.0PPB	☒	Auto	129068	268590	0.9400	2.5000	1.278032	0.9151	-2.65	1.312851	4.795379	4.795379
240118_011	1633 ICAL 5.0PPB	☒	Auto	602720	237331	4.7100	2.5000	1.347968	4.8360	2.67	1.312851	4.795379	4.795379
240118_012	1633 ICAL 10.0PPB	☒	Auto	1144724	230489	9.4000	2.5000	1.320877	9.4575	0.61	1.312851	4.795379	4.795379
240118_013	1633 ICAL 15.0PPB	☒	Auto	1721243	236876	14.1000	2.5000	1.288377	13.8371	-1.86	1.312851	4.795379	4.795379
240118_014	1633 ICAL 20.0PPB	☒	Auto	2222493	236375	18.8000	2.5000	1.250318	17.9045	-4.76	1.312851	4.795379	4.795379
240118_016	1633 ICV 1.0PPB		Auto	119422	231655	0.9400	2.5000	----	0.9817	4.43	1.312851	4.795379	4.795379
240118_017	1633 FTCA ICV 1.0PPB		ND(W/B)	----	260385	0.9400	2.5000	----	----	----	1.312851	4.795379	4.795379



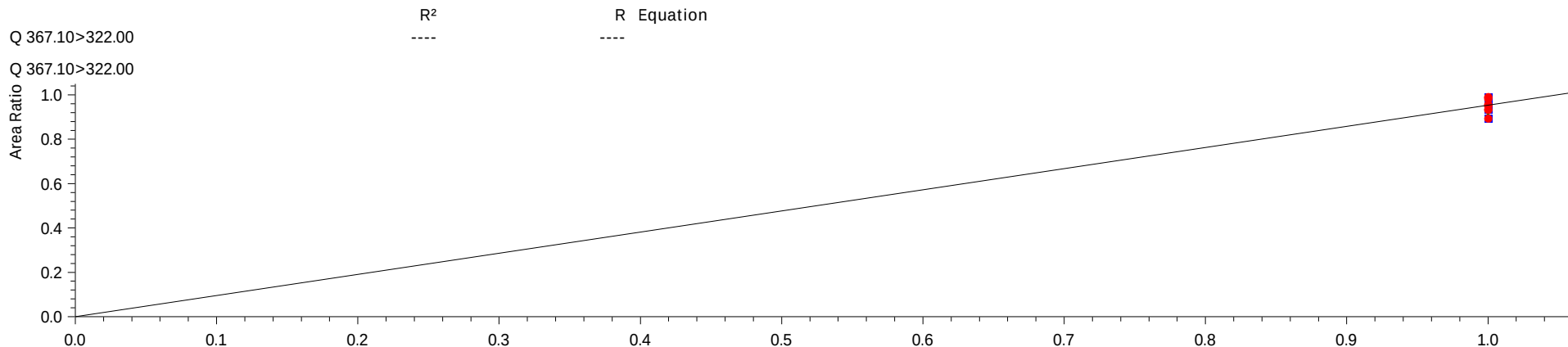
Compound: 13C4-PFHpA

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2

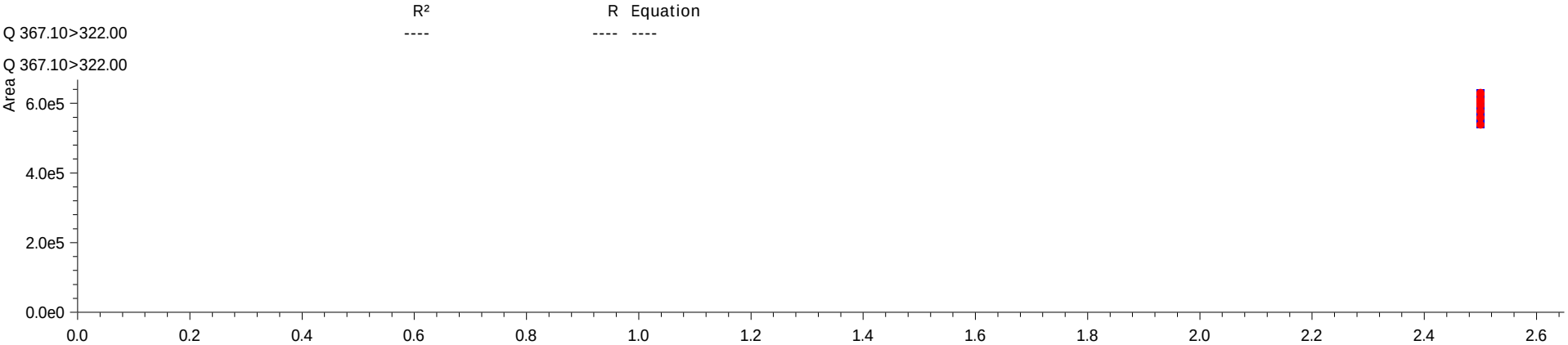


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☒	Auto	607483	618072	2.5000	2.5000	0.982868	2.5762	3.05	0.953799	3.280931	3.280931
240118_007	1633 ICAL 0.1PPB	☒	Auto	594464	664999	2.5000	2.5000	0.893933	2.3431	-6.28	0.953799	3.280931	3.280931
240118_008	1633 ICAL 0.25PPB	☒	Auto	603695	645671	2.5000	2.5000	0.934987	2.4507	-1.97	0.953799	3.280931	3.280931
240118_009	1633 ICAL 0.50PPB	☒	Auto	626586	656444	2.5000	2.5000	0.954516	2.5019	0.08	0.953799	3.280931	3.280931
240118_010	1633 ICAL 1.0PPB	☒	Auto	630102	663775	2.5000	2.5000	0.949271	2.4881	-0.47	0.953799	3.280931	3.280931
240118_011	1633 ICAL 5.0PPB	☒	Auto	612010	618889	2.5000	2.5000	0.988884	2.5920	3.68	0.953799	3.280931	3.280931
240118_012	1633 ICAL 10.0PPB	☒	Auto	578001	603861	2.5000	2.5000	0.957177	2.5089	0.35	0.953799	3.280931	3.280931
240118_013	1633 ICAL 15.0PPB	☒	Auto	539799	578981	2.5000	2.5000	0.932326	2.4437	-2.25	0.953799	3.280931	3.280931
240118_014	1633 ICAL 20.0PPB	☒	Auto	559359	564879	2.5000	2.5000	0.990227	2.5955	3.82	0.953799	3.280931	3.280931
240118_016	1633 ICV 1.0PPB		Auto	580798	628403	2.5000	2.5000	----	2.4225	-3.10	0.953799	3.280931	3.280931
240118_017	1633 FTCA ICV 1.0PPB		Auto	611403	626058	2.5000	2.5000	----	2.5597	2.39	0.953799	3.280931	3.280931



Compound: 13C4-PFHpA_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 0



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☐	Auto	607483	607483	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_007	1633 ICAL 0.1PPB	☐	Auto	594464	594464	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_008	1633 ICAL 0.25PPB	☐	Auto	603695	603695	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_009	1633 ICAL 0.50PPB	☐	Auto	626586	626586	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_010	1633 ICAL 1.0PPB	☐	Auto	630102	630102	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_011	1633 ICAL 5.0PPB	☐	Auto	612010	612010	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_012	1633 ICAL 10.0PPB	☐	Auto	578001	578001	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_013	1633 ICAL 15.0PPB	☐	Auto	539799	539799	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_014	1633 ICAL 20.0PPB	☐	Auto	559359	559359	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_016	1633 ICV 1.0PPB		Auto	580798	580798	2.5000	2.5000	----	2.5000	0.00	----	----	----
240118_017	1633 FTCA ICV 1.0PPB		Auto	611403	611403	2.5000	2.5000	----	2.5000	0.00	----	----	----



Compound: PFHpA

Curve Fit: Linear | Weighting: 1/C | Zero: Not Forced

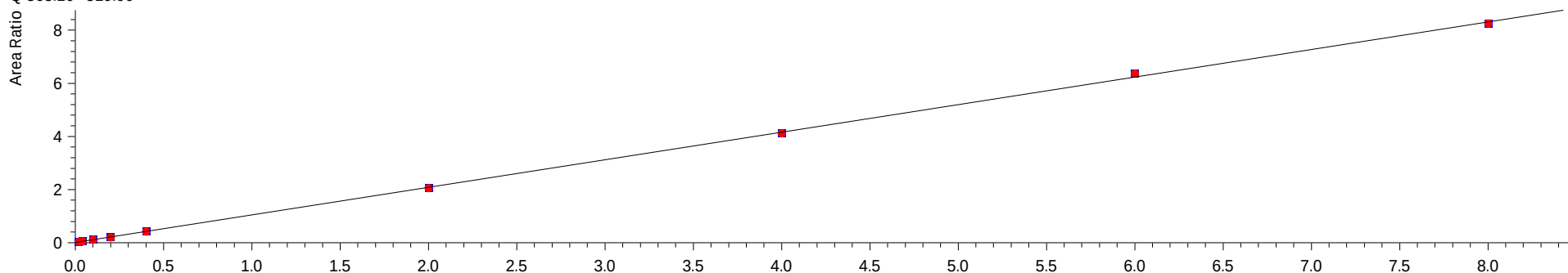
Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2

Q 363.10>319.00 R^2 0.9997418 R Equation 0.9998709 $y = 1.036815x + 0.01441567$

Q 363.10>319.00



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc.Ratio
240118_006	1633 ICAL 0.05PPB	☒	Auto	22449	607483	0.0500	2.5000	1.847681	0.0543	8.69	1.186644	23.344835	4.572759
240118_007	1633 ICAL 0.1PPB	☒	M	33505	594464	0.1000	2.5000	1.409028	0.1011	1.14	1.186644	23.344835	4.572759
240118_008	1633 ICAL 0.25PPB	☒	Auto	70720	603695	0.2500	2.5000	1.171449	0.2477	-0.92	1.186644	23.344835	4.572759
240118_009	1633 ICAL 0.50PPB	☒	Auto	128808	626586	0.5000	2.5000	1.027858	0.4609	-7.82	1.186644	23.344835	4.572759
240118_010	1633 ICAL 1.0PPB	☒	Auto	269319	630102	1.0000	2.5000	1.068553	0.9959	-0.41	1.186644	23.344835	4.572759
240118_011	1633 ICAL 5.0PPB	☒	Auto	1261564	612010	5.0000	2.5000	1.030673	4.9356	-1.29	1.186644	23.344835	4.572759
240118_012	1633 ICAL 10.0PPB	☒	Auto	2383855	578001	10.0000	2.5000	1.031076	9.9099	-0.90	1.186644	23.344835	4.572759
240118_013	1633 ICAL 15.0PPB	☒	Auto	3437882	539799	15.0000	2.5000	1.061469	15.3219	2.15	1.186644	23.344835	4.572759
240118_014	1633 ICAL 20.0PPB	☒	Auto	4618120	559359	20.0000	2.5000	1.032012	19.8726	-0.64	1.186644	23.344835	4.572759
240118_016	1633 ICV 1.0PPB		Auto	243549	580798	1.0000	2.5000	----	0.9764	-2.36	1.186644	23.344835	4.572759
240118_017	1633 FTCA ICV 1.0PPB		ND(W/B)	----	611403	1.0000	2.5000	----	----	----	1.186644	23.344835	4.572759



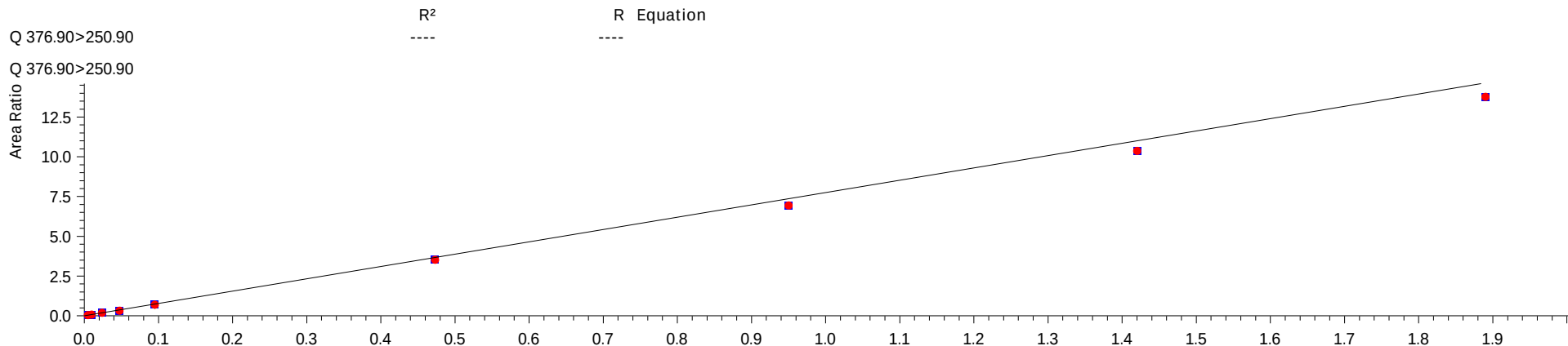
Compound: DONA

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2

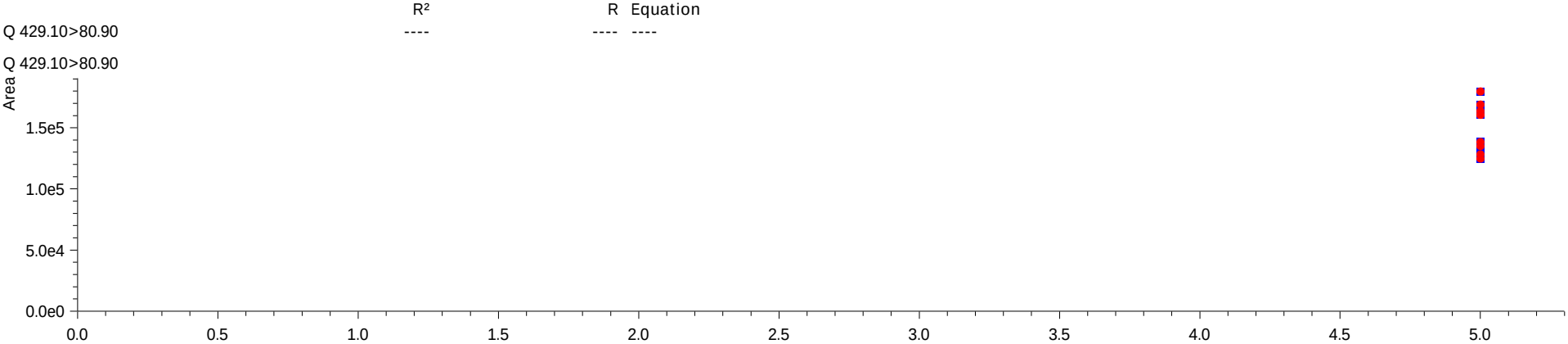


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☒	Auto	27814	595312	0.0473	10.0000	9.877849	0.0603	27.44	7.750688	11.317894	11.317896
240118_007	1633 ICAL 0.1PPB	☒	Auto	45741	604622	0.0950	10.0000	7.963371	0.0976	2.74	7.750688	11.317894	11.317896
240118_008	1633 ICAL 0.25PPB	☒	Auto	113323	588188	0.2360	10.0000	8.163736	0.2486	5.33	7.750688	11.317894	11.317896
240118_009	1633 ICAL 0.50PPB	☒	Auto	215774	654919	0.4730	10.0000	6.965449	0.4251	-10.13	7.750688	11.317894	11.317896
240118_010	1633 ICAL 1.0PPB	☒	Auto	450923	640534	0.9500	10.0000	7.410318	0.9083	-4.39	7.750688	11.317894	11.317896
240118_011	1633 ICAL 5.0PPB	☒	Auto	2183982	618248	4.7300	10.0000	7.468361	4.5577	-3.64	7.750688	11.317894	11.317896
240118_012	1633 ICAL 10.0PPB	☒	Auto	4152849	598128	9.5000	10.0000	7.308504	8.9580	-5.71	7.750688	11.317894	11.317896
240118_013	1633 ICAL 15.0PPB	☒	Auto	6058875	583755	14.2000	10.0000	7.309256	13.3913	-5.70	7.750688	11.317894	11.317896
240118_014	1633 ICAL 20.0PPB	☒	Auto	8299655	602434	18.9000	10.0000	7.289344	17.7750	-5.95	7.750688	11.317894	11.317896
240118_016	1633 ICV 1.0PPB		Auto	411896	617025	0.9500	10.0000	----	0.8613	-9.34	7.750688	11.317894	11.317896
240118_017	1633 FTCA ICV 1.0PPB		ND(W/B)	----	650567	0.9500	10.0000	----	----	----	7.750688	11.317894	11.317896



Compound: 13C2-6_2 FTS_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 0

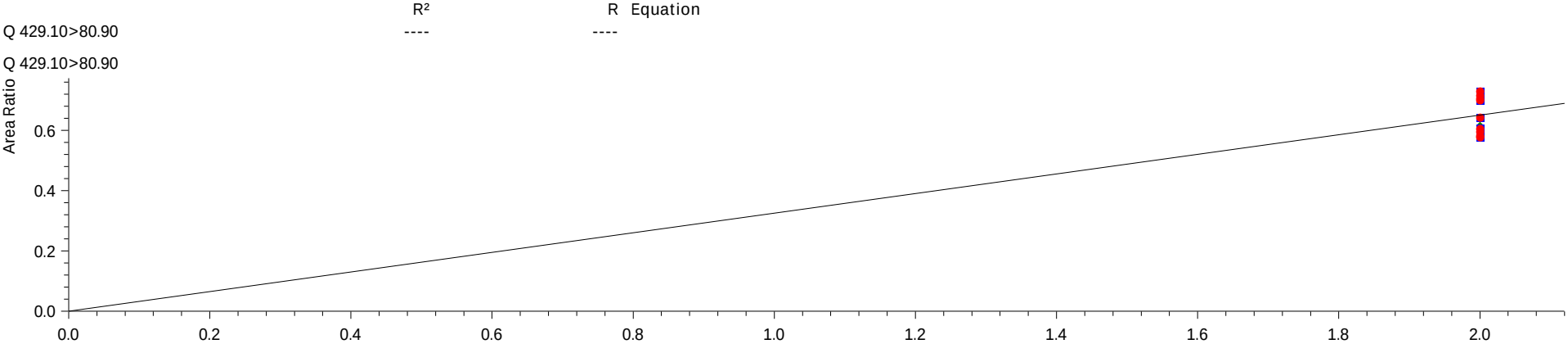


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☐	Auto	160811	160811	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_007	1633 ICAL 0.1PPB	☐	Auto	163769	163769	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_008	1633 ICAL 0.25PPB	☐	Auto	169139	169139	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_009	1633 ICAL 0.50PPB	☐	Auto	179759	179759	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_010	1633 ICAL 1.0PPB	☐	Auto	160736	160736	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_011	1633 ICAL 5.0PPB	☐	Auto	138496	138496	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_012	1633 ICAL 10.0PPB	☐	Auto	135213	135213	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_013	1633 ICAL 15.0PPB	☐	Auto	128419	128419	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_014	1633 ICAL 20.0PPB	☐	Auto	124875	124875	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_016	1633 ICV 1.0PPB		Auto	124466	124466	5.0000	5.0000	----	5.0000	0.00	----	----	----
240118_017	1633 FTCA ICV 1.0PPB		Auto	135491	135491	5.0000	5.0000	----	5.0000	0.00	----	----	----



Compound: 13C2-6_2 FTS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 2



Conc.Ratio													
Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☒	Auto	160811	229705	5.0000	2.5000	0.350038	5.3788	7.58	0.325387	9.565151	9.565151
240118_007	1633 ICAL 0.1PPB	☒	Auto	163769	224476	5.0000	2.5000	0.364780	5.6053	12.11	0.325387	9.565151	9.565151
240118_008	1633 ICAL 0.25PPB	☒	Auto	169139	239451	5.0000	2.5000	0.353181	5.4271	8.54	0.325387	9.565151	9.565151
240118_009	1633 ICAL 0.50PPB	☒	Auto	179759	251143	5.0000	2.5000	0.357883	5.4993	9.99	0.325387	9.565151	9.565151
240118_010	1633 ICAL 1.0PPB	☒	Auto	160736	249998	5.0000	2.5000	0.321474	4.9399	-1.20	0.325387	9.565151	9.565151
240118_011	1633 ICAL 5.0PPB	☒	Auto	138496	232307	5.0000	2.5000	0.298090	4.5805	-8.39	0.325387	9.565151	9.565151
240118_012	1633 ICAL 10.0PPB	☒	Auto	135213	223258	5.0000	2.5000	0.302819	4.6532	-6.94	0.325387	9.565151	9.565151
240118_013	1633 ICAL 15.0PPB	☒	Auto	128419	220445	5.0000	2.5000	0.291273	4.4758	-10.48	0.325387	9.565151	9.565151
240118_014	1633 ICAL 20.0PPB	☒	Auto	124875	216087	5.0000	2.5000	0.288945	4.4400	-11.20	0.325387	9.565151	9.565151
240118_016	1633 ICV 1.0PPB		Auto	124466	202223	5.0000	2.5000	----	4.7289	-5.42	0.325387	9.565151	9.565151
240118_017	1633 FTCA ICV 1.0PPB		Auto	135491	234067	5.0000	2.5000	----	4.4474	-11.05	0.325387	9.565151	9.565151



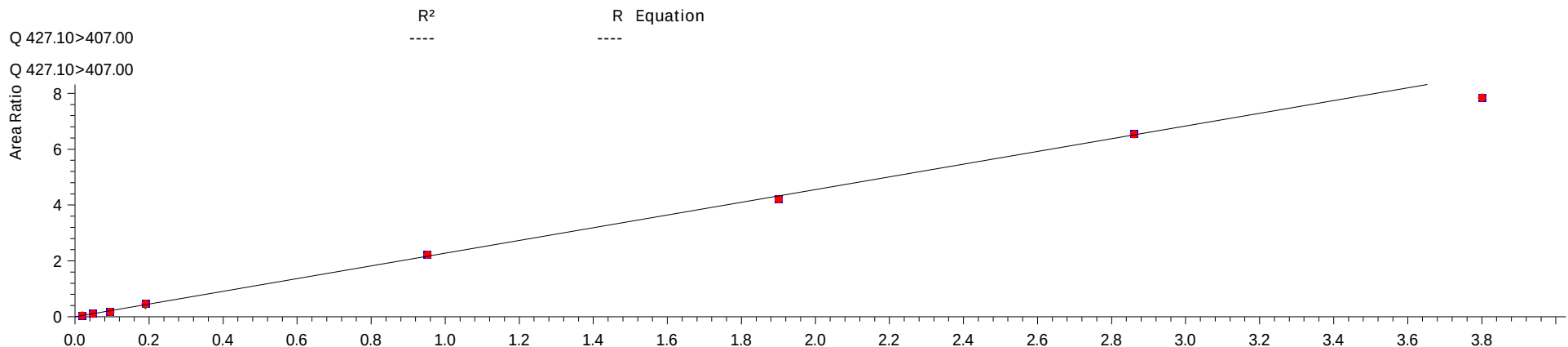
Compound: 6_2 FTS

Curve Fit: Mean RF | Weighting: 1/C | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 8

No. of Control Points: 2

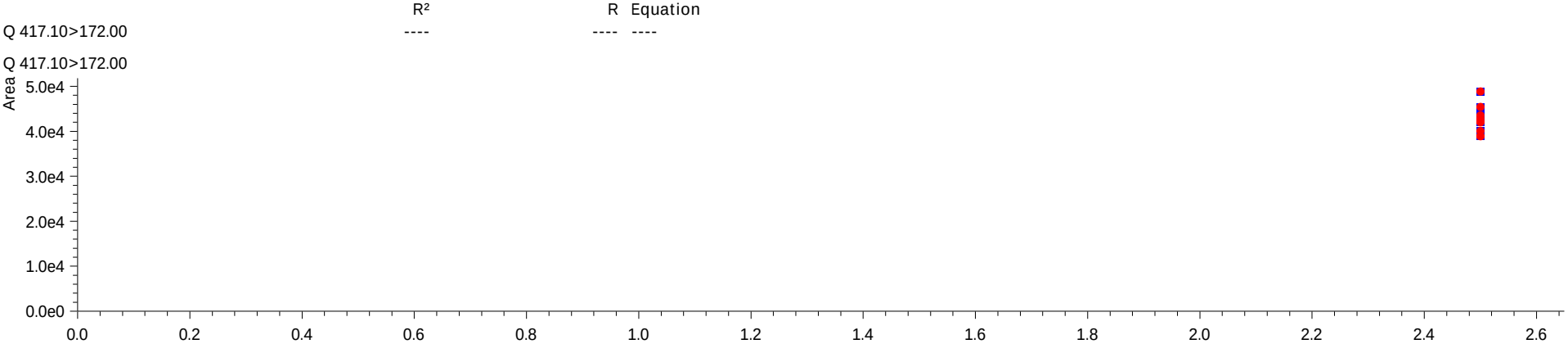


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_007	1633 ICAL 0.1PPB	☒	Auto	8104	163769	0.0950	5.0000	2.604381	0.1087	14.39	2.276802	10.571631	10.571630
240118_008	1633 ICAL 0.25PPB	☒	Auto	19395	169139	0.2380	5.0000	2.409044	0.2518	5.81	2.276802	10.571631	10.571630
240118_009	1633 ICAL 0.50PPB	☒	Auto	31384	179759	0.4760	5.0000	1.833935	0.3834	-19.45	2.276802	10.571631	10.571630
240118_010	1633 ICAL 1.0PPB	☒	Auto	75066	160736	0.9500	5.0000	2.457983	1.0256	7.96	2.276802	10.571631	10.571630
240118_011	1633 ICAL 5.0PPB	☒	Auto	308099	138496	4.7600	5.0000	2.336764	4.8854	2.63	2.276802	10.571631	10.571630
240118_012	1633 ICAL 10.0PPB	☒	Auto	570370	135213	9.5000	5.0000	2.220155	9.2636	-2.49	2.276802	10.571631	10.571630
240118_013	1633 ICAL 15.0PPB	☒	Auto	840038	128419	14.3000	5.0000	2.287188	14.3652	0.46	2.276802	10.571631	10.571630
240118_014	1633 ICAL 20.0PPB	☒	Auto	979879	124875	19.0000	5.0000	2.064970	17.2322	-9.30	2.276802	10.571631	10.571630
240118_016	1633 ICV 1.0PPB		Auto	50269	124466	0.9500	5.0000	----	0.8869	-6.64	2.276802	10.571631	10.571630
240118_017	1633 FTCA ICV 1.0PPB		ND(W/B)	----	135491	0.9500	5.0000	----	----	----	2.276802	10.571631	10.571630



Compound: 13C4-PFOA_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 0



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☐	Auto	48882	48882	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_007	1633 ICAL 0.1PPB	☐	Auto	45445	45445	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_008	1633 ICAL 0.25PPB	☐	Auto	42281	42281	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_009	1633 ICAL 0.50PPB	☐	Auto	43612	43612	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_010	1633 ICAL 1.0PPB	☐	Auto	42030	42030	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_011	1633 ICAL 5.0PPB	☐	Auto	42891	42891	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_012	1633 ICAL 10.0PPB	☐	Auto	40079	40079	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_013	1633 ICAL 15.0PPB	☐	Auto	38960	38960	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_014	1633 ICAL 20.0PPB	☐	Auto	39074	39074	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_016	1633 ICV 1.0PPB		Auto	45925	45925	2.5000	2.5000	----	2.5000	0.00	----	----	----
240118_017	1633 FTCA ICV 1.0PPB		Auto	45240	45240	2.5000	2.5000	----	2.5000	0.00	----	----	----



Calibration
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Compound: 13C8-PFOA_IS

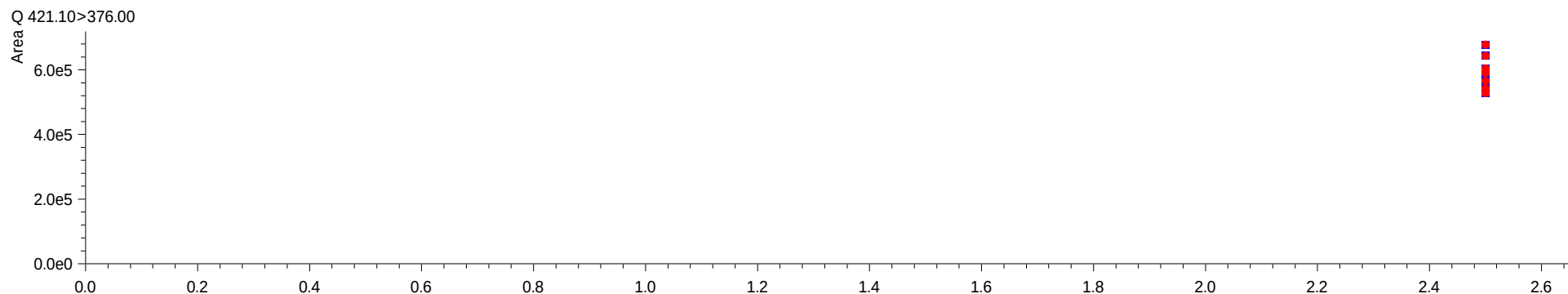
Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 0

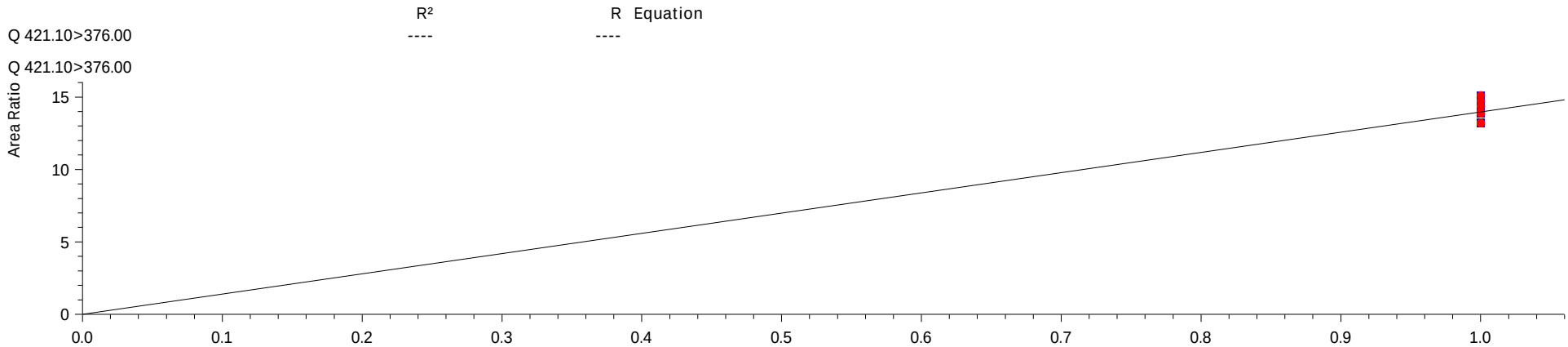
	R ²	R	Equation
Q 421.10>376.00	-----	-----	-----





Compound: 13C8-PFOA

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 2



													Conc.Ratio
Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☒	Auto	678231	48882	2.5000	2.5000	13.874821	2.4824	-0.70	13.973203	4.983840	4.983840
240118_007	1633 ICAL 0.1PPB	☒	Auto	601542	45445	2.5000	2.5000	13.236760	2.3682	-5.27	13.973203	4.983840	4.983840
240118_008	1633 ICAL 0.25PPB	☒	Auto	592639	42281	2.5000	2.5000	14.016728	2.5078	0.31	13.973203	4.983840	4.983840
240118_009	1633 ICAL 0.50PPB	☒	Auto	643488	43612	2.5000	2.5000	14.754836	2.6398	5.59	13.973203	4.983840	4.983840
240118_010	1633 ICAL 1.0PPB	☒	Auto	604919	42030	2.5000	2.5000	14.392710	2.5751	3.00	13.973203	4.983840	4.983840
240118_011	1633 ICAL 5.0PPB	☒	Auto	566184	42891	2.5000	2.5000	13.200492	2.3618	-5.53	13.973203	4.983840	4.983840
240118_012	1633 ICAL 10.0PPB	☒	Auto	529017	40079	2.5000	2.5000	13.199490	2.3616	-5.54	13.973203	4.983840	4.983840
240118_013	1633 ICAL 15.0PPB	☒	Auto	543532	38960	2.5000	2.5000	13.951017	2.4960	-0.16	13.973203	4.983840	4.983840
240118_014	1633 ICAL 20.0PPB	☒	Auto	591270	39074	2.5000	2.5000	15.131971	2.7073	8.29	13.973203	4.983840	4.983840
240118_016	1633 ICV 1.0PPB		Auto	607205	45925	2.5000	2.5000	----	2.3656	-5.38	13.973203	4.983840	4.983840
240118_017	1633 FTCA ICV 1.0PPB		Auto	640225	45240	2.5000	2.5000	----	2.5320	1.28	13.973203	4.983840	4.983840



Compound: PFOA

Curve Fit: Linear | Weighting: 1/C | Zero: Not Forced

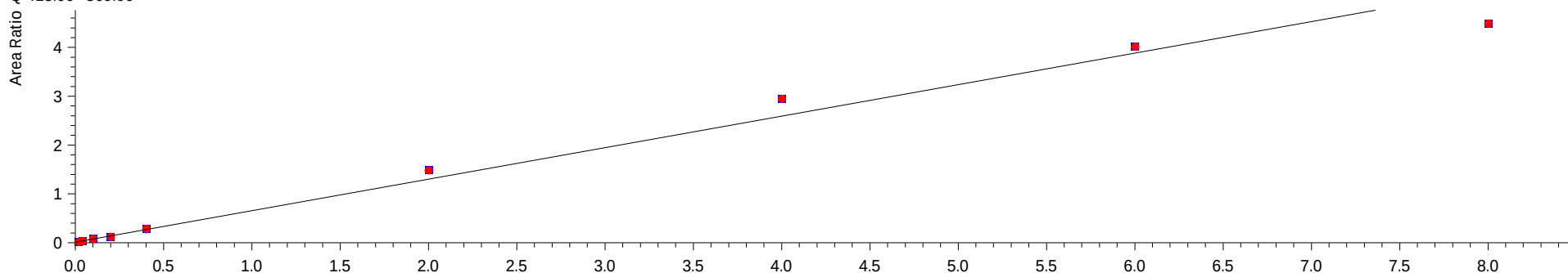
Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2

Q 413.00>369.00
R² 0.9865353
R Equation 0.9932448 $y = 0.6452173x + 0.01128976$

Q 413.00>369.00



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc.Ratio
240118_006	1633 ICAL 0.05PPB	☒	Auto	14351	678231	0.0500	2.5000	1.057974	0.0382	-23.52	0.762558	20.496195	14.251962
240118_007	1633 ICAL 0.1PPB	☒	Auto	22726	601542	0.1000	2.5000	0.944508	0.1026	2.64	0.762558	20.496195	14.251962
240118_008	1633 ICAL 0.25PPB	☒	Auto	48118	592639	0.2500	2.5000	0.811930	0.2709	8.34	0.762558	20.496195	14.251962
240118_009	1633 ICAL 0.50PPB	☒	Auto	79730	643488	0.5000	2.5000	0.619514	0.4363	-12.73	0.762558	20.496195	14.251962
240118_010	1633 ICAL 1.0PPB	☒	Auto	173590	604919	1.0000	2.5000	0.717409	1.0681	6.81	0.762558	20.496195	14.251962
240118_011	1633 ICAL 5.0PPB	☒	Auto	841329	566184	5.0000	2.5000	0.742982	5.7139	14.28	0.762558	20.496195	14.251962
240118_012	1633 ICAL 10.0PPB	☒	Auto	1561625	529017	10.0000	2.5000	0.737984	11.3940	13.94	0.762558	20.496195	14.251962
240118_013	1633 ICAL 15.0PPB	☒	Auto	2182267	543532	15.0000	2.5000	0.669162	15.5129	3.42	0.762558	20.496195	14.251962
240118_014	1633 ICAL 20.0PPB	☒	Auto	2656249	591270	20.0000	2.5000	0.561556	17.3630	-13.19	0.762558	20.496195	14.251962
240118_016	1633 ICV 1.0PPB		Auto	158761	607205	1.0000	2.5000	----	0.9693	-3.07	0.762558	20.496195	14.251962
240118_017	1633 FTCA ICV 1.0PPB		ND(W/B)	----	640225	1.0000	2.5000	----	----	----	0.762558	20.496195	14.251962



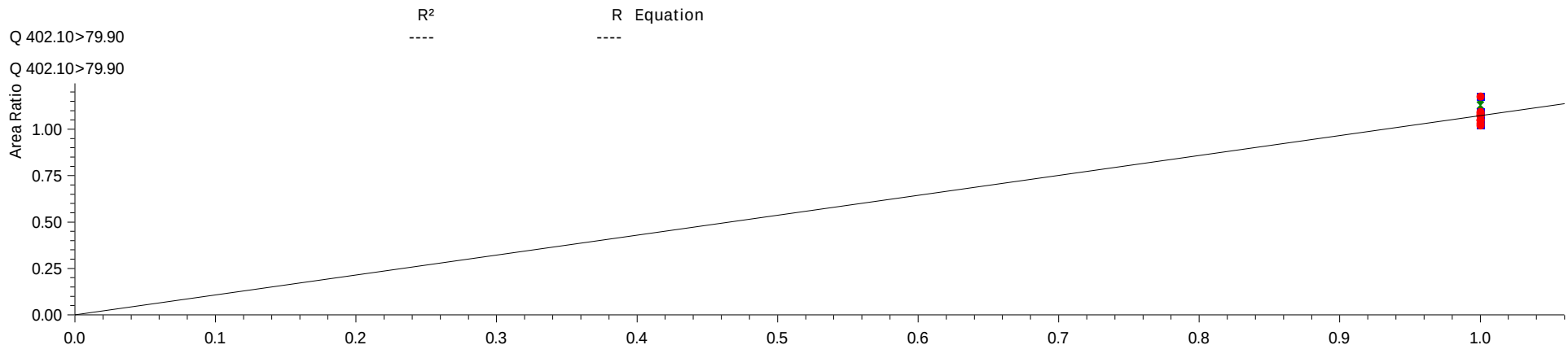
Compound: 13C3-PFHxS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2

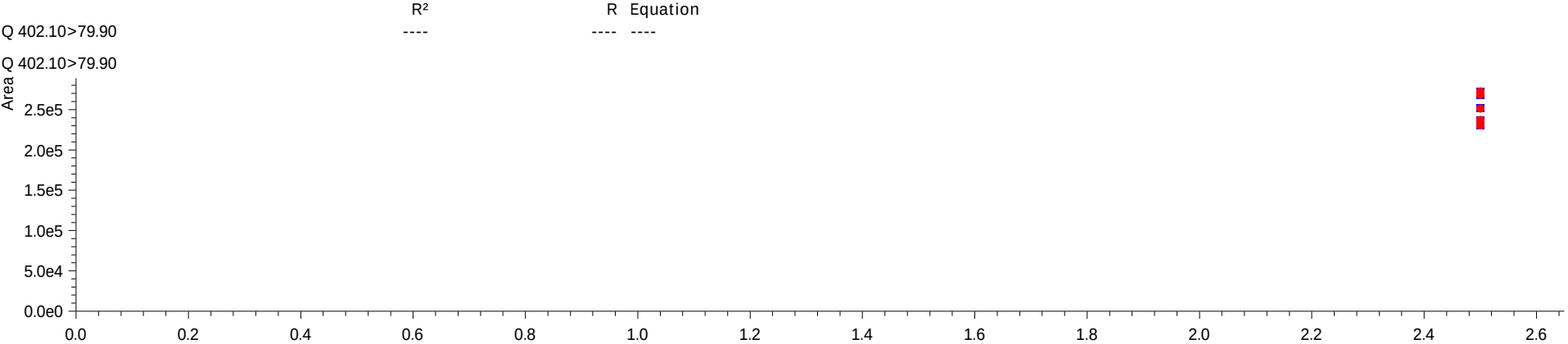


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☒	Auto	270206	229705	2.5000	2.5000	1.176316	2.7405	9.62	1.073069	4.251782	4.251782
240118_007	1633 ICAL 0.1PPB	☒	Auto	235487	224476	2.5000	2.5000	1.049056	2.4441	-2.24	1.073069	4.251782	4.251782
240118_008	1633 ICAL 0.25PPB	☒	Auto	251448	239451	2.5000	2.5000	1.050099	2.4465	-2.14	1.073069	4.251782	4.251782
240118_009	1633 ICAL 0.50PPB	☒	Auto	272575	251143	2.5000	2.5000	1.085341	2.5286	1.14	1.073069	4.251782	4.251782
240118_010	1633 ICAL 1.0PPB	☒	Auto	268590	249998	2.5000	2.5000	1.074367	2.5030	0.12	1.073069	4.251782	4.251782
240118_011	1633 ICAL 5.0PPB	☒	Auto	237331	232307	2.5000	2.5000	1.021629	2.3802	-4.79	1.073069	4.251782	4.251782
240118_012	1633 ICAL 10.0PPB	☒	Auto	230489	223258	2.5000	2.5000	1.032390	2.4052	-3.79	1.073069	4.251782	4.251782
240118_013	1633 ICAL 15.0PPB	☒	Auto	236876	220445	2.5000	2.5000	1.074533	2.5034	0.14	1.073069	4.251782	4.251782
240118_014	1633 ICAL 20.0PPB	☒	Auto	236375	216087	2.5000	2.5000	1.093888	2.5485	1.94	1.073069	4.251782	4.251782
240118_016	1633 ICV 1.0PPB		Auto	231655	202223	2.5000	2.5000	----	2.6688	6.75	1.073069	4.251782	4.251782
240118_017	1633 FTCA ICV 1.0PPB		Auto	260385	234067	2.5000	2.5000	----	2.5917	3.67	1.073069	4.251782	4.251782



Compound: 13C3-PFHxS_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 0



												Conc. (ng/mL)		
Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)	
240118_006	1633 ICAL 0.05PPB	☐	Auto	270206	270206	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----	
240118_007	1633 ICAL 0.1PPB	☐	Auto	235487	235487	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----	
240118_008	1633 ICAL 0.25PPB	☐	Auto	251448	251448	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----	
240118_009	1633 ICAL 0.50PPB	☐	Auto	272575	272575	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----	
240118_010	1633 ICAL 1.0PPB	☐	Auto	268590	268590	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----	
240118_011	1633 ICAL 5.0PPB	☐	Auto	237331	237331	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----	
240118_012	1633 ICAL 10.0PPB	☐	Auto	230489	230489	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----	
240118_013	1633 ICAL 15.0PPB	☐	Auto	236876	236876	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----	
240118_014	1633 ICAL 20.0PPB	☐	Auto	236375	236375	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----	
240118_016	1633 ICV 1.0PPB		Auto	231655	231655	2.5000	2.5000	----	2.5000	0.00	----	----	----	
240118_017	1633 FTCA ICV 1.0PPB		Auto	260385	260385	2.5000	2.5000	----	2.5000	0.00	----	----	----	



Compound: PFHxS

Curve Fit: Linear | Weighting: 1/C | Zero: Not Forced

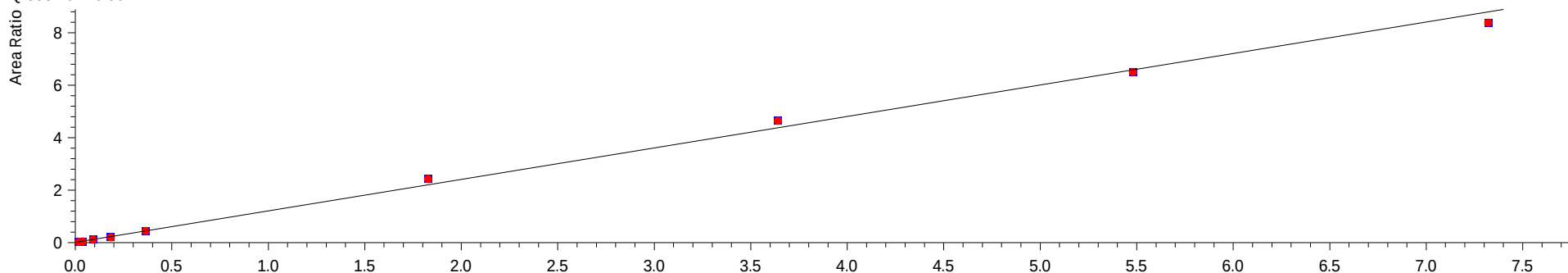
Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2

Q 398.70>79.90
R² 0.9971211 R Equation 0.9985595 $y = 1.199935x + 0.009189795$

Q 398.70>79.90

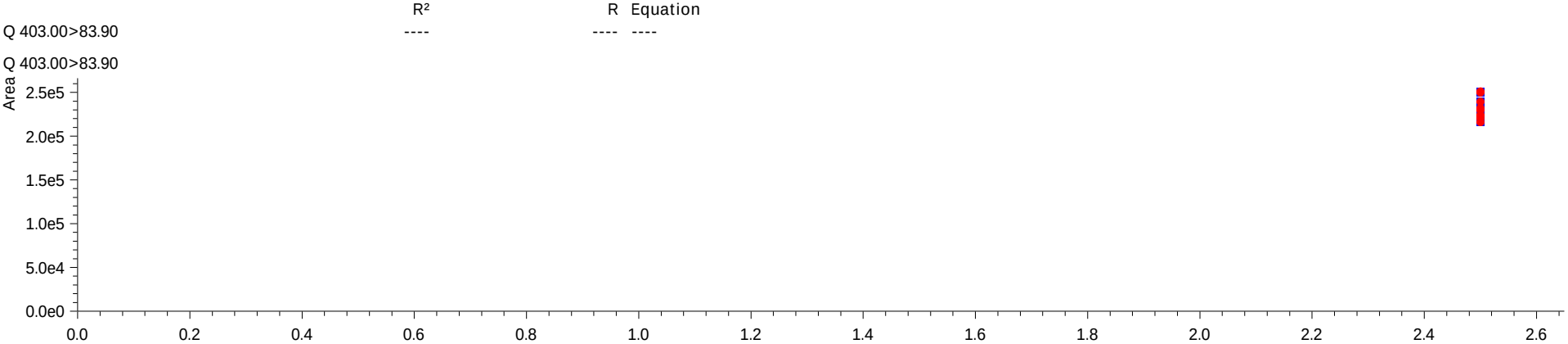


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc.Ratio
240118_006	1633 ICAL 0.05PPB	☒	M	8655	270206	0.0457	2.5000	1.752299	0.0476	4.14	1.304548	14.604888	6.624538
240118_007	1633 ICAL 0.1PPB	☒	M	12132	235487	0.0910	2.5000	1.415332	0.0882	-3.09	1.304548	14.604888	6.624538
240118_008	1633 ICAL 0.25PPB	☒	M	29288	251448	0.2290	2.5000	1.271577	0.2235	-2.39	1.304548	14.604888	6.624538
240118_009	1633 ICAL 0.50PPB	☒	M	56162	272575	0.4570	2.5000	1.127155	0.4101	-10.25	1.304548	14.604888	6.624538
240118_010	1633 ICAL 1.0PPB	☒	M	120607	268590	0.9100	2.5000	1.233615	0.9164	0.70	1.304548	14.604888	6.624538
240118_011	1633 ICAL 5.0PPB	☒	M	576452	237331	4.5700	2.5000	1.328716	5.0413	10.31	1.304548	14.604888	6.624538
240118_012	1633 ICAL 10.0PPB	☒	M	1072624	230489	9.1000	2.5000	1.278485	9.6766	6.34	1.304548	14.604888	6.624538
240118_013	1633 ICAL 15.0PPB	☒	M	1542165	236876	13.7000	2.5000	1.188037	13.5450	-1.13	1.304548	14.604888	6.624538
240118_014	1633 ICAL 20.0PPB	☒	M	1982393	236375	18.3000	2.5000	1.145715	17.4540	-4.62	1.304548	14.604888	6.624538
240118_016	1633 ICV 1.0PPB		M	104885	231655	0.9100	2.5000	----	0.9242	1.56	1.304548	14.604888	6.624538
240118_017	1633 FTCA ICV 1.0PPB		ND(W/B)	----	260385	0.9100	2.5000	----	----	----	1.304548	14.604888	6.624538



Compound: 18O2-PFHxS_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 0

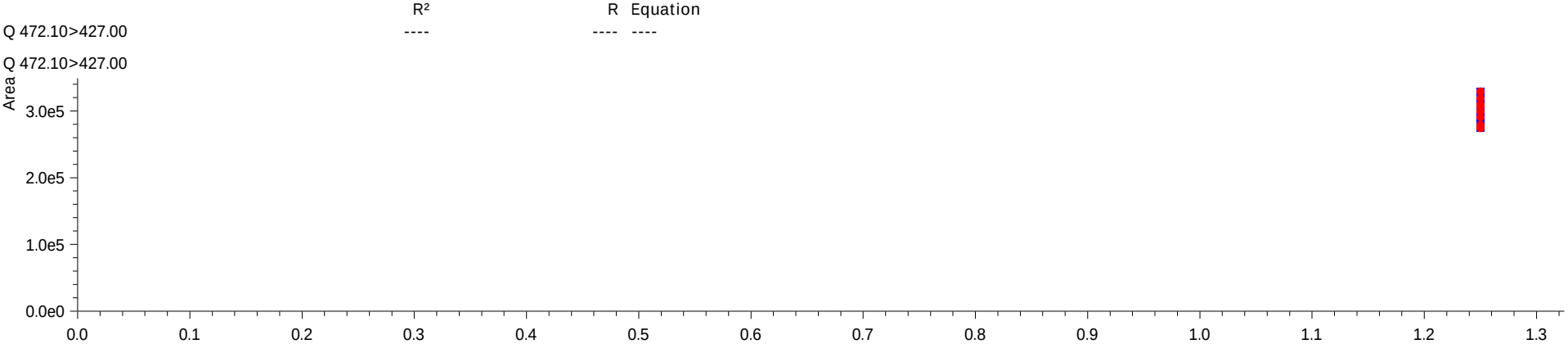


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☐	Auto	229705	229705	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_007	1633 ICAL 0.1PPB	☐	Auto	224476	224476	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_008	1633 ICAL 0.25PPB	☐	Auto	239451	239451	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_009	1633 ICAL 0.50PPB	☐	Auto	251143	251143	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_010	1633 ICAL 1.0PPB	☐	Auto	249998	249998	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_011	1633 ICAL 5.0PPB	☐	Auto	232307	232307	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_012	1633 ICAL 10.0PPB	☐	Auto	223258	223258	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_013	1633 ICAL 15.0PPB	☐	Auto	220445	220445	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_014	1633 ICAL 20.0PPB	☐	Auto	216087	216087	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_016	1633 ICV 1.0PPB		Auto	202223	202223	2.5000	2.5000	----	2.5000	0.00	----	----	----
240118_017	1633 FTCA ICV 1.0PPB		Auto	234067	234067	2.5000	2.5000	----	2.5000	0.00	----	----	----



Compound: 13C9-PFNA_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 0



												Conc. (ng/mL)	
Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☐	Auto	310687	310687	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240118_007	1633 ICAL 0.1PPB	☐	Auto	299675	299675	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240118_008	1633 ICAL 0.25PPB	☐	Auto	306696	306696	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240118_009	1633 ICAL 0.50PPB	☐	Auto	319396	319396	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240118_010	1633 ICAL 1.0PPB	☐	Auto	329225	329225	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240118_011	1633 ICAL 5.0PPB	☐	Auto	308940	308940	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240118_012	1633 ICAL 10.0PPB	☐	Auto	290785	290785	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240118_013	1633 ICAL 15.0PPB	☐	Auto	274221	274221	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240118_014	1633 ICAL 20.0PPB	☐	Auto	279137	279137	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240118_016	1633 ICV 1.0PPB		Auto	288107	288107	1.2500	1.2500	----	1.2500	0.00	----	----	----
240118_017	1633 FTCA ICV 1.0PPB		Auto	307312	307312	1.2500	1.2500	----	1.2500	0.00	----	----	----



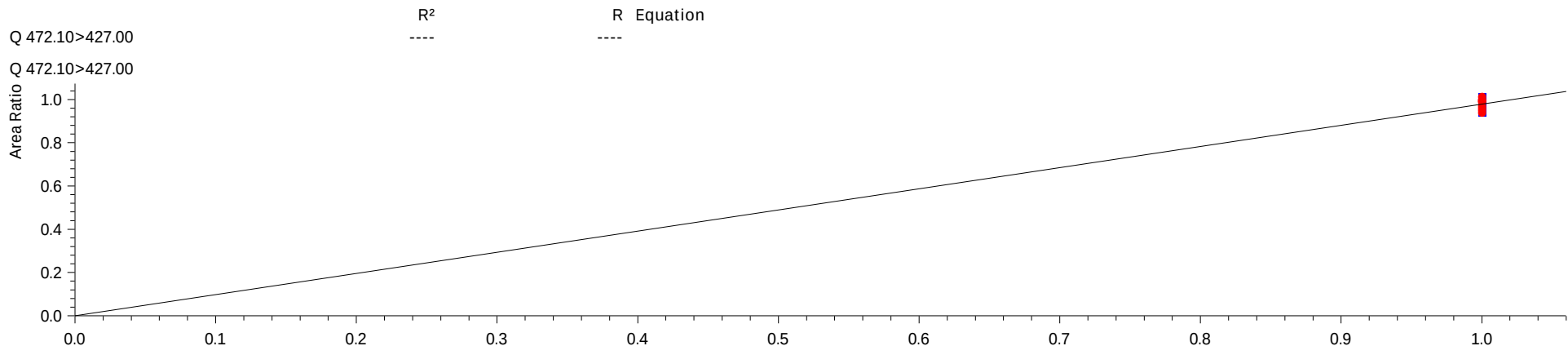
Compound: 13C9-PFNA

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2

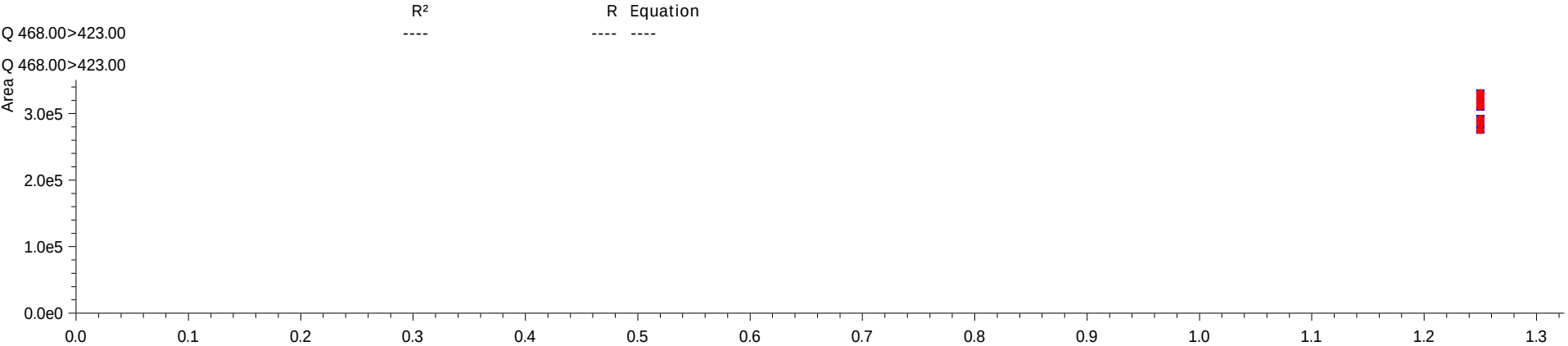


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☒	Auto	310687	330771	1.2500	1.2500	0.939282	1.1996	-4.03	0.978731	2.559267	2.559267
240118_007	1633 ICAL 0.1PPB	☒	Auto	299675	315542	1.2500	1.2500	0.949716	1.2129	-2.96	0.978731	2.559267	2.559267
240118_008	1633 ICAL 0.25PPB	☒	Auto	306696	316331	1.2500	1.2500	0.969541	1.2383	-0.94	0.978731	2.559267	2.559267
240118_009	1633 ICAL 0.50PPB	☒	Auto	319396	323300	1.2500	1.2500	0.987923	1.2617	0.94	0.978731	2.559267	2.559267
240118_010	1633 ICAL 1.0PPB	☒	Auto	329225	328955	1.2500	1.2500	1.000822	1.2782	2.26	0.978731	2.559267	2.559267
240118_011	1633 ICAL 5.0PPB	☒	Auto	308940	311099	1.2500	1.2500	0.993062	1.2683	1.46	0.978731	2.559267	2.559267
240118_012	1633 ICAL 10.0PPB	☒	Auto	290785	292150	1.2500	1.2500	0.995326	1.2712	1.70	0.978731	2.559267	2.559267
240118_013	1633 ICAL 15.0PPB	☒	Auto	274221	285546	1.2500	1.2500	0.960336	1.2265	-1.88	0.978731	2.559267	2.559267
240118_014	1633 ICAL 20.0PPB	☒	Auto	279137	275672	1.2500	1.2500	1.012570	1.2932	3.46	0.978731	2.559267	2.559267
240118_016	1633 ICV 1.0PPB		Auto	288107	288016	1.2500	1.2500	----	1.2776	2.21	0.978731	2.559267	2.559267
240118_017	1633 FTCA ICV 1.0PPB		Auto	307312	316255	1.2500	1.2500	----	1.2411	-0.72	0.978731	2.559267	2.559267



Compound: 13C5-PFNA_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 0



												Conc. (ng/mL)	
Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☐	Auto	330771	330771	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240118_007	1633 ICAL 0.1PPB	☐	Auto	315542	315542	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240118_008	1633 ICAL 0.25PPB	☐	Auto	316331	316331	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240118_009	1633 ICAL 0.50PPB	☐	Auto	323300	323300	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240118_010	1633 ICAL 1.0PPB	☐	Auto	328955	328955	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240118_011	1633 ICAL 5.0PPB	☐	Auto	311099	311099	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240118_012	1633 ICAL 10.0PPB	☐	Auto	292150	292150	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240118_013	1633 ICAL 15.0PPB	☐	Auto	285546	285546	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240118_014	1633 ICAL 20.0PPB	☐	Auto	275672	275672	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240118_016	1633 ICV 1.0PPB		Auto	288016	288016	1.2500	1.2500	----	1.2500	0.00	----	----	----
240118_017	1633 FTCA ICV 1.0PPB		Auto	316255	316255	1.2500	1.2500	----	1.2500	0.00	----	----	----



Compound: PFNA

Curve Fit: Linear | Weighting: 1/C | Zero: Not Forced

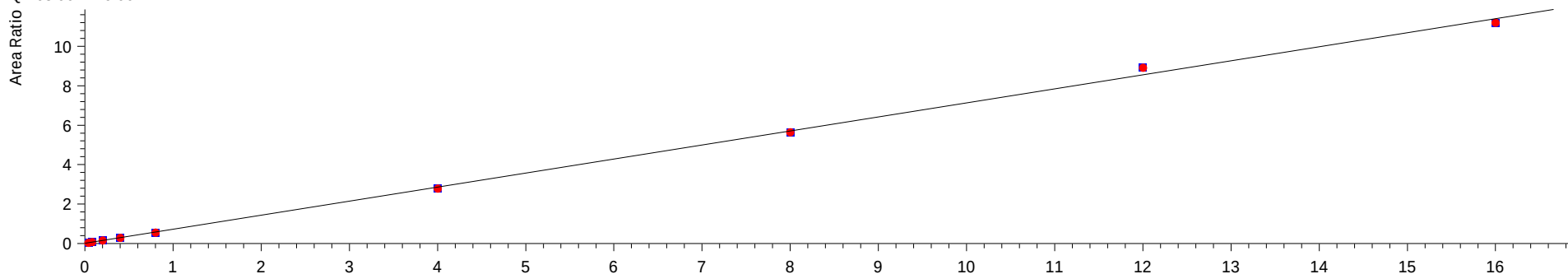
Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2

Q 463.00>419.00
R² 0.9991685
R Equation 0.9995842 $y = 0.7114112x + 0.01755533$

Q 463.00>419.00



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc.Ratio
240118_006	1633 ICAL 0.05PPB	☒	Auto	14376	310687	0.0500	1.2500	1.156762	0.0505	0.91	0.802642	19.784006	3.647905
240118_007	1633 ICAL 0.1PPB	☒	Auto	23138	299675	0.1000	1.2500	0.965118	0.1048	4.82	0.802642	19.784006	3.647905
240118_008	1633 ICAL 0.25PPB	☒	Auto	50390	306696	0.2500	1.2500	0.821493	0.2578	3.14	0.802642	19.784006	3.647905
240118_009	1633 ICAL 0.50PPB	☒	Auto	93339	319396	0.5000	1.2500	0.730590	0.4826	-3.47	0.802642	19.784006	3.647905
240118_010	1633 ICAL 1.0PPB	☒	Auto	185195	329225	1.0000	1.2500	0.703148	0.9575	-4.25	0.802642	19.784006	3.647905
240118_011	1633 ICAL 5.0PPB	☒	Auto	862607	308940	5.0000	1.2500	0.698037	4.8752	-2.50	0.802642	19.784006	3.647905
240118_012	1633 ICAL 10.0PPB	☒	Auto	1640974	290785	10.0000	1.2500	0.705408	9.8848	-1.15	0.802642	19.784006	3.647905
240118_013	1633 ICAL 15.0PPB	☒	Auto	2446359	274221	15.0000	1.2500	0.743428	15.6442	4.29	0.802642	19.784006	3.647905
240118_014	1633 ICAL 20.0PPB	☒	Auto	3125421	279137	20.0000	1.2500	0.699795	19.6426	-1.79	0.802642	19.784006	3.647905
240118_016	1633 ICV 1.0PPB		Auto	161182	288107	1.0000	1.2500	----	0.9521	-4.79	0.802642	19.784006	3.647905
240118_017	1633 FTCA ICV 1.0PPB		ND(W/B)	----	307312	1.0000	1.2500	----	----	----	0.802642	19.784006	3.647905



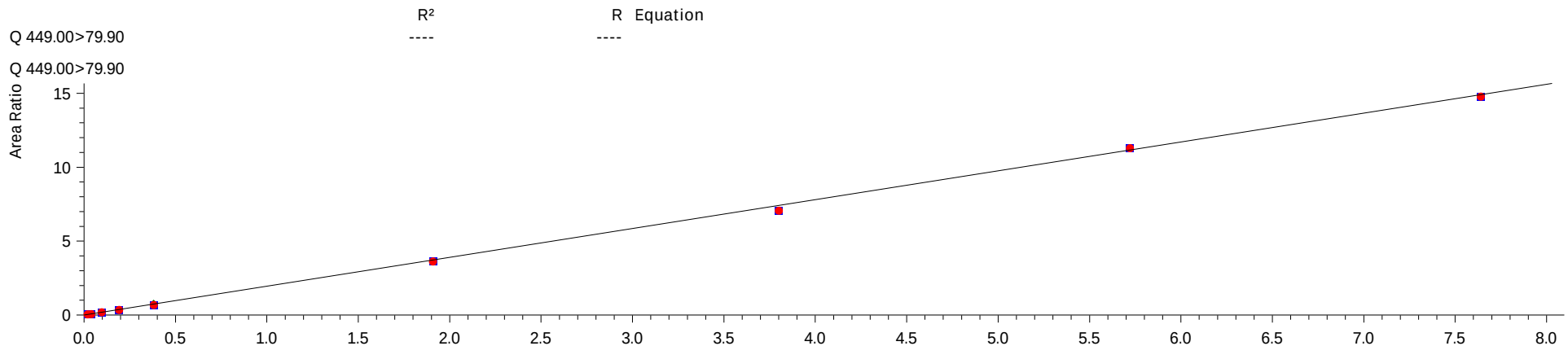
Compound: PFHpS

Curve Fit: Mean RF | Weighting: 1/C | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☒	Auto	5220	117833	0.0477	2.5000	2.322005	0.0568	19.00	1.951324	7.750383	7.750384
240118_007	1633 ICAL 0.1PPB	☒	Auto	8515	118069	0.0950	2.5000	1.897786	0.0924	-2.74	1.951324	7.750383	7.750384
240118_008	1633 ICAL 0.25PPB	☒	Auto	21835	114171	0.2390	2.5000	2.000480	0.2450	2.52	1.951324	7.750383	7.750384
240118_009	1633 ICAL 0.50PPB	☒	Auto	43044	121099	0.4770	2.5000	1.862932	0.4554	-4.53	1.951324	7.750383	7.750384
240118_010	1633 ICAL 1.0PPB	☒	Auto	85513	124480	0.9500	2.5000	1.807790	0.8801	-7.36	1.951324	7.750383	7.750384
240118_011	1633 ICAL 5.0PPB	☒	Auto	420346	116018	4.7700	2.5000	1.898913	4.6419	-2.69	1.951324	7.750383	7.750384
240118_012	1633 ICAL 10.0PPB	☒	Auto	795008	112442	9.5000	2.5000	1.860621	9.0584	-4.65	1.951324	7.750383	7.750384
240118_013	1633 ICAL 15.0PPB	☒	Auto	1176371	104055	14.3000	2.5000	1.976457	14.4842	1.29	1.951324	7.750383	7.750384
240118_014	1633 ICAL 20.0PPB	☒	Auto	1572876	106399	19.1000	2.5000	1.934928	18.9395	-0.84	1.951324	7.750383	7.750384
240118_016	1633 ICV 1.0PPB		Auto	82761	105678	0.9500	2.5000	----	1.0034	5.62	1.951324	7.750383	7.750384
240118_017	1633 FTCA ICV 1.0PPB		ND(W/B)	----	114722	0.9500	2.5000	----	----	----	1.951324	7.750383	7.750384



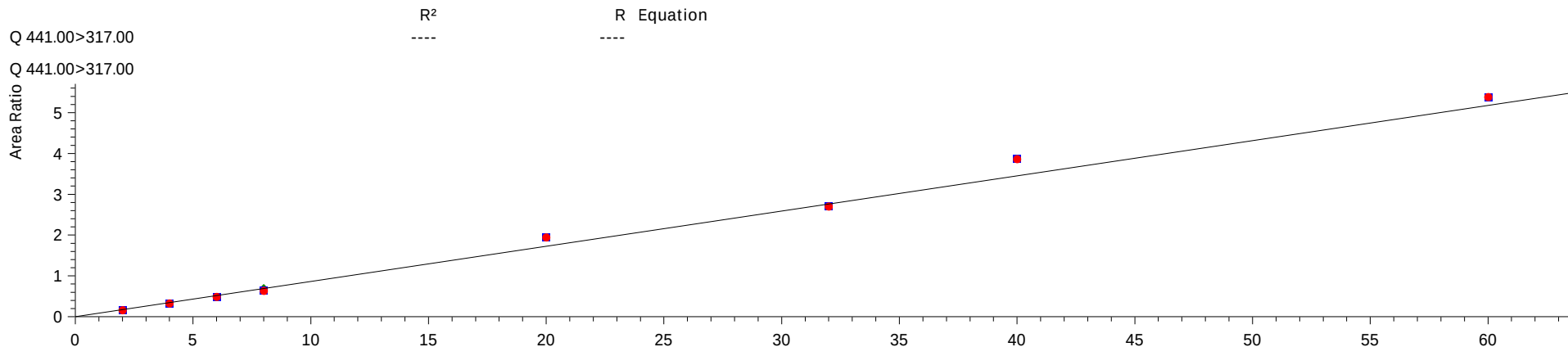
Compound: 7_3 FTCA

Curve Fit: Mean RF | Weighting: 1/C | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 8

No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_007	1633 ICAL 0.1PPB	☒	Auto	113753	701158	5.0000	2.5000	0.081118	4.6983	-6.03	0.086327	8.375004	8.375004
240118_008	1633 ICAL 0.25PPB	☒	Auto	213059	651214	10.0000	2.5000	0.081793	9.4748	-5.25	0.086327	8.375004	8.375004
240118_009	1633 ICAL 0.50PPB	☒	Auto	333337	687616	15.0000	2.5000	0.080795	14.0388	-6.41	0.086327	8.375004	8.375004
240118_010	1633 ICAL 1.0PPB	☒	Auto	439237	693968	20.0000	2.5000	0.079117	18.3296	-8.35	0.086327	8.375004	8.375004
240118_011	1633 ICAL 5.0PPB	☒	Auto	1288455	663242	50.0000	2.5000	0.097133	56.2589	12.52	0.086327	8.375004	8.375004
240118_012	1633 ICAL 10.0PPB	☒	Auto	1723816	638007	80.0000	2.5000	0.084434	78.2456	-2.19	0.086327	8.375004	8.375004
240118_013	1633 ICAL 15.0PPB	☒	Auto	2253481	583700	100.0000	2.5000	0.096517	111.8043	11.80	0.086327	8.375004	8.375004
240118_014	1633 ICAL 20.0PPB	☒	Auto	3326875	618096	150.0000	2.5000	0.089708	155.8744	3.92	0.086327	8.375004	8.375004
240118_016	1633 ICV 1.0PPB		ND(W/B)	----	659266	20.0000	2.5000	----	----	----	0.086327	8.375004	8.375004
240118_017	1633 FTCA ICV 1.0PPB		Auto	466748	661898	20.0000	2.5000	----	20.4214	2.11	0.086327	8.375004	8.375004



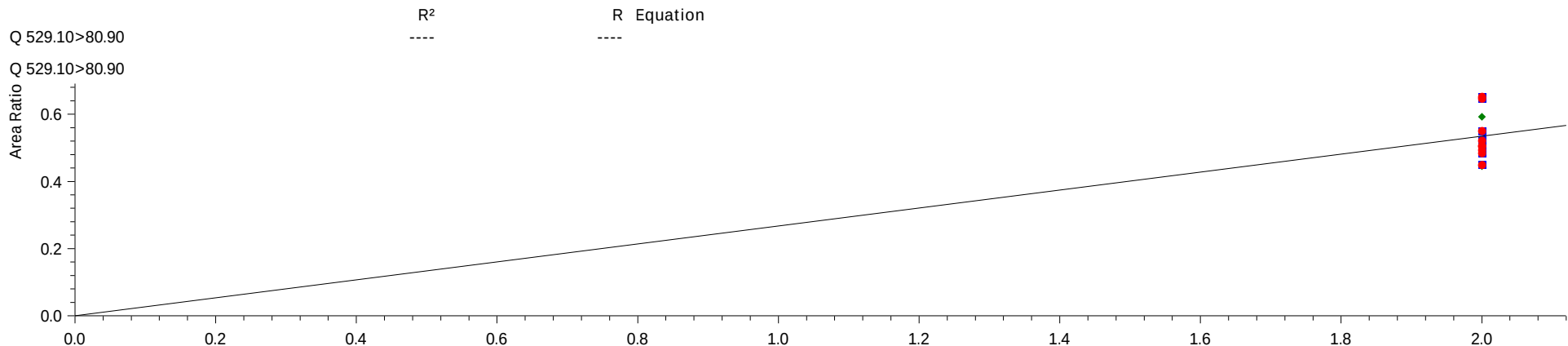
Compound: 13C2-8_2-FTS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2

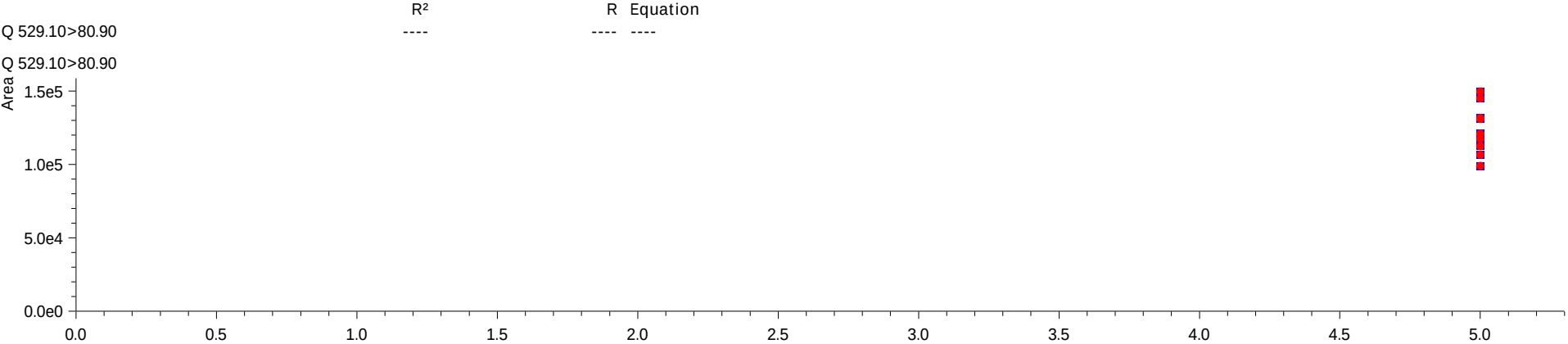


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc.Ratio
240118_006	1633 ICAL 0.05PPB	☒	Auto	149793	229705	5.0000	2.5000	0.326055	6.0993	21.99	0.267288	13.218868	13.218868
240118_007	1633 ICAL 0.1PPB	☒	Auto	145227	224476	5.0000	2.5000	0.323480	6.0512	21.02	0.267288	13.218868	13.218868
240118_008	1633 ICAL 0.25PPB	☒	Auto	131843	239451	5.0000	2.5000	0.275303	5.1499	3.00	0.267288	13.218868	13.218868
240118_009	1633 ICAL 0.50PPB	☒	Auto	131115	251143	5.0000	2.5000	0.261038	4.8831	-2.34	0.267288	13.218868	13.218868
240118_010	1633 ICAL 1.0PPB	☒	Auto	121050	249998	5.0000	2.5000	0.242102	4.5289	-9.42	0.267288	13.218868	13.218868
240118_011	1633 ICAL 5.0PPB	☒	Auto	117777	232307	5.0000	2.5000	0.253494	4.7420	-5.16	0.267288	13.218868	13.218868
240118_012	1633 ICAL 10.0PPB	☒	Auto	112708	223258	5.0000	2.5000	0.252417	4.7218	-5.56	0.267288	13.218868	13.218868
240118_013	1633 ICAL 15.0PPB	☒	Auto	99053	220445	5.0000	2.5000	0.224666	4.2027	-15.95	0.267288	13.218868	13.218868
240118_014	1633 ICAL 20.0PPB	☒	Auto	106762	216087	5.0000	2.5000	0.247035	4.6211	-7.58	0.267288	13.218868	13.218868
240118_016	1633 ICV 1.0PPB		Auto	119746	202223	5.0000	2.5000	----	5.5385	10.77	0.267288	13.218868	13.218868
240118_017	1633 FTCA ICV 1.0PPB		Auto	104364	234067	5.0000	2.5000	----	4.1703	-16.59	0.267288	13.218868	13.218868



Compound: 13C2-8_2-FTS_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 0



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☐	Auto	149793	149793	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_007	1633 ICAL 0.1PPB	☐	Auto	145227	145227	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_008	1633 ICAL 0.25PPB	☐	Auto	131843	131843	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_009	1633 ICAL 0.50PPB	☐	Auto	131115	131115	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_010	1633 ICAL 1.0PPB	☐	Auto	121050	121050	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_011	1633 ICAL 5.0PPB	☐	Auto	117777	117777	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_012	1633 ICAL 10.0PPB	☐	Auto	112708	112708	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_013	1633 ICAL 15.0PPB	☐	Auto	99053	99053	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_014	1633 ICAL 20.0PPB	☐	Auto	106762	106762	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_016	1633 ICV 1.0PPB		Auto	119746	119746	5.0000	5.0000	----	5.0000	0.00	----	----	----
240118_017	1633 FTCA ICV 1.0PPB		Auto	104364	104364	5.0000	5.0000	----	5.0000	0.00	----	----	----



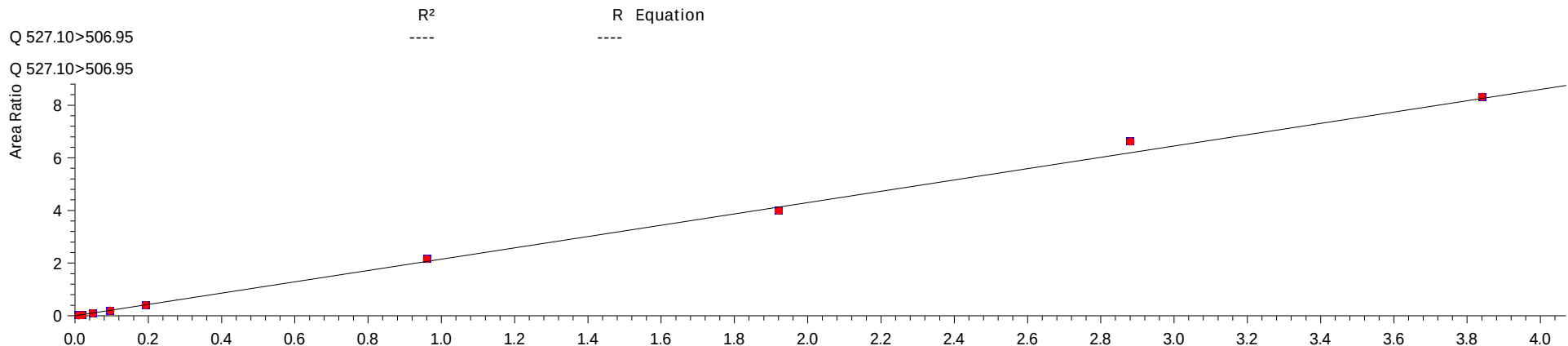
Compound: 8_2 FTS

Curve Fit: Mean RF | Weighting: 1/C | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☒	Auto	3653	149793	0.0480	5.0000	2.540267	0.0568	18.23	2.148527	11.052846	11.052846
240118_007	1633 ICAL 0.1PPB	☒	Auto	4600	145227	0.0960	5.0000	1.649590	0.0737	-23.22	2.148527	11.052846	11.052846
240118_008	1633 ICAL 0.25PPB	☒	Auto	13634	131843	0.2400	5.0000	2.154335	0.2406	0.27	2.148527	11.052846	11.052846
240118_009	1633 ICAL 0.50PPB	☒	Auto	25869	131115	0.4800	5.0000	2.055201	0.4592	-4.34	2.148527	11.052846	11.052846
240118_010	1633 ICAL 1.0PPB	☒	Auto	49479	121050	0.9600	5.0000	2.128898	0.9512	-0.91	2.148527	11.052846	11.052846
240118_011	1633 ICAL 5.0PPB	☒	Auto	255045	117777	4.8000	5.0000	2.255719	5.0395	4.99	2.148527	11.052846	11.052846
240118_012	1633 ICAL 10.0PPB	☒	Auto	450949	112708	9.6000	5.0000	2.083874	9.3111	-3.01	2.148527	11.052846	11.052846
240118_013	1633 ICAL 15.0PPB	☒	Auto	656762	99053	14.4000	5.0000	2.302225	15.4301	7.15	2.148527	11.052846	11.052846
240118_014	1633 ICAL 20.0PPB	☒	Auto	888247	106762	19.2000	5.0000	2.166629	19.3618	0.84	2.148527	11.052846	11.052846
240118_016	1633 ICV 1.0PPB		Auto	50915	119746	0.9600	5.0000	----	0.9895	3.07	2.148527	11.052846	11.052846
240118_017	1633 FTCA ICV 1.0PPB		ND(W/B)	----	104364	0.9600	5.0000	----	----	----	2.148527	11.052846	11.052846



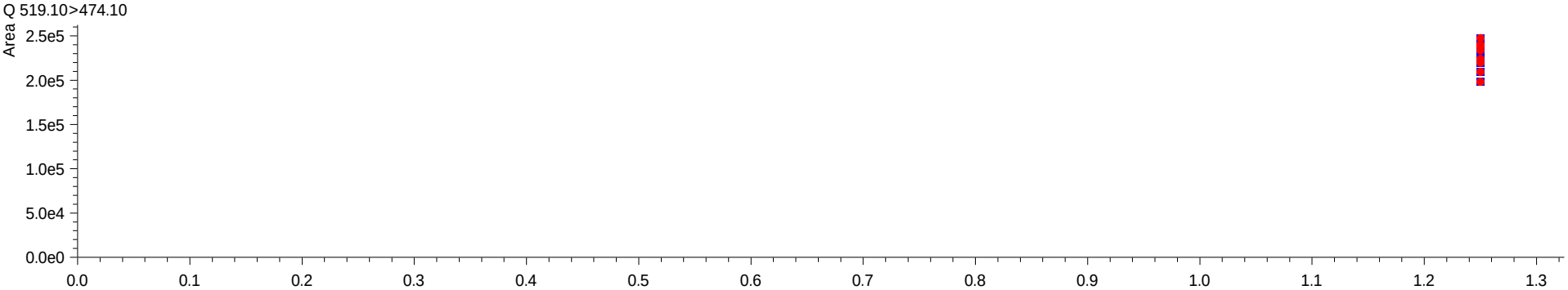
Compound: 13C6-PFDA_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 0

Q 519.10>474.10

R²

R Equation

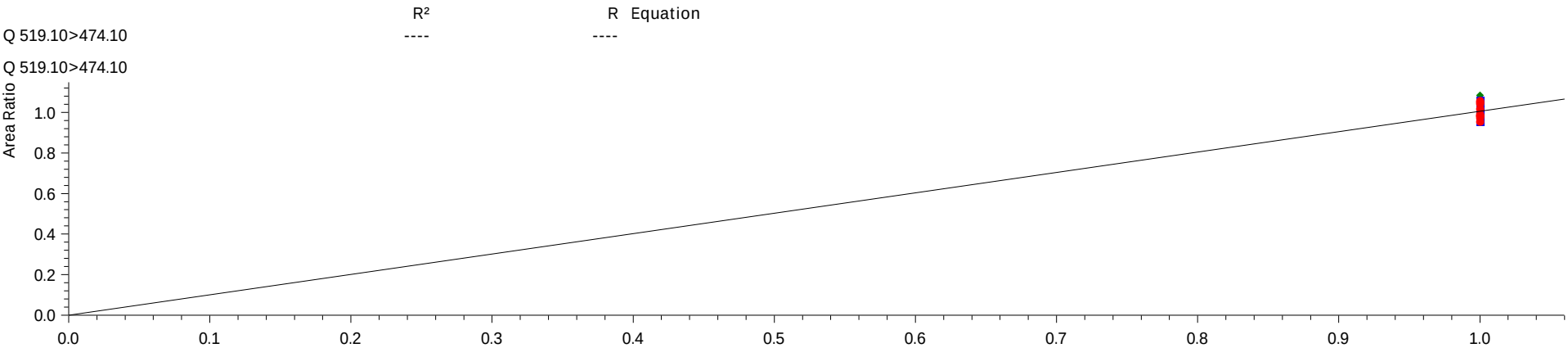


Data Filename		Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc. (ng/mL)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☐	Auto	238849	238849	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----		----
240118_007	1633 ICAL 0.1PPB	☐	Auto	240568	240568	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----		----
240118_008	1633 ICAL 0.25PPB	☐	Auto	224311	224311	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----		----
240118_009	1633 ICAL 0.50PPB	☐	Auto	238617	238617	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----		----
240118_010	1633 ICAL 1.0PPB	☐	Auto	247598	247598	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----		----
240118_011	1633 ICAL 5.0PPB	☐	Auto	233845	233845	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----		----
240118_012	1633 ICAL 10.0PPB	☐	Auto	219938	219938	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----		----
240118_013	1633 ICAL 15.0PPB	☐	Auto	209485	209485	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----		----
240118_014	1633 ICAL 20.0PPB	☐	Auto	198408	198408	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----		----
240118_016	1633 ICV 1.0PPB		Auto	232114	232114	1.2500	1.2500	----	1.2500	0.00	----	----	----		----
240118_017	1633 FTCA ICV 1.0PPB		Auto	221808	221808	1.2500	1.2500	----	1.2500	0.00	----	----	----		----



Compound: 13C6-PFDA

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☒	Auto	238849	227340	1.2500	1.2500	1.050624	1.3059	4.47	1.005662	3.692328	3.692328
240118_007	1633 ICAL 0.1PPB	☒	Auto	240568	242916	1.2500	1.2500	0.990337	1.2310	-1.52	1.005662	3.692328	3.692328
240118_008	1633 ICAL 0.25PPB	☒	Auto	224311	235058	1.2500	1.2500	0.954279	1.1861	-5.11	1.005662	3.692328	3.692328
240118_009	1633 ICAL 0.50PPB	☒	Auto	238617	225855	1.2500	1.2500	1.056506	1.3132	5.06	1.005662	3.692328	3.692328
240118_010	1633 ICAL 1.0PPB	☒	Auto	247598	243243	1.2500	1.2500	1.017906	1.2652	1.22	1.005662	3.692328	3.692328
240118_011	1633 ICAL 5.0PPB	☒	Auto	233845	237831	1.2500	1.2500	0.983240	1.2221	-2.23	1.005662	3.692328	3.692328
240118_012	1633 ICAL 10.0PPB	☒	Auto	219938	226144	1.2500	1.2500	0.972556	1.2089	-3.29	1.005662	3.692328	3.692328
240118_013	1633 ICAL 15.0PPB	☒	Auto	209485	201059	1.2500	1.2500	1.041905	1.2950	3.60	1.005662	3.692328	3.692328
240118_014	1633 ICAL 20.0PPB	☒	Auto	198408	201715	1.2500	1.2500	0.983604	1.2226	-2.19	1.005662	3.692328	3.692328
240118_016	1633 ICV 1.0PPB		Auto	232114	214237	1.2500	1.2500	----	1.3467	7.73	1.005662	3.692328	3.692328
240118_017	1633 FTCA ICV 1.0PPB		Auto	221808	222912	1.2500	1.2500	----	1.2368	-1.06	1.005662	3.692328	3.692328



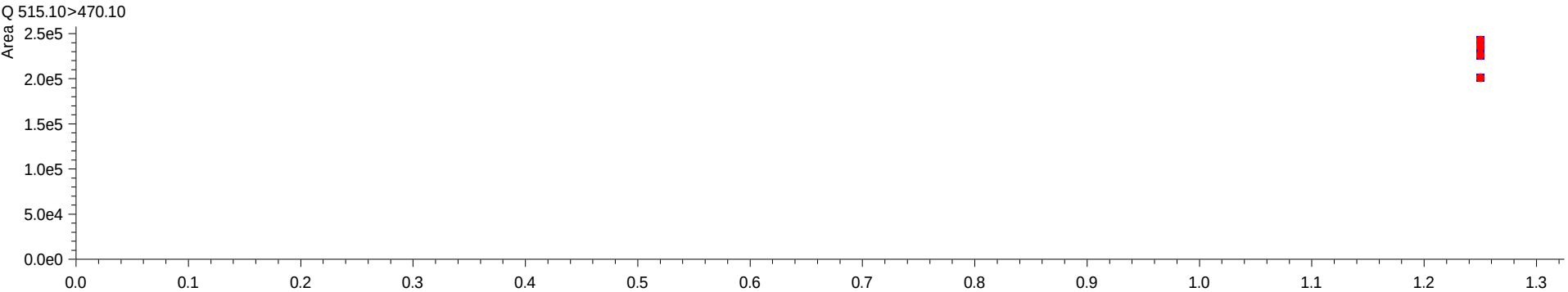
Compound: 13C2-PFDA_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 0

Q 515.10>470.10

R²-----

R Equation-----



Data Filename		Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc. (ng/mL)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☐	Auto	227340	227340	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----		----
240118_007	1633 ICAL 0.1PPB	☐	Auto	242916	242916	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----		----
240118_008	1633 ICAL 0.25PPB	☐	Auto	235058	235058	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----		----
240118_009	1633 ICAL 0.50PPB	☐	Auto	225855	225855	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----		----
240118_010	1633 ICAL 1.0PPB	☐	Auto	243243	243243	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----		----
240118_011	1633 ICAL 5.0PPB	☐	Auto	237831	237831	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----		----
240118_012	1633 ICAL 10.0PPB	☐	Auto	226144	226144	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----		----
240118_013	1633 ICAL 15.0PPB	☐	Auto	201059	201059	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----		----
240118_014	1633 ICAL 20.0PPB	☐	Auto	201715	201715	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----		----
240118_016	1633 ICV 1.0PPB		Auto	214237	214237	1.2500	1.2500	----	1.2500	0.00	----	----	----		----
240118_017	1633 FTCA ICV 1.0PPB		Auto	222912	222912	1.2500	1.2500	----	1.2500	0.00	----	----	----		----



Compound: PFDA

Curve Fit: Linear | Weighting: 1/C | Zero: Not Forced

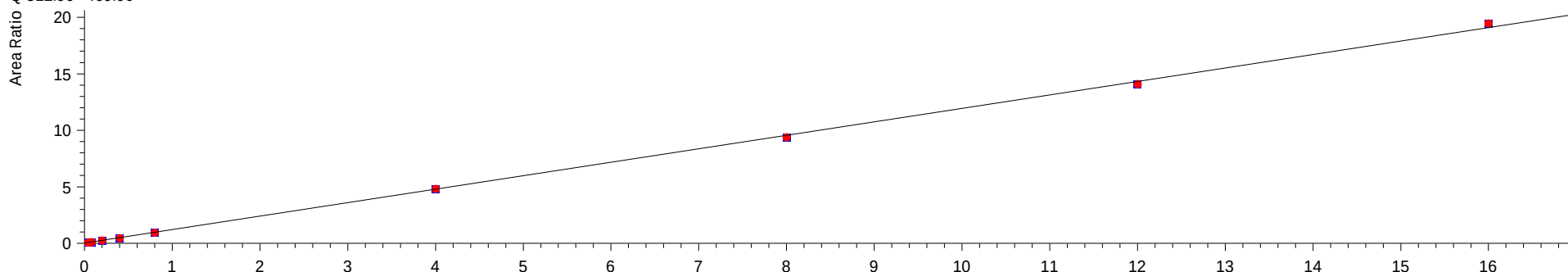
Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2

Q 512.90>469.00
R² 0.9996490
R Equation 0.9998245 $y = 1.191461x + 0.02427254$

Q 512.90>469.00

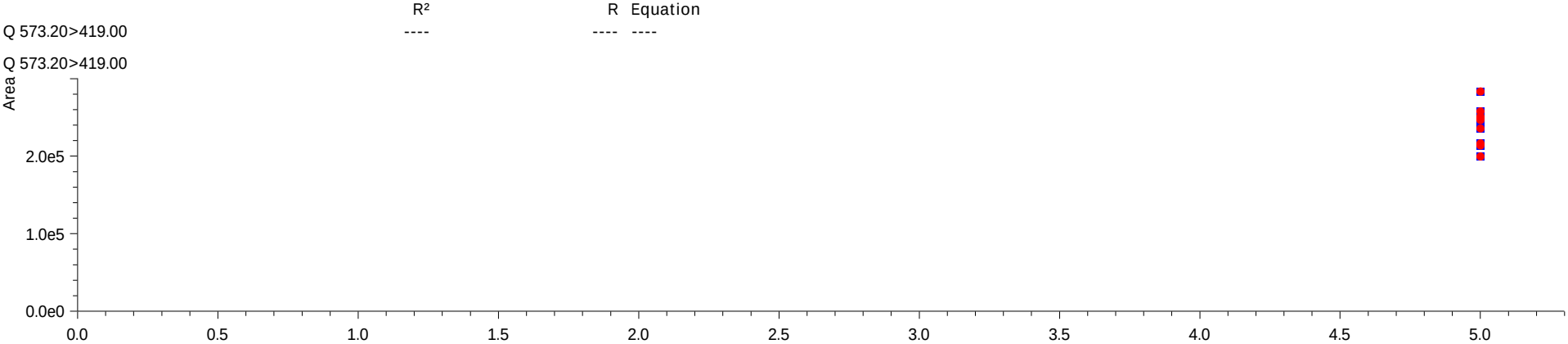


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc.Ratio
240118_006	1633 ICAL 0.05PPB	☒	Auto	18416	238849	0.0500	1.2500	1.927555	0.0554	10.85	1.317599	19.050671	5.099668
240118_007	1633 ICAL 0.1PPB	☒	Auto	28917	240568	0.1000	1.2500	1.502527	0.1006	0.64	1.317599	19.050671	5.099668
240118_008	1633 ICAL 0.25PPB	☒	Auto	57165	224311	0.2500	1.2500	1.274241	0.2419	-3.24	1.317599	19.050671	5.099668
240118_009	1633 ICAL 0.50PPB	☒	Auto	112231	238617	0.5000	1.2500	1.175849	0.4680	-6.40	1.317599	19.050671	5.099668
240118_010	1633 ICAL 1.0PPB	☒	Auto	238103	247598	1.0000	1.2500	1.202064	0.9834	-1.66	1.317599	19.050671	5.099668
240118_011	1633 ICAL 5.0PPB	☒	Auto	1130874	233845	5.0000	1.2500	1.209002	5.0481	0.96	1.317599	19.050671	5.099668
240118_012	1633 ICAL 10.0PPB	☒	Auto	2069023	219938	10.0000	1.2500	1.175914	9.8440	-1.56	1.317599	19.050671	5.099668
240118_013	1633 ICAL 15.0PPB	☒	Auto	2953361	209485	15.0000	1.2500	1.174852	14.7654	-1.56	1.317599	19.050671	5.099668
240118_014	1633 ICAL 20.0PPB	☒	Auto	3861460	198408	20.0000	1.2500	1.216388	20.3930	1.96	1.317599	19.050671	5.099668
240118_016	1633 ICV 1.0PPB		Auto	222841	232114	1.0000	1.2500	----	0.9818	-1.82	1.317599	19.050671	5.099668
240118_017	1633 FTCA ICV 1.0PPB		ND(W/B)	----	221808	1.0000	1.2500	----	----	----	1.317599	19.050671	5.099668



Compound: D3-NMeFOSAA_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 0



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☐	Auto	283573	283573	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_007	1633 ICAL 0.1PPB	☐	Auto	258147	258147	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_008	1633 ICAL 0.25PPB	☐	Auto	246883	246883	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_009	1633 ICAL 0.50PPB	☐	Auto	249589	249589	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_010	1633 ICAL 1.0PPB	☐	Auto	251536	251536	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_011	1633 ICAL 5.0PPB	☐	Auto	235854	235854	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_012	1633 ICAL 10.0PPB	☐	Auto	216872	216872	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_013	1633 ICAL 15.0PPB	☐	Auto	199875	199875	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_014	1633 ICAL 20.0PPB	☐	Auto	214118	214118	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_016	1633 ICV 1.0PPB		Auto	227223	227223	5.0000	5.0000	----	5.0000	0.00	----	----	----
240118_017	1633 FTCA ICV 1.0PPB		Auto	217334	217334	5.0000	5.0000	----	5.0000	0.00	----	----	----



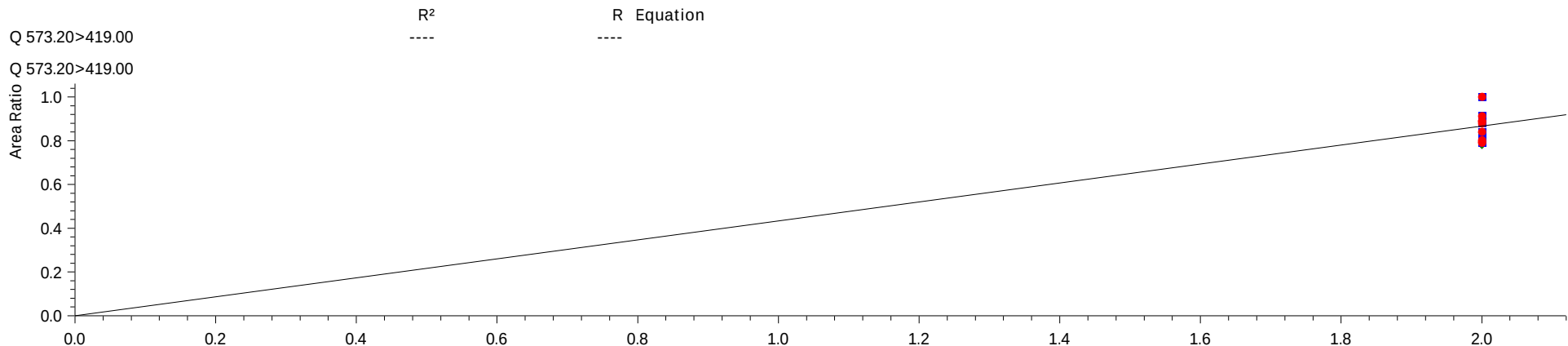
Compound: D3-NMeFOSAA

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☒	Auto	283573	283185	5.0000	2.5000	0.500685	5.7696	15.39	0.433897	7.812151	7.812151
240118_007	1633 ICAL 0.1PPB	☒	Auto	258147	282518	5.0000	2.5000	0.456869	5.2647	5.29	0.433897	7.812151	7.812151
240118_008	1633 ICAL 0.25PPB	☒	Auto	246883	277483	5.0000	2.5000	0.444862	5.1264	2.53	0.433897	7.812151	7.812151
240118_009	1633 ICAL 0.50PPB	☒	Auto	249589	279876	5.0000	2.5000	0.445892	5.1382	2.76	0.433897	7.812151	7.812151
240118_010	1633 ICAL 1.0PPB	☒	Auto	251536	298833	5.0000	2.5000	0.420864	4.8498	-3.00	0.433897	7.812151	7.812151
240118_011	1633 ICAL 5.0PPB	☒	Auto	235854	293425	5.0000	2.5000	0.401898	4.6313	-7.37	0.433897	7.812151	7.812151
240118_012	1633 ICAL 10.0PPB	☒	Auto	216872	272314	5.0000	2.5000	0.398204	4.5887	-8.23	0.433897	7.812151	7.812151
240118_013	1633 ICAL 15.0PPB	☒	Auto	199875	252372	5.0000	2.5000	0.395993	4.5632	-8.74	0.433897	7.812151	7.812151
240118_014	1633 ICAL 20.0PPB	☒	Auto	214118	243425	5.0000	2.5000	0.439802	5.0681	1.36	0.433897	7.812151	7.812151
240118_016	1633 ICV 1.0PPB		Auto	227223	271163	5.0000	2.5000	----	4.8281	-3.44	0.433897	7.812151	7.812151
240118_017	1633 FTCA ICV 1.0PPB		Auto	217334	278941	5.0000	2.5000	----	4.4892	-10.22	0.433897	7.812151	7.812151



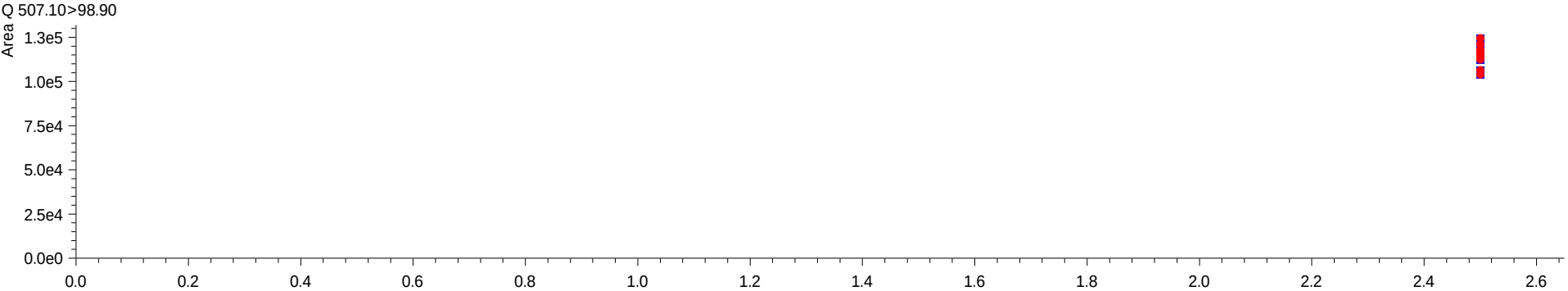
Compound: 13C8-PFOS_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 0

Q 507.10>98.90

R²

R Equation



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☐	Auto	117833	117833	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_007	1633 ICAL 0.1PPB	☐	Auto	118069	118069	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_008	1633 ICAL 0.25PPB	☐	Auto	114171	114171	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_009	1633 ICAL 0.50PPB	☐	Auto	121099	121099	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_010	1633 ICAL 1.0PPB	☐	Auto	124480	124480	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_011	1633 ICAL 5.0PPB	☐	Auto	116018	116018	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_012	1633 ICAL 10.0PPB	☐	Auto	112442	112442	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_013	1633 ICAL 15.0PPB	☐	Auto	104055	104055	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_014	1633 ICAL 20.0PPB	☐	Auto	106399	106399	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_016	1633 ICV 1.0PPB		Auto	105678	105678	2.5000	2.5000	----	2.5000	0.00	----	----	----
240118_017	1633 FTCA ICV 1.0PPB		Auto	114722	114722	2.5000	2.5000	----	2.5000	0.00	----	----	----



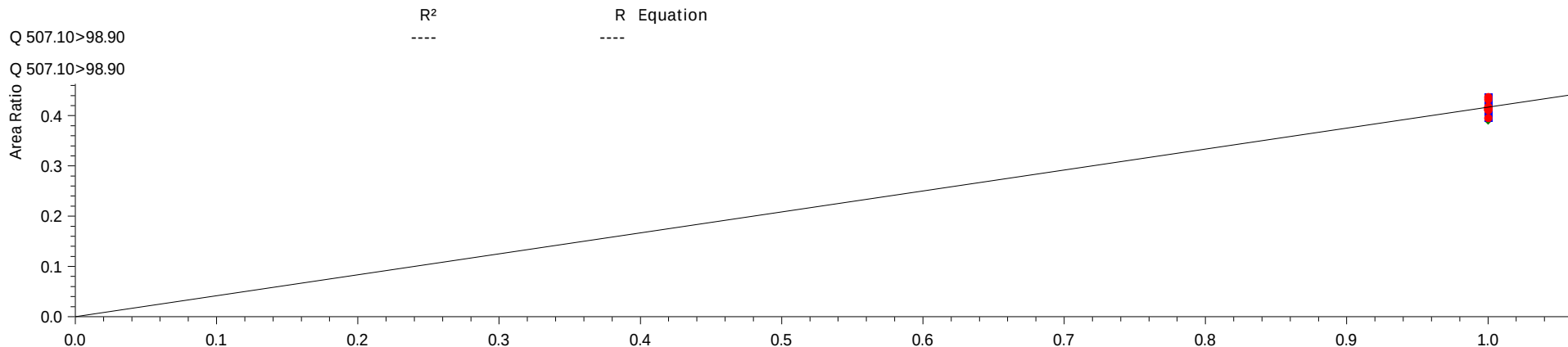
Compound: 13C8-PFOS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☒	Auto	117833	283185	2.5000	2.5000	0.416099	2.4950	-0.20	0.416935	2.922731	2.922731
240118_007	1633 ICAL 0.1PPB	☒	Auto	118069	282518	2.5000	2.5000	0.417919	2.5059	0.24	0.416935	2.922731	2.922731
240118_008	1633 ICAL 0.25PPB	☒	Auto	114171	277483	2.5000	2.5000	0.411453	2.4671	-1.31	0.416935	2.922731	2.922731
240118_009	1633 ICAL 0.50PPB	☒	Auto	121099	279876	2.5000	2.5000	0.432687	2.5945	3.78	0.416935	2.922731	2.922731
240118_010	1633 ICAL 1.0PPB	☒	Auto	124480	298833	2.5000	2.5000	0.416553	2.4977	-0.09	0.416935	2.922731	2.922731
240118_011	1633 ICAL 5.0PPB	☒	Auto	116018	293425	2.5000	2.5000	0.395390	2.3708	-5.17	0.416935	2.922731	2.922731
240118_012	1633 ICAL 10.0PPB	☒	Auto	112442	272314	2.5000	2.5000	0.412915	2.4759	-0.96	0.416935	2.922731	2.922731
240118_013	1633 ICAL 15.0PPB	☒	Auto	104055	252372	2.5000	2.5000	0.412306	2.4722	-1.11	0.416935	2.922731	2.922731
240118_014	1633 ICAL 20.0PPB	☒	Auto	106399	243425	2.5000	2.5000	0.437089	2.6209	4.83	0.416935	2.922731	2.922731
240118_016	1633 ICV 1.0PPB		Auto	105678	271163	2.5000	2.5000	----	2.3368	-6.53	0.416935	2.922731	2.922731
240118_017	1633 FTCA ICV 1.0PPB		Auto	114722	278941	2.5000	2.5000	----	2.4661	-1.36	0.416935	2.922731	2.922731

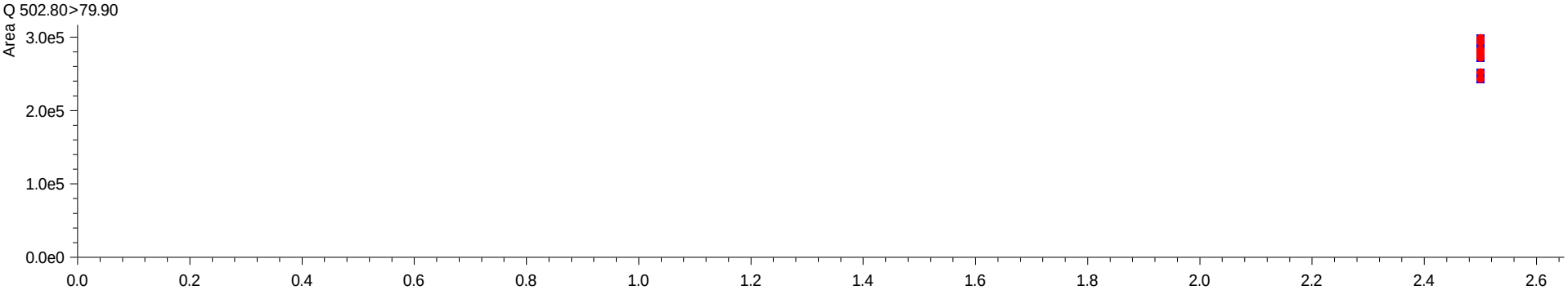


Compound: 13C4-PFOS_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 0

Q 502.80>79.90

R²-----R Equation-----



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc. (ng/mL)
													RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☐	Auto	283185	283185	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_007	1633 ICAL 0.1PPB	☐	Auto	282518	282518	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_008	1633 ICAL 0.25PPB	☐	Auto	277483	277483	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_009	1633 ICAL 0.50PPB	☐	Auto	279876	279876	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_010	1633 ICAL 1.0PPB	☐	Auto	298833	298833	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_011	1633 ICAL 5.0PPB	☐	Auto	293425	293425	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_012	1633 ICAL 10.0PPB	☐	Auto	272314	272314	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_013	1633 ICAL 15.0PPB	☐	Auto	252372	252372	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_014	1633 ICAL 20.0PPB	☐	Auto	243425	243425	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_016	1633 ICV 1.0PPB		Auto	271163	271163	2.5000	2.5000	----	2.5000	0.00	----	----	----
240118_017	1633 FTCA ICV 1.0PPB		Auto	278941	278941	2.5000	2.5000	----	2.5000	0.00	----	----	----



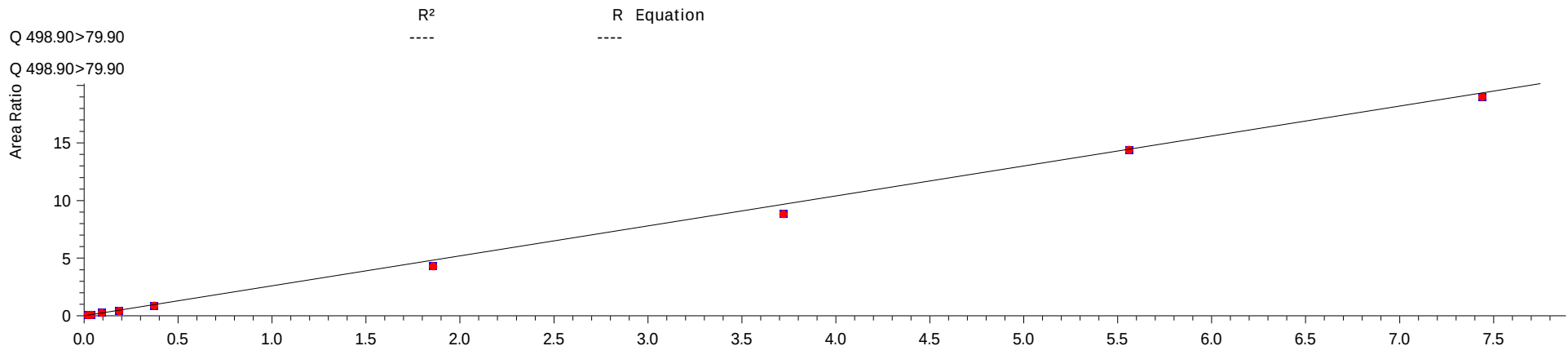
Compound: PFOS

Curve Fit: Mean RF | Weighting: 1/C | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2

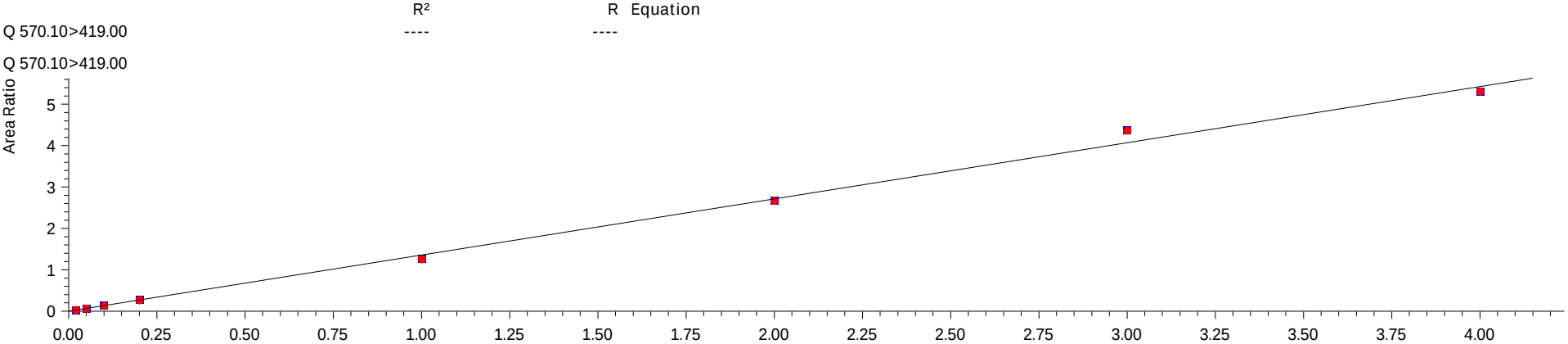


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☒	M	7169	117833	0.0464	2.5000	3.278029	0.0585	26.07	2.600246	12.466691	12.466691
240118_007	1633 ICAL 0.1PPB	☒	M	11920	118069	0.0930	2.5000	2.713837	0.0971	4.37	2.600246	12.466691	12.466691
240118_008	1633 ICAL 0.25PPB	☒	M	30901	114171	0.2330	2.5000	2.904035	0.2602	11.68	2.600246	12.466691	12.466691
240118_009	1633 ICAL 0.50PPB	☒	M	51913	121099	0.4640	2.5000	2.309715	0.4122	-11.17	2.600246	12.466691	12.466691
240118_010	1633 ICAL 1.0PPB	☒	M	108900	124480	0.9300	2.5000	2.351715	0.8411	-9.56	2.600246	12.466691	12.466691
240118_011	1633 ICAL 5.0PPB	☒	M	499726	116018	4.6400	2.5000	2.320759	4.1413	-10.75	2.600246	12.466691	12.466691
240118_012	1633 ICAL 10.0PPB	☒	M	994421	112442	9.3000	2.5000	2.377375	8.5029	-8.57	2.600246	12.466691	12.466691
240118_013	1633 ICAL 15.0PPB	☒	M	1499453	104055	13.9000	2.5000	2.591773	13.8547	-0.33	2.600246	12.466691	12.466691
240118_014	1633 ICAL 20.0PPB	☒	M	2022532	106399	18.6000	2.5000	2.554972	18.2762	-1.74	2.600246	12.466691	12.466691
240118_016	1633 ICV 1.0PPB		M	93974	105678	0.9300	2.5000	----	0.8550	-8.07	2.600246	12.466691	12.466691
240118_017	1633 FTCA ICV 1.0PPB		ND(W/B)	----	114722	0.9300	2.5000	----	----	----	2.600246	12.466691	12.466691



Compound: NMeFOSAA

Curve Fit: Mean RF | Weighting: 1/C | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 8
No. of Control Points: 2

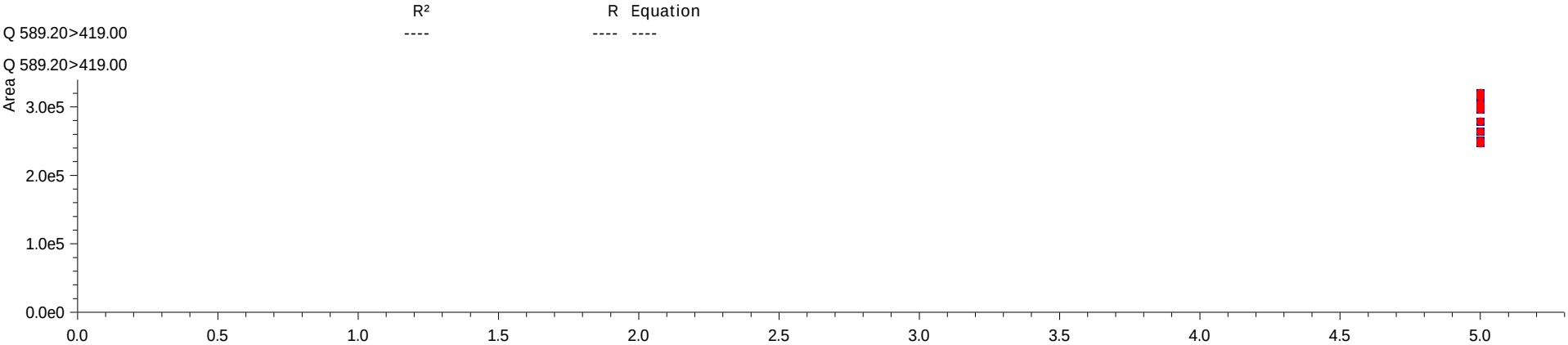


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc.Ratio
240118_007	1633 ICAL 0.1PPB	☑	M	7957	258147	0.1000	5.0000	1.541119	0.1136	13.60	1.356672	7.287886	7.287885
240118_008	1633 ICAL 0.25PPB	☑	M	15374	246883	0.2500	5.0000	1.245412	0.2295	-8.20	1.356672	7.287886	7.287885
240118_009	1633 ICAL 0.50PPB	☑	M	33145	249589	0.5000	5.0000	1.327995	0.4894	-2.11	1.356672	7.287886	7.287885
240118_010	1633 ICAL 1.0PPB	☑	M	68385	251536	1.0000	5.0000	1.359346	1.0020	0.20	1.356672	7.287886	7.287885
240118_011	1633 ICAL 5.0PPB	☑	M	296556	235854	5.0000	5.0000	1.257372	4.6340	-7.32	1.356672	7.287886	7.287885
240118_012	1633 ICAL 10.0PPB	☑	M	579948	216872	10.0000	5.0000	1.337073	9.8555	-1.44	1.356672	7.287886	7.287885
240118_013	1633 ICAL 15.0PPB	☑	M	873824	199875	15.0000	5.0000	1.457281	16.1124	7.42	1.356672	7.287886	7.287885
240118_014	1633 ICAL 20.0PPB	☑	M	1137204	214118	20.0000	5.0000	1.327777	19.5740	-2.13	1.356672	7.287886	7.287885
240118_016	1633 ICV 1.0PPB		M	57190	227223	1.0000	5.0000	----	0.9276	-7.24	1.356672	7.287886	7.287885
240118_017	1633 FTCA ICV 1.0PPB		ND(W/B)	----	217334	1.0000	5.0000	----	----	----	1.356672	7.287886	7.287885



Compound: D5-NEtFOSAA_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 0

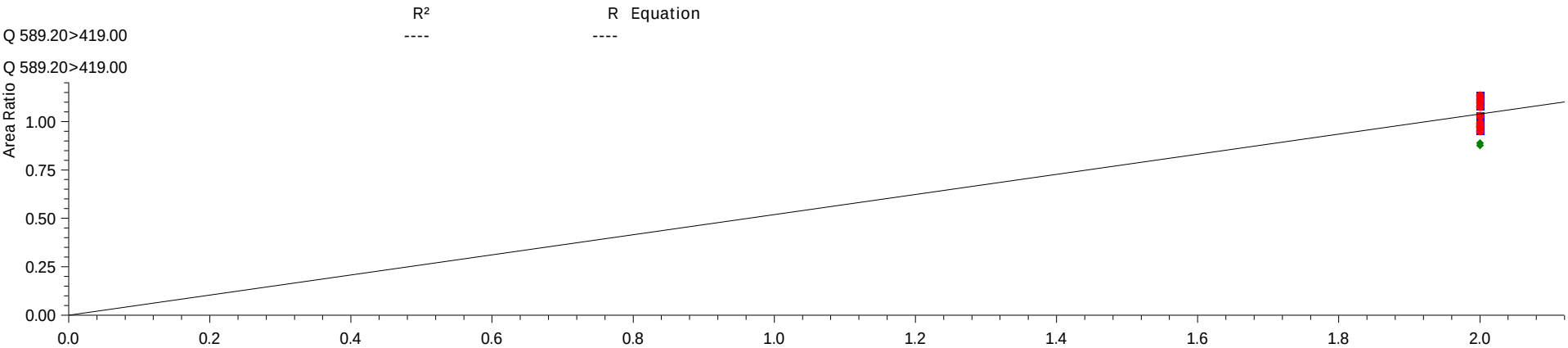


													Conc. (ng/mL)
Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☐	Auto	315390	315390	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_007	1633 ICAL 0.1PPB	☐	Auto	320494	320494	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_008	1633 ICAL 0.25PPB	☐	Auto	304822	304822	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_009	1633 ICAL 0.50PPB	☐	Auto	301439	301439	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_010	1633 ICAL 1.0PPB	☐	Auto	296281	296281	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_011	1633 ICAL 5.0PPB	☐	Auto	279078	279078	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_012	1633 ICAL 10.0PPB	☐	Auto	264164	264164	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_013	1633 ICAL 15.0PPB	☐	Auto	246903	246903	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_014	1633 ICAL 20.0PPB	☐	Auto	250513	250513	5.0000	5.0000	1.000000	5.0000	0.00	----	----	----
240118_016	1633 ICV 1.0PPB		Auto	241074	241074	5.0000	5.0000	----	5.0000	0.00	----	----	----
240118_017	1633 FTCA ICV 1.0PPB		Auto	244437	244437	5.0000	5.0000	----	5.0000	0.00	----	----	----



Compound: D5-NEtFOSAA

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 2

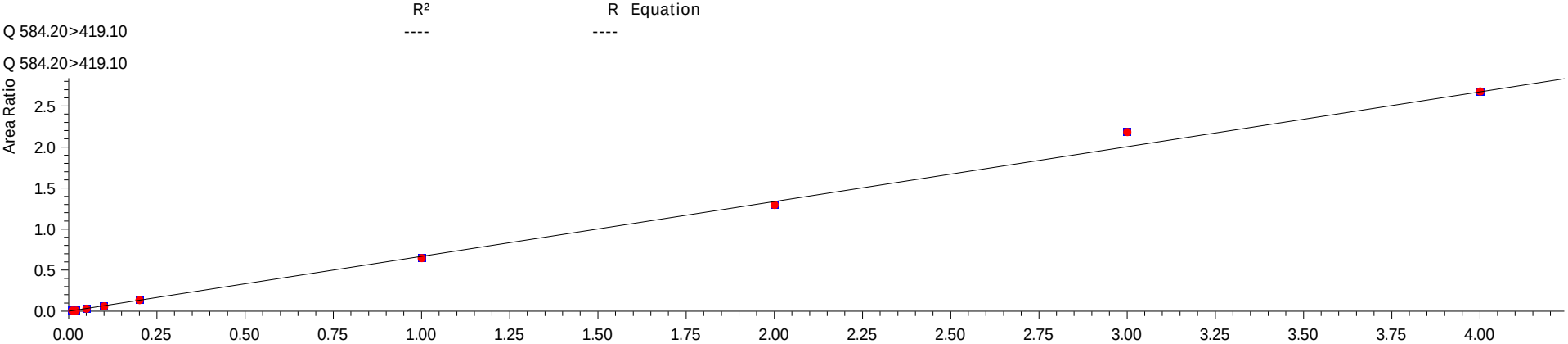


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc.Ratio
240118_006	1633 ICAL 0.05PPB	☒	Auto	315390	283185	5.0000	2.5000	0.556861	5.3637	7.27	0.519100	6.654894	6.654894
240118_007	1633 ICAL 0.1PPB	☒	Auto	320494	282518	5.0000	2.5000	0.567210	5.4634	9.27	0.519100	6.654894	6.654894
240118_008	1633 ICAL 0.25PPB	☒	Auto	304822	277483	5.0000	2.5000	0.549263	5.2905	5.81	0.519100	6.654894	6.654894
240118_009	1633 ICAL 0.50PPB	☒	Auto	301439	279876	5.0000	2.5000	0.538522	5.1871	3.74	0.519100	6.654894	6.654894
240118_010	1633 ICAL 1.0PPB	☒	Auto	296281	298833	5.0000	2.5000	0.495731	4.7749	-4.50	0.519100	6.654894	6.654894
240118_011	1633 ICAL 5.0PPB	☒	Auto	279078	293425	5.0000	2.5000	0.475552	4.5805	-8.39	0.519100	6.654894	6.654894
240118_012	1633 ICAL 10.0PPB	☒	Auto	264164	272314	5.0000	2.5000	0.485036	4.6719	-6.56	0.519100	6.654894	6.654894
240118_013	1633 ICAL 15.0PPB	☒	Auto	246903	252372	5.0000	2.5000	0.489164	4.7117	-5.77	0.519100	6.654894	6.654894
240118_014	1633 ICAL 20.0PPB	☒	Auto	250513	243425	5.0000	2.5000	0.514558	4.9563	-0.87	0.519100	6.654894	6.654894
240118_016	1633 ICV 1.0PPB		Auto	241074	271163	5.0000	2.5000	----	4.2816	-14.37	0.519100	6.654894	6.654894
240118_017	1633 FTCA ICV 1.0PPB		Auto	244437	278941	5.0000	2.5000	----	4.2203	-15.59	0.519100	6.654894	6.654894



Compound: NEtFOSAA

Curve Fit: Mean RF | Weighting: 1/C | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 2

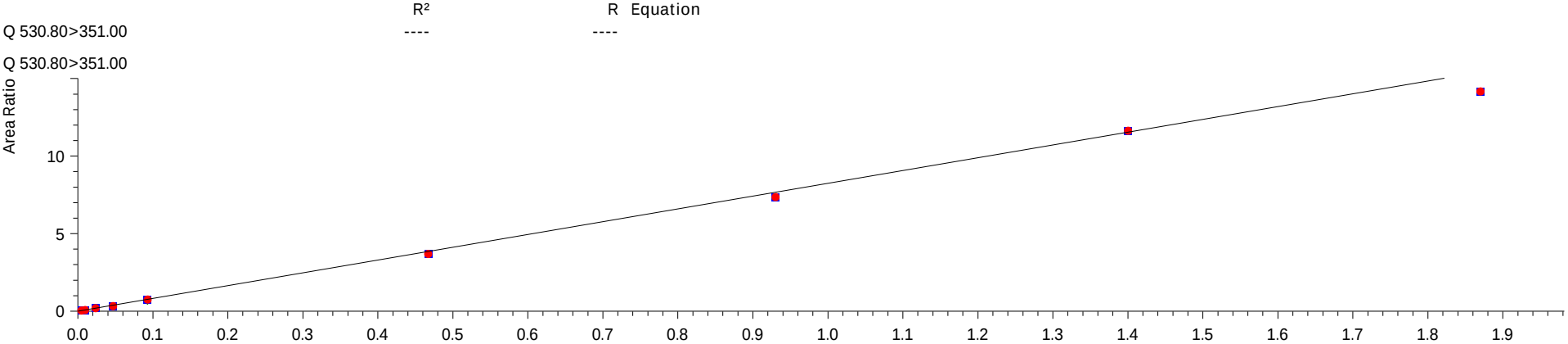


		Conc.Ratio											
Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☒	M	2717	315390	0.0500	5.0000	0.861581	0.0645	29.02	0.667778	14.431317	14.431316
240118_007	1633 ICAL 0.1PPB	☒	M	3243	320494	0.1000	5.0000	0.505981	0.0758	-24.23	0.667778	14.431317	14.431316
240118_008	1633 ICAL 0.25PPB	☒	M	10212	304822	0.2500	5.0000	0.670046	0.2508	0.34	0.667778	14.431317	14.431316
240118_009	1633 ICAL 0.50PPB	☒	M	17841	301439	0.5000	5.0000	0.591848	0.4431	-11.37	0.667778	14.431317	14.431316
240118_010	1633 ICAL 1.0PPB	☒	M	40635	296281	1.0000	5.0000	0.685750	1.0269	2.69	0.667778	14.431317	14.431316
240118_011	1633 ICAL 5.0PPB	☒	M	180916	279078	5.0000	5.0000	0.648264	4.8539	-2.92	0.667778	14.431317	14.431316
240118_012	1633 ICAL 10.0PPB	☒	M	342529	264164	10.0000	5.0000	0.648327	9.7087	-2.91	0.667778	14.431317	14.431316
240118_013	1633 ICAL 15.0PPB	☒	M	539699	246903	15.0000	5.0000	0.728626	16.3668	9.11	0.667778	14.431317	14.431316
240118_014	1633 ICAL 20.0PPB	☒	M	670953	250513	20.0000	5.0000	0.669579	20.0539	0.27	0.667778	14.431317	14.431316
240118_016	1633 ICV 1.0PPB		M	32459	241074	1.0000	5.0000	----	1.0081	0.81	0.667778	14.431317	14.431316
240118_017	1633 FTCA ICV 1.0PPB		ND(W/B)	----	244437	1.0000	5.0000	----	----	----	0.667778	14.431317	14.431316



Compound: 9-Cl-PF3ONS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☑	Auto	28101	595312	0.0467	10.0000	10.107900	0.0573	22.61	8.244264	9.496481	9.496481
240118_007	1633 ICAL 0.1PPB	☑	Auto	46416	604622	0.0930	10.0000	8.254759	0.0931	0.13	8.244264	9.496481	9.496481
240118_008	1633 ICAL 0.25PPB	☑	Auto	116926	588188	0.2340	10.0000	8.495298	0.2411	3.04	8.244264	9.496481	9.496481
240118_009	1633 ICAL 0.50PPB	☑	Auto	226384	654919	0.4670	10.0000	7.401864	0.4193	-10.22	8.244264	9.496481	9.496481
240118_010	1633 ICAL 1.0PPB	☑	Auto	488722	640534	0.9300	10.0000	8.204216	0.9255	-0.49	8.244264	9.496481	9.496481
240118_011	1633 ICAL 5.0PPB	☑	Auto	2287642	618248	4.6700	10.0000	7.923344	4.4882	-3.89	8.244264	9.496481	9.496481
240118_012	1633 ICAL 10.0PPB	☑	Auto	4405373	598128	9.3000	10.0000	7.919643	8.9338	-3.94	8.244264	9.496481	9.496481
240118_013	1633 ICAL 15.0PPB	☑	Auto	6793632	583755	14.0000	10.0000	8.312727	14.1163	0.83	8.244264	9.496481	9.496481
240118_014	1633 ICAL 20.0PPB	☑	Auto	8537715	602434	18.7000	10.0000	7.578621	17.1902	-8.07	8.244264	9.496481	9.496481
240118_016	1633 ICV 1.0PPB		Auto	410044	617025	0.9300	10.0000	----	0.8061	-13.33	8.244264	9.496481	9.496481
240118_017	1633 FTCA ICV 1.0PPB		ND(W/B)	----	650567	0.9300	10.0000	----	----	----	8.244264	9.496481	9.496481



Compound: PFUnDA

Curve Fit: Linear | Weighting: 1/C | Zero: Not Forced

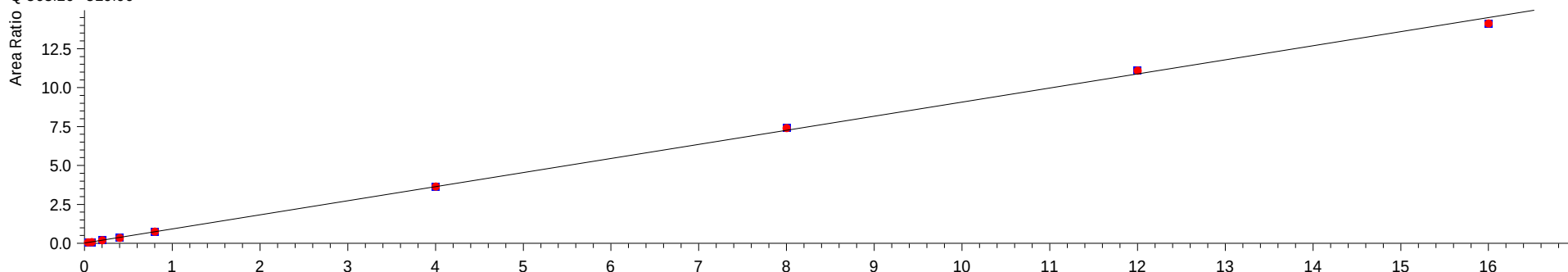
Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2

Q 563.10>519.00 R^2 0.9994179 R Equation $y = 0.9050830x + 0.02151114$

Q 563.10>519.00

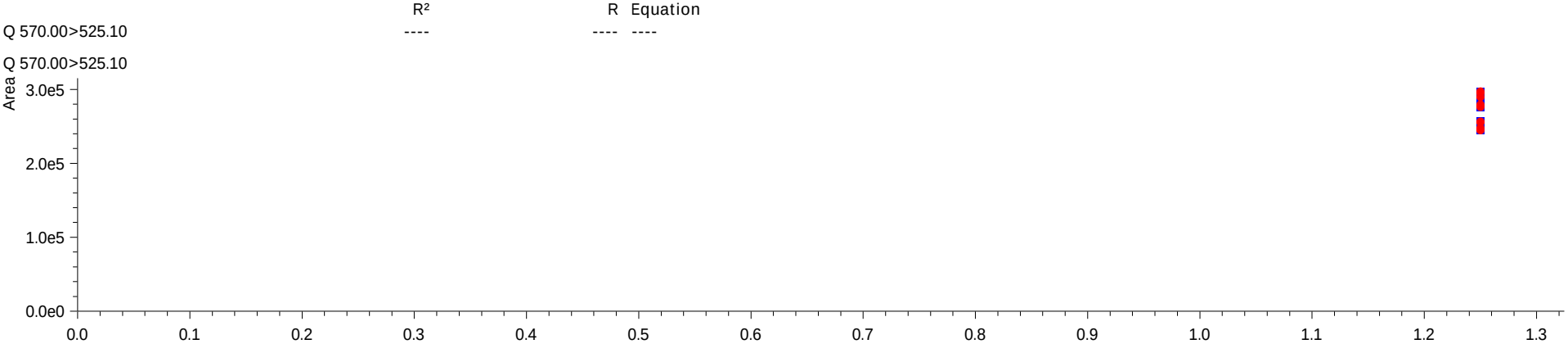


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc.Ratio
240118_006	1633 ICAL 0.05PPB	☒	Auto	18285	295082	0.0500	1.2500	1.549137	0.0559	11.74	1.016871	20.695156	6.350896
240118_007	1633 ICAL 0.1PPB	☒	Auto	25490	290019	0.1000	1.2500	1.098635	0.0917	-8.32	1.016871	20.695156	6.350896
240118_008	1633 ICAL 0.25PPB	☒	Auto	56306	279544	0.2500	1.2500	1.007098	0.2485	-0.61	1.016871	20.695156	6.350896
240118_009	1633 ICAL 0.50PPB	☒	Auto	106205	297301	0.5000	1.2500	0.893073	0.4637	-7.27	1.016871	20.695156	6.350896
240118_010	1633 ICAL 1.0PPB	☒	Auto	211279	276567	1.0000	1.2500	0.954916	1.0253	2.53	1.016871	20.695156	6.350896
240118_011	1633 ICAL 5.0PPB	☒	Auto	933949	255491	5.0000	1.2500	0.913875	5.0189	0.38	1.016871	20.695156	6.350896
240118_012	1633 ICAL 10.0PPB	☒	Auto	1839221	248001	10.0000	1.2500	0.927021	10.2127	2.13	1.016871	20.695156	6.350896
240118_013	1633 ICAL 15.0PPB	☒	Auto	2720435	245029	15.0000	1.2500	0.925209	15.3038	2.03	1.016871	20.695156	6.350896
240118_014	1633 ICAL 20.0PPB	☒	Auto	3625574	256659	20.0000	1.2500	0.882877	19.4796	-2.60	1.016871	20.695156	6.350896
240118_016	1633 ICV 1.0PPB		Auto	194333	255936	1.0000	1.2500	----	1.0190	1.90	1.016871	20.695156	6.350896
240118_017	1633 FTCA ICV 1.0PPB		ND(W/B)	----	272818	1.0000	1.2500	----	----	----	1.016871	20.695156	6.350896



Compound: 13C7-PFUnDA_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 0



												Conc. (ng/mL)	
Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☐	Auto	295082	295082	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240118_007	1633 ICAL 0.1PPB	☐	Auto	290019	290019	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240118_008	1633 ICAL 0.25PPB	☐	Auto	279544	279544	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240118_009	1633 ICAL 0.50PPB	☐	Auto	297301	297301	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240118_010	1633 ICAL 1.0PPB	☐	Auto	276567	276567	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240118_011	1633 ICAL 5.0PPB	☐	Auto	255491	255491	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240118_012	1633 ICAL 10.0PPB	☐	Auto	248001	248001	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240118_013	1633 ICAL 15.0PPB	☐	Auto	245029	245029	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240118_014	1633 ICAL 20.0PPB	☐	Auto	256659	256659	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----
240118_016	1633 ICV 1.0PPB		Auto	255936	255936	1.2500	1.2500	----	1.2500	0.00	----	----	----
240118_017	1633 FTCA ICV 1.0PPB		Auto	272818	272818	1.2500	1.2500	----	1.2500	0.00	----	----	----



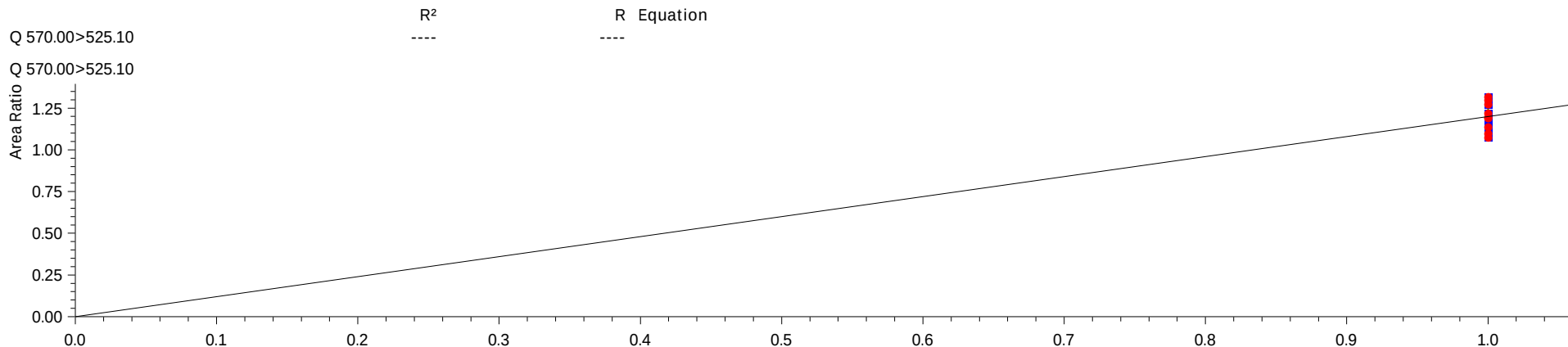
Compound: 13C7-PFUnDA

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc.Ratio
240118_006	1633 ICAL 0.05PPB	☒	Auto	295082	227340	1.2500	1.2500	1.297974	1.3525	8.20	1.199606	7.178995	7.178995
240118_007	1633 ICAL 0.1PPB	☒	Auto	290019	242916	1.2500	1.2500	1.193909	1.2441	-0.47	1.199606	7.178995	7.178995
240118_008	1633 ICAL 0.25PPB	☒	Auto	279544	235058	1.2500	1.2500	1.189260	1.2392	-0.86	1.199606	7.178995	7.178995
240118_009	1633 ICAL 0.50PPB	☒	Auto	297301	225855	1.2500	1.2500	1.316334	1.3716	9.73	1.199606	7.178995	7.178995
240118_010	1633 ICAL 1.0PPB	☒	Auto	276567	243243	1.2500	1.2500	1.137000	1.1848	-5.22	1.199606	7.178995	7.178995
240118_011	1633 ICAL 5.0PPB	☒	Auto	255491	237831	1.2500	1.2500	1.074258	1.1194	-10.45	1.199606	7.178995	7.178995
240118_012	1633 ICAL 10.0PPB	☒	Auto	248001	226144	1.2500	1.2500	1.096652	1.1427	-8.58	1.199606	7.178995	7.178995
240118_013	1633 ICAL 15.0PPB	☒	Auto	245029	201059	1.2500	1.2500	1.218690	1.2699	1.59	1.199606	7.178995	7.178995
240118_014	1633 ICAL 20.0PPB	☒	Auto	256659	201715	1.2500	1.2500	1.272382	1.3258	6.07	1.199606	7.178995	7.178995
240118_016	1633 ICV 1.0PPB		Auto	255936	214237	1.2500	1.2500	----	1.2448	-0.41	1.199606	7.178995	7.178995
240118_017	1633 FTCA ICV 1.0PPB		Auto	272818	222912	1.2500	1.2500	----	1.2753	2.02	1.199606	7.178995	7.178995



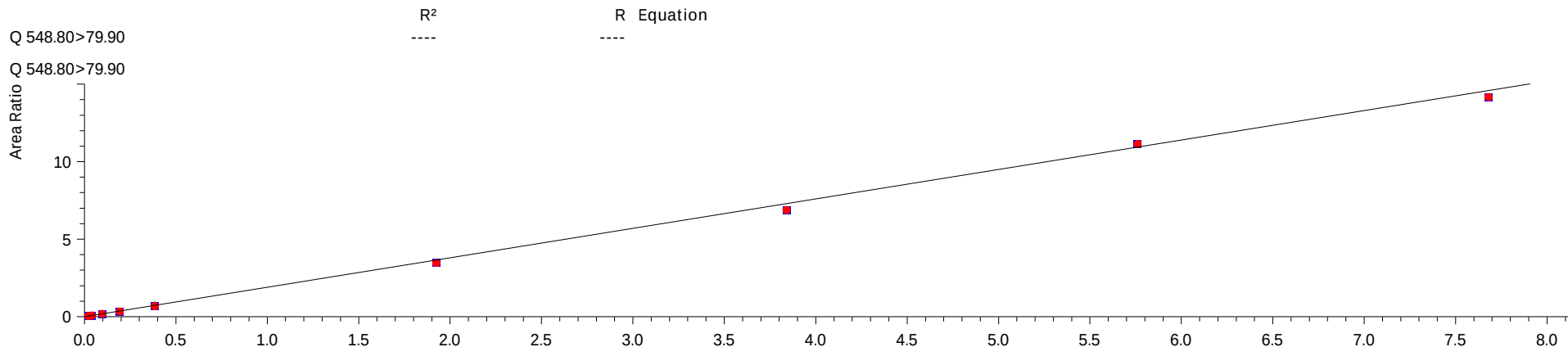
Compound: PFNS

Curve Fit: Mean RF | Weighting: 1/C | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☒	Auto	5101	117833	0.0481	2.5000	2.250142	0.0570	18.46	1.899500	7.778652	7.778650
240118_007	1633 ICAL 0.1PPB	☒	Auto	8984	118069	0.0960	2.5000	1.981589	0.1001	4.32	1.899500	7.778652	7.778650
240118_008	1633 ICAL 0.25PPB	☒	Auto	20655	114171	0.2400	2.5000	1.884534	0.2381	-0.79	1.899500	7.778652	7.778650
240118_009	1633 ICAL 0.50PPB	☒	Auto	41760	121099	0.4810	2.5000	1.792329	0.4539	-5.64	1.899500	7.778652	7.778650
240118_010	1633 ICAL 1.0PPB	☒	Auto	85942	124480	0.9600	2.5000	1.797948	0.9087	-5.35	1.899500	7.778652	7.778650
240118_011	1633 ICAL 5.0PPB	☒	Auto	404394	116018	4.8100	2.5000	1.811655	4.5876	-4.62	1.899500	7.778652	7.778650
240118_012	1633 ICAL 10.0PPB	☒	Auto	775210	112442	9.6000	2.5000	1.795389	9.0738	-5.48	1.899500	7.778652	7.778650
240118_013	1633 ICAL 15.0PPB	☒	Auto	1160949	104055	14.4000	2.5000	1.937001	14.6843	1.97	1.899500	7.778652	7.778650
240118_014	1633 ICAL 20.0PPB	☒	Auto	1507553	106399	19.2000	2.5000	1.844909	18.6482	-2.87	1.899500	7.778652	7.778650
240118_016	1633 ICV 1.0PPB		Auto	78210	105678	0.9600	2.5000	----	0.9740	1.46	1.899500	7.778652	7.778650
240118_017	1633 FTCA ICV 1.0PPB		ND(W/B)	----	114722	0.9600	2.5000	----	----	----	1.899500	7.778652	7.778650



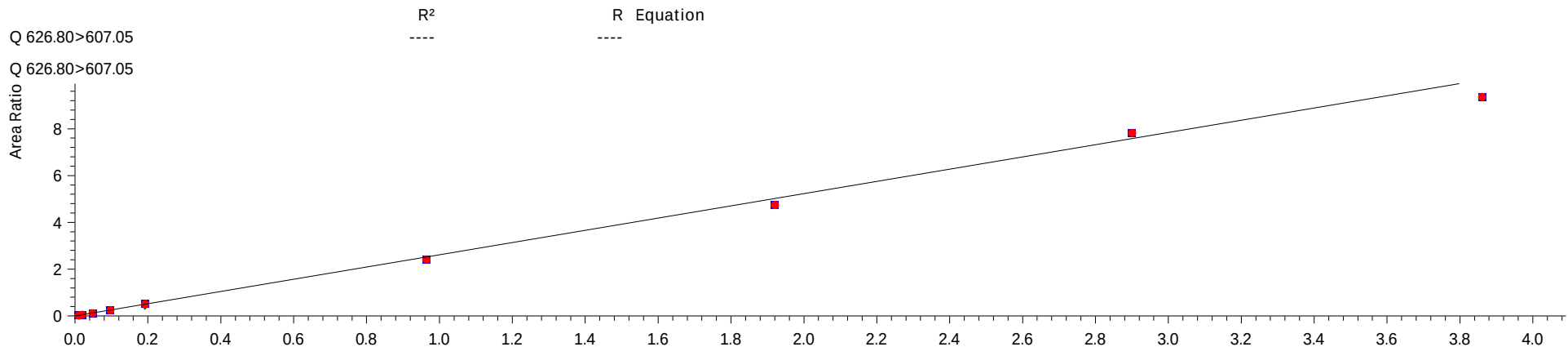
Compound: 10_2 FTS

Curve Fit: Mean RF | Weighting: 1/C | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2

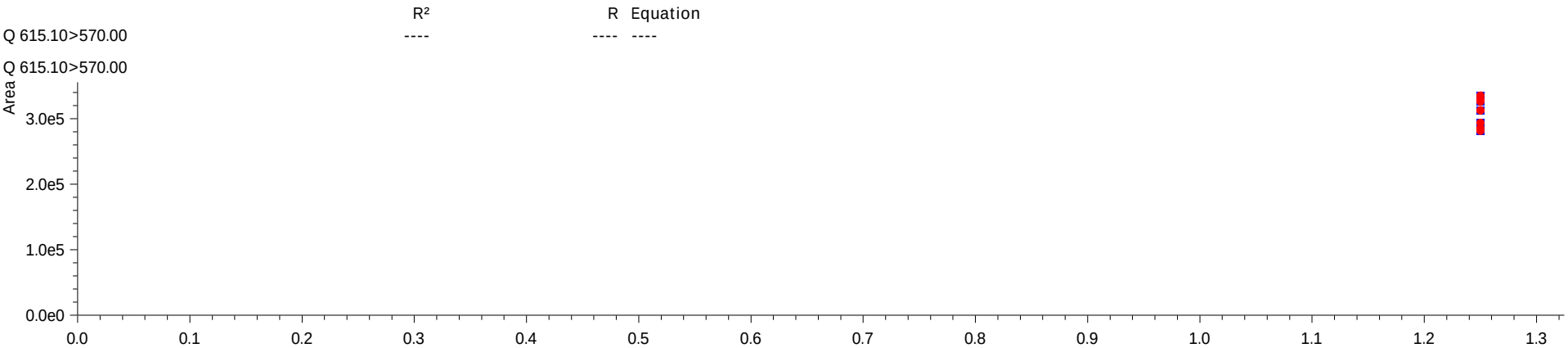


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☒	Auto	4057	149793	0.0482	5.0000	2.809740	0.0518	7.48	2.614100	5.693540	5.693541
240118_007	1633 ICAL 0.1PPB	☒	Auto	7907	145227	0.0960	5.0000	2.835849	0.1041	8.48	2.614100	5.693540	5.693541
240118_008	1633 ICAL 0.25PPB	☒	Auto	16489	131843	0.2410	5.0000	2.594712	0.2392	-0.74	2.614100	5.693540	5.693541
240118_009	1633 ICAL 0.50PPB	☒	Auto	31611	131115	0.4820	5.0000	2.500927	0.4611	-4.33	2.614100	5.693540	5.693541
240118_010	1633 ICAL 1.0PPB	☒	Auto	62123	121050	0.9600	5.0000	2.672924	0.9816	2.25	2.614100	5.693540	5.693541
240118_011	1633 ICAL 5.0PPB	☒	Auto	285490	117777	4.8200	5.0000	2.514514	4.6364	-3.81	2.614100	5.693540	5.693541
240118_012	1633 ICAL 10.0PPB	☒	Auto	534728	112708	9.6000	5.0000	2.471027	9.0746	-5.47	2.614100	5.693540	5.693541
240118_013	1633 ICAL 15.0PPB	☒	Auto	775809	99053	14.5000	5.0000	2.700780	14.9808	3.32	2.614100	5.693540	5.693541
240118_014	1633 ICAL 20.0PPB	☒	Auto	999936	106762	19.3000	5.0000	2.426425	17.9144	-7.18	2.614100	5.693540	5.693541
240118_016	1633 ICV 1.0PPB		Auto	51049	119746	0.9600	5.0000	----	0.8154	-15.06	2.614100	5.693540	5.693541
240118_017	1633 FTCA ICV 1.0PPB		ND(W/B)	----	104364	0.9600	5.0000	----	----	----	2.614100	5.693540	5.693541



Compound: 13C2-PFDOA_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 0

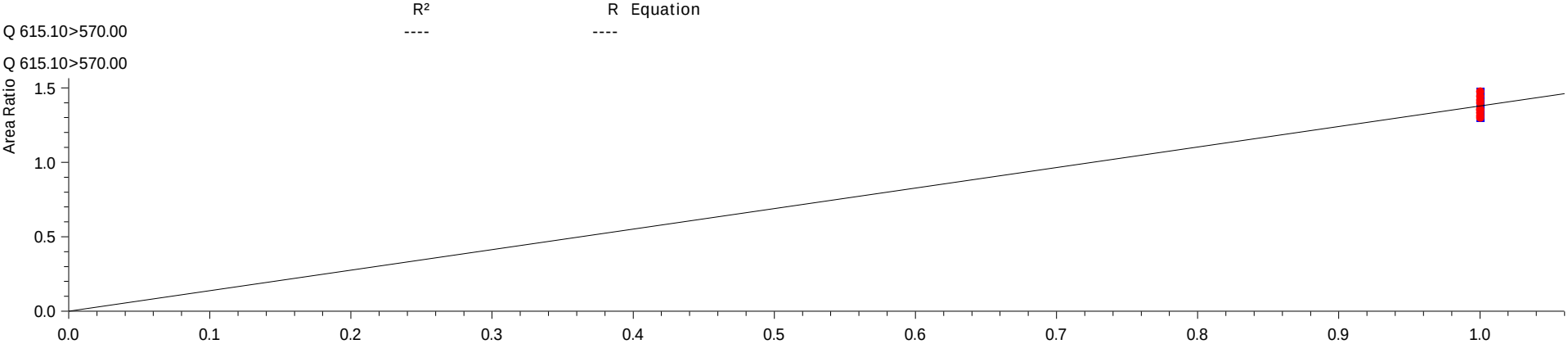


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc. (ng/mL)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☐	Auto	335621	335621	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----	----
240118_007	1633 ICAL 0.1PPB	☐	Auto	330237	330237	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----	----
240118_008	1633 ICAL 0.25PPB	☐	Auto	313428	313428	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----	----
240118_009	1633 ICAL 0.50PPB	☐	Auto	326480	326480	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----	----
240118_010	1633 ICAL 1.0PPB	☐	Auto	328895	328895	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----	----
240118_011	1633 ICAL 5.0PPB	☐	Auto	312907	312907	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----	----
240118_012	1633 ICAL 10.0PPB	☐	Auto	294038	294038	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----	----
240118_013	1633 ICAL 15.0PPB	☐	Auto	281877	281877	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----	----
240118_014	1633 ICAL 20.0PPB	☐	Auto	286167	286167	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----	----
240118_016	1633 ICV 1.0PPB		Auto	285641	285641	1.2500	1.2500	----	1.2500	0.00	----	----	----	----
240118_017	1633 FTCA ICV 1.0PPB		Auto	304097	304097	1.2500	1.2500	----	1.2500	0.00	----	----	----	----



Compound: 13C2-PFDOA

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 2



Conc.Ratio													
Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☑	Auto	335621	227340	1.2500	1.2500	1.476296	1.3390	7.12	1.378151	4.397641	4.397641
240118_007	1633 ICAL 0.1PPB	☑	Auto	330237	242916	1.2500	1.2500	1.359472	1.2331	-1.36	1.378151	4.397641	4.397641
240118_008	1633 ICAL 0.25PPB	☑	Auto	313428	235058	1.2500	1.2500	1.333409	1.2094	-3.25	1.378151	4.397641	4.397641
240118_009	1633 ICAL 0.50PPB	☑	Auto	326480	225855	1.2500	1.2500	1.445528	1.3111	4.89	1.378151	4.397641	4.397641
240118_010	1633 ICAL 1.0PPB	☑	Auto	328895	243243	1.2500	1.2500	1.352128	1.2264	-1.89	1.378151	4.397641	4.397641
240118_011	1633 ICAL 5.0PPB	☑	Auto	312907	237831	1.2500	1.2500	1.315673	1.1933	-4.53	1.378151	4.397641	4.397641
240118_012	1633 ICAL 10.0PPB	☑	Auto	294038	226144	1.2500	1.2500	1.300223	1.1793	-5.65	1.378151	4.397641	4.397641
240118_013	1633 ICAL 15.0PPB	☑	Auto	281877	201059	1.2500	1.2500	1.401959	1.2716	1.73	1.378151	4.397641	4.397641
240118_014	1633 ICAL 20.0PPB	☑	Auto	286167	201715	1.2500	1.2500	1.418669	1.2868	2.94	1.378151	4.397641	4.397641
240118_016	1633 ICV 1.0PPB		Auto	285641	214237	1.2500	1.2500	----	1.2093	-3.25	1.378151	4.397641	4.397641
240118_017	1633 FTCA ICV 1.0PPB		Auto	304097	222912	1.2500	1.2500	----	1.2373	-1.01	1.378151	4.397641	4.397641



Compound: PFDOA

Curve Fit: Linear | Weighting: 1/C | Zero: Not Forced

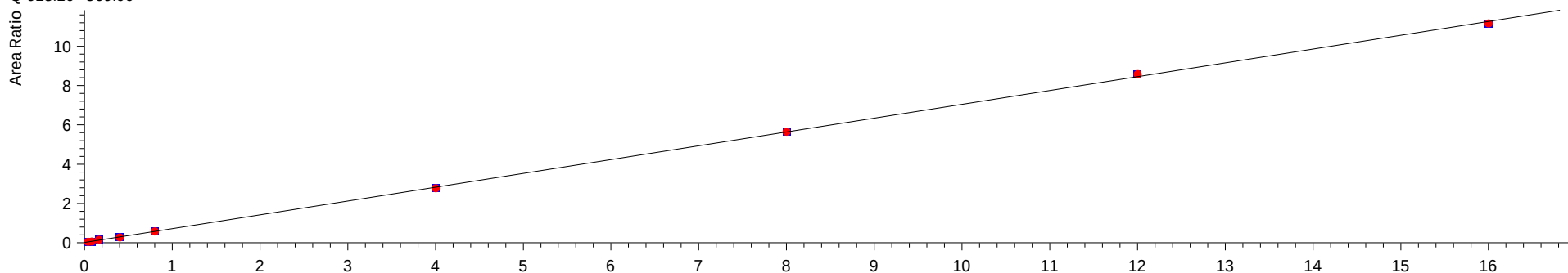
Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2

Q 613.10>569.00 R^2 0.9995045 R Equation 0.9997522 $y = 0.7030456x + 0.01847295$

Q 613.10>569.00



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc.Ratio
240118_006	1633 ICAL 0.05PPB	☒	Auto	15951	335621	0.0500	1.2500	1.188199	0.0517	3.32	0.801611	21.540539	12.051783
240118_007	1633 ICAL 0.1PPB	☒	Auto	21109	330237	0.1000	1.2500	0.799000	0.0808	-19.20	0.801611	21.540539	12.051783
240118_008	1633 ICAL 0.25PPB	☒	Auto	49481	313428	0.2000	1.2500	0.986700	0.2478	23.92	0.801611	21.540539	12.051783
240118_009	1633 ICAL 0.50PPB	☒	Auto	90780	326480	0.5000	1.2500	0.695144	0.4615	-7.69	0.801611	21.540539	12.051783
240118_010	1633 ICAL 1.0PPB	☒	Auto	191533	328895	1.0000	1.2500	0.727939	1.0026	0.26	0.801611	21.540539	12.051783
240118_011	1633 ICAL 5.0PPB	☒	Auto	872492	312907	5.0000	1.2500	0.697085	4.9248	-1.50	0.801611	21.540539	12.051783
240118_012	1633 ICAL 10.0PPB	☒	Auto	1662292	294038	10.0000	1.2500	0.706666	10.0186	0.19	0.801611	21.540539	12.051783
240118_013	1633 ICAL 15.0PPB	☒	Auto	2421057	281877	15.0000	1.2500	0.715755	15.2383	1.59	0.801611	21.540539	12.051783
240118_014	1633 ICAL 20.0PPB	☒	Auto	3195955	286167	20.0000	1.2500	0.698008	19.8239	-0.88	0.801611	21.540539	12.051783
240118_016	1633 ICV 1.0PPB		Auto	160458	285641	1.0000	1.2500	----	0.9659	-3.41	0.801611	21.540539	12.051783
240118_017	1633 FTCA ICV 1.0PPB		ND(W/B)	----	304097	1.0000	1.2500	----	----	----	0.801611	21.540539	12.051783



Compound: PFDS

Curve Fit: Linear | Weighting: 1/C | Zero: Not Forced

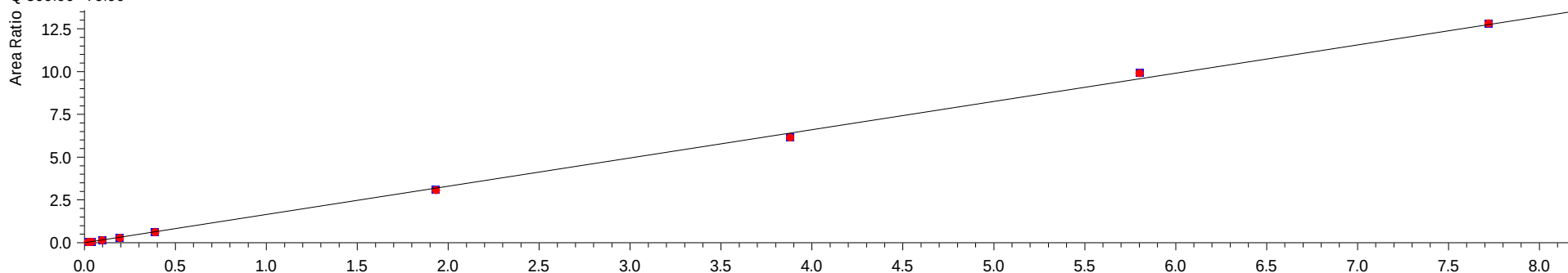
Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2

Q 599.00>79.90
R² 0.9990392 R Equation 0.9995195 $y = 1.650955x + 0.004118254$

Q 599.00>79.90



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☒	Auto	5065	117833	0.0483	2.5000	2.224960	0.0589	21.86	1.695221	12.179576	9.458813
240118_007	1633 ICAL 0.1PPB	☒	Auto	7754	118069	0.0970	2.5000	1.692570	0.0932	-3.91	1.695221	12.179576	9.458813
240118_008	1633 ICAL 0.25PPB	☒	Auto	18165	114171	0.2410	2.5000	1.650462	0.2347	-2.62	1.695221	12.179576	9.458813
240118_009	1633 ICAL 0.50PPB	☒	Auto	35775	121099	0.4830	2.5000	1.529096	0.4411	-8.67	1.695221	12.179576	9.458813
240118_010	1633 ICAL 1.0PPB	☒	Auto	77566	124480	0.9700	2.5000	1.605993	0.9373	-3.37	1.695221	12.179576	9.458813
240118_011	1633 ICAL 5.0PPB	☒	Auto	357453	116018	4.8300	2.5000	1.594733	4.6593	-3.53	1.695221	12.179576	9.458813
240118_012	1633 ICAL 10.0PPB	☒	Auto	693164	112442	9.7000	2.5000	1.588819	9.3287	-3.83	1.695221	12.179576	9.458813
240118_013	1633 ICAL 15.0PPB	☒	Auto	1031983	104055	14.5000	2.5000	1.709951	15.0119	3.53	1.695221	12.179576	9.458813
240118_014	1633 ICAL 20.0PPB	☒	Auto	1363851	106399	19.3000	2.5000	1.660403	19.4042	0.54	1.695221	12.179576	9.458813
240118_016	1633 ICV 1.0PPB		Auto	69073	105678	0.9700	2.5000	----	0.9835	1.39	1.695221	12.179576	9.458813
240118_017	1633 FTCA ICV 1.0PPB		ND(W/B)	----	114722	0.9700	2.5000	----	----	----	1.695221	12.179576	9.458813



Compound: PFTTrDA

Curve Fit: Linear | Weighting: 1/C | Zero: Not Forced

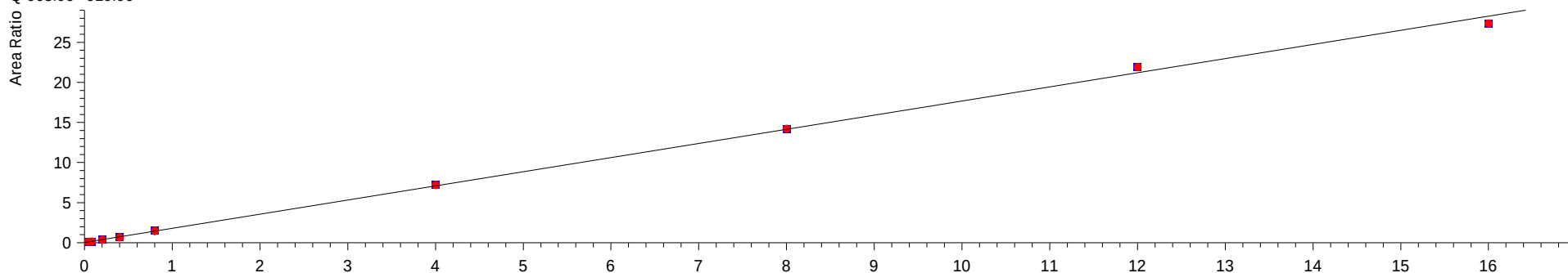
Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2

Q 663.00>619.00
R² 0.9991398
R Equation 0.9995698 $y = 1.763432x + 0.04368874$

Q 663.00>619.00



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc.Ratio
240118_006	1633 ICAL 0.05PPB	☒	Auto	16904	144376	0.0500	1.2500	2.926994	0.0520	4.05	1.990471	19.434343	4.217908
240118_007	1633 ICAL 0.1PPB	☒	Auto	25207	141033	0.1000	1.2500	2.234178	0.0957	-4.27	1.990471	19.434343	4.217908
240118_008	1633 ICAL 0.25PPB	☒	Auto	54014	133833	0.2500	1.2500	2.017977	0.2551	2.05	1.990471	19.434343	4.217908
240118_009	1633 ICAL 0.50PPB	☒	Auto	102058	146161	0.5000	1.2500	1.745642	0.4640	-7.20	1.990471	19.434343	4.217908
240118_010	1633 ICAL 1.0PPB	☒	Auto	209818	140054	1.0000	1.2500	1.872648	1.0310	3.10	1.990471	19.434343	4.217908
240118_011	1633 ICAL 5.0PPB	☒	Auto	938247	130195	5.0000	1.2500	1.801618	5.0773	1.55	1.990471	19.434343	4.217908
240118_012	1633 ICAL 10.0PPB	☒	Auto	1805435	126897	10.0000	1.2500	1.778445	10.0542	0.54	1.990471	19.434343	4.217908
240118_013	1633 ICAL 15.0PPB	☒	Auto	2690758	122751	15.0000	1.2500	1.826703	15.5072	3.38	1.990471	19.434343	4.217908
240118_014	1633 ICAL 20.0PPB	☒	Auto	3467914	126748	20.0000	1.2500	1.710039	19.3635	-3.18	1.990471	19.434343	4.217908
240118_016	1633 ICV 1.0PPB		Auto	176723	130145	1.0000	1.2500	----	0.9316	-6.84	1.990471	19.434343	4.217908
240118_017	1633 FTCA ICV 1.0PPB		ND(W/B)	----	125092	1.0000	1.2500	----	----	----	1.990471	19.434343	4.217908



Compound: 11-CI-PF3OUdS

Curve Fit: Linear | Weighting: 1/C | Zero: Not Forced

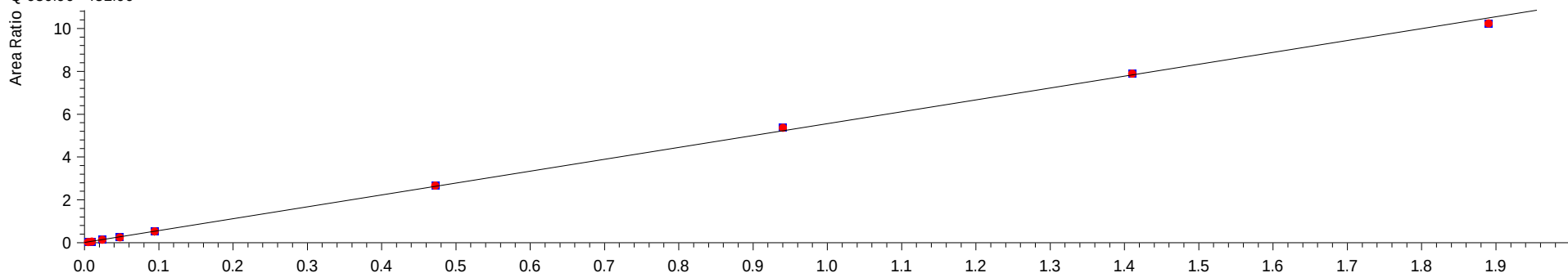
Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2

Q 630.90>451.00
R² 0.9994801 R Equation 0.9997400 $y = 5.546383x + 0.009454939$

Q 630.90>451.00



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc.Ratio
240118_006	1633 ICAL 0.05PPB	☒	Auto	22926	595312	0.0472	10.0000	8.158992	0.0524	10.99	5.963310	14.227572	6.506780
240118_007	1633 ICAL 0.1PPB	☒	Auto	33734	604622	0.0940	10.0000	5.935450	0.0835	-11.12	5.963310	14.227572	6.506780
240118_008	1633 ICAL 0.25PPB	☒	Auto	83986	588188	0.2360	10.0000	6.050316	0.2404	1.86	5.963310	14.227572	6.506780
240118_009	1633 ICAL 0.50PPB	☒	Auto	168194	654919	0.4720	10.0000	5.441016	0.4460	-5.51	5.963310	14.227572	6.506780
240118_010	1633 ICAL 1.0PPB	☒	Auto	342495	640534	0.9400	10.0000	5.688318	0.9470	0.75	5.963310	14.227572	6.506780
240118_011	1633 ICAL 5.0PPB	☒	Auto	1651817	618248	4.7200	10.0000	5.660533	4.8001	1.70	5.963310	14.227572	6.506780
240118_012	1633 ICAL 10.0PPB	☒	Auto	3212472	598128	9.4000	10.0000	5.713700	9.6665	2.84	5.963310	14.227572	6.506780
240118_013	1633 ICAL 15.0PPB	☒	Auto	4612445	583755	14.1000	10.0000	5.603786	14.2289	0.91	5.963310	14.227572	6.506780
240118_014	1633 ICAL 20.0PPB	☒	Auto	6168575	602434	18.9000	10.0000	5.417679	18.4444	-2.41	5.963310	14.227572	6.506780
240118_016	1633 ICV 1.0PPB		Auto	310994	617025	0.9400	10.0000	----	0.8917	-5.14	5.963310	14.227572	6.506780
240118_017	1633 FTCA ICV 1.0PPB		ND(W/B)	----	650567	0.9400	10.0000	----	----	----	5.963310	14.227572	6.506780



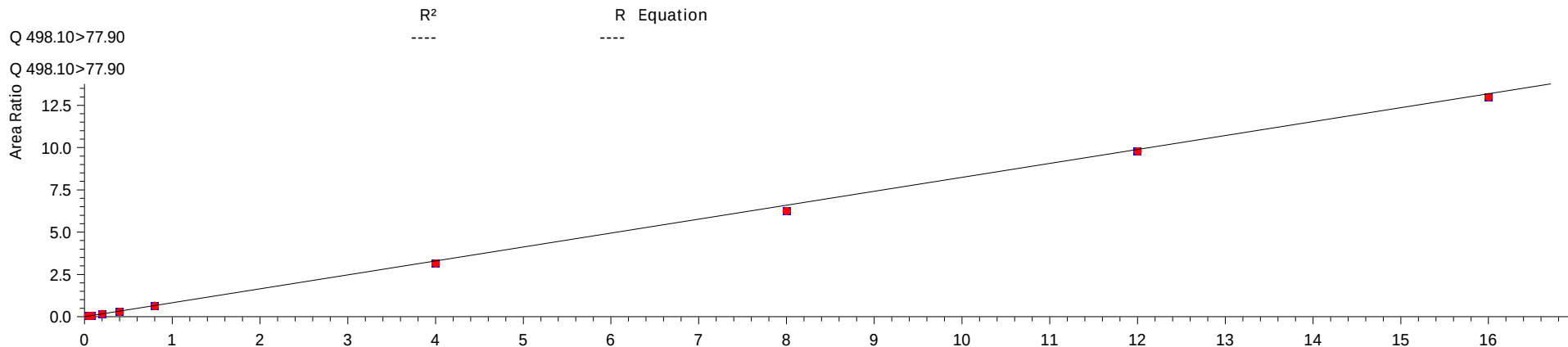
Compound: PFOSAm

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☑	M	12073	308563	0.1000	2.5000	0.978204	0.1187	18.71	0.824015	8.026985	8.026984
240118_007	1633 ICAL 0.1PPB	☑	M	20717	304301	0.2000	2.5000	0.850998	0.2065	3.27	0.824015	8.026985	8.026984
240118_008	1633 ICAL 0.25PPB	☑	M	48743	288124	0.5000	2.5000	0.845869	0.5133	2.65	0.824015	8.026985	8.026984
240118_009	1633 ICAL 0.50PPB	☑	M	93404	313170	1.0000	2.5000	0.745630	0.9049	-9.51	0.824015	8.026985	8.026984
240118_010	1633 ICAL 1.0PPB	☑	M	197052	309952	2.0000	2.5000	0.794687	1.9288	-3.56	0.824015	8.026985	8.026984
240118_011	1633 ICAL 5.0PPB	☑	M	919814	290803	10.0000	2.5000	0.790753	9.5963	-4.04	0.824015	8.026985	8.026984
240118_012	1633 ICAL 10.0PPB	☑	M	1754149	280036	20.0000	2.5000	0.783002	19.0046	-4.98	0.824015	8.026985	8.026984
240118_013	1633 ICAL 15.0PPB	☑	M	2599880	265772	30.0000	2.5000	0.815198	29.6790	-1.07	0.824015	8.026985	8.026984
240118_014	1633 ICAL 20.0PPB	☑	M	3534545	272125	40.0000	2.5000	0.811793	39.4067	-1.48	0.824015	8.026985	8.026984
240118_016	1633 ICV 1.0PPB		M	179763	263852	2.0000	2.5000	----	2.0670	3.35	0.824015	8.026985	8.026984
240118_017	1633 FTCA ICV 1.0PPB		ND(W/B)	----	280695	2.0000	2.5000	----	----	----	0.824015	8.026985	8.026984



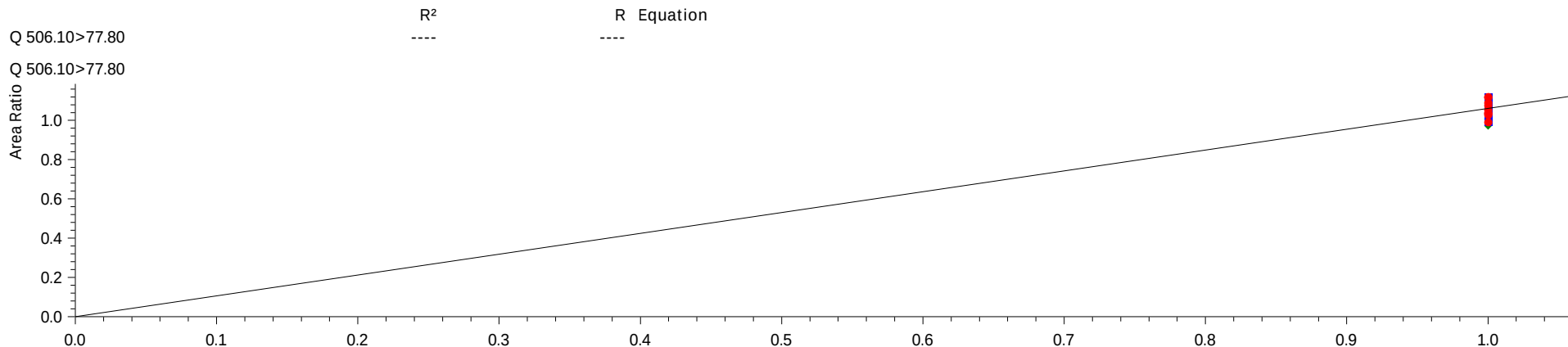
Compound: 13C8-PFOSAm

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2

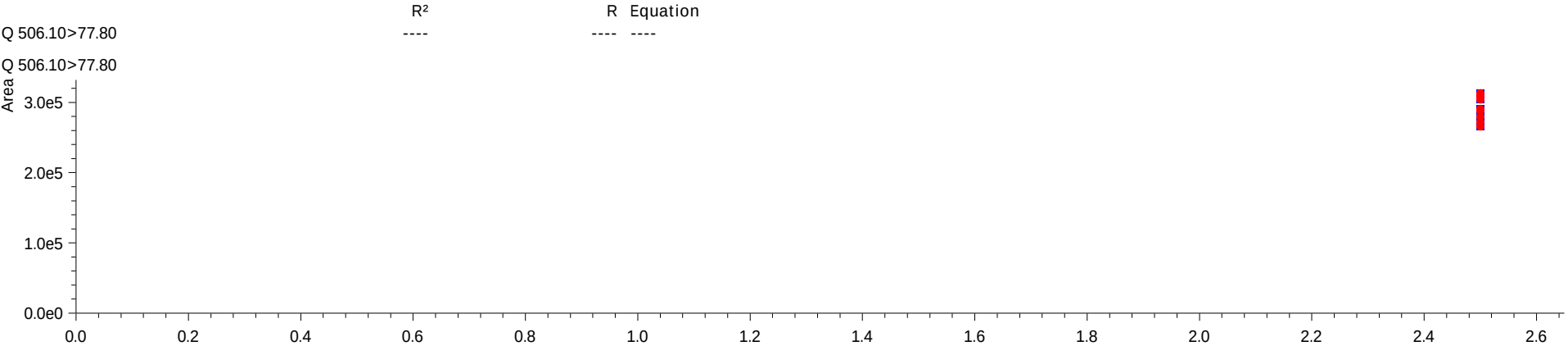


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc.Ratio
240118_006	1633 ICAL 0.05PPB	☒	Auto	308563	283185	2.5000	2.5000	1.089616	2.5667	2.67	1.061295	4.048974	4.048974
240118_007	1633 ICAL 0.1PPB	☒	Auto	304301	282518	2.5000	2.5000	1.077102	2.5372	1.49	1.061295	4.048974	4.048974
240118_008	1633 ICAL 0.25PPB	☒	Auto	288124	277483	2.5000	2.5000	1.038348	2.4459	-2.16	1.061295	4.048974	4.048974
240118_009	1633 ICAL 0.50PPB	☒	Auto	313170	279876	2.5000	2.5000	1.118961	2.6358	5.43	1.061295	4.048974	4.048974
240118_010	1633 ICAL 1.0PPB	☒	Auto	309952	298833	2.5000	2.5000	1.037211	2.4433	-2.27	1.061295	4.048974	4.048974
240118_011	1633 ICAL 5.0PPB	☒	Auto	290803	293425	2.5000	2.5000	0.991063	2.3346	-6.62	1.061295	4.048974	4.048974
240118_012	1633 ICAL 10.0PPB	☒	Auto	280036	272314	2.5000	2.5000	1.028358	2.4224	-3.10	1.061295	4.048974	4.048974
240118_013	1633 ICAL 15.0PPB	☒	Auto	265772	252372	2.5000	2.5000	1.053095	2.4807	-0.77	1.061295	4.048974	4.048974
240118_014	1633 ICAL 20.0PPB	☒	Auto	272125	243425	2.5000	2.5000	1.117898	2.6333	5.33	1.061295	4.048974	4.048974
240118_016	1633 ICV 1.0PPB		Auto	263852	271163	2.5000	2.5000	----	2.2921	-8.32	1.061295	4.048974	4.048974
240118_017	1633 FTCA ICV 1.0PPB		Auto	280695	278941	2.5000	2.5000	----	2.3704	-5.18	1.061295	4.048974	4.048974



Compound: 13C8-PFOSAm_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 0



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc. (ng/mL)
													RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☐	Auto	308563	308563	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_007	1633 ICAL 0.1PPB	☐	Auto	304301	304301	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_008	1633 ICAL 0.25PPB	☐	Auto	288124	288124	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_009	1633 ICAL 0.50PPB	☐	Auto	313170	313170	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_010	1633 ICAL 1.0PPB	☐	Auto	309952	309952	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_011	1633 ICAL 5.0PPB	☐	Auto	290803	290803	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_012	1633 ICAL 10.0PPB	☐	Auto	280036	280036	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_013	1633 ICAL 15.0PPB	☐	Auto	265772	265772	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_014	1633 ICAL 20.0PPB	☐	Auto	272125	272125	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_016	1633 ICV 1.0PPB		Auto	263852	263852	2.5000	2.5000	----	2.5000	0.00	----	----	----
240118_017	1633 FTCA ICV 1.0PPB		Auto	280695	280695	2.5000	2.5000	----	2.5000	0.00	----	----	----



Compound: PFTDA

Curve Fit: Linear | Weighting: 1/C | Zero: Not Forced

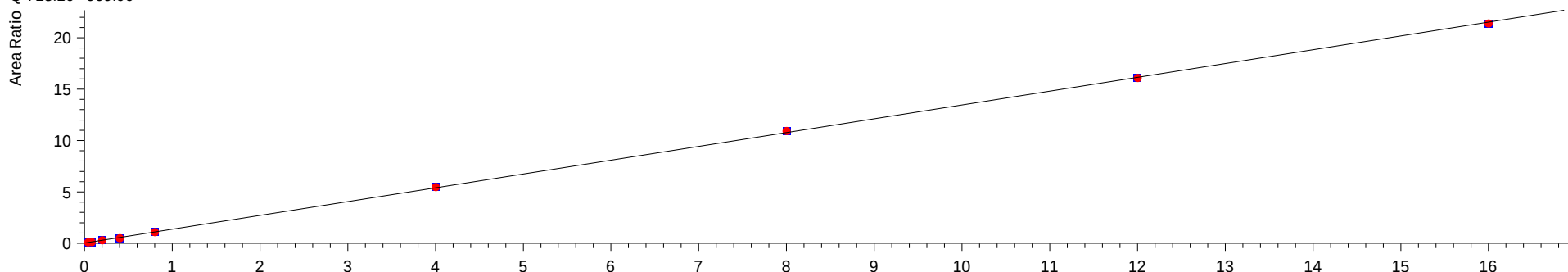
Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2

Q 713.10>669.00
R² 0.9998059 R Equation 0.9999030 $y = 1.343181x + 0.02987298$

Q 713.10>669.00



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☒	M	12918	144376	0.0500	1.2500	2.236897	0.0555	10.94	1.498423	19.896105	5.982474
240118_007	1633 ICAL 0.1PPB	☒	Auto	18542	141033	0.1000	1.2500	1.643397	0.0946	-5.45	1.498423	19.896105	5.982474
240118_008	1633 ICAL 0.25PPB	☒	Auto	40907	133833	0.2500	1.2500	1.528289	0.2567	2.66	1.498423	19.896105	5.982474
240118_009	1633 ICAL 0.50PPB	☒	Auto	75486	146161	0.5000	1.2500	1.291153	0.4528	-9.43	1.498423	19.896105	5.982474
240118_010	1633 ICAL 1.0PPB	☒	Auto	153669	140054	1.0000	1.2500	1.371511	0.9933	-0.67	1.498423	19.896105	5.982474
240118_011	1633 ICAL 5.0PPB	☒	Auto	713428	130195	5.0000	1.2500	1.369922	5.0717	1.43	1.498423	19.896105	5.982474
240118_012	1633 ICAL 10.0PPB	☒	Auto	1387467	126897	10.0000	1.2500	1.366726	10.1475	1.47	1.498423	19.896105	5.982474
240118_013	1633 ICAL 15.0PPB	☒	Auto	1974838	122751	15.0000	1.2500	1.340679	14.9443	-0.37	1.498423	19.896105	5.982474
240118_014	1633 ICAL 20.0PPB	☒	Auto	2711883	126748	20.0000	1.2500	1.337238	19.8837	-0.58	1.498423	19.896105	5.982474
240118_016	1633 ICV 1.0PPB		Auto	147427	130145	1.0000	1.2500	----	1.0264	2.64	1.498423	19.896105	5.982474
240118_017	1633 FTCA ICV 1.0PPB		ND(W/B)	----	125092	1.0000	1.2500	----	----	----	1.498423	19.896105	5.982474



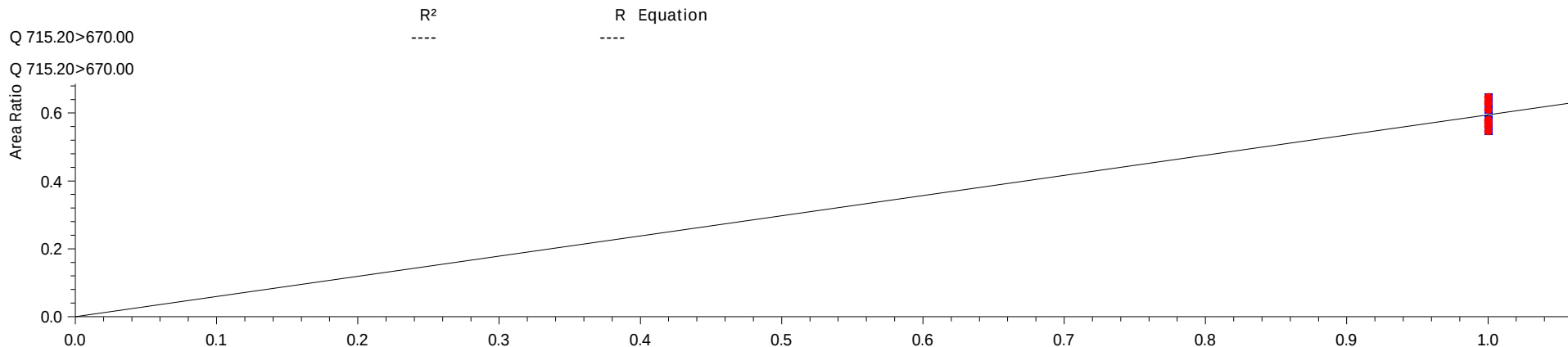
Compound: 13C2-PFTDA

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☒	Auto	144376	227340	1.2500	1.2500	0.635066	1.3341	6.73	0.595041	6.036633	6.036633
240118_007	1633 ICAL 0.1PPB	☒	Auto	141033	242916	1.2500	1.2500	0.580583	1.2196	-2.43	0.595041	6.036633	6.036633
240118_008	1633 ICAL 0.25PPB	☒	Auto	133833	235058	1.2500	1.2500	0.569363	1.1961	-4.32	0.595041	6.036633	6.036633
240118_009	1633 ICAL 0.50PPB	☒	Auto	146161	225855	1.2500	1.2500	0.647144	1.3595	8.76	0.595041	6.036633	6.036633
240118_010	1633 ICAL 1.0PPB	☒	Auto	140054	243243	1.2500	1.2500	0.575779	1.2095	-3.24	0.595041	6.036633	6.036633
240118_011	1633 ICAL 5.0PPB	☒	Auto	130195	237831	1.2500	1.2500	0.547428	1.1500	-8.00	0.595041	6.036633	6.036633
240118_012	1633 ICAL 10.0PPB	☒	Auto	126897	226144	1.2500	1.2500	0.561133	1.1788	-5.70	0.595041	6.036633	6.036633
240118_013	1633 ICAL 15.0PPB	☒	Auto	122751	201059	1.2500	1.2500	0.610522	1.2825	2.60	0.595041	6.036633	6.036633
240118_014	1633 ICAL 20.0PPB	☒	Auto	126748	201715	1.2500	1.2500	0.628352	1.3200	5.60	0.595041	6.036633	6.036633
240118_016	1633 ICV 1.0PPB		Auto	130145	214237	1.2500	1.2500	----	1.2761	2.09	0.595041	6.036633	6.036633
240118_017	1633 FTCA ICV 1.0PPB		Auto	125092	222912	1.2500	1.2500	----	1.1789	-5.69	0.595041	6.036633	6.036633



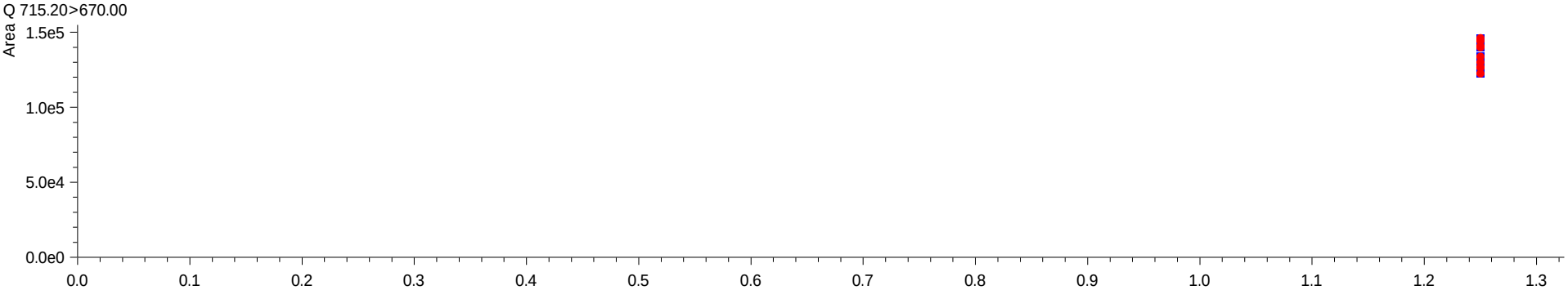
Compound: 13C2-PFTDA_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 0

Q 715.20>670.00

R²

R Equation

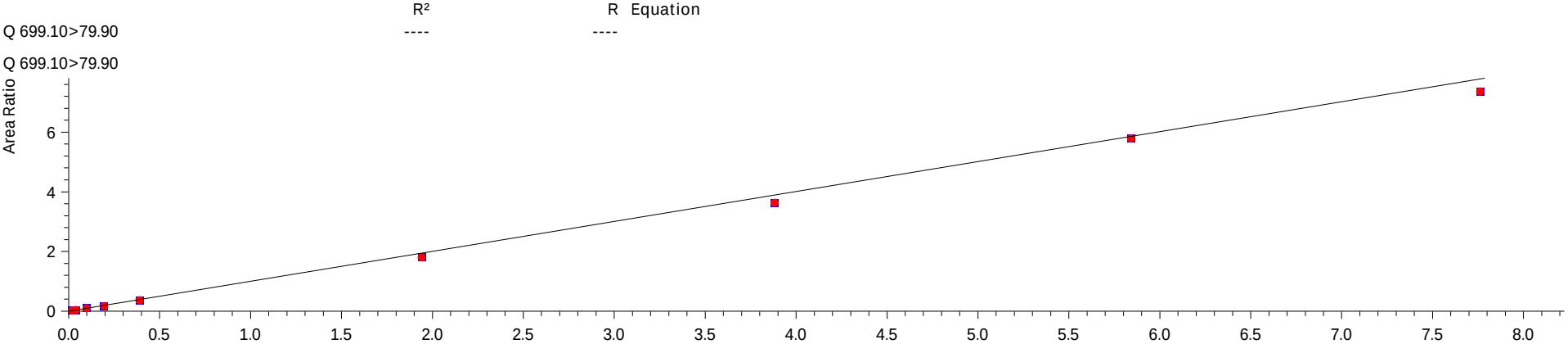


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc. (ng/mL)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☐	Auto	144376	144376	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----	----
240118_007	1633 ICAL 0.1PPB	☐	Auto	141033	141033	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----	----
240118_008	1633 ICAL 0.25PPB	☐	Auto	133833	133833	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----	----
240118_009	1633 ICAL 0.50PPB	☐	Auto	146161	146161	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----	----
240118_010	1633 ICAL 1.0PPB	☐	Auto	140054	140054	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----	----
240118_011	1633 ICAL 5.0PPB	☐	Auto	130195	130195	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----	----
240118_012	1633 ICAL 10.0PPB	☐	Auto	126897	126897	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----	----
240118_013	1633 ICAL 15.0PPB	☐	Auto	122751	122751	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----	----
240118_014	1633 ICAL 20.0PPB	☐	Auto	126748	126748	1.2500	1.2500	1.000000	1.2500	0.00	----	----	----	----
240118_016	1633 ICV 1.0PPB		Auto	130145	130145	1.2500	1.2500	----	1.2500	0.00	----	----	----	----
240118_017	1633 FTCA ICV 1.0PPB		Auto	125092	125092	1.2500	1.2500	----	1.2500	0.00	----	----	----	----



Compound: PFDoS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc.Ratio
240118_006	1633 ICAL 0.05PPB	☒	M	2919	117833	0.0485	2.5000	1.277066	0.0618	27.38	1.002596	11.431600	11.431602
240118_007	1633 ICAL 0.1PPB	☒	MI R1 R2	4787	118069	0.0970	2.5000	1.044897	0.1011	4.22	1.002596	11.431600	11.431602
240118_008	1633 ICAL 0.25PPB	☒	Auto	11601	114171	0.2430	2.5000	1.045357	0.2534	4.26	1.002596	11.431600	11.431602
240118_009	1633 ICAL 0.50PPB	☒	Auto	21129	121099	0.4850	2.5000	0.899355	0.4351	-10.30	1.002596	11.431600	11.431602
240118_010	1633 ICAL 1.0PPB	☒	Auto	45685	124480	0.9700	2.5000	0.945889	0.9151	-5.66	1.002596	11.431600	11.431602
240118_011	1633 ICAL 5.0PPB	☒	Auto	209550	116018	4.8500	2.5000	0.931025	4.5038	-7.14	1.002596	11.431600	11.431602
240118_012	1633 ICAL 10.0PPB	☒	Auto	409175	112442	9.7000	2.5000	0.937880	9.0739	-6.45	1.002596	11.431600	11.431602
240118_013	1633 ICAL 15.0PPB	☒	Auto	603262	104055	14.6000	2.5000	0.992732	14.4564	-0.98	1.002596	11.431600	11.431602
240118_014	1633 ICAL 20.0PPB	☒	Auto	783680	106399	19.4000	2.5000	0.949162	18.3661	-5.33	1.002596	11.431600	11.431602
240118_016	1633 ICV 1.0PPB		Auto	39640	105678	0.9700	2.5000	----	0.9353	-3.58	1.002596	11.431600	11.431602
240118_017	1633 FTCA ICV 1.0PPB		ND(W/B)	----	114722	0.9700	2.5000	----	----	----	1.002596	11.431600	11.431602



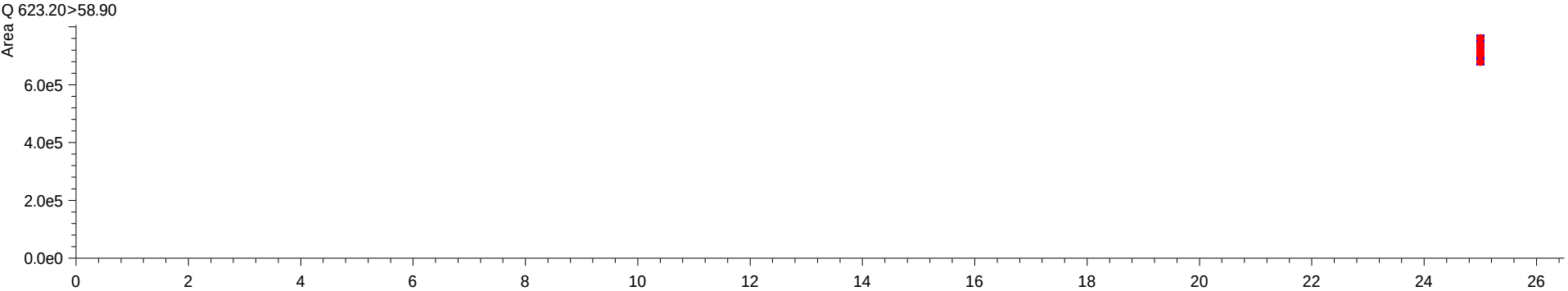
Compound: D7-MeFOSE_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 0

Q 623.20>58.90

R²

R Equation



											Conc. (ng/mL)		
Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☐	Auto	739936	739936	25.0000	25.0000	1.000000	25.0000	0.00	----	----	----
240118_007	1633 ICAL 0.1PPB	☐	Auto	720120	720120	25.0000	25.0000	1.000000	25.0000	0.00	----	----	----
240118_008	1633 ICAL 0.25PPB	☐	Auto	713433	713433	25.0000	25.0000	1.000000	25.0000	0.00	----	----	----
240118_009	1633 ICAL 0.50PPB	☐	Auto	761016	761016	25.0000	25.0000	1.000000	25.0000	0.00	----	----	----
240118_010	1633 ICAL 1.0PPB	☐	Auto	736922	736922	25.0000	25.0000	1.000000	25.0000	0.00	----	----	----
240118_011	1633 ICAL 5.0PPB	☐	Auto	704676	704676	25.0000	25.0000	1.000000	25.0000	0.00	----	----	----
240118_012	1633 ICAL 10.0PPB	☐	Auto	704481	704481	25.0000	25.0000	1.000000	25.0000	0.00	----	----	----
240118_013	1633 ICAL 15.0PPB	☐	Auto	679962	679962	25.0000	25.0000	1.000000	25.0000	0.00	----	----	----
240118_014	1633 ICAL 20.0PPB	☐	Auto	717715	717715	25.0000	25.0000	1.000000	25.0000	0.00	----	----	----
240118_016	1633 ICV 1.0PPB		Auto	664189	664189	25.0000	25.0000	----	25.0000	0.00	----	----	----
240118_017	1633 FTCA ICV 1.0PPB		Auto	702577	702577	25.0000	25.0000	----	25.0000	0.00	----	----	----



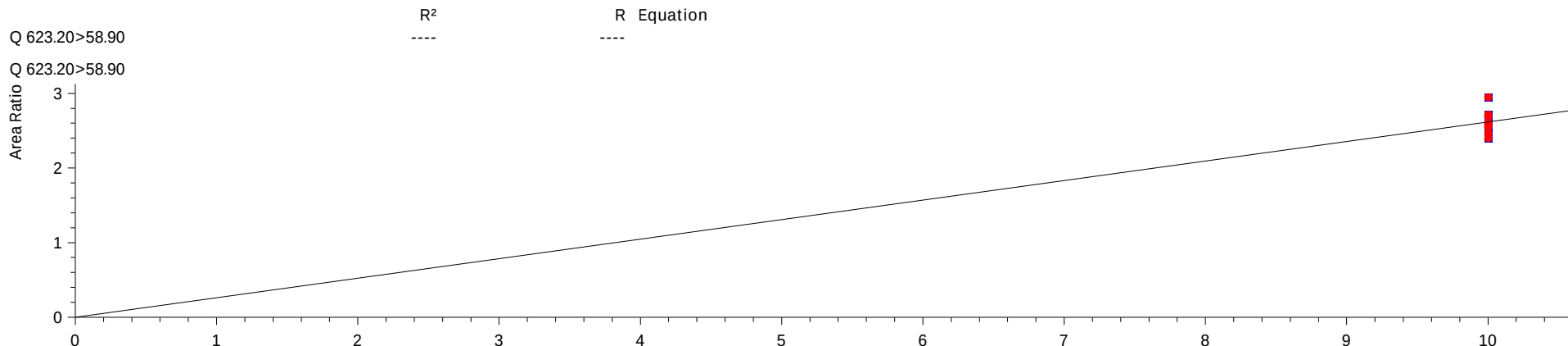
Compound: D7-MeFOSE

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc.Ratio
240118_006	1633 ICAL 0.05PPB	☒	Auto	739936	283185	25.0000	2.5000	0.261291	24.9648	-0.14	0.261659	6.089380	6.089380
240118_007	1633 ICAL 0.1PPB	☒	Auto	720120	282518	25.0000	2.5000	0.254894	24.3536	-2.59	0.261659	6.089380	6.089380
240118_008	1633 ICAL 0.25PPB	☒	Auto	713433	277483	25.0000	2.5000	0.257109	24.5653	-1.74	0.261659	6.089380	6.089380
240118_009	1633 ICAL 0.50PPB	☒	Auto	761016	279876	25.0000	2.5000	0.271912	25.9796	3.92	0.261659	6.089380	6.089380
240118_010	1633 ICAL 1.0PPB	☒	Auto	736922	298833	25.0000	2.5000	0.246600	23.5612	-5.76	0.261659	6.089380	6.089380
240118_011	1633 ICAL 5.0PPB	☒	Auto	704676	293425	25.0000	2.5000	0.240155	22.9454	-8.22	0.261659	6.089380	6.089380
240118_012	1633 ICAL 10.0PPB	☒	Auto	704481	272314	25.0000	2.5000	0.258702	24.7175	-1.13	0.261659	6.089380	6.089380
240118_013	1633 ICAL 15.0PPB	☒	Auto	679962	252372	25.0000	2.5000	0.269428	25.7423	2.97	0.261659	6.089380	6.089380
240118_014	1633 ICAL 20.0PPB	☒	Auto	717715	243425	25.0000	2.5000	0.294840	28.1702	12.68	0.261659	6.089380	6.089380
240118_016	1633 ICV 1.0PPB		Auto	664189	271163	25.0000	2.5000	----	23.4027	-6.39	0.261659	6.089380	6.089380
240118_017	1633 FTCA ICV 1.0PPB		Auto	702577	278941	25.0000	2.5000	----	24.0650	-3.74	0.261659	6.089380	6.089380



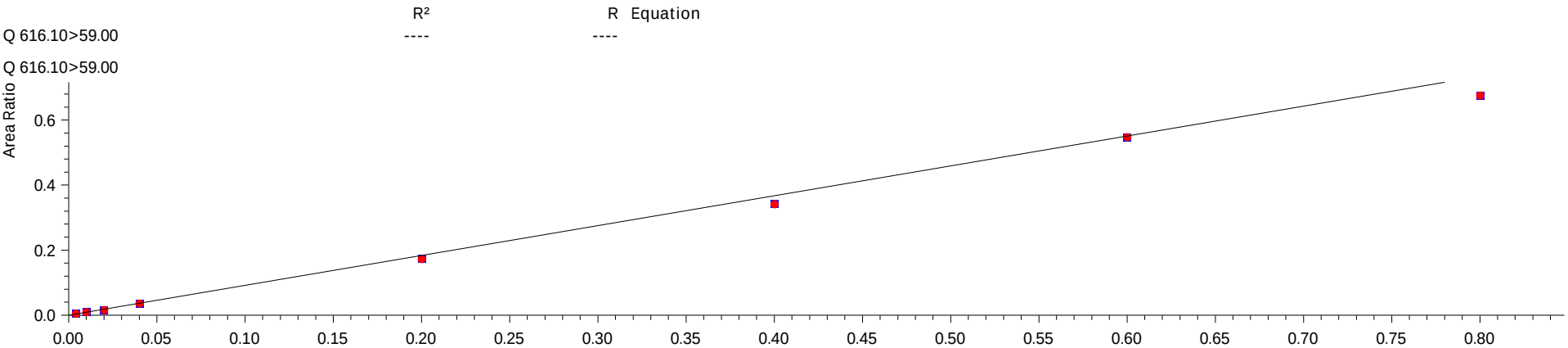
Compound: MeFOSE

Curve Fit: Mean RF | Weighting: 1/C | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 8

No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_007	1633 ICAL 0.1PPB	☒	M	3379	720120	0.1000	25.0000	1.173168	0.1278	27.78	0.918123	12.475473	12.475475
240118_008	1633 ICAL 0.25PPB	☒	M	6979	713433	0.2500	25.0000	0.978259	0.2664	6.55	0.918123	12.475473	12.475475
240118_009	1633 ICAL 0.50PPB	☒	M	12425	761016	0.5000	25.0000	0.816361	0.4446	-11.08	0.918123	12.475473	12.475475
240118_010	1633 ICAL 1.0PPB	☒	M	26578	736922	1.0000	25.0000	0.901660	0.9821	-1.79	0.918123	12.475473	12.475475
240118_011	1633 ICAL 5.0PPB	☒	M	121820	704676	5.0000	25.0000	0.864369	4.7073	-5.85	0.918123	12.475473	12.475475
240118_012	1633 ICAL 10.0PPB	☒	M	240406	704481	10.0000	25.0000	0.853133	9.2921	-7.08	0.918123	12.475473	12.475475
240118_013	1633 ICAL 15.0PPB	☒	M	372675	679962	15.0000	25.0000	0.913470	14.9240	-0.51	0.918123	12.475473	12.475475
240118_014	1633 ICAL 20.0PPB	☒	M	484926	717715	20.0000	25.0000	0.844566	18.3977	-8.01	0.918123	12.475473	12.475475
240118_016	1633 ICV 1.0PPB		M	23461	664189	1.0000	25.0000	----	0.9618	-3.82	0.918123	12.475473	12.475475
240118_017	1633 FTCA ICV 1.0PPB		ND(W/B)	----	702577	1.0000	25.0000	----	----	----	0.918123	12.475473	12.475475



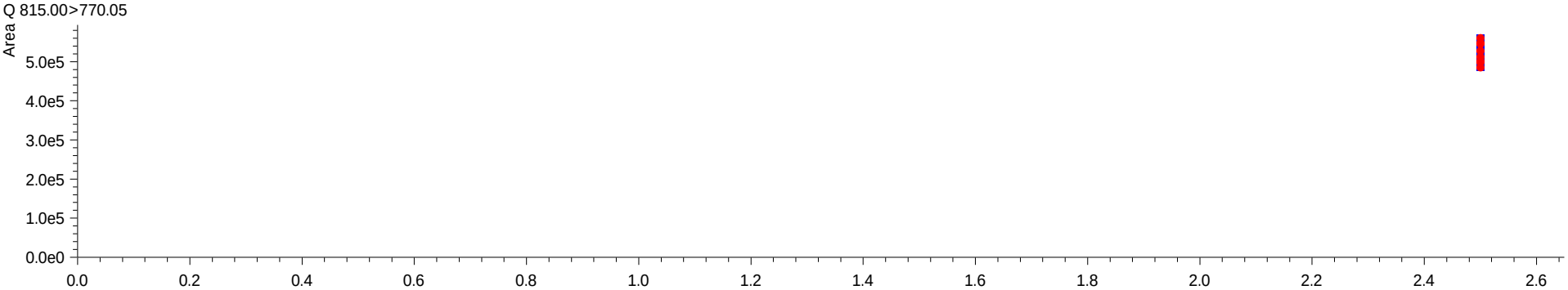
Compound: 13C2-PFHxDA_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 0

Q 815.00>770.05

R²-----

R Equation-----



													Conc. (ng/mL)
Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☐	Auto	560359	560359	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_007	1633 ICAL 0.1PPB	☐	Auto	546960	546960	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_008	1633 ICAL 0.25PPB	☐	Auto	527703	527703	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_009	1633 ICAL 0.50PPB	☐	Auto	546187	546187	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_010	1633 ICAL 1.0PPB	☐	Auto	548879	548879	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_011	1633 ICAL 5.0PPB	☐	Auto	512196	512196	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_012	1633 ICAL 10.0PPB	☐	Auto	498313	498313	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_013	1633 ICAL 15.0PPB	☐	Auto	485630	485630	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_014	1633 ICAL 20.0PPB	☐	Auto	502493	502493	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_016	1633 ICV 1.0PPB		Auto	474606	474606	2.5000	2.5000	----	2.5000	0.00	----	----	----
240118_017	1633 FTCA ICV 1.0PPB		Auto	503559	503559	2.5000	2.5000	----	2.5000	0.00	----	----	----



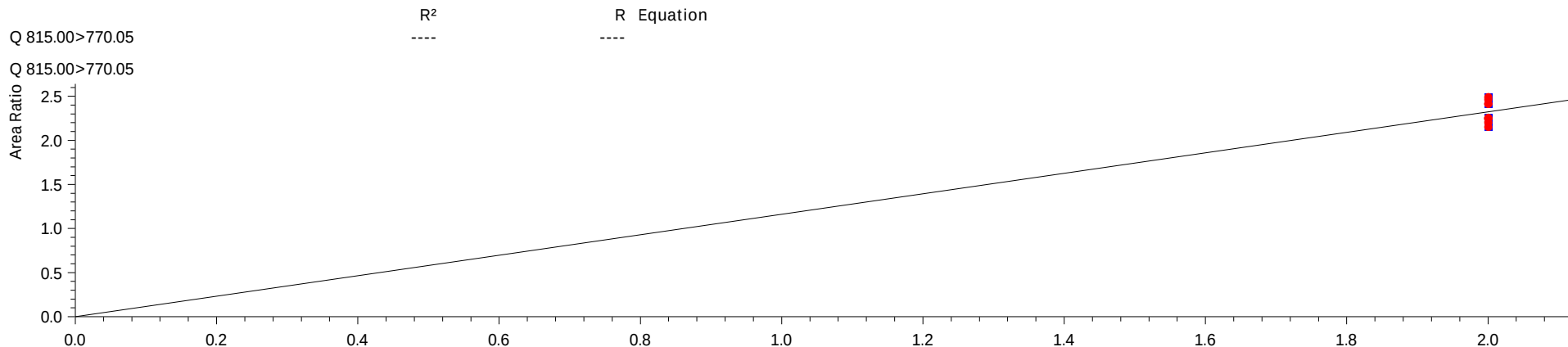
Compound: 13C2-PFHDA

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☒	Auto	560359	227340	2.5000	1.2500	1.232423	2.6536	6.14	1.161105	5.373085	5.373085
240118_007	1633 ICAL 0.1PPB	☒	Auto	546960	242916	2.5000	1.2500	1.125823	2.4240	-3.04	1.161105	5.373085	5.373085
240118_008	1633 ICAL 0.25PPB	☒	Auto	527703	235058	2.5000	1.2500	1.122497	2.4169	-3.33	1.161105	5.373085	5.373085
240118_009	1633 ICAL 0.50PPB	☒	Auto	546187	225855	2.5000	1.2500	1.209152	2.6034	4.14	1.161105	5.373085	5.373085
240118_010	1633 ICAL 1.0PPB	☒	Auto	548879	243243	2.5000	1.2500	1.128253	2.4293	-2.83	1.161105	5.373085	5.373085
240118_011	1633 ICAL 5.0PPB	☒	Auto	512196	237831	2.5000	1.2500	1.076808	2.3185	-7.26	1.161105	5.373085	5.373085
240118_012	1633 ICAL 10.0PPB	☒	Auto	498313	226144	2.5000	1.2500	1.101761	2.3722	-5.11	1.161105	5.373085	5.373085
240118_013	1633 ICAL 15.0PPB	☒	Auto	485630	201059	2.5000	1.2500	1.207679	2.6003	4.01	1.161105	5.373085	5.373085
240118_014	1633 ICAL 20.0PPB	☒	Auto	502493	201715	2.5000	1.2500	1.245550	2.6818	7.27	1.161105	5.373085	5.373085
240118_016	1633 ICV 1.0PPB		Auto	474606	214237	2.5000	1.2500	----	2.3849	-4.60	1.161105	5.373085	5.373085
240118_017	1633 FTCA ICV 1.0PPB		Auto	503559	222912	2.5000	1.2500	----	2.4320	-2.72	1.161105	5.373085	5.373085



Compound: PFHXDA

Curve Fit: Linear | Weighting: 1/C | Zero: Not Forced

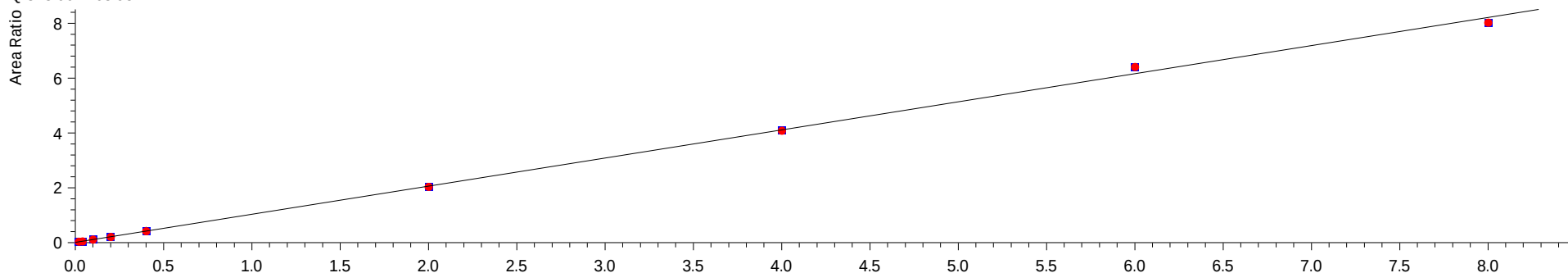
Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2

Q 813.00>768.95
R² 0.9992410
R Equation 0.9996204 $y = 1.025030x + 0.01143400$

Q 813.00>768.95

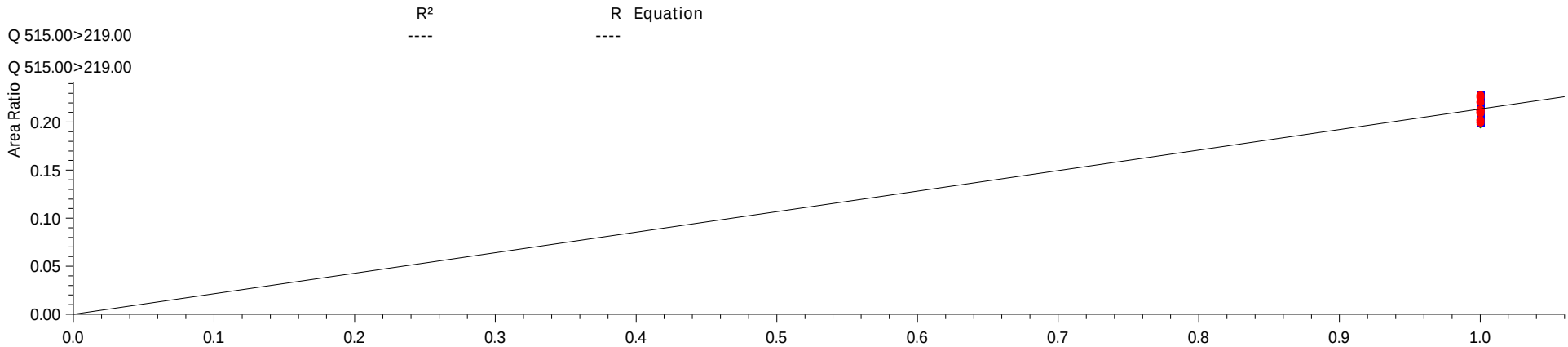


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc.Ratio
240118_006	1633 ICAL 0.05PPB	☒	Auto	19294	560359	0.0500	2.5000	1.721587	0.0561	12.18	1.143869	19.796866	6.377702
240118_007	1633 ICAL 0.1PPB	☒	Auto	26427	546960	0.1000	2.5000	1.207905	0.0900	-10.05	1.143869	19.796866	6.377702
240118_008	1633 ICAL 0.25PPB	☒	Auto	60426	527703	0.2500	2.5000	1.145084	0.2514	0.56	1.143869	19.796866	6.377702
240118_009	1633 ICAL 0.50PPB	☒	Auto	114442	546187	0.5000	2.5000	1.047649	0.4831	-3.37	1.143869	19.796866	6.377702
240118_010	1633 ICAL 1.0PPB	☒	Auto	233309	548879	1.0000	2.5000	1.062663	1.0088	0.88	1.143869	19.796866	6.377702
240118_011	1633 ICAL 5.0PPB	☒	Auto	1043205	512196	5.0000	2.5000	1.018365	4.9396	-1.21	1.143869	19.796866	6.377702
240118_012	1633 ICAL 10.0PPB	☒	Auto	2034708	498313	10.0000	2.5000	1.020798	9.9308	-0.69	1.143869	19.796866	6.377702
240118_013	1633 ICAL 15.0PPB	☒	Auto	3111088	485630	15.0000	2.5000	1.067715	15.5968	3.98	1.143869	19.796866	6.377702
240118_014	1633 ICAL 20.0PPB	☒	Auto	4032238	502493	20.0000	2.5000	1.003058	19.5434	-2.28	1.143869	19.796866	6.377702
240118_016	1633 ICV 1.0PPB		Auto	206805	474606	1.0000	2.5000	----	1.0349	3.49	1.143869	19.796866	6.377702
240118_017	1633 FTCA ICV 1.0PPB		ND(W/B)	----	503559	1.0000	2.5000	----	----	----	1.143869	19.796866	6.377702



Compound: D3-MeFOSA

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 2

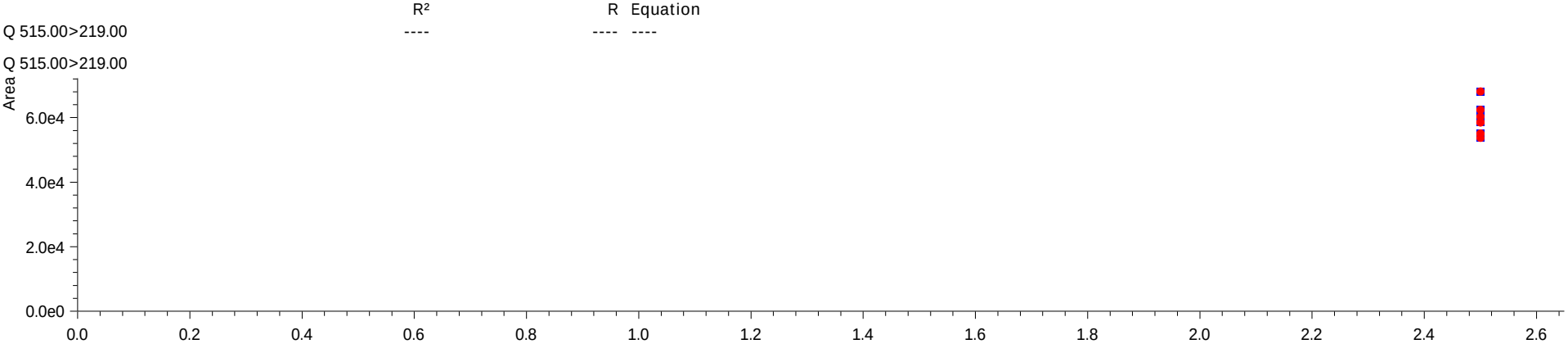


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc.Ratio
240118_006	1633 ICAL 0.05PPB	☒	Auto	60326	283185	2.5000	2.5000	0.213026	2.4918	-0.33	0.213725	4.591228	4.591228
240118_007	1633 ICAL 0.1PPB	☒	Auto	62455	282518	2.5000	2.5000	0.221064	2.5858	3.43	0.213725	4.591228	4.591228
240118_008	1633 ICAL 0.25PPB	☒	Auto	58544	277483	2.5000	2.5000	0.210982	2.4679	-1.28	0.213725	4.591228	4.591228
240118_009	1633 ICAL 0.50PPB	☒	Auto	58649	279876	2.5000	2.5000	0.209554	2.4512	-1.95	0.213725	4.591228	4.591228
240118_010	1633 ICAL 1.0PPB	☒	Auto	68121	298833	2.5000	2.5000	0.227957	2.6665	6.66	0.213725	4.591228	4.591228
240118_011	1633 ICAL 5.0PPB	☒	Auto	58592	293425	2.5000	2.5000	0.199682	2.3357	-6.57	0.213725	4.591228	4.591228
240118_012	1633 ICAL 10.0PPB	☒	Auto	55039	272314	2.5000	2.5000	0.202115	2.3642	-5.43	0.213725	4.591228	4.591228
240118_013	1633 ICAL 15.0PPB	☒	Auto	53740	252372	2.5000	2.5000	0.212940	2.4908	-0.37	0.213725	4.591228	4.591228
240118_014	1633 ICAL 20.0PPB	☒	Auto	55065	243425	2.5000	2.5000	0.226209	2.6460	5.84	0.213725	4.591228	4.591228
240118_016	1633 ICV 1.0PPB		Auto	53519	271163	2.5000	2.5000	----	2.3087	-7.65	0.213725	4.591228	4.591228
240118_017	1633 FTCA ICV 1.0PPB		Auto	58296	278941	2.5000	2.5000	----	2.4446	-2.22	0.213725	4.591228	4.591228



Compound: D3-MeFOSA_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 0



												Conc. (ng/mL)	
Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☐	Auto	60326	60326	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_007	1633 ICAL 0.1PPB	☐	Auto	62455	62455	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_008	1633 ICAL 0.25PPB	☐	Auto	58544	58544	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_009	1633 ICAL 0.50PPB	☐	Auto	58649	58649	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_010	1633 ICAL 1.0PPB	☐	Auto	68121	68121	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_011	1633 ICAL 5.0PPB	☐	Auto	58592	58592	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_012	1633 ICAL 10.0PPB	☐	Auto	55039	55039	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_013	1633 ICAL 15.0PPB	☐	Auto	53740	53740	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_014	1633 ICAL 20.0PPB	☐	Auto	55065	55065	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_016	1633 ICV 1.0PPB		Auto	53519	53519	2.5000	2.5000	----	2.5000	0.00	----	----	----
240118_017	1633 FTCA ICV 1.0PPB		Auto	58296	58296	2.5000	2.5000	----	2.5000	0.00	----	----	----



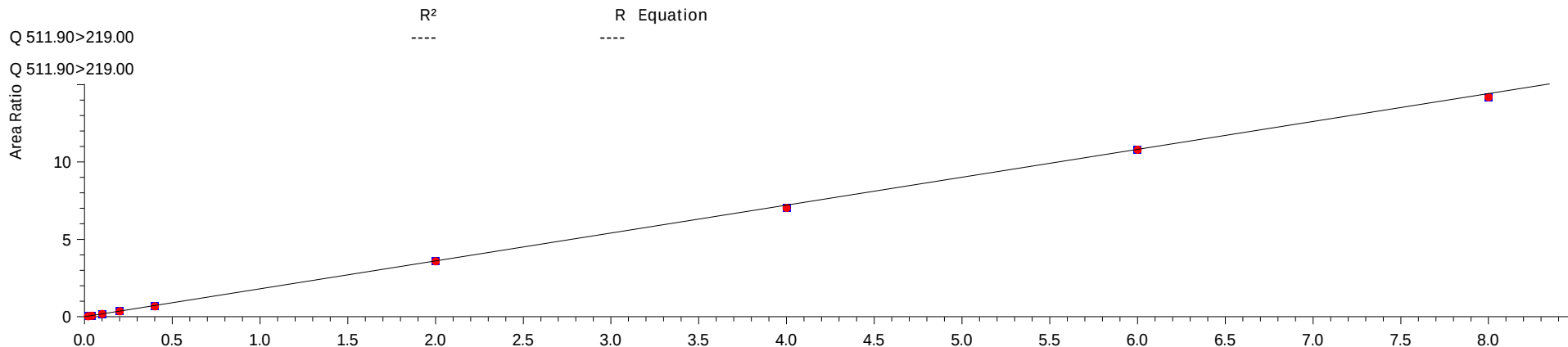
Compound: MeFOSA

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2

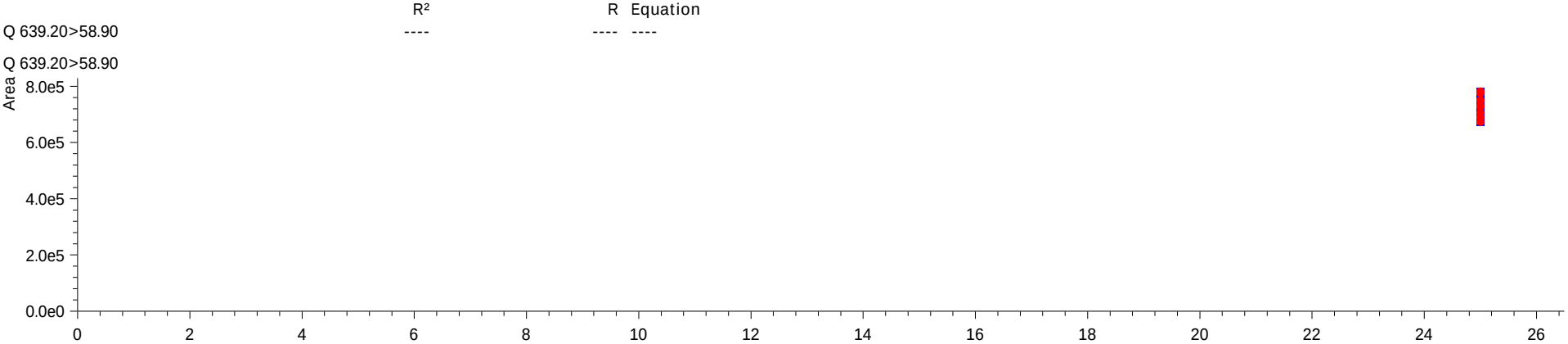


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	Conc.Ratio
240118_006	1633 ICAL 0.05PPB	☒	M	2491	60326	0.0500	2.5000	2.064446	0.0573	14.55	1.802158	6.239343	6.239342
240118_007	1633 ICAL 0.1PPB	☒	M	4164	62455	0.1000	2.5000	1.666954	0.0925	-7.50	1.802158	6.239343	6.239342
240118_008	1633 ICAL 0.25PPB	☒	M	10796	58544	0.2500	2.5000	1.844140	0.2558	2.33	1.802158	6.239343	6.239342
240118_009	1633 ICAL 0.50PPB	☒	M	21243	58649	0.5000	2.5000	1.811056	0.5025	0.49	1.802158	6.239343	6.239342
240118_010	1633 ICAL 1.0PPB	☒	M	46422	68121	1.0000	2.5000	1.703658	0.9453	-5.47	1.802158	6.239343	6.239342
240118_011	1633 ICAL 5.0PPB	☒	M	210164	58592	5.0000	2.5000	1.793464	4.9759	-0.48	1.802158	6.239343	6.239342
240118_012	1633 ICAL 10.0PPB	☒	M	387762	55039	10.0000	2.5000	1.761320	9.7734	-2.27	1.802158	6.239343	6.239342
240118_013	1633 ICAL 15.0PPB	☒	M	580448	53740	15.0000	2.5000	1.800171	14.9835	-0.11	1.802158	6.239343	6.239342
240118_014	1633 ICAL 20.0PPB	☒	M	781577	55065	20.0000	2.5000	1.774213	19.6899	-1.55	1.802158	6.239343	6.239342
240118_016	1633 ICV 1.0PPB		M	36906	53519	1.0000	2.5000	----	0.9566	-4.34	1.802158	6.239343	6.239342
240118_017	1633 FTCA ICV 1.0PPB		ND(W/B)	----	58296	1.0000	2.5000	----	----	----	1.802158	6.239343	6.239342



Compound: D9-EtFOSE_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 0



												Conc. (ng/mL)	
Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☐	Auto	750458	750458	25.0000	25.0000	1.000000	25.0000	0.00	----	----	----
240118_007	1633 ICAL 0.1PPB	☐	Auto	749002	749002	25.0000	25.0000	1.000000	25.0000	0.00	----	----	----
240118_008	1633 ICAL 0.25PPB	☐	Auto	727751	727751	25.0000	25.0000	1.000000	25.0000	0.00	----	----	----
240118_009	1633 ICAL 0.50PPB	☐	Auto	781729	781729	25.0000	25.0000	1.000000	25.0000	0.00	----	----	----
240118_010	1633 ICAL 1.0PPB	☐	Auto	776012	776012	25.0000	25.0000	1.000000	25.0000	0.00	----	----	----
240118_011	1633 ICAL 5.0PPB	☐	Auto	732770	732770	25.0000	25.0000	1.000000	25.0000	0.00	----	----	----
240118_012	1633 ICAL 10.0PPB	☐	Auto	689895	689895	25.0000	25.0000	1.000000	25.0000	0.00	----	----	----
240118_013	1633 ICAL 15.0PPB	☐	Auto	673693	673693	25.0000	25.0000	1.000000	25.0000	0.00	----	----	----
240118_014	1633 ICAL 20.0PPB	☐	Auto	706883	706883	25.0000	25.0000	1.000000	25.0000	0.00	----	----	----
240118_016	1633 ICV 1.0PPB		Auto	658737	658737	25.0000	25.0000	----	25.0000	0.00	----	----	----
240118_017	1633 FTCA ICV 1.0PPB		Auto	699259	699259	25.0000	25.0000	----	25.0000	0.00	----	----	----



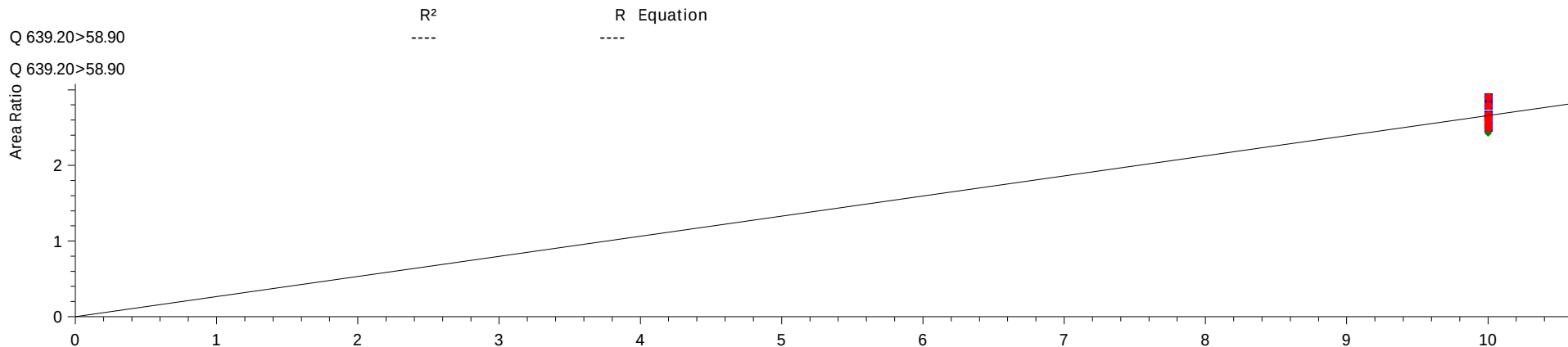
Compound: D9-EtFOSE

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2

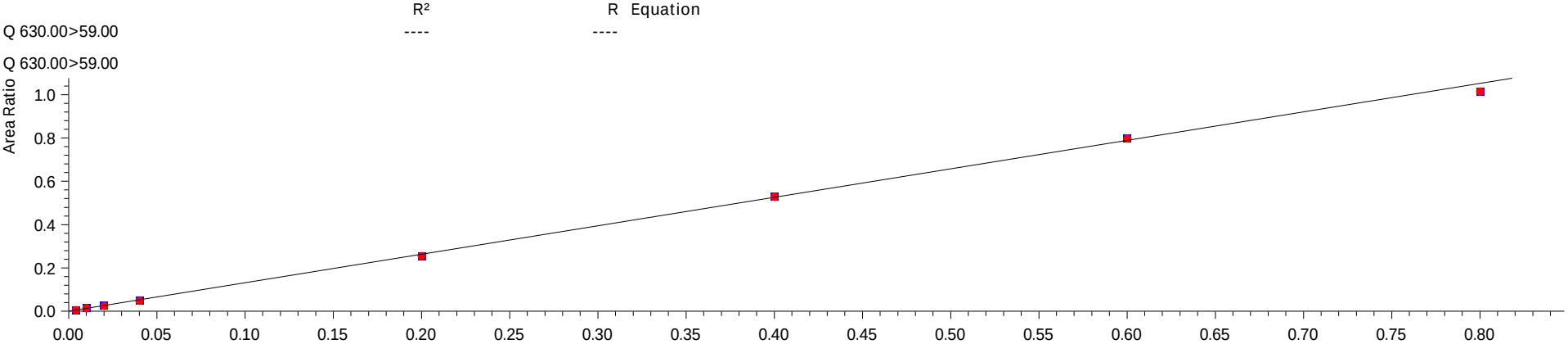


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☒	Auto	750458	283185	25.0000	2.5000	0.265006	24.9296	-0.28	0.265755	4.709062	4.709062
240118_007	1633 ICAL 0.1PPB	☒	Auto	749002	282518	25.0000	2.5000	0.265117	24.9399	-0.24	0.265755	4.709062	4.709062
240118_008	1633 ICAL 0.25PPB	☒	Auto	727751	277483	25.0000	2.5000	0.262269	24.6721	-1.31	0.265755	4.709062	4.709062
240118_009	1633 ICAL 0.50PPB	☒	Auto	781729	279876	25.0000	2.5000	0.279313	26.2754	5.10	0.265755	4.709062	4.709062
240118_010	1633 ICAL 1.0PPB	☒	Auto	776012	298833	25.0000	2.5000	0.259681	24.4286	-2.29	0.265755	4.709062	4.709062
240118_011	1633 ICAL 5.0PPB	☒	Auto	732770	293425	25.0000	2.5000	0.249730	23.4925	-6.03	0.265755	4.709062	4.709062
240118_012	1633 ICAL 10.0PPB	☒	Auto	689895	272314	25.0000	2.5000	0.253346	23.8326	-4.67	0.265755	4.709062	4.709062
240118_013	1633 ICAL 15.0PPB	☒	Auto	673693	252372	25.0000	2.5000	0.266944	25.1119	0.45	0.265755	4.709062	4.709062
240118_014	1633 ICAL 20.0PPB	☒	Auto	706883	243425	25.0000	2.5000	0.290390	27.3174	9.27	0.265755	4.709062	4.709062
240118_016	1633 ICV 1.0PPB		Auto	658737	271163	25.0000	2.5000	----	22.8528	-8.59	0.265755	4.709062	4.709062
240118_017	1633 FTCA ICV 1.0PPB		Auto	699259	278941	25.0000	2.5000	----	23.5822	-5.67	0.265755	4.709062	4.709062



Compound: EtFOSE

Curve Fit: Mean RF | Weighting: 1/C | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 8
No. of Control Points: 2

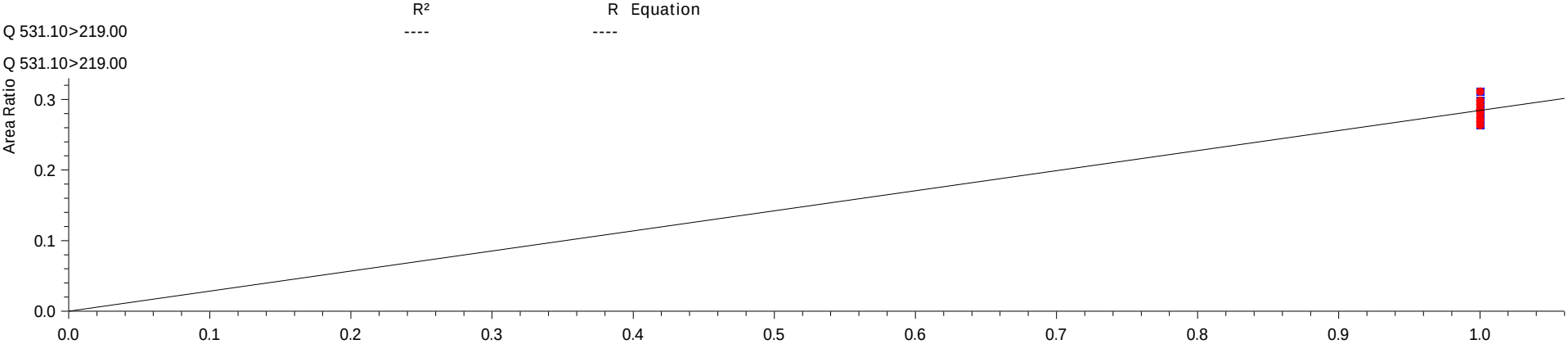


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_007	1633 ICAL 0.1PPB	☒	M	4233	749002	0.1000	25.0000	1.412878	0.1074	7.41	1.315363	5.864919	5.864919
240118_008	1633 ICAL 0.25PPB	☒	M	10471	727751	0.2500	25.0000	1.438857	0.2735	9.39	1.315363	5.864919	5.864919
240118_009	1633 ICAL 0.50PPB	☒	M	19620	781729	0.5000	25.0000	1.254891	0.4770	-4.60	1.315363	5.864919	5.864919
240118_010	1633 ICAL 1.0PPB	☒	M	37832	776012	1.0000	25.0000	1.218806	0.9266	-7.34	1.315363	5.864919	5.864919
240118_011	1633 ICAL 5.0PPB	☒	M	187022	732770	5.0000	25.0000	1.276126	4.8509	-2.98	1.315363	5.864919	5.864919
240118_012	1633 ICAL 10.0PPB	☒	M	365015	689895	10.0000	25.0000	1.322719	10.0559	0.56	1.315363	5.864919	5.864919
240118_013	1633 ICAL 15.0PPB	☒	M	537366	673693	15.0000	25.0000	1.329403	15.1601	1.07	1.315363	5.864919	5.864919
240118_014	1633 ICAL 20.0PPB	☒	M	717754	706883	20.0000	25.0000	1.269224	19.2985	-3.51	1.315363	5.864919	5.864919
240118_016	1633 ICV 1.0PPB		M	34456	658737	1.0000	25.0000	----	0.9941	-0.59	1.315363	5.864919	5.864919
240118_017	1633 FTCA ICV 1.0PPB		ND(W/B)	----	699259	1.0000	25.0000	----	----	----	1.315363	5.864919	5.864919



Compound: D5-EtFOSAm

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 2

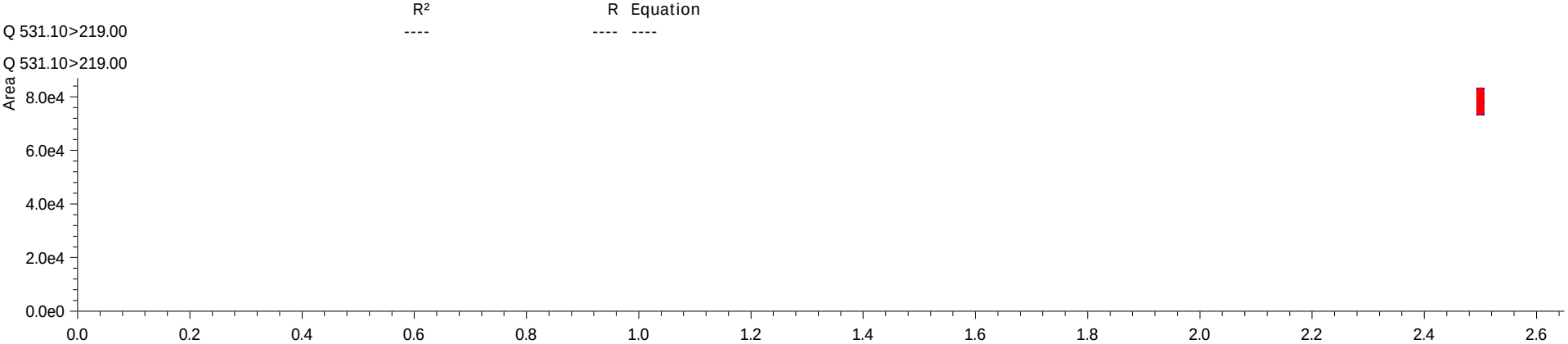


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☒	Auto	79483	283185	2.5000	2.5000	0.280675	2.4659	-1.36	0.284555	5.268710	5.268710
240118_007	1633 ICAL 0.1PPB	☒	Auto	80456	282518	2.5000	2.5000	0.284781	2.5020	0.08	0.284555	5.268710	5.268710
240118_008	1633 ICAL 0.25PPB	☒	Auto	79387	277483	2.5000	2.5000	0.286097	2.5135	0.54	0.284555	5.268710	5.268710
240118_009	1633 ICAL 0.50PPB	☒	Auto	82004	279876	2.5000	2.5000	0.293000	2.5742	2.97	0.284555	5.268710	5.268710
240118_010	1633 ICAL 1.0PPB	☒	Auto	80394	298833	2.5000	2.5000	0.269026	2.3636	-5.46	0.284555	5.268710	5.268710
240118_011	1633 ICAL 5.0PPB	☒	Auto	77332	293425	2.5000	2.5000	0.263548	2.3154	-7.38	0.284555	5.268710	5.268710
240118_012	1633 ICAL 10.0PPB	☒	Auto	74601	272314	2.5000	2.5000	0.273951	2.4068	-3.73	0.284555	5.268710	5.268710
240118_013	1633 ICAL 15.0PPB	☒	Auto	75346	252372	2.5000	2.5000	0.298551	2.6230	4.92	0.284555	5.268710	5.268710
240118_014	1633 ICAL 20.0PPB	☒	Auto	75793	243425	2.5000	2.5000	0.311362	2.7355	9.42	0.284555	5.268710	5.268710
240118_016	1633 ICV 1.0PPB		Auto	72597	271163	2.5000	2.5000	----	2.3521	-5.91	0.284555	5.268710	5.268710
240118_017	1633 FTCA ICV 1.0PPB		Auto	73976	278941	2.5000	2.5000	----	2.3300	-6.80	0.284555	5.268710	5.268710



Compound: D5-EtFOSAm_IS

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 0



													Conc. (ng/mL)
Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☐	Auto	79483	79483	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_007	1633 ICAL 0.1PPB	☐	Auto	80456	80456	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_008	1633 ICAL 0.25PPB	☐	Auto	79387	79387	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_009	1633 ICAL 0.50PPB	☐	Auto	82004	82004	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_010	1633 ICAL 1.0PPB	☐	Auto	80394	80394	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_011	1633 ICAL 5.0PPB	☐	Auto	77332	77332	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_012	1633 ICAL 10.0PPB	☐	Auto	74601	74601	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_013	1633 ICAL 15.0PPB	☐	Auto	75346	75346	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_014	1633 ICAL 20.0PPB	☐	Auto	75793	75793	2.5000	2.5000	1.000000	2.5000	0.00	----	----	----
240118_016	1633 ICV 1.0PPB		Auto	72597	72597	2.5000	2.5000	----	2.5000	0.00	----	----	----
240118_017	1633 FTCA ICV 1.0PPB		Auto	73976	73976	2.5000	2.5000	----	2.5000	0.00	----	----	----



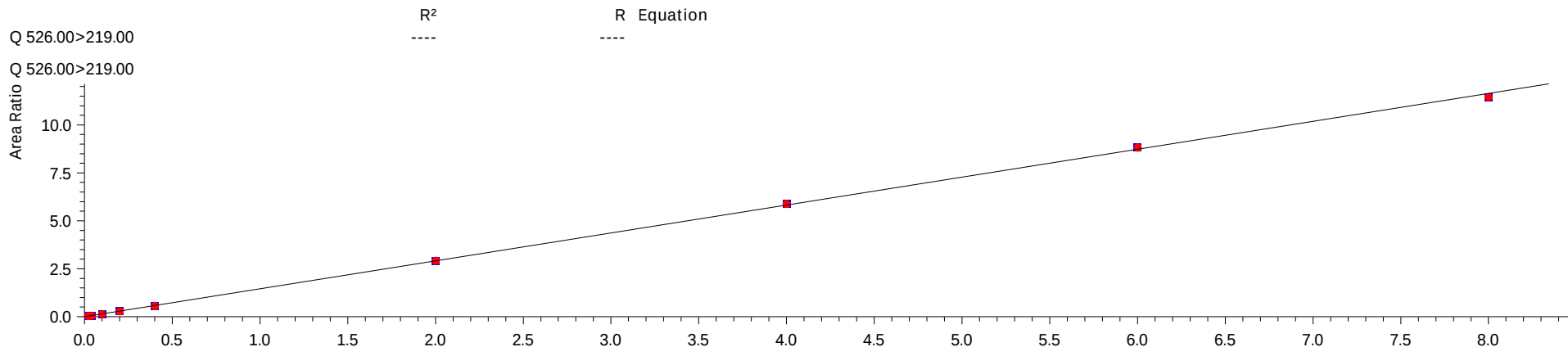
Compound: EtFOSAm

Curve Fit: Mean RF | Weighting: None | Zero: Not Forced

Quantitative Method: Internal Standard

No. of Calibration Points: 9

No. of Control Points: 2

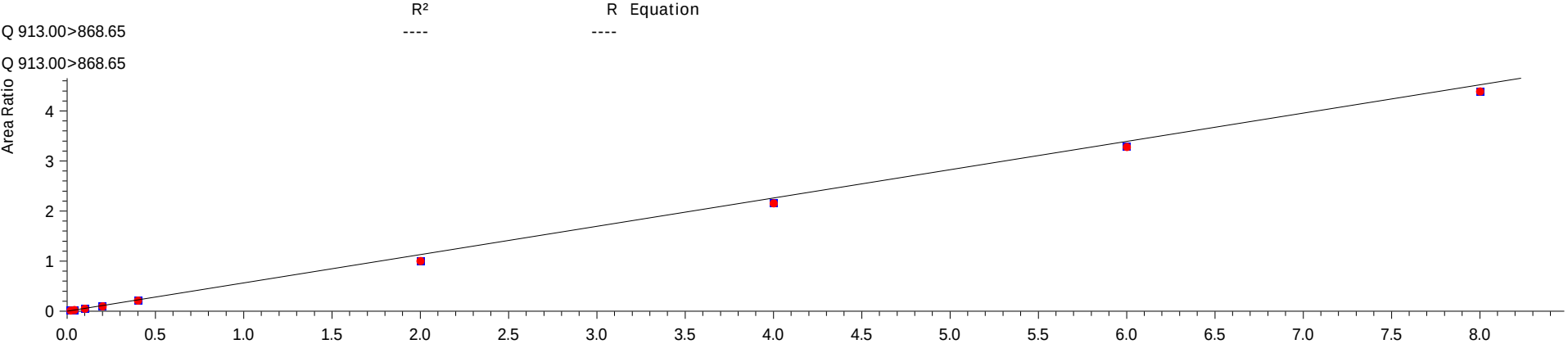


Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☒	M	2813	79483	0.0500	2.5000	1.769312	0.0608	21.57	1.455430	8.870478	8.870477
240118_007	1633 ICAL 0.1PPB	☒	M	4199	80456	0.1000	2.5000	1.304690	0.0896	-10.36	1.455430	8.870478	8.870477
240118_008	1633 ICAL 0.25PPB	☒	M	10878	79387	0.2500	2.5000	1.370228	0.2354	-5.85	1.455430	8.870478	8.870477
240118_009	1633 ICAL 0.50PPB	☒	M	23101	82004	0.5000	2.5000	1.408565	0.4839	-3.22	1.455430	8.870478	8.870477
240118_010	1633 ICAL 1.0PPB	☒	M	45505	80394	1.0000	2.5000	1.415079	0.9723	-2.77	1.455430	8.870478	8.870477
240118_011	1633 ICAL 5.0PPB	☒	M	225568	77332	5.0000	2.5000	1.458449	5.0104	0.21	1.455430	8.870478	8.870477
240118_012	1633 ICAL 10.0PPB	☒	M	439049	74601	10.0000	2.5000	1.471334	10.1093	1.09	1.455430	8.870478	8.870477
240118_013	1633 ICAL 15.0PPB	☒	M	664270	75346	15.0000	2.5000	1.469376	15.1437	0.96	1.455430	8.870478	8.870477
240118_014	1633 ICAL 20.0PPB	☒	M	868189	75793	20.0000	2.5000	1.431836	19.6758	-1.62	1.455430	8.870478	8.870477
240118_016	1633 ICV 1.0PPB		M	43052	72597	1.0000	2.5000	----	1.0187	1.87	1.455430	8.870478	8.870477
240118_017	1633 FTCA ICV 1.0PPB		ND(W/B)	----	73976	1.0000	2.5000	----	----	----	1.455430	8.870478	8.870477



Compound: PFODA

Curve Fit: Mean RF | Weighting: 1/C | Zero: Not Forced
Quantitative Method: Internal Standard
No. of Calibration Points: 9
No. of Control Points: 2



Data Filename	Sample ID	Cal Point	Mode ID	Area	ISTD Area	Std. Conc.	ISTD Amount	RF	Conc.	%Diff	RF Mean (curve)	RF %RSD (curve)	RF RSE (curve)
240118_006	1633 ICAL 0.05PPB	☒	Auto	8140	560359	0.0500	2.5000	0.726336	0.0642	28.48	0.565331	12.545918	12.545916
240118_007	1633 ICAL 0.1PPB	☒	Auto	13821	546960	0.1000	2.5000	0.631741	0.1117	11.75	0.565331	12.545918	12.545916
240118_008	1633 ICAL 0.25PPB	☒	Auto	28924	527703	0.2500	2.5000	0.548110	0.2424	-3.05	0.565331	12.545918	12.545916
240118_009	1633 ICAL 0.50PPB	☒	Auto	55160	546187	0.5000	2.5000	0.504953	0.4466	-10.68	0.565331	12.545918	12.545916
240118_010	1633 ICAL 1.0PPB	☒	Auto	118686	548879	1.0000	2.5000	0.540585	0.9562	-4.38	0.565331	12.545918	12.545916
240118_011	1633 ICAL 5.0PPB	☒	Auto	513994	512196	5.0000	2.5000	0.501756	4.4377	-11.25	0.565331	12.545918	12.545916
240118_012	1633 ICAL 10.0PPB	☒	Auto	1074240	498313	10.0000	2.5000	0.538938	9.5331	-4.67	0.565331	12.545918	12.545916
240118_013	1633 ICAL 15.0PPB	☒	Auto	1592958	485630	15.0000	2.5000	0.546698	14.5056	-3.30	0.565331	12.545918	12.545916
240118_014	1633 ICAL 20.0PPB	☒	Auto	2206399	502493	20.0000	2.5000	0.548863	19.4174	-2.91	0.565331	12.545918	12.545916
240118_016	1633 ICV 1.0PPB		Auto	100861	474606	1.0000	2.5000	----	0.9398	-6.02	0.565331	12.545918	12.545916
240118_017	1633 FTCA ICV 1.0PPB		ND(W/B)	----	503559	1.0000	2.5000	----	----	----	0.565331	12.545918	12.545916



240118_005

Sample ID: 1633 CCB
Date Acquired: 1/18/2024 1:41:18 PM
Acquired by: System Administrator
Data File: 240118_005
Vial: 54 | Inj. Volume: 10.0000uL | Tray: 1

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	1051928	----	----	----	----	----	----	
13C4-PFBA_IS	216.80>171.90	----	1051928	----	----	----	----	----	----	
13C3-PFBA_IS	216.00>172.00	----	467833	----	----	----	----	----	----	
PFBA	212.80>169.05	----	1131	----	----	----	----	----	----	
PFMPA	229.00>84.90	----	72	----	----	----	----	----	----	
3_3 FTCA	241.00>177.10	241.00>117.00	----	0	0.00	141.17	0	0.00	141.17	
13C5-PFPeA	268.30>223.00	----	121927	----	----	----	----	----	----	
13C5-PFPeA_IS	268.30>223.00	----	121927	----	----	----	----	----	----	
PFPeA	263.00>219.00	----	1648	----	----	----	----	----	----	
PFMBA	279.00>84.95	----	81	----	----	----	----	----	----	
13C2-4_2 FTS	329.10>80.90	----	152561	----	----	----	----	----	----	
13C2-4_2 FTS_IS	329.10>80.90	----	152561	----	----	----	----	----	----	
4_2 FTS	327.10>307.00	327.10>80.90	82	48	58.04	29.06	48	58.04	29.06	IRr
13C3-PFBS_IS	302.10>79.90	----	278307	----	----	----	----	----	----	
PFBS	298.70>79.90	298.70>98.80	----	0	0.00	46.72	0	0.00	46.72	
13C3-PFBS	302.10>79.90	----	278307	----	----	----	----	----	----	
NFDHA	295.00>201.00	295.00>84.90	769	298	38.74	40.25	298	38.74	40.25	
13C5-PFHxA	318.00>273.00	----	544048	----	----	----	----	----	----	
13C5-PFHxA_IS	318.00>273.00	----	544048	----	----	----	----	----	----	
13C2-PFHxA_IS	315.10>270.00	----	512027	----	----	----	----	----	----	
PFHxA	313.00>269.00	----	1518	----	----	----	----	----	----	
PFEESA	314.80>135.00	314.80>82.90	----	0	0.00	6.11	0	0.00	6.11	
13C3-HFPO-DA	286.90>168.90	----	474826	----	----	----	----	----	----	
13C3-HFPO-DA_IS	286.90>168.90	----	474826	----	----	----	----	----	----	
HFPO-DA	284.90>168.90	284.90>184.90	----	0	0.00	65.61	0	0.00	65.61	
5_3 FTCA	341.00>237.05	341.00>217.00	----	0	0.00	158.86	0	0.00	158.86	
PFPeS	349.10>79.90	349.10>98.80	33	39	119.82	55.80	39	119.82	55.80	IRr
13C4-PFHpA	367.10>322.00	----	475428	----	----	----	----	----	----	
13C4-PFHpA_IS	367.10>322.00	----	475428	----	----	----	----	----	----	
PFHpA	363.10>319.00	363.10>169.00	6237	1332	21.35	21.50	1332	21.35	21.50	
DONA	376.90>250.90	376.90>84.80	----	0	0.00	29.66	0	0.00	29.66	
13C2-6_2 FTS_IS	429.10>80.90	----	153320	----	----	----	----	----	----	
13C2-6_2 FTS	429.10>80.90	----	153320	----	----	----	----	----	----	
6_2 FTS	427.10>407.00	427.10>80.90	1654	690	41.75	41.15	690	41.75	41.15	
13C4-PFOA_IS	417.10>172.00	----	38868	----	----	----	----	----	----	
13C8-PFOA_IS	421.10>376.00	----	519681	----	----	----	----	----	----	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240118_005 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	519681	----	----	----	----	----	----	----
PFOA	413.00>369.00	413.00>169.00	5298	1248	23.55	31.89	1248	23.55	31.89	
13C3-PFHxS	402.10>79.90	----	217732	----	----	----	----	----	----	----
13C3-PFHxS_IS	402.10>79.90	----	217732	----	----	----	----	----	----	----
PFHxS	398.70>79.90	398.70>98.90	1358	803	59.09	56.62	803	59.09	56.62	
18O2-PFHxS_IS	403.00>83.90	----	184084	----	----	----	----	----	----	----
13C9-PFNA_IS	472.10>427.00	----	234653	----	----	----	----	----	----	----
13C9-PFNA	472.10>427.00	----	234653	----	----	----	----	----	----	----
13C5-PFNA_IS	468.00>423.00	----	238020	----	----	----	----	----	----	----
PFNA	463.00>419.00	463.00>219.00	4427	1101	24.86	23.17	1101	24.86	23.17	
PFHpS	449.00>79.90	449.00>98.80	----	0	0.00	56.96	0	0.00	56.96	
7_3 FTCA	441.00>317.00	441.00>336.90	621	941	151.46	117.47	941	151.46	117.47	
13C2-8_2-FTS	529.10>80.90	----	124234	----	----	----	----	----	----	----
13C2-8_2-FTS_IS	529.10>80.90	----	124234	----	----	----	----	----	----	----
8_2 FTS	527.10>506.95	527.10>80.80	----	0	0.00	49.59	0	0.00	49.59	
13C6-PFDA_IS	519.10>474.10	----	175870	----	----	----	----	----	----	----
13C6-PFDA	519.10>474.10	----	175870	----	----	----	----	----	----	----
13C2-PFDA_IS	515.10>470.10	----	179410	----	----	----	----	----	----	----
PFDA	512.90>469.00	512.90>219.00	6331	742	11.72	19.00	742	11.72	19.00	
D3-NMeFOSAA_IS	573.20>419.00	----	221304	----	----	----	----	----	----	----
D3-NMeFOSAA	573.20>419.00	----	221304	----	----	----	----	----	----	----
13C8-PFOS_IS	507.10>98.90	----	88158	----	----	----	----	----	----	----
13C8-PFOS	507.10>98.90	----	88158	----	----	----	----	----	----	----
13C4-PFOS_IS	502.80>79.90	----	217788	----	----	----	----	----	----	----
PFOS	498.90>79.90	498.90>98.80	484	536	110.70	52.47	536	110.70	52.47	IRr
NMeFOSAA	570.10>419.00	570.10>483.00	----	0	0.00	55.15	0	0.00	55.15	
D5-NEtFOSAA_IS	589.20>419.00	----	279170	----	----	----	----	----	----	----
D5-NEtFOSAA	589.20>419.00	----	279170	----	----	----	----	----	----	----
NEtFOSAA	584.20>419.10	584.20>526.00	----	0	0.00	81.95	0	0.00	81.95	
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	----	0	0.00	32.76	0	0.00	32.76	
PFUnDA	563.10>519.00	563.10>269.10	4502	480	10.67	13.12	480	10.67	13.12	
13C7-PFUnDA_IS	570.00>525.10	----	232552	----	----	----	----	----	----	----
13C7-PFUnDA	570.00>525.10	----	232552	----	----	----	----	----	----	----
PFNS	548.80>79.90	548.80>98.80	----	0	0.00	65.22	0	0.00	65.22	
10_2 FTS	626.80>607.05	626.80>81.00	----	0	0.00	37.13	0	0.00	37.13	
13C2-PFDOA_IS	615.10>570.00	----	264426	----	----	----	----	----	----	----
13C2-PFDOA	615.10>570.00	----	264426	----	----	----	----	----	----	----
PFDOA	613.10>569.00	613.10>319.00	4360	419	9.61	11.29	419	9.61	11.29	
PFDS	599.00>79.90	599.00>98.80	----	0	0.00	60.18	0	0.00	60.18	
PFTrDA	663.00>619.00	663.00>168.90	4573	873	19.09	17.64	873	19.09	17.64	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240118_005 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	----	0	0.00	36.44	0	0.00	36.44	
PFOSAm	498.10>77.90	----	279	----	----	----	----	----	----	
13C8-PFOSAm	506.10>77.80	----	246289	----	----	----	----	----	----	
13C8-PFOSAm_IS	506.10>77.80	----	246289	----	----	----	----	----	----	
PFTDA	713.10>669.00	713.10>168.90	3716	721	19.40	22.96	721	19.40	22.96	
13C2-PFTDA	715.20>670.00	----	113989	----	----	----	----	----	----	
13C2-PFTDA_IS	715.20>670.00	----	113989	----	----	----	----	----	----	
PFDoS	699.10>79.90	699.10>98.80	----	0	0.00	67.40	0	0.00	67.40	
D7-MeFOSE_IS	623.20>58.90	----	566102	----	----	----	----	----	----	
D7-MeFOSE	623.20>58.90	----	566102	----	----	----	----	----	----	
MeFOSE	616.10>59.00	----	----	----	----	----	----	----	----	
13C2-PFHxDA_IS	815.00>770.05	----	446720	----	----	----	----	----	----	
13C2-PFHxDA	815.00>770.05	----	446720	----	----	----	----	----	----	
PFHxDA	813.00>768.95	813.00>218.95	4242	426	10.05	13.90	426	10.05	13.90	
D3-MeFOSA	515.00>219.00	----	45343	----	----	----	----	----	----	
D3-MeFOSA_IS	515.00>219.00	----	45343	----	----	----	----	----	----	
MeFOSA	511.90>219.00	511.90>169.00	----	0	0.00	140.79	0	0.00	140.79	
D9-EtFOSE_IS	639.20>58.90	----	555054	----	----	----	----	----	----	
D9-EtFOSE	639.20>58.90	----	555054	----	----	----	----	----	----	
EtFOSE	630.00>59.00	----	----	----	----	----	----	----	----	
D5-EtFOSAm	531.10>219.00	----	63166	----	----	----	----	----	----	
D5-EtFOSAm_IS	531.10>219.00	----	63166	----	----	----	----	----	----	
EtFOSAm	526.00>219.00	526.00>169.00	----	0	0.00	163.90	0	0.00	163.90	
PFODA	913.00>868.65	913.00>169.00	1452	360	24.81	27.03	360	24.81	27.03	

Flag ID key: IRr: Ion Ratio (Relative)



240118_005

Sample ID: 1633 CCB
Date Acquired: 1/18/2024 1:41:18 PM
Acquired by: System Administrator
Data File: 240118_005
Vial: 54 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Std. Conc.	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.447	0.033	-0.001	1051928	467833	13C3-PFBA_IS	----	10.0596	ng/mL	
13C4-PFBA_IS	Auto	1.447	0.033	----	1051928	1051928	----	----	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.448	0.033	----	467833	467833	----	----	5.0000	ng/mL	
PFBA	M	1.430	0.014	-0.017	1131	1051928	13C4-PFBA_IS	----	0.0125	ng/mL	
PFMPA	M	2.468	0.036	-1.054	72	121927	13C5-PFPeA_IS	----	0.0009	ng/mL	
3_3 FTCA	ND(W/B)	----	----	----	----	121927	13C5-PFPeA_IS	----	----	ng/mL	
13C5-PFPeA	Auto	3.523	0.030	-1.485	121927	512027	13C2-PFHxA_IS	----	5.2754	ng/mL	
13C5-PFPeA_IS	Auto	3.523	0.030	----	121927	121927	----	----	5.0000	ng/mL	
PFPeA	M	3.526	0.031	0.004	1648	121927	13C5-PFPeA_IS	----	0.0104	ng/mL	
PFMBA	M	4.064	0.039	0.542	81	121927	13C5-PFPeA_IS	----	0.0007	ng/mL	
13C2-4_2 FTS	Auto	4.688	0.027	-2.423	152561	184084	18O2-PFHxS_IS	----	6.0223	ng/mL	
13C2-4_2 FTS_IS	Auto	4.688	0.027	----	152561	152561	----	----	5.0000	ng/mL	
4_2 FTS	M	4.709	0.047	0.021	82	152561	13C2-4_2 FTS_IS	----	0.0011	ng/mL	IRr
13C3-PFBS_IS	Auto	4.680	0.033	----	278307	278307	----	----	2.5000	ng/mL	
PFBS	ND(W/B)	----	----	----	----	278307	13C3-PFBS_IS	----	----	ng/mL	
13C3-PFBS	Auto	4.680	0.033	-2.431	278307	184084	18O2-PFHxS_IS	----	2.6641	ng/mL	
NFDHA	M	4.870	0.035	-0.135	769	544048	13C5-PFHxA_IS	----	0.0064	ng/mL	
13C5-PFHxA	Auto	5.005	0.027	-0.002	544048	512027	13C2-PFHxA_IS	----	2.5211	ng/mL	
13C5-PFHxA_IS	Auto	5.005	0.027	----	544048	544048	----	----	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	5.007	0.028	----	512027	512027	----	----	2.5000	ng/mL	
PFHxA	M	5.012	0.032	0.007	1518	544048	13C5-PFHxA_IS	----	0.0000	ng/mL	
PFEESA	ND(W/B)	----	----	----	----	544048	13C5-PFHxA_IS	----	----	ng/mL	
13C3-HFPO-DA	Auto	5.479	0.027	0.472	474826	512027	13C2-PFHxA_IS	----	9.4732	ng/mL	
13C3-HFPO-DA_IS	Auto	5.479	0.027	----	474826	474826	----	----	10.0000	ng/mL	
HFPO-DA	ND(W/B)	----	----	----	----	474826	13C3-HFPO-DA_IS	----	----	ng/mL	
5_3 FTCA	ND(W/B)	----	----	----	----	544048	13C5-PFHxA_IS	----	----	ng/mL	
PFPeS	M	6.029	0.011	-1.082	33	217732	13C3-PFHxS_IS	----	0.0003	ng/mL	IRr
13C4-PFHpA	Auto	6.180	0.026	1.173	475428	512027	13C2-PFHxA_IS	----	2.4337	ng/mL	
13C4-PFHpA_IS	Auto	6.180	0.026	----	475428	475428	----	----	2.5000	ng/mL	
PFHpA	M	6.162	0.007	-0.018	6237	475428	13C4-PFHpA_IS	----	-0.0031	ng/mL	
DONA	ND(W/B)	----	----	----	----	474826	13C3-HFPO-DA_IS	----	----	ng/mL	
13C2-6_2 FTS_IS	Auto	6.816	0.023	----	153320	153320	----	----	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.816	0.023	-0.295	153320	184084	18O2-PFHxS_IS	----	6.3991	ng/mL	
6_2 FTS	M	6.813	0.020	-0.004	1654	153320	13C2-6_2 FTS_IS	----	0.0237	ng/mL	
13C4-PFOA_IS	Auto	7.132	0.025	----	38868	38868	----	----	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.132	0.025	----	519681	519681	----	----	2.5000	ng/mL	
13C8-PFOA	Auto	7.132	0.025	0.000	519681	38868	13C4-PFOA_IS	----	2.3921	ng/mL	
PFOA	M	7.130	0.020	-0.002	5298	519681	13C8-PFOA_IS	----	-0.0042	ng/mL	
13C3-PFHxS	Auto	7.111	0.025	0.000	217732	184084	18O2-PFHxS_IS	----	2.7556	ng/mL	
13C3-PFHxS_IS	Auto	7.111	0.025	----	217732	217732	----	----	2.5000	ng/mL	
PFHxS	M	7.110	0.026	-0.001	1358	217732	13C3-PFHxS_IS	----	-0.0061	ng/mL	
18O2-PFHxS_IS	Auto	7.111	0.025	----	184084	184084	----	----	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.979	0.023	----	234653	234653	----	----	1.2500	ng/mL	
13C9-PFNA	Auto	7.979	0.023	0.000	234653	238020	13C5-PFNA_IS	----	1.2591	ng/mL	
13C5-PFNA_IS	Auto	7.979	0.023	----	238020	238020	----	----	1.2500	ng/mL	
PFNA	M	7.980	0.023	0.001	4427	234653	13C9-PFNA_IS	----	0.0023	ng/mL	
PFHpS	ND(W/B)	----	----	----	----	88158	13C8-PFOS_IS	----	----	ng/mL	
7_3 FTCA	M	7.975	0.021	2.970	621	544048	13C5-PFHxA_IS	----	0.0331	ng/mL	
13C2-8_2-FTS	Auto	8.431	0.022	1.320	124234	184084	18O2-PFHxS_IS	----	6.3122	ng/mL	
13C2-8_2-FTS_IS	Auto	8.431	0.022	----	124234	124234	----	----	5.0000	ng/mL	
8_2 FTS	ND(W/B)	----	----	----	----	124234	13C2-8_2-FTS_IS	----	----	ng/mL	
13C6-PFDA_IS	Auto	8.743	0.023	----	175870	175870	----	----	1.2500	ng/mL	
13C6-PFDA	Auto	8.743	0.023	0.000	175870	179410	13C2-PFDA_IS	----	1.2184	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_005 (continued)

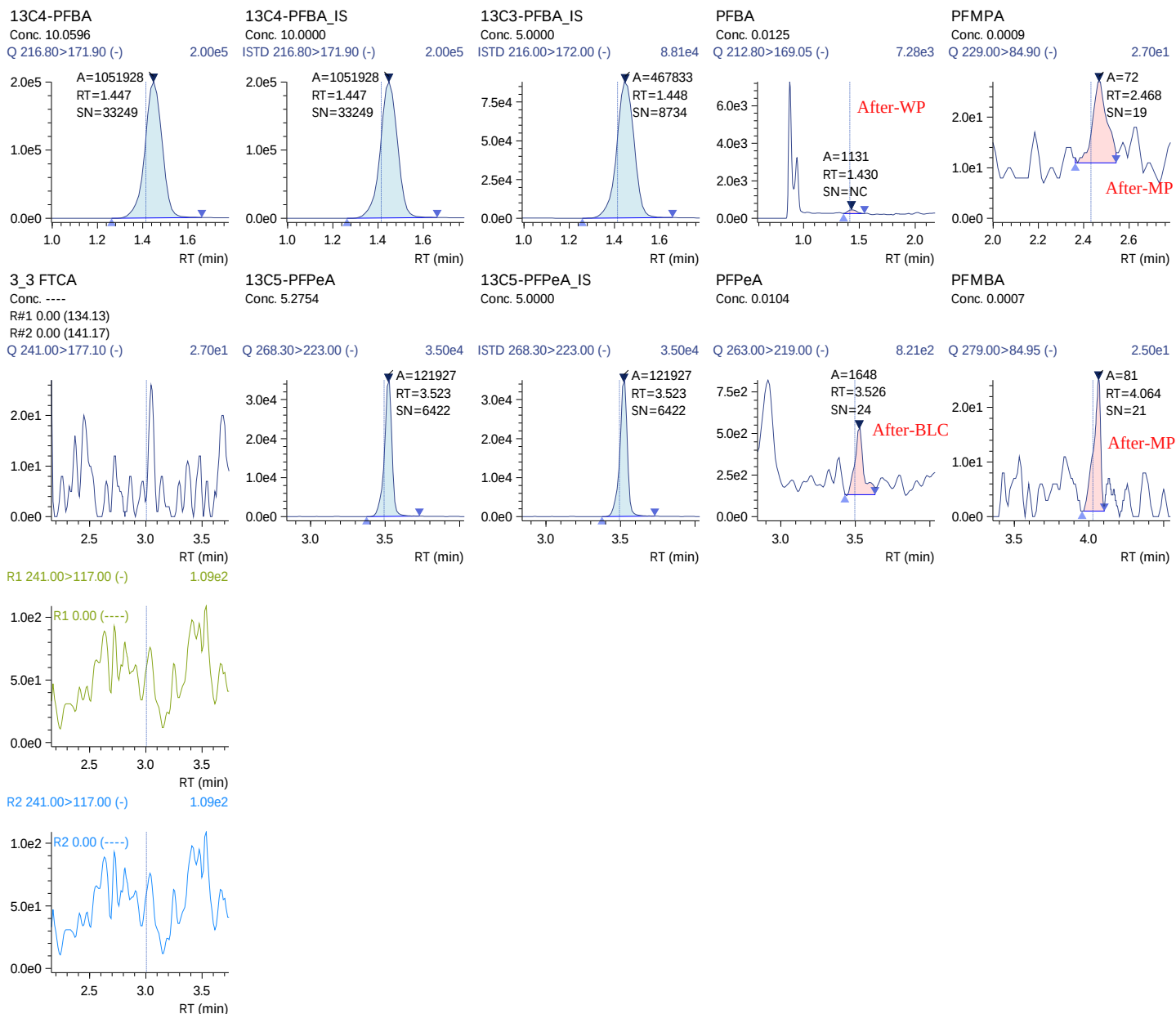
(Table continued from previous page)

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Std. Conc.	Conc.	Unit	Flag ID
13C2-PFDA_IS	Auto	8.743	0.022	----	179410	179410	----	----	1.2500	ng/mL	
PFDA	M	8.745	0.024	0.002	6331	175870	13C6-PFDA_IS	----	0.0123	ng/mL	
D3-NMeFOSAA_IS	Auto	8.875	0.020	----	221304	221304	----	----	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.875	0.020	0.030	221304	217788	13C4-PFOS_IS	----	5.8548	ng/mL	
13C8-PFOS_IS	Auto	8.845	0.025	----	88158	88158	----	----	2.5000	ng/mL	
13C8-PFOS	Auto	8.845	0.025	0.000	88158	217788	13C4-PFOS_IS	----	2.4272	ng/mL	
13C4-PFOS_IS	Auto	8.845	0.025	----	217788	217788	----	----	2.5000	ng/mL	
PFOS	M	8.848	0.026	0.003	484	88158	13C8-PFOS_IS	----	0.0053	ng/mL	IRr
NMeFOSAA	ND(W/B)	----	----	----	----	221304	D3-NMeFOSAA_IS	----	----	ng/mL	
D5-NetFOSAA_IS	Auto	9.208	0.022	----	279170	279170	----	----	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.208	0.022	0.363	279170	217788	13C4-PFOS_IS	----	6.1734	ng/mL	
NetFOSAA	ND(W/B)	----	----	----	----	279170	D5-NetFOSAA_IS	----	----	ng/mL	
9-CI-PF3ONS	ND(W/B)	----	----	----	----	474826	13C3-HFPO-DA_IS	----	----	ng/mL	
PFUnDA	M	9.468	0.021	0.000	4502	232552	13C7-PFUnDA_IS	----	-0.0030	ng/mL	
13C7-PFUnDA_IS	Auto	9.468	0.023	----	232552	232552	----	----	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.468	0.023	0.725	232552	179410	13C2-PFDA_IS	----	1.3507	ng/mL	
PFNS	ND(W/B)	----	----	----	----	88158	13C8-PFOS_IS	----	----	ng/mL	
10_2_FTS	ND(W/B)	----	----	----	----	124234	13C2-8_2-FTS_IS	----	----	ng/mL	
13C2-PFDOA_IS	Auto	10.156	0.023	----	264426	264426	----	----	1.2500	ng/mL	
13C2-PFDOA	Auto	10.156	0.023	1.413	264426	179410	13C2-PFDA_IS	----	1.3368	ng/mL	
PFDOA	M	10.155	0.021	-0.001	4360	264426	13C2-PFDOA_IS	----	-0.0035	ng/mL	
PFDS	ND(W/B)	----	----	----	----	88158	13C8-PFOS_IS	----	----	ng/mL	
PFTrDA	Auto	10.816	0.024	-0.630	4573	113989	13C2-PFTDA_IS	----	-0.0025	ng/mL	
11-CI-PF3OUdS	ND(W/B)	----	----	----	----	474826	13C3-HFPO-DA_IS	----	----	ng/mL	
PFOSAm	M	11.167	0.003	-0.008	279	246289	13C8-PFOSAm_IS	----	0.0034	ng/mL	
13C8-PFOSAm	Auto	11.175	0.010	2.330	246289	217788	13C4-PFOS_IS	----	2.6639	ng/mL	
13C8-PFOSAm_IS	Auto	11.175	0.010	----	246289	246289	----	----	2.5000	ng/mL	
PFTDA	M	11.446	0.021	0.000	3716	113989	13C2-PFTDA_IS	----	0.0025	ng/mL	
13C2-PFTDA	Auto	11.446	0.022	2.703	113989	179410	13C2-PFDA_IS	----	1.3347	ng/mL	
13C2-PFTDA_IS	Auto	11.446	0.022	----	113989	113989	----	----	1.2500	ng/mL	
PFDoS	ND(W/B)	----	----	----	----	88158	13C8-PFOS_IS	----	----	ng/mL	
D7-MeFOSE_IS	Auto	13.384	0.007	----	566102	566102	----	----	25.0000	ng/mL	
D7-MeFOSE	Auto	13.384	0.007	4.539	566102	217788	13C4-PFOS_IS	----	24.8351	ng/mL	
MeFOSE	ND(W/B)	----	----	----	----	566102	D7-MeFOSE_IS	----	----	ng/mL	
13C2-PFHxDA_IS	Auto	12.663	0.022	----	446720	446720	----	----	2.5000	ng/mL	
13C2-PFHxDA	Auto	12.663	0.022	3.920	446720	179410	13C2-PFDA_IS	----	2.6806	ng/mL	
PFHxDA	M	12.664	0.022	0.001	4242	446720	13C2-PFHxDA_IS	----	-0.0047	ng/mL	
D3-MeFOSA	Auto	13.692	0.007	4.847	45343	217788	13C4-PFOS_IS	----	2.4353	ng/mL	
D3-MeFOSA_IS	Auto	13.692	0.007	----	45343	45343	----	----	2.5000	ng/mL	
MeFOSA	ND(W/B)	----	----	----	----	45343	D3-MeFOSA_IS	----	----	ng/mL	
D9-EtFOSE_IS	Auto	14.013	0.007	----	555054	555054	----	----	25.0000	ng/mL	
D9-EtFOSE	Auto	14.013	0.007	5.168	555054	217788	13C4-PFOS_IS	----	23.9751	ng/mL	
EtFOSE	ND(W/B)	----	----	----	----	555054	D9-EtFOSE_IS	----	----	ng/mL	
D5-EtFOSAm	Auto	14.370	0.008	5.525	63166	217788	13C4-PFOS_IS	----	2.5482	ng/mL	
D5-EtFOSAm_IS	Auto	14.370	0.008	----	63166	63166	----	----	2.5000	ng/mL	
EtFOSAm	ND(W/B)	----	----	----	----	63166	D5-EtFOSAm_IS	----	----	ng/mL	
PFODA	M	13.806	0.031	1.143	1452	446720	13C2-PFHxDA_IS	----	0.0144	ng/mL	

Flag ID key: IRr: Ion Ratio (Relative)



240118_005 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_005 (continued)

13C2-4_2 FTS
Conc. 6.0223

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. 0.0011
R#1 58.04 (34.14)
R#2 58.04 (29.06)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. ----
R#1 0.00 (47.53)
R#2 0.00 (46.72)

Q 329.10>80.90 (-)

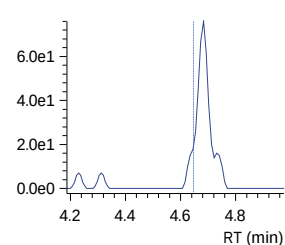
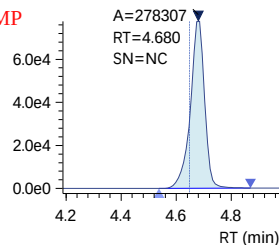
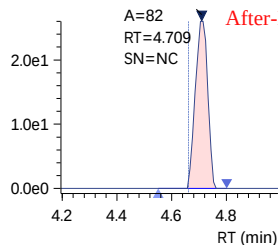
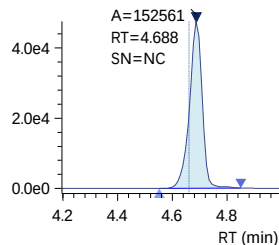
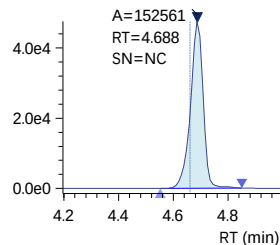
4.76e4 ISTD 329.10>80.90 (-)

4.76e4 Q 327.10>307.00 (-)

2.60e1 ISTD 302.10>79.90 (-)

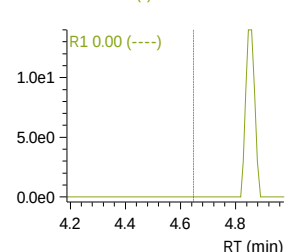
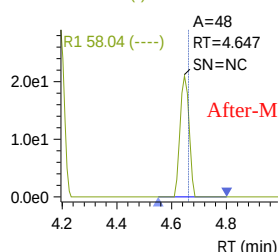
7.76e4 Q 298.70>79.90 (-)

7.60e1



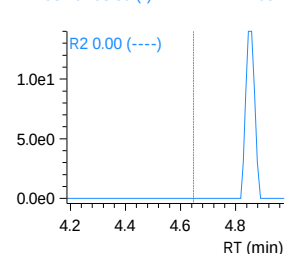
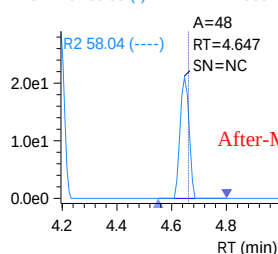
R1 327.10>80.90 (-) 2.90e1

R1 298.70>98.80 (-) 1.40e1



R2 327.10>80.90 (-) 2.90e1

R2 298.70>98.80 (-) 1.40e1





240118_005 (continued)

13C3-PFBS
Conc. 2.6641

NFDHA
Conc. 0.0064
R#1 38.74 (37.88)
R#2 38.74 (40.25)

13C5-PFHxA
Conc. 2.5211

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

Q 302.10>79.90 (-)

7.76e4

Q 295.00>201.00 (-)

2.14e2

Q 318.00>273.00 (-)

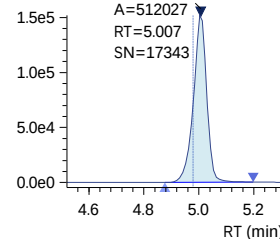
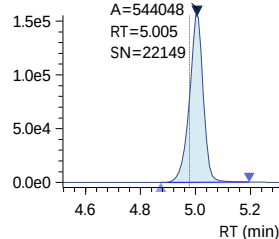
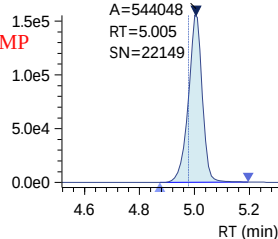
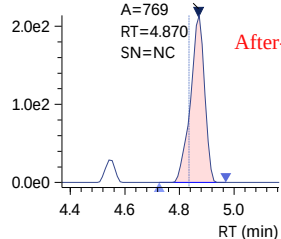
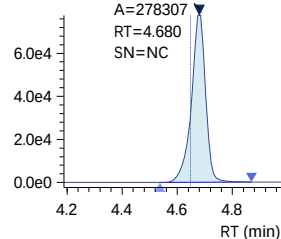
1.55e5

ISTD 318.00>273.00 (-)

1.55e5

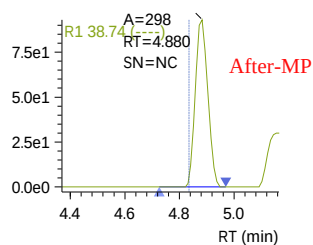
ISTD 315.10>270.00 (-)

1.52e5



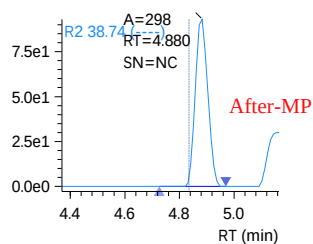
R1 295.00>84.90 (-)

9.30e1



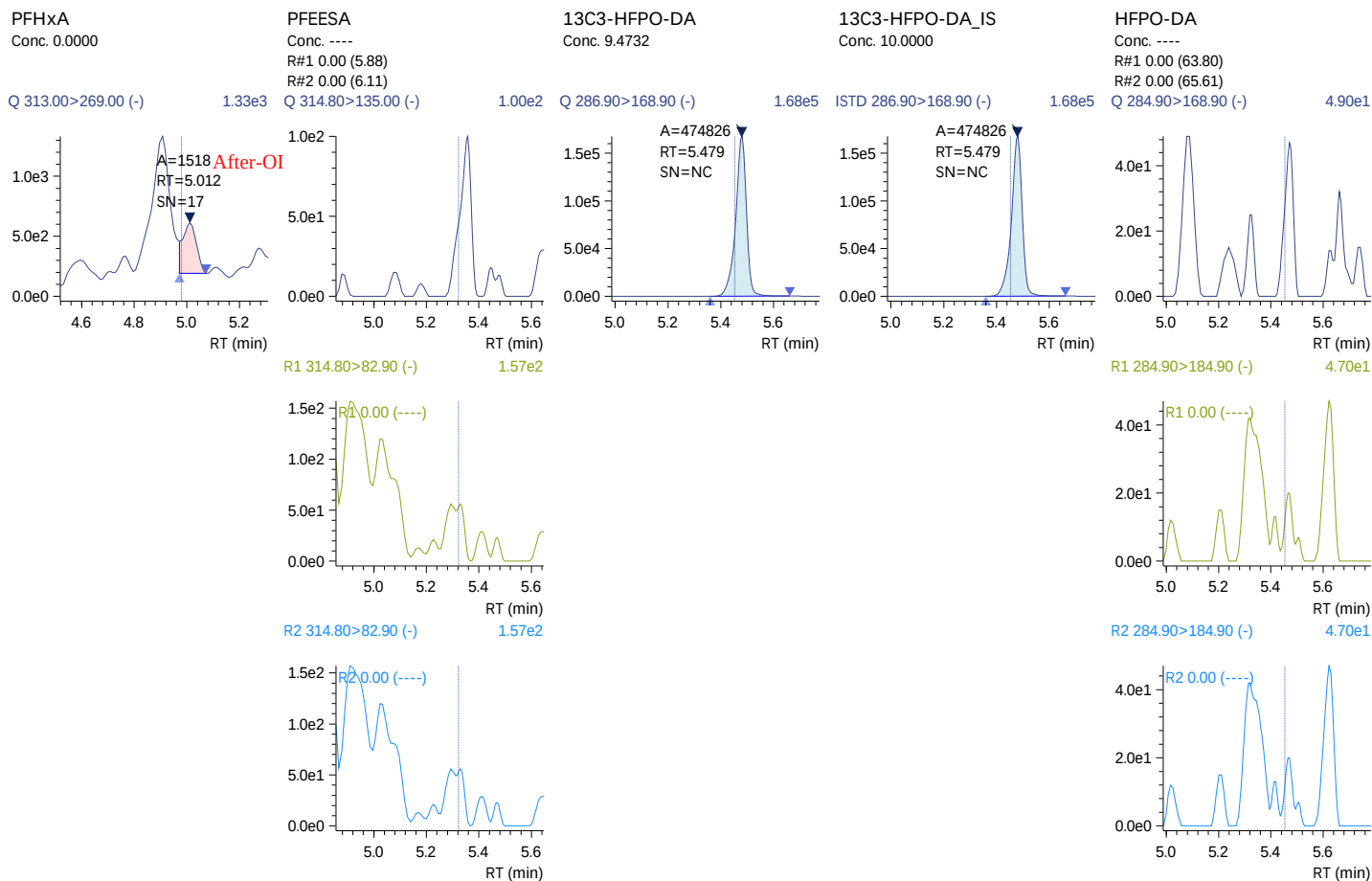
R2 295.00>84.90 (-)

9.30e1





240118_005 (continued)

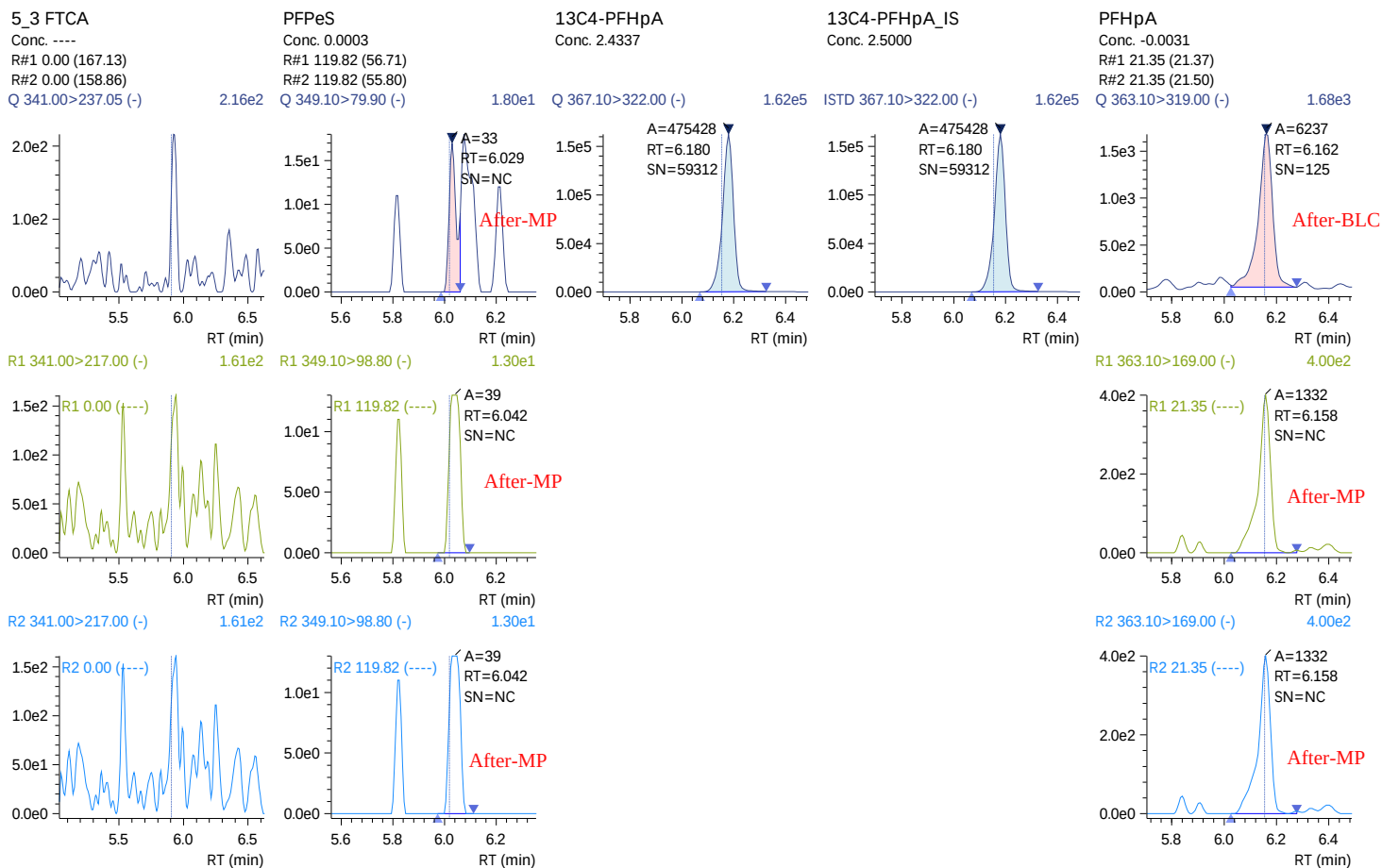


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_005 (continued)

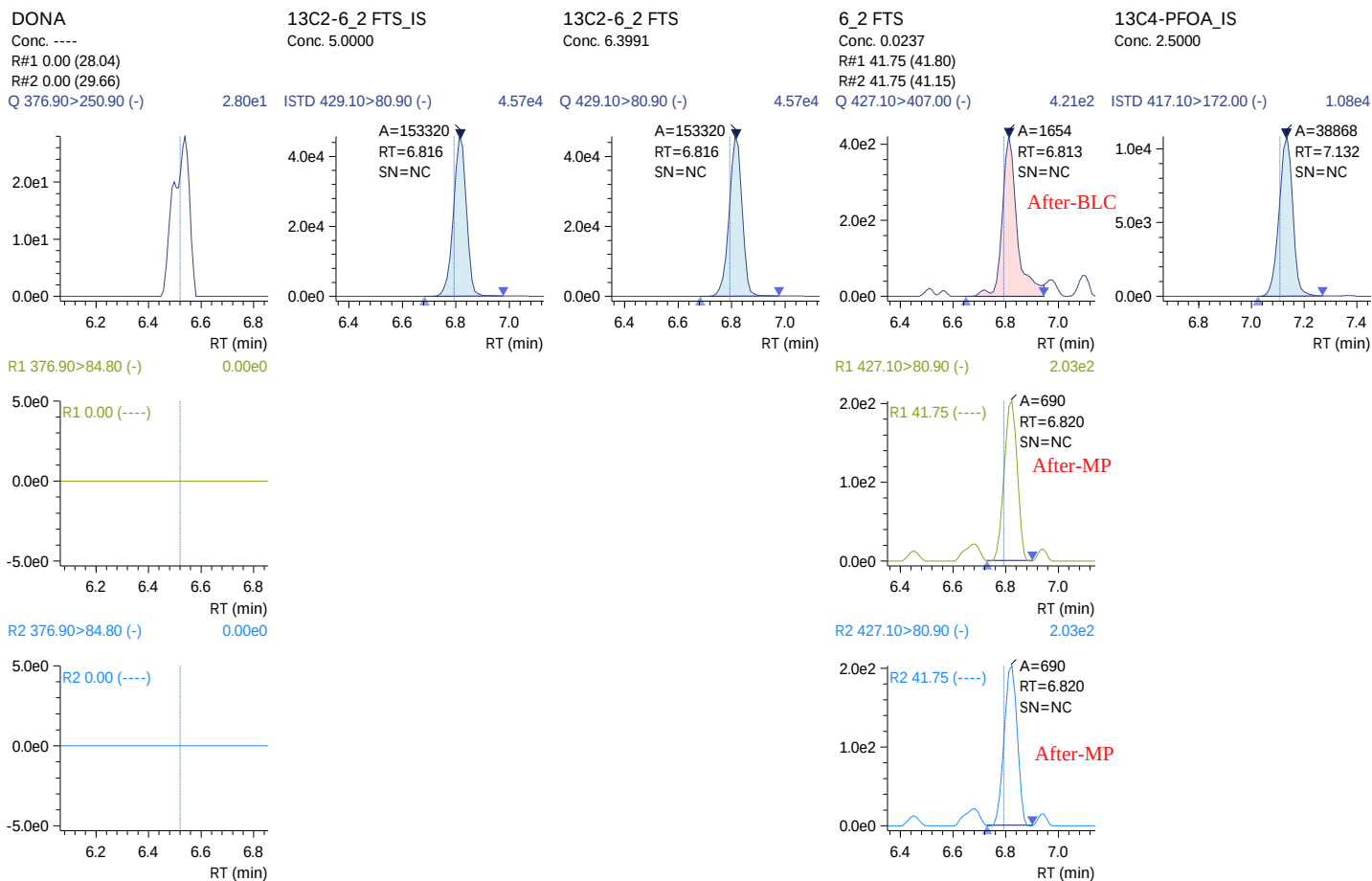


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_005 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_005 (continued)

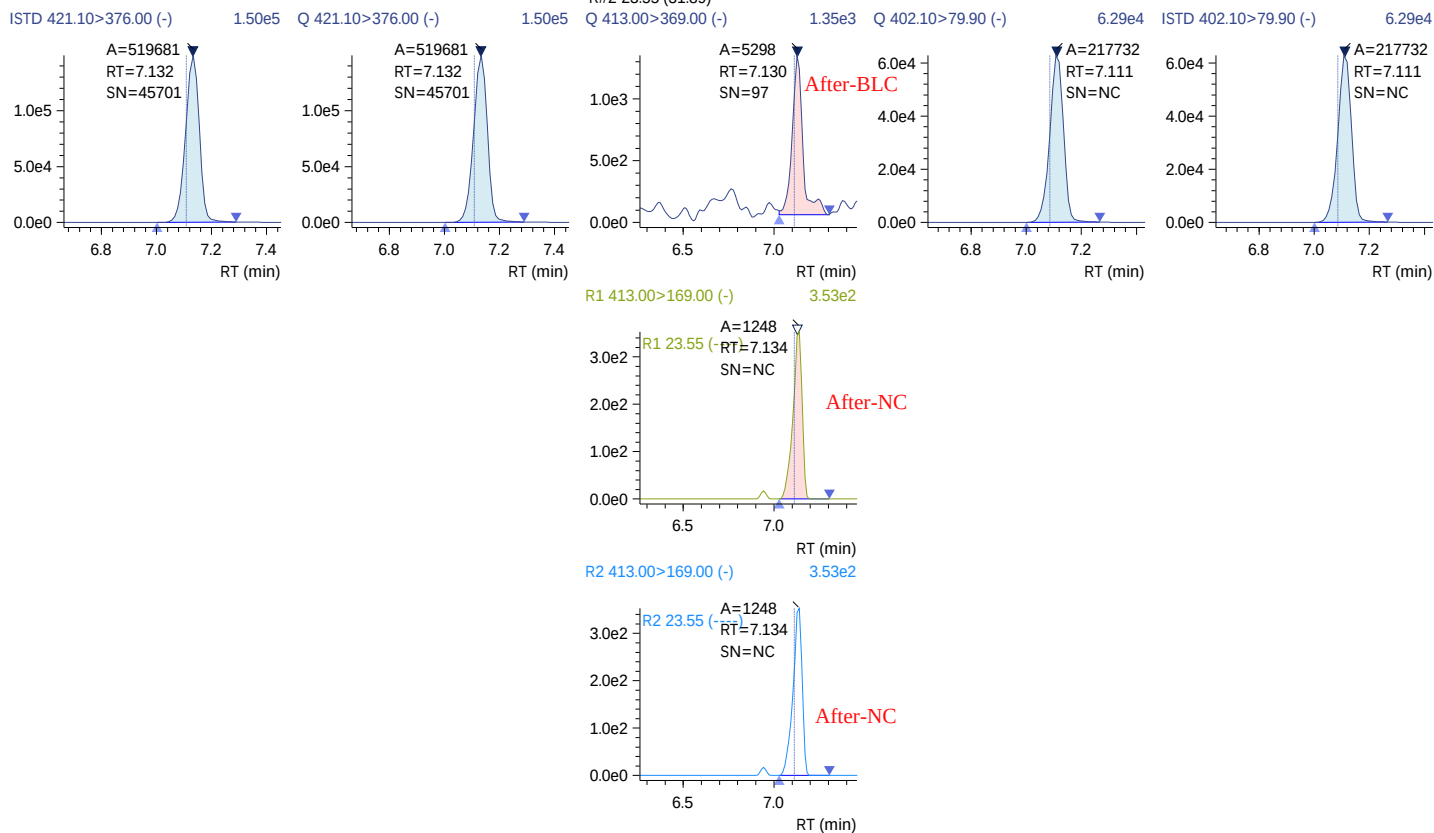
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.3921

PFOA
Conc. -0.0042
R#1 23.55 (29.05)
R#2 23.55 (31.89)

13C3-PFHxS
Conc. 2.7556

13C3-PFHxS_IS
Conc. 2.5000

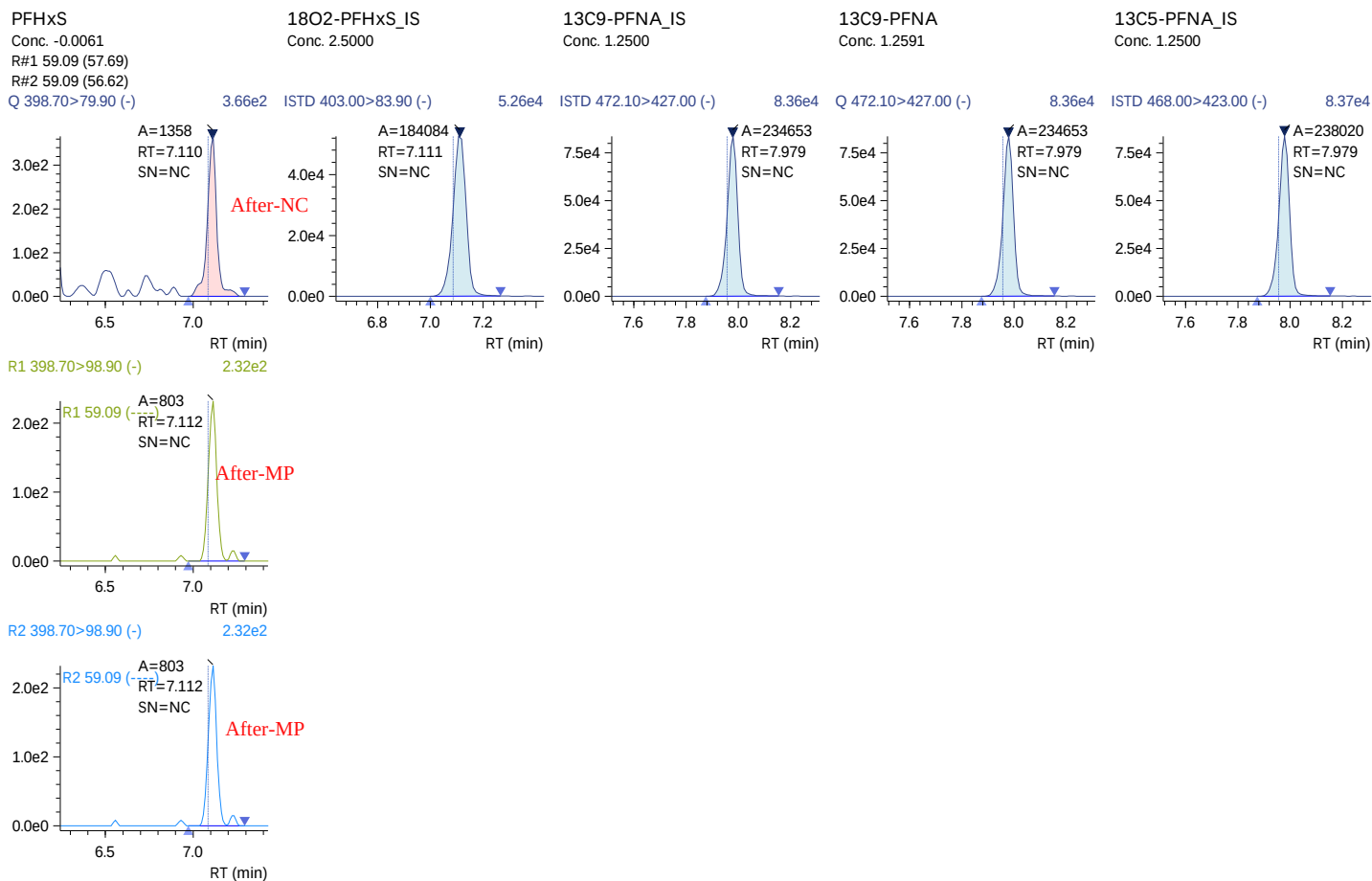


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_005 (continued)

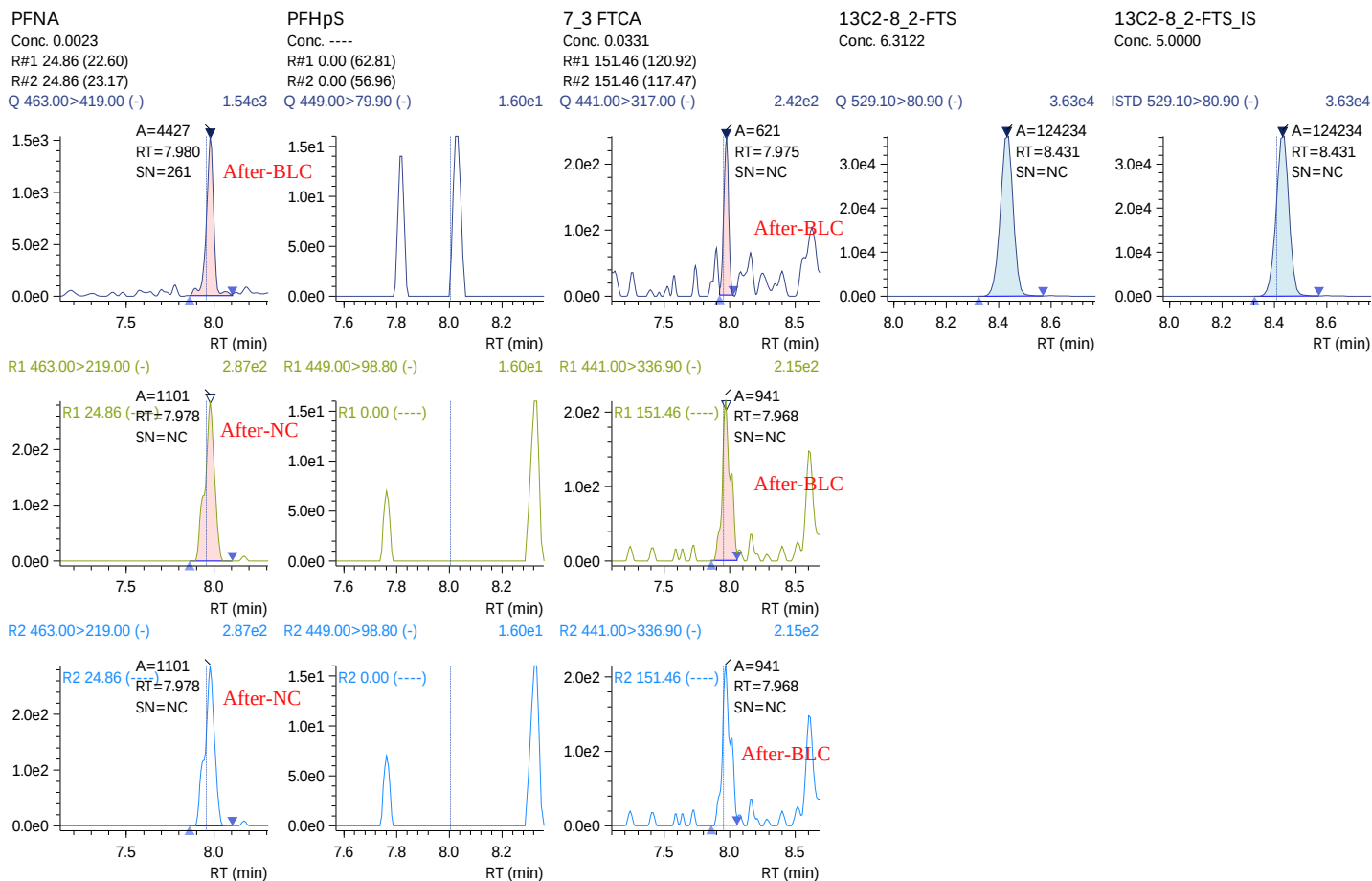


J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_005 (continued)

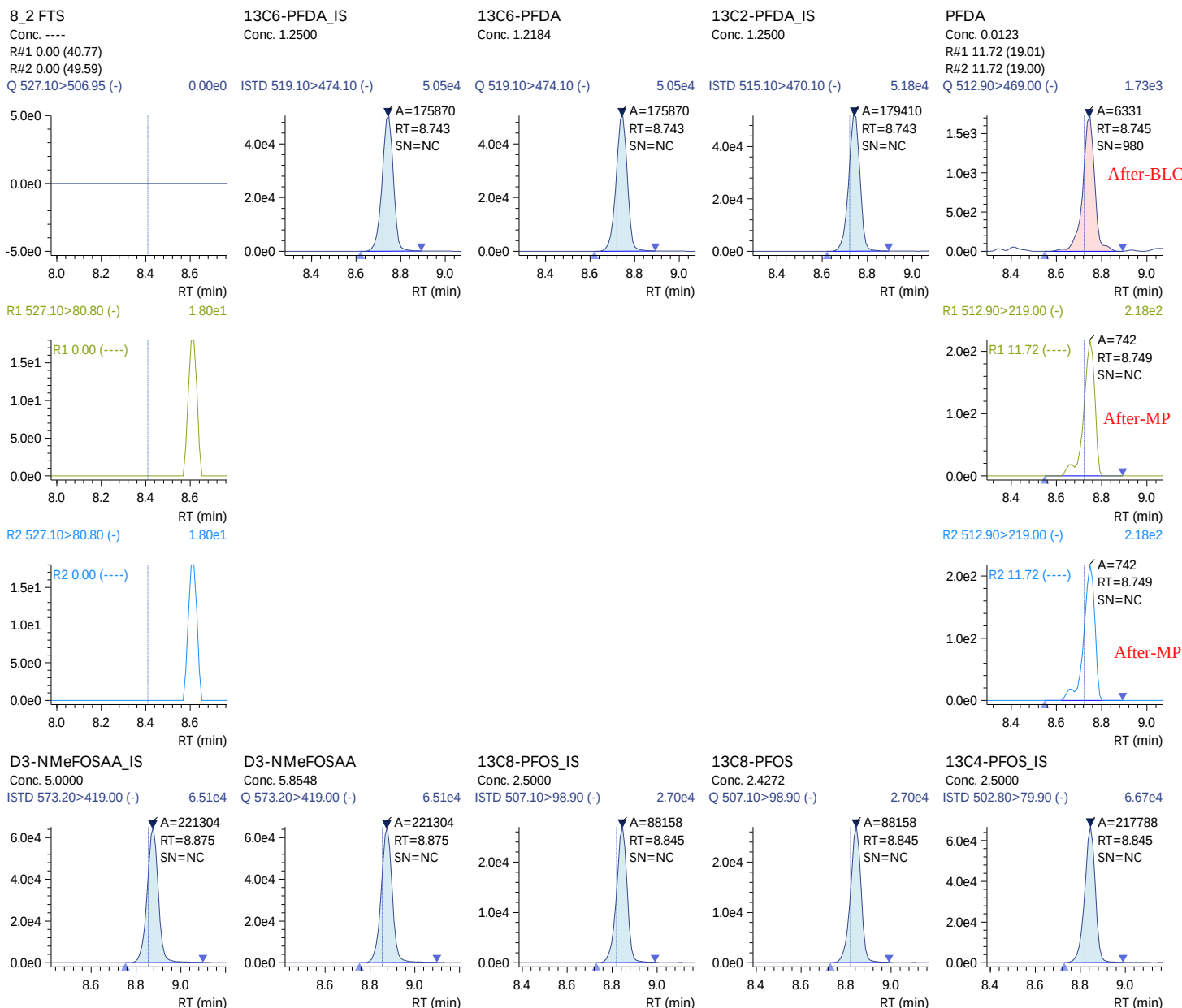


J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_005 (continued)

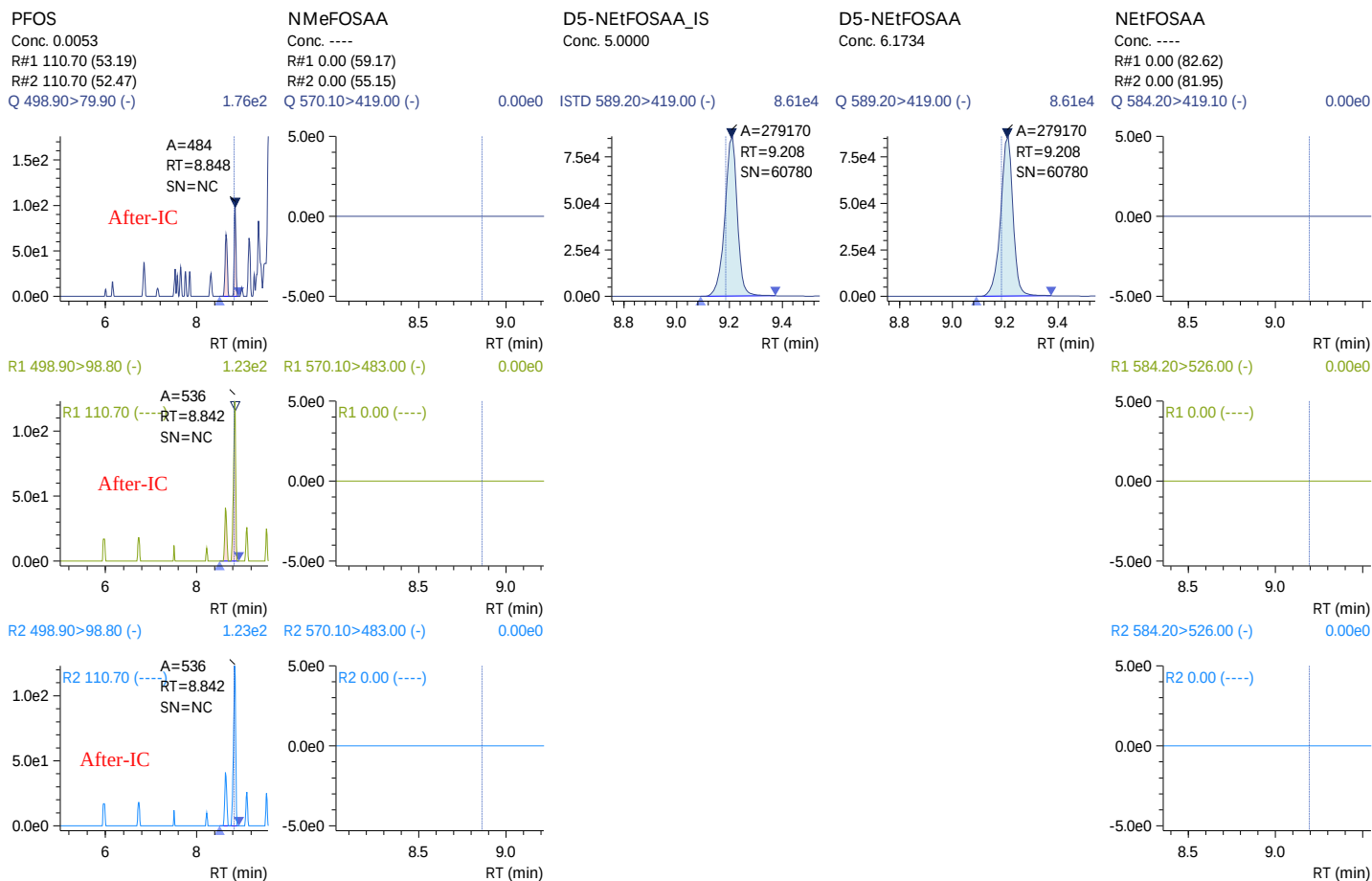


J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_005 (continued)



J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_005 (continued)

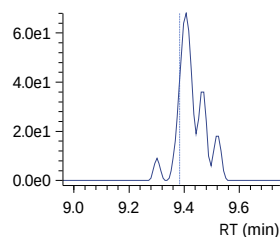
9-Cl-PF3ONS

Conc. ----

R#1 0.00 (31.76)

R#2 0.00 (32.76)

Q 530.80>351.00 (-)



R1 532.80>353.00 (-)

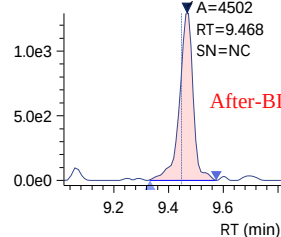
PFUnDA

Conc. -0.0030

R#1 10.67 (12.31)

R#2 10.67 (13.12)

Q 563.10>519.00 (-)

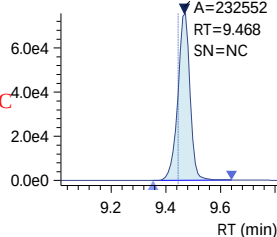


R1 563.10>269.10 (-)

13C7-PFUnDA_IS

Conc. 1.2500

ISTD 570.00>525.10 (-)

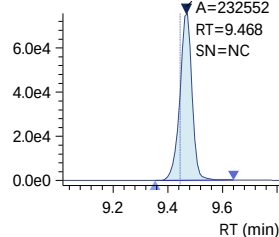


R1 563.10>269.10 (-)

13C7-PFUnDA

Conc. 1.3507

Q 570.00>525.10 (-)



R1 563.10>269.10 (-)

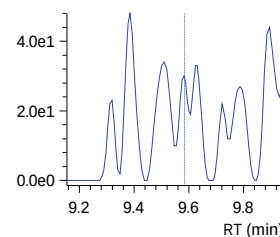
PFNS

Conc. ----

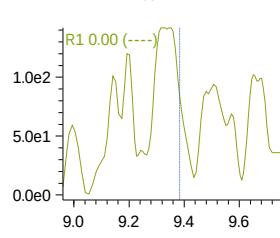
R#1 0.00 (63.31)

R#2 0.00 (65.22)

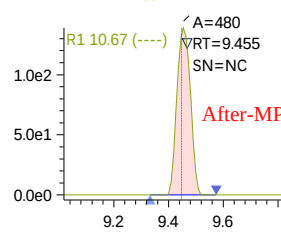
Q 548.80>79.90 (-)



R1 548.80>98.80 (-)



R2 532.80>353.00 (-)



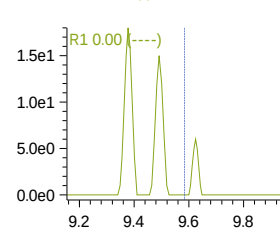
R2 563.10>269.10 (-)



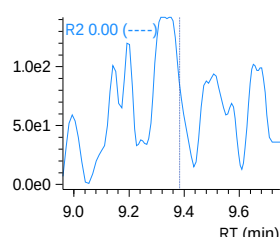
R2 563.10>269.10 (-)



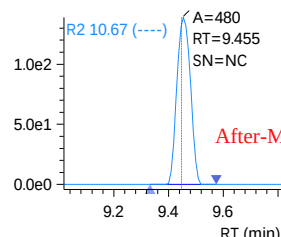
R2 563.10>269.10 (-)



R2 548.80>98.80 (-)



R2 532.80>353.00 (-)



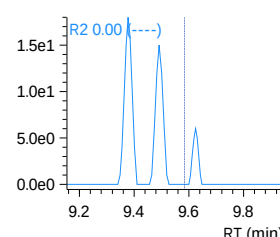
R2 563.10>269.10 (-)



R2 563.10>269.10 (-)



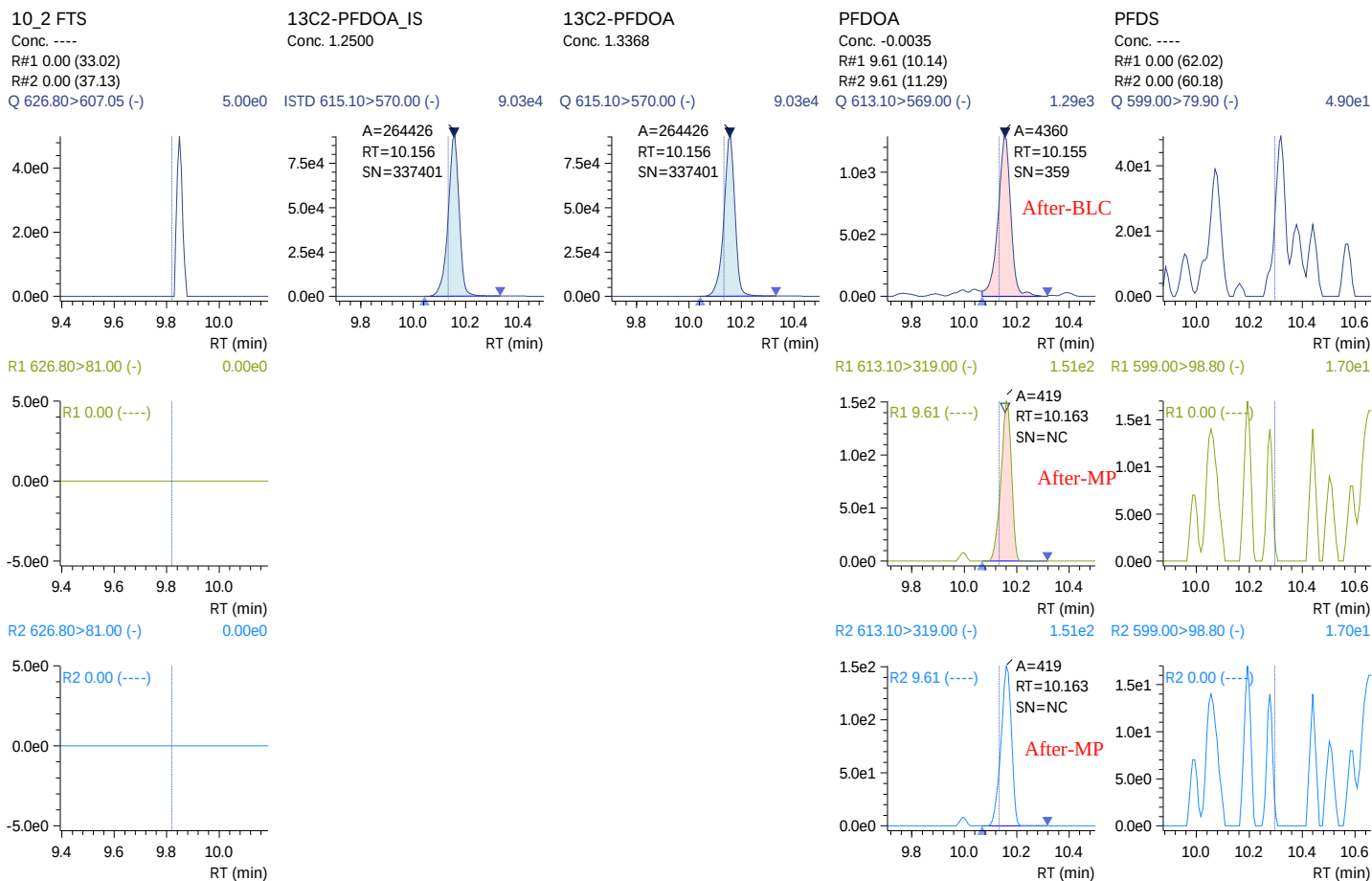
R2 563.10>269.10 (-)



R2 548.80>98.80 (-)



240118_005 (continued)

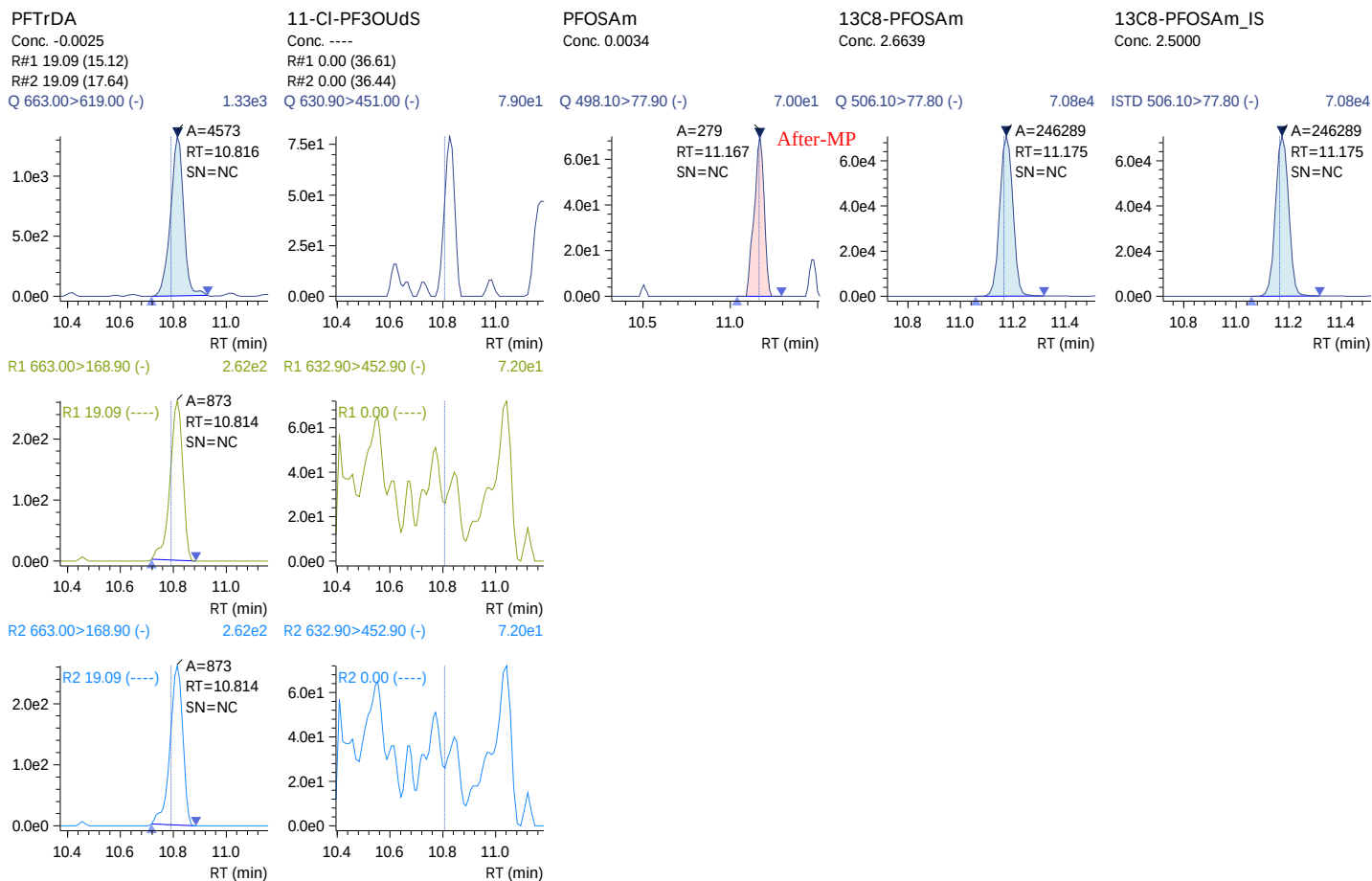


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_005 (continued)

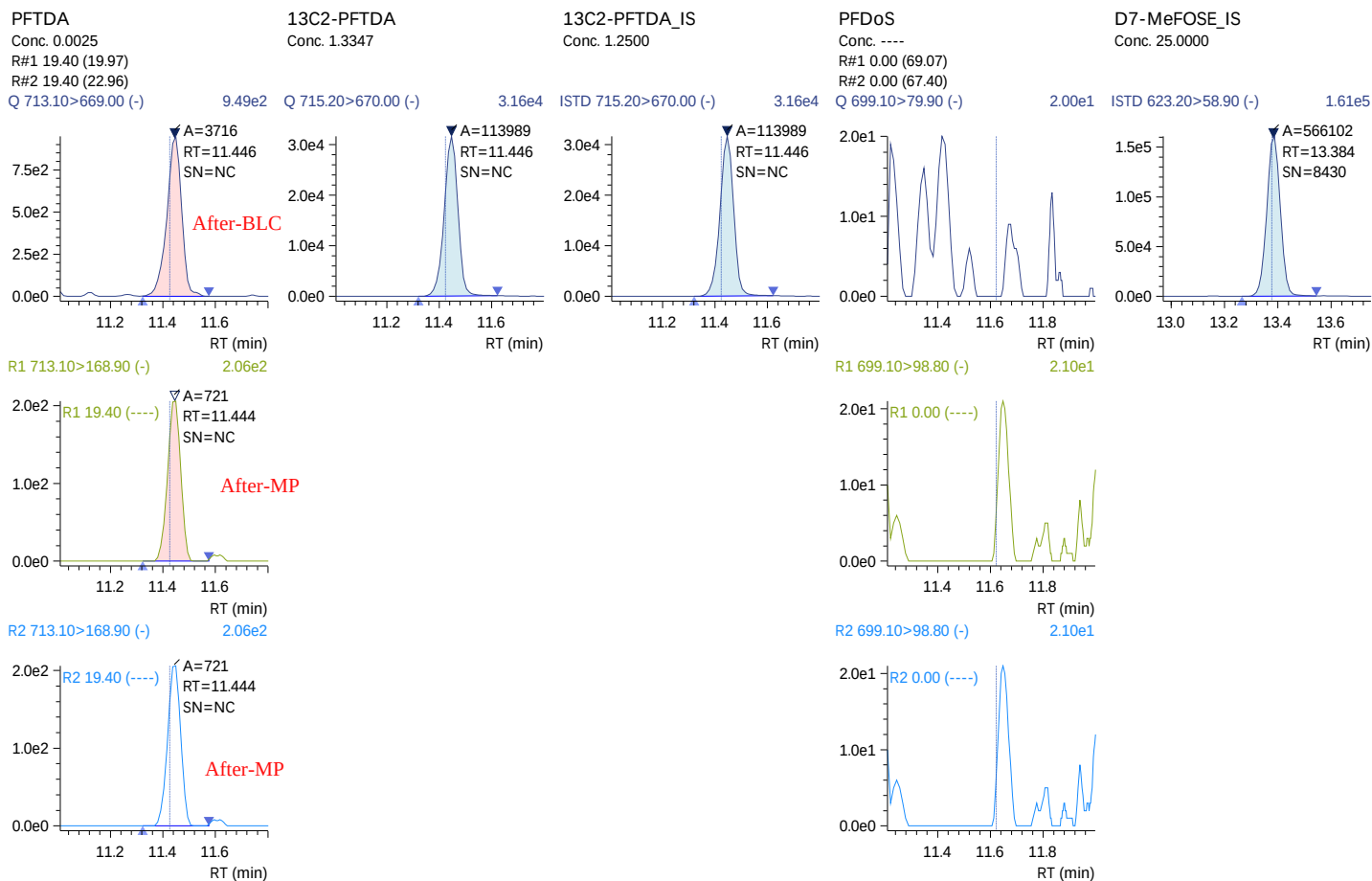


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_005 (continued)



J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_005 (continued)

D7-MeFOSE
Conc. 24.8351

MeFOSE
Conc. ----

13C2-PFHXA_IS
Conc. 2.5000

13C2-PFHXA
Conc. 2.6806

PFHXA
Conc. -0.0047
R#1 10.05 (11.64)
R#2 10.05 (13.90)

Q 623.20>58.90 (-)

1.61e5

Q 616.10>59.00 (-)

7.10e1

ISTD 815.00>770.05 (-)

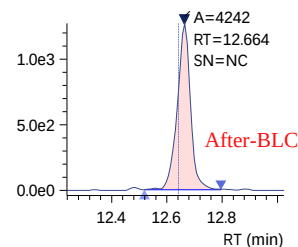
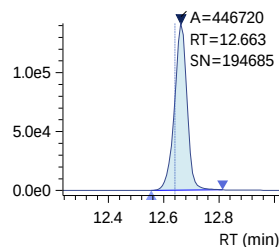
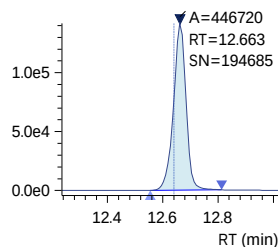
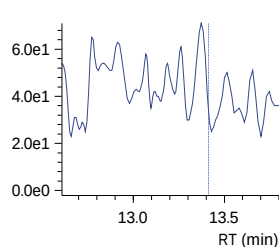
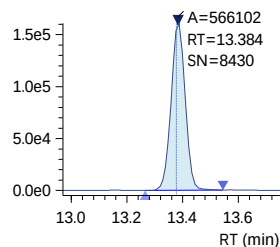
1.42e5

Q 815.00>770.05 (-)

1.42e5

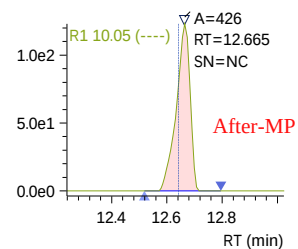
Q 813.00>768.95 (-)

1.27e3



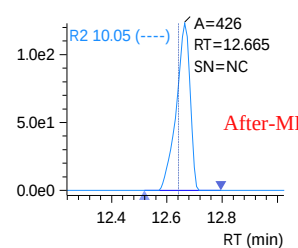
R1 813.00>218.95 (-)

1.23e2



R2 813.00>218.95 (-)

1.23e2





240118_005 (continued)

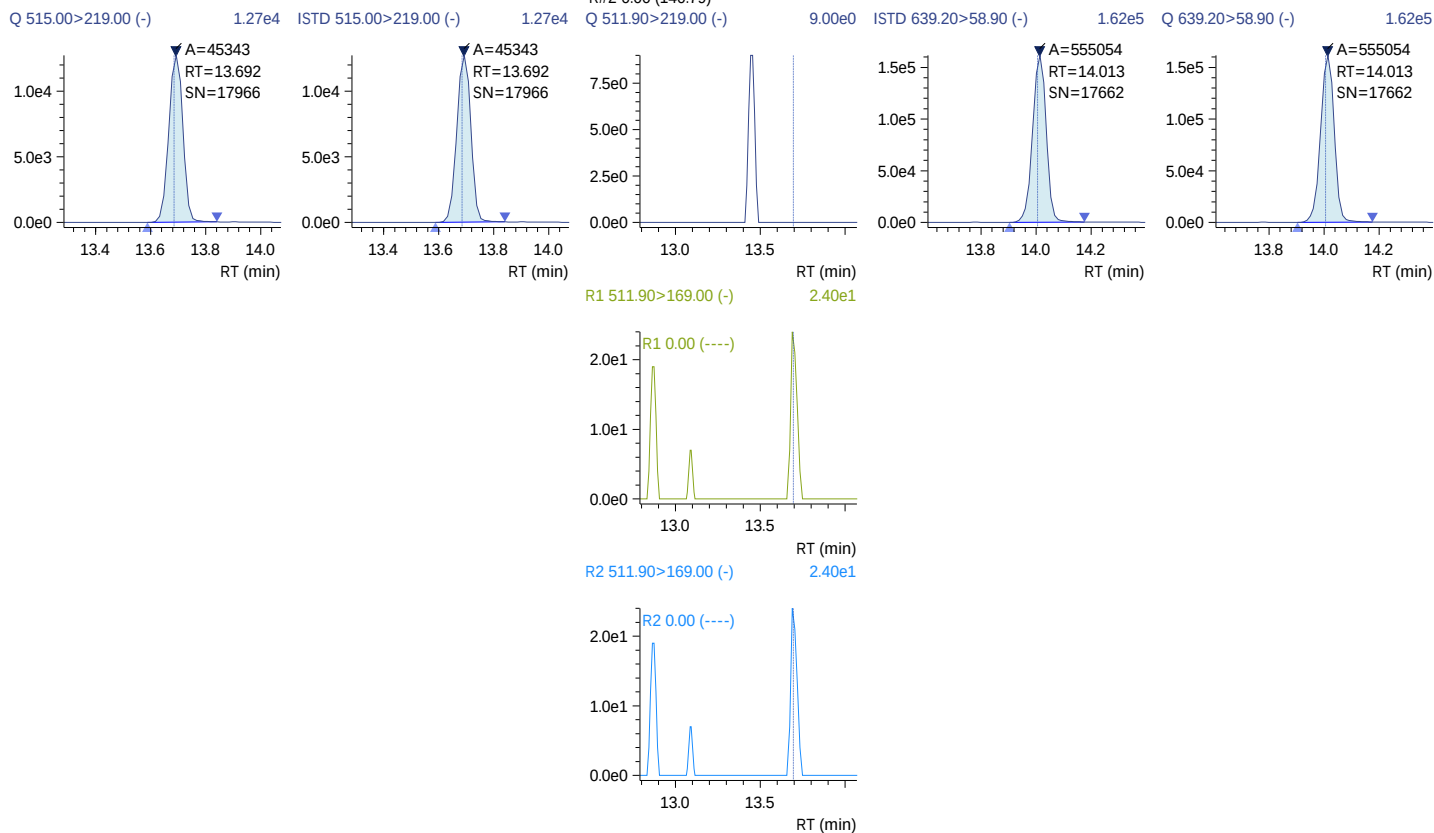
D3-MeFOSA
Conc. 2.4353

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. ----
R#1 0.00 (149.05)
R#2 0.00 (140.79)

D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 23.9751

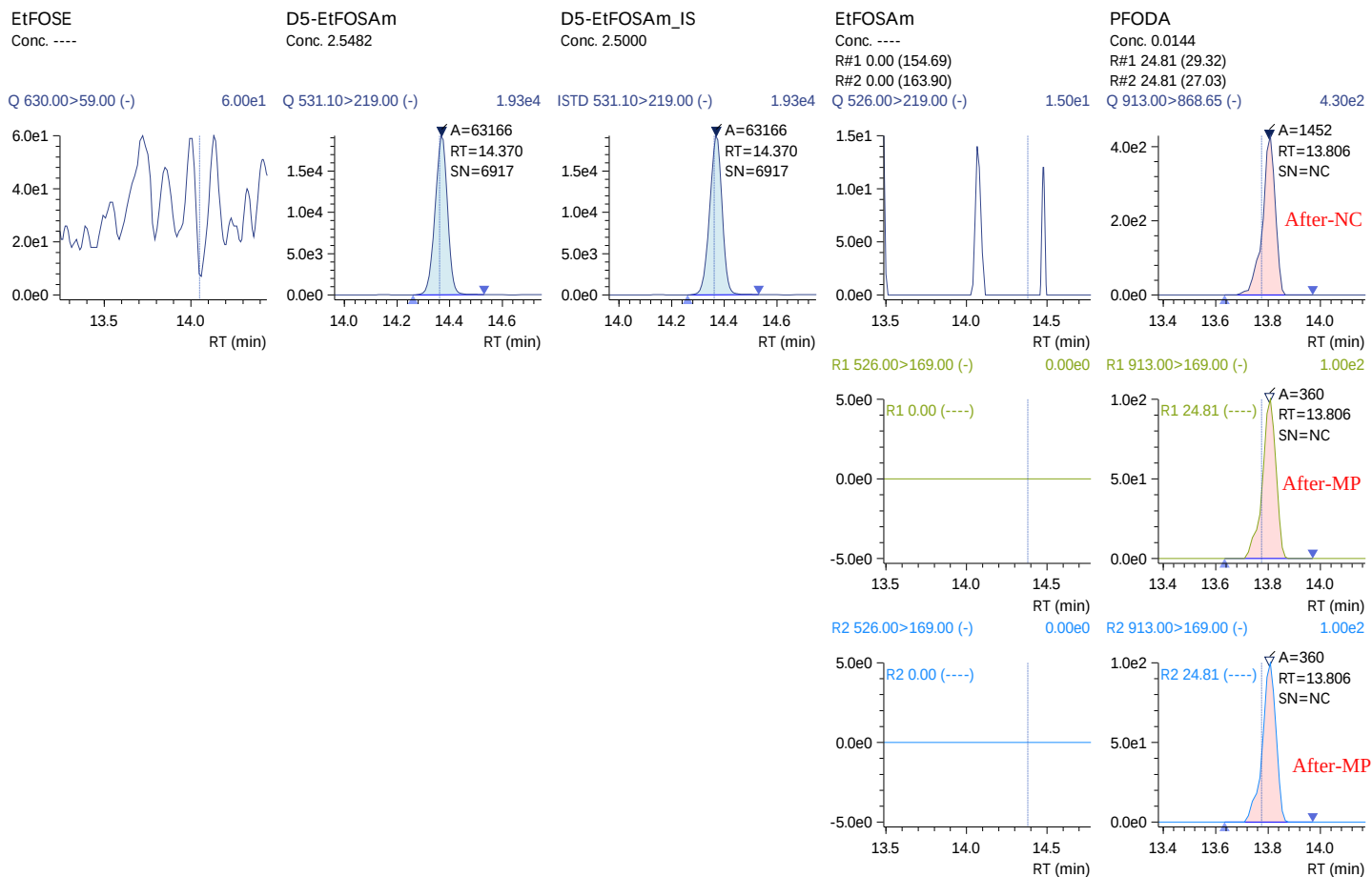


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_005 (continued)



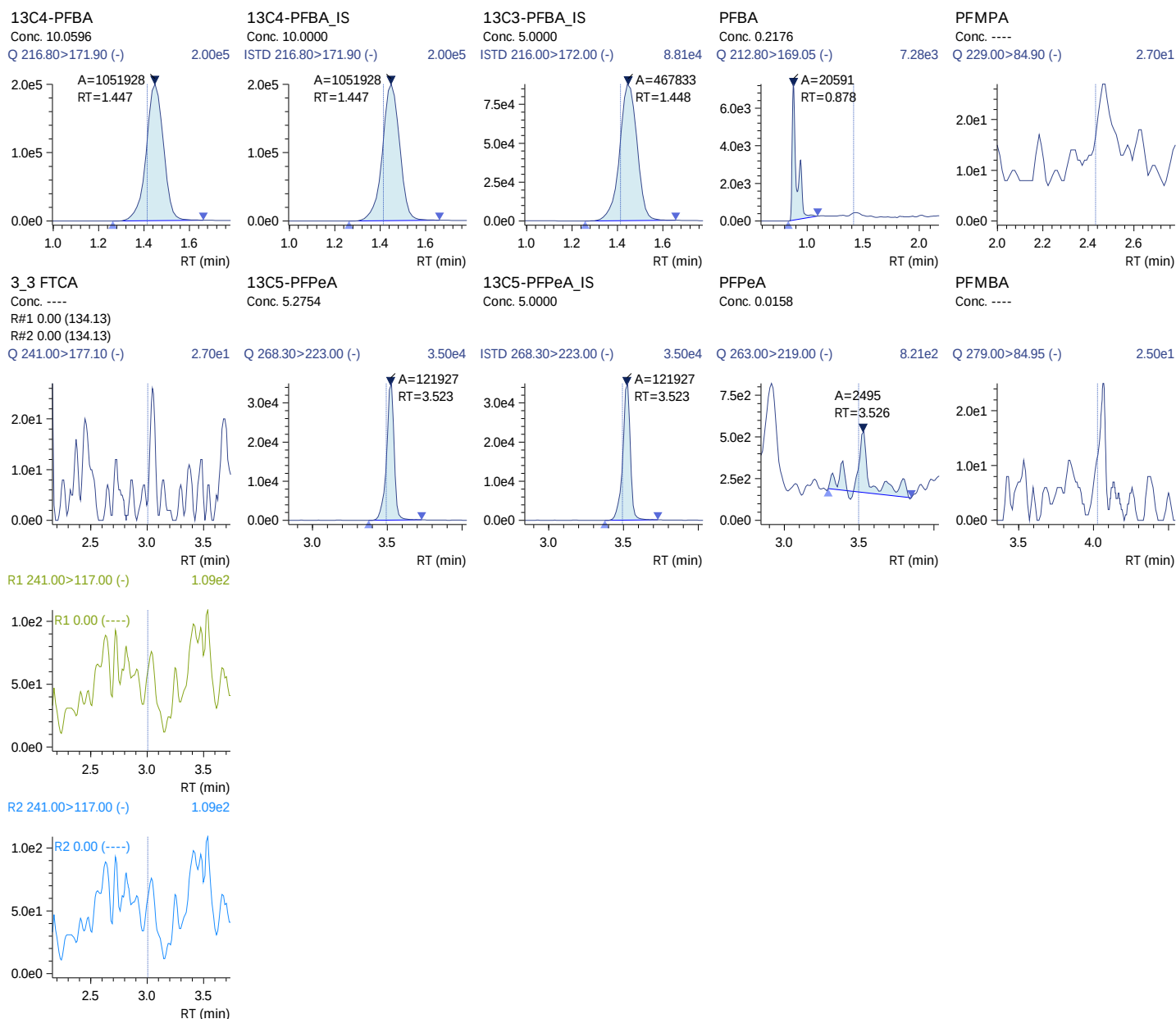
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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_005

Sample ID: 1633 CCB
Date Acquired: 1/18/2024 1:41:18 PM
Acquired by: System Administrator
Data File: 240118_005
Vial: 54 | Inj. Volume: 10.0000uL | Tray: 1





240118_005 (continued)

13C2-4_2 FTS
 Conc. 6.0223

13C2-4_2 FTS_IS
 Conc. 5.0000

4_2 FTS
 Conc. ----
 R#1 0.00 (34.14)
 R#2 0.00 (34.14)

13C3-PFBS_IS
 Conc. 2.5000

PFBS
 Conc. ----
 R#1 0.00 (47.53)
 R#2 0.00 (47.53)

Q 329.10>80.90 (-)

4.76e4

ISTD 329.10>80.90 (-)

4.76e4

Q 327.10>307.00 (-)

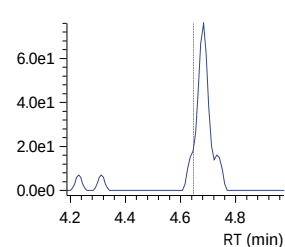
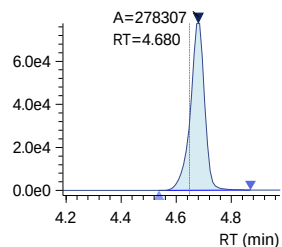
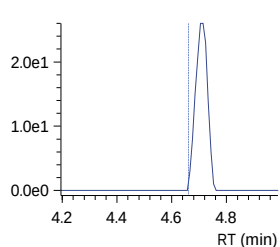
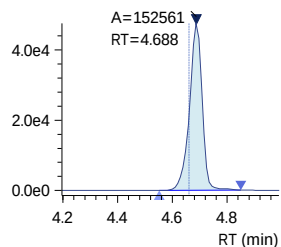
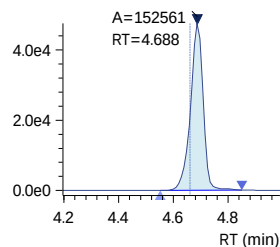
2.60e1

ISTD 302.10>79.90 (-)

7.76e4

Q 298.70>79.90 (-)

7.60e1

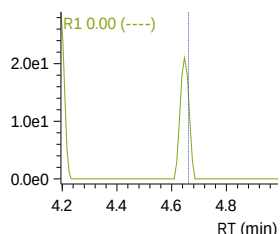


R1 327.10>80.90 (-)

2.90e1

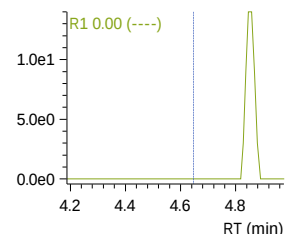
R1 298.70>98.80 (-)

1.40e1



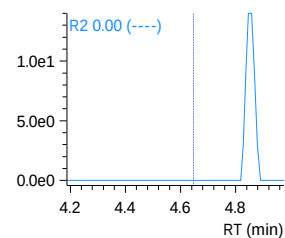
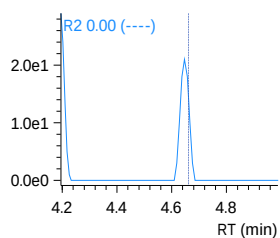
R2 327.10>80.90 (-)

2.90e1



R2 298.70>98.80 (-)

1.40e1





240118_005 (continued)

13C3-PFBS
Conc. 2.6641

NFDHA
Conc. ----
R#1 0.00 (37.88)
R#2 0.00 (37.88)

13C5-PFHxA
Conc. 2.5211

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

Q 302.10>79.90 (-)

7.76e4

Q 295.00>201.00 (-)

2.14e2

Q 318.00>273.00 (-)

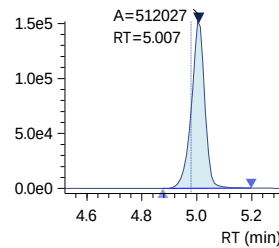
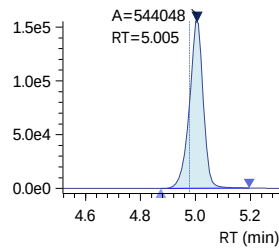
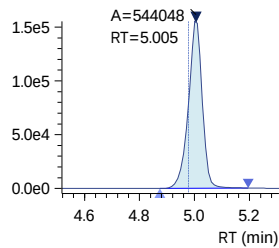
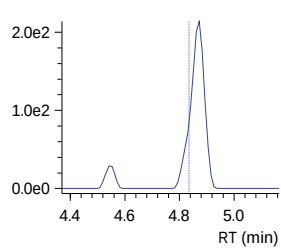
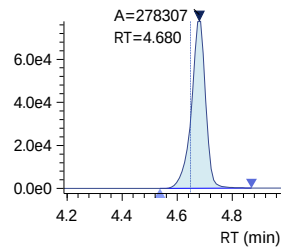
1.55e5

ISTD 318.00>273.00 (-)

1.55e5

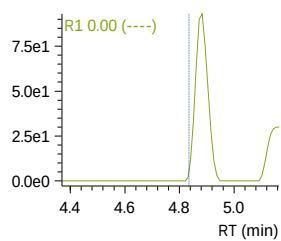
ISTD 315.10>270.00 (-)

1.52e5



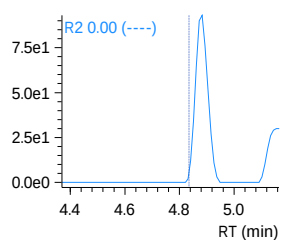
R1 295.00>84.90 (-)

9.30e1



R2 295.00>84.90 (-)

9.30e1





240118_005 (continued)

PFHxA
Conc. 0.0428

PFEESA
Conc. ----

13C3-HFPO-DA
Conc. 9.4732

13C3-HFPO-DA_IS
Conc. 10.0000

HFPO-DA
Conc. ----

Q 313.00>269.00 (-)

1.33e3

Q 314.80>135.00 (-)

1.00e2

Q 286.90>168.90 (-)

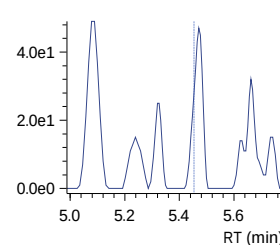
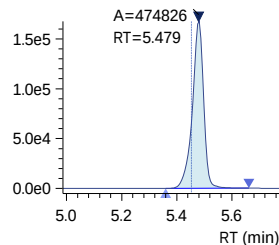
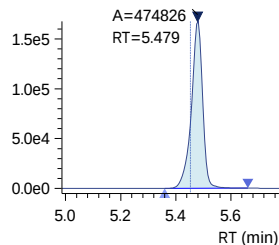
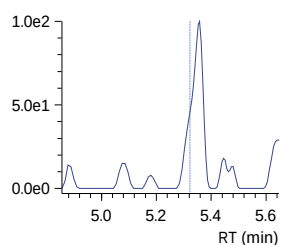
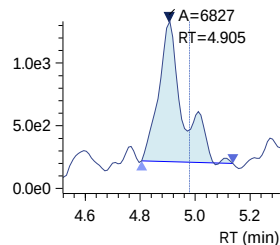
1.68e5

ISTD 286.90>168.90 (-)

1.68e5

Q 284.90>168.90 (-)

4.90e1

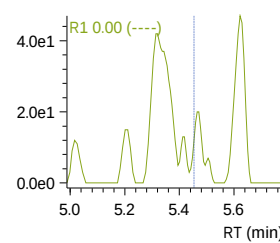
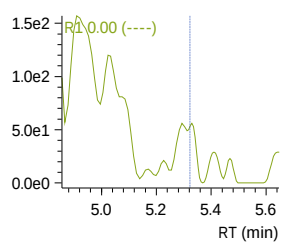


R1 314.80>82.90 (-)

1.57e2

R1 284.90>184.90 (-)

4.70e1

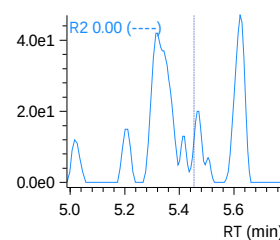
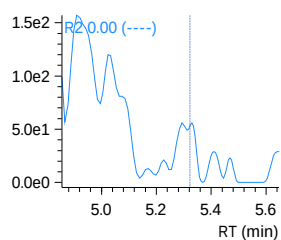


R2 314.80>82.90 (-)

1.57e2

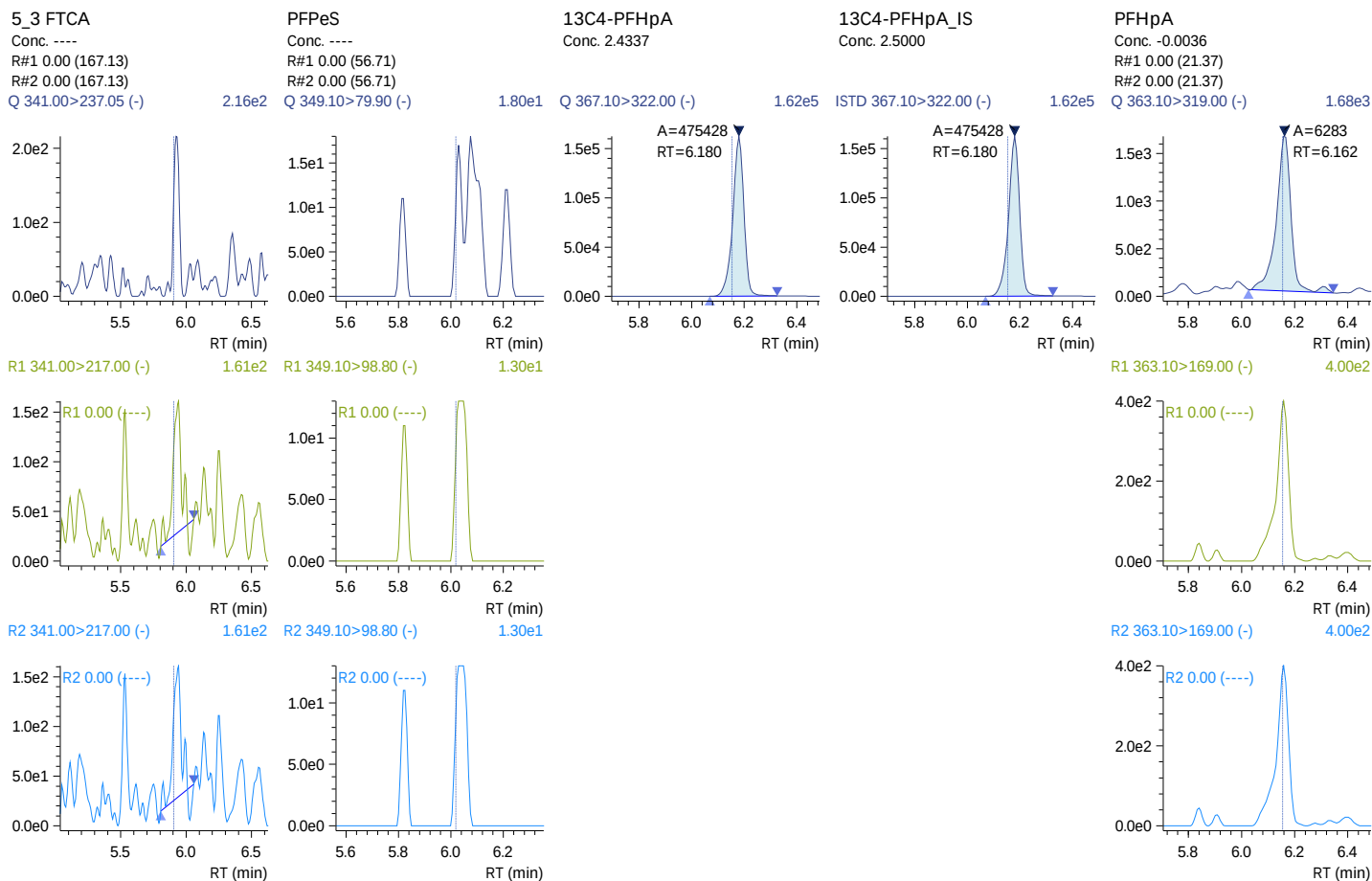
R2 284.90>184.90 (-)

4.70e1



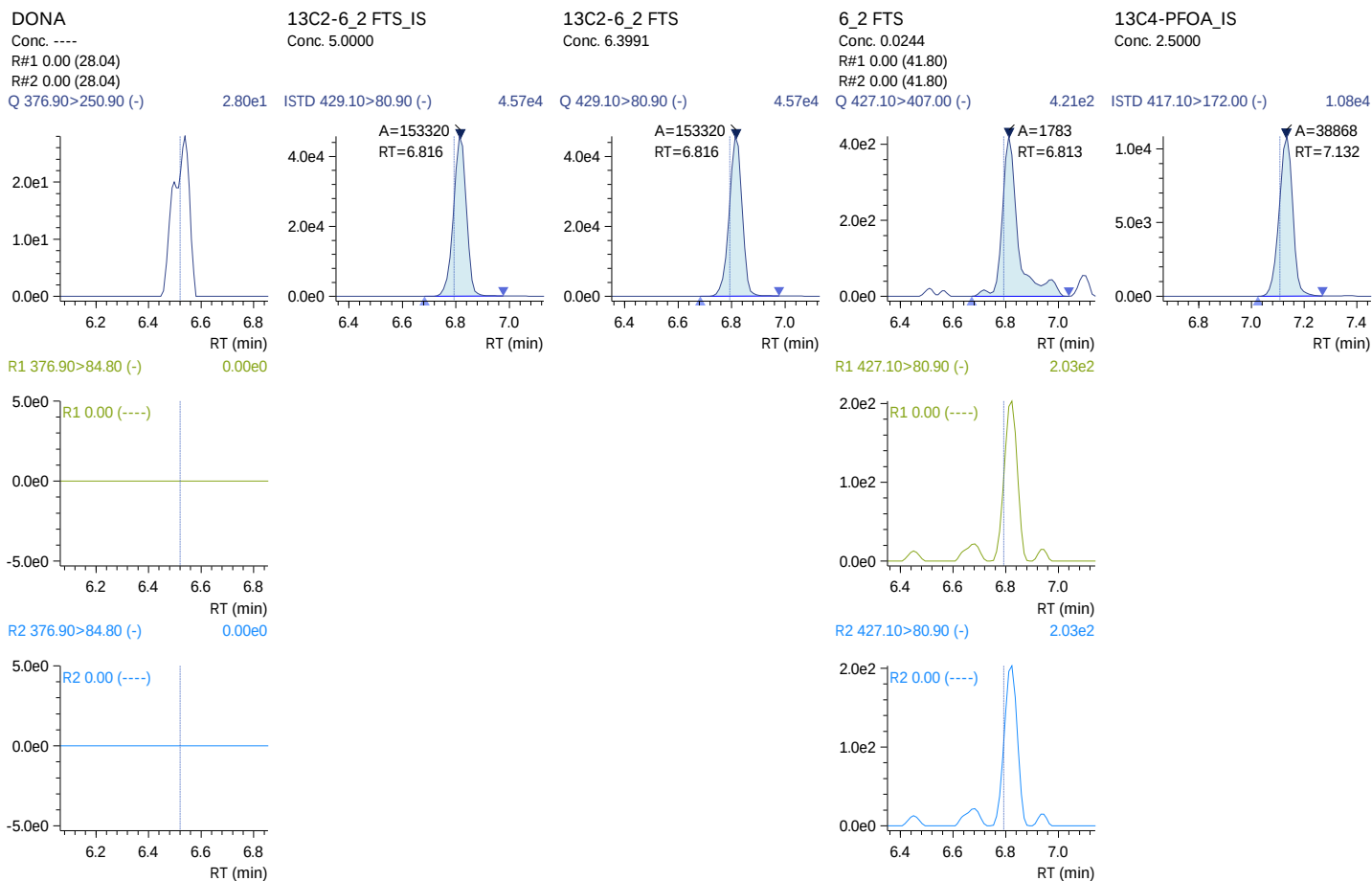


240118_005 (continued)





240118_005 (continued)





240118_005 (continued)

13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.3921

PFOA
Conc. -0.0074
R#1 25.58 (29.05)
R#2 25.58 (29.05)

13C3-PFHxS
Conc. 2.7556

13C3-PFHxS_IS
Conc. 2.5000

ISTD 421.10>376.00 (-)

1.50e5

Q 421.10>376.00 (-)

1.50e5

Q 413.00>369.00 (-)

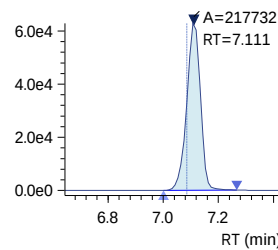
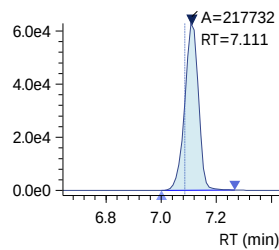
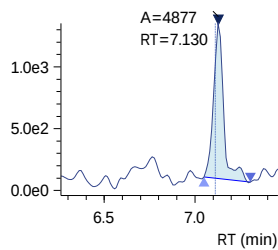
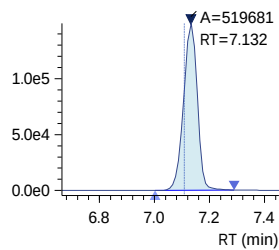
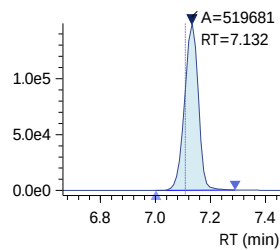
1.35e3

Q 402.10>79.90 (-)

6.29e4

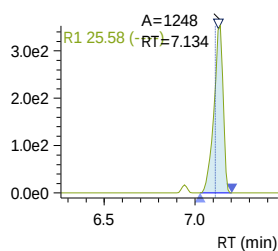
ISTD 402.10>79.90 (-)

6.29e4



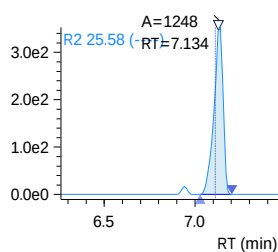
R1 413.00>169.00 (-)

3.53e2



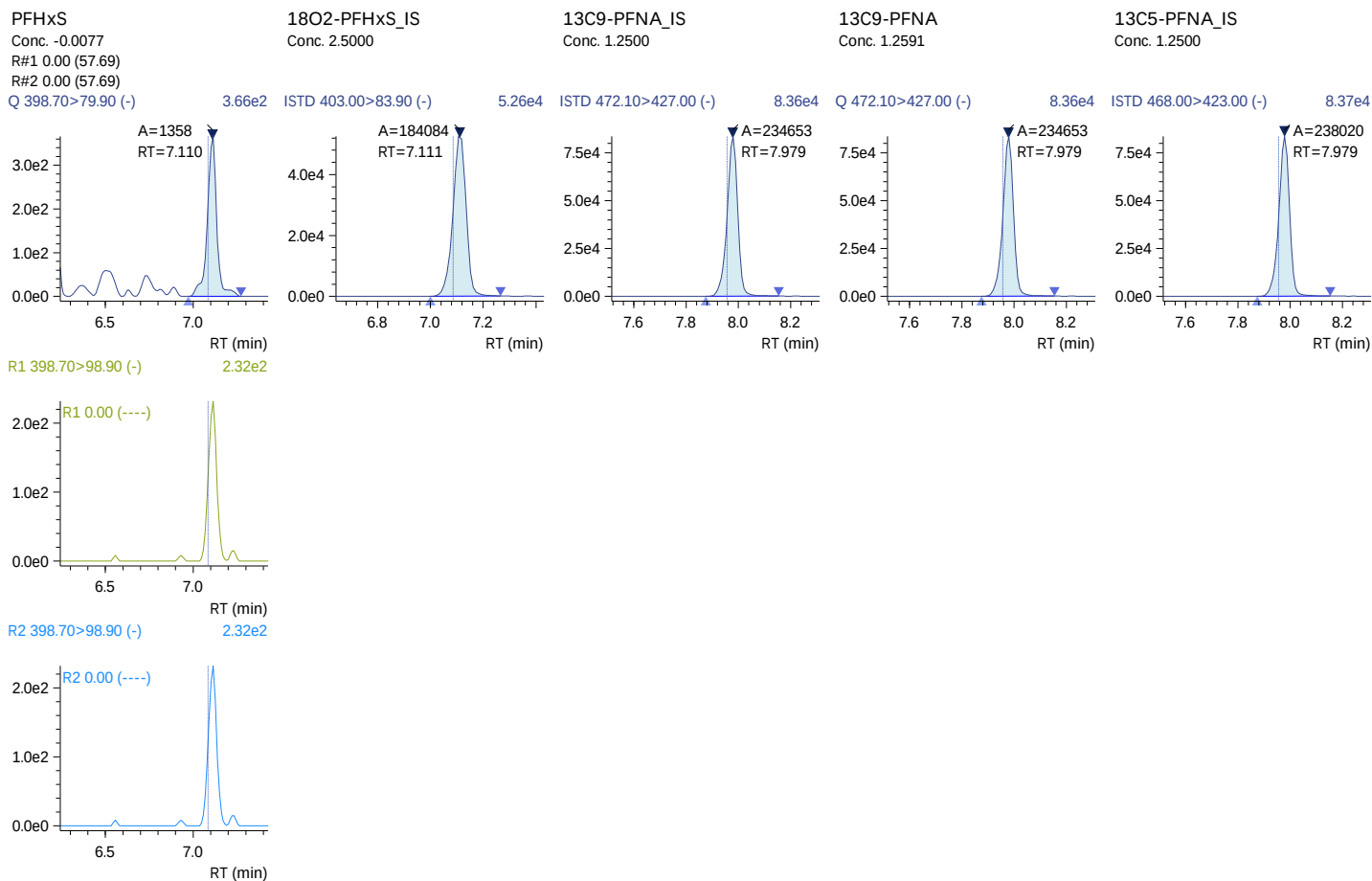
R2 413.00>169.00 (-)

3.53e2



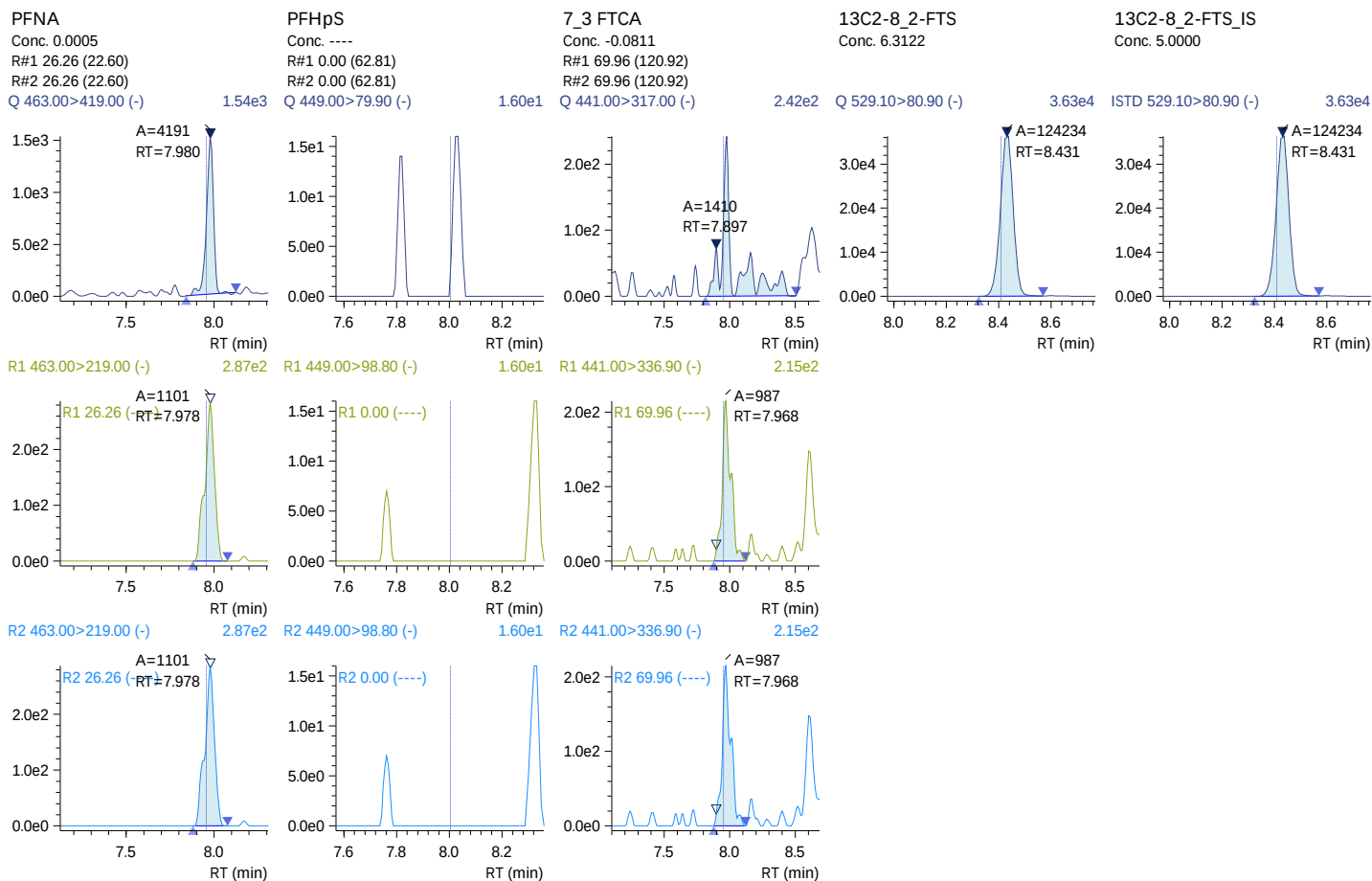


240118_005 (continued)



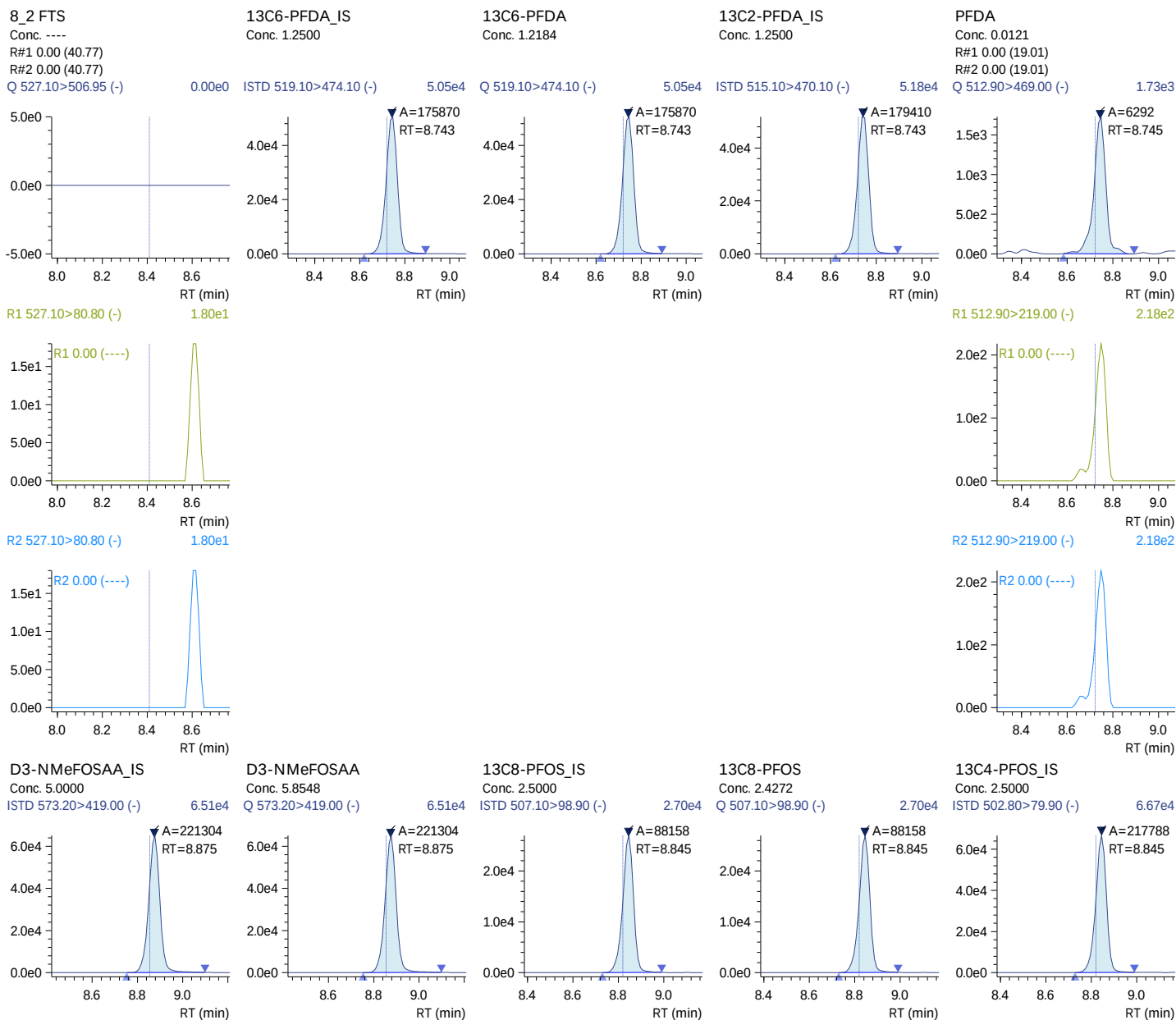


240118_005 (continued)



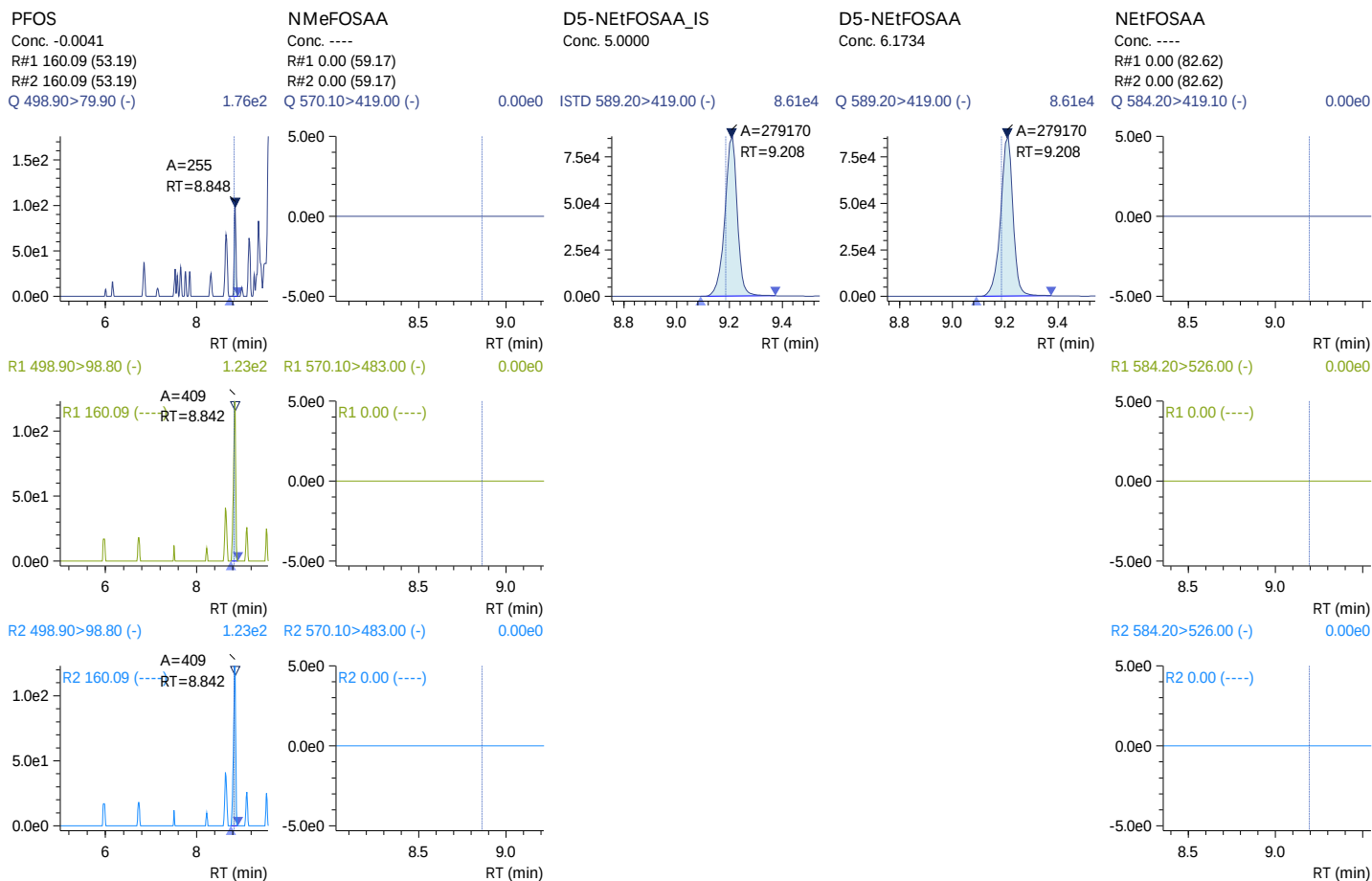


240118_005 (continued)





240118_005 (continued)





240118_005 (continued)

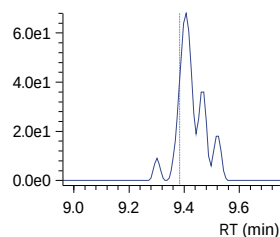
9-Cl-PF3ONS

Conc. ----

R#1 0.00 (31.76)

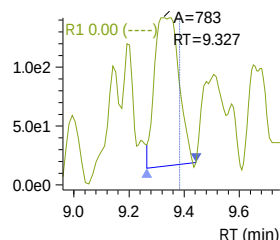
R#2 0.00 (31.76)

Q 530.80>351.00 (-)



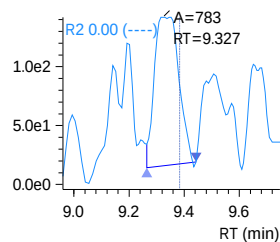
R1 532.80>353.00 (-)

1.42e2



R2 532.80>353.00 (-)

1.42e2



RT (min)

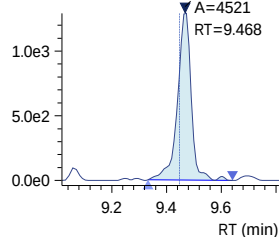
PFUnDA

Conc. -0.0029

R#1 0.00 (12.31)

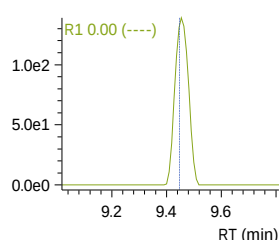
R#2 0.00 (12.31)

Q 563.10>519.00 (-)



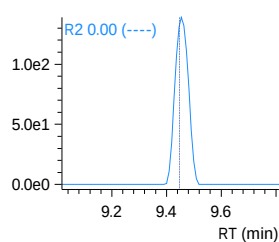
R1 563.10>269.10 (-)

1.39e2



R2 563.10>269.10 (-)

1.39e2

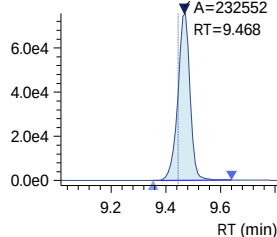


RT (min)

13C7-PFUnDA_IS

Conc. 1.2500

ISTD 570.00>525.10 (-)



A=232552
RT=9.468

7.57e4



A=232552
RT=9.468

7.57e4

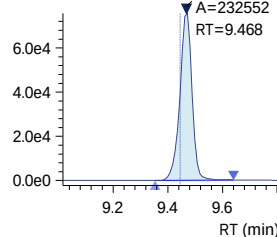


RT (min)

13C7-PFUnDA

Conc. 1.3507

Q 570.00>525.10 (-)



A=232552
RT=9.468

7.57e4



A=232552
RT=9.468

7.57e4



RT (min)

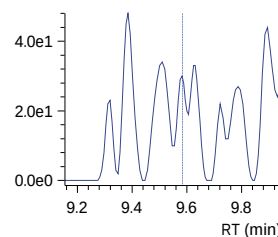
PFNS

Conc. ----

R#1 0.00 (63.31)

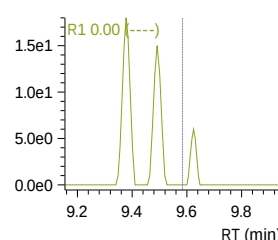
R#2 0.00 (63.31)

Q 548.80>79.90 (-)



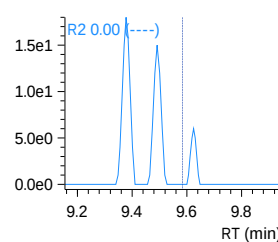
R1 548.80>98.80 (-)

1.80e1



R2 548.80>98.80 (-)

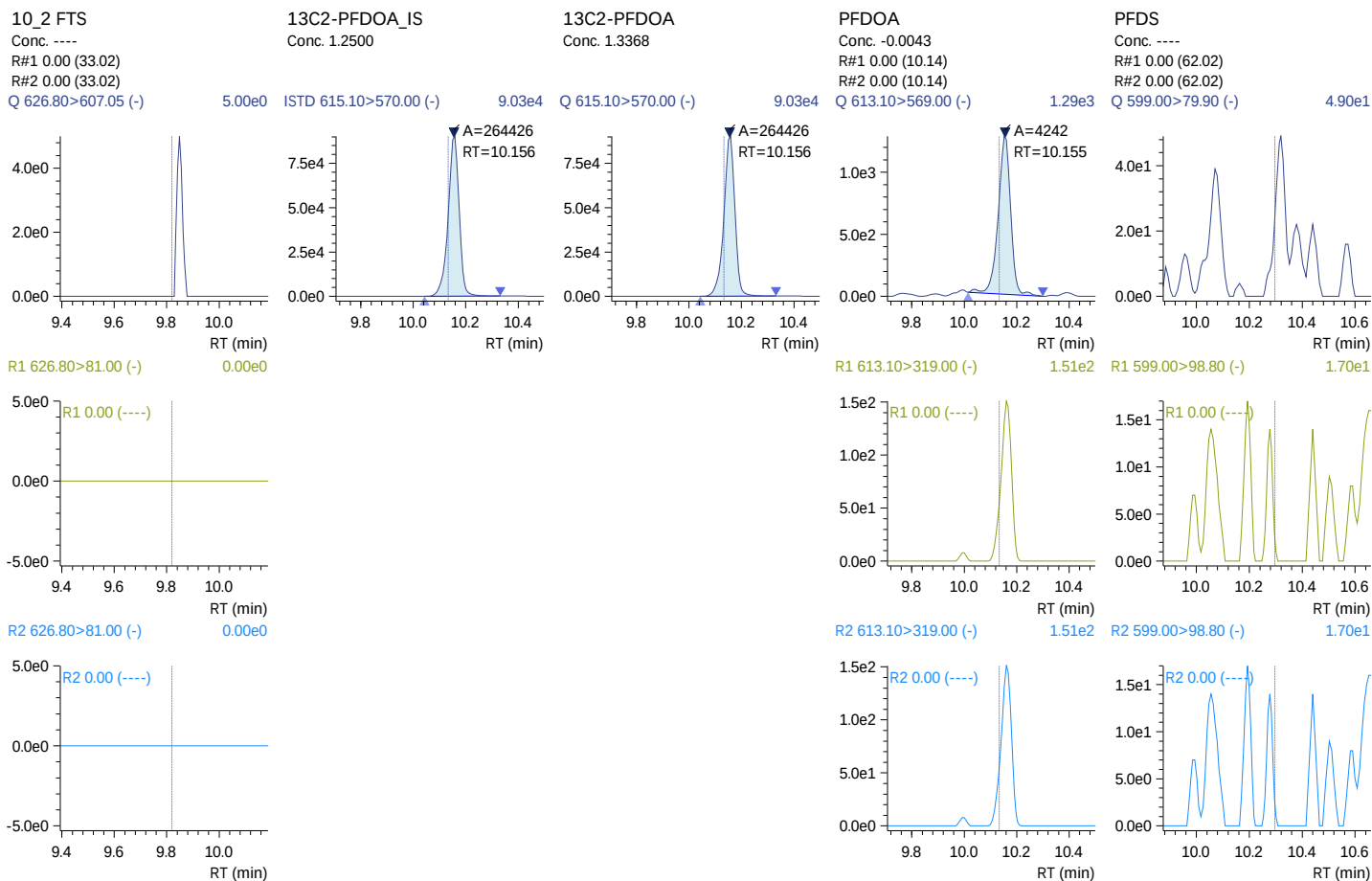
1.80e1



RT (min)



240118_005 (continued)





240118_005 (continued)

PFTTrDA

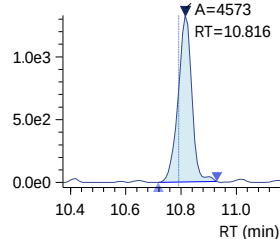
Conc. -0.0025

R#1 19.09 (15.12)

R#2 19.09 (15.12)

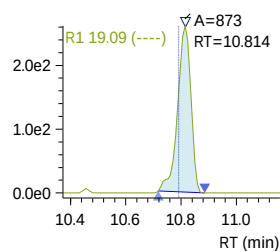
Q 663.00>619.00 (-)

1.33e3



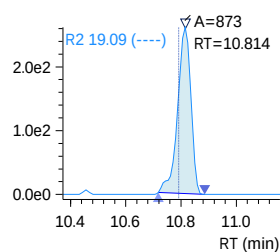
R1 663.00>168.90 (-)

2.62e2



R2 663.00>168.90 (-)

2.62e2



11-Cl-PF3OUdS

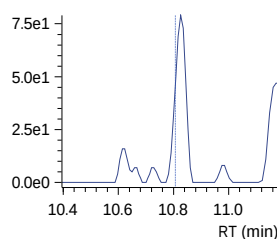
Conc. ----

R#1 0.00 (36.61)

R#2 0.00 (36.61)

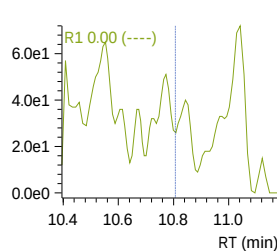
Q 630.90>451.00 (-)

7.90e1



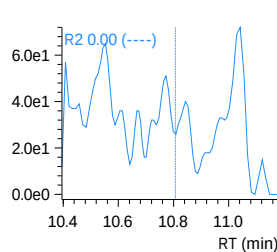
R1 632.90>452.90 (-)

7.20e1



R2 632.90>452.90 (-)

7.20e1

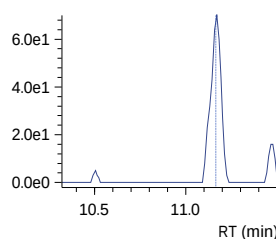


PFOSAm

Conc. ----

Q 498.10>77.90 (-)

7.00e1

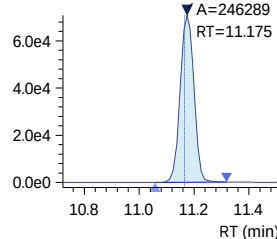


13C8-PFOSAm

Conc. 2.6639

Q 506.10>77.80 (-)

7.08e4

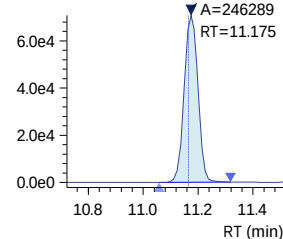


13C8-PFOSAm_IS

Conc. 2.5000

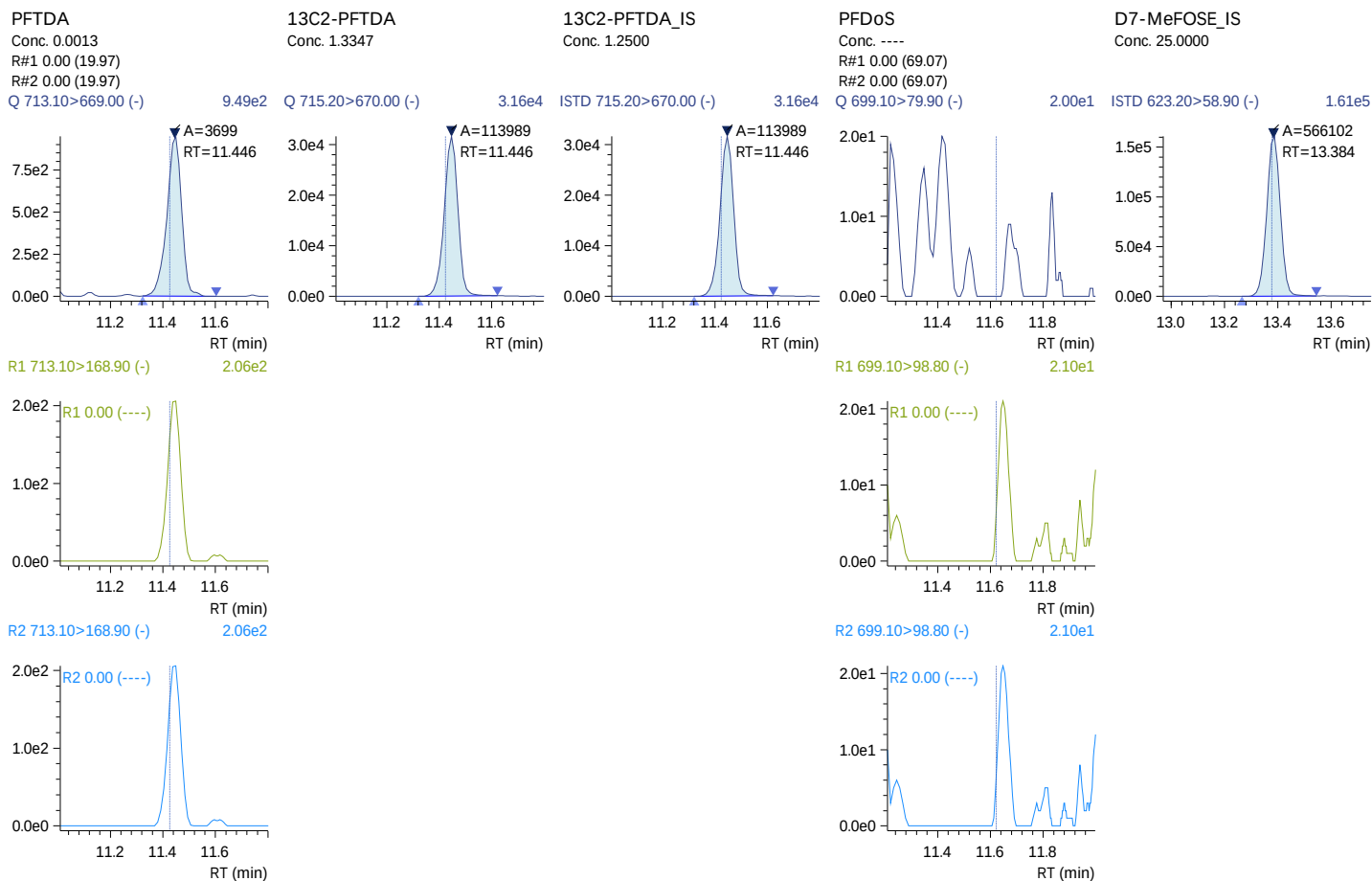
ISTD 506.10>77.80 (-)

7.08e4





240118_005 (continued)





240118_005 (continued)

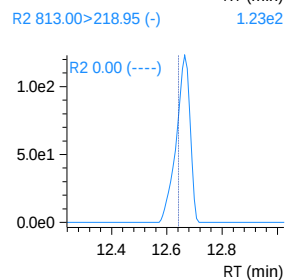
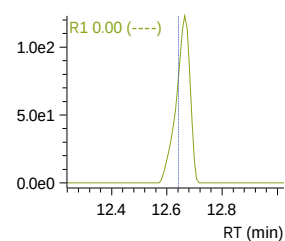
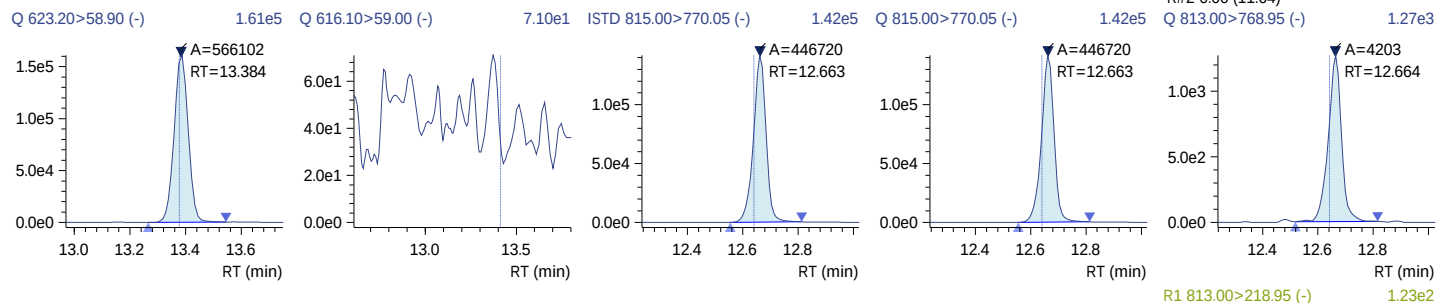
D7-MeFOSE
 Conc. 24.8351

MeFOSE
 Conc. ----

13C2-PFHDA_IS
 Conc. 2.5000

13C2-PFHDA
 Conc. 2.6806

PFHXDA
 Conc. -0.0049
 R#1 0.00 (11.64)
 R#2 0.00 (11.64)





240118_005 (continued)

D3-MeFOSA
 Conc. 2.4353

D3-MeFOSA_IS
 Conc. 2.5000

MeFOSA
 Conc. ----
 R#1 0.00 (149.05)
 R#2 0.00 (149.05)

D9-EtFOSE_IS
 Conc. 25.0000

D9-EtFOSE
 Conc. 23.9751

Q 515.00>219.00 (-)

1.27e4

ISTD 515.00>219.00 (-)

1.27e4

Q 511.90>219.00 (-)

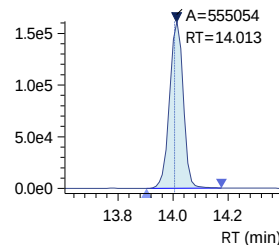
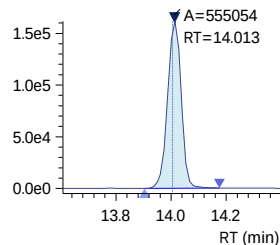
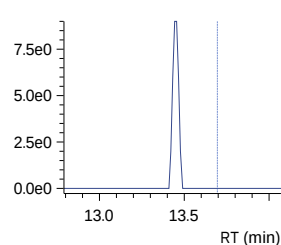
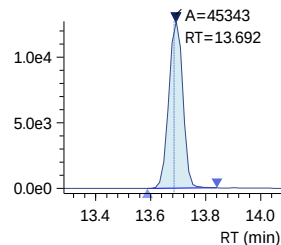
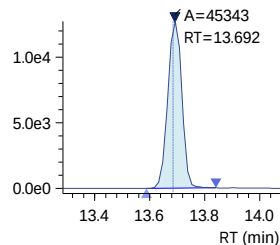
9.00e0

ISTD 639.20>58.90 (-)

1.62e5

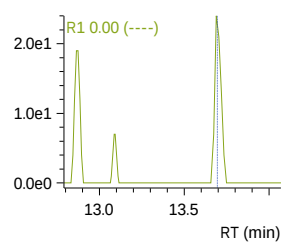
Q 639.20>58.90 (-)

1.62e5



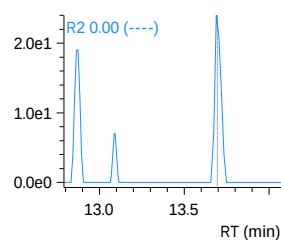
R1 511.90>169.00 (-)

2.40e1



R2 511.90>169.00 (-)

2.40e1





240118_005 (continued)

EtFOSE
Conc. ----

D5-EtFOSAm
Conc. 2.5482

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. ----

PFODA
Conc. 0.0040

Q 630.00>59.00 (-)

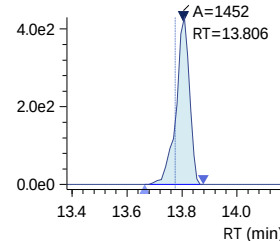
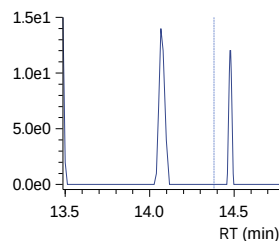
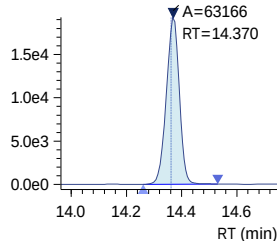
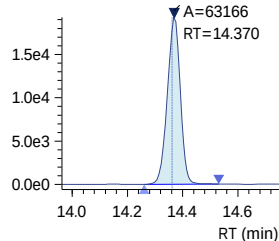
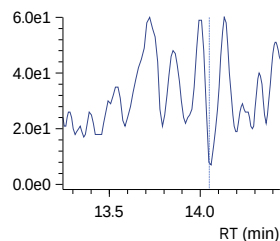
6.00e1 Q 531.10>219.00 (-)

1.93e4 ISTD 531.10>219.00 (-)

1.93e4 Q 526.00>219.00 (-)

1.50e1 Q 913.00>868.65 (-)

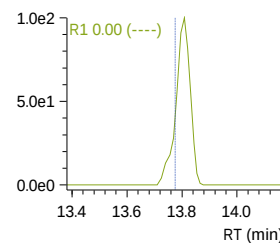
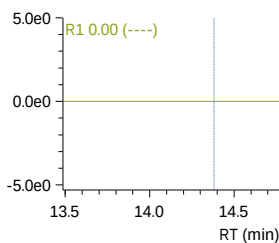
4.30e2



R1 526.00>169.00 (-)

0.00e0 R1 913.00>169.00 (-)

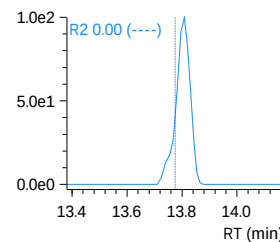
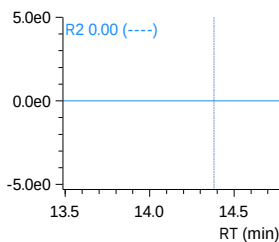
1.00e2



R2 526.00>169.00 (-)

0.00e0 R2 913.00>169.00 (-)

1.00e2





240118_006

Sample ID: 1633 ICAL 0.05PPB
Date Acquired: 1/18/2024 2:04:34 PM
Acquired by: System Administrator
Data File: 240118_006
Vial: 1 | Inj. Volume: 10.0000uL | Tray: 1

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	1308470	----	----	----	----	----	----	
13C4-PFBA_IS	216.80>171.90	----	1308470	----	----	----	----	----	----	
13C3-PFBA_IS	216.00>172.00	----	598299	----	----	----	----	----	----	
PFBA	212.80>169.05	----	7715	----	----	----	----	----	----	AC
PFMPA	229.00>84.90	----	5804	----	----	----	----	----	----	
3_3 FTCA	241.00>177.10	241.00>117.00	3313	5296	159.84	141.17	5296	159.84	141.17	
13C5-PFPeA	268.30>223.00	----	152450	----	----	----	----	----	----	
13C5-PFPeA_IS	268.30>223.00	----	152450	----	----	----	----	----	----	
PFPeA	263.00>219.00	----	12644	----	----	----	----	----	----	
PFMBA	279.00>84.95	----	7994	----	----	----	----	----	----	
13C2-4_2 FTS	329.10>80.90	----	188057	----	----	----	----	----	----	
13C2-4_2 FTS_IS	329.10>80.90	----	188057	----	----	----	----	----	----	
4_2 FTS	327.10>307.00	327.10>80.90	4993	1515	30.35	29.06	1515	30.35	29.06	
13C3-PFBS_IS	302.10>79.90	----	336745	----	----	----	----	----	----	
PFBS	298.70>79.90	298.70>98.80	8756	4540	51.86	46.72	4540	51.86	46.72	
13C3-PFBS	302.10>79.90	----	336745	----	----	----	----	----	----	
NFDHA	295.00>201.00	295.00>84.90	9711	3287	33.85	40.25	3287	33.85	40.25	
13C5-PFHxA	318.00>273.00	----	677503	----	----	----	----	----	----	
13C5-PFHxA_IS	318.00>273.00	----	677503	----	----	----	----	----	----	
13C2-PFHxA_IS	315.10>270.00	----	618072	----	----	----	----	----	----	
PFHxA	313.00>269.00	----	16225	----	----	----	----	----	----	
PFEESA	314.80>135.00	314.80>82.90	41229	2394	5.81	6.11	2394	5.81	6.11	
13C3-HFPO-DA	286.90>168.90	----	595312	----	----	----	----	----	----	
13C3-HFPO-DA_IS	286.90>168.90	----	595312	----	----	----	----	----	----	
HFPO-DA	284.90>168.90	284.90>184.90	3643	2602	71.42	65.61	2602	71.42	65.61	
5_3 FTCA	341.00>237.05	341.00>217.00	19665	32730	166.44	158.86	32730	166.44	158.86	
PFPeS	349.10>79.90	349.10>98.80	7075	4403	62.24	55.80	4403	62.24	55.80	
13C4-PFHpA	367.10>322.00	----	607483	----	----	----	----	----	----	
13C4-PFHpA_IS	367.10>322.00	----	607483	----	----	----	----	----	----	
PFHpA	363.10>319.00	363.10>169.00	22449	4895	21.81	21.50	4895	21.81	21.50	
DONA	376.90>250.90	376.90>84.80	27814	8020	28.83	29.66	8020	28.83	29.66	
13C2-6_2 FTS_IS	429.10>80.90	----	160811	----	----	----	----	----	----	
13C2-6_2 FTS	429.10>80.90	----	160811	----	----	----	----	----	----	
6_2 FTS	427.10>407.00	427.10>80.90	4980	1802	36.19	41.15	1802	36.19	41.15	AC
13C4-PFOA_IS	417.10>172.00	----	48882	----	----	----	----	----	----	
13C8-PFOA_IS	421.10>376.00	----	678231	----	----	----	----	----	----	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240118_006 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	678231	----	----	----	----	----	----	----
PFOA	413.00>369.00	413.00>169.00	14351	5657	39.42	31.89	5657	39.42	31.89	
13C3-PFHxS	402.10>79.90	----	270206	----	----	----	----	----	----	----
13C3-PFHxS_IS	402.10>79.90	----	270206	----	----	----	----	----	----	----
PFHxS	398.70>79.90	398.70>98.90	8655	4607	53.23	56.62	4607	53.23	56.62	
18O2-PFHxS_IS	403.00>83.90	----	229705	----	----	----	----	----	----	----
13C9-PFNA_IS	472.10>427.00	----	310687	----	----	----	----	----	----	----
13C9-PFNA	472.10>427.00	----	310687	----	----	----	----	----	----	----
13C5-PFNA_IS	468.00>423.00	----	330771	----	----	----	----	----	----	----
PFNA	463.00>419.00	463.00>219.00	14376	3416	23.76	23.17	3416	23.76	23.17	
PFHpS	449.00>79.90	449.00>98.80	5220	3245	62.17	56.96	3245	62.17	56.96	
7_3 FTCA	441.00>317.00	441.00>336.90	37608	39478	104.97	117.47	39478	104.97	117.47	AC
13C2-8_2-FTS	529.10>80.90	----	149793	----	----	----	----	----	----	----
13C2-8_2-FTS_IS	529.10>80.90	----	149793	----	----	----	----	----	----	----
8_2 FTS	527.10>506.95	527.10>80.80	3653	1812	49.59	49.59	1812	49.59	49.59	
13C6-PFDA_IS	519.10>474.10	----	238849	----	----	----	----	----	----	----
13C6-PFDA	519.10>474.10	----	238849	----	----	----	----	----	----	----
13C2-PFDA_IS	515.10>470.10	----	227340	----	----	----	----	----	----	----
PFDA	512.90>469.00	512.90>219.00	18416	3329	18.08	19.00	3329	18.08	19.00	
D3-NMeFOSAA_IS	573.20>419.00	----	283573	----	----	----	----	----	----	----
D3-NMeFOSAA	573.20>419.00	----	283573	----	----	----	----	----	----	----
13C8-PFOS_IS	507.10>98.90	----	117833	----	----	----	----	----	----	----
13C8-PFOS	507.10>98.90	----	117833	----	----	----	----	----	----	----
13C4-PFOS_IS	502.80>79.90	----	283185	----	----	----	----	----	----	----
PFOS	498.90>79.90	498.90>98.80	7169	3994	55.71	52.47	3994	55.71	52.47	
NMeFOSAA	570.10>419.00	570.10>483.00	5295	1526	28.82	55.15	1526	28.82	55.15	AC
D5-NeFOSAA_IS	589.20>419.00	----	315390	----	----	----	----	----	----	----
D5-NeFOSAA	589.20>419.00	----	315390	----	----	----	----	----	----	----
NeFOSAA	584.20>419.10	584.20>526.00	2717	2154	79.27	81.95	2154	79.27	81.95	
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	28101	8238	29.32	32.76	8238	29.32	32.76	
PFUnDA	563.10>519.00	563.10>269.10	18285	2858	15.63	13.12	2858	15.63	13.12	
13C7-PFUnDA_IS	570.00>525.10	----	295082	----	----	----	----	----	----	----
13C7-PFUnDA	570.00>525.10	----	295082	----	----	----	----	----	----	----
PFNS	548.80>79.90	548.80>98.80	5101	3145	61.64	65.22	3145	61.64	65.22	
10_2 FTS	626.80>607.05	626.80>81.00	4057	1130	27.86	37.13	1130	27.86	37.13	
13C2-PFDOA_IS	615.10>570.00	----	335621	----	----	----	----	----	----	----
13C2-PFDOA	615.10>570.00	----	335621	----	----	----	----	----	----	----
PFDOA	613.10>569.00	613.10>319.00	15951	1904	11.94	11.29	1904	11.94	11.29	
PFDS	599.00>79.90	599.00>98.80	5065	2842	56.12	60.18	2842	56.12	60.18	
PFTDA	663.00>619.00	663.00>168.90	16904	3165	18.72	17.64	3165	18.72	17.64	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240118_006 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	22926	6854	29.90	36.44	6854	29.90	36.44	
PFOSAm	498.10>77.90	----	12073	----	----	----	----	----	----	
13C8-PFOSAm	506.10>77.80	----	308563	----	----	----	----	----	----	
13C8-PFOSAm_IS	506.10>77.80	----	308563	----	----	----	----	----	----	
PFTDA	713.10>669.00	713.10>168.90	12918	3353	25.95	22.96	3353	25.95	22.96	
13C2-PFTDA	715.20>670.00	----	144376	----	----	----	----	----	----	
13C2-PFTDA_IS	715.20>670.00	----	144376	----	----	----	----	----	----	
PFDoS	699.10>79.90	699.10>98.80	2919	1706	58.44	67.40	1706	58.44	67.40	
D7-MeFOSE_IS	623.20>58.90	----	739936	----	----	----	----	----	----	
D7-MeFOSE	623.20>58.90	----	739936	----	----	----	----	----	----	
MeFOSE	616.10>59.00	----	2019	----	----	----	----	----	----	AC
13C2-PFHxDA_IS	815.00>770.05	----	560359	----	----	----	----	----	----	
13C2-PFHxDA	815.00>770.05	----	560359	----	----	----	----	----	----	
PFHxDA	813.00>768.95	813.00>218.95	19294	2661	13.79	13.90	2661	13.79	13.90	
D3-MeFOSA	515.00>219.00	----	60326	----	----	----	----	----	----	
D3-MeFOSA_IS	515.00>219.00	----	60326	----	----	----	----	----	----	
MeFOSA	511.90>219.00	511.90>169.00	2491	0	0.00	140.79	0	0.00	140.79	IRr
D9-EtFOSE_IS	639.20>58.90	----	750458	----	----	----	----	----	----	
D9-EtFOSE	639.20>58.90	----	750458	----	----	----	----	----	----	
EtFOSE	630.00>59.00	----	2935	----	----	----	----	----	----	AC
D5-EtFOSAm	531.10>219.00	----	79483	----	----	----	----	----	----	
D5-EtFOSAm_IS	531.10>219.00	----	79483	----	----	----	----	----	----	
EtFOSAm	526.00>219.00	526.00>169.00	2813	4908	174.51	163.90	4908	174.51	163.90	
PFODA	913.00>868.65	913.00>169.00	8140	2208	27.13	27.03	2208	27.13	27.03	

Flag ID key: AC: Accuracy%, IRr: Ion Ratio (Relative)



240118_006

Sample ID: 1633 ICAL 0.05PPB
Date Acquired: 1/18/2024 2:04:34 PM
Acquired by: System Administrator
Data File: 240118_006
Vial: 1 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Std. Conc.	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.416	0.002	-0.002	1308470	598299	13C3-PFBA_IS	10.0000	9.7844	ng/mL	
13C4-PFBA_IS	Auto	1.416	0.002	----	1308470	1308470	----	10.0000	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.418	0.003	----	598299	598299	----	5.0000	5.0000	ng/mL	
PFBA	Auto	1.422	0.006	0.006	7715	1308470	13C4-PFBA_IS	----	0.0686	ng/mL	AC
PFMPA	Auto	2.432	0.000	-1.063	5804	152450	13C5-PFPeA_IS	0.0500	0.0589	ng/mL	
3_3 FTCA	Auto	3.005	0.001	-0.490	3313	152450	13C5-PFPeA_IS	1.0000	0.9802	ng/mL	
13C5-PFPeA	Auto	3.495	0.003	-1.487	152450	618072	13C2-PFHxA_IS	5.0000	5.4644	ng/mL	
13C5-PFPeA_IS	Auto	3.495	0.003	----	152450	152450	----	5.0000	5.0000	ng/mL	
PFPeA	M	3.496	0.001	0.001	12644	152450	13C5-PFPeA_IS	0.0500	0.0640	ng/mL	
PFMBA	Auto	4.030	0.005	0.535	7994	152450	13C5-PFPeA_IS	0.0500	0.0573	ng/mL	
13C2-4_2 FTS	Auto	4.664	0.003	-2.426	188057	229705	18O2-PFHxS_IS	5.0000	5.9492	ng/mL	
13C2-4_2 FTS_IS	Auto	4.664	0.003	----	188057	188057	----	5.0000	5.0000	ng/mL	
4_2 FTS	MI R1 R2	4.666	0.004	0.002	4993	188057	13C2-4_2 FTS_IS	0.0469	0.0540	ng/mL	
13C3-PFBS_IS	Auto	4.650	0.003	----	336745	336745	----	2.5000	2.5000	ng/mL	
PFBS	Auto	4.651	0.003	0.001	8756	336745	13C3-PFBS_IS	0.0444	0.0508	ng/mL	
13C3-PFBS	Auto	4.650	0.003	-2.440	336745	229705	18O2-PFHxS_IS	2.5000	2.5833	ng/mL	
NFDHA	Auto	4.840	0.005	-0.142	9711	677503	13C5-PFHxA_IS	0.0500	0.0646	ng/mL	
13C5-PFHxA	Auto	4.982	0.004	0.000	677503	618072	13C2-PFHxA_IS	2.5000	2.6009	ng/mL	
13C5-PFHxA_IS	Auto	4.982	0.004	----	677503	677503	----	2.5000	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	4.982	0.003	----	618072	618072	----	2.5000	2.5000	ng/mL	
PFHxA	M	4.982	0.002	0.000	16225	677503	13C5-PFHxA_IS	0.0500	0.0636	ng/mL	
PFEESA	MI R1 R2	5.327	0.005	0.345	41229	677503	13C5-PFHxA_IS	0.0445	0.0543	ng/mL	
13C3-HFPO-DA	Auto	5.456	0.004	0.474	595312	618072	13C2-PFHxA_IS	10.0000	9.8392	ng/mL	
13C3-HFPO-DA_IS	Auto	5.456	0.004	----	595312	595312	----	10.0000	10.0000	ng/mL	
HFPO-DA	M	5.455	0.002	-0.001	3643	595312	13C3-HFPO-DA_IS	0.0500	0.0554	ng/mL	
5_3 FTCA	Auto	5.910	0.004	0.928	19665	677503	13C5-PFHxA_IS	1.0000	1.1222	ng/mL	
PFPeS	Auto	6.021	0.003	-1.069	7075	270206	13C3-PFHxS_IS	0.0471	0.0499	ng/mL	
13C4-PFHpA	Auto	6.159	0.005	1.177	607483	618072	13C2-PFHxA_IS	2.5000	2.5762	ng/mL	
13C4-PFHpA_IS	Auto	6.159	0.005	----	607483	607483	----	2.5000	2.5000	ng/mL	
PFHpA	Auto	6.157	0.002	-0.002	22449	607483	13C4-PFHpA_IS	0.0500	0.0543	ng/mL	
DONA	Auto	6.524	0.004	1.068	27814	595312	13C3-HFPO-DA_IS	0.0473	0.0603	ng/mL	
13C2-6_2 FTS_IS	Auto	6.796	0.003	----	160811	160811	----	5.0000	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.796	0.003	-0.294	160811	229705	18O2-PFHxS_IS	5.0000	5.3788	ng/mL	
6_2 FTS	Auto	6.796	0.004	0.000	4980	160811	13C2-6_2 FTS_IS	----	0.0680	ng/mL	AC
13C4-PFOA_IS	Auto	7.113	0.006	----	48882	48882	----	2.5000	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.113	0.006	----	678231	678231	----	2.5000	2.5000	ng/mL	
13C8-PFOA	Auto	7.113	0.006	0.000	678231	48882	13C4-PFOA_IS	2.5000	2.4824	ng/mL	
PFOA	Auto	7.112	0.002	-0.001	14351	678231	13C8-PFOA_IS	0.0500	0.0382	ng/mL	
13C3-PFHxS	Auto	7.090	0.004	0.000	270206	229705	18O2-PFHxS_IS	2.5000	2.7405	ng/mL	
13C3-PFHxS_IS	Auto	7.090	0.004	----	270206	270206	----	2.5000	2.5000	ng/mL	
PFHxS	M	7.091	0.007	0.001	8655	270206	13C3-PFHxS_IS	0.0457	0.0476	ng/mL	
18O2-PFHxS_IS	Auto	7.090	0.004	----	229705	229705	----	2.5000	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.961	0.005	----	310687	310687	----	1.2500	1.2500	ng/mL	
13C9-PFNA	Auto	7.961	0.005	0.000	310687	330771	13C5-PFNA_IS	1.2500	1.1996	ng/mL	
13C5-PFNA_IS	Auto	7.961	0.005	----	330771	330771	----	1.2500	1.2500	ng/mL	
PFNA	Auto	7.960	0.003	-0.001	14376	310687	13C9-PFNA_IS	0.0500	0.0505	ng/mL	
PFHpS	Auto	8.009	0.005	-0.817	5220	117833	13C8-PFOS_IS	0.0477	0.0568	ng/mL	
7_3 FTCA	Auto	7.957	0.003	2.975	37608	677503	13C5-PFHxA_IS	----	1.6075	ng/mL	AC
13C2-8_2-FTS	Auto	8.415	0.006	1.325	149793	229705	18O2-PFHxS_IS	5.0000	6.0993	ng/mL	
13C2-8_2-FTS_IS	Auto	8.415	0.006	----	149793	149793	----	5.0000	5.0000	ng/mL	
8_2 FTS	Auto	8.415	0.005	0.000	3653	149793	13C2-8_2-FTS_IS	0.0480	0.0568	ng/mL	
13C6-PFDA_IS	Auto	8.726	0.006	----	238849	238849	----	1.2500	1.2500	ng/mL	
13C6-PFDA	Auto	8.726	0.006	0.000	238849	227340	13C2-PFDA_IS	1.2500	1.3059	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_006 (continued)

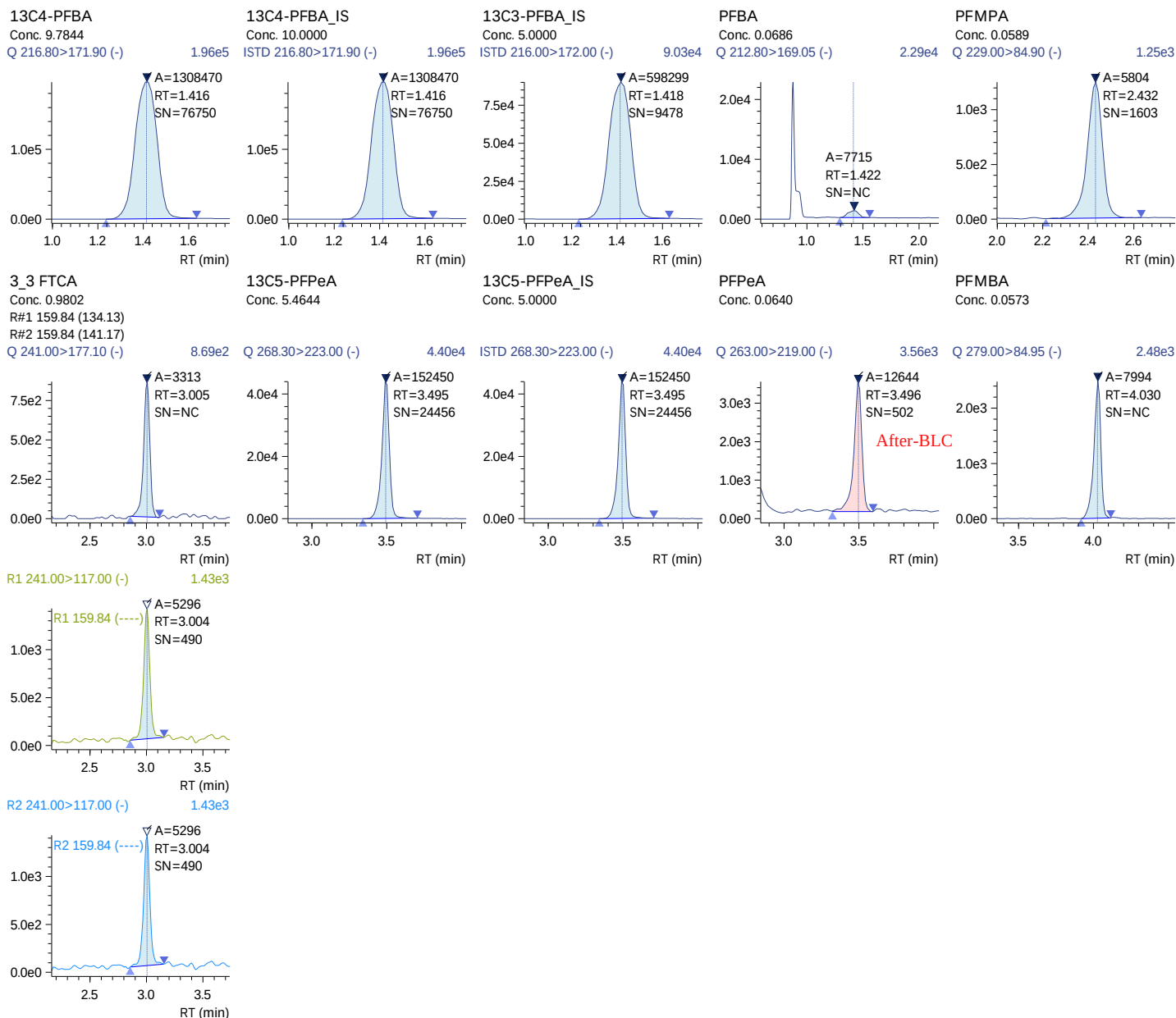
(Table continued from previous page)

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Std. Conc.	Conc.	Unit	Flag ID
13C2-PFDA_IS	Auto	8.726	0.005	----	227340	227340	----	1.2500	1.2500	ng/mL	
PFDA	Auto	8.728	0.007	0.002	18416	238849	13C6-PFDA_IS	0.0500	0.0554	ng/mL	
D3-NMeFOSAA_IS	Auto	8.860	0.005	----	283573	283573	----	5.0000	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.860	0.005	0.034	283573	283185	13C4-PFOS_IS	5.0000	5.7696	ng/mL	
13C8-PFOS_IS	Auto	8.826	0.006	----	117833	117833	----	2.5000	2.5000	ng/mL	
13C8-PFOS	Auto	8.826	0.006	0.000	117833	283185	13C4-PFOS_IS	2.5000	2.4950	ng/mL	
13C4-PFOS_IS	Auto	8.826	0.006	----	283185	283185	----	2.5000	2.5000	ng/mL	
PFOS	M	8.827	0.005	0.001	7169	117833	13C8-PFOS_IS	0.0464	0.0585	ng/mL	
NMeFOSAA	M	8.864	0.003	0.004	5295	283573	D3-NMeFOSAA_IS	----	0.0688	ng/mL	AC, IRr
D5-NetFOSAA_IS	Auto	9.191	0.005	----	315390	315390	----	5.0000	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.191	0.005	0.365	315390	283185	13C4-PFOS_IS	5.0000	5.3637	ng/mL	
NetFOSAA	M	9.203	0.008	0.012	2717	315390	D5-NetFOSAA_IS	0.0500	0.0645	ng/mL	
9-CI-PF3ONS	Auto	9.390	0.006	3.934	28101	595312	13C3-HFPO-DA_IS	0.0467	0.0573	ng/mL	
PFUnDA	Auto	9.450	0.003	0.000	18285	295082	13C7-PFUnDA_IS	0.0500	0.0559	ng/mL	
13C7-PFUnDA_IS	Auto	9.450	0.005	----	295082	295082	----	1.2500	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.450	0.005	0.724	295082	227340	13C2-PFDA_IS	1.2500	1.3525	ng/mL	
PFNS	Auto	9.590	0.006	0.764	5101	117833	13C8-PFOS_IS	0.0481	0.0570	ng/mL	
10_2_FTS	Auto	9.826	0.007	1.411	4057	149793	13C2-8_2-FTS_IS	0.0482	0.0518	ng/mL	
13C2-PFDOA_IS	Auto	10.138	0.005	----	335621	335621	----	1.2500	1.2500	ng/mL	
13C2-PFDOA	Auto	10.138	0.005	1.412	335621	227340	13C2-PFDA_IS	1.2500	1.3390	ng/mL	
PFDOA	Auto	10.141	0.007	0.003	15951	335621	13C2-PFDOA_IS	0.0500	0.0517	ng/mL	
PFDS	Auto	10.301	0.005	1.475	5065	117833	13C8-PFOS_IS	0.0483	0.0589	ng/mL	
PFTDA	Auto	10.798	0.006	-0.633	16904	144376	13C2-PFTDA_IS	0.0500	0.0520	ng/mL	
11-CI-PF3OUdS	Auto	10.813	0.007	5.357	22926	595312	13C3-HFPO-DA_IS	0.0472	0.0524	ng/mL	
PFOSAm	M	11.166	0.002	0.000	12073	308563	13C8-PFOSAm_IS	0.1000	0.1187	ng/mL	
13C8-PFOSAm	Auto	11.166	0.001	2.340	308563	283185	13C4-PFOS_IS	2.5000	2.5667	ng/mL	
13C8-PFOSAm_IS	Auto	11.166	0.001	----	308563	308563	----	2.5000	2.5000	ng/mL	
PFTDA	M	11.433	0.008	0.002	12918	144376	13C2-PFTDA_IS	0.0500	0.0555	ng/mL	
13C2-PFTDA	Auto	11.431	0.007	2.705	144376	227340	13C2-PFDA_IS	1.2500	1.3341	ng/mL	
13C2-PFTDA_IS	Auto	11.431	0.007	----	144376	144376	----	1.2500	1.2500	ng/mL	
PFDoS	M	11.629	0.007	2.803	2919	117833	13C8-PFOS_IS	0.0485	0.0618	ng/mL	
D7-MeFOSE_IS	Auto	13.379	0.002	----	739936	739936	----	25.0000	25.0000	ng/mL	
D7-MeFOSE	Auto	13.379	0.002	4.553	739936	283185	13C4-PFOS_IS	25.0000	24.9648	ng/mL	
MeFOSE	M	13.420	0.007	0.041	2019	739936	D7-MeFOSE_IS	----	0.0743	ng/mL	AC
13C2-PFHXA_IS	Auto	12.647	0.006	----	560359	560359	----	2.5000	2.5000	ng/mL	
13C2-PFHXA	Auto	12.647	0.006	3.921	560359	227340	13C2-PFDA_IS	2.5000	2.6536	ng/mL	
PFHXA	Auto	12.648	0.006	0.001	19294	560359	13C2-PFHXA_IS	0.0500	0.0561	ng/mL	
D3-MeFOSA	Auto	13.687	0.002	4.861	60326	283185	13C4-PFOS_IS	2.5000	2.4918	ng/mL	
D3-MeFOSA_IS	Auto	13.687	0.002	----	60326	60326	----	2.5000	2.5000	ng/mL	
MeFOSA	M	13.694	0.000	0.007	2491	60326	D3-MeFOSA_IS	0.0500	0.0573	ng/mL	
D9-EtFOSE_IS	Auto	14.008	0.002	----	750458	750458	----	25.0000	25.0000	ng/mL	
D9-EtFOSE	Auto	14.008	0.002	5.182	750458	283185	13C4-PFOS_IS	25.0000	24.9296	ng/mL	
EtFOSE	M	14.053	0.005	0.045	2935	750458	D9-EtFOSE_IS	----	0.0743	ng/mL	AC
D5-EtFOSAm	Auto	14.365	0.003	5.539	79483	283185	13C4-PFOS_IS	2.5000	2.4659	ng/mL	
D5-EtFOSAm_IS	Auto	14.365	0.003	----	79483	79483	----	2.5000	2.5000	ng/mL	
EtFOSAm	M	14.384	0.004	0.019	2813	79483	D5-EtFOSAm_IS	0.0500	0.0608	ng/mL	
PFODA	Auto	13.786	0.011	1.139	8140	560359	13C2-PFHXA_IS	0.0500	0.0642	ng/mL	

Flag ID key: AC: Accuracy%, IRr: Ion Ratio (Relative)



240118_006 (continued)





240118_006 (continued)

13C2-4_2 FTS
Conc. 5.9492

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. 0.0540
R#1 30.35 (34.14)
R#2 30.35 (29.06)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 0.0508
R#1 51.86 (47.53)
R#2 51.86 (46.72)

Q 329.10>80.90 (-)

5.79e4

ISTD 329.10>80.90 (-)

5.79e4

Q 327.10>307.00 (-)

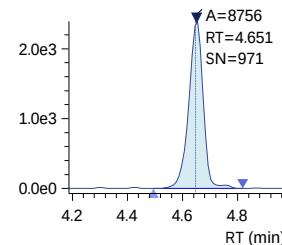
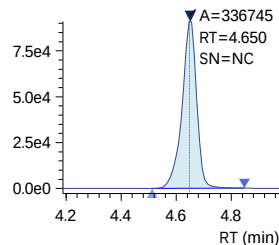
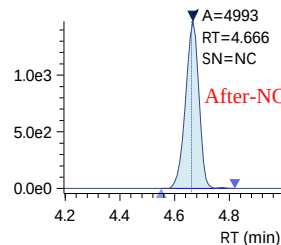
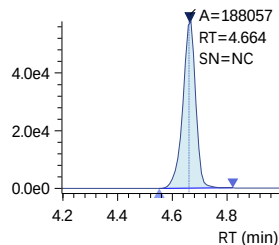
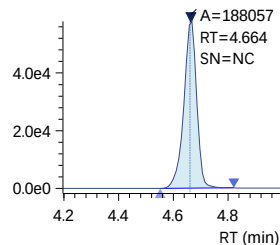
1.48e3

ISTD 302.10>79.90 (-)

9.11e4

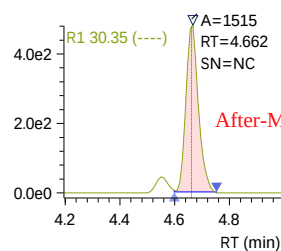
Q 298.70>79.90 (-)

2.39e3



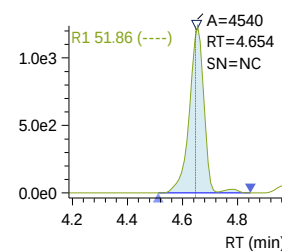
R1 327.10>80.90 (-)

4.81e2



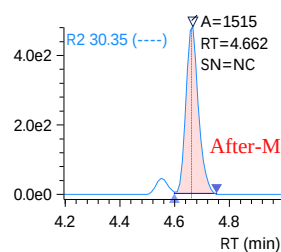
R1 298.70>98.80 (-)

1.24e3



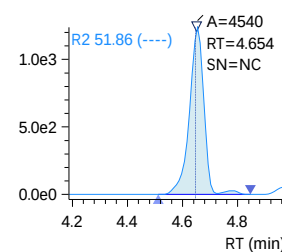
R2 327.10>80.90 (-)

4.81e2



R2 298.70>98.80 (-)

1.24e3





240118_006 (continued)

13C3-PFBS
Conc. 2.5833

NFDHA
Conc. 0.0646
R#1 33.85 (37.88)
R#2 33.85 (40.25)

13C5-PFHxA
Conc. 2.6009

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

Q 302.10>79.90 (-)

9.11e4

Q 295.00>201.00 (-)

2.89e3

Q 318.00>273.00 (-)

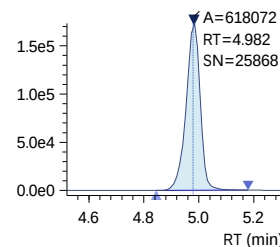
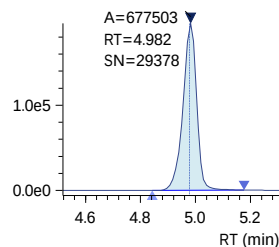
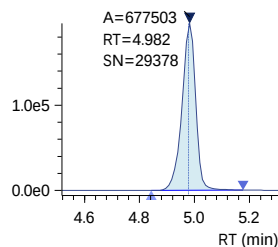
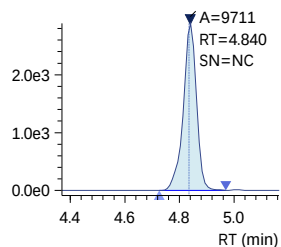
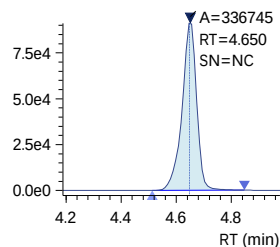
1.96e5

ISTD 318.00>273.00 (-)

1.96e5

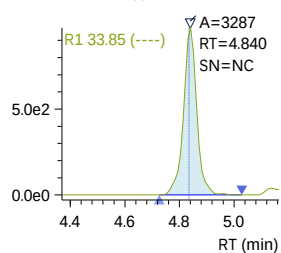
ISTD 315.10>270.00 (-)

1.73e5



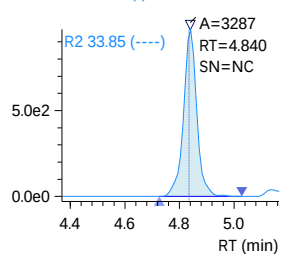
R1 295.00>84.90 (-)

9.73e2



R2 295.00>84.90 (-)

9.73e2





240118_006 (continued)

PFHxA
Conc. 0.0636

PFEESA
Conc. 0.0543
R#1 5.81 (5.88)
R#2 5.81 (6.11)

13C3-HFPO-DA
Conc. 9.8392

13C3-HFPO-DA_IS
Conc. 10.0000

HFPO-DA
Conc. 0.0554
R#1 71.42 (63.80)
R#2 71.42 (65.61)

Q 313.00>269.00 (-)

4.46e3

Q 314.80>135.00 (-)

1.24e4

Q 286.90>168.90 (-)

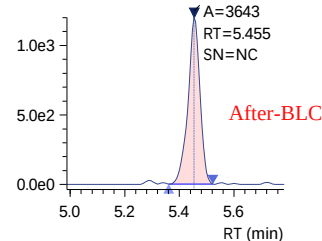
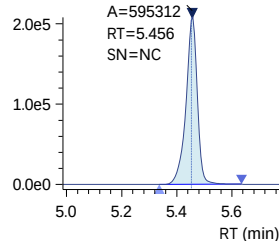
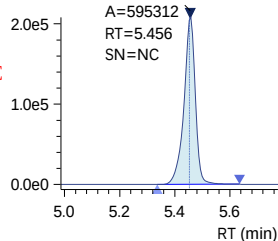
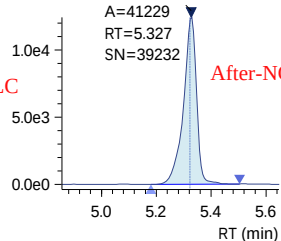
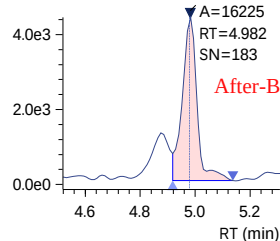
2.08e5

ISTD 286.90>168.90 (-)

2.08e5

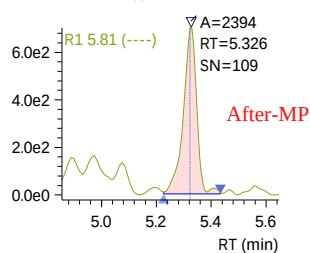
Q 284.90>168.90 (-)

1.20e3



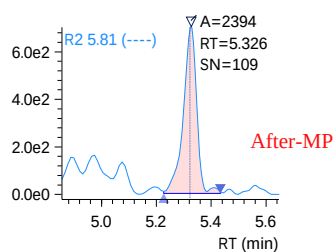
R1 314.80>82.90 (-)

7.03e2



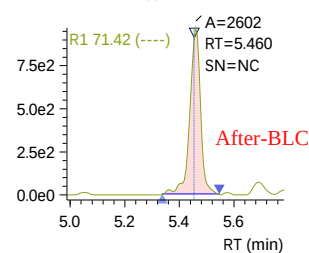
R2 314.80>82.90 (-)

7.03e2



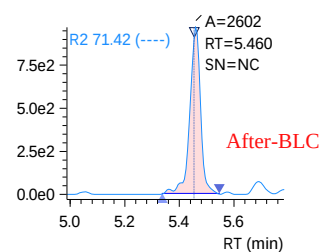
R1 284.90>184.90 (-)

9.70e2



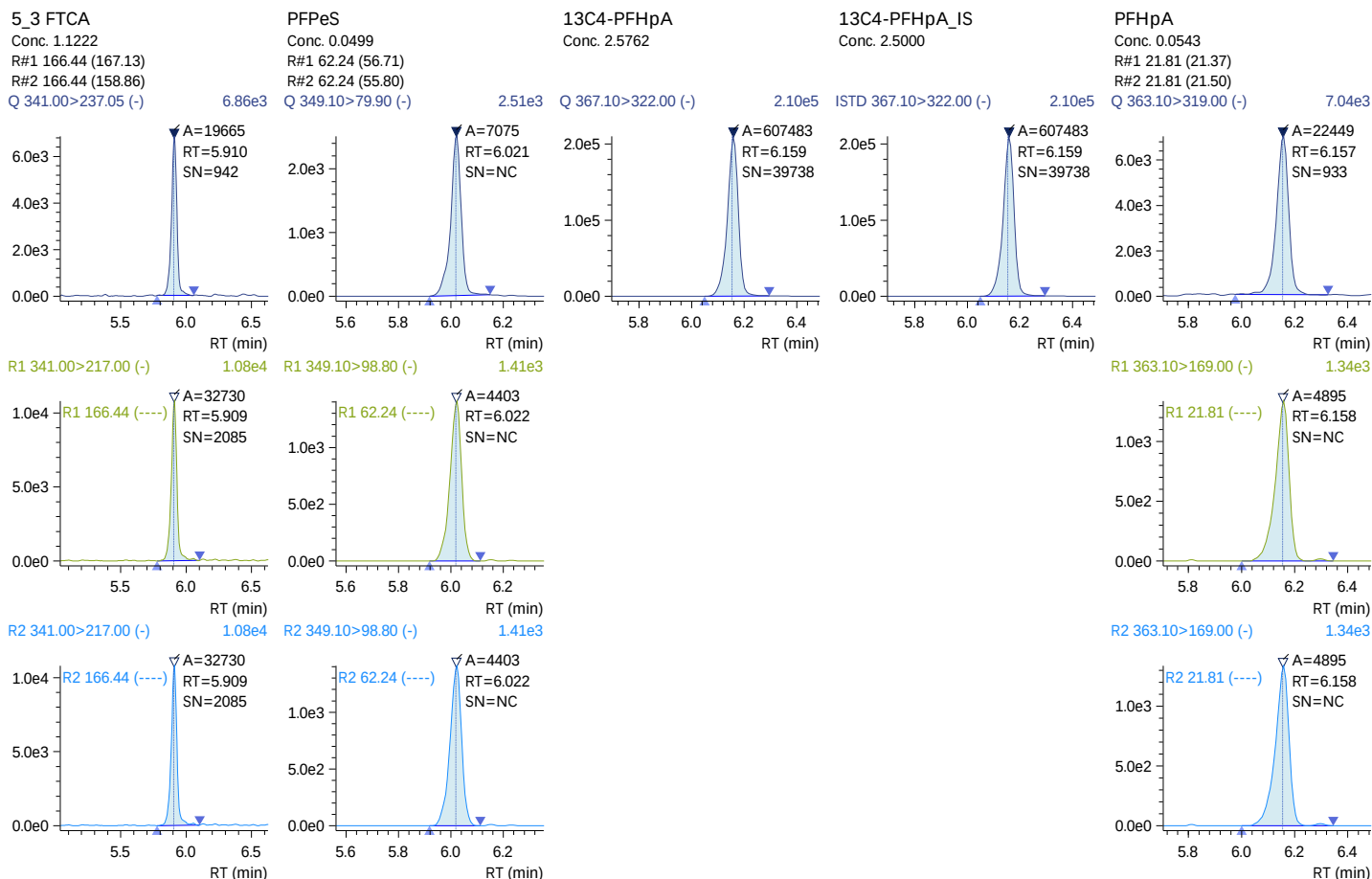
R2 284.90>184.90 (-)

9.70e2





240118_006 (continued)

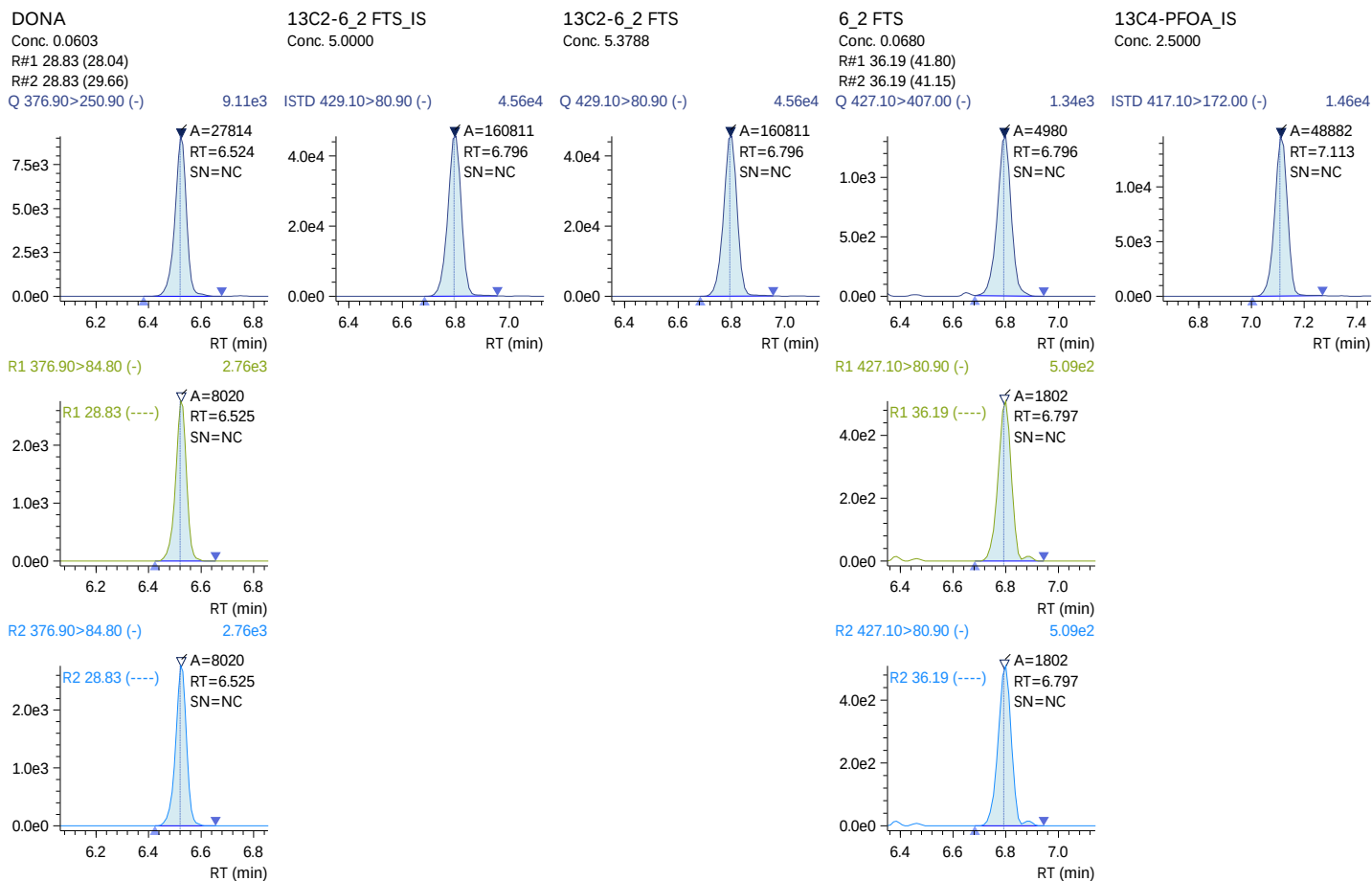


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_006 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_006 (continued)

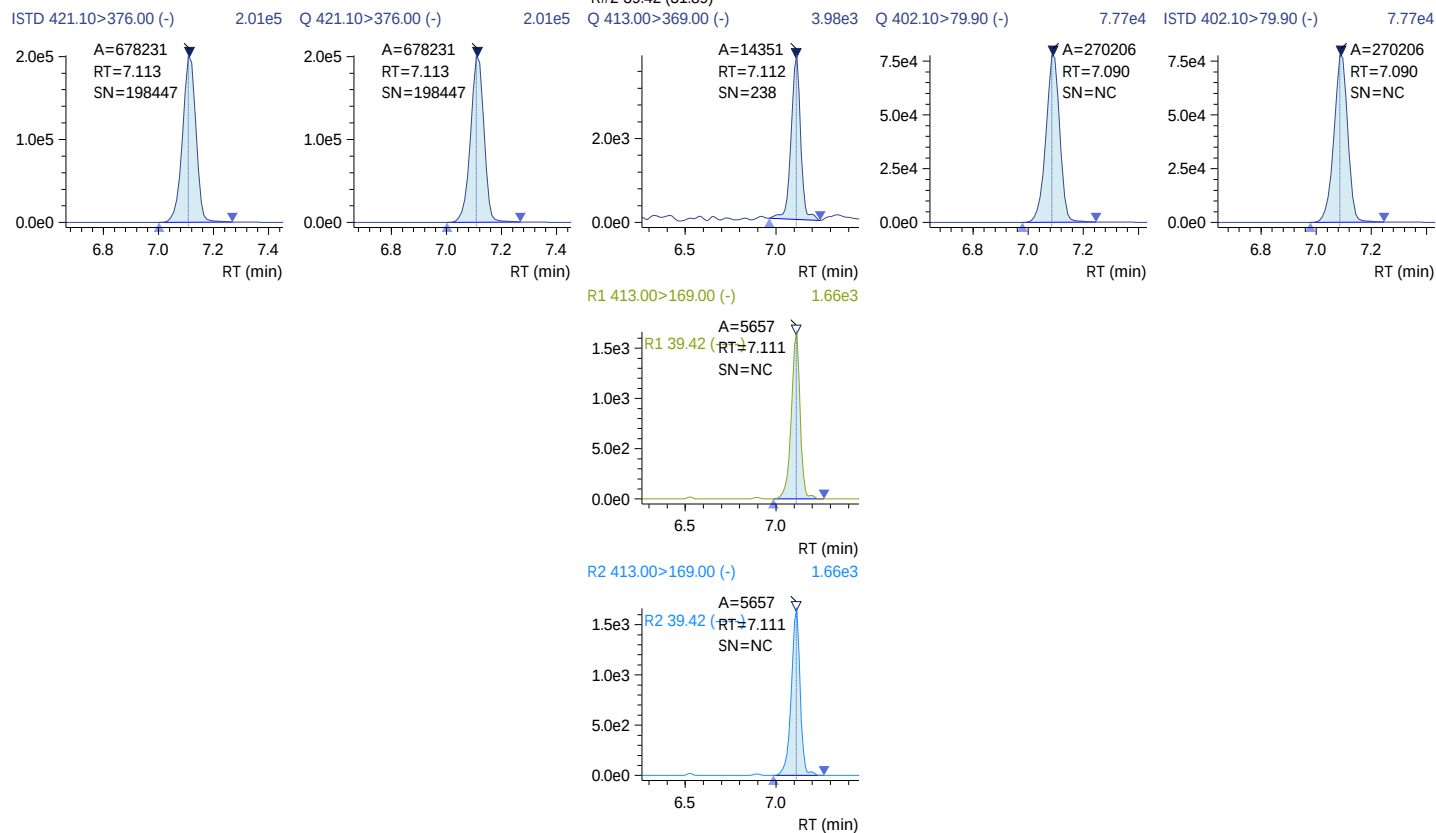
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.4824

PFOA
Conc. 0.0382
R#1 39.42 (29.05)
R#2 39.42 (31.89)

13C3-PFHxS
Conc. 2.7405

13C3-PFHxS_IS
Conc. 2.5000

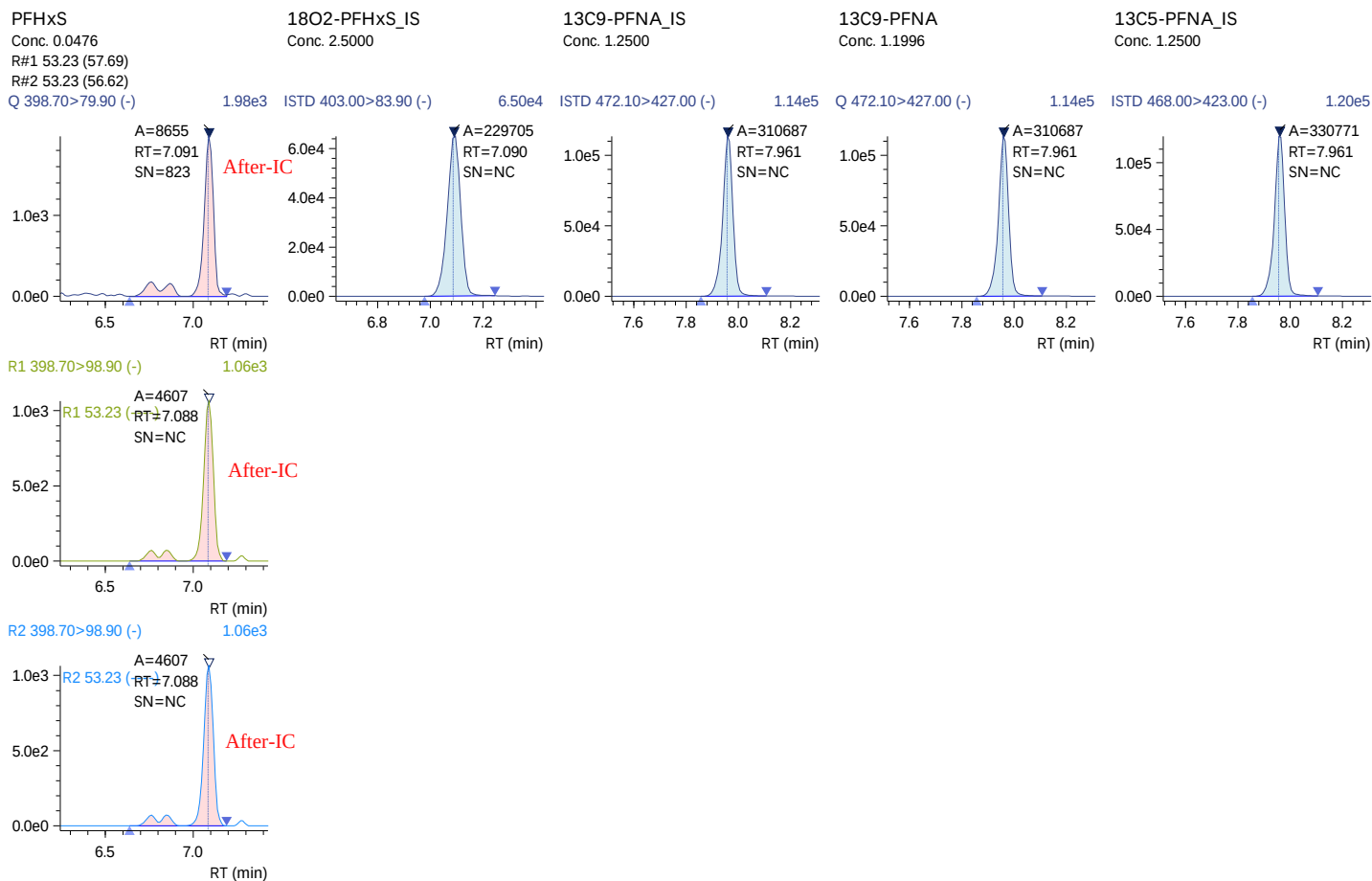


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_006 (continued)

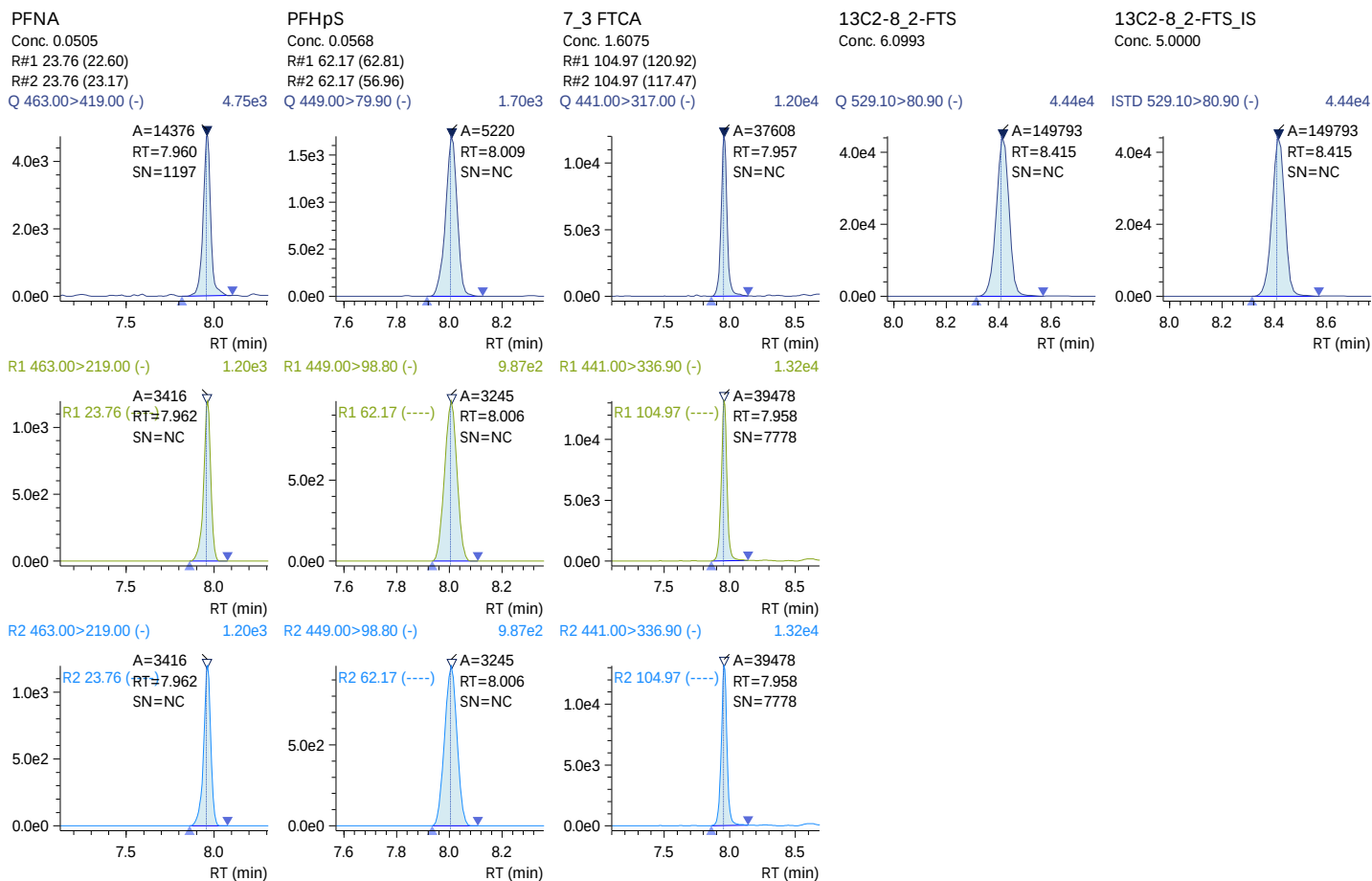


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_006 (continued)

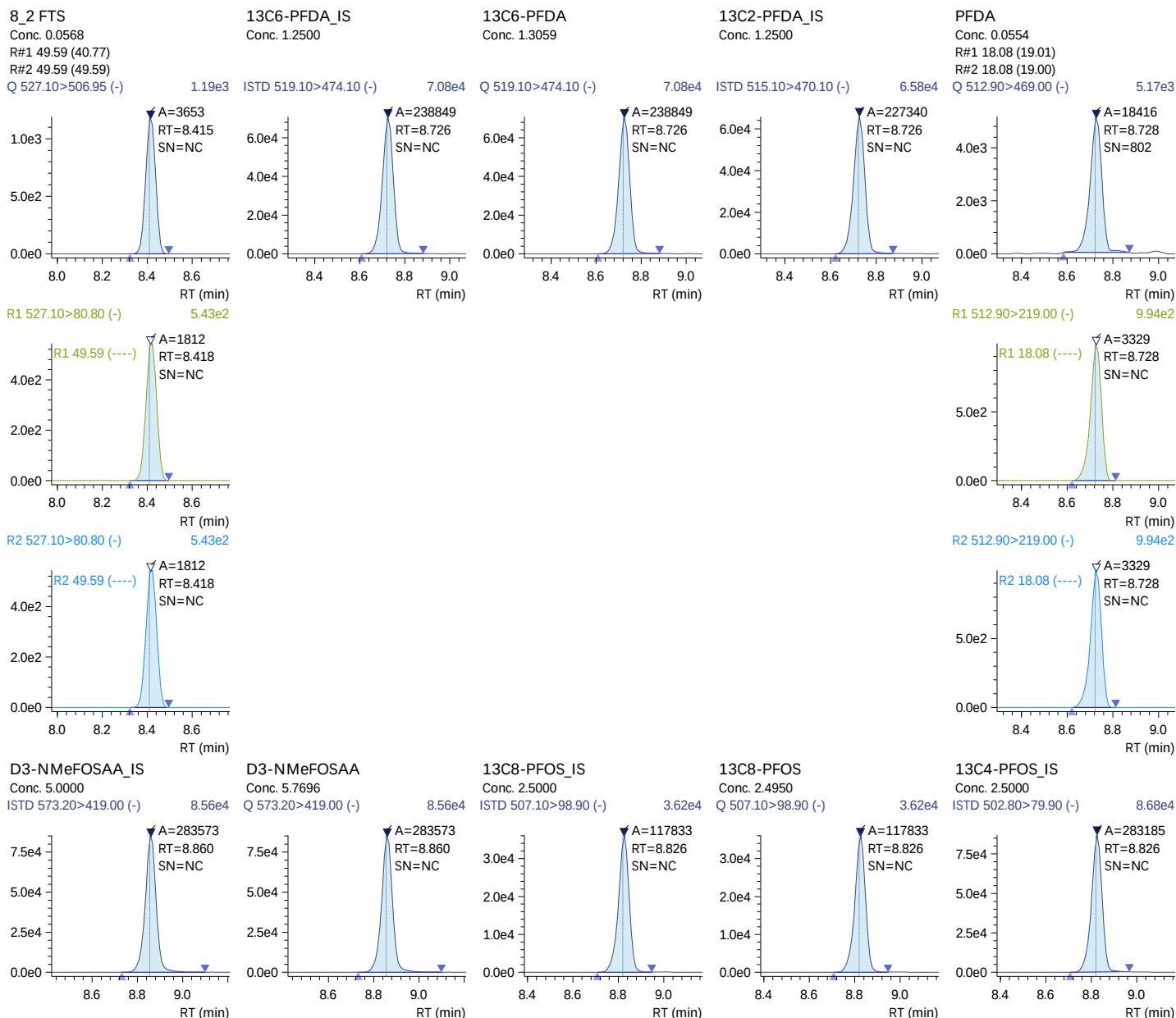


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_006 (continued)

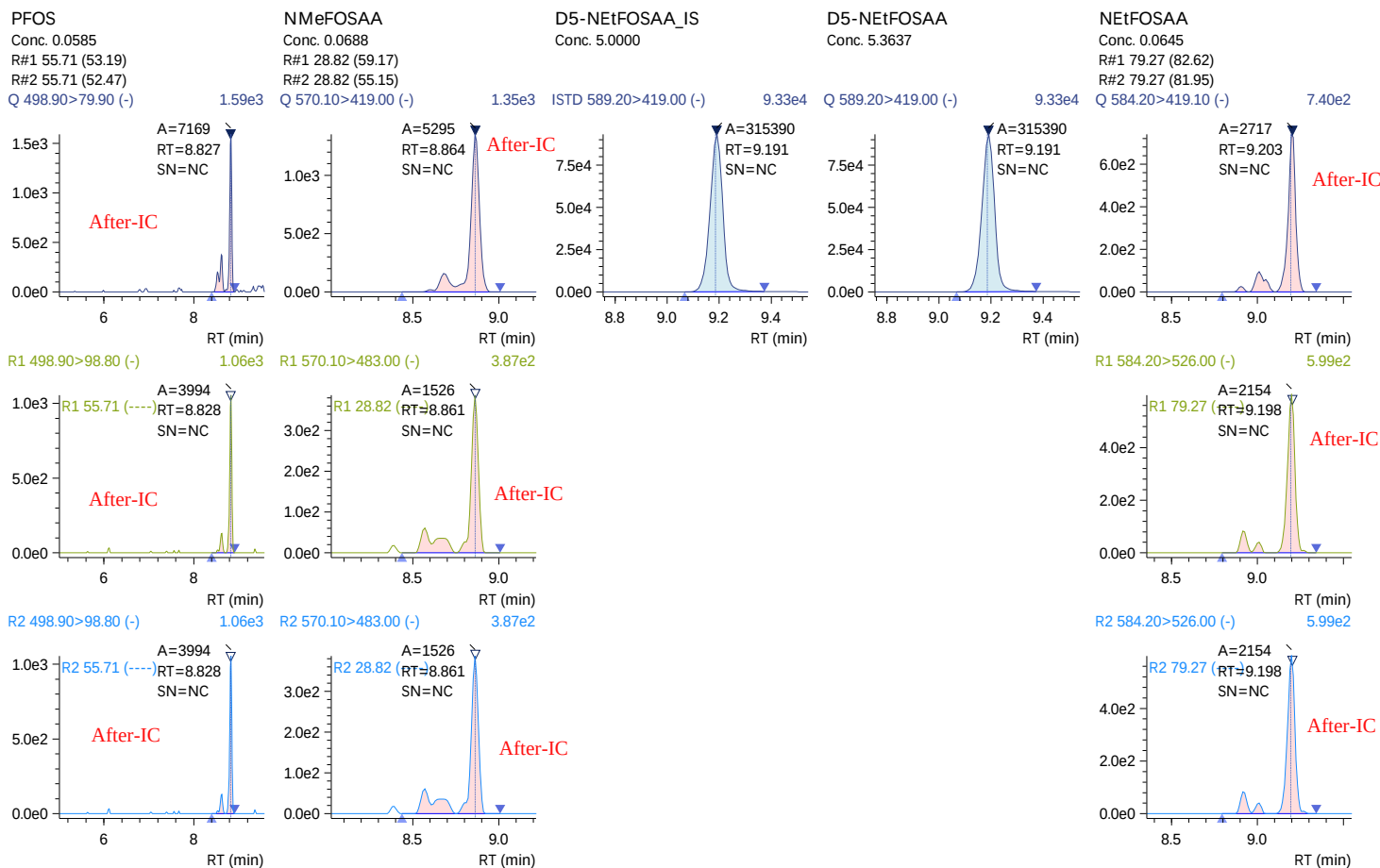


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_006 (continued)



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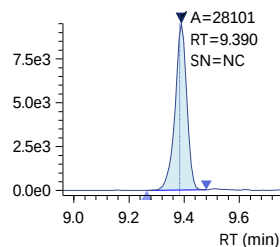
SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



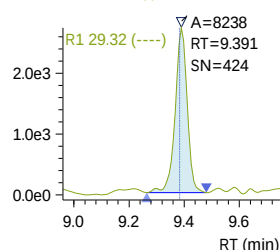
240118_006 (continued)

9-Cl-PF3ONS

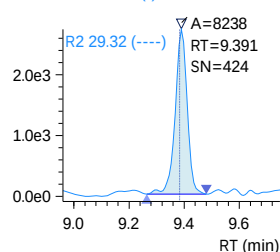
Conc. 0.0573
R#1 29.32 (31.76)
R#2 29.32 (32.76)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-) 2.75e3

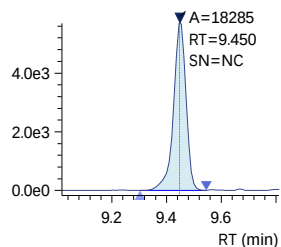


R2 532.80>353.00 (-) 2.75e3

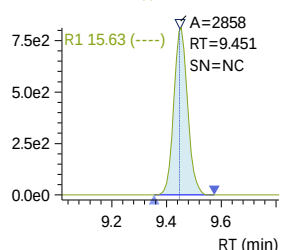


PFUnDA

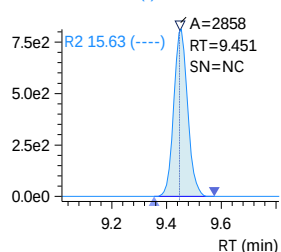
Conc. 0.0559
R#1 15.63 (12.31)
R#2 15.63 (13.12)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-) 8.12e2

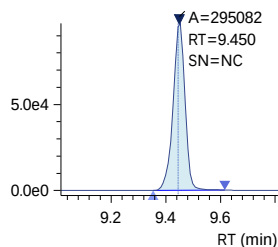


R2 563.10>269.10 (-) 8.12e2



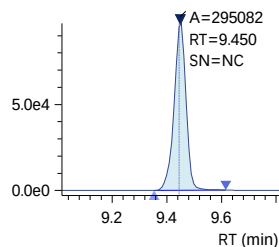
13C7-PFUnDA_IS

Conc. 1.2500
ISTD 570.00>525.10 (-)



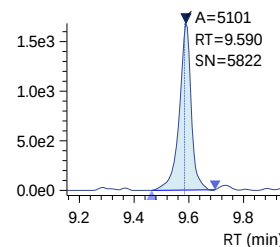
13C7-PFUnDA

Conc. 1.3525
Q 570.00>525.10 (-)

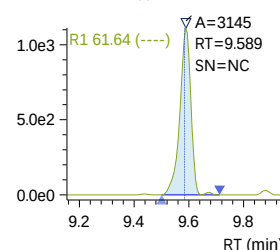


PFNS

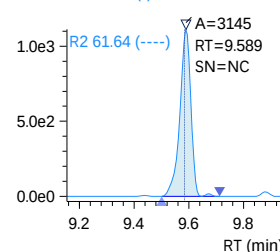
Conc. 0.0570
R#1 61.64 (63.31)
R#2 61.64 (65.22)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-) 1.11e3

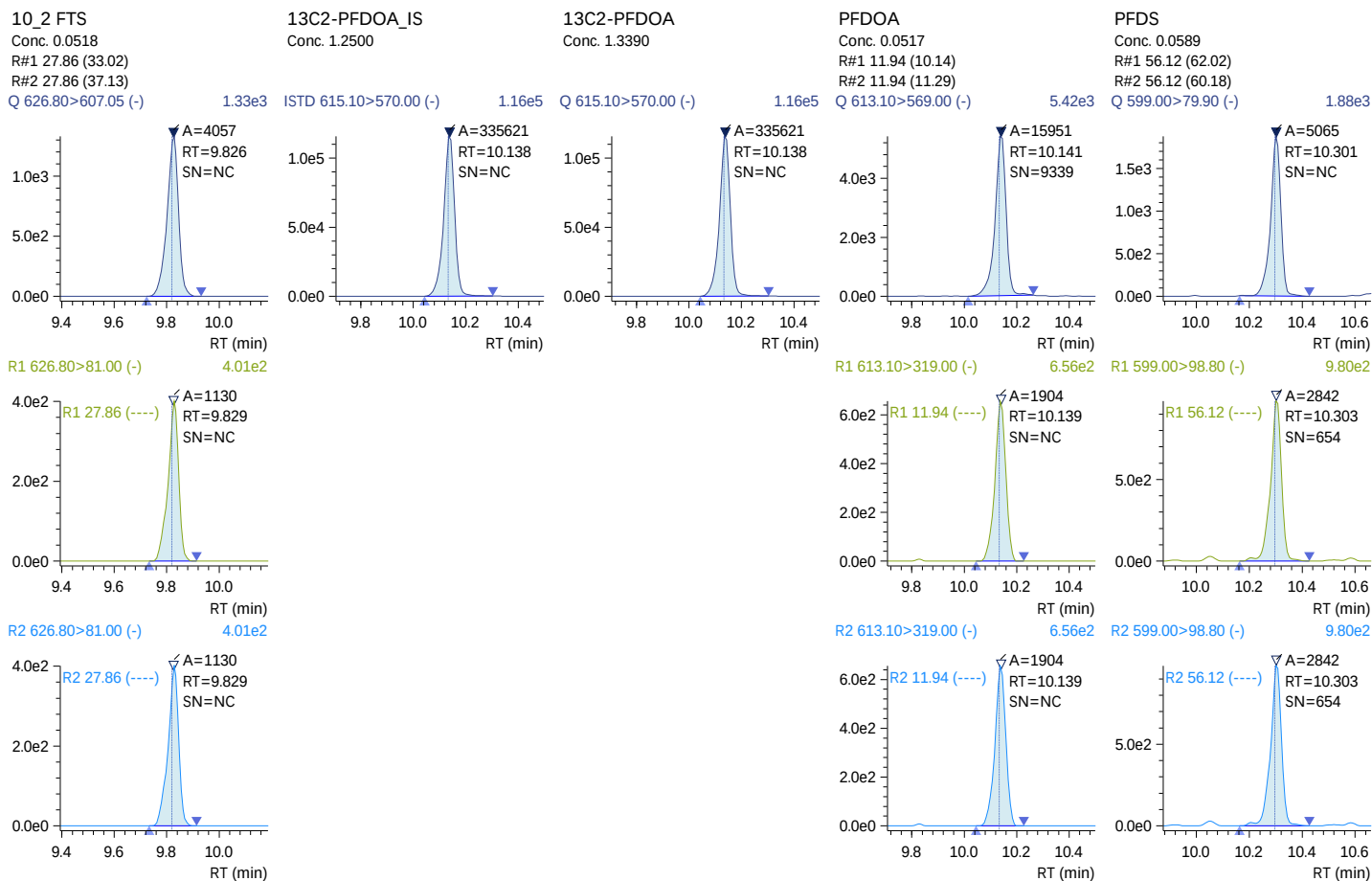


R2 548.80>98.80 (-) 1.11e3





240118_006 (continued)

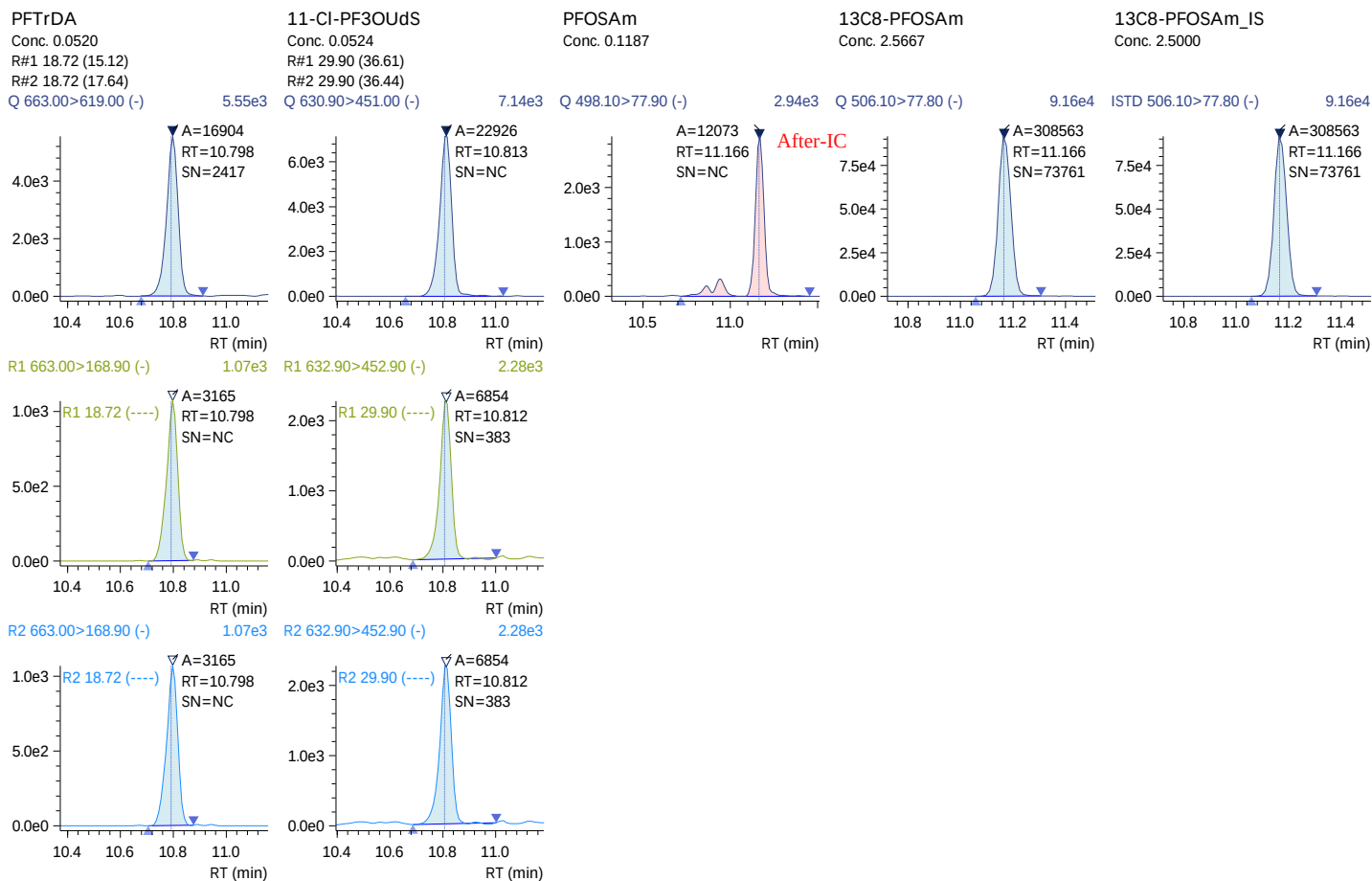


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_006 (continued)

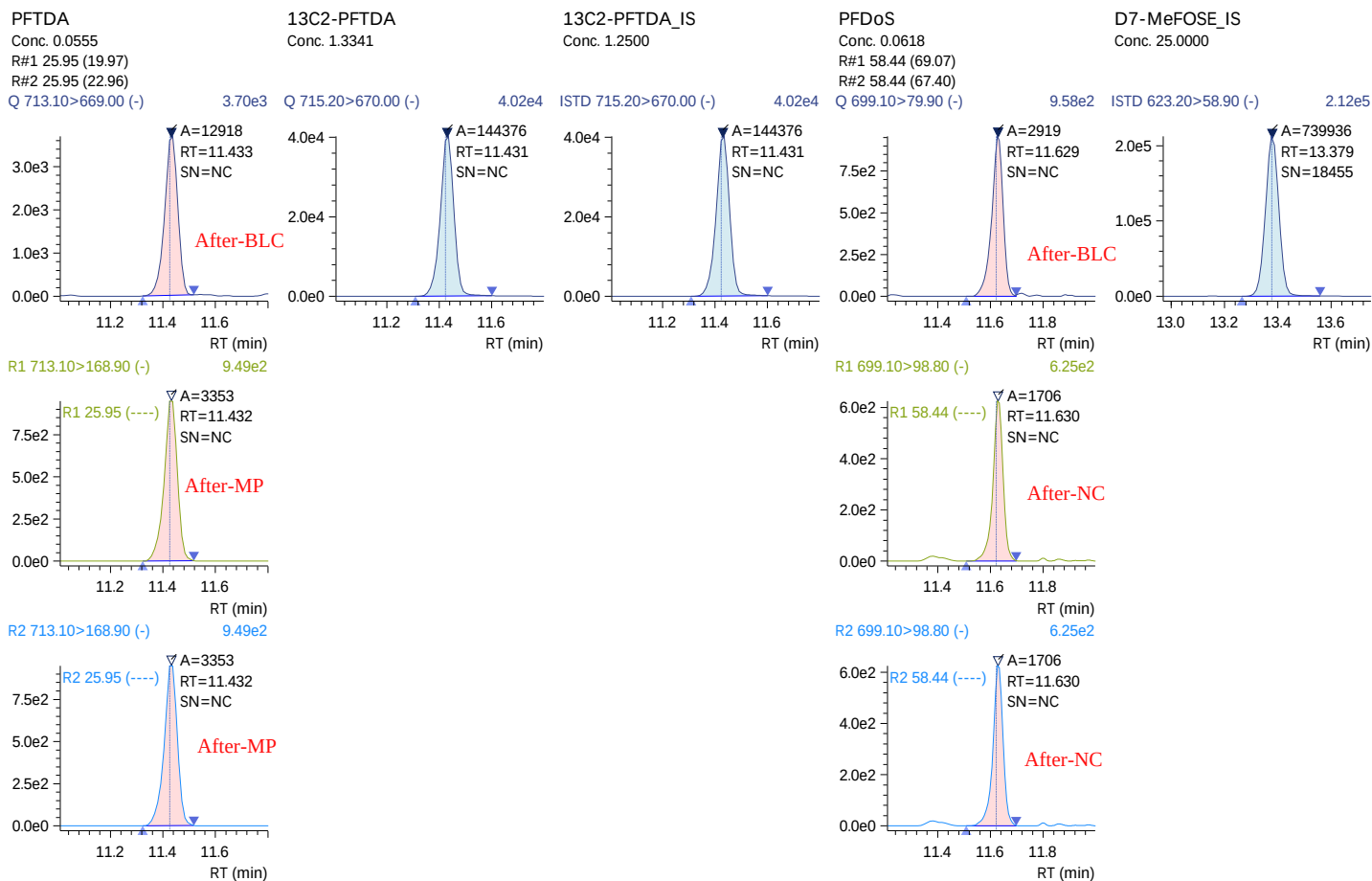


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_006 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_006 (continued)

D7-MeFOSE
Conc. 24.9648

MeFOSE
Conc. 0.0743

13C2-PFHXA_IS
Conc. 2.5000

13C2-PFHXA
Conc. 2.6536

PFHXA
Conc. 0.0561
R#1 13.79 (11.64)
R#2 13.79 (13.90)

Q 623.20>58.90 (-)

2.12e5

Q 616.10>59.00 (-)

2.72e2

ISTD 815.00>770.05 (-)

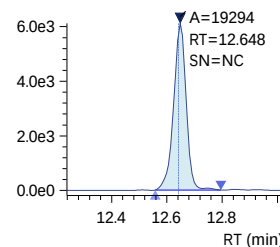
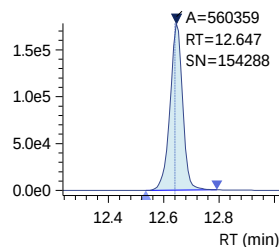
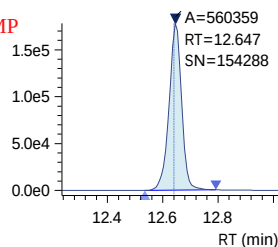
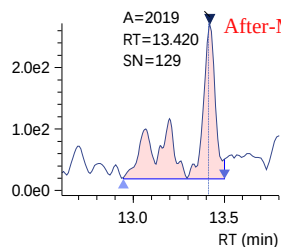
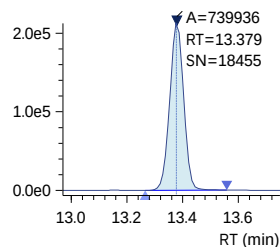
1.78e5

Q 815.00>770.05 (-)

1.78e5

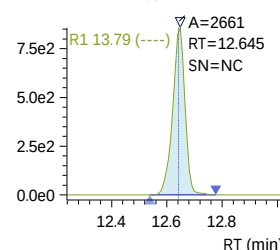
Q 813.00>768.95 (-)

6.12e3



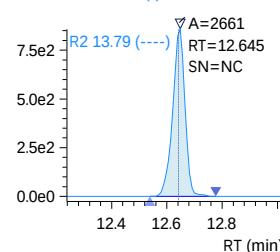
R1 813.00>218.95 (-)

8.57e2



R2 813.00>218.95 (-)

8.57e2





240118_006 (continued)

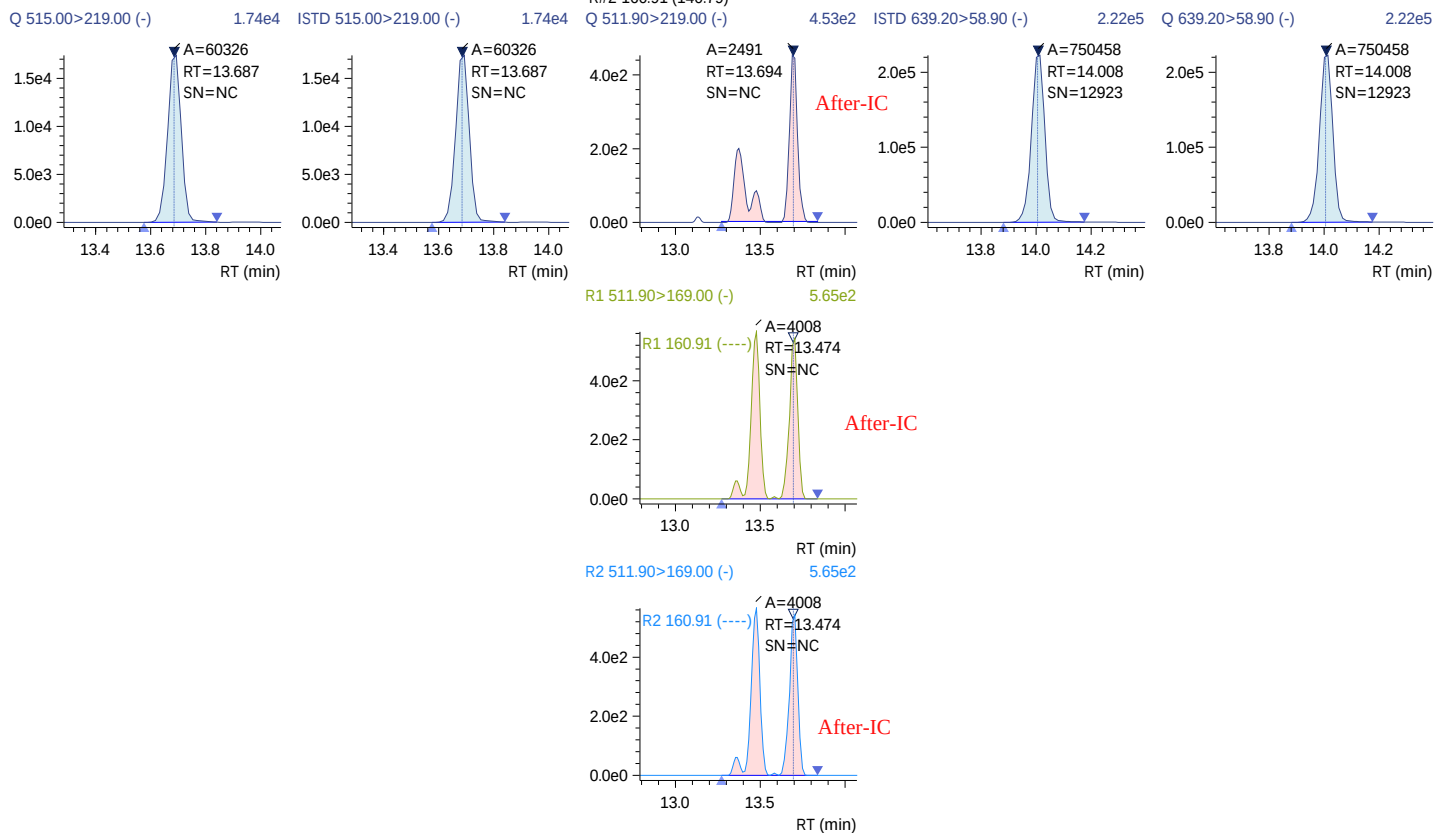
D3-MeFOSA
Conc. 2.4918

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. 0.0573
R#1 160.91 (149.05)
R#2 160.91 (140.79)

D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 24.9296



J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_006 (continued)

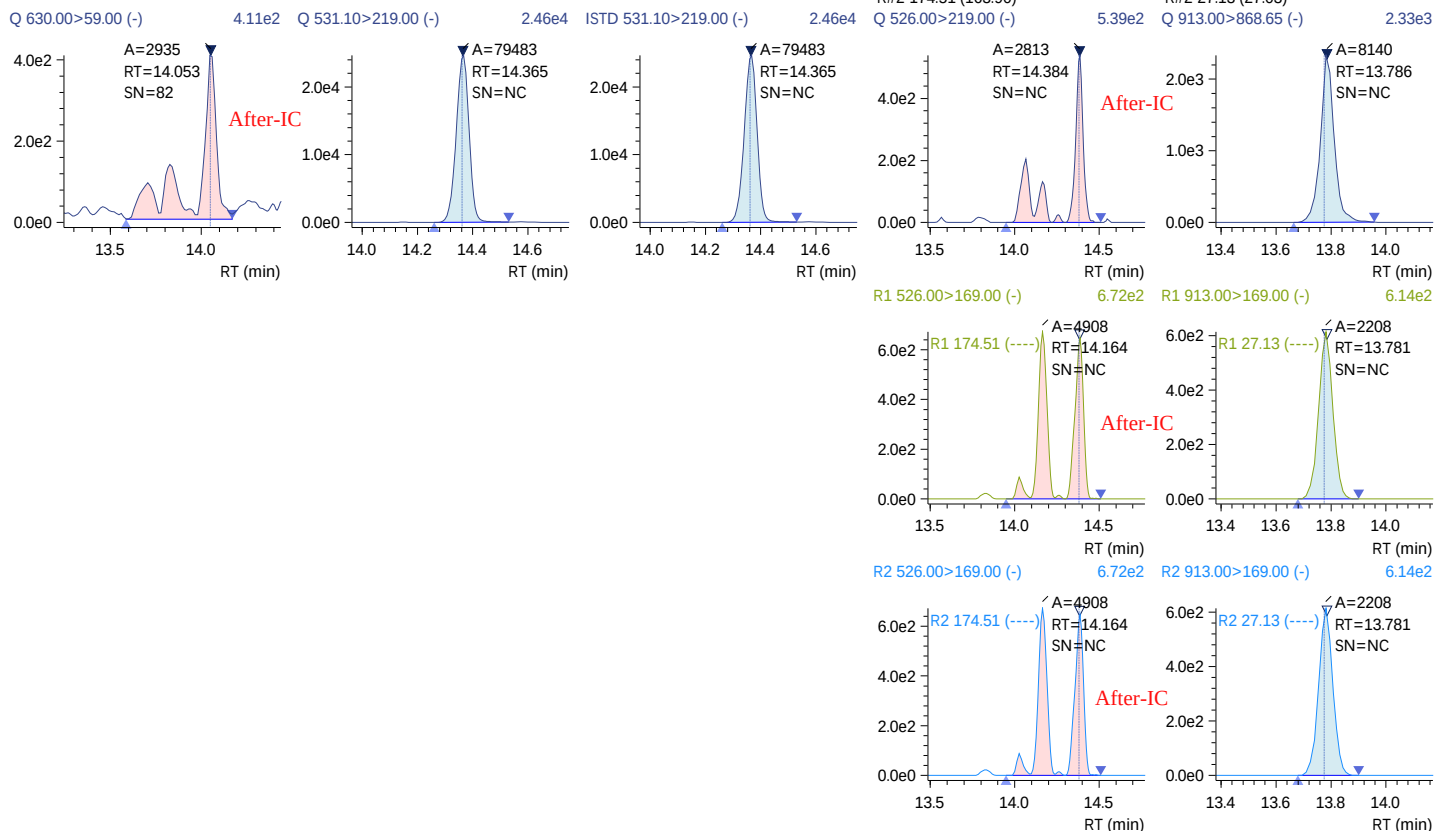
EtFOSE
Conc. 0.0743

D5-EtFOSAm
Conc. 2.4659

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. 0.0608
R#1 174.51 (154.69)
R#2 174.51 (163.90)

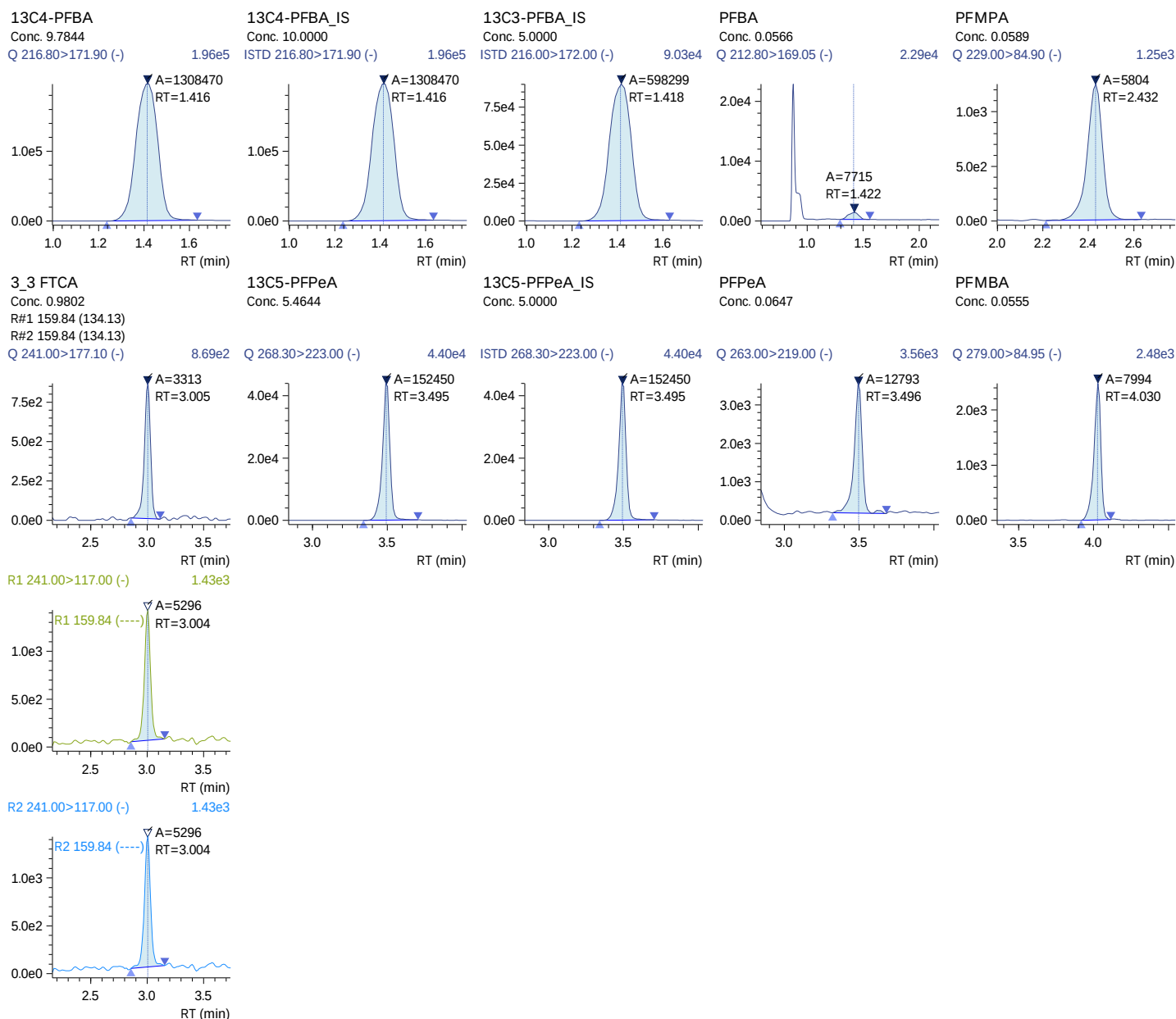
PFODA
Conc. 0.0642
R#1 27.13 (29.32)
R#2 27.13 (27.03)





240118_006

Sample ID: 1633 ICAL 0.05PPB
Date Acquired: 1/18/2024 2:04:34 PM
Acquired by: System Administrator
Data File: 240118_006
Vial: 1 | Inj. Volume: 10.0000uL | Tray: 1





240118_006 (continued)

13C2-4_2 FTS
Conc. 5.9492

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. 0.0540
R#1 0.00 (34.14)
R#2 0.00 (34.14)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 0.0508
R#1 51.86 (47.53)
R#2 51.86 (47.53)

Q 329.10>80.90 (-)

5.79e4

ISTD 329.10>80.90 (-)

5.79e4

Q 327.10>307.00 (-)

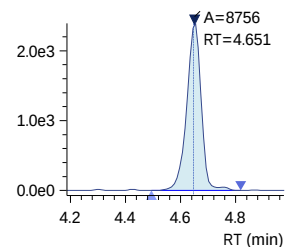
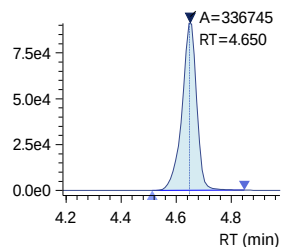
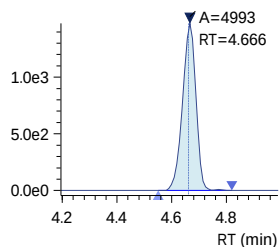
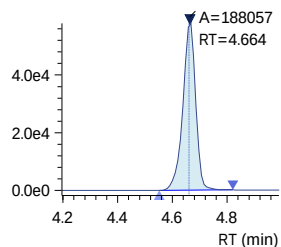
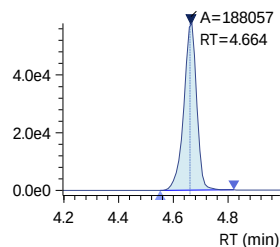
1.48e3

ISTD 302.10>79.90 (-)

9.11e4

Q 298.70>79.90 (-)

2.39e3

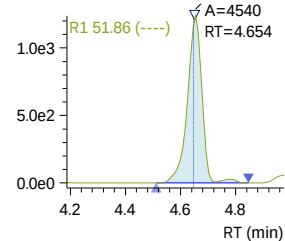
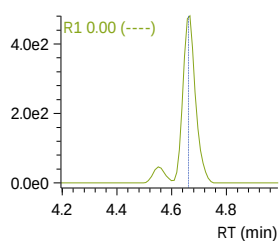


R1 327.10>80.90 (-)

4.81e2

R1 298.70>98.80 (-)

1.24e3

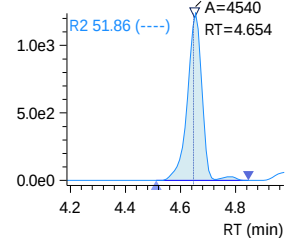
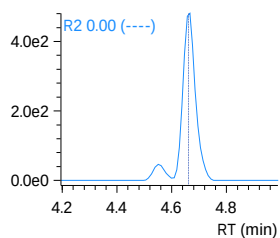


R2 327.10>80.90 (-)

4.81e2

R2 298.70>98.80 (-)

1.24e3





240118_006 (continued)

13C3-PFBS
Conc. 2.5833

NFDHA
Conc. 0.0646
R#1 33.85 (37.88)
R#2 33.85 (37.88)

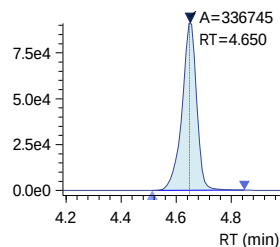
13C5-PFHxA
Conc. 2.6009

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

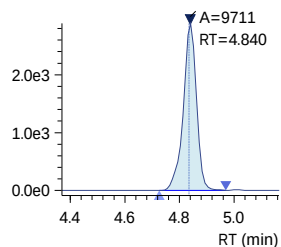
Q 302.10>79.90 (-)

9.11e4



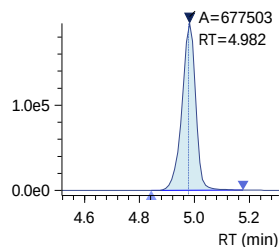
Q 295.00>201.00 (-)

2.89e3



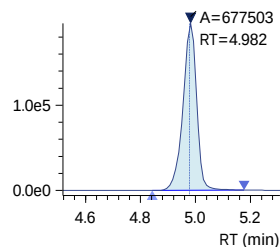
Q 318.00>273.00 (-)

1.96e5



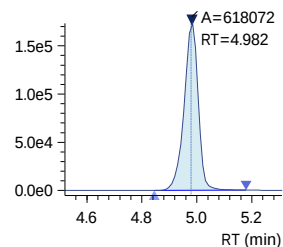
ISTD 318.00>273.00 (-)

1.96e5



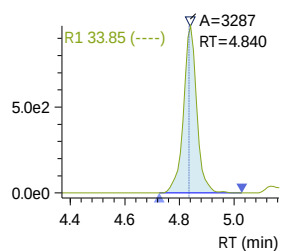
ISTD 315.10>270.00 (-)

1.73e5



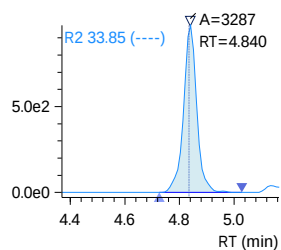
R1 295.00>84.90 (-)

9.73e2



R2 295.00>84.90 (-)

9.73e2





240118_006 (continued)

PFHxA
Conc. 0.0555

PFEESA
Conc. 0.0543
R#1 0.00 (5.88)
R#2 0.00 (5.88)

13C3-HFPO-DA
Conc. 9.8392

13C3-HFPO-DA_IS
Conc. 10.0000

HFPO-DA
Conc. 0.0547
R#1 75.24 (63.80)
R#2 75.24 (63.80)

Q 313.00>269.00 (-)

4.46e3

Q 314.80>135.00 (-)

1.24e4

Q 286.90>168.90 (-)

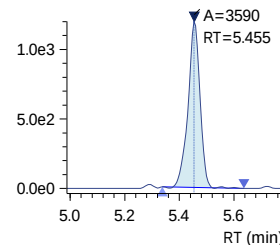
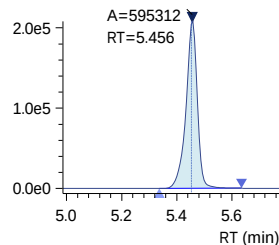
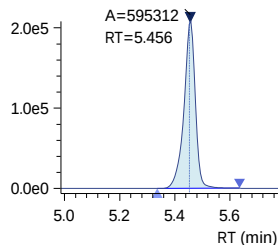
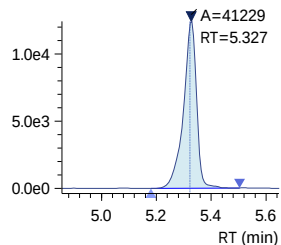
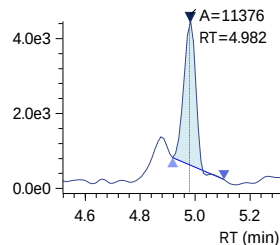
2.08e5

ISTD 286.90>168.90 (-)

2.08e5

Q 284.90>168.90 (-)

1.20e3

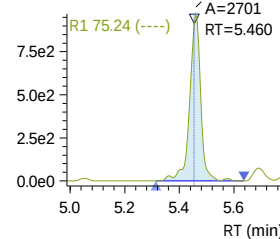
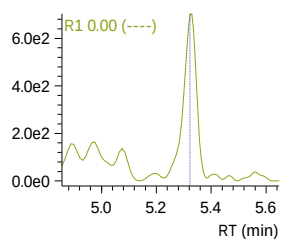


R1 314.80>82.90 (-)

7.03e2

R1 284.90>184.90 (-)

9.70e2

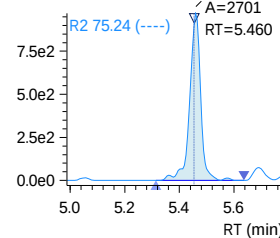
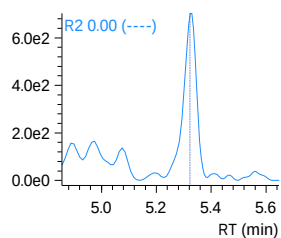


R2 314.80>82.90 (-)

7.03e2

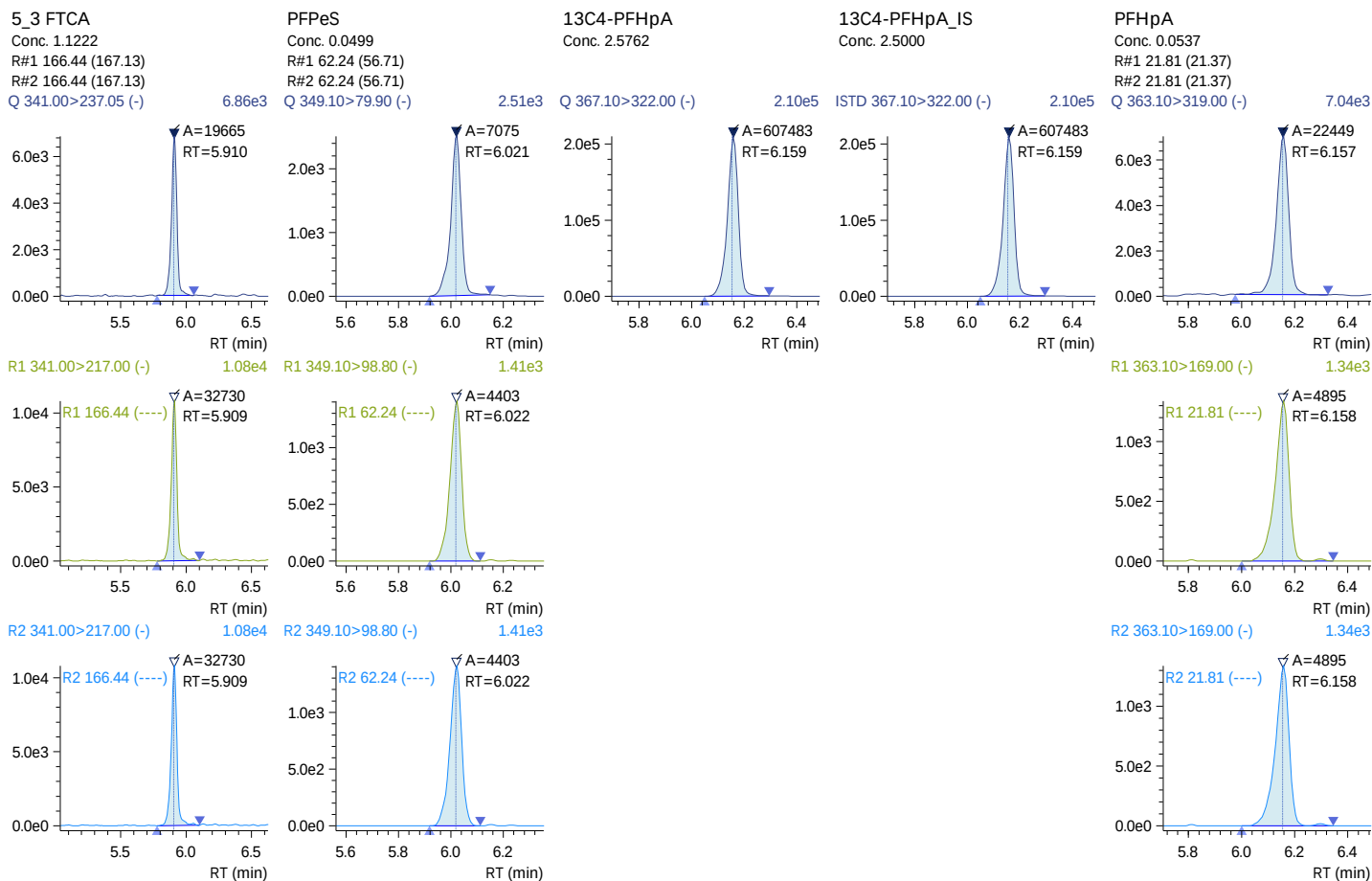
R2 284.90>184.90 (-)

9.70e2



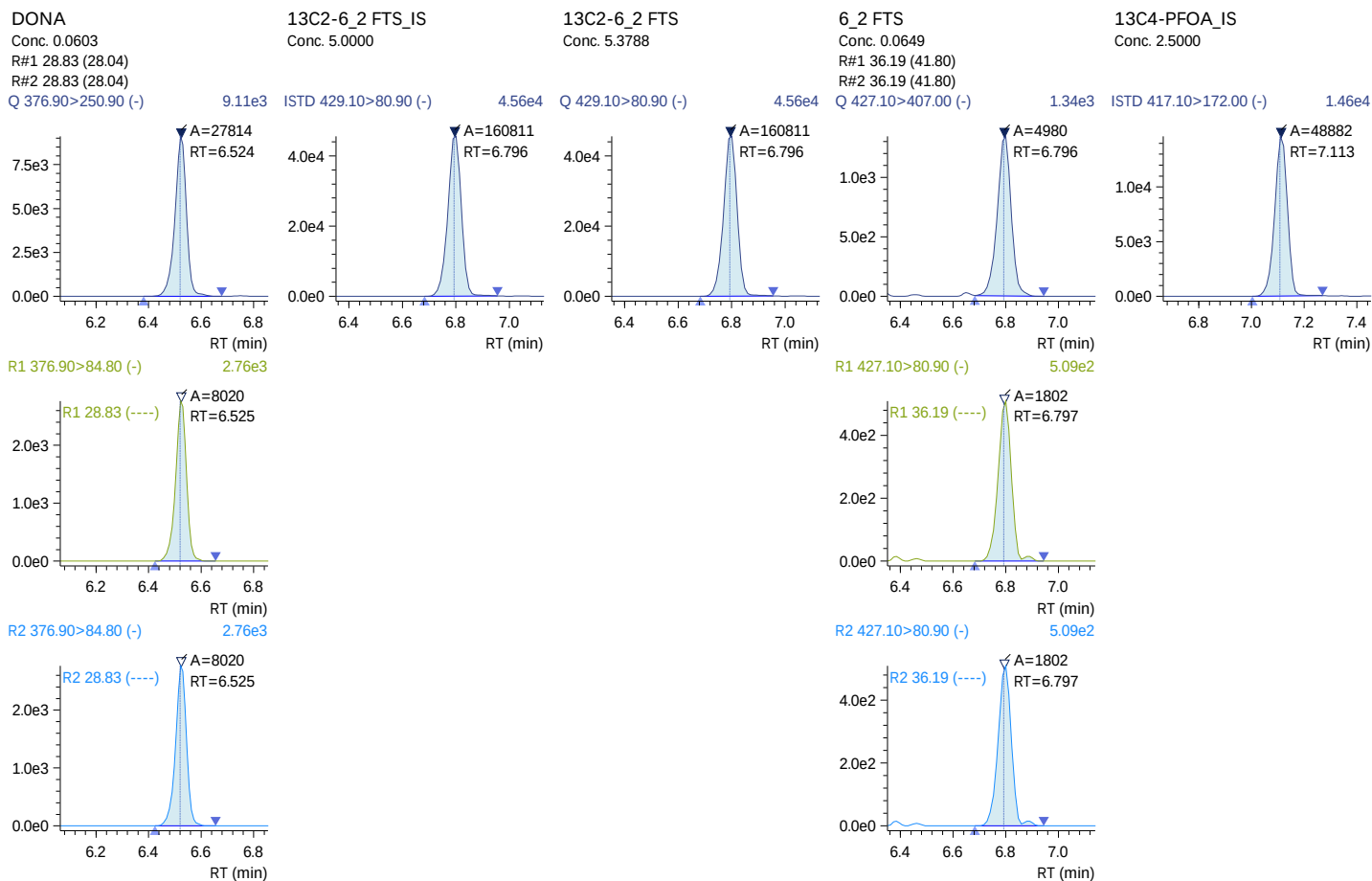


240118_006 (continued)





240118_006 (continued)





240118_006 (continued)

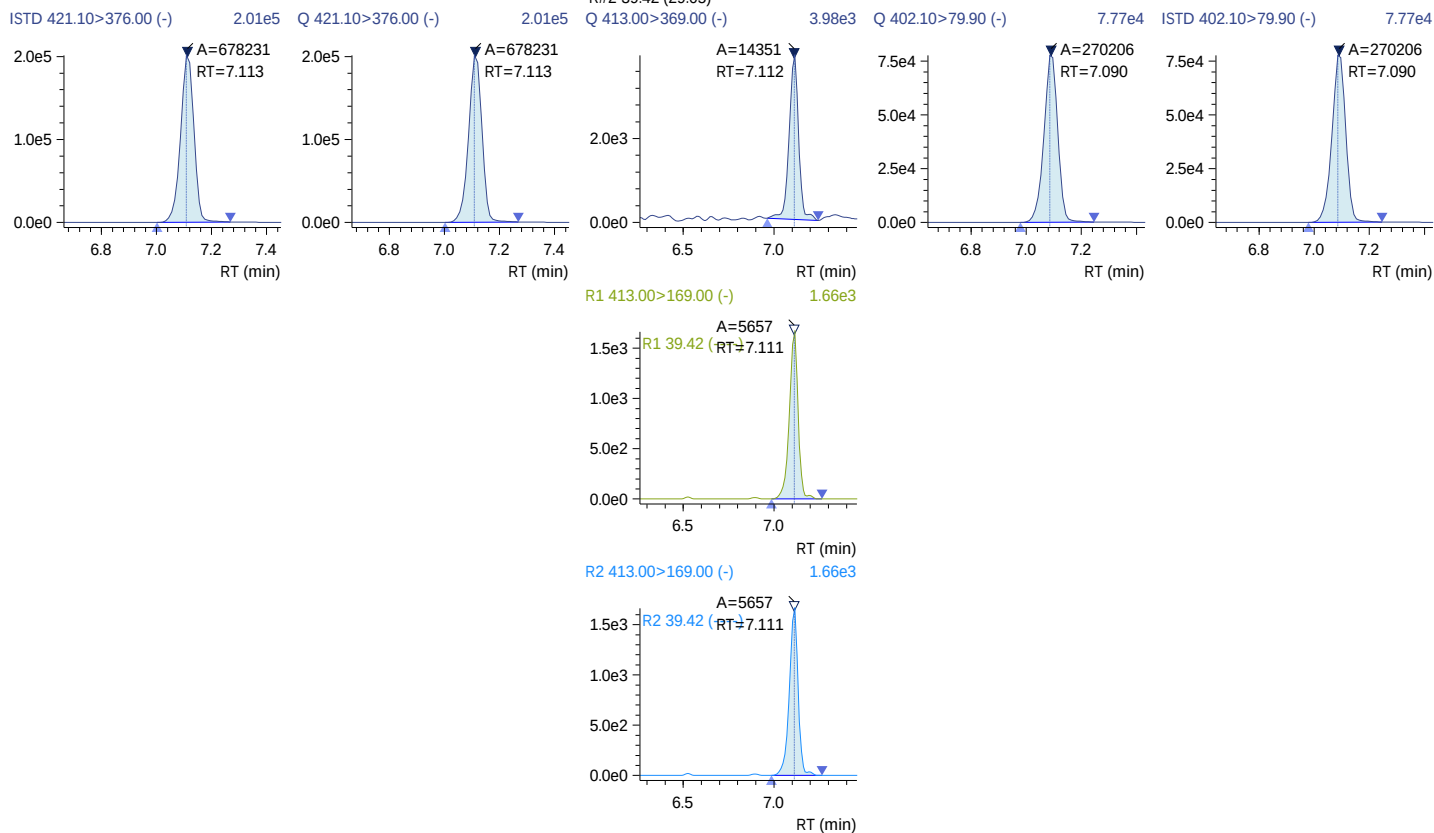
13C8-PFOA_IS
 Conc. 2.5000

13C8-PFOA
 Conc. 2.4824

PFOA
 Conc. 0.0382
 R#1 39.42 (29.05)
 R#2 39.42 (29.05)

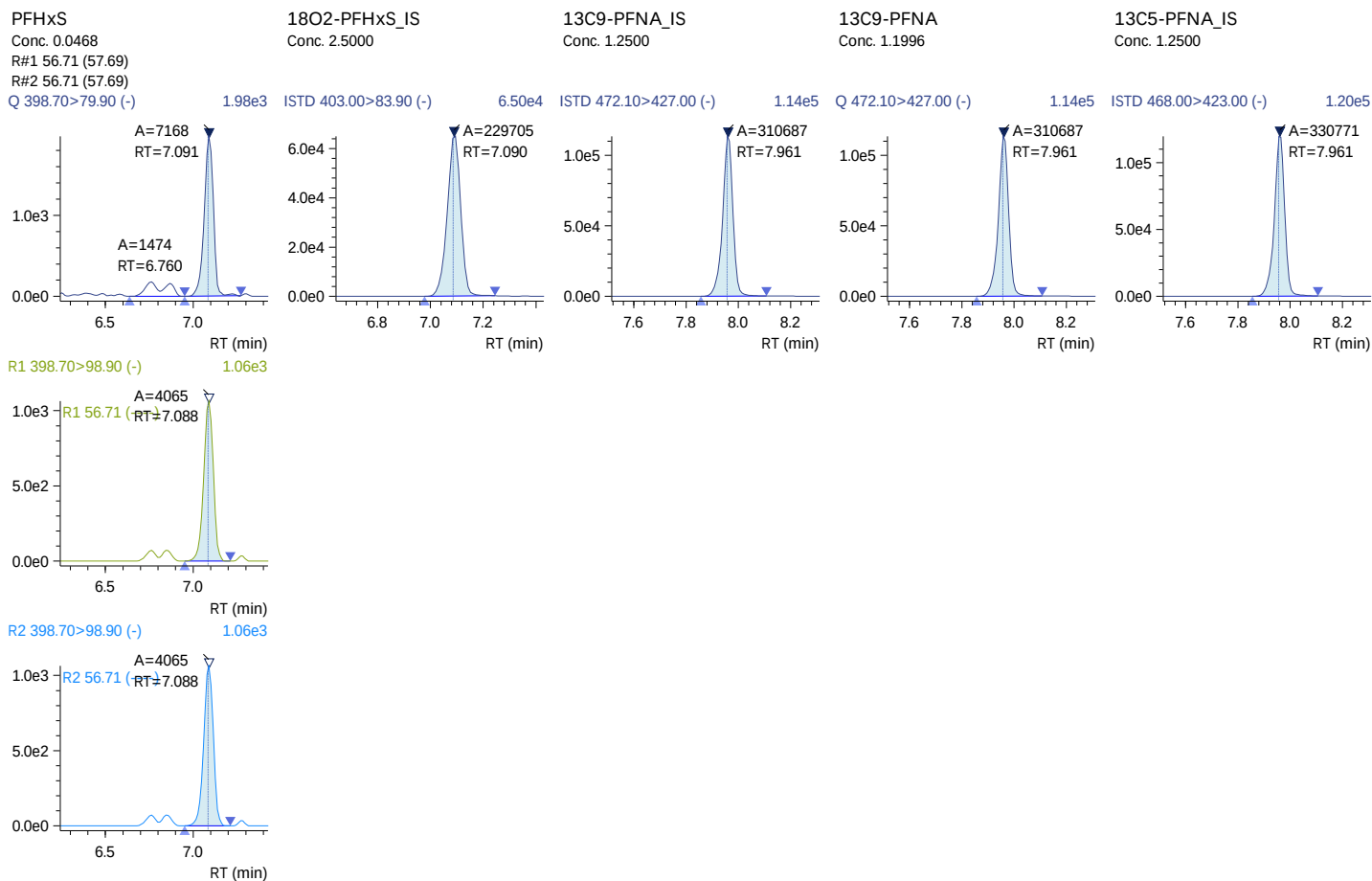
13C3-PFHxS
 Conc. 2.7405

13C3-PFHxS_IS
 Conc. 2.5000



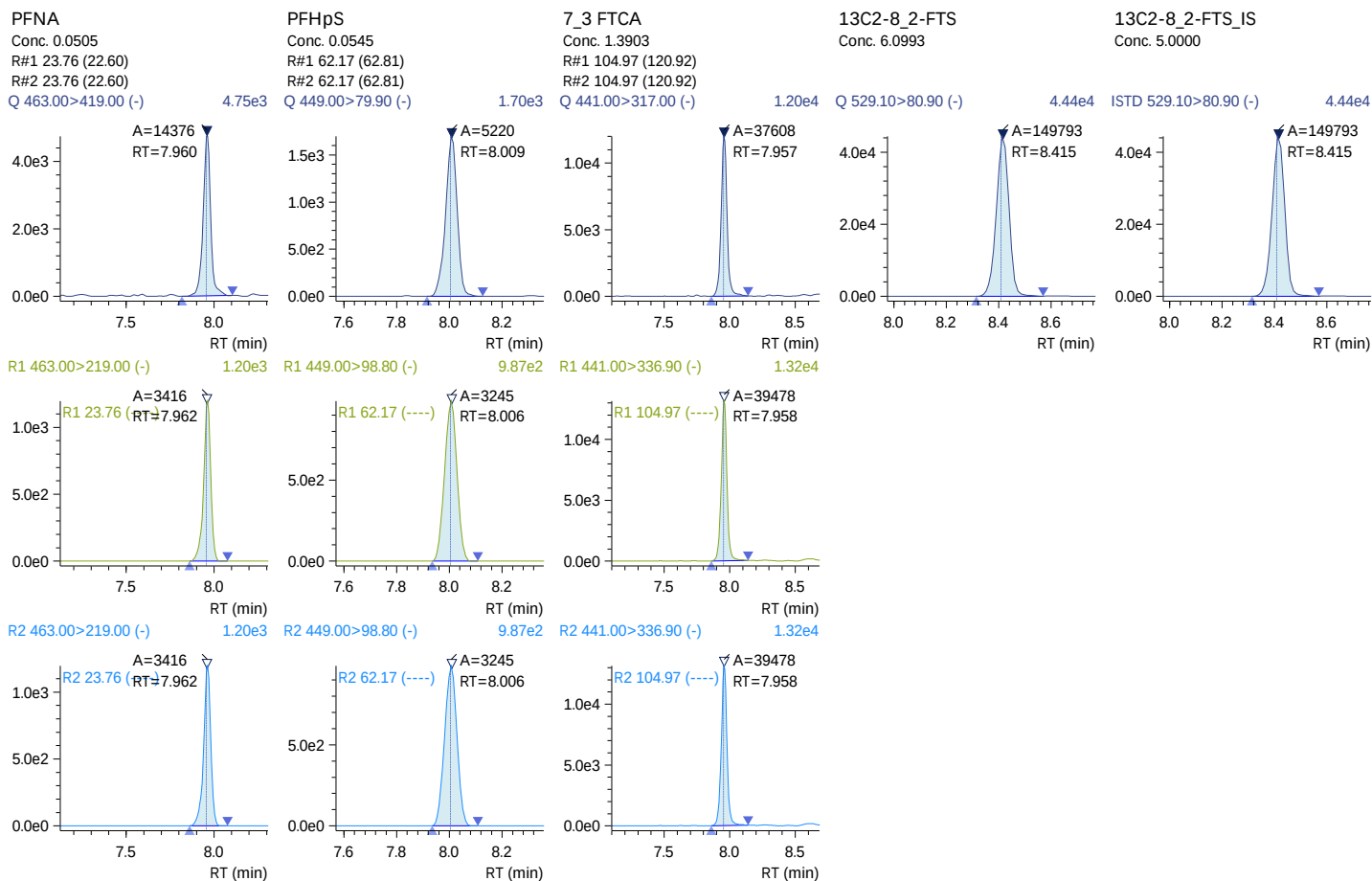


240118_006 (continued)



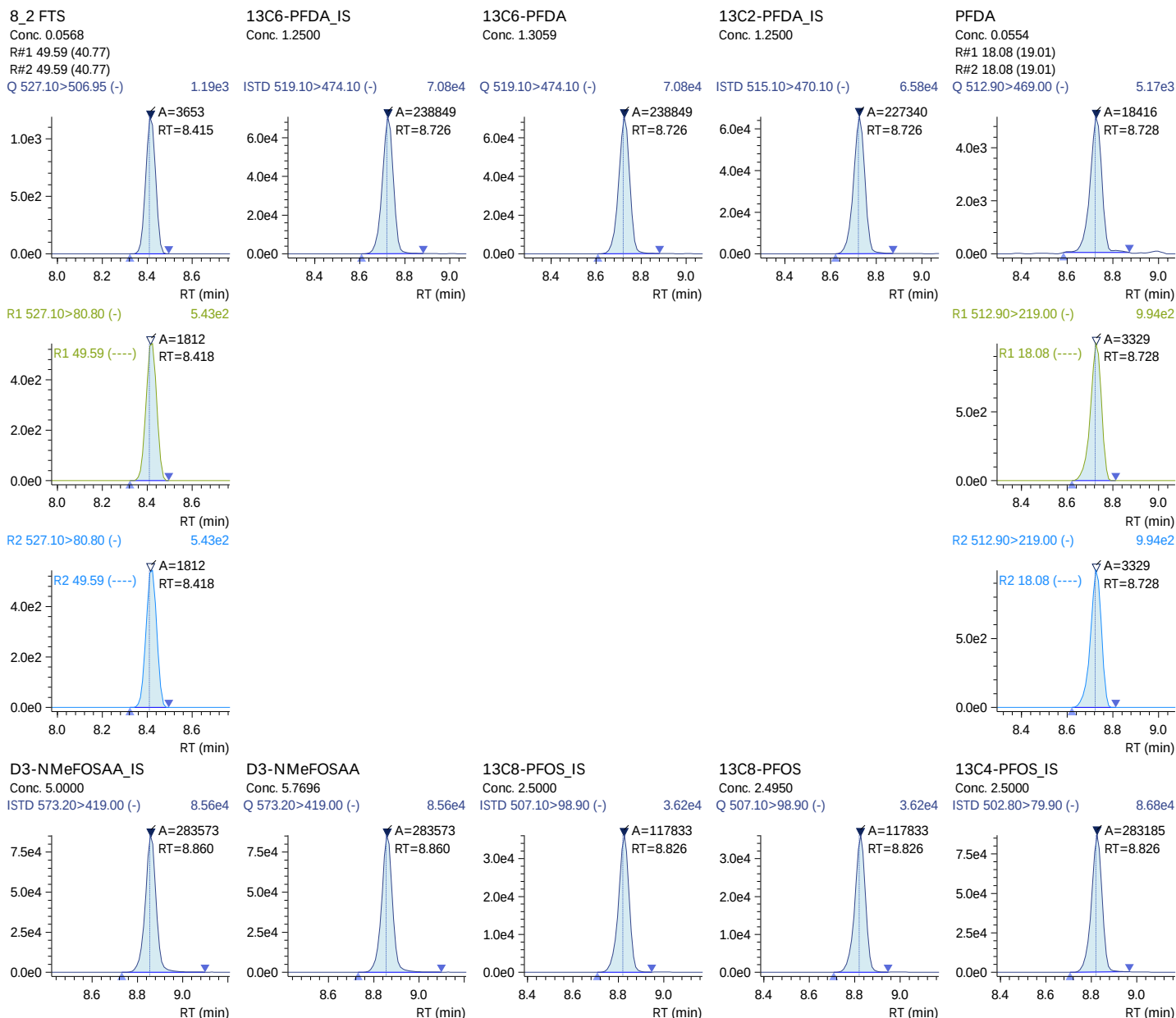


240118_006 (continued)



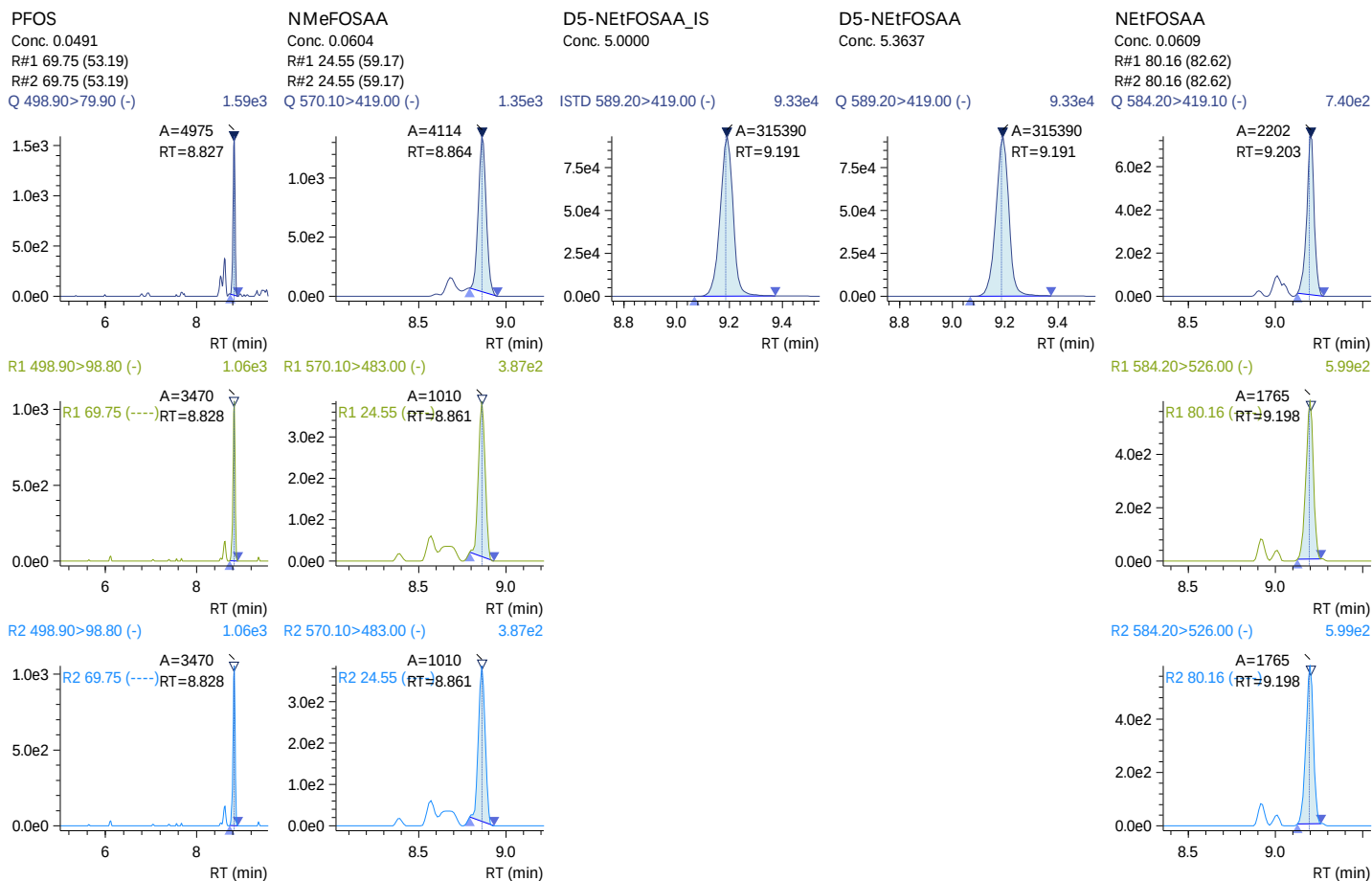


240118_006 (continued)





240118_006 (continued)

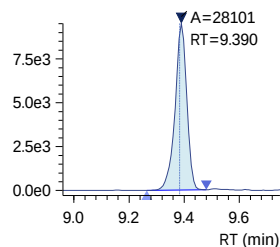




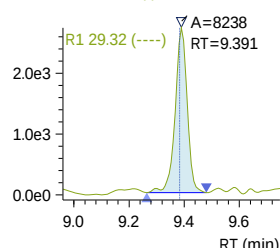
240118_006 (continued)

9-Cl-PF3ONS

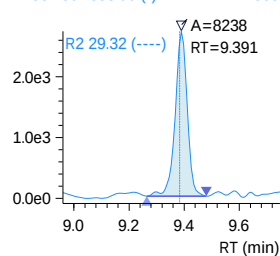
Conc. 0.0573
R#1 29.32 (31.76)
R#2 29.32 (31.76)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-) 2.75e3

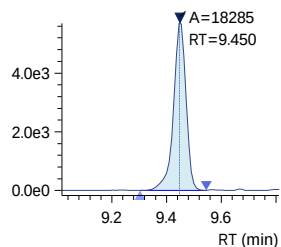


R2 532.80>353.00 (-) 2.75e3

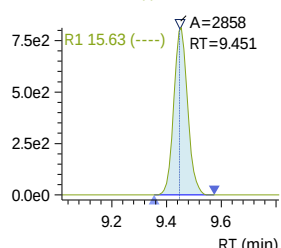


PFUnDA

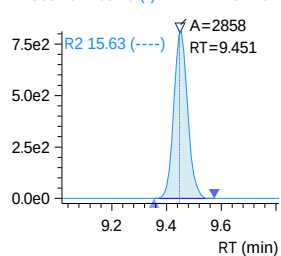
Conc. 0.0559
R#1 15.63 (12.31)
R#2 15.63 (12.31)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-) 8.12e2

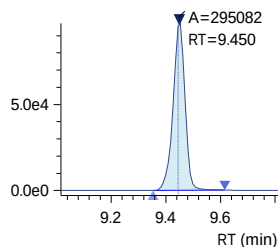


R2 563.10>269.10 (-) 8.12e2



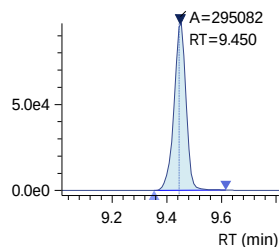
13C7-PFUnDA_IS

Conc. 1.2500
ISTD 570.00>525.10 (-)



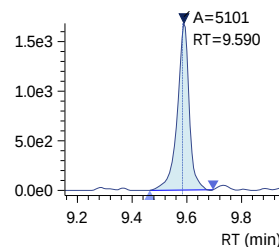
13C7-PFUnDA

Conc. 1.3525
Q 570.00>525.10 (-)

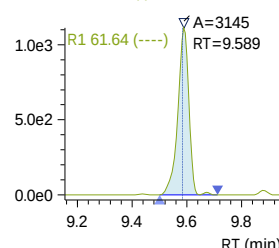


PFNS

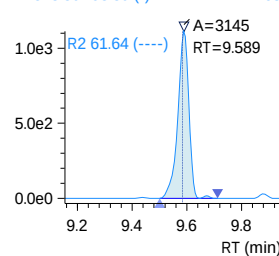
Conc. 0.0570
R#1 61.64 (63.31)
R#2 61.64 (63.31)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-) 1.11e3

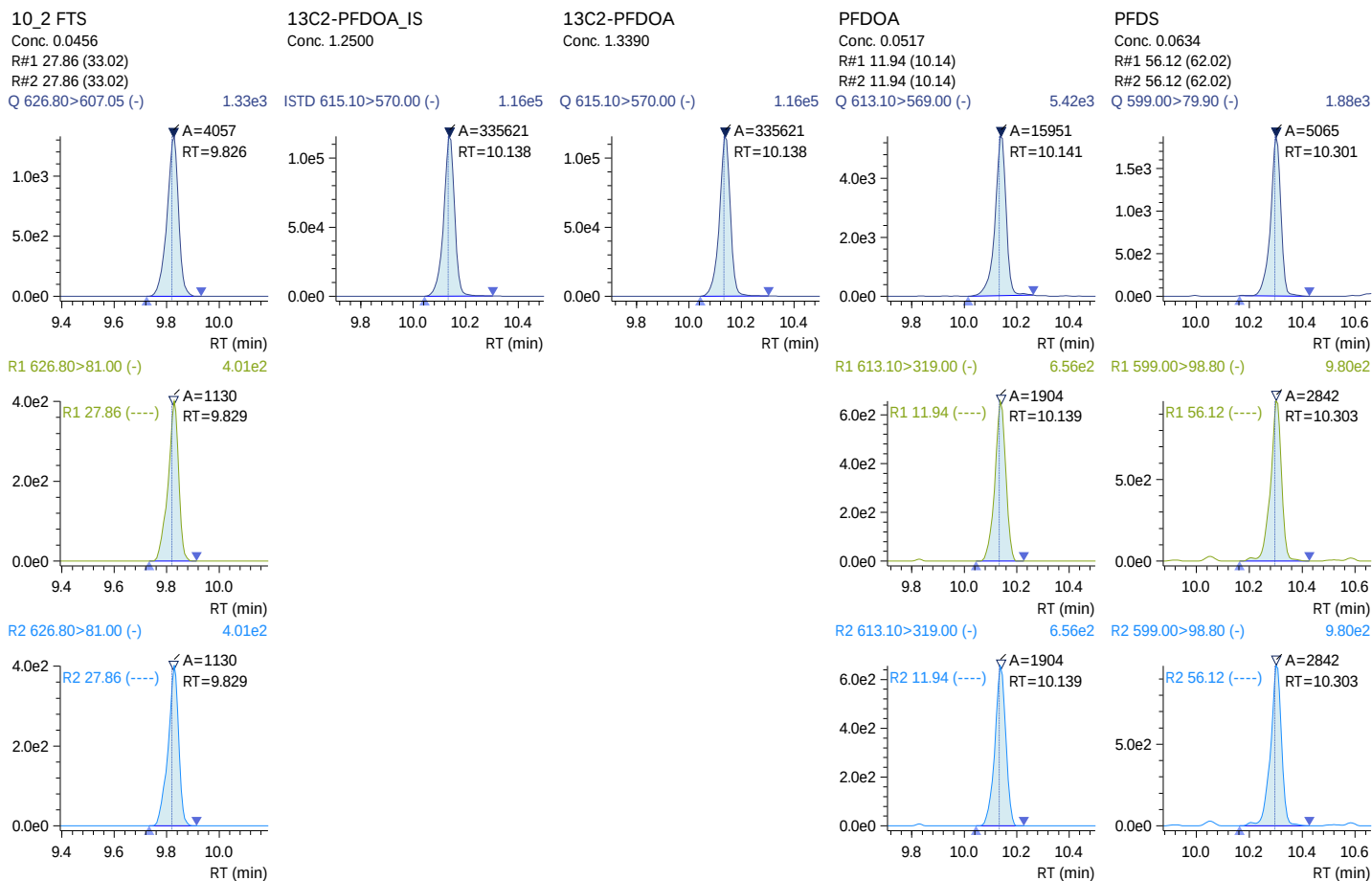


R2 548.80>98.80 (-) 1.11e3



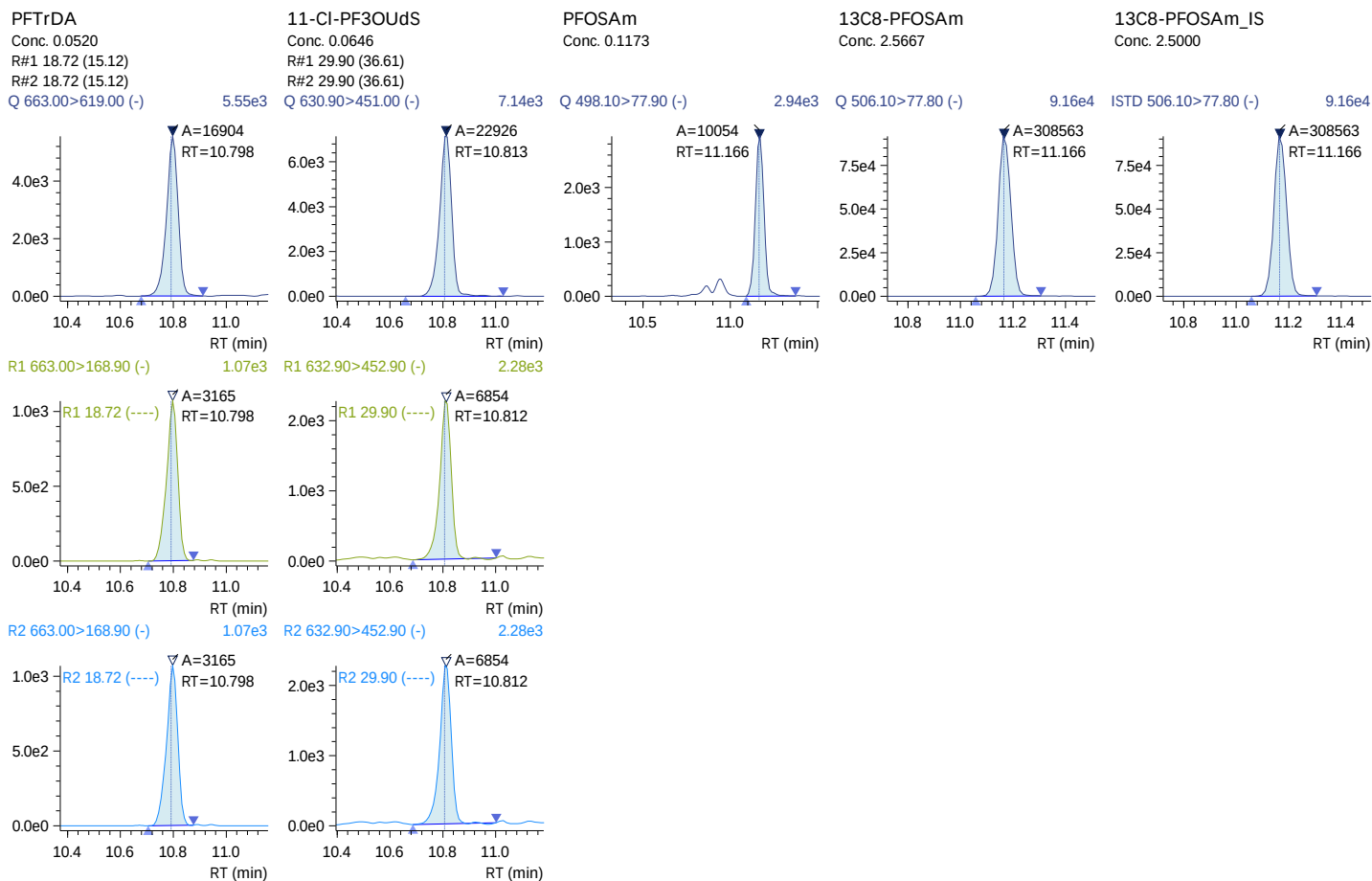


240118_006 (continued)



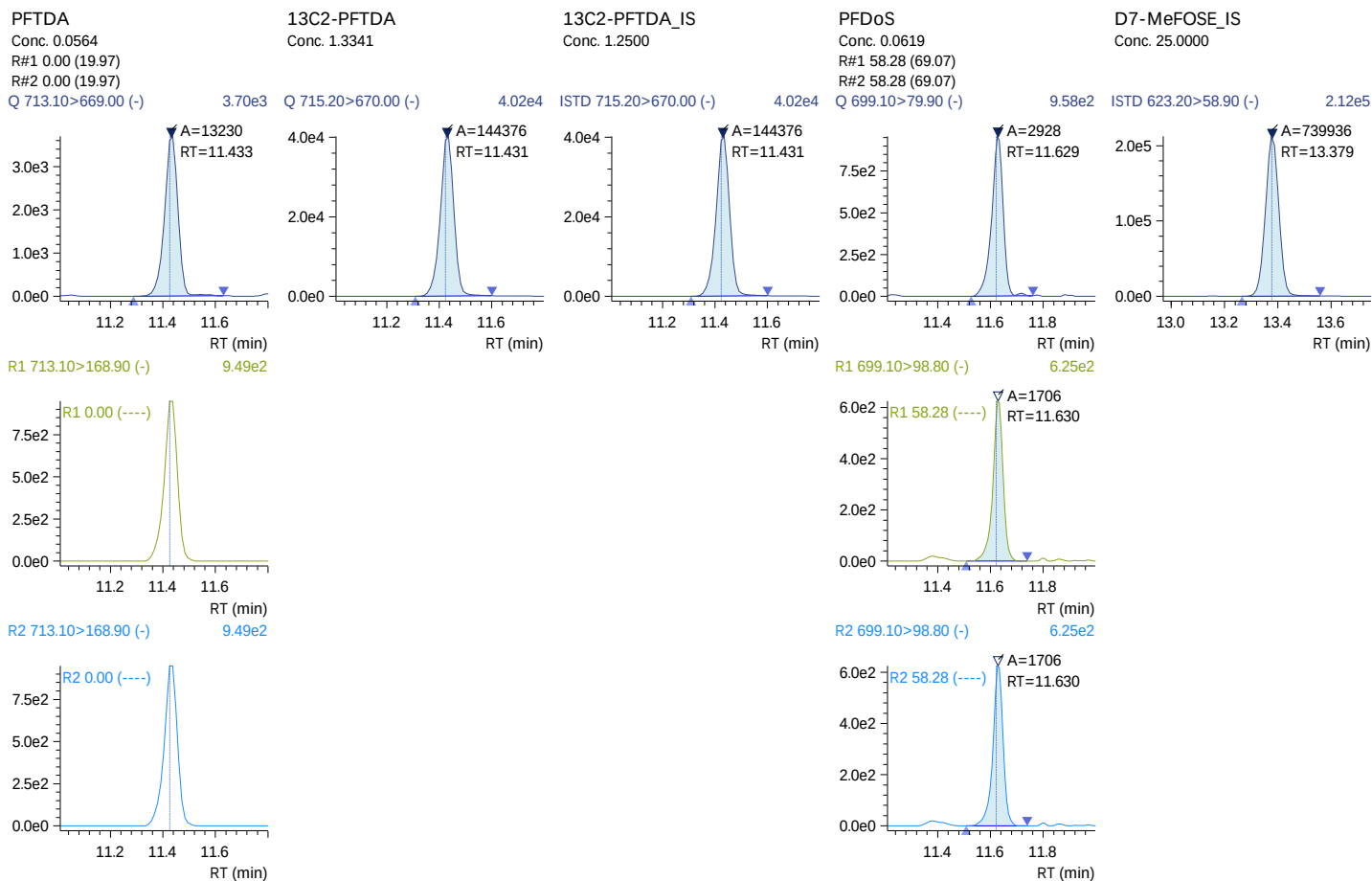


240118_006 (continued)





240118_006 (continued)





240118_006 (continued)

D7-MeFOSE
 Conc. 24.9648

MeFOSE
 Conc. ----

¹³C2-PFHxDA_IS
 Conc. 2.5000

¹³C2-PFHxDA
 Conc. 2.6536

PFHxDA
 Conc. 0.0561
 R#1 13.79 (11.64)
 R#2 13.79 (11.64)

Q 623.20>58.90 (-)

2.12e5

Q 616.10>59.00 (-)

2.72e2

ISTD 815.00>770.05 (-)

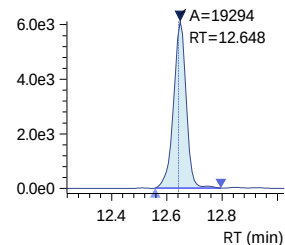
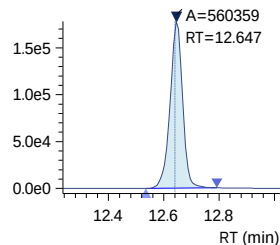
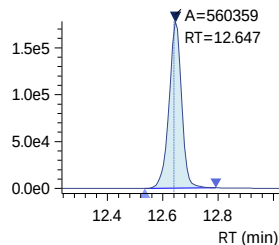
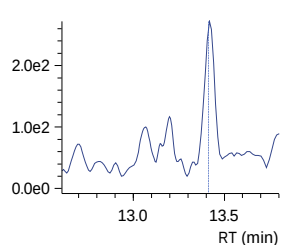
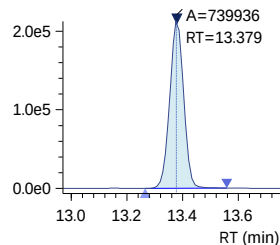
1.78e5

Q 815.00>770.05 (-)

1.78e5

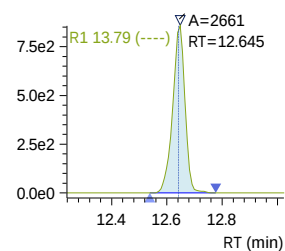
Q 813.00>768.95 (-)

6.12e3



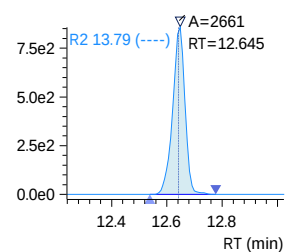
R1 813.00>218.95 (-)

8.57e2



R2 813.00>218.95 (-)

8.57e2





240118_006 (continued)

D3-MeFOSA
 Conc. 2.4918

D3-MeFOSA_IS
 Conc. 2.5000

MeFOSA
 Conc. 0.0560
 R#1 0.00 (149.05)
 R#2 0.00 (149.05)

D9-EtFOSE_IS
 Conc. 25.0000

D9-EtFOSE
 Conc. 24.9296

Q 515.00>219.00 (-)

1.74e4

ISTD 515.00>219.00 (-)

1.74e4

Q 511.90>219.00 (-)

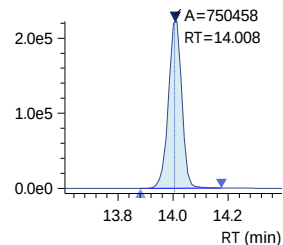
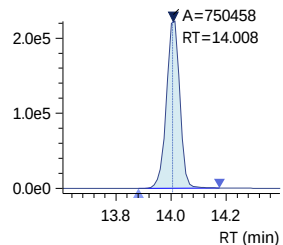
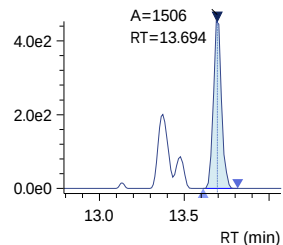
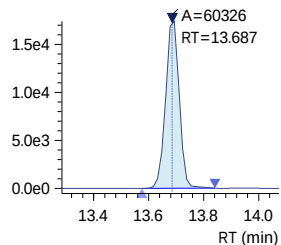
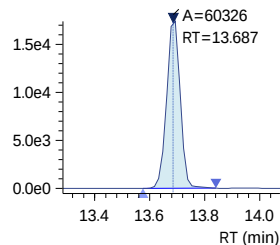
4.53e2

ISTD 639.20>58.90 (-)

2.22e5

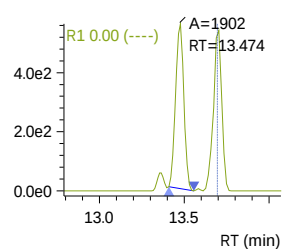
Q 639.20>58.90 (-)

2.22e5



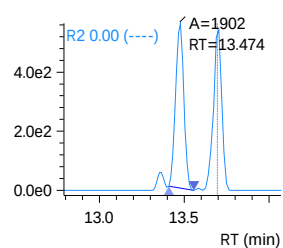
R1 511.90>169.00 (-)

5.65e2



R2 511.90>169.00 (-)

5.65e2





240118_006 (continued)

EtFOSE
Conc. 0.0588

D5-EtFOSAm
Conc. 2.4659

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. 0.0621
R#1 145.37 (154.69)
R#2 145.37 (154.69)

PFODA
Conc. 0.0561
R#1 27.13 (29.32)
R#2 27.13 (29.32)

Q 630.00>59.00 (-)

4.11e2

Q 531.10>219.00 (-)

2.46e4

ISTD 531.10>219.00 (-)

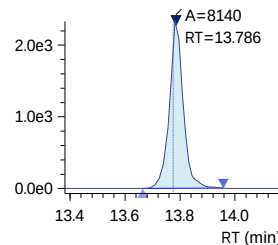
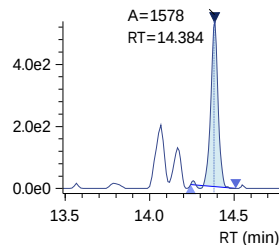
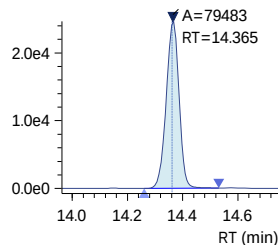
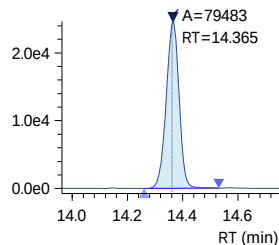
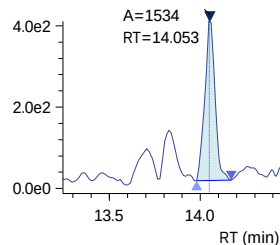
2.46e4

Q 526.00>219.00 (-)

5.39e2

Q 913.00>868.65 (-)

2.33e3

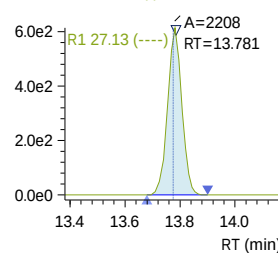
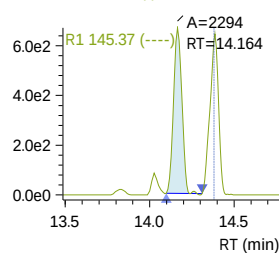


R1 526.00>169.00 (-)

6.72e2

R1 913.00>169.00 (-)

6.14e2

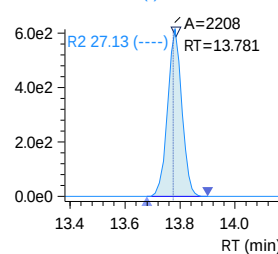
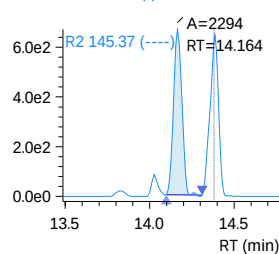


R2 526.00>169.00 (-)

6.72e2

R2 913.00>169.00 (-)

6.14e2





240118_007

Sample ID: 1633 ICAL 0.1PPB
Date Acquired: 1/18/2024 2:27:50 PM
Acquired by: System Administrator
Data File: 240118_007
Vial: 2 | Inj. Volume: 10.0000uL | Tray: 1

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	1323938	----	----	----	----	----	----	
13C4-PFBA_IS	216.80>171.90	----	1323938	----	----	----	----	----	----	
13C3-PFBA_IS	216.00>172.00	----	588848	----	----	----	----	----	----	
PFBA	212.80>169.05	----	12114	----	----	----	----	----	----	
PFMPA	229.00>84.90	----	9475	----	----	----	----	----	----	
3_3 FTCA	241.00>177.10	241.00>117.00	16133	24839	153.97	141.17	24839	153.97	141.17	
13C5-PFPeA	268.30>223.00	----	141960	----	----	----	----	----	----	
13C5-PFPeA_IS	268.30>223.00	----	141960	----	----	----	----	----	----	
PFPeA	263.00>219.00	----	20016	----	----	----	----	----	----	
PFMBA	279.00>84.95	----	13370	----	----	----	----	----	----	
13C2-4_2 FTS	329.10>80.90	----	185513	----	----	----	----	----	----	
13C2-4_2 FTS_IS	329.10>80.90	----	185513	----	----	----	----	----	----	
4_2 FTS	327.10>307.00	327.10>80.90	8314	2331	28.04	29.06	2331	28.04	29.06	
13C3-PFBS_IS	302.10>79.90	----	333703	----	----	----	----	----	----	
PFBS	298.70>79.90	298.70>98.80	14873	7654	51.46	46.72	7654	51.46	46.72	
13C3-PFBS	302.10>79.90	----	333703	----	----	----	----	----	----	
NFDHA	295.00>201.00	295.00>84.90	14637	6019	41.12	40.25	6019	41.12	40.25	
13C5-PFHxA	318.00>273.00	----	701158	----	----	----	----	----	----	
13C5-PFHxA_IS	318.00>273.00	----	701158	----	----	----	----	----	----	
13C2-PFHxA_IS	315.10>270.00	----	664999	----	----	----	----	----	----	
PFHxA	313.00>269.00	----	23282	----	----	----	----	----	----	
PFEESA	314.80>135.00	314.80>82.90	66265	4209	6.35	6.11	4209	6.35	6.11	
13C3-HFPO-DA	286.90>168.90	----	604622	----	----	----	----	----	----	
13C3-HFPO-DA_IS	286.90>168.90	----	604622	----	----	----	----	----	----	
HFPO-DA	284.90>168.90	284.90>184.90	7258	4042	55.70	65.61	4042	55.70	65.61	
5_3 FTCA	341.00>237.05	341.00>217.00	92840	140561	151.40	158.86	140561	151.40	158.86	
PFPeS	349.10>79.90	349.10>98.80	12097	6937	57.34	55.80	6937	57.34	55.80	
13C4-PFHpA	367.10>322.00	----	594464	----	----	----	----	----	----	
13C4-PFHpA_IS	367.10>322.00	----	594464	----	----	----	----	----	----	
PFHpA	363.10>319.00	363.10>169.00	33505	6132	18.30	21.50	6132	18.30	21.50	
DONA	376.90>250.90	376.90>84.80	45741	13575	29.68	29.66	13575	29.68	29.66	
13C2-6_2 FTS_IS	429.10>80.90	----	163769	----	----	----	----	----	----	
13C2-6_2 FTS	429.10>80.90	----	163769	----	----	----	----	----	----	
6_2 FTS	427.10>407.00	427.10>80.90	8104	2955	36.46	41.15	2955	36.46	41.15	
13C4-PFOA_IS	417.10>172.00	----	45445	----	----	----	----	----	----	
13C8-PFOA_IS	421.10>376.00	----	601542	----	----	----	----	----	----	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240118_007 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	601542	----	----	----	----	----	----	----
PFOA	413.00>369.00	413.00>169.00	22726	7700	33.88	31.89	7700	33.88	31.89	
13C3-PFHxS	402.10>79.90	----	235487	----	----	----	----	----	----	----
13C3-PFHxS_IS	402.10>79.90	----	235487	----	----	----	----	----	----	----
PFHxS	398.70>79.90	398.70>98.90	12132	7187	59.24	56.62	7187	59.24	56.62	
18O2-PFHxS_IS	403.00>83.90	----	224476	----	----	----	----	----	----	----
13C9-PFNA_IS	472.10>427.00	----	299675	----	----	----	----	----	----	----
13C9-PFNA	472.10>427.00	----	299675	----	----	----	----	----	----	----
13C5-PFNA_IS	468.00>423.00	----	315542	----	----	----	----	----	----	----
PFNA	463.00>419.00	463.00>219.00	23138	5021	21.70	23.17	5021	21.70	23.17	
PFHpS	449.00>79.90	449.00>98.80	8515	5054	59.36	56.96	5054	59.36	56.96	
7_3 FTCA	441.00>317.00	441.00>336.90	113753	131554	115.65	117.47	131554	115.65	117.47	
13C2-8_2-FTS	529.10>80.90	----	145227	----	----	----	----	----	----	----
13C2-8_2-FTS_IS	529.10>80.90	----	145227	----	----	----	----	----	----	----
8_2 FTS	527.10>506.95	527.10>80.80	4600	2143	46.59	49.59	2143	46.59	49.59	
13C6-PFDA_IS	519.10>474.10	----	240568	----	----	----	----	----	----	----
13C6-PFDA	519.10>474.10	----	240568	----	----	----	----	----	----	----
13C2-PFDA_IS	515.10>470.10	----	242916	----	----	----	----	----	----	----
PFDA	512.90>469.00	512.90>219.00	28917	3872	13.39	19.00	3872	13.39	19.00	
D3-NMeFOSAA_IS	573.20>419.00	----	258147	----	----	----	----	----	----	----
D3-NMeFOSAA	573.20>419.00	----	258147	----	----	----	----	----	----	----
13C8-PFOS_IS	507.10>98.90	----	118069	----	----	----	----	----	----	----
13C8-PFOS	507.10>98.90	----	118069	----	----	----	----	----	----	----
13C4-PFOS_IS	502.80>79.90	----	282518	----	----	----	----	----	----	----
PFOS	498.90>79.90	498.90>98.80	11920	5378	45.12	52.47	5378	45.12	52.47	
NMeFOSAA	570.10>419.00	570.10>483.00	7957	3246	40.80	55.15	3246	40.80	55.15	
D5-NeFOSAA_IS	589.20>419.00	----	320494	----	----	----	----	----	----	----
D5-NeFOSAA	589.20>419.00	----	320494	----	----	----	----	----	----	----
NeFOSAA	584.20>419.10	584.20>526.00	3243	2715	83.71	81.95	2715	83.71	81.95	
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	46416	15084	32.50	32.76	15084	32.50	32.76	
PFUnDA	563.10>519.00	563.10>269.10	25490	3628	14.23	13.12	3628	14.23	13.12	
13C7-PFUnDA_IS	570.00>525.10	----	290019	----	----	----	----	----	----	----
13C7-PFUnDA	570.00>525.10	----	290019	----	----	----	----	----	----	----
PFNS	548.80>79.90	548.80>98.80	8984	5781	64.35	65.22	5781	64.35	65.22	
10_2 FTS	626.80>607.05	626.80>81.00	7907	2717	34.37	37.13	2717	34.37	37.13	
13C2-PFDOA_IS	615.10>570.00	----	330237	----	----	----	----	----	----	----
13C2-PFDOA	615.10>570.00	----	330237	----	----	----	----	----	----	----
PFDOA	613.10>569.00	613.10>319.00	21109	2348	11.12	11.29	2348	11.12	11.29	
PFDS	599.00>79.90	599.00>98.80	7754	4190	54.03	60.18	4190	54.03	60.18	
PFTDA	663.00>619.00	663.00>168.90	25207	4162	16.51	17.64	4162	16.51	17.64	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240118_007 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	33734	12828	38.03	36.44	12828	38.03	36.44	
PFOSAm	498.10>77.90	----	20717	----	----	----	----	----	----	
13C8-PFOSAm	506.10>77.80	----	304301	----	----	----	----	----	----	
13C8-PFOSAm_IS	506.10>77.80	----	304301	----	----	----	----	----	----	
PFTDA	713.10>669.00	713.10>168.90	18542	4556	24.57	22.96	4556	24.57	22.96	
13C2-PFTDA	715.20>670.00	----	141033	----	----	----	----	----	----	
13C2-PFTDA_IS	715.20>670.00	----	141033	----	----	----	----	----	----	
PFDoS	699.10>79.90	699.10>98.80	4787	2975	62.15	67.40	2975	62.15	67.40	
D7-MeFOSE_IS	623.20>58.90	----	720120	----	----	----	----	----	----	
D7-MeFOSE	623.20>58.90	----	720120	----	----	----	----	----	----	
MeFOSE	616.10>59.00	----	3379	----	----	----	----	----	----	
13C2-PFHxDA_IS	815.00>770.05	----	546960	----	----	----	----	----	----	
13C2-PFHxDA	815.00>770.05	----	546960	----	----	----	----	----	----	
PFHxDA	813.00>768.95	813.00>218.95	26427	3392	12.84	13.90	3392	12.84	13.90	
D3-MeFOSA	515.00>219.00	----	62455	----	----	----	----	----	----	
D3-MeFOSA_IS	515.00>219.00	----	62455	----	----	----	----	----	----	
MeFOSA	511.90>219.00	511.90>169.00	4164	7086	170.15	140.79	7086	170.15	140.79	
D9-EtFOSE_IS	639.20>58.90	----	749002	----	----	----	----	----	----	
D9-EtFOSE	639.20>58.90	----	749002	----	----	----	----	----	----	
EtFOSE	630.00>59.00	----	4233	----	----	----	----	----	----	
D5-EtFOSAm	531.10>219.00	----	80456	----	----	----	----	----	----	
D5-EtFOSAm_IS	531.10>219.00	----	80456	----	----	----	----	----	----	
EtFOSAm	526.00>219.00	526.00>169.00	4199	8217	195.70	163.90	8217	195.70	163.90	
PFODA	913.00>868.65	913.00>169.00	13821	3635	26.30	27.03	3635	26.30	27.03	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240118_007

Sample ID: 1633 ICAL 0.1PPB
Date Acquired: 1/18/2024 2:27:50 PM
Acquired by: System Administrator
Data File: 240118_007
Vial: 2 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Std. Conc.	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.414	0.000	-0.001	1323938	588848	13C3-PFBA_IS	10.0000	10.0589	ng/mL	
13C4-PFBA_IS	Auto	1.414	0.000	----	1323938	1323938	----	10.0000	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.415	0.000	----	588848	588848	----	5.0000	5.0000	ng/mL	
PFBA	Auto	1.420	0.004	0.006	12114	1323938	13C4-PFBA_IS	0.1000	0.1065	ng/mL	
PFMPA	Auto	2.436	0.004	-1.062	9475	141960	13C5-PFPeA_IS	0.1000	0.1033	ng/mL	
3_3 FTCA	Auto	3.010	0.006	-0.488	16133	141960	13C5-PFPeA_IS	5.0000	5.1248	ng/mL	
13C5-PFPeA	Auto	3.498	0.006	-1.490	141960	664999	13C2-PFHxA_IS	5.0000	4.7293	ng/mL	
13C5-PFPeA_IS	Auto	3.498	0.006	----	141960	141960	----	5.0000	5.0000	ng/mL	
PFPeA	Auto	3.501	0.006	0.003	20016	141960	13C5-PFPeA_IS	0.1000	0.1089	ng/mL	
PFMBA	Auto	4.034	0.009	0.536	13370	141960	13C5-PFPeA_IS	0.1000	0.1029	ng/mL	
13C2-4_2 FTS	Auto	4.670	0.009	-2.426	185513	224476	18O2-PFHxS_IS	5.0000	6.0055	ng/mL	
13C2-4_2 FTS_IS	Auto	4.670	0.009	----	185513	185513	----	5.0000	5.0000	ng/mL	
4_2 FTS	Auto	4.670	0.008	0.000	8314	185513	13C2-4_2 FTS_IS	0.0940	0.0911	ng/mL	
13C3-PFBS_IS	Auto	4.656	0.009	----	333703	333703	----	2.5000	2.5000	ng/mL	
PFBS	Auto	4.655	0.007	-0.001	14873	333703	13C3-PFBS_IS	0.0890	0.0871	ng/mL	
13C3-PFBS	Auto	4.656	0.009	-2.440	333703	224476	18O2-PFHxS_IS	2.5000	2.6196	ng/mL	
NFDHA	Auto	4.844	0.009	-0.144	14637	701158	13C5-PFHxA_IS	0.1000	0.0941	ng/mL	
13C5-PFHxA	Auto	4.988	0.010	0.000	701158	664999	13C2-PFHxA_IS	2.5000	2.5018	ng/mL	
13C5-PFHxA_IS	Auto	4.988	0.010	----	701158	701158	----	2.5000	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	4.988	0.009	----	664999	664999	----	2.5000	2.5000	ng/mL	
PFHxA	M	4.989	0.009	0.001	23282	701158	13C5-PFHxA_IS	0.1000	0.0914	ng/mL	
PFEESA	Auto	5.332	0.010	0.344	66265	701158	13C5-PFHxA_IS	0.0890	0.0844	ng/mL	
13C3-HFPO-DA	Auto	5.462	0.010	0.474	604622	664999	13C2-PFHxA_IS	10.0000	9.2879	ng/mL	
13C3-HFPO-DA_IS	Auto	5.462	0.010	----	604622	604622	----	10.0000	10.0000	ng/mL	
HFPO-DA	Auto	5.464	0.011	0.002	7258	604622	13C3-HFPO-DA_IS	0.1000	0.1087	ng/mL	
5_3 FTCA	Auto	5.916	0.010	0.928	92840	701158	13C5-PFHxA_IS	5.0000	5.1190	ng/mL	
PFPeS	Auto	6.029	0.011	-1.067	12097	235487	13C3-PFHxS_IS	0.0940	0.0978	ng/mL	
13C4-PFHpA	Auto	6.165	0.011	1.177	594464	664999	13C2-PFHxA_IS	2.5000	2.3431	ng/mL	
13C4-PFHpA_IS	Auto	6.165	0.011	----	594464	594464	----	2.5000	2.5000	ng/mL	
PFHpA	M	6.164	0.009	-0.001	33505	594464	13C4-PFHpA_IS	0.1000	0.1011	ng/mL	
DONA	Auto	6.531	0.011	1.069	45741	604622	13C3-HFPO-DA_IS	0.0950	0.0976	ng/mL	
13C2-6_2 FTS_IS	Auto	6.803	0.010	----	163769	163769	----	5.0000	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.803	0.010	-0.293	163769	224476	18O2-PFHxS_IS	5.0000	5.6053	ng/mL	
6_2 FTS	Auto	6.803	0.011	0.000	8104	163769	13C2-6_2 FTS_IS	0.0950	0.1087	ng/mL	
13C4-PFOA_IS	Auto	7.118	0.011	----	45445	45445	----	2.5000	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.118	0.011	----	601542	601542	----	2.5000	2.5000	ng/mL	
13C8-PFOA	Auto	7.118	0.011	0.000	601542	45445	13C4-PFOA_IS	2.5000	2.3682	ng/mL	
PFOA	Auto	7.119	0.009	0.001	22726	601542	13C8-PFOA_IS	0.1000	0.1026	ng/mL	
13C3-PFHxS	Auto	7.096	0.010	0.000	235487	224476	18O2-PFHxS_IS	2.5000	2.4441	ng/mL	
13C3-PFHxS_IS	Auto	7.096	0.010	----	235487	235487	----	2.5000	2.5000	ng/mL	
PFHxS	M	7.098	0.014	0.002	12132	235487	13C3-PFHxS_IS	0.0910	0.0882	ng/mL	
18O2-PFHxS_IS	Auto	7.096	0.010	----	224476	224476	----	2.5000	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.966	0.010	----	299675	299675	----	1.2500	1.2500	ng/mL	
13C9-PFNA	Auto	7.966	0.010	-0.001	299675	315542	13C5-PFNA_IS	1.2500	1.2129	ng/mL	
13C5-PFNA_IS	Auto	7.967	0.011	----	315542	315542	----	1.2500	1.2500	ng/mL	
PFNA	Auto	7.968	0.011	0.002	23138	299675	13C9-PFNA_IS	0.1000	0.1048	ng/mL	
PFHpS	Auto	8.015	0.011	-0.815	8515	118069	13C8-PFOS_IS	0.0950	0.0924	ng/mL	
7_3 FTCA	Auto	7.964	0.010	2.976	113753	701158	13C5-PFHxA_IS	5.0000	4.6983	ng/mL	
13C2-8_2-FTS	Auto	8.419	0.010	1.323	145227	224476	18O2-PFHxS_IS	5.0000	6.0512	ng/mL	
13C2-8_2-FTS_IS	Auto	8.419	0.010	----	145227	145227	----	5.0000	5.0000	ng/mL	
8_2 FTS	Auto	8.418	0.008	-0.001	4600	145227	13C2-8_2-FTS_IS	0.0960	0.0737	ng/mL	
13C6-PFDA_IS	Auto	8.730	0.010	----	240568	240568	----	1.2500	1.2500	ng/mL	
13C6-PFDA	Auto	8.730	0.010	-0.001	240568	242916	13C2-PFDA_IS	1.2500	1.2310	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_007 (continued)

(Table continued from previous page)

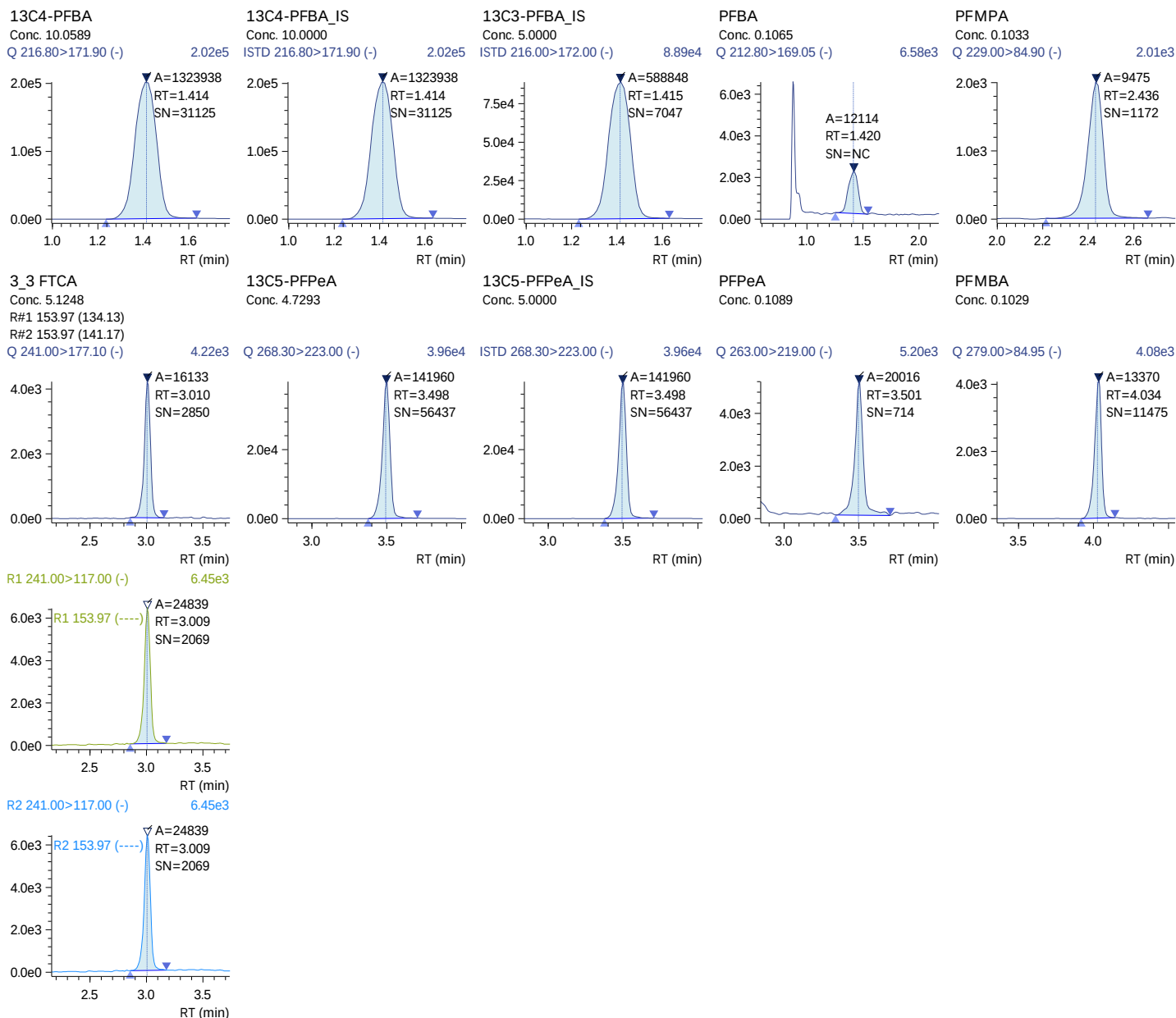
Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Std. Conc.	Conc.	Unit	Flag ID
13C2-PFDA_IS	Auto	8.731	0.010	----	242916	242916	----	1.2500	1.2500	ng/mL	
PFDA	Auto	8.732	0.011	0.002	28917	240568	13C6-PFDA_IS	0.1000	0.1006	ng/mL	
D3-NMeFOSAA_IS	Auto	8.865	0.010	----	258147	258147	----	5.0000	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.865	0.010	0.034	258147	282518	13C4-PFOS_IS	5.0000	5.2647	ng/mL	
13C8-PFOS_IS	Auto	8.830	0.010	----	118069	118069	----	2.5000	2.5000	ng/mL	
13C8-PFOS	Auto	8.830	0.010	-0.001	118069	282518	13C4-PFOS_IS	2.5000	2.5059	ng/mL	
13C4-PFOS_IS	Auto	8.831	0.011	----	282518	282518	----	2.5000	2.5000	ng/mL	
PFOS	M	8.833	0.011	0.003	11920	118069	13C8-PFOS_IS	0.0930	0.0971	ng/mL	
NMeFOSAA	M	8.873	0.012	0.008	7957	258147	D3-NMeFOSAA_IS	0.1000	0.1136	ng/mL	
D5-NetFOSAA_IS	Auto	9.197	0.011	----	320494	320494	----	5.0000	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.197	0.011	0.366	320494	282518	13C4-PFOS_IS	5.0000	5.4634	ng/mL	
NetFOSAA	M	9.208	0.013	0.011	3243	320494	D5-NetFOSAA_IS	0.1000	0.0758	ng/mL	
9-CI-PF3ONS	Auto	9.396	0.012	3.934	46416	604622	13C3-HFPO-DA_IS	0.0930	0.0931	ng/mL	
PFUnDA	Auto	9.457	0.010	0.001	25490	290019	13C7-PFUnDA_IS	0.1000	0.0917	ng/mL	
13C7-PFUnDA_IS	Auto	9.456	0.011	----	290019	290019	----	1.2500	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.456	0.011	0.725	290019	242916	13C2-PFDA_IS	1.2500	1.2441	ng/mL	
PFNS	Auto	9.594	0.010	0.764	8984	118069	13C8-PFOS_IS	0.0960	0.1001	ng/mL	
10_2_FTS	Auto	9.832	0.013	1.413	7907	145227	13C2-8_2-FTS_IS	0.0960	0.1041	ng/mL	
13C2-PFDOA_IS	Auto	10.144	0.011	----	330237	330237	----	1.2500	1.2500	ng/mL	
13C2-PFDOA	Auto	10.144	0.011	1.413	330237	242916	13C2-PFDA_IS	1.2500	1.2331	ng/mL	
PFDOA	Auto	10.145	0.011	0.001	21109	330237	13C2-PFDOA_IS	0.1000	0.0808	ng/mL	
PFDS	Auto	10.307	0.011	1.477	7754	118069	13C8-PFOS_IS	0.0970	0.0932	ng/mL	
PFTDA	Auto	10.802	0.010	-0.633	25207	141033	13C2-PFTDA_IS	0.1000	0.0957	ng/mL	
11-CI-PF3OUdS	Auto	10.817	0.011	5.355	33734	604622	13C3-HFPO-DA_IS	0.0940	0.0835	ng/mL	
PFOSAm	M	11.171	0.007	-0.004	20717	304301	13C8-PFOSAm_IS	0.2000	0.2065	ng/mL	
13C8-PFOSAm	Auto	11.175	0.010	2.344	304301	282518	13C4-PFOS_IS	2.5000	2.5372	ng/mL	
13C8-PFOSAm_IS	Auto	11.175	0.010	----	304301	304301	----	2.5000	2.5000	ng/mL	
PFTDA	Auto	11.437	0.012	0.002	18542	141033	13C2-PFTDA_IS	0.1000	0.0946	ng/mL	
13C2-PFTDA	Auto	11.435	0.011	2.704	141033	242916	13C2-PFDA_IS	1.2500	1.2196	ng/mL	
13C2-PFTDA_IS	Auto	11.435	0.011	----	141033	141033	----	1.2500	1.2500	ng/mL	
PFDoS	MI R1 R2	11.634	0.012	2.804	4787	118069	13C8-PFOS_IS	0.0970	0.1011	ng/mL	
D7-MeFOSE_IS	Auto	13.388	0.011	----	720120	720120	----	25.0000	25.0000	ng/mL	
D7-MeFOSE	Auto	13.388	0.011	4.557	720120	282518	13C4-PFOS_IS	25.0000	24.3536	ng/mL	
MeFOSE	M	13.428	0.015	0.040	3379	720120	D7-MeFOSE_IS	0.1000	0.1278	ng/mL	
13C2-PFHXA_IS	Auto	12.654	0.013	----	546960	546960	----	2.5000	2.5000	ng/mL	
13C2-PFHXA	Auto	12.654	0.013	3.923	546960	242916	13C2-PFDA_IS	2.5000	2.4240	ng/mL	
PFHXA	Auto	12.655	0.013	0.001	26427	546960	13C2-PFHXA_IS	0.1000	0.0900	ng/mL	
D3-MeFOSA	Auto	13.697	0.012	4.866	62455	282518	13C4-PFOS_IS	2.5000	2.5858	ng/mL	
D3-MeFOSA_IS	Auto	13.697	0.012	----	62455	62455	----	2.5000	2.5000	ng/mL	
MeFOSA	M	13.707	0.013	0.010	4164	62455	D3-MeFOSA_IS	0.1000	0.0925	ng/mL	
D9-EtFOSE_IS	Auto	14.017	0.011	----	749002	749002	----	25.0000	25.0000	ng/mL	
D9-EtFOSE	Auto	14.017	0.011	5.186	749002	282518	13C4-PFOS_IS	25.0000	24.9399	ng/mL	
EtFOSE	M	14.061	0.013	0.044	4233	749002	D9-EtFOSE_IS	0.1000	0.1074	ng/mL	
D5-EtFOSAm	Auto	14.373	0.011	5.542	80456	282518	13C4-PFOS_IS	2.5000	2.5020	ng/mL	
D5-EtFOSAm_IS	Auto	14.373	0.011	----	80456	80456	----	2.5000	2.5000	ng/mL	
EtFOSAm	M	14.389	0.009	0.016	4199	80456	D5-EtFOSAm_IS	0.1000	0.0896	ng/mL	
PFODA	Auto	13.787	0.012	1.133	13821	546960	13C2-PFHXA_IS	0.1000	0.1117	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_007 (continued)





240118_007 (continued)

13C2-4_2_FTS
Conc. 6.0055

13C2-4_2_FTS_IS
Conc. 5.0000

4_2_FTS
Conc. 0.0911
R#1 28.04 (34.14)
R#2 28.04 (29.06)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 0.0871
R#1 51.46 (47.53)
R#2 51.46 (46.72)

Q 329.10>80.90 (-)

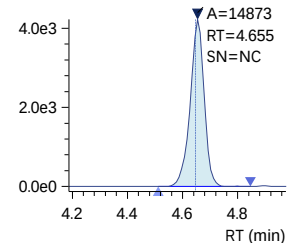
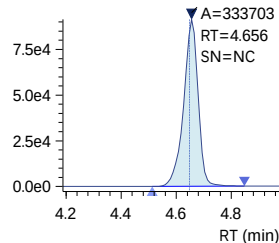
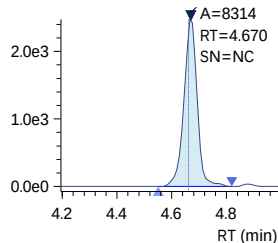
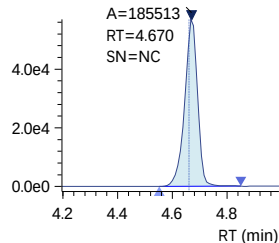
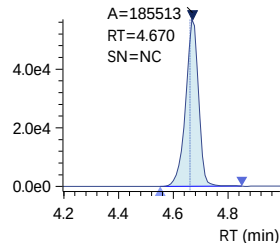
5.70e4 ISTD 329.10>80.90 (-)

5.70e4 Q 327.10>307.00 (-)

2.47e3 ISTD 302.10>79.90 (-)

9.15e4 Q 298.70>79.90 (-)

4.23e3

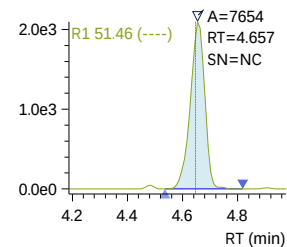
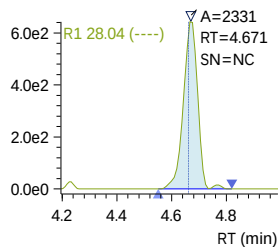


R1 327.10>80.90 (-)

6.43e2

R1 298.70>98.80 (-)

2.10e3

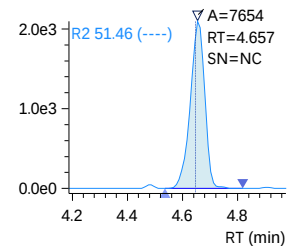
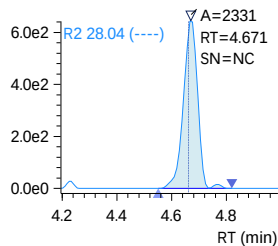


R2 327.10>80.90 (-)

6.43e2

R2 298.70>98.80 (-)

2.10e3





240118_007 (continued)

13C3-PFBS
Conc. 2.6196

NFDHA
Conc. 0.0941
R#1 41.12 (37.88)
R#2 41.12 (40.25)

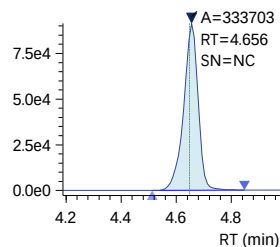
13C5-PFHxA
Conc. 2.5018

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

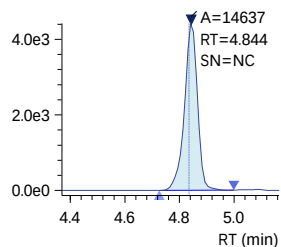
Q 302.10>79.90 (-)

9.15e4



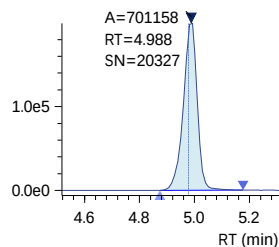
Q 295.00>201.00 (-)

4.42e3



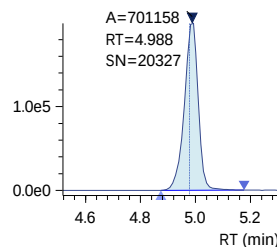
Q 318.00>273.00 (-)

1.99e5



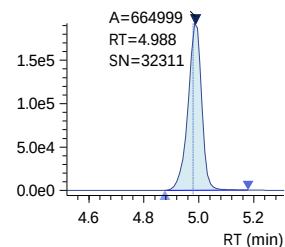
ISTD 318.00>273.00 (-)

1.99e5



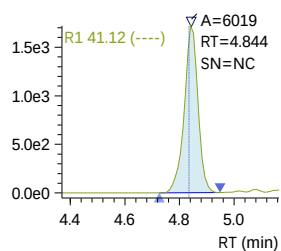
ISTD 315.10>270.00 (-)

1.92e5



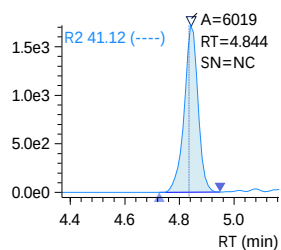
R1 295.00>84.90 (-)

1.72e3



R2 295.00>84.90 (-)

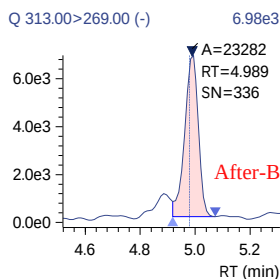
1.72e3





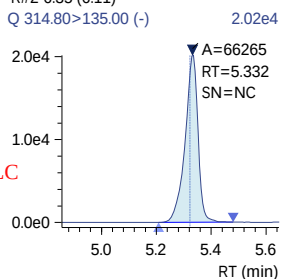
240118_007 (continued)

PFHxA
Conc. 0.0914

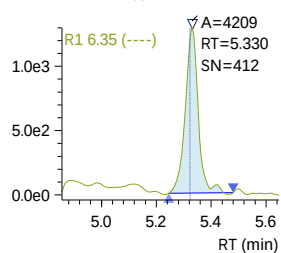


PFEESA
Conc. 0.0844

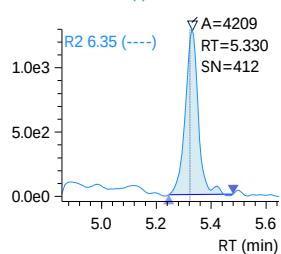
R#1 6.35 (5.88)
R#2 6.35 (6.11)



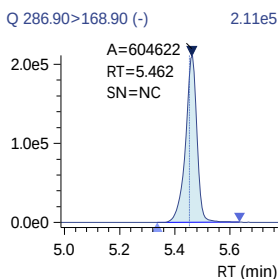
R1 314.80>82.90 (-) 1.30e3



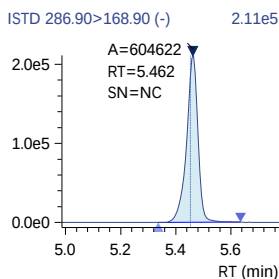
R2 314.80>82.90 (-) 1.30e3



13C3-HFPO-DA
Conc. 9.2879

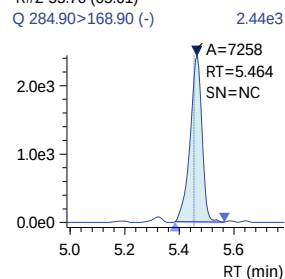


13C3-HFPO-DA_IS
Conc. 10.0000

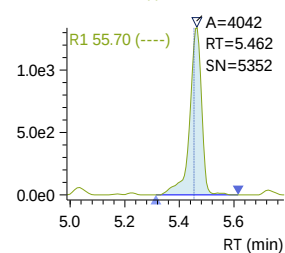


HFPO-DA
Conc. 0.1087

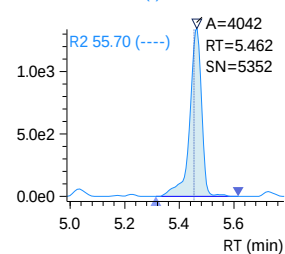
R#1 55.70 (63.80)
R#2 55.70 (65.61)



R1 284.90>184.90 (-) 1.34e3

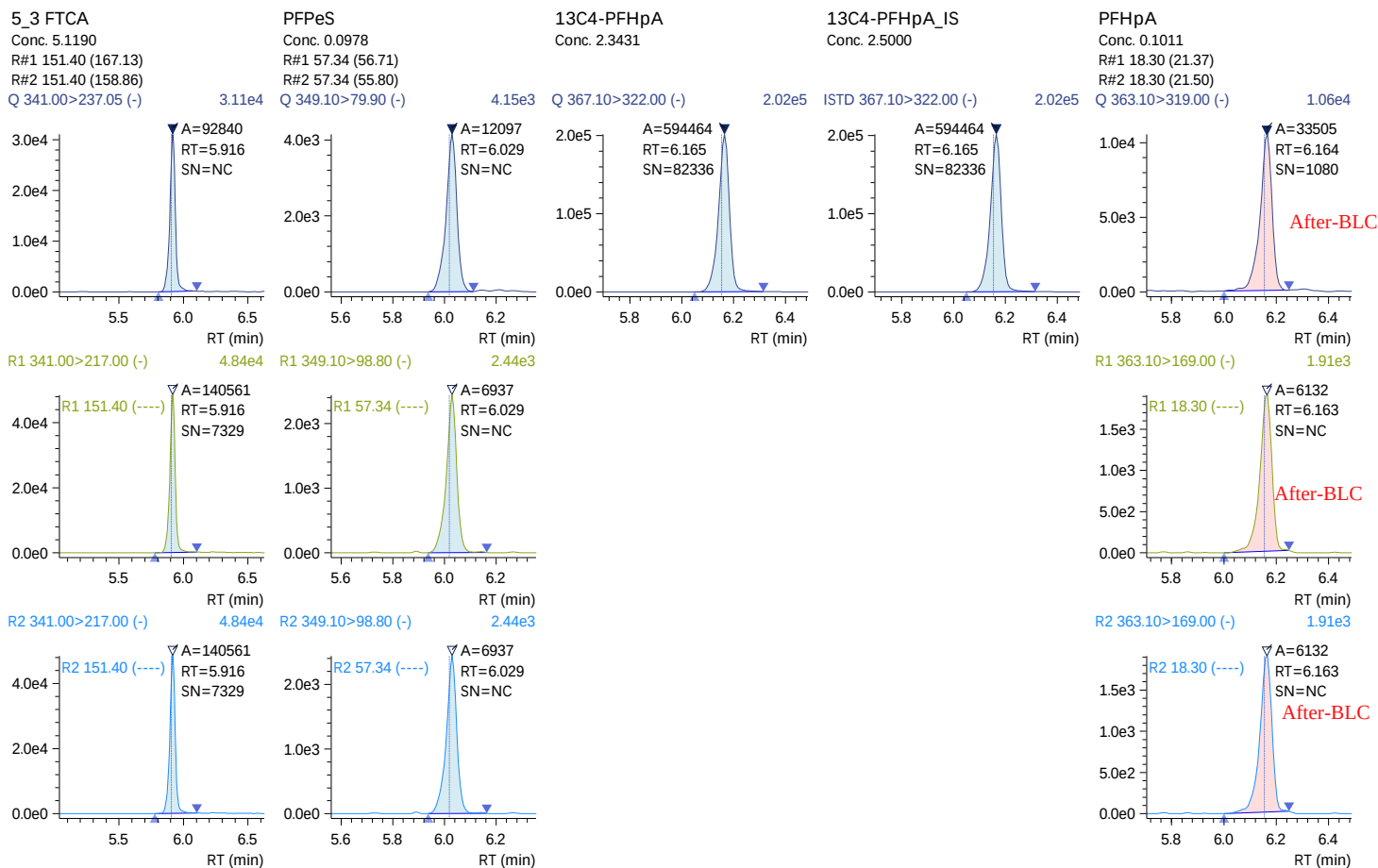


R2 284.90>184.90 (-) 1.34e3





240118_007 (continued)

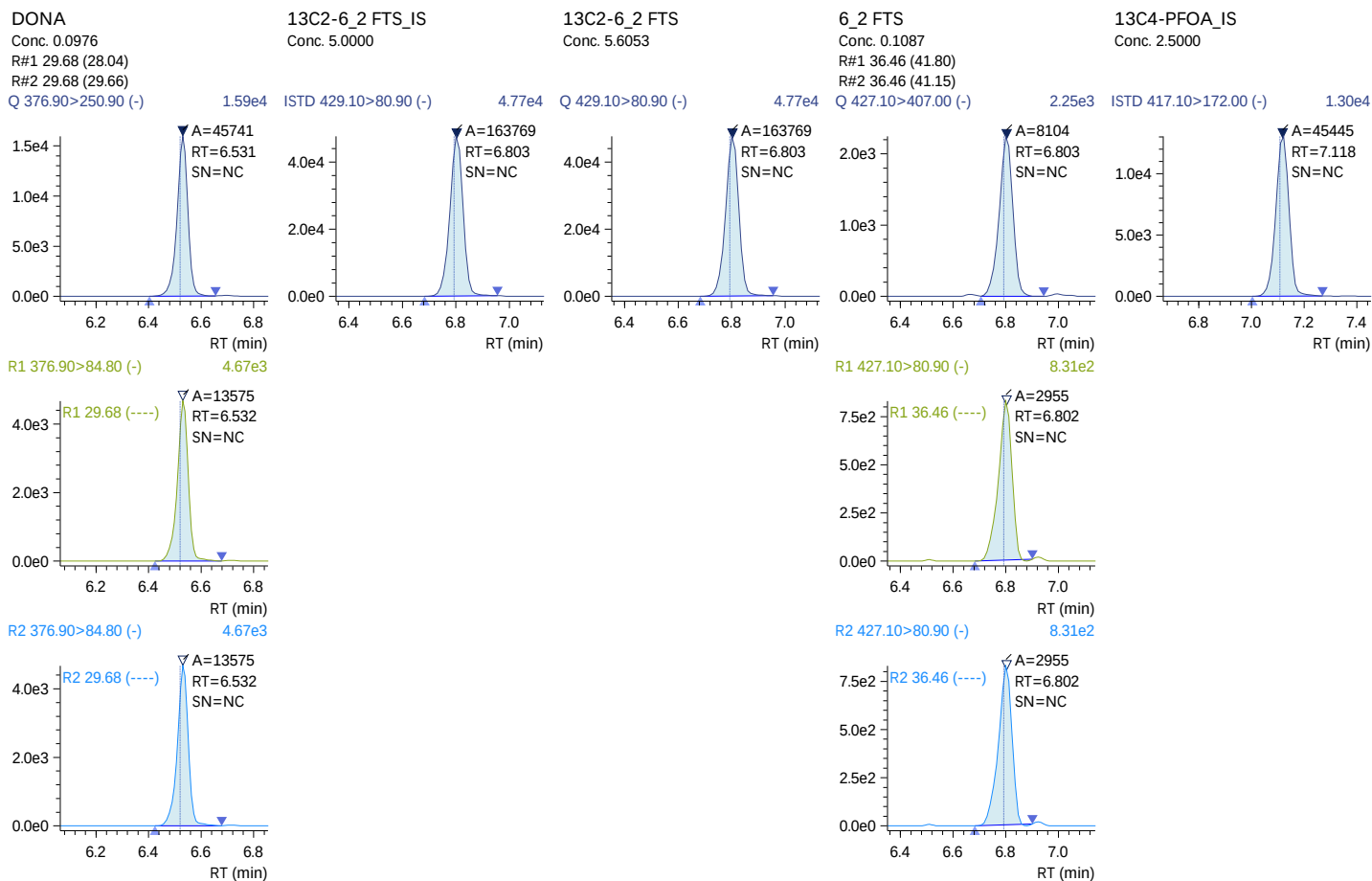


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_007 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_007 (continued)

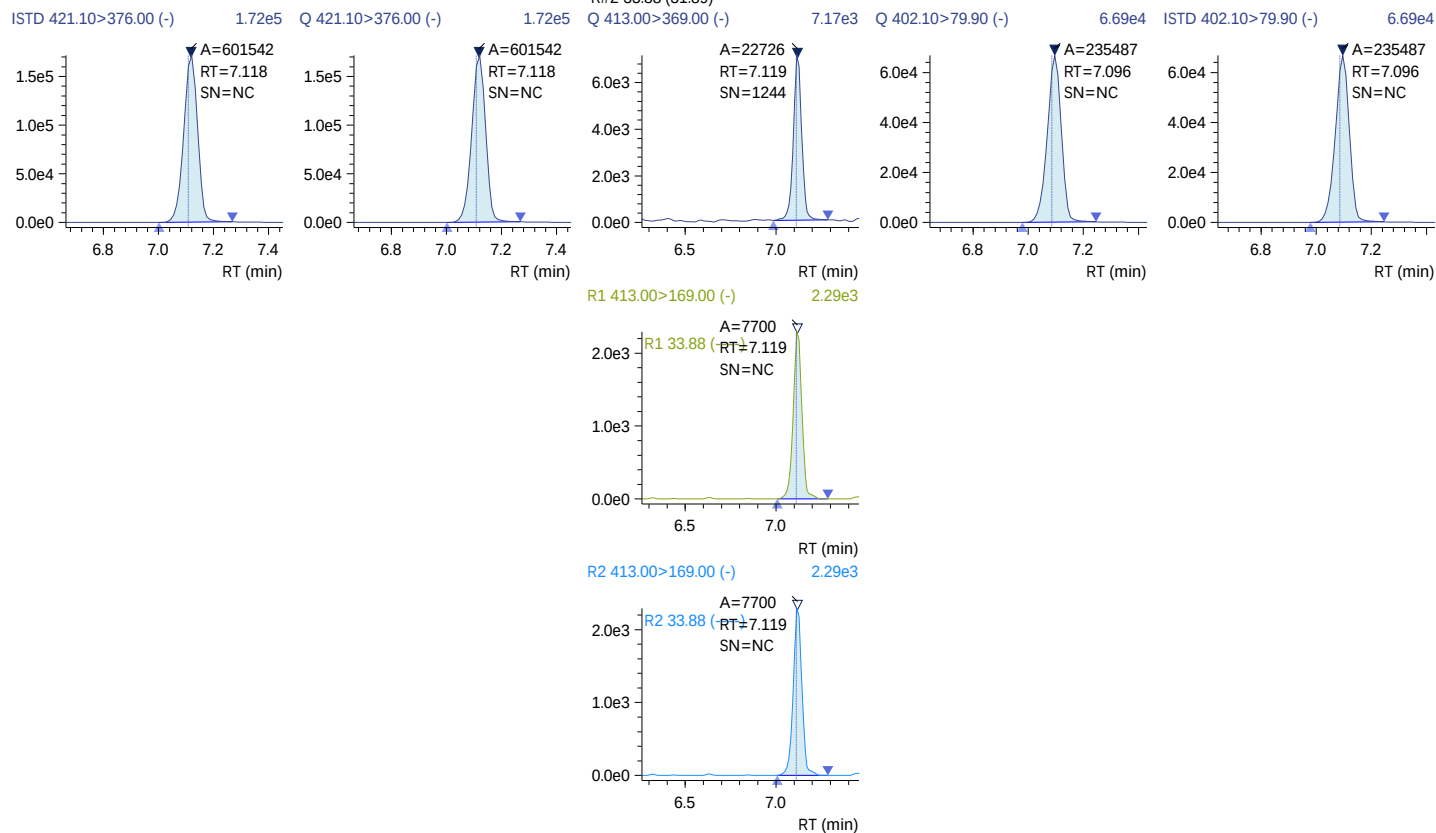
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.3682

PFOA
Conc. 0.1026
R#1 33.88 (29.05)
R#2 33.88 (31.89)

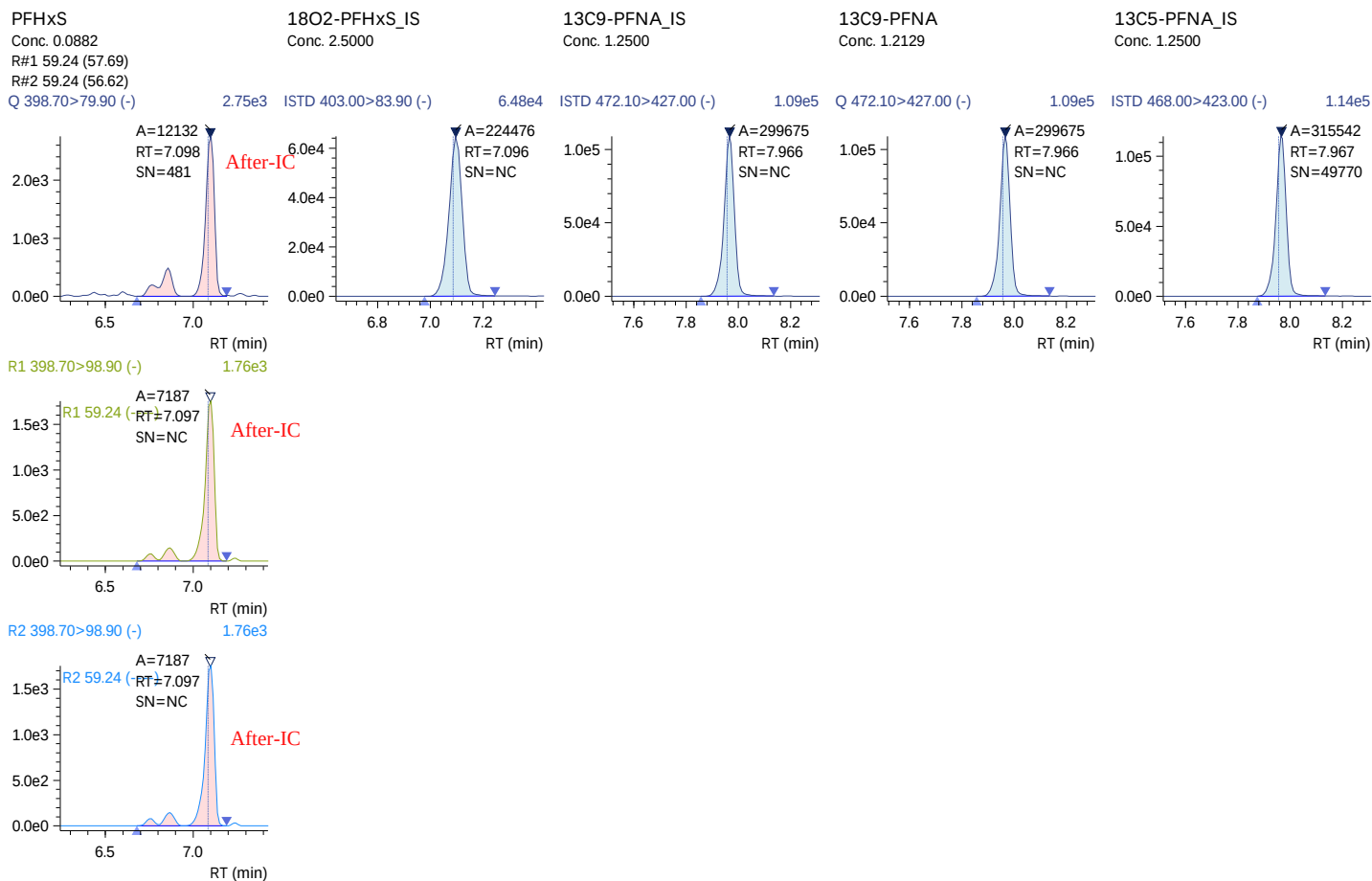
13C3-PFHxS
Conc. 2.4441

13C3-PFHxS_IS
Conc. 2.5000





240118_007 (continued)

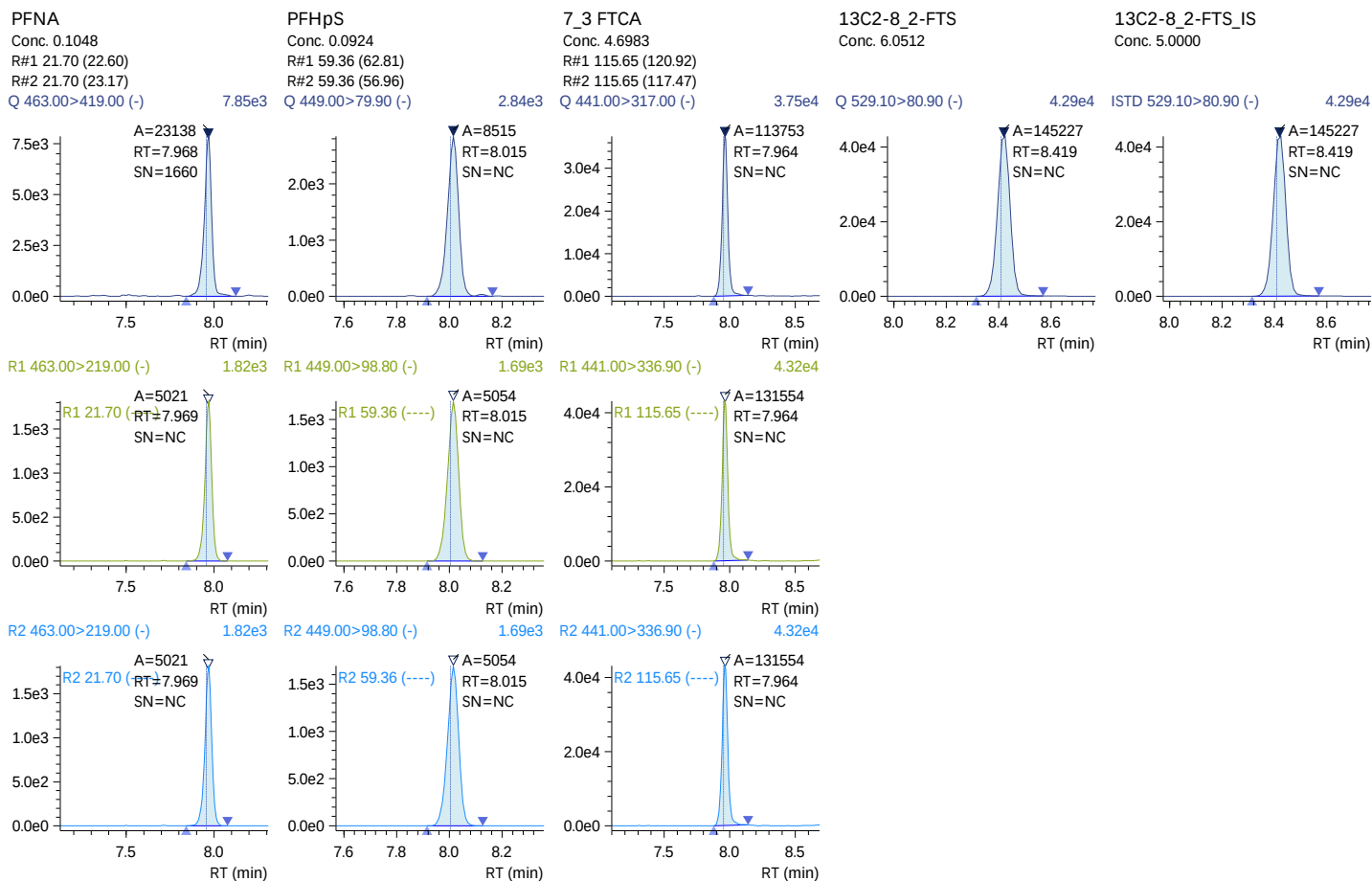


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_007 (continued)

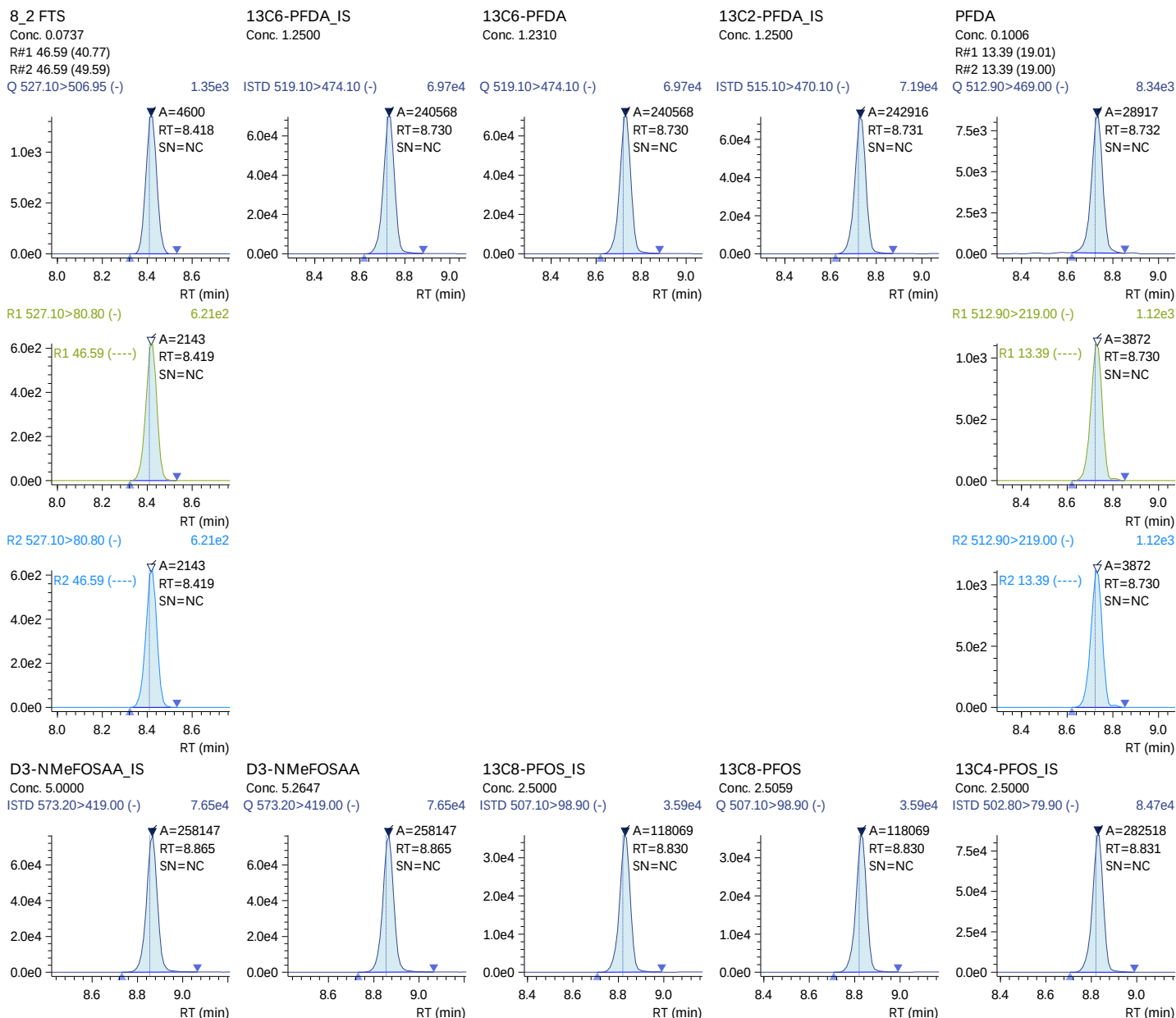


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_007 (continued)

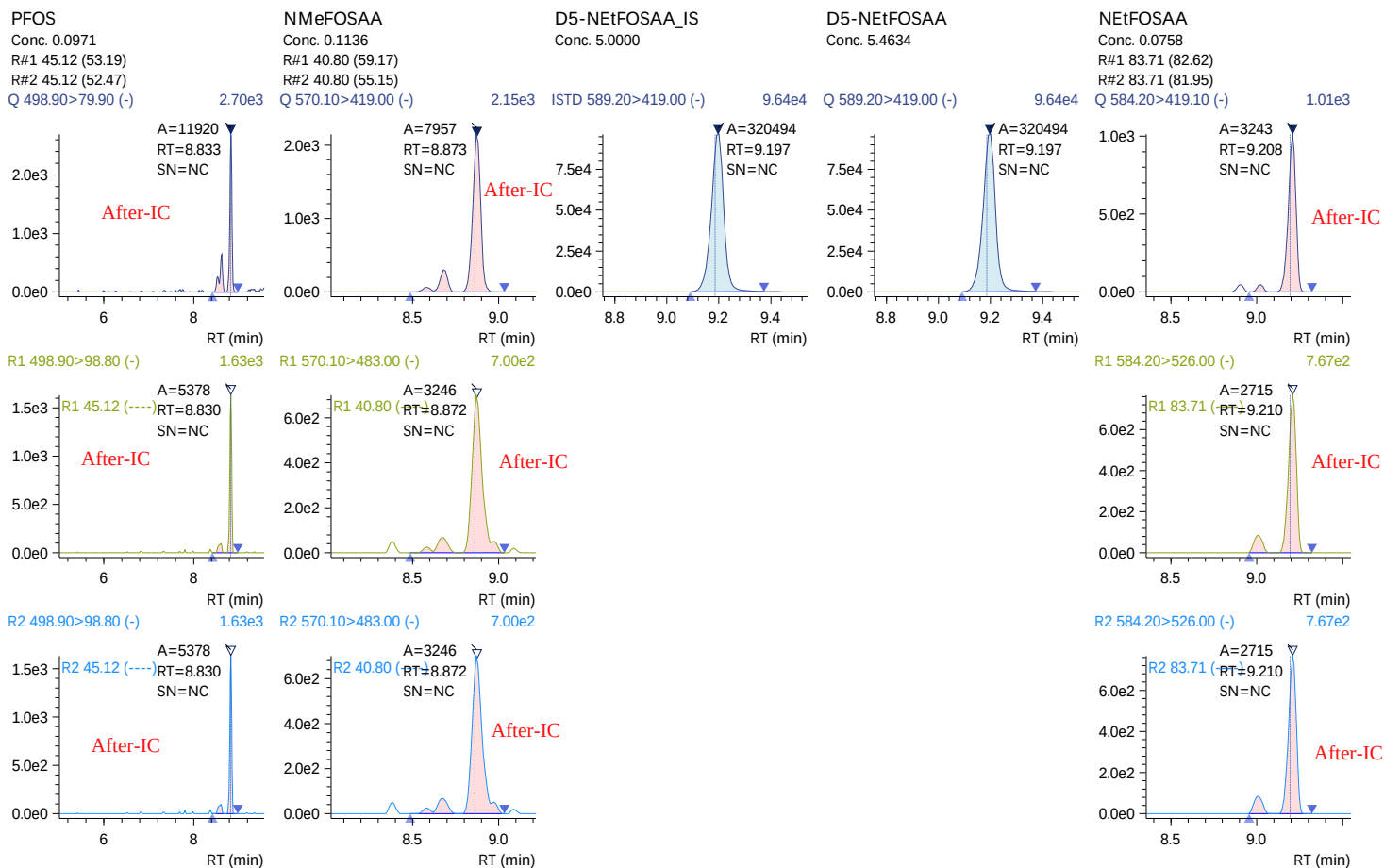


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_007 (continued)



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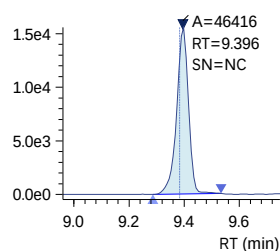
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Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



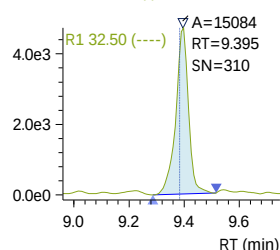
240118_007 (continued)

9-Cl-PF3ONS

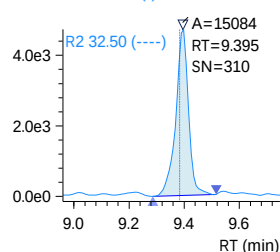
Conc. 0.0931
R#1 32.50 (31.76)
R#2 32.50 (32.76)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-)

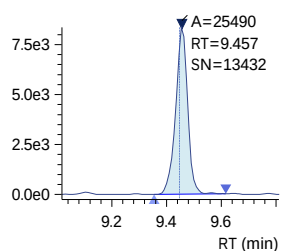


R2 532.80>353.00 (-)

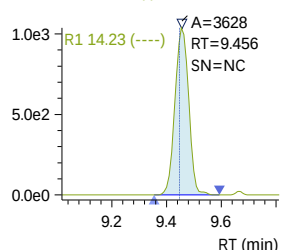


PFUnDA

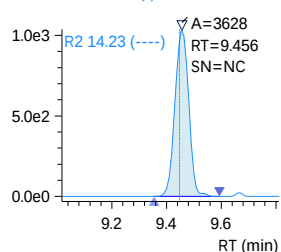
Conc. 0.0917
R#1 14.23 (12.31)
R#2 14.23 (13.12)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-)

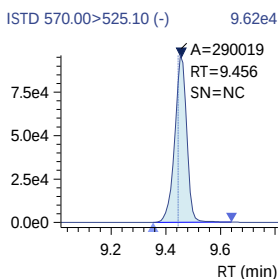


R2 563.10>269.10 (-)



13C7-PFUnDA_IS

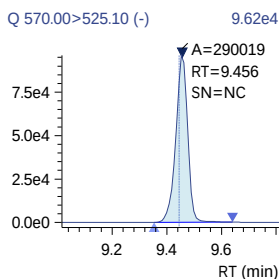
Conc. 1.2500



ISTD 570.00>525.10 (-)

13C7-PFUnDA

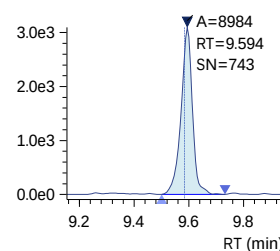
Conc. 1.2441



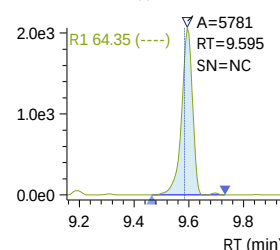
Q 570.00>525.10 (-)

PFNS

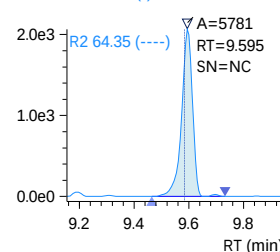
Conc. 0.1001
R#1 64.35 (63.31)
R#2 64.35 (65.22)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-)

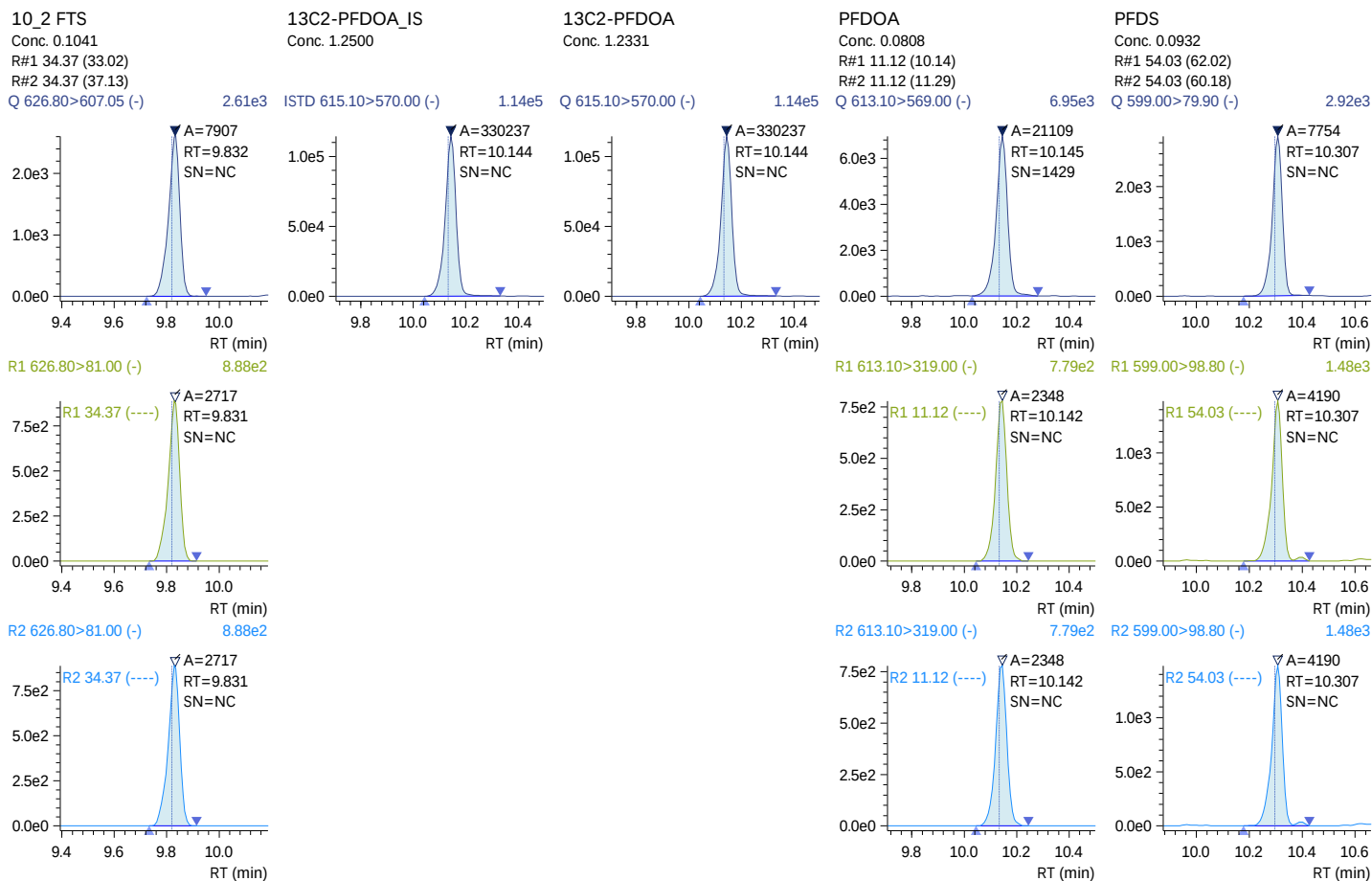


R2 548.80>98.80 (-)





240118_007 (continued)

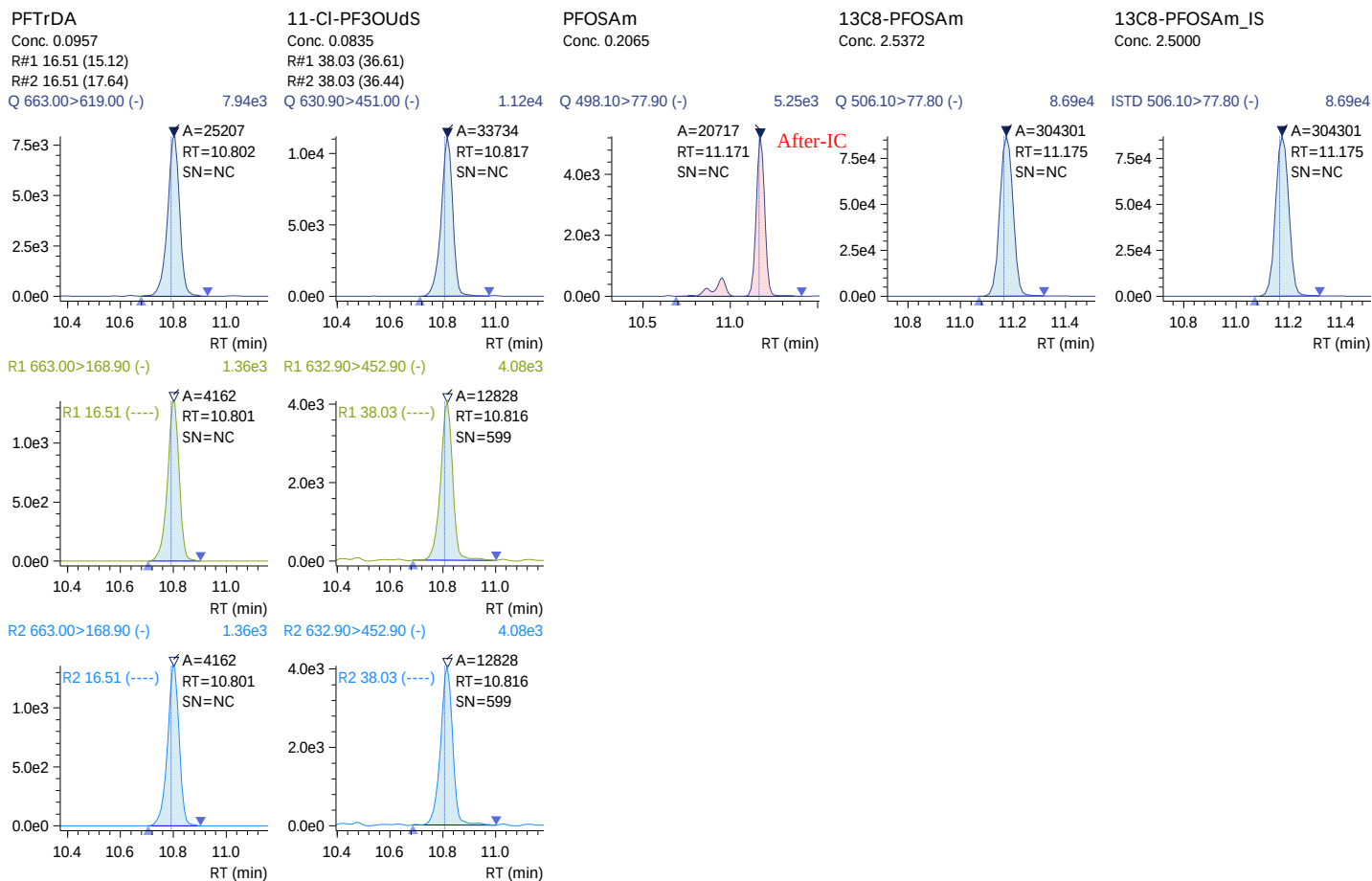


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_007 (continued)

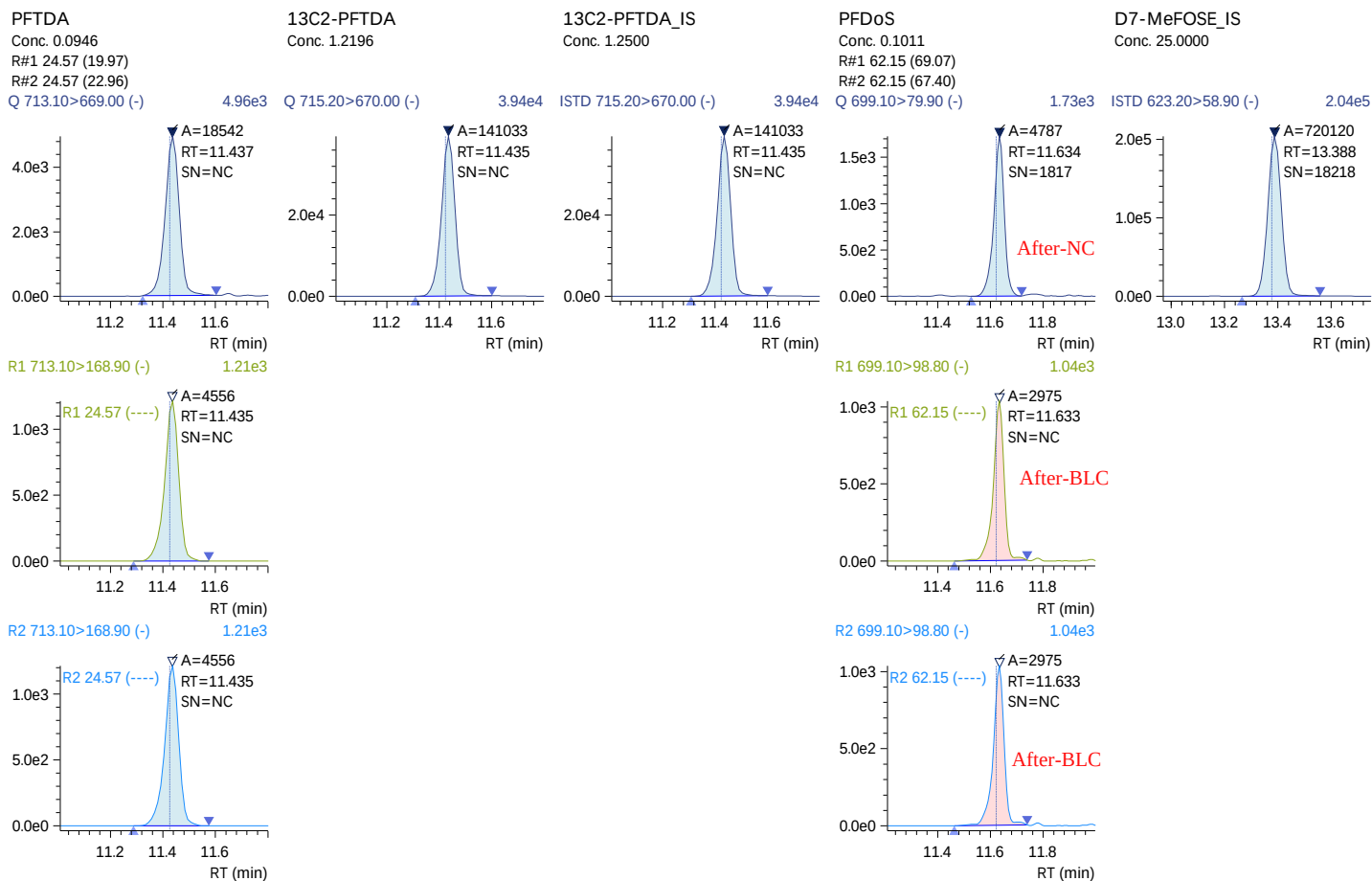


J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.damlp

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_007 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_007 (continued)

D7-MeFOSE
Conc. 24.3536

MeFOSE
Conc. 0.1278

13C2-PFHXA_IS
Conc. 2.5000

13C2-PFHXA
Conc. 2.4240

PFHXA
Conc. 0.0900

Q 623.20>58.90 (-)

2.04e5

Q 616.10>59.00 (-)

6.14e2

ISTD 815.00>770.05 (-)

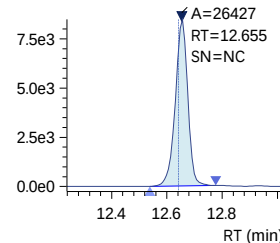
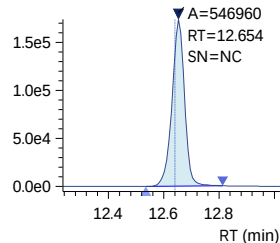
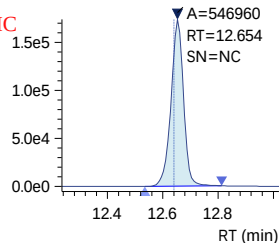
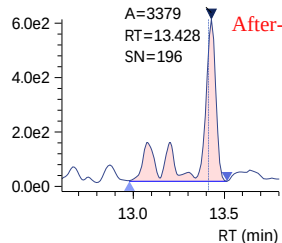
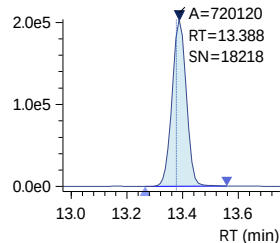
1.74e5

Q 815.00>770.05 (-)

1.74e5

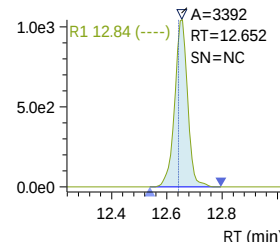
Q 813.00>768.95 (-)

8.49e3



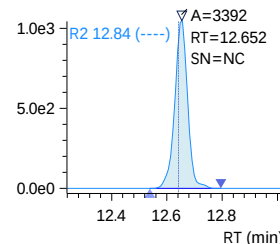
R1 813.00>218.95 (-)

1.04e3



R2 813.00>218.95 (-)

1.04e3





240118_007 (continued)

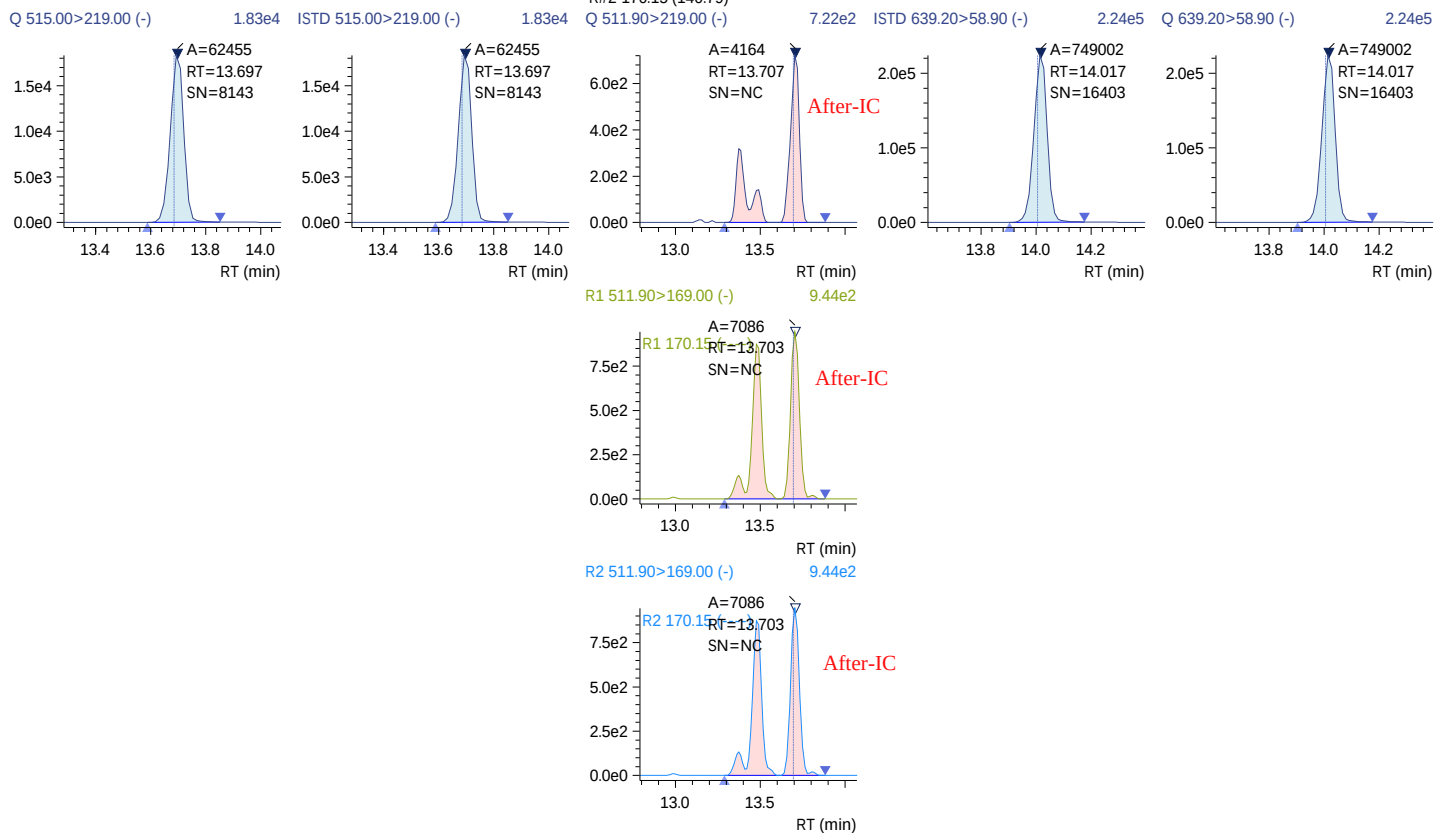
D3-MeFOSA
Conc. 2.5858

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. 0.0925
R#1 170.15 (149.05)
R#2 170.15 (140.79)

D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 24.9399



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_007 (continued)

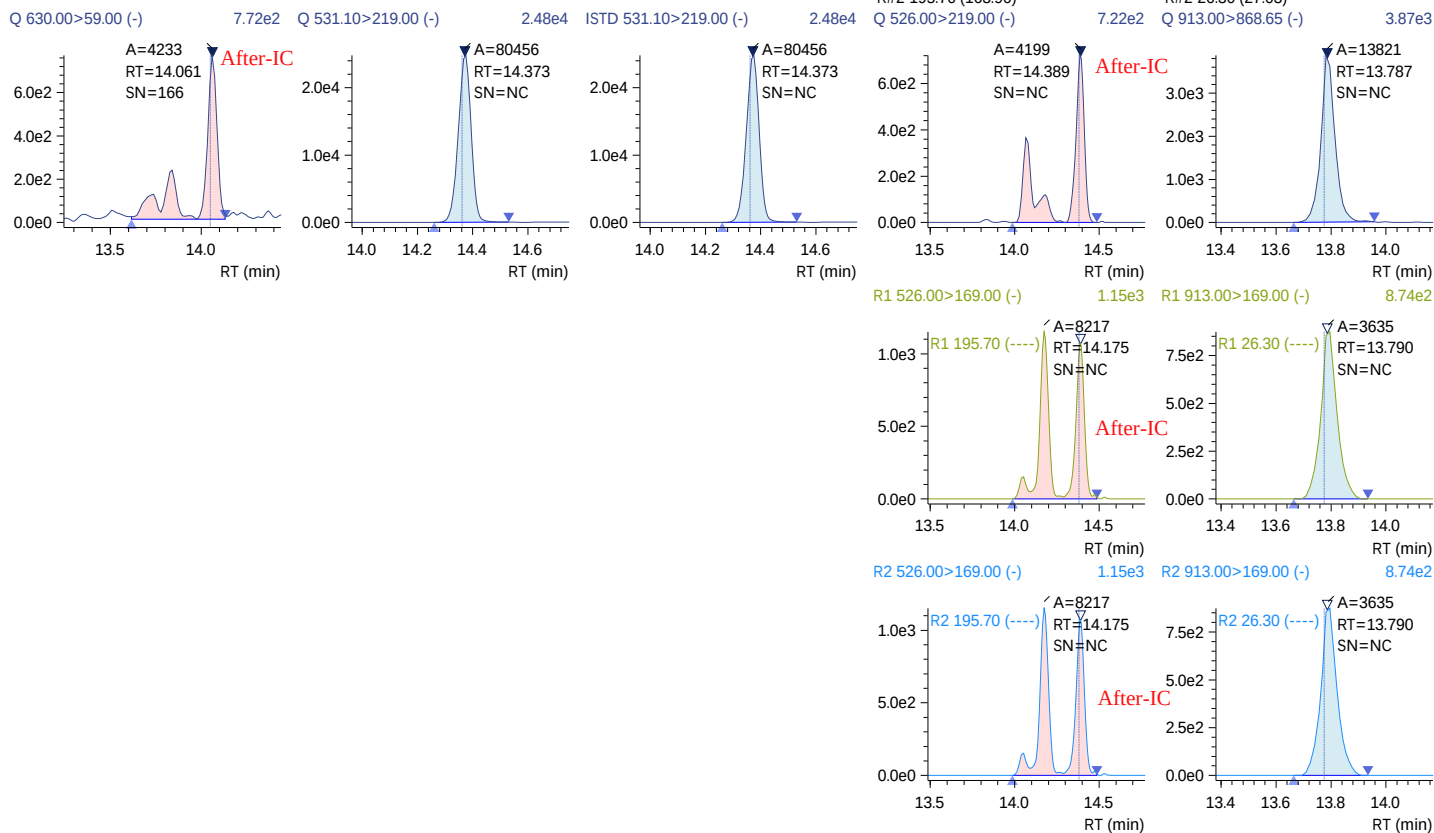
EtFOSE
Conc. 0.1074

D5-EtFOSAm
Conc. 2.5020

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. 0.0896
R#1 195.70 (154.69)
R#2 195.70 (163.90)

PFODA
Conc. 0.1117
R#1 26.30 (29.32)
R#2 26.30 (27.03)



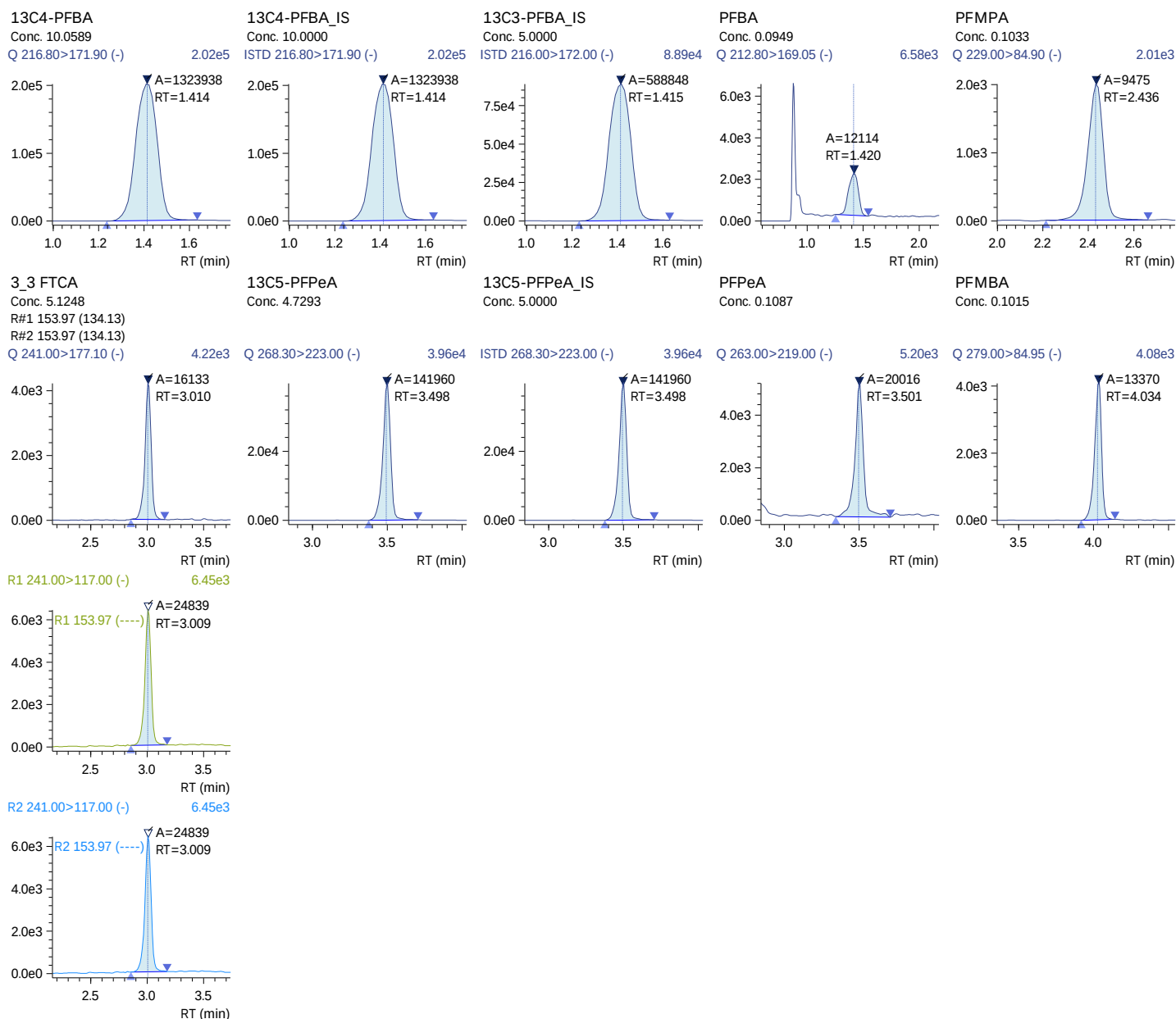
J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_007

Sample ID: 1633 ICAL 0.1PPB
Date Acquired: 1/18/2024 2:27:50 PM
Acquired by: System Administrator
Data File: 240118_007
Vial: 2 | Inj. Volume: 10.0000uL | Tray: 1





240118_007 (continued)

13C2-4_2 FTS
Conc. 6.0055

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. 0.0911
R#1 28.04 (34.14)
R#2 28.04 (34.14)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 0.0871
R#1 51.46 (47.53)
R#2 51.46 (47.53)

Q 329.10>80.90 (-)

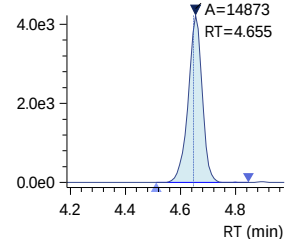
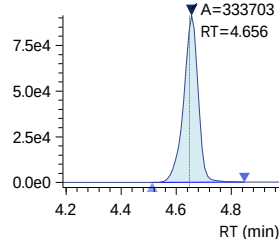
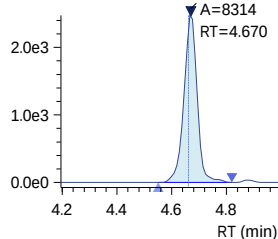
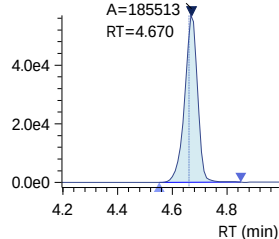
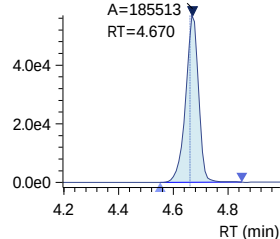
5.70e4 ISTD 329.10>80.90 (-)

5.70e4 Q 327.10>307.00 (-)

2.47e3 ISTD 302.10>79.90 (-)

9.15e4 Q 298.70>79.90 (-)

4.23e3

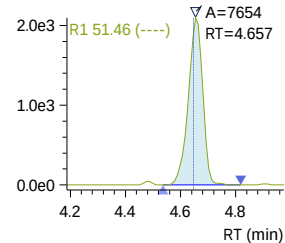
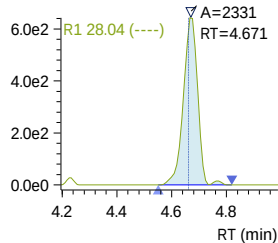


R1 327.10>80.90 (-)

6.43e2

R1 298.70>98.80 (-)

2.10e3

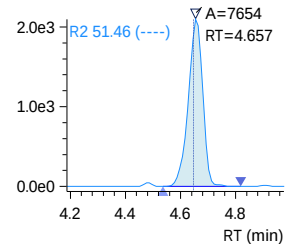
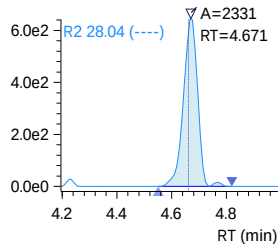


R2 327.10>80.90 (-)

6.43e2

R2 298.70>98.80 (-)

2.10e3





240118_007 (continued)

13C3-PFBS
 Conc. 2.6196

NFDHA
 Conc. 0.0941
 R#1 41.12 (37.88)
 R#2 41.12 (37.88)

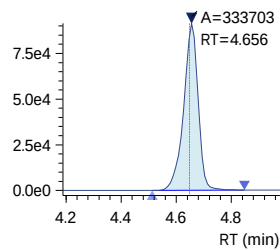
13C5-PFHxA
 Conc. 2.5018

13C5-PFHxA_IS
 Conc. 2.5000

13C2-PFHxA_IS
 Conc. 2.5000

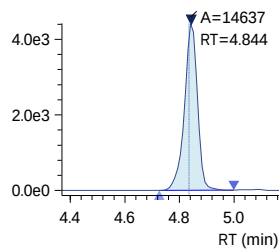
Q 302.10>79.90 (-)

9.15e4



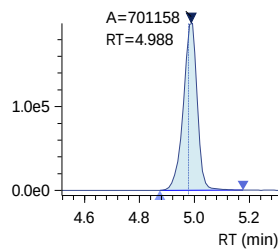
Q 295.00>201.00 (-)

4.42e3



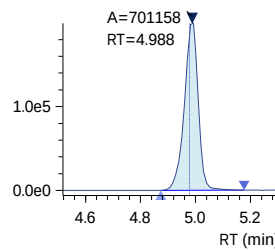
Q 318.00>273.00 (-)

1.99e5



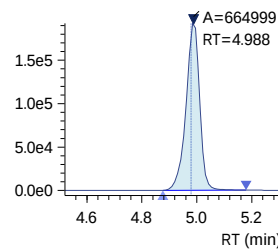
ISTD 318.00>273.00 (-)

1.99e5



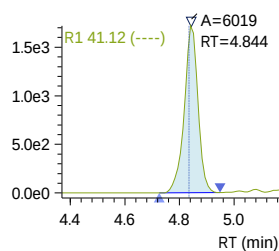
ISTD 315.10>270.00 (-)

1.92e5



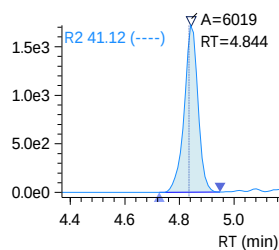
R1 295.00>84.90 (-)

1.72e3



R2 295.00>84.90 (-)

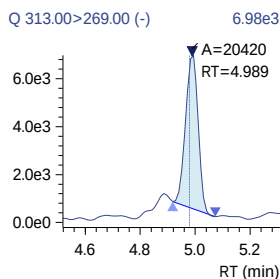
1.72e3





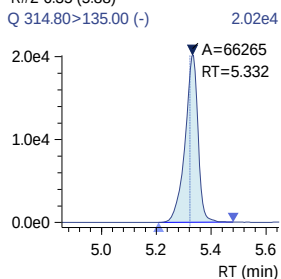
240118_007 (continued)

PFHxA
 Conc. 0.0925

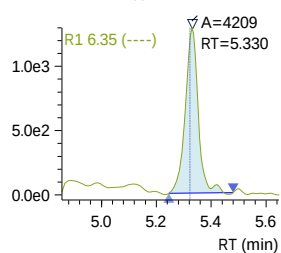


PFEESA
 Conc. 0.0844

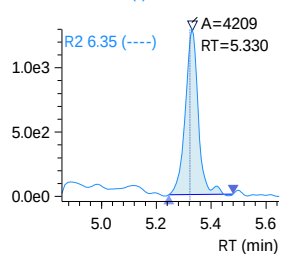
R#1 6.35 (5.88)
 R#2 6.35 (5.88)



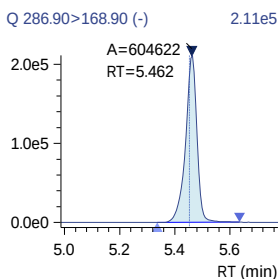
R1 314.80>82.90 (-) 1.30e3



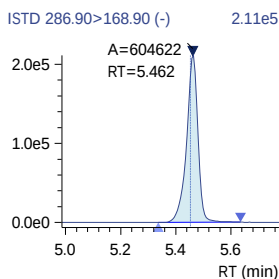
R2 314.80>82.90 (-) 1.30e3



13C3-HFPO-DA
 Conc. 9.2879

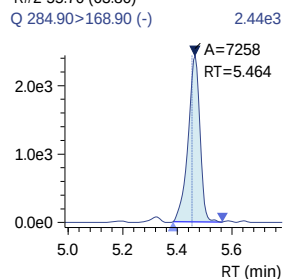


13C3-HFPO-DA_IS
 Conc. 10.0000

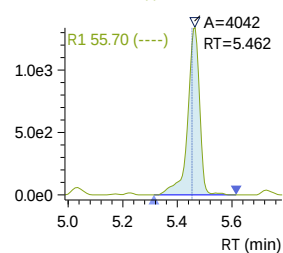


HFPO-DA
 Conc. 0.1089

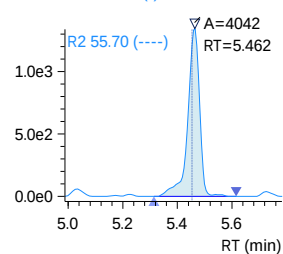
R#1 55.70 (63.80)
 R#2 55.70 (63.80)



R1 284.90>184.90 (-) 1.34e3

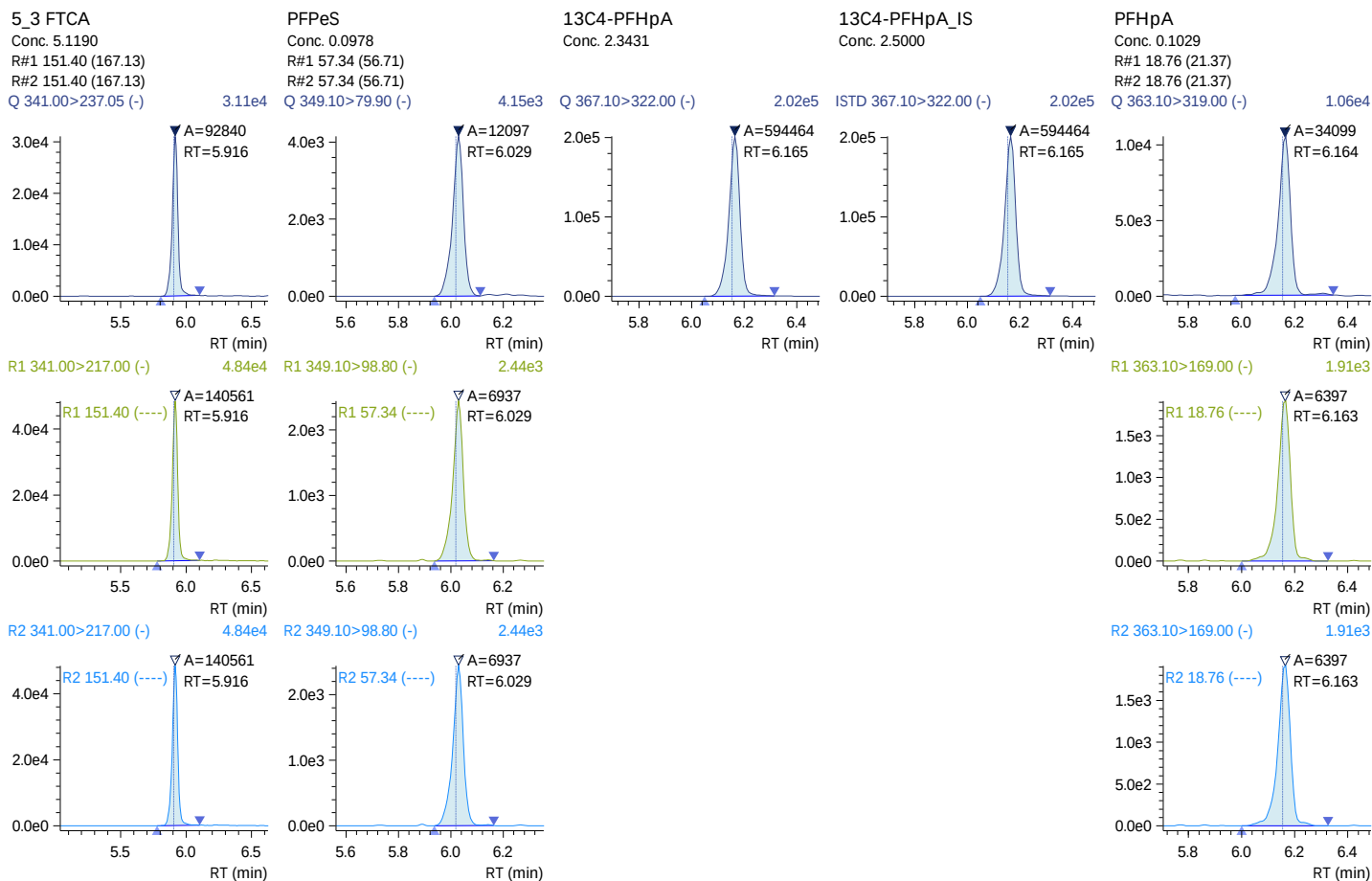


R2 284.90>184.90 (-) 1.34e3



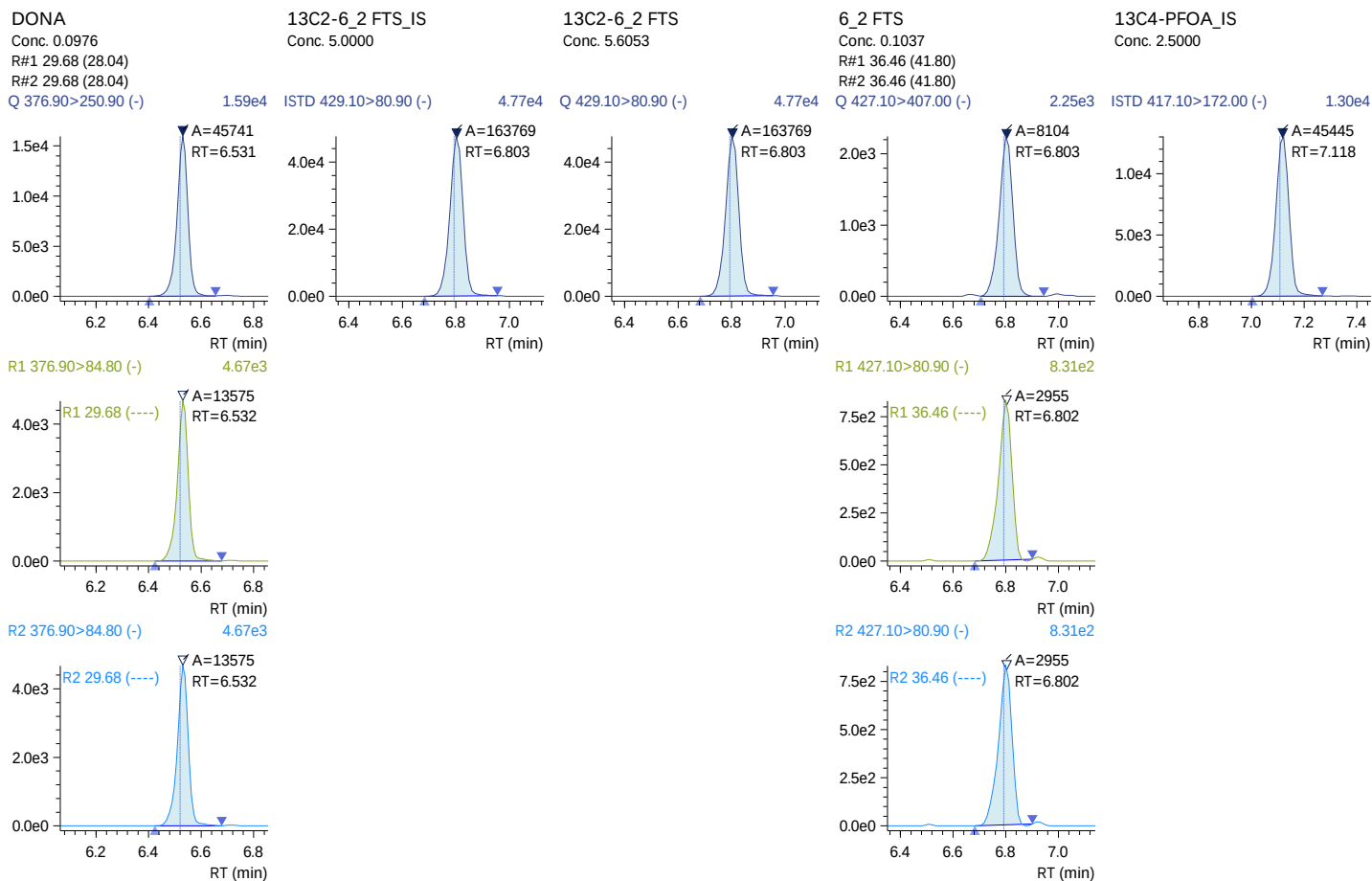


240118_007 (continued)





240118_007 (continued)





240118_007 (continued)

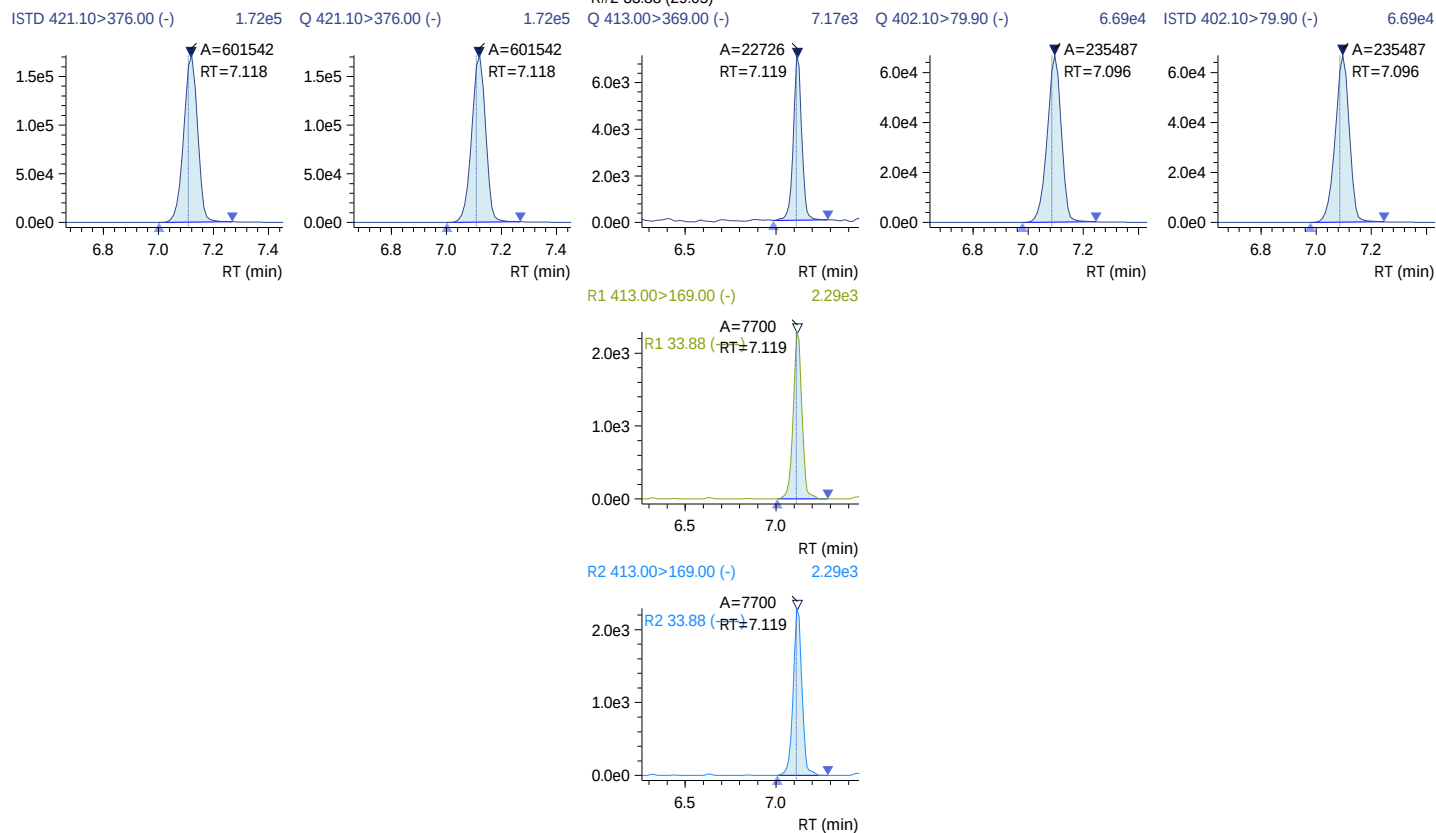
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.3682

PFOA
Conc. 0.1026
R#1 33.88 (29.05)
R#2 33.88 (29.05)

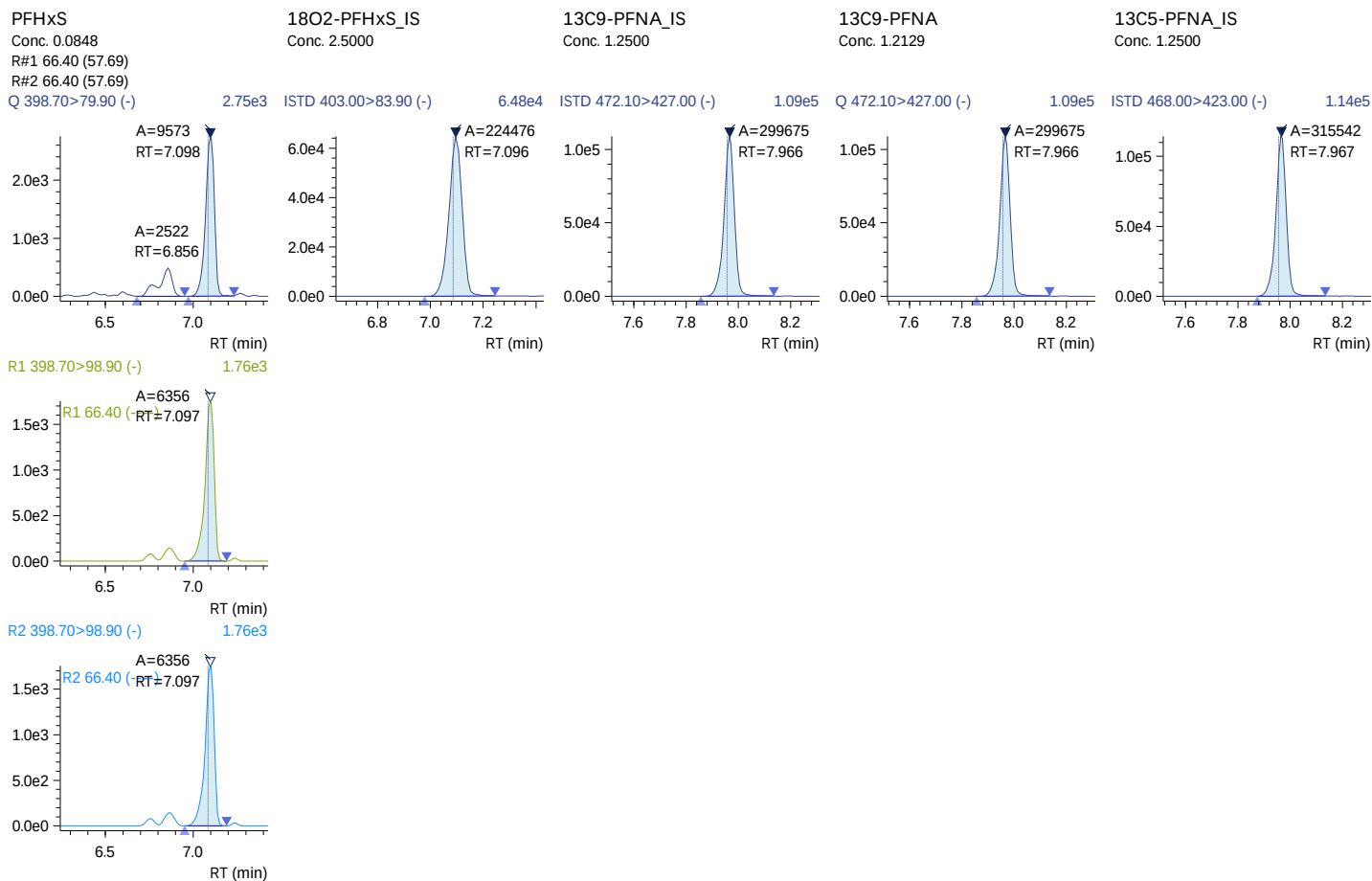
13C3-PFHxS
Conc. 2.4441

13C3-PFHxS_IS
Conc. 2.5000



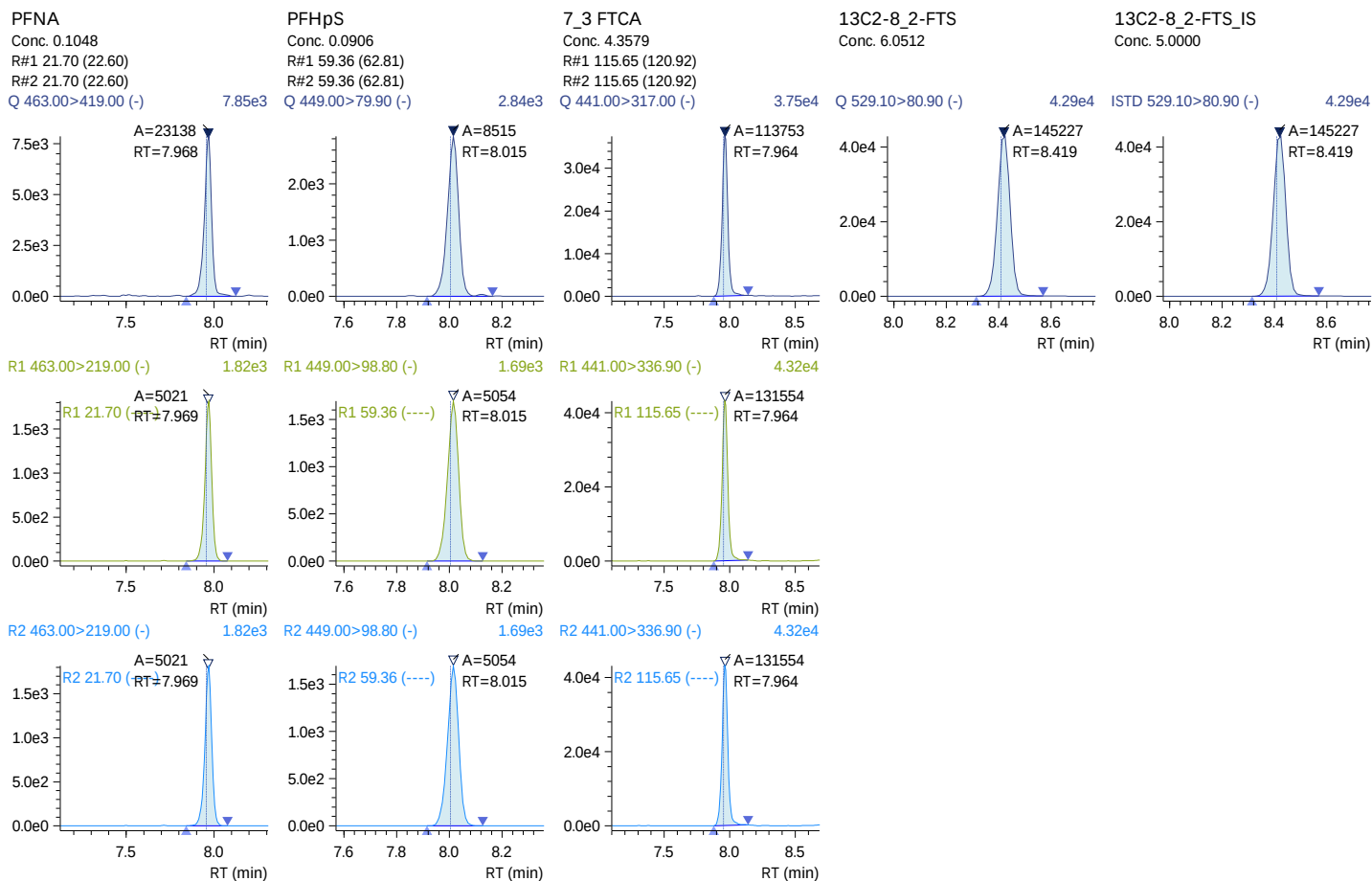


240118_007 (continued)



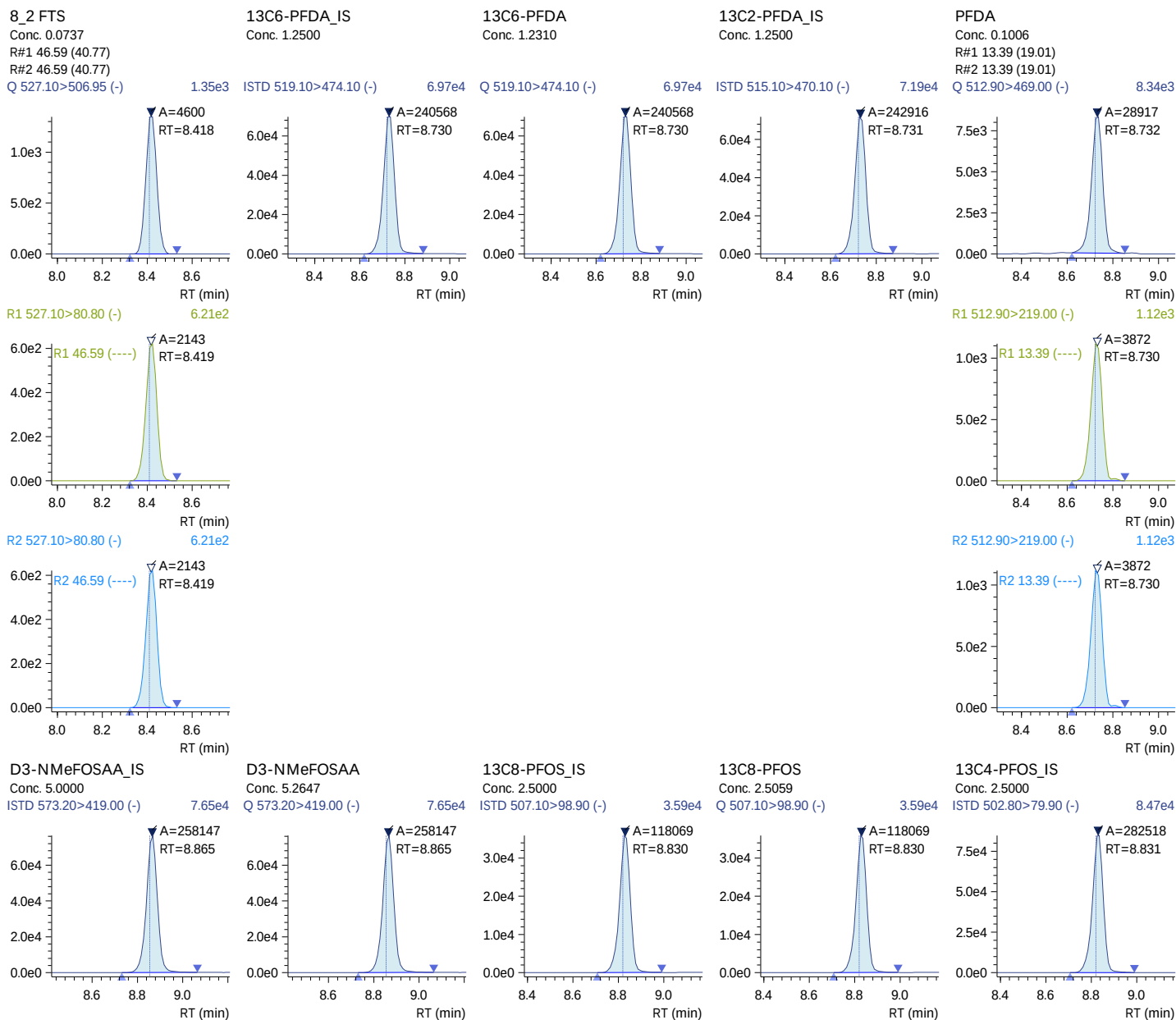


240118_007 (continued)



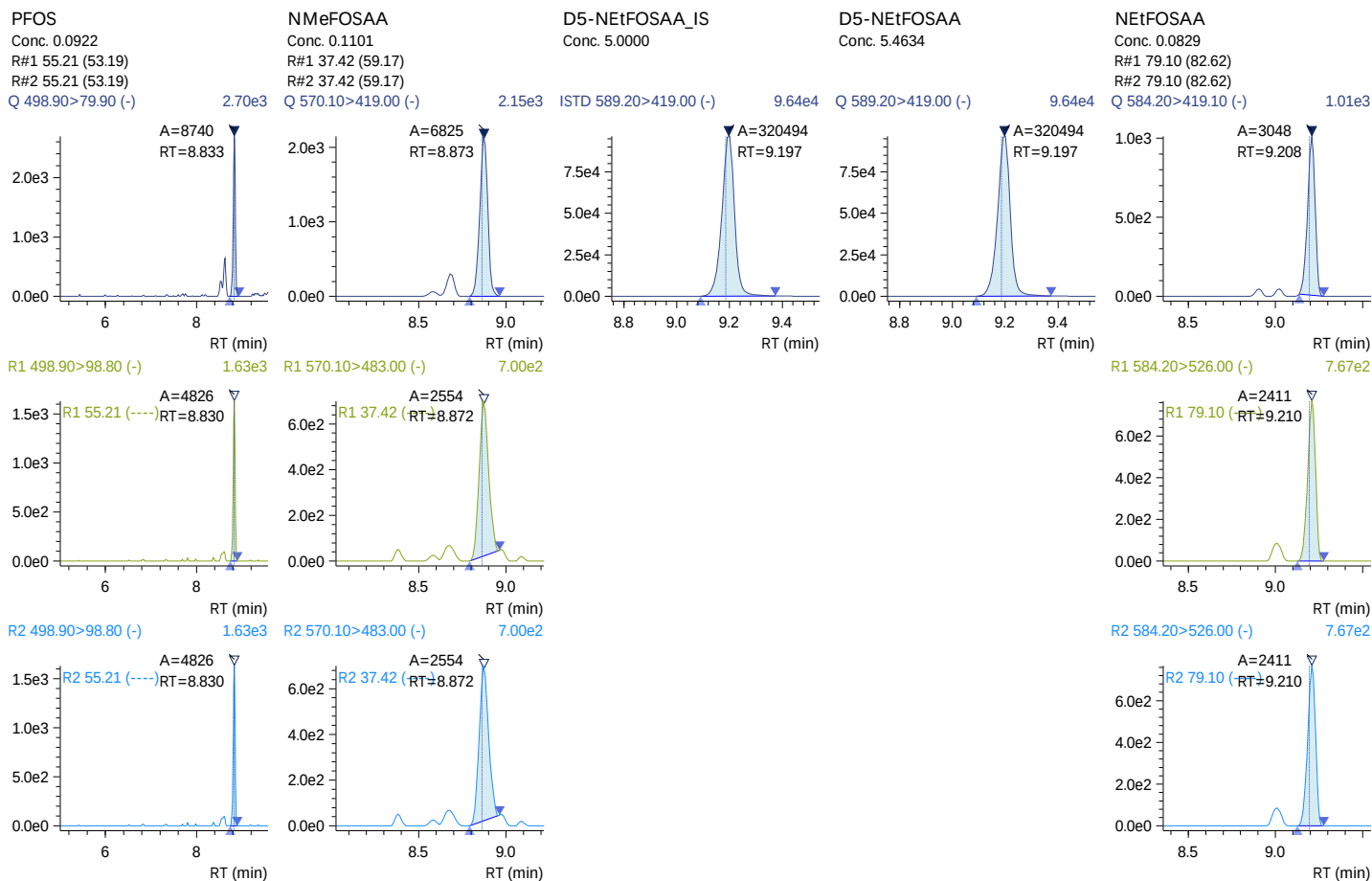


240118_007 (continued)





240118_007 (continued)

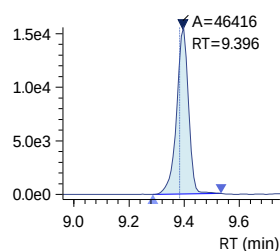




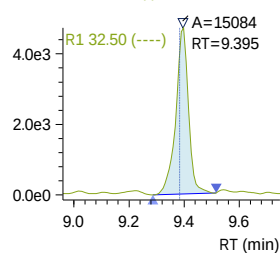
240118_007 (continued)

9-Cl-PF3ONS

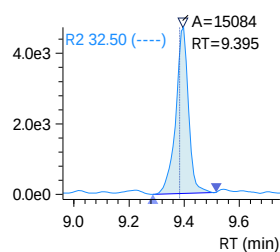
Conc. 0.0931
R#1 32.50 (31.76)
R#2 32.50 (31.76)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-) 4.74e3

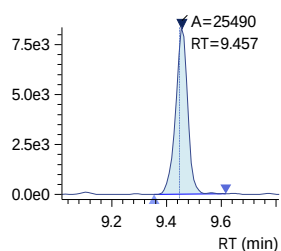


R2 532.80>353.00 (-) 4.74e3

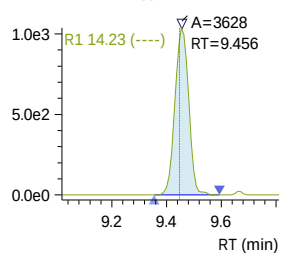


PFUnDA

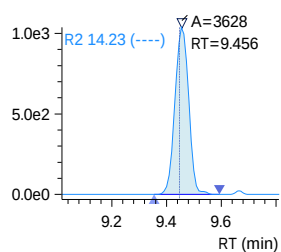
Conc. 0.0917
R#1 14.23 (12.31)
R#2 14.23 (12.31)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-) 1.04e3

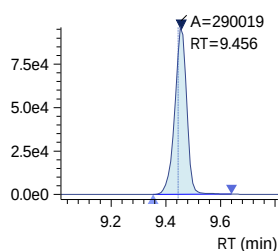


R2 563.10>269.10 (-) 1.04e3



13C7-PFUnDA_IS

Conc. 1.2500
ISTD 570.00>525.10 (-)



Q 570.00>525.10 (-) 9.62e4

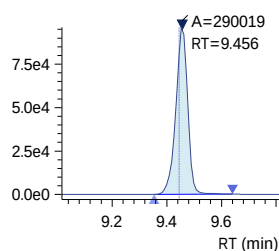


Q 570.00>525.10 (-) 9.62e4



13C7-PFUnDA

Conc. 1.2441
Q 570.00>525.10 (-)



Q 570.00>525.10 (-) 9.62e4

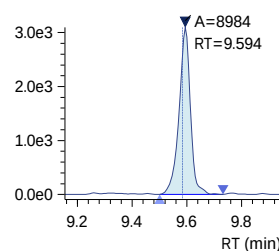


Q 570.00>525.10 (-) 9.62e4

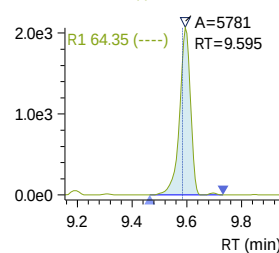


PFNS

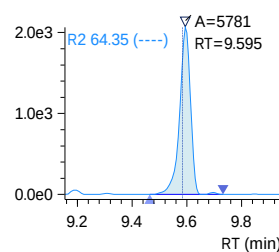
Conc. 0.1001
R#1 64.35 (63.31)
R#2 64.35 (63.31)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-) 2.07e3



R2 548.80>98.80 (-) 2.07e3





240118_007 (continued)

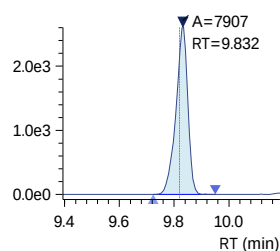
10_2_FTS

Conc. 0.0997

R#1 34.37 (33.02)

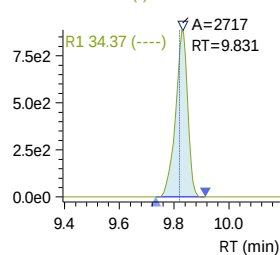
R#2 34.37 (33.02)

Q 626.80>607.05 (-)



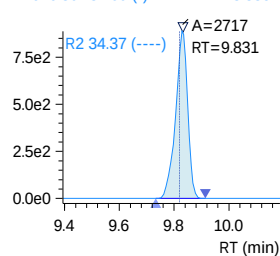
R1 626.80>81.00 (-)

8.88e2



R2 626.80>81.00 (-)

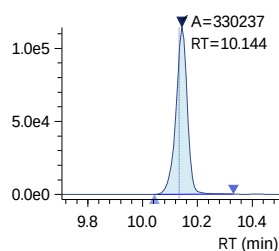
8.88e2



13C2-PFDOA_IS

Conc. 1.2500

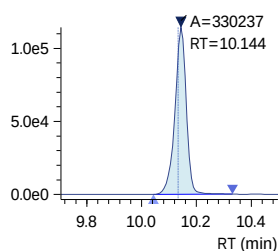
ISTD 615.10>570.00 (-)



13C2-PFDOA

Conc. 1.2331

Q 615.10>570.00 (-)



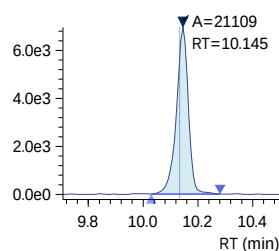
PFDOA

Conc. 0.0808

R#1 11.12 (10.14)

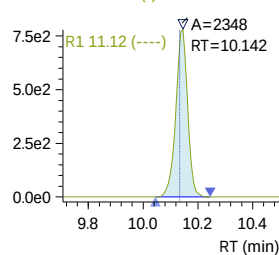
R#2 11.12 (10.14)

Q 613.10>569.00 (-)



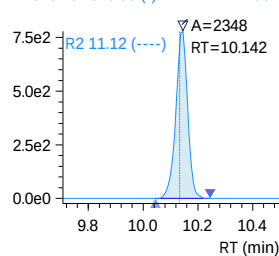
R1 613.10>319.00 (-)

7.79e2



R2 613.10>319.00 (-)

7.79e2



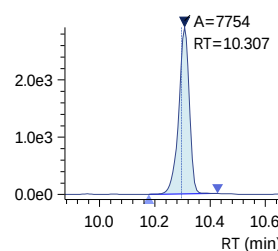
PFDS

Conc. 0.0968

R#1 54.03 (62.02)

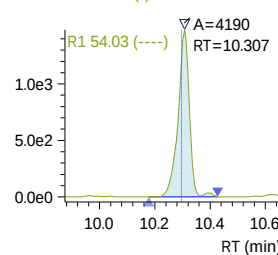
R#2 54.03 (62.02)

Q 599.00>79.90 (-)



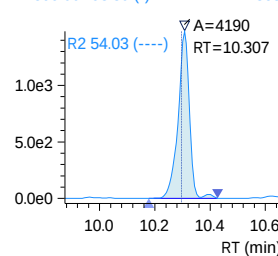
R1 599.00>98.80 (-)

1.48e3



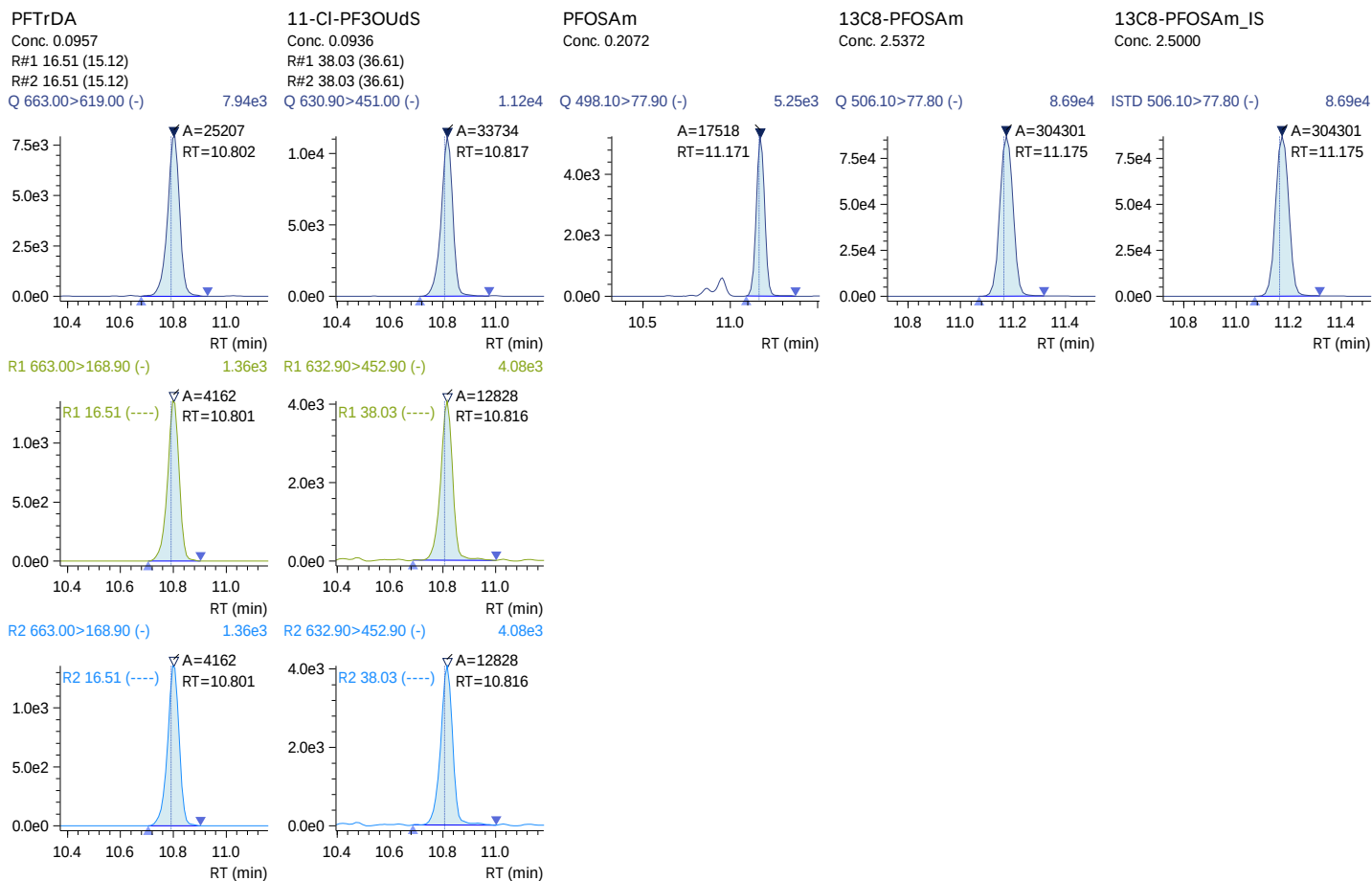
R2 599.00>98.80 (-)

1.48e3



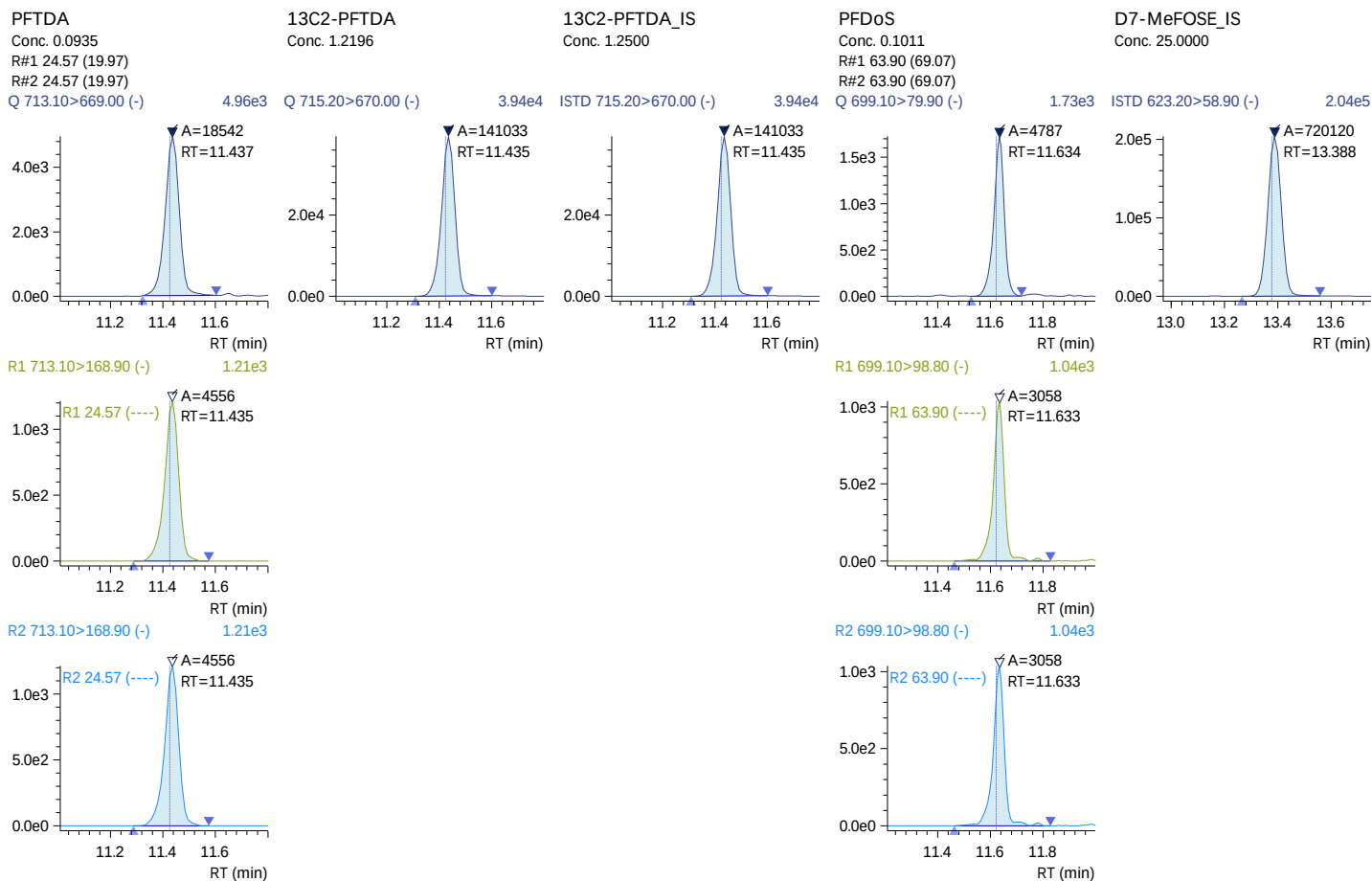


240118_007 (continued)





240118_007 (continued)





240118_007 (continued)

D7-MeFOSE
 Conc. 24.3536

MeFOSE
 Conc. 0.1135

13C2-PFHxDA_IS
 Conc. 2.5000

13C2-PFHxDA
 Conc. 2.4240

PFHxDA
 Conc. 0.0900
 R#1 12.84 (11.64)
 R#2 12.84 (11.64)

Q 623.20>58.90 (-)

2.04e5

Q 616.10>59.00 (-)

6.14e2

ISTD 815.00>770.05 (-)

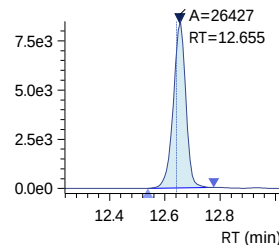
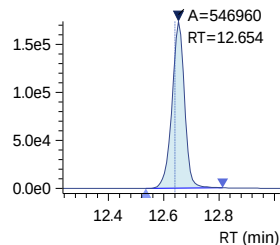
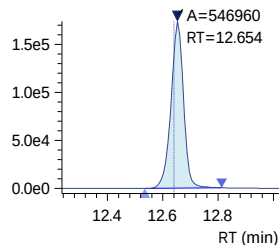
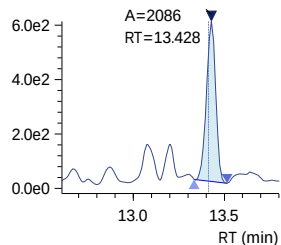
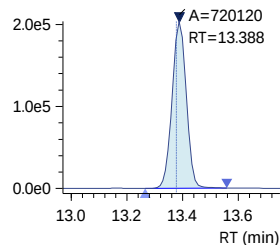
1.74e5

Q 815.00>770.05 (-)

1.74e5

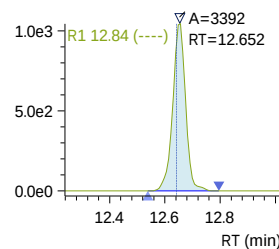
Q 813.00>768.95 (-)

8.49e3



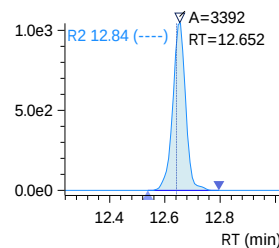
R1 813.00>218.95 (-)

1.04e3



R2 813.00>218.95 (-)

1.04e3





240118_007 (continued)

D3-MeFOSA
Conc. 2.5858

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. 0.0940
R#1 130.57 (149.05)
R#2 130.57 (149.05)

D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 24.9399

Q 515.00>219.00 (-)

1.83e4

ISTD 515.00>219.00 (-)

1.83e4

Q 511.90>219.00 (-)

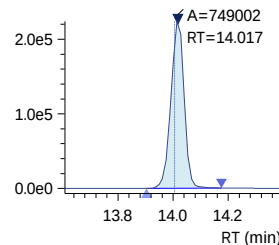
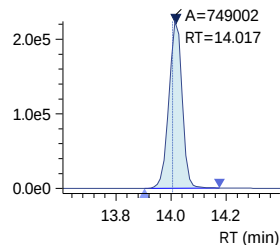
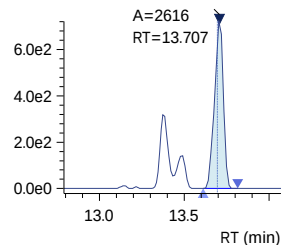
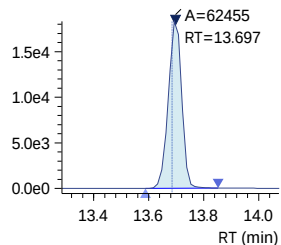
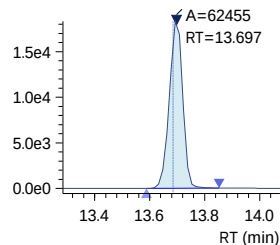
7.22e2

ISTD 639.20>58.90 (-)

2.24e5

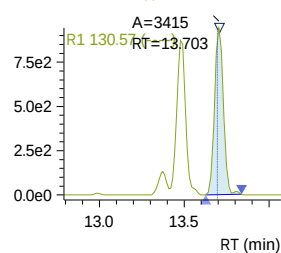
Q 639.20>58.90 (-)

2.24e5



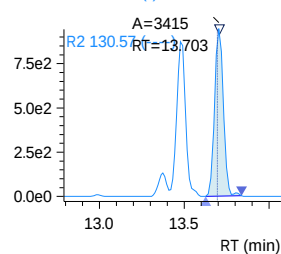
R1 511.90>169.00 (-)

9.44e2



R2 511.90>169.00 (-)

9.44e2





240118_007 (continued)

EtFOSE
Conc. 0.0996

D5-EtFOSAm
Conc. 2.5020

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. 0.0955
R#1 149.47 (154.69)
R#2 149.47 (154.69)

PFODA
Conc. 0.1058
R#1 26.30 (29.32)
R#2 26.30 (29.32)

Q 630.00>59.00 (-)

7.72e2

Q 531.10>219.00 (-)

2.48e4

ISTD 531.10>219.00 (-)

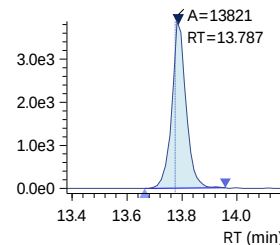
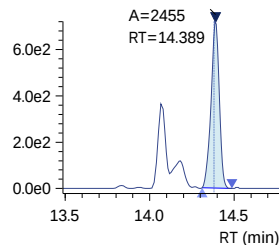
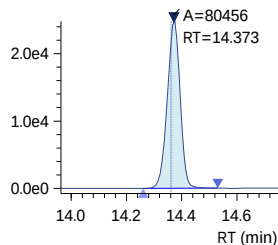
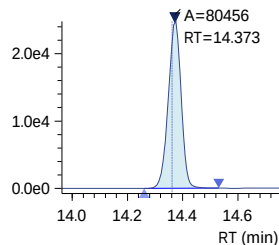
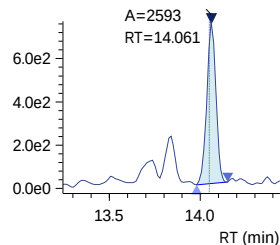
2.48e4

Q 526.00>219.00 (-)

7.22e2

Q 913.00>868.65 (-)

3.87e3

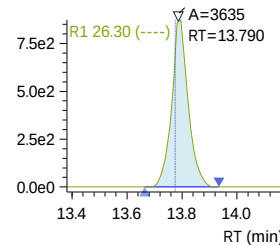
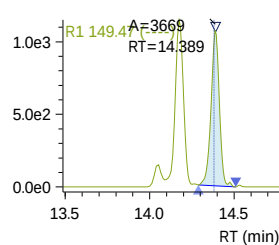


R1 526.00>169.00 (-)

1.15e3

R1 913.00>169.00 (-)

8.74e2

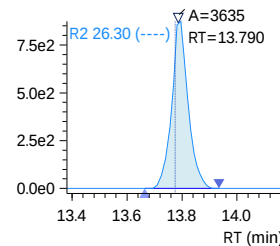
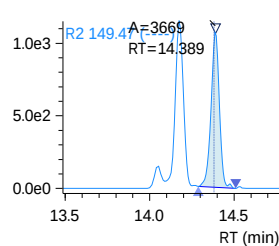


R2 526.00>169.00 (-)

1.15e3

R2 913.00>169.00 (-)

8.74e2





240118_008

Sample ID: 1633 ICAL 0.25PPB
Date Acquired: 1/18/2024 2:51:05 PM
Acquired by: System Administrator
Data File: 240118_008
Vial: 3 | Inj. Volume: 10.0000uL | Tray: 1

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	1289139	----	----	----	----	----	----	
13C4-PFBA_IS	216.80>171.90	----	1289139	----	----	----	----	----	----	
13C3-PFBA_IS	216.00>172.00	----	579289	----	----	----	----	----	----	
PFBA	212.80>169.05	----	28706	----	----	----	----	----	----	
PFMPA	229.00>84.90	----	23024	----	----	----	----	----	----	
3_3 FTCA	241.00>177.10	241.00>117.00	30420	42185	138.68	141.17	42185	138.68	141.17	
13C5-PFPeA	268.30>223.00	----	141383	----	----	----	----	----	----	
13C5-PFPeA_IS	268.30>223.00	----	141383	----	----	----	----	----	----	
PFPeA	263.00>219.00	----	43873	----	----	----	----	----	----	
PFMBA	279.00>84.95	----	31409	----	----	----	----	----	----	
13C2-4_2 FTS	329.10>80.90	----	178483	----	----	----	----	----	----	
13C2-4_2 FTS_IS	329.10>80.90	----	178483	----	----	----	----	----	----	
4_2 FTS	327.10>307.00	327.10>80.90	19625	5602	28.55	29.06	5602	28.55	29.06	
13C3-PFBS_IS	302.10>79.90	----	324049	----	----	----	----	----	----	
PFBS	298.70>79.90	298.70>98.80	39554	17890	45.23	46.72	17890	45.23	46.72	
13C3-PFBS	302.10>79.90	----	324049	----	----	----	----	----	----	
NFDHA	295.00>201.00	295.00>84.90	36786	13906	37.80	40.25	13906	37.80	40.25	
13C5-PFHxA	318.00>273.00	----	651214	----	----	----	----	----	----	
13C5-PFHxA_IS	318.00>273.00	----	651214	----	----	----	----	----	----	
13C2-PFHxA_IS	315.10>270.00	----	645671	----	----	----	----	----	----	
PFHxA	313.00>269.00	----	54817	----	----	----	----	----	----	
PFEESA	314.80>135.00	314.80>82.90	162206	9361	5.77	6.11	9361	5.77	6.11	
13C3-HFPO-DA	286.90>168.90	----	588188	----	----	----	----	----	----	
13C3-HFPO-DA_IS	286.90>168.90	----	588188	----	----	----	----	----	----	
HFPO-DA	284.90>168.90	284.90>184.90	16861	11270	66.84	65.61	11270	66.84	65.61	
5_3 FTCA	341.00>237.05	341.00>217.00	168370	267161	158.68	158.86	267161	158.68	158.86	
PFPeS	349.10>79.90	349.10>98.80	32440	17967	55.39	55.80	17967	55.39	55.80	
13C4-PFHpA	367.10>322.00	----	603695	----	----	----	----	----	----	
13C4-PFHpA_IS	367.10>322.00	----	603695	----	----	----	----	----	----	
PFHpA	363.10>319.00	363.10>169.00	70720	16338	23.10	21.50	16338	23.10	21.50	
DONA	376.90>250.90	376.90>84.80	113323	34353	30.31	29.66	34353	30.31	29.66	
13C2-6_2 FTS_IS	429.10>80.90	----	169139	----	----	----	----	----	----	
13C2-6_2 FTS	429.10>80.90	----	169139	----	----	----	----	----	----	
6_2 FTS	427.10>407.00	427.10>80.90	19395	7772	40.07	41.15	7772	40.07	41.15	
13C4-PFOA_IS	417.10>172.00	----	42281	----	----	----	----	----	----	
13C8-PFOA_IS	421.10>376.00	----	592639	----	----	----	----	----	----	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240118_008 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	592639	----	----	----	----	----	----	----
PFOA	413.00>369.00	413.00>169.00	48118	15681	32.59	31.89	15681	32.59	31.89	
13C3-PFHxS	402.10>79.90	----	251448	----	----	----	----	----	----	----
13C3-PFHxS_IS	402.10>79.90	----	251448	----	----	----	----	----	----	----
PFHxS	398.70>79.90	398.70>98.90	29288	14959	51.08	56.62	14959	51.08	56.62	
18O2-PFHxS_IS	403.00>83.90	----	239451	----	----	----	----	----	----	----
13C9-PFNA_IS	472.10>427.00	----	306696	----	----	----	----	----	----	----
13C9-PFNA	472.10>427.00	----	306696	----	----	----	----	----	----	----
13C5-PFNA_IS	468.00>423.00	----	316331	----	----	----	----	----	----	----
PFNA	463.00>419.00	463.00>219.00	50390	10468	20.77	23.17	10468	20.77	23.17	
PFHpS	449.00>79.90	449.00>98.80	21835	12752	58.40	56.96	12752	58.40	56.96	
7_3 FTCA	441.00>317.00	441.00>336.90	213059	242358	113.75	117.47	242358	113.75	117.47	
13C2-8_2-FTS	529.10>80.90	----	131843	----	----	----	----	----	----	----
13C2-8_2-FTS_IS	529.10>80.90	----	131843	----	----	----	----	----	----	----
8_2 FTS	527.10>506.95	527.10>80.80	13634	6755	49.54	49.59	6755	49.54	49.59	
13C6-PFDA_IS	519.10>474.10	----	224311	----	----	----	----	----	----	----
13C6-PFDA	519.10>474.10	----	224311	----	----	----	----	----	----	----
13C2-PFDA_IS	515.10>470.10	----	235058	----	----	----	----	----	----	----
PFDA	512.90>469.00	512.90>219.00	57165	11842	20.72	19.00	11842	20.72	19.00	
D3-NMeFOSAA_IS	573.20>419.00	----	246883	----	----	----	----	----	----	----
D3-NMeFOSAA	573.20>419.00	----	246883	----	----	----	----	----	----	----
13C8-PFOS_IS	507.10>98.90	----	114171	----	----	----	----	----	----	----
13C8-PFOS	507.10>98.90	----	114171	----	----	----	----	----	----	----
13C4-PFOS_IS	502.80>79.90	----	277483	----	----	----	----	----	----	----
PFOS	498.90>79.90	498.90>98.80	30901	14209	45.98	52.47	14209	45.98	52.47	
NMeFOSAA	570.10>419.00	570.10>483.00	15374	9298	60.48	55.15	9298	60.48	55.15	
D5-NetFOSAA_IS	589.20>419.00	----	304822	----	----	----	----	----	----	----
D5-NetFOSAA	589.20>419.00	----	304822	----	----	----	----	----	----	----
NetFOSAA	584.20>419.10	584.20>526.00	10212	7149	70.01	81.95	7149	70.01	81.95	
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	116926	37370	31.96	32.76	37370	31.96	32.76	
PFUnDA	563.10>519.00	563.10>269.10	56306	8900	15.81	13.12	8900	15.81	13.12	
13C7-PFUnDA_IS	570.00>525.10	----	279544	----	----	----	----	----	----	----
13C7-PFUnDA	570.00>525.10	----	279544	----	----	----	----	----	----	----
PFNS	548.80>79.90	548.80>98.80	20655	12792	61.93	65.22	12792	61.93	65.22	
10_2 FTS	626.80>607.05	626.80>81.00	16489	6079	36.87	37.13	6079	36.87	37.13	
13C2-PFDOA_IS	615.10>570.00	----	313428	----	----	----	----	----	----	----
13C2-PFDOA	615.10>570.00	----	313428	----	----	----	----	----	----	----
PFDOA	613.10>569.00	613.10>319.00	49481	5212	10.53	11.29	5212	10.53	11.29	
PFDS	599.00>79.90	599.00>98.80	18165	11442	62.99	60.18	11442	62.99	60.18	
PFTrDA	663.00>619.00	663.00>168.90	54014	9652	17.87	17.64	9652	17.87	17.64	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240118_008 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	83986	29813	35.50	36.44	29813	35.50	36.44	
PFOSAm	498.10>77.90	----	48743	----	----	----	----	----	----	
13C8-PFOSAm	506.10>77.80	----	288124	----	----	----	----	----	----	
13C8-PFOSAm_IS	506.10>77.80	----	288124	----	----	----	----	----	----	
PFTDA	713.10>669.00	713.10>168.90	40907	8797	21.51	22.96	8797	21.51	22.96	
13C2-PFTDA	715.20>670.00	----	133833	----	----	----	----	----	----	
13C2-PFTDA_IS	715.20>670.00	----	133833	----	----	----	----	----	----	
PFDoS	699.10>79.90	699.10>98.80	11601	7331	63.19	67.40	7331	63.19	67.40	
D7-MeFOSE_IS	623.20>58.90	----	713433	----	----	----	----	----	----	
D7-MeFOSE	623.20>58.90	----	713433	----	----	----	----	----	----	
MeFOSE	616.10>59.00	----	6979	----	----	----	----	----	----	
13C2-PFHxDA_IS	815.00>770.05	----	527703	----	----	----	----	----	----	
13C2-PFHxDA	815.00>770.05	----	527703	----	----	----	----	----	----	
PFHxDA	813.00>768.95	813.00>218.95	60426	8420	13.93	13.90	8420	13.93	13.90	
D3-MeFOSA	515.00>219.00	----	58544	----	----	----	----	----	----	
D3-MeFOSA_IS	515.00>219.00	----	58544	----	----	----	----	----	----	
MeFOSA	511.90>219.00	511.90>169.00	10796	15742	145.81	140.79	15742	145.81	140.79	
D9-EtFOSE_IS	639.20>58.90	----	727751	----	----	----	----	----	----	
D9-EtFOSE	639.20>58.90	----	727751	----	----	----	----	----	----	
EtFOSE	630.00>59.00	----	10471	----	----	----	----	----	----	
D5-EtFOSAm	531.10>219.00	----	79387	----	----	----	----	----	----	
D5-EtFOSAm_IS	531.10>219.00	----	79387	----	----	----	----	----	----	
EtFOSAm	526.00>219.00	526.00>169.00	10878	17714	162.85	163.90	17714	162.85	163.90	
PFODA	913.00>868.65	913.00>169.00	28924	6967	24.09	27.03	6967	24.09	27.03	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
 IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240118_008

Sample ID: 1633 ICAL 0.25PPB
Date Acquired: 1/18/2024 2:51:05 PM
Acquired by: System Administrator
Data File: 240118_008
Vial: 3 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Std. Conc.	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.414	0.000	0.000	1289139	579289	13C3-PFBA_IS	10.0000	9.9562	ng/mL	
13C4-PFBA_IS	Auto	1.414	0.000	----	1289139	1289139	----	10.0000	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.414	-0.001	----	579289	579289	----	5.0000	5.0000	ng/mL	
PFBA	Auto	1.419	0.003	0.005	28706	1289139	13C4-PFBA_IS	0.2500	0.2592	ng/mL	
PFMPA	Auto	2.429	-0.003	-1.062	23024	141383	13C5-PFPeA_IS	0.2500	0.2520	ng/mL	
3_3 FTCA	Auto	3.003	-0.001	-0.488	30420	141383	13C5-PFPeA_IS	10.0000	9.7028	ng/mL	
13C5-PFPeA	Auto	3.491	-0.001	-1.486	141383	645671	13C2-PFHxA_IS	5.0000	4.8511	ng/mL	
13C5-PFPeA_IS	Auto	3.491	-0.001	----	141383	141383	----	5.0000	5.0000	ng/mL	
PFPeA	Auto	3.494	-0.001	0.003	43873	141383	13C5-PFPeA_IS	0.2500	0.2396	ng/mL	
PFMBA	Auto	4.024	-0.001	0.533	31409	141383	13C5-PFPeA_IS	0.2500	0.2426	ng/mL	
13C2-4_2 FTS	Auto	4.660	-0.001	-2.427	178483	239451	18O2-PFHxS_IS	5.0000	5.4165	ng/mL	
13C2-4_2 FTS_IS	Auto	4.660	-0.001	----	178483	178483	----	5.0000	5.0000	ng/mL	
4_2 FTS	Auto	4.659	-0.003	-0.001	19625	178483	13C2-4_2 FTS_IS	0.2340	0.2236	ng/mL	
13C3-PFBS_IS	Auto	4.645	-0.002	----	324049	324049	----	2.5000	2.5000	ng/mL	
PFBS	Auto	4.648	0.000	0.003	39554	324049	13C3-PFBS_IS	0.2210	0.2385	ng/mL	
13C3-PFBS	Auto	4.645	-0.002	-2.442	324049	239451	18O2-PFHxS_IS	2.5000	2.3847	ng/mL	
NFDHA	Auto	4.836	0.001	-0.141	36786	651214	13C5-PFHxA_IS	0.2500	0.2546	ng/mL	
13C5-PFHxA	Auto	4.977	-0.001	0.000	651214	645671	13C2-PFHxA_IS	2.5000	2.3931	ng/mL	
13C5-PFHxA_IS	Auto	4.977	-0.001	----	651214	651214	----	2.5000	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	4.977	-0.002	----	645671	645671	----	2.5000	2.5000	ng/mL	
PFHxA	M	4.979	-0.001	0.002	54817	651214	13C5-PFHxA_IS	0.2500	0.2445	ng/mL	
PFEESA	Auto	5.321	-0.001	0.344	162206	651214	13C5-PFHxA_IS	0.2230	0.2224	ng/mL	
13C3-HFPO-DA	Auto	5.451	-0.001	0.474	588188	645671	13C2-PFHxA_IS	10.0000	9.3059	ng/mL	
13C3-HFPO-DA_IS	Auto	5.451	-0.001	----	588188	588188	----	10.0000	10.0000	ng/mL	
HFPO-DA	Auto	5.453	0.000	0.002	16861	588188	13C3-HFPO-DA_IS	0.2500	0.2595	ng/mL	
5_3 FTCA	Auto	5.906	0.000	0.929	168370	651214	13C5-PFHxA_IS	10.0000	9.9956	ng/mL	
PFPeS	Auto	6.018	0.000	-1.068	32440	251448	13C3-PFHxS_IS	0.2350	0.2457	ng/mL	
13C4-PFHpA	Auto	6.154	0.000	1.177	603695	645671	13C2-PFHxA_IS	2.5000	2.4507	ng/mL	
13C4-PFHpA_IS	Auto	6.154	0.000	----	603695	603695	----	2.5000	2.5000	ng/mL	
PFHpA	Auto	6.154	-0.001	0.000	70720	603695	13C4-PFHpA_IS	0.2500	0.2477	ng/mL	
DONA	Auto	6.520	0.000	1.069	113323	588188	13C3-HFPO-DA_IS	0.2360	0.2486	ng/mL	
13C2-6_2 FTS_IS	Auto	6.793	0.000	----	169139	169139	----	5.0000	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.793	0.000	-0.294	169139	239451	18O2-PFHxS_IS	5.0000	5.4271	ng/mL	
6_2 FTS	Auto	6.793	0.001	0.000	19395	169139	13C2-6_2 FTS_IS	0.2380	0.2518	ng/mL	
13C4-PFOA_IS	Auto	7.109	0.002	----	42281	42281	----	2.5000	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.108	0.001	----	592639	592639	----	2.5000	2.5000	ng/mL	
13C8-PFOA	Auto	7.108	0.001	-0.001	592639	42281	13C4-PFOA_IS	2.5000	2.5078	ng/mL	
PFOA	Auto	7.111	0.001	0.003	48118	592639	13C8-PFOA_IS	0.2500	0.2709	ng/mL	
13C3-PFHxS	Auto	7.086	0.000	-0.001	251448	239451	18O2-PFHxS_IS	2.5000	2.4465	ng/mL	
13C3-PFHxS_IS	Auto	7.086	0.000	----	251448	251448	----	2.5000	2.5000	ng/mL	
PFHxS	M	7.085	0.001	-0.001	29288	251448	13C3-PFHxS_IS	0.2290	0.2235	ng/mL	
18O2-PFHxS_IS	Auto	7.087	0.001	----	239451	239451	----	2.5000	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.956	0.000	----	306696	306696	----	1.2500	1.2500	ng/mL	
13C9-PFNA	Auto	7.956	0.000	-0.001	306696	316331	13C5-PFNA_IS	1.2500	1.2383	ng/mL	
13C5-PFNA_IS	Auto	7.957	0.001	----	316331	316331	----	1.2500	1.2500	ng/mL	
PFNA	Auto	7.958	0.001	0.002	50390	306696	13C9-PFNA_IS	0.2500	0.2578	ng/mL	
PFHpS	Auto	8.006	0.002	-0.814	21835	114171	13C8-PFOS_IS	0.2390	0.2450	ng/mL	
7_3 FTCA	Auto	7.955	0.001	2.978	213059	651214	13C5-PFHxA_IS	10.0000	9.4748	ng/mL	
13C2-8_2-FTS	Auto	8.410	0.001	1.323	131843	239451	18O2-PFHxS_IS	5.0000	5.1499	ng/mL	
13C2-8_2-FTS_IS	Auto	8.410	0.001	----	131843	131843	----	5.0000	5.0000	ng/mL	
8_2 FTS	Auto	8.409	-0.001	-0.001	13634	131843	13C2-8_2-FTS_IS	0.2400	0.2406	ng/mL	
13C6-PFDA_IS	Auto	8.721	0.001	----	224311	224311	----	1.2500	1.2500	ng/mL	
13C6-PFDA	Auto	8.721	0.001	-0.001	224311	235058	13C2-PFDA_IS	1.2500	1.1861	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_008 (continued)

(Table continued from previous page)

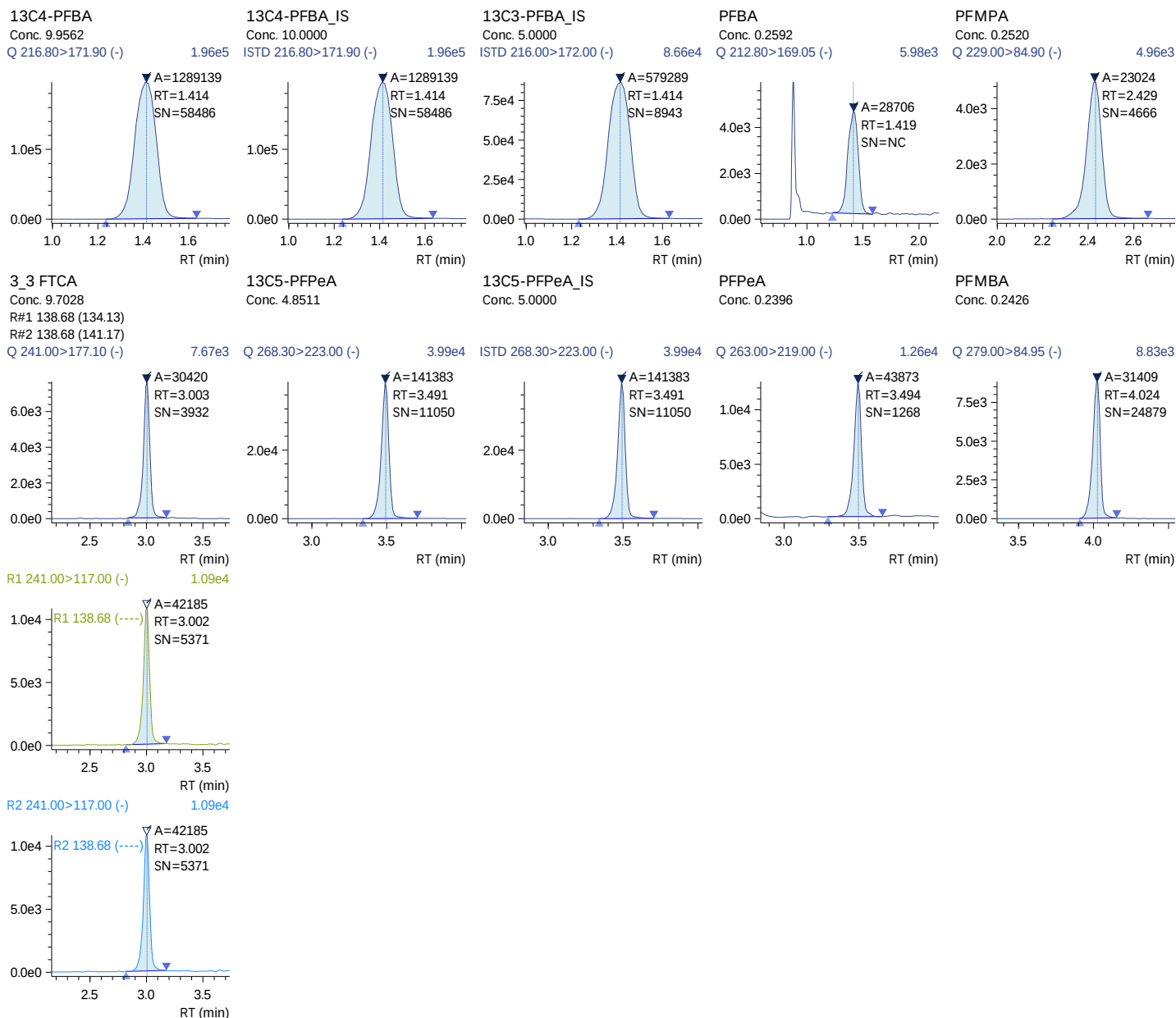
Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Std. Conc.	Conc.	Unit	Flag ID
13C2-PFDA_IS	Auto	8.722	0.001	----	235058	235058	----	1.2500	1.2500	ng/mL	
PFDA	Auto	8.723	0.002	0.002	57165	224311	13C6-PFDA_IS	0.2500	0.2419	ng/mL	
D3-NMeFOSAA_IS	Auto	8.855	0.000	----	246883	246883	----	5.0000	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.855	0.000	0.035	246883	277483	13C4-PFOS_IS	5.0000	5.1264	ng/mL	
13C8-PFOS_IS	Auto	8.820	0.000	----	114171	114171	----	2.5000	2.5000	ng/mL	
13C8-PFOS	Auto	8.820	0.000	0.000	114171	277483	13C4-PFOS_IS	2.5000	2.4671	ng/mL	
13C4-PFOS_IS	Auto	8.820	0.000	----	277483	277483	----	2.5000	2.5000	ng/mL	
PFOS	M	8.821	-0.001	0.001	30901	114171	13C8-PFOS_IS	0.2330	0.2602	ng/mL	
NMeFOSAA	M	8.861	0.000	0.006	15374	246883	D3-NMeFOSAA_IS	0.2500	0.2295	ng/mL	
D5-NetFOSAA_IS	Auto	9.187	0.001	----	304822	304822	----	5.0000	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.187	0.001	0.367	304822	277483	13C4-PFOS_IS	5.0000	5.2905	ng/mL	
NetFOSAA	M	9.196	0.001	0.009	10212	304822	D5-NetFOSAA_IS	0.2500	0.2508	ng/mL	
9-CI-PF3ONS	Auto	9.385	0.001	3.934	116926	588188	13C3-HFPO-DA_IS	0.2340	0.2411	ng/mL	
PFUnDA	Auto	9.447	0.000	0.001	56306	279544	13C7-PFUnDA_IS	0.2500	0.2485	ng/mL	
13C7-PFUnDA_IS	Auto	9.446	0.001	----	279544	279544	----	1.2500	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.446	0.001	0.724	279544	235058	13C2-PFDA_IS	1.2500	1.2392	ng/mL	
PFNS	Auto	9.585	0.001	0.765	20655	114171	13C8-PFOS_IS	0.2400	0.2381	ng/mL	
10_2_FTS	Auto	9.818	-0.001	1.408	16489	131843	13C2-8_2-FTS_IS	0.2410	0.2392	ng/mL	
13C2-PFDOA_IS	Auto	10.133	0.000	----	313428	313428	----	1.2500	1.2500	ng/mL	
13C2-PFDOA	Auto	10.133	0.000	1.411	313428	235058	13C2-PFDA_IS	1.2500	1.2094	ng/mL	
PFDOA	Auto	10.134	0.000	0.001	49481	313428	13C2-PFDOA_IS	0.2000	0.2478	ng/mL	
PFDS	Auto	10.297	0.000	1.476	18165	114171	13C8-PFOS_IS	0.2410	0.2347	ng/mL	
PFTDA	Auto	10.792	0.000	-0.632	54014	133833	13C2-PFTDA_IS	0.2500	0.2551	ng/mL	
11-CI-PF3OUdS	Auto	10.807	0.001	5.356	83986	588188	13C3-HFPO-DA_IS	0.2360	0.2404	ng/mL	
PFOSAm	M	11.163	-0.001	-0.001	48743	288124	13C8-PFOSAm_IS	0.5000	0.5133	ng/mL	
13C8-PFOSAm	Auto	11.164	-0.001	2.344	288124	277483	13C4-PFOS_IS	2.5000	2.4459	ng/mL	
13C8-PFOSAm_IS	Auto	11.164	-0.001	----	288124	288124	----	2.5000	2.5000	ng/mL	
PFTDA	Auto	11.427	0.002	0.003	40907	133833	13C2-PFTDA_IS	0.2500	0.2567	ng/mL	
13C2-PFTDA	Auto	11.424	0.000	2.702	133833	235058	13C2-PFDA_IS	1.2500	1.1961	ng/mL	
13C2-PFTDA_IS	Auto	11.424	0.000	----	133833	133833	----	1.2500	1.2500	ng/mL	
PFDoS	Auto	11.623	0.001	2.803	11601	114171	13C8-PFOS_IS	0.2430	0.2534	ng/mL	
D7-MeFOSE_IS	Auto	13.379	0.002	----	713433	713433	----	25.0000	25.0000	ng/mL	
D7-MeFOSE	Auto	13.379	0.002	4.559	713433	277483	13C4-PFOS_IS	25.0000	24.5653	ng/mL	
MeFOSE	M	13.415	0.002	0.036	6979	713433	D7-MeFOSE_IS	0.2500	0.2664	ng/mL	
13C2-PFHXA_IS	Auto	12.642	0.001	----	527703	527703	----	2.5000	2.5000	ng/mL	
13C2-PFHXA	Auto	12.642	0.001	3.920	527703	235058	13C2-PFDA_IS	2.5000	2.4169	ng/mL	
PFHXDA	Auto	12.643	0.001	0.001	60426	527703	13C2-PFHXA_IS	0.2500	0.2514	ng/mL	
D3-MeFOSA	Auto	13.686	0.001	4.866	58544	277483	13C4-PFOS_IS	2.5000	2.4679	ng/mL	
D3-MeFOSA_IS	Auto	13.686	0.001	----	58544	58544	----	2.5000	2.5000	ng/mL	
MeFOSA	M	13.695	0.001	0.009	10796	58544	D3-MeFOSA_IS	0.2500	0.2558	ng/mL	
D9-EtFOSE_IS	Auto	14.008	0.002	----	727751	727751	----	25.0000	25.0000	ng/mL	
D9-EtFOSE	Auto	14.008	0.002	5.188	727751	277483	13C4-PFOS_IS	25.0000	24.6721	ng/mL	
EtFOSE	M	14.052	0.004	0.044	10471	727751	D9-EtFOSE_IS	0.2500	0.2735	ng/mL	
D5-EtFOSAm	Auto	14.364	0.002	5.544	79387	277483	13C4-PFOS_IS	2.5000	2.5135	ng/mL	
D5-EtFOSAm_IS	Auto	14.364	0.002	----	79387	79387	----	2.5000	2.5000	ng/mL	
EtFOSAm	M	14.380	0.000	0.016	10878	79387	D5-EtFOSAm_IS	0.2500	0.2354	ng/mL	
PFODA	Auto	13.779	0.004	1.137	28924	527703	13C2-PFHXA_IS	0.2500	0.2424	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_008 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_008 (continued)

13C2-4_2 FTS
Conc. 5.4165

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. 0.2236
R#1 28.55 (34.14)
R#2 28.55 (29.06)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 0.2385
R#1 45.23 (47.53)
R#2 45.23 (46.72)

Q 329.10>80.90 (-)

5.55e4

ISTD 329.10>80.90 (-)

5.55e4

Q 327.10>307.00 (-)

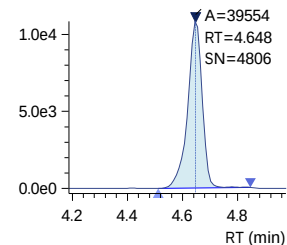
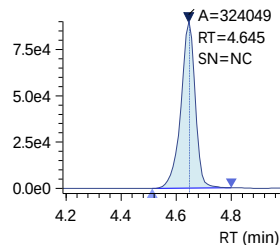
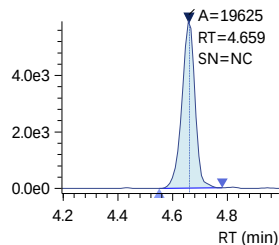
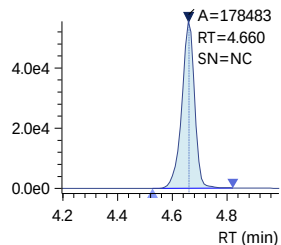
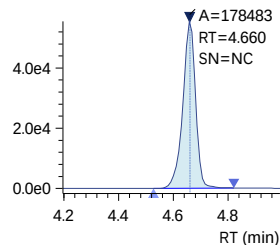
5.92e3

ISTD 302.10>79.90 (-)

9.01e4

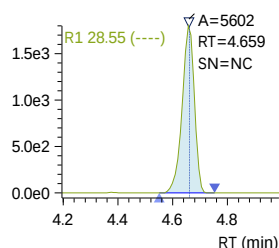
Q 298.70>79.90 (-)

1.08e4



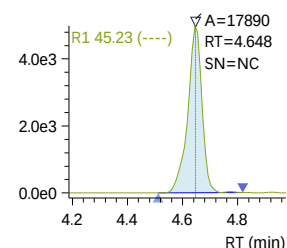
R1 327.10>80.90 (-)

1.80e3



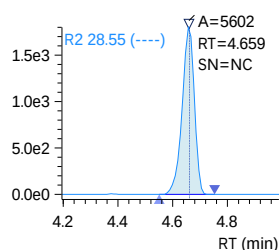
R1 298.70>98.80 (-)

4.99e3



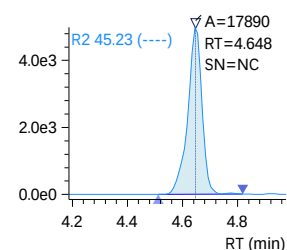
R2 327.10>80.90 (-)

1.80e3



R2 298.70>98.80 (-)

4.99e3





240118_008 (continued)

13C3-PFBS
Conc. 2.3847

NFDHA
Conc. 0.2546
R#1 37.80 (37.88)
R#2 37.80 (40.25)

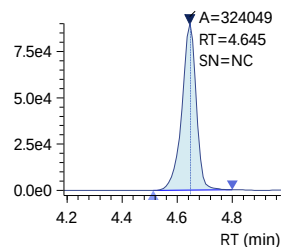
13C5-PFHxA
Conc. 2.3931

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

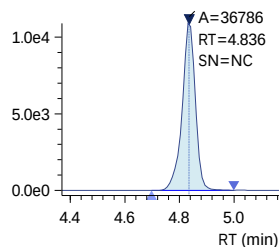
Q 302.10>79.90 (-)

9.01e4



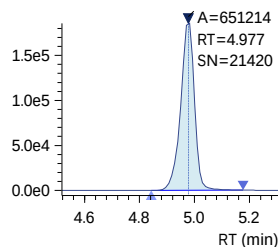
Q 295.00>201.00 (-)

1.09e4



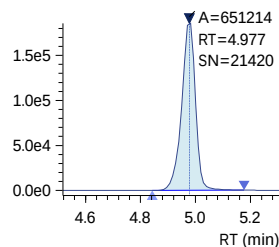
Q 318.00>273.00 (-)

1.86e5



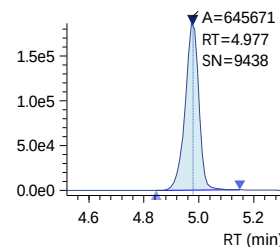
ISTD 318.00>273.00 (-)

1.86e5



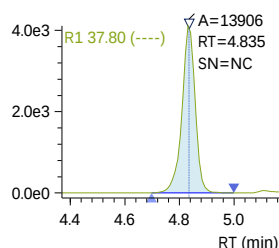
ISTD 315.10>270.00 (-)

1.86e5



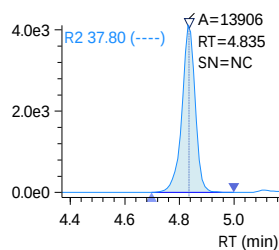
R1 295.00>84.90 (-)

4.11e3



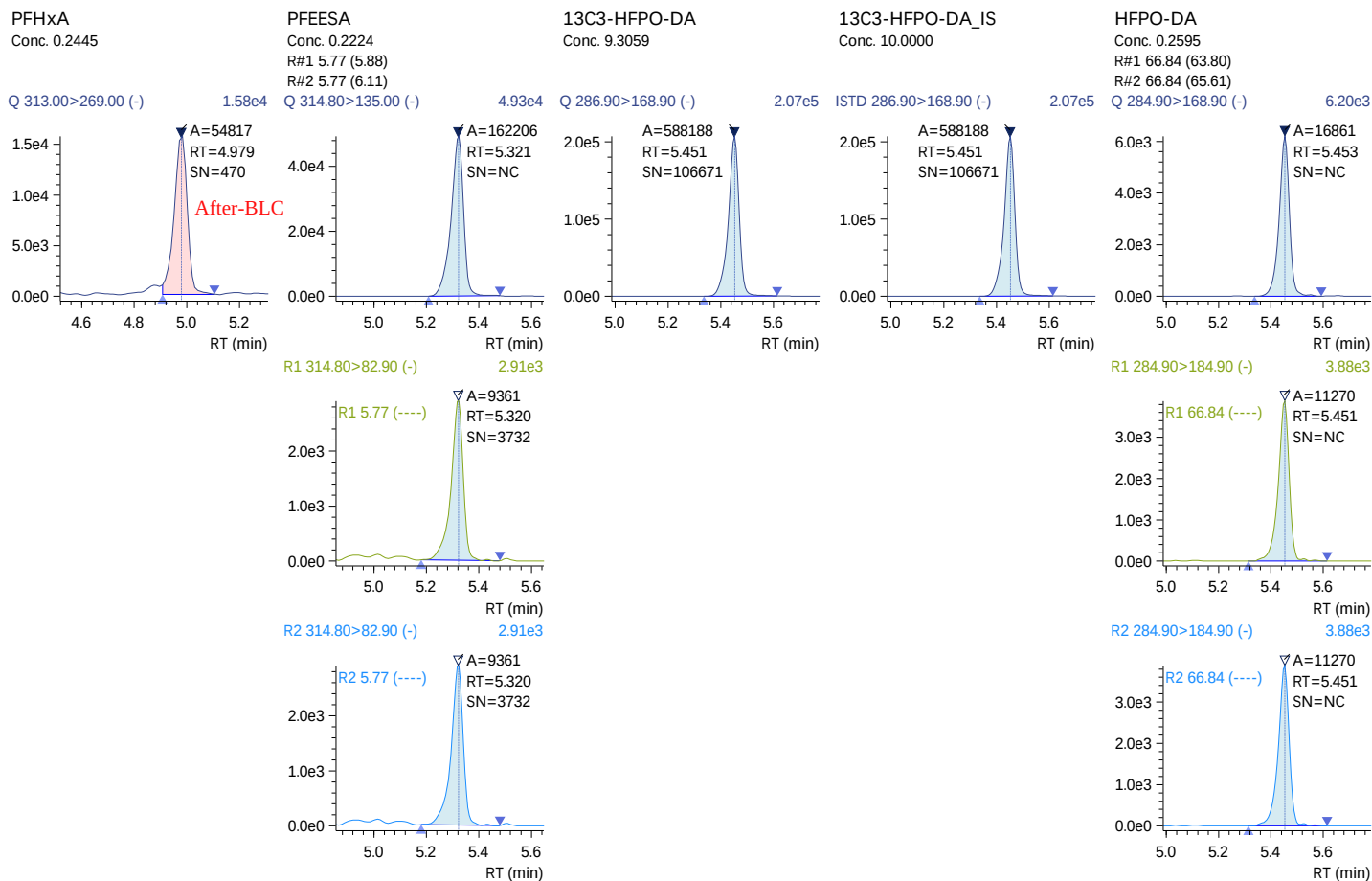
R2 295.00>84.90 (-)

4.11e3





240118_008 (continued)

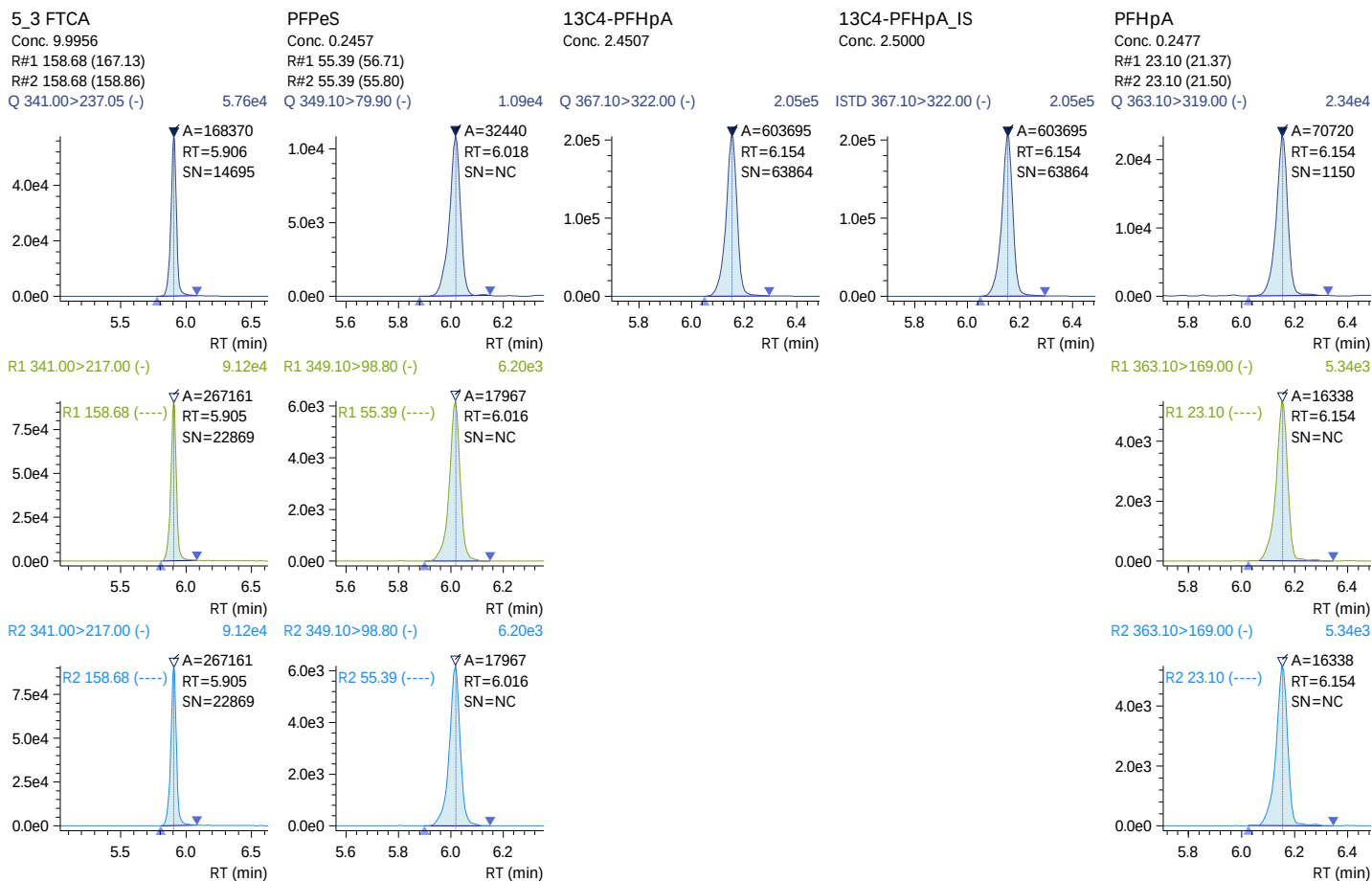


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_008 (continued)

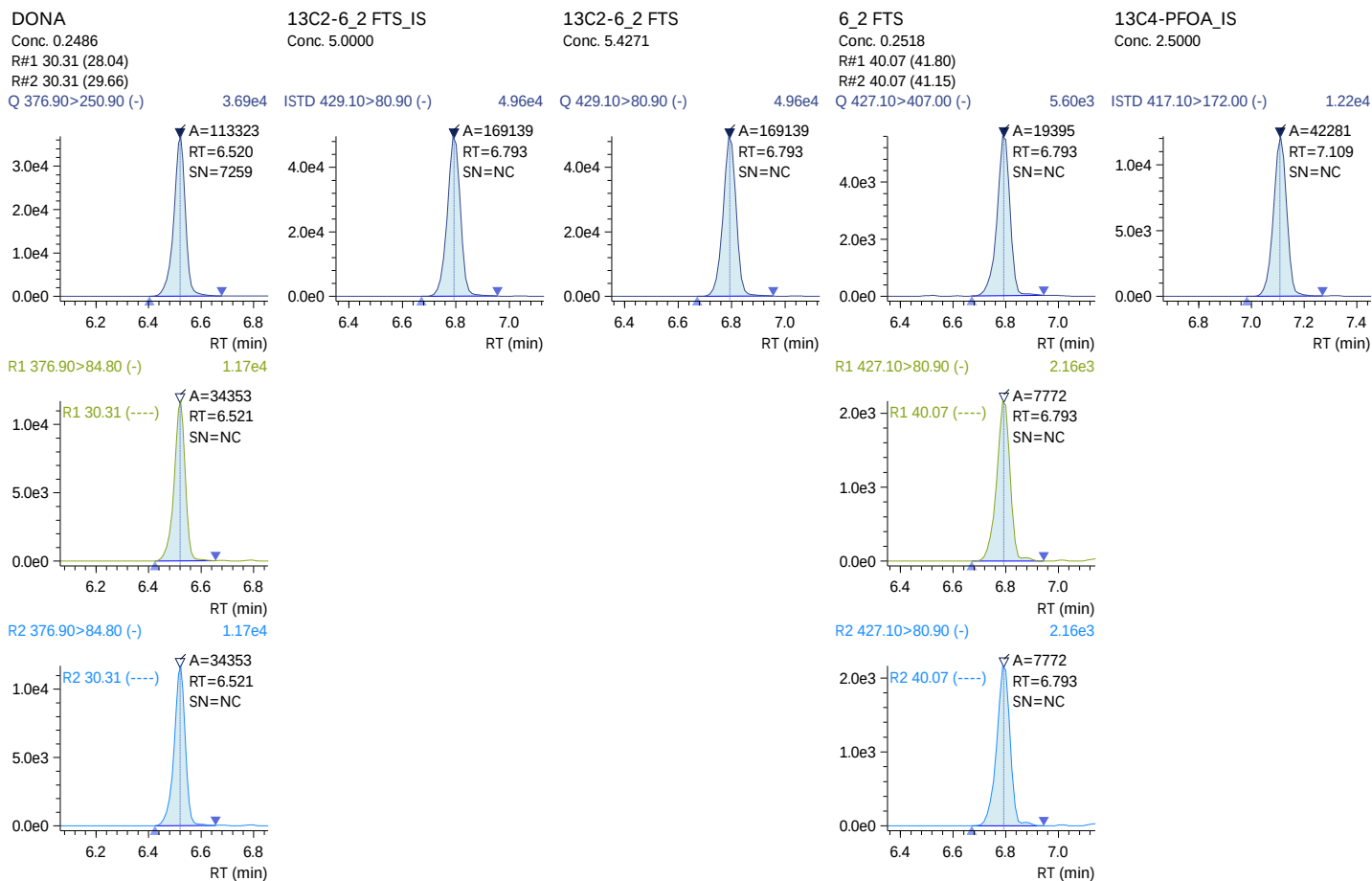


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_008 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_008 (continued)

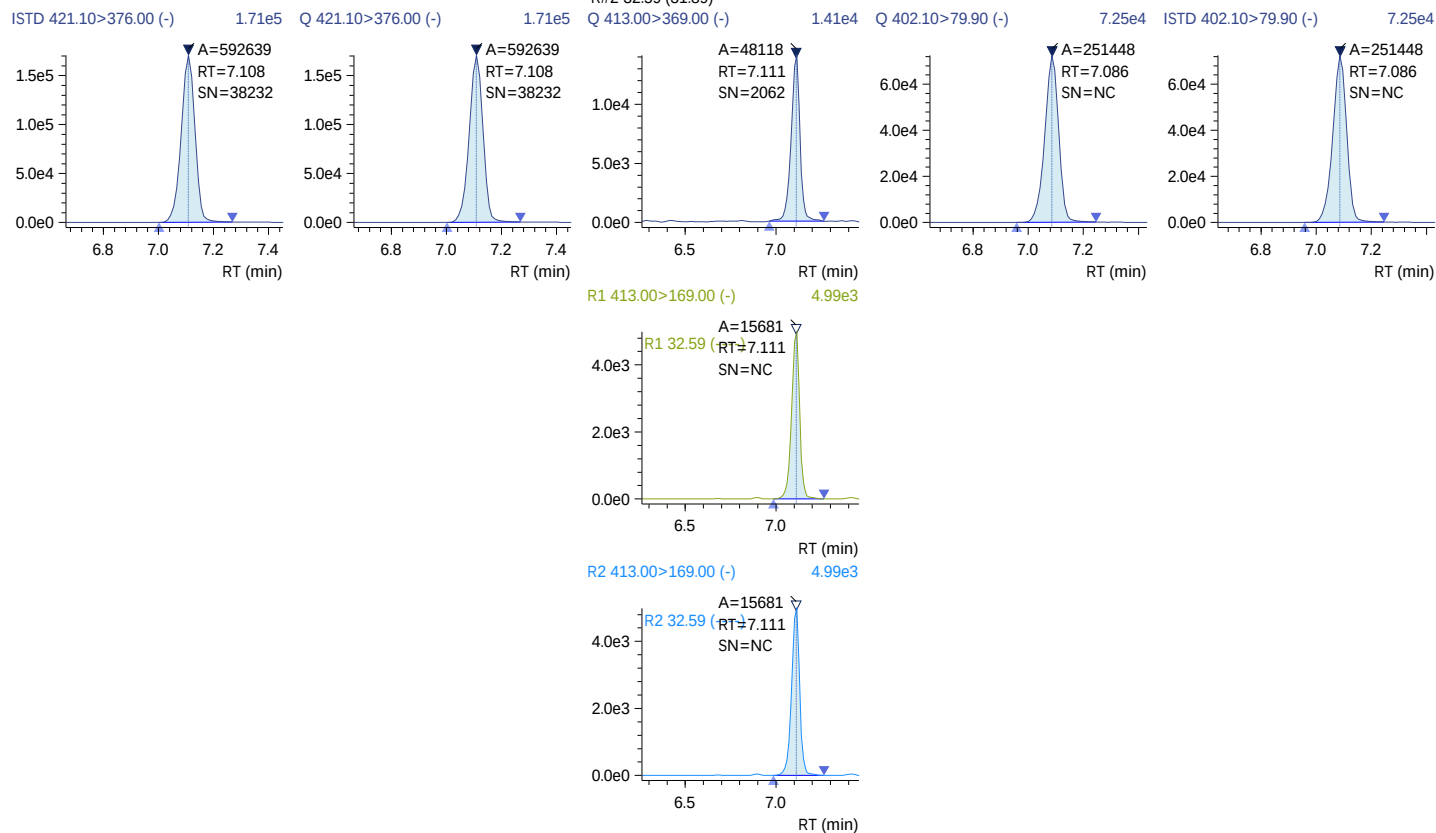
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.5078

PFOA
Conc. 0.2709
R#1 32.59 (29.05)
R#2 32.59 (31.89)

13C3-PFHxS
Conc. 2.4465

13C3-PFHxS_IS
Conc. 2.5000

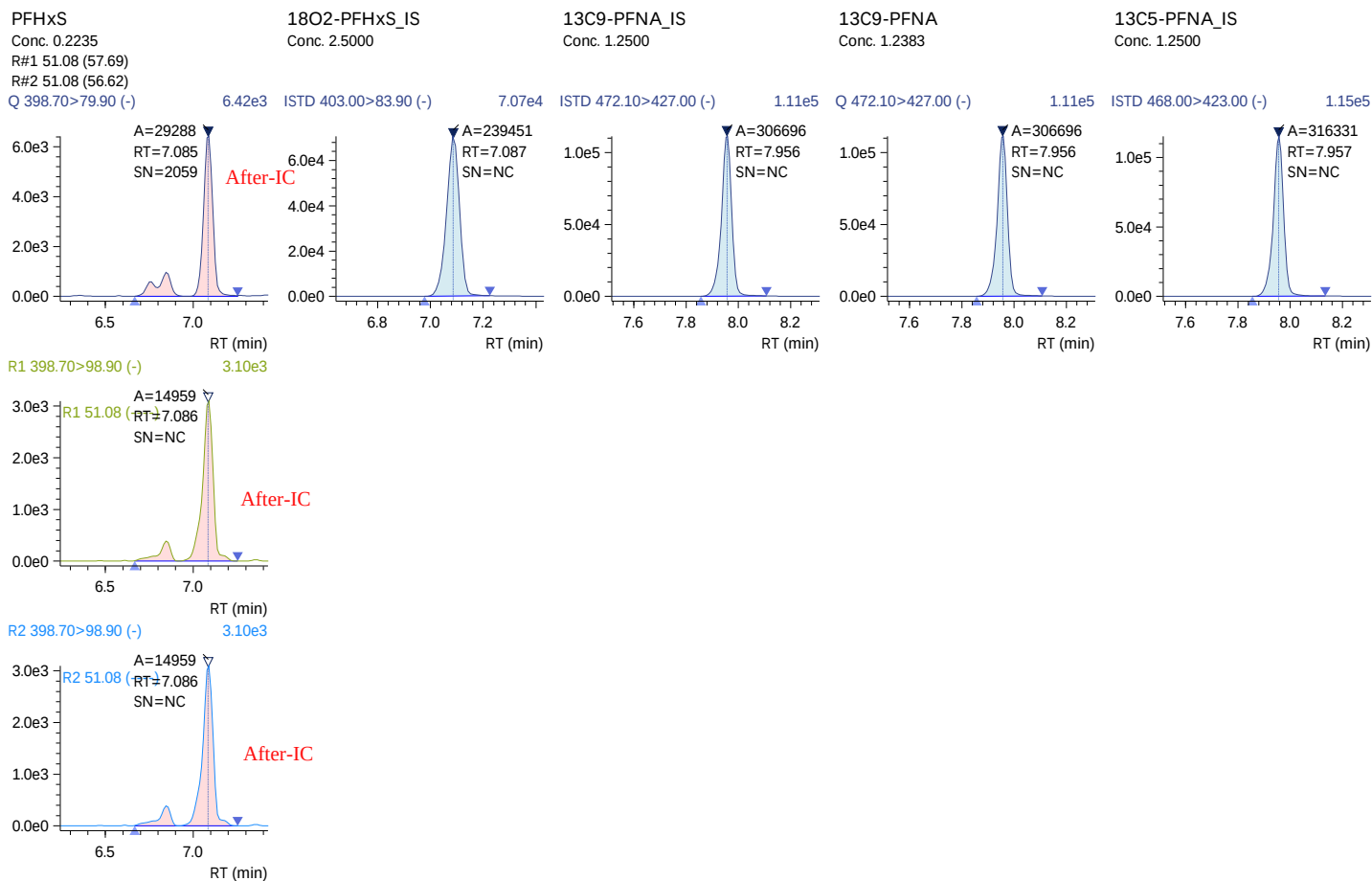


J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.

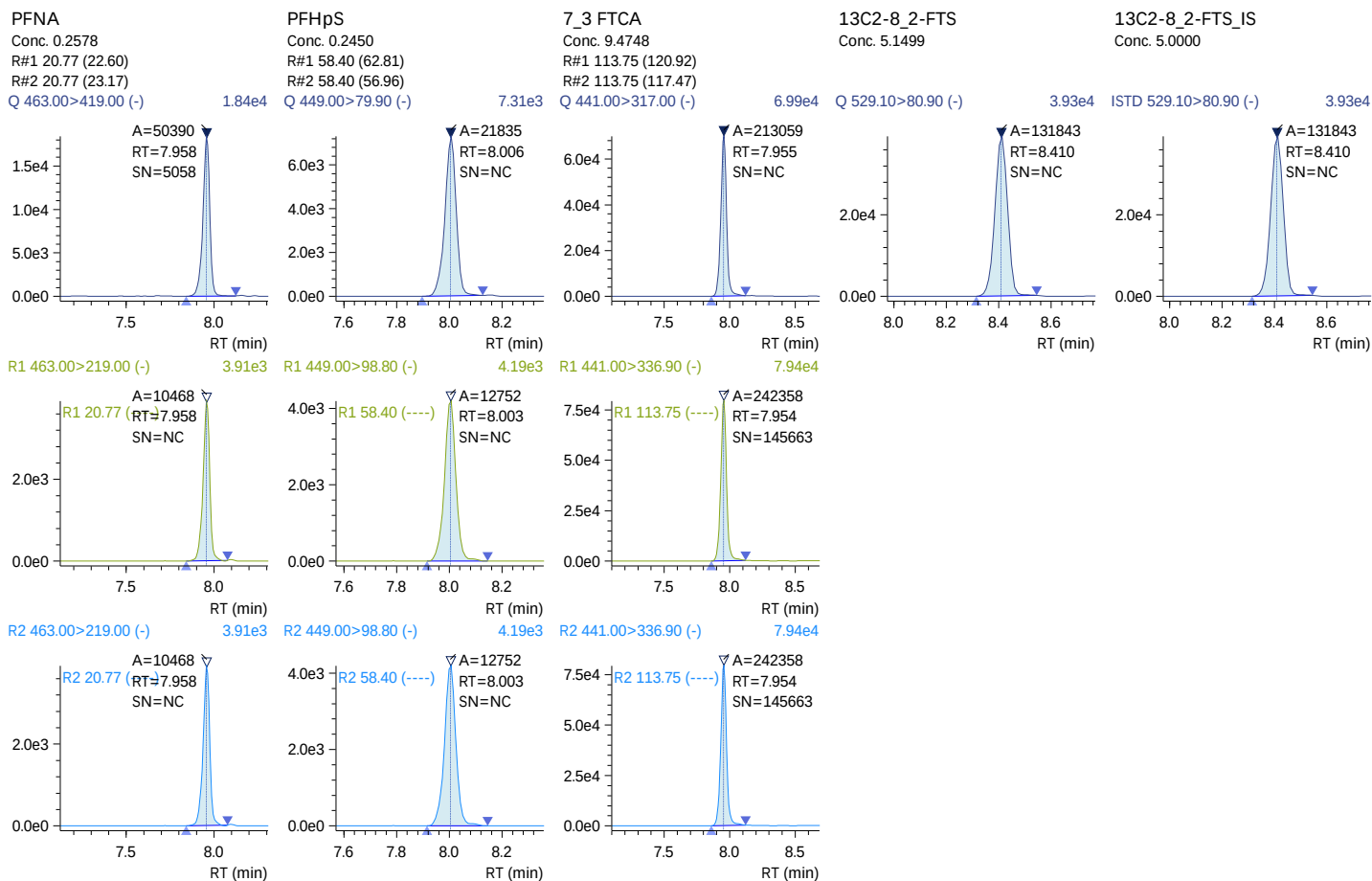


240118_008 (continued)





240118_008 (continued)

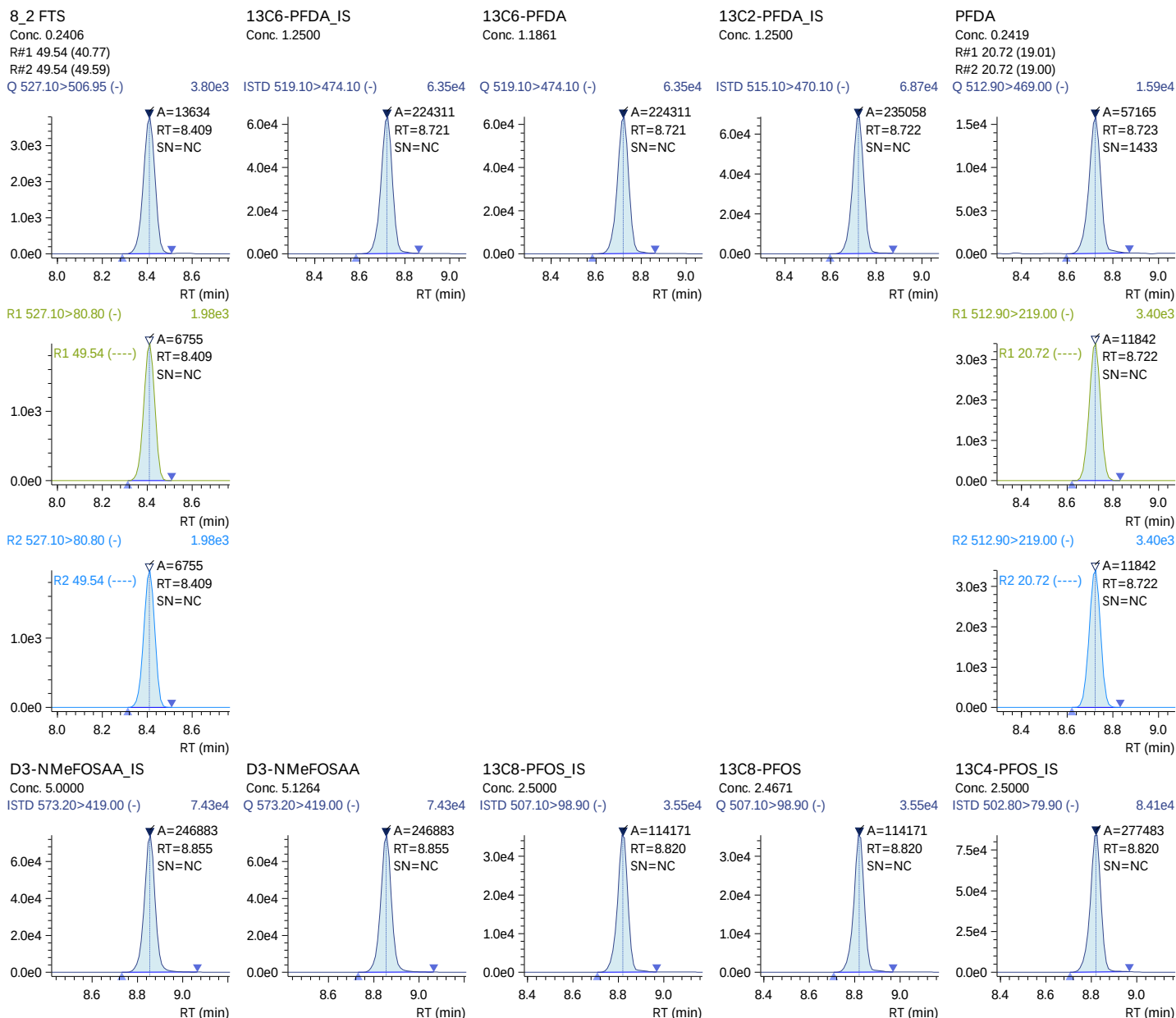


J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_008 (continued)

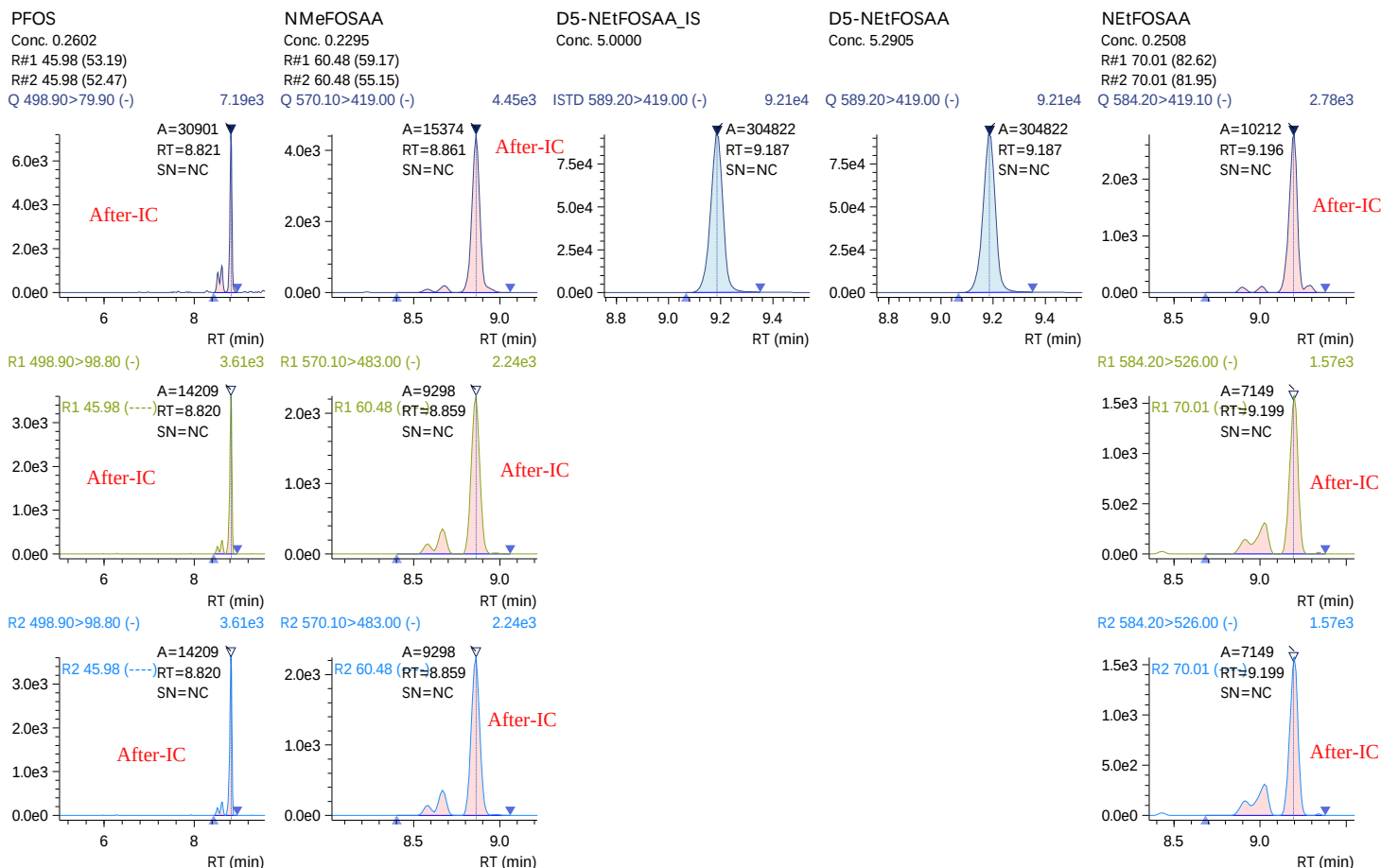


J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_008 (continued)



J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

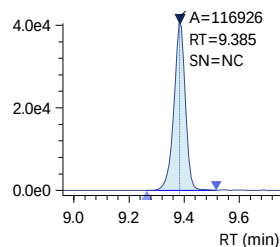
SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



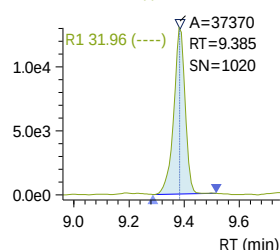
240118_008 (continued)

9-Cl-PF3ONS

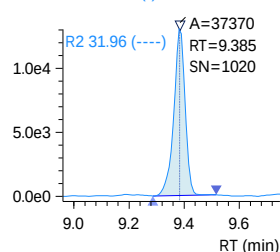
Conc. 0.2411
R#1 31.96 (31.76)
R#2 31.96 (32.76)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-) 1.31e4

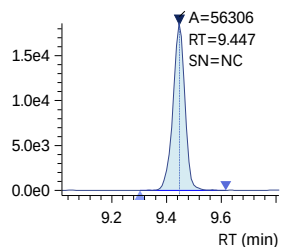


R2 532.80>353.00 (-) 1.31e4

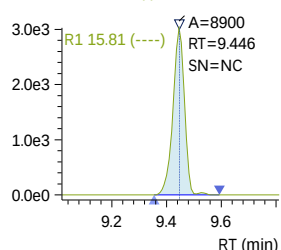


PFUnDA

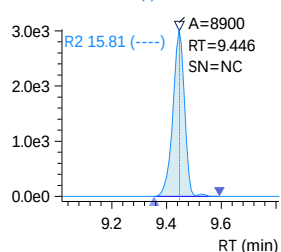
Conc. 0.2485
R#1 15.81 (12.31)
R#2 15.81 (13.12)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-) 3.03e3



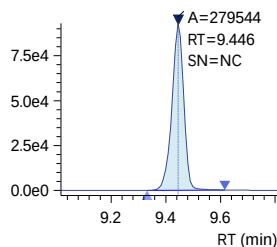
R2 563.10>269.10 (-) 3.03e3



13C7-PFUnDA_IS

Conc. 1.2500

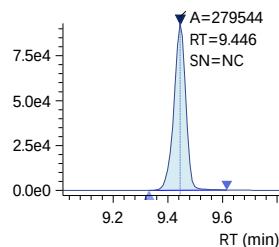
ISTD 570.00>525.10 (-)



13C7-PFUnDA

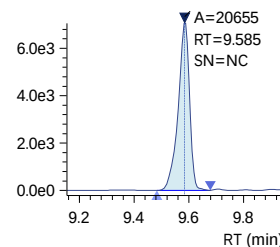
Conc. 1.2392

Q 570.00>525.10 (-)

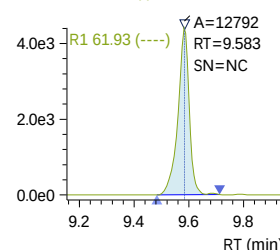


PFNS

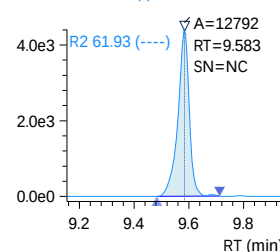
Conc. 0.2381
R#1 61.93 (63.31)
R#2 61.93 (65.22)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-) 4.41e3

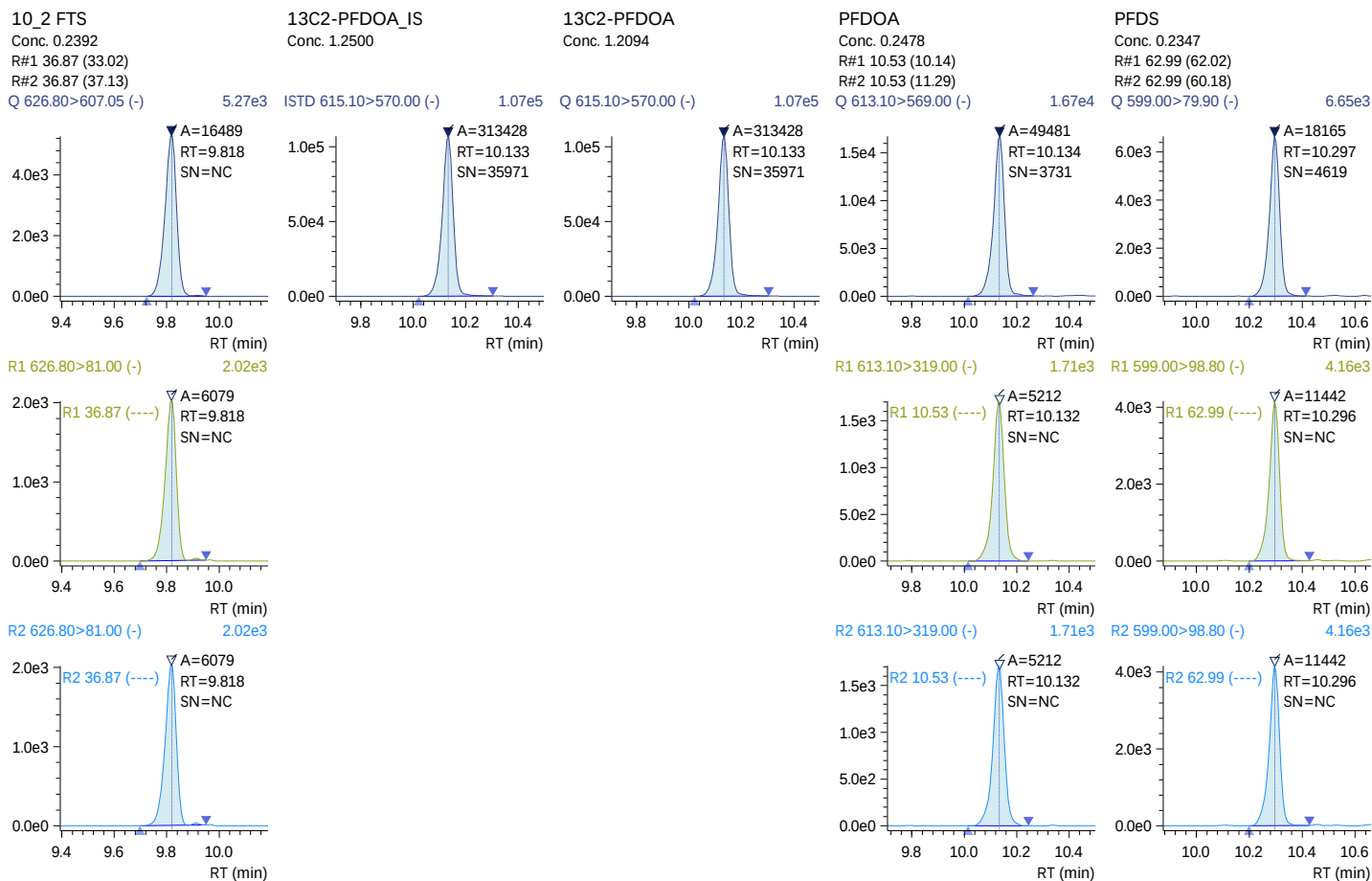


R2 548.80>98.80 (-) 4.41e3





240118_008 (continued)

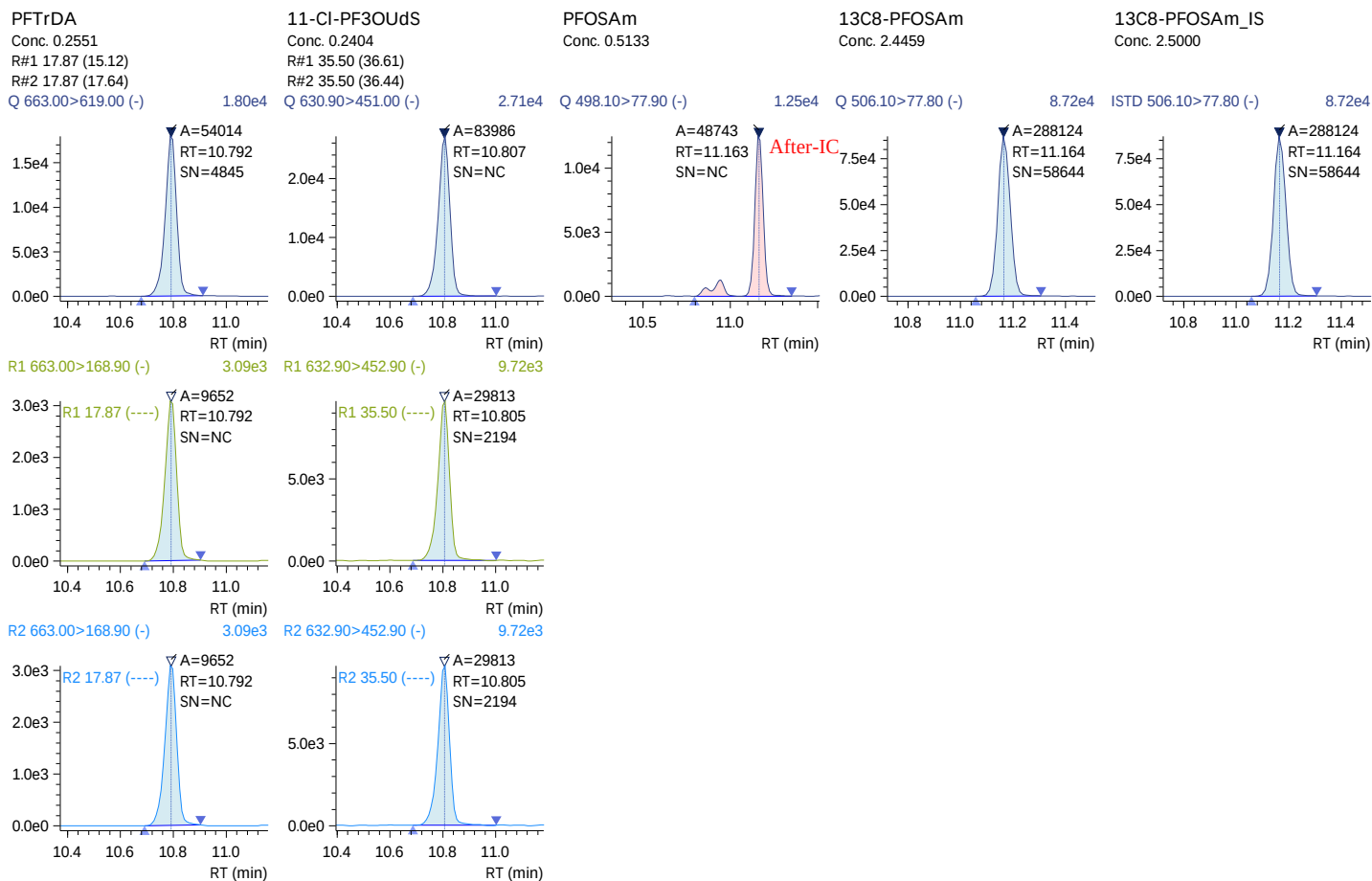


J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_008 (continued)

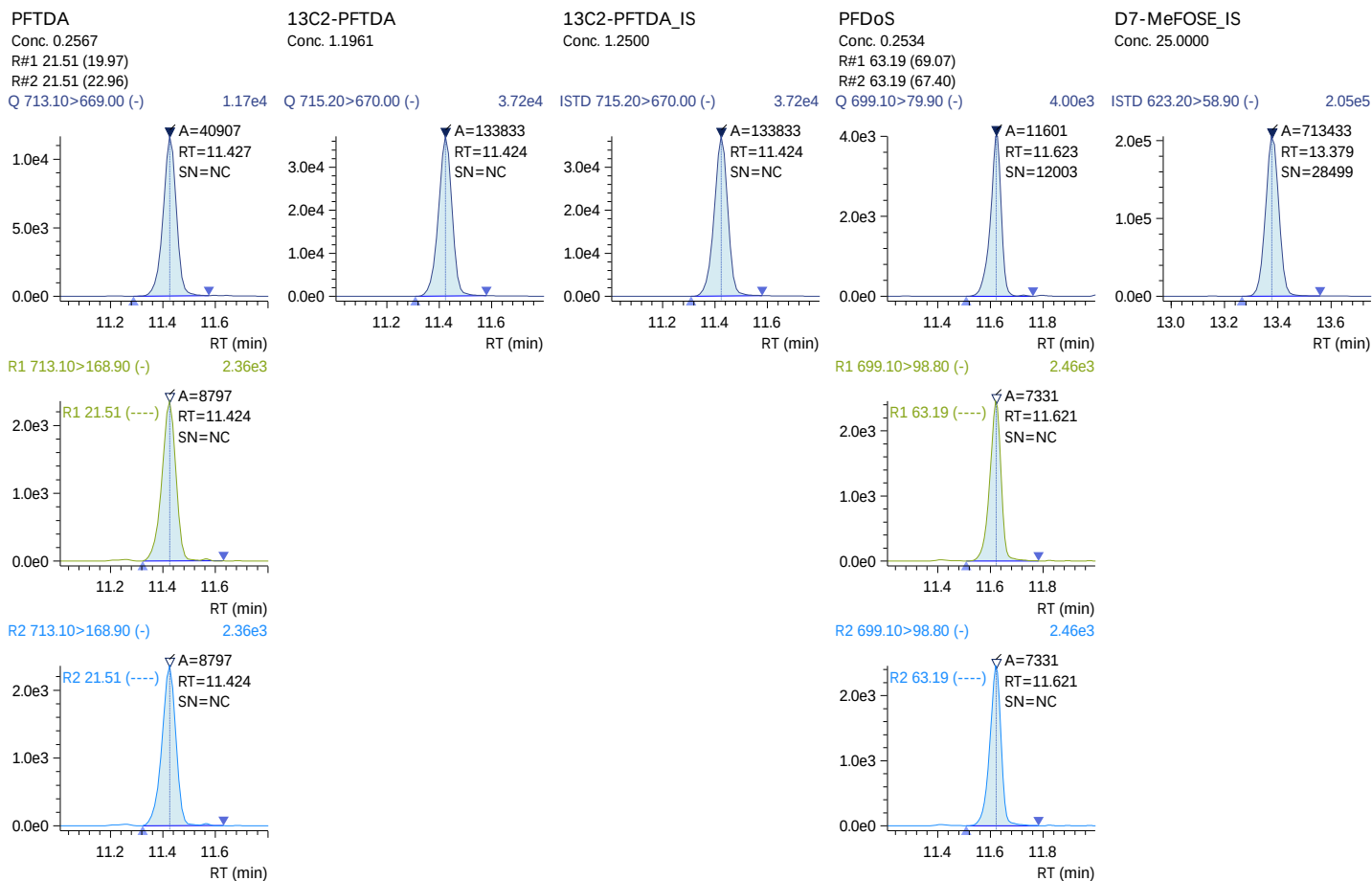


J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_008 (continued)



J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_008 (continued)

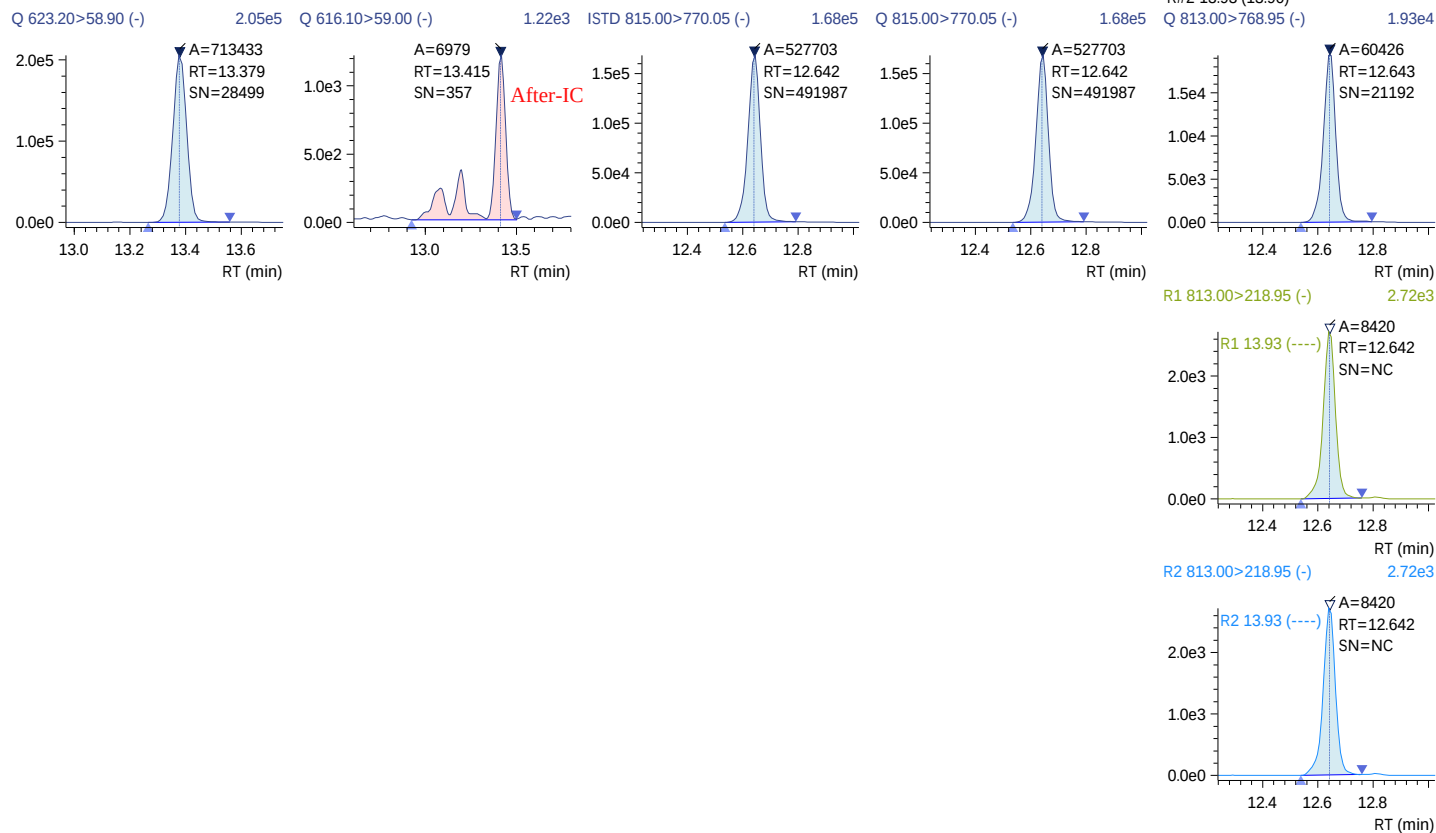
D7-MeFOSE
Conc. 24.5653

MeFOSE
Conc. 0.2664

13C2-PFHXA_IS
Conc. 2.5000

13C2-PFHXA
Conc. 2.4169

PFHXA
Conc. 0.2514
R#1 13.93 (11.64)
R#2 13.93 (13.90)





240118_008 (continued)

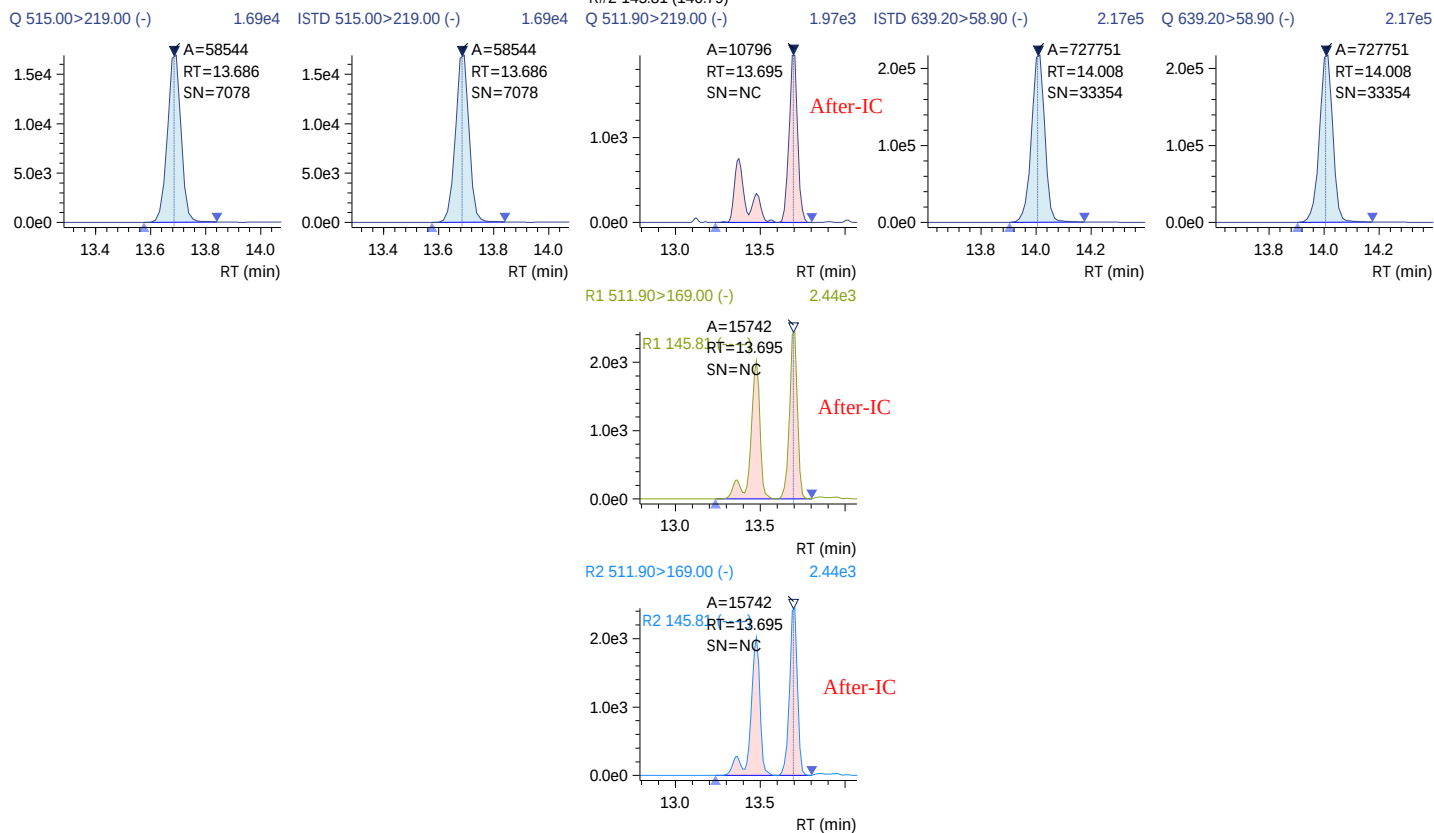
D3-MeFOSA
Conc. 2.4679

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. 0.2558
R#1 145.81 (149.05)
R#2 145.81 (140.79)

D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 24.6721

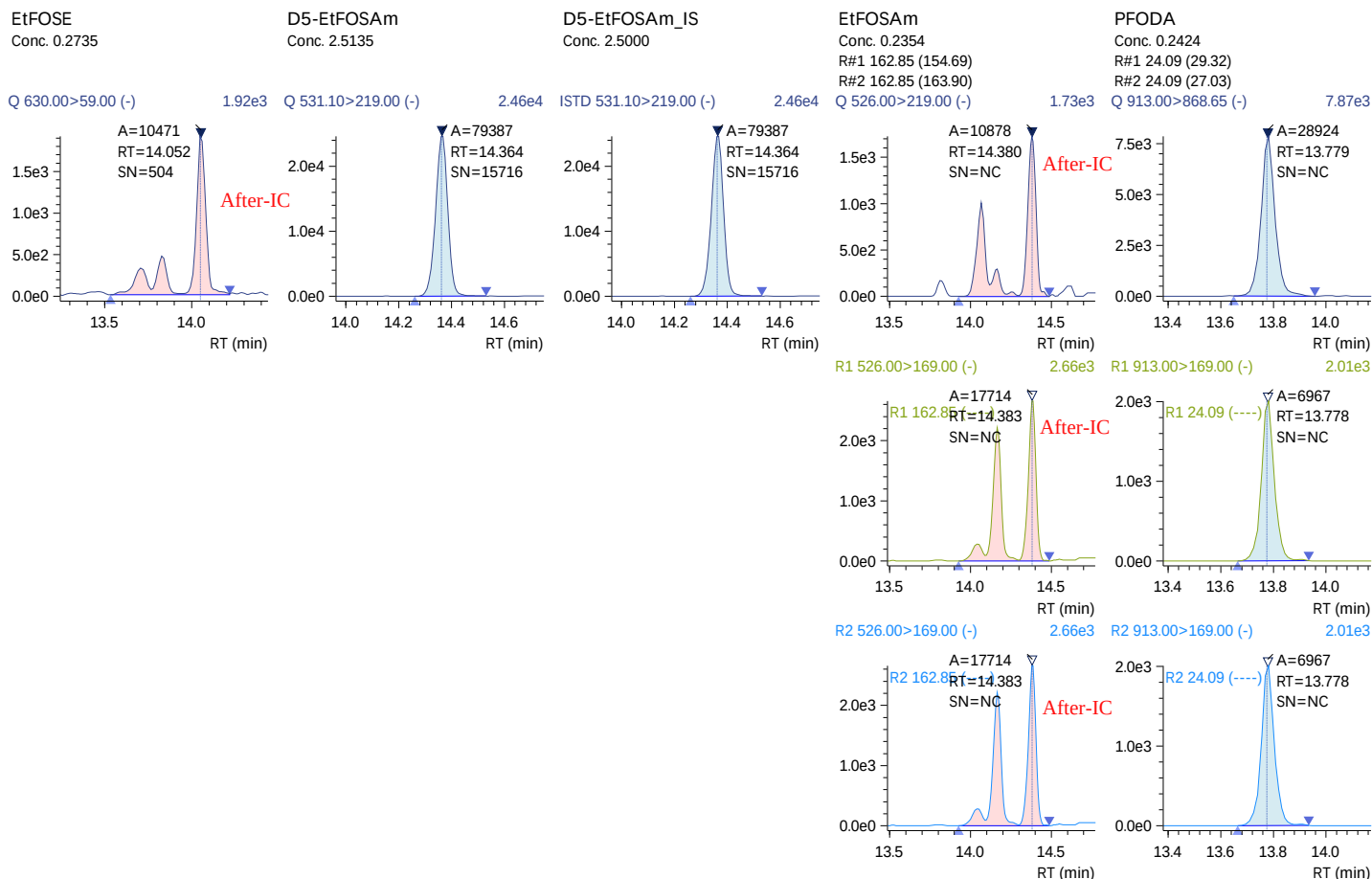


J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_008 (continued)



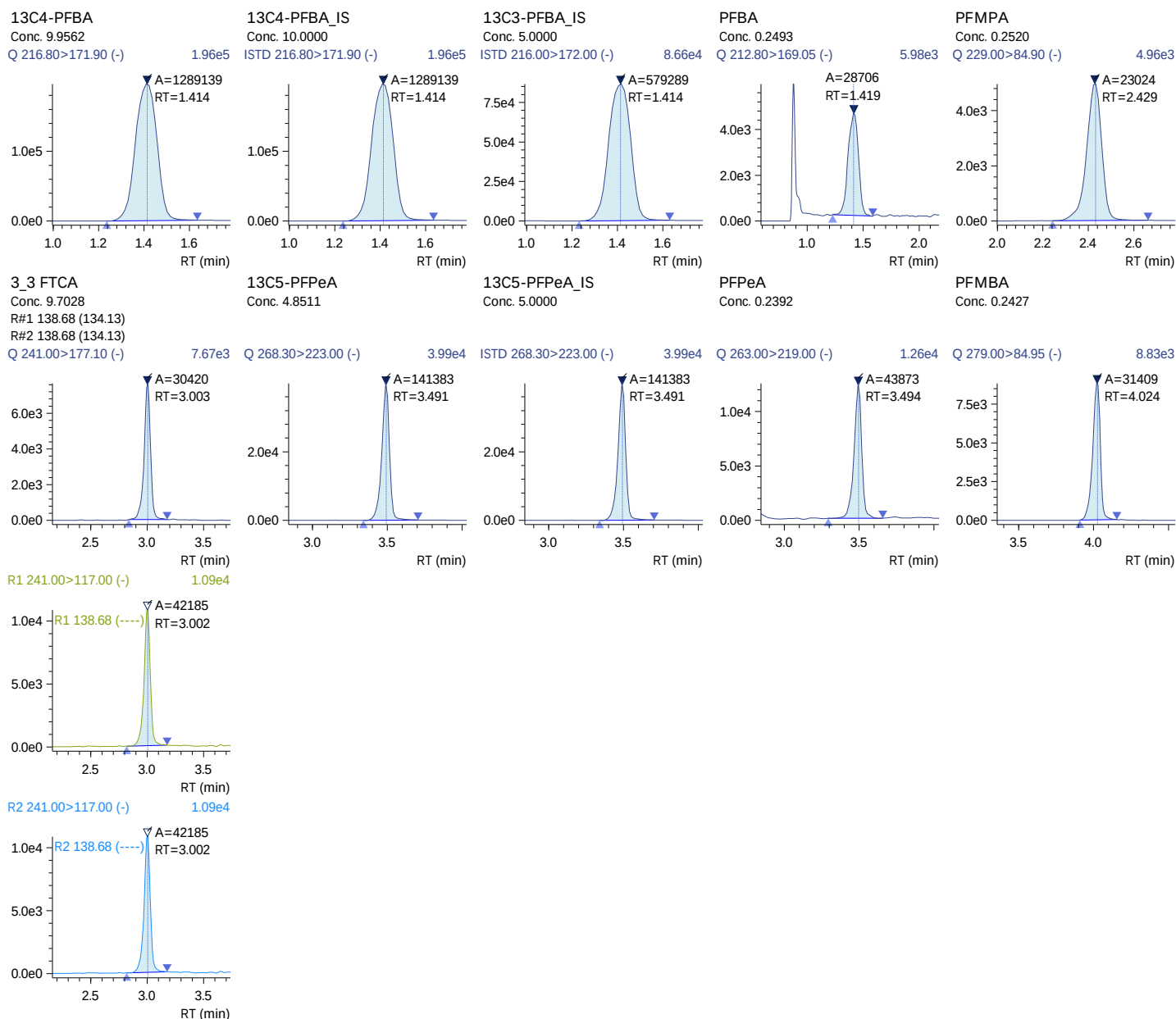
J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.damlp

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_008

Sample ID: 1633 ICAL 0.25PPB
Date Acquired: 1/18/2024 2:51:05 PM
Acquired by: System Administrator
Data File: 240118_008
Vial: 3 | Inj. Volume: 10.0000uL | Tray: 1





240118_008 (continued)

13C2-4_2 FTS
Conc. 5.4165

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. 0.2236
R#1 28.55 (34.14)
R#2 28.55 (34.14)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 0.2385
R#1 45.23 (47.53)
R#2 45.23 (47.53)

Q 329.10>80.90 (-)

5.55e4

ISTD 329.10>80.90 (-)

5.55e4

Q 327.10>307.00 (-)

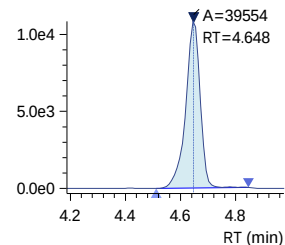
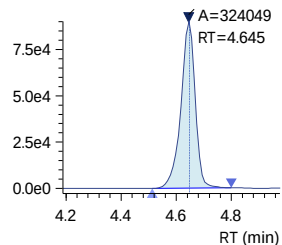
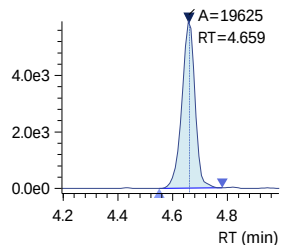
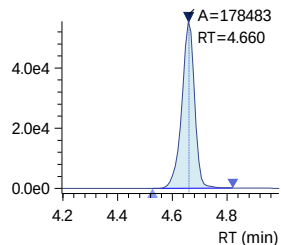
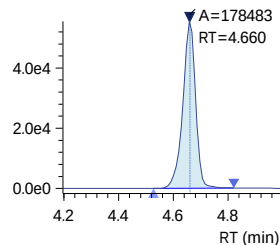
5.92e3

ISTD 302.10>79.90 (-)

9.01e4

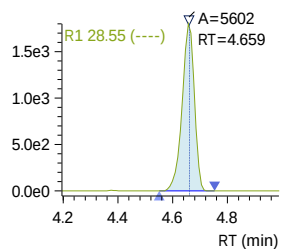
Q 298.70>79.90 (-)

1.08e4



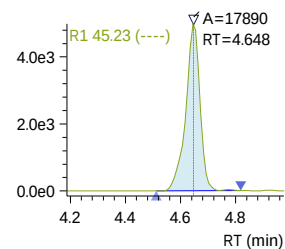
R1 327.10>80.90 (-)

1.80e3



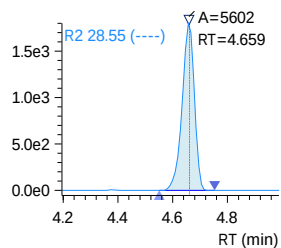
R1 298.70>98.80 (-)

4.99e3



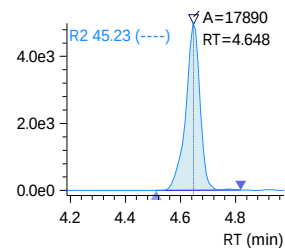
R2 327.10>80.90 (-)

1.80e3



R2 298.70>98.80 (-)

4.99e3





240118_008 (continued)

13C3-PFBS
 Conc. 2.3847

NFDHA
 Conc. 0.2546
 R#1 37.80 (37.88)
 R#2 37.80 (37.88)

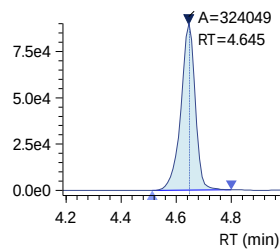
13C5-PFHxA
 Conc. 2.3931

13C5-PFHxA_IS
 Conc. 2.5000

13C2-PFHxA_IS
 Conc. 2.5000

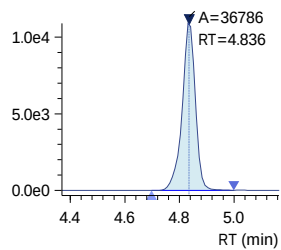
Q 302.10>79.90 (-)

9.01e4



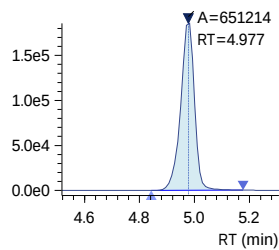
Q 295.00>201.00 (-)

1.09e4



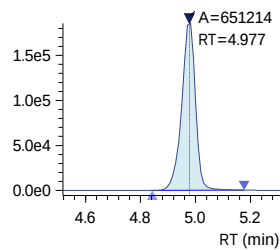
Q 318.00>273.00 (-)

1.86e5



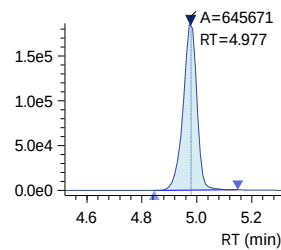
ISTD 318.00>273.00 (-)

1.86e5



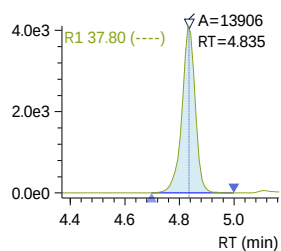
ISTD 315.10>270.00 (-)

1.86e5



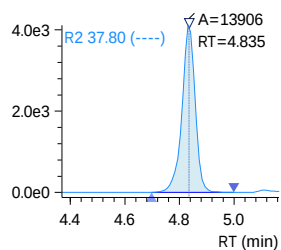
R1 295.00>84.90 (-)

4.11e3



R2 295.00>84.90 (-)

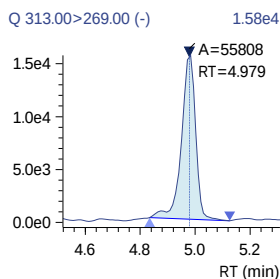
4.11e3





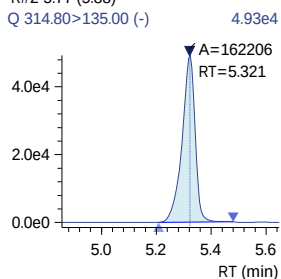
240118_008 (continued)

PFHxA
Conc. 0.2620

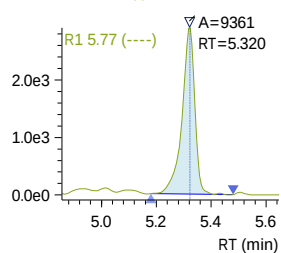


PFEESA
Conc. 0.2224

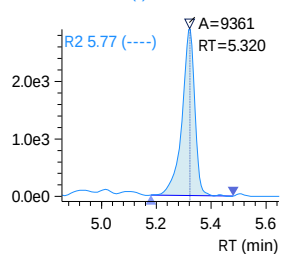
R#1 5.77 (5.88)
R#2 5.77 (5.88)



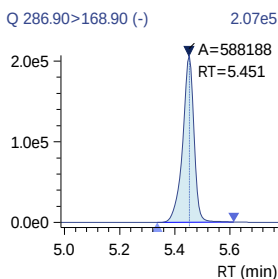
R1 314.80>82.90 (-) 2.91e3



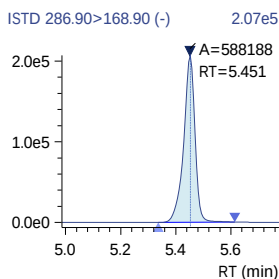
R2 314.80>82.90 (-) 2.91e3



13C3-HFPO-DA
Conc. 9.3059

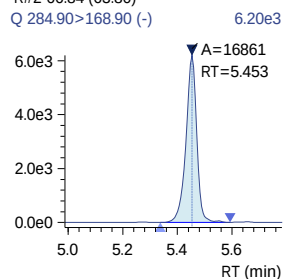


13C3-HFPO-DA_IS
Conc. 10.0000

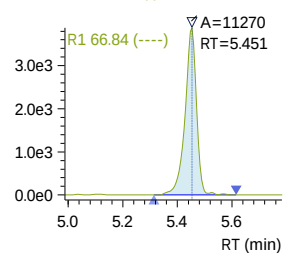


HFPO-DA
Conc. 0.2600

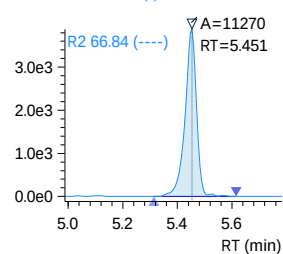
R#1 66.84 (63.80)
R#2 66.84 (63.80)



R1 284.90>184.90 (-) 3.88e3



R2 284.90>184.90 (-) 3.88e3





240118_008 (continued)

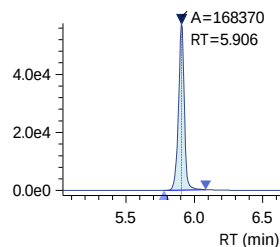
5_3 FTCA

Conc. 9.9956

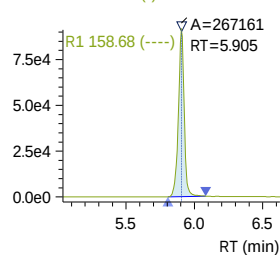
R#1 158.68 (167.13)

R#2 158.68 (167.13)

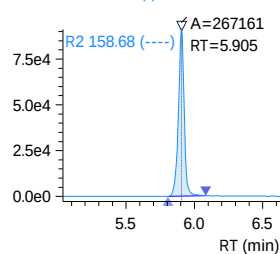
Q 341.00>237.05 (-)



R1 341.00>217.00 (-)



R2 341.00>217.00 (-)



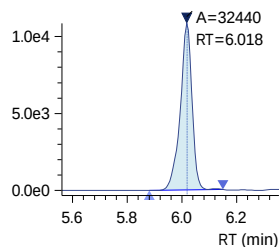
PFPeS

Conc. 0.2457

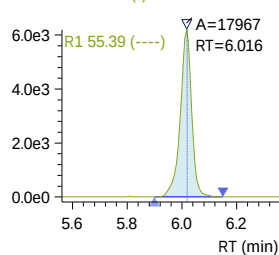
R#1 55.39 (56.71)

R#2 55.39 (56.71)

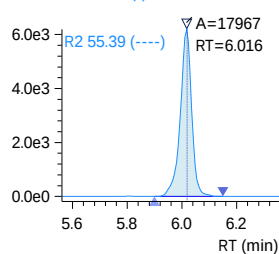
Q 349.10>79.90 (-)



R1 349.10>98.80 (-)



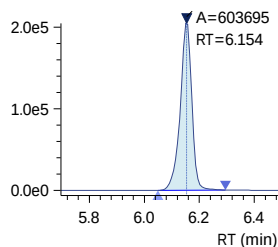
R2 349.10>98.80 (-)



13C4-PFHpa

Conc. 2.4507

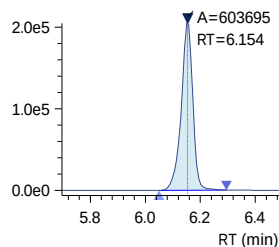
Q 367.10>322.00 (-)



13C4-PFHpa_IS

Conc. 2.5000

ISTD 367.10>322.00 (-)



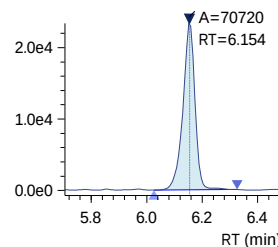
PFHpA

Conc. 0.2471

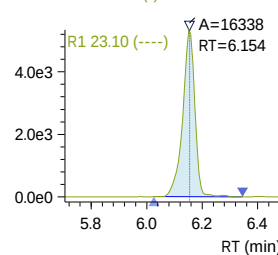
R#1 23.10 (21.37)

R#2 23.10 (21.37)

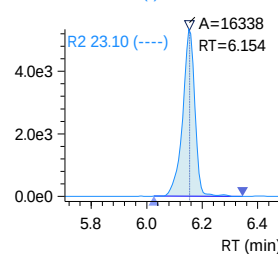
Q 363.10>319.00 (-)



R1 363.10>169.00 (-)

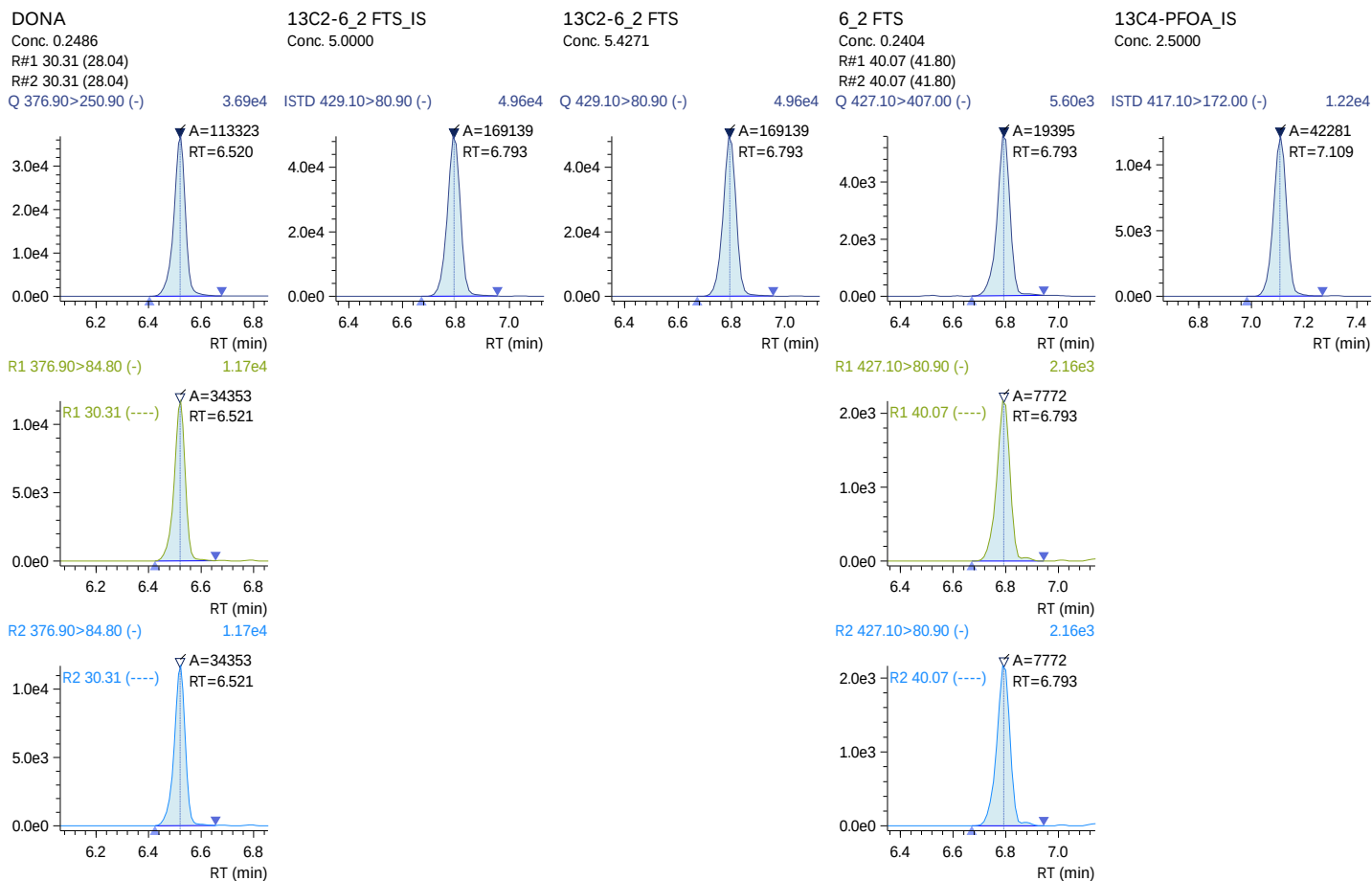


R2 363.10>169.00 (-)





240118_008 (continued)





240118_008 (continued)

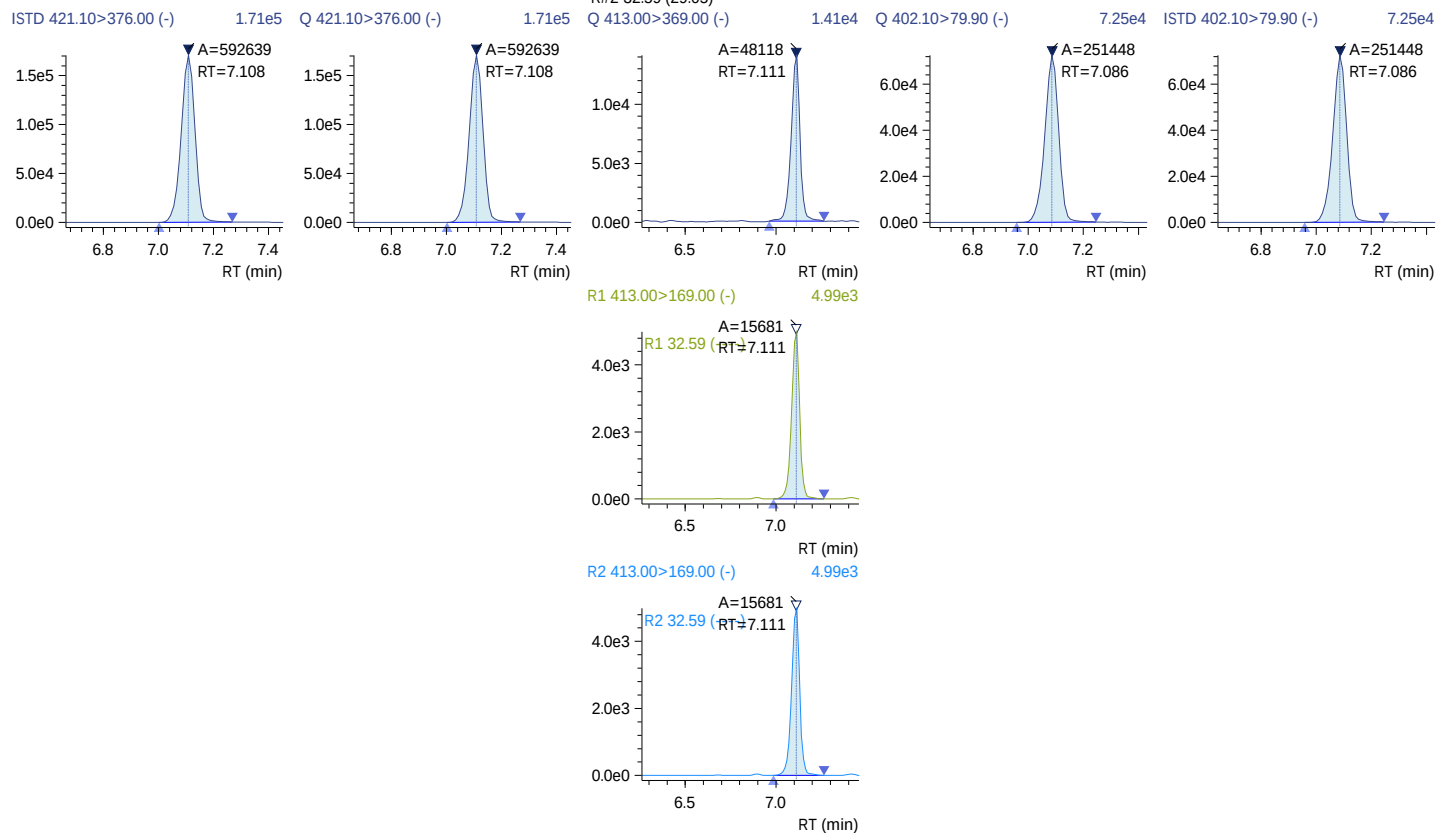
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.5078

PFOA
Conc. 0.2709
R#1 32.59 (29.05)
R#2 32.59 (29.05)

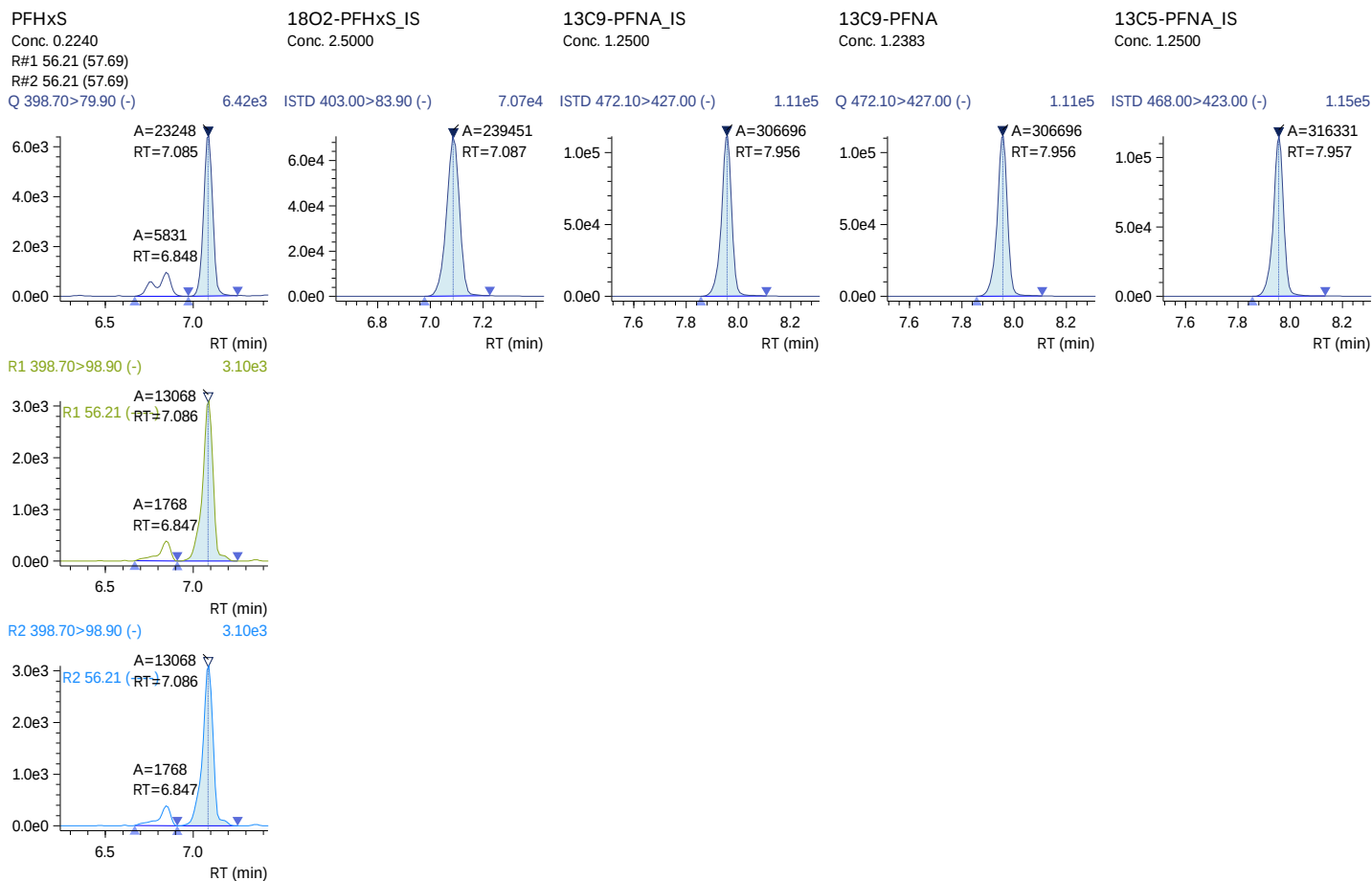
13C3-PFHxS
Conc. 2.4465

13C3-PFHxS_IS
Conc. 2.5000



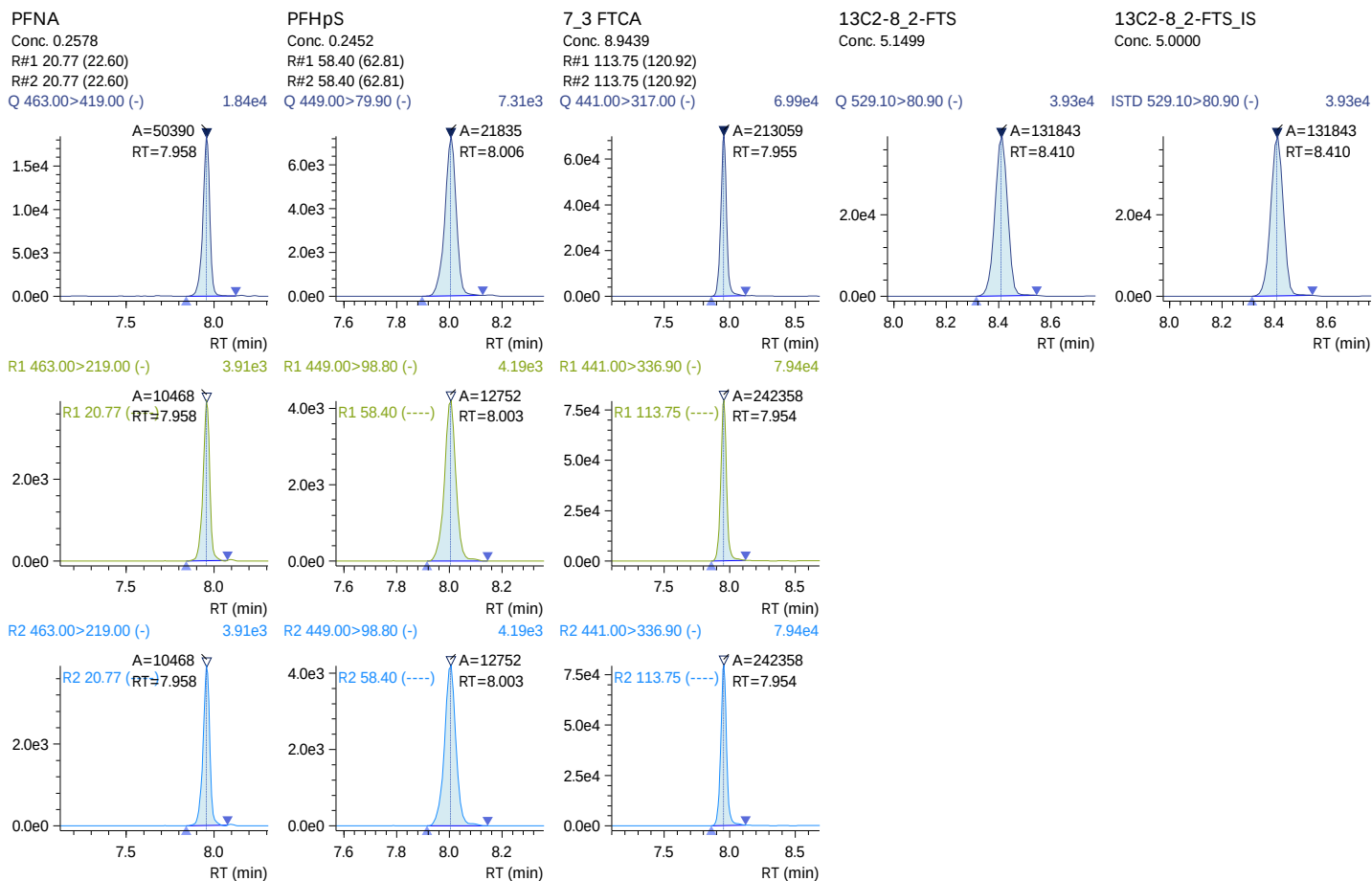


240118_008 (continued)



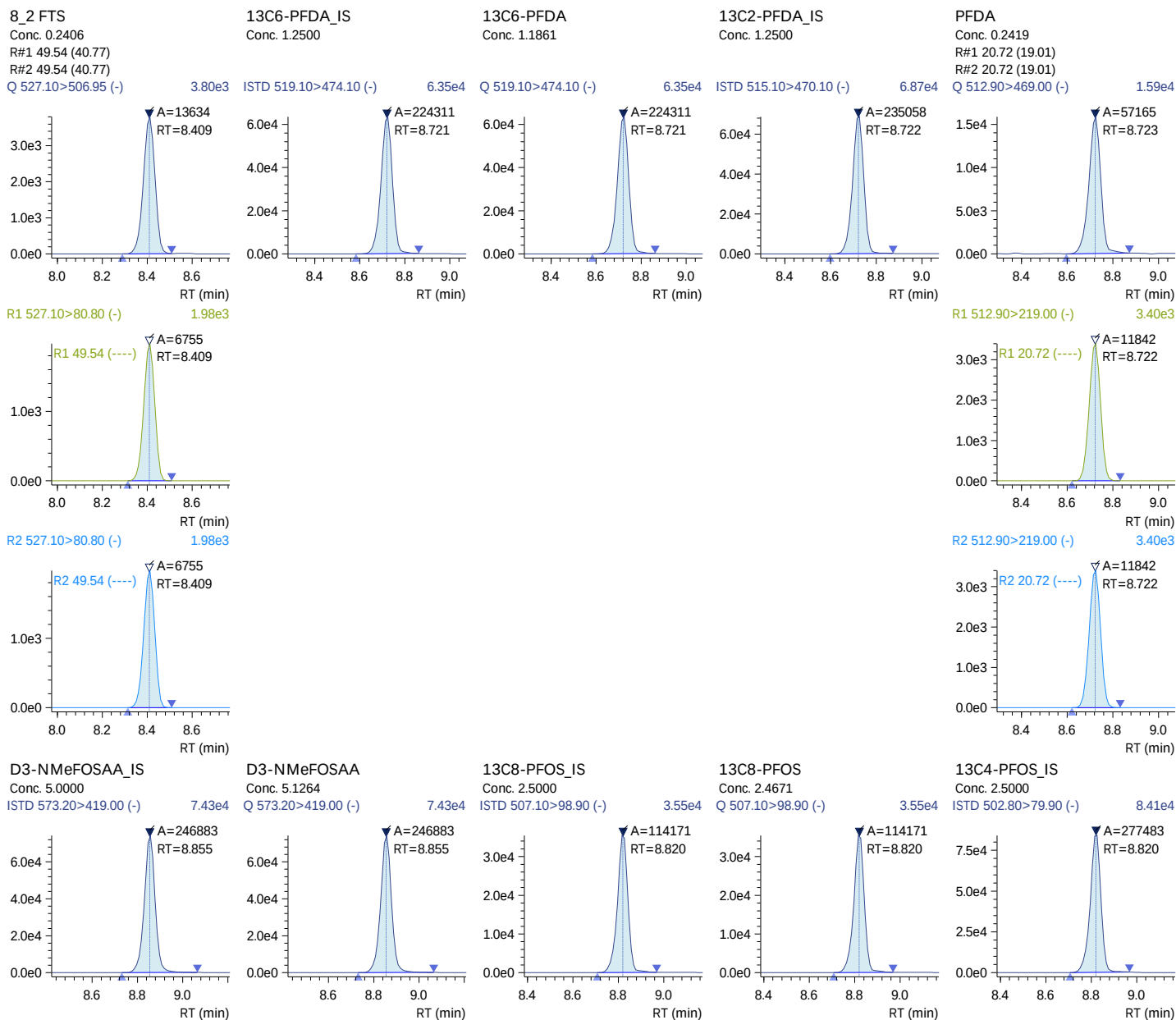


240118_008 (continued)



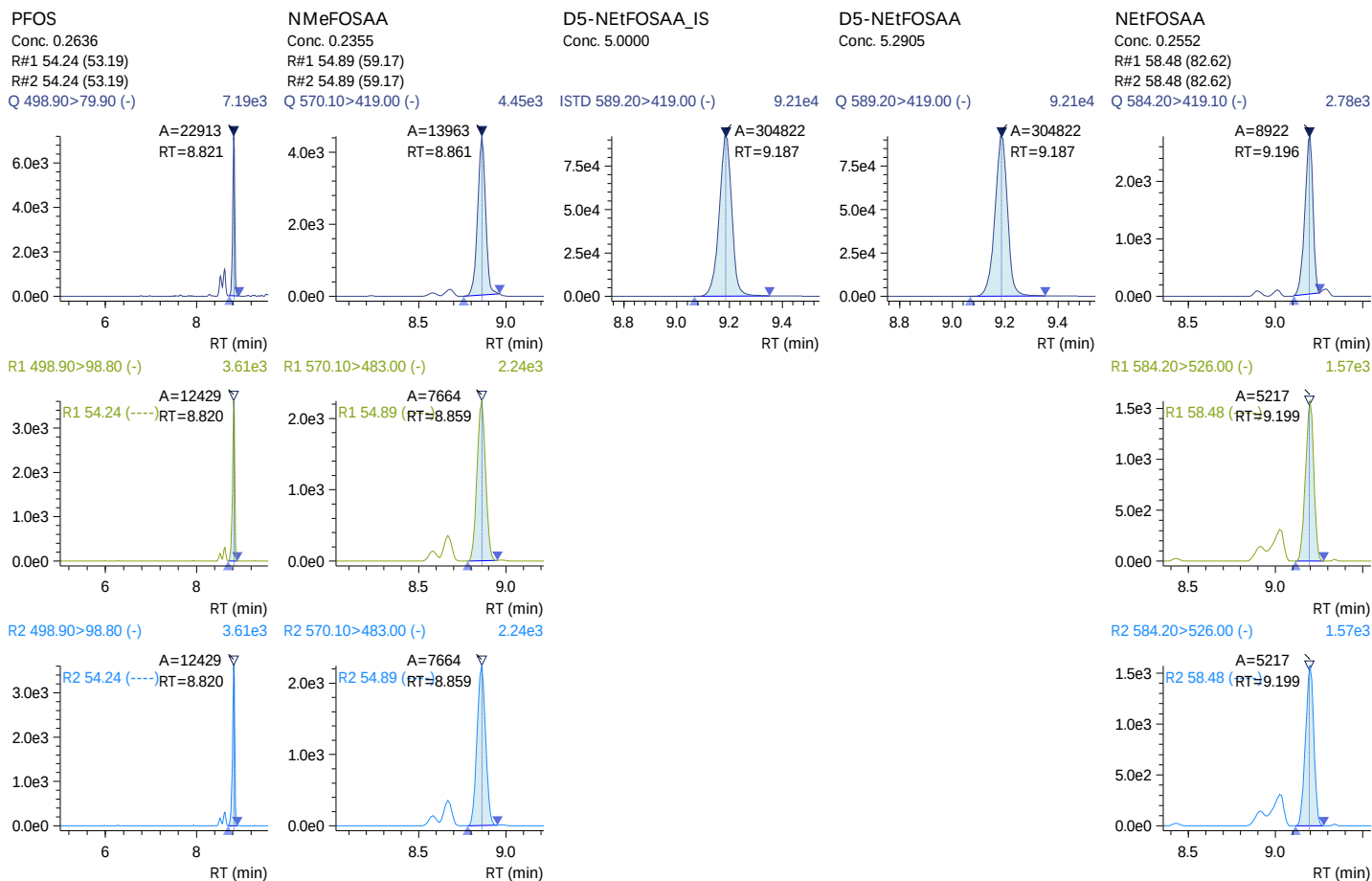


240118_008 (continued)





240118_008 (continued)

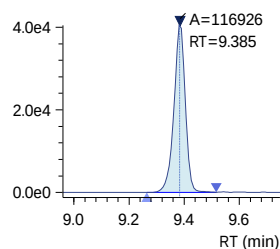




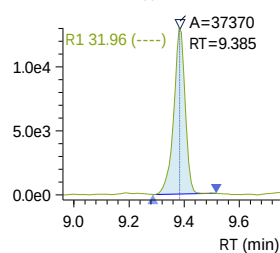
240118_008 (continued)

9-Cl-PF3ONS

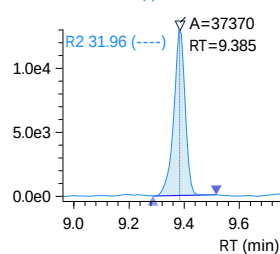
Conc. 0.2411
R#1 31.96 (31.76)
R#2 31.96 (31.76)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-) 1.31e4

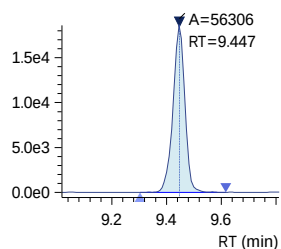


R2 532.80>353.00 (-) 1.31e4

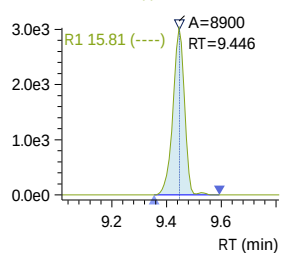


PFUnDA

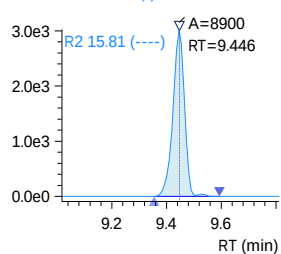
Conc. 0.2485
R#1 15.81 (12.31)
R#2 15.81 (12.31)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-) 3.03e3

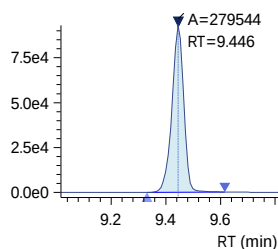


R2 563.10>269.10 (-) 3.03e3



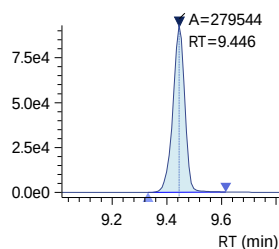
13C7-PFUnDA_IS

Conc. 1.2500
ISTD 570.00>525.10 (-)



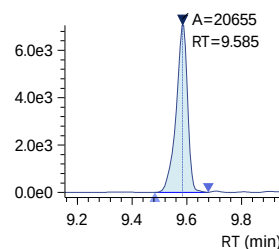
13C7-PFUnDA

Conc. 1.2392
Q 570.00>525.10 (-)

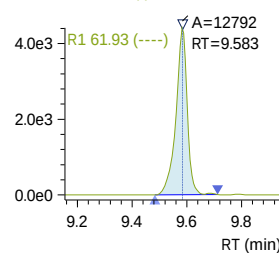


PFNS

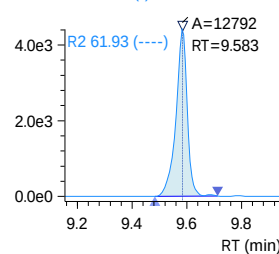
Conc. 0.2381
R#1 61.93 (63.31)
R#2 61.93 (63.31)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-) 4.41e3

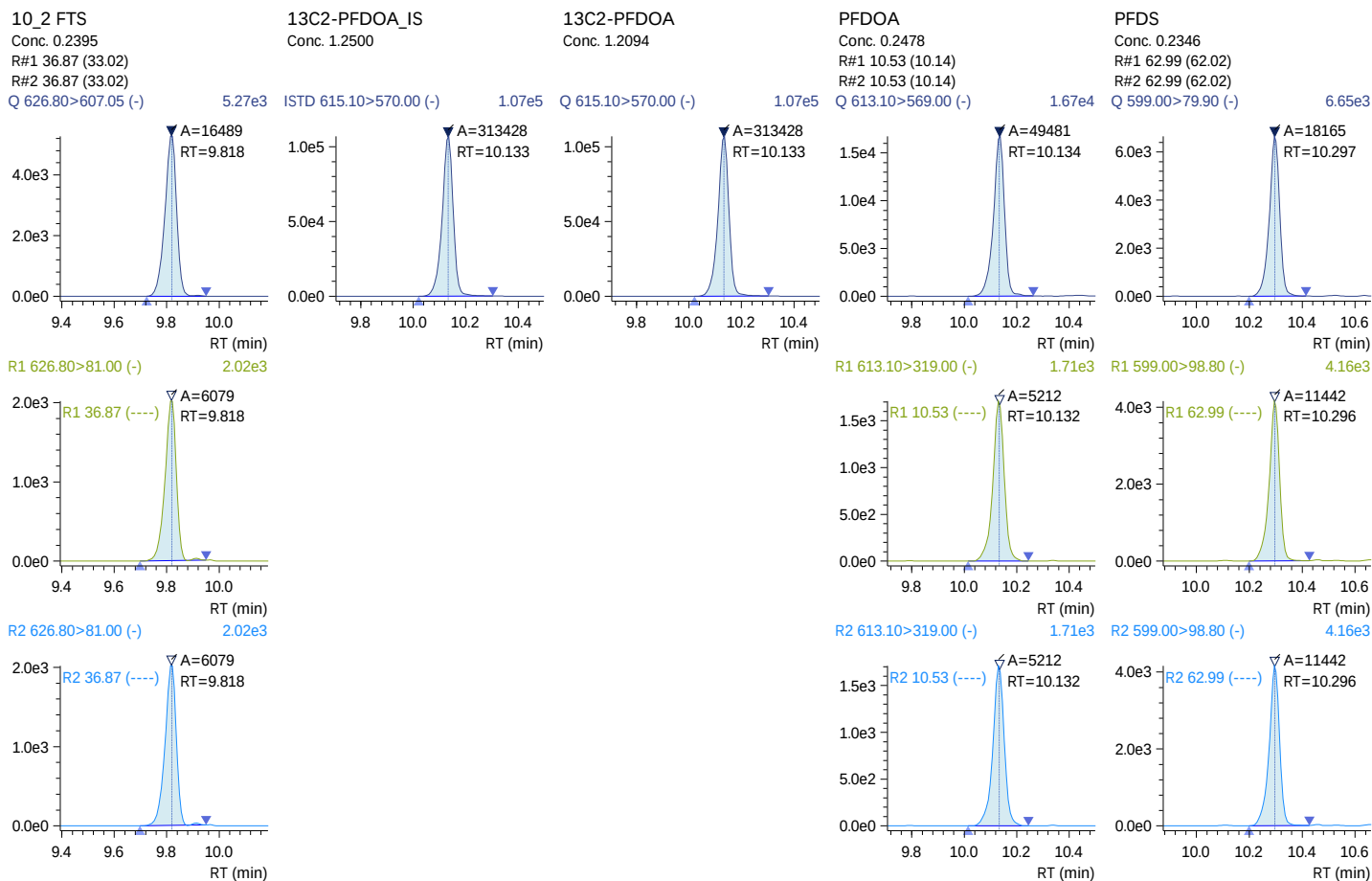


R2 548.80>98.80 (-) 4.41e3



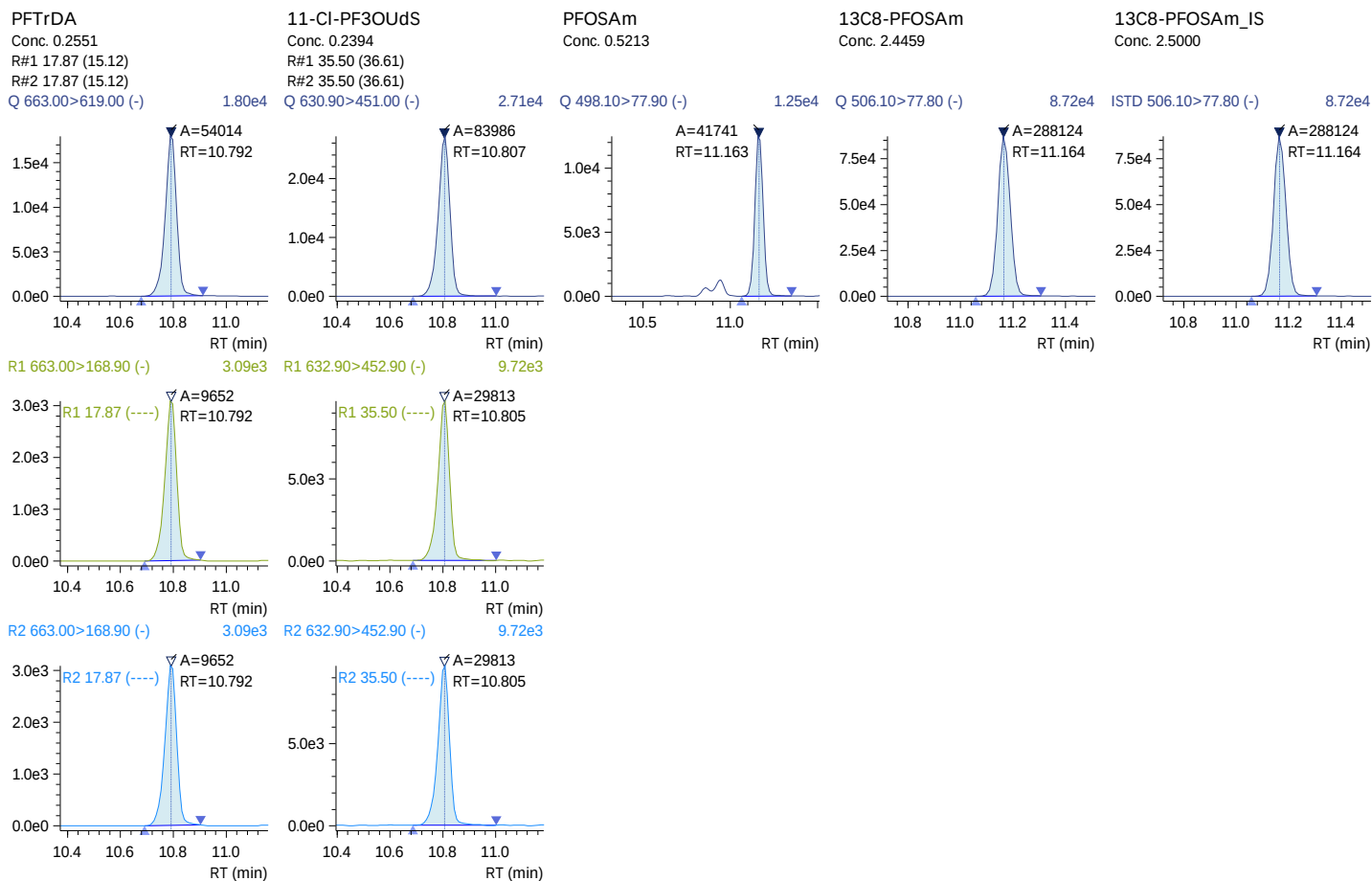


240118_008 (continued)



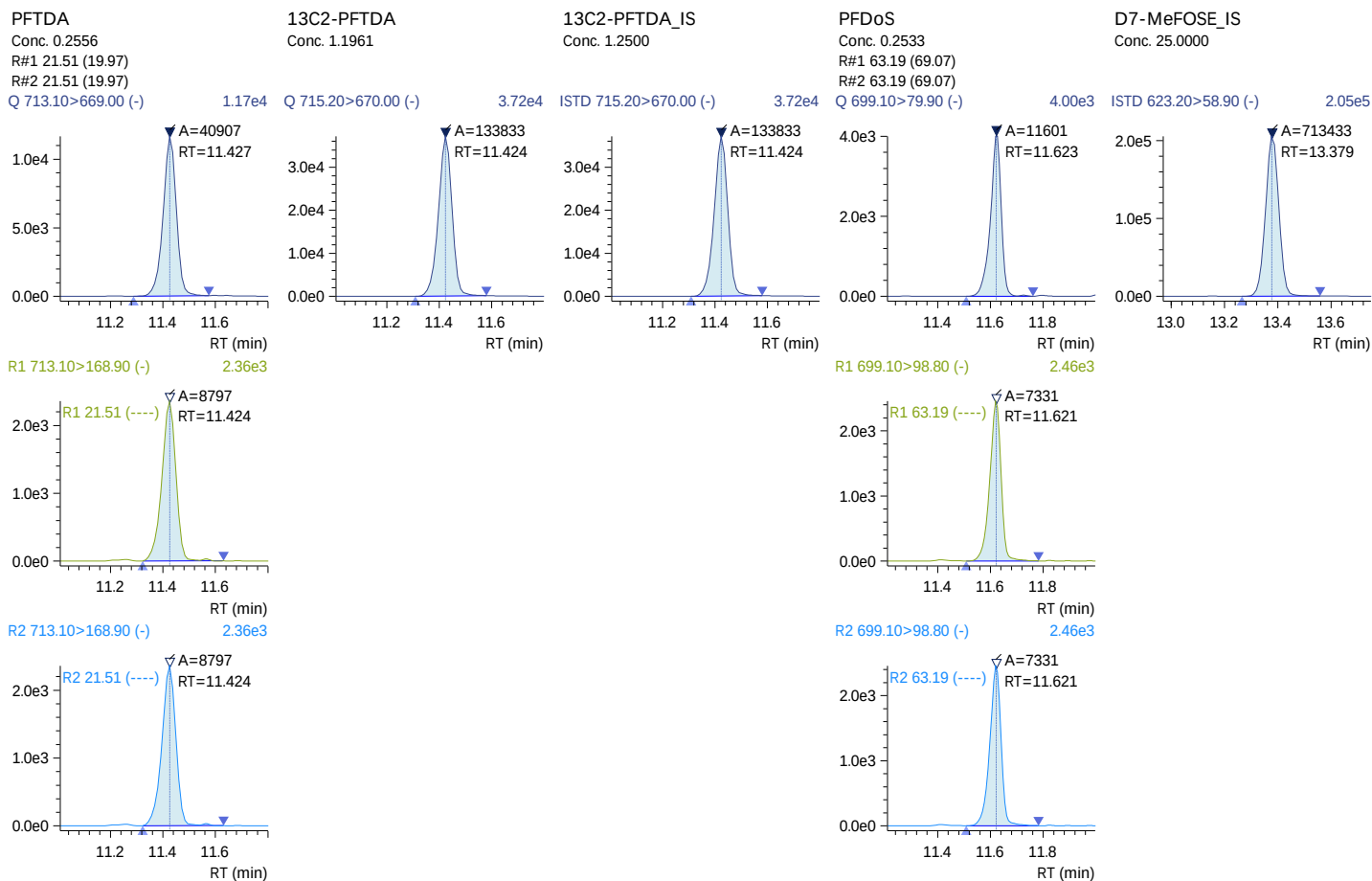


240118_008 (continued)





240118_008 (continued)





240118_008 (continued)

D7-MeFOSE
 Conc. 24.5653

MeFOSE
 Conc. 0.2507

¹³C2-PFHXA_IS
 Conc. 2.5000

¹³C2-PFHXA
 Conc. 2.4169

PFHXA
 Conc. 0.2514
 R#1 13.93 (11.64)
 R#2 13.93 (11.64)

Q 623.20>58.90 (-)

2.05e5

Q 616.10>59.00 (-)

1.22e3

ISTD 815.00>770.05 (-)

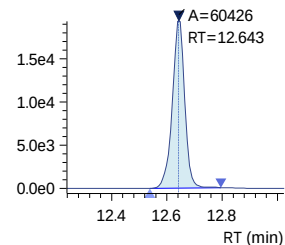
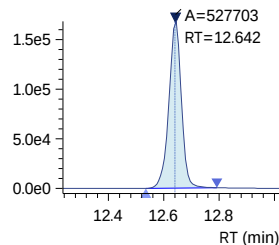
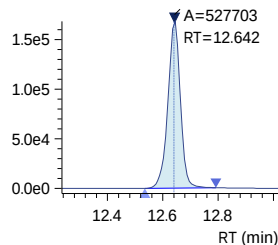
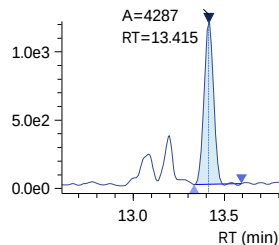
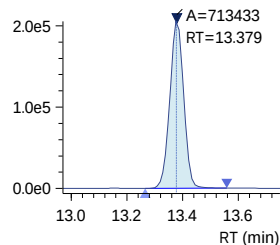
1.68e5

Q 815.00>770.05 (-)

1.68e5

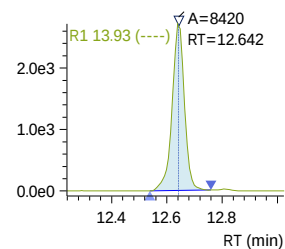
Q 813.00>768.95 (-)

1.93e4



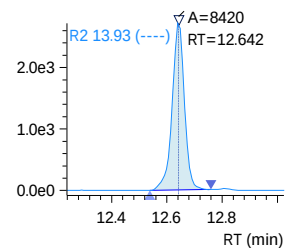
R1 813.00>218.95 (-)

2.72e3



R2 813.00>218.95 (-)

2.72e3





240118_008 (continued)

D3-MeFOSA
 Conc. 2.4679

D3-MeFOSA_IS
 Conc. 2.5000

MeFOSA
 Conc. 0.2633
 R#1 114.52 (149.05)
 R#2 114.52 (149.05)

D9-EtFOSE_IS
 Conc. 25.0000

D9-EtFOSE
 Conc. 24.6721

Q 515.00>219.00 (-)

1.69e4

ISTD 515.00>219.00 (-)

1.69e4

Q 511.90>219.00 (-)

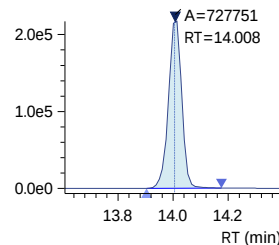
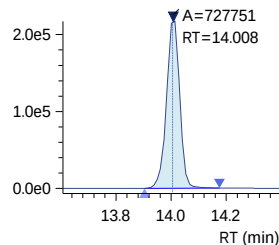
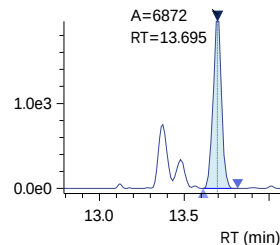
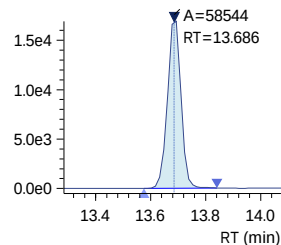
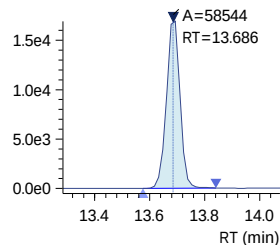
1.97e3

ISTD 639.20>58.90 (-)

2.17e5

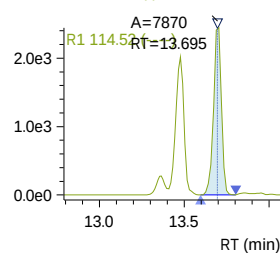
Q 639.20>58.90 (-)

2.17e5



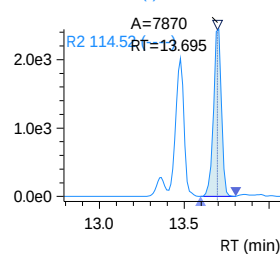
R1 511.90>169.00 (-)

2.44e3



R2 511.90>169.00 (-)

2.44e3





240118_008 (continued)

EtFOSE
Conc. 0.2612

D5-EtFOSAm
Conc. 2.5135

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. 0.1772
R#1 0.00 (154.69)
R#2 0.00 (154.69)

PFODA
Conc. 0.2425
R#1 24.09 (29.32)
R#2 24.09 (29.32)

Q 630.00>59.00 (-)

1.92e3

Q 531.10>219.00 (-)

2.46e4

ISTD 531.10>219.00 (-)

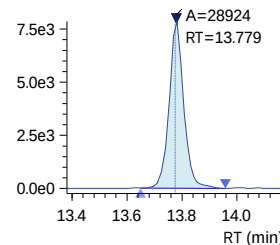
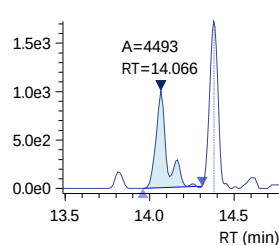
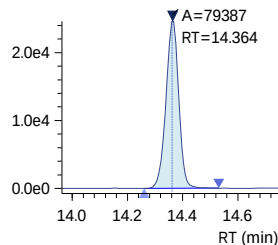
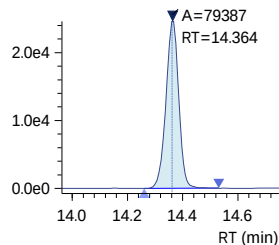
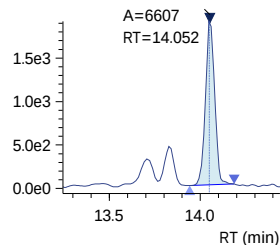
2.46e4

Q 526.00>219.00 (-)

1.73e3

Q 913.00>868.65 (-)

7.87e3

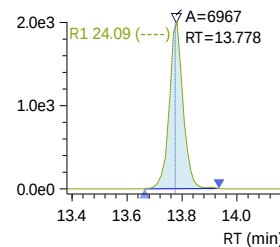
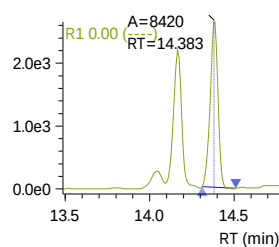


R1 526.00>169.00 (-)

2.66e3

R1 913.00>169.00 (-)

2.01e3

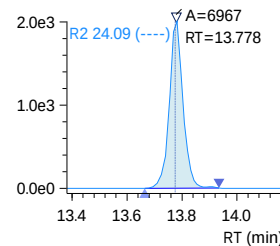
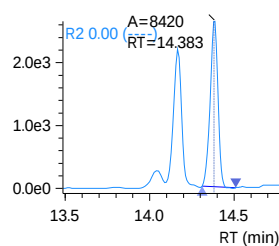


R2 526.00>169.00 (-)

2.66e3

R2 913.00>169.00 (-)

2.01e3





240118_009

Sample ID: 1633 ICAL 0.50PPB
Date Acquired: 1/18/2024 3:14:20 PM
Acquired by: System Administrator
Data File: 240118_009
Vial: 4 | Inj. Volume: 10.0000uL | Tray: 1

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	1388027	----	----	----	----	----	----	
13C4-PFBA_IS	216.80>171.90	----	1388027	----	----	----	----	----	----	
13C3-PFBA_IS	216.00>172.00	----	617199	----	----	----	----	----	----	
PFBA	212.80>169.05	----	57419	----	----	----	----	----	----	
PFMPA	229.00>84.90	----	45603	----	----	----	----	----	----	
3_3 FTCA	241.00>177.10	241.00>117.00	47512	65317	137.48	141.17	65317	137.48	141.17	
13C5-PFPeA	268.30>223.00	----	153759	----	----	----	----	----	----	
13C5-PFPeA_IS	268.30>223.00	----	153759	----	----	----	----	----	----	
PFPeA	263.00>219.00	----	92188	----	----	----	----	----	----	
PFMBA	279.00>84.95	----	65533	----	----	----	----	----	----	
13C2-4_2 FTS	329.10>80.90	----	169678	----	----	----	----	----	----	
13C2-4_2 FTS_IS	329.10>80.90	----	169678	----	----	----	----	----	----	
4_2 FTS	327.10>307.00	327.10>80.90	39193	10856	27.70	29.06	10856	27.70	29.06	
13C3-PFBS_IS	302.10>79.90	----	356850	----	----	----	----	----	----	
PFBS	298.70>79.90	298.70>98.80	72727	35074	48.23	46.72	35074	48.23	46.72	
13C3-PFBS	302.10>79.90	----	356850	----	----	----	----	----	----	
NFDHA	295.00>201.00	295.00>84.90	73337	26904	36.69	40.25	26904	36.69	40.25	
13C5-PFHxA	318.00>273.00	----	687616	----	----	----	----	----	----	
13C5-PFHxA_IS	318.00>273.00	----	687616	----	----	----	----	----	----	
13C2-PFHxA_IS	315.10>270.00	----	656444	----	----	----	----	----	----	
PFHxA	313.00>269.00	----	99630	----	----	----	----	----	----	
PFEESA	314.80>135.00	314.80>82.90	318712	18736	5.88	6.11	18736	5.88	6.11	
13C3-HFPO-DA	286.90>168.90	----	654919	----	----	----	----	----	----	
13C3-HFPO-DA_IS	286.90>168.90	----	654919	----	----	----	----	----	----	
HFPO-DA	284.90>168.90	284.90>184.90	32544	21937	67.41	65.61	21937	67.41	65.61	
5_3 FTCA	341.00>237.05	341.00>217.00	254250	414925	163.20	158.86	414925	163.20	158.86	
PFPeS	349.10>79.90	349.10>98.80	61708	33981	55.07	55.80	33981	55.07	55.80	
13C4-PFHpA	367.10>322.00	----	626586	----	----	----	----	----	----	
13C4-PFHpA_IS	367.10>322.00	----	626586	----	----	----	----	----	----	
PFHpA	363.10>319.00	363.10>169.00	128808	31060	24.11	21.50	31060	24.11	21.50	
DONA	376.90>250.90	376.90>84.80	215774	65410	30.31	29.66	65410	30.31	29.66	
13C2-6_2 FTS_IS	429.10>80.90	----	179759	----	----	----	----	----	----	
13C2-6_2 FTS	429.10>80.90	----	179759	----	----	----	----	----	----	
6_2 FTS	427.10>407.00	427.10>80.90	31384	14521	46.27	41.15	14521	46.27	41.15	
13C4-PFOA_IS	417.10>172.00	----	43612	----	----	----	----	----	----	
13C8-PFOA_IS	421.10>376.00	----	643488	----	----	----	----	----	----	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240118_009 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	643488	----	----	----	----	----	----	----
PFOA	413.00>369.00	413.00>169.00	79730	24432	30.64	31.89	24432	30.64	31.89	
13C3-PFHxS	402.10>79.90	----	272575	----	----	----	----	----	----	----
13C3-PFHxS_IS	402.10>79.90	----	272575	----	----	----	----	----	----	----
PFHxS	398.70>79.90	398.70>98.90	56162	32107	57.17	56.62	32107	57.17	56.62	
18O2-PFHxS_IS	403.00>83.90	----	251143	----	----	----	----	----	----	----
13C9-PFNA_IS	472.10>427.00	----	319396	----	----	----	----	----	----	----
13C9-PFNA	472.10>427.00	----	319396	----	----	----	----	----	----	----
13C5-PFNA_IS	468.00>423.00	----	323300	----	----	----	----	----	----	----
PFNA	463.00>419.00	463.00>219.00	93339	21228	22.74	23.17	21228	22.74	23.17	
PFHpS	449.00>79.90	449.00>98.80	43044	23013	53.47	56.96	23013	53.47	56.96	
7_3 FTCA	441.00>317.00	441.00>336.90	333337	380232	114.07	117.47	380232	114.07	117.47	
13C2-8_2-FTS	529.10>80.90	----	131115	----	----	----	----	----	----	----
13C2-8_2-FTS_IS	529.10>80.90	----	131115	----	----	----	----	----	----	----
8_2 FTS	527.10>506.95	527.10>80.80	25869	10893	42.11	49.59	10893	42.11	49.59	
13C6-PFDA_IS	519.10>474.10	----	238617	----	----	----	----	----	----	----
13C6-PFDA	519.10>474.10	----	238617	----	----	----	----	----	----	----
13C2-PFDA_IS	515.10>470.10	----	225855	----	----	----	----	----	----	----
PFDA	512.90>469.00	512.90>219.00	112231	18746	16.70	19.00	18746	16.70	19.00	
D3-NMeFOSAA_IS	573.20>419.00	----	249589	----	----	----	----	----	----	----
D3-NMeFOSAA	573.20>419.00	----	249589	----	----	----	----	----	----	----
13C8-PFOS_IS	507.10>98.90	----	121099	----	----	----	----	----	----	----
13C8-PFOS	507.10>98.90	----	121099	----	----	----	----	----	----	----
13C4-PFOS_IS	502.80>79.90	----	279876	----	----	----	----	----	----	----
PFOS	498.90>79.90	498.90>98.80	51913	27615	53.19	52.47	27615	53.19	52.47	
NMeFOSAA	570.10>419.00	570.10>483.00	33145	20374	61.47	55.15	20374	61.47	55.15	
D5-NEtFOSAA_IS	589.20>419.00	----	301439	----	----	----	----	----	----	----
D5-NEtFOSAA	589.20>419.00	----	301439	----	----	----	----	----	----	----
NEtFOSAA	584.20>419.10	584.20>526.00	17841	16091	90.20	81.95	16091	90.20	81.95	
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	226384	69268	30.60	32.76	69268	30.60	32.76	
PFUnDA	563.10>519.00	563.10>269.10	106205	13806	13.00	13.12	13806	13.00	13.12	
13C7-PFUnDA_IS	570.00>525.10	----	297301	----	----	----	----	----	----	----
13C7-PFUnDA	570.00>525.10	----	297301	----	----	----	----	----	----	----
PFNS	548.80>79.90	548.80>98.80	41760	26227	62.80	65.22	26227	62.80	65.22	
10_2 FTS	626.80>607.05	626.80>81.00	31611	10832	34.27	37.13	10832	34.27	37.13	
13C2-PFDOA_IS	615.10>570.00	----	326480	----	----	----	----	----	----	----
13C2-PFDOA	615.10>570.00	----	326480	----	----	----	----	----	----	----
PFDOA	613.10>569.00	613.10>319.00	90780	10093	11.12	11.29	10093	11.12	11.29	
PFDS	599.00>79.90	599.00>98.80	35775	21508	60.12	60.18	21508	60.12	60.18	
PFTrDA	663.00>619.00	663.00>168.90	102058	17501	17.15	17.64	17501	17.15	17.64	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240118_009 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	168194	59554	35.41	36.44	59554	35.41	36.44	
PFOSAm	498.10>77.90	----	93404	----	----	----	----	----	----	
13C8-PFOSAm	506.10>77.80	----	313170	----	----	----	----	----	----	
13C8-PFOSAm_IS	506.10>77.80	----	313170	----	----	----	----	----	----	
PFTDA	713.10>669.00	713.10>168.90	75486	17744	23.51	22.96	17744	23.51	22.96	
13C2-PFTDA	715.20>670.00	----	146161	----	----	----	----	----	----	
13C2-PFTDA_IS	715.20>670.00	----	146161	----	----	----	----	----	----	
PFDoS	699.10>79.90	699.10>98.80	21129	14265	67.51	67.40	14265	67.51	67.40	
D7-MeFOSE_IS	623.20>58.90	----	761016	----	----	----	----	----	----	
D7-MeFOSE	623.20>58.90	----	761016	----	----	----	----	----	----	
MeFOSE	616.10>59.00	----	12425	----	----	----	----	----	----	
13C2-PFHxDA_IS	815.00>770.05	----	546187	----	----	----	----	----	----	
13C2-PFHxDA	815.00>770.05	----	546187	----	----	----	----	----	----	
PFHxDA	813.00>768.95	813.00>218.95	114442	15063	13.16	13.90	15063	13.16	13.90	
D3-MeFOSA	515.00>219.00	----	58649	----	----	----	----	----	----	
D3-MeFOSA_IS	515.00>219.00	----	58649	----	----	----	----	----	----	
MeFOSA	511.90>219.00	511.90>169.00	21243	31360	147.62	140.79	31360	147.62	140.79	
D9-EtFOSE_IS	639.20>58.90	----	781729	----	----	----	----	----	----	
D9-EtFOSE	639.20>58.90	----	781729	----	----	----	----	----	----	
EtFOSE	630.00>59.00	----	19620	----	----	----	----	----	----	
D5-EtFOSAm	531.10>219.00	----	82004	----	----	----	----	----	----	
D5-EtFOSAm_IS	531.10>219.00	----	82004	----	----	----	----	----	----	
EtFOSAm	526.00>219.00	526.00>169.00	23101	31853	137.88	163.90	31853	137.88	163.90	
PFODA	913.00>868.65	913.00>169.00	55160	13222	23.97	27.03	13222	23.97	27.03	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
 IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240118_009

Sample ID: 1633 ICAL 0.50PPB
Date Acquired: 1/18/2024 3:14:20 PM
Acquired by: System Administrator
Data File: 240118_009
Vial: 4 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Std. Conc.	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.416	0.002	0.000	1388027	617199	13C3-PFBA_IS	10.0000	10.0614	ng/mL	
13C4-PFBA_IS	Auto	1.416	0.002	----	1388027	1388027	----	10.0000	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.416	0.001	----	617199	617199	----	5.0000	5.0000	ng/mL	
PFBA	Auto	1.423	0.007	0.007	57419	1388027	13C4-PFBA_IS	0.5000	0.4815	ng/mL	
PFMPA	Auto	2.434	0.002	-1.060	45603	153759	13C5-PFPeA_IS	0.5000	0.4589	ng/mL	
3_3 FTCA	Auto	3.007	0.003	-0.487	47512	153759	13C5-PFPeA_IS	15.0000	13.9348	ng/mL	
13C5-PFPeA	Auto	3.494	0.002	-1.486	153759	656444	13C2-PFHxA_IS	5.0000	5.1891	ng/mL	
13C5-PFPeA_IS	Auto	3.494	0.002	----	153759	153759	----	5.0000	5.0000	ng/mL	
PFPeA	Auto	3.497	0.002	0.003	92188	153759	13C5-PFPeA_IS	0.5000	0.4629	ng/mL	
PFMBA	Auto	4.027	0.002	0.533	65533	153759	13C5-PFPeA_IS	0.5000	0.4655	ng/mL	
13C2-4_2 FTS	Auto	4.662	0.001	-2.426	169678	251143	18O2-PFHxS_IS	5.0000	4.9096	ng/mL	
13C2-4_2 FTS_IS	Auto	4.662	0.001	----	169678	169678	----	5.0000	5.0000	ng/mL	
4_2 FTS	Auto	4.662	0.000	0.000	39193	169678	13C2-4_2 FTS_IS	0.4690	0.4696	ng/mL	
13C3-PFBS_IS	Auto	4.649	0.002	----	356850	356850	----	2.5000	2.5000	ng/mL	
PFBS	Auto	4.649	0.001	0.000	72727	356850	13C3-PFBS_IS	0.4440	0.3982	ng/mL	
13C3-PFBS	Auto	4.649	0.002	-2.439	356850	251143	18O2-PFHxS_IS	2.5000	2.5038	ng/mL	
NFDHA	Auto	4.837	0.002	-0.143	73337	687616	13C5-PFHxA_IS	0.5000	0.4807	ng/mL	
13C5-PFHxA	Auto	4.980	0.002	0.000	687616	656444	13C2-PFHxA_IS	2.5000	2.4854	ng/mL	
13C5-PFHxA_IS	Auto	4.980	0.002	----	687616	687616	----	2.5000	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	4.980	0.001	----	656444	656444	----	2.5000	2.5000	ng/mL	
PFHxA	M	4.982	0.002	0.002	99630	687616	13C5-PFHxA_IS	0.5000	0.4269	ng/mL	
PFEESA	Auto	5.324	0.002	0.344	318712	687616	13C5-PFHxA_IS	0.4450	0.4138	ng/mL	
13C3-HFPO-DA	Auto	5.454	0.002	0.474	654919	656444	13C2-PFHxA_IS	10.0000	10.1917	ng/mL	
13C3-HFPO-DA_IS	Auto	5.454	0.002	----	654919	654919	----	10.0000	10.0000	ng/mL	
HFPO-DA	Auto	5.456	0.003	0.002	32544	654919	13C3-HFPO-DA_IS	0.5000	0.4499	ng/mL	
5_3 FTCA	Auto	5.908	0.002	0.928	254250	687616	13C5-PFHxA_IS	15.0000	14.2950	ng/mL	
PFPeS	Auto	6.020	0.002	-1.068	61708	272575	13C3-PFHxS_IS	0.4710	0.4311	ng/mL	
13C4-PFHpA	Auto	6.156	0.002	1.176	626586	656444	13C2-PFHxA_IS	2.5000	2.5019	ng/mL	
13C4-PFHpA_IS	Auto	6.156	0.002	----	626586	626586	----	2.5000	2.5000	ng/mL	
PFHpA	Auto	6.157	0.002	0.001	128808	626586	13C4-PFHpA_IS	0.5000	0.4609	ng/mL	
DONA	Auto	6.522	0.002	1.068	215774	654919	13C3-HFPO-DA_IS	0.4730	0.4251	ng/mL	
13C2-6_2 FTS_IS	Auto	6.794	0.001	----	179759	179759	----	5.0000	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.794	0.001	-0.294	179759	251143	18O2-PFHxS_IS	5.0000	5.4993	ng/mL	
6_2 FTS	Auto	6.794	0.002	0.000	31384	179759	13C2-6_2 FTS_IS	0.4760	0.3834	ng/mL	
13C4-PFOA_IS	Auto	7.111	0.004	----	43612	43612	----	2.5000	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.110	0.003	----	643488	643488	----	2.5000	2.5000	ng/mL	
13C8-PFOA	Auto	7.110	0.003	-0.001	643488	43612	13C4-PFOA_IS	2.5000	2.6398	ng/mL	
PFOA	Auto	7.112	0.002	0.002	79730	643488	13C8-PFOA_IS	0.5000	0.4363	ng/mL	
13C3-PFHxS	Auto	7.088	0.002	0.000	272575	251143	18O2-PFHxS_IS	2.5000	2.5286	ng/mL	
13C3-PFHxS_IS	Auto	7.088	0.002	----	272575	272575	----	2.5000	2.5000	ng/mL	
PFHxS	M	7.088	0.004	0.000	56162	272575	13C3-PFHxS_IS	0.4570	0.4101	ng/mL	
18O2-PFHxS_IS	Auto	7.088	0.002	----	251143	251143	----	2.5000	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.958	0.002	----	319396	319396	----	1.2500	1.2500	ng/mL	
13C9-PFNA	Auto	7.958	0.002	0.000	319396	323300	13C5-PFNA_IS	1.2500	1.2617	ng/mL	
13C5-PFNA_IS	Auto	7.959	0.002	----	323300	323300	----	1.2500	1.2500	ng/mL	
PFNA	Auto	7.959	0.002	0.001	93339	319396	13C9-PFNA_IS	0.5000	0.4826	ng/mL	
PFHpS	Auto	8.008	0.004	-0.814	43044	121099	13C8-PFOS_IS	0.4770	0.4554	ng/mL	
7_3 FTCA	Auto	7.957	0.003	2.977	333337	687616	13C5-PFHxA_IS	15.0000	14.0388	ng/mL	
13C2-8_2-FTS	Auto	8.412	0.003	1.324	131115	251143	18O2-PFHxS_IS	5.0000	4.8831	ng/mL	
13C2-8_2-FTS_IS	Auto	8.412	0.003	----	131115	131115	----	5.0000	5.0000	ng/mL	
8_2 FTS	Auto	8.413	0.003	0.001	25869	131115	13C2-8_2-FTS_IS	0.4800	0.4592	ng/mL	
13C6-PFDA_IS	Auto	8.723	0.003	----	238617	238617	----	1.2500	1.2500	ng/mL	
13C6-PFDA	Auto	8.723	0.003	-0.001	238617	225855	13C2-PFDA_IS	1.2500	1.3132	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_009 (continued)

(Table continued from previous page)

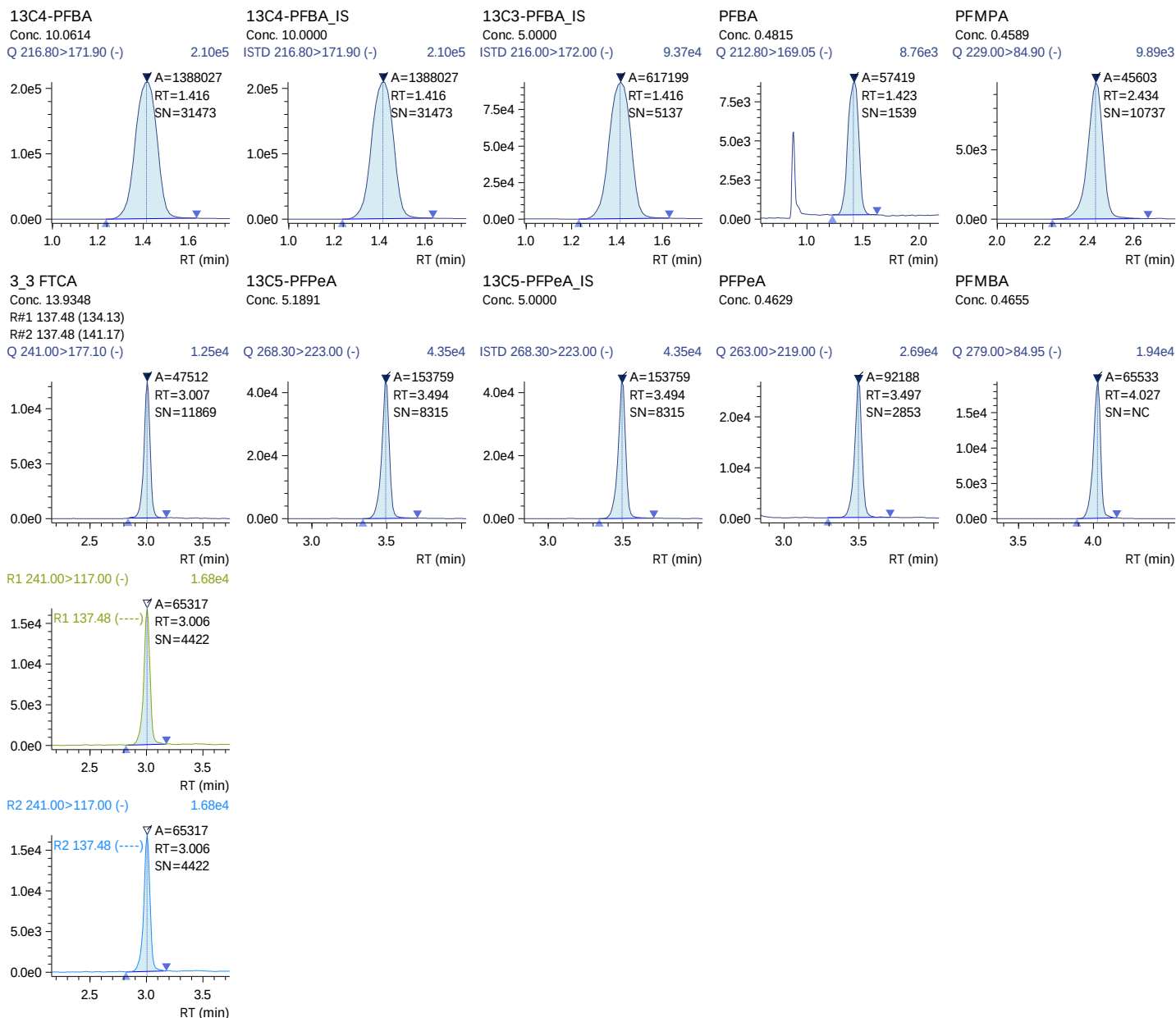
Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Std. Conc.	Conc.	Unit	Flag ID
13C2-PFDA_IS	Auto	8.724	0.003	----	225855	225855	----	1.2500	1.2500	ng/mL	
PFDA	Auto	8.725	0.004	0.002	112231	238617	13C6-PFDA_IS	0.5000	0.4680	ng/mL	
D3-NMeFOSAA_IS	Auto	8.858	0.003	----	249589	249589	----	5.0000	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.858	0.003	0.035	249589	279876	13C4-PFOS_IS	5.0000	5.1382	ng/mL	
13C8-PFOS_IS	Auto	8.822	0.002	----	121099	121099	----	2.5000	2.5000	ng/mL	
13C8-PFOS	Auto	8.822	0.002	-0.001	121099	279876	13C4-PFOS_IS	2.5000	2.5945	ng/mL	
13C4-PFOS_IS	Auto	8.823	0.003	----	279876	279876	----	2.5000	2.5000	ng/mL	
PFOS	M	8.824	0.002	0.002	51913	121099	13C8-PFOS_IS	0.4640	0.4122	ng/mL	
NMeFOSAA	M	8.863	0.002	0.005	33145	249589	D3-NMeFOSAA_IS	0.5000	0.4894	ng/mL	
D5-NetFOSAA_IS	Auto	9.188	0.002	----	301439	301439	----	5.0000	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.188	0.002	0.365	301439	279876	13C4-PFOS_IS	5.0000	5.1871	ng/mL	
NetFOSAA	M	9.202	0.007	0.014	17841	301439	D5-NetFOSAA_IS	0.5000	0.4431	ng/mL	
9-CI-PF3ONS	Auto	9.387	0.003	3.933	226384	654919	13C3-HFPO-DA_IS	0.4670	0.4193	ng/mL	
PFUnDA	Auto	9.448	0.001	0.001	106205	297301	13C7-PFUnDA_IS	0.5000	0.4637	ng/mL	
13C7-PFUnDA_IS	Auto	9.447	0.002	----	297301	297301	----	1.2500	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.447	0.002	0.723	297301	225855	13C2-PFDA_IS	1.2500	1.3716	ng/mL	
PFNS	Auto	9.586	0.002	0.764	41760	121099	13C8-PFOS_IS	0.4810	0.4539	ng/mL	
10_2_FTS	Auto	9.821	0.002	1.409	31611	131115	13C2-8_2-FTS_IS	0.4820	0.4611	ng/mL	
13C2-PFDOA_IS	Auto	10.136	0.003	----	326480	326480	----	1.2500	1.2500	ng/mL	
13C2-PFDOA	Auto	10.136	0.003	1.412	326480	225855	13C2-PFDA_IS	1.2500	1.3111	ng/mL	
PFDOA	Auto	10.137	0.003	0.001	90780	326480	13C2-PFDOA_IS	0.5000	0.4615	ng/mL	
PFDS	Auto	10.299	0.003	1.477	35775	121099	13C8-PFOS_IS	0.4830	0.4411	ng/mL	
PFTDA	Auto	10.794	0.002	-0.633	102058	146161	13C2-PFTDA_IS	0.5000	0.4640	ng/mL	
11-CI-PF3OUdS	Auto	10.809	0.003	5.355	168194	654919	13C3-HFPO-DA_IS	0.4720	0.4460	ng/mL	
PFOSAm	M	11.165	0.001	-0.001	93404	313170	13C8-PFOSAm_IS	1.0000	0.9049	ng/mL	
13C8-PFOSAm	Auto	11.166	0.001	2.343	313170	279876	13C4-PFOS_IS	2.5000	2.6358	ng/mL	
13C8-PFOSAm_IS	Auto	11.166	0.001	----	313170	313170	----	2.5000	2.5000	ng/mL	
PFTDA	Auto	11.429	0.004	0.002	75486	146161	13C2-PFTDA_IS	0.5000	0.4528	ng/mL	
13C2-PFTDA	Auto	11.427	0.003	2.703	146161	225855	13C2-PFDA_IS	1.2500	1.3595	ng/mL	
13C2-PFTDA_IS	Auto	11.427	0.003	----	146161	146161	----	1.2500	1.2500	ng/mL	
PFDoS	Auto	11.625	0.003	2.803	21129	121099	13C8-PFOS_IS	0.4850	0.4351	ng/mL	
D7-MeFOSE_IS	Auto	13.380	0.003	----	761016	761016	----	25.0000	25.0000	ng/mL	
D7-MeFOSE	Auto	13.380	0.003	4.557	761016	279876	13C4-PFOS_IS	25.0000	25.9796	ng/mL	
MeFOSE	M	13.418	0.005	0.038	12425	761016	D7-MeFOSE_IS	0.5000	0.4446	ng/mL	
13C2-PFHXA_IS	Auto	12.642	0.001	----	546187	546187	----	2.5000	2.5000	ng/mL	
13C2-PFHXA	Auto	12.642	0.001	3.918	546187	225855	13C2-PFDA_IS	2.5000	2.6034	ng/mL	
PFHXA	Auto	12.643	0.001	0.001	114442	546187	13C2-PFHXA_IS	0.5000	0.4831	ng/mL	
D3-MeFOSA	Auto	13.687	0.002	4.864	58649	279876	13C4-PFOS_IS	2.5000	2.4512	ng/mL	
D3-MeFOSA_IS	Auto	13.687	0.002	----	58649	58649	----	2.5000	2.5000	ng/mL	
MeFOSA	M	13.696	0.002	0.009	21243	58649	D3-MeFOSA_IS	0.5000	0.5025	ng/mL	
D9-EtFOSE_IS	Auto	14.008	0.002	----	781729	781729	----	25.0000	25.0000	ng/mL	
D9-EtFOSE	Auto	14.008	0.002	5.185	781729	279876	13C4-PFOS_IS	25.0000	26.2754	ng/mL	
EtFOSE	M	14.051	0.003	0.043	19620	781729	D9-EtFOSE_IS	0.5000	0.4770	ng/mL	
D5-EtFOSAm	Auto	14.364	0.002	5.541	82004	279876	13C4-PFOS_IS	2.5000	2.5742	ng/mL	
D5-EtFOSAm_IS	Auto	14.364	0.002	----	82004	82004	----	2.5000	2.5000	ng/mL	
EtFOSAm	M	14.383	0.003	0.019	23101	82004	D5-EtFOSAm_IS	0.5000	0.4839	ng/mL	
PFODA	Auto	13.780	0.005	1.138	55160	546187	13C2-PFHXA_IS	0.5000	0.4466	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_009 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_009 (continued)

13C2-4_2 FTS
Conc. 4.9096

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. 0.4696
R#1 27.70 (34.14)
R#2 27.70 (29.06)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 0.3982
R#1 48.23 (47.53)
R#2 48.23 (46.72)

Q 329.10>80.90 (-)

5.19e4

ISTD 329.10>80.90 (-)

5.19e4

Q 327.10>307.00 (-)

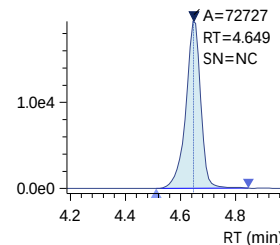
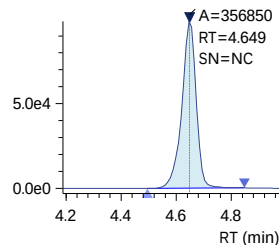
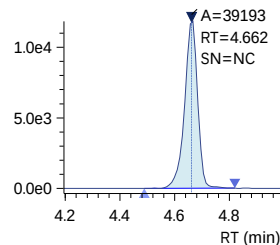
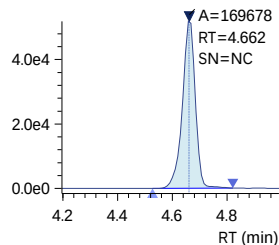
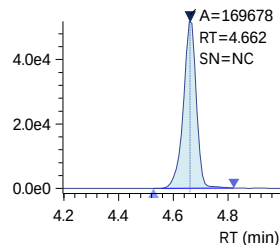
1.18e4

ISTD 302.10>79.90 (-)

9.86e4

Q 298.70>79.90 (-)

1.94e4

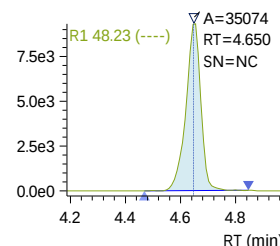
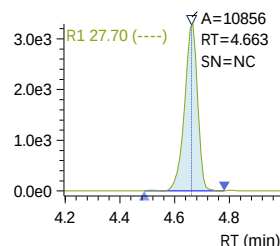


R1 327.10>80.90 (-)

3.30e3

R1 298.70>98.80 (-)

9.32e3

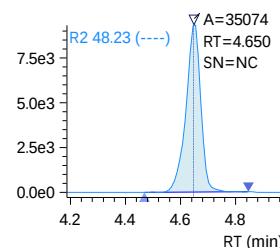
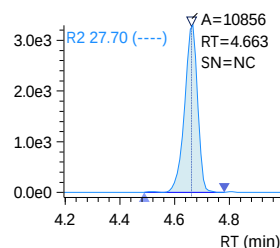


R2 327.10>80.90 (-)

3.30e3

R2 298.70>98.80 (-)

9.32e3





240118_009 (continued)

13C3-PFBS
Conc. 2.5038

NFDHA
Conc. 0.4807
R#1 36.69 (37.88)
R#2 36.69 (40.25)

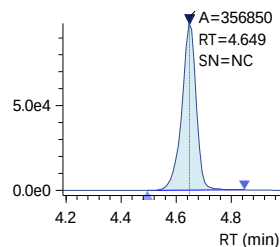
13C5-PFHxA
Conc. 2.4854

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

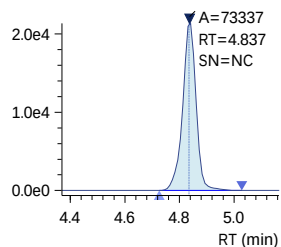
Q 302.10>79.90 (-)

9.86e4



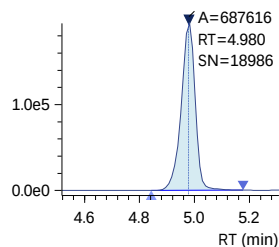
Q 295.00>201.00 (-)

2.14e4



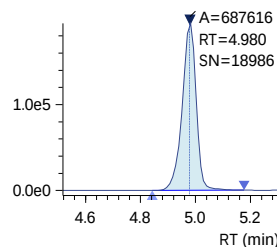
Q 318.00>273.00 (-)

1.95e5



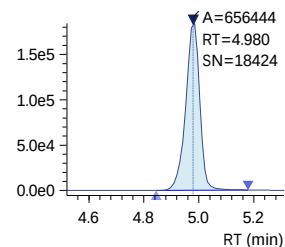
ISTD 318.00>273.00 (-)

1.95e5



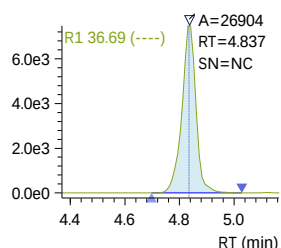
ISTD 315.10>270.00 (-)

1.84e5



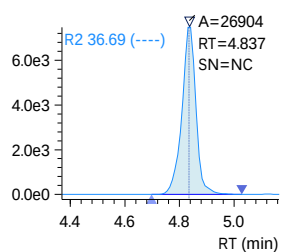
R1 295.00>84.90 (-)

7.47e3



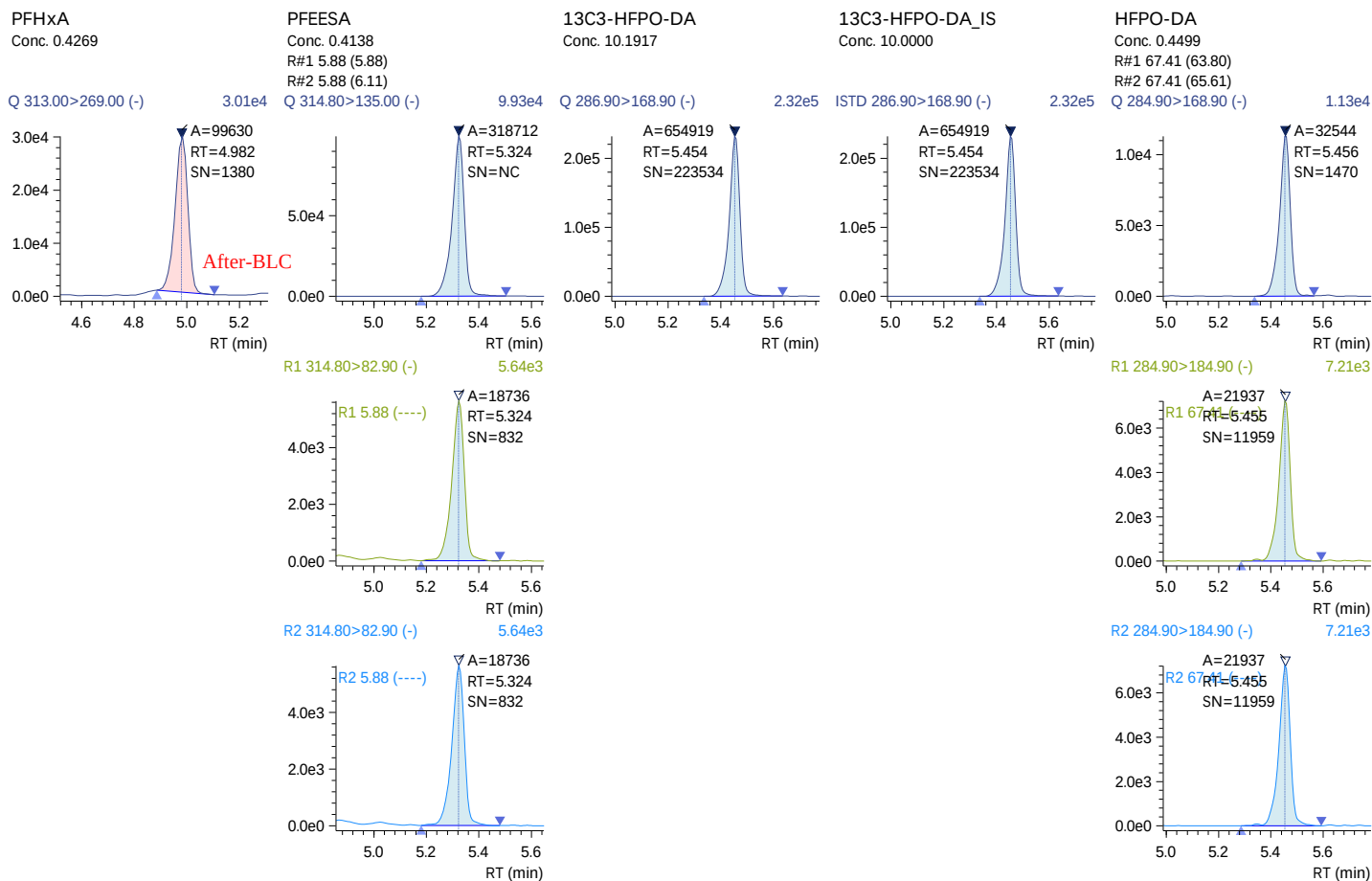
R2 295.00>84.90 (-)

7.47e3





240118_009 (continued)

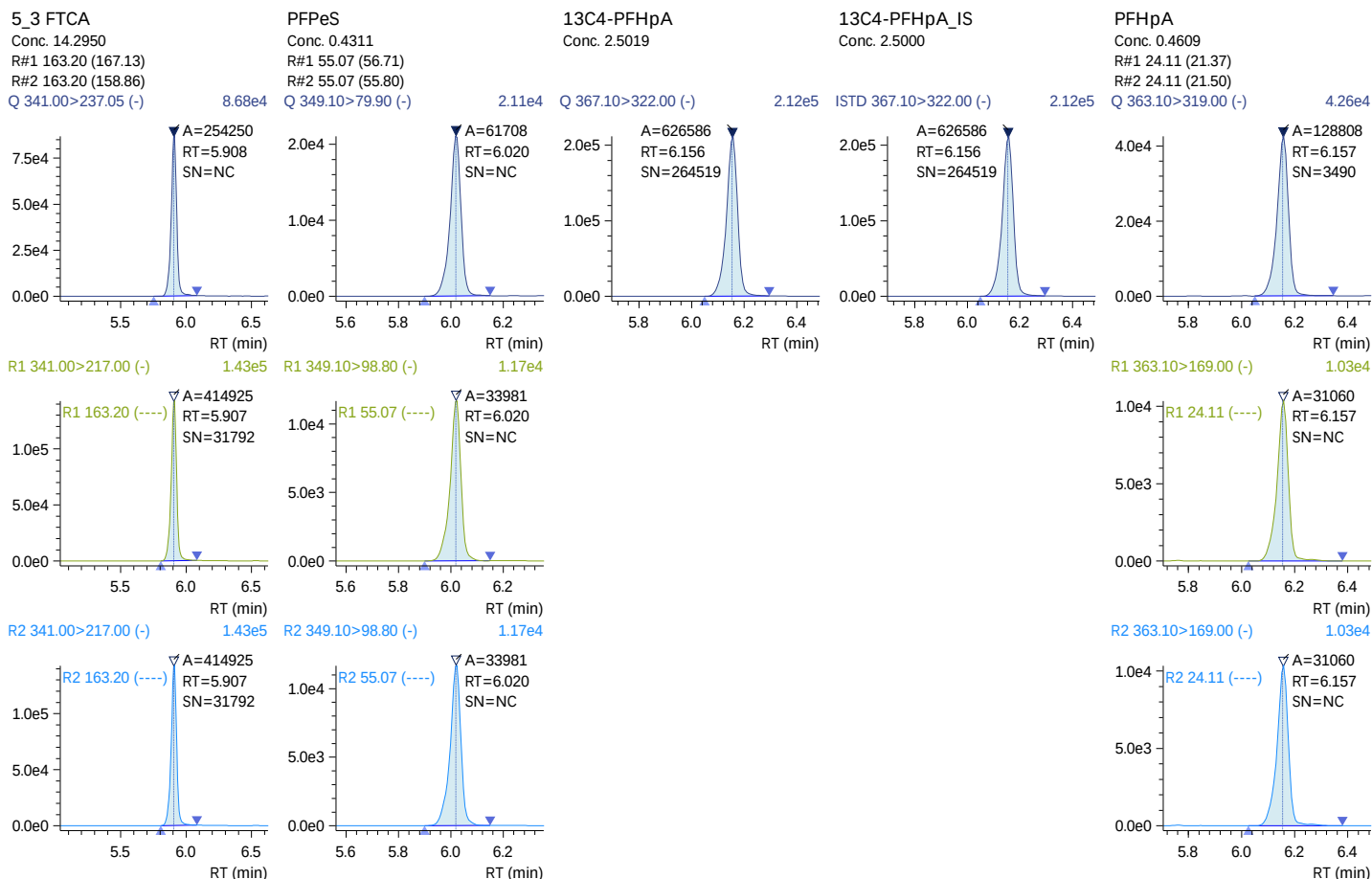


J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.damlp

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_009 (continued)

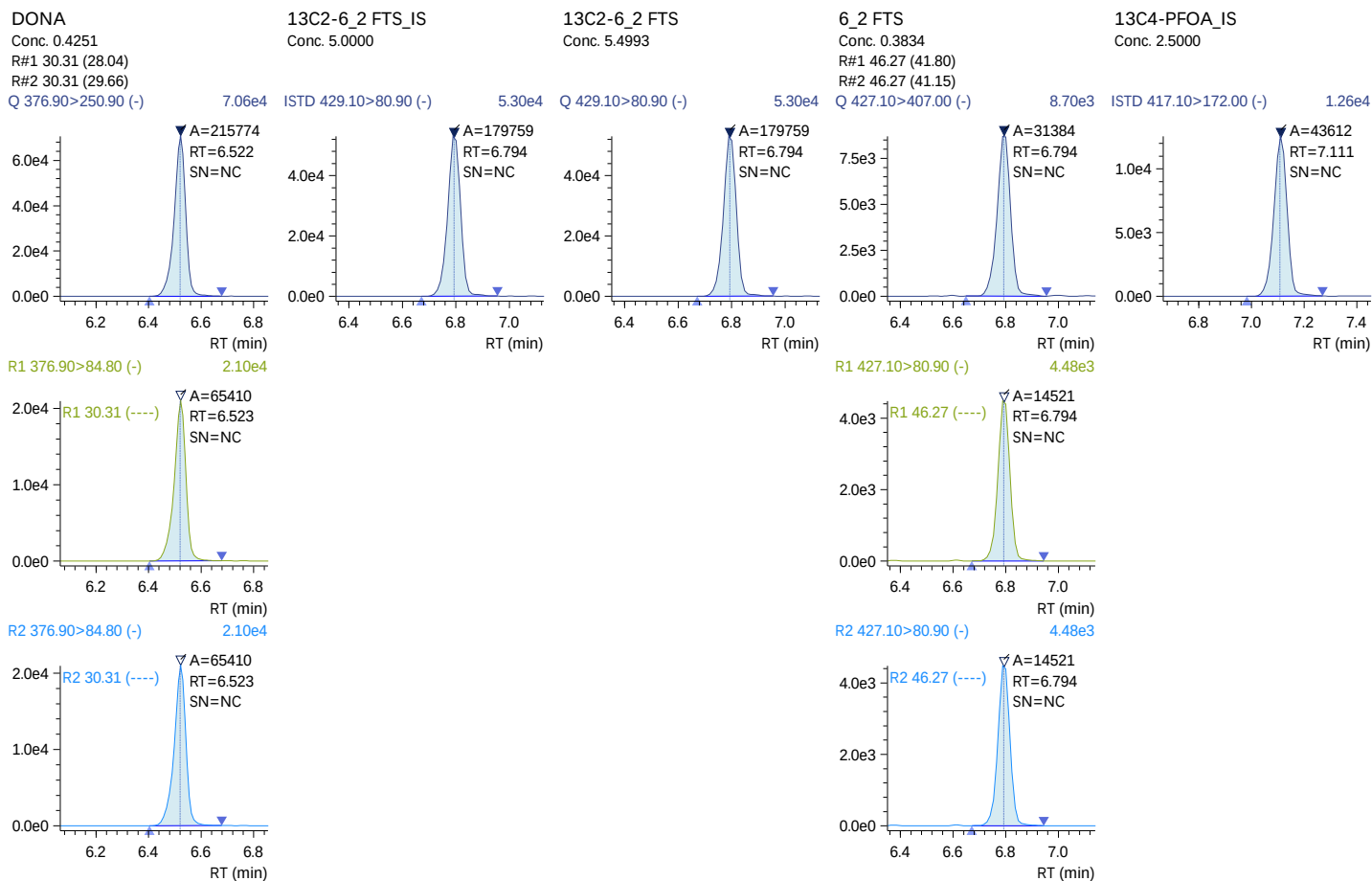


J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_009 (continued)



J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_009 (continued)

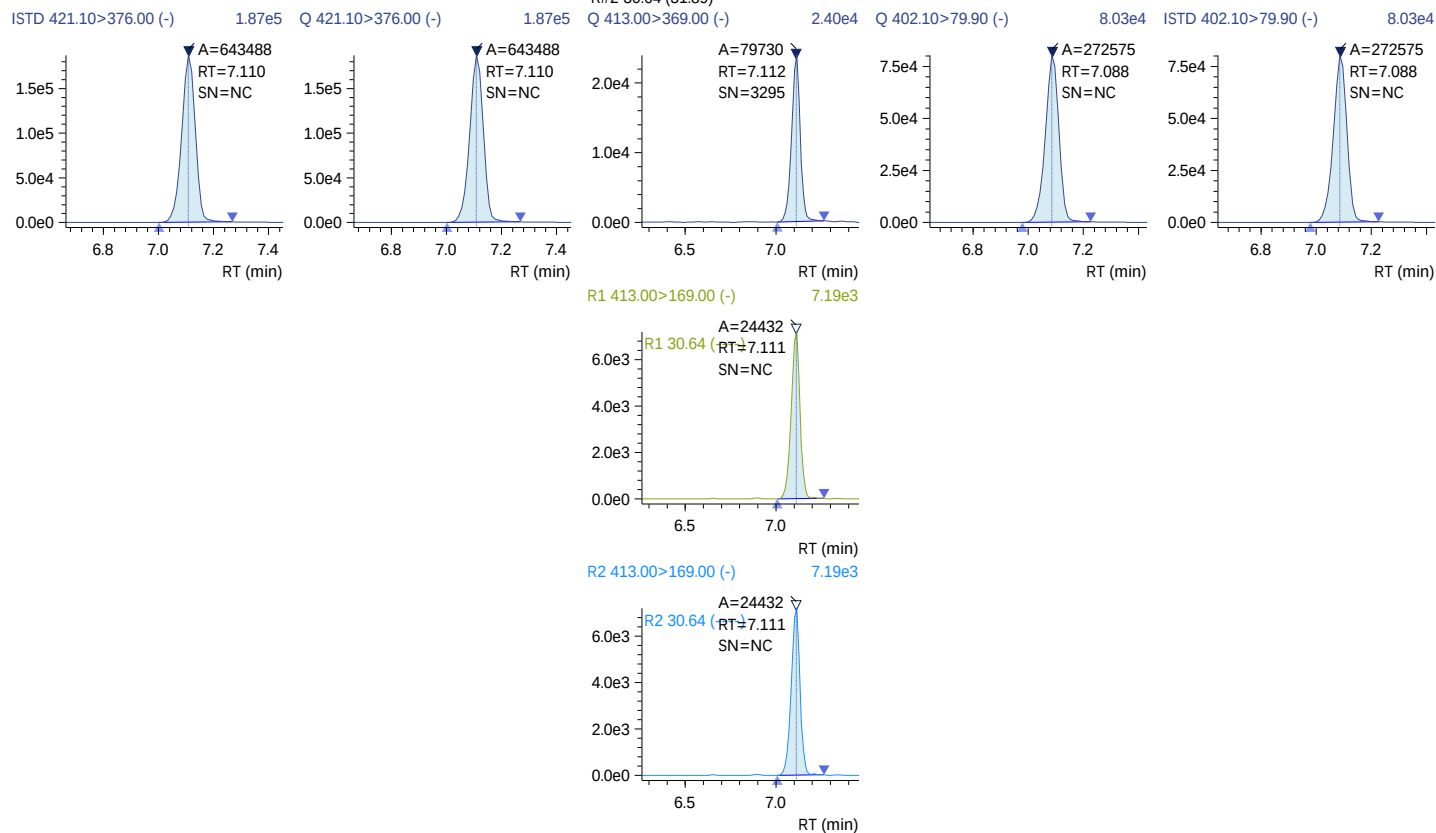
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.6398

PFOA
Conc. 0.4363
R#1 30.64 (29.05)
R#2 30.64 (31.89)

13C3-PFHxS
Conc. 2.5286

13C3-PFHxS_IS
Conc. 2.5000

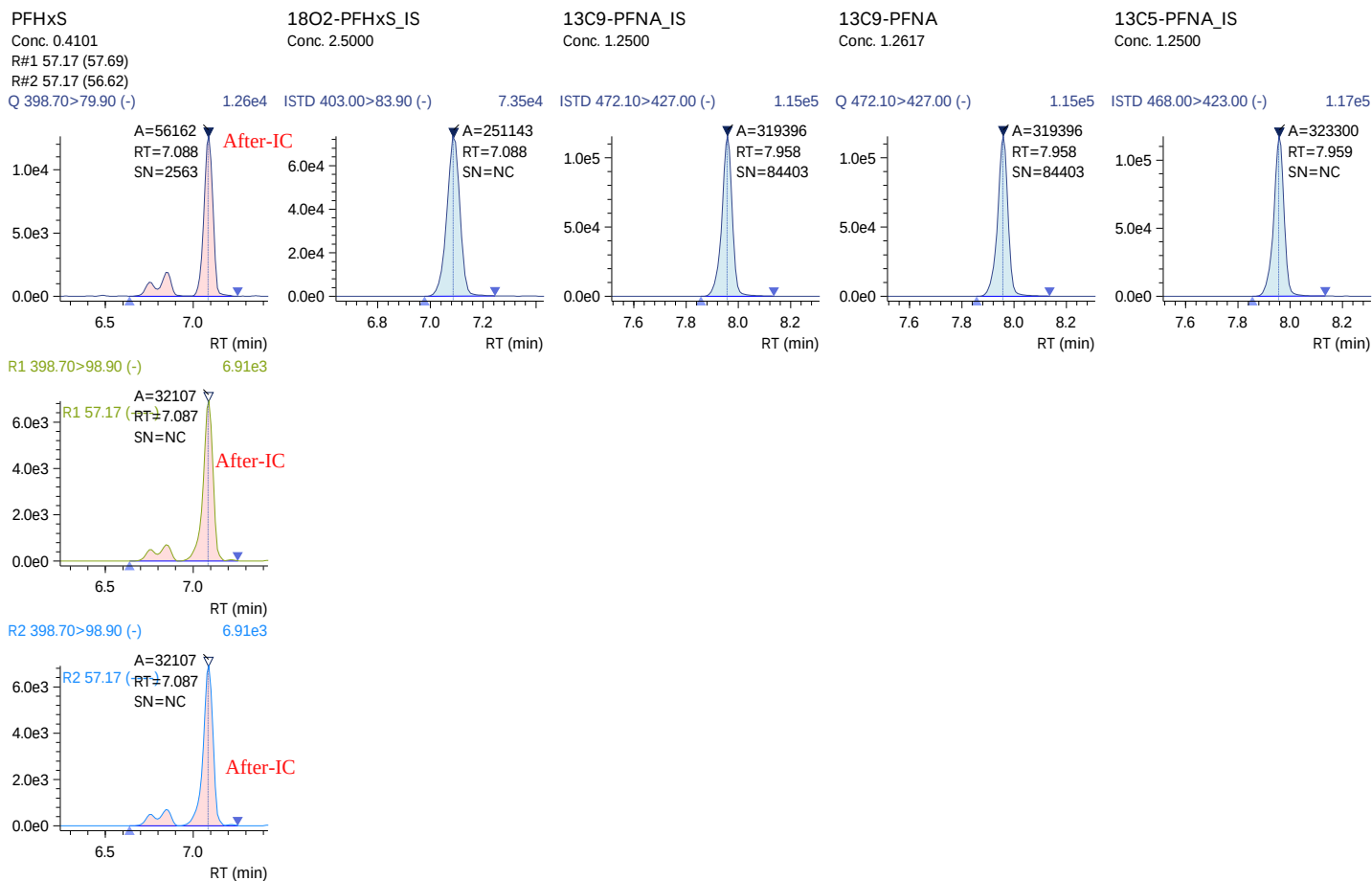


J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_009 (continued)

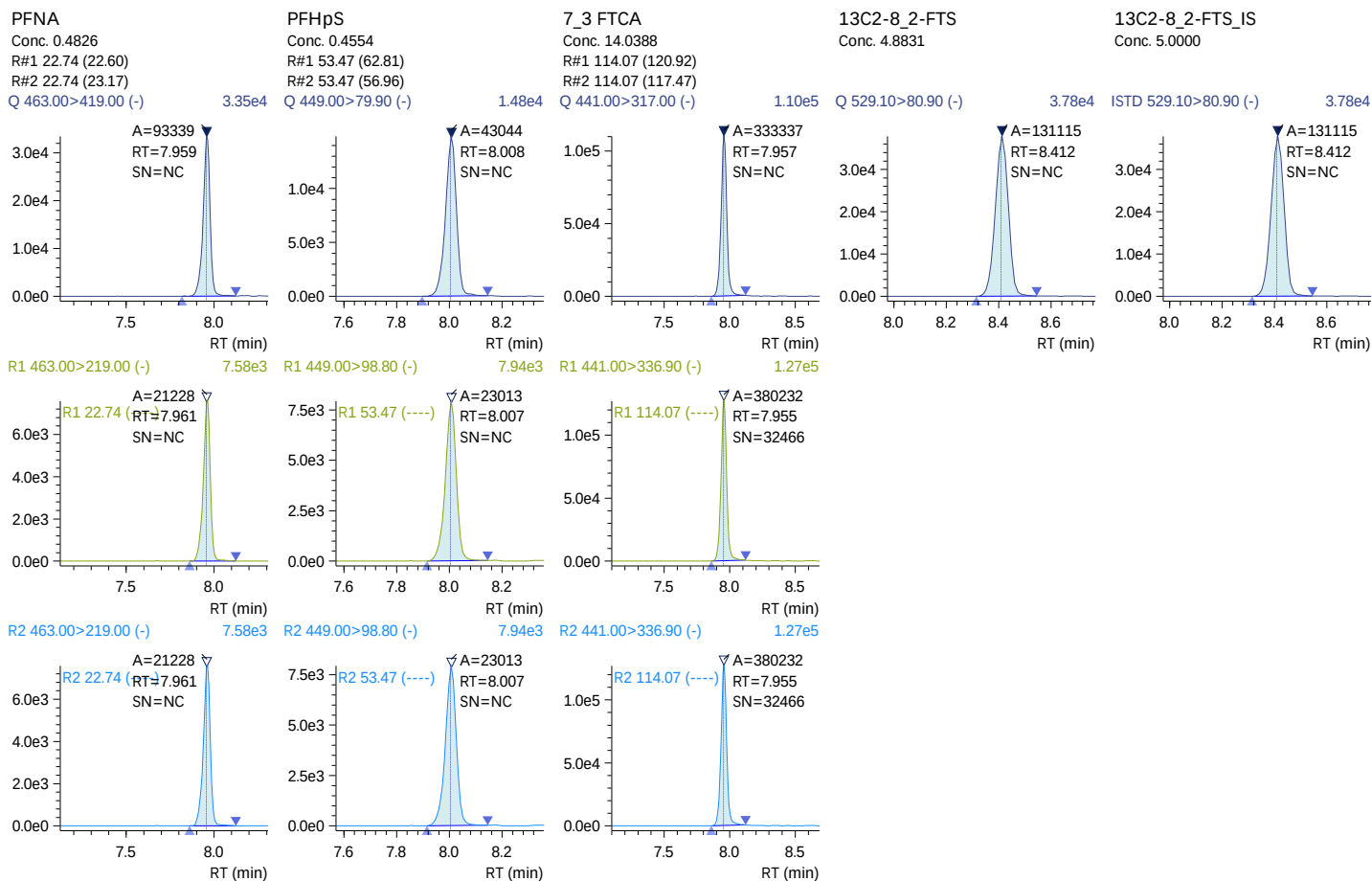


J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_009 (continued)

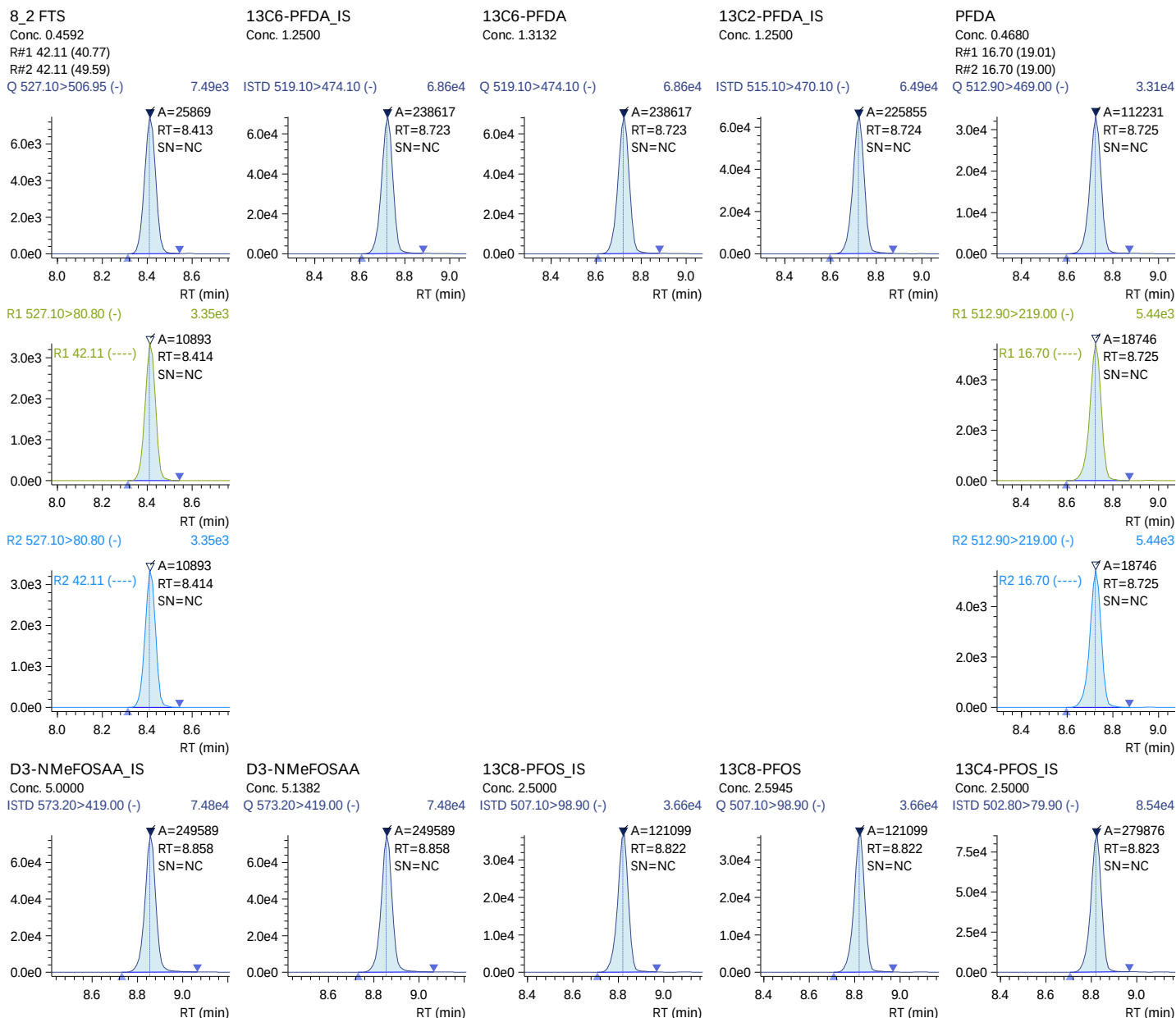


J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.damlp

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_009 (continued)

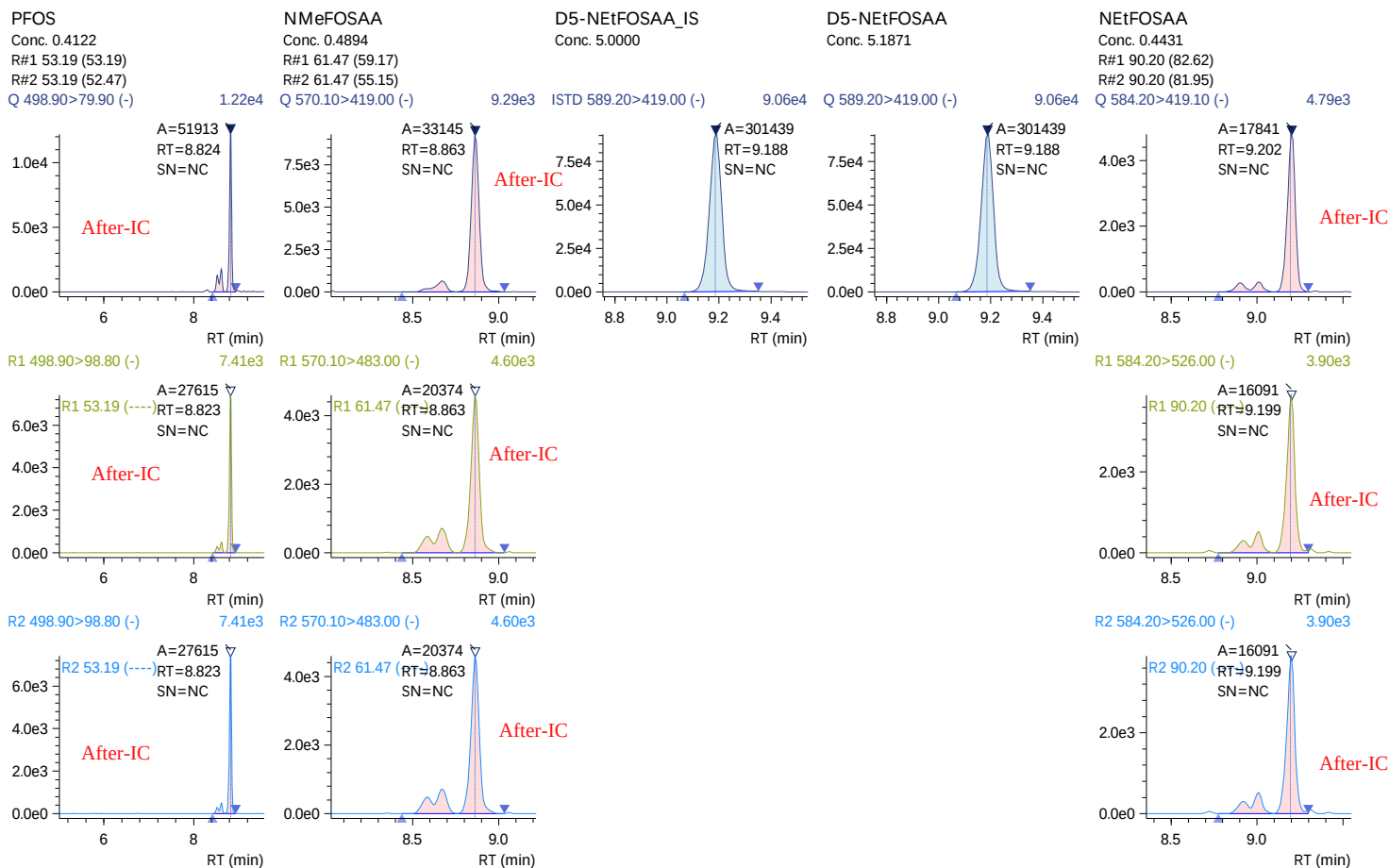


J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_009 (continued)



J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

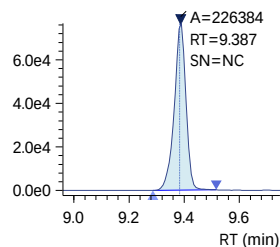
SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



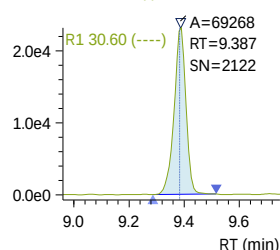
240118_009 (continued)

9-Cl-PF3ONS

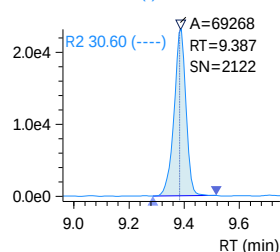
Conc. 0.4193
R#1 30.60 (31.76)
R#2 30.60 (32.76)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-) 2.32e4

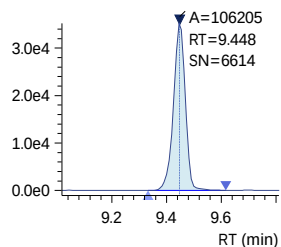


R2 532.80>353.00 (-) 2.32e4

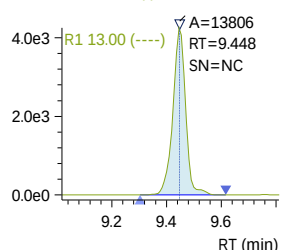


PFUnDA

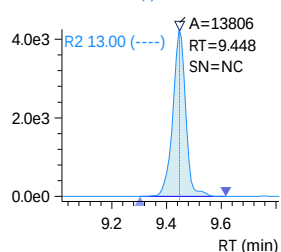
Conc. 0.4637
R#1 13.00 (12.31)
R#2 13.00 (13.12)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-) 4.25e3

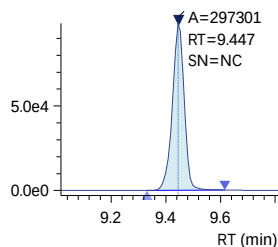


R2 563.10>269.10 (-) 4.25e3



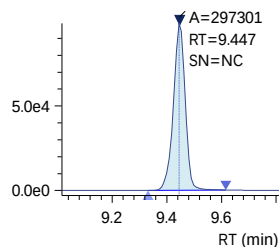
13C7-PFUnDA_IS

Conc. 1.2500
ISTD 570.00>525.10 (-)



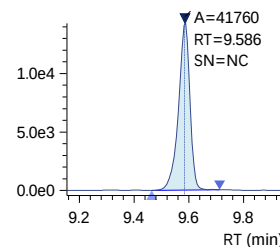
13C7-PFUnDA

Conc. 1.3716
Q 570.00>525.10 (-)

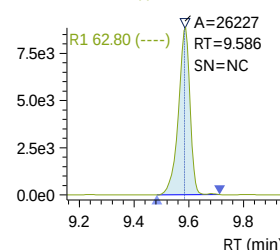


PFNS

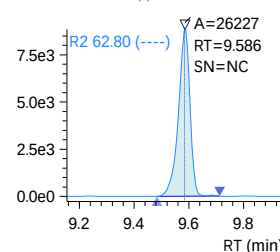
Conc. 0.4539
R#1 62.80 (63.31)
R#2 62.80 (65.22)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-) 8.85e3

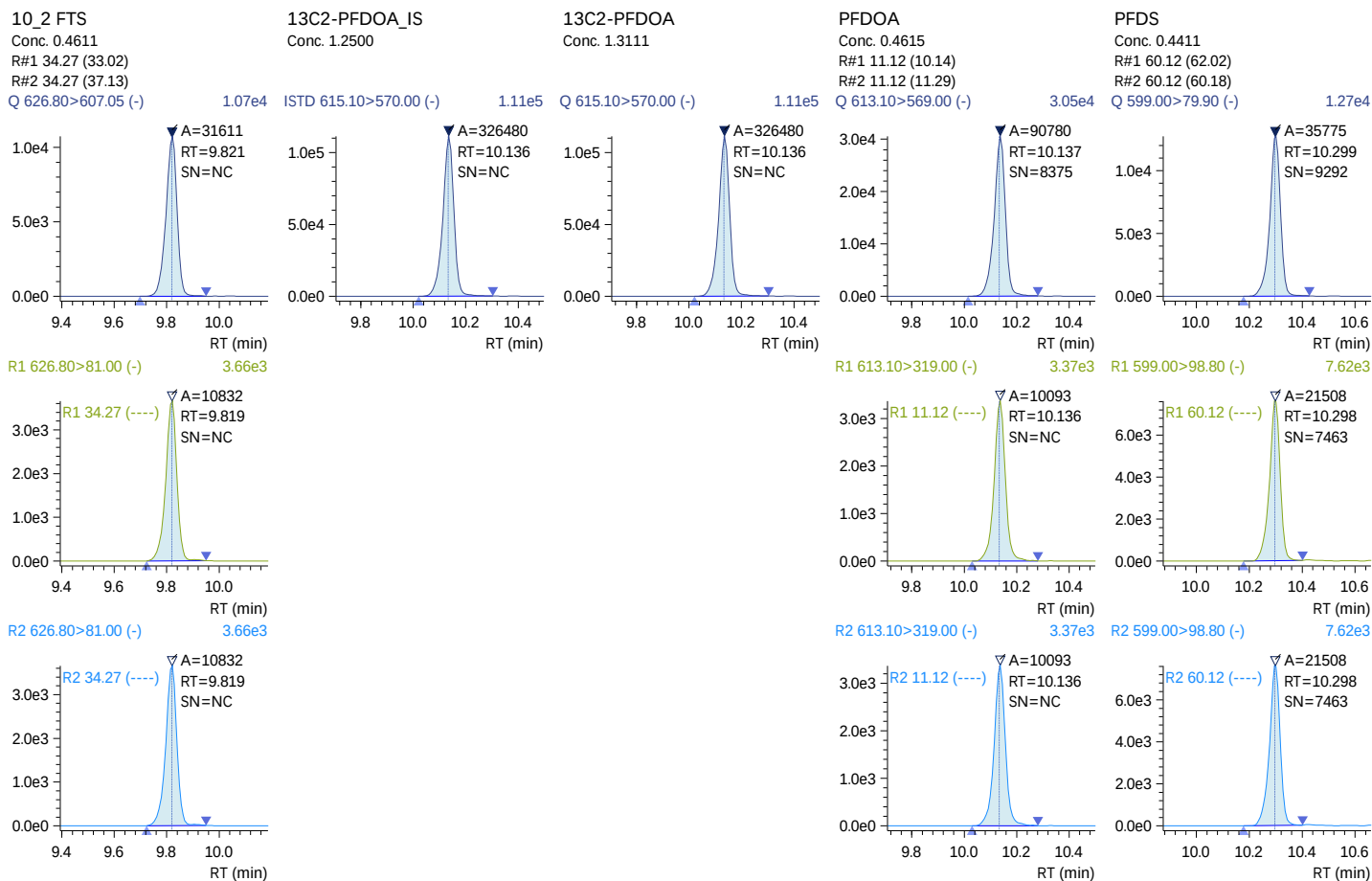


R2 548.80>98.80 (-) 8.85e3





240118_009 (continued)

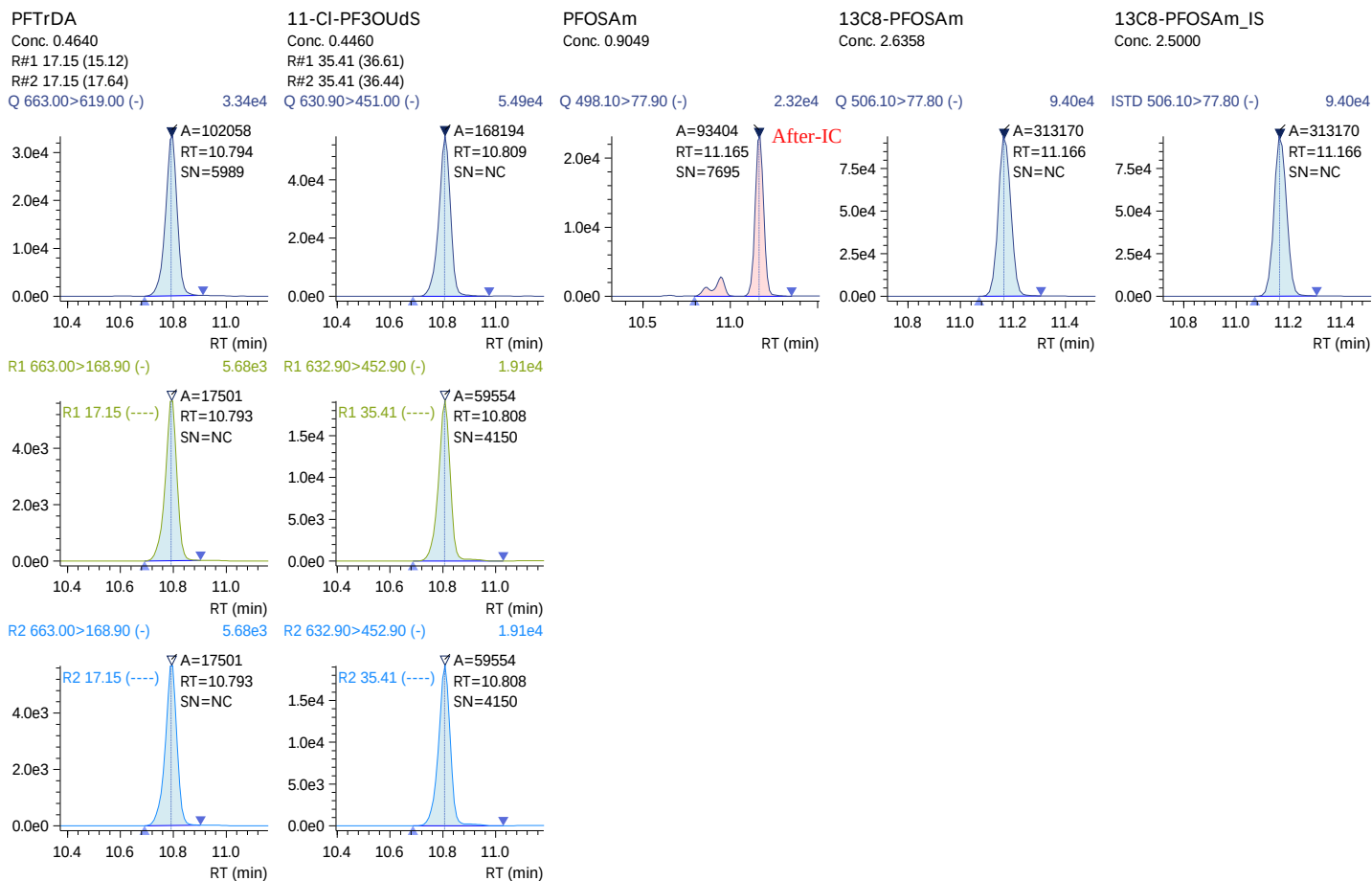


J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_009 (continued)

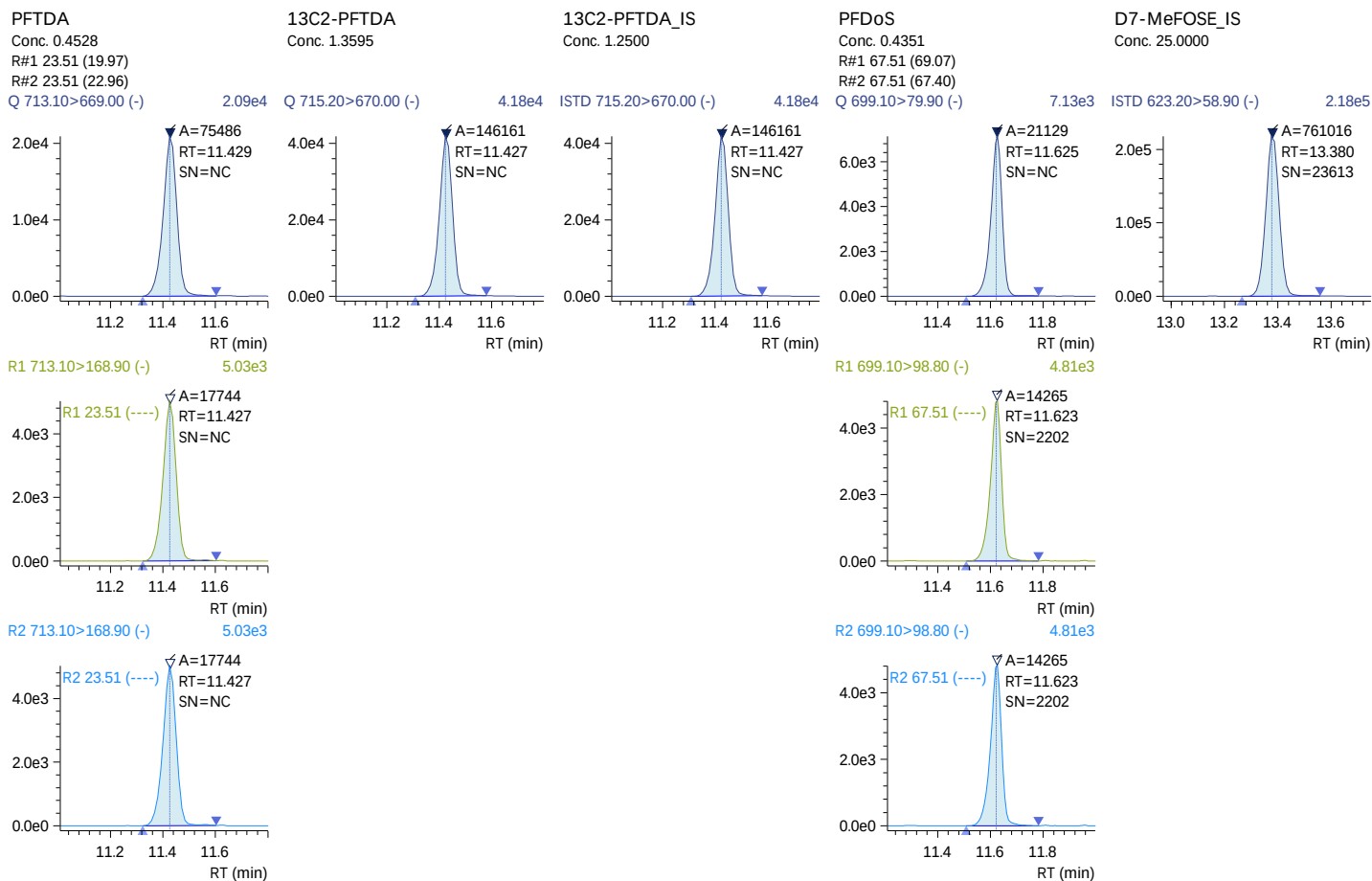


J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_009 (continued)



J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.damlp

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_009 (continued)

D7-MeFOSE
Conc. 25.9796

MeFOSE
Conc. 0.4446

13C2-PFHXA_IS
Conc. 2.5000

13C2-PFHXA
Conc. 2.6034

PFHXA
Conc. 0.4831

R#1 13.16 (11.64)

R#2 13.16 (13.90)

Q 623.20>58.90 (-)

2.18e5

Q 616.10>59.00 (-)

2.11e3

ISTD 815.00>770.05 (-)

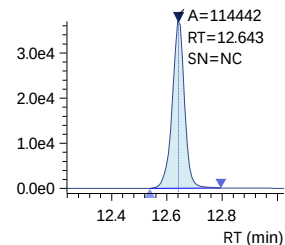
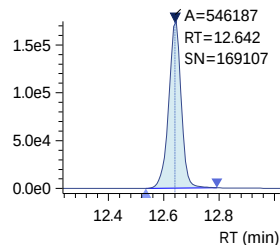
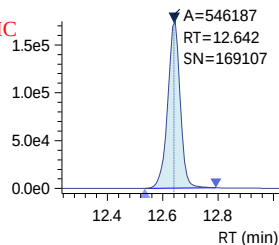
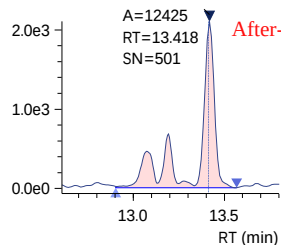
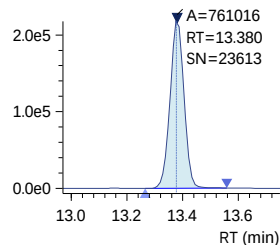
1.75e5

Q 815.00>770.05 (-)

1.75e5

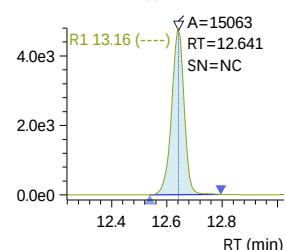
Q 813.00>768.95 (-)

3.70e4



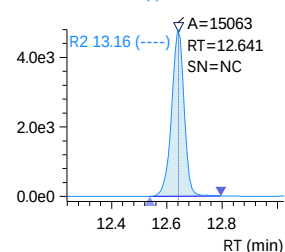
R1 813.00>218.95 (-)

4.81e3



R2 813.00>218.95 (-)

4.81e3





240118_009 (continued)

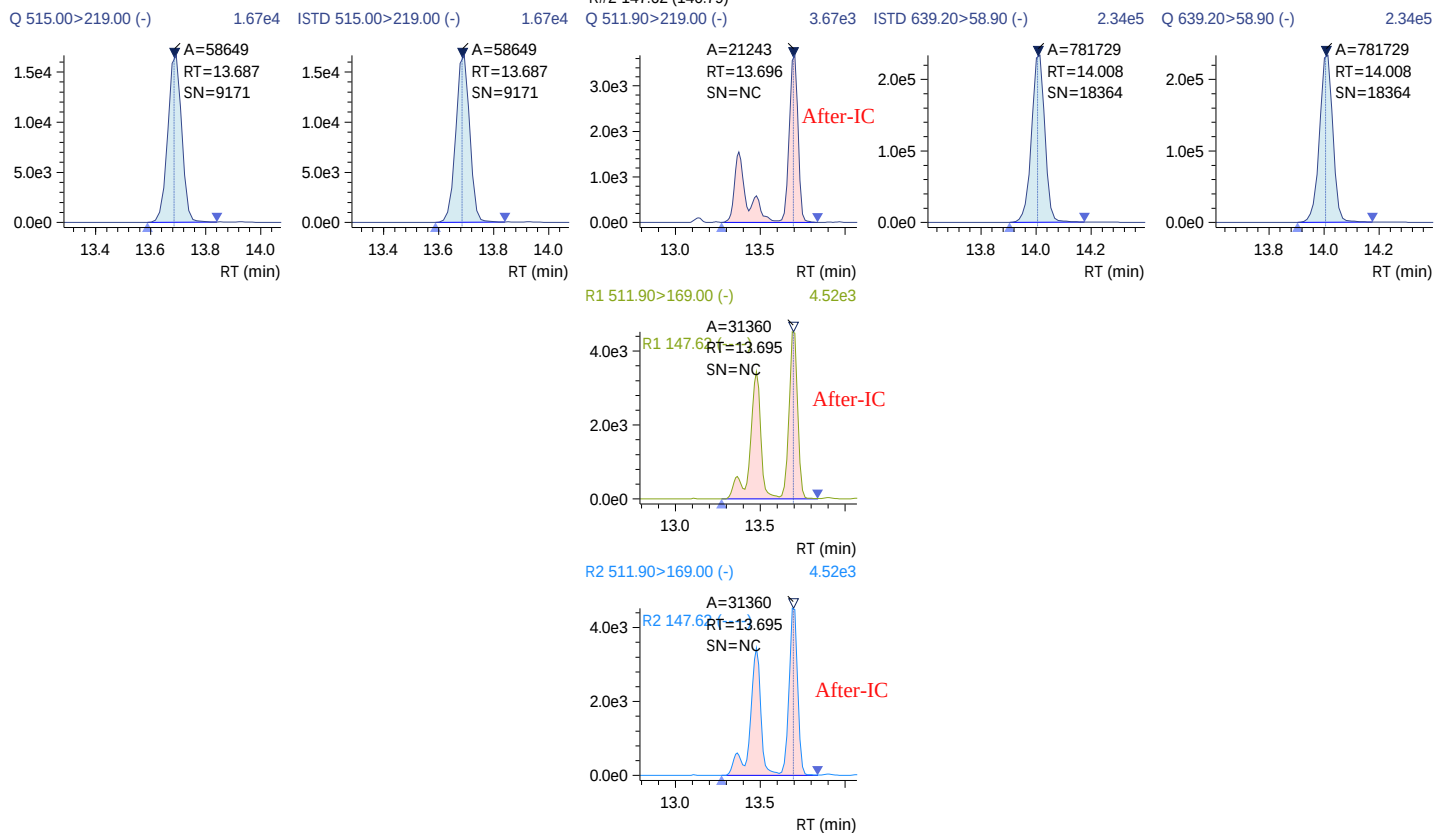
D3-MeFOSA
Conc. 2.4512

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. 0.5025
R#1 147.62 (149.05)
R#2 147.62 (140.79)

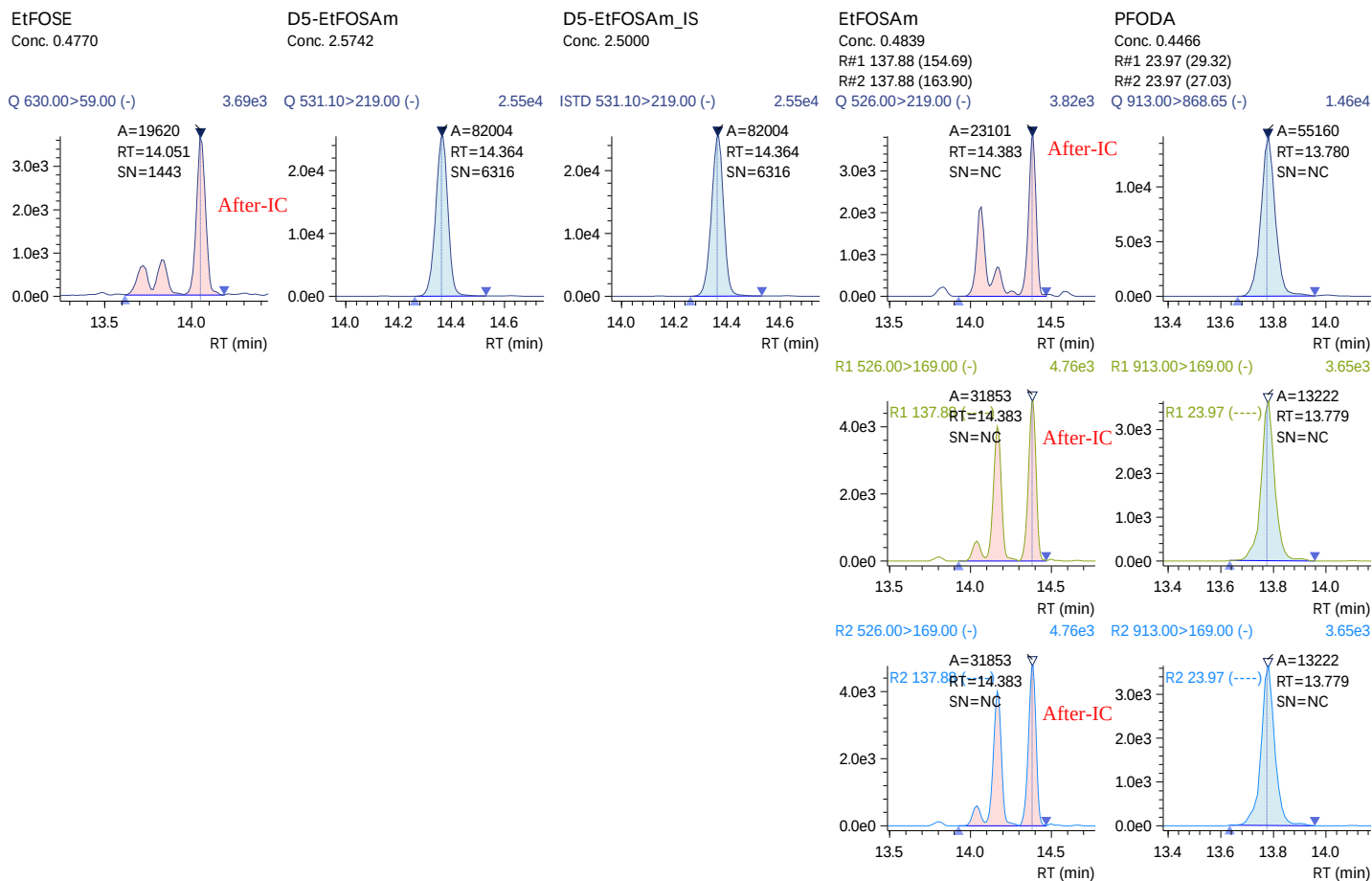
D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 26.2754





240118_009 (continued)



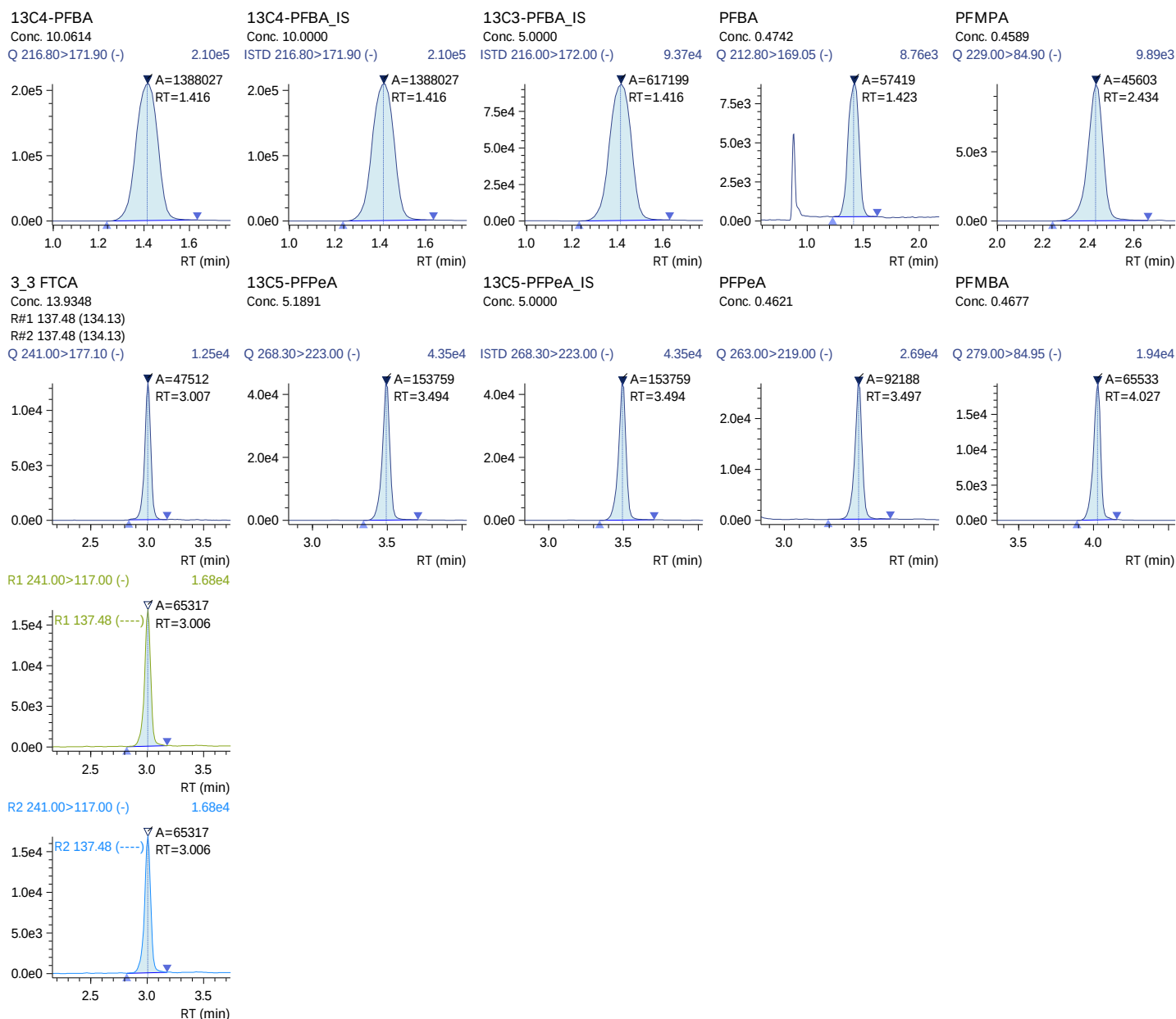
J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\lp

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_009

Sample ID: 1633 ICAL 0.50PPB
Date Acquired: 1/18/2024 3:14:20 PM
Acquired by: System Administrator
Data File: 240118_009
Vial: 4 | Inj. Volume: 10.0000uL | Tray: 1





240118_009 (continued)

13C2-4_2 FTS
Conc. 4.9096

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. 0.4696
R#1 27.70 (34.14)
R#2 27.70 (34.14)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 0.3982
R#1 48.23 (47.53)
R#2 48.23 (47.53)

Q 329.10>80.90 (-)

5.19e4

ISTD 329.10>80.90 (-)

5.19e4

Q 327.10>307.00 (-)

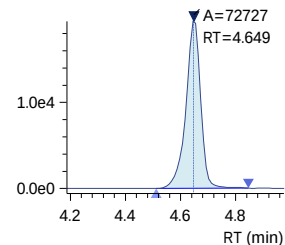
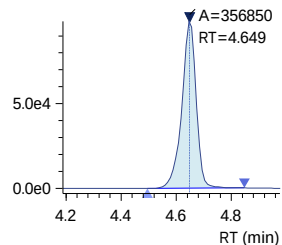
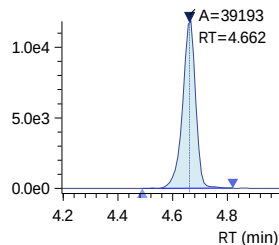
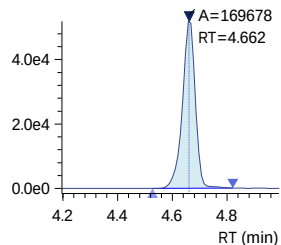
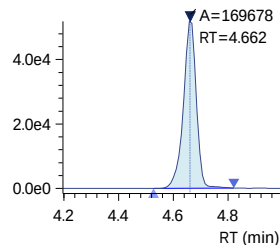
1.18e4

ISTD 302.10>79.90 (-)

9.86e4

Q 298.70>79.90 (-)

1.94e4

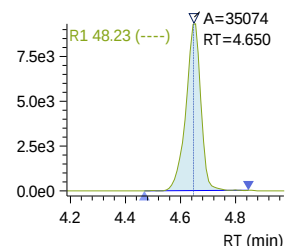
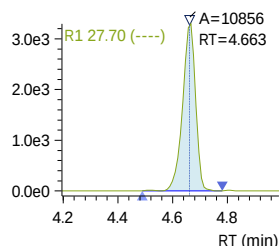


R1 327.10>80.90 (-)

3.30e3

R1 298.70>98.80 (-)

9.32e3

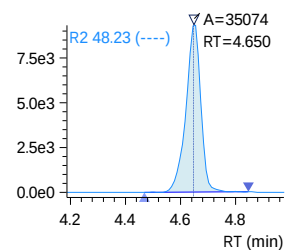
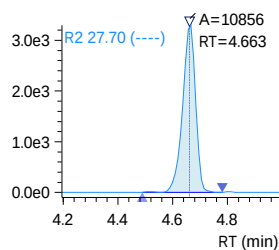


R2 327.10>80.90 (-)

3.30e3

R2 298.70>98.80 (-)

9.32e3

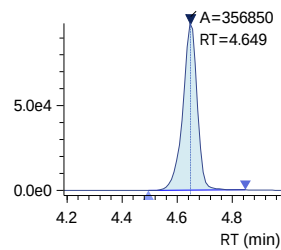




240118_009 (continued)

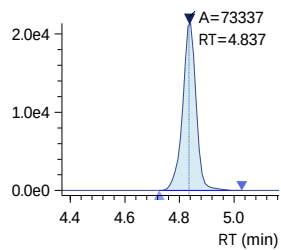
13C3-PFBS
 Conc. 2.5038

Q 302.10>79.90 (-)

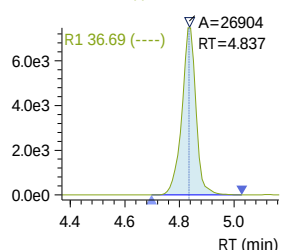


NFDHA
 Conc. 0.4807
 R#1 36.69 (37.88)
 R#2 36.69 (37.88)

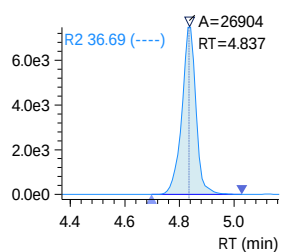
Q 295.00>201.00 (-)



R1 295.00>84.90 (-)

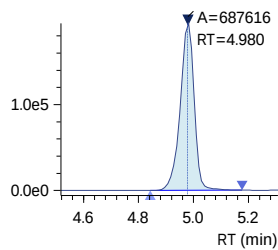


R2 295.00>84.90 (-)



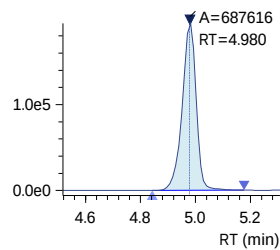
13C5-PFHxA
 Conc. 2.4854

Q 318.00>273.00 (-)



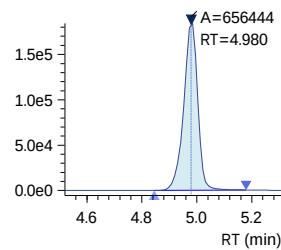
13C5-PFHxA_IS
 Conc. 2.5000

ISTD 318.00>273.00 (-)



13C2-PFHxA_IS
 Conc. 2.5000

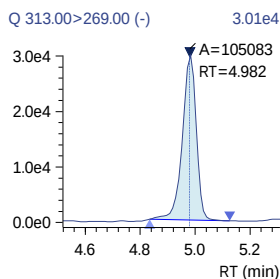
ISTD 315.10>270.00 (-)





240118_009 (continued)

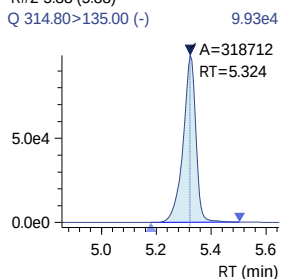
PFHxA
Conc. 0.4633



PFEESA
Conc. 0.4138

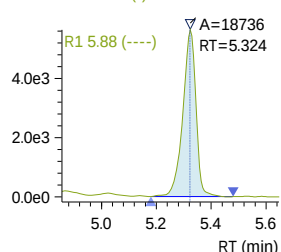
R#1 5.88 (5.88)

R#2 5.88 (5.88)



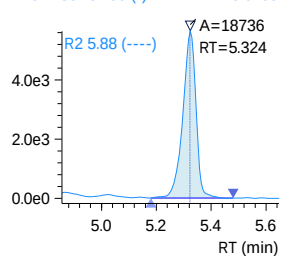
R1 314.80>82.90 (-)

5.64e3

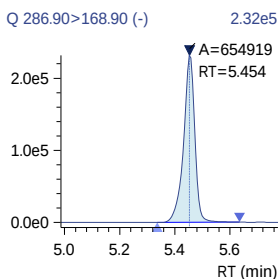


R2 314.80>82.90 (-)

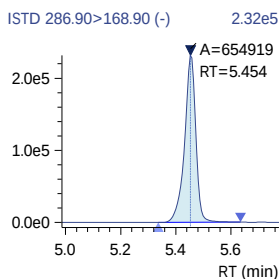
5.64e3



13C3-HFPO-DA
Conc. 10.1917



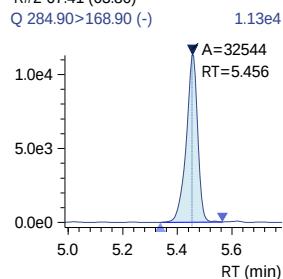
13C3-HFPO-DA_IS
Conc. 10.0000



HFPO-DA
Conc. 0.4507

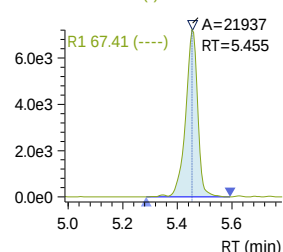
R#1 67.41 (63.80)

R#2 67.41 (63.80)



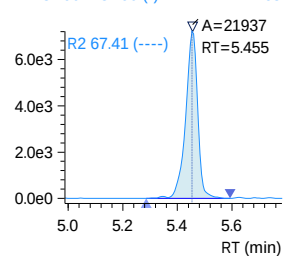
R1 284.90>184.90 (-)

7.21e3



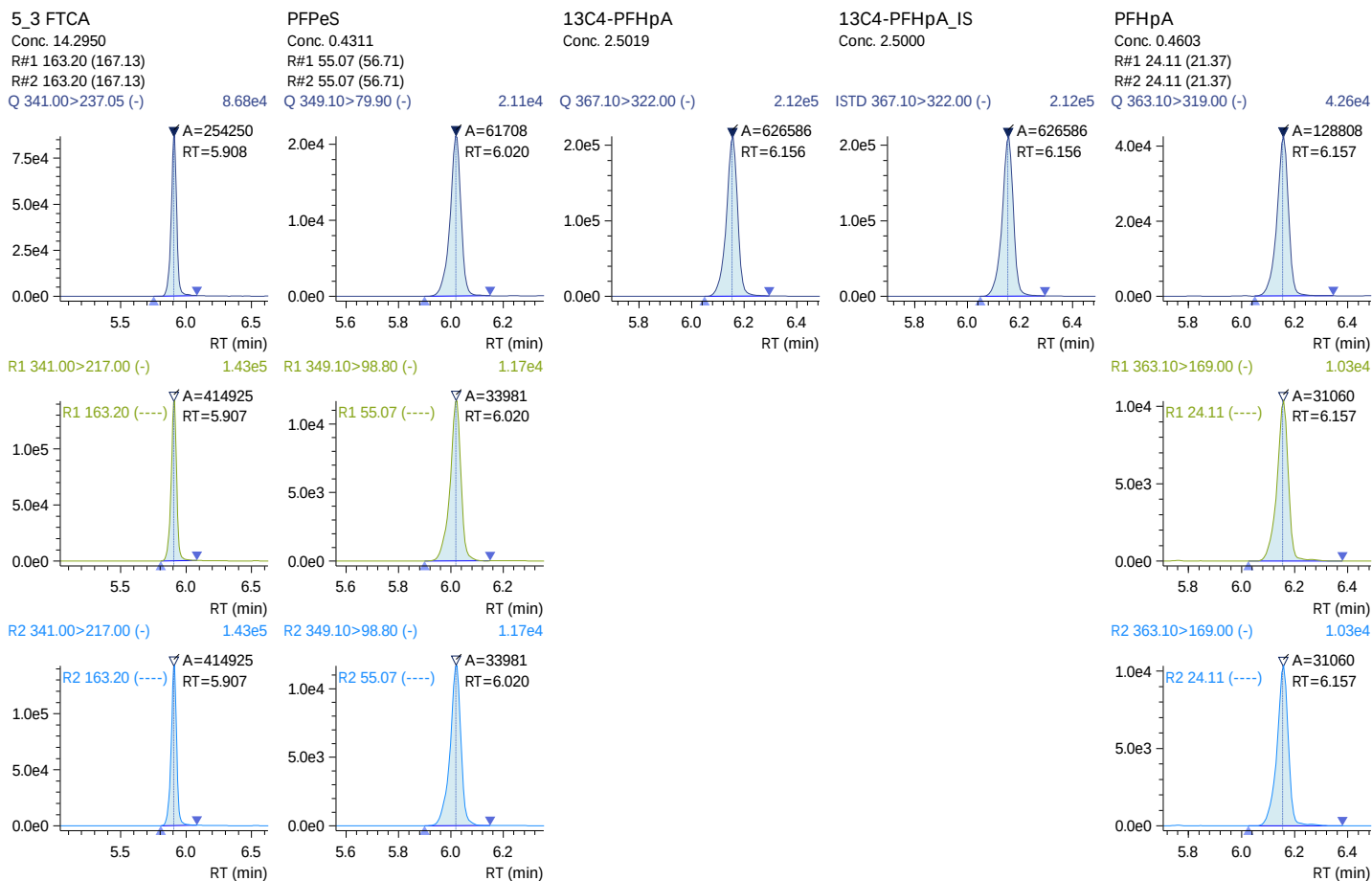
R2 284.90>184.90 (-)

7.21e3



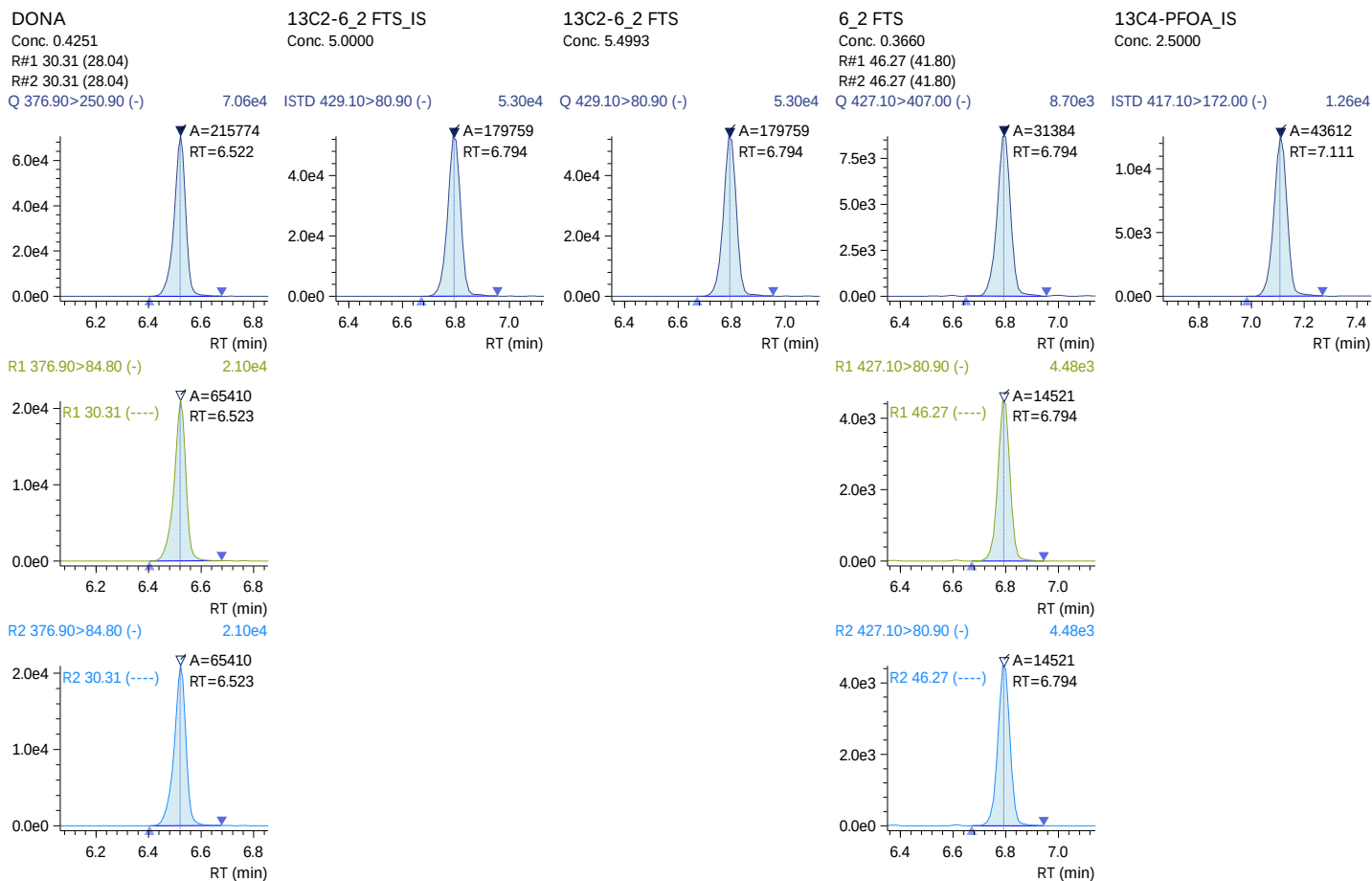


240118_009 (continued)





240118_009 (continued)





240118_009 (continued)

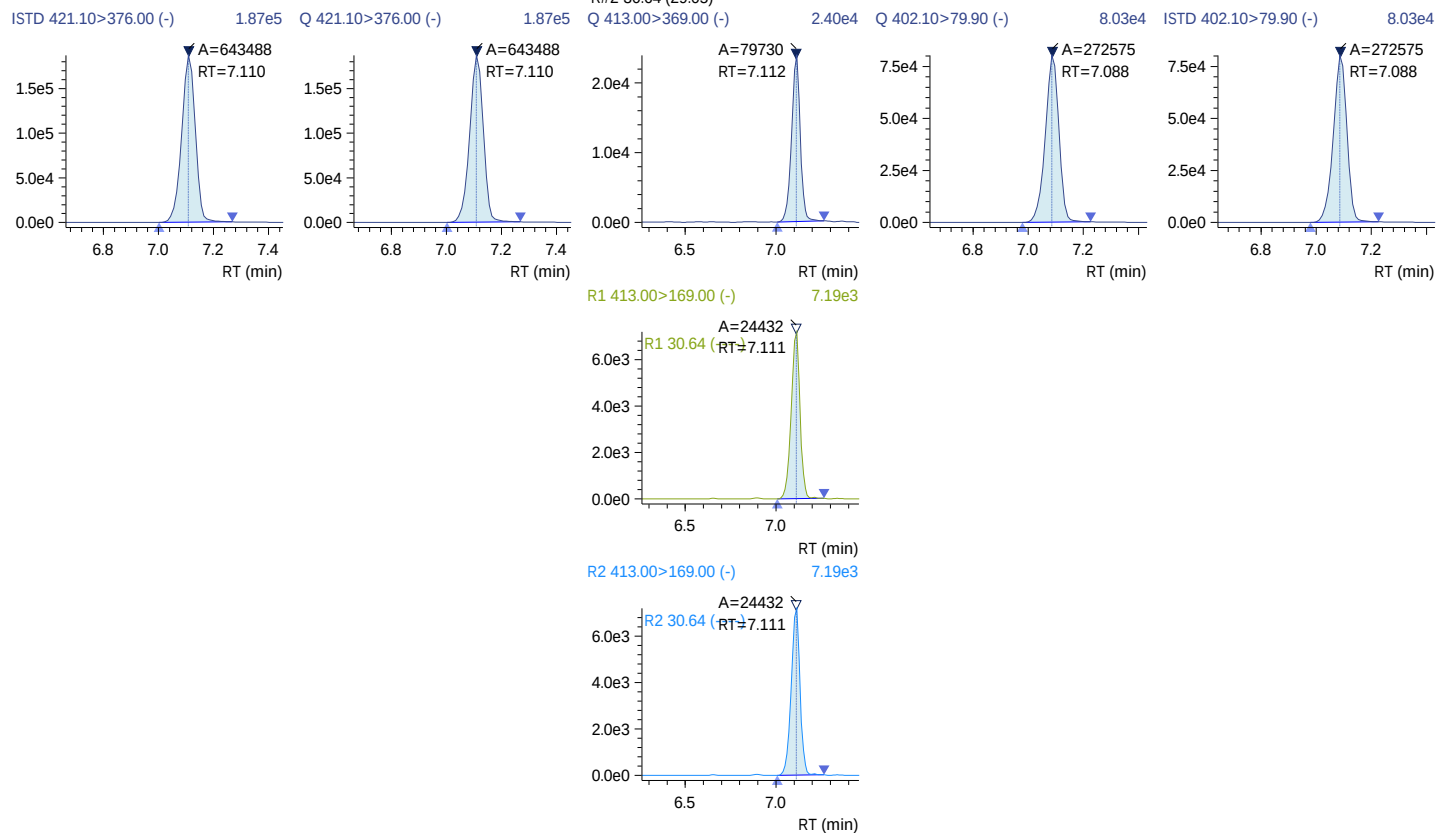
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.6398

PFOA
Conc. 0.4363
R#1 30.64 (29.05)
R#2 30.64 (29.05)

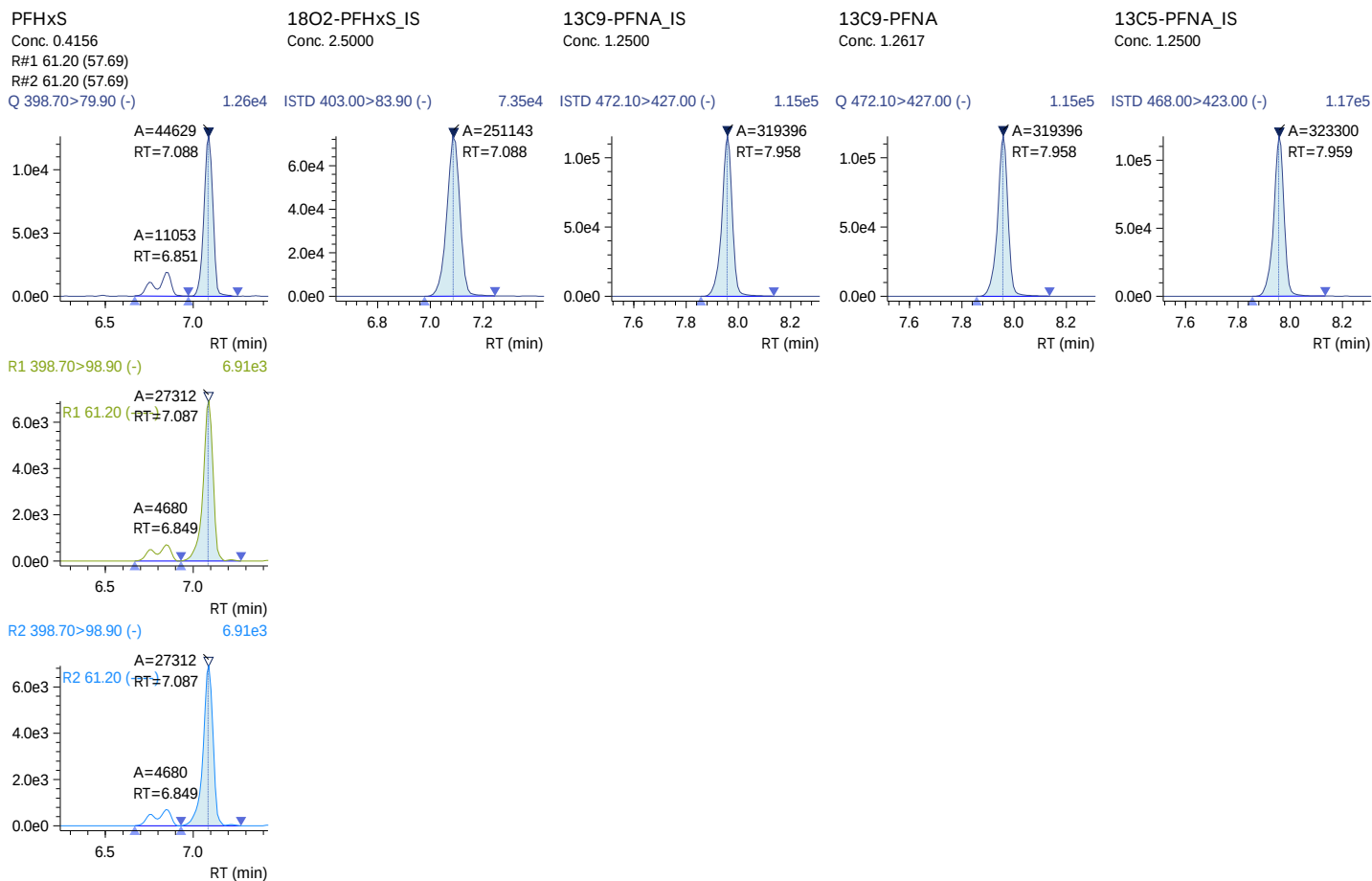
13C3-PFHxS
Conc. 2.5286

13C3-PFHxS_IS
Conc. 2.5000



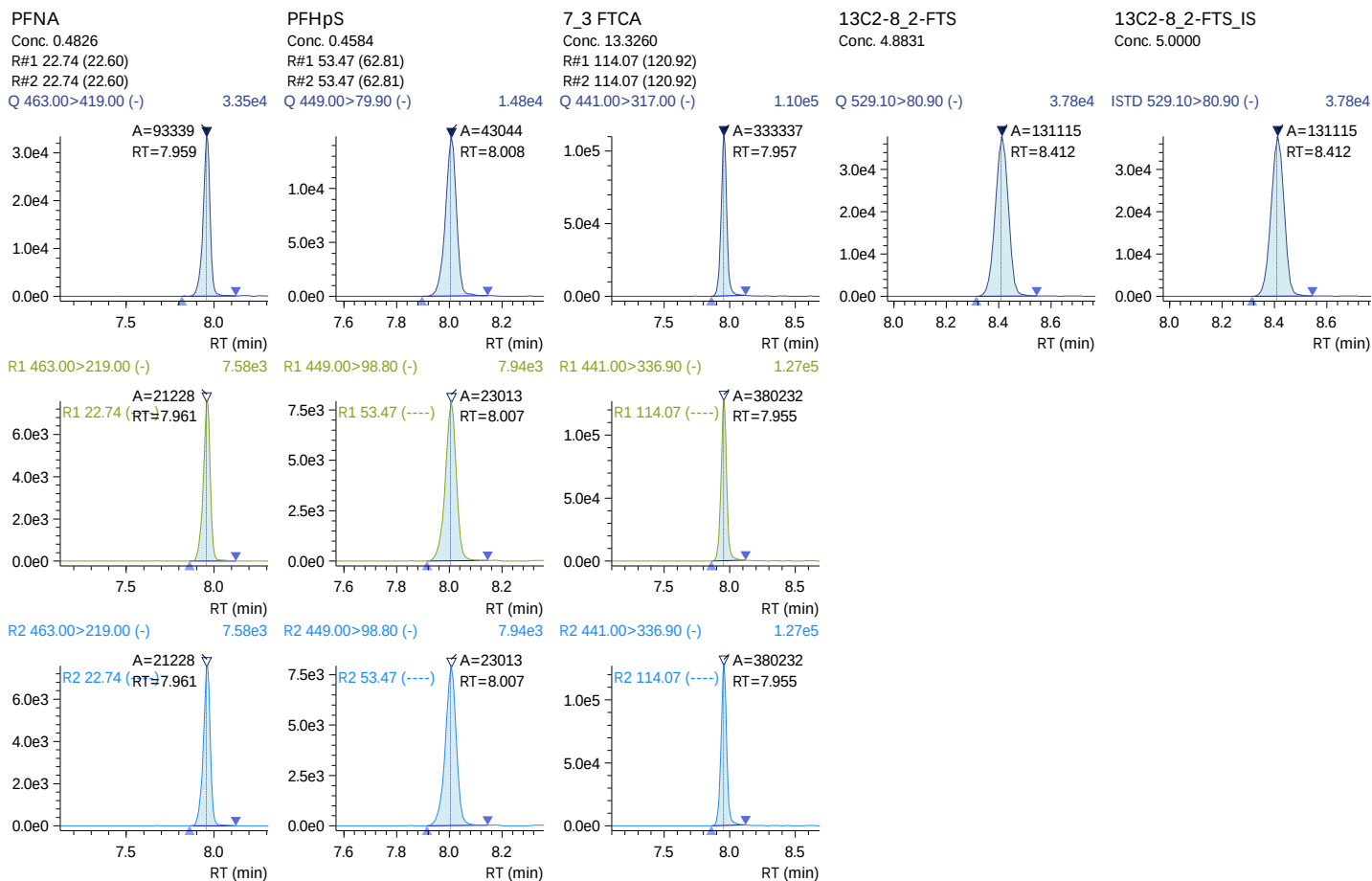


240118_009 (continued)



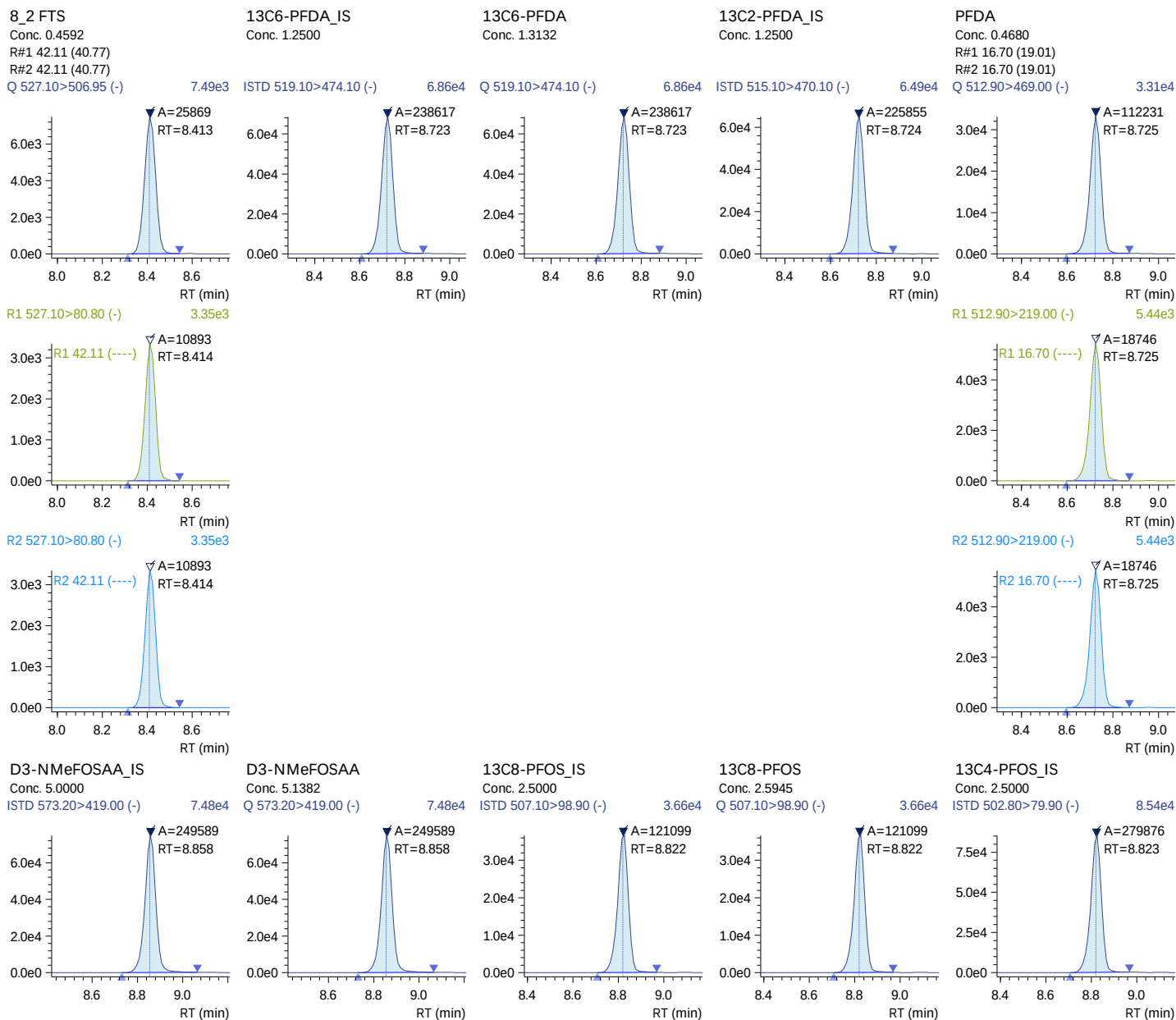


240118_009 (continued)



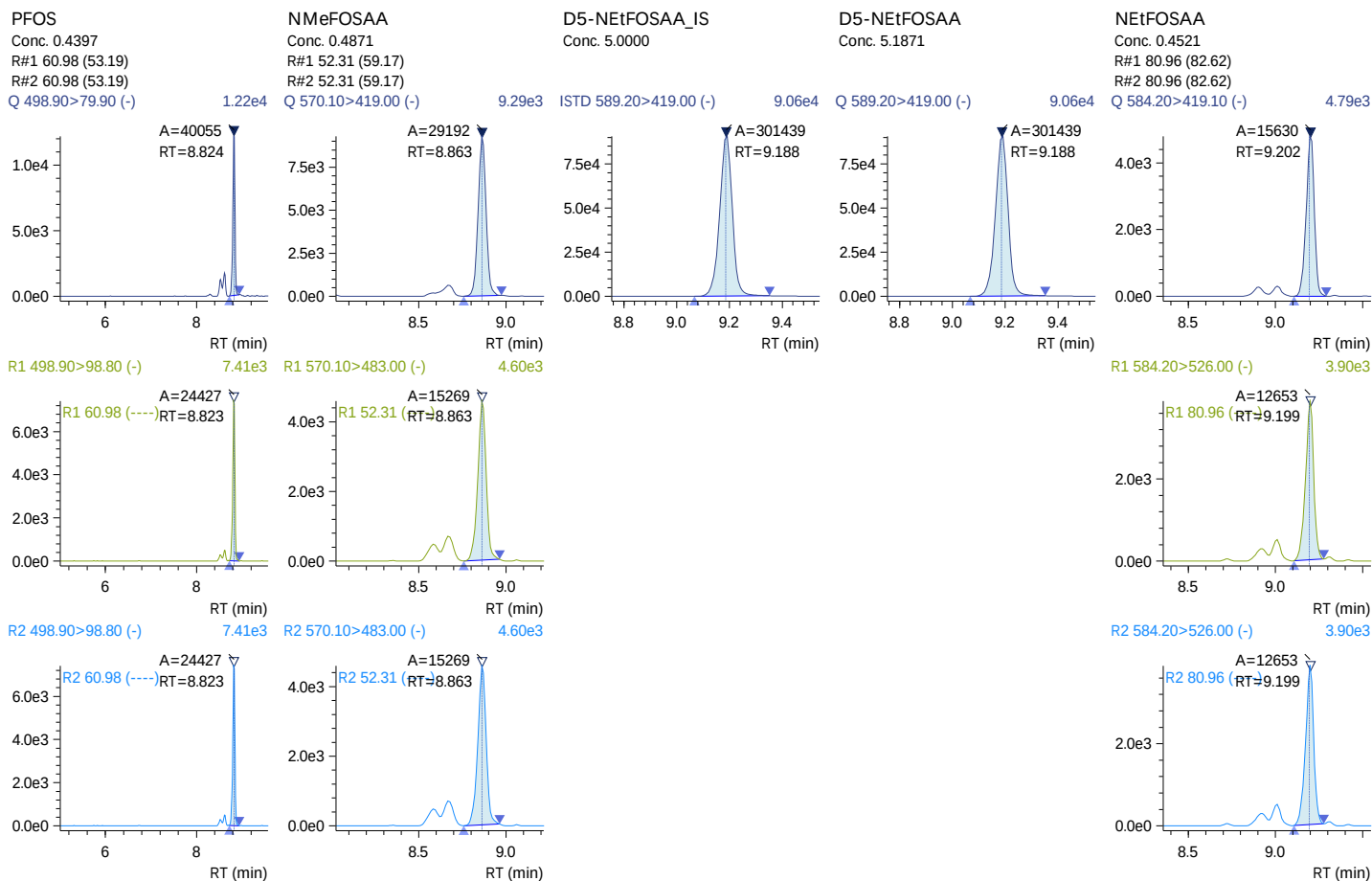


240118_009 (continued)





240118_009 (continued)

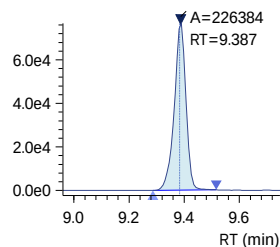




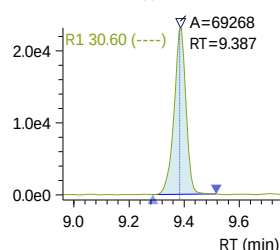
240118_009 (continued)

9-Cl-PF3ONS

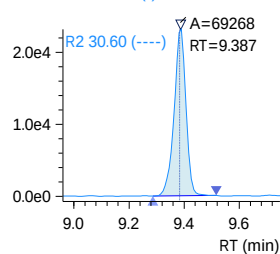
Conc. 0.4193
R#1 30.60 (31.76)
R#2 30.60 (31.76)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-) 2.32e4

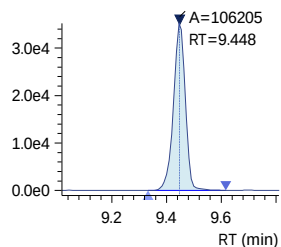


R2 532.80>353.00 (-) 2.32e4

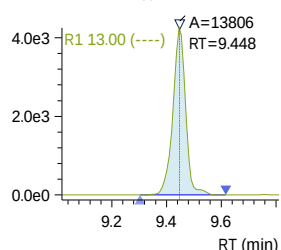


PFUnDA

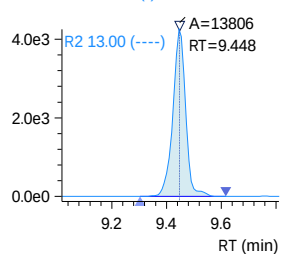
Conc. 0.4637
R#1 13.00 (12.31)
R#2 13.00 (12.31)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-) 4.25e3

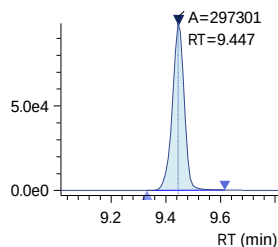


R2 563.10>269.10 (-) 4.25e3



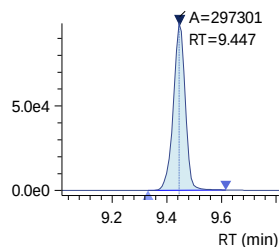
13C7-PFUnDA_IS

Conc. 1.2500
ISTD 570.00>525.10 (-)



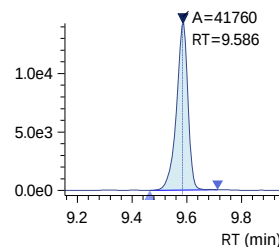
13C7-PFUnDA

Conc. 1.3716
Q 570.00>525.10 (-)

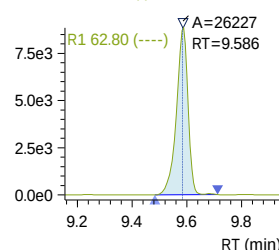


PFNS

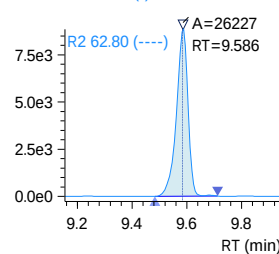
Conc. 0.4539
R#1 62.80 (63.31)
R#2 62.80 (63.31)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-) 8.85e3



R2 548.80>98.80 (-) 8.85e3





240118_009 (continued)

10_2 FTS

Conc. 0.4691

R#1 34.27 (33.02)

R#2 34.27 (33.02)

Q 626.80>607.05 (-)

1.07e4

13C2-PFDOA_IS

Conc. 1.2500

ISTD 615.10>570.00 (-)

1.11e5

13C2-PFDOA

Conc. 1.3111

Q 615.10>570.00 (-)

1.11e5

PFDOA

Conc. 0.4615

R#1 11.12 (10.14)

R#2 11.12 (10.14)

Q 613.10>569.00 (-)

3.05e4

PFDS

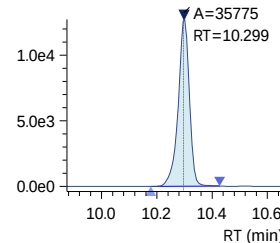
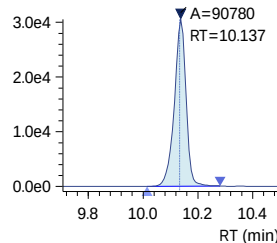
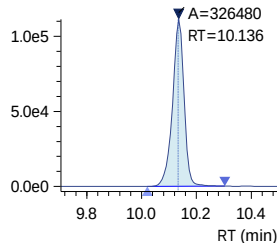
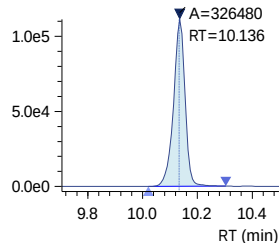
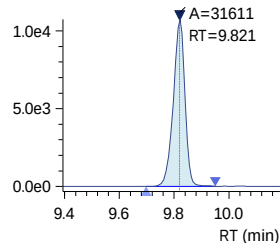
Conc. 0.4357

R#1 60.12 (62.02)

R#2 60.12 (62.02)

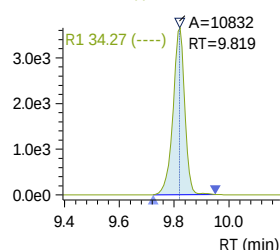
Q 599.00>79.90 (-)

1.27e4



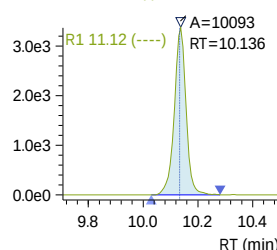
R1 626.80>81.00 (-)

3.66e3



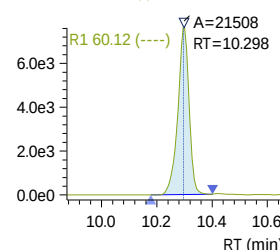
R1 613.10>319.00 (-)

3.37e3



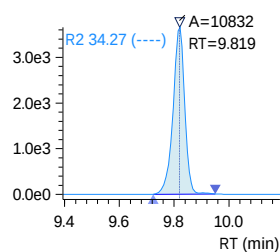
R1 599.00>98.80 (-)

7.62e3



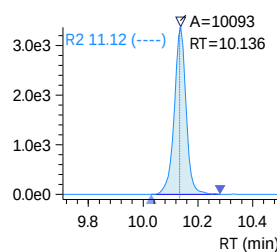
R2 626.80>81.00 (-)

3.66e3



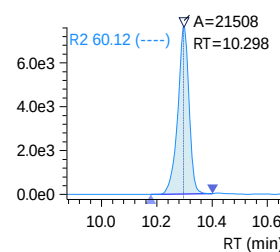
R2 613.10>319.00 (-)

3.37e3



R2 599.00>98.80 (-)

7.62e3

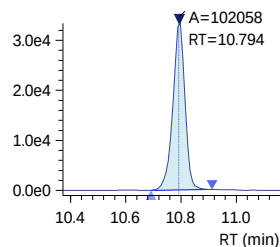




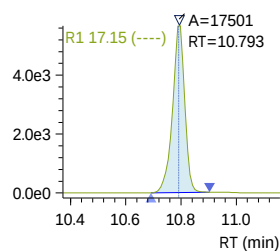
240118_009 (continued)

PFTTrDA

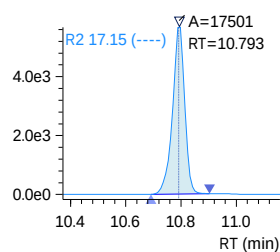
Conc. 0.4640
R#1 17.15 (15.12)
R#2 17.15 (15.12)
Q 663.00>619.00 (-)



R1 663.00>168.90 (-) 5.68e3

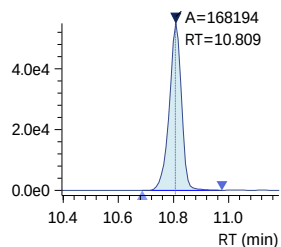


R2 663.00>168.90 (-) 5.68e3

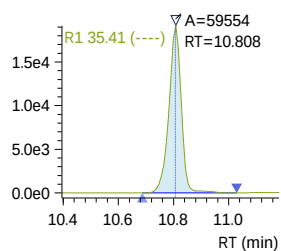


11-Cl-PF3OUdS

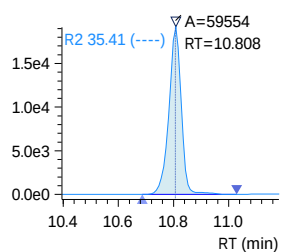
Conc. 0.4307
R#1 35.41 (36.61)
R#2 35.41 (36.61)
Q 630.90>451.00 (-)



R1 632.90>452.90 (-) 1.91e4



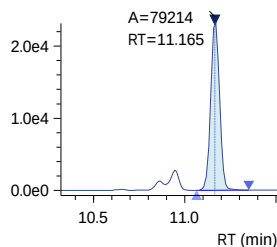
R2 632.90>452.90 (-) 1.91e4



PFOSAm

Conc. 0.9102

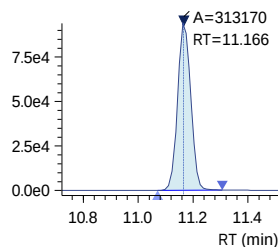
Q 498.10>77.90 (-)



13C8-PFOSAm

Conc. 2.6358

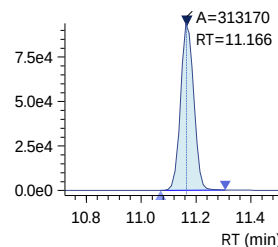
Q 506.10>77.80 (-)



13C8-PFOSAm_IS

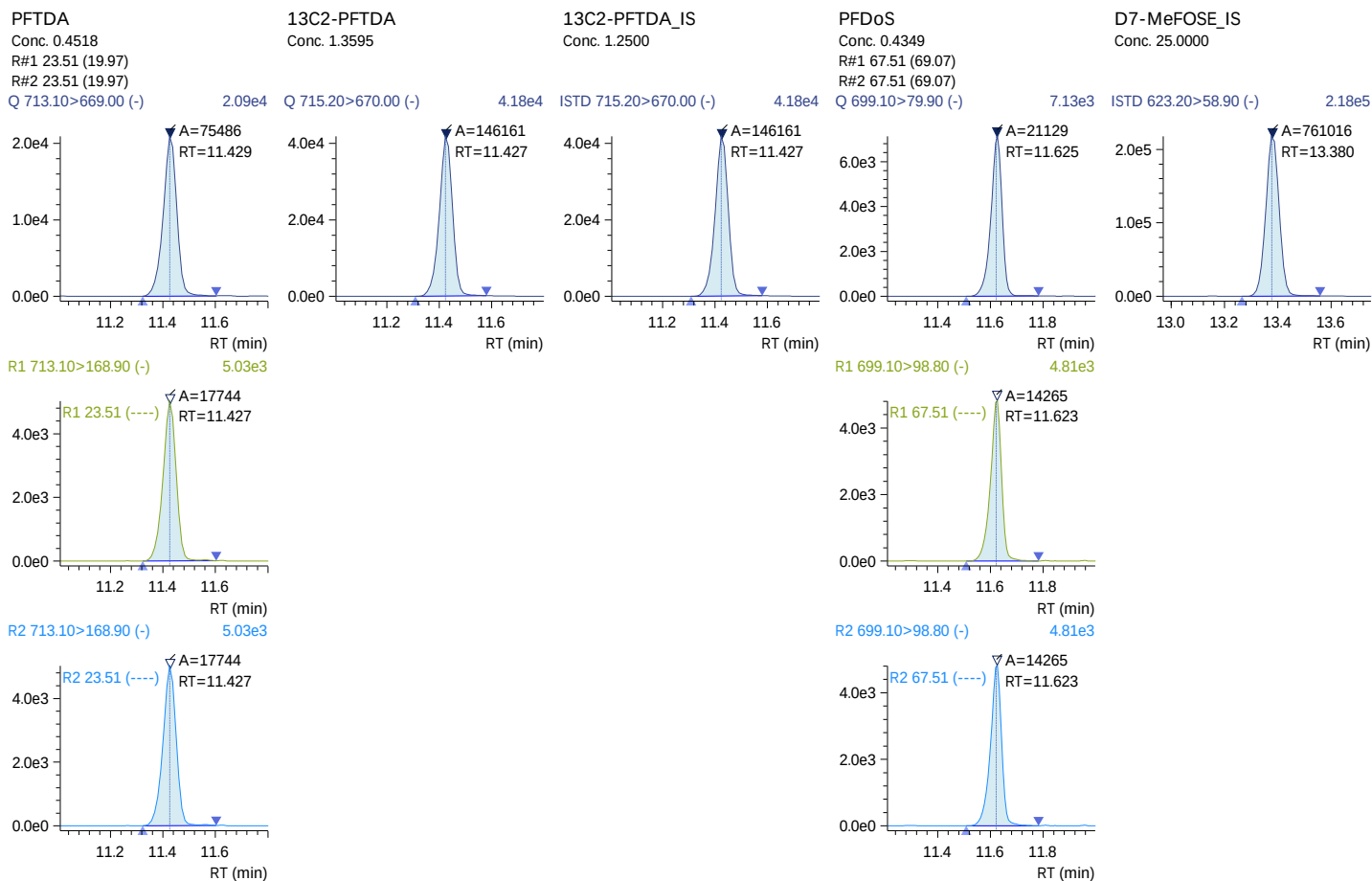
Conc. 2.5000

ISTD 506.10>77.80 (-)





240118_009 (continued)





240118_009 (continued)

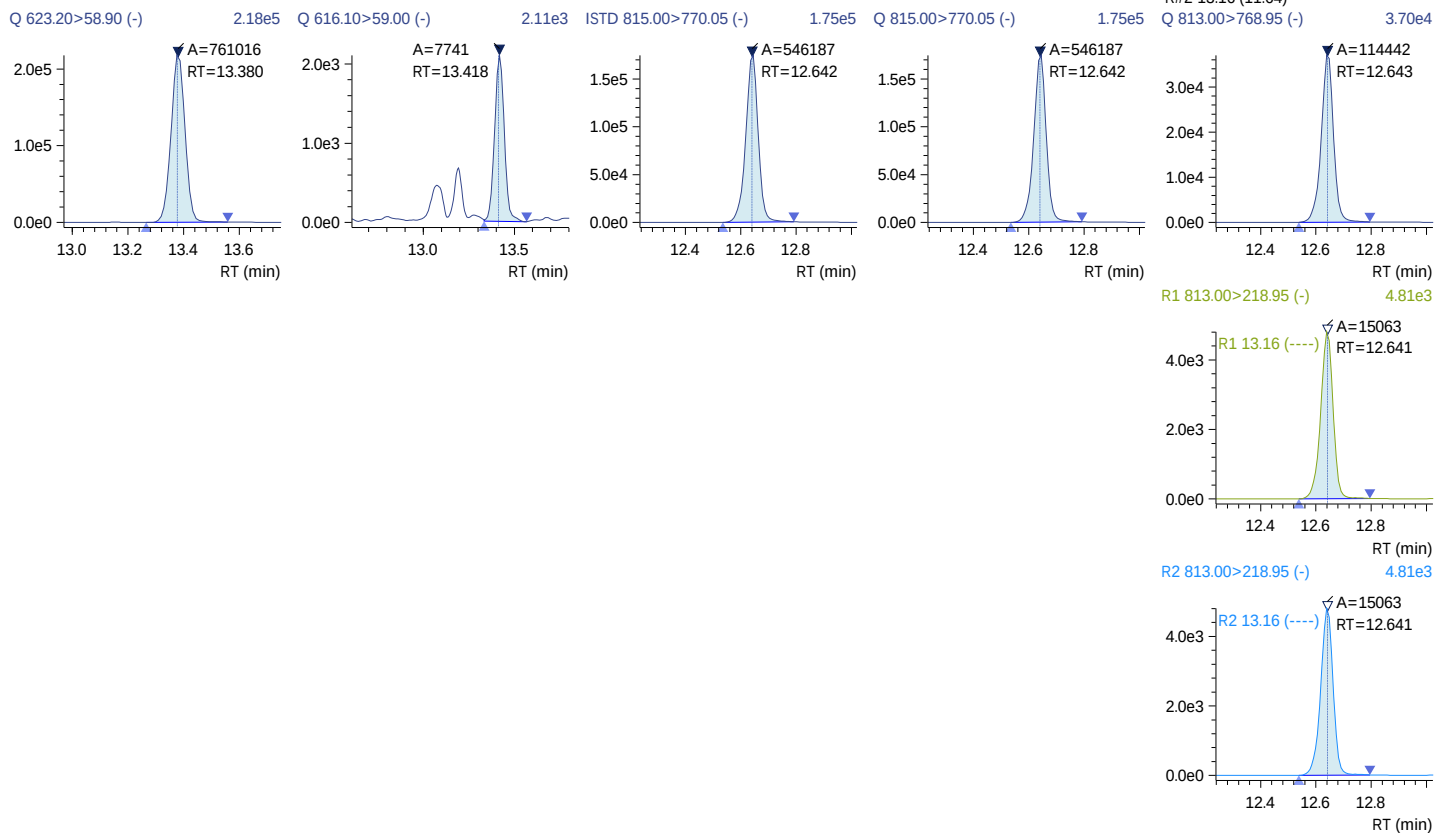
D7-MeFOSE
 Conc. 25.9796

MeFOSE
 Conc. 0.4343

¹³C2-PFHxDA_IS
 Conc. 2.5000

¹³C2-PFHxDA
 Conc. 2.6034

PFHxDA
 Conc. 0.4831
 R#1 13.16 (11.64)
 R#2 13.16 (11.64)





240118_009 (continued)

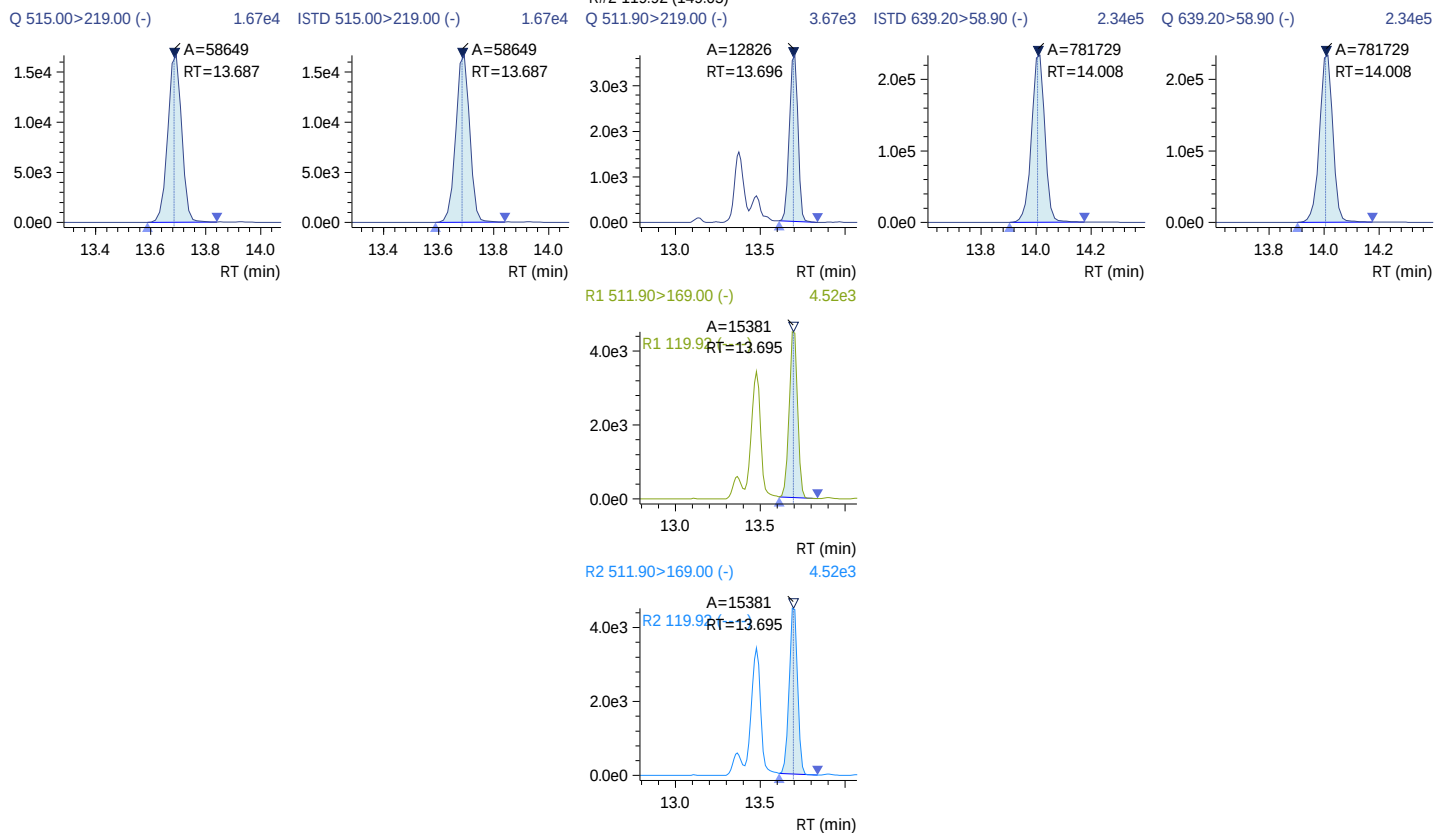
D3-MeFOSA
 Conc. 2.4512

D3-MeFOSA_IS
 Conc. 2.5000

MeFOSA
 Conc. 0.4906
 R#1 119.92 (149.05)
 R#2 119.92 (149.05)

D9-EtFOSE_IS
 Conc. 25.0000

D9-EtFOSE
 Conc. 26.2754





240118_009 (continued)

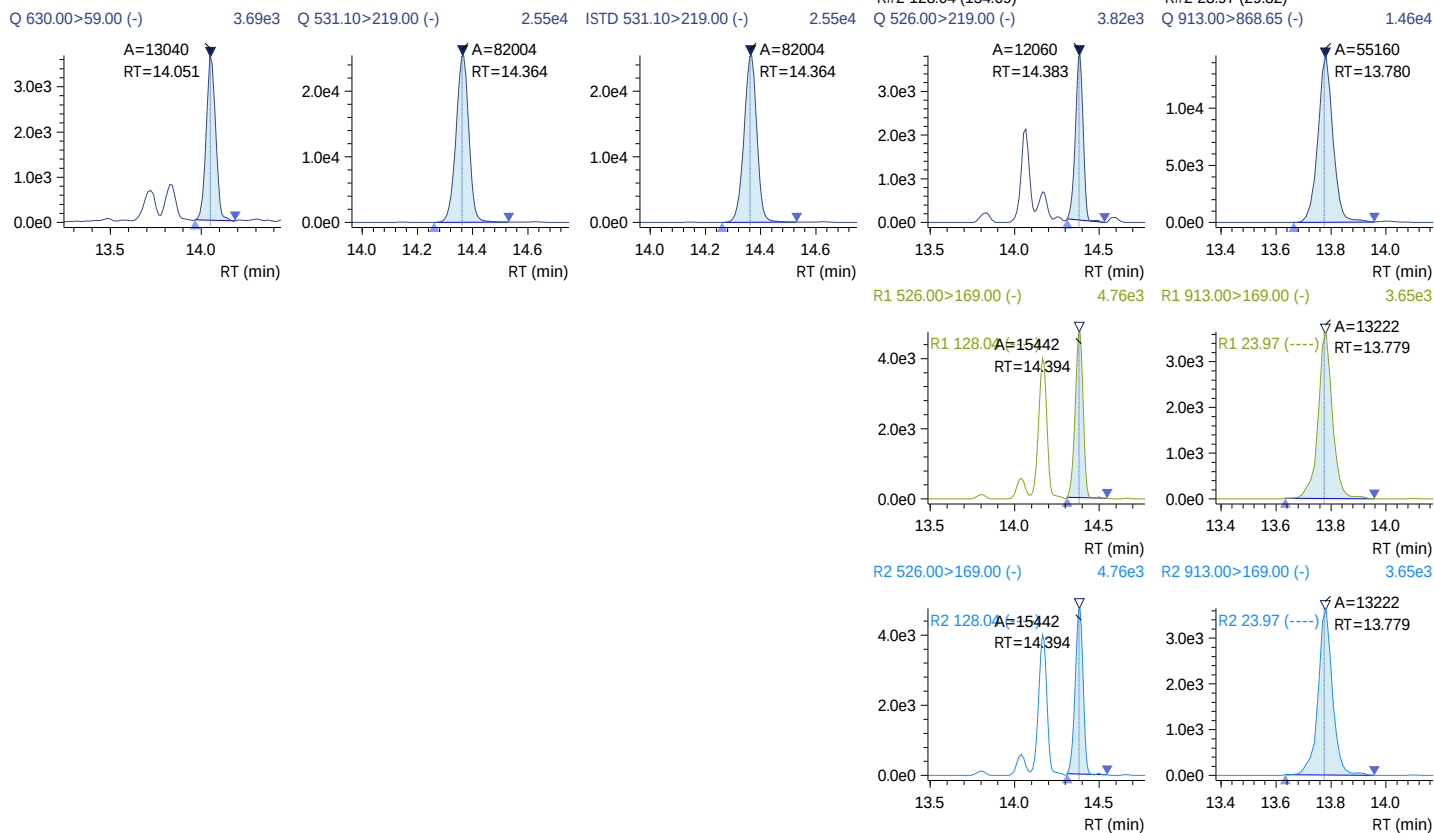
EtFOSE
Conc. 0.4800

D5-EtFOSAm
Conc. 2.5742

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. 0.4604
R#1 128.04 (154.69)
R#2 128.04 (154.69)

PFODA
Conc. 0.4561
R#1 23.97 (29.32)
R#2 23.97 (29.32)





240118_010

Sample ID: 1633 ICAL 1.0PPB
Date Acquired: 1/18/2024 3:37:35 PM
Acquired by: System Administrator
Data File: 240118_010
Vial: 5 | Inj. Volume: 10.0000uL | Tray: 1

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	1369234	----	----	----	----	----	----	
13C4-PFBA_IS	216.80>171.90	----	1369234	----	----	----	----	----	----	
13C3-PFBA_IS	216.00>172.00	----	602847	----	----	----	----	----	----	
PFBA	212.80>169.05	----	116117	----	----	----	----	----	----	
PFMPA	229.00>84.90	----	92865	----	----	----	----	----	----	
3_3 FTCA	241.00>177.10	241.00>117.00	62978	88902	141.17	141.17	88902	141.17	141.17	
13C5-PFPeA	268.30>223.00	----	147694	----	----	----	----	----	----	
13C5-PFPeA_IS	268.30>223.00	----	147694	----	----	----	----	----	----	
PFPeA	263.00>219.00	----	177078	----	----	----	----	----	----	
PFMBA	279.00>84.95	----	132663	----	----	----	----	----	----	
13C2-4_2 FTS	329.10>80.90	----	171979	----	----	----	----	----	----	
13C2-4_2 FTS_IS	329.10>80.90	----	171979	----	----	----	----	----	----	
4_2 FTS	327.10>307.00	327.10>80.90	79974	23242	29.06	29.06	23242	29.06	29.06	
13C3-PFBS_IS	302.10>79.90	----	347150	----	----	----	----	----	----	
PFBS	298.70>79.90	298.70>98.80	159927	74712	46.72	46.72	74712	46.72	46.72	
13C3-PFBS	302.10>79.90	----	347150	----	----	----	----	----	----	
NFDHA	295.00>201.00	295.00>84.90	146253	58868	40.25	40.25	58868	40.25	40.25	
13C5-PFHxA	318.00>273.00	----	693968	----	----	----	----	----	----	
13C5-PFHxA_IS	318.00>273.00	----	693968	----	----	----	----	----	----	
13C2-PFHxA_IS	315.10>270.00	----	663775	----	----	----	----	----	----	
PFHxA	313.00>269.00	----	229361	----	----	----	----	----	----	
PFEESA	314.80>135.00	314.80>82.90	664025	40601	6.11	6.11	40601	6.11	6.11	
13C3-HFPO-DA	286.90>168.90	----	640534	----	----	----	----	----	----	
13C3-HFPO-DA_IS	286.90>168.90	----	640534	----	----	----	----	----	----	
HFPO-DA	284.90>168.90	284.90>184.90	71358	46818	65.61	65.61	46818	65.61	65.61	
5_3 FTCA	341.00>237.05	341.00>217.00	345149	548316	158.86	158.86	548316	158.86	158.86	
PFPeS	349.10>79.90	349.10>98.80	129068	72025	55.80	55.80	72025	55.80	55.80	
13C4-PFHpA	367.10>322.00	----	630102	----	----	----	----	----	----	
13C4-PFHpA_IS	367.10>322.00	----	630102	----	----	----	----	----	----	
PFHpA	363.10>319.00	363.10>169.00	269319	57893	21.50	21.50	57893	21.50	21.50	
DONA	376.90>250.90	376.90>84.80	450923	133727	29.66	29.66	133727	29.66	29.66	
13C2-6_2 FTS_IS	429.10>80.90	----	160736	----	----	----	----	----	----	
13C2-6_2 FTS	429.10>80.90	----	160736	----	----	----	----	----	----	
6_2 FTS	427.10>407.00	427.10>80.90	75066	30892	41.15	41.15	30892	41.15	41.15	
13C4-PFOA_IS	417.10>172.00	----	42030	----	----	----	----	----	----	
13C8-PFOA_IS	421.10>376.00	----	604919	----	----	----	----	----	----	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240118_010 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	604919	----	----	----	----	----	----	----
PFOA	413.00>369.00	413.00>169.00	173590	55357	31.89	31.89	55357	31.89	31.89	
13C3-PFHxS	402.10>79.90	----	268590	----	----	----	----	----	----	----
13C3-PFHxS_IS	402.10>79.90	----	268590	----	----	----	----	----	----	----
PFHxS	398.70>79.90	398.70>98.90	120607	68283	56.62	56.62	68283	56.62	56.62	
18O2-PFHxS_IS	403.00>83.90	----	249998	----	----	----	----	----	----	----
13C9-PFNA_IS	472.10>427.00	----	329225	----	----	----	----	----	----	----
13C9-PFNA	472.10>427.00	----	329225	----	----	----	----	----	----	----
13C5-PFNA_IS	468.00>423.00	----	328955	----	----	----	----	----	----	----
PFNA	463.00>419.00	463.00>219.00	185195	42912	23.17	23.17	42912	23.17	23.17	
PFHpS	449.00>79.90	449.00>98.80	85513	48708	56.96	56.96	48708	56.96	56.96	
7_3 FTCA	441.00>317.00	441.00>336.90	439237	515991	117.47	117.47	515991	117.47	117.47	
13C2-8_2-FTS	529.10>80.90	----	121050	----	----	----	----	----	----	----
13C2-8_2-FTS_IS	529.10>80.90	----	121050	----	----	----	----	----	----	----
8_2 FTS	527.10>506.95	527.10>80.80	49479	24538	49.59	49.59	24538	49.59	49.59	
13C6-PFDA_IS	519.10>474.10	----	247598	----	----	----	----	----	----	----
13C6-PFDA	519.10>474.10	----	247598	----	----	----	----	----	----	----
13C2-PFDA_IS	515.10>470.10	----	243243	----	----	----	----	----	----	----
PFDA	512.90>469.00	512.90>219.00	238103	45229	19.00	19.00	45229	19.00	19.00	
D3-NMeFOSAA_IS	573.20>419.00	----	251536	----	----	----	----	----	----	----
D3-NMeFOSAA	573.20>419.00	----	251536	----	----	----	----	----	----	----
13C8-PFOS_IS	507.10>98.90	----	124480	----	----	----	----	----	----	----
13C8-PFOS	507.10>98.90	----	124480	----	----	----	----	----	----	----
13C4-PFOS_IS	502.80>79.90	----	298833	----	----	----	----	----	----	----
PFOS	498.90>79.90	498.90>98.80	108900	57134	52.47	52.47	57134	52.47	52.47	
NMeFOSAA	570.10>419.00	570.10>483.00	68385	37711	55.15	55.15	37711	55.15	55.15	
D5-NeFOSAA_IS	589.20>419.00	----	296281	----	----	----	----	----	----	----
D5-NeFOSAA	589.20>419.00	----	296281	----	----	----	----	----	----	----
NeFOSAA	584.20>419.10	584.20>526.00	40635	33302	81.95	81.95	33302	81.95	81.95	
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	488722	160081	32.76	32.76	160081	32.76	32.76	
PFUnDA	563.10>519.00	563.10>269.10	211279	27724	13.12	13.12	27724	13.12	13.12	
13C7-PFUnDA_IS	570.00>525.10	----	276567	----	----	----	----	----	----	----
13C7-PFUnDA	570.00>525.10	----	276567	----	----	----	----	----	----	----
PFNS	548.80>79.90	548.80>98.80	85942	56052	65.22	65.22	56052	65.22	65.22	
10_2 FTS	626.80>607.05	626.80>81.00	62123	23064	37.13	37.13	23064	37.13	37.13	
13C2-PFDOA_IS	615.10>570.00	----	328895	----	----	----	----	----	----	----
13C2-PFDOA	615.10>570.00	----	328895	----	----	----	----	----	----	----
PFDOA	613.10>569.00	613.10>319.00	191533	21617	11.29	11.29	21617	11.29	11.29	
PFDS	599.00>79.90	599.00>98.80	77566	46681	60.18	60.18	46681	60.18	60.18	
PFTDA	663.00>619.00	663.00>168.90	209818	37007	17.64	17.64	37007	17.64	17.64	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240118_010 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	342495	124792	36.44	36.44	124792	36.44	36.44	
PFOSAm	498.10>77.90	----	197052	----	----	----	----	----	----	
13C8-PFOSAm	506.10>77.80	----	309952	----	----	----	----	----	----	
13C8-PFOSAm_IS	506.10>77.80	----	309952	----	----	----	----	----	----	
PFTDA	713.10>669.00	713.10>168.90	153669	35281	22.96	22.96	35281	22.96	22.96	
13C2-PFTDA	715.20>670.00	----	140054	----	----	----	----	----	----	
13C2-PFTDA_IS	715.20>670.00	----	140054	----	----	----	----	----	----	
PFDoS	699.10>79.90	699.10>98.80	45685	30789	67.40	67.40	30789	67.40	67.40	
D7-MeFOSE_IS	623.20>58.90	----	736922	----	----	----	----	----	----	
D7-MeFOSE	623.20>58.90	----	736922	----	----	----	----	----	----	
MeFOSE	616.10>59.00	----	26578	----	----	----	----	----	----	
13C2-PFHxDA_IS	815.00>770.05	----	548879	----	----	----	----	----	----	
13C2-PFHxDA	815.00>770.05	----	548879	----	----	----	----	----	----	
PFHxDA	813.00>768.95	813.00>218.95	233309	32433	13.90	13.90	32433	13.90	13.90	
D3-MeFOSA	515.00>219.00	----	68121	----	----	----	----	----	----	
D3-MeFOSA_IS	515.00>219.00	----	68121	----	----	----	----	----	----	
MeFOSA	511.90>219.00	511.90>169.00	46422	65358	140.79	140.79	65358	140.79	140.79	
D9-EtFOSE_IS	639.20>58.90	----	776012	----	----	----	----	----	----	
D9-EtFOSE	639.20>58.90	----	776012	----	----	----	----	----	----	
EtFOSE	630.00>59.00	----	37832	----	----	----	----	----	----	
D5-EtFOSAm	531.10>219.00	----	80394	----	----	----	----	----	----	
D5-EtFOSAm_IS	531.10>219.00	----	80394	----	----	----	----	----	----	
EtFOSAm	526.00>219.00	526.00>169.00	45505	74584	163.90	163.90	74584	163.90	163.90	
PFODA	913.00>868.65	913.00>169.00	118686	32075	27.03	27.03	32075	27.03	27.03	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
 IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240118_010

Sample ID: 1633 ICAL 1.0PPB
Date Acquired: 1/18/2024 3:37:35 PM
Acquired by: System Administrator
Data File: 240118_010
Vial: 5 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Std. Conc.	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.414	0.000	-0.001	1369234	602847	13C3-PFBA_IS	10.0000	10.1615	ng/mL	
13C4-PFBA_IS	Auto	1.414	0.000	----	1369234	1369234	----	10.0000	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.415	0.000	----	602847	602847	----	5.0000	5.0000	ng/mL	
PFBA	Auto	1.416	0.000	0.002	116117	1369234	13C4-PFBA_IS	1.0000	0.9870	ng/mL	
PFMPA	Auto	2.432	0.000	-1.060	92865	147694	13C5-PFPeA_IS	1.0000	0.9729	ng/mL	
3_3 FTCA	Auto	3.004	0.000	-0.488	62978	147694	13C5-PFPeA_IS	20.0000	19.2293	ng/mL	
13C5-PFPeA	Auto	3.493	0.000	-1.487	147694	663775	13C2-PFHxA_IS	5.0000	4.9294	ng/mL	
13C5-PFPeA_IS	Auto	3.493	0.000	----	147694	147694	----	5.0000	5.0000	ng/mL	
PFPeA	Auto	3.495	0.000	0.003	177078	147694	13C5-PFPeA_IS	1.0000	0.9257	ng/mL	
PFMBA	Auto	4.025	0.000	0.533	132663	147694	13C5-PFPeA_IS	1.0000	0.9811	ng/mL	
13C2-4_2 FTS	Auto	4.661	0.000	-2.425	171979	249998	18O2-PFHxS_IS	5.0000	4.9989	ng/mL	
13C2-4_2 FTS_IS	Auto	4.661	0.000	----	171979	171979	----	5.0000	5.0000	ng/mL	
4_2 FTS	Auto	4.662	0.000	0.001	79974	171979	13C2-4_2 FTS_IS	0.9400	0.9455	ng/mL	
13C3-PFBS_IS	Auto	4.647	0.000	----	347150	347150	----	2.5000	2.5000	ng/mL	
PFBS	Auto	4.648	0.000	0.001	159927	347150	13C3-PFBS_IS	0.8900	0.9000	ng/mL	
13C3-PFBS	Auto	4.647	0.000	-2.439	347150	249998	18O2-PFHxS_IS	2.5000	2.4469	ng/mL	
NFDHA	Auto	4.835	0.000	-0.143	146253	693968	13C5-PFHxA_IS	1.0000	0.9499	ng/mL	
13C5-PFHxA	Auto	4.978	0.000	-0.001	693968	663775	13C2-PFHxA_IS	2.5000	2.4807	ng/mL	
13C5-PFHxA_IS	Auto	4.978	0.000	----	693968	693968	----	2.5000	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	4.979	0.000	----	663775	663775	----	2.5000	2.5000	ng/mL	
PFHxA	Auto	4.980	0.000	0.002	229361	693968	13C5-PFHxA_IS	1.0000	0.9846	ng/mL	
PFEESA	Auto	5.322	0.000	0.344	664025	693968	13C5-PFHxA_IS	0.8900	0.8543	ng/mL	
13C3-HFPO-DA	Auto	5.452	0.000	0.473	640534	663775	13C2-PFHxA_IS	10.0000	9.8577	ng/mL	
13C3-HFPO-DA_IS	Auto	5.452	0.000	----	640534	640534	----	10.0000	10.0000	ng/mL	
HFPO-DA	Auto	5.453	0.000	0.001	71358	640534	13C3-HFPO-DA_IS	1.0000	1.0087	ng/mL	
5_3 FTCA	Auto	5.906	0.000	0.928	345149	693968	13C5-PFHxA_IS	20.0000	19.2281	ng/mL	
PFPeS	Auto	6.018	0.000	-1.068	129068	268590	13C3-PFHxS_IS	0.9400	0.9151	ng/mL	
13C4-PFHpA	Auto	6.154	0.000	1.175	630102	663775	13C2-PFHxA_IS	2.5000	2.4881	ng/mL	
13C4-PFHpA_IS	Auto	6.154	0.000	----	630102	630102	----	2.5000	2.5000	ng/mL	
PFHpA	Auto	6.155	0.000	0.001	269319	630102	13C4-PFHpA_IS	1.0000	0.9959	ng/mL	
DONA	Auto	6.520	0.000	1.068	450923	640534	13C3-HFPO-DA_IS	0.9500	0.9083	ng/mL	
13C2-6_2 FTS_IS	Auto	6.793	0.000	----	160736	160736	----	5.0000	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.793	0.000	-0.293	160736	249998	18O2-PFHxS_IS	5.0000	4.9399	ng/mL	
6_2 FTS	Auto	6.792	0.000	-0.001	75066	160736	13C2-6_2 FTS_IS	0.9500	1.0256	ng/mL	
13C4-PFOA_IS	Auto	7.107	0.000	----	42030	42030	----	2.5000	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.107	0.000	----	604919	604919	----	2.5000	2.5000	ng/mL	
13C8-PFOA	Auto	7.107	0.000	0.000	604919	42030	13C4-PFOA_IS	2.5000	2.5751	ng/mL	
PFOA	Auto	7.110	0.000	0.003	173590	604919	13C8-PFOA_IS	1.0000	1.0681	ng/mL	
13C3-PFHxS	Auto	7.086	0.000	0.000	268590	249998	18O2-PFHxS_IS	2.5000	2.5030	ng/mL	
13C3-PFHxS_IS	Auto	7.086	0.000	----	268590	268590	----	2.5000	2.5000	ng/mL	
PFHxS	M	7.084	0.000	-0.002	120607	268590	13C3-PFHxS_IS	0.9100	0.9164	ng/mL	
18O2-PFHxS_IS	Auto	7.086	0.000	----	249998	249998	----	2.5000	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.956	0.000	----	329225	329225	----	1.2500	1.2500	ng/mL	
13C9-PFNA	Auto	7.956	0.000	0.000	329225	328955	13C5-PFNA_IS	1.2500	1.2782	ng/mL	
13C5-PFNA_IS	Auto	7.956	0.000	----	328955	328955	----	1.2500	1.2500	ng/mL	
PFNA	Auto	7.957	0.000	0.001	185195	329225	13C9-PFNA_IS	1.0000	0.9575	ng/mL	
PFHpS	Auto	8.004	0.000	-0.816	85513	124480	13C8-PFOS_IS	0.9500	0.8801	ng/mL	
7_3 FTCA	Auto	7.954	0.000	2.976	439237	693968	13C5-PFHxA_IS	20.0000	18.3296	ng/mL	
13C2-8_2-FTS	Auto	8.409	0.000	1.323	121050	249998	18O2-PFHxS_IS	5.0000	4.5289	ng/mL	
13C2-8_2-FTS_IS	Auto	8.409	0.000	----	121050	121050	----	5.0000	5.0000	ng/mL	
8_2 FTS	Auto	8.410	0.000	0.001	49479	121050	13C2-8_2-FTS_IS	0.9600	0.9512	ng/mL	
13C6-PFDA_IS	Auto	8.720	0.000	----	247598	247598	----	1.2500	1.2500	ng/mL	
13C6-PFDA	Auto	8.720	0.000	-0.001	247598	243243	13C2-PFDA_IS	1.2500	1.2652	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_010 (continued)

(Table continued from previous page)

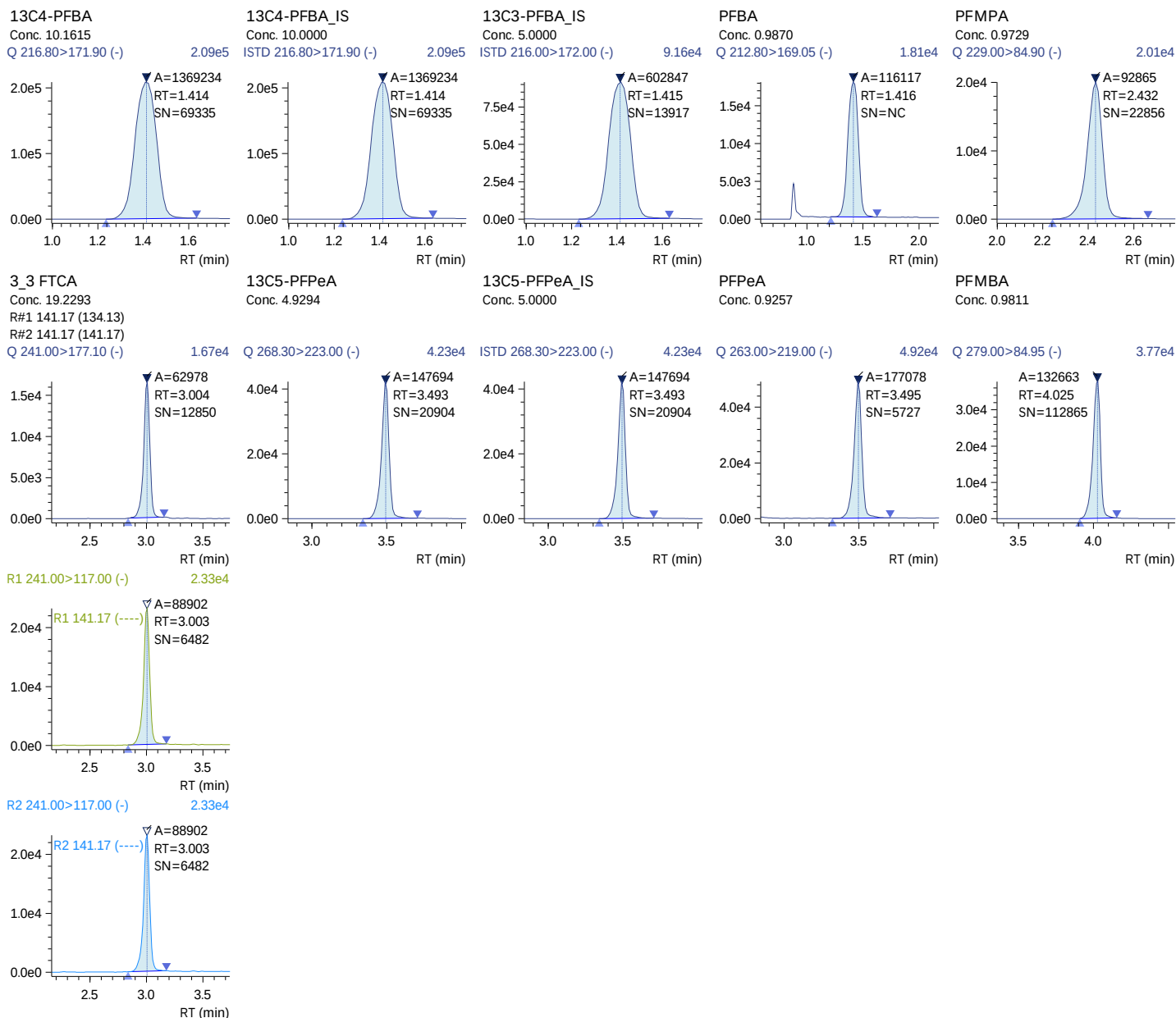
Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Std. Conc.	Conc.	Unit	Flag ID
13C2-PFDA_IS	Auto	8.721	0.000	----	243243	243243	----	1.2500	1.2500	ng/mL	
PFDA	Auto	8.721	0.000	0.001	238103	247598	13C6-PFDA_IS	1.0000	0.9834	ng/mL	
D3-NMeFOSAA_IS	Auto	8.855	0.000	----	251536	251536	----	5.0000	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.855	0.000	0.035	251536	298833	13C4-PFOS_IS	5.0000	4.8498	ng/mL	
13C8-PFOS_IS	Auto	8.820	0.000	----	124480	124480	----	2.5000	2.5000	ng/mL	
13C8-PFOS	Auto	8.820	0.000	0.000	124480	298833	13C4-PFOS_IS	2.5000	2.4977	ng/mL	
13C4-PFOS_IS	Auto	8.820	0.000	----	298833	298833	----	2.5000	2.5000	ng/mL	
PFOS	M	8.822	0.000	0.002	108900	124480	13C8-PFOS_IS	0.9300	0.8411	ng/mL	
NMeFOSAA	M	8.861	0.000	0.006	68385	251536	D3-NMeFOSAA_IS	1.0000	1.0020	ng/mL	
D5-NetFOSAA_IS	Auto	9.186	0.000	----	296281	296281	----	5.0000	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.186	0.000	0.366	296281	298833	13C4-PFOS_IS	5.0000	4.7749	ng/mL	
NetFOSAA	M	9.195	0.000	0.009	40635	296281	D5-NetFOSAA_IS	1.0000	1.0269	ng/mL	
9-CI-PF3ONS	Auto	9.384	0.000	3.932	488722	640534	13C3-HFPO-DA_IS	0.9300	0.9255	ng/mL	
PFUnDA	Auto	9.447	0.000	0.002	211279	276567	13C7-PFUnDA_IS	1.0000	1.0253	ng/mL	
13C7-PFUnDA_IS	Auto	9.445	0.000	----	276567	276567	----	1.2500	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.445	0.000	0.724	276567	243243	13C2-PFDA_IS	1.2500	1.1848	ng/mL	
PFNS	Auto	9.584	0.000	0.764	85942	124480	13C8-PFOS_IS	0.9600	0.9087	ng/mL	
10_2_FTS	Auto	9.819	0.000	1.410	62123	121050	13C2-8_2-FTS_IS	0.9600	0.9816	ng/mL	
13C2-PFDOA_IS	Auto	10.133	0.000	----	328895	328895	----	1.2500	1.2500	ng/mL	
13C2-PFDOA	Auto	10.133	0.000	1.412	328895	243243	13C2-PFDA_IS	1.2500	1.2264	ng/mL	
PFDOA	Auto	10.134	0.000	0.001	191533	328895	13C2-PFDOA_IS	1.0000	1.0026	ng/mL	
PFDS	Auto	10.296	0.000	1.476	77566	124480	13C8-PFOS_IS	0.9700	0.9373	ng/mL	
PFTDA	Auto	10.792	0.000	-0.632	209818	140054	13C2-PFTDA_IS	1.0000	1.0310	ng/mL	
11-CI-PF3OUdS	Auto	10.806	0.000	5.354	342495	640534	13C3-HFPO-DA_IS	0.9400	0.9470	ng/mL	
PFOSAm	M	11.164	0.000	-0.001	197052	309952	13C8-PFOSAm_IS	2.0000	1.9288	ng/mL	
13C8-PFOSAm	Auto	11.165	0.000	2.345	309952	298833	13C4-PFOS_IS	2.5000	2.4433	ng/mL	
13C8-PFOSAm_IS	Auto	11.165	0.000	----	309952	309952	----	2.5000	2.5000	ng/mL	
PFTDA	Auto	11.425	0.000	0.001	153669	140054	13C2-PFTDA_IS	1.0000	0.9933	ng/mL	
13C2-PFTDA	Auto	11.424	0.000	2.703	140054	243243	13C2-PFDA_IS	1.2500	1.2095	ng/mL	
13C2-PFTDA_IS	Auto	11.424	0.000	----	140054	140054	----	1.2500	1.2500	ng/mL	
PFDoS	Auto	11.622	0.000	2.802	45685	124480	13C8-PFOS_IS	0.9700	0.9151	ng/mL	
D7-MeFOSE_IS	Auto	13.377	0.000	----	736922	736922	----	25.0000	25.0000	ng/mL	
D7-MeFOSE	Auto	13.377	0.000	4.557	736922	298833	13C4-PFOS_IS	25.0000	23.5612	ng/mL	
MeFOSE	M	13.413	0.000	0.036	26578	736922	D7-MeFOSE_IS	1.0000	0.9821	ng/mL	
13C2-PFHXA_IS	Auto	12.641	0.000	----	548879	548879	----	2.5000	2.5000	ng/mL	
13C2-PFHXA	Auto	12.641	0.000	3.920	548879	243243	13C2-PFDA_IS	2.5000	2.4293	ng/mL	
PFHXA	Auto	12.642	0.000	0.001	233309	548879	13C2-PFHXA_IS	1.0000	1.0088	ng/mL	
D3-MeFOSA	Auto	13.685	0.000	4.865	68121	298833	13C4-PFOS_IS	2.5000	2.6665	ng/mL	
D3-MeFOSA_IS	Auto	13.685	0.000	----	68121	68121	----	2.5000	2.5000	ng/mL	
MeFOSA	M	13.694	0.000	0.009	46422	68121	D3-MeFOSA_IS	1.0000	0.9453	ng/mL	
D9-EtFOSE_IS	Auto	14.006	0.000	----	776012	776012	----	25.0000	25.0000	ng/mL	
D9-EtFOSE	Auto	14.006	0.000	5.186	776012	298833	13C4-PFOS_IS	25.0000	24.4286	ng/mL	
EtFOSE	M	14.049	0.000	0.042	37832	776012	D9-EtFOSE_IS	1.0000	0.9266	ng/mL	
D5-EtFOSAm	Auto	14.362	0.000	5.542	80394	298833	13C4-PFOS_IS	2.5000	2.3636	ng/mL	
D5-EtFOSAm_IS	Auto	14.362	0.000	----	80394	80394	----	2.5000	2.5000	ng/mL	
EtFOSAm	M	14.380	0.000	0.018	45505	80394	D5-EtFOSAm_IS	1.0000	0.9723	ng/mL	
PFODA	Auto	13.775	0.000	1.134	118686	548879	13C2-PFHXA_IS	1.0000	0.9562	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_010 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_010 (continued)

13C2-4_2 FTS
Conc. 4.9989

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. 0.9455
R#1 29.06 (34.14)
R#2 29.06 (29.06)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 0.9000
R#1 46.72 (47.53)
R#2 46.72 (46.72)

Q 329.10>80.90 (-)

5.42e4

ISTD 329.10>80.90 (-)

5.42e4

Q 327.10>307.00 (-)

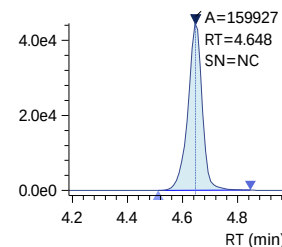
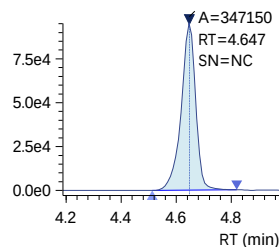
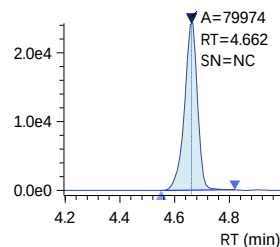
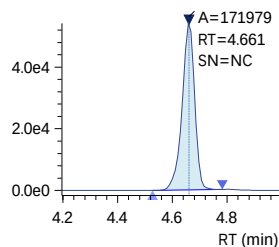
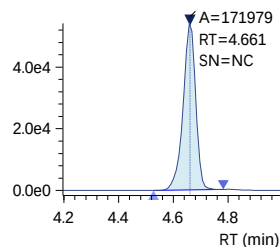
2.43e4

ISTD 302.10>79.90 (-)

9.52e4

Q 298.70>79.90 (-)

4.45e4

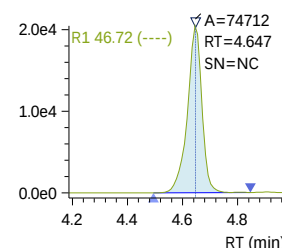
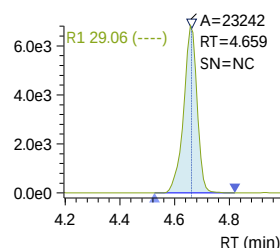


R1 327.10>80.90 (-)

6.82e3

R1 298.70>98.80 (-)

2.05e4

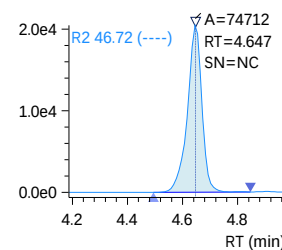
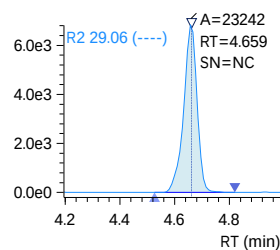


R2 327.10>80.90 (-)

6.82e3

R2 298.70>98.80 (-)

2.05e4





240118_010 (continued)

13C3-PFBS
Conc. 2.4469

NFDHA
Conc. 0.9499
R#1 40.25 (37.88)
R#2 40.25 (40.25)

13C5-PFHxA
Conc. 2.4807

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

Q 302.10>79.90 (-)

9.52e4

Q 295.00>201.00 (-)

4.25e4

Q 318.00>273.00 (-)

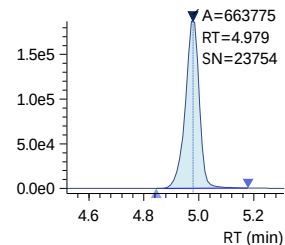
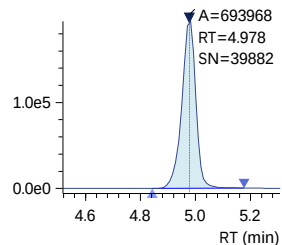
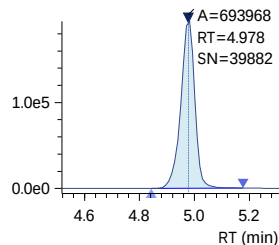
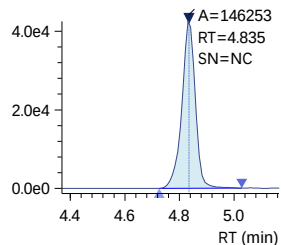
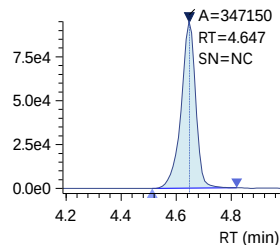
1.95e5

ISTD 318.00>273.00 (-)

1.95e5

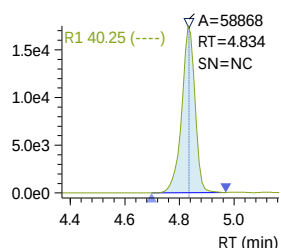
ISTD 315.10>270.00 (-)

1.87e5



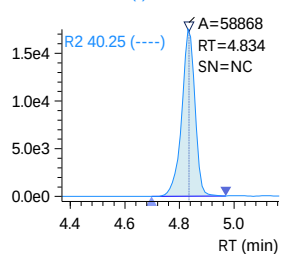
R1 295.00>84.90 (-)

1.75e4



R2 295.00>84.90 (-)

1.75e4

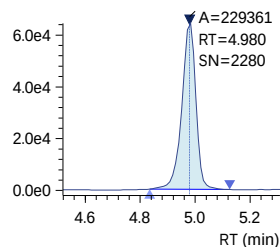




240118_010 (continued)

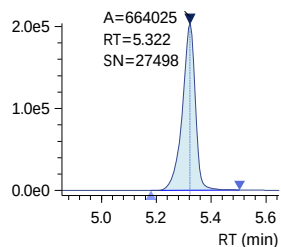
PFHxA
Conc. 0.9846

Q 313.00>269.00 (-)

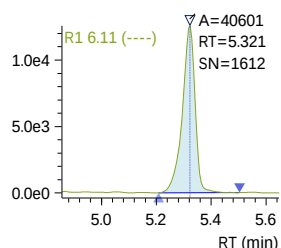


PFEESA
Conc. 0.8543
R#1 6.11 (5.88)
R#2 6.11 (6.11)

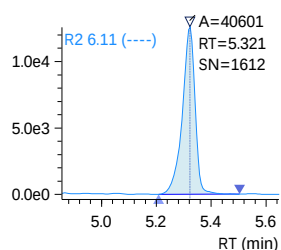
Q 314.80>135.00 (-)



R1 314.80>82.90 (-)

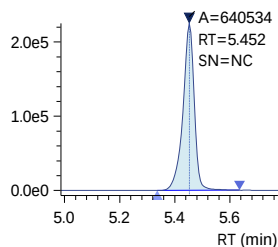


R2 314.80>82.90 (-)



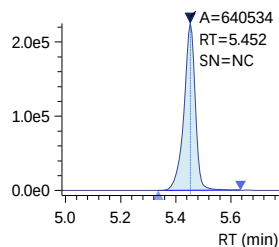
13C3-HFPO-DA
Conc. 9.8577

Q 286.90>168.90 (-)



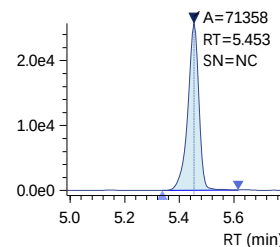
13C3-HFPO-DA_IS
Conc. 10.0000

ISTD 286.90>168.90 (-)

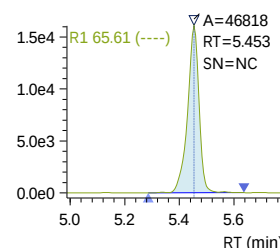


HFPO-DA
Conc. 1.0087
R#1 65.61 (63.80)
R#2 65.61 (65.61)

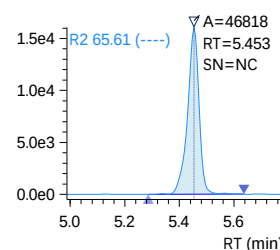
Q 284.90>168.90 (-)



R1 284.90>184.90 (-)

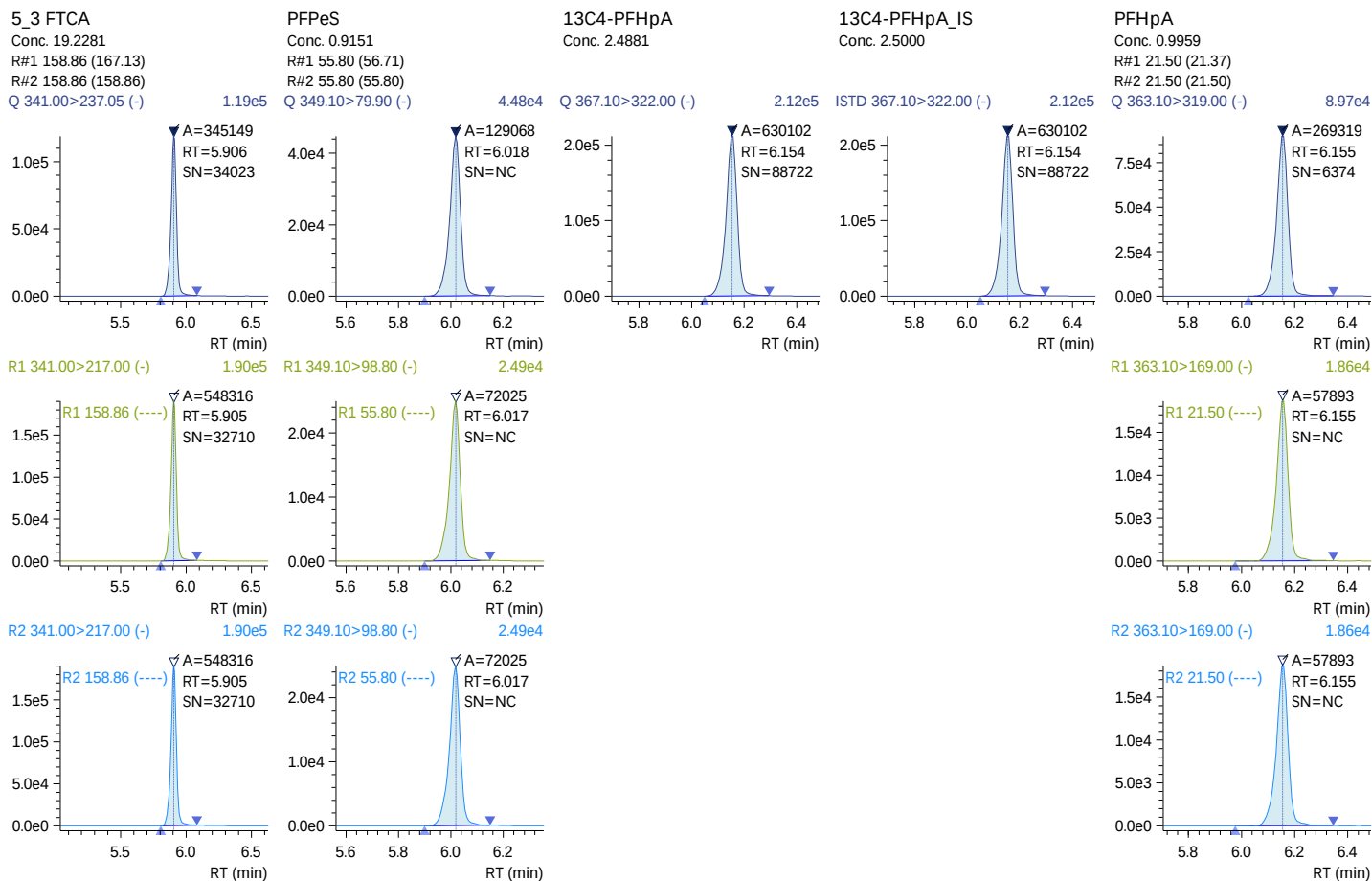


R2 284.90>184.90 (-)





240118_010 (continued)

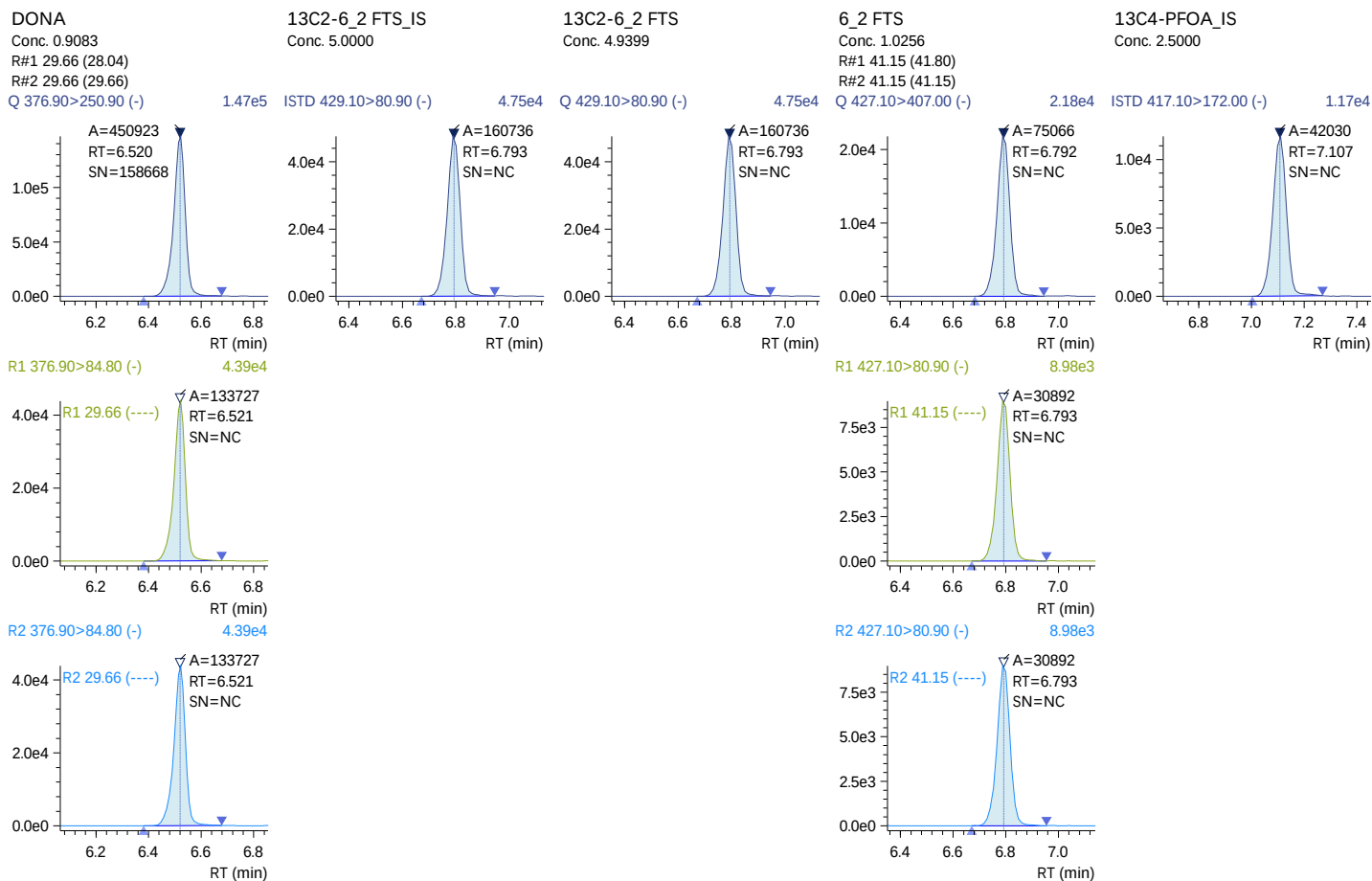


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_010 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_010 (continued)

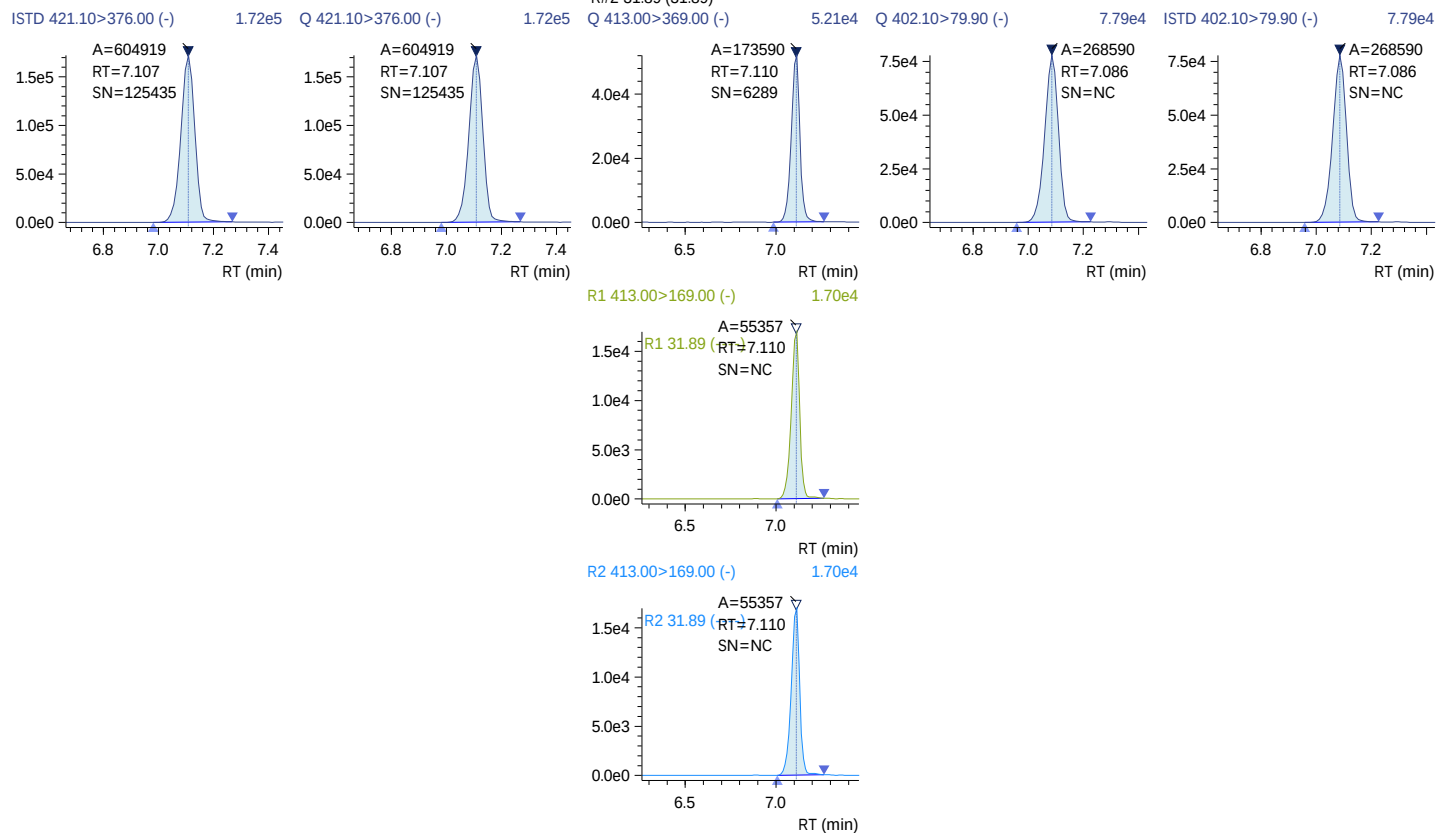
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.5751

PFOA
Conc. 1.0681
R#1 31.89 (29.05)
R#2 31.89 (31.89)

13C3-PFHxS
Conc. 2.5030

13C3-PFHxS_IS
Conc. 2.5000

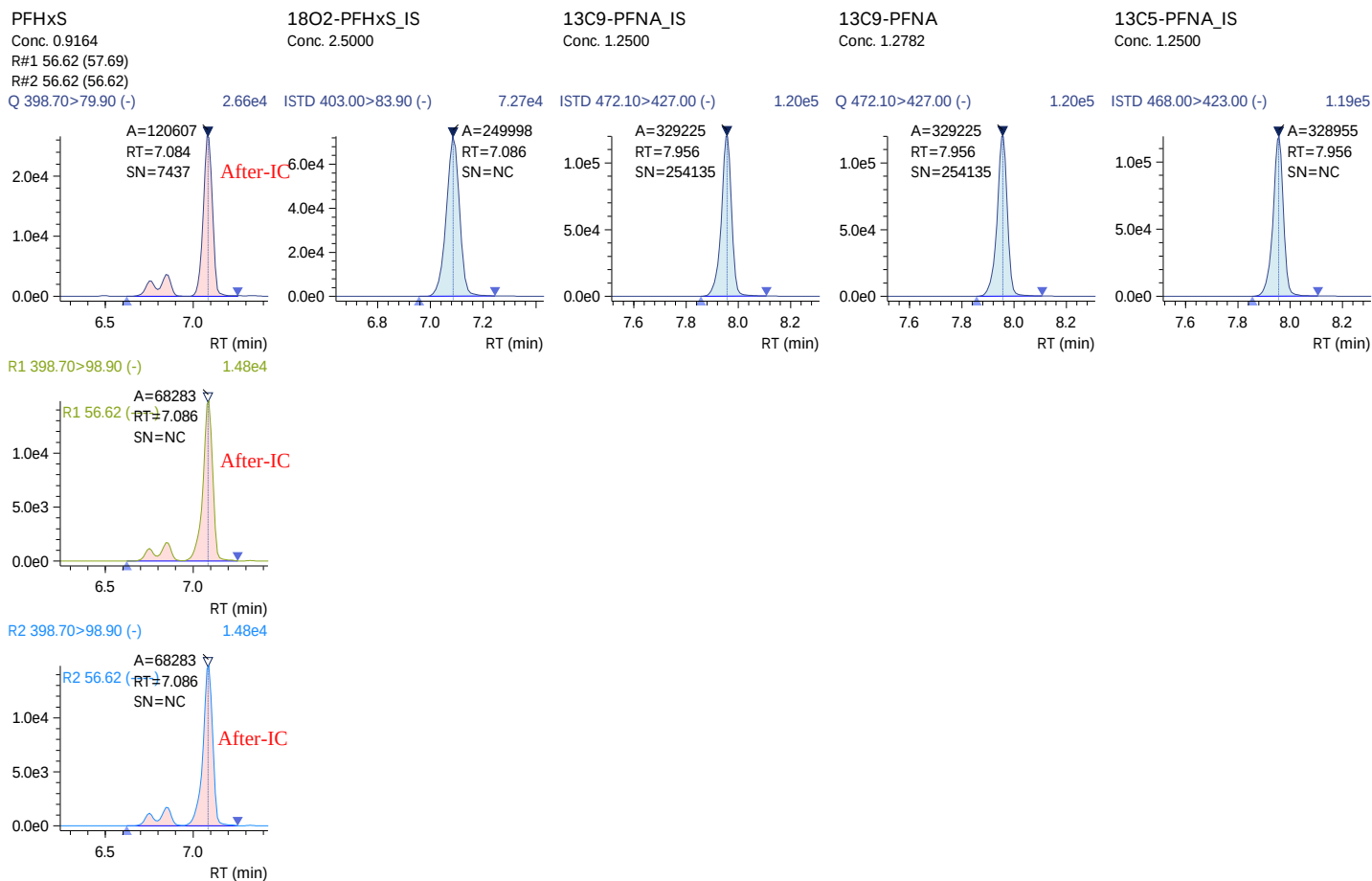


J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_010 (continued)

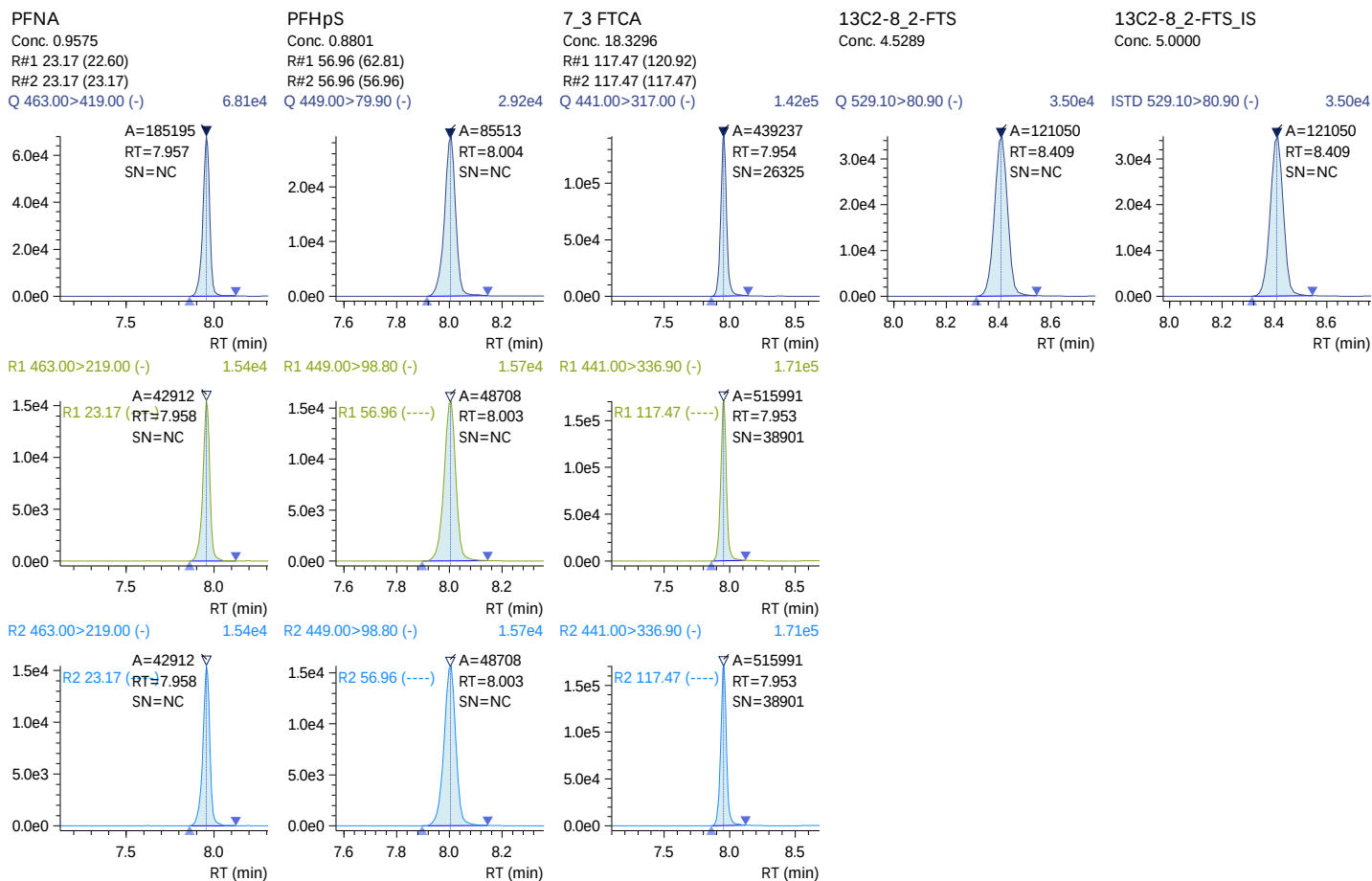


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_010 (continued)

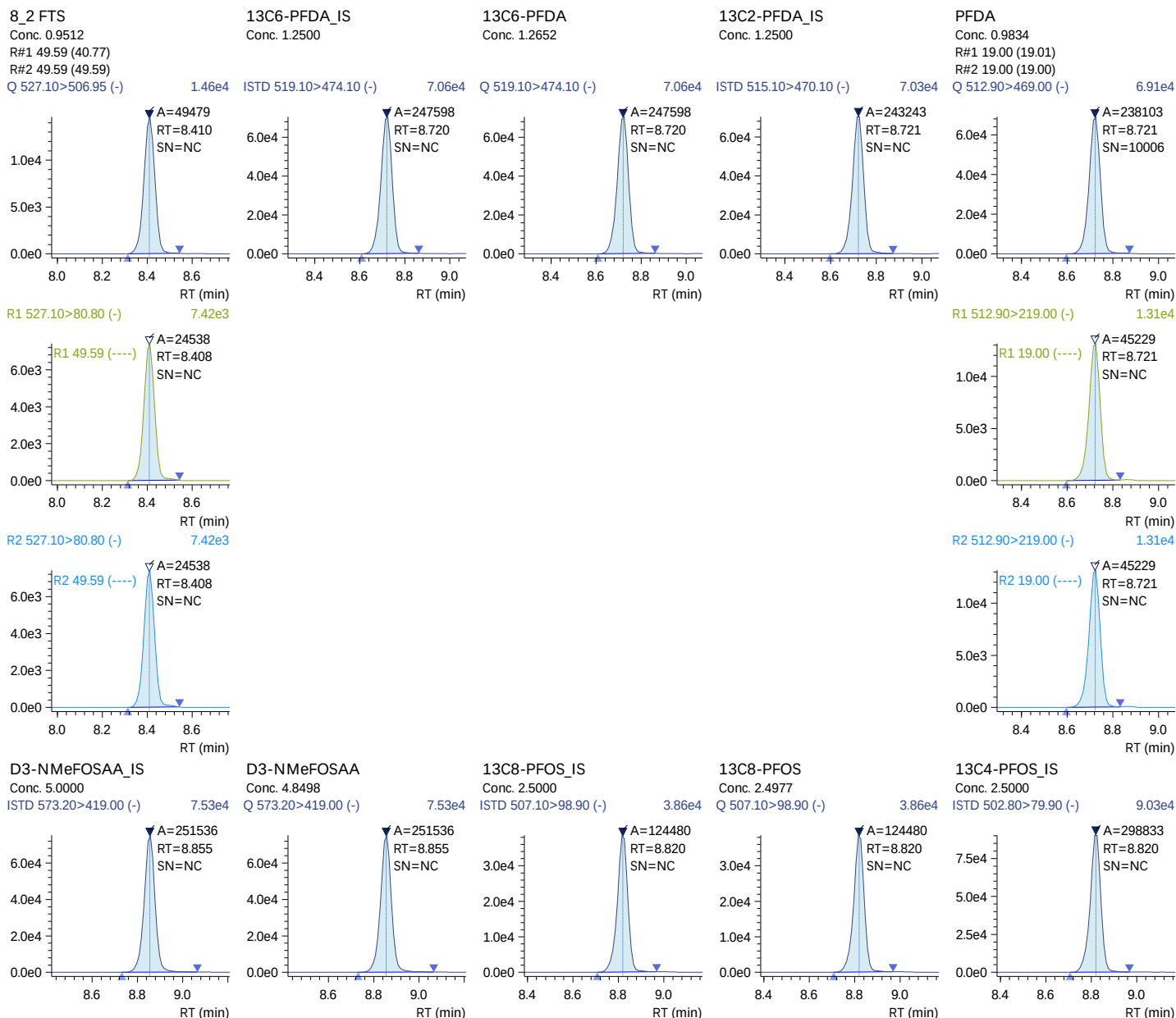


J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_010 (continued)

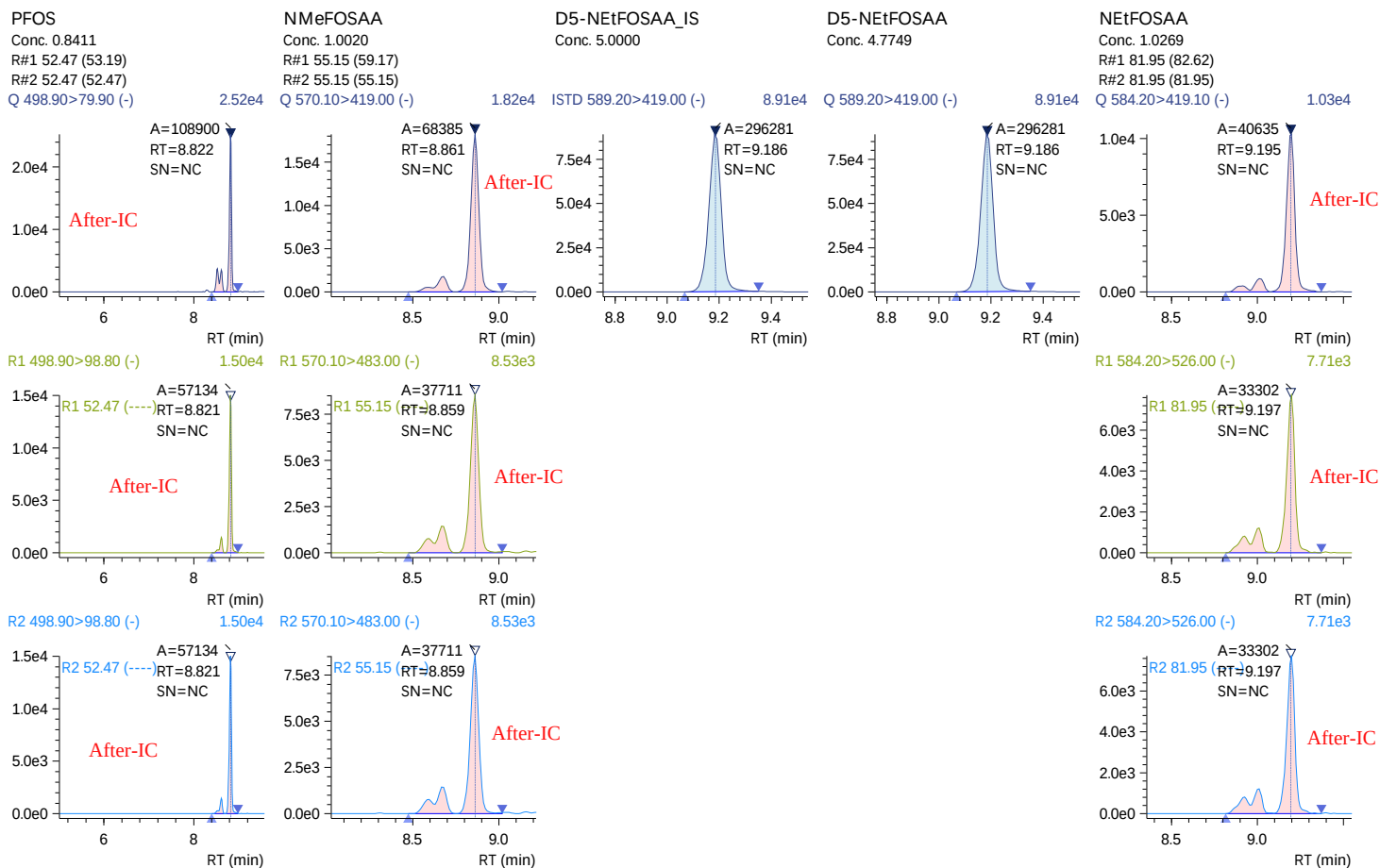


J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_010 (continued)



J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

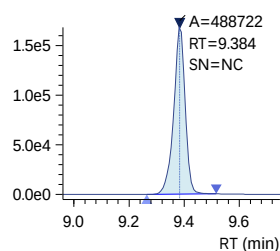
SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



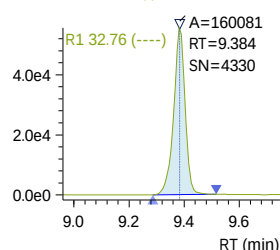
240118_010 (continued)

9-Cl-PF3ONS

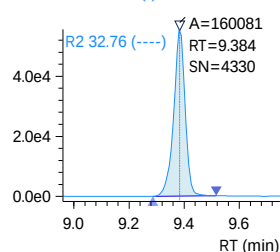
Conc. 0.9255
R#1 32.76 (31.76)
R#2 32.76 (32.76)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-)

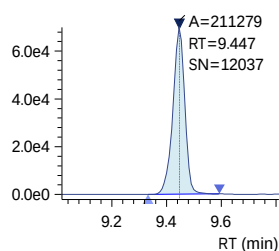


R2 532.80>353.00 (-)

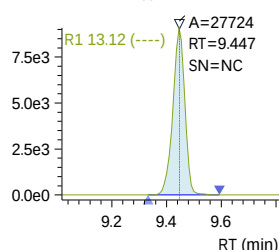


PFUnDA

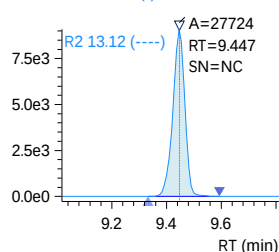
Conc. 1.0253
R#1 13.12 (12.31)
R#2 13.12 (13.12)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-)

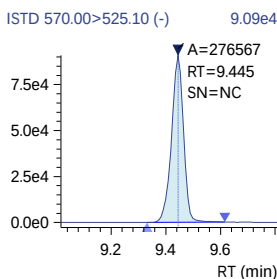


R2 563.10>269.10 (-)



13C7-PFUnDA_IS

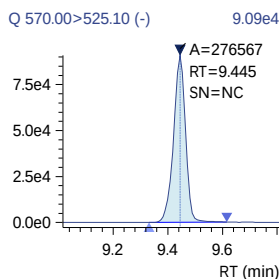
Conc. 1.2500



ISTD 570.00>525.10 (-)

13C7-PFUnDA

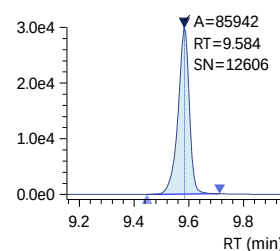
Conc. 1.1848



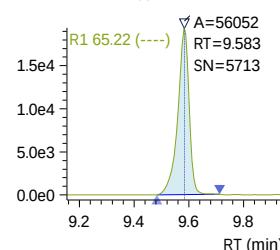
Q 570.00>525.10 (-)

PFNS

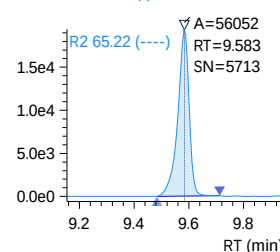
Conc. 0.9087
R#1 65.22 (63.31)
R#2 65.22 (65.22)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-)

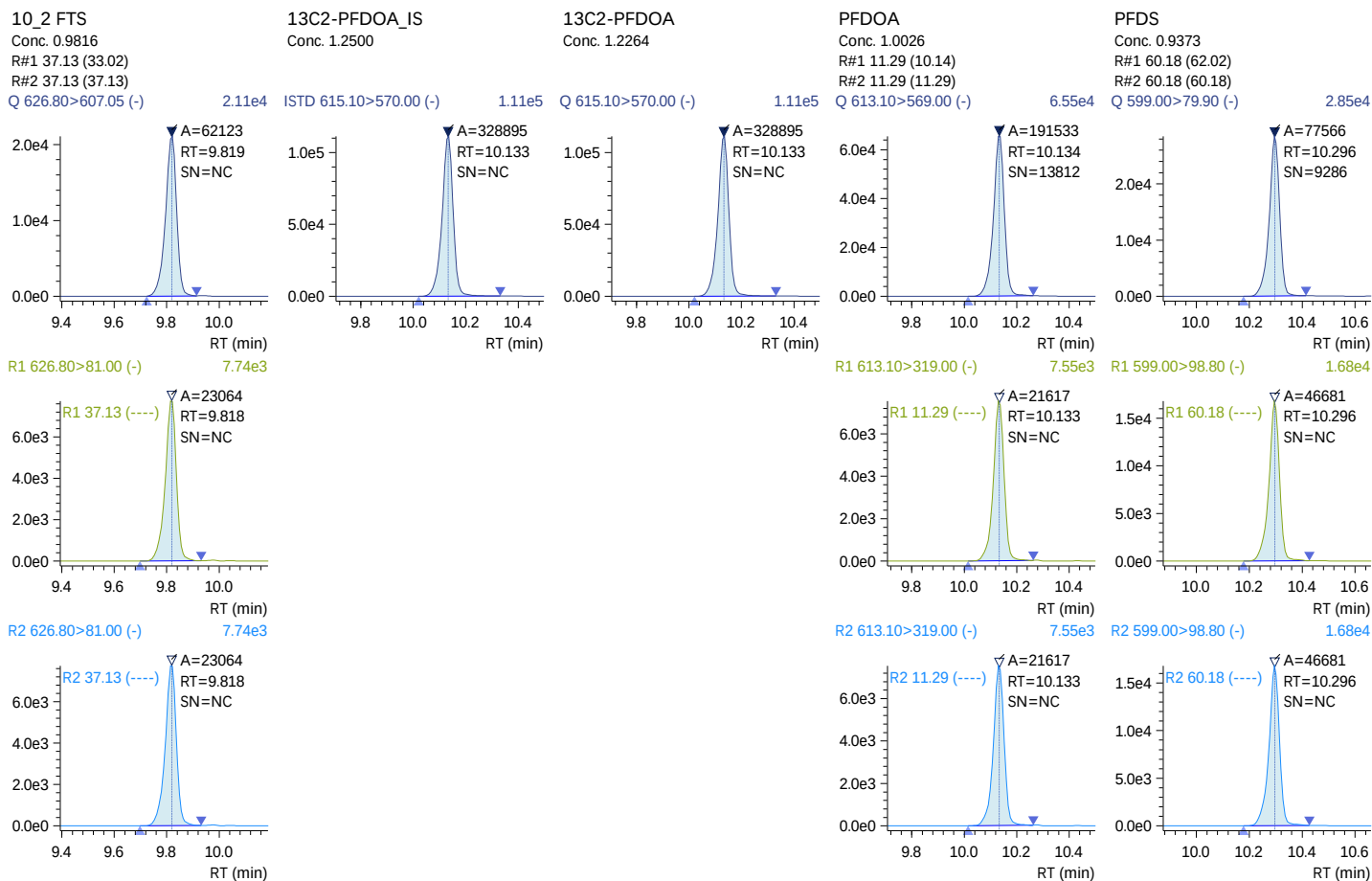


R2 548.80>98.80 (-)





240118_010 (continued)

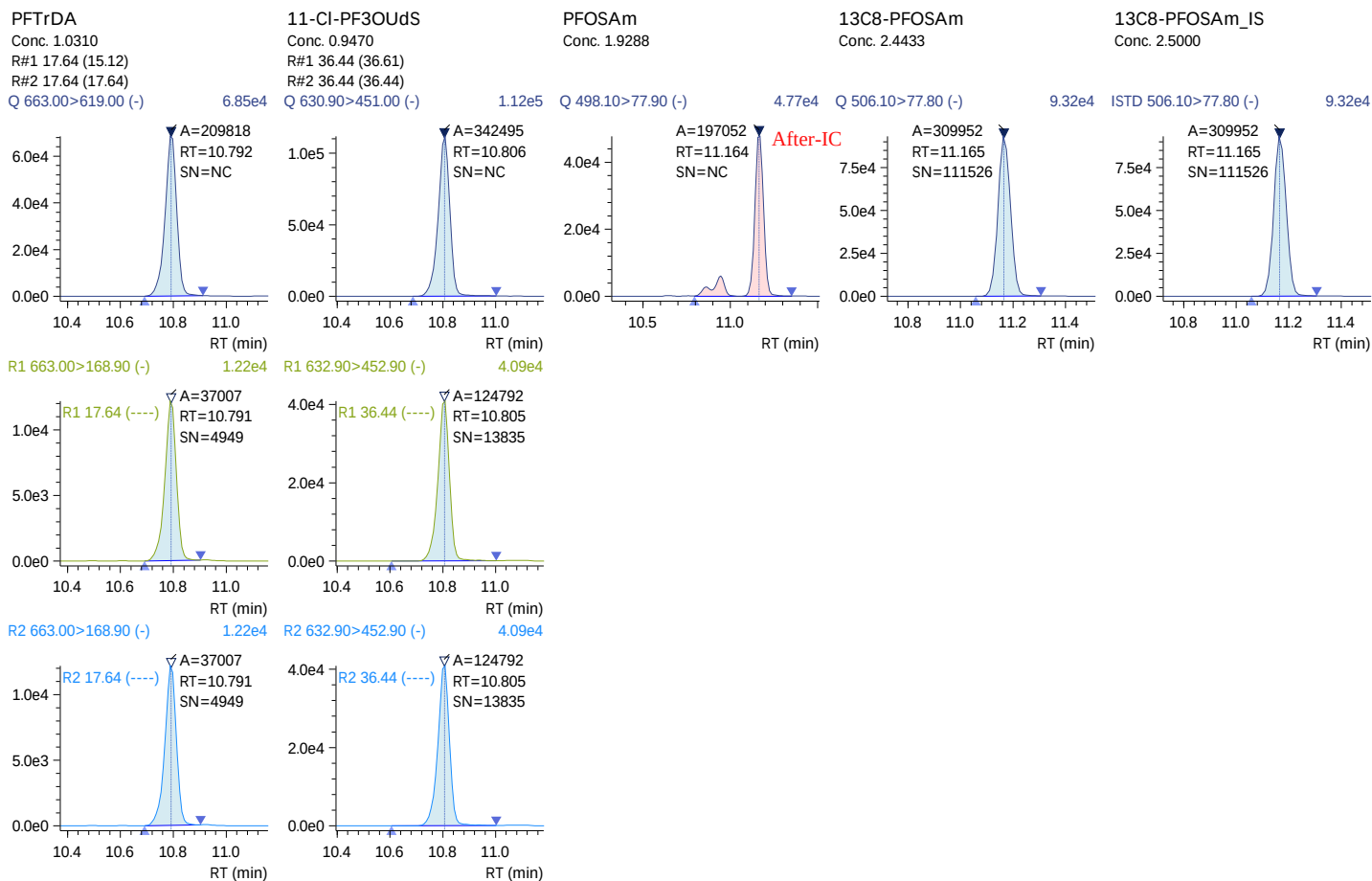


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_010 (continued)

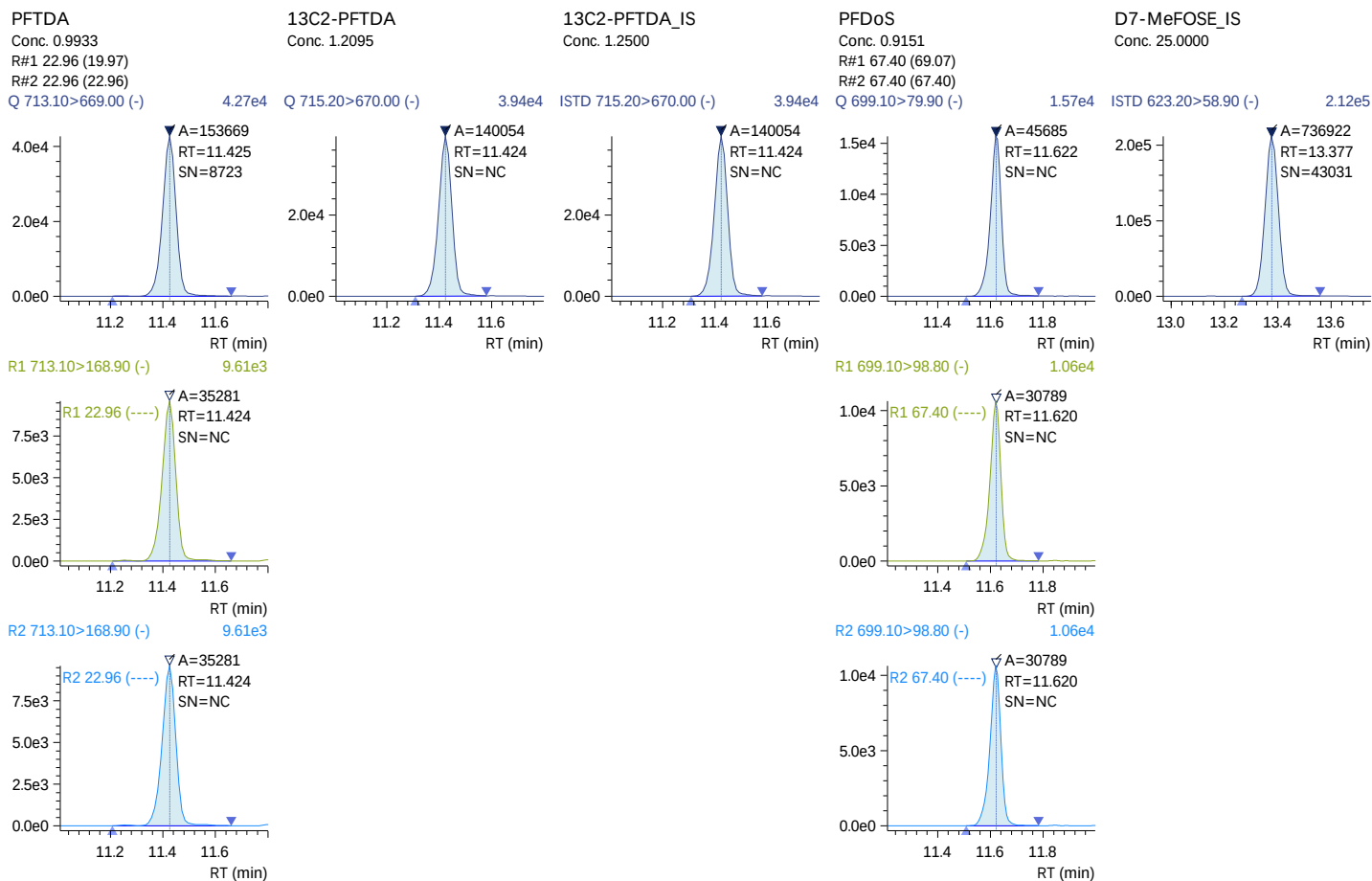


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_010 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_010 (continued)

D7-MeFOSE
Conc. 23.5612

MeFOSE
Conc. 0.9821

13C2-PFHXA_IS
Conc. 2.5000

13C2-PFHXA
Conc. 2.4293

PFHXA

Conc. 1.0088
R#1 13.90 (11.64)
R#2 13.90 (13.90)

Q 623.20>58.90 (-)

2.12e5

Q 616.10>59.00 (-)

4.72e3

ISTD 815.00>770.05 (-)

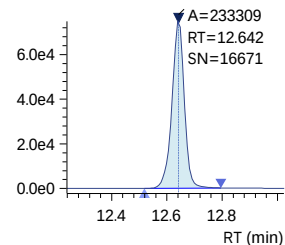
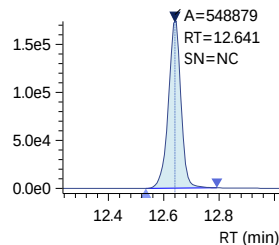
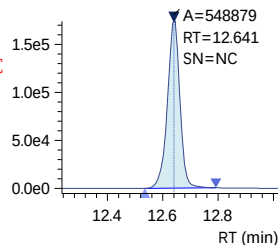
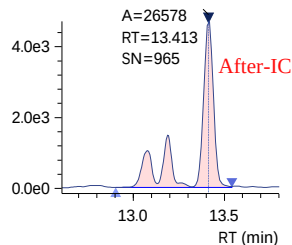
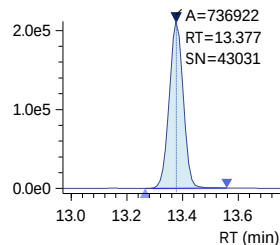
1.74e5

Q 815.00>770.05 (-)

1.74e5

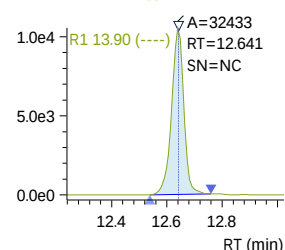
Q 813.00>768.95 (-)

7.49e4



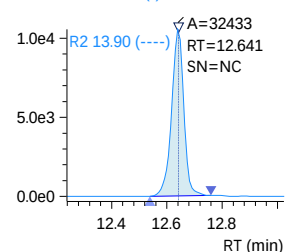
R1 813.00>218.95 (-)

1.06e4



R2 813.00>218.95 (-)

1.06e4





240118_010 (continued)

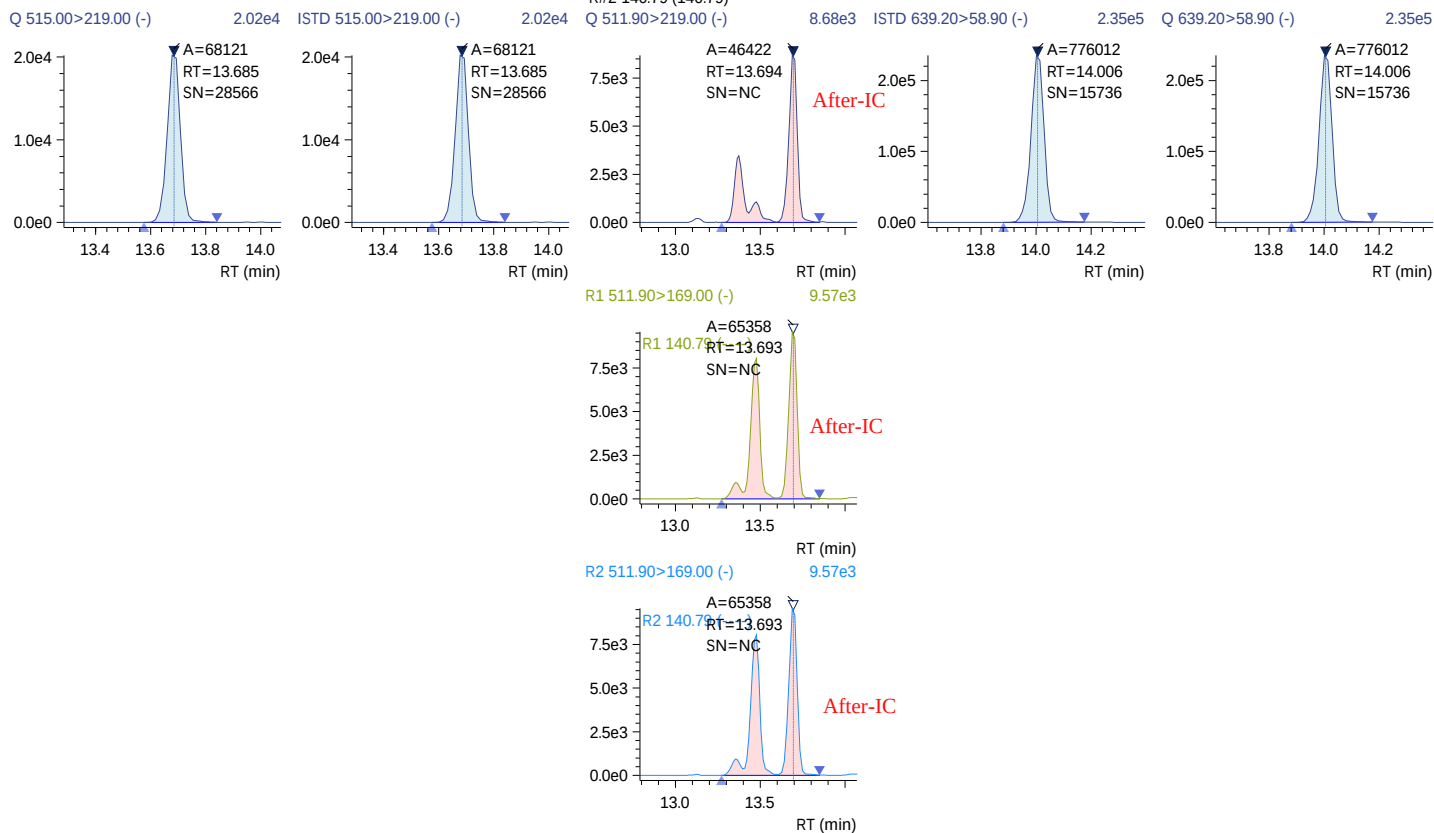
D3-MeFOSA
Conc. 2.6665

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. 0.9453
R#1 140.79 (149.05)
R#2 140.79 (140.79)

D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 24.4286

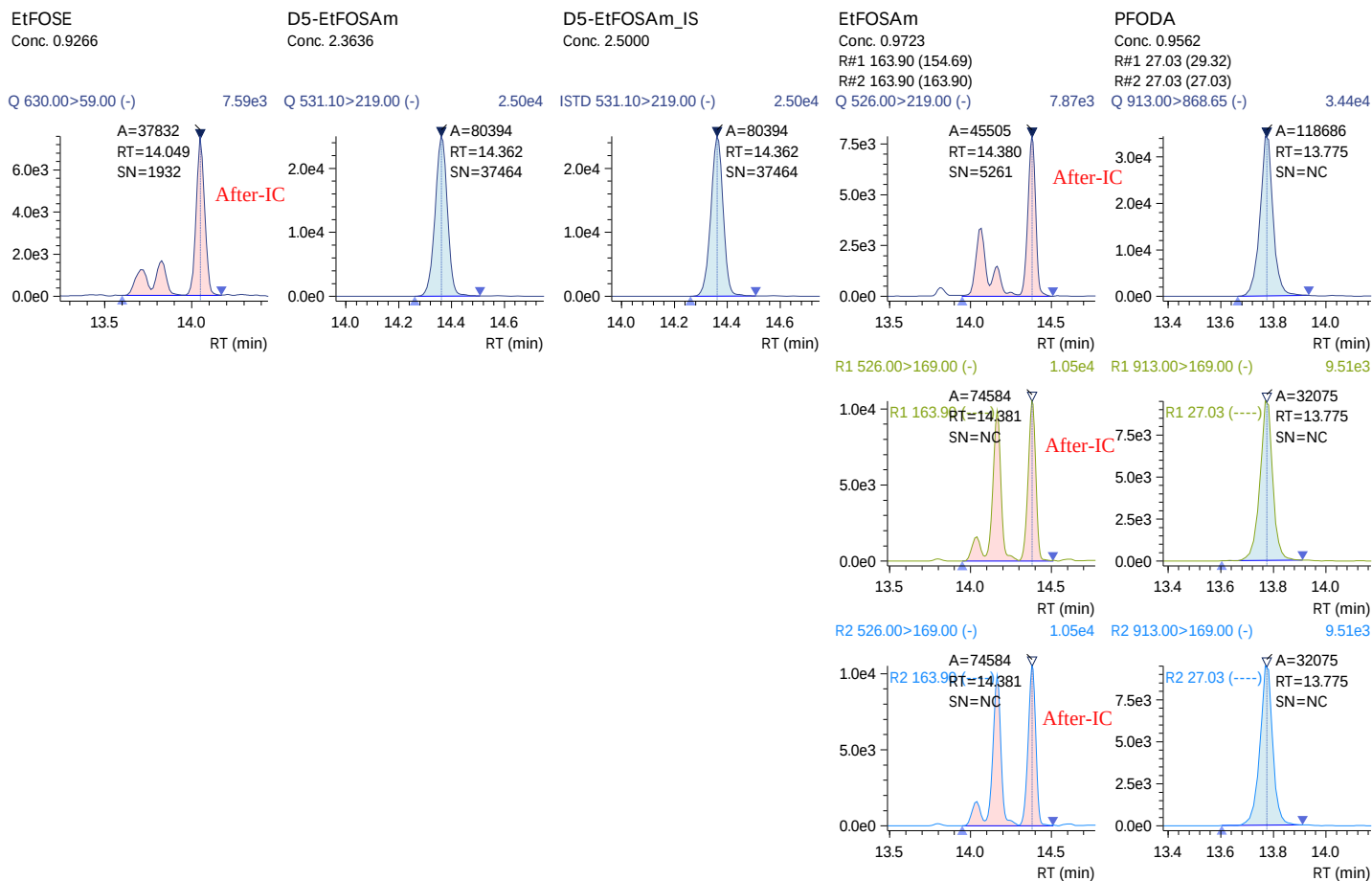


J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_010 (continued)



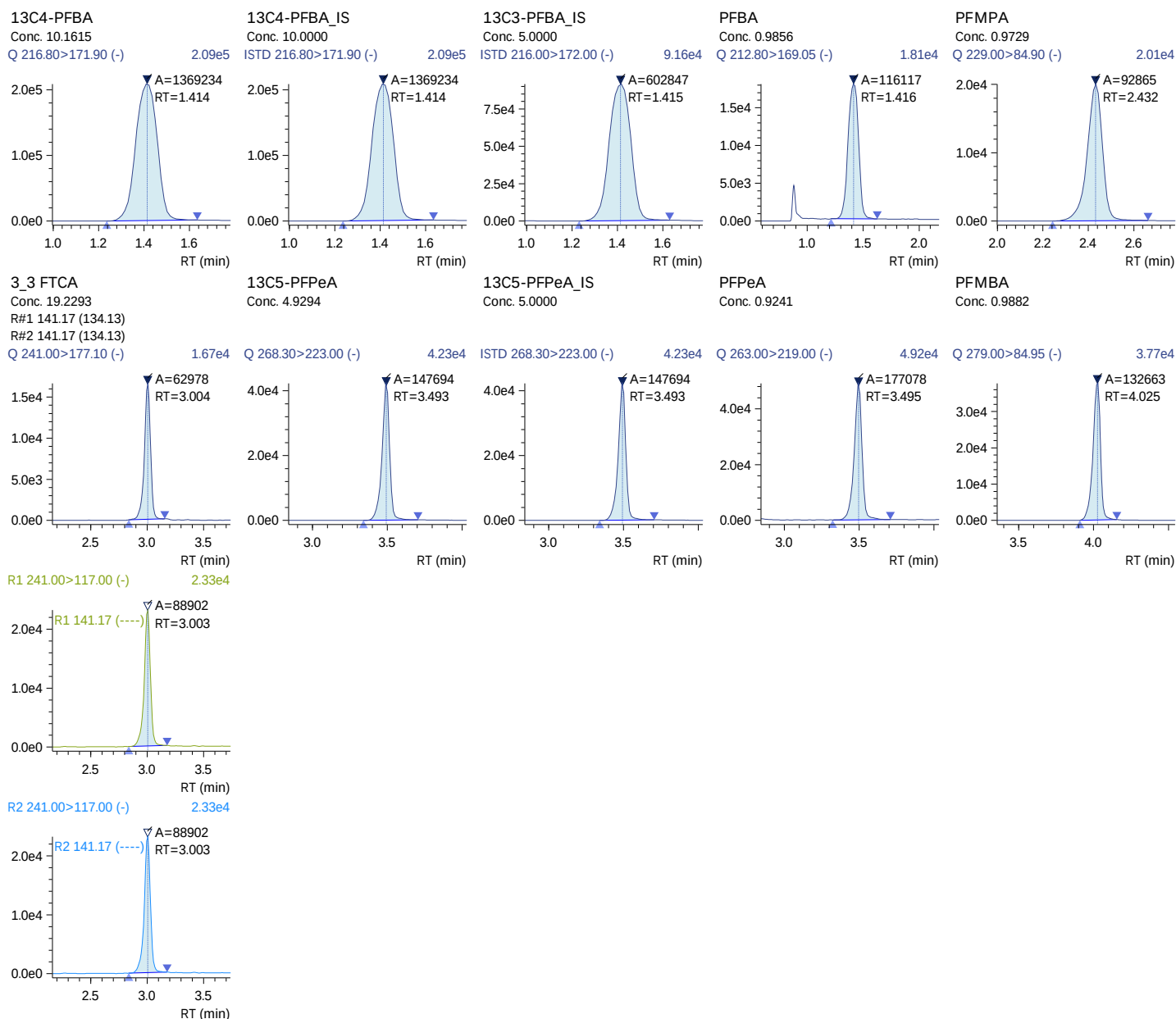
J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\lp

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_010

Sample ID: 1633 ICAL 1.0PPB
Date Acquired: 1/18/2024 3:37:35 PM
Acquired by: System Administrator
Data File: 240118_010
Vial: 5 | Inj. Volume: 10.0000uL | Tray: 1





240118_010 (continued)

13C2-4_2 FTS
 Conc. 4.9989

13C2-4_2 FTS_IS
 Conc. 5.0000

4_2 FTS
 Conc. 0.9455
 R#1 29.06 (34.14)
 R#2 29.06 (34.14)

13C3-PFBS_IS
 Conc. 2.5000

PFBS
 Conc. 0.9000
 R#1 46.72 (47.53)
 R#2 46.72 (47.53)

Q 329.10>80.90 (-)

5.42e4

ISTD 329.10>80.90 (-)

5.42e4

Q 327.10>307.00 (-)

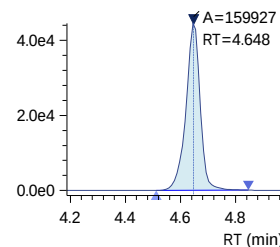
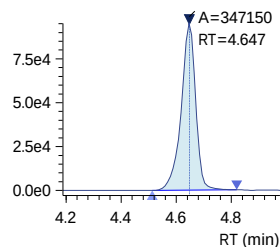
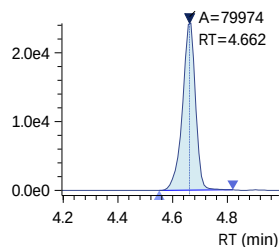
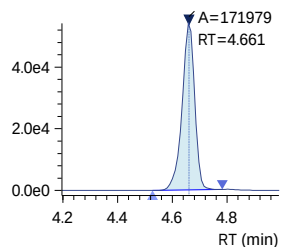
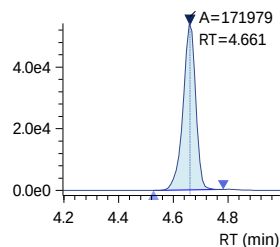
2.43e4

ISTD 302.10>79.90 (-)

9.52e4

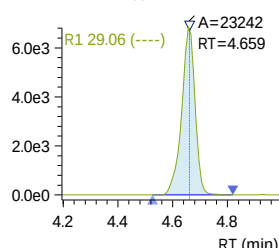
Q 298.70>79.90 (-)

4.45e4



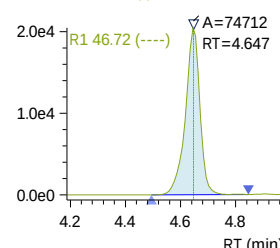
R1 327.10>80.90 (-)

6.82e3



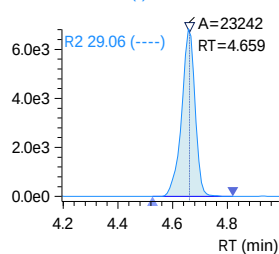
R1 298.70>98.80 (-)

2.05e4



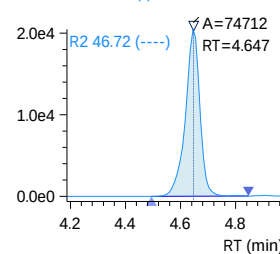
R2 327.10>80.90 (-)

6.82e3



R2 298.70>98.80 (-)

2.05e4





240118_010 (continued)

13C3-PFBS
Conc. 2.4469

NFDHA
Conc. 0.9499
R#1 40.25 (37.88)
R#2 40.25 (37.88)

13C5-PFHxA
Conc. 2.4807

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

Q 302.10>79.90 (-)

9.52e4

Q 295.00>201.00 (-)

4.25e4

Q 318.00>273.00 (-)

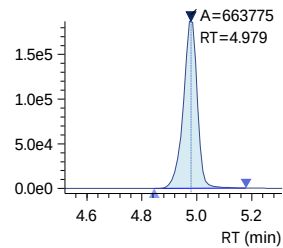
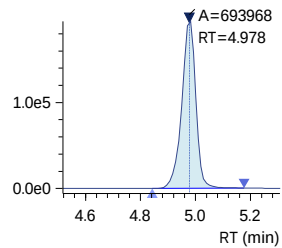
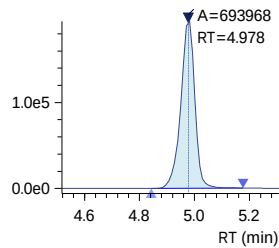
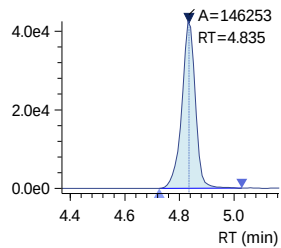
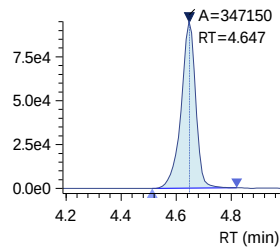
1.95e5

ISTD 318.00>273.00 (-)

1.95e5

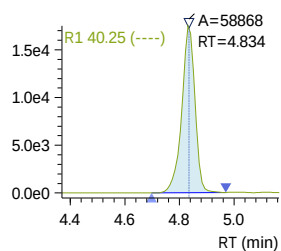
ISTD 315.10>270.00 (-)

1.87e5



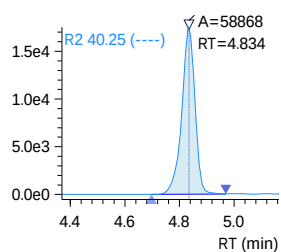
R1 295.00>84.90 (-)

1.75e4



R2 295.00>84.90 (-)

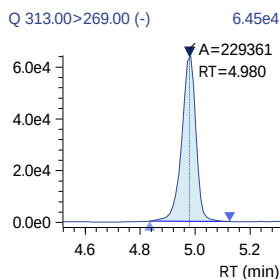
1.75e4





240118_010 (continued)

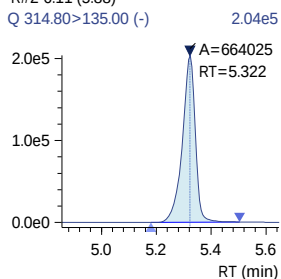
PFHxA
Conc. 0.9959



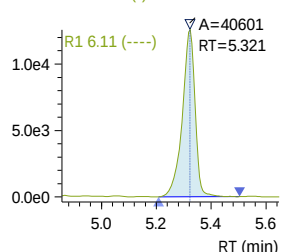
PFEESA
Conc. 0.8543

R#1 6.11 (5.88)

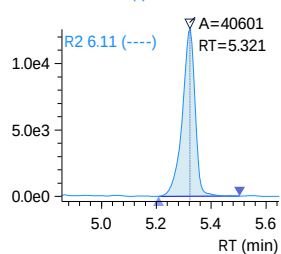
R#2 6.11 (5.88)



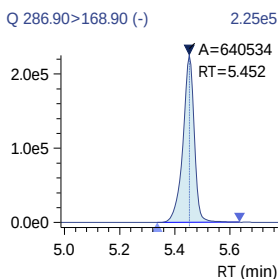
R1 314.80>82.90 (-) 1.26e4



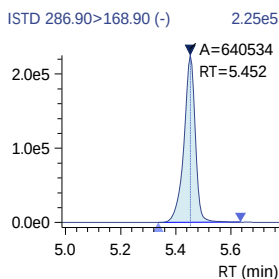
R2 314.80>82.90 (-) 1.26e4



13C3-HFPO-DA
Conc. 9.8577



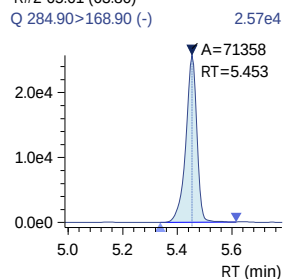
13C3-HFPO-DA_IS
Conc. 10.0000



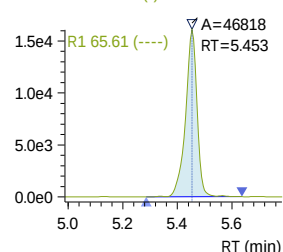
HFPO-DA
Conc. 1.0105

R#1 65.61 (63.80)

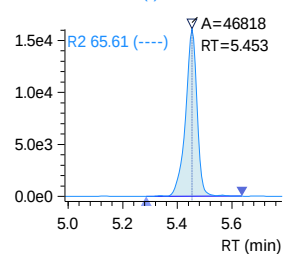
R#2 65.61 (63.80)



R1 284.90>184.90 (-) 1.61e4



R2 284.90>184.90 (-) 1.61e4





240118_010 (continued)

5_3 FTCA

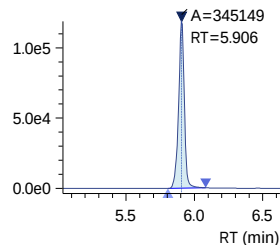
Conc. 19.2281

R#1 158.86 (167.13)

R#2 158.86 (167.13)

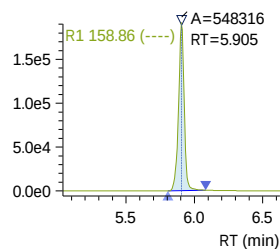
Q 341.00>237.05 (-)

1.19e5



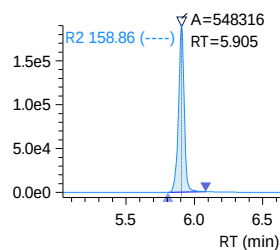
R1 341.00>217.00 (-)

1.90e5



R2 341.00>217.00 (-)

1.90e5



PFPeS

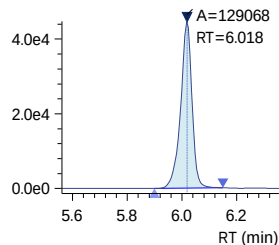
Conc. 0.9151

R#1 55.80 (56.71)

R#2 55.80 (56.71)

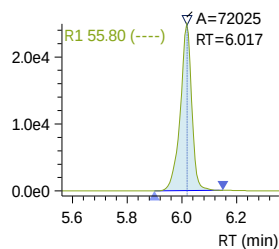
Q 349.10>79.90 (-)

4.48e4



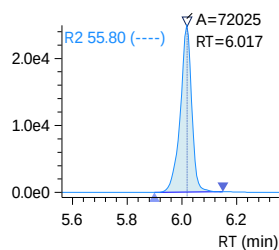
R1 349.10>98.80 (-)

2.49e4



R2 349.10>98.80 (-)

2.49e4

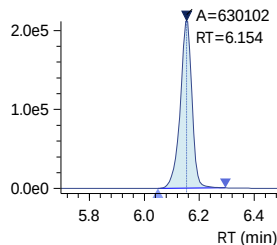


13C4-PFHpa

Conc. 2.4881

Q 367.10>322.00 (-)

2.12e5

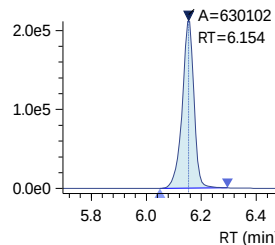


13C4-PFHpa_IS

Conc. 2.5000

ISTD 367.10>322.00 (-)

2.12e5



PFHpA

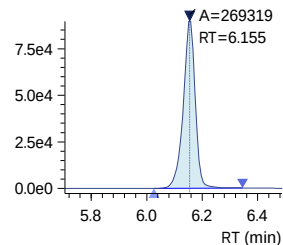
Conc. 0.9953

R#1 21.50 (21.37)

R#2 21.50 (21.37)

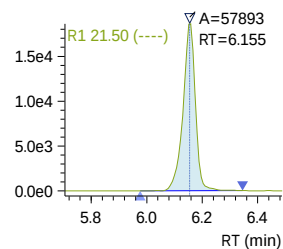
Q 363.10>319.00 (-)

8.97e4



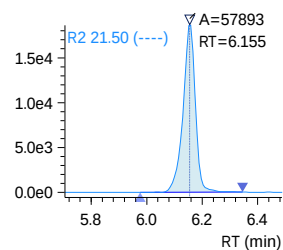
R1 363.10>169.00 (-)

1.86e4



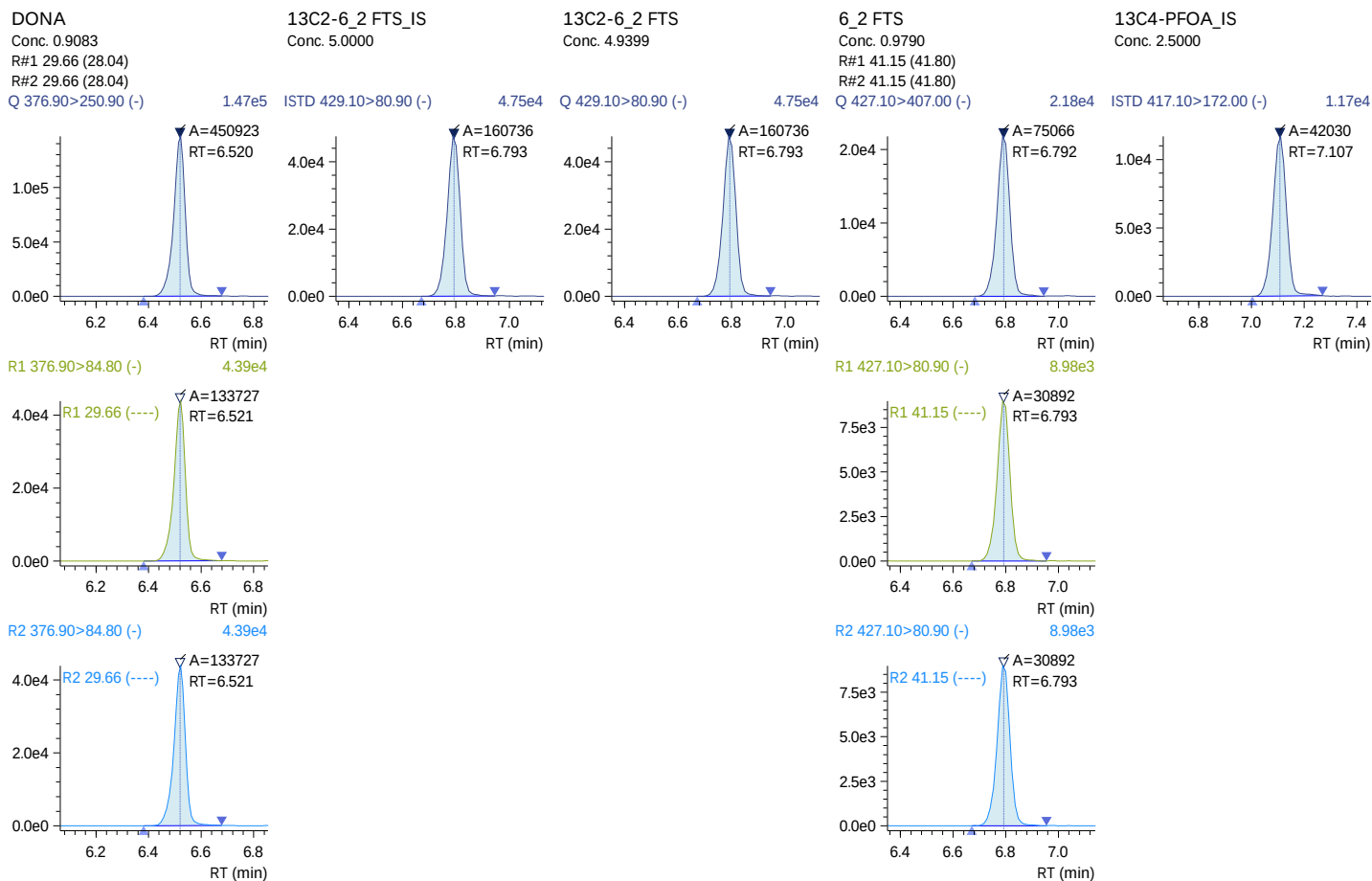
R2 363.10>169.00 (-)

1.86e4





240118_010 (continued)





240118_010 (continued)

13C8-PFOA_IS
 Conc. 2.5000

13C8-PFOA
 Conc. 2.5751

PFOA
 Conc. 1.0681
 R#1 31.89 (29.05)
 R#2 31.89 (29.05)

13C3-PFHxS
 Conc. 2.5030

13C3-PFHxS_IS
 Conc. 2.5000

ISTD 421.10>376.00 (-)

1.72e5

Q 421.10>376.00 (-)

1.72e5

Q 413.00>369.00 (-)

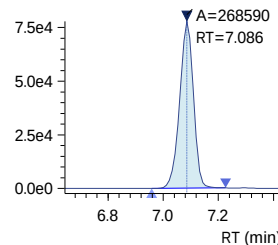
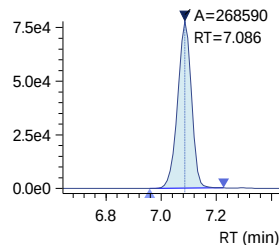
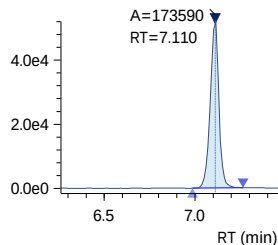
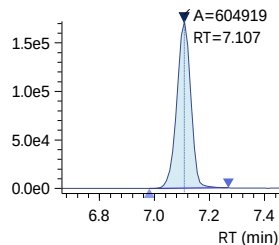
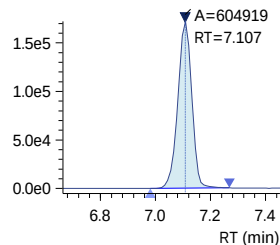
5.21e4

Q 402.10>79.90 (-)

7.79e4

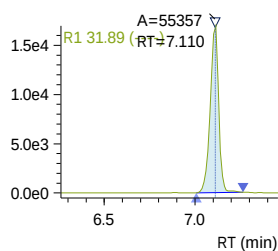
ISTD 402.10>79.90 (-)

7.79e4



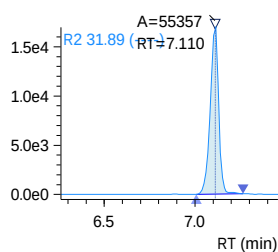
R1 413.00>169.00 (-)

1.70e4



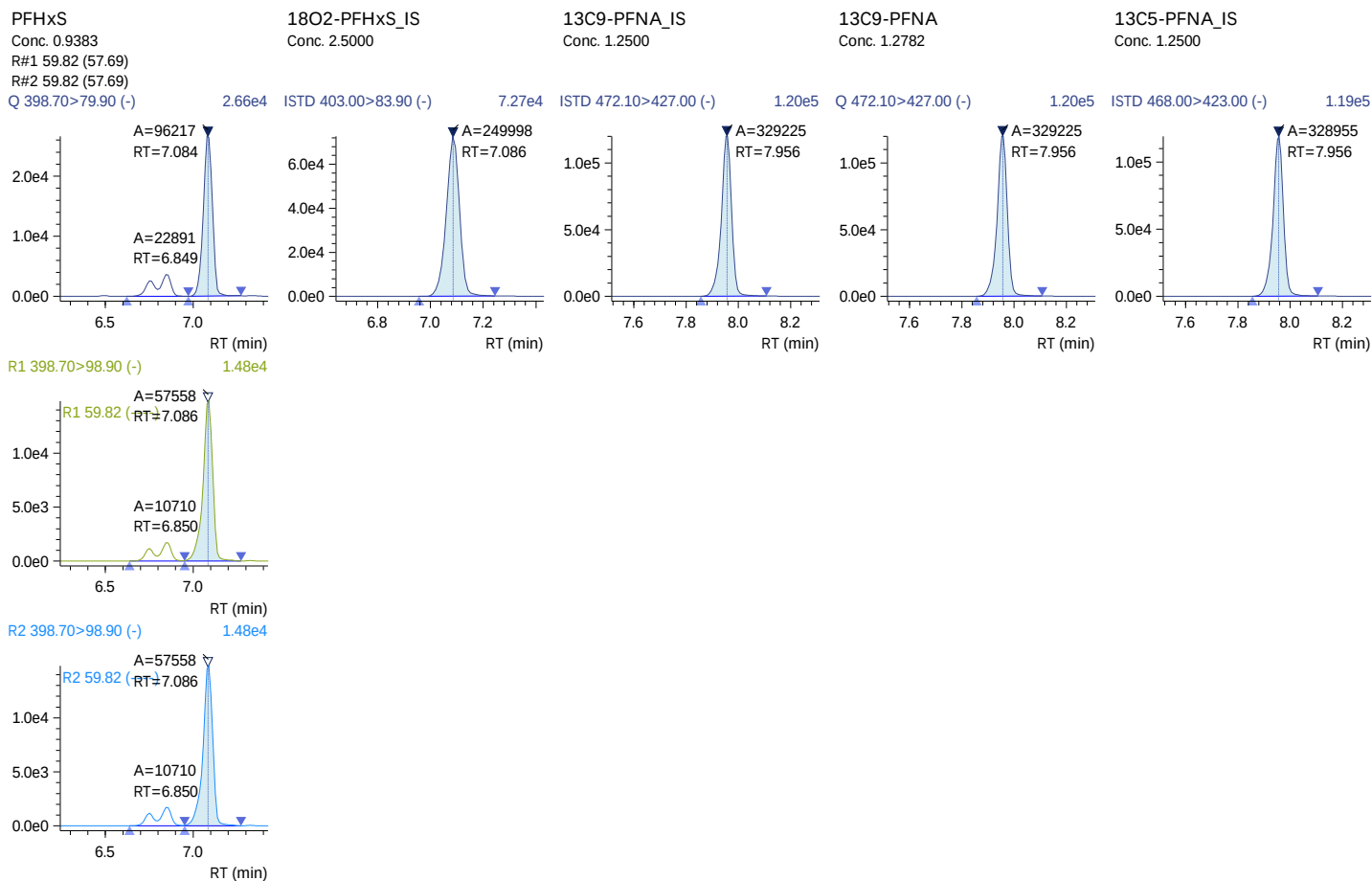
R2 413.00>169.00 (-)

1.70e4



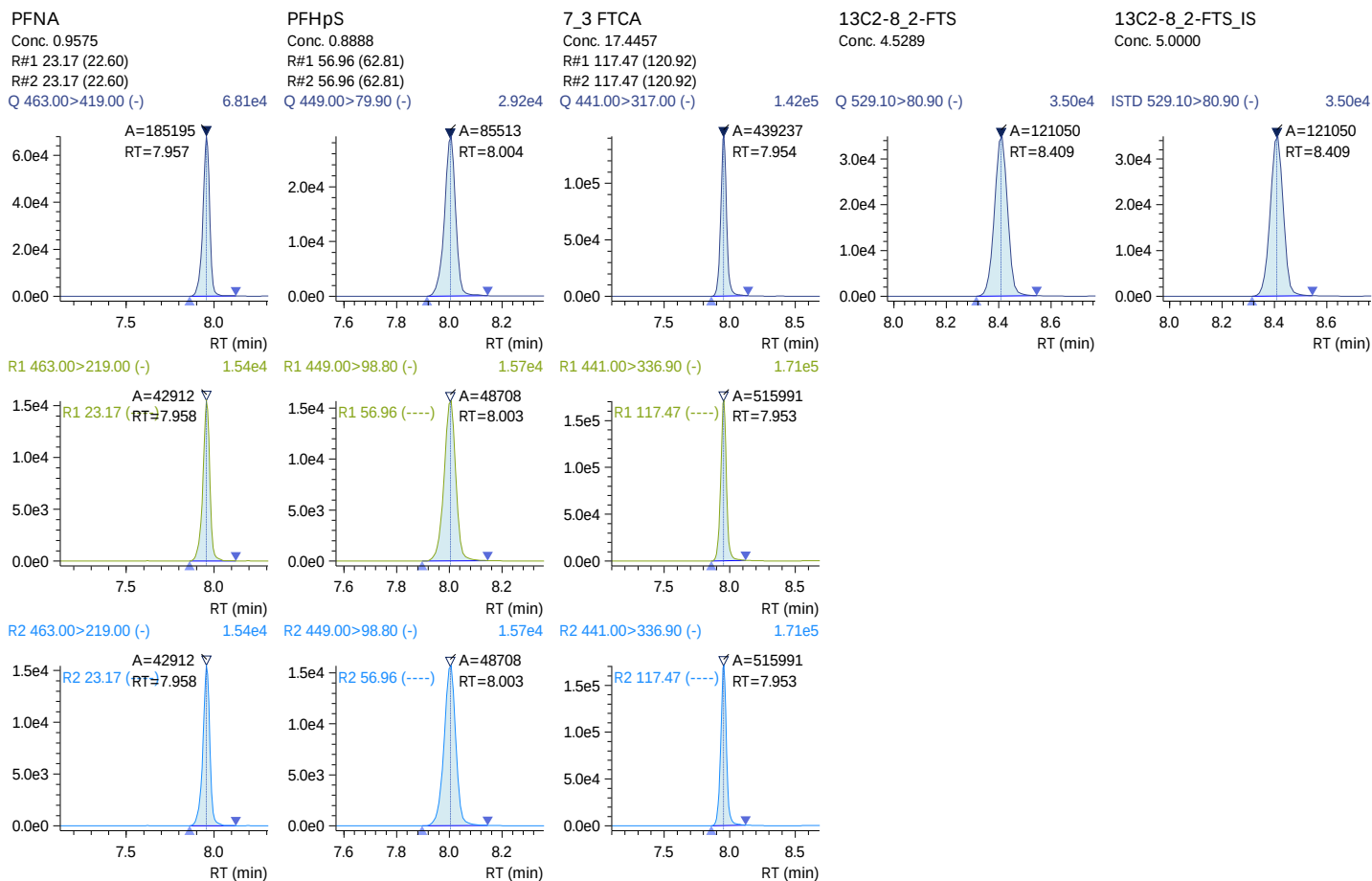


240118_010 (continued)



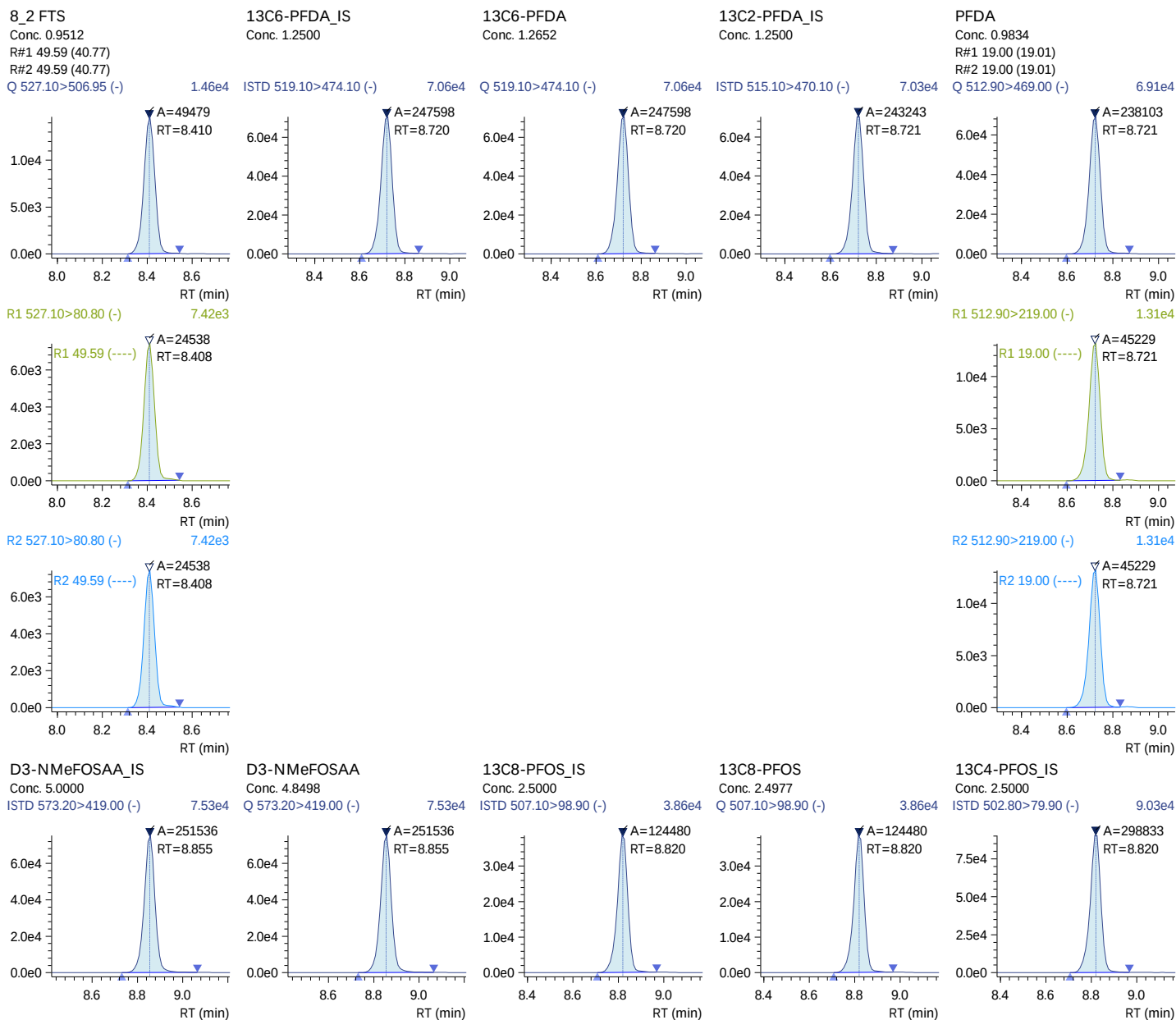


240118_010 (continued)



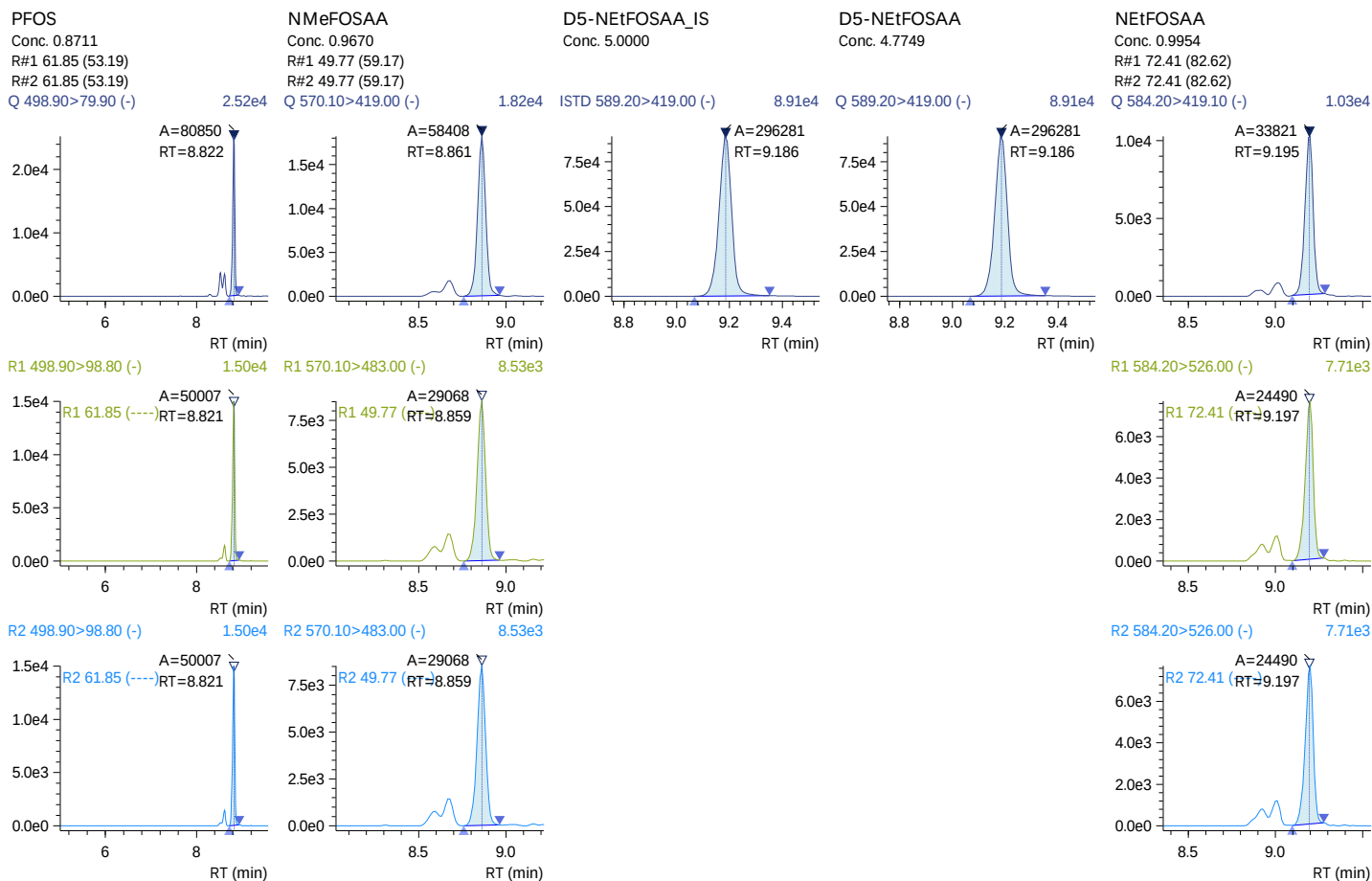


240118_010 (continued)





240118_010 (continued)

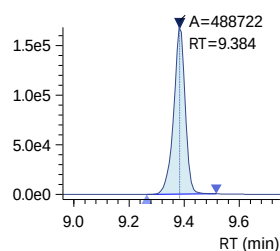




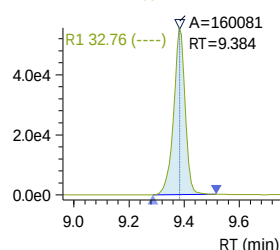
240118_010 (continued)

9-CI-PF3ONS

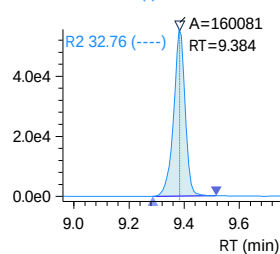
Conc. 0.9255
R#1 32.76 (31.76)
R#2 32.76 (31.76)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-) 5.56e4

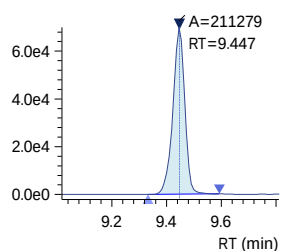


R2 532.80>353.00 (-) 5.56e4

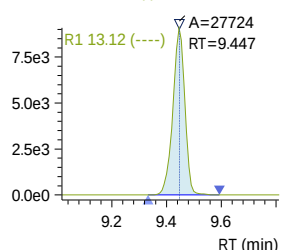


PFUnDA

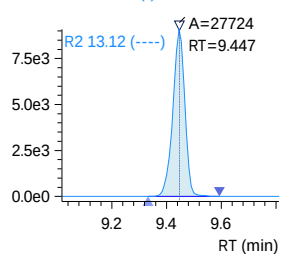
Conc. 1.0253
R#1 13.12 (12.31)
R#2 13.12 (12.31)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-) 9.09e3

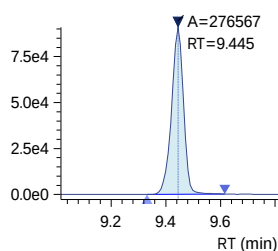


R2 563.10>269.10 (-) 9.09e3



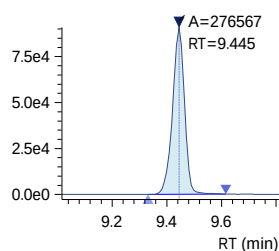
13C7-PFUnDA_IS

Conc. 1.2500
ISTD 570.00>525.10 (-)



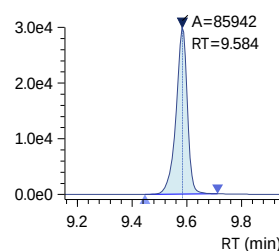
13C7-PFUnDA

Conc. 1.1848
Q 570.00>525.10 (-)

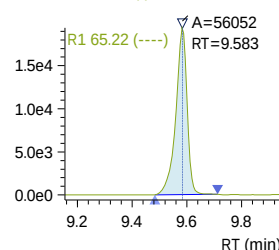


PFNS

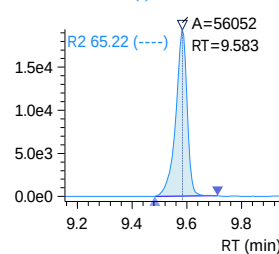
Conc. 0.9087
R#1 65.22 (63.31)
R#2 65.22 (63.31)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-) 1.94e4



R2 548.80>98.80 (-) 1.94e4





240118_010 (continued)

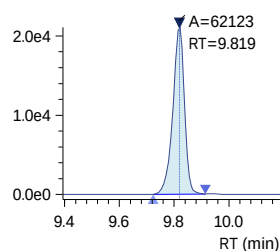
10_2 FTS

Conc. 1.0075

R#1 37.13 (33.02)

R#2 37.13 (33.02)

Q 626.80>607.05 (-)



R1 626.80>81.00 (-)

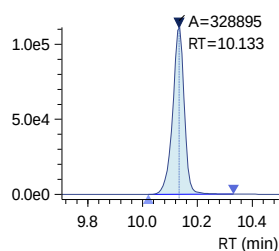
2.11e4

7.74e3

13C2-PFDOA_IS

Conc. 1.2500

ISTD 615.10>570.00 (-)

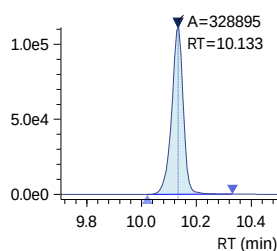


1.11e5

13C2-PFDOA

Conc. 1.2264

Q 615.10>570.00 (-)



1.11e5

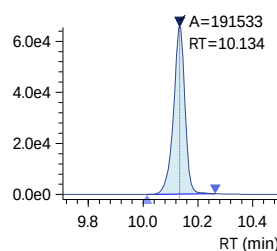
PFDOA

Conc. 1.0026

R#1 11.29 (10.14)

R#2 11.29 (10.14)

Q 613.10>569.00 (-)



R1 613.10>319.00 (-)

6.55e4

7.55e3

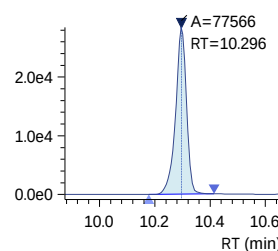
PFDS

Conc. 0.9189

R#1 60.18 (62.02)

R#2 60.18 (62.02)

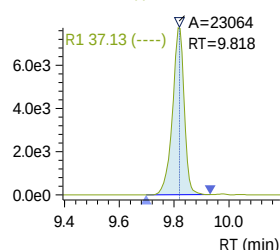
Q 599.00>79.90 (-)



R1 599.00>98.80 (-)

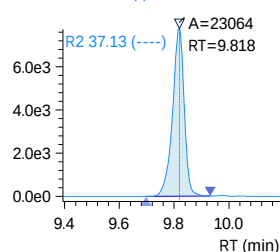
2.85e4

1.68e4



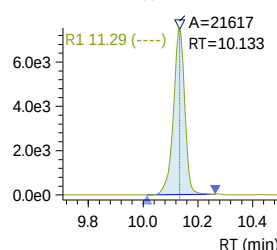
R2 626.80>81.00 (-)

7.74e3



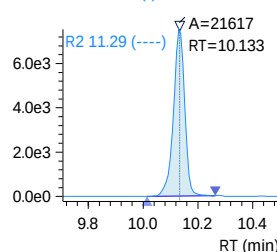
R2 626.80>81.00 (-)

7.74e3



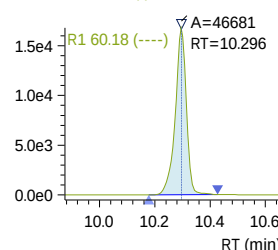
R2 613.10>319.00 (-)

7.55e3



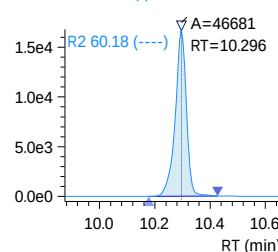
R2 613.10>319.00 (-)

7.55e3



R2 599.00>98.80 (-)

1.68e4



R2 599.00>98.80 (-)

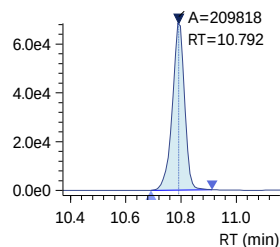
1.68e4



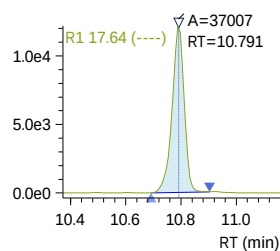
240118_010 (continued)

PFTrDA

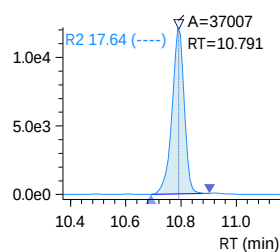
Conc. 1.0310
R#1 17.64 (15.12)
R#2 17.64 (15.12)
Q 663.00>619.00 (-)



R1 663.00>168.90 (-) 1.22e4

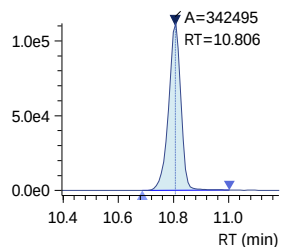


R2 663.00>168.90 (-) 1.22e4

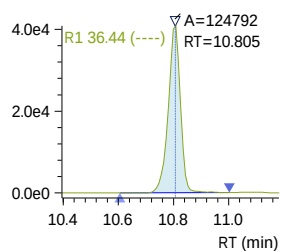


11-CI-PF3OUdS

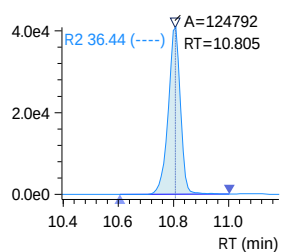
Conc. 0.8967
R#1 36.44 (36.61)
R#2 36.44 (36.61)
Q 630.90>451.00 (-)



R1 632.90>452.90 (-) 4.09e4

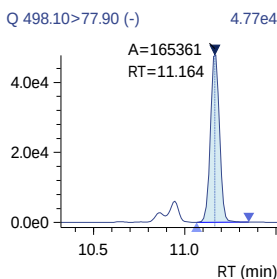


R2 632.90>452.90 (-) 4.09e4



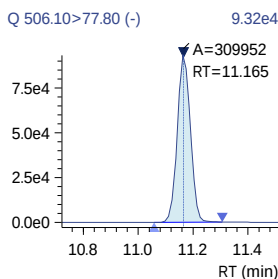
PFOSAm

Conc. 1.9199



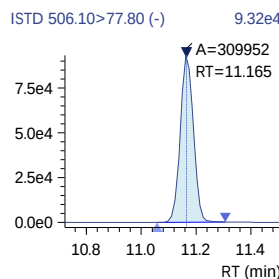
13C8-PFOSAm

Conc. 2.4433



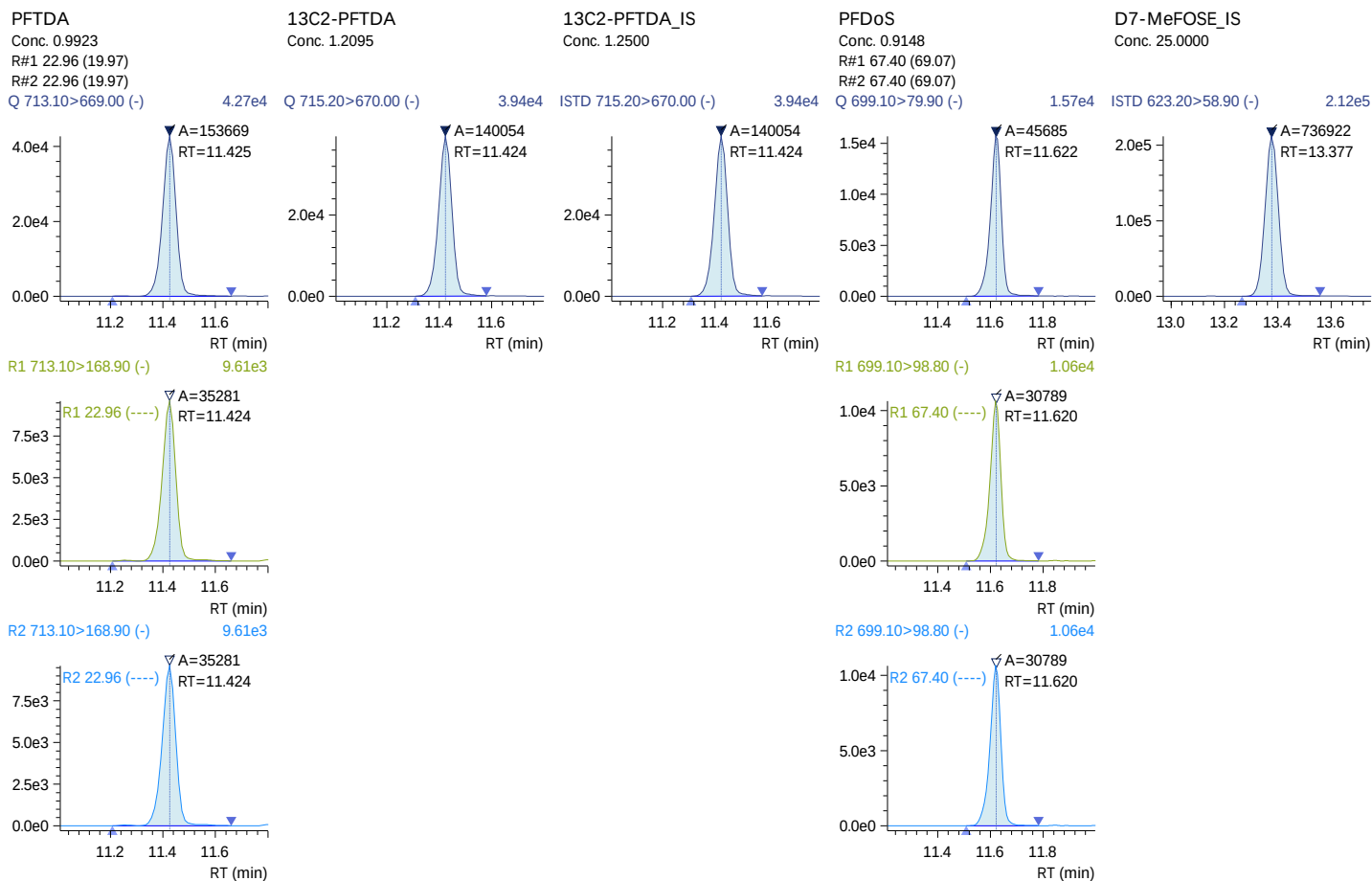
13C8-PFOSAm_IS

Conc. 2.5000





240118_010 (continued)





240118_010 (continued)

D7-MeFOSE
Conc. 23.5612

MeFOSE
Conc. 1.0087

13C2-PFHxDA_IS
Conc. 2.5000

13C2-PFHxDA
Conc. 2.4293

PFHxDA
Conc. 1.0088
R#1 13.90 (11.64)
R#2 13.90 (11.64)

Q 623.20>58.90 (-)

2.12e5

Q 616.10>59.00 (-)

4.72e3

ISTD 815.00>770.05 (-)

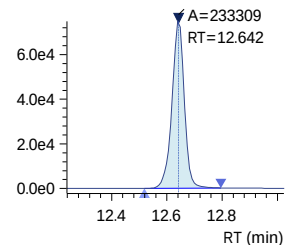
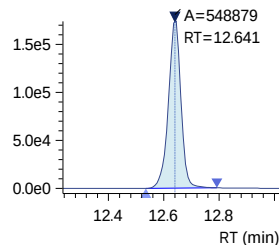
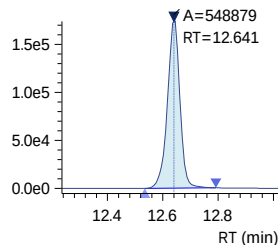
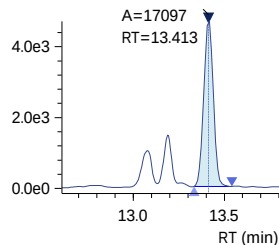
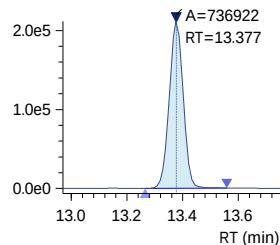
1.74e5

Q 815.00>770.05 (-)

1.74e5

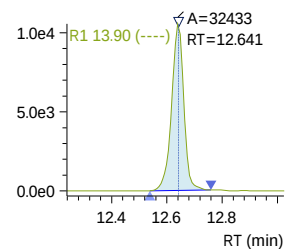
Q 813.00>768.95 (-)

7.49e4



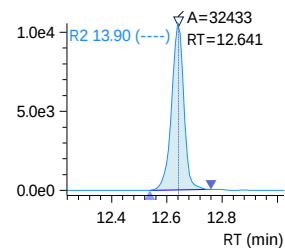
R1 813.00>218.95 (-)

1.06e4



R2 813.00>218.95 (-)

1.06e4





240118_010 (continued)

D3-MeFOSA
 Conc. 2.6665

D3-MeFOSA_IS
 Conc. 2.5000

MeFOSA
 Conc. 0.9725
 R#1 109.16 (149.05)
 R#2 109.16 (149.05)

D9-EtFOSE_IS
 Conc. 25.0000

D9-EtFOSE
 Conc. 24.4286

Q 515.00>219.00 (-)

2.02e4

ISTD 515.00>219.00 (-)

2.02e4

Q 511.90>219.00 (-)

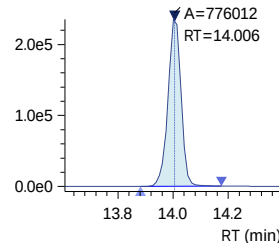
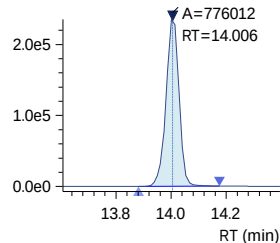
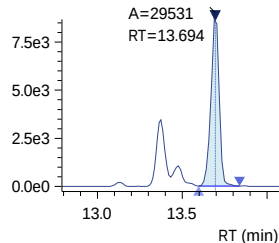
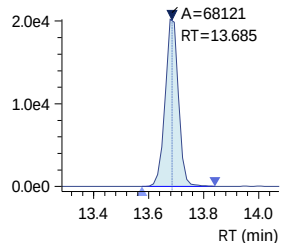
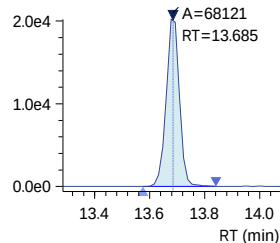
8.68e3

ISTD 639.20>58.90 (-)

2.35e5

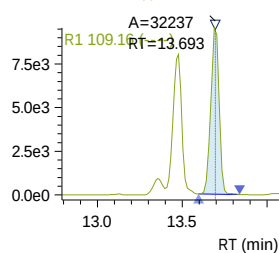
Q 639.20>58.90 (-)

2.35e5



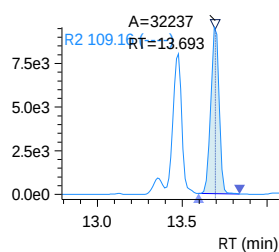
R1 511.90>169.00 (-)

9.57e3



R2 511.90>169.00 (-)

9.57e3





240118_010 (continued)

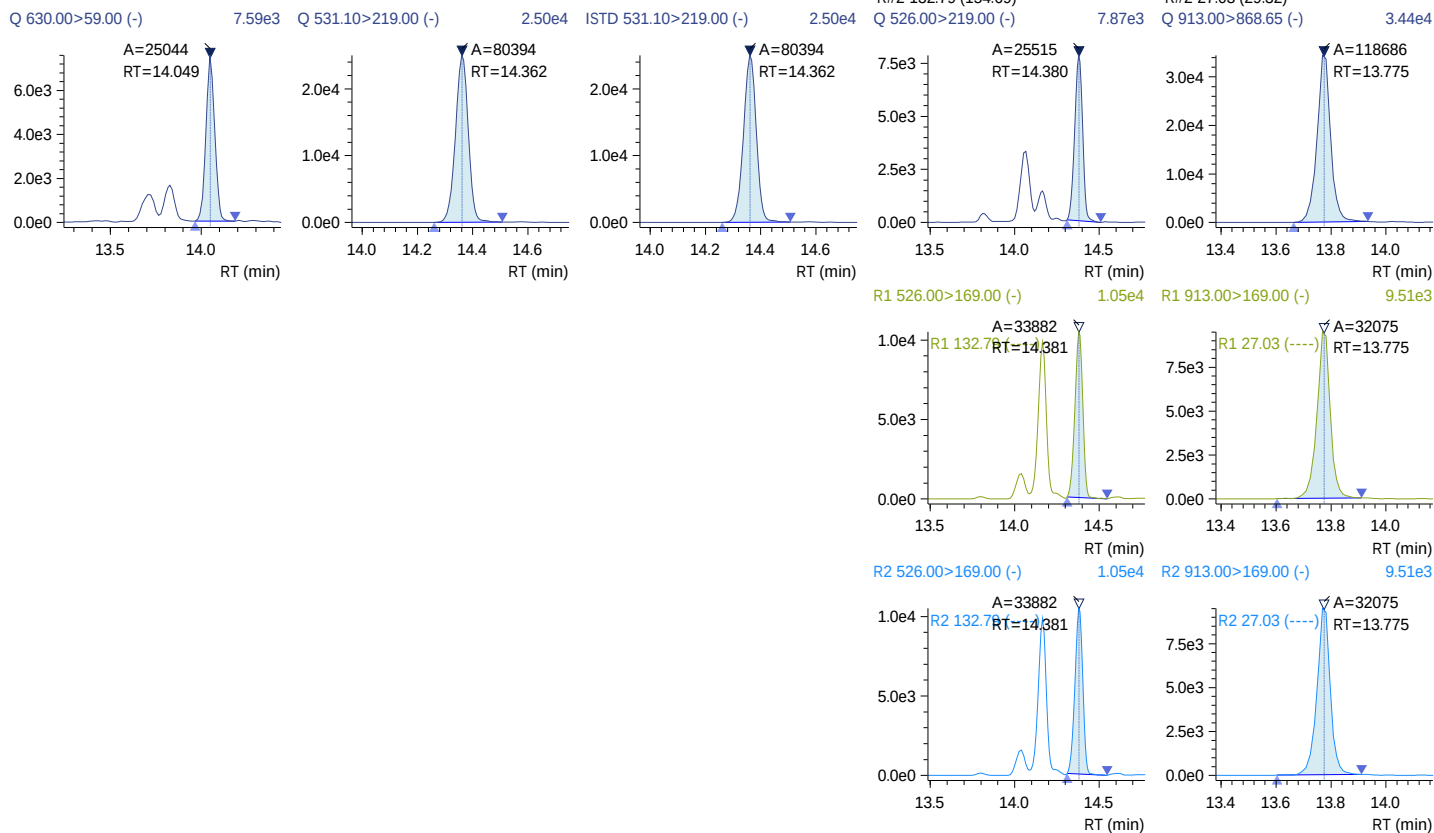
EtFOSE
Conc. 0.9287

D5-EtFOSAm
Conc. 2.3636

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. 0.9934
R#1 132.79 (154.69)
R#2 132.79 (154.69)

PFODA
Conc. 0.9891
R#1 27.03 (29.32)
R#2 27.03 (29.32)





240118_011

Sample ID: 1633 ICAL 5.0PPB
Date Acquired: 1/18/2024 4:00:49 PM
Acquired by: System Administrator
Data File: 240118_011
Vial: 6 | Inj. Volume: 10.0000uL | Tray: 1

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	1324886	----	----	----	----	----	----	----
13C4-PFBA_IS	216.80>171.90	----	1324886	----	----	----	----	----	----	----
13C3-PFBA_IS	216.00>172.00	----	590832	----	----	----	----	----	----	----
PFBA	212.80>169.05	----	553236	----	----	----	----	----	----	----
PFMPA	229.00>84.90	----	437210	----	----	----	----	----	----	----
3_3 FTCA	241.00>177.10	241.00>117.00	168591	238810	141.65	141.17	238810	141.65	141.17	
13C5-PFPeA	268.30>223.00	----	138295	----	----	----	----	----	----	----
13C5-PFPeA_IS	268.30>223.00	----	138295	----	----	----	----	----	----	----
PFPeA	263.00>219.00	----	832768	----	----	----	----	----	----	----
PFMBA	279.00>84.95	----	610219	----	----	----	----	----	----	----
13C2-4_2 FTS	329.10>80.90	----	155760	----	----	----	----	----	----	----
13C2-4_2 FTS_IS	329.10>80.90	----	155760	----	----	----	----	----	----	----
4_2 FTS	327.10>307.00	327.10>80.90	351191	107991	30.75	29.06	107991	30.75	29.06	
13C3-PFBS_IS	302.10>79.90	----	331653	----	----	----	----	----	----	----
PFBS	298.70>79.90	298.70>98.80	730019	337190	46.19	46.72	337190	46.19	46.72	
13C3-PFBS	302.10>79.90	----	331653	----	----	----	----	----	----	----
NFDHA	295.00>201.00	295.00>84.90	707390	259381	36.67	40.25	259381	36.67	40.25	
13C5-PFHxA	318.00>273.00	----	663242	----	----	----	----	----	----	----
13C5-PFHxA_IS	318.00>273.00	----	663242	----	----	----	----	----	----	----
13C2-PFHxA_IS	315.10>270.00	----	618889	----	----	----	----	----	----	----
PFHxA	313.00>269.00	----	1080271	----	----	----	----	----	----	----
PFEESA	314.80>135.00	314.80>82.90	3161183	182008	5.76	6.11	182008	5.76	6.11	
13C3-HFPO-DA	286.90>168.90	----	618248	----	----	----	----	----	----	----
13C3-HFPO-DA_IS	286.90>168.90	----	618248	----	----	----	----	----	----	----
HFPO-DA	284.90>168.90	284.90>184.90	328917	209408	63.67	65.61	209408	63.67	65.61	
5_3 FTCA	341.00>237.05	341.00>217.00	876794	1419531	161.90	158.86	1419531	161.90	158.86	
PFPeS	349.10>79.90	349.10>98.80	602720	330887	54.90	55.80	330887	54.90	55.80	
13C4-PFHpA	367.10>322.00	----	612010	----	----	----	----	----	----	----
13C4-PFHpA_IS	367.10>322.00	----	612010	----	----	----	----	----	----	----
PFHpA	363.10>319.00	363.10>169.00	1261564	283669	22.49	21.50	283669	22.49	21.50	
DONA	376.90>250.90	376.90>84.80	2183982	645638	29.56	29.66	645638	29.56	29.66	
13C2-6_2 FTS_IS	429.10>80.90	----	138496	----	----	----	----	----	----	----
13C2-6_2 FTS	429.10>80.90	----	138496	----	----	----	----	----	----	----
6_2 FTS	427.10>407.00	427.10>80.90	308099	128023	41.55	41.15	128023	41.55	41.15	
13C4-PFOA_IS	417.10>172.00	----	42891	----	----	----	----	----	----	----
13C8-PFOA_IS	421.10>376.00	----	566184	----	----	----	----	----	----	----

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240118_011 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	566184	----	----	----	----	----	----	----
PFOA	413.00>369.00	413.00>169.00	841329	266398	31.66	31.89	266398	31.66	31.89	
13C3-PFHxS	402.10>79.90	----	237331	----	----	----	----	----	----	----
13C3-PFHxS_IS	402.10>79.90	----	237331	----	----	----	----	----	----	----
PFHxS	398.70>79.90	398.70>98.90	576452	315516	54.73	56.62	315516	54.73	56.62	
18O2-PFHxS_IS	403.00>83.90	----	232307	----	----	----	----	----	----	----
13C9-PFNA_IS	472.10>427.00	----	308940	----	----	----	----	----	----	----
13C9-PFNA	472.10>427.00	----	308940	----	----	----	----	----	----	----
13C5-PFNA_IS	468.00>423.00	----	311099	----	----	----	----	----	----	----
PFNA	463.00>419.00	463.00>219.00	862607	204209	23.67	23.17	204209	23.67	23.17	
PFHpS	449.00>79.90	449.00>98.80	420346	245566	58.42	56.96	245566	58.42	56.96	
7_3 FTCA	441.00>317.00	441.00>336.90	1288455	1489073	115.57	117.47	1489073	115.57	117.47	
13C2-8_2-FTS	529.10>80.90	----	117777	----	----	----	----	----	----	----
13C2-8_2-FTS_IS	529.10>80.90	----	117777	----	----	----	----	----	----	----
8_2 FTS	527.10>506.95	527.10>80.80	255045	111581	43.75	49.59	111581	43.75	49.59	
13C6-PFDA_IS	519.10>474.10	----	233845	----	----	----	----	----	----	----
13C6-PFDA	519.10>474.10	----	233845	----	----	----	----	----	----	----
13C2-PFDA_IS	515.10>470.10	----	237831	----	----	----	----	----	----	----
PFDA	512.90>469.00	512.90>219.00	1130874	213510	18.88	19.00	213510	18.88	19.00	
D3-NMeFOSAA_IS	573.20>419.00	----	235854	----	----	----	----	----	----	----
D3-NMeFOSAA	573.20>419.00	----	235854	----	----	----	----	----	----	----
13C8-PFOS_IS	507.10>98.90	----	116018	----	----	----	----	----	----	----
13C8-PFOS	507.10>98.90	----	116018	----	----	----	----	----	----	----
13C4-PFOS_IS	502.80>79.90	----	293425	----	----	----	----	----	----	----
PFOS	498.90>79.90	498.90>98.80	499726	258791	51.79	52.47	258791	51.79	52.47	
NMeFOSAA	570.10>419.00	570.10>483.00	296556	176925	59.66	55.15	176925	59.66	55.15	
D5-NetFOSAA_IS	589.20>419.00	----	279078	----	----	----	----	----	----	----
D5-NetFOSAA	589.20>419.00	----	279078	----	----	----	----	----	----	----
NetFOSAA	584.20>419.10	584.20>526.00	180916	145890	80.64	81.95	145890	80.64	81.95	
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	2287642	723748	31.64	32.76	723748	31.64	32.76	
PFUnDA	563.10>519.00	563.10>269.10	933949	126809	13.58	13.12	126809	13.58	13.12	
13C7-PFUnDA_IS	570.00>525.10	----	255491	----	----	----	----	----	----	----
13C7-PFUnDA	570.00>525.10	----	255491	----	----	----	----	----	----	----
PFNS	548.80>79.90	548.80>98.80	404394	252578	62.46	65.22	252578	62.46	65.22	
10_2 FTS	626.80>607.05	626.80>81.00	285490	105628	37.00	37.13	105628	37.00	37.13	
13C2-PFDOA_IS	615.10>570.00	----	312907	----	----	----	----	----	----	----
13C2-PFDOA	615.10>570.00	----	312907	----	----	----	----	----	----	----
PFDOA	613.10>569.00	613.10>319.00	872492	95557	10.95	11.29	95557	10.95	11.29	
PFDS	599.00>79.90	599.00>98.80	357453	217025	60.71	60.18	217025	60.71	60.18	
PFTDA	663.00>619.00	663.00>168.90	938247	170109	18.13	17.64	170109	18.13	17.64	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240118_011 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	1651817	594103	35.97	36.44	594103	35.97	36.44	
PFOSAm	498.10>77.90	----	919814	----	----	----	----	----	----	
13C8-PFOSAm	506.10>77.80	----	290803	----	----	----	----	----	----	
13C8-PFOSAm_IS	506.10>77.80	----	290803	----	----	----	----	----	----	
PFTDA	713.10>669.00	713.10>168.90	713428	160588	22.51	22.96	160588	22.51	22.96	
13C2-PFTDA	715.20>670.00	----	130195	----	----	----	----	----	----	
13C2-PFTDA_IS	715.20>670.00	----	130195	----	----	----	----	----	----	
PFDoS	699.10>79.90	699.10>98.80	209550	140972	67.27	67.40	140972	67.27	67.40	
D7-MeFOSE_IS	623.20>58.90	----	704676	----	----	----	----	----	----	
D7-MeFOSE	623.20>58.90	----	704676	----	----	----	----	----	----	
MeFOSE	616.10>59.00	----	121820	----	----	----	----	----	----	
13C2-PFHxDA_IS	815.00>770.05	----	512196	----	----	----	----	----	----	
13C2-PFHxDA	815.00>770.05	----	512196	----	----	----	----	----	----	
PFHxDA	813.00>768.95	813.00>218.95	1043205	146068	14.00	13.90	146068	14.00	13.90	
D3-MeFOSA	515.00>219.00	----	58592	----	----	----	----	----	----	
D3-MeFOSA_IS	515.00>219.00	----	58592	----	----	----	----	----	----	
MeFOSA	511.90>219.00	511.90>169.00	210164	326643	155.42	140.79	326643	155.42	140.79	
D9-EtFOSE_IS	639.20>58.90	----	732770	----	----	----	----	----	----	
D9-EtFOSE	639.20>58.90	----	732770	----	----	----	----	----	----	
EtFOSE	630.00>59.00	----	187022	----	----	----	----	----	----	
D5-EtFOSAm	531.10>219.00	----	77332	----	----	----	----	----	----	
D5-EtFOSAm_IS	531.10>219.00	----	77332	----	----	----	----	----	----	
EtFOSAm	526.00>219.00	526.00>169.00	225568	343289	152.19	163.90	343289	152.19	163.90	
PFODA	913.00>868.65	913.00>169.00	513994	128651	25.03	27.03	128651	25.03	27.03	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
 IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240118_011

Sample ID: 1633 ICAL 5.0PPB
Date Acquired: 1/18/2024 4:00:49 PM
Acquired by: System Administrator
Data File: 240118_011
Vial: 6 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Std. Conc.	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.413	-0.001	0.000	1324886	590832	13C3-PFBA_IS	10.0000	10.0323	ng/mL	
13C4-PFBA_IS	Auto	1.413	-0.001	----	1324886	1324886	----	10.0000	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.413	-0.002	----	590832	590832	----	5.0000	5.0000	ng/mL	
PFBA	Auto	1.416	0.000	0.003	553236	1324886	13C4-PFBA_IS	5.0000	4.8600	ng/mL	
PFMPA	Auto	2.432	0.000	-1.060	437210	138295	13C5-PFPeA_IS	5.0000	4.8918	ng/mL	
3_3 FTCA	Auto	3.005	0.001	-0.487	168591	138295	13C5-PFPeA_IS	50.0000	54.9751	ng/mL	
13C5-PFPeA	Auto	3.492	0.000	-1.485	138295	618889	13C2-PFHxA_IS	5.0000	4.9505	ng/mL	
13C5-PFPeA_IS	Auto	3.492	0.000	----	138295	138295	----	5.0000	5.0000	ng/mL	
PFPeA	Auto	3.495	0.000	0.003	832768	138295	13C5-PFPeA_IS	5.0000	4.6491	ng/mL	
PFMBA	Auto	4.024	-0.001	0.532	610219	138295	13C5-PFPeA_IS	5.0000	4.8193	ng/mL	
13C2-4_2 FTS	Auto	4.659	-0.002	-2.426	155760	232307	18O2-PFHxS_IS	5.0000	4.8723	ng/mL	
13C2-4_2 FTS_IS	Auto	4.659	-0.002	----	155760	155760	----	5.0000	5.0000	ng/mL	
4_2 FTS	Auto	4.659	-0.003	0.000	351191	155760	13C2-4_2 FTS_IS	4.6900	4.5841	ng/mL	
13C3-PFBS_IS	Auto	4.646	-0.001	----	331653	331653	----	2.5000	2.5000	ng/mL	
PFBS	Auto	4.646	-0.002	0.000	730019	331653	13C3-PFBS_IS	4.4400	4.3002	ng/mL	
13C3-PFBS	Auto	4.646	-0.001	-2.439	331653	232307	18O2-PFHxS_IS	2.5000	2.5157	ng/mL	
NFDHA	Auto	4.834	-0.001	-0.142	707390	663242	13C5-PFHxA_IS	5.0000	4.8072	ng/mL	
13C5-PFHxA	Auto	4.976	-0.002	-0.001	663242	618889	13C2-PFHxA_IS	2.5000	2.5428	ng/mL	
13C5-PFHxA_IS	Auto	4.976	-0.002	----	663242	663242	----	2.5000	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	4.977	-0.002	----	618889	618889	----	2.5000	2.5000	ng/mL	
PFHxA	Auto	4.977	-0.003	0.001	1080271	663242	13C5-PFHxA_IS	5.0000	4.8850	ng/mL	
PFEESA	Auto	5.321	-0.001	0.345	3161183	663242	13C5-PFHxA_IS	4.4500	4.2553	ng/mL	
13C3-HFPO-DA	Auto	5.451	-0.001	0.474	618248	618889	13C2-PFHxA_IS	10.0000	10.2048	ng/mL	
13C3-HFPO-DA_IS	Auto	5.451	-0.001	----	618248	618248	----	10.0000	10.0000	ng/mL	
HFPO-DA	Auto	5.452	-0.001	0.001	328917	618248	13C3-HFPO-DA_IS	5.0000	4.8171	ng/mL	
5_3 FTCA	Auto	5.905	-0.001	0.929	876794	663242	13C5-PFHxA_IS	50.0000	51.1086	ng/mL	
PFPeS	Auto	6.017	-0.001	-1.067	602720	237331	13C3-PFHxS_IS	4.7100	4.8360	ng/mL	
13C4-PFHpA	Auto	6.153	-0.001	1.176	612010	618889	13C2-PFHxA_IS	2.5000	2.5920	ng/mL	
13C4-PFHpA_IS	Auto	6.153	-0.001	----	612010	612010	----	2.5000	2.5000	ng/mL	
PFHpA	Auto	6.155	0.000	0.002	1261564	612010	13C4-PFHpA_IS	5.0000	4.9356	ng/mL	
DONA	Auto	6.519	-0.001	1.068	2183982	618248	13C3-HFPO-DA_IS	4.7300	4.5577	ng/mL	
13C2-6_2 FTS_IS	Auto	6.791	-0.002	----	138496	138496	----	5.0000	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.791	-0.002	-0.294	138496	232307	18O2-PFHxS_IS	5.0000	4.5805	ng/mL	
6_2 FTS	Auto	6.792	0.000	0.001	308099	138496	13C2-6_2 FTS_IS	4.7600	4.8854	ng/mL	
13C4-PFOA_IS	Auto	7.106	-0.001	----	42891	42891	----	2.5000	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.106	-0.001	----	566184	566184	----	2.5000	2.5000	ng/mL	
13C8-PFOA	Auto	7.106	-0.001	0.000	566184	42891	13C4-PFOA_IS	2.5000	2.3618	ng/mL	
PFOA	Auto	7.110	0.000	0.004	841329	566184	13C8-PFOA_IS	5.0000	5.7139	ng/mL	
13C3-PFHxS	Auto	7.084	-0.002	-0.001	237331	232307	18O2-PFHxS_IS	2.5000	2.3802	ng/mL	
13C3-PFHxS_IS	Auto	7.084	-0.002	----	237331	237331	----	2.5000	2.5000	ng/mL	
PFHxS	M	7.084	0.000	0.000	576452	237331	13C3-PFHxS_IS	4.5700	5.0413	ng/mL	
18O2-PFHxS_IS	Auto	7.085	-0.001	----	232307	232307	----	2.5000	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.955	-0.001	----	308940	308940	----	1.2500	1.2500	ng/mL	
13C9-PFNA	Auto	7.955	-0.001	0.000	308940	311099	13C5-PFNA_IS	1.2500	1.2683	ng/mL	
13C5-PFNA_IS	Auto	7.955	-0.001	----	311099	311099	----	1.2500	1.2500	ng/mL	
PFNA	Auto	7.956	-0.001	0.001	862607	308940	13C9-PFNA_IS	5.0000	4.8752	ng/mL	
PFHpS	Auto	8.003	-0.001	-0.815	420346	116018	13C8-PFOS_IS	4.7700	4.6419	ng/mL	
7_3 FTCA	Auto	7.952	-0.002	2.976	1288455	663242	13C5-PFHxA_IS	50.0000	56.2589	ng/mL	
13C2-8_2-FTS	Auto	8.408	-0.001	1.323	117777	232307	18O2-PFHxS_IS	5.0000	4.7420	ng/mL	
13C2-8_2-FTS_IS	Auto	8.408	-0.001	----	117777	117777	----	5.0000	5.0000	ng/mL	
8_2 FTS	Auto	8.407	-0.003	-0.001	255045	117777	13C2-8_2-FTS_IS	4.8000	5.0395	ng/mL	
13C6-PFDA_IS	Auto	8.718	-0.002	----	233845	233845	----	1.2500	1.2500	ng/mL	
13C6-PFDA	Auto	8.718	-0.002	-0.001	233845	237831	13C2-PFDA_IS	1.2500	1.2221	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_011 (continued)

(Table continued from previous page)

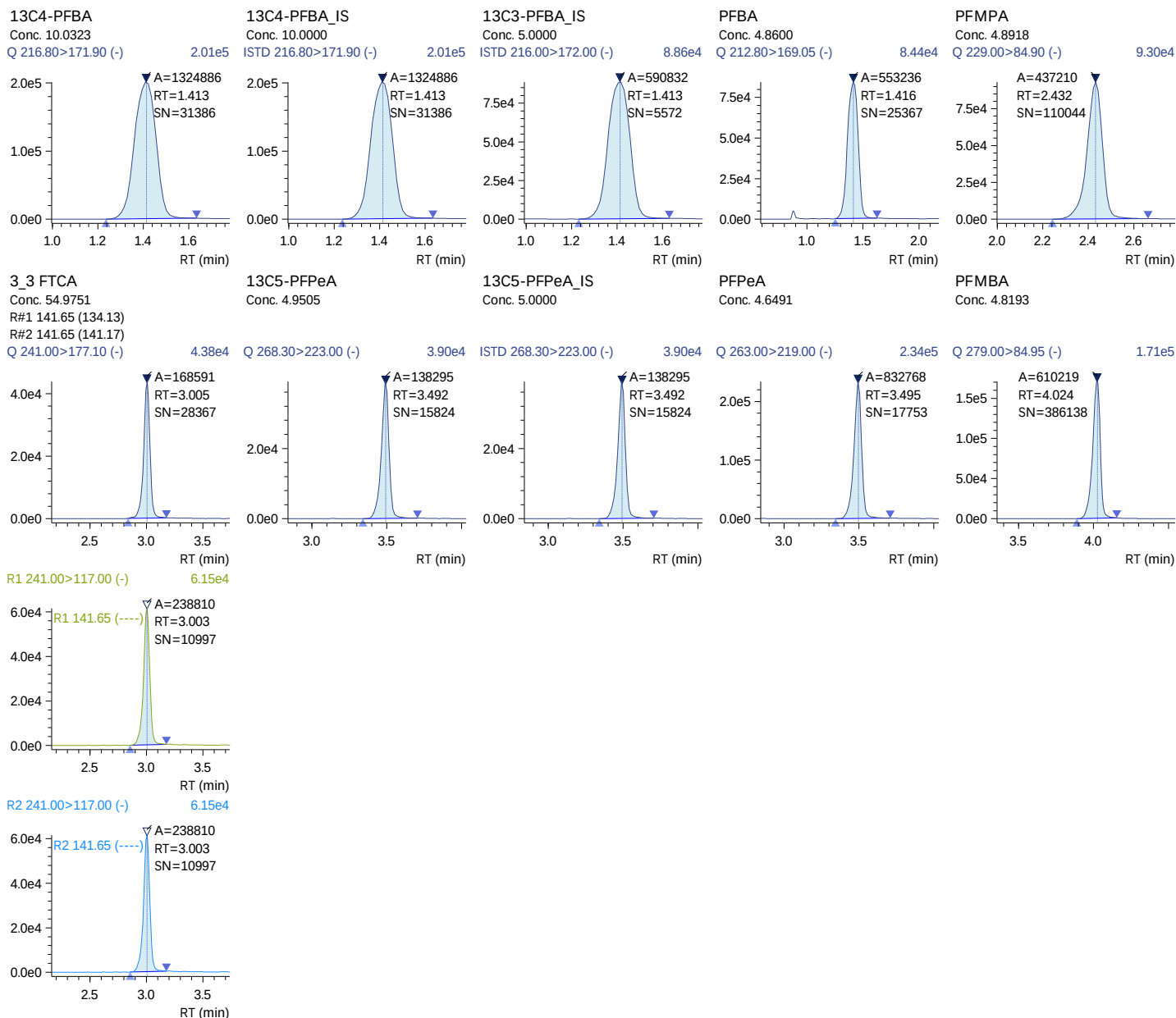
Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Std. Conc.	Conc.	Unit	Flag ID
13C2-PFDA_IS	Auto	8.719	-0.002	----	237831	237831	----	1.2500	1.2500	ng/mL	
PFDA	Auto	8.720	-0.001	0.002	1130874	233845	13C6-PFDA_IS	5.0000	5.0481	ng/mL	
D3-NMeFOSAA_IS	Auto	8.853	-0.002	----	235854	235854	----	5.0000	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.853	-0.002	0.035	235854	293425	13C4-PFOS_IS	5.0000	4.6313	ng/mL	
13C8-PFOS_IS	Auto	8.818	-0.002	----	116018	116018	----	2.5000	2.5000	ng/mL	
13C8-PFOS	Auto	8.818	-0.002	0.000	116018	293425	13C4-PFOS_IS	2.5000	2.3708	ng/mL	
13C4-PFOS_IS	Auto	8.818	-0.002	----	293425	293425	----	2.5000	2.5000	ng/mL	
PFOS	M	8.819	-0.003	0.001	499726	116018	13C8-PFOS_IS	4.6400	4.1413	ng/mL	
NMeFOSAA	M	8.859	-0.002	0.006	296556	235854	D3-NMeFOSAA_IS	5.0000	4.6340	ng/mL	
D5-NetFOSAA_IS	Auto	9.185	-0.001	----	279078	279078	----	5.0000	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.185	-0.001	0.367	279078	293425	13C4-PFOS_IS	5.0000	4.5805	ng/mL	
NetFOSAA	M	9.194	-0.001	0.009	180916	279078	D5-NetFOSAA_IS	5.0000	4.8539	ng/mL	
9-CI-PF3ONS	Auto	9.383	-0.001	3.932	2287642	618248	13C3-HFPO-DA_IS	4.6700	4.4882	ng/mL	
PFUnDA	Auto	9.445	-0.002	0.002	933949	255491	13C7-PFUnDA_IS	5.0000	5.0189	ng/mL	
13C7-PFUnDA_IS	Auto	9.443	-0.002	----	255491	255491	----	1.2500	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.443	-0.002	0.724	255491	237831	13C2-PFDA_IS	1.2500	1.1194	ng/mL	
PFNS	Auto	9.582	-0.002	0.764	404394	116018	13C8-PFOS_IS	4.8100	4.5876	ng/mL	
10_2_FTS	Auto	9.817	-0.002	1.409	285490	117777	13C2-8_2-FTS_IS	4.8200	4.6364	ng/mL	
13C2-PFDOA_IS	Auto	10.131	-0.002	----	312907	312907	----	1.2500	1.2500	ng/mL	
13C2-PFDOA	Auto	10.131	-0.002	1.412	312907	237831	13C2-PFDA_IS	1.2500	1.1933	ng/mL	
PFDOA	Auto	10.133	-0.001	0.002	872492	312907	13C2-PFDOA_IS	5.0000	4.9248	ng/mL	
PFDS	Auto	10.295	-0.001	1.477	357453	116018	13C8-PFOS_IS	4.8300	4.6593	ng/mL	
PFTDA	Auto	10.791	-0.001	-0.632	938247	130195	13C2-PFTDA_IS	5.0000	5.0773	ng/mL	
11-CI-PF3OUdS	Auto	10.805	-0.001	5.354	1651817	618248	13C3-HFPO-DA_IS	4.7200	4.8001	ng/mL	
PFOSAm	M	11.163	-0.001	-0.002	919814	290803	13C8-PFOSAm_IS	10.0000	9.5963	ng/mL	
13C8-PFOSAm	Auto	11.165	0.000	2.347	290803	293425	13C4-PFOS_IS	2.5000	2.3346	ng/mL	
13C8-PFOSAm_IS	Auto	11.165	0.000	----	290803	290803	----	2.5000	2.5000	ng/mL	
PFTDA	Auto	11.424	-0.001	0.001	713428	130195	13C2-PFTDA_IS	5.0000	5.0717	ng/mL	
13C2-PFTDA	Auto	11.423	-0.001	2.704	130195	237831	13C2-PFDA_IS	1.2500	1.1500	ng/mL	
13C2-PFTDA_IS	Auto	11.423	-0.001	----	130195	130195	----	1.2500	1.2500	ng/mL	
PFDoS	Auto	11.621	-0.001	2.803	209550	116018	13C8-PFOS_IS	4.8500	4.5038	ng/mL	
D7-MeFOSE_IS	Auto	13.378	0.001	----	704676	704676	----	25.0000	25.0000	ng/mL	
D7-MeFOSE	Auto	13.378	0.001	4.560	704676	293425	13C4-PFOS_IS	25.0000	22.9454	ng/mL	
MeFOSE	M	13.415	0.002	0.037	121820	704676	D7-MeFOSE_IS	5.0000	4.7073	ng/mL	
13C2-PFHXA_IS	Auto	12.638	-0.003	----	512196	512196	----	2.5000	2.5000	ng/mL	
13C2-PFHXA	Auto	12.638	-0.003	3.919	512196	237831	13C2-PFDA_IS	2.5000	2.3185	ng/mL	
PFHXDA	Auto	12.639	-0.003	0.001	1043205	512196	13C2-PFHXA_IS	5.0000	4.9396	ng/mL	
D3-MeFOSA	Auto	13.686	0.001	4.868	58592	293425	13C4-PFOS_IS	2.5000	2.3357	ng/mL	
D3-MeFOSA_IS	Auto	13.686	0.001	----	58592	58592	----	2.5000	2.5000	ng/mL	
MeFOSA	M	13.695	0.001	0.009	210164	58592	D3-MeFOSA_IS	5.0000	4.9759	ng/mL	
D9-EtFOSE_IS	Auto	14.008	0.002	----	732770	732770	----	25.0000	25.0000	ng/mL	
D9-EtFOSE	Auto	14.008	0.002	5.190	732770	293425	13C4-PFOS_IS	25.0000	23.4925	ng/mL	
EtFOSE	M	14.051	0.003	0.043	187022	732770	D9-EtFOSE_IS	5.0000	4.8509	ng/mL	
D5-EtFOSAm	Auto	14.363	0.001	5.545	77332	293425	13C4-PFOS_IS	2.5000	2.3154	ng/mL	
D5-EtFOSAm_IS	Auto	14.363	0.001	----	77332	77332	----	2.5000	2.5000	ng/mL	
EtFOSAm	M	14.382	0.002	0.019	225568	77332	D5-EtFOSAm_IS	5.0000	5.0104	ng/mL	
PFODA	Auto	13.777	0.002	1.139	513994	512196	13C2-PFHXA_IS	5.0000	4.4377	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_011 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_011 (continued)

13C2-4_2 FTS
Conc. 4.8723

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. 4.5841
R#1 30.75 (34.14)
R#2 30.75 (29.06)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 4.3002
R#1 46.19 (47.53)
R#2 46.19 (46.72)

Q 329.10>80.90 (-)

4.84e4

ISTD 329.10>80.90 (-)

4.84e4

Q 327.10>307.00 (-)

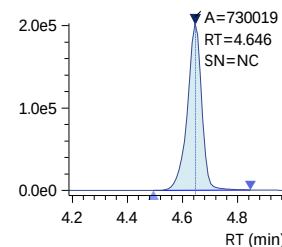
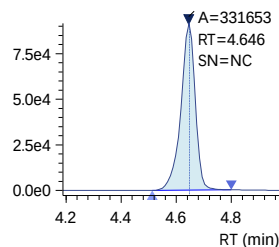
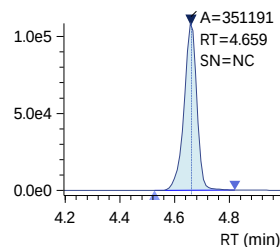
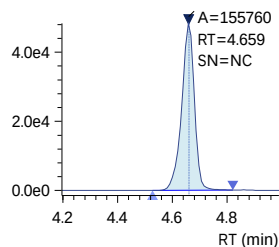
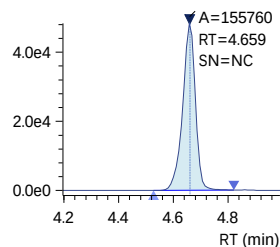
1.09e5

ISTD 302.10>79.90 (-)

9.16e4

Q 298.70>79.90 (-)

2.03e5

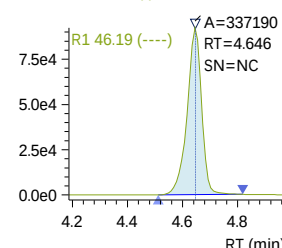
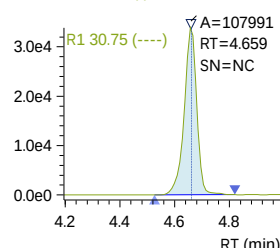


R1 327.10>80.90 (-)

3.39e4

R1 298.70>98.80 (-)

9.24e4

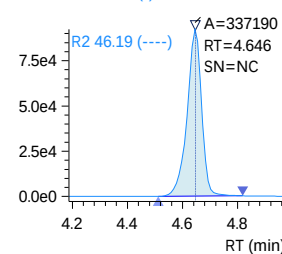
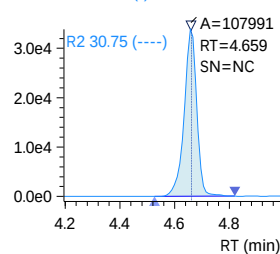


R2 327.10>80.90 (-)

3.39e4

R2 298.70>98.80 (-)

9.24e4





240118_011 (continued)

13C3-PFBS
Conc. 2.5157

NFDHA
Conc. 4.8072
R#1 36.67 (37.88)
R#2 36.67 (40.25)

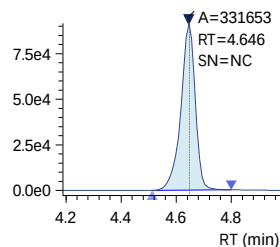
13C5-PFHxA
Conc. 2.5428

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

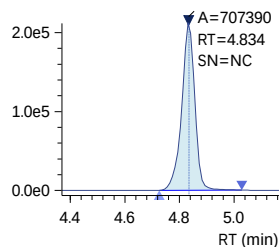
Q 302.10>79.90 (-)

9.16e4



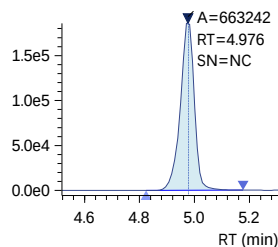
Q 295.00>201.00 (-)

2.12e5



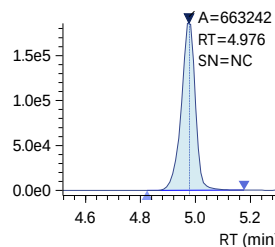
Q 318.00>273.00 (-)

1.86e5



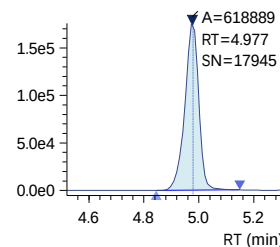
ISTD 318.00>273.00 (-)

1.86e5



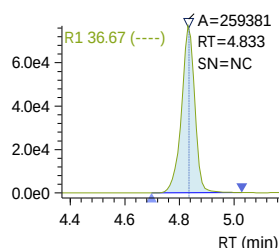
ISTD 315.10>270.00 (-)

1.76e5



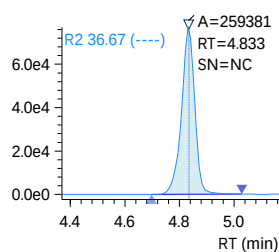
R1 295.00>84.90 (-)

7.70e4



R2 295.00>84.90 (-)

7.70e4

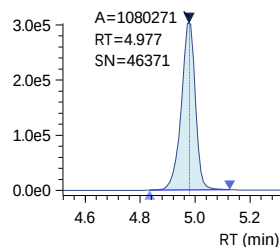




240118_011 (continued)

PFHxA
Conc. 4.8850

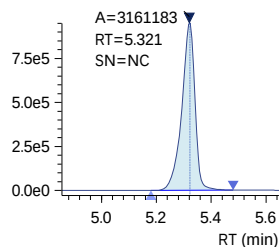
Q 313.00>269.00 (-)



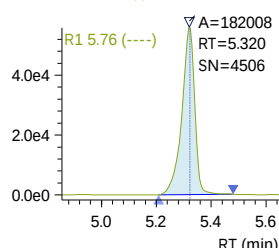
PFEESA
Conc. 4.2553

R#1 5.76 (5.88)
R#2 5.76 (6.11)

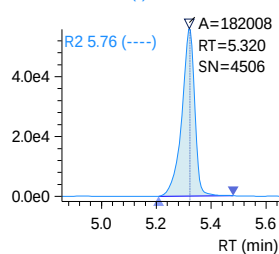
Q 314.80>135.00 (-)



R1 314.80>82.90 (-)

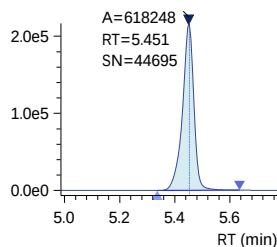


R2 314.80>82.90 (-)



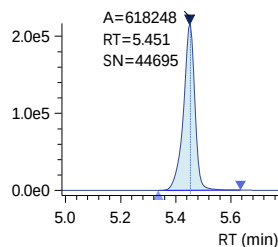
13C3-HFPO-DA
Conc. 10.2048

Q 286.90>168.90 (-)



13C3-HFPO-DA_IS
Conc. 10.0000

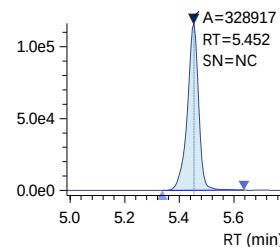
ISTD 286.90>168.90 (-)



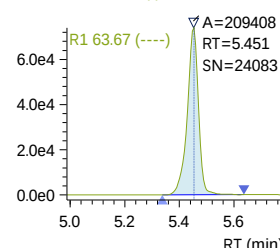
HFPO-DA
Conc. 4.8171

R#1 63.67 (63.80)
R#2 63.67 (65.61)

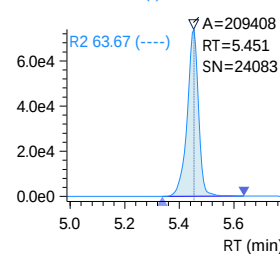
Q 284.90>168.90 (-)



R1 284.90>184.90 (-)

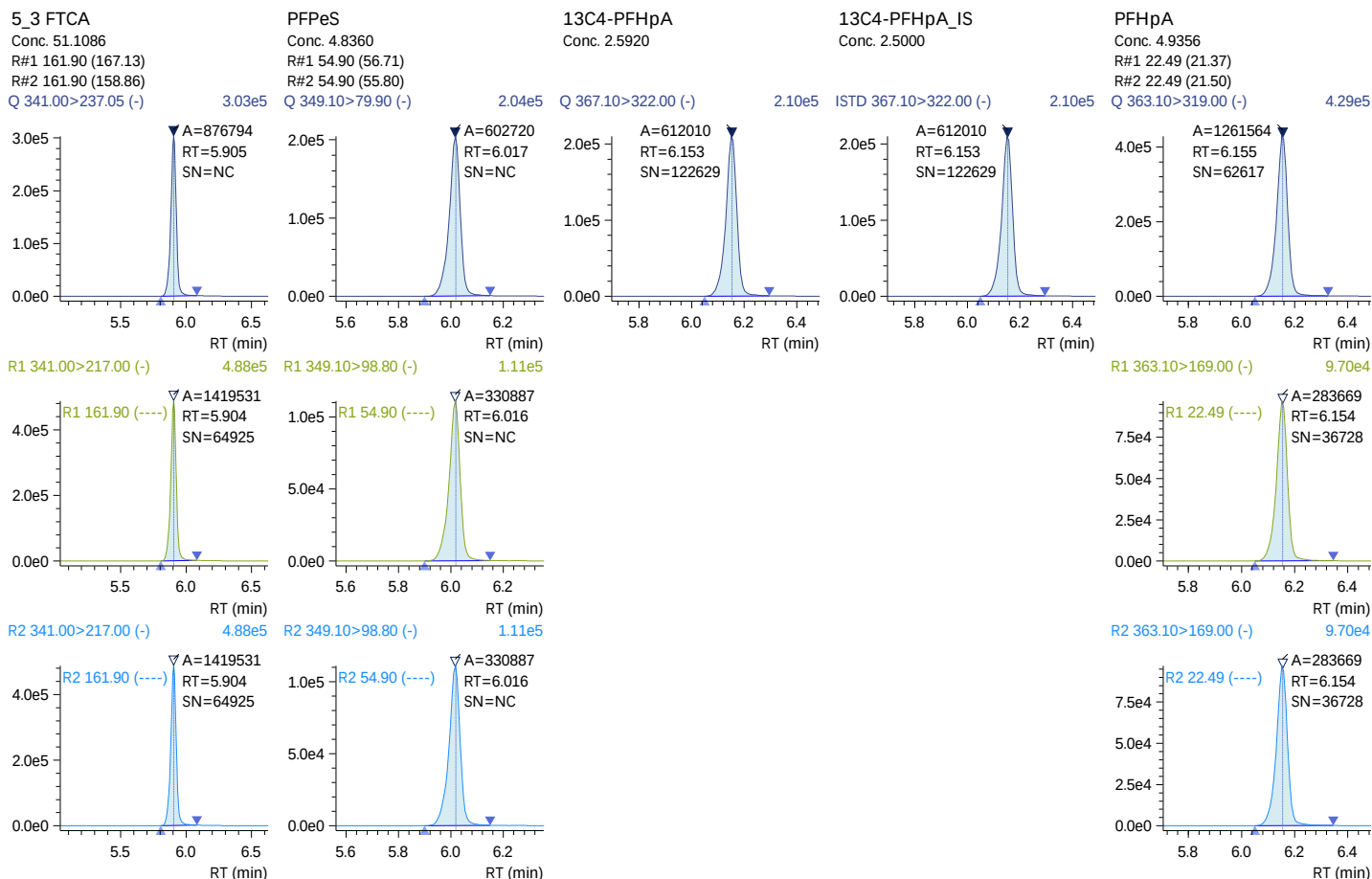


R2 284.90>184.90 (-)





240118_011 (continued)

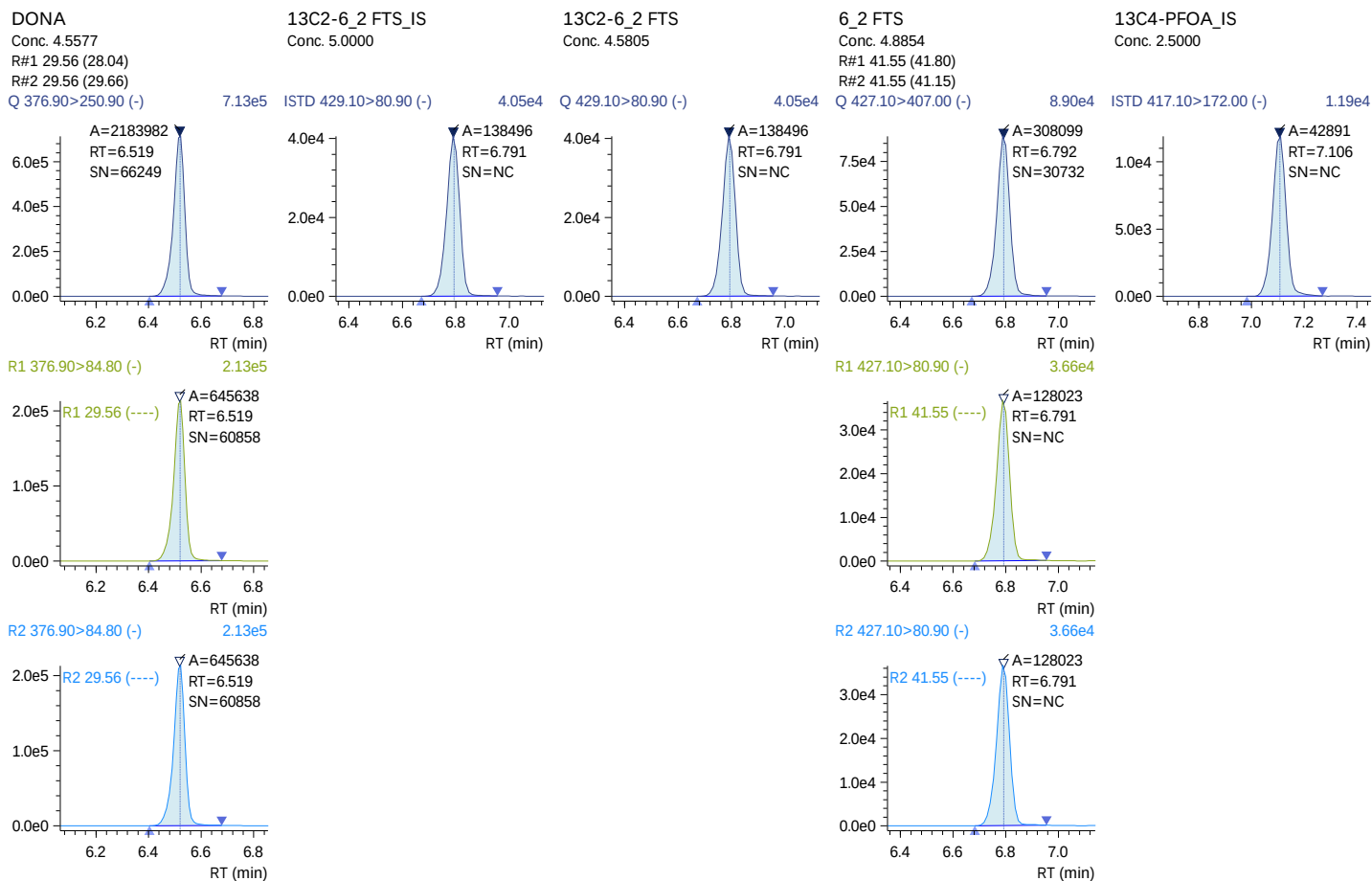


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_011 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_011 (continued)

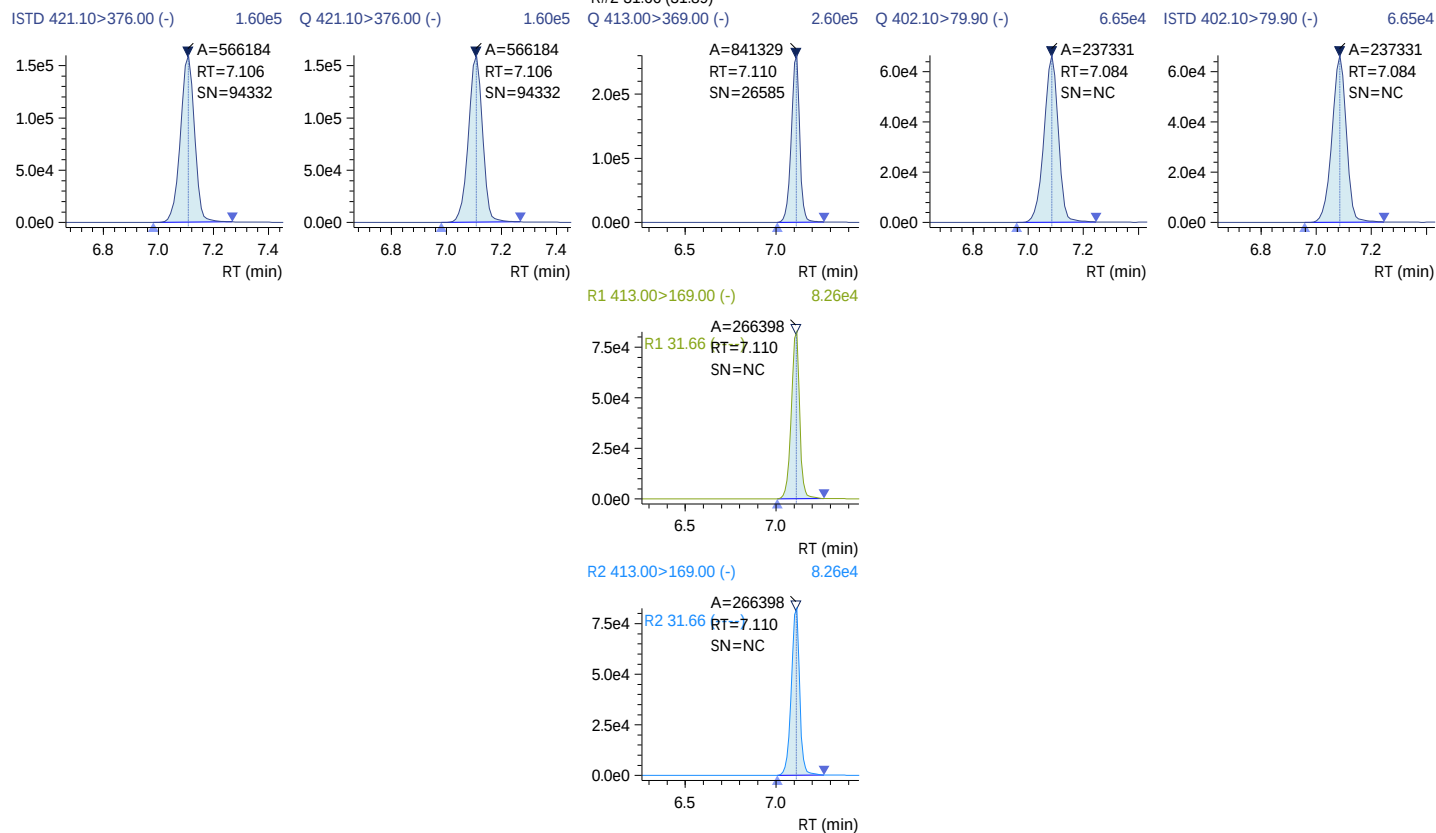
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.3618

PFOA
Conc. 5.7139
R#1 31.66 (29.05)
R#2 31.66 (31.89)

13C3-PFHxS
Conc. 2.3802

13C3-PFHxS_IS
Conc. 2.5000

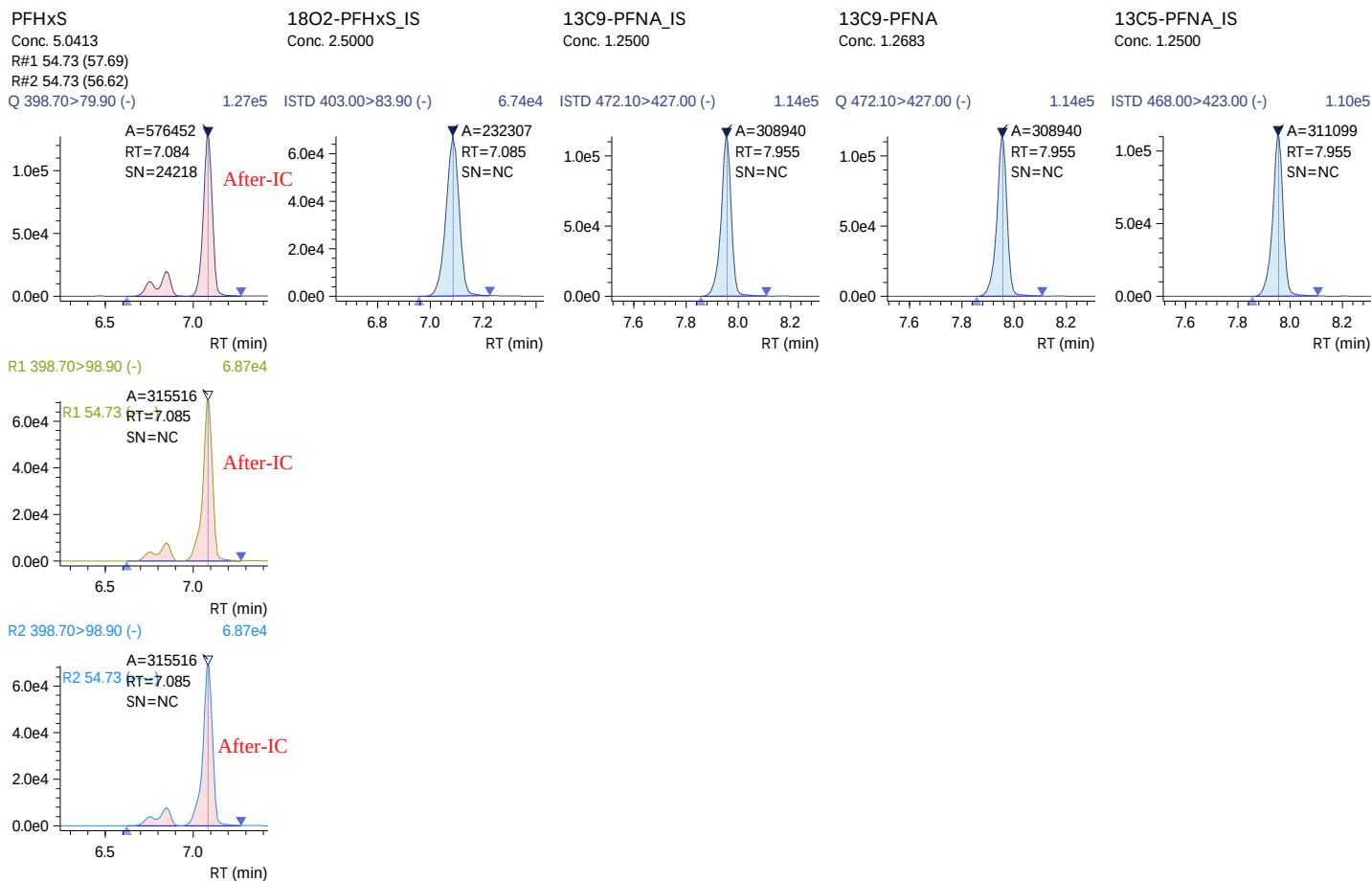


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_011 (continued)

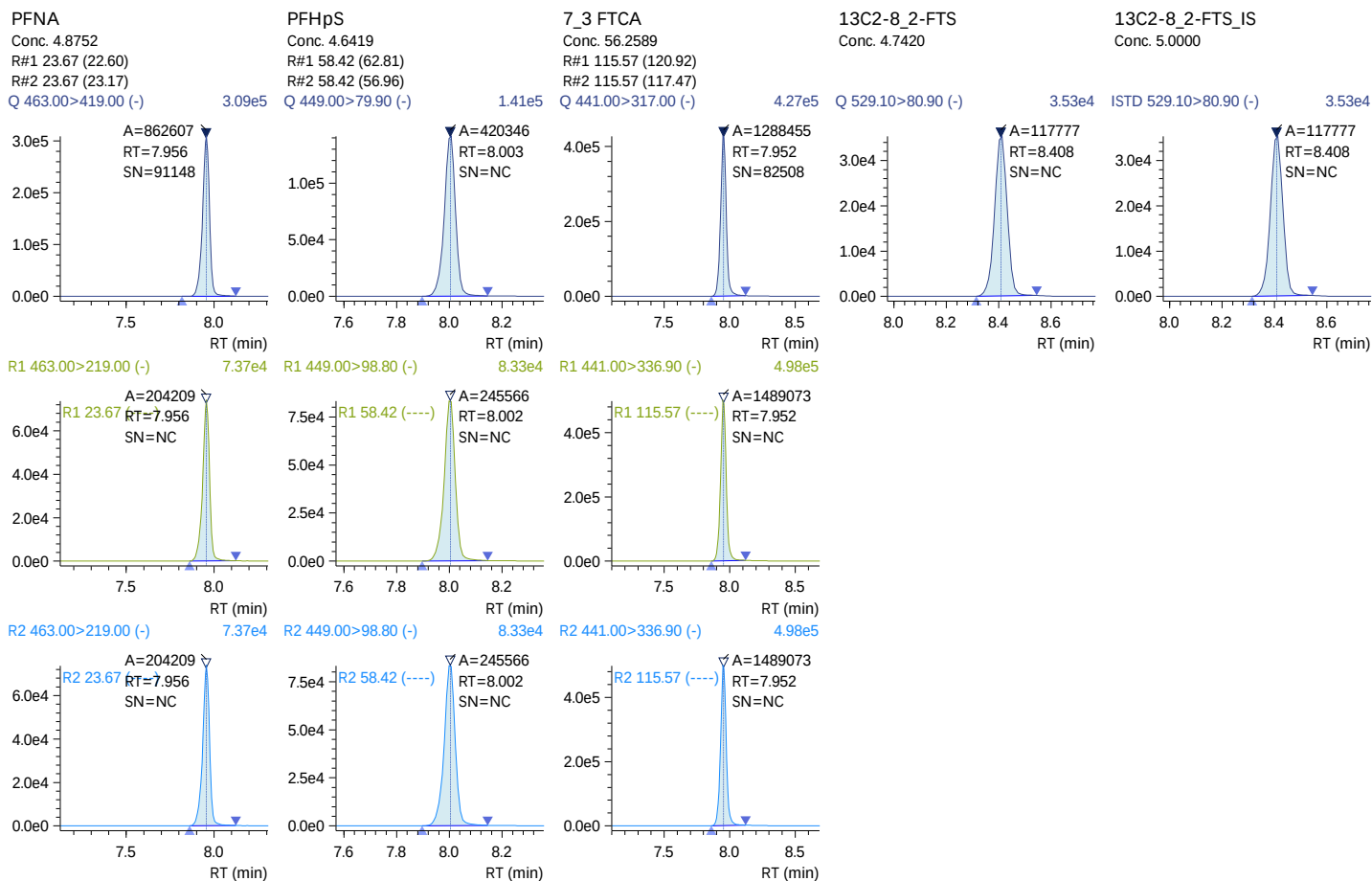


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_011 (continued)

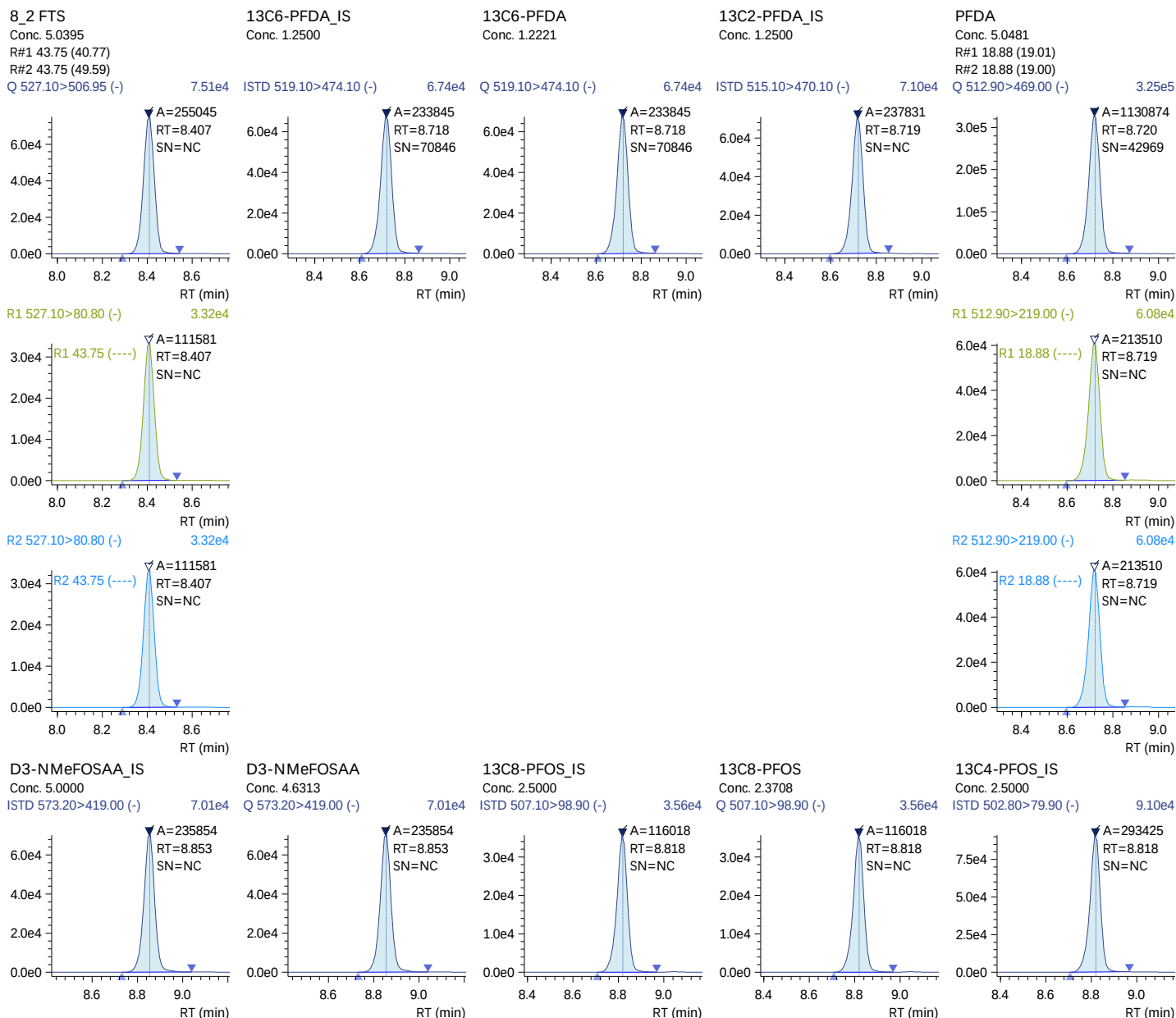


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_011 (continued)

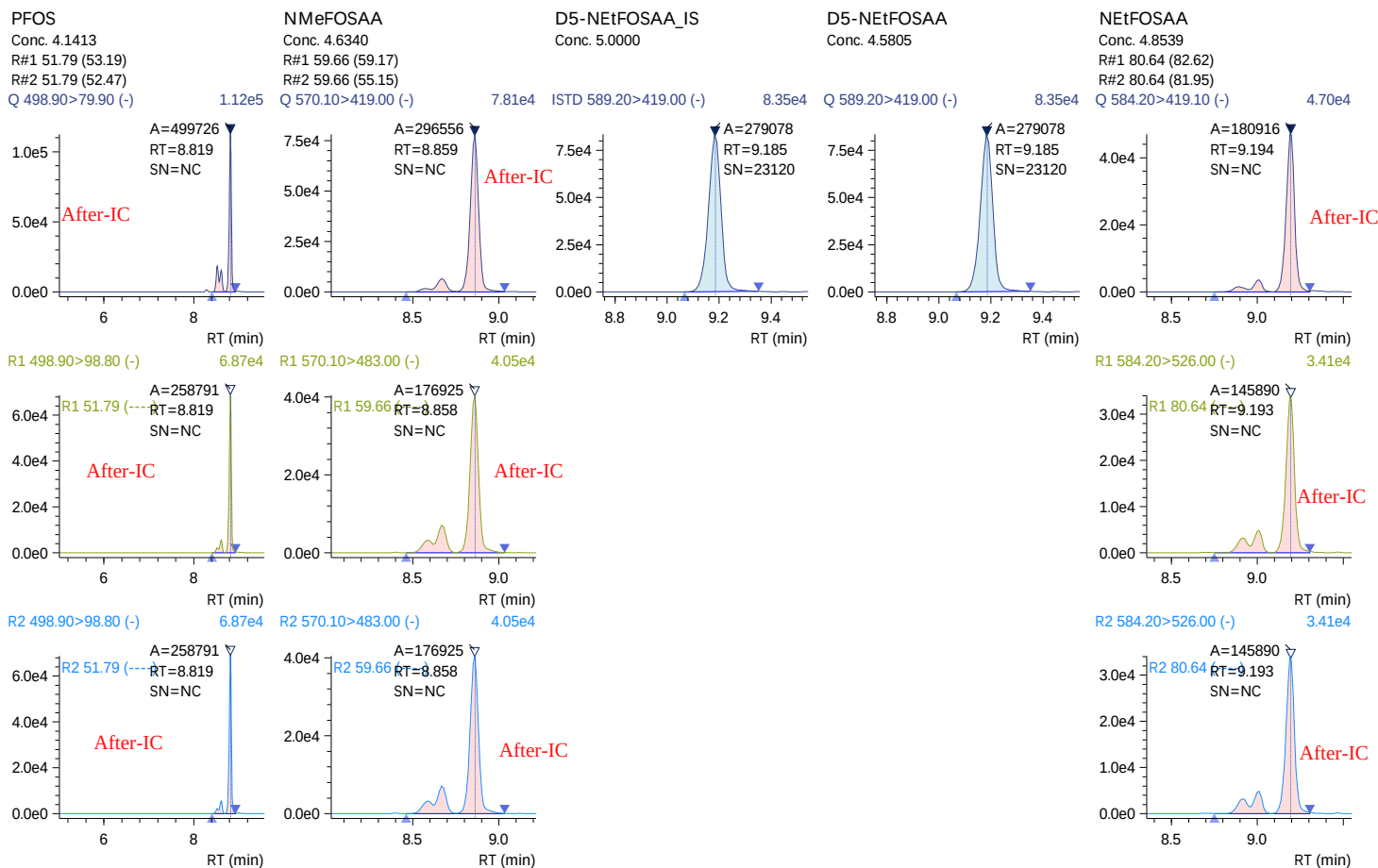


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_011 (continued)



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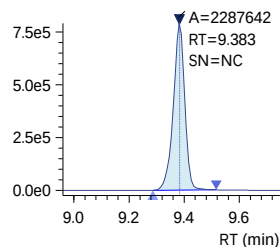
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Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



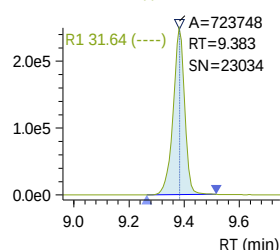
240118_011 (continued)

9-CI-PF3ONS

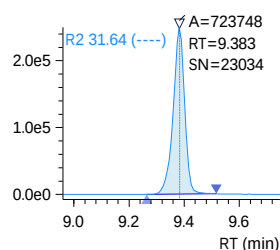
Conc. 4.4882
R#1 31.64 (31.76)
R#2 31.64 (32.76)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-) 2.50e5

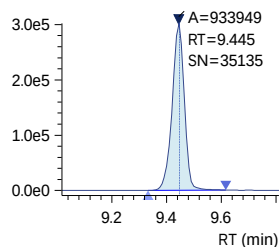


R2 532.80>353.00 (-) 2.50e5

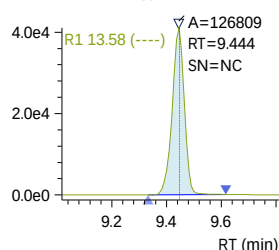


PFUnDA

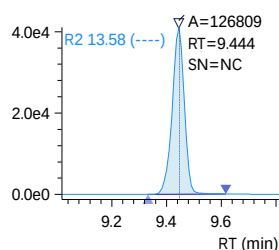
Conc. 5.0189
R#1 13.58 (12.31)
R#2 13.58 (13.12)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-) 4.11e4



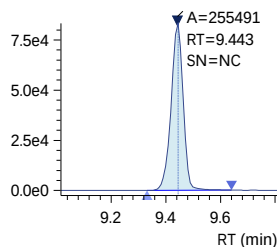
R2 563.10>269.10 (-) 4.11e4



13C7-PFUnDA_IS

Conc. 1.2500

ISTD 570.00>525.10 (-)

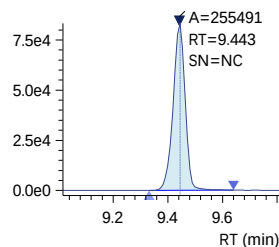


8.33e4

13C7-PFUnDA

Conc. 1.1194

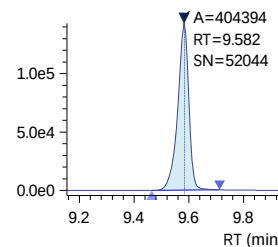
Q 570.00>525.10 (-)



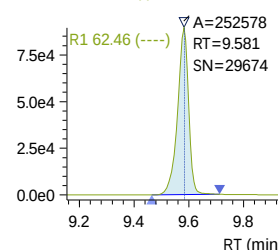
8.33e4

PFNS

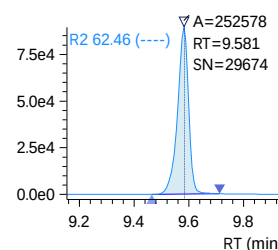
Conc. 4.5876
R#1 62.46 (63.31)
R#2 62.46 (65.22)
Q 548.80>79.90 (-)



1.43e5

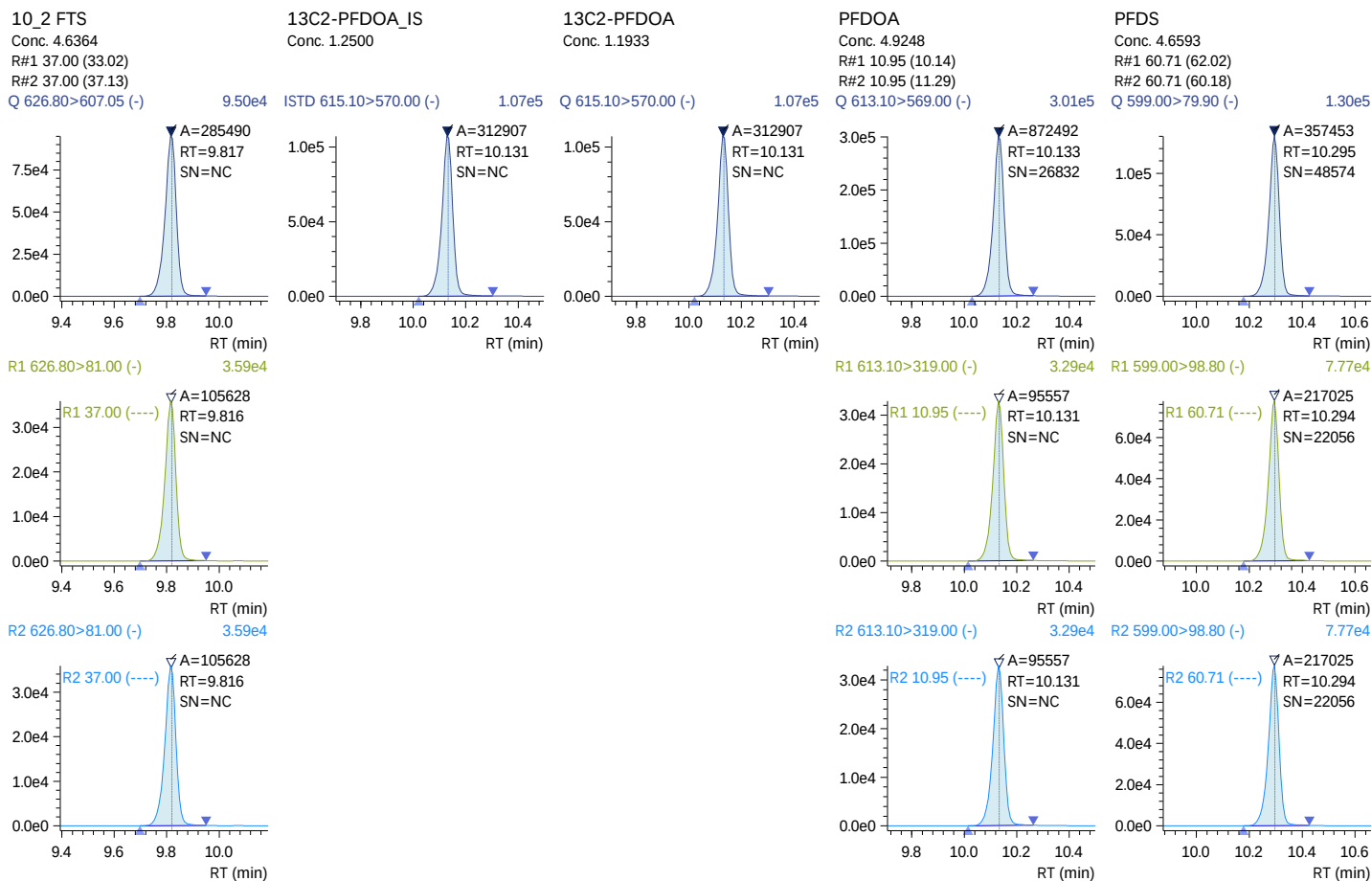


8.95e4





240118_011 (continued)

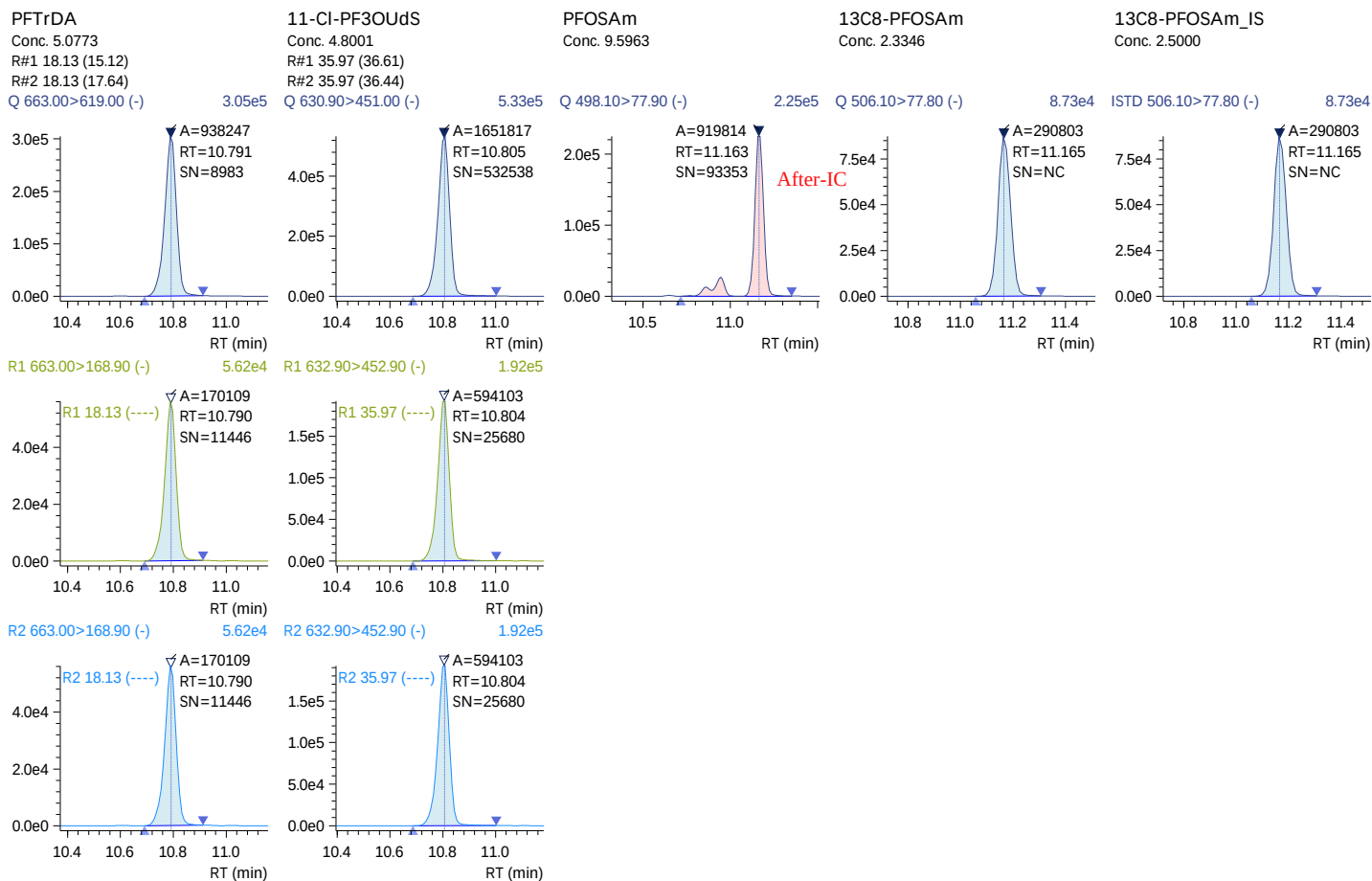


J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_011 (continued)

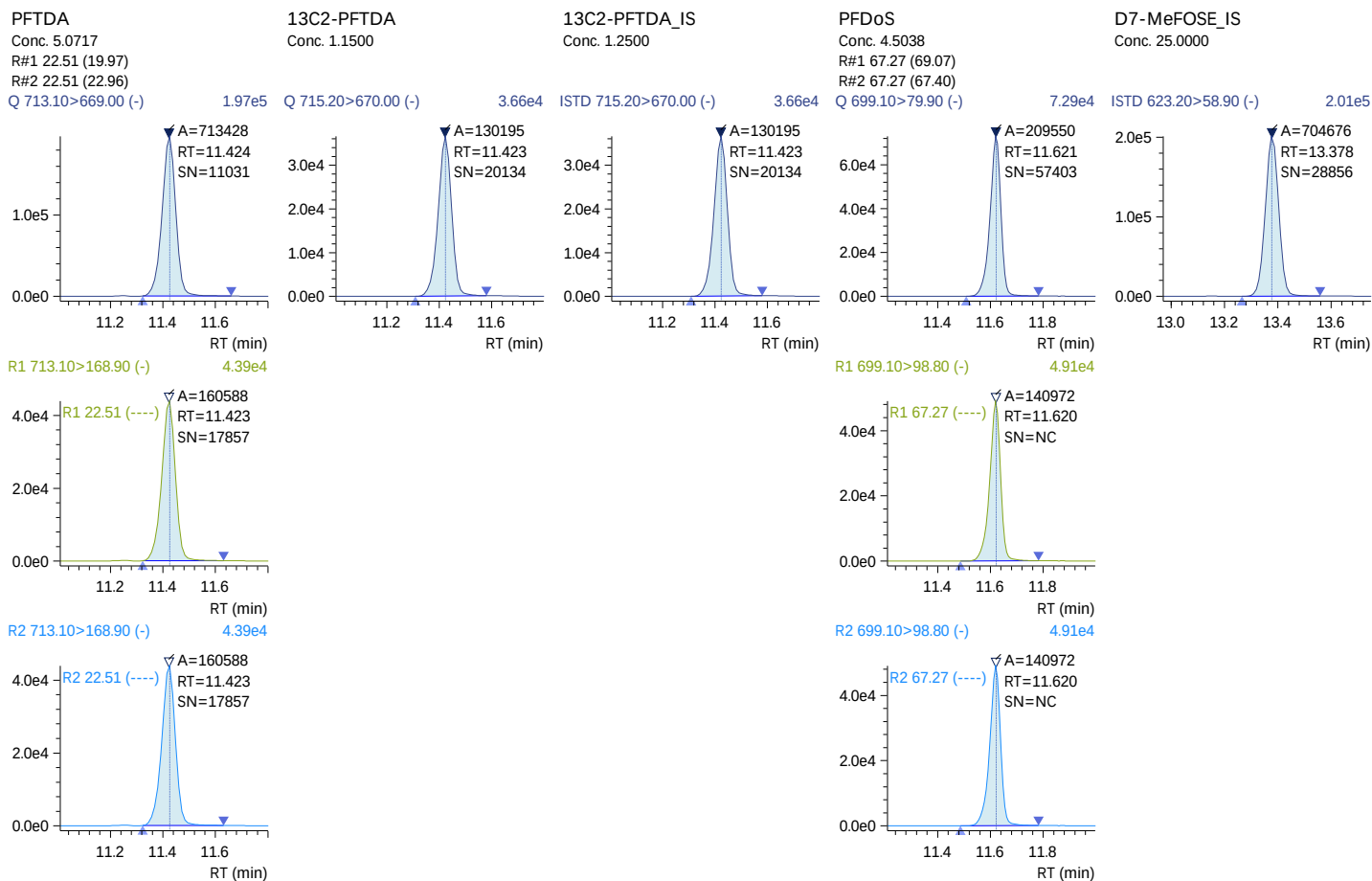


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_011 (continued)



J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_011 (continued)

D7-MeFOSE
Conc. 22.9454

MeFOSE
Conc. 4.7073

13C2-PFHXA_IS
Conc. 2.5000

13C2-PFHXA
Conc. 2.3185

PFHXA
Conc. 4.9396
R#1 14.00 (11.64)
R#2 14.00 (13.90)

Q 623.20>58.90 (-)

2.01e5

Q 616.10>59.00 (-)

2.15e4

ISTD 815.00>770.05 (-)

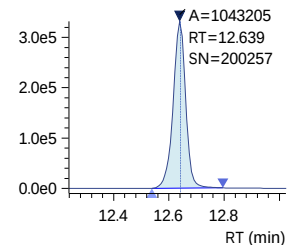
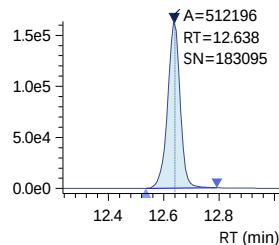
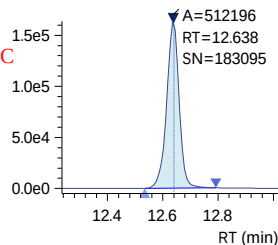
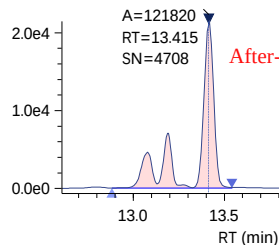
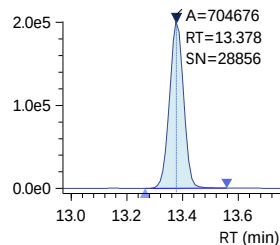
1.64e5

Q 815.00>770.05 (-)

1.64e5

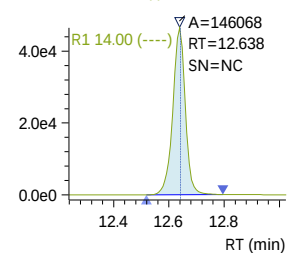
Q 813.00>768.95 (-)

3.32e5



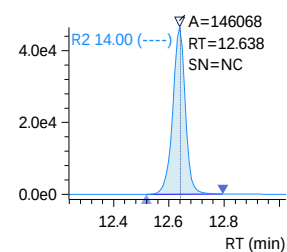
R1 813.00>218.95 (-)

4.65e4



R2 813.00>218.95 (-)

4.65e4





240118_011 (continued)

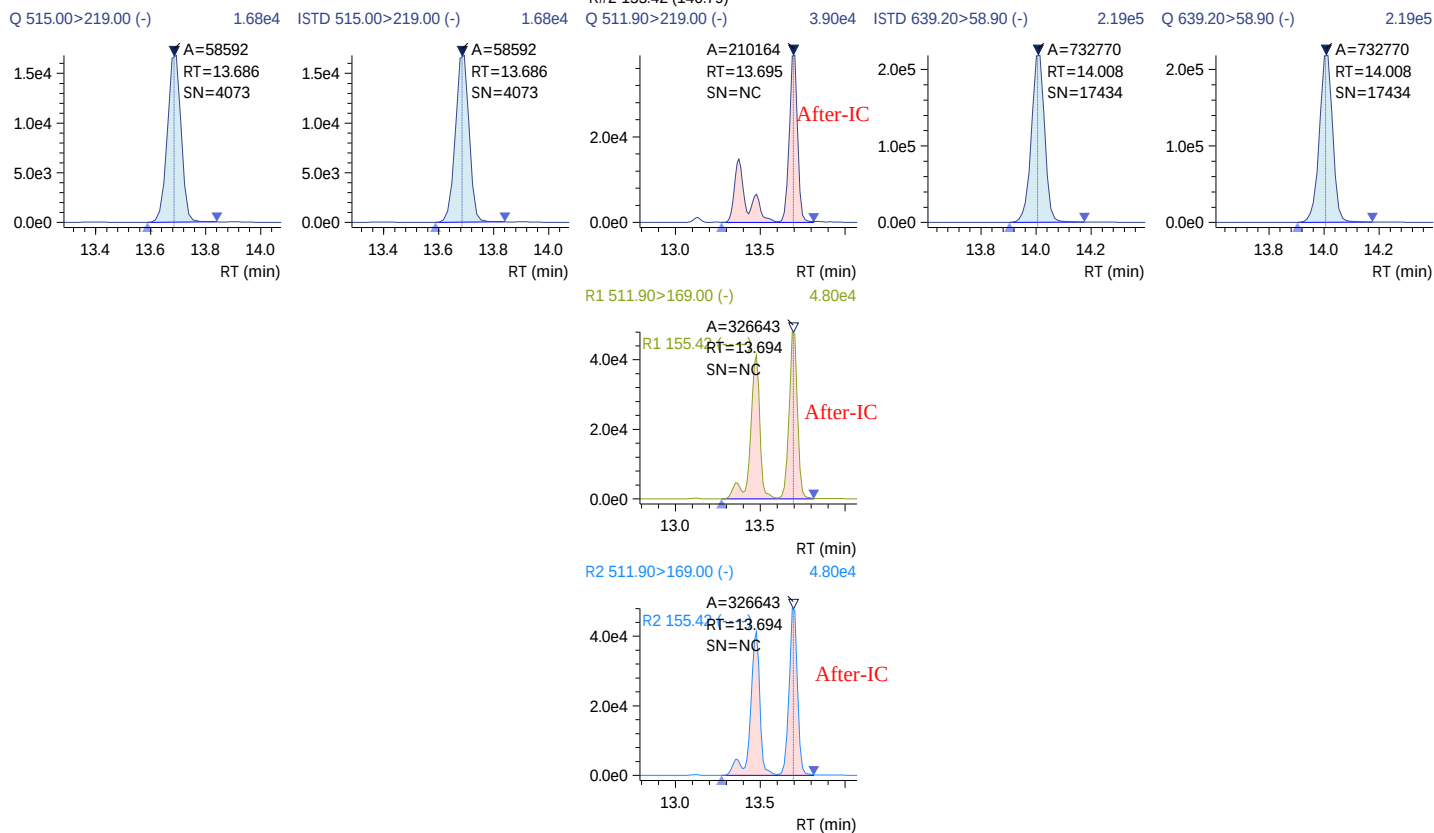
D3-MeFOSA
Conc. 2.3357

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. 4.9759
R#1 155.42 (149.05)
R#2 155.42 (140.79)

D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 23.4925

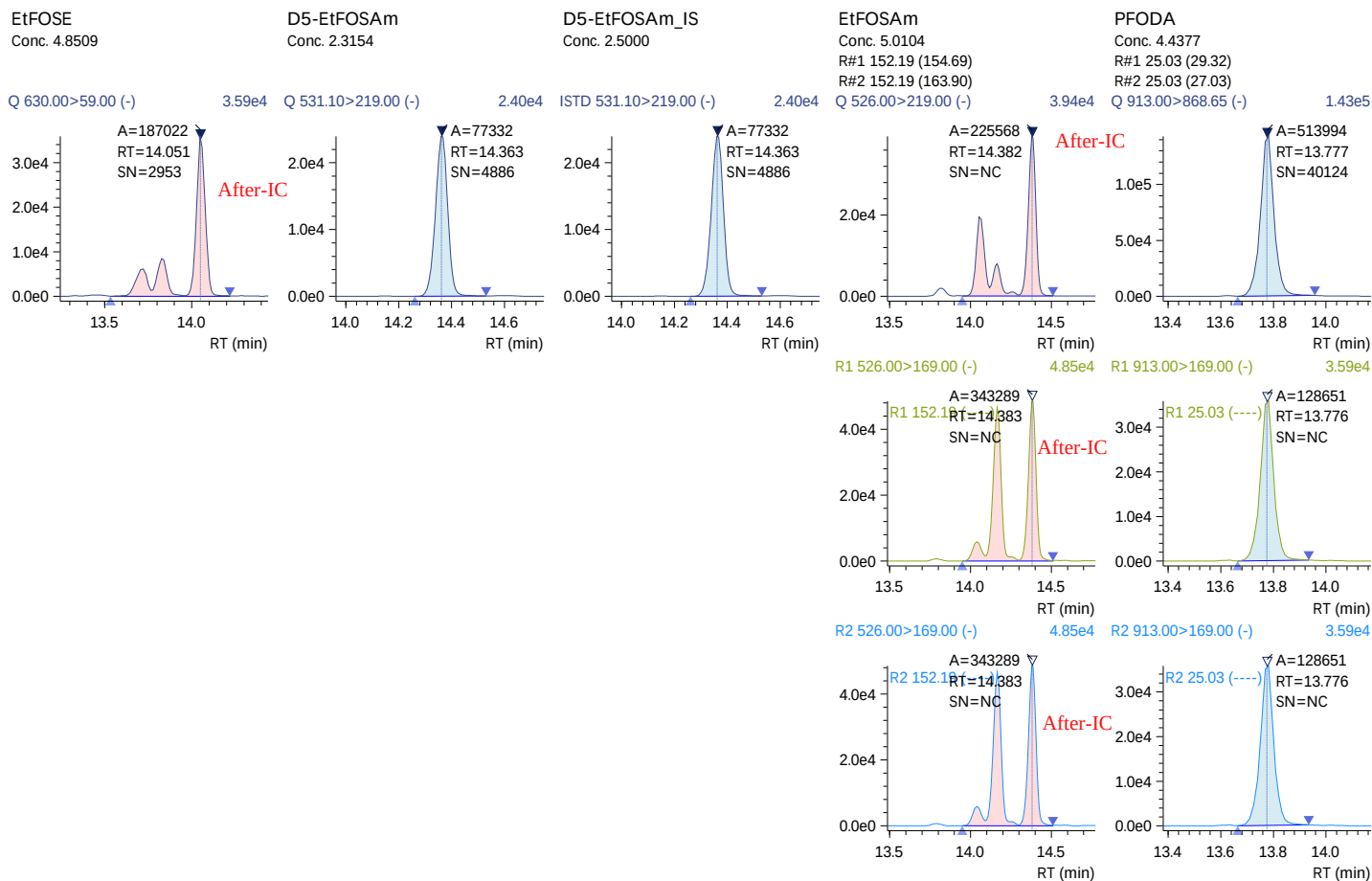


J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_011 (continued)



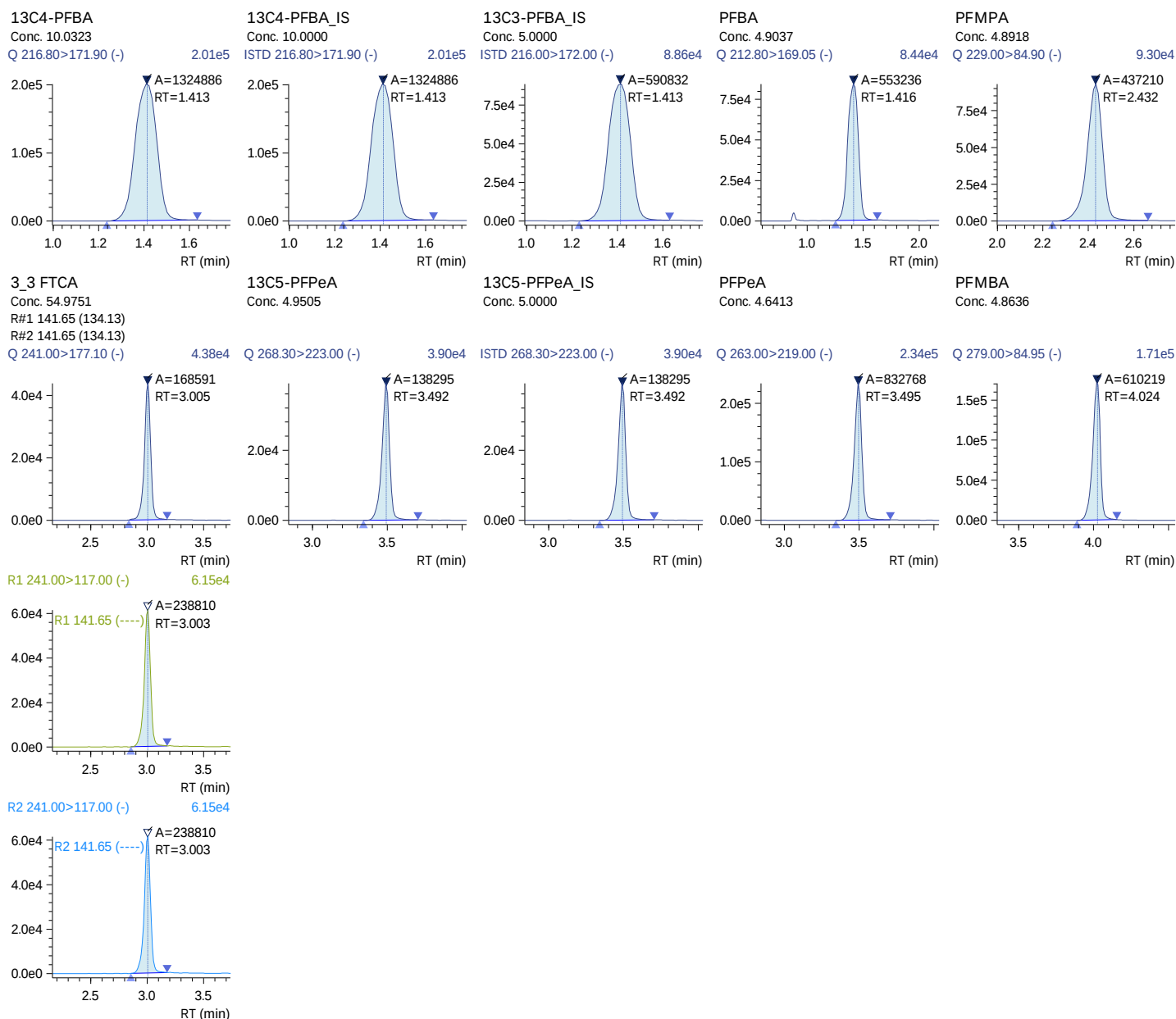
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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_011

Sample ID: 1633 ICAL 5.0PPB
Date Acquired: 1/18/2024 4:00:49 PM
Acquired by: System Administrator
Data File: 240118_011
Vial: 6 | Inj. Volume: 10.0000uL | Tray: 1





240118_011 (continued)

13C2-4_2 FTS
Conc. 4.8723

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. 4.5841
R#1 30.75 (34.14)
R#2 30.75 (34.14)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 4.3002
R#1 46.19 (47.53)
R#2 46.19 (47.53)

Q 329.10>80.90 (-)

4.84e4

ISTD 329.10>80.90 (-)

4.84e4

Q 327.10>307.00 (-)

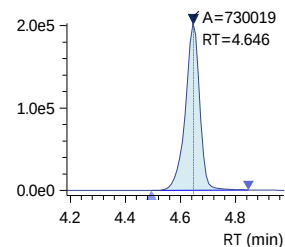
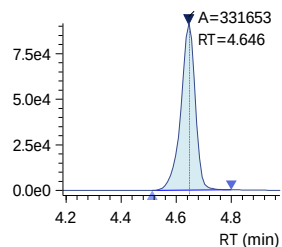
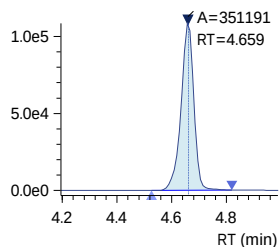
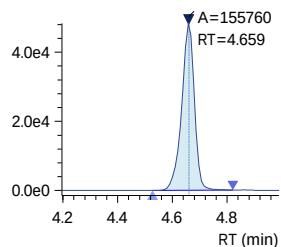
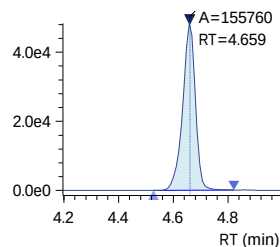
1.09e5

ISTD 302.10>79.90 (-)

9.16e4

Q 298.70>79.90 (-)

2.03e5

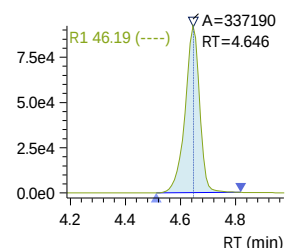
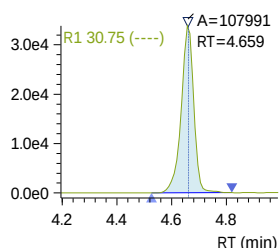


R1 327.10>80.90 (-)

3.39e4

R1 298.70>98.80 (-)

9.24e4

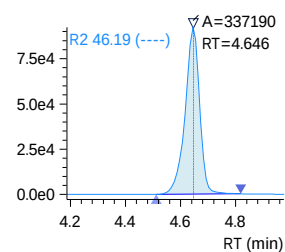
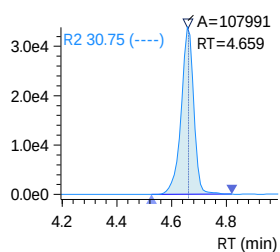


R2 327.10>80.90 (-)

3.39e4

R2 298.70>98.80 (-)

9.24e4





240118_011 (continued)

13C3-PFBS
 Conc. 2.5157

NFDHA
 Conc. 4.8072
 R#1 36.67 (37.88)
 R#2 36.67 (37.88)

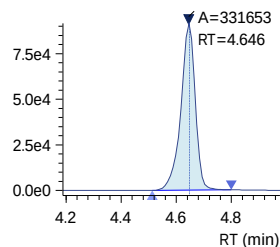
13C5-PFHxA
 Conc. 2.5428

13C5-PFHxA_IS
 Conc. 2.5000

13C2-PFHxA_IS
 Conc. 2.5000

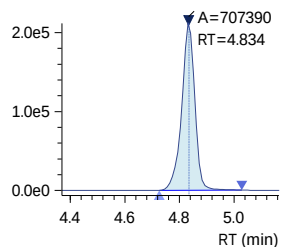
Q 302.10>79.90 (-)

9.16e4



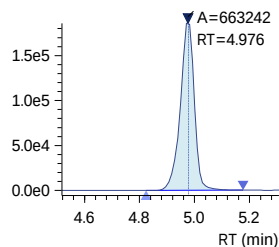
Q 295.00>201.00 (-)

2.12e5



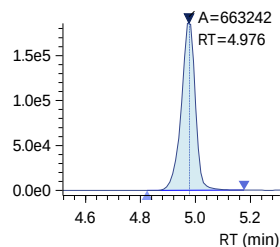
Q 318.00>273.00 (-)

1.86e5



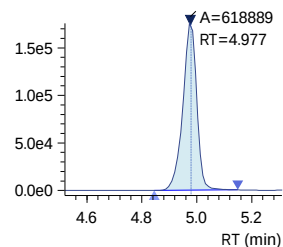
ISTD 318.00>273.00 (-)

1.86e5



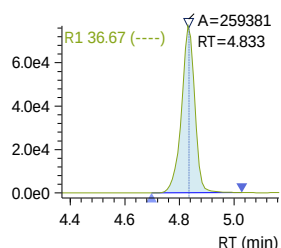
ISTD 315.10>270.00 (-)

1.76e5



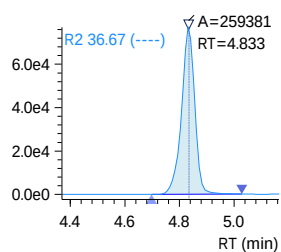
R1 295.00>84.90 (-)

7.70e4



R2 295.00>84.90 (-)

7.70e4





240118_011 (continued)

PFHxA
Conc. 4.8876

PFEESA
Conc. 4.2553
R#1 5.76 (5.88)
R#2 5.76 (5.88)

13C3-HFPO-DA
Conc. 10.2048

13C3-HFPO-DA_IS
Conc. 10.0000

HFPO-DA
Conc. 4.8257
R#1 63.67 (63.80)
R#2 63.67 (63.80)

Q 313.00>269.00 (-)

3.03e5

Q 314.80>135.00 (-)

9.49e5

Q 286.90>168.90 (-)

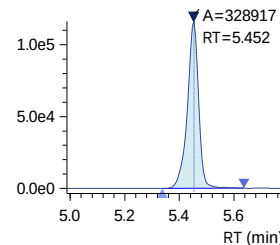
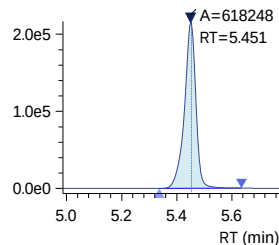
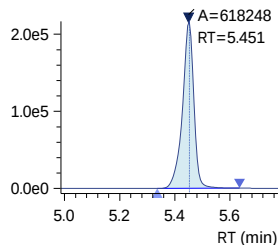
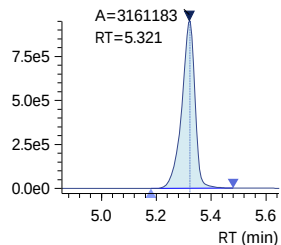
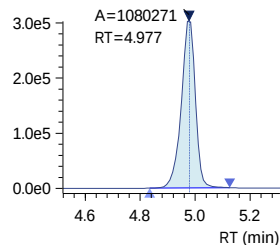
2.17e5

ISTD 286.90>168.90 (-)

2.17e5

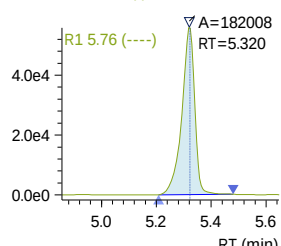
Q 284.90>168.90 (-)

1.16e5



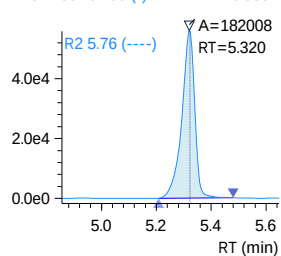
R1 314.80>82.90 (-)

5.58e4



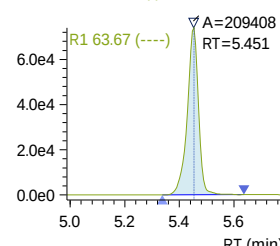
R2 314.80>82.90 (-)

5.58e4



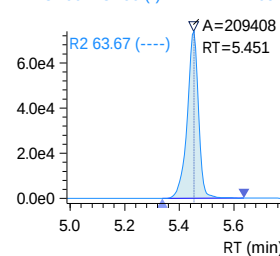
R1 284.90>184.90 (-)

7.40e4



R2 284.90>184.90 (-)

7.40e4

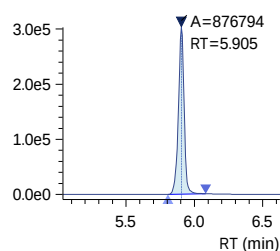




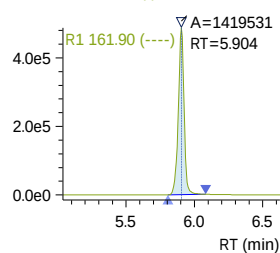
240118_011 (continued)

5_3 FTCA

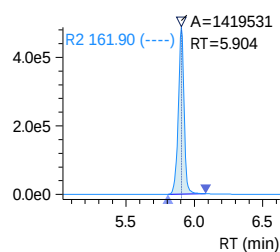
Conc. 51.1086
R#1 161.90 (167.13)
R#2 161.90 (167.13)
Q 341.00>237.05 (-)



R1 341.00>217.00 (-) 4.88e5

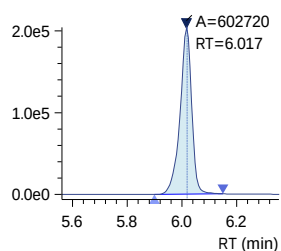


R2 341.00>217.00 (-) 4.88e5

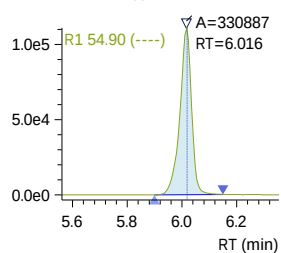


PFPeS

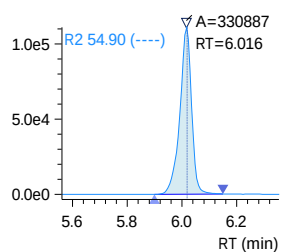
Conc. 4.8360
R#1 54.90 (56.71)
R#2 54.90 (56.71)
Q 349.10>79.90 (-)



R1 349.10>98.80 (-) 1.11e5

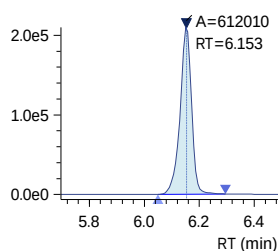


R2 349.10>98.80 (-) 1.11e5



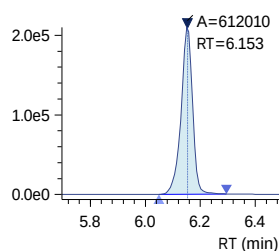
13C4-PFHpA

Conc. 2.5920
Q 367.10>322.00 (-)



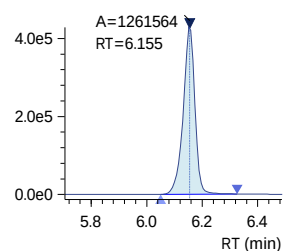
13C4-PFHpA_IS

Conc. 2.5000
ISTD 367.10>322.00 (-)

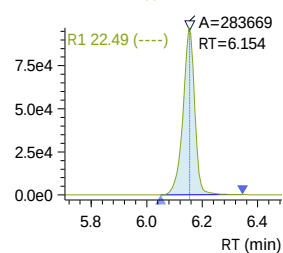


PFHpA

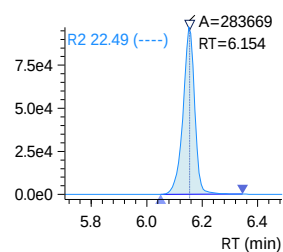
Conc. 4.9353
R#1 22.49 (21.37)
R#2 22.49 (21.37)
Q 363.10>319.00 (-)



R1 363.10>169.00 (-) 9.70e4

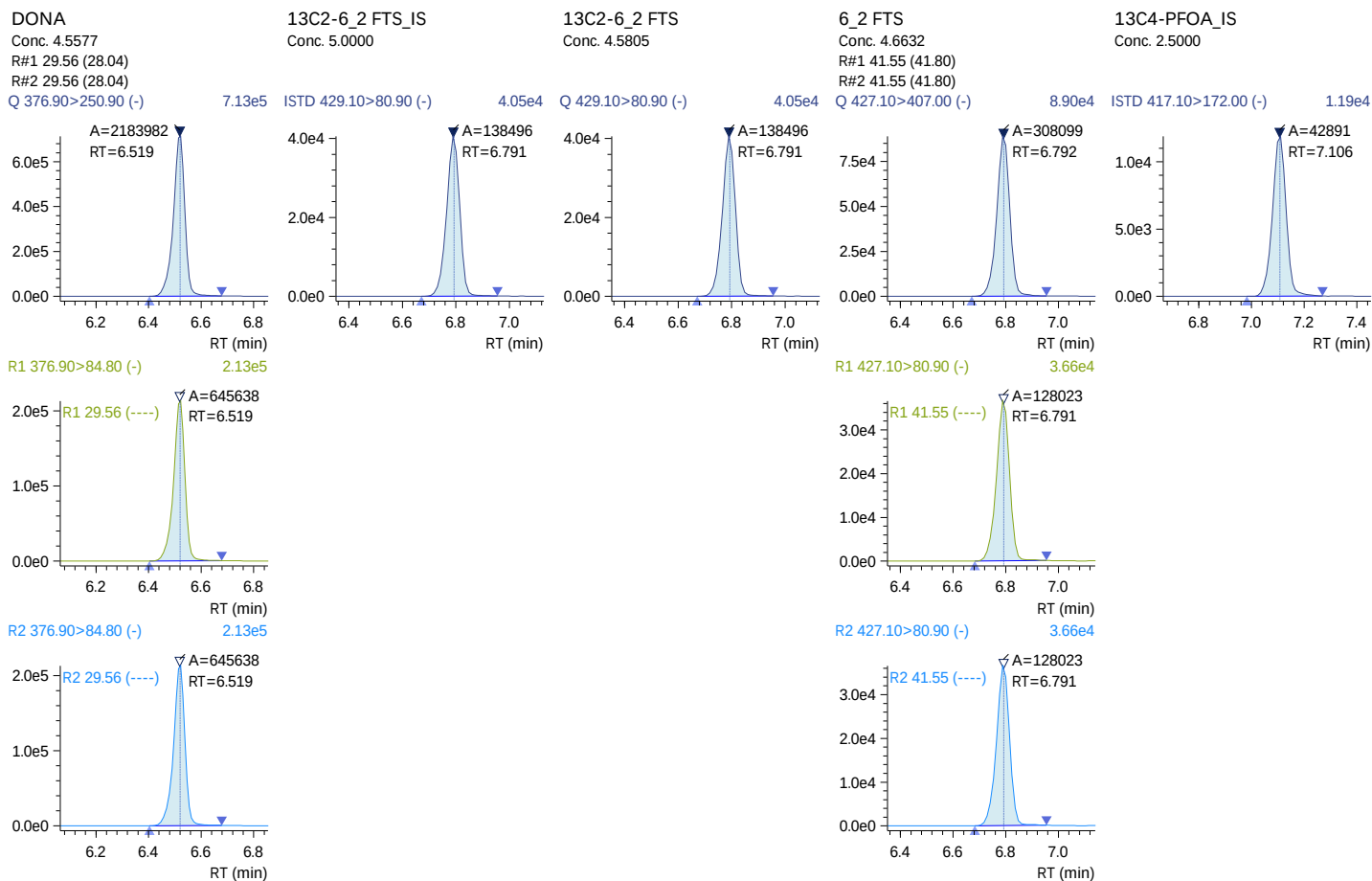


R2 363.10>169.00 (-) 9.70e4





240118_011 (continued)





240118_011 (continued)

13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.3618

PFOA
Conc. 5.7139
R#1 31.66 (29.05)
R#2 31.66 (29.05)

13C3-PFHxS
Conc. 2.3802

13C3-PFHxS_IS
Conc. 2.5000

ISTD 421.10>376.00 (-)

1.60e5

Q 421.10>376.00 (-)

1.60e5

Q 413.00>369.00 (-)

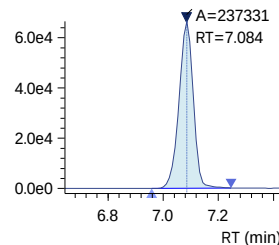
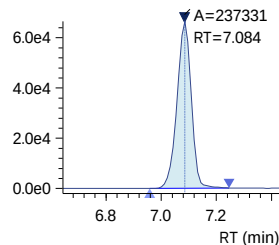
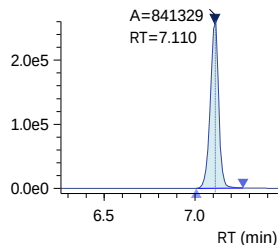
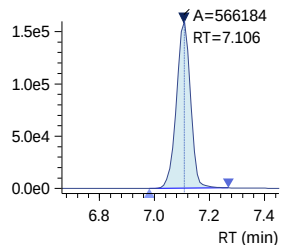
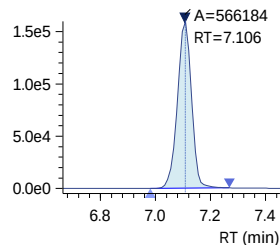
2.60e5

Q 402.10>79.90 (-)

6.65e4

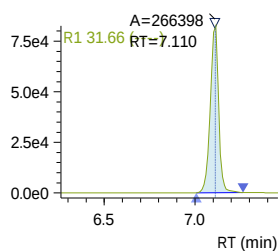
ISTD 402.10>79.90 (-)

6.65e4



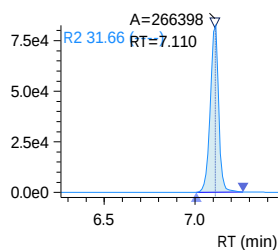
R1 413.00>169.00 (-)

8.26e4



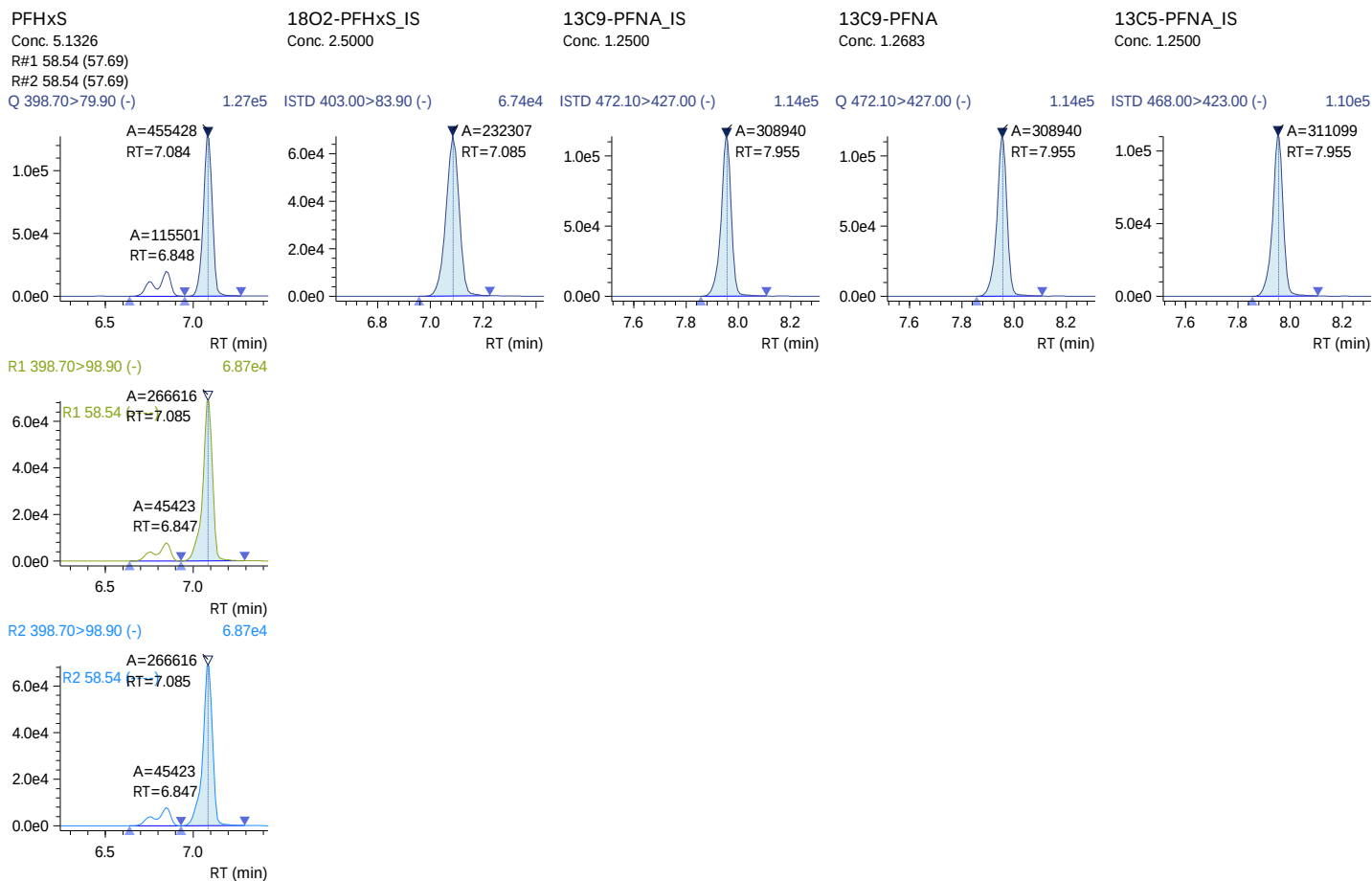
R2 413.00>169.00 (-)

8.26e4



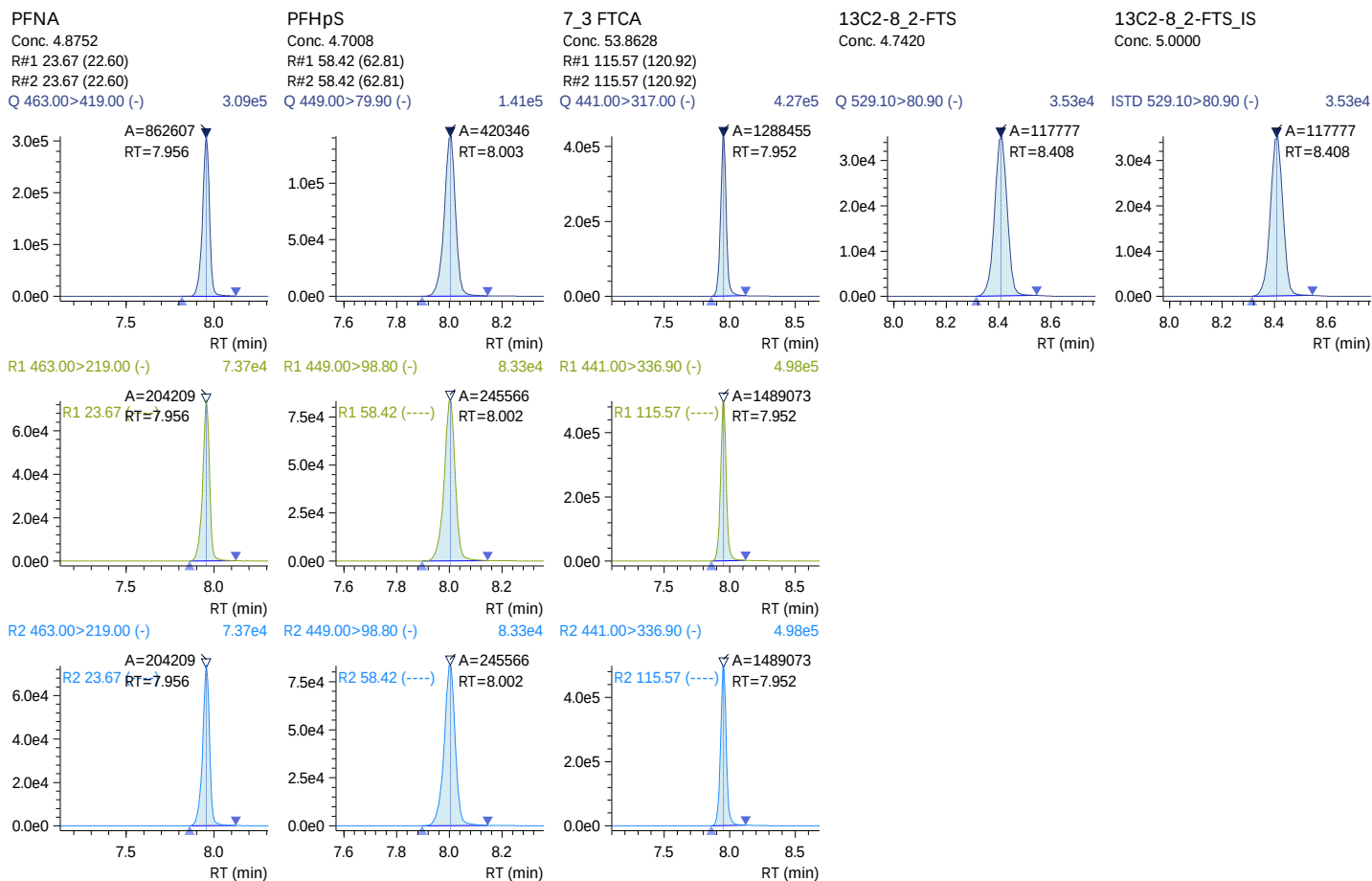


240118_011 (continued)



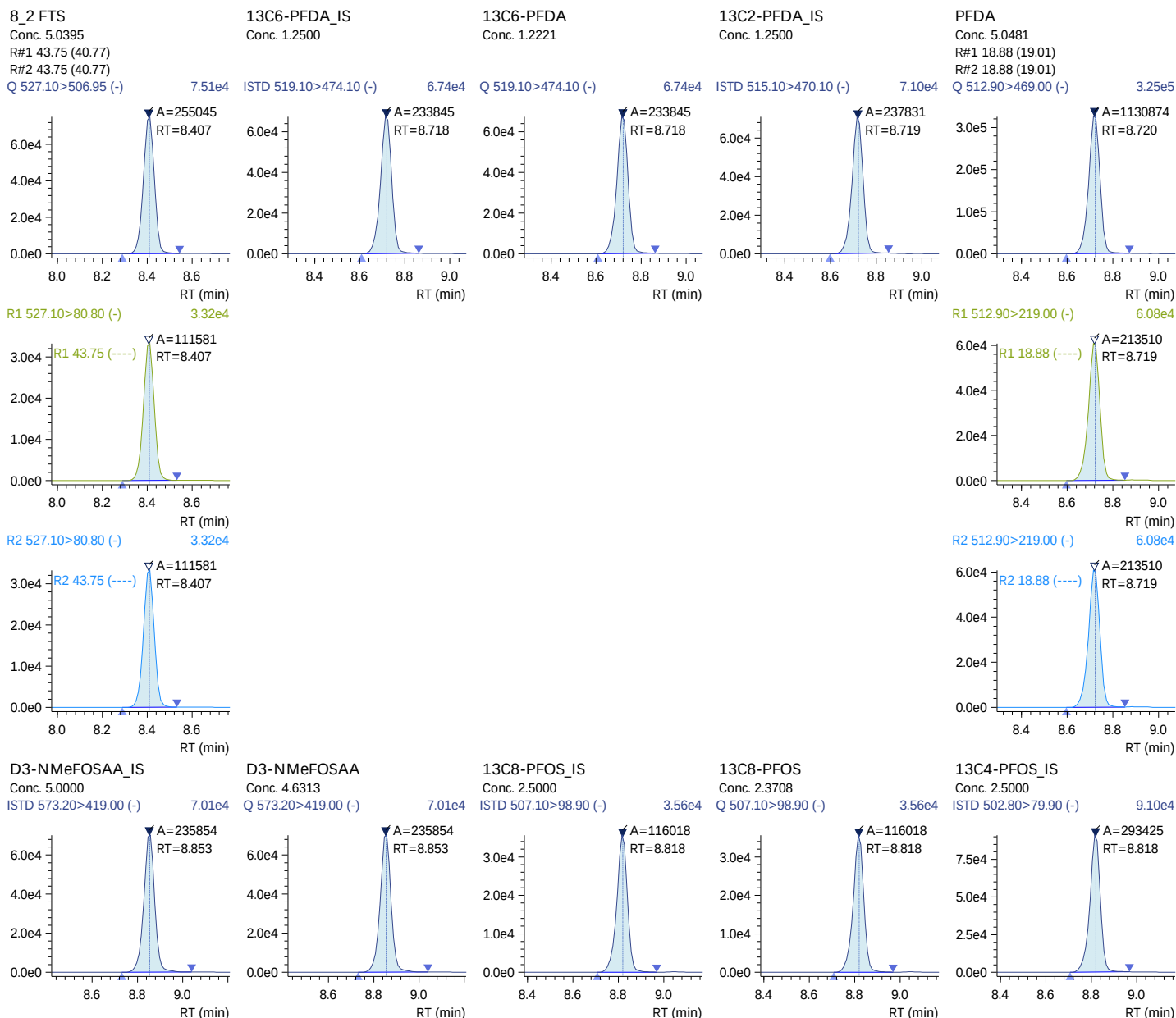


240118_011 (continued)



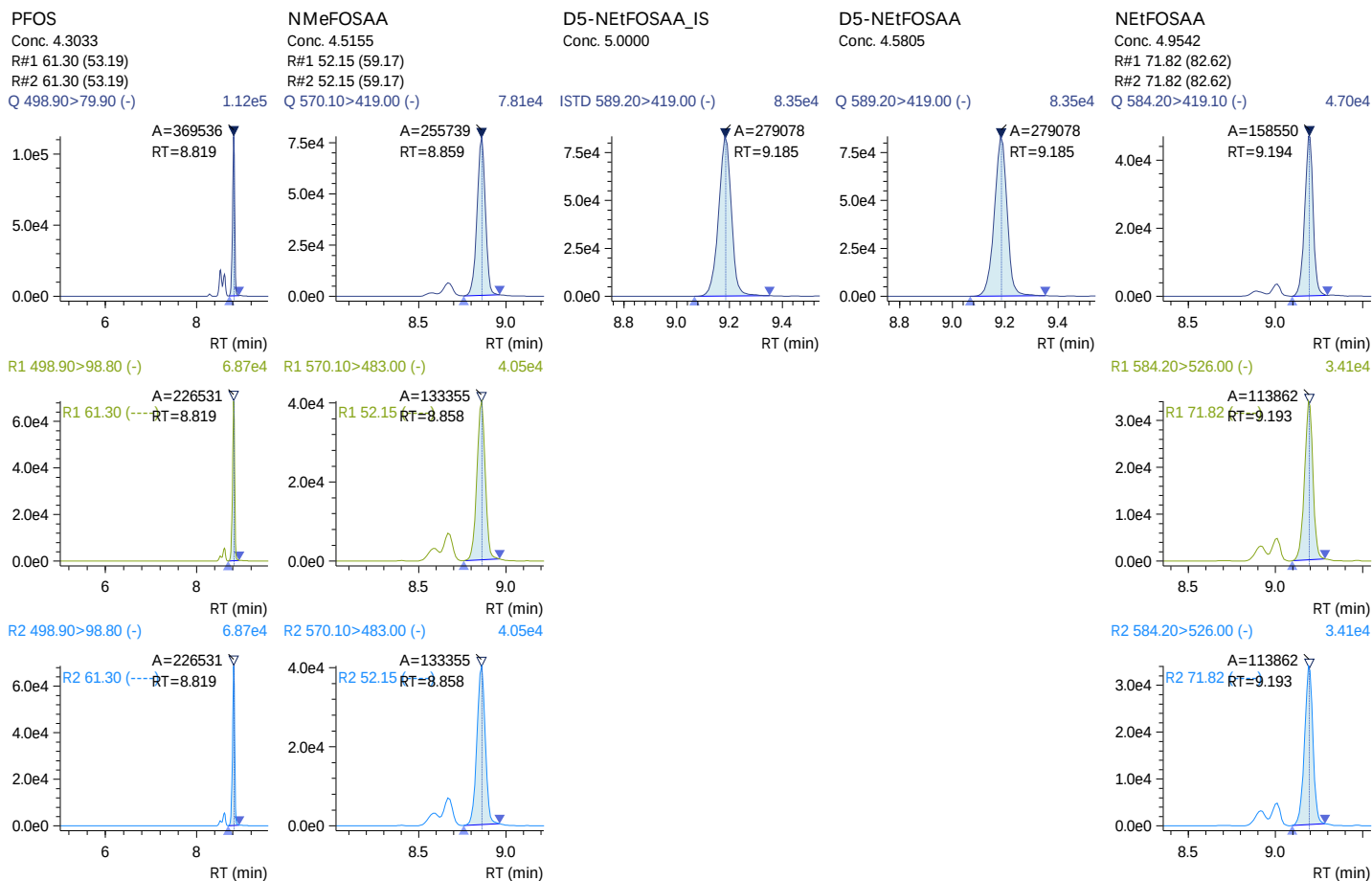


240118_011 (continued)





240118_011 (continued)

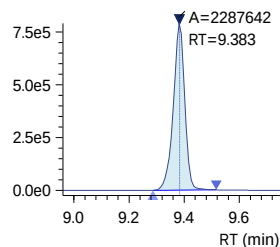




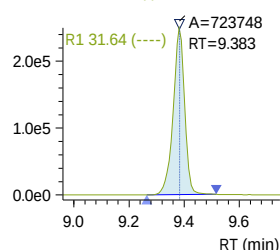
240118_011 (continued)

9-Cl-PF3ONS

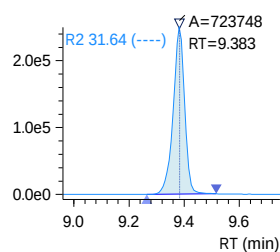
Conc. 4.4882
R#1 31.64 (31.76)
R#2 31.64 (31.76)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-) 2.50e5

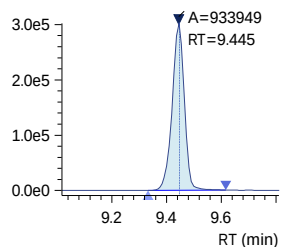


R2 532.80>353.00 (-) 2.50e5

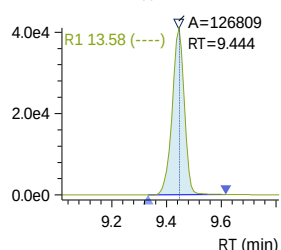


PFUnDA

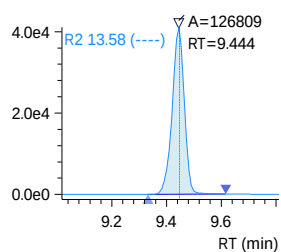
Conc. 5.0189
R#1 13.58 (12.31)
R#2 13.58 (12.31)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-) 4.11e4

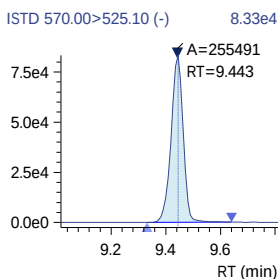


R2 563.10>269.10 (-) 4.11e4



13C7-PFUnDA_IS

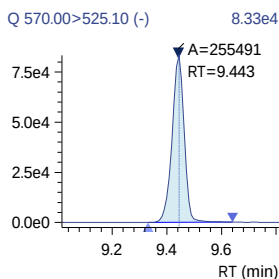
Conc. 1.2500



ISTD 570.00>525.10 (-) 8.33e4

13C7-PFUnDA

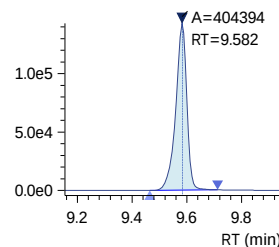
Conc. 1.1194



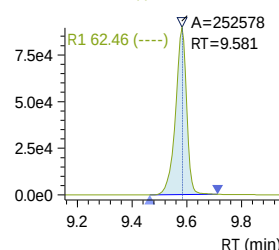
Q 570.00>525.10 (-) 8.33e4

PFNS

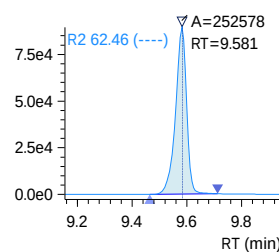
Conc. 4.5876
R#1 62.46 (63.31)
R#2 62.46 (63.31)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-) 8.95e4



R2 548.80>98.80 (-) 8.95e4





240118_011 (continued)

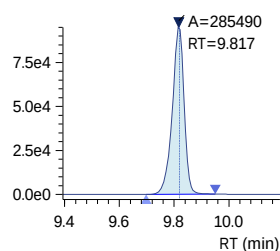
10_2_FTS

Conc. 4.7887

R#1 37.00 (33.02)

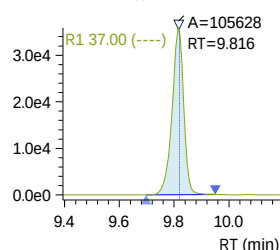
R#2 37.00 (33.02)

Q 626.80>607.05 (-)



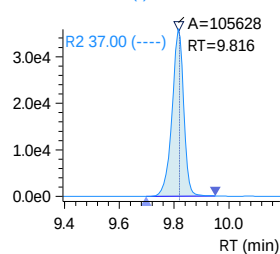
R1 626.80>81.00 (-)

3.59e4



R2 626.80>81.00 (-)

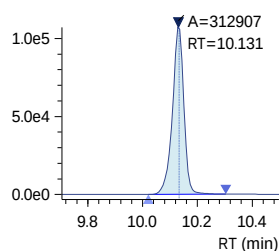
3.59e4



13C2-PFDOA_IS

Conc. 1.2500

ISTD 615.10>570.00 (-)



Q 615.10>570.00 (-)

1.07e5



Q 615.10>570.00 (-)

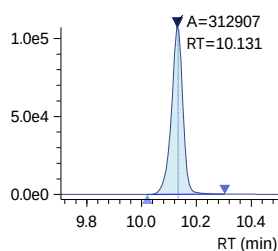
1.07e5



13C2-PFDOA

Conc. 1.1933

Q 615.10>570.00 (-)



Q 615.10>570.00 (-)

1.07e5



Q 615.10>570.00 (-)

1.07e5



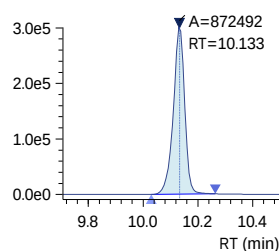
PFDOA

Conc. 4.9248

R#1 10.95 (10.14)

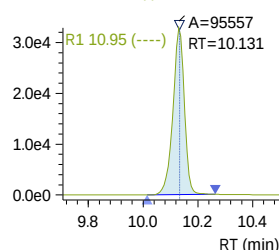
R#2 10.95 (10.14)

Q 613.10>569.00 (-)



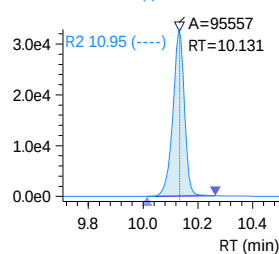
R1 613.10>319.00 (-)

3.29e4



R2 613.10>319.00 (-)

3.29e4



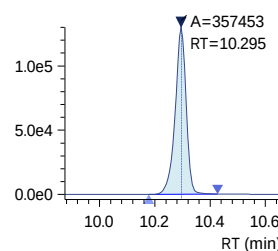
PFDS

Conc. 4.5437

R#1 60.71 (62.02)

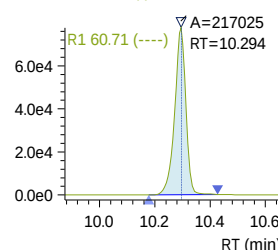
R#2 60.71 (62.02)

Q 599.00>79.90 (-)



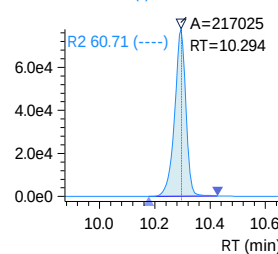
R1 599.00>98.80 (-)

7.77e4



R2 599.00>98.80 (-)

7.77e4





240118_011 (continued)

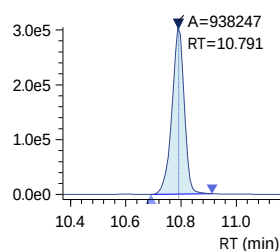
PFTTrDA

Conc. 5.0773

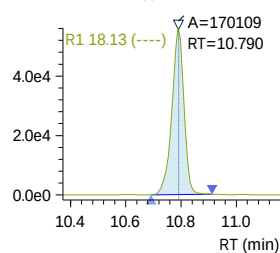
R#1 18.13 (15.12)

R#2 18.13 (15.12)

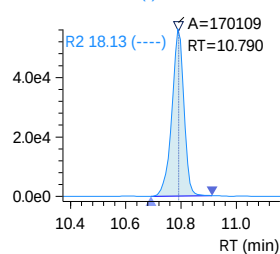
Q 663.00>619.00 (-)



R1 663.00>168.90 (-)



R2 663.00>168.90 (-)



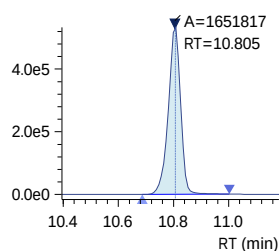
11-CI-PF3OUdS

Conc. 4.4804

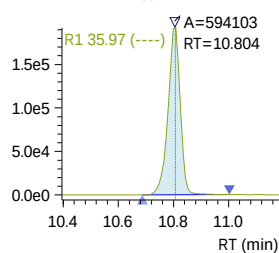
R#1 35.97 (36.61)

R#2 35.97 (36.61)

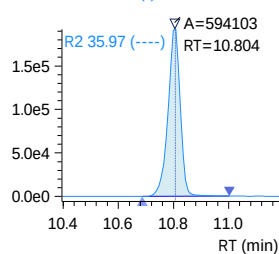
Q 630.90>451.00 (-)



R1 632.90>452.90 (-)



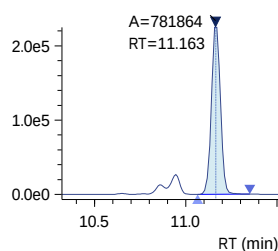
R2 632.90>452.90 (-)



PFOSAm

Conc. 9.6754

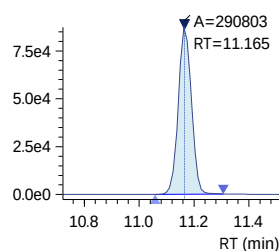
Q 498.10>77.90 (-)



13C8-PFOSAm

Conc. 2.3346

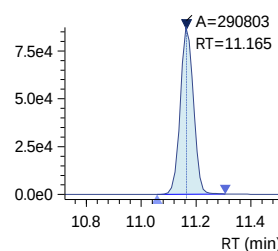
Q 506.10>77.80 (-)



13C8-PFOSAm_IS

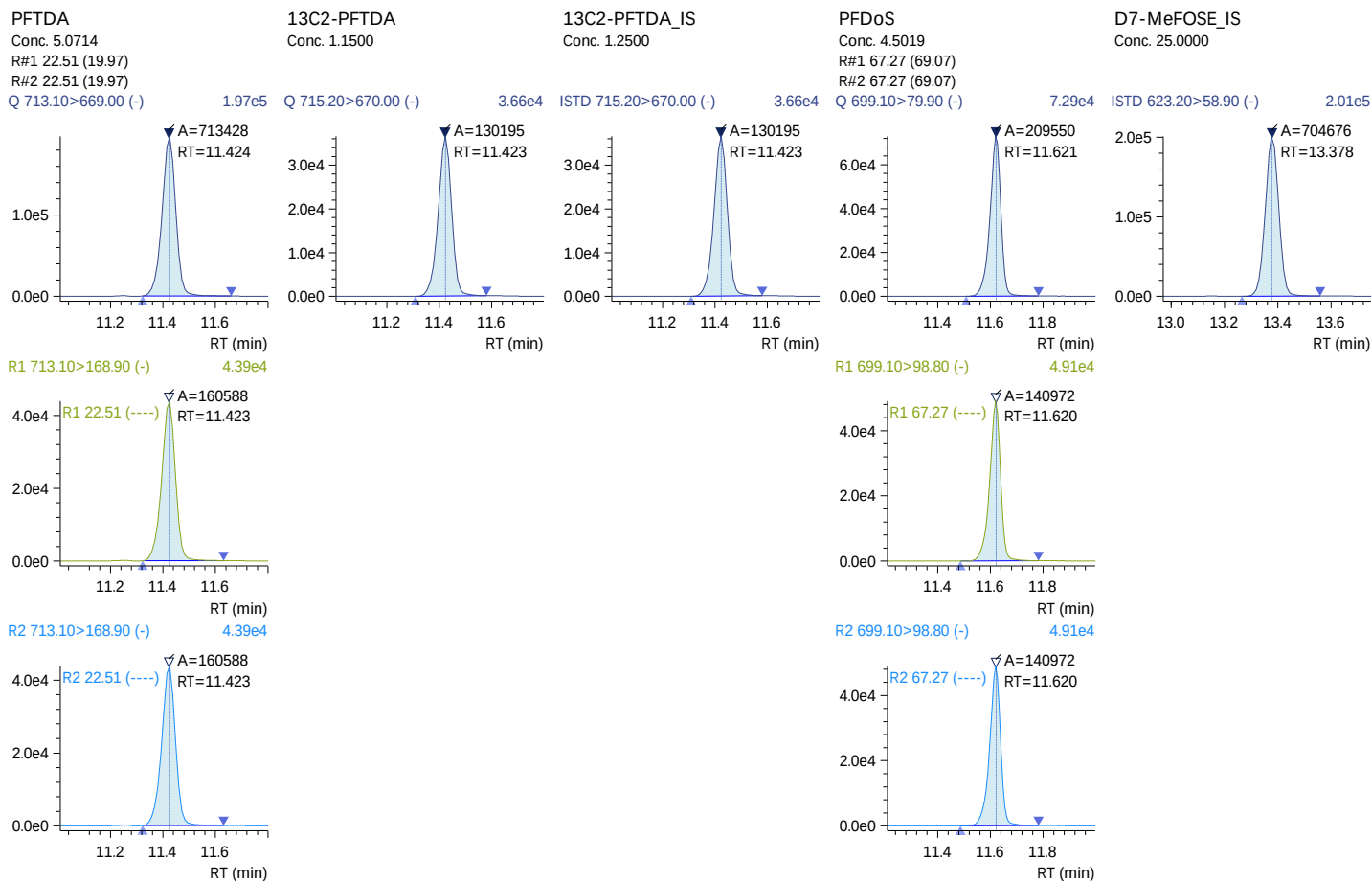
Conc. 2.5000

ISTD 506.10>77.80 (-)





240118_011 (continued)





240118_011 (continued)

D7-MeFOSE
Conc. 22.9454

MeFOSE
Conc. 4.8682

13C2-PFHXA_IS
Conc. 2.5000

13C2-PFHXA
Conc. 2.3185

PFHXA
Conc. 4.9396
R#1 14.00 (11.64)
R#2 14.00 (11.64)

Q 623.20>58.90 (-)

2.01e5

Q 616.10>59.00 (-)

2.15e4

ISTD 815.00>770.05 (-)

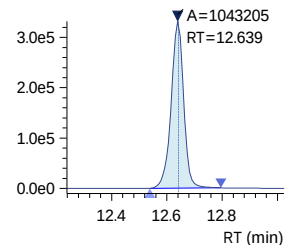
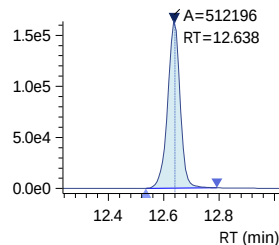
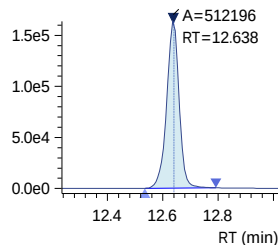
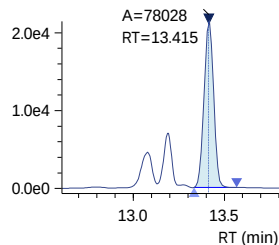
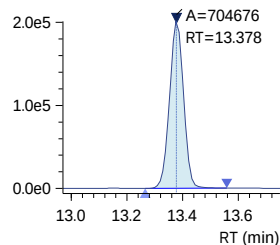
1.64e5

Q 815.00>770.05 (-)

1.64e5

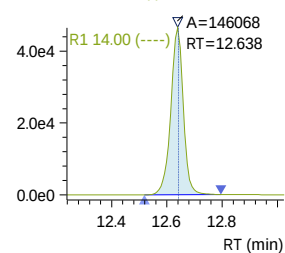
Q 813.00>768.95 (-)

3.32e5



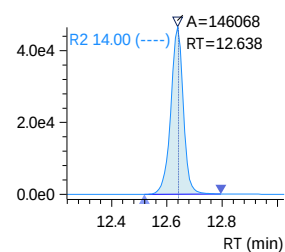
R1 813.00>218.95 (-)

4.65e4



R2 813.00>218.95 (-)

4.65e4





240118_011 (continued)

D3-MeFOSA
 Conc. 2.3357

D3-MeFOSA_IS
 Conc. 2.5000

MeFOSA
 Conc. 4.9719
 R#1 123.73 (149.05)
 R#2 123.73 (149.05)

D9-EtFOSE_IS
 Conc. 25.0000

D9-EtFOSE
 Conc. 23.4925

Q 515.00>219.00 (-)

1.68e4

ISTD 515.00>219.00 (-)

1.68e4

Q 511.90>219.00 (-)

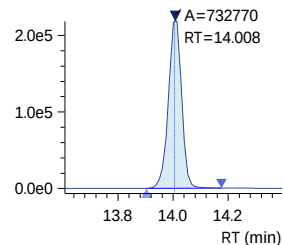
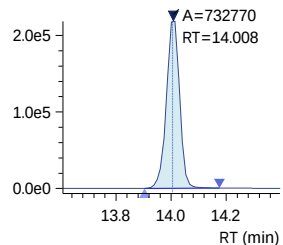
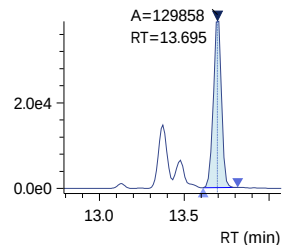
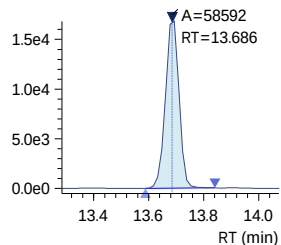
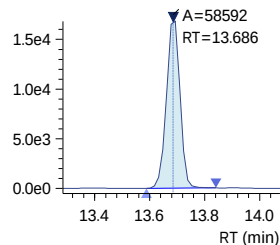
3.90e4

ISTD 639.20>58.90 (-)

2.19e5

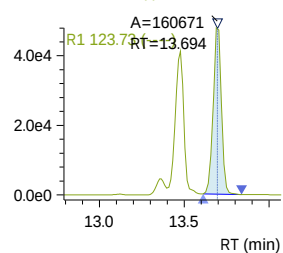
Q 639.20>58.90 (-)

2.19e5



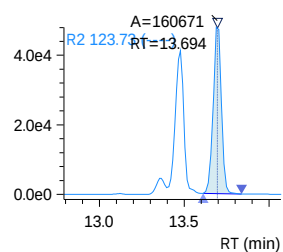
R1 511.90>169.00 (-)

4.80e4



R2 511.90>169.00 (-)

4.80e4





240118_011 (continued)

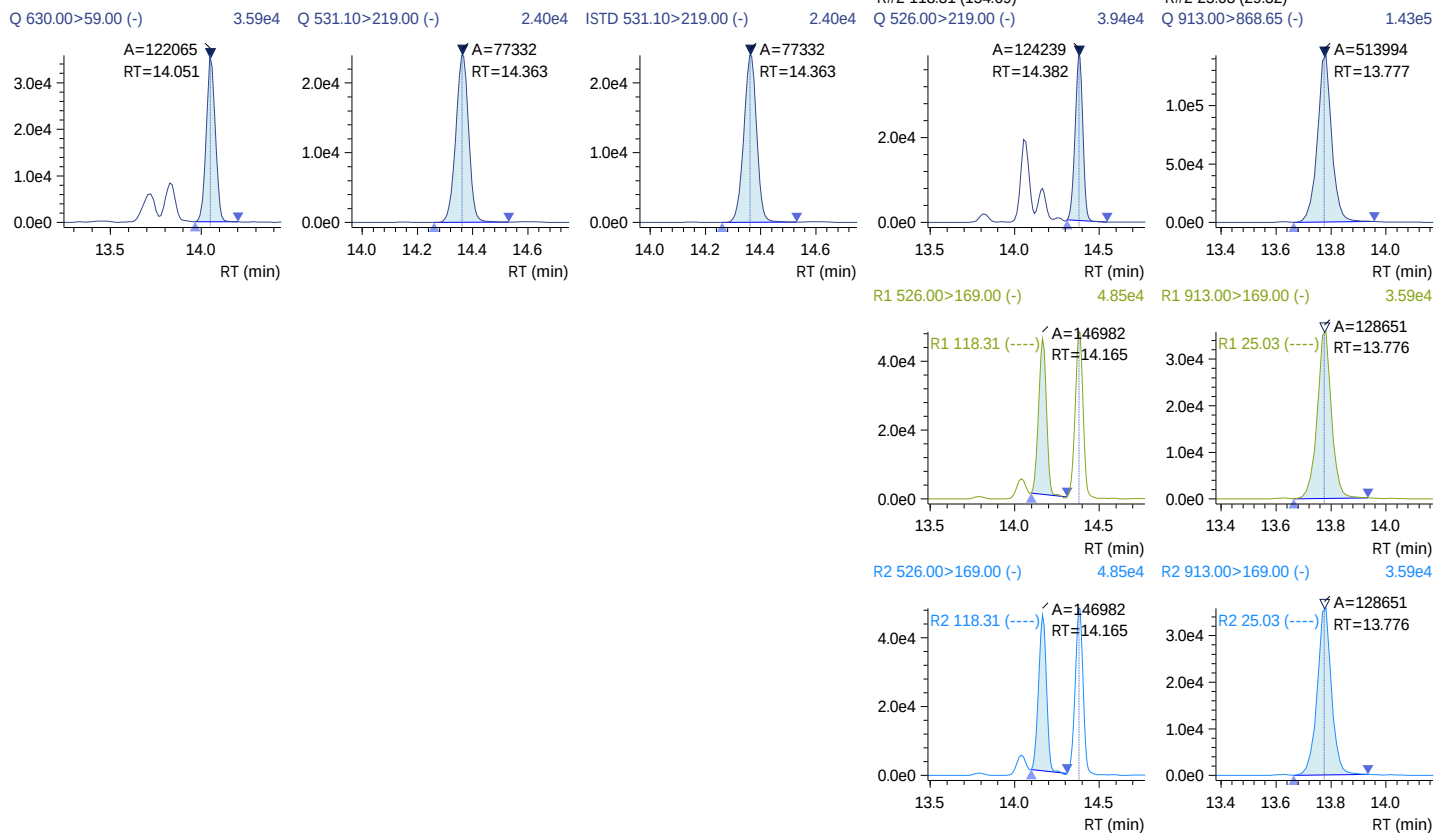
EtFOSE
Conc. 4.7938

D5-EtFOSAm
Conc. 2.3154

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. 5.0290
R#1 118.31 (154.69)
R#2 118.31 (154.69)

PFODA
Conc. 4.6306
R#1 25.03 (29.32)
R#2 25.03 (29.32)





240118_012

Sample ID: 1633 ICAL 10.OPPB
Date Acquired: 1/18/2024 4:24:05 PM
Acquired by: System Administrator
Data File: 240118_012
Vial: 7 | Inj. Volume: 10.0000uL | Tray: 1

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	1260062	----	----	----	----	----	----	
13C4-PFBA_IS	216.80>171.90	----	1260062	----	----	----	----	----	----	
13C3-PFBA_IS	216.00>172.00	----	566334	----	----	----	----	----	----	
PFBA	212.80>169.05	----	1060864	----	----	----	----	----	----	
PFMPA	229.00>84.90	----	827555	----	----	----	----	----	----	
3_3 FTCA	241.00>177.10	241.00>117.00	225272	315598	140.10	141.17	315598	140.10	141.17	
13C5-PFPeA	268.30>223.00	----	128399	----	----	----	----	----	----	
13C5-PFPeA_IS	268.30>223.00	----	128399	----	----	----	----	----	----	
PFPeA	263.00>219.00	----	1583589	----	----	----	----	----	----	
PFMBA	279.00>84.95	----	1162269	----	----	----	----	----	----	
13C2-4_2 FTS	329.10>80.90	----	143510	----	----	----	----	----	----	
13C2-4_2 FTS_IS	329.10>80.90	----	143510	----	----	----	----	----	----	
4_2 FTS	327.10>307.00	327.10>80.90	651111	191574	29.42	29.06	191574	29.42	29.06	
13C3-PFBS_IS	302.10>79.90	----	305947	----	----	----	----	----	----	
PFBS	298.70>79.90	298.70>98.80	1378071	651278	47.26	46.72	651278	47.26	46.72	
13C3-PFBS	302.10>79.90	----	305947	----	----	----	----	----	----	
NFDHA	295.00>201.00	295.00>84.90	1353187	499404	36.91	40.25	499404	36.91	40.25	
13C5-PFHxA	318.00>273.00	----	638007	----	----	----	----	----	----	
13C5-PFHxA_IS	318.00>273.00	----	638007	----	----	----	----	----	----	
13C2-PFHxA_IS	315.10>270.00	----	603861	----	----	----	----	----	----	
PFHxA	313.00>269.00	----	2124466	----	----	----	----	----	----	
PFEESA	314.80>135.00	314.80>82.90	6200515	361928	5.84	6.11	361928	5.84	6.11	
13C3-HFPO-DA	286.90>168.90	----	598128	----	----	----	----	----	----	
13C3-HFPO-DA_IS	286.90>168.90	----	598128	----	----	----	----	----	----	
HFPO-DA	284.90>168.90	284.90>184.90	638442	418062	65.48	65.61	418062	65.48	65.61	
5_3 FTCA	341.00>237.05	341.00>217.00	1196348	1883717	157.46	158.86	1883717	157.46	158.86	
PFPeS	349.10>79.90	349.10>98.80	1144724	628074	54.87	55.80	628074	54.87	55.80	
13C4-PFHpA	367.10>322.00	----	578001	----	----	----	----	----	----	
13C4-PFHpA_IS	367.10>322.00	----	578001	----	----	----	----	----	----	
PFHpA	363.10>319.00	363.10>169.00	2383855	541068	22.70	21.50	541068	22.70	21.50	
DONA	376.90>250.90	376.90>84.80	4152849	1217322	29.31	29.66	1217322	29.31	29.66	
13C2-6_2 FTS_IS	429.10>80.90	----	135213	----	----	----	----	----	----	
13C2-6_2 FTS	429.10>80.90	----	135213	----	----	----	----	----	----	
6_2 FTS	427.10>407.00	427.10>80.90	570370	248132	43.50	41.15	248132	43.50	41.15	
13C4-PFOA_IS	417.10>172.00	----	40079	----	----	----	----	----	----	
13C8-PFOA_IS	421.10>376.00	----	529017	----	----	----	----	----	----	

J:\LCMS08\Data\240118_1633_Curve\240118_1633_Curve.damIp

Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240118_012 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	529017	----	----	----	----	----	----	----
PFOA	413.00>369.00	413.00>169.00	1561625	495517	31.73	31.89	495517	31.73	31.89	
13C3-PFHxS	402.10>79.90	----	230489	----	----	----	----	----	----	----
13C3-PFHxS_IS	402.10>79.90	----	230489	----	----	----	----	----	----	----
PFHxS	398.70>79.90	398.70>98.90	1072624	612506	57.10	56.62	612506	57.10	56.62	
18O2-PFHxS_IS	403.00>83.90	----	223258	----	----	----	----	----	----	----
13C9-PFNA_IS	472.10>427.00	----	290785	----	----	----	----	----	----	----
13C9-PFNA	472.10>427.00	----	290785	----	----	----	----	----	----	----
13C5-PFNA_IS	468.00>423.00	----	292150	----	----	----	----	----	----	----
PFNA	463.00>419.00	463.00>219.00	1640974	383766	23.39	23.17	383766	23.39	23.17	
PFHpS	449.00>79.90	449.00>98.80	795008	448512	56.42	56.96	448512	56.42	56.96	
7_3 FTCA	441.00>317.00	441.00>336.90	1723816	1994631	115.71	117.47	1994631	115.71	117.47	
13C2-8_2-FTS	529.10>80.90	----	112708	----	----	----	----	----	----	----
13C2-8_2-FTS_IS	529.10>80.90	----	112708	----	----	----	----	----	----	----
8_2 FTS	527.10>506.95	527.10>80.80	450949	200114	44.38	49.59	200114	44.38	49.59	
13C6-PFDA_IS	519.10>474.10	----	219938	----	----	----	----	----	----	----
13C6-PFDA	519.10>474.10	----	219938	----	----	----	----	----	----	----
13C2-PFDA_IS	515.10>470.10	----	226144	----	----	----	----	----	----	----
PFDA	512.90>469.00	512.90>219.00	2069023	393109	19.00	19.00	393109	19.00	19.00	
D3-NMeFOSAA_IS	573.20>419.00	----	216872	----	----	----	----	----	----	----
D3-NMeFOSAA	573.20>419.00	----	216872	----	----	----	----	----	----	----
13C8-PFOS_IS	507.10>98.90	----	112442	----	----	----	----	----	----	----
13C8-PFOS	507.10>98.90	----	112442	----	----	----	----	----	----	----
13C4-PFOS_IS	502.80>79.90	----	272314	----	----	----	----	----	----	----
PFOS	498.90>79.90	498.90>98.80	994421	495339	49.81	52.47	495339	49.81	52.47	
NMeFOSAA	570.10>419.00	570.10>483.00	579948	349441	60.25	55.15	349441	60.25	55.15	
D5-NetFOSAA_IS	589.20>419.00	----	264164	----	----	----	----	----	----	----
D5-NetFOSAA	589.20>419.00	----	264164	----	----	----	----	----	----	----
NetFOSAA	584.20>419.10	584.20>526.00	342529	298204	87.06	81.95	298204	87.06	81.95	
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	4405373	1435305	32.58	32.76	1435305	32.58	32.76	
PFUnDA	563.10>519.00	563.10>269.10	1839221	251448	13.67	13.12	251448	13.67	13.12	
13C7-PFUnDA_IS	570.00>525.10	----	248001	----	----	----	----	----	----	----
13C7-PFUnDA	570.00>525.10	----	248001	----	----	----	----	----	----	----
PFNS	548.80>79.90	548.80>98.80	775210	500267	64.53	65.22	500267	64.53	65.22	
10_2 FTS	626.80>607.05	626.80>81.00	534728	202779	37.92	37.13	202779	37.92	37.13	
13C2-PFDOA_IS	615.10>570.00	----	294038	----	----	----	----	----	----	----
13C2-PFDOA	615.10>570.00	----	294038	----	----	----	----	----	----	----
PFDOA	613.10>569.00	613.10>319.00	1662292	184694	11.11	11.29	184694	11.11	11.29	
PFDS	599.00>79.90	599.00>98.80	693164	415893	60.00	60.18	415893	60.00	60.18	
PFTrDA	663.00>619.00	663.00>168.90	1805435	318118	17.62	17.64	318118	17.62	17.64	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240118_012 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	3212472	1145584	35.66	36.44	1145584	35.66	36.44	
PFOSAm	498.10>77.90	----	1754149	----	----	----	----	----	----	
13C8-PFOSAm	506.10>77.80	----	280036	----	----	----	----	----	----	
13C8-PFOSAm_IS	506.10>77.80	----	280036	----	----	----	----	----	----	
PFTDA	713.10>669.00	713.10>168.90	1387467	300213	21.64	22.96	300213	21.64	22.96	
13C2-PFTDA	715.20>670.00	----	126897	----	----	----	----	----	----	
13C2-PFTDA_IS	715.20>670.00	----	126897	----	----	----	----	----	----	
PFDoS	699.10>79.90	699.10>98.80	409175	274704	67.14	67.40	274704	67.14	67.40	
D7-MeFOSE_IS	623.20>58.90	----	704481	----	----	----	----	----	----	
D7-MeFOSE	623.20>58.90	----	704481	----	----	----	----	----	----	
MeFOSE	616.10>59.00	----	240406	----	----	----	----	----	----	
13C2-PFHxDA_IS	815.00>770.05	----	498313	----	----	----	----	----	----	
13C2-PFHxDA	815.00>770.05	----	498313	----	----	----	----	----	----	
PFHxDA	813.00>768.95	813.00>218.95	2034708	282722	13.90	13.90	282722	13.90	13.90	
D3-MeFOSA	515.00>219.00	----	55039	----	----	----	----	----	----	
D3-MeFOSA_IS	515.00>219.00	----	55039	----	----	----	----	----	----	
MeFOSA	511.90>219.00	511.90>169.00	387762	590412	152.26	140.79	590412	152.26	140.79	
D9-EtFOSE_IS	639.20>58.90	----	689895	----	----	----	----	----	----	
D9-EtFOSE	639.20>58.90	----	689895	----	----	----	----	----	----	
EtFOSE	630.00>59.00	----	365015	----	----	----	----	----	----	
D5-EtFOSAm	531.10>219.00	----	74601	----	----	----	----	----	----	
D5-EtFOSAm_IS	531.10>219.00	----	74601	----	----	----	----	----	----	
EtFOSAm	526.00>219.00	526.00>169.00	439049	674511	153.63	163.90	674511	153.63	163.90	
PFODA	913.00>868.65	913.00>169.00	1074240	270313	25.16	27.03	270313	25.16	27.03	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
 IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240118_012

Sample ID: 1633 ICAL 10.0PPB
Date Acquired: 1/18/2024 4:24:05 PM
Acquired by: System Administrator
Data File: 240118_012
Vial: 7 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Std. Conc.	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.410	-0.004	0.000	1260062	566334	13C3-PFBA_IS	10.0000	9.9542	ng/mL	
13C4-PFBA_IS	Auto	1.410	-0.004	----	1260062	1260062	----	10.0000	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.410	-0.005	----	566334	566334	----	5.0000	5.0000	ng/mL	
PFBA	Auto	1.411	-0.005	0.001	1060864	1260062	13C4-PFBA_IS	10.0000	9.7988	ng/mL	
PFMPA	Auto	2.429	-0.003	-1.061	827555	128399	13C5-PFPeA_IS	10.0000	9.9729	ng/mL	
3_3 FTCA	Auto	3.003	-0.001	-0.487	225272	128399	13C5-PFPeA_IS	80.0000	79.1196	ng/mL	
13C5-PFPeA	Auto	3.490	-0.002	-1.486	128399	603861	13C2-PFHxA_IS	5.0000	4.7106	ng/mL	
13C5-PFPeA_IS	Auto	3.490	-0.002	----	128399	128399	----	5.0000	5.0000	ng/mL	
PFPeA	Auto	3.493	-0.002	0.003	1583589	128399	13C5-PFPeA_IS	10.0000	9.5221	ng/mL	
PFMBA	Auto	4.022	-0.003	0.532	1162269	128399	13C5-PFPeA_IS	10.0000	9.8868	ng/mL	
13C2-4_2 FTS	Auto	4.659	-0.002	-2.426	143510	223258	18O2-PFHxS_IS	5.0000	4.6710	ng/mL	
13C2-4_2 FTS_IS	Auto	4.659	-0.002	----	143510	143510	----	5.0000	5.0000	ng/mL	
4_2 FTS	Auto	4.659	-0.003	0.000	651111	143510	13C2-4_2 FTS_IS	9.4000	9.2244	ng/mL	
13C3-PFBS_IS	Auto	4.644	-0.003	----	305947	305947	----	2.5000	2.5000	ng/mL	
PFBS	Auto	4.644	-0.004	0.000	1378071	305947	13C3-PFBS_IS	8.9000	8.7997	ng/mL	
13C3-PFBS	Auto	4.644	-0.003	-2.441	305947	223258	18O2-PFHxS_IS	2.5000	2.4148	ng/mL	
NFDHA	Auto	4.833	-0.002	-0.142	1353187	638007	13C5-PFHxA_IS	10.0000	9.5596	ng/mL	
13C5-PFHxA	Auto	4.975	-0.003	-0.001	638007	603861	13C2-PFHxA_IS	2.5000	2.5069	ng/mL	
13C5-PFHxA_IS	Auto	4.975	-0.003	----	638007	638007	----	2.5000	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	4.976	-0.003	----	603861	603861	----	2.5000	2.5000	ng/mL	
PFHxA	Auto	4.977	-0.003	0.002	2124466	638007	13C5-PFHxA_IS	10.0000	9.9957	ng/mL	
PFEESA	Auto	5.319	-0.003	0.344	6200515	638007	13C5-PFHxA_IS	8.9000	8.6768	ng/mL	
13C3-HFPO-DA	Auto	5.450	-0.002	0.474	598128	603861	13C2-PFHxA_IS	10.0000	10.1184	ng/mL	
13C3-HFPO-DA_IS	Auto	5.450	-0.002	----	598128	598128	----	10.0000	10.0000	ng/mL	
HFPO-DA	Auto	5.451	-0.002	0.001	638442	598128	13C3-HFPO-DA_IS	10.0000	9.6646	ng/mL	
5_3 FTCA	Auto	5.904	-0.002	0.929	1196348	638007	13C5-PFHxA_IS	80.0000	72.4939	ng/mL	
PFPeS	Auto	6.016	-0.002	-1.069	1144724	230489	13C3-PFHxS_IS	9.4000	9.4575	ng/mL	
13C4-PFHpA	Auto	6.153	-0.001	1.177	578001	603861	13C2-PFHxA_IS	2.5000	2.5089	ng/mL	
13C4-PFHpA_IS	Auto	6.153	-0.001	----	578001	578001	----	2.5000	2.5000	ng/mL	
PFHpA	Auto	6.155	0.000	0.002	2383855	578001	13C4-PFHpA_IS	10.0000	9.9099	ng/mL	
DONA	Auto	6.519	-0.001	1.069	4152849	598128	13C3-HFPO-DA_IS	9.5000	8.9580	ng/mL	
13C2-6_2 FTS_IS	Auto	6.793	0.000	----	135213	135213	----	5.0000	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.793	0.000	-0.292	135213	223258	18O2-PFHxS_IS	5.0000	4.6532	ng/mL	
6_2 FTS	Auto	6.792	0.000	-0.001	570370	135213	13C2-6_2 FTS_IS	9.5000	9.2636	ng/mL	
13C4-PFOA_IS	Auto	7.107	0.000	----	40079	40079	----	2.5000	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.107	0.000	----	529017	529017	----	2.5000	2.5000	ng/mL	
13C8-PFOA	Auto	7.107	0.000	0.000	529017	40079	13C4-PFOA_IS	2.5000	2.3616	ng/mL	
PFOA	Auto	7.111	0.001	0.004	1561625	529017	13C8-PFOA_IS	10.0000	11.3940	ng/mL	
13C3-PFHxS	Auto	7.085	-0.001	0.000	230489	223258	18O2-PFHxS_IS	2.5000	2.4052	ng/mL	
13C3-PFHxS_IS	Auto	7.085	-0.001	----	230489	230489	----	2.5000	2.5000	ng/mL	
PFHxS	M	7.084	0.000	-0.001	1072624	230489	13C3-PFHxS_IS	9.1000	9.6766	ng/mL	
18O2-PFHxS_IS	Auto	7.085	-0.001	----	223258	223258	----	2.5000	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.955	-0.001	----	290785	290785	----	1.2500	1.2500	ng/mL	
13C9-PFNA	Auto	7.955	-0.001	0.000	290785	292150	13C5-PFNA_IS	1.2500	1.2712	ng/mL	
13C5-PFNA_IS	Auto	7.955	-0.001	----	292150	292150	----	1.2500	1.2500	ng/mL	
PFNA	Auto	7.957	0.000	0.002	1640974	290785	13C9-PFNA_IS	10.0000	9.8848	ng/mL	
PFHpS	Auto	8.004	0.000	-0.816	795008	112442	13C8-PFOS_IS	9.5000	9.0584	ng/mL	
7_3 FTCA	Auto	7.953	-0.001	2.978	1723816	638007	13C5-PFHxA_IS	80.0000	78.2456	ng/mL	
13C2-8_2-FTS	Auto	8.409	0.000	1.324	112708	223258	18O2-PFHxS_IS	5.0000	4.7218	ng/mL	
13C2-8_2-FTS_IS	Auto	8.409	0.000	----	112708	112708	----	5.0000	5.0000	ng/mL	
8_2 FTS	Auto	8.410	0.000	0.001	450949	112708	13C2-8_2-FTS_IS	9.6000	9.3111	ng/mL	
13C6-PFDA_IS	Auto	8.720	0.000	----	219938	219938	----	1.2500	1.2500	ng/mL	
13C6-PFDA	Auto	8.720	0.000	-0.001	219938	226144	13C2-PFDA_IS	1.2500	1.2089	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_012 (continued)

(Table continued from previous page)

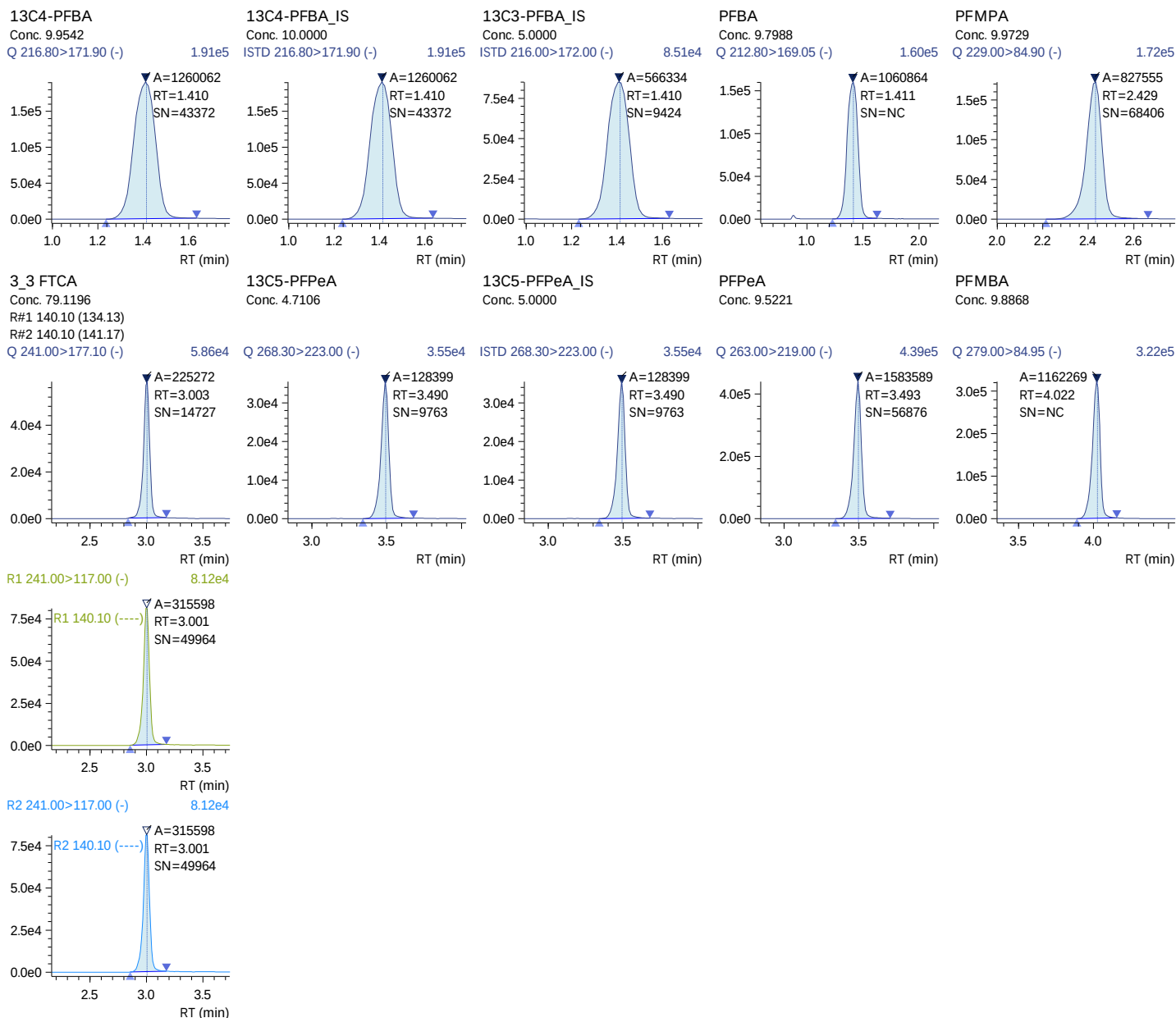
Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Std. Conc.	Conc.	Unit	Flag ID
13C2-PFDA_IS	Auto	8.721	0.000	----	226144	226144	----	1.2500	1.2500	ng/mL	
PFDA	Auto	8.722	0.001	0.002	2069023	219938	13C6-PFDA_IS	10.0000	9.8440	ng/mL	
D3-NMeFOSAA_IS	Auto	8.855	0.000	----	216872	216872	----	5.0000	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.855	0.000	0.035	216872	272314	13C4-PFOS_IS	5.0000	4.5887	ng/mL	
13C8-PFOS_IS	Auto	8.820	0.000	----	112442	112442	----	2.5000	2.5000	ng/mL	
13C8-PFOS	Auto	8.820	0.000	0.000	112442	272314	13C4-PFOS_IS	2.5000	2.4759	ng/mL	
13C4-PFOS_IS	Auto	8.820	0.000	----	272314	272314	----	2.5000	2.5000	ng/mL	
PFOS	M	8.821	-0.001	0.001	994421	112442	13C8-PFOS_IS	9.3000	8.5029	ng/mL	
NMeFOSAA	M	8.861	0.000	0.006	579948	216872	D3-NMeFOSAA_IS	10.0000	9.8555	ng/mL	
D5-NetFOSAA_IS	Auto	9.186	0.000	----	264164	264164	----	5.0000	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.186	0.000	0.366	264164	272314	13C4-PFOS_IS	5.0000	4.6719	ng/mL	
NetFOSAA	M	9.196	0.001	0.010	342529	264164	D5-NetFOSAA_IS	10.0000	9.7087	ng/mL	
9-CI-PF3ONS	Auto	9.385	0.001	3.935	4405373	598128	13C3-HFPO-DA_IS	9.3000	8.9338	ng/mL	
PFUnDA	Auto	9.446	-0.001	0.001	1839221	248001	13C7-PFUnDA_IS	10.0000	10.2127	ng/mL	
13C7-PFUnDA_IS	Auto	9.445	0.000	----	248001	248001	----	1.2500	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.445	0.000	0.724	248001	226144	13C2-PFDA_IS	1.2500	1.1427	ng/mL	
PFNS	Auto	9.584	0.000	0.764	775210	112442	13C8-PFOS_IS	9.6000	9.0738	ng/mL	
10_2_FTS	Auto	9.818	-0.001	1.409	534728	112708	13C2-8_2-FTS_IS	9.6000	9.0746	ng/mL	
13C2-PFDOA_IS	Auto	10.133	0.000	----	294038	294038	----	1.2500	1.2500	ng/mL	
13C2-PFDOA	Auto	10.133	0.000	1.412	294038	226144	13C2-PFDA_IS	1.2500	1.1793	ng/mL	
PFDOA	Auto	10.134	0.000	0.001	1662292	294038	13C2-PFDOA_IS	10.0000	10.0186	ng/mL	
PFDS	Auto	10.296	0.000	1.476	693164	112442	13C8-PFOS_IS	9.7000	9.3287	ng/mL	
PFTDA	Auto	10.791	-0.001	-0.633	1805435	126897	13C2-PFTDA_IS	10.0000	10.0542	ng/mL	
11-CI-PF3OUdS	Auto	10.806	0.000	5.356	3212472	598128	13C3-HFPO-DA_IS	9.4000	9.6665	ng/mL	
PFOSAm	M	11.165	0.001	-0.002	1754149	280036	13C8-PFOSAm_IS	20.0000	19.0046	ng/mL	
13C8-PFOSAm	Auto	11.167	0.002	2.347	280036	272314	13C4-PFOS_IS	2.5000	2.4224	ng/mL	
13C8-PFOSAm_IS	Auto	11.167	0.002	----	280036	280036	----	2.5000	2.5000	ng/mL	
PFTDA	Auto	11.426	0.001	0.002	1387467	126897	13C2-PFTDA_IS	10.0000	10.1475	ng/mL	
13C2-PFTDA	Auto	11.424	0.000	2.703	126897	226144	13C2-PFDA_IS	1.2500	1.1788	ng/mL	
13C2-PFTDA_IS	Auto	11.424	0.000	----	126897	126897	----	1.2500	1.2500	ng/mL	
PFDoS	Auto	11.622	0.000	2.802	409175	112442	13C8-PFOS_IS	9.7000	9.0739	ng/mL	
D7-MeFOSE_IS	Auto	13.381	0.004	----	704481	704481	----	25.0000	25.0000	ng/mL	
D7-MeFOSE	Auto	13.381	0.004	4.561	704481	272314	13C4-PFOS_IS	25.0000	24.7175	ng/mL	
MeFOSE	M	13.419	0.006	0.038	240406	704481	D7-MeFOSE_IS	10.0000	9.2921	ng/mL	
13C2-PFHXA_IS	Auto	12.641	0.000	----	498313	498313	----	2.5000	2.5000	ng/mL	
13C2-PFHXA	Auto	12.641	0.000	3.920	498313	226144	13C2-PFDA_IS	2.5000	2.3722	ng/mL	
PFHXA	Auto	12.643	0.001	0.002	2034708	498313	13C2-PFHXA_IS	10.0000	9.9308	ng/mL	
D3-MeFOSA	Auto	13.689	0.004	4.869	55039	272314	13C4-PFOS_IS	2.5000	2.3642	ng/mL	
D3-MeFOSA_IS	Auto	13.689	0.004	----	55039	55039	----	2.5000	2.5000	ng/mL	
MeFOSA	M	13.697	0.003	0.008	387762	55039	D3-MeFOSA_IS	10.0000	9.7734	ng/mL	
D9-EtFOSE_IS	Auto	14.011	0.004	----	689895	689895	----	25.0000	25.0000	ng/mL	
D9-EtFOSE	Auto	14.011	0.004	5.190	689895	272314	13C4-PFOS_IS	25.0000	23.8326	ng/mL	
EtFOSE	M	14.054	0.006	0.044	365015	689895	D9-EtFOSE_IS	10.0000	10.0559	ng/mL	
D5-EtFOSAm	Auto	14.368	0.006	5.548	74601	272314	13C4-PFOS_IS	2.5000	2.4068	ng/mL	
D5-EtFOSAm_IS	Auto	14.368	0.006	----	74601	74601	----	2.5000	2.5000	ng/mL	
EtFOSAm	M	14.386	0.006	0.018	439049	74601	D5-EtFOSAm_IS	10.0000	10.1093	ng/mL	
PFODA	Auto	13.778	0.003	1.137	1074240	498313	13C2-PFHXA_IS	10.0000	9.5331	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_012 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_012 (continued)

13C2-4_2 FTS
Conc. 4.6710

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. 9.2244
R#1 29.42 (34.14)
R#2 29.42 (29.06)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 8.7997
R#1 47.26 (47.53)
R#2 47.26 (46.72)

Q 329.10>80.90 (-)

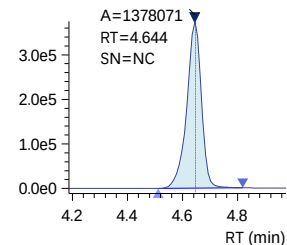
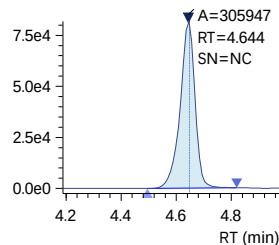
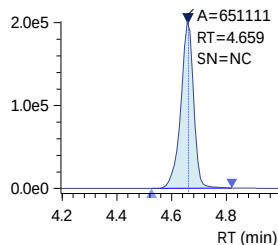
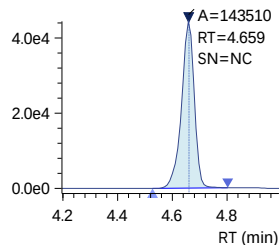
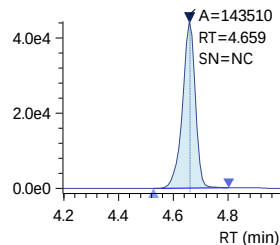
4.45e4 ISTD 329.10>80.90 (-)

4.45e4 Q 327.10>307.00 (-)

2.02e5 ISTD 302.10>79.90 (-)

8.18e4 Q 298.70>79.90 (-)

3.75e5

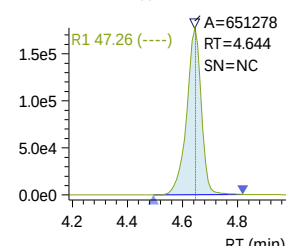
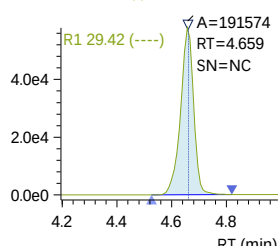


R1 327.10>80.90 (-)

5.79e4

R1 298.70>98.80 (-)

1.78e5

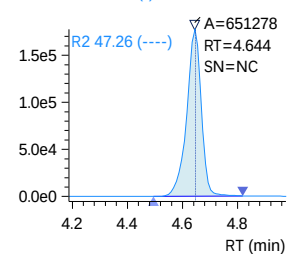
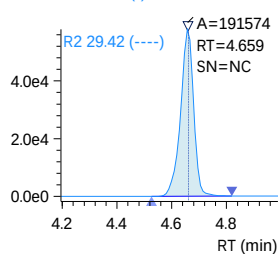


R2 327.10>80.90 (-)

5.79e4

R2 298.70>98.80 (-)

1.78e5





240118_012 (continued)

13C3-PFBS
Conc. 2.4148

NFDHA
Conc. 9.5596
R#1 36.91 (37.88)
R#2 36.91 (40.25)

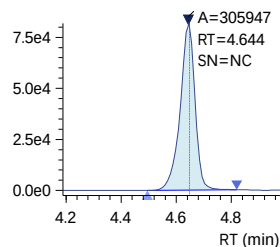
13C5-PFHxA
Conc. 2.5069

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

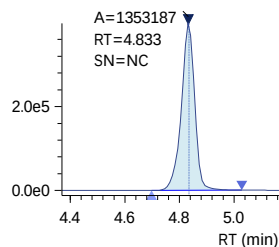
Q 302.10>79.90 (-)

8.18e4



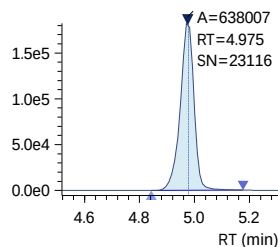
Q 295.00>201.00 (-)

3.98e5



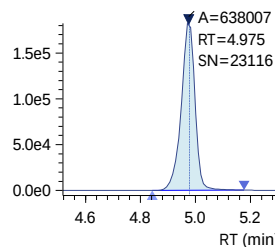
Q 318.00>273.00 (-)

1.82e5



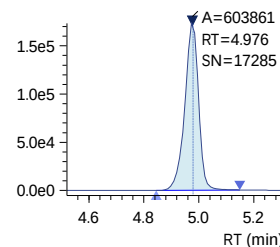
ISTD 318.00>273.00 (-)

1.82e5



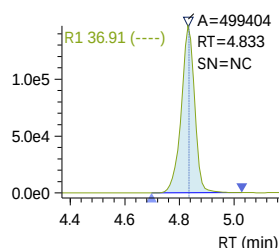
ISTD 315.10>270.00 (-)

1.73e5



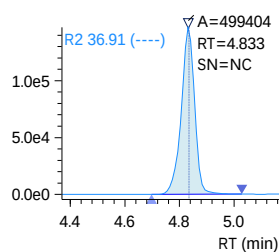
R1 295.00>84.90 (-)

1.47e5



R2 295.00>84.90 (-)

1.47e5





240118_012 (continued)

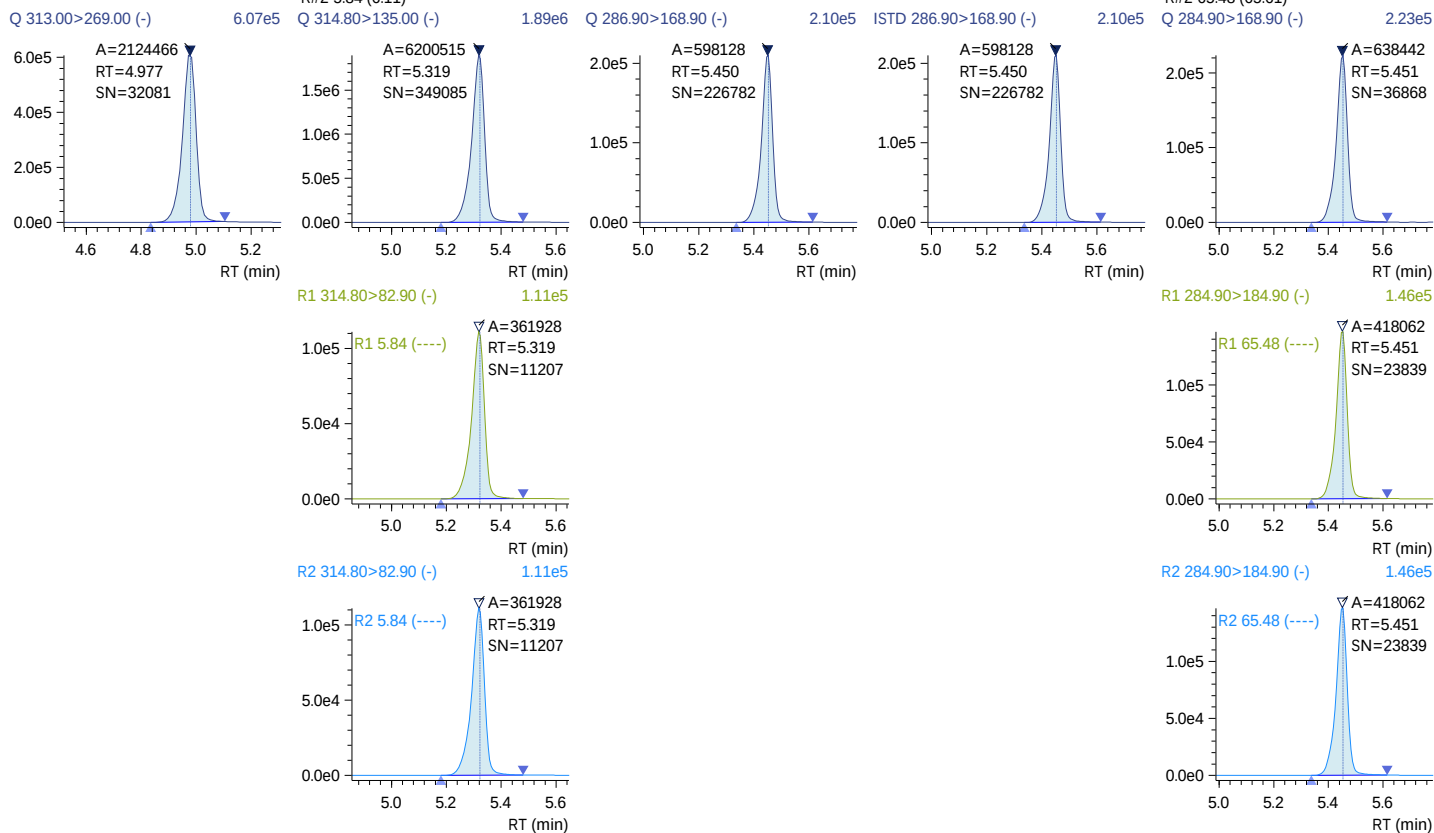
PFHxA
Conc. 9.9957

PFEESA
Conc. 8.6768
R#1 5.84 (5.88)
R#2 5.84 (6.11)

13C3-HFPO-DA
Conc. 10.1184

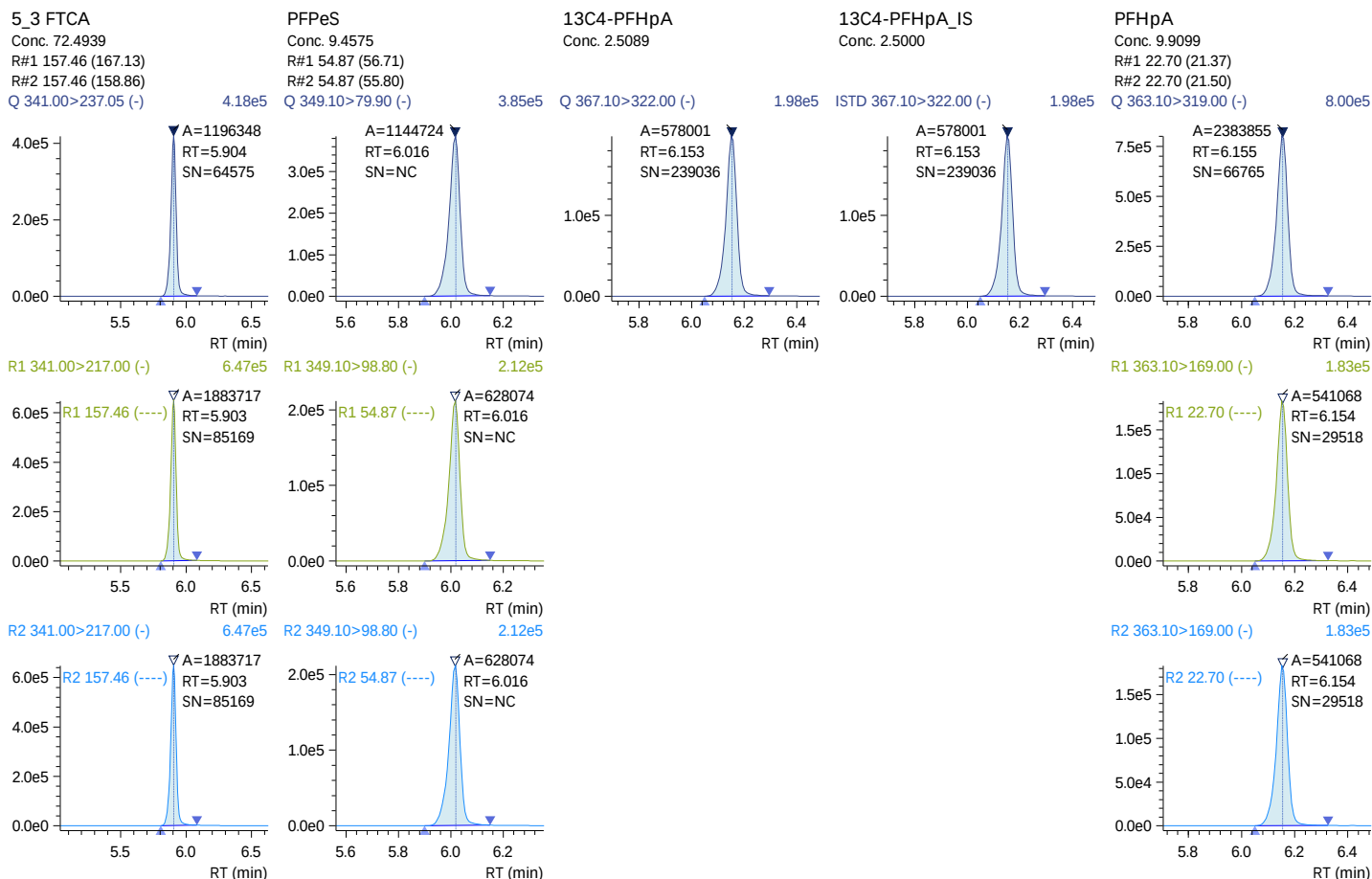
13C3-HFPO-DA_IS
Conc. 10.0000

HFPO-DA
Conc. 9.6646
R#1 65.48 (63.80)
R#2 65.48 (65.61)





240118_012 (continued)

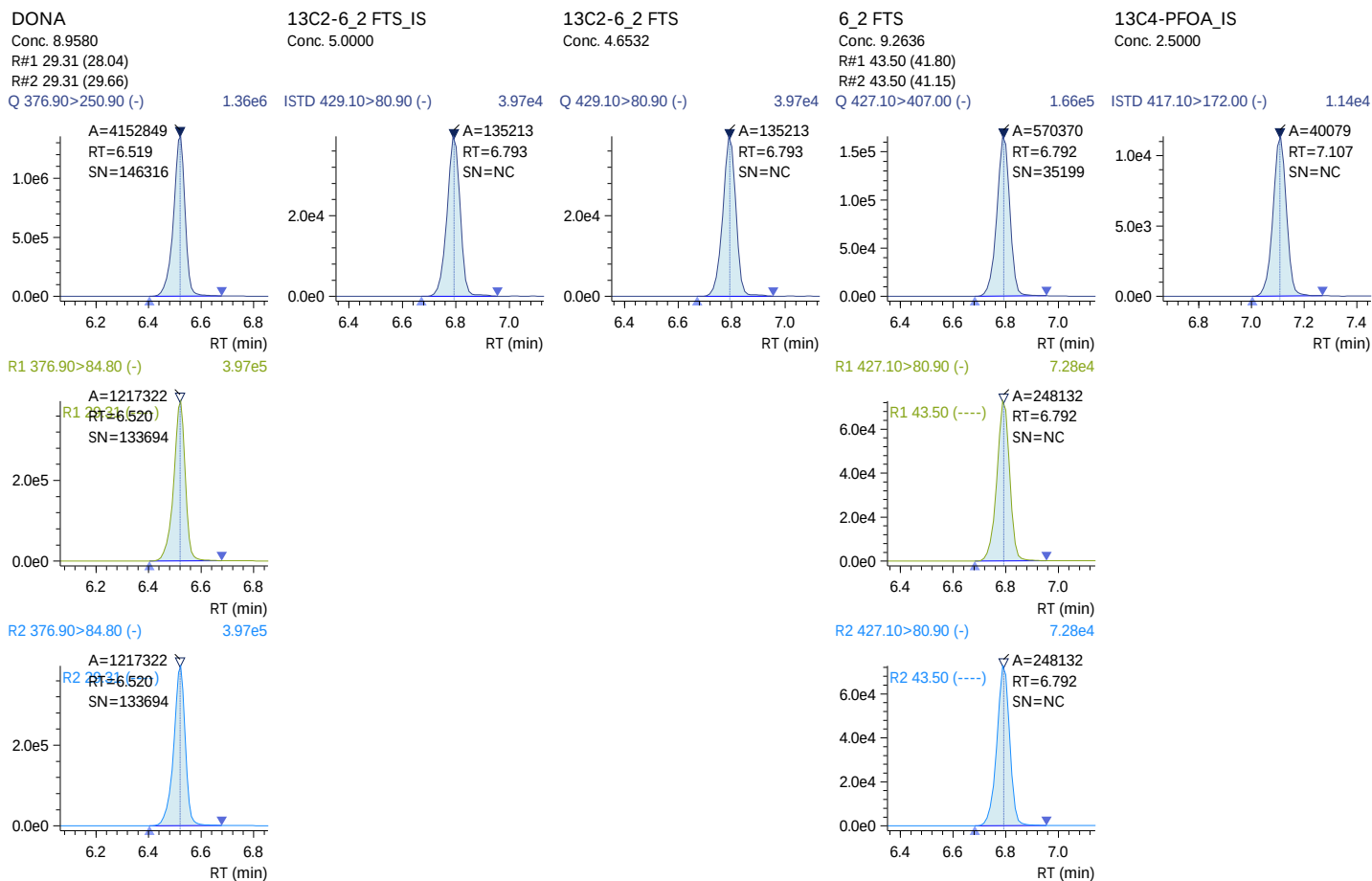


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_012 (continued)



J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_012 (continued)

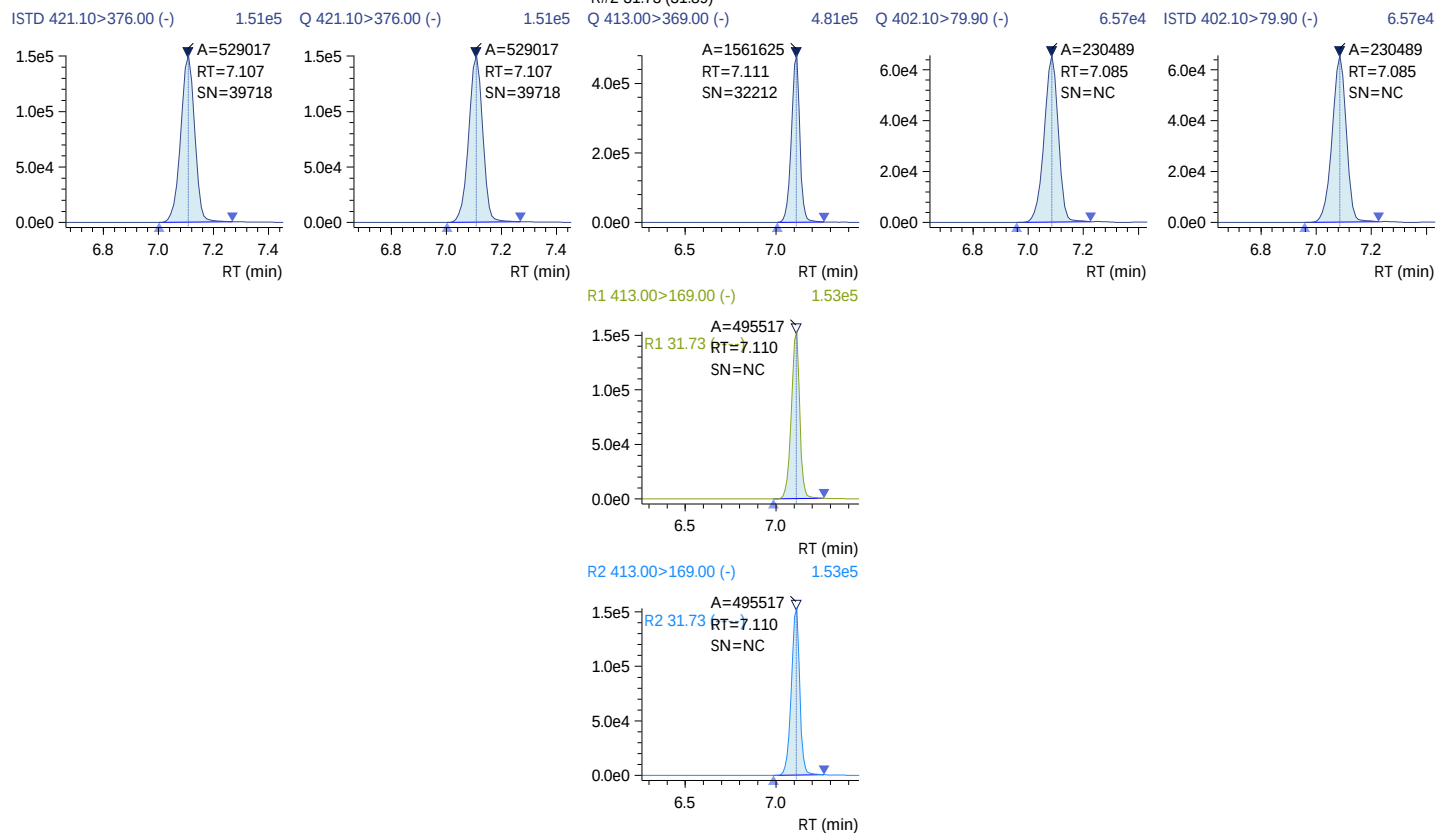
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.3616

PFOA
Conc. 11.3940
R#1 31.73 (29.05)
R#2 31.73 (31.89)

13C3-PFHxS
Conc. 2.4052

13C3-PFHxS_IS
Conc. 2.5000

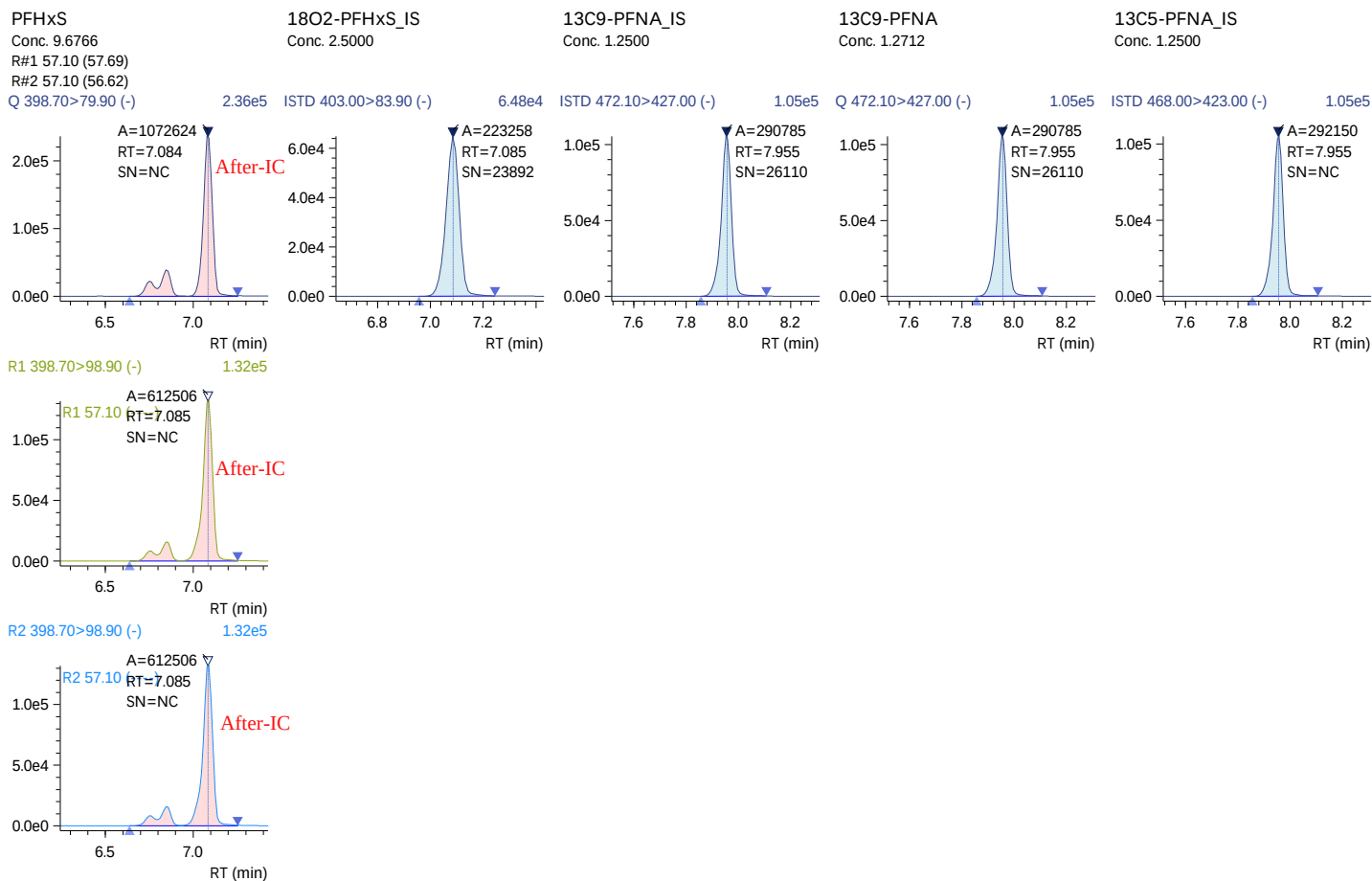


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_012 (continued)

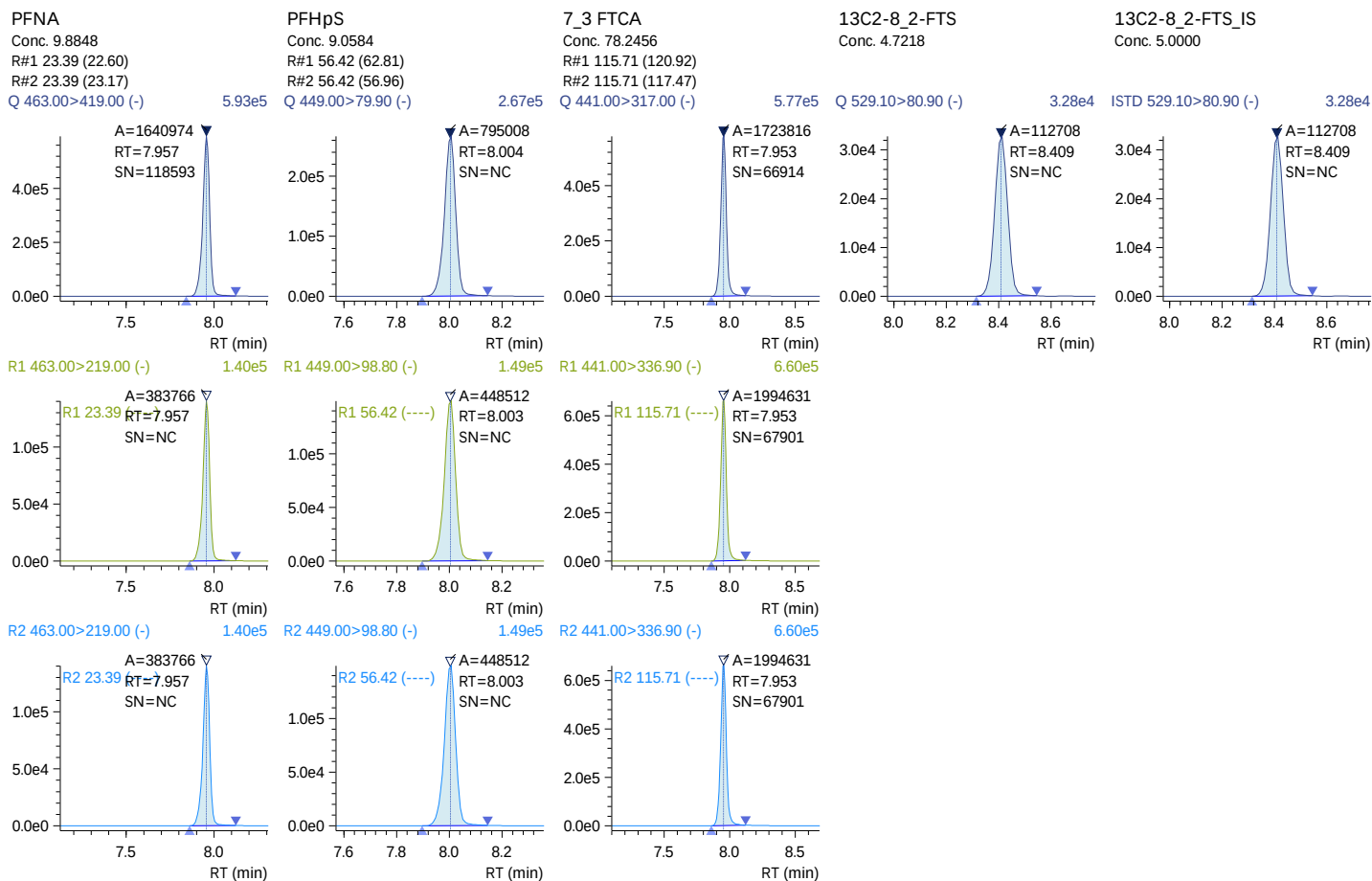


J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_012 (continued)

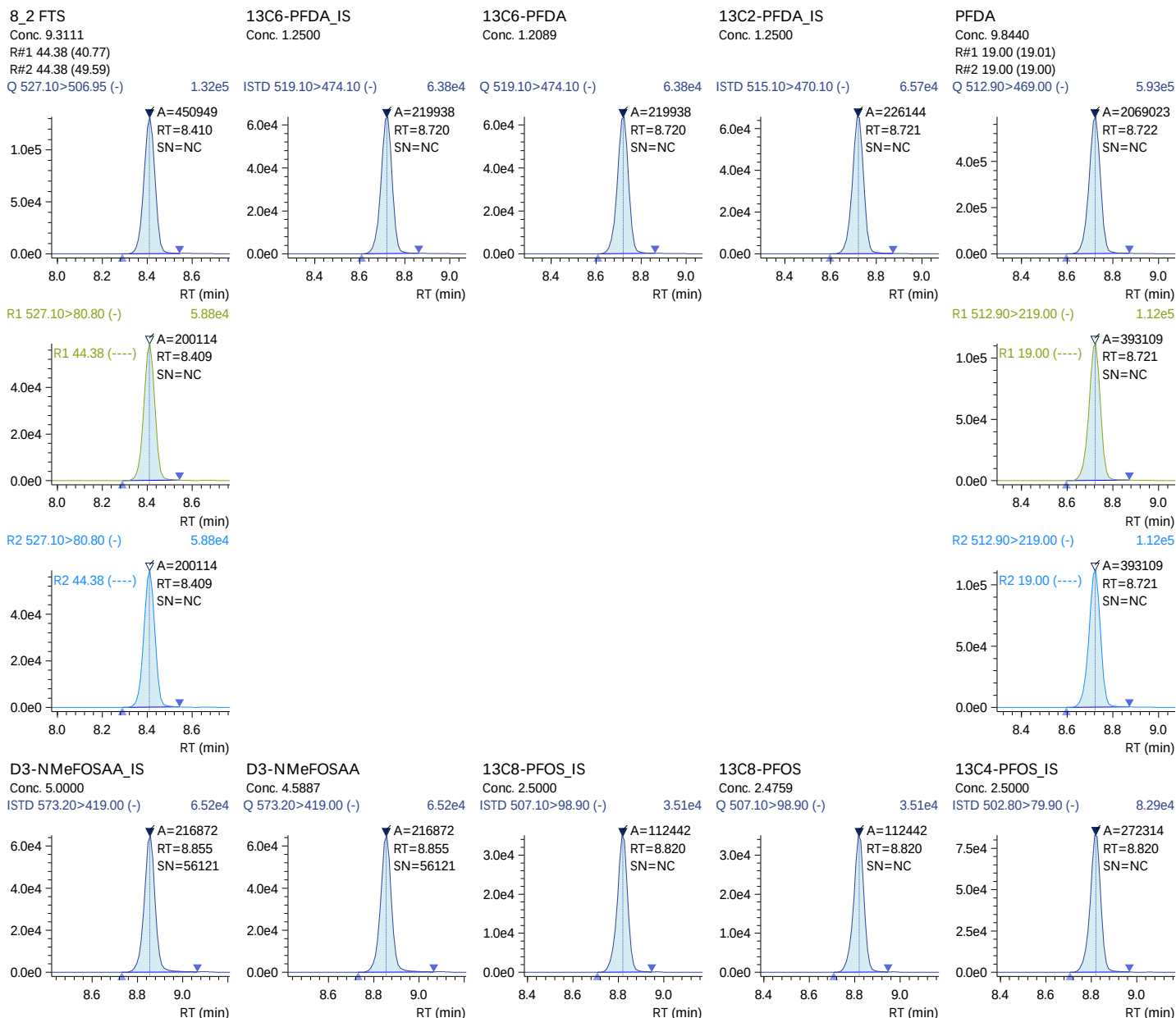


J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.damlp

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_012 (continued)

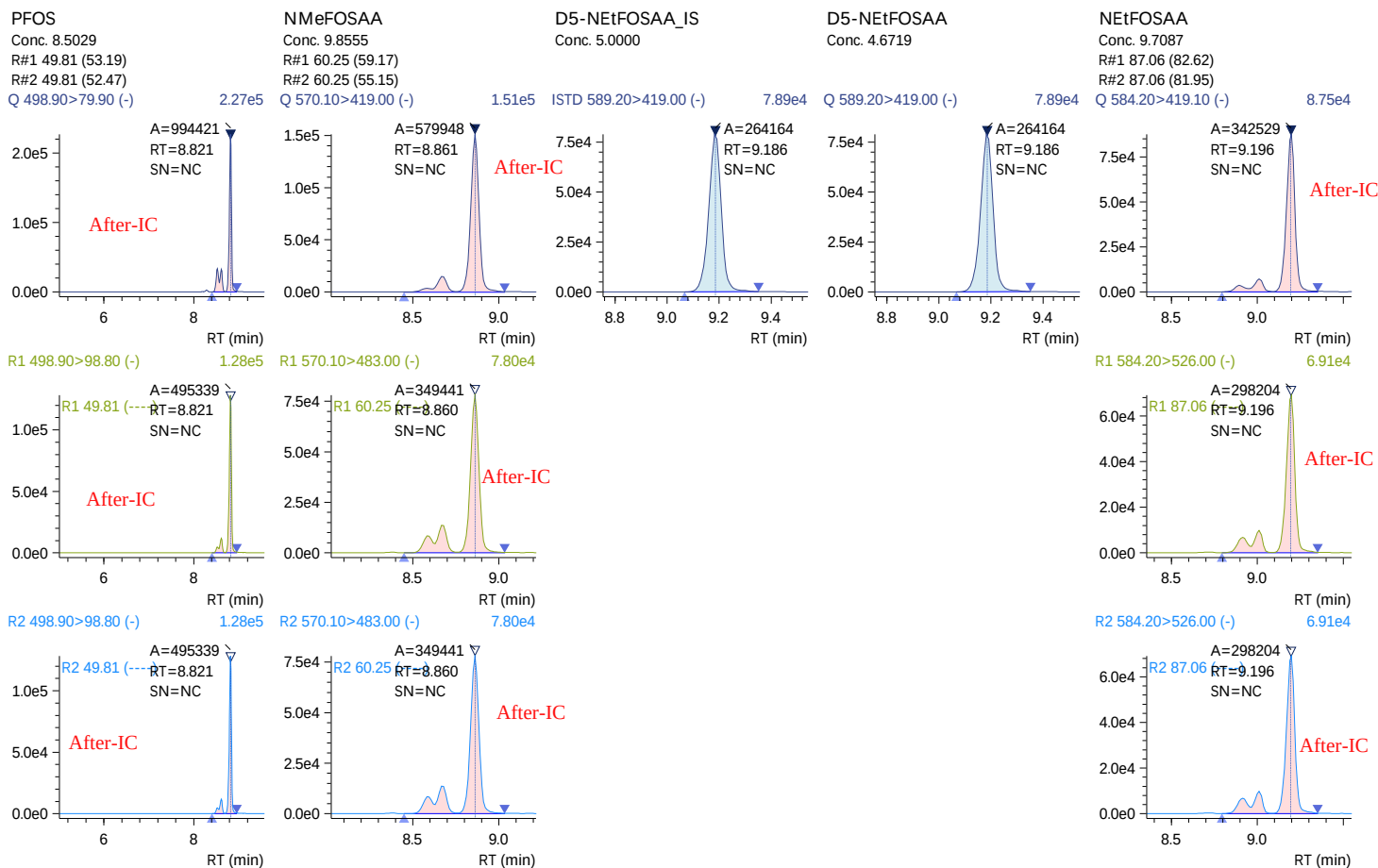


J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_012 (continued)



J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

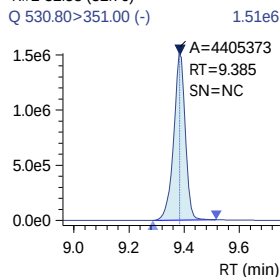
SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



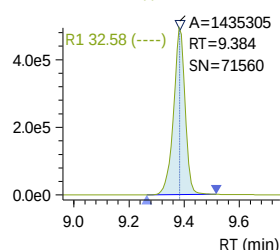
240118_012 (continued)

9-Cl-PF3ONS

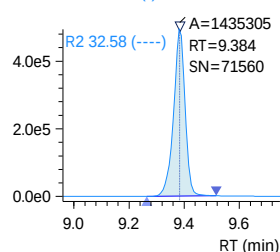
Conc. 8.9338
R#1 32.58 (31.76)
R#2 32.58 (32.76)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-) 4.94e5

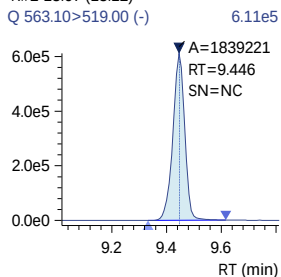


R2 532.80>353.00 (-) 4.94e5

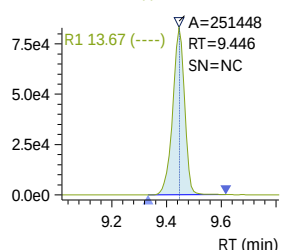


PFUnDA

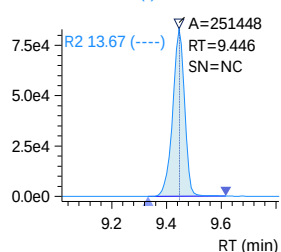
Conc. 10.2127
R#1 13.67 (12.31)
R#2 13.67 (13.12)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-) 8.30e4

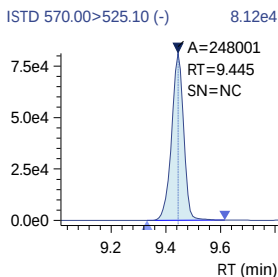


R2 563.10>269.10 (-) 8.30e4



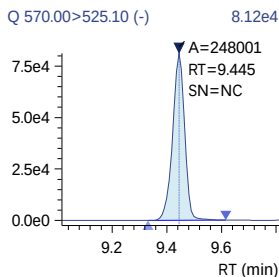
13C7-PFUnDA_IS

Conc. 1.2500



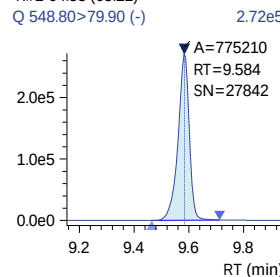
13C7-PFUnDA

Conc. 1.1427

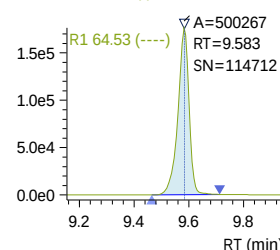


PFNS

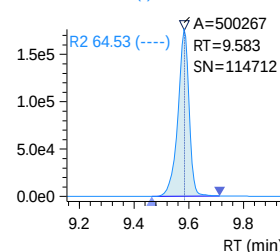
Conc. 9.0738
R#1 64.53 (63.31)
R#2 64.53 (65.22)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-) 1.76e5

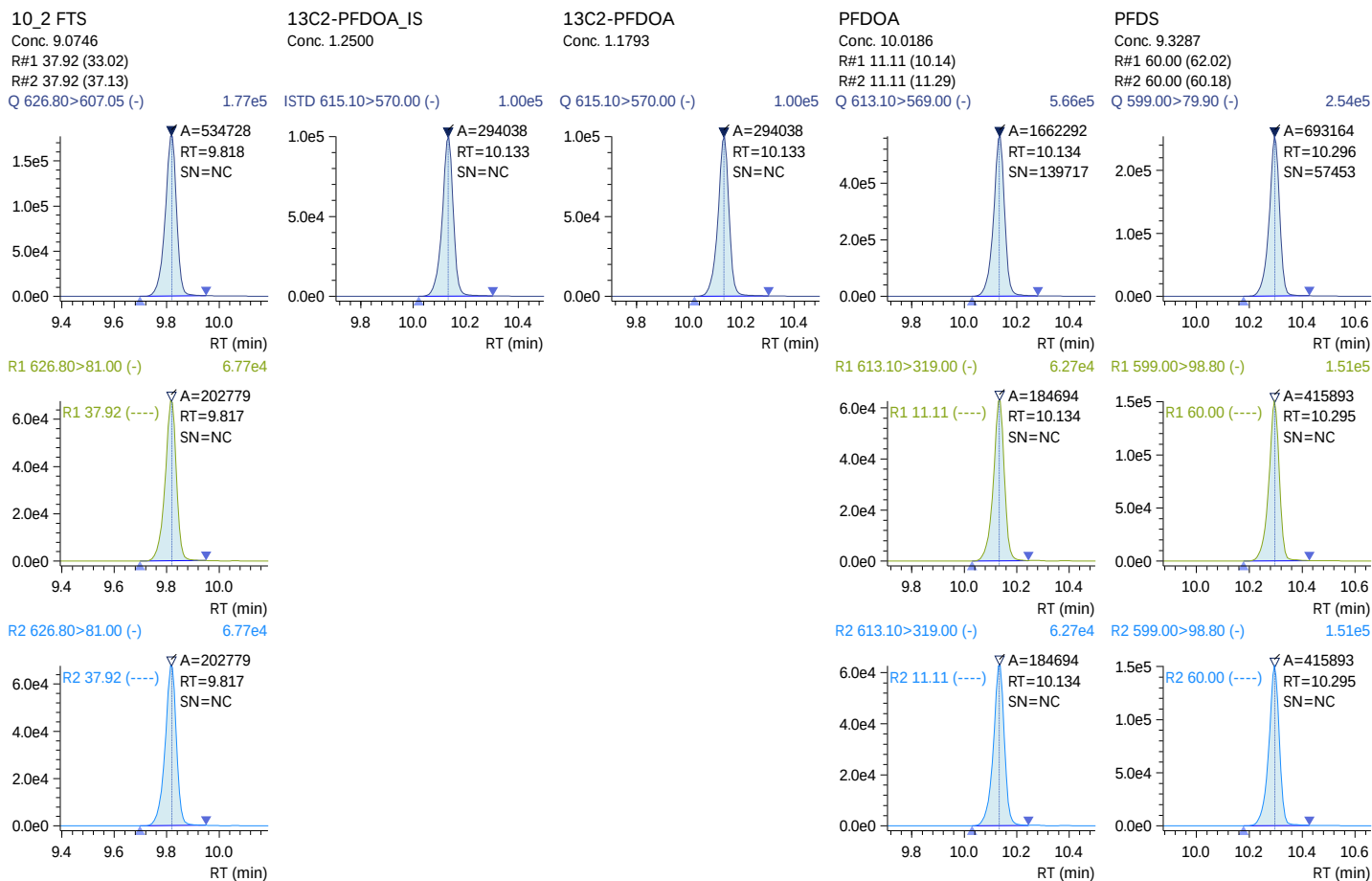


R2 548.80>98.80 (-) 1.76e5





240118_012 (continued)

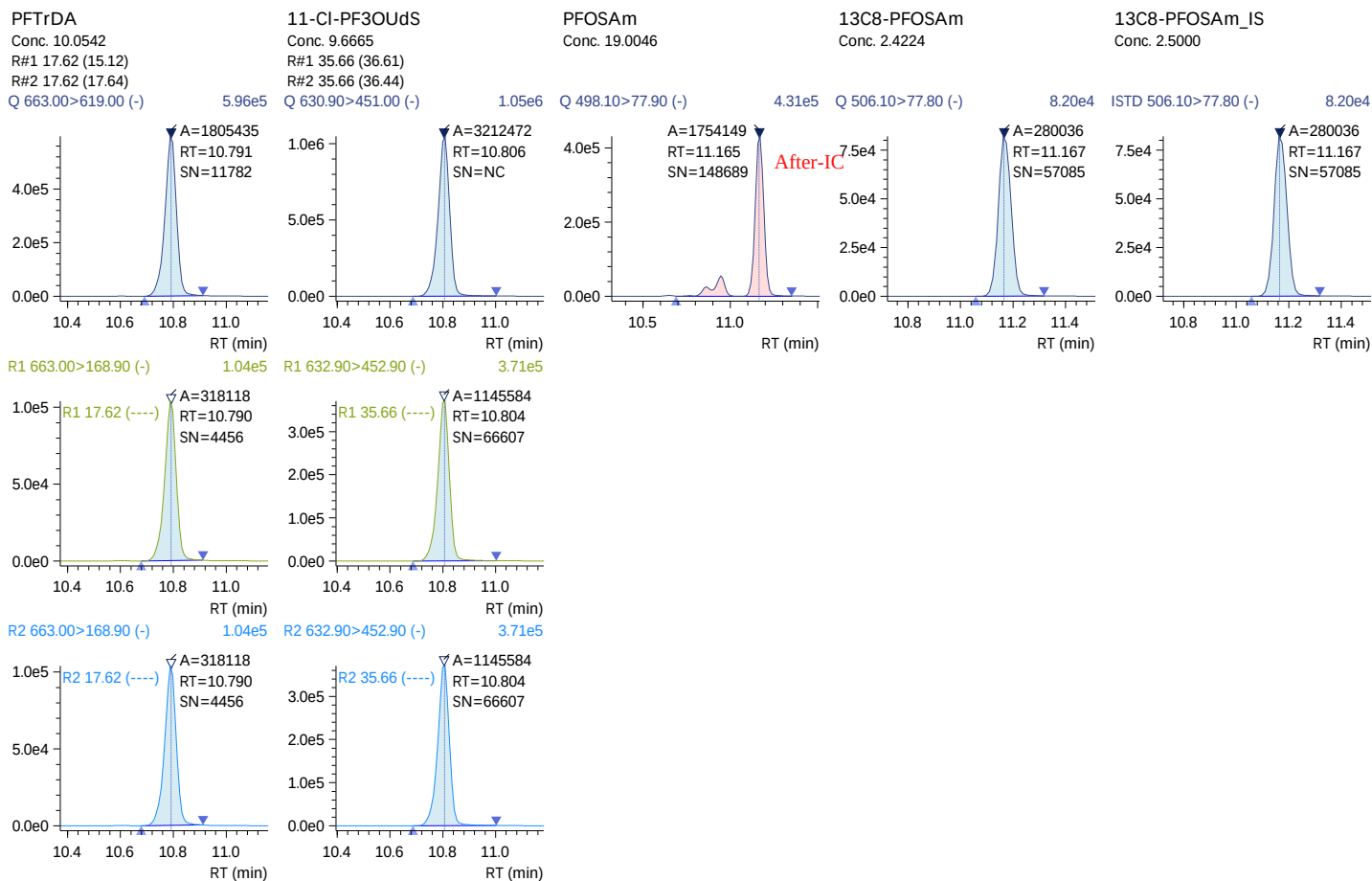


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_012 (continued)

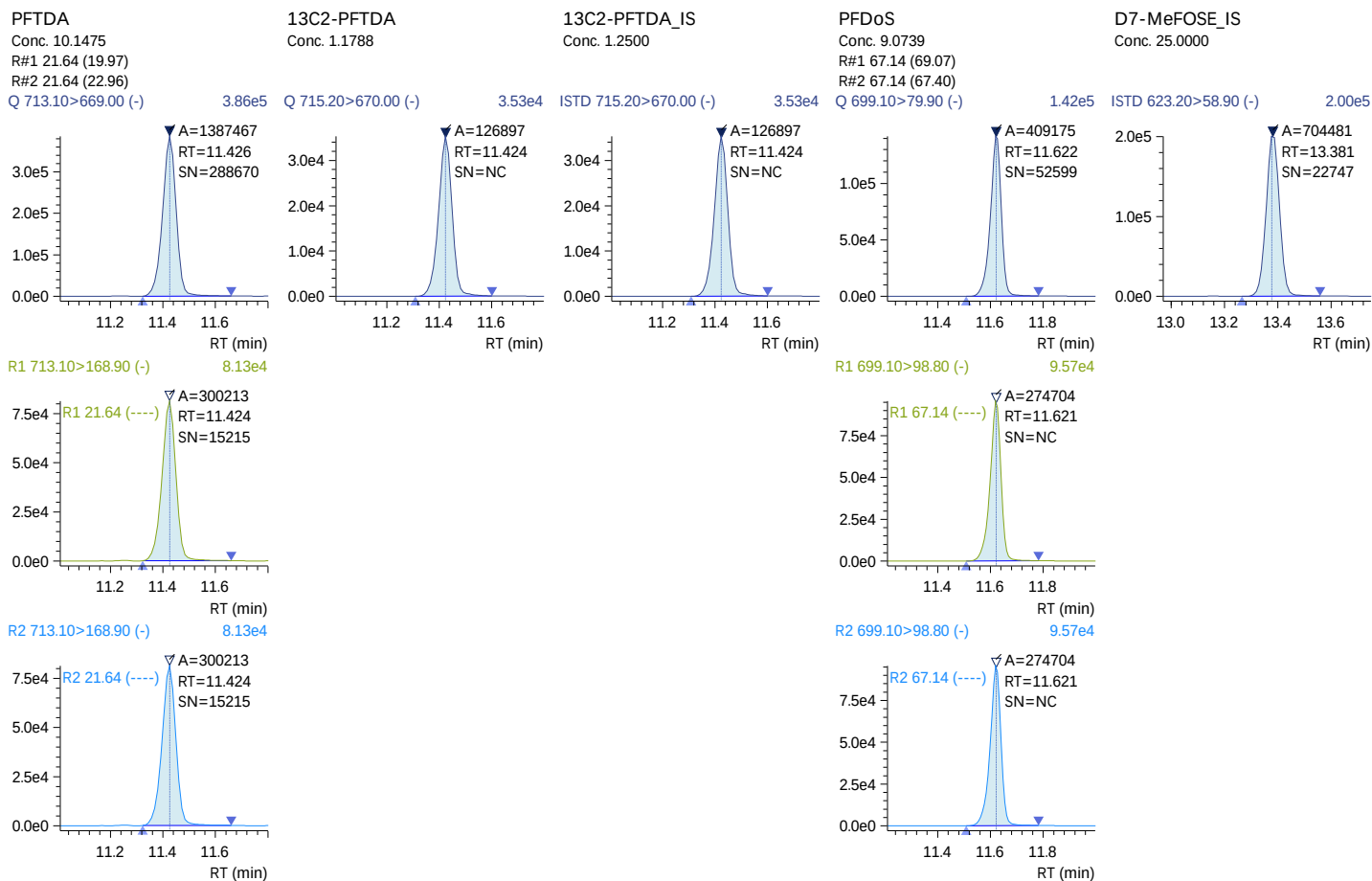


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_012 (continued)



J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.damlp

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_012 (continued)

D7-MeFOSE
Conc. 24.7175

MeFOSE
Conc. 9.2921

13C2-PFHXA_IS
Conc. 2.5000

13C2-PFHXA
Conc. 2.3722

PFHXA
Conc. 9.9308

Q 623.20>58.90 (-)

2.00e5

Q 616.10>59.00 (-)

4.39e4

ISTD 815.00>770.05 (-)

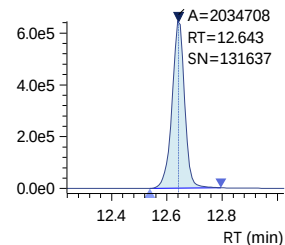
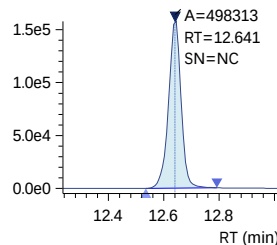
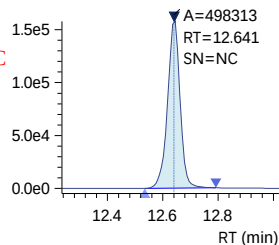
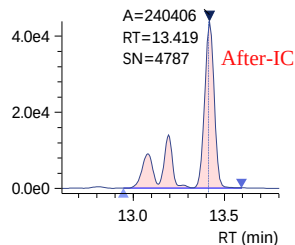
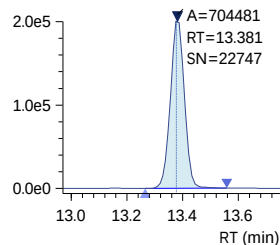
1.58e5

Q 815.00>770.05 (-)

1.58e5

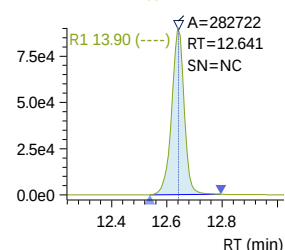
Q 813.00>768.95 (-)

6.45e5



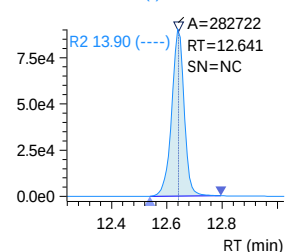
R1 813.00>218.95 (-)

9.03e4



R2 813.00>218.95 (-)

9.03e4





240118_012 (continued)

D3-MeFOSA
Conc. 2.3642

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. 9.7734
R#1 152.26 (149.05)
R#2 152.26 (140.79)

D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 23.8326

Q 515.00>219.00 (-)

1.60e4

ISTD 515.00>219.00 (-)

1.60e4

Q 511.90>219.00 (-)

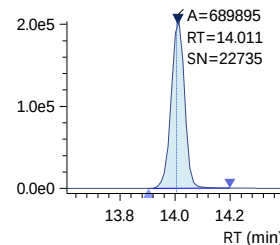
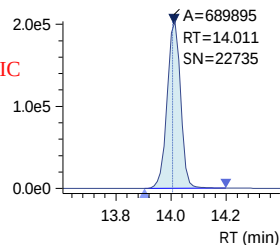
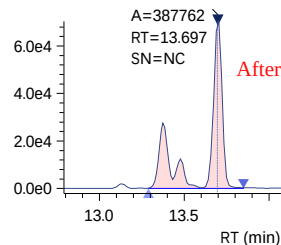
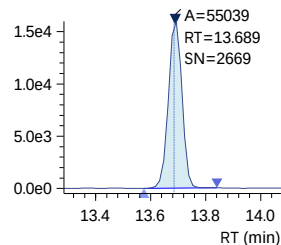
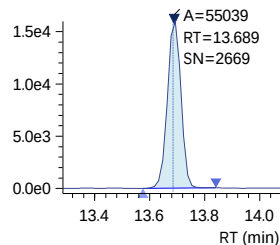
7.04e4

ISTD 639.20>58.90 (-)

2.04e5

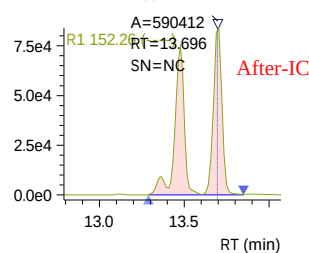
Q 639.20>58.90 (-)

2.04e5



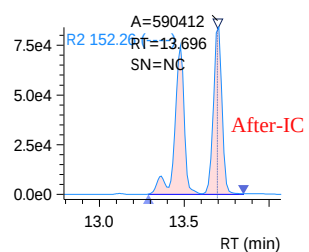
R1 511.90>169.00 (-)

8.40e4



R2 511.90>169.00 (-)

8.40e4





240118_012 (continued)

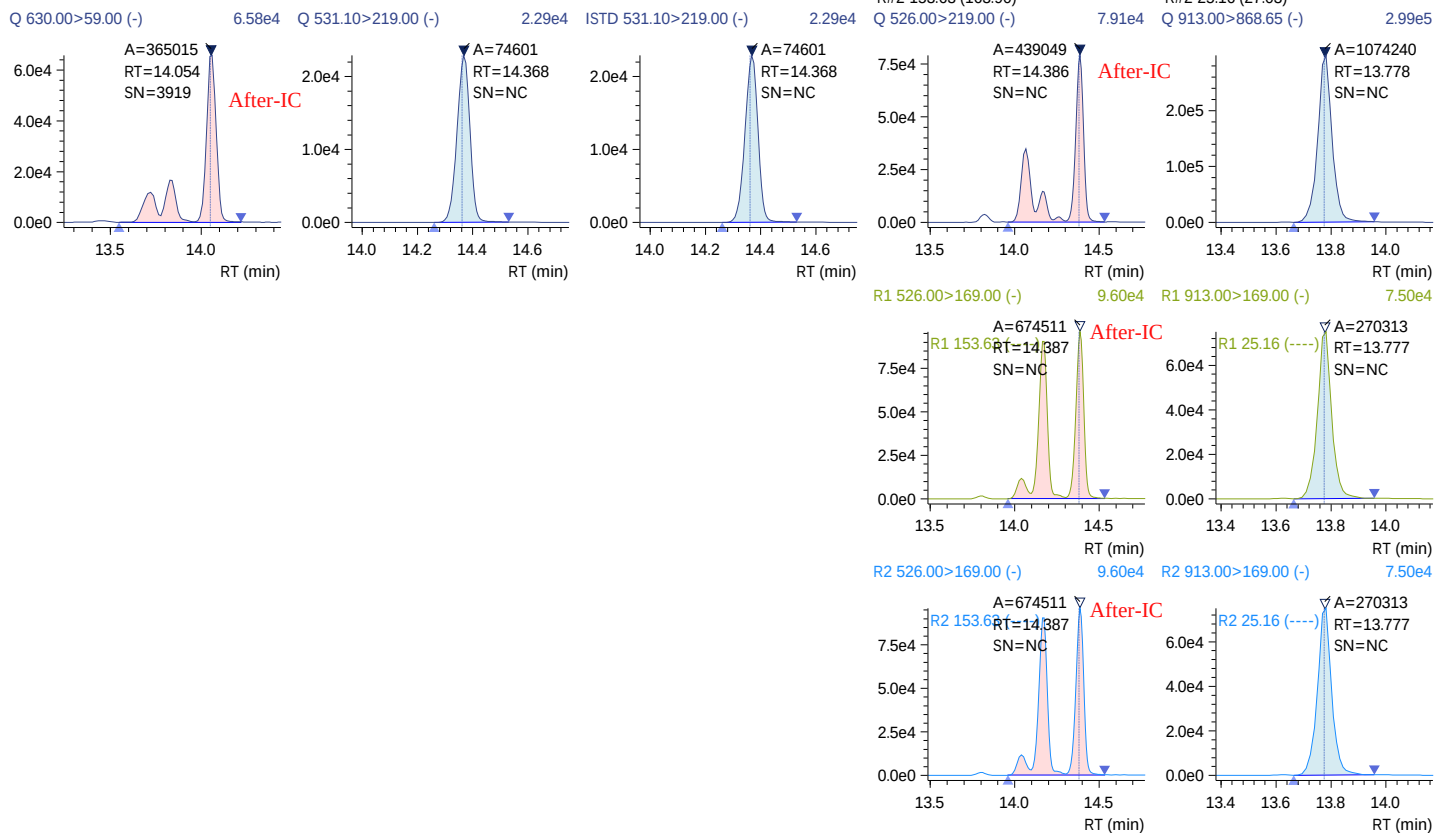
EtFOSE
Conc. 10.0559

D5-EtFOSAm
Conc. 2.4068

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. 10.1093
R#1 153.63 (154.69)
R#2 153.63 (163.90)

PFODA
Conc. 9.5331
R#1 25.16 (29.32)
R#2 25.16 (27.03)



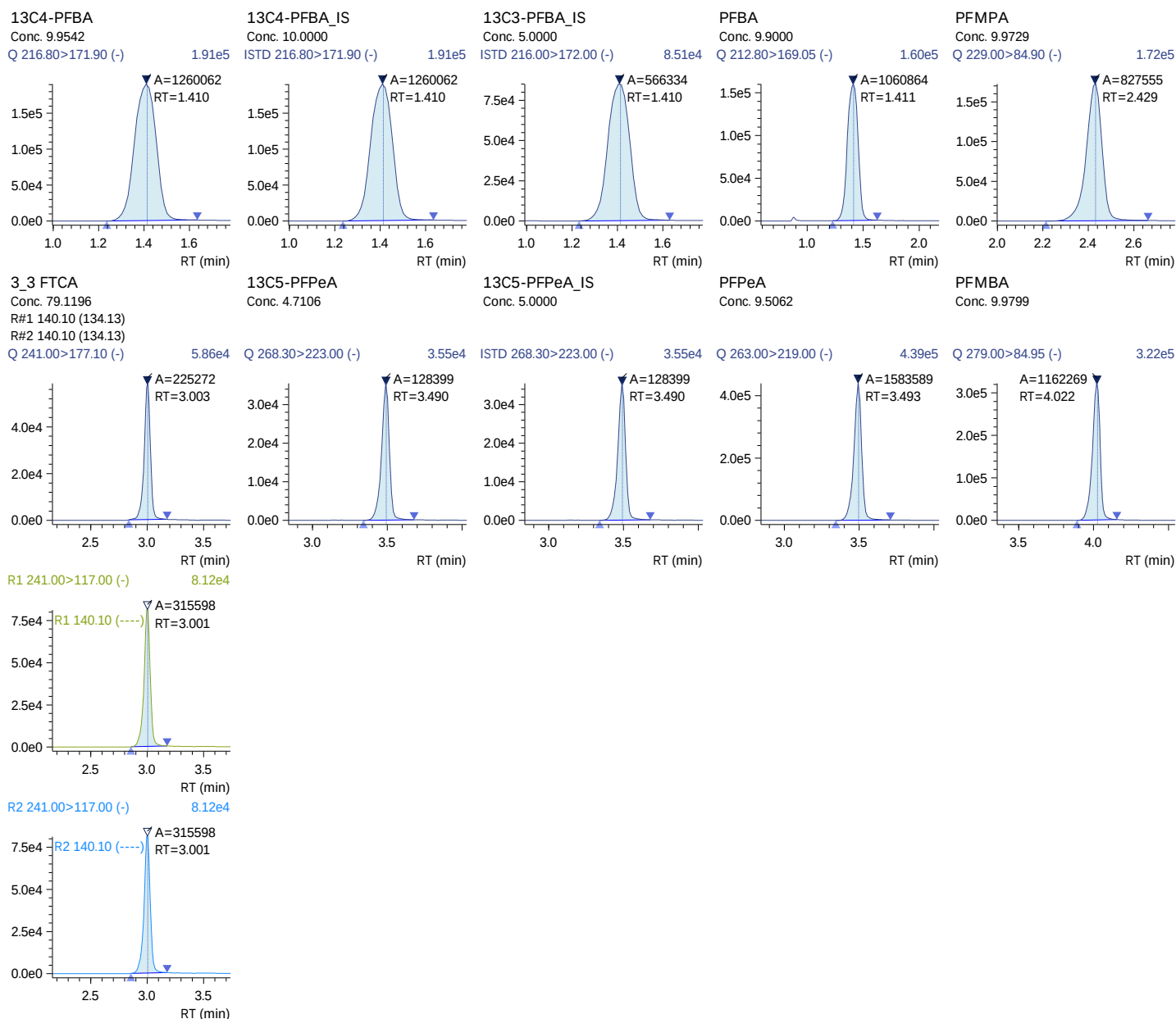
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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_012

Sample ID: 1633 ICAL 10.0PPB
Date Acquired: 1/18/2024 4:24:05 PM
Acquired by: System Administrator
Data File: 240118_012
Vial: 7 | Inj. Volume: 10.0000uL | Tray: 1





240118_012 (continued)

13C2-4_2 FTS
 Conc. 4.6710

13C2-4_2 FTS_IS
 Conc. 5.0000

4_2 FTS
 Conc. 9.2244
 R#1 29.42 (34.14)
 R#2 29.42 (34.14)

13C3-PFBS_IS
 Conc. 2.5000

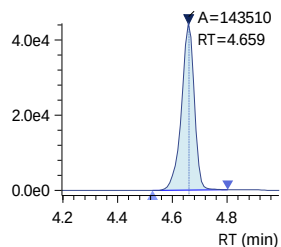
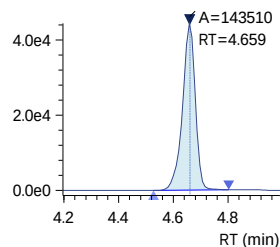
PFBS
 Conc. 8.7997
 R#1 47.26 (47.53)
 R#2 47.26 (47.53)

Q 329.10>80.90 (-)

4.45e4

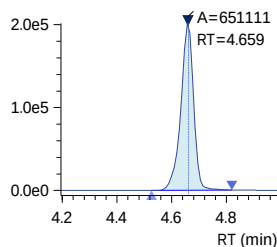
ISTD 329.10>80.90 (-)

4.45e4



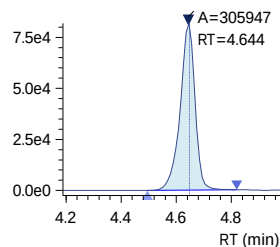
Q 327.10>307.00 (-)

2.02e5



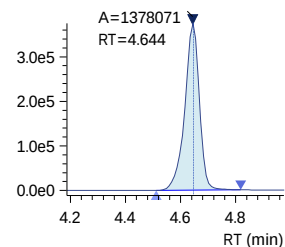
ISTD 302.10>79.90 (-)

8.18e4



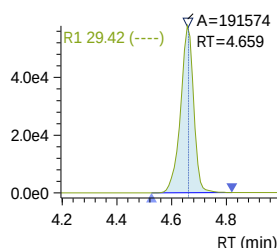
Q 298.70>79.90 (-)

3.75e5



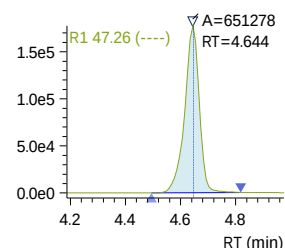
R1 327.10>80.90 (-)

5.79e4



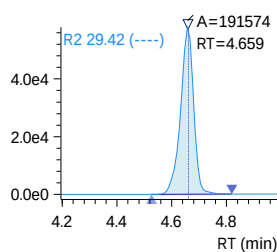
R1 298.70>98.80 (-)

1.78e5



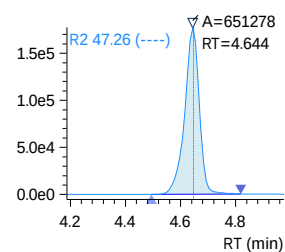
R2 327.10>80.90 (-)

5.79e4



R2 298.70>98.80 (-)

1.78e5





240118_012 (continued)

13C3-PFBS
 Conc. 2.4148

NFDHA
 Conc. 9.5596
 R#1 36.91 (37.88)
 R#2 36.91 (37.88)

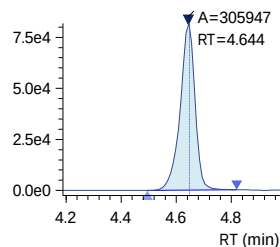
13C5-PFHxA
 Conc. 2.5069

13C5-PFHxA_IS
 Conc. 2.5000

13C2-PFHxA_IS
 Conc. 2.5000

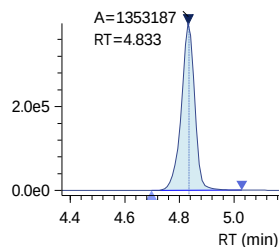
Q 302.10>79.90 (-)

8.18e4



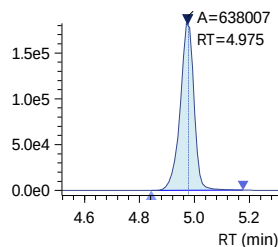
Q 295.00>201.00 (-)

3.98e5



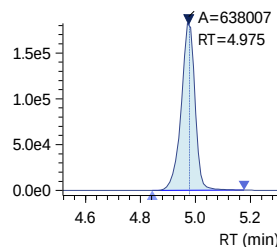
Q 318.00>273.00 (-)

1.82e5



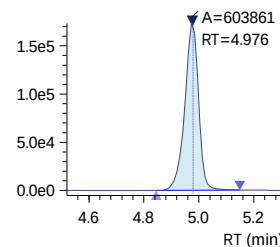
ISTD 318.00>273.00 (-)

1.82e5



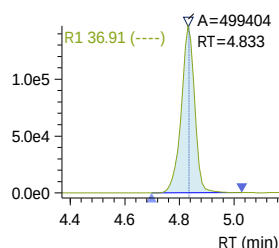
ISTD 315.10>270.00 (-)

1.73e5



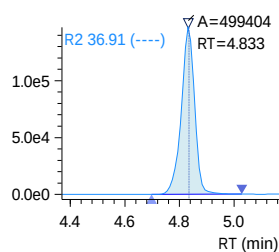
R1 295.00>84.90 (-)

1.47e5



R2 295.00>84.90 (-)

1.47e5

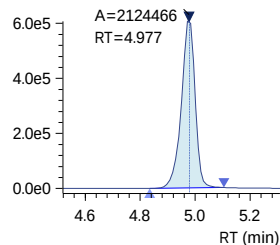




240118_012 (continued)

PFHxA
Conc. 9.9868

Q 313.00>269.00 (-)

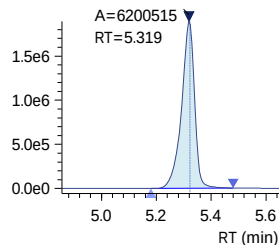


PFEESA
Conc. 8.6768

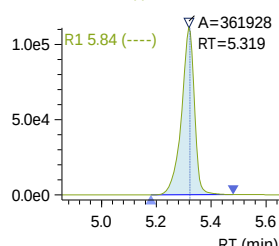
R#1 5.84 (5.88)

R#2 5.84 (5.88)

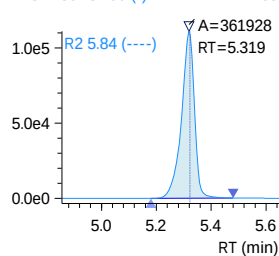
Q 314.80>135.00 (-)



R1 314.80>82.90 (-)

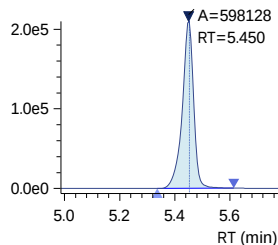


R2 314.80>82.90 (-)



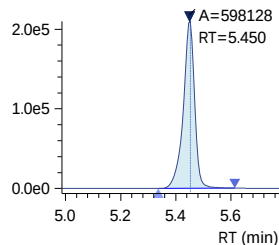
13C3-HFPO-DA
Conc. 10.1184

Q 286.90>168.90 (-)



13C3-HFPO-DA_IS
Conc. 10.0000

ISTD 286.90>168.90 (-)

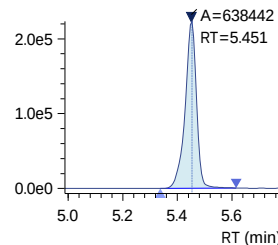


HFPO-DA
Conc. 9.6819

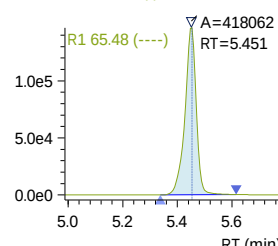
R#1 65.48 (63.80)

R#2 65.48 (63.80)

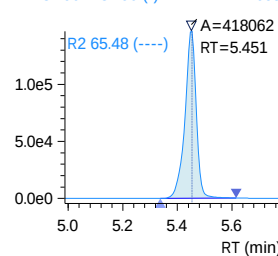
Q 284.90>168.90 (-)



R1 284.90>184.90 (-)

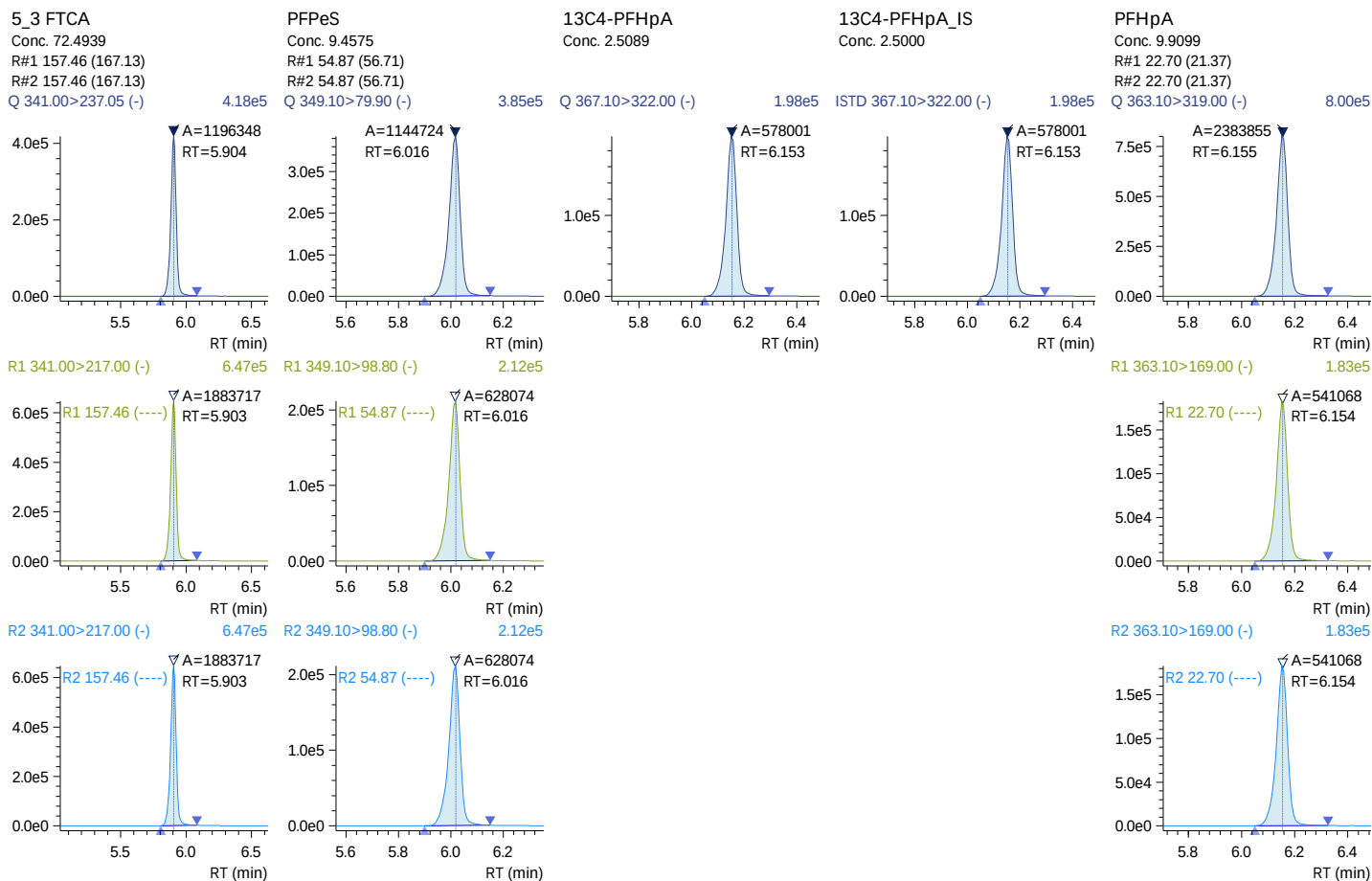


R2 284.90>184.90 (-)



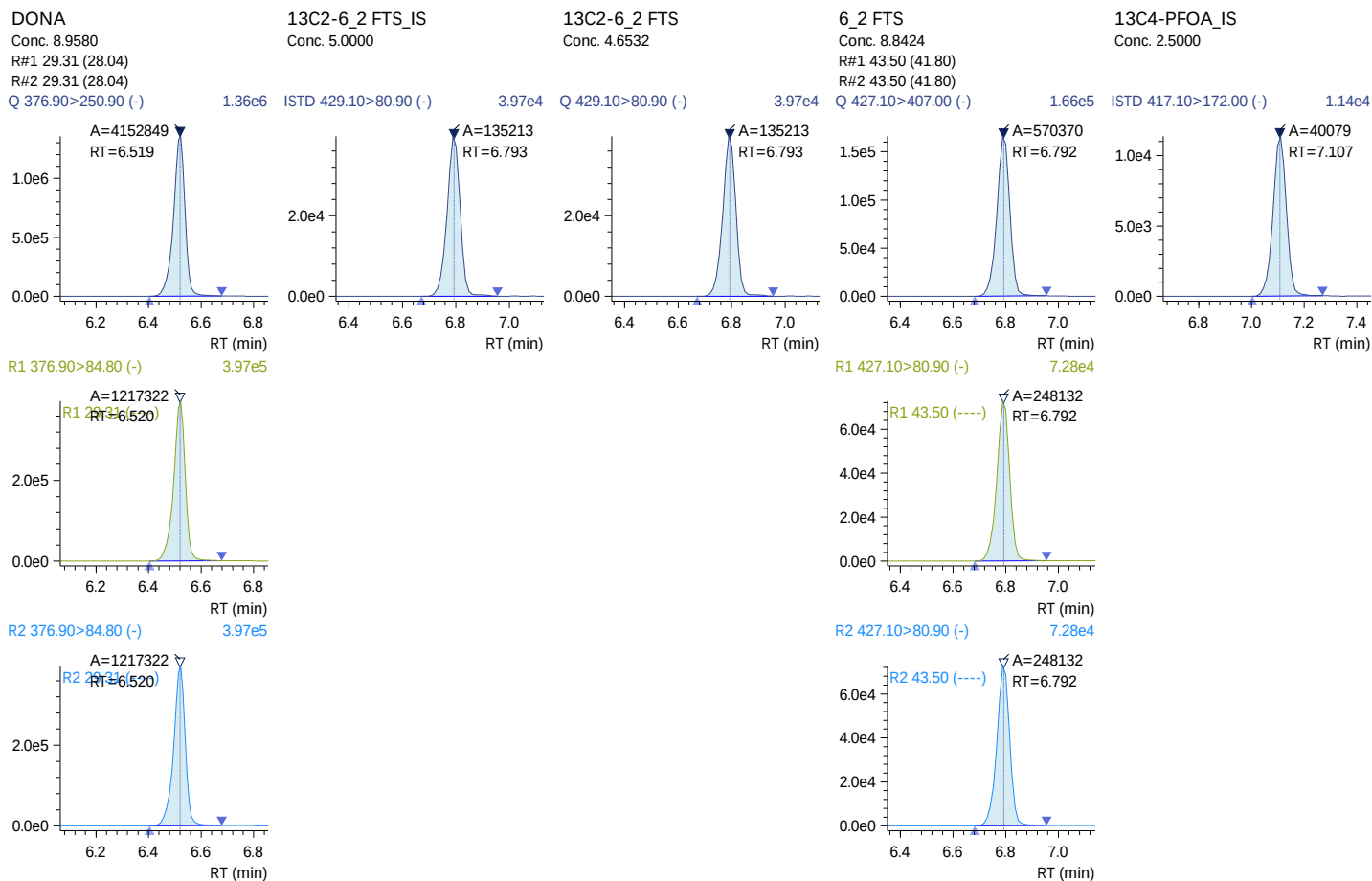


240118_012 (continued)





240118_012 (continued)





240118_012 (continued)

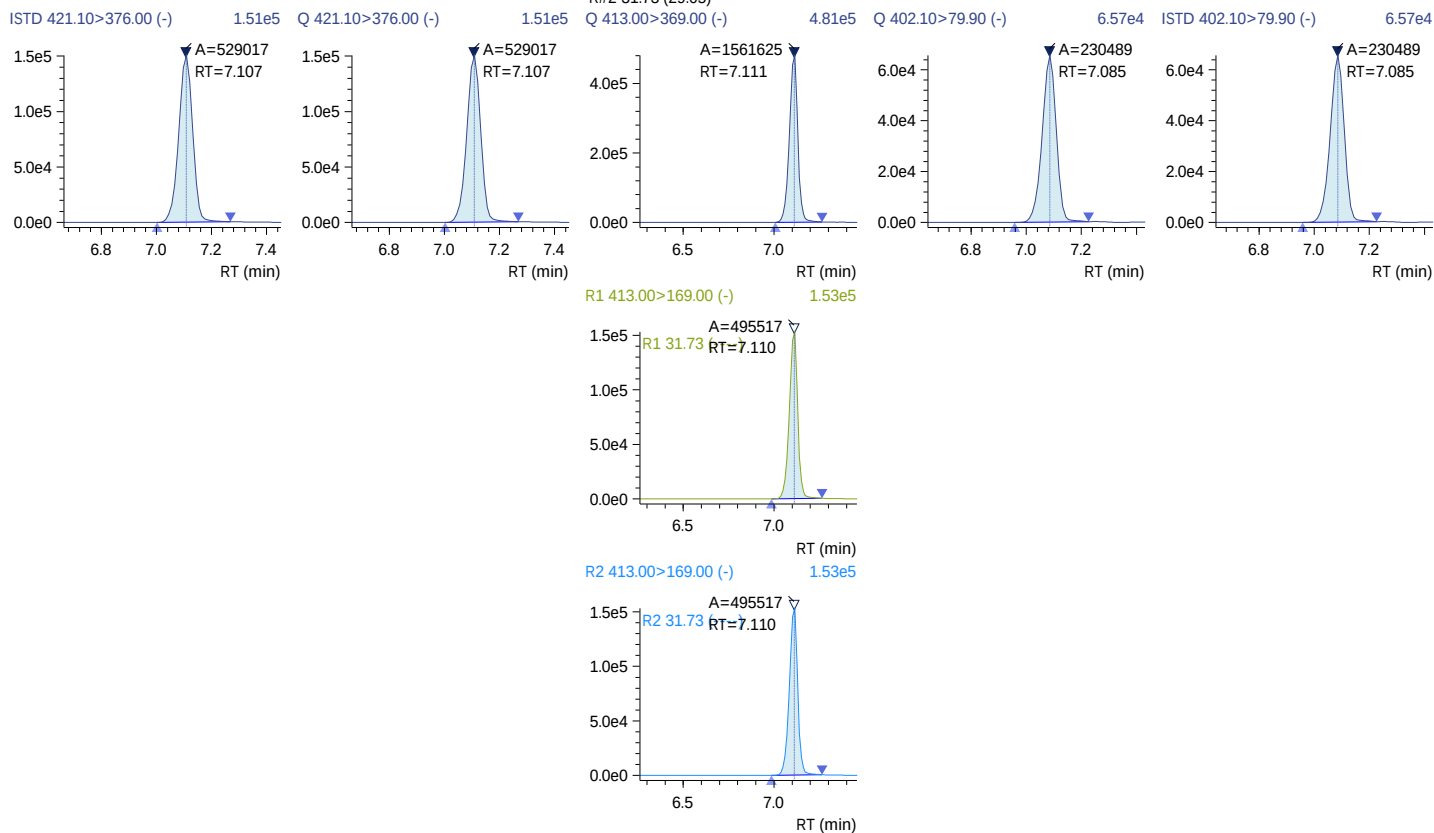
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.3616

PFOA
Conc. 11.3940
R#1 31.73 (29.05)
R#2 31.73 (29.05)

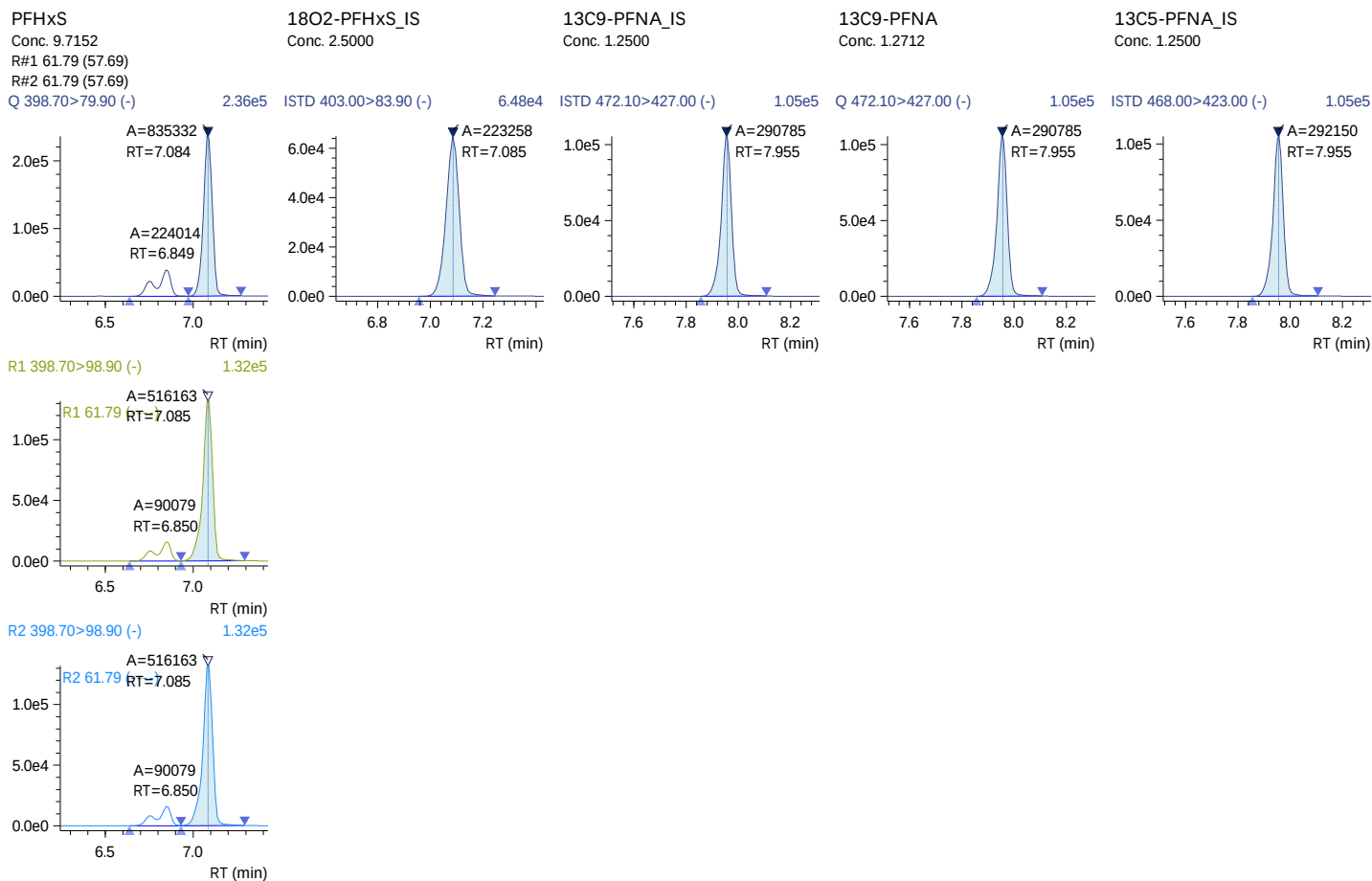
13C3-PFHxS
Conc. 2.4052

13C3-PFHxS_IS
Conc. 2.5000



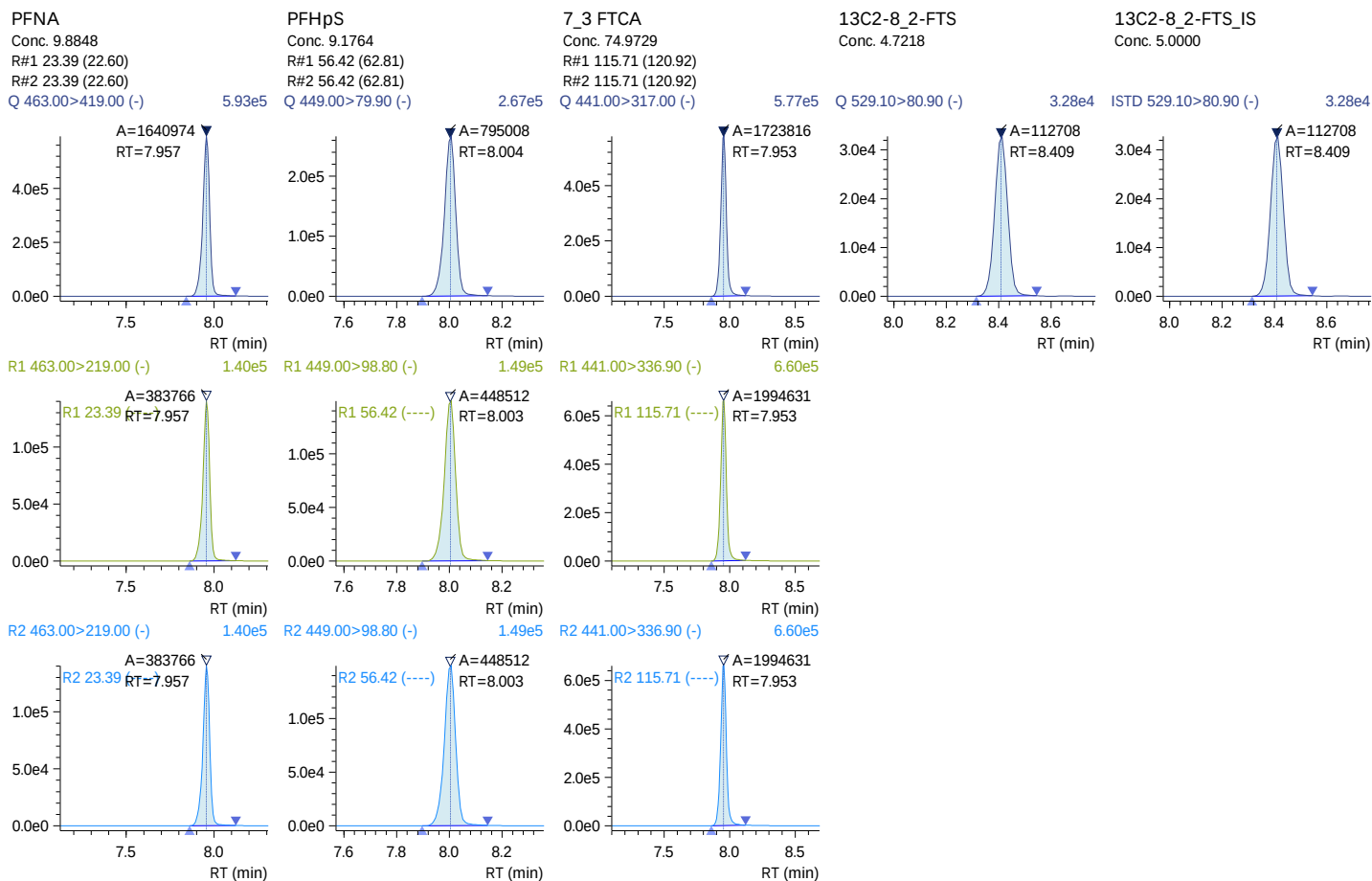


240118_012 (continued)



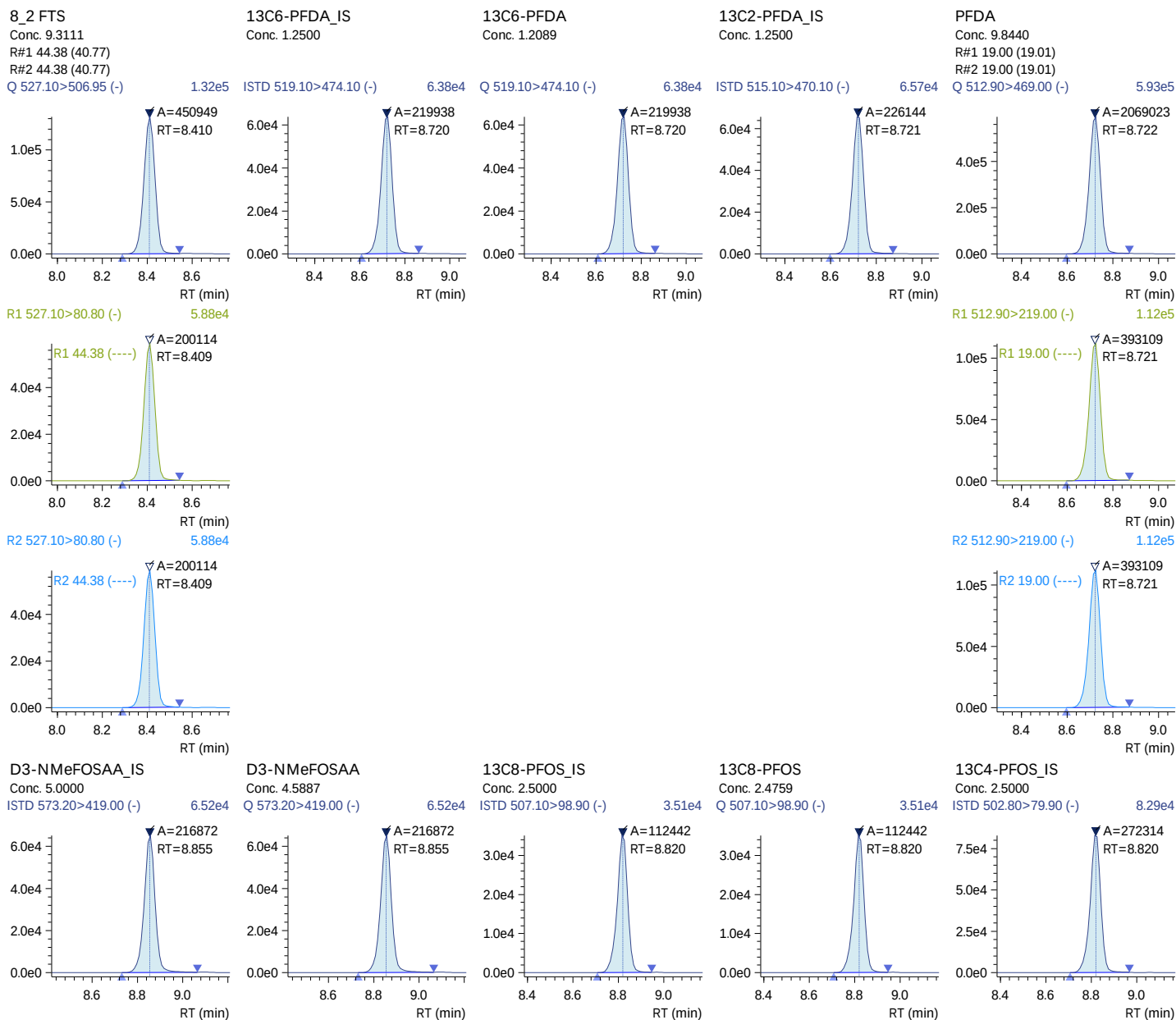


240118_012 (continued)



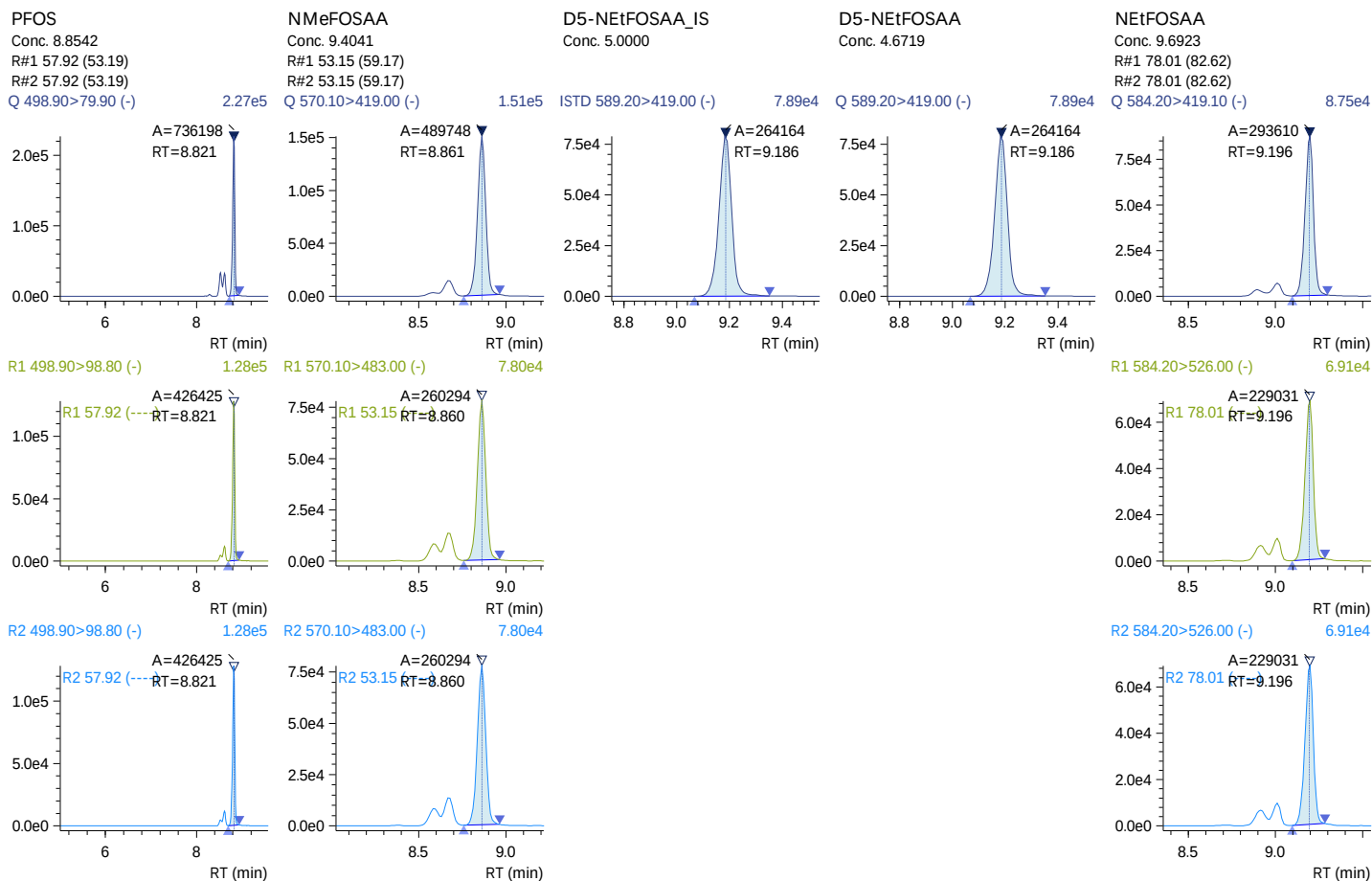


240118_012 (continued)





240118_012 (continued)

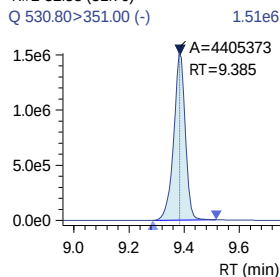




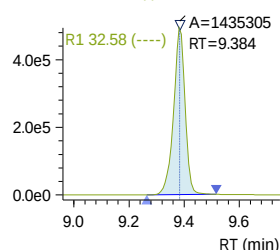
240118_012 (continued)

9-Cl-PF3ONS

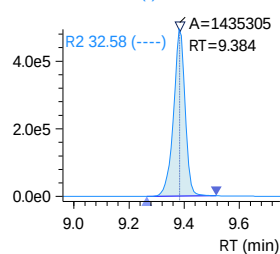
Conc. 8.9338
R#1 32.58 (31.76)
R#2 32.58 (31.76)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-) 4.94e5

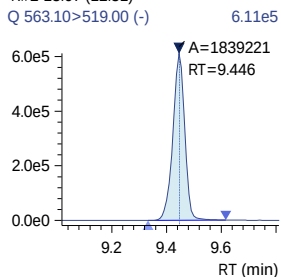


R2 532.80>353.00 (-) 4.94e5

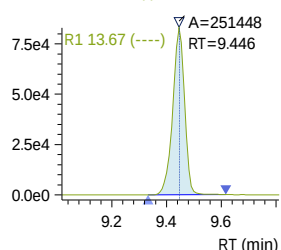


PFUnDA

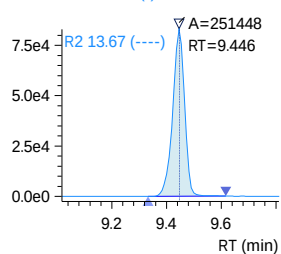
Conc. 10.2127
R#1 13.67 (12.31)
R#2 13.67 (12.31)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-) 8.30e4

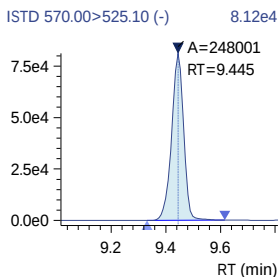


R2 563.10>269.10 (-) 8.30e4



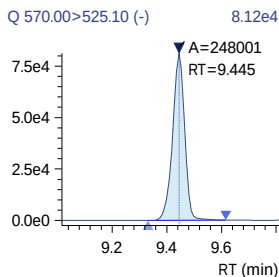
13C7-PFUnDA_IS

Conc. 1.2500



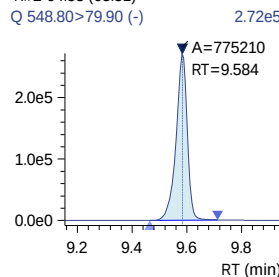
13C7-PFUnDA

Conc. 1.1427

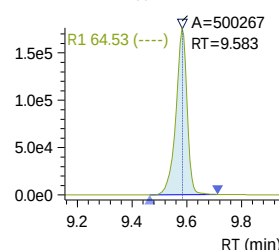


PFNS

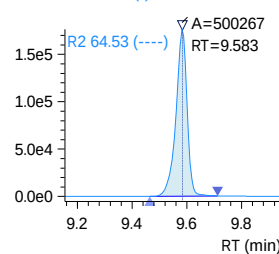
Conc. 9.0738
R#1 64.53 (63.31)
R#2 64.53 (63.31)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-) 1.76e5



R2 548.80>98.80 (-) 1.76e5





240118_012 (continued)

10_2_FTS

Conc. 9.3804

R#1 37.92 (33.02)

R#2 37.92 (33.02)

Q 626.80>607.05 (-)

1.77e5

13C2-PFDOA_IS

Conc. 1.2500

ISTD 615.10>570.00 (-)

1.00e5

13C2-PFDOA

Conc. 1.1793

Q 615.10>570.00 (-)

1.00e5

PFDOA

Conc. 10.0186

R#1 11.11 (10.14)

R#2 11.11 (10.14)

Q 613.10>569.00 (-)

5.66e5

PFDS

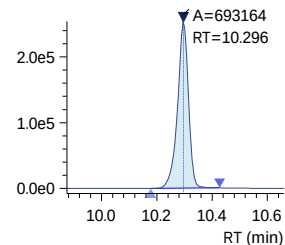
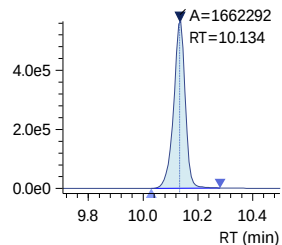
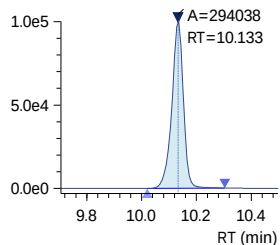
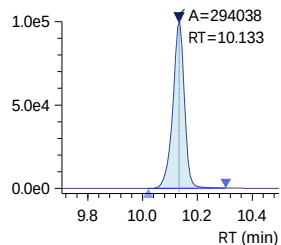
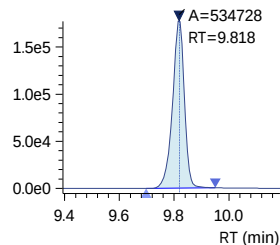
Conc. 9.0912

R#1 60.00 (62.02)

R#2 60.00 (62.02)

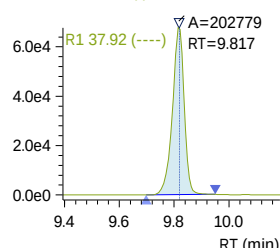
Q 599.00>79.90 (-)

2.54e5



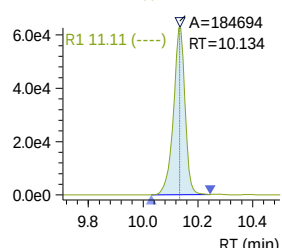
R1 626.80>81.00 (-)

6.77e4



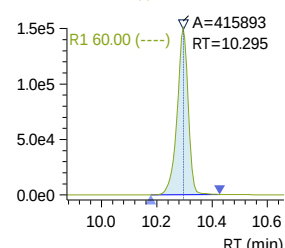
R1 613.10>319.00 (-)

6.27e4



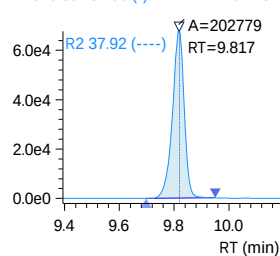
R1 599.00>98.80 (-)

1.51e5



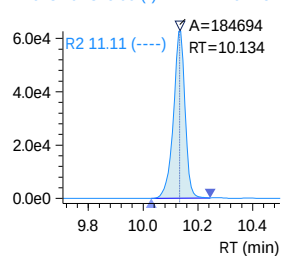
R2 626.80>81.00 (-)

6.77e4



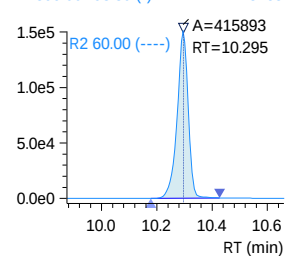
R2 613.10>319.00 (-)

6.27e4



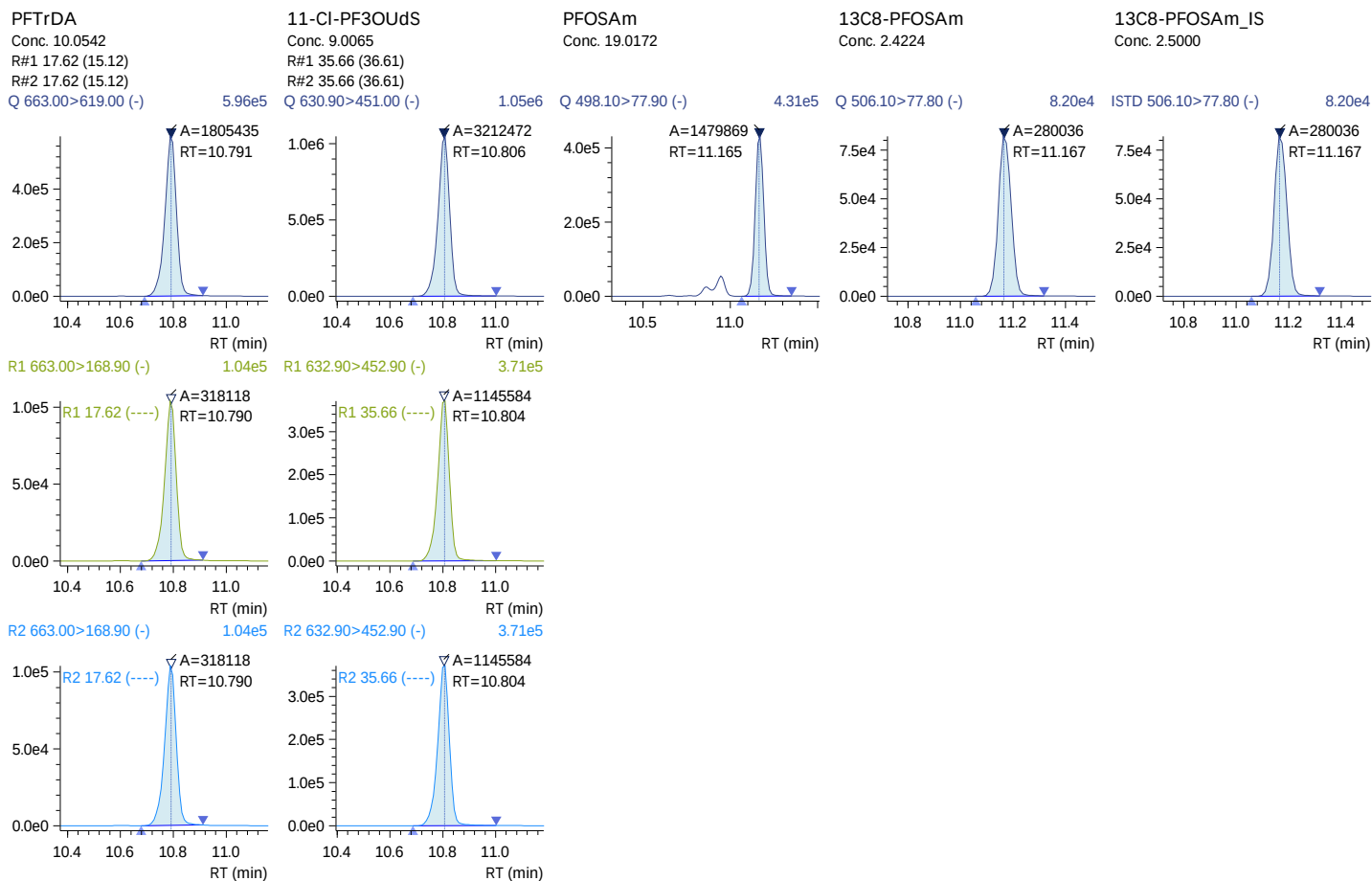
R2 599.00>98.80 (-)

1.51e5



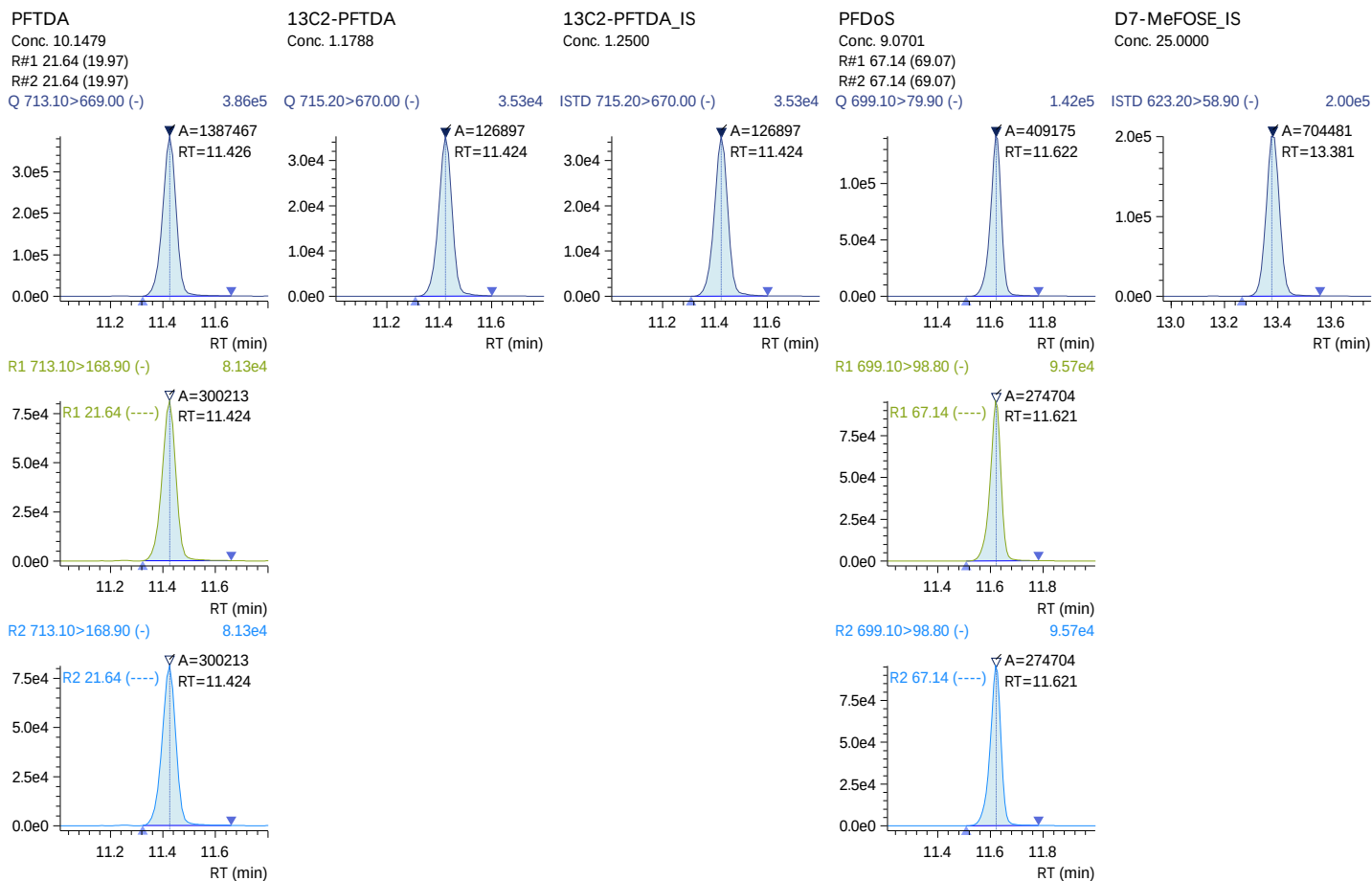


240118_012 (continued)





240118_012 (continued)





240118_012 (continued)

D7-MeFOSE
Conc. 24.7175

MeFOSE
Conc. 9.8056

13C2-PFHDA_IS
Conc. 2.5000

13C2-PFHDA
Conc. 2.3722

PFHXDA
Conc. 9.9308
R#1 13.90 (11.64)
R#2 13.90 (11.64)

Q 623.20>58.90 (-)

2.00e5

Q 616.10>59.00 (-)

4.39e4

ISTD 815.00>770.05 (-)

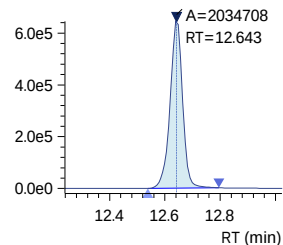
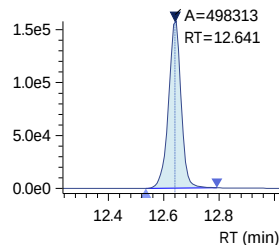
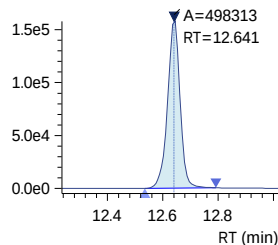
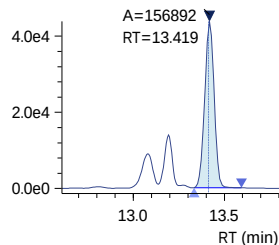
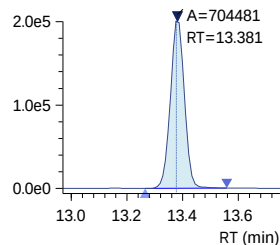
1.58e5

Q 815.00>770.05 (-)

1.58e5

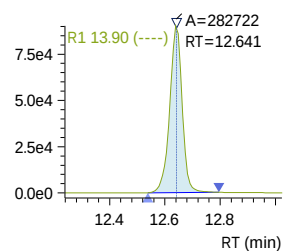
Q 813.00>768.95 (-)

6.45e5



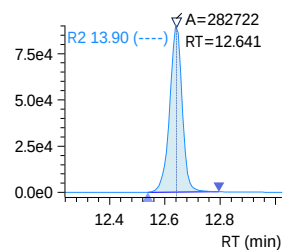
R1 813.00>218.95 (-)

9.03e4



R2 813.00>218.95 (-)

9.03e4





240118_012 (continued)

D3-MeFOSA
 Conc. 2.3642

D3-MeFOSA_IS
 Conc. 2.5000

MeFOSA
 Conc. 9.8159
 R#1 119.89 (149.05)
 R#2 119.89 (149.05)

D9-EtFOSE_IS
 Conc. 25.0000

D9-EtFOSE
 Conc. 23.8326

Q 515.00>219.00 (-)

1.60e4

ISTD 515.00>219.00 (-)

1.60e4

Q 511.90>219.00 (-)

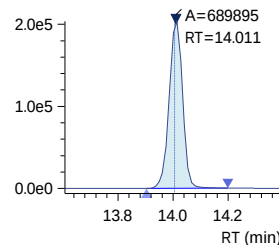
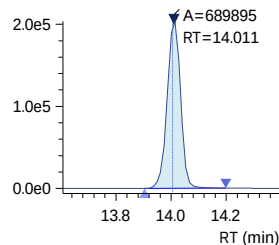
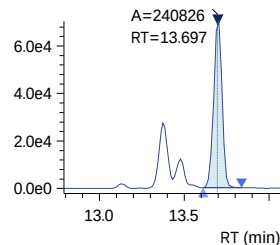
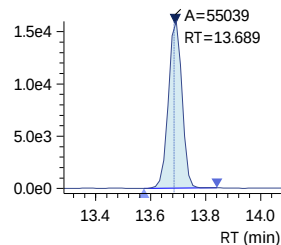
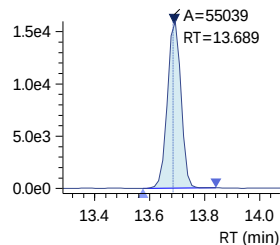
7.04e4

ISTD 639.20>58.90 (-)

2.04e5

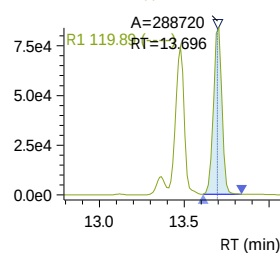
Q 639.20>58.90 (-)

2.04e5



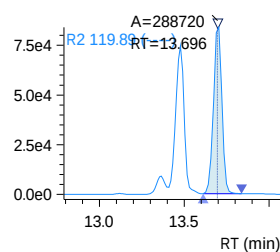
R1 511.90>169.00 (-)

8.40e4



R2 511.90>169.00 (-)

8.40e4





240118_012 (continued)

EtFOSE
 Conc. 9.9350

D5-EtFOSAm
 Conc. 2.4068

D5-EtFOSAm_IS
 Conc. 2.5000

EtFOSAm
 Conc. 10.7645

PFODA
 Conc. 9.9601

Q 630.00>59.00 (-)

6.58e4

Q 531.10>219.00 (-)

2.29e4

ISTD 531.10>219.00 (-)

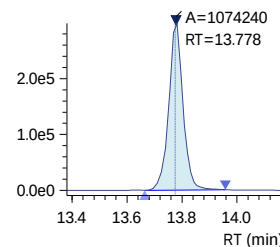
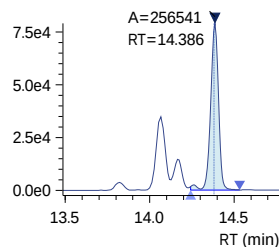
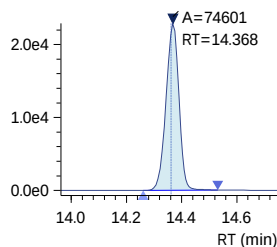
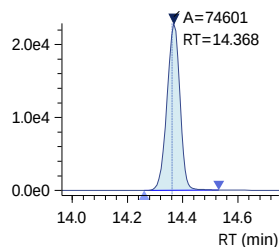
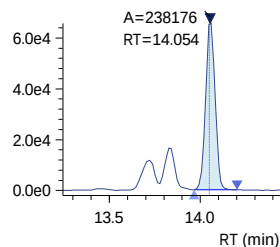
2.29e4

Q 526.00>219.00 (-)

7.91e4

Q 913.00>868.65 (-)

2.99e5

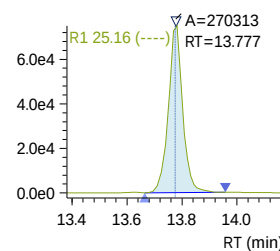
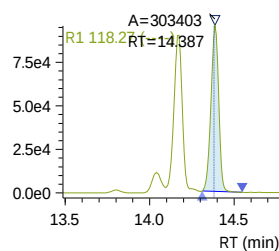


R1 526.00>169.00 (-)

9.60e4

R1 913.00>169.00 (-)

7.50e4

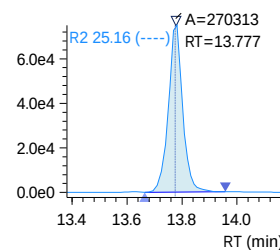
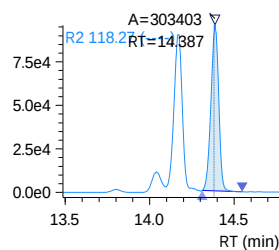


R2 526.00>169.00 (-)

9.60e4

R2 913.00>169.00 (-)

7.50e4





240118_013

Sample ID: 1633 ICAL 15.0PPB
Date Acquired: 1/18/2024 4:47:18 PM
Acquired by: System Administrator
Data File: 240118_013
Vial: 8 | Inj. Volume: 10.0000uL | Tray: 1

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	1223381	----	----	----	----	----	----	
13C4-PFBA_IS	216.80>171.90	----	1223381	----	----	----	----	----	----	
13C3-PFBA_IS	216.00>172.00	----	559080	----	----	----	----	----	----	
PFBA	212.80>169.05	----	1600400	----	----	----	----	----	----	
PFMPA	229.00>84.90	----	1224225	----	----	----	----	----	----	
3_3 FTCA	241.00>177.10	241.00>117.00	301852	415736	137.73	141.17	415736	137.73	141.17	
13C5-PFPeA	268.30>223.00	----	132195	----	----	----	----	----	----	
13C5-PFPeA_IS	268.30>223.00	----	132195	----	----	----	----	----	----	
PFPeA	263.00>219.00	----	2493787	----	----	----	----	----	----	
PFMBA	279.00>84.95	----	1795086	----	----	----	----	----	----	
13C2-4_2 FTS	329.10>80.90	----	120797	----	----	----	----	----	----	
13C2-4_2 FTS_IS	329.10>80.90	----	120797	----	----	----	----	----	----	
4_2 FTS	327.10>307.00	327.10>80.90	847984	254953	30.07	29.06	254953	30.07	29.06	
13C3-PFBS_IS	302.10>79.90	----	304776	----	----	----	----	----	----	
PFBS	298.70>79.90	298.70>98.80	2087380	982788	47.08	46.72	982788	47.08	46.72	
13C3-PFBS	302.10>79.90	----	304776	----	----	----	----	----	----	
NFDHA	295.00>201.00	295.00>84.90	1969096	743937	37.78	40.25	743937	37.78	40.25	
13C5-PFHxA	318.00>273.00	----	583700	----	----	----	----	----	----	
13C5-PFHxA_IS	318.00>273.00	----	583700	----	----	----	----	----	----	
13C2-PFHxA_IS	315.10>270.00	----	578981	----	----	----	----	----	----	
PFHxA	313.00>269.00	----	3050311	----	----	----	----	----	----	
PFEESA	314.80>135.00	314.80>82.90	9109371	517873	5.69	6.11	517873	5.69	6.11	
13C3-HFPO-DA	286.90>168.90	----	583755	----	----	----	----	----	----	
13C3-HFPO-DA_IS	286.90>168.90	----	583755	----	----	----	----	----	----	
HFPO-DA	284.90>168.90	284.90>184.90	945275	614294	64.99	65.61	614294	64.99	65.61	
5_3 FTCA	341.00>237.05	341.00>217.00	1573075	2542954	161.66	158.86	2542954	161.66	158.86	
PFPeS	349.10>79.90	349.10>98.80	1721243	958937	55.71	55.80	958937	55.71	55.80	
13C4-PFHpA	367.10>322.00	----	539799	----	----	----	----	----	----	
13C4-PFHpA_IS	367.10>322.00	----	539799	----	----	----	----	----	----	
PFHpA	363.10>319.00	363.10>169.00	3437882	782930	22.77	21.50	782930	22.77	21.50	
DONA	376.90>250.90	376.90>84.80	6058875	1808417	29.85	29.66	1808417	29.85	29.66	
13C2-6_2 FTS_IS	429.10>80.90	----	128419	----	----	----	----	----	----	
13C2-6_2 FTS	429.10>80.90	----	128419	----	----	----	----	----	----	
6_2 FTS	427.10>407.00	427.10>80.90	840038	363546	43.28	41.15	363546	43.28	41.15	
13C4-PFOA_IS	417.10>172.00	----	38960	----	----	----	----	----	----	
13C8-PFOA_IS	421.10>376.00	----	543532	----	----	----	----	----	----	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240118_013 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	543532	----	----	----	----	----	----	----
PFOA	413.00>369.00	413.00>169.00	2182267	688919	31.57	31.89	688919	31.57	31.89	
13C3-PFHxS	402.10>79.90	----	236876	----	----	----	----	----	----	----
13C3-PFHxS_IS	402.10>79.90	----	236876	----	----	----	----	----	----	----
PFHxS	398.70>79.90	398.70>98.90	1542165	875164	56.75	56.62	875164	56.75	56.62	
18O2-PFHxS_IS	403.00>83.90	----	220445	----	----	----	----	----	----	----
13C9-PFNA_IS	472.10>427.00	----	274221	----	----	----	----	----	----	----
13C9-PFNA	472.10>427.00	----	274221	----	----	----	----	----	----	----
13C5-PFNA_IS	468.00>423.00	----	285546	----	----	----	----	----	----	----
PFNA	463.00>419.00	463.00>219.00	2446359	562861	23.01	23.17	562861	23.01	23.17	
PFHpS	449.00>79.90	449.00>98.80	1176371	654880	55.67	56.96	654880	55.67	56.96	
7_3 FTCA	441.00>317.00	441.00>336.90	2253481	2631203	116.76	117.47	2631203	116.76	117.47	
13C2-8_2-FTS	529.10>80.90	----	99053	----	----	----	----	----	----	----
13C2-8_2-FTS_IS	529.10>80.90	----	99053	----	----	----	----	----	----	----
8_2 FTS	527.10>506.95	527.10>80.80	656762	298412	45.44	49.59	298412	45.44	49.59	
13C6-PFDA_IS	519.10>474.10	----	209485	----	----	----	----	----	----	----
13C6-PFDA	519.10>474.10	----	209485	----	----	----	----	----	----	----
13C2-PFDA_IS	515.10>470.10	----	201059	----	----	----	----	----	----	----
PFDA	512.90>469.00	512.90>219.00	2953361	567967	19.23	19.00	567967	19.23	19.00	
D3-NMeFOSAA_IS	573.20>419.00	----	199875	----	----	----	----	----	----	----
D3-NMeFOSAA	573.20>419.00	----	199875	----	----	----	----	----	----	----
13C8-PFOS_IS	507.10>98.90	----	104055	----	----	----	----	----	----	----
13C8-PFOS	507.10>98.90	----	104055	----	----	----	----	----	----	----
13C4-PFOS_IS	502.80>79.90	----	252372	----	----	----	----	----	----	----
PFOS	498.90>79.90	498.90>98.80	1499453	774053	51.62	52.47	774053	51.62	52.47	
NMeFOSAA	570.10>419.00	570.10>483.00	873824	518112	59.29	55.15	518112	59.29	55.15	
D5-NetFOSAA_IS	589.20>419.00	----	246903	----	----	----	----	----	----	----
D5-NetFOSAA	589.20>419.00	----	246903	----	----	----	----	----	----	----
NetFOSAA	584.20>419.10	584.20>526.00	539699	442612	82.01	81.95	442612	82.01	81.95	
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	6793632	2134994	31.43	32.76	2134994	31.43	32.76	
PFUnDA	563.10>519.00	563.10>269.10	2720435	378942	13.93	13.12	378942	13.93	13.12	
13C7-PFUnDA_IS	570.00>525.10	----	245029	----	----	----	----	----	----	----
13C7-PFUnDA	570.00>525.10	----	245029	----	----	----	----	----	----	----
PFNS	548.80>79.90	548.80>98.80	1160949	741598	63.88	65.22	741598	63.88	65.22	
10_2 FTS	626.80>607.05	626.80>81.00	775809	281670	36.31	37.13	281670	36.31	37.13	
13C2-PFDOA_IS	615.10>570.00	----	281877	----	----	----	----	----	----	----
13C2-PFDOA	615.10>570.00	----	281877	----	----	----	----	----	----	----
PFDOA	613.10>569.00	613.10>319.00	2421057	267961	11.07	11.29	267961	11.07	11.29	
PFDS	599.00>79.90	599.00>98.80	1031983	618586	59.94	60.18	618586	59.94	60.18	
PFTrDA	663.00>619.00	663.00>168.90	2690758	471439	17.52	17.64	471439	17.52	17.64	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240118_013 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	4612445	1689824	36.64	36.44	1689824	36.64	36.44	
PFOSAm	498.10>77.90	----	2599880	----	----	----	----	----	----	
13C8-PFOSAm	506.10>77.80	----	265772	----	----	----	----	----	----	
13C8-PFOSAm_IS	506.10>77.80	----	265772	----	----	----	----	----	----	
PFTDA	713.10>669.00	713.10>168.90	1974838	457842	23.18	22.96	457842	23.18	22.96	
13C2-PFTDA	715.20>670.00	----	122751	----	----	----	----	----	----	
13C2-PFTDA_IS	715.20>670.00	----	122751	----	----	----	----	----	----	
PFDoS	699.10>79.90	699.10>98.80	603262	396678	65.76	67.40	396678	65.76	67.40	
D7-MeFOSE_IS	623.20>58.90	----	679962	----	----	----	----	----	----	
D7-MeFOSE	623.20>58.90	----	679962	----	----	----	----	----	----	
MeFOSE	616.10>59.00	----	372675	----	----	----	----	----	----	
13C2-PFHxDA_IS	815.00>770.05	----	485630	----	----	----	----	----	----	
13C2-PFHxDA	815.00>770.05	----	485630	----	----	----	----	----	----	
PFHxDA	813.00>768.95	813.00>218.95	3111088	428611	13.78	13.90	428611	13.78	13.90	
D3-MeFOSA	515.00>219.00	----	53740	----	----	----	----	----	----	
D3-MeFOSA_IS	515.00>219.00	----	53740	----	----	----	----	----	----	
MeFOSA	511.90>219.00	511.90>169.00	580448	871016	150.06	140.79	871016	150.06	140.79	
D9-EtFOSE_IS	639.20>58.90	----	673693	----	----	----	----	----	----	
D9-EtFOSE	639.20>58.90	----	673693	----	----	----	----	----	----	
EtFOSE	630.00>59.00	----	537366	----	----	----	----	----	----	
D5-EtFOSAm	531.10>219.00	----	75346	----	----	----	----	----	----	
D5-EtFOSAm_IS	531.10>219.00	----	75346	----	----	----	----	----	----	
EtFOSAm	526.00>219.00	526.00>169.00	664270	1025114	154.32	163.90	1025114	154.32	163.90	
PFODA	913.00>868.65	913.00>169.00	1592958	398997	25.05	27.03	398997	25.05	27.03	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
 IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240118_013

Sample ID: 1633 ICAL 15.0PPB
Date Acquired: 1/18/2024 4:47:18 PM
Acquired by: System Administrator
Data File: 240118_013
Vial: 8 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Std. Conc.	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.408	-0.006	-0.001	1223381	559080	13C3-PFBA_IS	10.0000	9.7898	ng/mL	
13C4-PFBA_IS	Auto	1.408	-0.006	----	1223381	1223381	----	10.0000	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.409	-0.006	----	559080	559080	----	5.0000	5.0000	ng/mL	
PFBA	Auto	1.410	-0.006	0.002	1600400	1223381	13C4-PFBA_IS	15.0000	15.2256	ng/mL	
PFMPA	Auto	2.434	0.002	-1.060	1224225	132195	13C5-PFPeA_IS	15.0000	14.3296	ng/mL	
3_3 FTCA	Auto	3.008	0.004	-0.486	301852	132195	13C5-PFPeA_IS	100.0000	102.9716	ng/mL	
13C5-PFPeA	Auto	3.494	0.002	-1.486	132195	578981	13C2-PFHxA_IS	5.0000	5.0583	ng/mL	
13C5-PFPeA_IS	Auto	3.494	0.002	----	132195	132195	----	5.0000	5.0000	ng/mL	
PFPeA	Auto	3.497	0.002	0.003	2493787	132195	13C5-PFPeA_IS	15.0000	14.5646	ng/mL	
PFMBA	Auto	4.027	0.002	0.533	1795086	132195	13C5-PFPeA_IS	15.0000	14.8314	ng/mL	
13C2-4_2 FTS	Auto	4.663	0.002	-2.424	120797	220445	18O2-PFHxS_IS	5.0000	3.9819	ng/mL	
13C2-4_2 FTS_IS	Auto	4.663	0.002	----	120797	120797	----	5.0000	5.0000	ng/mL	
4_2 FTS	Auto	4.663	0.001	0.000	847984	120797	13C2-4_2 FTS_IS	14.1000	14.2724	ng/mL	
13C3-PFBS_IS	Auto	4.648	0.001	----	304776	304776	----	2.5000	2.5000	ng/mL	
PFBS	Auto	4.648	0.000	0.000	2087380	304776	13C3-PFBS_IS	13.3000	13.3801	ng/mL	
13C3-PFBS	Auto	4.648	0.001	-2.439	304776	220445	18O2-PFHxS_IS	2.5000	2.4362	ng/mL	
NFDHA	Auto	4.837	0.002	-0.142	1969096	583700	13C5-PFHxA_IS	15.0000	15.2050	ng/mL	
13C5-PFHxA	Auto	4.979	0.001	-0.001	583700	578981	13C2-PFHxA_IS	2.5000	2.3921	ng/mL	
13C5-PFHxA_IS	Auto	4.979	0.001	----	583700	583700	----	2.5000	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	4.980	0.001	----	578981	578981	----	2.5000	2.5000	ng/mL	
PFHxA	Auto	4.982	0.002	0.003	3050311	583700	13C5-PFHxA_IS	15.0000	15.6919	ng/mL	
PFEESA	Auto	5.323	0.001	0.344	9109371	583700	13C5-PFHxA_IS	13.4000	13.9333	ng/mL	
13C3-HFPO-DA	Auto	5.454	0.002	0.474	583755	578981	13C2-PFHxA_IS	10.0000	10.2996	ng/mL	
13C3-HFPO-DA_IS	Auto	5.454	0.002	----	583755	583755	----	10.0000	10.0000	ng/mL	
HFPO-DA	Auto	5.456	0.003	0.002	945275	583755	13C3-HFPO-DA_IS	15.0000	14.6618	ng/mL	
5_3 FTCA	Auto	5.909	0.002	0.929	1573075	583700	13C5-PFHxA_IS	100.0000	104.1907	ng/mL	
PFPeS	Auto	6.020	0.002	-1.067	1721243	236876	13C3-PFHxS_IS	14.1000	13.8371	ng/mL	
13C4-PFHpA	Auto	6.156	0.002	1.176	539799	578981	13C2-PFHxA_IS	2.5000	2.4437	ng/mL	
13C4-PFHpA_IS	Auto	6.156	0.002	----	539799	539799	----	2.5000	2.5000	ng/mL	
PFHpA	Auto	6.158	0.003	0.002	3437882	539799	13C4-PFHpA_IS	15.0000	15.3219	ng/mL	
DONA	Auto	6.522	0.002	1.068	6058875	583755	13C3-HFPO-DA_IS	14.2000	13.3913	ng/mL	
13C2-6_2 FTS_IS	Auto	6.794	0.001	----	128419	128419	----	5.0000	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.794	0.001	-0.293	128419	220445	18O2-PFHxS_IS	5.0000	4.4758	ng/mL	
6_2 FTS	Auto	6.794	0.002	0.000	840038	128419	13C2-6_2 FTS_IS	14.3000	14.3652	ng/mL	
13C4-PFOA_IS	Auto	7.110	0.003	----	38960	38960	----	2.5000	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.110	0.003	----	543532	543532	----	2.5000	2.5000	ng/mL	
13C8-PFOA	Auto	7.110	0.003	0.000	543532	38960	13C4-PFOA_IS	2.5000	2.4960	ng/mL	
PFOA	Auto	7.112	0.002	0.002	2182267	543532	13C8-PFOA_IS	15.0000	15.5129	ng/mL	
13C3-PFHxS	Auto	7.087	0.001	0.000	236876	220445	18O2-PFHxS_IS	2.5000	2.5034	ng/mL	
13C3-PFHxS_IS	Auto	7.087	0.001	----	236876	236876	----	2.5000	2.5000	ng/mL	
PFHxS	M	7.087	0.003	0.000	1542165	236876	13C3-PFHxS_IS	13.7000	13.5450	ng/mL	
18O2-PFHxS_IS	Auto	7.087	0.001	----	220445	220445	----	2.5000	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.957	0.001	----	274221	274221	----	1.2500	1.2500	ng/mL	
13C9-PFNA	Auto	7.957	0.001	-0.001	274221	285546	13C5-PFNA_IS	1.2500	1.2265	ng/mL	
13C5-PFNA_IS	Auto	7.958	0.002	----	285546	285546	----	1.2500	1.2500	ng/mL	
PFNA	Auto	7.958	0.001	0.001	2446359	274221	13C9-PFNA_IS	15.0000	15.6442	ng/mL	
PFHpS	Auto	8.006	0.002	-0.814	1176371	104055	13C8-PFOS_IS	14.3000	14.4842	ng/mL	
7_3 FTCA	Auto	7.955	0.001	2.976	2253481	583700	13C5-PFHxA_IS	100.0000	111.8043	ng/mL	
13C2-8_2-FTS	Auto	8.411	0.002	1.324	99053	220445	18O2-PFHxS_IS	5.0000	4.2027	ng/mL	
13C2-8_2-FTS_IS	Auto	8.411	0.002	----	99053	99053	----	5.0000	5.0000	ng/mL	
8_2 FTS	Auto	8.412	0.002	0.001	656762	99053	13C2-8_2-FTS_IS	14.4000	15.4301	ng/mL	
13C6-PFDA_IS	Auto	8.722	0.002	----	209485	209485	----	1.2500	1.2500	ng/mL	
13C6-PFDA	Auto	8.722	0.002	0.000	209485	201059	13C2-PFDA_IS	1.2500	1.2950	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_013 (continued)

(Table continued from previous page)

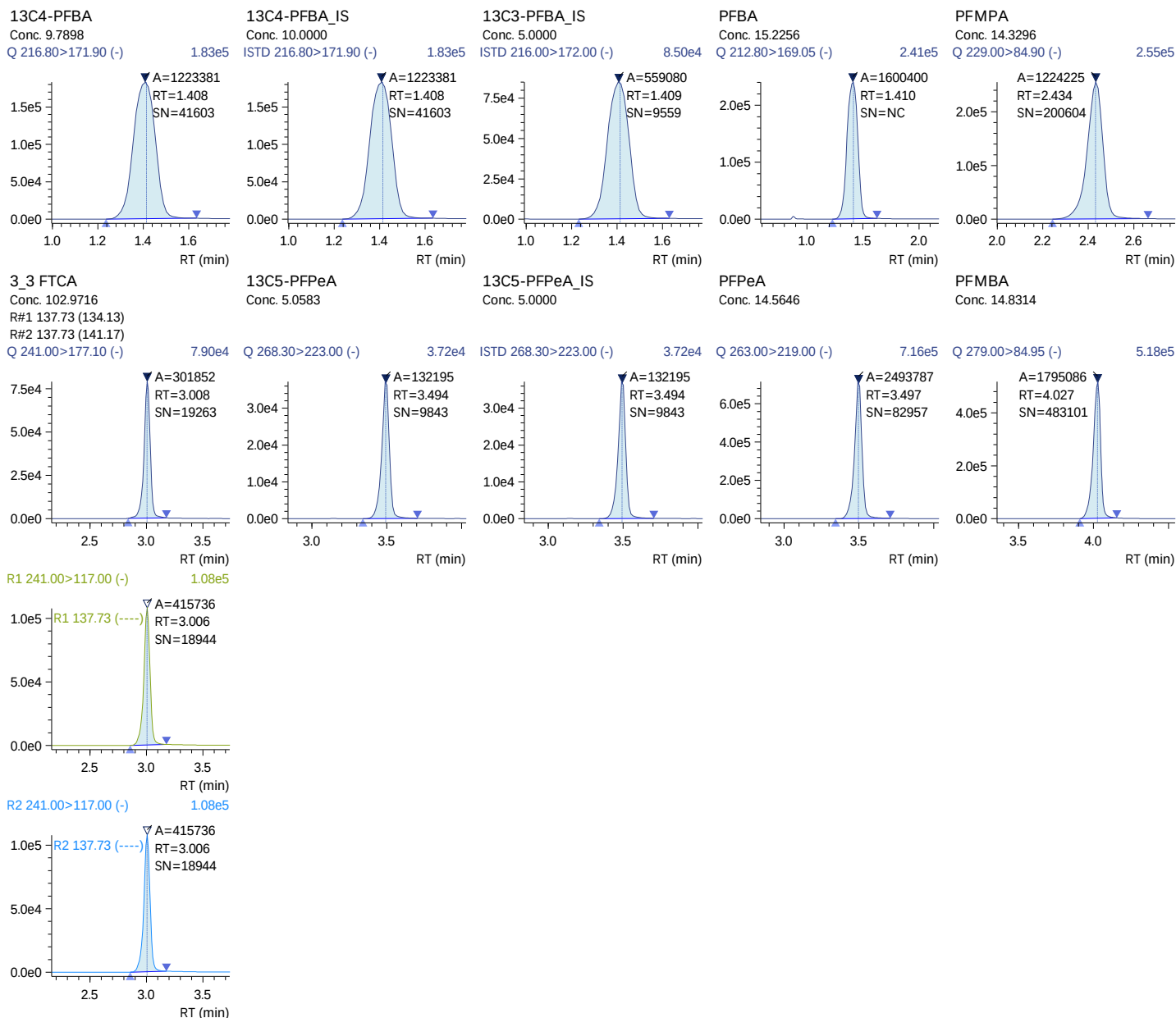
Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Std. Conc.	Conc.	Unit	Flag ID
13C2-PFDA_IS	Auto	8.722	0.001	----	201059	201059	----	1.2500	1.2500	ng/mL	
PFDA	Auto	8.724	0.003	0.002	2953361	209485	13C6-PFDA_IS	15.0000	14.7654	ng/mL	
D3-NMeFOSAA_IS	Auto	8.857	0.002	----	199875	199875	----	5.0000	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.857	0.002	0.036	199875	252372	13C4-PFOS_IS	5.0000	4.5632	ng/mL	
13C8-PFOS_IS	Auto	8.820	0.000	----	104055	104055	----	2.5000	2.5000	ng/mL	
13C8-PFOS	Auto	8.820	0.000	-0.001	104055	252372	13C4-PFOS_IS	2.5000	2.4722	ng/mL	
13C4-PFOS_IS	Auto	8.821	0.001	----	252372	252372	----	2.5000	2.5000	ng/mL	
PFOS	M	8.823	0.001	0.003	1499453	104055	13C8-PFOS_IS	13.9000	13.8547	ng/mL	
NMeFOSAA	M	8.863	0.002	0.006	873824	199875	D3-NMeFOSAA_IS	15.0000	16.1124	ng/mL	
D5-NetFOSAA_IS	Auto	9.186	0.000	----	246903	246903	----	5.0000	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.186	0.000	0.365	246903	252372	13C4-PFOS_IS	5.0000	4.7117	ng/mL	
NetFOSAA	M	9.196	0.001	0.010	539699	246903	D5-NetFOSAA_IS	15.0000	16.3668	ng/mL	
9-CI-PF3ONS	Auto	9.385	0.001	3.931	6793632	583755	13C3-HFPO-DA_IS	14.0000	14.1163	ng/mL	
PFUnDA	Auto	9.446	-0.001	0.001	2720435	245029	13C7-PFUnDA_IS	15.0000	15.3038	ng/mL	
13C7-PFUnDA_IS	Auto	9.445	0.000	----	245029	245029	----	1.2500	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.445	0.000	0.723	245029	201059	13C2-PFDA_IS	1.2500	1.2699	ng/mL	
PFNS	Auto	9.584	0.000	0.764	1160949	104055	13C8-PFOS_IS	14.4000	14.6843	ng/mL	
10_2_FTS	Auto	9.820	0.001	1.409	775809	99053	13C2-8_2-FTS_IS	14.5000	14.9808	ng/mL	
13C2-PFDOA_IS	Auto	10.134	0.001	----	281877	281877	----	1.2500	1.2500	ng/mL	
13C2-PFDOA	Auto	10.134	0.001	1.412	281877	201059	13C2-PFDA_IS	1.2500	1.2716	ng/mL	
PFDOA	Auto	10.135	0.001	0.001	2421057	281877	13C2-PFDOA_IS	15.0000	15.2383	ng/mL	
PFDS	Auto	10.297	0.001	1.477	1031983	104055	13C8-PFOS_IS	14.5000	15.0119	ng/mL	
PFTDA	Auto	10.792	0.000	-0.632	2690758	122751	13C2-PFTDA_IS	15.0000	15.5072	ng/mL	
11-CI-PF3OUdS	Auto	10.807	0.001	5.353	4612445	583755	13C3-HFPO-DA_IS	14.1000	14.2289	ng/mL	
PFOSAm	M	11.167	0.003	-0.002	2599880	265772	13C8-PFOSAm_IS	30.0000	29.6790	ng/mL	
13C8-PFOSAm	Auto	11.169	0.004	2.348	265772	252372	13C4-PFOS_IS	2.5000	2.4807	ng/mL	
13C8-PFOSAm_IS	Auto	11.169	0.004	----	265772	265772	----	2.5000	2.5000	ng/mL	
PFTDA	Auto	11.424	-0.001	0.000	1974838	122751	13C2-PFTDA_IS	15.0000	14.9443	ng/mL	
13C2-PFTDA	Auto	11.424	0.000	2.702	122751	201059	13C2-PFDA_IS	1.2500	1.2825	ng/mL	
13C2-PFTDA_IS	Auto	11.424	0.000	----	122751	122751	----	1.2500	1.2500	ng/mL	
PFDoS	Auto	11.622	0.000	2.802	603262	104055	13C8-PFOS_IS	14.6000	14.4564	ng/mL	
D7-MeFOSE_IS	Auto	13.382	0.005	----	679962	679962	----	25.0000	25.0000	ng/mL	
D7-MeFOSE	Auto	13.382	0.005	4.561	679962	252372	13C4-PFOS_IS	25.0000	25.7423	ng/mL	
MeFOSE	M	13.420	0.007	0.038	372675	679962	D7-MeFOSE_IS	15.0000	14.9240	ng/mL	
13C2-PFHXA_IS	Auto	12.641	0.000	----	485630	485630	----	2.5000	2.5000	ng/mL	
13C2-PFHXA	Auto	12.641	0.000	3.919	485630	201059	13C2-PFDA_IS	2.5000	2.6003	ng/mL	
PFHXA	Auto	12.642	0.000	0.001	3111088	485630	13C2-PFHXA_IS	15.0000	15.5968	ng/mL	
D3-MeFOSA	Auto	13.691	0.006	4.870	53740	252372	13C4-PFOS_IS	2.5000	2.4908	ng/mL	
D3-MeFOSA_IS	Auto	13.691	0.006	----	53740	53740	----	2.5000	2.5000	ng/mL	
MeFOSA	M	13.698	0.004	0.007	580448	53740	D3-MeFOSA_IS	15.0000	14.9835	ng/mL	
D9-EtFOSE_IS	Auto	14.011	0.005	----	673693	673693	----	25.0000	25.0000	ng/mL	
D9-EtFOSE	Auto	14.011	0.005	5.190	673693	252372	13C4-PFOS_IS	25.0000	25.1119	ng/mL	
EtFOSE	M	14.055	0.007	0.044	537366	673693	D9-EtFOSE_IS	15.0000	15.1601	ng/mL	
D5-EtFOSAm	Auto	14.369	0.007	5.548	75346	252372	13C4-PFOS_IS	2.5000	2.6230	ng/mL	
D5-EtFOSAm_IS	Auto	14.369	0.007	----	75346	75346	----	2.5000	2.5000	ng/mL	
EtFOSAm	M	14.386	0.006	0.017	664270	75346	D5-EtFOSAm_IS	15.0000	15.1437	ng/mL	
PFODA	Auto	13.777	0.002	1.136	1592958	485630	13C2-PFHXA_IS	15.0000	14.5056	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_013 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
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240118_013 (continued)

13C2-4_2_FTS
Conc. 3.9819

13C2-4_2_FTS_IS
Conc. 5.0000

4_2_FTS
Conc. 14.2724
R#1 30.07 (34.14)
R#2 30.07 (29.06)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 13.3801
R#1 47.08 (47.53)
R#2 47.08 (46.72)

Q 329.10>80.90 (-)

3.54e4

ISTD 329.10>80.90 (-)

3.54e4

Q 327.10>307.00 (-)

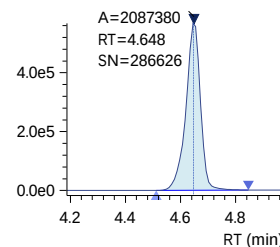
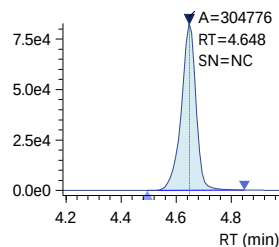
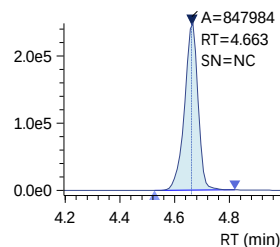
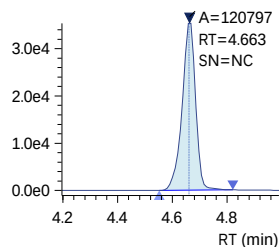
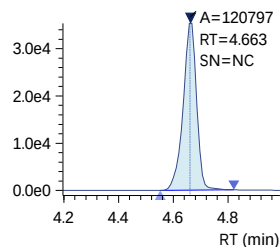
2.49e5

ISTD 302.10>79.90 (-)

8.28e4

Q 298.70>79.90 (-)

5.68e5

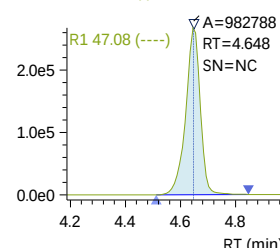
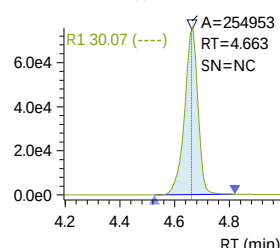


R1 327.10>80.90 (-)

7.58e4

R1 298.70>98.80 (-)

2.67e5

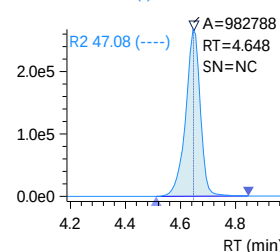
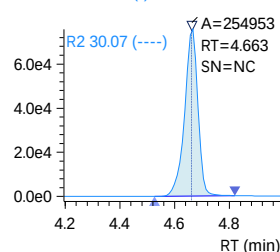


R2 327.10>80.90 (-)

7.58e4

R2 298.70>98.80 (-)

2.67e5





240118_013 (continued)

13C3-PFBS
Conc. 2.4362

NFDHA
Conc. 15.2050
R#1 37.78 (37.88)
R#2 37.78 (40.25)

13C5-PFHxA
Conc. 2.3921

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

Q 302.10>79.90 (-)

8.28e4

Q 295.00>201.00 (-)

5.70e5

Q 318.00>273.00 (-)

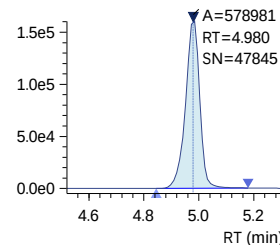
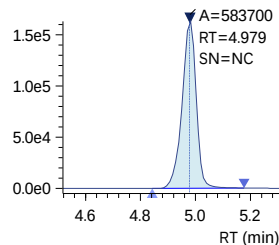
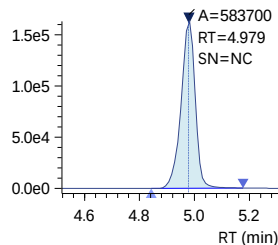
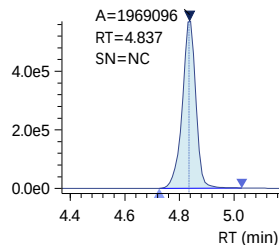
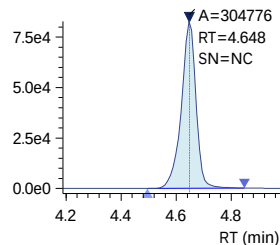
1.63e5

ISTD 318.00>273.00 (-)

1.63e5

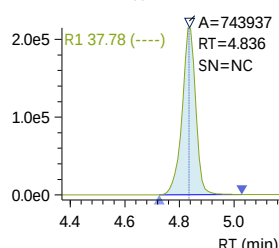
ISTD 315.10>270.00 (-)

1.60e5



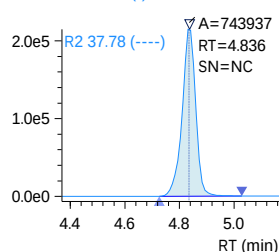
R1 295.00>84.90 (-)

2.15e5



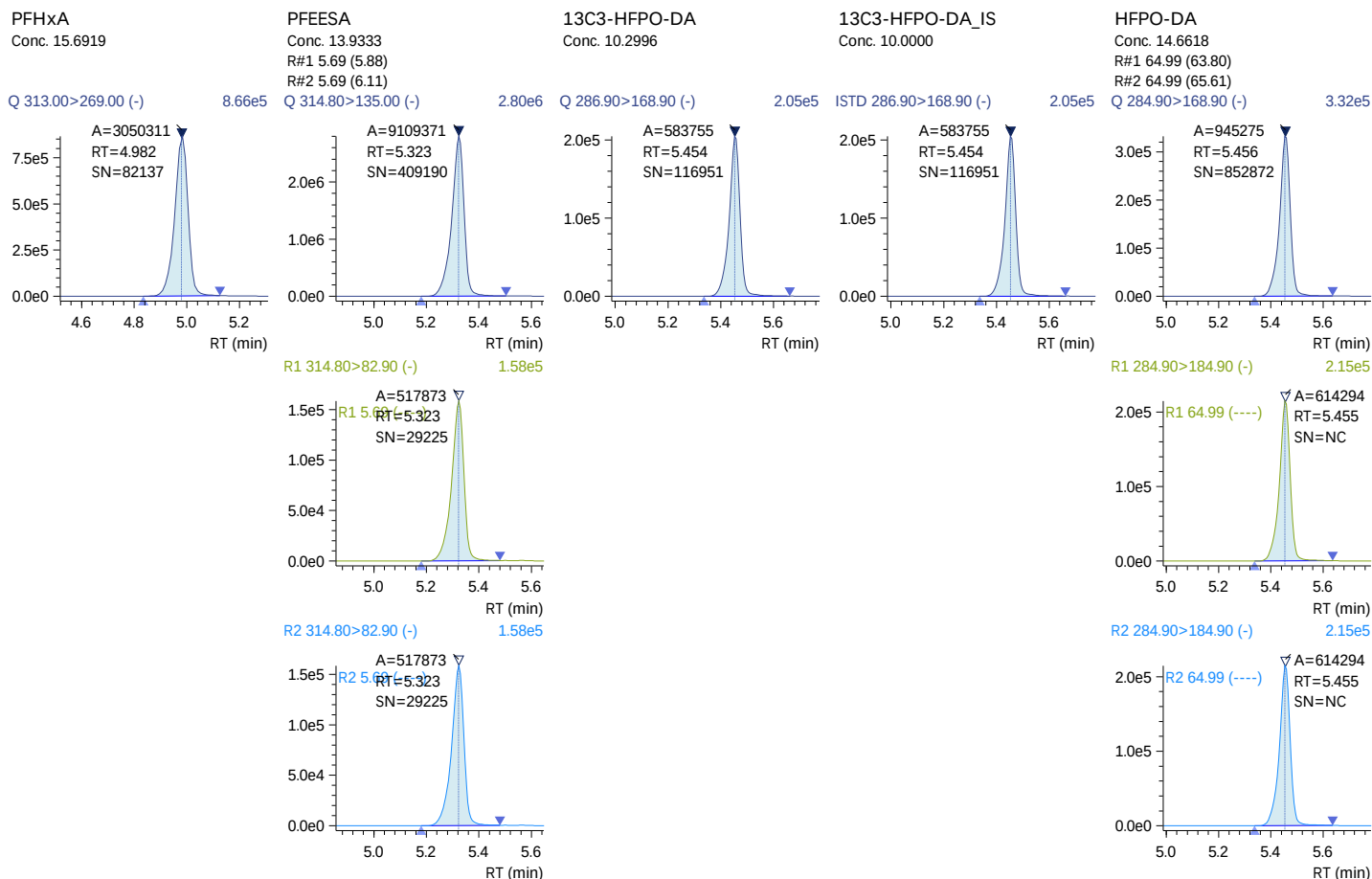
R2 295.00>84.90 (-)

2.15e5





240118_013 (continued)

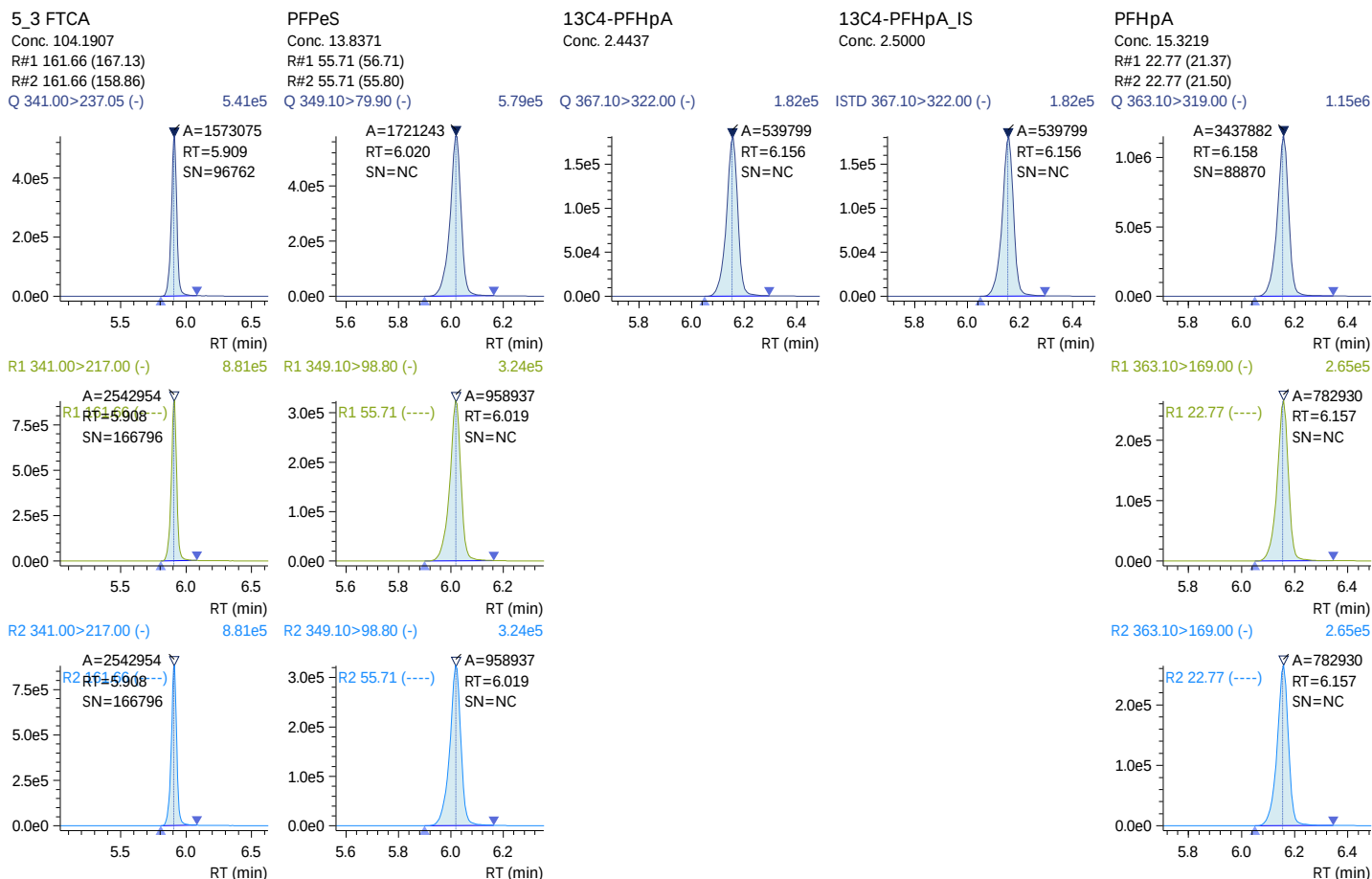


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_013 (continued)

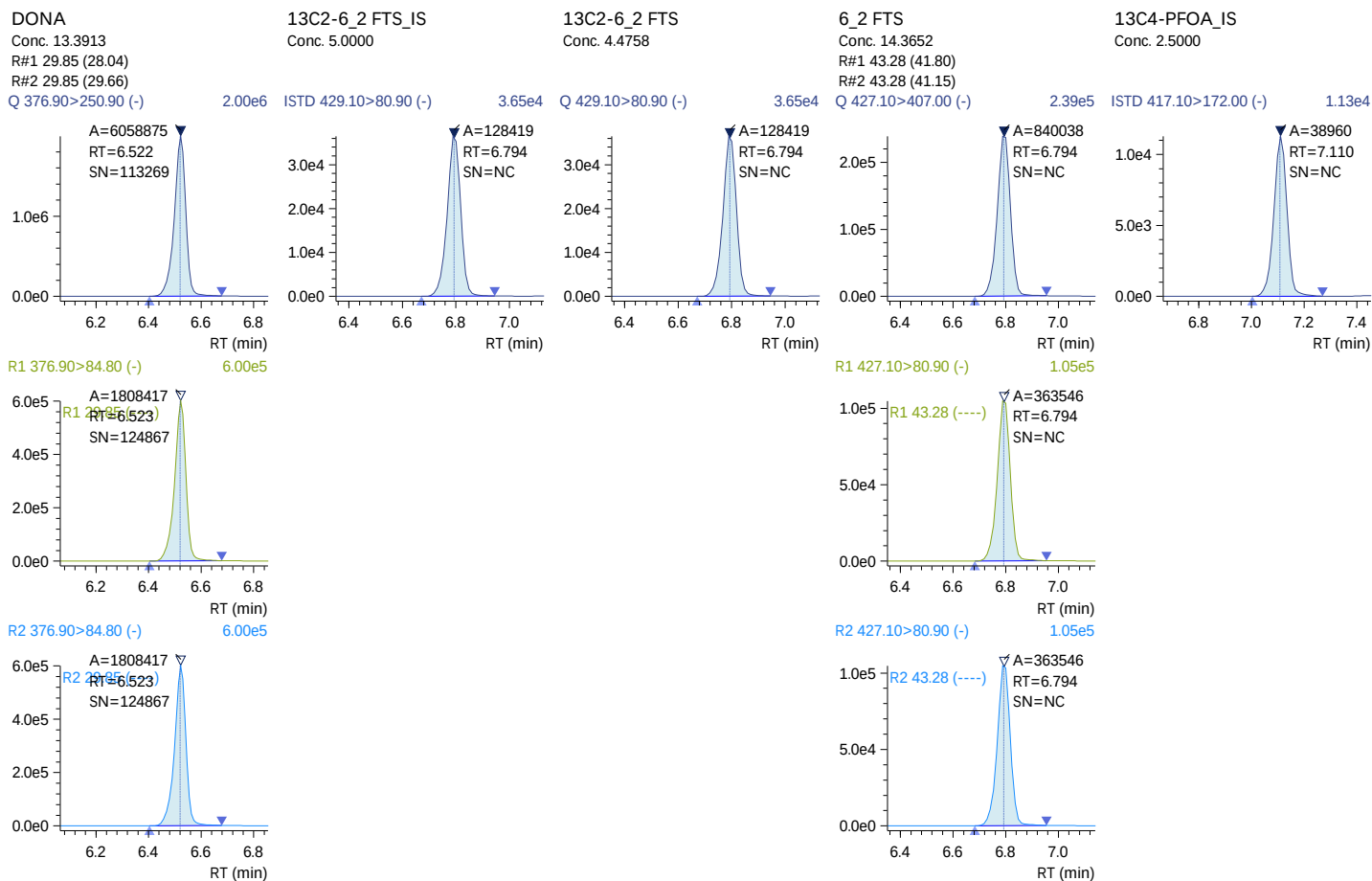


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
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240118_013 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
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240118_013 (continued)

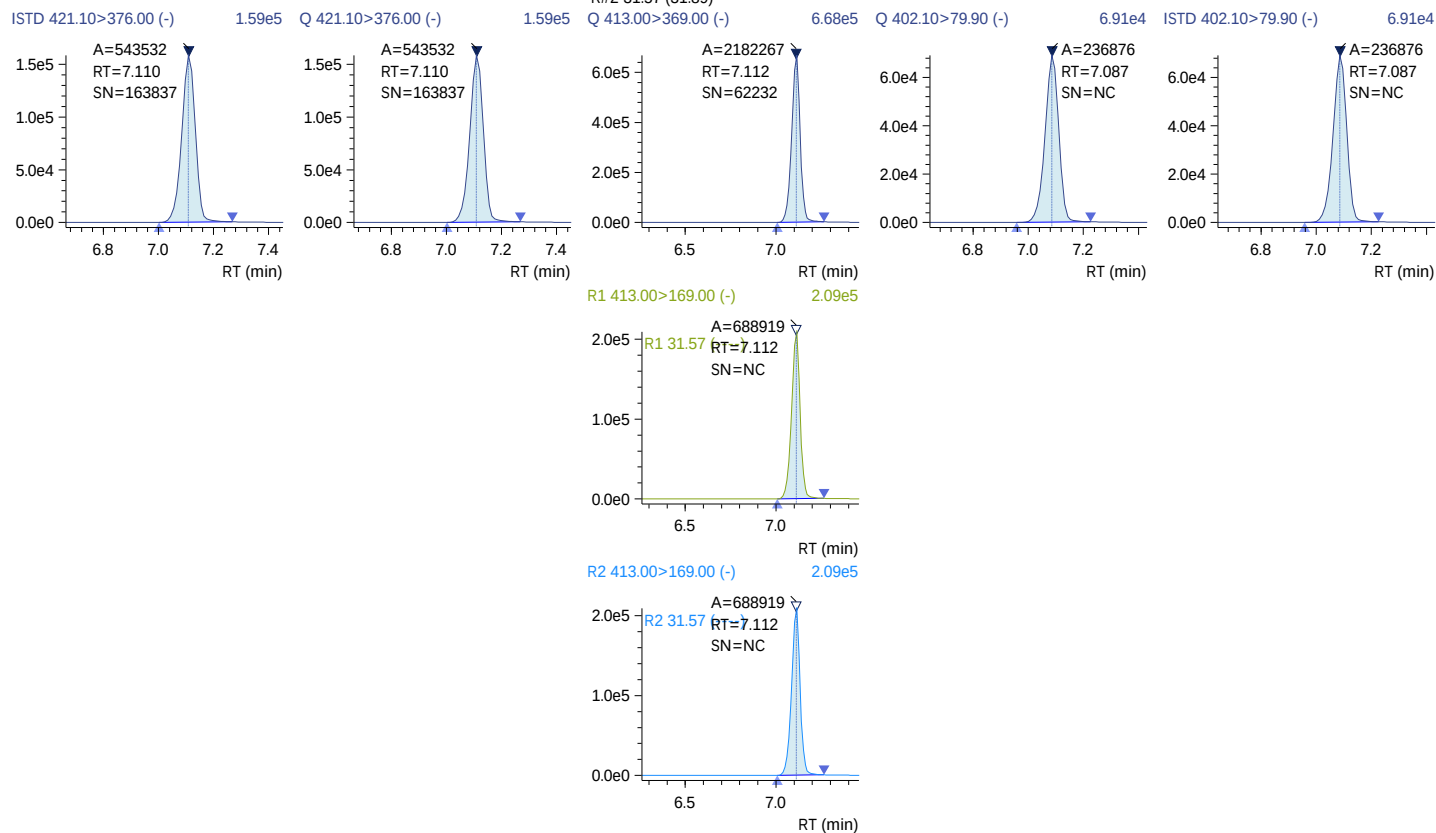
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.4960

PFOA
Conc. 15.5129
R#1 31.57 (29.05)
R#2 31.57 (31.89)

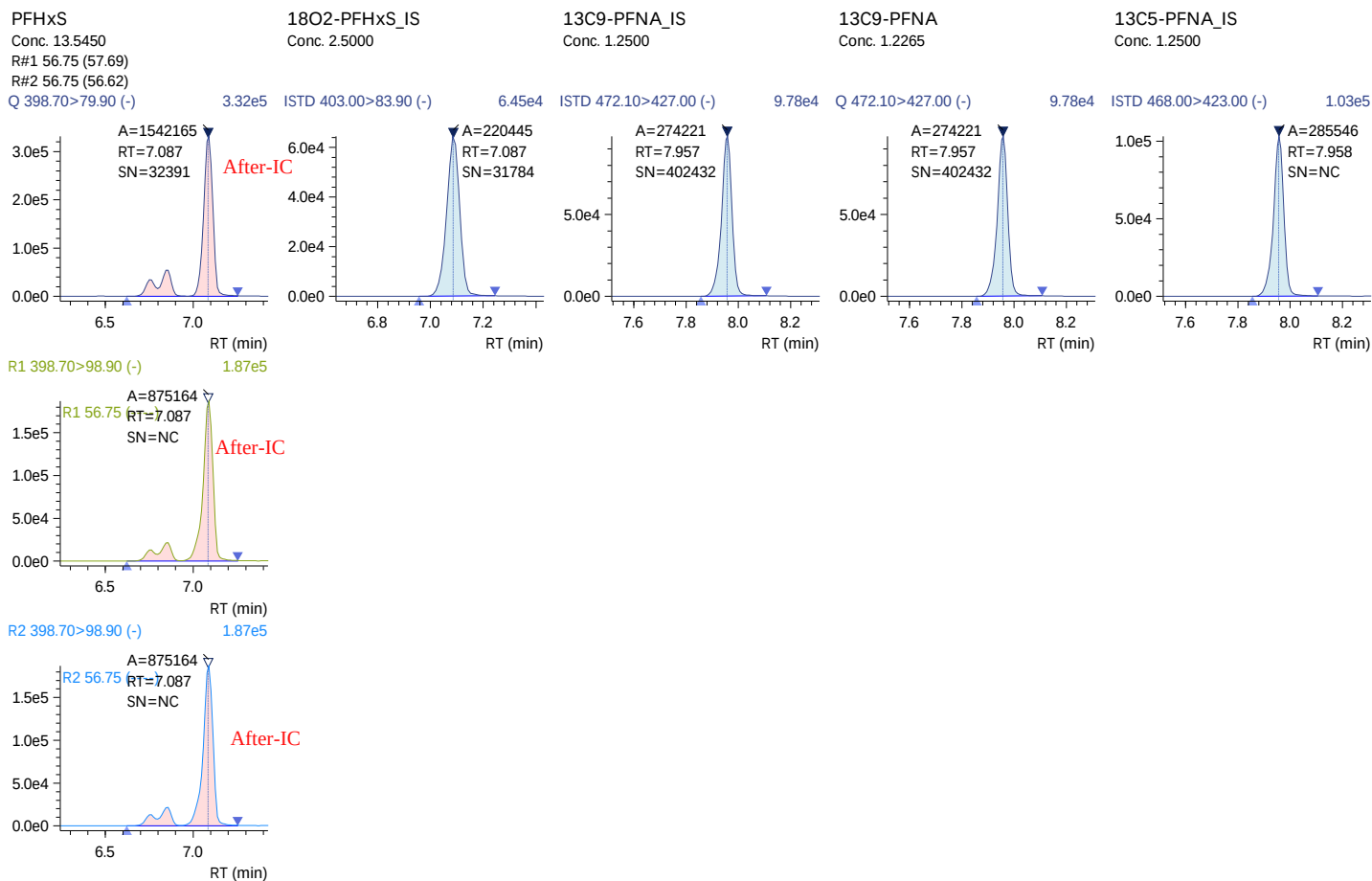
13C3-PFHxS
Conc. 2.5034

13C3-PFHxS_IS
Conc. 2.5000





240118_013 (continued)

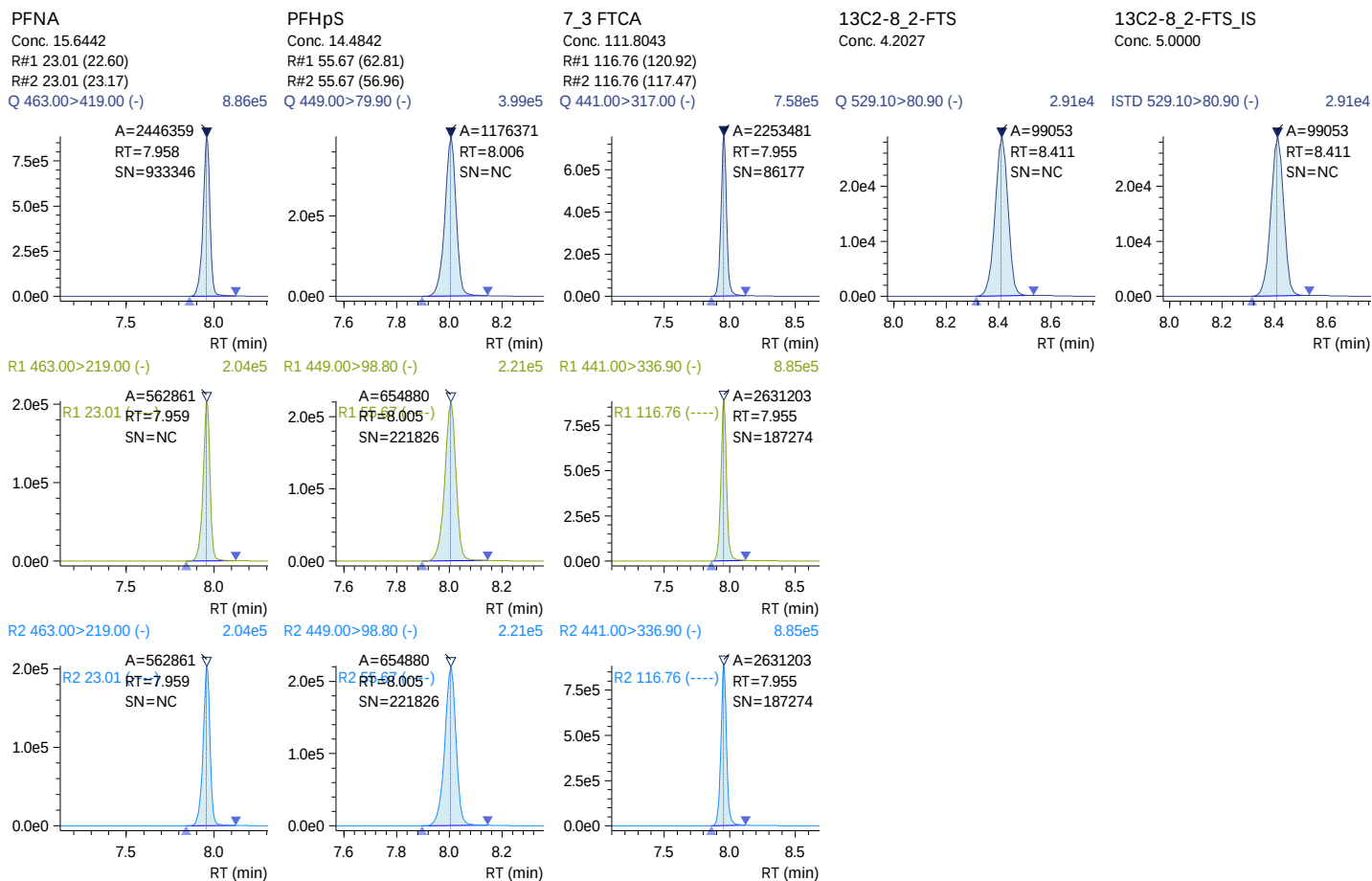


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_013 (continued)

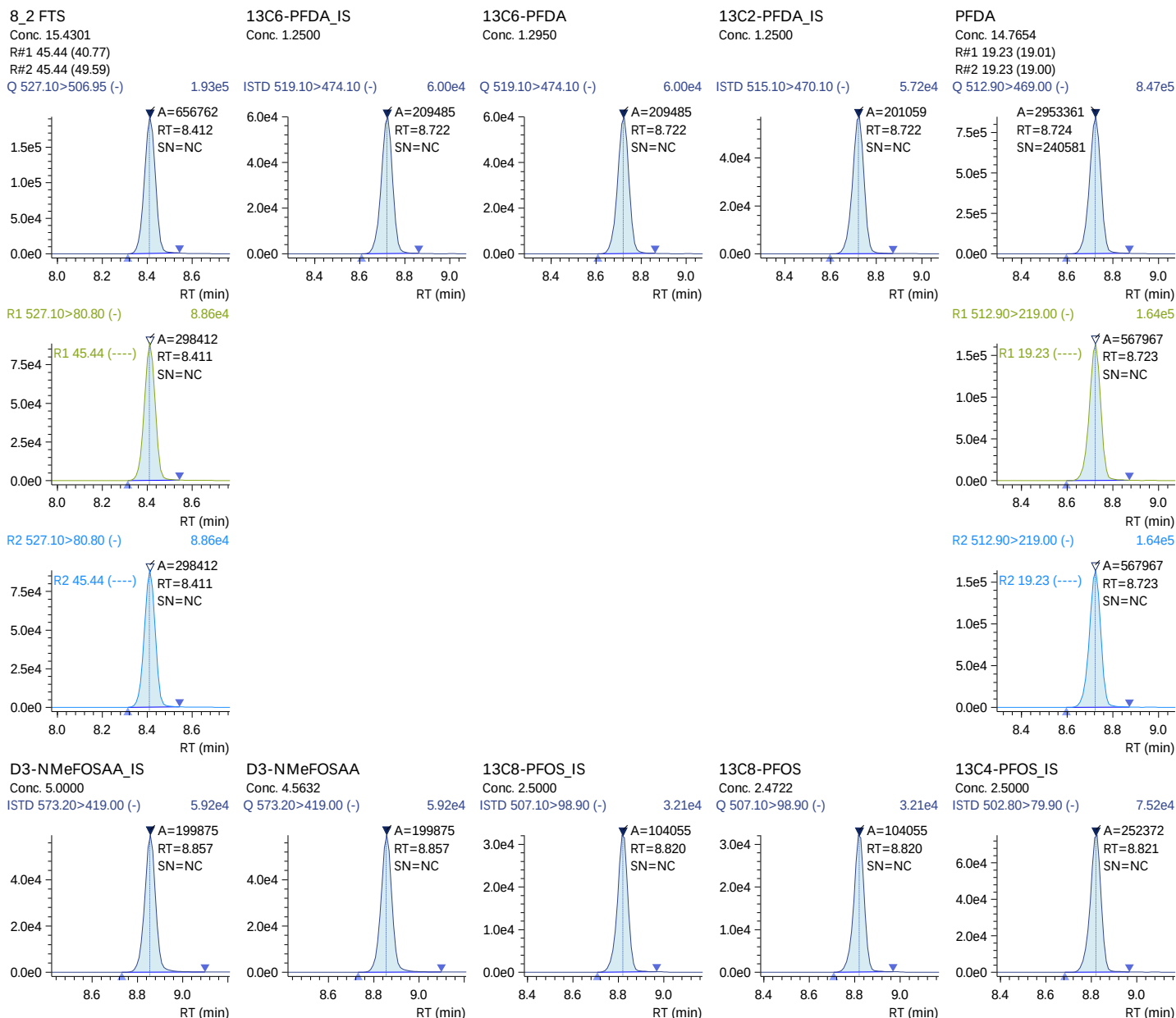


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_013 (continued)

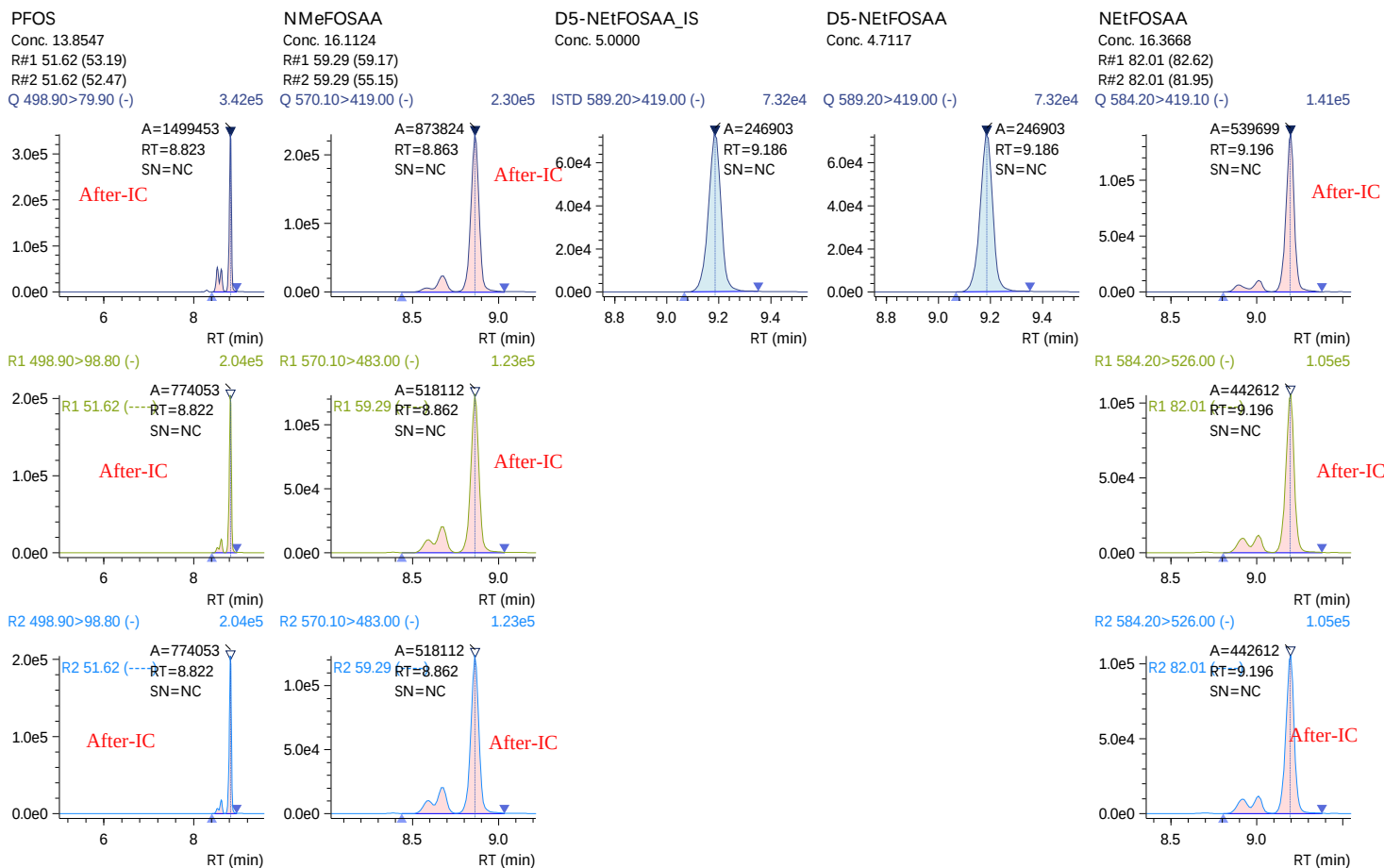


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_013 (continued)



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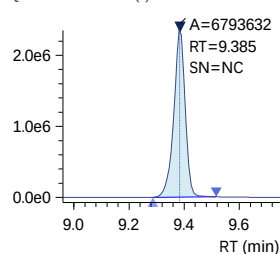
SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



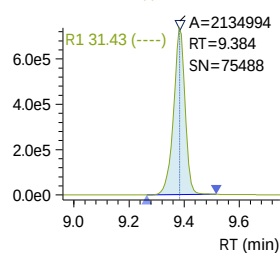
240118_013 (continued)

9-Cl-PF3ONS

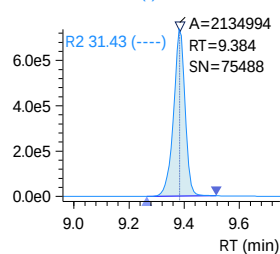
Conc. 14.1163
R#1 31.43 (31.76)
R#2 31.43 (32.76)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-)

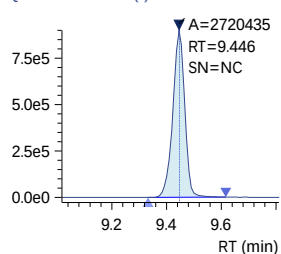


R2 532.80>353.00 (-)

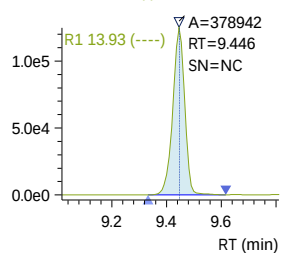


PFUnDA

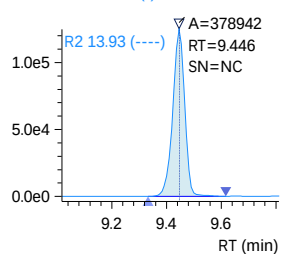
Conc. 15.3038
R#1 13.93 (12.31)
R#2 13.93 (13.12)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-)

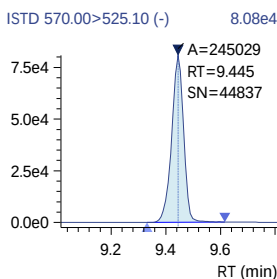


R2 563.10>269.10 (-)



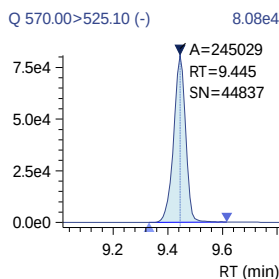
13C7-PFUnDA_IS

Conc. 1.2500



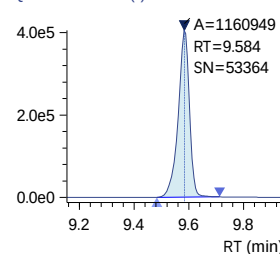
13C7-PFUnDA

Conc. 1.2699

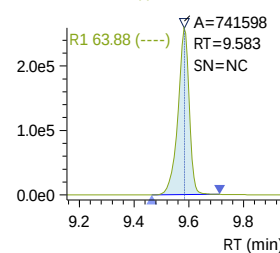


PFNS

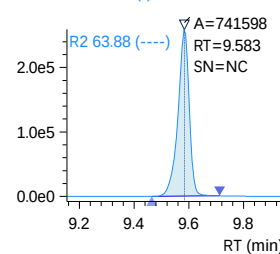
Conc. 14.6843
R#1 63.88 (63.31)
R#2 63.88 (65.22)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-)

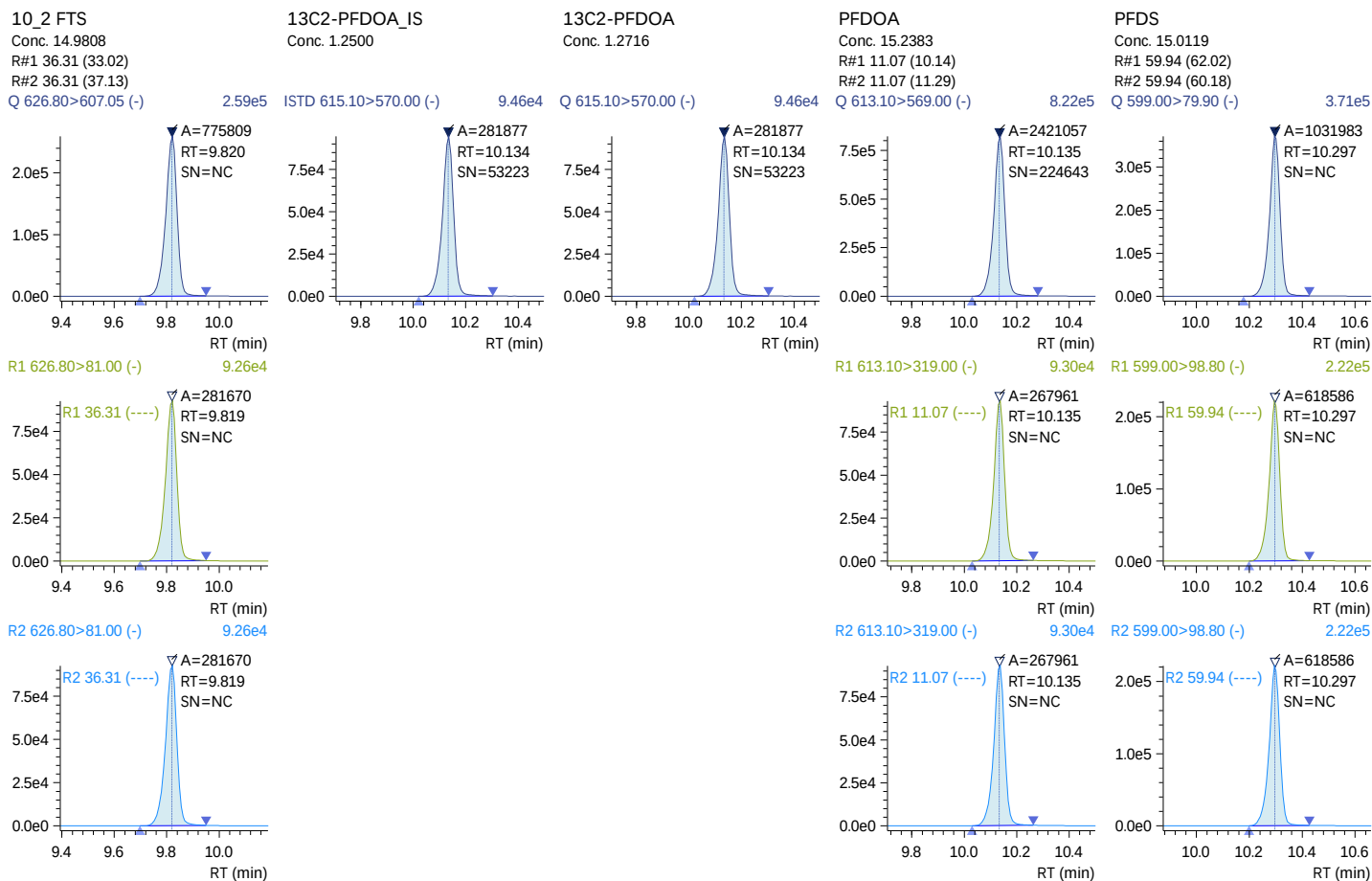


R2 548.80>98.80 (-)





240118_013 (continued)



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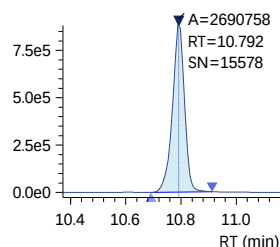
SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_013 (continued)

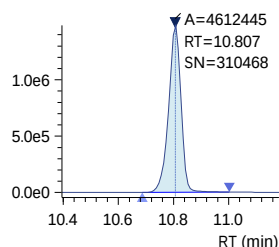
PFTTrDA

Conc. 15.5072
R#1 17.52 (15.12)
R#2 17.52 (17.64)
Q 663.00>619.00 (-)



11-Cl-PF3OUdS

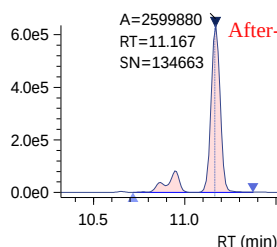
Conc. 14.2289
R#1 36.64 (36.61)
R#2 36.64 (36.44)
Q 630.90>451.00 (-)



PFOSAm

Conc. 29.6790

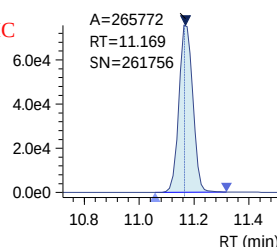
Q 498.10>77.90 (-)



13C8-PFOSAm

Conc. 2.4807

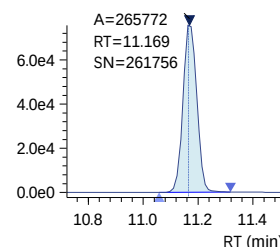
Q 506.10>77.80 (-)



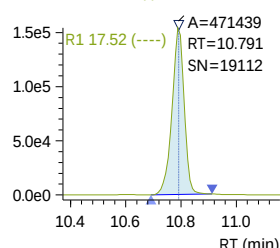
13C8-PFOSAm_IS

Conc. 2.5000

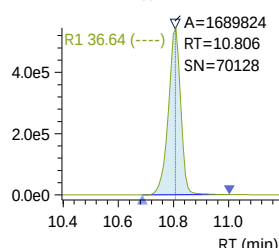
ISTD 506.10>77.80 (-)



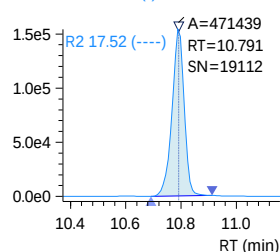
R1 663.00>168.90 (-)



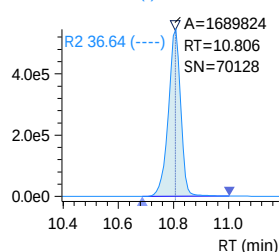
R1 632.90>452.90 (-)



R2 663.00>168.90 (-)

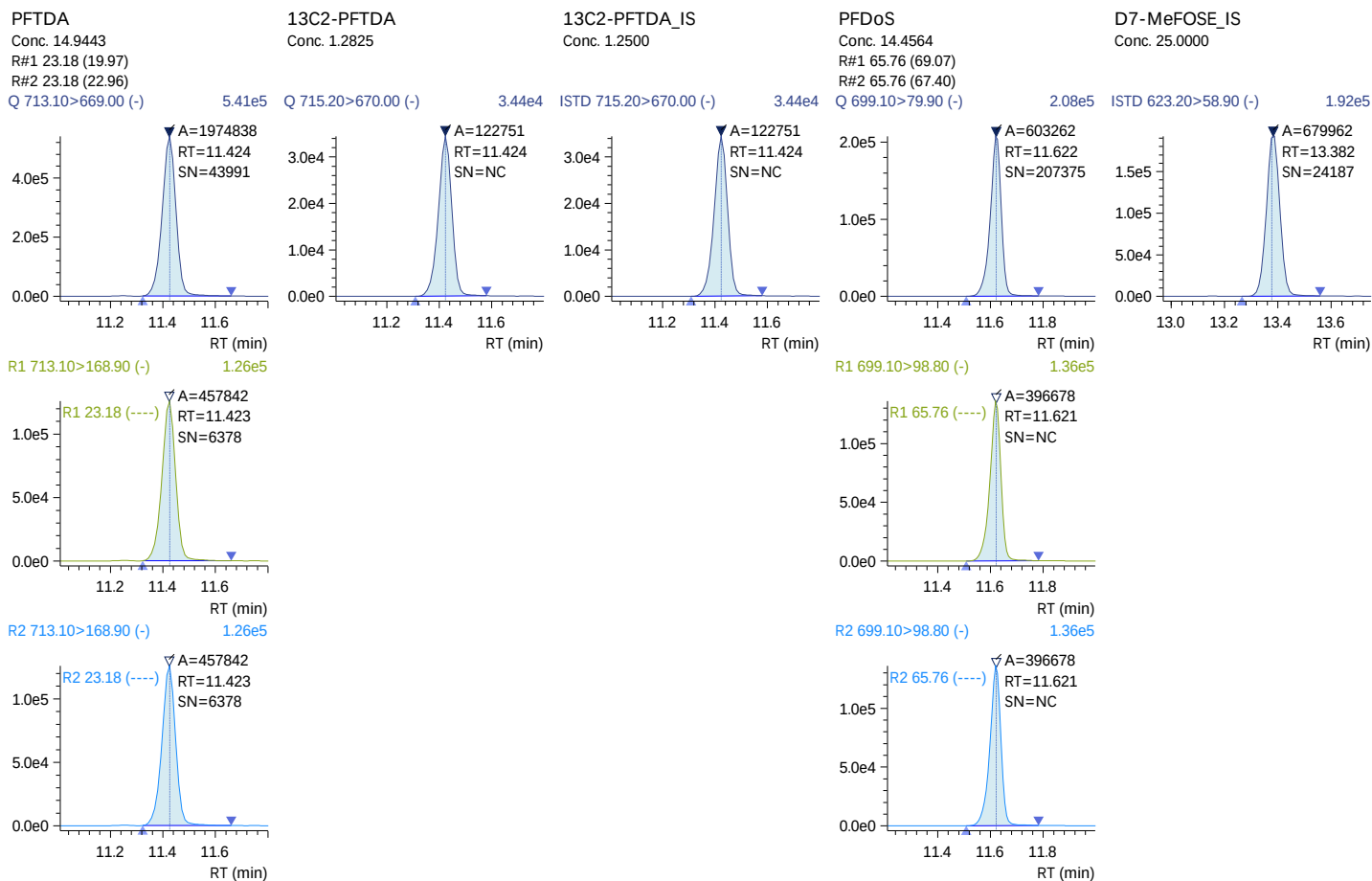


R2 632.90>452.90 (-)





240118_013 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_013 (continued)

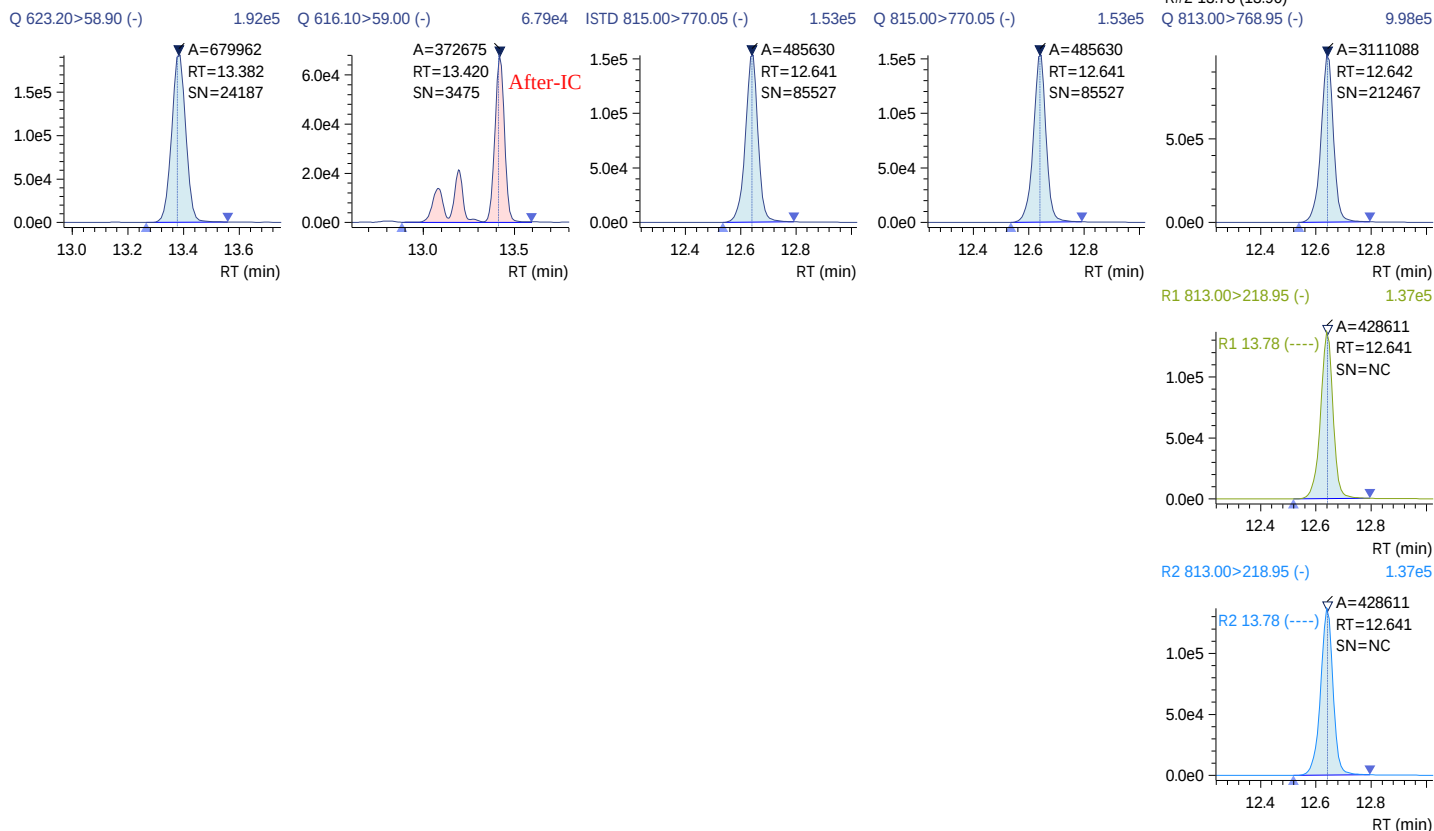
D7-MeFOSE
Conc. 25.7423

MeFOSE
Conc. 14.9240

13C2-PFHXA_IS
Conc. 2.5000

13C2-PFHXA
Conc. 2.6003

PFHXA
Conc. 15.5968
R#1 13.78 (11.64)
R#2 13.78 (13.90)





240118_013 (continued)

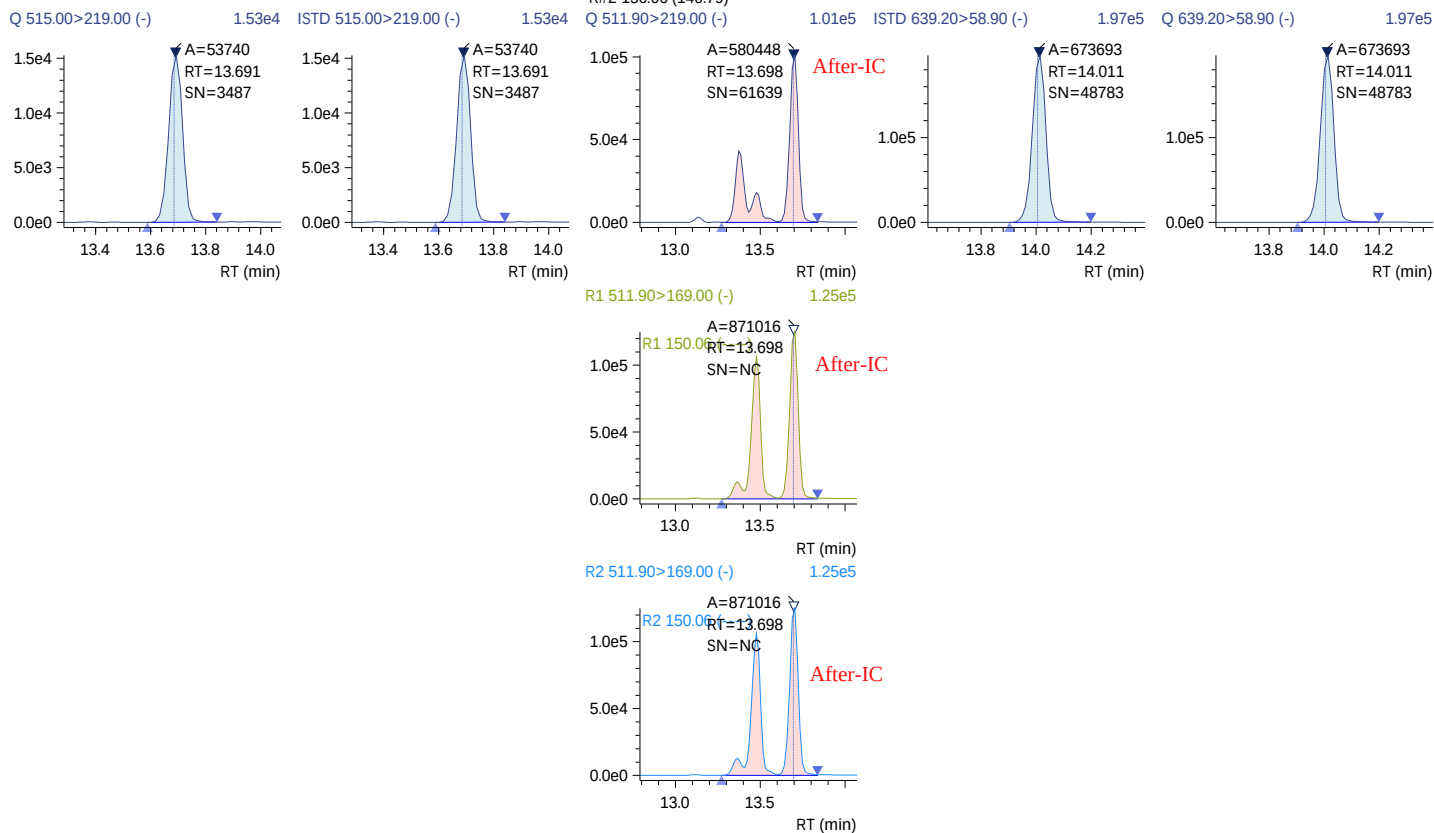
D3-MeFOSA
Conc. 2.4908

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. 14.9835
R#1 150.06 (149.05)
R#2 150.06 (140.79)

D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 25.1119

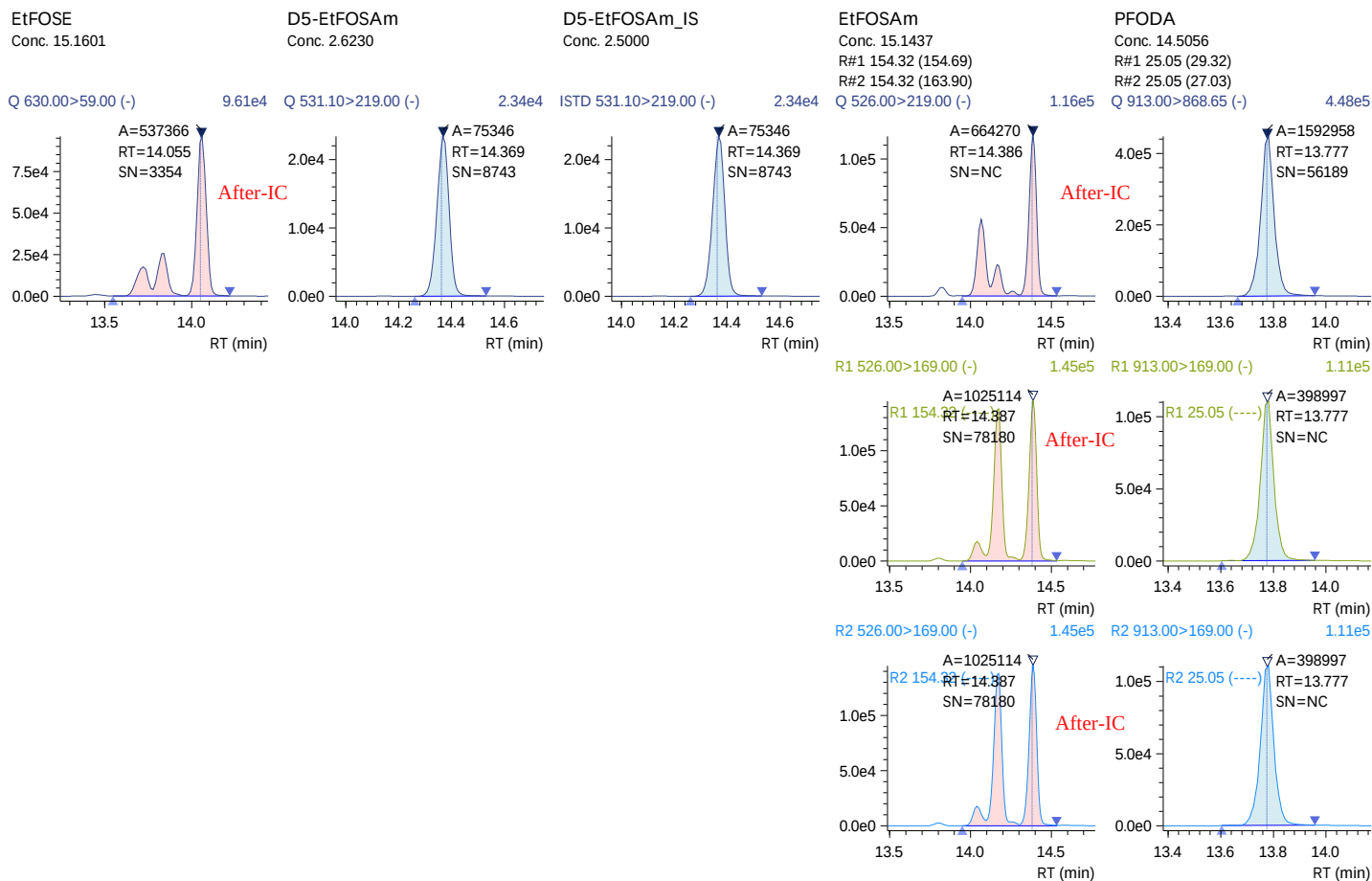


J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_013 (continued)



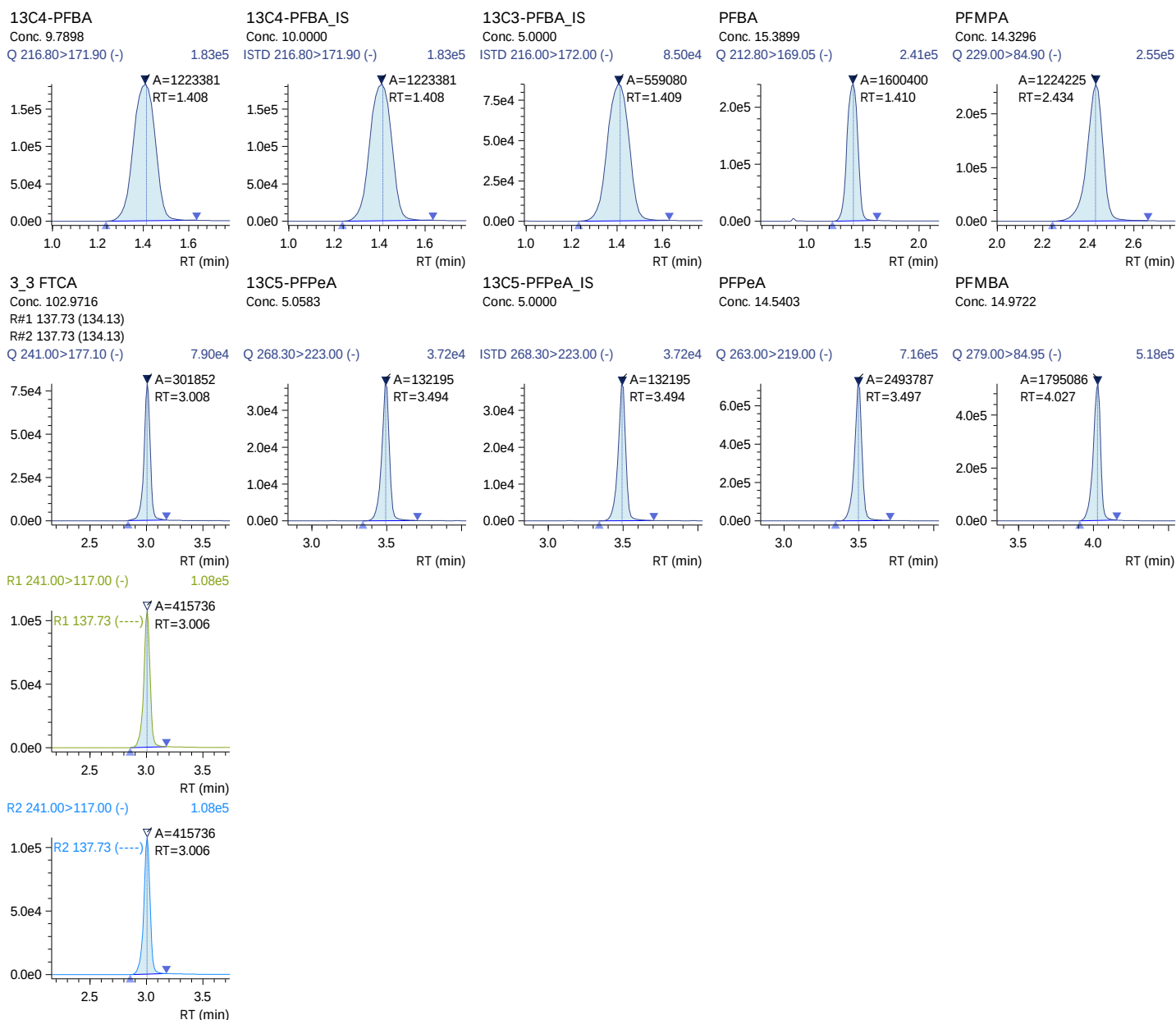
J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\lp

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_013

Sample ID: 1633 ICAL 15.0PPB
Date Acquired: 1/18/2024 4:47:18 PM
Acquired by: System Administrator
Data File: 240118_013
Vial: 8 | Inj. Volume: 10.0000uL | Tray: 1





240118_013 (continued)

13C2-4_2 FTS
Conc. 3.9819

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. 14.2724
R#1 30.07 (34.14)
R#2 30.07 (34.14)

13C3-PFBS_IS
Conc. 2.5000

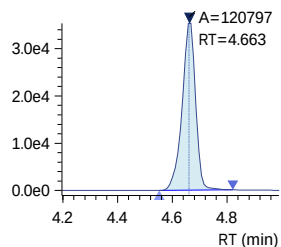
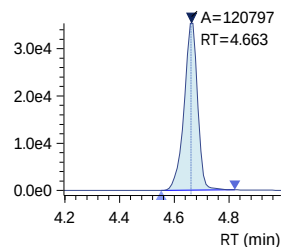
PFBS
Conc. 13.3801
R#1 47.08 (47.53)
R#2 47.08 (47.53)

Q 329.10>80.90 (-)

3.54e4

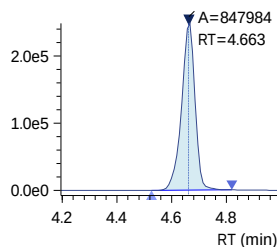
ISTD 329.10>80.90 (-)

3.54e4



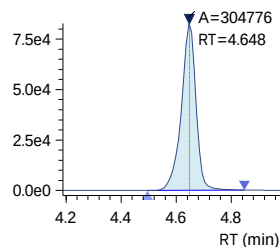
Q 327.10>307.00 (-)

2.49e5



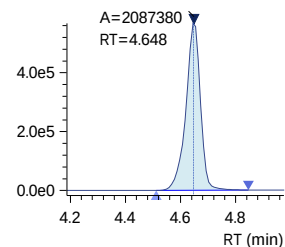
ISTD 302.10>79.90 (-)

8.28e4



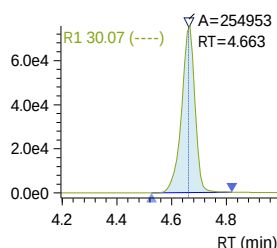
Q 298.70>79.90 (-)

5.68e5



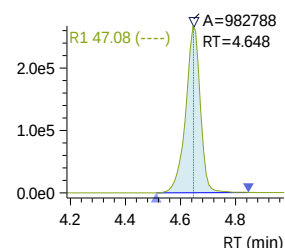
R1 327.10>80.90 (-)

7.58e4



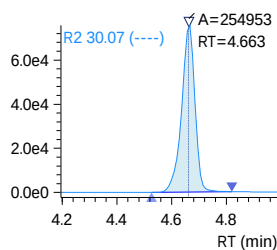
R1 298.70>98.80 (-)

2.67e5



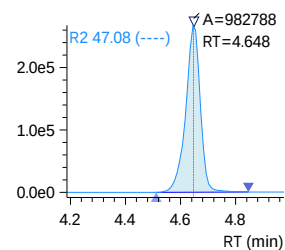
R2 327.10>80.90 (-)

7.58e4



R2 298.70>98.80 (-)

2.67e5





240118_013 (continued)

13C3-PFBS
 Conc. 2.4362

NFDHA
 Conc. 15.2050
 R#1 37.78 (37.88)
 R#2 37.78 (37.88)

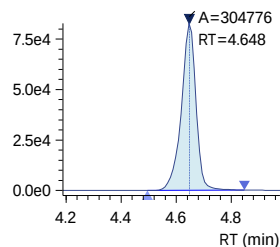
13C5-PFHxA
 Conc. 2.3921

13C5-PFHxA_IS
 Conc. 2.5000

13C2-PFHxA_IS
 Conc. 2.5000

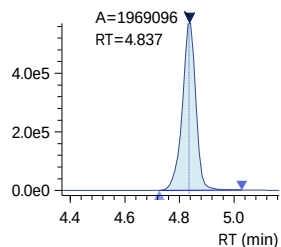
Q 302.10>79.90 (-)

8.28e4



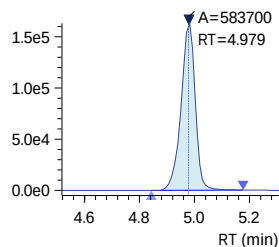
Q 295.00>201.00 (-)

5.70e5



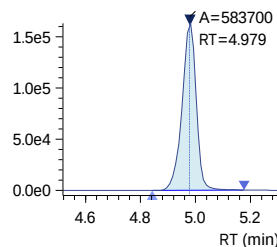
Q 318.00>273.00 (-)

1.63e5



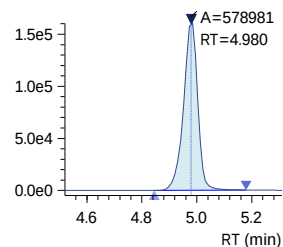
ISTD 318.00>273.00 (-)

1.63e5



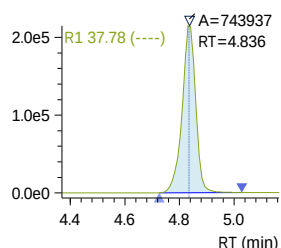
ISTD 315.10>270.00 (-)

1.60e5



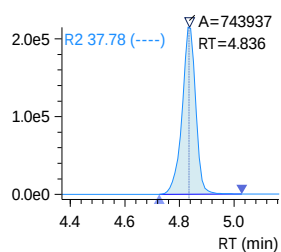
R1 295.00>84.90 (-)

2.15e5



R2 295.00>84.90 (-)

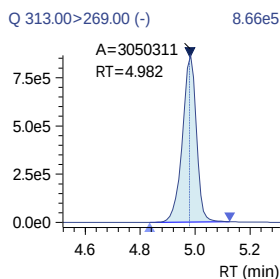
2.15e5



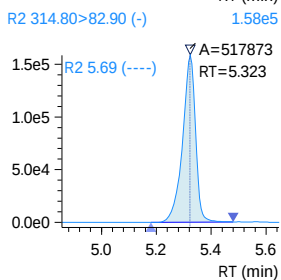
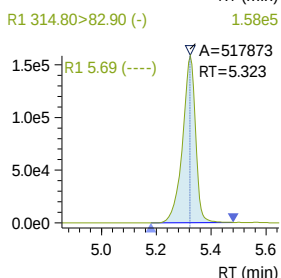
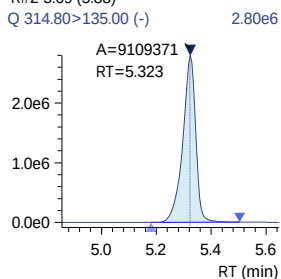


240118_013 (continued)

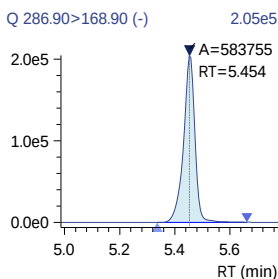
PFHxA
Conc. 15.6702



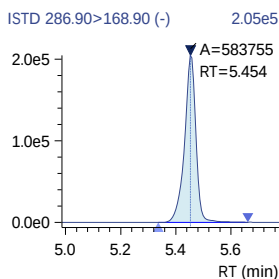
PFEESA
Conc. 13.9333
R#1 5.69 (5.88)
R#2 5.69 (5.88)



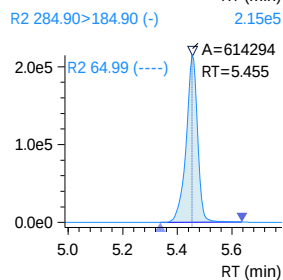
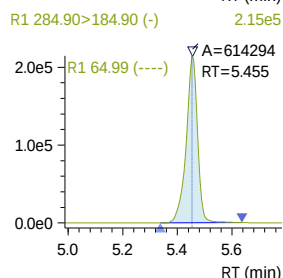
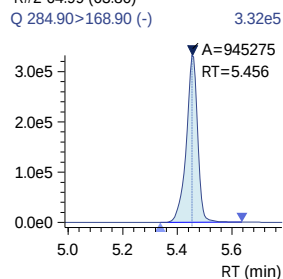
13C3-HFPO-DA
Conc. 10.2996



13C3-HFPO-DA_IS
Conc. 10.0000

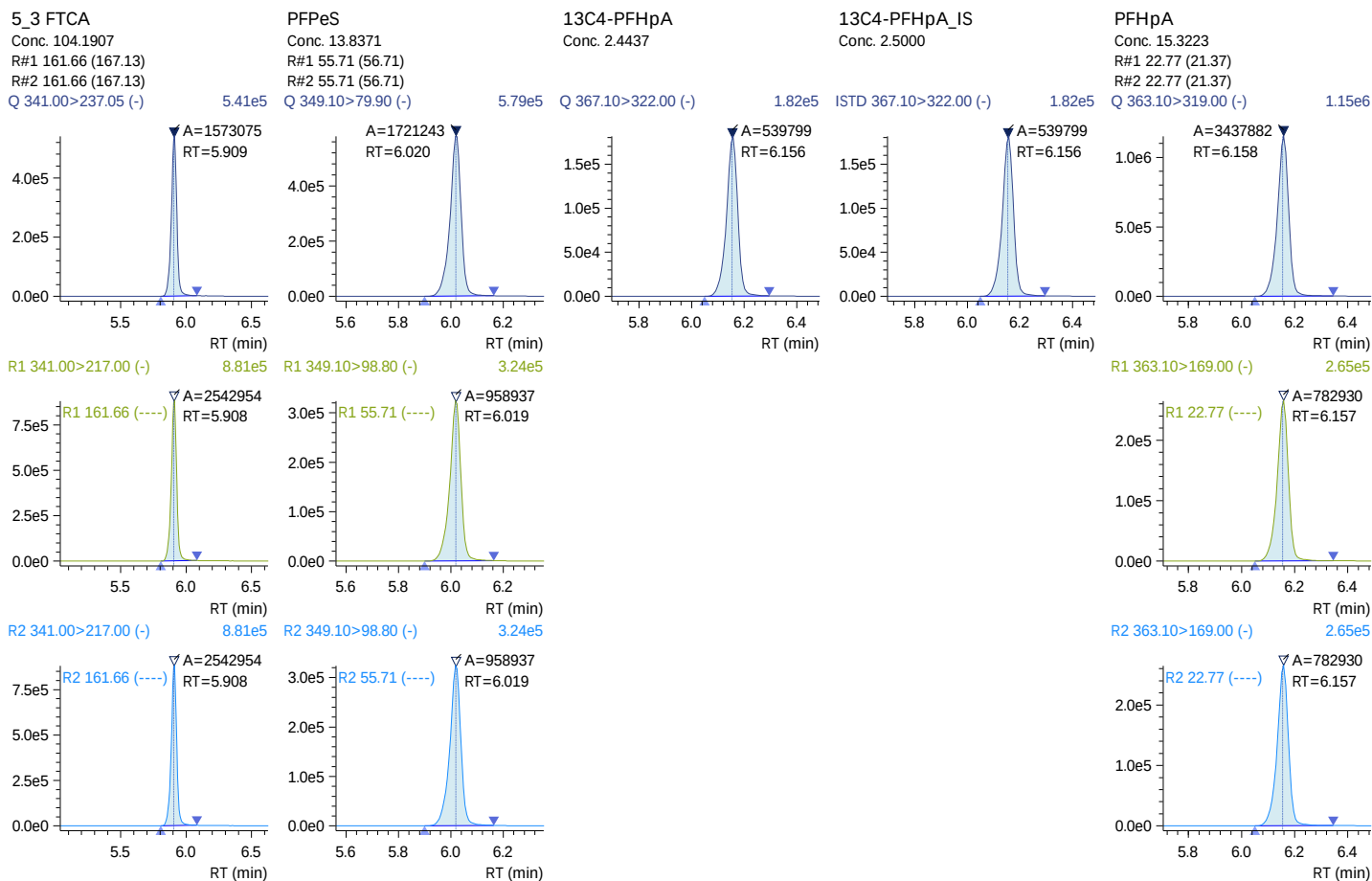


HFPO-DA
Conc. 14.6879
R#1 64.99 (63.80)
R#2 64.99 (63.80)



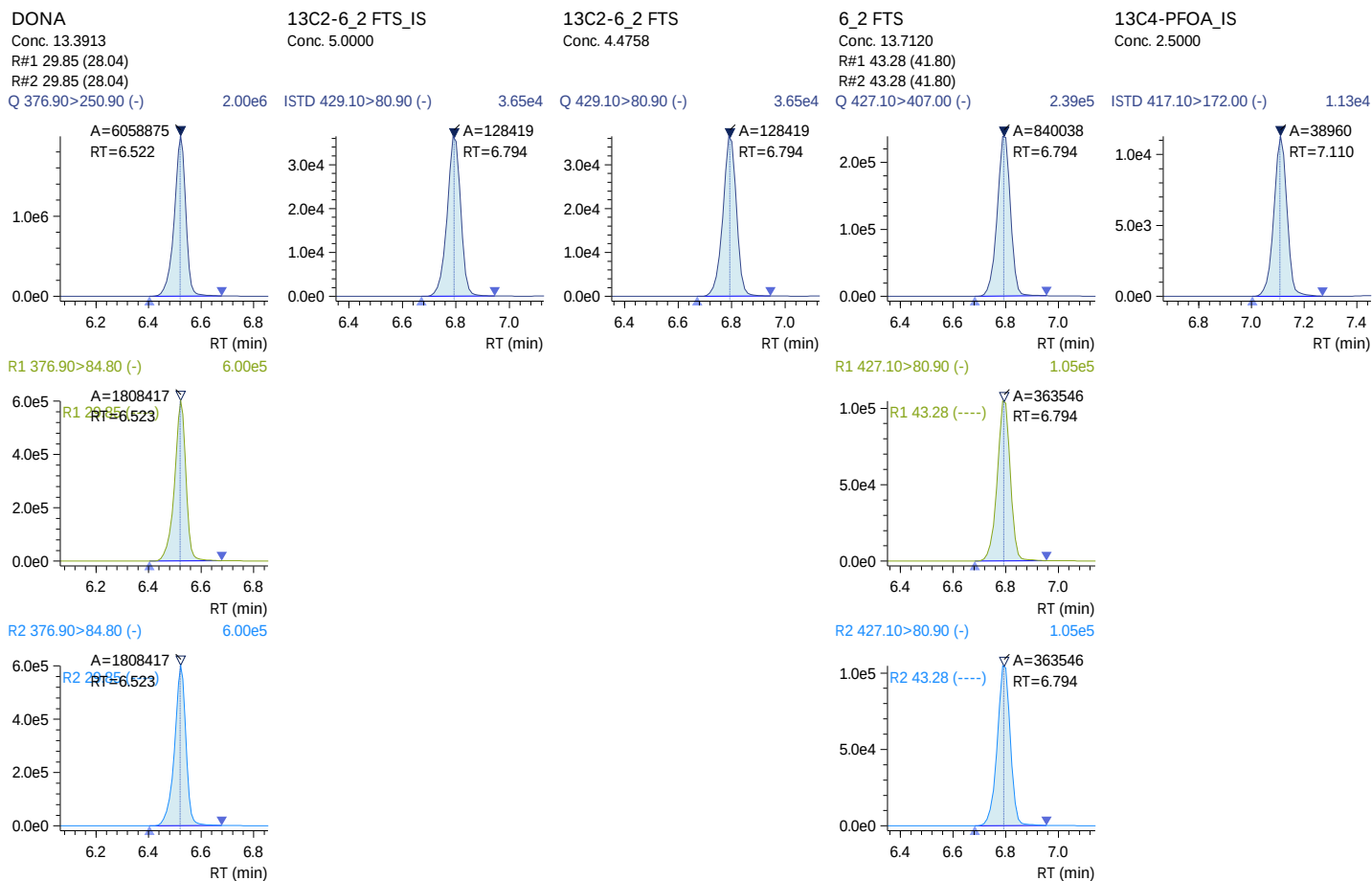


240118_013 (continued)





240118_013 (continued)





240118_013 (continued)

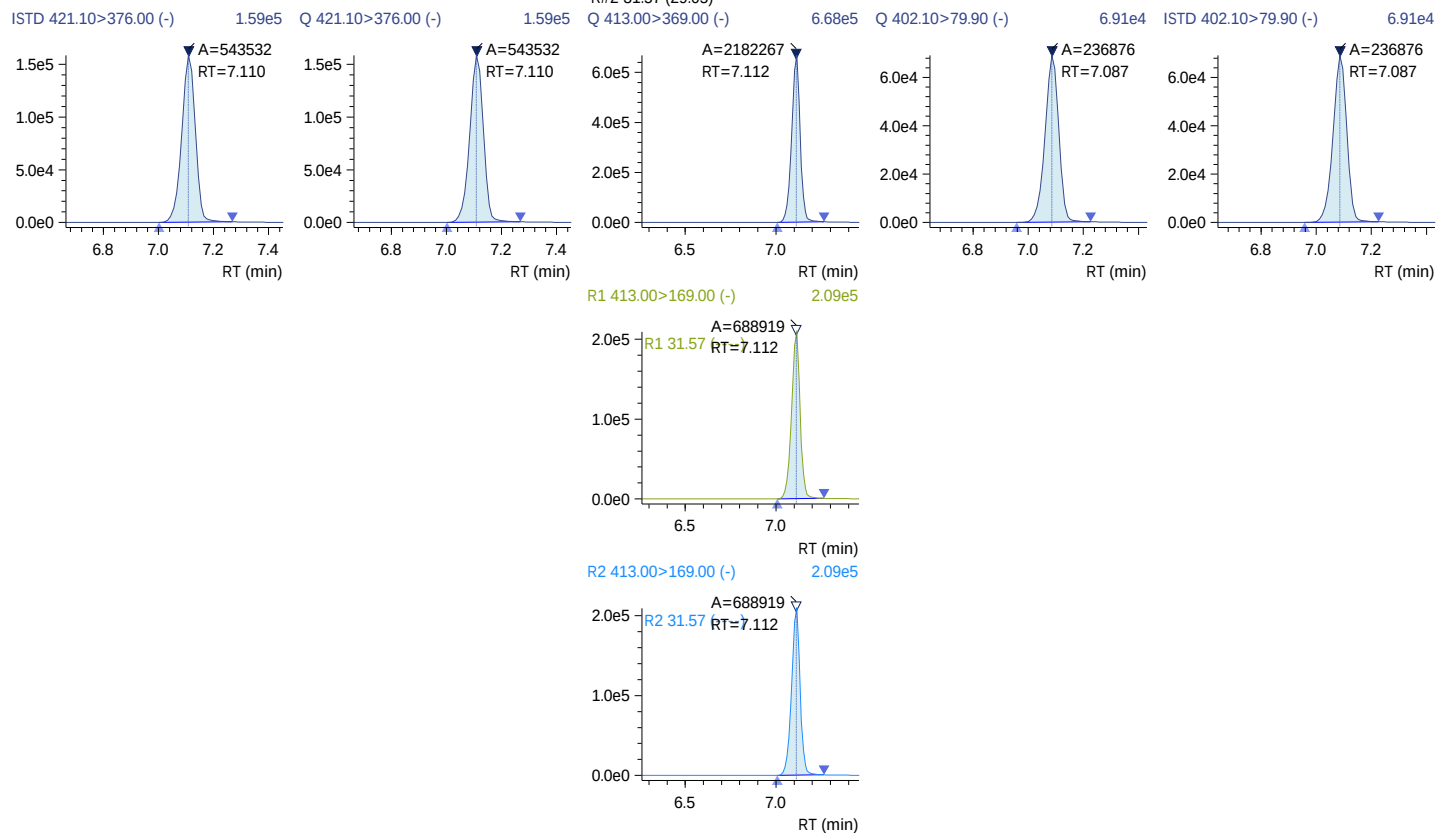
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.4960

PFOA
Conc. 15.5129
R#1 31.57 (29.05)
R#2 31.57 (29.05)

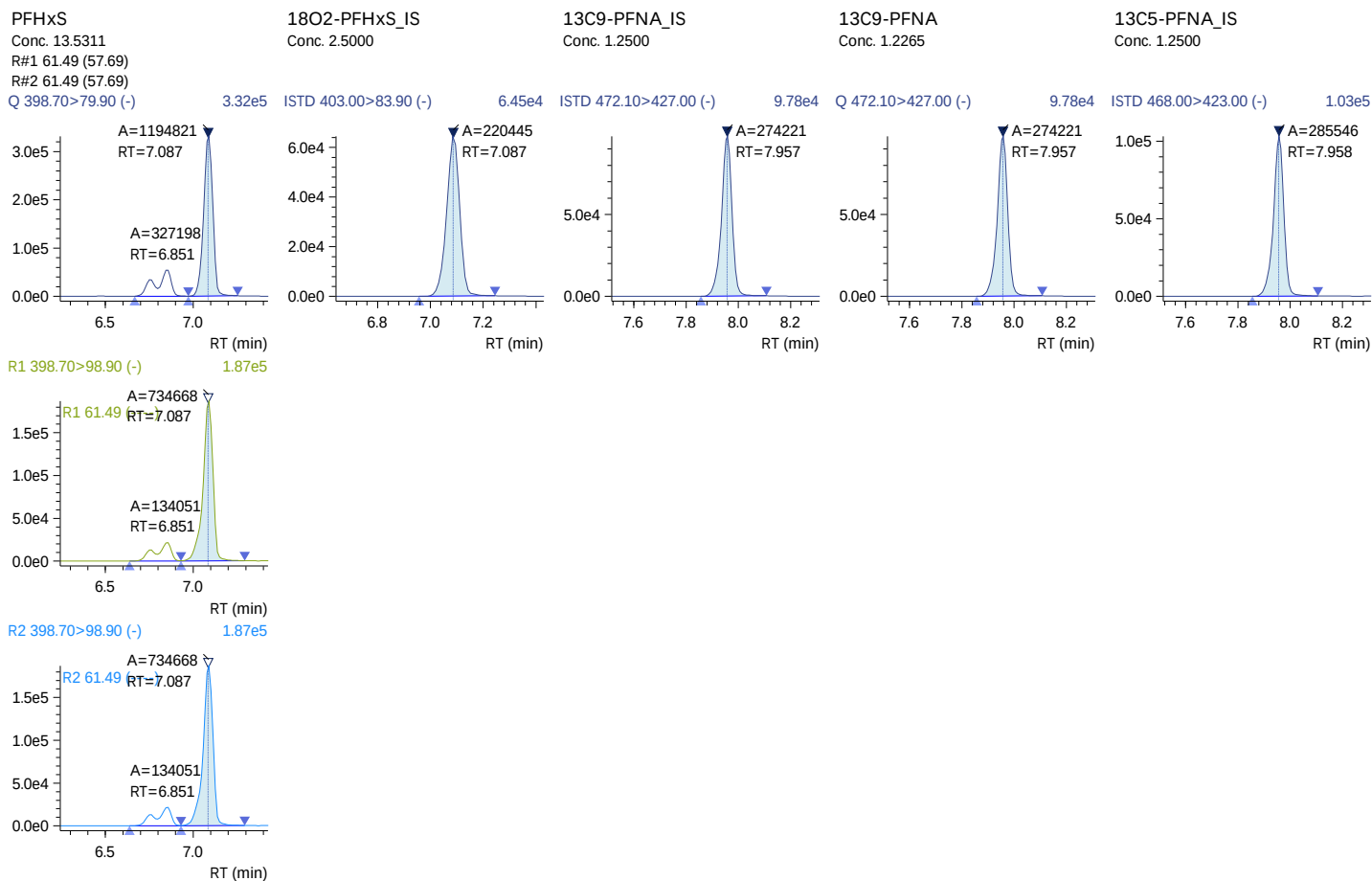
13C3-PFHxS
Conc. 2.5034

13C3-PFHxS_IS
Conc. 2.5000



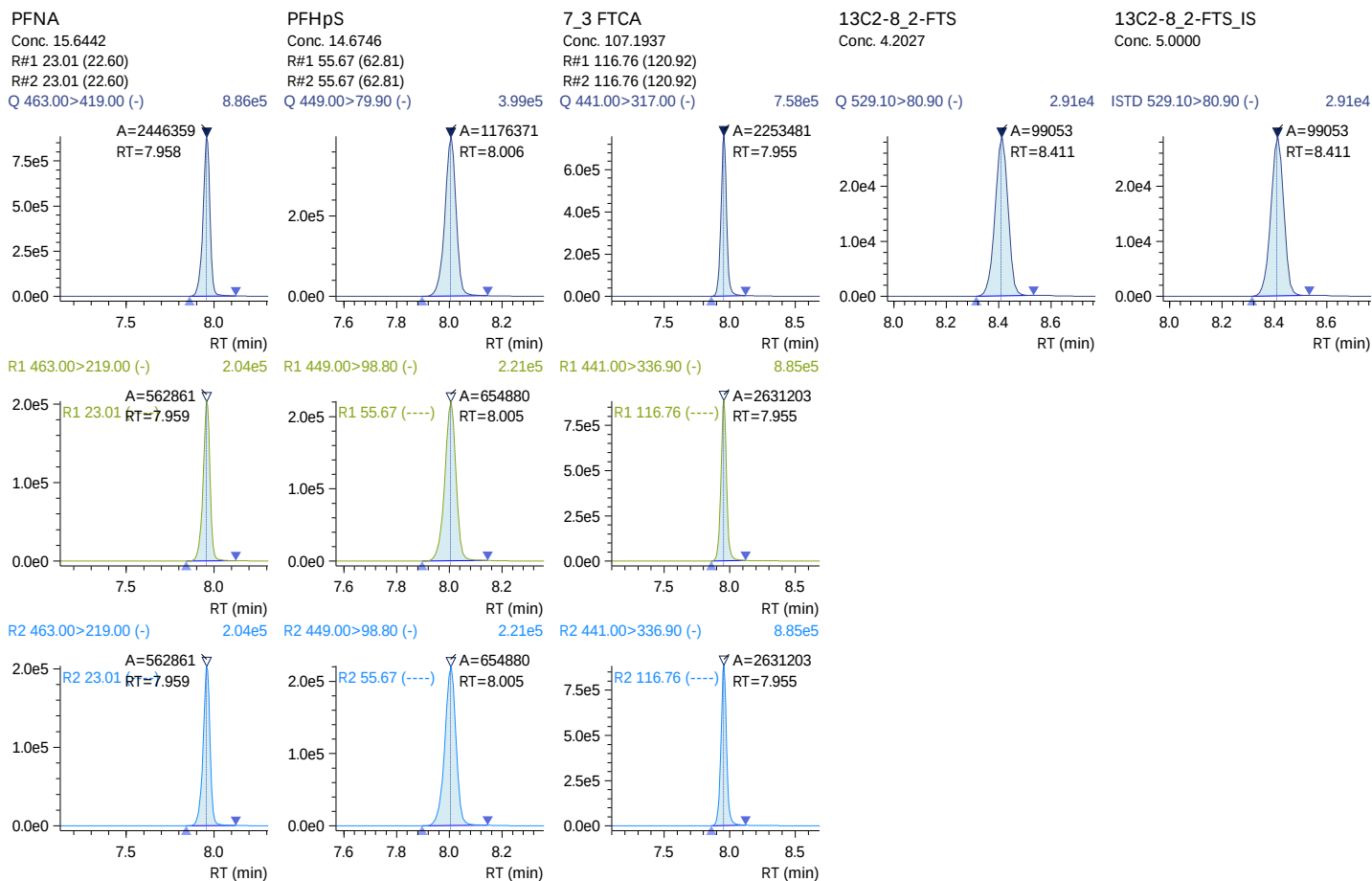


240118_013 (continued)



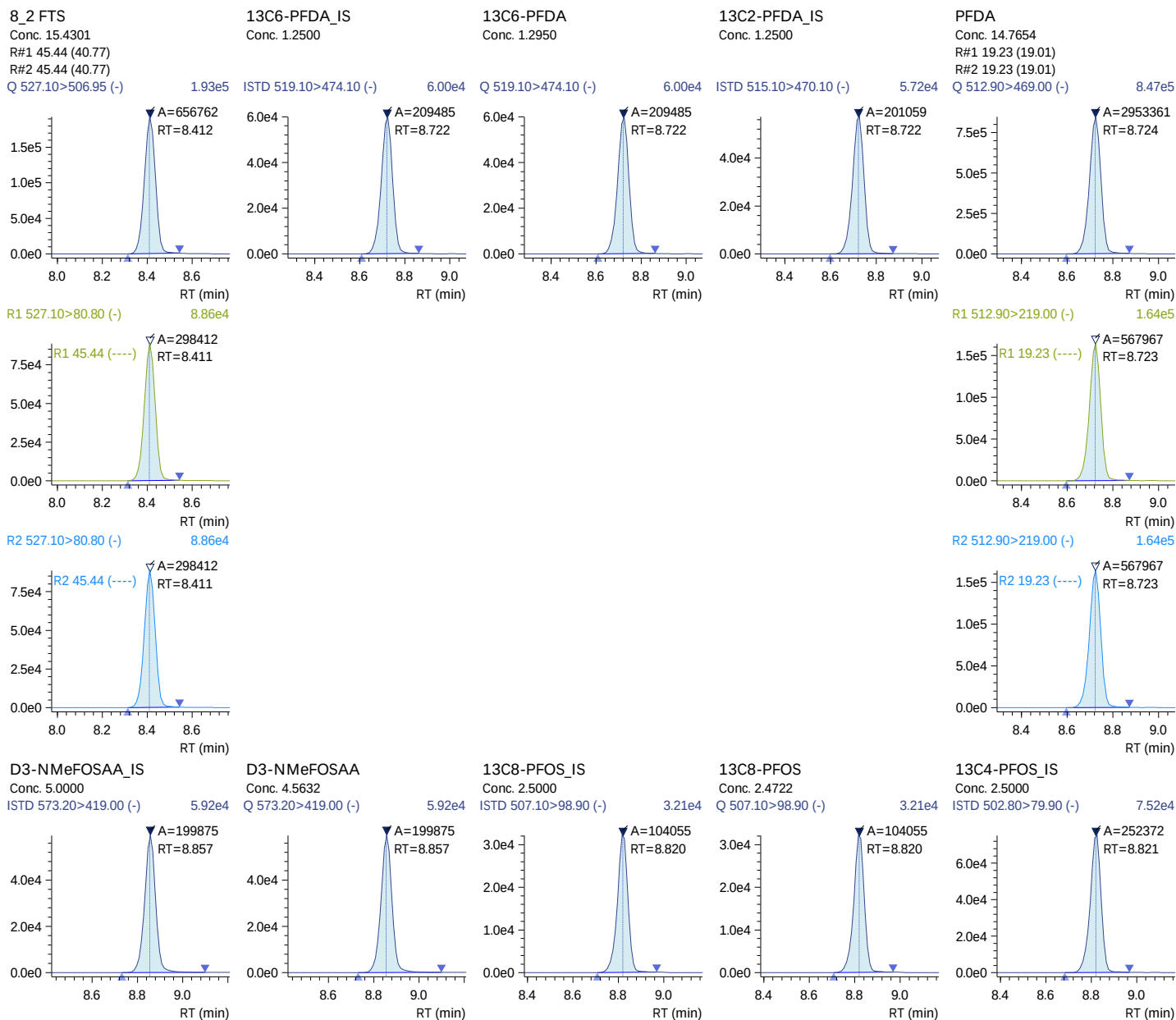


240118_013 (continued)



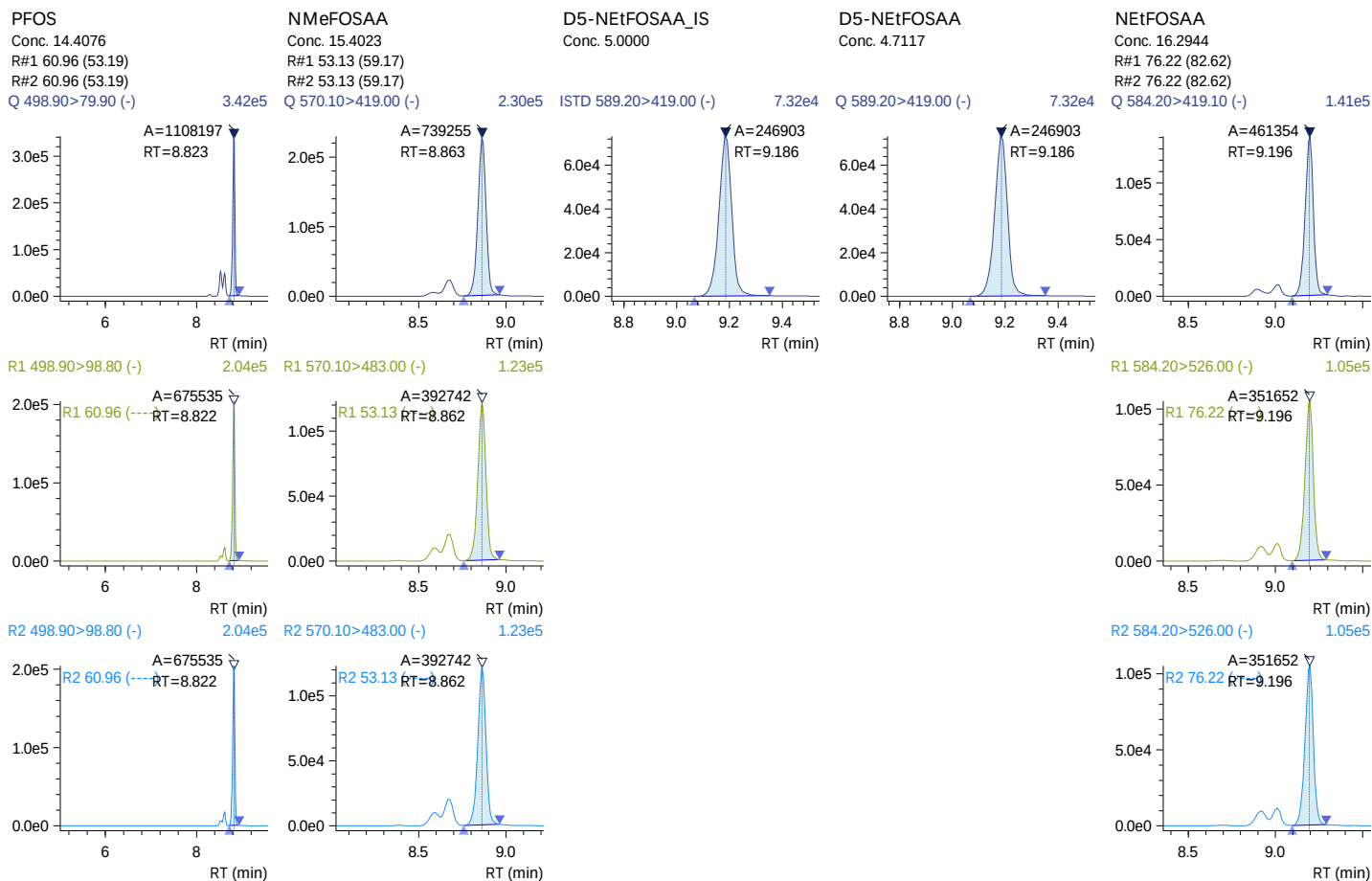


240118_013 (continued)





240118_013 (continued)

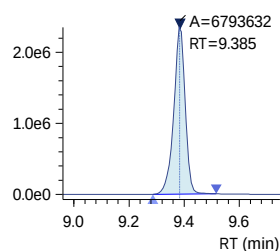




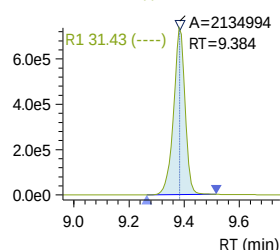
240118_013 (continued)

9-Cl-PF3ONS

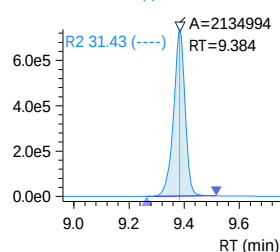
Conc. 14.1163
R#1 31.43 (31.76)
R#2 31.43 (31.76)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-) 7.37e5

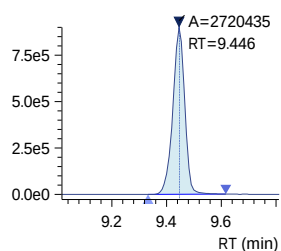


R2 532.80>353.00 (-) 7.37e5

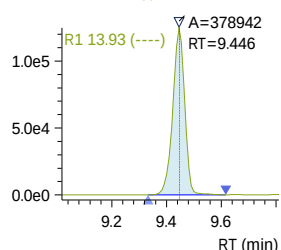


PFUnDA

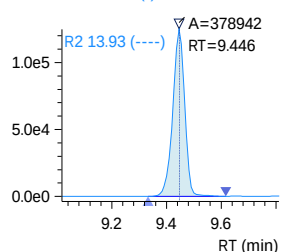
Conc. 15.3038
R#1 13.93 (12.31)
R#2 13.93 (12.31)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-) 1.25e5

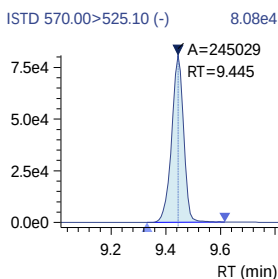


R2 563.10>269.10 (-) 1.25e5



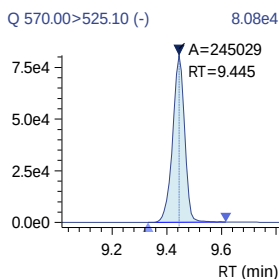
13C7-PFUnDA_IS

Conc. 1.2500



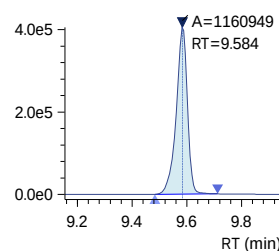
13C7-PFUnDA

Conc. 1.2699

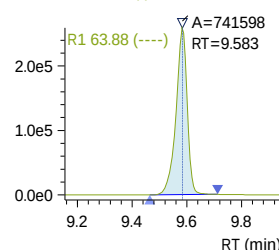


PFNS

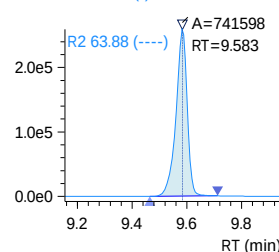
Conc. 14.6843
R#1 63.88 (63.31)
R#2 63.88 (63.31)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-) 2.59e5



R2 548.80>98.80 (-) 2.59e5





240118_013 (continued)

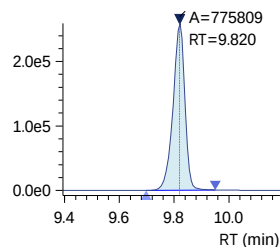
10_2_FTS

Conc. 15.4908

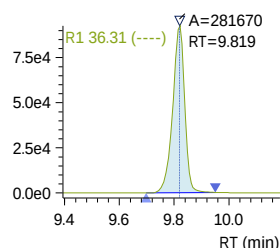
R#1 36.31 (33.02)

R#2 36.31 (33.02)

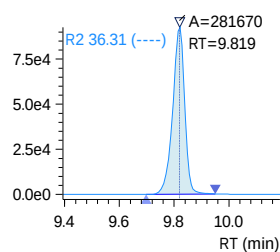
Q 626.80>607.05 (-)



R1 626.80>81.00 (-) 9.26e4



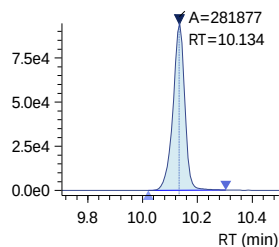
R2 626.80>81.00 (-) 9.26e4



13C2-PFDOA_IS

Conc. 1.2500

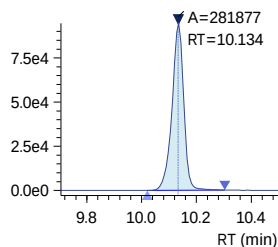
ISTD 615.10>570.00 (-)



13C2-PFDOA

Conc. 1.2716

Q 615.10>570.00 (-)



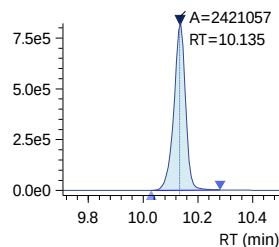
PFDOA

Conc. 15.2383

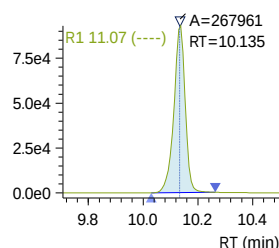
R#1 11.07 (10.14)

R#2 11.07 (10.14)

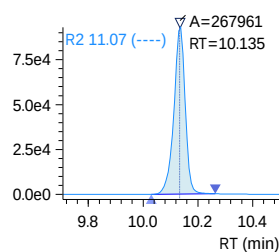
Q 613.10>569.00 (-)



R1 613.10>319.00 (-) 9.30e4



R2 613.10>319.00 (-) 9.30e4



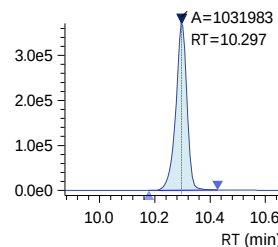
PFDS

Conc. 14.6260

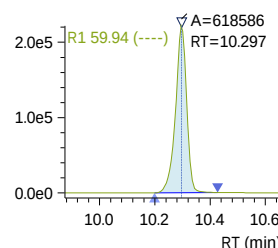
R#1 59.94 (62.02)

R#2 59.94 (62.02)

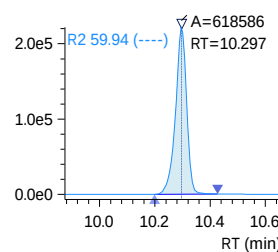
Q 599.00>79.90 (-)



R1 599.00>98.80 (-) 2.22e5



R2 599.00>98.80 (-) 2.22e5

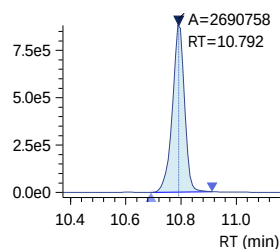




240118_013 (continued)

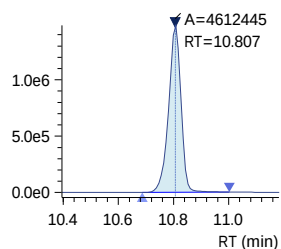
PFTTrDA

Conc. 15.5072
R#1 17.52 (15.12)
R#2 17.52 (15.12)
Q 663.00>619.00 (-)



11-Cl-PF3OUds

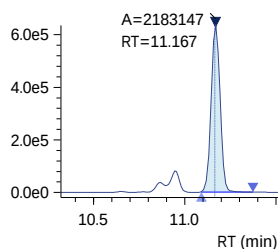
Conc. 13.2499
R#1 36.64 (36.61)
R#2 36.64 (36.61)
Q 630.90>451.00 (-)



PFOSAm

Conc. 29.5605

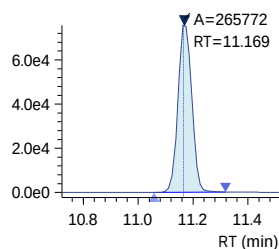
Q 498.10>77.90 (-)



13C8-PFOSAm

Conc. 2.4807

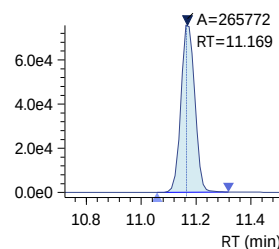
Q 506.10>77.80 (-)



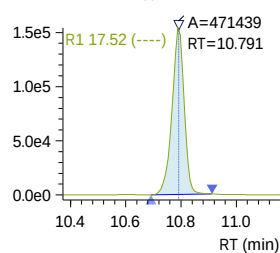
13C8-PFOSAm_IS

Conc. 2.5000

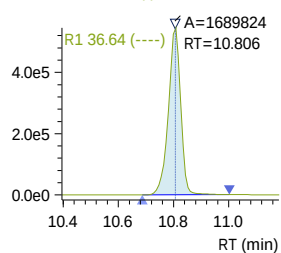
ISTD 506.10>77.80 (-)



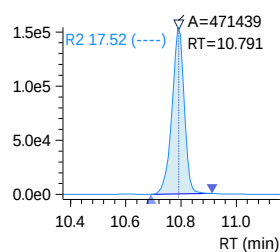
R1 663.00>168.90 (-)



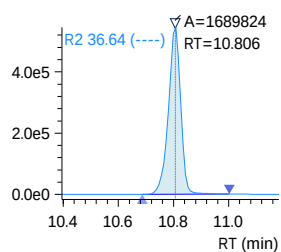
R1 632.90>452.90 (-)



R2 663.00>168.90 (-)

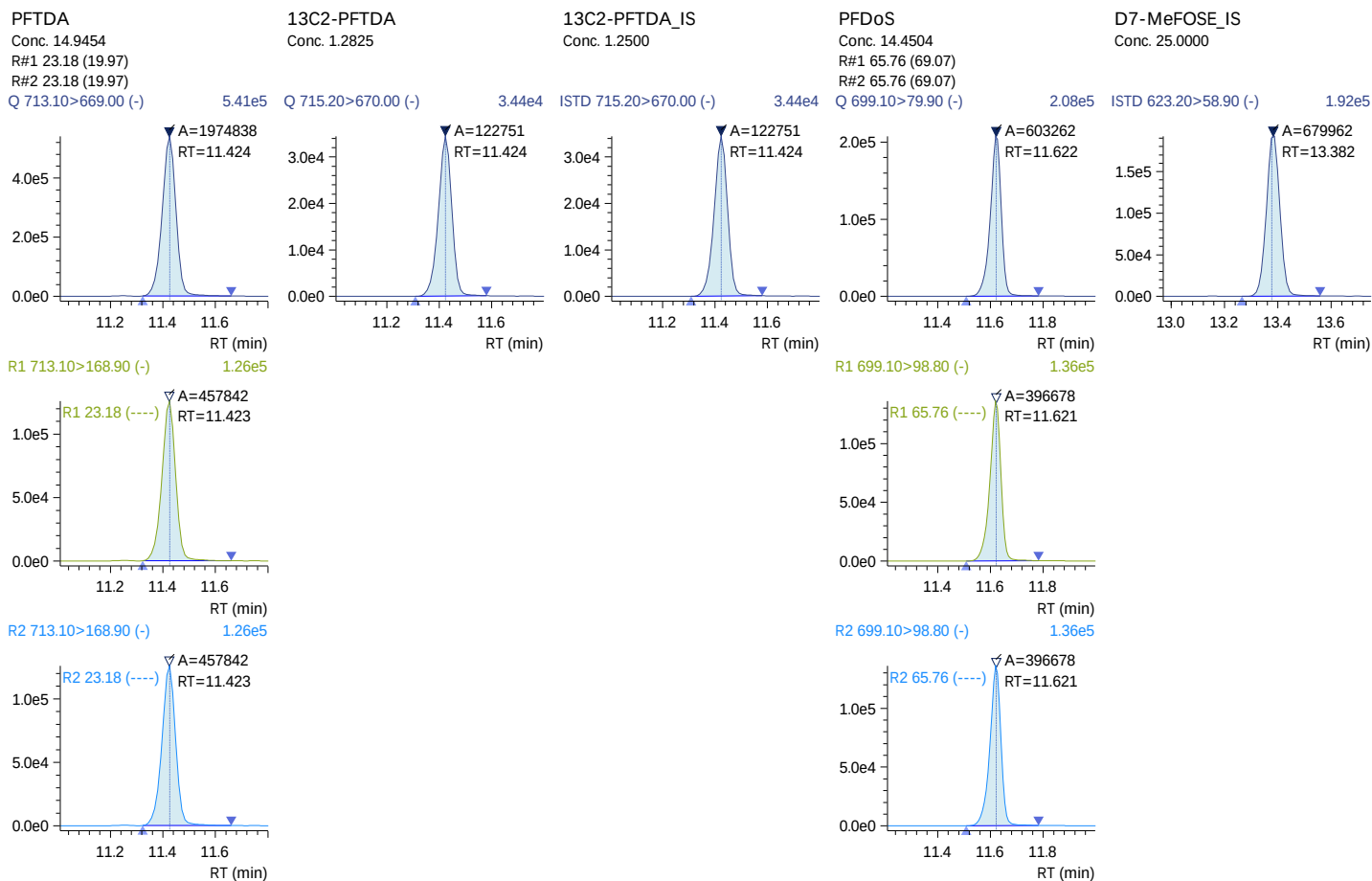


R2 632.90>452.90 (-)





240118_013 (continued)





240118_013 (continued)

D7-MeFOSE
Conc. 25.7423

MeFOSE
Conc. 15.7330

13C2-PFHXA_IS
Conc. 2.5000

13C2-PFHXA
Conc. 2.6003

PFHXA
Conc. 15.5968
R#1 13.78 (11.64)
R#2 13.78 (11.64)

Q 623.20>58.90 (-)

1.92e5

Q 616.10>59.00 (-)

6.79e4

ISTD 815.00>770.05 (-)

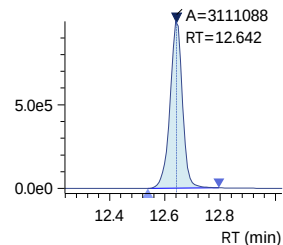
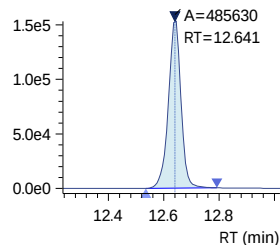
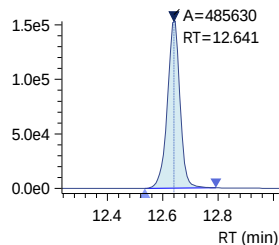
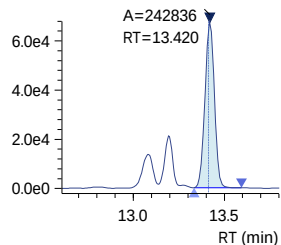
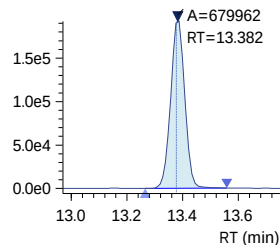
1.53e5

Q 815.00>770.05 (-)

1.53e5

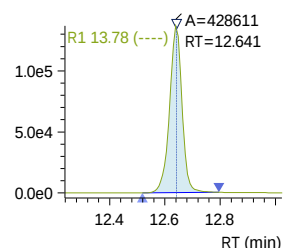
Q 813.00>768.95 (-)

9.98e5



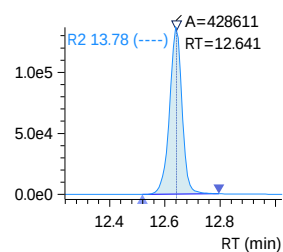
R1 813.00>218.95 (-)

1.37e5



R2 813.00>218.95 (-)

1.37e5





240118_013 (continued)

D3-MeFOSA
 Conc. 2.4908

D3-MeFOSA_IS
 Conc. 2.5000

MeFOSA
 Conc. 14.7072
 R#1 122.24 (149.05)
 R#2 122.24 (149.05)

D9-EtFOSE_IS
 Conc. 25.0000

D9-EtFOSE
 Conc. 25.1119

Q 515.00>219.00 (-)

1.53e4

ISTD 515.00>219.00 (-)

1.53e4

Q 511.90>219.00 (-)

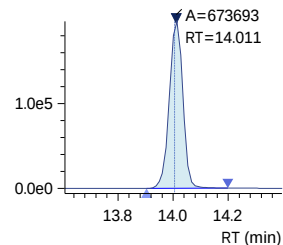
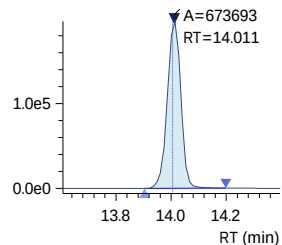
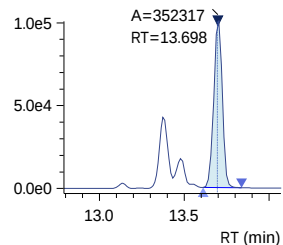
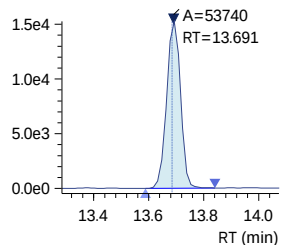
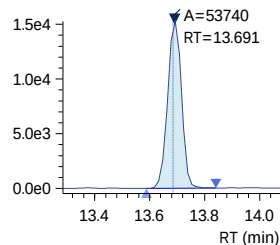
1.01e5

ISTD 639.20>58.90 (-)

1.97e5

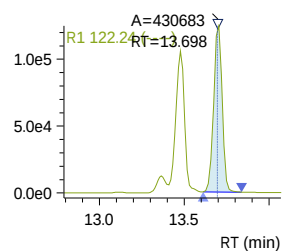
Q 639.20>58.90 (-)

1.97e5



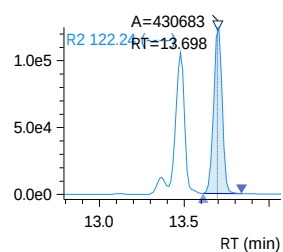
R1 511.90>169.00 (-)

1.25e5



R2 511.90>169.00 (-)

1.25e5





240118_013 (continued)

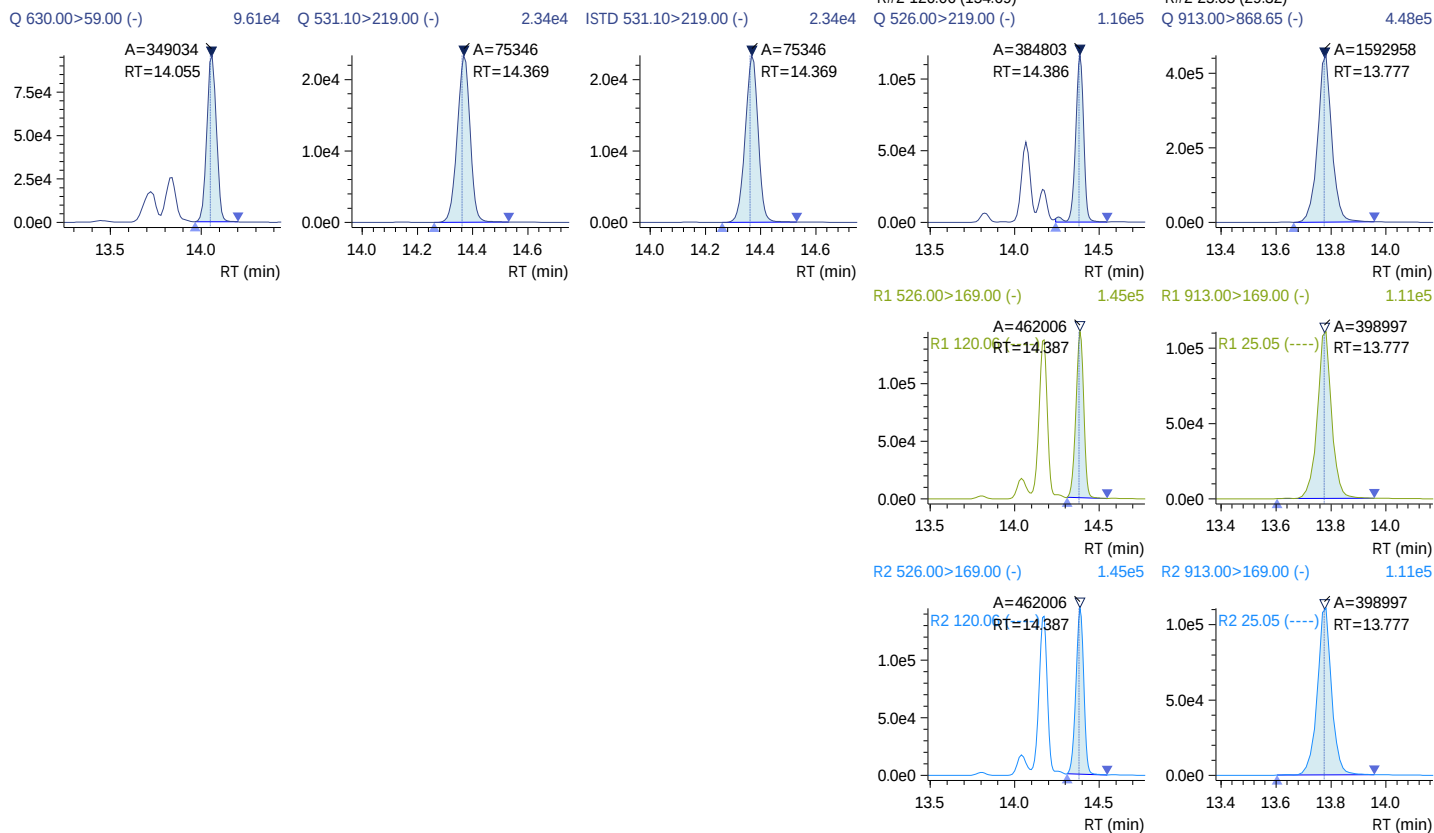
EtFOSE
Conc. 14.9094

D5-EtFOSAm
Conc. 2.6230

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. 15.9866
R#1 120.06 (154.69)
R#2 120.06 (154.69)

PFODA
Conc. 15.1611
R#1 25.05 (29.32)
R#2 25.05 (29.32)





240118_014

Sample ID: 1633 ICAL 20.OPPB
Date Acquired: 1/18/2024 5:10:33 PM
Acquired by: System Administrator
Data File: 240118_014
Vial: 9 | Inj. Volume: 10.0000uL | Tray: 1

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	1258641	----	----	----	----	----	----	
13C4-PFBA_IS	216.80>171.90	----	1258641	----	----	----	----	----	----	
13C3-PFBA_IS	216.00>172.00	----	551996	----	----	----	----	----	----	
PFBA	212.80>169.05	----	2122848	----	----	----	----	----	----	
PFMPA	229.00>84.90	----	1617890	----	----	----	----	----	----	
3_3 FTCA	241.00>177.10	241.00>117.00	440929	628516	142.54	141.17	628516	142.54	141.17	
13C5-PFPeA	268.30>223.00	----	130481	----	----	----	----	----	----	
13C5-PFPeA_IS	268.30>223.00	----	130481	----	----	----	----	----	----	
PFPeA	263.00>219.00	----	3271617	----	----	----	----	----	----	
PFMBA	279.00>84.95	----	2393773	----	----	----	----	----	----	
13C2-4_2 FTS	329.10>80.90	----	124744	----	----	----	----	----	----	
13C2-4_2 FTS_IS	329.10>80.90	----	124744	----	----	----	----	----	----	
4_2 FTS	327.10>307.00	327.10>80.90	1085733	327700	30.18	29.06	327700	30.18	29.06	
13C3-PFBS_IS	302.10>79.90	----	318216	----	----	----	----	----	----	
PFBS	298.70>79.90	298.70>98.80	2673582	1300821	48.66	46.72	1300821	48.66	46.72	
13C3-PFBS	302.10>79.90	----	318216	----	----	----	----	----	----	
NFDHA	295.00>201.00	295.00>84.90	2485749	933183	37.54	40.25	933183	37.54	40.25	
13C5-PFHxA	318.00>273.00	----	618096	----	----	----	----	----	----	
13C5-PFHxA_IS	318.00>273.00	----	618096	----	----	----	----	----	----	
13C2-PFHxA_IS	315.10>270.00	----	564879	----	----	----	----	----	----	
PFHxA	313.00>269.00	----	4016916	----	----	----	----	----	----	
PFEESA	314.80>135.00	314.80>82.90	11990970	689852	5.75	6.11	689852	5.75	6.11	
13C3-HFPO-DA	286.90>168.90	----	602434	----	----	----	----	----	----	
13C3-HFPO-DA_IS	286.90>168.90	----	602434	----	----	----	----	----	----	
HFPO-DA	284.90>168.90	284.90>184.90	1265517	805620	63.66	65.61	805620	63.66	65.61	
5_3 FTCA	341.00>237.05	341.00>217.00	2325743	3802537	163.50	158.86	3802537	163.50	158.86	
PFPeS	349.10>79.90	349.10>98.80	2222493	1237229	55.67	55.80	1237229	55.67	55.80	
13C4-PFHpA	367.10>322.00	----	559359	----	----	----	----	----	----	
13C4-PFHpA_IS	367.10>322.00	----	559359	----	----	----	----	----	----	
PFHpA	363.10>319.00	363.10>169.00	4618120	1017034	22.02	21.50	1017034	22.02	21.50	
DONA	376.90>250.90	376.90>84.80	8299655	2422304	29.19	29.66	2422304	29.19	29.66	
13C2-6_2 FTS_IS	429.10>80.90	----	124875	----	----	----	----	----	----	
13C2-6_2 FTS	429.10>80.90	----	124875	----	----	----	----	----	----	
6_2 FTS	427.10>407.00	427.10>80.90	979879	450130	45.94	41.15	450130	45.94	41.15	
13C4-PFOA_IS	417.10>172.00	----	39074	----	----	----	----	----	----	
13C8-PFOA_IS	421.10>376.00	----	591270	----	----	----	----	----	----	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240118_014 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	591270	----	----	----	----	----	----	----
PFOA	413.00>369.00	413.00>169.00	2656249	851160	32.04	31.89	851160	32.04	31.89	
13C3-PFHxS	402.10>79.90	----	236375	----	----	----	----	----	----	----
13C3-PFHxS_IS	402.10>79.90	----	236375	----	----	----	----	----	----	----
PFHxS	398.70>79.90	398.70>98.90	1982393	1155317	58.28	56.62	1155317	58.28	56.62	
18O2-PFHxS_IS	403.00>83.90	----	216087	----	----	----	----	----	----	----
13C9-PFNA_IS	472.10>427.00	----	279137	----	----	----	----	----	----	----
13C9-PFNA	472.10>427.00	----	279137	----	----	----	----	----	----	----
13C5-PFNA_IS	468.00>423.00	----	275672	----	----	----	----	----	----	----
PFNA	463.00>419.00	463.00>219.00	3125421	722662	23.12	23.17	722662	23.12	23.17	
PFHpS	449.00>79.90	449.00>98.80	1572876	887537	56.43	56.96	887537	56.43	56.96	
7_3 FTCA	441.00>317.00	441.00>336.90	3326875	3826882	115.03	117.47	3826882	115.03	117.47	
13C2-8_2-FTS	529.10>80.90	----	106762	----	----	----	----	----	----	----
13C2-8_2-FTS_IS	529.10>80.90	----	106762	----	----	----	----	----	----	----
8_2 FTS	527.10>506.95	527.10>80.80	888247	383078	43.13	49.59	383078	43.13	49.59	
13C6-PFDA_IS	519.10>474.10	----	198408	----	----	----	----	----	----	----
13C6-PFDA	519.10>474.10	----	198408	----	----	----	----	----	----	----
13C2-PFDA_IS	515.10>470.10	----	201715	----	----	----	----	----	----	----
PFDA	512.90>469.00	512.90>219.00	3861460	749008	19.40	19.00	749008	19.40	19.00	
D3-NMeFOSAA_IS	573.20>419.00	----	214118	----	----	----	----	----	----	----
D3-NMeFOSAA	573.20>419.00	----	214118	----	----	----	----	----	----	----
13C8-PFOS_IS	507.10>98.90	----	106399	----	----	----	----	----	----	----
13C8-PFOS	507.10>98.90	----	106399	----	----	----	----	----	----	----
13C4-PFOS_IS	502.80>79.90	----	243425	----	----	----	----	----	----	----
PFOS	498.90>79.90	498.90>98.80	2022532	1029473	50.90	52.47	1029473	50.90	52.47	
NMeFOSAA	570.10>419.00	570.10>483.00	1137204	697090	61.30	55.15	697090	61.30	55.15	
D5-NetFOSAA_IS	589.20>419.00	----	250513	----	----	----	----	----	----	----
D5-NetFOSAA	589.20>419.00	----	250513	----	----	----	----	----	----	----
NetFOSAA	584.20>419.10	584.20>526.00	670953	582594	86.83	81.95	582594	86.83	81.95	
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	8537715	2737615	32.07	32.76	2737615	32.07	32.76	
PFUnDA	563.10>519.00	563.10>269.10	3625574	487849	13.46	13.12	487849	13.46	13.12	
13C7-PFUnDA_IS	570.00>525.10	----	256659	----	----	----	----	----	----	----
13C7-PFUnDA	570.00>525.10	----	256659	----	----	----	----	----	----	----
PFNS	548.80>79.90	548.80>98.80	1507553	962384	63.84	65.22	962384	63.84	65.22	
10_2 FTS	626.80>607.05	626.80>81.00	999936	372298	37.23	37.13	372298	37.23	37.13	
13C2-PFDOA_IS	615.10>570.00	----	286167	----	----	----	----	----	----	----
13C2-PFDOA	615.10>570.00	----	286167	----	----	----	----	----	----	----
PFDOA	613.10>569.00	613.10>319.00	3195955	346187	10.83	11.29	346187	10.83	11.29	
PFDS	599.00>79.90	599.00>98.80	1363851	817322	59.93	60.18	817322	59.93	60.18	
PFTDA	663.00>619.00	663.00>168.90	3467914	604465	17.43	17.64	604465	17.43	17.64	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240118_014 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	6168575	2220177	35.99	36.44	2220177	35.99	36.44	
PFOSAm	498.10>77.90	----	3534545	----	----	----	----	----	----	
13C8-PFOSAm	506.10>77.80	----	272125	----	----	----	----	----	----	
13C8-PFOSAm_IS	506.10>77.80	----	272125	----	----	----	----	----	----	
PFTDA	713.10>669.00	713.10>168.90	2711883	606088	22.35	22.96	606088	22.35	22.96	
13C2-PFTDA	715.20>670.00	----	126748	----	----	----	----	----	----	
13C2-PFTDA_IS	715.20>670.00	----	126748	----	----	----	----	----	----	
PFDoS	699.10>79.90	699.10>98.80	783680	529055	67.51	67.40	529055	67.51	67.40	
D7-MeFOSE_IS	623.20>58.90	----	717715	----	----	----	----	----	----	
D7-MeFOSE	623.20>58.90	----	717715	----	----	----	----	----	----	
MeFOSE	616.10>59.00	----	484926	----	----	----	----	----	----	
13C2-PFHxDA_IS	815.00>770.05	----	502493	----	----	----	----	----	----	
13C2-PFHxDA	815.00>770.05	----	502493	----	----	----	----	----	----	
PFHxDA	813.00>768.95	813.00>218.95	4032238	545489	13.53	13.90	545489	13.53	13.90	
D3-MeFOSA	515.00>219.00	----	55065	----	----	----	----	----	----	
D3-MeFOSA_IS	515.00>219.00	----	55065	----	----	----	----	----	----	
MeFOSA	511.90>219.00	511.90>169.00	781577	1162158	148.69	140.79	1162158	148.69	140.79	
D9-EtFOSE_IS	639.20>58.90	----	706883	----	----	----	----	----	----	
D9-EtFOSE	639.20>58.90	----	706883	----	----	----	----	----	----	
EtFOSE	630.00>59.00	----	717754	----	----	----	----	----	----	
D5-EtFOSAm	531.10>219.00	----	75793	----	----	----	----	----	----	
D5-EtFOSAm_IS	531.10>219.00	----	75793	----	----	----	----	----	----	
EtFOSAm	526.00>219.00	526.00>169.00	868189	1333537	153.60	163.90	1333537	153.60	163.90	
PFODA	913.00>868.65	913.00>169.00	2206399	569228	25.80	27.03	569228	25.80	27.03	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
 IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240118_014

Sample ID: 1633 ICAL 20.OPPB
Date Acquired: 1/18/2024 5:10:33 PM
Acquired by: System Administrator
Data File: 240118_014
Vial: 9 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Std. Conc.	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.410	-0.004	-0.001	1258641	551996	13C3-PFBA_IS	10.0000	10.2013	ng/mL	
13C4-PFBA_IS	Auto	1.410	-0.004	----	1258641	1258641	----	10.0000	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.411	-0.004	----	551996	551996	----	5.0000	5.0000	ng/mL	
PFBA	Auto	1.412	-0.004	0.002	2122848	1258641	13C4-PFBA_IS	20.0000	19.6301	ng/mL	
PFMPA	Auto	2.432	0.000	-1.062	1617890	130481	13C5-PFPeA_IS	20.0000	19.1861	ng/mL	
3_3 FTCA	Auto	3.006	0.002	-0.488	440929	130481	13C5-PFPeA_IS	150.0000	152.3911	ng/mL	
13C5-PFPeA	Auto	3.494	0.002	-1.488	130481	564879	13C2-PFHxA_IS	5.0000	5.1173	ng/mL	
13C5-PFPeA_IS	Auto	3.494	0.002	----	130481	130481	----	5.0000	5.0000	ng/mL	
PFPeA	Auto	3.497	0.002	0.003	3271617	130481	13C5-PFPeA_IS	20.0000	19.3584	ng/mL	
PFMBA	Auto	4.028	0.003	0.534	2393773	130481	13C5-PFPeA_IS	20.0000	20.0376	ng/mL	
13C2-4_2 FTS	Auto	4.666	0.005	-2.423	124744	216087	18O2-PFHxS_IS	5.0000	4.1950	ng/mL	
13C2-4_2 FTS_IS	Auto	4.666	0.005	----	124744	124744	----	5.0000	5.0000	ng/mL	
4_2 FTS	Auto	4.666	0.004	0.000	1085733	124744	13C2-4_2 FTS_IS	18.7000	17.6958	ng/mL	
13C3-PFBS_IS	Auto	4.650	0.003	----	318216	318216	----	2.5000	2.5000	ng/mL	
PFBS	Auto	4.651	0.003	0.001	2673582	318216	13C3-PFBS_IS	17.7000	16.4139	ng/mL	
13C3-PFBS	Auto	4.650	0.003	-2.439	318216	216087	18O2-PFHxS_IS	2.5000	2.5950	ng/mL	
NFDHA	Auto	4.839	0.004	-0.143	2485749	618096	13C5-PFHxA_IS	20.0000	18.1263	ng/mL	
13C5-PFHxA	Auto	4.982	0.004	0.000	618096	564879	13C2-PFHxA_IS	2.5000	2.5963	ng/mL	
13C5-PFHxA_IS	Auto	4.982	0.004	----	618096	618096	----	2.5000	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	4.982	0.003	----	564879	564879	----	2.5000	2.5000	ng/mL	
PFHxA	Auto	4.984	0.004	0.002	4016916	618096	13C5-PFHxA_IS	20.0000	19.5165	ng/mL	
PFEESA	Auto	5.326	0.004	0.344	11990970	618096	13C5-PFHxA_IS	17.8000	17.3202	ng/mL	
13C3-HFPO-DA	Auto	5.456	0.004	0.474	602434	564879	13C2-PFHxA_IS	10.0000	10.8946	ng/mL	
13C3-HFPO-DA_IS	Auto	5.456	0.004	----	602434	602434	----	10.0000	10.0000	ng/mL	
HFPO-DA	Auto	5.458	0.005	0.002	1265517	602434	13C3-HFPO-DA_IS	20.0000	19.0203	ng/mL	
5_3 FTCA	Auto	5.910	0.004	0.928	2325743	618096	13C5-PFHxA_IS	150.0000	145.4705	ng/mL	
PFPeS	Auto	6.022	0.004	-1.066	2222493	236375	13C3-PFHxS_IS	18.8000	17.9045	ng/mL	
13C4-PFHpA	Auto	6.158	0.004	1.176	559359	564879	13C2-PFHxA_IS	2.5000	2.5955	ng/mL	
13C4-PFHpA_IS	Auto	6.158	0.004	----	559359	559359	----	2.5000	2.5000	ng/mL	
PFHpA	Auto	6.160	0.005	0.002	4618120	559359	13C4-PFHpA_IS	20.0000	19.8726	ng/mL	
DONA	Auto	6.525	0.005	1.069	8299655	602434	13C3-HFPO-DA_IS	18.9000	17.7750	ng/mL	
13C2-6_2 FTS_IS	Auto	6.796	0.003	----	124875	124875	----	5.0000	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.796	0.003	-0.293	124875	216087	18O2-PFHxS_IS	5.0000	4.4400	ng/mL	
6_2 FTS	Auto	6.797	0.005	0.001	979879	124875	13C2-6_2 FTS_IS	19.0000	17.2322	ng/mL	
13C4-PFOA_IS	Auto	7.113	0.006	----	39074	39074	----	2.5000	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.112	0.005	----	591270	591270	----	2.5000	2.5000	ng/mL	
13C8-PFOA	Auto	7.112	0.005	-0.001	591270	39074	13C4-PFOA_IS	2.5000	2.7073	ng/mL	
PFOA	Auto	7.113	0.003	0.001	2656249	591270	13C8-PFOA_IS	20.0000	17.3630	ng/mL	
13C3-PFHxS	Auto	7.088	0.002	-0.001	236375	216087	18O2-PFHxS_IS	2.5000	2.5485	ng/mL	
13C3-PFHxS_IS	Auto	7.088	0.002	----	236375	236375	----	2.5000	2.5000	ng/mL	
PFHxS	M	7.089	0.005	0.001	1982393	236375	13C3-PFHxS_IS	18.3000	17.4540	ng/mL	
18O2-PFHxS_IS	Auto	7.089	0.003	----	216087	216087	----	2.5000	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.959	0.003	----	279137	279137	----	1.2500	1.2500	ng/mL	
13C9-PFNA	Auto	7.959	0.003	0.000	279137	275672	13C5-PFNA_IS	1.2500	1.2932	ng/mL	
13C5-PFNA_IS	Auto	7.959	0.003	----	275672	275672	----	1.2500	1.2500	ng/mL	
PFNA	Auto	7.960	0.003	0.001	3125421	279137	13C9-PFNA_IS	20.0000	19.6426	ng/mL	
PFHpS	Auto	8.007	0.003	-0.815	1572876	106399	13C8-PFOS_IS	19.1000	18.9395	ng/mL	
7_3 FTCA	Auto	7.956	0.002	2.974	3326875	618096	13C5-PFHxA_IS	150.0000	155.8744	ng/mL	
13C2-8_2-FTS	Auto	8.412	0.003	1.323	106762	216087	18O2-PFHxS_IS	5.0000	4.6211	ng/mL	
13C2-8_2-FTS_IS	Auto	8.412	0.003	----	106762	106762	----	5.0000	5.0000	ng/mL	
8_2 FTS	Auto	8.413	0.003	0.001	888247	106762	13C2-8_2-FTS_IS	19.2000	19.3618	ng/mL	
13C6-PFDA_IS	Auto	8.723	0.002	----	198408	198408	----	1.2500	1.2500	ng/mL	
13C6-PFDA	Auto	8.723	0.002	-0.001	198408	201715	13C2-PFDA_IS	1.2500	1.2226	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_014 (continued)

(Table continued from previous page)

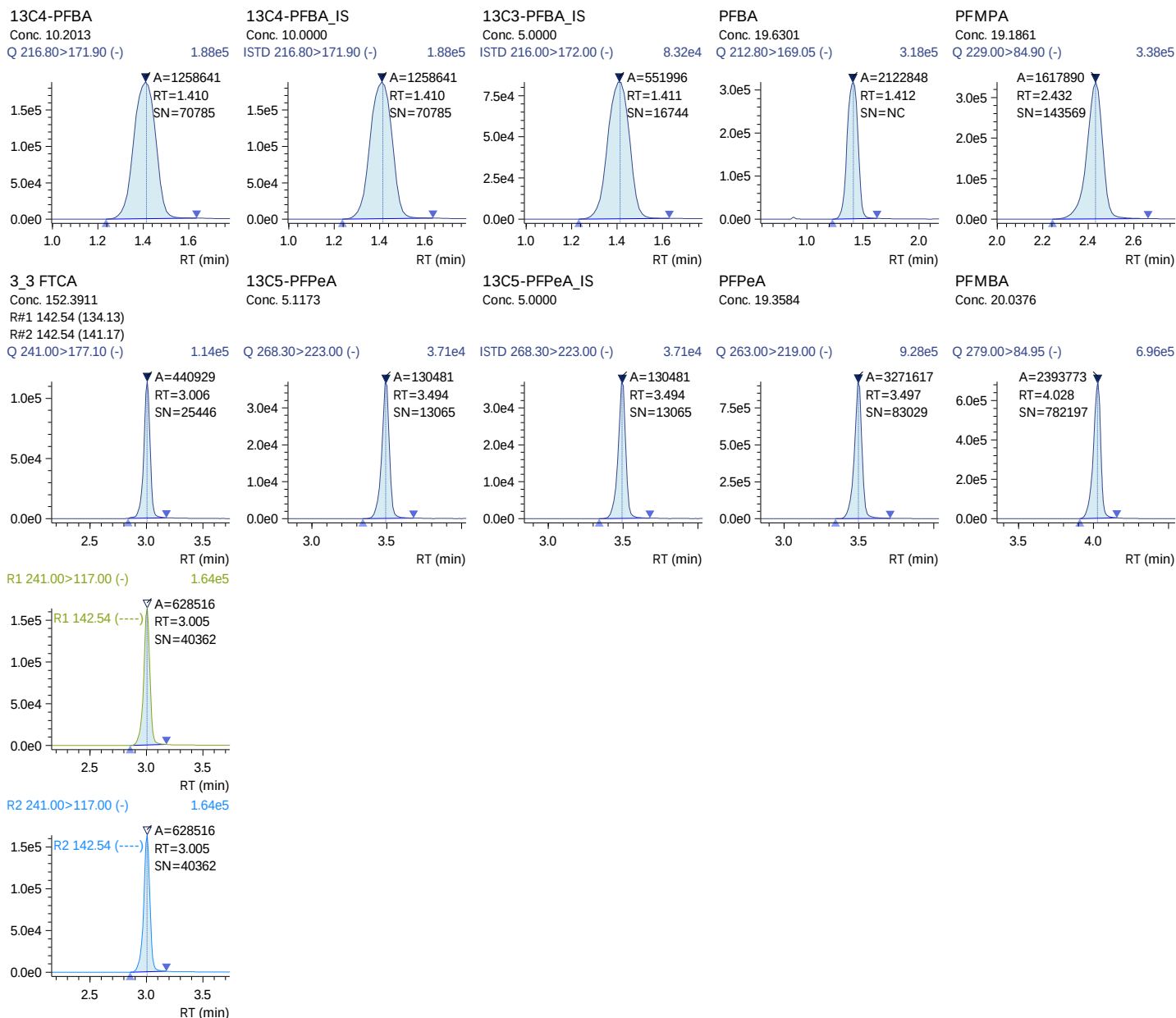
Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Std. Conc.	Conc.	Unit	Flag ID
13C2-PFDA_IS	Auto	8.723	0.002	----	201715	201715	----	1.2500	1.2500	ng/mL	
PFDA	Auto	8.724	0.003	0.002	3861460	198408	13C6-PFDA_IS	20.0000	20.3930	ng/mL	
D3-NMeFOSAA_IS	Auto	8.858	0.003	----	214118	214118	----	5.0000	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.858	0.003	0.036	214118	243425	13C4-PFOS_IS	5.0000	5.0681	ng/mL	
13C8-PFOS_IS	Auto	8.822	0.002	----	106399	106399	----	2.5000	2.5000	ng/mL	
13C8-PFOS	Auto	8.822	0.002	0.000	106399	243425	13C4-PFOS_IS	2.5000	2.6209	ng/mL	
13C4-PFOS_IS	Auto	8.822	0.002	----	243425	243425	----	2.5000	2.5000	ng/mL	
PFOS	M	8.823	0.001	0.001	2022532	106399	13C8-PFOS_IS	18.6000	18.2762	ng/mL	
NMeFOSAA	M	8.864	0.003	0.006	1137204	214118	D3-NMeFOSAA_IS	20.0000	19.5740	ng/mL	
D5-NetFOSAA_IS	Auto	9.187	0.001	----	250513	250513	----	5.0000	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.187	0.001	0.365	250513	243425	13C4-PFOS_IS	5.0000	4.9563	ng/mL	
NetFOSAA	M	9.198	0.003	0.011	670953	250513	D5-NetFOSAA_IS	20.0000	20.0539	ng/mL	
9-CI-PF3ONS	Auto	9.386	0.002	3.930	8537715	602434	13C3-HFPO-DA_IS	18.7000	17.1902	ng/mL	
PFUnDA	Auto	9.448	0.001	0.002	3625574	256659	13C7-PFUnDA_IS	20.0000	19.4796	ng/mL	
13C7-PFUnDA_IS	Auto	9.446	0.001	----	256659	256659	----	1.2500	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.446	0.001	0.723	256659	201715	13C2-PFDA_IS	1.2500	1.3258	ng/mL	
PFNS	Auto	9.585	0.001	0.763	1507553	106399	13C8-PFOS_IS	19.2000	18.6482	ng/mL	
10_2_FTS	Auto	9.820	0.001	1.408	999936	106762	13C2-8_2-FTS_IS	19.3000	17.9144	ng/mL	
13C2-PFDOA_IS	Auto	10.134	0.001	----	286167	286167	----	1.2500	1.2500	ng/mL	
13C2-PFDOA	Auto	10.134	0.001	1.411	286167	201715	13C2-PFDA_IS	1.2500	1.2868	ng/mL	
PFDOA	Auto	10.135	0.001	0.001	3195955	286167	13C2-PFDOA_IS	20.0000	19.8239	ng/mL	
PFDS	Auto	10.297	0.001	1.475	1363851	106399	13C8-PFOS_IS	19.3000	19.4042	ng/mL	
PFTDA	Auto	10.792	0.000	-0.633	3467914	126748	13C2-PFTDA_IS	20.0000	19.3635	ng/mL	
11-CI-PF3OUdS	Auto	10.807	0.001	5.351	6168575	602434	13C3-HFPO-DA_IS	18.9000	18.4444	ng/mL	
PFOSAm	M	11.168	0.004	-0.002	3534545	272125	13C8-PFOSAm_IS	40.0000	39.4067	ng/mL	
13C8-PFOSAm	Auto	11.170	0.005	2.348	272125	243425	13C4-PFOS_IS	2.5000	2.6333	ng/mL	
13C8-PFOSAm_IS	Auto	11.170	0.005	----	272125	272125	----	2.5000	2.5000	ng/mL	
PFTDA	Auto	11.426	0.001	0.001	2711883	126748	13C2-PFTDA_IS	20.0000	19.8837	ng/mL	
13C2-PFTDA	Auto	11.425	0.001	2.702	126748	201715	13C2-PFDA_IS	1.2500	1.3200	ng/mL	
13C2-PFTDA_IS	Auto	11.425	0.001	----	126748	126748	----	1.2500	1.2500	ng/mL	
PFDoS	Auto	11.623	0.001	2.801	783680	106399	13C8-PFOS_IS	19.4000	18.3661	ng/mL	
D7-MeFOSE_IS	Auto	13.382	0.005	----	717715	717715	----	25.0000	25.0000	ng/mL	
D7-MeFOSE	Auto	13.382	0.005	4.560	717715	243425	13C4-PFOS_IS	25.0000	28.1702	ng/mL	
MeFOSE	M	13.419	0.006	0.037	484926	717715	D7-MeFOSE_IS	20.0000	18.3977	ng/mL	
13C2-PFHXA_IS	Auto	12.640	-0.001	----	502493	502493	----	2.5000	2.5000	ng/mL	
13C2-PFHXA	Auto	12.640	-0.001	3.917	502493	201715	13C2-PFDA_IS	2.5000	2.6818	ng/mL	
PFHXDA	Auto	12.642	0.000	0.002	4032238	502493	13C2-PFHXA_IS	20.0000	19.5434	ng/mL	
D3-MeFOSA	Auto	13.690	0.005	4.868	55065	243425	13C4-PFOS_IS	2.5000	2.6460	ng/mL	
D3-MeFOSA_IS	Auto	13.690	0.005	----	55065	55065	----	2.5000	2.5000	ng/mL	
MeFOSA	M	13.698	0.004	0.008	781577	55065	D3-MeFOSA_IS	20.0000	19.6899	ng/mL	
D9-EtFOSE_IS	Auto	14.011	0.005	----	706883	706883	----	25.0000	25.0000	ng/mL	
D9-EtFOSE	Auto	14.011	0.005	5.189	706883	243425	13C4-PFOS_IS	25.0000	27.3174	ng/mL	
EtFOSE	M	14.054	0.006	0.043	717754	706883	D9-EtFOSE_IS	20.0000	19.2985	ng/mL	
D5-EtFOSAm	Auto	14.368	0.006	5.546	75793	243425	13C4-PFOS_IS	2.5000	2.7355	ng/mL	
D5-EtFOSAm_IS	Auto	14.368	0.006	----	75793	75793	----	2.5000	2.5000	ng/mL	
EtFOSAm	M	14.386	0.006	0.018	868189	75793	D5-EtFOSAm_IS	20.0000	19.6758	ng/mL	
PFODA	Auto	13.776	0.001	1.136	2206399	502493	13C2-PFHXA_IS	20.0000	19.4174	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_014 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_014 (continued)

13C2-4_2_FTS
Conc. 4.1950

13C2-4_2_FTS_IS
Conc. 5.0000

4_2_FTS
Conc. 17.6958
R#1 30.18 (34.14)
R#2 30.18 (29.06)

13C3-PFBS_IS
Conc. 2.5000

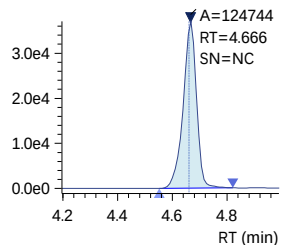
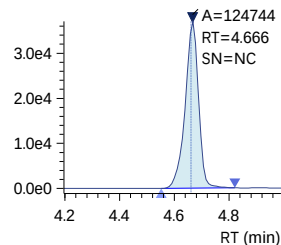
PFBS
Conc. 16.4139
R#1 48.66 (47.53)
R#2 48.66 (46.72)

Q 329.10>80.90 (-)

3.71e4

ISTD 329.10>80.90 (-)

3.71e4

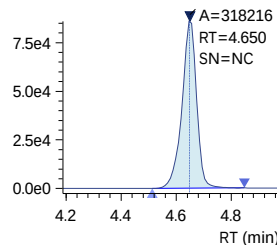
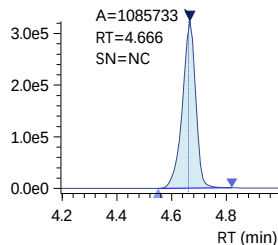


Q 327.10>307.00 (-)

3.24e5

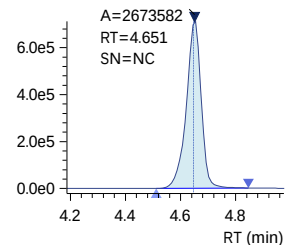
ISTD 302.10>79.90 (-)

8.60e4



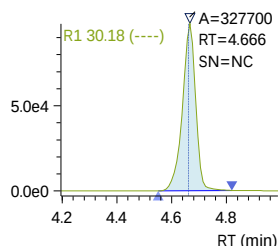
Q 298.70>79.90 (-)

7.12e5



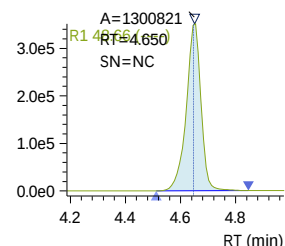
R1 327.10>80.90 (-)

9.81e4



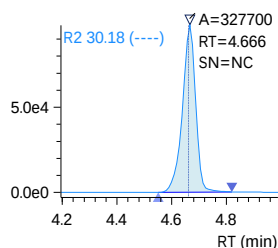
R1 298.70>98.80 (-)

3.52e5



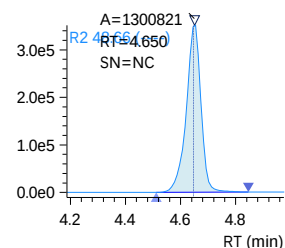
R2 327.10>80.90 (-)

9.81e4



R2 298.70>98.80 (-)

3.52e5





240118_014 (continued)

13C3-PFBS
Conc. 2.5950

NFDHA
Conc. 18.1263
R#1 37.54 (37.88)
R#2 37.54 (40.25)

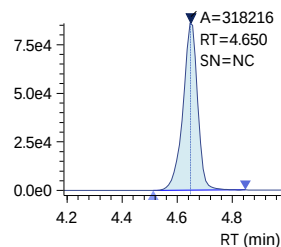
13C5-PFHxA
Conc. 2.5963

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

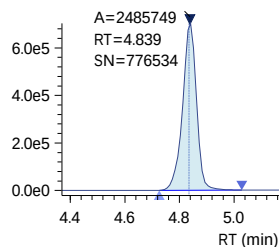
Q 302.10>79.90 (-)

8.60e4



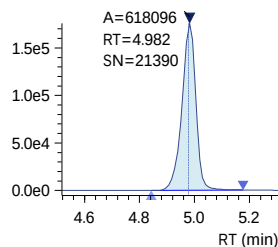
Q 295.00>201.00 (-)

7.03e5



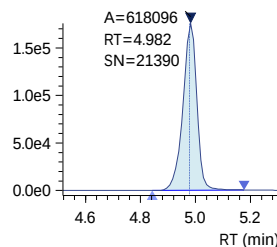
Q 318.00>273.00 (-)

1.76e5



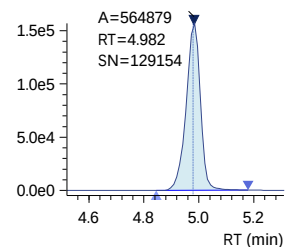
ISTD 318.00>273.00 (-)

1.76e5



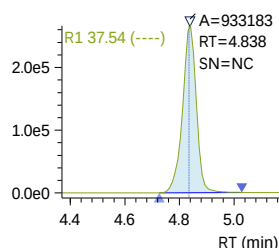
ISTD 315.10>270.00 (-)

1.57e5



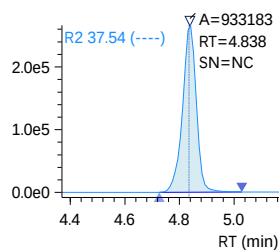
R1 295.00>84.90 (-)

2.66e5



R2 295.00>84.90 (-)

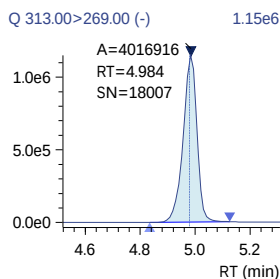
2.66e5



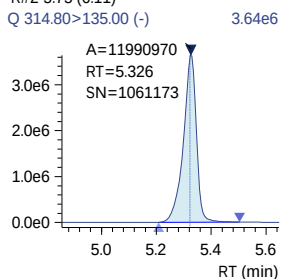


240118_014 (continued)

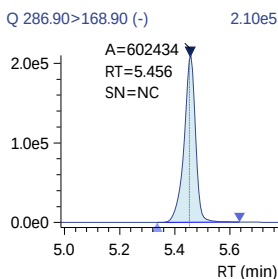
PFHxA
Conc. 19.5165



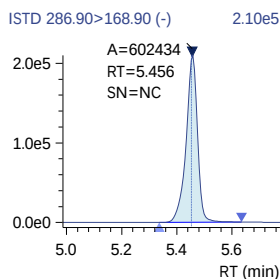
PFEESA
Conc. 17.3202
R#1 5.75 (5.88)
R#2 5.75 (6.11)



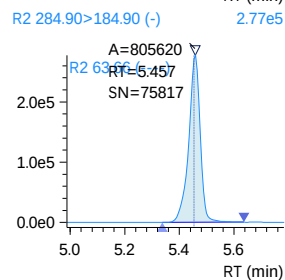
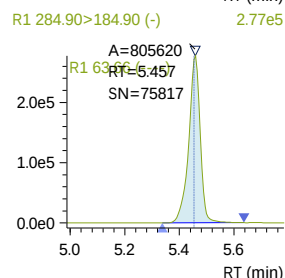
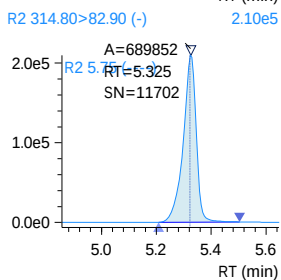
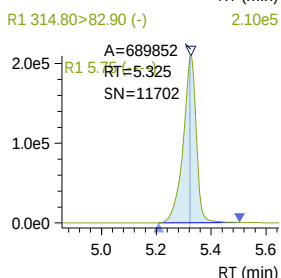
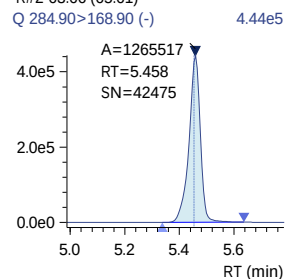
13C3-HFPO-DA
Conc. 10.8946



13C3-HFPO-DA_IS
Conc. 10.0000

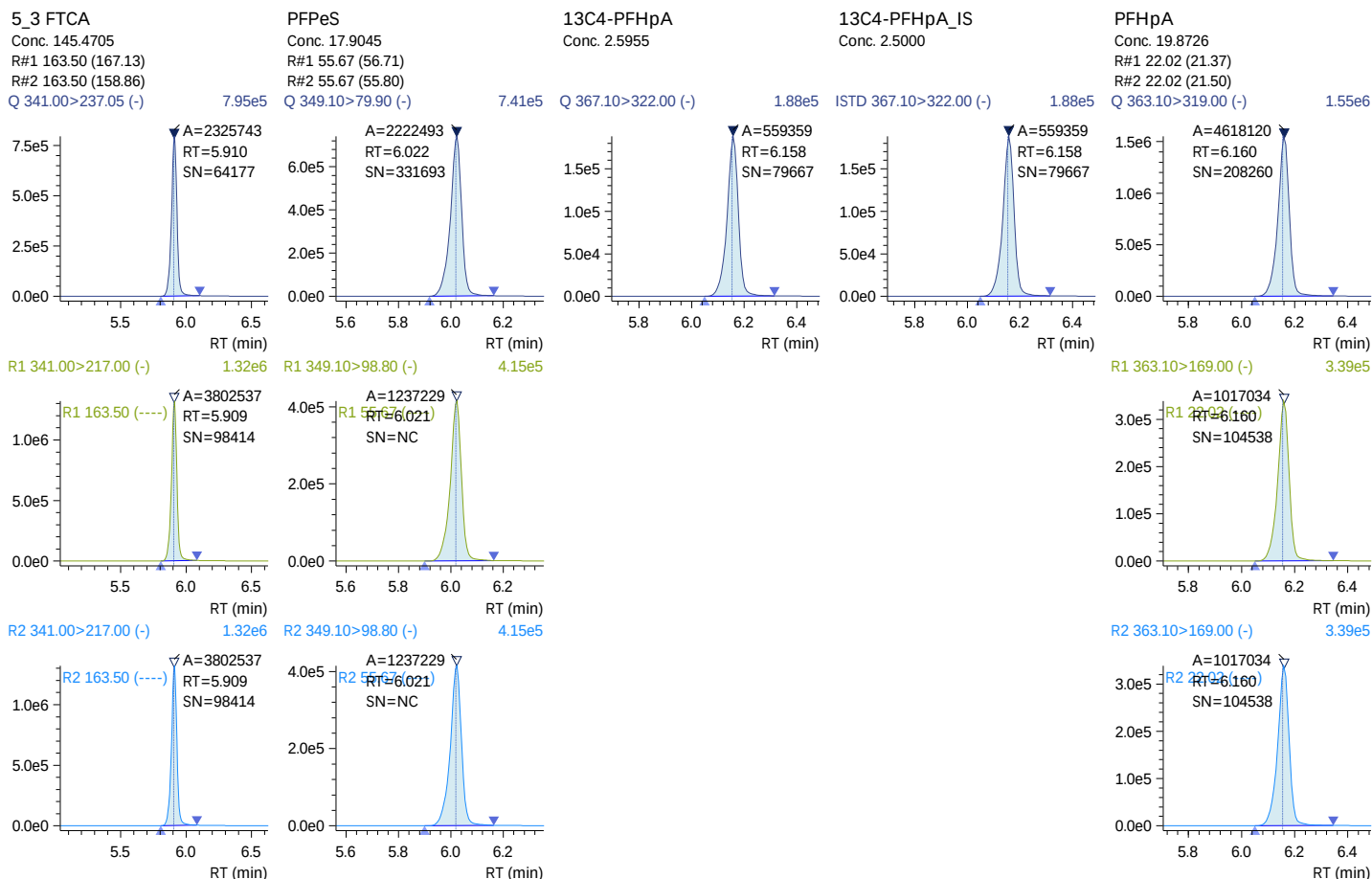


HFPO-DA
Conc. 19.0203
R#1 63.66 (63.80)
R#2 63.66 (65.61)





240118_014 (continued)

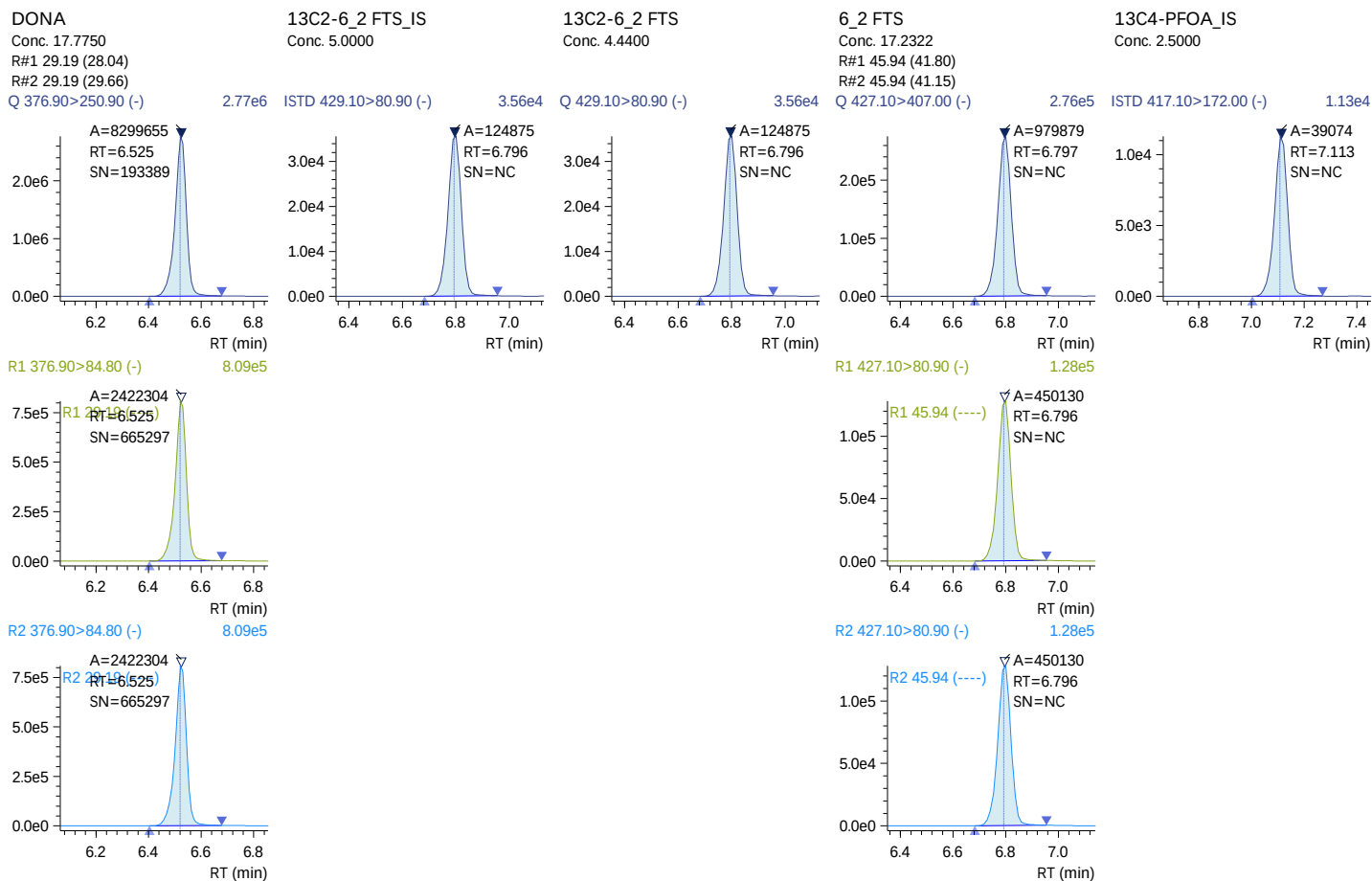


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_014 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_014 (continued)

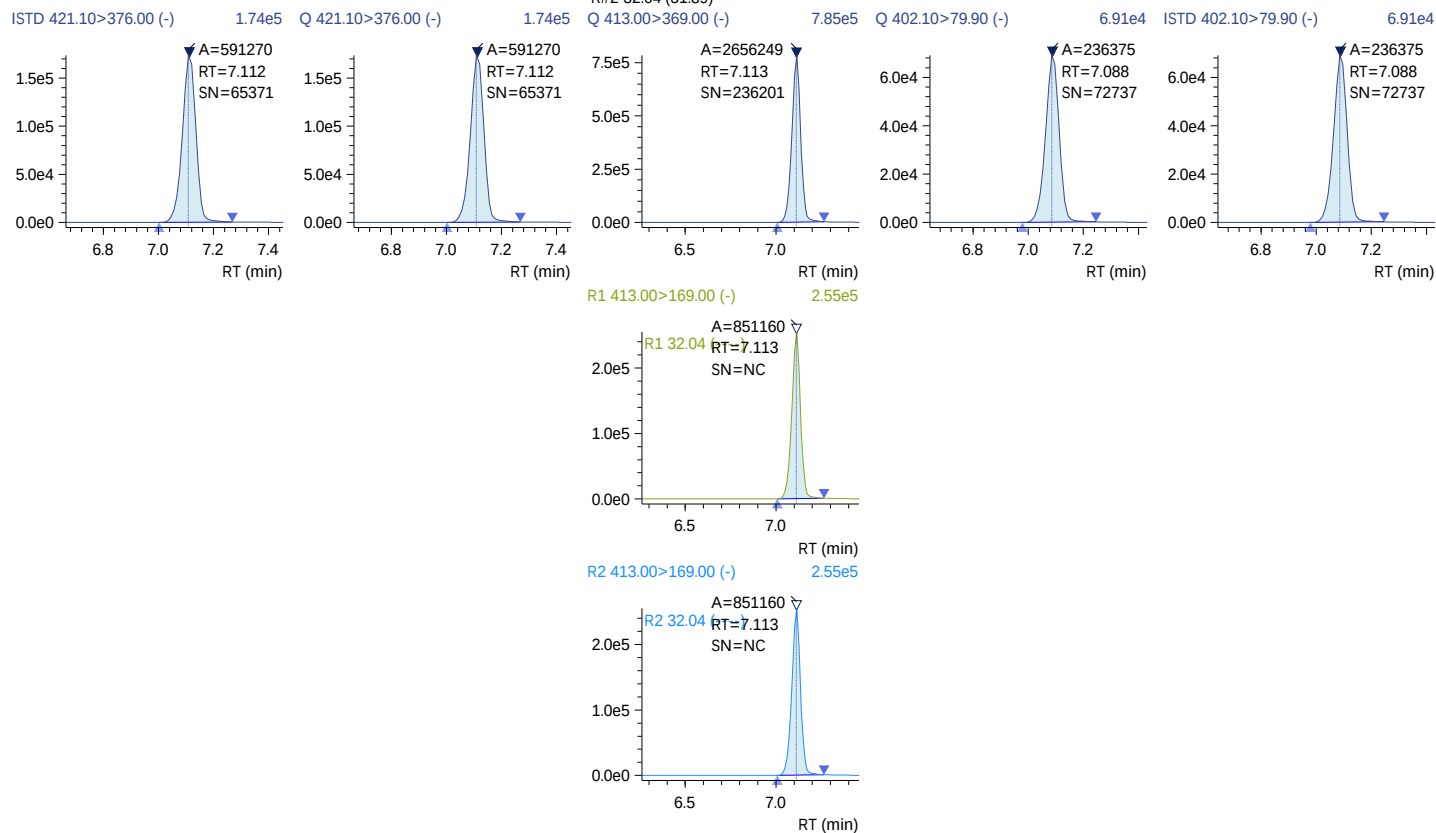
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.7073

PFOA
Conc. 17.3630
R#1 32.04 (29.05)
R#2 32.04 (31.89)

13C3-PFHxS
Conc. 2.5485

13C3-PFHxS_IS
Conc. 2.5000

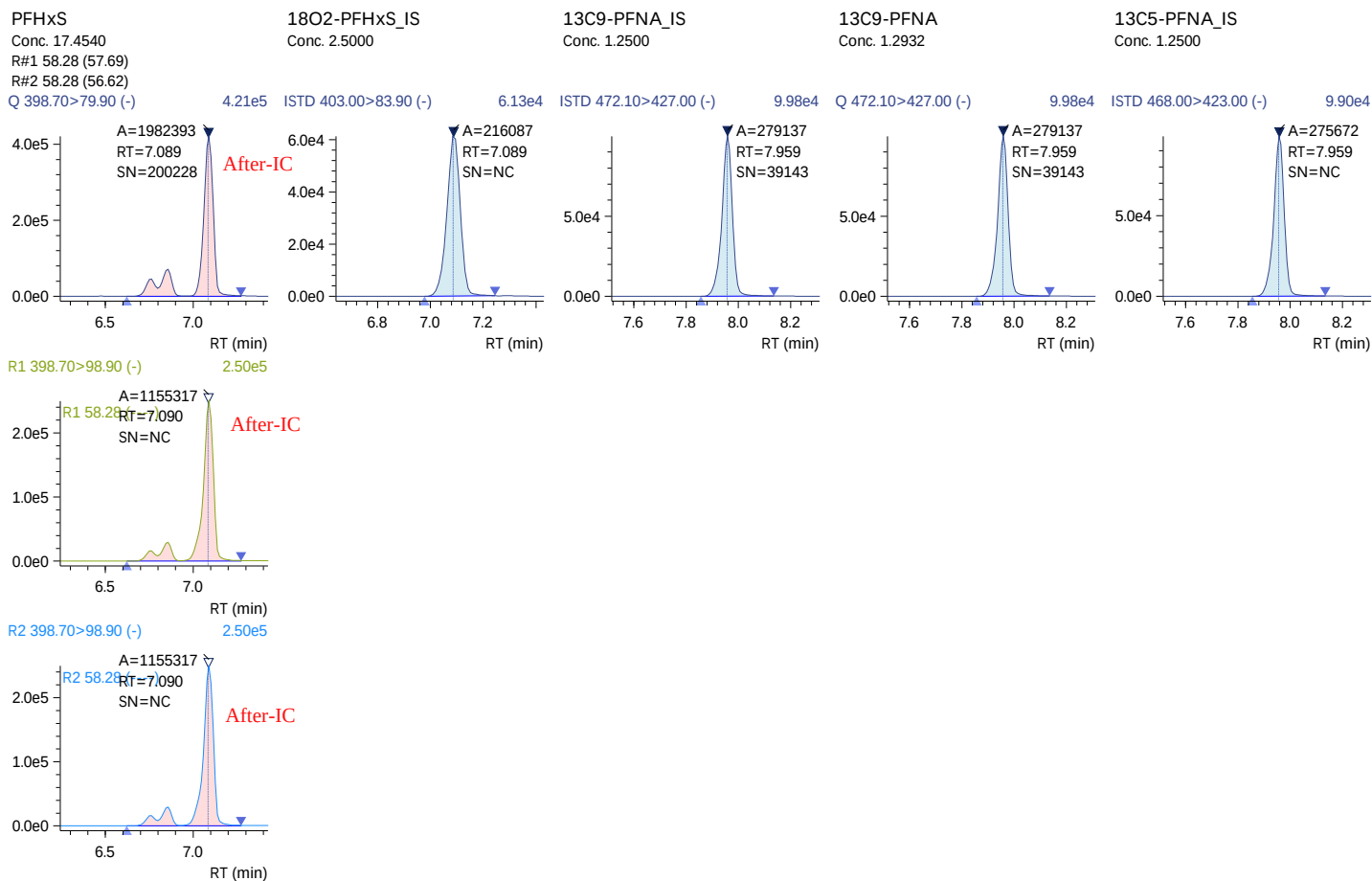


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
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240118_014 (continued)

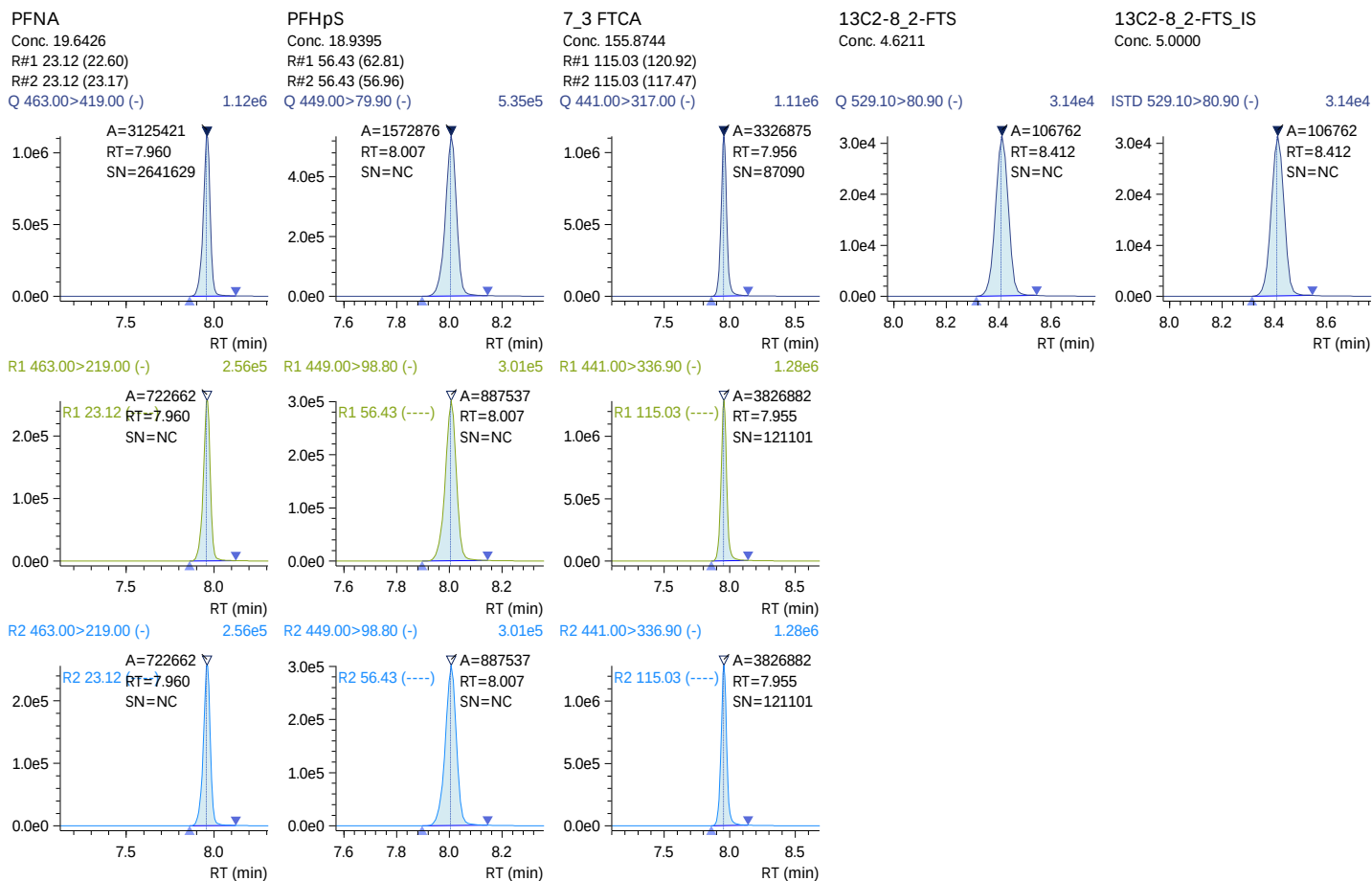


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_014 (continued)

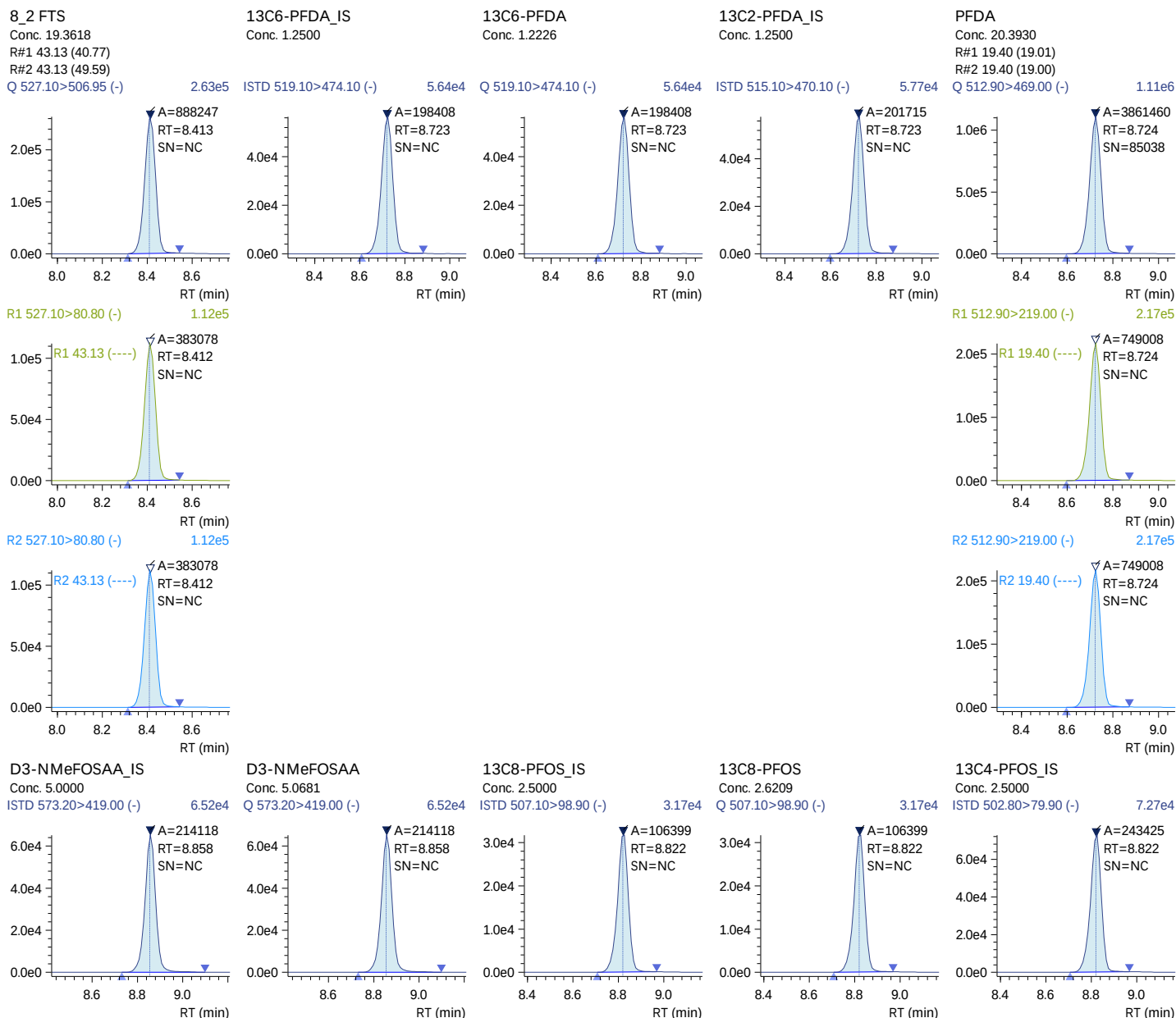


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_014 (continued)

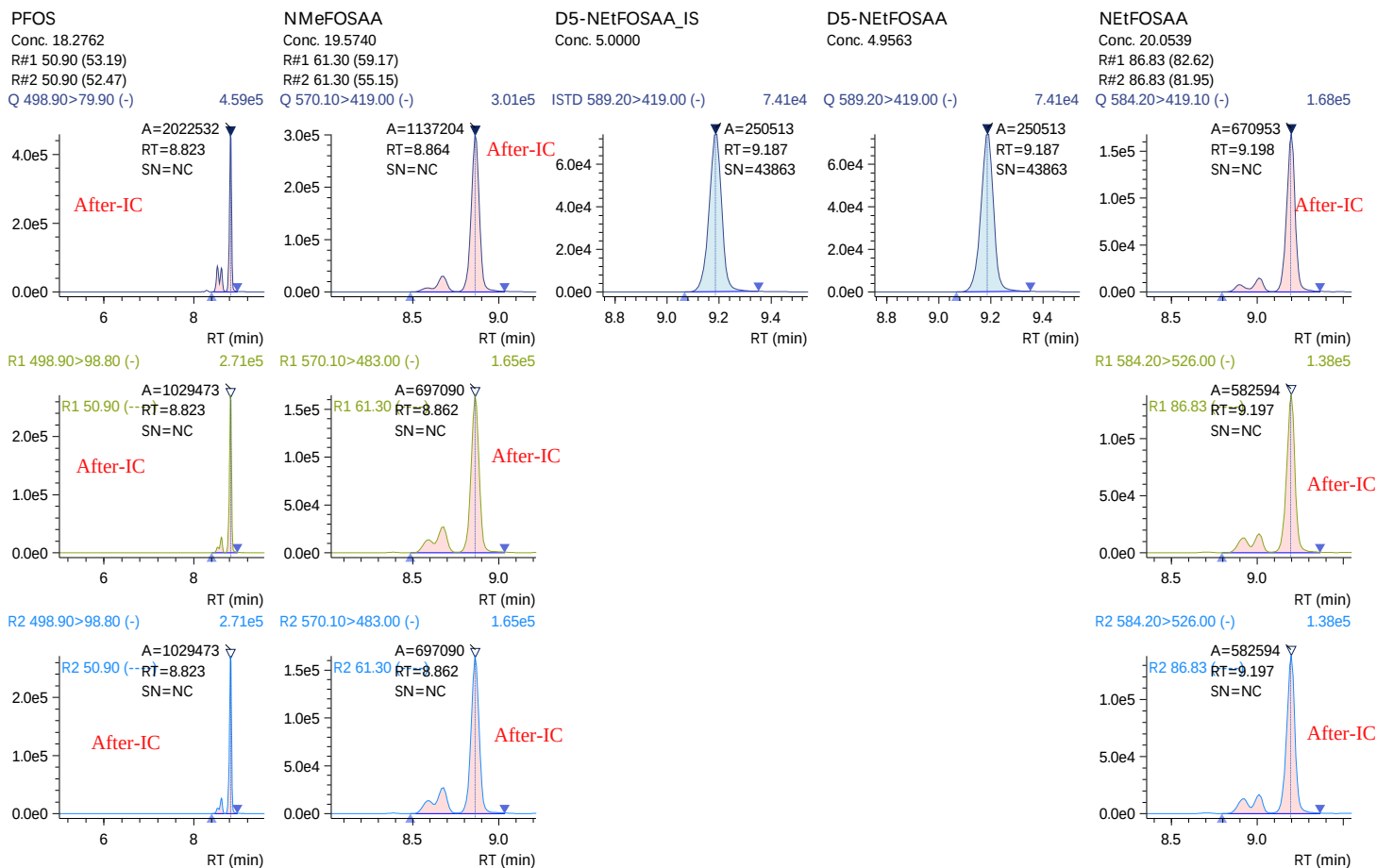


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_014 (continued)



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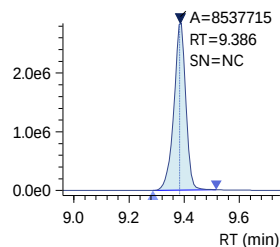
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Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



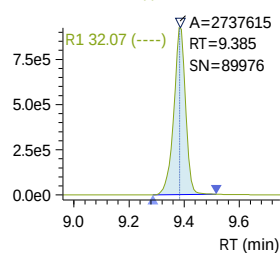
240118_014 (continued)

9-Cl-PF3ONS

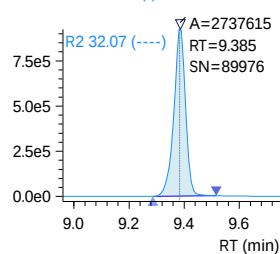
Conc. 17.1902
R#1 32.07 (31.76)
R#2 32.07 (32.76)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-)

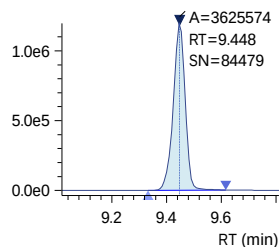


R2 532.80>353.00 (-)

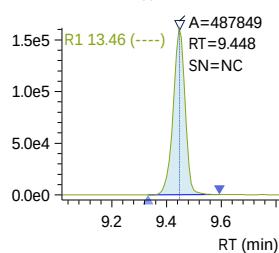


PFUnDA

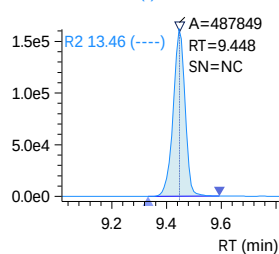
Conc. 19.4796
R#1 13.46 (12.31)
R#2 13.46 (13.12)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-)



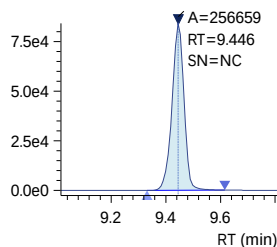
R2 563.10>269.10 (-)



13C7-PFUnDA_IS

Conc. 1.2500

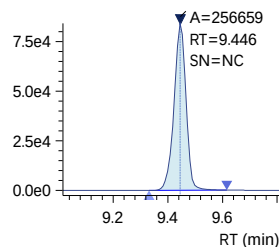
ISTD 570.00>525.10 (-)



13C7-PFUnDA

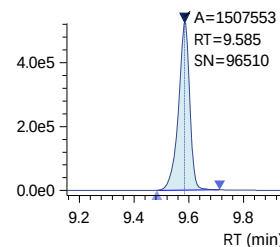
Conc. 1.3258

Q 570.00>525.10 (-)

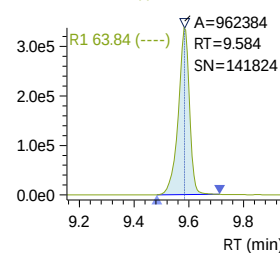


PFNS

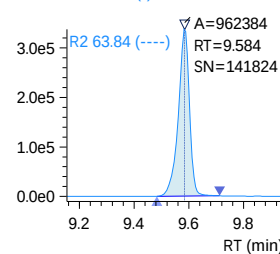
Conc. 18.6482
R#1 63.84 (63.31)
R#2 63.84 (65.22)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-)

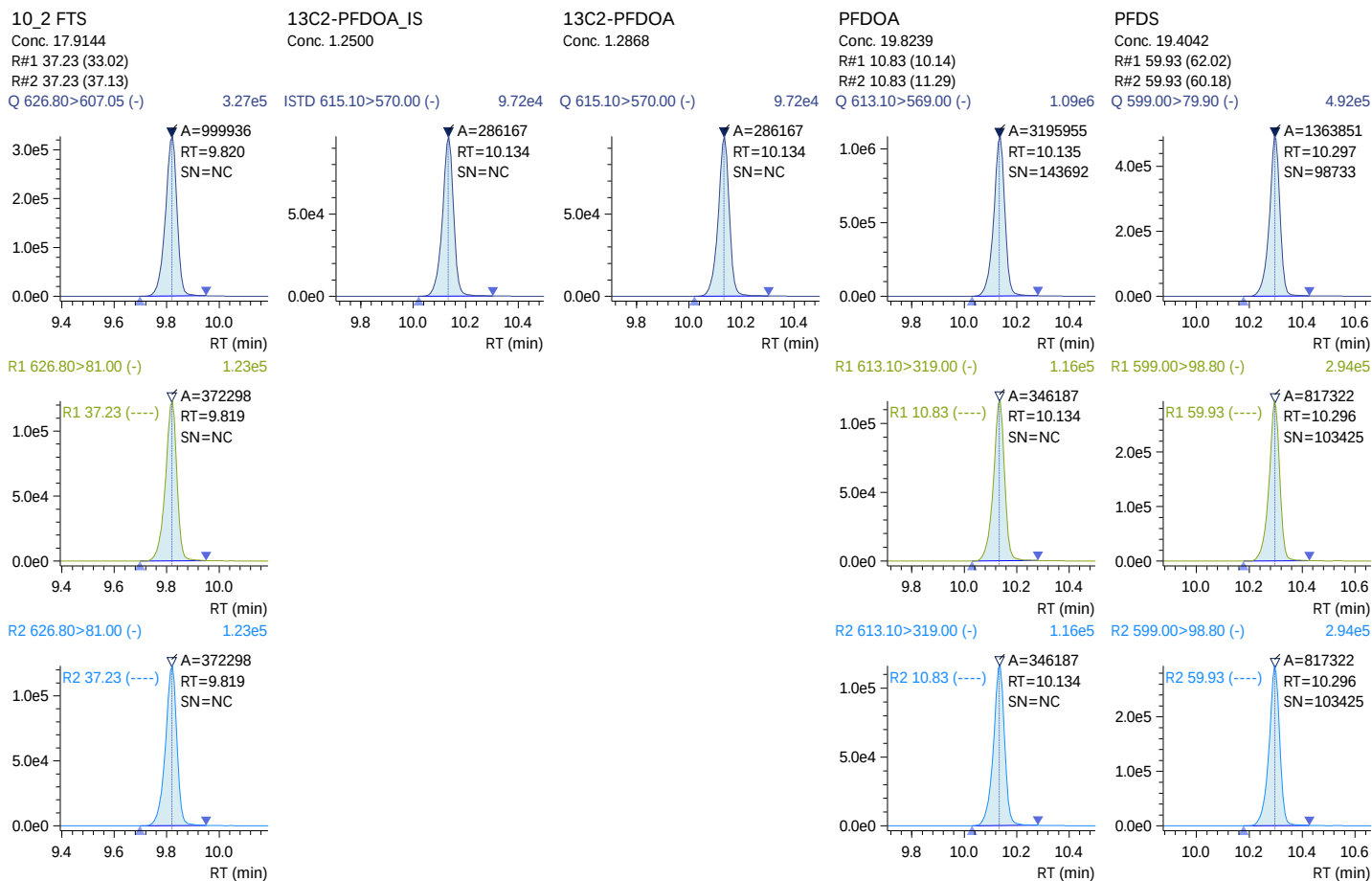


R2 548.80>98.80 (-)





240118_014 (continued)

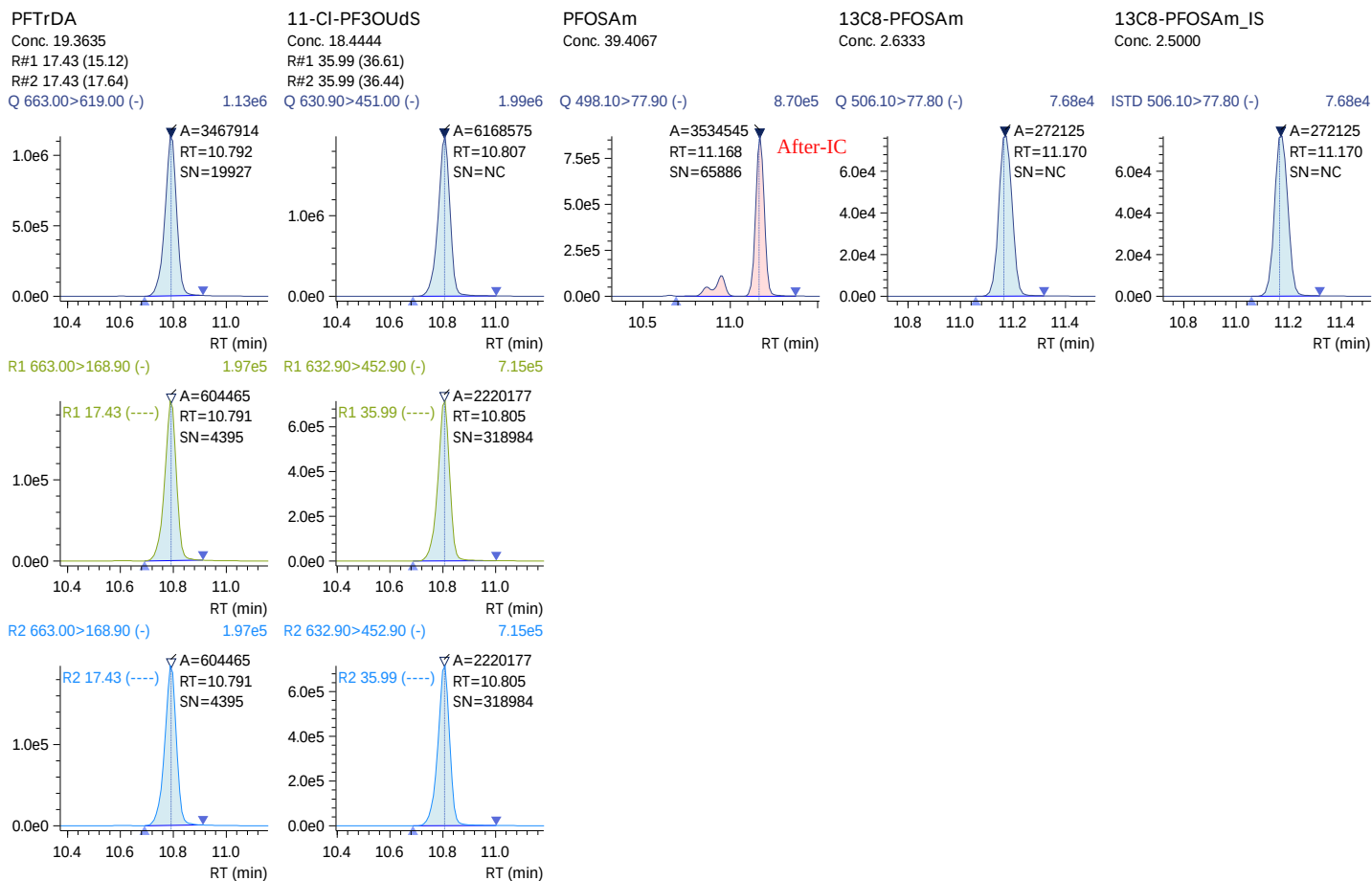


J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_014 (continued)

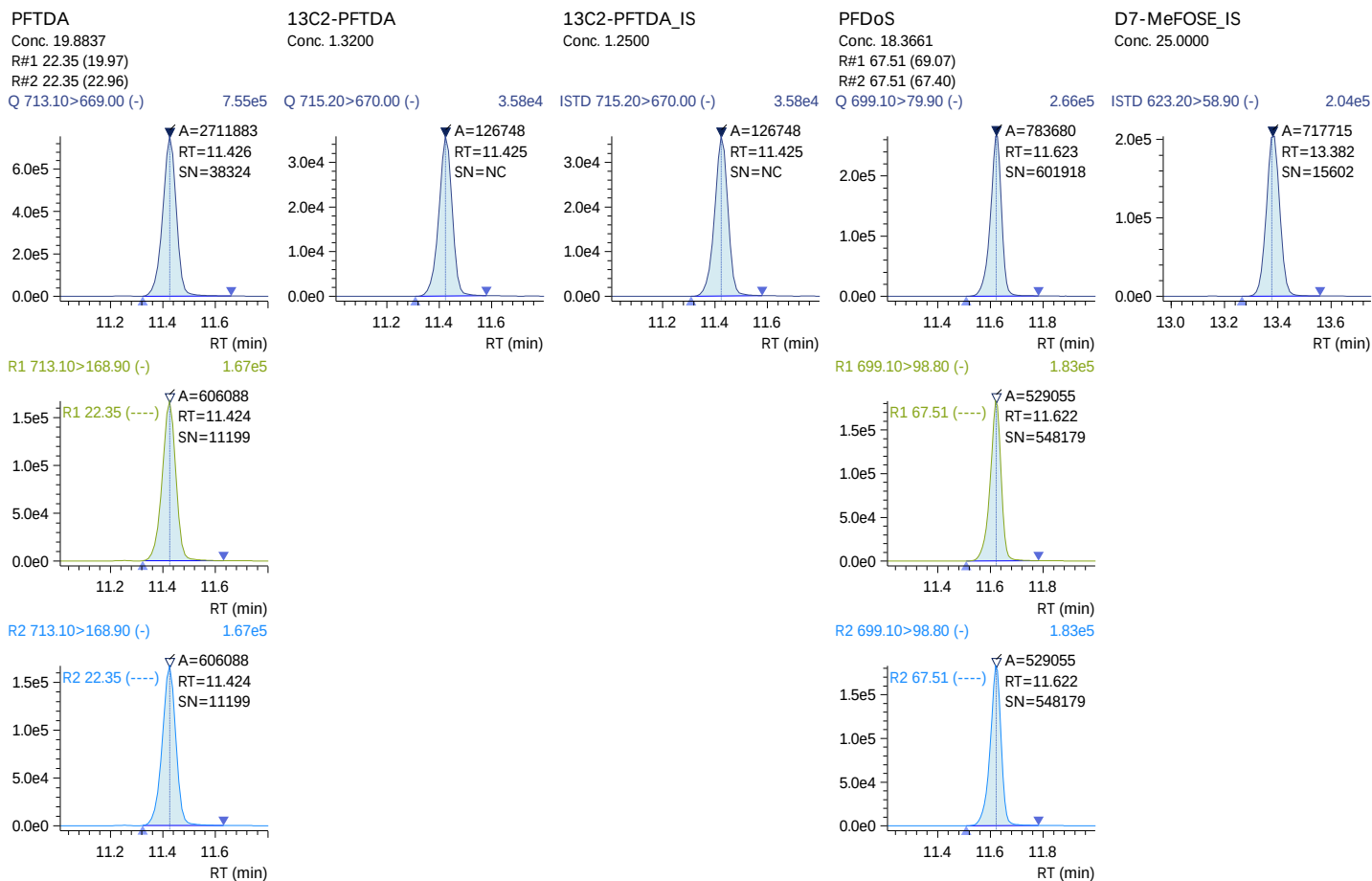


J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.damlp

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_014 (continued)



J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_014 (continued)

D7-MeFOSE
Conc. 28.1702

MeFOSE
Conc. 18.3977

13C2-PFHXA_IS
Conc. 2.5000

13C2-PFHXA
Conc. 2.6818

PFHXA
Conc. 19.5434
R#1 13.53 (11.64)
R#2 13.53 (13.90)

Q 623.20>58.90 (-)

2.04e5

Q 616.10>59.00 (-)

8.91e4

ISTD 815.00>770.05 (-)

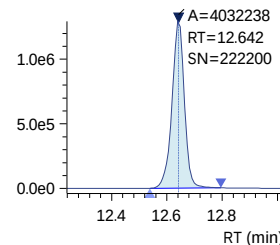
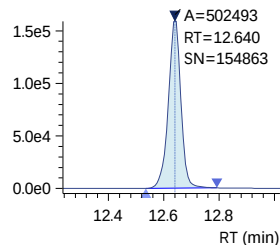
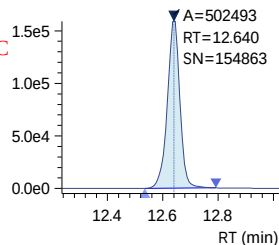
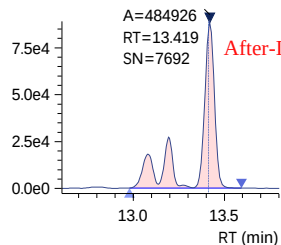
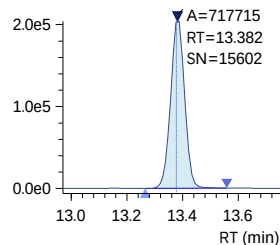
1.59e5

Q 815.00>770.05 (-)

1.59e5

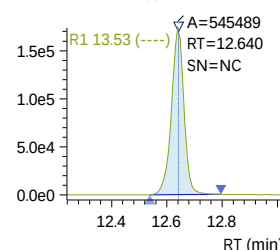
Q 813.00>768.95 (-)

1.29e6



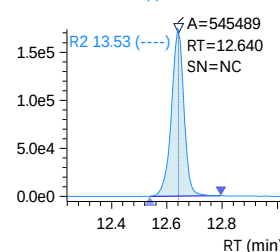
R1 813.00>218.95 (-)

1.74e5



R2 813.00>218.95 (-)

1.74e5





240118_014 (continued)

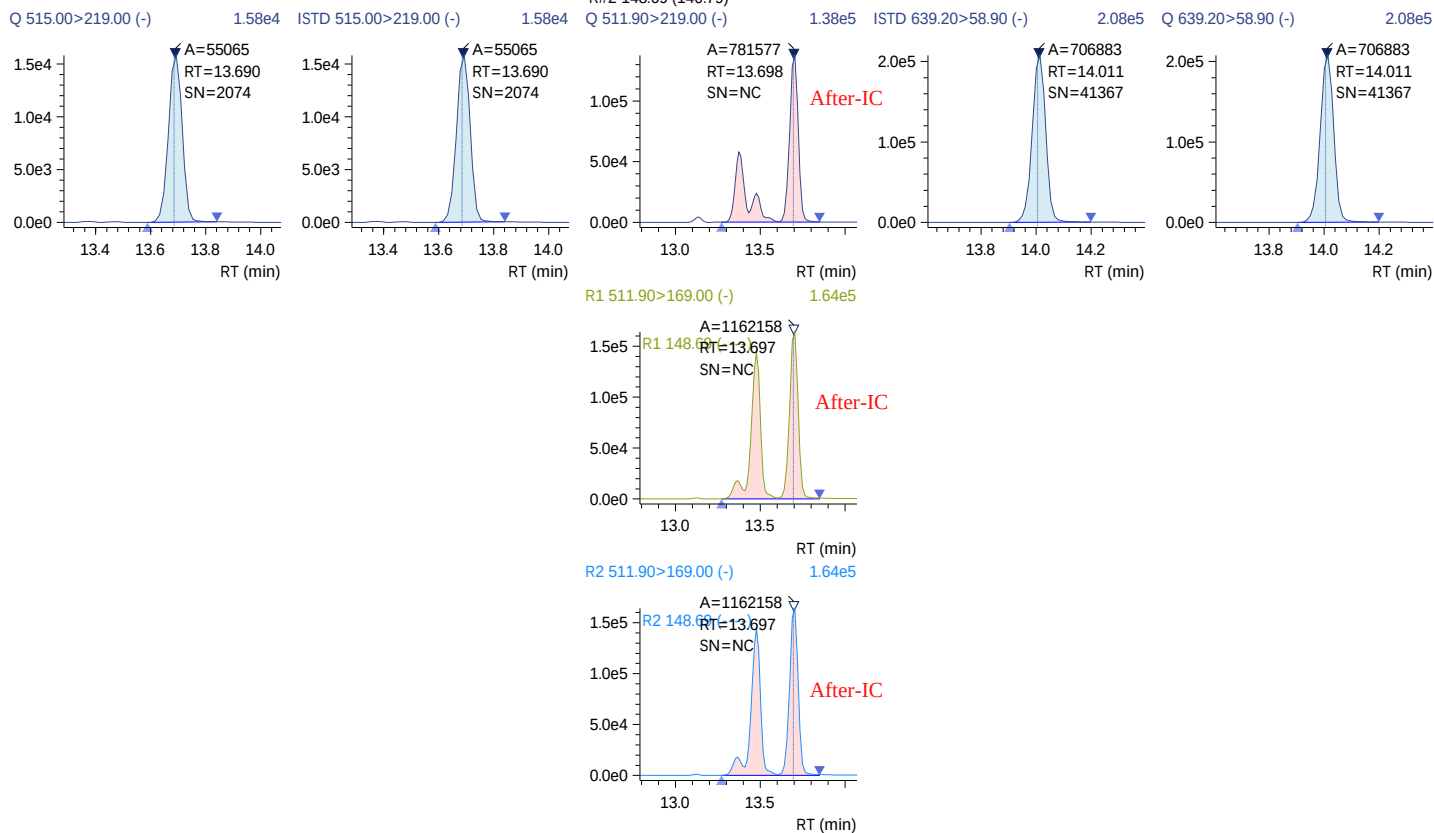
D3-MeFOSA
Conc. 2.6460

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. 19.6899
R#1 148.69 (149.05)
R#2 148.69 (140.79)

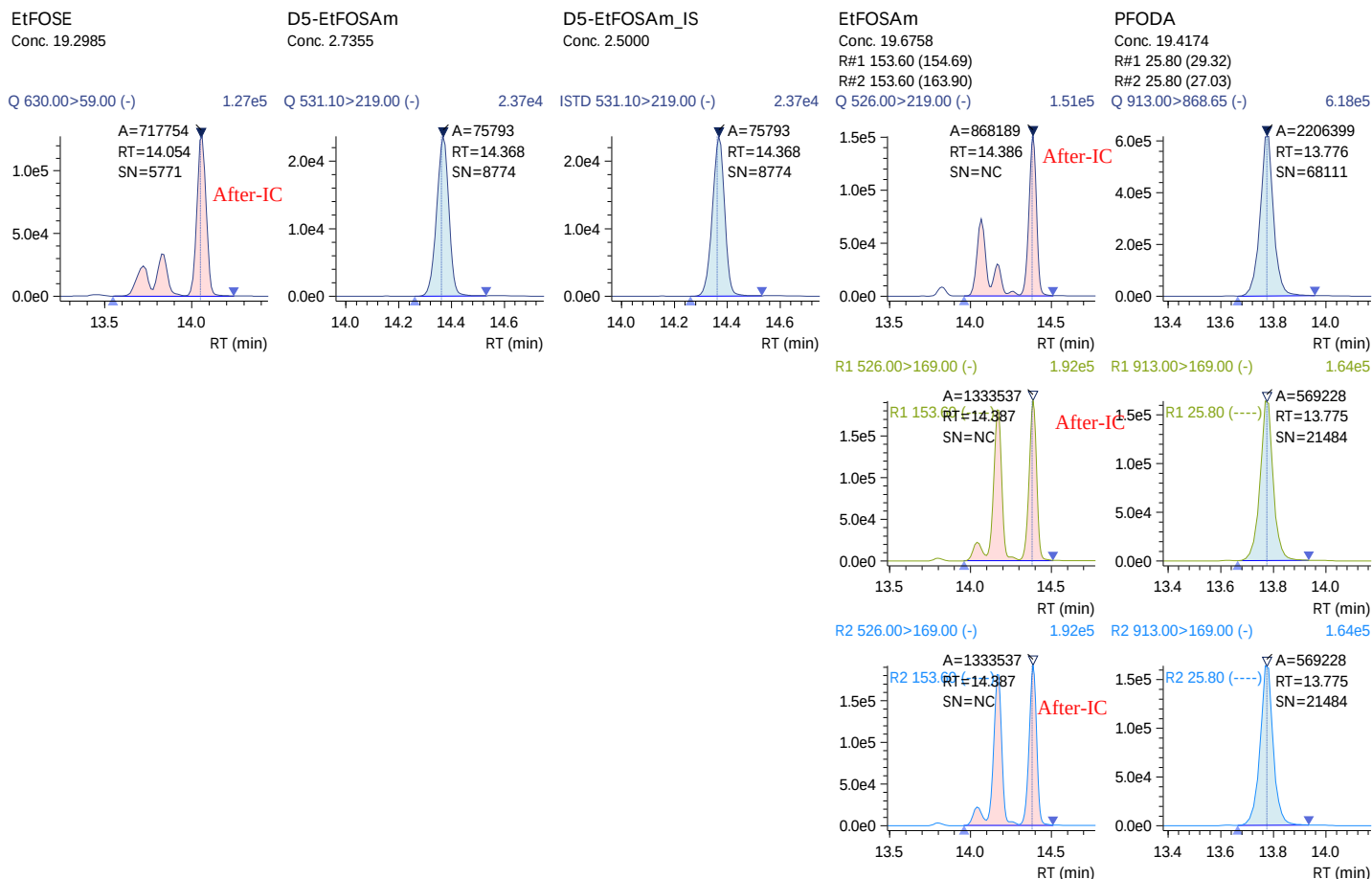
D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 27.3174





240118_014 (continued)



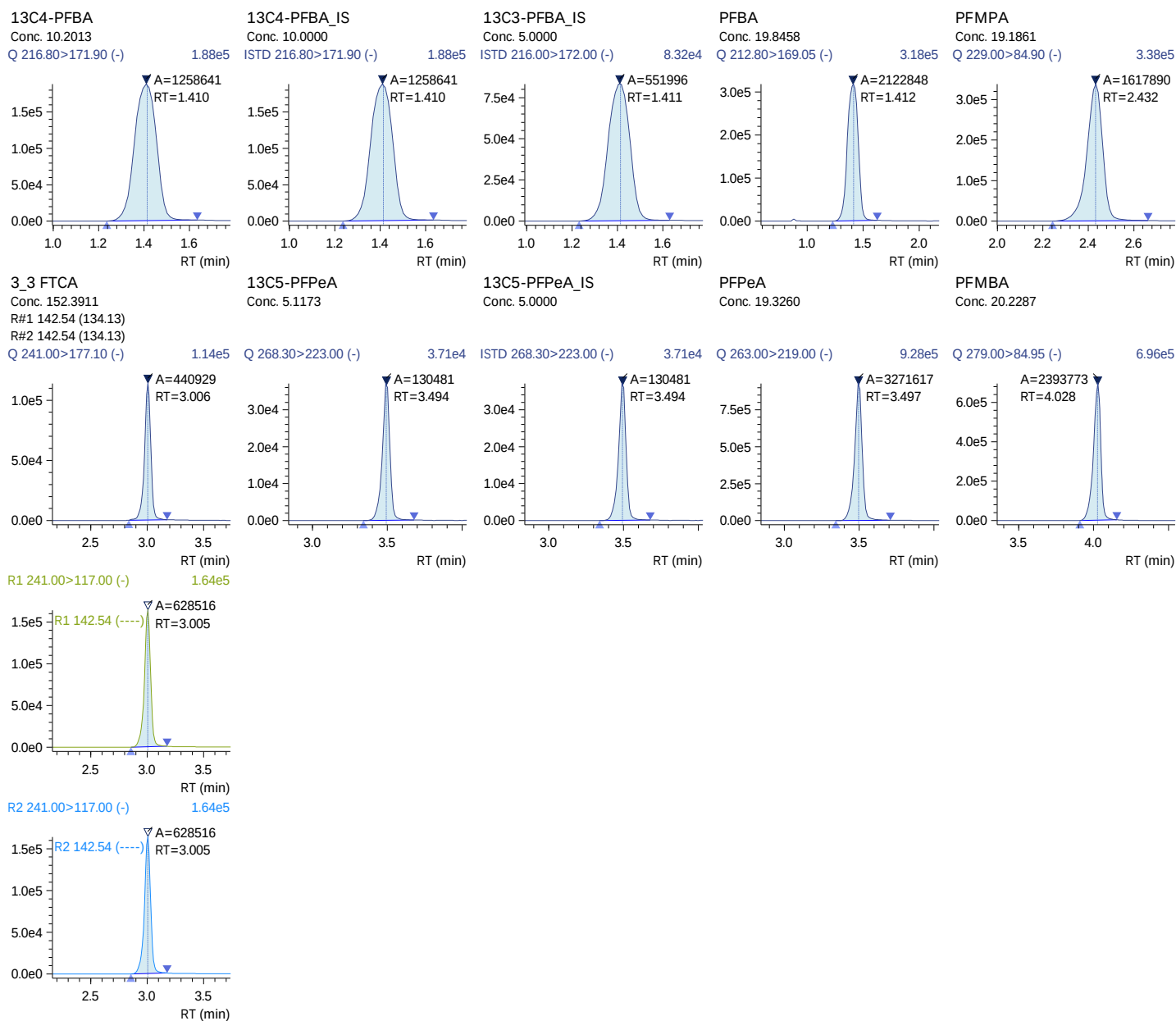
J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_014

Sample ID: 1633 ICAL 20.0PPB
Date Acquired: 1/18/2024 5:10:33 PM
Acquired by: System Administrator
Data File: 240118_014
Vial: 9 | Inj. Volume: 10.0000uL | Tray: 1





240118_014 (continued)

13C2-4_2 FTS
Conc. 4.1950

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. 17.6958
R#1 30.18 (34.14)
R#2 30.18 (34.14)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 16.4139
R#1 48.66 (47.53)
R#2 48.66 (47.53)

Q 329.10>80.90 (-)

3.71e4

ISTD 329.10>80.90 (-)

3.71e4

Q 327.10>307.00 (-)

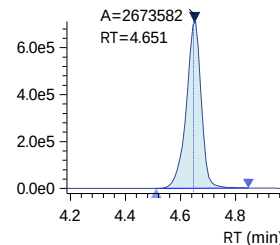
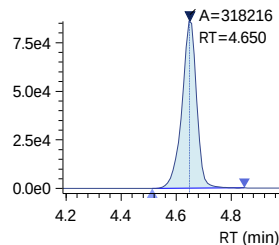
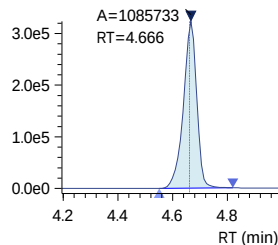
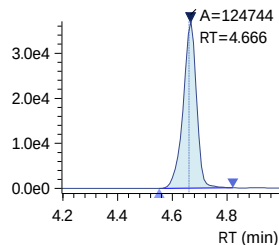
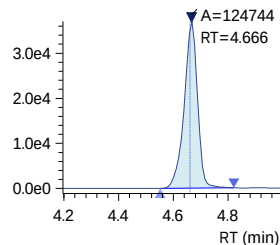
3.24e5

ISTD 302.10>79.90 (-)

8.60e4

Q 298.70>79.90 (-)

7.12e5

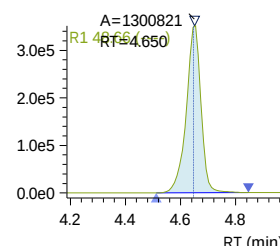
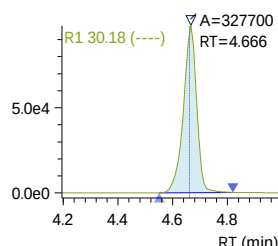


R1 327.10>80.90 (-)

9.81e4

R1 298.70>98.80 (-)

3.52e5

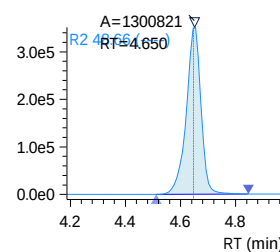
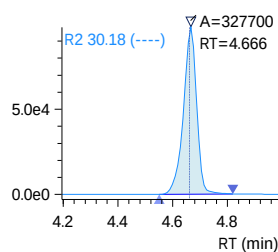


R2 327.10>80.90 (-)

9.81e4

R2 298.70>98.80 (-)

3.52e5





240118_014 (continued)

13C3-PFBS
 Conc. 2.5950

NFDHA
 Conc. 18.1263
 R#1 37.54 (37.88)
 R#2 37.54 (37.88)

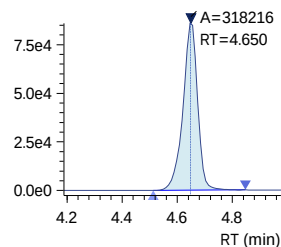
13C5-PFHxA
 Conc. 2.5963

13C5-PFHxA_IS
 Conc. 2.5000

13C2-PFHxA_IS
 Conc. 2.5000

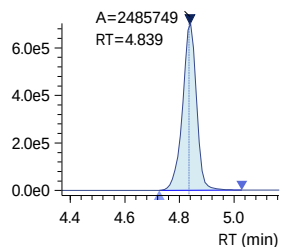
Q 302.10>79.90 (-)

8.60e4



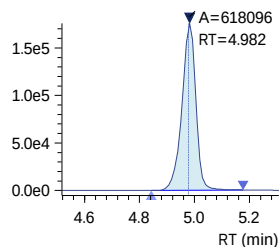
Q 295.00>201.00 (-)

7.03e5



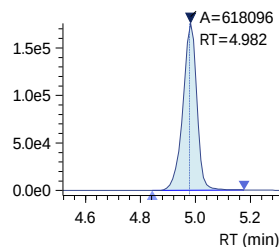
Q 318.00>273.00 (-)

1.76e5



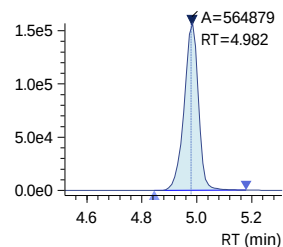
ISTD 318.00>273.00 (-)

1.76e5



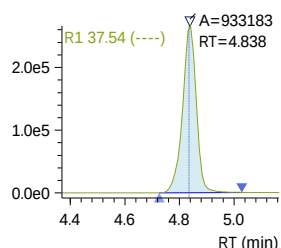
ISTD 315.10>270.00 (-)

1.57e5



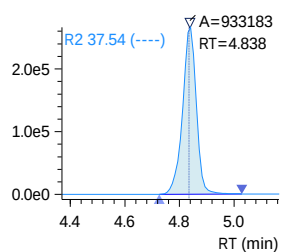
R1 295.00>84.90 (-)

2.66e5



R2 295.00>84.90 (-)

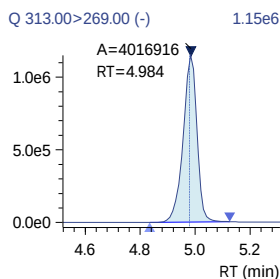
2.66e5



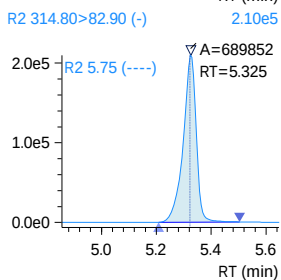
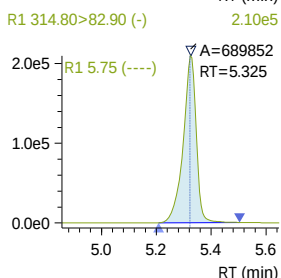
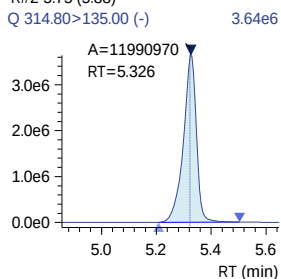


240118_014 (continued)

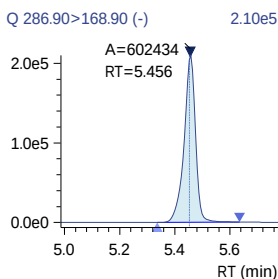
PFHxA
Conc. 19.4863



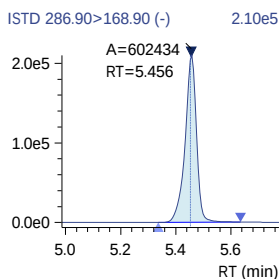
PFEESA
Conc. 17.3202
R#1 5.75 (5.88)
R#2 5.75 (5.88)



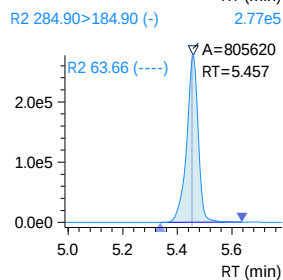
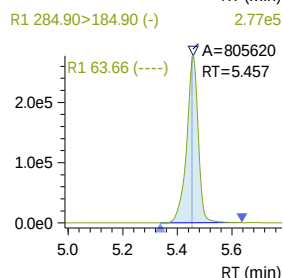
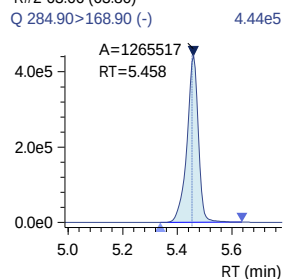
13C3-HFPO-DA
Conc. 10.8946



13C3-HFPO-DA_IS
Conc. 10.0000



HFPO-DA
Conc. 19.0542
R#1 63.66 (63.80)
R#2 63.66 (63.80)

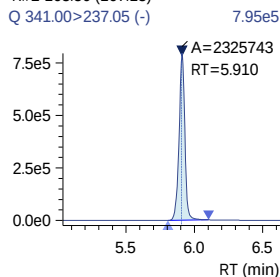




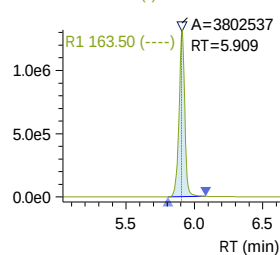
240118_014 (continued)

5_3 FTCA

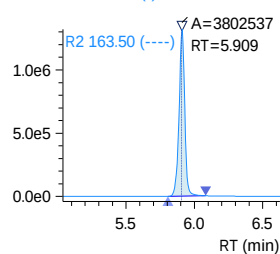
Conc. 145.4705
R#1 163.50 (167.13)
R#2 163.50 (167.13)
Q 341.00>237.05 (-)



R1 341.00>217.00 (-) 1.32e6

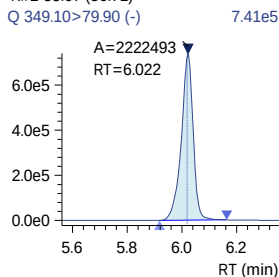


R2 341.00>217.00 (-) 1.32e6

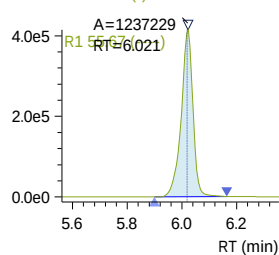


PFPeS

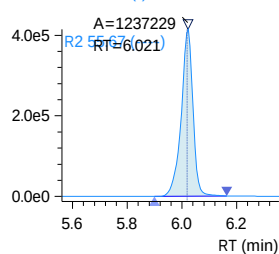
Conc. 17.9045
R#1 55.67 (56.71)
R#2 55.67 (56.71)
Q 349.10>79.90 (-)



R1 349.10>98.80 (-) 4.15e5

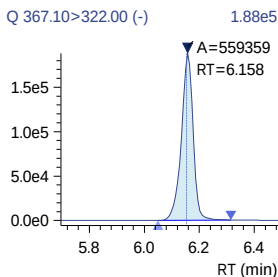


R2 349.10>98.80 (-) 4.15e5



13C4-PFHpA

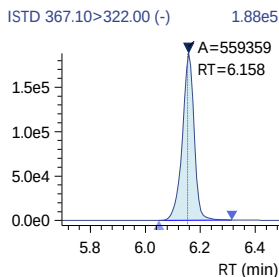
Conc. 2.5955



Q 367.10>322.00 (-)

13C4-PFHpA_IS

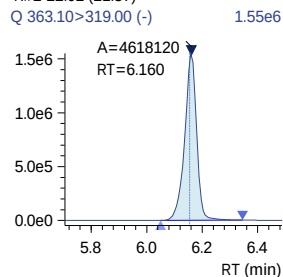
Conc. 2.5000



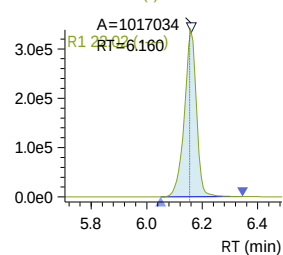
ISTD 367.10>322.00 (-)

PFHpA

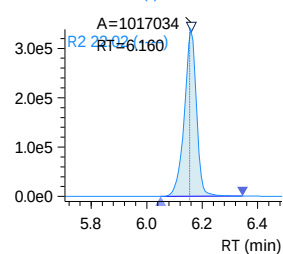
Conc. 19.8733
R#1 22.02 (21.37)
R#2 22.02 (21.37)
Q 363.10>319.00 (-)



R1 363.10>169.00 (-) 3.39e5

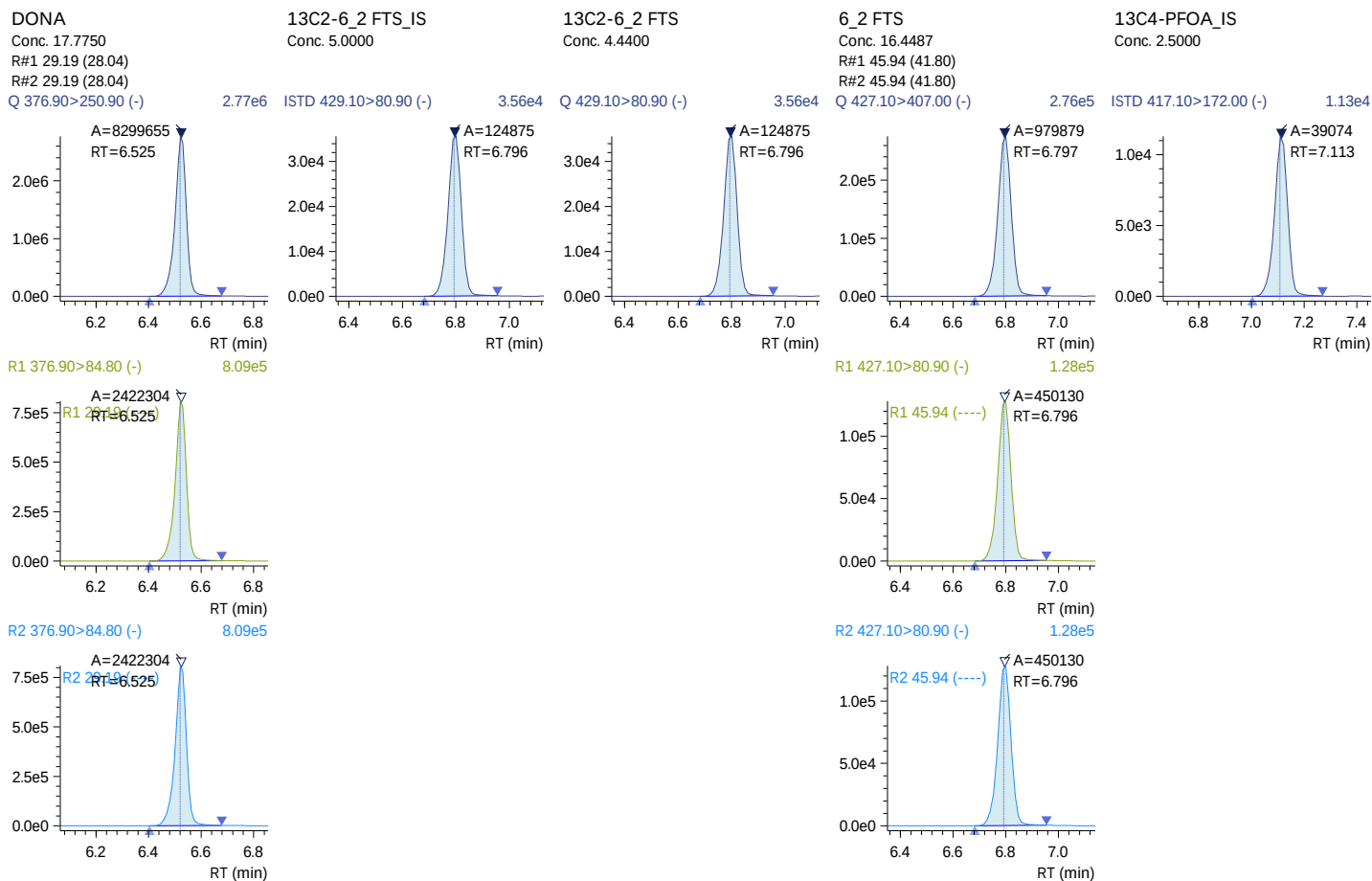


R2 363.10>169.00 (-) 3.39e5





240118_014 (continued)





240118_014 (continued)

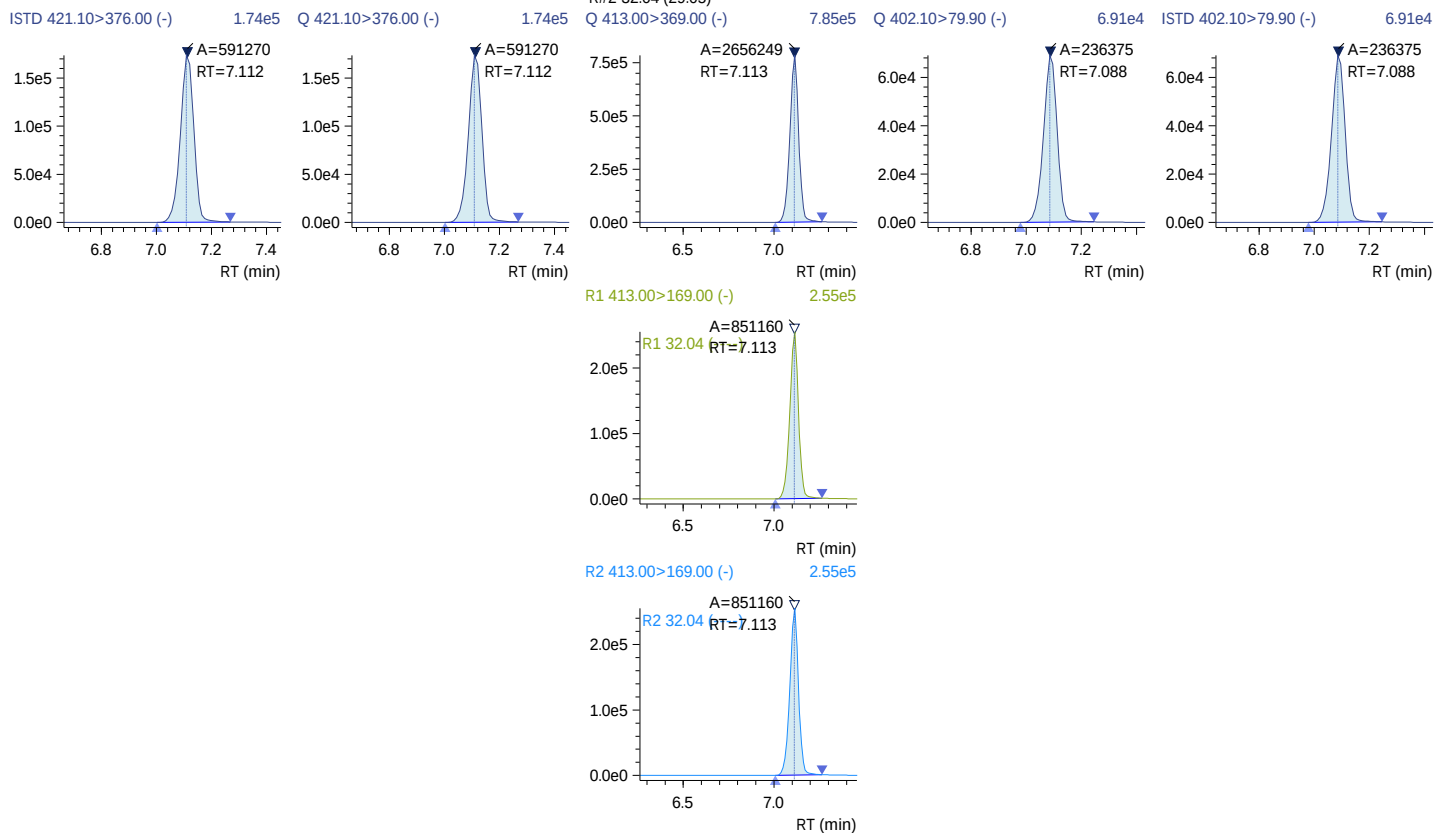
13C8-PFOA_IS
 Conc. 2.5000

13C8-PFOA
 Conc. 2.7073

PFOA
 Conc. 17.3630
 R#1 32.04 (29.05)
 R#2 32.04 (29.05)

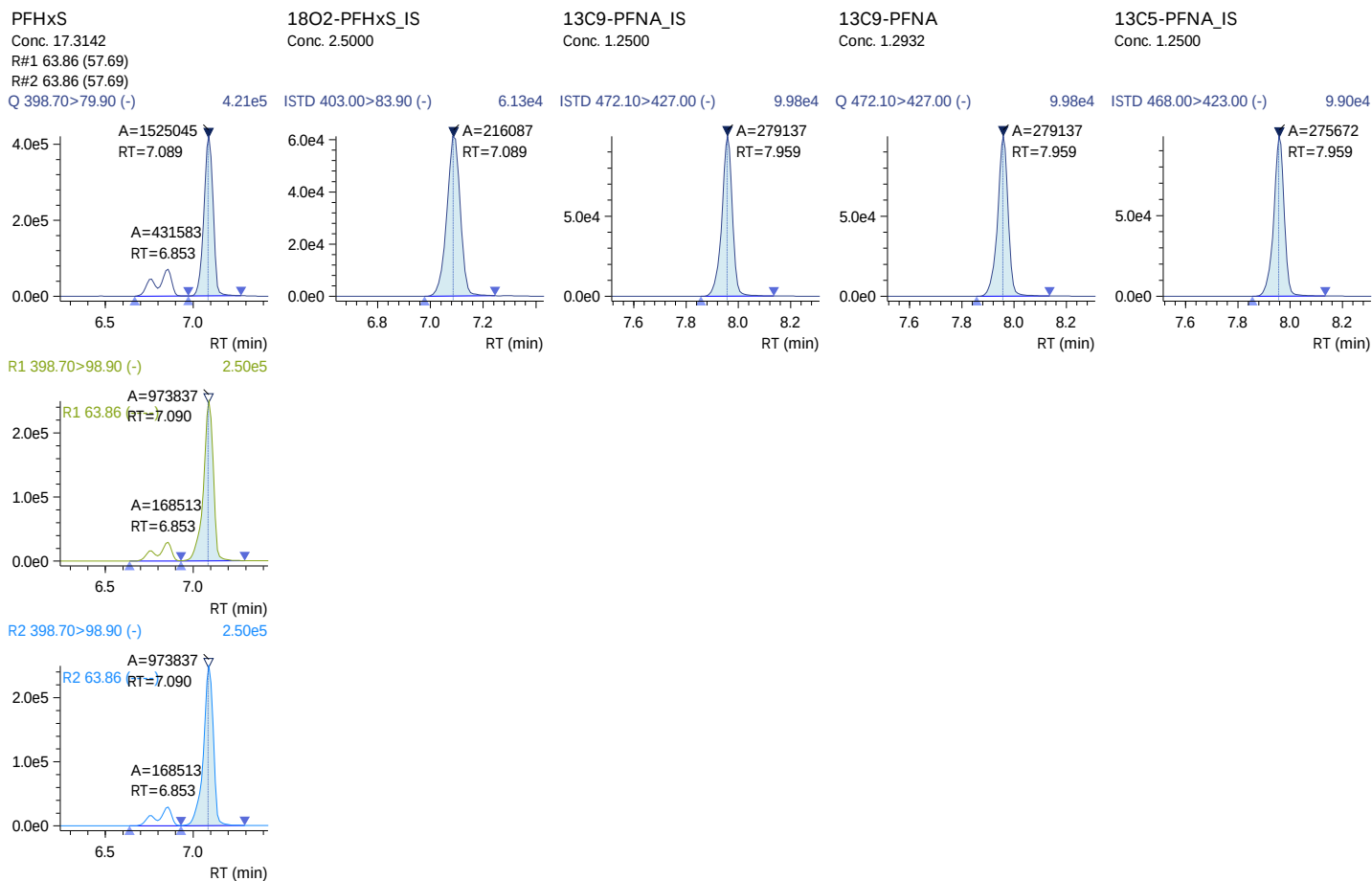
13C3-PFHxS
 Conc. 2.5485

13C3-PFHxS_IS
 Conc. 2.5000



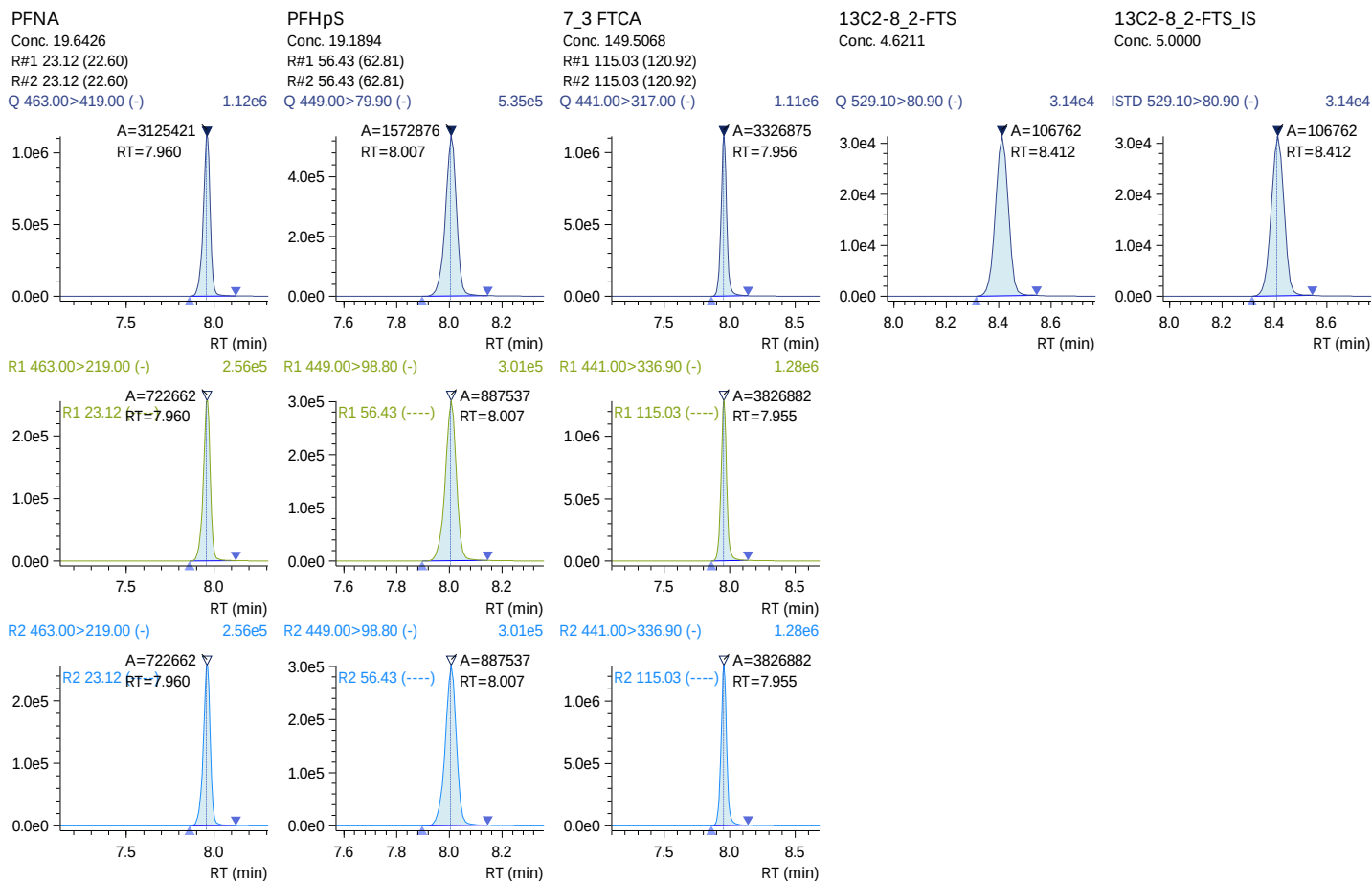


240118_014 (continued)



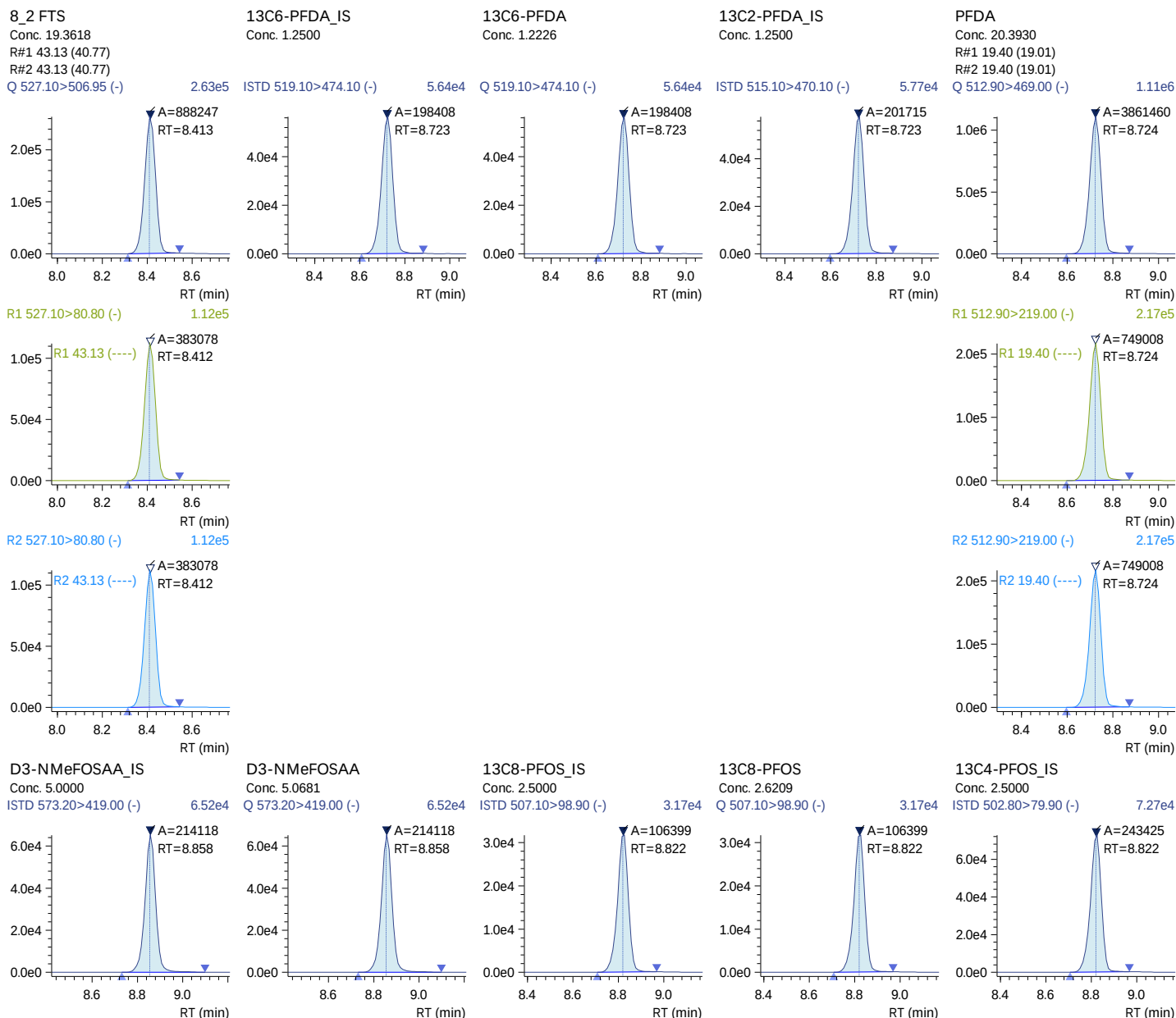


240118_014 (continued)



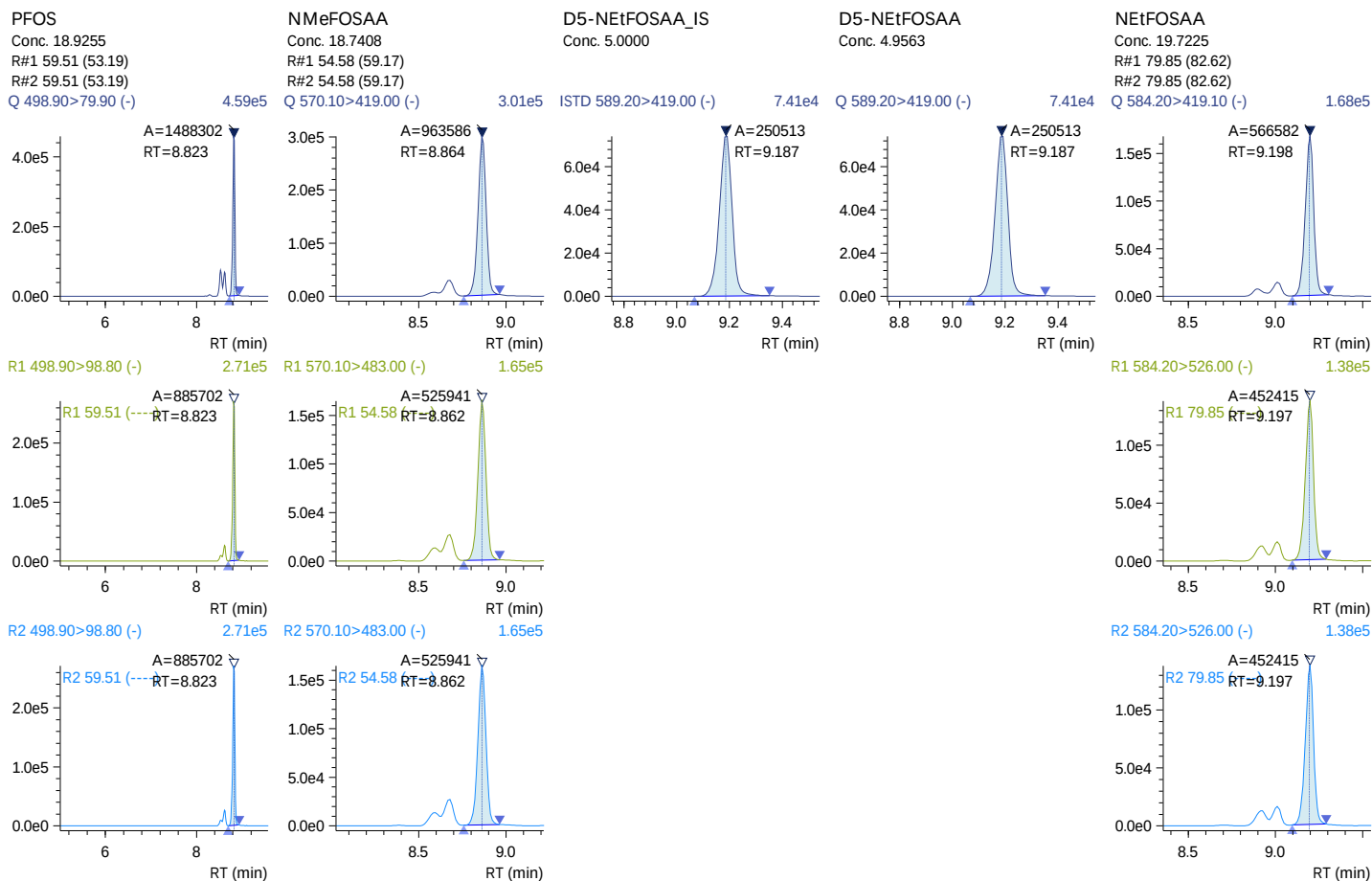


240118_014 (continued)





240118_014 (continued)

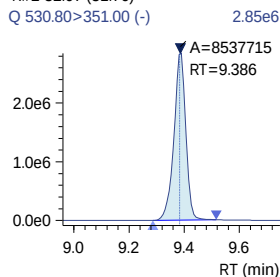




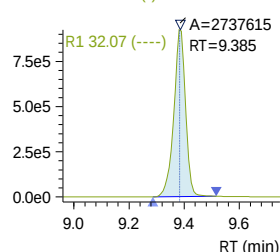
240118_014 (continued)

9-Cl-PF3ONS

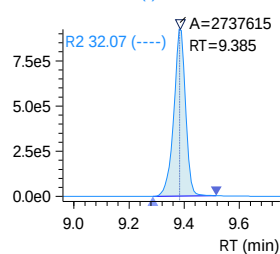
Conc. 17.1902
R#1 32.07 (31.76)
R#2 32.07 (31.76)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-)

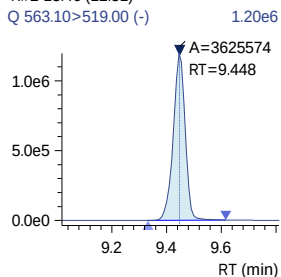


R2 532.80>353.00 (-)

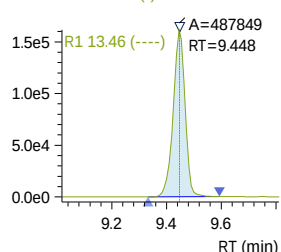


PFUnDA

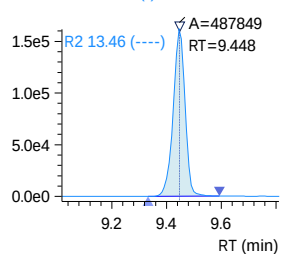
Conc. 19.4796
R#1 13.46 (12.31)
R#2 13.46 (12.31)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-)

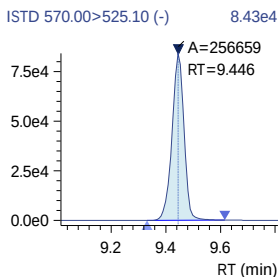


R2 563.10>269.10 (-)



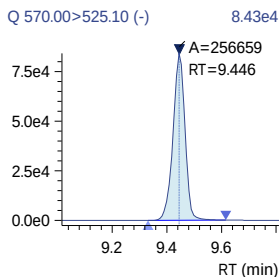
13C7-PFUnDA_IS

Conc. 1.2500



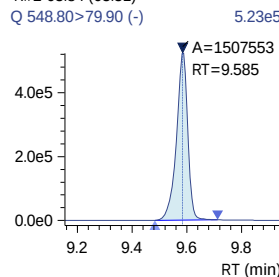
13C7-PFUnDA

Conc. 1.3258

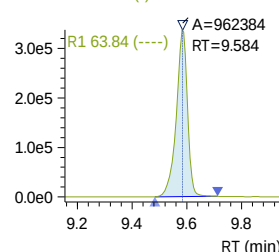


PFNS

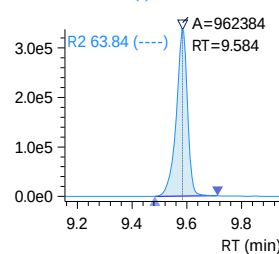
Conc. 18.6482
R#1 63.84 (63.31)
R#2 63.84 (63.31)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-)

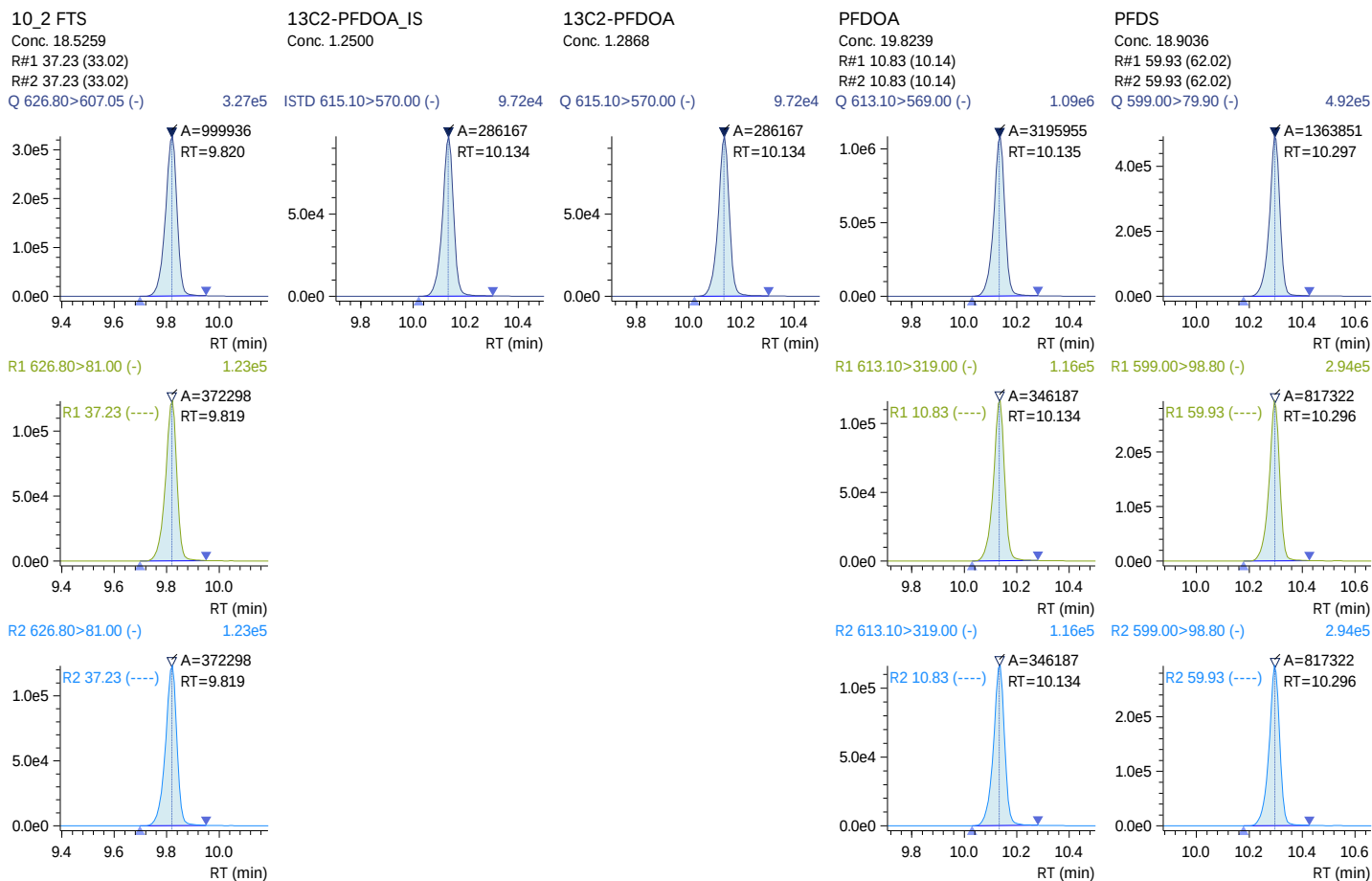


R2 548.80>98.80 (-)



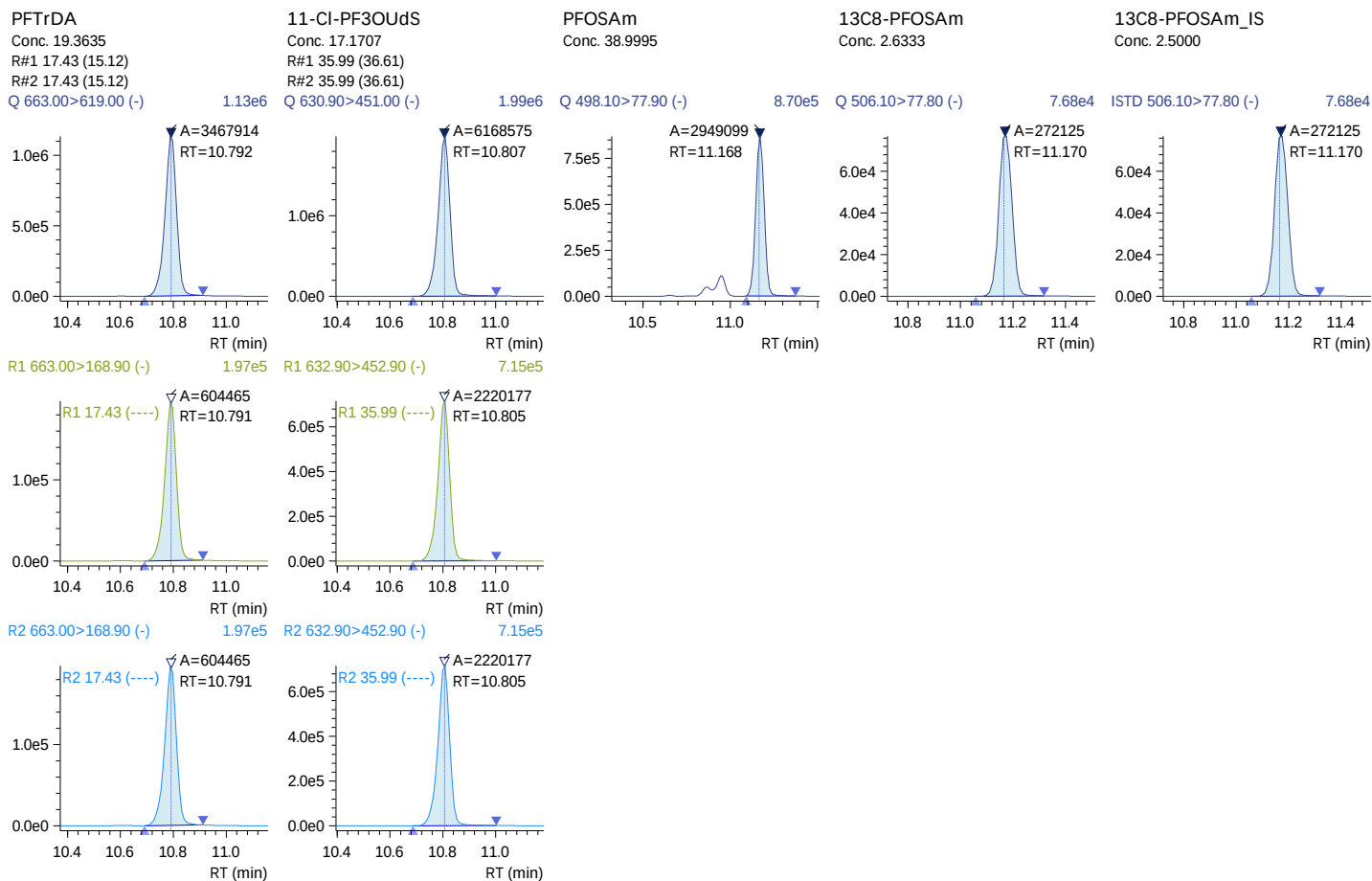


240118_014 (continued)



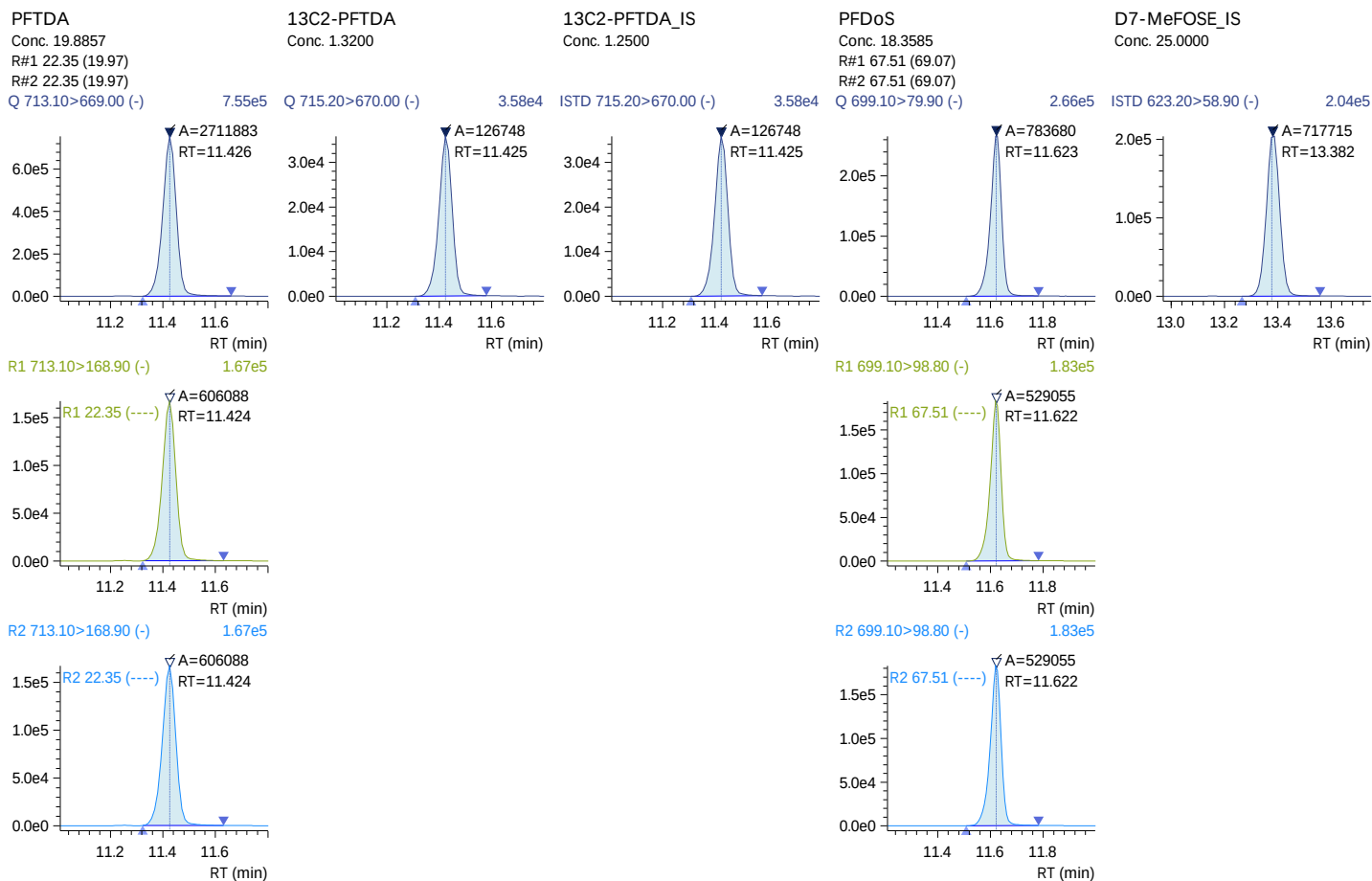


240118_014 (continued)





240118_014 (continued)





240118_014 (continued)

D7-MeFOSE
 Conc. 28.1702

MeFOSE
 Conc. 19.6360

13C2-PFHXA_IS
 Conc. 2.5000

13C2-PFHXA
 Conc. 2.6818

PFHXA
 Conc. 19.5434
 R#1 13.53 (11.64)
 R#2 13.53 (11.64)

Q 623.20>58.90 (-)

2.04e5

Q 616.10>59.00 (-)

8.91e4

ISTD 815.00>770.05 (-)

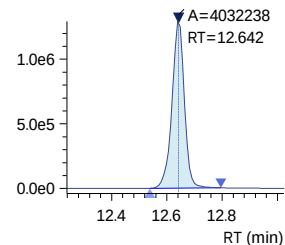
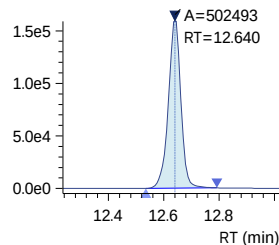
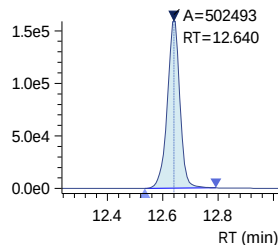
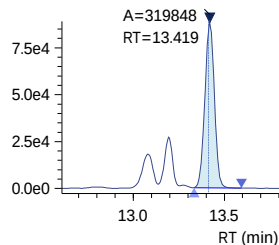
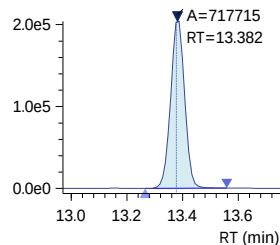
1.59e5

Q 815.00>770.05 (-)

1.59e5

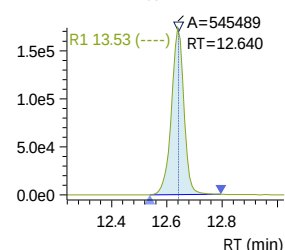
Q 813.00>768.95 (-)

1.29e6



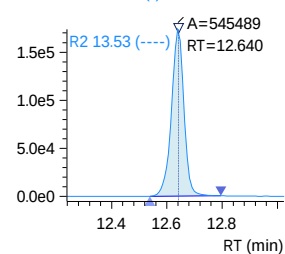
R1 813.00>218.95 (-)

1.74e5



R2 813.00>218.95 (-)

1.74e5





240118_014 (continued)

D3-MeFOSA
 Conc. 2.6460

D3-MeFOSA_IS
 Conc. 2.5000

MeFOSA
 Conc. 19.5396
 R#1 118.08 (149.05)
 R#2 118.08 (149.05)

D9-EtFOSE_IS
 Conc. 25.0000

D9-EtFOSE
 Conc. 27.3174

Q 515.00>219.00 (-)

1.58e4

ISTD 515.00>219.00 (-)

1.58e4

Q 511.90>219.00 (-)

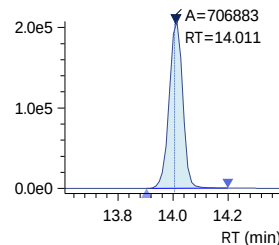
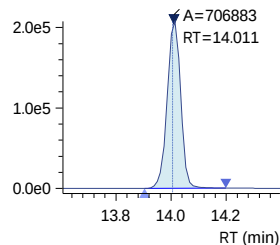
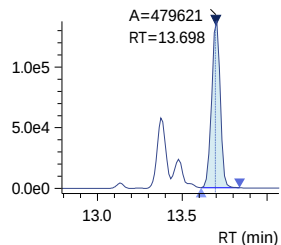
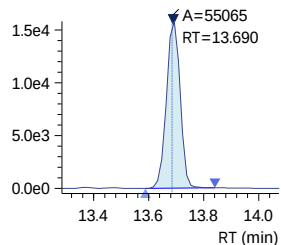
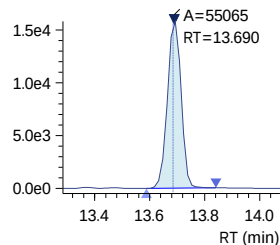
1.38e5

ISTD 639.20>58.90 (-)

2.08e5

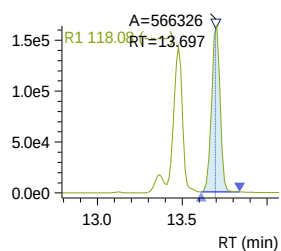
Q 639.20>58.90 (-)

2.08e5



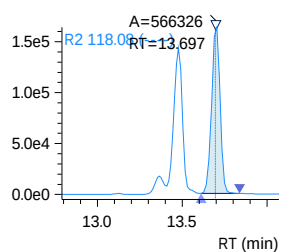
R1 511.90>169.00 (-)

1.64e5



R2 511.90>169.00 (-)

1.64e5





240118_014 (continued)

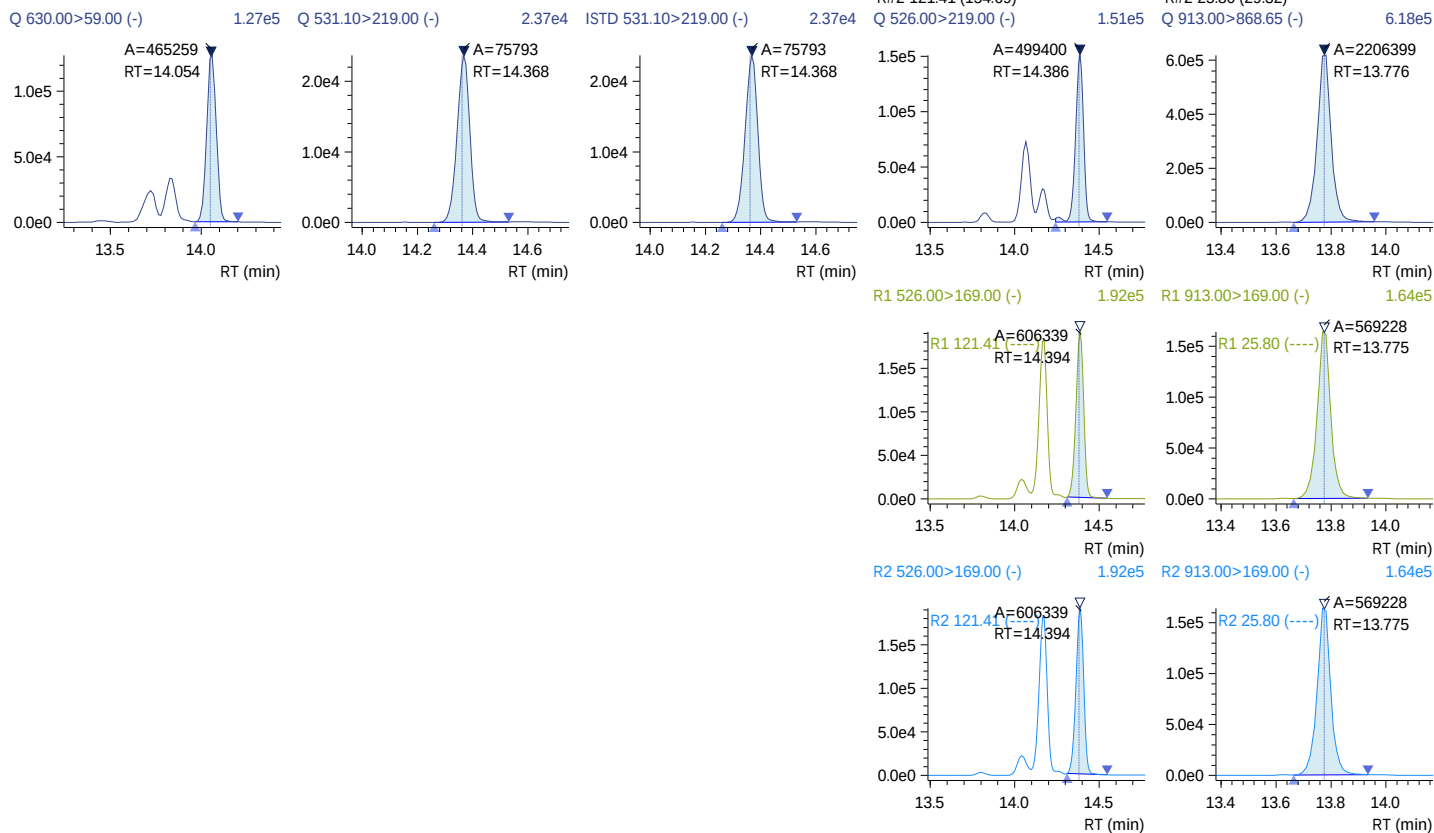
EtFOSE
Conc. 18.9410

D5-EtFOSAm
Conc. 2.7355

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. 20.6251
R#1 121.41 (154.69)
R#2 121.41 (154.69)

PFODA
Conc. 20.2986
R#1 25.80 (29.32)
R#2 25.80 (29.32)





240118_015

Sample ID: 1633 CCB
Date Acquired: 1/18/2024 5:33:48 PM
Acquired by: System Administrator
Data File: 240118_015
Vial: 54 | Inj. Volume: 10.0000uL | Tray: 1

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	985859	----	----	----	----	----	----	
13C4-PFBA_IS	216.80>171.90	----	985859	----	----	----	----	----	----	
13C3-PFBA_IS	216.00>172.00	----	443009	----	----	----	----	----	----	
PFBA	212.80>169.05	----	994	----	----	----	----	----	----	
PFMPA	229.00>84.90	----	----	----	----	----	----	----	----	
3_3 FTCA	241.00>177.10	241.00>117.00	----	0	0.00	141.17	0	0.00	141.17	
13C5-PFPeA	268.30>223.00	----	109708	----	----	----	----	----	----	
13C5-PFPeA_IS	268.30>223.00	----	109708	----	----	----	----	----	----	
PFPeA	263.00>219.00	----	1828	----	----	----	----	----	----	
PFMBA	279.00>84.95	----	199	----	----	----	----	----	----	
13C2-4_2 FTS	329.10>80.90	----	117886	----	----	----	----	----	----	
13C2-4_2 FTS_IS	329.10>80.90	----	117886	----	----	----	----	----	----	
4_2 FTS	327.10>307.00	327.10>80.90	----	0	0.00	29.06	0	0.00	29.06	
13C3-PFBS_IS	302.10>79.90	----	261866	----	----	----	----	----	----	
PFBS	298.70>79.90	298.70>98.80	----	0	0.00	46.72	0	0.00	46.72	
13C3-PFBS	302.10>79.90	----	261866	----	----	----	----	----	----	
NFDHA	295.00>201.00	295.00>84.90	880	401	45.63	40.25	401	45.63	40.25	
13C5-PFHxA	318.00>273.00	----	524950	----	----	----	----	----	----	
13C5-PFHxA_IS	318.00>273.00	----	524950	----	----	----	----	----	----	
13C2-PFHxA_IS	315.10>270.00	----	496509	----	----	----	----	----	----	
PFHxA	313.00>269.00	----	1879	----	----	----	----	----	----	
PFEESA	314.80>135.00	314.80>82.90	----	0	0.00	6.11	0	0.00	6.11	
13C3-HFPO-DA	286.90>168.90	----	490564	----	----	----	----	----	----	
13C3-HFPO-DA_IS	286.90>168.90	----	490564	----	----	----	----	----	----	
HFPO-DA	284.90>168.90	284.90>184.90	----	0	0.00	65.61	0	0.00	65.61	
5_3 FTCA	341.00>237.05	341.00>217.00	----	0	0.00	158.86	0	0.00	158.86	
PFPeS	349.10>79.90	349.10>98.80	212	142	67.20	55.80	142	67.20	55.80	
13C4-PFHpA	367.10>322.00	----	465059	----	----	----	----	----	----	
13C4-PFHpA_IS	367.10>322.00	----	465059	----	----	----	----	----	----	
PFHpA	363.10>319.00	363.10>169.00	6250	1250	20.00	21.50	1250	20.00	21.50	
DONA	376.90>250.90	376.90>84.80	289	42	14.49	29.66	42	14.49	29.66	IRr
13C2-6_2 FTS_IS	429.10>80.90	----	103523	----	----	----	----	----	----	
13C2-6_2 FTS	429.10>80.90	----	103523	----	----	----	----	----	----	
6_2 FTS	427.10>407.00	427.10>80.90	869	509	58.51	41.15	509	58.51	41.15	
13C4-PFOA_IS	417.10>172.00	----	34963	----	----	----	----	----	----	
13C8-PFOA_IS	421.10>376.00	----	486369	----	----	----	----	----	----	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240118_015 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	486369	----	----	----	----	----	----	----
PFOA	413.00>369.00	413.00>169.00	4635	1402	30.26	31.89	1402	30.26	31.89	
13C3-PFHxS	402.10>79.90	----	199596	----	----	----	----	----	----	----
13C3-PFHxS_IS	402.10>79.90	----	199596	----	----	----	----	----	----	----
PFHxS	398.70>79.90	398.70>98.90	871	536	61.53	56.62	536	61.53	56.62	
18O2-PFHxS_IS	403.00>83.90	----	169573	----	----	----	----	----	----	----
13C9-PFNA_IS	472.10>427.00	----	230581	----	----	----	----	----	----	----
13C9-PFNA	472.10>427.00	----	230581	----	----	----	----	----	----	----
13C5-PFNA_IS	468.00>423.00	----	237143	----	----	----	----	----	----	----
PFNA	463.00>419.00	463.00>219.00	3177	782	24.63	23.17	782	24.63	23.17	
PFHpS	449.00>79.90	449.00>98.80	----	0	0.00	56.96	0	0.00	56.96	
7_3 FTCA	441.00>317.00	441.00>336.90	1672	1939	115.94	117.47	1939	115.94	117.47	
13C2-8_2-FTS	529.10>80.90	----	82310	----	----	----	----	----	----	----
13C2-8_2-FTS_IS	529.10>80.90	----	82310	----	----	----	----	----	----	----
8_2 FTS	527.10>506.95	527.10>80.80	----	0	0.00	49.59	0	0.00	49.59	
13C6-PFDA_IS	519.10>474.10	----	168168	----	----	----	----	----	----	----
13C6-PFDA	519.10>474.10	----	168168	----	----	----	----	----	----	----
13C2-PFDA_IS	515.10>470.10	----	161918	----	----	----	----	----	----	----
PFDA	512.90>469.00	512.90>219.00	4820	581	12.05	19.00	581	12.05	19.00	
D3-NMeFOSAA_IS	573.20>419.00	----	166245	----	----	----	----	----	----	----
D3-NMeFOSAA	573.20>419.00	----	166245	----	----	----	----	----	----	----
13C8-PFOS_IS	507.10>98.90	----	84233	----	----	----	----	----	----	----
13C8-PFOS	507.10>98.90	----	84233	----	----	----	----	----	----	----
13C4-PFOS_IS	502.80>79.90	----	203319	----	----	----	----	----	----	----
PFOS	498.90>79.90	498.90>98.80	----	0	0.00	52.47	0	0.00	52.47	
NMeFOSAA	570.10>419.00	570.10>483.00	127	41	32.38	55.15	41	32.38	55.15	
D5-NEtFOSAA_IS	589.20>419.00	----	194960	----	----	----	----	----	----	----
D5-NEtFOSAA	589.20>419.00	----	194960	----	----	----	----	----	----	----
NEtFOSAA	584.20>419.10	584.20>526.00	----	0	0.00	81.95	0	0.00	81.95	
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	----	0	0.00	32.76	0	0.00	32.76	
PFUnDA	563.10>519.00	563.10>269.10	3835	423	11.02	13.12	423	11.02	13.12	
13C7-PFUnDA_IS	570.00>525.10	----	200384	----	----	----	----	----	----	----
13C7-PFUnDA	570.00>525.10	----	200384	----	----	----	----	----	----	----
PFNS	548.80>79.90	548.80>98.80	----	0	0.00	65.22	0	0.00	65.22	
10_2 FTS	626.80>607.05	626.80>81.00	----	0	0.00	37.13	0	0.00	37.13	
13C2-PFDOA_IS	615.10>570.00	----	229376	----	----	----	----	----	----	----
13C2-PFDOA	615.10>570.00	----	229376	----	----	----	----	----	----	----
PFDOA	613.10>569.00	613.10>319.00	3092	239	7.74	11.29	239	7.74	11.29	
PFDS	599.00>79.90	599.00>98.80	----	0	0.00	60.18	0	0.00	60.18	
PFTrDA	663.00>619.00	663.00>168.90	3587	624	17.40	17.64	624	17.40	17.64	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240118_015 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	----	0	0.00	36.44	0	0.00	36.44	
PFOSAm	498.10>77.90	----	1052	----	----	----	----	----	----	
13C8-PFOSAm	506.10>77.80	----	204049	----	----	----	----	----	----	
13C8-PFOSAm_IS	506.10>77.80	----	204049	----	----	----	----	----	----	
PFTDA	713.10>669.00	713.10>168.90	3191	708	22.19	22.96	708	22.19	22.96	
13C2-PFTDA	715.20>670.00	----	94706	----	----	----	----	----	----	
13C2-PFTDA_IS	715.20>670.00	----	94706	----	----	----	----	----	----	
PFDoS	699.10>79.90	699.10>98.80	----	0	0.00	67.40	0	0.00	67.40	
D7-MeFOSE_IS	623.20>58.90	----	501038	----	----	----	----	----	----	
D7-MeFOSE	623.20>58.90	----	501038	----	----	----	----	----	----	
MeFOSE	616.10>59.00	----	----	----	----	----	----	----	----	
13C2-PFHxDA_IS	815.00>770.05	----	374925	----	----	----	----	----	----	
13C2-PFHxDA	815.00>770.05	----	374925	----	----	----	----	----	----	
PFHxDA	813.00>768.95	813.00>218.95	4743	698	14.73	13.90	698	14.73	13.90	
D3-MeFOSA	515.00>219.00	----	45843	----	----	----	----	----	----	
D3-MeFOSA_IS	515.00>219.00	----	45843	----	----	----	----	----	----	
MeFOSA	511.90>219.00	511.90>169.00	114	129	112.80	140.79	129	112.80	140.79	
D9-EtFOSE_IS	639.20>58.90	----	529622	----	----	----	----	----	----	
D9-EtFOSE	639.20>58.90	----	529622	----	----	----	----	----	----	
EtFOSE	630.00>59.00	----	----	----	----	----	----	----	----	
D5-EtFOSAm	531.10>219.00	----	53669	----	----	----	----	----	----	
D5-EtFOSAm_IS	531.10>219.00	----	53669	----	----	----	----	----	----	
EtFOSAm	526.00>219.00	526.00>169.00	----	0	0.00	163.90	0	0.00	163.90	
PFODA	913.00>868.65	913.00>169.00	3338	1126	33.73	27.03	1126	33.73	27.03	

Flag ID key: IRr: Ion Ratio (Relative)



240118_015

Sample ID: 1633 CCB
Date Acquired: 1/18/2024 5:33:48 PM
Acquired by: System Administrator
Data File: 240118_015
Vial: 54 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Std. Conc.	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.441	0.027	0.000	985859	443009	13C3-PFBA_IS	----	9.9561	ng/mL	
13C4-PFBA_IS	Auto	1.441	0.027	----	985859	985859	----	----	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.441	0.026	----	443009	443009	----	----	5.0000	ng/mL	
PFBA	M	1.435	0.019	-0.006	994	985859	13C4-PFBA_IS	----	0.0117	ng/mL	
PFMPA	ND(W/B)	----	----	----	----	109708	13C5-PFPeA_IS	----	----	ng/mL	
3_3 FTCA	ND(W/B)	----	----	----	----	109708	13C5-PFPeA_IS	----	----	ng/mL	
13C5-PFPeA	Auto	3.507	0.015	-1.481	109708	496509	13C2-PFHxA_IS	----	4.8951	ng/mL	
13C5-PFPeA_IS	Auto	3.507	0.015	----	109708	109708	----	----	5.0000	ng/mL	
PFPeA	M	3.504	0.009	-0.003	1828	109708	13C5-PFPeA_IS	----	0.0129	ng/mL	
PFMBA	M	4.040	0.015	0.533	199	109708	13C5-PFPeA_IS	----	0.0020	ng/mL	
13C2-4_2 FTS	Auto	4.670	0.009	-2.421	117886	169573	18O2-PFHxS_IS	----	5.0518	ng/mL	
13C2-4_2 FTS_IS	Auto	4.670	0.009	----	117886	117886	----	----	5.0000	ng/mL	
4_2 FTS	ND(W/B)	----	----	----	----	117886	13C2-4_2 FTS_IS	----	----	ng/mL	
13C3-PFBS_IS	Auto	4.660	0.013	----	261866	261866	----	----	2.5000	ng/mL	
PFBS	ND(W/B)	----	----	----	----	261866	13C3-PFBS_IS	----	----	ng/mL	
13C3-PFBS	Auto	4.660	0.013	-2.431	261866	169573	18O2-PFHxS_IS	----	2.7212	ng/mL	
NFDHA	M	4.844	0.009	-0.143	880	524950	13C5-PFHxA_IS	----	0.0076	ng/mL	
13C5-PFHxA	Auto	4.987	0.009	-0.001	524950	496509	13C2-PFHxA_IS	----	2.5087	ng/mL	
13C5-PFHxA_IS	Auto	4.987	0.009	----	524950	524950	----	----	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	4.988	0.009	----	496509	496509	----	----	2.5000	ng/mL	
PFHxA	M	4.988	0.008	0.001	1879	524950	13C5-PFHxA_IS	----	0.0024	ng/mL	
PFEESA	ND(W/B)	----	----	----	----	524950	13C5-PFHxA_IS	----	----	ng/mL	
13C3-HFPO-DA	Auto	5.459	0.007	0.471	490564	496509	13C2-PFHxA_IS	----	10.0931	ng/mL	
13C3-HFPO-DA_IS	Auto	5.459	0.007	----	490564	490564	----	----	10.0000	ng/mL	
HFPO-DA	ND(W/B)	----	----	----	----	490564	13C3-HFPO-DA_IS	----	----	ng/mL	
5_3 FTCA	ND(W/B)	----	----	----	----	524950	13C5-PFHxA_IS	----	----	ng/mL	
PFPeS	M	6.041	0.023	-1.049	212	199596	13C3-PFHxS_IS	----	0.0020	ng/mL	
13C4-PFHpA	Auto	6.160	0.006	1.172	465059	496509	13C2-PFHxA_IS	----	2.4551	ng/mL	
13C4-PFHpA_IS	Auto	6.160	0.006	----	465059	465059	----	----	2.5000	ng/mL	
PFHpA	M	6.144	-0.011	-0.016	6250	465059	13C4-PFHpA_IS	----	-0.0024	ng/mL	
DONA	M	6.539	0.019	1.080	289	490564	13C3-HFPO-DA_IS	----	0.0008	ng/mL	IRr
13C2-6_2 FTS_IS	Auto	6.796	0.003	----	103523	103523	----	----	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.796	0.003	-0.295	103523	169573	18O2-PFHxS_IS	----	4.6905	ng/mL	
6_2 FTS	M	6.795	0.003	-0.001	869	103523	13C2-6_2 FTS_IS	----	0.0184	ng/mL	
13C4-PFOA_IS	Auto	7.112	0.005	----	34963	34963	----	----	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.112	0.005	----	486369	486369	----	----	2.5000	ng/mL	
13C8-PFOA	Auto	7.112	0.005	0.000	486369	34963	13C4-PFOA_IS	----	2.4889	ng/mL	
PFOA	M	7.112	0.002	0.000	4635	486369	13C8-PFOA_IS	----	-0.0068	ng/mL	
13C3-PFHxS	Auto	7.090	0.004	-0.001	199596	169573	18O2-PFHxS_IS	----	2.7423	ng/mL	
13C3-PFHxS_IS	Auto	7.090	0.004	----	199596	199596	----	----	2.5000	ng/mL	
PFHxS	M	7.094	0.010	0.004	871	199596	13C3-PFHxS_IS	----	-0.0100	ng/mL	
18O2-PFHxS_IS	Auto	7.091	0.005	----	169573	169573	----	----	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.959	0.003	----	230581	230581	----	----	1.2500	ng/mL	
13C9-PFNA	Auto	7.959	0.003	0.000	230581	237143	13C5-PFNA_IS	----	1.2418	ng/mL	
13C5-PFNA_IS	Auto	7.959	0.003	----	237143	237143	----	----	1.2500	ng/mL	
PFNA	M	7.958	0.001	-0.001	3177	230581	13C9-PFNA_IS	----	-0.0066	ng/mL	
PFHpS	ND(W/B)	----	----	----	----	84233	13C8-PFOS_IS	----	----	ng/mL	
7_3 FTCA	M	7.959	0.005	2.972	1672	524950	13C5-PFHxA_IS	----	0.0923	ng/mL	
13C2-8_2-FTS	Auto	8.411	0.002	1.320	82310	169573	18O2-PFHxS_IS	----	4.5400	ng/mL	
13C2-8_2-FTS_IS	Auto	8.411	0.002	----	82310	82310	----	----	5.0000	ng/mL	
8_2 FTS	ND(W/B)	----	----	----	----	82310	13C2-8_2-FTS_IS	----	----	ng/mL	
13C6-PFDA_IS	Auto	8.722	0.002	----	168168	168168	----	----	1.2500	ng/mL	
13C6-PFDA	Auto	8.722	0.002	0.000	168168	161918	13C2-PFDA_IS	----	1.2909	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_015 (continued)

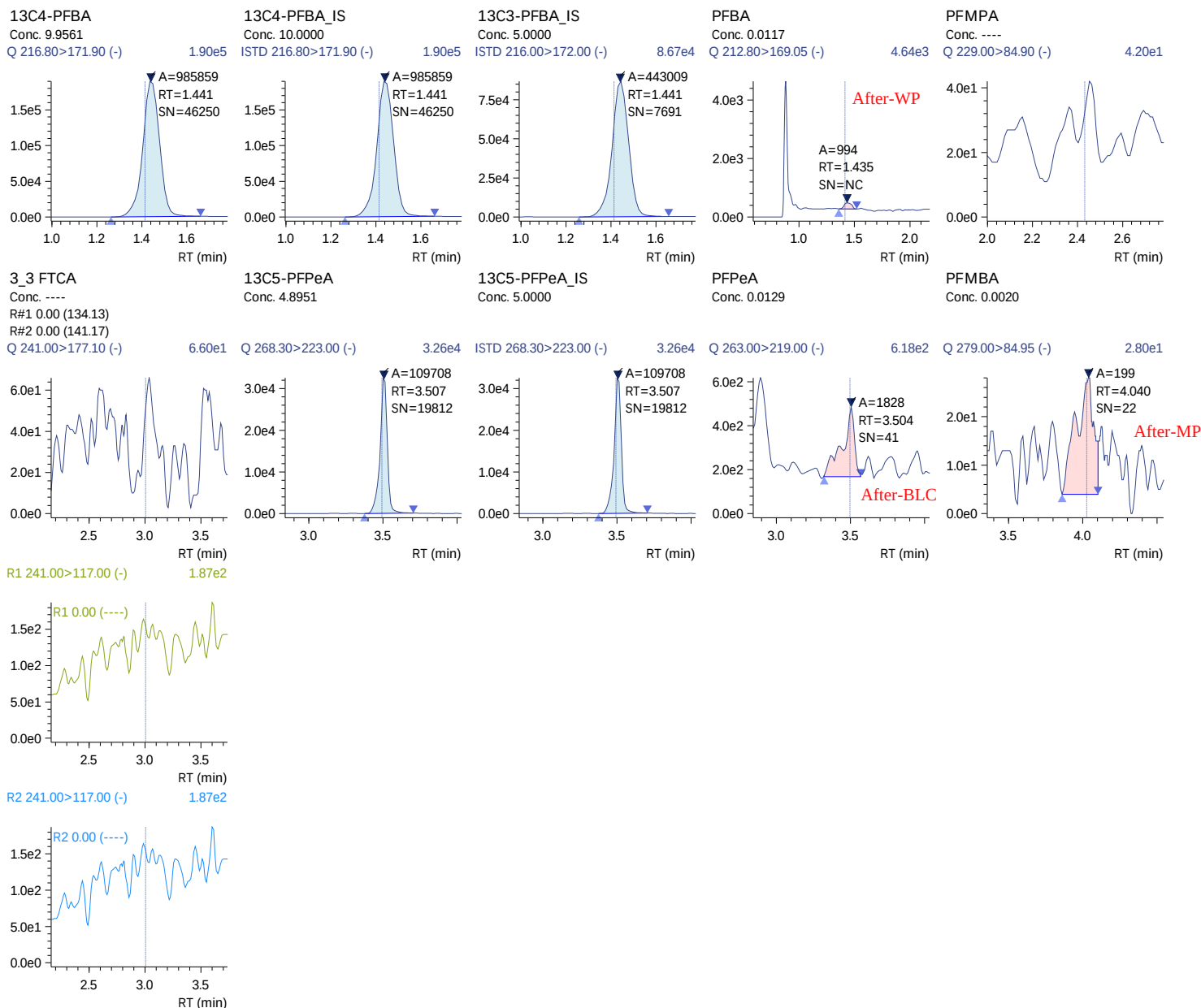
(Table continued from previous page)

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Std. Conc.	Conc.	Unit	Flag ID
13C2-PFDA_IS	Auto	8.723	0.001	----	161918	161918	----	----	1.2500	ng/mL	
PFDA	M	8.720	-0.001	-0.002	4820	168168	13C6-PFDA_IS	----	0.0046	ng/mL	
D3-NMeFOSAA_IS	Auto	8.856	0.001	----	166245	166245	----	----	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.856	0.001	0.033	166245	203319	13C4-PFOS_IS	----	4.7111	ng/mL	
13C8-PFOS_IS	Auto	8.822	0.002	----	84233	84233	----	----	2.5000	ng/mL	
13C8-PFOS	Auto	8.822	0.002	-0.001	84233	203319	13C4-PFOS_IS	----	2.4841	ng/mL	
13C4-PFOS_IS	Auto	8.823	0.003	----	203319	203319	----	----	2.5000	ng/mL	
PFOS	ND(W/B)	----	----	----	----	84233	13C8-PFOS_IS	----	----	ng/mL	
NMeFOSAA	M	8.861	0.000	0.005	127	166245	D3-NMeFOSAA_IS	----	0.0028	ng/mL	
D5-NetFOSAA_IS	Auto	9.186	0.000	----	194960	194960	----	----	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.186	0.000	0.363	194960	203319	13C4-PFOS_IS	----	4.6180	ng/mL	
NetFOSAA	ND(W/B)	----	----	----	----	194960	D5-NetFOSAA_IS	----	----	ng/mL	
9-CI-PF3ONS	ND(W/B)	----	----	----	----	490564	13C3-HFPO-DA_IS	----	----	ng/mL	
PFUnDA	M	9.446	-0.001	0.000	3835	200384	13C7-PFUnDA_IS	----	-0.0033	ng/mL	
13C7-PFUnDA_IS	Auto	9.446	0.001	----	200384	200384	----	----	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.446	0.001	0.724	200384	161918	13C2-PFDA_IS	----	1.2896	ng/mL	
PFNS	ND(W/B)	----	----	----	----	84233	13C8-PFOS_IS	----	----	ng/mL	
10_2_FTS	ND(W/B)	----	----	----	----	82310	13C2-8_2-FTS_IS	----	----	ng/mL	
13C2-PFDOA_IS	Auto	10.133	0.000	----	229376	229376	----	----	1.2500	ng/mL	
13C2-PFDOA	Auto	10.133	0.000	1.411	229376	161918	13C2-PFDA_IS	----	1.2849	ng/mL	
PFDOA	M	10.134	0.000	0.001	3092	229376	13C2-PFDOA_IS	----	-0.0089	ng/mL	
PFDS	ND(W/B)	----	----	----	----	84233	13C8-PFOS_IS	----	----	ng/mL	
PFTDA	Auto	10.788	-0.004	-0.636	3587	94706	13C2-PFTDA_IS	----	-0.0041	ng/mL	
11-CI-PF3OUdS	ND(W/B)	----	----	----	----	490564	13C3-HFPO-DA_IS	----	----	ng/mL	
PFOSAm	M	11.156	-0.008	-0.007	1052	204049	13C8-PFOSAm_IS	----	0.0156	ng/mL	
13C8-PFOSAm	Auto	11.163	-0.002	2.340	204049	203319	13C4-PFOS_IS	----	2.3641	ng/mL	
13C8-PFOSAm_IS	Auto	11.163	-0.002	----	204049	204049	----	----	2.5000	ng/mL	
PFTDA	M	11.427	0.002	0.003	3191	94706	13C2-PFTDA_IS	----	0.0036	ng/mL	
13C2-PFTDA	Auto	11.424	0.000	2.702	94706	161918	13C2-PFDA_IS	----	1.2287	ng/mL	
13C2-PFTDA_IS	Auto	11.424	0.000	----	94706	94706	----	----	1.2500	ng/mL	
PFDoS	ND(W/B)	----	----	----	----	84233	13C8-PFOS_IS	----	----	ng/mL	
D7-MeFOSE_IS	Auto	13.374	-0.003	----	501038	501038	----	----	25.0000	ng/mL	
D7-MeFOSE	Auto	13.374	-0.003	4.551	501038	203319	13C4-PFOS_IS	----	23.5450	ng/mL	
MeFOSE	ND(W/B)	----	----	----	----	501038	D7-MeFOSE_IS	----	----	ng/mL	
13C2-PFHxDA_IS	Auto	12.639	-0.002	----	374925	374925	----	----	2.5000	ng/mL	
13C2-PFHxDA	Auto	12.639	-0.002	3.917	374925	161918	13C2-PFDA_IS	----	2.4928	ng/mL	
PFHxDA	M	12.641	-0.001	0.002	4743	374925	13C2-PFHxDA_IS	----	0.0030	ng/mL	
D3-MeFOSA	Auto	13.685	0.000	4.862	45843	203319	13C4-PFOS_IS	----	2.6374	ng/mL	
D3-MeFOSA_IS	Auto	13.685	0.000	----	45843	45843	----	----	2.5000	ng/mL	
MeFOSA	M	13.682	-0.012	-0.003	114	45843	D3-MeFOSA_IS	----	0.0034	ng/mL	
D9-EtFOSE_IS	Auto	14.005	-0.001	----	529622	529622	----	----	25.0000	ng/mL	
D9-EtFOSE	Auto	14.005	-0.001	5.182	529622	203319	13C4-PFOS_IS	----	24.5046	ng/mL	
EtFOSE	ND(W/B)	----	----	----	----	529622	D9-EtFOSE_IS	----	----	ng/mL	
D5-EtFOSAm	Auto	14.360	-0.002	5.537	53669	203319	13C4-PFOS_IS	----	2.3191	ng/mL	
D5-EtFOSAm_IS	Auto	14.360	-0.002	----	53669	53669	----	----	2.5000	ng/mL	
EtFOSAm	ND(W/B)	----	----	----	----	53669	D5-EtFOSAm_IS	----	----	ng/mL	
PFODA	Auto	13.777	0.002	1.138	3338	374925	13C2-PFHxDA_IS	----	0.0394	ng/mL	

Flag ID key: IRr: Ion Ratio (Relative)



240118_015 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_015 (continued)

13C2-4_2 FTS
Conc. 5.0518

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. ----
R#1 0.00 (34.14)
R#2 0.00 (29.06)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. ----
R#1 0.00 (47.53)
R#2 0.00 (46.72)

Q 329.10>80.90 (-)

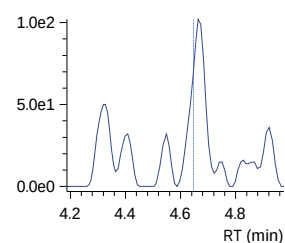
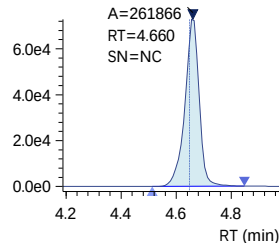
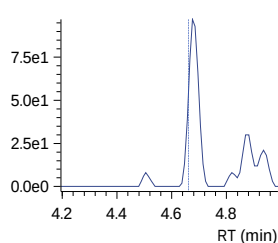
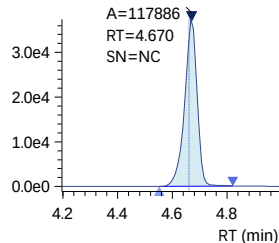
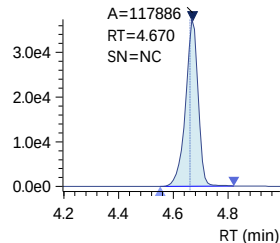
3.74e4 ISTD 329.10>80.90 (-)

3.74e4 Q 327.10>307.00 (-)

9.70e1 ISTD 302.10>79.90 (-)

7.29e4 Q 298.70>79.90 (-)

1.02e2

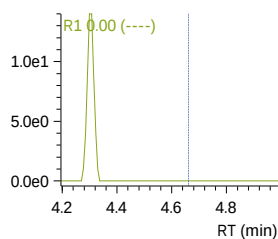


R1 327.10>80.90 (-)

1.40e1

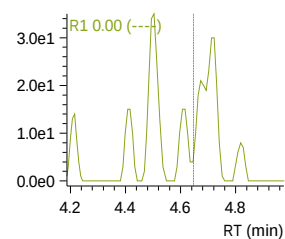
R1 298.70>98.80 (-)

3.50e1



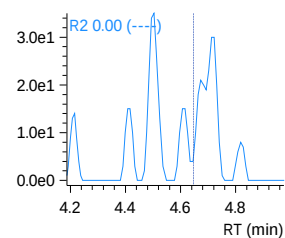
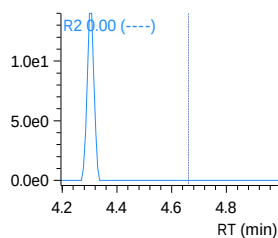
R2 327.10>80.90 (-)

1.40e1



R2 298.70>98.80 (-)

3.50e1





240118_015 (continued)

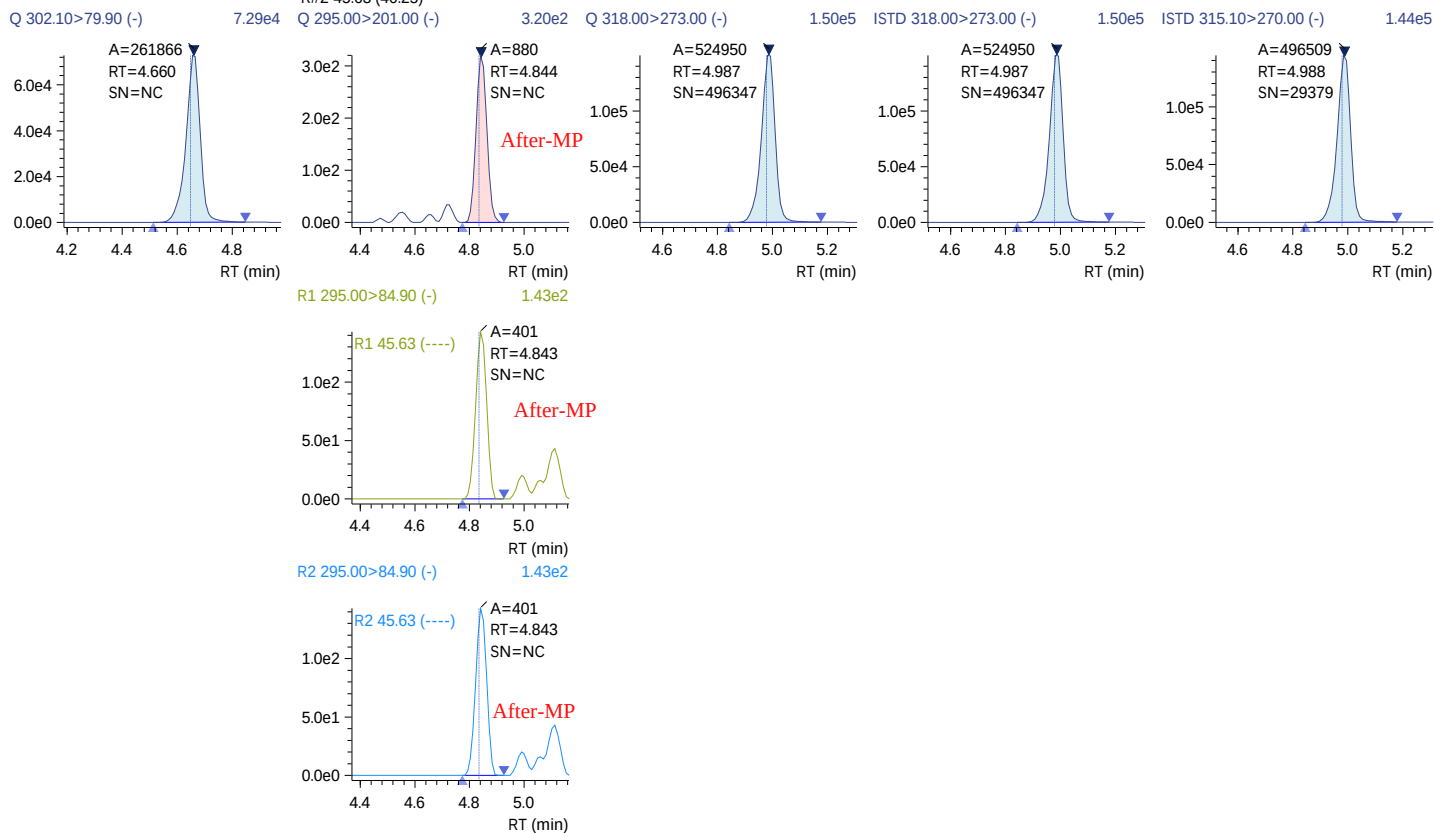
13C3-PFBS
Conc. 2.7212

NFDHA
Conc. 0.0076
R#1 45.63 (37.88)
R#2 45.63 (40.25)

13C5-PFHxA
Conc. 2.5087

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000





240118_015 (continued)

PFHxA
Conc. 0.0024

PFEESA
Conc. ----
R#1 0.00 (5.88)
R#2 0.00 (6.11)

13C3-HFPO-DA
Conc. 10.0931

13C3-HFPO-DA_IS
Conc. 10.0000

HFPO-DA
Conc. ----

Q 313.00>269.00 (-)

1.08e3

Q 314.80>135.00 (-)

1.48e2

Q 286.90>168.90 (-)

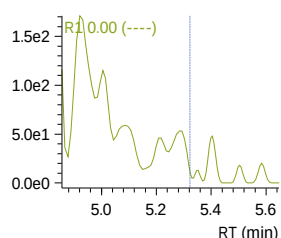
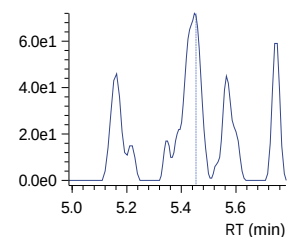
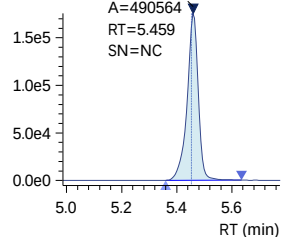
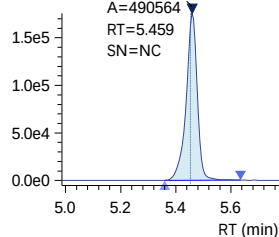
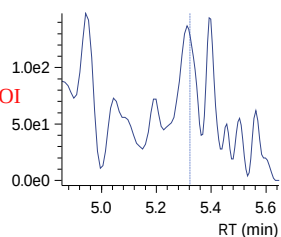
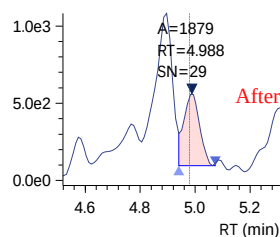
1.76e5

ISTD 286.90>168.90 (-)

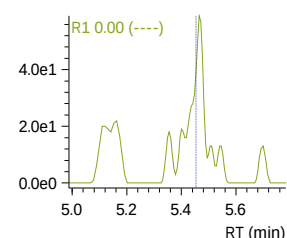
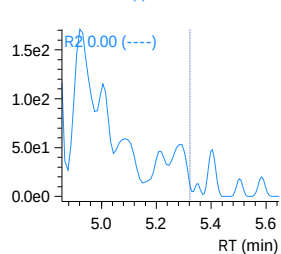
1.76e5

Q 284.90>168.90 (-)

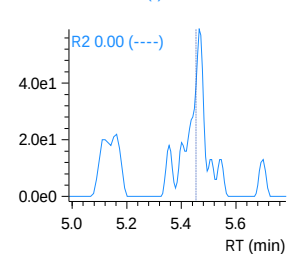
7.20e1



R2 314.80>82.90 (-)

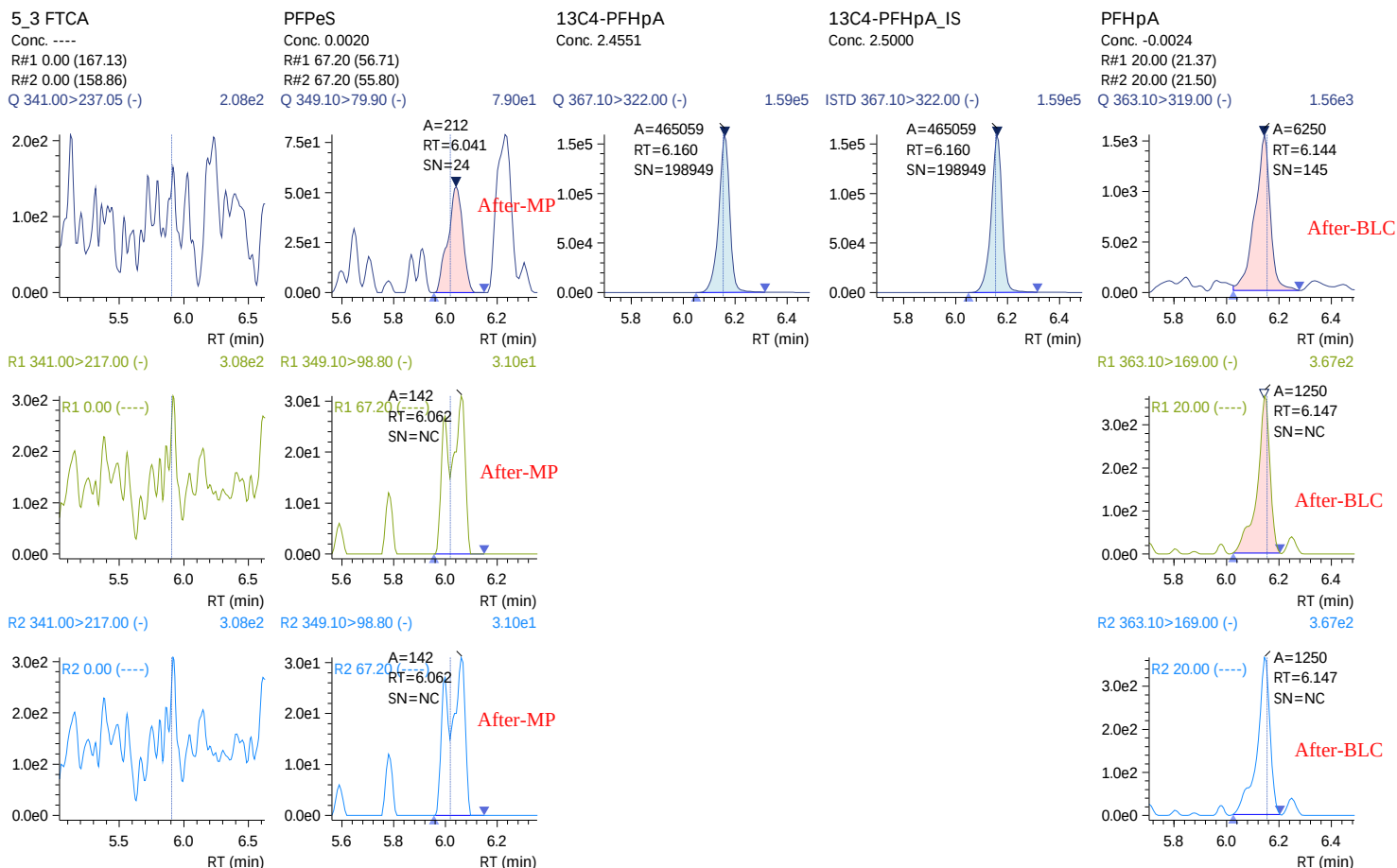


R2 284.90>184.90 (-)





240118_015 (continued)

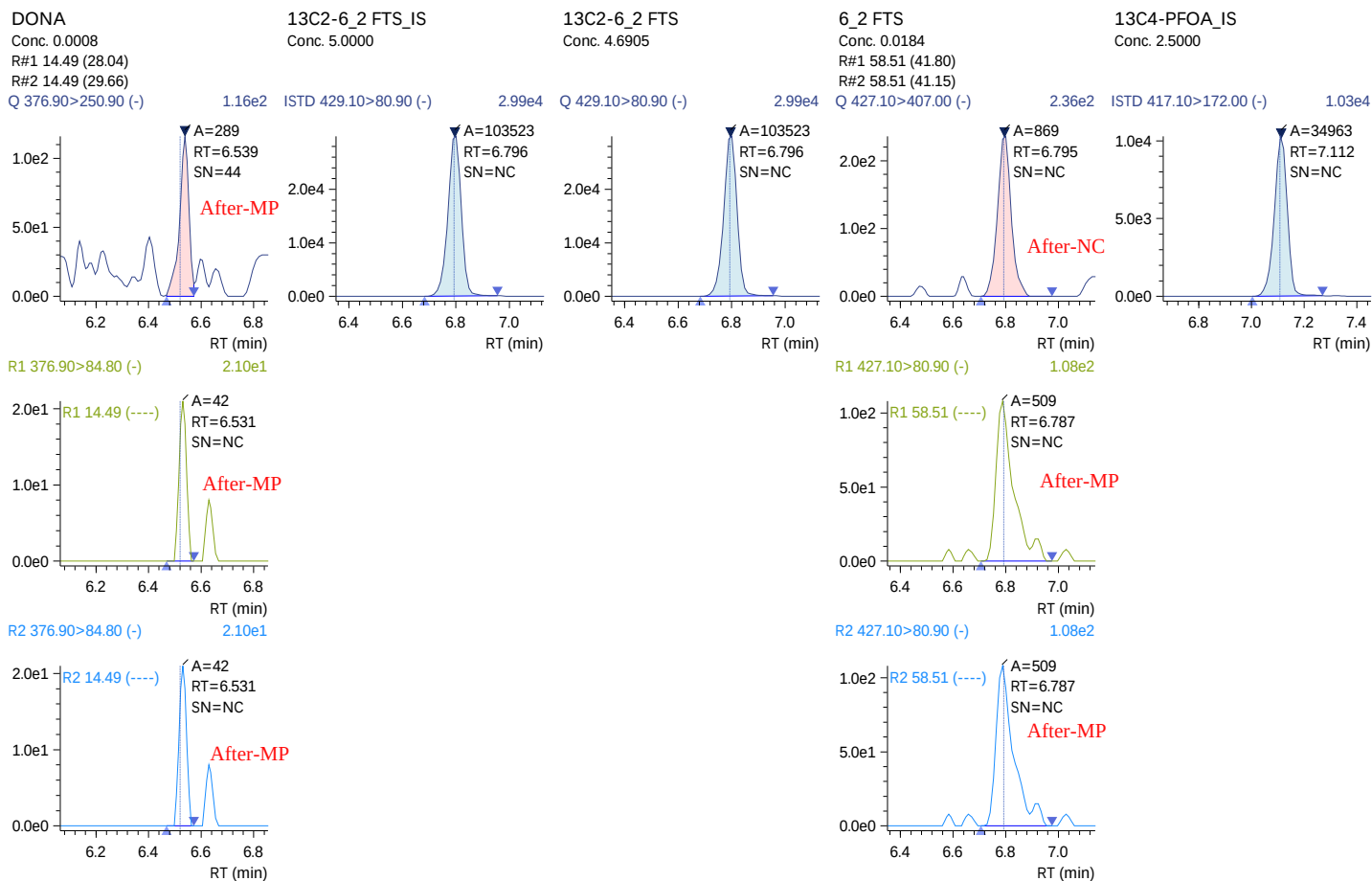


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_015 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_015 (continued)

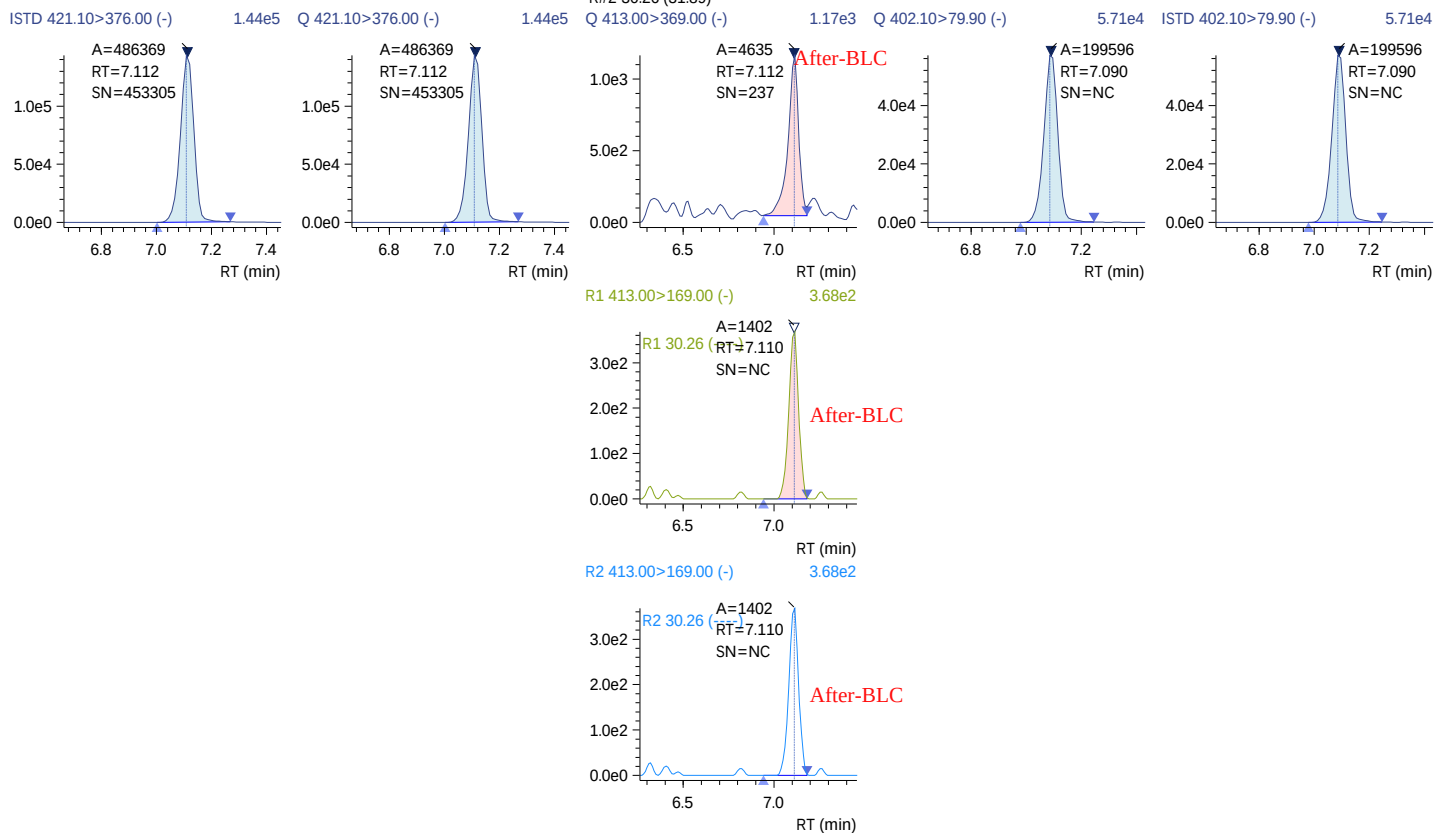
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.4889

PFOA
Conc. -0.0068
R#1 30.26 (29.05)
R#2 30.26 (31.89)

13C3-PFHxS
Conc. 2.7423

13C3-PFHxS_IS
Conc. 2.5000

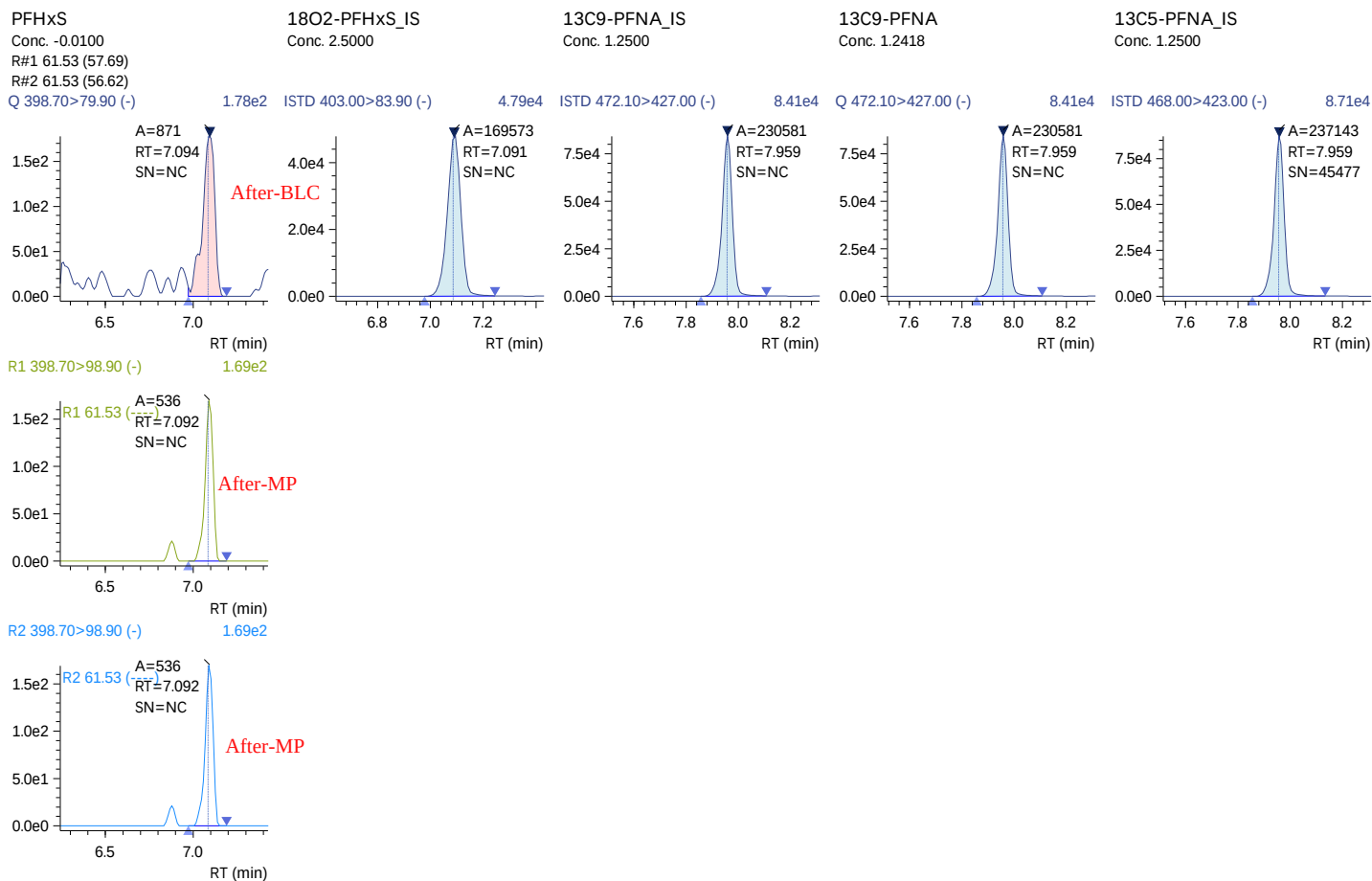


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_015 (continued)

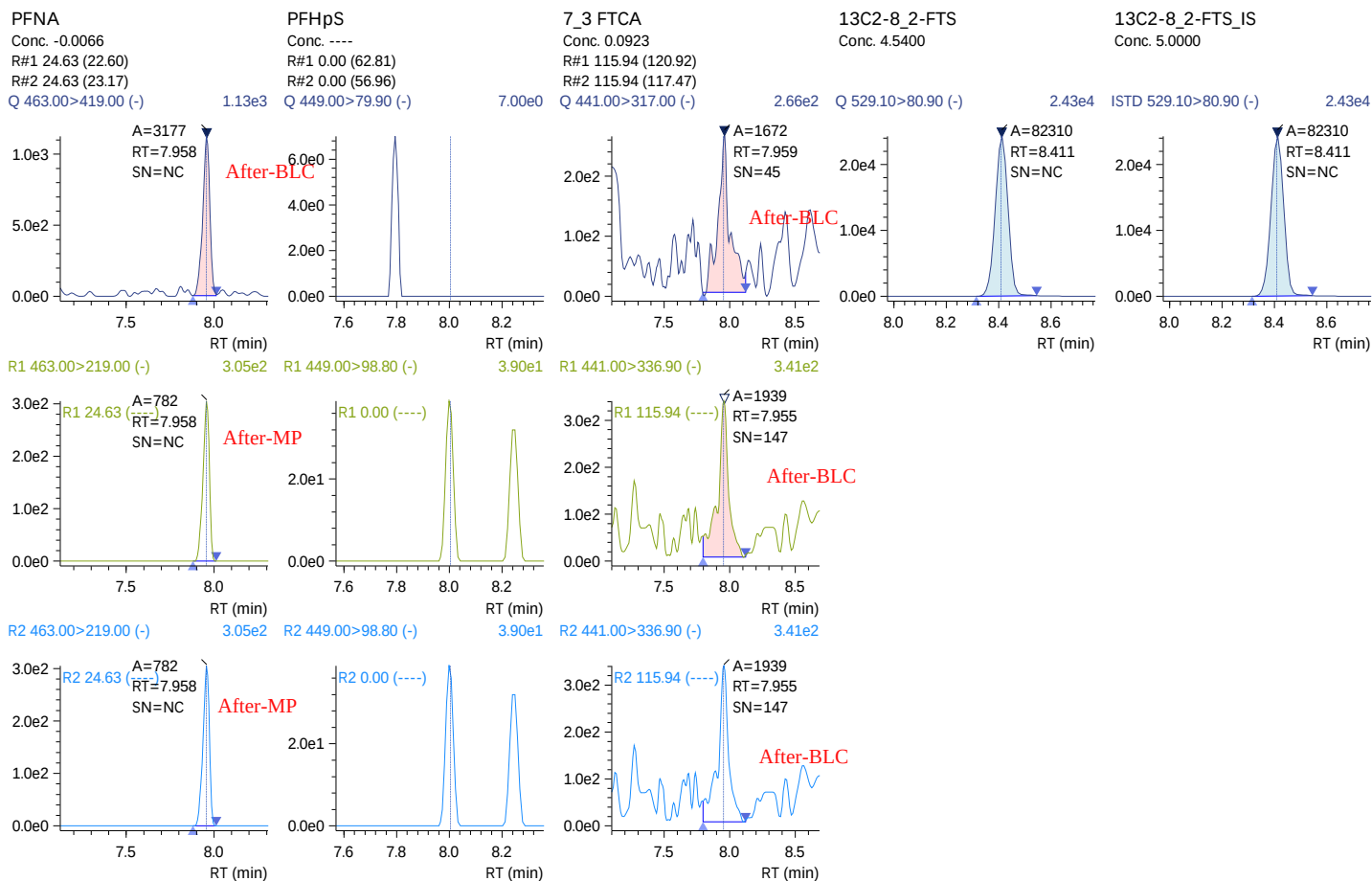


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_015 (continued)

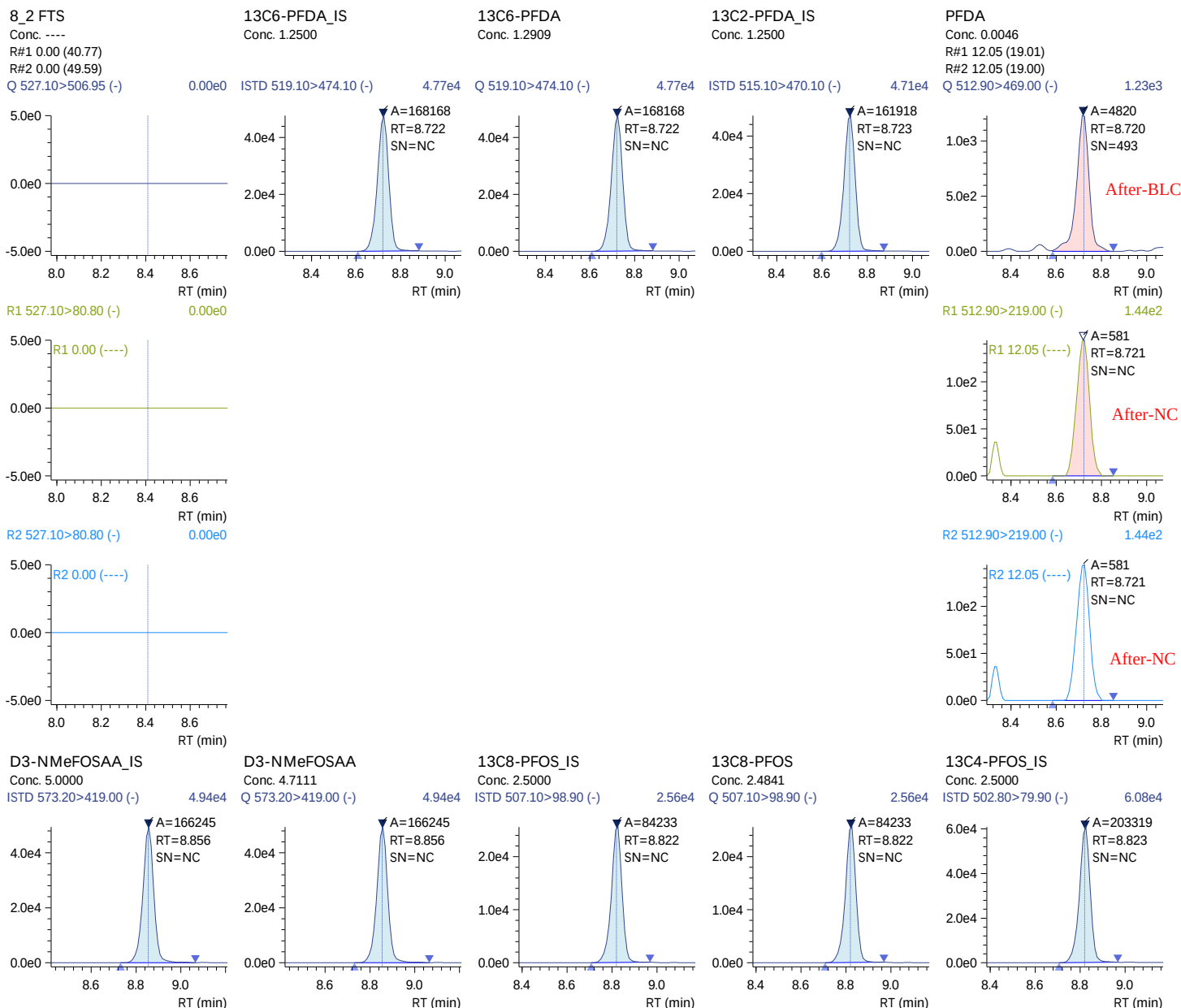


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_015 (continued)

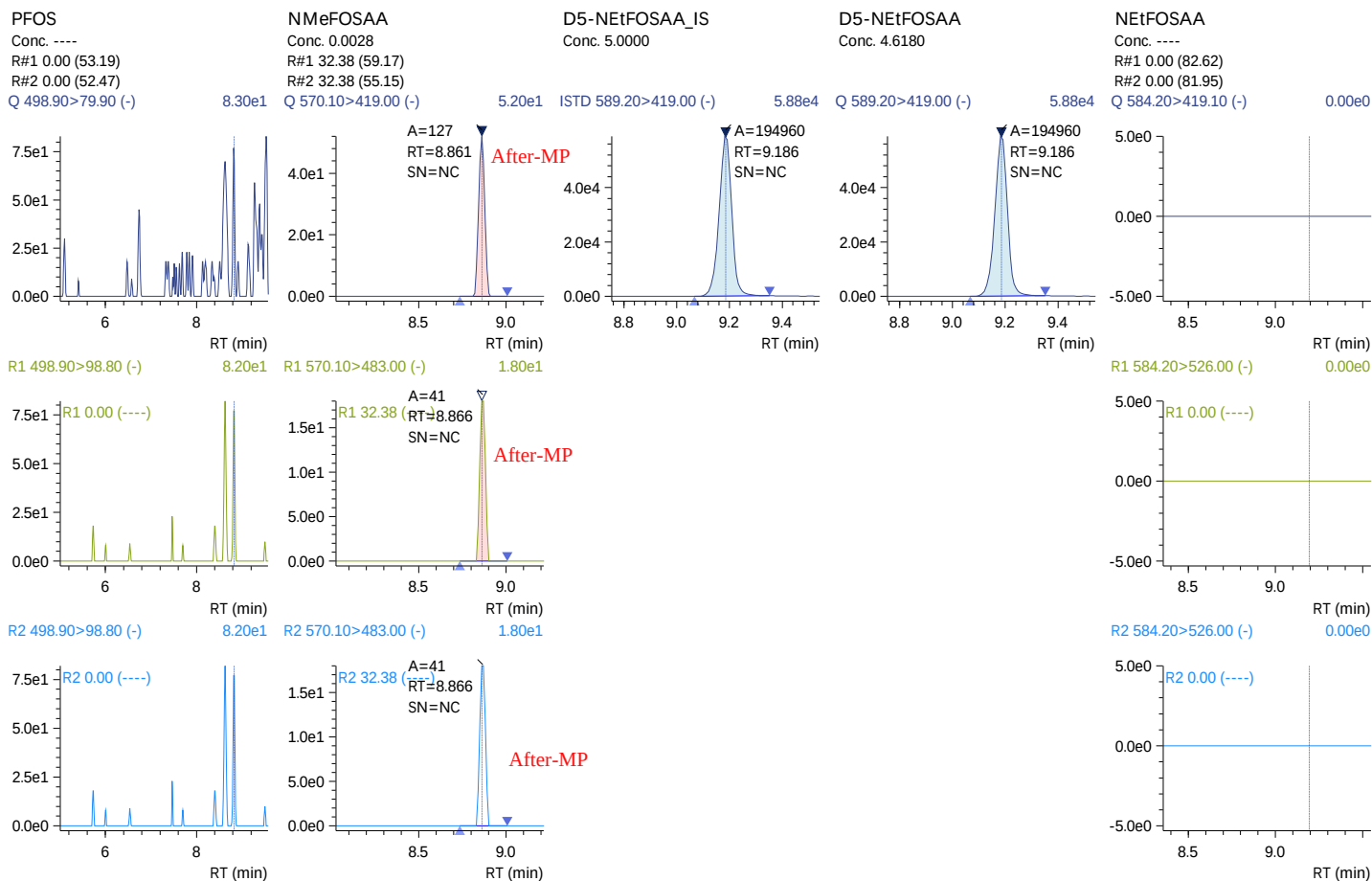


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_015 (continued)





240118_015 (continued)

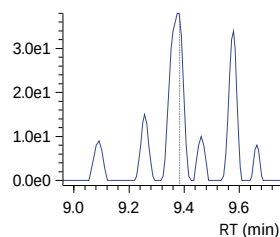
9-Cl-PF3ONS

Conc. ----

R#1 0.00 (31.76)

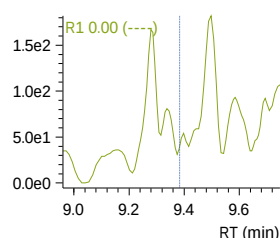
R#2 0.00 (32.76)

Q 530.80>351.00 (-)



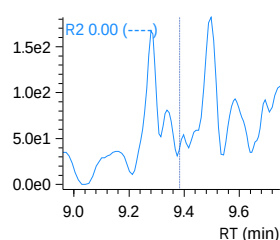
R1 532.80>353.00 (-)

1.82e2



R2 532.80>353.00 (-)

1.82e2



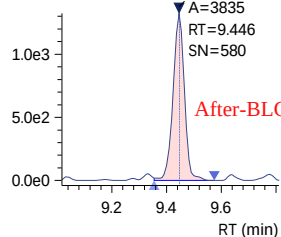
PFUnDA

Conc. -0.0033

R#1 11.02 (12.31)

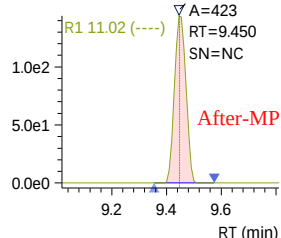
R#2 11.02 (13.12)

Q 563.10>519.00 (-)



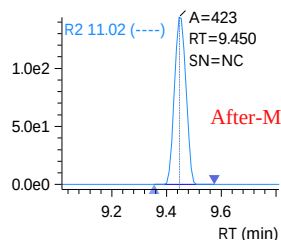
R1 563.10>269.10 (-)

1.44e2



R2 563.10>269.10 (-)

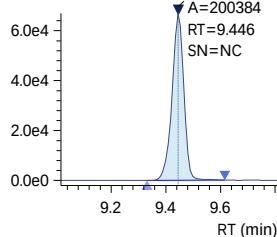
1.44e2



13C7-PFUnDA_IS

Conc. 1.2500

ISTD 570.00>525.10 (-)



R1 570.00>525.10 (-)

6.70e4



R2 570.00>525.10 (-)

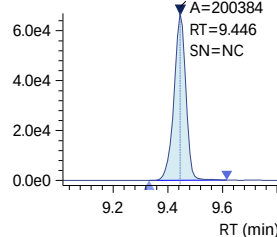
6.70e4



13C7-PFUnDA

Conc. 1.2896

Q 570.00>525.10 (-)



R1 570.00>525.10 (-)

6.70e4



R2 570.00>525.10 (-)

6.70e4



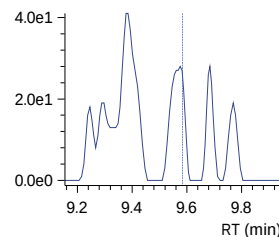
PFNS

Conc. ----

R#1 0.00 (63.31)

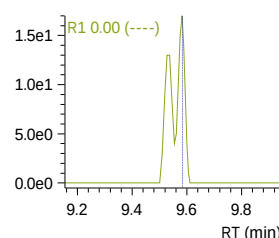
R#2 0.00 (65.22)

Q 548.80>79.90 (-)



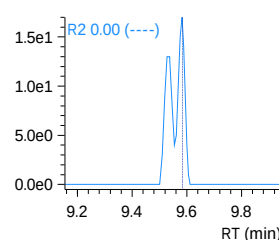
R1 548.80>98.80 (-)

1.70e1



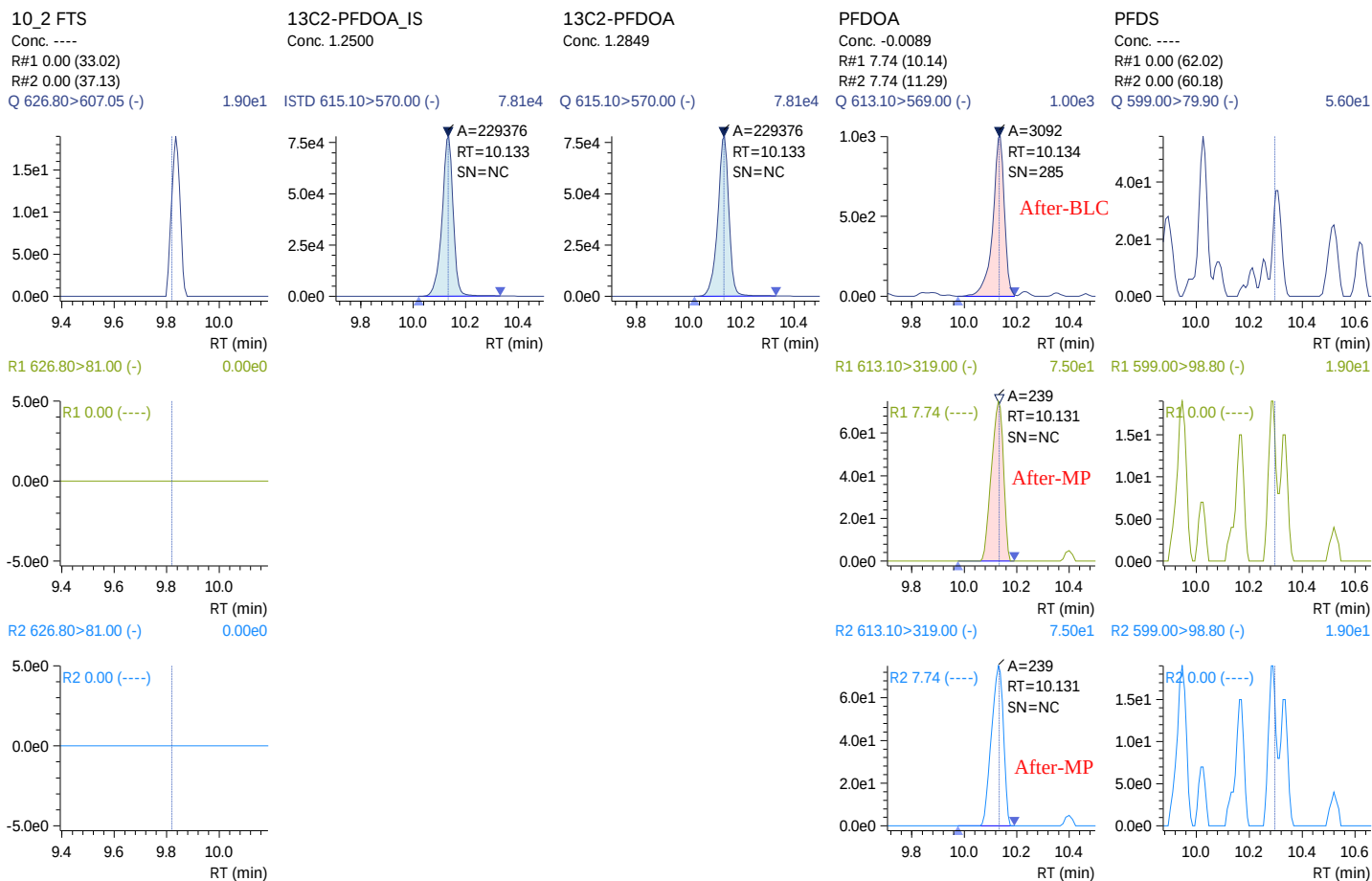
R2 548.80>98.80 (-)

1.70e1





240118_015 (continued)

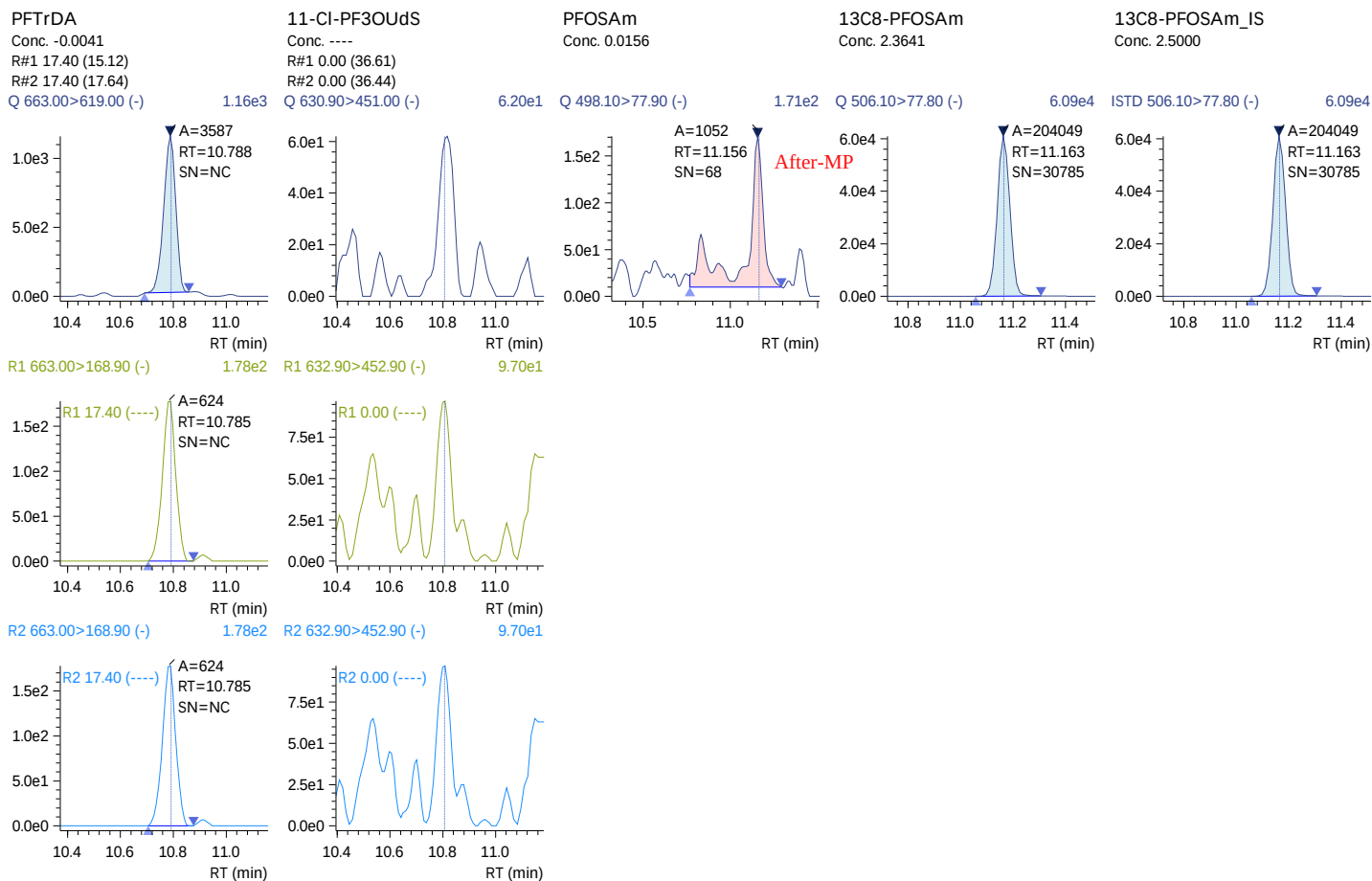


J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_015 (continued)

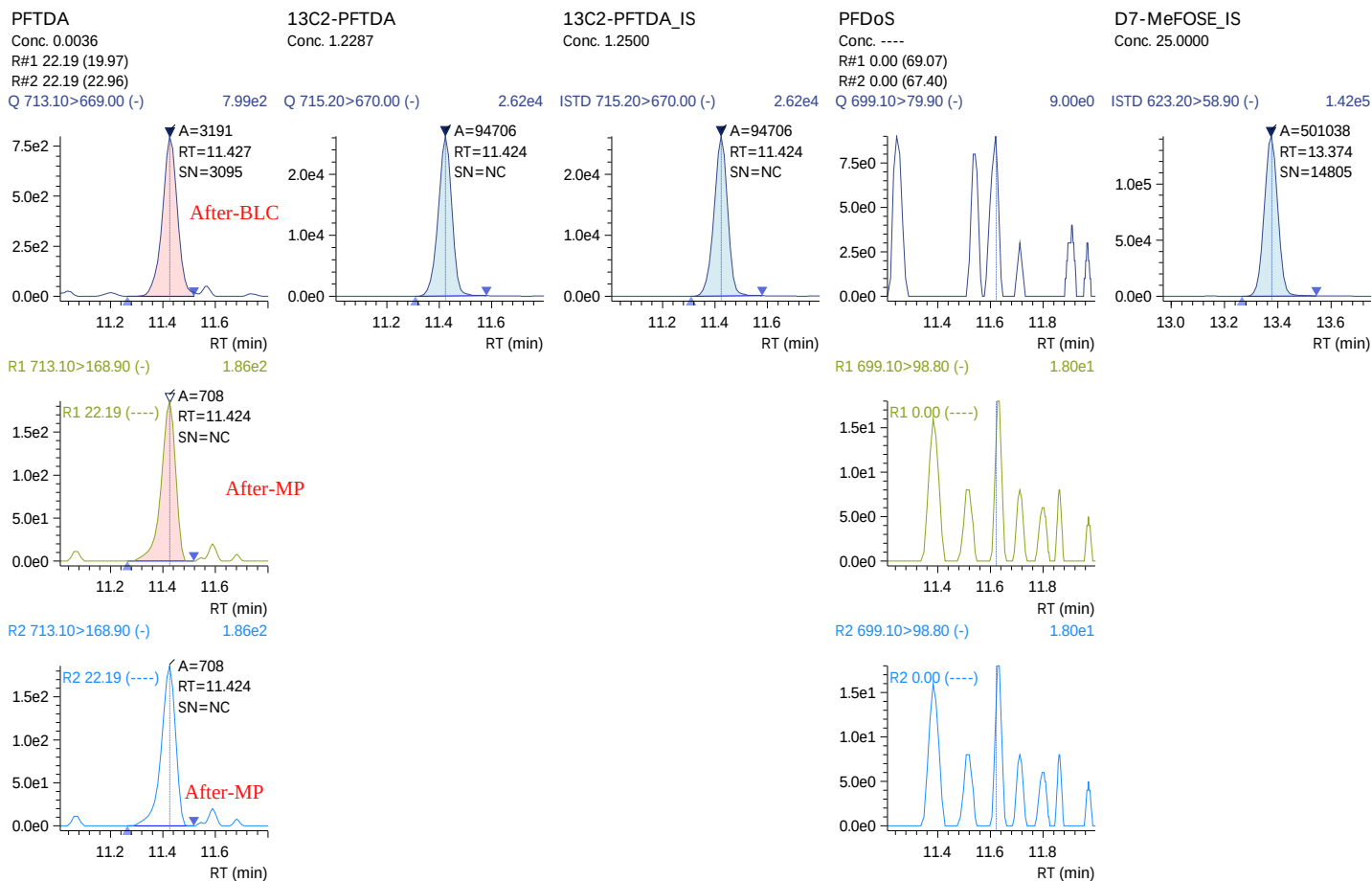


J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.damlp

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_015 (continued)



J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.damlp

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_015 (continued)

D7-MeFOSE
Conc. 23.5450

MeFOSE
Conc. ----

13C2-PFHXA_IS
Conc. 2.5000

13C2-PFHXA
Conc. 2.4928

PFHXA
Conc. 0.0030

R#1 14.73 (11.64)

R#2 14.73 (13.90)

Q 623.20>58.90 (-)

1.42e5

Q 616.10>59.00 (-)

5.40e1

ISTD 815.00>770.05 (-)

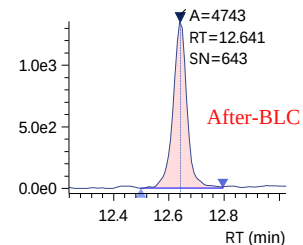
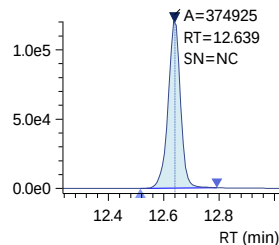
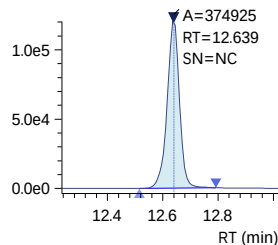
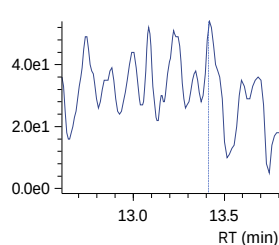
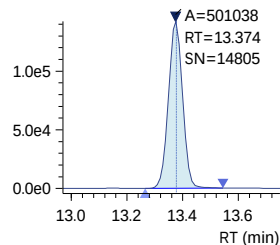
1.21e5

Q 815.00>770.05 (-)

1.21e5

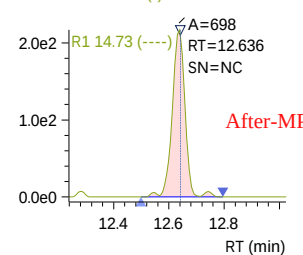
Q 813.00>768.95 (-)

1.36e3



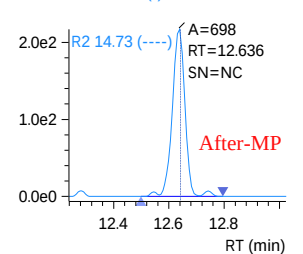
R1 813.00>218.95 (-)

2.17e2



R2 813.00>218.95 (-)

2.17e2





240118_015 (continued)

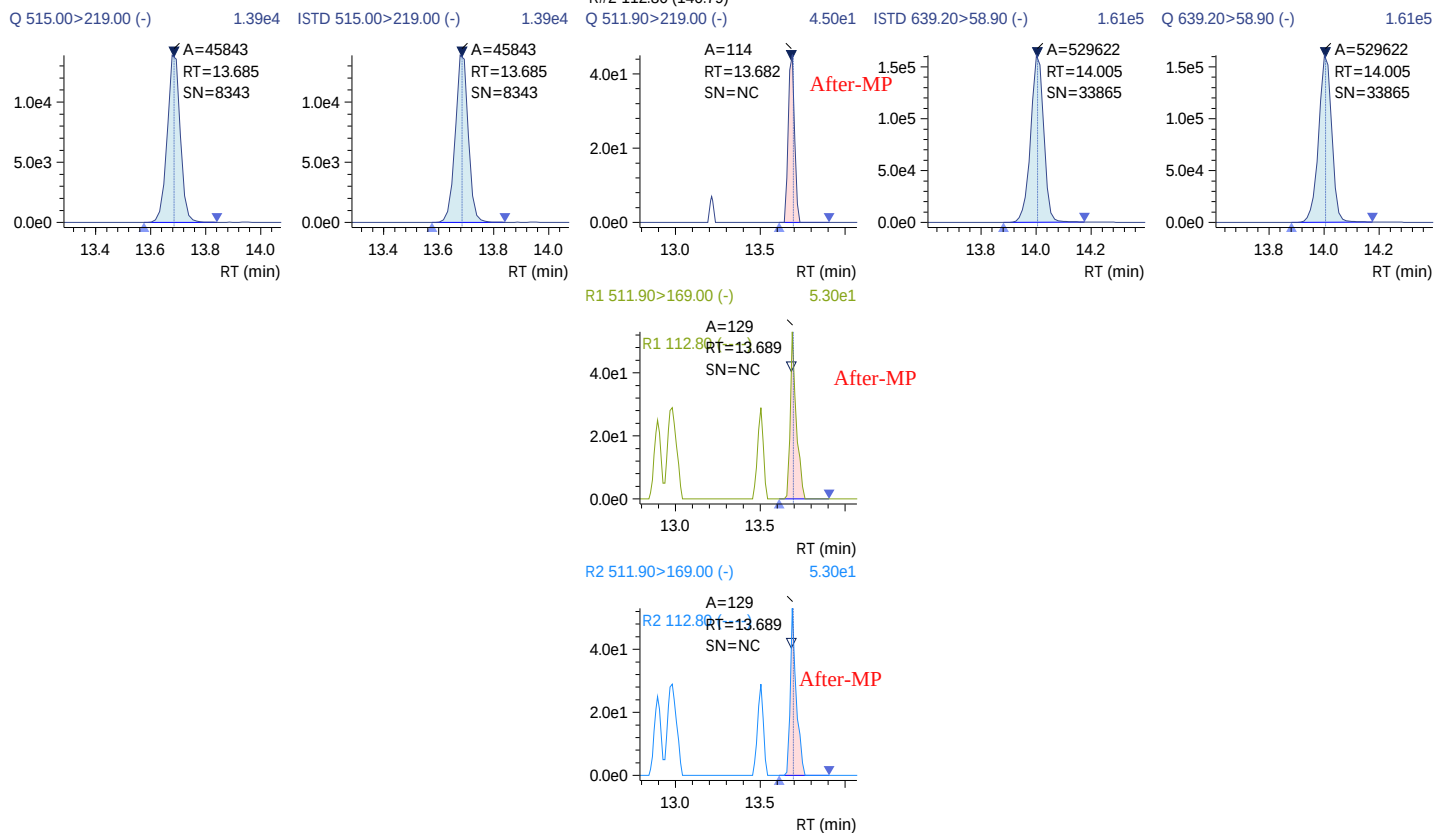
D3-MeFOSA
Conc. 2.6374

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. 0.0034
R#1 112.80 (149.05)
R#2 112.80 (140.79)

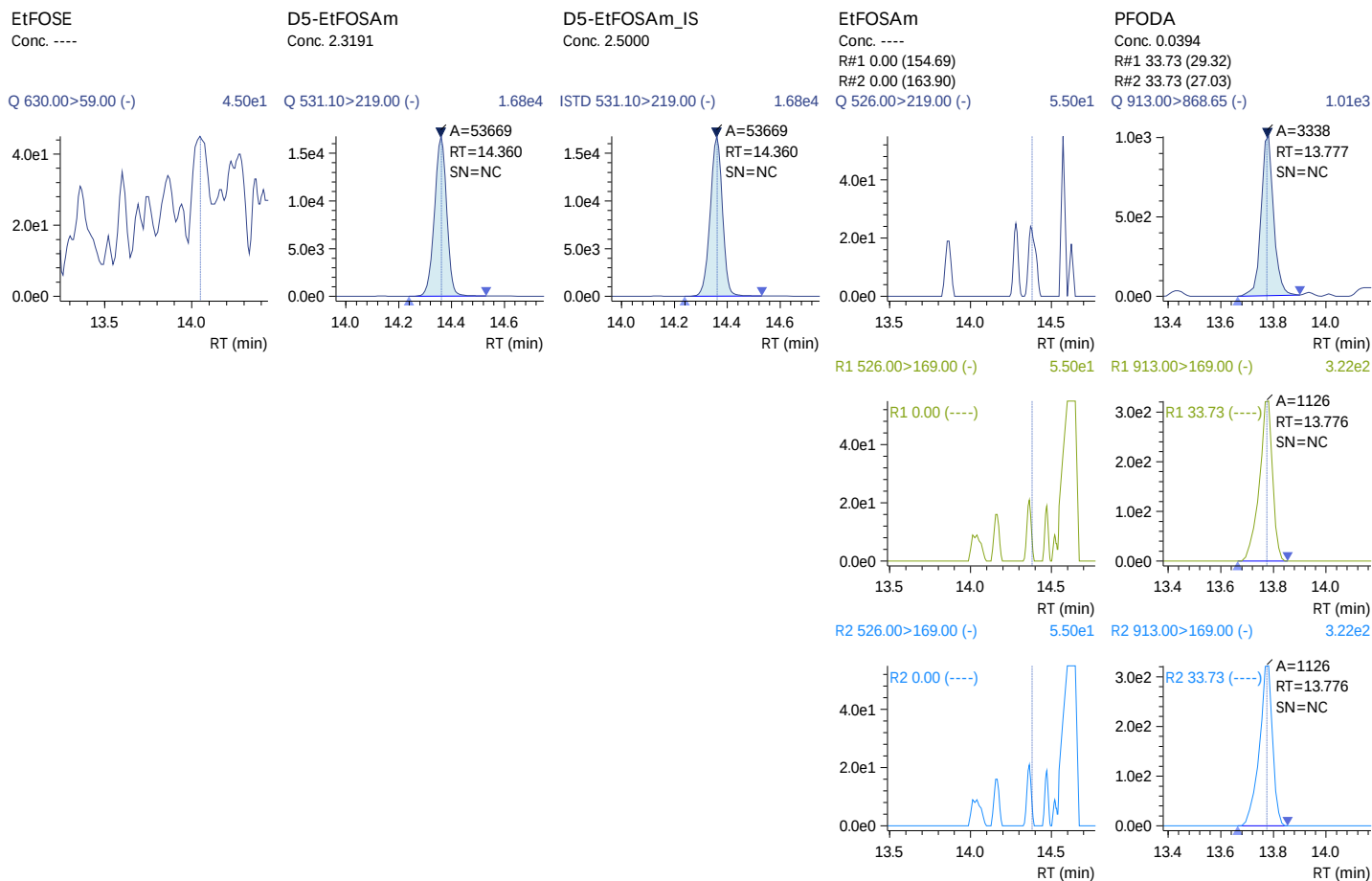
D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 24.5046





240118_015 (continued)



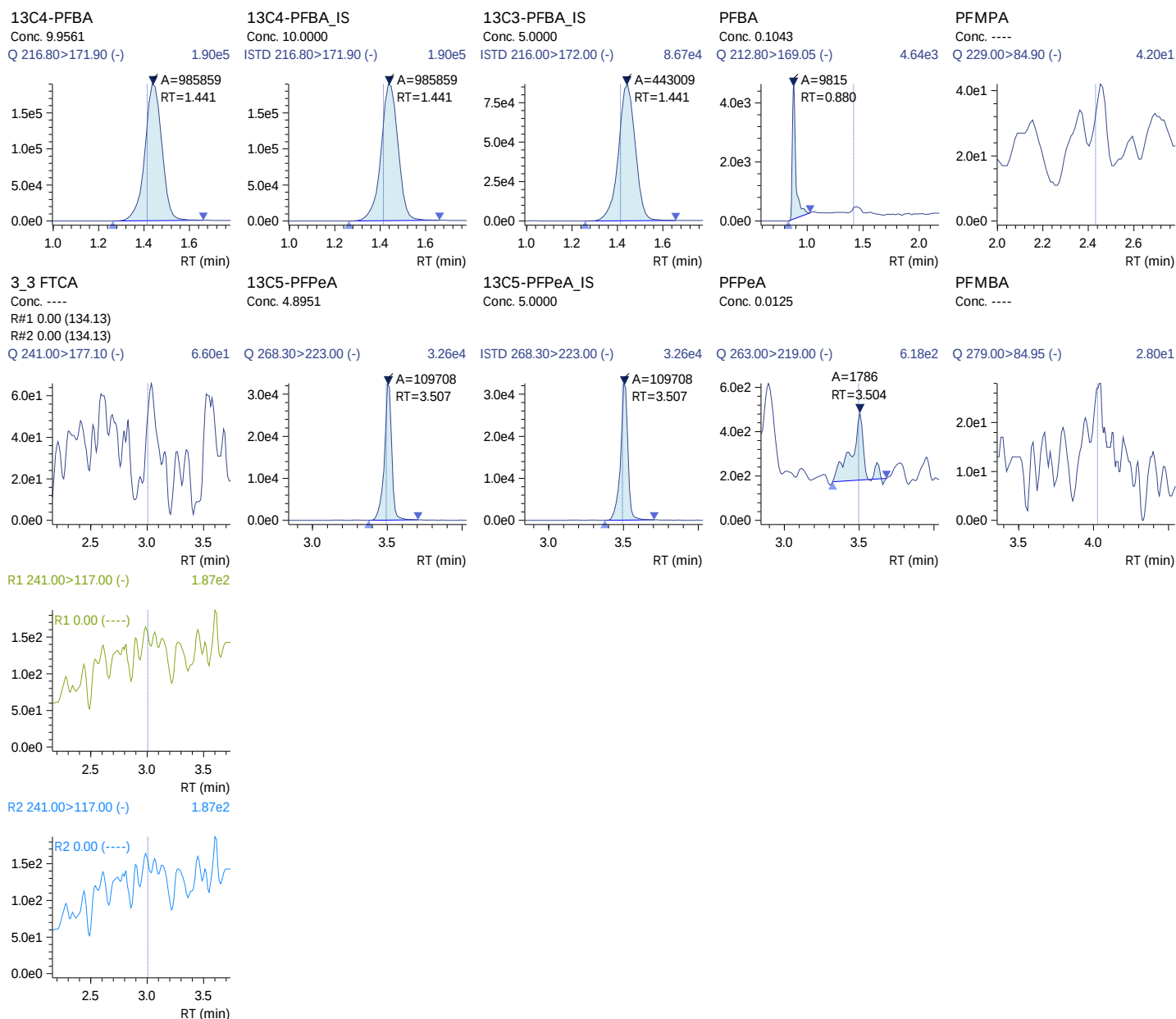
J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_015

Sample ID: 1633 CCB
Date Acquired: 1/18/2024 5:33:48 PM
Acquired by: System Administrator
Data File: 240118_015
Vial: 54 | Inj. Volume: 10.0000uL | Tray: 1





240118_015 (continued)

13C2-4_2 FTS
Conc. 5.0518

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. ----
R#1 0.00 (34.14)
R#2 0.00 (34.14)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. ----
R#1 0.00 (47.53)
R#2 0.00 (47.53)

Q 329.10>80.90 (-)

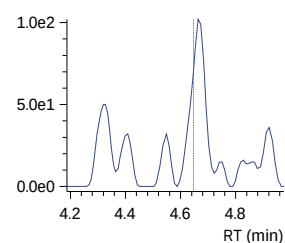
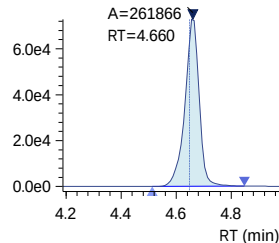
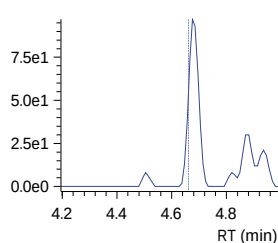
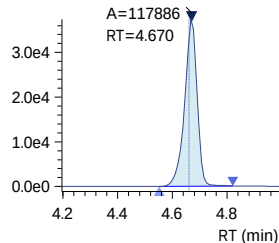
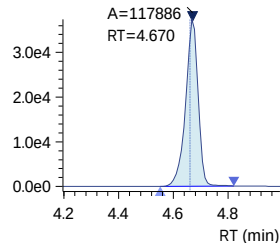
3.74e4 ISTD 329.10>80.90 (-)

3.74e4 Q 327.10>307.00 (-)

9.70e1 ISTD 302.10>79.90 (-)

7.29e4 Q 298.70>79.90 (-)

1.02e2

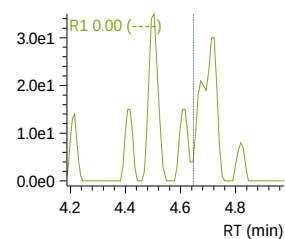
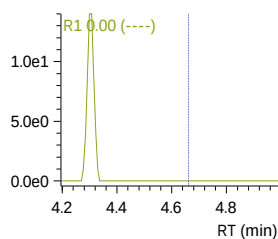


R1 327.10>80.90 (-)

1.40e1

R1 298.70>98.80 (-)

3.50e1

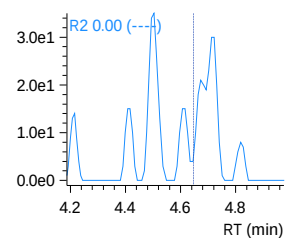
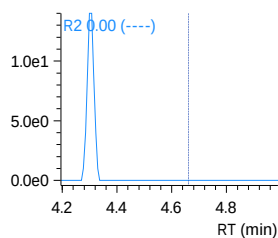


R2 327.10>80.90 (-)

1.40e1

R2 298.70>98.80 (-)

3.50e1





240118_015 (continued)

13C3-PFBS
 Conc. 2.7212

NFDHA
 Conc. ----
 R#1 0.00 (37.88)
 R#2 0.00 (37.88)

13C5-PFHxA
 Conc. 2.5087

13C5-PFHxA_IS
 Conc. 2.5000

13C2-PFHxA_IS
 Conc. 2.5000

Q 302.10>79.90 (-)

7.29e4

Q 295.00>201.00 (-)

3.20e2

Q 318.00>273.00 (-)

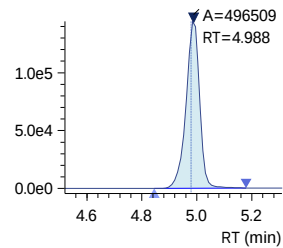
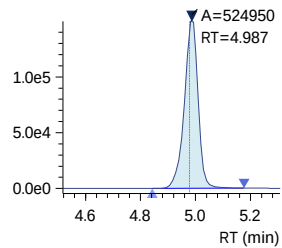
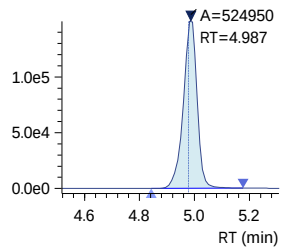
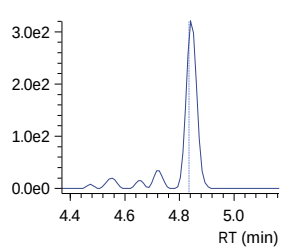
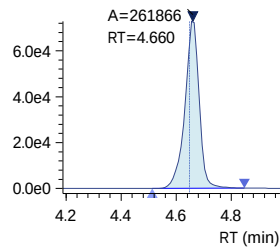
1.50e5

ISTD 318.00>273.00 (-)

1.50e5

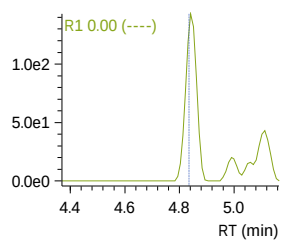
ISTD 315.10>270.00 (-)

1.44e5



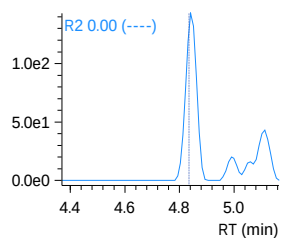
R1 295.00>84.90 (-)

1.43e2



R2 295.00>84.90 (-)

1.43e2





240118_015 (continued)

PFHxA
Conc. 0.0281

PFEESA
Conc. ----
R#1 0.00 (5.88)
R#2 0.00 (5.88)

13C3-HFPO-DA
Conc. 10.0931

13C3-HFPO-DA_IS
Conc. 10.0000

HFPO-DA
Conc. ----
R#1 0.00 (63.80)
R#2 0.00 (63.80)

Q 313.00>269.00 (-)

1.08e3

Q 314.80>135.00 (-)

1.48e2

Q 286.90>168.90 (-)

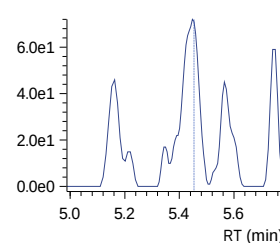
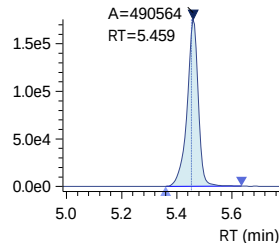
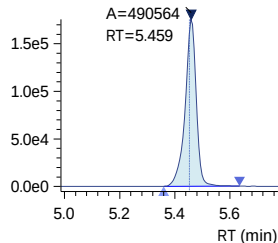
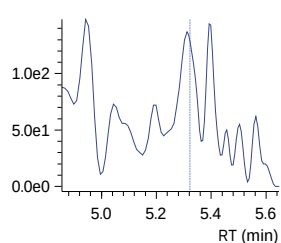
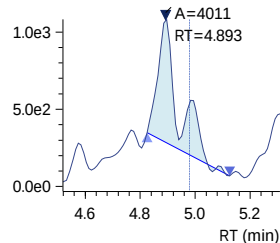
1.76e5

ISTD 286.90>168.90 (-)

1.76e5

Q 284.90>168.90 (-)

7.20e1

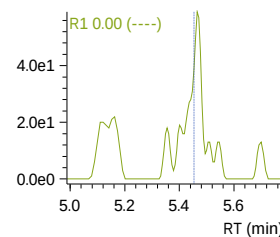
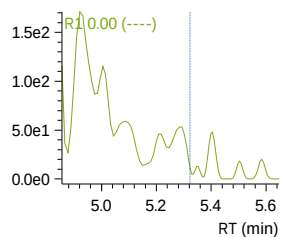


R1 314.80>82.90 (-)

1.71e2

R1 284.90>184.90 (-)

5.90e1

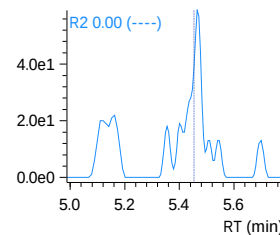
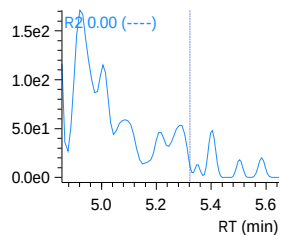


R2 314.80>82.90 (-)

1.71e2

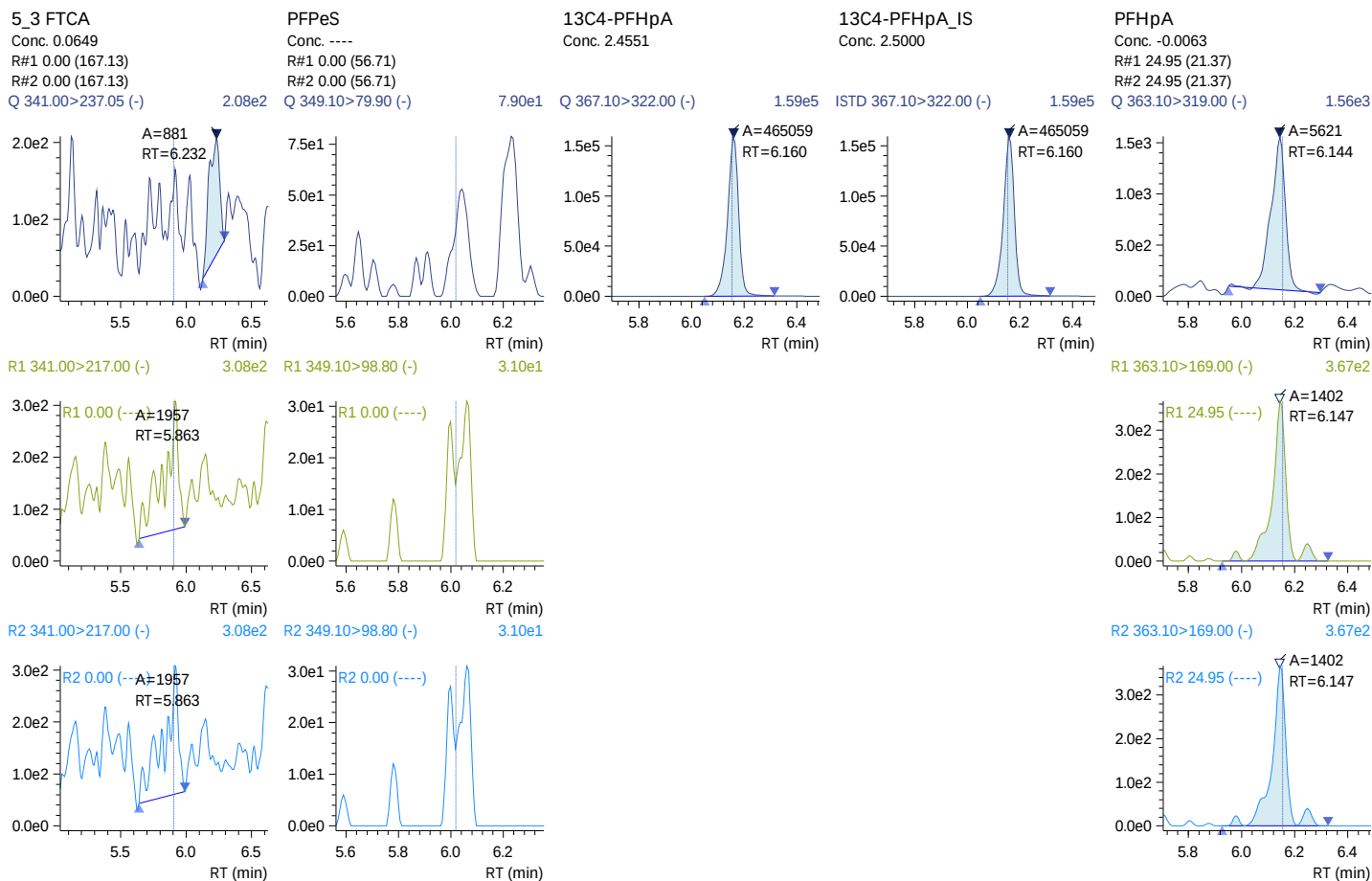
R2 284.90>184.90 (-)

5.90e1



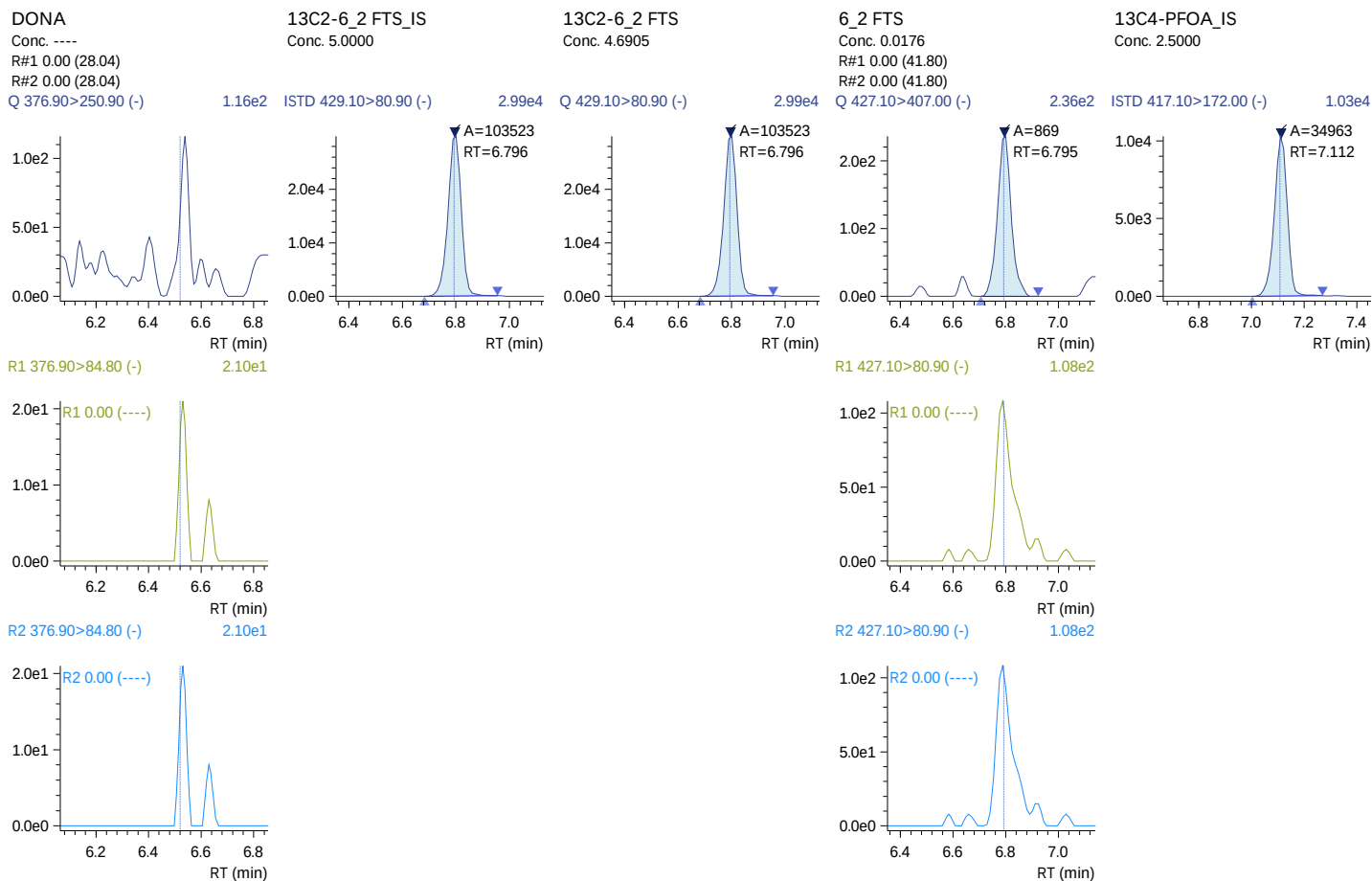


240118_015 (continued)





240118_015 (continued)





240118_015 (continued)

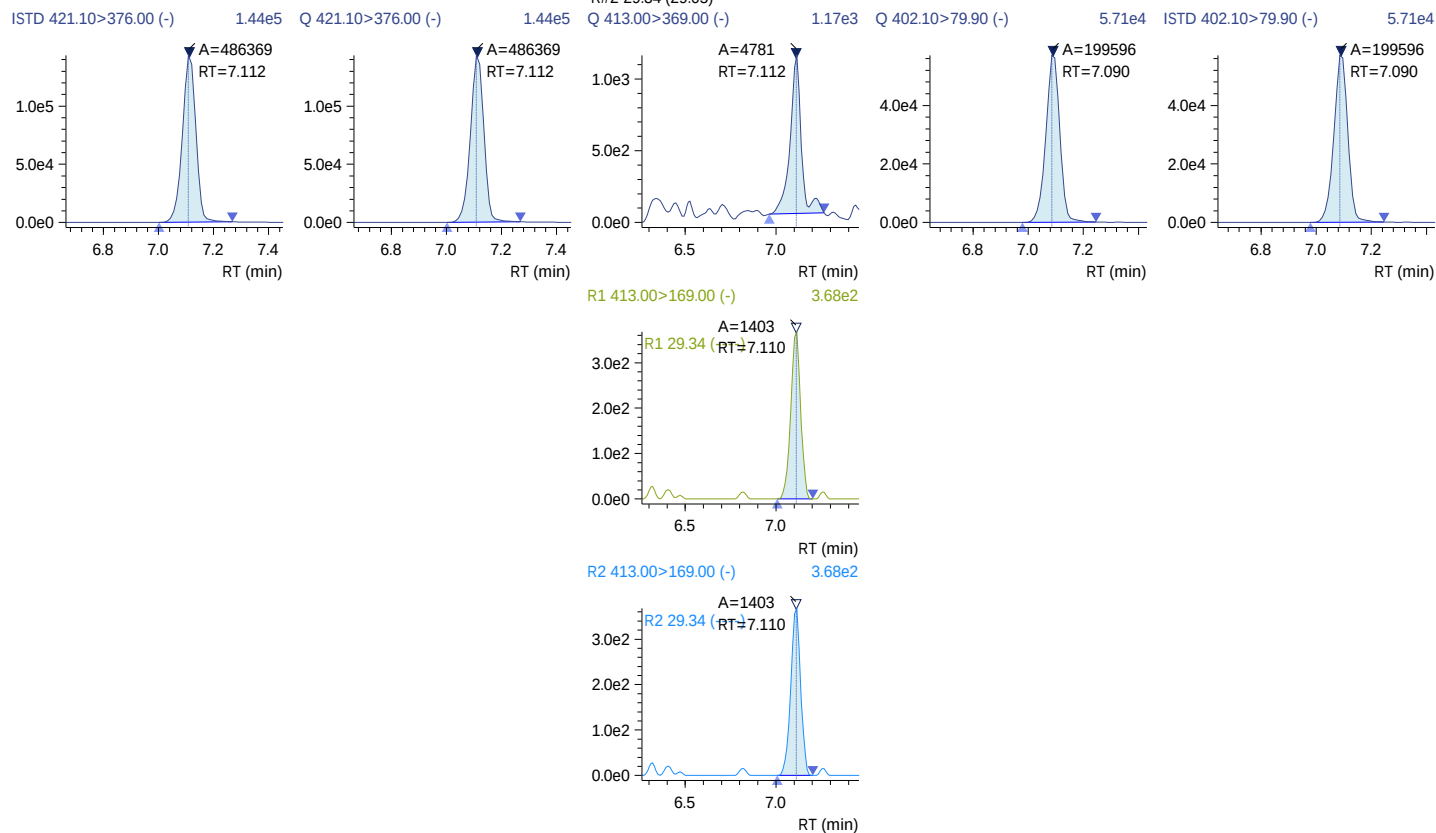
13C8-PFOA_IS
 Conc. 2.5000

13C8-PFOA
 Conc. 2.4889

PFOA
 Conc. -0.0057
 R#1 29.34 (29.05)
 R#2 29.34 (29.05)

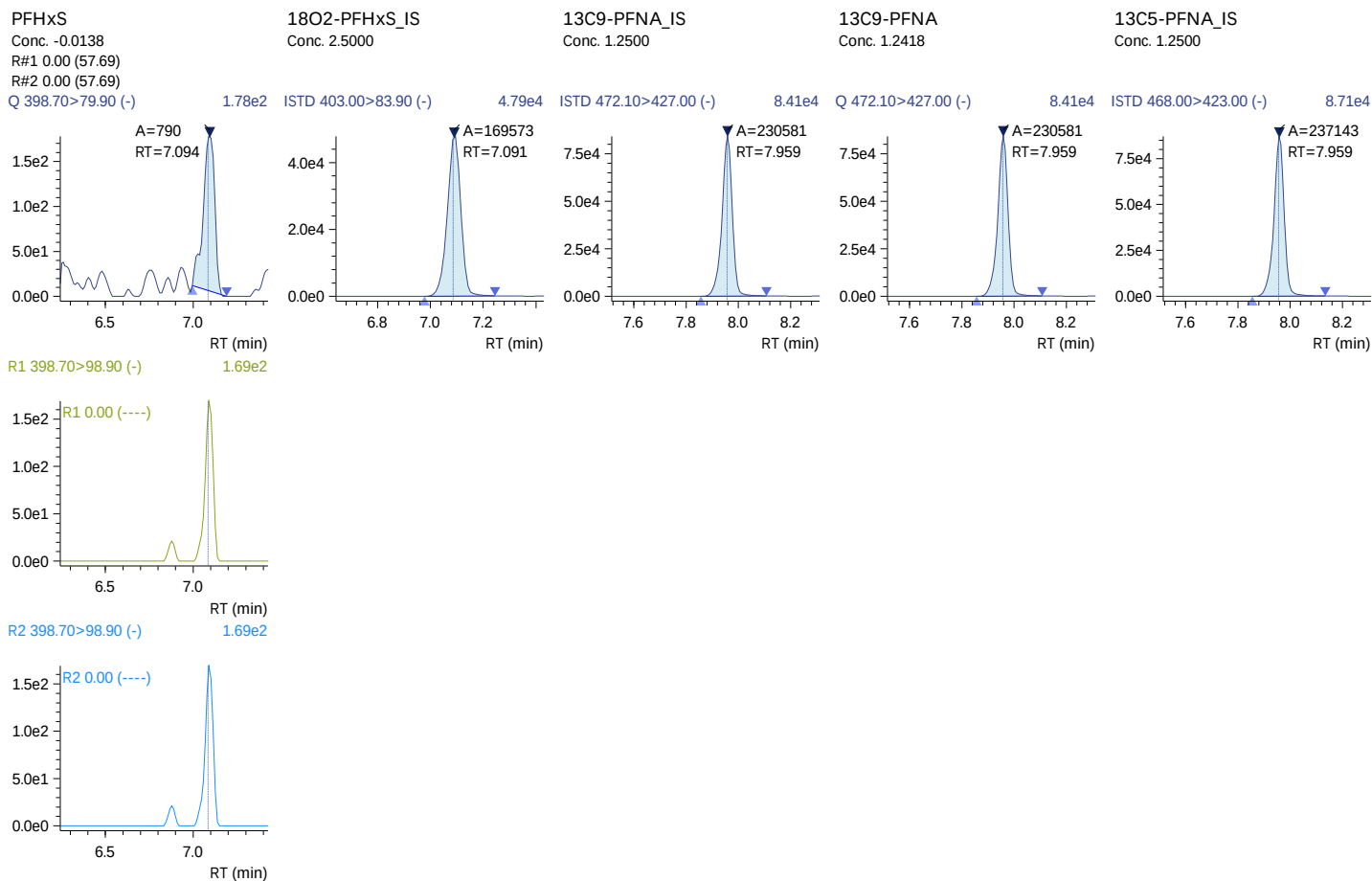
13C3-PFHxS
 Conc. 2.7423

13C3-PFHxS_IS
 Conc. 2.5000



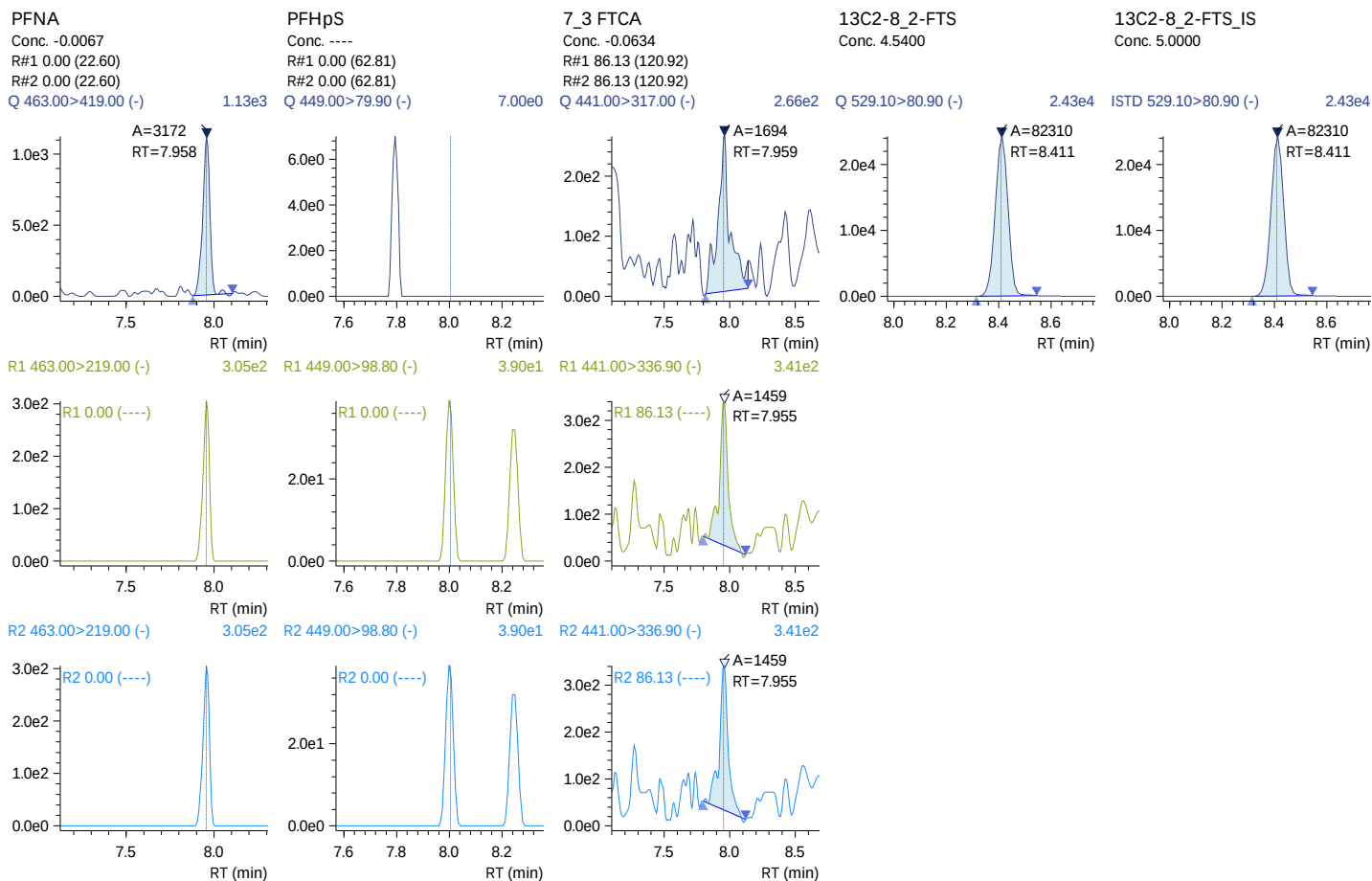


240118_015 (continued)



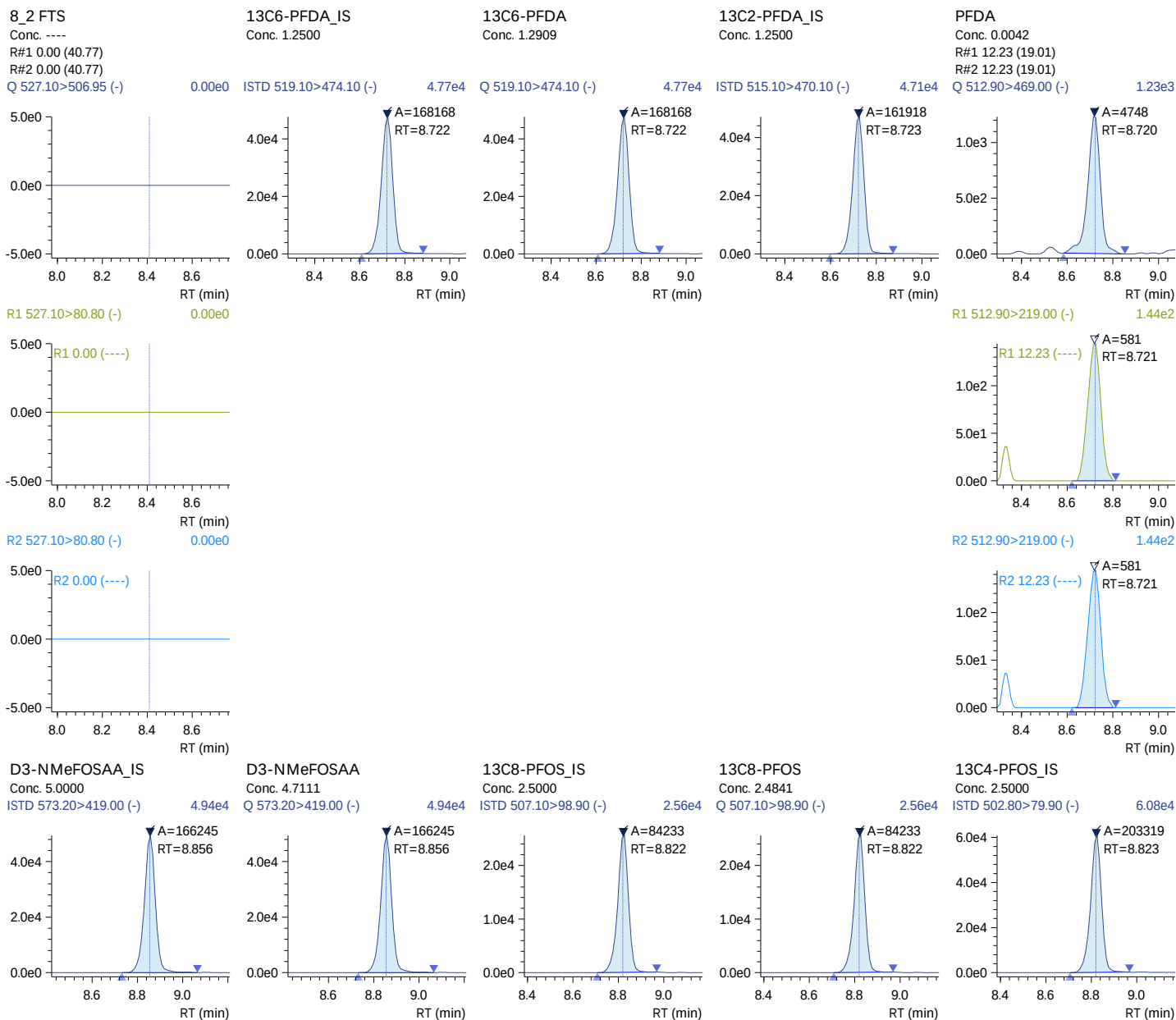


240118_015 (continued)



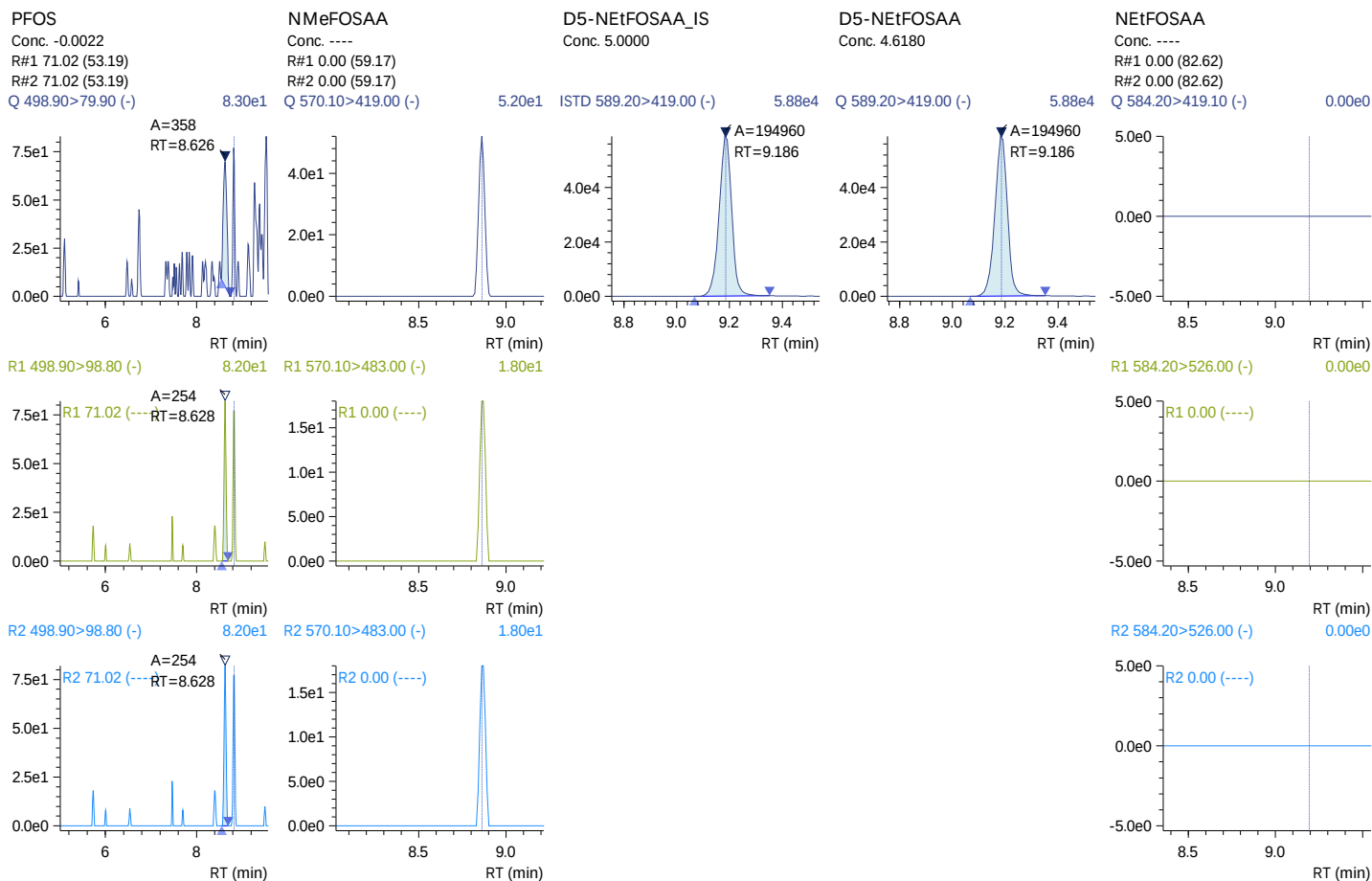


240118_015 (continued)





240118_015 (continued)





240118_015 (continued)

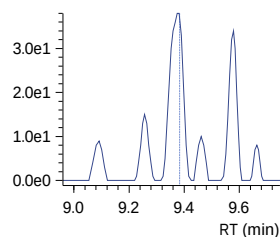
9-Cl-PF3ONS

Conc. ----

R#1 0.00 (31.76)

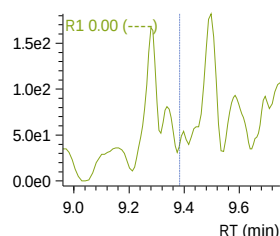
R#2 0.00 (31.76)

Q 530.80>351.00 (-)



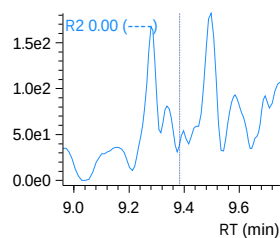
R1 532.80>353.00 (-)

1.82e2



R2 532.80>353.00 (-)

1.82e2



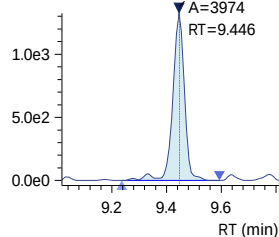
PFUnDA

Conc. -0.0023

R#1 0.00 (12.31)

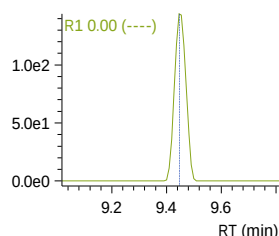
R#2 0.00 (12.31)

Q 563.10>519.00 (-)



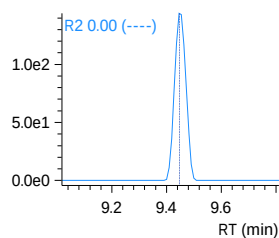
R1 563.10>269.10 (-)

1.44e2



R2 563.10>269.10 (-)

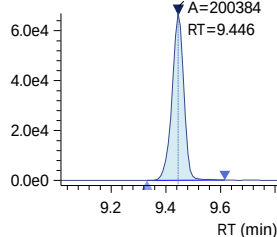
1.44e2



13C7-PFUnDA_IS

Conc. 1.2500

ISTD 570.00>525.10 (-)



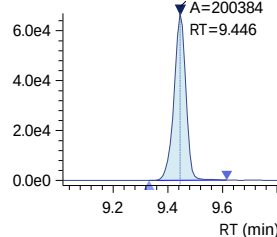
6.70e4



13C7-PFUnDA

Conc. 1.2896

Q 570.00>525.10 (-)



6.70e4



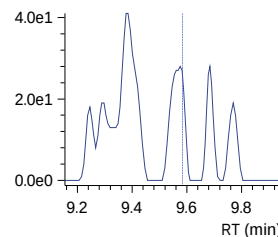
PFNS

Conc. ----

R#1 0.00 (63.31)

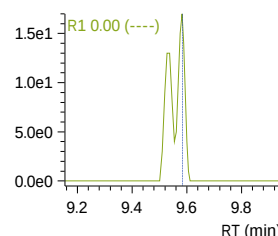
R#2 0.00 (63.31)

Q 548.80>79.90 (-)



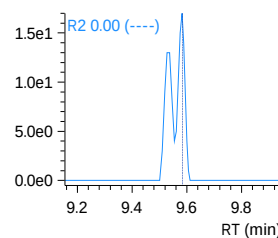
R1 548.80>98.80 (-)

1.70e1



R2 548.80>98.80 (-)

1.70e1





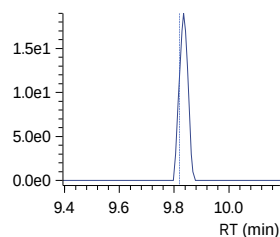
240118_015 (continued)

10_2 FTS
Conc. ----

R#1 0.00 (33.02)

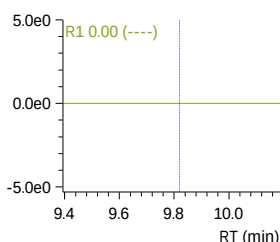
R#2 0.00 (33.02)

Q 626.80>607.05 (-)



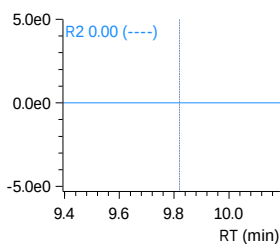
R1 626.80>81.00 (-)

0.00e0



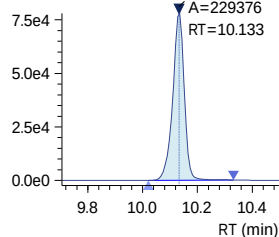
R2 626.80>81.00 (-)

0.00e0



13C2-PFDOA_IS
Conc. 1.2500

ISTD 615.10>570.00 (-)



R1 615.10>570.00 (-)

7.81e4



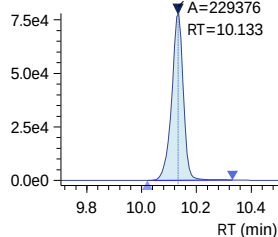
R2 615.10>570.00 (-)

7.81e4



13C2-PFDOA
Conc. 1.2849

Q 615.10>570.00 (-)



R1 615.10>570.00 (-)

7.81e4



R2 615.10>570.00 (-)

7.81e4



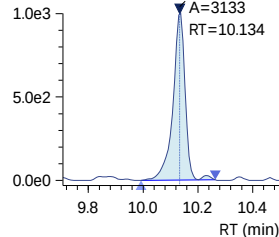
PFDOA

Conc. -0.0086

R#1 0.00 (10.14)

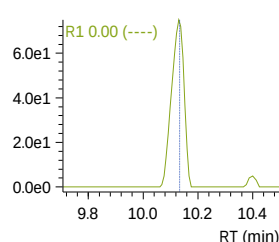
R#2 0.00 (10.14)

Q 613.10>569.00 (-)



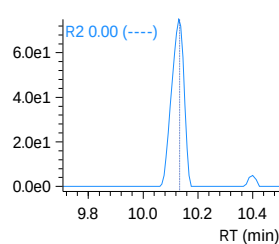
R1 613.10>319.00 (-)

7.50e1



R2 613.10>319.00 (-)

7.50e1



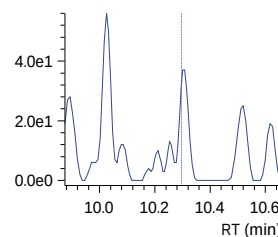
PFDS

Conc. ----

R#1 0.00 (62.02)

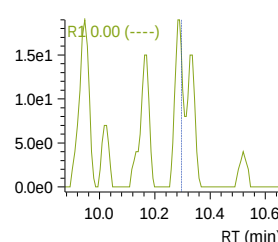
R#2 0.00 (62.02)

Q 599.00>79.90 (-)



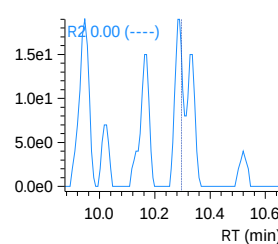
R1 599.00>98.80 (-)

5.60e1



R2 599.00>98.80 (-)

1.90e1





240118_015 (continued)

PFTrDA

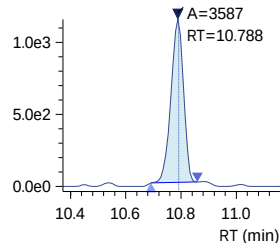
Conc. -0.0041

R#1 17.40 (15.12)

R#2 17.40 (15.12)

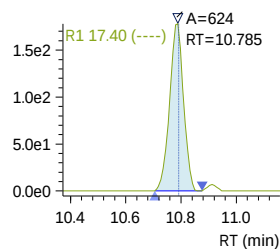
Q 663.00>619.00 (-)

1.16e3



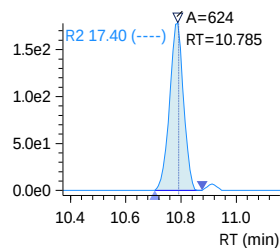
R1 663.00>168.90 (-)

1.78e2



R2 663.00>168.90 (-)

1.78e2



11-Cl-PF3OUdS

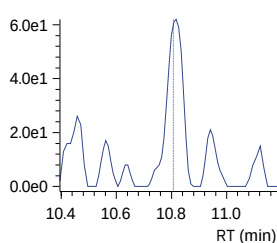
Conc. ----

R#1 0.00 (36.61)

R#2 0.00 (36.61)

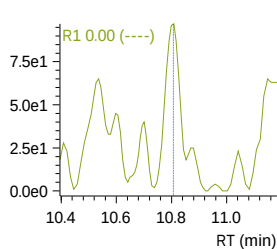
Q 630.90>451.00 (-)

6.20e1



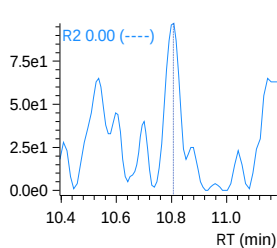
R1 632.90>452.90 (-)

9.70e1



R2 632.90>452.90 (-)

9.70e1

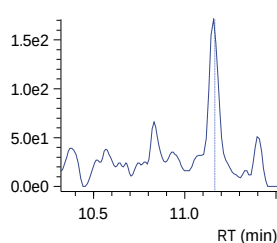


PFOSAm

Conc. ----

Q 498.10>77.90 (-)

1.71e2

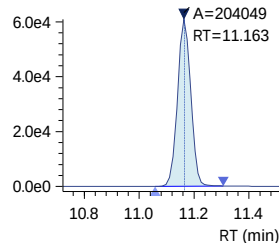


13C8-PFOSAm

Conc. 2.3641

Q 506.10>77.80 (-)

6.09e4

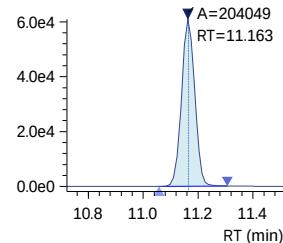


13C8-PFOSAm_IS

Conc. 2.5000

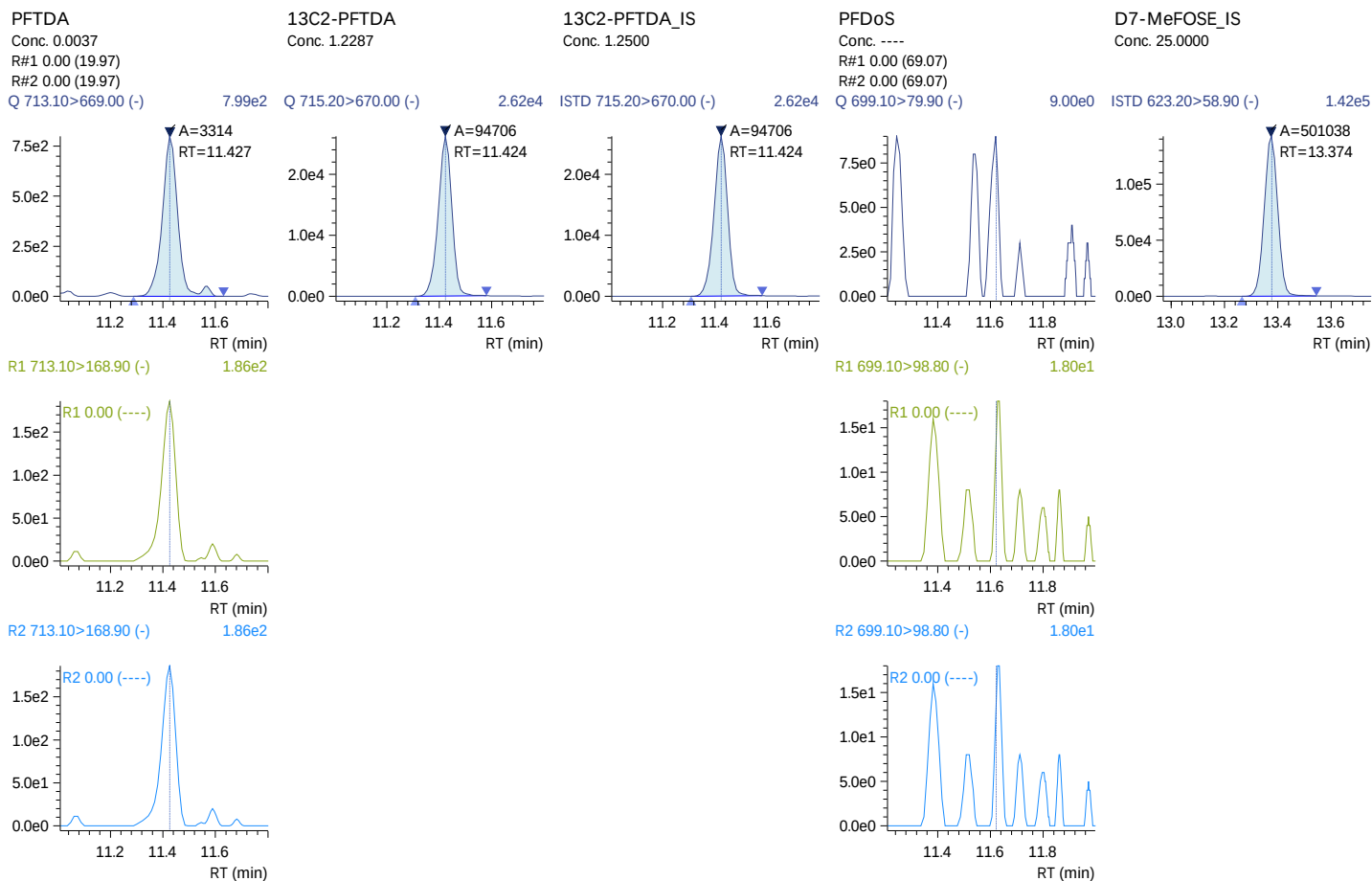
ISTD 506.10>77.80 (-)

6.09e4





240118_015 (continued)





240118_015 (continued)

D7-MeFOSE
 Conc. 23.5450

MeFOSE
 Conc. ----

13C2-PFHXA_IS
 Conc. 2.5000

13C2-PFHXA
 Conc. 2.4928

PFHXA
 Conc. 0.0024
 R#1 0.00 (11.64)
 R#2 0.00 (11.64)

Q 623.20>58.90 (-)

1.42e5

Q 616.10>59.00 (-)

5.40e1

ISTD 815.00>770.05 (-)

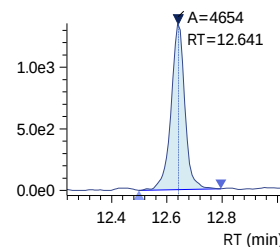
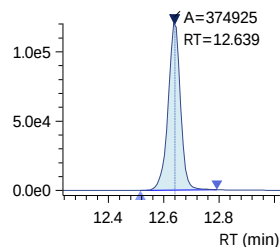
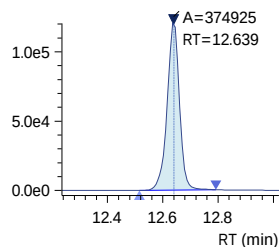
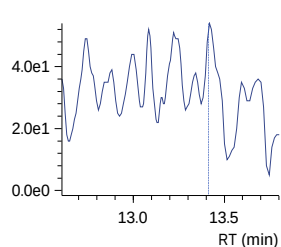
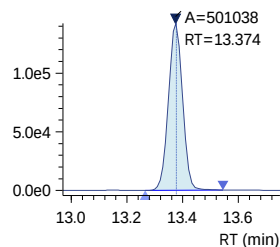
1.21e5

Q 815.00>770.05 (-)

1.21e5

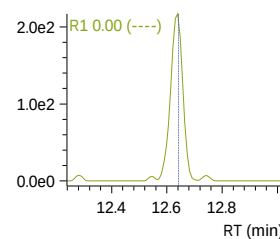
Q 813.00>768.95 (-)

1.36e3



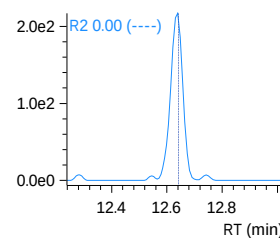
R1 813.00>218.95 (-)

2.17e2



R2 813.00>218.95 (-)

2.17e2





240118_015 (continued)

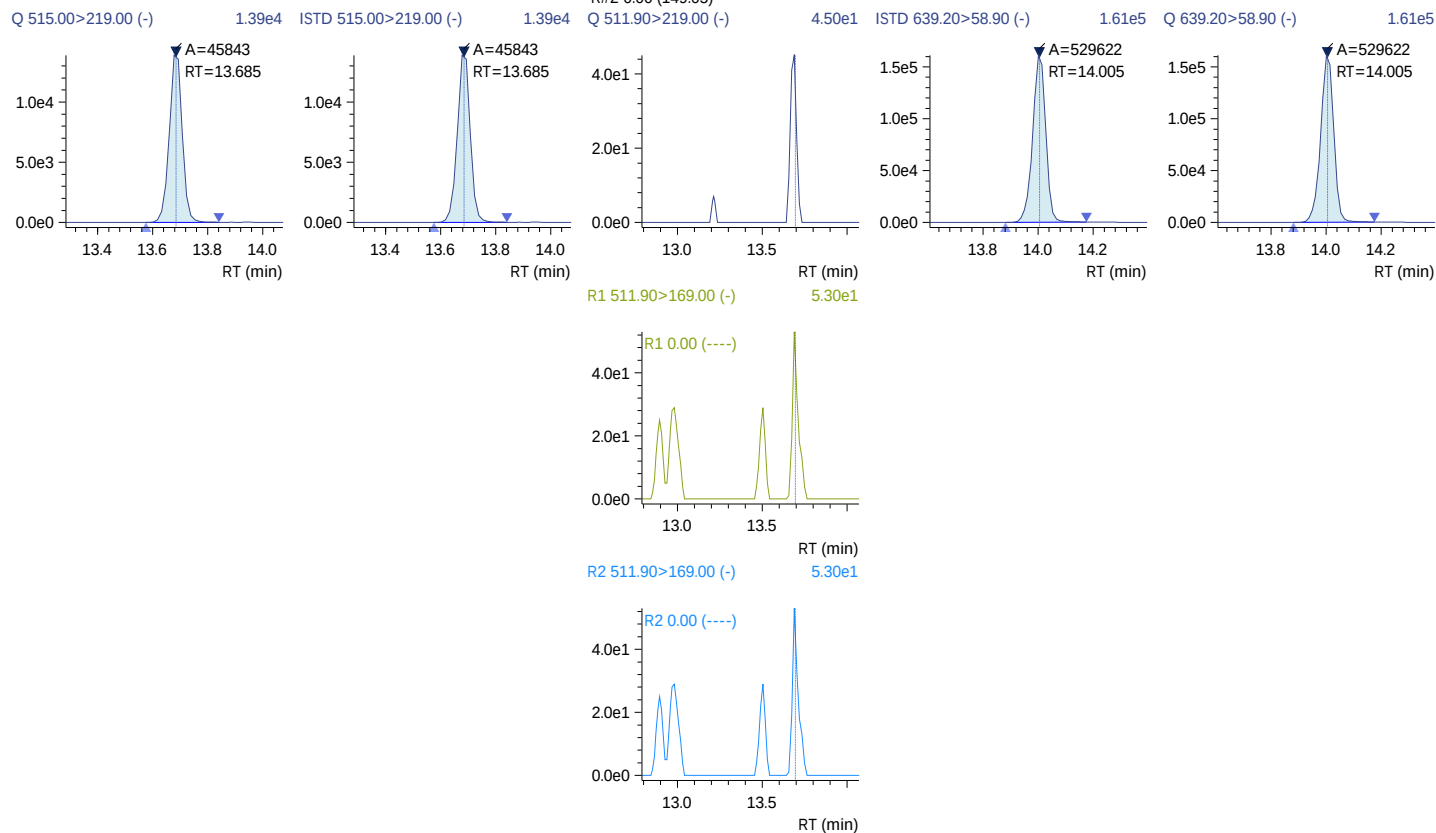
D3-MeFOSA
 Conc. 2.6374

D3-MeFOSA_IS
 Conc. 2.5000

MeFOSA
 Conc. ----
 R#1 0.00 (149.05)
 R#2 0.00 (149.05)

D9-EtFOSE_IS
 Conc. 25.0000

D9-EtFOSE
 Conc. 24.5046





240118_015 (continued)

EtFOSE
Conc. ----

D5-EtFOSAm
Conc. 2.3191

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. ----

PFODA
Conc. 0.0301

Q 630.00>59.00 (-)

4.50e1

Q 531.10>219.00 (-)

1.68e4

ISTD 531.10>219.00 (-)

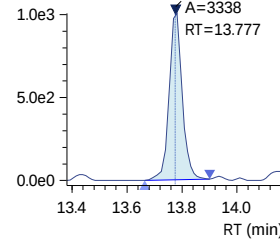
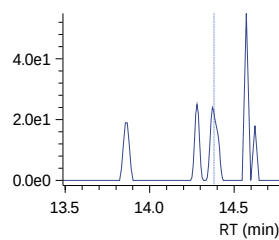
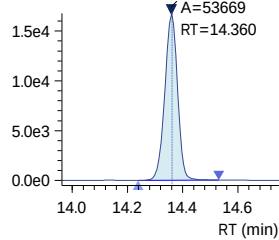
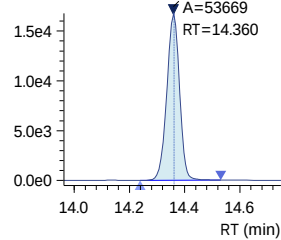
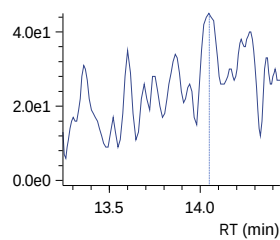
1.68e4

Q 526.00>219.00 (-)

5.50e1

Q 913.00>868.65 (-)

1.01e3

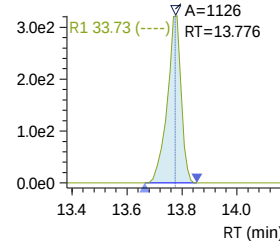
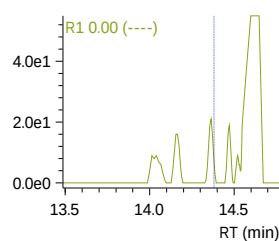


R1 526.00>169.00 (-)

5.50e1

R1 913.00>169.00 (-)

3.22e2

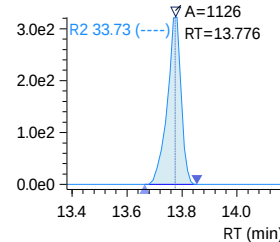
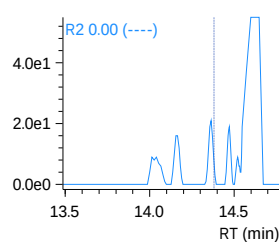


R2 526.00>169.00 (-)

5.50e1

R2 913.00>169.00 (-)

3.22e2





240118_016

Sample ID: 1633 ICV 1.0PPB
Date Acquired: 1/18/2024 5:57:03 PM
Acquired by: System Administrator
Data File: 240118_016
Vial: 10 | Inj. Volume: 10.0000uL | Tray: 1

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	1258661	----	----	----	----	----	----	
13C4-PFBA_IS	216.80>171.90	----	1258661	----	----	----	----	----	----	
13C3-PFBA_IS	216.00>172.00	----	566546	----	----	----	----	----	----	
PFBA	212.80>169.05	----	107094	----	----	----	----	----	----	
PFMPA	229.00>84.90	----	85041	----	----	----	----	----	----	
3_3 FTCA	241.00>177.10	241.00>117.00	----	0	0.00	141.17	0	0.00	141.17	
13C5-PFPeA	268.30>223.00	----	131451	----	----	----	----	----	----	
13C5-PFPeA_IS	268.30>223.00	----	131451	----	----	----	----	----	----	
PFPeA	263.00>219.00	----	164731	----	----	----	----	----	----	
PFMBA	279.00>84.95	----	130341	----	----	----	----	----	----	
13C2-4_2 FTS	329.10>80.90	----	142829	----	----	----	----	----	----	
13C2-4_2 FTS_IS	329.10>80.90	----	142829	----	----	----	----	----	----	
4_2 FTS	327.10>307.00	327.10>80.90	63477	18535	29.20	29.06	18535	29.20	29.06	
13C3-PFBS_IS	302.10>79.90	----	312426	----	----	----	----	----	----	
PFBS	298.70>79.90	298.70>98.80	138227	67088	48.54	46.72	67088	48.54	46.72	
13C3-PFBS	302.10>79.90	----	312426	----	----	----	----	----	----	
NFDHA	295.00>201.00	295.00>84.90	139473	49455	35.46	40.25	49455	35.46	40.25	
13C5-PFHxA	318.00>273.00	----	659266	----	----	----	----	----	----	
13C5-PFHxA_IS	318.00>273.00	----	659266	----	----	----	----	----	----	
13C2-PFHxA_IS	315.10>270.00	----	628403	----	----	----	----	----	----	
PFHxA	313.00>269.00	----	220020	----	----	----	----	----	----	
PFEESA	314.80>135.00	314.80>82.90	613751	36157	5.89	6.11	36157	5.89	6.11	
13C3-HFPO-DA	286.90>168.90	----	617025	----	----	----	----	----	----	
13C3-HFPO-DA_IS	286.90>168.90	----	617025	----	----	----	----	----	----	
HFPO-DA	284.90>168.90	284.90>184.90	65078	44523	68.42	65.61	44523	68.42	65.61	
5_3 FTCA	341.00>237.05	341.00>217.00	----	0	0.00	158.86	0	0.00	158.86	
PFPeS	349.10>79.90	349.10>98.80	119422	64872	54.32	55.80	64872	54.32	55.80	
13C4-PFHpA	367.10>322.00	----	580798	----	----	----	----	----	----	
13C4-PFHpA_IS	367.10>322.00	----	580798	----	----	----	----	----	----	
PFHpA	363.10>319.00	363.10>169.00	243549	55782	22.90	21.50	55782	22.90	21.50	
DONA	376.90>250.90	376.90>84.80	411896	123264	29.93	29.66	123264	29.93	29.66	
13C2-6_2 FTS_IS	429.10>80.90	----	124466	----	----	----	----	----	----	
13C2-6_2 FTS	429.10>80.90	----	124466	----	----	----	----	----	----	
6_2 FTS	427.10>407.00	427.10>80.90	50269	23712	47.17	41.15	23712	47.17	41.15	
13C4-PFOA_IS	417.10>172.00	----	45925	----	----	----	----	----	----	
13C8-PFOA_IS	421.10>376.00	----	607205	----	----	----	----	----	----	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240118_016 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	607205	----	----	----	----	----	----	----
PFOA	413.00>369.00	413.00>169.00	158761	51377	32.36	31.89	51377	32.36	31.89	
13C3-PFHxS	402.10>79.90	----	231655	----	----	----	----	----	----	----
13C3-PFHxS_IS	402.10>79.90	----	231655	----	----	----	----	----	----	----
PFHxS	398.70>79.90	398.70>98.90	104885	65488	62.44	56.62	65488	62.44	56.62	
18O2-PFHxS_IS	403.00>83.90	----	202223	----	----	----	----	----	----	----
13C9-PFNA_IS	472.10>427.00	----	288107	----	----	----	----	----	----	----
13C9-PFNA	472.10>427.00	----	288107	----	----	----	----	----	----	----
13C5-PFNA_IS	468.00>423.00	----	288016	----	----	----	----	----	----	----
PFNA	463.00>419.00	463.00>219.00	161182	40940	25.40	23.17	40940	25.40	23.17	
PFHpS	449.00>79.90	449.00>98.80	82761	48767	58.92	56.96	48767	58.92	56.96	
7_3 FTCA	441.00>317.00	441.00>336.90	----	0	0.00	117.47	0	0.00	117.47	
13C2-8_2-FTS	529.10>80.90	----	119746	----	----	----	----	----	----	----
13C2-8_2-FTS_IS	529.10>80.90	----	119746	----	----	----	----	----	----	----
8_2 FTS	527.10>506.95	527.10>80.80	50915	22943	45.06	49.59	22943	45.06	49.59	
13C6-PFDA_IS	519.10>474.10	----	232114	----	----	----	----	----	----	----
13C6-PFDA	519.10>474.10	----	232114	----	----	----	----	----	----	----
13C2-PFDA_IS	515.10>470.10	----	214237	----	----	----	----	----	----	----
PFDA	512.90>469.00	512.90>219.00	222841	42245	18.96	19.00	42245	18.96	19.00	
D3-NMeFOSAA_IS	573.20>419.00	----	227223	----	----	----	----	----	----	----
D3-NMeFOSAA	573.20>419.00	----	227223	----	----	----	----	----	----	----
13C8-PFOS_IS	507.10>98.90	----	105678	----	----	----	----	----	----	----
13C8-PFOS	507.10>98.90	----	105678	----	----	----	----	----	----	----
13C4-PFOS_IS	502.80>79.90	----	271163	----	----	----	----	----	----	----
PFOS	498.90>79.90	498.90>98.80	93974	47694	50.75	52.47	47694	50.75	52.47	
NMeFOSAA	570.10>419.00	570.10>483.00	57190	34723	60.72	55.15	34723	60.72	55.15	
D5-NeFOSAA_IS	589.20>419.00	----	241074	----	----	----	----	----	----	----
D5-NeFOSAA	589.20>419.00	----	241074	----	----	----	----	----	----	----
NeFOSAA	584.20>419.10	584.20>526.00	32459	29529	90.97	81.95	29529	90.97	81.95	
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	410044	133923	32.66	32.76	133923	32.66	32.76	
PFUnDA	563.10>519.00	563.10>269.10	194333	25492	13.12	13.12	25492	13.12	13.12	
13C7-PFUnDA_IS	570.00>525.10	----	255936	----	----	----	----	----	----	----
13C7-PFUnDA	570.00>525.10	----	255936	----	----	----	----	----	----	----
PFNS	548.80>79.90	548.80>98.80	78210	48986	62.64	65.22	48986	62.64	65.22	
10_2 FTS	626.80>607.05	626.80>81.00	51049	18857	36.94	37.13	18857	36.94	37.13	
13C2-PFDOA_IS	615.10>570.00	----	285641	----	----	----	----	----	----	----
13C2-PFDOA	615.10>570.00	----	285641	----	----	----	----	----	----	----
PFDOA	613.10>569.00	613.10>319.00	160458	19096	11.90	11.29	19096	11.90	11.29	
PFDS	599.00>79.90	599.00>98.80	69073	42256	61.18	60.18	42256	61.18	60.18	
PFTDA	663.00>619.00	663.00>168.90	176723	32536	18.41	17.64	32536	18.41	17.64	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240118_016 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	310994	111620	35.89	36.44	111620	35.89	36.44	
PFOSAm	498.10>77.90	----	179763	----	----	----	----	----	----	
13C8-PFOSAm	506.10>77.80	----	263852	----	----	----	----	----	----	
13C8-PFOSAm_IS	506.10>77.80	----	263852	----	----	----	----	----	----	
PFTDA	713.10>669.00	713.10>168.90	147427	31626	21.45	22.96	31626	21.45	22.96	
13C2-PFTDA	715.20>670.00	----	130145	----	----	----	----	----	----	
13C2-PFTDA_IS	715.20>670.00	----	130145	----	----	----	----	----	----	
PFDoS	699.10>79.90	699.10>98.80	39640	25278	63.77	67.40	25278	63.77	67.40	
D7-MeFOSE_IS	623.20>58.90	----	664189	----	----	----	----	----	----	
D7-MeFOSE	623.20>58.90	----	664189	----	----	----	----	----	----	
MeFOSE	616.10>59.00	----	23461	----	----	----	----	----	----	
13C2-PFHxDA_IS	815.00>770.05	----	474606	----	----	----	----	----	----	
13C2-PFHxDA	815.00>770.05	----	474606	----	----	----	----	----	----	
PFHxDA	813.00>768.95	813.00>218.95	206805	30083	14.55	13.90	30083	14.55	13.90	
D3-MeFOSA	515.00>219.00	----	53519	----	----	----	----	----	----	
D3-MeFOSA_IS	515.00>219.00	----	53519	----	----	----	----	----	----	
MeFOSA	511.90>219.00	511.90>169.00	36906	55790	151.17	140.79	55790	151.17	140.79	
D9-EtFOSE_IS	639.20>58.90	----	658737	----	----	----	----	----	----	
D9-EtFOSE	639.20>58.90	----	658737	----	----	----	----	----	----	
EtFOSE	630.00>59.00	----	34456	----	----	----	----	----	----	
D5-EtFOSAm	531.10>219.00	----	72597	----	----	----	----	----	----	
D5-EtFOSAm_IS	531.10>219.00	----	72597	----	----	----	----	----	----	
EtFOSAm	526.00>219.00	526.00>169.00	43052	65742	152.70	163.90	65742	152.70	163.90	
PFODA	913.00>868.65	913.00>169.00	100861	24393	24.18	27.03	24393	24.18	27.03	



240118_016

Sample ID: 1633 ICV 1.0PPB
Date Acquired: 1/18/2024 5:57:03 PM
Acquired by: System Administrator
Data File: 240118_016
Vial: 10 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Std. Conc.	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.414	0.000	0.001	1258661	566546	13C3-PFBA_IS	10.0000	9.9394	ng/mL	
13C4-PFBA_IS	Auto	1.414	0.000	----	1258661	1258661	----	10.0000	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.413	-0.002	----	566546	566546	----	5.0000	5.0000	ng/mL	
PFBA	Auto	1.416	0.000	0.002	107094	1258661	13C4-PFBA_IS	1.0000	0.9903	ng/mL	
PFMPA	Auto	2.436	0.004	-1.062	85041	131451	13C5-PFPeA_IS	1.0000	1.0010	ng/mL	
3_3 FTCA	ND(W/B)	----	----	----	----	131451	13C5-PFPeA_IS	20.0000	----	ng/mL	
13C5-PFPeA	Auto	3.498	0.006	-1.489	131451	628403	13C2-PFHxA_IS	5.0000	4.6342	ng/mL	
13C5-PFPeA_IS	Auto	3.498	0.006	----	131451	131451	----	5.0000	5.0000	ng/mL	
PFPeA	Auto	3.500	0.005	0.002	164731	131451	13C5-PFPeA_IS	1.0000	0.9675	ng/mL	
PFMBA	Auto	4.032	0.007	0.534	130341	131451	13C5-PFPeA_IS	1.0000	1.0830	ng/mL	
13C2-4_2 FTS	Auto	4.669	0.008	-2.424	142829	202223	18O2-PFHxS_IS	5.0000	5.1325	ng/mL	
13C2-4_2 FTS_IS	Auto	4.669	0.008	----	142829	142829	----	5.0000	5.0000	ng/mL	
4_2 FTS	Auto	4.668	0.006	-0.001	63477	142829	13C2-4_2 FTS_IS	0.9400	0.9036	ng/mL	
13C3-PFBS_IS	Auto	4.654	0.007	----	312426	312426	----	2.5000	2.5000	ng/mL	
PFBS	Auto	4.655	0.007	0.001	138227	312426	13C3-PFBS_IS	0.8900	0.8643	ng/mL	
13C3-PFBS	Auto	4.654	0.007	-2.439	312426	202223	18O2-PFHxS_IS	2.5000	2.7224	ng/mL	
NFDHA	Auto	4.844	0.009	-0.142	139473	659266	13C5-PFHxA_IS	1.0000	0.9535	ng/mL	
13C5-PFHxA	Auto	4.986	0.008	-0.001	659266	628403	13C2-PFHxA_IS	2.5000	2.4893	ng/mL	
13C5-PFHxA_IS	Auto	4.986	0.008	----	659266	659266	----	2.5000	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	4.987	0.008	----	628403	628403	----	2.5000	2.5000	ng/mL	
PFHxA	Auto	4.988	0.008	0.002	220020	659266	13C5-PFHxA_IS	1.0000	0.9943	ng/mL	
PFEESA	Auto	5.330	0.008	0.344	613751	659266	13C5-PFHxA_IS	0.8900	0.8312	ng/mL	
13C3-HFPO-DA	Auto	5.460	0.008	0.473	617025	628403	13C2-PFHxA_IS	10.0000	10.0304	ng/mL	
13C3-HFPO-DA_IS	Auto	5.460	0.008	----	617025	617025	----	10.0000	10.0000	ng/mL	
HFPO-DA	Auto	5.461	0.008	0.001	65078	617025	13C3-HFPO-DA_IS	1.0000	0.9550	ng/mL	
5_3 FTCA	ND(W/B)	----	----	----	----	659266	13C5-PFHxA_IS	20.0000	----	ng/mL	
PFPeS	Auto	6.026	0.008	-1.066	119422	231655	13C3-PFHxS_IS	0.9400	0.9817	ng/mL	
13C4-PFHpA	Auto	6.162	0.008	1.175	580798	628403	13C2-PFHxA_IS	2.5000	2.4225	ng/mL	
13C4-PFHpA_IS	Auto	6.162	0.008	----	580798	580798	----	2.5000	2.5000	ng/mL	
PFHpA	Auto	6.163	0.008	0.001	243549	580798	13C4-PFHpA_IS	1.0000	0.9764	ng/mL	
DONA	Auto	6.528	0.008	1.068	411896	617025	13C3-HFPO-DA_IS	0.9500	0.8613	ng/mL	
13C2-6_2 FTS_IS	Auto	6.799	0.006	----	124466	124466	----	5.0000	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.799	0.006	-0.294	124466	202223	18O2-PFHxS_IS	5.0000	4.7289	ng/mL	
6_2 FTS	Auto	6.800	0.008	0.001	50269	124466	13C2-6_2 FTS_IS	0.9500	0.8869	ng/mL	
13C4-PFOA_IS	Auto	7.115	0.008	----	45925	45925	----	2.5000	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.115	0.008	----	607205	607205	----	2.5000	2.5000	ng/mL	
13C8-PFOA	Auto	7.115	0.008	0.000	607205	45925	13C4-PFOA_IS	2.5000	2.3656	ng/mL	
PFOA	Auto	7.116	0.006	0.001	158761	607205	13C8-PFOA_IS	1.0000	0.9693	ng/mL	
13C3-PFHxS	Auto	7.092	0.006	-0.001	231655	202223	18O2-PFHxS_IS	2.5000	2.6688	ng/mL	
13C3-PFHxS_IS	Auto	7.092	0.006	----	231655	231655	----	2.5000	2.5000	ng/mL	
PFHxS	M	7.093	0.009	0.001	104885	231655	13C3-PFHxS_IS	0.9100	0.9242	ng/mL	
18O2-PFHxS_IS	Auto	7.093	0.007	----	202223	202223	----	2.5000	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.962	0.006	----	288107	288107	----	1.2500	1.2500	ng/mL	
13C9-PFNA	Auto	7.962	0.006	-0.001	288107	288016	13C5-PFNA_IS	1.2500	1.2776	ng/mL	
13C5-PFNA_IS	Auto	7.963	0.007	----	288016	288016	----	1.2500	1.2500	ng/mL	
PFNA	Auto	7.964	0.007	0.002	161182	288107	13C9-PFNA_IS	1.0000	0.9521	ng/mL	
PFHpS	Auto	8.012	0.008	-0.815	82761	105678	13C8-PFOS_IS	0.9500	1.0034	ng/mL	
7_3 FTCA	ND(W/B)	----	----	----	----	659266	13C5-PFHxA_IS	20.0000	----	ng/mL	
13C2-8_2-FTS	Auto	8.418	0.009	1.325	119746	202223	18O2-PFHxS_IS	5.0000	5.5385	ng/mL	
13C2-8_2-FTS_IS	Auto	8.418	0.009	----	119746	119746	----	5.0000	5.0000	ng/mL	
8_2 FTS	Auto	8.416	0.006	-0.002	50915	119746	13C2-8_2-FTS_IS	0.9600	0.9895	ng/mL	
13C6-PFDA_IS	Auto	8.728	0.008	----	232114	232114	----	1.2500	1.2500	ng/mL	
13C6-PFDA	Auto	8.728	0.008	-0.001	232114	214237	13C2-PFDA_IS	1.2500	1.3467	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_016 (continued)

(Table continued from previous page)

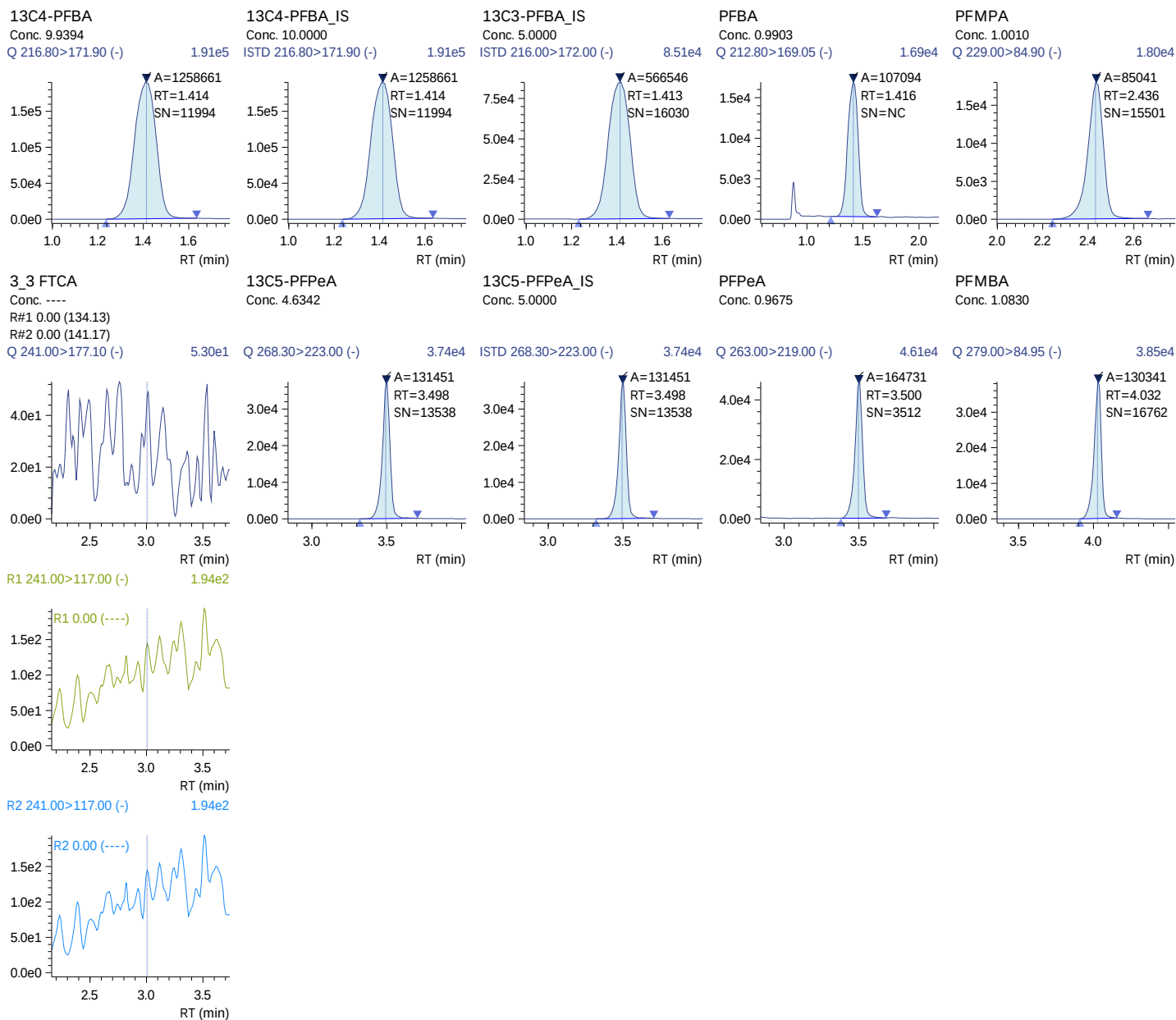
Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Std. Conc.	Conc.	Unit	Flag ID
13C2-PFDA_IS	Auto	8.729	0.008	----	214237	214237	----	1.2500	1.2500	ng/mL	
PFDA	Auto	8.729	0.008	0.001	222841	232114	13C6-PFDA_IS	1.0000	0.9818	ng/mL	
D3-NMeFOSAA_IS	Auto	8.862	0.007	----	227223	227223	----	5.0000	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.862	0.007	0.035	227223	271163	13C4-PFOS_IS	5.0000	4.8281	ng/mL	
13C8-PFOS_IS	Auto	8.827	0.007	----	105678	105678	----	2.5000	2.5000	ng/mL	
13C8-PFOS	Auto	8.827	0.007	0.000	105678	271163	13C4-PFOS_IS	2.5000	2.3368	ng/mL	
13C4-PFOS_IS	Auto	8.827	0.007	----	271163	271163	----	2.5000	2.5000	ng/mL	
PFOS	M	8.828	0.006	0.001	93974	105678	13C8-PFOS_IS	0.9300	0.8550	ng/mL	
NMeFOSAA	M	8.869	0.008	0.007	57190	227223	D3-NMeFOSAA_IS	1.0000	0.9276	ng/mL	
D5-NetFOSAA_IS	Auto	9.192	0.006	----	241074	241074	----	5.0000	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.192	0.006	0.365	241074	271163	13C4-PFOS_IS	5.0000	4.2816	ng/mL	
NetFOSAA	M	9.202	0.007	0.010	32459	241074	D5-NetFOSAA_IS	1.0000	1.0081	ng/mL	
9-CI-PF3ONS	Auto	9.389	0.005	3.929	410044	617025	13C3-HFPO-DA_IS	0.9300	0.8061	ng/mL	
PFUnDA	Auto	9.450	0.003	0.001	194333	255936	13C7-PFUnDA_IS	1.0000	1.0190	ng/mL	
13C7-PFUnDA_IS	Auto	9.449	0.004	----	255936	255936	----	1.2500	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.449	0.004	0.720	255936	214237	13C2-PFDA_IS	1.2500	1.2448	ng/mL	
PFNS	Auto	9.588	0.004	0.761	78210	105678	13C8-PFOS_IS	0.9600	0.9740	ng/mL	
10_2_FTS	Auto	9.822	0.003	1.404	51049	119746	13C2-8_2-FTS_IS	0.9600	0.8154	ng/mL	
13C2-PFDOA_IS	Auto	10.136	0.003	----	285641	285641	----	1.2500	1.2500	ng/mL	
13C2-PFDOA	Auto	10.136	0.003	1.407	285641	214237	13C2-PFDA_IS	1.2500	1.2093	ng/mL	
PFDOA	Auto	10.137	0.003	0.001	160458	285641	13C2-PFDOA_IS	1.0000	0.9659	ng/mL	
PFDS	Auto	10.298	0.002	1.471	69073	105678	13C8-PFOS_IS	0.9700	0.9835	ng/mL	
PFTDA	Auto	10.794	0.002	-0.633	176723	130145	13C2-PFTDA_IS	1.0000	0.9316	ng/mL	
11-CI-PF3OUdS	Auto	10.809	0.003	5.349	310994	617025	13C3-HFPO-DA_IS	0.9400	0.8917	ng/mL	
PFOSAm	M	11.169	0.005	-0.003	179763	263852	13C8-PFOSAm_IS	2.0000	2.0670	ng/mL	
13C8-PFOSAm	Auto	11.172	0.007	2.345	263852	271163	13C4-PFOS_IS	2.5000	2.2921	ng/mL	
13C8-PFOSAm_IS	Auto	11.172	0.007	----	263852	263852	----	2.5000	2.5000	ng/mL	
PFTDA	Auto	11.429	0.004	0.002	147427	130145	13C2-PFTDA_IS	1.0000	1.0264	ng/mL	
13C2-PFTDA	Auto	11.427	0.003	2.698	130145	214237	13C2-PFDA_IS	1.2500	1.2761	ng/mL	
13C2-PFTDA_IS	Auto	11.427	0.003	----	130145	130145	----	1.2500	1.2500	ng/mL	
PFDoS	Auto	11.626	0.004	2.799	39640	105678	13C8-PFOS_IS	0.9700	0.9353	ng/mL	
D7-MeFOSE_IS	Auto	13.383	0.006	----	664189	664189	----	25.0000	25.0000	ng/mL	
D7-MeFOSE	Auto	13.383	0.006	4.556	664189	271163	13C4-PFOS_IS	25.0000	23.4027	ng/mL	
MeFOSE	M	13.421	0.008	0.038	23461	664189	D7-MeFOSE_IS	1.0000	0.9618	ng/mL	
13C2-PFHXA_IS	Auto	12.643	0.002	----	474606	474606	----	2.5000	2.5000	ng/mL	
13C2-PFHXA	Auto	12.643	0.002	3.914	474606	214237	13C2-PFDA_IS	2.5000	2.3849	ng/mL	
PFHXDA	Auto	12.644	0.002	0.001	206805	474606	13C2-PFHXA_IS	1.0000	1.0349	ng/mL	
D3-MeFOSA	Auto	13.693	0.008	4.866	53519	271163	13C4-PFOS_IS	2.5000	2.3087	ng/mL	
D3-MeFOSA_IS	Auto	13.693	0.008	----	53519	53519	----	2.5000	2.5000	ng/mL	
MeFOSA	M	13.700	0.006	0.007	36906	53519	D3-MeFOSA_IS	1.0000	0.9566	ng/mL	
D9-EtFOSE_IS	Auto	14.012	0.006	----	658737	658737	----	25.0000	25.0000	ng/mL	
D9-EtFOSE	Auto	14.012	0.006	5.185	658737	271163	13C4-PFOS_IS	25.0000	22.8528	ng/mL	
EtFOSE	M	14.057	0.009	0.045	34456	658737	D9-EtFOSE_IS	1.0000	0.9941	ng/mL	
D5-EtFOSAm	Auto	14.369	0.007	5.542	72597	271163	13C4-PFOS_IS	2.5000	2.3521	ng/mL	
D5-EtFOSAm_IS	Auto	14.369	0.007	----	72597	72597	----	2.5000	2.5000	ng/mL	
EtFOSAm	M	14.388	0.008	0.019	43052	72597	D5-EtFOSAm_IS	1.0000	1.0187	ng/mL	
PFODA	Auto	13.781	0.006	1.138	100861	474606	13C2-PFHXA_IS	1.0000	0.9398	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_016 (continued)





240118_016 (continued)

13C2-4_2 FTS
Conc. 5.1325

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. 0.9036
R#1 29.20 (34.14)
R#2 29.20 (29.06)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 0.8643
R#1 48.54 (47.53)
R#2 48.54 (46.72)

Q 329.10>80.90 (-)

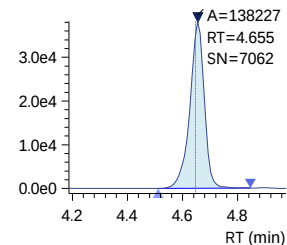
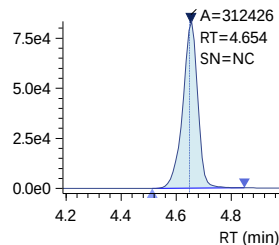
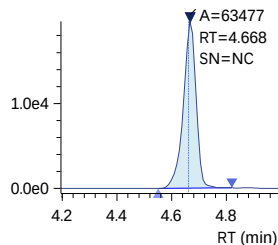
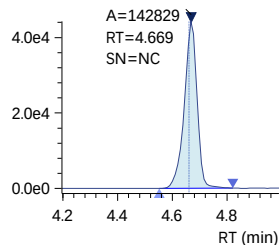
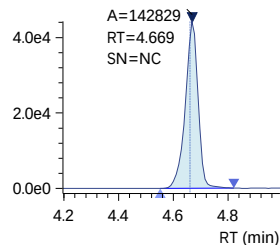
4.43e4 ISTD 329.10>80.90 (-)

4.43e4 Q 327.10>307.00 (-)

1.97e4 ISTD 302.10>79.90 (-)

8.34e4 Q 298.70>79.90 (-)

3.82e4

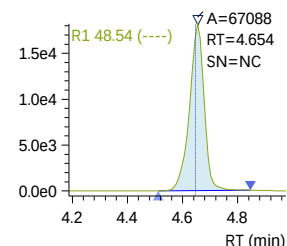
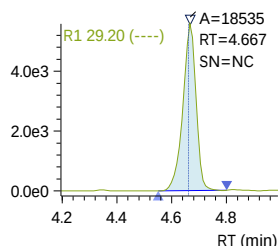


R1 327.10>80.90 (-)

5.58e3

R1 298.70>98.80 (-)

1.82e4

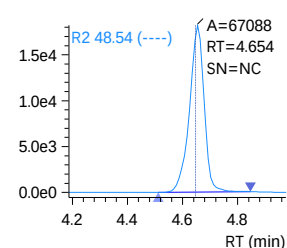
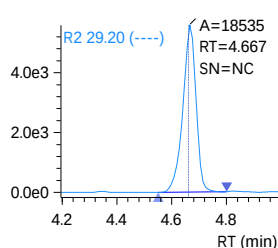


R2 327.10>80.90 (-)

5.58e3

R2 298.70>98.80 (-)

1.82e4





240118_016 (continued)

13C3-PFBS
Conc. 2.7224

NFDHA
Conc. 0.9535
R#1 35.46 (37.88)
R#2 35.46 (40.25)

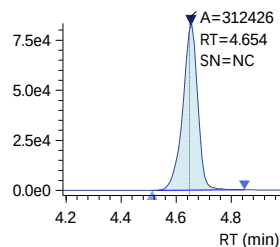
13C5-PFHxA
Conc. 2.4893

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

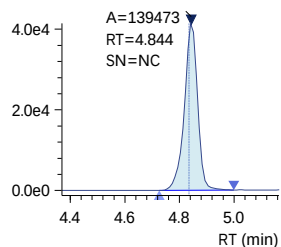
Q 302.10>79.90 (-)

8.34e4



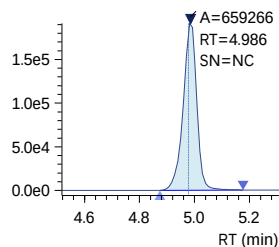
Q 295.00>201.00 (-)

4.15e4



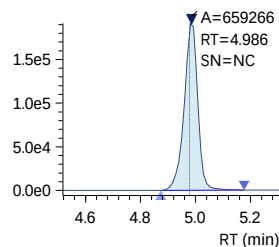
Q 318.00>273.00 (-)

1.91e5



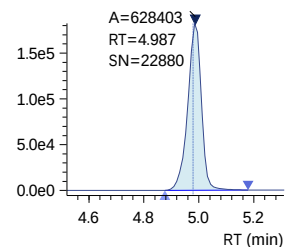
ISTD 318.00>273.00 (-)

1.91e5



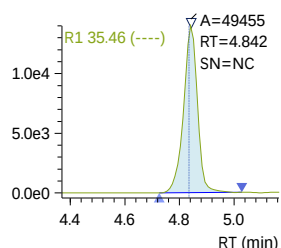
ISTD 315.10>270.00 (-)

1.82e5



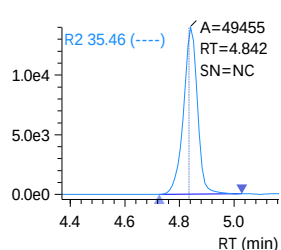
R1 295.00>84.90 (-)

1.40e4



R2 295.00>84.90 (-)

1.40e4





240118_016 (continued)

PFHxA
Conc. 0.9943

PFEESA
Conc. 0.8312
R#1 5.89 (5.88)
R#2 5.89 (6.11)

13C3-HFPO-DA
Conc. 10.0304

13C3-HFPO-DA_IS
Conc. 10.0000

HFPO-DA
Conc. 0.9550
R#1 68.42 (63.80)
R#2 68.42 (65.61)

Q 313.00>269.00 (-)

6.27e4

Q 314.80>135.00 (-)

1.90e5

Q 286.90>168.90 (-)

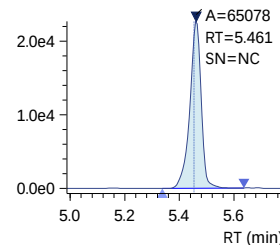
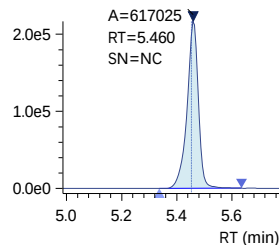
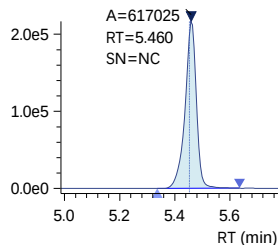
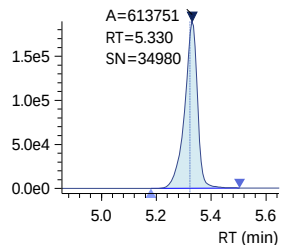
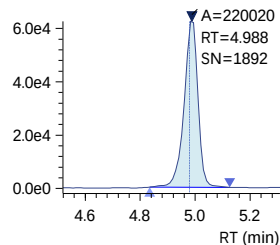
2.17e5

ISTD 286.90>168.90 (-)

2.17e5

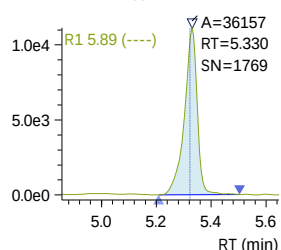
Q 284.90>168.90 (-)

2.27e4



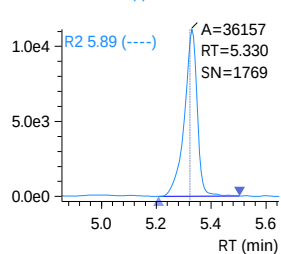
R1 314.80>82.90 (-)

1.11e4



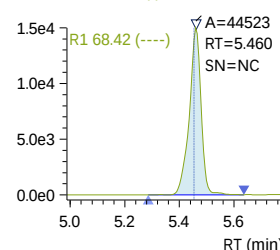
R2 314.80>82.90 (-)

1.11e4



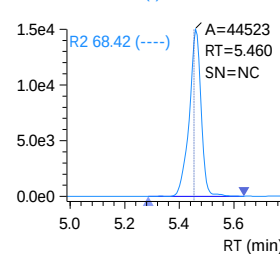
R1 284.90>184.90 (-)

1.50e4



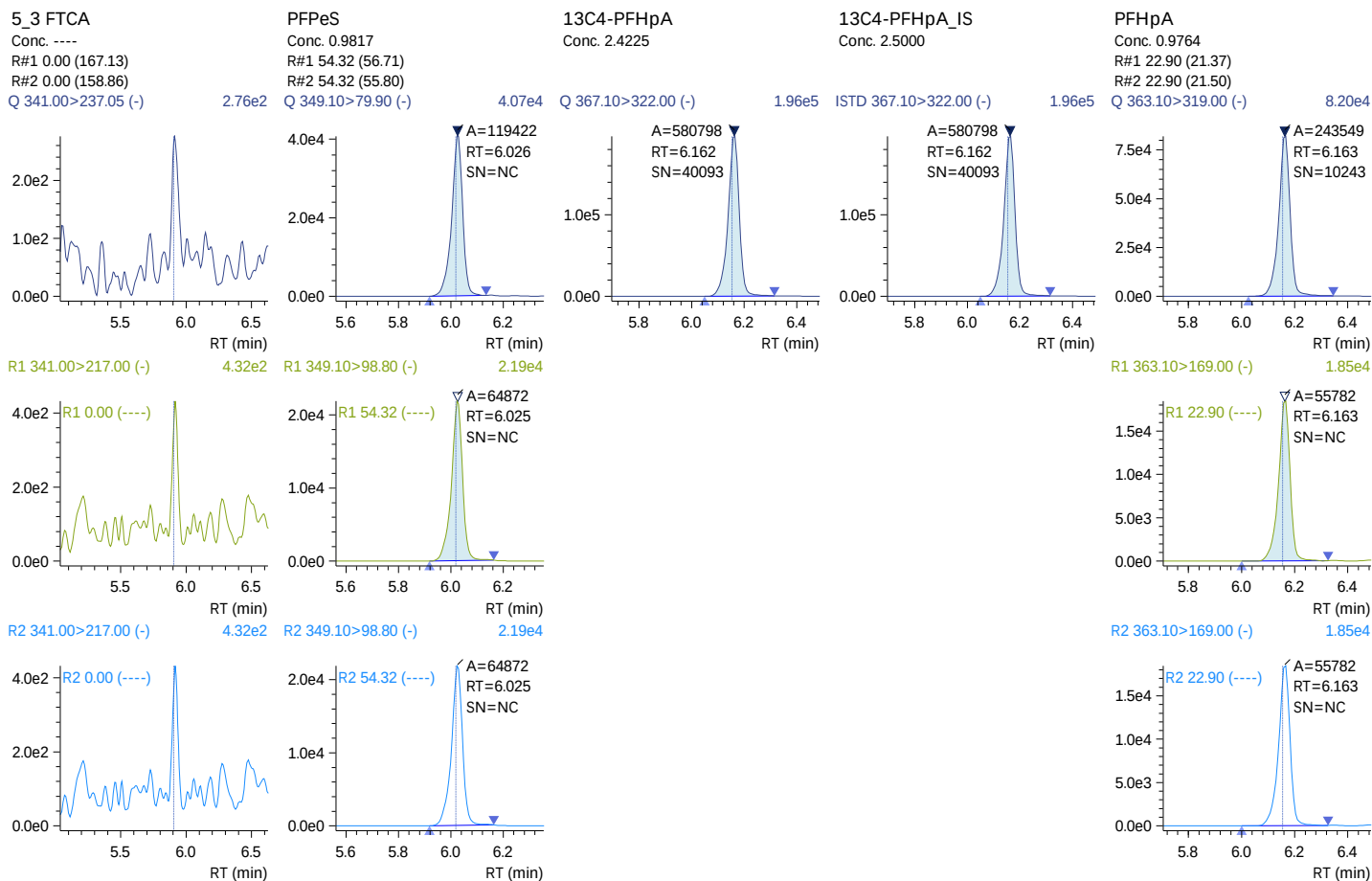
R2 284.90>184.90 (-)

1.50e4





240118_016 (continued)

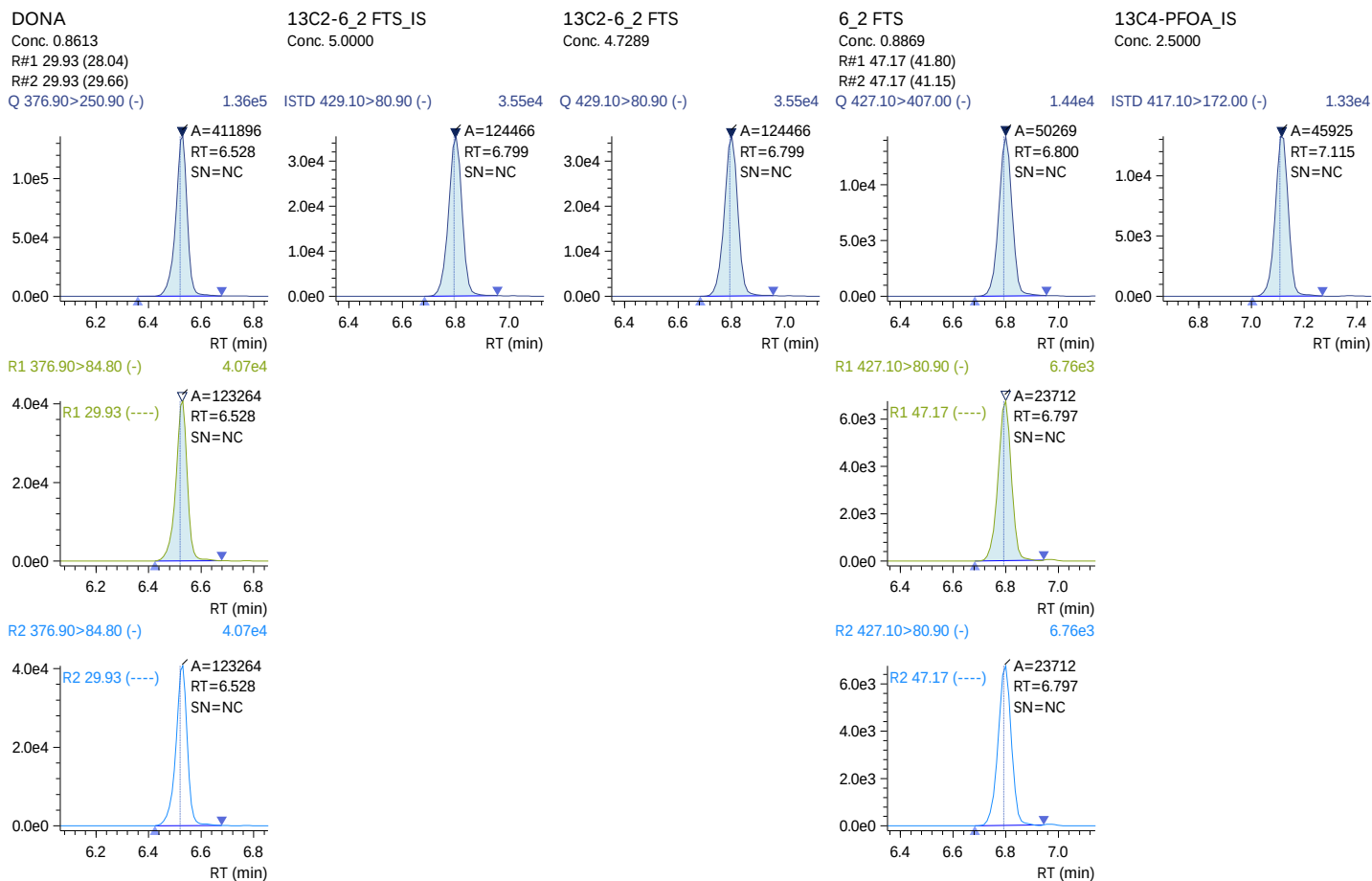


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_016 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_016 (continued)

13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.3656

PFOA
Conc. 0.9693
R#1 32.36 (29.05)
R#2 32.36 (31.89)

13C3-PFHxS
Conc. 2.6688

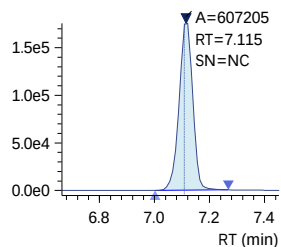
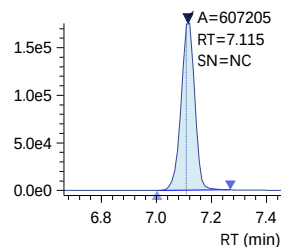
13C3-PFHxS_IS
Conc. 2.5000

ISTD 421.10>376.00 (-)

1.76e5

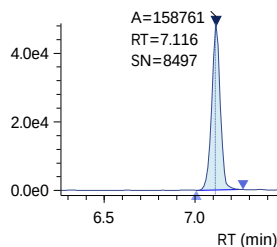
Q 421.10>376.00 (-)

1.76e5



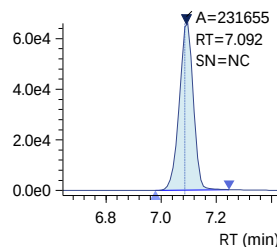
Q 413.00>369.00 (-)

4.87e4



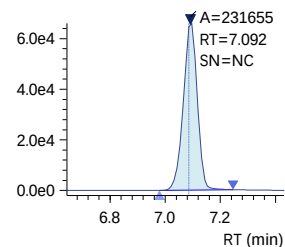
Q 402.10>79.90 (-)

6.60e4



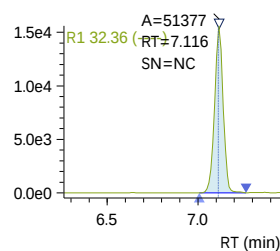
ISTD 402.10>79.90 (-)

6.60e4



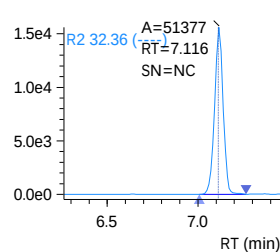
R1 413.00>169.00 (-)

1.56e4



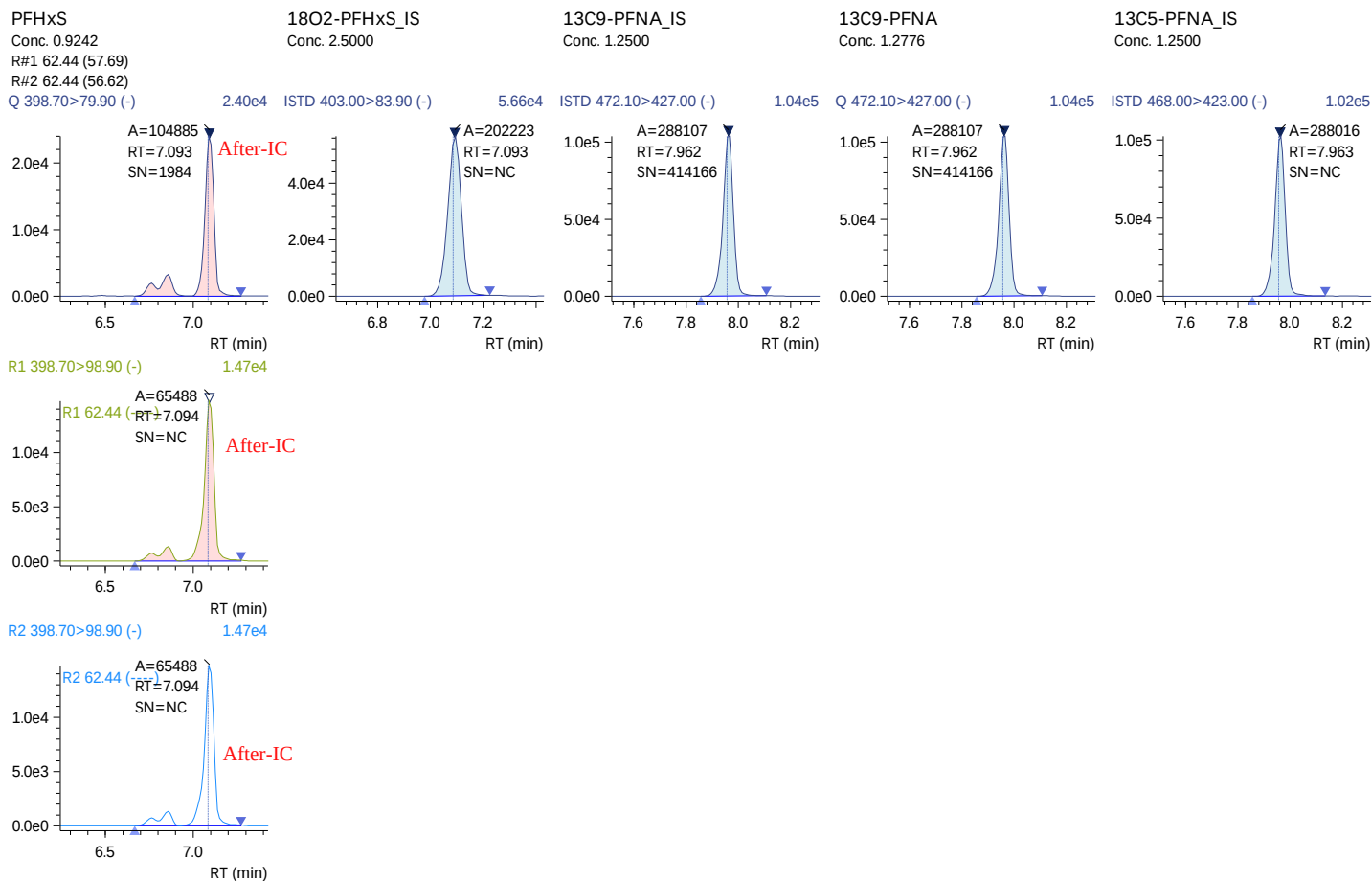
R2 413.00>169.00 (-)

1.56e4





240118_016 (continued)

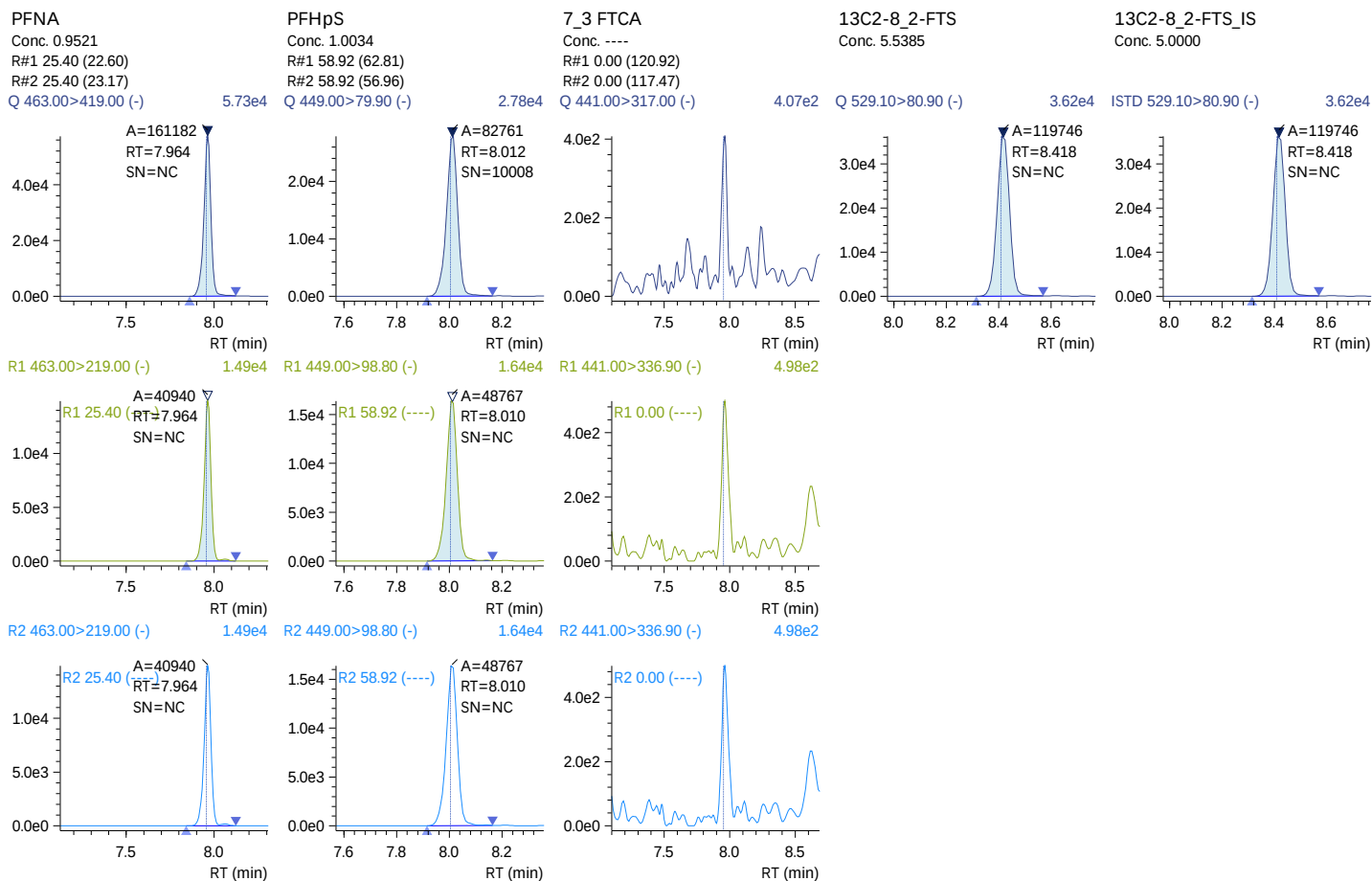


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_016 (continued)

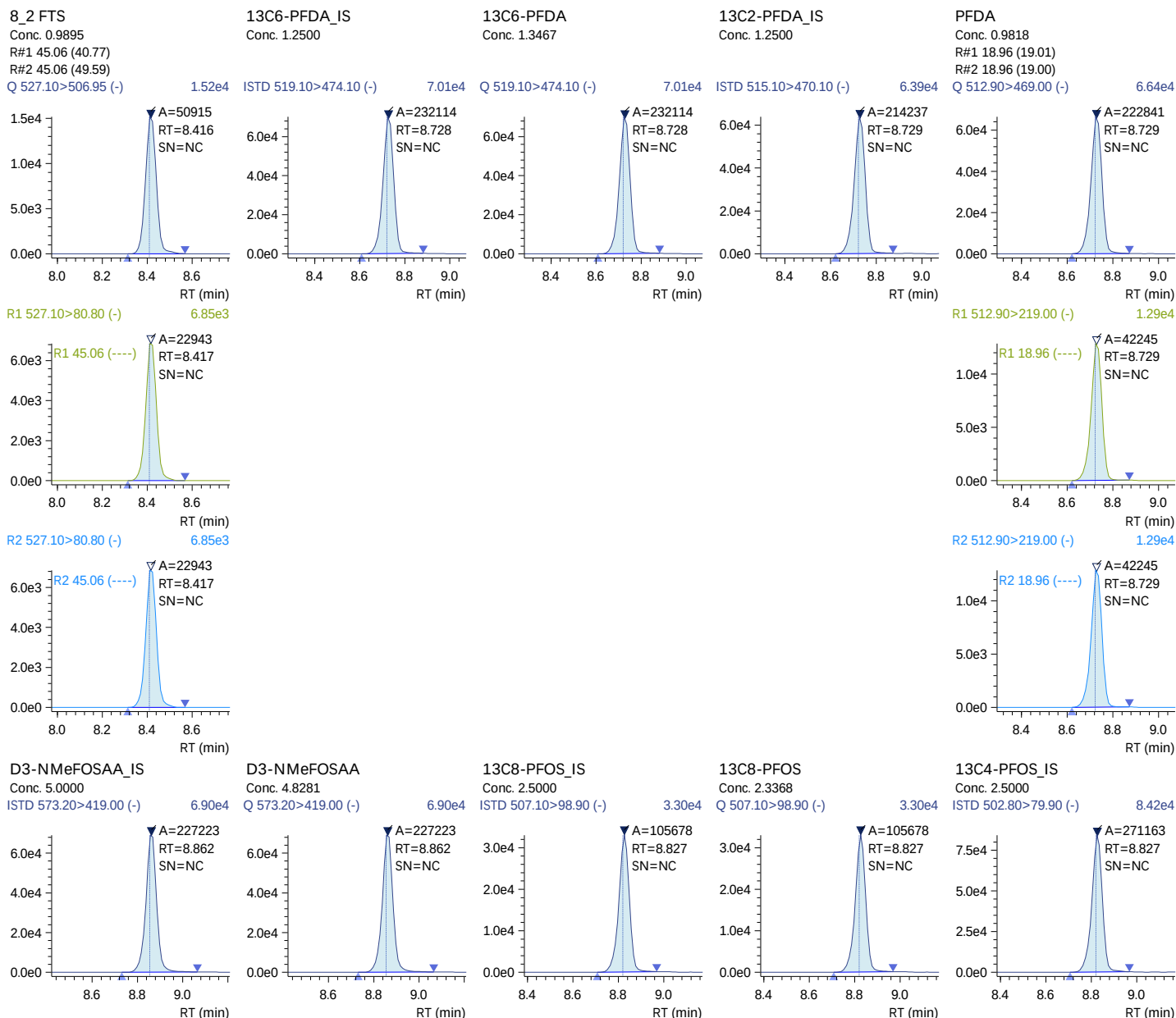


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_016 (continued)

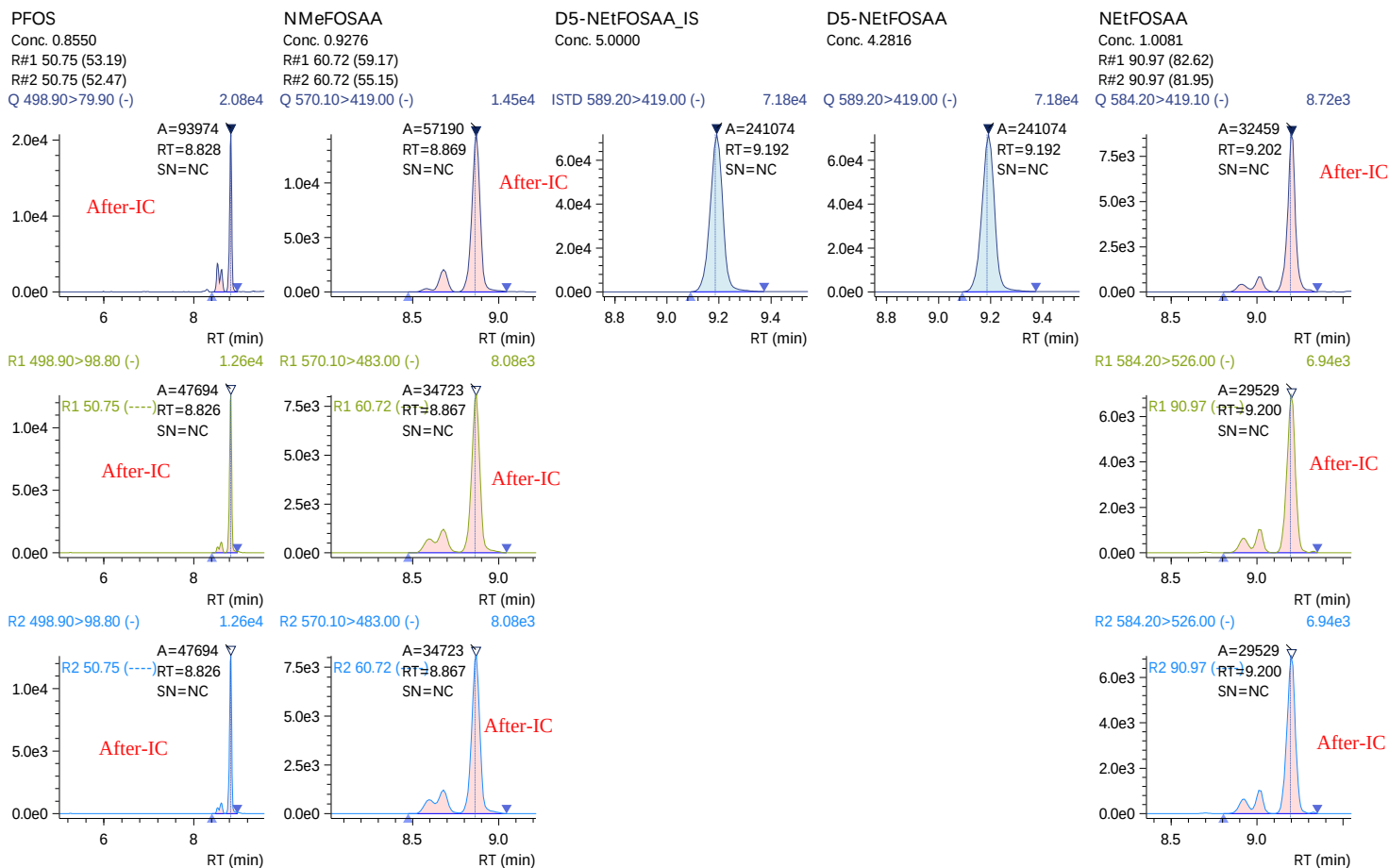


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_016 (continued)



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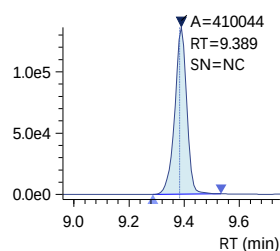
SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



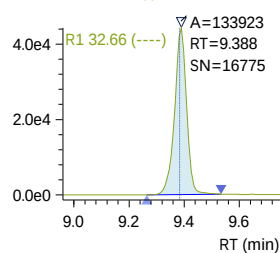
240118_016 (continued)

9-Cl-PF3ONS

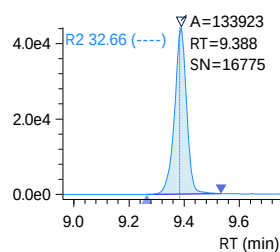
Conc. 0.8061
R#1 32.66 (31.76)
R#2 32.66 (32.76)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-)

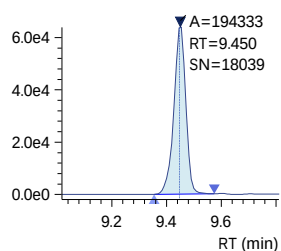


R2 532.80>353.00 (-)

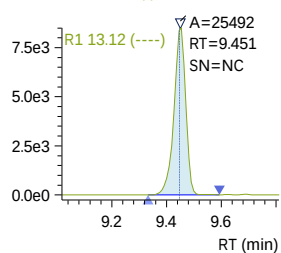


PFUnDA

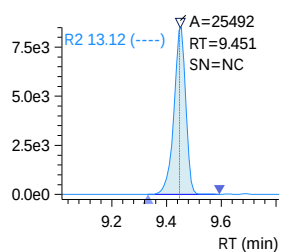
Conc. 1.0190
R#1 13.12 (12.31)
R#2 13.12 (13.12)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-)

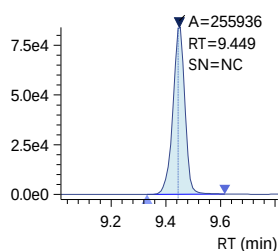


R2 563.10>269.10 (-)



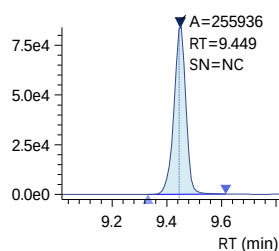
13C7-PFUnDA_IS

Conc. 1.2500
ISTD 570.00>525.10 (-)



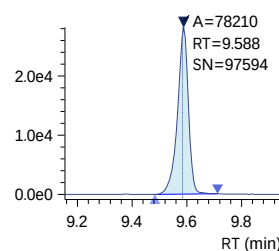
13C7-PFUnDA

Conc. 1.2448
Q 570.00>525.10 (-)

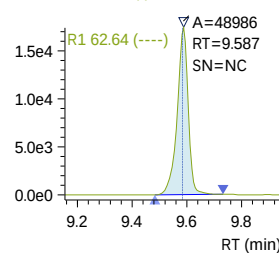


PFNS

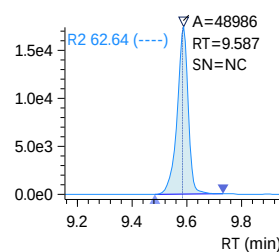
Conc. 0.9740
R#1 62.64 (63.31)
R#2 62.64 (65.22)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-)

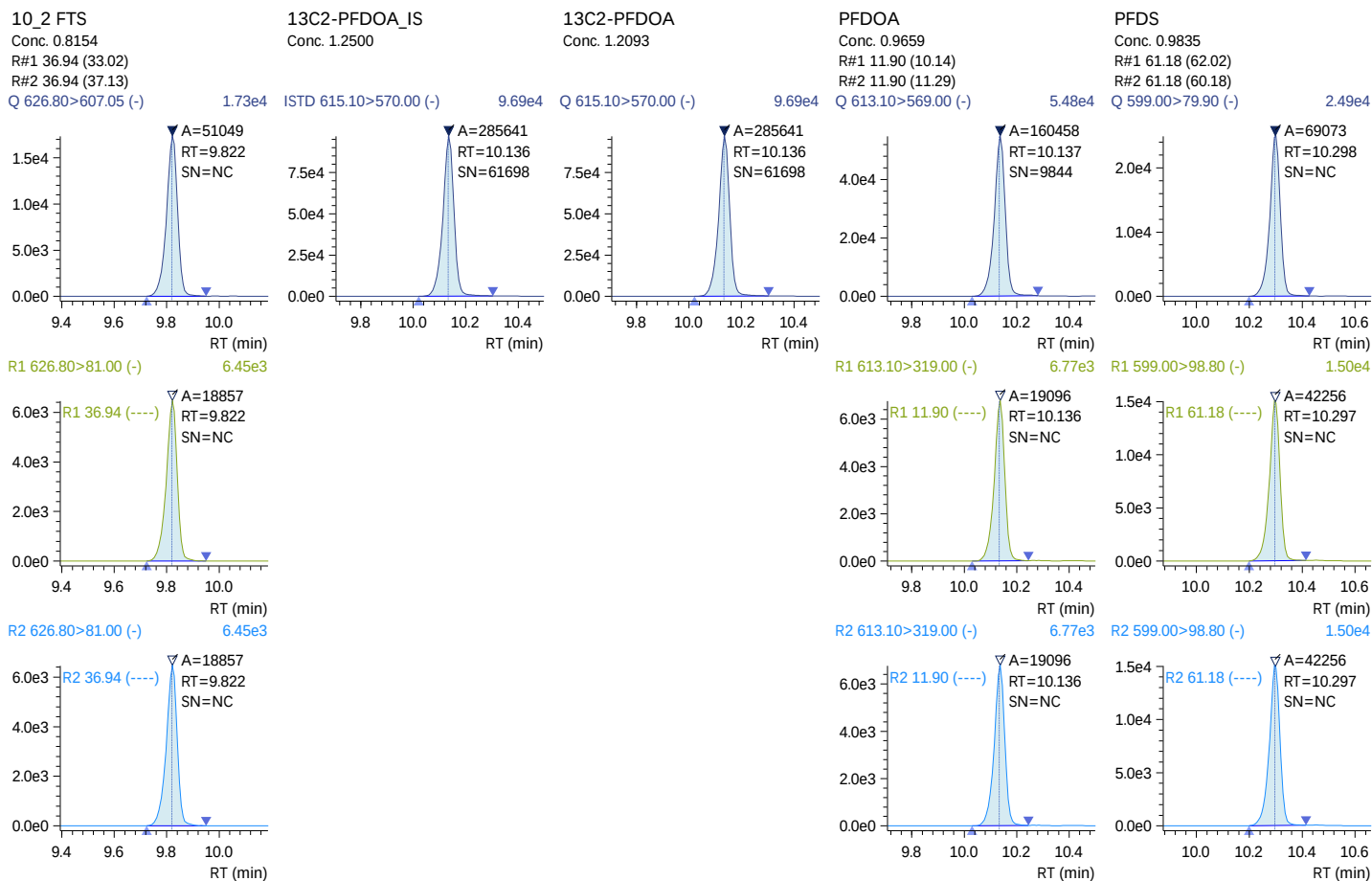


R2 548.80>98.80 (-)





240118_016 (continued)

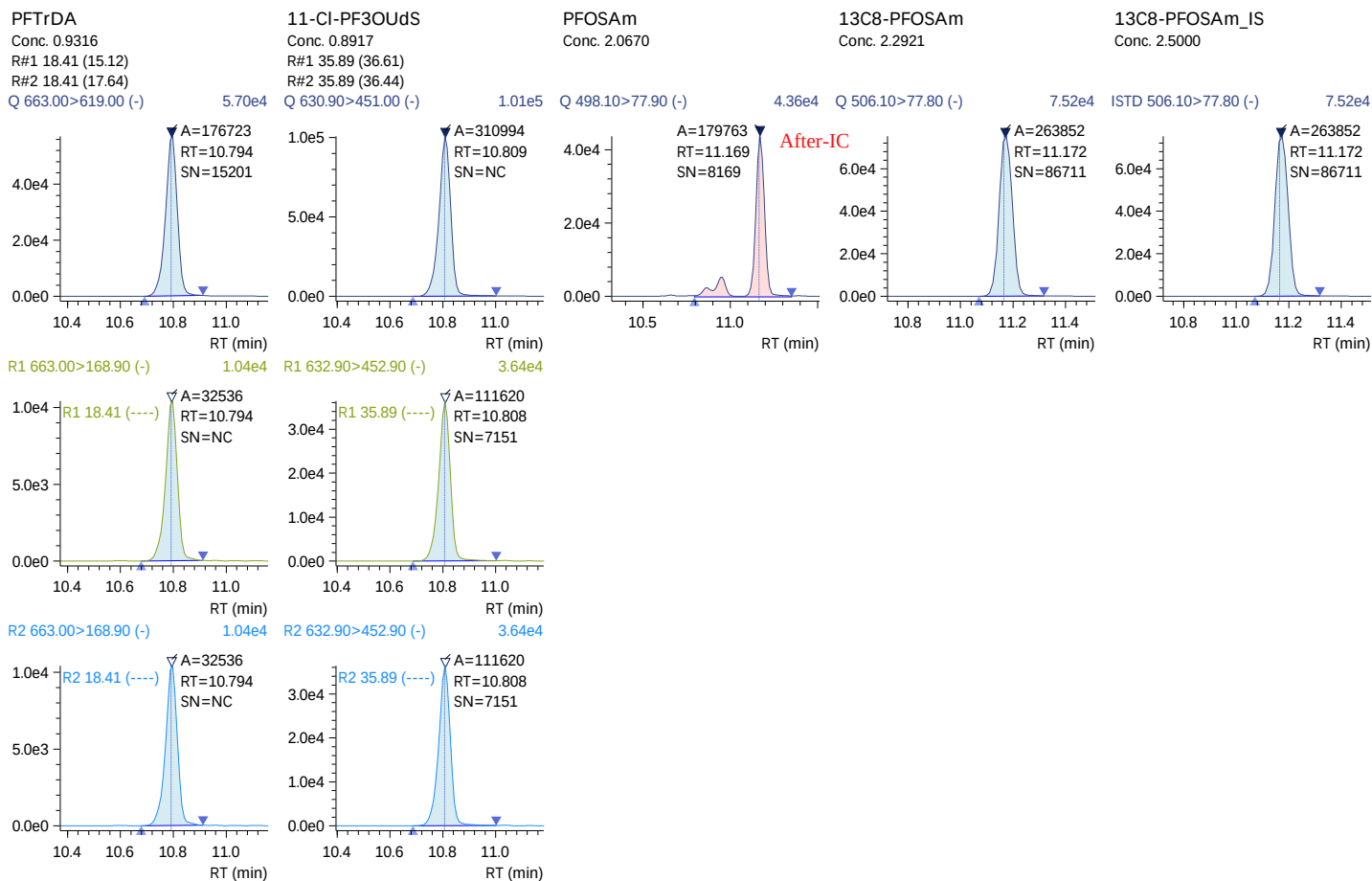


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_016 (continued)

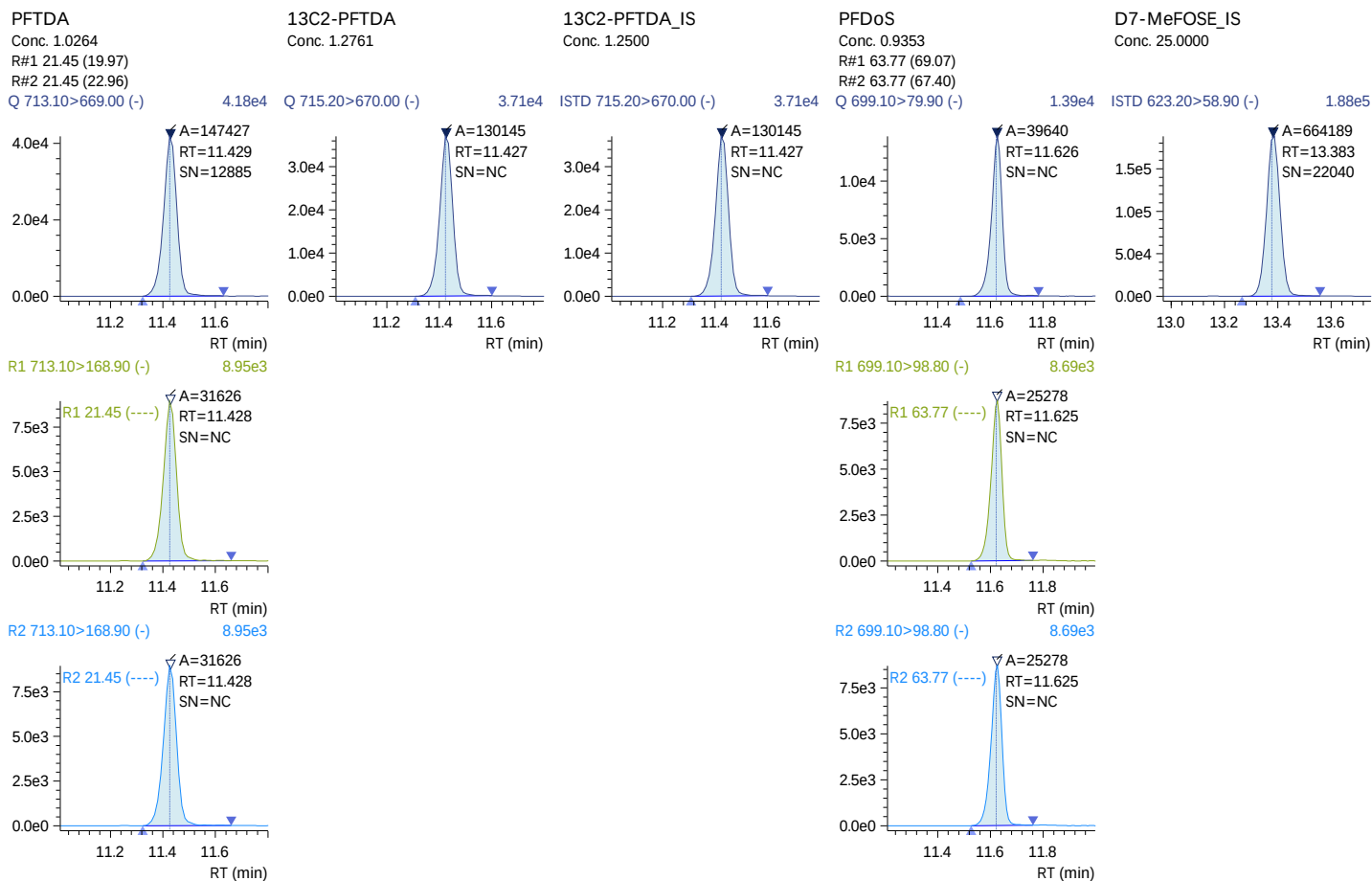


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_016 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_016 (continued)

D7-MeFOSE
Conc. 23.4027

MeFOSE
Conc. 0.9618

13C2-PFHXA_IS
Conc. 2.5000

13C2-PFHXA
Conc. 2.3849

PFHXA

Conc. 1.0349
R#1 14.55 (11.64)
R#2 14.55 (13.90)

Q 623.20>58.90 (-)

1.88e5

Q 616.10>59.00 (-)

4.10e3

ISTD 815.00>770.05 (-)

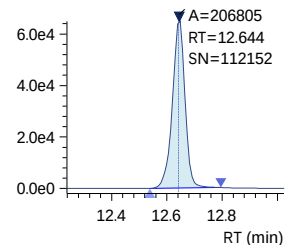
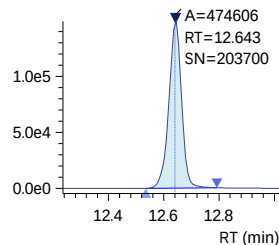
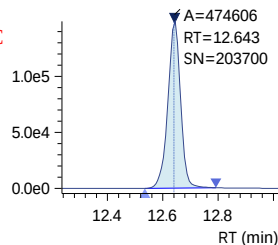
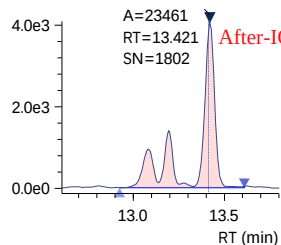
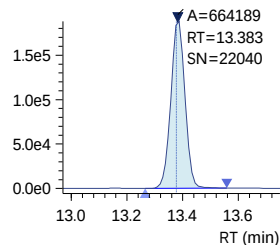
1.49e5

Q 815.00>770.05 (-)

1.49e5

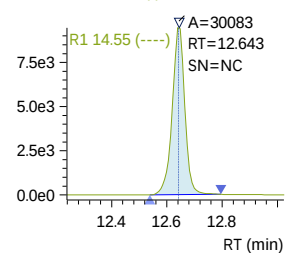
Q 813.00>768.95 (-)

6.49e4



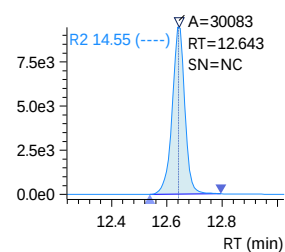
R1 813.00>218.95 (-)

9.46e3



R2 813.00>218.95 (-)

9.46e3





240118_016 (continued)

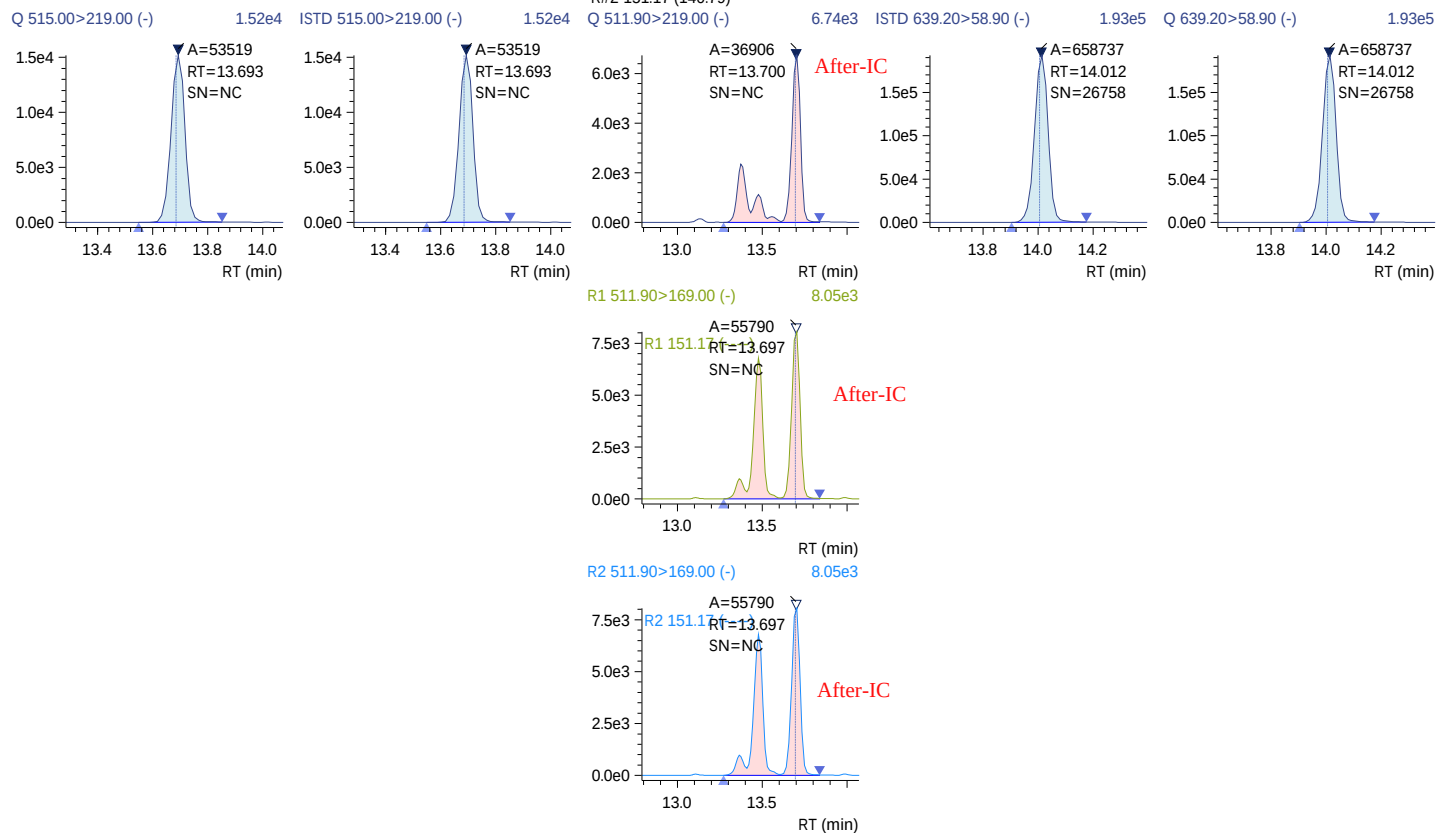
D3-MeFOSA
Conc. 2.3087

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. 0.9566
R#1 151.17 (149.05)
R#2 151.17 (140.79)

D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 22.8528

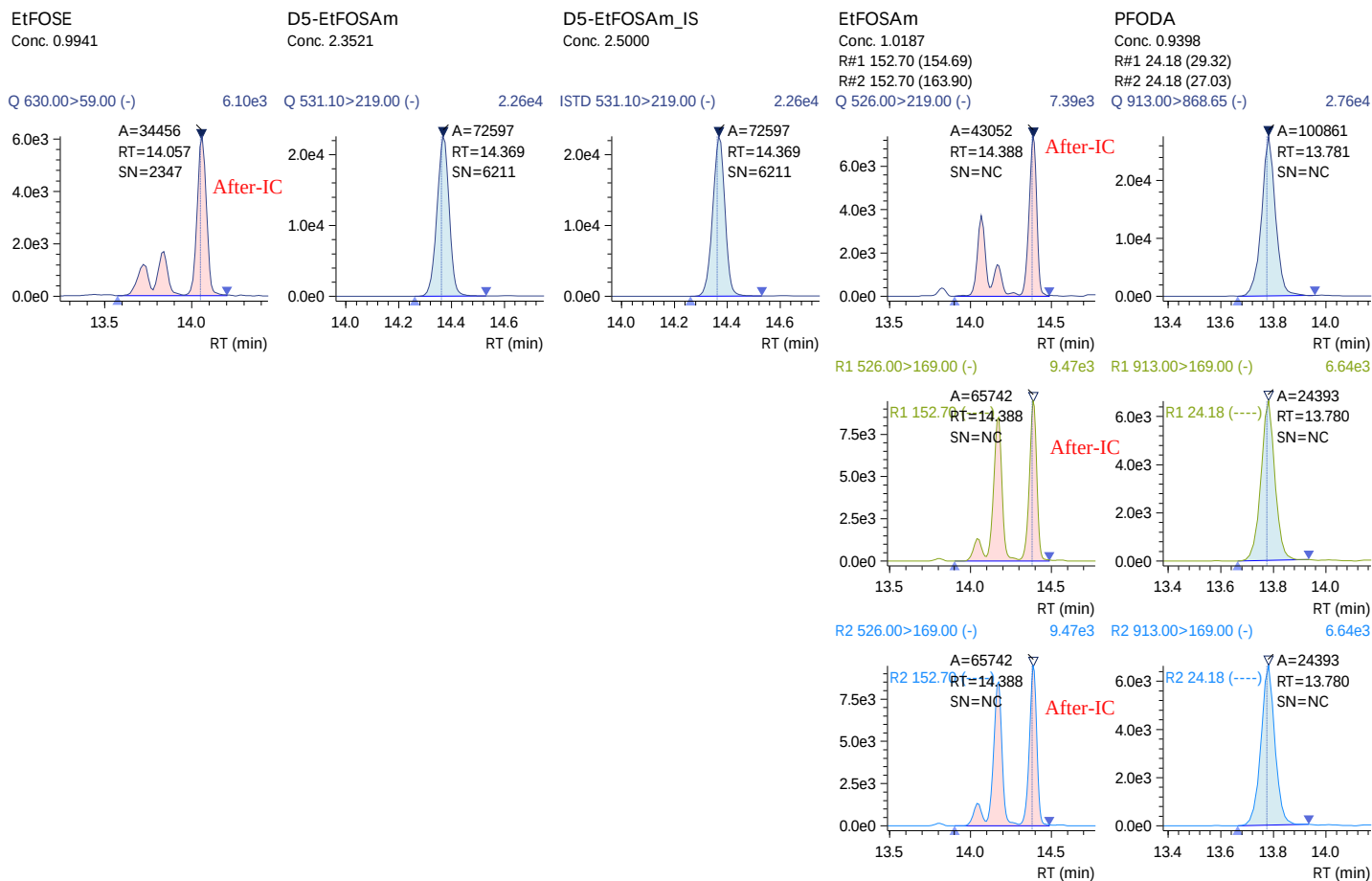


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_016 (continued)



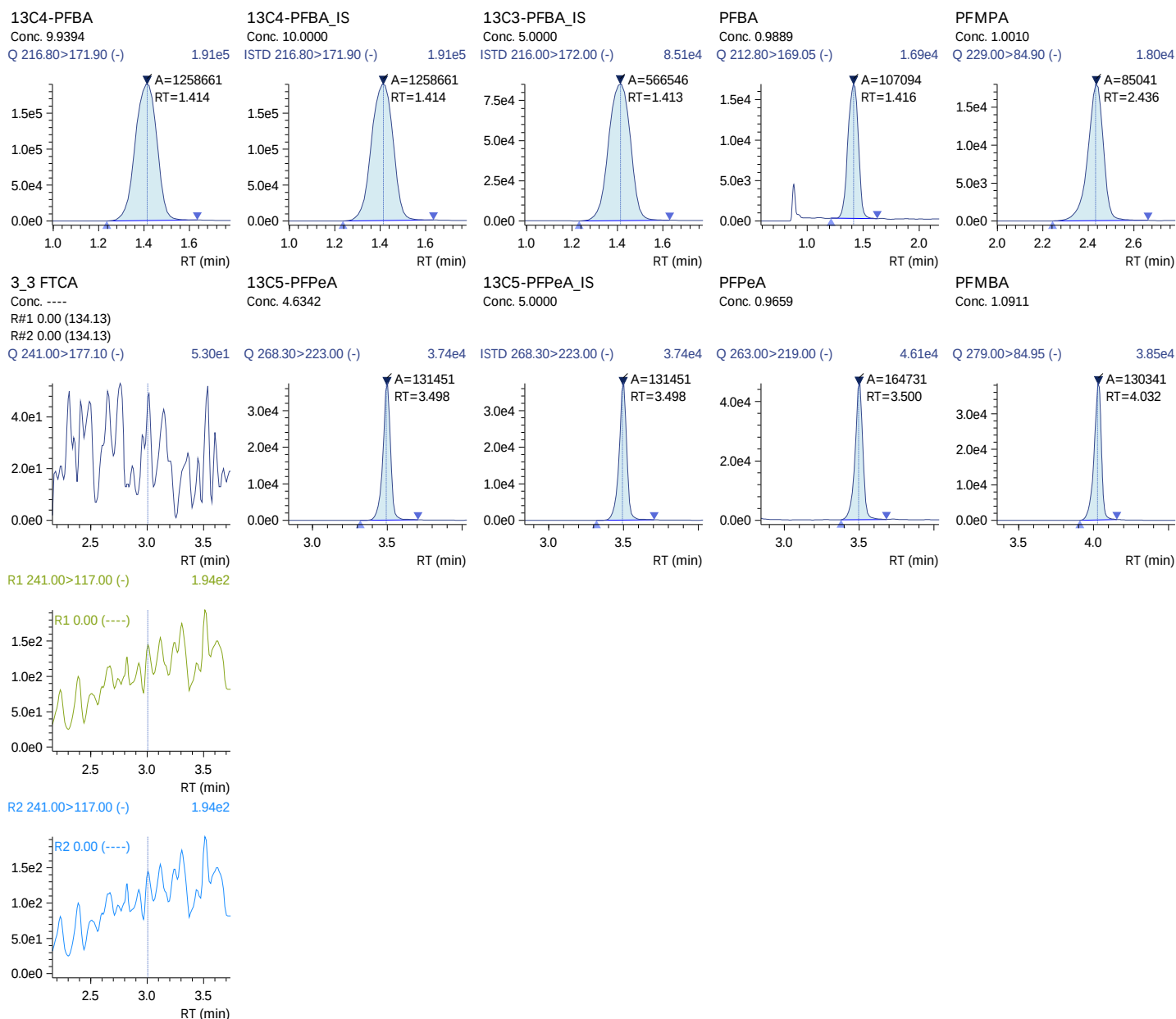
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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_016

Sample ID: 1633 ICV 1.0PPB
Date Acquired: 1/18/2024 5:57:03 PM
Acquired by: System Administrator
Data File: 240118_016
Vial: 10 | Inj. Volume: 10.0000uL | Tray: 1





240118_016 (continued)

13C2-4_2 FTS
Conc. 5.1325

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. 0.9036
R#1 29.20 (34.14)
R#2 29.20 (34.14)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 0.8643
R#1 48.54 (47.53)
R#2 48.54 (47.53)

Q 329.10>80.90 (-)

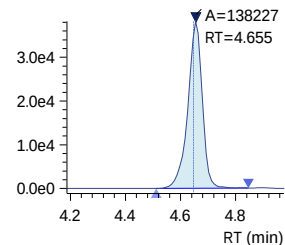
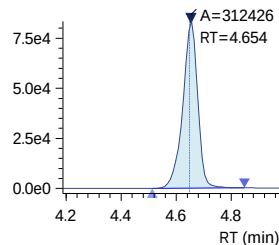
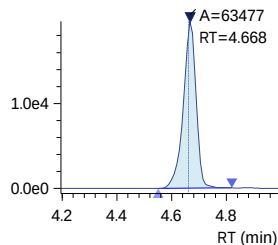
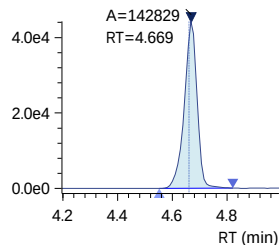
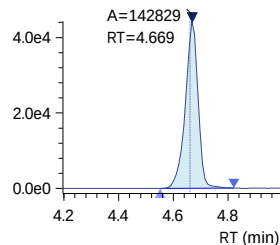
4.43e4 ISTD 329.10>80.90 (-)

4.43e4 Q 327.10>307.00 (-)

1.97e4 ISTD 302.10>79.90 (-)

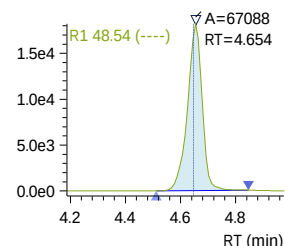
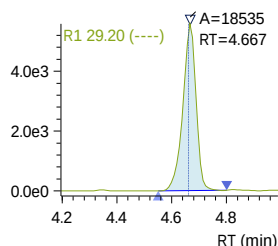
8.34e4 Q 298.70>79.90 (-)

3.82e4



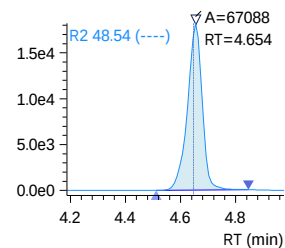
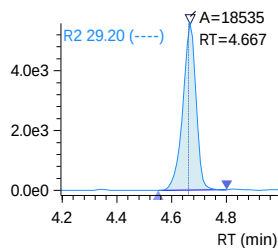
R1 327.10>80.90 (-) 5.58e3

R1 298.70>98.80 (-) 1.82e4



R2 327.10>80.90 (-) 5.58e3

R2 298.70>98.80 (-) 1.82e4





240118_016 (continued)

13C3-PFBS
 Conc. 2.7224

NFDHA
 Conc. 0.9535
 R#1 35.46 (37.88)
 R#2 35.46 (37.88)

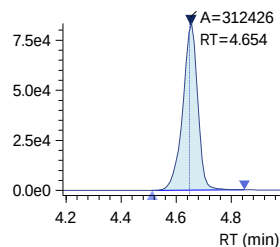
13C5-PFHxA
 Conc. 2.4893

13C5-PFHxA_IS
 Conc. 2.5000

13C2-PFHxA_IS
 Conc. 2.5000

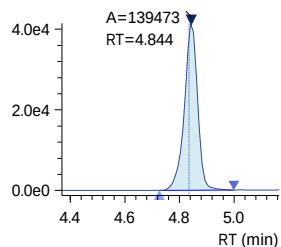
Q 302.10>79.90 (-)

8.34e4



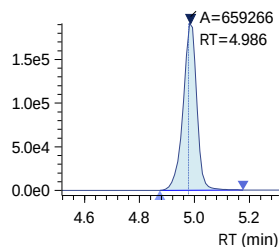
Q 295.00>201.00 (-)

4.15e4



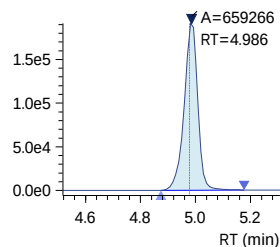
Q 318.00>273.00 (-)

1.91e5



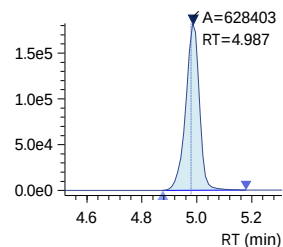
ISTD 318.00>273.00 (-)

1.91e5



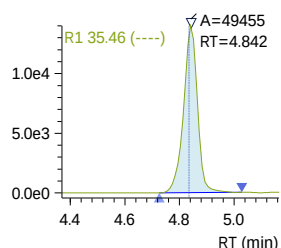
ISTD 315.10>270.00 (-)

1.82e5



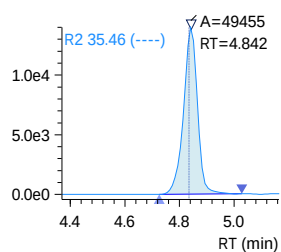
R1 295.00>84.90 (-)

1.40e4



R2 295.00>84.90 (-)

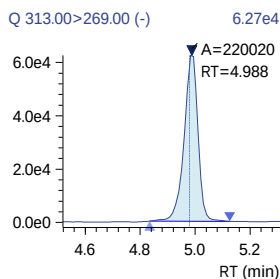
1.40e4



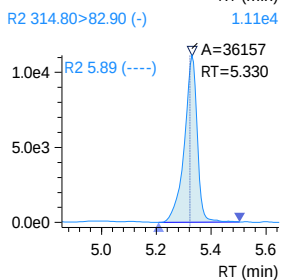
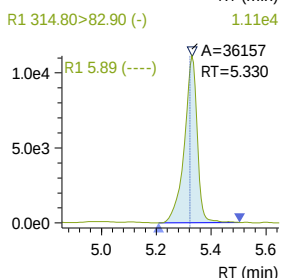
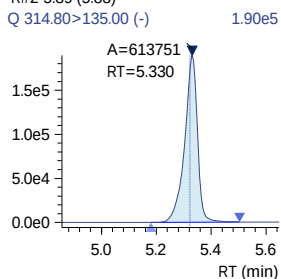


240118_016 (continued)

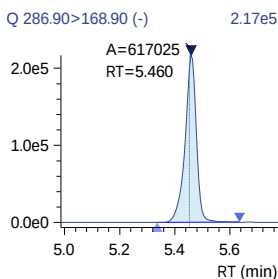
PFHxA
 Conc. 1.0056



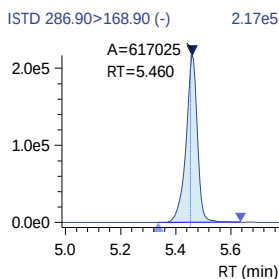
PFEESA
 Conc. 0.8312
 R#1 5.89 (5.88)
 R#2 5.89 (5.88)



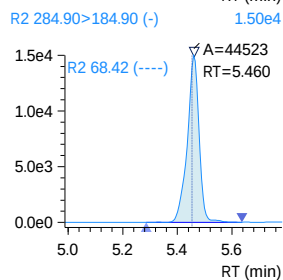
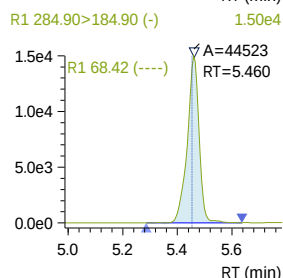
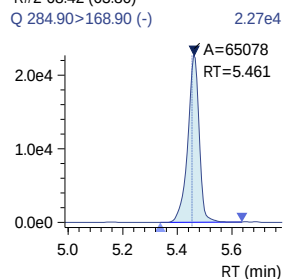
13C3-HFPO-DA
 Conc. 10.0304



13C3-HFPO-DA_IS
 Conc. 10.0000

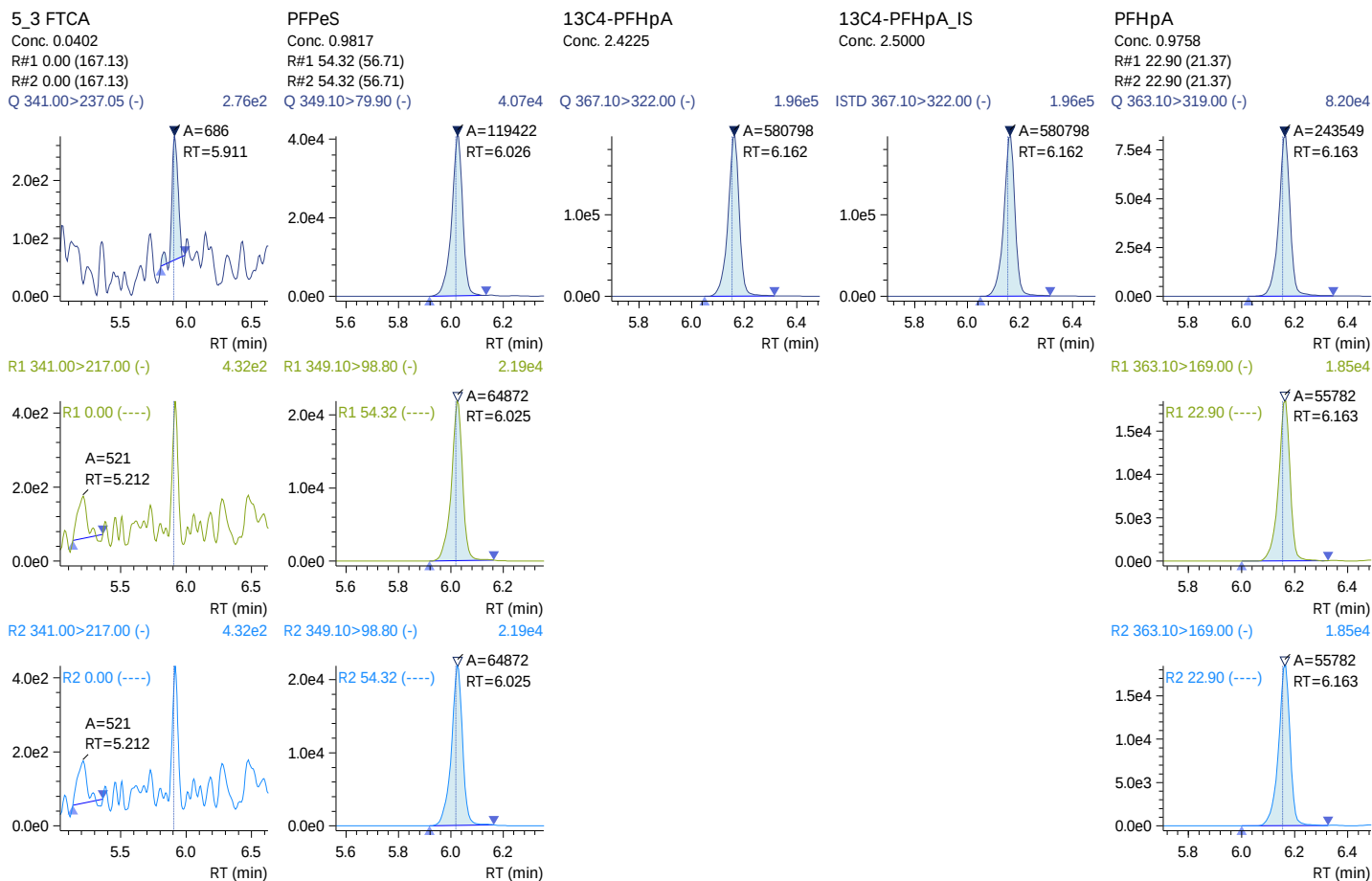


HFPO-DA
 Conc. 0.9567
 R#1 68.42 (63.80)
 R#2 68.42 (63.80)



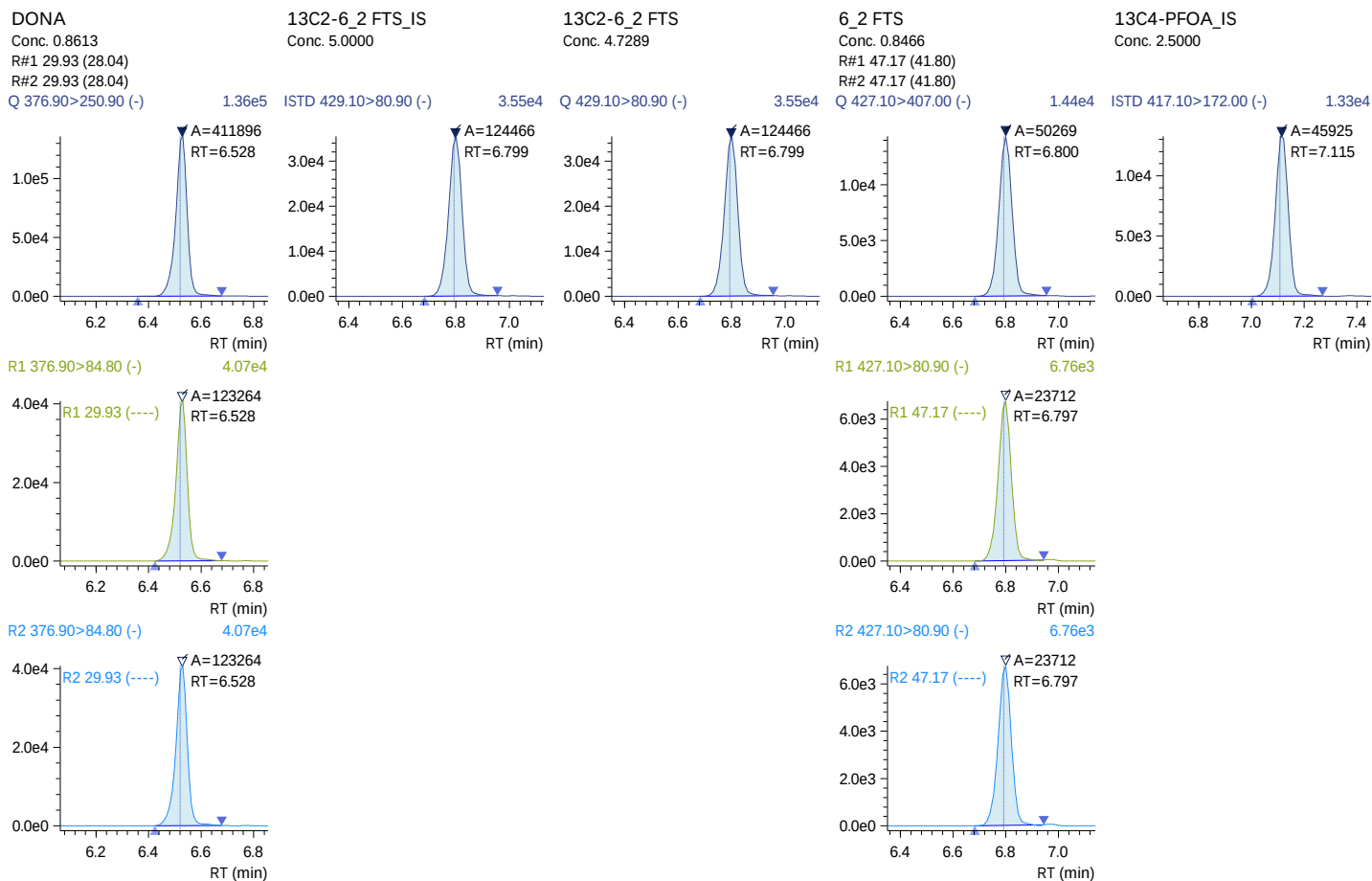


240118_016 (continued)





240118_016 (continued)





240118_016 (continued)

13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.3656

PFOA
Conc. 0.9693
R#1 32.36 (29.05)
R#2 32.36 (29.05)

13C3-PFHxS
Conc. 2.6688

13C3-PFHxS_IS
Conc. 2.5000

ISTD 421.10>376.00 (-)

1.76e5

Q 421.10>376.00 (-)

1.76e5

Q 413.00>369.00 (-)

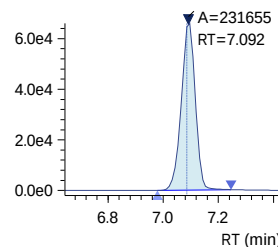
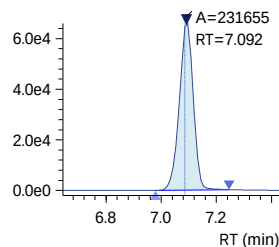
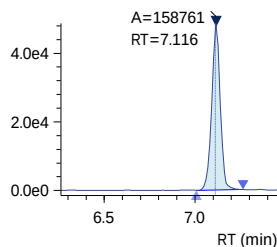
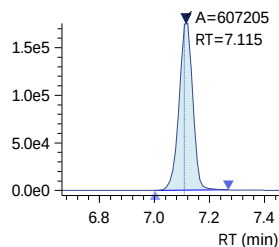
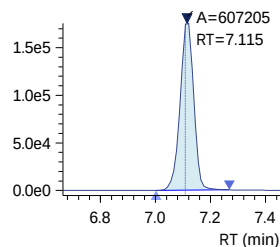
4.87e4

Q 402.10>79.90 (-)

6.60e4

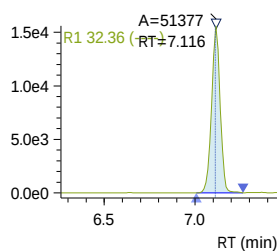
ISTD 402.10>79.90 (-)

6.60e4



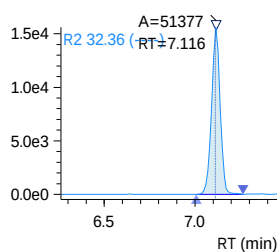
R1 413.00>169.00 (-)

1.56e4



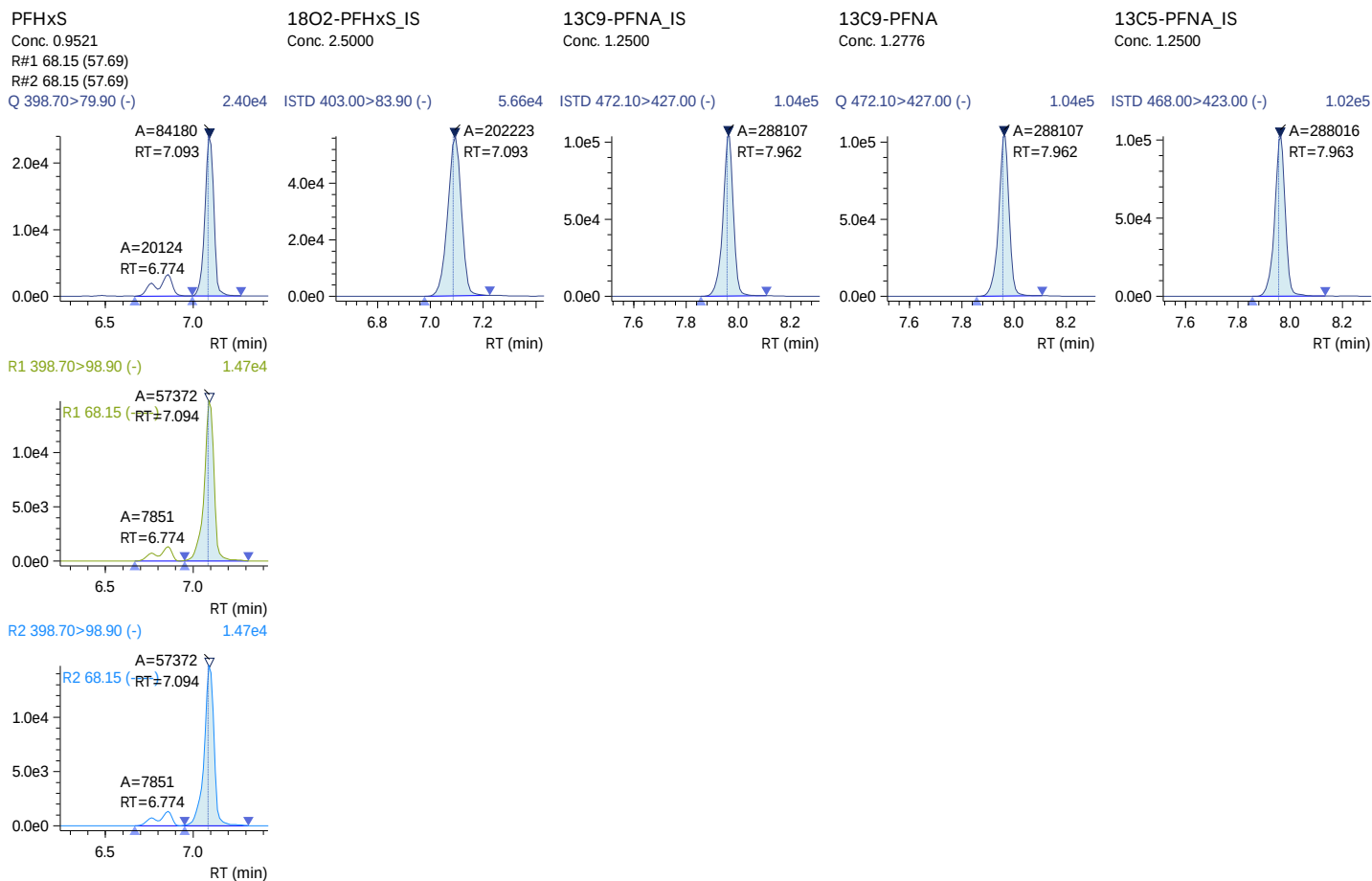
R2 413.00>169.00 (-)

1.56e4



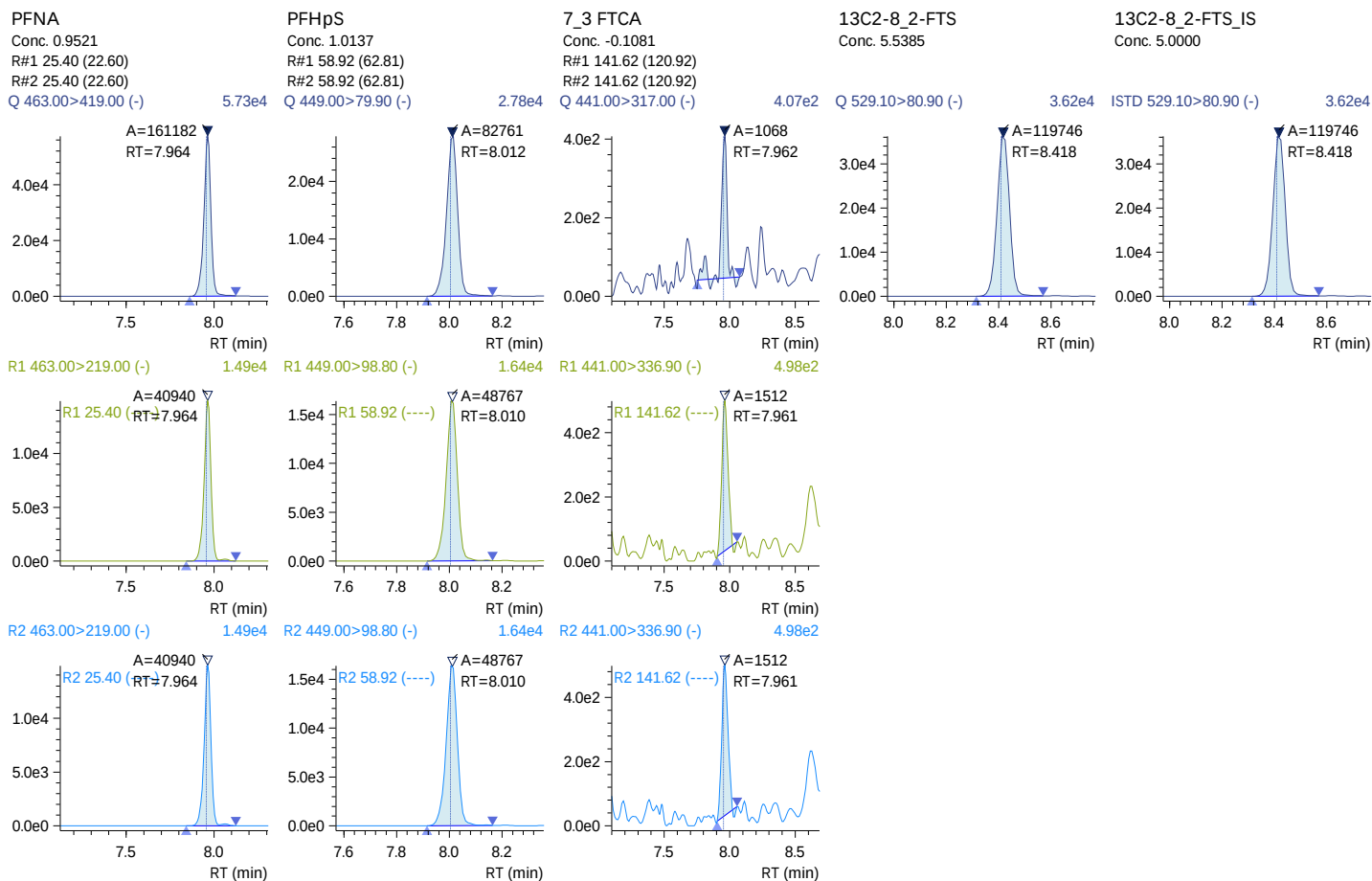


240118_016 (continued)



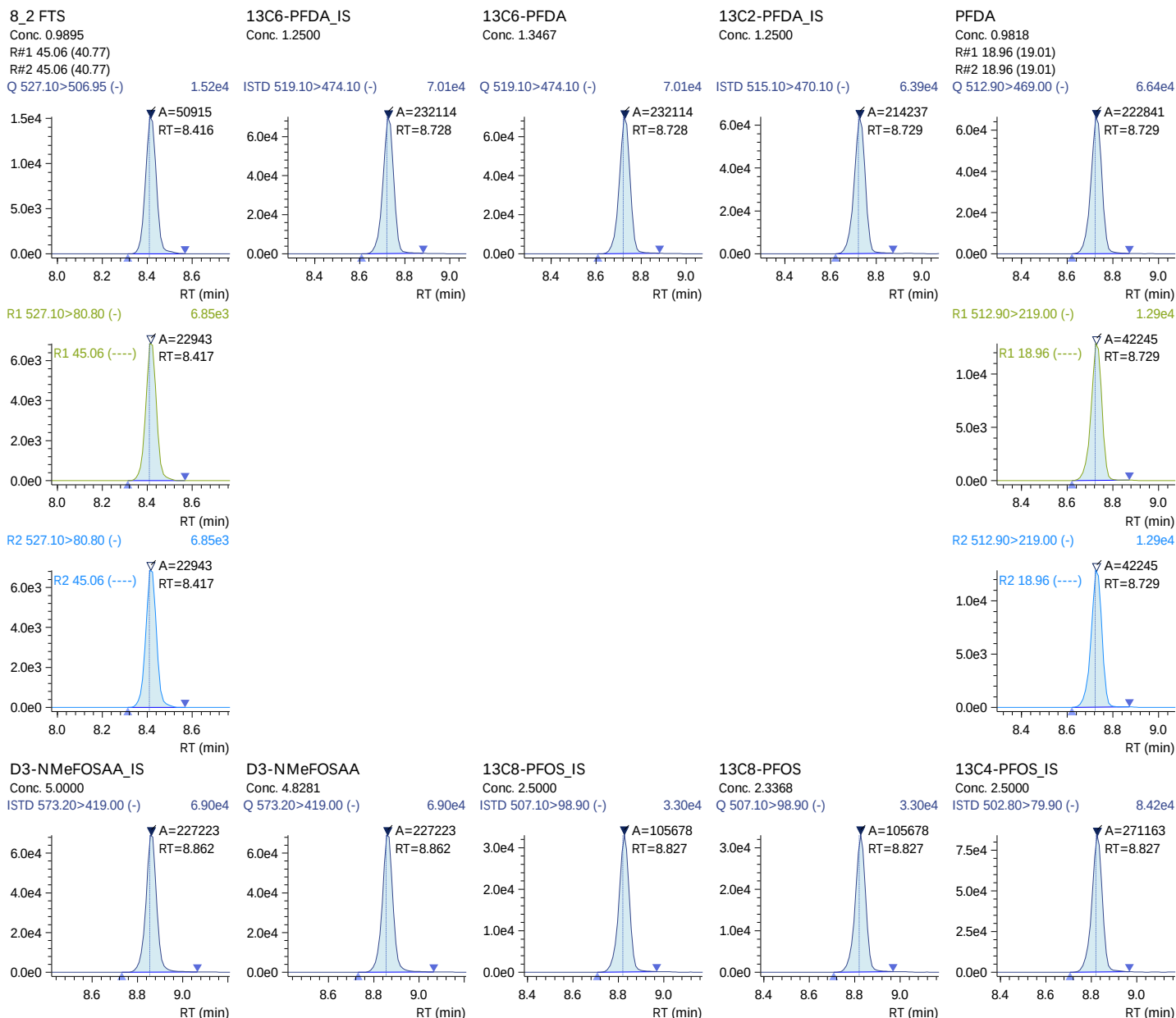


240118_016 (continued)



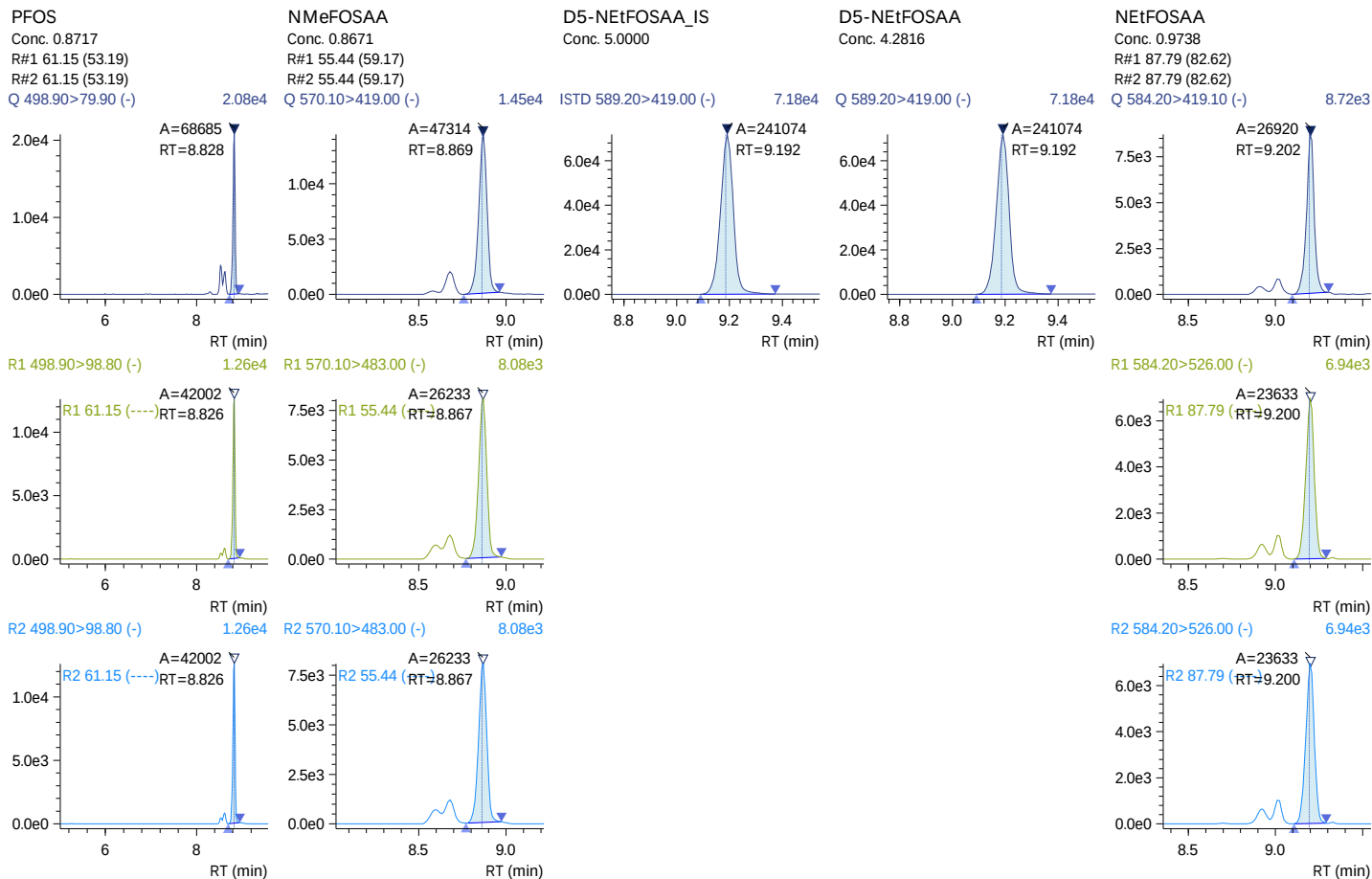


240118_016 (continued)





240118_016 (continued)

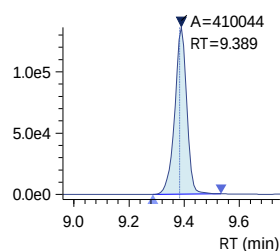




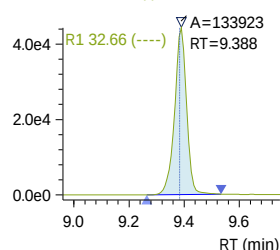
240118_016 (continued)

9-Cl-PF3ONS

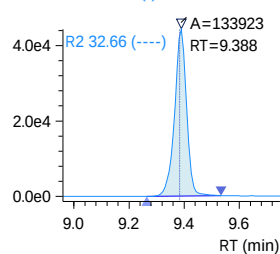
Conc. 0.8061
R#1 32.66 (31.76)
R#2 32.66 (31.76)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-) 4.43e4

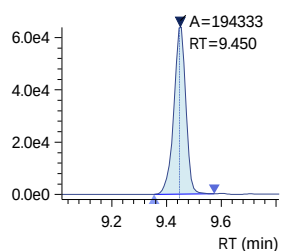


R2 532.80>353.00 (-) 4.43e4

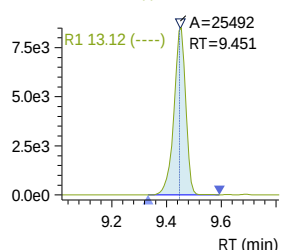


PFUnDA

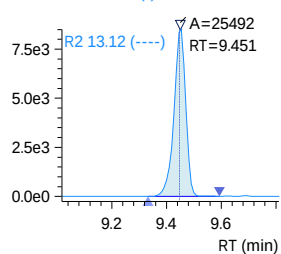
Conc. 1.0190
R#1 13.12 (12.31)
R#2 13.12 (12.31)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-) 8.51e3

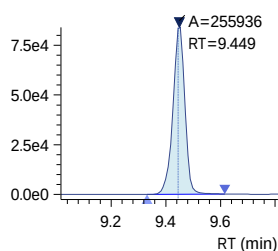


R2 563.10>269.10 (-) 8.51e3



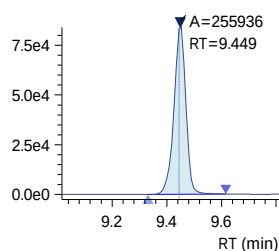
13C7-PFUnDA_IS

Conc. 1.2500
ISTD 570.00>525.10 (-)



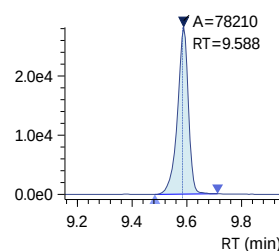
13C7-PFUnDA

Conc. 1.2448
Q 570.00>525.10 (-)

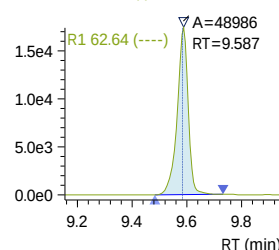


PFNS

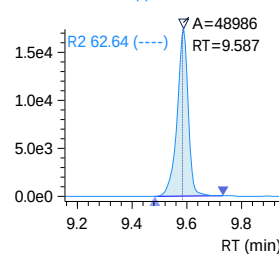
Conc. 0.9740
R#1 62.64 (63.31)
R#2 62.64 (63.31)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-) 1.74e4



R2 548.80>98.80 (-) 1.74e4





240118_016 (continued)

10_2_FTS

Conc. 0.8356

R#1 36.94 (33.02)

R#2 36.94 (33.02)

Q 626.80>607.05 (-)

1.73e4

13C2-PFDOA_IS

Conc. 1.2500

ISTD 615.10>570.00 (-)

9.69e4

13C2-PFDOA

Conc. 1.2093

Q 615.10>570.00 (-)

9.69e4

PFDOA

Conc. 0.9659

R#1 11.90 (10.14)

R#2 11.90 (10.14)

Q 613.10>569.00 (-)

5.48e4

PFDS

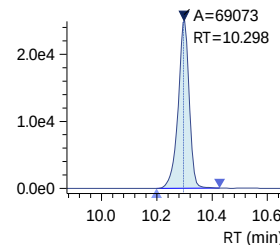
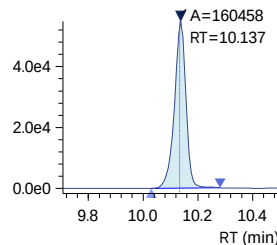
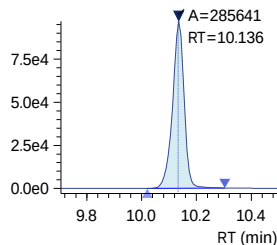
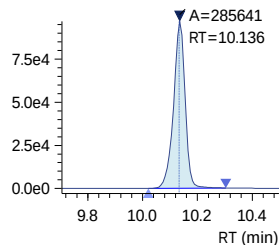
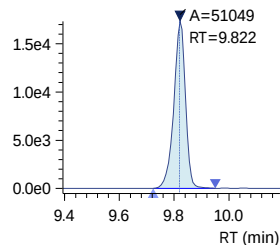
Conc. 0.9639

R#1 61.18 (62.02)

R#2 61.18 (62.02)

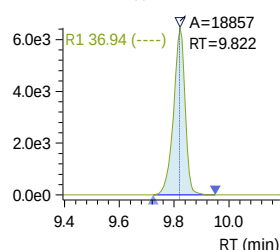
Q 599.00>79.90 (-)

2.49e4



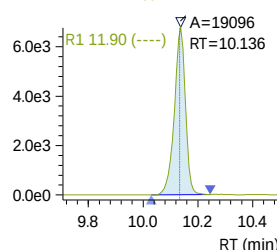
R1 626.80>81.00 (-)

6.45e3



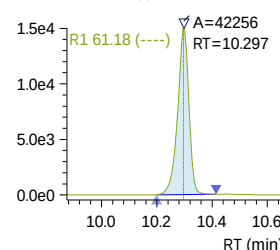
R1 613.10>319.00 (-)

6.77e3



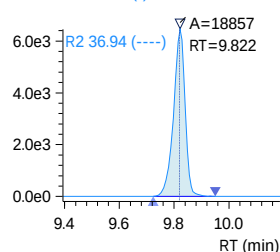
R1 599.00>98.80 (-)

1.50e4



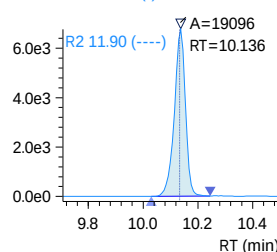
R2 626.80>81.00 (-)

6.45e3



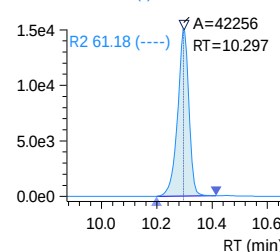
R2 613.10>319.00 (-)

6.77e3



R2 599.00>98.80 (-)

1.50e4

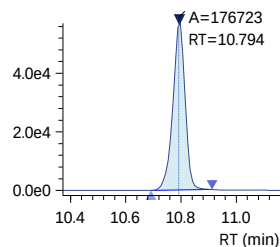




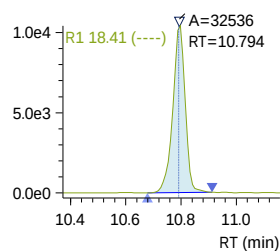
240118_016 (continued)

PFTrDA

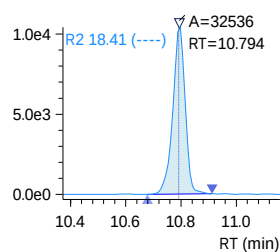
Conc. 0.9316
R#1 18.41 (15.12)
R#2 18.41 (15.12)
Q 663.00>619.00 (-)



R1 663.00>168.90 (-) 1.04e4

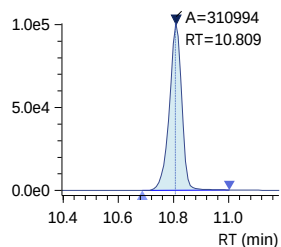


R2 663.00>168.90 (-) 1.04e4

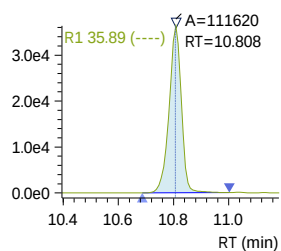


11-CI-PF3OUdS

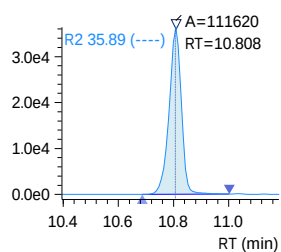
Conc. 0.8452
R#1 35.89 (36.61)
R#2 35.89 (36.61)
Q 630.90>451.00 (-)



R1 632.90>452.90 (-) 3.64e4

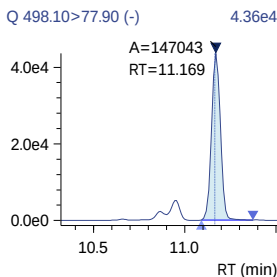


R2 632.90>452.90 (-) 3.64e4



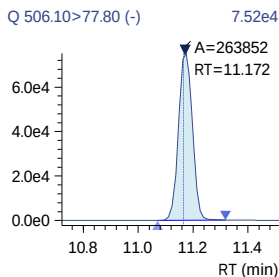
PFOSAm

Conc. 2.0055



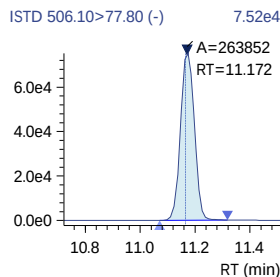
13C8-PFOSAm

Conc. 2.2921



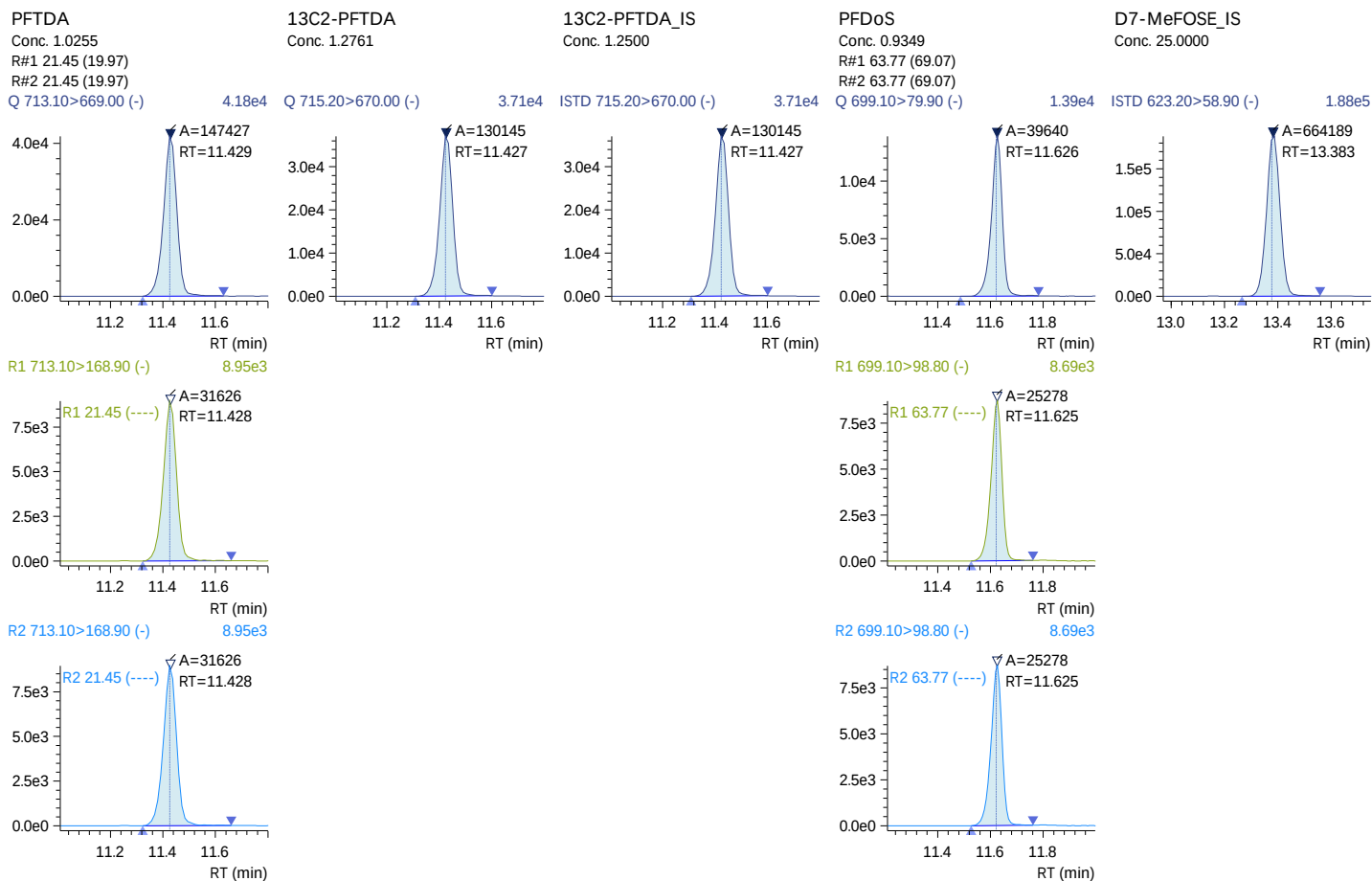
13C8-PFOSAm_IS

Conc. 2.5000





240118_016 (continued)





240118_016 (continued)

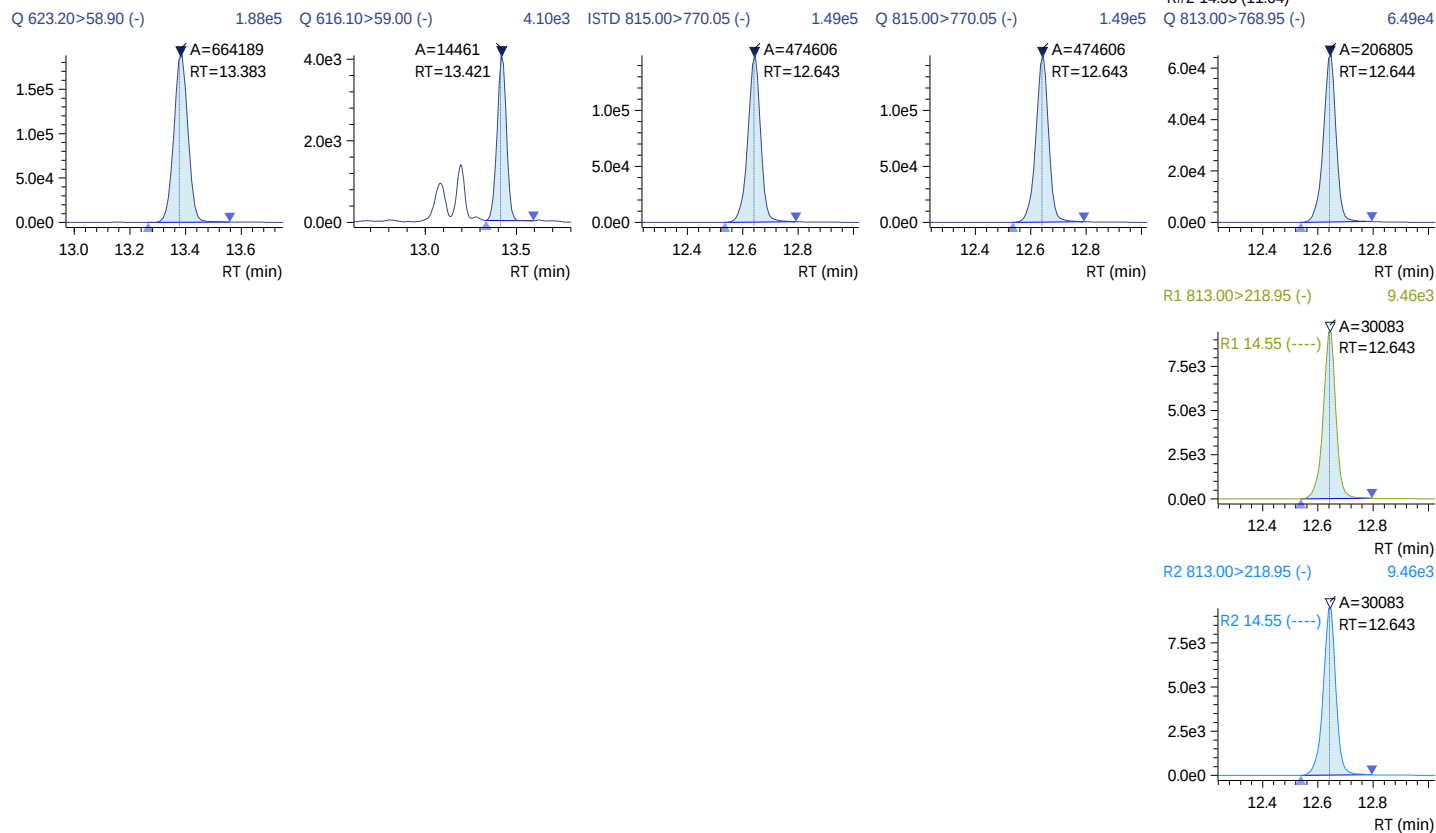
D7-MeFOSE
 Conc. 23.4027

MeFOSE
 Conc. 0.9457

13C2-PFHXA_IS
 Conc. 2.5000

13C2-PFHXA
 Conc. 2.3849

PFHXA
 Conc. 1.0349
 R#1 14.55 (11.64)
 R#2 14.55 (11.64)





240118_016 (continued)

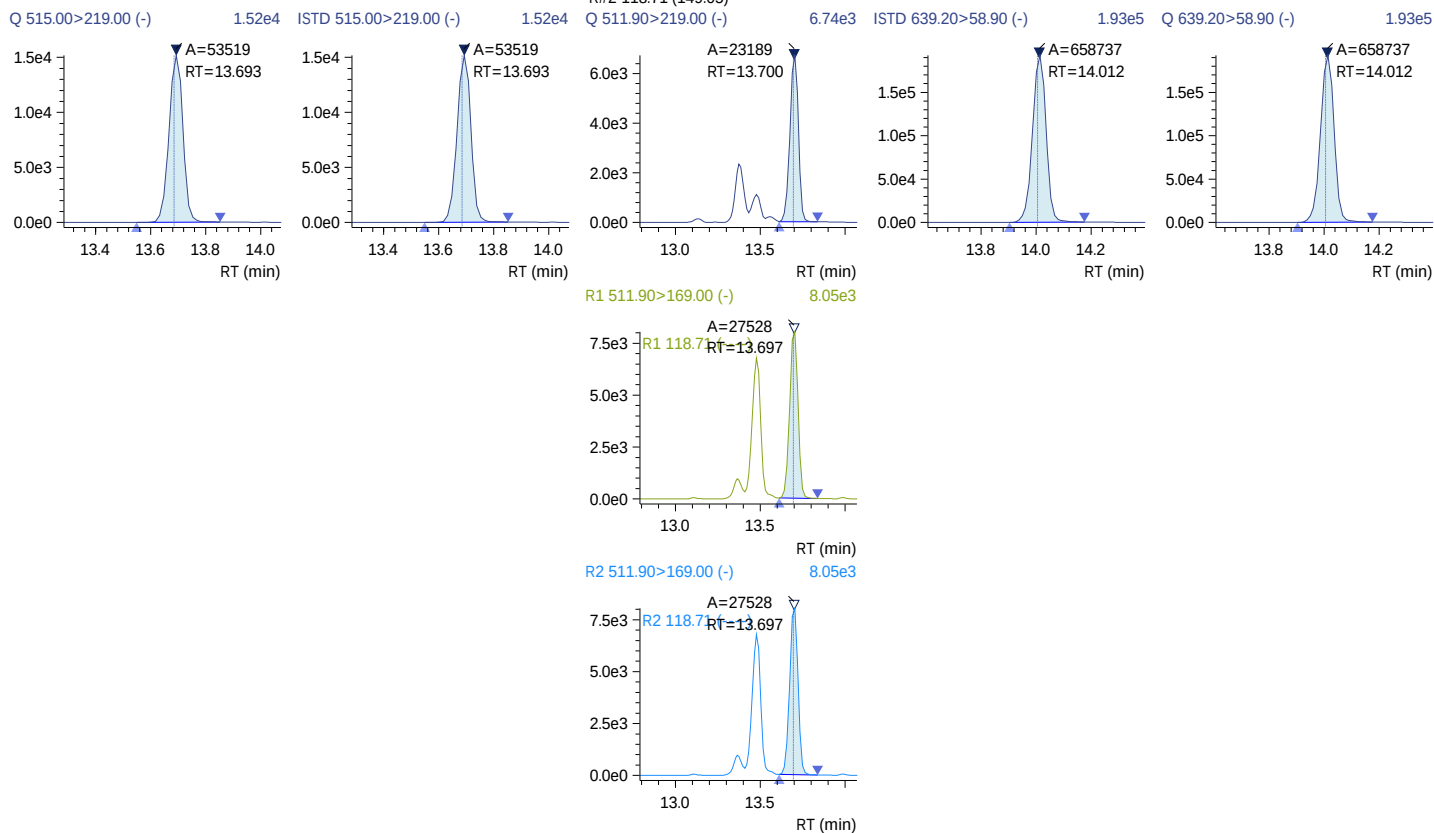
D3-MeFOSA
Conc. 2.3087

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. 0.9720
R#1 118.71 (149.05)
R#2 118.71 (149.05)

D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 22.8528





240118_016 (continued)

EtFOSE
Conc. 0.9647

D5-EtFOSAm
Conc. 2.3521

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. 1.0319
R#1 146.76 (154.69)
R#2 146.76 (154.69)

PFODA
Conc. 0.9719
R#1 24.18 (29.32)
R#2 24.18 (29.32)

Q 630.00>59.00 (-)

6.10e3

Q 531.10>219.00 (-)

2.26e4

ISTD 531.10>219.00 (-)

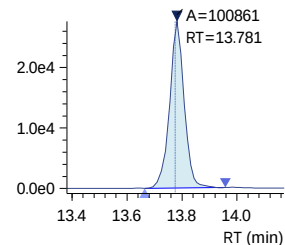
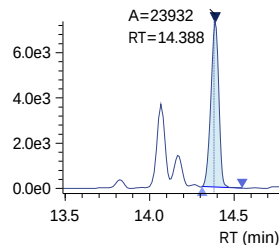
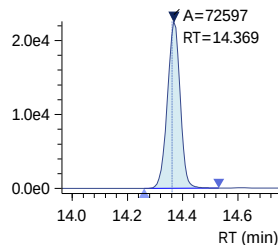
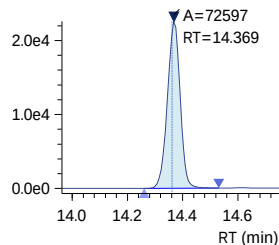
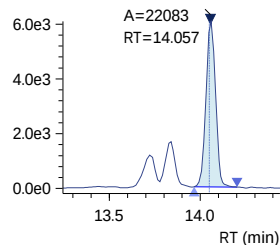
2.26e4

Q 526.00>219.00 (-)

7.39e3

Q 913.00>868.65 (-)

2.76e4

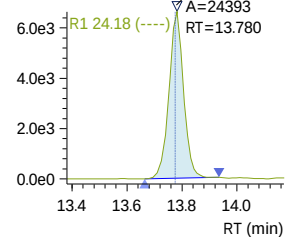
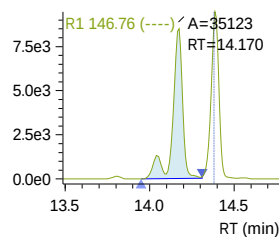


R1 526.00>169.00 (-)

9.47e3

R1 913.00>169.00 (-)

6.64e3

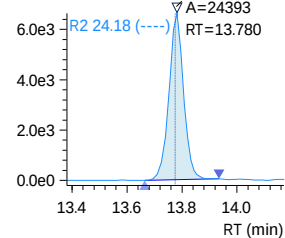
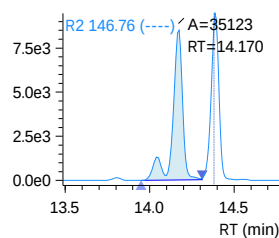


R2 526.00>169.00 (-)

9.47e3

R2 913.00>169.00 (-)

6.64e3





240118_017

Sample ID: 1633 FTCA ICV 1.0PPB
Date Acquired: 1/18/2024 6:20:19 PM
Acquired by: System Administrator
Data File: 240118_017
Vial: 11 | Inj. Volume: 10.0000uL | Tray: 1

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	1330303	----	----	----	----	----	----	----
13C4-PFBA_IS	216.80>171.90	----	1330303	----	----	----	----	----	----	----
13C3-PFBA_IS	216.00>172.00	----	598500	----	----	----	----	----	----	----
PFBA	212.80>169.05	----	----	----	----	----	----	----	----	----
PFMPA	229.00>84.90	----	----	----	----	----	----	----	----	----
3_3 FTCA	241.00>177.10	241.00>117.00	70176	96213	137.10	141.17	96213	137.10	141.17	
13C5-PFPeA	268.30>223.00	----	145319	----	----	----	----	----	----	----
13C5-PFPeA_IS	268.30>223.00	----	145319	----	----	----	----	----	----	----
PFPeA	263.00>219.00	----	----	----	----	----	----	----	----	----
PFMBA	279.00>84.95	----	----	----	----	----	----	----	----	----
13C2-4_2 FTS	329.10>80.90	----	145969	----	----	----	----	----	----	----
13C2-4_2 FTS_IS	329.10>80.90	----	145969	----	----	----	----	----	----	----
4_2 FTS	327.10>307.00	327.10>80.90	----	0	0.00	29.06	0	0.00	29.06	
13C3-PFBS_IS	302.10>79.90	----	344240	----	----	----	----	----	----	----
PFBS	298.70>79.90	298.70>98.80	----	0	0.00	46.72	0	0.00	46.72	
13C3-PFBS	302.10>79.90	----	344240	----	----	----	----	----	----	----
NFDHA	295.00>201.00	295.00>84.90	----	0	0.00	40.25	0	0.00	40.25	
13C5-PFHxA	318.00>273.00	----	661898	----	----	----	----	----	----	----
13C5-PFHxA_IS	318.00>273.00	----	661898	----	----	----	----	----	----	----
13C2-PFHxA_IS	315.10>270.00	----	626058	----	----	----	----	----	----	----
PFHxA	313.00>269.00	----	----	----	----	----	----	----	----	----
PFEESA	314.80>135.00	314.80>82.90	----	0	0.00	6.11	0	0.00	6.11	
13C3-HFPO-DA	286.90>168.90	----	650567	----	----	----	----	----	----	----
13C3-HFPO-DA_IS	286.90>168.90	----	650567	----	----	----	----	----	----	----
HFPO-DA	284.90>168.90	284.90>184.90	----	0	0.00	65.61	0	0.00	65.61	
5_3 FTCA	341.00>237.05	341.00>217.00	331687	530323	159.89	158.86	530323	159.89	158.86	
PFPeS	349.10>79.90	349.10>98.80	----	0	0.00	55.80	0	0.00	55.80	
13C4-PFHpA	367.10>322.00	----	611403	----	----	----	----	----	----	----
13C4-PFHpA_IS	367.10>322.00	----	611403	----	----	----	----	----	----	----
PFHpA	363.10>319.00	363.10>169.00	----	0	0.00	21.50	0	0.00	21.50	
DONA	376.90>250.90	376.90>84.80	----	0	0.00	29.66	0	0.00	29.66	
13C2-6_2 FTS_IS	429.10>80.90	----	135491	----	----	----	----	----	----	----
13C2-6_2 FTS	429.10>80.90	----	135491	----	----	----	----	----	----	----
6_2 FTS	427.10>407.00	427.10>80.90	----	0	0.00	41.15	0	0.00	41.15	
13C4-PFOA_IS	417.10>172.00	----	45240	----	----	----	----	----	----	----
13C8-PFOA_IS	421.10>376.00	----	640225	----	----	----	----	----	----	----

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240118_017 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	640225	----	----	----	----	----	----	----
PFOA	413.00>369.00	413.00>169.00	----	0	0.00	31.89	0	0.00	31.89	
13C3-PFHxS	402.10>79.90	----	260385	----	----	----	----	----	----	----
13C3-PFHxS_IS	402.10>79.90	----	260385	----	----	----	----	----	----	----
PFHxS	398.70>79.90	398.70>98.90	----	0	0.00	56.62	0	0.00	56.62	
18O2-PFHxS_IS	403.00>83.90	----	234067	----	----	----	----	----	----	----
13C9-PFNA_IS	472.10>427.00	----	307312	----	----	----	----	----	----	----
13C9-PFNA	472.10>427.00	----	307312	----	----	----	----	----	----	----
13C5-PFNA_IS	468.00>423.00	----	316255	----	----	----	----	----	----	----
PFNA	463.00>419.00	463.00>219.00	----	0	0.00	23.17	0	0.00	23.17	
PFHpS	449.00>79.90	449.00>98.80	----	0	0.00	56.96	0	0.00	56.96	
7_3 FTCA	441.00>317.00	441.00>336.90	466748	535231	114.67	117.47	535231	114.67	117.47	
13C2-8_2-FTS	529.10>80.90	----	104364	----	----	----	----	----	----	----
13C2-8_2-FTS_IS	529.10>80.90	----	104364	----	----	----	----	----	----	----
8_2 FTS	527.10>506.95	527.10>80.80	----	0	0.00	49.59	0	0.00	49.59	
13C6-PFDA_IS	519.10>474.10	----	221808	----	----	----	----	----	----	----
13C6-PFDA	519.10>474.10	----	221808	----	----	----	----	----	----	----
13C2-PFDA_IS	515.10>470.10	----	222912	----	----	----	----	----	----	----
PFDA	512.90>469.00	512.90>219.00	----	0	0.00	19.00	0	0.00	19.00	
D3-NMeFOSAA_IS	573.20>419.00	----	217334	----	----	----	----	----	----	----
D3-NMeFOSAA	573.20>419.00	----	217334	----	----	----	----	----	----	----
13C8-PFOS_IS	507.10>98.90	----	114722	----	----	----	----	----	----	----
13C8-PFOS	507.10>98.90	----	114722	----	----	----	----	----	----	----
13C4-PFOS_IS	502.80>79.90	----	278941	----	----	----	----	----	----	----
PFOS	498.90>79.90	498.90>98.80	----	0	0.00	52.47	0	0.00	52.47	
NMeFOSAA	570.10>419.00	570.10>483.00	----	0	0.00	55.15	0	0.00	55.15	
D5-NEtFOSAA_IS	589.20>419.00	----	244437	----	----	----	----	----	----	----
D5-NEtFOSAA	589.20>419.00	----	244437	----	----	----	----	----	----	----
NEtFOSAA	584.20>419.10	584.20>526.00	----	0	0.00	81.95	0	0.00	81.95	
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	----	0	0.00	32.76	0	0.00	32.76	
PFUnDA	563.10>519.00	563.10>269.10	----	0	0.00	13.12	0	0.00	13.12	
13C7-PFUnDA_IS	570.00>525.10	----	272818	----	----	----	----	----	----	----
13C7-PFUnDA	570.00>525.10	----	272818	----	----	----	----	----	----	----
PFNS	548.80>79.90	548.80>98.80	----	0	0.00	65.22	0	0.00	65.22	
10_2 FTS	626.80>607.05	626.80>81.00	----	0	0.00	37.13	0	0.00	37.13	
13C2-PFDOA_IS	615.10>570.00	----	304097	----	----	----	----	----	----	----
13C2-PFDOA	615.10>570.00	----	304097	----	----	----	----	----	----	----
PFDOA	613.10>569.00	613.10>319.00	----	0	0.00	11.29	0	0.00	11.29	
PFDS	599.00>79.90	599.00>98.80	----	0	0.00	60.18	0	0.00	60.18	
PFTTrDA	663.00>619.00	663.00>168.90	----	0	0.00	17.64	0	0.00	17.64	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240118_017 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	----	0	0.00	36.44	0	0.00	36.44	
PFOSAm	498.10>77.90	----	----	----	----	----	----	----	----	
13C8-PFOSAm	506.10>77.80	----	280695	----	----	----	----	----	----	
13C8-PFOSAm_IS	506.10>77.80	----	280695	----	----	----	----	----	----	
PFTDA	713.10>669.00	713.10>168.90	----	0	0.00	22.96	0	0.00	22.96	
13C2-PFTDA	715.20>670.00	----	125092	----	----	----	----	----	----	
13C2-PFTDA_IS	715.20>670.00	----	125092	----	----	----	----	----	----	
PFDoS	699.10>79.90	699.10>98.80	----	0	0.00	67.40	0	0.00	67.40	
D7-MeFOSE_IS	623.20>58.90	----	702577	----	----	----	----	----	----	
D7-MeFOSE	623.20>58.90	----	702577	----	----	----	----	----	----	
MeFOSE	616.10>59.00	----	----	----	----	----	----	----	----	
13C2-PFHxDA_IS	815.00>770.05	----	503559	----	----	----	----	----	----	
13C2-PFHxDA	815.00>770.05	----	503559	----	----	----	----	----	----	
PFHxDA	813.00>768.95	813.00>218.95	----	0	0.00	13.90	0	0.00	13.90	
D3-MeFOSA	515.00>219.00	----	58296	----	----	----	----	----	----	
D3-MeFOSA_IS	515.00>219.00	----	58296	----	----	----	----	----	----	
MeFOSA	511.90>219.00	511.90>169.00	----	0	0.00	140.79	0	0.00	140.79	
D9-EtFOSE_IS	639.20>58.90	----	699259	----	----	----	----	----	----	
D9-EtFOSE	639.20>58.90	----	699259	----	----	----	----	----	----	
EtFOSE	630.00>59.00	----	----	----	----	----	----	----	----	
D5-EtFOSAm	531.10>219.00	----	73976	----	----	----	----	----	----	
D5-EtFOSAm_IS	531.10>219.00	----	73976	----	----	----	----	----	----	
EtFOSAm	526.00>219.00	526.00>169.00	----	0	0.00	163.90	0	0.00	163.90	
PFODA	913.00>868.65	913.00>169.00	----	0	0.00	27.03	0	0.00	27.03	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240118_017

Sample ID: 1633 FTCA ICV 1.0PPB
Date Acquired: 1/18/2024 6:20:19 PM
Acquired by: System Administrator
Data File: 240118_017
Vial: 11 | Inj. Volume: 10.0000uL | Tray: 1

Check FTCAs

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Std. Conc.	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.406	-0.008	-0.001	1330303	598500	13C3-PFBA_IS	10.0000	9.9443	ng/mL	
13C4-PFBA_IS	Auto	1.406	-0.008	----	1330303	1330303	----	10.0000	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.407	-0.008	----	598500	598500	----	5.0000	5.0000	ng/mL	
PFBA	ND(W/B)	----	----	----	----	1330303	13C4-PFBA_IS	1.0000	----	ng/mL	
PFMPA	ND(W/B)	----	----	----	----	145319	13C5-PFPeA_IS	1.0000	----	ng/mL	
3_3 FTCA	M	3.006	0.002	-0.488	70176	145319	13C5-PFPeA_IS	20.0000	21.7775	ng/mL	
13C5-PFPeA	Auto	3.494	0.002	-1.488	145319	626058	13C2-PFHxA_IS	5.0000	5.1423	ng/mL	
13C5-PFPeA_IS	Auto	3.494	0.002	----	145319	145319	----	5.0000	5.0000	ng/mL	
PFPeA	ND(W/B)	----	----	----	----	145319	13C5-PFPeA_IS	1.0000	----	ng/mL	
PFMBA	ND(W/B)	----	----	----	----	145319	13C5-PFPeA_IS	1.0000	----	ng/mL	
13C2-4_2 FTS	Auto	4.665	0.004	-2.424	145969	234067	18O2-PFHxS_IS	5.0000	4.5317	ng/mL	
13C2-4_2 FTS_IS	Auto	4.665	0.004	----	145969	145969	----	5.0000	5.0000	ng/mL	
4_2 FTS	ND(W/B)	----	----	----	----	145969	13C2-4_2 FTS_IS	0.9400	----	ng/mL	
13C3-PFBS_IS	Auto	4.649	0.002	----	344240	344240	----	2.5000	2.5000	ng/mL	
PFBS	ND(W/B)	----	----	----	----	344240	13C3-PFBS_IS	0.8900	----	ng/mL	
13C3-PFBS	Auto	4.649	0.002	-2.440	344240	234067	18O2-PFHxS_IS	2.5000	2.5916	ng/mL	
NFDHA	ND(W/B)	----	----	----	----	661898	13C5-PFHxA_IS	1.0000	----	ng/mL	
13C5-PFHxA	Auto	4.981	0.003	-0.001	661898	626058	13C2-PFHxA_IS	2.5000	2.5086	ng/mL	
13C5-PFHxA_IS	Auto	4.981	0.003	----	661898	661898	----	2.5000	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	4.982	0.003	----	626058	626058	----	2.5000	2.5000	ng/mL	
PFHxA	ND(W/B)	----	----	----	----	661898	13C5-PFHxA_IS	1.0000	----	ng/mL	
PFEESA	ND(W/B)	----	----	----	----	661898	13C5-PFHxA_IS	0.8900	----	ng/mL	
13C3-HFPO-DA	Auto	5.456	0.004	0.474	650567	626058	13C2-PFHxA_IS	10.0000	10.6153	ng/mL	
13C3-HFPO-DA_IS	Auto	5.456	0.004	----	650567	650567	----	10.0000	10.0000	ng/mL	
HFPO-DA	ND(W/B)	----	----	----	----	650567	13C3-HFPO-DA_IS	1.0000	----	ng/mL	
5_3 FTCA	Auto	5.911	0.005	0.930	331687	661898	13C5-PFHxA_IS	20.0000	19.3734	ng/mL	
PFPeS	ND(W/B)	----	----	----	----	260385	13C3-PFHxS_IS	0.9400	----	ng/mL	
13C4-PFHpA	Auto	6.158	0.004	1.176	611403	626058	13C2-PFHxA_IS	2.5000	2.5597	ng/mL	
13C4-PFHpA_IS	Auto	6.158	0.004	----	611403	611403	----	2.5000	2.5000	ng/mL	
PFHpA	ND(W/B)	----	----	----	----	611403	13C4-PFHpA_IS	1.0000	----	ng/mL	
DONA	ND(W/B)	----	----	----	----	650567	13C3-HFPO-DA_IS	0.9500	----	ng/mL	
13C2-6_2 FTS_IS	Auto	6.796	0.003	----	135491	135491	----	5.0000	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.796	0.003	-0.293	135491	234067	18O2-PFHxS_IS	5.0000	4.4474	ng/mL	
6_2 FTS	ND(W/B)	----	----	----	----	135491	13C2-6_2 FTS_IS	0.9500	----	ng/mL	
13C4-PFOA_IS	Auto	7.112	0.005	----	45240	45240	----	2.5000	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.112	0.005	----	640225	640225	----	2.5000	2.5000	ng/mL	
13C8-PFOA	Auto	7.112	0.005	0.000	640225	45240	13C4-PFOA_IS	2.5000	2.5320	ng/mL	
PFOA	ND(W/B)	----	----	----	----	640225	13C8-PFOA_IS	1.0000	----	ng/mL	
13C3-PFHxS	Auto	7.089	0.003	0.000	260385	234067	18O2-PFHxS_IS	2.5000	2.5917	ng/mL	
13C3-PFHxS_IS	Auto	7.089	0.003	----	260385	260385	----	2.5000	2.5000	ng/mL	
PFHxS	ND(W/B)	----	----	----	----	260385	13C3-PFHxS_IS	0.9100	----	ng/mL	
18O2-PFHxS_IS	Auto	7.089	0.003	----	234067	234067	----	2.5000	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.959	0.003	----	307312	307312	----	1.2500	1.2500	ng/mL	
13C9-PFNA	Auto	7.959	0.003	0.000	307312	316255	13C5-PFNA_IS	1.2500	1.2411	ng/mL	
13C5-PFNA_IS	Auto	7.959	0.003	----	316255	316255	----	1.2500	1.2500	ng/mL	
PFNA	ND(W/B)	----	----	----	----	307312	13C9-PFNA_IS	1.0000	----	ng/mL	
PFHpS	ND(W/B)	----	----	----	----	114722	13C8-PFOS_IS	0.9500	----	ng/mL	
7_3 FTCA	Auto	7.959	0.005	2.978	466748	661898	13C5-PFHxA_IS	20.0000	20.4214	ng/mL	
13C2-8_2-FTS	Auto	8.413	0.004	1.324	104364	234067	18O2-PFHxS_IS	5.0000	4.1703	ng/mL	
13C2-8_2-FTS_IS	Auto	8.413	0.004	----	104364	104364	----	5.0000	5.0000	ng/mL	
8_2 FTS	ND(W/B)	----	----	----	----	104364	13C2-8_2-FTS_IS	0.9600	----	ng/mL	
13C6-PFDA_IS	Auto	8.722	0.002	----	221808	221808	----	1.2500	1.2500	ng/mL	
13C6-PFDA	Auto	8.722	0.002	0.000	221808	222912	13C2-PFDA_IS	1.2500	1.2368	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_017 (continued)

(Table continued from previous page)

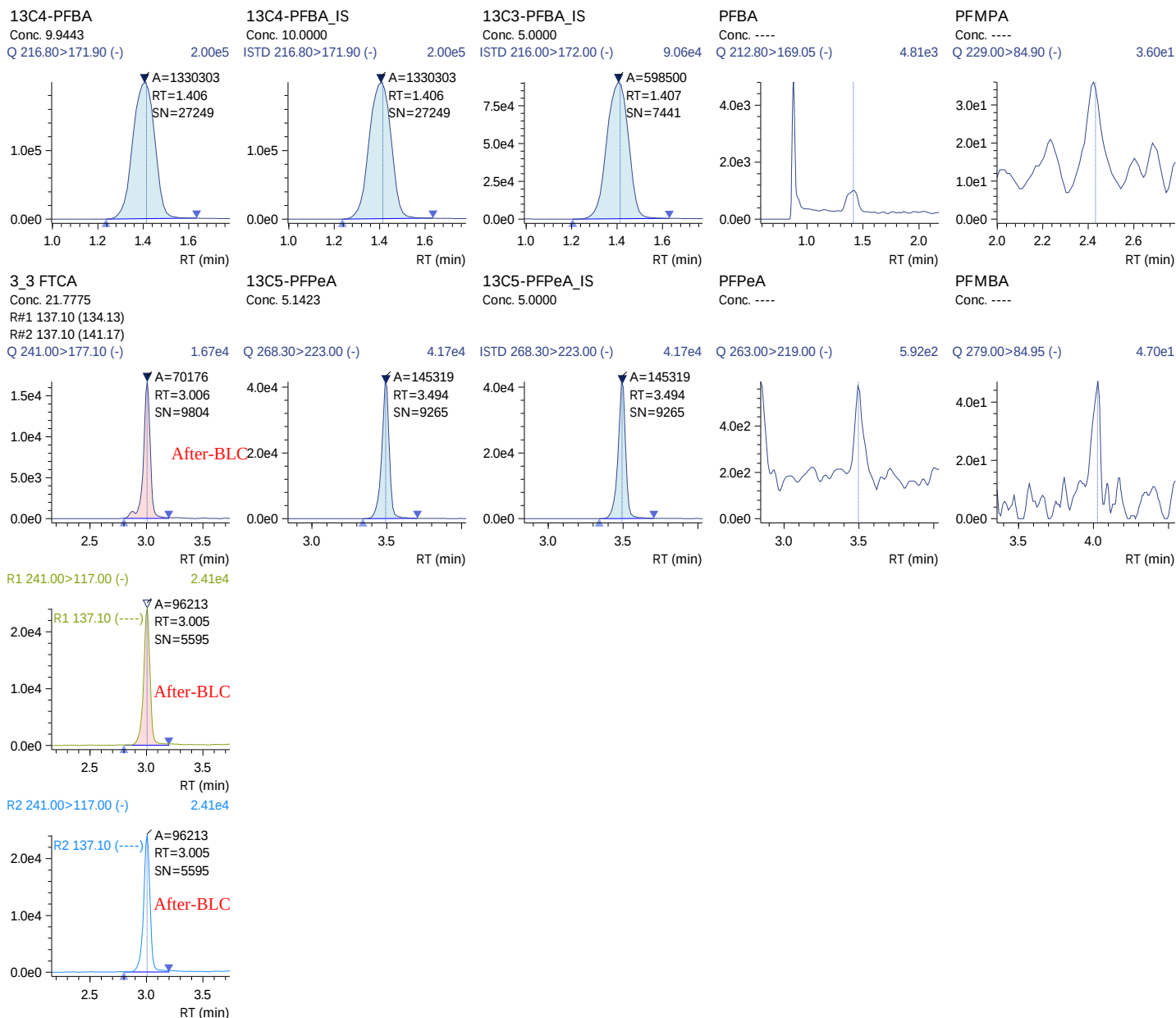
Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Std. Conc.	Conc.	Unit	Flag ID
13C2-PFDA_IS	Auto	8.722	0.001	----	222912	222912	----	1.2500	1.2500	ng/mL	
PFDA	ND(W/B)	----	----	----	----	221808	13C6-PFDA_IS	1.0000	----	ng/mL	
D3-NMeFOSAA_IS	Auto	8.857	0.002	----	217334	217334	----	5.0000	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.857	0.002	0.035	217334	278941	13C4-PFOS_IS	5.0000	4.4892	ng/mL	
13C8-PFOS_IS	Auto	8.821	0.001	----	114722	114722	----	2.5000	2.5000	ng/mL	
13C8-PFOS	Auto	8.821	0.001	-0.001	114722	278941	13C4-PFOS_IS	2.5000	2.4661	ng/mL	
13C4-PFOS_IS	Auto	8.822	0.002	----	278941	278941	----	2.5000	2.5000	ng/mL	
PFOS	ND(W/B)	----	----	----	----	114722	13C8-PFOS_IS	0.9300	----	ng/mL	
NMeFOSAA	ND(W/B)	----	----	----	----	217334	D3-NMeFOSAA_IS	1.0000	----	ng/mL	
D5-NetFOSAA_IS	Auto	9.188	0.002	----	244437	244437	----	5.0000	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.188	0.002	0.366	244437	278941	13C4-PFOS_IS	5.0000	4.2203	ng/mL	
NetFOSAA	ND(W/B)	----	----	----	----	244437	D5-NetFOSAA_IS	1.0000	----	ng/mL	
9-CI-PF3ONS	ND(W/B)	----	----	----	----	650567	13C3-HFPO-DA_IS	0.9300	----	ng/mL	
PFUnDA	ND(W/B)	----	----	----	----	272818	13C7-PFUnDA_IS	1.0000	----	ng/mL	
13C7-PFUnDA_IS	Auto	9.446	0.001	----	272818	272818	----	1.2500	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.446	0.001	0.724	272818	222912	13C2-PFDA_IS	1.2500	1.2753	ng/mL	
PFNS	ND(W/B)	----	----	----	----	114722	13C8-PFOS_IS	0.9600	----	ng/mL	
10_2_FTS	ND(W/B)	----	----	----	----	104364	13C2-8_2-FTS_IS	0.9600	----	ng/mL	
13C2-PFDOA_IS	Auto	10.133	0.000	----	304097	304097	----	1.2500	1.2500	ng/mL	
13C2-PFDOA	Auto	10.133	0.000	1.411	304097	222912	13C2-PFDA_IS	1.2500	1.2373	ng/mL	
PFDOA	ND(W/B)	----	----	----	----	304097	13C2-PFDOA_IS	1.0000	----	ng/mL	
PFDS	ND(W/B)	----	----	----	----	114722	13C8-PFOS_IS	0.9700	----	ng/mL	
PFTDA	ND(W/B)	----	----	----	----	125092	13C2-PFTDA_IS	1.0000	----	ng/mL	
11-CI-PF3OUdS	ND(W/B)	----	----	----	----	650567	13C3-HFPO-DA_IS	0.9400	----	ng/mL	
PFOSAm	ND(W/B)	----	----	----	----	280695	13C8-PFOSAm_IS	2.0000	----	ng/mL	
13C8-PFOSAm	Auto	11.170	0.005	2.348	280695	278941	13C4-PFOS_IS	2.5000	2.3704	ng/mL	
13C8-PFOSAm_IS	Auto	11.170	0.005	----	280695	280695	----	2.5000	2.5000	ng/mL	
PFTDA	ND(W/B)	----	----	----	----	125092	13C2-PFTDA_IS	1.0000	----	ng/mL	
13C2-PFTDA	Auto	11.423	-0.001	2.701	125092	222912	13C2-PFDA_IS	1.2500	1.1789	ng/mL	
13C2-PFTDA_IS	Auto	11.423	-0.001	----	125092	125092	----	1.2500	1.2500	ng/mL	
PFDoS	ND(W/B)	----	----	----	----	114722	13C8-PFOS_IS	0.9700	----	ng/mL	
D7-MeFOSE_IS	Auto	13.382	0.005	----	702577	702577	----	25.0000	25.0000	ng/mL	
D7-MeFOSE	Auto	13.382	0.005	4.560	702577	278941	13C4-PFOS_IS	25.0000	24.0650	ng/mL	
MeFOSE	ND(W/B)	----	----	----	----	702577	D7-MeFOSE_IS	1.0000	----	ng/mL	
13C2-PFHXA_IS	Auto	12.639	-0.002	----	503559	503559	----	2.5000	2.5000	ng/mL	
13C2-PFHXA	Auto	12.639	-0.002	3.917	503559	222912	13C2-PFDA_IS	2.5000	2.4320	ng/mL	
PFHXDA	ND(W/B)	----	----	----	----	503559	13C2-PFHXA_IS	1.0000	----	ng/mL	
D3-MeFOSA	Auto	13.690	0.005	4.868	58296	278941	13C4-PFOS_IS	2.5000	2.4446	ng/mL	
D3-MeFOSA_IS	Auto	13.690	0.005	----	58296	58296	----	2.5000	2.5000	ng/mL	
MeFOSA	ND(W/B)	----	----	----	----	58296	D3-MeFOSA_IS	1.0000	----	ng/mL	
D9-EtFOSE_IS	Auto	14.011	0.005	----	699259	699259	----	25.0000	25.0000	ng/mL	
D9-EtFOSE	Auto	14.011	0.005	5.189	699259	278941	13C4-PFOS_IS	25.0000	23.5822	ng/mL	
EtFOSE	ND(W/B)	----	----	----	----	699259	D9-EtFOSE_IS	1.0000	----	ng/mL	
D5-EtFOSAm	Auto	14.367	0.005	5.545	73976	278941	13C4-PFOS_IS	2.5000	2.3300	ng/mL	
D5-EtFOSAm_IS	Auto	14.367	0.005	----	73976	73976	----	2.5000	2.5000	ng/mL	
EtFOSAm	ND(W/B)	----	----	----	----	73976	D5-EtFOSAm_IS	1.0000	----	ng/mL	
PFODA	ND(W/B)	----	----	----	----	503559	13C2-PFHXA_IS	1.0000	----	ng/mL	

J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_017 (continued)



J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_017 (continued)

13C2-4_2 FTS
Conc. 4.5317

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. ----
R#1 0.00 (34.14)
R#2 0.00 (29.06)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. ----
R#1 0.00 (47.53)
R#2 0.00 (46.72)

Q 329.10>80.90 (-)

4.46e4

ISTD 329.10>80.90 (-)

4.46e4

Q 327.10>307.00 (-)

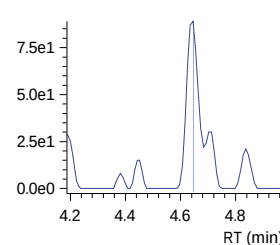
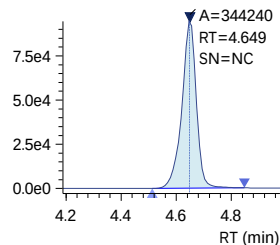
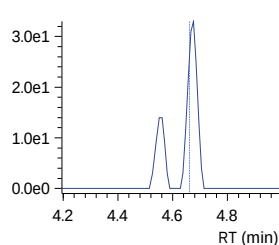
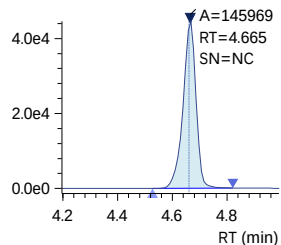
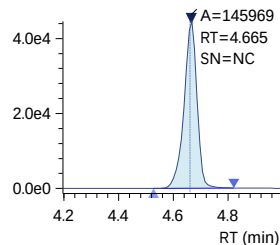
3.30e1

ISTD 302.10>79.90 (-)

9.45e4

Q 298.70>79.90 (-)

8.90e1

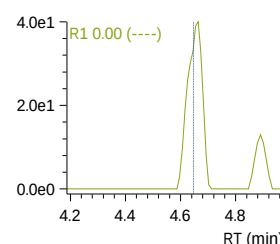
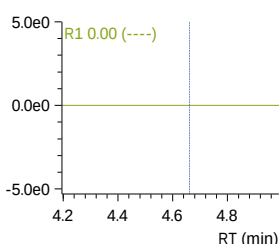


R1 327.10>80.90 (-)

0.00e0

R1 298.70>98.80 (-)

4.00e1

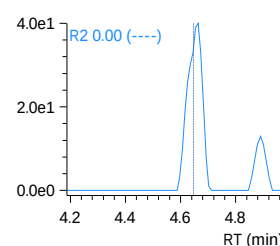
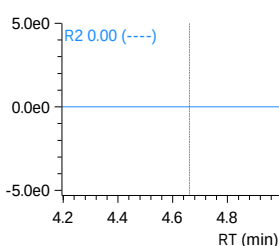


R2 327.10>80.90 (-)

0.00e0

R2 298.70>98.80 (-)

4.00e1





240118_017 (continued)

13C3-PFBS
Conc. 2.5916

NFDHA
Conc. ----
R#1 0.00 (37.88)
R#2 0.00 (40.25)

13C5-PFHxA
Conc. 2.5086

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

Q 302.10>79.90 (-)

9.45e4

Q 295.00>201.00 (-)

2.60e2

Q 318.00>273.00 (-)

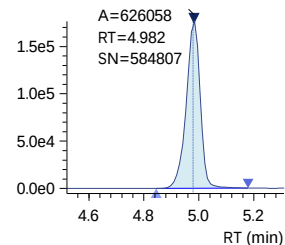
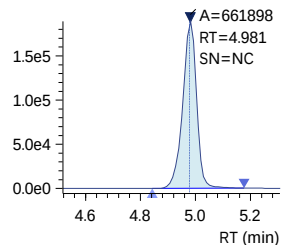
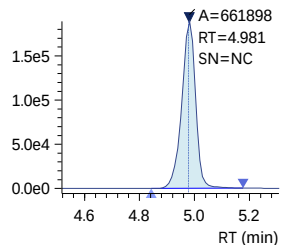
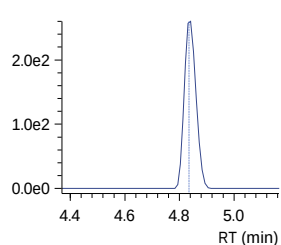
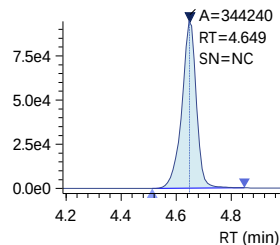
1.89e5

ISTD 318.00>273.00 (-)

1.89e5

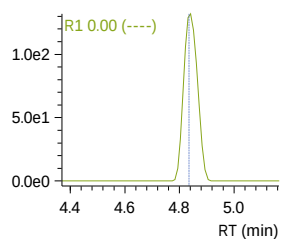
ISTD 315.10>270.00 (-)

1.77e5



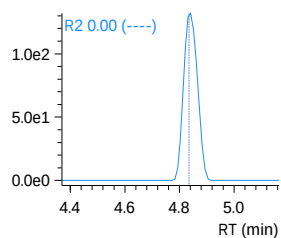
R1 295.00>84.90 (-)

1.32e2



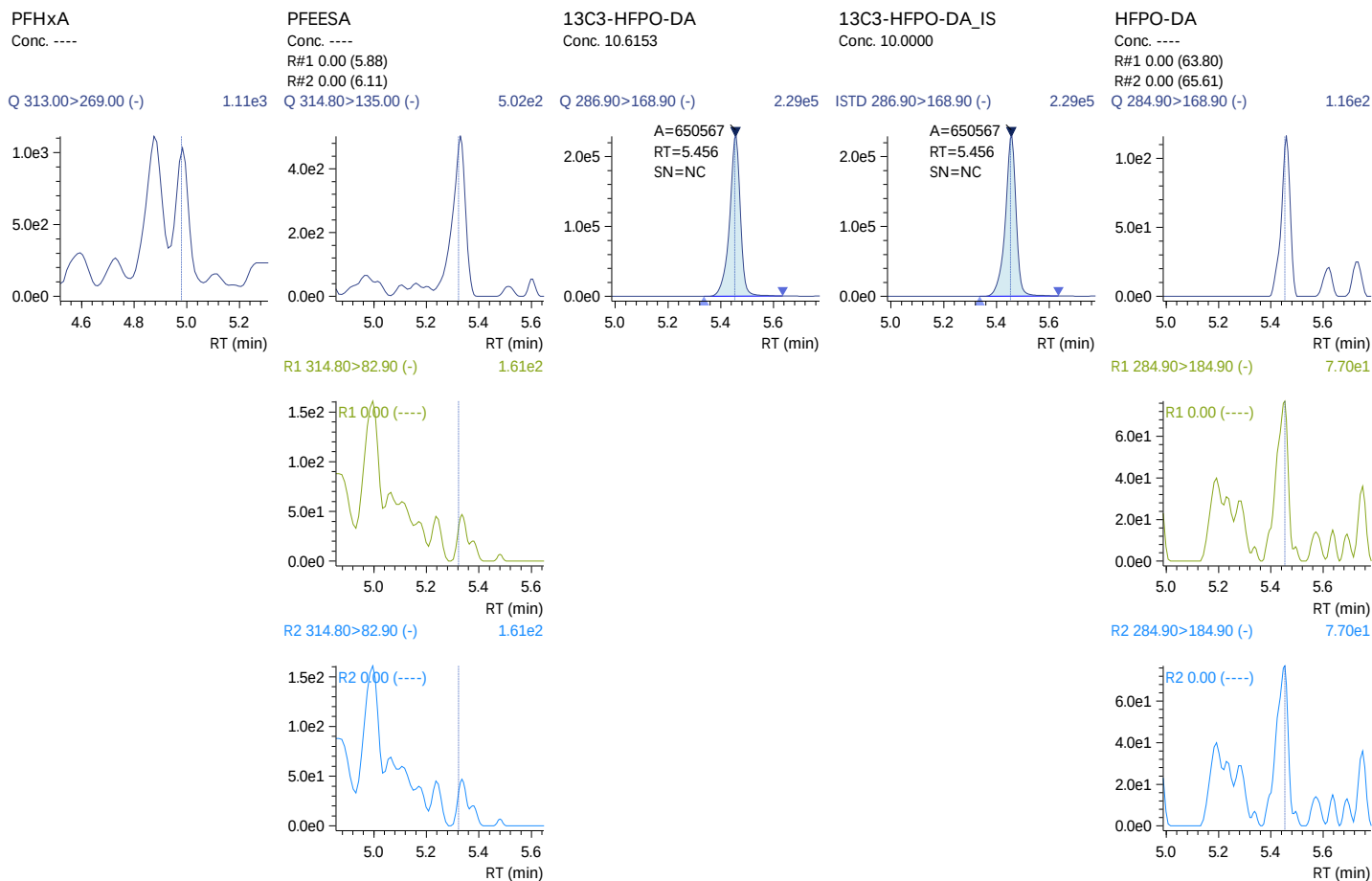
R2 295.00>84.90 (-)

1.32e2





240118_017 (continued)

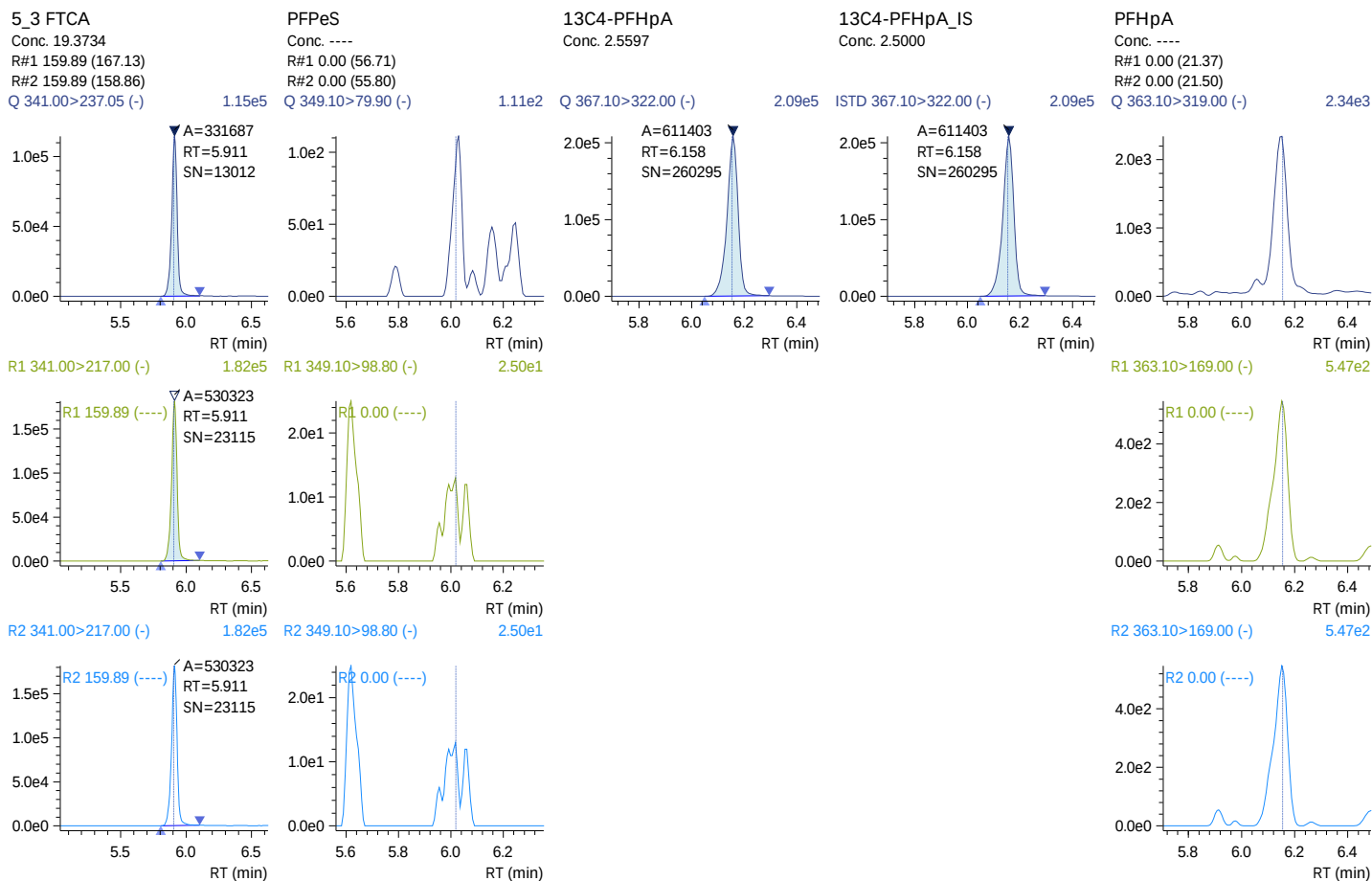


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_017 (continued)

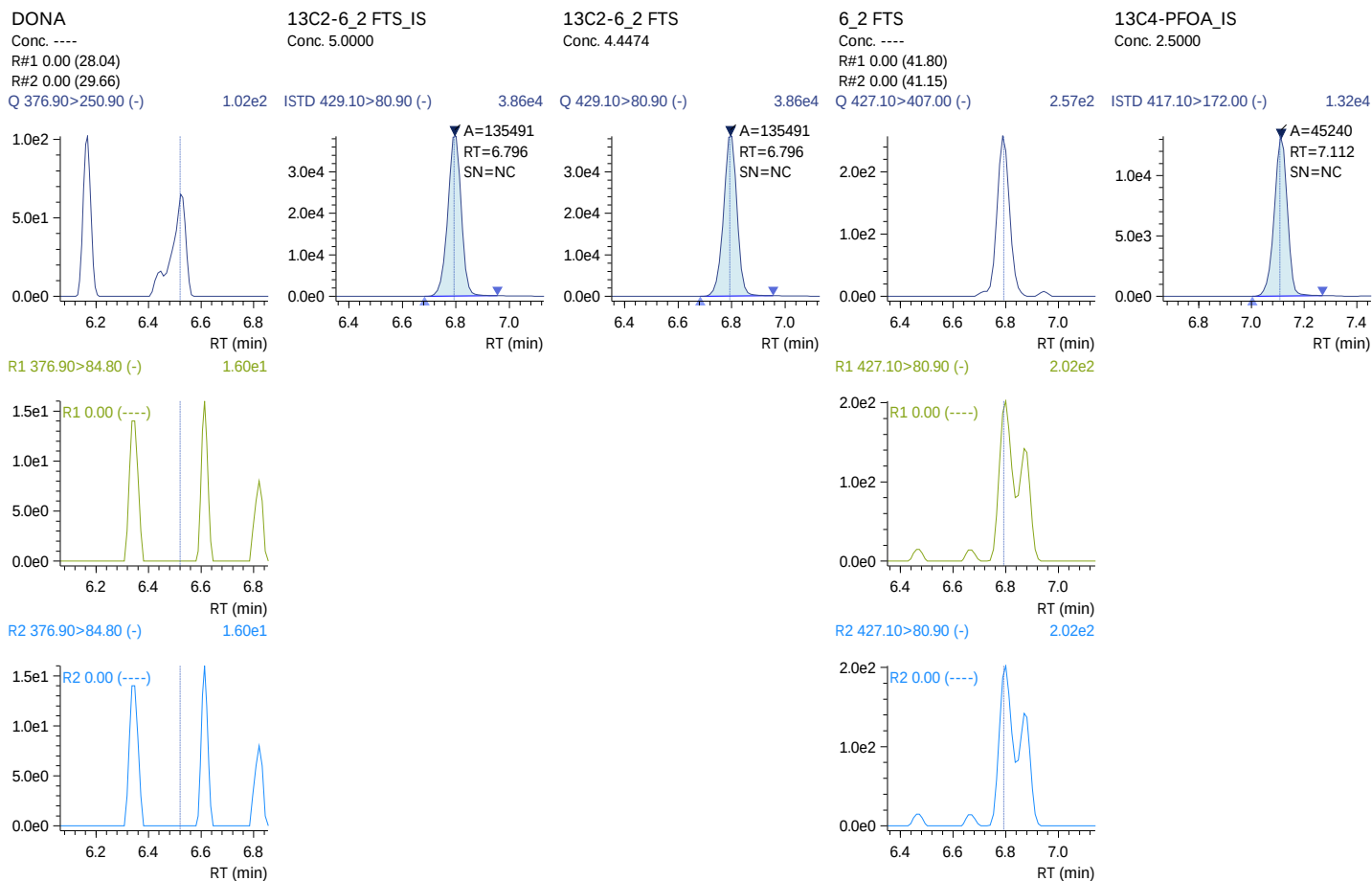


J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_017 (continued)



J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_017 (continued)

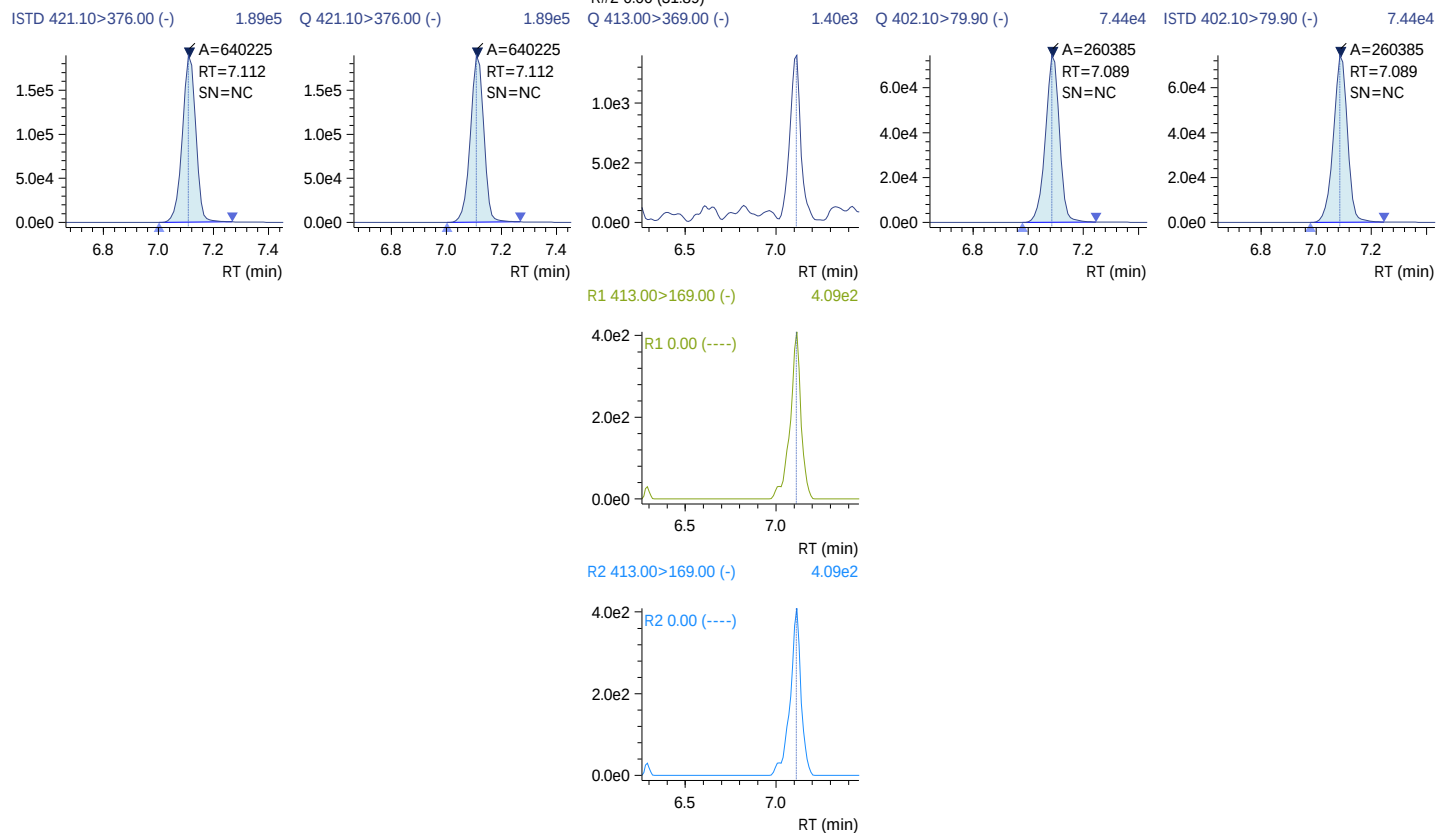
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.5320

PFOA
Conc. ----
R#1 0.00 (29.05)
R#2 0.00 (31.89)

13C3-PFHxS
Conc. 2.5917

13C3-PFHxS_IS
Conc. 2.5000

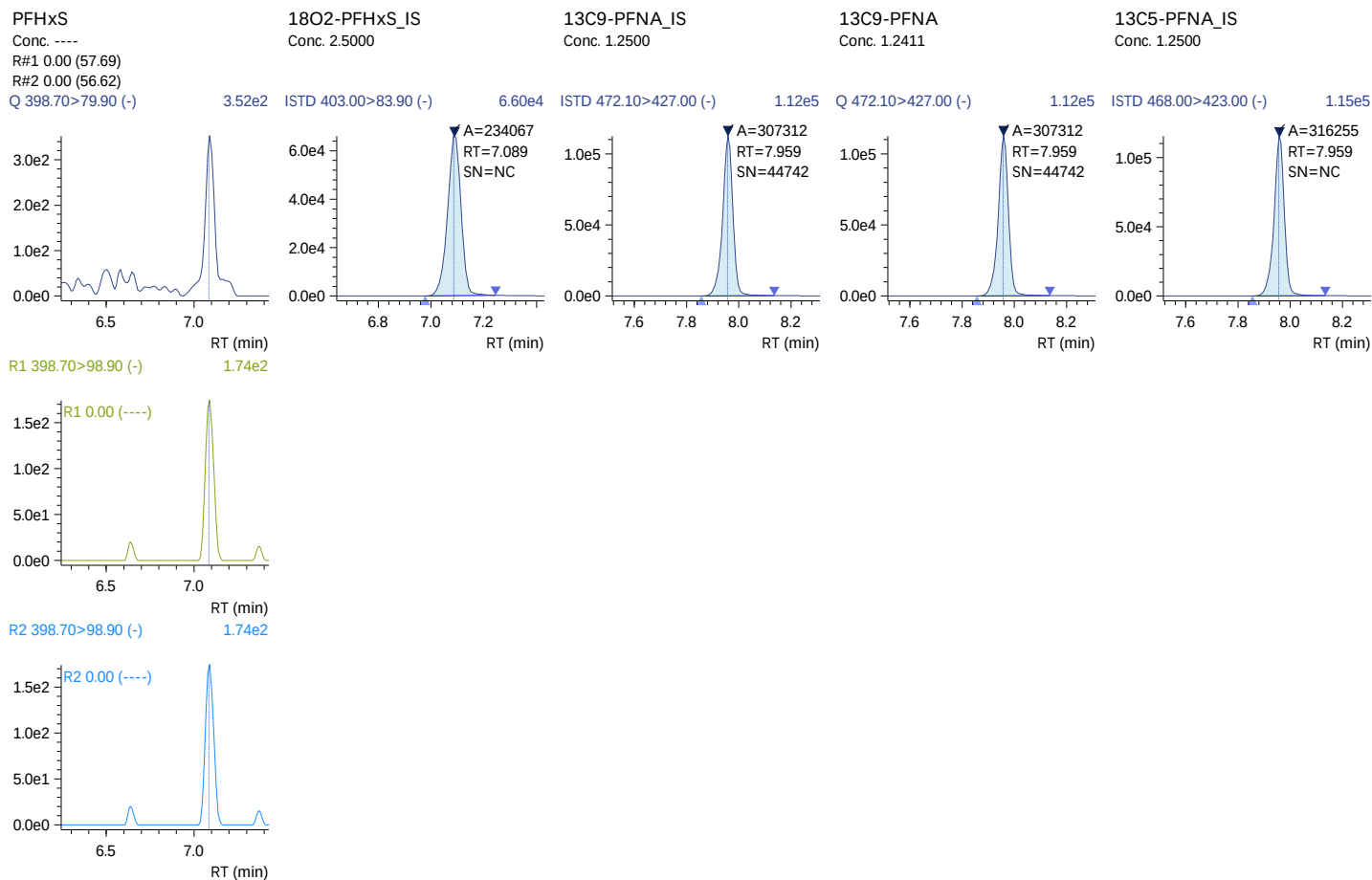


J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_017 (continued)

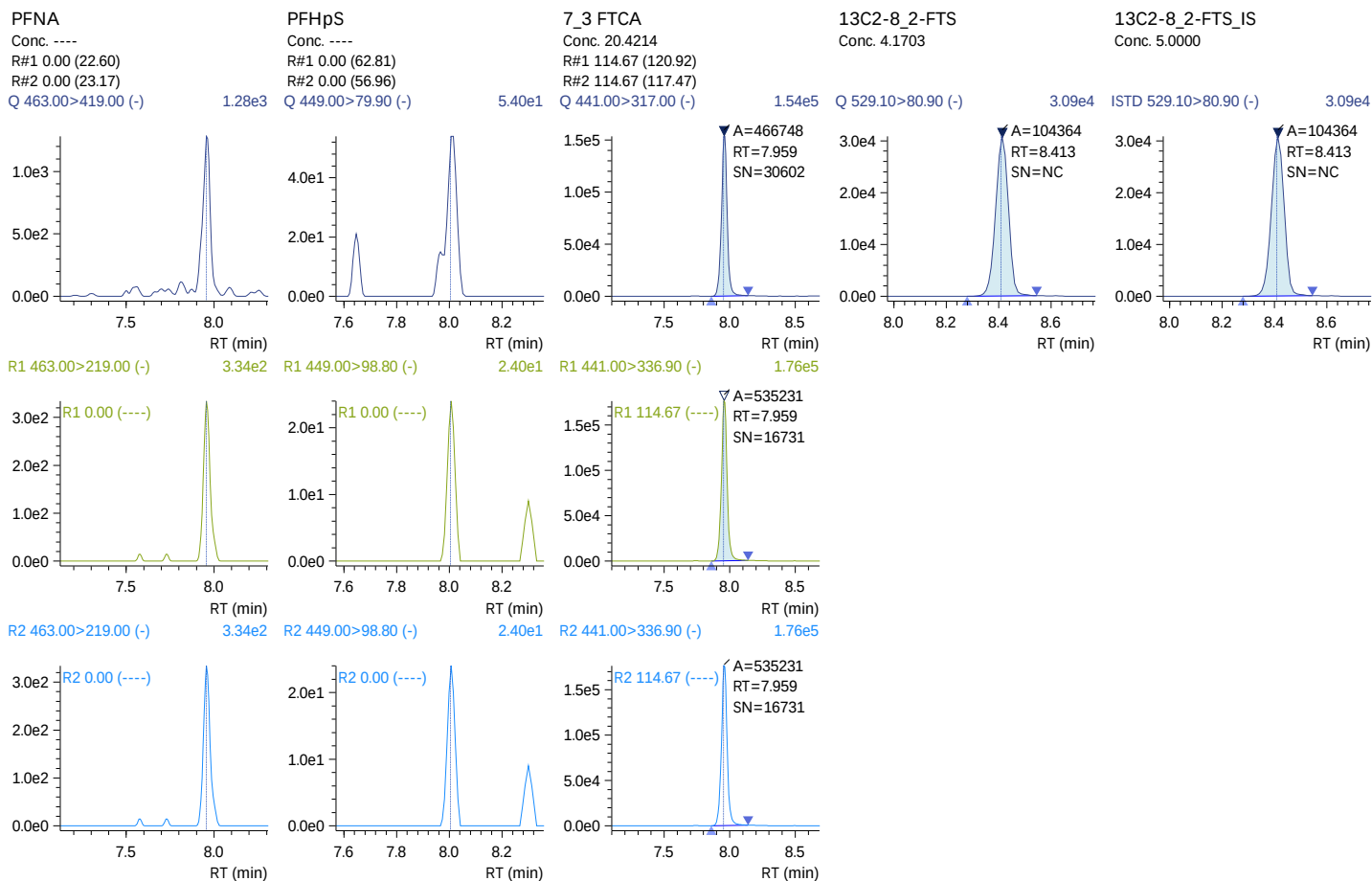


J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_017 (continued)

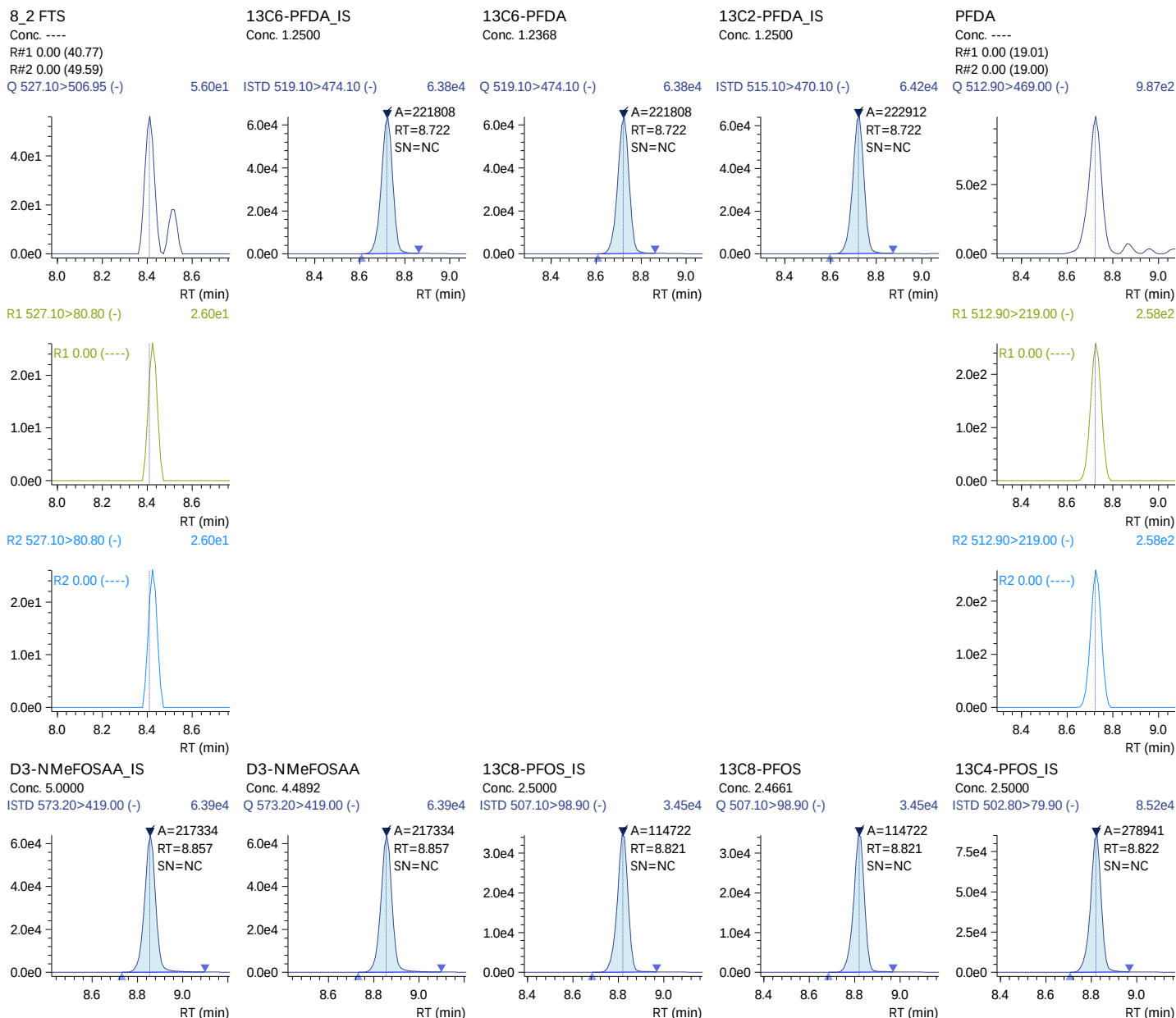


J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_017 (continued)

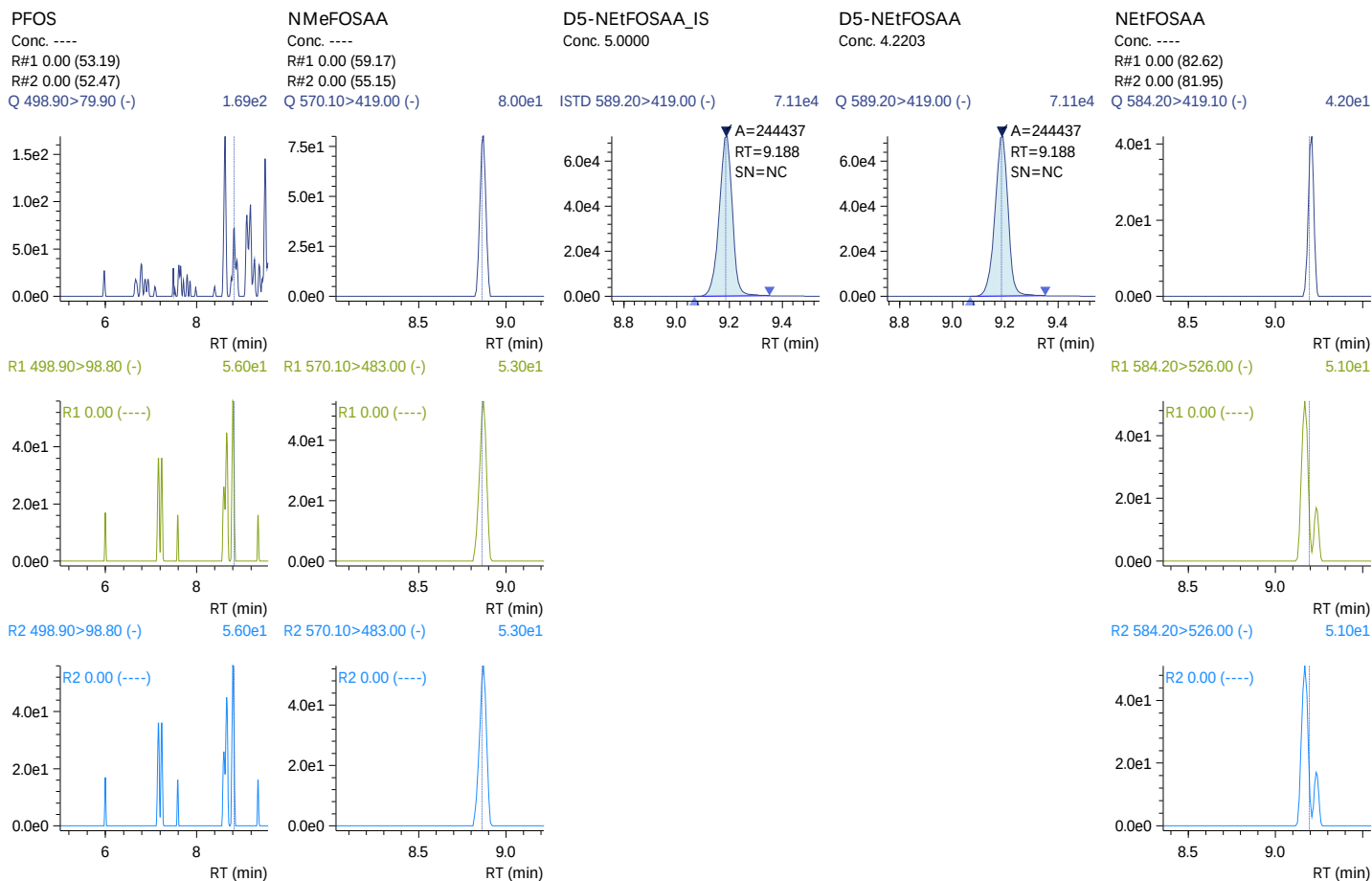


J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_017 (continued)



J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_017 (continued)

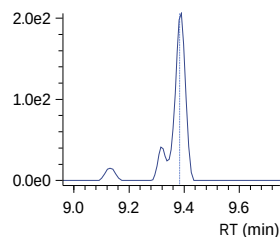
9-Cl-PF3ONS

Conc. ----

R#1 0.00 (31.76)

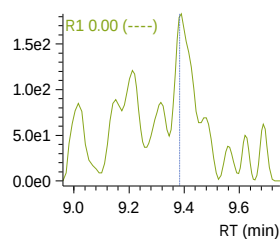
R#2 0.00 (32.76)

Q 530.80>351.00 (-)



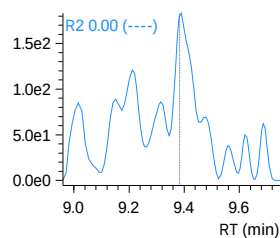
R1 532.80>353.00 (-)

1.83e2



R2 532.80>353.00 (-)

1.83e2



RT (min)

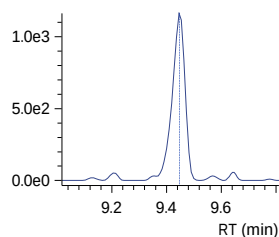
PFUnDA

Conc. ----

R#1 0.00 (12.31)

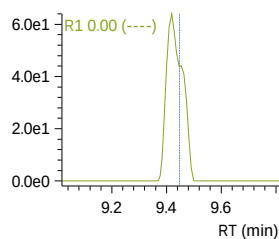
R#2 0.00 (13.12)

Q 563.10>519.00 (-)



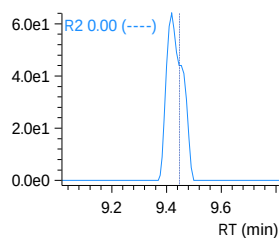
R1 563.10>269.10 (-)

6.40e1



R2 563.10>269.10 (-)

6.40e1

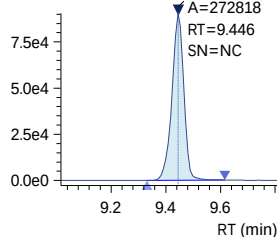


RT (min)

13C7-PFUnDA_IS

Conc. 1.2500

ISTD 570.00>525.10 (-)

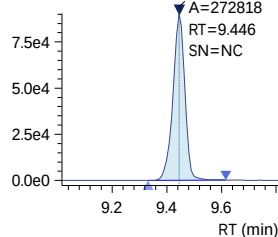


9.05e4

13C7-PFUnDA

Conc. 1.2753

Q 570.00>525.10 (-)



9.05e4

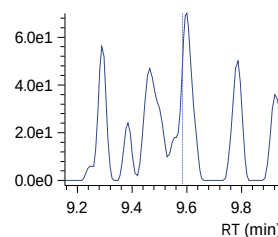
PFNS

Conc. ----

R#1 0.00 (63.31)

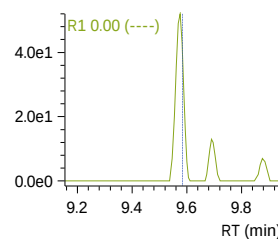
R#2 0.00 (65.22)

Q 548.80>79.90 (-)



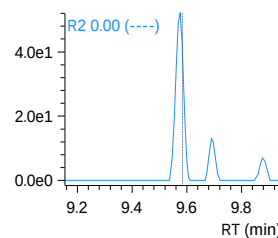
R1 548.80>98.80 (-)

5.20e1



R2 548.80>98.80 (-)

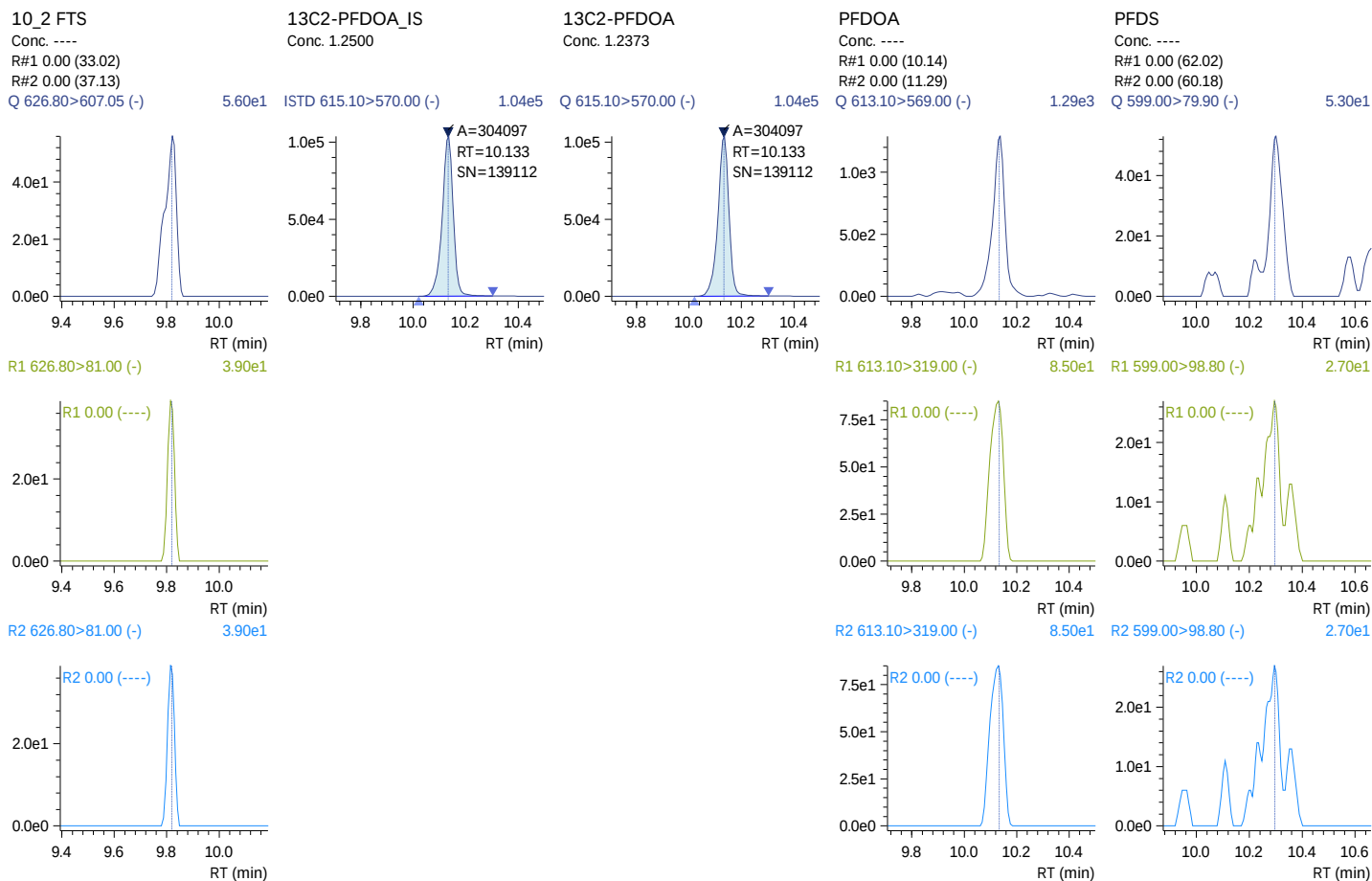
5.20e1



RT (min)



240118_017 (continued)

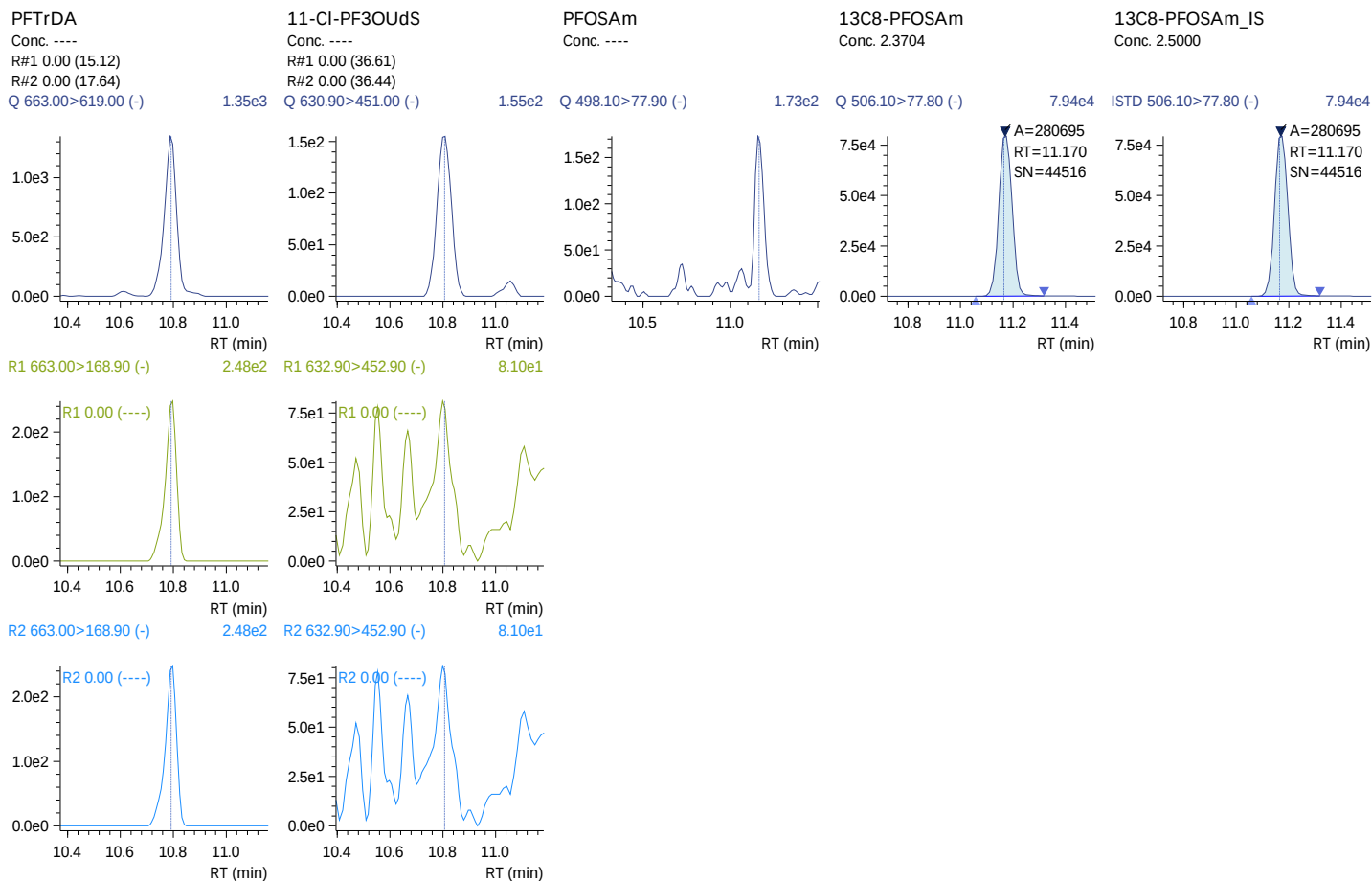


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_017 (continued)

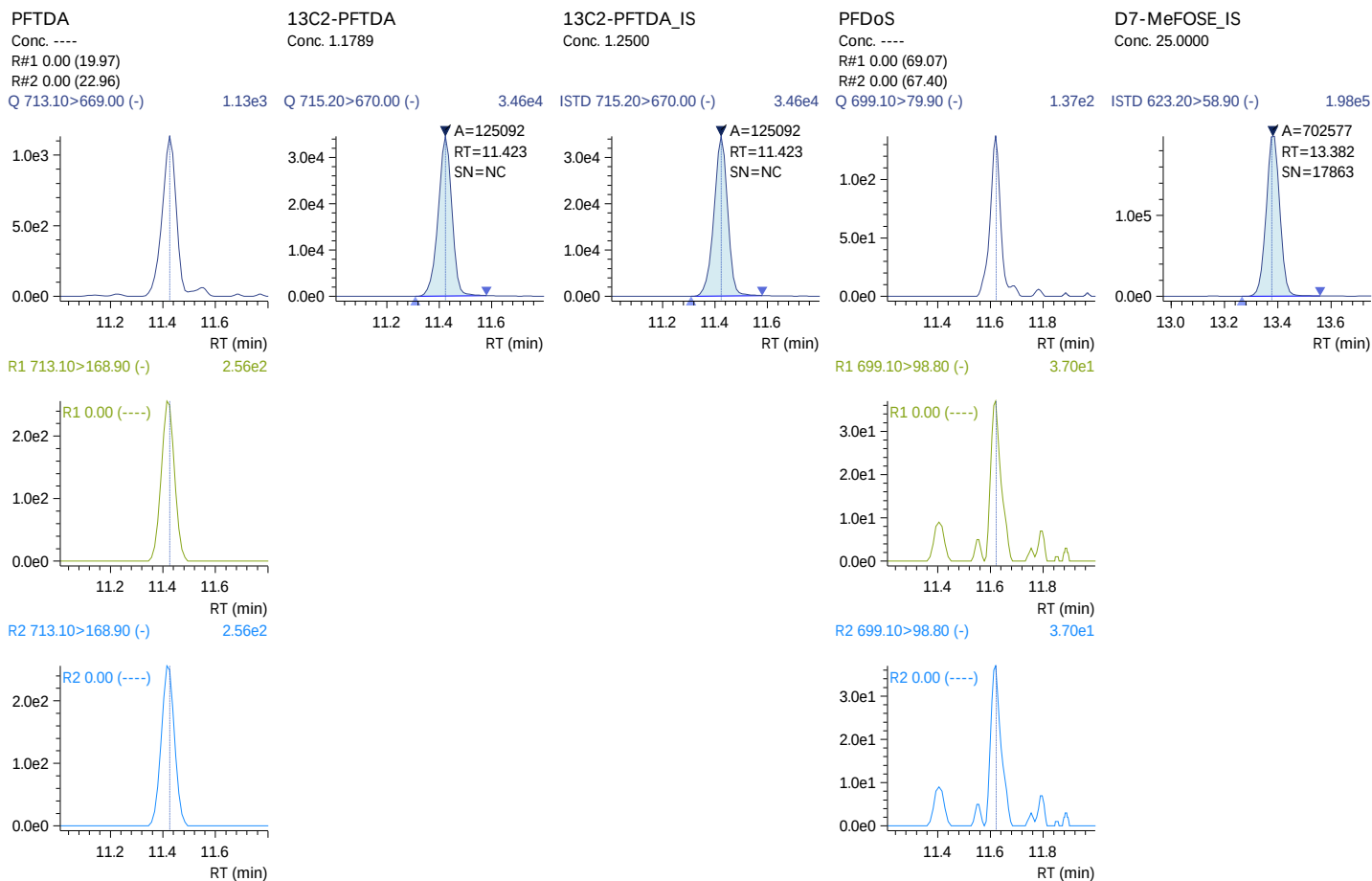


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_017 (continued)



J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_017 (continued)

D7-MeFOSE
Conc. 24.0650

MeFOSE
Conc. ----

13C2-PFHDA-IS
Conc. 2.5000

13C2-PFHDA
Conc. 2.4320

PFHDA
Conc. ----

R#1 0.00 (11.64)

R#2 0.00 (13.90)

Q 623.20>58.90 (-)

1.98e5

Q 616.10>59.00 (-)

4.70e1

ISTD 815.00>770.05 (-)

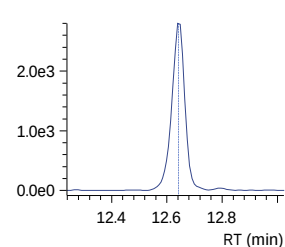
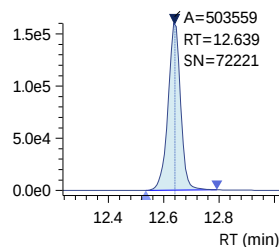
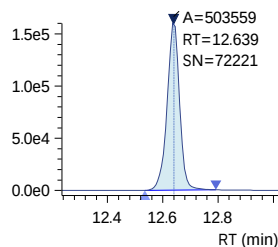
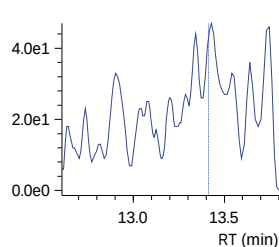
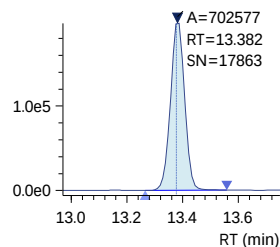
1.60e5

Q 815.00>770.05 (-)

1.60e5

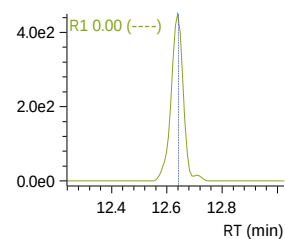
Q 813.00>768.95 (-)

2.80e3



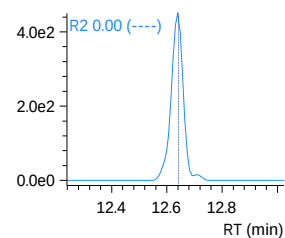
R1 813.00>218.95 (-)

4.50e2



R2 813.00>218.95 (-)

4.50e2





240118_017 (continued)

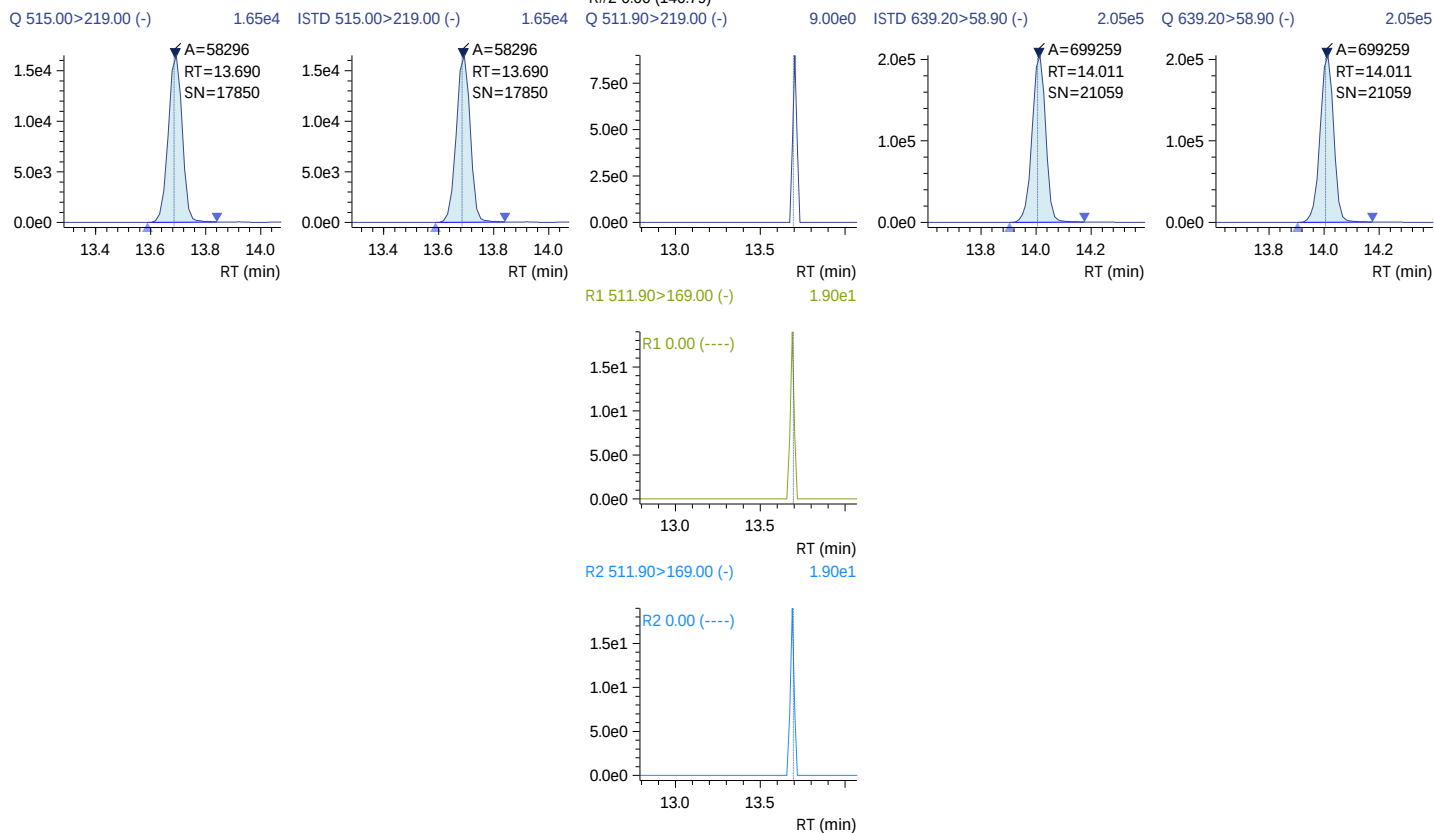
D3-MeFOSA
Conc. 2.4446

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. ----
R#1 0.00 (149.05)
R#2 0.00 (140.79)

D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 23.5822

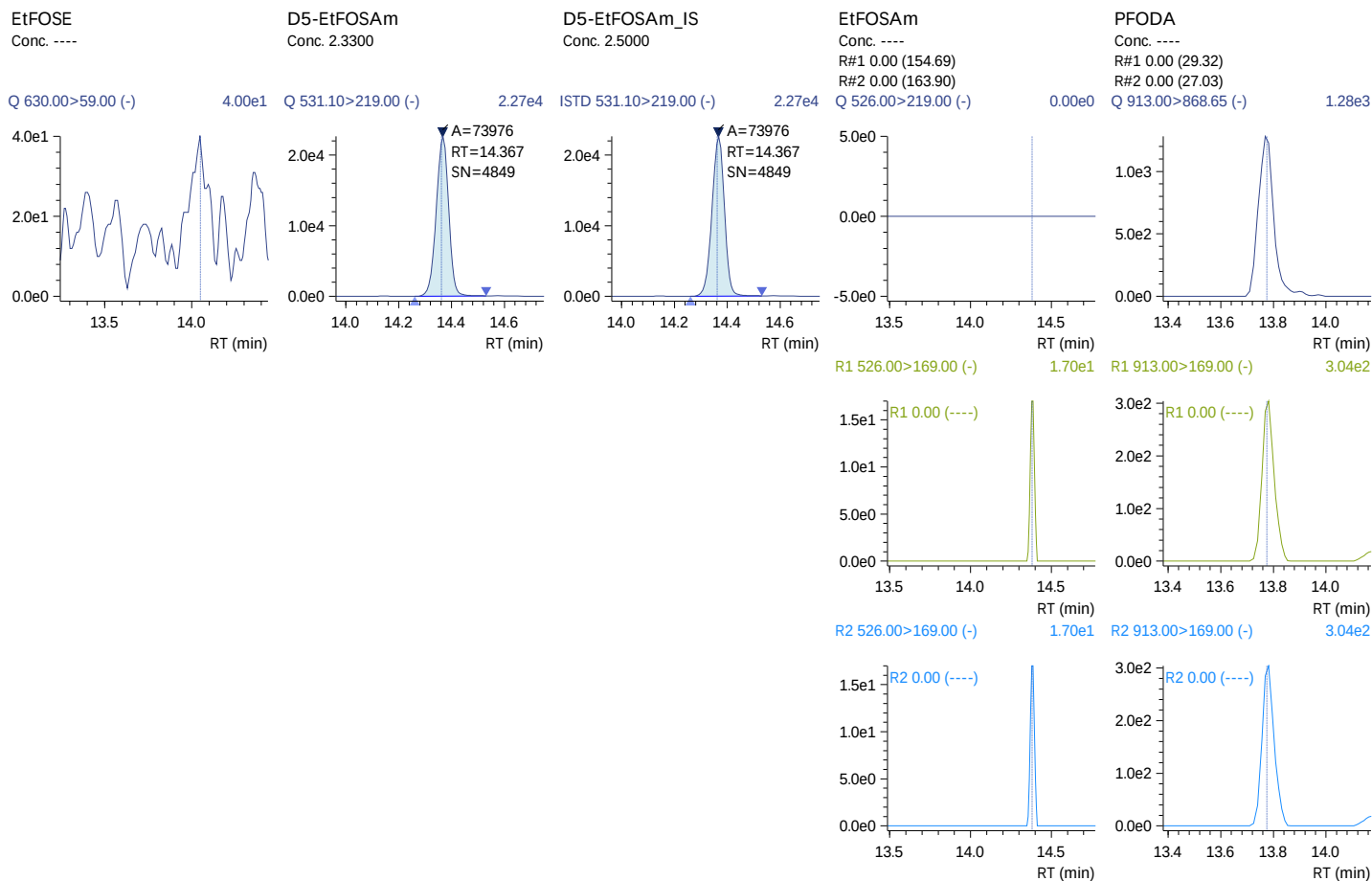


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_017 (continued)



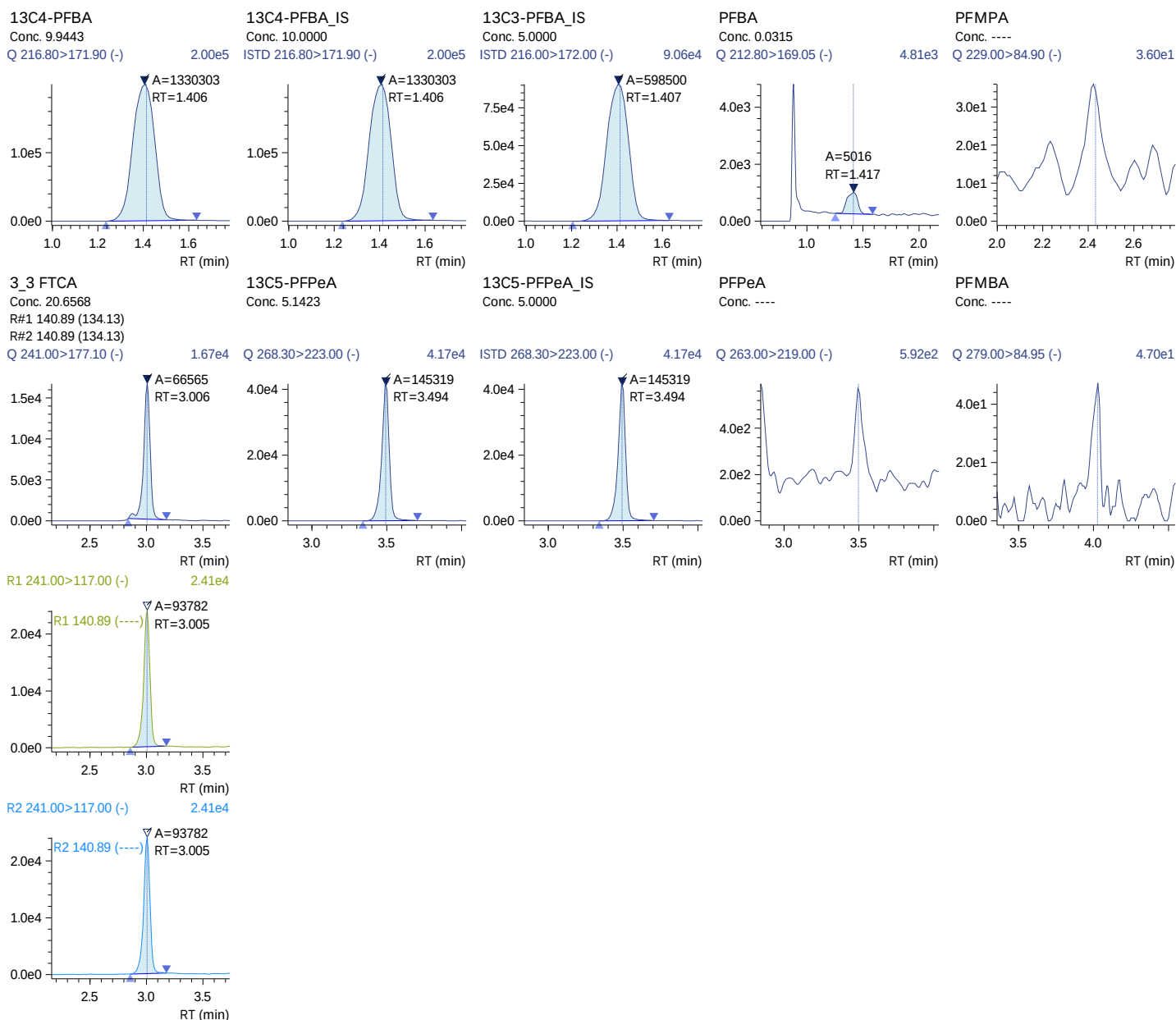
J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
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240118_017

Sample ID: 1633 FTCA ICV 1.0PPB
Date Acquired: 1/18/2024 6:20:19 PM
Acquired by: System Administrator
Data File: 240118_017
Vial: 11 | Inj. Volume: 10.0000uL | Tray: 1





240118_017 (continued)

13C2-4_2 FTS
Conc. 4.5317

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. ----
R#1 0.00 (34.14)
R#2 0.00 (34.14)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. ----
R#1 0.00 (47.53)
R#2 0.00 (47.53)

Q 329.10>80.90 (-)

4.46e4

ISTD 329.10>80.90 (-)

4.46e4

Q 327.10>307.00 (-)

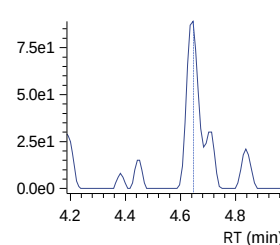
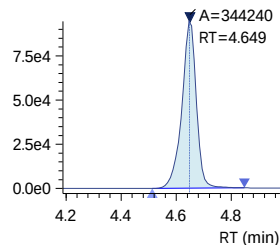
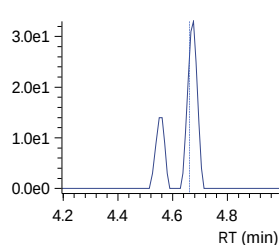
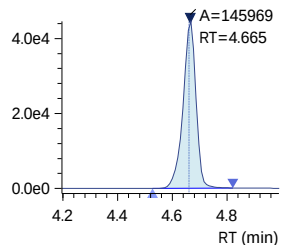
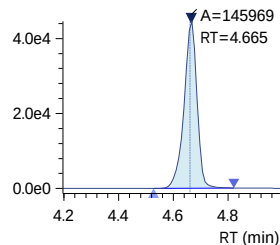
3.30e1

ISTD 302.10>79.90 (-)

9.45e4

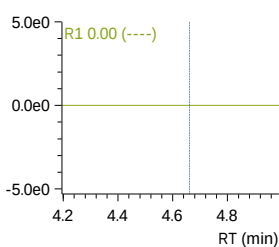
Q 298.70>79.90 (-)

8.90e1



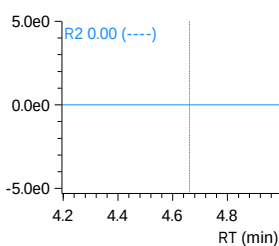
R1 327.10>80.90 (-)

0.00e0



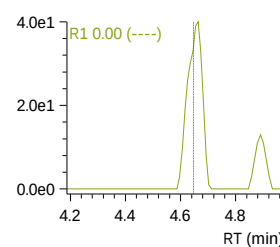
R2 327.10>80.90 (-)

0.00e0



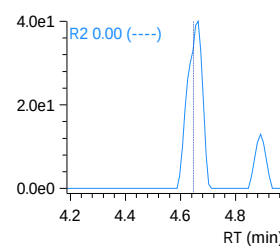
R1 298.70>98.80 (-)

4.00e1



R2 298.70>98.80 (-)

4.00e1





240118_017 (continued)

13C3-PFBS
Conc. 2.5916

NFDHA
Conc. ----
R#1 0.00 (37.88)
R#2 0.00 (37.88)

13C5-PFHxA
Conc. 2.5086

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

Q 302.10>79.90 (-)

9.45e4

Q 295.00>201.00 (-)

2.60e2

Q 318.00>273.00 (-)

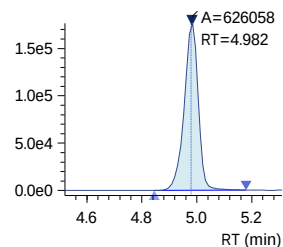
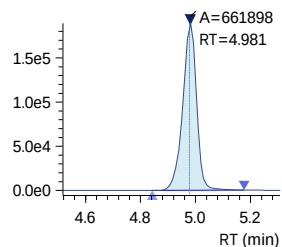
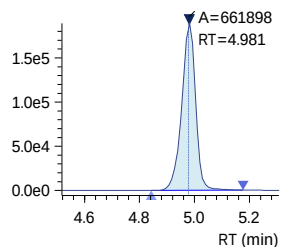
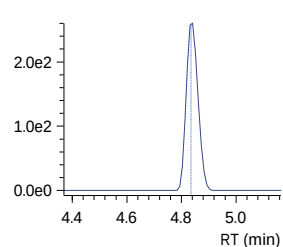
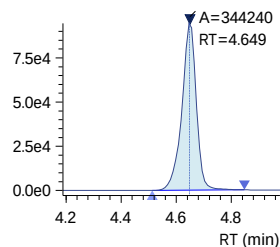
1.89e5

ISTD 318.00>273.00 (-)

1.89e5

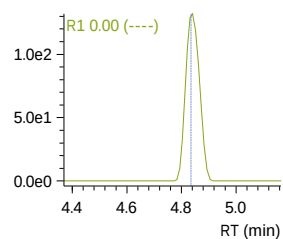
ISTD 315.10>270.00 (-)

1.77e5



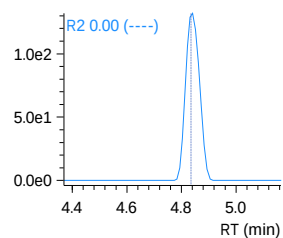
R1 295.00>84.90 (-)

1.32e2



R2 295.00>84.90 (-)

1.32e2





240118_017 (continued)

PFHxA
Conc. 0.0379

PFEESA
Conc. ----
R#1 0.00 (5.88)
R#2 0.00 (5.88)

13C3-HFPO-DA
Conc. 10.6153

13C3-HFPO-DA_IS
Conc. 10.0000

HFPO-DA
Conc. ----
R#1 0.00 (63.80)
R#2 0.00 (63.80)

Q 313.00>269.00 (-)

1.11e3

Q 314.80>135.00 (-)

5.02e2

Q 286.90>168.90 (-)

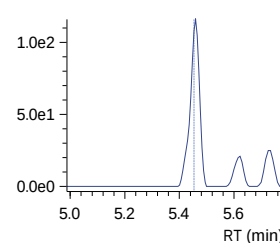
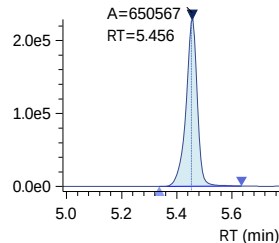
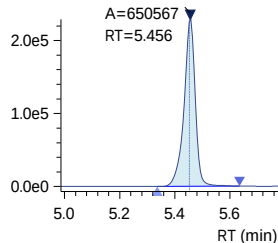
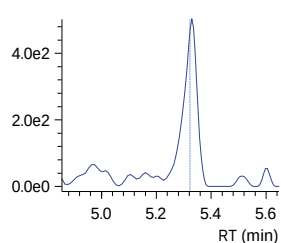
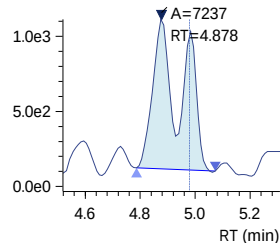
2.29e5

ISTD 286.90>168.90 (-)

2.29e5

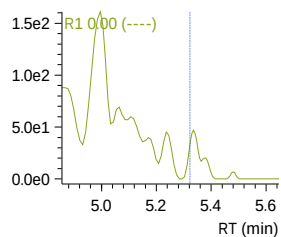
Q 284.90>168.90 (-)

1.16e2



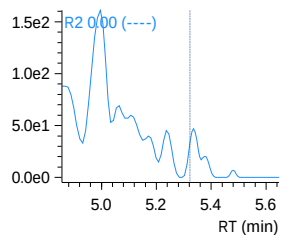
R1 314.80>82.90 (-)

1.61e2



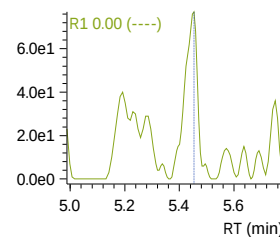
R2 314.80>82.90 (-)

1.61e2



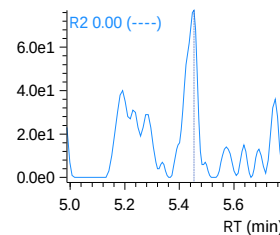
R1 284.90>184.90 (-)

7.70e1



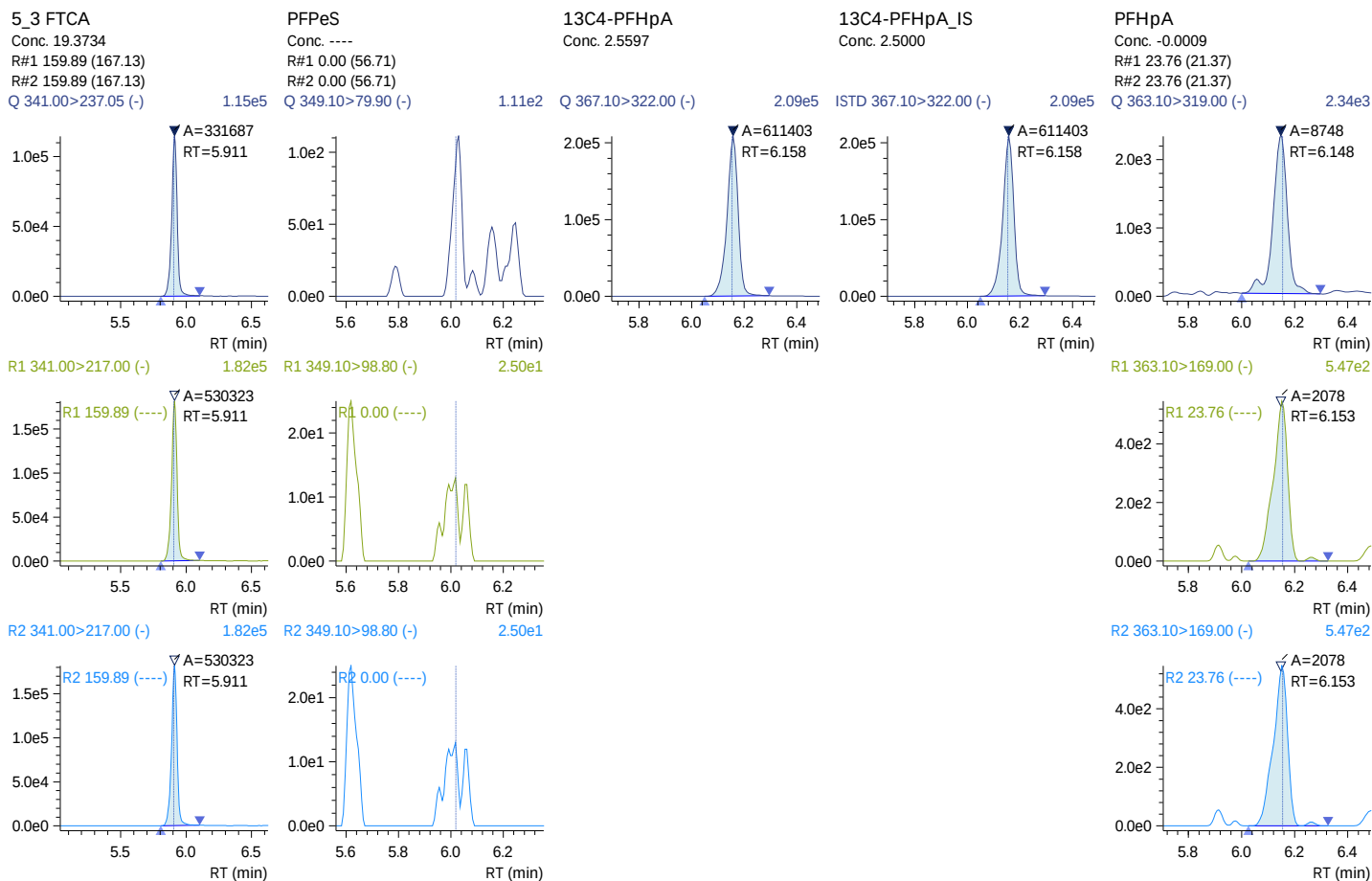
R2 284.90>184.90 (-)

7.70e1



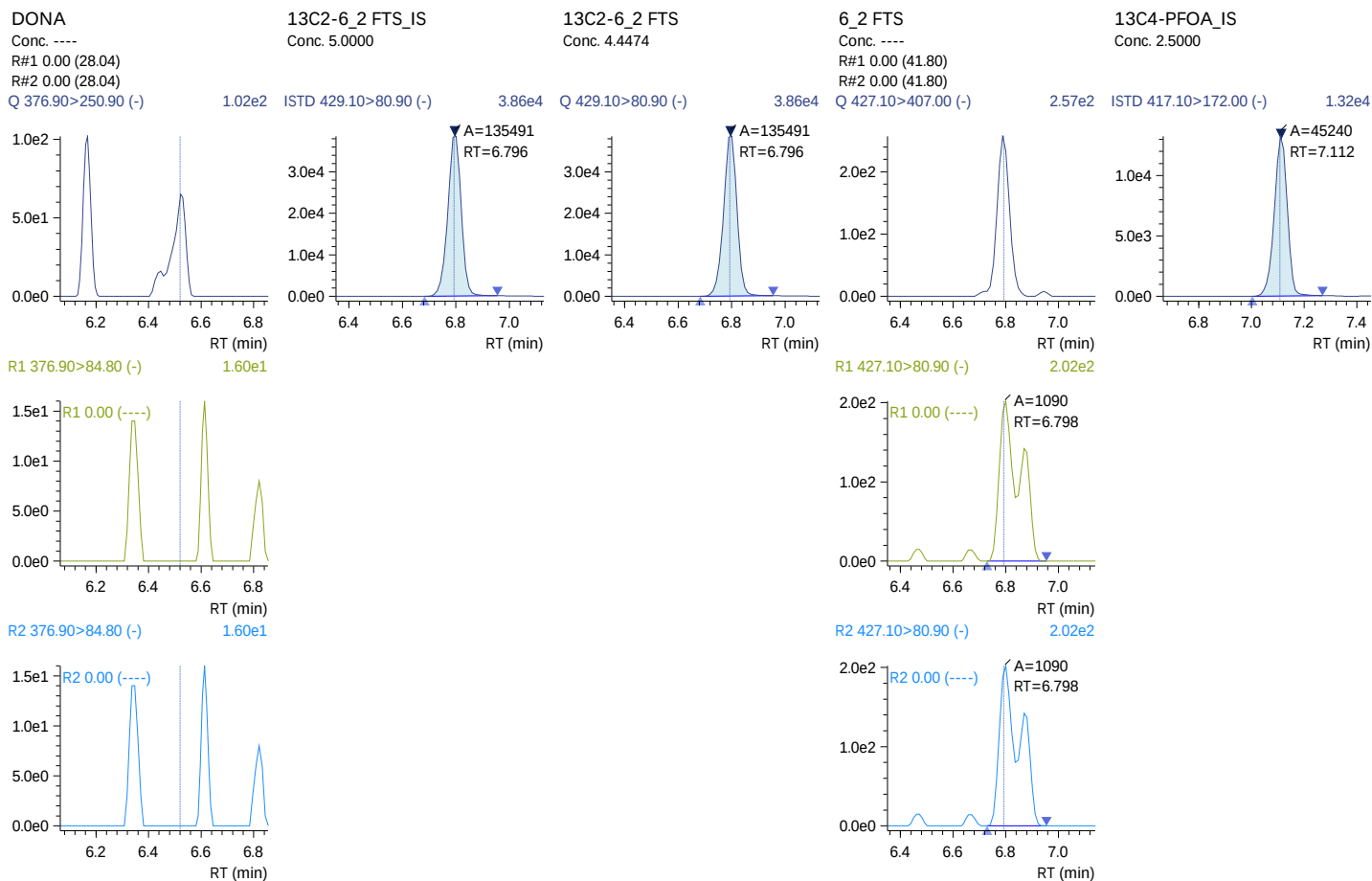


240118_017 (continued)





240118_017 (continued)





240118_017 (continued)

13C8-PFOA_IS
 Conc. 2.5000

13C8-PFOA
 Conc. 2.5320

PFOA
 Conc. -0.0105
 R#1 31.10 (29.05)
 R#2 31.10 (29.05)

13C3-PFHxS
 Conc. 2.5917

13C3-PFHxS_IS
 Conc. 2.5000

ISTD 421.10>376.00 (-)

1.89e5

Q 421.10>376.00 (-)

1.89e5

Q 413.00>369.00 (-)

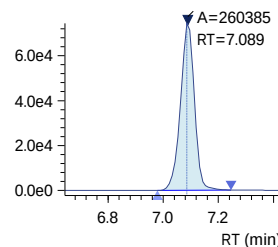
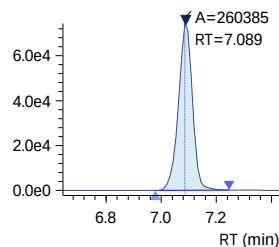
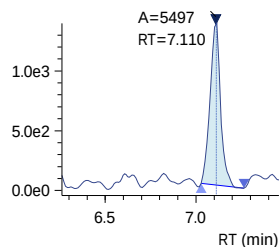
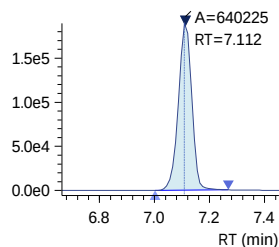
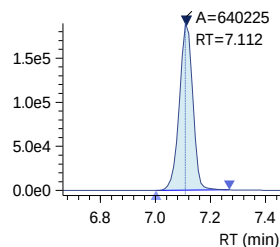
1.40e3

Q 402.10>79.90 (-)

7.44e4

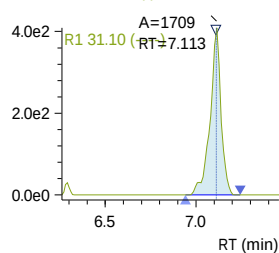
ISTD 402.10>79.90 (-)

7.44e4



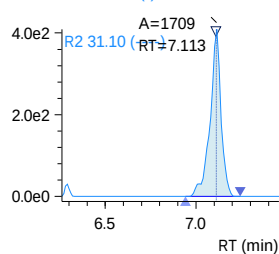
R1 413.00>169.00 (-)

4.09e2



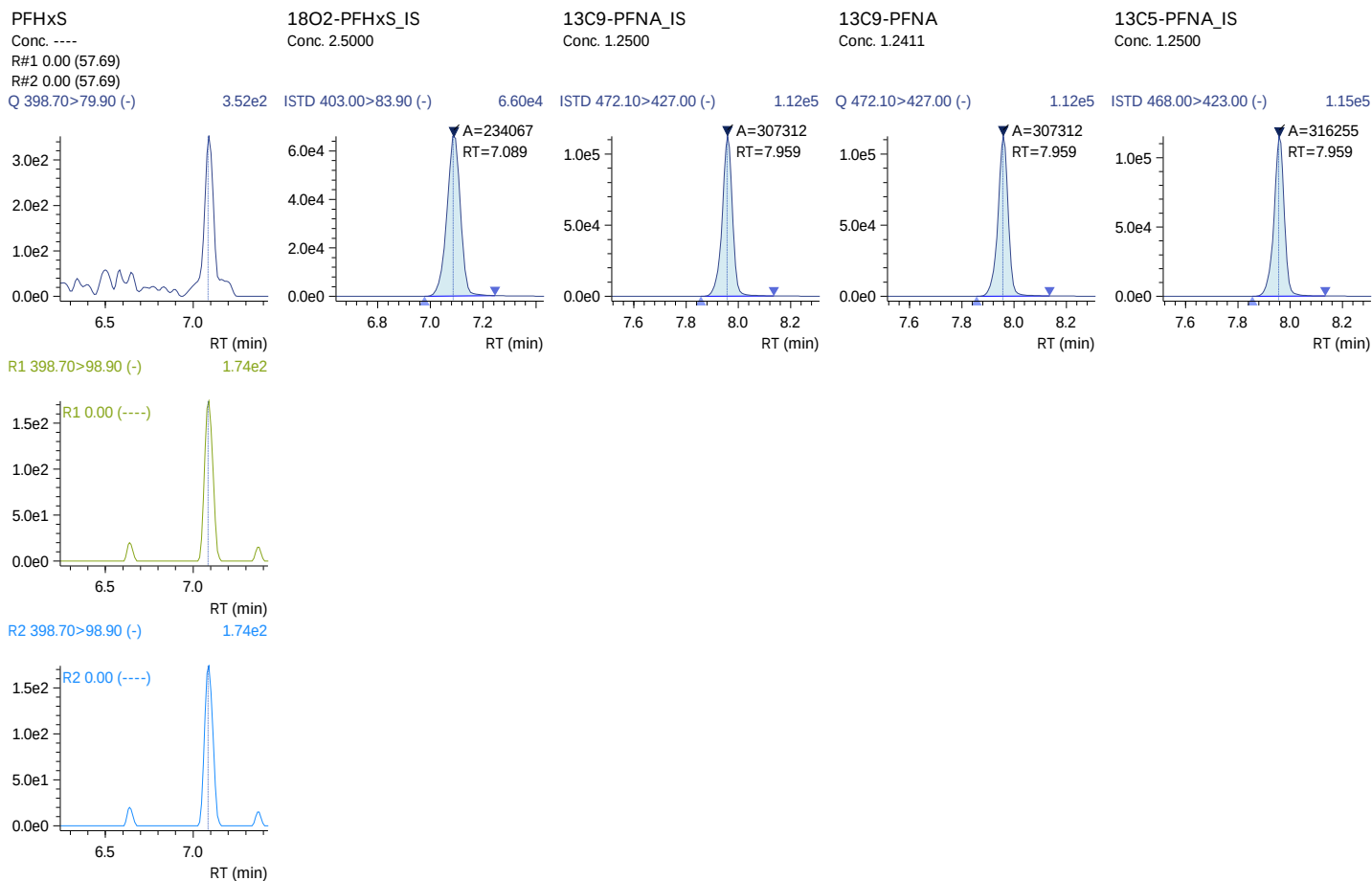
R2 413.00>169.00 (-)

4.09e2



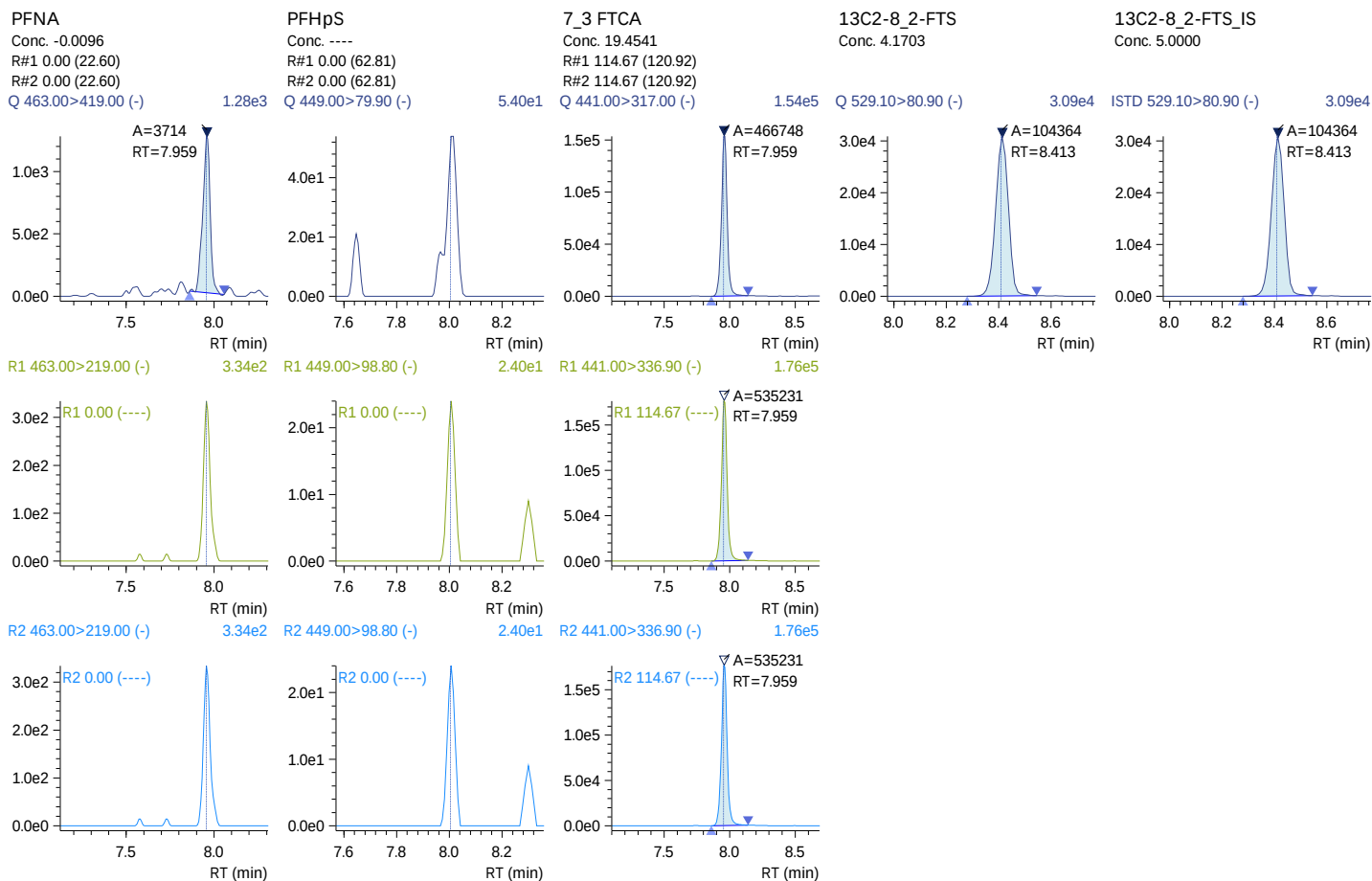


240118_017 (continued)



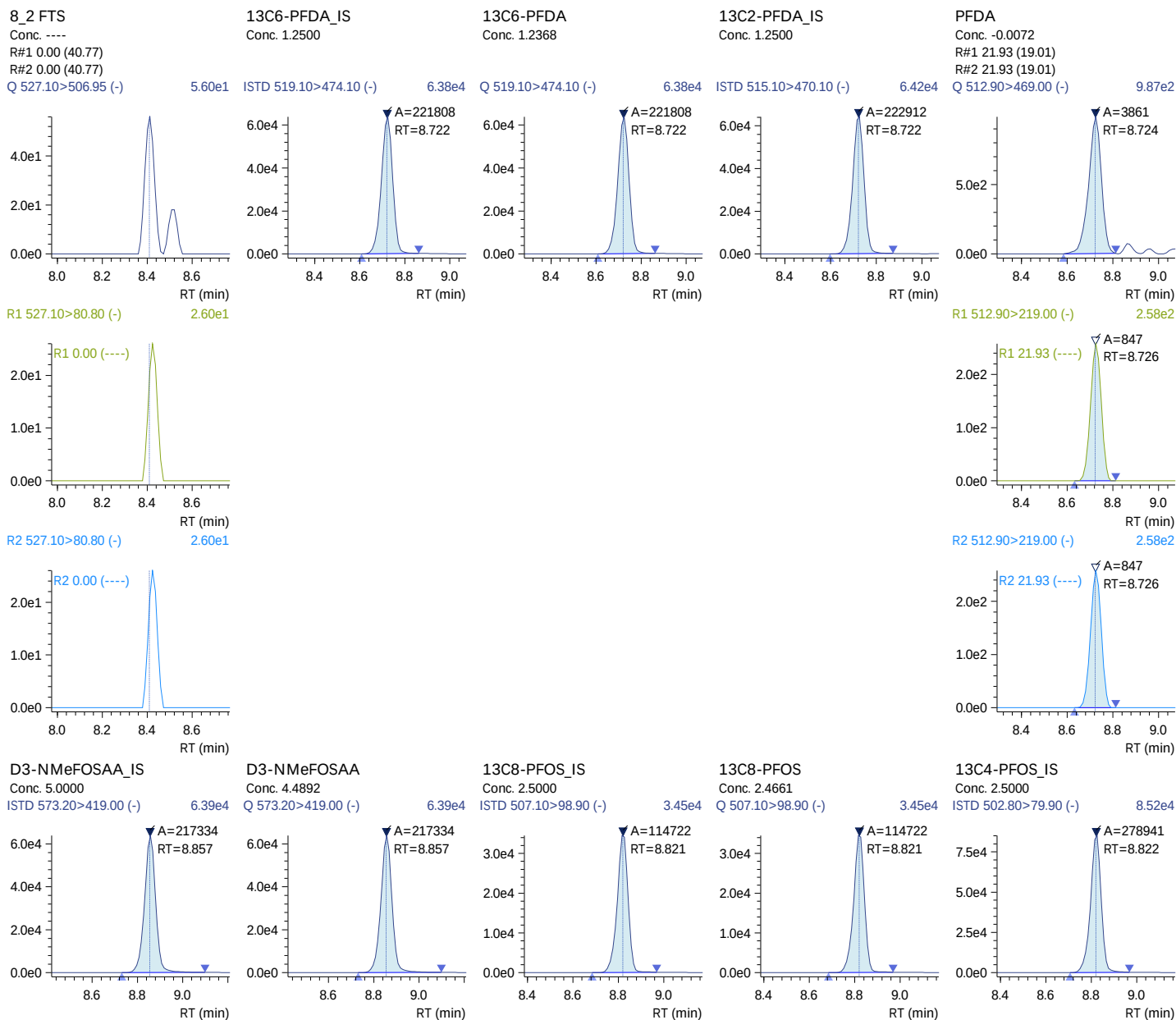


240118_017 (continued)



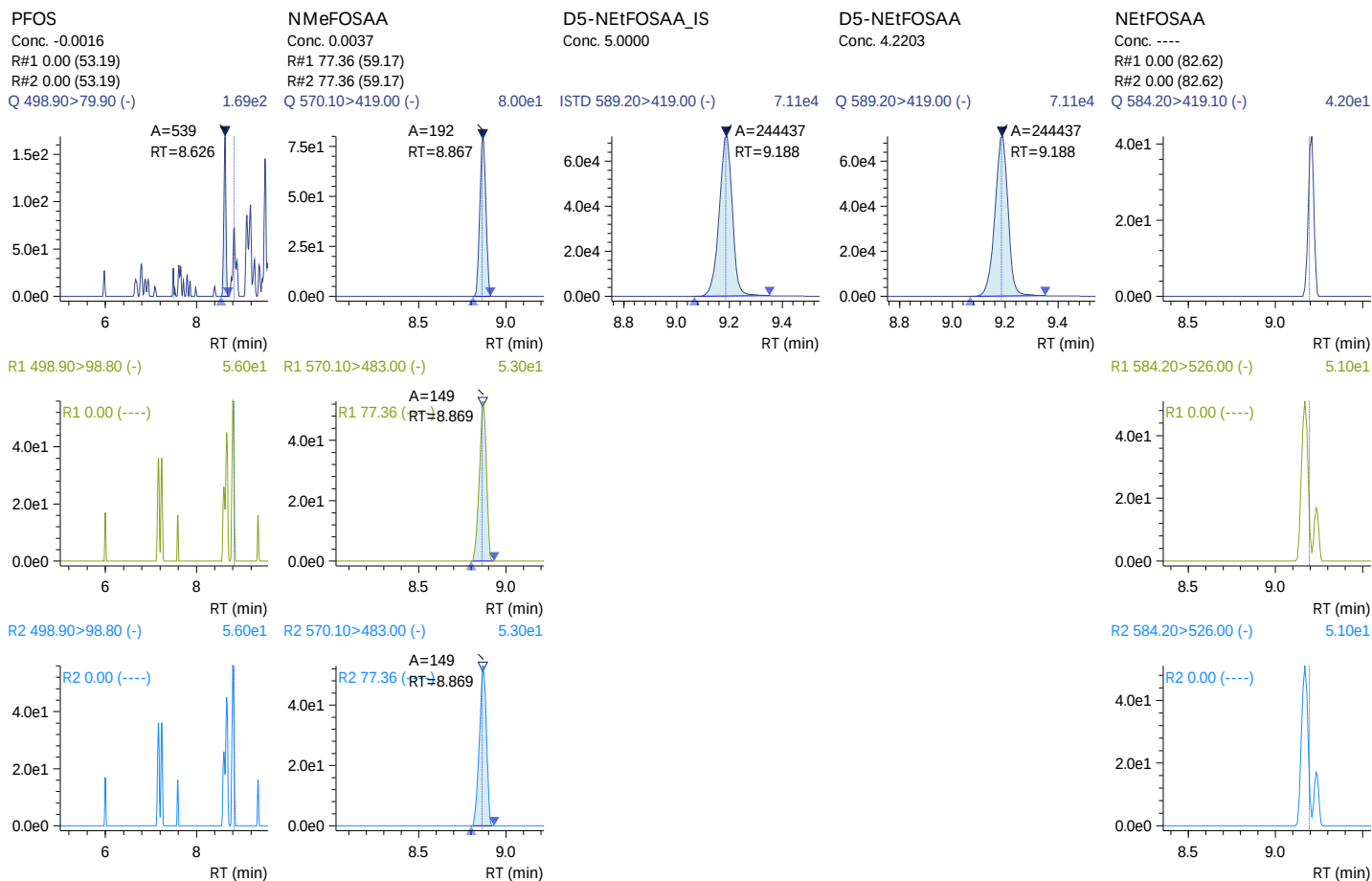


240118_017 (continued)





240118_017 (continued)

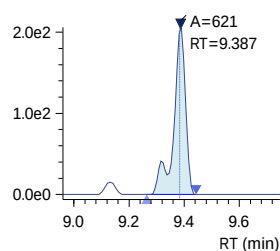




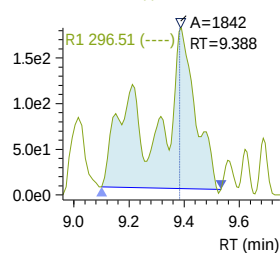
240118_017 (continued)

9-Cl-PF3ONS

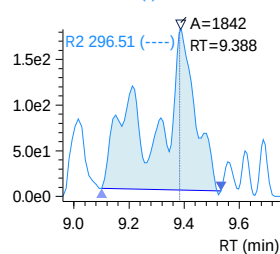
Conc. 0.0012
R#1 296.51 (31.76)
R#2 296.51 (31.76)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-) 1.83e2

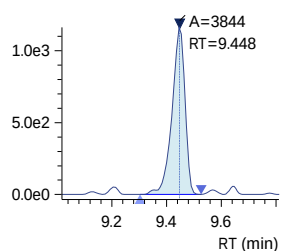


R2 532.80>353.00 (-) 1.83e2

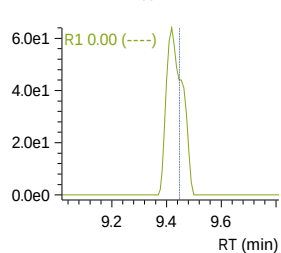


PFUnDA

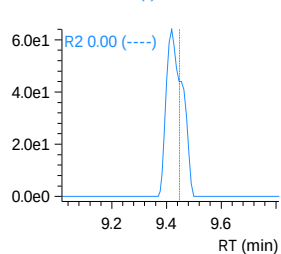
Conc. -0.0102
R#1 0.00 (12.31)
R#2 0.00 (12.31)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-) 6.40e1

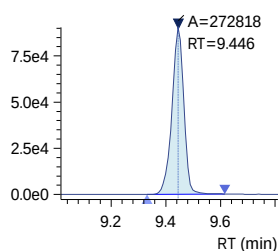


R2 563.10>269.10 (-) 6.40e1



13C7-PFUnDA_IS

Conc. 1.2500
ISTD 570.00>525.10 (-)



Q 570.00>525.10 (-) 9.05e4

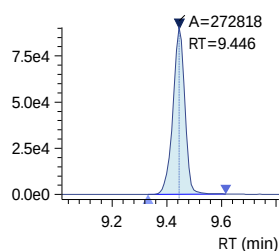


Q 570.00>525.10 (-) 9.05e4



13C7-PFUnDA

Conc. 1.2753
Q 570.00>525.10 (-)



Q 570.00>525.10 (-) 9.05e4

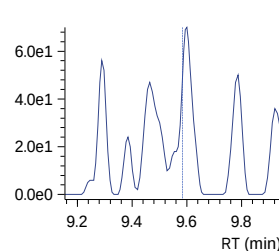


Q 570.00>525.10 (-) 9.05e4

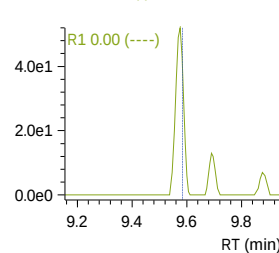


PFNS

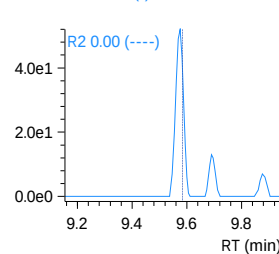
Conc. ----
R#1 0.00 (63.31)
R#2 0.00 (63.31)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-) 5.20e1

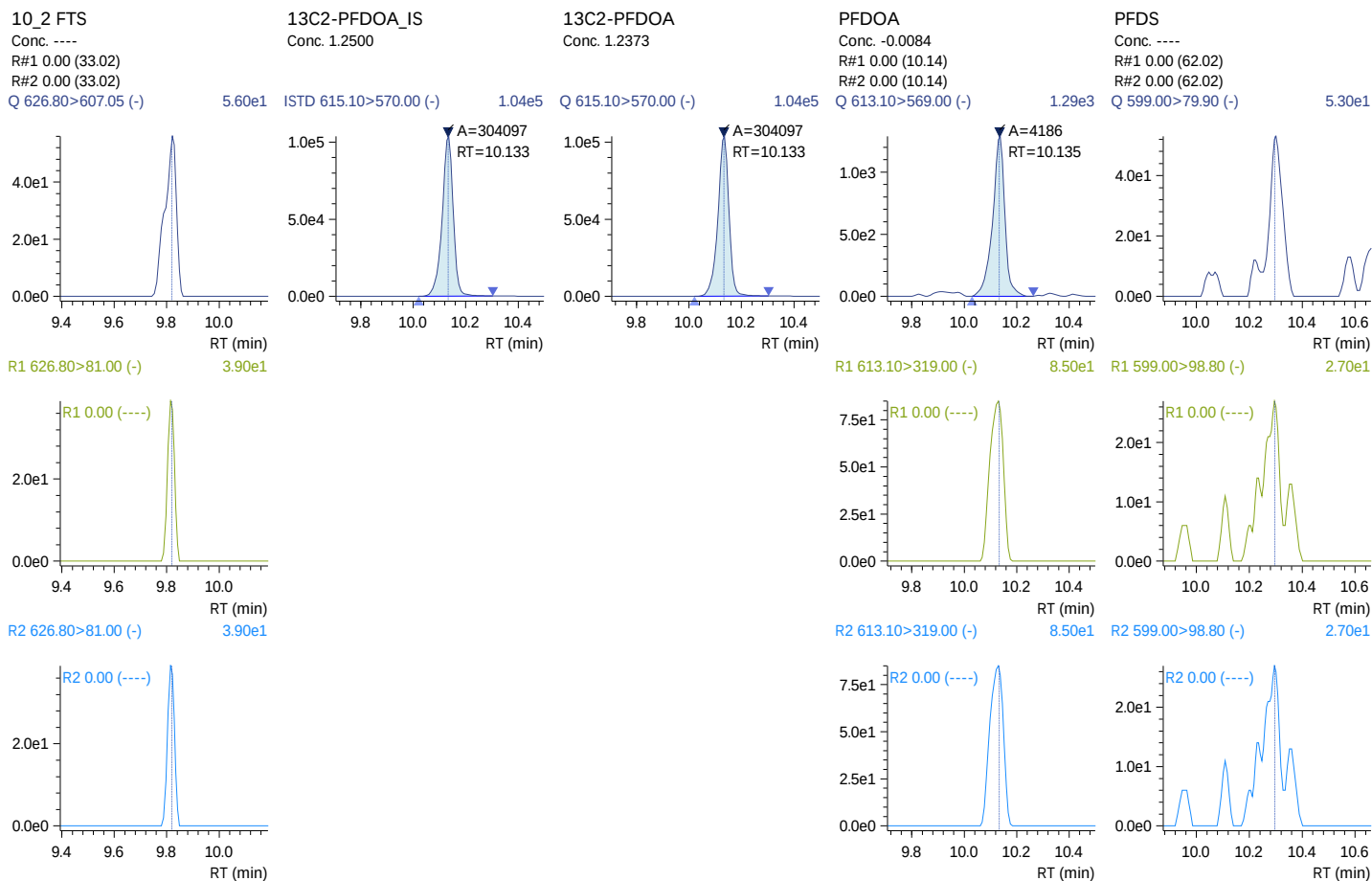


R2 548.80>98.80 (-) 5.20e1



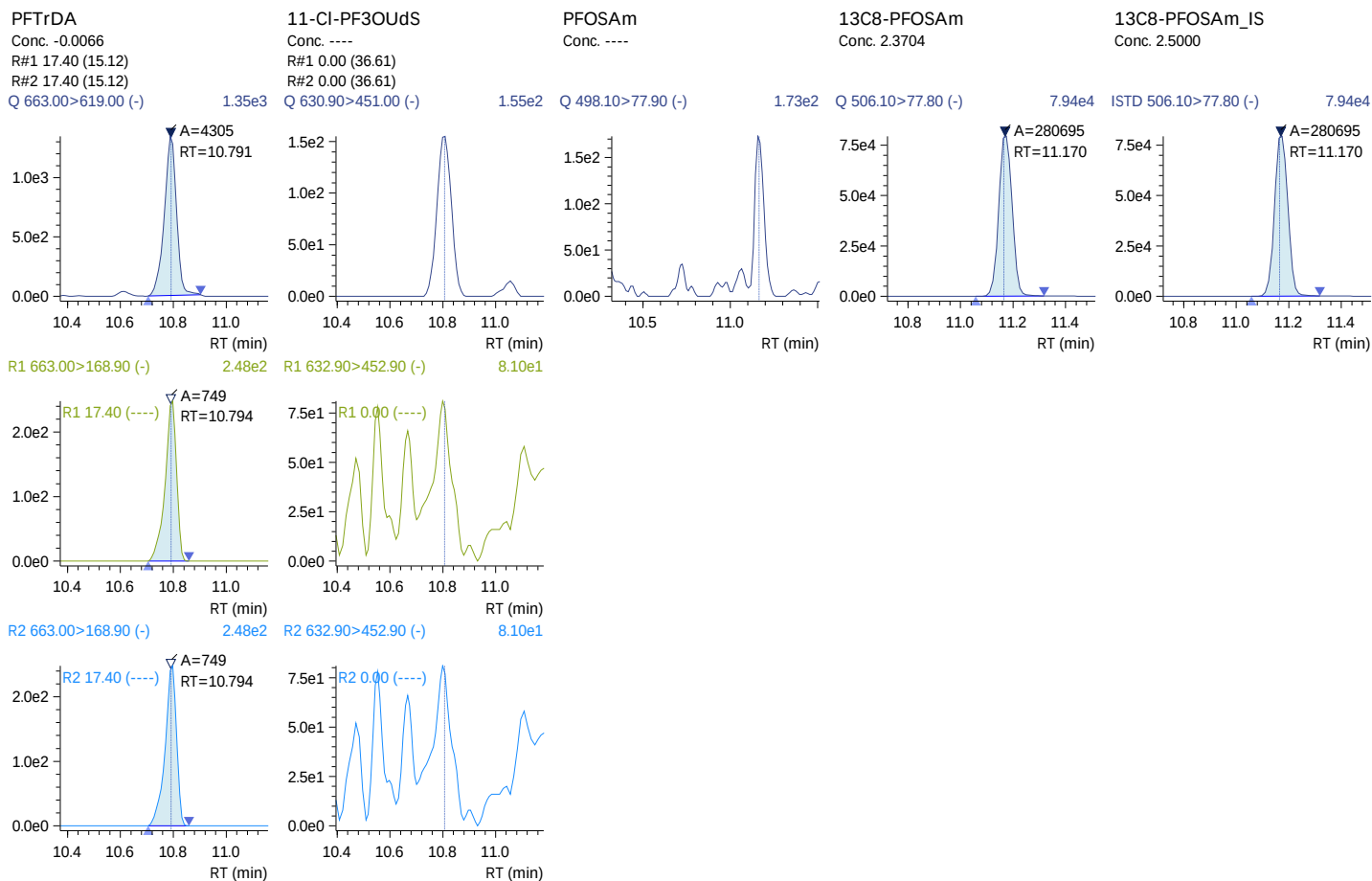


240118_017 (continued)



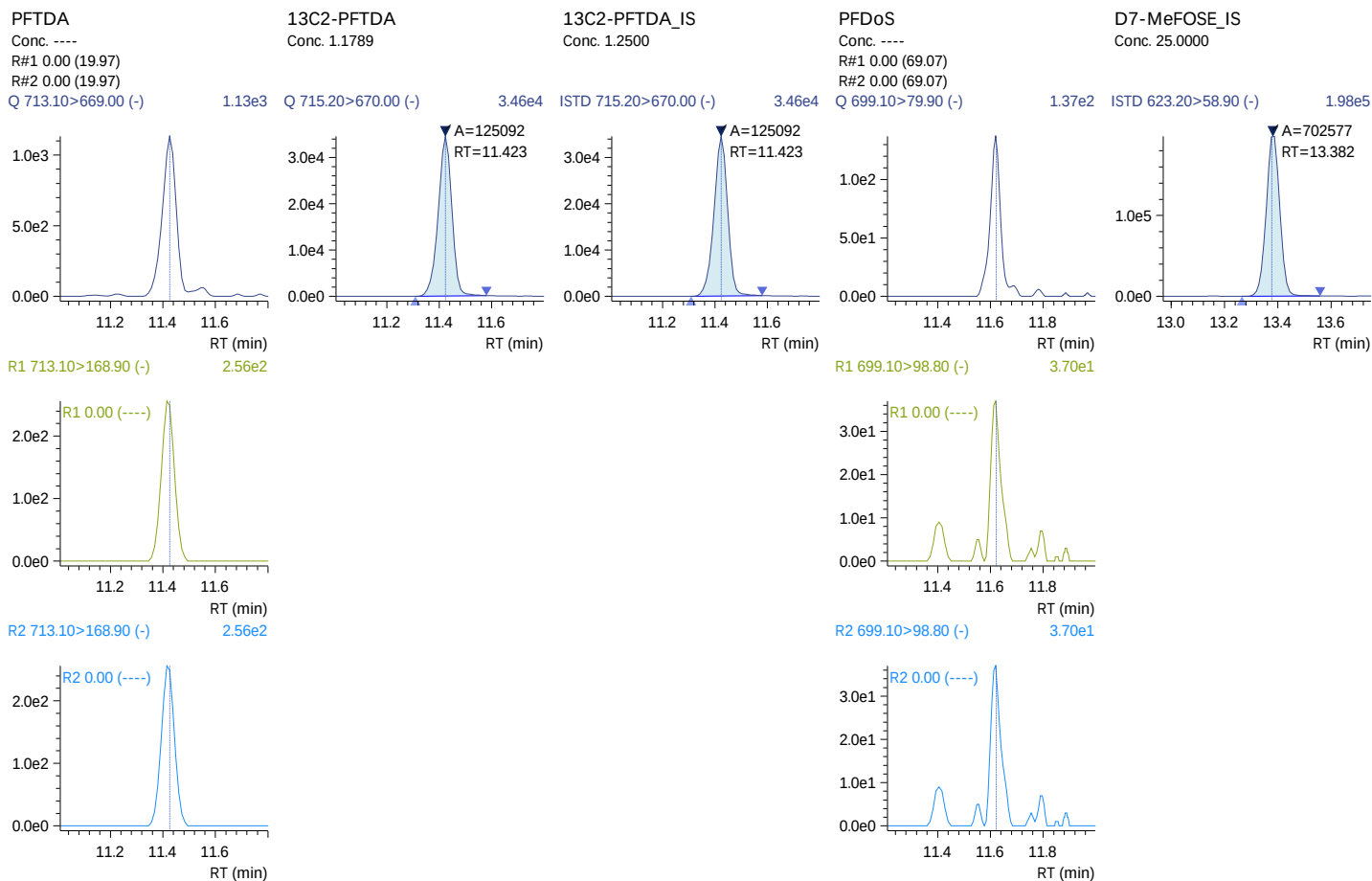


240118_017 (continued)





240118_017 (continued)





240118_017 (continued)

D7-MeFOSE
 Conc. 24.0650

MeFOSE
 Conc. ----

¹³C2-PFHxDA_IS
 Conc. 2.5000

¹³C2-PFHxDA
 Conc. 2.4320

PFHxDA
 Conc. 0.0172
 R#1 14.86 (11.64)
 R#2 14.86 (11.64)

Q 623.20>58.90 (-)

1.98e5

Q 616.10>59.00 (-)

4.70e1

ISTD 815.00>770.05 (-)

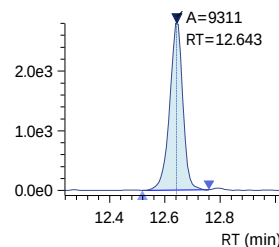
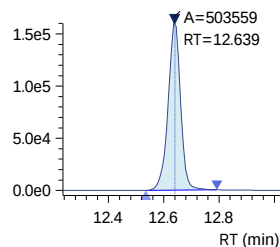
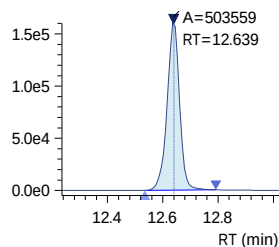
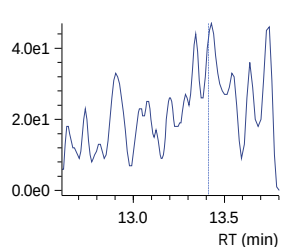
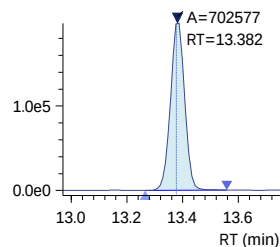
1.60e5

Q 815.00>770.05 (-)

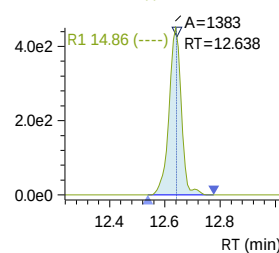
1.60e5

Q 813.00>768.95 (-)

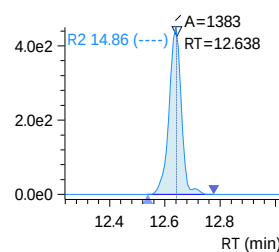
2.80e3



R1 813.00>218.95 (-) 4.50e2



R2 813.00>218.95 (-) 4.50e2





240118_017 (continued)

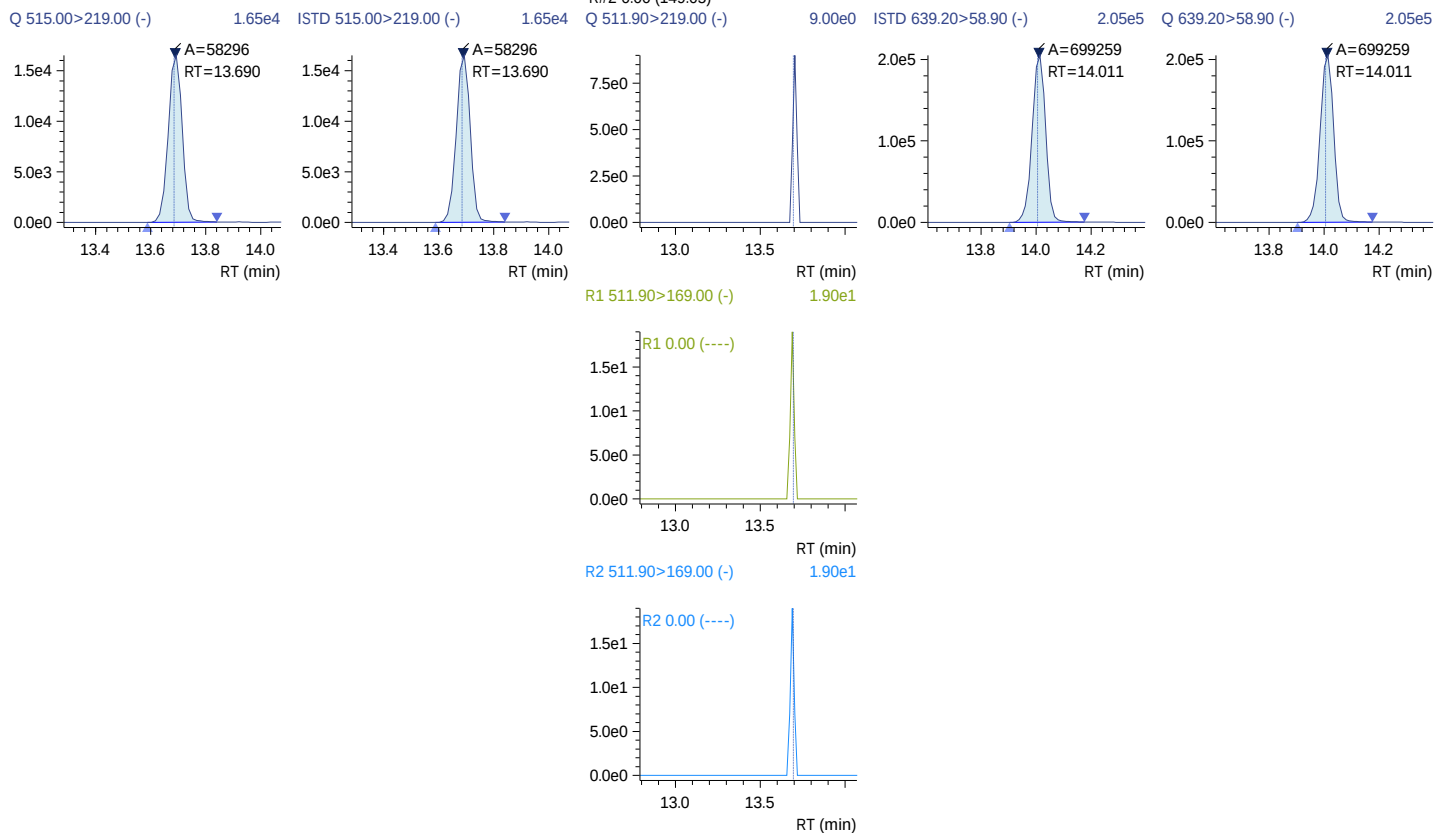
D3-MeFOSA
 Conc. 2.4446

D3-MeFOSA_IS
 Conc. 2.5000

MeFOSA
 Conc. ----
 R#1 0.00 (149.05)
 R#2 0.00 (149.05)

D9-EtFOSE_IS
 Conc. 25.0000

D9-EtFOSE
 Conc. 23.5822





240118_017 (continued)

EtFOSE
Conc. ----

D5-EtFOSAm
Conc. 2.3300

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. ----

PFODA
Conc. 0.0365

Q 630.00>59.00 (-)

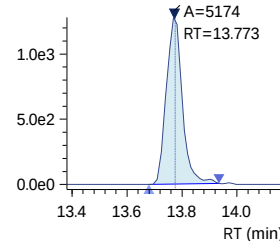
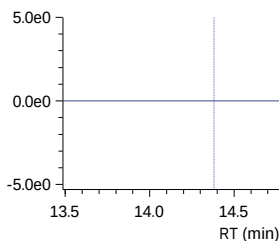
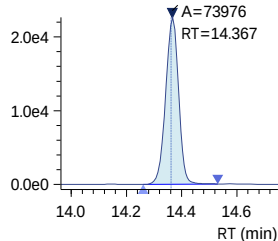
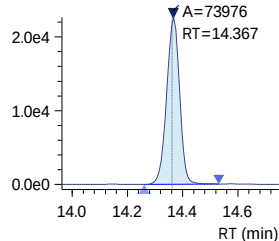
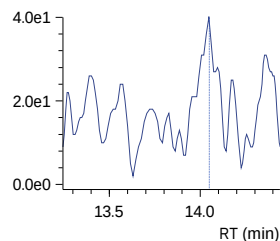
4.00e1 Q 531.10>219.00 (-)

2.27e4 ISTD 531.10>219.00 (-)

2.27e4 Q 526.00>219.00 (-)

0.00e0 Q 913.00>868.65 (-)

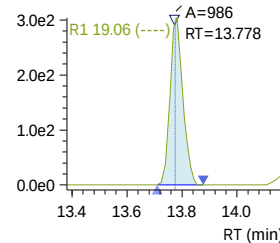
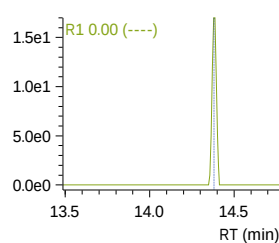
1.28e3



R1 526.00>169.00 (-)

1.70e1 R1 913.00>169.00 (-)

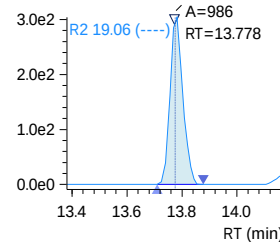
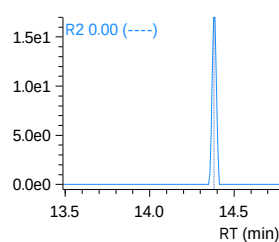
3.04e2



R2 526.00>169.00 (-)

1.70e1 R2 913.00>169.00 (-)

3.04e2





240118_018

Sample ID: TDCA CHECK
Date Acquired: 1/18/2024 6:43:34 PM
Acquired by: System Administrator
Data File: 240118_018
Vial: 12 | Inj. Volume: 10.0000uL | Tray: 1

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	----	----	----	----	----	----	----	----
13C4-PFBA_IS	216.80>171.90	----	----	----	----	----	----	----	----	----
13C3-PFBA_IS	216.00>172.00	----	----	----	----	----	----	----	----	----
PFBA	212.80>169.05	----	----	----	----	----	----	----	----	----
PFMPA	229.00>84.90	----	----	----	----	----	----	----	----	----
3_3 FTCA	241.00>177.10	241.00>117.00	----	0	0.00	141.17	0	0.00	141.17	----
13C5-PFPeA	268.30>223.00	----	----	----	----	----	----	----	----	----
13C5-PFPeA_IS	268.30>223.00	----	----	----	----	----	----	----	----	----
PFPeA	263.00>219.00	----	----	----	----	----	----	----	----	----
PFMBA	279.00>84.95	----	----	----	----	----	----	----	----	----
13C2-4_2 FTS	329.10>80.90	----	----	----	----	----	----	----	----	----
13C2-4_2 FTS_IS	329.10>80.90	----	----	----	----	----	----	----	----	----
4_2 FTS	327.10>307.00	327.10>80.90	----	0	0.00	29.06	0	0.00	29.06	----
13C3-PFBS_IS	302.10>79.90	----	----	----	----	----	----	----	----	----
PFBS	298.70>79.90	298.70>98.80	----	0	0.00	46.72	0	0.00	46.72	----
13C3-PFBS	302.10>79.90	----	----	----	----	----	----	----	----	----
NFDHA	295.00>201.00	295.00>84.90	----	0	0.00	40.25	0	0.00	40.25	----
13C5-PFHxA	318.00>273.00	----	----	----	----	----	----	----	----	----
13C5-PFHxA_IS	318.00>273.00	----	----	----	----	----	----	----	----	----
13C2-PFHxA_IS	315.10>270.00	----	----	----	----	----	----	----	----	----
PFHxA	313.00>269.00	----	----	----	----	----	----	----	----	----
PFEESA	314.80>135.00	314.80>82.90	----	0	0.00	6.11	0	0.00	6.11	----
13C3-HFPO-DA	286.90>168.90	----	----	----	----	----	----	----	----	----
13C3-HFPO-DA_IS	286.90>168.90	----	----	----	----	----	----	----	----	----
HFPO-DA	284.90>168.90	284.90>184.90	----	0	0.00	65.61	0	0.00	65.61	----
5_3 FTCA	341.00>237.05	341.00>217.00	----	0	0.00	158.86	0	0.00	158.86	----
PFPeS	349.10>79.90	349.10>98.80	----	0	0.00	55.80	0	0.00	55.80	----
13C4-PFHpA	367.10>322.00	----	----	----	----	----	----	----	----	----
13C4-PFHpA_IS	367.10>322.00	----	----	----	----	----	----	----	----	----
PFHpA	363.10>319.00	363.10>169.00	----	0	0.00	21.50	0	0.00	21.50	----
DONA	376.90>250.90	376.90>84.80	----	0	0.00	29.66	0	0.00	29.66	----
13C2-6_2 FTS_IS	429.10>80.90	----	----	----	----	----	----	----	----	----
13C2-6_2 FTS	429.10>80.90	----	----	----	----	----	----	----	----	----
6_2 FTS	427.10>407.00	427.10>80.90	----	0	0.00	41.15	0	0.00	41.15	----
13C4-PFOA_IS	417.10>172.00	----	----	----	----	----	----	----	----	----
13C8-PFOA_IS	421.10>376.00	----	----	----	----	----	----	----	----	----

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240118_018 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	----	----	----	----	----	----	----	----
PFOA	413.00>369.00	413.00>169.00	----	0	0.00	31.89	0	0.00	31.89	
13C3-PFHxS	402.10>79.90	----	----	----	----	----	----	----	----	----
13C3-PFHxS_IS	402.10>79.90	----	----	----	----	----	----	----	----	----
PFHxS	398.70>79.90	398.70>98.90	----	0	0.00	56.62	0	0.00	56.62	
18O2-PFHxS_IS	403.00>83.90	----	----	----	----	----	----	----	----	----
13C9-PFNA_IS	472.10>427.00	----	----	----	----	----	----	----	----	----
13C9-PFNA	472.10>427.00	----	----	----	----	----	----	----	----	----
13C5-PFNA_IS	468.00>423.00	----	----	----	----	----	----	----	----	----
PFNA	463.00>419.00	463.00>219.00	----	0	0.00	23.17	0	0.00	23.17	
PFHpS	449.00>79.90	449.00>98.80	----	0	0.00	56.96	0	0.00	56.96	
7_3 FTCA	441.00>317.00	441.00>336.90	----	0	0.00	117.47	0	0.00	117.47	
13C2-8_2-FTS	529.10>80.90	----	----	----	----	----	----	----	----	----
13C2-8_2-FTS_IS	529.10>80.90	----	----	----	----	----	----	----	----	----
8_2 FTS	527.10>506.95	527.10>80.80	----	0	0.00	49.59	0	0.00	49.59	
13C6-PFDA_IS	519.10>474.10	----	----	----	----	----	----	----	----	----
13C6-PFDA	519.10>474.10	----	----	----	----	----	----	----	----	----
13C2-PFDA_IS	515.10>470.10	----	----	----	----	----	----	----	----	----
PFDA	512.90>469.00	512.90>219.00	----	0	0.00	19.00	0	0.00	19.00	
D3-NMeFOSAA_IS	573.20>419.00	----	----	----	----	----	----	----	----	----
D3-NMeFOSAA	573.20>419.00	----	----	----	----	----	----	----	----	----
13C8-PFOS_IS	507.10>98.90	----	----	----	----	----	----	----	----	----
13C8-PFOS	507.10>98.90	----	----	----	----	----	----	----	----	----
13C4-PFOS_IS	502.80>79.90	----	2380	----	----	----	----	----	----	----
PFOS	498.90>79.90	498.90>98.80	----	0	0.00	52.47	0	0.00	52.47	
NMeFOSAA	570.10>419.00	570.10>483.00	----	0	0.00	55.15	0	0.00	55.15	
D5-NetFOSAA_IS	589.20>419.00	----	----	----	----	----	----	----	----	----
D5-NetFOSAA	589.20>419.00	----	----	----	----	----	----	----	----	----
NetFOSAA	584.20>419.10	584.20>526.00	----	0	0.00	81.95	0	0.00	81.95	
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	----	0	0.00	32.76	0	0.00	32.76	
PFUnDA	563.10>519.00	563.10>269.10	----	0	0.00	13.12	0	0.00	13.12	
13C7-PFUnDA_IS	570.00>525.10	----	----	----	----	----	----	----	----	----
13C7-PFUnDA	570.00>525.10	----	----	----	----	----	----	----	----	----
PFNS	548.80>79.90	548.80>98.80	----	0	0.00	65.22	0	0.00	65.22	
10_2 FTS	626.80>607.05	626.80>81.00	----	0	0.00	37.13	0	0.00	37.13	
13C2-PFDOA_IS	615.10>570.00	----	----	----	----	----	----	----	----	----
13C2-PFDOA	615.10>570.00	----	----	----	----	----	----	----	----	----
PFDOA	613.10>569.00	613.10>319.00	----	0	0.00	11.29	0	0.00	11.29	
PFDS	599.00>79.90	599.00>98.80	----	0	0.00	60.18	0	0.00	60.18	
PFTDA	663.00>619.00	663.00>168.90	----	0	0.00	17.64	0	0.00	17.64	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240118_018 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	----	0	0.00	36.44	0	0.00	36.44	
PFOSAm	498.10>77.90	----	----	----	----	----	----	----	----	
13C8-PFOSAm	506.10>77.80	----	----	----	----	----	----	----	----	
13C8-PFOSAm_IS	506.10>77.80	----	----	----	----	----	----	----	----	
PFTDA	713.10>669.00	713.10>168.90	----	0	0.00	22.96	0	0.00	22.96	
13C2-PFTDA	715.20>670.00	----	----	----	----	----	----	----	----	
13C2-PFTDA_IS	715.20>670.00	----	----	----	----	----	----	----	----	
PFDoS	699.10>79.90	699.10>98.80	----	0	0.00	67.40	0	0.00	67.40	
D7-MeFOSE_IS	623.20>58.90	----	----	----	----	----	----	----	----	
D7-MeFOSE	623.20>58.90	----	----	----	----	----	----	----	----	
MeFOSE	616.10>59.00	----	----	----	----	----	----	----	----	
13C2-PFHxDA_IS	815.00>770.05	----	2100	----	----	----	----	----	----	
13C2-PFHxDA	815.00>770.05	----	2100	----	----	----	----	----	----	
PFHxDA	813.00>768.95	813.00>218.95	----	0	0.00	13.90	0	0.00	13.90	
D3-MeFOSA	515.00>219.00	----	----	----	----	----	----	----	----	
D3-MeFOSA_IS	515.00>219.00	----	----	----	----	----	----	----	----	
MeFOSA	511.90>219.00	511.90>169.00	----	0	0.00	140.79	0	0.00	140.79	
D9-EtFOSE_IS	639.20>58.90	----	----	----	----	----	----	----	----	
D9-EtFOSE	639.20>58.90	----	----	----	----	----	----	----	----	
EtFOSE	630.00>59.00	----	----	----	----	----	----	----	----	
D5-EtFOSAm	531.10>219.00	----	----	----	----	----	----	----	----	
D5-EtFOSAm_IS	531.10>219.00	----	----	----	----	----	----	----	----	
EtFOSAm	526.00>219.00	526.00>169.00	----	0	0.00	163.90	0	0.00	163.90	
PFODA	913.00>868.65	913.00>169.00	----	0	0.00	27.03	0	0.00	27.03	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240118_018

Sample ID: TDCA CHECK
Date Acquired: 1/18/2024 6:43:34 PM
Acquired by: System Administrator
Data File: 240118_018
Vial: 12 | Inj. Volume: 10.0000uL | Tray: 1

Check PFOS

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Std. Conc.	Conc.	Unit	Flag ID
13C4-PFBA	ND(W/B)	----	----	----	----	----	13C3-PFBA_IS	----	ISTD Error	ng/mL	
13C4-PFBA_IS	ND(W/B)	----	----	----	----	----	----	----	----	ng/mL	
13C3-PFBA_IS	ND(W/B)	----	----	----	----	----	----	----	----	ng/mL	
PFBA	ND(W/B)	----	----	----	----	----	13C4-PFBA_IS	----	ISTD Error	ng/mL	
PFMPA	ND(W/B)	----	----	----	----	----	13C5-PFPeA_IS	----	ISTD Error	ng/mL	
3_3 FTCA	ND(W/B)	----	----	----	----	----	13C5-PFPeA_IS	----	ISTD Error	ng/mL	
13C5-PFPeA	ND(W/B)	----	----	----	----	----	13C2-PFHxA_IS	----	ISTD Error	ng/mL	
13C5-PFPeA_IS	ND(W/B)	----	----	----	----	----	----	----	----	ng/mL	
PFPeA	ND(W/B)	----	----	----	----	----	13C5-PFPeA_IS	----	ISTD Error	ng/mL	
PFMBA	ND(W/B)	----	----	----	----	----	13C5-PFPeA_IS	----	ISTD Error	ng/mL	
13C2-4_2 FTS	ND(W/B)	----	----	----	----	----	18O2-PFHxS_IS	----	ISTD Error	ng/mL	
13C2-4_2 FTS_IS	ND(W/B)	----	----	----	----	----	----	----	----	ng/mL	
4_2 FTS	ND(W/B)	----	----	----	----	----	13C2-4_2 FTS_IS	----	ISTD Error	ng/mL	
13C3-PFBS_IS	ND(W/B)	----	----	----	----	----	----	----	----	ng/mL	
PFBS	ND(W/B)	----	----	----	----	----	13C3-PFBS_IS	----	ISTD Error	ng/mL	
13C3-PFBS	ND(W/B)	----	----	----	----	----	18O2-PFHxS_IS	----	ISTD Error	ng/mL	
NFDHA	ND(W/B)	----	----	----	----	----	13C5-PFHxA_IS	----	ISTD Error	ng/mL	
13C5-PFHxA	ND(W/B)	----	----	----	----	----	13C2-PFHxA_IS	----	ISTD Error	ng/mL	
13C5-PFHxA_IS	ND(W/B)	----	----	----	----	----	----	----	----	ng/mL	
13C2-PFHxA_IS	ND(W/B)	----	----	----	----	----	----	----	----	ng/mL	
PFHxA	ND(W/B)	----	----	----	----	----	13C5-PFHxA_IS	----	ISTD Error	ng/mL	
PFEESA	ND(W/B)	----	----	----	----	----	13C5-PFHxA_IS	----	ISTD Error	ng/mL	
13C3-HFPO-DA	ND(W/B)	----	----	----	----	----	13C2-PFHxA_IS	----	ISTD Error	ng/mL	
13C3-HFPO-DA_IS	ND(W/B)	----	----	----	----	----	----	----	----	ng/mL	
HFPO-DA	ND(W/B)	----	----	----	----	----	13C3-HFPO-DA_IS	----	ISTD Error	ng/mL	
5_3 FTCA	ND(W/B)	----	----	----	----	----	13C5-PFHxA_IS	----	ISTD Error	ng/mL	
PFPeS	ND(W/B)	----	----	----	----	----	13C3-PFHxS_IS	----	ISTD Error	ng/mL	
13C4-PFHpA	ND(W/B)	----	----	----	----	----	13C2-PFHxA_IS	----	ISTD Error	ng/mL	
13C4-PFHpA_IS	ND(W/B)	----	----	----	----	----	----	----	----	ng/mL	
PFHpA	ND(W/B)	----	----	----	----	----	13C4-PFHpA_IS	----	ISTD Error	ng/mL	
DONA	ND(W/B)	----	----	----	----	----	13C3-HFPO-DA_IS	----	ISTD Error	ng/mL	
13C2-6_2 FTS_IS	ND(W/B)	----	----	----	----	----	----	----	----	ng/mL	
13C2-6_2 FTS	ND(W/B)	----	----	----	----	----	18O2-PFHxS_IS	----	ISTD Error	ng/mL	
6_2 FTS	ND(W/B)	----	----	----	----	----	13C2-6_2 FTS_IS	----	ISTD Error	ng/mL	
13C4-PFOA_IS	ND(W/B)	----	----	----	----	----	----	----	----	ng/mL	
13C8-PFOA_IS	ND(W/B)	----	----	----	----	----	----	----	----	ng/mL	
13C8-PFOA	ND(W/B)	----	----	----	----	----	13C4-PFOA_IS	----	ISTD Error	ng/mL	
PFOA	ND(W/B)	----	----	----	----	----	13C8-PFOA_IS	----	ISTD Error	ng/mL	
13C3-PFHxS	ND(W/B)	----	----	----	----	----	18O2-PFHxS_IS	----	ISTD Error	ng/mL	
13C3-PFHxS_IS	ND(W/B)	----	----	----	----	----	----	----	----	ng/mL	
PFHxS	ND(W/B)	----	----	----	----	----	13C3-PFHxS_IS	----	ISTD Error	ng/mL	
18O2-PFHxS_IS	ND(W/B)	----	----	----	----	----	----	----	----	ng/mL	
13C9-PFNA_IS	ND(W/B)	----	----	----	----	----	----	----	----	ng/mL	
13C9-PFNA	ND(W/B)	----	----	----	----	----	13C5-PFNA_IS	----	ISTD Error	ng/mL	
13C5-PFNA_IS	ND(W/B)	----	----	----	----	----	----	----	----	ng/mL	
PFNA	ND(W/B)	----	----	----	----	----	13C9-PFNA_IS	----	ISTD Error	ng/mL	
PFHpS	ND(W/B)	----	----	----	----	----	13C8-PFOS_IS	----	ISTD Error	ng/mL	
7_3 FTCA	ND(W/B)	----	----	----	----	----	13C5-PFHxA_IS	----	ISTD Error	ng/mL	
13C2-8_2-FTS	ND(W/B)	----	----	----	----	----	18O2-PFHxS_IS	----	ISTD Error	ng/mL	
13C2-8_2-FTS_IS	ND(W/B)	----	----	----	----	----	----	----	----	ng/mL	
8_2 FTS	ND(W/B)	----	----	----	----	----	13C2-8_2-FTS_IS	----	ISTD Error	ng/mL	
13C6-PFDA_IS	ND(W/B)	----	----	----	----	----	----	----	----	ng/mL	
13C6-PFDA	ND(W/B)	----	----	----	----	----	13C2-PFDA_IS	----	ISTD Error	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_018 (continued)

(Table continued from previous page)

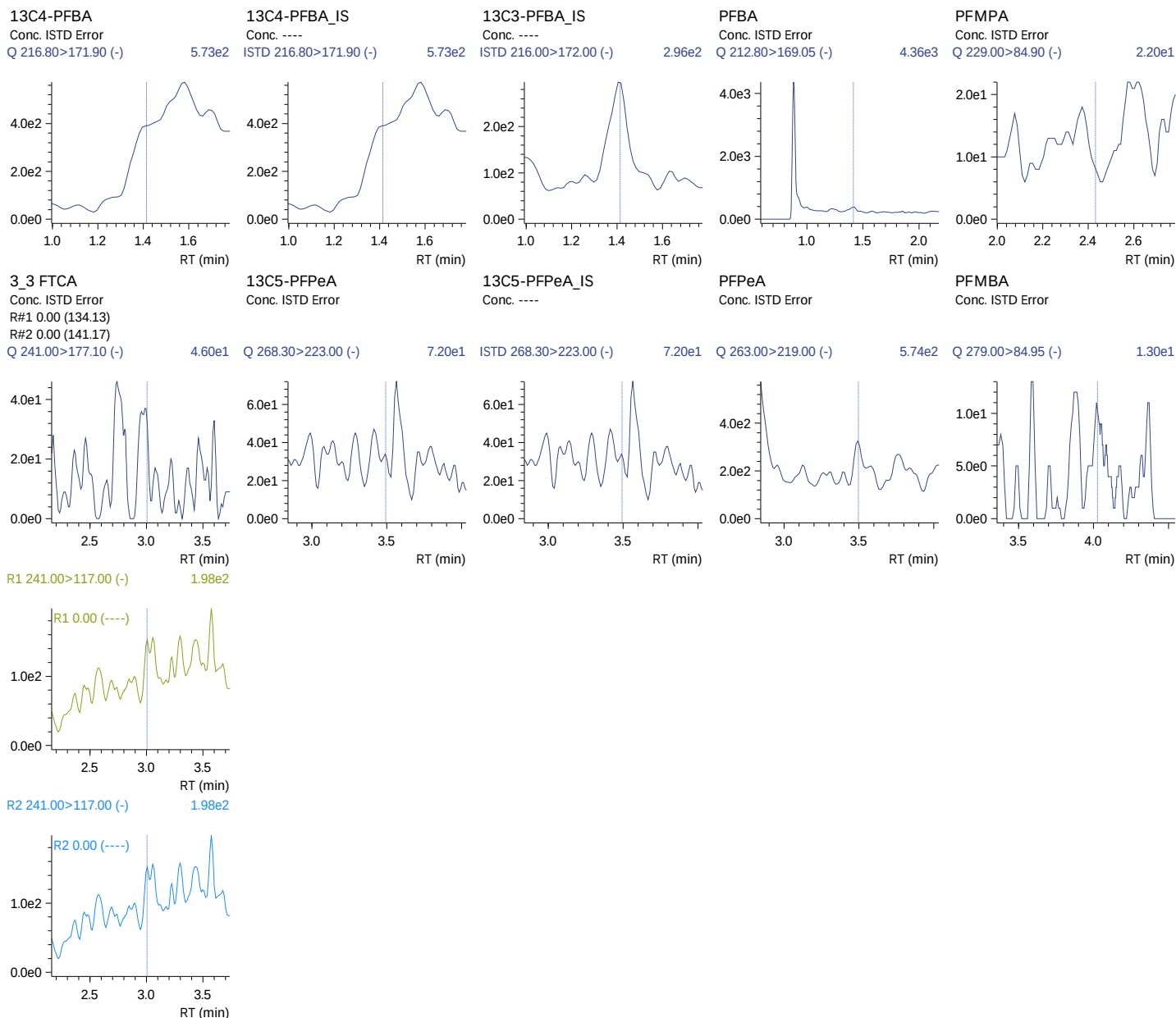
Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Std. Conc.	Conc.	Unit	Flag ID
13C2-PFDA_IS	ND(W/B)	----	----	----	----	----	----	----	----	ng/mL	
PFDA	ND(W/B)	----	----	----	----	----	13C6-PFDA_IS	----	ISTD Error	ng/mL	
D3-NMeFOSAA_IS	ND(W/B)	----	----	----	----	----	----	----	----	ng/mL	
D3-NMeFOSAA	ND(W/B)	----	----	----	----	2380	13C4-PFOS_IS	----	----	ng/mL	
13C8-PFOS_IS	ND(W/B)	----	----	----	----	----	----	----	----	ng/mL	
13C8-PFOS	ND(W/B)	----	----	----	----	2380	13C4-PFOS_IS	----	----	ng/mL	
13C4-PFOS_IS	Auto	8.816	-0.004	----	2380	2380	----	----	2.5000	ng/mL	
PFOS	ND(W/B)	----	----	----	----	----	13C8-PFOS_IS	----	ISTD Error	ng/mL	
NMeFOSAA	ND(W/B)	----	----	----	----	----	D3-NMeFOSAA_IS	----	ISTD Error	ng/mL	
D5-NetFOSAA_IS	ND(W/B)	----	----	----	----	----	----	----	----	ng/mL	
D5-NetFOSAA	ND(W/B)	----	----	----	----	2380	13C4-PFOS_IS	----	----	ng/mL	
NetFOSAA	ND(W/B)	----	----	----	----	----	D5-NetFOSAA_IS	----	ISTD Error	ng/mL	
9-CI-PF3ONS	ND(W/B)	----	----	----	----	----	13C3-HFPO-DA_IS	----	ISTD Error	ng/mL	
PFUnDA	ND(W/B)	----	----	----	----	----	13C7-PFUnDA_IS	----	ISTD Error	ng/mL	
13C7-PFUnDA_IS	ND(W/B)	----	----	----	----	----	----	----	----	ng/mL	
13C7-PFUnDA	ND(W/B)	----	----	----	----	----	13C2-PFDA_IS	----	ISTD Error	ng/mL	
PFNS	ND(W/B)	----	----	----	----	----	13C8-PFOS_IS	----	ISTD Error	ng/mL	
10_2_FTS	ND(W/B)	----	----	----	----	----	13C2-8_2-FTS_IS	----	ISTD Error	ng/mL	
13C2-PFDOA_IS	ND(W/B)	----	----	----	----	----	----	----	----	ng/mL	
13C2-PFDOA	ND(W/B)	----	----	----	----	----	13C2-PFDA_IS	----	ISTD Error	ng/mL	
PFDOA	ND(W/B)	----	----	----	----	----	13C2-PFDOA_IS	----	ISTD Error	ng/mL	
PFDS	ND(W/B)	----	----	----	----	----	13C8-PFOS_IS	----	ISTD Error	ng/mL	
PFTDA	ND(W/B)	----	----	----	----	----	13C2-PFTDA_IS	----	ISTD Error	ng/mL	
11-CI-PF3OUdS	ND(W/B)	----	----	----	----	----	13C3-HFPO-DA_IS	----	ISTD Error	ng/mL	
PFOSAm	ND(W/B)	----	----	----	----	----	13C8-PFOSAm_IS	----	ISTD Error	ng/mL	
13C8-PFOSAm	ND(W/B)	----	----	----	----	2380	13C4-PFOS_IS	----	----	ng/mL	
13C8-PFOSAm_IS	ND(W/B)	----	----	----	----	----	----	----	----	ng/mL	
PFTDA	ND(W/B)	----	----	----	----	----	13C2-PFTDA_IS	----	ISTD Error	ng/mL	
13C2-PFTDA	ND(W/B)	----	----	----	----	----	13C2-PFDA_IS	----	ISTD Error	ng/mL	
13C2-PFTDA_IS	ND(W/B)	----	----	----	----	----	----	----	----	ng/mL	
PFDoS	ND(W/B)	----	----	----	----	----	13C8-PFOS_IS	----	ISTD Error	ng/mL	
D7-MeFOSE_IS	ND(W/B)	----	----	----	----	----	----	----	----	ng/mL	
D7-MeFOSE	ND(W/B)	----	----	----	----	2380	13C4-PFOS_IS	----	----	ng/mL	
MeFOSE	ND(W/B)	----	----	----	----	----	D7-MeFOSE_IS	----	ISTD Error	ng/mL	
13C2-PFHXA_IS	Auto	12.635	-0.006	----	2100	2100	----	----	2.5000	ng/mL	
13C2-PFHXA	Auto	12.635	-0.006	----	2100	----	13C2-PFDA_IS	----	ISTD Error	ng/mL	
PFHXDA	ND(W/B)	----	----	----	----	2100	13C2-PFHXA_IS	----	----	ng/mL	
D3-MeFOSA	ND(W/B)	----	----	----	----	2380	13C4-PFOS_IS	----	----	ng/mL	
D3-MeFOSA_IS	ND(W/B)	----	----	----	----	----	----	----	----	ng/mL	
MeFOSA	ND(W/B)	----	----	----	----	----	D3-MeFOSA_IS	----	ISTD Error	ng/mL	
D9-EtFOSE_IS	ND(W/B)	----	----	----	----	----	----	----	----	ng/mL	
D9-EtFOSE	ND(W/B)	----	----	----	----	2380	13C4-PFOS_IS	----	----	ng/mL	
EtFOSE	ND(W/B)	----	----	----	----	----	D9-EtFOSE_IS	----	ISTD Error	ng/mL	
D5-EtFOSAm	ND(W/B)	----	----	----	----	2380	13C4-PFOS_IS	----	----	ng/mL	
D5-EtFOSAm_IS	ND(W/B)	----	----	----	----	----	----	----	----	ng/mL	
EtFOSAm	ND(W/B)	----	----	----	----	----	D5-EtFOSAm_IS	----	ISTD Error	ng/mL	
PFODA	ND(W/B)	----	----	----	----	2100	13C2-PFHXA_IS	----	----	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_018 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_018 (continued)

13C2-4_2 FTS
Conc. ISTD Error

13C2-4_2 FTS_IS
Conc. ----

4_2 FTS
Conc. ISTD Error
R#1 0.00 (34.14)
R#2 0.00 (29.06)

13C3-PFBS_IS
Conc. ----

PFBS
Conc. ISTD Error
R#1 0.00 (47.53)
R#2 0.00 (46.72)

Q 329.10>80.90 (-)

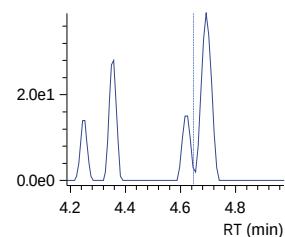
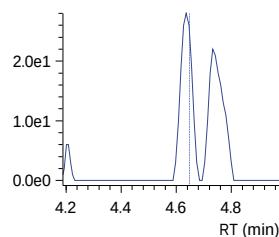
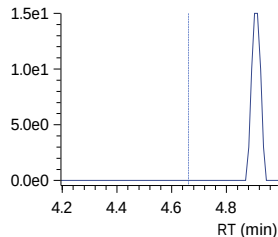
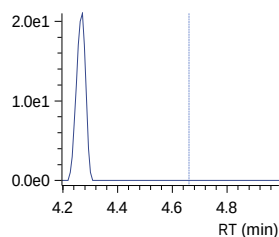
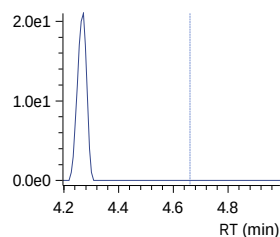
2.10e1 ISTD 329.10>80.90 (-)

2.10e1 Q 327.10>307.00 (-)

1.50e1 ISTD 302.10>79.90 (-)

2.80e1 Q 298.70>79.90 (-)

3.90e1

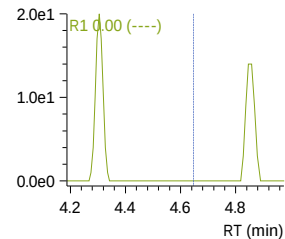
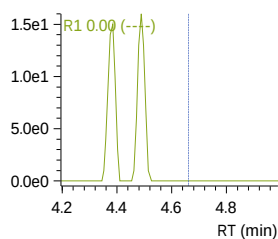


R1 327.10>80.90 (-)

1.60e1

R1 298.70>98.80 (-)

2.00e1

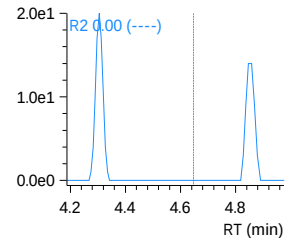
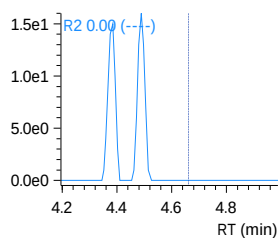


R2 327.10>80.90 (-)

1.60e1

R2 298.70>98.80 (-)

2.00e1





240118_018 (continued)

13C3-PFBS
Conc. ISTD Error

NFDHA
Conc. ISTD Error
R#1 0.00 (37.88)
R#2 0.00 (40.25)

13C5-PFHxA
Conc. ISTD Error

13C5-PFHxA_IS
Conc. ----

13C2-PFHxA_IS
Conc. ----

Q 302.10>79.90 (-)

2.80e1

Q 295.00>201.00 (-)

2.20e1

Q 318.00>273.00 (-)

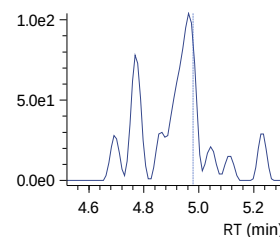
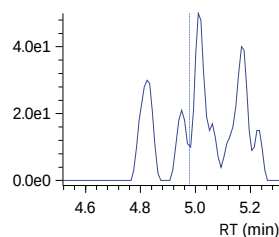
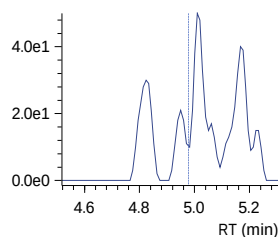
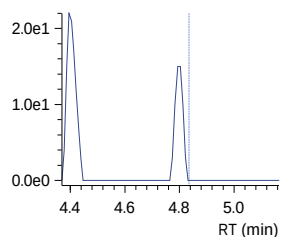
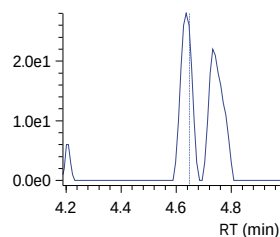
5.00e1

ISTD 318.00>273.00 (-)

5.00e1

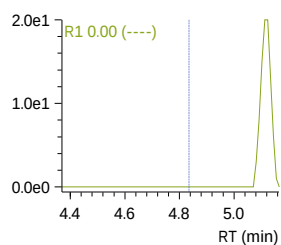
ISTD 315.10>270.00 (-)

1.04e2



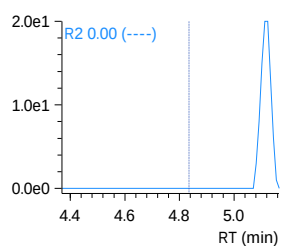
R1 295.00>84.90 (-)

2.00e1



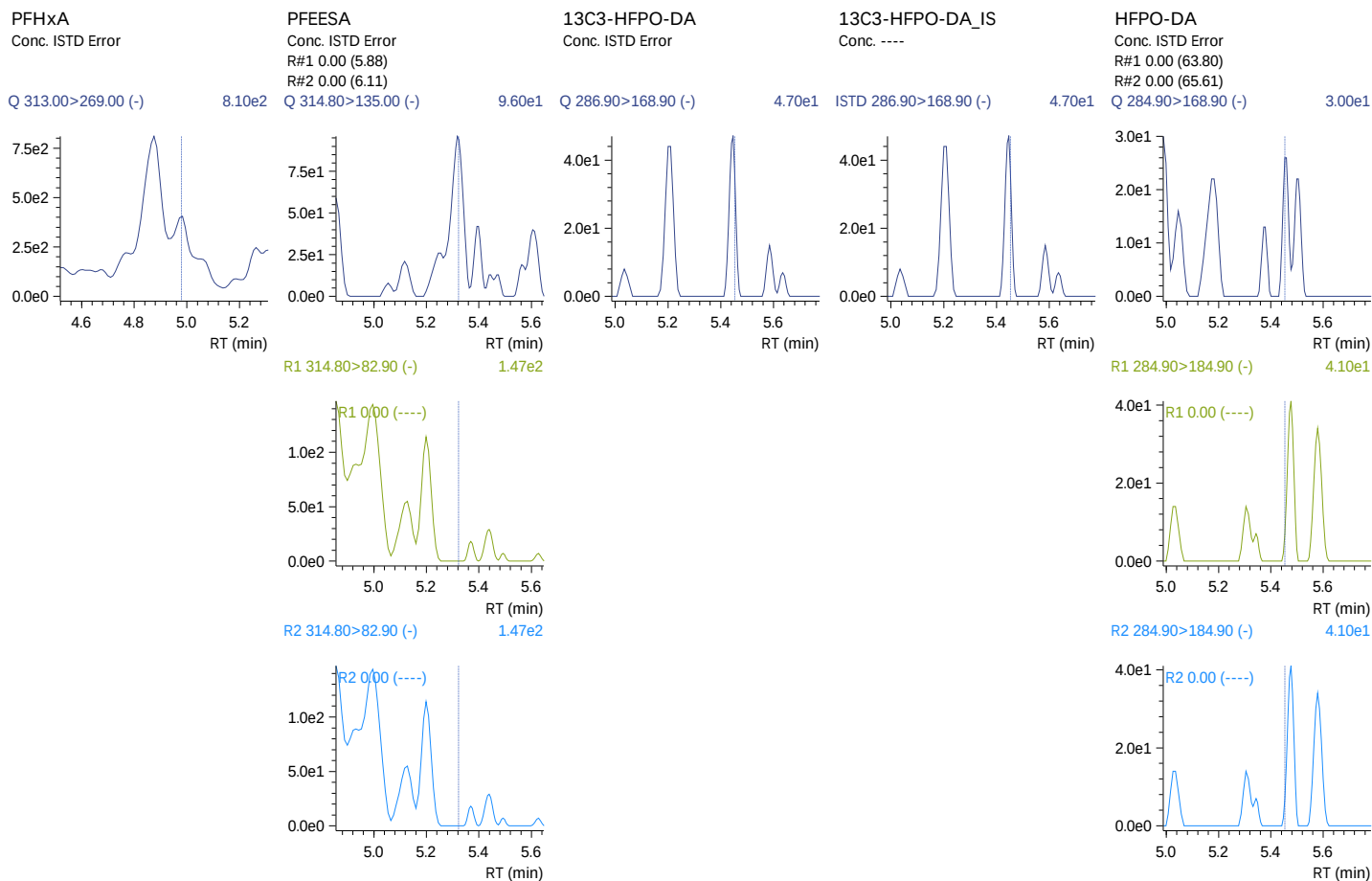
R2 295.00>84.90 (-)

2.00e1





240118_018 (continued)

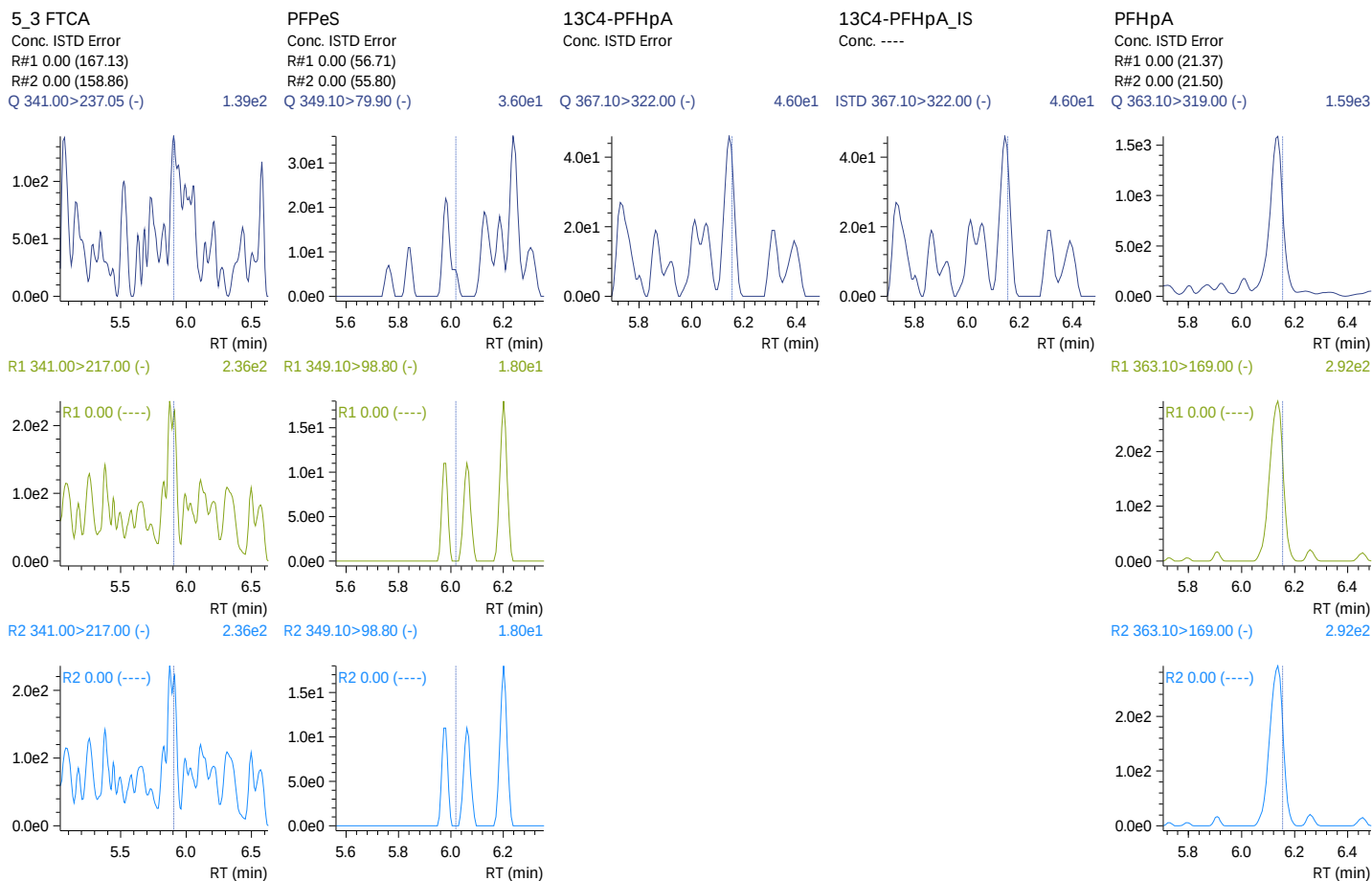


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_018 (continued)

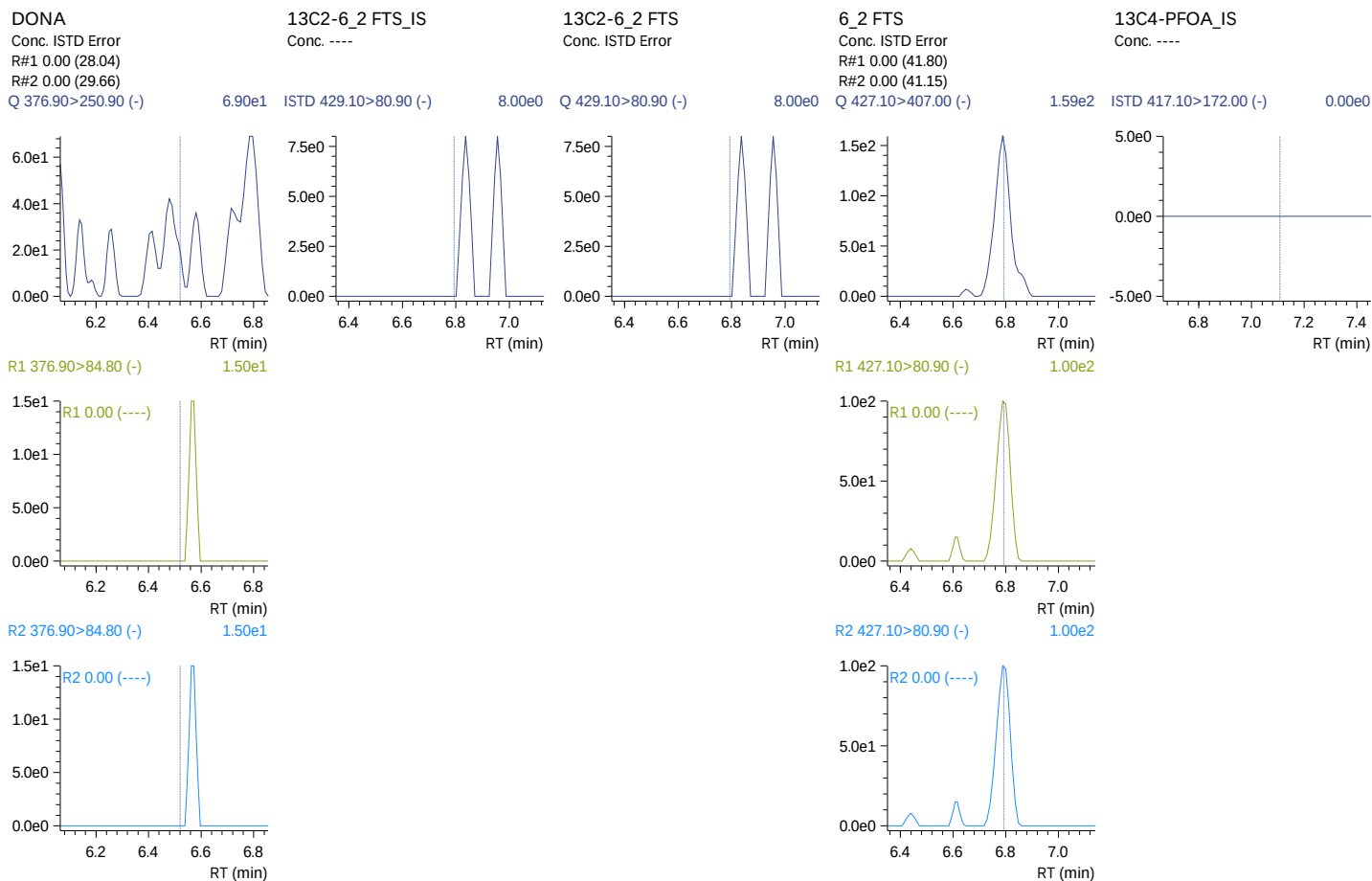


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_018 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_018 (continued)

13C8-PFOA_IS
Conc. ----

13C8-PFOA
Conc. ISTD Error

PFOA
Conc. ISTD Error
R#1 0.00 (29.05)
R#2 0.00 (31.89)

13C3-PFHxS
Conc. ISTD Error

13C3-PFHxS_IS
Conc. ----

ISTD 421.10>376.00 (-)

5.90e1

Q 421.10>376.00 (-)

5.90e1

Q 413.00>369.00 (-)

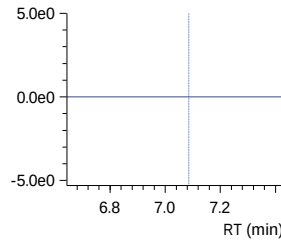
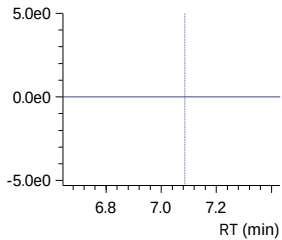
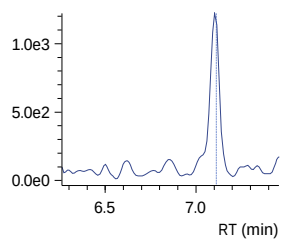
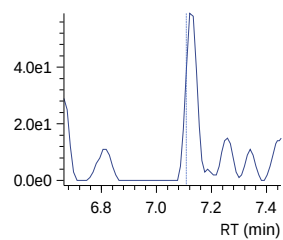
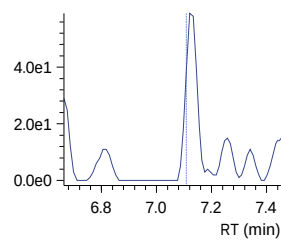
1.22e3

Q 402.10>79.90 (-)

0.00e0

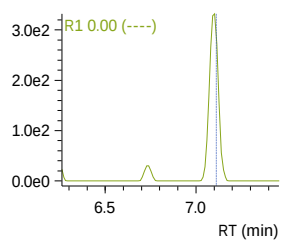
ISTD 402.10>79.90 (-)

0.00e0



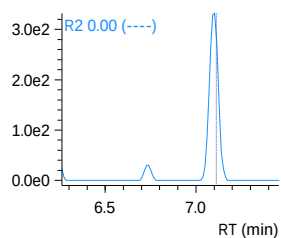
R1 413.00>169.00 (-)

3.32e2



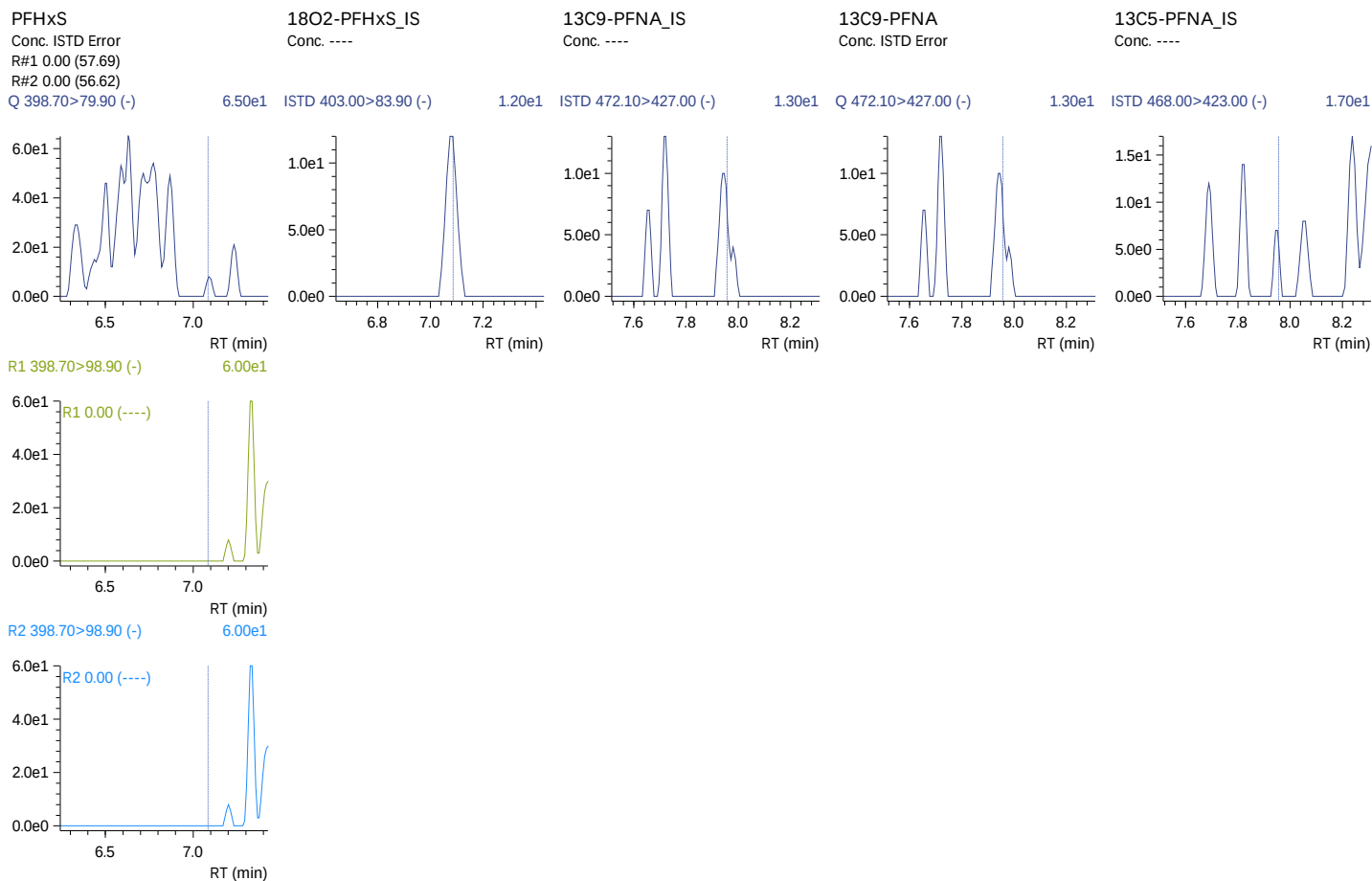
R2 413.00>169.00 (-)

3.32e2





240118_018 (continued)

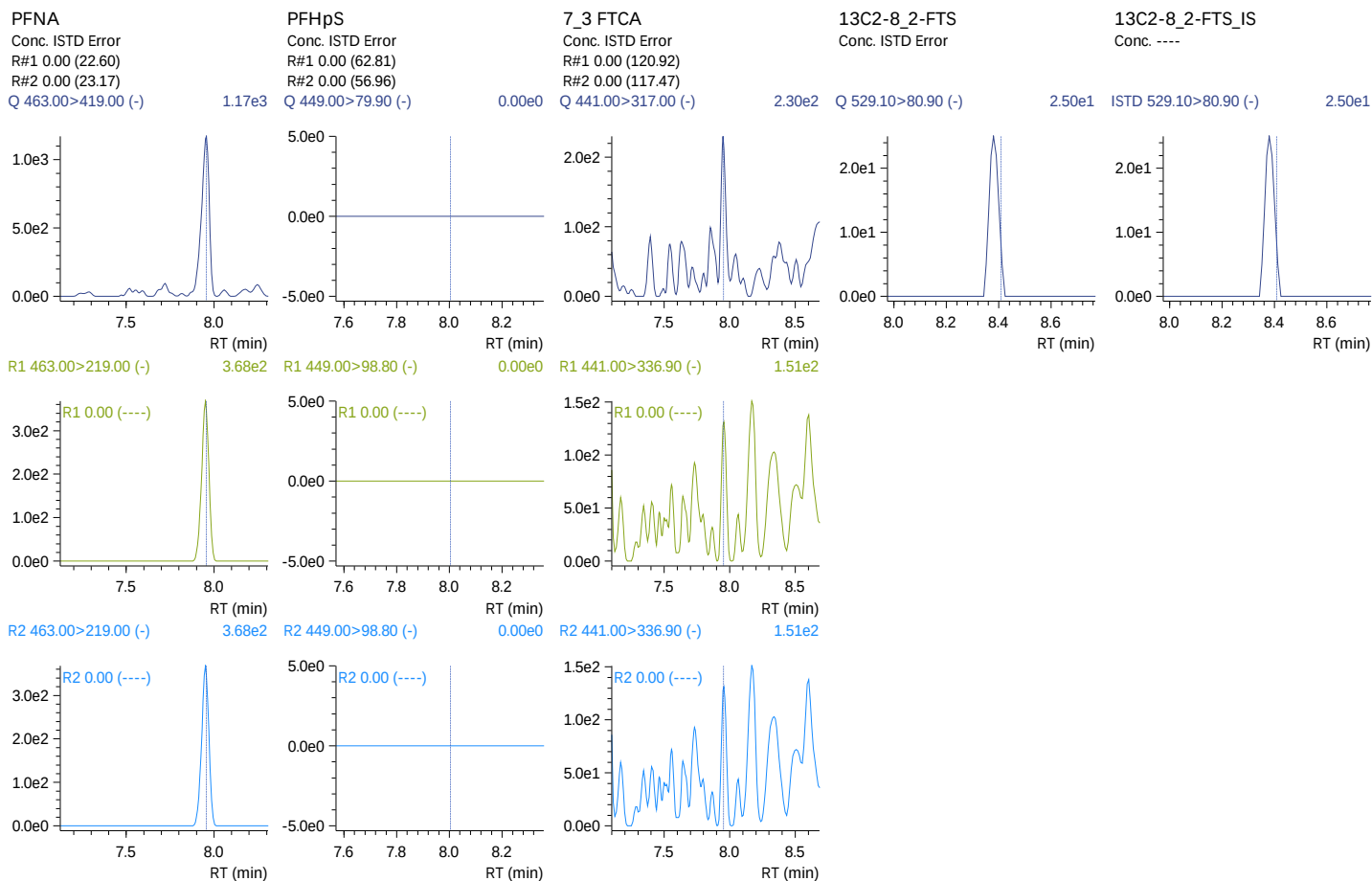


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
 Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_018 (continued)

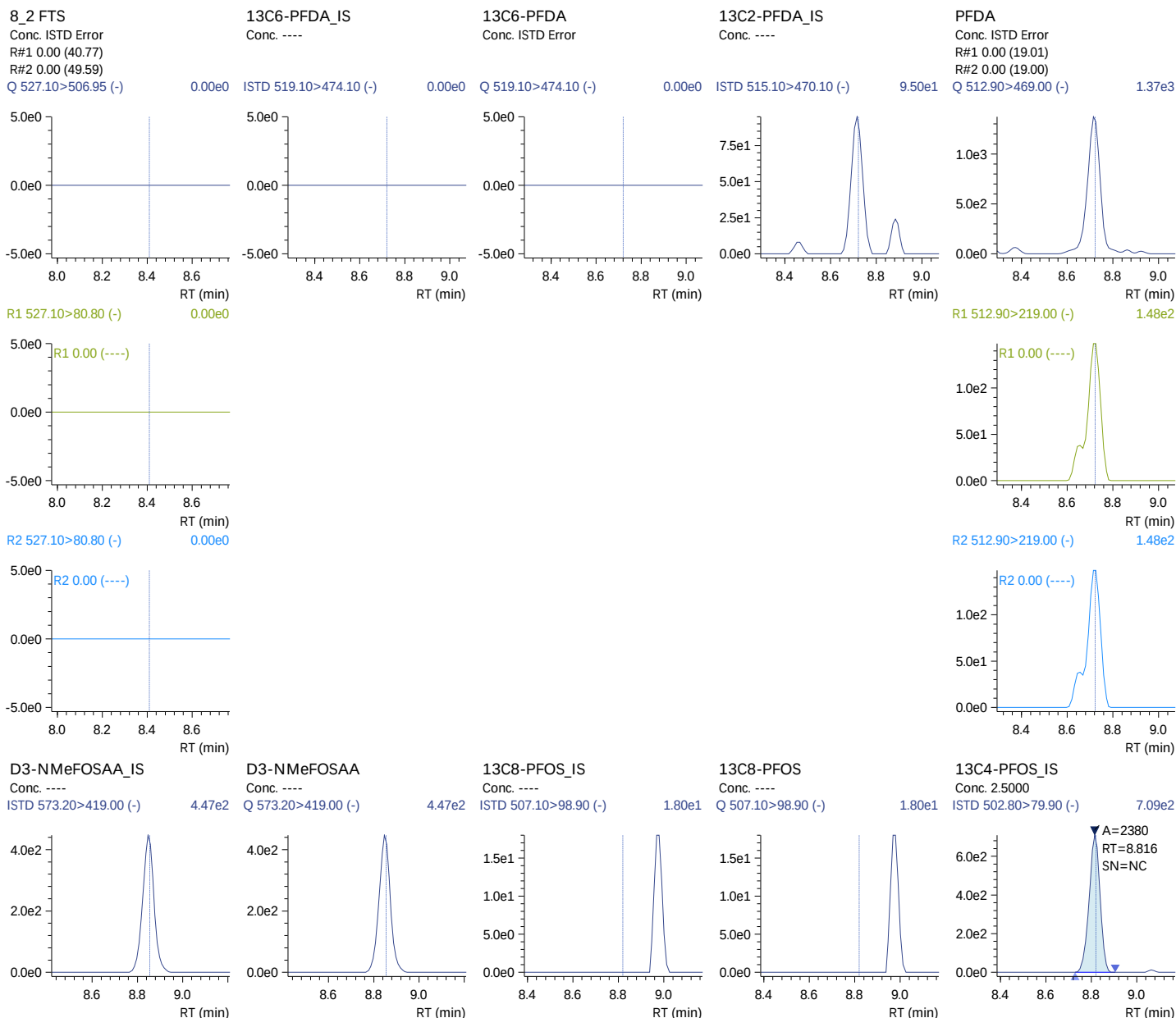


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_018 (continued)

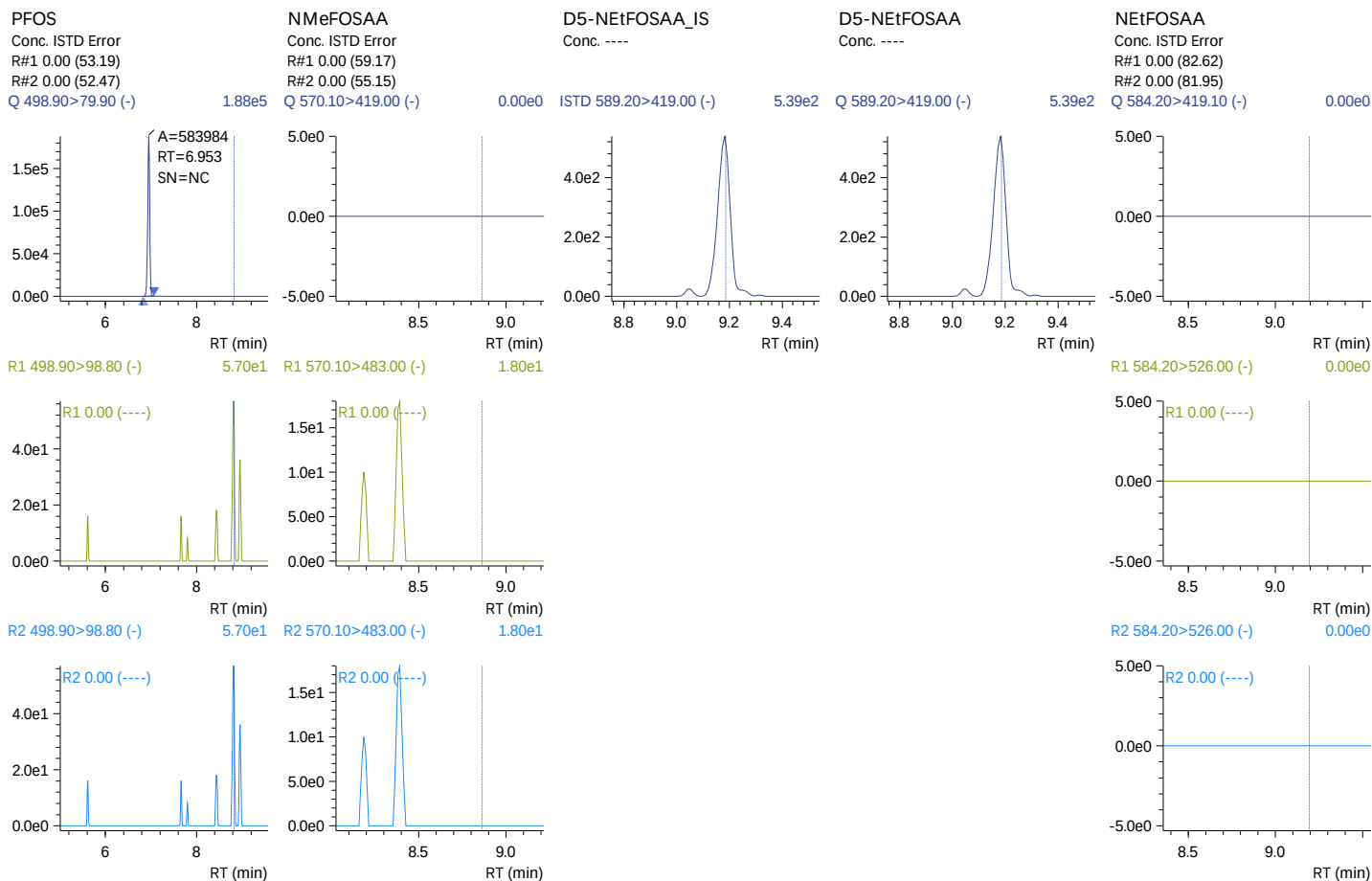


J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_018 (continued)



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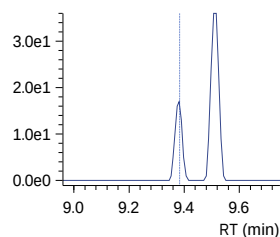
SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



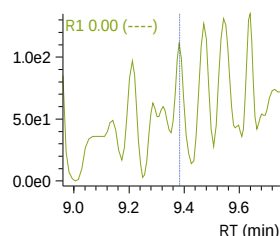
240118_018 (continued)

9-Cl-PF3ONS

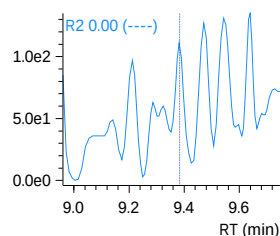
Conc. ISTD Error
R#1 0.00 (31.76)
R#2 0.00 (32.76)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-) 1.35e2

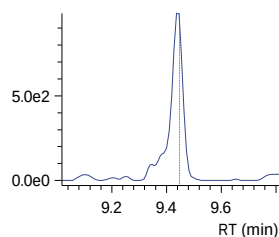


R2 532.80>353.00 (-) 1.35e2

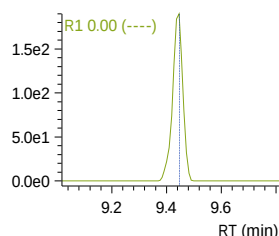


PFUnDA

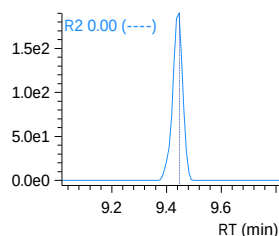
Conc. ISTD Error
R#1 0.00 (12.31)
R#2 0.00 (13.12)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-) 1.90e2



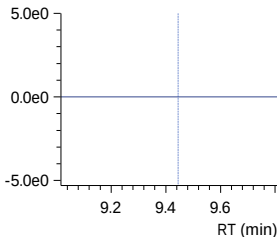
R2 563.10>269.10 (-) 1.90e2



13C7-PFUnDA_IS

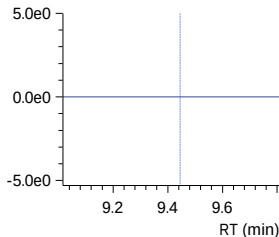
Conc. ----

ISTD 570.00>525.10 (-)



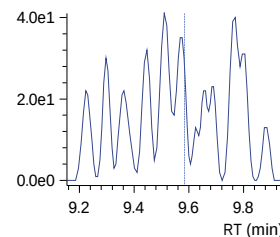
13C7-PFUnDA

Conc. ISTD Error
Q 570.00>525.10 (-)

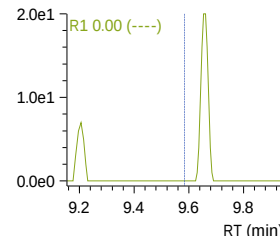


PFNS

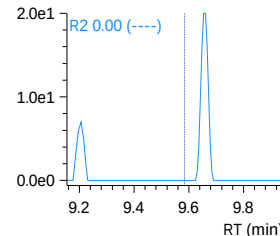
Conc. ISTD Error
R#1 0.00 (63.31)
R#2 0.00 (65.22)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-) 2.00e1

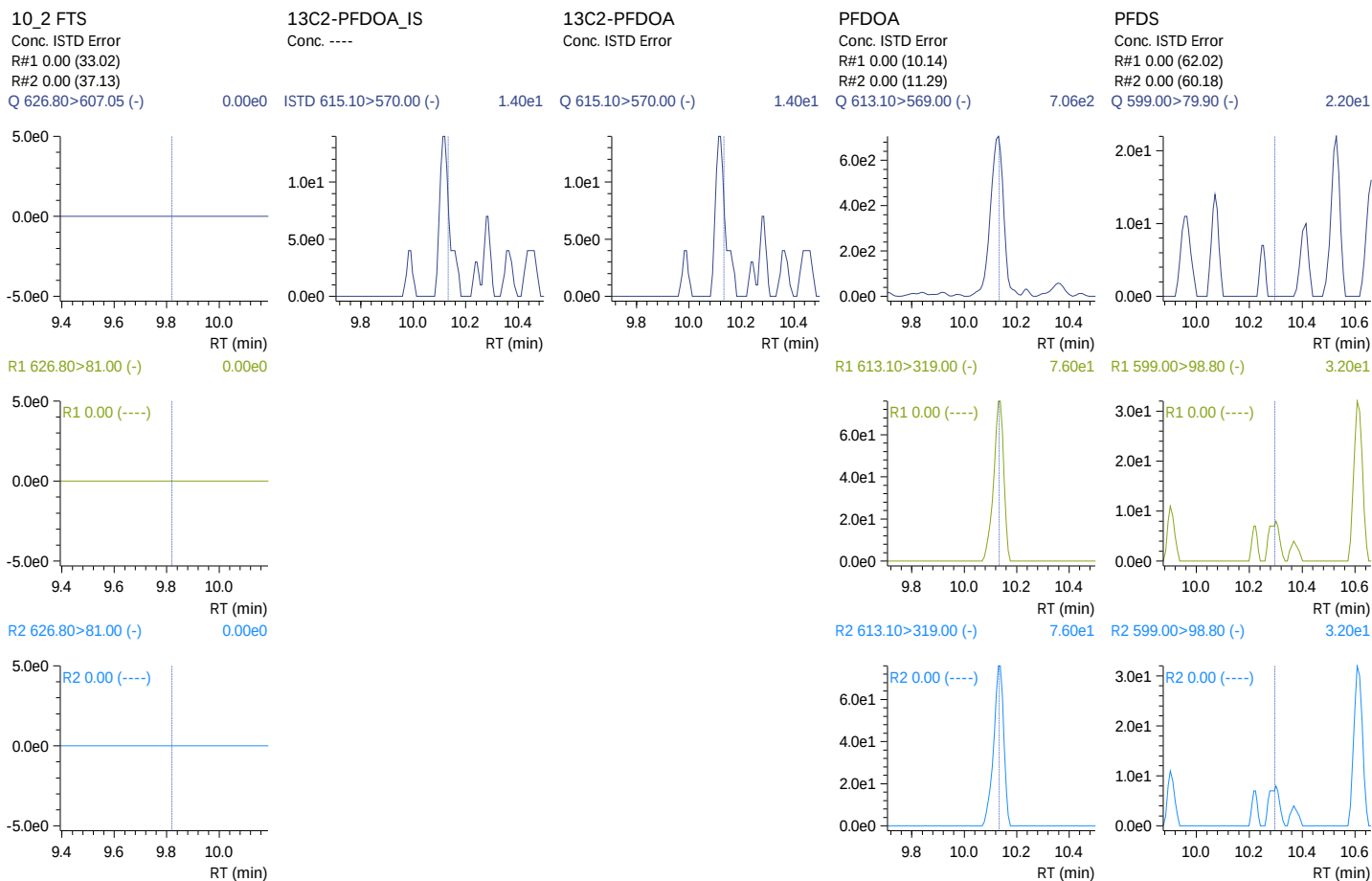


R2 548.80>98.80 (-) 2.00e1





240118_018 (continued)

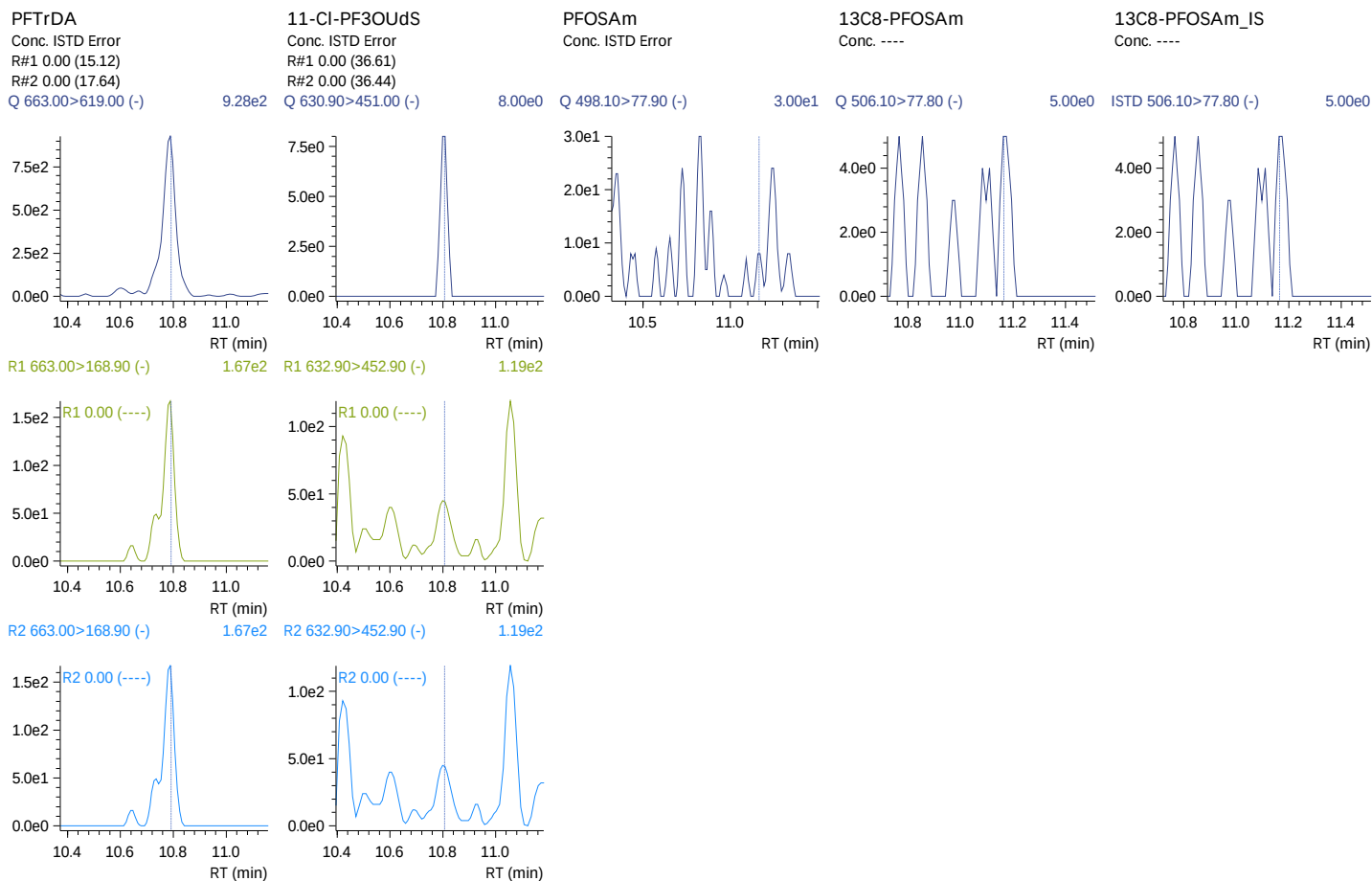


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_018 (continued)

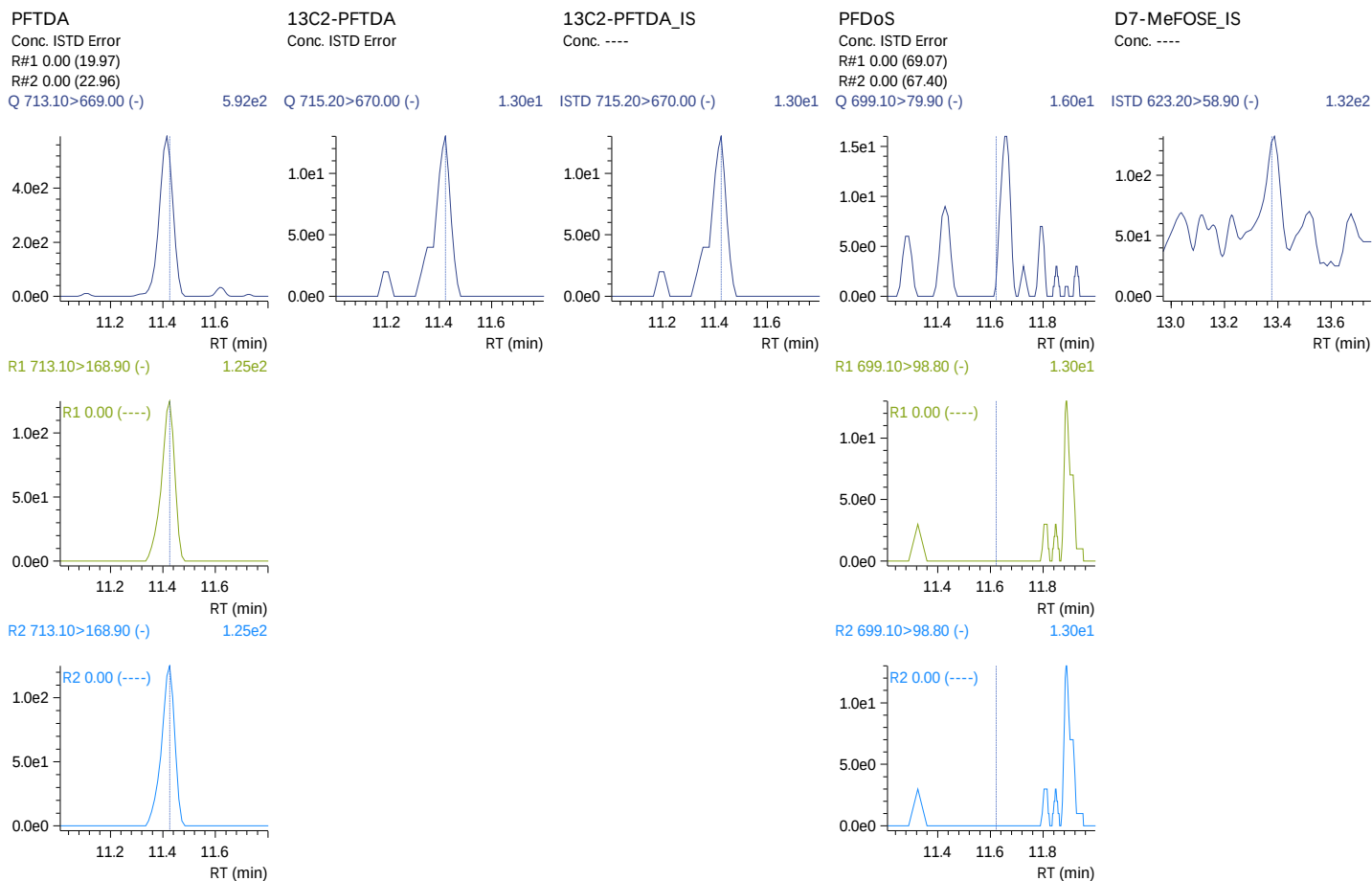


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_018 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_018 (continued)

D7-MeFOSE
Conc. ----

MeFOSE
Conc. ISTD Error

13C2-PFHDA_IS
Conc. 2.5000

13C2-PFHDA
Conc. ISTD Error

PFHXDA
Conc. ----

R#1 0.00 (11.64)

R#2 0.00 (13.90)

Q 623.20>58.90 (-)

1.32e2

Q 616.10>59.00 (-)

5.30e1

ISTD 815.00>770.05 (-)

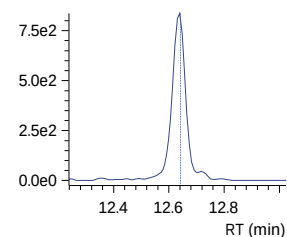
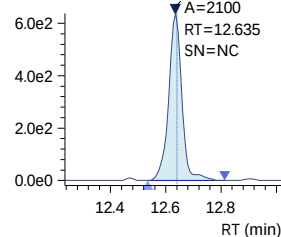
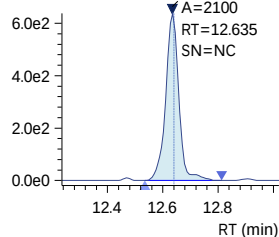
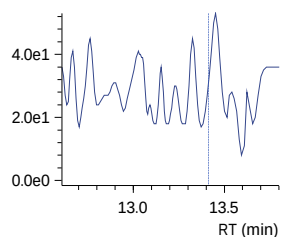
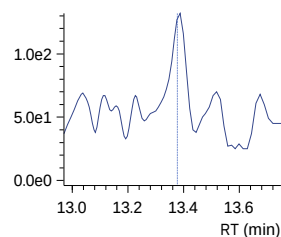
6.38e2

Q 815.00>770.05 (-)

6.38e2

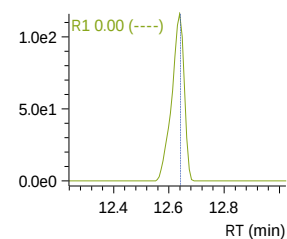
Q 813.00>768.95 (-)

8.37e2



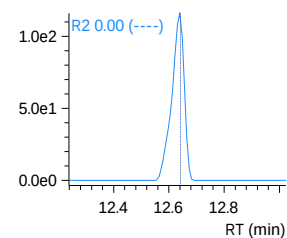
R1 813.00>218.95 (-)

1.16e2



R2 813.00>218.95 (-)

1.16e2

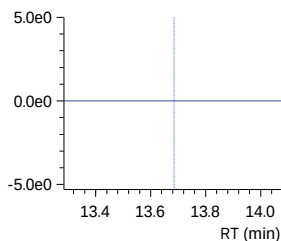




240118_018 (continued)

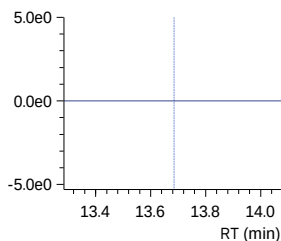
D3-MeFOSA
Conc. ----

Q 515.00>219.00 (-)



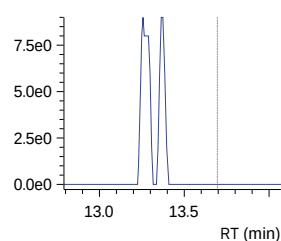
D3-MeFOSA_IS
Conc. ----

ISTD 515.00>219.00 (-)

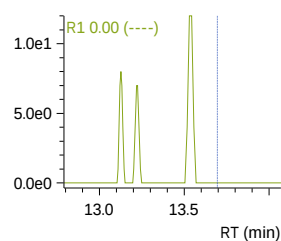


MeFOSA
Conc. ISTD Error
R#1 0.00 (149.05)
R#2 0.00 (140.79)

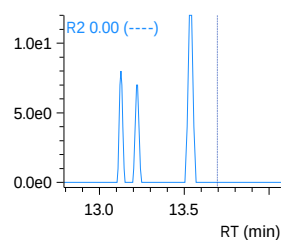
Q 511.90>219.00 (-)



R1 511.90>169.00 (-) 1.20e1

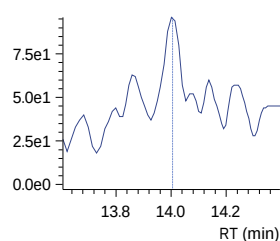


R2 511.90>169.00 (-) 1.20e1



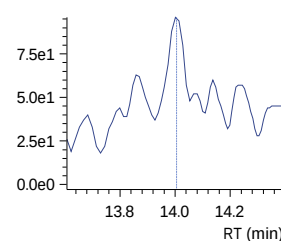
D9-EtFOSE_IS
Conc. ----

ISTD 639.20>58.90 (-)



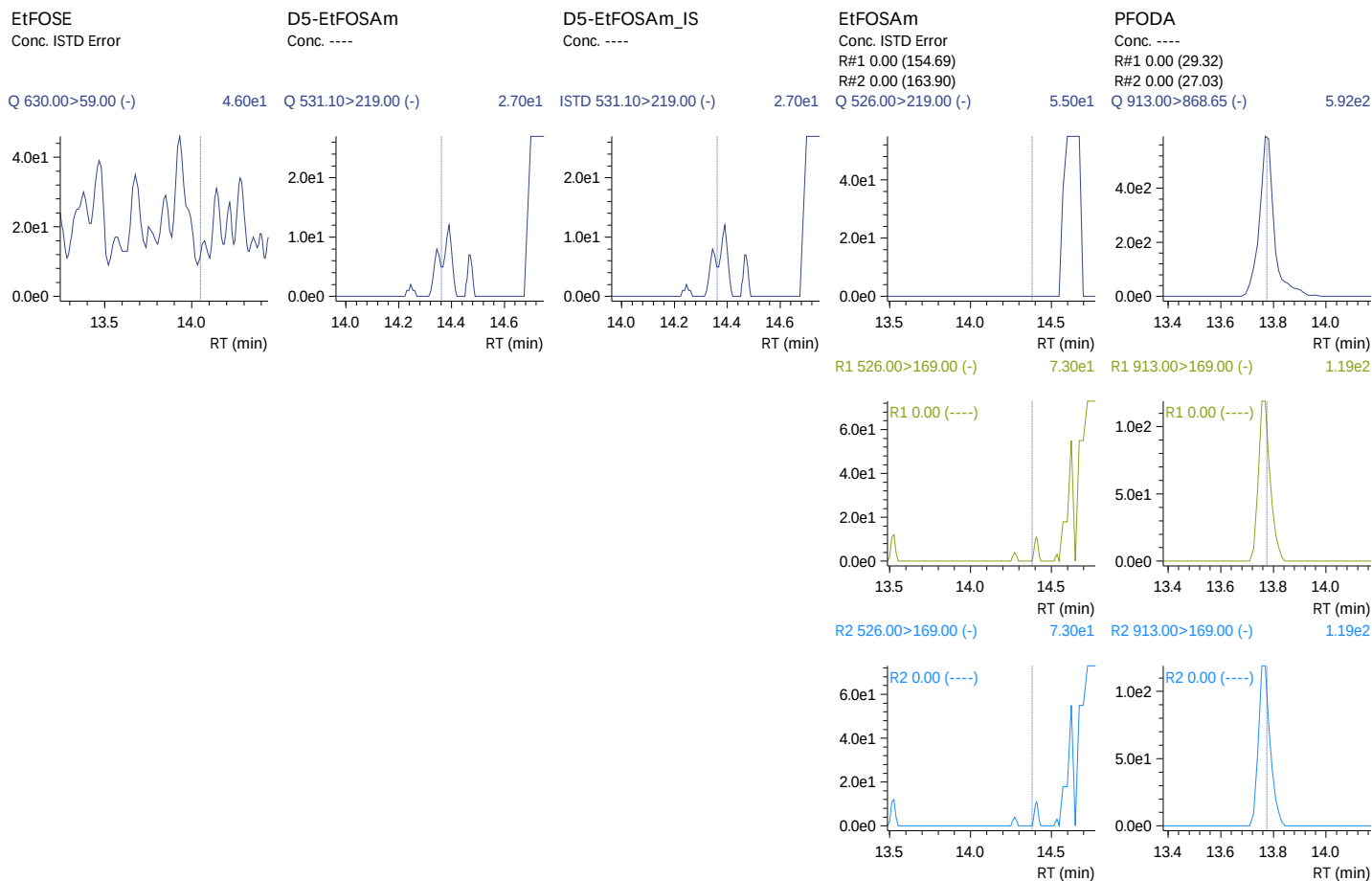
D9-EtFOSE
Conc. ----

Q 639.20>58.90 (-)





240118_018 (continued)



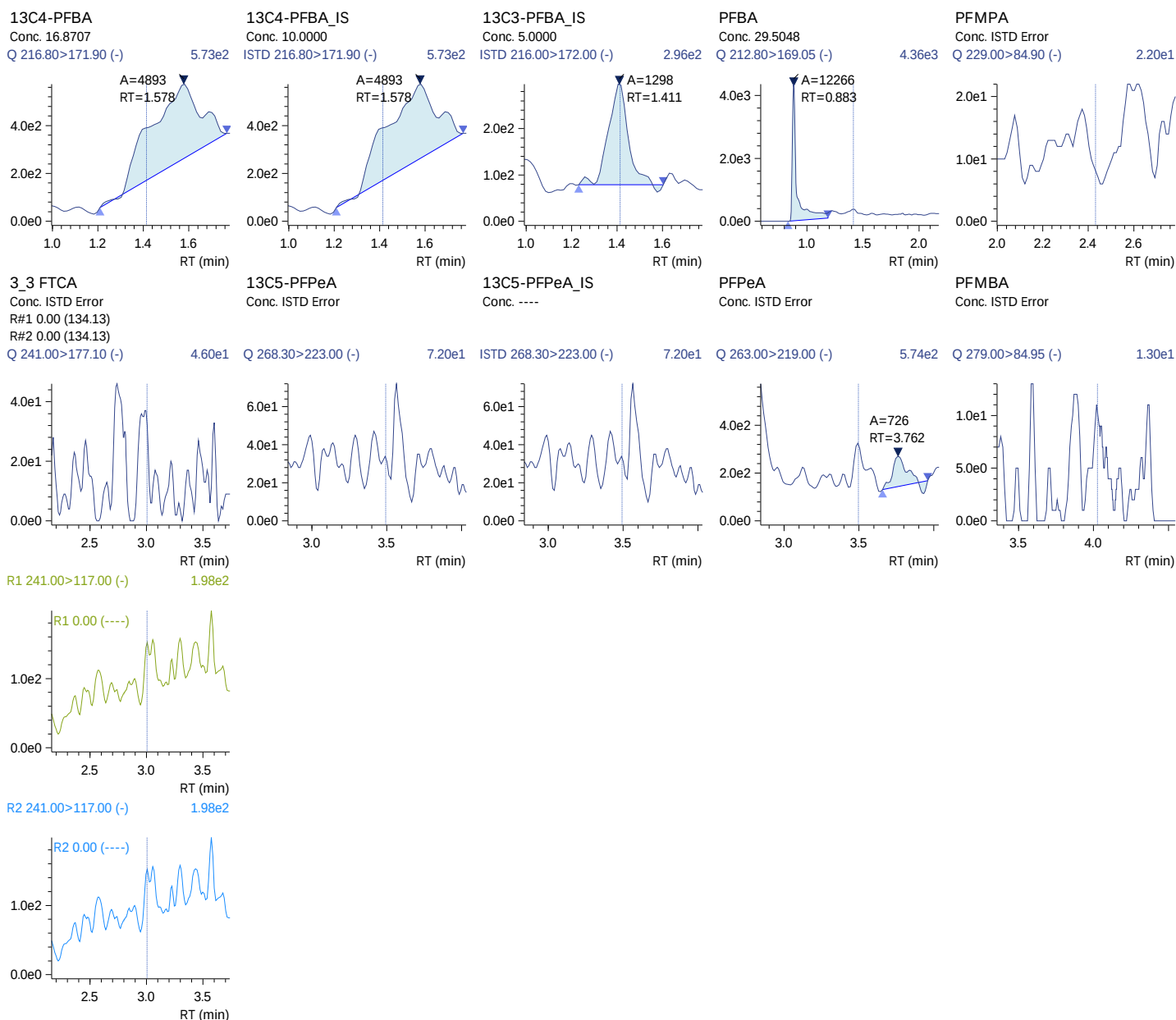
J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_018

Sample ID: TDCA CHECK
Date Acquired: 1/18/2024 6:43:34 PM
Acquired by: System Administrator
Data File: 240118_018
Vial: 12 | Inj. Volume: 10.0000uL | Tray: 1





240118_018 (continued)

13C2-4_2 FTS
Conc. ISTD Error

13C2-4_2 FTS_IS
Conc. ----

4_2 FTS
Conc. ISTD Error
R#1 0.00 (34.14)
R#2 0.00 (34.14)

13C3-PFBS_IS
Conc. ----

PFBS
Conc. ISTD Error
R#1 0.00 (47.53)
R#2 0.00 (47.53)

Q 329.10>80.90 (-)

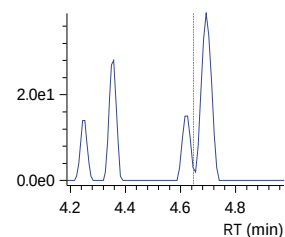
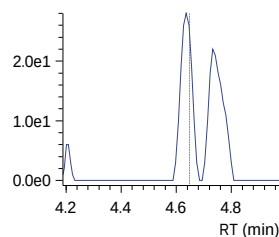
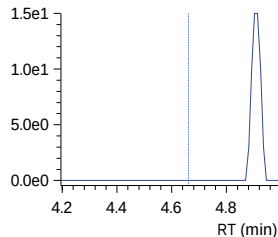
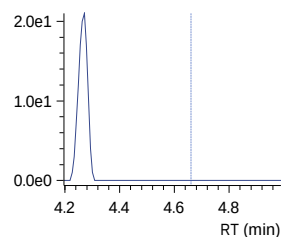
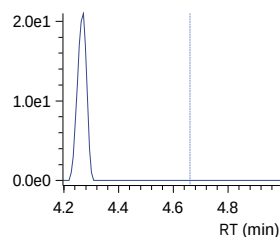
2.10e1 ISTD 329.10>80.90 (-)

2.10e1 Q 327.10>307.00 (-)

1.50e1 ISTD 302.10>79.90 (-)

2.80e1 Q 298.70>79.90 (-)

3.90e1

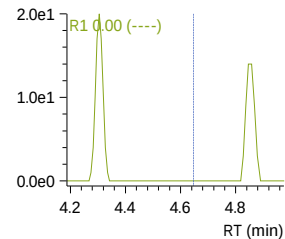
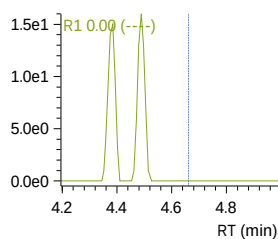


R1 327.10>80.90 (-)

1.60e1

R1 298.70>98.80 (-)

2.00e1

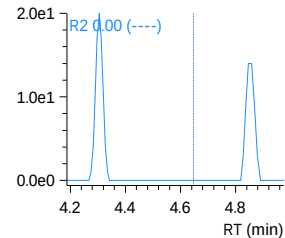
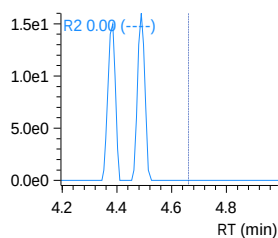


R2 327.10>80.90 (-)

1.60e1

R2 298.70>98.80 (-)

2.00e1

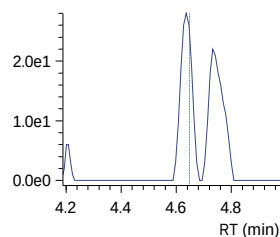




240118_018 (continued)

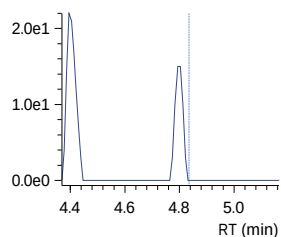
13C3-PFBS
Conc. ISTD Error

Q 302.10>79.90 (-)



NFDHA
Conc. ISTD Error
R#1 0.00 (37.88)
R#2 0.00 (37.88)

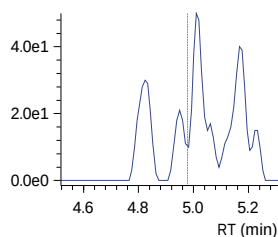
2.80e1 Q 295.00>201.00 (-)



R1 295.00>84.90 (-)

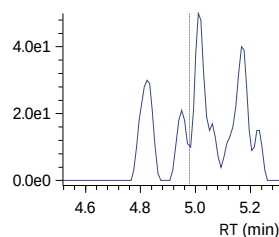
13C5-PFHxA
Conc. ISTD Error

2.20e1 Q 318.00>273.00 (-)



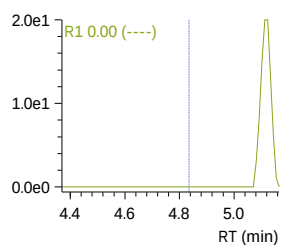
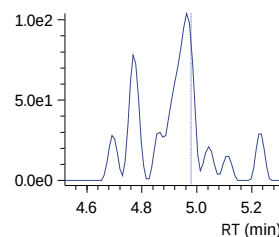
13C5-PFHxA_IS
Conc. ----

5.00e1 ISTD 318.00>273.00 (-)

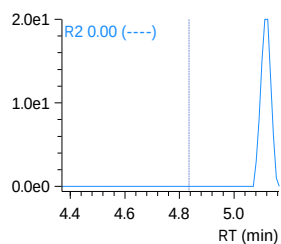


13C2-PFHxA_IS
Conc. ----

5.00e1 ISTD 315.10>270.00 (-)

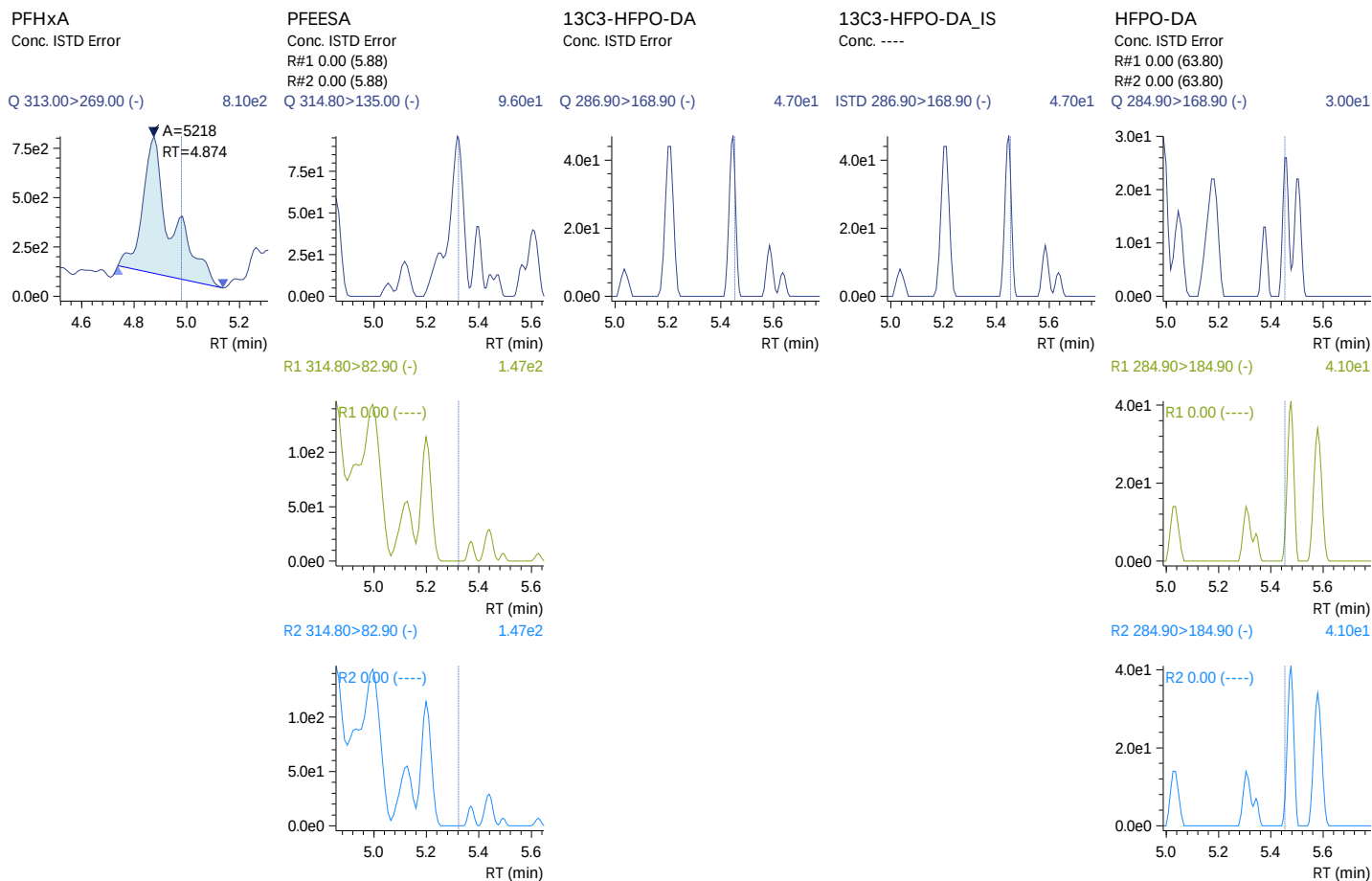


R2 295.00>84.90 (-)





240118_018 (continued)





240118_018 (continued)

5_3 FTCA

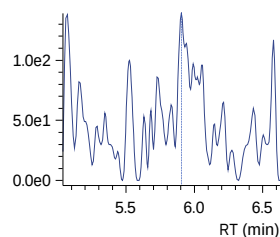
Conc. ISTD Error

R#1 0.00 (167.13)

R#2 0.00 (167.13)

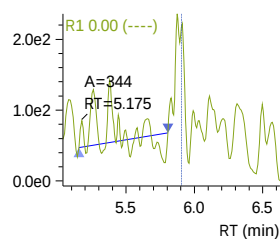
Q 341.00>237.05 (-)

1.39e2



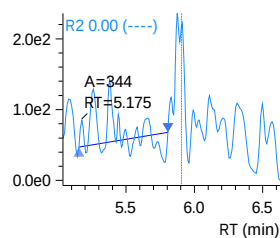
R1 341.00>217.00 (-)

2.36e2



R2 341.00>217.00 (-)

2.36e2



RT (min)

PFPeS

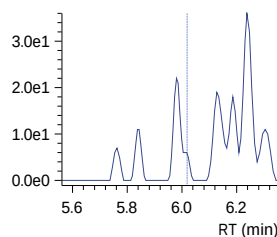
Conc. ISTD Error

R#1 0.00 (56.71)

R#2 0.00 (56.71)

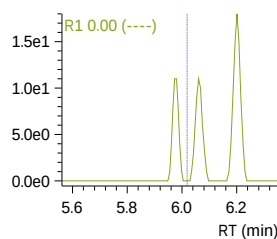
Q 349.10>79.90 (-)

3.60e1



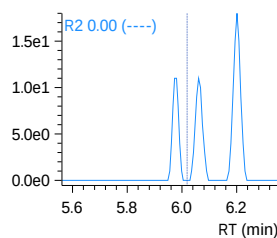
R1 349.10>98.80 (-)

1.80e1



R2 349.10>98.80 (-)

1.80e1



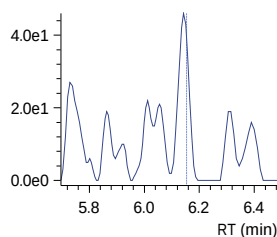
RT (min)

13C4-PFHpa

Conc. ISTD Error

Q 367.10>322.00 (-)

4.60e1

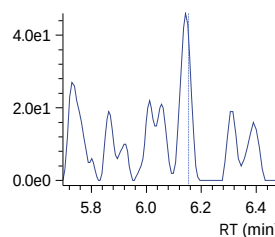


13C4-PFHpa_IS

Conc. ----

ISTD 367.10>322.00 (-)

4.60e1



PFHpA

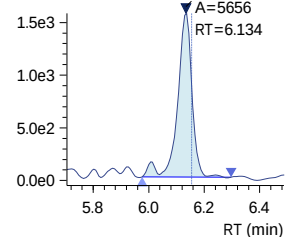
Conc. ISTD Error

R#1 0.00 (21.37)

R#2 0.00 (21.37)

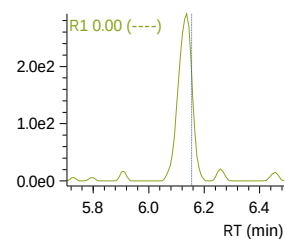
Q 363.10>319.00 (-)

1.59e3



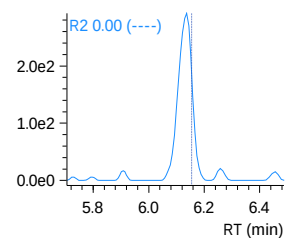
R1 363.10>169.00 (-)

2.92e2



R2 363.10>169.00 (-)

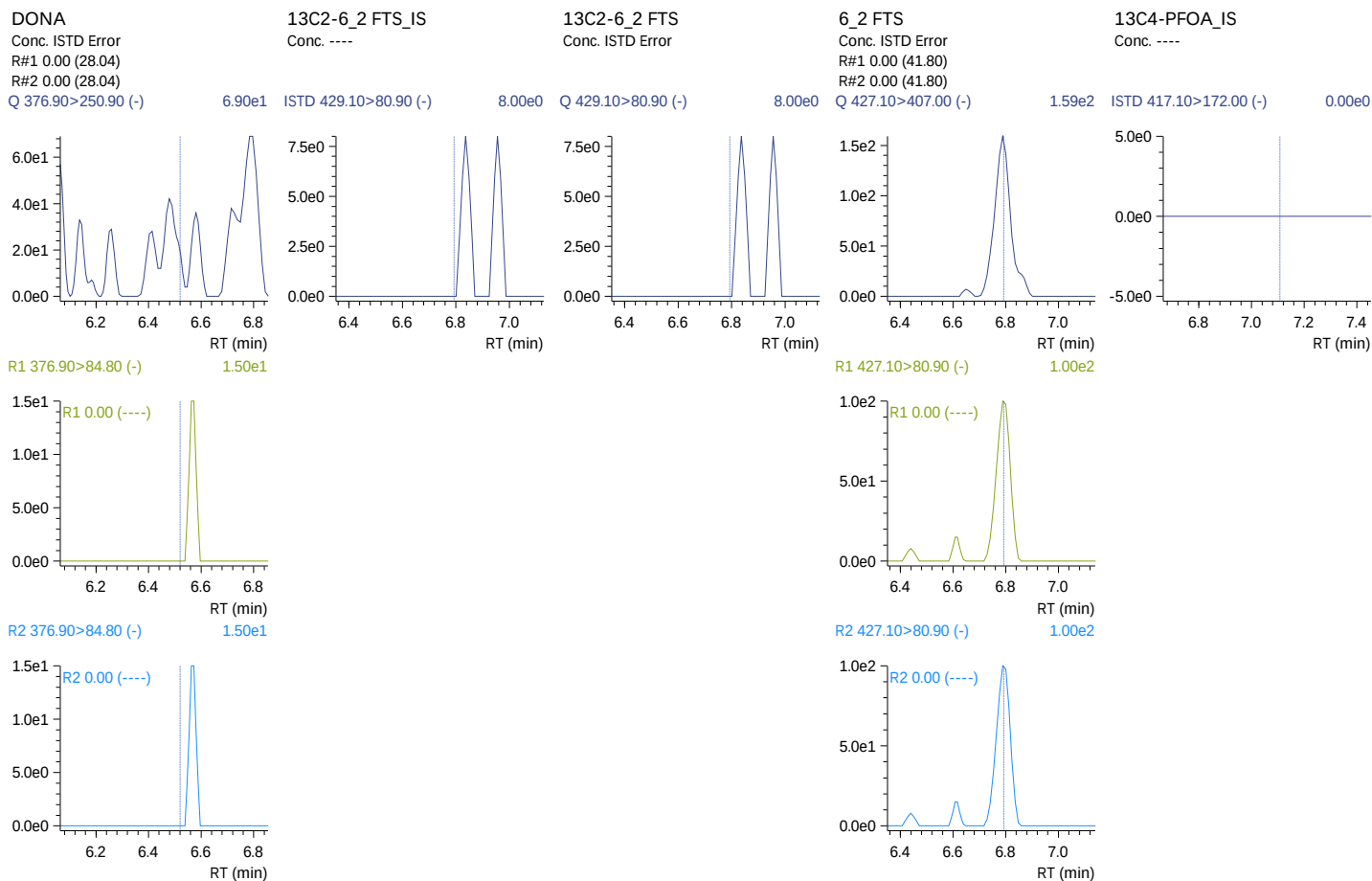
2.92e2



RT (min)



240118_018 (continued)





240118_018 (continued)

13C8-PFOA_IS
Conc. ----

13C8-PFOA
Conc. ISTD Error

PFOA
Conc. ISTD Error
R#1 0.00 (29.05)
R#2 0.00 (29.05)

13C3-PFHxS
Conc. ISTD Error

13C3-PFHxS_IS
Conc. ----

ISTD 421.10>376.00 (-)

5.90e1

Q 421.10>376.00 (-)

5.90e1

Q 413.00>369.00 (-)

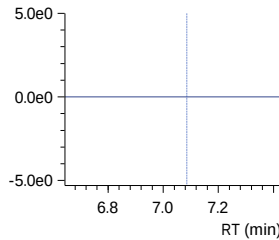
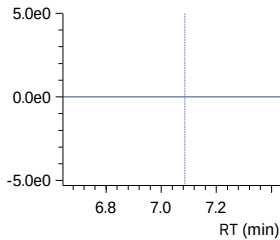
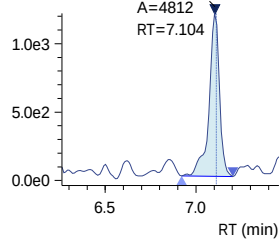
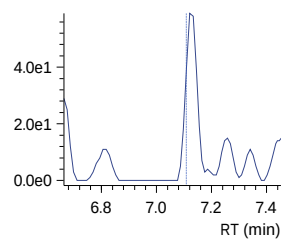
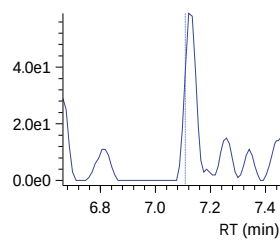
1.22e3

Q 402.10>79.90 (-)

0.00e0

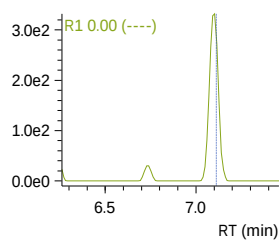
ISTD 402.10>79.90 (-)

0.00e0



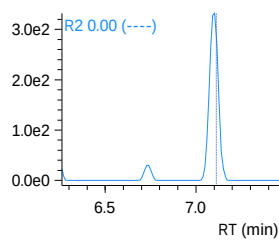
R1 413.00>169.00 (-)

3.32e2



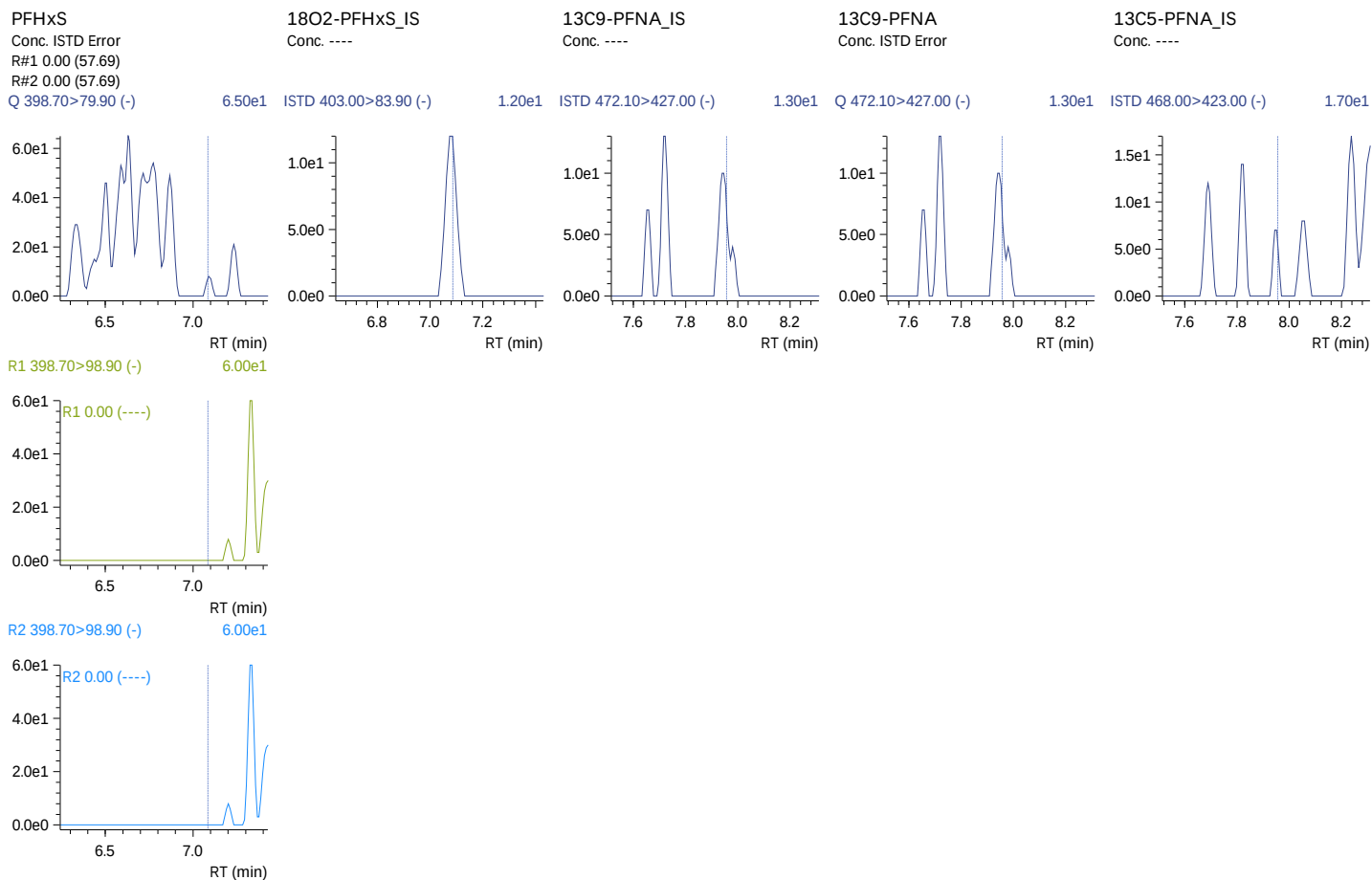
R2 413.00>169.00 (-)

3.32e2



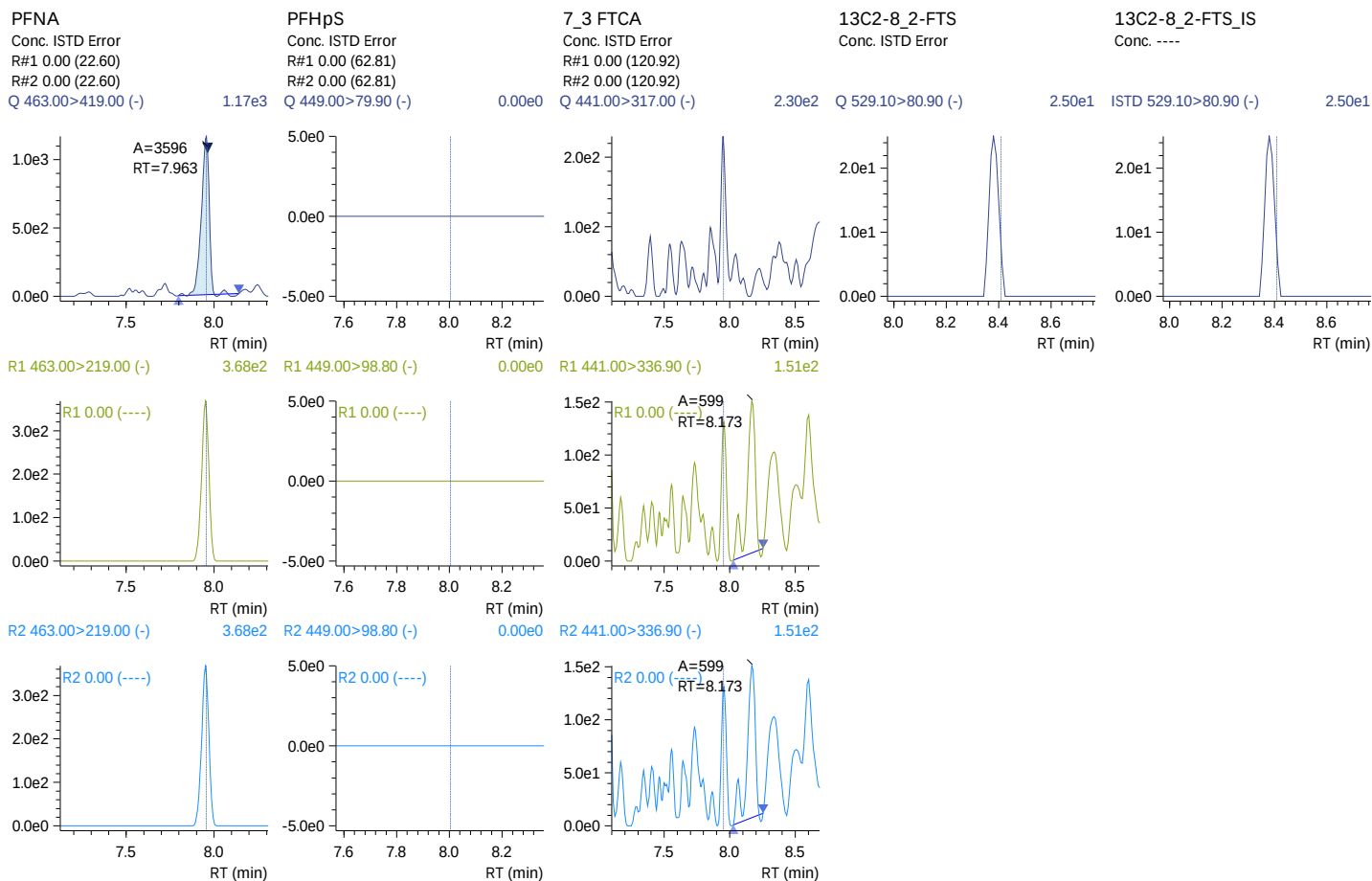


240118_018 (continued)



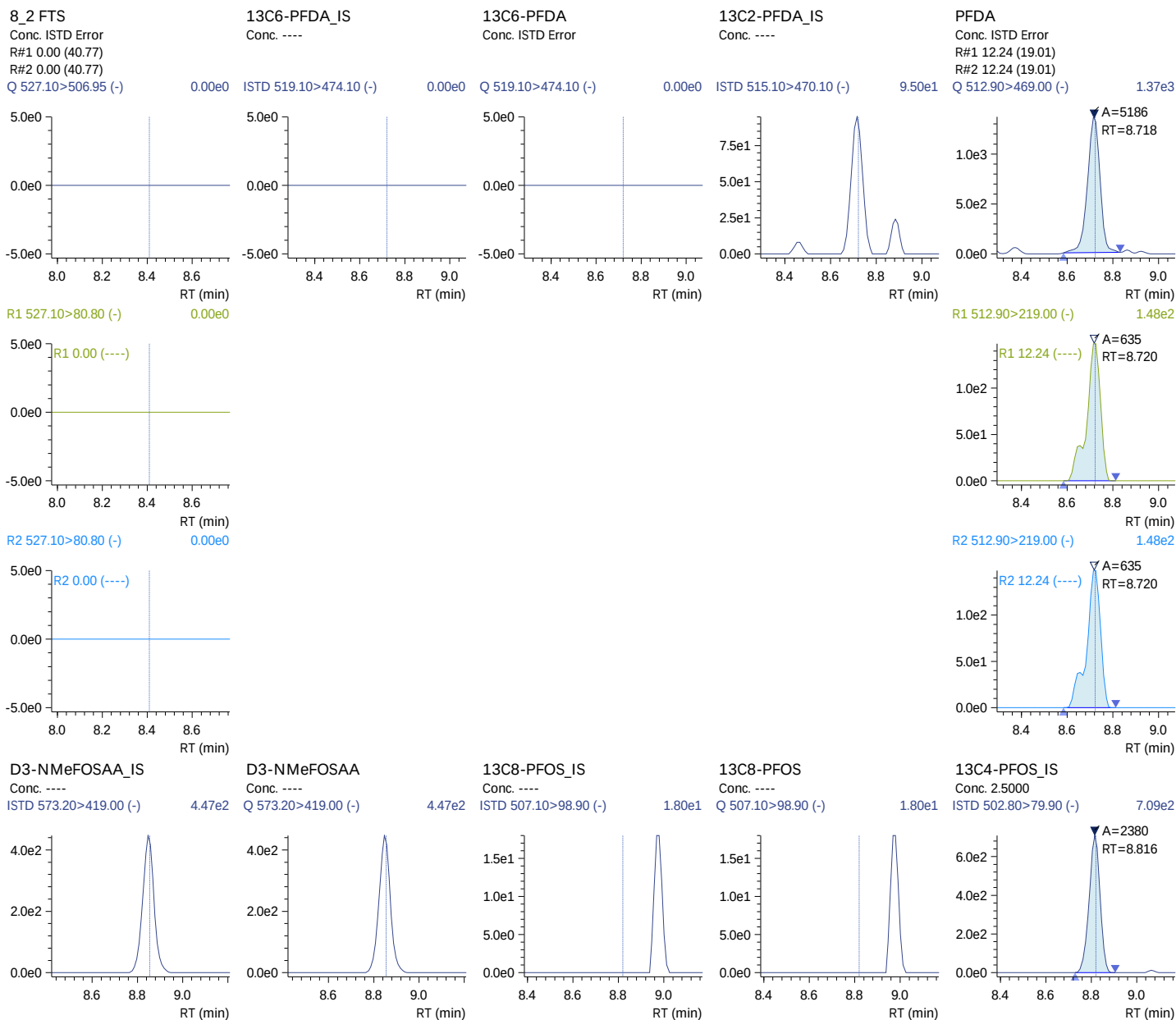


240118_018 (continued)



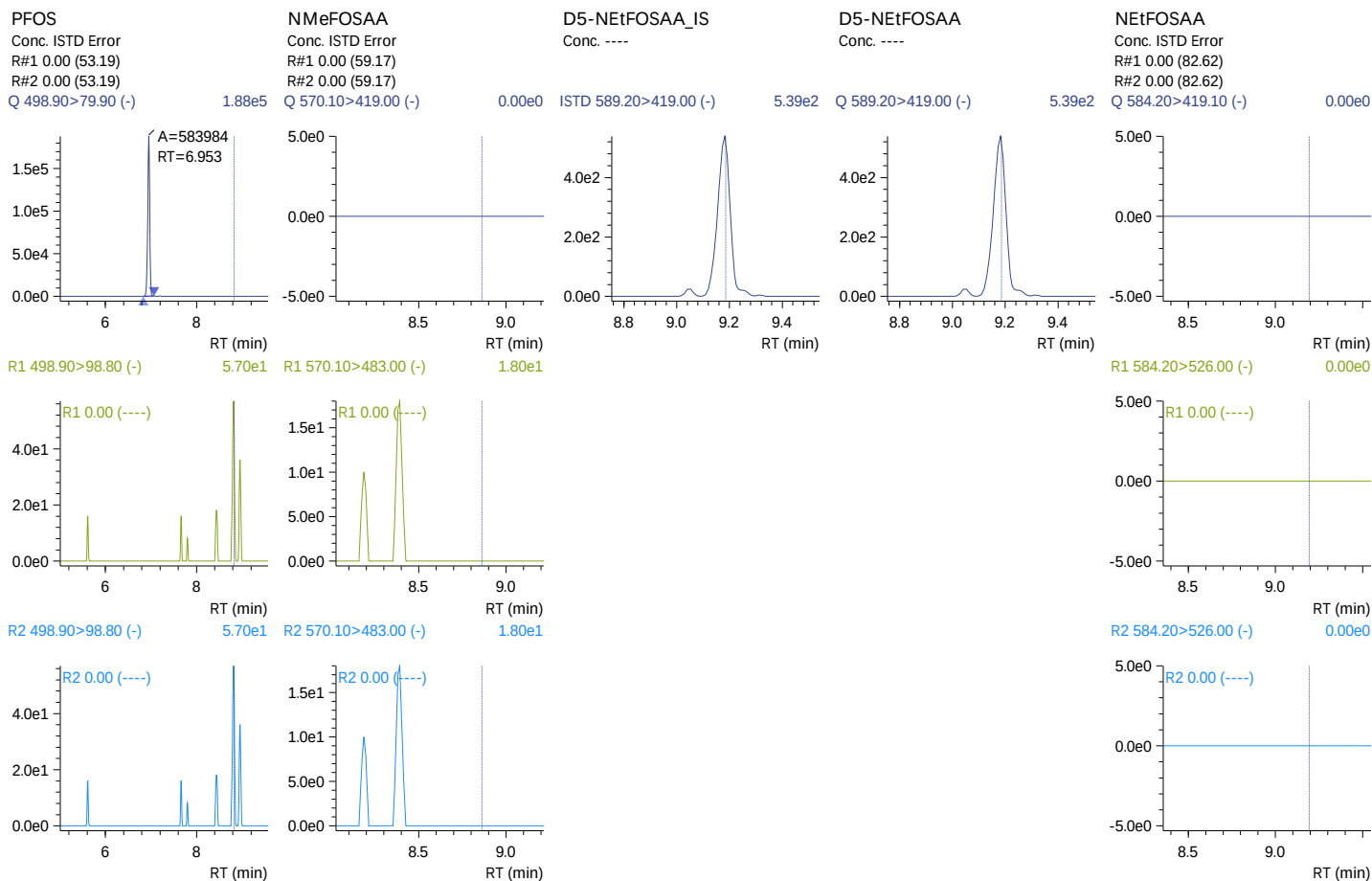


240118_018 (continued)





240118_018 (continued)

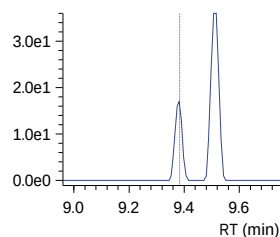




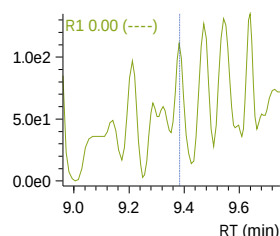
240118_018 (continued)

9-Cl-PF3ONS

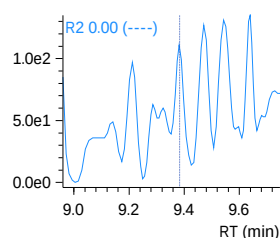
Conc. ISTD Error
R#1 0.00 (31.76)
R#2 0.00 (31.76)
Q 530.80>351.00 (-)



R1 532.80>353.00 (-) 1.35e2

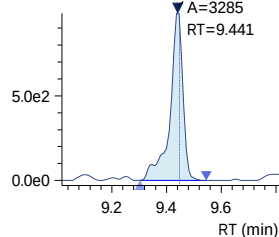


R2 532.80>353.00 (-) 1.35e2

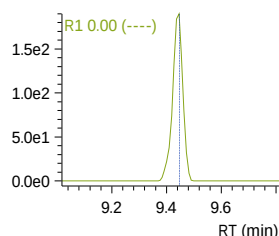


PFUnDA

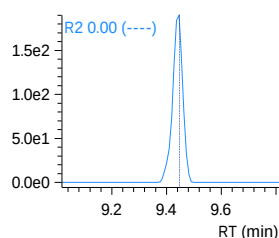
Conc. ISTD Error
R#1 0.00 (12.31)
R#2 0.00 (12.31)
Q 563.10>519.00 (-)



R1 563.10>269.10 (-) 1.90e2



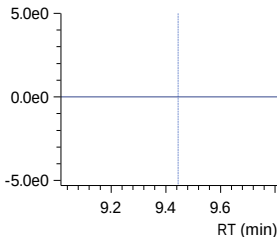
R2 563.10>269.10 (-) 1.90e2



13C7-PFUnDA_IS

Conc. ----

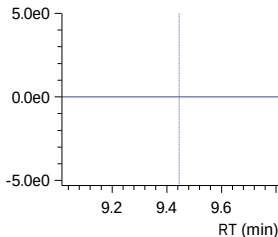
ISTD 570.00>525.10 (-)



13C7-PFUnDA

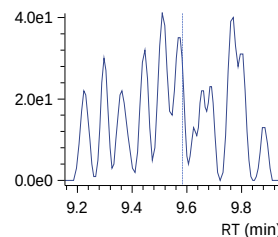
Conc. ISTD Error

Q 570.00>525.10 (-)

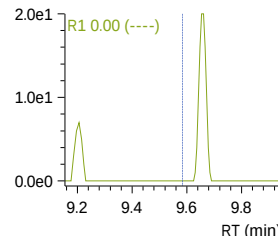


PFNS

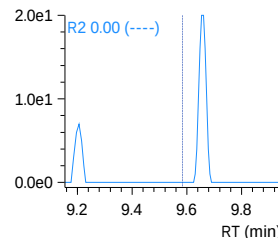
Conc. ISTD Error
R#1 0.00 (63.31)
R#2 0.00 (63.31)
Q 548.80>79.90 (-)



R1 548.80>98.80 (-) 2.00e1

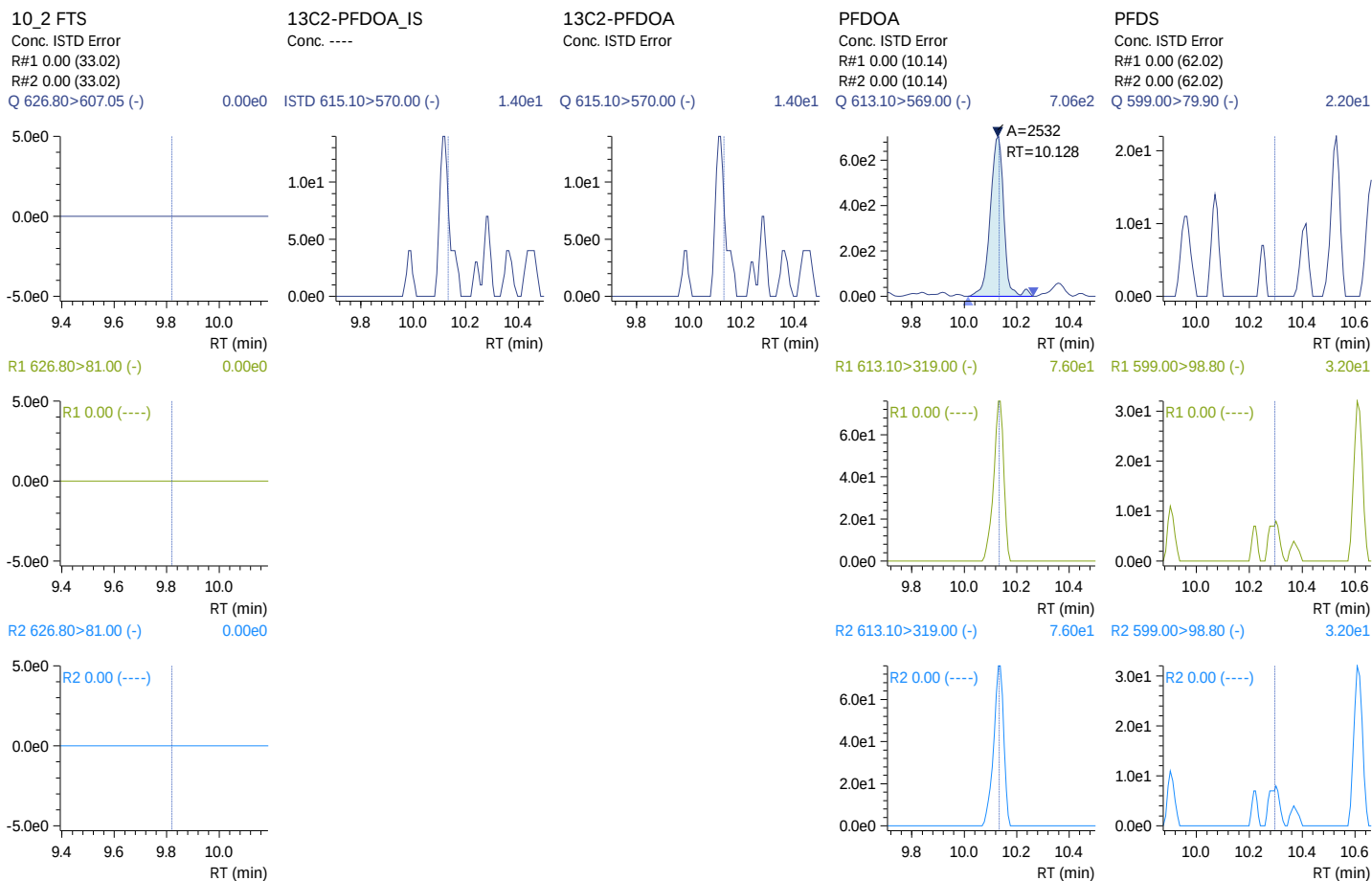


R2 548.80>98.80 (-) 2.00e1





240118_018 (continued)

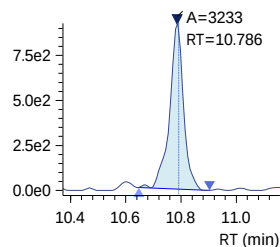




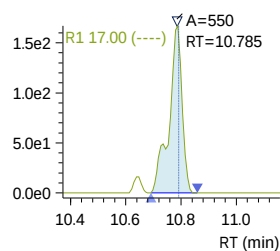
240118_018 (continued)

PFTrDA

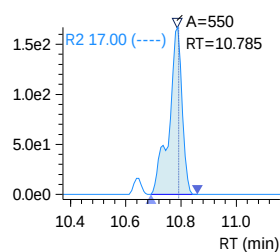
Conc. ISTD Error
 R#1 17.00 (15.12)
 R#2 17.00 (15.12)
 Q 663.00>619.00 (-)



R1 663.00>168.90 (-) 1.67e2

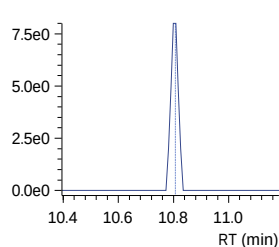


R2 663.00>168.90 (-) 1.67e2

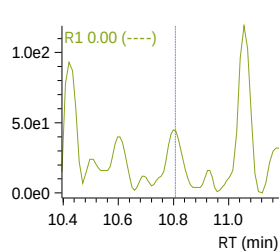


11-Cl-PF3OUdS

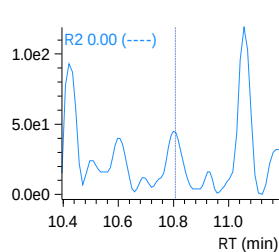
Conc. ISTD Error
 R#1 0.00 (36.61)
 R#2 0.00 (36.61)
 Q 630.90>451.00 (-)



R1 632.90>452.90 (-) 1.19e2



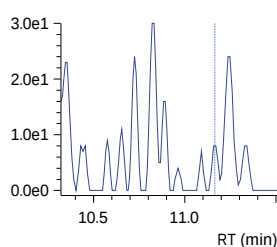
R2 632.90>452.90 (-) 1.19e2



PFOSAm

Conc. ISTD Error

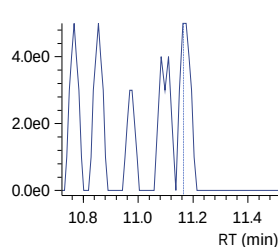
Q 498.10>77.90 (-)



13C8-PFOSAm

Conc. ----

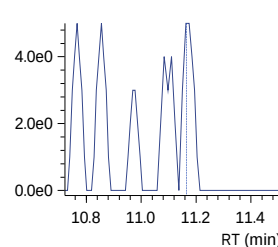
Q 506.10>77.80 (-)



13C8-PFOSAm_IS

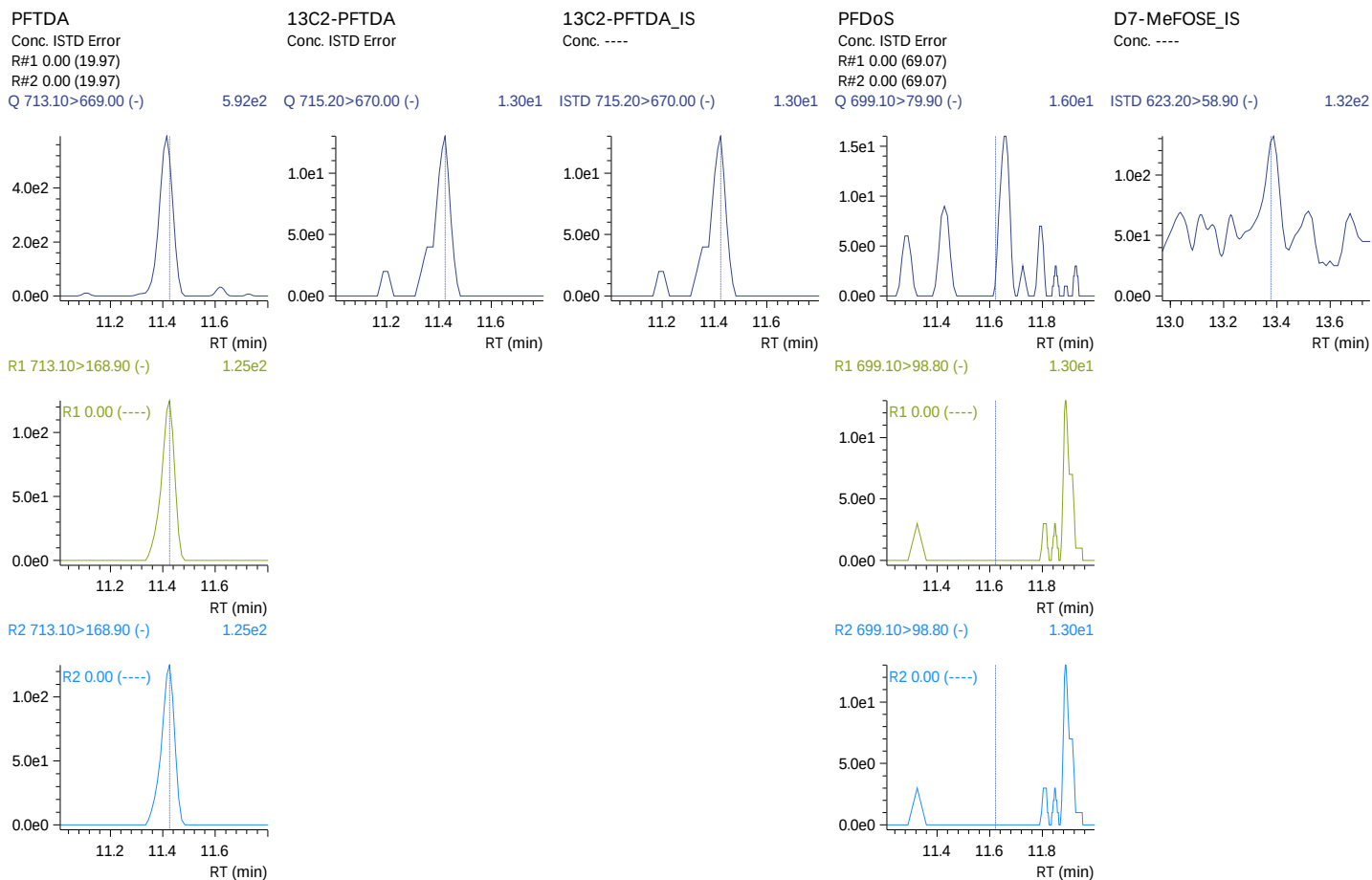
Conc. ----

ISTD 506.10>77.80 (-)





240118_018 (continued)





240118_018 (continued)

D7-MeFOSE
Conc. ----

MeFOSE
Conc. ISTD Error

13C2-PFHDA_IS
Conc. 2.5000

13C2-PFHDA
Conc. ISTD Error

PFHXDA
Conc. 3.3130
R#1 0.00 (11.64)
R#2 0.00 (11.64)

Q 623.20>58.90 (-)

1.32e2

Q 616.10>59.00 (-)

5.30e1

ISTD 815.00>770.05 (-)

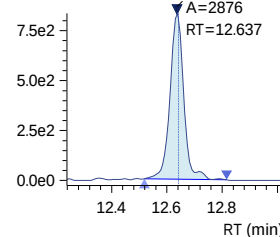
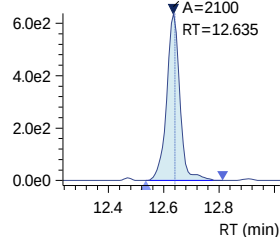
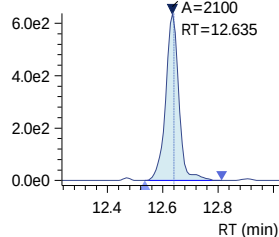
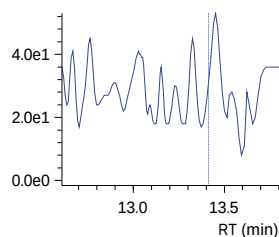
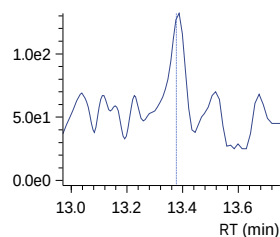
6.38e2

Q 815.00>770.05 (-)

6.38e2

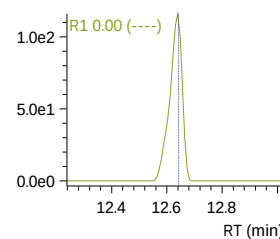
Q 813.00>768.95 (-)

8.37e2



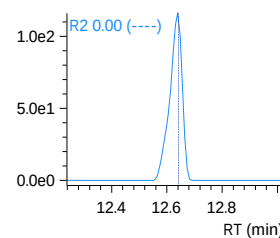
R1 813.00>218.95 (-)

1.16e2



R2 813.00>218.95 (-)

1.16e2

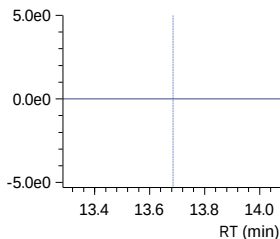




240118_018 (continued)

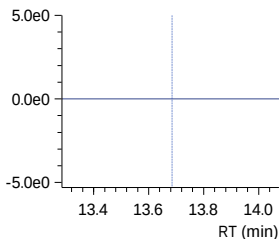
D3-MeFOSA
 Conc. ----

Q 515.00>219.00 (-)



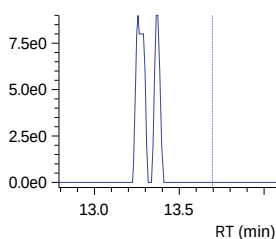
D3-MeFOSA_IS
 Conc. ----

ISTD 515.00>219.00 (-)



MeFOSA
 Conc. ISTD Error
 R#1 0.00 (149.05)
 R#2 0.00 (149.05)

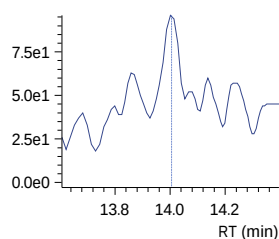
Q 511.90>219.00 (-)



R1 511.90>169.00 (-)

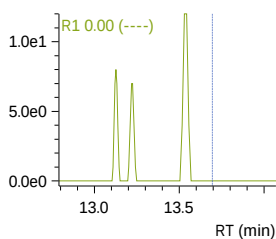
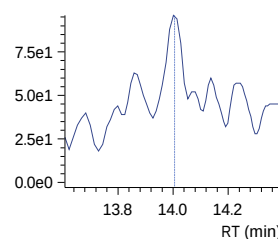
D9-EtFOSE_IS
 Conc. ----

ISTD 639.20>58.90 (-)

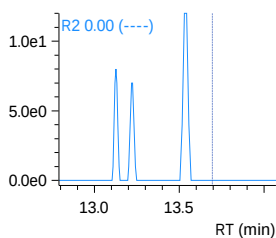


D9-EtFOSE
 Conc. ----

Q 639.20>58.90 (-)

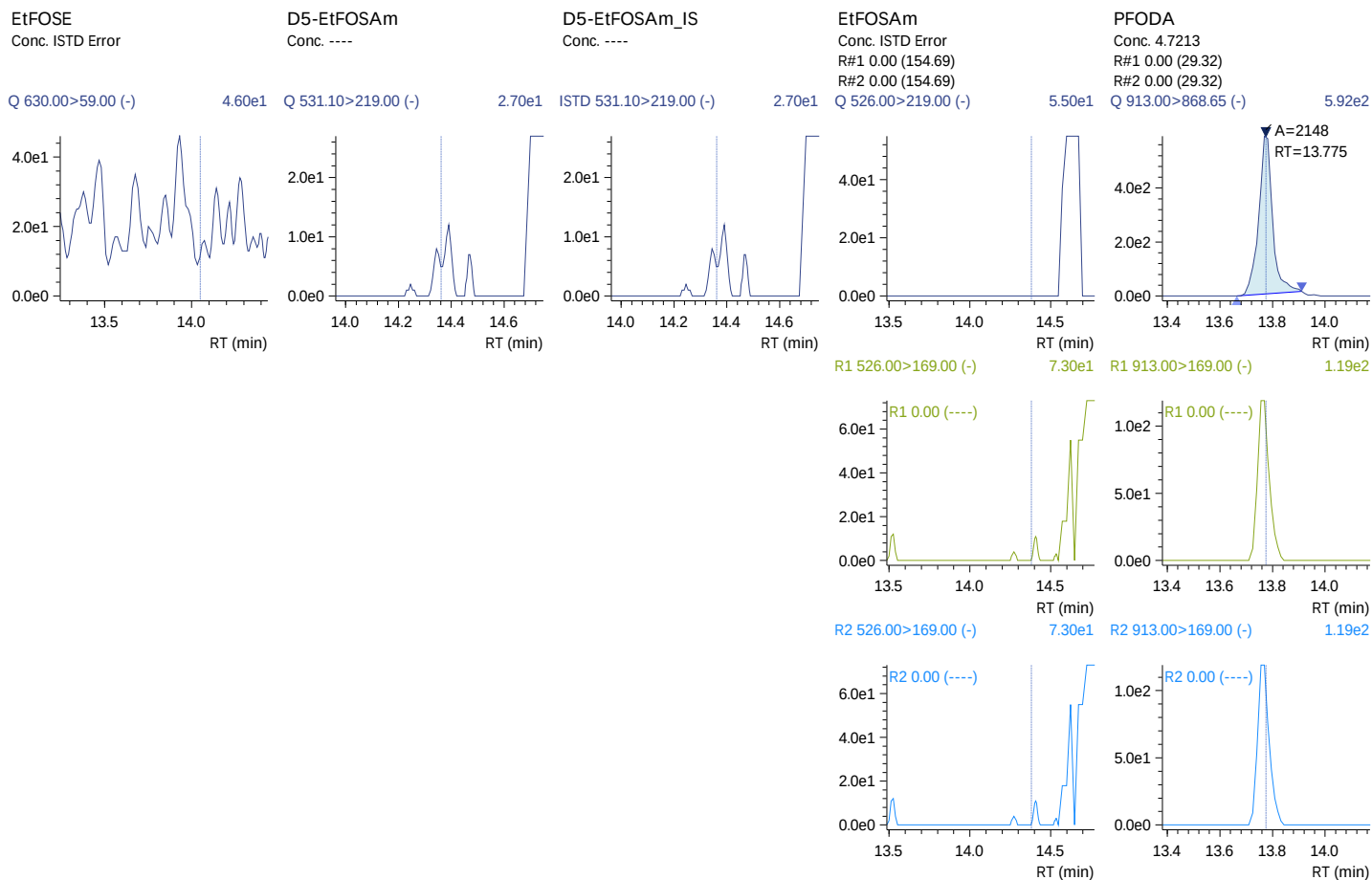


R2 511.90>169.00 (-)





240118_018 (continued)





240118_019

Sample ID: 1633 CCB
Date Acquired: 1/18/2024 7:06:49 PM
Acquired by: System Administrator
Data File: 240118_019
Vial: 54 | Inj. Volume: 10.0000uL | Tray: 1

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	928998	----	----	----	----	----	----	
13C4-PFBA_IS	216.80>171.90	----	928998	----	----	----	----	----	----	
13C3-PFBA_IS	216.00>172.00	----	407833	----	----	----	----	----	----	
PFBA	212.80>169.05	----	1217	----	----	----	----	----	----	
PFMPA	229.00>84.90	----	----	----	----	----	----	----	----	
3_3 FTCA	241.00>177.10	241.00>117.00	----	0	0.00	141.17	0	0.00	141.17	
13C5-PFPeA	268.30>223.00	----	95214	----	----	----	----	----	----	
13C5-PFPeA_IS	268.30>223.00	----	95214	----	----	----	----	----	----	
PFPeA	263.00>219.00	----	1615	----	----	----	----	----	----	
PFMBA	279.00>84.95	----	50	----	----	----	----	----	----	
13C2-4_2 FTS	329.10>80.90	----	106131	----	----	----	----	----	----	
13C2-4_2 FTS_IS	329.10>80.90	----	106131	----	----	----	----	----	----	
4_2 FTS	327.10>307.00	327.10>80.90	----	0	0.00	29.06	0	0.00	29.06	
13C3-PFBS_IS	302.10>79.90	----	229580	----	----	----	----	----	----	
PFBS	298.70>79.90	298.70>98.80	222	150	67.36	46.72	150	67.36	46.72	
13C3-PFBS	302.10>79.90	----	229580	----	----	----	----	----	----	
NFDHA	295.00>201.00	295.00>84.90	938	298	31.79	40.25	298	31.79	40.25	
13C5-PFHxA	318.00>273.00	----	471271	----	----	----	----	----	----	
13C5-PFHxA_IS	318.00>273.00	----	471271	----	----	----	----	----	----	
13C2-PFHxA_IS	315.10>270.00	----	459053	----	----	----	----	----	----	
PFHxA	313.00>269.00	----	1105	----	----	----	----	----	----	
PFEESA	314.80>135.00	314.80>82.90	----	0	0.00	6.11	0	0.00	6.11	
13C3-HFPO-DA	286.90>168.90	----	447905	----	----	----	----	----	----	
13C3-HFPO-DA_IS	286.90>168.90	----	447905	----	----	----	----	----	----	
HFPO-DA	284.90>168.90	284.90>184.90	----	0	0.00	65.61	0	0.00	65.61	
5_3 FTCA	341.00>237.05	341.00>217.00	----	0	0.00	158.86	0	0.00	158.86	
PFPeS	349.10>79.90	349.10>98.80	28	57	202.63	55.80	57	202.63	55.80	IRr
13C4-PFHpA	367.10>322.00	----	448949	----	----	----	----	----	----	
13C4-PFHpA_IS	367.10>322.00	----	448949	----	----	----	----	----	----	
PFHpA	363.10>319.00	363.10>169.00	4713	1386	29.41	21.50	1386	29.41	21.50	
DONA	376.90>250.90	376.90>84.80	217	44	20.33	29.66	44	20.33	29.66	
13C2-6_2 FTS_IS	429.10>80.90	----	102974	----	----	----	----	----	----	
13C2-6_2 FTS	429.10>80.90	----	102974	----	----	----	----	----	----	
6_2 FTS	427.10>407.00	427.10>80.90	1065	497	46.68	41.15	497	46.68	41.15	
13C4-PFOA_IS	417.10>172.00	----	30337	----	----	----	----	----	----	
13C8-PFOA_IS	421.10>376.00	----	453661	----	----	----	----	----	----	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240118_019 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	453661	----	----	----	----	----	----	----
PFOA	413.00>369.00	413.00>169.00	4801	917	19.10	31.89	917	19.10	31.89	
13C3-PFHxS	402.10>79.90	----	170454	----	----	----	----	----	----	----
13C3-PFHxS_IS	402.10>79.90	----	170454	----	----	----	----	----	----	----
PFHxS	398.70>79.90	398.70>98.90	749	353	47.15	56.62	353	47.15	56.62	
18O2-PFHxS_IS	403.00>83.90	----	157111	----	----	----	----	----	----	----
13C9-PFNA_IS	472.10>427.00	----	214927	----	----	----	----	----	----	----
13C9-PFNA	472.10>427.00	----	214927	----	----	----	----	----	----	----
13C5-PFNA_IS	468.00>423.00	----	220522	----	----	----	----	----	----	----
PFNA	463.00>419.00	463.00>219.00	3845	785	20.42	23.17	785	20.42	23.17	
PFHpS	449.00>79.90	449.00>98.80	----	0	0.00	56.96	0	0.00	56.96	
7_3 FTCA	441.00>317.00	441.00>336.90	----	0	0.00	117.47	0	0.00	117.47	
13C2-8_2-FTS	529.10>80.90	----	72781	----	----	----	----	----	----	----
13C2-8_2-FTS_IS	529.10>80.90	----	72781	----	----	----	----	----	----	----
8_2 FTS	527.10>506.95	527.10>80.80	----	0	0.00	49.59	0	0.00	49.59	
13C6-PFDA_IS	519.10>474.10	----	165561	----	----	----	----	----	----	----
13C6-PFDA	519.10>474.10	----	165561	----	----	----	----	----	----	----
13C2-PFDA_IS	515.10>470.10	----	155234	----	----	----	----	----	----	----
PFDA	512.90>469.00	512.90>219.00	4206	726	17.26	19.00	726	17.26	19.00	
D3-NMeFOSAA_IS	573.20>419.00	----	161516	----	----	----	----	----	----	----
D3-NMeFOSAA	573.20>419.00	----	161516	----	----	----	----	----	----	----
13C8-PFOS_IS	507.10>98.90	----	78161	----	----	----	----	----	----	----
13C8-PFOS	507.10>98.90	----	78161	----	----	----	----	----	----	----
13C4-PFOS_IS	502.80>79.90	----	196518	----	----	----	----	----	----	----
PFOS	498.90>79.90	498.90>98.80	516	126	24.33	52.47	126	24.33	52.47	IRr
NMeFOSAA	570.10>419.00	570.10>483.00	----	0	0.00	55.15	0	0.00	55.15	
D5-NEtFOSAA_IS	589.20>419.00	----	191221	----	----	----	----	----	----	----
D5-NEtFOSAA	589.20>419.00	----	191221	----	----	----	----	----	----	----
NEtFOSAA	584.20>419.10	584.20>526.00	----	0	0.00	81.95	0	0.00	81.95	
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	----	0	0.00	32.76	0	0.00	32.76	
PFUnDA	563.10>519.00	563.10>269.10	4277	152	3.56	13.12	152	3.56	13.12	IRr
13C7-PFUnDA_IS	570.00>525.10	----	192787	----	----	----	----	----	----	----
13C7-PFUnDA	570.00>525.10	----	192787	----	----	----	----	----	----	----
PFNS	548.80>79.90	548.80>98.80	----	0	0.00	65.22	0	0.00	65.22	
10_2 FTS	626.80>607.05	626.80>81.00	----	0	0.00	37.13	0	0.00	37.13	
13C2-PFDOA_IS	615.10>570.00	----	219158	----	----	----	----	----	----	----
13C2-PFDOA	615.10>570.00	----	219158	----	----	----	----	----	----	----
PFDOA	613.10>569.00	613.10>319.00	2695	264	9.80	11.29	264	9.80	11.29	
PFDS	599.00>79.90	599.00>98.80	----	0	0.00	60.18	0	0.00	60.18	
PFTrDA	663.00>619.00	663.00>168.90	3005	677	22.52	17.64	677	22.52	17.64	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240118_019 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	----	0	0.00	36.44	0	0.00	36.44	
PFOSAm	498.10>77.90	----	205	----	----	----	----	----	----	
13C8-PFOSAm	506.10>77.80	----	185274	----	----	----	----	----	----	
13C8-PFOSAm_IS	506.10>77.80	----	185274	----	----	----	----	----	----	
PFTDA	713.10>669.00	713.10>168.90	2979	547	18.36	22.96	547	18.36	22.96	
13C2-PFTDA	715.20>670.00	----	89966	----	----	----	----	----	----	
13C2-PFTDA_IS	715.20>670.00	----	89966	----	----	----	----	----	----	
PFDoS	699.10>79.90	699.10>98.80	----	0	0.00	67.40	0	0.00	67.40	
D7-MeFOSE_IS	623.20>58.90	----	504642	----	----	----	----	----	----	
D7-MeFOSE	623.20>58.90	----	504642	----	----	----	----	----	----	
MeFOSE	616.10>59.00	----	----	----	----	----	----	----	----	
13C2-PFHxDA_IS	815.00>770.05	----	348976	----	----	----	----	----	----	
13C2-PFHxDA	815.00>770.05	----	348976	----	----	----	----	----	----	
PFHxDA	813.00>768.95	813.00>218.95	3387	458	13.53	13.90	458	13.53	13.90	
D3-MeFOSA	515.00>219.00	----	41279	----	----	----	----	----	----	
D3-MeFOSA_IS	515.00>219.00	----	41279	----	----	----	----	----	----	
MeFOSA	511.90>219.00	511.90>169.00	----	0	0.00	140.79	0	0.00	140.79	
D9-EtFOSE_IS	639.20>58.90	----	496690	----	----	----	----	----	----	
D9-EtFOSE	639.20>58.90	----	496690	----	----	----	----	----	----	
EtFOSE	630.00>59.00	----	----	----	----	----	----	----	----	
D5-EtFOSAm	531.10>219.00	----	54096	----	----	----	----	----	----	
D5-EtFOSAm_IS	531.10>219.00	----	54096	----	----	----	----	----	----	
EtFOSAm	526.00>219.00	526.00>169.00	----	0	0.00	163.90	0	0.00	163.90	
PFODA	913.00>868.65	913.00>169.00	1588	576	36.26	27.03	576	36.26	27.03	

Flag ID key: IRr: Ion Ratio (Relative)



240118_019

Sample ID: 1633 CCB
Date Acquired: 1/18/2024 7:06:49 PM
Acquired by: System Administrator
Data File: 240118_019
Vial: 54 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Std. Conc.	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.445	0.031	0.000	928998	407833	13C3-PFBA_IS	----	10.1911	ng/mL	
13C4-PFBA_IS	Auto	1.445	0.031	----	928998	928998	----	----	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.445	0.030	----	407833	407833	----	----	5.0000	ng/mL	
PFBA	M	1.439	0.023	-0.006	1217	928998	13C4-PFBA_IS	----	0.0153	ng/mL	
PFMPA	ND(W/B)	----	----	----	----	95214	13C5-PFPeA_IS	----	----	ng/mL	
3_3 FTCA	ND(W/B)	----	----	----	----	95214	13C5-PFPeA_IS	----	----	ng/mL	
13C5-PFPeA	Auto	3.510	0.018	-1.480	95214	459053	13C2-PFHxA_IS	----	4.5951	ng/mL	
13C5-PFPeA_IS	Auto	3.510	0.018	----	95214	95214	----	----	5.0000	ng/mL	
PFPeA	M	3.512	0.017	0.002	1615	95214	13C5-PFPeA_IS	----	0.0131	ng/mL	
PFMBA	M	4.045	0.020	0.535	50	95214	13C5-PFPeA_IS	----	0.0006	ng/mL	
13C2-4_2 FTS	Auto	4.672	0.011	-2.418	106131	157111	18O2-PFHxS_IS	----	4.9088	ng/mL	
13C2-4_2 FTS_IS	Auto	4.672	0.011	----	106131	106131	----	----	5.0000	ng/mL	
4_2 FTS	ND(W/B)	----	----	----	----	106131	13C2-4_2 FTS_IS	----	----	ng/mL	
13C3-PFBS_IS	Auto	4.663	0.016	----	229580	229580	----	----	2.5000	ng/mL	
PFBS	M	4.661	0.013	-0.002	222	229580	13C3-PFBS_IS	----	0.0019	ng/mL	
13C3-PFBS	Auto	4.663	0.016	-2.427	229580	157111	18O2-PFHxS_IS	----	2.5749	ng/mL	
NFDHA	M	4.850	0.015	-0.139	938	471271	13C5-PFHxA_IS	----	0.0090	ng/mL	
13C5-PFHxA	Auto	4.989	0.011	-0.001	471271	459053	13C2-PFHxA_IS	----	2.4359	ng/mL	
13C5-PFHxA_IS	Auto	4.989	0.011	----	471271	471271	----	----	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	4.990	0.011	----	459053	459053	----	----	2.5000	ng/mL	
PFHxA	M	4.990	0.010	0.001	1105	471271	13C5-PFHxA_IS	----	-0.0013	ng/mL	
PFEESA	ND(W/B)	----	----	----	----	471271	13C5-PFHxA_IS	----	----	ng/mL	
13C3-HFPO-DA	Auto	5.461	0.009	0.471	447905	459053	13C2-PFHxA_IS	----	9.9673	ng/mL	
13C3-HFPO-DA_IS	Auto	5.461	0.009	----	447905	447905	----	----	10.0000	ng/mL	
HFPO-DA	ND(W/B)	----	----	----	----	447905	13C3-HFPO-DA_IS	----	----	ng/mL	
5_3 FTCA	ND(W/B)	----	----	----	----	471271	13C5-PFHxA_IS	----	----	ng/mL	
PFPeS	M	6.008	-0.010	-1.082	28	170454	13C3-PFHxS_IS	----	0.0003	ng/mL	IRr
13C4-PFHpA	Auto	6.161	0.007	1.171	448949	459053	13C2-PFHxA_IS	----	2.5634	ng/mL	
13C4-PFHpA_IS	Auto	6.161	0.007	----	448949	448949	----	----	2.5000	ng/mL	
PFHpA	M	6.145	-0.010	-0.016	4713	448949	13C4-PFHpA_IS	----	-0.0094	ng/mL	
DONA	M	6.529	0.009	1.068	217	447905	13C3-HFPO-DA_IS	----	0.0006	ng/mL	
13C2-6_2 FTS_IS	Auto	6.796	0.003	----	102974	102974	----	----	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.796	0.003	-0.294	102974	157111	18O2-PFHxS_IS	----	5.0357	ng/mL	
6_2 FTS	M	6.795	0.003	-0.001	1065	102974	13C2-6_2 FTS_IS	----	0.0227	ng/mL	
13C4-PFOA_IS	Auto	7.112	0.005	----	30337	30337	----	----	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.112	0.005	----	453661	453661	----	----	2.5000	ng/mL	
13C8-PFOA	Auto	7.112	0.005	0.000	453661	30337	13C4-PFOA_IS	----	2.6754	ng/mL	
PFOA	M	7.111	0.001	-0.001	4801	453661	13C8-PFOA_IS	----	-0.0027	ng/mL	
13C3-PFHxS	Auto	7.090	0.004	0.000	170454	157111	18O2-PFHxS_IS	----	2.5276	ng/mL	
13C3-PFHxS_IS	Auto	7.090	0.004	----	170454	170454	----	----	2.5000	ng/mL	
PFHxS	M	7.088	0.004	-0.002	749	170454	13C3-PFHxS_IS	----	-0.0100	ng/mL	
18O2-PFHxS_IS	Auto	7.090	0.004	----	157111	157111	----	----	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.957	0.001	----	214927	214927	----	----	1.2500	ng/mL	
13C9-PFNA	Auto	7.957	0.001	-0.001	214927	220522	13C5-PFNA_IS	----	1.2448	ng/mL	
13C5-PFNA_IS	Auto	7.958	0.002	----	220522	220522	----	----	1.2500	ng/mL	
PFNA	M	7.957	0.000	0.000	3845	214927	13C9-PFNA_IS	----	0.0006	ng/mL	
PFHpS	ND(W/B)	----	----	----	----	78161	13C8-PFOS_IS	----	----	ng/mL	
7_3 FTCA	ND(W/B)	----	----	----	----	471271	13C5-PFHxA_IS	----	----	ng/mL	
13C2-8_2-FTS	Auto	8.410	0.001	1.320	72781	157111	18O2-PFHxS_IS	----	4.3328	ng/mL	
13C2-8_2-FTS_IS	Auto	8.410	0.001	----	72781	72781	----	----	5.0000	ng/mL	
8_2 FTS	ND(W/B)	----	----	----	----	72781	13C2-8_2-FTS_IS	----	----	ng/mL	
13C6-PFDA_IS	Auto	8.720	0.000	----	165561	165561	----	----	1.2500	ng/mL	
13C6-PFDA	Auto	8.720	0.000	-0.001	165561	155234	13C2-PFDA_IS	----	1.3256	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_019 (continued)

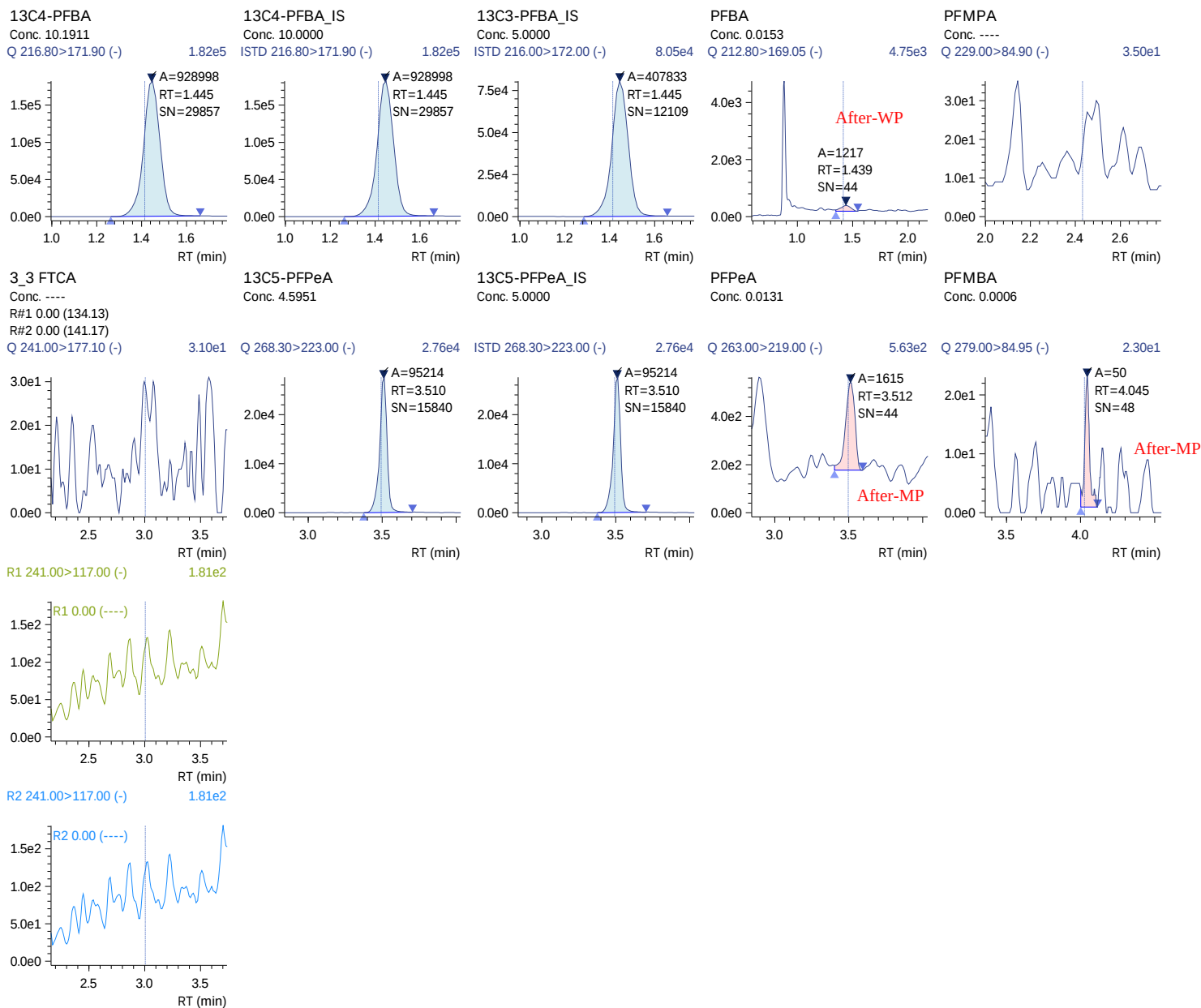
(Table continued from previous page)

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Std. Conc.	Conc.	Unit	Flag ID
13C2-PFDA_IS	Auto	8.721	0.000	----	155234	155234	----	----	1.2500	ng/mL	
PFDA	Auto	8.718	-0.003	-0.002	4206	165561	13C6-PFDA_IS	----	0.0012	ng/mL	
D3-NMeFOSAA_IS	Auto	8.854	-0.001	----	161516	161516	----	----	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.854	-0.001	0.032	161516	196518	13C4-PFOS_IS	----	4.7355	ng/mL	
13C8-PFOS_IS	Auto	8.821	0.001	----	78161	78161	----	----	2.5000	ng/mL	
13C8-PFOS	Auto	8.821	0.001	-0.001	78161	196518	13C4-PFOS_IS	----	2.3849	ng/mL	
13C4-PFOS_IS	Auto	8.822	0.002	----	196518	196518	----	----	2.5000	ng/mL	
PFOS	M	8.831	0.009	0.010	516	78161	13C8-PFOS_IS	----	0.0064	ng/mL	IRr
NMeFOSAA	ND(W/B)	----	----	----	----	161516	D3-NMeFOSAA_IS	----	----	ng/mL	
D5-NetFOSAA_IS	Auto	9.186	0.000	----	191221	191221	----	----	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.186	0.000	0.364	191221	196518	13C4-PFOS_IS	----	4.6862	ng/mL	
NetFOSAA	ND(W/B)	----	----	----	----	191221	D5-NetFOSAA_IS	----	----	ng/mL	
9-CI-PF3ONS	ND(W/B)	----	----	----	----	447905	13C3-HFPO-DA_IS	----	----	ng/mL	
PFUnDA	M	9.442	-0.005	-0.002	4277	192787	13C7-PFUnDA_IS	----	0.0009	ng/mL	IRr
13C7-PFUnDA_IS	Auto	9.444	-0.001	----	192787	192787	----	----	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.444	-0.001	0.723	192787	155234	13C2-PFDA_IS	----	1.2941	ng/mL	
PFNS	ND(W/B)	----	----	----	----	78161	13C8-PFOS_IS	----	----	ng/mL	
10_2_FTS	ND(W/B)	----	----	----	----	72781	13C2-8_2-FTS_IS	----	----	ng/mL	
13C2-PFDOA_IS	Auto	10.130	-0.003	----	219158	219158	----	----	1.2500	ng/mL	
13C2-PFDOA	Auto	10.130	-0.003	1.409	219158	155234	13C2-PFDA_IS	----	1.2805	ng/mL	
PFDOA	M	10.131	-0.003	0.001	2695	219158	13C2-PFDOA_IS	----	-0.0110	ng/mL	
PFDS	ND(W/B)	----	----	----	----	78161	13C8-PFOS_IS	----	----	ng/mL	
PFTrDA	M	10.784	-0.008	-0.636	3005	89966	13C2-PFTDA_IS	----	-0.0073	ng/mL	
11-CI-PF3OUdS	ND(W/B)	----	----	----	----	447905	13C3-HFPO-DA_IS	----	----	ng/mL	
PFOSAm	M	11.165	0.001	0.004	205	185274	13C8-PFOSAm_IS	----	0.0034	ng/mL	
13C8-PFOSAm	Auto	11.161	-0.004	2.339	185274	196518	13C4-PFOS_IS	----	2.2208	ng/mL	
13C8-PFOSAm_IS	Auto	11.161	-0.004	----	185274	185274	----	----	2.5000	ng/mL	
PFTDA	M	11.421	-0.004	0.001	2979	89966	13C2-PFTDA_IS	----	0.0030	ng/mL	
13C2-PFTDA	Auto	11.420	-0.004	2.699	89966	155234	13C2-PFDA_IS	----	1.2175	ng/mL	
13C2-PFTDA_IS	Auto	11.420	-0.004	----	89966	89966	----	----	1.2500	ng/mL	
PFDoS	ND(W/B)	----	----	----	----	78161	13C8-PFOS_IS	----	----	ng/mL	
D7-MeFOSE_IS	Auto	13.371	-0.006	----	504642	504642	----	----	25.0000	ng/mL	
D7-MeFOSE	Auto	13.371	-0.006	4.549	504642	196518	13C4-PFOS_IS	----	24.5350	ng/mL	
MeFOSE	ND(W/B)	----	----	----	----	504642	D7-MeFOSE_IS	----	----	ng/mL	
13C2-PFHxDA_IS	Auto	12.637	-0.004	----	348976	348976	----	----	2.5000	ng/mL	
13C2-PFHxDA	Auto	12.637	-0.004	3.916	348976	155234	13C2-PFDA_IS	----	2.4202	ng/mL	
PFHxDA	M	12.636	-0.006	-0.001	3387	348976	13C2-PFHxDA_IS	----	-0.0042	ng/mL	
D3-MeFOSA	Auto	13.681	-0.004	4.859	41279	196518	13C4-PFOS_IS	----	2.4570	ng/mL	
D3-MeFOSA_IS	Auto	13.681	-0.004	----	41279	41279	----	----	2.5000	ng/mL	
MeFOSA	ND(W/B)	----	----	----	----	41279	D3-MeFOSA_IS	----	----	ng/mL	
D9-EtFOSE_IS	Auto	14.003	-0.003	----	496690	496690	----	----	25.0000	ng/mL	
D9-EtFOSE	Auto	14.003	-0.003	5.181	496690	196518	13C4-PFOS_IS	----	23.7762	ng/mL	
EtFOSE	ND(W/B)	----	----	----	----	496690	D9-EtFOSE_IS	----	----	ng/mL	
D5-EtFOSAm	Auto	14.358	-0.004	5.536	54096	196518	13C4-PFOS_IS	----	2.4184	ng/mL	
D5-EtFOSAm_IS	Auto	14.358	-0.004	----	54096	54096	----	----	2.5000	ng/mL	
EtFOSAm	ND(W/B)	----	----	----	----	54096	D5-EtFOSAm_IS	----	----	ng/mL	
PFODA	M	13.773	-0.002	1.136	1588	348976	13C2-PFHxDA_IS	----	0.0201	ng/mL	

Flag ID key: IRr: Ion Ratio (Relative)



240118_019 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_019 (continued)

13C2-4_2 FTS
Conc. 4.9088

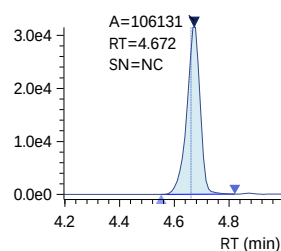
13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. ----
R#1 0.00 (34.14)
R#2 0.00 (29.06)

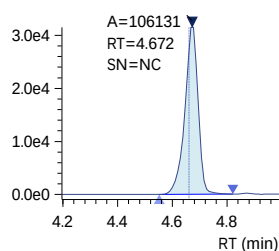
13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. 0.0019
R#1 67.36 (47.53)
R#2 67.36 (46.72)

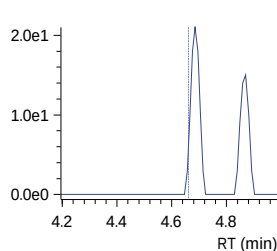
Q 329.10>80.90 (-)



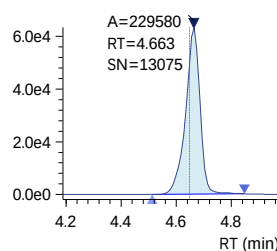
ISTD 329.10>80.90 (-)



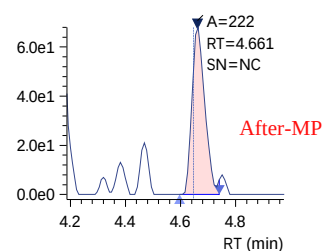
Q 327.10>307.00 (-)



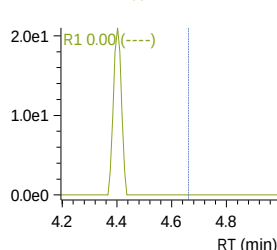
ISTD 302.10>79.90 (-)



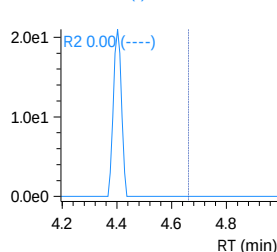
Q 298.70>79.90 (-)



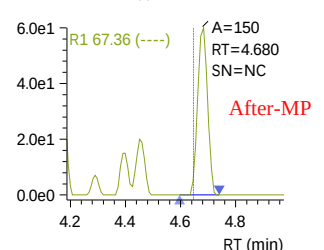
R1 327.10>80.90 (-)



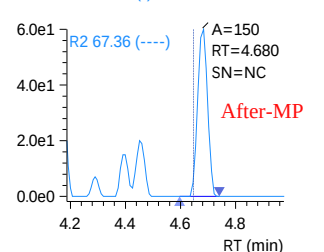
R2 327.10>80.90 (-)



R1 298.70>98.80 (-)



R2 298.70>98.80 (-)





240118_019 (continued)

13C3-PFBS
Conc. 2.5749

NFDHA
Conc. 0.0090
R#1 31.79 (37.88)
R#2 31.79 (40.25)

13C5-PFHxA
Conc. 2.4359

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

Q 302.10>79.90 (-)

6.34e4

Q 295.00>201.00 (-)

2.88e2

Q 318.00>273.00 (-)

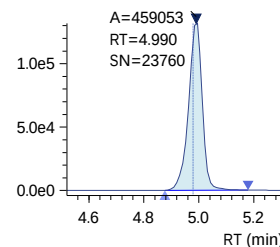
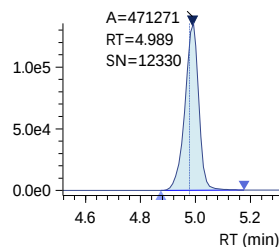
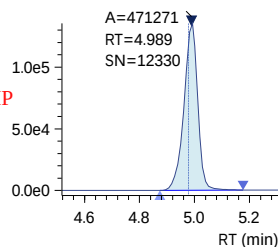
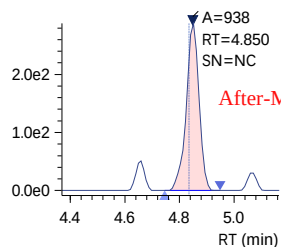
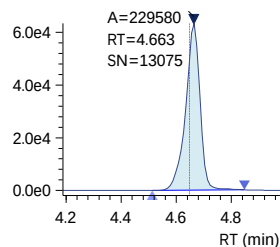
1.35e5

ISTD 318.00>273.00 (-)

1.35e5

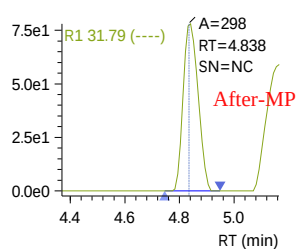
ISTD 315.10>270.00 (-)

1.32e5



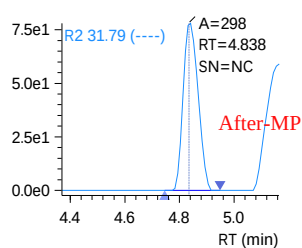
R1 295.00>84.90 (-)

7.80e1



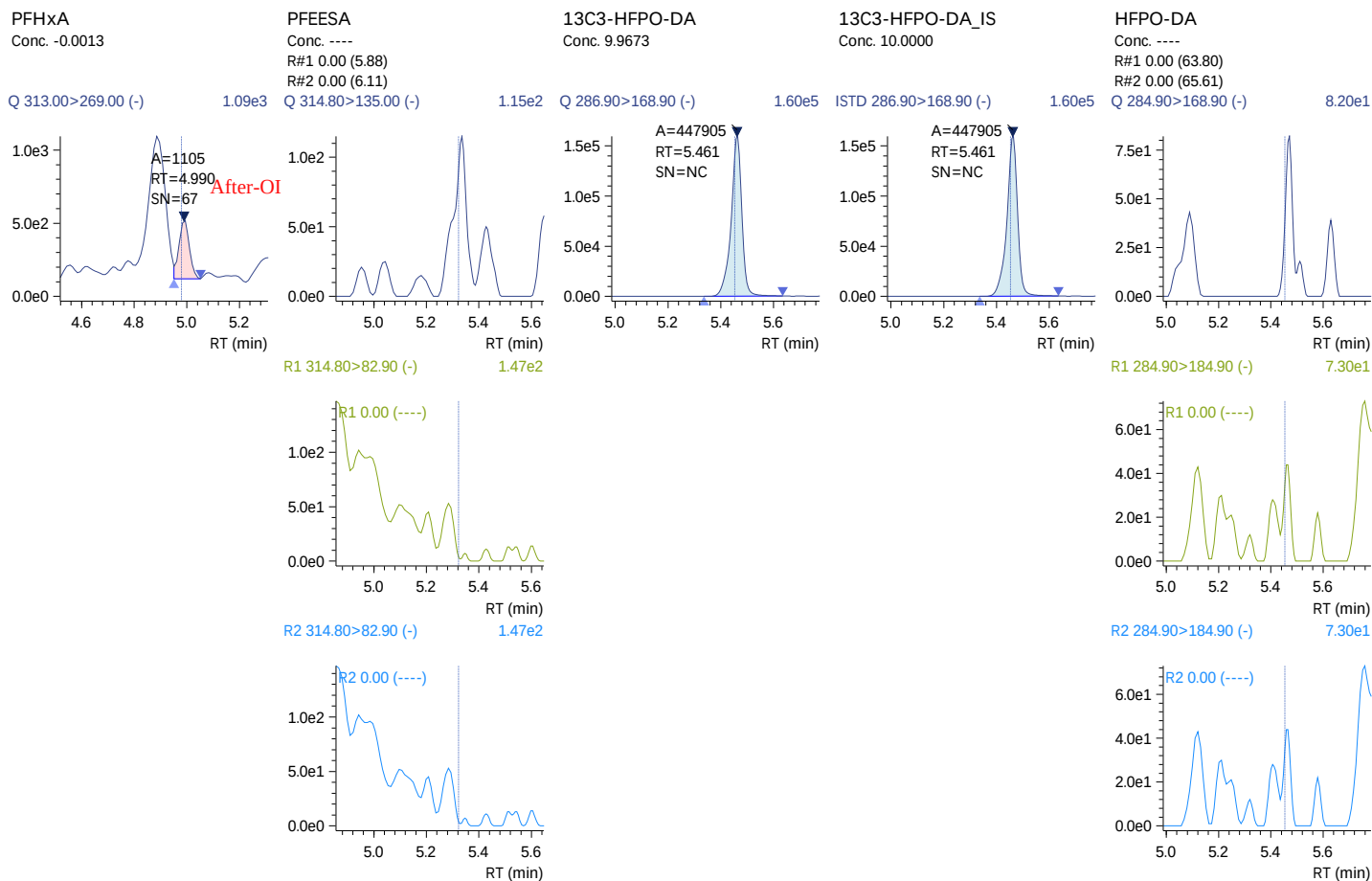
R2 295.00>84.90 (-)

7.80e1





240118_019 (continued)

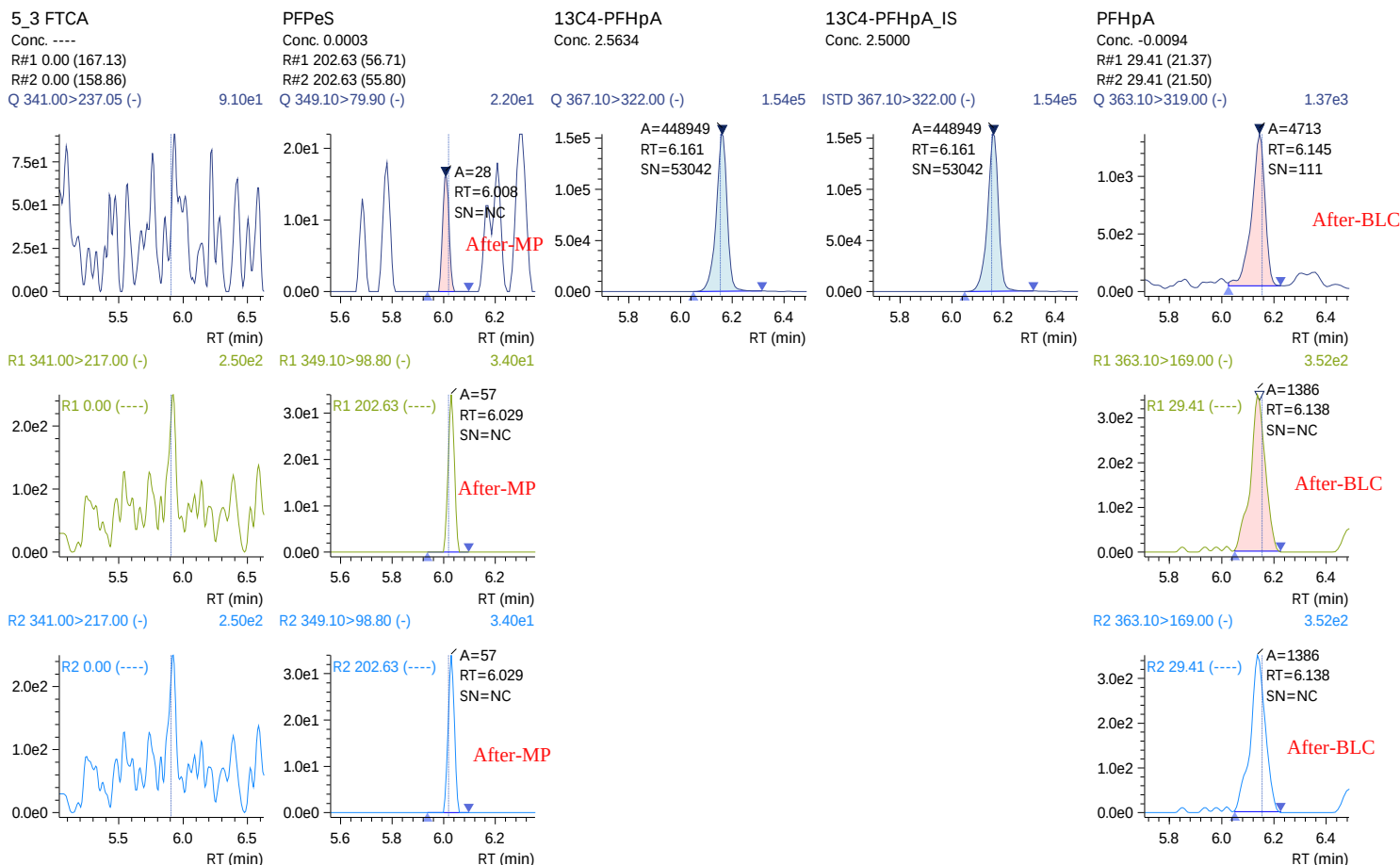


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_019 (continued)

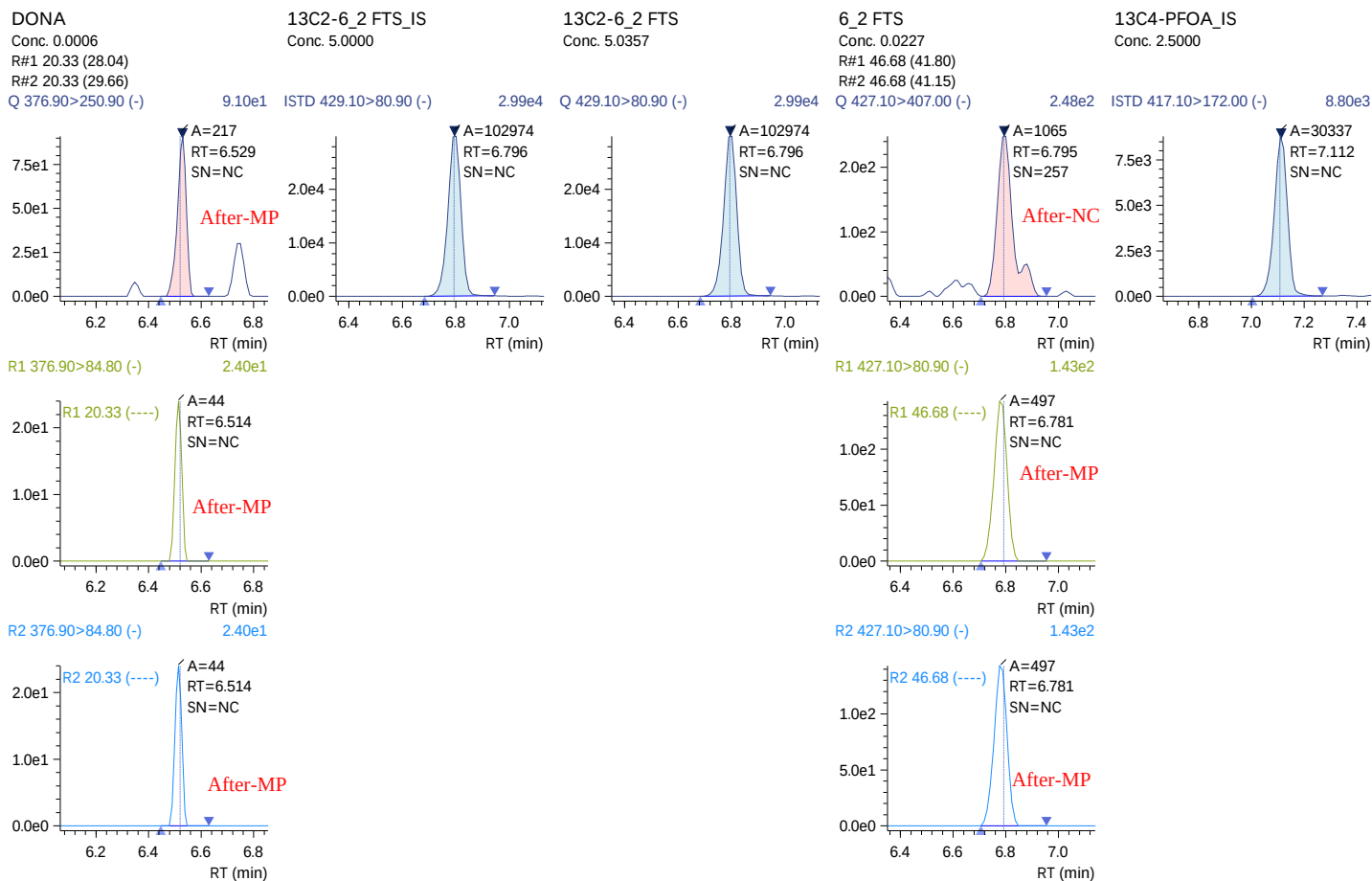


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.

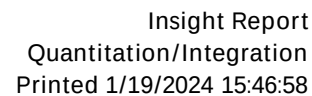


240118_019 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
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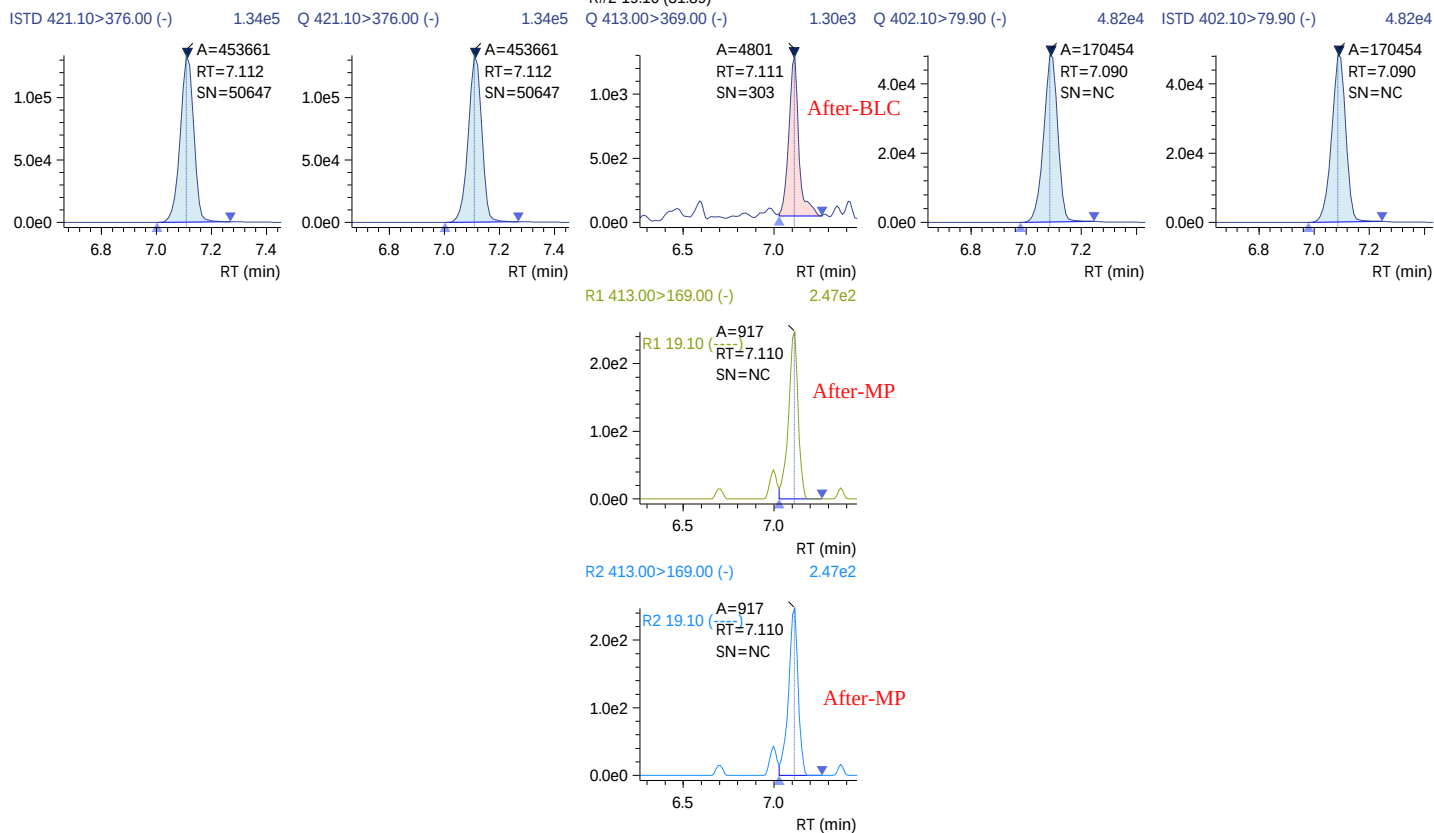
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.6754

PFOA
Conc. -0.0027
R#1 19.10 (29.05)
R#2 19.10 (21.89)

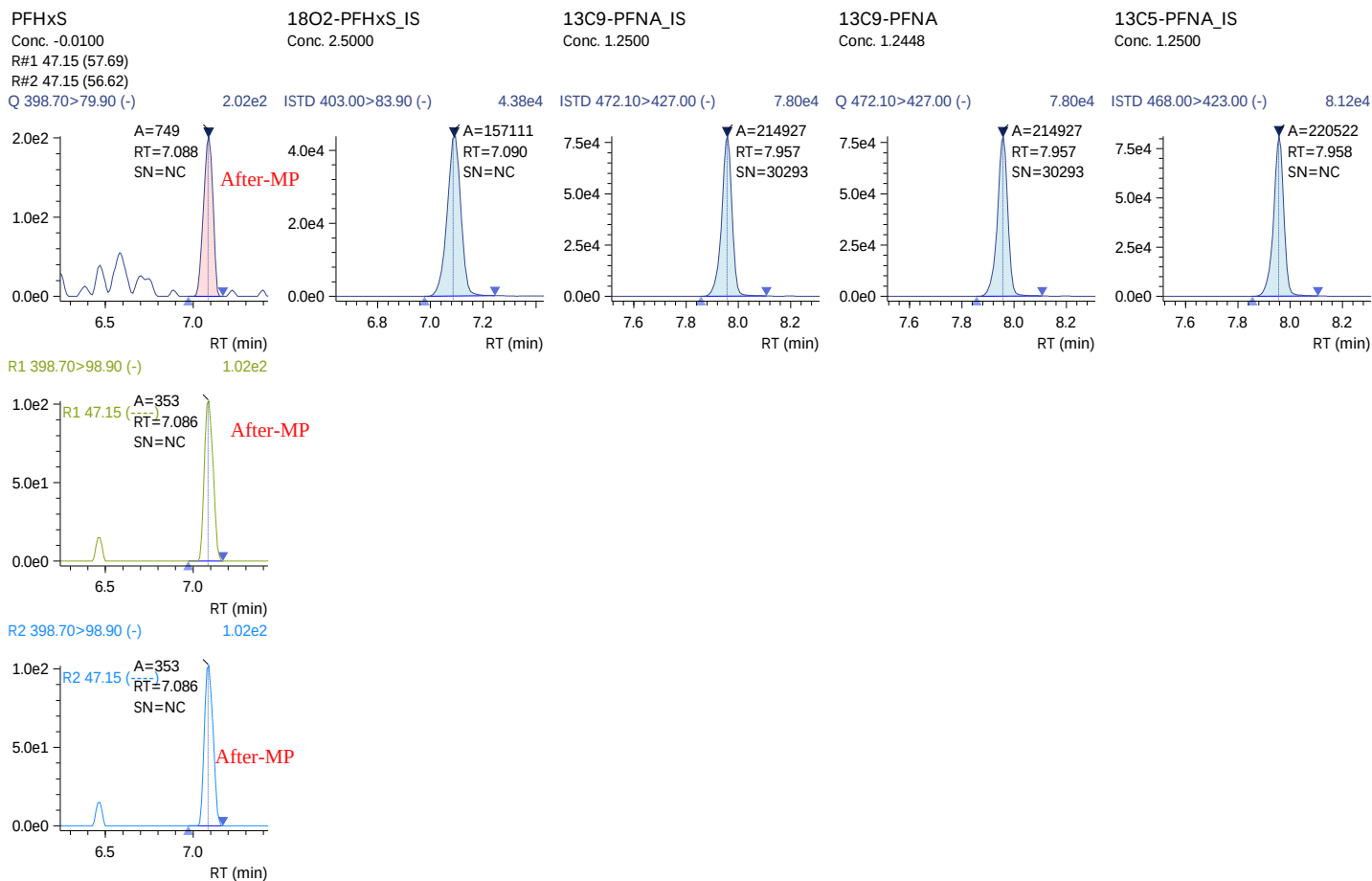
13C3-PFHxS
Conc. 2.5276

13C3-PFHxS_IS
Conc. 2.5000





240118_019 (continued)

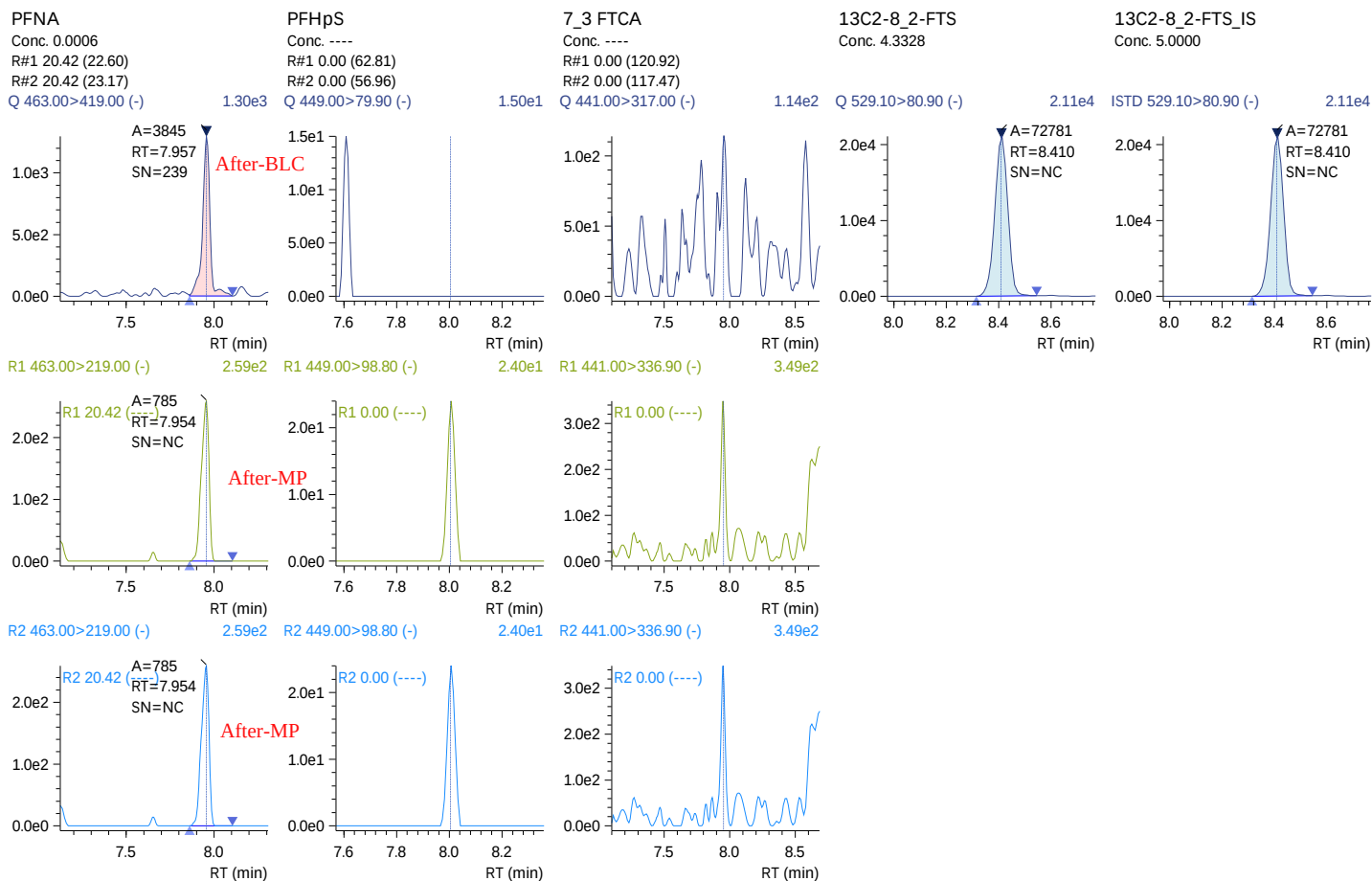


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_019 (continued)

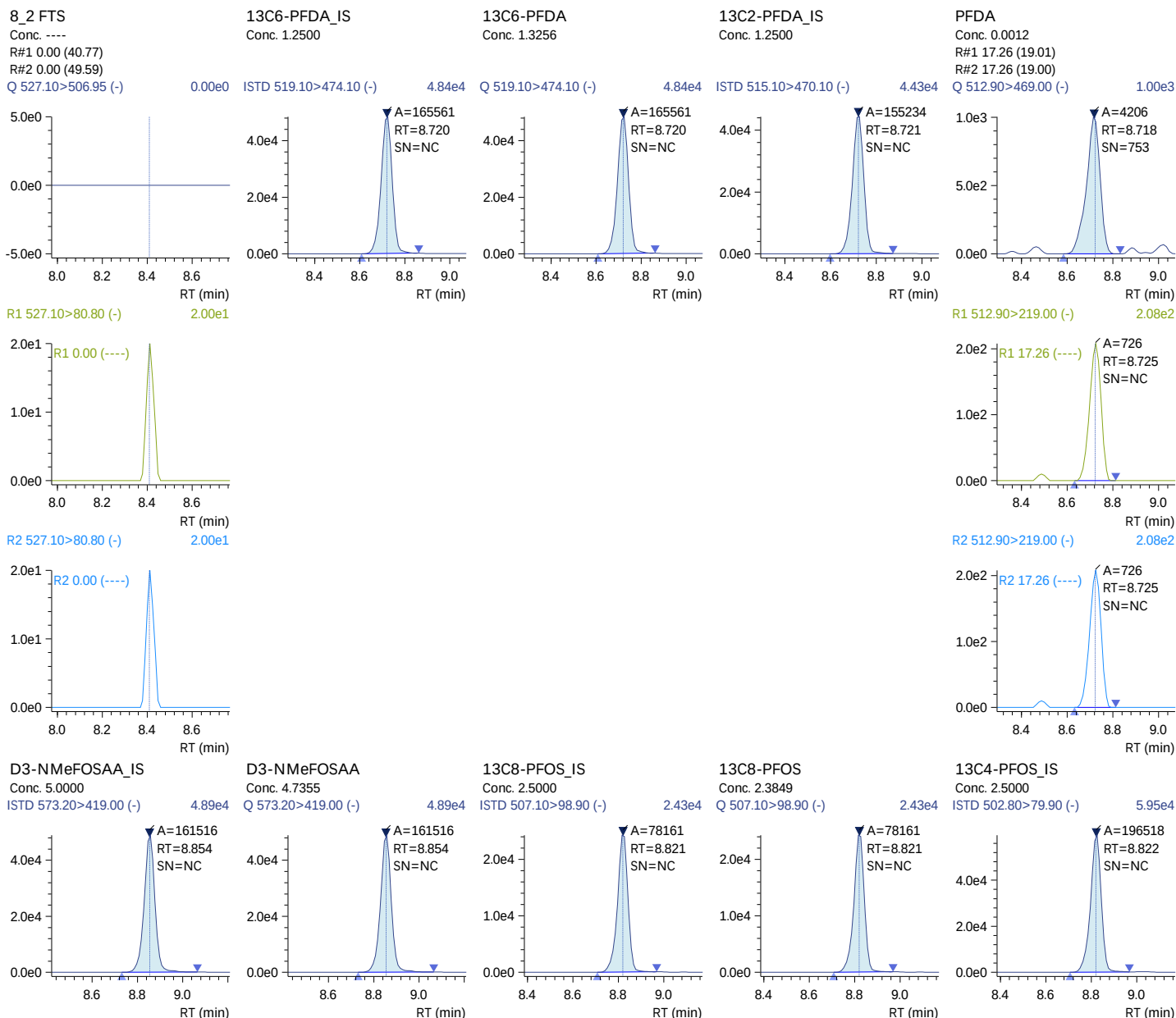


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_019 (continued)

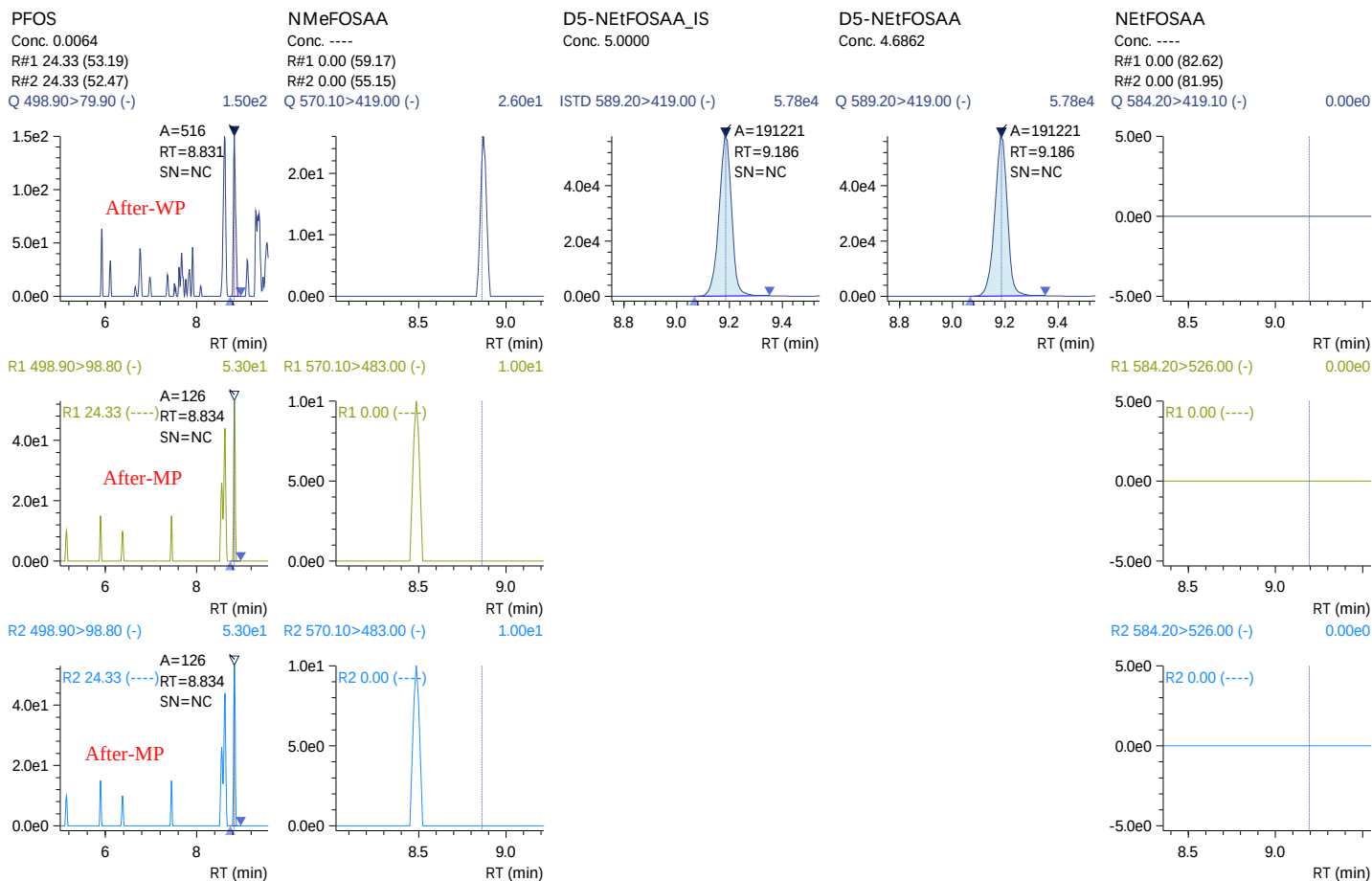


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_019 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_019 (continued)

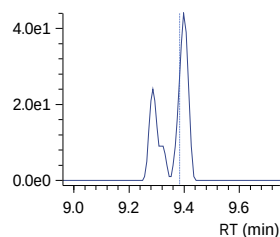
9-Cl-PF3ONS

Conc. ----

R#1 0.00 (31.76)

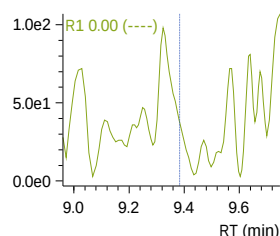
R#2 0.00 (32.76)

Q 530.80>351.00 (-)



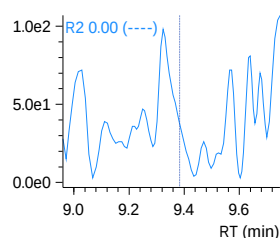
R1 532.80>353.00 (-)

1.07e2



R2 532.80>353.00 (-)

1.07e2



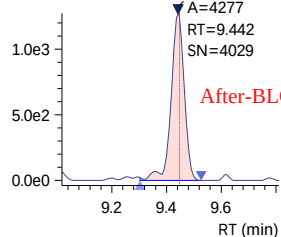
PFUnDA

Conc. 0.0009

R#1 3.56 (12.31)

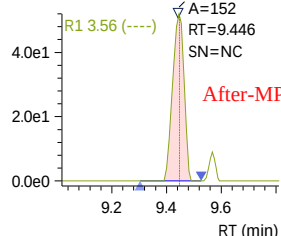
R#2 3.56 (13.12)

Q 563.10>519.00 (-)



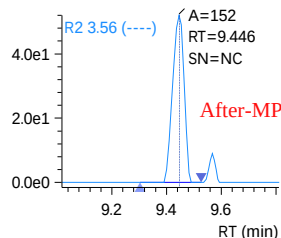
R1 563.10>269.10 (-)

5.20e1



R2 563.10>269.10 (-)

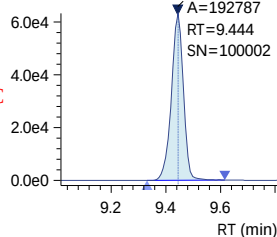
5.20e1



13C7-PFUnDA_IS

Conc. 1.2500

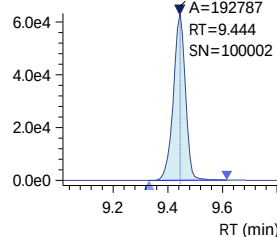
ISTD 570.00>525.10 (-)



13C7-PFUnDA

Conc. 1.2941

Q 570.00>525.10 (-)



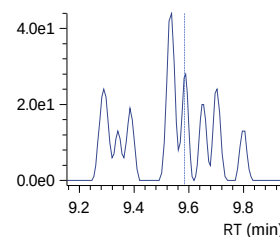
PFNS

Conc. ----

R#1 0.00 (63.31)

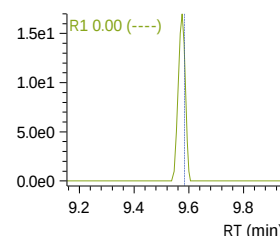
R#2 0.00 (65.22)

Q 548.80>79.90 (-)



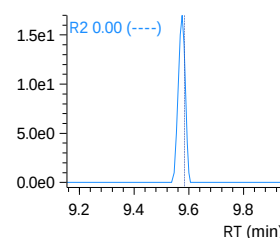
R1 548.80>98.80 (-)

1.70e1



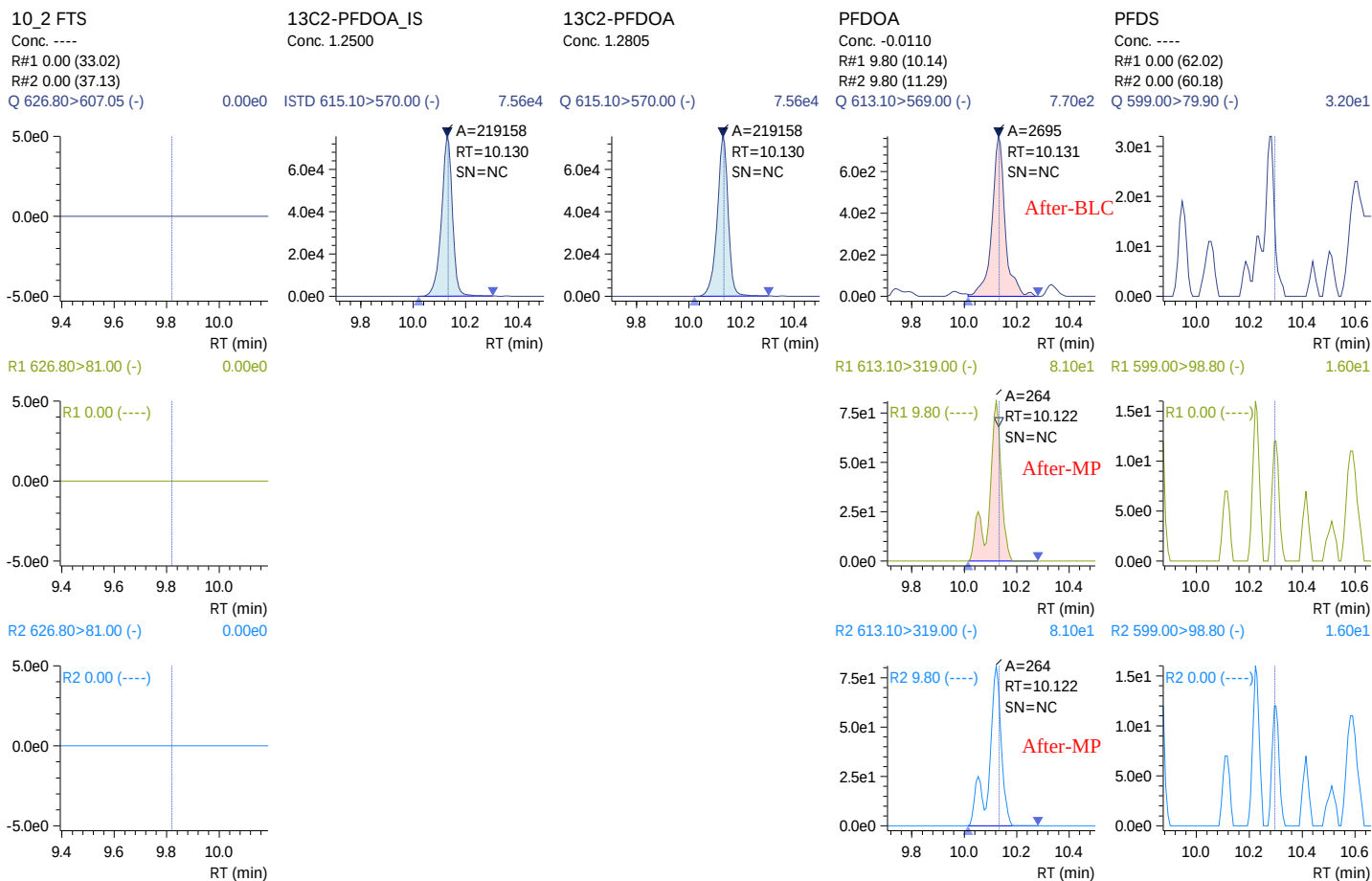
R2 548.80>98.80 (-)

1.70e1





240118_019 (continued)

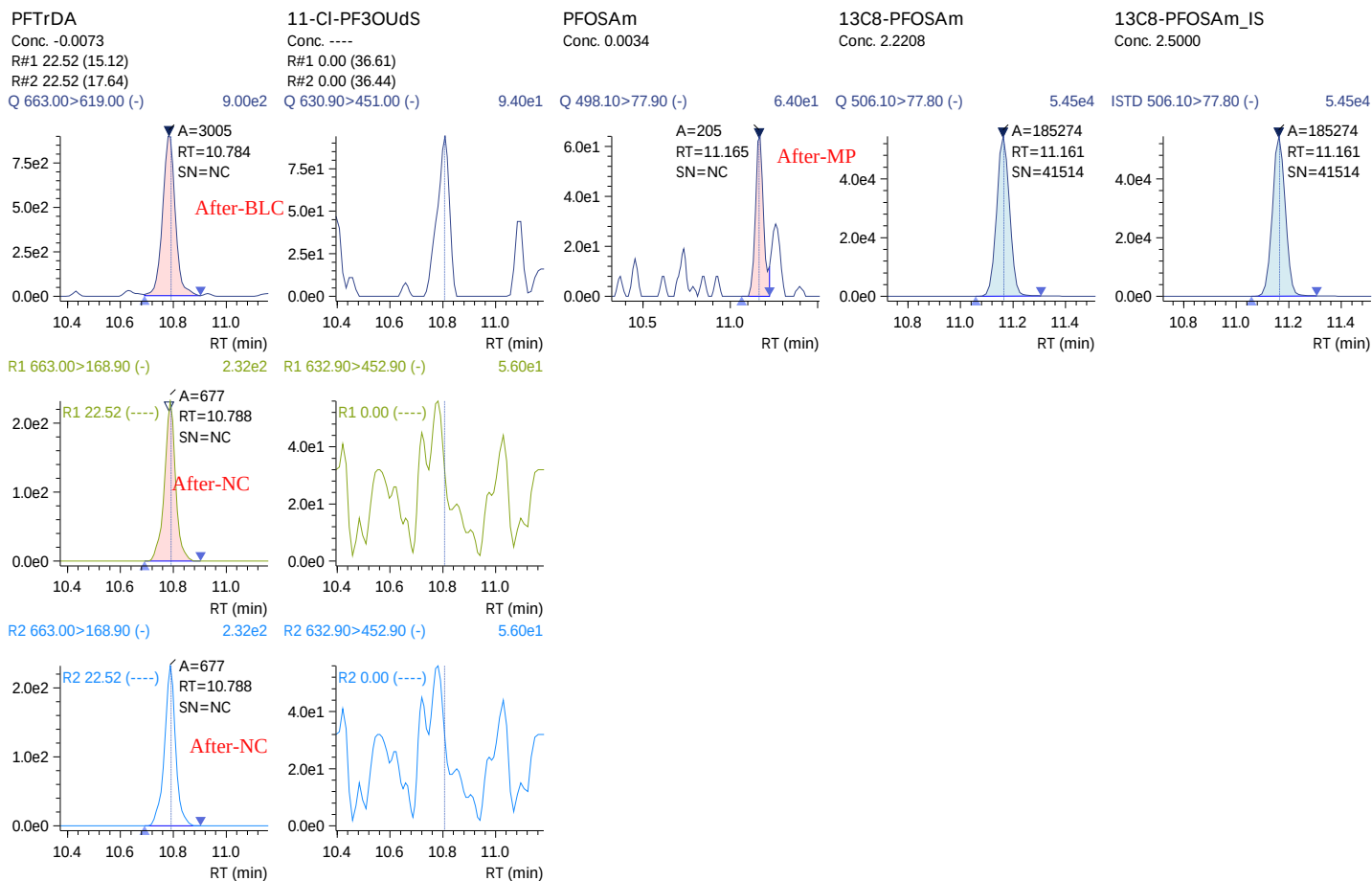


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_019 (continued)

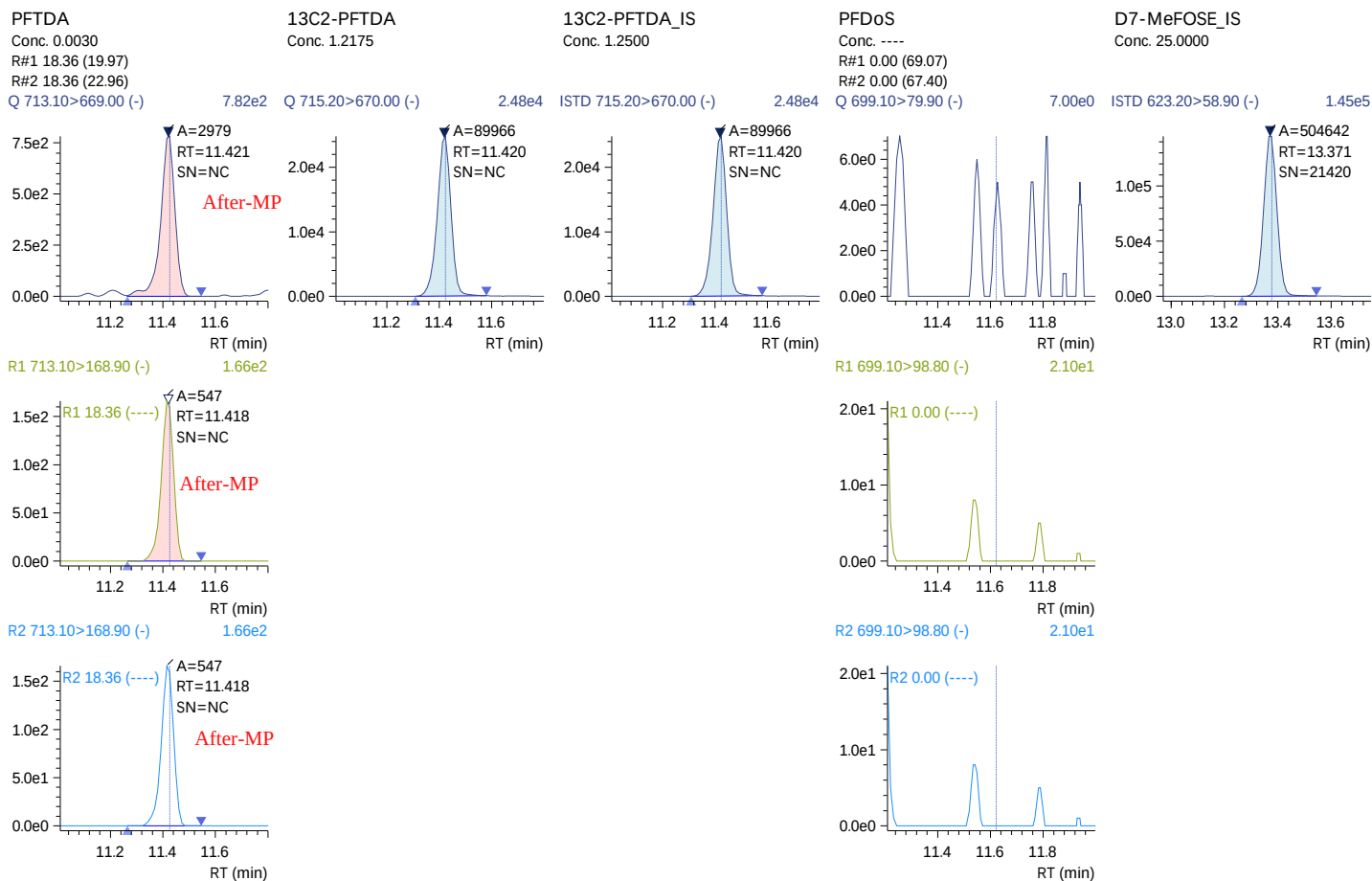


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_019 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_019 (continued)

D7-MeFOSE
Conc. 24.5350

MeFOSE
Conc. ----

13C2-PFHXA_IS
Conc. 2.5000

13C2-PFHXA
Conc. 2.4202

PFHXA

Conc. -0.0042
R#1 13.53 (11.64)
R#2 13.53 (13.90)

Q 623.20>58.90 (-)

1.45e5

Q 616.10>59.00 (-)

4.10e1

ISTD 815.00>770.05 (-)

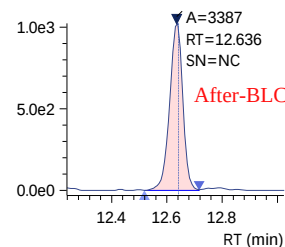
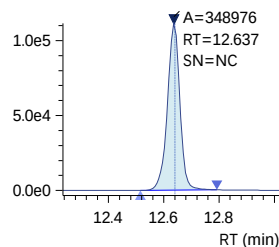
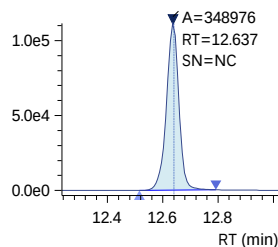
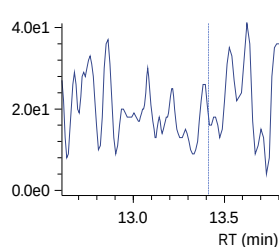
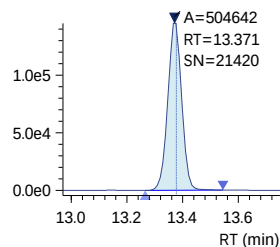
1.11e5

Q 815.00>770.05 (-)

1.11e5

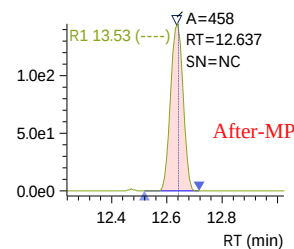
Q 813.00>768.95 (-)

1.02e3



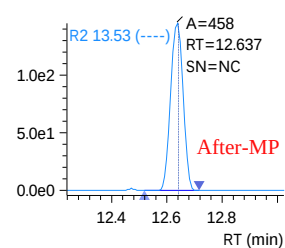
R1 813.00>218.95 (-)

1.45e2



R2 813.00>218.95 (-)

1.45e2





240118_019 (continued)

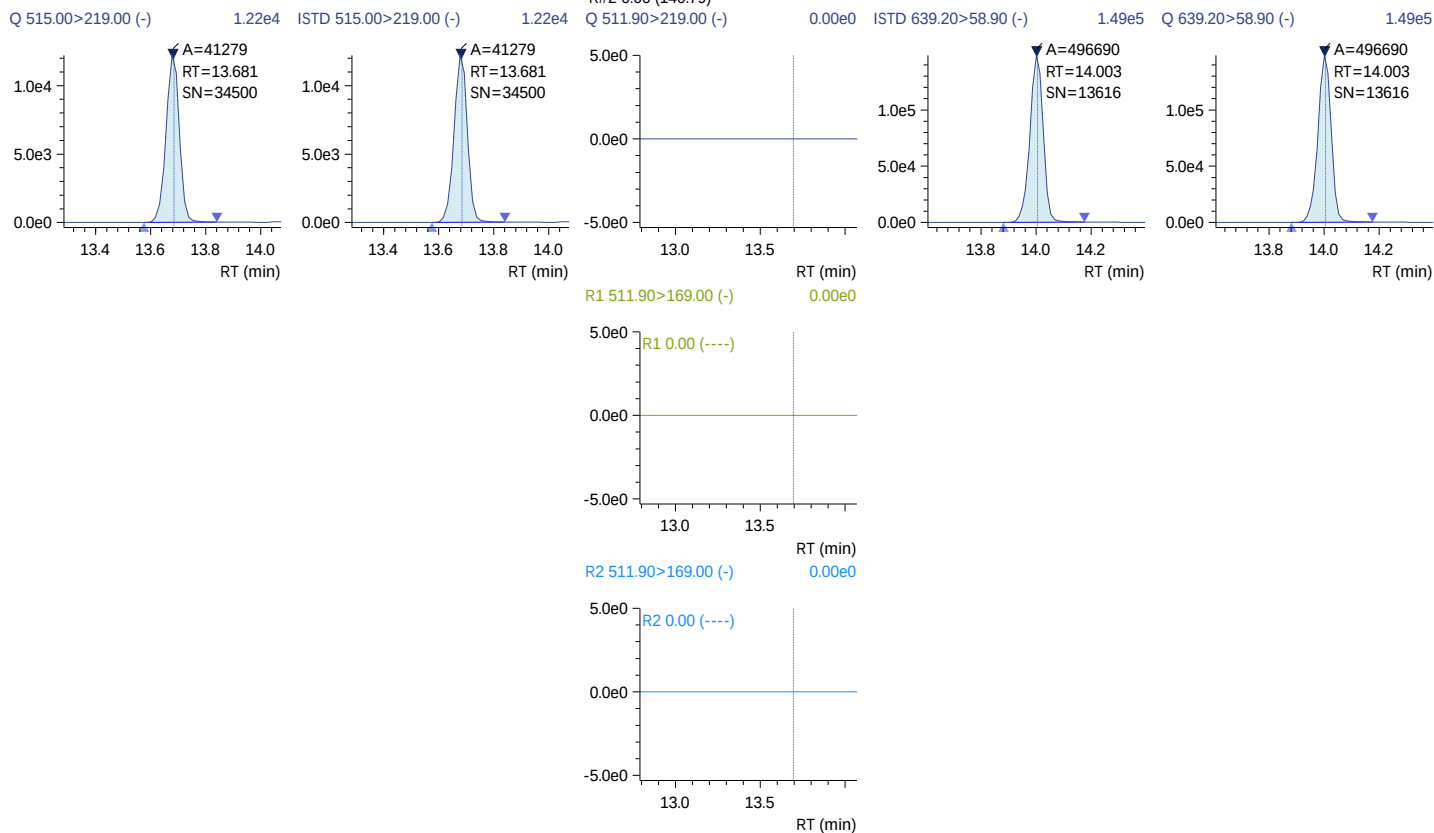
D3-MeFOSA
Conc. 2.4570

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. ----
R#1 0.00 (149.05)
R#2 0.00 (140.79)

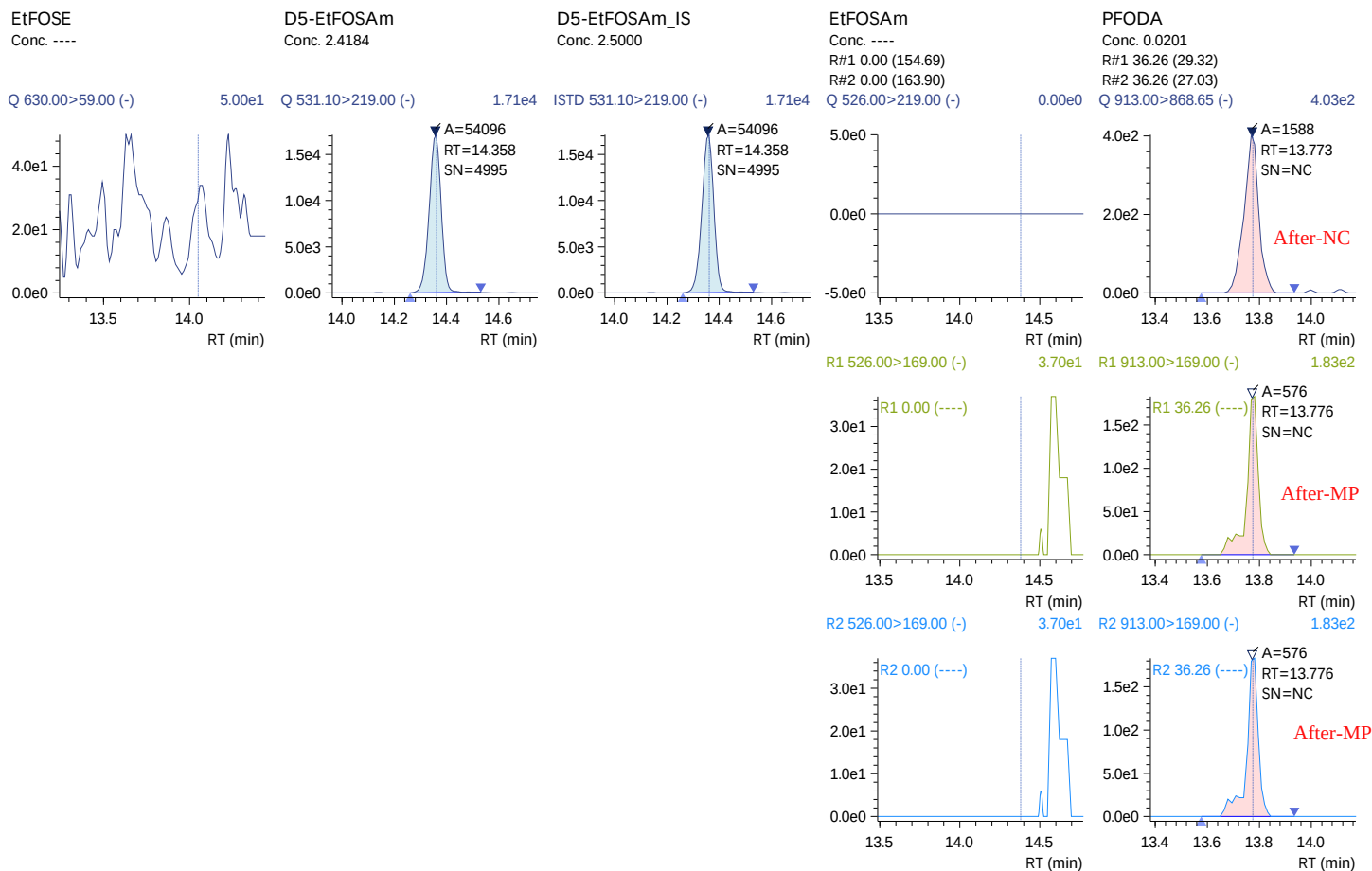
D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 23.7762





240118_019 (continued)



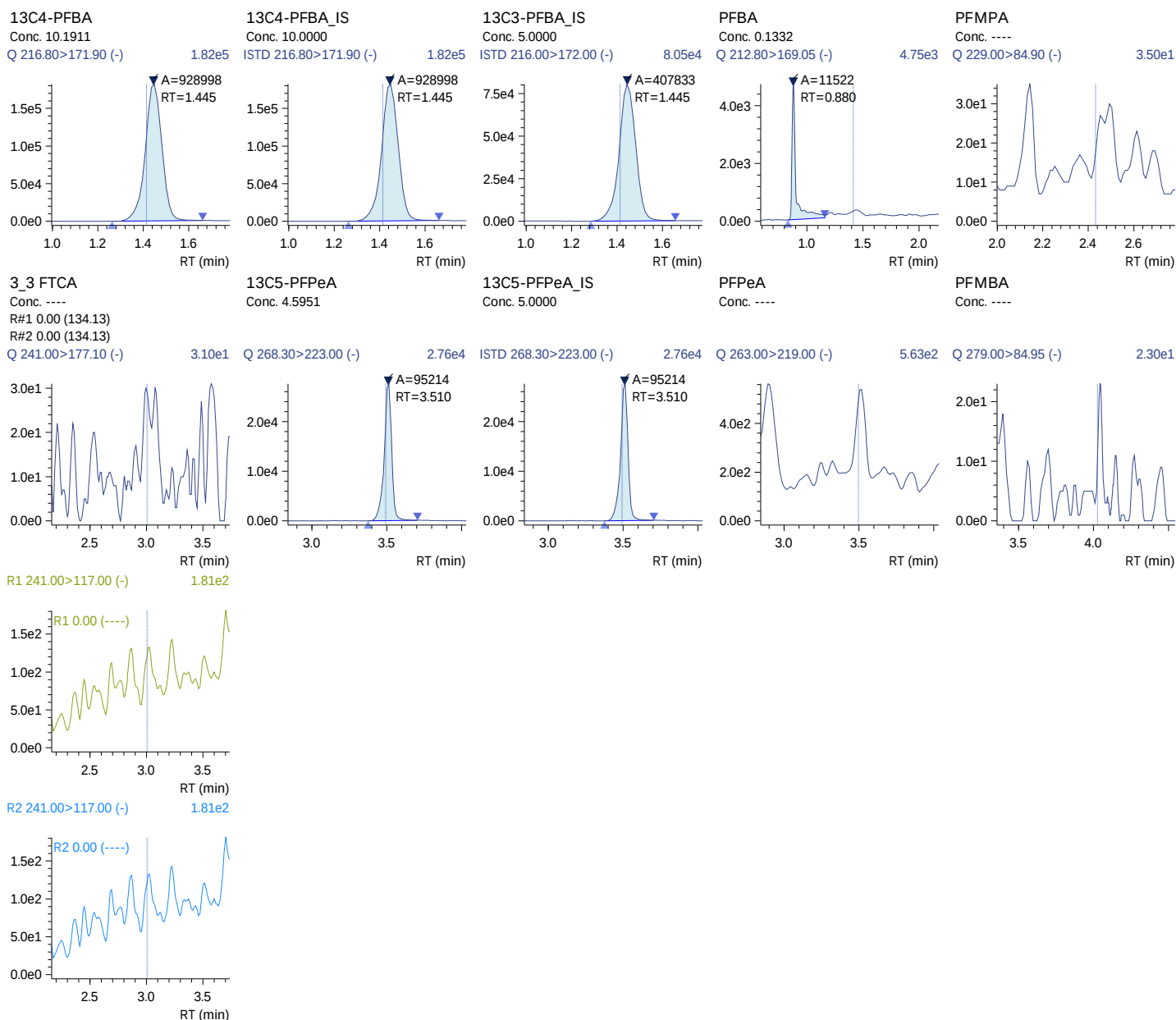
J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_019

Sample ID: 1633 CCB
Date Acquired: 1/18/2024 7:06:49 PM
Acquired by: System Administrator
Data File: 240118_019
Vial: 54 | Inj. Volume: 10.0000uL | Tray: 1





240118_019 (continued)

13C2-4_2 FTS
Conc. 4.9088

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. ----
R#1 0.00 (34.14)
R#2 0.00 (34.14)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. ----
R#1 0.00 (47.53)
R#2 0.00 (47.53)

Q 329.10>80.90 (-)

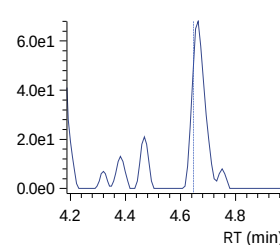
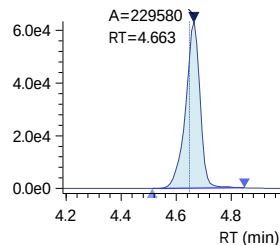
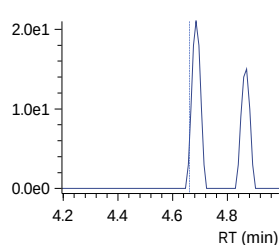
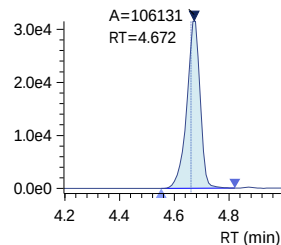
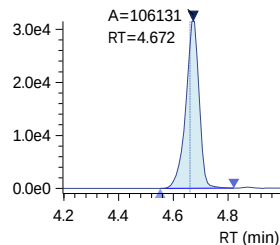
3.15e4 ISTD 329.10>80.90 (-)

3.15e4 Q 327.10>307.00 (-)

2.10e1 ISTD 302.10>79.90 (-)

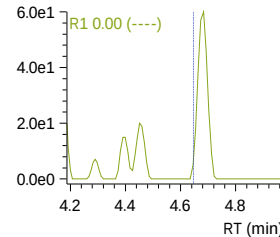
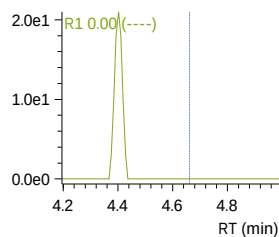
6.34e4 Q 298.70>79.90 (-)

6.80e1



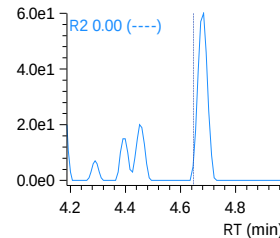
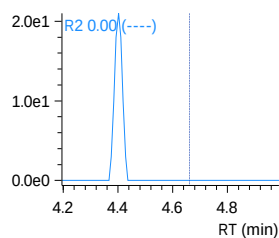
R1 327.10>80.90 (-)

R1 298.70>98.80 (-)



R2 327.10>80.90 (-)

R2 298.70>98.80 (-)





240118_019 (continued)

13C3-PFBS
 Conc. 2.5749

NFDHA
 Conc. ----
 R#1 0.00 (37.88)
 R#2 0.00 (37.88)

13C5-PFHxA
 Conc. 2.4359

13C5-PFHxA_IS
 Conc. 2.5000

13C2-PFHxA_IS
 Conc. 2.5000

Q 302.10>79.90 (-)

6.34e4

Q 295.00>201.00 (-)

2.88e2

Q 318.00>273.00 (-)

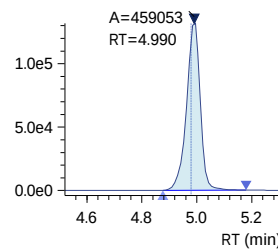
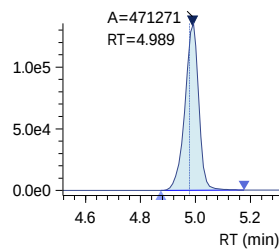
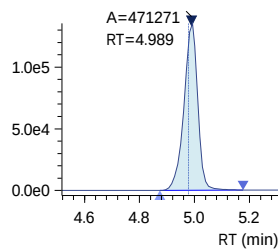
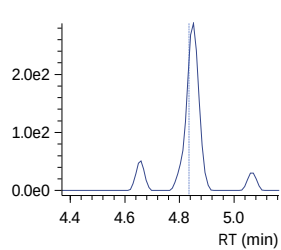
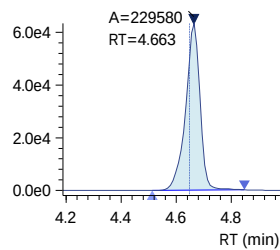
1.35e5

ISTD 318.00>273.00 (-)

1.35e5

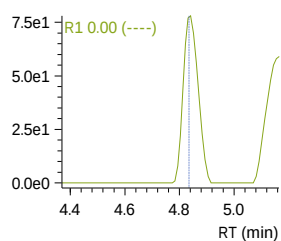
ISTD 315.10>270.00 (-)

1.32e5



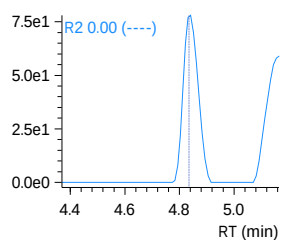
R1 295.00>84.90 (-)

7.80e1



R2 295.00>84.90 (-)

7.80e1





240118_019 (continued)

PFHxA
Conc. 0.0374

PFEESA
Conc. ----
R#1 0.00 (5.88)
R#2 0.00 (5.88)

13C3-HFPO-DA
Conc. 9.9673

13C3-HFPO-DA_IS
Conc. 10.0000

HFPO-DA
Conc. ----
R#1 0.00 (63.80)
R#2 0.00 (63.80)

Q 313.00>269.00 (-)

1.09e3

Q 314.80>135.00 (-)

1.15e2

Q 286.90>168.90 (-)

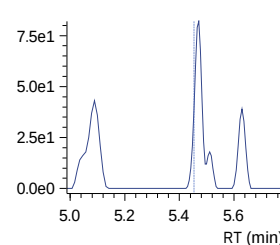
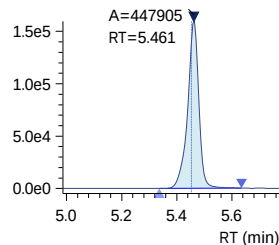
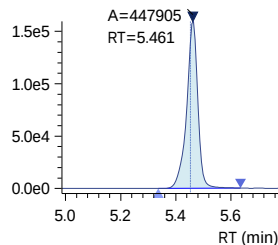
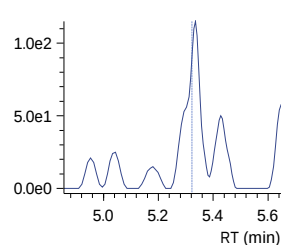
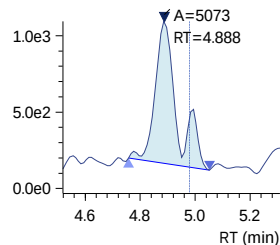
1.60e5

ISTD 286.90>168.90 (-)

1.60e5

Q 284.90>168.90 (-)

8.20e1

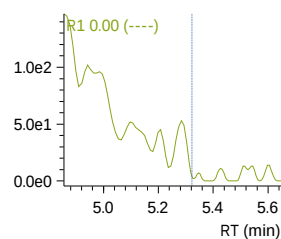


R1 314.80>82.90 (-)

1.47e2

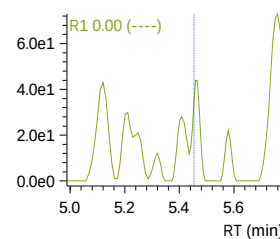
R1 284.90>184.90 (-)

7.30e1



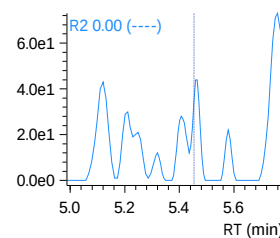
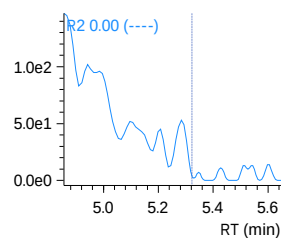
R2 314.80>82.90 (-)

1.47e2



R2 284.90>184.90 (-)

7.30e1





240118_019 (continued)

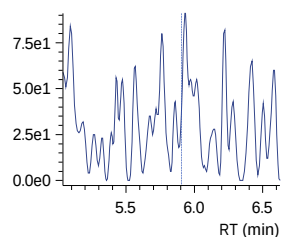
5_3 FTCA

Conc. ----

R#1 0.00 (167.13)

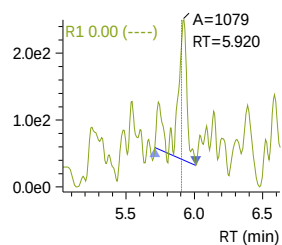
R#2 0.00 (167.13)

Q 341.00>237.05 (-)



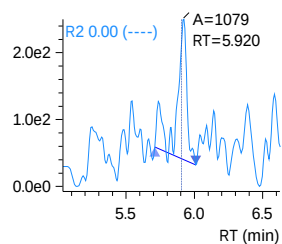
R1 341.00>217.00 (-)

2.50e2



R2 341.00>217.00 (-)

2.50e2



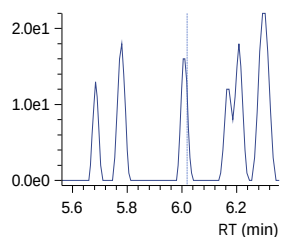
PFPeS

Conc. ----

R#1 0.00 (56.71)

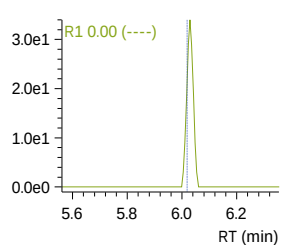
R#2 0.00 (56.71)

Q 349.10>79.90 (-)



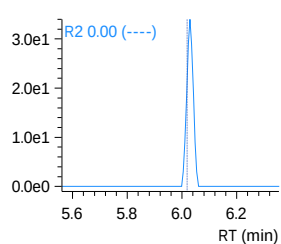
R1 349.10>98.80 (-)

3.40e1



R2 349.10>98.80 (-)

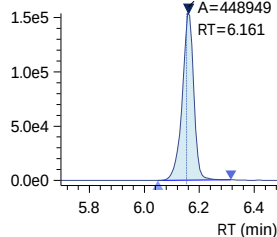
3.40e1



13C4-PFHpa

Conc. 2.5634

Q 367.10>322.00 (-)



1.54e5

R1 367.10>322.00 (-)

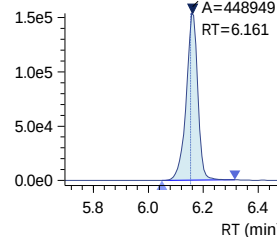
1.54e5



13C4-PFHpa_IS

Conc. 2.5000

ISTD 367.10>322.00 (-)



1.54e5

R1 367.10>322.00 (-)

1.54e5



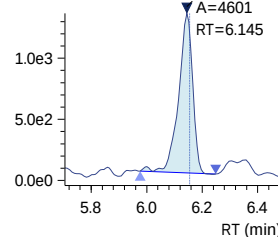
PFHpA

Conc. -0.0107

R#1 29.94 (21.37)

R#2 29.94 (21.37)

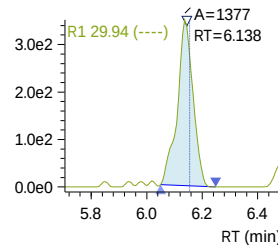
Q 363.10>319.00 (-)



1.37e3

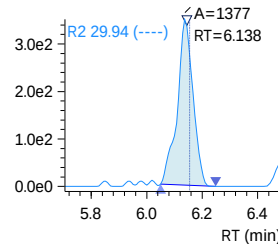
R1 363.10>169.00 (-)

3.52e2



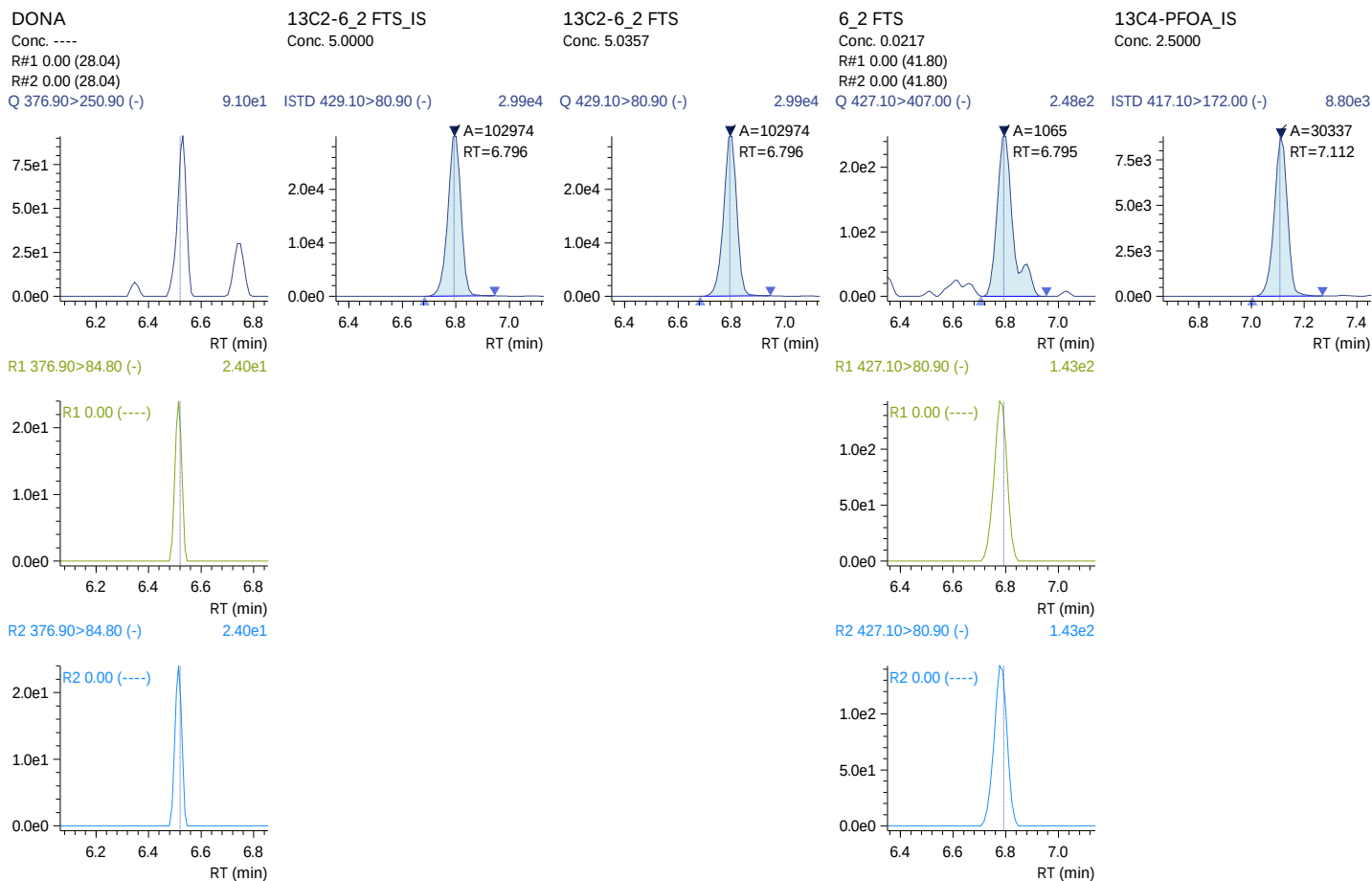
R2 363.10>169.00 (-)

3.52e2





240118_019 (continued)





240118_019 (continued)

13C8-PFOA_IS
 Conc. 2.5000

13C8-PFOA
 Conc. 2.6754

PFOA
 Conc. -0.0034
 R#1 0.00 (29.05)
 R#2 0.00 (29.05)

13C3-PFHxS
 Conc. 2.5276

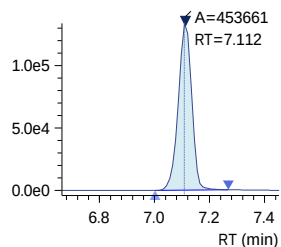
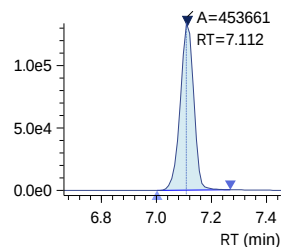
13C3-PFHxS_IS
 Conc. 2.5000

ISTD 421.10>376.00 (-)

1.34e5

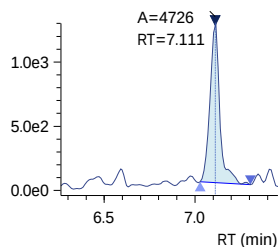
Q 421.10>376.00 (-)

1.34e5



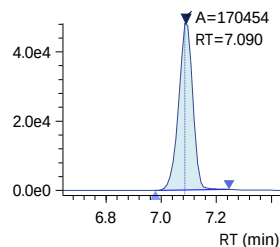
Q 413.00>369.00 (-)

1.30e3



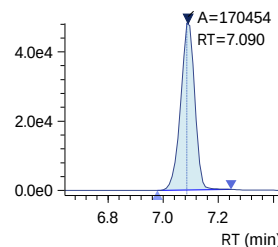
Q 402.10>79.90 (-)

4.82e4



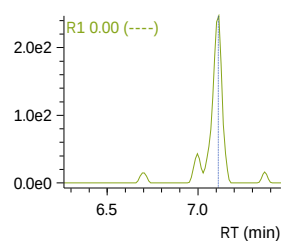
ISTD 402.10>79.90 (-)

4.82e4



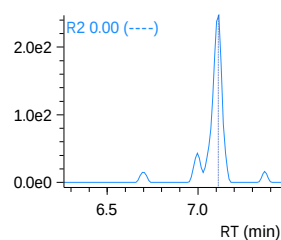
R1 413.00>169.00 (-)

2.47e2



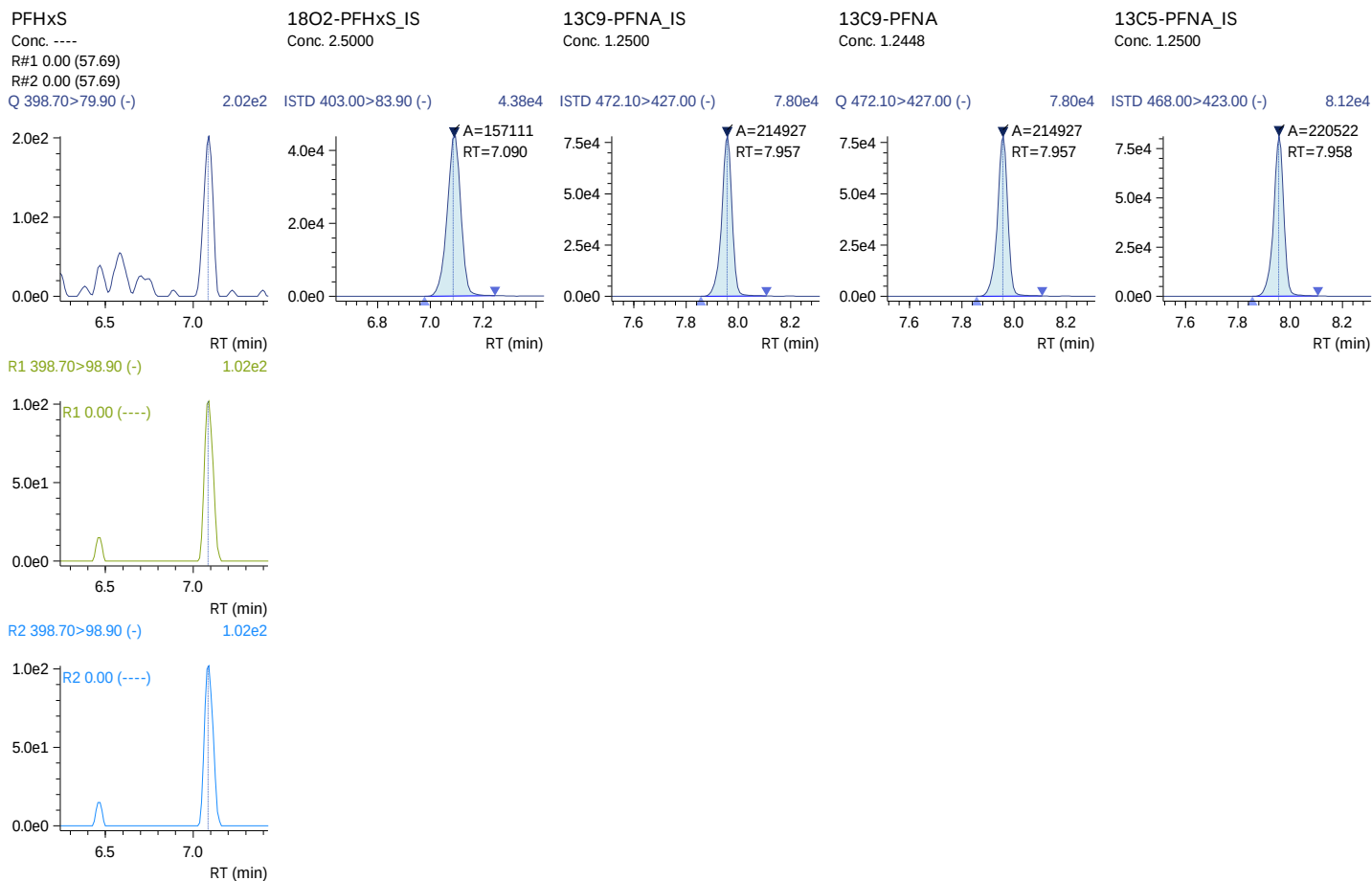
R2 413.00>169.00 (-)

2.47e2



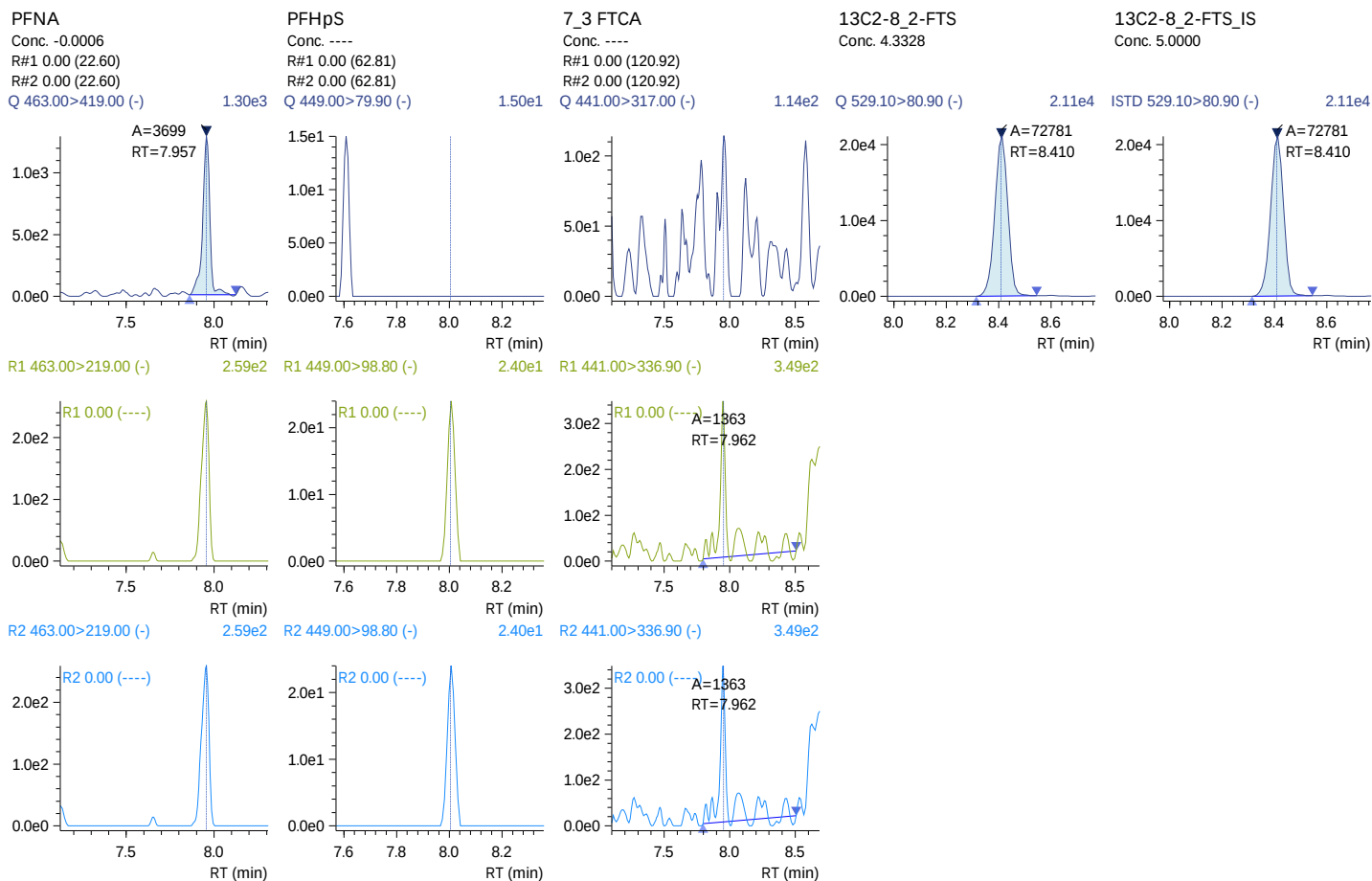


240118_019 (continued)



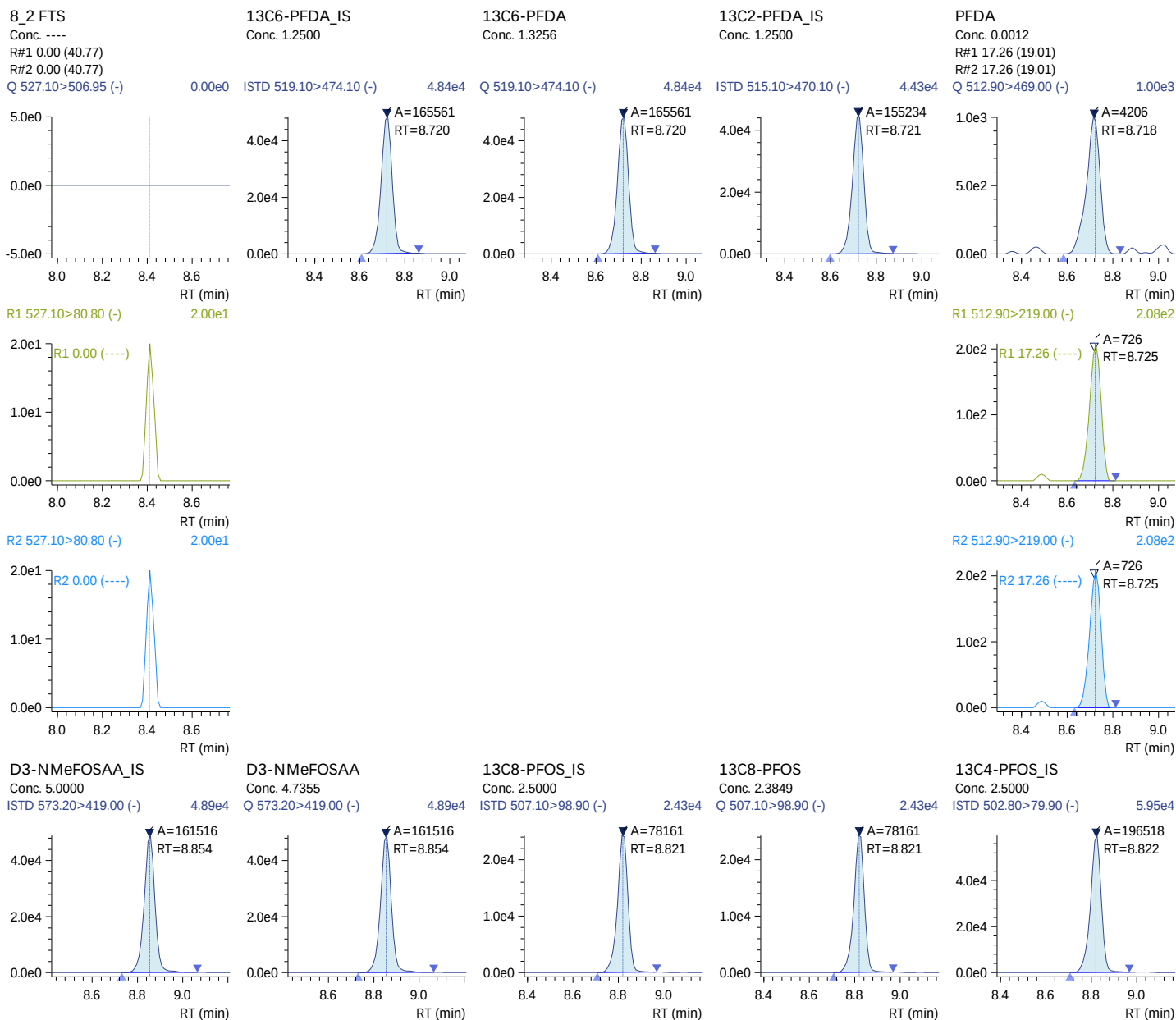


240118_019 (continued)



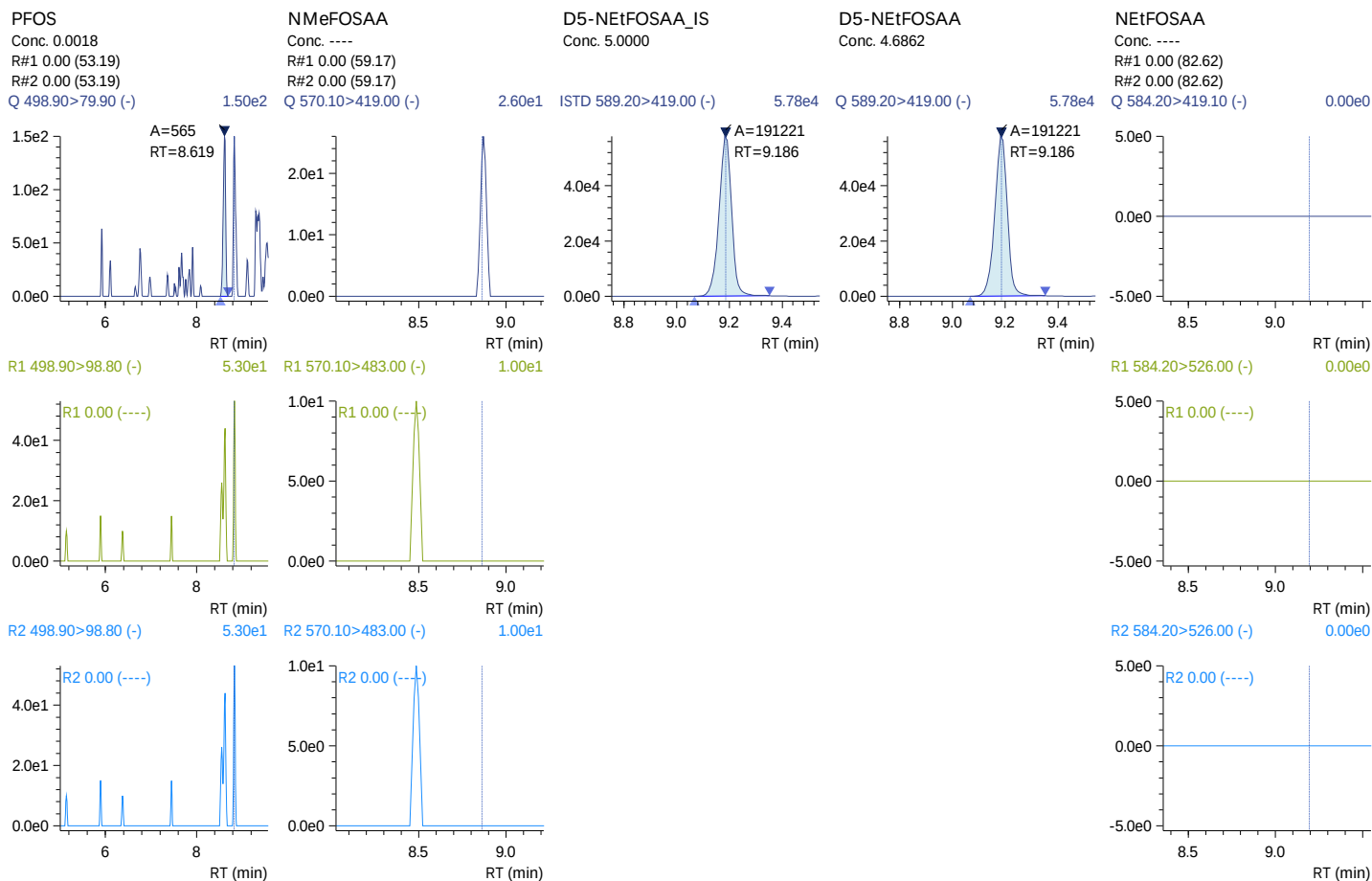


240118_019 (continued)





240118_019 (continued)





240118_019 (continued)

9-Cl-PF3ONS

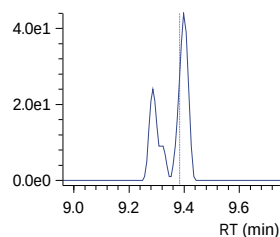
Conc. ----

R#1 0.00 (31.76)

R#2 0.00 (31.76)

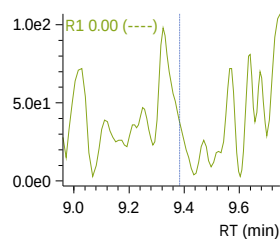
Q 530.80>351.00 (-)

4.40e1



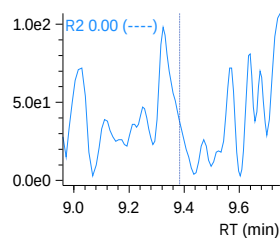
R1 532.80>353.00 (-)

1.07e2



R2 532.80>353.00 (-)

1.07e2



PFUnDA

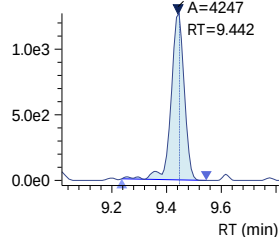
Conc. 0.0007

R#1 0.00 (12.31)

R#2 0.00 (12.31)

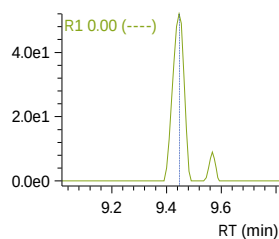
Q 563.10>519.00 (-)

1.27e3



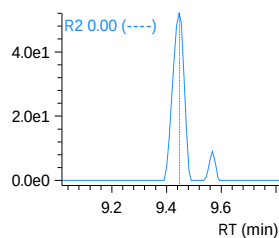
R1 563.10>269.10 (-)

5.20e1



R2 563.10>269.10 (-)

5.20e1

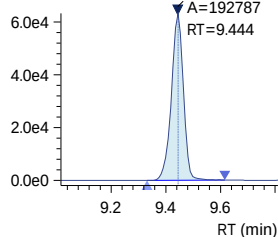


13C7-PFUnDA_IS

Conc. 1.2500

ISTD 570.00>525.10 (-)

6.33e4



ISTD 570.00>525.10 (-)

6.33e4



ISTD 570.00>525.10 (-)

6.33e4

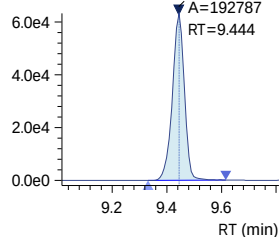


13C7-PFUnDA

Conc. 1.2941

Q 570.00>525.10 (-)

6.33e4



Q 570.00>525.10 (-)

6.33e4



Q 570.00>525.10 (-)

6.33e4



PFNS

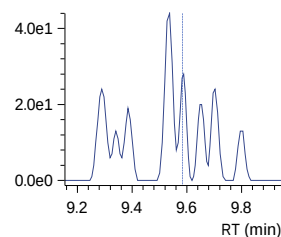
Conc. ----

R#1 0.00 (63.31)

R#2 0.00 (63.31)

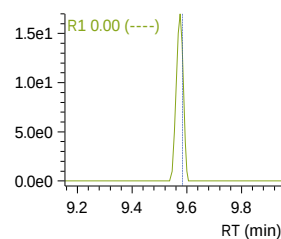
Q 548.80>79.90 (-)

4.40e1



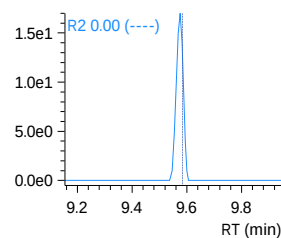
R1 548.80>98.80 (-)

1.70e1



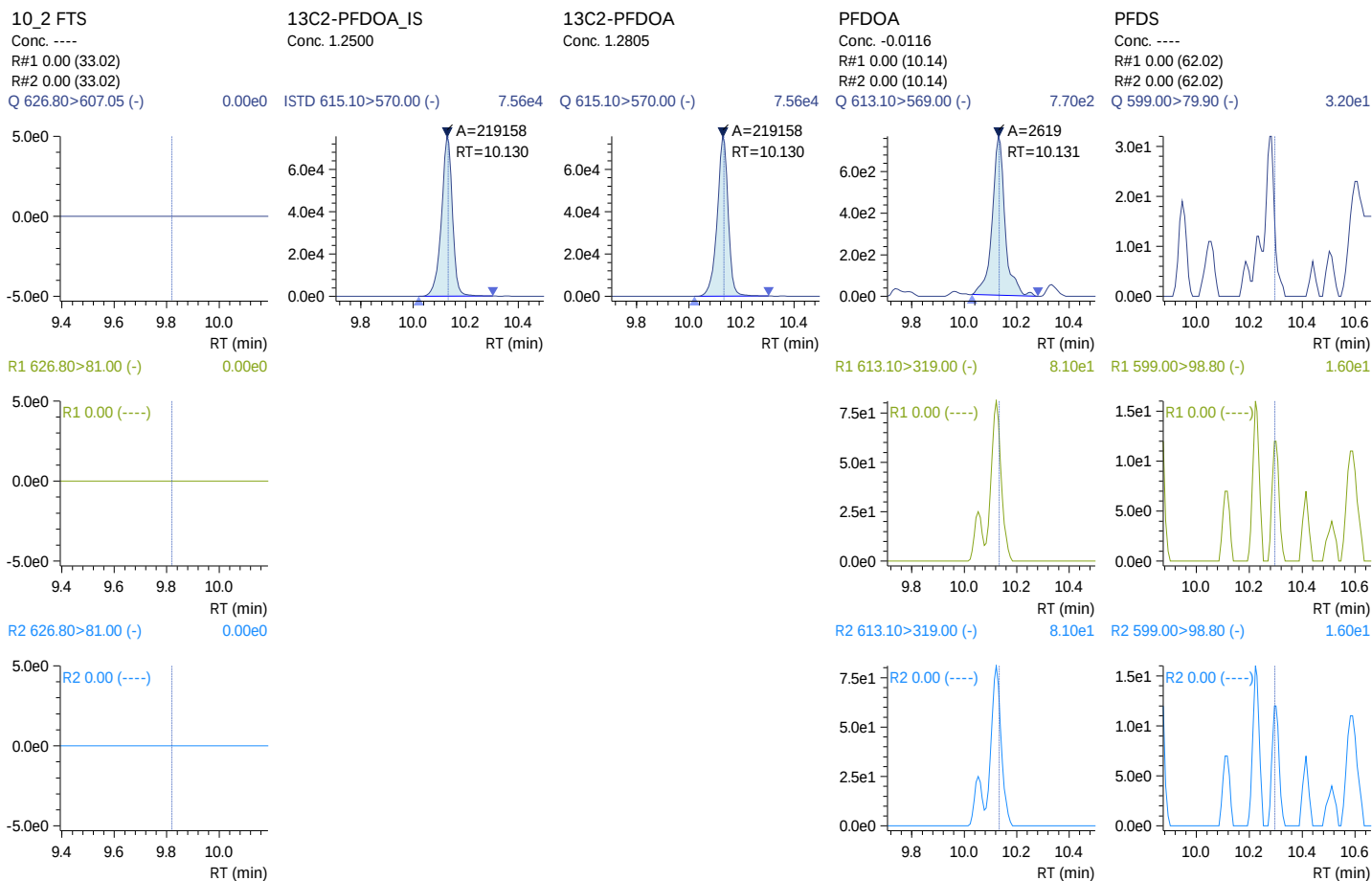
R2 548.80>98.80 (-)

1.70e1



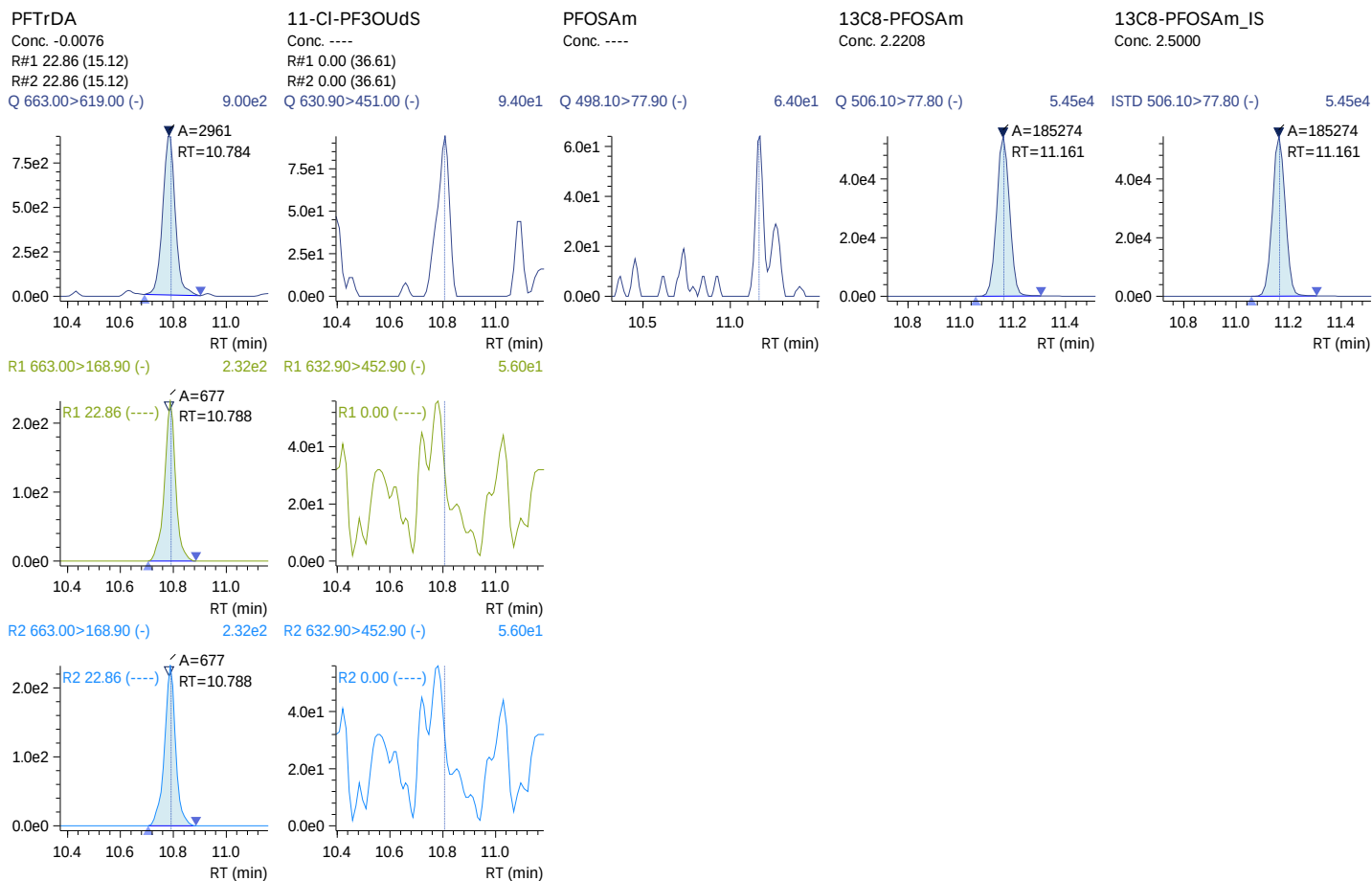


240118_019 (continued)



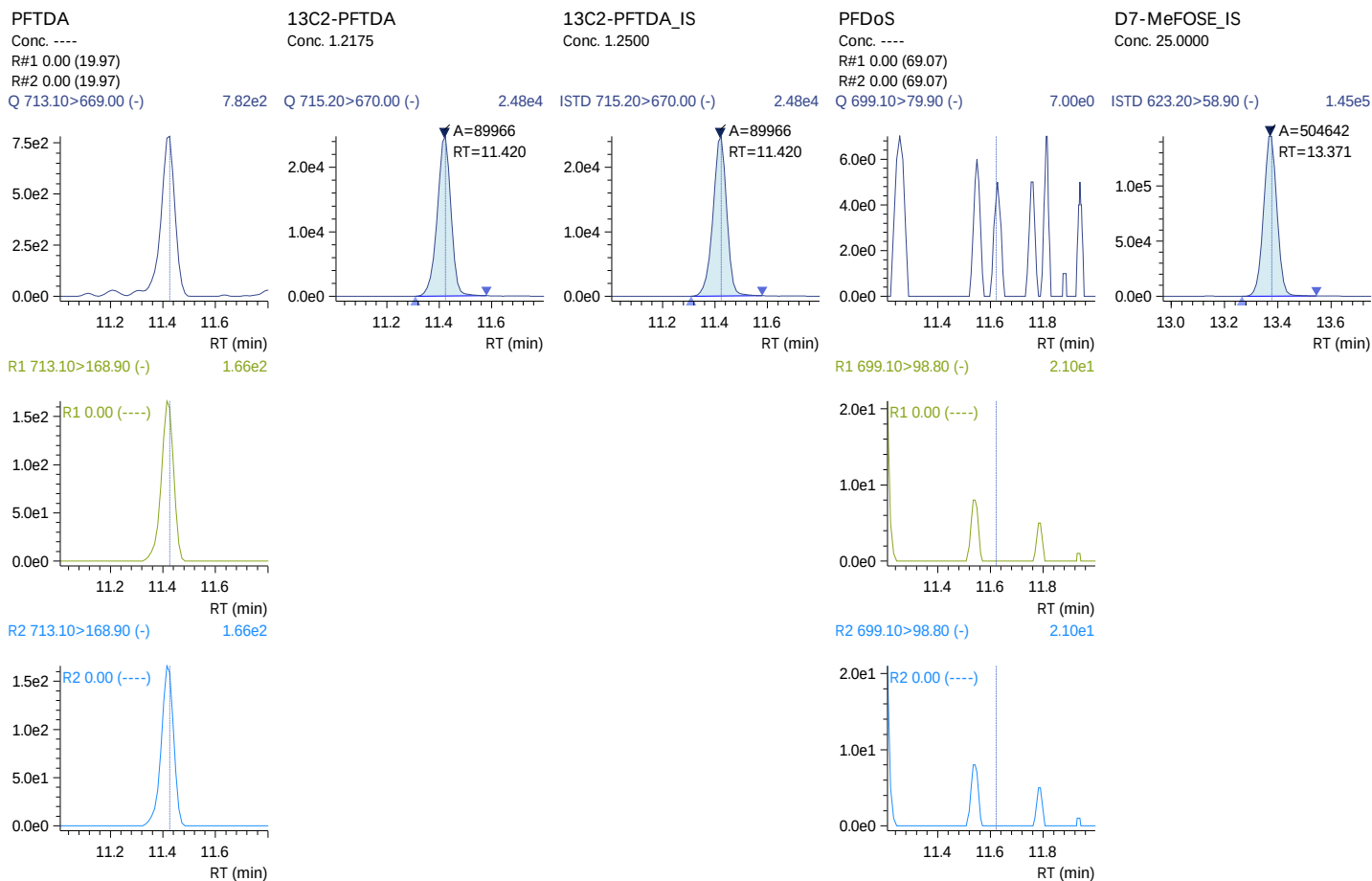


240118_019 (continued)





240118_019 (continued)





240118_019 (continued)

D7-MeFOSE
 Conc. 24.5350

MeFOSE
 Conc. ----

13C2-PFHXA_IS
 Conc. 2.5000

13C2-PFHXA
 Conc. 2.4202

PFHXA

Conc. -0.0043
 R#1 0.00 (11.64)
 R#2 0.00 (11.64)

Q 623.20>58.90 (-)

1.45e5

Q 616.10>59.00 (-)

4.10e1

ISTD 815.00>770.05 (-)

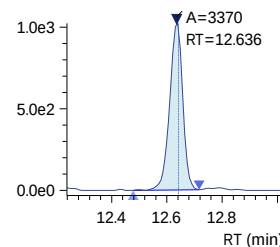
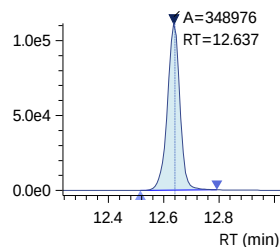
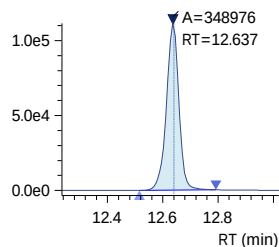
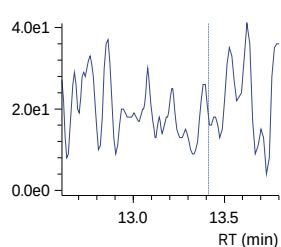
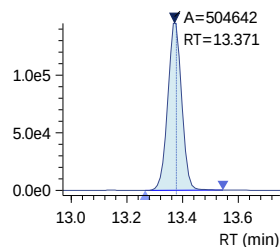
1.11e5

Q 815.00>770.05 (-)

1.11e5

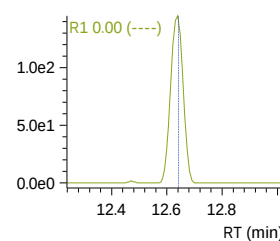
Q 813.00>768.95 (-)

1.02e3



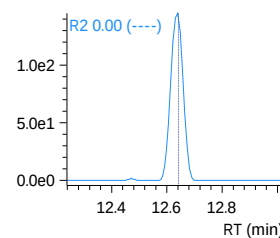
R1 813.00>218.95 (-)

1.45e2



R2 813.00>218.95 (-)

1.45e2





240118_019 (continued)

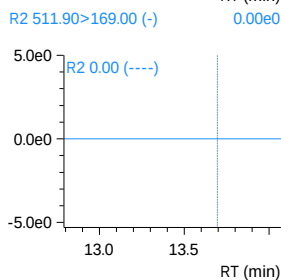
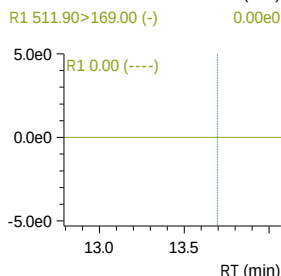
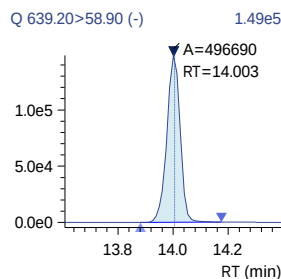
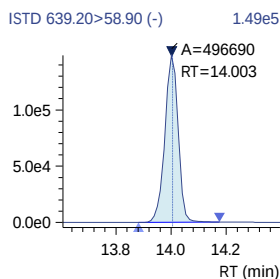
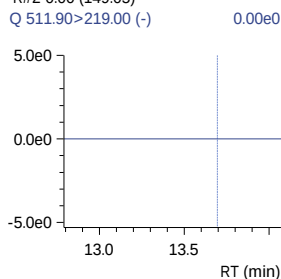
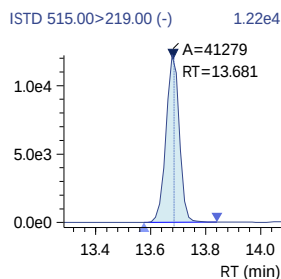
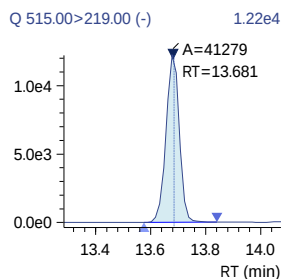
D3-MeFOSA
 Conc. 2.4570

D3-MeFOSA_IS
 Conc. 2.5000

MeFOSA
 Conc. ----
 R#1 0.00 (149.05)
 R#2 0.00 (149.05)
 Q 511.90>219.00 (-)

D9-EtFOSE_IS
 Conc. 25.0000

D9-EtFOSE
 Conc. 23.7762





240118_019 (continued)

EtFOSE
Conc. ----

D5-EtFOSAm
Conc. 2.4184

D5-EtFOSAm_IS
Conc. 2.5000

EtFOSAm
Conc. ----

PFODA
Conc. 0.0100

Q 630.00>59.00 (-)

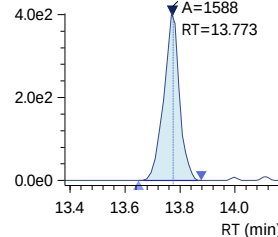
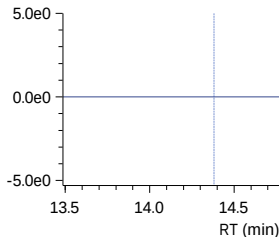
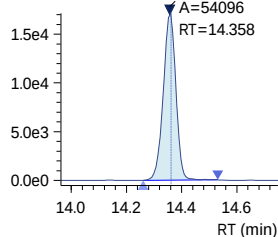
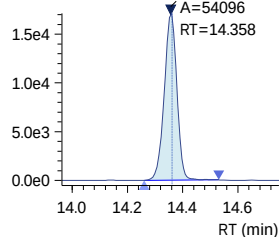
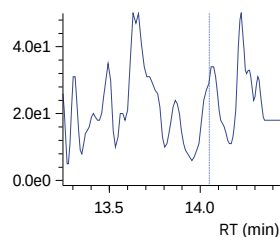
5.00e1 Q 531.10>219.00 (-)

1.71e4 ISTD 531.10>219.00 (-)

1.71e4 Q 526.00>219.00 (-)

0.00e0 Q 913.00>868.65 (-)

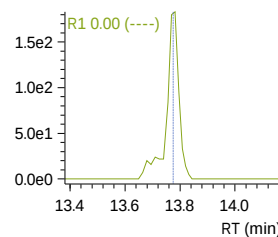
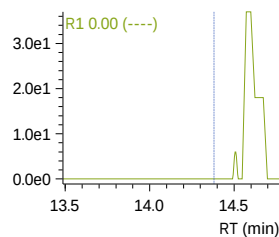
4.03e2



R1 526.00>169.00 (-)

3.70e1 R1 913.00>169.00 (-)

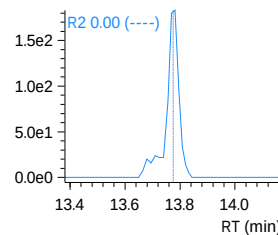
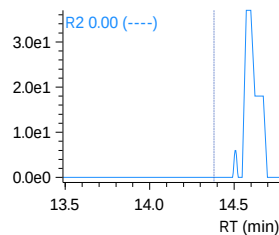
1.83e2



R2 526.00>169.00 (-)

3.70e1 R2 913.00>169.00 (-)

1.83e2





240118_020

Sample ID: 1633 QIS
Date Acquired: 1/18/2024 7:30:05 PM
Acquired by: System Administrator
Data File: 240118_020
Vial: 13 | Inj. Volume: 10.0000uL | Tray: 1

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C4-PFBA	216.80>171.90	----	1259422	----	----	----	----	----	----	----
13C4-PFBA_IS	216.80>171.90	----	1259422	----	----	----	----	----	----	----
13C3-PFBA_IS	216.00>172.00	----	550128	----	----	----	----	----	----	----
PFBA	212.80>169.05	----	----	----	----	----	----	----	----	----
PFMPA	229.00>84.90	----	----	----	----	----	----	----	----	----
3_3 FTCA	241.00>177.10	241.00>117.00	----	0	0.00	141.17	0	0.00	141.17	----
13C5-PFPeA	268.30>223.00	----	130508	----	----	----	----	----	----	----
13C5-PFPeA_IS	268.30>223.00	----	130508	----	----	----	----	----	----	----
PFPeA	263.00>219.00	----	----	----	----	----	----	----	----	----
PFMBA	279.00>84.95	----	----	----	----	----	----	----	----	----
13C2-4_2 FTS	329.10>80.90	----	141099	----	----	----	----	----	----	----
13C2-4_2 FTS_IS	329.10>80.90	----	141099	----	----	----	----	----	----	----
4_2 FTS	327.10>307.00	327.10>80.90	----	0	0.00	29.06	0	0.00	29.06	----
13C3-PFBS_IS	302.10>79.90	----	323419	----	----	----	----	----	----	----
PFBS	298.70>79.90	298.70>98.80	----	0	0.00	46.72	0	0.00	46.72	----
13C3-PFBS	302.10>79.90	----	323419	----	----	----	----	----	----	----
NFDHA	295.00>201.00	295.00>84.90	----	0	0.00	40.25	0	0.00	40.25	----
13C5-PFHxA	318.00>273.00	----	645073	----	----	----	----	----	----	----
13C5-PFHxA_IS	318.00>273.00	----	645073	----	----	----	----	----	----	----
13C2-PFHxA_IS	315.10>270.00	----	602297	----	----	----	----	----	----	----
PFHxA	313.00>269.00	----	----	----	----	----	----	----	----	----
PFEESA	314.80>135.00	314.80>82.90	----	0	0.00	6.11	0	0.00	6.11	----
13C3-HFPO-DA	286.90>168.90	----	596587	----	----	----	----	----	----	----
13C3-HFPO-DA_IS	286.90>168.90	----	596587	----	----	----	----	----	----	----
HFPO-DA	284.90>168.90	284.90>184.90	----	0	0.00	65.61	0	0.00	65.61	----
5_3 FTCA	341.00>237.05	341.00>217.00	----	0	0.00	158.86	0	0.00	158.86	----
PFPeS	349.10>79.90	349.10>98.80	----	0	0.00	55.80	0	0.00	55.80	----
13C4-PFHpA	367.10>322.00	----	608359	----	----	----	----	----	----	----
13C4-PFHpA_IS	367.10>322.00	----	608359	----	----	----	----	----	----	----
PFHpA	363.10>319.00	363.10>169.00	----	0	0.00	21.50	0	0.00	21.50	----
DONA	376.90>250.90	376.90>84.80	----	0	0.00	29.66	0	0.00	29.66	----
13C2-6_2 FTS_IS	429.10>80.90	----	125326	----	----	----	----	----	----	----
13C2-6_2 FTS	429.10>80.90	----	125326	----	----	----	----	----	----	----
6_2 FTS	427.10>407.00	427.10>80.90	----	0	0.00	41.15	0	0.00	41.15	----
13C4-PFOA_IS	417.10>172.00	----	44626	----	----	----	----	----	----	----
13C8-PFOA_IS	421.10>376.00	----	630860	----	----	----	----	----	----	----

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240118_020 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
13C8-PFOA	421.10>376.00	----	630860	----	----	----	----	----	----	----
PFOA	413.00>369.00	413.00>169.00	146186	46817	32.03	31.89	46817	32.03	31.89	
13C3-PFHxS	402.10>79.90	----	225446	----	----	----	----	----	----	----
13C3-PFHxS_IS	402.10>79.90	----	225446	----	----	----	----	----	----	----
PFHxS	398.70>79.90	398.70>98.90	----	0	0.00	56.62	0	0.00	56.62	
18O2-PFHxS_IS	403.00>83.90	----	206354	----	----	----	----	----	----	----
13C9-PFNA_IS	472.10>427.00	----	298537	----	----	----	----	----	----	----
13C9-PFNA	472.10>427.00	----	298537	----	----	----	----	----	----	----
13C5-PFNA_IS	468.00>423.00	----	303873	----	----	----	----	----	----	----
PFNA	463.00>419.00	463.00>219.00	476922	0	0.00	23.17	0	0.00	23.17	IRr, RTi
PFHpS	449.00>79.90	449.00>98.80	----	0	0.00	56.96	0	0.00	56.96	
7_3 FTCA	441.00>317.00	441.00>336.90	----	0	0.00	117.47	0	0.00	117.47	
13C2-8_2-FTS	529.10>80.90	----	121489	----	----	----	----	----	----	----
13C2-8_2-FTS_IS	529.10>80.90	----	121489	----	----	----	----	----	----	----
8_2 FTS	527.10>506.95	527.10>80.80	----	0	0.00	49.59	0	0.00	49.59	
13C6-PFDA_IS	519.10>474.10	----	224603	----	----	----	----	----	----	----
13C6-PFDA	519.10>474.10	----	224603	----	----	----	----	----	----	----
13C2-PFDA_IS	515.10>470.10	----	195574	----	----	----	----	----	----	----
PFDA	512.90>469.00	512.90>219.00	----	0	0.00	19.00	0	0.00	19.00	
D3-NMeFOSAA_IS	573.20>419.00	----	230003	----	----	----	----	----	----	----
D3-NMeFOSAA	573.20>419.00	----	230003	----	----	----	----	----	----	----
13C8-PFOS_IS	507.10>98.90	----	102125	----	----	----	----	----	----	----
13C8-PFOS	507.10>98.90	----	102125	----	----	----	----	----	----	----
13C4-PFOS_IS	502.80>79.90	----	247964	----	----	----	----	----	----	----
PFOS	498.90>79.90	498.90>98.80	----	0	0.00	52.47	0	0.00	52.47	
NMeFOSAA	570.10>419.00	570.10>483.00	----	0	0.00	55.15	0	0.00	55.15	
D5-NEtFOSAA_IS	589.20>419.00	----	252595	----	----	----	----	----	----	----
D5-NEtFOSAA	589.20>419.00	----	252595	----	----	----	----	----	----	----
NEtFOSAA	584.20>419.10	584.20>526.00	----	0	0.00	81.95	0	0.00	81.95	
9-Cl-PF3ONS	530.80>351.00	532.80>353.00	----	0	0.00	32.76	0	0.00	32.76	
PFUnDA	563.10>519.00	563.10>269.10	----	0	0.00	13.12	0	0.00	13.12	
13C7-PFUnDA_IS	570.00>525.10	----	268499	----	----	----	----	----	----	----
13C7-PFUnDA	570.00>525.10	----	268499	----	----	----	----	----	----	----
PFNS	548.80>79.90	548.80>98.80	----	0	0.00	65.22	0	0.00	65.22	
10_2 FTS	626.80>607.05	626.80>81.00	----	0	0.00	37.13	0	0.00	37.13	
13C2-PFDOA_IS	615.10>570.00	----	294881	----	----	----	----	----	----	----
13C2-PFDOA	615.10>570.00	----	294881	----	----	----	----	----	----	----
PFDOA	613.10>569.00	613.10>319.00	----	0	0.00	11.29	0	0.00	11.29	
PFDS	599.00>79.90	599.00>98.80	----	0	0.00	60.18	0	0.00	60.18	
PFTDA	663.00>619.00	663.00>168.90	----	0	0.00	17.64	0	0.00	17.64	

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Ref 1 Set Ratio assigned from calibration mid-point; Ref 2 Set Ratio assigned from opening calibration verification.
IRr - Ion ratio outside either set of criteria. Exceedances for reported detections to be "I" flagged in the analytical report.



240118_020 (continued)

(Table continued from previous page)

Name	m/z	Ref 1 m/z	Area	Ref 1 Measured	Ref 1 Actual Ratio	Ref 1 Set Ratio	Ref 2 Measured	Ref 2 Actual Ratio	Ref 2 Set Ratio	Flag ID
11-CI-PF3OUdS	630.90>451.00	632.90>452.90	----	0	0.00	36.44	0	0.00	36.44	
PFOSAm	498.10>77.90	----	----	----	----	----	----	----	----	
13C8-PFOSAm	506.10>77.80	----	271787	----	----	----	----	----	----	
13C8-PFOSAm_IS	506.10>77.80	----	271787	----	----	----	----	----	----	
PFTDA	713.10>669.00	713.10>168.90	----	0	0.00	22.96	0	0.00	22.96	
13C2-PFTDA	715.20>670.00	----	127902	----	----	----	----	----	----	
13C2-PFTDA_IS	715.20>670.00	----	127902	----	----	----	----	----	----	
PFDoS	699.10>79.90	699.10>98.80	----	0	0.00	67.40	0	0.00	67.40	
D7-MeFOSE_IS	623.20>58.90	----	717755	----	----	----	----	----	----	
D7-MeFOSE	623.20>58.90	----	717755	----	----	----	----	----	----	
MeFOSE	616.10>59.00	----	----	----	----	----	----	----	----	
13C2-PFHxDA_IS	815.00>770.05	----	508875	----	----	----	----	----	----	
13C2-PFHxDA	815.00>770.05	----	508875	----	----	----	----	----	----	
PFHxDA	813.00>768.95	813.00>218.95	----	0	0.00	13.90	0	0.00	13.90	
D3-MeFOSA	515.00>219.00	----	54281	----	----	----	----	----	----	
D3-MeFOSA_IS	515.00>219.00	----	54281	----	----	----	----	----	----	
MeFOSA	511.90>219.00	511.90>169.00	----	0	0.00	140.79	0	0.00	140.79	
D9-EtFOSE_IS	639.20>58.90	----	709094	----	----	----	----	----	----	
D9-EtFOSE	639.20>58.90	----	709094	----	----	----	----	----	----	
EtFOSE	630.00>59.00	----	----	----	----	----	----	----	----	
D5-EtFOSAm	531.10>219.00	----	74458	----	----	----	----	----	----	
D5-EtFOSAm_IS	531.10>219.00	----	74458	----	----	----	----	----	----	
EtFOSAm	526.00>219.00	526.00>169.00	----	0	0.00	163.90	0	0.00	163.90	
PFODA	913.00>868.65	913.00>169.00	----	0	0.00	27.03	0	0.00	27.03	

Flag ID key: IRr: Ion Ratio (Relative), RTi: RT Diff (Absolute ISTD)



Check PFOA and PFNA

Insight Report
Quantitation/Integration
Printed 1/19/2024 15:46:58

240118_020

Sample ID: 1633 QIS
Date Acquired: 1/18/2024 7:30:05 PM
Acquired by: System Administrator
Data File: 240118_020
Vial: 13 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Std. Conc.	Conc.	Unit	Flag ID
13C4-PFBA	Auto	1.418	0.004	-0.001	1259422	550128	13C3-PFBA_IS	----	10.2422	ng/mL	
13C4-PFBA_IS	Auto	1.418	0.004	----	1259422	1259422	----	----	10.0000	ng/mL	
13C3-PFBA_IS	Auto	1.419	0.004	----	550128	550128	----	----	5.0000	ng/mL	
PFBA	ND(W/B)	----	----	----	----	1259422	13C4-PFBA_IS	----	----	ng/mL	
PFMPA	ND(W/B)	----	----	----	----	130508	13C5-PFPeA_IS	----	----	ng/mL	
3_3 FTCA	ND(W/B)	----	----	----	----	130508	13C5-PFPeA_IS	----	----	ng/mL	
13C5-PFPeA	Auto	3.496	0.004	-1.489	130508	602297	13C2-PFHxA_IS	----	4.8004	ng/mL	
13C5-PFPeA_IS	Auto	3.496	0.004	----	130508	130508	----	----	5.0000	ng/mL	
PFPeA	ND(W/B)	----	----	----	----	130508	13C5-PFPeA_IS	----	----	ng/mL	
PFMBA	ND(W/B)	----	----	----	----	130508	13C5-PFPeA_IS	----	----	ng/mL	
13C2-4_2 FTS	Auto	4.667	0.006	-2.425	141099	206354	18O2-PFHxS_IS	----	4.9688	ng/mL	
13C2-4_2 FTS_IS	Auto	4.667	0.006	----	141099	141099	----	----	5.0000	ng/mL	
4_2 FTS	ND(W/B)	----	----	----	----	141099	13C2-4_2 FTS_IS	----	----	ng/mL	
13C3-PFBS_IS	Auto	4.652	0.005	----	323419	323419	----	----	2.5000	ng/mL	
PFBS	ND(W/B)	----	----	----	----	323419	13C3-PFBS_IS	----	----	ng/mL	
13C3-PFBS	Auto	4.652	0.005	-2.440	323419	206354	18O2-PFHxS_IS	----	2.7618	ng/mL	
NFDHA	ND(W/B)	----	----	----	----	645073	13C5-PFHxA_IS	----	----	ng/mL	
13C5-PFHxA	Auto	4.985	0.007	0.000	645073	602297	13C2-PFHxA_IS	----	2.5413	ng/mL	
13C5-PFHxA_IS	Auto	4.985	0.007	----	645073	645073	----	----	2.5000	ng/mL	
13C2-PFHxA_IS	Auto	4.985	0.006	----	602297	602297	----	----	2.5000	ng/mL	
PFHxA	ND(W/B)	----	----	----	----	645073	13C5-PFHxA_IS	----	----	ng/mL	
PFEESA	ND(W/B)	----	----	----	----	645073	13C5-PFHxA_IS	----	----	ng/mL	
13C3-HFPO-DA	Auto	5.458	0.006	0.473	596587	602297	13C2-PFHxA_IS	----	10.1186	ng/mL	
13C3-HFPO-DA_IS	Auto	5.458	0.006	----	596587	596587	----	----	10.0000	ng/mL	
HFPO-DA	ND(W/B)	----	----	----	----	596587	13C3-HFPO-DA_IS	----	----	ng/mL	
5_3 FTCA	ND(W/B)	----	----	----	----	645073	13C5-PFHxA_IS	----	----	ng/mL	
PFPeS	ND(W/B)	----	----	----	----	225446	13C3-PFHxS_IS	----	----	ng/mL	
13C4-PFHpA	Auto	6.160	0.006	1.175	608359	602297	13C2-PFHxA_IS	----	2.6475	ng/mL	
13C4-PFHpA_IS	Auto	6.160	0.006	----	608359	608359	----	----	2.5000	ng/mL	
PFHpA	ND(W/B)	----	----	----	----	608359	13C4-PFHpA_IS	----	----	ng/mL	
DONA	ND(W/B)	----	----	----	----	596587	13C3-HFPO-DA_IS	----	----	ng/mL	
13C2-6_2 FTS_IS	Auto	6.798	0.005	----	125326	125326	----	----	5.0000	ng/mL	
13C2-6_2 FTS	Auto	6.798	0.005	-0.294	125326	206354	18O2-PFHxS_IS	----	4.6663	ng/mL	
6_2 FTS	ND(W/B)	----	----	----	----	125326	13C2-6_2 FTS_IS	----	----	ng/mL	
13C4-PFOA_IS	Auto	7.115	0.008	----	44626	44626	----	----	2.5000	ng/mL	
13C8-PFOA_IS	Auto	7.114	0.007	----	630860	630860	----	----	2.5000	ng/mL	
13C8-PFOA	Auto	7.114	0.007	-0.001	630860	44626	13C4-PFOA_IS	----	2.5292	ng/mL	
PFOA	M	7.116	0.006	0.002	146186	630860	13C8-PFOA_IS	----	0.8541	ng/mL	
13C3-PFHxS	Auto	7.092	0.006	0.000	225446	206354	18O2-PFHxS_IS	----	2.5453	ng/mL	
13C3-PFHxS_IS	Auto	7.092	0.006	----	225446	225446	----	----	2.5000	ng/mL	
PFHxS	ND(W/B)	----	----	----	----	225446	13C3-PFHxS_IS	----	----	ng/mL	
18O2-PFHxS_IS	Auto	7.092	0.006	----	206354	206354	----	----	2.5000	ng/mL	
13C9-PFNA_IS	Auto	7.961	0.005	----	298537	298537	----	----	1.2500	ng/mL	
13C9-PFNA	Auto	7.961	0.005	0.000	298537	303873	13C5-PFNA_IS	----	1.2547	ng/mL	
13C5-PFNA_IS	Auto	7.961	0.005	----	303873	303873	----	----	1.2500	ng/mL	
PFNA	M	7.700	-0.257	-0.261	476922	298537	13C9-PFNA_IS	----	2.7761	ng/mL	RTi
PFHpS	ND(W/B)	----	----	----	----	102125	13C8-PFOS_IS	----	----	ng/mL	
7_3 FTCA	ND(W/B)	----	----	----	----	645073	13C5-PFHxA_IS	----	----	ng/mL	
13C2-8_2-FTS	Auto	8.416	0.007	1.324	121489	206354	18O2-PFHxS_IS	----	5.5066	ng/mL	
13C2-8_2-FTS_IS	Auto	8.416	0.007	----	121489	121489	----	----	5.0000	ng/mL	
8_2 FTS	ND(W/B)	----	----	----	----	121489	13C2-8_2-FTS_IS	----	----	ng/mL	
13C6-PFDA_IS	Auto	8.726	0.006	----	224603	224603	----	----	1.2500	ng/mL	
13C6-PFDA	Auto	8.726	0.006	0.000	224603	195574	13C2-PFDA_IS	----	1.4275	ng/mL	

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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_020 (continued)

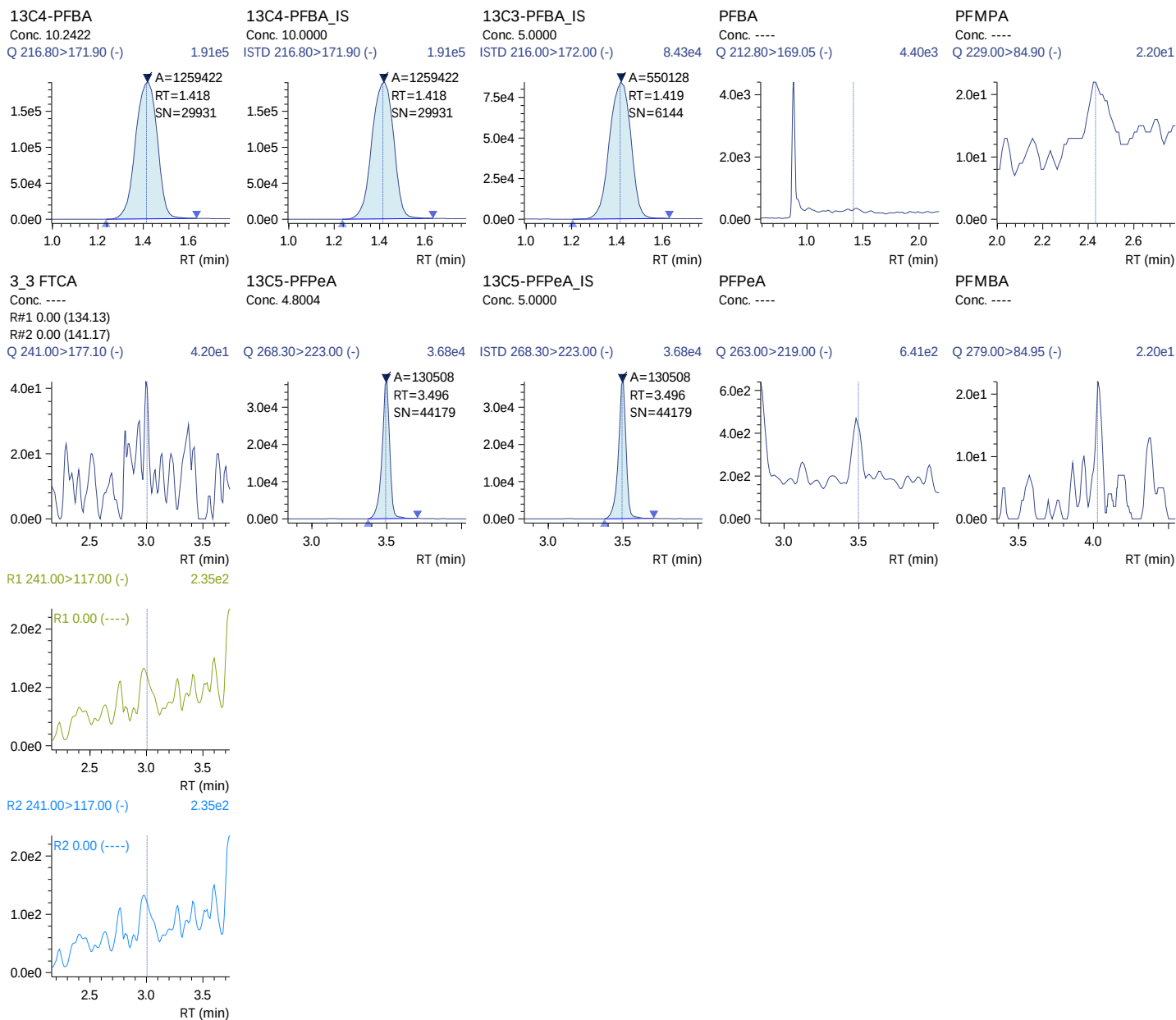
(Table continued from previous page)

Name	Mode ID	Found RT	RT Diff	ISTD RT Diff	Area	ISTD Area	ISTD Name	Std. Conc.	Conc.	Unit	Flag ID
13C2-PFDA_IS	Auto	8.726	0.005	----	195574	195574	----	----	1.2500	ng/mL	
PFDA	ND(W/B)	----	----	----	----	224603	13C6-PFDA_IS	----	----	ng/mL	
D3-NMeFOSAA_IS	Auto	8.859	0.004	----	230003	230003	----	----	5.0000	ng/mL	
D3-NMeFOSAA	Auto	8.859	0.004	0.034	230003	247964	13C4-PFOS_IS	----	5.3444	ng/mL	
13C8-PFOS_IS	Auto	8.825	0.005	----	102125	102125	----	----	2.5000	ng/mL	
13C8-PFOS	Auto	8.825	0.005	0.000	102125	247964	13C4-PFOS_IS	----	2.4695	ng/mL	
13C4-PFOS_IS	Auto	8.825	0.005	----	247964	247964	----	----	2.5000	ng/mL	
PFOS	ND(W/B)	----	----	----	----	102125	13C8-PFOS_IS	----	----	ng/mL	
NMeFOSAA	ND(W/B)	----	----	----	----	230003	D3-NMeFOSAA_IS	----	----	ng/mL	
D5-NetFOSAA_IS	Auto	9.189	0.003	----	252595	252595	----	----	5.0000	ng/mL	
D5-NetFOSAA	Auto	9.189	0.003	0.364	252595	247964	13C4-PFOS_IS	----	4.9060	ng/mL	
NetFOSAA	ND(W/B)	----	----	----	----	252595	D5-NetFOSAA_IS	----	----	ng/mL	
9-CI-PF3ONS	ND(W/B)	----	----	----	----	596587	13C3-HFPO-DA_IS	----	----	ng/mL	
PFUnDA	ND(W/B)	----	----	----	----	268499	13C7-PFUnDA_IS	----	----	ng/mL	
13C7-PFUnDA_IS	Auto	9.448	0.003	----	268499	268499	----	----	1.2500	ng/mL	
13C7-PFUnDA	Auto	9.448	0.003	0.722	268499	195574	13C2-PFDA_IS	----	1.4306	ng/mL	
PFNS	ND(W/B)	----	----	----	----	102125	13C8-PFOS_IS	----	----	ng/mL	
10_2_FTS	ND(W/B)	----	----	----	----	121489	13C2-8_2-FTS_IS	----	----	ng/mL	
13C2-PFDOA_IS	Auto	10.134	0.001	----	294881	294881	----	----	1.2500	ng/mL	
13C2-PFDOA	Auto	10.134	0.001	1.408	294881	195574	13C2-PFDA_IS	----	1.3676	ng/mL	
PFDOA	ND(W/B)	----	----	----	----	294881	13C2-PFDOA_IS	----	----	ng/mL	
PFDS	ND(W/B)	----	----	----	----	102125	13C8-PFOS_IS	----	----	ng/mL	
PFTDA	ND(W/B)	----	----	----	----	127902	13C2-PFTDA_IS	----	----	ng/mL	
11-CI-PF3OUdS	ND(W/B)	----	----	----	----	596587	13C3-HFPO-DA_IS	----	----	ng/mL	
PFOSAm	ND(W/B)	----	----	----	----	271787	13C8-PFOSAm_IS	----	----	ng/mL	
13C8-PFOSAm	Auto	11.168	0.003	2.343	271787	247964	13C4-PFOS_IS	----	2.5819	ng/mL	
13C8-PFOSAm_IS	Auto	11.168	0.003	----	271787	271787	----	----	2.5000	ng/mL	
PFTDA	ND(W/B)	----	----	----	----	127902	13C2-PFTDA_IS	----	----	ng/mL	
13C2-PFTDA	Auto	11.425	0.001	2.699	127902	195574	13C2-PFDA_IS	----	1.3738	ng/mL	
13C2-PFTDA_IS	Auto	11.425	0.001	----	127902	127902	----	----	1.2500	ng/mL	
PFDoS	ND(W/B)	----	----	----	----	102125	13C8-PFOS_IS	----	----	ng/mL	
D7-MeFOSE_IS	Auto	13.380	0.003	----	717755	717755	----	----	25.0000	ng/mL	
D7-MeFOSE	Auto	13.380	0.003	4.555	717755	247964	13C4-PFOS_IS	----	27.6562	ng/mL	
MeFOSE	ND(W/B)	----	----	----	----	717755	D7-MeFOSE_IS	----	----	ng/mL	
13C2-PFHXDA_IS	Auto	12.640	-0.001	----	508875	508875	----	----	2.5000	ng/mL	
13C2-PFHXDA	Auto	12.640	-0.001	3.914	508875	195574	13C2-PFDA_IS	----	2.8012	ng/mL	
PFHXDA	ND(W/B)	----	----	----	----	508875	13C2-PFHXDA_IS	----	----	ng/mL	
D3-MeFOSA	Auto	13.687	0.002	4.862	54281	247964	13C4-PFOS_IS	----	2.5606	ng/mL	
D3-MeFOSA_IS	Auto	13.687	0.002	----	54281	54281	----	----	2.5000	ng/mL	
MeFOSA	ND(W/B)	----	----	----	----	54281	D3-MeFOSA_IS	----	----	ng/mL	
D9-EtFOSE_IS	Auto	14.009	0.003	----	709094	709094	----	----	25.0000	ng/mL	
D9-EtFOSE	Auto	14.009	0.003	5.184	709094	247964	13C4-PFOS_IS	----	26.9013	ng/mL	
EtFOSE	ND(W/B)	----	----	----	----	709094	D9-EtFOSE_IS	----	----	ng/mL	
D5-EtFOSAm	Auto	14.365	0.003	5.540	74458	247964	13C4-PFOS_IS	----	2.6381	ng/mL	
D5-EtFOSAm_IS	Auto	14.365	0.003	----	74458	74458	----	----	2.5000	ng/mL	
EtFOSAm	ND(W/B)	----	----	----	----	74458	D5-EtFOSAm_IS	----	----	ng/mL	
PFODA	ND(W/B)	----	----	----	----	508875	13C2-PFHXDA_IS	----	----	ng/mL	

Flag ID key: RT: RT Diff (Absolute ISTD)



240118_020 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_020 (continued)

13C2-4_2 FTS
Conc. 4.9688

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. ----
R#1 0.00 (34.14)
R#2 0.00 (29.06)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. ----
R#1 0.00 (47.53)
R#2 0.00 (46.72)

Q 329.10>80.90 (-)

4.36e4

ISTD 329.10>80.90 (-)

4.36e4

Q 327.10>307.00 (-)

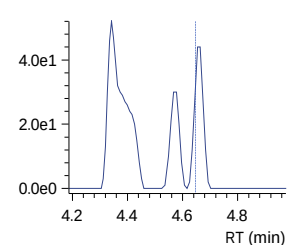
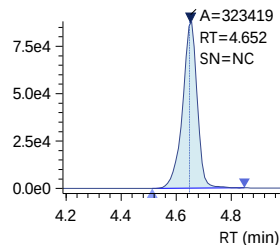
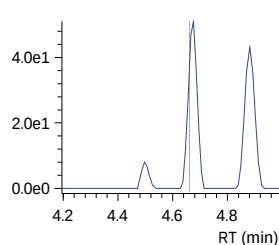
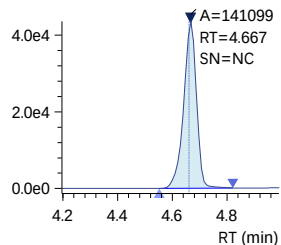
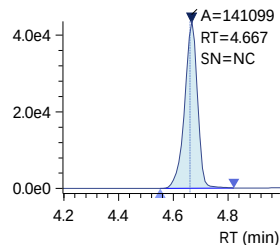
5.10e1

ISTD 302.10>79.90 (-)

8.81e4

Q 298.70>79.90 (-)

5.20e1

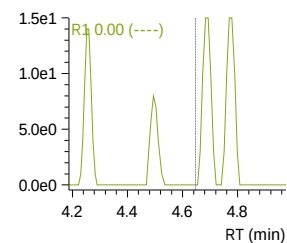
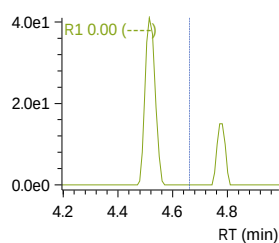


R1 327.10>80.90 (-)

4.10e1

R1 298.70>98.80 (-)

1.50e1

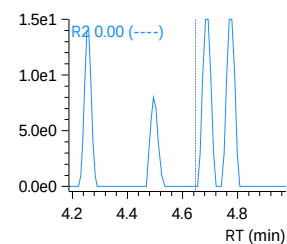
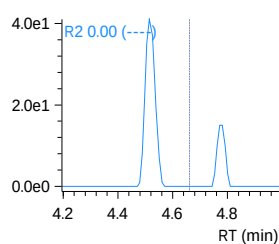


R2 327.10>80.90 (-)

4.10e1

R2 298.70>98.80 (-)

1.50e1





240118_020 (continued)

13C3-PFBS
Conc. 2.7618

NFDHA
Conc. ----
R#1 0.00 (37.88)
R#2 0.00 (40.25)

13C5-PFHxA
Conc. 2.5413

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

Q 302.10>79.90 (-)

8.81e4

Q 295.00>201.00 (-)

2.56e2

Q 318.00>273.00 (-)

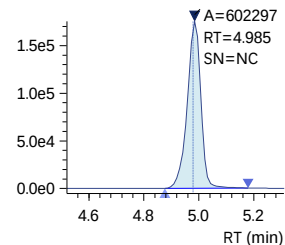
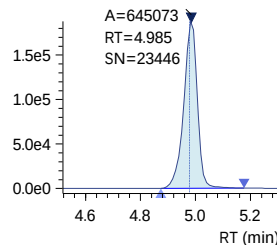
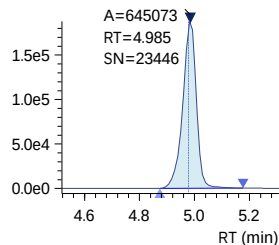
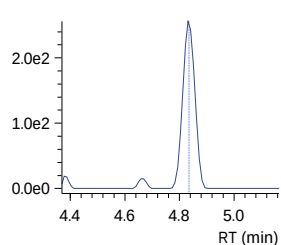
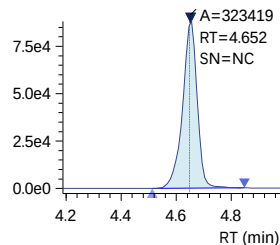
1.88e5

ISTD 318.00>273.00 (-)

1.88e5

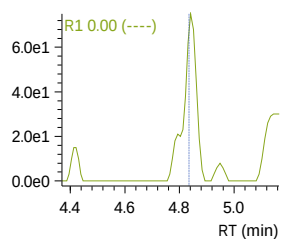
ISTD 315.10>270.00 (-)

1.75e5



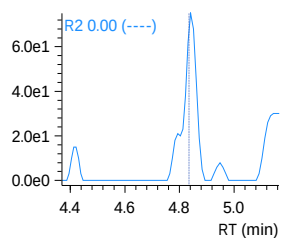
R1 295.00>84.90 (-)

7.50e1



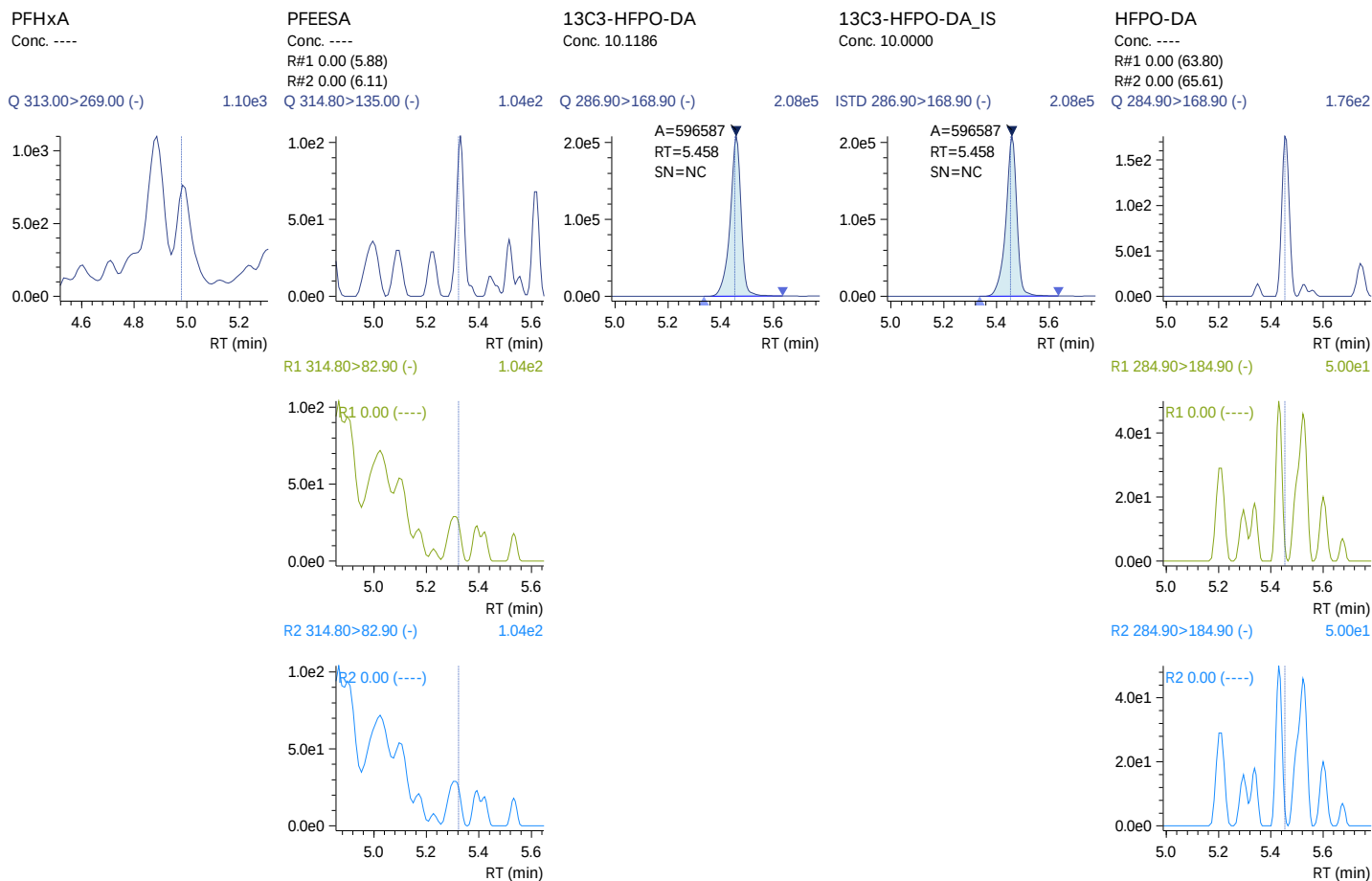
R2 295.00>84.90 (-)

7.50e1





240118_020 (continued)

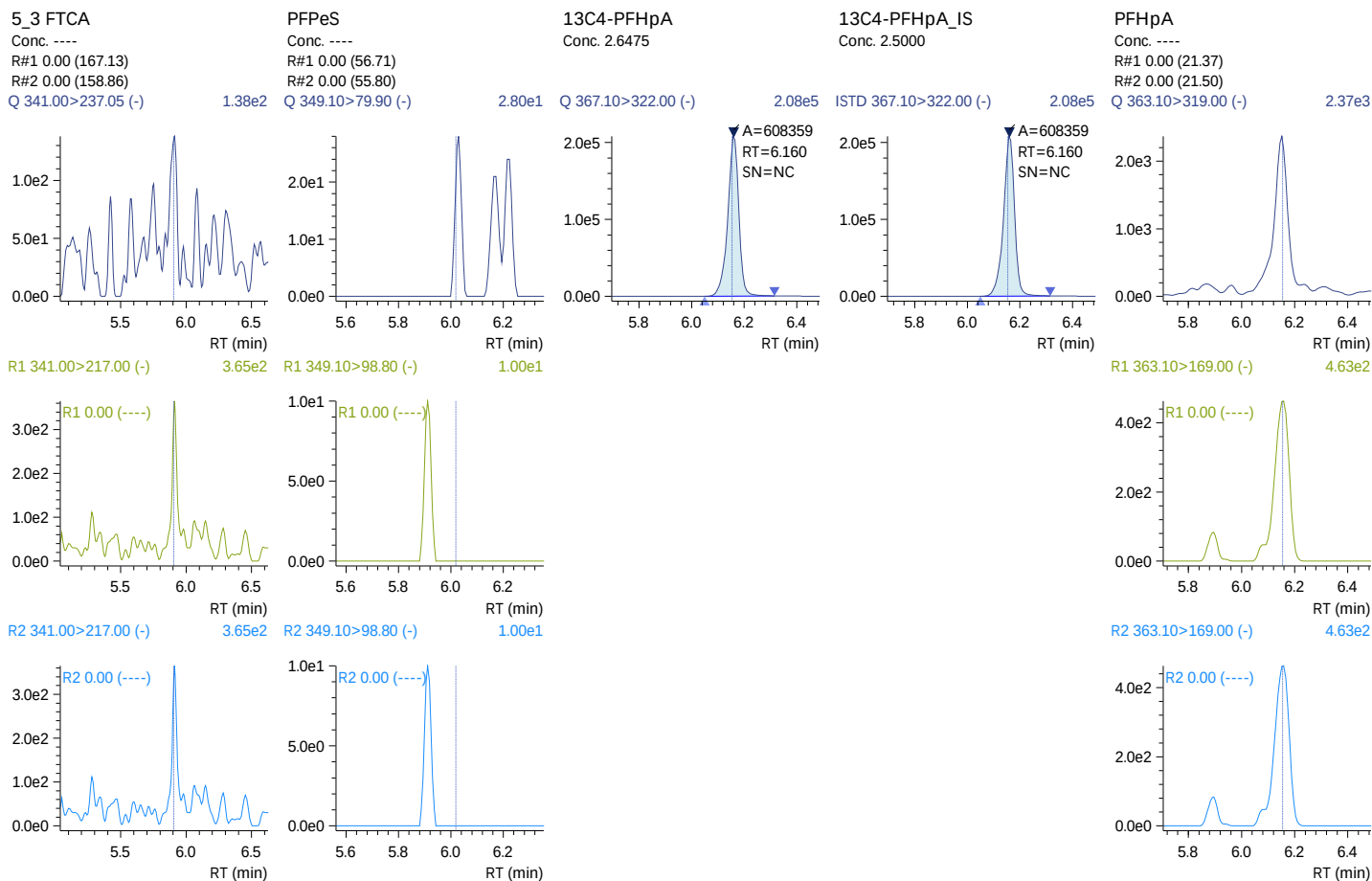


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_020 (continued)

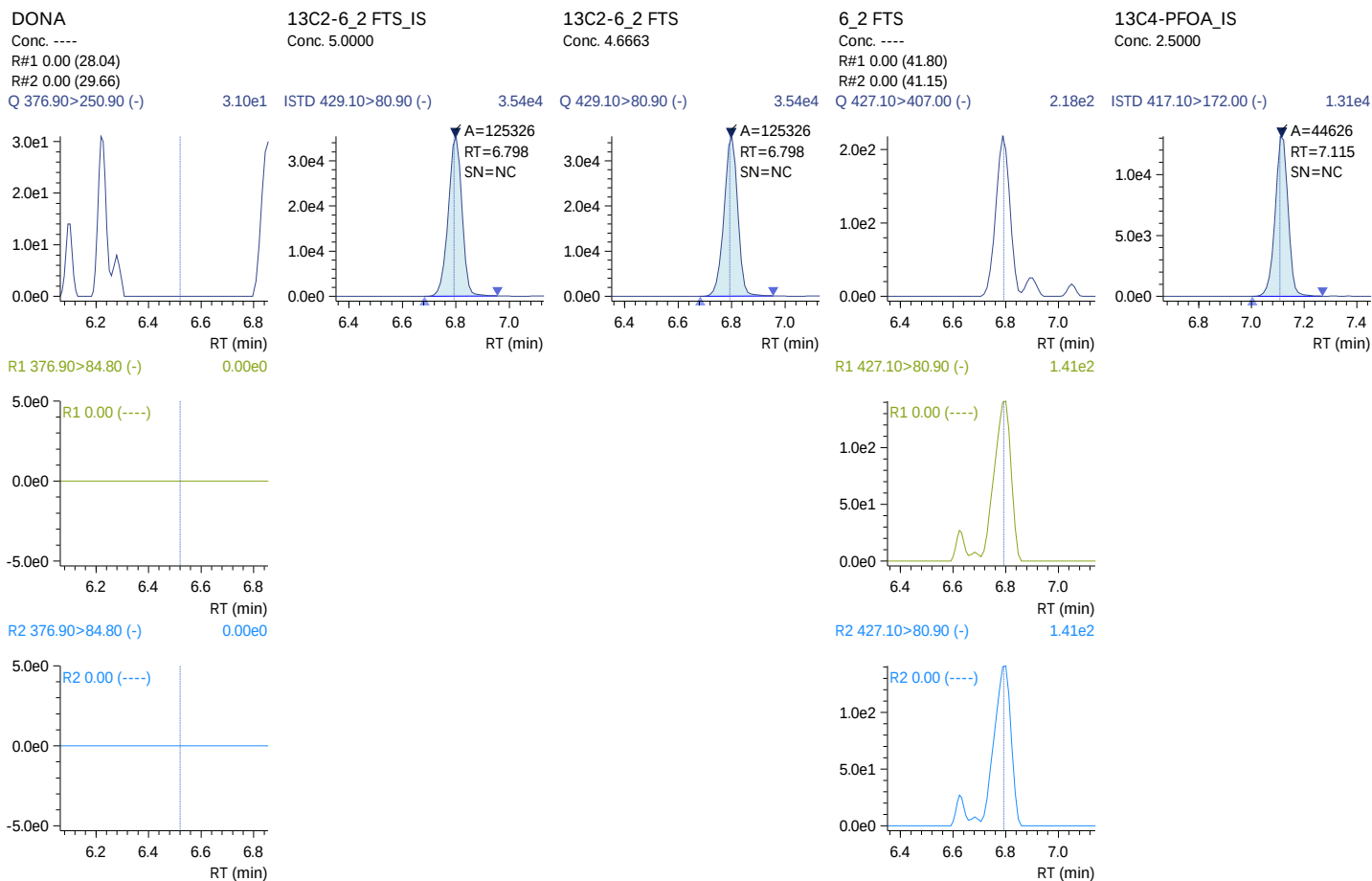


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_020 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_020 (continued)

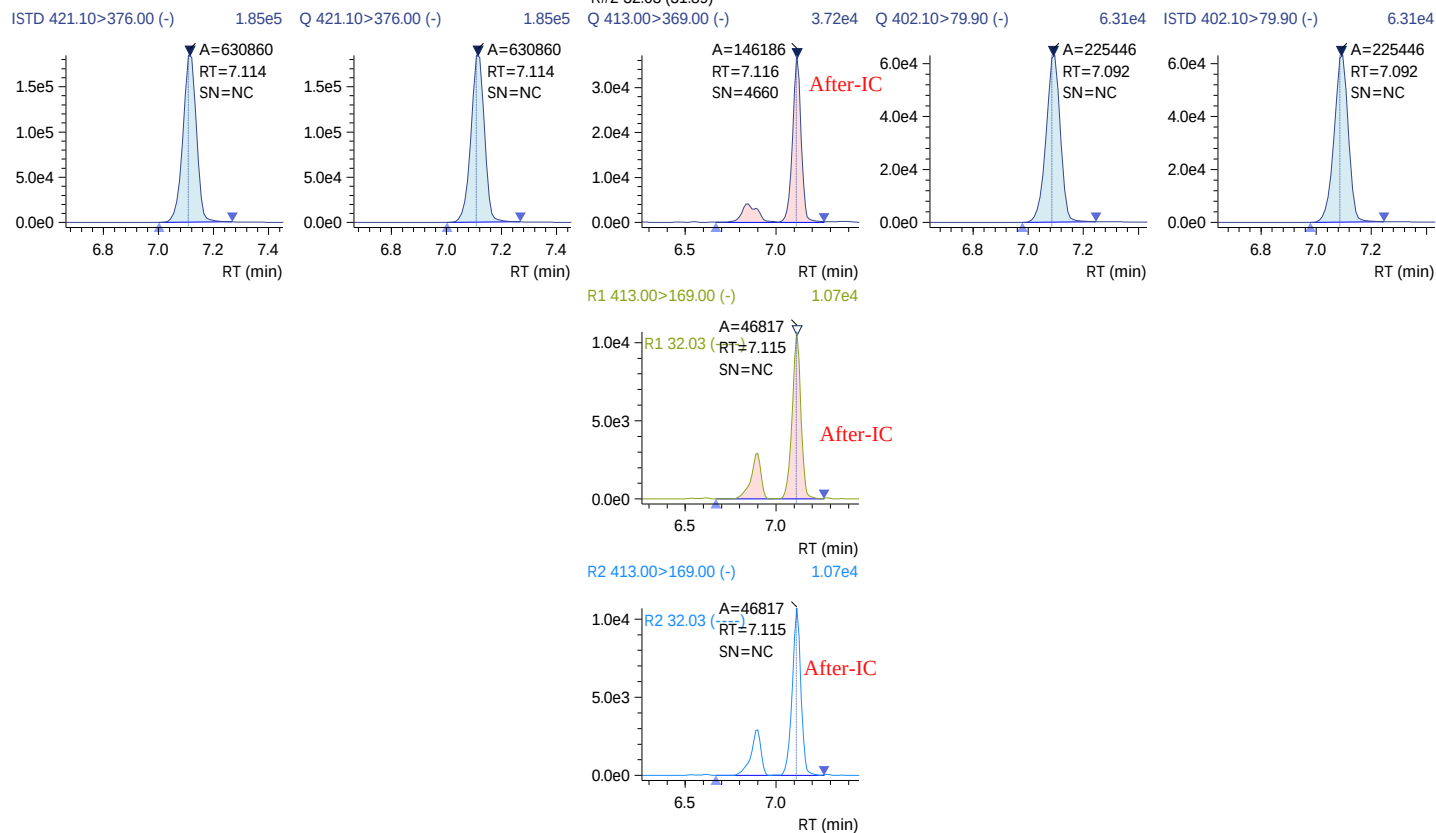
13C8-PFOA_IS
Conc. 2.5000

13C8-PFOA
Conc. 2.5292

PFOA
Conc. 0.8541
R#1 32.03 (29.05)
R#2 32.03 (31.89)

13C3-PFHxS
Conc. 2.5453

13C3-PFHxS_IS
Conc. 2.5000

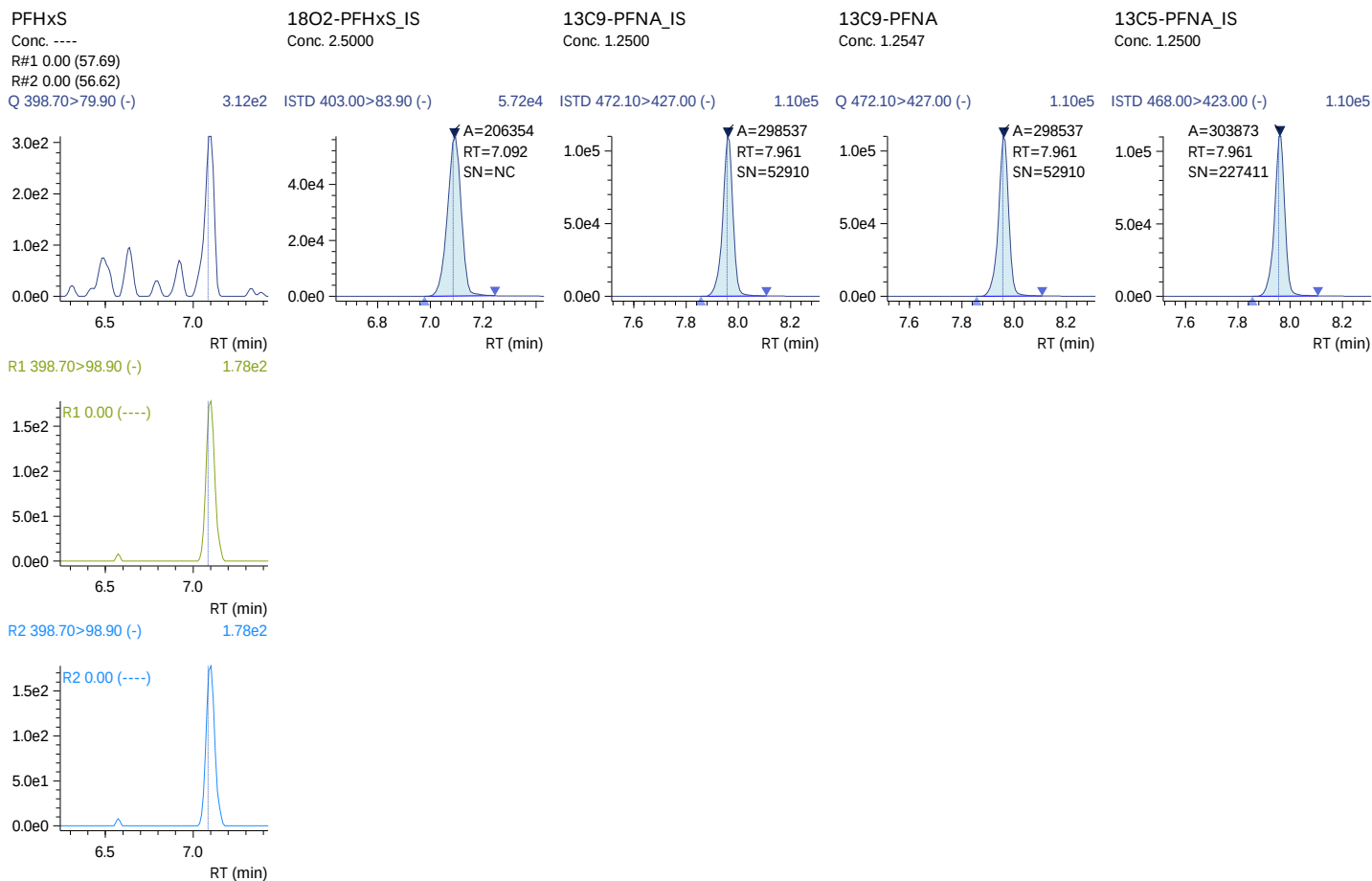


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_020 (continued)

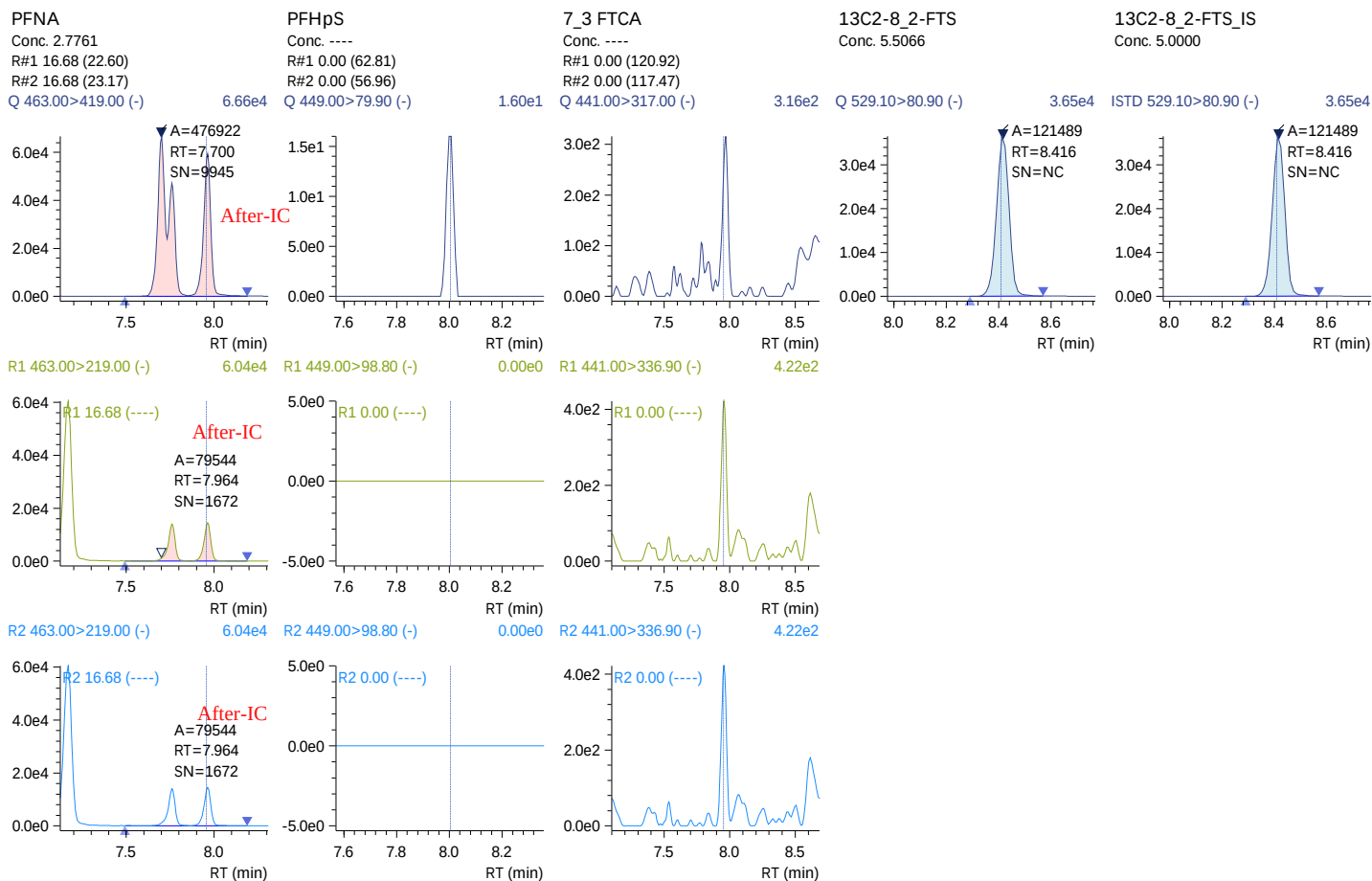


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_020 (continued)

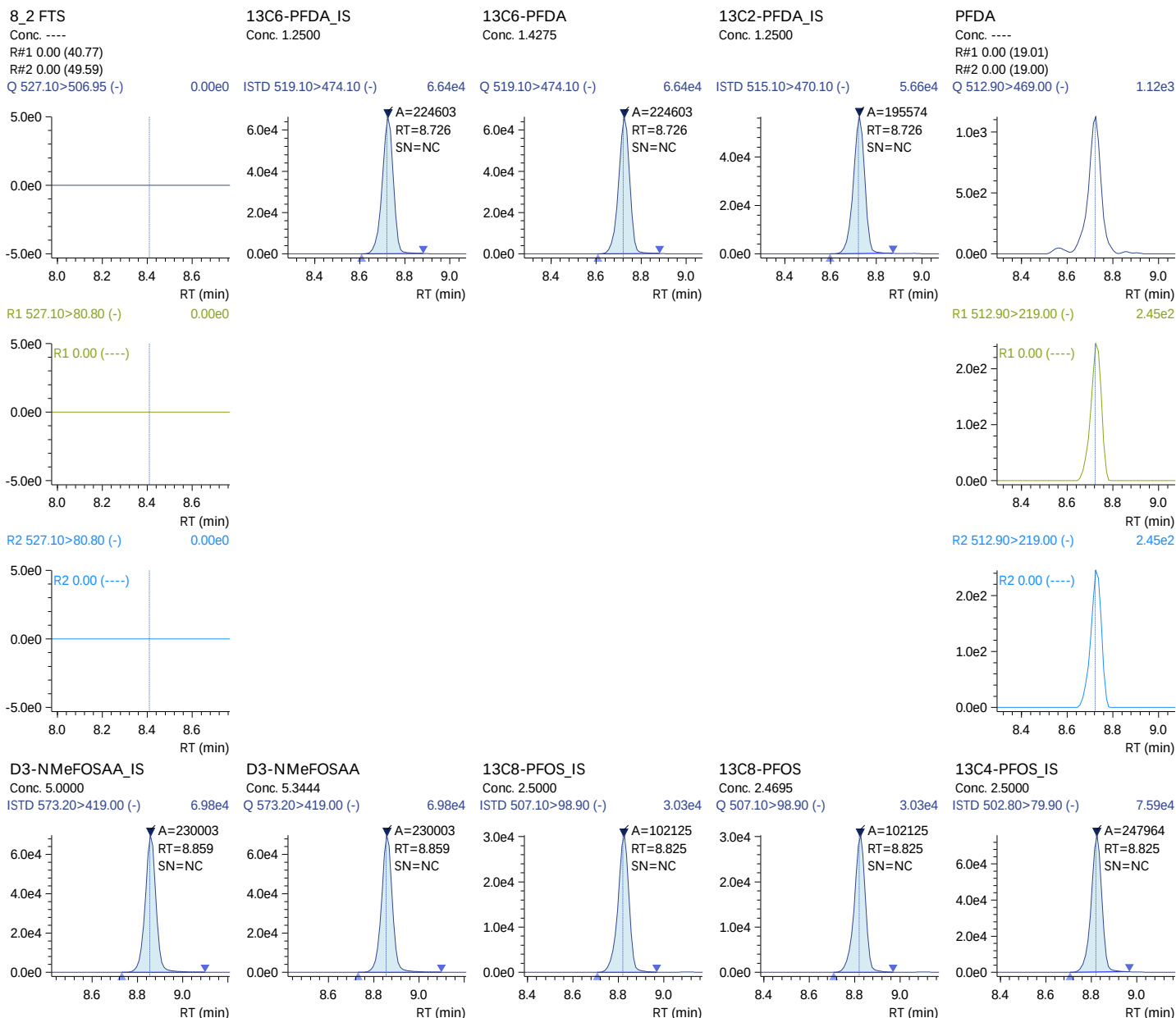


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_020 (continued)

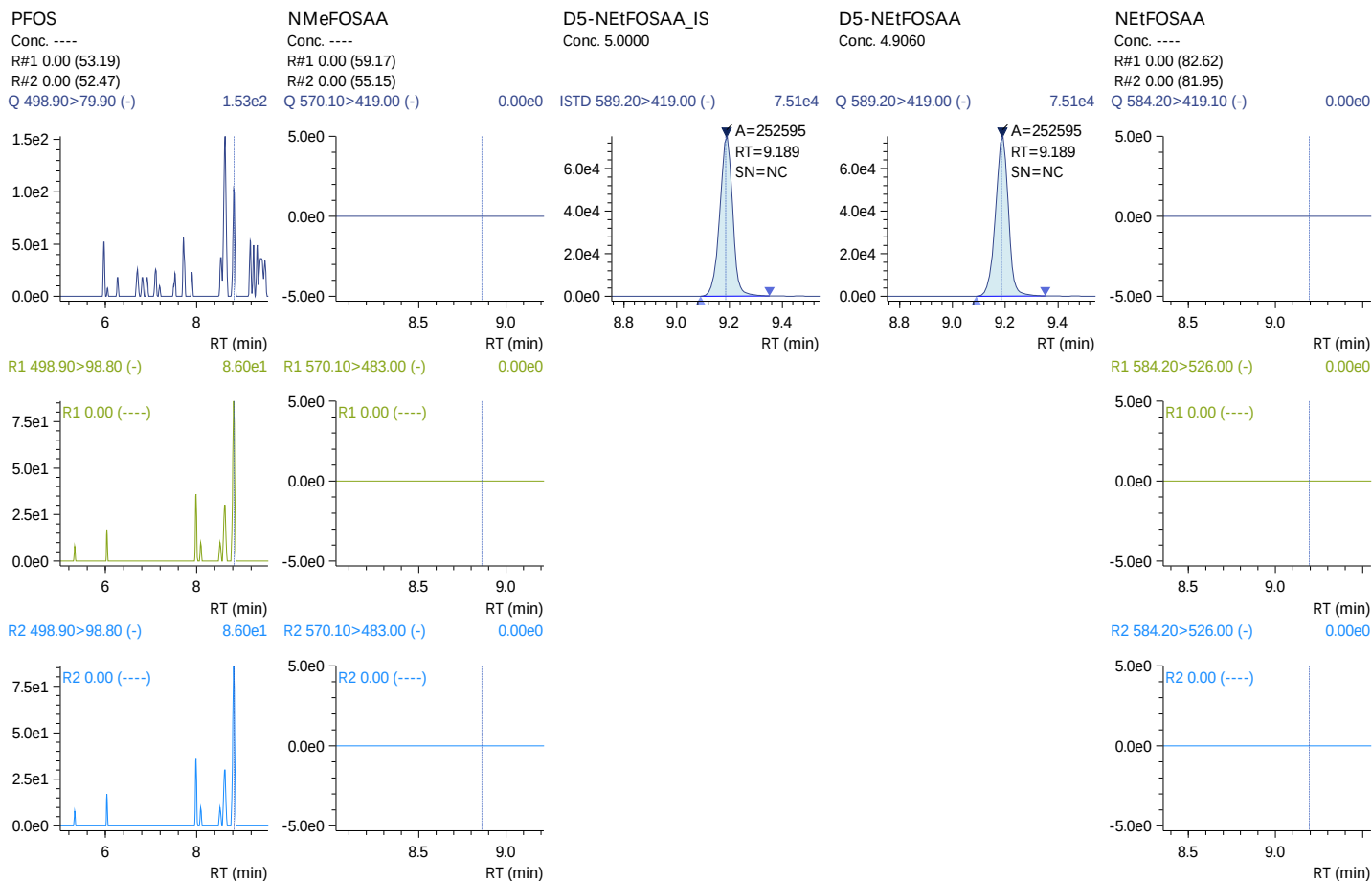


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_020 (continued)



J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_020 (continued)

9-Cl-PF3ONS

Conc. ----

R#1 0.00 (31.76)

R#2 0.00 (32.76)

Q 530.80>351.00 (-)

PFUnDA

Conc. ----

R#1 0.00 (12.31)

R#2 0.00 (13.12)

Q 563.10>519.00 (-)

13C7-PFUnDA_IS

Conc. 1.2500

ISTD 570.00>525.10 (-)

13C7-PFUnDA

Conc. 1.4306

Q 570.00>525.10 (-)

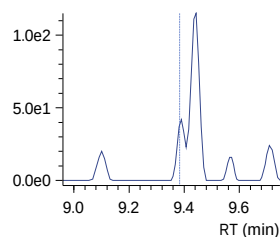
PFNS

Conc. ----

R#1 0.00 (63.31)

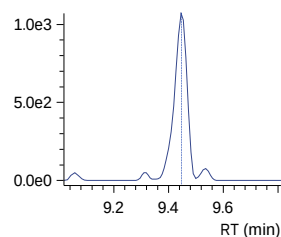
R#2 0.00 (65.22)

Q 548.80>79.90 (-)



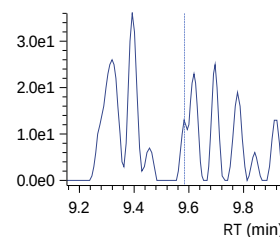
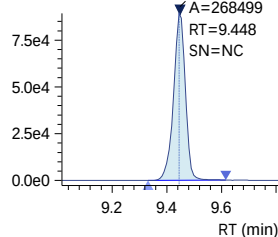
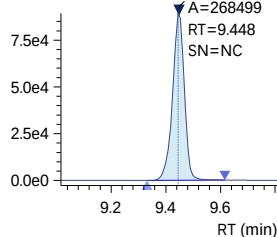
R1 532.80>353.00 (-)

1.14e2



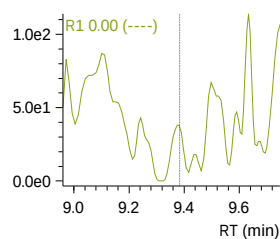
R1 563.10>269.10 (-)

1.25e2



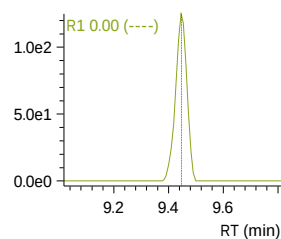
R1 548.80>98.80 (-)

0.00e0



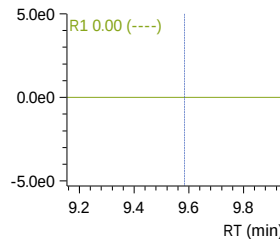
R2 532.80>353.00 (-)

1.14e2



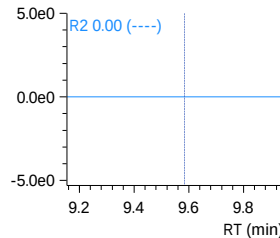
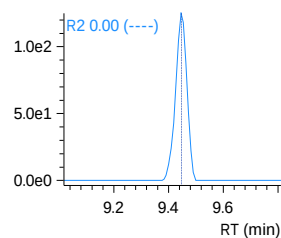
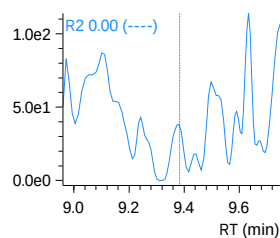
R2 563.10>269.10 (-)

1.25e2



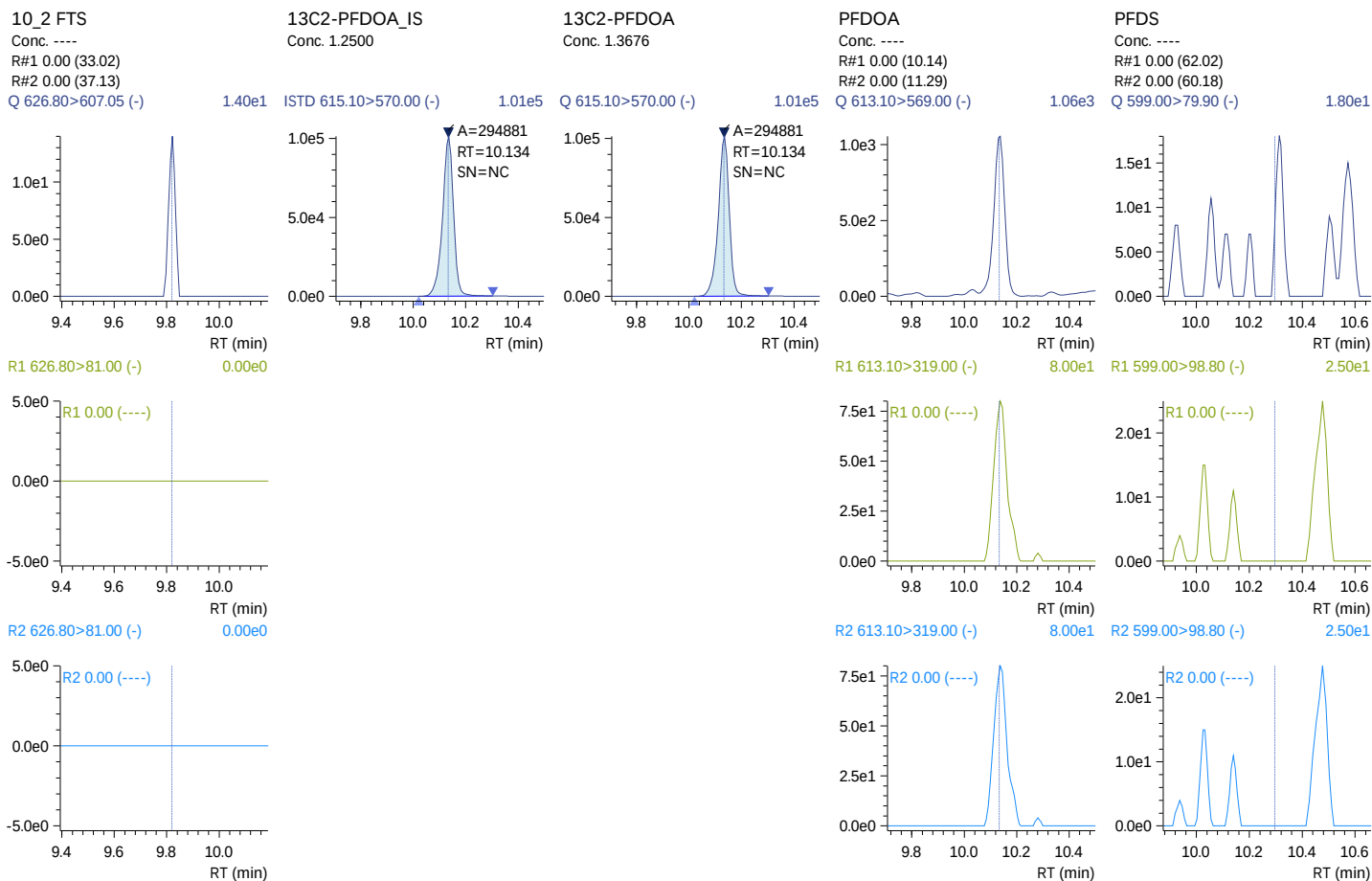
R2 548.80>98.80 (-)

0.00e0





240118_020 (continued)

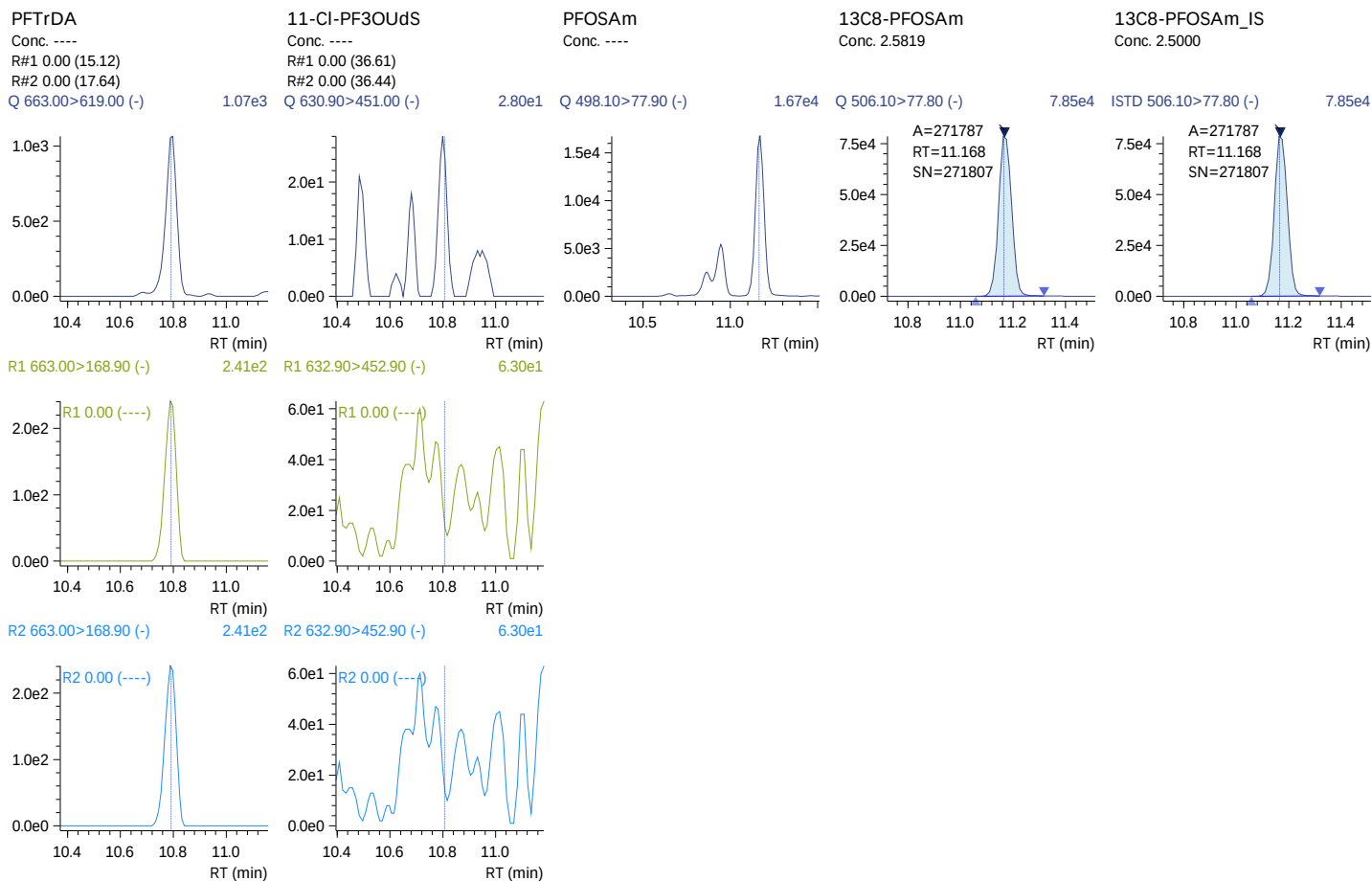


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_020 (continued)

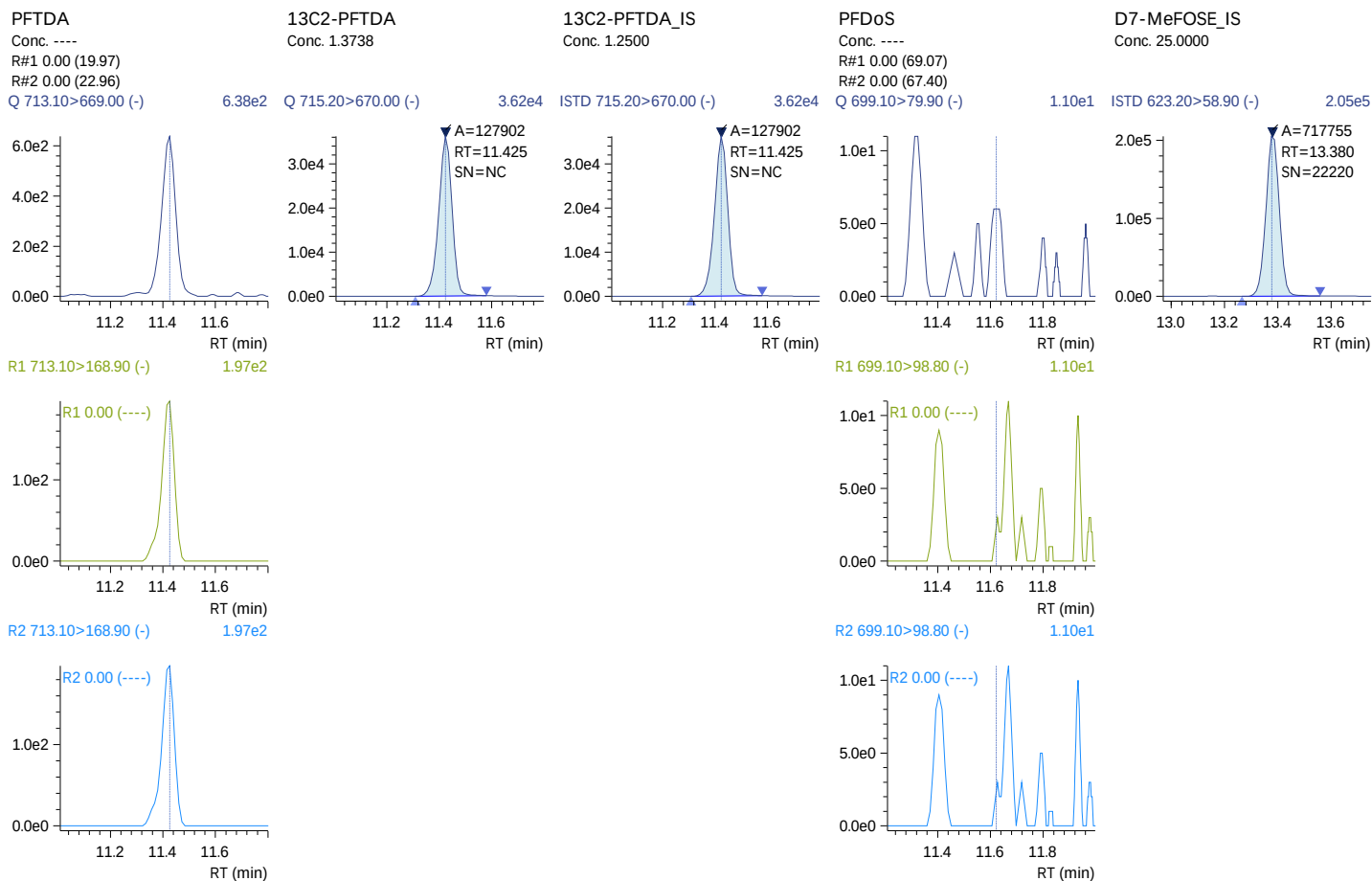


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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_020 (continued)



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SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_020 (continued)

D7-MeFOSE
Conc. 27.6562

MeFOSE
Conc. ----

13C2-PFHXA_IS
Conc. 2.5000

13C2-PFHXA
Conc. 2.8012

PFHXA
Conc. ----

Q 623.20>58.90 (-)

2.05e5

Q 616.10>59.00 (-)

4.75e3

ISTD 815.00>770.05 (-)

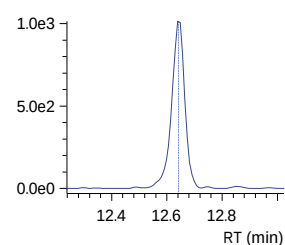
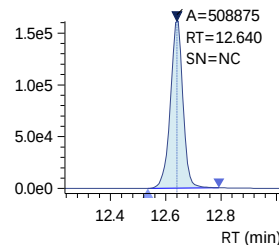
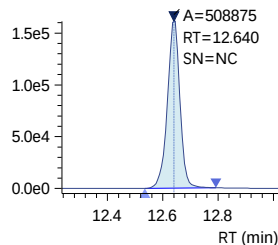
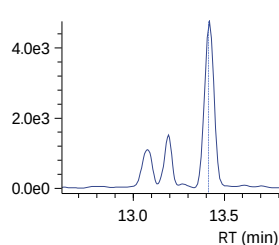
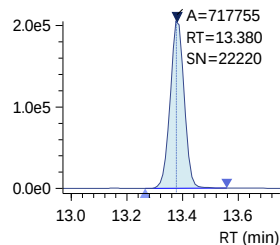
1.61e5

Q 815.00>770.05 (-)

1.61e5

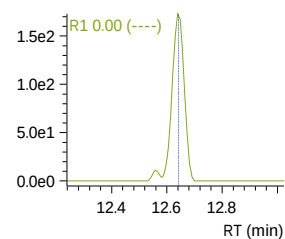
Q 813.00>768.95 (-)

1.01e3



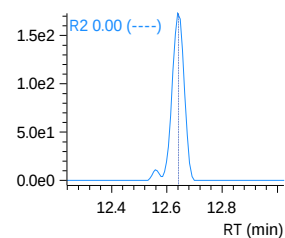
R1 813.00>218.95 (-)

1.73e2



R2 813.00>218.95 (-)

1.73e2





240118_020 (continued)

D3-MeFOSA
Conc. 2.5606

D3-MeFOSA_IS
Conc. 2.5000

MeFOSA
Conc. ----
R#1 0.00 (149.05)
R#2 0.00 (140.79)

D9-EtFOSE_IS
Conc. 25.0000

D9-EtFOSE
Conc. 26.9013

Q 515.00>219.00 (-)

1.57e4

ISTD 515.00>219.00 (-)

1.57e4

Q 511.90>219.00 (-)

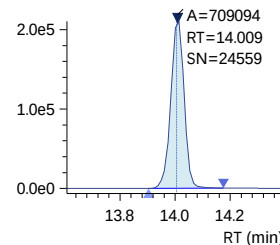
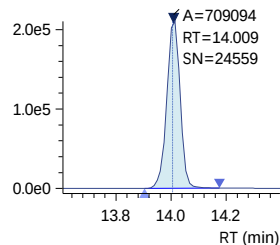
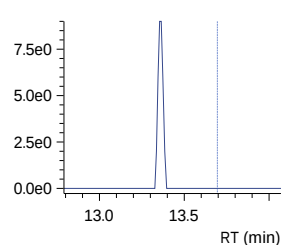
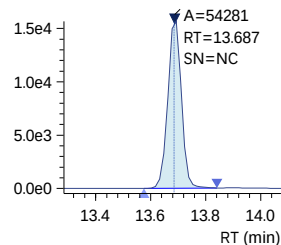
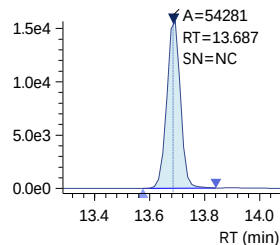
9.00e0

ISTD 639.20>58.90 (-)

2.10e5

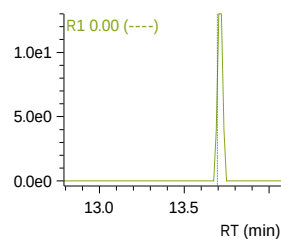
Q 639.20>58.90 (-)

2.10e5



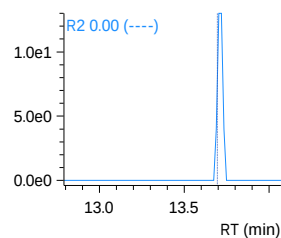
R1 511.90>169.00 (-)

1.30e1



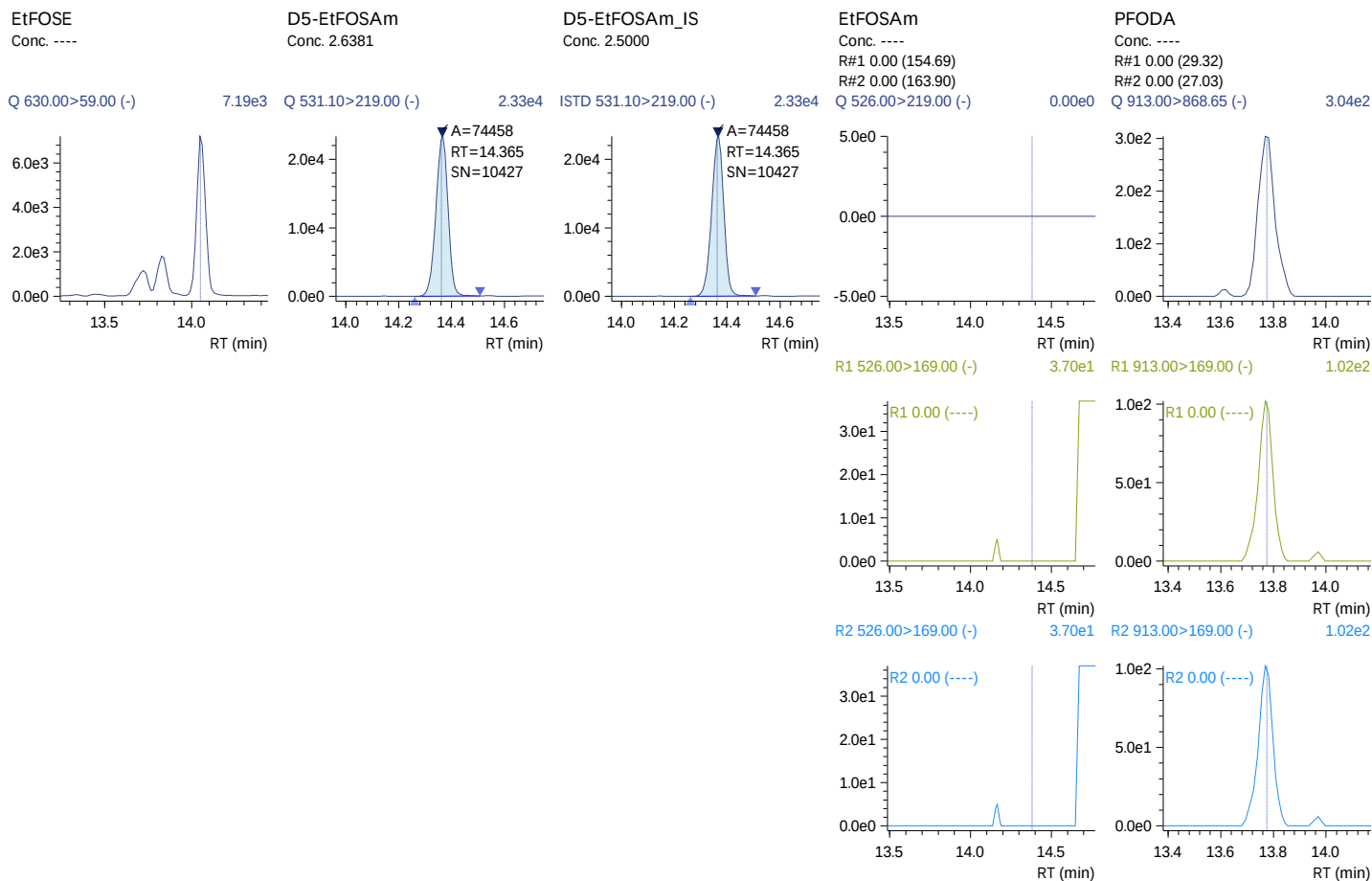
R2 511.90>169.00 (-)

1.30e1





240118_020 (continued)



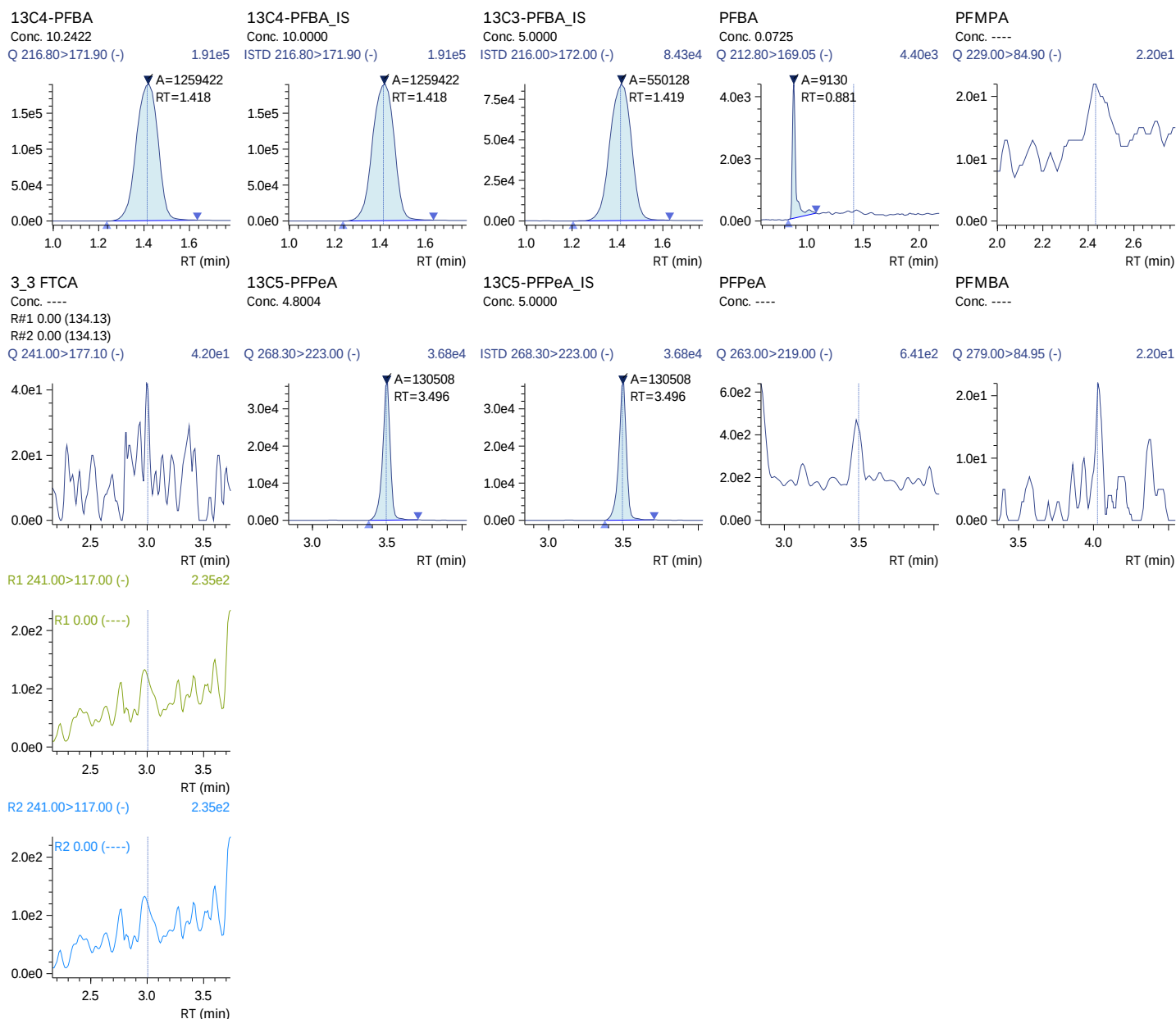
J:\LCMS08\Data\240118_1633_Curve\240118-1633_Curve.dam\p

SN - Software-calculated S/N ratio outside criteria due to non-target peaks or drift in noise calculation window.
Analyst review of noise levels (excluding non-target peaks) in chromatogram indicates S/N ratio meets criteria.



240118_020

Sample ID: 1633 QIS
Date Acquired: 1/18/2024 7:30:05 PM
Acquired by: System Administrator
Data File: 240118_020
Vial: 13 | Inj. Volume: 10.0000uL | Tray: 1





240118_020 (continued)

13C2-4_2 FTS
Conc. 4.9688

13C2-4_2 FTS_IS
Conc. 5.0000

4_2 FTS
Conc. ----
R#1 0.00 (34.14)
R#2 0.00 (34.14)

13C3-PFBS_IS
Conc. 2.5000

PFBS
Conc. ----
R#1 0.00 (47.53)
R#2 0.00 (47.53)

Q 329.10>80.90 (-)

4.36e4

ISTD 329.10>80.90 (-)

4.36e4

Q 327.10>307.00 (-)

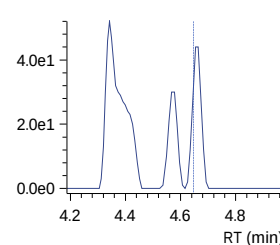
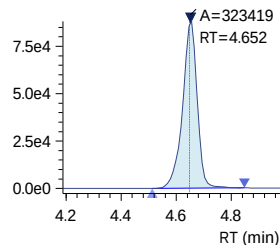
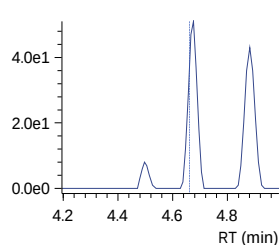
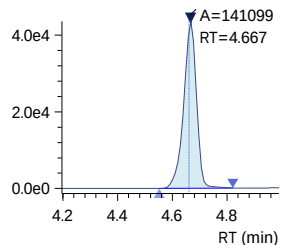
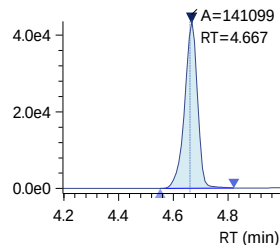
5.10e1

ISTD 302.10>79.90 (-)

8.81e4

Q 298.70>79.90 (-)

5.20e1

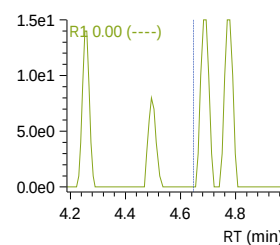
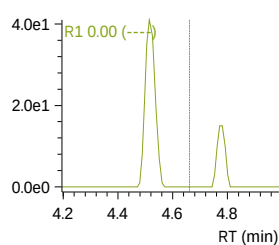


R1 327.10>80.90 (-)

4.10e1

R1 298.70>98.80 (-)

1.50e1

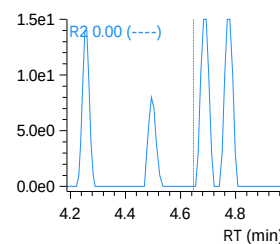
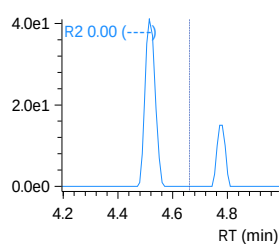


R2 327.10>80.90 (-)

4.10e1

R2 298.70>98.80 (-)

1.50e1





240118_020 (continued)

13C3-PFBS
Conc. 2.7618

NFDHA
Conc. ----
R#1 0.00 (37.88)
R#2 0.00 (37.88)

13C5-PFHxA
Conc. 2.5413

13C5-PFHxA_IS
Conc. 2.5000

13C2-PFHxA_IS
Conc. 2.5000

Q 302.10>79.90 (-)

8.81e4

Q 295.00>201.00 (-)

2.56e2

Q 318.00>273.00 (-)

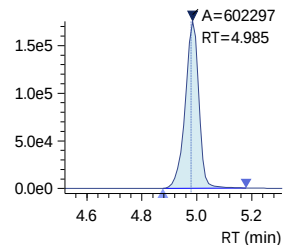
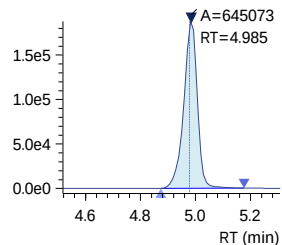
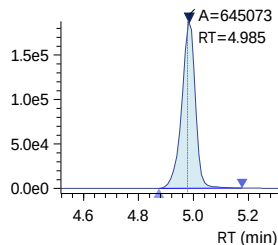
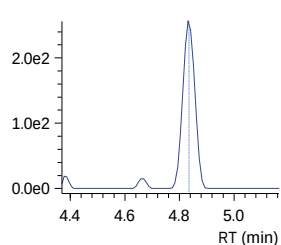
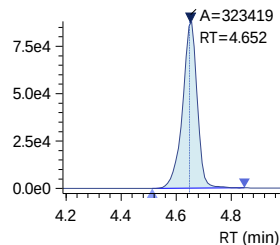
1.88e5

ISTD 318.00>273.00 (-)

1.88e5

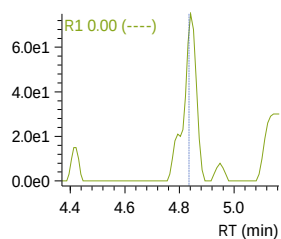
ISTD 315.10>270.00 (-)

1.75e5



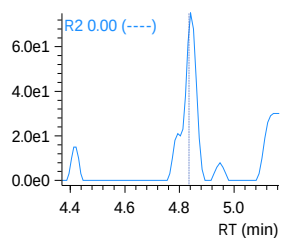
R1 295.00>84.90 (-)

7.50e1



R2 295.00>84.90 (-)

7.50e1





240118_020 (continued)

PFHxA
Conc. 0.0247

PFEESA
Conc. ----

13C3-HFPO-DA
Conc. 10.1186

13C3-HFPO-DA_IS
Conc. 10.0000

HFPO-DA
Conc. ----

Q 313.00>269.00 (-)

1.10e3

Q 314.80>135.00 (-)

1.04e2

Q 286.90>168.90 (-)

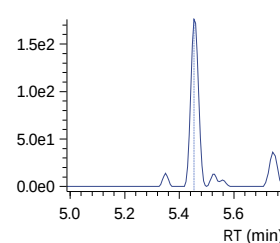
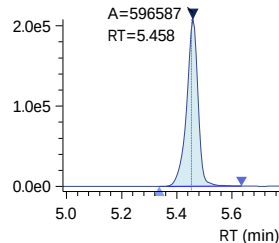
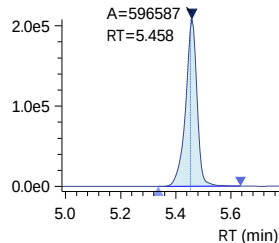
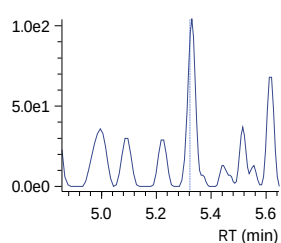
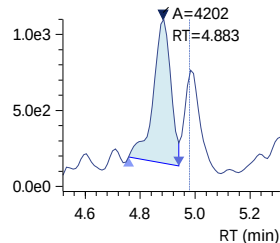
2.08e5

ISTD 286.90>168.90 (-)

2.08e5

Q 284.90>168.90 (-)

1.76e2

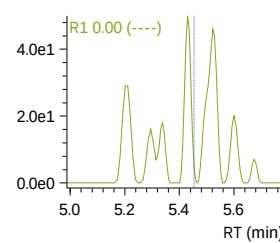
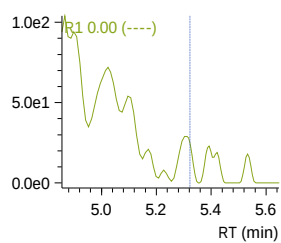


R1 314.80>82.90 (-)

1.04e2

R1 284.90>184.90 (-)

5.00e1

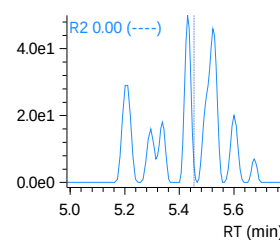
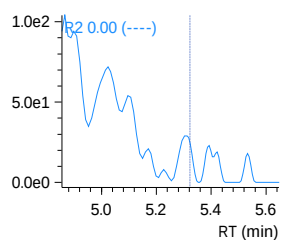


R2 314.80>82.90 (-)

1.04e2

R2 284.90>184.90 (-)

5.00e1





240118_020 (continued)

5_3 FTCA

Conc. ----

R#1 0.00 (167.13)

R#2 0.00 (167.13)

Q 341.00>237.05 (-)

1.38e2

PFPeS

Conc. ----

R#1 0.00 (56.71)

R#2 0.00 (56.71)

Q 349.10>79.90 (-)

2.80e1

13C4-PFHpA

Conc. 2.6475

Q 367.10>322.00 (-)

2.08e5

13C4-PFHpA_IS

Conc. 2.5000

ISTD 367.10>322.00 (-)

2.08e5

PFHpA

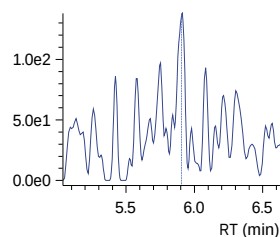
Conc. -0.0016

R#1 0.00 (21.37)

R#2 0.00 (21.37)

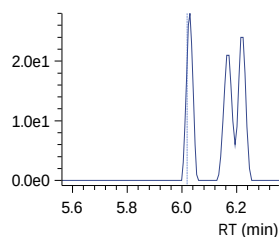
Q 363.10>319.00 (-)

2.37e3



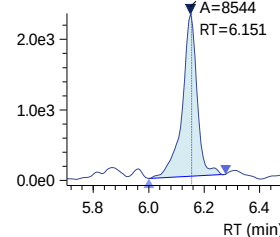
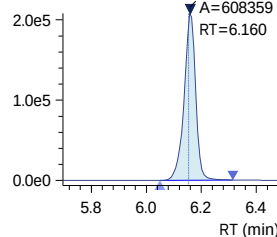
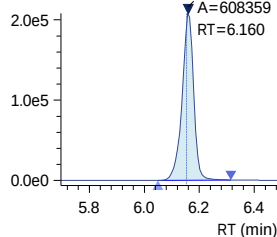
R1 341.00>217.00 (-)

3.65e2



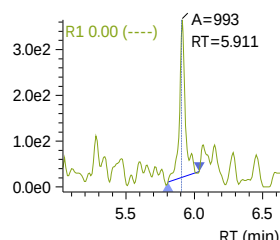
R1 349.10>98.80 (-)

1.00e1



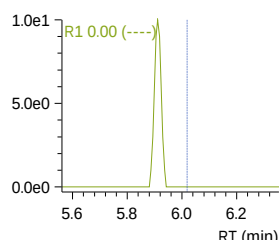
R1 363.10>169.00 (-)

4.63e2



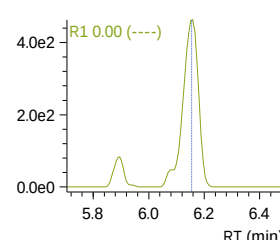
R2 341.00>217.00 (-)

3.65e2



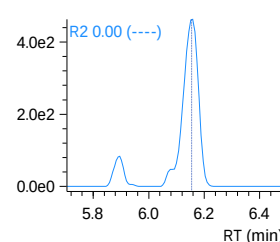
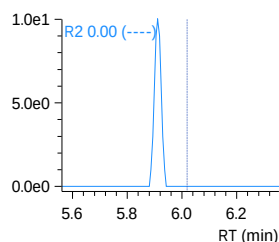
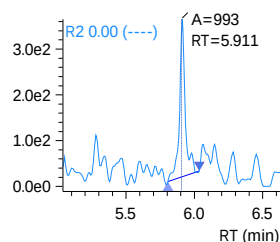
R2 349.10>98.80 (-)

1.00e1



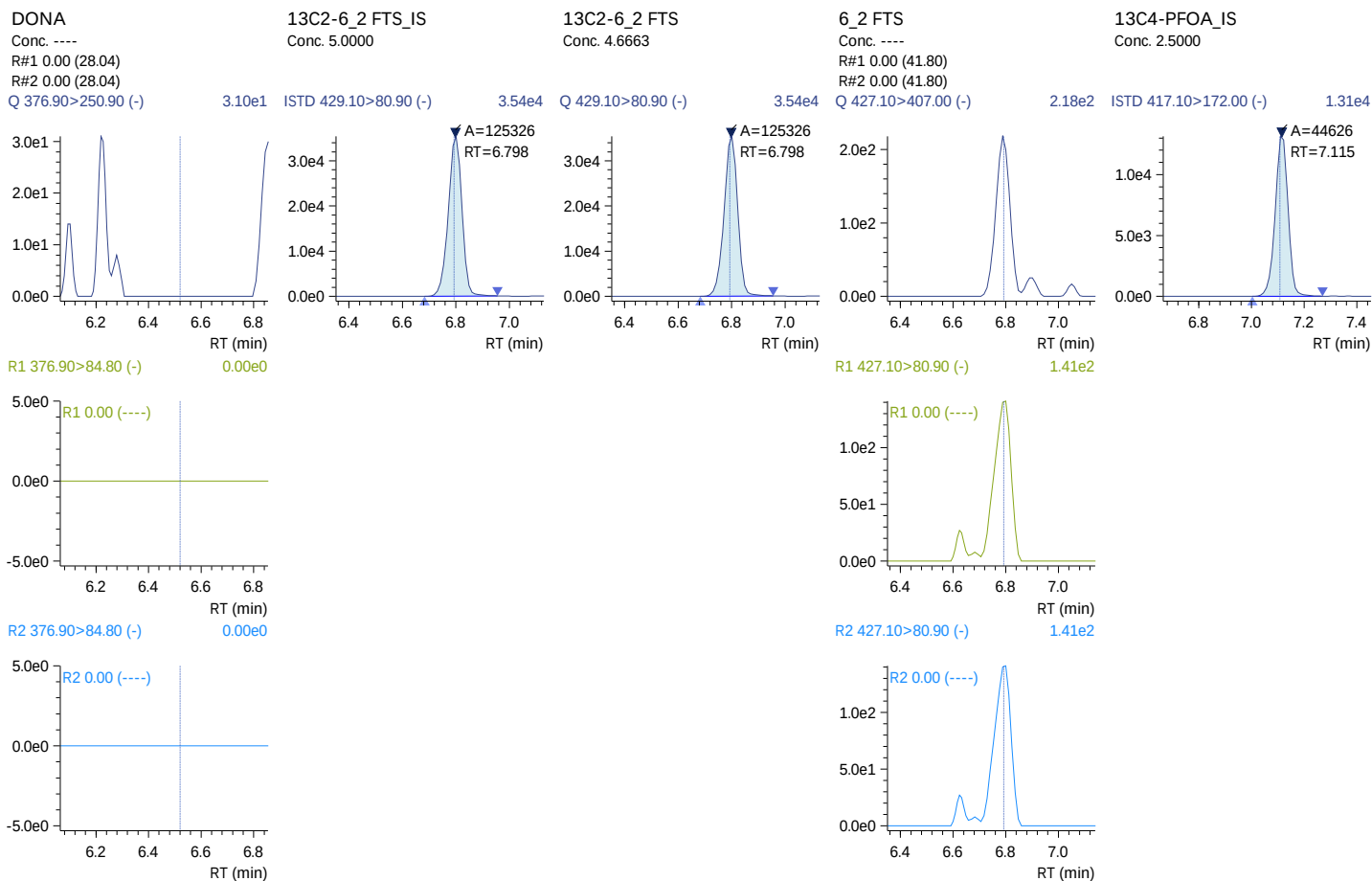
R2 363.10>169.00 (-)

4.63e2





240118_020 (continued)





240118_020 (continued)

13C8-PFOA_IS
 Conc. 2.5000

13C8-PFOA
 Conc. 2.5292

PFOA
 Conc. 0.6881
 R#1 29.76 (29.05)
 R#2 29.76 (29.05)

13C3-PFHxS
 Conc. 2.5453

13C3-PFHxS_IS
 Conc. 2.5000

ISTD 421.10>376.00 (-)

1.85e5

Q 421.10>376.00 (-)

1.85e5

Q 413.00>369.00 (-)

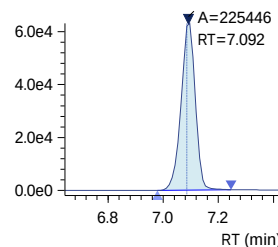
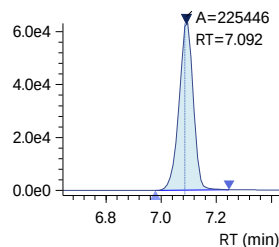
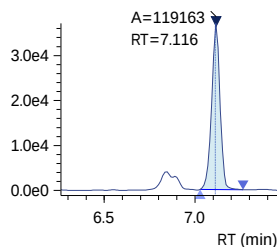
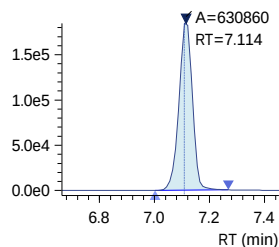
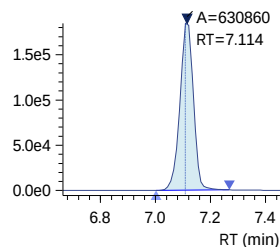
3.72e4

Q 402.10>79.90 (-)

6.31e4

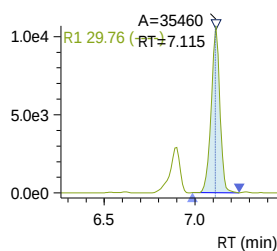
ISTD 402.10>79.90 (-)

6.31e4



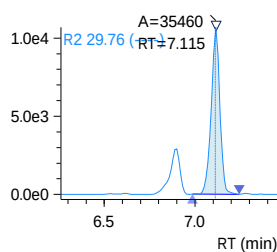
R1 413.00>169.00 (-)

1.07e4



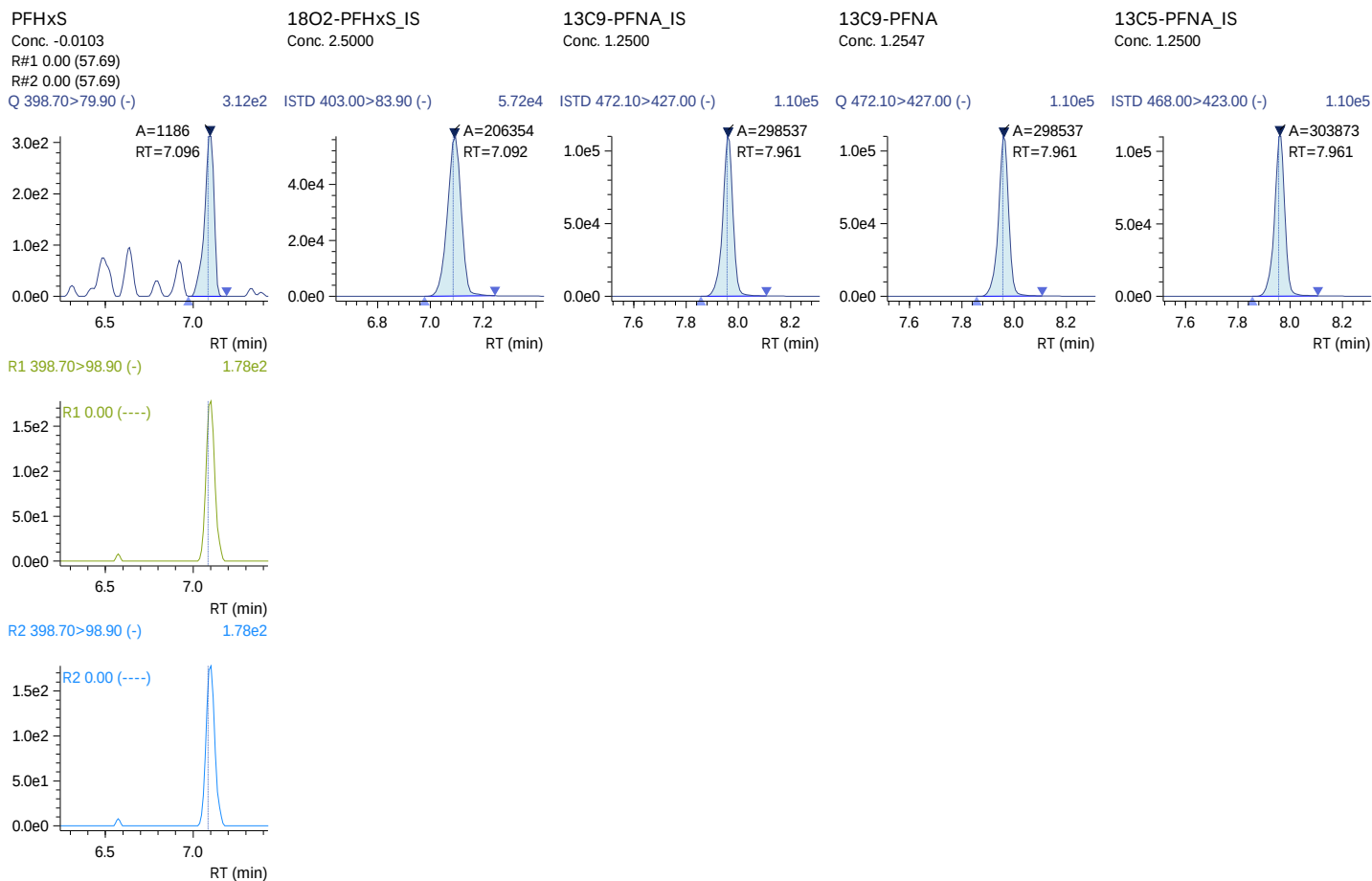
R2 413.00>169.00 (-)

1.07e4



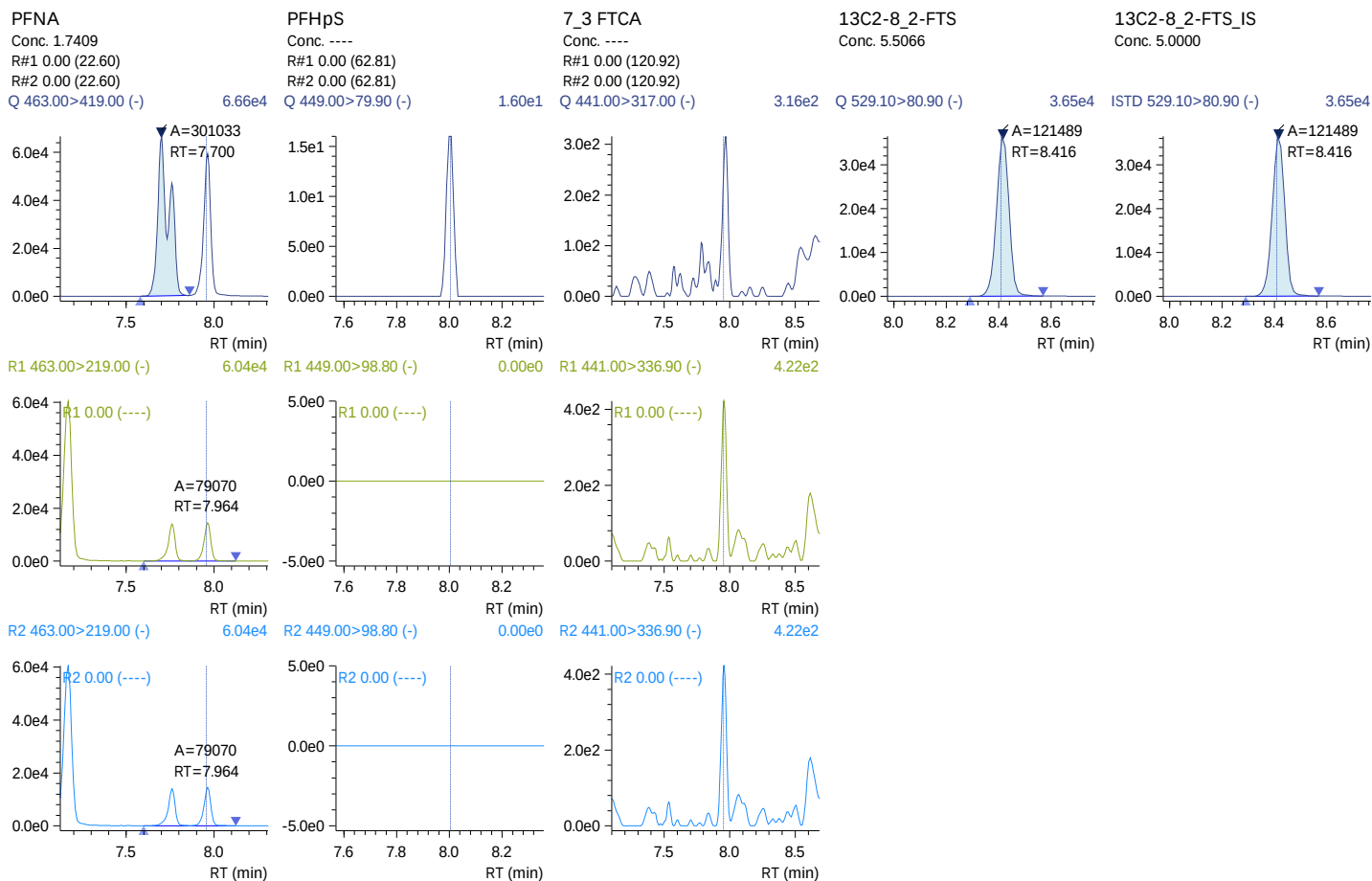


240118_020 (continued)



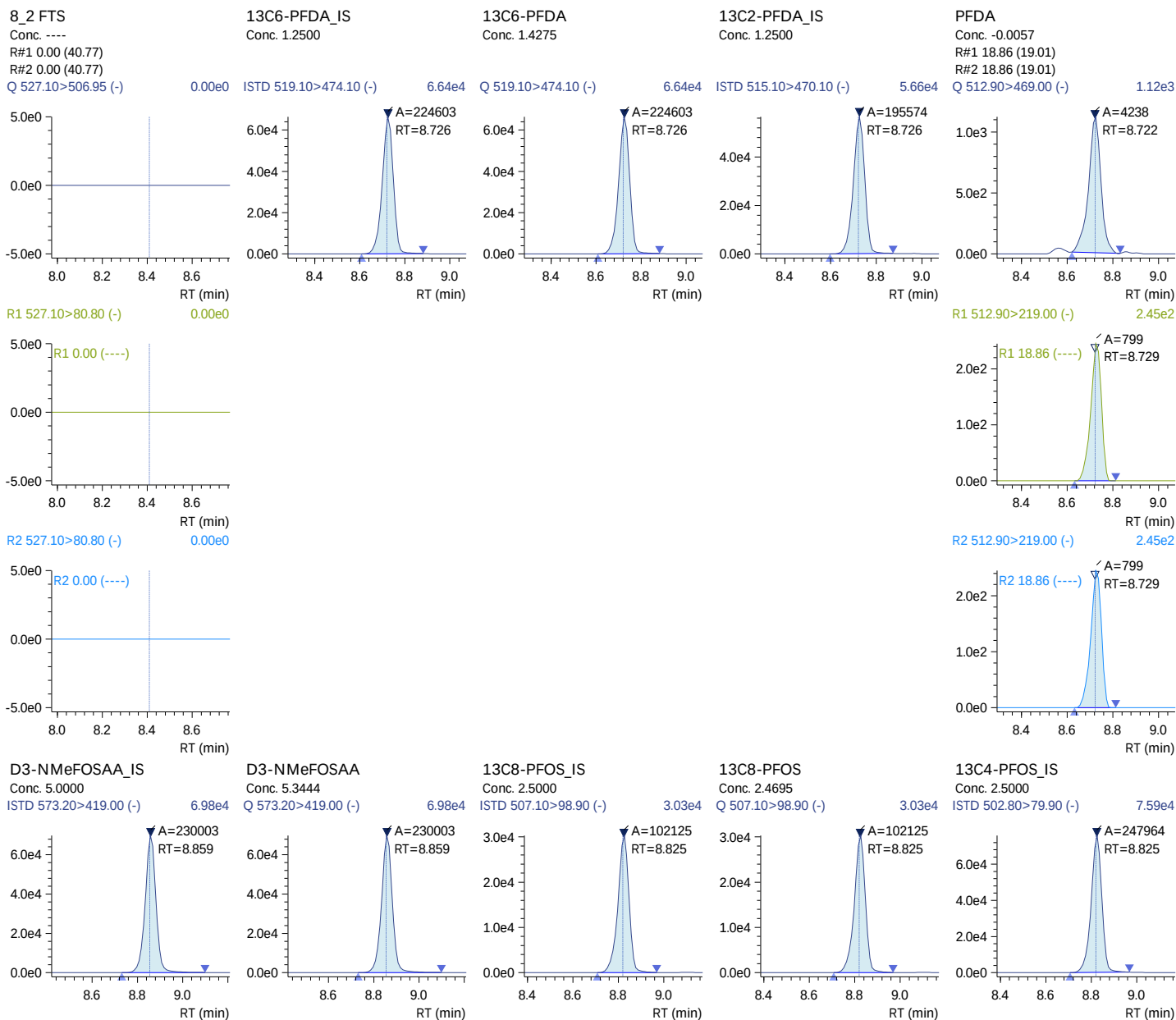


240118_020 (continued)



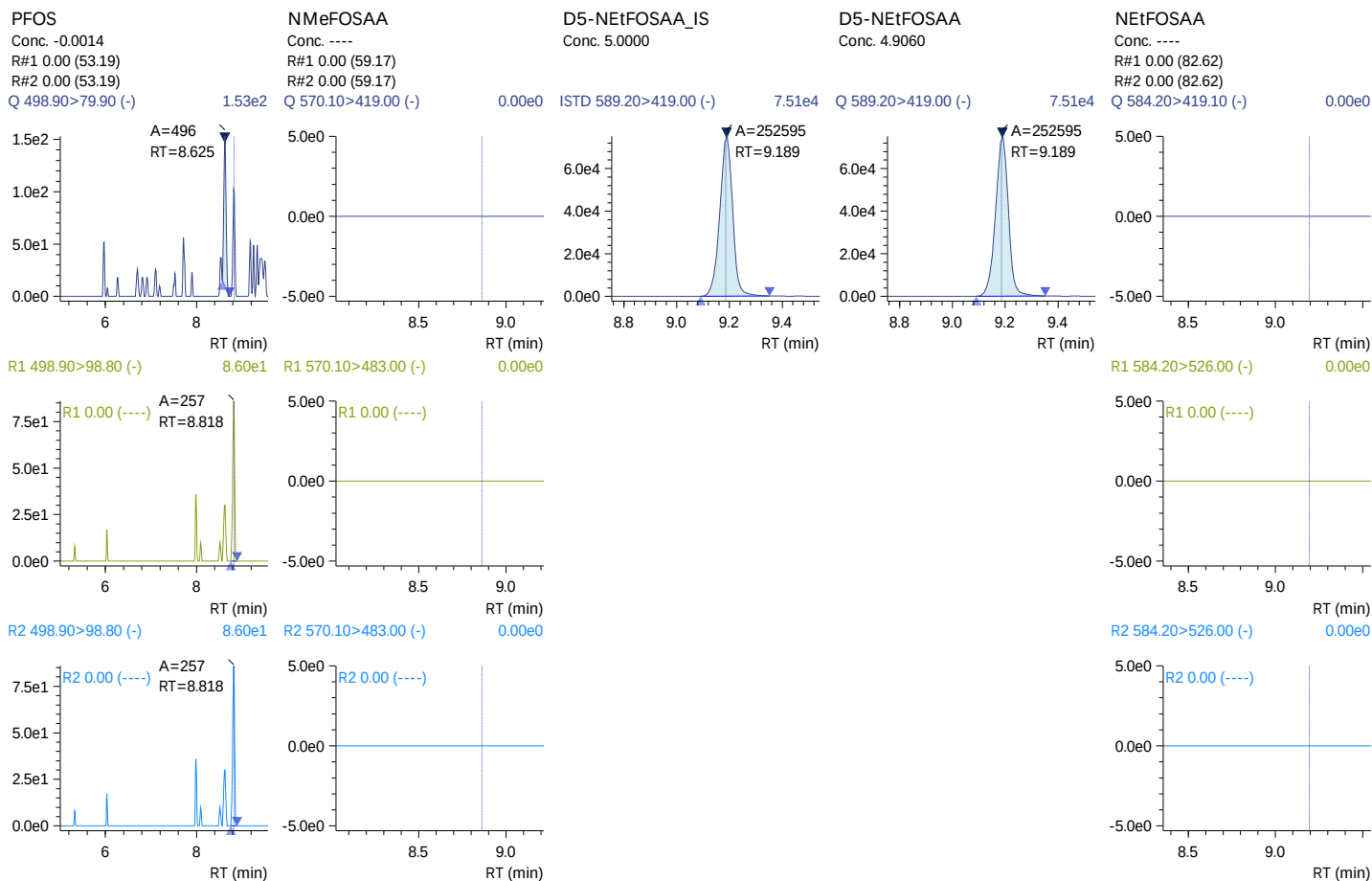


240118_020 (continued)





240118_020 (continued)





240118_020 (continued)

9-Cl-PF3ONS

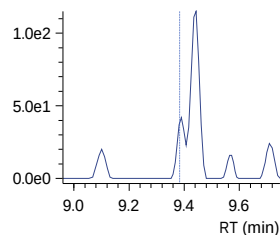
Conc. ----

R#1 0.00 (31.76)

R#2 0.00 (31.76)

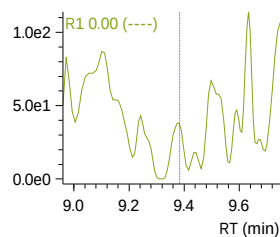
Q 530.80>351.00 (-)

1.15e2



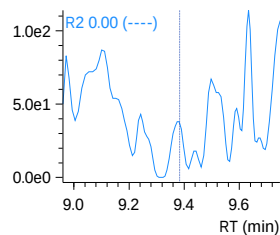
R1 532.80>353.00 (-)

1.14e2



R2 532.80>353.00 (-)

1.14e2



PFUnDA

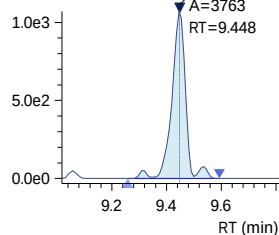
Conc. -0.0104

R#1 0.00 (12.31)

R#2 0.00 (12.31)

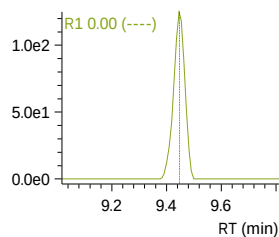
Q 563.10>519.00 (-)

1.07e3



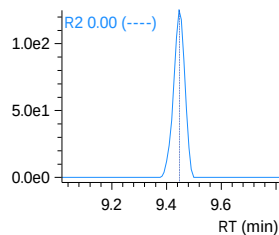
R1 563.10>269.10 (-)

1.25e2



R2 563.10>269.10 (-)

1.25e2

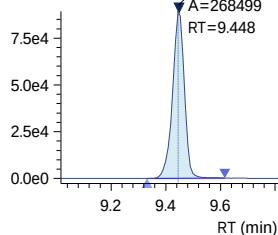


13C7-PFUnDA_IS

Conc. 1.2500

ISTD 570.00>525.10 (-)

8.93e4

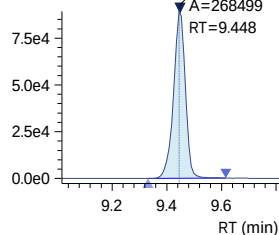


13C7-PFUnDA

Conc. 1.4306

Q 570.00>525.10 (-)

8.93e4



PFNS

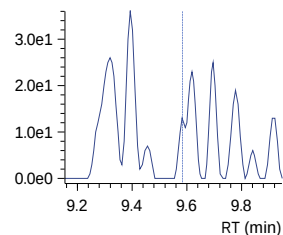
Conc. ----

R#1 0.00 (63.31)

R#2 0.00 (63.31)

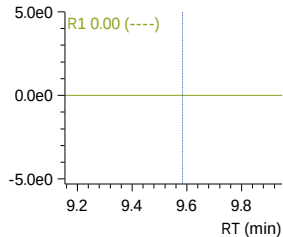
Q 548.80>79.90 (-)

3.60e1



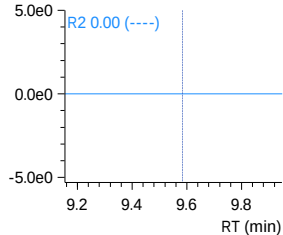
R1 548.80>98.80 (-)

0.00e0



R2 548.80>98.80 (-)

0.00e0





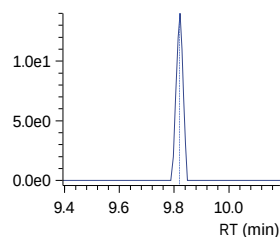
240118_020 (continued)

10_2 FTS
Conc. ----

R#1 0.00 (33.02)

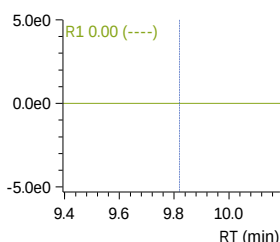
R#2 0.00 (33.02)

Q 626.80>607.05 (-)



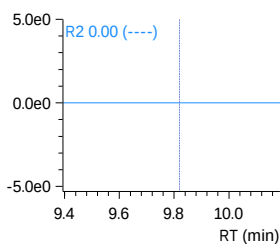
R1 626.80>81.00 (-)

0.00e0



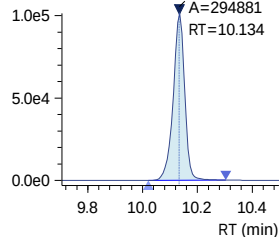
R2 626.80>81.00 (-)

0.00e0



13C2-PFDOA_IS
Conc. 1.2500

ISTD 615.10>570.00 (-)



Q 615.10>570.00 (-)

1.01e5



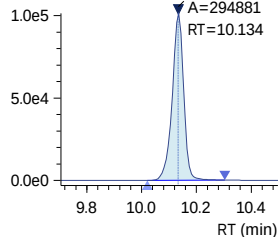
R1 615.10>570.00 (-)

1.01e5



13C2-PFDOA
Conc. 1.3676

Q 615.10>570.00 (-)



Q 615.10>570.00 (-)

1.01e5



R1 615.10>570.00 (-)

1.01e5



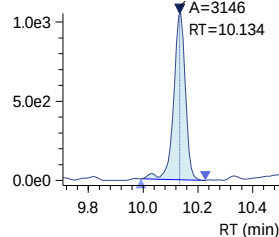
PFDOA

Conc. -0.0139

R#1 0.00 (10.14)

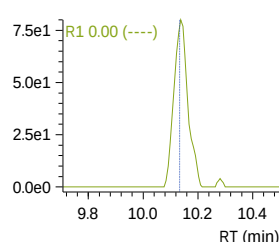
R#2 0.00 (10.14)

Q 613.10>569.00 (-)



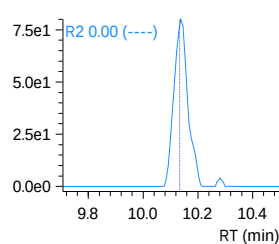
R1 613.10>319.00 (-)

8.00e1



R2 613.10>319.00 (-)

8.00e1



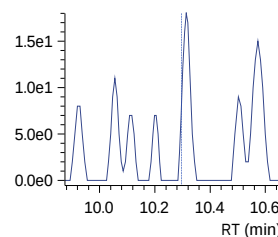
PFDS

Conc. ----

R#1 0.00 (62.02)

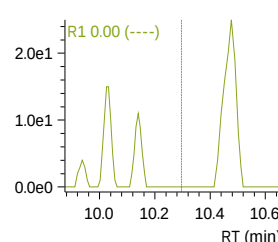
R#2 0.00 (62.02)

Q 599.00>79.90 (-)



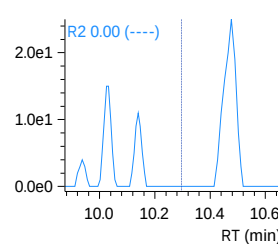
R1 599.00>98.80 (-)

2.50e1



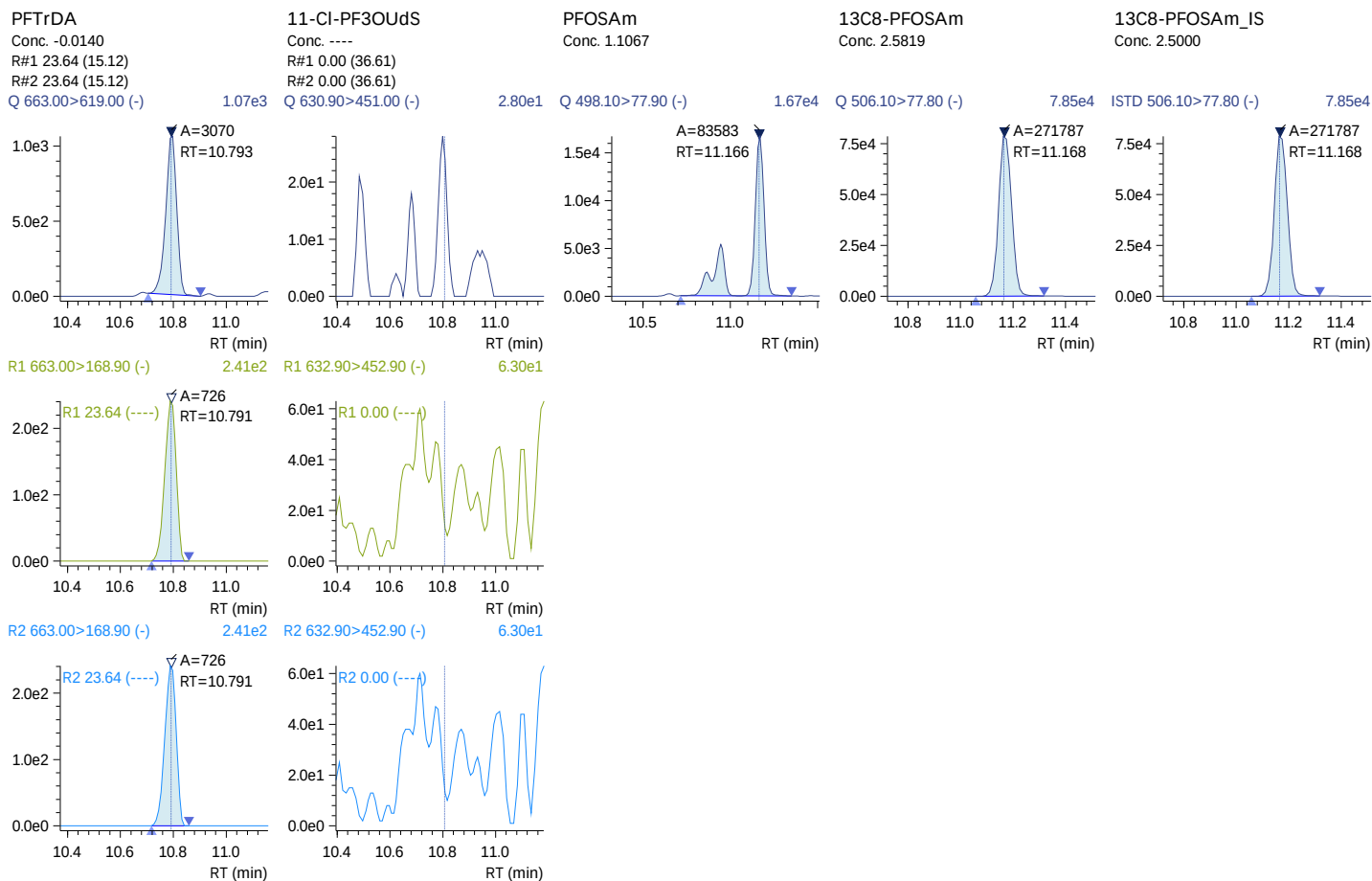
R2 599.00>98.80 (-)

2.50e1



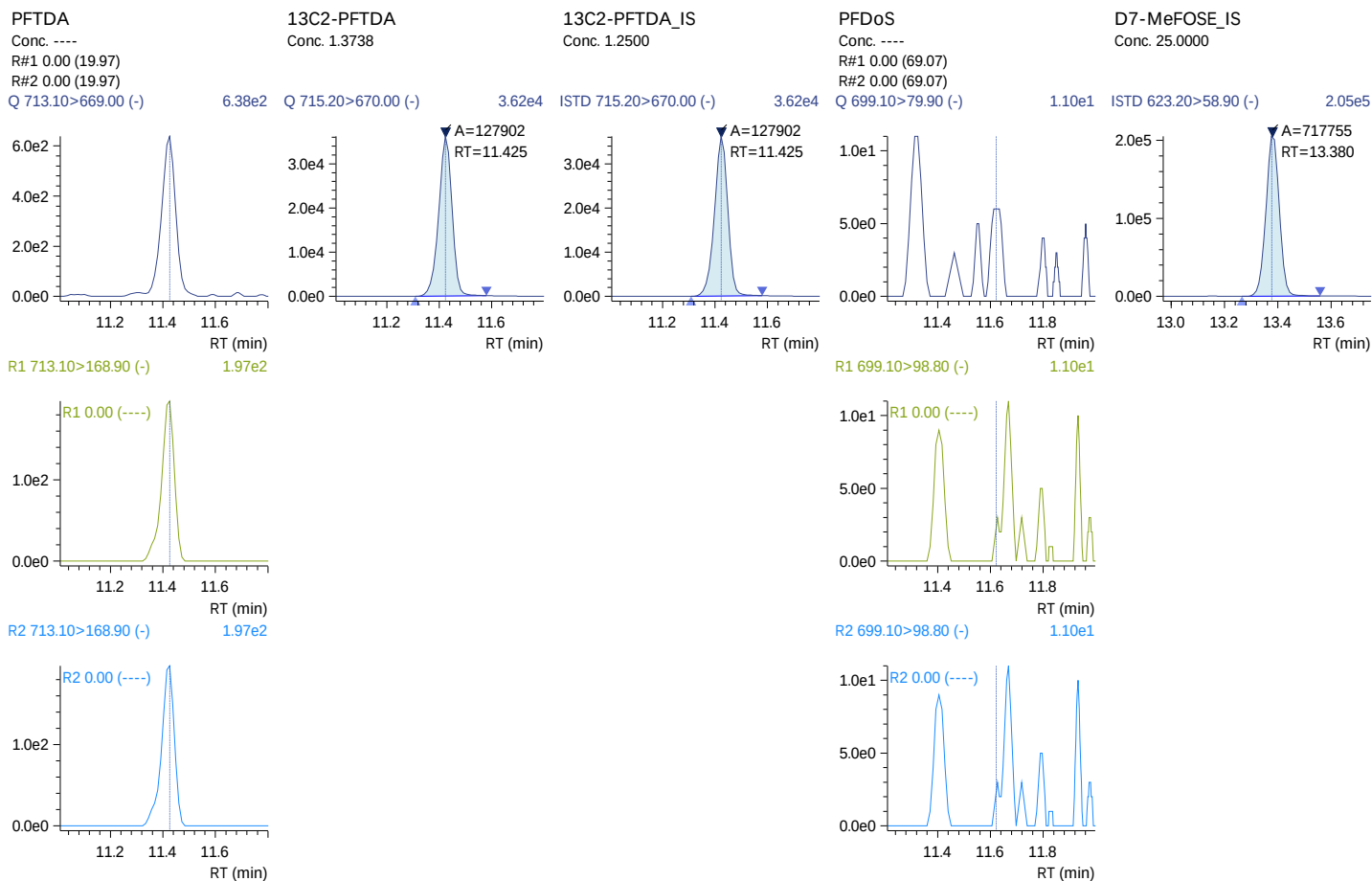


240118_020 (continued)





240118_020 (continued)





240118_020 (continued)

D7-MeFOSE
 Conc. 27.6562

MeFOSE
 Conc. 1.0427

13C2-PFHDA_IS
 Conc. 2.5000

13C2-PFHDA
 Conc. 2.8012

PFHXDA
 Conc. -0.0116
 R#1 0.00 (11.64)
 R#2 0.00 (11.64)

Q 623.20>58.90 (-)

2.05e5

Q 616.10>59.00 (-)

4.75e3

ISTD 815.00>770.05 (-)

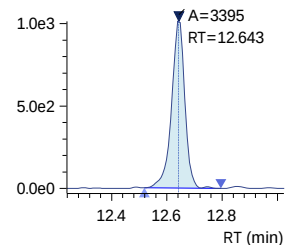
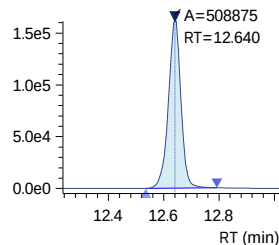
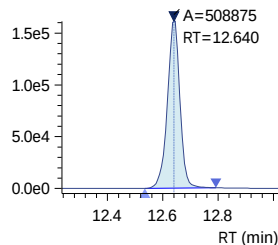
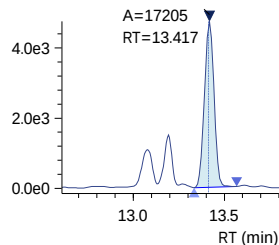
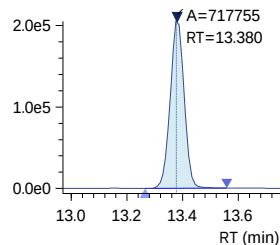
1.61e5

Q 815.00>770.05 (-)

1.61e5

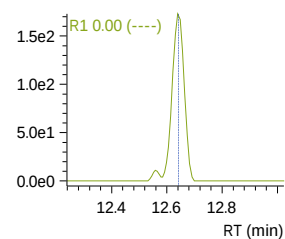
Q 813.00>768.95 (-)

1.01e3



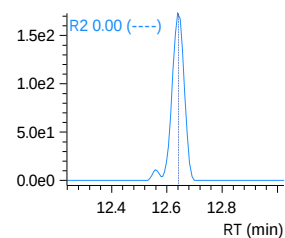
R1 813.00>218.95 (-)

1.73e2



R2 813.00>218.95 (-)

1.73e2





240118_020 (continued)

D3-MeFOSA
 Conc. 2.5606

D3-MeFOSA_IS
 Conc. 2.5000

MeFOSA
 Conc. ----
 R#1 0.00 (149.05)
 R#2 0.00 (149.05)

D9-EtFOSE_IS
 Conc. 25.0000

D9-EtFOSE
 Conc. 26.9013

Q 515.00>219.00 (-)

1.57e4

ISTD 515.00>219.00 (-)

1.57e4

Q 511.90>219.00 (-)

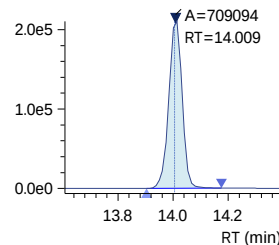
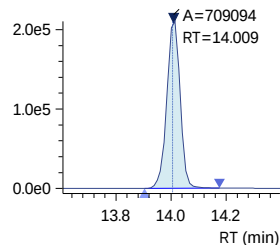
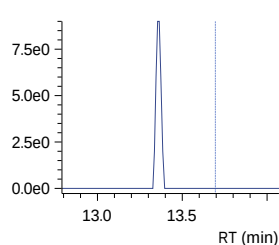
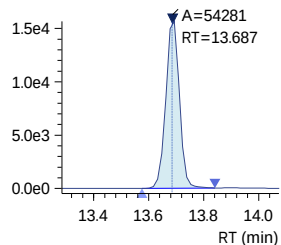
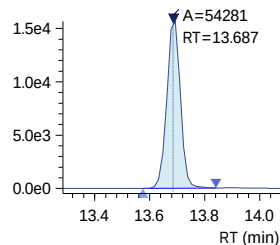
9.00e0

ISTD 639.20>58.90 (-)

2.10e5

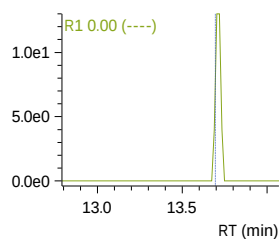
Q 639.20>58.90 (-)

2.10e5



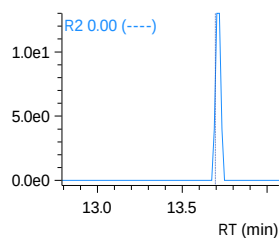
R1 511.90>169.00 (-)

1.30e1



R2 511.90>169.00 (-)

1.30e1





240118_020 (continued)

EtFOSE
 Conc. 1.0182

D5-EtFOSAm
 Conc. 2.6381

D5-EtFOSAm_IS
 Conc. 2.5000

EtFOSAm
 Conc. ----

PFODA
 Conc. 0.0014

Q 630.00>59.00 (-)

7.19e3

Q 531.10>219.00 (-)

2.33e4

ISTD 531.10>219.00 (-)

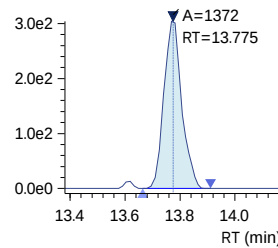
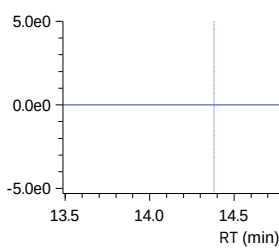
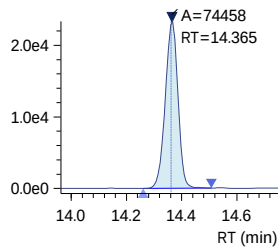
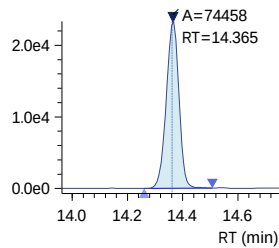
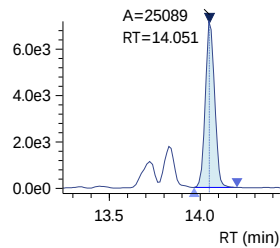
2.33e4

Q 526.00>219.00 (-)

0.00e0

Q 913.00>868.65 (-)

3.04e2

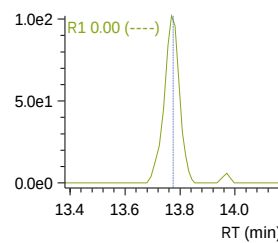
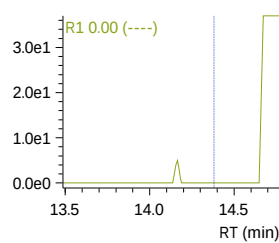


R1 526.00>169.00 (-)

3.70e1

R1 913.00>169.00 (-)

1.02e2

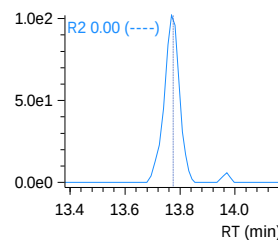
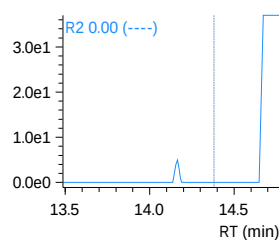


R2 526.00>169.00 (-)

3.70e1

R2 913.00>169.00 (-)

1.02e2



240119_1633_B1


 Environmental
Injection Log

LCMS08 - Shimadzu 8060

ICAL Date: 1/18/2024

Std. xp: 2/2/2024

ICAL ID: KC2400027

LIMS ID: 830171

1st Review:

P. Salvyards

2nd Review:

Column:

Phenomenex EVO-C18 100X3.0 mm S/N: H23-138925

Mobile Phases

A: 2mM Ammonium Acetate in H2O:ACN 95%:5% 23-OLC-04-012D

B: ACN Lot #62120

	Sample Name	File Name	Acquisition Method	Dilution	R	
1	TDCA CHECK	23-OLC-04-03E	240119_005	1633_240111.lcm	1x	☑ Showed adequate separation from PFOS
2	1633 CCB	23-OLC-04-06K	240119_006	1633_240111.lcm	1x	☑
3	1633 ICAL 0.25PPB	23-OLC-04-06C	240119_007	1633_240111.lcm	1x	☑
4	1633 ICAL 0.50PPB	23-OLC-04-06D	240119_008	1633_240111.lcm	1x	☑
5	1633 ICAL 1.0PPB	23-OLC-04-06E	240119_009	1633_240111.lcm	1x	☑
6	1633 ICAL 5.0PPB	23-OLC-04-06F	240119_010	1633_240111.lcm	1x	☑
7	1633 Q1S	23-OLC-04-06J	240119_011	1633_240111.lcm	1x	☑ Showed isomers of both PFOA and PFNA
8	1633 CCB	23-OLC-04-06K	240119_012	1633_240111.lcm	1x	☑
9	K2312844-002	5X	240119_013	1633_240111.lcm	1x	☑ Report PFOS
10	PRIMER		240119_014	1633_240111.lcm	1x	NR, not needed
11	K2311057-001	10X	240119_015	1633_240111.lcm	1x	Awaiting PC response
12	K2311057-001		240119_016	1633_240111.lcm	1x	Awaiting PC response
13	K2314345-002	5X	240119_017	1633_240111.lcm	1x	NR, not needed
14	PRIMER		240119_018	1633_240111.lcm	1x	NR, not needed
15	1633 ICAL 1.0PPB	23-OLC-04-06E	240119_019	1633_240111.lcm	1x	☑
16	1633 CCB	23-OLC-04-06K	240119_020	1633_240111.lcm	1x	☑
17	1633 ICAL 5.0PPB	23-OLC-04-06F	240119_021	1633_240111.lcm	1x	☑
18	1633 CCB	23-OLC-04-06K	240119_022	1633_240111.lcm	1x	☑
19	K2312924-002	10X	240119_023	1633_240111.lcm	1x	NR, not needed
20	K2312924-002		240119_024	1633_240111.lcm	1x	☑ Report PFBA
21	KQ2400355-03	MB	240119_025	1633_240111.lcm	1x	☑
22	KQ2400355-01	LCS	240119_026	1633_240111.lcm	1x	☑
23	KQ2400355-02	LCSLL	240119_027	1633_240111.lcm	1x	☑
24	K2314273-004		240119_028	1633_240111.lcm	1x	☑
25	K2314273-005		240119_029	1633_240111.lcm	1x	☑
26	K2314283-001		240119_030	1633_240111.lcm	1x	☑
27	K2314283-002		240119_031	1633_240111.lcm	1x	☑
28	K2314432-001		240119_032	1633_240111.lcm	1x	☑ Reanalyze for PFOS E flag
29	K2314505-001		240119_033	1633_240111.lcm	1x	☑
30	KQ2400355-04	MS	240119_034	1633_240111.lcm	1x	☑
31	KQ2400355-05	DMS	240119_035	1633_240111.lcm	1x	☑
32	1633 ICAL 5.0PPB	23-OLC-04-06F	240119_036	1633_240111.lcm	1x	☑
33	1633 CCB	23-OLC-04-06K	240119_037	1633_240111.lcm	1x	☑
34	K2314505-002		240119_038	1633_240111.lcm	1x	☑
35	K2314505-003		240119_039	1633_240111.lcm	1x	☑
36	K2314505-004		240119_040	1633_240111.lcm	1x	☑
37	K2314546-001		240119_041	1633_240111.lcm	1x	☑
38	KQ2321832-08	MB	240119_042	1633_240111.lcm	1x	☑
39	KQ2321832-06	LCS	240119_043	1633_240111.lcm	1x	☑
40	KQ2321832-07	LCSLL	240119_044	1633_240111.lcm	1x	☑
41	K2313324-001		240119_045	1633_240111.lcm	1x	☑
42	K2313324-002		240119_046	1633_240111.lcm	1x	☑
43	K2313324-003		240119_047	1633_240111.lcm	1x	☑
44	K2313324-004		240119_048	1633_240111.lcm	1x	☑
45	K2313324-005		240119_049	1633_240111.lcm	1x	☑
46	K2313373-024		240119_050	1633_240111.lcm	1x	☑
47	1633 ICAL 5.0PPB	23-OLC-04-06F	240119_051	1633_240111.lcm	1x	☑
48	1633 CCB	23-OLC-04-06K	240119_052	1633_240111.lcm	1x	☑
49	K2313373-027		240119_053	1633_240111.lcm	1x	☑
50	K2313720-001	10X	240119_054	1633_240111.lcm	1x	☑ Report PFOS, 6:2 FTS, and EtFOSE
51	K2313720-001	1X	240119_055	1633_240111.lcm	1x	☑
52	PRIMER		240119_056	1633_240111.lcm	1x	NR, not needed
53	KQ2321832-04	10X MS	240119_057	1633_240111.lcm	1x	☑ Report PFOS and 6:2 FTS
54	KQ2321832-04	MS	240119_058	1633_240111.lcm	1x	☑ Narrate low failing surrogates
55	PRIMER		240119_059	1633_240111.lcm	1x	NR, not needed
56	KQ2321832-05	10X DMS	240119_060	1633_240111.lcm	1x	☑ Report PFOS and 6:2 FTS
57	KQ2321832-05	DMS	240119_061	1633_240111.lcm	1x	☑ Narrate low failing surrogates
58	PRIMER		240119_062	1633_240111.lcm	1x	NR, not needed
59	K2313949-001		240119_063	1633_240111.lcm	1x	☑ Reanalyze for 6:2 FTS E flag and low failing EtFOSE surrogate
60	K2314044-002		240119_064	1633_240111.lcm	1x	☑
61	K2314044-003		240119_065	1633_240111.lcm	1x	☑
62	1633 ICAL 5.0PPB	23-OLC-04-06F	240119_066	1633_240111.lcm	1x	☑
63	1633 CCB	23-OLC-04-06K	240119_067	1633_240111.lcm	1x	☑

5/22/24

Analysis: 1633	IS/Lot/Exp.: 23-04-03-83E	Filter lot: 220244103	Solvent/Lot: EVS: 23-04-04-04A
Pipette: OSTAVID ①	Envl-Carb: -	Centrifuge: -	
Original analysis batch:		Date reruns submitted: 1/18/24	
Sample ID	IS Amount	Sample Aliquot	Reruns submitted by: P. Salvards
K2314345-002 W	8.5L	200.5L	Final Volume
K2312924-002 S	4.5L	100.5L	Dilution Factor
K2312924-002 S	-	1 mL	Date
		5x	5/14/24
		10x	PS
		1x	Analyst
			Sample run prior had E flag for HXS with no primer
			PFBA shifted out of window
			PFBA shifted out of window

K2314345: LIMS: 431919, 829035
240104-1633-81

K2312924: LIMS: 429642, 827251
231208-1633-82

① Dilutions made via syringe 05 4/19/24

SP2424

Analysis: 1633 W	IS/Lot/Exp.: 23-01C-03-83E	Filter lot: -	Solvent/Lot: FV5 23-01C-04-04A				
Pipette: Ostand ①	Envl-Carb: -	Centrifuge: -					
Original analysis batch: 231226_1633_B1		Date reruns submitted: 1/18/24					
Sample ID	IS Amount	Sample Aliquot	Final Volume	Dilution Factor	Date	Analyst	Analyte for dilution
R2311057-001	-	1ML	1ML	1x	Y/A/24	RS	4:2 FTS hit with failing ion ratio
R2311057-001	4 PL	100 PL	-	10x	J	RS	Several low failing surrogates
K2312844-002	8 PL	200 PL	J	5x	J	RS	PFO5 E flag

LIMS: 22842 prep: 431662

Storage: PORNHED

① Dilutions made via syringe RS Y/A/24



Volatile Organic Compounds by GC/MS

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577- 7222 Fax (360)636- 1068
www.alsglobal.com

Validation Report

1st  01/05/24
2nd  01/08/24

Data File: J:\MS24\DATA\122223\1222F011.D\
Lab ID: K2314283-001
RunType: N/A
Matrix: Soil

Date Acquired: 12/22/23 13:55:00
Batch ID: 828030
Analysis Method: 8260C/VOC FP

Validations

Validation Categories	Pass	Fail
Analytical Hold Time	X	
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery		X
Lab Control Sample Recovery		X
Duplicate Lab Control Sample Recovery	X	
Method Blank	X	
Method Blank Surrogates	X	
Internal Standards	X	
Surrogates	X	
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Continuing Calibration Recovery	Acetone	-28		20	CCVOK
	Dichlorodifluoromethane	72		20	High Bias
	Trichlorofluoromethane (CFC 11)	37		20	
Lab Control Sample Recovery	Dichlorodifluoromethane	172	38	160	Advisory Limits

Primary Review: _____

Secondary Review: _____

Quantitation Report

1st 01/04/24
2nd 01/08/24

Data File:	J:\MS24\DATA\122223\1222F011.D\	Instrument:	K-MS-24
Acqu Date:	12/22/23 13:55:00	Vial:	11
Run Type:	N/A	Dilution:	1
Lab ID:	K2314283-001	Raw Units:	ppb
Bottle ID:	K2314283-001.01	Tier:	IV
Prod Code:	VOC FP	Collect Date:	12/20/23
		Matrix:	Soil
		Receive Date:	12/20/23
Analysis Lot:	828030	Prep Lot:	
Analysis	8260C	Prep Method:	
		Prep Date:	
Report Group:	K2314283		
Title:	Volatile Organic Compounds by GC/MS		
		Calibration ID:	KC2300633
		Report List ID:	20903

Internal Standard Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Area Criteria
Chlorobenzene-d5	6.62		125013	50.00	OK
1,4-Dichlorobenzene-d4	8.94		118229	50.00	OK
Fluorobenzene	3.99		280256	50.00	OK

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
4-Bromofluorobenzene	7.79	+0.01	102906	44.53	89	61 - 133	Y
Dibromofluoromethane	3.51		70057	47.62	95	59 - 134	Y
Toluene-d8	5.28		286827	47.30	95	77 - 122	Y

Target Compounds

Final Conc.Units: ug/Kg

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Acetone	1.97		6361	3.40	4.4	J	Y
Benzene	3.76		2254	0.31	0.40	J	Y
Bromobenzene	0.00		0	0.00	0	U	Y
Bromochloromethane	0.00		0	0.00	0	U	Y
Bromodichloromethane	0.00		0	0.00	0	U	Y
Bromoform	0.00		0	0.00	0	U	Y
Bromomethane	0.00		0	0.00	0	U	Y
2-Butanone (MEK)	0.00		0	0.00	0	U	Y
n-Butylbenzene	0.00		0	0.00	0	U	Y
sec-Butylbenzene	0.00		0	0.00	0	U	Y
tert-Butylbenzene	0.00		0	0.00	0	U	Y
Carbon Disulfide	0.00		0	0.00	0	U	Y
Carbon Tetrachloride	0.00		0	0.00	0	U	Y
Chlorobenzene	0.00		0	0.00	0	U	Y
Chloroethane	0.00		0	0.00	0	U	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 1/5/24 15:29

\\alprews001\starlims\LIMSReps\QuantValidation.rpt

		1st	01/04/24
Data File:	J:\MS24\DATA\122223\1222F011.D\	Instrument:	K-MS-24 nd
Acqu Date:	12/22/23 13:55:00	Vial:	11
Run Type:	N/A	Dilution:	1
Lab ID:	K2314283-001	Raw Units:	ppb
			01/08/24

Target Compounds		Final Conc.Units: ug/Kg					
Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Chloroform	0.00		0	0.00	0	U	Y
Chloromethane	0.00		0	0.00	0	U	Y
2-Chlorotoluene	0.00		0	0.00	0	U	Y
4-Chlorotoluene	0.00		0	0.00	0	U	Y
1,2-Dibromo-3-chloropropane	0.00		0	0.00	0	U	Y
Dibromochloromethane	0.00		0	0.00	0	U	Y
1,2-Dibromoethane (EDB)	0.00		0	0.00	0	U	Y
Dibromomethane	0.00		0	0.00	0	U	Y
1,2-Dichlorobenzene	0.00		0	0.00	0	U	Y
1,3-Dichlorobenzene	0.00		0	0.00	0	U	Y
1,4-Dichlorobenzene	0.00		0	0.00	0	U	Y
Dichlorodifluoromethane	0.00		0	0.00	0	U	Y
1,1-Dichloroethane	0.00		0	0.00	0	U	Y
1,2-Dichloroethane (EDC)	0.00		0	0.00	0	U	Y
1,1-Dichloroethene	0.00		0	0.00	0	U	Y
cis-1,2-Dichloroethene	0.00		0	0.00	0	U	Y
trans-1,2-Dichloroethene	0.00		0	0.00	0	U	Y
1,2-Dichloropropane	0.00		0	0.00	0	U	Y
1,3-Dichloropropane	0.00		0	0.00	0	U	Y
2,2-Dichloropropane	0.00		0	0.00	0	U	Y
1,1-Dichloropropene	0.00		0	0.00	0	U	Y
cis-1,3-Dichloropropene	0.00		0	0.00	0	U	Y
trans-1,3-Dichloropropene	0.00		0	0.00	0	U	Y
Ethylbenzene	0.00		0	0.00	0	U	Y
Hexachlorobutadiene	0.00		0	0.00	0	U	Y
2-Hexanone	0.00		0	0.00	0	U	Y
Isopropylbenzene	0.00		0	0.00	0	U	Y
4-Isopropyltoluene	0.00		0	0.00	0	U	Y
4-Methyl-2-pentanone (MIBK)	0.00		0	0.00	0	U	Y
Methylene Chloride	2.25		2542	0.03	0.039	U	Y
Naphthalene	0.00		0	0.00	0	U	Y
n-Propylbenzene	0.00		0	0.00	0	U	Y
Styrene	0.00		0	0.00	0	U	Y
1,1,1,2-Tetrachloroethane	0.00		0	0.00	0	U	Y
1,1,2,2-Tetrachloroethane	0.00		0	0.00	0	U	Y
Tetrachloroethene (PCE)	0.00		0	0.00	0	U	Y
Toluene	0.00		0	0.00	0	U	Y
1,2,3-Trichlorobenzene	0.00		0	0.00	0	U	Y
1,2,4-Trichlorobenzene	0.00		0	0.00	0	U	Y
1,1,2-Trichloroethane	0.00		0	0.00	0	U	Y
1,1,1-Trichloroethane (TCA)	0.00		0	0.00	0	U	Y

			1st	01/04/24
Data File:	J:\MS24\DATA\122223\1222F011.D\	Instrument:	K-MS-24	01/08/24
Acqu Date:	12/22/23 13:55:00	Vial:	11	
Run Type:	N/A	Dilution:	1	
Lab ID:	K2314283-001	Raw Units:	ppb	

Target Compounds			Final Conc.Units: ug/Kg				
Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Trichloroethene (TCE)	0.00		0	0.00	0	U	Y
Trichlorofluoromethane (CFC 11)	0.00		0	0.00	0	U	Y
1,2,3-Trichloropropane	0.00		0	0.00	0	U	Y
1,2,4-Trimethylbenzene	0.00		0	0.00	0	U	Y
1,3,5-Trimethylbenzene	0.00		0	0.00	0	U	Y
Vinyl Chloride	0.00		0	0.00	0	U	Y
o-Xylene	0.00		0	0.00	0	U	Y
m,p-Xylenes	0.00		0	0.00	0	U	Y
Xylenes, Total				0.000	0	U	Y

Prep Amount:	5.268 g	Dilution:	1
Prep Final Amount:	5.00 mL	Basis Factor:	72.70

Data File : J:\MS24\DATA\122223\1222F011.D

Acq On : 22 Dec 2023 01:55 pm

Sample : K2314283-001

Misc :

Vial: 11

Operator: EW/OT

Inst : MS24

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Dec 27 08:25:28 2023

Quant Results File: 103023_MS24_FULL_SOIL.RES

Quant Method : J:\MS24\M...\103023_MS24_FULL_SOIL.M (RTE Integrator)

Title : VOA MS24 EPA Method 8260B

Last Update : Wed Nov 01 09:13:30 2023

Response via : Initial Calibration

DataAcq Meth : 8260.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	3.99	96	280256	50.00	PPB	0.00
59) Chlorobenzene-d5	6.62	82	125013	50.00	PPB	0.00
78) 1,4-Dichlorobenzene-d4	8.94	152	118229	50.00	PPB	0.00

System Monitoring Compounds

39) Dibromofluoromethane	3.51	113	70057	47.62	PPB	0.00
Spiked Amount	50.000		Recovery	=	95.24%	
43) 1,2-Dichloroethane-d4	3.78	65	92173	50.77	PPB	0.00
Spiked Amount	50.000		Recovery	=	101.54%	
57) Toluene-d8	5.28	98	286827	47.30	PPB	0.00
Spiked Amount	50.000		Recovery	=	94.60%	
77) 4-Bromofluorobenzene	7.79	95	102906	44.53	PPB	0.00
Spiked Amount	50.000		Recovery	=	89.06%	

Target Compounds

						Qvalue
12) Acetone	1.97	43	6361	3.40	PPB	95
13) Iodomethane	1.99	142	530	3.29	PPB	83
18) Methylene Chloride	2.25	84	2542	0.03	PPB	96
44) Benzene	3.76	78	2254	0.31	PPB	# 43

Data File : J:\MS24\DATA\122223\1222F011.D

Acq On : 22 Dec 2023 01:55 pm

Sample : K2314283-001

Misc :

Vial: 11

Operator: EW/OT

Inst : MS24

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Dec 27 9:49 2023

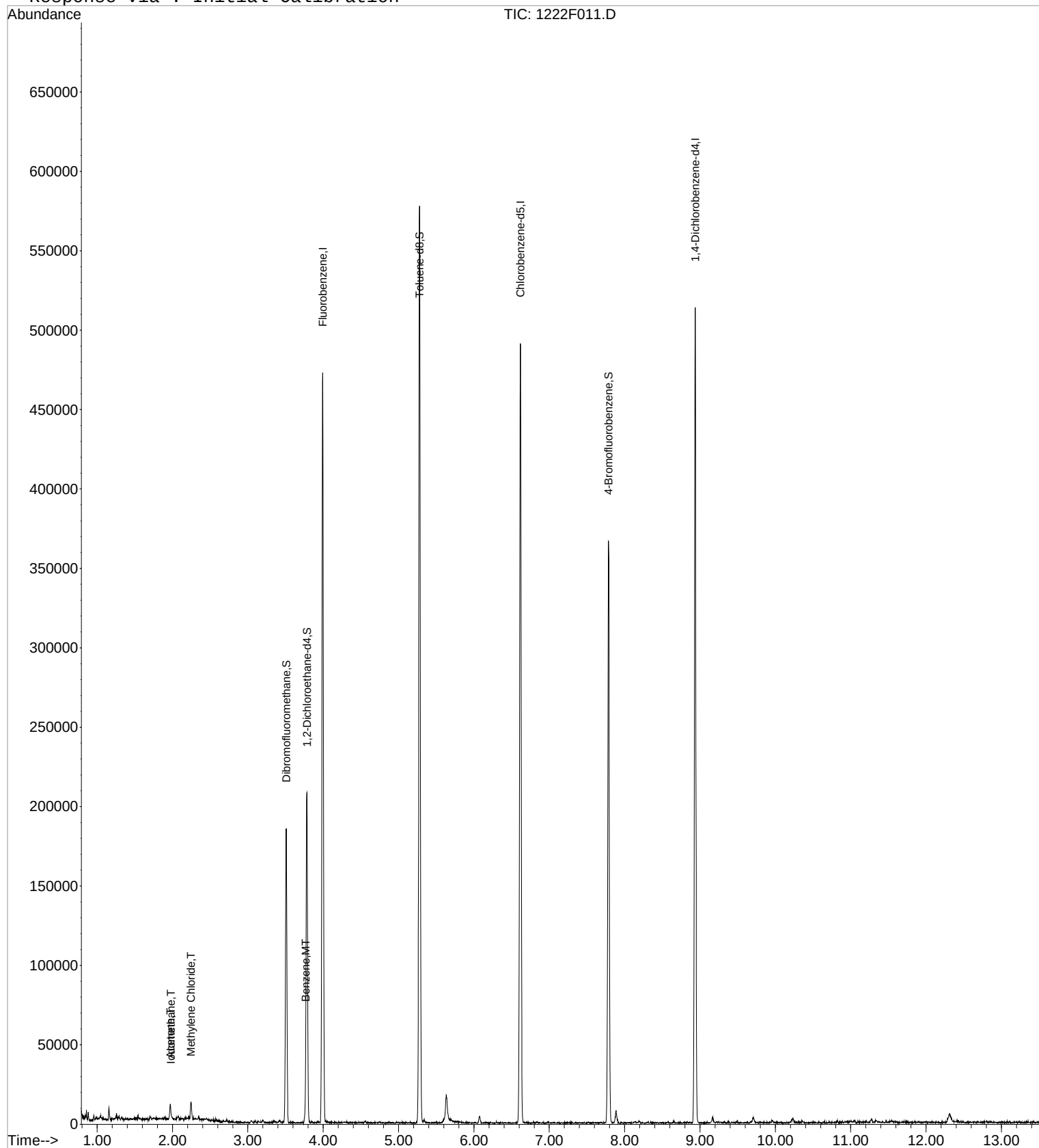
Quant Results File: 103023_MS24_FULL_SOIL.RES

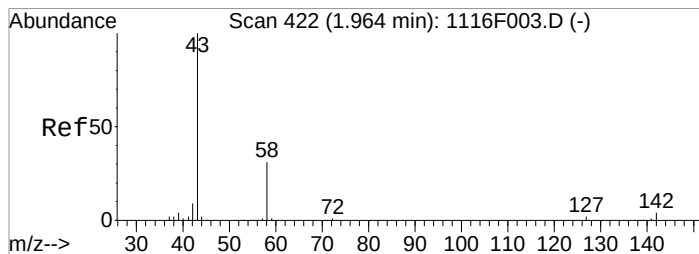
Method : J:\MS24\METHODS\2010\103023_MS24_FULL_SOIL.M (RTE Integrator)

Title : VOA MS24 EPA Method 8260B

Last Update : Wed Nov 01 09:13:30 2023

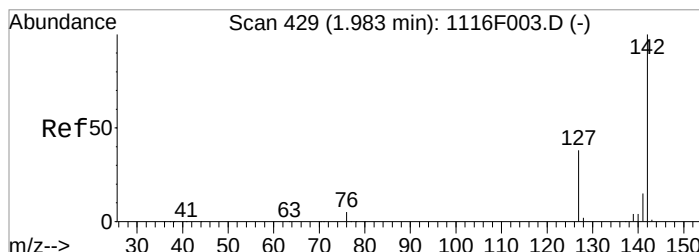
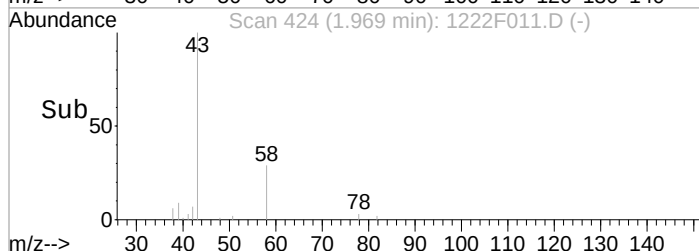
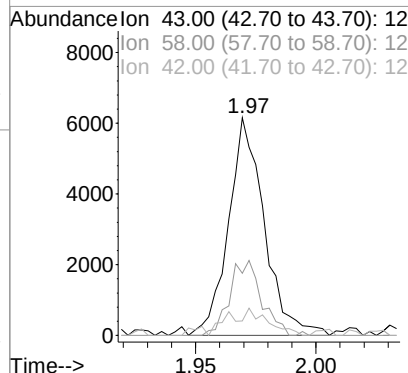
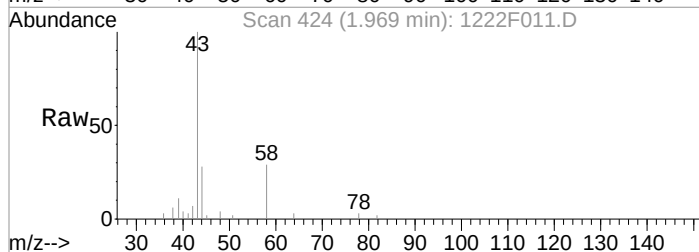
Response via : Initial Calibration





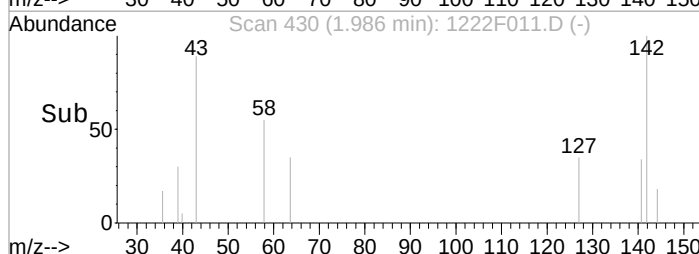
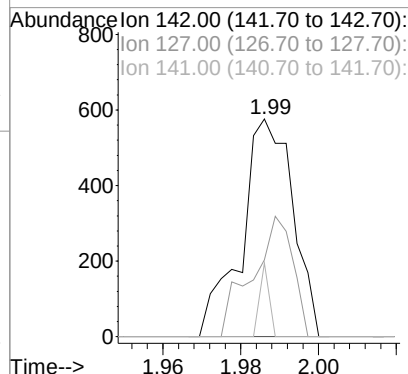
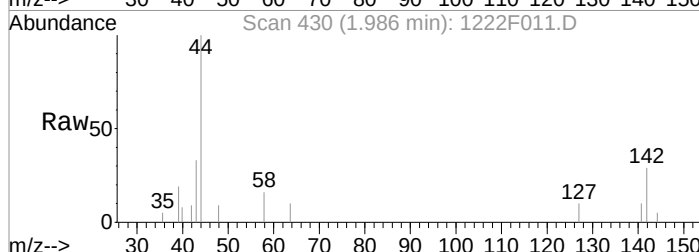
#12
Acetone
Concen: 3.40 PPB
RT: 1.97 min Scan# 424
Delta R.T. 0.00 min
Lab File: 1222F011.D
Acq: 22 Dec 2023 01:55 pm

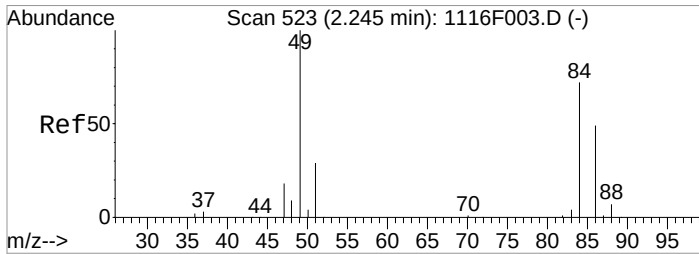
Tgt Ion:	43	Resp:	6361
Ion Ratio	Lower	Upper	
43	100		
58	28.5	0.4	60.4
42	3.9	0.0	38.1



#13
Iodomethane
Concen: 3.29 PPB
RT: 1.99 min Scan# 430
Delta R.T. 0.00 min
Lab File: 1222F011.D
Acq: 22 Dec 2023 01:55 pm

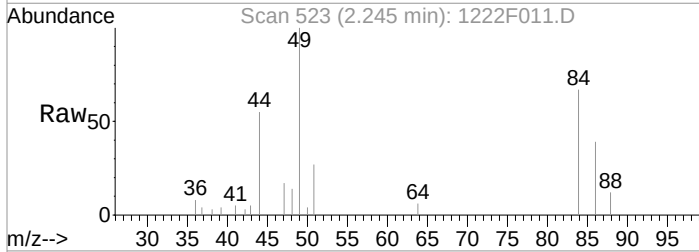
Tgt Ion:	142	Resp:	530
Ion Ratio	Lower	Upper	
142	100		
127	35.4	8.8	68.8
141	33.9	0.0	44.0



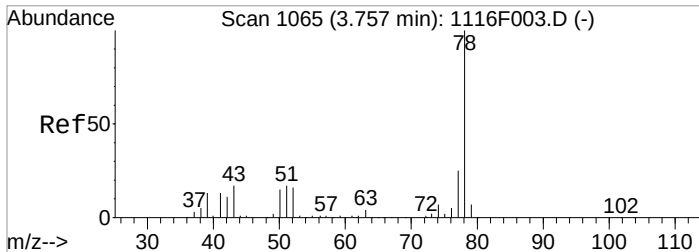
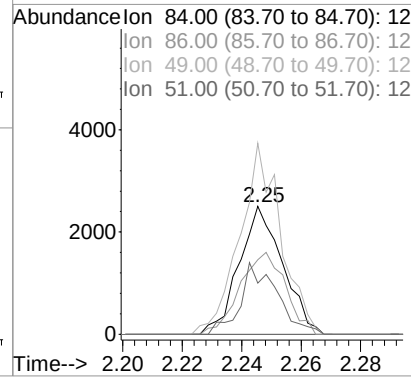
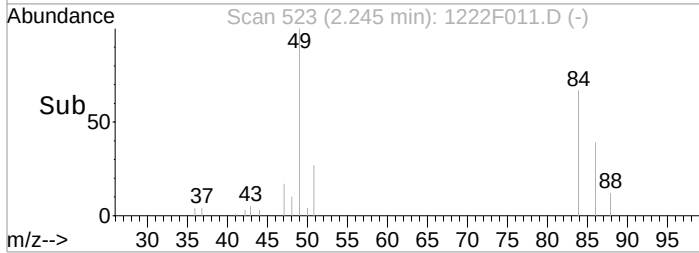


#18
Methylene Chloride
Concen: 0.03 PPB
RT: 2.25 min Scan# 523
Delta R.T. -0.00 min
Lab File: 1222F011.D
Acq: 22 Dec 2023 01:55 pm

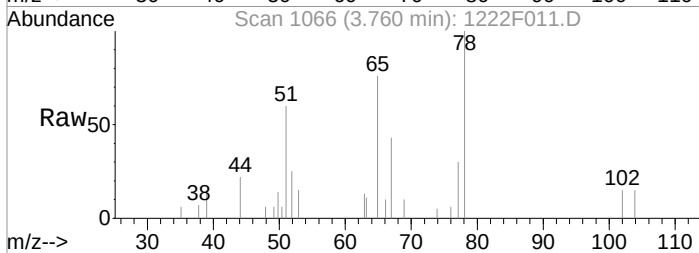
1st 01/04/24
2nd 01/08/24



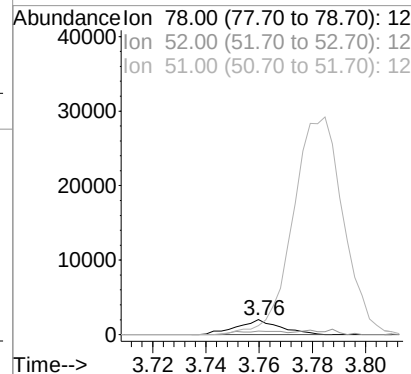
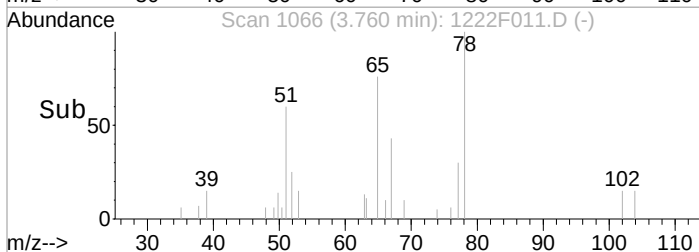
Tgt Ion: 84 Resp: 2542
Ion Ratio Lower Upper
84 100
86 58.3 33.8 93.8
49 149.3 114.9 174.9
51 40.0 12.0 72.0



#44
Benzene
Concen: 0.31 PPB
RT: 3.76 min Scan# 1066
Delta R.T. -0.00 min
Lab File: 1222F011.D
Acq: 22 Dec 2023 01:55 pm



Tgt Ion: 78 Resp: 2254
Ion Ratio Lower Upper
78 100
52 24.6 0.0 47.0
51 59.7 0.0 47.8#



Validation Report

1st  01/04/24
2nd  01/08/24

Data File: J:\MS24\DATA\122223\1222F012.D\
Lab ID: K2314283-002
RunType: N/A
Matrix: Soil

Date Acquired: 12/22/23 14:16:00
Batch ID: 828030
Analysis Method: 8260C/VOC FP

Validations

Validation Categories	Pass	Fail
Analytical Hold Time	X	
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery		X
Lab Control Sample Recovery		X
Duplicate Lab Control Sample Recovery	X	
Method Blank	X	
Method Blank Surrogates	X	
Internal Standards	X	
Surrogates	X	
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Continuing Calibration Recovery	Acetone	-28		20	CCVOK
	Dichlorodifluoromethane	72		20	High Bias
	Trichlorofluoromethane (CFC 11)	37		20	
Lab Control Sample Recovery	Dichlorodifluoromethane	172	38	160	Advisory Limits

Primary Review: _____

Secondary Review: _____

Quantitation Report

1st 01/04/24

2nd 01/08/24

Data File:	J:\MS24\DATA\122223\1222F012.D\	Instrument:	K-MS-24
Acqu Date:	12/22/23 14:16:00	Vial:	12
Run Type:	N/A	Dilution:	1
Lab ID:	K2314283-002	Raw Units:	ppb

Bottle ID:	K2314283-002.03	Tier:	IV	Matrix:	Soil
Prod Code:	VOC FP	Collect Date:	12/20/23	Receive Date:	12/20/23

Analysis Lot:	828030	Prep Lot:		Report Group:	K2314283
Analysis	8260C	Prep Method:			
		Prep Date:			

Title:	Volatile Organic Compounds by GC/MS	Calibration ID:	KC2300633
		Report List ID:	20903

Internal Standard Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Area Criteria
Chlorobenzene-d5	6.62		126219	50.00	OK
1,4-Dichlorobenzene-d4	8.94		118529	50.00	OK
Fluorobenzene	3.99		288865	50.00	OK

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
4-Bromofluorobenzene	7.79	+0.01	102118	43.76	88	61 - 133	Y
Dibromofluoromethane	3.51		72245	47.64	95	59 - 134	Y
Toluene-d8	5.28		292696	46.83	94	77 - 122	Y

Target Compounds

Final Conc.Units: ug/Kg

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Acetone	1.96	-0.01	6131	2.68	3.5	U	Y
Benzene	0.00		0	0.00	0	U	Y
Bromobenzene	0.00		0	0.00	0	U	Y
Bromochloromethane	0.00		0	0.00	0	U	Y
Bromodichloromethane	0.00		0	0.00	0	U	Y
Bromoform	0.00		0	0.00	0	U	Y
Bromomethane	0.00		0	0.00	0	U	Y
2-Butanone (MEK)	0.00		0	0.00	0	U	Y
n-Butylbenzene	0.00		0	0.00	0	U	Y
sec-Butylbenzene	0.00		0	0.00	0	U	Y
tert-Butylbenzene	0.00		0	0.00	0	U	Y
Carbon Disulfide	0.00		0	0.00	0	U	Y
Carbon Tetrachloride	0.00		0	0.00	0	U	Y
Chlorobenzene	0.00		0	0.00	0	U	Y
Chloroethane	0.00		0	0.00	0	U	Y

U: Undetected at or above MDL

J: Analyte detected above MDL, but below MRL

B: Hit above MRL also found in Method Blank

E: Analyte concentration above high point of ICAL

N: Presumptive evidence of compound

D: Result from dilution

m: Manual integration performed

d: Compound manually deleted

NR: Analyte not reported from this analysis

*: Result fails acceptance criteria

#: Acceptance criteria not applicable

?: Insufficient information to determine acceptance

e: Result >= MRL, but MRL less than low point of ICAL

c: check for co-elution

Printed: 1/5/24 15:29

\\alprews001\starlims\LIMSReps\QuantValidation.rpt

		1st	01/04/24
Data File:	J:\MS24\DATA\122223\1222F012.D\	Instrument:	K-MS-24 nd
Acqu Date:	12/22/23 14:16:00	Vial:	12
Run Type:	N/A	Dilution:	1
Lab ID:	K2314283-002	Raw Units:	ppb

Target Compounds

Final Conc.Units: ug/Kg

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Chloroform	0.00		0	0.00	0	U	Y
Chloromethane	0.00		0	0.00	0	U	Y
2-Chlorotoluene	0.00		0	0.00	0	U	Y
4-Chlorotoluene	0.00		0	0.00	0	U	Y
1,2-Dibromo-3-chloropropane	0.00		0	0.00	0	U	Y
Dibromochloromethane	0.00		0	0.00	0	U	Y
1,2-Dibromoethane (EDB)	0.00		0	0.00	0	U	Y
Dibromomethane	0.00		0	0.00	0	U	Y
1,2-Dichlorobenzene	0.00		0	0.00	0	U	Y
1,3-Dichlorobenzene	0.00		0	0.00	0	U	Y
1,4-Dichlorobenzene	0.00		0	0.00	0	U	Y
Dichlorodifluoromethane	0.00		0	0.00	0	U	Y
1,1-Dichloroethane	0.00		0	0.00	0	U	Y
1,2-Dichloroethane (EDC)	0.00		0	0.00	0	U	Y
1,1-Dichloroethene	0.00		0	0.00	0	U	Y
cis-1,2-Dichloroethene	0.00		0	0.00	0	U	Y
trans-1,2-Dichloroethene	0.00		0	0.00	0	U	Y
1,2-Dichloropropane	0.00		0	0.00	0	U	Y
1,3-Dichloropropane	0.00		0	0.00	0	U	Y
2,2-Dichloropropane	0.00		0	0.00	0	U	Y
1,1-Dichloropropene	0.00		0	0.00	0	U	Y
cis-1,3-Dichloropropene	0.00		0	0.00	0	U	Y
trans-1,3-Dichloropropene	0.00		0	0.00	0	U	Y
Ethylbenzene	0.00		0	0.00	0	U	Y
Hexachlorobutadiene	0.00		0	0.00	0	U	Y
2-Hexanone	0.00		0	0.00	0	U	Y
Isopropylbenzene	0.00		0	0.00	0	U	Y
4-Isopropyltoluene	0.00		0	0.00	0	U	Y
4-Methyl-2-pentanone (MIBK)	0.00		0	0.00	0	U	Y
Methylene Chloride	2.25		2605	0.02	0.026	U	Y
Naphthalene	0.00		0	0.00	0	U	Y
n-Propylbenzene	0.00		0	0.00	0	U	Y
Styrene	0.00		0	0.00	0	U	Y
1,1,1,2-Tetrachloroethane	0.00		0	0.00	0	U	Y
1,1,2,2-Tetrachloroethane	0.00		0	0.00	0	U	Y
Tetrachloroethene (PCE)	0.00		0	0.00	0	U	Y
Toluene	0.00		0	0.00	0	U	Y
1,2,3-Trichlorobenzene	0.00		0	0.00	0	U	Y
1,2,4-Trichlorobenzene	0.00		0	0.00	0	U	Y
1,1,2-Trichloroethane	0.00		0	0.00	0	U	Y
1,1,1-Trichloroethane (TCA)	0.00		0	0.00	0	U	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

			1st	01/04/24
Data File:	J:\MS24\DATA\122223\1222F012.D\	Instrument:	K-MS-24	01/08/24
Acqu Date:	12/22/23 14:16:00	Vial:	12	
Run Type:	N/A	Dilution:	1	
Lab ID:	K2314283-002	Raw Units:	ppb	

<i>Target Compounds</i>		Final Conc.Units: ug/Kg					
Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Trichloroethene (TCE)	0.00		0	0.00	0	U	Y
Trichlorofluoromethane (CFC 11)	0.00		0	0.00	0	U	Y
1,2,3-Trichloropropane	0.00		0	0.00	0	U	Y
1,2,4-Trimethylbenzene	0.00		0	0.00	0	U	Y
1,3,5-Trimethylbenzene	0.00		0	0.00	0	U	Y
Vinyl Chloride	0.00		0	0.00	0	U	Y
o-Xylene	0.00		0	0.00	0	U	Y
m,p-Xylenes	0.00		0	0.00	0	U	Y
Xylenes, Total				0.000	0	U	Y

Prep Amount:	4.472 g	Dilution:	1
Prep Final Amount:	5.00 mL	Basis Factor:	85.30

Data File : J:\MS24\DATA\122223\1222F012.D

Acq On : 22 Dec 2023 02:16 pm

Sample : K2314283-002

Misc :

Vial: 12

Operator: EW/OT

Inst : MS24

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Dec 27 09:59:23 2023

Quant Results File: 103023_MS24_FULL_SOIL.RES

Quant Method : J:\MS24\M...\103023_MS24_FULL_SOIL.M (RTE Integrator)

Title : VOA MS24 EPA Method 8260B

Last Update : Wed Nov 01 09:13:30 2023

Response via : Initial Calibration

DataAcq Meth : 8260.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	3.99	96	288865	50.00	PPB	0.00
59) Chlorobenzene-d5	6.62	82	126219	50.00	PPB	0.00
78) 1,4-Dichlorobenzene-d4	8.94	152	118529	50.00	PPB	0.00

System Monitoring Compounds

39) Dibromofluoromethane	3.51	113	72245	47.64	PPB	0.00
Spiked Amount	50.000					
			Recovery	=	95.28%	
43) 1,2-Dichloroethane-d4	3.78	65	90756	48.50	PPB	0.00
Spiked Amount	50.000					
			Recovery	=	97.00%	
57) Toluene-d8	5.28	98	292696	46.83	PPB	0.00
Spiked Amount	50.000					
			Recovery	=	93.66%	
77) 4-Bromofluorobenzene	7.79	95	102118	43.76	PPB	0.00
Spiked Amount	50.000					
			Recovery	=	87.52%	

Target Compounds

						Qvalue
12) Acetone	1.96	43	6131	2.68	PPB	88
18) Methylene Chloride	2.25	84	2605	0.02	PPB	93

Data File : J:\MS24\DATA\122223\1222F012.D

Acq On : 22 Dec 2023 02:16 pm

Sample : K2314283-002

Misc :

Vial: 12

Operator: EW/OT

Inst : MS24

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Dec 27 10:04 2023

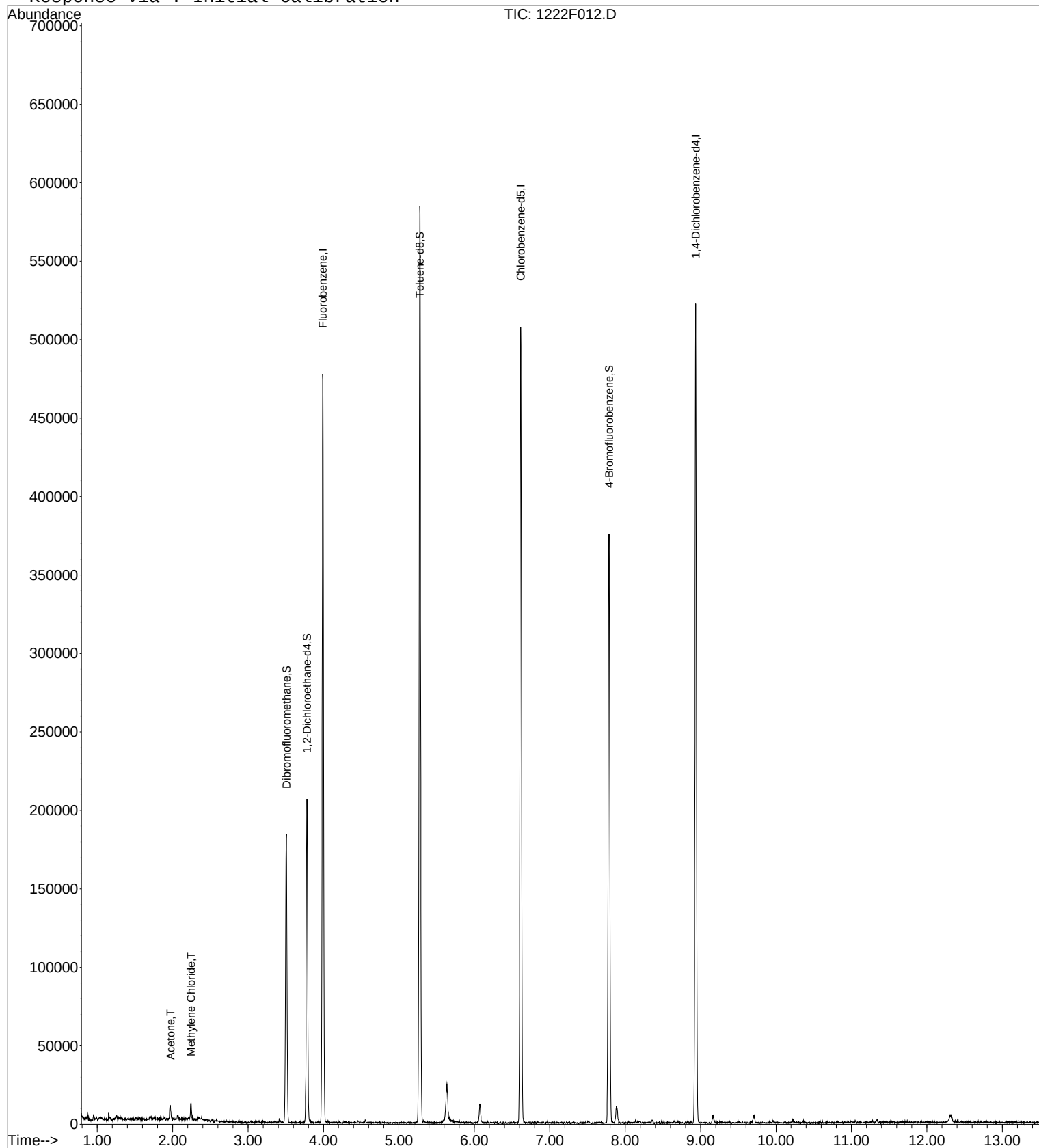
Quant Results File: 103023_MS24_FULL_SOIL.RES

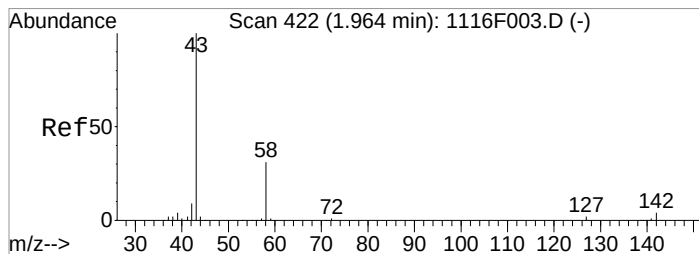
Method : J:\MS24\METHODS\2010\103023_MS24_FULL_SOIL.M (RTE Integrator)

Title : VOA MS24 EPA Method 8260B

Last Update : Wed Nov 01 09:13:30 2023

Response via : Initial Calibration

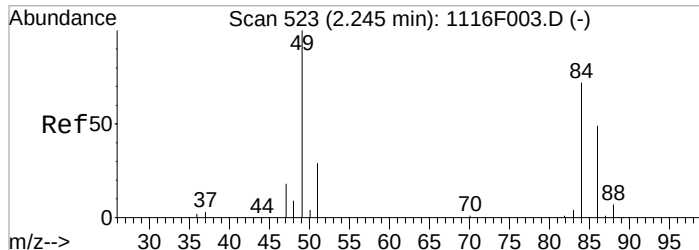
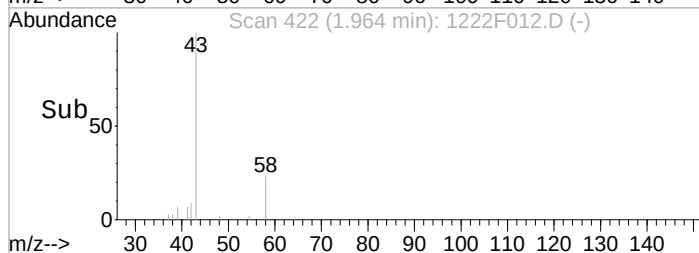
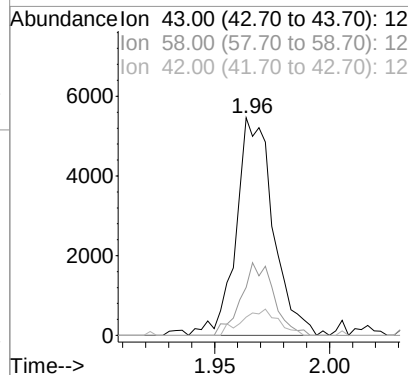
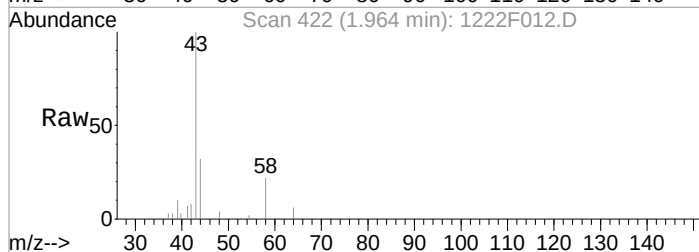




#12
Acetone
Concen: 2.68 PPB
RT: 1.96 min Scan# 422
Delta R.T. -0.01 min
Lab File: 1222F012.D
Acq: 22 Dec 2023 02:16 pm

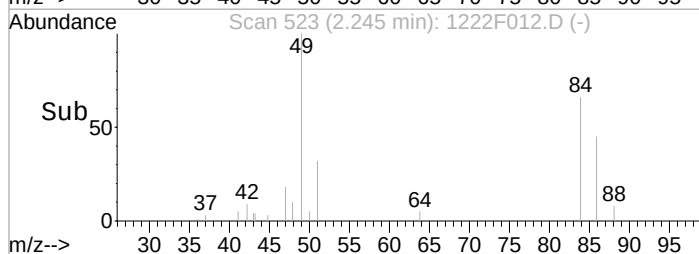
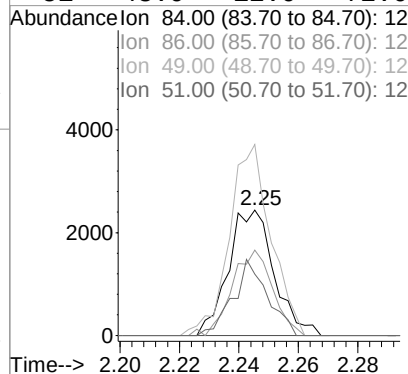
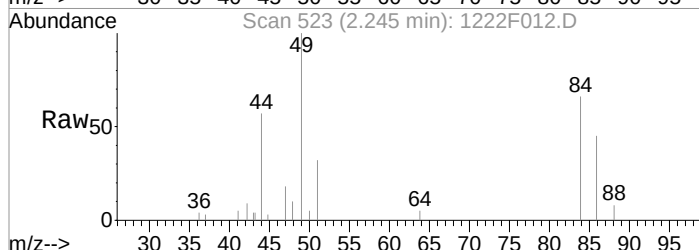
1st 01/04/24
2nd 01/08/24

Tgt Ion: 43 Resp: 6131
Ion Ratio Lower Upper
43 100
58 22.1 0.4 60.4
42 8.5 0.0 38.1



#18
Methylene Chloride
Concen: 0.02 PPB
RT: 2.25 min Scan# 523
Delta R.T. -0.00 min
Lab File: 1222F012.D
Acq: 22 Dec 2023 02:16 pm

Tgt Ion: 84 Resp: 2605
Ion Ratio Lower Upper
84 100
86 68.0 33.8 93.8
49 152.2 114.9 174.9
51 48.9 12.0 72.0



Validation Report

1st  01/04/24
2nd  01/08/24

Data File: J:\MS24\DATA\122223\1222F008.D\
Lab ID: KQ2322503-05
RunType: MB
Matrix: Paperboard

Date Acquired: 12/22/23 12:52:00
Batch ID: 828032
Analysis Method: 8260C/VOC FP_RPTA

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery	X	
Internal Standards	X	
Surrogates	X	
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	

Primary Review: _____

Secondary Review: _____

Validation Report

1st  01/04/24
2nd  01/08/24

Data File: J:\MS24\DATA\122223\1222F008.D\
Lab ID: KQ2322502-05
RunType: MB
Matrix: Soil

Date Acquired: 12/22/23 12:52:00
Batch ID: 828030
Analysis Method: 8260C/VOC FP

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery	X	
Internal Standards	X	
Surrogates	X	
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	

Primary Review: _____

Secondary Review: _____

Validation Report

1st 01/04/24
2nd 01/08/24

Data File: J:\MS24\DATA\122223\1222F008.D\
Lab ID: KQ2322502-05
RunType: MB
Matrix: Soil

Date Acquired: 12/22/23 12:52:00
Batch ID: 828030
Analysis Method: 8260C/VOC Unp

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery		X
Internal Standards	X	
Surrogates	X	
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Continuing Calibration Recovery	Acetone	-28		20	CCVOK
	Dichlorodifluoromethane	72		20	High Bias
	Trichlorofluoromethane	37		20	

Primary Review: _____

Secondary Review: _____

Quantitation Report

1st 01/04/24
2nd 01/08/24

Data File:	J:\MS24\DATA\122223\1222F008.D\	Instrument:	K-MS-24
Acqu Date:	12/22/23 12:52:00	Vial:	5
Run Type:	MB	Dilution:	1
Lab ID:	KQ2322503-05	Raw Units:	ppb

Bottle ID:		Tier:	I	Matrix:	Paperboard
Prod Code:	VOC FP_RPTA	Collect Date:	11/29/23	Receive Date:	12/12/23

Analysis Lot:	828032	Prep Lot:		Report Group:	KQ2322503
Analysis	8260C	Prep Method:			
		Prep Date:			

Title:	Volatile Organic Compounds by GC/MS	Calibration ID:	KC2300633
		Report List ID:	22951

Internal Standard Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Area Criteria
1,4-Dichlorobenzene-d4	8.94		115559	50.00	OK
Chlorobenzene-d5	6.62		128735	50.00	OK
Fluorobenzene	3.99		289823	50.00	OK

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
4-Bromofluorobenzene	7.78		102839	43.21	86	61 - 133	Y
Dibromofluoromethane	3.51		70229	46.16	92	59 - 134	Y
Toluene-d8	5.28		298602	47.62	95	77 - 122	Y

Target Compounds

Final Conc.Units: mg/Kg

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
1,1-Dichloroethene (1,1-DCE)	0.00		0	0.00	0	U	Y
1,2-Dibromo-3-chloropropane (DBCP)	0.00		0	0.00	0	U	Y
1,2-Dibromoethane	0.00		0	0.00	0	U	Y
1,4-Dichlorobenzene	0.00		0	0.00	0	U	Y
Benzene	0.00		0	0.00	0	U	Y
Chloroform	0.00		0	0.00	0	U	Y
Dichloromethane	2.24	-0.01	5027	1.49	0.0015	J	Y
Styrene	0.00		0	0.00	0	U	Y
Tetrachloroethene (PCE)	0.00		0	0.00	0	U	Y
Toluene	0.00		0	0.00	0	U	Y
Vinyl Chloride	0.00		0	0.00	0	U	Y
cis-1,3-Dichloropropene	0.00		0	0.00	0	U	Y
m,p-Xylenes	0.00		0	0.00	0	U	Y
trans-1,3-Dichloropropene	0.00		0	0.00	0	U	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 12/27/23 14:54

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Data File: J:\MS24\DATA\122223\1222F008.D\
Acqu Date: 12/22/23 12:52:00
Run Type: MB
Lab ID: KQ2322503-05

Instrument: K-MS-2nd
Vial: 5
Dilution: 1
Raw Units: ppb

Prep Amount: 5 g
Prep Final Amount: 5.00 mL
Dilution: 1
Basis Factor: 100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result $\geq$ MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 12/27/23 14:54

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Quantitation Report

1st  01/05/24
2nd  01/08/24

Data File:	J:\MS24\DATA\122223\1222F008.D\	Instrument:	K-MS-24
Acqu Date:	12/22/23 12:52:00	Vial:	5
Run Type:	MB	Dilution:	1
Lab ID:	KQ2322503-05	Raw Units:	ppb

Bottle ID:		Tier:	I	Matrix:	Paperboard
Prod Code:	VOC FP_RPTA	Collect Date:	11/29/23	Receive Date:	12/12/23

Analysis Lot:	828032	Prep Lot:		Report Group:	KQ2322503
Analysis	8260C	Prep Method:			
		Prep Date:			

Title:	Volatile Organic Compounds by GC/MS	Calibration ID:	KC2300633
		Report List ID:	26196

Internal Standard Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Area Criteria
1,4-Dichlorobenzene-d4	8.94		115559	50.00	OK
Chlorobenzene-d5	6.62		128735	50.00	OK
Fluorobenzene	3.99		289823	50.00	OK

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
4-Bromofluorobenzene	7.78		102839	43.21	86	61 - 133	Y
Dibromofluoromethane	3.51		70229	46.16	92	59 - 134	Y
Toluene-d8	5.28		298602	47.62	95	77 - 122	Y

Target Compounds

Final Conc.Units: mg/Kg							
Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
1,2-Dichloropropane	0.00		0	0.00	0	U	Y

Prep Amount: 5 g **Dilution:** 1
Prep Final Amount: 5.00 mL **Basis Factor:** 100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 1/5/24 15:39

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Quantitation Report

1st 01/04/24
2nd 01/08/24

Data File:	J:\MS24\DATA\122223\1222F008.D\	Instrument:	K-MS-24
Acqu Date:	12/22/23 12:52:00	Vial:	9
Run Type:	MB	Dilution:	1
Lab ID:	KQ2322502-05	Raw Units:	ppb
Bottle ID:		Tier:	IV
Prod Code:	VOC FP	Collect Date:	12/20/23
		Matrix:	Soil
		Receive Date:	12/20/23
Analysis Lot:	828030	Prep Lot:	
Analysis	8260C	Prep Method:	
		Prep Date:	
Report Group:	KQ2322502		
Title:	Volatile Organic Compounds by GC/MS	Calibration ID:	KC2300633
		Report List ID:	20903

Internal Standard Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Area Criteria
Chlorobenzene-d5	6.62		128735	50.00	OK
1,4-Dichlorobenzene-d4	8.94		115559	50.00	OK
Fluorobenzene	3.99		289823	50.00	OK

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
4-Bromofluorobenzene	7.78		102839	43.21	86	61 - 133	Y
Dibromofluoromethane	3.51		70229	46.16	92	59 - 134	Y
Toluene-d8	5.28		298602	47.62	95	77 - 122	Y

Target Compounds

Final Conc.Units: ug/Kg

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Acetone	0.00		0	0.00	0	U	Y
Benzene	0.00		0	0.00	0	U	Y
Bromobenzene	0.00		0	0.00	0	U	Y
Bromochloromethane	0.00		0	0.00	0	U	Y
Bromodichloromethane	0.00		0	0.00	0	U	Y
Bromoform	0.00		0	0.00	0	U	Y
Bromomethane	0.00		0	0.00	0	U	Y
2-Butanone (MEK)	0.00		0	0.00	0	U	Y
n-Butylbenzene	0.00		0	0.00	0	U	Y
sec-Butylbenzene	0.00		0	0.00	0	U	Y
tert-Butylbenzene	0.00		0	0.00	0	U	Y
Carbon Disulfide	0.00		0	0.00	0	U	Y
Carbon Tetrachloride	0.00		0	0.00	0	U	Y
Chlorobenzene	0.00		0	0.00	0	U	Y
Chloroethane	0.00		0	0.00	0	U	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 12/27/23 16:16

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			1st	01/04/24
Data File:	J:\MS24\DATA\122223\1222F008.D\	Instrument:	K-MS-24 nd	01/08/24
Acqu Date:	12/22/23 12:52:00	Vial:	9	
Run Type:	MB	Dilution:	1	
Lab ID:	KQ2322502-05	Raw Units:	ppb	

Target Compounds

Final Conc.Units: ug/Kg

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Chloroform	0.00		0	0.00	0	U	Y
Chloromethane	0.00		0	0.00	0	U	Y
2-Chlorotoluene	0.00		0	0.00	0	U	Y
4-Chlorotoluene	0.00		0	0.00	0	U	Y
1,2-Dibromo-3-chloropropane	0.00		0	0.00	0	U	Y
Dibromochloromethane	0.00		0	0.00	0	U	Y
1,2-Dibromoethane (EDB)	0.00		0	0.00	0	U	Y
Dibromomethane	0.00		0	0.00	0	U	Y
1,2-Dichlorobenzene	0.00		0	0.00	0	U	Y
1,3-Dichlorobenzene	0.00		0	0.00	0	U	Y
1,4-Dichlorobenzene	0.00		0	0.00	0	U	Y
Dichlorodifluoromethane	0.00		0	0.00	0	U	Y
1,1-Dichloroethane	0.00		0	0.00	0	U	Y
1,2-Dichloroethane (EDC)	0.00		0	0.00	0	U	Y
1,1-Dichloroethene	0.00		0	0.00	0	U	Y
cis-1,2-Dichloroethene	0.00		0	0.00	0	U	Y
trans-1,2-Dichloroethene	0.00		0	0.00	0	U	Y
1,2-Dichloropropane	0.00		0	0.00	0	U	Y
1,3-Dichloropropane	0.00		0	0.00	0	U	Y
2,2-Dichloropropane	0.00		0	0.00	0	U	Y
1,1-Dichloropropene	0.00		0	0.00	0	U	Y
cis-1,3-Dichloropropene	0.00		0	0.00	0	U	Y
trans-1,3-Dichloropropene	0.00		0	0.00	0	U	Y
Ethylbenzene	0.00		0	0.00	0	U	Y
Hexachlorobutadiene	0.00		0	0.00	0	U	Y
2-Hexanone	0.00		0	0.00	0	U	Y
Isopropylbenzene	0.00		0	0.00	0	U	Y
4-Isopropyltoluene	0.00		0	0.00	0	U	Y
4-Methyl-2-pentanone (MIBK)	0.00		0	0.00	0	U	Y
Methylene Chloride	2.24	-0.01	5027	1.49	1.5	J	Y
Naphthalene	11.05		3225	0.54	0.54	J	Y
n-Propylbenzene	0.00		0	0.00	0	U	Y
Styrene	0.00		0	0.00	0	U	Y
1,1,1,2-Tetrachloroethane	0.00		0	0.00	0	U	Y
1,1,2,2-Tetrachloroethane	0.00		0	0.00	0	U	Y
Tetrachloroethene (PCE)	0.00		0	0.00	0	U	Y
Toluene	0.00		0	0.00	0	U	Y
1,2,3-Trichlorobenzene	11.27	-0.01	1221	0.48	0.48	J	Y
1,2,4-Trichlorobenzene	0.00		0	0.00	0	U	Y
1,1,2-Trichloroethane	0.00		0	0.00	0	U	Y
1,1,1-Trichloroethane (TCA)	0.00		0	0.00	0	U	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 12/27/23 16:16

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			1st	01/04/24
Data File:	J:\MS24\DATA\122223\1222F008.D\	Instrument:	K-MS-24 nd	01/08/24
Acqu Date:	12/22/23 12:52:00	Vial:	9	
Run Type:	MB	Dilution:	1	
Lab ID:	KQ2322502-05	Raw Units:	ppb	

<i>Target Compounds</i>		Final Conc.Units: ug/Kg					
Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Trichloroethene (TCE)	0.00		0	0.00	0	U	Y
Trichlorofluoromethane (CFC 11)	0.00		0	0.00	0	U	Y
1,2,3-Trichloropropane	0.00		0	0.00	0	U	Y
1,2,4-Trimethylbenzene	0.00		0	0.00	0	U	Y
1,3,5-Trimethylbenzene	0.00		0	0.00	0	U	Y
Vinyl Chloride	0.00		0	0.00	0	U	Y
o-Xylene	0.00		0	0.00	0	U	Y
m,p-Xylenes	0.00		0	0.00	0	U	Y
Xylenes, Total				0.000	0	U	Y

Prep Amount:	5 g	Dilution:	1
Prep Final Amount:	5.00 mL	Basis Factor:	100.00

Quantitation Report

1st 01/04/24

2nd 01/08/24

Data File: J:\MS24\DATA\122223\1222F008.D\
Acqu Date: 12/22/23 12:52:00
Run Type: MB
Lab ID: KQ2322502-05

Instrument: K-MS-24
Vial: 9
Dilution: 1
Raw Units: ppb

Bottle ID:
Prod Code: VOC FP

Tier: IV
Collect Date: 12/20/23

Matrix: Soil
Receive Date: 12/20/23

Analysis Lot: 828030
Analysis 8260C

Prep Lot:
Prep Method:
Prep Date:

Report Group: KQ2322502

Title: Volatile Organic Compounds by GC/MS

Calibration ID: KC2300633
Report List ID: 21451

Internal Standard Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Area Criteria
Chlorobenzene-d5	6.62		128735	50.00	OK
1,4-Dichlorobenzene-d4	8.94		115559	50.00	OK
Fluorobenzene	3.99		289823	50.00	OK

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
4-Bromofluorobenzene	7.78		102839	43.21	86	61 - 133	Y
Dibromofluoromethane	3.51		70229	46.16	92	59 - 134	Y
Toluene-d8	5.28		298602	47.62	95	77 - 122	Y

Target Compounds

Final Conc.Units: ug/Kg

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Acrolein	0.00		0	0.00	0	U	Y
Acrylonitrile	0.00		0	0.00	0	U	Y
Benzene	0.00		0	0.00	0	U	Y
Bromodichloromethane	0.00		0	0.00	0	U	Y
Bromoform	0.00		0	0.00	0	U	Y
Bromomethane	0.00		0	0.00	0	U	Y
Carbon Tetrachloride	0.00		0	0.00	0	U	Y
Chlorobenzene	0.00		0	0.00	0	U	Y
Chloroethane	0.00		0	0.00	0	U	Y
2-Chloroethyl Vinyl Ether	0.00		0	0.00	0	U	Y
Chloroform	0.00		0	0.00	0	U	Y
Chloromethane	0.00		0	0.00	0	U	Y
Dibromochloromethane	0.00		0	0.00	0	U	Y
1,2-Dichlorobenzene	0.00		0	0.00	0	U	Y
1,3-Dichlorobenzene	0.00		0	0.00	0	U	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 12/27/23 16:23

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			1st	01/04/24
Data File:	J:\MS24\DATA\122223\1222F008.D\	Instrument:	K-MS-24 nd	01/08/24
Acqu Date:	12/22/23 12:52:00	Vial:	9	
Run Type:	MB	Dilution:	1	
Lab ID:	KQ2322502-05	Raw Units:	ppb	

Target Compounds		Final Conc.Units: ug/Kg					
Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
1,4-Dichlorobenzene	0.00		0	0.00	0	U	Y
1,1-Dichloroethane	0.00		0	0.00	0	U	Y
1,2-Dichloroethane (EDC)	0.00		0	0.00	0	U	Y
1,1-Dichloroethene	0.00		0	0.00	0	U	Y
trans-1,2-Dichloroethene	0.00		0	0.00	0	U	Y
1,2-Dichloropropane	0.00		0	0.00	0	U	Y
Ethylbenzene	0.00		0	0.00	0	U	Y
Methylene Chloride	2.24	-0.01	5027	1.49	1.5	J	Y
1,1,2,2-Tetrachloroethane	0.00		0	0.00	0	U	Y
Tetrachloroethene (PCE)	0.00		0	0.00	0	U	Y
Toluene	0.00		0	0.00	0	U	Y
1,1,2-Trichloroethane	0.00		0	0.00	0	U	Y
1,1,1-Trichloroethane (TCA)	0.00		0	0.00	0	U	Y
Trichloroethene (TCE)	0.00		0	0.00	0	U	Y
Vinyl Chloride	0.00		0	0.00	0	U	Y
o-Xylene	0.00		0	0.00	0	U	Y
m,p-Xylenes	0.00		0	0.00	0	U	Y

Prep Amount:	5 g	Dilution:	1
Prep Final Amount:	5.00 mL	Basis Factor:	100.00

Quantitation Report

1st  01/04/24
2nd  01/08/24

Data File:	J:\MS24\DATA\122223\1222F008.D\	Instrument:	K-MS-24
Acqu Date:	12/22/23 12:52:00	Vial:	9
Run Type:	MB	Dilution:	1
Lab ID:	KQ2322502-05	Raw Units:	ppb
Bottle ID:		Tier:	IV
Prod Code:	VOC FP	Collect Date:	12/20/23
		Matrix:	Soil
		Receive Date:	12/20/23
Analysis Lot:	828030	Prep Lot:	
Analysis	8260C	Prep Method:	
		Prep Date:	
Report Group:	KQ2322502		
Title:	Volatile Organic Compounds by GC/MS		
		Calibration ID:	KC2300633
		Report List ID:	21697

Internal Standard Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Area Criteria
Chlorobenzene-d5	6.62		128735	50.00	OK
1,4-Dichlorobenzene-d4	8.94		115559	50.00	OK
Fluorobenzene	3.99		289823	50.00	OK

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
4-Bromofluorobenzene	7.78		102839	43.21	86	61 - 133	Y
Dibromofluoromethane	3.51		70229	46.16	92	59 - 134	Y
Toluene-d8	5.28		298602	47.62	95	77 - 122	Y

Target Compounds

Final Conc.Units: ug/Kg

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Benzene	0.00		0	0.00	0	U	Y
Toluene	0.00		0	0.00	0	U	Y

Prep Amount: 5 g **Dilution:** 1
Prep Final Amount: 5.00 mL **Basis Factor:** 100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound
D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report

1st 01/04/24
2nd 01/08/24

Data File:	J:\MS24\DATA\122223\1222F008.D\	Instrument:	K-MS-24
Acqu Date:	12/22/23 12:52:00	Vial:	10
Run Type:	MB	Dilution:	1
Lab ID:	KQ2322502-05	Raw Units:	ppb
Bottle ID:		Tier:	IV
Prod Code:	VOC Unp	Collect Date:	12/20/23
		Matrix:	Soil
		Receive Date:	12/20/23
Analysis Lot:	828030	Prep Lot:	
Analysis	8260C	Prep Method:	
		Prep Date:	
Report Group:	KQ2322502		
Title:	Volatile Organic Compounds by GC/MS, Unpreserved	Calibration ID:	KC2300633
		Report List ID:	21747

Internal Standard Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Area Criteria
1,4-Dichlorobenzene-d4	8.94		115559	50.00	OK
Chlorobenzene-d5	6.62		128735	50.00	OK
Fluorobenzene	3.99		289823	50.00	OK

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
4-Bromofluorobenzene	7.78		102839	43.21	86	61 - 133	Y
Dibromofluoromethane	3.51		70229	46.16	92	59 - 134	Y
Toluene-d8	5.28		298602	47.62	95	77 - 122	Y

Target Compounds

Final Conc.Units: ug/Kg

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
1,1,1,2-Tetrachloroethane	0.00		0	0.00	0	U	Y
1,1,1-Trichloroethane (TCA)	0.00		0	0.00	0	U	Y
1,1,2,2-Tetrachloroethane	0.00		0	0.00	0	U	Y
1,1,2-Trichloroethane	0.00		0	0.00	0	U	Y
1,1-Dichloroethane	0.00		0	0.00	0	U	Y
1,1-Dichloroethene	0.00		0	0.00	0	U	Y
1,1-Dichloropropene	0.00		0	0.00	0	U	Y
1,2,3-Trichlorobenzene	11.27	-0.01	1221	0.48	0.48	J	Y
1,2,3-Trichloropropane	0.00		0	0.00	0	U	Y
1,2,4-Trichlorobenzene	0.00		0	0.00	0	U	Y
1,2,4-Trimethylbenzene	0.00		0	0.00	0	U	Y
1,2-Dibromo-3-chloropropane	0.00		0	0.00	0	U	Y
1,2-Dibromoethane (EDB)	0.00		0	0.00	0	U	Y
1,2-Dichlorobenzene	0.00		0	0.00	0	U	Y
1,2-Dichloroethane (EDC)	0.00		0	0.00	0	U	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 1/5/24 15:29

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			1st	01/04/24
Data File:	J:\MS24\DATA\122223\1222F008.D\	Instrument:	K-MS-24 nd	01/08/24
Acqu Date:	12/22/23 12:52:00	Vial:	10	
Run Type:	MB	Dilution:	1	
Lab ID:	KQ2322502-05	Raw Units:	ppb	

Target Compounds

Final Conc.Units: ug/Kg

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
1,2-Dichloropropane	0.00		0	0.00	0	U	Y
1,3,5-Trimethylbenzene	0.00		0	0.00	0	U	Y
1,3-Dichlorobenzene	0.00		0	0.00	0	U	Y
1,3-Dichloropropane	0.00		0	0.00	0	U	Y
1,4-Dichlorobenzene	0.00		0	0.00	0	U	Y
2,2-Dichloropropane	0.00		0	0.00	0	U	Y
2-Butanone (MEK)	0.00		0	0.00	0	U	Y
2-Chlorotoluene	0.00		0	0.00	0	U	Y
2-Hexanone	0.00		0	0.00	0	U	Y
4-Chlorotoluene	0.00		0	0.00	0	U	Y
4-Isopropyltoluene	0.00		0	0.00	0	U	Y
4-Methyl-2-pentanone (MIBK)	0.00		0	0.00	0	U	Y
Acetone	0.00		0	0.00	0	U	Y
Benzene	0.00		0	0.00	0	U	Y
Bromobenzene	0.00		0	0.00	0	U	Y
Bromochloromethane	0.00		0	0.00	0	U	Y
Bromodichloromethane	0.00		0	0.00	0	U	Y
Bromoform	0.00		0	0.00	0	U	Y
Bromomethane	0.00		0	0.00	0	U	Y
Carbon Disulfide	0.00		0	0.00	0	U	Y
Carbon Tetrachloride	0.00		0	0.00	0	U	Y
Chlorobenzene	0.00		0	0.00	0	U	Y
Chloroethane	0.00		0	0.00	0	U	Y
Chloroform	0.00		0	0.00	0	U	Y
Chloromethane	0.00		0	0.00	0	U	Y
Dibromochloromethane	0.00		0	0.00	0	U	Y
Dibromomethane	0.00		0	0.00	0	U	Y
Dichlorodifluoromethane	0.00		0	0.00	0	U	Y
Ethylbenzene	0.00		0	0.00	0	U	Y
Hexachlorobutadiene	0.00		0	0.00	0	U	Y
Isopropylbenzene	0.00		0	0.00	0	U	Y
Methylene Chloride	2.24	-0.01	5027	1.49	1.5	J	Y
Naphthalene	11.05		3225	0.54	0.54	J	Y
Styrene	0.00		0	0.00	0	U	Y
Tetrachloroethene (PCE)	0.00		0	0.00	0	U	Y
Toluene	0.00		0	0.00	0	U	Y
Trichloroethene (TCE)	0.00		0	0.00	0	U	Y
Trichlorofluoromethane	0.00		0	0.00	0	U	Y
Vinyl Chloride	0.00		0	0.00	0	U	Y
cis-1,2-Dichloroethene	0.00		0	0.00	0	U	Y
cis-1,3-Dichloropropene	0.00		0	0.00	0	U	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 1/5/24 15:29

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			1st	01/04/24
Data File:	J:\MS24\DATA\122223\1222F008.D\	Instrument:	K-MS-24	01/08/24
Acqu Date:	12/22/23 12:52:00	Vial:	10	
Run Type:	MB	Dilution:	1	
Lab ID:	KQ2322502-05	Raw Units:	ppb	

Target Compounds		Final Conc.Units: ug/Kg					
Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
m,p-Xylenes	0.00		0	0.00	0	U	Y
n-Butylbenzene	0.00		0	0.00	0	U	Y
n-Propylbenzene	0.00		0	0.00	0	U	Y
o-Xylene	0.00		0	0.00	0	U	Y
sec-Butylbenzene	0.00		0	0.00	0	U	Y
tert-Butylbenzene	0.00		0	0.00	0	U	Y
trans-1,2-Dichloroethene	0.00		0	0.00	0	U	Y
trans-1,3-Dichloropropene	0.00		0	0.00	0	U	Y

Prep Amount:	5 g	Dilution:	1
Prep Final Amount:	5.00 mL	Basis Factor:	100.00

Data File : J:\MS24\DATA\122223\1222F008.D

Acq On : 22 Dec 2023 12:52 pm

Sample : MB

Misc :

Vial: 8

Operator: EW/OT

Inst : MS24

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Dec 26 15:32:02 2023

Quant Results File: 103023_MS24_FULL_SOIL.RES

Quant Method : J:\MS24\M...\103023_MS24_FULL_SOIL.M (RTE Integrator)

Title : VOA MS24 EPA Method 8260B

Last Update : Wed Nov 01 09:13:30 2023

Response via : Initial Calibration

DataAcq Meth : 8260.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	3.99	96	289823	50.00	PPB	0.00
59) Chlorobenzene-d5	6.62	82	128735	50.00	PPB	0.00
78) 1,4-Dichlorobenzene-d4	8.94	152	115559	50.00	PPB	0.00
System Monitoring Compounds						
39) Dibromofluoromethane	3.51	113	70229	46.16	PPB	0.00
Spiked Amount 50.000			Recovery	=	92.32%	
43) 1,2-Dichloroethane-d4	3.78	65	86206	45.92	PPB	0.00
Spiked Amount 50.000			Recovery	=	91.84%	
57) Toluene-d8	5.28	98	298602	47.62	PPB	0.00
Spiked Amount 50.000			Recovery	=	95.24%	
77) 4-Bromofluorobenzene	7.78	95	102839	43.21	PPB	0.00
Spiked Amount 50.000			Recovery	=	86.42%	
Target Compounds						Qvalue
18) Methylene Chloride	2.24	84	5027	1.49	PPB	88
99) Naphthalene	11.05	128	3225	0.54	PPB	89
100) 1,2,3-Trichlorobenzene	11.27	180	1221	0.48	PPB	69

Data File : J:\MS24\DATA\122223\1222F008.D

Acq On : 22 Dec 2023 12:52 pm

Sample : MB

Misc :

MS Integration Params: rteint.p

Quant Time: Dec 26 15:35 2023

Vial: 8

Operator: EW/OT

Inst : MS24

Multiplr: 1.00

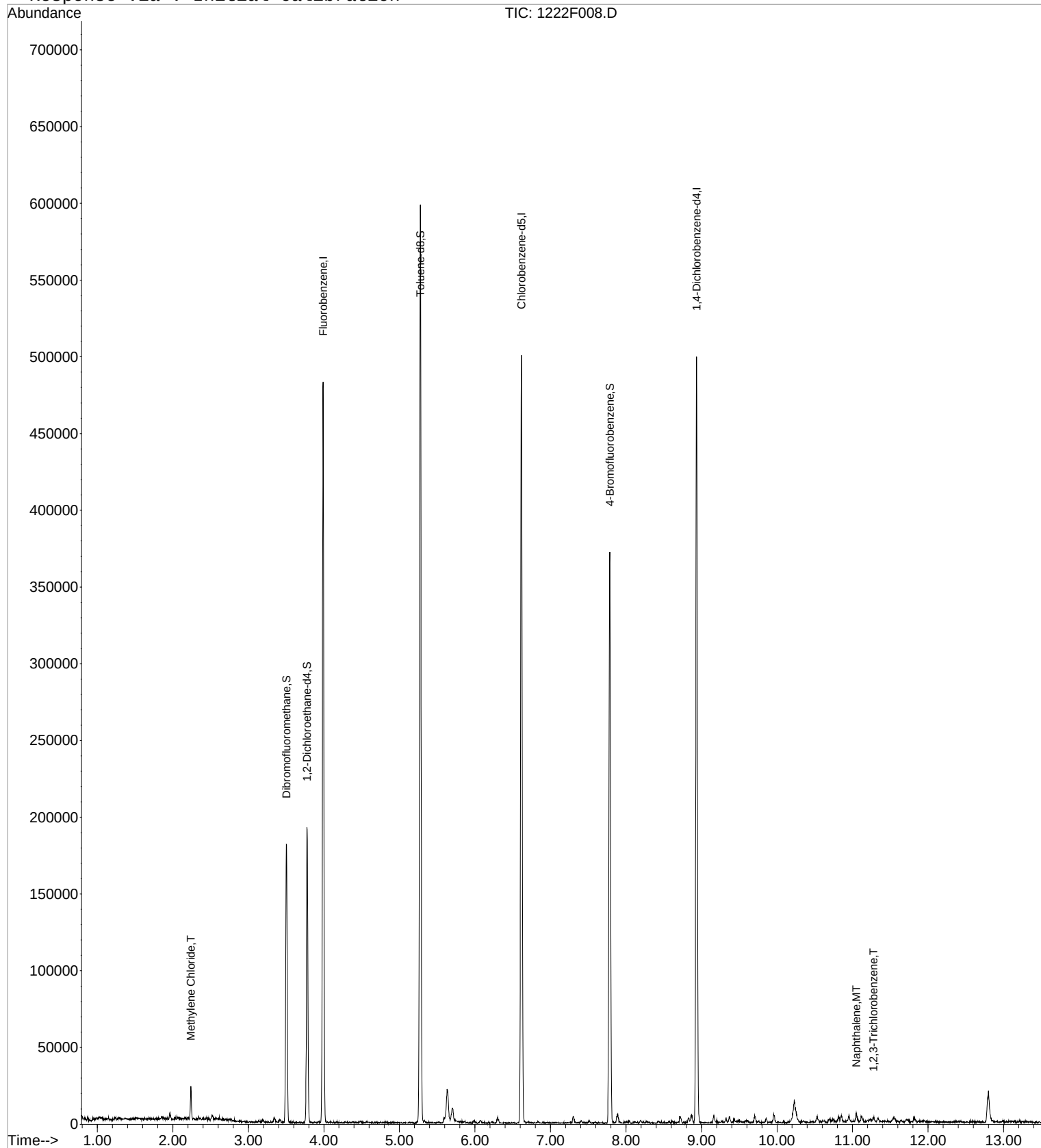
Quant Results File: 103023_MS24_FULL_SOIL.RES

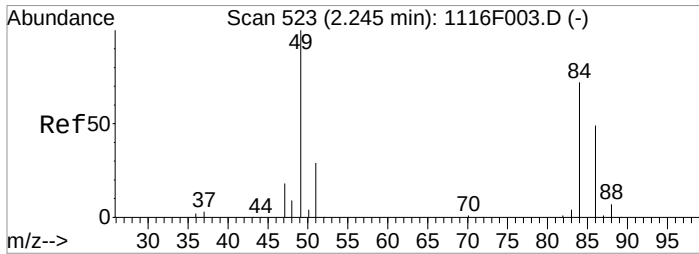
Method : J:\MS24\METHODS\2010\103023_MS24_FULL_SOIL.M (RTE Integrator)

Title : VOA MS24 EPA Method 8260B

Last Update : Wed Nov 01 09:13:30 2023

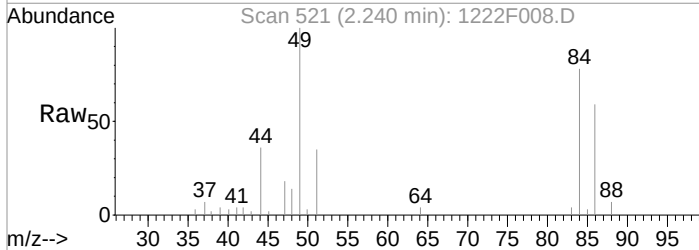
Response via : Initial Calibration



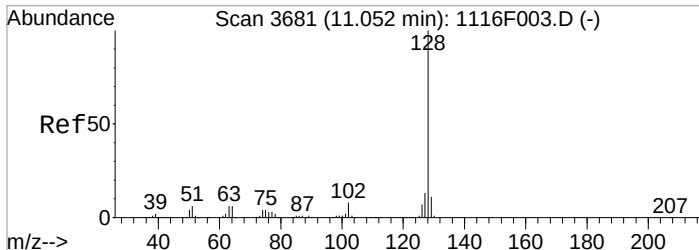
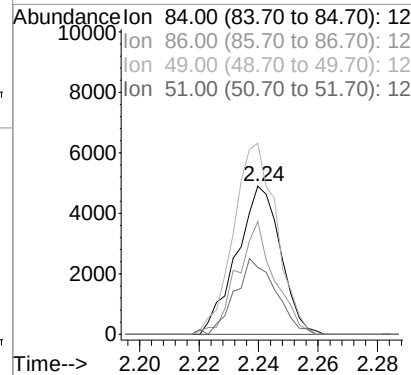
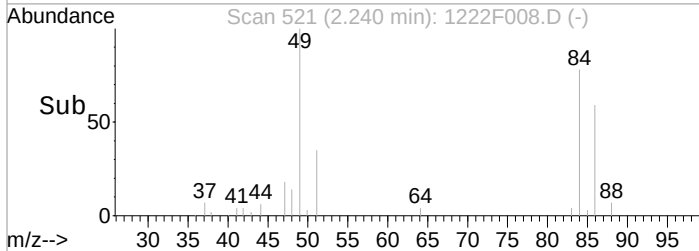


#18
Methylene Chloride
Concen: 1.49 PPB
RT: 2.24 min Scan# 521
Delta R.T. -0.01 min
Lab File: 1222F008.D
Acq: 22 Dec 2023 12:52 pm

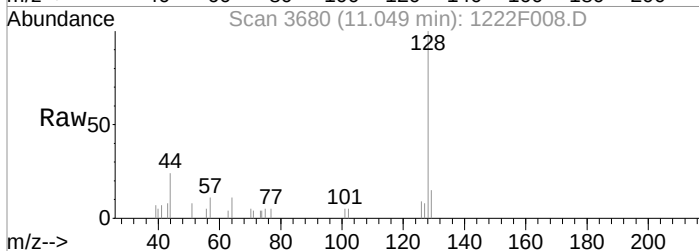
1st 01/04/24
2nd 01/08/24



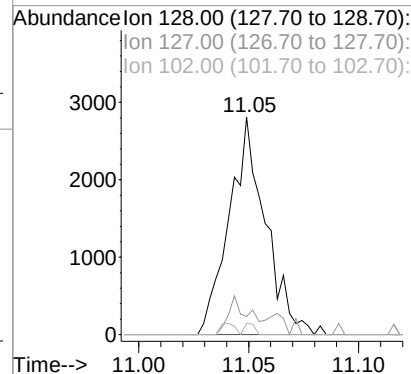
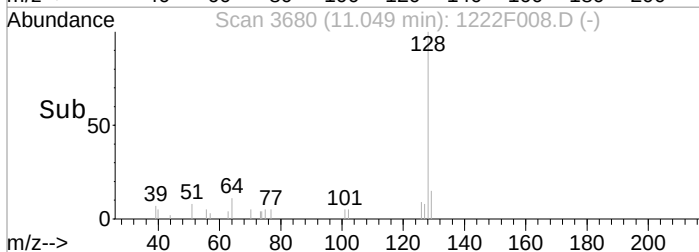
Tgt Ion: 84 Resp: 5027
Ion Ratio Lower Upper
84 100
86 76.0 33.8 93.8
49 128.8 114.9 174.9
51 45.1 12.0 72.0

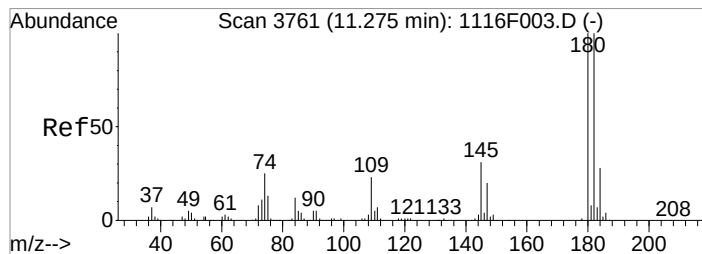


#99
Naphthalene
Concen: 0.54 PPB
RT: 11.05 min Scan# 3680
Delta R.T. 0.00 min
Lab File: 1222F008.D
Acq: 22 Dec 2023 12:52 pm



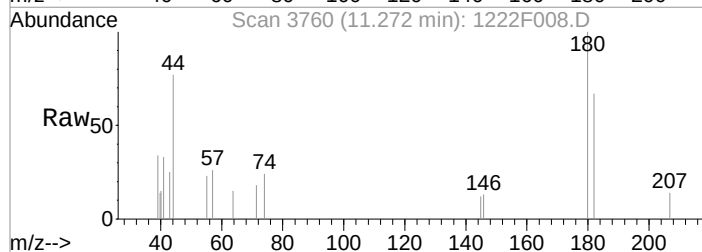
Tgt Ion: 128 Resp: 3225
Ion Ratio Lower Upper
128 100
127 8.4 0.0 43.6
102 5.2 0.0 37.4



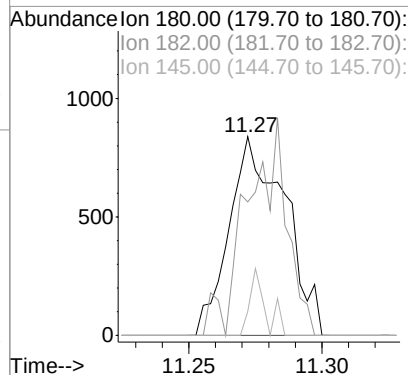
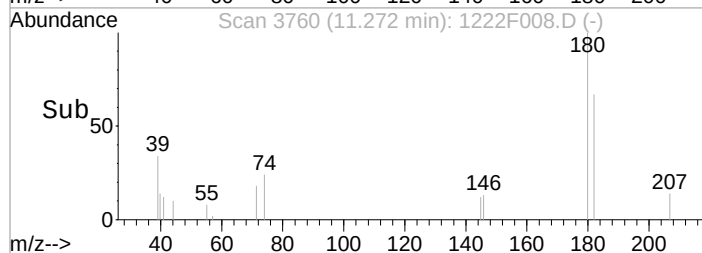


#100
 1,2,3-Trichlorobenzene
 Concen: 0.48 PPB
 RT: 11.27 min Scan# 3760
 Delta R.T. -0.01 min
 Lab File: 1222F008.D
 Acq: 22 Dec 2023 12:52 pm

1st 01/04/24
 2nd 01/08/24



Tgt Ion:180 Resp: 1221
 Ion Ratio Lower Upper
 180 100
 182 67.2 67.1 127.1
 145 12.1 0.0 59.1



Validation Report

1st  01/04/24
2nd  01/08/24

Data File: J:\MS24\DATA\122223\1222F004.D\
Lab ID: KQ2322503-03
RunType: LCS
Matrix: Paperboard

Date Acquired: 12/22/23 11:29:00
Batch ID: 828032
Analysis Method: 8260C/VOC FP_RPTA

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery	X	
Internal Standards	X	
Surrogates	X	
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	

Primary Review: _____

Secondary Review: _____

Validation Report

1st  01/04/24
2nd  01/08/24

Data File: J:\MS24\DATA\122223\1222F004.D\
Lab ID: KQ2322502-03
RunType: LCS
Matrix: Soil

Date Acquired: 12/22/23 11:29:00
Batch ID: 828030
Analysis Method: 8260C/VOC FP

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery	X	
Internal Standards	X	
Surrogates	X	
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	

Primary Review: _____

Secondary Review: _____

Validation Report

1st 01/04/24
2nd 01/08/24

Data File: J:\MS24\DATA\122223\1222F004.D\
Lab ID: KQ2322502-03
RunType: LCS
Matrix: Soil

Date Acquired: 12/22/23 11:29:00
Batch ID: 828030
Analysis Method: 8260C/VOC Unp

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery		X
Internal Standards	X	
Surrogates	X	
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Continuing Calibration Recovery	Acetone	-28		20	CCVOK
	Dichlorodifluoromethane	72		20	High Bias
	Trichlorofluoromethane	37		20	

Primary Review: _____

Secondary Review: _____

Quantitation Report

1st  01/04/24
2nd  01/08/24

Data File:	J:\MS24\DATA\122223\1222F004.D\	Instrument:	K-MS-24
Acqu Date:	12/22/23 11:29:00	Vial:	3
Run Type:	LCS	Dilution:	1
Lab ID:	KQ2322503-03	Raw Units:	ppb
Bottle ID:		Tier:	I
Prod Code:	VOC FP_RPTA	Collect Date:	11/29/23
		Matrix:	Paperboard
		Receive Date:	12/12/23
Analysis Lot:	828032	Prep Lot:	
Analysis	8260C	Prep Method:	
		Prep Date:	
Report Group:	KQ2322503		
Title:	Volatile Organic Compounds by GC/MS		
		Calibration ID:	KC2300633
		Report List ID:	22951

Internal Standard Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Area Criteria
1,4-Dichlorobenzene-d4	8.94		122850	50.00	OK
Chlorobenzene-d5	6.61	-0.01	132941	50.00	OK
Fluorobenzene	3.99		301338	50.00	OK

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
4-Bromofluorobenzene	7.78		112183	45.65	91	61 - 133	Y
Dibromofluoromethane	3.51		73613	46.54	93	59 - 134	Y
Toluene-d8	5.28		311762	47.82	96	77 - 122	Y

Target Compounds

Final Conc.Units: mg/Kg

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
1,1-Dichloroethene (1,1-DCE)	1.86	-0.01	69380	52.95	0.0530		Y
1,2-Dibromo-3-chloropropane (DBCP)	10.10		16407	46.69	0.0467		Y
1,2-Dibromoethane	6.21		86488	50.35	0.0504		Y
1,4-Dichlorobenzene	8.96		236604	51.25	0.0513		Y
Benzene	3.76		403615	52.35	0.0524		Y
Chloroform	3.38		170630	54.22	0.0542		Y
Dichloromethane	2.24	-0.01	90314	51.12	0.0511		Y
Styrene	7.26		151977	54.07	0.0541		Y
Tetrachloroethene (PCE)	5.79		87577	53.38	0.0534		Y
Toluene	5.33	-0.01	262431	52.83	0.0528		Y
Vinyl Chloride	1.06		94060	57.05	0.0571		Y
cis-1,3-Dichloropropene	5.10		167081	57.12	0.0571		Y
m,p-Xylenes	6.84		390820	107.20	0.107		Y
trans-1,3-Dichloropropene	5.61		141842	52.56	0.0526		Y

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Printed: 12/27/23 14:54

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		1st		01/04/24
Data File:	J:\MS24\DATA\122223\1222F004.D\	Instrument:	K-MS-24 nd	 01/08/24
Acqu Date:	12/22/23 11:29:00	Vial:	3	
Run Type:	LCS	Dilution:	1	
Lab ID:	KQ2322503-03	Raw Units:	ppb	

Prep Amount:	5 g	Dilution:	1
Prep Final Amount:	5.00 mL	Basis Factor:	100.00

Quantitation Report

1st  01/05/24
2nd  01/08/24

Data File:	J:\MS24\DATA\122223\1222F004.D\	Instrument:	K-MS-24
Acqu Date:	12/22/23 11:29:00	Vial:	3
Run Type:	LCS	Dilution:	1
Lab ID:	KQ2322503-03	Raw Units:	ppb

Bottle ID:		Tier:	I	Matrix:	Paperboard
Prod Code:	VOC FP_RPTA	Collect Date:	11/29/23	Receive Date:	12/12/23

Analysis Lot:	828032	Prep Lot:		Report Group:	KQ2322503
Analysis	8260C	Prep Method:			
		Prep Date:			

Title:	Volatile Organic Compounds by GC/MS	Calibration ID:	KC2300633
		Report List ID:	26196

Internal Standard Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Area Criteria
1,4-Dichlorobenzene-d4	8.94		122850	50.00	OK
Chlorobenzene-d5	6.61	-0.01	132941	50.00	OK
Fluorobenzene	3.99		301338	50.00	OK

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
4-Bromofluorobenzene	7.78		112183	45.65	91	61 - 133	Y
Dibromofluoromethane	3.51		73613	46.54	93	59 - 134	Y
Toluene-d8	5.28		311762	47.82	96	77 - 122	Y

Target Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
1,2-Dichloropropane	4.49		110770	54.18	0.0542		Y

Prep Amount: 5 g **Dilution:** 1
Prep Final Amount: 5.00 mL **Basis Factor:** 100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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Quantitation Report

1st 01/04/24
2nd 01/08/24

Data File:	J:\MS24\DATA\122223\1222F004.D\	Instrument:	K-MS-24
Acqu Date:	12/22/23 11:29:00	Vial:	5
Run Type:	LCS	Dilution:	1
Lab ID:	KQ2322502-03	Raw Units:	ppb

Bottle ID:		Tier:	IV	Matrix:	Soil
Prod Code:	VOC FP	Collect Date:	12/20/23	Receive Date:	12/20/23

Analysis Lot:	828030	Prep Lot:		Report Group:	KQ2322502
Analysis	8260C	Prep Method:			
		Prep Date:			

Title:	Volatile Organic Compounds by GC/MS	Calibration ID:	KC2300633
		Report List ID:	20903

Internal Standard Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Area Criteria
Chlorobenzene-d5	6.61	-0.01	132941	50.00	OK
1,4-Dichlorobenzene-d4	8.94		122850	50.00	OK
Fluorobenzene	3.99		301338	50.00	OK

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
4-Bromofluorobenzene	7.78		112183	45.65	91	61 - 133	Y
Dibromofluoromethane	3.51		73613	46.54	93	59 - 134	Y
Toluene-d8	5.28		311762	47.82	96	77 - 122	Y

Target Compounds

Final Conc.Units: ug/Kg

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Acetone	1.96	-0.01	46099	66.84	66.8		Y
Benzene	3.76		403615	52.35	52.4		Y
Bromobenzene	7.92		124462	50.67	50.7		Y
Bromochloromethane	3.33		49825	52.55	52.6		Y
Bromodichloromethane	4.71		131692	56.28	56.3		Y
Bromoform	7.46		62985	55.57	55.6		Y
Bromomethane	1.28	-0.01	37613	47.57	47.6		Y
2-Butanone (MEK)	3.19		19398	85.10	85.1		Y
n-Butylbenzene	9.27		400321	57.41	57.4		Y
sec-Butylbenzene	8.73		506905	55.98	56.0		Y
tert-Butylbenzene	8.51		341767	50.86	50.9		Y
Carbon Disulfide	1.99	-0.01	211956	54.10	54.1		Y
Carbon Tetrachloride	3.57		111404	59.02	59.0		Y
Chlorobenzene	6.64		290307	50.85	50.9		Y
Chloroethane	1.35	-0.01	59437	52.51	52.5		Y

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

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		1st	01/04/24
Data File:	J:\MS24\DATA\122223\1222F004.D\	Instrument:	K-MS-24 nd
Acqu Date:	12/22/23 11:29:00	Vial:	5
Run Type:	LCS	Dilution:	1
Lab ID:	KQ2322502-03	Raw Units:	ppb

Target Compounds

Final Conc.Units: ug/Kg

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Chloroform	3.38		170630	54.22	54.2		Y
Chloromethane	0.99		101730	49.62	49.6		Y
2-Chlorotoluene	8.11		339738	52.28	52.3		Y
4-Chlorotoluene	8.23		357074	51.83	51.8		Y
1,2-Dibromo-3-chloropropane	10.10		16407	46.69	46.7		Y
Dibromochloromethane	6.10	+0.01	101354	57.17	57.2		Y
1,2-Dibromoethane (EDB)	6.21		86488	50.35	50.4		Y
Dibromomethane	4.59		59047	53.21	53.2		Y
1,2-Dichlorobenzene	9.32		218147	51.94	51.9		Y
1,3-Dichlorobenzene	8.86		235686	51.67	51.7		Y
1,4-Dichlorobenzene	8.96		236604	51.25	51.3		Y
Dichlorodifluoromethane	0.86		84204	86.06	86.1		Y
1,1-Dichloroethane	2.72	-0.01	164663	49.48	49.5		Y
1,2-Dichloroethane (EDC)	3.84		133835	53.45	53.5		Y
1,1-Dichloroethene	1.86	-0.01	69380	52.95	53.0		Y
cis-1,2-Dichloroethene	3.15		105870	51.42	51.4		Y
trans-1,2-Dichloroethene	2.39	-0.01	79543	47.78	47.8		Y
1,2-Dichloropropane	4.49		110770	54.18	54.2		Y
1,3-Dichloropropane	5.92	-0.01	161754	51.22	51.2		Y
2,2-Dichloropropane	3.12		131559	55.30	55.3		Y
1,1-Dichloropropene	3.60		128517	57.24	57.2		Y
cis-1,3-Dichloropropene	5.10		167081	57.12	57.1		Y
trans-1,3-Dichloropropene	5.61		141842	52.56	52.6		Y
Ethylbenzene	6.72		154933	52.42	52.4		Y
Hexachlorobutadiene	10.93		81400	51.68	51.7		Y
2-Hexanone	5.99	+0.01	24060	97.33	97.3		Y
Isopropylbenzene	7.59		480910	54.37	54.4		Y
4-Isopropyltoluene	8.87		427691	54.62	54.6		Y
4-Methyl-2-pentanone (MIBK)	5.23		68032	106.11	106		Y
Methylene Chloride	2.24	-0.01	90314	51.12	51.1		Y
Naphthalene	11.05		305112	47.79	47.8		Y
n-Propylbenzene	8.00		573669	54.59	54.6		Y
Styrene	7.26		151977	54.07	54.1		Y
1,1,1,2-Tetrachloroethane	6.73		98062	53.20	53.2		Y
1,1,2,2-Tetrachloroethane	7.98		113786	49.22	49.2		Y
Tetrachloroethene (PCE)	5.79		87577	53.38	53.4		Y
Toluene	5.33	-0.01	262431	52.83	52.8		Y
1,2,3-Trichlorobenzene	11.28		130489	48.49	48.5		Y
1,2,4-Trichlorobenzene	10.82		147358	49.97	50.0		Y
1,1,2-Trichloroethane	5.77		74716	48.68	48.7		Y
1,1,1-Trichloroethane (TCA)	3.48		135262	57.33	57.3		Y

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

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		1st	01/04/24
Data File:	J:\MS24\DATA\122223\1222F004.D\	Instrument:	K-MS-24 nd
Acqu Date:	12/22/23 11:29:00	Vial:	5
Run Type:	LCS	Dilution:	1
Lab ID:	KQ2322502-03	Raw Units:	ppb

<i>Target Compounds</i>		Final Conc.Units: ug/Kg					
Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Trichloroethene (TCE)	4.26		96833	53.12	53.1		Y
Trichlorofluoromethane (CFC 11)	1.50		117484	66.24	66.2		Y
1,2,3-Trichloropropane	8.03		35200	47.12	47.1		Y
1,2,4-Trimethylbenzene	8.57		401642	53.41	53.4		Y
1,3,5-Trimethylbenzene	8.20		393765	51.22	51.2		Y
Vinyl Chloride	1.06		94060	57.05	57.1		Y
o-Xylene	7.23		187824	53.35	53.4		Y
m,p-Xylenes	6.84		390820	107.20	107		Y
Xylenes, Total				160.550	161		Y

Prep Amount:	5 g	Dilution:	1
Prep Final Amount:	5.00 mL	Basis Factor:	100.00

Quantitation Report

1st 01/04/24
2nd 01/08/24

Data File:	J:\MS24\DATA\122223\1222F004.D\	Instrument:	K-MS-24
Acqu Date:	12/22/23 11:29:00	Vial:	5
Run Type:	LCS	Dilution:	1
Lab ID:	KQ2322502-03	Raw Units:	ppb

Bottle ID:		Tier:	IV	Matrix:	Soil
Prod Code:	VOC FP	Collect Date:	12/20/23	Receive Date:	12/20/23

Analysis Lot:	828030	Prep Lot:		Report Group:	KQ2322502
Analysis	8260C	Prep Method:			
		Prep Date:			

Title:	Volatile Organic Compounds by GC/MS	Calibration ID:	KC2300633
		Report List ID:	21451

Internal Standard Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Area Criteria
Chlorobenzene-d5	6.61	-0.01	132941	50.00	OK
1,4-Dichlorobenzene-d4	8.94		122850	50.00	OK
Fluorobenzene	3.99		301338	50.00	OK

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
4-Bromofluorobenzene	7.78		112183	45.65	91	61 - 133	Y
Dibromofluoromethane	3.51		73613	46.54	93	59 - 134	Y
Toluene-d8	5.28		311762	47.82	96	77 - 122	Y

Target Compounds

Final Conc.Units: ug/Kg

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Acrolein	1.85		93887	260.35	260		Y
Acrylonitrile	2.47	-0.01	59712	93.40	93.4		Y
Benzene	3.76		403615	52.35	52.4		Y
Bromodichloromethane	4.71		131692	56.28	56.3		Y
Bromoform	7.46		62985	55.57	55.6		Y
Bromomethane	1.28	-0.01	37613	47.57	47.6		Y
Carbon Tetrachloride	3.57		111404	59.02	59.0		Y
Chlorobenzene	6.64		290307	50.85	50.9		Y
Chloroethane	1.35	-0.01	59437	52.51	52.5		Y
2-Chloroethyl Vinyl Ether	4.99	+0.01	15867	29.17	29.2		Y
Chloroform	3.38		170630	54.22	54.2		Y
Chloromethane	0.99		101730	49.62	49.6		Y
Dibromochloromethane	6.10	+0.01	101354	57.17	57.2		Y
1,2-Dichlorobenzene	9.32		218147	51.94	51.9		Y
1,3-Dichlorobenzene	8.86		235686	51.67	51.7		Y

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

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		1st	01/04/24
Data File:	J:\MS24\DATA\122223\1222F004.D\	Instrument:	K-MS-24 nd
Acqu Date:	12/22/23 11:29:00	Vial:	5
Run Type:	LCS	Dilution:	1
Lab ID:	KQ2322502-03	Raw Units:	ppb

<i>Target Compounds</i>		Final Conc.Units: ug/Kg					
Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
1,4-Dichlorobenzene	8.96		236604	51.25	51.3		Y
1,1-Dichloroethane	2.72	-0.01	164663	49.48	49.5		Y
1,2-Dichloroethane (EDC)	3.84		133835	53.45	53.5		Y
1,1-Dichloroethene	1.86	-0.01	69380	52.95	53.0		Y
trans-1,2-Dichloroethene	2.39	-0.01	79543	47.78	47.8		Y
1,2-Dichloropropane	4.49		110770	54.18	54.2		Y
Ethylbenzene	6.72		154933	52.42	52.4		Y
Methylene Chloride	2.24	-0.01	90314	51.12	51.1		Y
1,1,2,2-Tetrachloroethane	7.98		113786	49.22	49.2		Y
Tetrachloroethene (PCE)	5.79		87577	53.38	53.4		Y
Toluene	5.33	-0.01	262431	52.83	52.8		Y
1,1,2-Trichloroethane	5.77		74716	48.68	48.7		Y
1,1,1-Trichloroethane (TCA)	3.48		135262	57.33	57.3		Y
Trichloroethene (TCE)	4.26		96833	53.12	53.1		Y
Vinyl Chloride	1.06		94060	57.05	57.1		Y
o-Xylene	7.23		187824	53.35	53.4		Y
m,p-Xylenes	6.84		390820	107.20	107		Y

Prep Amount:	5 g	Dilution:	1
Prep Final Amount:	5.00 mL	Basis Factor:	100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report

1st  01/04/24
2nd  01/08/24

Data File:	J:\MS24\DATA\122223\1222F004.D\	Instrument:	K-MS-24
Acqu Date:	12/22/23 11:29:00	Vial:	5
Run Type:	LCS	Dilution:	1
Lab ID:	KQ2322502-03	Raw Units:	ppb
Bottle ID:		Tier:	IV
Prod Code:	VOC FP	Collect Date:	12/20/23
		Matrix:	Soil
		Receive Date:	12/20/23
Analysis Lot:	828030	Prep Lot:	
Analysis	8260C	Prep Method:	
		Prep Date:	
Report Group:	KQ2322502		
Title:	Volatile Organic Compounds by GC/MS		
		Calibration ID:	KC2300633
		Report List ID:	21697

Internal Standard Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Area Criteria
Chlorobenzene-d5	6.61	-0.01	132941	50.00	OK
1,4-Dichlorobenzene-d4	8.94		122850	50.00	OK
Fluorobenzene	3.99		301338	50.00	OK

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
4-Bromofluorobenzene	7.78		112183	45.65	91	61 - 133	Y
Dibromofluoromethane	3.51		73613	46.54	93	59 - 134	Y
Toluene-d8	5.28		311762	47.82	96	77 - 122	Y

Target Compounds

Final Conc.Units: ug/Kg

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Benzene	3.76		403615	52.35	52.4		Y
Toluene	5.33	-0.01	262431	52.83	52.8		Y

Prep Amount: 5 g **Dilution:** 1
Prep Final Amount: 5.00 mL **Basis Factor:** 100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound
D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report

1st 01/04/24
2nd 01/08/24

Data File:	J:\MS24\DATA\122223\1222F004.D\	Instrument:	K-MS-24
Acqu Date:	12/22/23 11:29:00	Vial:	6
Run Type:	LCS	Dilution:	1
Lab ID:	KQ2322502-03	Raw Units:	ppb

Bottle ID:		Tier:	IV	Matrix:	Soil
Prod Code:	VOC Unp	Collect Date:	12/20/23	Receive Date:	12/20/23

Analysis Lot:	828030	Prep Lot:		Report Group:	KQ2322502
Analysis	8260C	Prep Method:			
		Prep Date:			

Title:	Volatile Organic Compounds by GC/MS, Unpreserved	Calibration ID:	KC2300633
		Report List ID:	21747

Internal Standard Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Area Criteria
1,4-Dichlorobenzene-d4	8.94		122850	50.00	OK
Chlorobenzene-d5	6.61	-0.01	132941	50.00	OK
Fluorobenzene	3.99		301338	50.00	OK

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
4-Bromofluorobenzene	7.78		112183	45.65	91	61 - 133	Y
Dibromofluoromethane	3.51		73613	46.54	93	59 - 134	Y
Toluene-d8	5.28		311762	47.82	96	77 - 122	Y

Target Compounds

Final Conc.Units: ug/Kg

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
1,1,1,2-Tetrachloroethane	6.73		98062	53.20	53.2		Y
1,1,1-Trichloroethane (TCA)	3.48		135262	57.33	57.3		Y
1,1,2,2-Tetrachloroethane	7.98		113786	49.22	49.2		Y
1,1,2-Trichloroethane	5.77		74716	48.68	48.7		Y
1,1-Dichloroethane	2.72	-0.01	164663	49.48	49.5		Y
1,1-Dichloroethene	1.86	-0.01	69380	52.95	53.0		Y
1,1-Dichloropropene	3.60		128517	57.24	57.2		Y
1,2,3-Trichlorobenzene	11.28		130489	48.49	48.5		Y
1,2,3-Trichloropropane	8.03		35200	47.12	47.1		Y
1,2,4-Trichlorobenzene	10.82		147358	49.97	50.0		Y
1,2,4-Trimethylbenzene	8.57		401642	53.41	53.4		Y
1,2-Dibromo-3-chloropropane	10.10		16407	46.69	46.7		Y
1,2-Dibromoethane (EDB)	6.21		86488	50.35	50.4		Y
1,2-Dichlorobenzene	9.32		218147	51.94	51.9		Y
1,2-Dichloroethane (EDC)	3.84		133835	53.45	53.5		Y

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Printed: 1/5/24 15:29

\\alprews001\starlims\LIMSReps\QuantValidation.rpt

			1st	01/04/24
Data File:	J:\MS24\DATA\122223\1222F004.D\	Instrument:	K-MS-24 nd	01/08/24
Acqu Date:	12/22/23 11:29:00	Vial:	6	
Run Type:	LCS	Dilution:	1	
Lab ID:	KQ2322502-03	Raw Units:	ppb	

Target Compounds

Final Conc.Units: ug/Kg

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
1,2-Dichloropropane	4.49		110770	54.18	54.2		Y
1,3,5-Trimethylbenzene	8.20		393765	51.22	51.2		Y
1,3-Dichlorobenzene	8.86		235686	51.67	51.7		Y
1,3-Dichloropropane	5.92	-0.01	161754	51.22	51.2		Y
1,4-Dichlorobenzene	8.96		236604	51.25	51.3		Y
2,2-Dichloropropane	3.12		131559	55.30	55.3		Y
2-Butanone (MEK)	3.19		19398	85.10	85.1		Y
2-Chlorotoluene	8.11		339738	52.28	52.3		Y
2-Hexanone	5.99	+0.01	24060	97.33	97.3		Y
4-Chlorotoluene	8.23		357074	51.83	51.8		Y
4-Isopropyltoluene	8.87		427691	54.62	54.6		Y
4-Methyl-2-pentanone (MIBK)	5.23		68032	106.11	106		Y
Acetone	1.96	-0.01	46099	66.84	66.8		Y
Benzene	3.76		403615	52.35	52.4		Y
Bromobenzene	7.92		124462	50.67	50.7		Y
Bromochloromethane	3.33		49825	52.55	52.6		Y
Bromodichloromethane	4.71		131692	56.28	56.3		Y
Bromoform	7.46		62985	55.57	55.6		Y
Bromomethane	1.28	-0.01	37613	47.57	47.6		Y
Carbon Disulfide	1.99	-0.01	211956	54.10	54.1		Y
Carbon Tetrachloride	3.57		111404	59.02	59.0		Y
Chlorobenzene	6.64		290307	50.85	50.9		Y
Chloroethane	1.35	-0.01	59437	52.51	52.5		Y
Chloroform	3.38		170630	54.22	54.2		Y
Chloromethane	0.99		101730	49.62	49.6		Y
Dibromochloromethane	6.10	+0.01	101354	57.17	57.2		Y
Dibromomethane	4.59		59047	53.21	53.2		Y
Dichlorodifluoromethane	0.86		84204	86.06	86.1		Y
Ethylbenzene	6.72		154933	52.42	52.4		Y
Hexachlorobutadiene	10.93		81400	51.68	51.7		Y
Isopropylbenzene	7.59		480910	54.37	54.4		Y
Methylene Chloride	2.24	-0.01	90314	51.12	51.1		Y
Naphthalene	11.05		305112	47.79	47.8		Y
Styrene	7.26		151977	54.07	54.1		Y
Tetrachloroethene (PCE)	5.79		87577	53.38	53.4		Y
Toluene	5.33	-0.01	262431	52.83	52.8		Y
Trichloroethene (TCE)	4.26		96833	53.12	53.1		Y
Trichlorofluoromethane	1.50		117484	66.24	66.2		Y
Vinyl Chloride	1.06		94060	57.05	57.1		Y
cis-1,2-Dichloroethene	3.15		105870	51.42	51.4		Y
cis-1,3-Dichloropropene	5.10		167081	57.12	57.1		Y

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Printed: 1/5/24 15:29

\\alprews001\starlims\LIMSReps\QuantValidation.rpt

		1st	01/04/24
Data File:	J:\MS24\DATA\122223\1222F004.D\	Instrument:	K-MS-24 nd
Acqu Date:	12/22/23 11:29:00	Vial:	6
Run Type:	LCS	Dilution:	1
Lab ID:	KQ2322502-03	Raw Units:	ppb

Target Compounds		Final Conc.Units: ug/Kg					
Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
m,p-Xylenes	6.84		390820	107.20	107		Y
n-Butylbenzene	9.27		400321	57.41	57.4		Y
n-Propylbenzene	8.00		573669	54.59	54.6		Y
o-Xylene	7.23		187824	53.35	53.4		Y
sec-Butylbenzene	8.73		506905	55.98	56.0		Y
tert-Butylbenzene	8.51		341767	50.86	50.9		Y
trans-1,2-Dichloroethene	2.39	-0.01	79543	47.78	47.8		Y
trans-1,3-Dichloropropene	5.61		141842	52.56	52.6		Y

Prep Amount:	5 g	Dilution:	1
Prep Final Amount:	5.00 mL	Basis Factor:	100.00

Data File : J:\MS24\DATA\122223\1222F004.D

Acq On : 22 Dec 2023 11:29 am

Sample : LCS

Misc :

Vial: 4

Operator: EW/OT

Inst : MS24

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Dec 22 12:02:59 2023

Quant Results File: 103023_MS24_FULL_SOIL.RES

Quant Method : J:\MS24\M...\103023_MS24_FULL_SOIL.M (RTE Integrator)

Title : VOA MS24 EPA Method 8260B

Last Update : Wed Nov 01 09:13:30 2023

Response via : Initial Calibration

DataAcq Meth : 8260.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	3.99	96	301338	50.00	PPB	0.00
59) Chlorobenzene-d5	6.61	82	132941	50.00	PPB	0.00
78) 1,4-Dichlorobenzene-d4	8.94	152	122850	50.00	PPB	0.00

System Monitoring Compounds

39) Dibromofluoromethane	3.51	113	73613	46.54	PPB	0.00
Spiked Amount 50.000			Recovery	=	93.08%	
43) 1,2-Dichloroethane-d4	3.78	65	87487	44.82	PPB	0.00
Spiked Amount 50.000			Recovery	=	89.64%	
57) Toluene-d8	5.28	98	311762	47.82	PPB	0.00
Spiked Amount 50.000			Recovery	=	95.64%	
77) 4-Bromofluorobenzene	7.78	95	112183	45.65	PPB	0.00
Spiked Amount 50.000			Recovery	=	91.30%	

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	0.86	85	84204	86.06	PPB	96
3) Chloromethane	0.99	50	101730	49.62	PPB	98
4) Vinyl Chloride	1.06	62	94060	57.05	PPB	95
5) Bromomethane	1.28	96	37613	47.57	PPB	98
6) Chloroethane	1.35	64	59437	52.51	PPB	97
7) Dichlorofluoromethane	1.51	67	117680	50.47	PPB	98
8) Trichlorofluoromethane	1.50	101	117484	66.24	PPB	99
9) Acrolein	1.85	56	93887	260.35	PPB	91
10) Trichlorotrifluoroethane	1.84	151	48568	69.27	PPB	98
11) 1,1-Dichloroethene	1.86	96	69380	52.95	PPB	99
12) Acetone	1.96	43	46099	66.84	PPB	94
13) Iodomethane	1.98	142	200271	92.17	PPB	99
14) Carbon Disulfide	1.99	76	211956	54.10	PPB	99
15) 3-Chloro-1-Propane	2.14	76	40777	52.18	PPB	98
16) Methyl Acetate	2.17	43	54051	38.63	PPB	96
17) Acetonitrile	2.21	40	106891	858.70	PPB	98
18) Methylene Chloride	2.24	84	90314	51.12	PPB	96
19) tert-Butyl Alcohol	2.34	59	44590	231.46	PPB	96
20) Acrylonitrile	2.47	53	59712	93.40	PPB	99
21) Methyl tert-Butyl Ether	2.39	73	485798	101.72	PPB	98
22) trans-1,2-Dichloroethene	2.39	96	79543	47.78	PPB	97
23) Hexane	2.52	57	124833	70.45	PPB	95
24) Diisopropyl Ether	2.72	45	313218	49.47	PPB	99
25) 1,1-Dichloroethane	2.72	63	164663	49.48	PPB	97
26) Vinyl Acetate	2.76	86	18997	51.44	PPB	# 93
27) Chloroprene	2.76	53	271557	114.52	PPB	99
28) tert-Butyl Ethyl Ether	2.98	59	292620	52.21	PPB	99
29) 2,2-Dichloropropane	3.12	77	131559	55.30	PPB	98
30) cis-1,2-Dichloroethene	3.15	96	105870	51.42	PPB	96
31) 2-Butanone	3.19	72	19398	85.10	PPB	95
32) Propionitrile	3.29	54	26064	95.23	PPB	96
33) Ethyl Acetate	3.15	61	166310	54.41	PPB	100
34) Methacrylonitrile	3.37	67	77275	99.00	PPB	98
35) Bromochloromethane	3.33	128	49825	52.55	PPB	97
36) Chloroform	3.38	83	170630	54.22	PPB	98
37) Cyclohexane	3.46	56	106906	44.58	PPB	97
38) 1,1,1-Trichloroethane	3.48	97	135262	57.33	PPB	99
40) Carbon Tetrachloride	3.57	117	111404	59.02	PPB	96
41) 1,1-Dichloropropene	3.60	75	128517	57.24	PPB	99
42) Isobutyl Alcohol	3.76	43	90917	958.42	PPB	96
44) Benzene	3.76	78	403615	52.35	PPB	99
45) 1,2-Dichloroethane	3.84	62	133835	53.45	PPB	99
46) tert-Amyl Methyl Ether	3.83	55	75098	52.95	PPB	93

(#)=qualifier out of range (m)=manual integration

1222F004.D 103023_MS24_FULL_SOIL.M

Wed Dec 27 10:55:56 2023

KELSO

Page 1

Data File : J:\MS24\DATA\122223\1222F004.D

Acq On : 22 Dec 2023 11:29 am

Sample : LCS

Misc :

Vial: 4

Operator: EW/OT

Inst : MS24

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Dec 22 12:02:59 2023

Quant Results File: 103023_MS24_FULL_SOIL.RES

Quant Method : J:\MS24\M...\103023_MS24_FULL_SOIL.M (RTE Integrator)

Title : VOA MS24 EPA Method 8260B

Last Update : Wed Nov 01 09:13:30 2023

Response via : Initial Calibration

DataAcq Meth : 8260.M

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
47) Trichloroethene	4.26	95	96833	53.12	PPB	99
48) Methylcyclohexane	4.35	83	133843	59.18	PPB	98
49) 1,2-Dichloropropane	4.49	63	110770	54.18	PPB	98
50) Dibromomethane	4.59	93	59047	53.21	PPB	92
51) 1,4-Dioxane	4.59	88	18820	959.09	PPB	96
52) Bromodichloromethane	4.71	83	131692	56.28	PPB	98
53) 2-Nitropropane	4.98	41	69731	160.50	PPB	93
54) 2-Chloroethyl Vinyl Ether	4.99	63	15867	29.17	PPB	90
55) cis-1,3-Dichloropropene	5.10	75	167081	57.12	PPB	98
56) 4-Methyl-2-pentanone (MIBK)	5.23	58	68032	106.11	PPB	98
58) Toluene	5.33	92	262431	52.83	PPB	100
60) trans-1,3-Dichloropropene	5.61	75	141842	52.56	PPB	97
61) 1,1,2-Trichloroethane	5.77	83	74716	48.68	PPB	95
62) Tetrachloroethene	5.79	164	87577	53.38	PPB	99
63) 2-Hexanone	5.99	57	24060	97.33	PPB	# 81
64) 1,3-Dichloropropane	5.92	76	161754	51.22	PPB	96
65) Dibromochloromethane	6.10	129	101354	57.17	PPB	97
66) 1,2-Dibromoethane (EDB)	6.21	107	86488	50.35	PPB	98
67) 1-Chlorohexane	6.61	91	129424	56.76	PPB	98
68) Chlorobenzene	6.64	112	290307	50.85	PPB	97
69) Ethylbenzene	6.72	106	154933	52.42	PPB	98
70) 1,1,1,2-Tetrachloroethane	6.73	131	98062	53.20	PPB	96
71) m,p-Xylenes	6.84	106	390820	107.20	PPB	99
72) o-Xylene	7.23	106	187824	53.35	PPB	99
73) Styrene	7.26	103	151977m	54.07	PPB	
74) Bromoform	7.46	173	62985	55.57	PPB	94
75) Isopropylbenzene	7.59	105	480910	54.37	PPB	99
76) cis-1,4-Dichloro-2-butene	7.75	89	31670	98.49	PPB	90
79) 1,1,2,2-Tetrachloroethane	7.98	83	113786	49.22	PPB	97
80) trans-1,4-Dichloro-2-buten	8.05	53	33542	50.22	PPB	94
81) Bromobenzene	7.92	156	124462	50.67	PPB	96
82) n-Propylbenzene	8.00	91	573669	54.59	PPB	99
83) 1,2,3-Trichloropropane	8.03	110	35200	47.12	PPB	96
84) 2-Chlorotoluene	8.11	91	339738	52.28	PPB	98
85) 1,3,5-Trimethylbenzene	8.20	105	393765	51.22	PPB	97
86) 4-Chlorotoluene	8.23	91	357074	51.83	PPB	98
87) tert-Butylbenzene	8.51	119	341767	50.86	PPB	100
88) 1,2,4-Trimethylbenzene	8.57	105	401642	53.41	PPB	97
89) sec-Butylbenzene	8.73	105	506905	55.98	PPB	99
90) p-Isopropyltoluene	8.87	119	427691	54.62	PPB	100
91) 1,3-Dichlorobenzene	8.86	146	235686	51.67	PPB	98
92) 1,4-Dichlorobenzene	8.96	146	236604	51.25	PPB	94
93) n-Butylbenzene	9.27	91	400321	57.41	PPB	99
94) 1,2-Dichlorobenzene	9.32	146	218147	51.94	PPB	99
95) 1,2-Dibromo-3-chloropropan	10.10	155	16407	46.69	PPB	96
96) 1,3,5-Trichlorobenzene	10.23	180	166627	53.52	PPB	99
97) 1,2,4-Trichlorobenzene	10.82	180	147358	49.97	PPB	99
98) Hexachlorobutadiene	10.93	225	81400	51.68	PPB	96
99) Naphthalene	11.05	128	305112	47.79	PPB	99
100) 1,2,3-Trichlorobenzene	11.28	180	130489	48.49	PPB	96

(#) = qualifier out of range (m) = manual integration

1222F004.D 103023_MS24_FULL_SOIL.M

Wed Dec 27 10:55:56 2023

KELSO

Page 2

```

Data File : J:\MS24\DATA\1222223\1222F004.D
Acq On    : 22 Dec 2023  11:29 am
Sample    : LCS
Misc      :
Integratn :
Params: rfejnt.n

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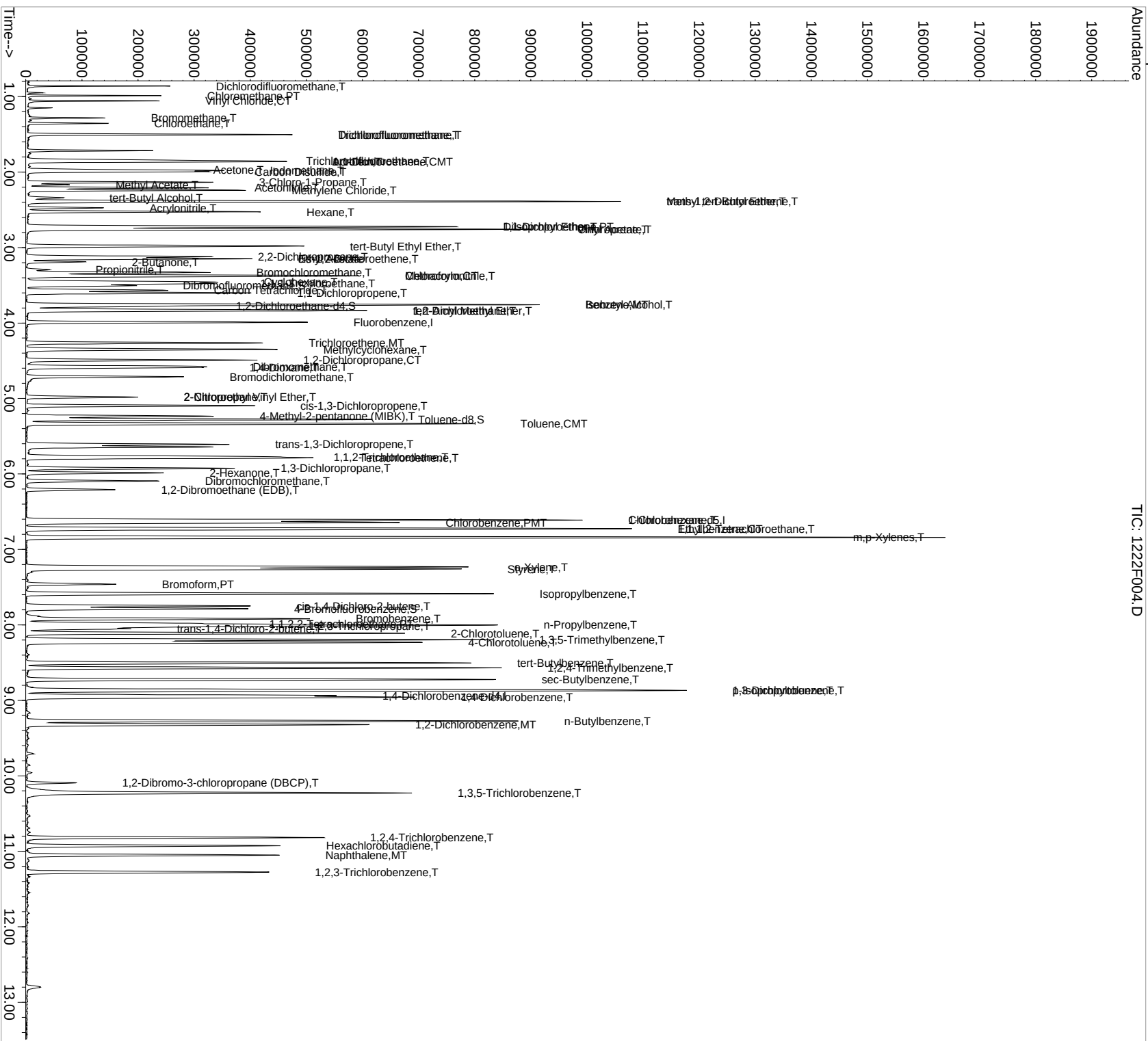
quant Results File: 103023_MS24_FULL_S01L.RES

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Method : J:\MS24\METHODS\2010\103023_MS24_FULL_SOIL.M (RTE Integrator)
Title : VQA MS24 EPA Method 8260B
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Last update : Wed Nov 01 09:13:30 2023
Response via : Initial Calibration

quant Results File: 103023_MS24_FULL_S01L.RES

TIC: 1222F004.D



Data File : J:\MS24\DATA\122223\1222F004.D

Acq On : 22 Dec 2023 11:29 am

Sample : LCS

Misc :

MS Integration Params: rteint.p

Quant Time: Dec 22 12:02 2023

Vial: 4

Operator: EW/OT

Inst : MS24

Multiplr: 1.00

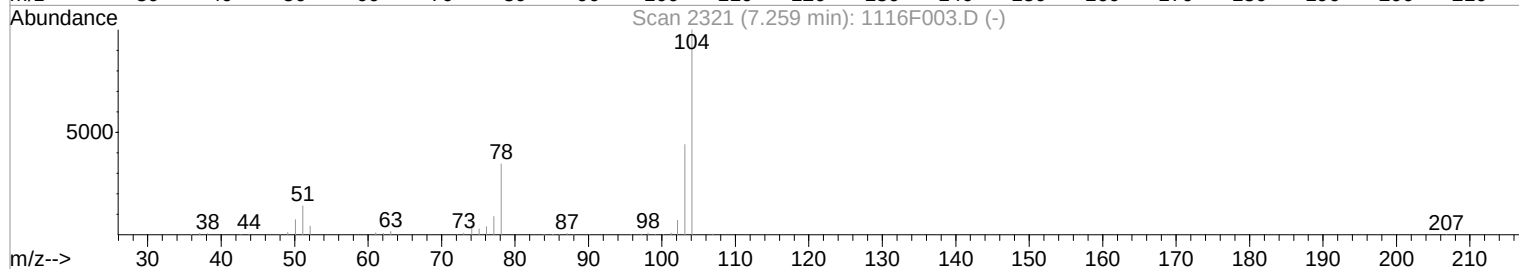
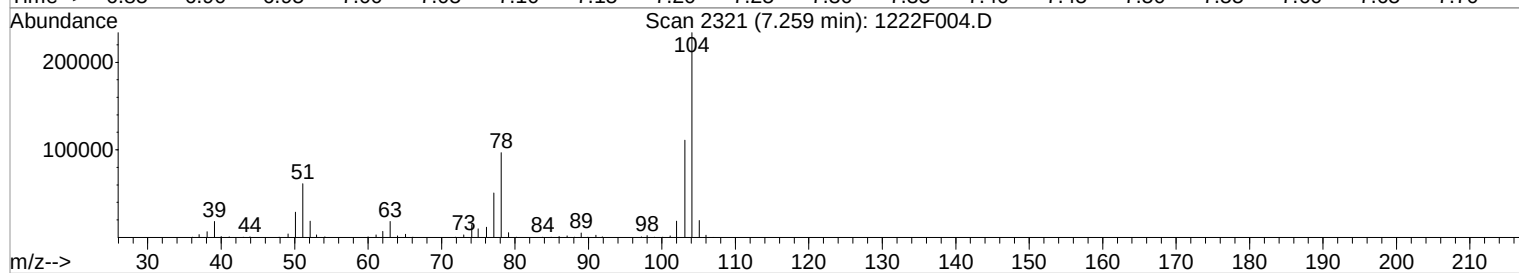
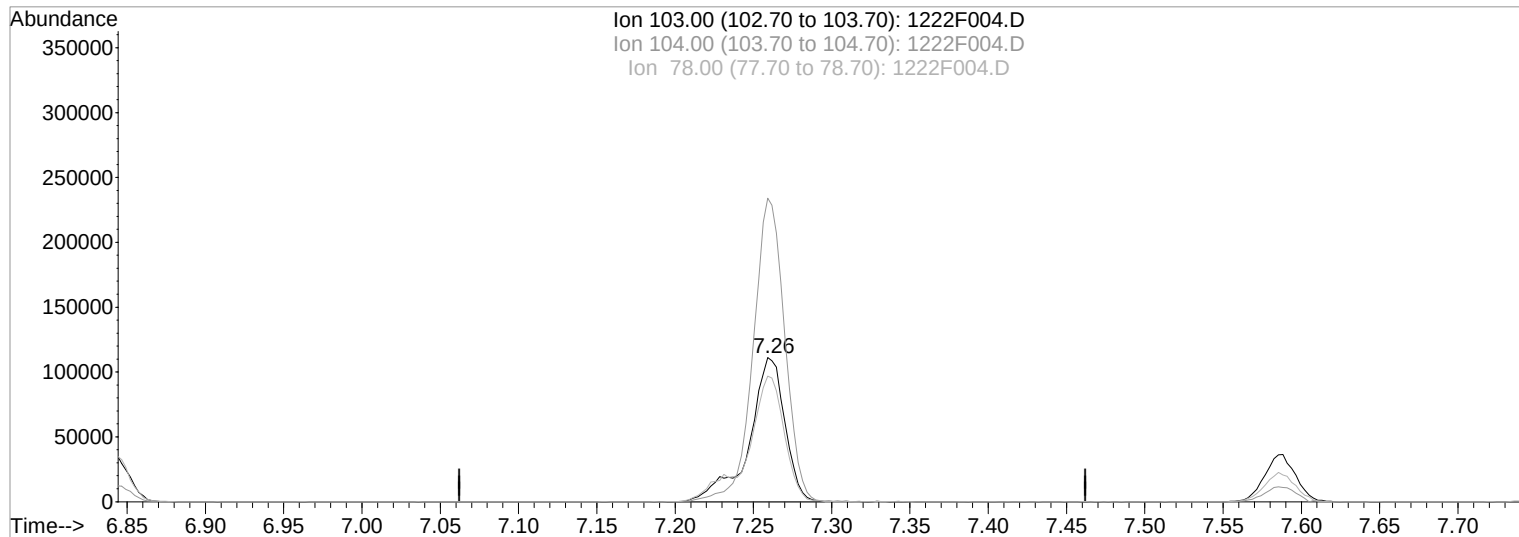
Quant Results File: temp.res

Method : J:\MS24\METHODS\2010\103023_MS24_FULL_SOIL.M (RTE Integrator)

Title : VOA MS24 EPA Method 8260B

Last Update : Wed Nov 01 09:13:30 2023

Response via : Multiple Level Calibration



TIC: 1222F004.D

(73) Styrene (T)

Manual Integration:

7.26min 62.68PPB

Before

response 176193

Ion	Exp%	Act%
-----	------	------

12/26/23

103.00	100	100
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104.00	210.30	210.58
--------	--------	--------

78.00	84.80	87.11
-------	-------	-------

0.00	0.00	0.00
------	------	------

Quantitation Report (Qedit)

1st 01/04/24

2nd 01/08/24

Data File : J:\MS24\DATA\122223\1222F004.D

Acq On : 22 Dec 2023 11:29 am

Sample : LCS

Misc :

MS Integration Params: rteint.p

Quant Time: Dec 26 15:20 2023

Vial: 4

Operator: EW/OT

Inst : MS24

Multiplr: 1.00

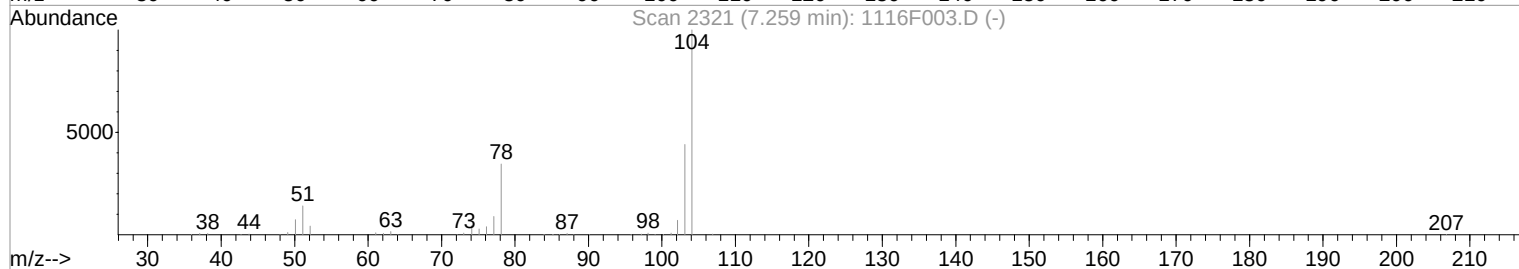
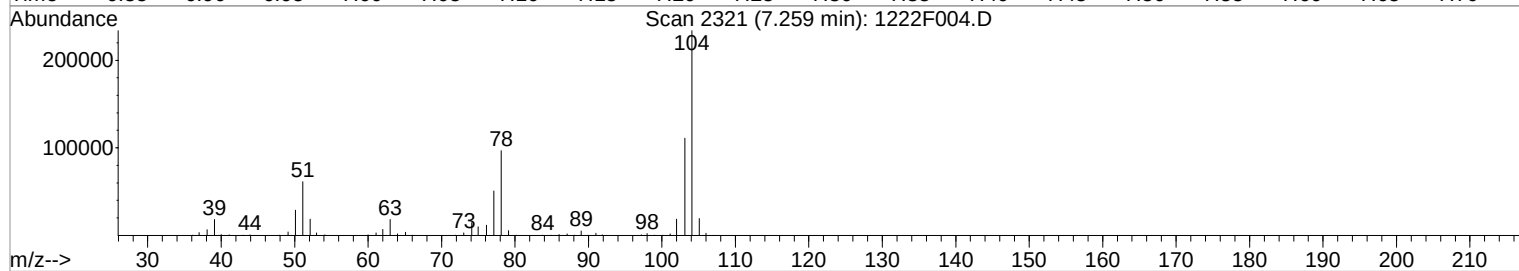
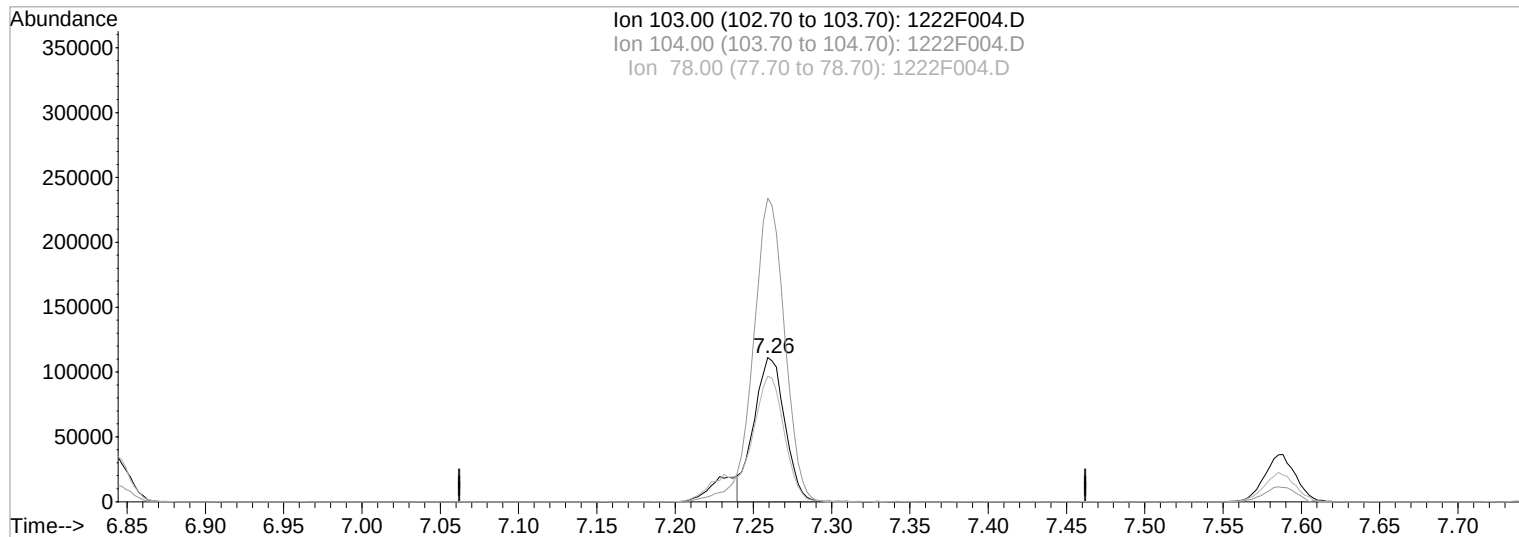
Quant Results File: temp.res

Method : J:\MS24\METHODS\2010\103023_MS24_FULL_SOIL.M (RTE Integrator)

Title : VOA MS24 EPA Method 8260B

Last Update : Wed Nov 01 09:13:30 2023

Response via : Multiple Level Calibration



TIC: 1222F004.D

(73) Styrene (T)

Manual Integration:

7.26min 54.07PPB m

After

response 151977

Shoulder

Ion	Exp%	Act%
-----	------	------

12/26/23

103.00	100	100
--------	-----	-----

104.00	210.30	210.58
--------	--------	--------

78.00	84.80	87.21
-------	-------	-------

0.00	0.00	0.00
------	------	------

Validation Report

1st  01/04/24
2nd  01/08/24

Data File: J:\MS24\DATA\122223\1222F005.D\
Lab ID: KQ2322503-04
RunType: DLCS
Matrix: Paperboard

Date Acquired: 12/22/23 11:50:00
Batch ID: 828032
Analysis Method: 8260C/VOC FP_RPTA

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery	X	
Internal Standards	X	
Surrogates	X	
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	

Primary Review: _____

Secondary Review: _____

Validation Report

1st  01/04/24
2nd  01/08/24

Data File: J:\MS24\DATA\122223\1222F005.D\
Lab ID: KQ2322502-04
RunType: DLCS
Matrix: Soil

Date Acquired: 12/22/23 11:50:00
Batch ID: 828030
Analysis Method: 8260C/VOC FP

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery	X	
Internal Standards	X	
Surrogates	X	
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	

Primary Review: _____

Secondary Review: _____

Validation Report

1st 01/04/24
2nd 01/08/24

Data File: J:\MS24\DATA\122223\1222F005.D\
Lab ID: KQ2322502-04
RunType: DLCS
Matrix: Soil

Date Acquired: 12/22/23 11:50:00
Batch ID: 828030
Analysis Method: 8260C/VOC Unp

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Continuing Calibration Recovery		X
Internal Standards	X	
Surrogates	X	
Std MRL Unsupported by ICAL	X	
Above Highest ICAL Level	X	

Analyte Exceptions

Exception Categories	Analyte Name	Result	Low Limit	High Limit	Corrective Action
Continuing Calibration Recovery	Acetone	-28		20	CCVOK
	Dichlorodifluoromethane	72		20	High Bias
	Trichlorofluoromethane	37		20	

Primary Review: _____

Secondary Review: _____

Quantitation Report

1st 01/04/24
2nd 01/08/24

Data File:	J:\MS24\DATA\122223\1222F005.D\	Instrument:	K-MS-24
Acqu Date:	12/22/23 11:50:00	Vial:	4
Run Type:	DLCS	Dilution:	1
Lab ID:	KQ2322503-04	Raw Units:	ppb

Bottle ID:		Tier:	I	Matrix:	Paperboard
Prod Code:	VOC FP_RPTA	Collect Date:	11/29/23	Receive Date:	12/12/23

Analysis Lot:	828032	Prep Lot:		Report Group:	KQ2322503
Analysis	8260C	Prep Method:			
		Prep Date:			

Title:	Volatile Organic Compounds by GC/MS	Calibration ID:	KC2300633
		Report List ID:	22951

Internal Standard Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Area Criteria
1,4-Dichlorobenzene-d4	8.94		122057	50.00	OK
Chlorobenzene-d5	6.62		129775	50.00	OK
Fluorobenzene	3.99		291375	50.00	OK

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
4-Bromofluorobenzene	7.78		112582	46.92	94	61 - 133	Y
Dibromofluoromethane	3.51		73162	47.83	96	59 - 134	Y
Toluene-d8	5.28		304673	48.33	97	77 - 122	Y

Target Compounds

Final Conc.Units: mg/Kg

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
1,1-Dichloroethene (1,1-DCE)	1.87		55029	43.43	0.0434		Y
1,2-Dibromo-3-chloropropane (DBCP)	10.09	-0.01	16273	46.61	0.0466		Y
1,2-Dibromoethane	6.21		76288	45.49	0.0455		Y
1,4-Dichlorobenzene	8.96		197864	43.14	0.0431		Y
Benzene	3.76		336080	45.08	0.0451		Y
Chloroform	3.38		142970	46.99	0.0470		Y
Dichloromethane	2.25		76059	44.32	0.0443		Y
Styrene	7.26		129326	47.13	0.0471		Y
Tetrachloroethene (PCE)	5.79		71291	44.51	0.0445		Y
Toluene	5.34		214686	44.70	0.0447		Y
Vinyl Chloride	1.06		75332	47.25	0.0473		Y
cis-1,3-Dichloropropene	5.10		140799	49.79	0.0498		Y
m,p-Xylenes	6.84		318825	89.59	0.0896		Y
trans-1,3-Dichloropropene	5.61		121836	46.25	0.0463		Y

		1st		01/04/24
Data File:	J:\MS24\DATA\122223\1222F005.D\	Instrument:	K-MS-24 nd	 01/08/24
Acqu Date:	12/22/23 11:50:00	Vial:	4	
Run Type:	DLCS	Dilution:	1	
Lab ID:	KQ2322503-04	Raw Units:	ppb	

Prep Amount:	5 g	Dilution:	1
Prep Final Amount:	5.00 mL	Basis Factor:	100.00

Quantitation Report

1st  01/05/24
2nd  01/08/24

Data File:	J:\MS24\DATA\122223\1222F005.D\	Instrument:	K-MS-24
Acqu Date:	12/22/23 11:50:00	Vial:	4
Run Type:	DLCS	Dilution:	1
Lab ID:	KQ2322503-04	Raw Units:	ppb

Bottle ID:		Tier:	I	Matrix:	Paperboard
Prod Code:	VOC FP_RPTA	Collect Date:	11/29/23	Receive Date:	12/12/23

Analysis Lot:	828032	Prep Lot:		Report Group:	KQ2322503
Analysis	8260C	Prep Method:			
		Prep Date:			

Title:	Volatile Organic Compounds by GC/MS	Calibration ID:	KC2300633
		Report List ID:	26196

Internal Standard Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Area Criteria
1,4-Dichlorobenzene-d4	8.94		122057	50.00	OK
Chlorobenzene-d5	6.62		129775	50.00	OK
Fluorobenzene	3.99		291375	50.00	OK

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
4-Bromofluorobenzene	7.78		112582	46.92	94	61 - 133	Y
Dibromofluoromethane	3.51		73162	47.83	96	59 - 134	Y
Toluene-d8	5.28		304673	48.33	97	77 - 122	Y

Target Compounds

Final Conc.Units: mg/Kg						
Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q Rpt?
1,2-Dichloropropane	4.50	+0.01	93080	47.09	0.0471	Y

Prep Amount: 5 g **Dilution:** 1
Prep Final Amount: 5.00 mL **Basis Factor:** 100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 1/5/24 15:39

\\alprews001\starlims\LIMSReps\QuantValidation.rpt

Quantitation Report

1st  01/04/24
2nd  01/08/24

Data File:	J:\MS24\DATA\122223\1222F005.D\	Instrument:	K-MS-24
Acqu Date:	12/22/23 11:50:00	Vial:	7
Run Type:	DLCS	Dilution:	1
Lab ID:	KQ2322502-04	Raw Units:	ppb

Bottle ID:		Tier:	IV	Matrix:	Soil
Prod Code:	VOC FP	Collect Date:	12/20/23	Receive Date:	12/20/23

Analysis Lot:	828030	Prep Lot:		Report Group:	KQ2322502
Analysis	8260C	Prep Method:			
		Prep Date:			

Title:	Volatile Organic Compounds by GC/MS	Calibration ID:	KC2300633
		Report List ID:	20903

Internal Standard Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Area Criteria
Chlorobenzene-d5	6.62		129775	50.00	OK
1,4-Dichlorobenzene-d4	8.94		122057	50.00	OK
Fluorobenzene	3.99		291375	50.00	OK

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
4-Bromofluorobenzene	7.78		112582	46.92	94	61 - 133	Y
Dibromofluoromethane	3.51		73162	47.83	96	59 - 134	Y
Toluene-d8	5.28		304673	48.33	97	77 - 122	Y

Target Compounds

Final Conc.Units: ug/Kg

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Acetone	1.97		44244	66.29	66.3		Y
Benzene	3.76		336080	45.08	45.1		Y
Bromobenzene	7.92		105497	43.23	43.2		Y
Bromochloromethane	3.33		43228	47.15	47.2		Y
Bromodichloromethane	4.71		109699	48.48	48.5		Y
Bromoform	7.46		54632	49.37	49.4		Y
Bromomethane	1.28	-0.01	32987	42.90	42.9		Y
2-Butanone (MEK)	3.19		18334	83.18	83.2		Y
n-Butylbenzene	9.27		320295	46.24	46.2		Y
sec-Butylbenzene	8.73		411264	45.71	45.7		Y
tert-Butylbenzene	8.51		283702	42.50	42.5		Y
Carbon Disulfide	2.00		169919	44.85	44.9		Y
Carbon Tetrachloride	3.57		89543	49.06	49.1		Y
Chlorobenzene	6.64		242180	43.45	43.5		Y
Chloroethane	1.36		48521	44.34	44.3		Y

			1st	01/04/24
Data File:	J:\MS24\DATA\122223\1222F005.D\	Instrument:	K-MS-24 nd	01/08/24
Acqu Date:	12/22/23 11:50:00	Vial:	7	
Run Type:	DLCS	Dilution:	1	
Lab ID:	KQ2322502-04	Raw Units:	ppb	

Target Compounds

Final Conc.Units: ug/Kg

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Chloroform	3.38		142970	46.99	47.0		Y
Chloromethane	0.99		83691	42.22	42.2		Y
2-Chlorotoluene	8.11		280279	43.41	43.4		Y
4-Chlorotoluene	8.23		298005	43.53	43.5		Y
1,2-Dibromo-3-chloropropane	10.09	-0.01	16273	46.61	46.6		Y
Dibromochloromethane	6.10	+0.01	87245	50.41	50.4		Y
1,2-Dibromoethane (EDB)	6.21		76288	45.49	45.5		Y
Dibromomethane	4.59		52086	48.54	48.5		Y
1,2-Dichlorobenzene	9.32		190704	45.70	45.7		Y
1,3-Dichlorobenzene	8.86		196180	43.28	43.3		Y
1,4-Dichlorobenzene	8.96		197864	43.14	43.1		Y
Dichlorodifluoromethane	0.86		65675	69.42	69.4		Y
1,1-Dichloroethane	2.73		144092	44.78	44.8		Y
1,2-Dichloroethane (EDC)	3.84		116677	48.19	48.2		Y
1,1-Dichloroethene	1.87		55029	43.43	43.4		Y
cis-1,2-Dichloroethene	3.15		87624	44.01	44.0		Y
trans-1,2-Dichloroethene	2.40		65372	40.61	40.6		Y
1,2-Dichloropropane	4.50	+0.01	93080	47.09	47.1		Y
1,3-Dichloropropane	5.93		140432	45.55	45.6		Y
2,2-Dichloropropane	3.12		105839	46.01	46.0		Y
1,1-Dichloropropene	3.60		105164	48.44	48.4		Y
cis-1,3-Dichloropropene	5.10		140799	49.79	49.8		Y
trans-1,3-Dichloropropene	5.61		121836	46.25	46.3		Y
Ethylbenzene	6.72		127154	44.07	44.1		Y
Hexachlorobutadiene	10.93		67815	43.33	43.3		Y
2-Hexanone	5.98		21547	89.29	89.3		Y
Isopropylbenzene	7.59		390056	45.18	45.2		Y
4-Isopropyltoluene	8.87		347431	44.66	44.7		Y
4-Methyl-2-pentanone (MIBK)	5.24	+0.01	64626	104.24	104		Y
Methylene Chloride	2.25		76059	44.32	44.3		Y
Naphthalene	11.05		278642	43.93	43.9		Y
n-Propylbenzene	8.00		467162	44.74	44.7		Y
Styrene	7.26		129326	47.13	47.1		Y
1,1,1,2-Tetrachloroethane	6.73		83484	46.39	46.4		Y
1,1,2,2-Tetrachloroethane	7.98		102366	44.56	44.6		Y
Tetrachloroethene (PCE)	5.79		71291	44.51	44.5		Y
Toluene	5.34		214686	44.70	44.7		Y
1,2,3-Trichlorobenzene	11.28		114036	42.66	42.7		Y
1,2,4-Trichlorobenzene	10.82		126561	43.19	43.2		Y
1,1,2-Trichloroethane	5.77		65577	43.76	43.8		Y
1,1,1-Trichloroethane (TCA)	3.48		109382	47.95	48.0		Y

		1st	01/04/24
Data File:	J:\MS24\DATA\122223\1222F005.D\	Instrument:	K-MS-24 nd
Acqu Date:	12/22/23 11:50:00	Vial:	7
Run Type:	DLCS	Dilution:	1
Lab ID:	KQ2322502-04	Raw Units:	ppb

<i>Target Compounds</i>		Final Conc.Units: ug/Kg					
Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Trichloroethene (TCE)	4.26		79977	45.37	45.4		Y
Trichlorofluoromethane (CFC 11)	1.50		96874	56.49	56.5		Y
1,2,3-Trichloropropane	8.03		31477	42.41	42.4		Y
1,2,4-Trimethylbenzene	8.57		335164	44.86	44.9		Y
1,3,5-Trimethylbenzene	8.20		327287	42.85	42.9		Y
Vinyl Chloride	1.06		75332	47.25	47.3		Y
o-Xylene	7.23		157409	45.80	45.8		Y
m,p-Xylenes	6.84		318825	89.59	89.6		Y
Xylenes, Total				135.390	135		Y

Prep Amount:	5 g	Dilution:	1
Prep Final Amount:	5.00 mL	Basis Factor:	100.00

Quantitation Report

1st  01/04/24
2nd  01/08/24

Data File:	J:\MS24\DATA\122223\1222F005.D\	Instrument:	K-MS-24
Acqu Date:	12/22/23 11:50:00	Vial:	7
Run Type:	DLCS	Dilution:	1
Lab ID:	KQ2322502-04	Raw Units:	ppb

Bottle ID:		Tier:	IV	Matrix:	Soil
Prod Code:	VOC FP	Collect Date:	12/20/23	Receive Date:	12/20/23

Analysis Lot:	828030	Prep Lot:		Report Group:	KQ2322502
Analysis	8260C	Prep Method:			
		Prep Date:			

Title:	Volatile Organic Compounds by GC/MS	Calibration ID:	KC2300633
		Report List ID:	21451

Internal Standard Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Area Criteria
Chlorobenzene-d5	6.62		129775	50.00	OK
1,4-Dichlorobenzene-d4	8.94		122057	50.00	OK
Fluorobenzene	3.99		291375	50.00	OK

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
4-Bromofluorobenzene	7.78		112582	46.92	94	61 - 133	Y
Dibromofluoromethane	3.51		73162	47.83	96	59 - 134	Y
Toluene-d8	5.28		304673	48.33	97	77 - 122	Y

Target Compounds

Final Conc.Units: ug/Kg

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Acrolein	1.86	+0.01	86783	248.87	249		Y
Acrylonitrile	2.48		57443	92.92	92.9		Y
Benzene	3.76		336080	45.08	45.1		Y
Bromodichloromethane	4.71		109699	48.48	48.5		Y
Bromoform	7.46		54632	49.37	49.4		Y
Bromomethane	1.28	-0.01	32987	42.90	42.9		Y
Carbon Tetrachloride	3.57		89543	49.06	49.1		Y
Chlorobenzene	6.64		242180	43.45	43.5		Y
Chloroethane	1.36		48521	44.34	44.3		Y
2-Chloroethyl Vinyl Ether	4.99	+0.01	6668	12.68	12.7		Y
Chloroform	3.38		142970	46.99	47.0		Y
Chloromethane	0.99		83691	42.22	42.2		Y
Dibromochloromethane	6.10	+0.01	87245	50.41	50.4		Y
1,2-Dichlorobenzene	9.32		190704	45.70	45.7		Y
1,3-Dichlorobenzene	8.86		196180	43.28	43.3		Y

		1st	01/04/24
Data File:	J:\MS24\DATA\122223\1222F005.D\	Instrument:	K-MS-24nd
Acqu Date:	12/22/23 11:50:00	Vial:	7
Run Type:	DLCS	Dilution:	1
Lab ID:	KQ2322502-04	Raw Units:	ppb

Target Compounds		Final Conc.Units: ug/Kg					
Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
1,4-Dichlorobenzene	8.96		197864	43.14	43.1		Y
1,1-Dichloroethane	2.73		144092	44.78	44.8		Y
1,2-Dichloroethane (EDC)	3.84		116677	48.19	48.2		Y
1,1-Dichloroethene	1.87		55029	43.43	43.4		Y
trans-1,2-Dichloroethene	2.40		65372	40.61	40.6		Y
1,2-Dichloropropane	4.50	+0.01	93080	47.09	47.1		Y
Ethylbenzene	6.72		127154	44.07	44.1		Y
Methylene Chloride	2.25		76059	44.32	44.3		Y
1,1,2,2-Tetrachloroethane	7.98		102366	44.56	44.6		Y
Tetrachloroethene (PCE)	5.79		71291	44.51	44.5		Y
Toluene	5.34		214686	44.70	44.7		Y
1,1,2-Trichloroethane	5.77		65577	43.76	43.8		Y
1,1,1-Trichloroethane (TCA)	3.48		109382	47.95	48.0		Y
Trichloroethene (TCE)	4.26		79977	45.37	45.4		Y
Vinyl Chloride	1.06		75332	47.25	47.3		Y
o-Xylene	7.23		157409	45.80	45.8		Y
m,p-Xylenes	6.84		318825	89.59	89.6		Y

Prep Amount:	5 g	Dilution:	1
Prep Final Amount:	5.00 mL	Basis Factor:	100.00

U: Undetected at or above MDL
 J: Analyte detected above MDL, but below MRL
 B: Hit above MRL also found in Method Blank
 E: Analyte concentration above high point of ICAL
 N: Presumptive evidence of compound

D: Result from dilution
 m: Manual integration performed
 d: Compound manually deleted
 NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
 #: Acceptance criteria not applicable
 ?: Insufficient information to determine acceptance
 e: Result >= MRL, but MRL less than low point of ICAL
 c: check for co-elution

Quantitation Report

1st  01/04/24
2nd  01/08/24

Data File:	J:\MS24\DATA\122223\1222F005.D\	Instrument:	K-MS-24
Acqu Date:	12/22/23 11:50:00	Vial:	7
Run Type:	DLCS	Dilution:	1
Lab ID:	KQ2322502-04	Raw Units:	ppb
Bottle ID:		Tier:	IV
Prod Code:	VOC FP	Collect Date:	12/20/23
		Matrix:	Soil
		Receive Date:	12/20/23
Analysis Lot:	828030	Prep Lot:	
Analysis	8260C	Prep Method:	
		Prep Date:	
Report Group:	KQ2322502		
Title:	Volatile Organic Compounds by GC/MS	Calibration ID:	KC2300633
		Report List ID:	21697

Internal Standard Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Area Criteria
Chlorobenzene-d5	6.62		129775	50.00	OK
1,4-Dichlorobenzene-d4	8.94		122057	50.00	OK
Fluorobenzene	3.99		291375	50.00	OK

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
4-Bromofluorobenzene	7.78		112582	46.92	94	61 - 133	Y
Dibromofluoromethane	3.51		73162	47.83	96	59 - 134	Y
Toluene-d8	5.28		304673	48.33	97	77 - 122	Y

Target Compounds

Final Conc.Units: ug/Kg

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
Benzene	3.76		336080	45.08	45.1		Y
Toluene	5.34		214686	44.70	44.7		Y

Prep Amount: 5 g **Dilution:** 1
Prep Final Amount: 5.00 mL **Basis Factor:** 100.00

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound
D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis
*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report

1st 01/04/24

2nd 01/08/24

Data File: J:\MS24\DATA\122223\1222F005.D\
Acqu Date: 12/22/23 11:50:00
Run Type: DLCS
Lab ID: KQ2322502-04

Instrument: K-MS-24
Vial: 8
Dilution: 1
Raw Units: ppb

Bottle ID:
Prod Code: VOC Unp

Tier: IV
Collect Date: 12/20/23

Matrix: Soil
Receive Date: 12/20/23

Analysis Lot: 828030
Analysis 8260C

Prep Lot:
Prep Method:
Prep Date:

Report Group: KQ2322502

Title: Volatile Organic Compounds by GC/MS, Unpreserved

Calibration ID: KC2300633
Report List ID: 21747

Internal Standard Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Area Criteria
1,4-Dichlorobenzene-d4	8.94		122057	50.00	OK
Chlorobenzene-d5	6.62		129775	50.00	OK
Fluorobenzene	3.99		291375	50.00	OK

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	% Rec	% Rec Criteria	Rpt?
4-Bromofluorobenzene	7.78		112582	46.92	94	61 - 133	Y
Dibromofluoromethane	3.51		73162	47.83	96	59 - 134	Y
Toluene-d8	5.28		304673	48.33	97	77 - 122	Y

Target Compounds

Final Conc.Units: ug/Kg

Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
1,1,1,2-Tetrachloroethane	6.73		83484	46.39	46.4		Y
1,1,1-Trichloroethane (TCA)	3.48		109382	47.95	48.0		Y
1,1,2,2-Tetrachloroethane	7.98		102366	44.56	44.6		Y
1,1,2-Trichloroethane	5.77		65577	43.76	43.8		Y
1,1-Dichloroethane	2.73		144092	44.78	44.8		Y
1,1-Dichloroethene	1.87		55029	43.43	43.4		Y
1,1-Dichloropropene	3.60		105164	48.44	48.4		Y
1,2,3-Trichlorobenzene	11.28		114036	42.66	42.7		Y
1,2,3-Trichloropropane	8.03		31477	42.41	42.4		Y
1,2,4-Trichlorobenzene	10.82		126561	43.19	43.2		Y
1,2,4-Trimethylbenzene	8.57		335164	44.86	44.9		Y
1,2-Dibromo-3-chloropropane	10.09	-0.01	16273	46.61	46.6		Y
1,2-Dibromoethane (EDB)	6.21		76288	45.49	45.5		Y
1,2-Dichlorobenzene	9.32		190704	45.70	45.7		Y
1,2-Dichloroethane (EDC)	3.84		116677	48.19	48.2		Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 1/5/24 15:29

\\alprews001\starlims\LIMSReps\QuantValidation.rpt

			1st	01/04/24
Data File:	J:\MS24\DATA\122223\1222F005.D\	Instrument:	K-MS-24 nd	01/08/24
Acqu Date:	12/22/23 11:50:00	Vial:	8	
Run Type:	DLCS	Dilution:	1	
Lab ID:	KQ2322502-04	Raw Units:	ppb	

Target Compounds		Final Conc.Units: ug/Kg				
Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q Rpt?
1,2-Dichloropropane	4.50	+0.01	93080	47.09	47.1	Y
1,3,5-Trimethylbenzene	8.20		327287	42.85	42.9	Y
1,3-Dichlorobenzene	8.86		196180	43.28	43.3	Y
1,3-Dichloropropane	5.93		140432	45.55	45.6	Y
1,4-Dichlorobenzene	8.96		197864	43.14	43.1	Y
2,2-Dichloropropane	3.12		105839	46.01	46.0	Y
2-Butanone (MEK)	3.19		18334	83.18	83.2	Y
2-Chlorotoluene	8.11		280279	43.41	43.4	Y
2-Hexanone	5.98		21547	89.29	89.3	Y
4-Chlorotoluene	8.23		298005	43.53	43.5	Y
4-Isopropyltoluene	8.87		347431	44.66	44.7	Y
4-Methyl-2-pentanone (MIBK)	5.24	+0.01	64626	104.24	104	Y
Acetone	1.97		44244	66.29	66.3	Y
Benzene	3.76		336080	45.08	45.1	Y
Bromobenzene	7.92		105497	43.23	43.2	Y
Bromochloromethane	3.33		43228	47.15	47.2	Y
Bromodichloromethane	4.71		109699	48.48	48.5	Y
Bromoform	7.46		54632	49.37	49.4	Y
Bromomethane	1.28	-0.01	32987	42.90	42.9	Y
Carbon Disulfide	2.00		169919	44.85	44.9	Y
Carbon Tetrachloride	3.57		89543	49.06	49.1	Y
Chlorobenzene	6.64		242180	43.45	43.5	Y
Chloroethane	1.36		48521	44.34	44.3	Y
Chloroform	3.38		142970	46.99	47.0	Y
Chloromethane	0.99		83691	42.22	42.2	Y
Dibromochloromethane	6.10	+0.01	87245	50.41	50.4	Y
Dibromomethane	4.59		52086	48.54	48.5	Y
Dichlorodifluoromethane	0.86		65675	69.42	69.4	Y
Ethylbenzene	6.72		127154	44.07	44.1	Y
Hexachlorobutadiene	10.93		67815	43.33	43.3	Y
Isopropylbenzene	7.59		390056	45.18	45.2	Y
Methylene Chloride	2.25		76059	44.32	44.3	Y
Naphthalene	11.05		278642	43.93	43.9	Y
Styrene	7.26		129326	47.13	47.1	Y
Tetrachloroethene (PCE)	5.79		71291	44.51	44.5	Y
Toluene	5.34		214686	44.70	44.7	Y
Trichloroethene (TCE)	4.26		79977	45.37	45.4	Y
Trichlorofluoromethane	1.50		96874	56.49	56.5	Y
Vinyl Chloride	1.06		75332	47.25	47.3	Y
cis-1,2-Dichloroethene	3.15		87624	44.01	44.0	Y
cis-1,3-Dichloropropene	5.10		140799	49.79	49.8	Y

		1st	01/04/24
Data File:	J:\MS24\DATA\122223\1222F005.D\	Instrument:	K-MS-24 nd
Acqu Date:	12/22/23 11:50:00	Vial:	8
Run Type:	DLCS	Dilution:	1
Lab ID:	KQ2322502-04	Raw Units:	ppb

<i>Target Compounds</i>		Final Conc.Units: ug/Kg					
Parameter Name	RT	RT Dev	Response	Solution Conc	Final Conc	Q	Rpt?
m,p-Xylenes	6.84		318825	89.59	89.6		Y
n-Butylbenzene	9.27		320295	46.24	46.2		Y
n-Propylbenzene	8.00		467162	44.74	44.7		Y
o-Xylene	7.23		157409	45.80	45.8		Y
sec-Butylbenzene	8.73		411264	45.71	45.7		Y
tert-Butylbenzene	8.51		283702	42.50	42.5		Y
trans-1,2-Dichloroethene	2.40		65372	40.61	40.6		Y
trans-1,3-Dichloropropene	5.61		121836	46.25	46.3		Y

Prep Amount:	5 g	Dilution:	1
Prep Final Amount:	5.00 mL	Basis Factor:	100.00

Data File : J:\MS24\DATA\122223\1222F005.D

Acq On : 22 Dec 2023 11:50 am

Sample : DLCS

Misc :

Vial: 5

Operator: EW/OT

Inst : MS24

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Dec 22 12:37:43 2023

Quant Results File: 103023_MS24_FULL_SOIL.RES

Quant Method : J:\MS24\M...\103023_MS24_FULL_SOIL.M (RTE Integrator)

Title : VOA MS24 EPA Method 8260B

Last Update : Wed Nov 01 09:13:30 2023

Response via : Initial Calibration

DataAcq Meth : 8260.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	3.99	96	291375	50.00	PPB	0.00
59) Chlorobenzene-d5	6.62	82	129775	50.00	PPB	0.00
78) 1,4-Dichlorobenzene-d4	8.94	152	122057	50.00	PPB	0.00

System Monitoring Compounds

39) Dibromofluoromethane	3.51	113	73162	47.83	PPB	0.00
Spiked Amount 50.000			Recovery	=	95.66%	
43) 1,2-Dichloroethane-d4	3.78	65	87855	46.54	PPB	0.00
Spiked Amount 50.000			Recovery	=	93.08%	
57) Toluene-d8	5.28	98	304673	48.33	PPB	0.00
Spiked Amount 50.000			Recovery	=	96.66%	
77) 4-Bromofluorobenzene	7.78	95	112582	46.92	PPB	0.00
Spiked Amount 50.000			Recovery	=	93.84%	

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	0.86	85	65675	69.42	PPB	97
3) Chloromethane	0.99	50	83691	42.22	PPB	99
4) Vinyl Chloride	1.06	62	75332	47.25	PPB	95
5) Bromomethane	1.28	96	32987	42.90	PPB	91
6) Chloroethane	1.36	64	48521	44.34	PPB	98
7) Dichlorofluoromethane	1.51	67	96831	42.95	PPB	99
8) Trichlorofluoromethane	1.50	101	96874	56.49	PPB	95
9) Acrolein	1.86	56	86783	248.87	PPB	99
10) Trichlorotrifluoroethane	1.85	151	39653	58.49	PPB	88
11) 1,1-Dichloroethene	1.87	96	55029	43.43	PPB	95
12) Acetone	1.97	43	44244	66.29	PPB	99
13) Iodomethane	1.98	142	163344	78.22	PPB	97
14) Carbon Disulfide	2.00	76	169919	44.85	PPB	100
15) 3-Chloro-1-Propane	2.14	76	32318	42.77	PPB	88
16) Methyl Acetate	2.17	43	52660	38.92	PPB	99
17) Acetonitrile	2.21	40	102158	848.74	PPB	95
18) Methylene Chloride	2.25	84	76059	44.32	PPB	97
19) tert-Butyl Alcohol	2.35	59	45919	246.51	PPB	94
20) Acrylonitrile	2.48	53	57443	92.92	PPB	99
21) Methyl tert-Butyl Ether	2.39	73	422102	91.40	PPB	99
22) trans-1,2-Dichloroethene	2.40	96	65372	40.61	PPB	93
23) Hexane	2.53	57	98633	57.57	PPB	93
24) Diisopropyl Ether	2.72	45	283268	46.27	PPB	97
25) 1,1-Dichloroethane	2.73	63	144092	44.78	PPB	98
26) Vinyl Acetate	2.77	86	17141	48.00	PPB	# 84
27) Chloroprene	2.76	53	230282	100.44	PPB	99
28) tert-Butyl Ethyl Ether	2.98	59	252099	46.52	PPB	98
29) 2,2-Dichloropropane	3.12	77	105839	46.01	PPB	95
30) cis-1,2-Dichloroethene	3.15	96	87624	44.01	PPB	95
31) 2-Butanone	3.19	72	18334	83.18	PPB	# 88
32) Propionitrile	3.29	54	25349	95.78	PPB	96
33) Ethyl Acetate	3.15	61	137101	46.39	PPB	99
34) Methacrylonitrile	3.37	67	72929	96.63	PPB	99
35) Bromochloromethane	3.33	128	43228	47.15	PPB	99
36) Chloroform	3.38	83	142970	46.99	PPB	95
37) Cyclohexane	3.46	56	85403	36.83	PPB	92
38) 1,1,1-Trichloroethane	3.48	97	109382	47.95	PPB	96
40) Carbon Tetrachloride	3.57	117	89543	49.06	PPB	91
41) 1,1-Dichloropropene	3.60	75	105164	48.44	PPB	99
42) Isobutyl Alcohol	3.75	43	93156	1015.60	PPB	93
44) Benzene	3.76	78	336080	45.08	PPB	99
45) 1,2-Dichloroethane	3.84	62	116677	48.19	PPB	98
46) tert-Amyl Methyl Ether	3.83	55	66056	48.17	PPB	99

(#)=qualifier out of range (m)=manual integration

1222F005.D 103023_MS24_FULL_SOIL.M

Wed Dec 27 10:55:58 2023

KELSO

Page 1

Data File : J:\MS24\DATA\122223\1222F005.D

Acq On : 22 Dec 2023 11:50 am

Sample : DLCS

Misc :

Vial: 5

Operator: EW/OT

Inst : MS24

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Dec 22 12:37:43 2023

Quant Results File: 103023_MS24_FULL_SOIL.RES

Quant Method : J:\MS24\M...\103023_MS24_FULL_SOIL.M (RTE Integrator)

Title : VOA MS24 EPA Method 8260B

Last Update : Wed Nov 01 09:13:30 2023

Response via : Initial Calibration

DataAcq Meth : 8260.M

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
47) Trichloroethene	4.26	95	79977	45.37	PPB	96
48) Methylcyclohexane	4.35	83	105707	48.33	PPB	100
49) 1,2-Dichloropropane	4.50	63	93080	47.09	PPB	99
50) Dibromomethane	4.59	93	52086	48.54	PPB	97
51) 1,4-Dioxane	4.59	88	19250	1014.55	PPB	100
52) Bromodichloromethane	4.71	83	109699	48.48	PPB	96
53) 2-Nitropropane	4.98	41	63777	151.82	PPB	88
54) 2-Chloroethyl Vinyl Ether	4.99	63	6668	12.68	PPB	92
55) cis-1,3-Dichloropropene	5.10	75	140799	49.79	PPB	98
56) 4-Methyl-2-pentanone (MIBK)	5.24	58	64626	104.24	PPB	99
58) Toluene	5.34	92	214686	44.70	PPB	97
60) trans-1,3-Dichloropropene	5.61	75	121836	46.25	PPB	97
61) 1,1,2-Trichloroethane	5.77	83	65577	43.76	PPB	93
62) Tetrachloroethene	5.79	164	71291	44.51	PPB	95
63) 2-Hexanone	5.98	57	21547	89.29	PPB	# 86
64) 1,3-Dichloropropane	5.93	76	140432	45.55	PPB	99
65) Dibromochloromethane	6.10	129	87245	50.41	PPB	98
66) 1,2-Dibromoethane (EDB)	6.21	107	76288	45.49	PPB	98
67) 1-Chlorohexane	6.61	91	103699	46.59	PPB	98
68) Chlorobenzene	6.64	112	242180	43.45	PPB	98
69) Ethylbenzene	6.72	106	127154	44.07	PPB	95
70) 1,1,1,2-Tetrachloroethane	6.73	131	83484	46.39	PPB	98
71) m,p-Xylenes	6.84	106	318825	89.59	PPB	96
72) o-Xylene	7.23	106	157409	45.80	PPB	92
73) Styrene	7.26	103	129326m	47.13	PPB	
74) Bromoform	7.46	173	54632	49.37	PPB	94
75) Isopropylbenzene	7.59	105	390056	45.18	PPB	99
76) cis-1,4-Dichloro-2-butene	7.75	89	29197	93.27	PPB	94
79) 1,1,2,2-Tetrachloroethane	7.98	83	102366	44.56	PPB	99
80) trans-1,4-Dichloro-2-buten	8.05	53	29224	44.04	PPB	96
81) Bromobenzene	7.92	156	105497	43.23	PPB	96
82) n-Propylbenzene	8.00	91	467162	44.74	PPB	99
83) 1,2,3-Trichloropropane	8.03	110	31477	42.41	PPB	86
84) 2-Chlorotoluene	8.11	91	280279	43.41	PPB	99
85) 1,3,5-Trimethylbenzene	8.20	105	327287	42.85	PPB	98
86) 4-Chlorotoluene	8.23	91	298005	43.53	PPB	99
87) tert-Butylbenzene	8.51	119	283702	42.50	PPB	96
88) 1,2,4-Trimethylbenzene	8.57	105	335164	44.86	PPB	99
89) sec-Butylbenzene	8.73	105	411264	45.71	PPB	100
90) p-Isopropyltoluene	8.87	119	347431	44.66	PPB	98
91) 1,3-Dichlorobenzene	8.86	146	196180	43.28	PPB	99
92) 1,4-Dichlorobenzene	8.96	146	197864	43.14	PPB	99
93) n-Butylbenzene	9.27	91	320295	46.24	PPB	99
94) 1,2-Dichlorobenzene	9.32	146	190704	45.70	PPB	98
95) 1,2-Dibromo-3-chloropropan	10.09	155	16273	46.61	PPB	89
96) 1,3,5-Trichlorobenzene	10.23	180	141540	45.76	PPB	98
97) 1,2,4-Trichlorobenzene	10.82	180	126561	43.19	PPB	97
98) Hexachlorobutadiene	10.93	225	67815	43.33	PPB	97
99) Naphthalene	11.05	128	278642	43.93	PPB	98
100) 1,2,3-Trichlorobenzene	11.28	180	114036	42.66	PPB	94

(#) = qualifier out of range (m) = manual integration

1222F005.D 103023_MS24_FULL_SOIL.M

Wed Dec 27 10:55:58 2023

KELSO

Page 2

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Data File : J:\MS24\DATA\1222223\1222F005.D
Acq On    : 22 Dec 2023  11:50 am
Sample    : DLCS
Misc      :
MS Integration Params: rteint.p

```

quant Results File: 103023_MS24_FULL_SOIL.RES

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Method : J:\MS24\METHODS\2010\103023_MS24_FULL_SOIL.M (RTE Integrator)
Title : VQA MS24 EPA Method 8260B
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Last Update : Wed Nov 01 09:13:30 2023
Response via : Initial Calibration

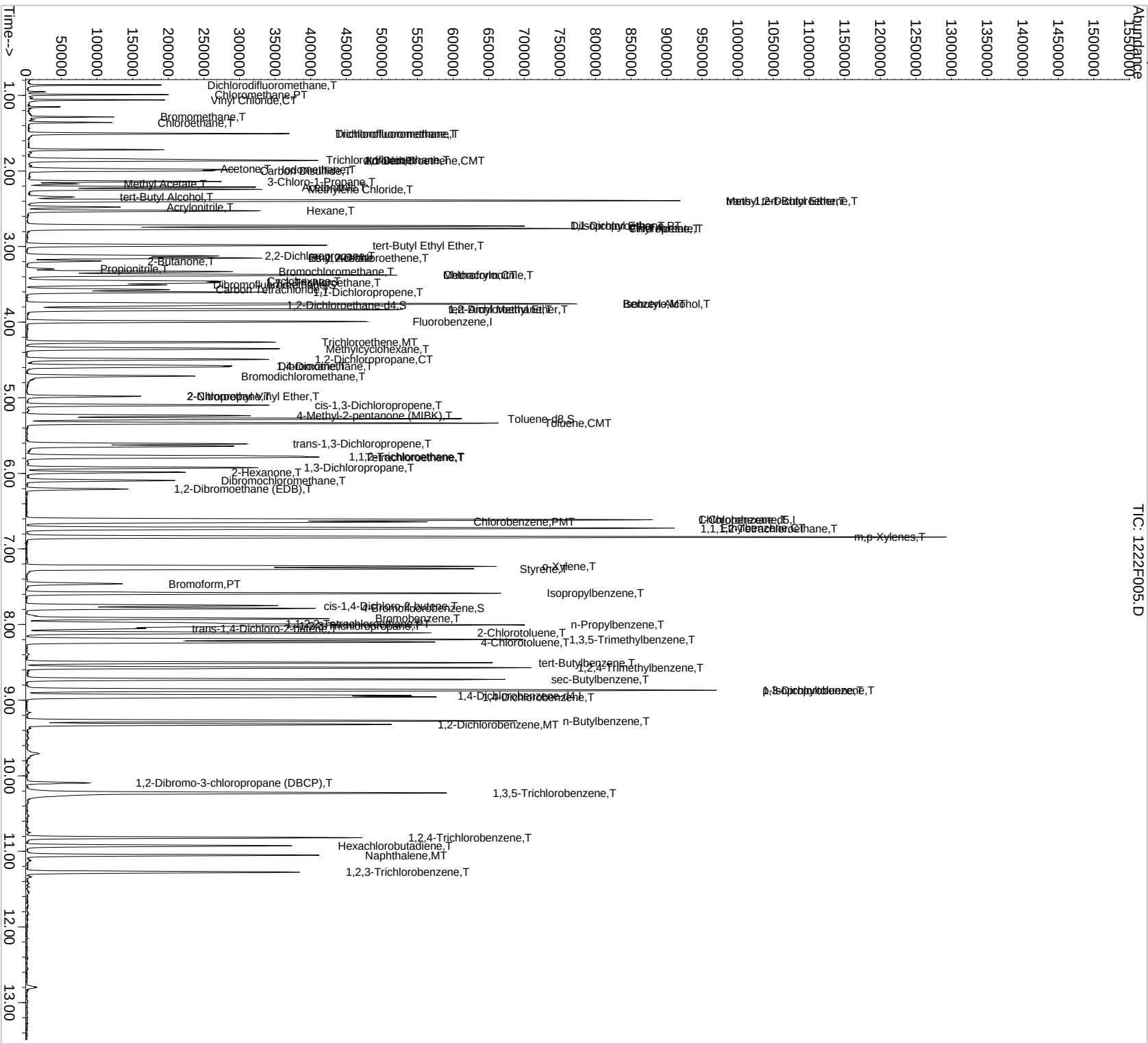
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MS Integration Params: rteint.p
Want Time: Dec 26 15:24 2023

Method      : J:\MS24\METHODS\
Title       : VOA MS24 EPA Met
Last Update : Wed Nov 01 09:13
Response via : Initial Calibrat

```

TIC: 1222F005.D



Quantitation Report (Qedit)

1st  01/04/24
2nd  01/08/24

Data File : J:\MS24\DATA\122223\1222F005.D

Acq On : 22 Dec 2023 11:50 am

Sample : DLCS

Misc :

MS Integration Params: rteint.p

Quant Time: Dec 22 12:37 2023

Vial: 5

Operator: EW/OT

Inst : MS24

Multiplr: 1.00

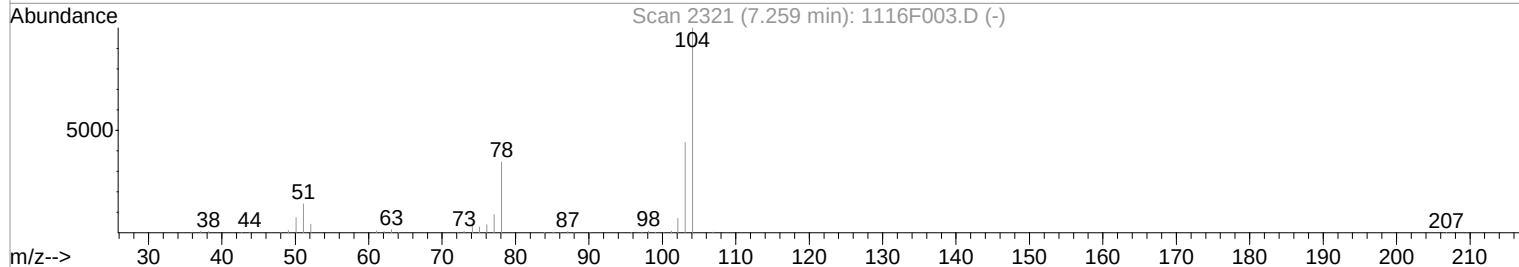
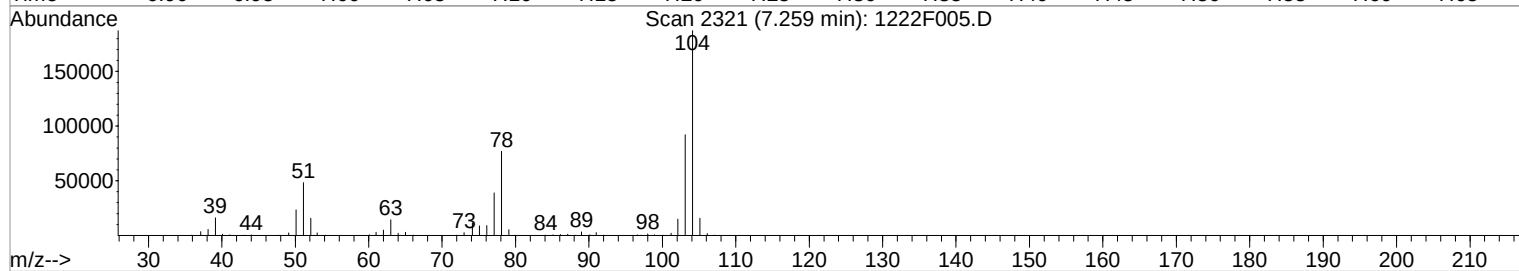
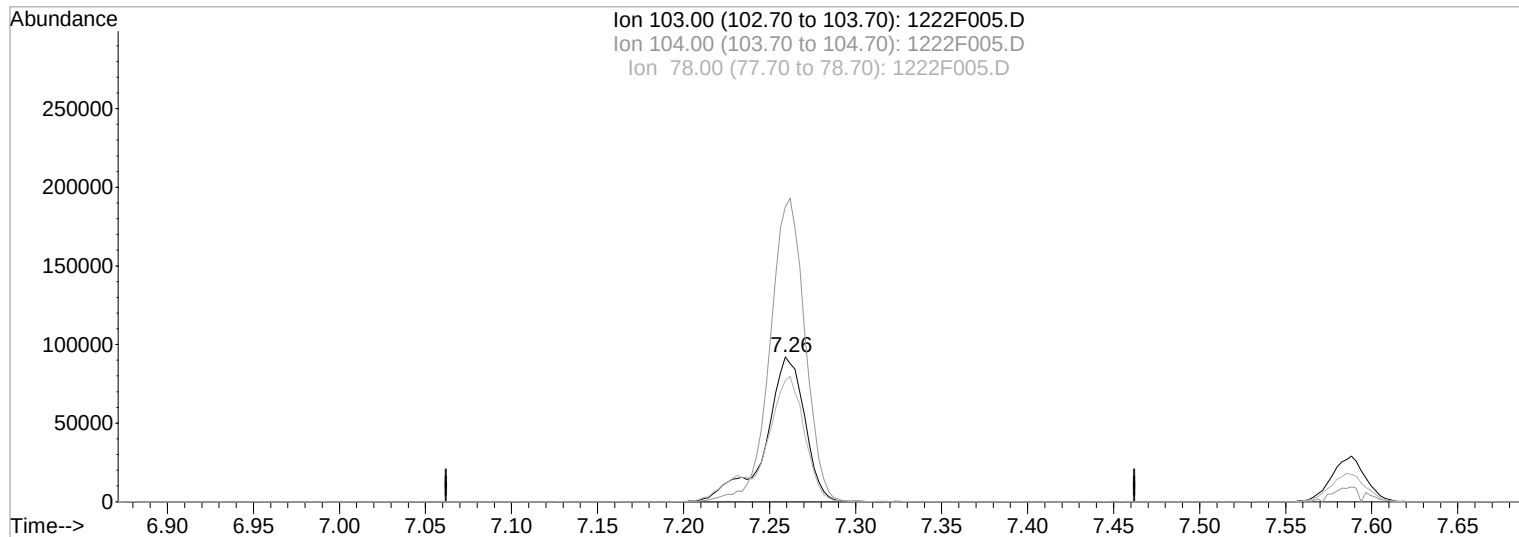
Quant Results File: temp.res

Method : J:\MS24\METHODS\2010\103023_MS24_FULL_SOIL.M (RTE Integrator)

Title : VOA MS24 EPA Method 8260B

Last Update : Wed Nov 01 09:13:30 2023

Response via : Multiple Level Calibration



TIC: 1222F005.D

(73) Styrene (T)

Manual Integration:

7.26min 53.36PPB

Before

response 146428

Ion	Exp%	Act%
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12/26/23

103.00	100	100
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104.00	210.30	203.31
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78.00	84.80	83.49
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0.00	0.00	0.00
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Data File : J:\MS24\DATA\122223\1222F005.D

Acq On : 22 Dec 2023 11:50 am

Sample : DLCS

Misc :

MS Integration Params: rteint.p

Quant Time: Dec 26 15:24 2023

Vial: 5

Operator: EW/OT

Inst : MS24

Multiplr: 1.00

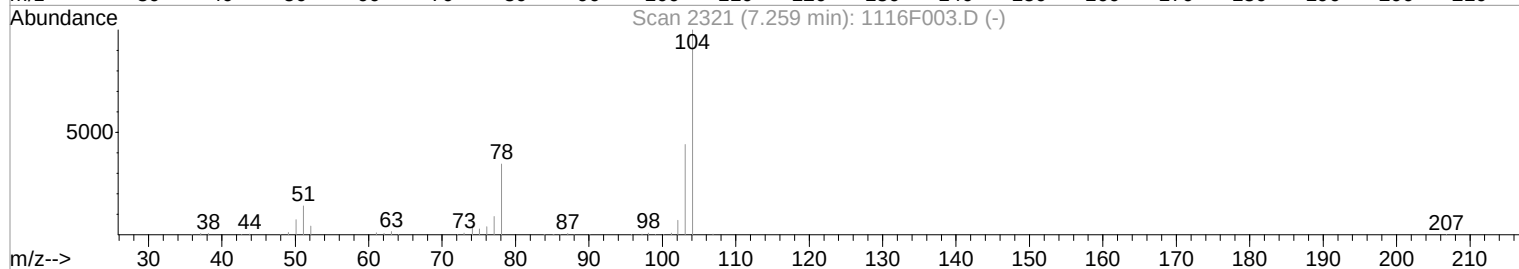
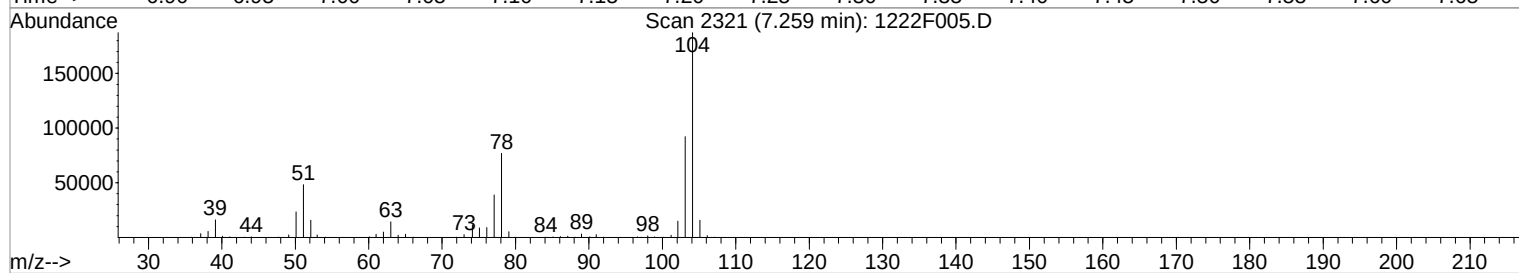
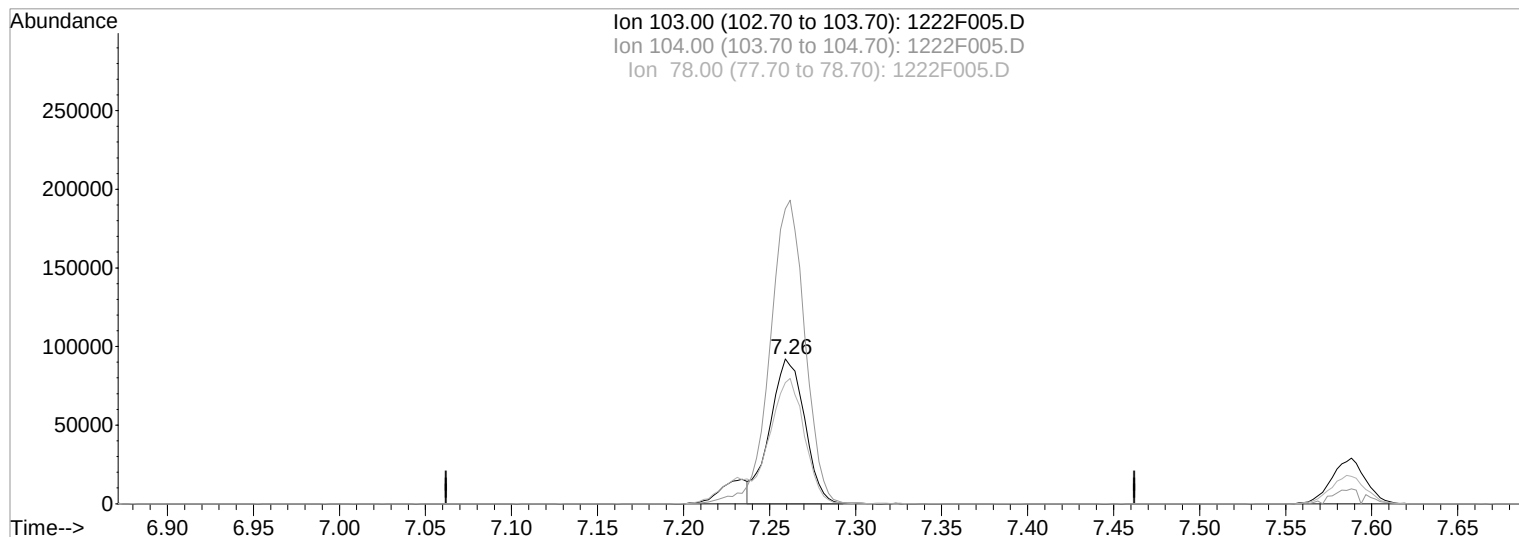
Quant Results File: temp.res

Method : J:\MS24\METHODS\2010\103023_MS24_FULL_SOIL.M (RTE Integrator)

Title : VOA MS24 EPA Method 8260B

Last Update : Wed Nov 01 09:13:30 2023

Response via : Multiple Level Calibration



TIC: 1222F005.D

(73) Styrene (T)

Manual Integration:

7.26min 47.13PPB m

After

response 129326

Shoulder

Ion	Exp%	Act%
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12/26/23

103.00	100	100
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104.00	210.30	203.31
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78.00	84.80	83.61
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0.00	0.00	0.00
------	------	------

Validation Report

1st  01/04/24
2nd  01/08/24

Data File: J:\MS24\DATA\122223\1222F003.D\
Lab ID: KQ2322503-02
RunType: CCV
Matrix: Paperboard

Date Acquired: 12/22/23 10:49:00
Batch ID: 828032
Analysis Method: 8260C/VOC FP_RPTA

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Internal Standards	X	

Primary Review: _____

Secondary Review: _____

Validation Report

1st  01/04/24
2nd  01/08/24

Data File: J:\MS24\DATA\122223\1222F003.D\
Lab ID: KQ2322502-02
RunType: CCV
Matrix: Soil

Date Acquired: 12/22/23 10:49:00
Batch ID: 828030
Analysis Method: 8260C/VOC FP

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Internal Standards	X	

Primary Review: _____

Secondary Review: _____

Validation Report

1st  01/04/24
2nd  01/08/24

Data File: J:\MS24\DATA\122223\1222F003.D\
Lab ID: KQ2322502-02
RunType: CCV
Matrix: Soil

Date Acquired: 12/22/23 10:49:00
Batch ID: 828030
Analysis Method: 8260C/VOC Unp

Validations

Validation Categories	Pass	Fail
ICAL Analyte Recovery	X	
Second Source ICAL Verification	X	
Internal Standards	X	

Primary Review: _____

Secondary Review: _____

Quantitation Report

1st 01/04/24
2nd 01/08/24

Data File:	J:\MS24\DATA\122223\1222F003.D\	Instrument:	K-MS-24
Acqu Date:	12/22/23 10:49:00	Vial:	2
Run Type:	CCV	Dilution:	1
Lab ID:	KQ2322503-02	Raw Units:	ppb

Bottle ID:		Tier:	I	Matrix:	Paperboard
Prod Code:	VOC FP_RPTA	Collect Date:	11/29/23	Receive Date:	12/12/23

Analysis Lot:	828032	Prep Lot:		Report Group:	KQ2322503
Analysis	8260C	Prep Method:			
		Prep Date:			

Title:	Volatile Organic Compounds by GC/MS	Calibration ID:	KC2300633
		Report List ID:	22951

Internal Standard Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Area Criteria
1,4-Dichlorobenzene-d4	8.94		120112	50.00	OK
Chlorobenzene-d5	6.62		131065	50.00	OK
Fluorobenzene	3.99		301987	50.00	OK

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Rpt?
4-Bromofluorobenzene	7.78		109919	45.36	Y
Dibromofluoromethane	3.51		73542	46.39	Y
Toluene-d8	5.28		312974	47.90	Y

Target Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Rpt?
1,1-Dichloroethene (1,1-DCE)	1.87		70657	53.81	Y
1,2-Dibromo-3-chloropropane (DBCP)	10.10		17257	50.23	Y
1,2-Dibromoethane	6.21		87099	51.43	Y
1,4-Dichlorobenzene	8.96		229621	50.87	Y
Benzene	3.76		403846	52.27	Y
Chloroform	3.38		171120	54.26	Y
Dichloromethane	2.25		89424	50.49	Y
Styrene	7.26		153390	55.35	Y
Tetrachloroethene (PCE)	5.79		85403	52.80	Y
Toluene	5.34		256714	51.57	Y
Vinyl Chloride	1.06		95312	57.69	Y
cis-1,3-Dichloropropene	5.10		167484	57.14	Y
m,p-Xylenes	6.84		380656	105.91	Y
trans-1,3-Dichloropropene	5.61		143573	53.97	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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Quantitation Report

1st  01/05/24
2nd  01/08/24

Data File:	J:\MS24\DATA\122223\1222F003.D\	Instrument:	K-MS-24
Acqu Date:	12/22/23 10:49:00	Vial:	2
Run Type:	CCV	Dilution:	1
Lab ID:	KQ2322503-02	Raw Units:	ppb

Bottle ID:		Tier:	I	Matrix:	Paperboard
Prod Code:	VOC FP_RPTA	Collect Date:	11/29/23	Receive Date:	12/12/23

Analysis Lot:	828032	Prep Lot:		Report Group:	KQ2322503
Analysis	8260C	Prep Method:			
		Prep Date:			

Title:	Volatile Organic Compounds by GC/MS	Calibration ID:	KC2300633
		Report List ID:	26196

Internal Standard Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Area Criteria
1,4-Dichlorobenzene-d4	8.94		120112	50.00	OK
Chlorobenzene-d5	6.62		131065	50.00	OK
Fluorobenzene	3.99		301987	50.00	OK

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Rpt?
4-Bromofluorobenzene	7.78		109919	45.36	Y
Dibromofluoromethane	3.51		73542	46.39	Y
Toluene-d8	5.28		312974	47.90	Y

Target Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Rpt?
1,2-Dichloropropane	4.49		110776	54.07	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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Quantitation Report

1st 01/04/24
2nd 01/08/24

Data File:	J:\MS24\DATA\122223\1222F003.D\	Instrument:	K-MS-24
Acqu Date:	12/22/23 10:49:00	Vial:	3
Run Type:	CCV	Dilution:	1
Lab ID:	KQ2322502-02	Raw Units:	ppb

Bottle ID:		Tier:	IV	Matrix:	Soil
Prod Code:	VOC FP	Collect Date:	12/20/23	Receive Date:	12/20/23

Analysis Lot:	828030	Prep Lot:		Report Group:	KQ2322502
Analysis	8260C	Prep Method:			
		Prep Date:			

Title:	Volatile Organic Compounds by GC/MS	Calibration ID:	KC2300633
		Report List ID:	20903

Internal Standard Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Area Criteria
Chlorobenzene-d5	6.62		131065	50.00	OK
1,4-Dichlorobenzene-d4	8.94		120112	50.00	OK
Fluorobenzene	3.99		301987	50.00	OK

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Rpt?
4-Bromofluorobenzene	7.78		109919	45.36	Y
Dibromofluoromethane	3.51		73542	46.39	Y
Toluene-d8	5.28		312974	47.90	Y

Target Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Rpt?
Acetone	1.97		49652	72.41	Y
Benzene	3.76		403846	52.27	Y
Bromobenzene	7.92		122339	50.94	Y
Bromochloromethane	3.33		50467	53.11	Y
Bromodichloromethane	4.71		131823	56.22	Y
Bromoform	7.46		63767	57.06	Y
Bromomethane	1.29		38169	48.21	Y
2-Butanone (MEK)	3.19		20172	88.30	Y
n-Butylbenzene	9.27		390612	57.30	Y
sec-Butylbenzene	8.73		502977	56.81	Y
tert-Butylbenzene	8.51		336637	51.24	Y
Carbon Disulfide	2.00		211022	53.74	Y
Carbon Tetrachloride	3.57		113016	59.75	Y
Chlorobenzene	6.64		285961	50.80	Y
Chloroethane	1.36		59732	52.66	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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			1st	01/04/24
Data File:	J:\MS24\DATA\122223\1222F003.D\	Instrument:	K-MS-24nd	01/08/24
Acqu Date:	12/22/23 10:49:00	Vial:	3	
Run Type:	CCV	Dilution:	1	
Lab ID:	KQ2322502-02	Raw Units:	ppb	

Target Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Rpt?
Chloroform	3.38		171120	54.26	Y
Chloromethane	0.99		103595	50.42	Y
2-Chlorotoluene	8.11		332641	52.36	Y
4-Chlorotoluene	8.23		343209	50.95	Y
1,2-Dibromo-3-chloropropane	10.10		17257	50.23	Y
Dibromochloromethane	6.09		101733	58.21	Y
1,2-Dibromoethane (EDB)	6.21		87099	51.43	Y
Dibromomethane	4.59		59239	53.26	Y
1,2-Dichlorobenzene	9.32		212805	51.82	Y
1,3-Dichlorobenzene	8.86		226474	50.78	Y
1,4-Dichlorobenzene	8.96		229621	50.87	Y
Dichlorodifluoromethane	0.86		84180	85.85	Y
1,1-Dichloroethane	2.73		176077	52.80	Y
1,2-Dichloroethane (EDC)	3.84		133297	53.12	Y
1,1-Dichloroethene	1.87		70657	53.81	Y
cis-1,2-Dichloroethene	3.15		105912	51.33	Y
trans-1,2-Dichloroethene	2.40		81781	49.02	Y
1,2-Dichloropropane	4.49		110776	54.07	Y
1,3-Dichloropropane	5.93		161674	51.93	Y
2,2-Dichloropropane	3.12		133157	55.85	Y
1,1-Dichloropropene	3.60		130515	58.00	Y
cis-1,3-Dichloropropene	5.10		167484	57.14	Y
trans-1,3-Dichloropropene	5.61		143573	53.97	Y
Ethylbenzene	6.72		154369	52.98	Y
Hexachlorobutadiene	10.93		82268	53.42	Y
2-Hexanone	5.98		24338	99.87	Y
Isopropylbenzene	7.59		475495	54.53	Y
4-Isopropyltoluene	8.87		415029	54.21	Y
4-Methyl-2-pentanone (MIBK)	5.23		70378	109.53	Y
Methylene Chloride	2.25		89424	50.49	Y
Naphthalene	11.05		300750	48.18	Y
n-Propylbenzene	8.00		563226	54.82	Y
Styrene	7.26		153390	55.35	Y
1,1,1,2-Tetrachloroethane	6.73		99592	54.80	Y
1,1,2,2-Tetrachloroethane	7.98		115679	51.18	Y
Tetrachloroethene (PCE)	5.79		85403	52.80	Y
Toluene	5.34		256714	51.57	Y
1,2,3-Trichlorobenzene	11.28		124750	47.42	Y
1,2,4-Trichlorobenzene	10.82		140568	48.75	Y
1,1,2-Trichloroethane	5.77		76806	50.75	Y
1,1,1-Trichloroethane (TCA)	3.48		137599	58.20	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

		1st	01/04/24
Data File:	J:\MS24\DATA\122223\1222F003.D\	Instrument:	K-MS-24 nd
Acqu Date:	12/22/23 10:49:00	Vial:	3
Run Type:	CCV	Dilution:	1
Lab ID:	KQ2322502-02	Raw Units:	ppb

Target Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Rpt?
Trichloroethene (TCE)	4.26		95449	52.25	Y
Trichlorofluoromethane (CFC 11)	1.50		122117	68.70	Y
1,2,3-Trichloropropane	8.03		35012	47.94	Y
1,2,4-Trimethylbenzene	8.57		393628	53.54	Y
1,3,5-Trimethylbenzene	8.20		390095	51.90	Y
Vinyl Chloride	1.06		95312	57.69	Y
o-Xylene	7.23		182466	52.57	Y
m,p-Xylenes	6.84		380656	105.91	Y
Xylenes, Total				158.480	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report

1st 01/04/24
2nd 01/08/24

Data File:	J:\MS24\DATA\122223\1222F003.D\	Instrument:	K-MS-24
Acqu Date:	12/22/23 10:49:00	Vial:	3
Run Type:	CCV	Dilution:	1
Lab ID:	KQ2322502-02	Raw Units:	ppb

Bottle ID:		Tier:	IV	Matrix:	Soil
Prod Code:	VOC FP	Collect Date:	12/20/23	Receive Date:	12/20/23

Analysis Lot:	828030	Prep Lot:		Report Group:	KQ2322502
Analysis	8260C	Prep Method:			
		Prep Date:			

Title:	Volatile Organic Compounds by GC/MS	Calibration ID:	KC2300633
		Report List ID:	21451

Internal Standard Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Area Criteria
Chlorobenzene-d5	6.62		131065	50.00	OK
1,4-Dichlorobenzene-d4	8.94		120112	50.00	OK
Fluorobenzene	3.99		301987	50.00	OK

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Rpt?
4-Bromofluorobenzene	7.78		109919	45.36	Y
Dibromofluoromethane	3.51		73542	46.39	Y
Toluene-d8	5.28		312974	47.90	Y

Target Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Rpt?
Acrolein	1.85		94357	261.09	Y
Acrylonitrile	2.48		60809	94.91	Y
Benzene	3.76		403846	52.27	Y
Bromodichloromethane	4.71		131823	56.22	Y
Bromoform	7.46		63767	57.06	Y
Bromomethane	1.29		38169	48.21	Y
Carbon Tetrachloride	3.57		113016	59.75	Y
Chlorobenzene	6.64		285961	50.80	Y
Chloroethane	1.36		59732	52.66	Y
2-Chloroethyl Vinyl Ether	4.98		7933	14.55	Y
Chloroform	3.38		171120	54.26	Y
Chloromethane	0.99		103595	50.42	Y
Dibromochloromethane	6.09		101733	58.21	Y
1,2-Dichlorobenzene	9.32		212805	51.82	Y
1,3-Dichlorobenzene	8.86		226474	50.78	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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		1st		01/04/24
Data File:	J:\MS24\DATA\122223\1222F003.D\	Instrument:	K-MS-24 nd	 01/08/24
Acqu Date:	12/22/23 10:49:00	Vial:	3	
Run Type:	CCV	Dilution:	1	
Lab ID:	KQ2322502-02	Raw Units:	ppb	

Target Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Rpt?
1,4-Dichlorobenzene	8.96		229621	50.87	Y
1,1-Dichloroethane	2.73		176077	52.80	Y
1,2-Dichloroethane (EDC)	3.84		133297	53.12	Y
1,1-Dichloroethene	1.87		70657	53.81	Y
trans-1,2-Dichloroethene	2.40		81781	49.02	Y
1,2-Dichloropropane	4.49		110776	54.07	Y
Ethylbenzene	6.72		154369	52.98	Y
Methylene Chloride	2.25		89424	50.49	Y
1,1,2,2-Tetrachloroethane	7.98		115679	51.18	Y
Tetrachloroethene (PCE)	5.79		85403	52.80	Y
Toluene	5.34		256714	51.57	Y
1,1,2-Trichloroethane	5.77		76806	50.75	Y
1,1,1-Trichloroethane (TCA)	3.48		137599	58.20	Y
Trichloroethene (TCE)	4.26		95449	52.25	Y
Vinyl Chloride	1.06		95312	57.69	Y
o-Xylene	7.23		182466	52.57	Y
m,p-Xylenes	6.84		380656	105.91	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report

1st  01/04/24
2nd  01/08/24

Data File:	J:\MS24\DATA\122223\1222F003.D\	Instrument:	K-MS-24
Acqu Date:	12/22/23 10:49:00	Vial:	3
Run Type:	CCV	Dilution:	1
Lab ID:	KQ2322502-02	Raw Units:	ppb

Bottle ID:		Tier:	IV	Matrix:	Soil
Prod Code:	VOC FP	Collect Date:	12/20/23	Receive Date:	12/20/23

Analysis Lot:	828030	Prep Lot:		Report Group:	KQ2322502
Analysis	8260C	Prep Method:			
		Prep Date:			

Title:	Volatile Organic Compounds by GC/MS	Calibration ID:	KC2300633
		Report List ID:	21697

Internal Standard Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Area Criteria
Chlorobenzene-d5	6.62		131065	50.00	OK
1,4-Dichlorobenzene-d4	8.94		120112	50.00	OK
Fluorobenzene	3.99		301987	50.00	OK

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Rpt?
4-Bromofluorobenzene	7.78		109919	45.36	Y
Dibromofluoromethane	3.51		73542	46.39	Y
Toluene-d8	5.28		312974	47.90	Y

Target Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Rpt?
Benzene	3.76		403846	52.27	Y
Toluene	5.34		256714	51.57	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

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Quantitation Report

1st  01/04/24
2nd  01/08/24

Data File:	J:\MS24\DATA\122223\1222F003.D\	Instrument:	K-MS-24
Acqu Date:	12/22/23 10:49:00	Vial:	4
Run Type:	CCV	Dilution:	1
Lab ID:	KQ2322502-02	Raw Units:	ppb

Bottle ID:		Tier:	IV	Matrix:	Soil
Prod Code:	VOC Unp	Collect Date:	12/20/23	Receive Date:	12/20/23

Analysis Lot:	828030	Prep Lot:		Report Group:	KQ2322502
Analysis	8260C	Prep Method:			
		Prep Date:			

Title:	Volatile Organic Compounds by GC/MS, Unpreserved	Calibration ID:	KC2300633
		Report List ID:	21747

Internal Standard Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Area Criteria
1,4-Dichlorobenzene-d4	8.94		120112	50.00	OK
Chlorobenzene-d5	6.62		131065	50.00	OK
Fluorobenzene	3.99		301987	50.00	OK

Surrogate Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Rpt?
4-Bromofluorobenzene	7.78		109919	45.36	Y
Dibromofluoromethane	3.51		73542	46.39	Y
Toluene-d8	5.28		312974	47.90	Y

Target Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Rpt?
1,1,1,2-Tetrachloroethane	6.73		99592	54.80	Y
1,1,1-Trichloroethane (TCA)	3.48		137599	58.20	Y
1,1,2,2-Tetrachloroethane	7.98		115679	51.18	Y
1,1,2-Trichloroethane	5.77		76806	50.75	Y
1,1-Dichloroethane	2.73		176077	52.80	Y
1,1-Dichloroethene	1.87		70657	53.81	Y
1,1-Dichloropropene	3.60		130515	58.00	Y
1,2,3-Trichlorobenzene	11.28		124750	47.42	Y
1,2,3-Trichloropropane	8.03		35012	47.94	Y
1,2,4-Trichlorobenzene	10.82		140568	48.75	Y
1,2,4-Trimethylbenzene	8.57		393628	53.54	Y
1,2-Dibromo-3-chloropropane	10.10		17257	50.23	Y
1,2-Dibromoethane (EDB)	6.21		87099	51.43	Y
1,2-Dichlorobenzene	9.32		212805	51.82	Y
1,2-Dichloroethane (EDC)	3.84		133297	53.12	Y

		1st	01/04/24
Data File:	J:\MS24\DATA\122223\1222F003.D\	Instrument:	K-MS-24nd
Acqu Date:	12/22/23 10:49:00	Vial:	4
Run Type:	CCV	Dilution:	1
Lab ID:	KQ2322502-02	Raw Units:	ppb

Target Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Rpt?
1,2-Dichloropropane	4.49		110776	54.07	Y
1,3,5-Trimethylbenzene	8.20		390095	51.90	Y
1,3-Dichlorobenzene	8.86		226474	50.78	Y
1,3-Dichloropropane	5.93		161674	51.93	Y
1,4-Dichlorobenzene	8.96		229621	50.87	Y
2,2-Dichloropropane	3.12		133157	55.85	Y
2-Butanone (MEK)	3.19		20172	88.30	Y
2-Chlorotoluene	8.11		332641	52.36	Y
2-Hexanone	5.98		24338	99.87	Y
4-Chlorotoluene	8.23		343209	50.95	Y
4-Isopropyltoluene	8.87		415029	54.21	Y
4-Methyl-2-pentanone (MIBK)	5.23		70378	109.53	Y
Acetone	1.97		49652	72.41	Y
Benzene	3.76		403846	52.27	Y
Bromobenzene	7.92		122339	50.94	Y
Bromochloromethane	3.33		50467	53.11	Y
Bromodichloromethane	4.71		131823	56.22	Y
Bromoform	7.46		63767	57.06	Y
Bromomethane	1.29		38169	48.21	Y
Carbon Disulfide	2.00		211022	53.74	Y
Carbon Tetrachloride	3.57		113016	59.75	Y
Chlorobenzene	6.64		285961	50.80	Y
Chloroethane	1.36		59732	52.66	Y
Chloroform	3.38		171120	54.26	Y
Chloromethane	0.99		103595	50.42	Y
Dibromochloromethane	6.09		101733	58.21	Y
Dibromomethane	4.59		59239	53.26	Y
Dichlorodifluoromethane	0.86		84180	85.85	Y
Ethylbenzene	6.72		154369	52.98	Y
Hexachlorobutadiene	10.93		82268	53.42	Y
Isopropylbenzene	7.59		475495	54.53	Y
Methylene Chloride	2.25		89424	50.49	Y
Naphthalene	11.05		300750	48.18	Y
Styrene	7.26		153390	55.35	Y
Tetrachloroethene (PCE)	5.79		85403	52.80	Y
Toluene	5.34		256714	51.57	Y
Trichloroethene (TCE)	4.26		95449	52.25	Y
Trichlorofluoromethane	1.50		122117	68.70	Y
Vinyl Chloride	1.06		95312	57.69	Y
cis-1,2-Dichloroethene	3.15		105912	51.33	Y
cis-1,3-Dichloropropene	5.10		167484	57.14	Y

		1st	01/04/24
Data File:	J:\MS24\DATA\122223\1222F003.D\	Instrument:	K-MS-24 nd
Acqu Date:	12/22/23 10:49:00	Vial:	4
Run Type:	CCV	Dilution:	1
Lab ID:	KQ2322502-02	Raw Units:	ppb

Target Compounds

Parameter Name	RT	RT Dev	Response	Solution Conc	Rpt?
m,p-Xylenes	6.84		380656	105.91	Y
n-Butylbenzene	9.27		390612	57.30	Y
n-Propylbenzene	8.00		563226	54.82	Y
o-Xylene	7.23		182466	52.57	Y
sec-Butylbenzene	8.73		502977	56.81	Y
tert-Butylbenzene	8.51		336637	51.24	Y
trans-1,2-Dichloroethene	2.40		81781	49.02	Y
trans-1,3-Dichloropropene	5.61		143573	53.97	Y

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File : J:\MS24\DATA\122223\1222F003.D

Acq On : 22 Dec 2023 10:49 am

Sample : CCV

Misc :

Vial: 3

Operator: EW/OT

Inst : MS24

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Dec 22 11:11:22 2023

Quant Results File: 103023_MS24_FULL_SOIL.RES

Quant Method : J:\MS24\M...\103023_MS24_FULL_SOIL.M (RTE Integrator)

Title : VOA MS24 EPA Method 8260B

Last Update : Wed Nov 01 09:13:30 2023

Response via : Initial Calibration

DataAcq Meth : 8260.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	3.99	96	301987	50.00	PPB	0.00
59) Chlorobenzene-d5	6.62	82	131065	50.00	PPB	0.00
78) 1,4-Dichlorobenzene-d4	8.94	152	120112	50.00	PPB	0.00

System Monitoring Compounds

39) Dibromofluoromethane	3.51	113	73542	46.39	PPB	0.00
Spiked Amount 50.000			Recovery	=	92.78%	
43) 1,2-Dichloroethane-d4	3.78	65	86975	44.46	PPB	0.00
Spiked Amount 50.000			Recovery	=	88.92%	
57) Toluene-d8	5.28	98	312974	47.90	PPB	0.00
Spiked Amount 50.000			Recovery	=	95.80%	
77) 4-Bromofluorobenzene	7.78	95	109919	45.36	PPB	0.00
Spiked Amount 50.000			Recovery	=	90.72%	

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	0.86	85	84180	85.85	PPB	97
3) Chloromethane	0.99	50	103595	50.42	PPB	98
4) Vinyl Chloride	1.06	62	95312	57.69	PPB	93
5) Bromomethane	1.29	96	38169	48.21	PPB	99
6) Chloroethane	1.36	64	59732	52.66	PPB	96
7) Dichlorofluoromethane	1.51	67	120996	51.78	PPB	99
8) Trichlorofluoromethane	1.50	101	122117	68.70	PPB	98
9) Acrolein	1.85	56	94357	261.09	PPB	98
10) Trichlorotrifluoroethane	1.84	151	48013	68.33	PPB	97
11) 1,1-Dichloroethene	1.87	96	70657	53.81	PPB	97
12) Acetone	1.97	43	49652	72.41	PPB	98
13) Iodomethane	1.98	142	196806	90.44	PPB	99
14) Carbon Disulfide	2.00	76	211022	53.74	PPB	99
15) 3-Chloro-1-Propane	2.14	76	39905	50.96	PPB	98
16) Methyl Acetate	2.17	43	55544	39.61	PPB	98
17) Acetonitrile	2.21	40	110786	888.08	PPB	97
18) Methylene Chloride	2.25	84	89424	50.49	PPB	95
19) tert-Butyl Alcohol	2.34	59	47074	243.83	PPB	95
20) Acrylonitrile	2.48	53	60809	94.91	PPB	98
21) Methyl tert-Butyl Ether	2.39	73	493940	103.20	PPB	98
22) trans-1,2-Dichloroethene	2.40	96	81781	49.02	PPB	98
23) Hexane	2.53	57	125602	70.73	PPB	96
24) Diisopropyl Ether	2.72	45	336832	53.09	PPB	98
25) 1,1-Dichloroethane	2.73	63	176077	52.80	PPB	97
26) Vinyl Acetate	2.76	86	19778	53.44	PPB	# 78
27) Chloroprene	2.76	53	286749	120.67	PPB	99
28) tert-Butyl Ethyl Ether	2.98	59	294650	52.46	PPB	99
29) 2,2-Dichloropropane	3.12	77	133157	55.85	PPB	97
30) cis-1,2-Dichloroethene	3.15	96	105912	51.33	PPB	94
31) 2-Butanone	3.19	72	20172	88.30	PPB	# 76
32) Propionitrile	3.29	54	26668	97.22	PPB	95
33) Ethyl Acetate	3.15	61	163469	53.37	PPB	100
34) Methacrylonitrile	3.37	67	79201	101.25	PPB	97
35) Bromochloromethane	3.33	128	50467	53.11	PPB	96
36) Chloroform	3.38	83	171120	54.26	PPB	97
37) Cyclohexane	3.46	56	109697	45.65	PPB	95
38) 1,1,1-Trichloroethane	3.48	97	137599	58.20	PPB	97
40) Carbon Tetrachloride	3.57	117	113016	59.75	PPB	97
41) 1,1-Dichloropropene	3.60	75	130515	58.00	PPB	98
42) Isobutyl Alcohol	3.75	43	96499	1015.08	PPB	96
44) Benzene	3.76	78	403846	52.27	PPB	99
45) 1,2-Dichloroethane	3.84	62	133297	53.12	PPB	97
46) tert-Amyl Methyl Ether	3.83	55	76444	53.78	PPB	99

(#)=qualifier out of range (m)=manual integration

1222F003.D 103023_MS24_FULL_SOIL.M

Wed Dec 27 10:55:54 2023

KELSO

Page 1

Data File : J:\MS24\DATA\122223\1222F003.D

Acq On : 22 Dec 2023 10:49 am

Sample : CCV

Misc :

Vial: 3

Operator: EW/OT

Inst : MS24

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Dec 22 11:11:22 2023

Quant Results File: 103023_MS24_FULL_SOIL.RES

Quant Method : J:\MS24\M...\103023_MS24_FULL_SOIL.M (RTE Integrator)

Title : VOA MS24 EPA Method 8260B

Last Update : Wed Nov 01 09:13:30 2023

Response via : Initial Calibration

DataAcq Meth : 8260.M

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
47) Trichloroethene	4.26	95	95449	52.25	PPB	97
48) Methylcyclohexane	4.35	83	134349	59.27	PPB	98
49) 1,2-Dichloropropane	4.49	63	110776	54.07	PPB	98
50) Dibromomethane	4.59	93	59239	53.26	PPB	91
51) 1,4-Dioxane	4.60	88	20713	1053.29	PPB	95
52) Bromodichloromethane	4.71	83	131823	56.22	PPB	98
53) 2-Nitropropane	4.98	41	71172	163.47	PPB	83
54) 2-Chloroethyl Vinyl Ether	4.98	63	7933	14.55	PPB	91
55) cis-1,3-Dichloropropene	5.10	75	167484	57.14	PPB	99
56) 4-Methyl-2-pentanone (MIBK)	5.23	58	70378	109.53	PPB	96
58) Toluene	5.34	92	256714	51.57	PPB	99
60) trans-1,3-Dichloropropene	5.61	75	143573	53.97	PPB	100
61) 1,1,2-Trichloroethane	5.77	83	76806	50.75	PPB	97
62) Tetrachloroethene	5.79	164	85403	52.80	PPB	97
63) 2-Hexanone	5.98	57	24338	99.87	PPB	# 70
64) 1,3-Dichloropropane	5.93	76	161674	51.93	PPB	96
65) Dibromochloromethane	6.09	129	101733	58.21	PPB	98
66) 1,2-Dibromoethane (EDB)	6.21	107	87099	51.43	PPB	92
67) 1-Chlorohexane	6.61	91	127403	56.68	PPB	99
68) Chlorobenzene	6.64	112	285961	50.80	PPB	98
69) Ethylbenzene	6.72	106	154369	52.98	PPB	89
70) 1,1,1,2-Tetrachloroethane	6.73	131	99592	54.80	PPB	98
71) m,p-Xylenes	6.84	106	380656	105.91	PPB	96
72) o-Xylene	7.23	106	182466	52.57	PPB	94
73) Styrene	7.26	103	153390	55.35	PPB	97
74) Bromoform	7.46	173	63767	57.06	PPB	94
75) Isopropylbenzene	7.59	105	475495	54.53	PPB	100
76) cis-1,4-Dichloro-2-butene	7.75	89	32503	102.33	PPB	90
79) 1,1,2,2-Tetrachloroethane	7.98	83	115679	51.18	PPB	96
80) trans-1,4-Dichloro-2-buten	8.05	53	33572	51.41	PPB	92
81) Bromobenzene	7.92	156	122339	50.94	PPB	99
82) n-Propylbenzene	8.00	91	563226	54.82	PPB	100
83) 1,2,3-Trichloropropane	8.03	110	35012	47.94	PPB	93
84) 2-Chlorotoluene	8.11	91	332641	52.36	PPB	97
85) 1,3,5-Trimethylbenzene	8.20	105	390095	51.90	PPB	98
86) 4-Chlorotoluene	8.23	91	343209	50.95	PPB	98
87) tert-Butylbenzene	8.51	119	336637	51.24	PPB	98
88) 1,2,4-Trimethylbenzene	8.57	105	393628	53.54	PPB	99
89) sec-Butylbenzene	8.73	105	502977	56.81	PPB	100
90) p-Isopropyltoluene	8.87	119	415029	54.21	PPB	100
91) 1,3-Dichlorobenzene	8.86	146	226474	50.78	PPB	100
92) 1,4-Dichlorobenzene	8.96	146	229621	50.87	PPB	98
93) n-Butylbenzene	9.27	91	390612	57.30	PPB	98
94) 1,2-Dichlorobenzene	9.32	146	212805	51.82	PPB	97
95) 1,2-Dibromo-3-chloropropan	10.10	155	17257	50.23	PPB	95
96) 1,3,5-Trichlorobenzene	10.23	180	161867	53.18	PPB	100
97) 1,2,4-Trichlorobenzene	10.82	180	140568	48.75	PPB	97
98) Hexachlorobutadiene	10.93	225	82268	53.42	PPB	96
99) Naphthalene	11.05	128	300750	48.18	PPB	99
100) 1,2,3-Trichlorobenzene	11.28	180	124750	47.42	PPB	98

(#) = qualifier out of range (m) = manual integration

1222F003.D 103023_MS24_FULL_SOIL.M

Wed Dec 27 10:55:54 2023

KELSO

Page 2

Data File : J:\MS24\DATA\122223\1222F003.D

Vial: 3

Acq On : 22 Dec 2023 10:49 am

Operator: EW/OT

Sample : CCV

Inst : MS24

Misc : 01/08/24

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Results File: 103023_MS24_FULL_SOIL.RES

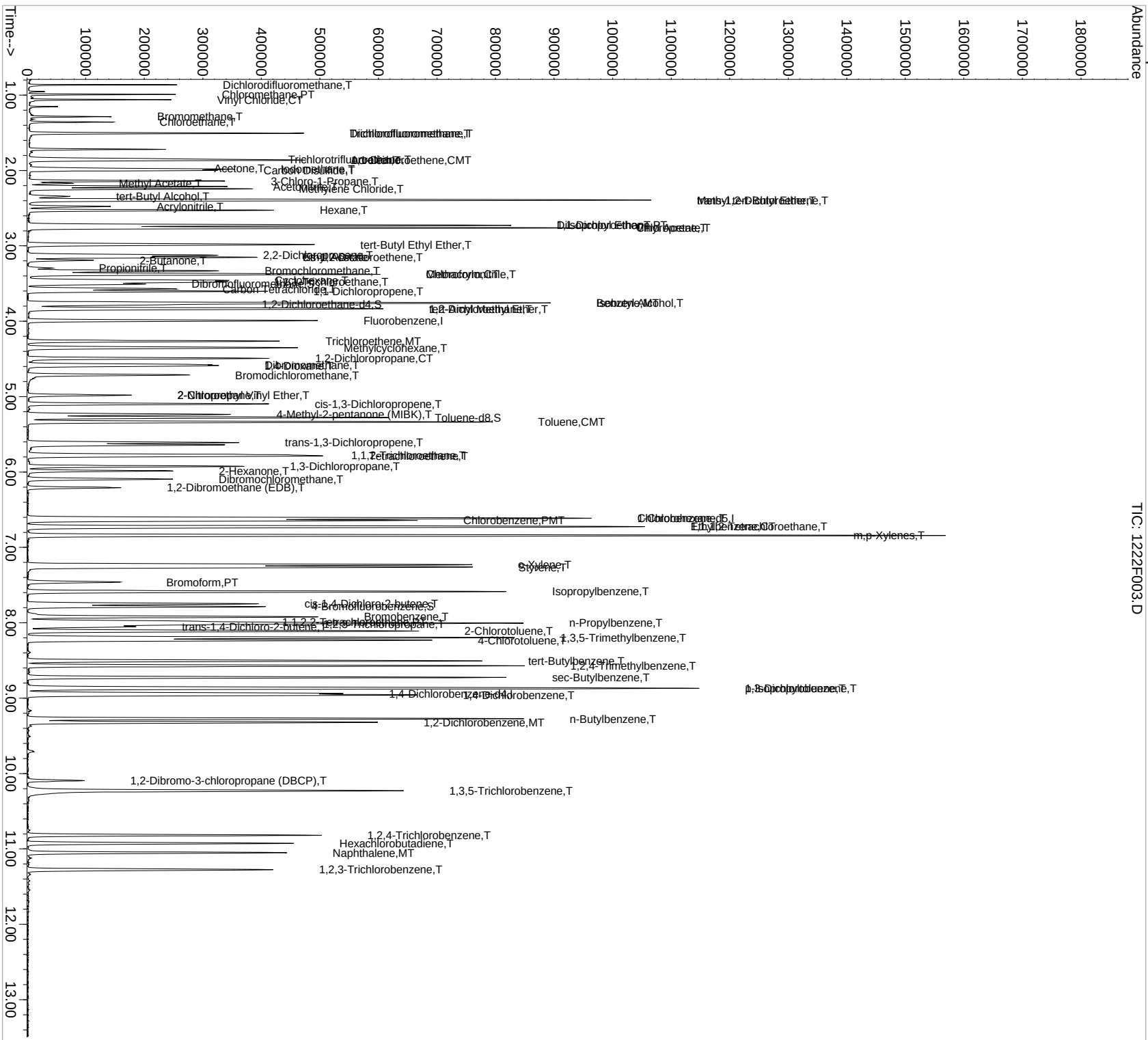
Quant Time: Dec 22 11:11 2023

Method : J:\MS24\METHODS\2010\103023_MS24_FULL_SOIL.M (RTE Integrator)

Title : VOA MS24 EPA Method 8260B

Last Update : Wed Nov 01 09:13:30 2023

Response via : Initial Calibration



Validation Report

1st  01/04/24
2nd  01/08/24

Data File: J:\MS24\DATA\122223\1222F001.D\
Lab ID: KQ2322503-01
RunType: TUNE
Matrix: Paperboard

Date Acquired: 12/22/23 09:39:00
Batch ID: 828032
Analysis Method: 8260C/VOC FP_RPTA

Validations

Validation Categories	Pass	Fail
Tune Ion Ratio	X	

Primary Review: _____

Secondary Review: _____

Validation Report

1st  01/04/24
2nd  01/08/24

Data File: J:\MS24\DATA\122223\1222F001.D\
Lab ID: KQ2322502-01
RunType: TUNE
Matrix: Soil

Date Acquired: 12/22/23 09:39:00
Batch ID: 828030
Analysis Method: 8260C/VOC FP

Validations

Validation Categories	Pass	Fail
Tune Ion Ratio	X	

Primary Review: _____

Secondary Review: _____

Validation Report

1st  01/04/24
2nd  01/08/24

Data File: J:\MS24\DATA\122223\1222F001.D\
Lab ID: KQ2322502-01
RunType: TUNE
Matrix: Soil

Date Acquired: 12/22/23 09:39:00
Batch ID: 828030
Analysis Method: 8260C/VOC Unp

Validations

Validation Categories	Pass	Fail
Tune Ion Ratio	X	

Primary Review: _____

Secondary Review: _____

Quantitation Report

1st 01/04/24
2nd 01/08/24

Data File:	J:\MS24\DATA\122223\1222F001.D\	Instrument:	K-MS-24
Acqu Date:	12/22/23 09:39:00	Vial:	1
Run Type:	TUNE	Dilution:	1
Lab ID:	KQ2322503-01	Raw Units:	

Bottle ID:		Tier:	I	Matrix:	Paperboard
Prod Code:	VOC FP_RPTA	Collect Date:	11/29/23	Receive Date:	12/12/23

Analysis Lot:	828032	Prep Lot:		Report Group:	KQ2322503
Analysis	8260C	Prep Method:			
		Prep Date:			

Title:	Volatile Organic Compounds by GC/MS	Calibration ID:	KC2300633
		Report List ID:	22951

Tune Results

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	21.9	3918	Pass
75	95	30	80	47.7	8516	Pass
95	95	100	100	100.0	17864	Pass
96	95	5	9	6.6	1182	Pass
173	174	0.00	2	0.0	0	Pass
174	95	50	120	87.1	15568	Pass
175	174	5	9	8.9	1389	Pass
176	174	95	101	98.6	15351	Pass
177	176	5	9	6.3	968	Pass

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 12/27/23 14:54

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Quantitation Report

1st 01/05/24
2nd 01/08/24

Data File:	J:\MS24\DATA\122223\1222F001.D\	Instrument:	K-MS-24
Acqu Date:	12/22/23 09:39:00	Vial:	1
Run Type:	TUNE	Dilution:	1
Lab ID:	KQ2322503-01	Raw Units:	

Bottle ID:		Tier:	I	Matrix:	Paperboard
Prod Code:	VOC FP_RPTA	Collect Date:	11/29/23	Receive Date:	12/12/23

Analysis Lot:	828032	Prep Lot:		Report Group:	KQ2322503
Analysis	8260C	Prep Method:			
		Prep Date:			

Title:	Volatile Organic Compounds by GC/MS	Calibration ID:	KC2300633
		Report List ID:	26196

Tune Results

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	21.9	3918	Pass
75	95	30	80	47.7	8516	Pass
95	95	100	100	100.0	17864	Pass
96	95	5	9	6.6	1182	Pass
173	174	0.00	2	0.0	0	Pass
174	95	50	120	87.1	15568	Pass
175	174	5	9	8.9	1389	Pass
176	174	95	101	98.6	15351	Pass
177	176	5	9	6.3	968	Pass

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 1/5/24 15:39

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Quantitation Report

1st 01/04/24
2nd 01/08/24

Data File:	J:\MS24\DATA\122223\1222F001.D\	Instrument:	K-MS-24
Acqu Date:	12/22/23 09:39:00	Vial:	1
Run Type:	TUNE	Dilution:	1
Lab ID:	KQ2322502-01	Raw Units:	

Bottle ID:	Tier:	IV	Matrix:	Soil	
Prod Code:	VOC FP	Collect Date:	12/20/23	Receive Date:	12/20/23

Analysis Lot:	828030	Prep Lot:	Report Group:	KQ2322502
Analysis	8260C	Prep Method:		
		Prep Date:		

Title:	Volatile Organic Compounds by GC/MS	Calibration ID:	KC2300633
		Report List ID:	20903

Tune Results

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	21.9	3918	Pass
75	95	30	80	47.7	8516	Pass
95	95	100	100	100.0	17864	Pass
96	95	5	9	6.6	1182	Pass
173	174	0.00	2	0.0	0	Pass
174	95	50	120	87.1	15568	Pass
175	174	5	9	8.9	1389	Pass
176	174	95	101	98.6	15351	Pass
177	176	5	9	6.3	968	Pass

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 12/27/23 16:16

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Quantitation Report

1st 01/04/24
2nd 01/08/24

Data File:	J:\MS24\DATA\122223\1222F001.D\	Instrument:	K-MS-24
Acqu Date:	12/22/23 09:39:00	Vial:	1
Run Type:	TUNE	Dilution:	1
Lab ID:	KQ2322502-01	Raw Units:	

Bottle ID:		Tier:	IV	Matrix:	Soil
Prod Code:	VOC FP	Collect Date:	12/20/23	Receive Date:	12/20/23

Analysis Lot:	828030	Prep Lot:		Report Group:	KQ2322502
Analysis	8260C	Prep Method:			
		Prep Date:			

Title:	Volatile Organic Compounds by GC/MS	Calibration ID:	KC2300633
		Report List ID:	21451

Tune Results

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	21.9	3918	Pass
75	95	30	80	47.7	8516	Pass
95	95	100	100	100.0	17864	Pass
96	95	5	9	6.6	1182	Pass
173	174	0.00	2	0.0	0	Pass
174	95	50	120	87.1	15568	Pass
175	174	5	9	8.9	1389	Pass
176	174	95	101	98.6	15351	Pass
177	176	5	9	6.3	968	Pass

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 12/27/23 16:23

\\alprews001\starlims\LIMSReps\QuantValidation.rpt

Quantitation Report

1st 01/04/24
2nd 01/08/24

Data File:	J:\MS24\DATA\122223\1222F001.D\	Instrument:	K-MS-24
Acqu Date:	12/22/23 09:39:00	Vial:	1
Run Type:	TUNE	Dilution:	1
Lab ID:	KQ2322502-01	Raw Units:	

Bottle ID:	Tier:	IV	Matrix:	Soil	
Prod Code:	VOC FP	Collect Date:	12/20/23	Receive Date:	12/20/23

Analysis Lot:	828030	Prep Lot:	Report Group:	KQ2322502
Analysis	8260C	Prep Method:		
		Prep Date:		

Title:	Volatile Organic Compounds by GC/MS	Calibration ID:	KC2300633
		Report List ID:	21697

Tune Results

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	21.9	3918	Pass
75	95	30	80	47.7	8516	Pass
95	95	100	100	100.0	17864	Pass
96	95	5	9	6.6	1182	Pass
173	174	0.00	2	0.0	0	Pass
174	95	50	120	87.1	15568	Pass
175	174	5	9	8.9	1389	Pass
176	174	95	101	98.6	15351	Pass
177	176	5	9	6.3	968	Pass

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 1/5/24 15:29

\\alprews001\starlims\LIMSReps\QuantValidation.rpt

Quantitation Report

1st 01/04/24
2nd 01/08/24

Data File:	J:\MS24\DATA\122223\1222F001.D\	Instrument:	K-MS-24
Acqu Date:	12/22/23 09:39:00	Vial:	2
Run Type:	TUNE	Dilution:	1
Lab ID:	KQ2322502-01	Raw Units:	

Bottle ID:		Tier:	IV	Matrix:	Soil
Prod Code:	VOC Unp	Collect Date:	12/20/23	Receive Date:	12/20/23

Analysis Lot:	828030	Prep Lot:		Report Group:	KQ2322502
Analysis	8260C	Prep Method:			
		Prep Date:			

Title:	Volatile Organic Compounds by GC/MS, Unpreserved	Calibration ID:	KC2300633
		Report List ID:	21747

Tune Results

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	21.9	3918	Pass
75	95	30	80	47.7	8516	Pass
95	95	100	100	100.0	17864	Pass
96	95	5	9	6.6	1182	Pass
173	174	0.00	2	0.0	0	Pass
174	95	50	120	87.1	15568	Pass
175	174	5	9	8.9	1389	Pass
176	174	95	101	98.6	15351	Pass
177	176	5	9	6.3	968	Pass

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Printed: 1/5/24 15:29

\\alprews001\starlims\LIMSReps\QuantValidation.rpt

Data File : J:\MS24\DATA\122223\1222F001.D

Vial: 1

Acq On : 22 Dec 2023 09:39 am

Operator: EW/OT

Sample : BFB

Inst : MS24

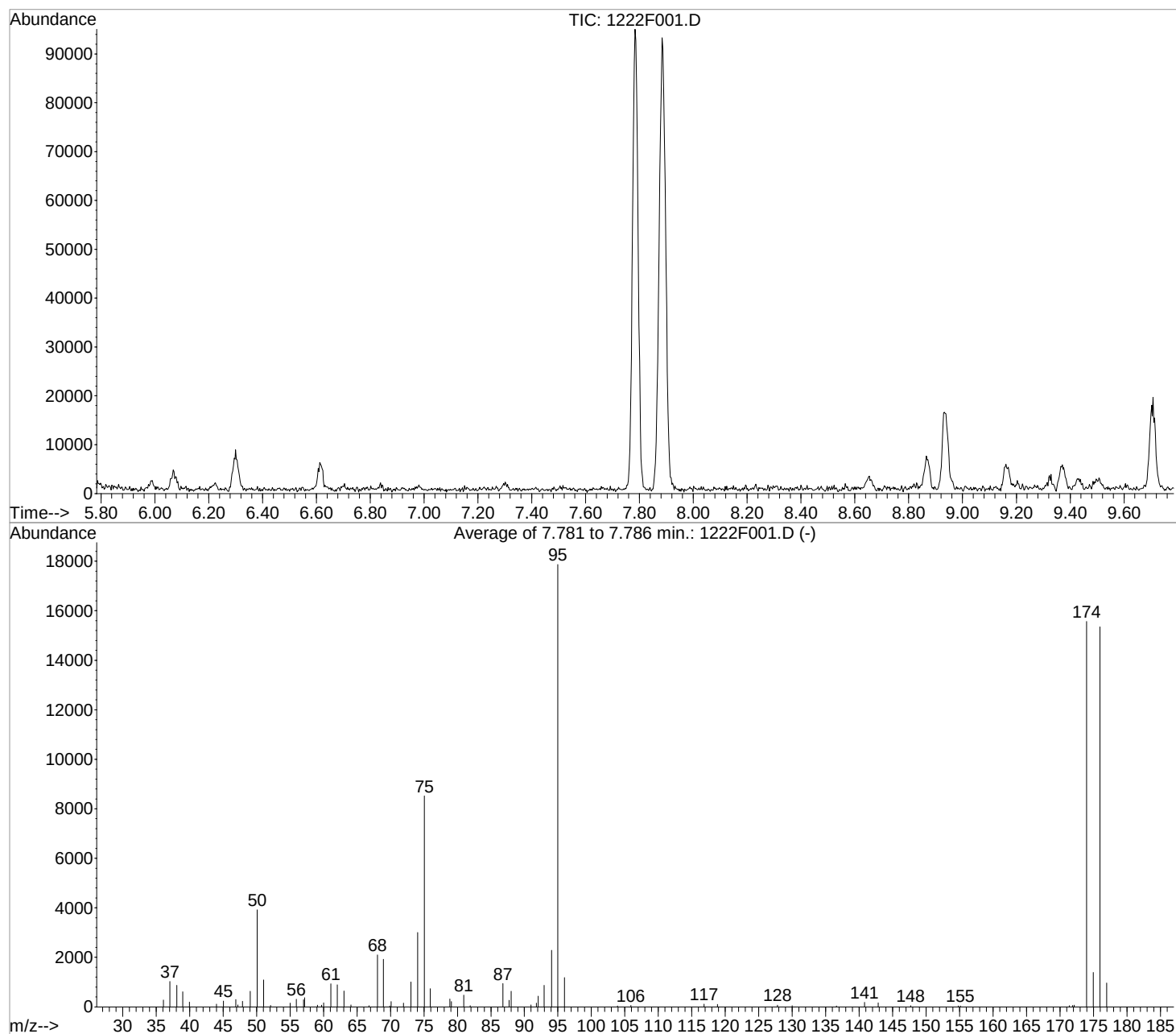
Misc :

Multiplr: 1.00

MS Integration Params: rteint.p

Method : J:\MS24\METHODS\2010\103023_MS24_FULL_SOIL.M (RTE Integrator)

Title : VOA MS24 EPA Method 8260B



Spectrum Information: Average of 7.781 to 7.786 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	21.9	3918	PASS
75	95	30	60	47.7	8516	PASS
95	95	100	100	100.0	17864	PASS
96	95	5	9	6.6	1182	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	87.1	15568	PASS
175	174	5	9	8.9	1389	PASS
176	174	95	101	98.6	15351	PASS
177	176	5	9	6.3	968	PASS

No Ethyl Acetate Cal

1602300633

Date: 10/30/23

ALS Environmental

Tune File: BFB-Atune

By: OT

Injection Log

New Tune: Yes

IS/SS Std. ID: 104VOA-13G

MS24 - Agilent 5975

CCV Std ID: 104VOA-14A

ICAL Date: 10/30/23

MS/DMS/LCS/ICV Std ID: 104VOA-10A/14D/14C/01G/15E/15F

Second RV:

BFB Std. ID: 104VOA-7C

103VOA-97C

LIMS ID:

11/12/23

	Sample Name	File Name	Method	Dilution	pH	Comments
1	BFB @ 50ng	1030F005	82600	None	NA	1µL → 5mL
2	IB	6				
3	IB	7				
4	ICAL 1 µL	8				see ICAL sheet
5	2	9				
6	5	10				
7	10	11				
8	20	12				
9	50	13				
10	100	14				
11	200	15				
12	300	16				
13	IB	17				
14	IB	18				
15	ICV	19				25/25/25/50/50µL → 50mL, NR
16	ICV	20				↓
17	BFB @ 50ng	21				1µL → 5mL
18	ICV	22				25/25/25/25/50/50µL → 50mL, NR
19	ICV	23				↓
20	ICV Ketones	24				50/25µL → 50mL
21						
22						
23						
24						
25						
26						
27						

INITIAL CALIBRATION CURVE

Date 10/30/23
Prepared By AT

Analysis 8260 soil
Instrument MS24

Stock Solution #1 104V0A-13 I
Stock Solution #2 104V0A-14A
Stock Solution #3 104V0A-13G

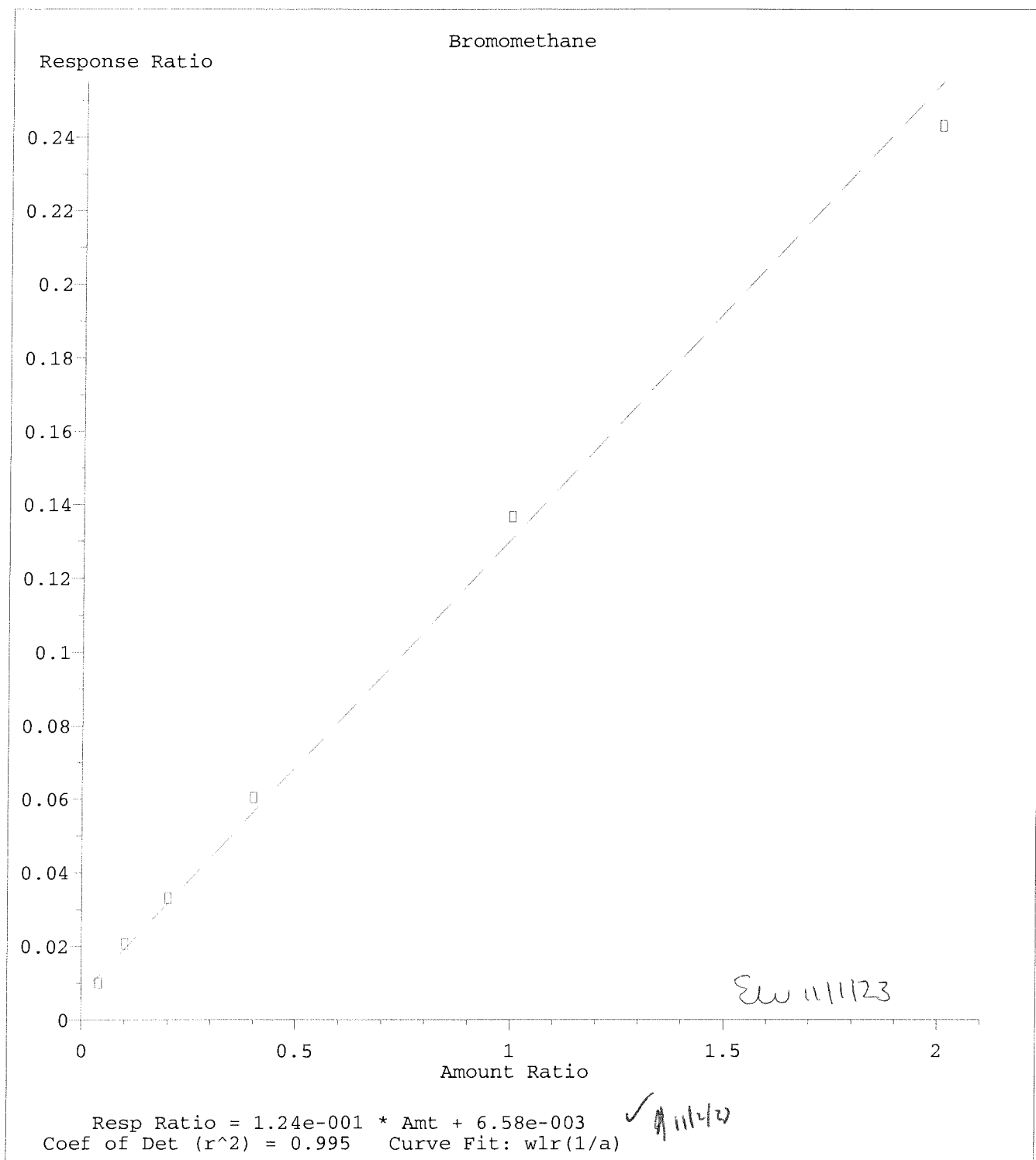
Analytes Surrogates
Analytes 8260 soil CCV mix
Analytes IS

Init. Concentration 100 ppm
Init. Concentration 100/500ppm
Init. Concentration 50 ppm

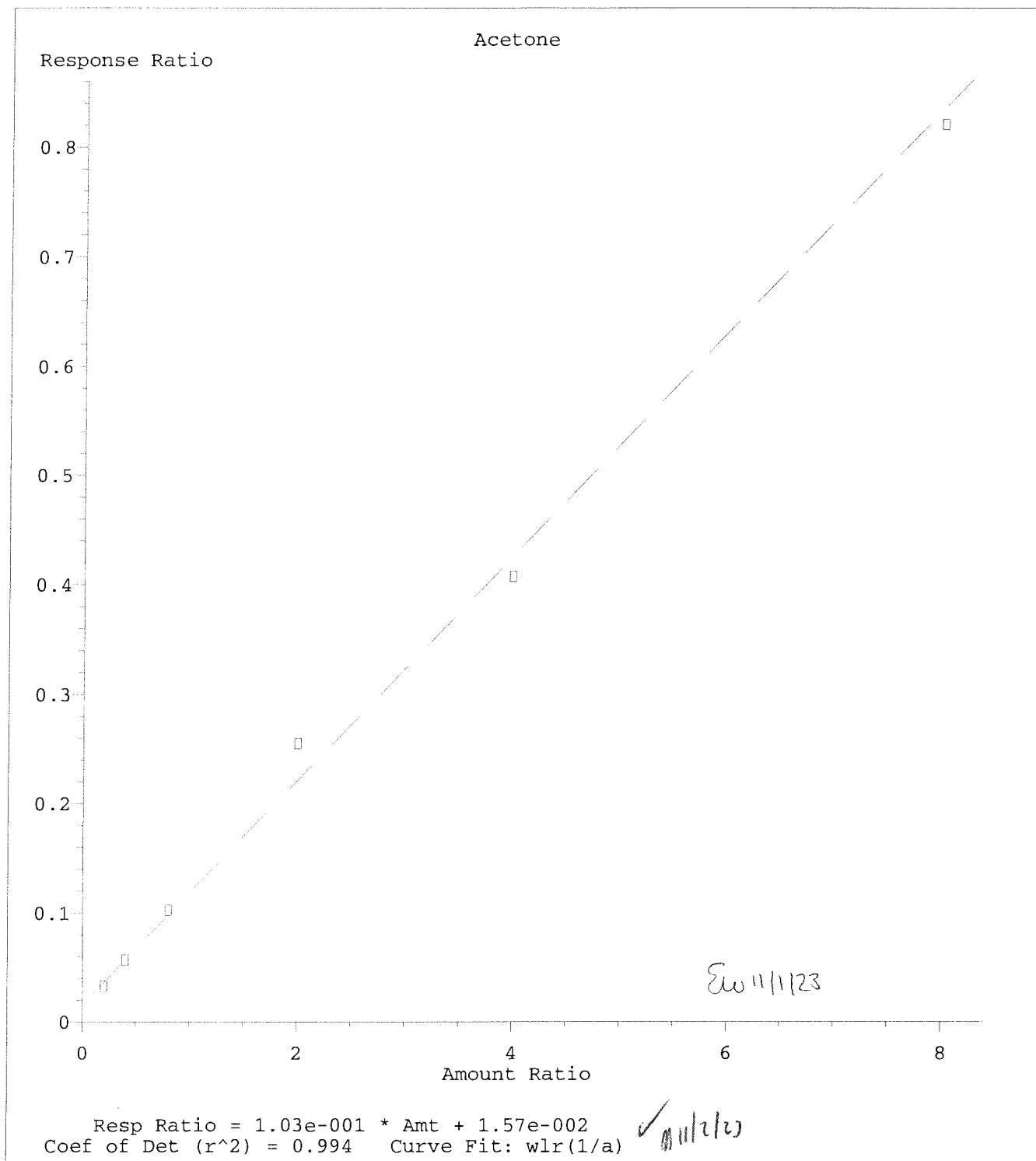
#	Aliquot of Stock Solution #1 (µL)	Final Conc. of #1 (µg/L)	Aliquot of Stock Solution #2 (µL)	Final Conc. of #2 (µg/L)	Aliquot of Stock Solution #3 (µL)	Final Conc. of #3 (µg/L)	Final Volume (mL)	Notes
1			0.5	1	5	50	50	
2	5	10	1	2			50	
3	10	20	2.5	5			50	
4	15	30	5	10			50	
5	20	40	10	20			50	
6	25	50	25	50			50	
7	35	70	50	100			50	
8	40	80	100	200			50	
9	60	120	150	300			50	
DPP Std# 104V0A-10A					ICV Std#			
					Absolute	104V0A-10A	11/11/23	50
					Acrolein	14D	11/16/23	50
					Freon 21	14C	11/16/23	25
					Oxygenates	016	12/19/23	25
					CLP	15E	11/21/23	25

BFB std#: 104V0A-7C

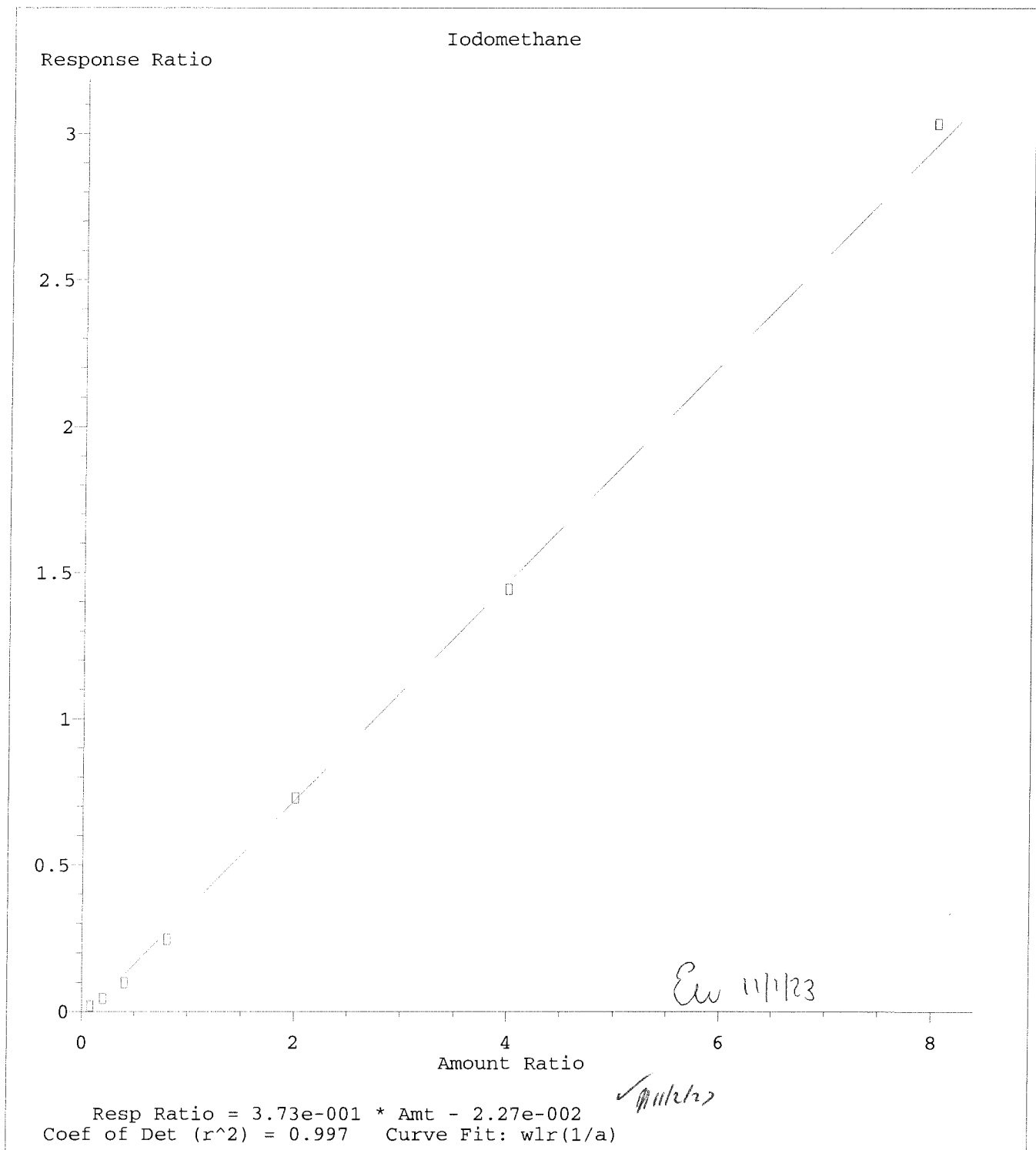
Custom appendix 103V0A-7C 12/14/23



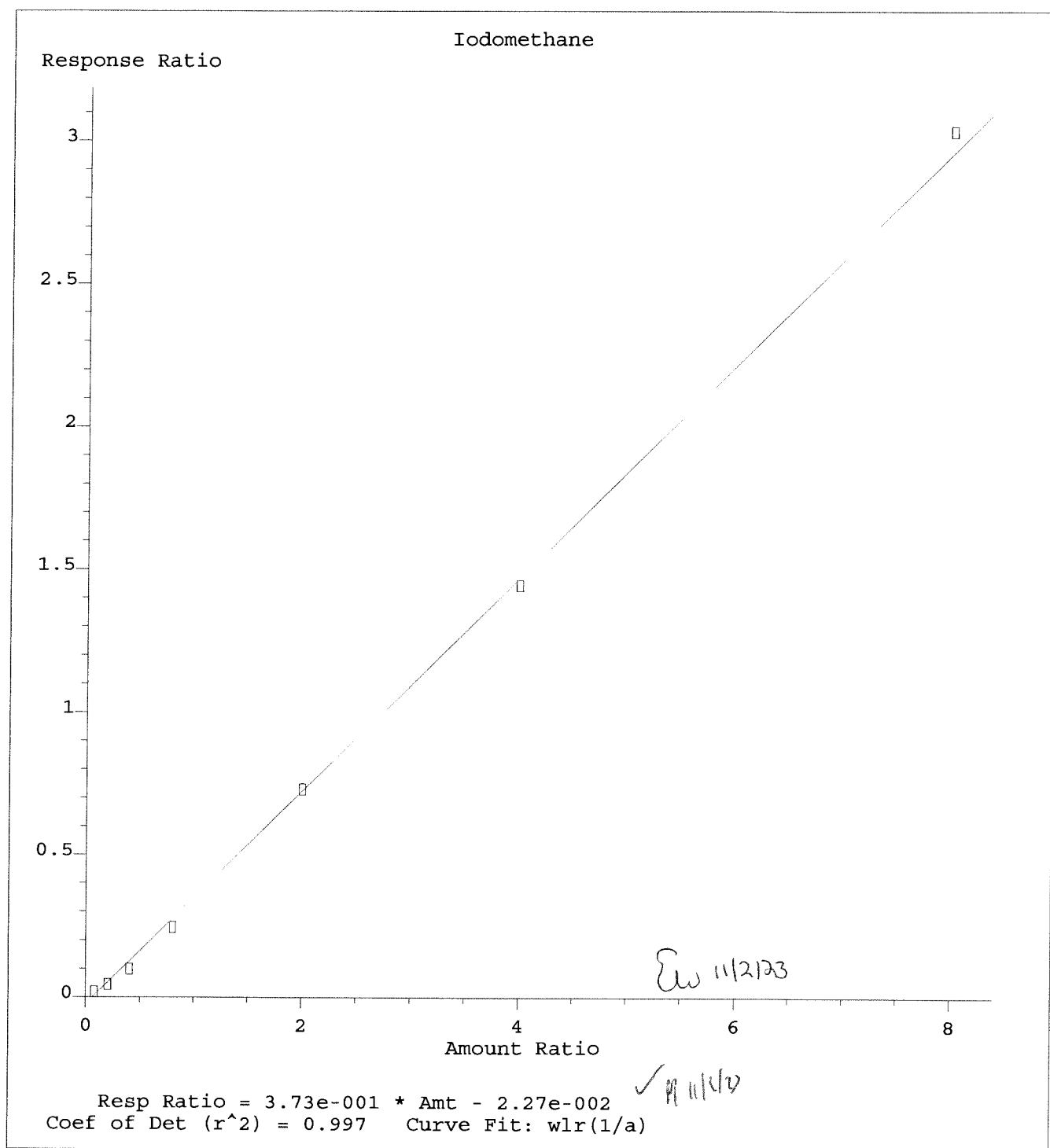
Method Name: J:\MS24\METHODS\2010\103023_MS24_FULL_SOIL.M
Calibration Table Last Updated: Wed Nov 01 09:13:30 2023



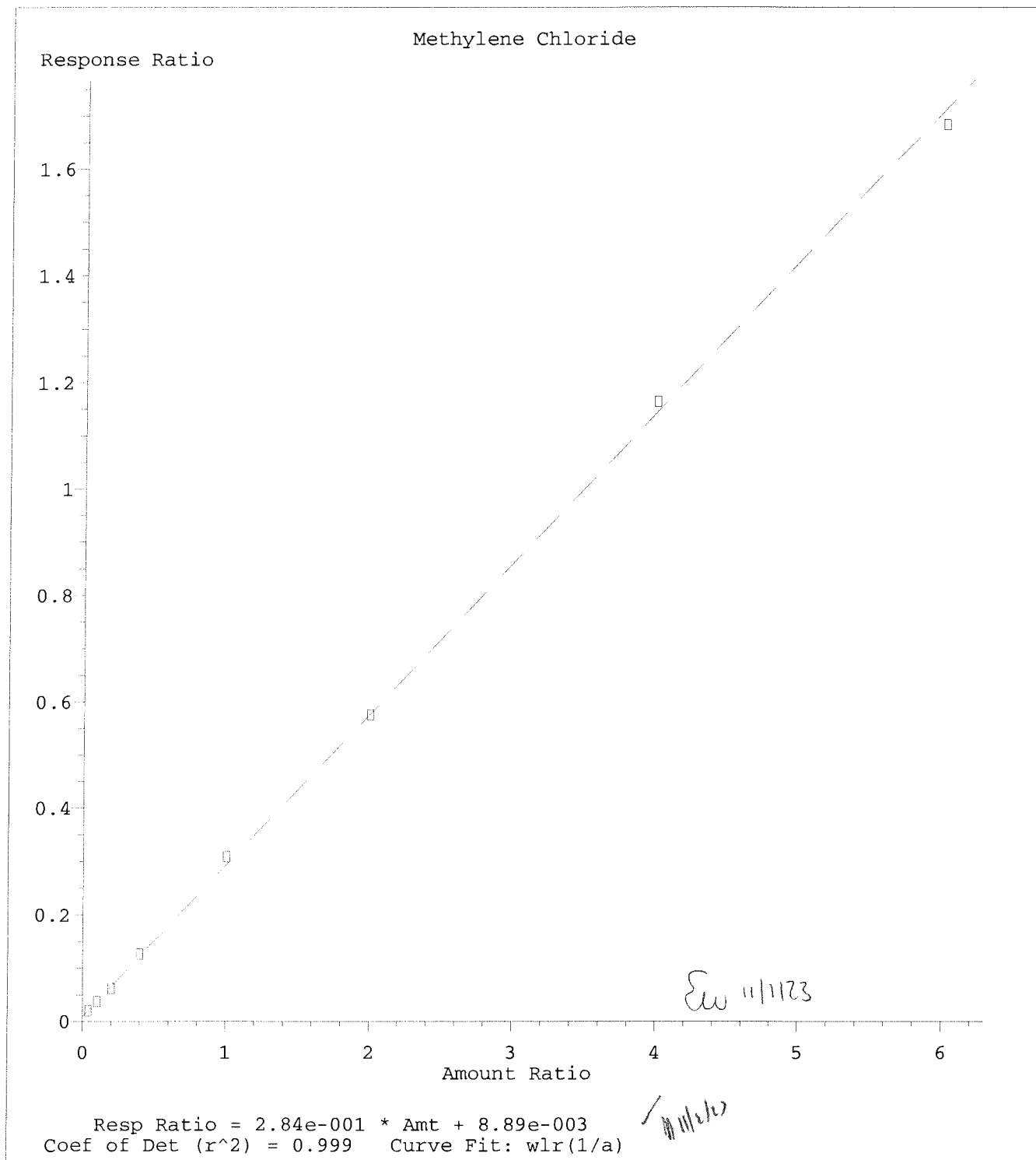
Method Name: J:\MS24\METHODS\2010\103023_MS24_FULL_SOIL.M
Calibration Table Last Updated: Wed Nov 01 09:13:30 2023



Method Name: J:\MS24\METHODS\2010\103023_MS24_FULL_SOIL.M
Calibration Table Last Updated: Wed Nov 01 09:13:30 2023



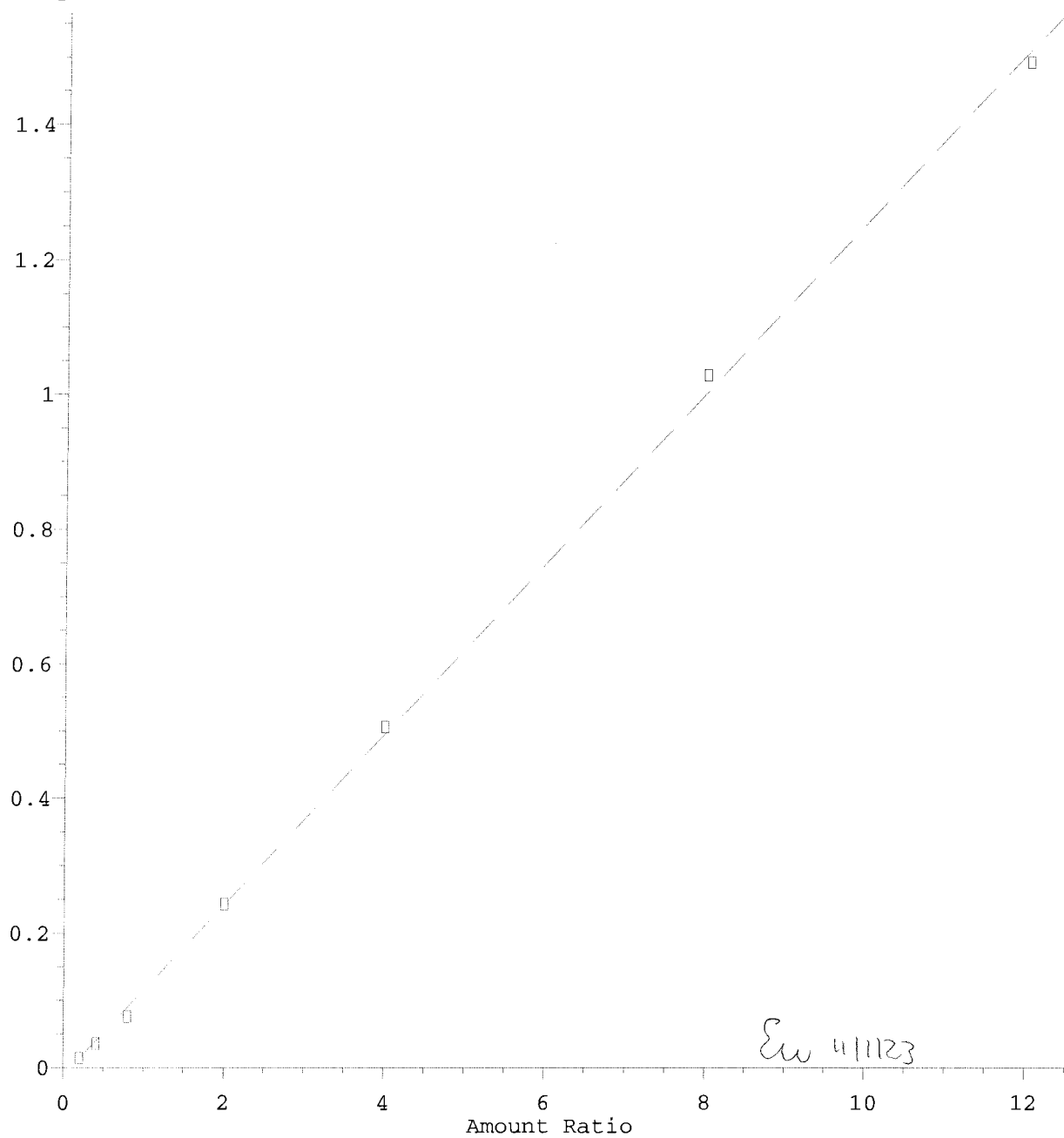
Method Name: J:\MS24\METHODS\2010\103023_MS24_FULL_SOIL.M
Calibration Table Last Updated: Wed Nov 01 09:13:30 2023



Method Name: J:\MS24\METHODS\2010\103023_MS24_FULL_SOIL.M
Calibration Table Last Updated: Wed Nov 01 09:13:30 2023

cis-1,4-Dichloro-2-butene

Response Ratio



Eu 4/11/23

Resp Ratio = 1.27×10^{-1} * Amt - 1.17×10^{-2}
 Coef of Det (r^2) = 0.999 Curve Fit: Linear

✓ 4/11/23

Method Name: J:\MS24\METHODS\2010\103023_MS24_FULL_SOIL.M
 Calibration Table Last Updated: Wed Nov 01 09:13:30 2023

Data File : J:\MS24\DATA\103023A\1030F005.D

Vial: 10

Acq On : 30 Oct 2023 02:55 pm

Operator: EW/OT

Sample : BFB

Inst : MS24

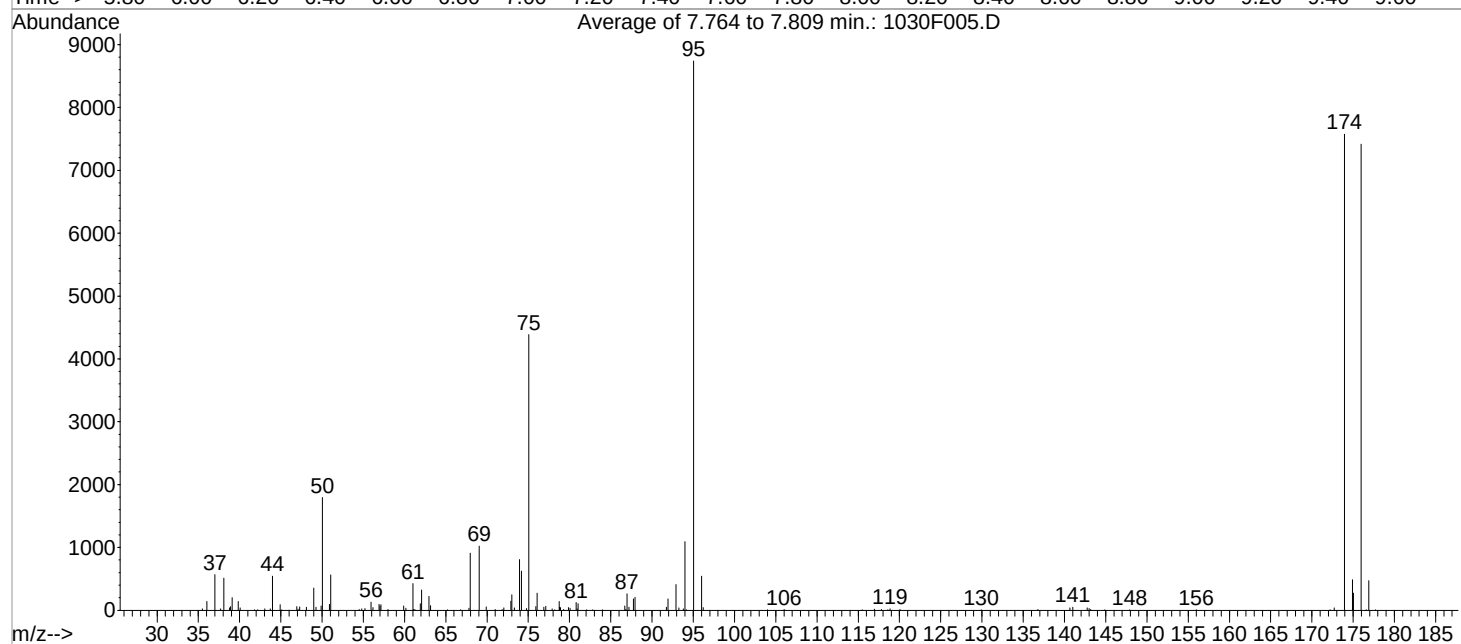
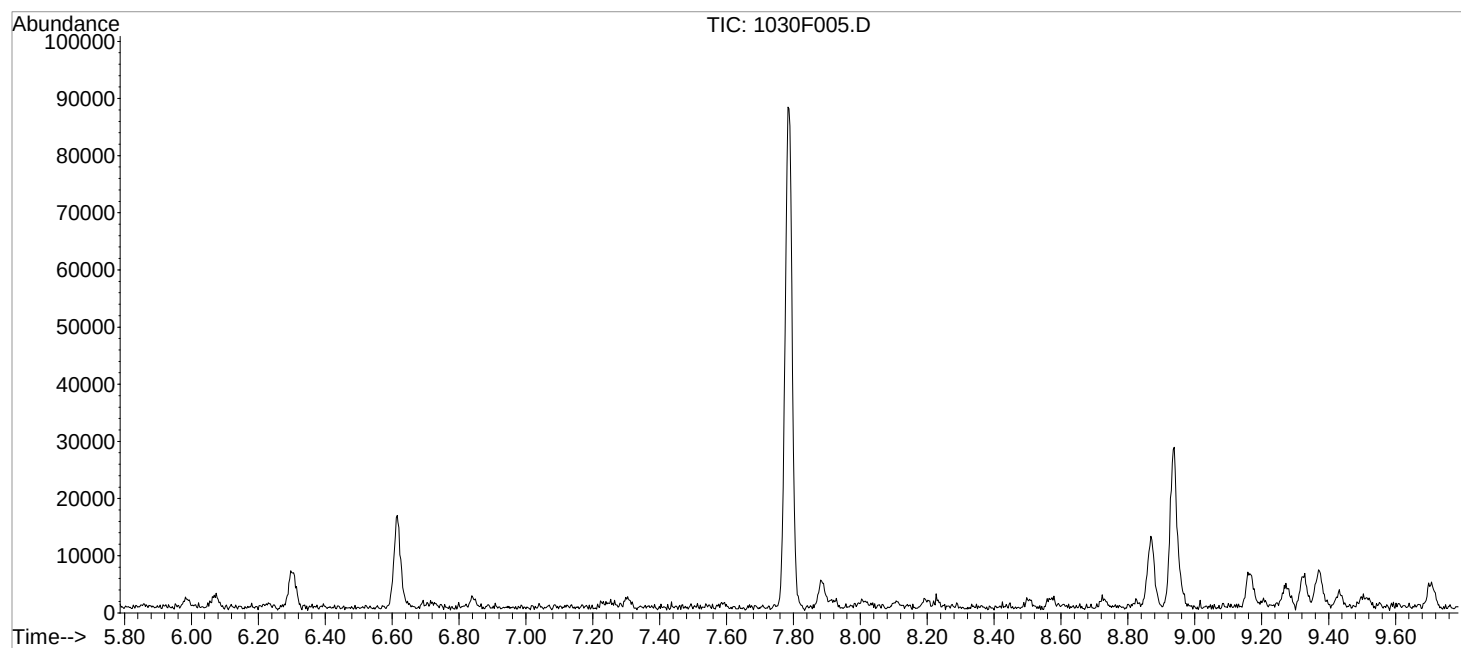
Misc :

Multiplr: 1.00

MS Integration Params: rteint.p

Method : J:\MS24\METHODS\2010\060123_MS24_FULL_SOIL.M (RTE Integrator)

Title : VOA MS24 EPA Method 8260B



Spectrum Information: Average of 7.764 to 7.809 min.

Whole peak -2502

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.5	1794	PASS
75	95	30	60	50.2	4384	PASS
95	95	100	100	100.0	8738	PASS
96	95	5	9	6.2	540	PASS
173	174	0.00	2	0.5	40	PASS
174	95	50	120	86.7	7576	PASS
175	174	5	9	6.4	485	PASS
176	174	95	101	97.9	7414	PASS
177	176	5	9	6.4	473	PASS

Data File : I:\MS24\DATA\103023A\1030F007.D

Acq On : 30 Oct 2023 03:52 pm

Sample : IB

Misc :

Vial: 12

Operator: EW/OT

Inst : MS24

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Nov 01 09:18:22 2023

Quant Results File: 103023_MS24_FULL_SOIL.RES

Quant Method : J:\MS24\M...\103023_MS24_FULL_SOIL.M (RTE Integrator)

Title : VOA MS24 EPA Method 8260B

Last Update : Tue Oct 31 15:51:56 2023

Response via : Initial Calibration

DataAcq Meth : 8260.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	3.99	96	315717	50.00	PPB	0.00
59) Chlorobenzene-d5	6.62	82	128214	50.00	PPB	0.00
78) 1,4-Dichlorobenzene-d4	8.94	152	112477	50.00	PPB	0.00

System Monitoring Compounds

39) Dibromofluoromethane	3.50	113	560	0.34	PPB	0.00
Spiked Amount	50.000		Recovery	=	0.68%	
43) 1,2-Dichloroethane-d4	0.00	65	0d	0.00	PPB	
Spiked Amount	50.000		Recovery	=	0.00%	
57) Toluene-d8	5.28	98	5339	0.78	PPB	0.00
Spiked Amount	50.000		Recovery	=	1.56%	
77) 4-Bromofluorobenzene	7.78	95	1668	0.70	PPB	0.00
Spiked Amount	50.000		Recovery	=	1.40%	

Target Compounds

						Qvalue
13) Iodomethane	1.98	142	634	3.31	PPB	78
97) 1,2,4-Trichlorobenzene	10.82	180	661	0.24	PPB	70
99) Naphthalene	11.05	128	2234	0.38	PPB	97

< MRL

Data File : I:\MS24\DATA\103023A\1030F007.D

Acq On : 30 Oct 2023 03:52 pm

Sample : IB

Misc :

Vial: 12

Operator: EW/OT

Inst : MS24

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Nov 1 9:20 2023

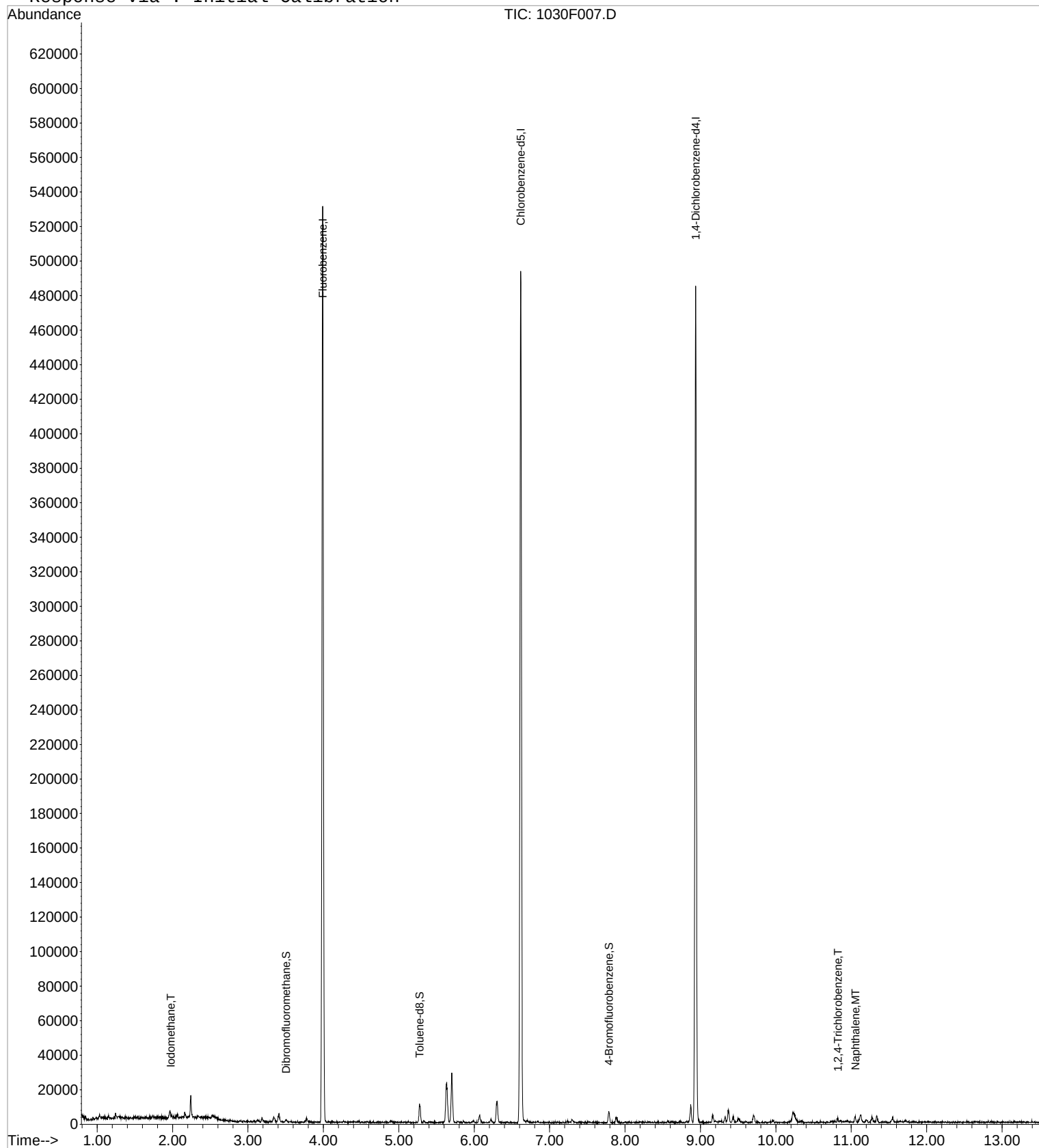
Quant Results File: 103023_MS24_FULL_SOIL.RES

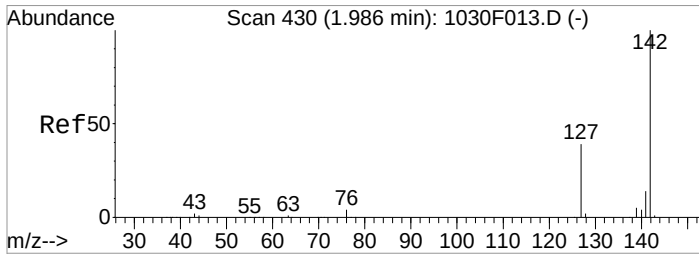
Method : J:\MS24\METHODS\2010\103023_MS24_FULL_SOIL.M (RTE Integrator)

Title : VOA MS24 EPA Method 8260B

Last Update : Wed Nov 01 09:13:30 2023

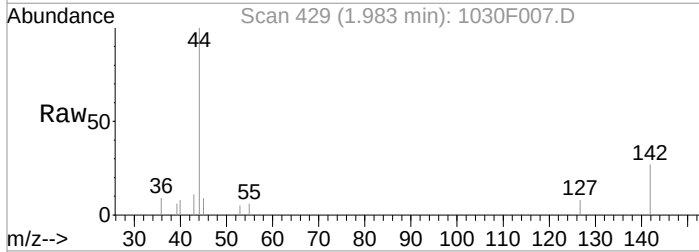
Response via : Initial Calibration



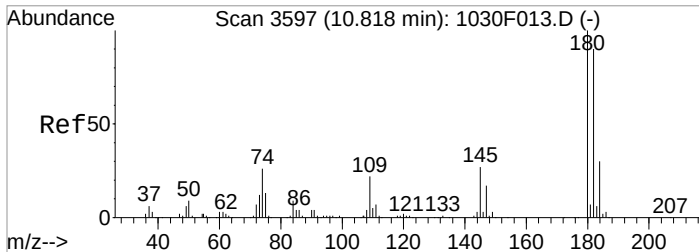
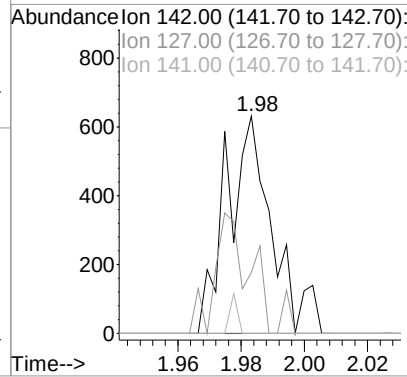
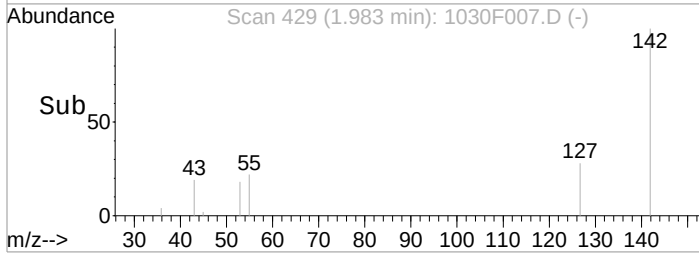


#13
Iodomethane
Concen: 3.31 PPB
RT: 1.98 min Scan# 429
Delta R.T. -0.00 min
Lab File: 1030F007.D
Acq: 30 Oct 2023 03:52 pm

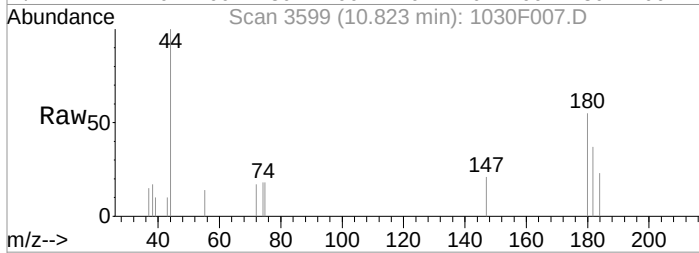
2nd 11/02/23



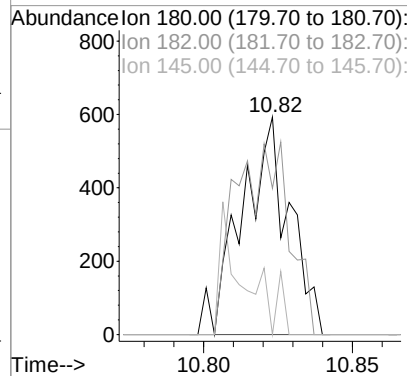
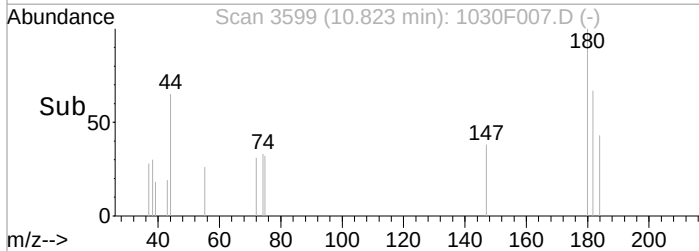
Tgt Ion	Ratio	Lower	Upper
142	100		
127	28.0	8.8	68.8
141	0.0	0.0	44.0

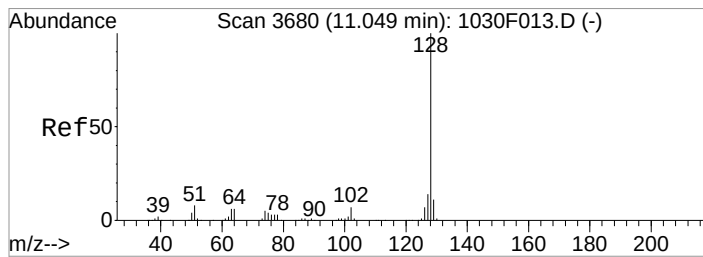


#97
1,2,4-Trichlorobenzene
Concen: 0.24 PPB
RT: 10.82 min Scan# 3599
Delta R.T. 0.01 min
Lab File: 1030F007.D
Acq: 30 Oct 2023 03:52 pm



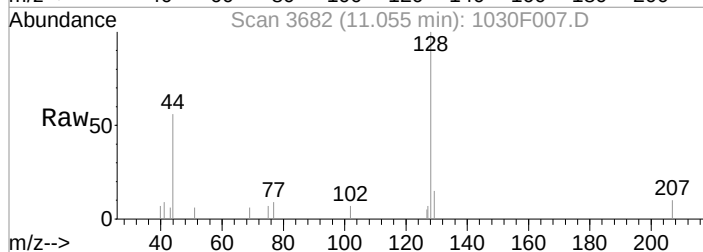
Tgt Ion	Ratio	Lower	Upper
180	100		
182	67.3	59.8	119.8
145	0.0	0.0	56.7



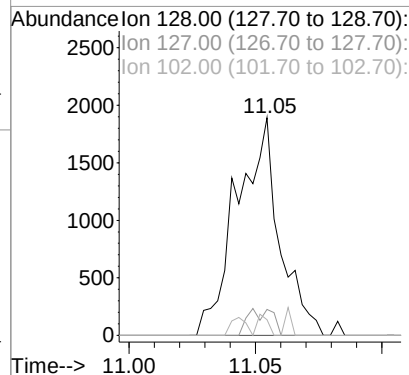
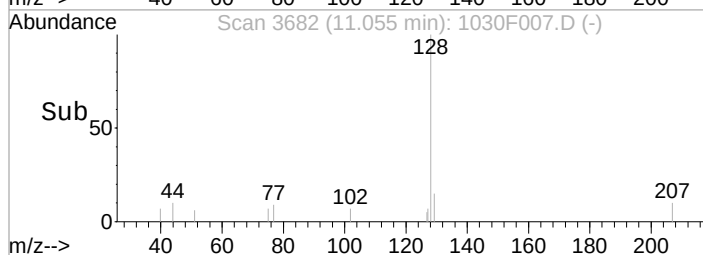


#99
Naphthalene
Concen: 0.38 PPB
RT: 11.05 min Scan# 3682
Delta R.T. 0.01 min
Lab File: 1030F007.D
Acq: 30 Oct 2023 03:52 pm

2nd 11/02/23



Tgt Ion:	128	Resp:	2234
Ion Ratio	Lower	Upper	
128	100		
127	11.9	0.0	43.6
102	7.2	0.0	37.4



Data File : J:\MS24\DATA\103023A\1030F008.D

Acq On : 30 Oct 2023 04:17 pm

Sample : ICAL 1

Misc :

Vial: 13

Operator: EW/OT

Inst : MS24

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Oct 31 10:03:03 2023

Quant Results File: 103023_MS24_FULL_SOIL.RES

Quant Method : J:\MS24\M...\103023_MS24_FULL_SOIL.M (RTE Integrator)

Title : VOA MS24 EPA Method 8260B

Last Update : Tue Oct 31 10:01:35 2023

Response via : Initial Calibration

DataAcq Meth : 8260.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	3.99	96	320485	50.00	PPB	0.00
59) Chlorobenzene-d5	6.62	82	130413	50.00	PPB	0.00
78) 1,4-Dichlorobenzene-d4	8.94	152	112537	50.00	PPB	0.00

System Monitoring Compounds

39) Dibromofluoromethane	0.00	113	0	0.00	PPB	
Spiked Amount	50.000		Recovery	=	0.00%	
43) 1,2-Dichloroethane-d4	3.78	65	877	0.43	PPB	0.00
Spiked Amount	50.000		Recovery	=	0.86%	
57) Toluene-d8	5.28	98	4621	0.68	PPB	0.00
Spiked Amount	50.000		Recovery	=	1.36%	
77) 4-Bromofluorobenzene	7.78	95	1654	0.70	PPB	0.00
Spiked Amount	50.000		Recovery	=	1.40%	

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	0.86	85	1460	1.20	PPB	91
3) Chloromethane	0.99	50	2631	1.26	PPB	85
4) Vinyl Chloride	1.06	62	1977	1.08	PPB	84
5) Bromomethane	1.29	96	1598	1.82	PPB	74
6) Chloroethane	1.36	64	1179	0.96	PPB	86
7) Dichlorofluoromethane	1.51	67	2597	1.02	PPB	90
8) Trichlorofluoromethane	1.50	101	2275	1.13	PPB	95
9) Acrolein	1.86	56	1744	4.36	PPB	90
10) Trichlorotrifluoroethane	1.84	151	921	1.13	PPB	91
11) 1,1-Dichloroethene	1.86	96	1646	1.17	PPB	83
12) Acetone	1.96	43	4252	5.21	PPB	99
13) Iodomethane	1.98	142	2207	0.94	PPB	89
14) Carbon Disulfide	2.00	76	4118	0.96	PPB	96
15) 3-Chloro-1-Propane	2.14	76	816	0.95	PPB	98
16) Methyl Acetate	2.16	43	2489	1.67	PPB	86
17) Acetonitrile	2.21	40	2858	21.36	PPB	# 78
18) Methylene Chloride	2.24	84	4417	2.23	PPB	84
19) tert-Butyl Alcohol	2.34	59	1441	6.58	PPB	79
20) Acrylonitrile	2.48	53	1318	1.86	PPB	88
21) Methyl tert-Butyl Ether	2.40	73	9856	1.86	PPB	97
22) trans-1,2-Dichloroethene	2.40	96	2010	1.11	PPB	82
23) Hexane	2.53	57	2456	1.24	PPB	85
24) Diisopropyl Ether	2.72	45	6669	0.95	PPB	97
25) 1,1-Dichloroethane	2.73	63	3398	0.91	PPB	94
27) Chloroprene	2.76	53	5109	1.94	PPB	99
28) tert-Butyl Ethyl Ether	2.98	59	5470	0.88	PPB	86
29) 2,2-Dichloropropane	3.12	77	2620	1.01	PPB	88
30) cis-1,2-Dichloroethene	3.15	96	2433	1.08	PPB	80
31) 2-Butanone	3.19	72	791	3.08	PPB	# 76
32) Propionitrile	3.30	54	743	2.42	PPB	68
33) Ethyl Acetate	3.15	61	2826	0.83	PPB	98
34) Methacrylonitrile	3.37	67	1701	1.97	PPB	# 76
35) Bromochloromethane	3.32	128	958m	0.90	PPB	
36) Chloroform	3.38	83	3087	0.88	PPB	89
37) Cyclohexane	3.46	56	2900	1.04	PPB	# 56
38) 1,1,1-Trichloroethane	3.48	97	2610	1.00	PPB	79
40) Carbon Tetrachloride	3.57	117	2105	0.98	PPB	79
41) 1,1-Dichloropropene	3.60	75	2488	1.00	PPB	92
42) Isobutyl Alcohol	3.75	43	1754	16.02	PPB	70
44) Benzene	3.76	78	7971	0.94	PPB	92
45) 1,2-Dichloroethane	3.84	62	2534	0.91	PPB	97
46) tert-Amyl Methyl Ether	3.83	55	1629	1.03	PPB	# 59
47) Trichloroethene	4.26	95	1968	0.98	PPB	81

(#)=qualifier out of range (m)=manual integration

1030F008.D 103023_MS24_FULL_SOIL.M

Tue Oct 31 14:26:01 2023

KELSO

Page 1

Data File : J:\MS24\DATA\103023A\1030F008.D

Acq On : 30 Oct 2023 04:17 pm

Sample : ICAL 1

Misc :

Vial: 13

Operator: EW/OT

Inst : MS24

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Oct 31 10:03:03 2023

Quant Results File: 103023_MS24_FULL_SOIL.RES

Quant Method : J:\MS24\M...\103023_MS24_FULL_SOIL.M (RTE Integrator)

Title : VOA MS24 EPA Method 8260B

Last Update : Tue Oct 31 10:01:35 2023

Response via : Initial Calibration

DataAcq Meth : 8260.M

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
48) Methylcyclohexane	4.35	83	2825	1.03	PPB	93
49) 1,2-Dichloropropane	4.50	63	2104	0.92	PPB	85
52) Bromodichloromethane	4.71	83	2316	0.88	PPB	78
53) 2-Nitropropane	4.98	41	1296	2.69	PPB	91
54) 2-Chloroethyl Vinyl Ether	4.99	63	558	0.93	PPB	88
55) cis-1,3-Dichloropropene	5.10	75	2744	0.80	PPB	89
56) 4-Methyl-2-pentanone (MIBK)	5.24	58	1337	1.84	PPB	# 76
58) Toluene	5.34	92	5633	1.03	PPB	88
60) trans-1,3-Dichloropropene	5.61	75	2424	0.85	PPB	80
61) 1,1,2-Trichloroethane	5.76	83	1459	0.93	PPB	# 74
62) Tetrachloroethene	5.80	164	1761	1.10	PPB	# 41
64) 1,3-Dichloropropane	5.92	76	2824	0.86	PPB	94
65) Dibromochloromethane	6.09	129	1397	0.73	PPB	81
66) 1,2-Dibromoethane (EDB)	6.20	107	1526	0.87	PPB	75
67) 1-Chlorohexane	6.61	91	2726	1.20	PPB	83
68) Chlorobenzene	6.65	112	5749	1.00	PPB	85
69) Ethylbenzene	6.72	106	2920	0.96	PPB	# 55
70) 1,1,1,2-Tetrachloroethane	6.74	131	1556	0.79	PPB	77
71) m,p-Xylenes	6.84	106	6786	1.78	PPB	99
72) o-Xylene	7.23	106	3298	0.89	PPB	# 81
73) Styrene	7.26	103	2590	0.86	PPB	# 65
74) Bromoform	7.46	173	677	0.56	PPB	# 68
75) Isopropylbenzene	7.59	105	8362	0.89	PPB	90
79) 1,1,2,2-Tetrachloroethane	7.98	83	2018	0.90	PPB	86
81) Bromobenzene	7.92	156	2228	0.94	PPB	# 75
82) n-Propylbenzene	8.00	91	8798	0.84	PPB	84
83) 1,2,3-Trichloropropane	8.03	110	505	0.71	PPB	84
84) 2-Chlorotoluene	8.11	91	5791	0.91	PPB	68
85) 1,3,5-Trimethylbenzene	8.20	105	6922	0.92	PPB	93
86) 4-Chlorotoluene	8.23	91	6357m	0.96	PPB	
87) tert-Butylbenzene	8.51	119	6065	0.93	PPB	92
88) 1,2,4-Trimethylbenzene	8.57	105	5990	0.80	PPB	94
89) sec-Butylbenzene	8.73	105	8054	0.91	PPB	92
90) p-Isopropyltoluene	8.87	119	6762	0.87	PPB	94
91) 1,3-Dichlorobenzene	8.86	146	4472	1.03	PPB	94
92) 1,4-Dichlorobenzene	8.96	146	4568	1.04	PPB	89
93) n-Butylbenzene	9.27	91	5904	0.85	PPB	79
94) 1,2-Dichlorobenzene	9.32	146	3890m	0.96	PPB	
96) 1,3,5-Trichlorobenzene	10.23	180	3031	1.05	PPB	87
97) 1,2,4-Trichlorobenzene	10.82	180	3099	1.13	PPB	# 65
98) Hexachlorobutadiene	10.93	225	1850	1.25	PPB	76
99) Naphthalene	11.05	128	6151	1.03	PPB	89
100) 1,2,3-Trichlorobenzene	11.27	180	2759	1.12	PPB	88

(#) = qualifier out of range (m) = manual integration

1030F008.D 103023_MS24_FULL_SOIL.M

Tue Oct 31 14:26:01 2023

KELSO

Page 2

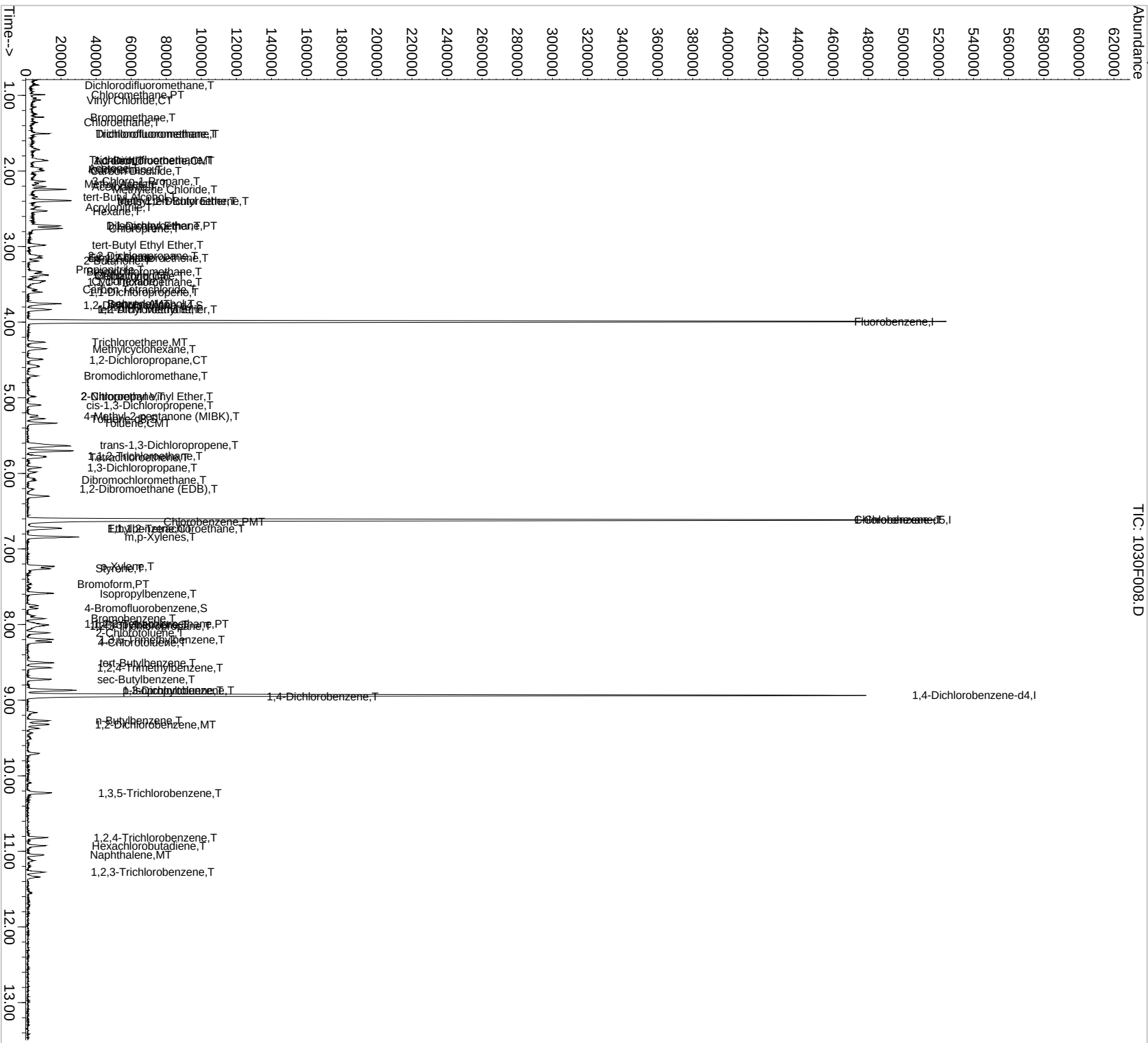

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Data File      : J:\MS24\DATA\103023A\1030F008.D
Acq On        : 30 Oct 2023   04:17 pm
Sample        : ICAL 1
:
:
EMISC         :
WMS Integration Params: rteint.p
Want Time:    Oct 31 10:13 2023
```

```
Vial: 13
Operator: EW/OT
Inst : MS24
Multiplr: 1.00
```

quant Results File: 103023_MS24_FULL_SOIL.RES

1st

Method	: J:\MS24\METHODS\2010\103023_MS24_FULL_SOIL.M (RTE Integrator)
Title	: VOA MS24 EPA Method 8260B
Last Update	: Tue Oct 31 14:24:46 2023
Response via	: Initial Calibration



Data File : J:\MS24\DATA\103023A\1030F008.D

Acq On : 30 Oct 2023 04:17 pm

Sample : ICAL 1

Misc :

Vial: 13

Operator: EW/OT

Inst : MS24

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Oct 31 10:03 2023

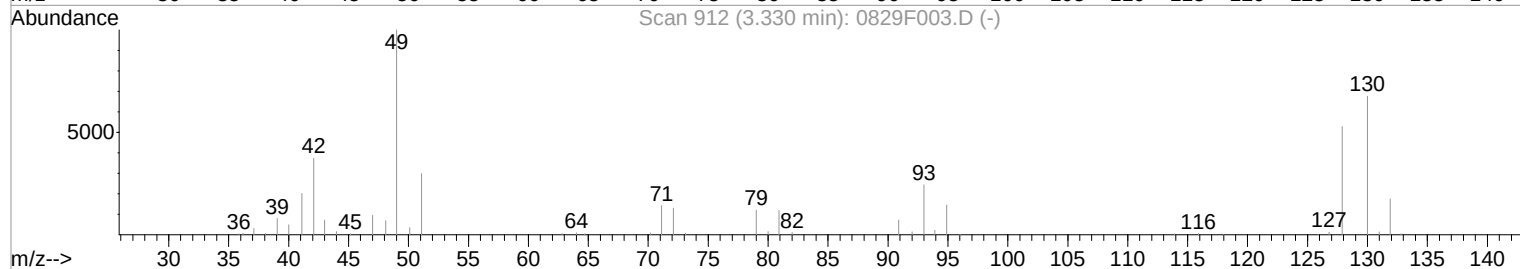
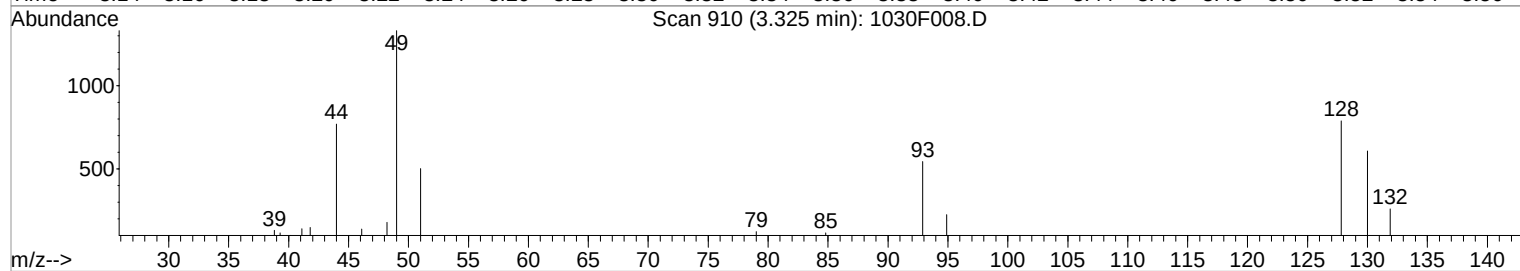
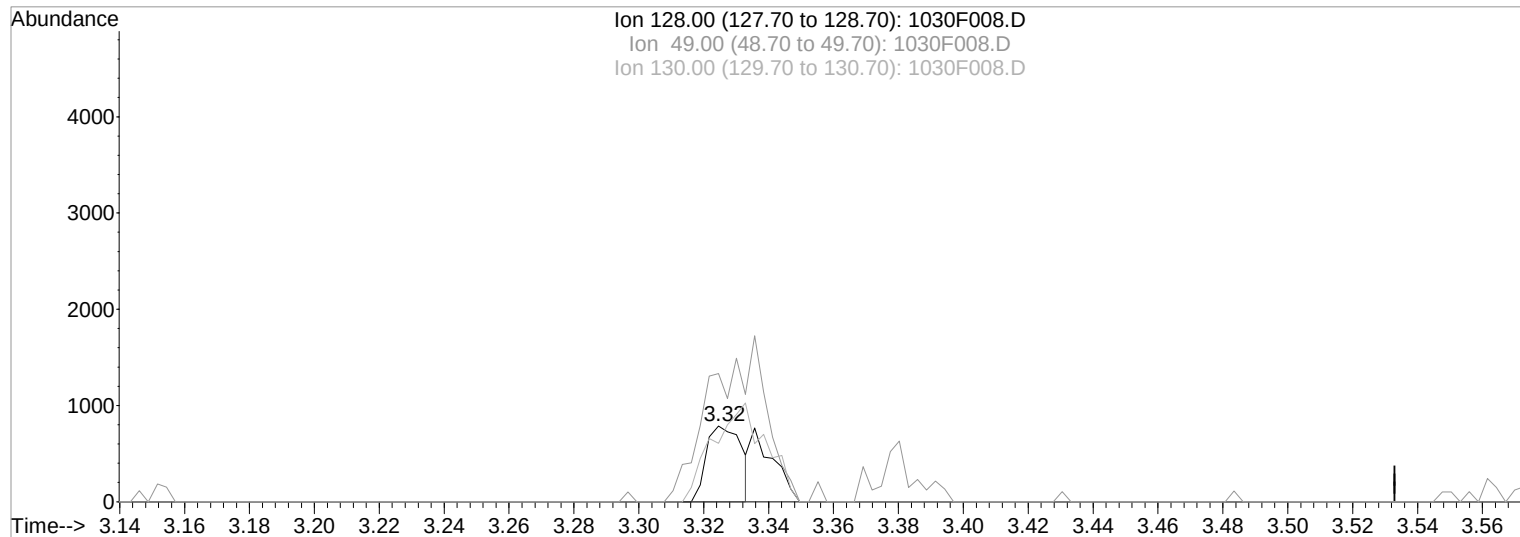
Quant Results File: temp.res

Method : J:\MS24\METHODS\2010\103023_MS24_FULL_SOIL.M (RTE Integrator)

Title : VOA MS24 EPA Method 8260B

Last Update : Tue Oct 31 10:01:35 2023

Response via : Multiple Level Calibration



TIC: 1030F008.D

(35) Bromochloromethane (T)

Manual Integration:

3.32min 0.56PPB

Before

response 594

Ion	Exp%	Act%
128.00	100	100
49.00	183.40	119.80#
130.00	128.30	77.03#
0.00	0.00	0.00

10/31/23

Data File : J:\MS24\DATA\103023A\1030F008.D

Acq On : 30 Oct 2023 04:17 pm

Sample : ICAL 1

Misc :

MS Integration Params: rteint.p

Quant Time: Oct 31 10:09 2023

Vial: 13

Operator: EW/OT

Inst : MS24

Multiplr: 1.00

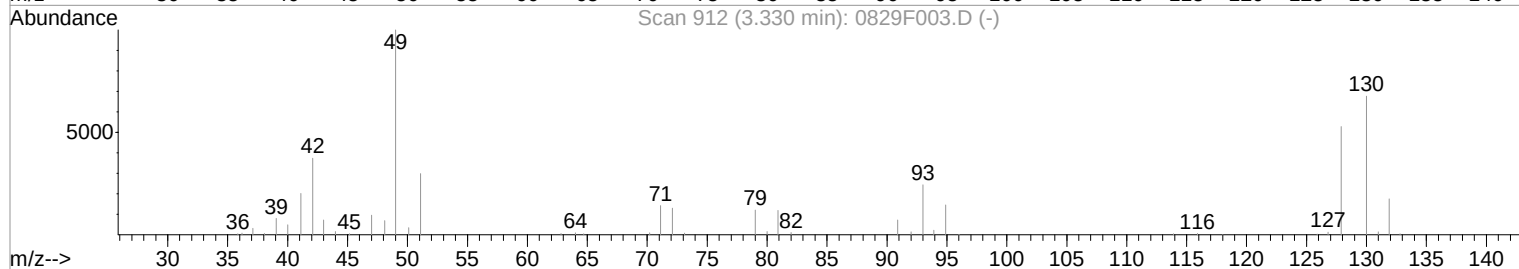
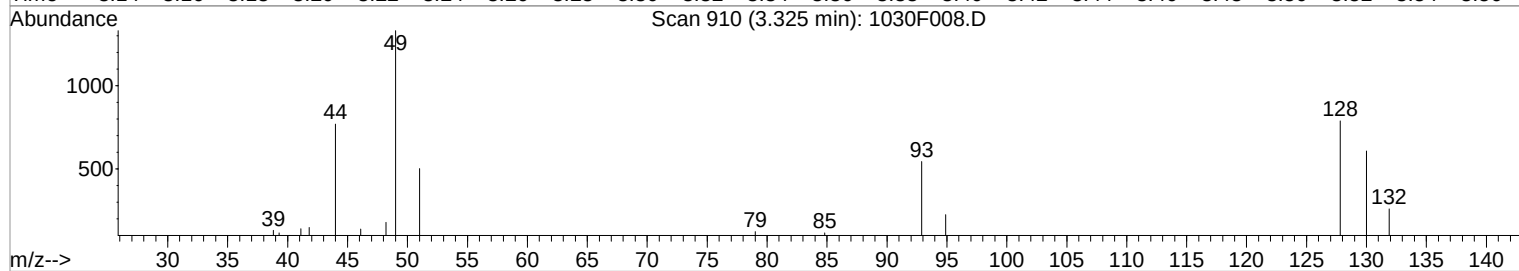
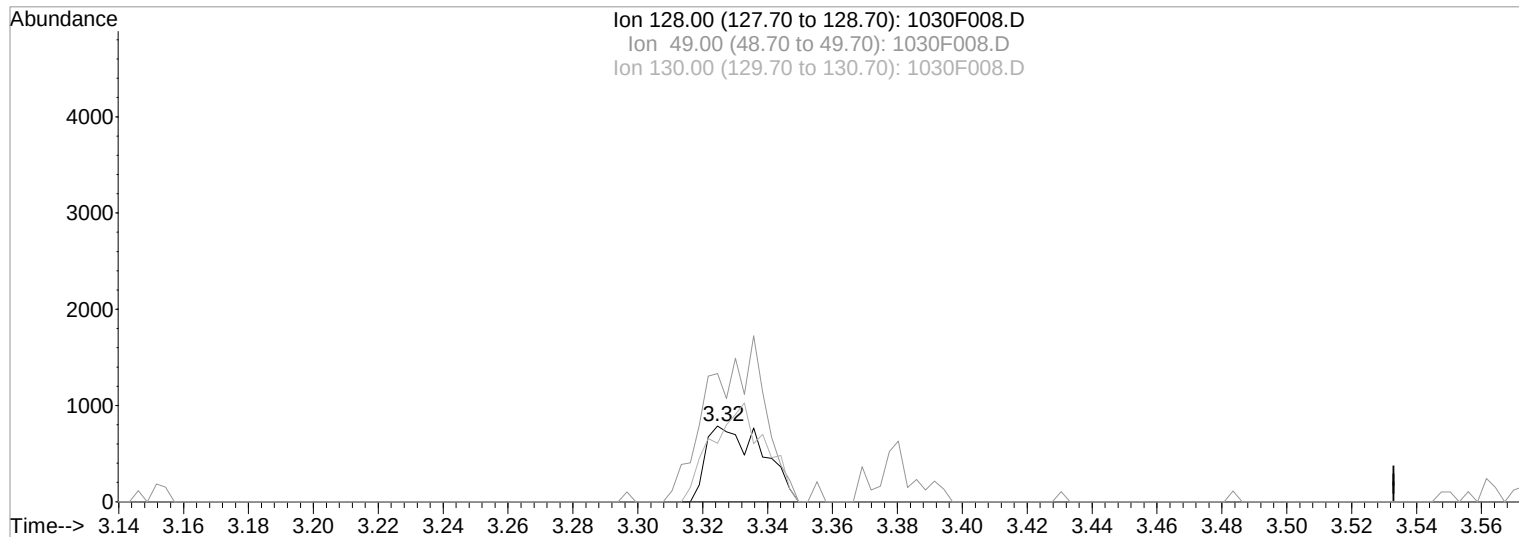
Quant Results File: temp.res

Method : J:\MS24\METHODS\2010\103023_MS24_FULL_SOIL.M (RTE Integrator)

Title : VOA MS24 EPA Method 8260B

Last Update : Tue Oct 31 10:01:35 2023

Response via : Multiple Level Calibration



TIC: 1030F008.D

(35) Bromochloromethane (T)

3.32min 0.90PPB m

response 958

Ion	Exp%	Act%
-----	------	------

128.00	100	100
--------	-----	-----

49.00	183.40	169.04
-------	--------	--------

130.00	128.30	77.03#
--------	--------	--------

0.00	0.00	0.00
------	------	------

Manual Integration:

After

Split peak

10/31/23

Data File : J:\MS24\DATA\103023A\1030F008.D

Acq On : 30 Oct 2023 04:17 pm

Sample : ICAL 1

Misc :

MS Integration Params: rteint.p

Quant Time: Oct 31 10:11 2023

Vial: 13

Operator: EW/OT

Inst : MS24

Multiplr: 1.00

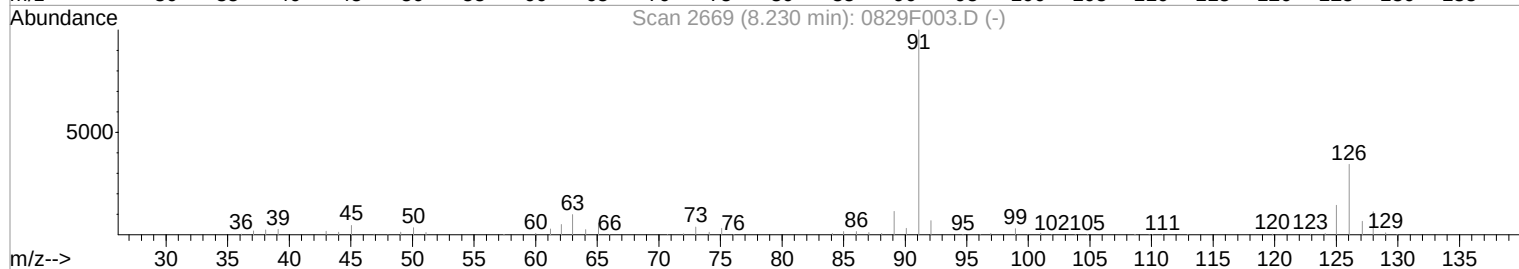
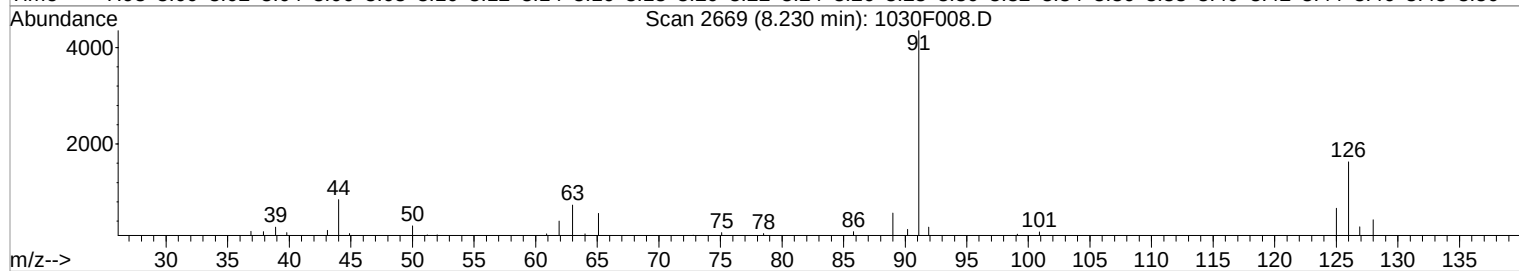
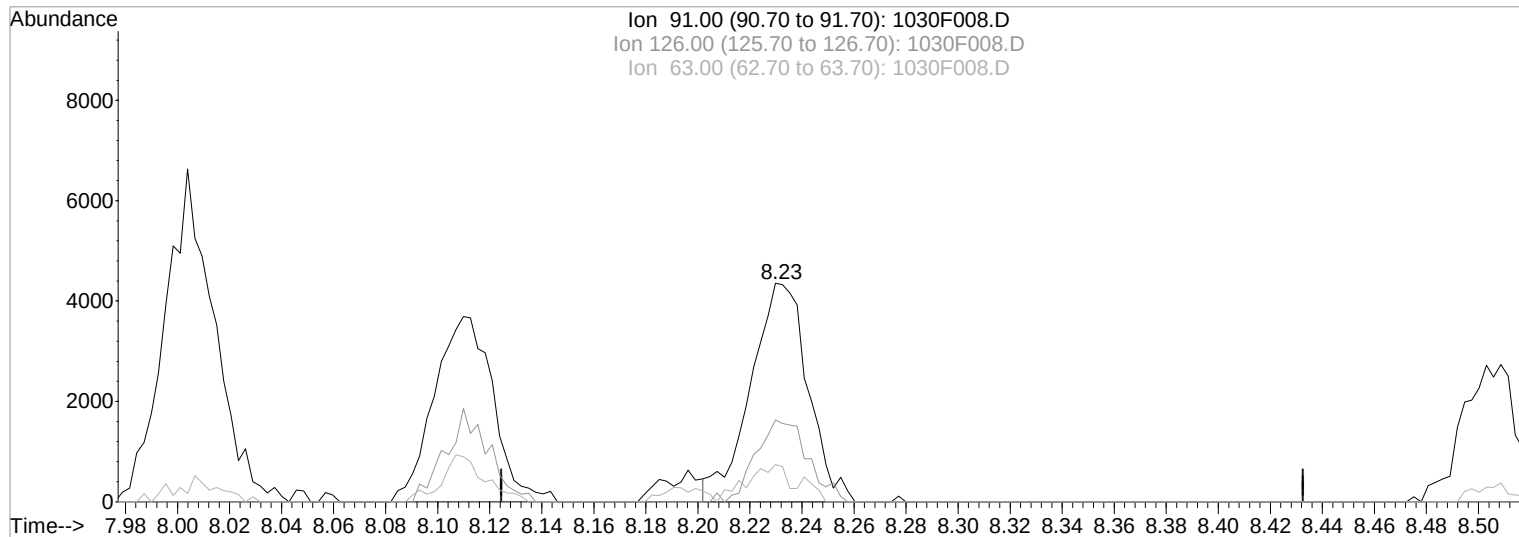
Quant Results File: temp.res

Method : J:\MS24\METHODS\2010\103023_MS24_FULL_SOIL.M (RTE Integrator)

Title : VOA MS24 EPA Method 8260B

Last Update : Tue Oct 31 10:01:35 2023

Response via : Multiple Level Calibration



TIC: 1030F008.D

(86) 4-Chlorotoluene (T)

Manual Integration:

8.23min 1.00PPB

Before

response 6624

Ion Exp% Act%

10/31/23

91.00 100 100

126.00 33.30 37.40

63.00 13.10 16.91

0.00 0.00 0.00

Data File : J:\MS24\DATA\103023A\1030F008.D

Acq On : 30 Oct 2023 04:17 pm

Sample : ICAL 1

Misc :

MS Integration Params: rteint.p

Quant Time: Oct 31 10:12 2023

Vial: 13

Operator: EW/OT

Inst : MS24

Multiplr: 1.00

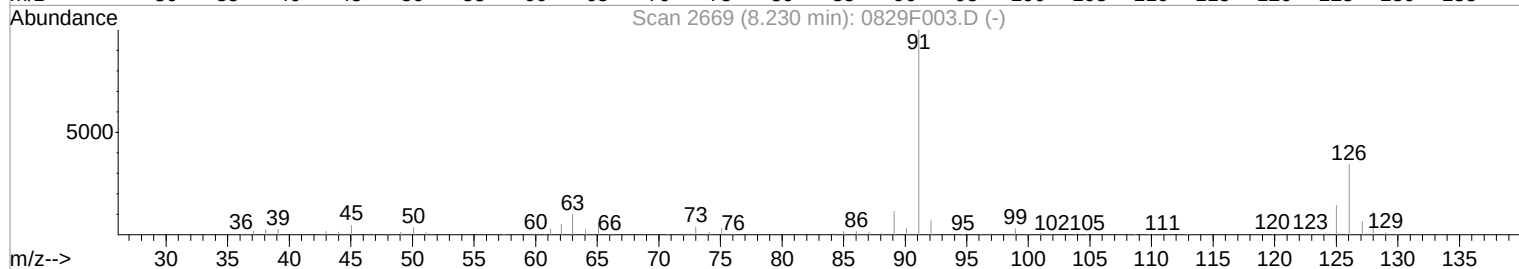
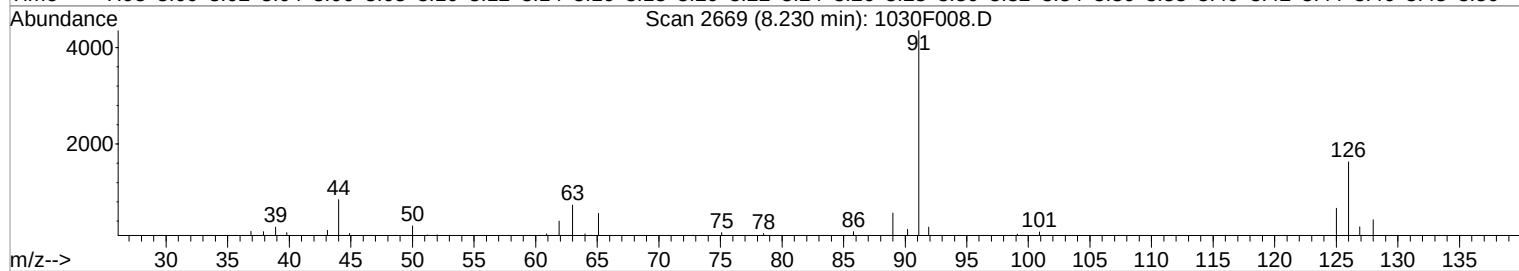
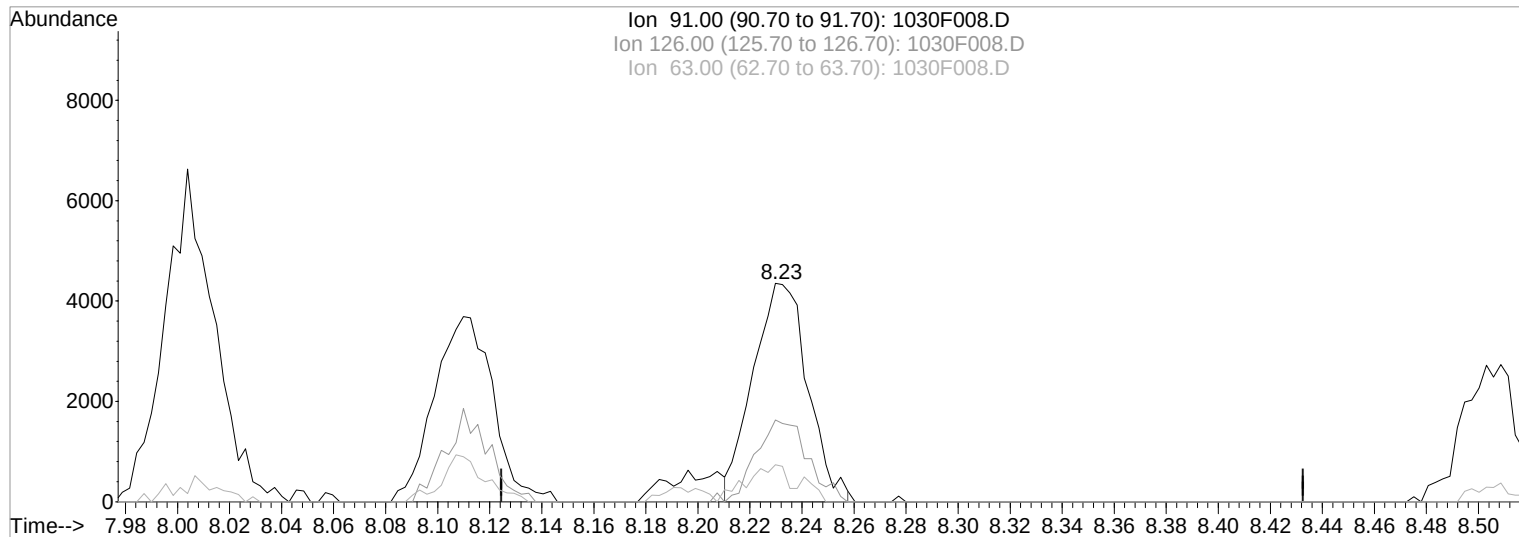
Quant Results File: temp.res

Method : J:\MS24\METHODS\2010\103023_MS24_FULL_SOIL.M (RTE Integrator)

Title : VOA MS24 EPA Method 8260B

Last Update : Tue Oct 31 10:01:35 2023

Response via : Multiple Level Calibration



TIC: 1030F008.D

(86) 4-Chlorotoluene (T)

Manual Integration:

8.23min 0.96PPB m

After

response 6357

Shoulder

Ion Exp% Act%

10/31/23

91.00 100 100

126.00 33.30 37.40

63.00 13.10 16.91

0.00 0.00 0.00

Data File : J:\MS24\DATA\103023A\1030F008.D

Acq On : 30 Oct 2023 04:17 pm

Sample : ICAL 1

Misc :

MS Integration Params: rteint.p

Quant Time: Oct 31 10:12 2023

Vial: 13

Operator: EW/OT

Inst : MS24

Multiplr: 1.00

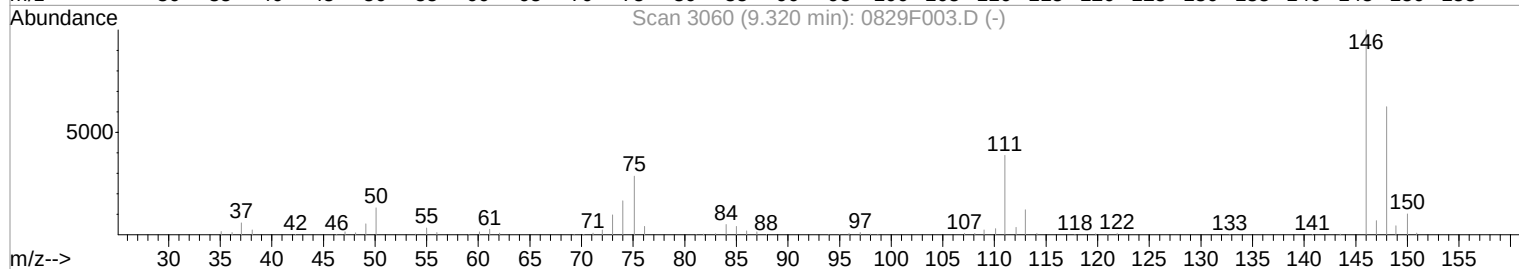
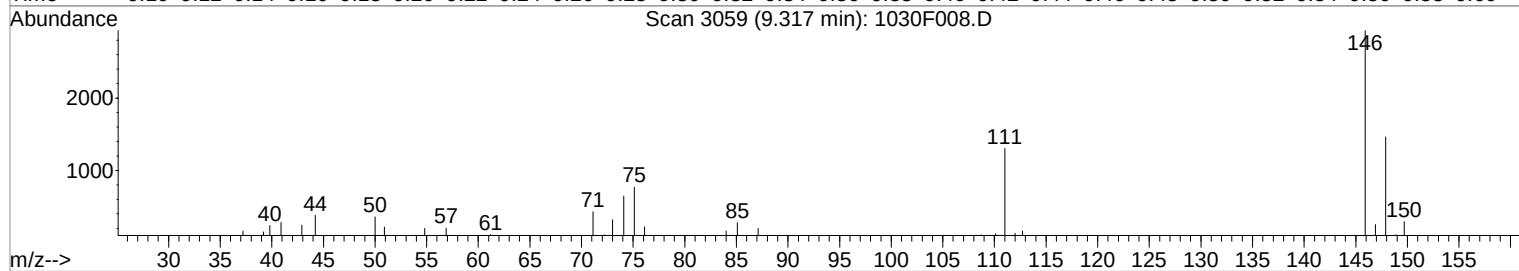
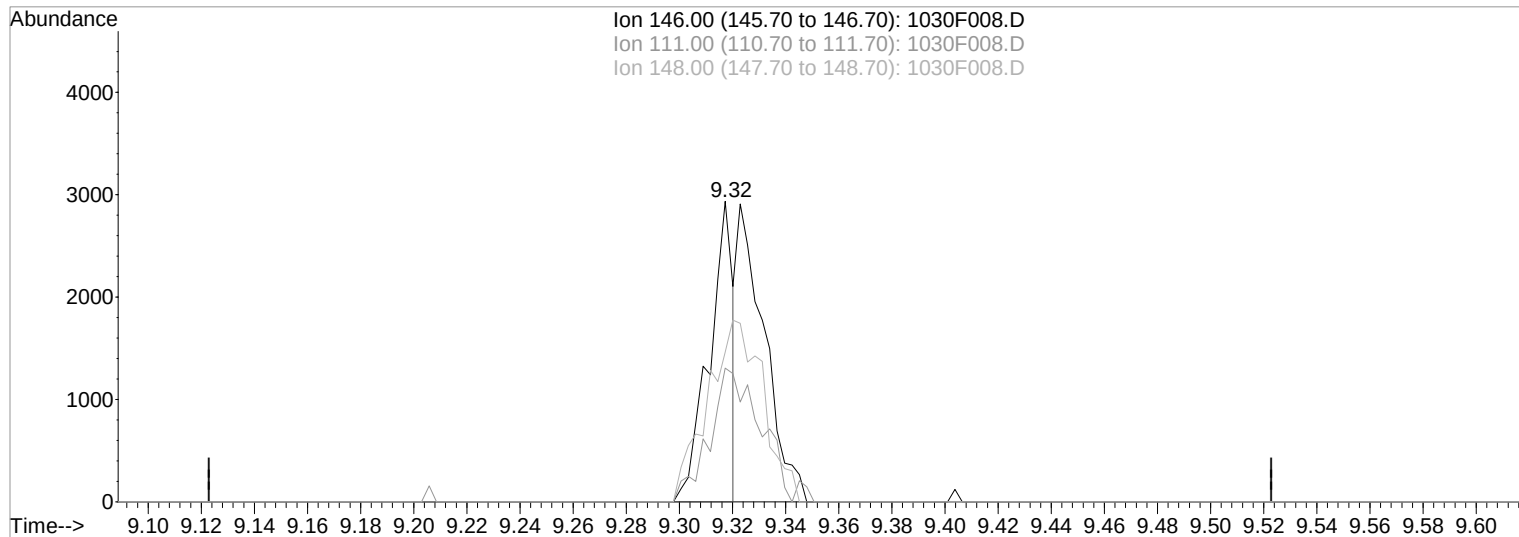
Quant Results File: temp.res

Method : J:\MS24\METHODS\2010\103023_MS24_FULL_SOIL.M (RTE Integrator)

Title : VOA MS24 EPA Method 8260B

Last Update : Tue Oct 31 10:01:35 2023

Response via : Multiple Level Calibration



TIC: 1030F008.D

(94) 1,2-Dichlorobenzene (MT)

Manual Integration:

9.32min 0.45PPB

Before

response 1825

Ion	Exp%	Act%
-----	------	------

10/31/23

146.00	100	100
--------	-----	-----

111.00	40.20	44.48
--------	-------	-------

148.00	63.40	49.83
--------	-------	-------

0.00	0.00	0.00
------	------	------

Data File : J:\MS24\DATA\103023A\1030F008.D

Acq On : 30 Oct 2023 04:17 pm

Sample : ICAL 1

Misc :

MS Integration Params: rteint.p

Quant Time: Oct 31 10:13 2023

Vial: 13

Operator: EW/OT

Inst : MS24

Multiplr: 1.00

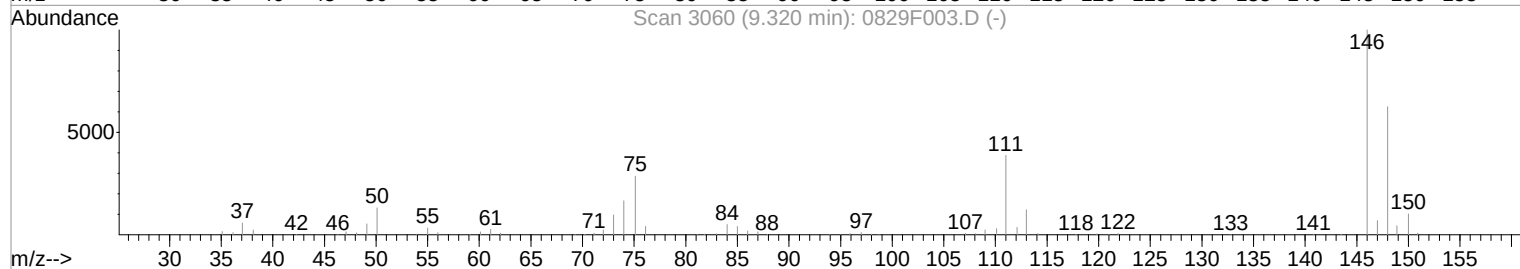
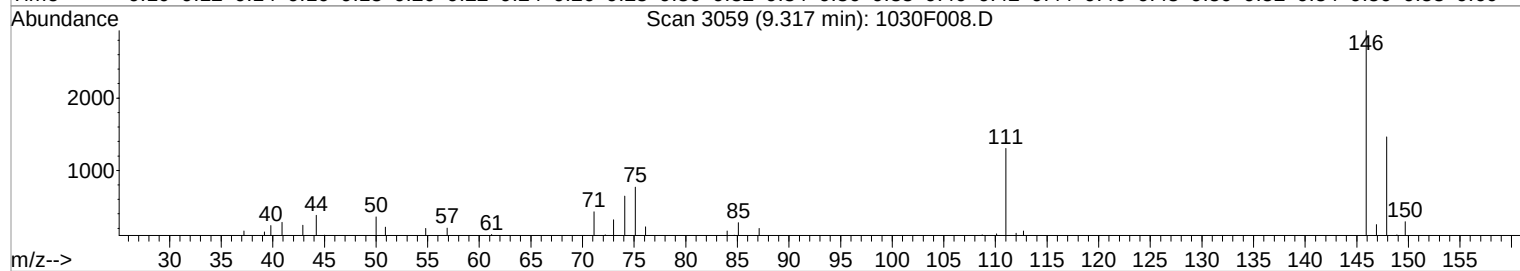
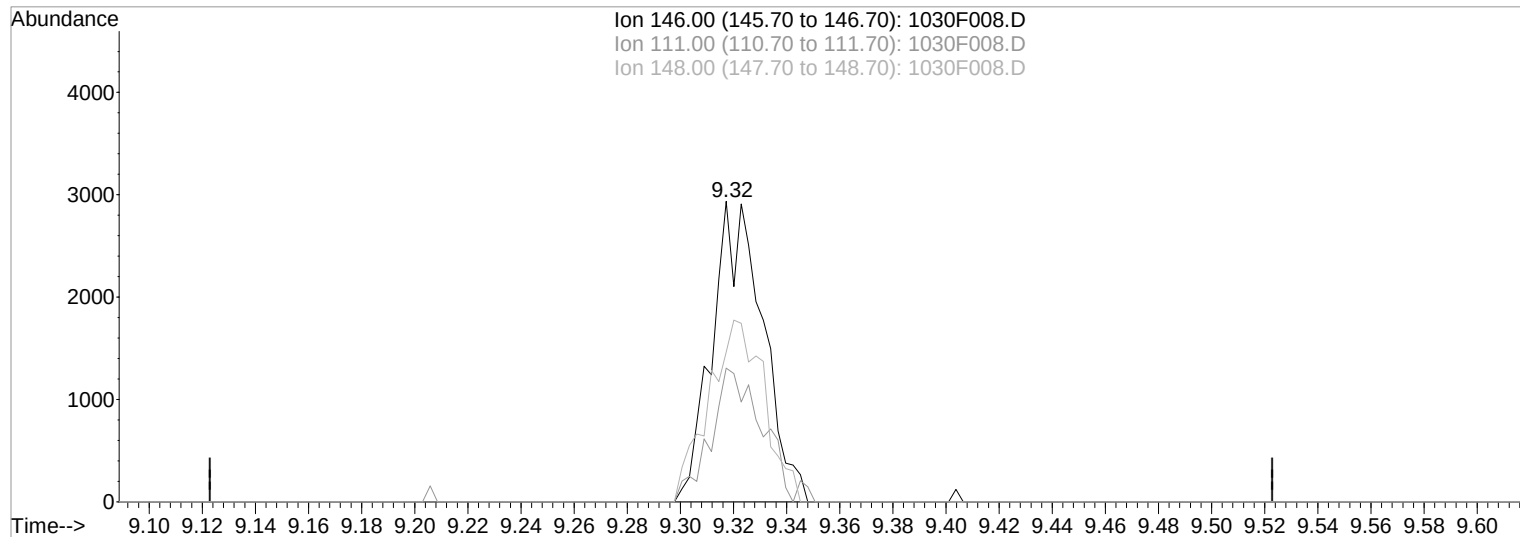
Quant Results File: temp.res

Method : J:\MS24\METHODS\2010\103023_MS24_FULL_SOIL.M (RTE Integrator)

Title : VOA MS24 EPA Method 8260B

Last Update : Tue Oct 31 10:01:35 2023

Response via : Multiple Level Calibration



TIC: 1030F008.D

(94) 1,2-Dichlorobenzene (MT)

9.32min 0.96PPB m

response 3890

Ion	Exp%	Act%
-----	------	------

146.00	100	100
--------	-----	-----

111.00	40.20	44.48
--------	-------	-------

148.00	63.40	49.83
--------	-------	-------

0.00	0.00	0.00
------	------	------

Manual Integration:

After

Split peak

10/31/23

Data File : J:\MS24\DATA\103023A\1030F009.D

Acq On : 30 Oct 2023 04:37 pm

Sample : ICAL 2

Misc :

Vial: 14

Operator: EW/OT

Inst : MS24

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Oct 31 10:13:47 2023

Quant Results File: 103023_MS24_FULL_SOIL.RES

Quant Method : J:\MS24\M...\103023_MS24_FULL_SOIL.M (RTE Integrator)

Title : VOA MS24 EPA Method 8260B

Last Update : Tue Oct 31 10:01:35 2023

Response via : Initial Calibration

DataAcq Meth : 8260.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	3.99	96	326279	50.00	PPB	0.00
59) Chlorobenzene-d5	6.62	82	133851	50.00	PPB	0.00
78) 1,4-Dichlorobenzene-d4	8.94	152	118534	50.00	PPB	0.00

System Monitoring Compounds

39) Dibromofluoromethane	3.49	113	17193	10.29	PPB	-0.01
Spiked Amount 50.000			Recovery	=	20.58%	
43) 1,2-Dichloroethane-d4	3.77	65	21721	10.46	PPB	-0.01
Spiked Amount 50.000			Recovery	=	20.92%	
57) Toluene-d8	5.27	98	72709	10.45	PPB	0.00
Spiked Amount 50.000			Recovery	=	20.90%	
77) 4-Bromofluorobenzene	7.79	95	26199	10.80	PPB	0.00
Spiked Amount 50.000			Recovery	=	21.60%	

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	0.84	85	2651	2.14	PPB	91
3) Chloromethane	0.97	50	5422	2.55	PPB	87
4) Vinyl Chloride	1.04	62	4010	2.16	PPB	97
5) Bromomethane	1.27	96	3315	3.71	PPB	95
6) Chloroethane	1.34	64	2716	2.16	PPB	91
7) Dichlorofluoromethane	1.49	67	5730	2.21	PPB	89
8) Trichlorofluoromethane	1.48	101	4509	2.20	PPB	94
9) Acrolein	1.84	56	3979	9.78	PPB	96
10) Trichlorotrifluoroethane	1.83	151	1759	2.12	PPB	90
11) 1,1-Dichloroethene	1.84	96	3247	2.27	PPB	83
12) Acetone	1.95	43	7126	8.57	PPB	89
13) Iodomethane	1.96	142	5938	2.50	PPB	88
14) Carbon Disulfide	1.98	76	9219	2.10	PPB	89
15) 3-Chloro-1-Propane	2.12	76	1818	2.08	PPB	# 75
16) Methyl Acetate	2.15	43	4113	2.71	PPB	86
17) Acetonitrile	2.20	40	6542	48.03	PPB	83
18) Methylene Chloride	2.23	84	6578	3.27	PPB	82
19) tert-Butyl Alcohol	2.33	59	2623	11.76	PPB	96
20) Acrylonitrile	2.46	53	2748	3.80	PPB	87
21) Methyl tert-Butyl Ether	2.38	73	21667	4.02	PPB	99
22) trans-1,2-Dichloroethene	2.38	96	4046	2.19	PPB	84
23) Hexane	2.51	57	4741	2.36	PPB	83
24) Diisopropyl Ether	2.71	45	14282	1.99	PPB	91
25) 1,1-Dichloroethane	2.71	63	7560	1.99	PPB	98
26) Vinyl Acetate	2.75	86	754	1.77	PPB	# 64
27) Chloroprene	2.75	53	11099	4.13	PPB	91
28) tert-Butyl Ethyl Ether	2.97	59	13488	2.13	PPB	85
29) 2,2-Dichloropropane	3.12	77	5764	2.19	PPB	86
30) cis-1,2-Dichloroethene	3.15	96	4718	2.06	PPB	81
31) 2-Butanone	3.18	72	1519	5.80	PPB	# 75
32) Propionitrile	3.28	54	837	2.67	PPB	82
33) Ethyl Acetate	3.14	61	7365	2.13	PPB	98
34) Methacrylonitrile	3.36	67	3372	3.83	PPB	# 79
35) Bromochloromethane	3.32	128	2071	1.92	PPB	94
36) Chloroform	3.37	83	7381	2.08	PPB	98
37) Cyclohexane	3.45	56	6243	2.19	PPB	94
38) 1,1,1-Trichloroethane	3.47	97	5754	2.17	PPB	97
40) Carbon Tetrachloride	3.56	117	4402	2.01	PPB	82
41) 1,1-Dichloropropene	3.60	75	5316	2.10	PPB	93
42) Isobutyl Alcohol	3.75	43	3927	35.24	PPB	89
44) Benzene	3.75	78	18219	2.11	PPB	95
45) 1,2-Dichloroethane	3.83	62	5736	2.01	PPB	92
46) tert-Amyl Methyl Ether	3.82	55	3297	2.05	PPB	# 71

(#)=qualifier out of range (m)=manual integration

1030F009.D 103023_MS24_FULL_SOIL.M

Tue Oct 31 14:26:02 2023

KELSO

Page 1

Data File : J:\MS24\DATA\103023A\1030F009.D

Acq On : 30 Oct 2023 04:37 pm

Sample : ICAL 2

Misc :

Vial: 14

Operator: EW/OT

Inst : MS24

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Oct 31 10:13:47 2023

Quant Results File: 103023_MS24_FULL_SOIL.RES

Quant Method : J:\MS24\M...\103023_MS24_FULL_SOIL.M (RTE Integrator)

Title : VOA MS24 EPA Method 8260B

Last Update : Tue Oct 31 10:01:35 2023

Response via : Initial Calibration

DataAcq Meth : 8260.M

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
47) Trichloroethene	4.26	95	4350	2.13	PPB	77
48) Methylcyclohexane	4.34	83	5544	1.99	PPB	86
49) 1,2-Dichloropropane	4.49	63	4681	2.00	PPB	92
50) Dibromomethane	4.58	93	2495	1.99	PPB	93
51) 1,4-Dioxane	4.59	88	848	33.02	PPB	94
52) Bromodichloromethane	4.70	83	4957	1.84	PPB	99
53) 2-Nitropropane	4.98	41	2841	5.80	PPB	94
54) 2-Chloroethyl Vinyl Ether	4.98	63	1278	2.09	PPB	97
55) cis-1,3-Dichloropropene	5.09	75	5860	1.67	PPB	92
56) 4-Methyl-2-pentanone (MIBK)	5.23	58	2908	3.93	PPB	# 72
58) Toluene	5.33	92	11550	2.07	PPB	92
60) trans-1,3-Dichloropropene	5.61	75	5017	1.72	PPB	86
61) 1,1,2-Trichloroethane	5.76	83	3150	1.95	PPB	92
62) Tetrachloroethene	5.79	164	3712m	2.25	PPB	
63) 2-Hexanone	5.98	57	1137	4.42	PPB	# 4
64) 1,3-Dichloropropane	5.93	76	6528	1.93	PPB	90
65) Dibromochloromethane	6.09	129	3284	1.68	PPB	89
66) 1,2-Dibromoethane (EDB)	6.21	107	3767	2.08	PPB	91
67) 1-Chlorohexane	6.61	91	4998	2.14	PPB	93
68) Chlorobenzene	6.64	112	12802	2.17	PPB	91
69) Ethylbenzene	6.73	106	6409	2.05	PPB	93
70) 1,1,1,2-Tetrachloroethane	6.73	131	3759	1.85	PPB	86
71) m,p-Xylenes	6.84	106	15873	4.06	PPB	87
72) o-Xylene	7.23	106	7095	1.86	PPB	98
73) Styrene	7.26	103	5579m	1.81	PPB	
74) Bromoform	7.46	173	1891	1.52	PPB	84
75) Isopropylbenzene	7.59	105	19042	1.98	PPB	97
76) cis-1,4-Dichloro-2-butene	7.74	89	807	2.48	PPB	81
79) 1,1,2,2-Tetrachloroethane	7.98	83	4468	1.90	PPB	96
80) trans-1,4-Dichloro-2-buten	8.05	53	1261	1.85	PPB	# 65
81) Bromobenzene	7.92	156	4954	1.98	PPB	90
82) n-Propylbenzene	8.01	91	20515	1.85	PPB	98
83) 1,2,3-Trichloropropane	8.02	110	1571	2.10	PPB	# 62
84) 2-Chlorotoluene	8.11	91	12841	1.92	PPB	90
85) 1,3,5-Trimethylbenzene	8.20	105	15217	1.91	PPB	85
86) 4-Chlorotoluene	8.23	91	13814	1.98	PPB	92
87) tert-Butylbenzene	8.50	119	14161	2.07	PPB	96
88) 1,2,4-Trimethylbenzene	8.57	105	14664	1.85	PPB	95
89) sec-Butylbenzene	8.72	105	18133	1.94	PPB	98
90) p-Isopropyltoluene	8.87	119	15403	1.88	PPB	94
91) 1,3-Dichlorobenzene	8.86	146	9548	2.10	PPB	98
92) 1,4-Dichlorobenzene	8.96	146	9919	2.15	PPB	96
93) n-Butylbenzene	9.28	91	13253	1.82	PPB	86
94) 1,2-Dichlorobenzene	9.32	146	8292	1.95	PPB	86
95) 1,2-Dibromo-3-chloropropan	10.10	155	521	1.57	PPB	# 73
96) 1,3,5-Trichlorobenzene	10.23	180	6823	2.24	PPB	96
97) 1,2,4-Trichlorobenzene	10.82	180	6023	2.08	PPB	96
98) Hexachlorobutadiene	10.92	225	3416	2.19	PPB	98
99) Naphthalene	11.05	128	12251	1.95	PPB	95
100) 1,2,3-Trichlorobenzene	11.27	180	5697	2.20	PPB	78

(#) = qualifier out of range (m) = manual integration

1030F009.D 103023_MS24_FULL_SOIL.M

Tue Oct 31 14:26:02 2023

KELSO

Page 2

11/01/23

```

Data File : J:\MS24\DATA\103023A\1030F009.D
Acq On    : 30 Oct 2023   04:37 pm
Sample     : ICAL 2
Misc       :
MS Interac Param: rfeint.n

```

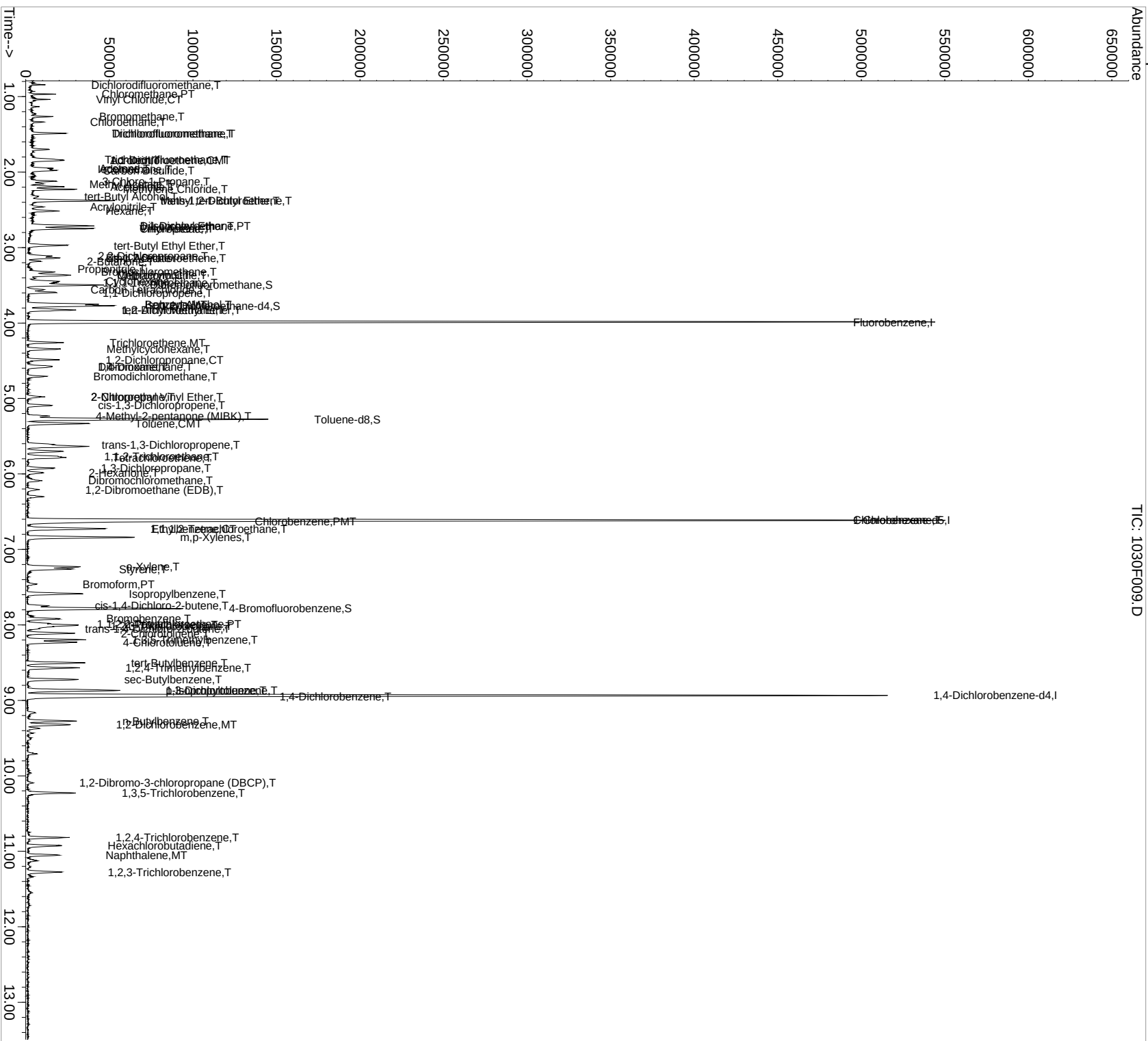
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Vial: 14
Operator: EW/OT
Inst : MS24
Multiplr: 1.00
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quant Results File: 103023_MS24_FULL_SOIL.RES

Quant Time: Oct 31 10:25 2023

1st

Method	: J:\MS24\METHODS\2010\103023_MS24_FULL_SOIL.M (RTE Integrator)
PN ₂	:
Title	: VOA MS24 EPA Method 8260B
Last Update	: Tue Oct 31 14:24:46 2023
Response Via	: Initial Calibration



Data File : J:\MS24\DATA\103023A\1030F009.D

Acq On : 30 Oct 2023 04:37 pm

Sample : ICAL 2

Misc :

MS Integration Params: rteint.p

Quant Time: Oct 31 10:13 2023

Vial: 14

Operator: EW/OT

Inst : MS24

Multiplr: 1.00

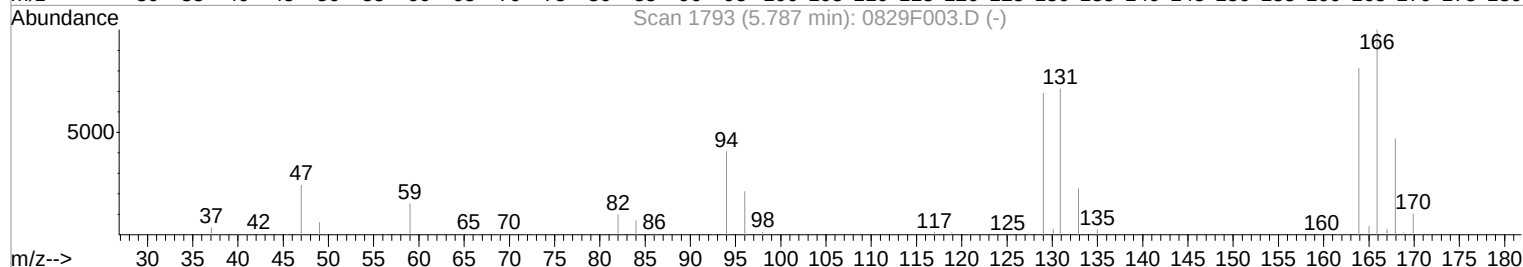
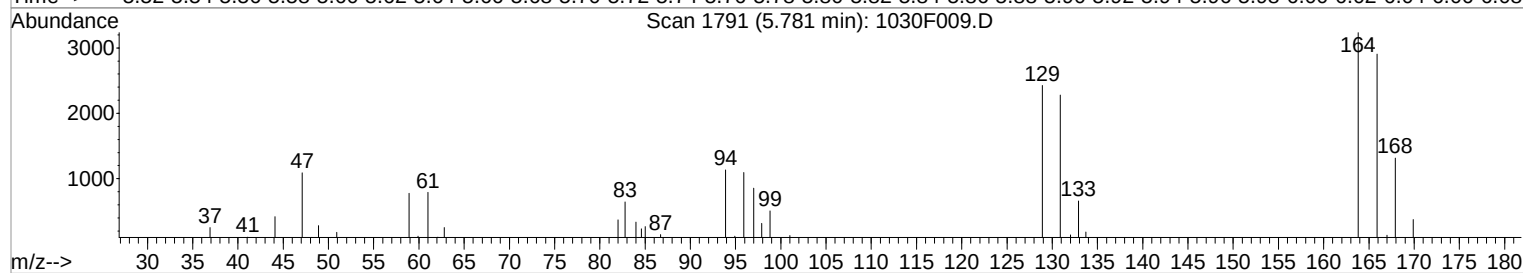
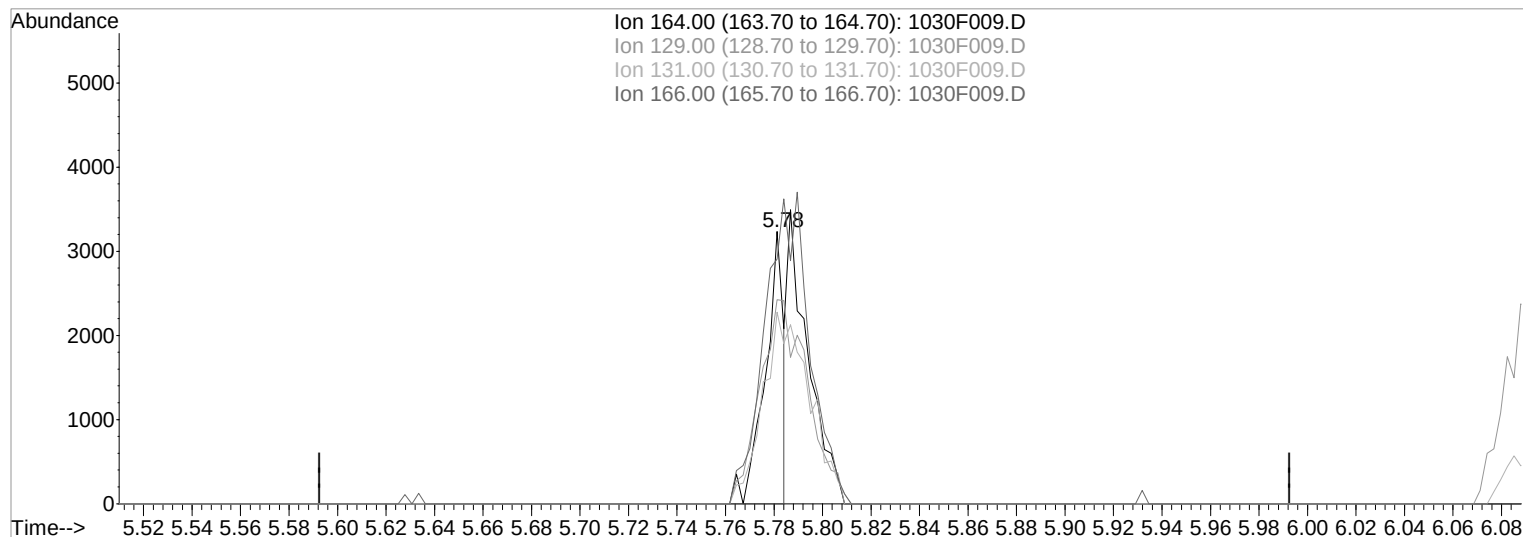
Quant Results File: temp.res

Method : J:\MS24\METHODS\2010\103023_MS24_FULL_SOIL.M (RTE Integrator)

Title : VOA MS24 EPA Method 8260B

Last Update : Tue Oct 31 10:01:35 2023

Response via : Multiple Level Calibration



TIC: 1030F009.D

(62) Tetrachloroethene (T)

Manual Integration:

5.78min 1.04PPB

Before

response 1721

Ion Exp% Act%

10/31/23

164.00 100 100

129.00 86.80 74.94

131.00 86.60 70.40

166.00 130.70 89.86#

Data File : J:\MS24\DATA\103023A\1030F009.D

Acq On : 30 Oct 2023 04:37 pm

Sample : ICAL 2

Misc :

MS Integration Params: rteint.p

Quant Time: Oct 31 10:23 2023

Vial: 14

Operator: EW/OT

Inst : MS24

Multiplr: 1.00

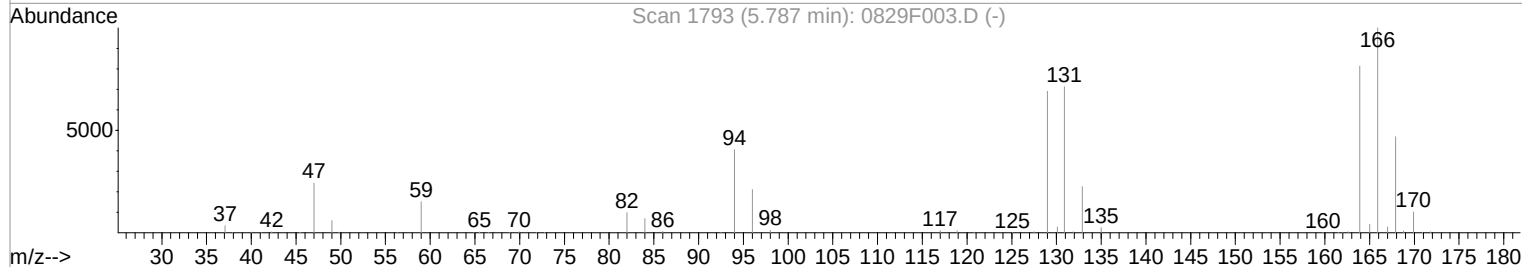
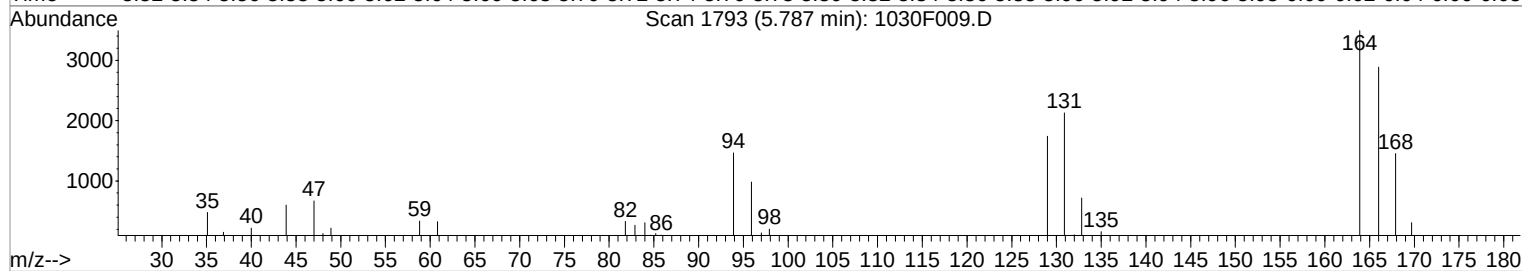
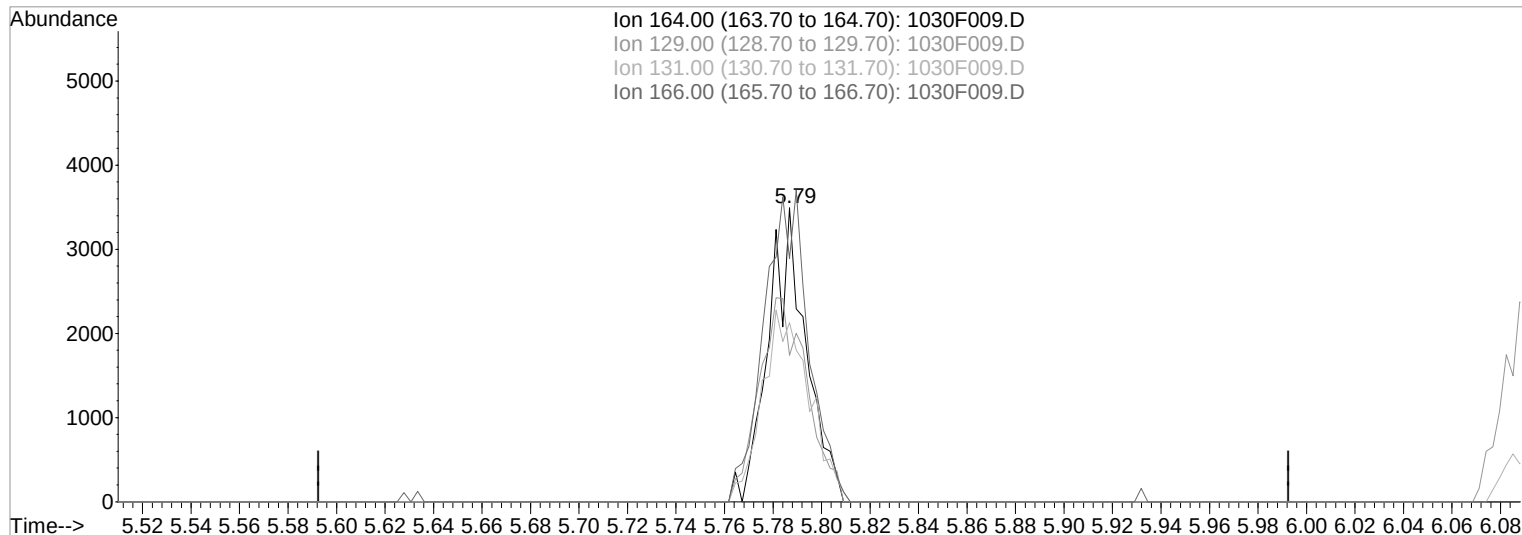
Quant Results File: temp.res

Method : J:\MS24\METHODS\2010\103023_MS24_FULL_SOIL.M (RTE Integrator)

Title : VOA MS24 EPA Method 8260B

Last Update : Tue Oct 31 10:01:35 2023

Response via : Multiple Level Calibration



TIC: 1030F009.D

(62) Tetrachloroethene (T)

5.79min 2.25PPB m

response 3712

Ion	Exp%	Act%
-----	------	------

164.00	100	100
--------	-----	-----

129.00	86.80	49.84#
--------	-------	--------

131.00	86.60	60.98
--------	-------	-------

166.00	130.70	82.65#
--------	--------	--------

Manual Integration:

After

Split peak

10/31/23

Data File : J:\MS24\DATA\103023A\1030F009.D

Vial: 14

Acq On : 30 Oct 2023 04:37 pm

Operator: EW/OT

Sample : ICAL 2

Inst : MS24

Misc :

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Oct 31 10:23 2023

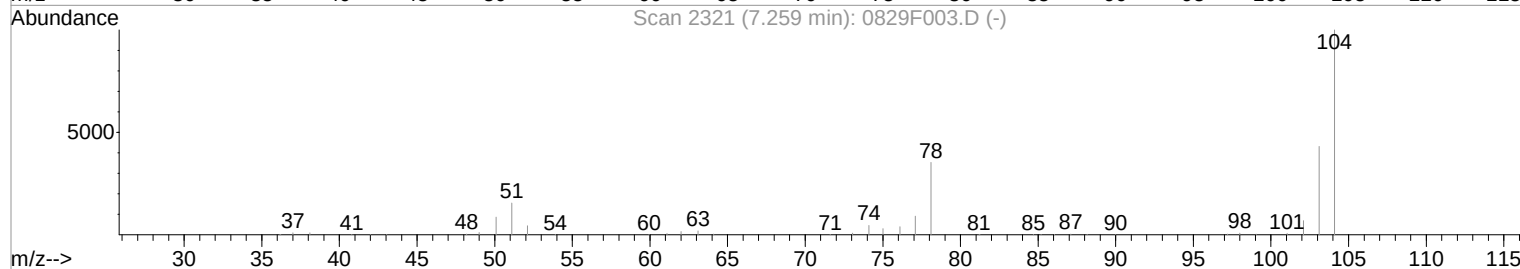
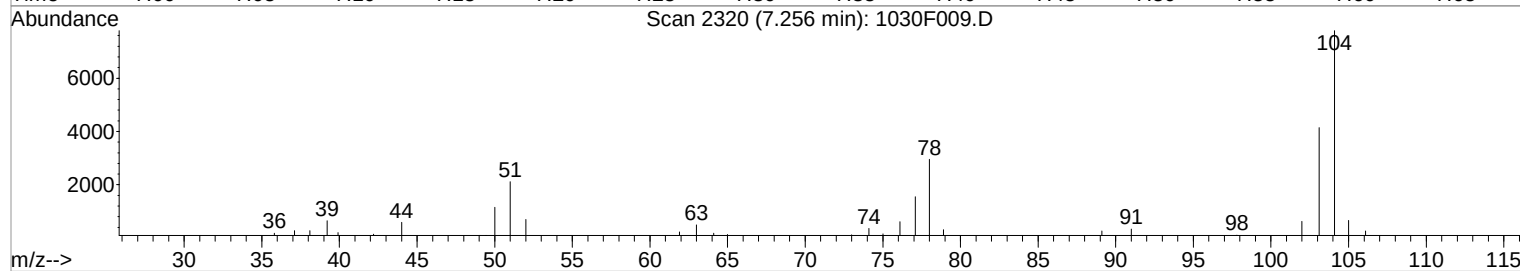
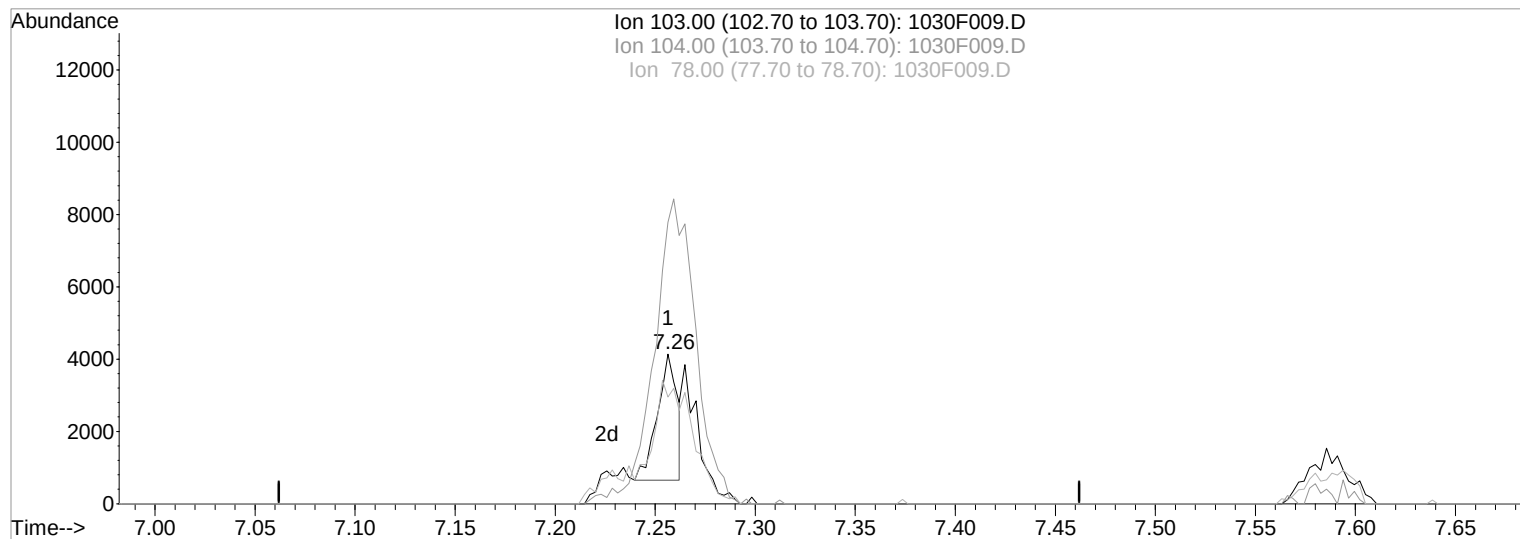
Quant Results File: temp.res

Method : J:\MS24\METHODS\2010\103023_MS24_FULL_SOIL.M (RTE Integrator)

Title : VOA MS24 EPA Method 8260B

Last Update : Tue Oct 31 10:01:35 2023

Response via : Multiple Level Calibration



TIC: 1030F009.D

(73) Styrene (T)

Manual Integration:

7.26min 0.79PPB

Before

response 2426

Ion	Exp%	Act%
103.00	100	100
104.00	210.30	191.32
78.00	84.80	65.69
0.00	0.00	0.00

10/31/23

Data File : J:\MS24\DATA\103023A\1030F009.D

Acq On : 30 Oct 2023 04:37 pm

Sample : ICAL 2

Misc :

MS Integration Params: rteint.p

Quant Time: Oct 31 10:25 2023

Vial: 14

Operator: EW/OT

Inst : MS24

Multiplr: 1.00

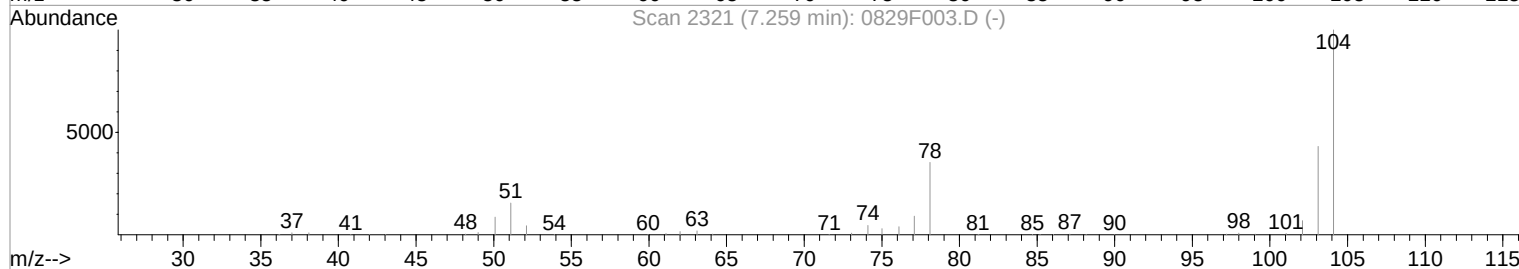
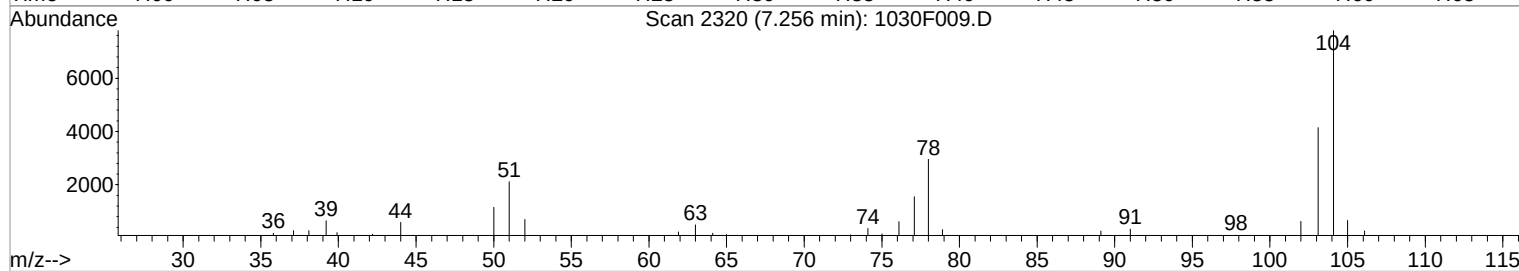
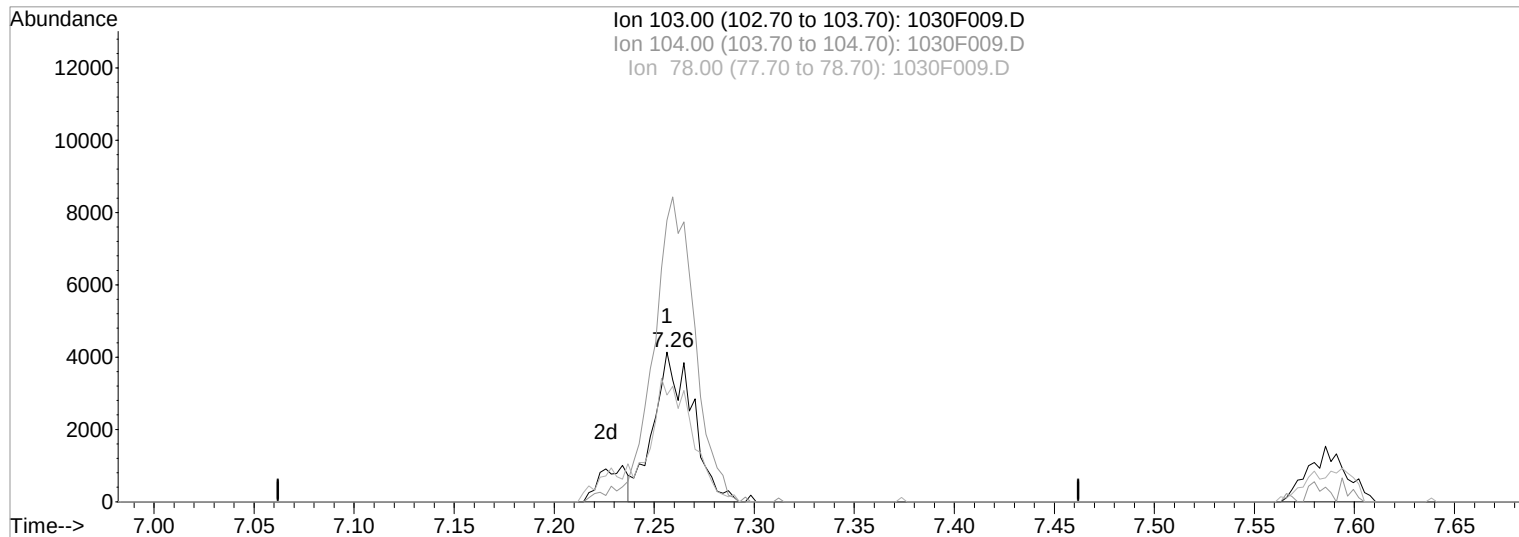
Quant Results File: temp.res

Method : J:\MS24\METHODS\2010\103023_MS24_FULL_SOIL.M (RTE Integrator)

Title : VOA MS24 EPA Method 8260B

Last Update : Tue Oct 31 10:01:35 2023

Response via : Multiple Level Calibration



TIC: 1030F009.D

(73) Styrene (T)

7.26min 1.81PPB m

response 5579

Ion	Exp%	Act%
-----	------	------

103.00	100	100
--------	-----	-----

104.00	210.30	188.12
--------	--------	--------

78.00	84.80	71.21
-------	-------	-------

0.00	0.00	0.00
------	------	------

Manual Integration:

After

Shoulder

10/31/23

Data File : J:\MS24\DATA\103023A\1030F010.D

Acq On : 30 Oct 2023 04:58 pm

Sample : ICAL 5

Misc :

Vial: 15

Operator: EW/OT

Inst : MS24

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Oct 31 11:19:31 2023

Quant Results File: 103023_MS24_FULL_SOIL.RES

Quant Method : J:\MS24\M...\103023_MS24_FULL_SOIL.M (RTE Integrator)

Title : VOA MS24 EPA Method 8260B

Last Update : Tue Oct 31 10:01:35 2023

Response via : Initial Calibration

DataAcq Meth : 8260.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	3.99	96	315592	50.00	PPB	0.00
59) Chlorobenzene-d5	6.62	82	127099	50.00	PPB	0.00
78) 1,4-Dichlorobenzene-d4	8.94	152	114644	50.00	PPB	0.00

System Monitoring Compounds

39) Dibromofluoromethane	3.51	113	33774	20.89	PPB	0.00
Spiked Amount 50.000			Recovery	=	41.78%	
43) 1,2-Dichloroethane-d4	3.78	65	41868	20.84	PPB	0.00
Spiked Amount 50.000			Recovery	=	41.68%	
57) Toluene-d8	5.28	98	142659	21.21	PPB	0.00
Spiked Amount 50.000			Recovery	=	42.42%	
77) 4-Bromofluorobenzene	7.79	95	49791	21.61	PPB	0.00
Spiked Amount 50.000			Recovery	=	43.22%	

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	0.86	85	4828	4.03	PPB	99
3) Chloromethane	0.99	50	11174	5.44	PPB	99
4) Vinyl Chloride	1.06	62	8961	4.99	PPB	94
5) Bromomethane	1.29	96	6519	7.55	PPB	83
6) Chloroethane	1.36	64	6255	5.15	PPB	96
7) Dichlorofluoromethane	1.51	67	12471	4.97	PPB	97
8) Trichlorofluoromethane	1.51	101	8924	4.51	PPB	91
9) Acrolein	1.85	56	8951	22.74	PPB	95
10) Trichlorotrifluoroethane	1.85	151	3583	4.47	PPB	77
11) 1,1-Dichloroethene	1.87	96	6987	5.05	PPB	94
12) Acetone	1.97	43	10428	12.96	PPB	97
13) Iodomethane	1.98	142	14097	6.12	PPB	98
14) Carbon Disulfide	2.00	76	20584	4.86	PPB	98
15) 3-Chloro-1-Propane	2.14	76	3814	4.51	PPB	93
16) Methyl Acetate	2.17	43	8091	5.51	PPB	90
17) Acetonitrile	2.21	40	13796	104.71	PPB	97
18) Methylene Chloride	2.25	84	11773	6.05	PPB	82
19) tert-Butyl Alcohol	2.34	59	5422	25.14	PPB	82
20) Acrylonitrile	2.47	53	7116	10.18	PPB	92
21) Methyl tert-Butyl Ether	2.39	73	48162	9.24	PPB	95
22) trans-1,2-Dichloroethene	2.40	96	8785	4.93	PPB	92
23) Hexane	2.53	57	7770	3.99	PPB	97
24) Diisopropyl Ether	2.72	45	32329	4.65	PPB	97
25) 1,1-Dichloroethane	2.73	63	17366	4.72	PPB	96
26) Vinyl Acetate	2.76	86	1884	4.58	PPB	# 80
27) Chloroprene	2.76	53	25016	9.62	PPB	96
28) tert-Butyl Ethyl Ether	2.98	59	28269	4.61	PPB	95
29) 2,2-Dichloropropane	3.12	77	11582	4.55	PPB	93
30) cis-1,2-Dichloroethene	3.15	96	10980	4.96	PPB	95
31) 2-Butanone	3.19	72	2555	10.09	PPB	# 67
32) Propionitrile	3.30	54	2900	9.58	PPB	95
33) Ethyl Acetate	3.15	61	16379	4.89	PPB	99
34) Methacrylonitrile	3.37	67	7506	8.81	PPB	90
35) Bromochloromethane	3.33	128	5066	4.85	PPB	# 79
36) Chloroform	3.38	83	16848	4.90	PPB	92
37) Cyclohexane	3.46	56	11067	4.02	PPB	84
38) 1,1,1-Trichloroethane	3.48	97	11769	4.58	PPB	93
40) Carbon Tetrachloride	3.57	117	9325	4.41	PPB	85
41) 1,1-Dichloropropene	3.60	75	11652	4.76	PPB	91
42) Isobutyl Alcohol	3.75	43	9424	87.43	PPB	99
44) Benzene	3.76	78	42184	5.06	PPB	96
45) 1,2-Dichloroethane	3.84	62	13135	4.77	PPB	92
46) tert-Amyl Methyl Ether	3.83	55	7595	4.89	PPB	# 80

(#)=qualifier out of range (m)=manual integration

1030F010.D 103023_MS24_FULL_SOIL.M

Tue Oct 31 14:26:03 2023

KELSO

Page 1

Data File : J:\MS24\DATA\103023A\1030F010.D

Acq On : 30 Oct 2023 04:58 pm

Sample : ICAL 5

Misc :

Vial: 15

Operator: EW/OT

Inst : MS24

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Oct 31 11:19:31 2023

Quant Results File: 103023_MS24_FULL_SOIL.RES

Quant Method : J:\MS24\M...\103023_MS24_FULL_SOIL.M (RTE Integrator)

Title : VOA MS24 EPA Method 8260B

Last Update : Tue Oct 31 10:01:35 2023

Response via : Initial Calibration

DataAcq Meth : 8260.M

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
47) Trichloroethene	4.26	95	9838	4.97	PPB	97
48) Methylcyclohexane	4.35	83	10233	3.80	PPB	93
49) 1,2-Dichloropropane	4.49	63	10530	4.65	PPB	94
50) Dibromomethane	4.59	93	5740	4.73	PPB	97
51) 1,4-Dioxane	4.59	88	1956	78.75	PPB	80
52) Bromodichloromethane	4.71	83	11352	4.36	PPB	91
53) 2-Nitropropane	4.98	41	5932	12.52	PPB	92
54) 2-Chloroethyl Vinyl Ether	4.99	63	2753	4.66	PPB	84
55) cis-1,3-Dichloropropene	5.10	75	13723	4.04	PPB	97
56) 4-Methyl-2-pentanone (MIBK)	5.24	58	6110	8.54	PPB	# 76
58) Toluene	5.34	92	26162	4.85	PPB	95
60) trans-1,3-Dichloropropene	5.61	75	11543	4.16	PPB	94
61) 1,1,2-Trichloroethane	5.77	83	7489	4.88	PPB	94
62) Tetrachloroethene	5.79	164	7867	5.03	PPB	86
63) 2-Hexanone	5.98	57	2560	10.49	PPB	# 50
64) 1,3-Dichloropropane	5.92	76	15199	4.73	PPB	96
65) Dibromochloromethane	6.09	129	7736	4.16	PPB	97
66) 1,2-Dibromoethane (EDB)	6.21	107	7987	4.65	PPB	98
67) 1-Chlorohexane	6.61	91	10573	4.76	PPB	92
68) Chlorobenzene	6.64	112	27501	4.91	PPB	97
69) Ethylbenzene	6.72	106	14168	4.77	PPB	93
70) 1,1,1,2-Tetrachloroethane	6.74	131	8601	4.46	PPB	97
71) m,p-Xylenes	6.84	106	35635	9.59	PPB	96
72) o-Xylene	7.23	106	17142	4.74	PPB	96
73) Styrene	7.26	103	12923m	4.41	PPB	
74) Bromoform	7.46	173	4590	3.87	PPB	98
75) Isopropylbenzene	7.59	105	42248	4.62	PPB	93
76) cis-1,4-Dichloro-2-butene	7.75	89	1788	5.79	PPB	82
79) 1,1,2,2-Tetrachloroethane	7.98	83	10475	4.61	PPB	94
80) trans-1,4-Dichloro-2-buten	8.05	53	2826	4.28	PPB	94
81) Bromobenzene	7.92	156	11505	4.75	PPB	95
82) n-Propylbenzene	8.01	91	48332	4.52	PPB	95
83) 1,2,3-Trichloropropane	8.03	110	3317	4.59	PPB	94
84) 2-Chlorotoluene	8.11	91	30313	4.69	PPB	93
85) 1,3,5-Trimethylbenzene	8.20	105	35155	4.57	PPB	98
86) 4-Chlorotoluene	8.23	91	32084	4.74	PPB	96
87) tert-Butylbenzene	8.51	119	31291	4.72	PPB	92
88) 1,2,4-Trimethylbenzene	8.57	105	34396	4.50	PPB	98
89) sec-Butylbenzene	8.73	105	42164	4.66	PPB	98
90) p-Isopropyltoluene	8.88	119	34913	4.40	PPB	95
91) 1,3-Dichlorobenzene	8.86	146	20728	4.70	PPB	95
92) 1,4-Dichlorobenzene	8.96	146	21293	4.77	PPB	90
93) n-Butylbenzene	9.27	91	31830	4.52	PPB	91
94) 1,2-Dichlorobenzene	9.32	146	19548	4.75	PPB	90
95) 1,2-Dibromo-3-chloropropan	10.09	155	1327	4.12	PPB	# 74
96) 1,3,5-Trichlorobenzene	10.23	180	14197	4.81	PPB	94
97) 1,2,4-Trichlorobenzene	10.82	180	13397	4.78	PPB	91
98) Hexachlorobutadiene	10.92	225	7211	4.78	PPB	92
99) Naphthalene	11.05	128	25583	4.21	PPB	95
100) 1,2,3-Trichlorobenzene	11.27	180	11679	4.66	PPB	97

(#) = qualifier out of range (m) = manual integration

1030F010.D 103023_MS24_FULL_SOIL.M

Tue Oct 31 14:26:03 2023

KELSO

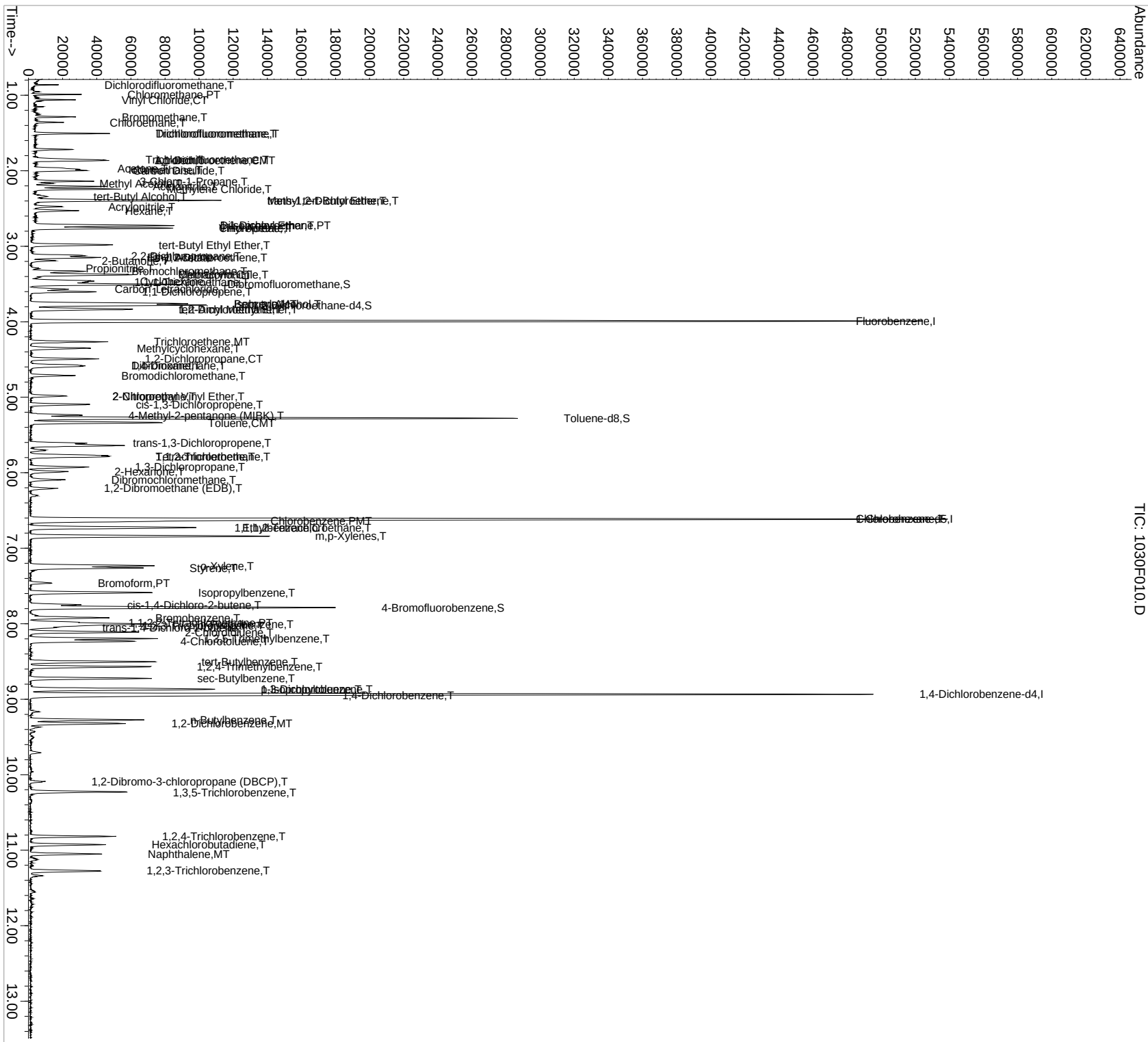
Page 2

Data File : J:\MS24\DATA\103023A\1030F010.D
 Acq On : 30 Oct 2023 04:58 pm
 Sample : ICAL 5
 Misc :
 MS Integration Params: rteint.p
 Quant Time: Oct 31 11:21 2023

Vial: 15
 Operator: EW/OT
 Inst : MS24
 Multiplr: 1.00

Quant Results File: 103023_MS24_FULL_SOIL.RES

Method : J:\MS24\METHODS\2010\103023_MS24_FULL_SOIL.M (RTE Integrator)
 Title : VOA MS24 EPA Method 8260B
 Last Update : Tue Oct 31 14:24:46 2023
 Response via : Initial Calibration



Data File : J:\MS24\DATA\103023A\1030F010.D

Acq On : 30 Oct 2023 04:58 pm

Sample : ICAL 5

Misc :

MS Integration Params: rteint.p

Quant Time: Oct 31 11:19 2023

Vial: 15

Operator: EW/OT

Inst : MS24

Multiplr: 1.00

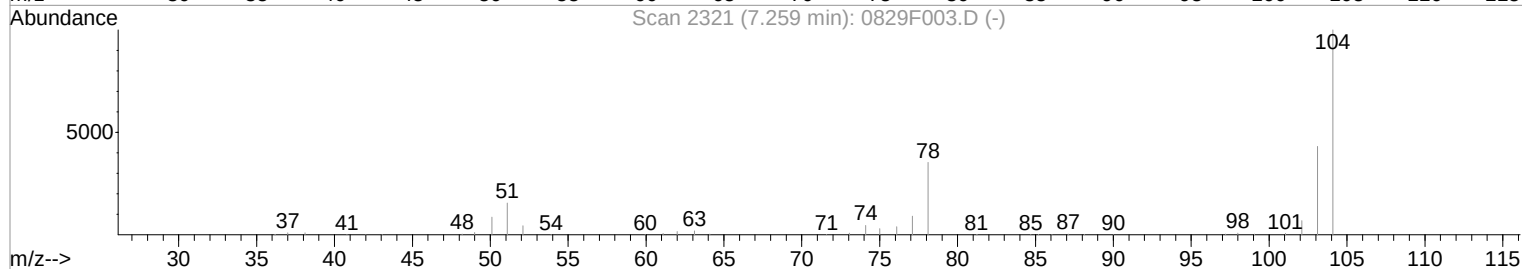
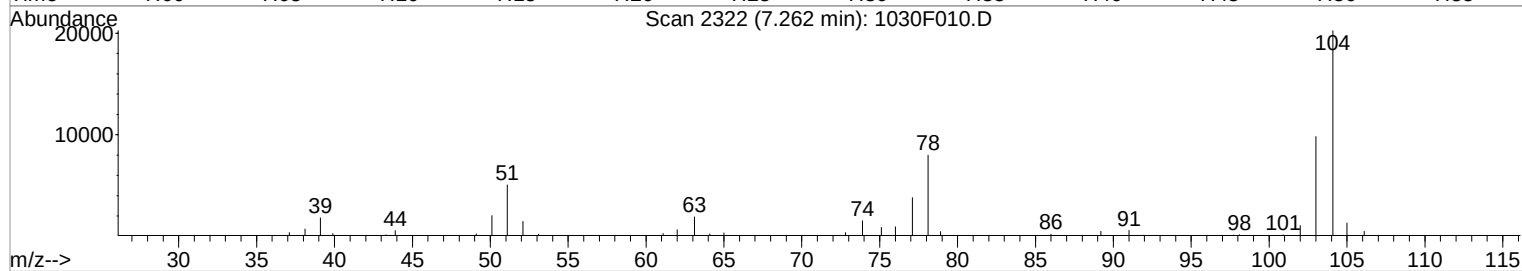
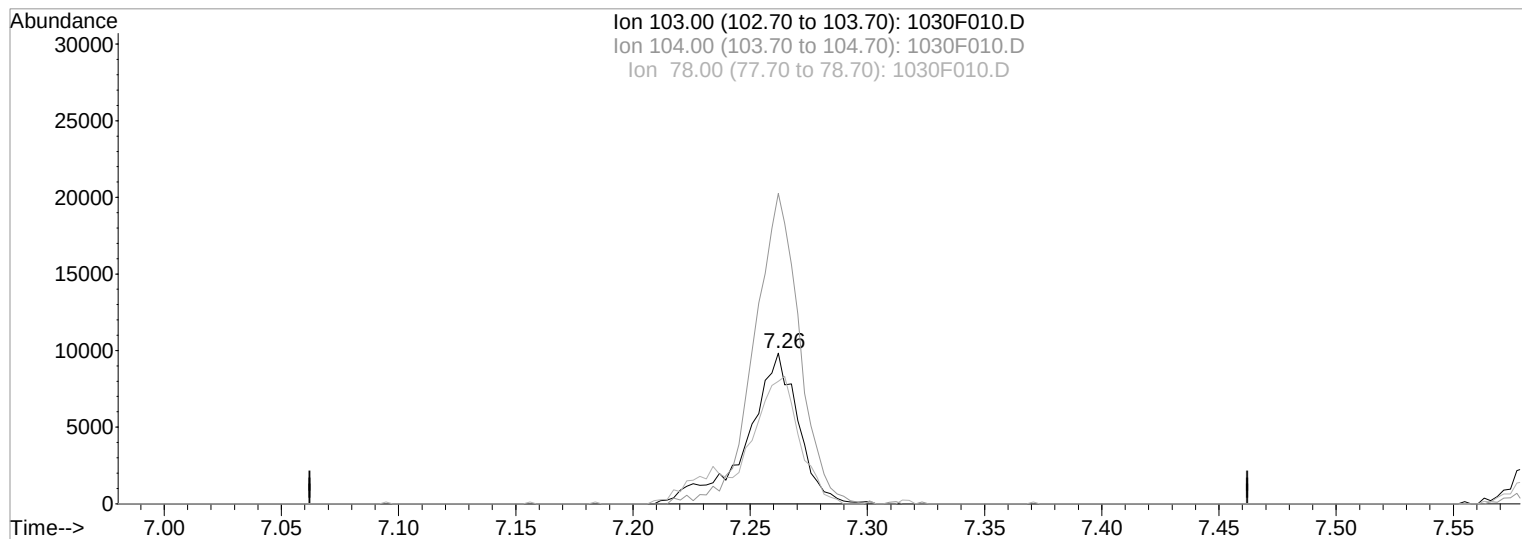
Quant Results File: temp.res

Method : J:\MS24\METHODS\2010\103023_MS24_FULL_SOIL.M (RTE Integrator)

Title : VOA MS24 EPA Method 8260B

Last Update : Tue Oct 31 10:01:35 2023

Response via : Multiple Level Calibration



TIC: 1030F010.D

(73) Styrene (T)

Manual Integration:

7.26min 5.06PPB

Before

response 14847

Ion Exp% Act%

10/31/23

103.00 100 100

104.00 210.30 206.15

78.00 84.80 81.27

0.00 0.00 0.00

Data File : J:\MS24\DATA\103023A\1030F010.D

Acq On : 30 Oct 2023 04:58 pm

Sample : ICAL 5

Misc :

Vial: 15

Operator: EW/OT

Inst : MS24

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Oct 31 11:21 2023

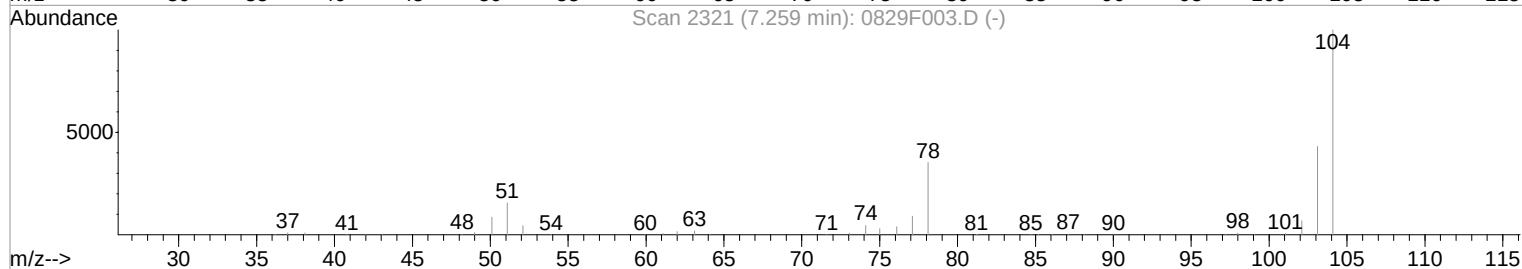
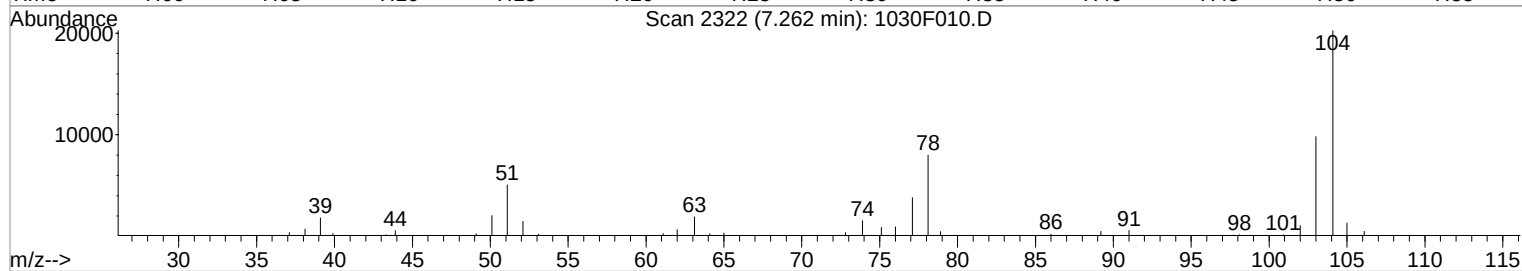
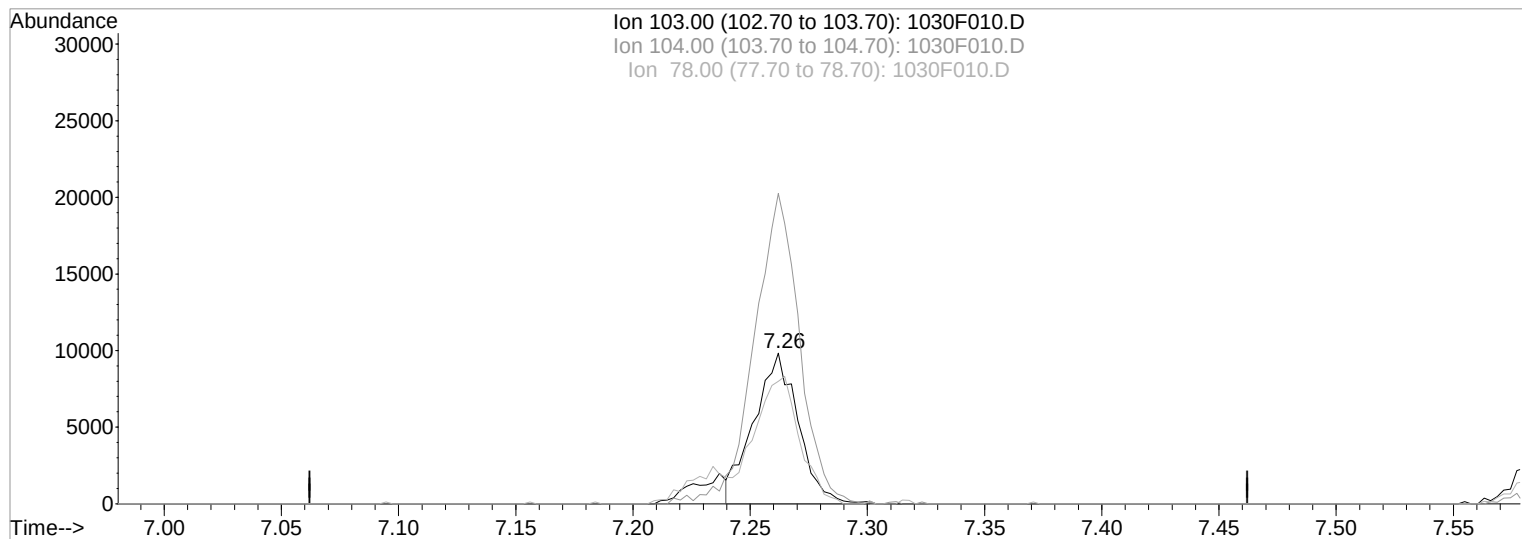
Quant Results File: temp.res

Method : J:\MS24\METHODS\2010\103023_MS24_FULL_SOIL.M (RTE Integrator)

Title : VOA MS24 EPA Method 8260B

Last Update : Tue Oct 31 10:01:35 2023

Response via : Multiple Level Calibration



TIC: 1030F010.D

(73) Styrene (T)

7.26min 4.41PPB m

response 12923

Ion	Exp%	Act%
-----	------	------

103.00	100	100
--------	-----	-----

104.00	210.30	206.15
--------	--------	--------

78.00	84.80	81.27
-------	-------	-------

0.00	0.00	0.00
------	------	------

Manual Integration:

After

Shoulder

10/31/23

Data File : J:\MS24\DATA\103023A\1030F011.D

Acq On : 30 Oct 2023 05:19 pm

Sample : ICAL 10

Misc :

Vial: 16

Operator: EW/OT

Inst : MS24

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Oct 31 10:32:17 2023

Quant Results File: 103023_MS24_FULL_SOIL.RES

Quant Method : J:\MS24\M...\103023_MS24_FULL_SOIL.M (RTE Integrator)

Title : VOA MS24 EPA Method 8260B

Last Update : Tue Oct 31 10:01:35 2023

Response via : Initial Calibration

DataAcq Meth : 8260.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	3.99	96	318424	50.00	PPB	0.00
59) Chlorobenzene-d5	6.62	82	132276	50.00	PPB	0.00
78) 1,4-Dichlorobenzene-d4	8.94	152	119252	50.00	PPB	0.00

System Monitoring Compounds

39) Dibromofluoromethane	3.51	113	50310	30.84	PPB	0.00
Spiked Amount 50.000			Recovery	=	61.68%	
43) 1,2-Dichloroethane-d4	3.78	65	62260	30.72	PPB	0.00
Spiked Amount 50.000			Recovery	=	61.44%	
57) Toluene-d8	5.28	98	211157	31.11	PPB	0.00
Spiked Amount 50.000			Recovery	=	62.22%	
77) 4-Bromofluorobenzene	7.78	95	75692	31.57	PPB	0.00
Spiked Amount 50.000			Recovery	=	63.14%	

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	0.86	85	10323	8.53	PPB	97
3) Chloromethane	0.99	50	20189	9.74	PPB	97
4) Vinyl Chloride	1.06	62	16069	8.87	PPB	95
5) Bromomethane	1.29	96	10510	12.06	PPB	95
6) Chloroethane	1.36	64	11065	9.03	PPB	98
7) Dichlorofluoromethane	1.51	67	22628	8.94	PPB	99
8) Trichlorofluoromethane	1.51	101	16982	8.50	PPB	98
9) Acrolein	1.86	56	18955	47.73	PPB	90
10) Trichlorotrifluoroethane	1.85	151	7050	8.71	PPB	93
11) 1,1-Dichloroethene	1.87	96	12309	8.81	PPB	95
12) Acetone	1.97	43	18129	22.34	PPB	90
13) Iodomethane	1.98	142	31360	13.50	PPB	98
14) Carbon Disulfide	2.00	76	36766	8.60	PPB	97
15) 3-Chloro-1-Propane	2.14	76	7814	9.16	PPB	# 80
16) Methyl Acetate	2.17	43	14677	9.90	PPB	95
17) Acetonitrile	2.21	40	25414	191.17	PPB	97
18) Methylene Chloride	2.25	84	19672	10.02	PPB	89
19) tert-Butyl Alcohol	2.34	59	10140	46.59	PPB	94
20) Acrylonitrile	2.48	53	13094	18.56	PPB	95
21) Methyl tert-Butyl Ether	2.39	73	95209	18.09	PPB	96
22) trans-1,2-Dichloroethene	2.40	96	15803	8.78	PPB	86
23) Hexane	2.53	57	16762	8.54	PPB	89
24) Diisopropyl Ether	2.73	45	59797	8.53	PPB	98
25) 1,1-Dichloroethane	2.73	63	30810	8.30	PPB	97
26) Vinyl Acetate	2.76	86	3235	7.79	PPB	# 93
27) Chloroprene	2.76	53	43666	16.65	PPB	96
28) tert-Butyl Ethyl Ether	2.98	59	54693	8.84	PPB	96
29) 2,2-Dichloropropane	3.13	77	22290	8.69	PPB	99
30) cis-1,2-Dichloroethene	3.15	96	19344	8.66	PPB	96
31) 2-Butanone	3.19	72	5275	20.65	PPB	# 71
32) Propionitrile	3.29	54	6157	20.16	PPB	95
33) Ethyl Acetate	3.15	61	30213	8.94	PPB	99
34) Methacrylonitrile	3.37	67	15699	18.26	PPB	97
35) Bromochloromethane	3.33	128	9064	8.60	PPB	94
36) Chloroform	3.38	83	30972	8.93	PPB	91
37) Cyclohexane	3.46	56	23269	8.38	PPB	98
38) 1,1,1-Trichloroethane	3.48	97	21992	8.49	PPB	94
40) Carbon Tetrachloride	3.57	117	17879	8.39	PPB	97
41) 1,1-Dichloropropene	3.60	75	21499	8.70	PPB	95
42) Isobutyl Alcohol	3.76	43	19722	181.34	PPB	93
44) Benzene	3.76	78	75273	8.95	PPB	98
45) 1,2-Dichloroethane	3.84	62	25182	9.06	PPB	93
46) tert-Amyl Methyl Ether	3.83	55	14205	9.06	PPB	89

(#)=qualifier out of range (m)=manual integration

1030F011.D 103023_MS24_FULL_SOIL.M

Tue Oct 31 14:26:04 2023

KELSO

Page 1

Data File : J:\MS24\DATA\103023A\1030F011.D

Acq On : 30 Oct 2023 05:19 pm

Sample : ICAL 10

Misc :

Vial: 16

Operator: EW/OT

Inst : MS24

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Oct 31 10:32:17 2023

Quant Results File: 103023_MS24_FULL_SOIL.RES

Quant Method : J:\MS24\M...\103023_MS24_FULL_SOIL.M (RTE Integrator)

Title : VOA MS24 EPA Method 8260B

Last Update : Tue Oct 31 10:01:35 2023

Response via : Initial Calibration

DataAcq Meth : 8260.M

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
47) Trichloroethene	4.27	95	17750	8.89	PPB	94
48) Methylcyclohexane	4.35	83	21881	8.06	PPB	97
49) 1,2-Dichloropropane	4.49	63	19659	8.61	PPB	98
50) Dibromomethane	4.58	93	10812	8.83	PPB	90
51) 1,4-Dioxane	4.60	88	4139	165.15	PPB	100
52) Bromodichloromethane	4.71	83	21942	8.35	PPB	95
53) 2-Nitropropane	4.98	41	11626	24.32	PPB	96
54) 2-Chloroethyl Vinyl Ether	4.98	63	5295	8.89	PPB	91
55) cis-1,3-Dichloropropene	5.10	75	27504	8.02	PPB	97
56) 4-Methyl-2-pentanone (MIBK)	5.24	58	12517	17.33	PPB	95
58) Toluene	5.34	92	48991	9.00	PPB	97
60) trans-1,3-Dichloropropene	5.61	75	23400	8.11	PPB	96
61) 1,1,2-Trichloroethane	5.77	83	14632	9.16	PPB	98
62) Tetrachloroethene	5.79	164	15114	9.28	PPB	92
63) 2-Hexanone	5.99	57	4299	16.93	PPB #	80
64) 1,3-Dichloropropane	5.93	76	29290	8.76	PPB	96
65) Dibromochloromethane	6.10	129	15874	8.19	PPB	84
66) 1,2-Dibromoethane (EDB)	6.21	107	16094	9.01	PPB	92
67) 1-Chlorohexane	6.61	91	19443	8.42	PPB	90
68) Chlorobenzene	6.64	112	53019	9.09	PPB	91
69) Ethylbenzene	6.72	106	26928	8.71	PPB	86
70) 1,1,1,2-Tetrachloroethane	6.74	131	16780	8.35	PPB	91
71) m,p-Xylenes	6.84	106	67013	17.33	PPB	99
72) o-Xylene	7.23	106	32119	8.53	PPB	91
73) Styrene	7.26	103	25624m	8.39	PPB	
74) Bromoform	7.46	173	10102	8.19	PPB	94
75) Isopropylbenzene	7.59	105	81896	8.60	PPB	98
76) cis-1,4-Dichloro-2-butene	7.75	89	4738	14.75	PPB	87
79) 1,1,2,2-Tetrachloroethane	7.98	83	21076	8.92	PPB	97
80) trans-1,4-Dichloro-2-buten	8.05	53	5690	8.29	PPB	81
81) Bromobenzene	7.92	156	21535	8.55	PPB	96
82) n-Propylbenzene	8.00	91	91944	8.26	PPB	97
83) 1,2,3-Trichloropropane	8.03	110	6985	9.30	PPB	91
84) 2-Chlorotoluene	8.11	91	57419	8.54	PPB	99
85) 1,3,5-Trimethylbenzene	8.20	105	68540	8.57	PPB	98
86) 4-Chlorotoluene	8.23	91	62213	8.84	PPB	96
87) tert-Butylbenzene	8.50	119	59974	8.70	PPB	92
88) 1,2,4-Trimethylbenzene	8.57	105	68435	8.60	PPB	98
89) sec-Butylbenzene	8.72	105	79917	8.49	PPB	98
90) p-Isopropyltoluene	8.87	119	69228	8.38	PPB	99
91) 1,3-Dichlorobenzene	8.86	146	40889	8.92	PPB	92
92) 1,4-Dichlorobenzene	8.96	146	41253	8.89	PPB	96
93) n-Butylbenzene	9.27	91	59941	8.18	PPB	97
94) 1,2-Dichlorobenzene	9.32	146	38016	8.87	PPB	97
95) 1,2-Dibromo-3-chloropropan	10.09	155	3346	9.99	PPB	85
96) 1,3,5-Trichlorobenzene	10.23	180	28363	9.24	PPB	98
97) 1,2,4-Trichlorobenzene	10.82	180	25334	8.69	PPB	98
98) Hexachlorobutadiene	10.93	225	14454	9.21	PPB	94
99) Naphthalene	11.05	128	55877	8.84	PPB	99
100) 1,2,3-Trichlorobenzene	11.27	180	23714	9.10	PPB	96

(#) = qualifier out of range (m) = manual integration

1030F011.D 103023_MS24_FULL_SOIL.M

Tue Oct 31 14:26:04 2023

KELSO

Page 2

```

Data File      : J:\MS24\DATA\103023A\1030F011.D
Acq On        : 30 Oct 2023   05:19 pm
Sample        : ICAL 10
Misc          :

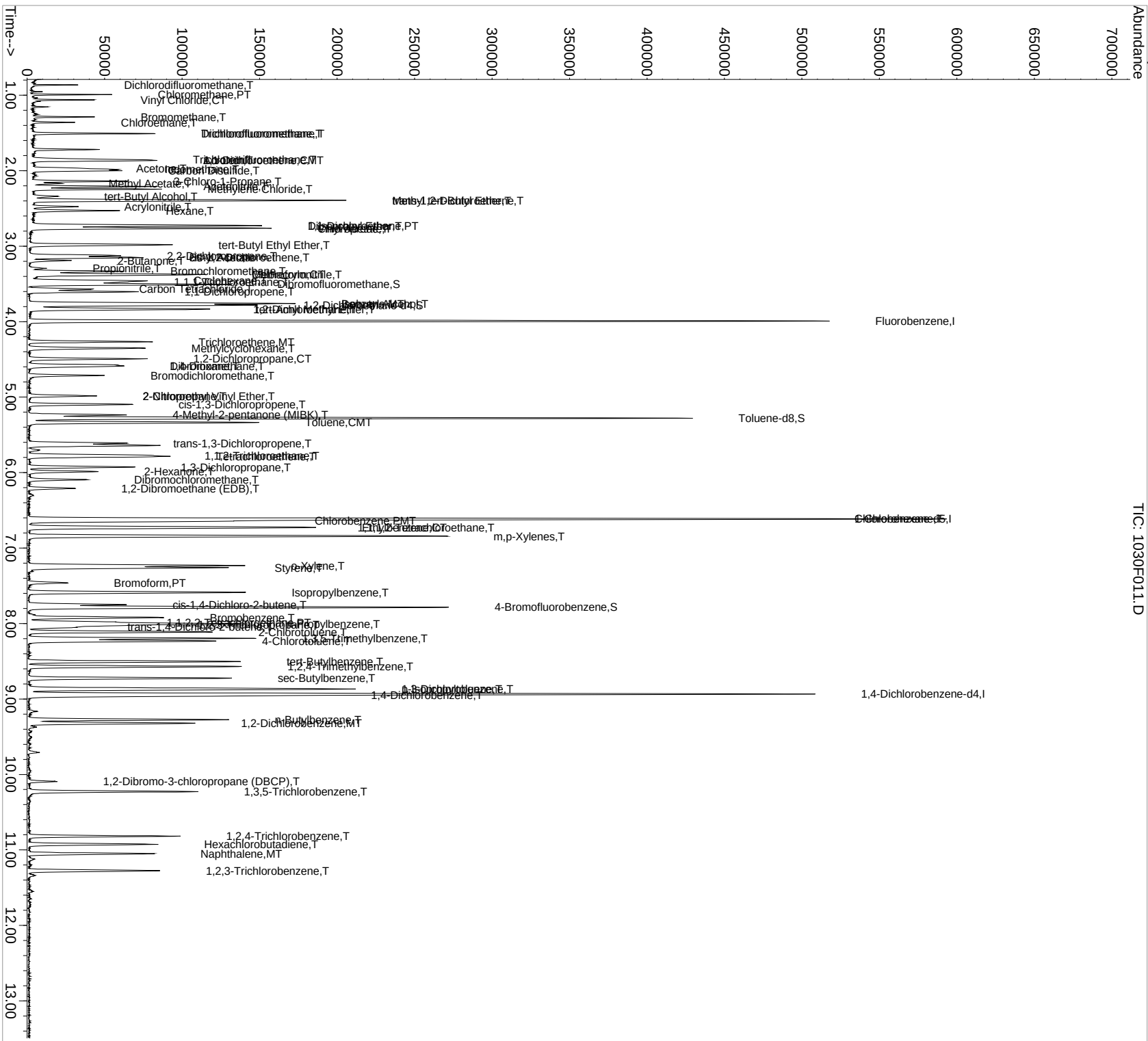
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```
Vial: 16
Operator: EW/OT
Inst : MS24
Multiplr: 1.00
```

quant Results File: 103023_MS24_FULL_SOIL.RES

1st

Method	: J:\MS24\METHODS\2010\103023_MS24_FULL_SOIL.M (RTE Integrator)
Title	: VOA MS24 EPA Method 8260B
Last Update	: Tue Oct 31 14:24:46 2023
Response via	: Initial Calibration



Quantitation Report (Qedit)

1st 11/01/23

2nd 11/02/23

Data File : J:\MS24\DATA\103023A\1030F011.D

Vial: 16

Acq On : 30 Oct 2023 05:19 pm

Operator: EW/OT

Sample : ICAL 10

Inst : MS24

Misc :

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Oct 31 10:32 2023

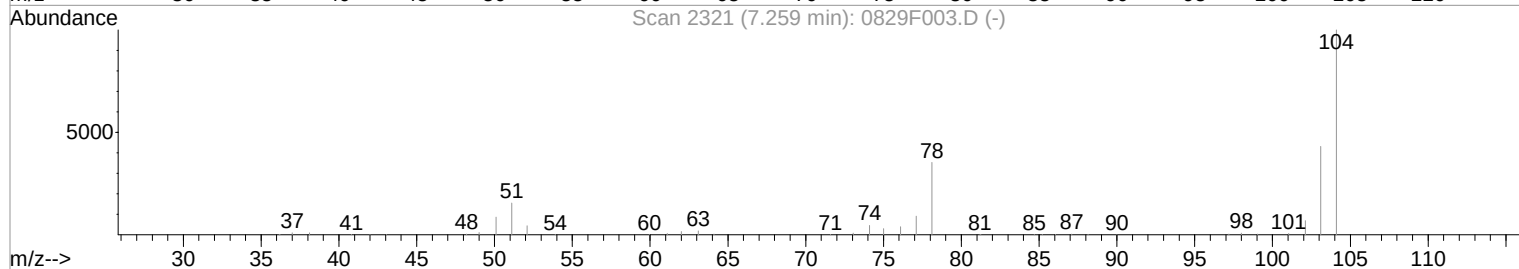
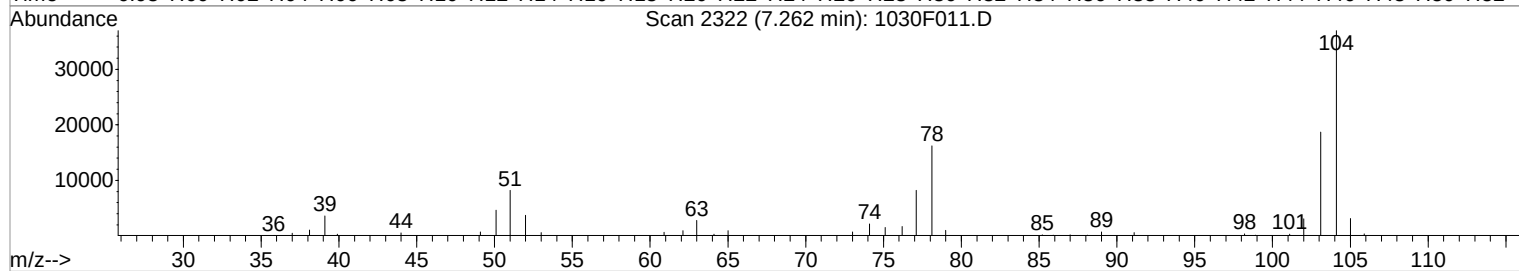
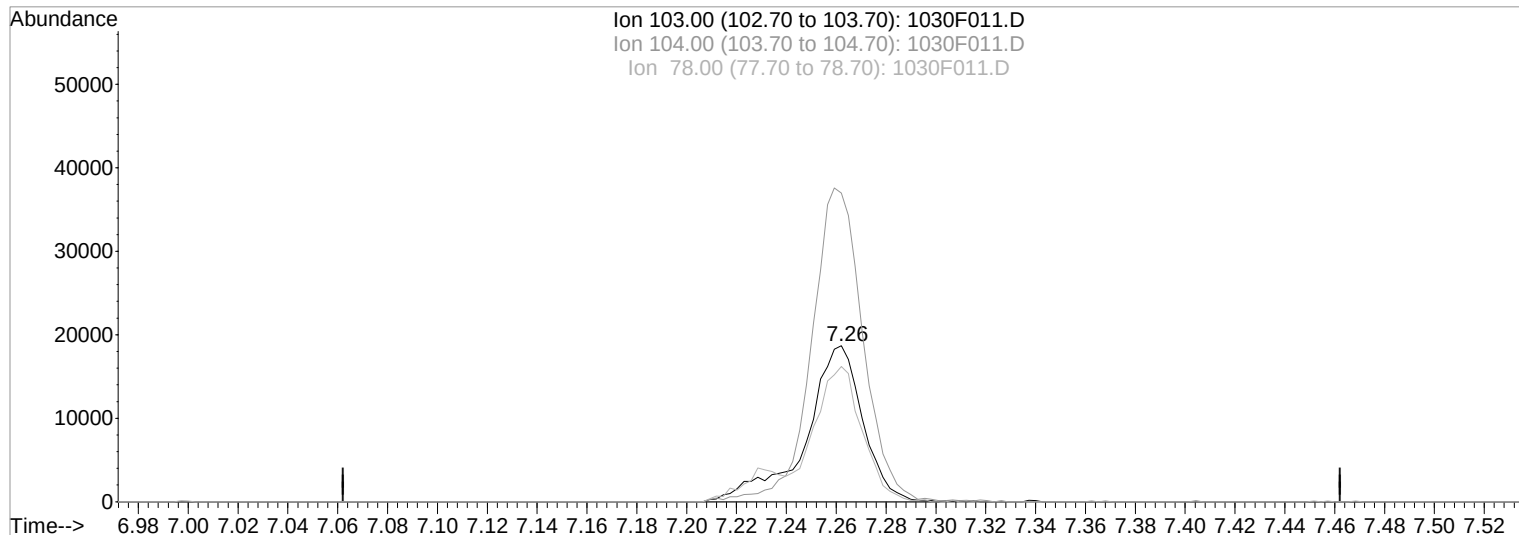
Quant Results File: temp.res

Method : J:\MS24\METHODS\2010\103023_MS24_FULL_SOIL.M (RTE Integrator)

Title : VOA MS24 EPA Method 8260B

Last Update : Tue Oct 31 10:01:35 2023

Response via : Multiple Level Calibration



TIC: 1030F011.D

(73) Styrene (T)

Manual Integration:

7.26min 9.74PPB

Before

response 29736

Ion Exp% Act%

10/31/23

103.00 100 100

104.00 210.30 197.78

78.00 84.80 86.55

0.00 0.00 0.00

Quantitation Report (Qedit)

1st 11/01/23

2nd 11/02/23

Data File : J:\MS24\DATA\103023A\1030F011.D

Vial: 16

Acq On : 30 Oct 2023 05:19 pm

Operator: EW/OT

Sample : ICAL 10

Inst : MS24

Misc :

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Oct 31 10:36 2023

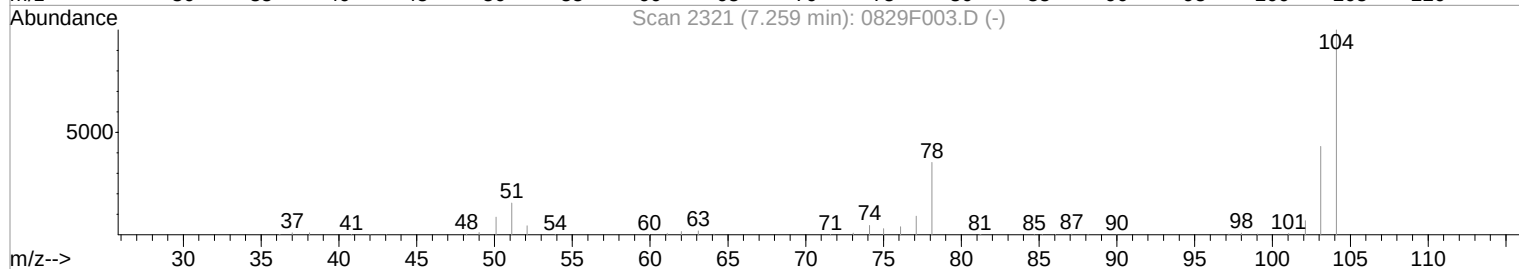
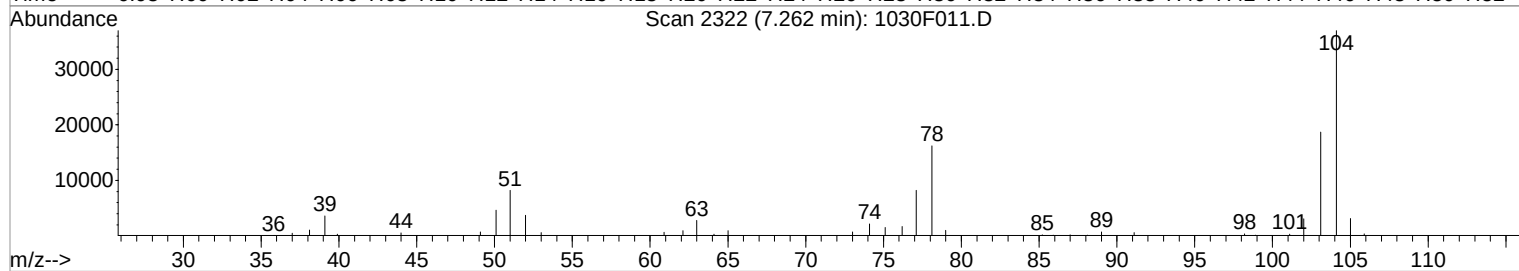
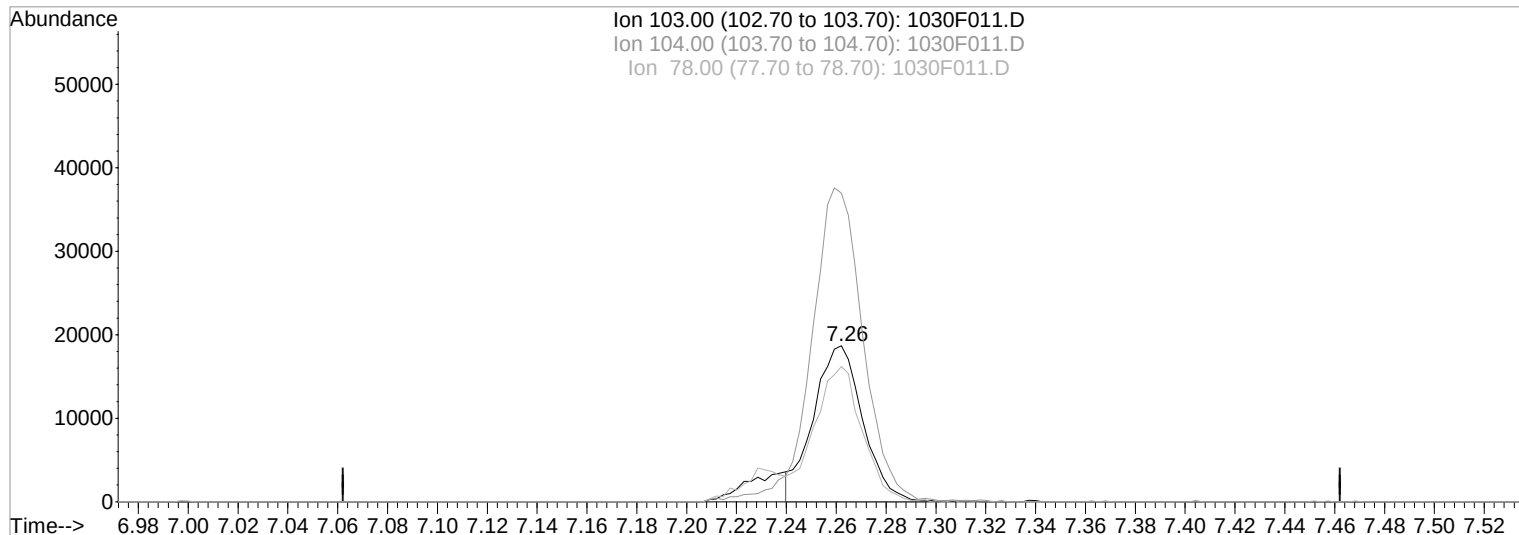
Quant Results File: temp.res

Method : J:\MS24\METHODS\2010\103023_MS24_FULL_SOIL.M (RTE Integrator)

Title : VOA MS24 EPA Method 8260B

Last Update : Tue Oct 31 10:01:35 2023

Response via : Multiple Level Calibration



TIC: 1030F011.D

(73) Styrene (T)

Manual Integration:

7.26min 8.39PPB m

After

response 25624

Shoulder

Ion	Exp%	Act%
-----	------	------

10/31/23

103.00	100	100
--------	-----	-----

104.00	210.30	197.78
--------	--------	--------

78.00	84.80	86.55
-------	-------	-------

0.00	0.00	0.00
------	------	------

Data File : J:\MS24\DATA\103023A\1030F012.D

Acq On : 30 Oct 2023 05:40 pm

Sample : ICAL 20

Misc :

Vial: 17

Operator: EW/OT

Inst : MS24

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Oct 31 11:15:50 2023

Quant Results File: 103023_MS24_FULL_SOIL.RES

Quant Method : J:\MS24\M...\103023_MS24_FULL_SOIL.M (RTE Integrator)

Title : VOA MS24 EPA Method 8260B

Last Update : Tue Oct 31 10:01:35 2023

Response via : Initial Calibration

DataAcq Meth : 8260.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	3.99	96	318832	50.00	PPB	0.00
59) Chlorobenzene-d5	6.62	82	132650	50.00	PPB	0.00
78) 1,4-Dichlorobenzene-d4	8.94	152	120025	50.00	PPB	0.00

System Monitoring Compounds

39) Dibromofluoromethane	3.51	113	65560	40.13	PPB	0.00
Spiked Amount 50.000			Recovery	=	80.26%	
43) 1,2-Dichloroethane-d4	3.78	65	82535	40.67	PPB	0.00
Spiked Amount 50.000			Recovery	=	81.34%	
57) Toluene-d8	5.28	98	275875	40.59	PPB	0.00
Spiked Amount 50.000			Recovery	=	81.18%	
77) 4-Bromofluorobenzene	7.78	95	100694	41.88	PPB	0.00
Spiked Amount 50.000			Recovery	=	83.76%	

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	0.87	85	20924	17.27	PPB	89
3) Chloromethane	1.00	50	40370	19.45	PPB	97
4) Vinyl Chloride	1.07	62	33742	18.61	PPB	99
5) Bromomethane	1.29	96	19277	22.09	PPB	97
6) Chloroethane	1.36	64	24237	19.75	PPB	91
7) Dichlorofluoromethane	1.51	67	47811	18.86	PPB	95
8) Trichlorofluoromethane	1.51	101	37140	18.56	PPB	98
9) Acrolein	1.86	56	37824	95.12	PPB	99
10) Trichlorotrifluoroethane	1.85	151	14392	17.75	PPB	97
11) 1,1-Dichloroethene	1.87	96	25537	18.25	PPB	94
12) Acetone	1.97	43	32620	40.14	PPB	97
13) Iodomethane	1.99	142	78211	33.64	PPB	97
14) Carbon Disulfide	2.00	76	80611	18.82	PPB	99
15) 3-Chloro-1-Propane	2.14	76	16704	19.55	PPB	# 82
16) Methyl Acetate	2.18	43	28861	19.44	PPB	98
17) Acetonitrile	2.21	40	50332	378.12	PPB	94
18) Methylene Chloride	2.25	84	40296	20.49	PPB	94
19) tert-Butyl Alcohol	2.34	59	19822	90.97	PPB	92
20) Acrylonitrile	2.48	53	26796	37.93	PPB	98
21) Methyl tert-Butyl Ether	2.39	73	200444	38.05	PPB	99
22) trans-1,2-Dichloroethene	2.40	96	34396	19.10	PPB	97
23) Hexane	2.53	57	34885	17.75	PPB	99
24) Diisopropyl Ether	2.73	45	133791	19.06	PPB	99
25) 1,1-Dichloroethane	2.73	63	71274	19.18	PPB	98
26) Vinyl Acetate	2.77	86	7781	18.71	PPB	98
27) Chloroprene	2.76	53	98142	37.37	PPB	100
28) tert-Butyl Ethyl Ether	2.98	59	118165	19.08	PPB	97
29) 2,2-Dichloropropane	3.13	77	48671	18.94	PPB	95
30) cis-1,2-Dichloroethene	3.15	96	41622	18.61	PPB	93
31) 2-Butanone	3.20	72	9429	36.86	PPB	# 85
32) Propionitrile	3.29	54	11120	36.36	PPB	97
33) Ethyl Acetate	3.15	61	63406	18.73	PPB	99
34) Methacrylonitrile	3.37	67	32538	37.81	PPB	96
35) Bromochloromethane	3.33	128	19340	18.34	PPB	96
36) Chloroform	3.38	83	65422	18.84	PPB	99
37) Cyclohexane	3.46	56	49468	17.79	PPB	99
38) 1,1,1-Trichloroethane	3.49	97	47495	18.30	PPB	94
40) Carbon Tetrachloride	3.57	117	38832	18.19	PPB	97
41) 1,1-Dichloropropene	3.61	75	45874	18.55	PPB	94
42) Isobutyl Alcohol	3.75	43	38315	351.85	PPB	96
44) Benzene	3.76	78	160301	19.03	PPB	99
45) 1,2-Dichloroethane	3.84	62	51885	18.64	PPB	98
46) tert-Amyl Methyl Ether	3.83	55	30314	19.32	PPB	98

(#)=qualifier out of range (m)=manual integration

1030F012.D 103023_MS24_FULL_SOIL.M

Tue Oct 31 14:26:05 2023

KELSO

Page 1

Data File : J:\MS24\DATA\103023A\1030F012.D

Acq On : 30 Oct 2023 05:40 pm

Sample : ICAL 20

Misc :

Vial: 17

Operator: EW/OT

Inst : MS24

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Oct 31 11:15:50 2023

Quant Results File: 103023_MS24_FULL_SOIL.RES

Quant Method : J:\MS24\M...\103023_MS24_FULL_SOIL.M (RTE Integrator)

Title : VOA MS24 EPA Method 8260B

Last Update : Tue Oct 31 10:01:35 2023

Response via : Initial Calibration

DataAcq Meth : 8260.M

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
47) Trichloroethene	4.26	95	37736	18.88	PPB	96
48) Methylcyclohexane	4.35	83	47431	17.45	PPB	97
49) 1,2-Dichloropropane	4.49	63	42044	18.39	PPB	97
50) Dibromomethane	4.59	93	22920	18.69	PPB	95
51) 1,4-Dioxane	4.59	88	7670	305.65	PPB	94
52) Bromodichloromethane	4.71	83	48764	18.52	PPB	94
53) 2-Nitropropane	4.98	41	25806	53.92	PPB	97
54) 2-Chloroethyl Vinyl Ether	4.99	63	11086	18.58	PPB	90
55) cis-1,3-Dichloropropene	5.10	75	60731	17.69	PPB	99
56) 4-Methyl-2-pentanone (MIBK)	5.23	58	26895	37.19	PPB	96
58) Toluene	5.34	92	102706	18.84	PPB	100
60) trans-1,3-Dichloropropene	5.61	75	52914	18.28	PPB	97
61) 1,1,2-Trichloroethane	5.77	83	29847	18.63	PPB	95
62) Tetrachloroethene	5.79	164	32175	19.69	PPB	97
63) 2-Hexanone	5.99	57	9851	38.68	PPB	# 61
64) 1,3-Dichloropropane	5.93	76	63744	19.02	PPB	97
65) Dibromochloromethane	6.09	129	34875	17.95	PPB	98
66) 1,2-Dibromoethane (EDB)	6.21	107	33251	18.56	PPB	96
67) 1-Chlorohexane	6.61	91	43493	18.78	PPB	99
68) Chlorobenzene	6.64	112	112790	19.29	PPB	98
69) Ethylbenzene	6.72	106	57698	18.61	PPB	93
70) 1,1,1,2-Tetrachloroethane	6.74	131	36514	18.12	PPB	94
71) m,p-Xylenes	6.84	106	145466	37.51	PPB	98
72) o-Xylene	7.23	106	72245	19.14	PPB	98
73) Styrene	7.26	103	56260m	18.38	PPB	
74) Bromoform	7.46	173	21611	17.47	PPB	93
75) Isopropylbenzene	7.59	105	179419	18.79	PPB	99
76) cis-1,4-Dichloro-2-butene	7.75	89	10081	31.29	PPB	94
79) 1,1,2,2-Tetrachloroethane	7.98	83	44431	18.68	PPB	91
80) trans-1,4-Dichloro-2-buten	8.05	53	12075	17.48	PPB	81
81) Bromobenzene	7.92	156	45759	18.05	PPB	90
82) n-Propylbenzene	8.00	91	204553	18.26	PPB	99
83) 1,2,3-Trichloropropane	8.02	110	14195	18.77	PPB	97
84) 2-Chlorotoluene	8.11	91	125781	18.58	PPB	99
85) 1,3,5-Trimethylbenzene	8.20	105	149888	18.62	PPB	100
86) 4-Chlorotoluene	8.23	91	134352	18.97	PPB	99
87) tert-Butylbenzene	8.50	119	131070	18.89	PPB	95
88) 1,2,4-Trimethylbenzene	8.57	105	147579	18.43	PPB	100
89) sec-Butylbenzene	8.73	105	178184	18.81	PPB	99
90) p-Isopropyltoluene	8.87	119	155178	18.67	PPB	97
91) 1,3-Dichlorobenzene	8.86	146	87017	18.86	PPB	99
92) 1,4-Dichlorobenzene	8.96	146	87602	18.75	PPB	95
93) n-Butylbenzene	9.27	91	135813	18.41	PPB	97
94) 1,2-Dichlorobenzene	9.32	146	81289	18.85	PPB	98
95) 1,2-Dibromo-3-chloropropan	10.09	155	6388	18.95	PPB	95
96) 1,3,5-Trichlorobenzene	10.23	180	59455	19.24	PPB	98
97) 1,2,4-Trichlorobenzene	10.82	180	55405	18.89	PPB	98
98) Hexachlorobutadiene	10.93	225	29976	18.98	PPB	96
99) Naphthalene	11.05	128	115061	18.09	PPB	99
100) 1,2,3-Trichlorobenzene	11.27	180	49082	18.72	PPB	94

(#) = qualifier out of range (m) = manual integration

1030F012.D 103023_MS24_FULL_SOIL.M

Tue Oct 31 14:26:05 2023

KELSO

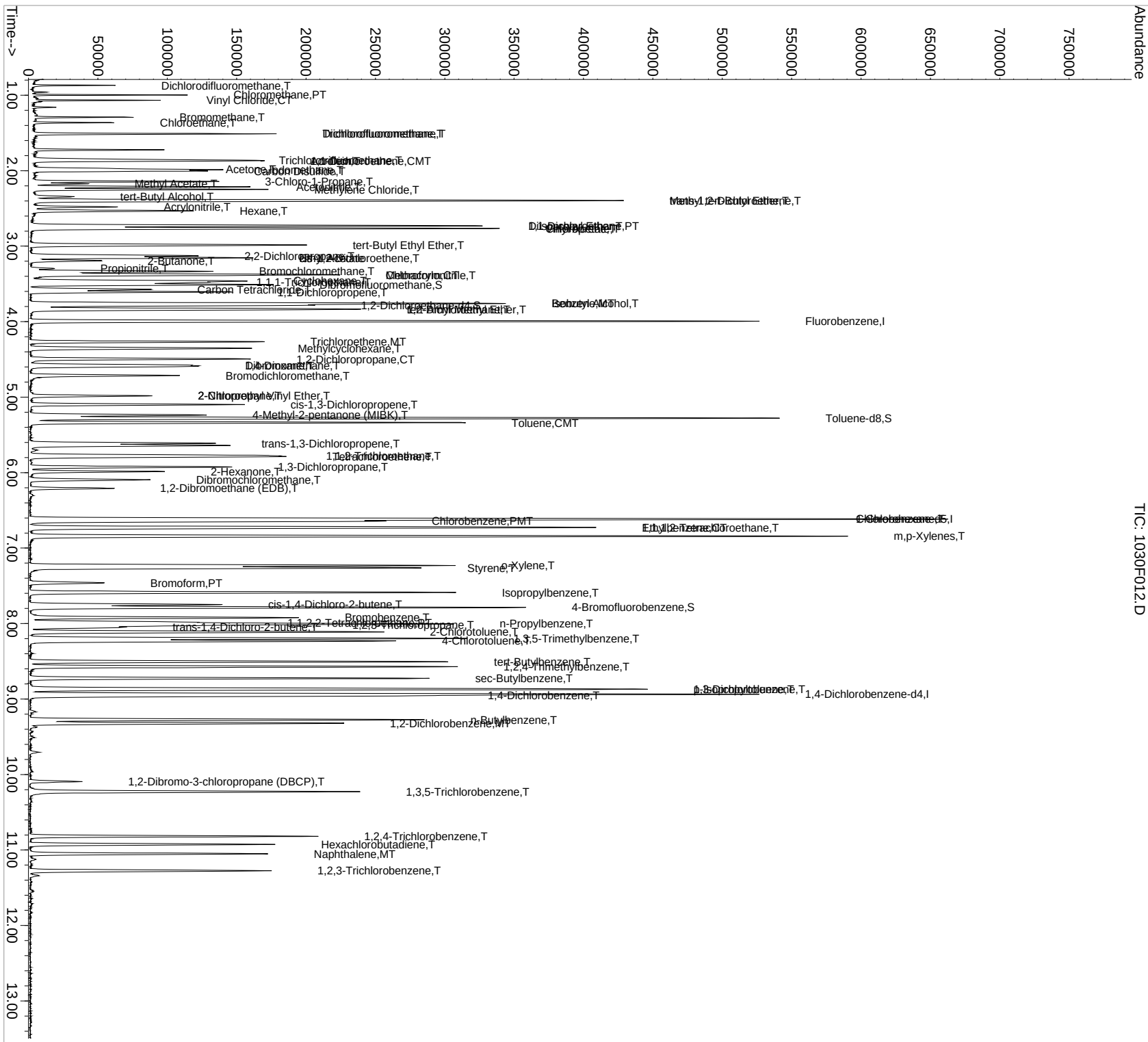
Page 2

Data File : J:\MS24\DATA\103023A\1030F012.D
 Acq On : 30 Oct 2023 05:40 pm
 Sample : ICAL 20
 Misc :
 MS Integration Params: rteint.p
 Quant Time: Oct 31 11:18 2023

Vial: 17
 Operator: EW/OT
 Inst : MS24
 Multiplr: 1.00

Quant Results File: 103023_MS24_FULL_SOIL.RES

Method : J:\MS24\METHODS\2010\103023_MS24_FULL_SOIL.M (RTE Integrator)
 Title : VOA MS24 EPA Method 8260B
 Last Update : Tue Oct 31 14:24:46 2023
 Response via : Initial Calibration



Data File : J:\MS24\DATA\103023A\1030F012.D

Acq On : 30 Oct 2023 05:40 pm

Sample : ICAL 20

Misc :

MS Integration Params: rteint.p

Quant Time: Oct 31 11:15 2023

Vial: 17

Operator: EW/OT

Inst : MS24

Multiplr: 1.00

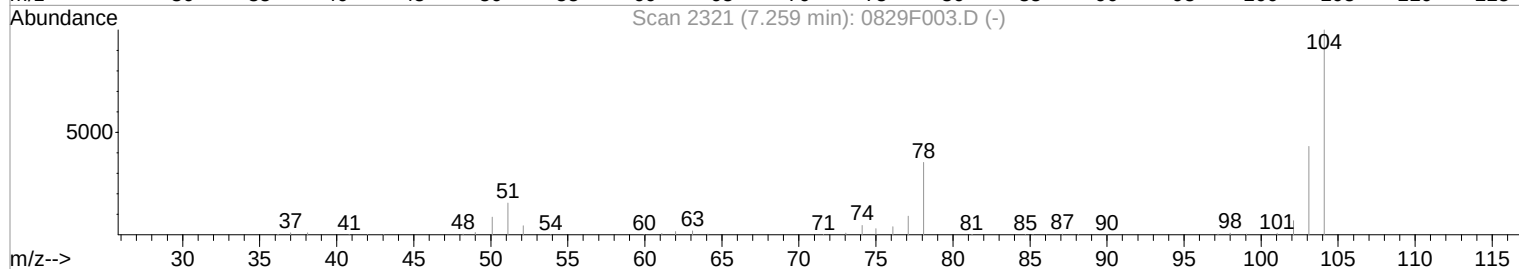
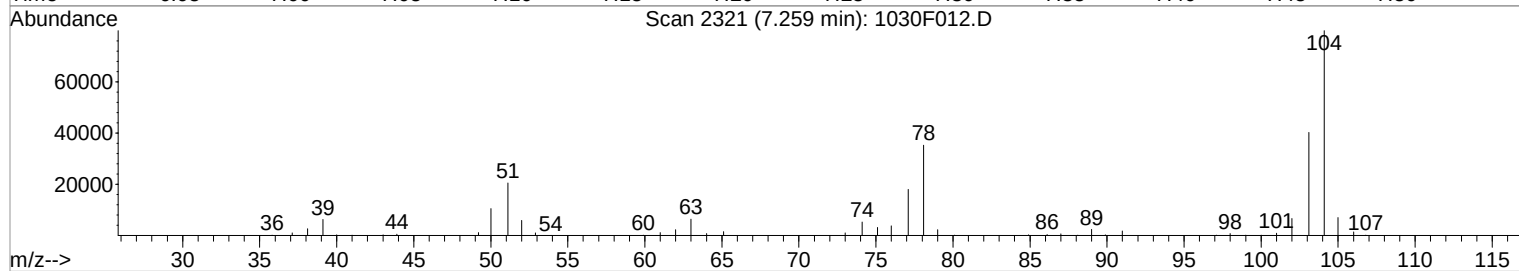
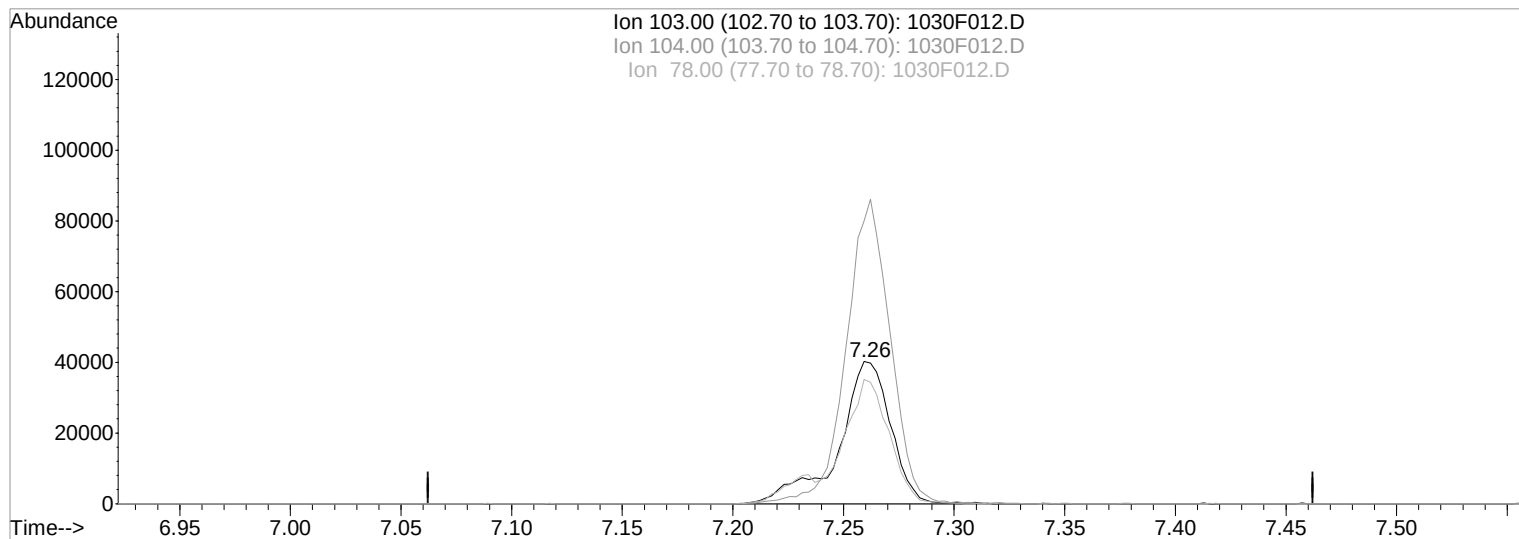
Quant Results File: temp.res

Method : J:\MS24\METHODS\2010\103023_MS24_FULL_SOIL.M (RTE Integrator)

Title : VOA MS24 EPA Method 8260B

Last Update : Tue Oct 31 10:01:35 2023

Response via : Multiple Level Calibration



TIC: 1030F012.D

(73) Styrene (T)

Manual Integration:

7.26min 21.43PPB

Before

response 65601

Ion	Exp%	Act%
-----	------	------

10/31/23

103.00	100	100
--------	-----	-----

104.00	210.30	198.83
--------	--------	--------

78.00	84.80	87.47
-------	-------	-------

0.00	0.00	0.00
------	------	------

Data File : J:\MS24\DATA\103023A\1030F012.D

Acq On : 30 Oct 2023 05:40 pm

Sample : ICAL 20

Misc :

MS Integration Params: rteint.p

Quant Time: Oct 31 11:18 2023

Vial: 17

Operator: EW/OT

Inst : MS24

Multiplr: 1.00

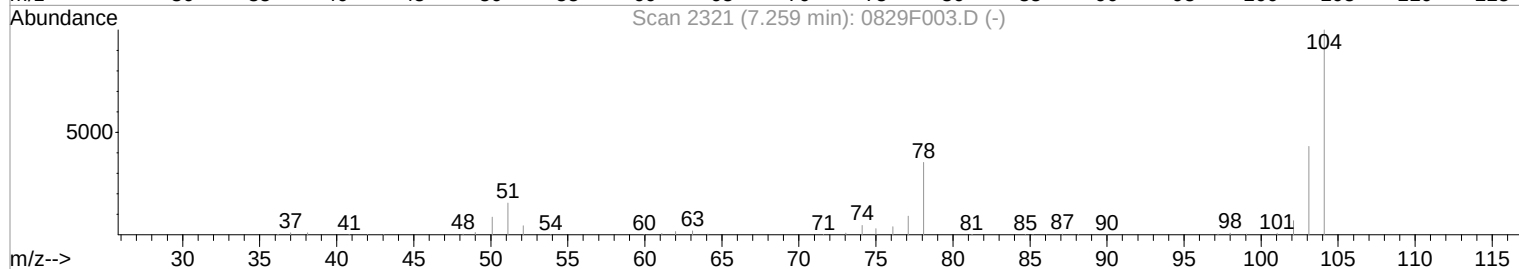
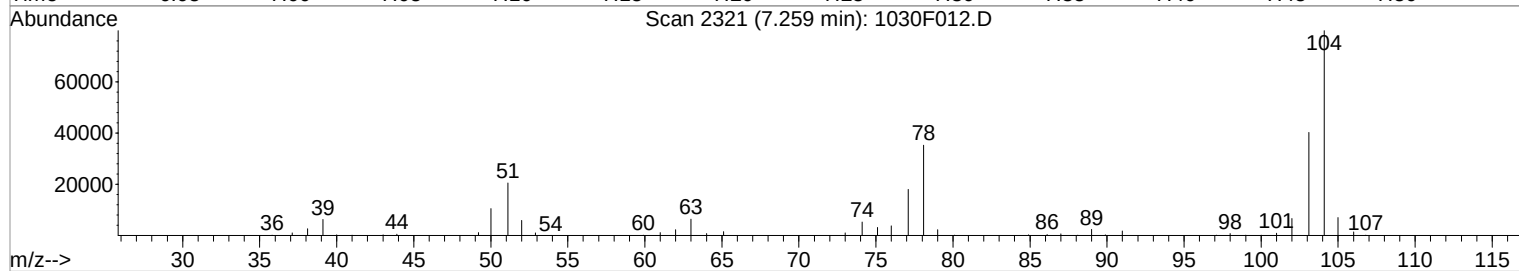
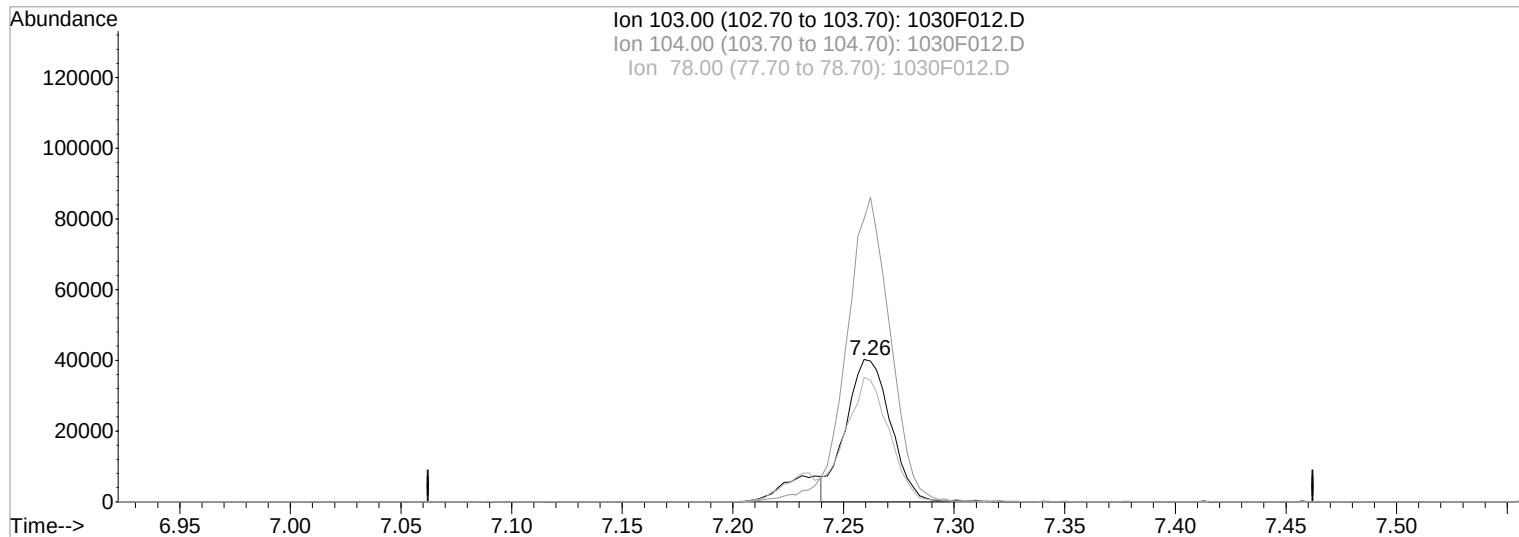
Quant Results File: temp.res

Method : J:\MS24\METHODS\2010\103023_MS24_FULL_SOIL.M (RTE Integrator)

Title : VOA MS24 EPA Method 8260B

Last Update : Tue Oct 31 10:01:35 2023

Response via : Multiple Level Calibration



TIC: 1030F012.D

(73) Styrene (T)

Manual Integration:

7.26min 18.38PPB m

After

response 56260

Shoulder

Ion	Exp%	Act%
-----	------	------

10/31/23

103.00	100	100
--------	-----	-----

104.00	210.30	198.83
--------	--------	--------

78.00	84.80	87.47
-------	-------	-------

0.00	0.00	0.00
------	------	------

Data File : J:\MS24\DATA\103023A\1030F013.D

Acq On : 30 Oct 2023 06:01 pm

Sample : ICAL 50

Misc :

Vial: 18

Operator: EW/OT

Inst : MS24

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Oct 31 10:02:03 2023

Quant Results File: 103023_MS24_FULL_SOIL.RES

Quant Method : J:\MS24\M...\103023_MS24_FULL_SOIL.M (RTE Integrator)

Title : VOA MS24 EPA Method 8260B

Last Update : Tue Oct 31 10:01:35 2023

Response via : Initial Calibration

DataAcq Meth : 8260.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	3.99	96	324813	50.00	PPB	0.00
59) Chlorobenzene-d5	6.62	82	135752	50.00	PPB	0.00
78) 1,4-Dichlorobenzene-d4	8.94	152	119714	50.00	PPB	0.00

System Monitoring Compounds

39) Dibromofluoromethane	3.51	113	83207	50.00	PPB	0.00
Spiked Amount 50.000			Recovery	=	100.00%	
43) 1,2-Dichloroethane-d4	3.78	65	103373	50.00	PPB	0.00
Spiked Amount 50.000			Recovery	=	100.00%	
57) Toluene-d8	5.28	98	346168	50.00	PPB	0.00
Spiked Amount 50.000			Recovery	=	100.00%	
77) 4-Bromofluorobenzene	7.79	95	123036	50.00	PPB	0.00
Spiked Amount 50.000			Recovery	=	100.00%	

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	0.87	85	61701	50.00	PPB	100
3) Chloromethane	0.99	50	105738	50.00	PPB	100
4) Vinyl Chloride	1.07	62	92375	50.00	PPB	100
5) Bromomethane	1.29	96	44449	50.00	PPB	100
6) Chloroethane	1.36	64	62520	50.00	PPB	100
7) Dichlorofluoromethane	1.51	67	129137	50.00	PPB	100
8) Trichlorofluoromethane	1.51	101	101926	50.00	PPB	100
9) Acrolein	1.86	56	101273	250.00	PPB	100
10) Trichlorotrifluoroethane	1.85	151	41295	50.00	PPB	100
11) 1,1-Dichloroethene	1.87	96	71268	50.00	PPB	100
12) Acetone	1.97	43	82786	100.00	PPB	100
13) Iodomethane	1.99	142	236887	100.00	PPB	100
14) Carbon Disulfide	2.00	76	218158	50.00	PPB	100
15) 3-Chloro-1-Propane	2.14	76	43525	50.00	PPB	100
16) Methyl Acetate	2.17	43	75618	50.00	PPB	100
17) Acetonitrile	2.21	40	135607	1000.00	PPB	100
18) Methylene Chloride	2.25	84	100178	50.00	PPB	100
19) tert-Butyl Alcohol	2.35	59	55498	250.00	PPB	100
20) Acrylonitrile	2.48	53	71979	100.00	PPB	100
21) Methyl tert-Butyl Ether	2.39	73	536741	100.00	PPB	100
22) trans-1,2-Dichloroethene	2.40	96	91753	50.00	PPB	100
23) Hexane	2.53	57	100108	50.00	PPB	100
24) Diisopropyl Ether	2.72	45	357526	50.00	PPB	100
25) 1,1-Dichloroethane	2.73	63	189246	50.00	PPB	100
26) Vinyl Acetate	2.77	86	21182	50.00	PPB	100
27) Chloroprene	2.76	53	267549	100.00	PPB	100
28) tert-Butyl Ethyl Ether	2.98	59	315500	50.00	PPB	100
29) 2,2-Dichloropropane	3.13	77	130881	50.00	PPB	100
30) cis-1,2-Dichloroethene	3.15	96	113912	50.00	PPB	100
31) 2-Butanone	3.19	72	26057	100.00	PPB	100
32) Propionitrile	3.29	54	31157	100.00	PPB	100
33) Ethyl Acetate	3.15	61	172447	50.00	PPB	100
34) Methacrylonitrile	3.37	67	87676	100.00	PPB	100
35) Bromochloromethane	3.33	128	53729	50.00	PPB	100
36) Chloroform	3.38	83	176910	50.00	PPB	100
37) Cyclohexane	3.46	56	141616	50.00	PPB	100
38) 1,1,1-Trichloroethane	3.48	97	132193	50.00	PPB	100
40) Carbon Tetrachloride	3.57	117	108744	50.00	PPB	100
41) 1,1-Dichloropropene	3.61	75	125996	50.00	PPB	100
42) Isobutyl Alcohol	3.75	43	110938	1000.00	PPB	100
44) Benzene	3.76	78	429074	50.00	PPB	100
45) 1,2-Dichloroethane	3.84	62	141790	50.00	PPB	100
46) tert-Amyl Methyl Ether	3.83	55	79937	50.00	PPB	100

(#)=qualifier out of range (m)=manual integration

1030F013.D 103023_MS24_FULL_SOIL.M

Tue Oct 31 14:26:05 2023

KELSO

Page 1

Data File : J:\MS24\DATA\103023A\1030F013.D

Vial: 18

Acq On : 30 Oct 2023 06:01 pm

Operator: EW/OT

Sample : ICAL 50

Inst : MS24

Misc :

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Oct 31 10:02:03 2023

Quant Results File: 103023_MS24_FULL_SOIL.RES

Quant Method : J:\MS24\M...\103023_MS24_FULL_SOIL.M (RTE Integrator)

Title : VOA MS24 EPA Method 8260B

Last Update : Tue Oct 31 10:01:35 2023

Response via : Initial Calibration

DataAcq Meth : 8260.M

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
47) Trichloroethene	4.27	95	101826	50.00	PPB	100
48) Methylcyclohexane	4.35	83	138483	50.00	PPB	100
49) 1,2-Dichloropropane	4.49	63	116437	50.00	PPB	100
50) Dibromomethane	4.59	93	62479	50.00	PPB	100
51) 1,4-Dioxane	4.59	88	25565	1000.00	PPB	100
52) Bromodichloromethane	4.71	83	134100	50.00	PPB	100
53) 2-Nitropropane	4.98	41	73138	150.00	PPB	100
54) 2-Chloroethyl Vinyl Ether	4.99	63	30390	50.00	PPB	100
55) cis-1,3-Dichloropropene	5.10	75	174833	50.00	PPB	100
56) 4-Methyl-2-pentanone (MIBK)	5.23	58	73670	100.00	PPB	100
58) Toluene	5.34	92	277750	50.00	PPB	100
60) trans-1,3-Dichloropropene	5.61	75	148088	50.00	PPB	100
61) 1,1,2-Trichloroethane	5.77	83	81979	50.00	PPB	100
62) Tetrachloroethene	5.79	164	83594	50.00	PPB	100
63) 2-Hexanone	5.98	57	26065	100.00	PPB	100
64) 1,3-Dichloropropane	5.93	76	171520	50.00	PPB	100
65) Dibromochloromethane	6.10	129	99418	50.00	PPB	100
66) 1,2-Dibromoethane (EDB)	6.21	107	91661	50.00	PPB	100
67) 1-Chlorohexane	6.61	91	118529	50.00	PPB	100
68) Chlorobenzene	6.64	112	299228	50.00	PPB	100
69) Ethylbenzene	6.72	106	158605	50.00	PPB	100
70) 1,1,1,2-Tetrachloroethane	6.74	131	103094	50.00	PPB	100
71) m,p-Xylenes	6.84	106	396886	100.00	PPB	100
72) o-Xylene	7.23	106	193139	50.00	PPB	100
73) Styrene	7.26	103	156664m	50.00	PPB	100
74) Bromoform	7.46	173	63286	50.00	PPB	100
75) Isopropylbenzene	7.59	105	488568	50.00	PPB	100
76) cis-1,4-Dichloro-2-butene	7.75	89	32971	100.00	PPB	100
79) 1,1,2,2-Tetrachloroethane	7.98	83	118612	50.00	PPB	100
80) trans-1,4-Dichloro-2-buten	8.05	53	34450	50.00	PPB	100
81) Bromobenzene	7.92	156	126412	50.00	PPB	100
82) n-Propylbenzene	8.00	91	558584	50.00	PPB	100
83) 1,2,3-Trichloropropane	8.03	110	37713	50.00	PPB	100
84) 2-Chlorotoluene	8.11	91	337533	50.00	PPB	100
85) 1,3,5-Trimethylbenzene	8.20	105	401388	50.00	PPB	100
86) 4-Chlorotoluene	8.23	91	353189	50.00	PPB	100
87) tert-Butylbenzene	8.50	119	345961	50.00	PPB	100
88) 1,2,4-Trimethylbenzene	8.57	105	399252	50.00	PPB	100
89) sec-Butylbenzene	8.73	105	472528	50.00	PPB	100
90) p-Isopropyltoluene	8.87	119	414595	50.00	PPB	100
91) 1,3-Dichlorobenzene	8.86	146	230137	50.00	PPB	100
92) 1,4-Dichlorobenzene	8.96	146	232953	50.00	PPB	100
93) n-Butylbenzene	9.27	91	367809	50.00	PPB	100
94) 1,2-Dichlorobenzene	9.32	146	215006	50.00	PPB	100
95) 1,2-Dibromo-3-chloropropan	10.09	155	16808	50.00	PPB	100
96) 1,3,5-Trichlorobenzene	10.23	180	154123	50.00	PPB	100
97) 1,2,4-Trichlorobenzene	10.82	180	146248	50.00	PPB	100
98) Hexachlorobutadiene	10.93	225	78756	50.00	PPB	100
99) Naphthalene	11.05	128	317207	50.00	PPB	100
100) 1,2,3-Trichlorobenzene	11.28	180	130786	50.00	PPB	100

(#) = qualifier out of range (m) = manual integration

1030F013.D 103023_MS24_FULL_SOIL.M

Tue Oct 31 14:26:05 2023

KELSO

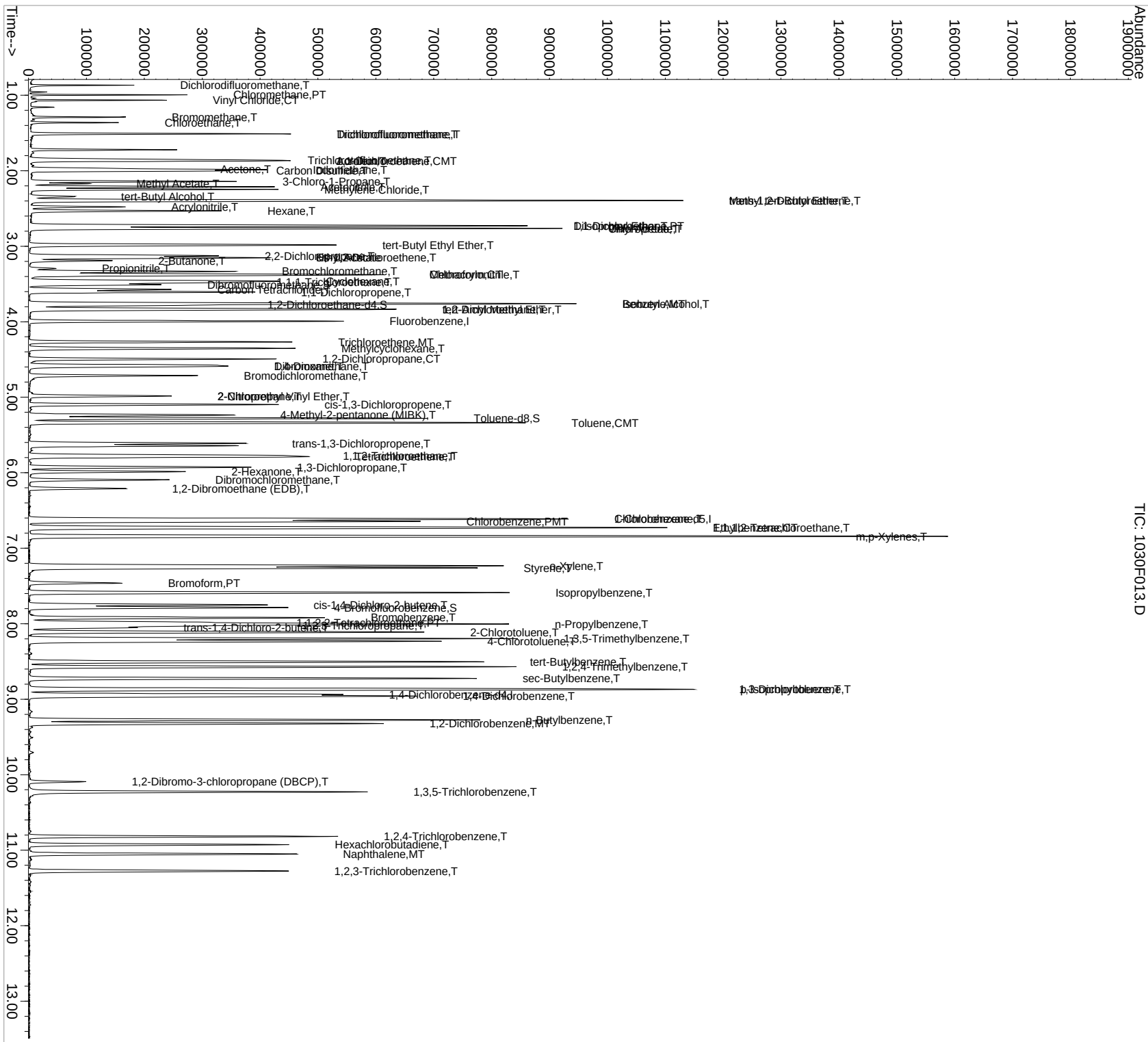
Page 2

Data File : J:\MS24\DATA\103023A\1030F013.D
Acq On : 30 Oct 2023 06:01 pm
Sample : ICAL 50
Misc :
11/02/23
MS Integration Params: rteint.p
Quant Time: Oct 31 10:02 2023

Vial: 18
Operator: EW/OT
Inst : MS24
Multiplr: 1.00

Quant Results File: 103023_MS24_FULL_SOIL.RES

Method : J:\MS24\METHODS\2010\103023_MS24_FULL_SOIL.M (RTE Integrator)
Title : VOA MS24 EPA Method 8260B
Last Update : Tue Oct 31 14:24:46 2023
Response via : Initial Calibration



Data File : J:\MS24\DATA\103023A\1030F013.D

Vial: 18

Acq On : 30 Oct 2023 06:01 pm

Operator: EW/OT

Sample : ICAL 50

Inst : MS24

Misc :

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Oct 31 9:55 2023

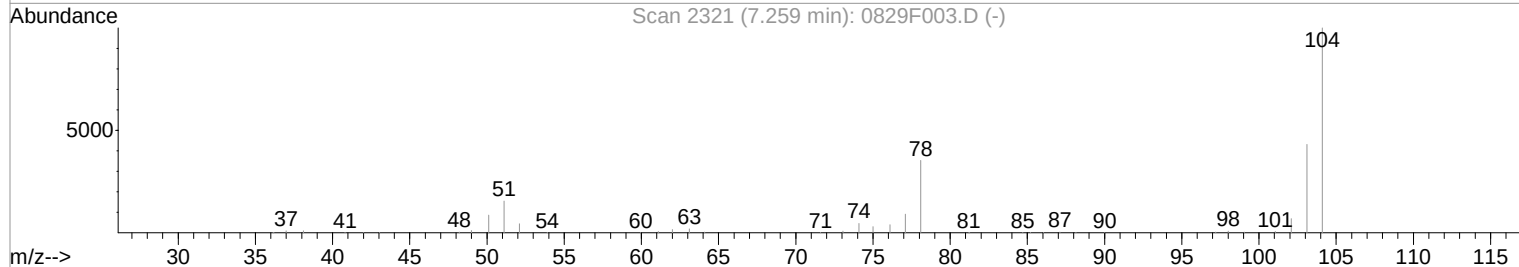
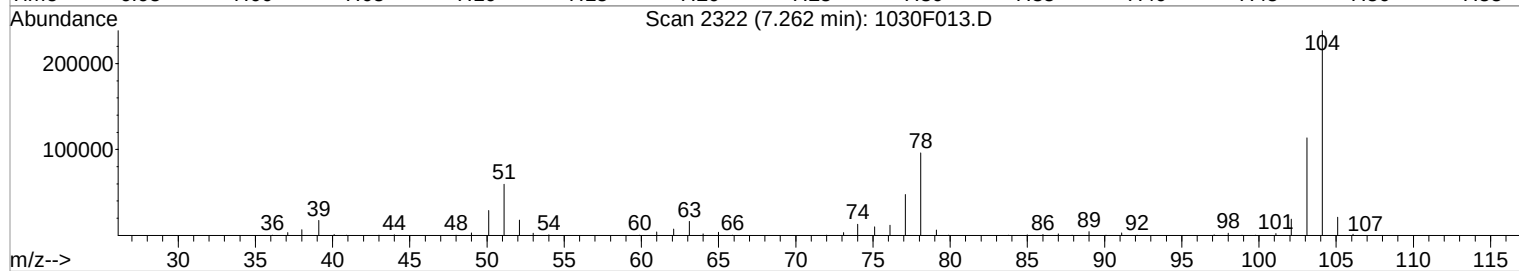
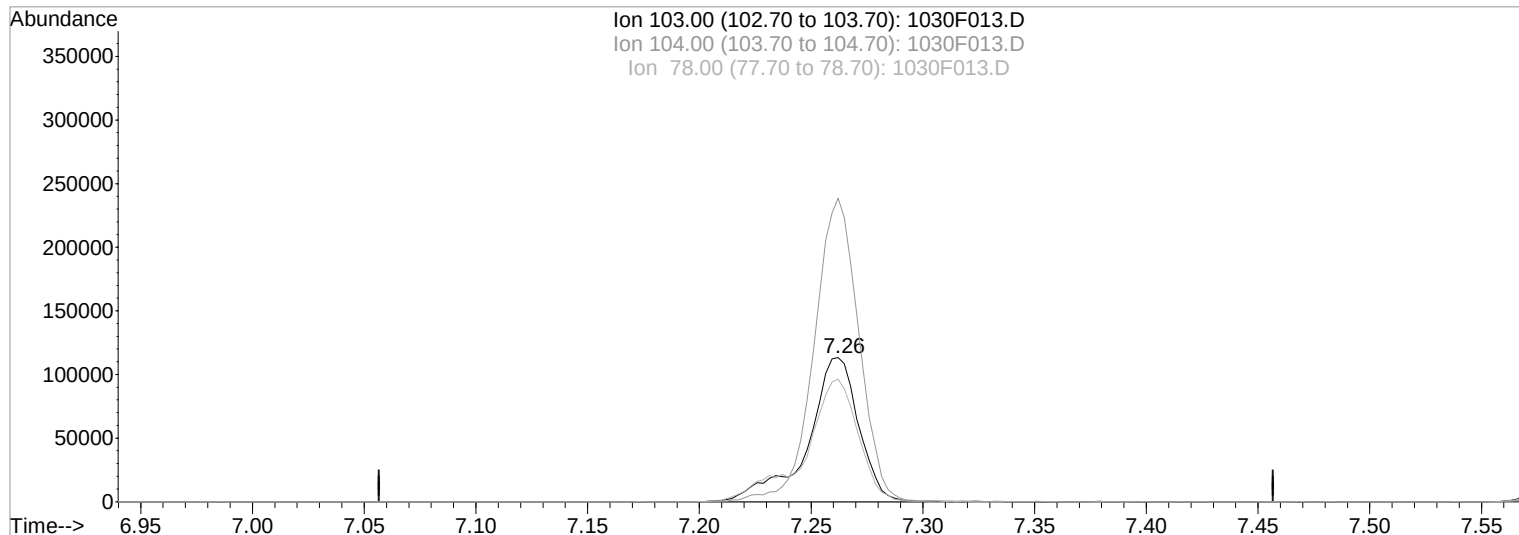
Quant Results File: temp.res

Method : J:\MS24\METHODS\2010\103023_MS24_FULL_SOIL.M (RTE Integrator)

Title : VOA MS24 EPA Method 8260B

Last Update : Fri Jun 02 09:29:55 2023

Response via : Multiple Level Calibration



TIC: 1030F013.D

(73) Styrene (T)

Manual Integration:

7.26min 65.05PPB

Before

response 180068

Ion	Exp%	Act%
-----	------	------

10/31/23

103.00	100	100
--------	-----	-----

104.00	208.40	210.33
--------	--------	--------

78.00	83.40	84.76
-------	-------	-------

0.00	0.00	0.00
------	------	------

Data File : J:\MS24\DATA\103023A\1030F013.D

Acq On : 30 Oct 2023 06:01 pm

Sample : ICAL 50

Misc :

MS Integration Params: rteint.p

Quant Time: Oct 31 9:57 2023

Vial: 18

Operator: EW/OT

Inst : MS24

Multiplr: 1.00

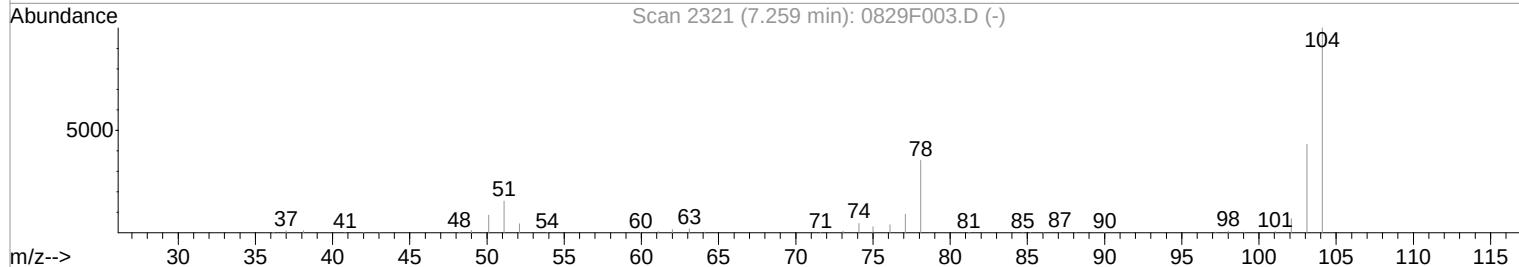
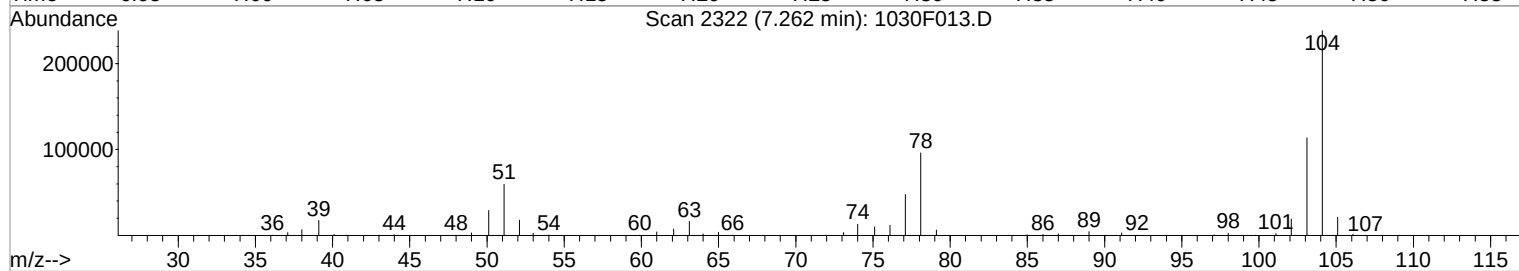
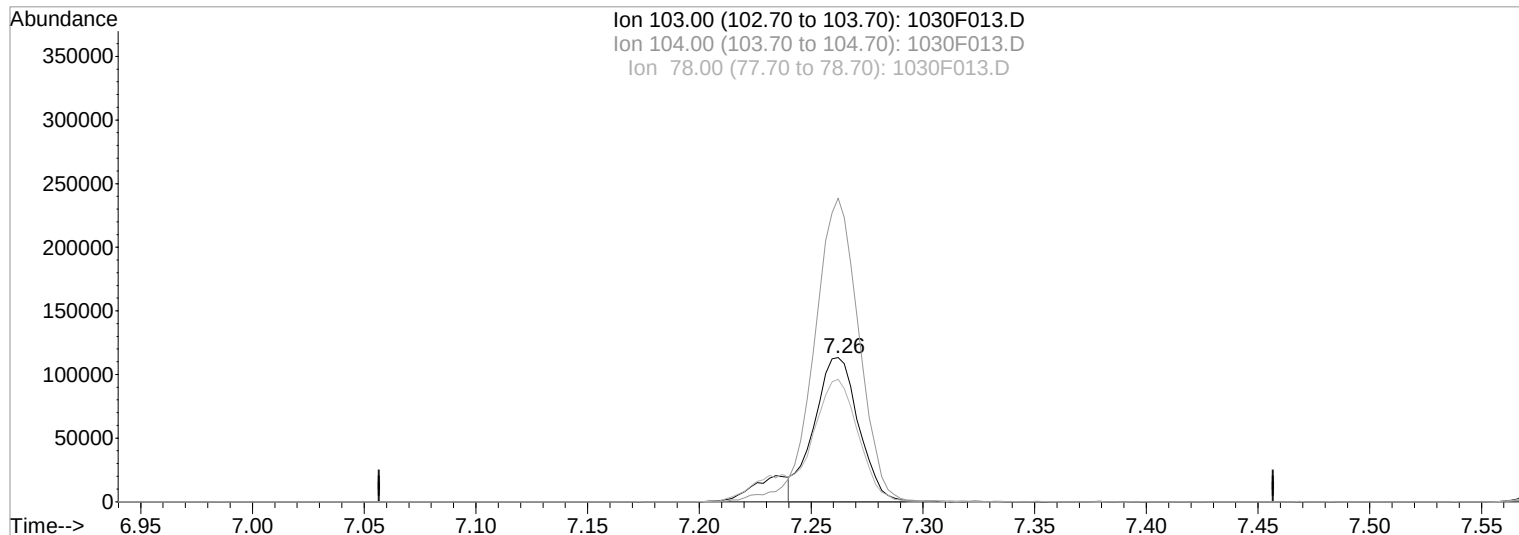
Quant Results File: temp.res

Method : J:\MS24\METHODS\2010\103023_MS24_FULL_SOIL.M (RTE Integrator)

Title : VOA MS24 EPA Method 8260B

Last Update : Fri Jun 02 09:29:55 2023

Response via : Multiple Level Calibration



TIC: 1030F013.D

(73) Styrene (T)

7.26min 56.59PPB m

response 156664

Ion	Exp%	Act%
-----	------	------

103.00	100	100
--------	-----	-----

104.00	208.40	210.33
--------	--------	--------

78.00	83.40	84.76
-------	-------	-------

0.00	0.00	0.00
------	------	------

Manual Integration:

After

Shoulder

10/31/23

Data File : J:\MS24\DATA\103023A\1030F014.D

Acq On : 30 Oct 2023 06:22 pm

Sample : ICAL 100

Misc :

Vial: 19

Operator: EW/OT

Inst : MS24

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Oct 31 11:22:11 2023

Quant Results File: 103023_MS24_FULL_SOIL.RES

Quant Method : J:\MS24\M...\103023_MS24_FULL_SOIL.M (RTE Integrator)

Title : VOA MS24 EPA Method 8260B

Last Update : Tue Oct 31 10:01:35 2023

Response via : Initial Calibration

DataAcq Meth : 8260.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	3.99	96	321178	50.00	PPB	0.00
59) Chlorobenzene-d5	6.61	82	133391	50.00	PPB	0.00
78) 1,4-Dichlorobenzene-d4	8.94	152	113348	50.00	PPB	0.00

System Monitoring Compounds

39) Dibromofluoromethane	3.51	113	120560	73.27	PPB	0.00
Spiked Amount 50.000			Recovery	=	146.54%	
43) 1,2-Dichloroethane-d4	3.78	65	144285	70.58	PPB	0.00
Spiked Amount 50.000			Recovery	=	141.16%	
57) Toluene-d8	5.28	98	486372	71.05	PPB	0.00
Spiked Amount 50.000			Recovery	=	142.10%	
77) 4-Bromofluorobenzene	7.78	95	174188	72.04	PPB	0.00
Spiked Amount 50.000			Recovery	=	144.08%	

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	0.86	85	108137	88.62	PPB	97
3) Chloromethane	0.99	50	196203	93.83	PPB	98
4) Vinyl Chloride	1.06	62	168798	92.40	PPB	96
5) Bromomethane	1.29	96	78082	88.83	PPB	95
6) Chloroethane	1.36	64	116286	94.05	PPB	97
7) Dichlorofluoromethane	1.51	67	236119	92.46	PPB	99
8) Trichlorofluoromethane	1.51	101	187396	92.97	PPB	98
9) Acrolein	1.86	56	201206	502.31	PPB	98
10) Trichlorotrifluoroethane	1.85	151	74498	91.22	PPB	96
11) 1,1-Dichloroethene	1.87	96	131797	93.51	PPB	96
12) Acetone	1.97	43	130942	159.96	PPB	98
13) Iodomethane	1.98	142	463523	197.89	PPB	99
14) Carbon Disulfide	2.00	76	408045	94.58	PPB	99
15) 3-Chloro-1-Propane	2.14	76	82753	96.14	PPB	89
16) Methyl Acetate	2.17	43	147092	98.36	PPB	99
17) Acetonitrile	2.21	40	258123	1925.01	PPB	99
18) Methylene Chloride	2.25	84	185122	93.44	PPB	95
19) tert-Butyl Alcohol	2.34	59	103778	472.78	PPB	94
20) Acrylonitrile	2.48	53	137450	193.12	PPB	99
21) Methyl tert-Butyl Ether	2.39	73	1029781	194.03	PPB	99
22) trans-1,2-Dichloroethene	2.40	96	166118	91.55	PPB	96
23) Hexane	2.53	57	182165	92.01	PPB	97
24) Diisopropyl Ether	2.72	45	678339	95.94	PPB	100
25) 1,1-Dichloroethane	2.73	63	351419	93.90	PPB	97
26) Vinyl Acetate	2.76	86	41552	99.19	PPB	95
27) Chloroprene	2.76	53	491176	185.66	PPB	100
28) tert-Butyl Ethyl Ether	2.98	59	601952	96.48	PPB	98
29) 2,2-Dichloropropane	3.13	77	250037	96.60	PPB	99
30) cis-1,2-Dichloroethene	3.15	96	213353	94.71	PPB	95
31) 2-Butanone	3.19	72	46295	179.68	PPB	89
32) Propionitrile	3.29	54	57852	187.78	PPB	96
33) Ethyl Acetate	3.15	61	323966	95.00	PPB	100
34) Methacrylonitrile	3.37	67	173905	200.59	PPB	97
35) Bromochloromethane	3.33	128	104553	98.40	PPB	98
36) Chloroform	3.38	83	333441	95.31	PPB	97
37) Cyclohexane	3.46	56	258932	92.46	PPB	95
38) 1,1,1-Trichloroethane	3.48	97	249029	95.26	PPB	96
40) Carbon Tetrachloride	3.57	117	204898	95.28	PPB	97
41) 1,1-Dichloropropene	3.60	75	236683	94.99	PPB	99
42) Isobutyl Alcohol	3.75	43	214232	1952.95	PPB	97
44) Benzene	3.76	78	807421	95.15	PPB	100
45) 1,2-Dichloroethane	3.84	62	269527	96.12	PPB	98
46) tert-Amyl Methyl Ether	3.83	55	148036	93.64	PPB	88

(#)=qualifier out of range (m)=manual integration

1030F014.D 103023_MS24_FULL_SOIL.M

Tue Oct 31 14:26:06 2023

KELSO

Page 1

Data File : J:\MS24\DATA\103023A\1030F014.D

Acq On : 30 Oct 2023 06:22 pm

Sample : ICAL 100

Misc :

Vial: 19

Operator: EW/OT

Inst : MS24

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Oct 31 11:22:11 2023

Quant Results File: 103023_MS24_FULL_SOIL.RES

Quant Method : J:\MS24\M...\103023_MS24_FULL_SOIL.M (RTE Integrator)

Title : VOA MS24 EPA Method 8260B

Last Update : Tue Oct 31 10:01:35 2023

Response via : Initial Calibration

DataAcq Meth : 8260.M

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
47) Trichloroethene	4.26	95	188569	93.64	PPB	99
48) Methylcyclohexane	4.35	83	249475	91.09	PPB	97
49) 1,2-Dichloropropane	4.49	63	220728	95.86	PPB	97
50) Dibromomethane	4.59	93	120230	97.31	PPB	96
51) 1,4-Dioxane	4.59	88	43297	1712.77	PPB	98
52) Bromodichloromethane	4.71	83	262864	99.12	PPB	99
53) 2-Nitropropane	4.98	41	151704	314.65	PPB	96
54) 2-Chloroethyl Vinyl Ether	4.99	63	59876	99.63	PPB	92
55) cis-1,3-Dichloropropene	5.10	75	341763	98.85	PPB	98
56) 4-Methyl-2-pentanone (MIBK)	5.23	58	143759	197.35	PPB	92
58) Toluene	5.34	92	515788	93.90	PPB	99
60) trans-1,3-Dichloropropene	5.61	75	294065	101.04	PPB	99
61) 1,1,2-Trichloroethane	5.77	83	155760	96.68	PPB	100
62) Tetrachloroethene	5.79	164	157197	95.69	PPB	94
63) 2-Hexanone	5.98	57	50369	196.66	PPB	# 84
64) 1,3-Dichloropropane	5.93	76	324959	96.41	PPB	99
65) Dibromochloromethane	6.10	129	196821	100.74	PPB	98
66) 1,2-Dibromoethane (EDB)	6.21	107	178608	99.15	PPB	98
67) 1-Chlorohexane	6.61	91	221975	95.29	PPB	95
68) Chlorobenzene	6.64	112	558089	94.91	PPB	98
69) Ethylbenzene	6.72	106	297352	95.40	PPB	99
70) 1,1,1,2-Tetrachloroethane	6.73	131	194438	95.97	PPB	98
71) m,p-Xylenes	6.84	106	734260	188.28	PPB	99
72) o-Xylene	7.23	106	361244	95.17	PPB	97
73) Styrene	7.26	103	297316m	96.57	PPB	
74) Bromoform	7.46	173	127714	102.69	PPB	93
75) Isopropylbenzene	7.59	105	896902	93.41	PPB	99
76) cis-1,4-Dichloro-2-butene	7.75	89	67480	208.29	PPB	92
79) 1,1,2,2-Tetrachloroethane	7.98	83	225300	100.31	PPB	99
80) trans-1,4-Dichloro-2-buten	8.05	53	68168	104.49	PPB	91
81) Bromobenzene	7.92	156	233298	97.46	PPB	99
82) n-Propylbenzene	8.01	91	1019749	96.41	PPB	99
83) 1,2,3-Trichloropropane	8.03	110	71458	100.06	PPB	94
84) 2-Chlorotoluene	8.11	91	621791	97.28	PPB	98
85) 1,3,5-Trimethylbenzene	8.20	105	733661	96.52	PPB	99
86) 4-Chlorotoluene	8.23	91	646966	96.73	PPB	99
87) tert-Butylbenzene	8.51	119	627003	95.71	PPB	98
88) 1,2,4-Trimethylbenzene	8.57	105	740235	97.91	PPB	98
89) sec-Butylbenzene	8.73	105	853740	95.41	PPB	99
90) p-Isopropyltoluene	8.87	119	759105	96.69	PPB	98
91) 1,3-Dichlorobenzene	8.86	146	424329	97.37	PPB	98
92) 1,4-Dichlorobenzene	8.96	146	425433	96.44	PPB	99
93) n-Butylbenzene	9.27	91	672275	96.52	PPB	99
94) 1,2-Dichlorobenzene	9.32	146	395394	97.11	PPB	97
95) 1,2-Dibromo-3-chloropropan	10.09	155	34234	107.56	PPB	95
96) 1,3,5-Trichlorobenzene	10.23	180	281521	96.46	PPB	98
97) 1,2,4-Trichlorobenzene	10.82	180	267073	96.44	PPB	95
98) Hexachlorobutadiene	10.93	225	142982	95.87	PPB	95
99) Naphthalene	11.05	128	624360	103.94	PPB	98
100) 1,2,3-Trichlorobenzene	11.28	180	249516	100.75	PPB	98

(#) = qualifier out of range (m) = manual integration

1030F014.D 103023_MS24_FULL_SOIL.M

Tue Oct 31 14:26:06 2023

KELSO

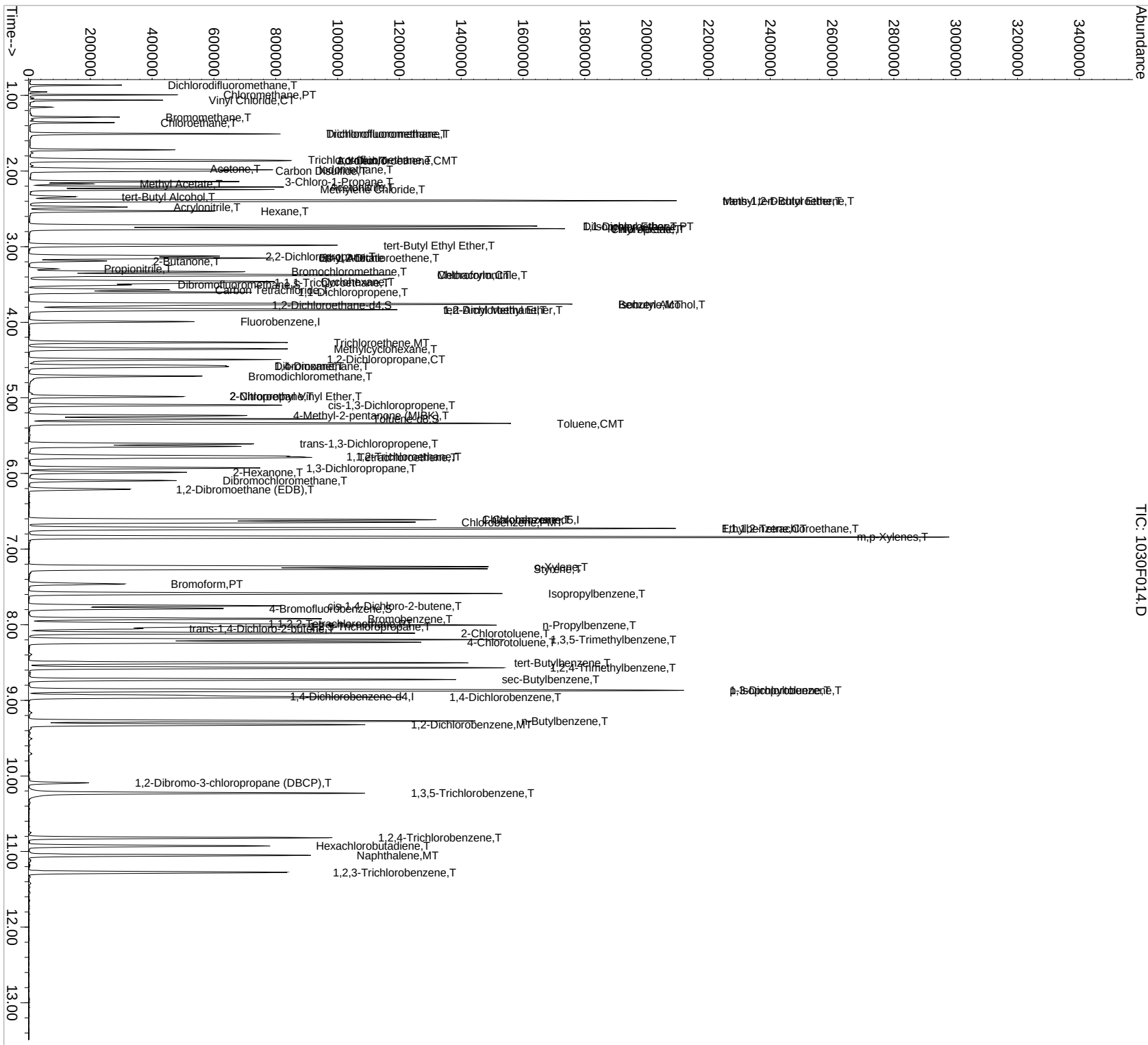
Page 2

Data File : J:\MS24\DATA\103023A\1030F014.D
Acq On : 30 Oct 2023 06:22 pm
Sample : ICAL 100
Misc :
MS Integration Params: rteint.p
Quant Time: Oct 31 11:28 2023

Vial: 19
Operator: EW/OT
Inst : MS24
Multiplr: 1.00

Quant Results File: 103023_MS24_FULL_SOIL.RES

Method : J:\MS24\METHODS\2010\103023_MS24_FULL_SOIL.M (RTE Integrator)
Title : VOA MS24 EPA Method 8260B
Last Update : Tue Oct 31 14:24:46 2023
Response via : Initial Calibration



Data File : J:\MS24\DATA\103023A\1030F014.D

Vial: 19

Acq On : 30 Oct 2023 06:22 pm

Operator: EW/OT

Sample : ICAL 100

Inst : MS24

Misc :

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Oct 31 11:22 2023

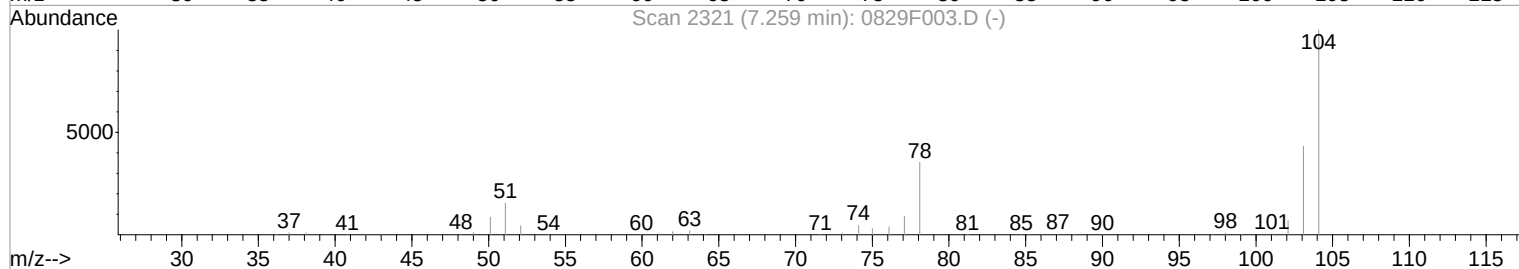
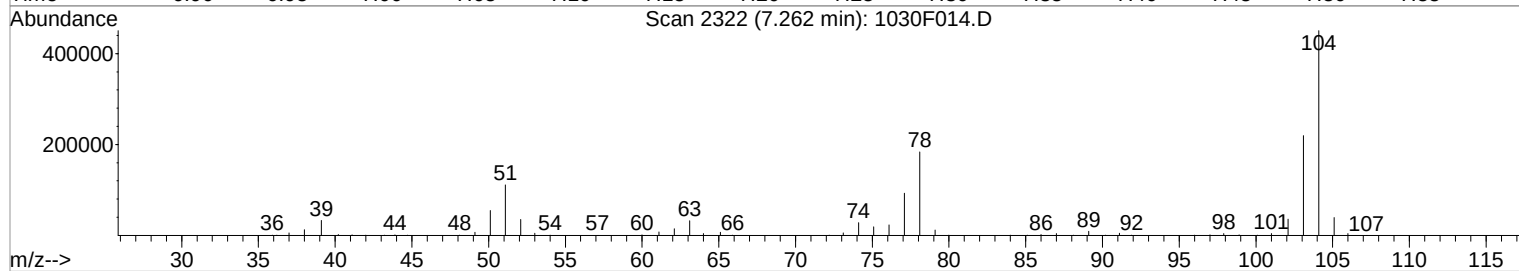
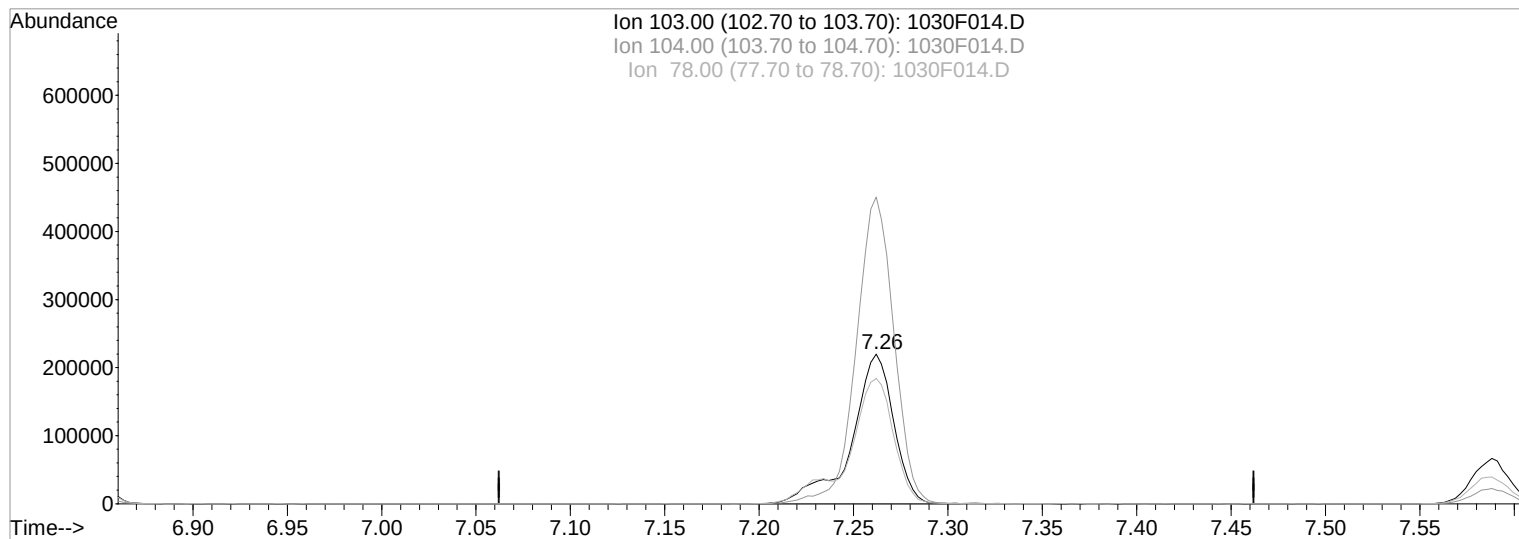
Quant Results File: temp.res

Method : J:\MS24\METHODS\2010\103023_MS24_FULL_SOIL.M (RTE Integrator)

Title : VOA MS24 EPA Method 8260B

Last Update : Tue Oct 31 10:01:35 2023

Response via : Multiple Level Calibration



TIC: 1030F014.D

(73) Styrene (T)

Manual Integration:

7.26min 110.74PPB

Before

response 340956

Ion Exp% Act%

10/31/23

103.00 100 100

104.00 210.30 205.27

78.00 84.80 83.74

0.00 0.00 0.00

Quantitation Report (Qedit)

1st  11/01/23
2nd  11/02/23

Data File : J:\MS24\DATA\103023A\1030F014.D

Acq On : 30 Oct 2023 06:22 pm

Sample : ICAL 100

Misc :

MS Integration Params: rteint.p

Quant Time: Oct 31 11:28 2023

Vial: 19

Operator: EW/OT

Inst : MS24

Multiplr: 1.00

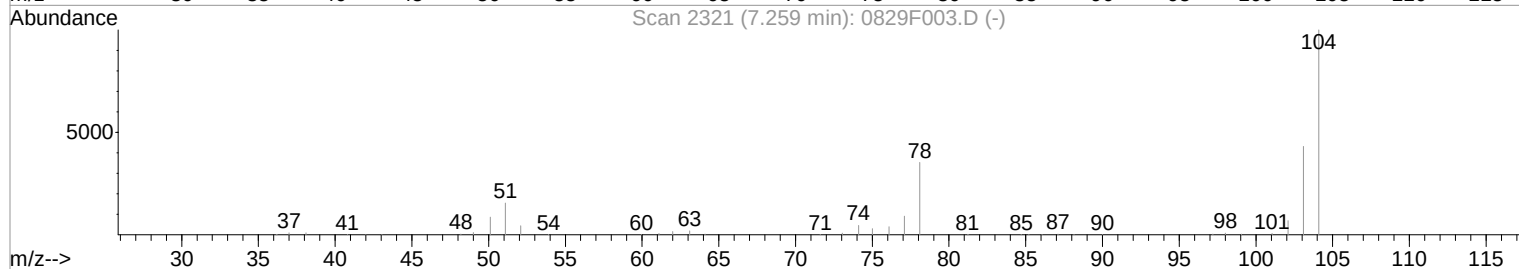
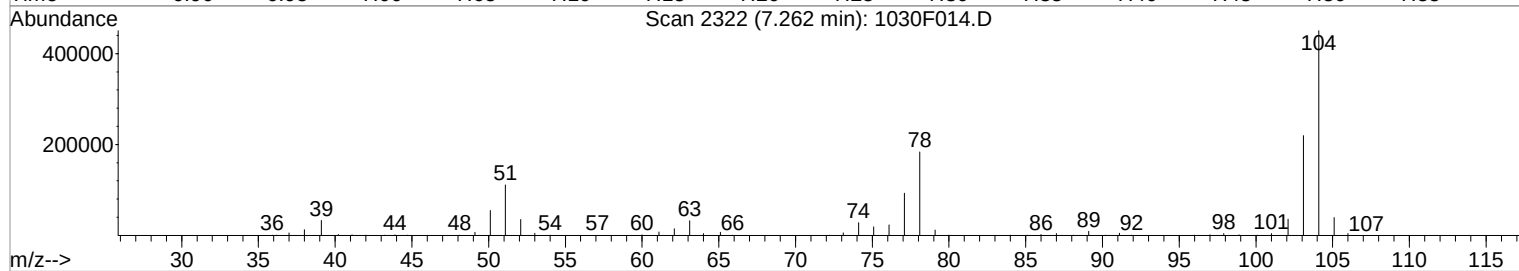
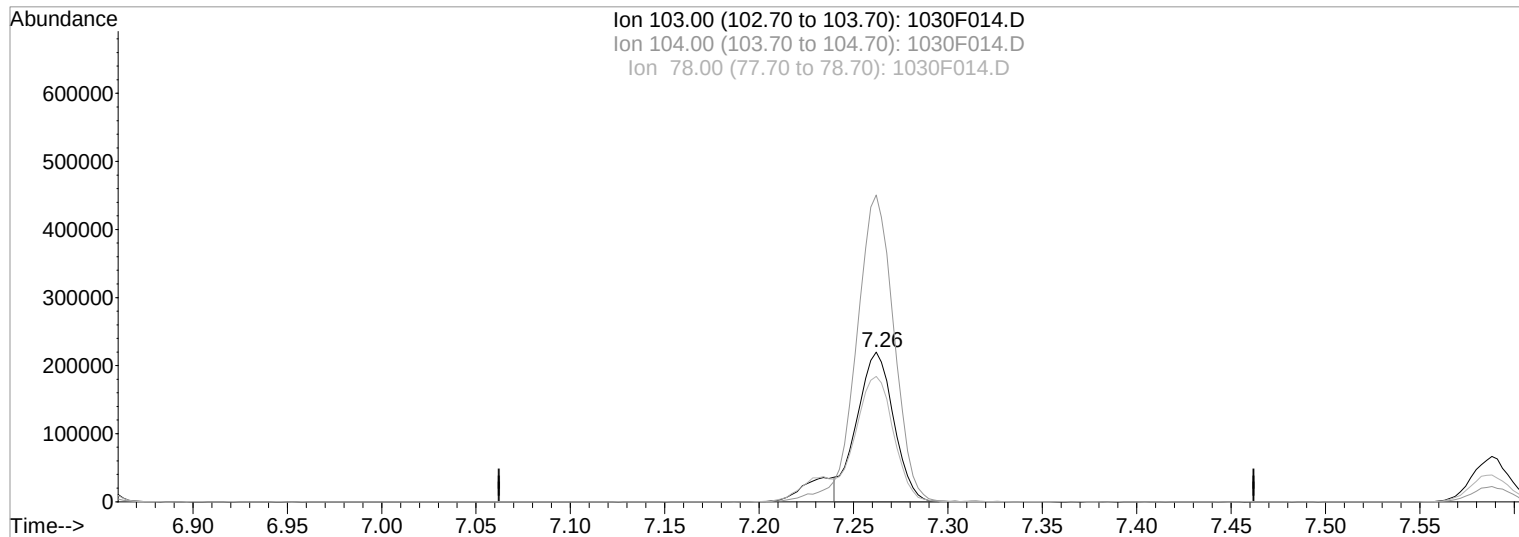
Quant Results File: temp.res

Method : J:\MS24\METHODS\2010\103023_MS24_FULL_SOIL.M (RTE Integrator)

Title : VOA MS24 EPA Method 8260B

Last Update : Tue Oct 31 10:01:35 2023

Response via : Multiple Level Calibration



TIC: 1030F014.D

(73) Styrene (T)

Manual Integration:

7.26min 96.57PPB m

After

response 297316

Shoulder

Ion	Exp%	Act%
-----	------	------

10/31/23

103.00	100	100
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104.00	210.30	205.27
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78.00	84.80	83.74
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0.00	0.00	0.00
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Data File : J:\MS24\DATA\103023A\1030F015.D

Vial: 20

Acq On : 30 Oct 2023 06:42 pm

Operator: EW/OT

Sample : ICAL 200

Inst : MS24

Misc :

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Oct 31 11:31:09 2023

Quant Results File: 103023_MS24_FULL_SOIL.RES

Quant Method : J:\MS24\M...\103023_MS24_FULL_SOIL.M (RTE Integrator)

Title : VOA MS24 EPA Method 8260B

Last Update : Tue Oct 31 10:01:35 2023

Response via : Initial Calibration

DataAcq Meth : 8260.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	3.99	96	318094	50.00	PPB	0.00
59) Chlorobenzene-d5	6.62	82	131268	50.00	PPB	0.00
78) 1,4-Dichlorobenzene-d4	8.94	152	109498	50.00	PPB	0.00

System Monitoring Compounds

39) Dibromofluoromethane	3.51	113	136026	83.47	PPB	0.00
Spiked Amount 50.000			Recovery	=	166.94%	
43) 1,2-Dichloroethane-d4	3.78	65	166324	82.15	PPB	0.00
Spiked Amount 50.000			Recovery	=	164.30%	
57) Toluene-d8	5.28	98	555782	81.97	PPB	0.00
Spiked Amount 50.000			Recovery	=	163.94%	
77) 4-Bromofluorobenzene	7.79	95	187398	78.76	PPB	0.00
Spiked Amount 50.000			Recovery	=	157.52%	

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	0.86	85	198543	164.29	PPB	96
3) Chloromethane	0.99	50	402886	194.54	PPB	99
4) Vinyl Chloride	1.06	62	351898	194.50	PPB	94
5) Bromomethane	1.28	96	147681	169.63	PPB	97
6) Chloroethane	1.36	64	239148	195.30	PPB	97
7) Dichlorofluoromethane	1.51	67	490616	193.97	PPB	97
8) Trichlorofluoromethane	1.50	101	373565	187.12	PPB	100
9) Acrolein	1.85	56	399504	1007.04	PPB	99
10) Trichlorotrifluoroethane	1.85	151	142646	176.36	PPB	96
11) 1,1-Dichloroethene	1.87	96	273300	195.79	PPB	99
12) Acetone	1.96	43	261076	322.02	PPB	99
13) Iodomethane	1.98	142	964876	415.92	PPB	99
14) Carbon Disulfide	2.00	76	872541	204.20	PPB	100
15) 3-Chloro-1-Propane	2.14	76	171143	200.76	PPB	95
16) Methyl Acetate	2.17	43	292438	197.45	PPB	98
17) Acetonitrile	2.21	40	489159	3683.37	PPB	99
18) Methylene Chloride	2.25	84	370494	188.82	PPB	98
19) tert-Butyl Alcohol	2.34	59	195938	901.28	PPB	95
20) Acrylonitrile	2.48	53	269744	382.67	PPB	97
21) Methyl tert-Butyl Ether	2.39	73	2069644	393.74	PPB	99
22) trans-1,2-Dichloroethene	2.40	96	346442	192.78	PPB	96
23) Hexane	2.53	57	330759	168.69	PPB	96
24) Diisopropyl Ether	2.72	45	1391489	198.71	PPB	99
25) 1,1-Dichloroethane	2.73	63	742003	200.18	PPB	98
26) Vinyl Acetate	2.76	86	84839	204.49	PPB	98
27) Chloroprene	2.76	53	1045449	399.00	PPB	99
28) tert-Butyl Ethyl Ether	2.98	59	1223468	197.99	PPB	98
29) 2,2-Dichloropropane	3.12	77	530528	206.96	PPB	100
30) cis-1,2-Dichloroethene	3.15	96	438844	196.69	PPB	95
31) 2-Butanone	3.19	72	91183	357.33	PPB	94
32) Propionitrile	3.29	54	113661	372.51	PPB	98
33) Ethyl Acetate	3.15	61	673938	199.53	PPB	99
34) Methacrylonitrile	3.37	67	343281	399.80	PPB	100
35) Bromochloromethane	3.33	128	209268	198.86	PPB	99
36) Chloroform	3.38	83	688247	198.63	PPB	96
37) Cyclohexane	3.46	56	504376	181.84	PPB	99
38) 1,1,1-Trichloroethane	3.48	97	531300	205.20	PPB	95
40) Carbon Tetrachloride	3.57	117	437367	205.35	PPB	99
41) 1,1-Dichloropropene	3.60	75	492379	199.52	PPB	98
42) Isobutyl Alcohol	3.75	43	414254	3812.98	PPB	95
44) Benzene	3.76	78	1656157	197.07	PPB	99
45) 1,2-Dichloroethane	3.84	62	537516	193.55	PPB	99
46) tert-Amyl Methyl Ether	3.83	55	293205	187.27	PPB	# 84

(#)=qualifier out of range (m)=manual integration

1030F015.D 103023_MS24_FULL_SOIL.M

Tue Oct 31 14:26:07 2023

KELSO

Page 1

Data File : J:\MS24\DATA\103023A\1030F015.D

Vial: 20

Acq On : 30 Oct 2023 06:42 pm

Operator: EW/OT

Sample : ICAL 200

Inst : MS24

Misc :

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Oct 31 11:31:09 2023

Quant Results File: 103023_MS24_FULL_SOIL.RES

Quant Method : J:\MS24\M...\103023_MS24_FULL_SOIL.M (RTE Integrator)

Title : VOA MS24 EPA Method 8260B

Last Update : Tue Oct 31 10:01:35 2023

Response via : Initial Calibration

DataAcq Meth : 8260.M

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
47) Trichloroethene	4.26	95	391571	196.34	PPB	99
48) Methylcyclohexane	4.35	83	477437	176.02	PPB	98
49) 1,2-Dichloropropane	4.49	63	451096	197.80	PPB	99
50) Dibromomethane	4.59	93	240430	196.47	PPB	94
51) 1,4-Dioxane	4.59	88	80295	3207.16	PPB	99
52) Bromodichloromethane	4.71	83	547477	208.44	PPB	99
53) 2-Nitropropane	4.98	41	310576	650.42	PPB	99
54) 2-Chloroethyl Vinyl Ether	4.98	63	120944	203.19	PPB	93
55) cis-1,3-Dichloropropene	5.10	75	701526	204.87	PPB	99
56) 4-Methyl-2-pentanone (MIBK)	5.24	58	283499	392.95	PPB	99
58) Toluene	5.34	92	1062924	195.39	PPB	100
60) trans-1,3-Dichloropropene	5.61	75	604827	211.19	PPB	98
61) 1,1,2-Trichloroethane	5.77	83	309779	195.39	PPB	98
62) Tetrachloroethene	5.79	164	328917	203.46	PPB	96
63) 2-Hexanone	5.98	57	98863	392.25	PPB	92
64) 1,3-Dichloropropane	5.93	76	642068	193.56	PPB	98
65) Dibromochloromethane	6.09	129	401140	208.64	PPB	97
66) 1,2-Dibromoethane (EDB)	6.21	107	351005	198.01	PPB	98
67) 1-Chlorohexane	6.61	91	455983	198.92	PPB	93
68) Chlorobenzene	6.64	112	1135337	196.19	PPB	99
69) Ethylbenzene	6.72	106	601910	196.23	PPB	95
70) 1,1,1,2-Tetrachloroethane	6.74	131	391727	196.48	PPB	96
71) m,p-Xylenes	6.84	106	1486461	387.32	PPB	96
72) o-Xylene	7.23	106	721303	193.11	PPB	99
73) Styrene	7.26	103	601350	198.48	PPB	99
74) Bromoform	7.46	173	256171	209.31	PPB	96
75) Isopropylbenzene	7.59	105	1788919	189.33	PPB	99
76) cis-1,4-Dichloro-2-butene	7.75	89	134952	423.29	PPB	94
79) 1,1,2,2-Tetrachloroethane	7.98	83	432429	199.29	PPB	97
80) trans-1,4-Dichloro-2-buten	8.05	53	129805	205.97	PPB	91
81) Bromobenzene	7.92	156	458249	198.16	PPB	98
82) n-Propylbenzene	8.00	91	2039268	199.57	PPB	99
83) 1,2,3-Trichloropropane	8.03	110	132029	191.38	PPB	95
84) 2-Chlorotoluene	8.11	91	1218259	197.30	PPB	98
85) 1,3,5-Trimethylbenzene	8.20	105	1444922	196.78	PPB	99
86) 4-Chlorotoluene	8.23	91	1268516	196.33	PPB	99
87) tert-Butylbenzene	8.51	119	1232268	194.71	PPB	98
88) 1,2,4-Trimethylbenzene	8.57	105	1446913	198.11	PPB	100
89) sec-Butylbenzene	8.73	105	1686491	195.10	PPB	99
90) p-Isopropyltoluene	8.87	119	1495103	197.13	PPB	99
91) 1,3-Dichlorobenzene	8.86	146	824004	195.73	PPB	98
92) 1,4-Dichlorobenzene	8.96	146	818969	192.18	PPB	100
93) n-Butylbenzene	9.27	91	1337110	198.73	PPB	99
94) 1,2-Dichlorobenzene	9.32	146	776715	197.48	PPB	98
95) 1,2-Dibromo-3-chloropropan	10.10	155	71145	231.39	PPB	92
96) 1,3,5-Trichlorobenzene	10.23	180	559867	198.58	PPB	98
97) 1,2,4-Trichlorobenzene	10.82	180	544669	203.59	PPB	94
98) Hexachlorobutadiene	10.93	225	294415	204.35	PPB	98
99) Naphthalene	11.05	128	1269447	218.77	PPB	99
100) 1,2,3-Trichlorobenzene	11.27	180	499711	208.87	PPB	99

(#) = qualifier out of range (m) = manual integration

1030F015.D 103023_MS24_FULL_SOIL.M

Tue Oct 31 14:26:07 2023

KELSO

Page 2

11/01/23

1st

Data File : J:\MS24\DATA\103023A\1030F015.D

Acq On : 30 Oct 2023 06:42 pm

Sample : ICAL 200

Misc : 11/02/23

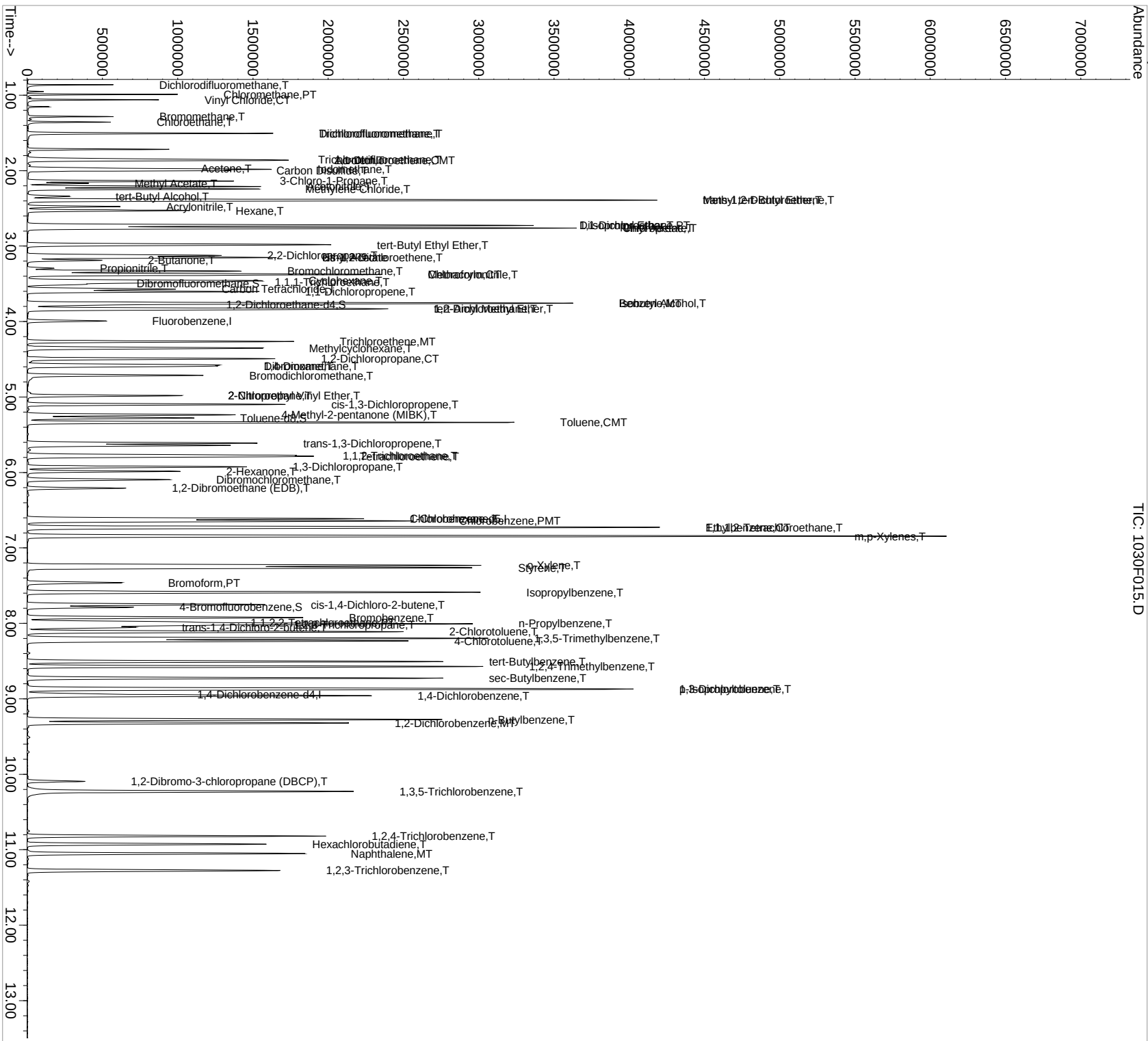
MS Integration Params: rteint.p

Quant Time: Oct 31 11:31 2023

Quant Results File: 103023_MS24_FULL_SOIL.RES

Vial: 20
Operator: EW/OT
Inst : MS24
Multiplr: 1.00

Method : J:\MS24\METHODS\2010\103023_MS24_FULL_SOIL.M (RTE Integrator)
Title : VOA MS24 EPA Method 8260B
Last Update : Tue Oct 31 14:24:46 2023
Response via : Initial Calibration



Data File : J:\MS24\DATA\103023A\1030F016.D

Vial: 21

Acq On : 30 Oct 2023 07:03 pm

Operator: EW/OT

Sample : ICAL 300

Inst : MS24

Misc :

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Oct 31 11:34:45 2023

Quant Results File: 103023_MS24_FULL_SOIL.RES

Quant Method : J:\MS24\M...\103023_MS24_FULL_SOIL.M (RTE Integrator)

Title : VOA MS24 EPA Method 8260B

Last Update : Tue Oct 31 10:01:35 2023

Response via : Initial Calibration

DataAcq Meth : 8260.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	3.99	96	317637	50.00	PPB	0.00
59) Chlorobenzene-d5	6.62	82	128686	50.00	PPB	0.00
78) 1,4-Dichlorobenzene-d4	8.94	152	106874	50.00	PPB	0.00

System Monitoring Compounds

39) Dibromofluoromethane	3.51	113	195762	120.29	PPB	0.00
Spiked Amount 50.000			Recovery	=	240.58%	
43) 1,2-Dichloroethane-d4	3.78	65	237325	117.38	PPB	0.00
Spiked Amount 50.000			Recovery	=	234.76%	
57) Toluene-d8	5.28	98	749853	110.75	PPB	0.00
Spiked Amount 50.000			Recovery	=	221.50%	
77) 4-Bromofluorobenzene	7.79	95	248003	106.32	PPB	0.00
Spiked Amount 50.000			Recovery	=	212.64%	

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	0.87	85	272327	225.67	PPB	97
3) Chloromethane	0.99	50	572218	276.70	PPB	99
4) Vinyl Chloride	1.07	62	489142	270.74	PPB	94
5) Bromomethane	1.29	96	197085	226.71	PPB	99
6) Chloroethane	1.36	64	332931	272.27	PPB	98
7) Dichlorofluoromethane	1.51	67	689141	272.85	PPB	98
8) Trichlorofluoromethane	1.51	101	512780	257.23	PPB	99
9) Acrolein	1.86	56	569580	1437.82	PPB	99
10) Trichlorotrifluoroethane	1.85	151	197428	244.45	PPB	96
11) 1,1-Dichloroethene	1.87	96	375168	269.16	PPB	99
12) Acetone	1.97	43	384267	474.66	PPB	98
13) Iodomethane	1.99	142	1337199	577.24	PPB	99
14) Carbon Disulfide	2.00	76	1220081	285.95	PPB	99
15) 3-Chloro-1-Propane	2.14	76	244839	287.62	PPB	93
16) Methyl Acetate	2.17	43	419840	283.88	PPB	97
17) Acetonitrile	2.21	40	702936	5300.73	PPB	97
18) Methylene Chloride	2.25	84	534924	273.02	PPB	97
19) tert-Butyl Alcohol	2.35	59	278108	1281.09	PPB	94
20) Acrylonitrile	2.48	53	389847	553.85	PPB	99
21) Methyl tert-Butyl Ether	2.39	73	3033218	577.88	PPB	100
22) trans-1,2-Dichloroethene	2.40	96	482304	268.77	PPB	97
23) Hexane	2.53	57	505141	258.00	PPB	94
24) Diisopropyl Ether	2.73	45	2014445	288.08	PPB	98
25) 1,1-Dichloroethane	2.73	63	1056511	285.44	PPB	98
26) Vinyl Acetate	2.77	86	122616	295.97	PPB	100
27) Chloroprene	2.76	53	1433713	547.98	PPB	98
28) tert-Butyl Ethyl Ether	2.98	59	1775079	287.67	PPB	99
29) 2,2-Dichloropropane	3.13	77	749509	292.80	PPB	100
30) cis-1,2-Dichloroethene	3.15	96	624624	280.36	PPB	95
31) 2-Butanone	3.19	72	129294	507.41	PPB	96
32) Propionitrile	3.30	54	161495	530.04	PPB	97
33) Ethyl Acetate	3.15	61	960286	284.72	PPB	100
34) Methacrylonitrile	3.37	67	490913	572.57	PPB	99
35) Bromochloromethane	3.33	128	306066	291.26	PPB	98
36) Chloroform	3.39	83	980089	283.26	PPB	99
37) Cyclohexane	3.46	56	696259	251.38	PPB	96
38) 1,1,1-Trichloroethane	3.48	97	739089	285.86	PPB	96
40) Carbon Tetrachloride	3.57	117	598506	281.41	PPB	98
41) 1,1-Dichloropropene	3.61	75	662654	268.91	PPB	100
42) Isobutyl Alcohol	3.76	43	587279	5413.35	PPB	96
44) Benzene	3.76	78	2323166	276.83	PPB	99
45) 1,2-Dichloroethane	3.84	62	775804	279.76	PPB	99
46) tert-Amyl Methyl Ether	3.83	55	422409	270.18	PPB	88

(#)=qualifier out of range (m)=manual integration

1030F016.D 103023_MS24_FULL_SOIL.M

Tue Oct 31 14:26:08 2023

KELSO

Page 1

Data File : J:\MS24\DATA\103023A\1030F016.D

Acq On : 30 Oct 2023 07:03 pm

Sample : ICAL 300

Misc :

Vial: 21

Operator: EW/OT

Inst : MS24

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Oct 31 11:34:45 2023

Quant Results File: 103023_MS24_FULL_SOIL.RES

Quant Method : J:\MS24\M...\103023_MS24_FULL_SOIL.M (RTE Integrator)

Title : VOA MS24 EPA Method 8260B

Last Update : Tue Oct 31 10:01:35 2023

Response via : Initial Calibration

DataAcq Meth : 8260.M

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
47) Trichloroethene	4.27	95	535164	268.72	PPB	97
48) Methylcyclohexane	4.35	83	662863	244.74	PPB	99
49) 1,2-Dichloropropane	4.50	63	642931	282.32	PPB	98
50) Dibromomethane	4.59	93	347106	284.05	PPB	95
51) 1,4-Dioxane	4.59	88	113673	4546.88	PPB	95
52) Bromodichloromethane	4.72	83	789323	300.95	PPB	99
53) 2-Nitropropane	4.98	41	446169	935.73	PPB	98
54) 2-Chloroethyl Vinyl Ether	4.99	63	176596	297.11	PPB	95
55) cis-1,3-Dichloropropene	5.10	75	1002666	293.23	PPB	96
56) 4-Methyl-2-pentanone (MIBK)	5.24	58	398507	553.16	PPB	99
58) Toluene	5.34	92	1442732	265.59	PPB	100
60) trans-1,3-Dichloropropene	5.61	75	874624	311.52	PPB	99
61) 1,1,2-Trichloroethane	5.77	83	436630	280.93	PPB	99
62) Tetrachloroethene	5.79	164	430022	271.33	PPB	95
63) 2-Hexanone	5.98	57	141222	571.56	PPB #	89
64) 1,3-Dichloropropane	5.93	76	910344	279.95	PPB	99
65) Dibromochloromethane	6.10	129	580599	308.03	PPB	97
66) 1,2-Dibromoethane (EDB)	6.21	107	501645	288.67	PPB	98
67) 1-Chlorohexane	6.61	91	601617	267.72	PPB	94
68) Chlorobenzene	6.65	112	1527354	269.23	PPB	99
69) Ethylbenzene	6.73	106	801347	266.49	PPB	93
70) 1,1,1,2-Tetrachloroethane	6.73	131	546394	279.55	PPB	98
71) m,p-Xylenes	6.84	106	1952958	519.09	PPB	98
72) o-Xylene	7.23	106	966897	264.06	PPB	97
73) Styrene	7.26	103	787711m	265.21	PPB	
74) Bromoform	7.46	173	366272	305.27	PPB	95
75) Isopropylbenzene	7.59	105	2321817	250.66	PPB	100
76) cis-1,4-Dichloro-2-butene	7.75	89	192031	614.40	PPB	93
79) 1,1,2,2-Tetrachloroethane	7.98	83	599559	283.10	PPB	100
80) trans-1,4-Dichloro-2-buten	8.05	53	184318	299.65	PPB	88
81) Bromobenzene	7.92	156	622974	276.01	PPB	98
82) n-Propylbenzene	8.01	91	2633499	264.05	PPB	100
83) 1,2,3-Trichloropropane	8.03	110	186851	277.49	PPB	91
84) 2-Chlorotoluene	8.11	91	1607072	266.66	PPB	99
85) 1,3,5-Trimethylbenzene	8.20	105	1874038	261.49	PPB	99
86) 4-Chlorotoluene	8.23	91	1662859	263.69	PPB	99
87) tert-Butylbenzene	8.51	119	1595831	258.35	PPB	99
88) 1,2,4-Trimethylbenzene	8.57	105	1887558	264.79	PPB	100
89) sec-Butylbenzene	8.73	105	2151521	255.01	PPB	99
90) p-Isopropyltoluene	8.88	119	1938724	261.90	PPB	99
91) 1,3-Dichlorobenzene	8.86	146	1089235	265.08	PPB	98
92) 1,4-Dichlorobenzene	8.96	146	1080022	259.66	PPB	100
93) n-Butylbenzene	9.28	91	1730159	263.46	PPB	99
94) 1,2-Dichlorobenzene	9.32	146	1026836	267.48	PPB	99
95) 1,2-Dibromo-3-chloropropan	10.09	155	101442	338.02	PPB	98
96) 1,3,5-Trichlorobenzene	10.23	180	734312	266.84	PPB	99
97) 1,2,4-Trichlorobenzene	10.82	180	722853	276.82	PPB	96
98) Hexachlorobutadiene	10.93	225	377247	268.28	PPB	98
99) Naphthalene	11.05	128	1792467	316.48	PPB	99
100) 1,2,3-Trichlorobenzene	11.28	180	679519	290.99	PPB	100

(#) = qualifier out of range (m) = manual integration

1030F016.D 103023_MS24_FULL_SOIL.M

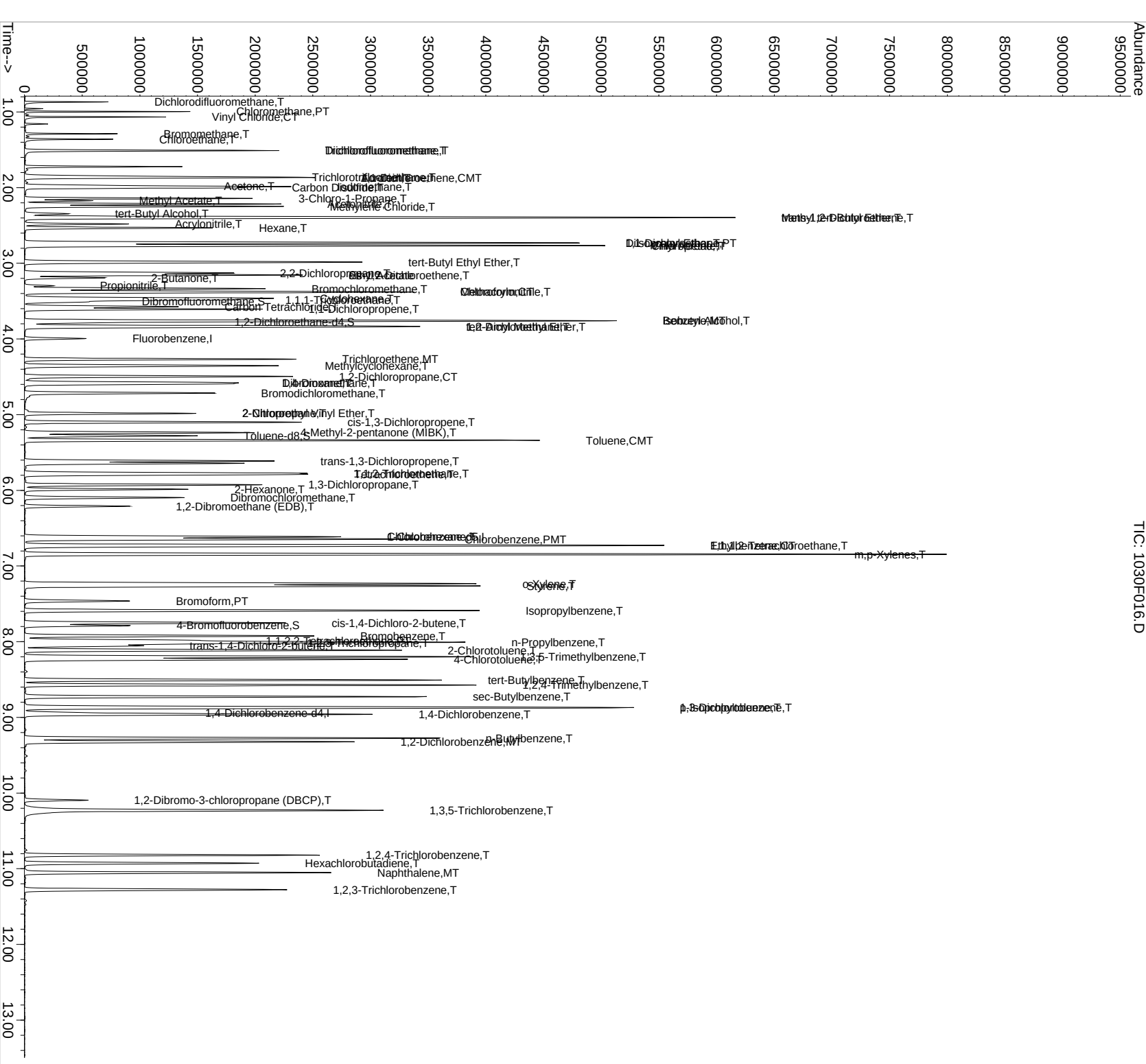
Tue Oct 31 14:26:08 2023

KELSO

Page 2

Data File : J:\MS24\DATA\103023A\1030F016.D
 Acq On : 30 Oct 2023 07:03 pm
 Sample : ICAL 300
 Misc :
 MS Integration Params: rteint.p
 Quant Time: Oct 31 11:39 2023
 Vial: 21
 Operator: EW/OT
 Inst : MS24
 Multiplr: 1.00

Method : J:\MS24\METHODS\2010\103023_MS24_FULL_SOIL.M (RTE Integrator)
 Title : VOA MS24 EPA Method 8260B
 Last Update : Tue Oct 31 14:24:46 2023
 Response via : Initial Calibration



Quantitation Report (Qedit)

1st 11/01/23

2nd 11/02/23

Data File : J:\MS24\DATA\103023A\1030F016.D

Vial: 21

Acq On : 30 Oct 2023 07:03 pm

Operator: EW/OT

Sample : ICAL 300

Inst : MS24

Misc :

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Oct 31 11:34 2023

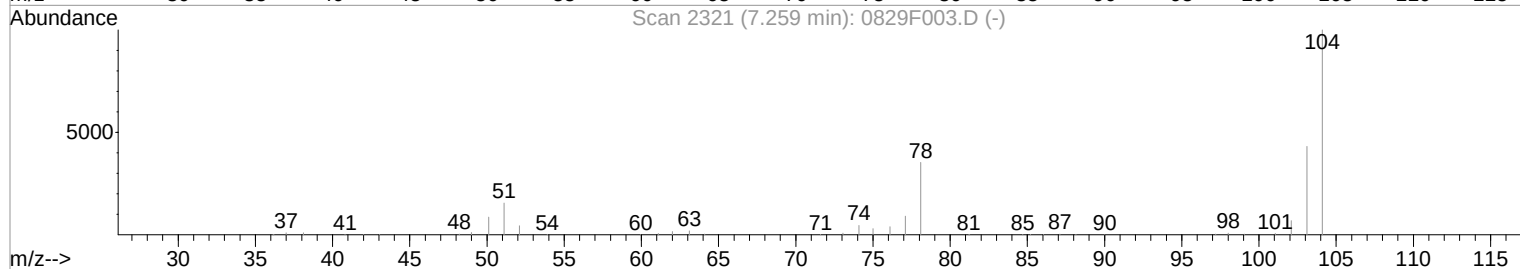
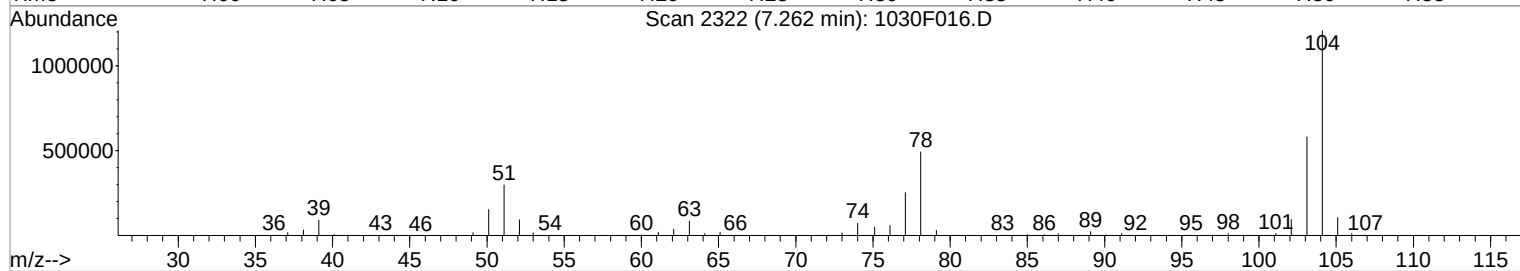
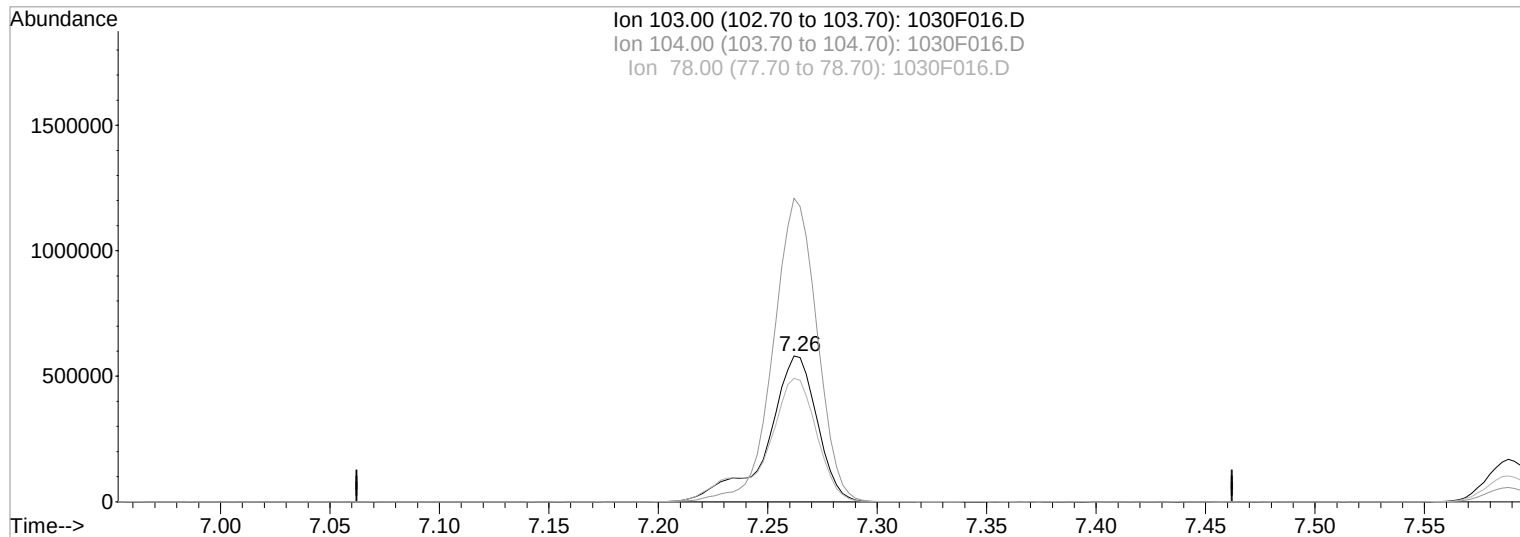
Quant Results File: temp.res

Method : J:\MS24\METHODS\2010\103023_MS24_FULL_SOIL.M (RTE Integrator)

Title : VOA MS24 EPA Method 8260B

Last Update : Tue Oct 31 10:01:35 2023

Response via : Multiple Level Calibration



TIC: 1030F016.D

(73) Styrene (T)

Manual Integration:

7.26min 307.30PPB

Before

response 912731

Ion	Exp%	Act%
-----	------	------

10/31/23

103.00	100	100
--------	-----	-----

104.00	210.30	208.06
--------	--------	--------

78.00	84.80	84.55
-------	-------	-------

0.00	0.00	0.00
------	------	------

Quantitation Report (Qedit)

1st  11/01/23
2nd  11/02/23

Data File : J:\MS24\DATA\103023A\1030F016.D

Acq On : 30 Oct 2023 07:03 pm

Sample : ICAL 300

Misc :

MS Integration Params: rteint.p

Quant Time: Oct 31 11:39 2023

Vial: 21

Operator: EW/OT

Inst : MS24

Multiplr: 1.00

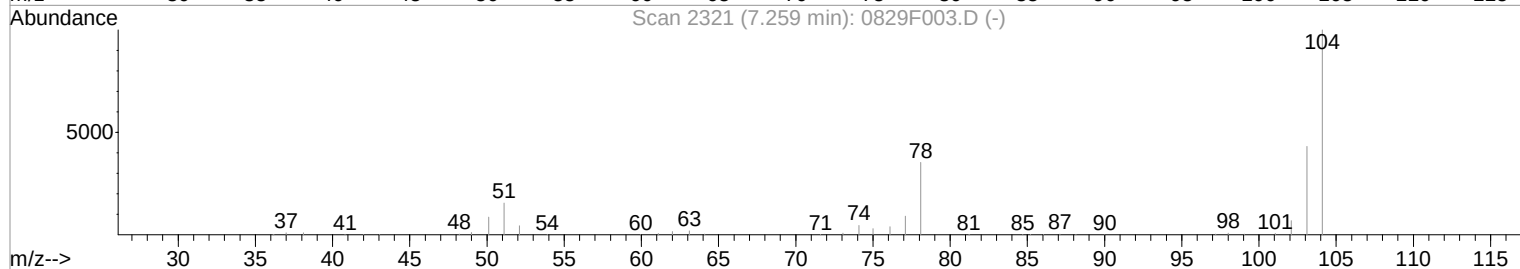
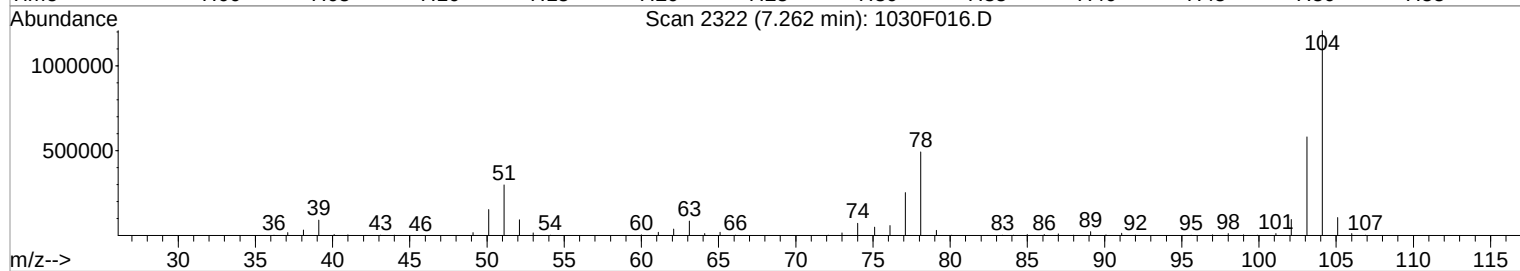
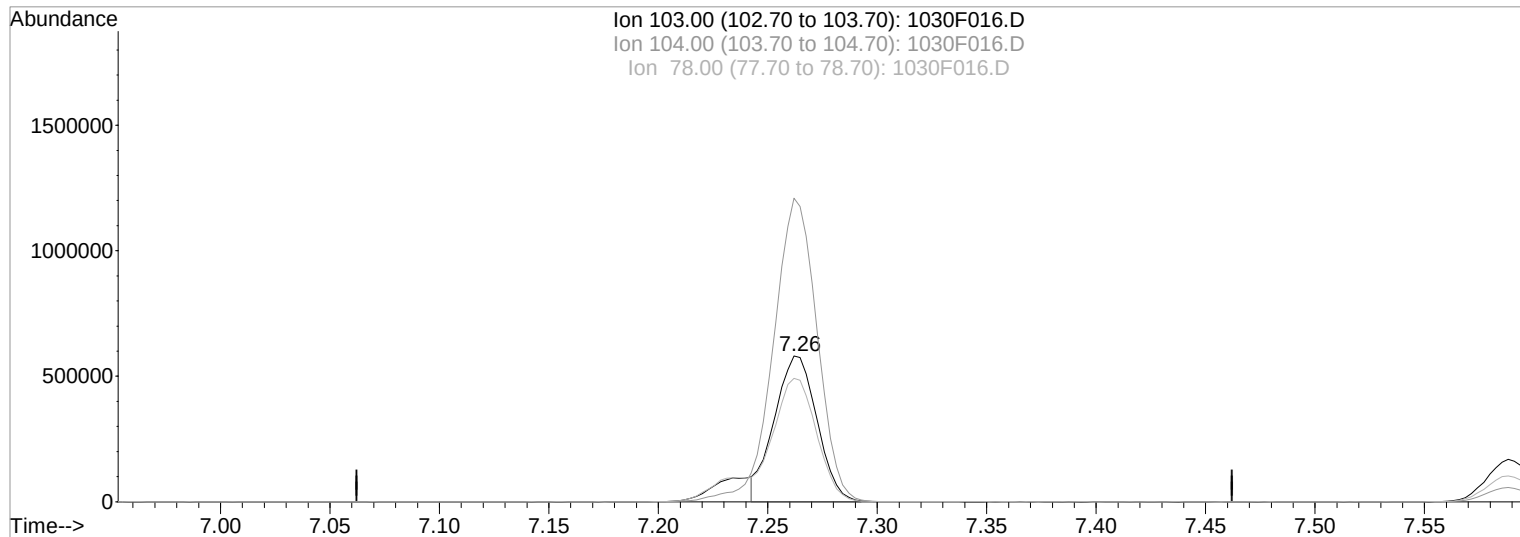
Quant Results File: temp.res

Method : J:\MS24\METHODS\2010\103023_MS24_FULL_SOIL.M (RTE Integrator)

Title : VOA MS24 EPA Method 8260B

Last Update : Tue Oct 31 10:01:35 2023

Response via : Multiple Level Calibration



TIC: 1030F016.D

(73) Styrene (T)

7.26min 265.21PPB m

response 787711

Ion	Exp%	Act%
-----	------	------

103.00	100	100
--------	-----	-----

104.00	210.30	208.06
--------	--------	--------

78.00	84.80	84.55
-------	-------	-------

0.00	0.00	0.00
------	------	------

Manual Integration:

After

Shoulder

10/31/23

Data File : J:\MS24\DATA\103023A\1030F021.D

Vial: 26

Acq On : 31 Oct 2023 12:43 pm

Operator: EW/OT

Sample : BFB

Inst : MS24

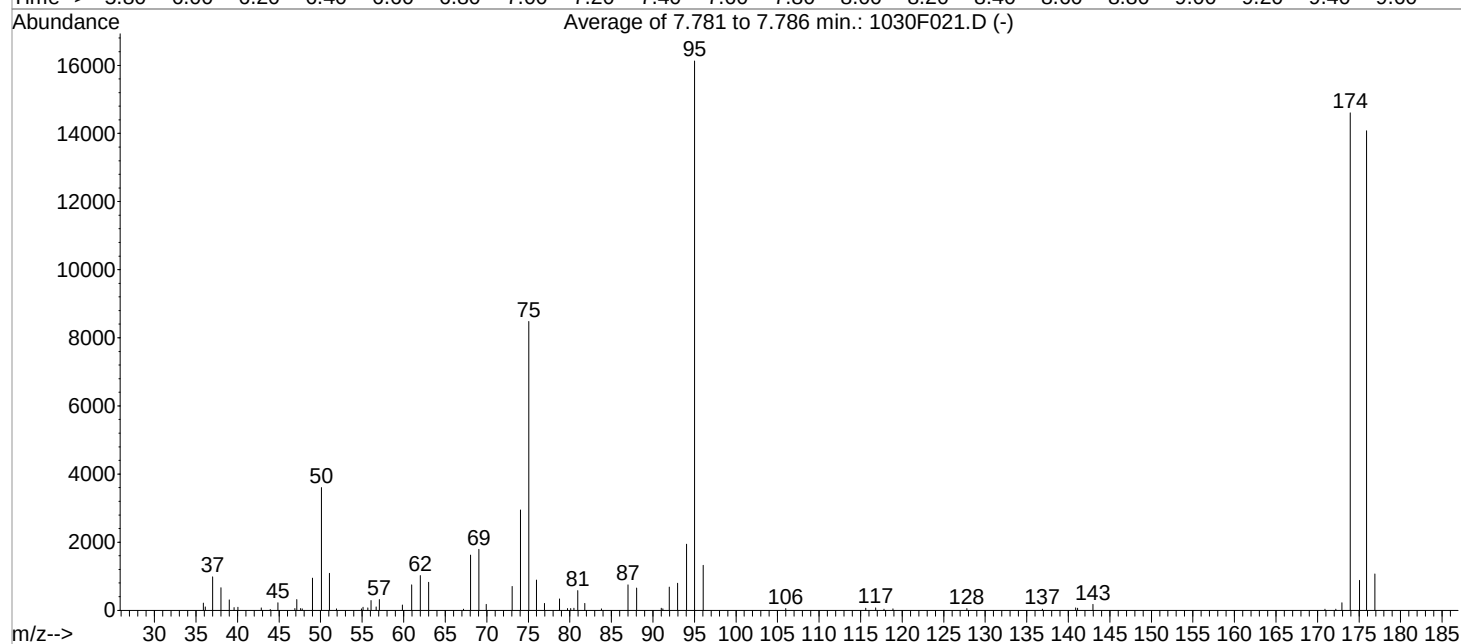
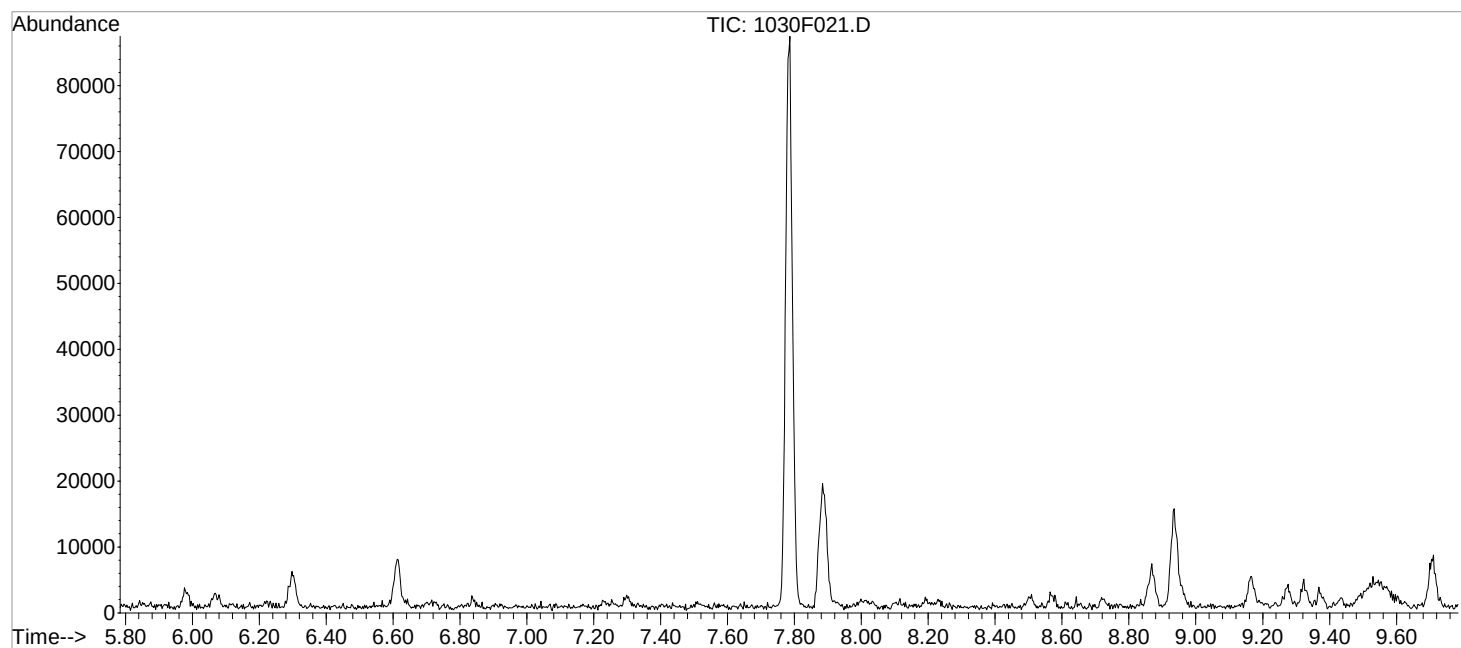
Misc :

Multiplr: 1.00

MS Integration Params: rteint.p

Method : J:\MS24\METHODS\2010\103023_MS24_FULL_SOIL.M (RTE Integrator)

Title : VOA MS24 EPA Method 8260B



AutoFind: Scans 2508, 2509, 2510; Background Corrected with Scan 2496

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	22.3	3603	PASS
75	95	30	60	52.6	8478	PASS
95	95	100	100	100.0	16124	PASS
96	95	5	9	8.2	1316	PASS
173	174	0.00	2	1.5	220	PASS
174	95	50	120	90.6	14606	PASS
175	174	5	9	6.0	876	PASS
176	174	95	101	96.4	14077	PASS
177	176	5	9	7.6	1066	PASS

Data File : J:\MS24\DATA\103023A\1030F023.D

Vial: 28

Acq On : 31 Oct 2023 02:08 pm

Operator: EW/OT

Sample : ICV

Inst : MS24

Misc :

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Oct 31 15:05:27 2023

Quant Results File: 103023_MS24_FULL_SOIL.RES

Quant Method : J:\MS24\M...\103023_MS24_FULL_SOIL.M (RTE Integrator)

Title : VOA MS24 EPA Method 8260B

Last Update : Tue Oct 31 15:01:51 2023

Response via : Initial Calibration

DataAcq Meth : 8260.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	3.99	96	324959	50.00	PPB	0.00
59) Chlorobenzene-d5	6.62	82	137216	50.00	PPB	0.00
78) 1,4-Dichlorobenzene-d4	8.94	152	122158	50.00	PPB	0.00

System Monitoring Compounds

39) Dibromofluoromethane	3.51	113	82351	48.28	PPB	0.00
Spiked Amount 50.000			Recovery	=	96.56%	
43) 1,2-Dichloroethane-d4	3.78	65	102407	48.65	PPB	0.00
Spiked Amount 50.000			Recovery	=	97.30%	
57) Toluene-d8	5.28	98	340428	48.42	PPB	0.00
Spiked Amount 50.000			Recovery	=	96.84%	
77) 4-Bromofluorobenzene	7.78	95	125553	49.49	PPB	0.00
Spiked Amount 50.000			Recovery	=	98.98%	

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	0.87	85	51239	48.56	PPB	95
3) Chloromethane	1.00	50	99953	45.21	PPB	99
4) Vinyl Chloride	1.07	62	88724	49.90	PPB	96
5) Bromomethane	1.29	96	43635	51.38	PPB	99
6) Chloroethane	1.36	64	57778	47.34	PPB	96
7) Dichlorofluoromethane	1.51	67	143317	57.00	PPB	98
8) Trichlorofluoromethane	1.51	101	99505	52.02	PPB	99
9) Acrolein	1.86	56	30642	78.79	PPB	97
10) Trichlorotrifluoroethane	1.85	151	93509	123.68	PPB	98
11) 1,1-Dichloroethene	1.87	96	60645	42.92	PPB	96
12) Acetone	1.97	43	135721	173.39	PPB	99
13) Iodomethane	1.99	142	194368	83.26	PPB	98
14) Carbon Disulfide	2.00	76	385846	91.32	PPB	100
15) 3-Chloro-1-Propane	2.14	76	83802	99.45	PPB	100
16) Methyl Acetate	2.18	43	76371	50.62	PPB	100
17) Acetonitrile	2.21	40	121644	906.18	PPB	97
18) Methylene Chloride	2.25	84	88582	46.36	PPB	95
19) tert-Butyl Alcohol	2.35	59	105695	508.76	PPB	90
20) Acrylonitrile	2.48	53	100734	146.11	PPB	97
21) Methyl tert-Butyl Ether	2.39	73	246966	47.95	PPB	99
22) trans-1,2-Dichloroethene	2.40	96	81002	45.12	PPB	95
23) Hexane	2.53	57	167156	87.48	PPB	95
24) Diisopropyl Ether	2.73	45	547561	80.20	PPB	98
25) 1,1-Dichloroethane	2.73	63	162127	45.18	PPB	97
26) Vinyl Acetate	2.77	86	75463	189.49	PPB	# 92
27) Chloroprene	2.76	53	238055	93.10	PPB	100
28) tert-Butyl Ethyl Ether	2.98	59	496373	82.13	PPB	98
29) 2,2-Dichloropropane	3.13	77	115343	44.96	PPB	99
30) cis-1,2-Dichloroethene	3.15	96	102198	46.03	PPB	98
31) 2-Butanone	3.19	72	59567	242.32	PPB	# 42
32) Propionitrile	3.30	54	27016	91.53	PPB	97
33) Ethyl Acetate	3.15	61	154879	46.99	PPB	99
34) Methacrylonitrile	3.37	67	80586	95.74	PPB	99
35) Bromochloromethane	3.33	128	47735	46.69	PPB	97
36) Chloroform	3.39	83	160844	47.40	PPB	98
37) Cyclohexane	3.46	56	98423	38.06	PPB	94
38) 1,1,1-Trichloroethane	3.48	97	124397	48.90	PPB	99
40) Carbon Tetrachloride	3.57	117	98965	48.62	PPB	99
41) 1,1-Dichloropropene	3.61	75	122904	50.76	PPB	99
42) Isobutyl Alcohol	3.75	43	93982	918.72	PPB	97
44) Benzene	3.76	78	391526	47.09	PPB	99
45) 1,2-Dichloroethane	3.84	62	126622	46.90	PPB	99
46) tert-Amyl Methyl Ether	3.83	55	131436	85.94	PPB	93

(#)=qualifier out of range (m)=manual integration

1030F023.D 103023_MS24_FULL_SOIL.M Tue Oct 31 15:25:40 2023

2023 of 2035

Data File : J:\MS24\DATA\103023A\1030F023.D

Acq On : 31 Oct 2023 02:08 pm

Sample : ICV

Misc :

Vial: 28

Operator: EW/OT

Inst : MS24

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Oct 31 15:05:27 2023

Quant Results File: 103023_MS24_FULL_SOIL.RES

Quant Method : J:\MS24\M...\103023_MS24_FULL_SOIL.M (RTE Integrator)

Title : VOA MS24 EPA Method 8260B

Last Update : Tue Oct 31 15:01:51 2023

Response via : Initial Calibration

DataAcq Meth : 8260.M

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
47) Trichloroethene	4.26	95	93605	47.62	PPB	98
48) Methylcyclohexane	4.35	83	92603	37.97	PPB	99
49) 1,2-Dichloropropane	4.49	63	104476	47.39	PPB	98
50) Dibromomethane	4.59	93	55627	46.48	PPB	93
51) 1,4-Dioxane	4.59	88	22117	1045.18	PPB	91
52) Bromodichloromethane	4.72	83	120030	47.57	PPB	94
53) 2-Nitropropane	4.98	41	44678	95.36	PPB	93
54) 2-Chloroethyl Vinyl Ether	4.99	63	29782	50.77	PPB	95
55) cis-1,3-Dichloropropene	5.10	75	158428	50.23	PPB	97
56) 4-Methyl-2-pentanone (MIBK)	5.23	58	198900	287.67	PPB	97
58) Toluene	5.34	92	254183	47.45	PPB	100
60) trans-1,3-Dichloropropene	5.61	75	135937	48.81	PPB	97
61) 1,1,2-Trichloroethane	5.77	83	71436	45.09	PPB	95
62) Tetrachloroethene	5.79	164	79423	46.90	PPB	97
63) 2-Hexanone	5.98	57	69155	271.05	PPB	# 89
64) 1,3-Dichloropropane	5.93	76	151347	46.43	PPB	96
65) Dibromochloromethane	6.09	129	87121	47.61	PPB	96
66) 1,2-Dibromoethane (EDB)	6.21	107	80884	45.62	PPB	97
67) 1-Chlorohexane	6.61	91	122090	51.88	PPB	97
68) Chlorobenzene	6.64	112	280706	47.64	PPB	95
69) Ethylbenzene	6.72	106	147153	48.24	PPB	95
70) 1,1,1,2-Tetrachloroethane	6.73	131	89790	47.19	PPB	99
71) m,p-Xylenes	6.84	106	372075	98.88	PPB	96
72) o-Xylene	7.23	106	181907	50.06	PPB	97
73) Styrene	7.26	103	143538m	49.47	PPB	
74) Bromoform	7.46	173	52585	44.95	PPB	95
75) Isopropylbenzene	7.59	105	425874	46.65	PPB	99
76) cis-1,4-Dichloro-2-butene	7.75	89	28834	87.42	PPB	92
79) 1,1,2,2-Tetrachloroethane	7.98	83	99385	43.23	PPB	99
80) trans-1,4-Dichloro-2-buten	8.05	53	64494	97.10	PPB	93
81) Bromobenzene	7.92	156	115373	47.24	PPB	98
82) n-Propylbenzene	8.00	91	524525	50.19	PPB	99
83) 1,2,3-Trichloropropane	8.03	110	31679	42.65	PPB	100
84) 2-Chlorotoluene	8.11	91	310072	47.99	PPB	99
85) 1,3,5-Trimethylbenzene	8.20	105	373802	48.90	PPB	100
86) 4-Chlorotoluene	8.23	91	330924	48.30	PPB	98
87) tert-Butylbenzene	8.51	119	324102	48.51	PPB	97
88) 1,2,4-Trimethylbenzene	8.57	105	382014	51.09	PPB	99
89) sec-Butylbenzene	8.72	105	473030	52.54	PPB	99
90) p-Isopropyltoluene	8.87	119	410812	52.76	PPB	98
91) 1,3-Dichlorobenzene	8.86	146	212673	46.89	PPB	98
92) 1,4-Dichlorobenzene	8.96	146	212768	46.35	PPB	99
93) n-Butylbenzene	9.27	91	352536	50.85	PPB	97
94) 1,2-Dichlorobenzene	9.32	146	191690	45.90	PPB	98
95) 1,2-Dibromo-3-chloropropan	10.10	155	14573	41.71	PPB	77
96) 1,3,5-Trichlorobenzene	10.23	180	163205	52.72	PPB	98
97) 1,2,4-Trichlorobenzene	10.82	180	134298	45.80	PPB	95
98) Hexachlorobutadiene	10.93	225	71286	45.51	PPB	94
99) Naphthalene	11.05	128	286458	45.12	PPB	99
100) 1,2,3-Trichlorobenzene	11.27	180	122934	45.95	PPB	96

(#) = qualifier out of range (m) = manual integration

1030F023.D 103023_MS24_FULL_SOIL.M

Tue Oct 31 15:25:40 2023

2024 of 2035

Data File : J:\MS24\DATA\103023A\1030F023.D

Acq On : 31 Oct 2023 02:08 pm

Sample : ICV

Misc :

MS Integration Params: rteint.p

Quant Time: Oct 31 15:07 2023

Vial: 28
Operator: EW/OT
Inst : MS24
Multiplr: 1.00

Quant Results File: 103023_MS24_FULL_SOIL.RES

1st

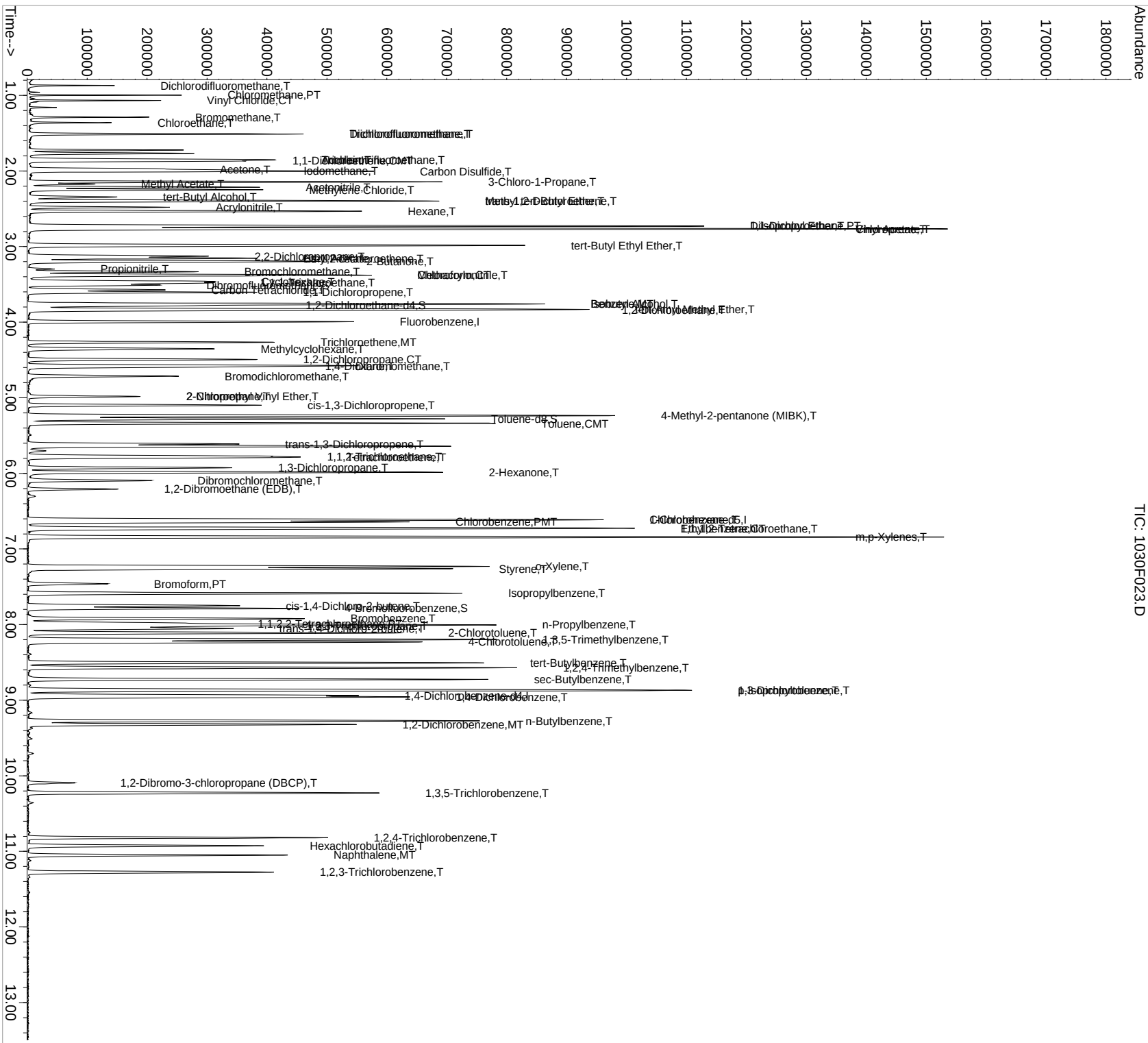
11/01/23

Method : J:\MS24\METHODS\2010\103023_MS24_FULL_SOIL.M (RTE Integrator)

Title : VOA MS24 EPA Method 8260B

Last Update : Tue Oct 31 15:24:56 2023

Response via : Initial Calibration



Quantitation Report (Qedit)

1st  11/01/23
2nd  11/02/23

Data File : J:\MS24\DATA\103023A\1030F023.D

Acq On : 31 Oct 2023 02:08 pm

Sample : ICV

Misc :

MS Integration Params: rteint.p

Quant Time: Oct 31 15:05 2023

Vial: 28

Operator: EW/OT

Inst : MS24

Multiplr: 1.00

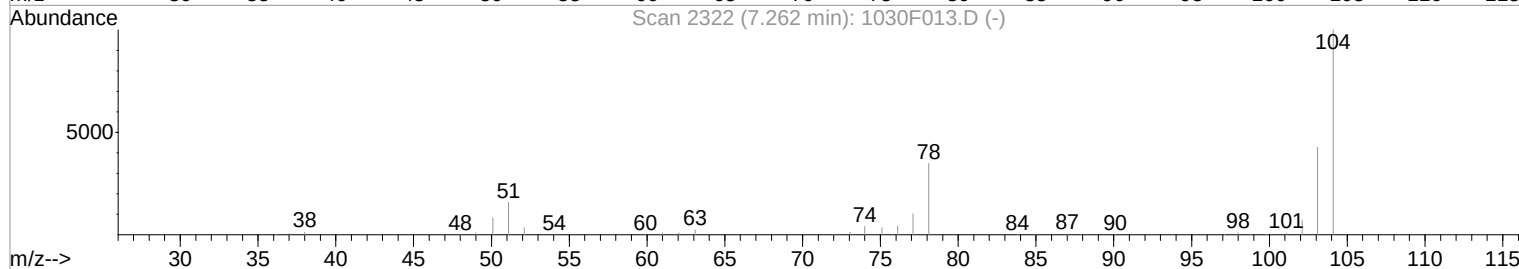
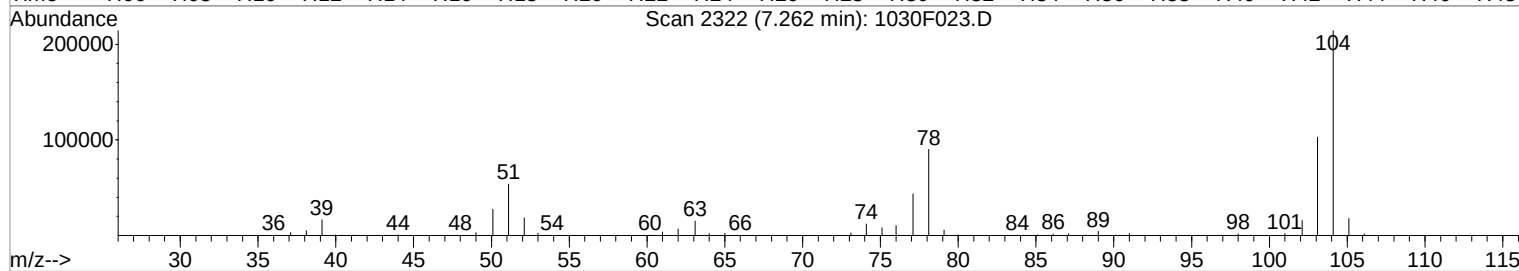
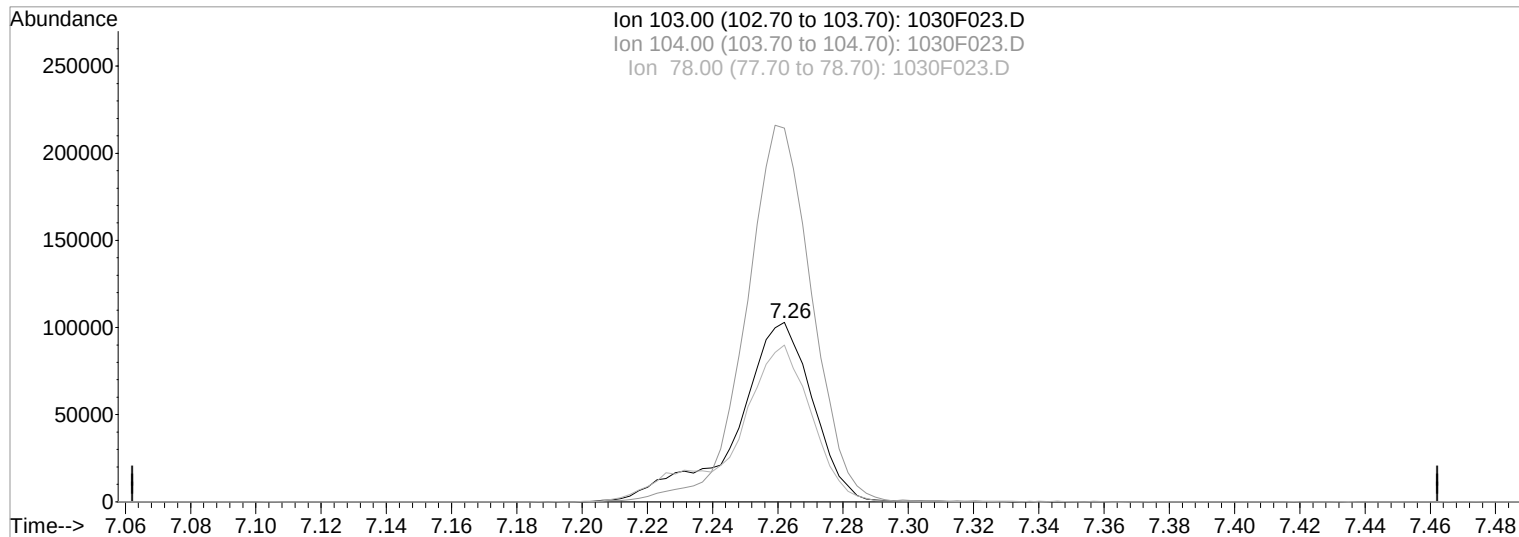
Quant Results File: temp.res

Method : J:\MS24\METHODS\2010\103023_MS24_FULL_SOIL.M (RTE Integrator)

Title : VOA MS24 EPA Method 8260B

Last Update : Tue Oct 31 15:01:51 2023

Response via : Multiple Level Calibration



TIC: 1030F023.D

(73) Styrene (T)

Manual Integration:

7.26min 57.52PPB

Before

response 166883

Ion	Exp%	Act%
-----	------	------

10/31/23

103.00	100	100
--------	-----	-----

104.00	210.30	208.28
--------	--------	--------

78.00	84.80	87.36
-------	-------	-------

0.00	0.00	0.00
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Data File : J:\MS24\DATA\103023A\1030F023.D

Acq On : 31 Oct 2023 02:08 pm

Sample : ICV

Misc :

MS Integration Params: rteint.p

Quant Time: Oct 31 15:07 2023

Vial: 28

Operator: EW/OT

Inst : MS24

Multiplr: 1.00

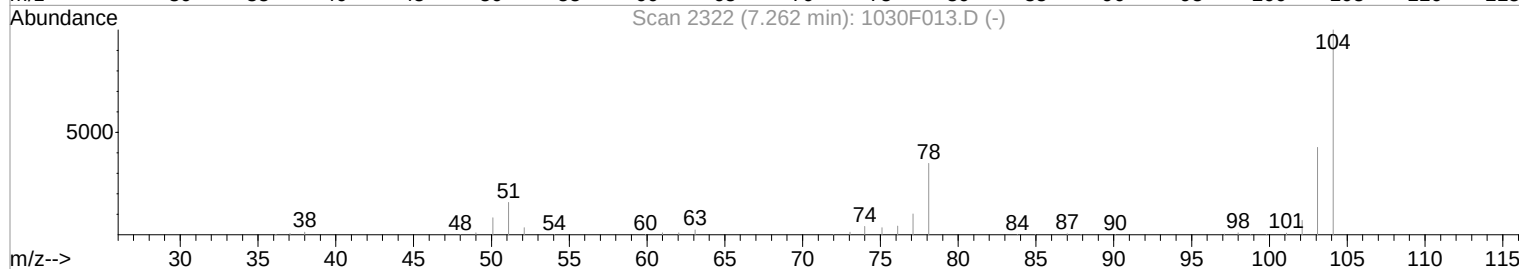
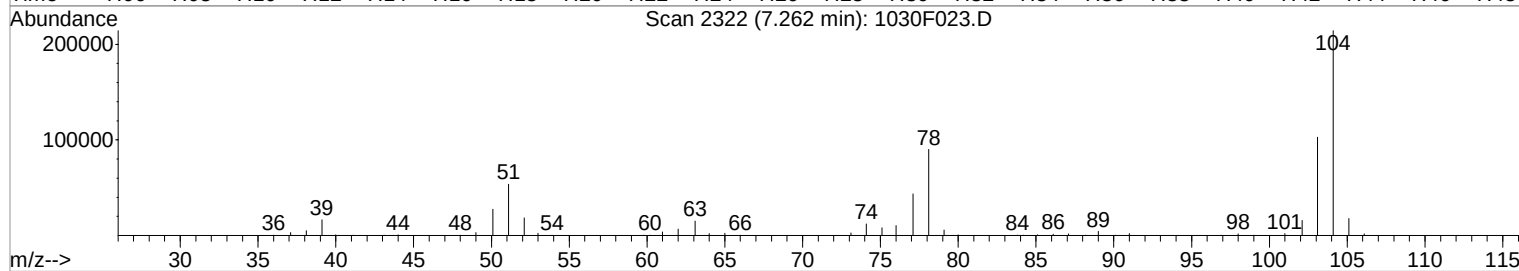
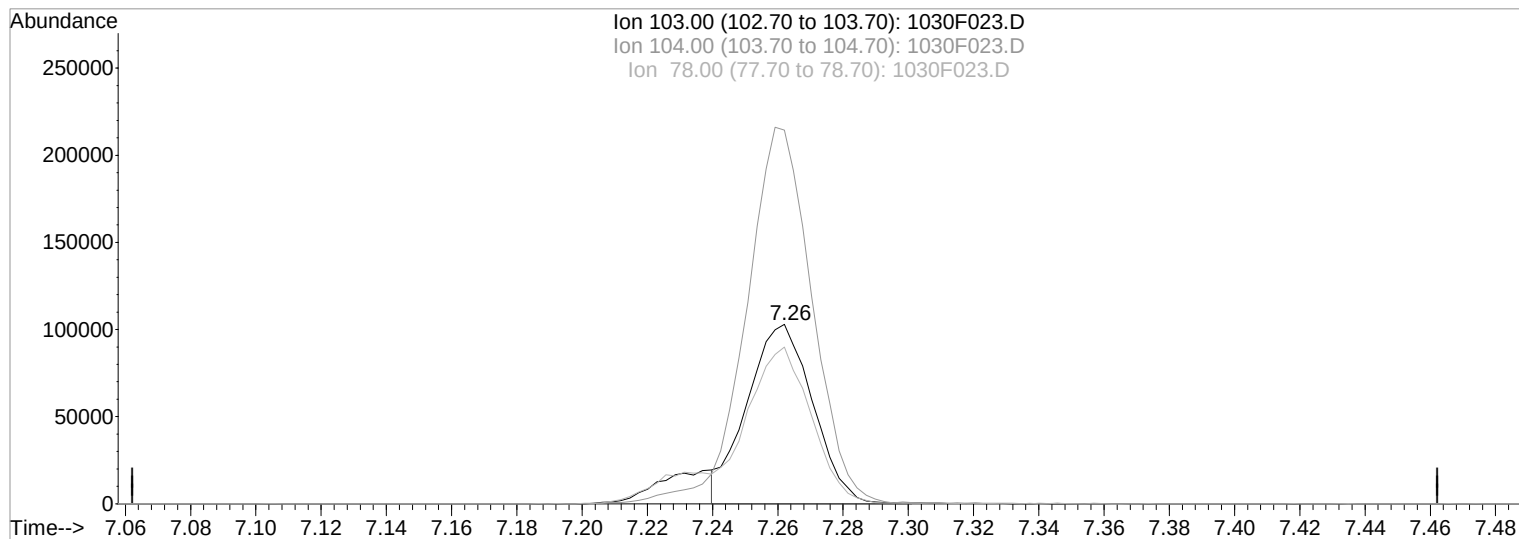
Quant Results File: temp.res

Method : J:\MS24\METHODS\2010\103023_MS24_FULL_SOIL.M (RTE Integrator)

Title : VOA MS24 EPA Method 8260B

Last Update : Tue Oct 31 15:01:51 2023

Response via : Multiple Level Calibration



TIC: 1030F023.D

(73) Styrene (T)

7.26min 49.47PPB m

response 143538

Ion	Exp%	Act%
-----	------	------

103.00	100	100
--------	-----	-----

104.00	210.30	208.28
--------	--------	--------

78.00	84.80	87.36
-------	-------	-------

0.00	0.00	0.00
------	------	------

Manual Integration:

After

Shoulder

10/31/23

Data File : J:\MS24\DATA\103023A\1030F024.D

Vial: 29

Acq On : 31 Oct 2023 04:30 pm

Operator: EW/OT

Sample : ICV Ketones

Inst : MS24

Misc :

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Oct 31 16:44:02 2023

Quant Results File: 103023_MS24_FULL_SOIL.RES

Quant Method : J:\MS24\M...\103023_MS24_FULL_SOIL.M (RTE Integrator)

Title : VOA MS24 EPA Method 8260B

Last Update : Tue Oct 31 15:51:56 2023

Response via : Initial Calibration

DataAcq Meth : 8260.M

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	3.99	96	331683	50.00	PPB	0.00
59) Chlorobenzene-d5	6.61	82	133976	50.00	PPB	0.00
78) 1,4-Dichlorobenzene-d4	8.94	152	113546	50.00	PPB	0.00

System Monitoring Compounds

39) Dibromofluoromethane	3.50	113	84302	48.42	PPB	0.00
Spiked Amount 50.000			Recovery	=	96.84%	
43) 1,2-Dichloroethane-d4	3.78	65	104290	48.54	PPB	0.00
Spiked Amount 50.000			Recovery	=	97.08%	
57) Toluene-d8	5.27	98	357877	49.87	PPB	0.00
Spiked Amount 50.000			Recovery	=	99.74%	
77) 4-Bromofluorobenzene	7.79	95	120810	48.78	PPB	0.00
Spiked Amount 50.000			Recovery	=	97.56%	

Target Compounds

						Qvalue
12) Acetone	1.96	43	140689	197.81	PPB	97
13) Iodomethane	1.97	142	1474	3.64	PPB	81
18) Methylene Chloride	2.24	84	3349	0.21	PPB	88
31) 2-Butanone	3.18	72	60619	241.60	PPB	94
56) 4-Methyl-2-pentanone (MIBK)	5.23	58	199250	282.33	PPB	96
63) 2-Hexanone	5.98	57	67540	271.12	PPB	93

Data File : J:\MS24\DATA\103023A\1030F024.D

Acq On : 31 Oct 2023 04:30 pm

Sample : ICV Ketones

Misc :

Vial: 29

Operator: EW/OT

Inst : MS24

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Oct 31 16:57 2023

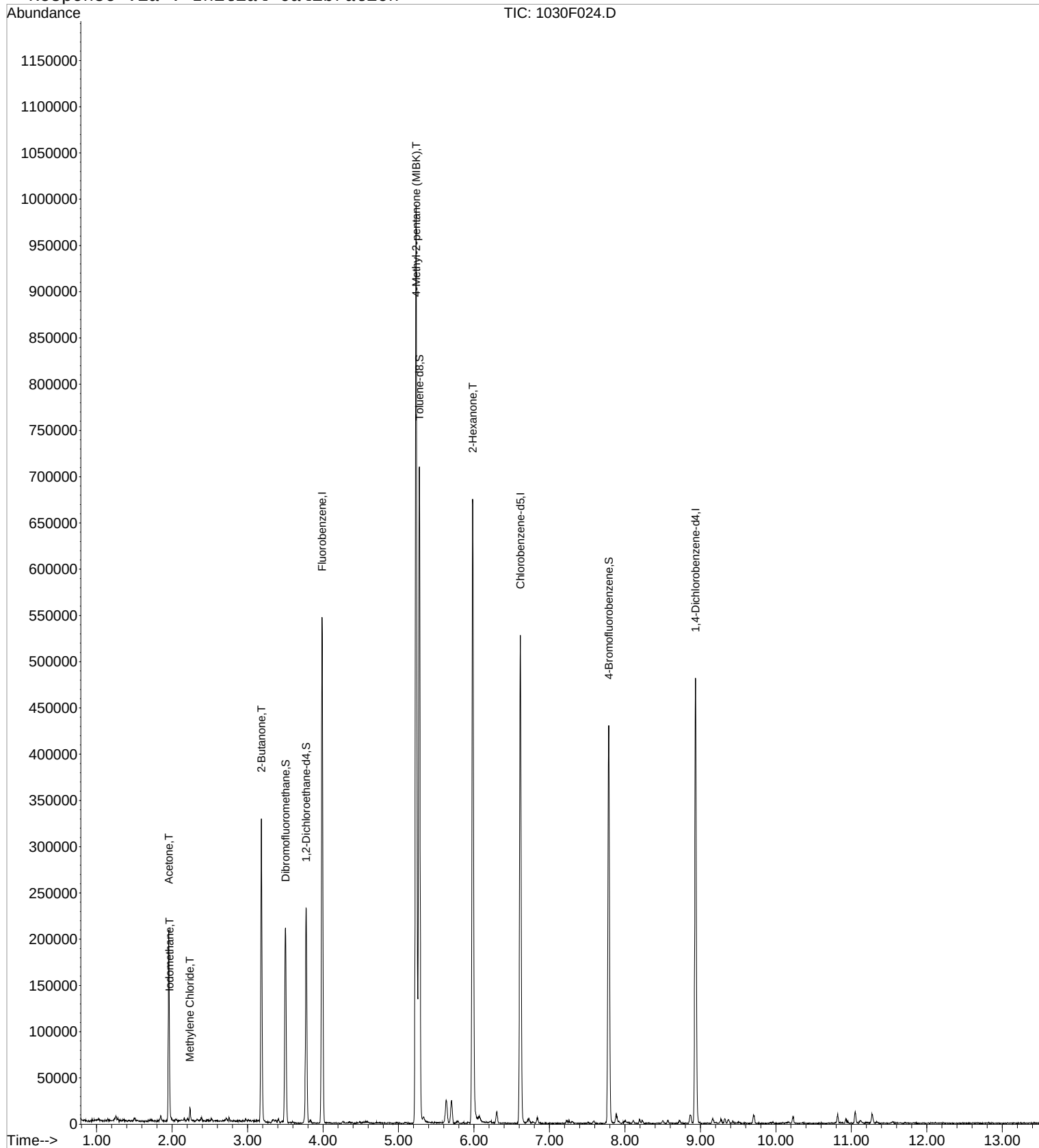
Quant Results File: 103023_MS24_FULL_SOIL.RES

Method : J:\MS24\METHODS\2010\103023_MS24_FULL_SOIL.M (RTE Integrator)

Title : VOA MS24 EPA Method 8260B

Last Update : Tue Oct 31 15:51:56 2023

Response via : Initial Calibration



Date: 12/22/23

ALS Environmental
Injection Log
MS24 - Agilent 5975

Tune File: BFB-Atune

By: SW

New Tune: NO

IS/SS Std. ID: 10UVOA-42B

CCV Std ID: 10UVOA-48A/45B

MS/DMS/LCS/ICV Std ID: 7

BFB Std. ID: 10UVOA-47E

ICAL Date: 10/30/23

Second RV: Soils 11/1/24 paperboards

LIMS ID: 828030, 828032

	Sample Name	File Name	Method	Dilution	pH	Comments
1	BFB @ 50 ng	1222F001	8260	NONE	NA	1 mL → 5 mL
2	Primer	7 2	7	7	7	
3	CCV	3	7			25 mL / 25 mL → 50 mL
4	LCS	4				7
5	DLCS	5				
6	IB	6				
7	MRL	7				25 / 25 mL → 50 mL
8	MB	8				
9	K2314049-5	9				
10	7 14165-8	10				
11	14283-1	11				
12	7 2	12				
13	14229-1	13				
14	14242-1	14				
15	14395-1	15				
16	IB	16				
17	Yukon 12/11/23 18	17				RR of Broken vial
18	Yukon 12/11/23	18				
19						
20						
21						
22						
23						
24						
25						
26						
27						

9:39

16:21
(4:21)

Service Request No(s): 23014069-5, 14165, 14283

Analyst: 

Date: 12/22/23

Start Time: 1305 Stop Time: 1310 Reviewed by and date: 11/1/24

P&T MeOH Lot No (ML only): — Voa Vial Lot No (ML only) —

Balance ID: 14

Comments: _____			
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MED
Low Level
AK101
RR
Scrn
8260

[illegible]
$$\text{Final Volume MeOH and Water} = \text{mL of solvent} + ((\% \text{Moisture} \times \text{Sample Wt. (g)}) / 100)$$

BFB CF (for shared jar AK101/8260) = ((25ug/ml) x 25ml) /V Meoh and H2O) + 10ppb (added by 8260 inst.) / 10

25ml MeOH= 19.79g Sample label, tape, barcode = 0.35g Barcode label and tape = 0.12g Barcode only = 0.1g

[illegible]

[illegible]